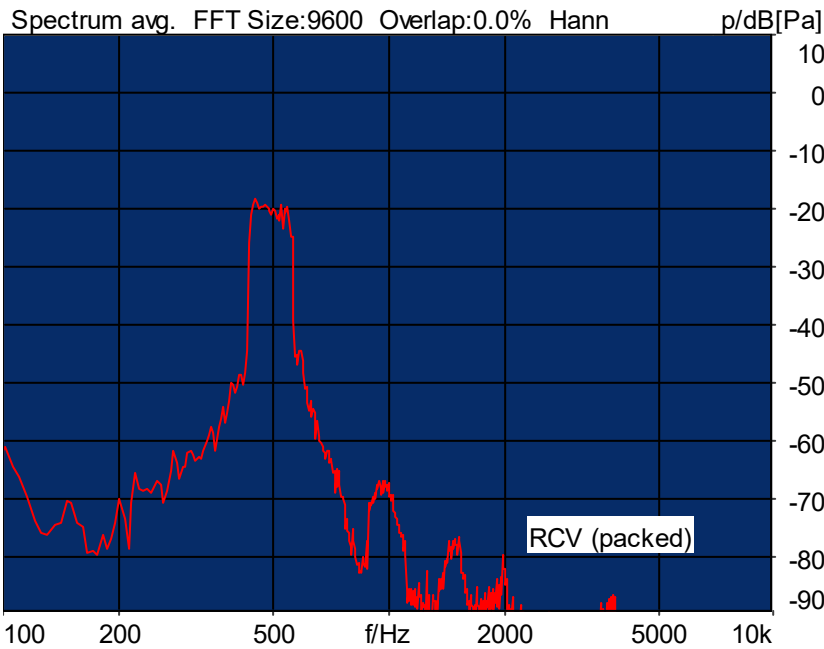


5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.57 dB (1.67%) Ok

Ok

2025/12/16 22:08 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

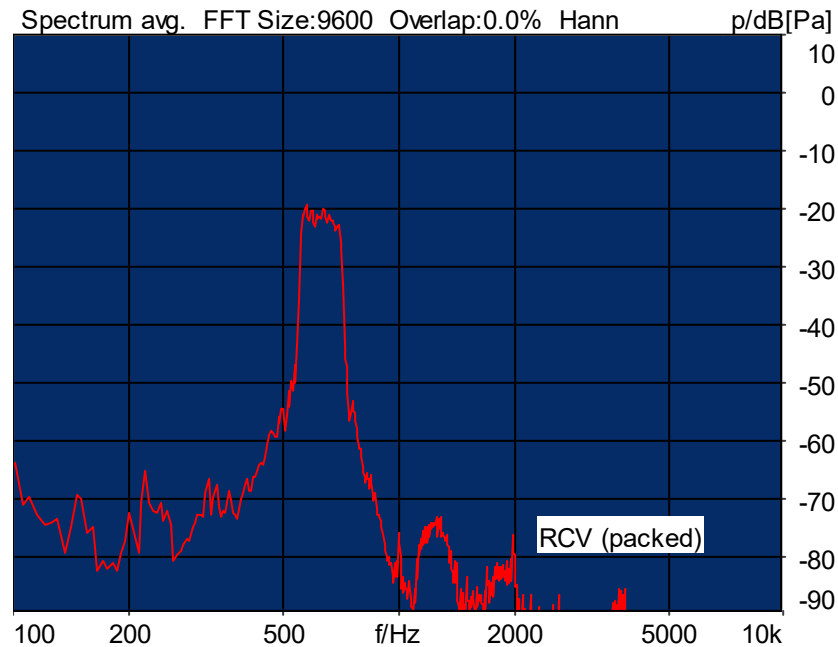
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.66 dB (1.31%) Ok

Ok

2025/12/16 22:08 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

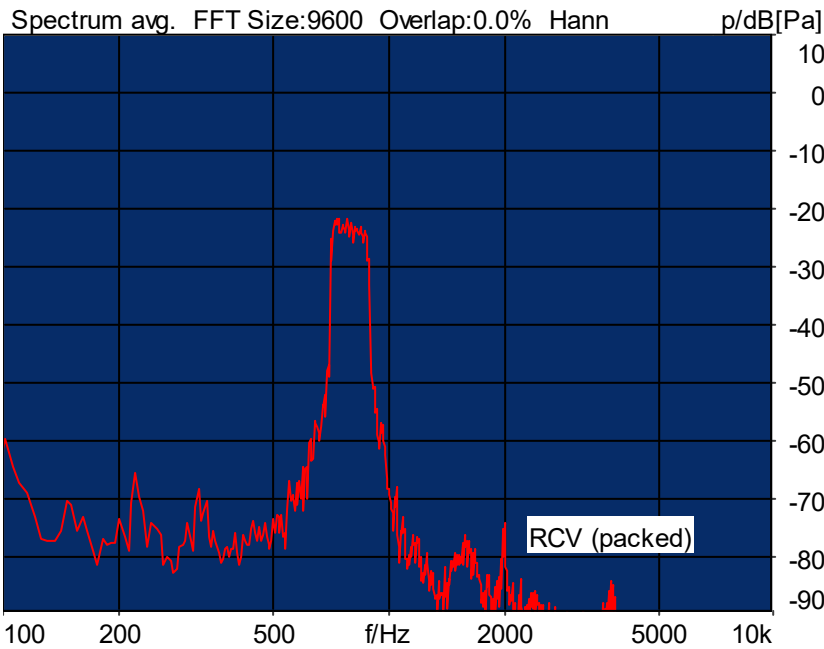
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.39 dB (1.35%) Ok

Ok

2025/12/16 22:08 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

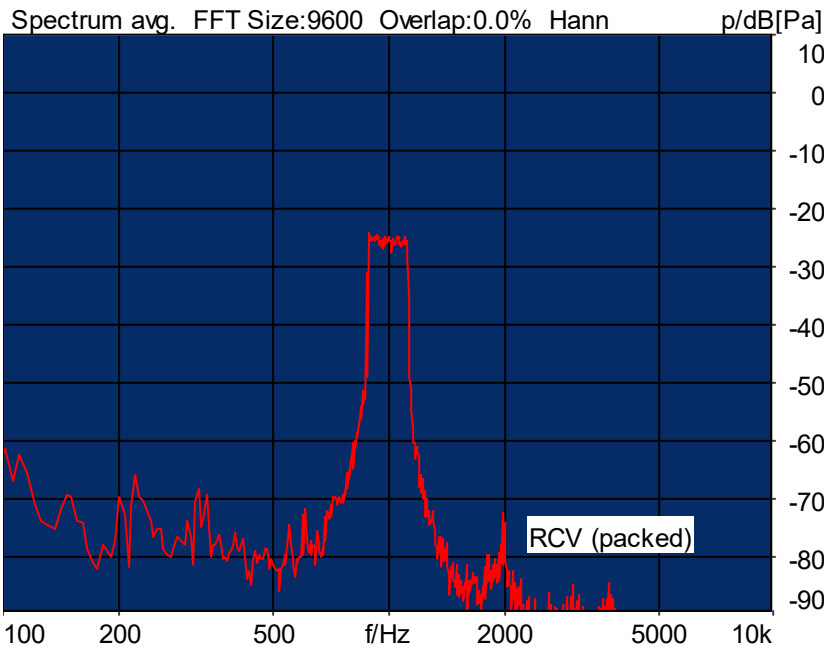
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.56 dB (1.32%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

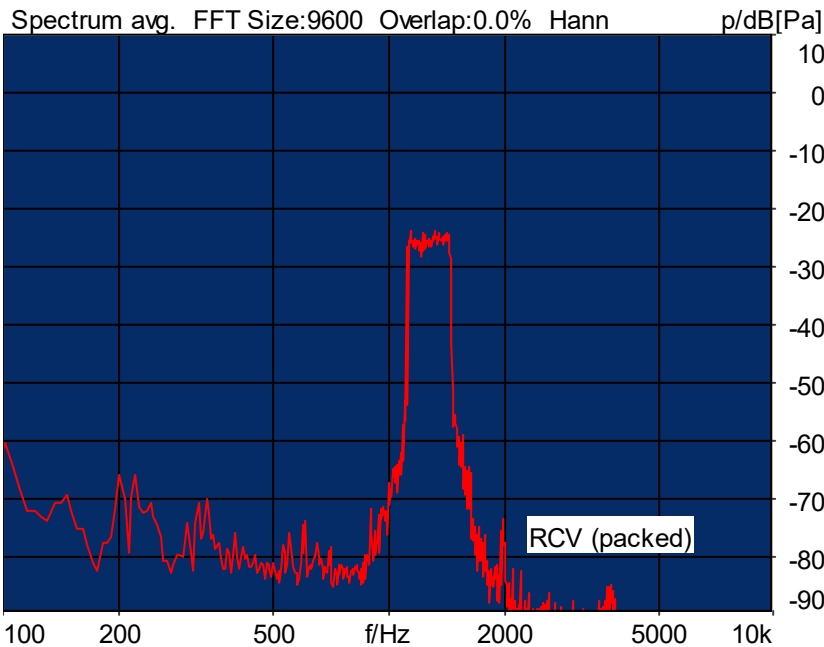
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.27 dB (2.43%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

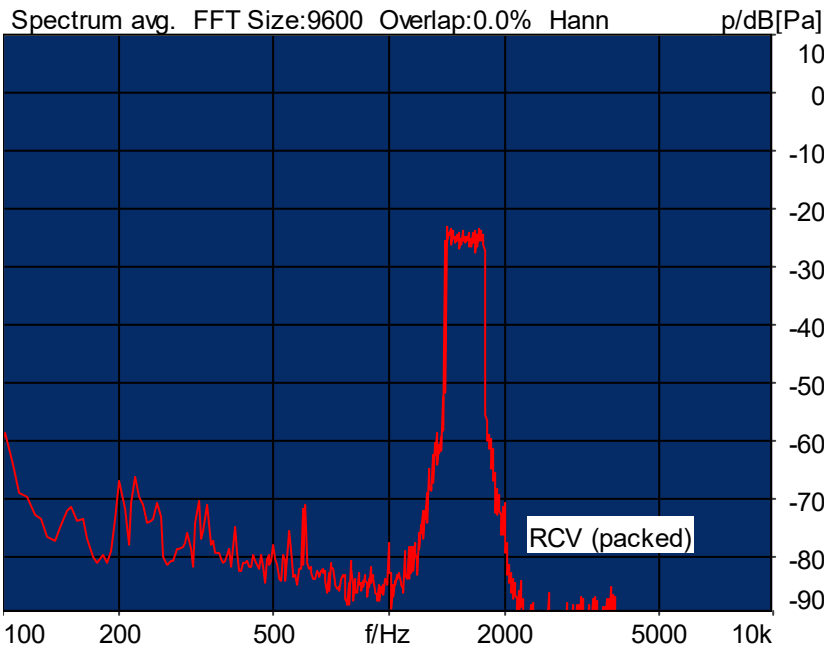
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.44 dB (1.07%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

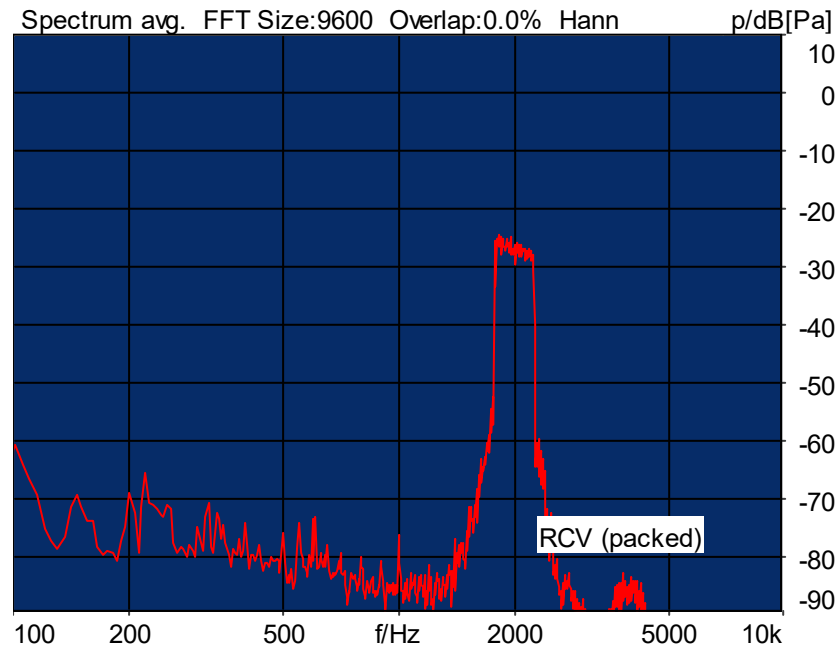
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.64 dB (1.47%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

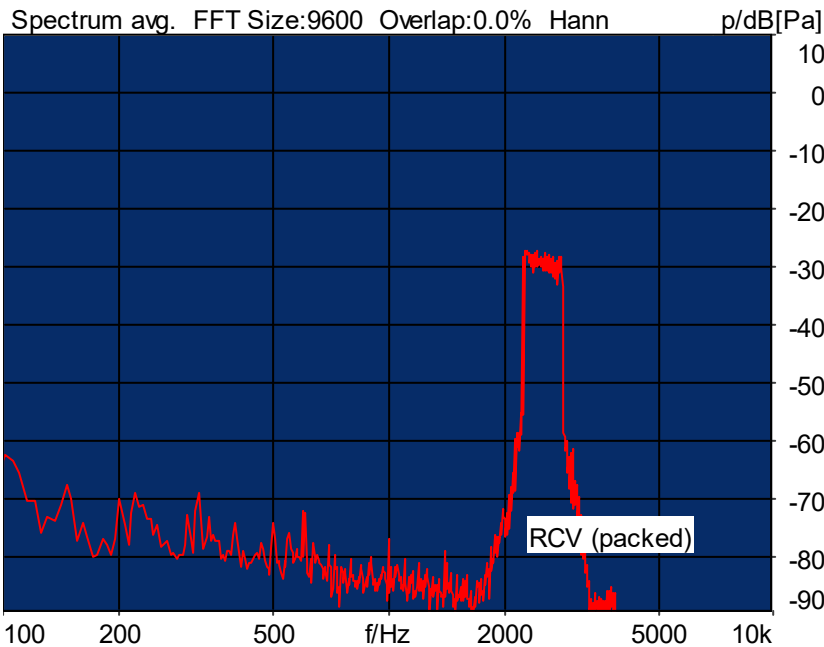
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.86 dB (1.81%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

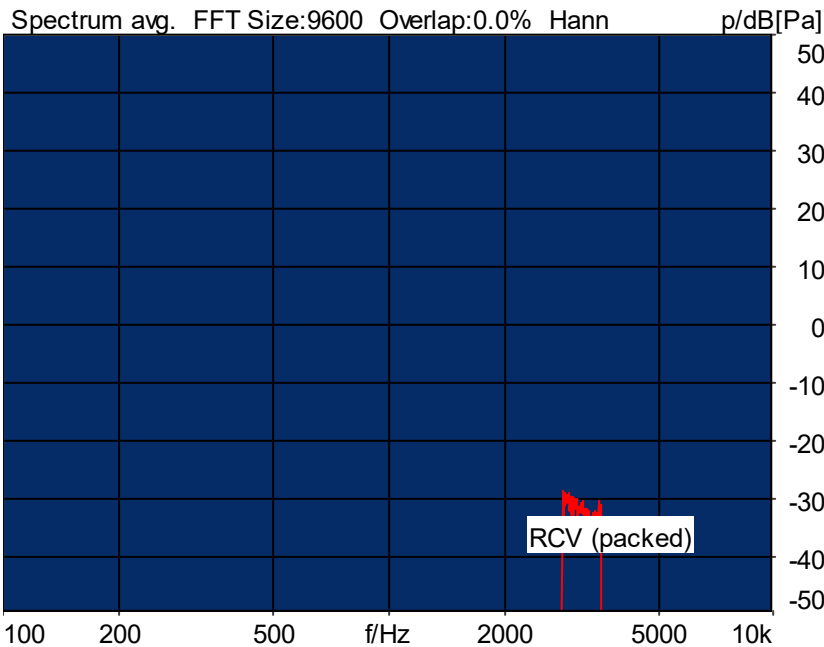
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.66 dB (3.29%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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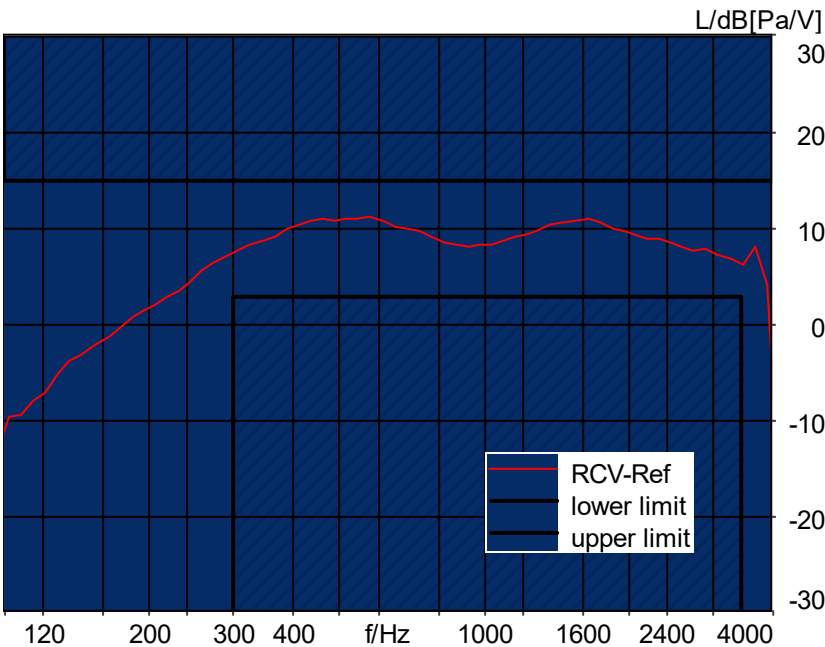
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.88 dB at 576.7 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(40#)

Measurement Object	BL-SZ25B0732-N25
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Status Overview

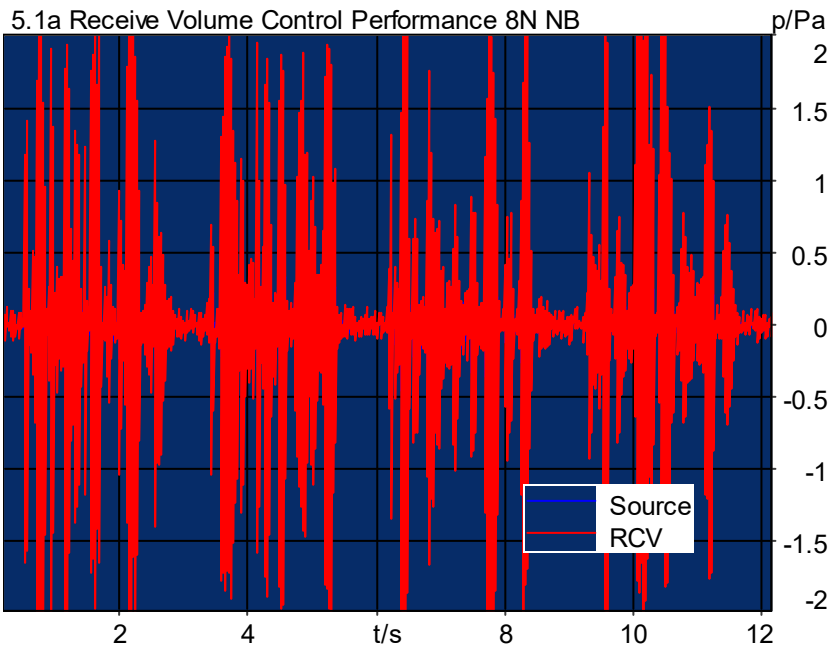
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.72	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.74	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.41	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.14	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.03	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.39	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.54	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.44	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	42.25	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.63	BL-SZ25B0732-N25
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.68	BL-SZ25B0732-N25
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	2.75	BL-SZ25B0732-N25

5.1a Receive Volume Control Performance 8N NB	1241
5.2 RCV Distortion and Noise - 400 Hz NB	1243
5.2 RCV Distortion and Noise - 500 Hz NB	1245
5.2 RCV Distortion and Noise - 630 Hz NB	1247
5.2 RCV Distortion and Noise - 800 Hz NB	1249
5.2 RCV Distortion and Noise - 1000 Hz NB	1251
5.2 RCV Distortion and Noise - 1250 Hz NB	1253
5.2 RCV Distortion and Noise - 1600 Hz NB	1255
5.2 RCV Distortion and Noise - 2000 Hz NB	1257
5.2 RCV Distortion and Noise - 2500 Hz NB	1259
5.2 RCV Distortion and Noise - 3150 Hz NB	1261
5.3 Frequency Response 8N FF HANB	1263

5.1a Receive Volume Control Performance 8N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.72 dB[SPL]	80.55%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

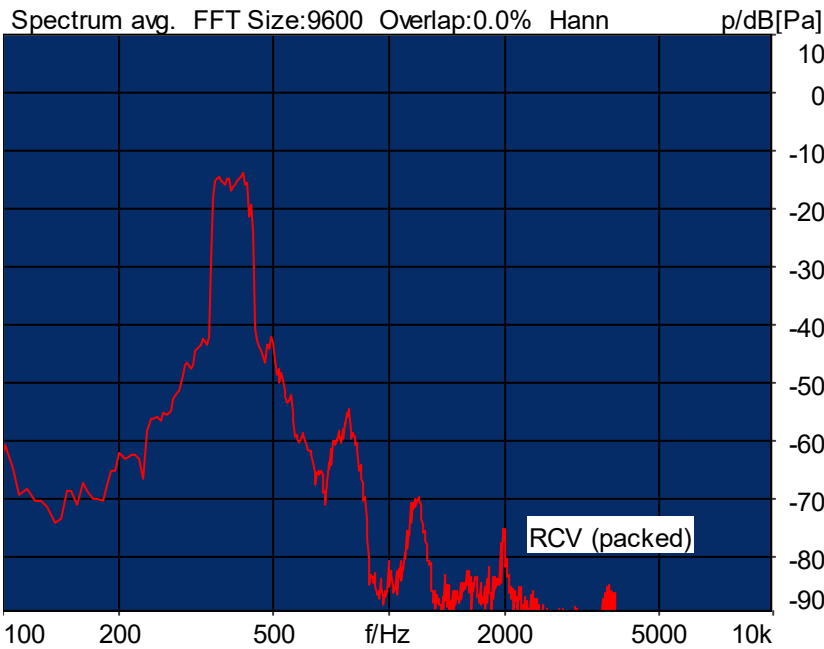
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.74 dB (2.06%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

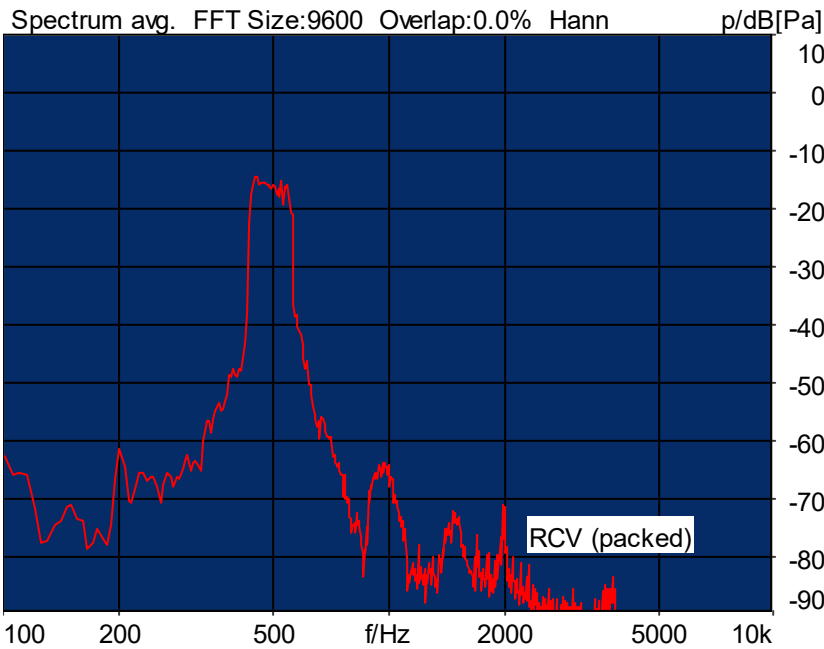
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.41 dB (1.51%) Ok

Ok

2025/12/16 22:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

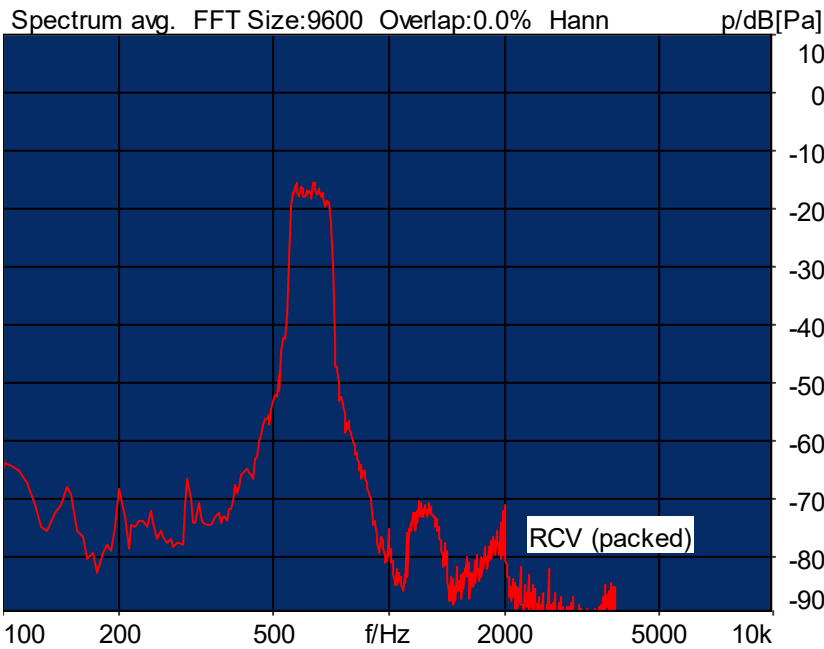
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.14 dB (0.98%) Ok

Ok

2025/12/16 22:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

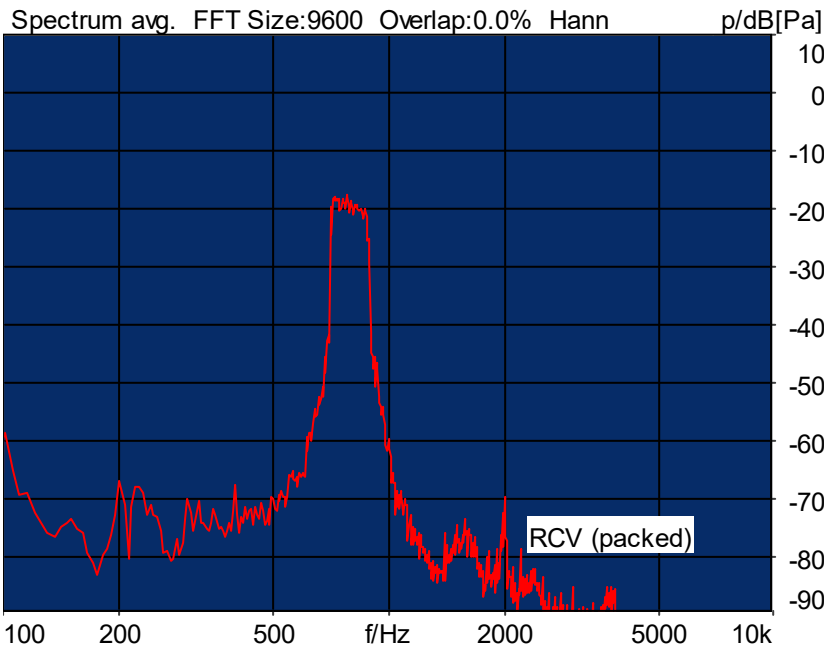
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.03 dB (1.58%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

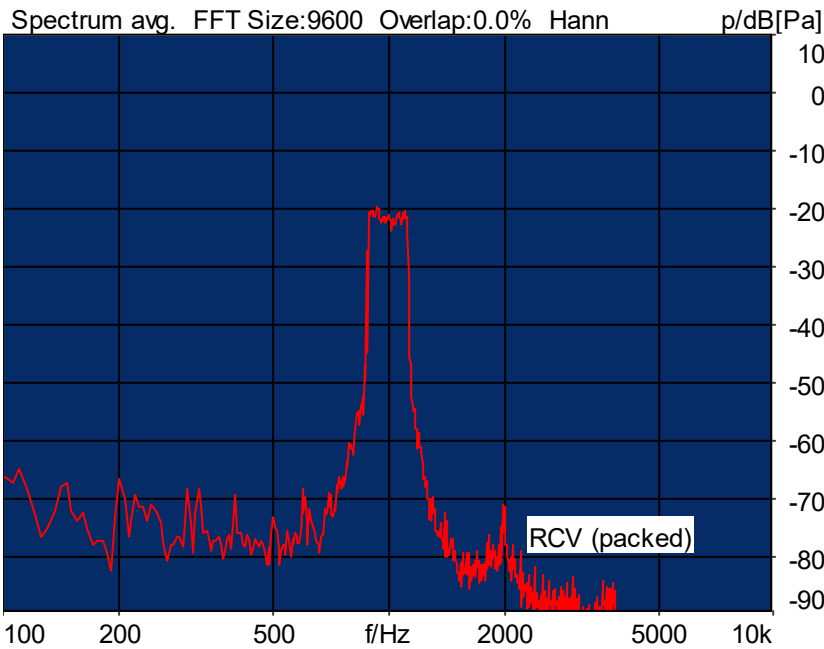
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.39 dB (1.20%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

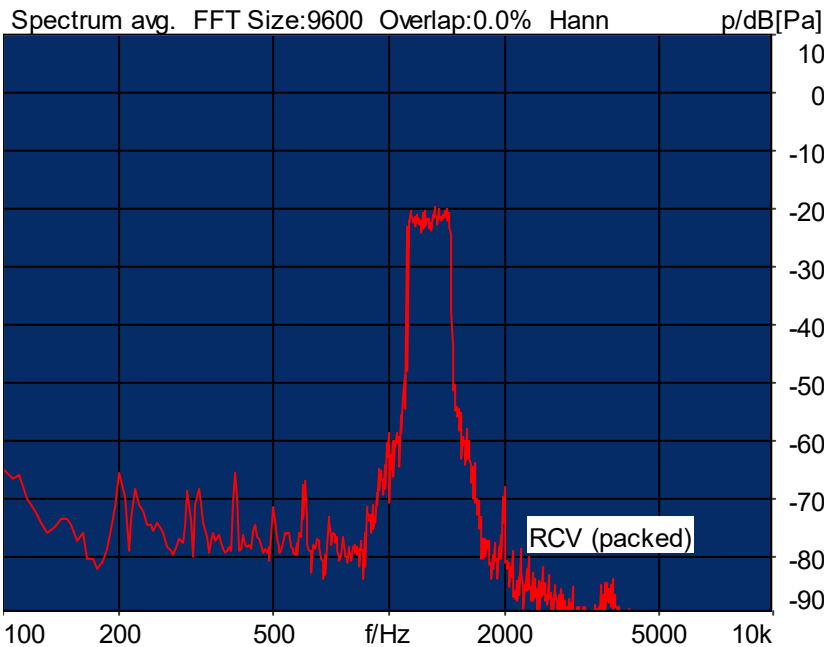
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.54 dB (2.97%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

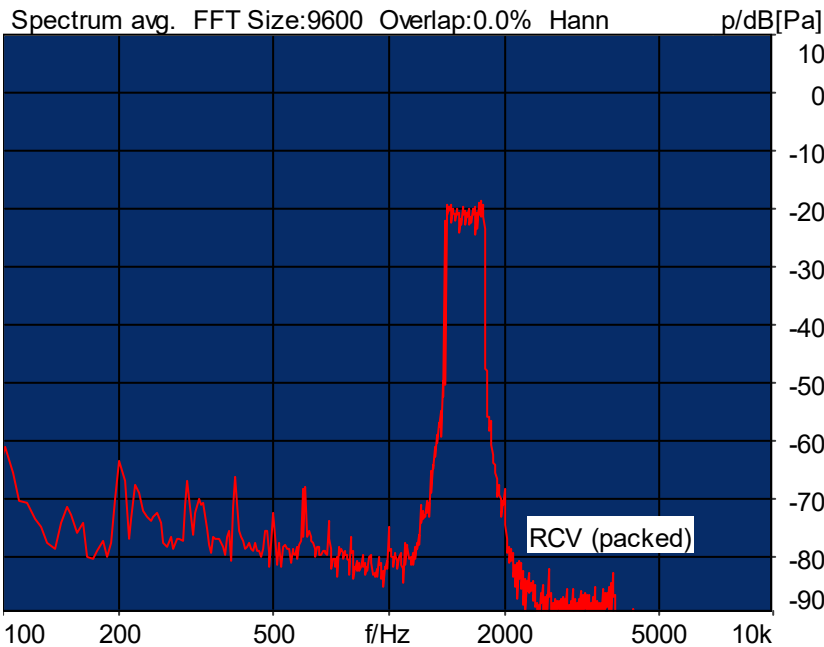
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.44 dB (0.85%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

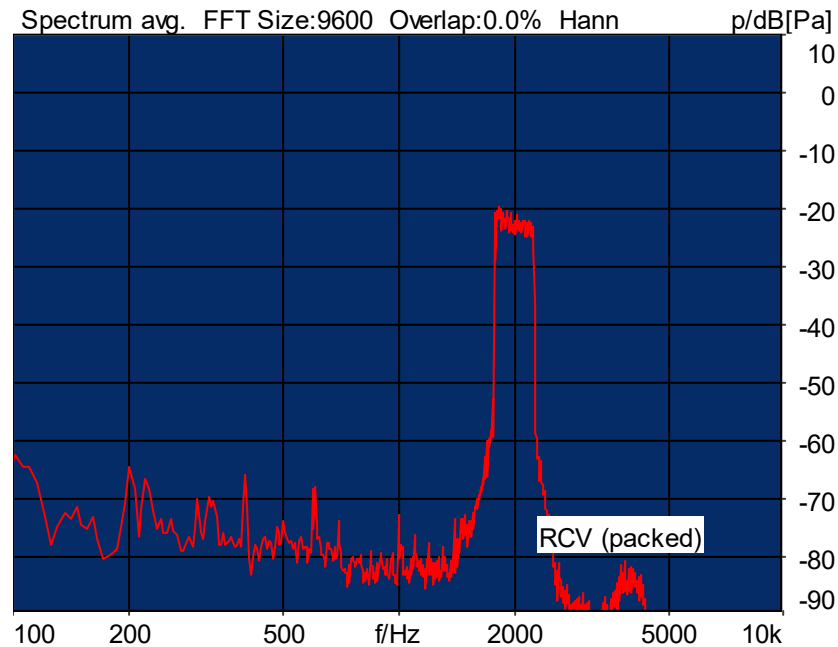
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 42.25 dB (0.77%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

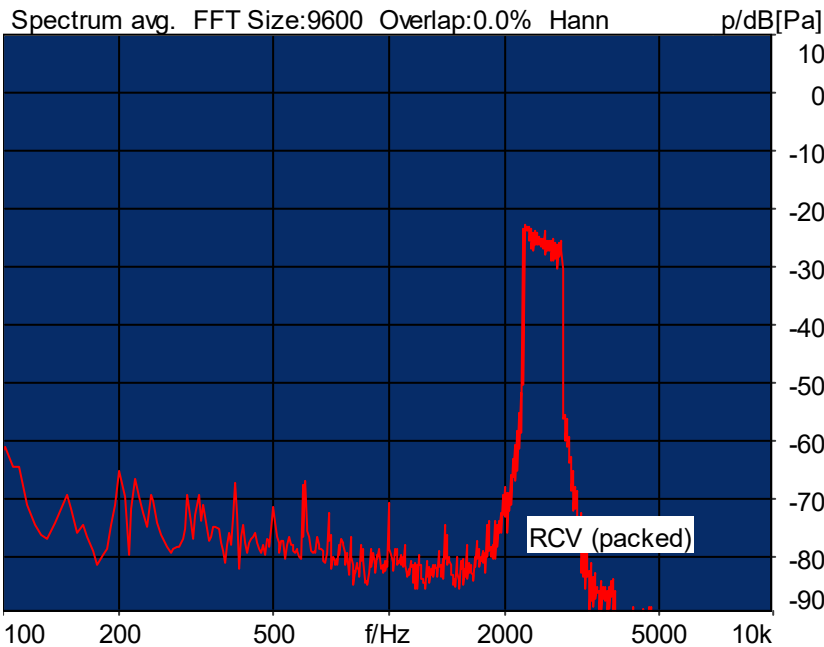
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.63 dB (1.47%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

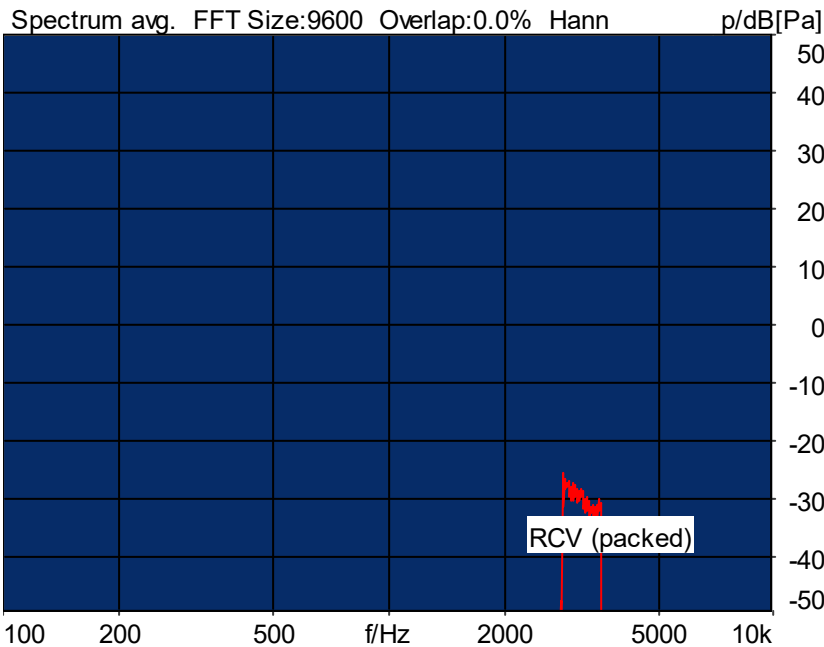
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.68 dB (2.60%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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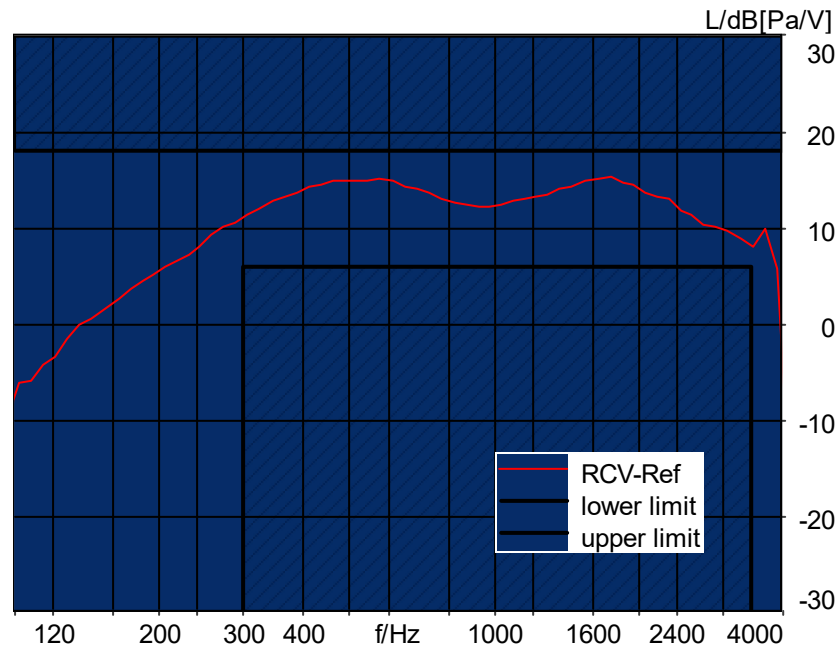
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

2.75 dB at 1747.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(41#)

Measurement Object	BL-SZ25B0732-n66
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Status Overview

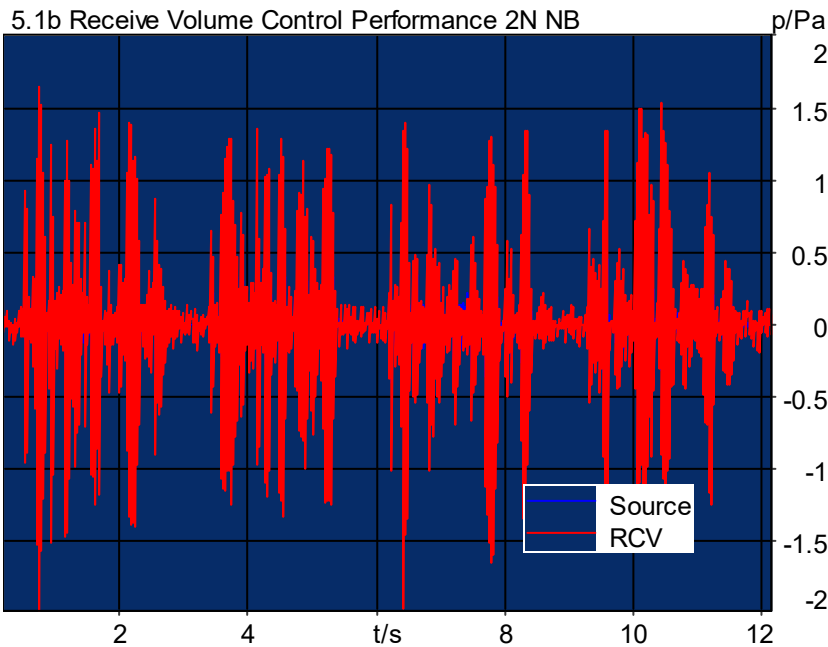
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.63	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.82	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.23	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.93	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.82	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.15	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.82	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.98	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.98	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.72	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.91	BL-SZ25B0732-n66
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 305.9 Hz	3.68	BL-SZ25B0732-n66

5.1b Receive Volume Control Performance 2N NB	1268
5.2 RCV Distortion and Noise - 400 Hz NB	1270
5.2 RCV Distortion and Noise - 500 Hz NB	1272
5.2 RCV Distortion and Noise - 630 Hz NB	1274
5.2 RCV Distortion and Noise - 800 Hz NB	1276
5.2 RCV Distortion and Noise - 1000 Hz NB	1278
5.2 RCV Distortion and Noise - 1250 Hz NB	1280
5.2 RCV Distortion and Noise - 1600 Hz NB	1282
5.2 RCV Distortion and Noise - 2000 Hz NB	1284
5.2 RCV Distortion and Noise - 2500 Hz NB	1286
5.2 RCV Distortion and Noise - 3150 Hz NB	1288
5.3 Frequency Response 2N FF HANB	1290

5.1b Receive Volume Control Performance 2N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.63 dB[SPL]	80.31%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

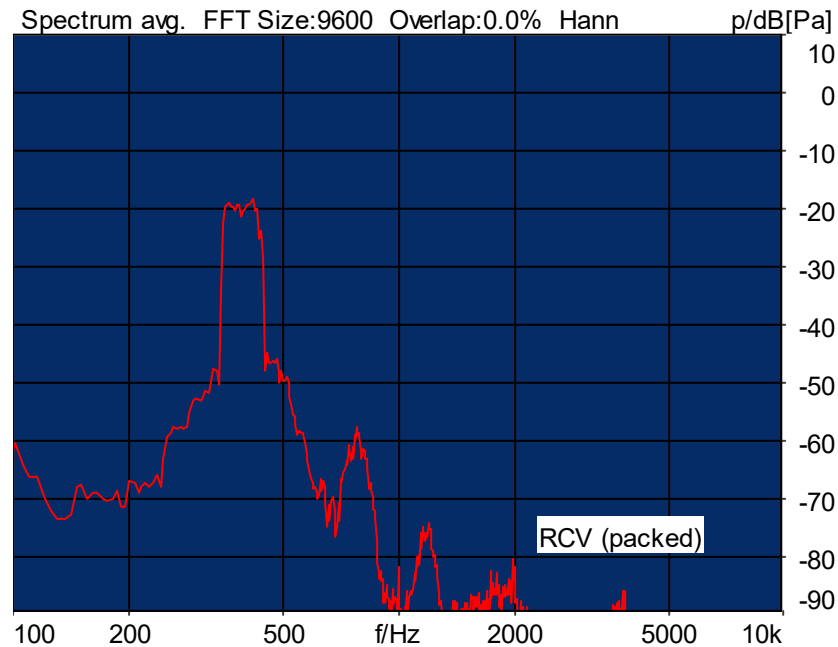
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.82 dB (2.04%) Ok

Ok

2025/12/06 9:47 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

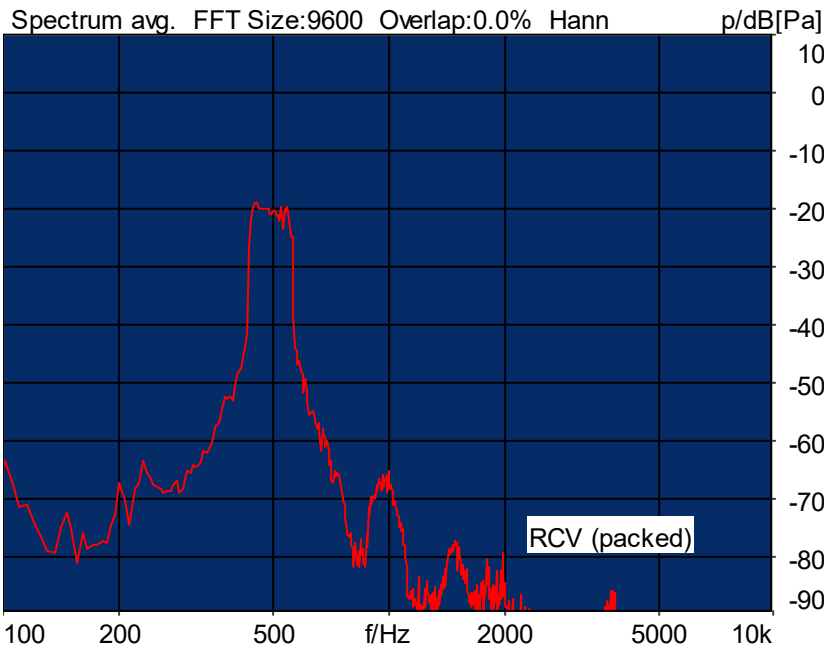
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.23 dB (1.73%) Ok

Ok

2025/12/06 9:47 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

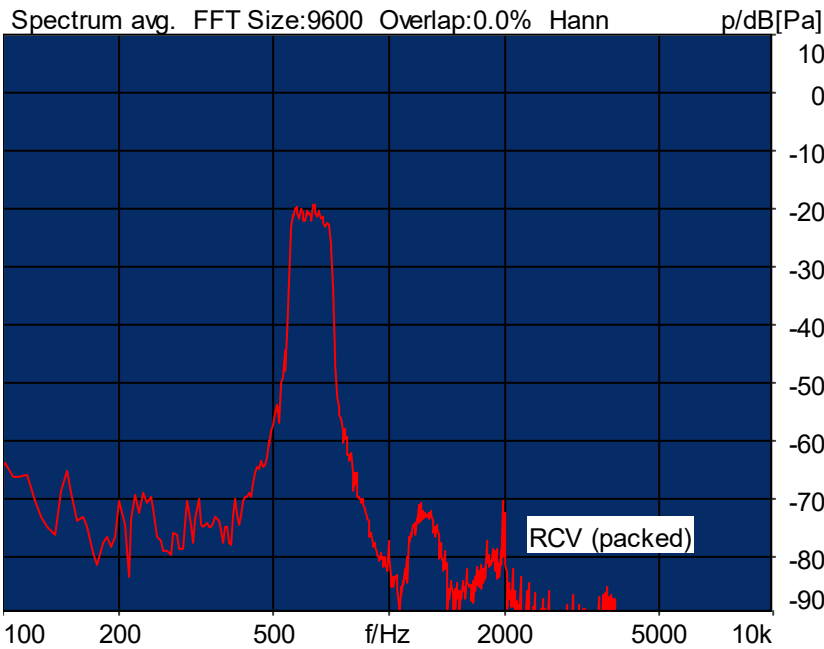
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.93 dB (1.01%) Ok

Ok

2025/12/06 9:47 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

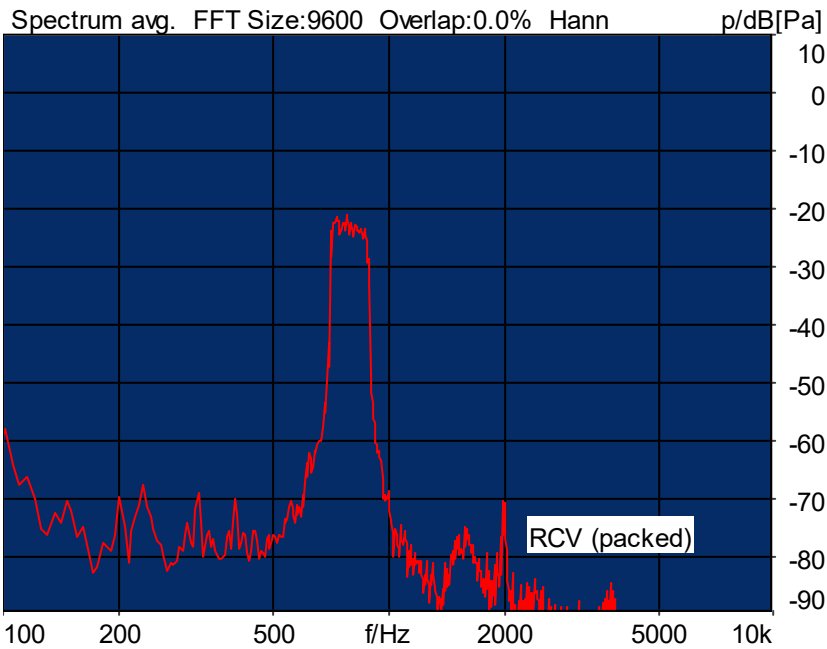
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.82 dB (0.91%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

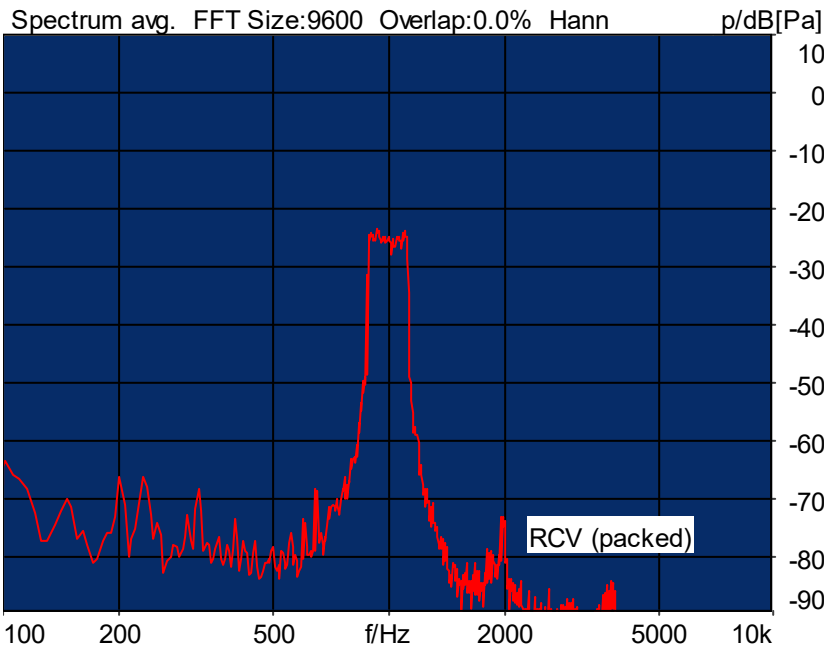
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.15 dB (1.39%) Ok

Ok

2025/12/06 9:49 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

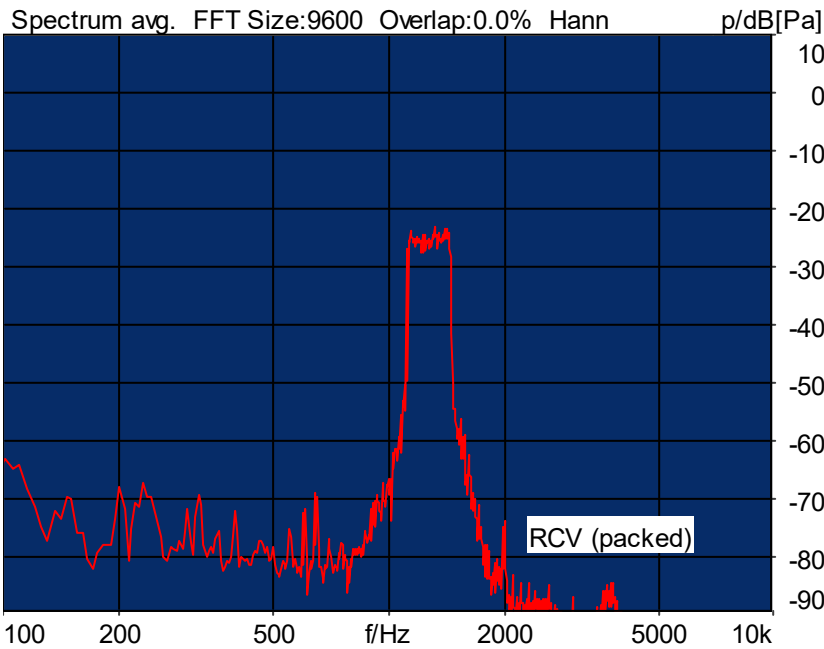
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.82 dB (2.88%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

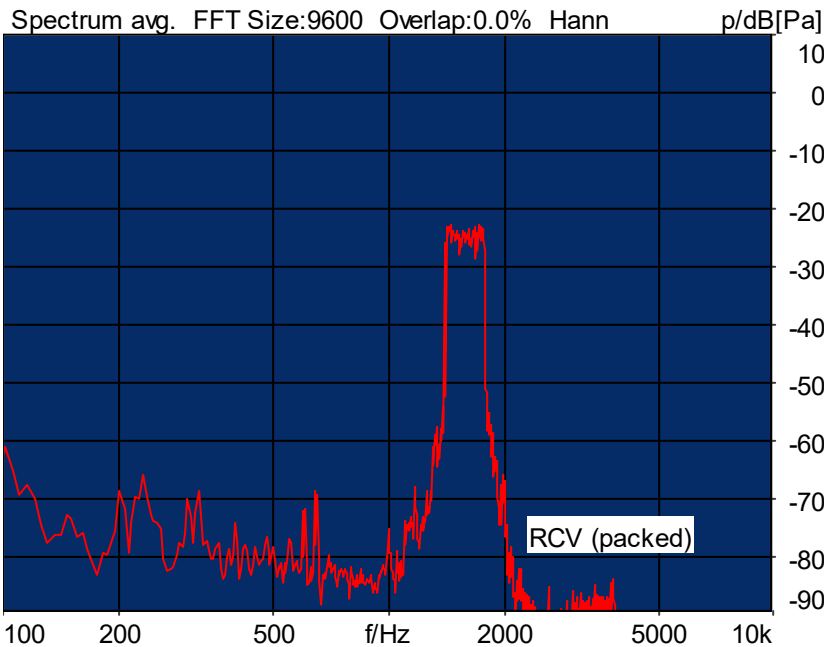
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.98 dB (1.26%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

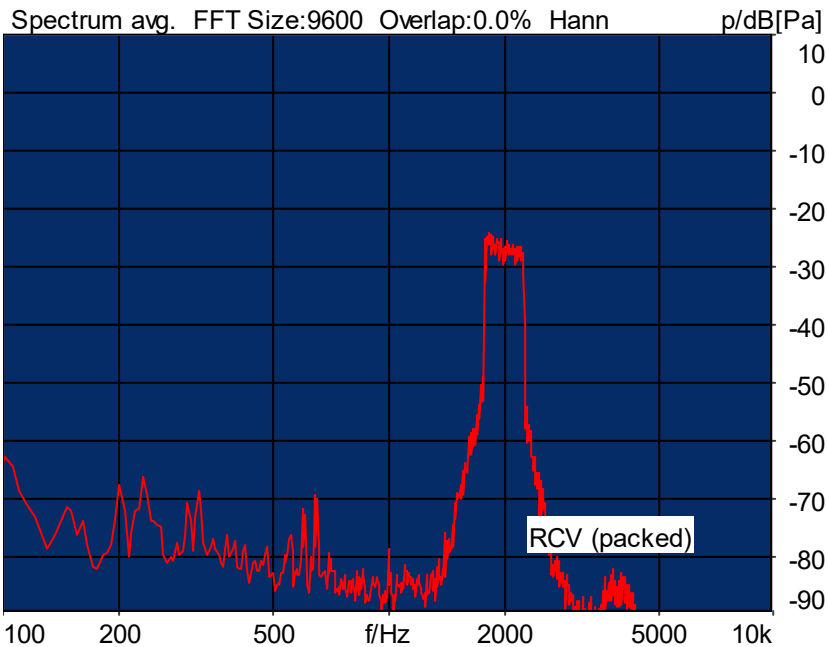
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.98 dB (2.52%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

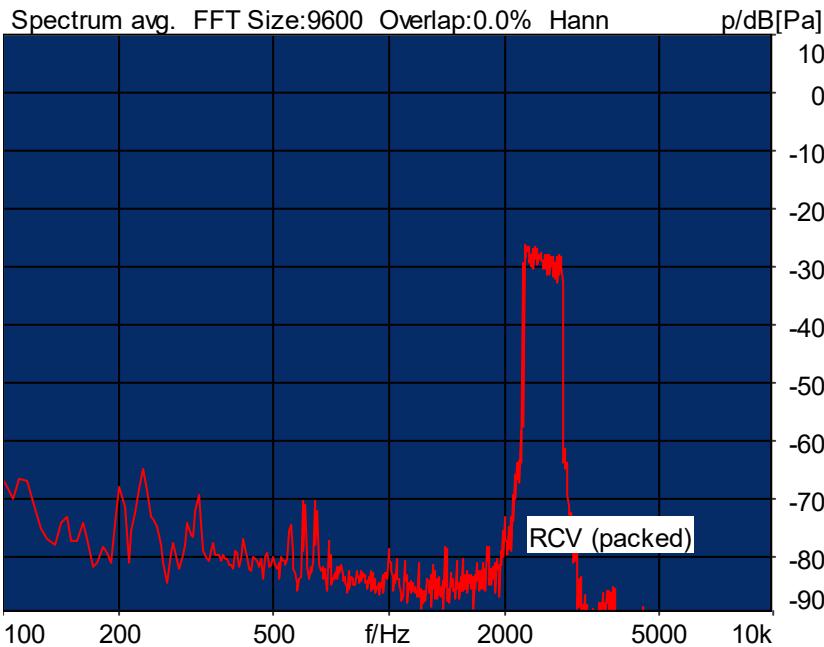
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.72 dB (1.03%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

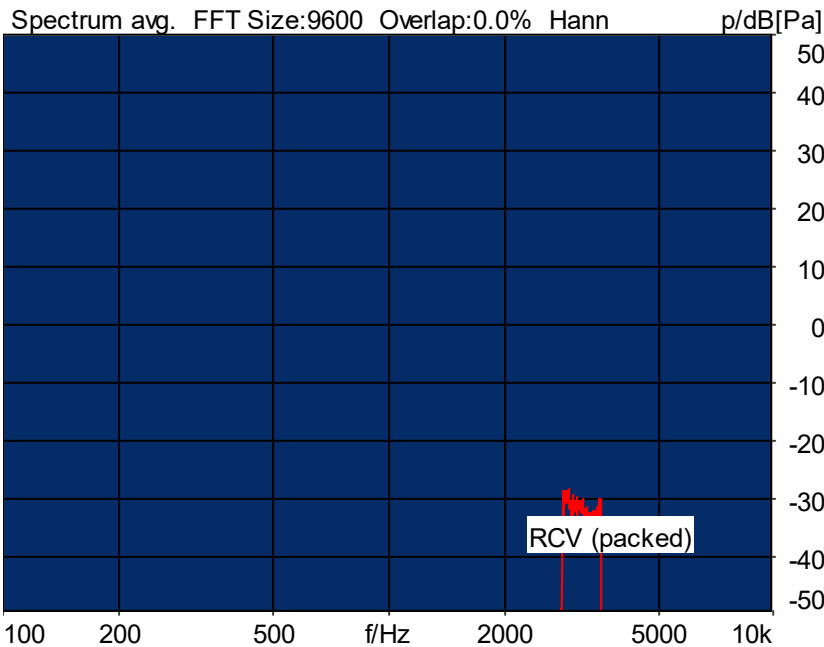
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.91 dB (2.85%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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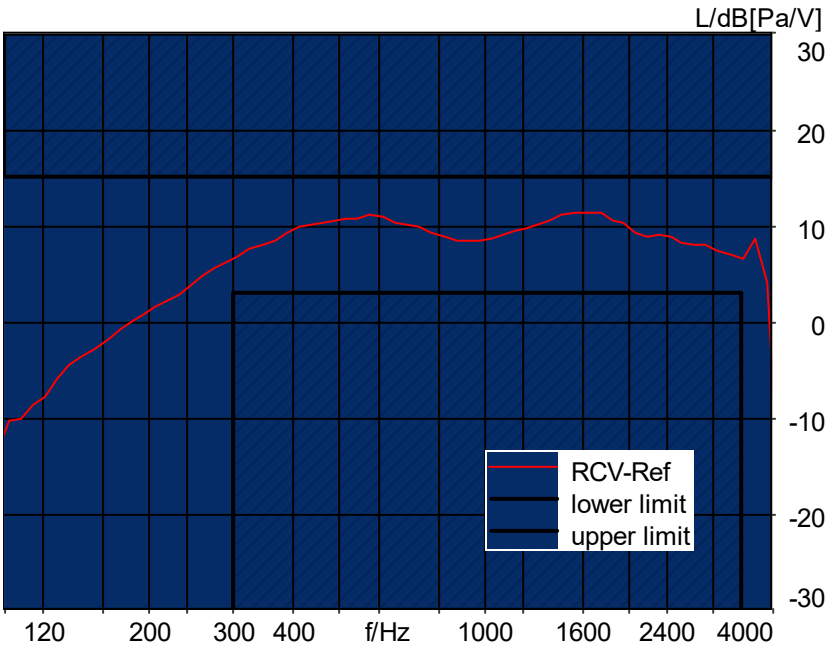
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.68 dB at 305.9 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(42#)

Measurement Object	BL-SZ25B0732-n66
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Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.47	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.54	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 315 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.67	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 400 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.55	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.20	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 630 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.90	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 800 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.19	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 1000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.31	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 1250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	23.34	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 1600 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.78	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 2000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.11	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 2500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.22	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 3150 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.85	BL-SZ25B0732-n66
5.2 RCV Distortion and Noise - 4000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.25	BL-SZ25B0732-n66

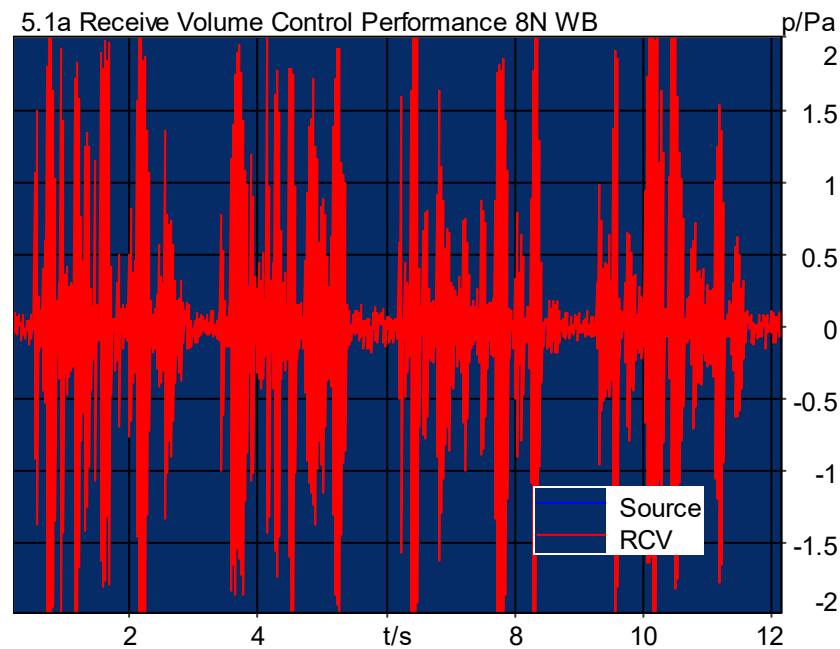
5.2 RCV Distortion and Noise - 5000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.53	BL-SZ25B073 2-n66
5.3 Frequency Response 8N FF	Ok	Min. dist. to tolerance scheme [dB], 462.0 Hz	2.71	BL-SZ25B073 2-n66

5.1a Receive Volume Control Performance 8N WB	1296
5.2 RCV Distortion and Noise - 250 Hz WB	1298
5.2 RCV Distortion and Noise - 315 Hz WB	1300
5.2 RCV Distortion and Noise - 400 Hz WB	1302
5.2 RCV Distortion and Noise - 500 Hz WB	1304
5.2 RCV Distortion and Noise - 630 Hz WB	1306
5.2 RCV Distortion and Noise - 800 Hz WB	1308
5.2 RCV Distortion and Noise - 1000 Hz WB	1310
5.2 RCV Distortion and Noise - 1250 Hz WB	1312
5.2 RCV Distortion and Noise - 1600 Hz WB	1314
5.2 RCV Distortion and Noise - 2000 Hz WB	1316
5.2 RCV Distortion and Noise - 2500 Hz WB	1318
5.2 RCV Distortion and Noise - 3150 Hz WB	1320
5.2 RCV Distortion and Noise - 4000 Hz WB	1322
5.2 RCV Distortion and Noise - 5000 Hz WB	1324
5.3 Frequency Response 8N FF	1326

5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.47 dB[SPL]	80.31%	Ok

Ok

2025/12/06 10:32 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

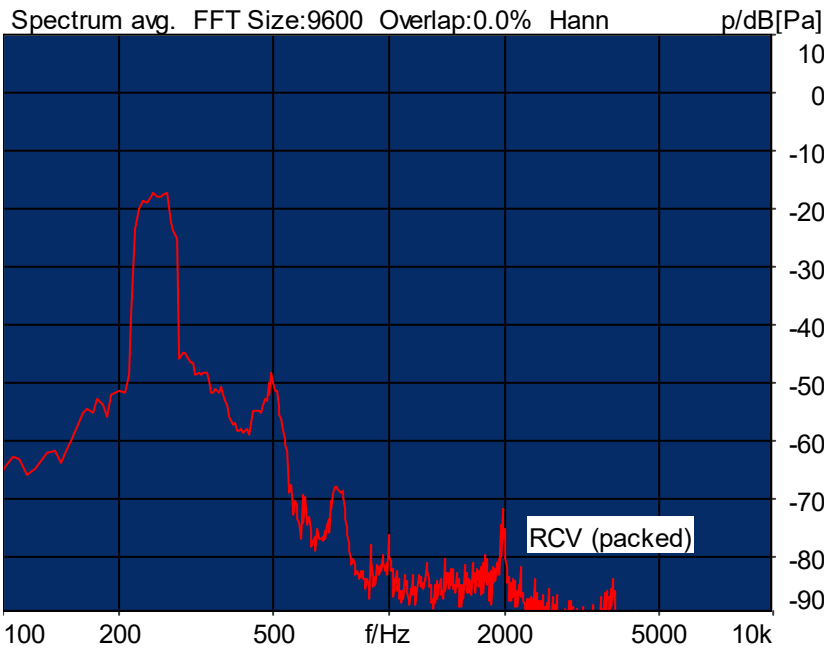
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.54 dB (2.36%) Ok

Ok

2025/12/06 10:38 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_250hz_sr20dbm0_v02.dat.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	190.0 Hz	Stimulus max.	315.0 Hz
Analysis min.	20.0 Hz	Analysis max.	185.0 Hz
Analysis (2) min.	320.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_250Hz

Hardware Config Settings

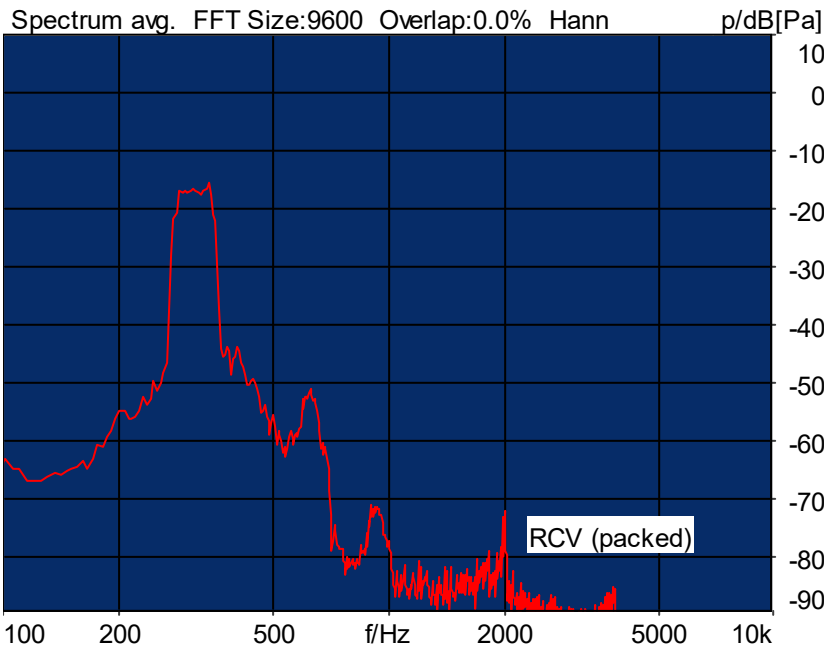
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 315 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.67 dB (2.32%) Ok

Ok

2025/12/06 10:39 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_315hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	245.0 Hz	Stimulus max.	390.0 Hz
Analysis min.	20.0 Hz	Analysis max.	240.0 Hz
Analysis (2) min.	395.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_315Hz

Hardware Config Settings

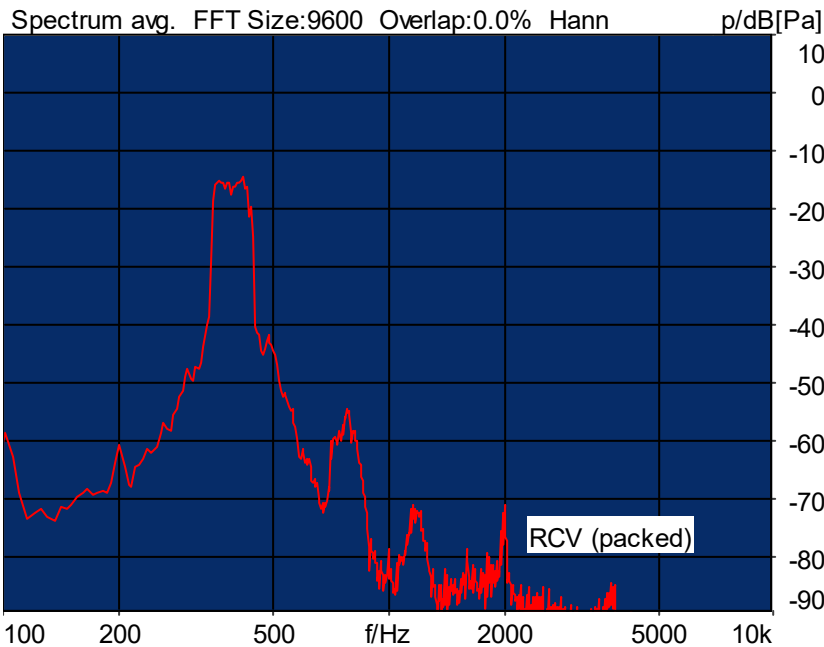
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 33.55 dB (2.10%) Ok

Ok

2025/12/06 10:39 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_400Hz

Hardware Config Settings

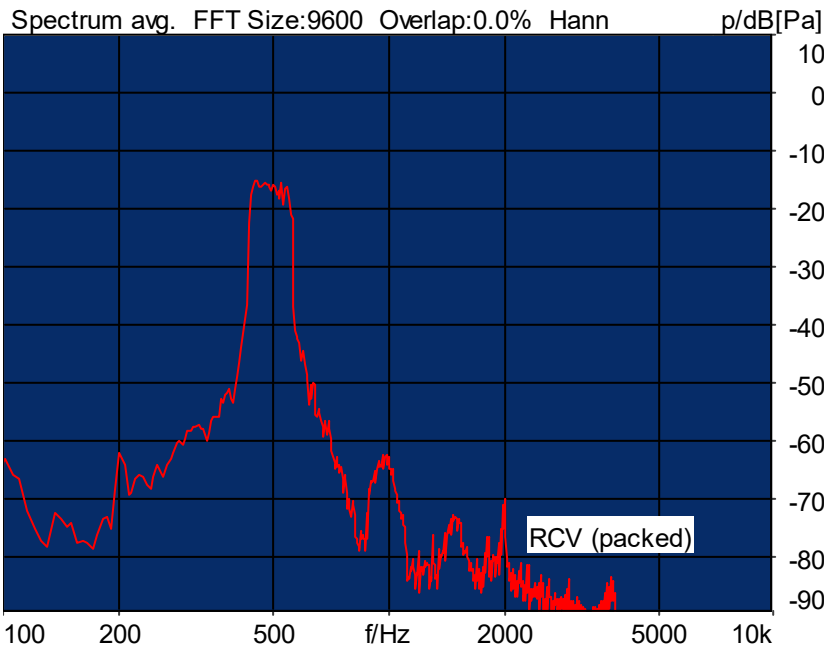
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.20 dB (1.55%) Ok

Ok

2025/12/06 10:40 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_500Hz

Hardware Config Settings

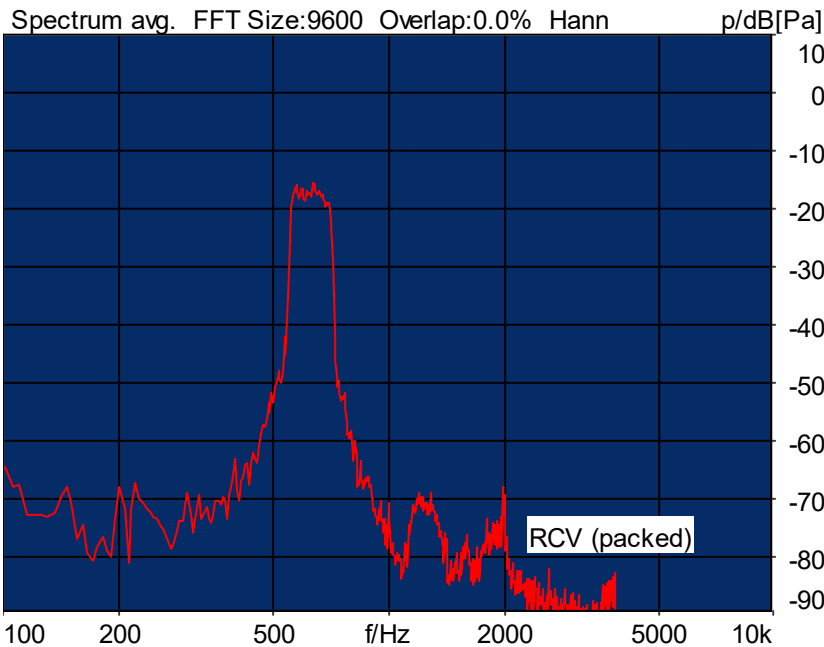
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 38.90 dB (1.14%) Ok

Ok

2025/12/06 10:40 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_630Hz

Hardware Config Settings

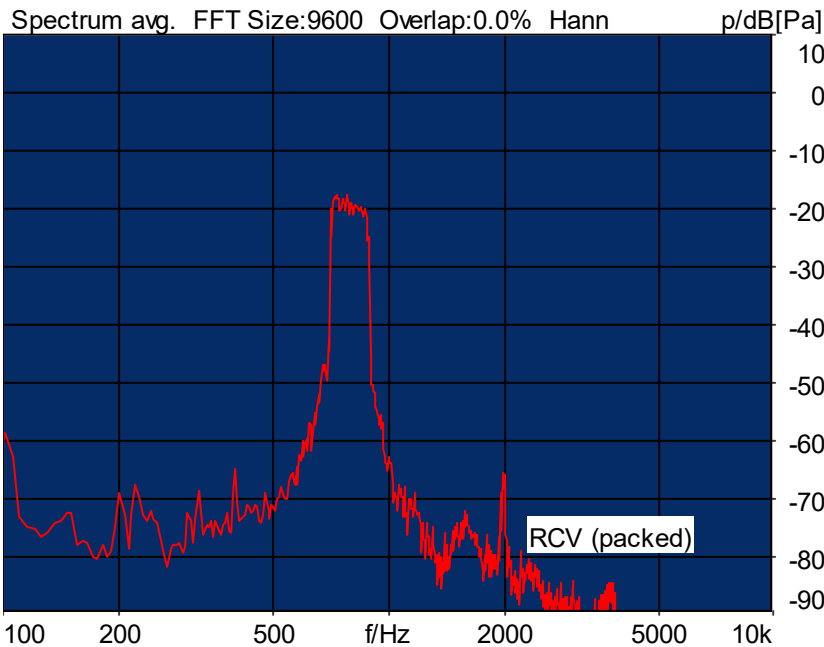
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 38.19 dB (1.23%) Ok

Ok

2025/12/06 10:40 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_800Hz

Hardware Config Settings

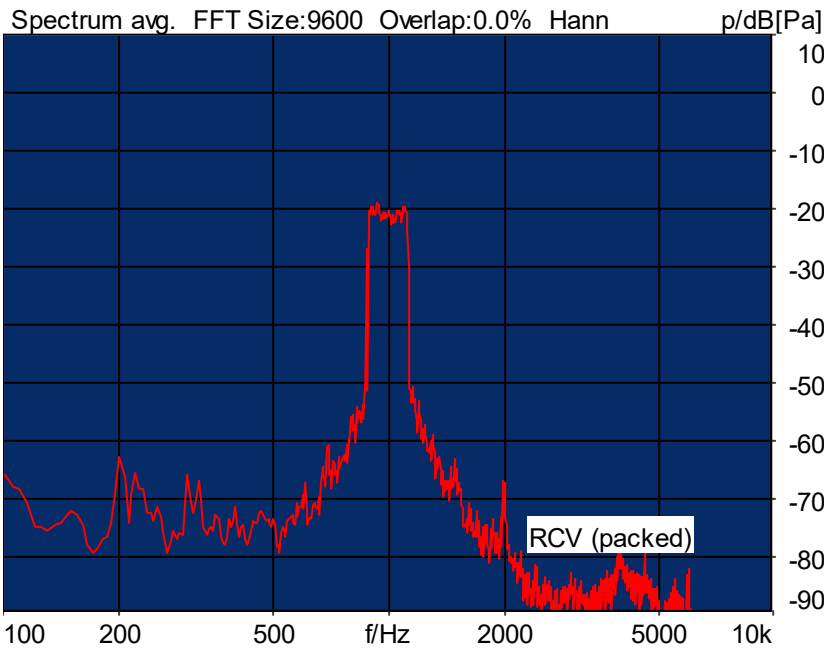
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 35.31 dB (1.72%) Ok

Ok

2025/12/06 10:41 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1000Hz

Hardware Config Settings

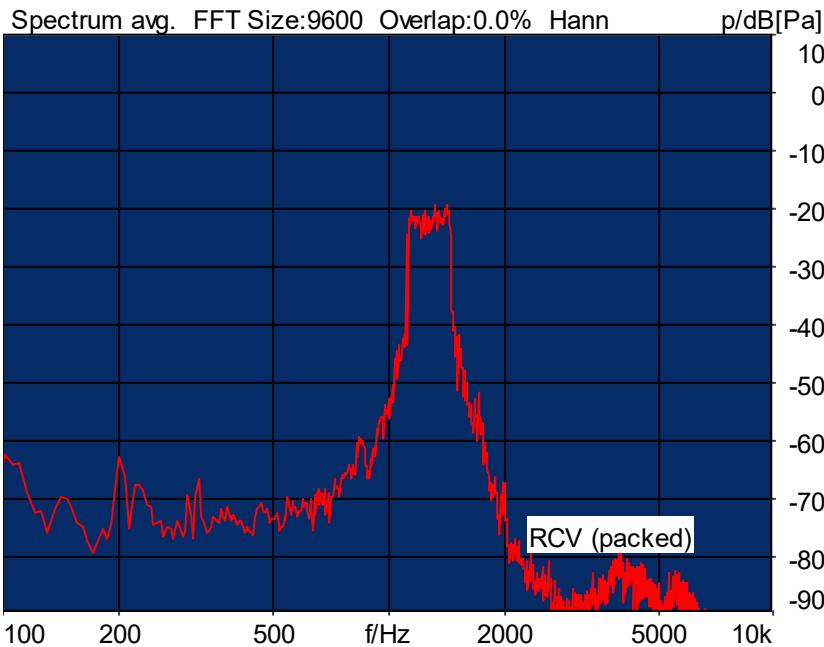
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 23.34 dB (6.81%) Ok

Ok

2025/12/06 10:41 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1250Hz

Hardware Config Settings

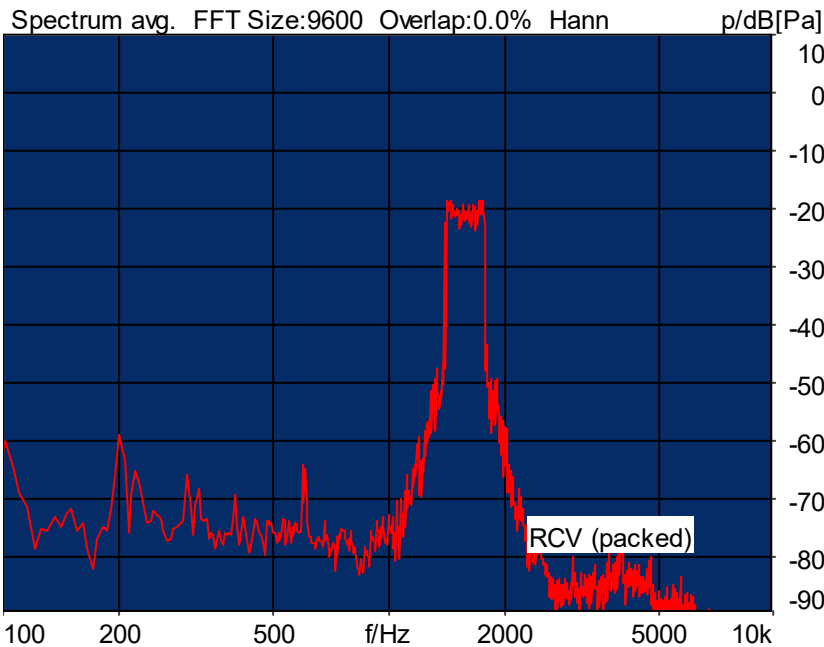
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.78 dB (2.30%) Ok

Ok

2025/12/06 10:41 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1600Hz

Hardware Config Settings

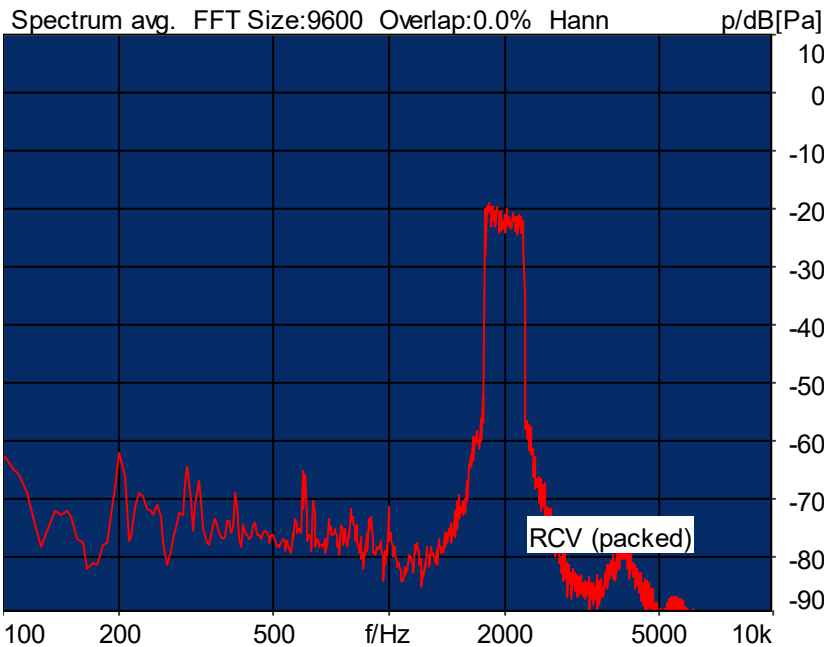
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 39.11 dB (1.11%) Ok

Ok

2025/12/06 10:42 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2000Hz

Hardware Config Settings

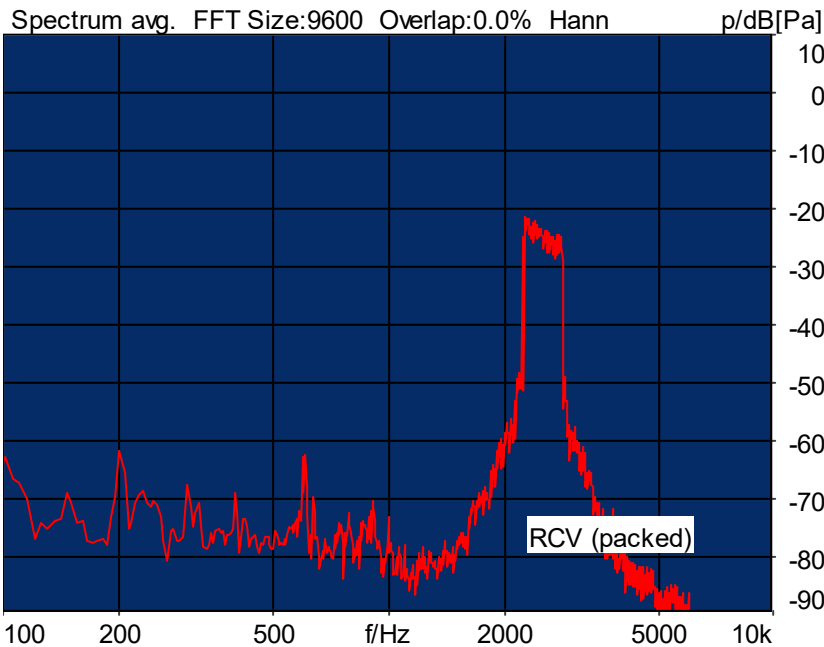
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 30.22 dB (3.08%) Ok

Ok

2025/12/06 10:42 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2500Hz

Hardware Config Settings

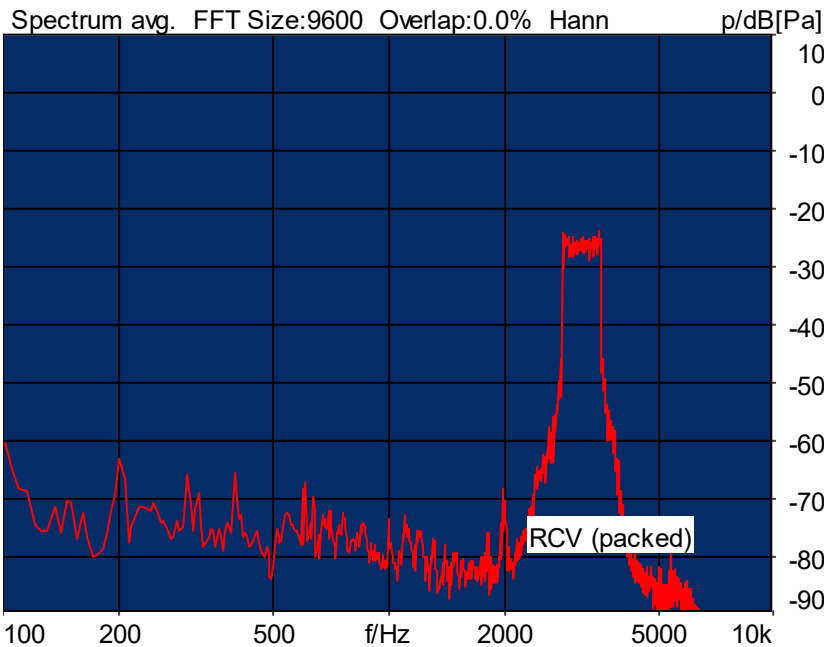
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 28.85 dB (3.61%) Ok

Ok

2025/12/06 10:43 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_3150Hz

Hardware Config Settings

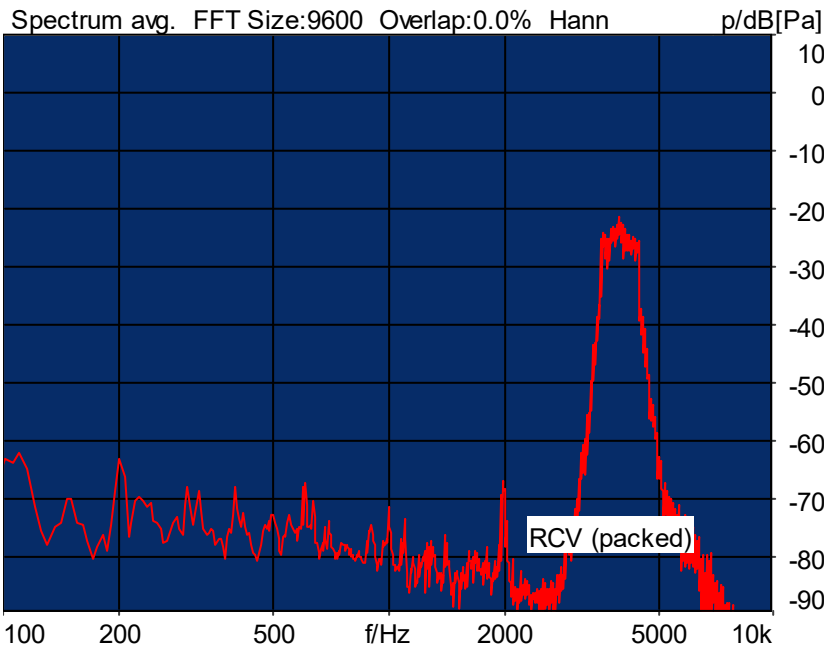
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 4000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 20.25 dB (9.72%) Ok

Ok

2025/12/06 10:43 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_4000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	3515.0 Hz	Stimulus max.	4500.0 Hz
Analysis min.	20.0 Hz	Analysis max.	3510.0 Hz
Analysis (2) min.	4505.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_4000Hz

Hardware Config Settings

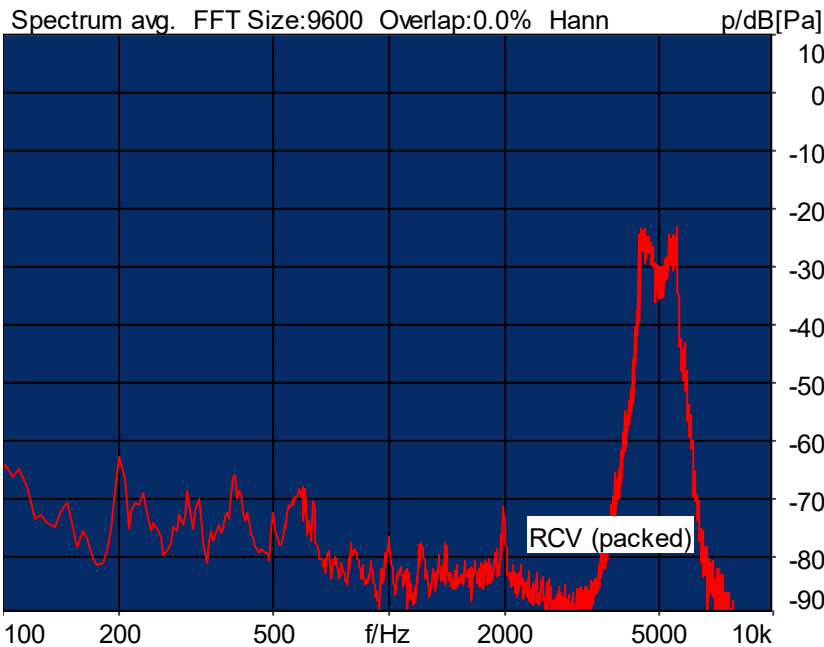
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 5000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 20.53 dB (9.40%) Ok

Ok

2025/12/06 10:44 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_5000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	4430.0 Hz	Stimulus max.	5660.0 Hz
Analysis min.	20.0 Hz	Analysis max.	4425.0 Hz
Analysis (2) min.	5665.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_5000Hz

Hardware Config Settings

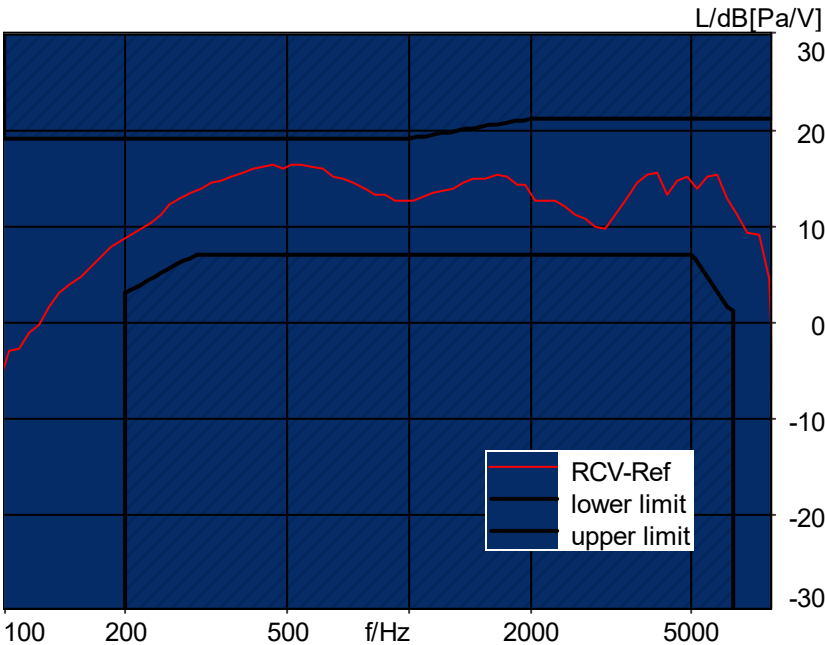
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF

TIA-5050 (2018-01) \ Measurements \ Wideband
EVS-WB-128



Absolute minimal distance
2.71 dB at 462.0 Hz Ok

Ok

2025/12/06 10:44 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_wb_r20_v01.dat

Level adjustment Channel 1 Gain -90.00 dB

WIDEBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -22,2 dBV, margin 15.9 dB +

Pause till end of file

Signal level (ch2): -22,2 dBV Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 8.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hawb.fft

Tol. scheme file 521_rcv_frq_man_hawb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 8000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(43#)

Measurement Object	BL-SZ25B0732-N71
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Status Overview

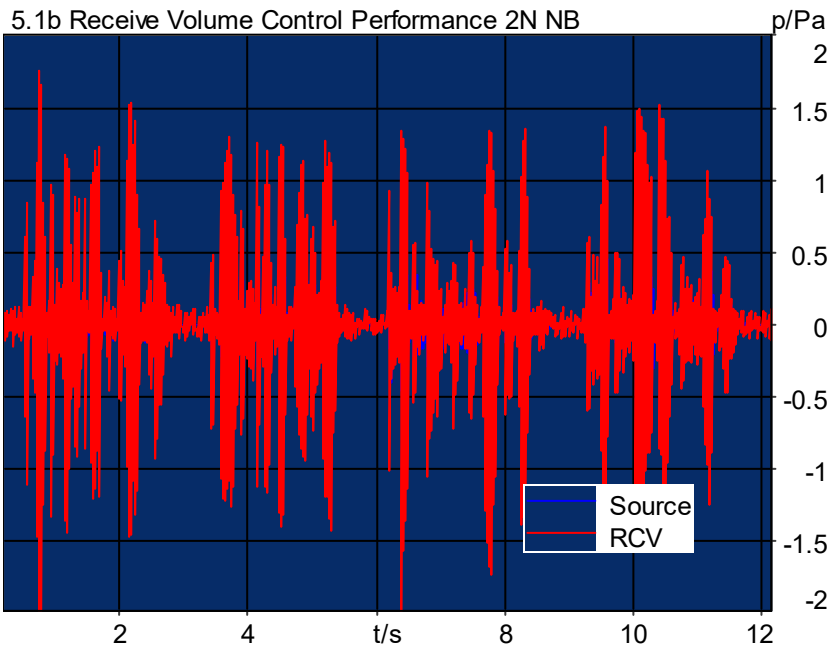
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.93	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.56	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.71	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.29	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.70	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.48	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.63	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.79	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.31	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.92	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.24	BL-SZ25B0732-N71
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3245.6 Hz	3.77	BL-SZ25B0732-N71

5.1b Receive Volume Control Performance 2N NB	1332
5.2 RCV Distortion and Noise - 400 Hz NB	1334
5.2 RCV Distortion and Noise - 500 Hz NB	1336
5.2 RCV Distortion and Noise - 630 Hz NB	1338
5.2 RCV Distortion and Noise - 800 Hz NB	1340
5.2 RCV Distortion and Noise - 1000 Hz NB	1342
5.2 RCV Distortion and Noise - 1250 Hz NB	1344
5.2 RCV Distortion and Noise - 1600 Hz NB	1346
5.2 RCV Distortion and Noise - 2000 Hz NB	1348
5.2 RCV Distortion and Noise - 2500 Hz NB	1350
5.2 RCV Distortion and Noise - 3150 Hz NB	1352
5.3 Frequency Response 2N FF HANB	1354

5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.93 dB[SPL]	80.59%	Ok

Ok

2025/12/17 0:56 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

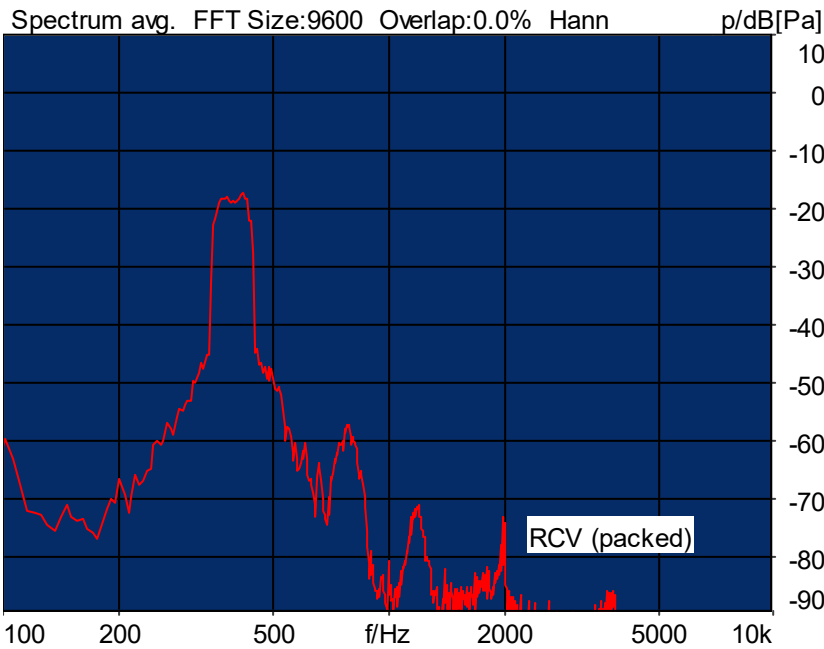
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.56 dB (1.87%) Ok

Ok

2025/12/17 0:57 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

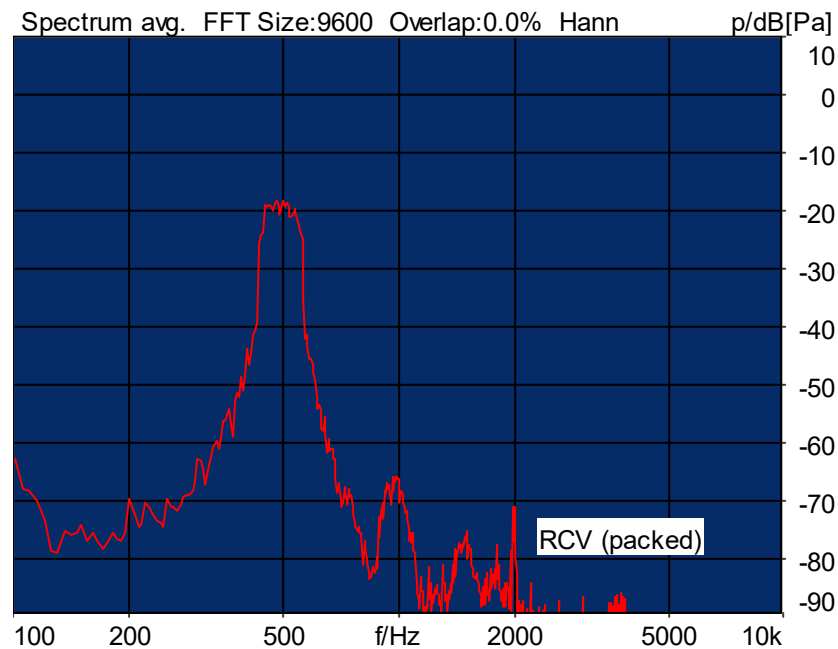
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.71 dB (1.64%) Ok

Ok

2025/12/17 1:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

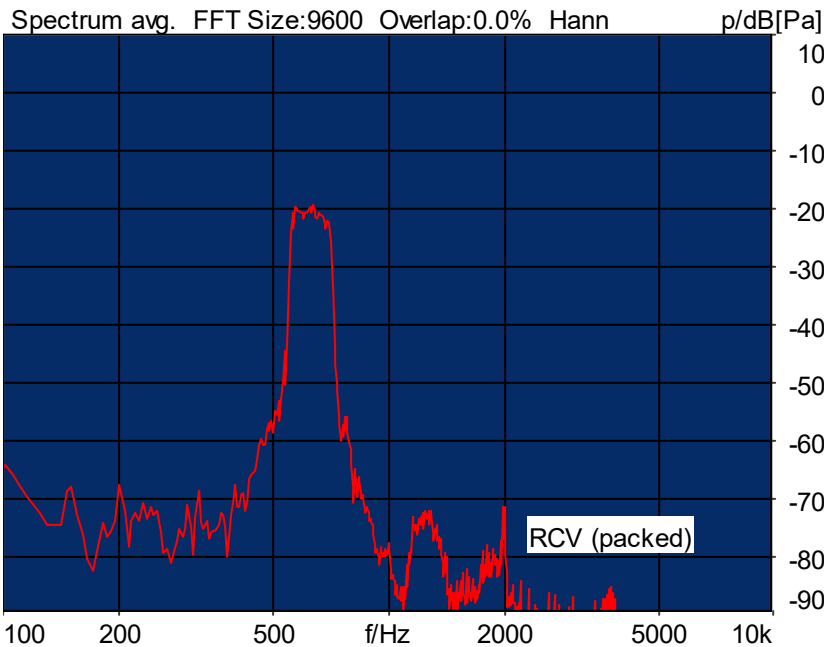
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.29 dB (1.09%) Ok

Ok

2025/12/17 0:57 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

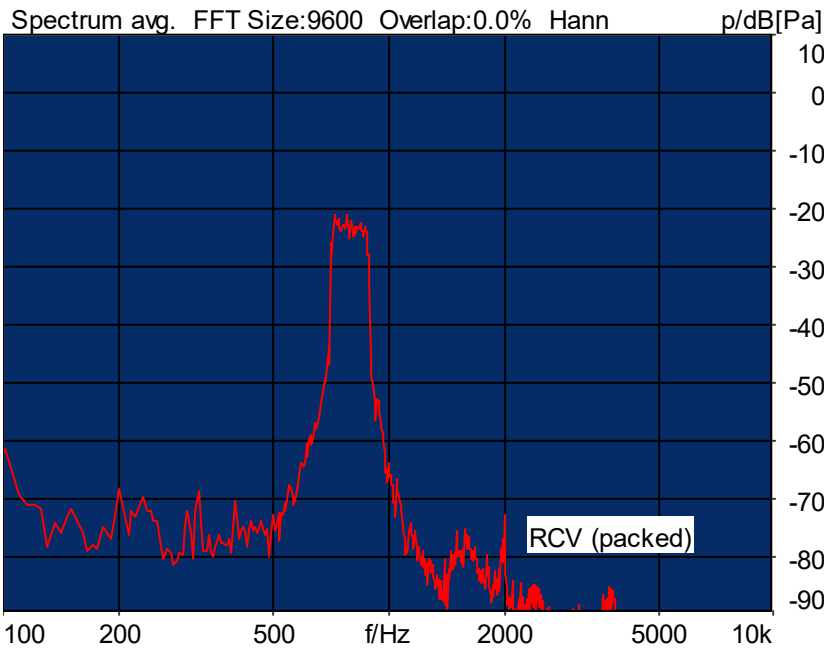
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.70 dB (1.64%) Ok

Ok

2025/12/17 0:58 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

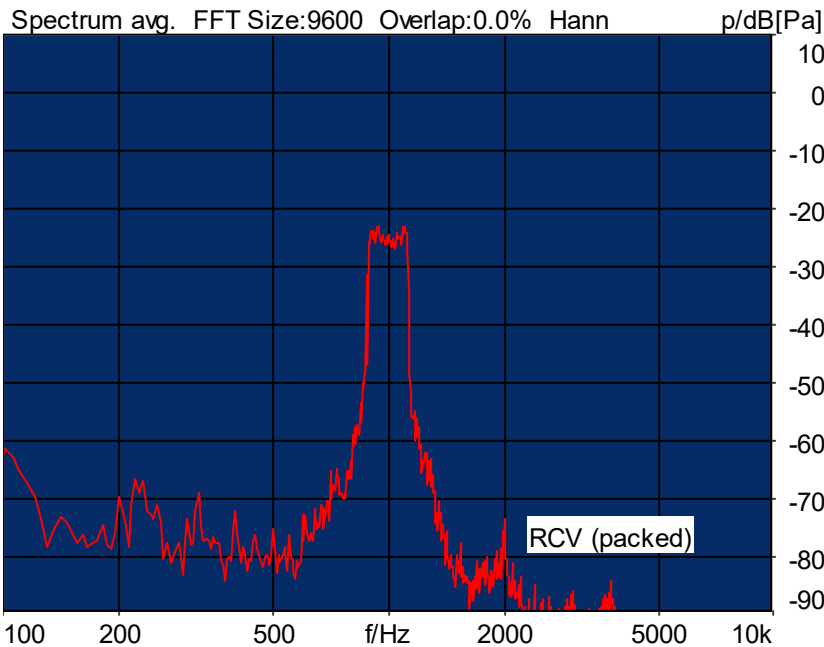
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.48 dB (1.68%) Ok

Ok

2025/12/17 0:58 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

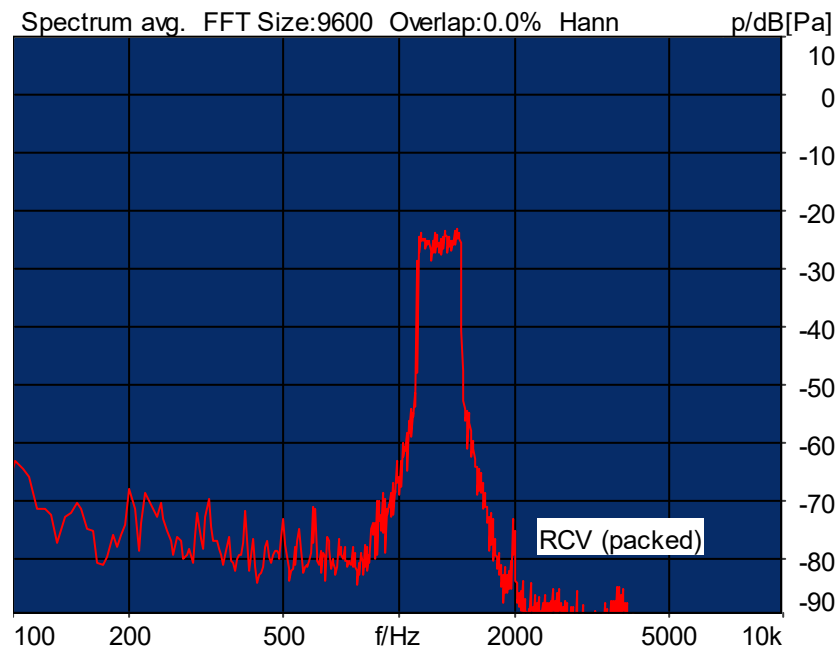
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.63 dB (3.30%) Ok

Ok

2025/12/17 0:58 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

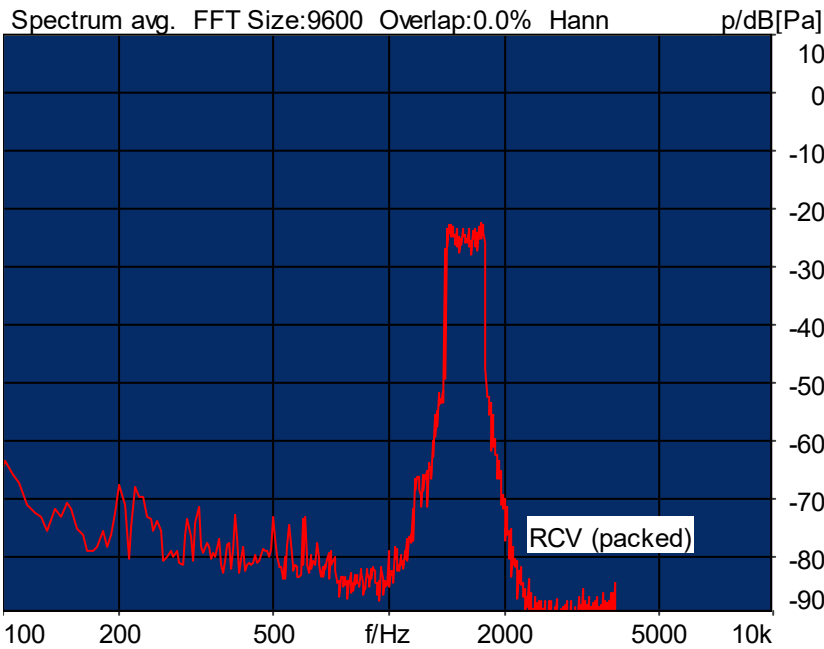
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.79 dB (2.04%) Ok

Ok

2025/12/17 0:59 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

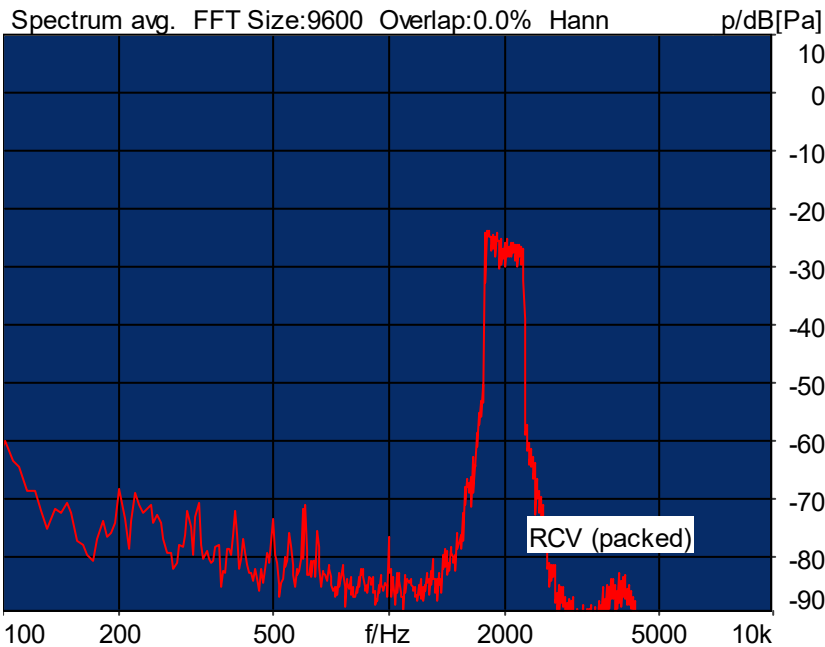
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.31 dB (1.72%) Ok

Ok

2025/12/17 0:59 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

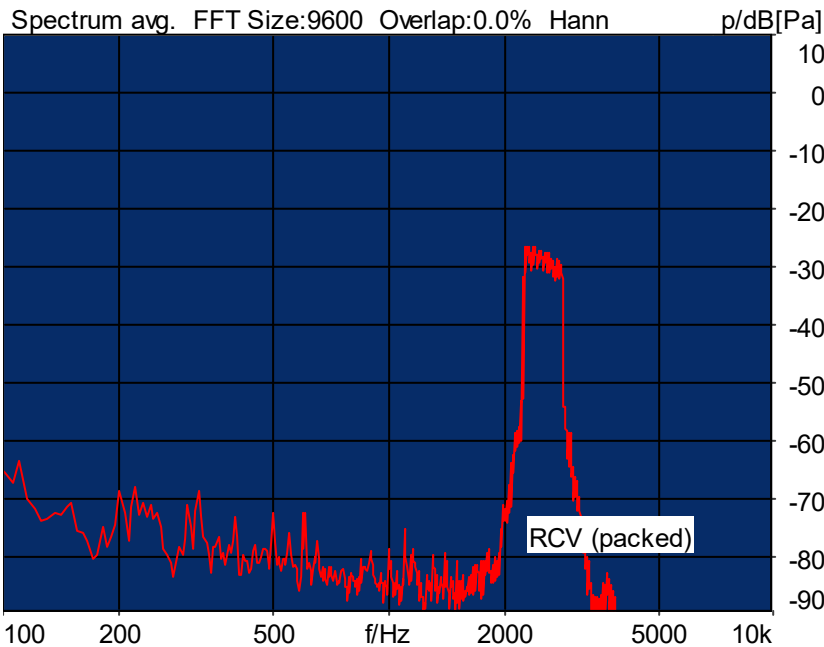
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.92 dB (2.26%) Ok

Ok

2025/12/17 1:00 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

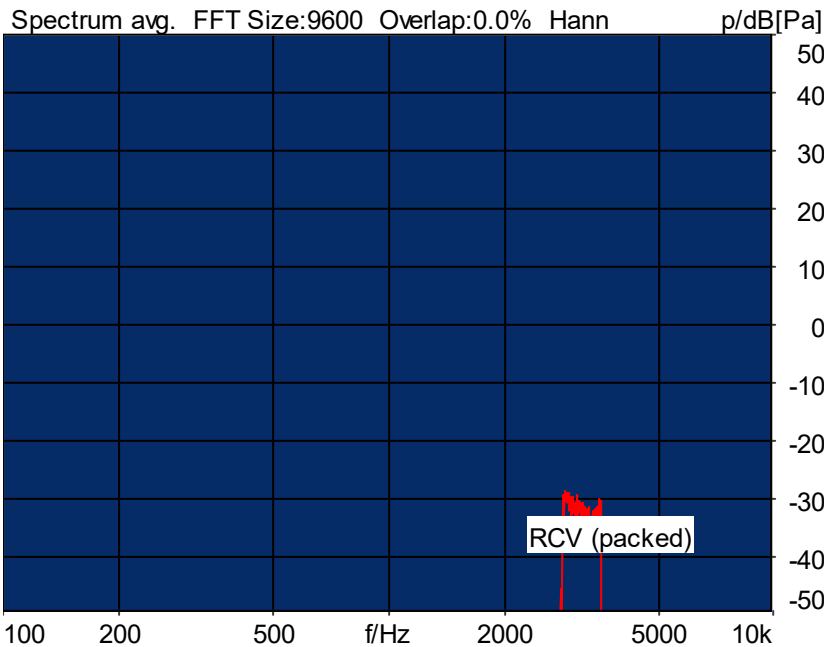
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.24 dB (2.74%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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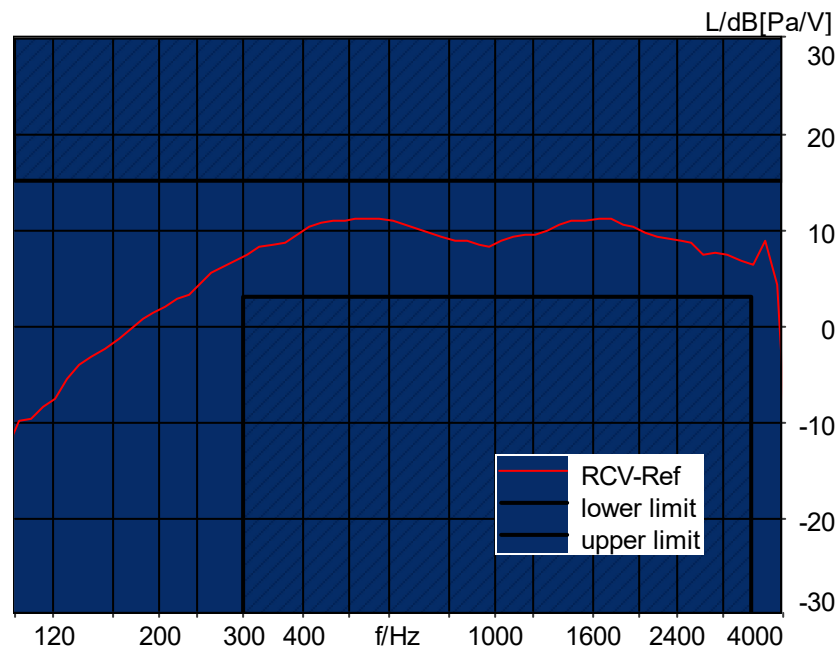
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.77 dB at 3245.6 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(44#)

Measurement Object	BL-SZ25B0732-N71
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Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.63	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.88	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 315 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.86	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 400 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.70	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.43	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 630 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.60	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 800 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.47	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 1000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.40	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 1250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.59	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 1600 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.23	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 2000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.30	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 2500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.46	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 3150 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.50	BL-SZ25B0732-N71
5.2 RCV Distortion and Noise - 4000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	22.00	BL-SZ25B0732-N71

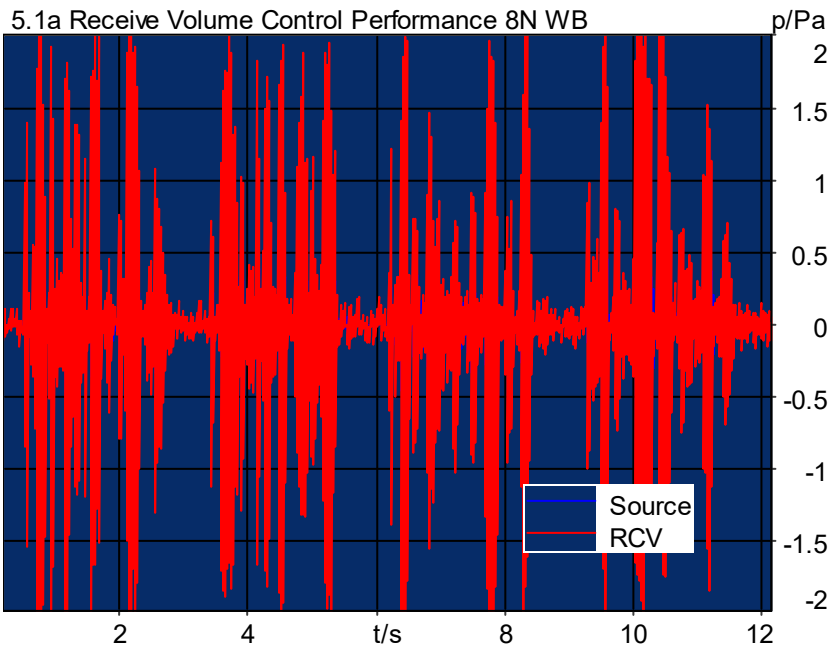
5.2 RCV Distortion and Noise - 5000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.04	BL-SZ25B073 2-N71
5.3 Frequency Response 8N FF	Ok	Min. dist. to tolerance scheme [dB], 462.0 Hz	2.98	BL-SZ25B073 2-N71

5.1a Receive Volume Control Performance 8N WB	1360
5.2 RCV Distortion and Noise - 250 Hz WB	1362
5.2 RCV Distortion and Noise - 315 Hz WB	1364
5.2 RCV Distortion and Noise - 400 Hz WB	1366
5.2 RCV Distortion and Noise - 500 Hz WB	1368
5.2 RCV Distortion and Noise - 630 Hz WB	1370
5.2 RCV Distortion and Noise - 800 Hz WB	1372
5.2 RCV Distortion and Noise - 1000 Hz WB	1374
5.2 RCV Distortion and Noise - 1250 Hz WB	1376
5.2 RCV Distortion and Noise - 1600 Hz WB	1378
5.2 RCV Distortion and Noise - 2000 Hz WB	1380
5.2 RCV Distortion and Noise - 2500 Hz WB	1382
5.2 RCV Distortion and Noise - 3150 Hz WB	1384
5.2 RCV Distortion and Noise - 4000 Hz WB	1386
5.2 RCV Distortion and Noise - 5000 Hz WB	1388
5.3 Frequency Response 8N FF	1390

5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.63 dB[SPL]	80.40%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

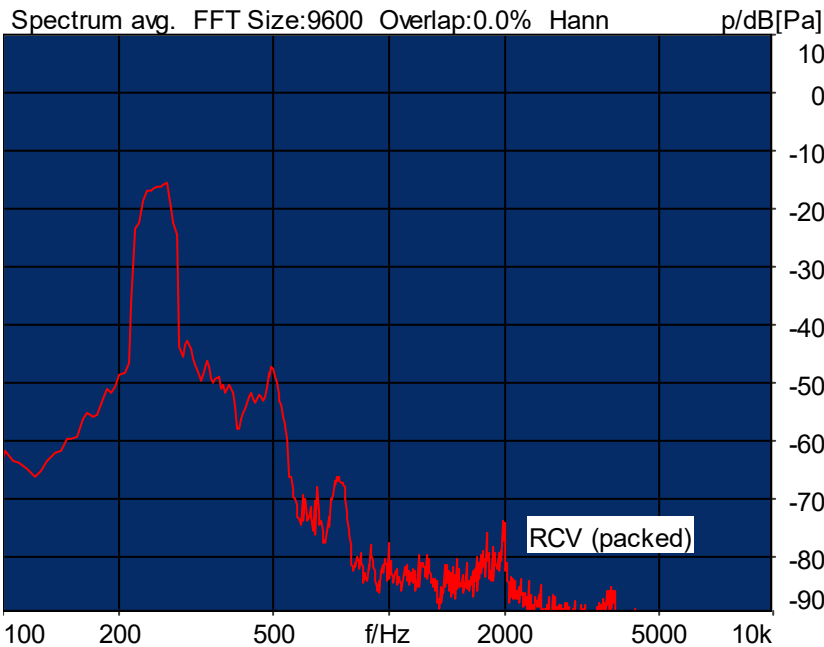
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.88 dB (2.55%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_250hz_sr20dbm0_v02.dat.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	190.0 Hz	Stimulus max.	315.0 Hz
Analysis min.	20.0 Hz	Analysis max.	185.0 Hz
Analysis (2) min.	320.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_250Hz

Hardware Config Settings

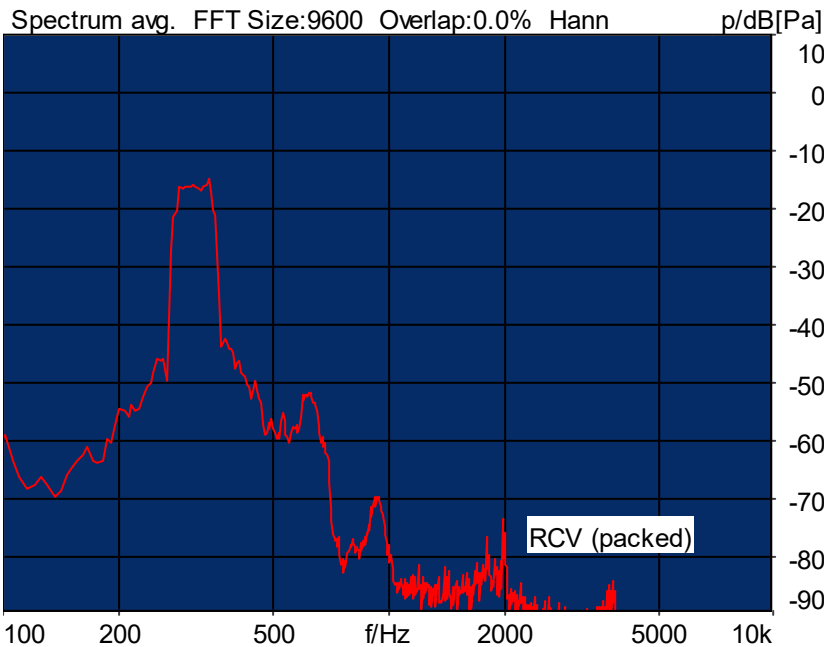
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 315 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 33.86 dB (2.03%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_315hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	245.0 Hz	Stimulus max.	390.0 Hz
Analysis min.	20.0 Hz	Analysis max.	240.0 Hz
Analysis (2) min.	395.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_315Hz

Hardware Config Settings

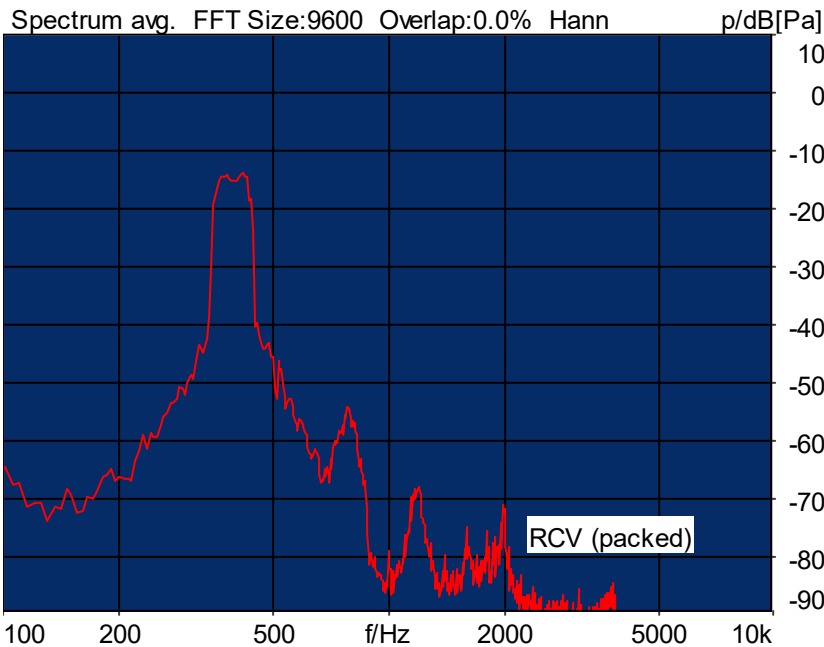
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.70 dB (1.84%) Ok

Ok

2025/12/17 1:10 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_400Hz

Hardware Config Settings

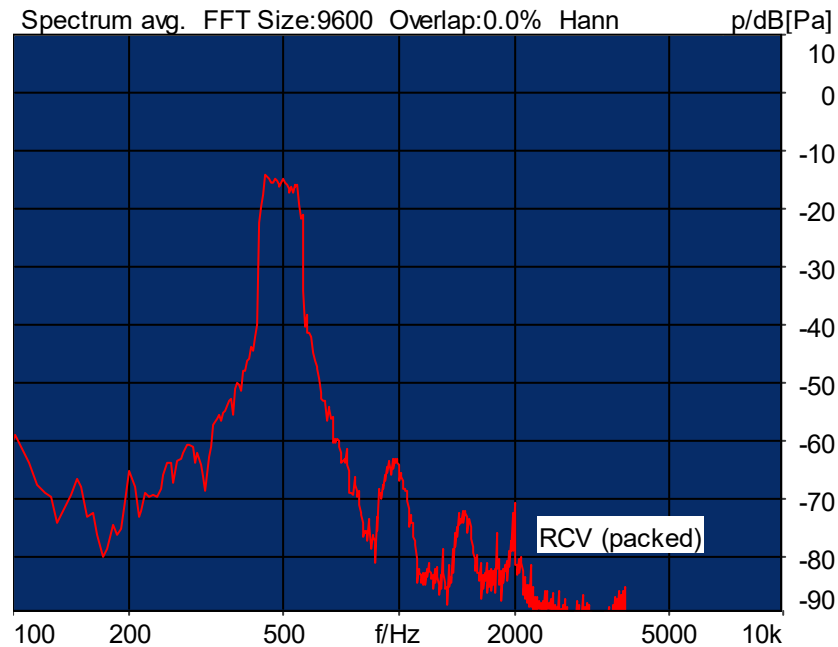
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.43 dB (1.51%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_500Hz

Hardware Config Settings

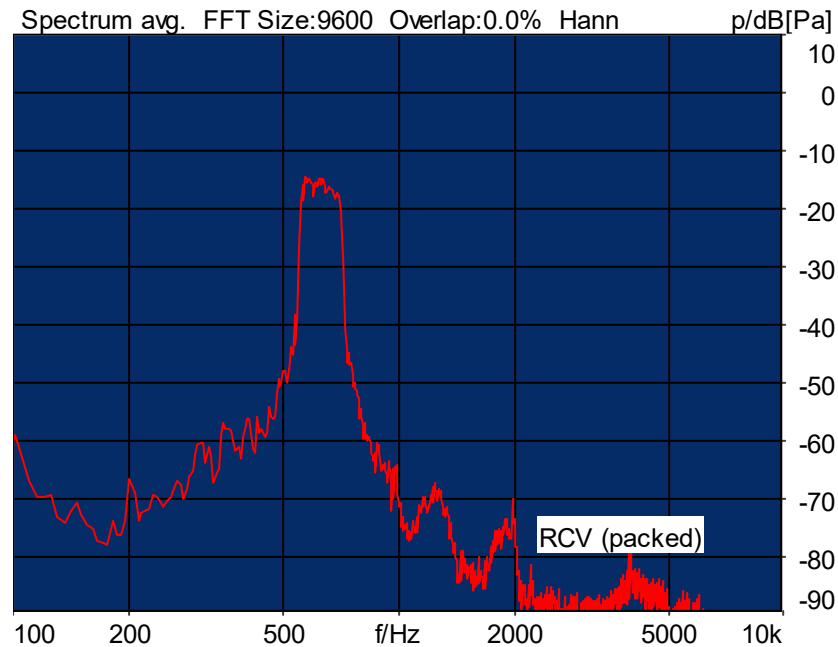
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.60 dB (1.48%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_630Hz

Hardware Config Settings

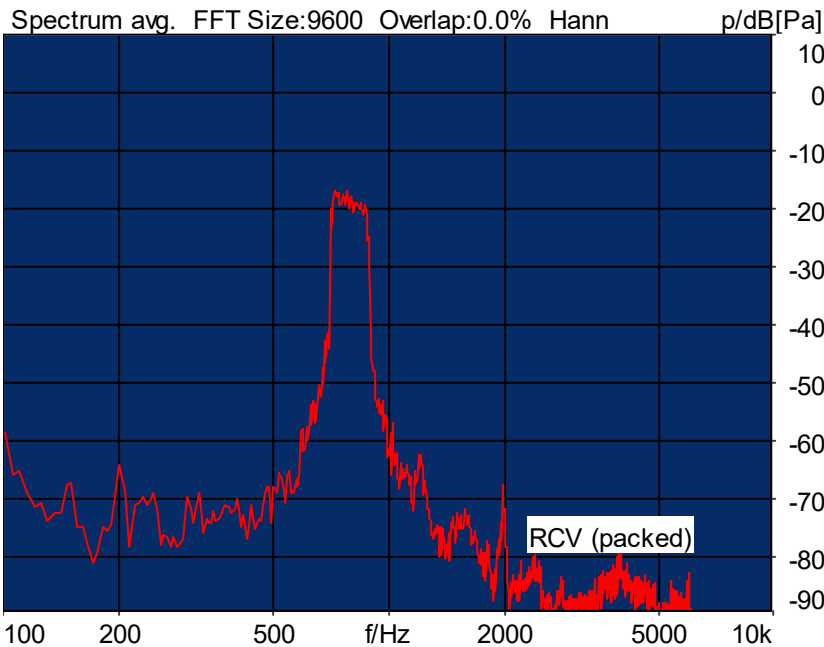
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.47 dB (1.50%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_800Hz

Hardware Config Settings

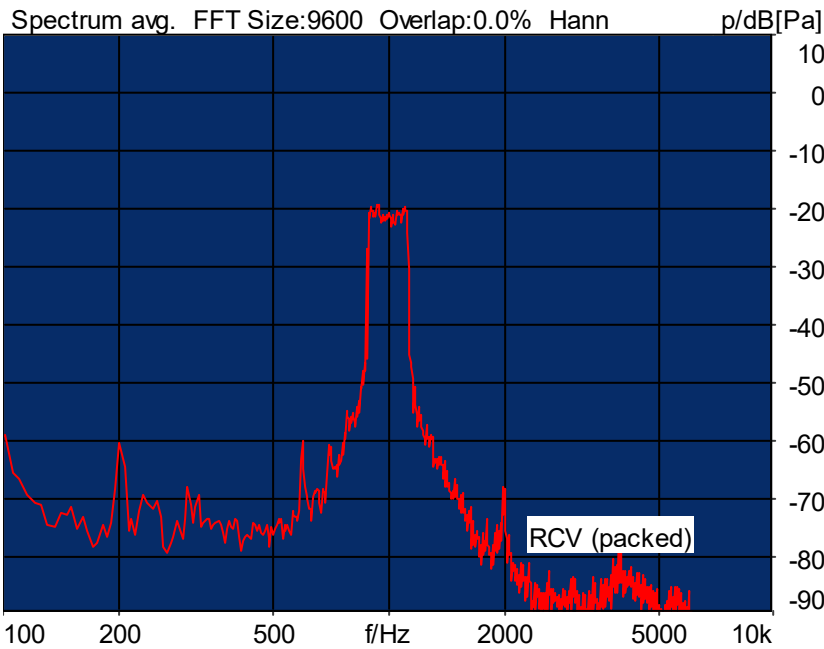
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.40 dB (1.91%) Ok

Ok

2025/12/17 1:11 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1000Hz

Hardware Config Settings

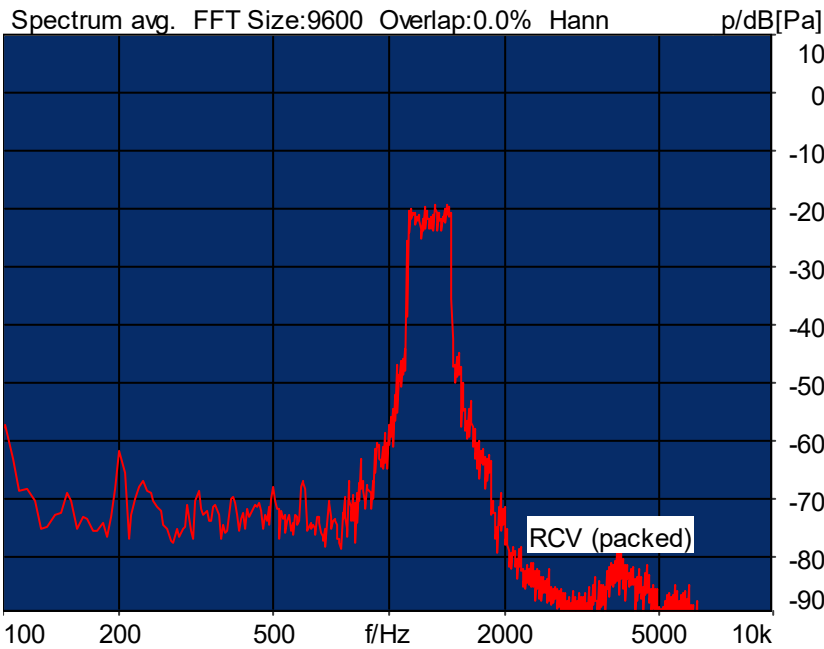
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 26.59 dB (4.68%) Ok

Ok

2025/12/17 1:12 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1250Hz

Hardware Config Settings

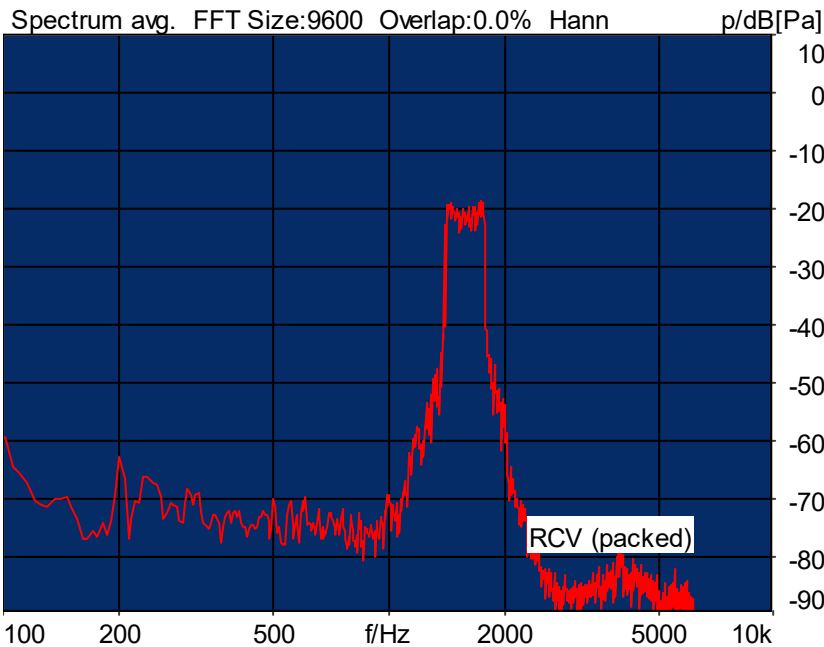
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 30.23 dB (3.08%) Ok

Ok

2025/12/17 1:12 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1600Hz

Hardware Config Settings

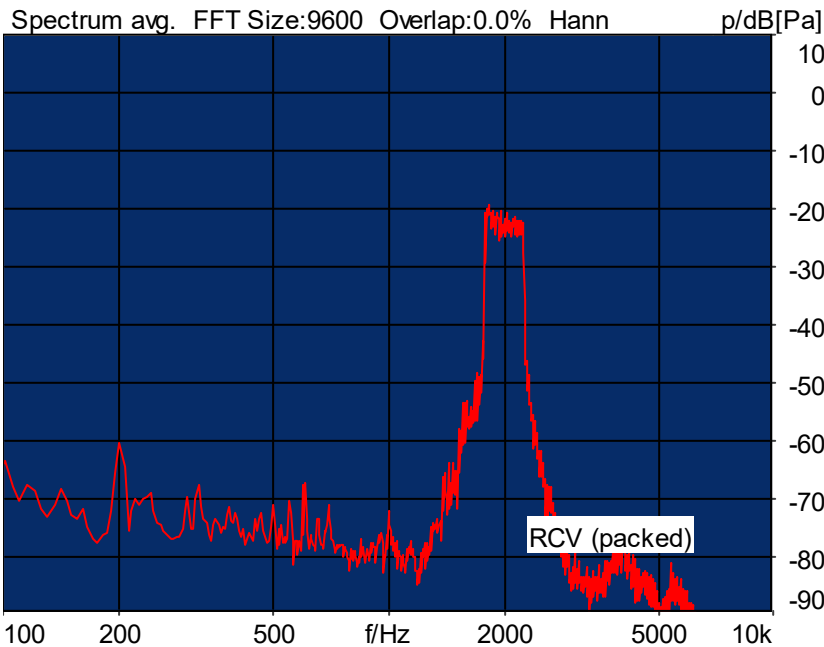
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.30 dB (2.72%) Ok

Ok

2025/12/17 1:13 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2000Hz

Hardware Config Settings

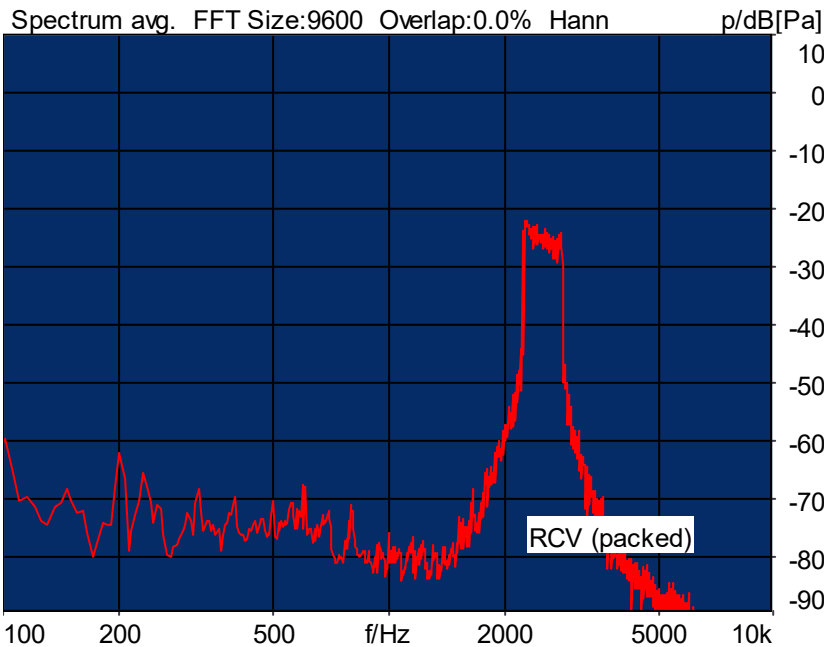
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 28.46 dB (3.78%) Ok

Ok

2025/12/17 1:13 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2500Hz

Hardware Config Settings

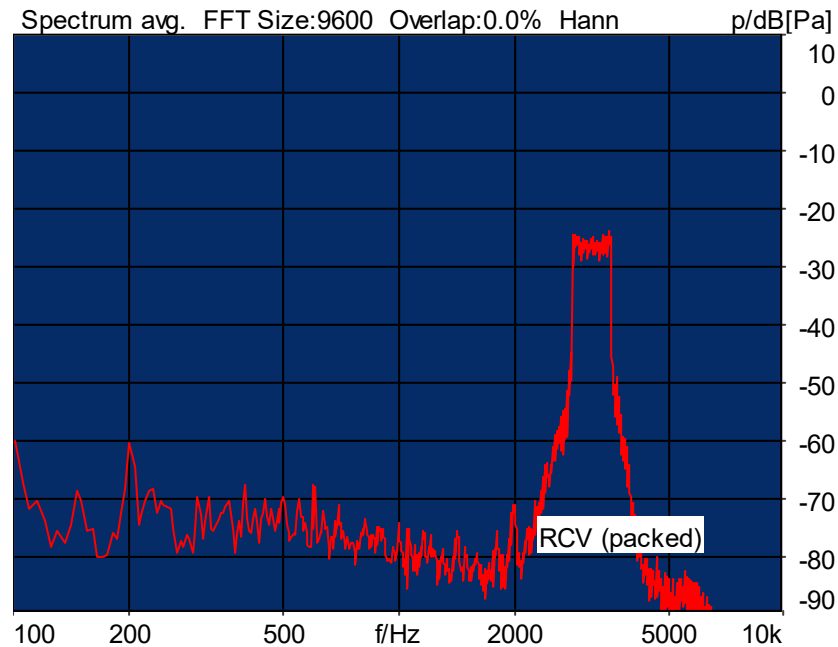
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 28.50 dB (3.76%) Ok

Ok

2025/12/17 1:13 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_3150Hz

Hardware Config Settings

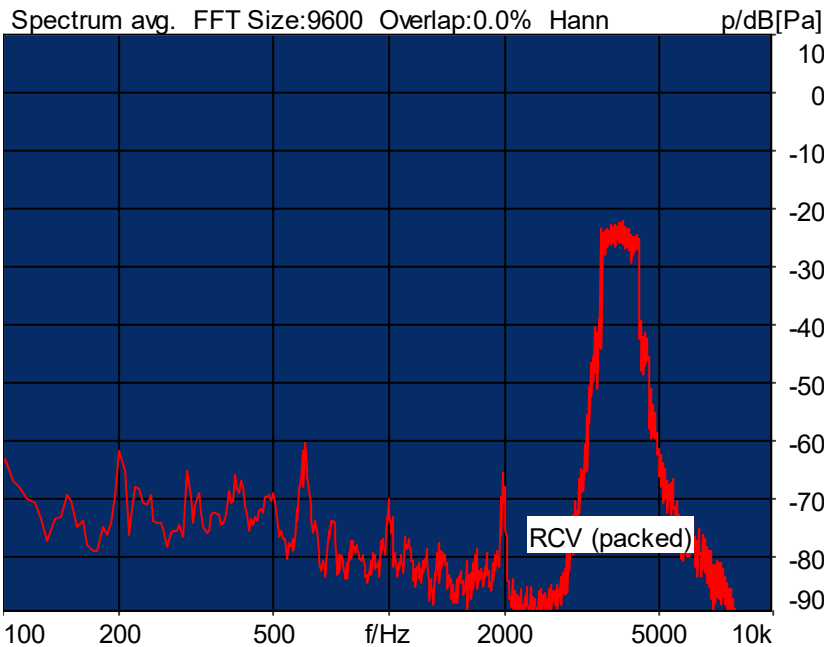
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 4000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 22.00 dB (7.94%) Ok

Ok

2025/12/17 1:22 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_4000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	3515.0 Hz	Stimulus max.	4500.0 Hz
Analysis min.	20.0 Hz	Analysis max.	3510.0 Hz
Analysis (2) min.	4505.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_4000Hz

Hardware Config Settings

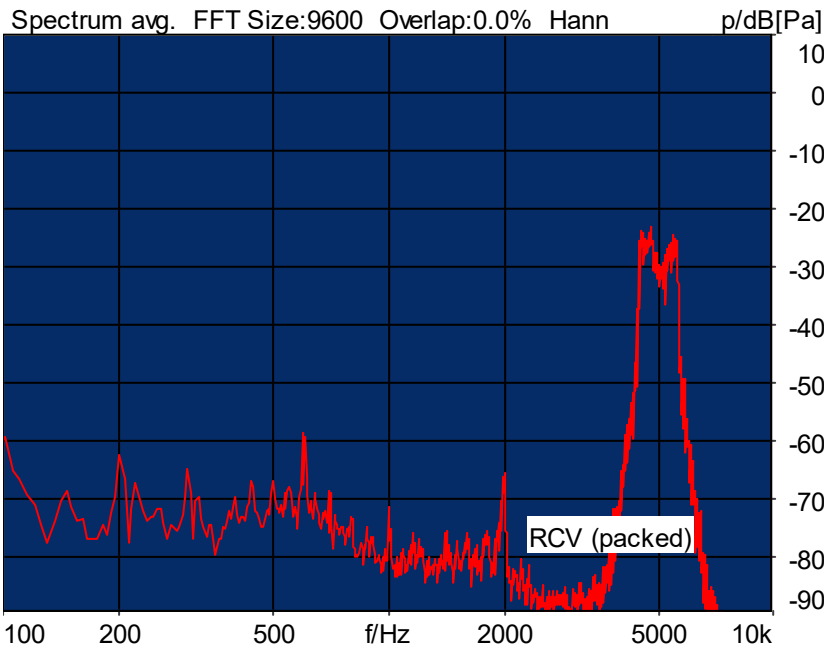
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 5000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 25.04 dB (5.60%) Ok

Ok

2025/12/17 1:20 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_5000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	4430.0 Hz	Stimulus max.	5660.0 Hz
Analysis min.	20.0 Hz	Analysis max.	4425.0 Hz
Analysis (2) min.	5665.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_5000Hz

Hardware Config Settings

Used Setting	TIA5050
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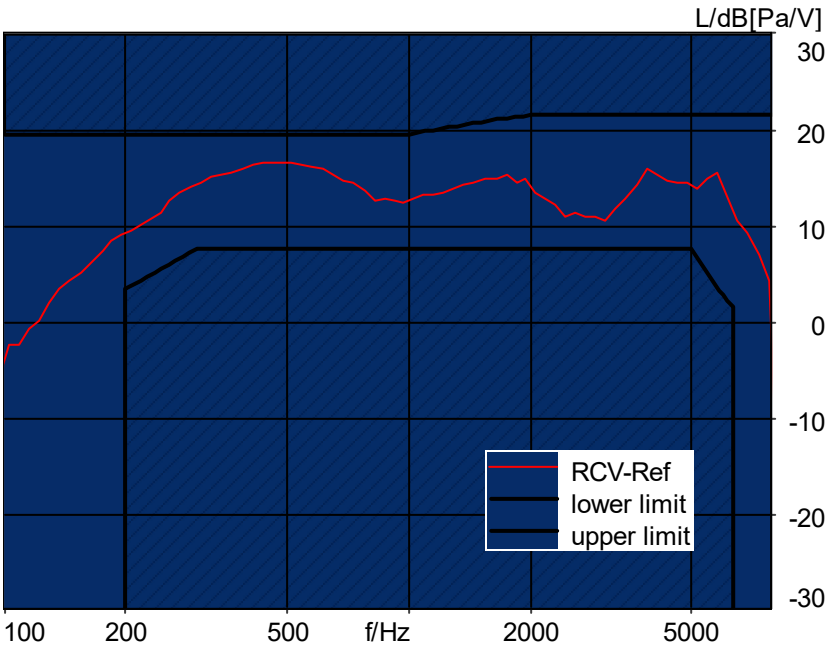
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Absolute minimal distance

2.98 dB at 462.0 Hz Ok

Ok

2025/12/17 1:14 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_wb_r20_v01.dat

Level adjustment Channel 1 Gain -90.00 dB

WIDEBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -22,2 dBV, margin 15.9 dB +

Pause till end of file

Signal level (ch2): -22,2 dBV Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 8.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hawb.fft

Tol. scheme file 521_rcv_frq_man_hawb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 8000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(45#)

Measurement Object	BL-SZ25B0732-N38
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Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.60	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.24	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 315 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.15	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 400 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.03	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.74	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 630 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	40.17	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 800 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.71	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 1000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.99	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 1250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.10	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 1600 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.12	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 2000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.88	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 2500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.02	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 3150 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.20	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 4000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	21.76	BL-SZ25B0732-N38

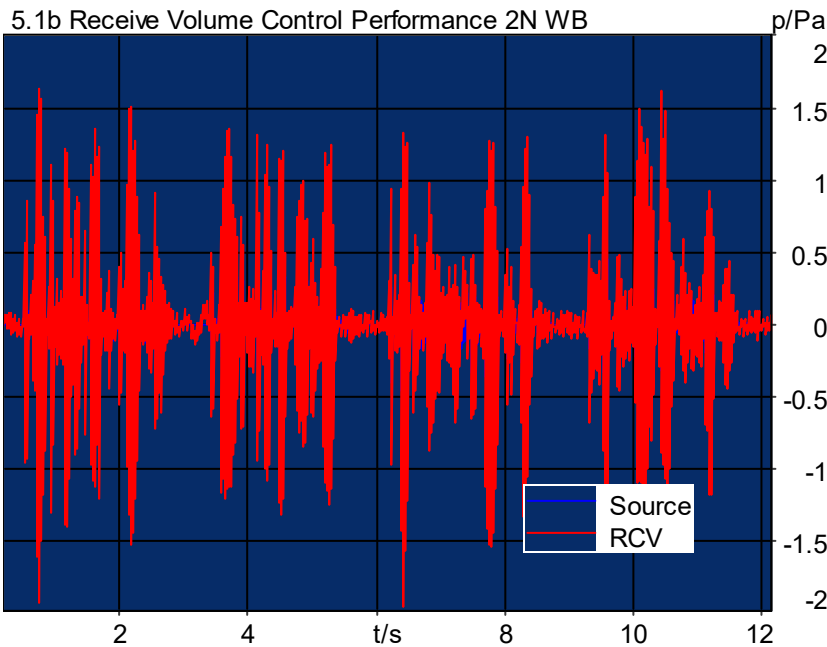
5.2 RCV Distortion and Noise - 5000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	20.71	BL-SZ25B0732-N38
5.3 Frequency Response 2N FF	Ok	Min. dist. to tolerance scheme [dB], 2571.8 Hz	3.57	BL-SZ25B0732-N38

5.1b Receive Volume Control Performance 2N WB	1396
5.2 RCV Distortion and Noise - 250 Hz WB	1398
5.2 RCV Distortion and Noise - 315 Hz WB	1400
5.2 RCV Distortion and Noise - 400 Hz WB	1402
5.2 RCV Distortion and Noise - 500 Hz WB	1404
5.2 RCV Distortion and Noise - 630 Hz WB	1406
5.2 RCV Distortion and Noise - 800 Hz WB	1408
5.2 RCV Distortion and Noise - 1000 Hz WB	1410
5.2 RCV Distortion and Noise - 1250 Hz WB	1412
5.2 RCV Distortion and Noise - 1600 Hz WB	1414
5.2 RCV Distortion and Noise - 2000 Hz WB	1416
5.2 RCV Distortion and Noise - 2500 Hz WB	1418
5.2 RCV Distortion and Noise - 3150 Hz WB	1420
5.2 RCV Distortion and Noise - 4000 Hz WB	1422
5.2 RCV Distortion and Noise - 5000 Hz WB	1424
5.3 Frequency Response 2N FF	1426

5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.60 dB[SPL]	80.40%	Ok

Ok

2025/12/16 19:37 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

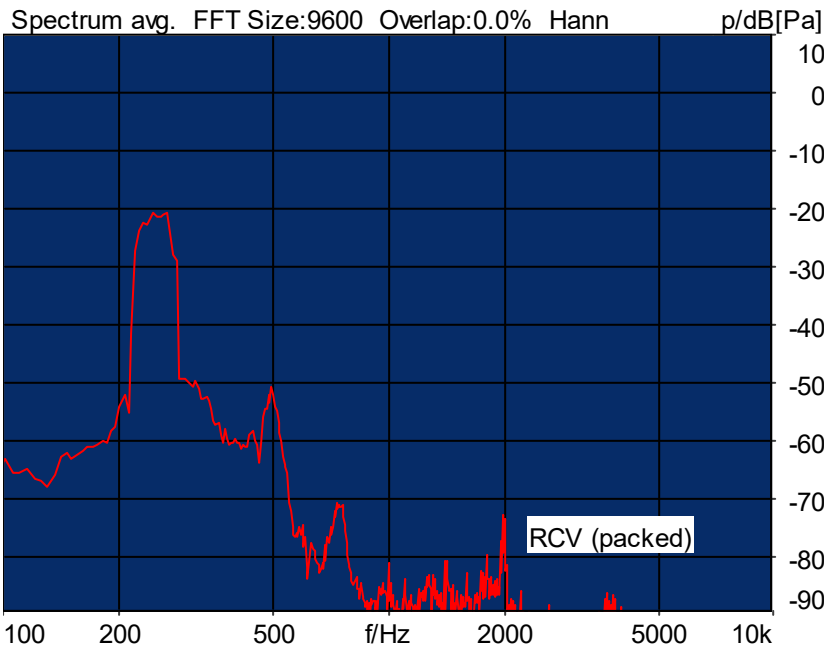
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.24 dB (2.44%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_250hz_sr20dbm0_v02.dat.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	190.0 Hz	Stimulus max.	315.0 Hz
Analysis min.	20.0 Hz	Analysis max.	185.0 Hz
Analysis (2) min.	320.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_250Hz

Hardware Config Settings

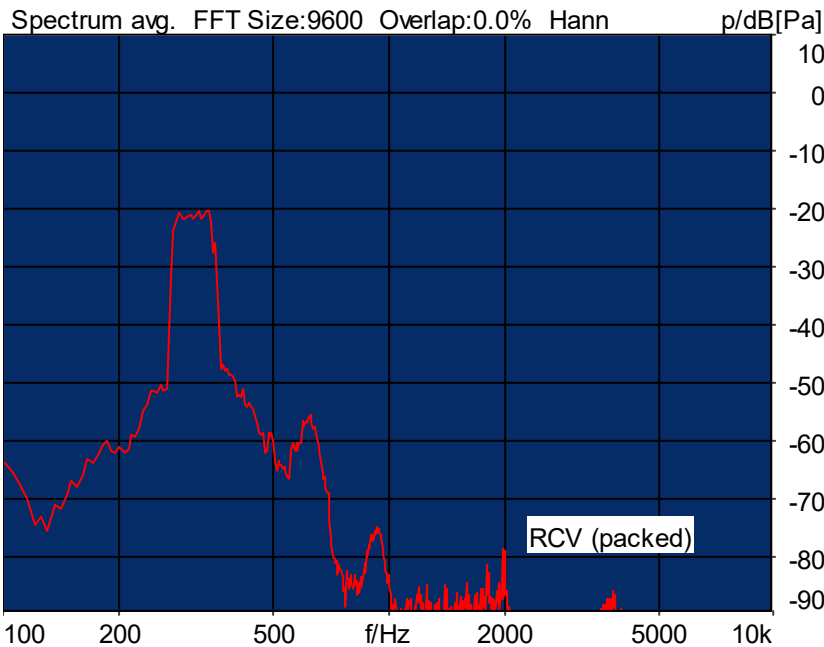
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 315 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 33.15 dB (2.20%) Ok

Ok

2025/12/16 19:38 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_315hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	245.0 Hz	Stimulus max.	390.0 Hz
Analysis min.	20.0 Hz	Analysis max.	240.0 Hz
Analysis (2) min.	395.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_315Hz

Hardware Config Settings

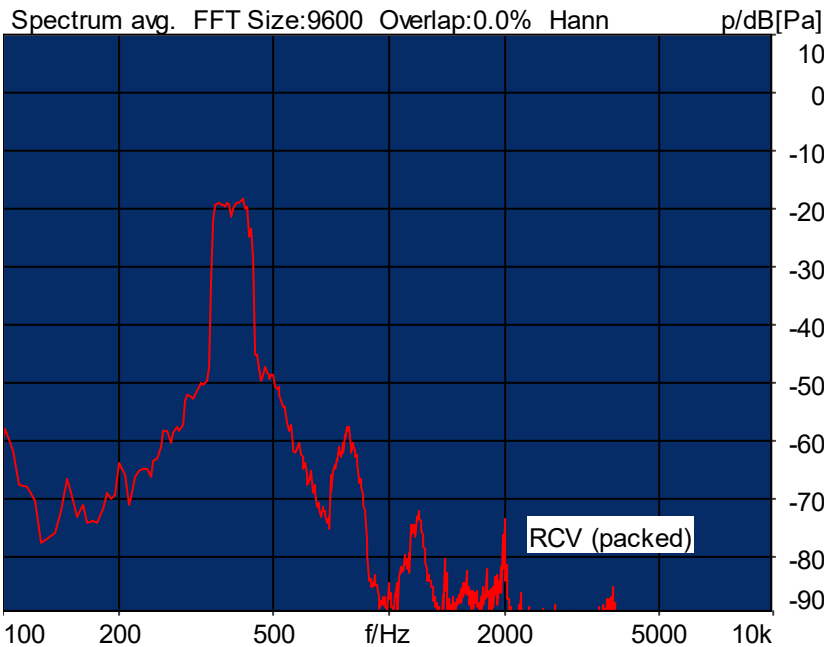
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.03 dB (1.99%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_400Hz

Hardware Config Settings

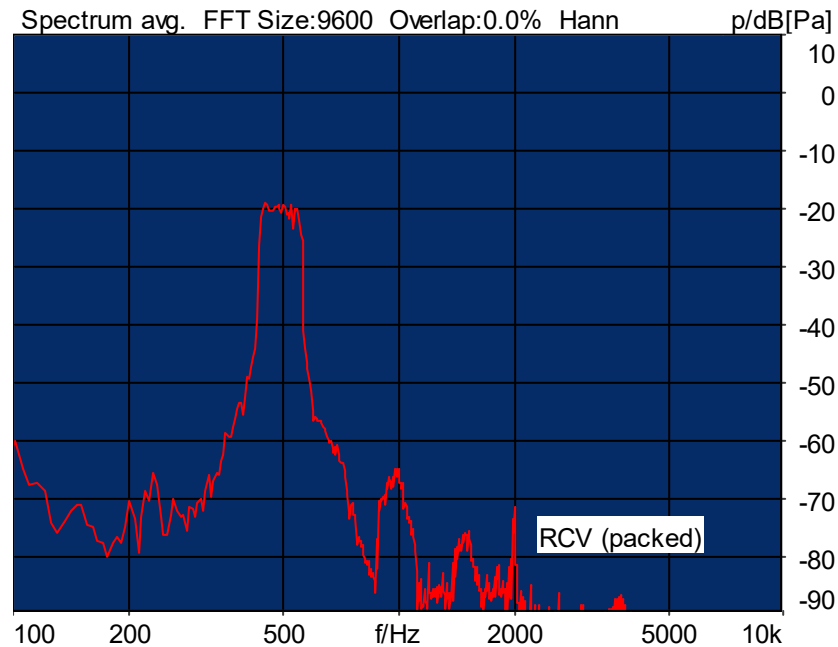
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 37.74 dB (1.30%) Ok

Ok

2025/12/16 19:39 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_500Hz

Hardware Config Settings

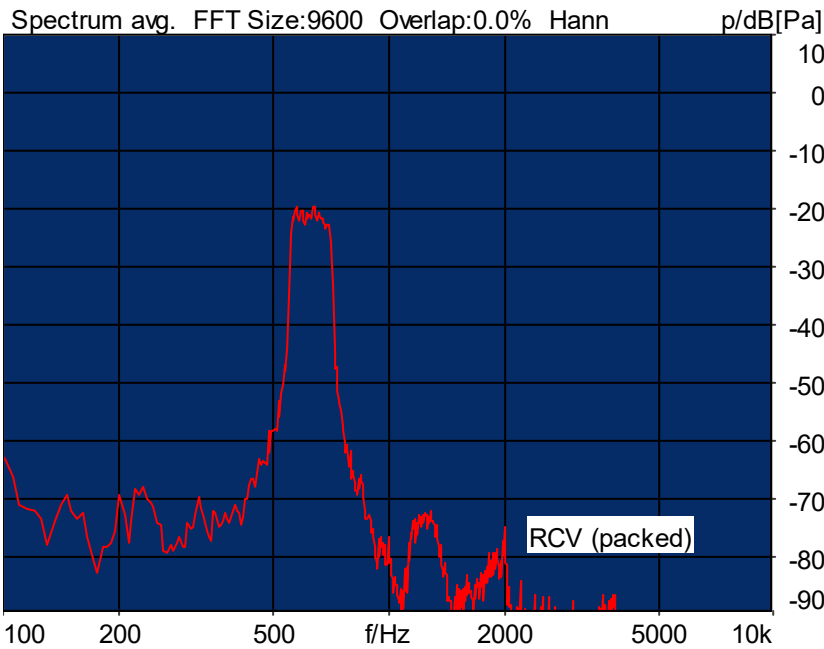
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 40.17 dB (0.98%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_630Hz

Hardware Config Settings

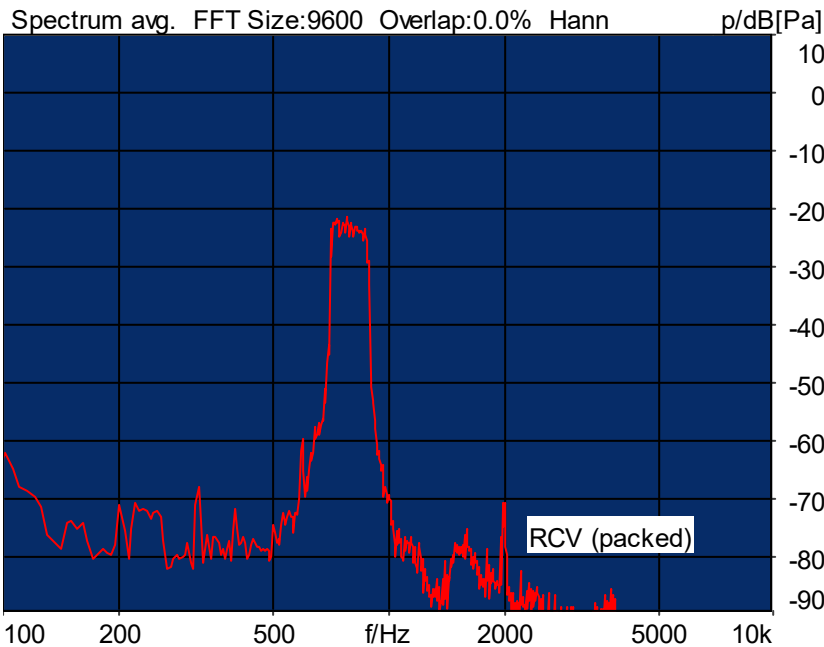
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 39.71 dB (1.03%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_800Hz

Hardware Config Settings

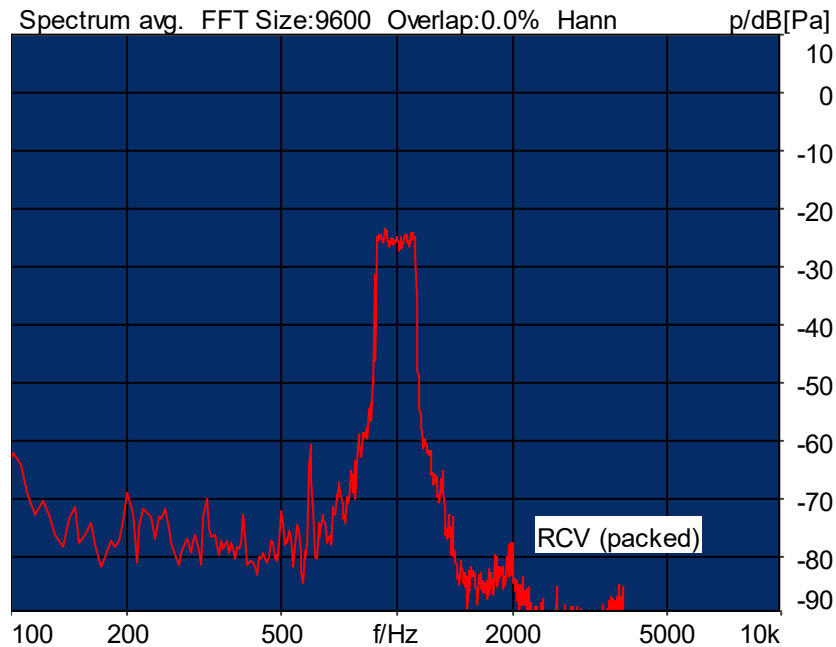
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 35.99 dB (1.59%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1000Hz

Hardware Config Settings

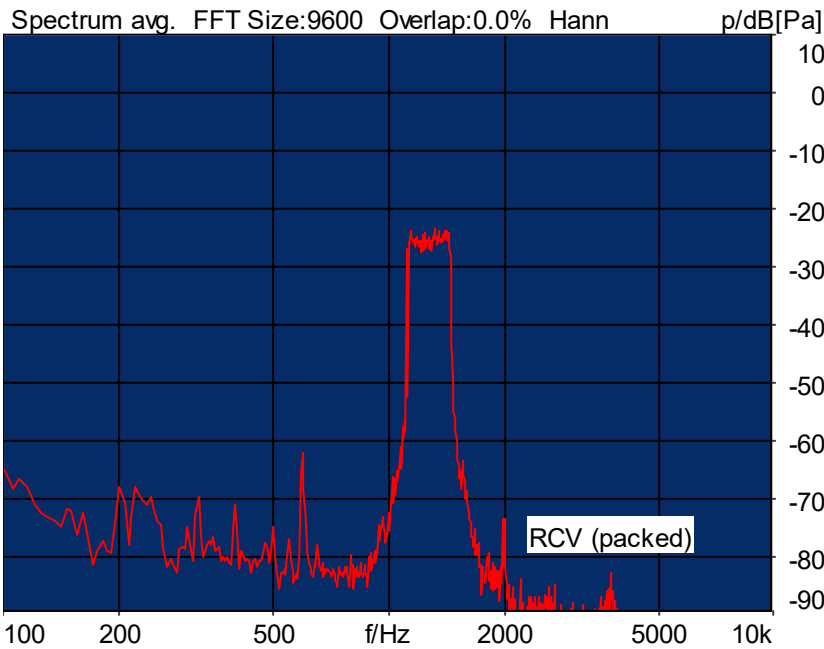
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.10 dB (2.48%) Ok

Ok

2025/12/16 19:40 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1250Hz

Hardware Config Settings

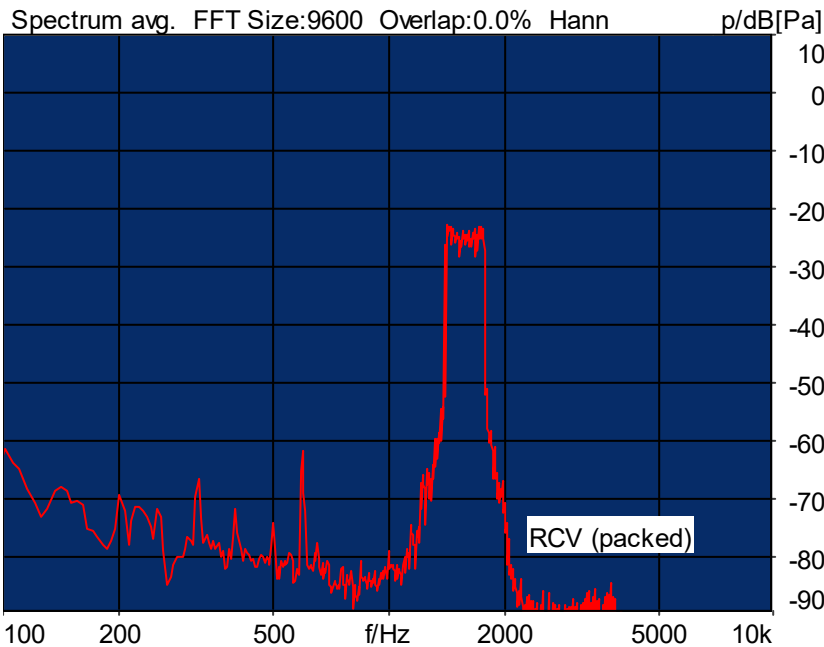
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 38.12 dB (1.24%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1600Hz

Hardware Config Settings

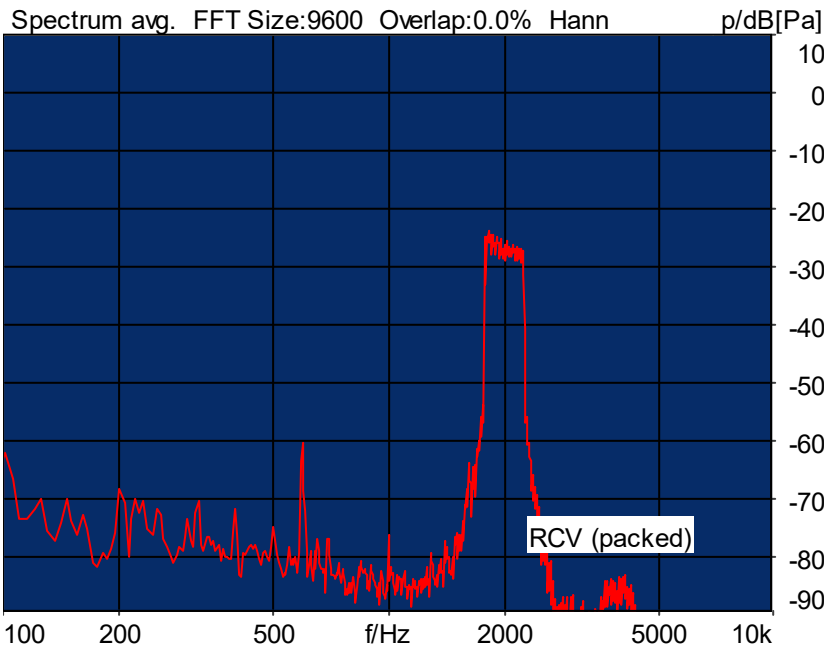
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.88 dB (1.43%) Ok

Ok

2025/12/16 19:41 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2000Hz

Hardware Config Settings

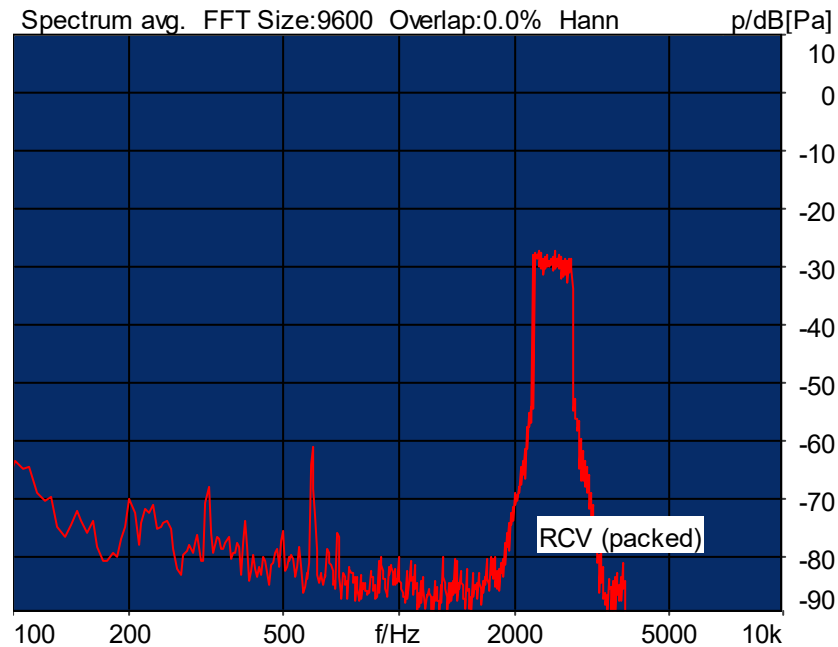
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.02 dB (2.81%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2500Hz

Hardware Config Settings

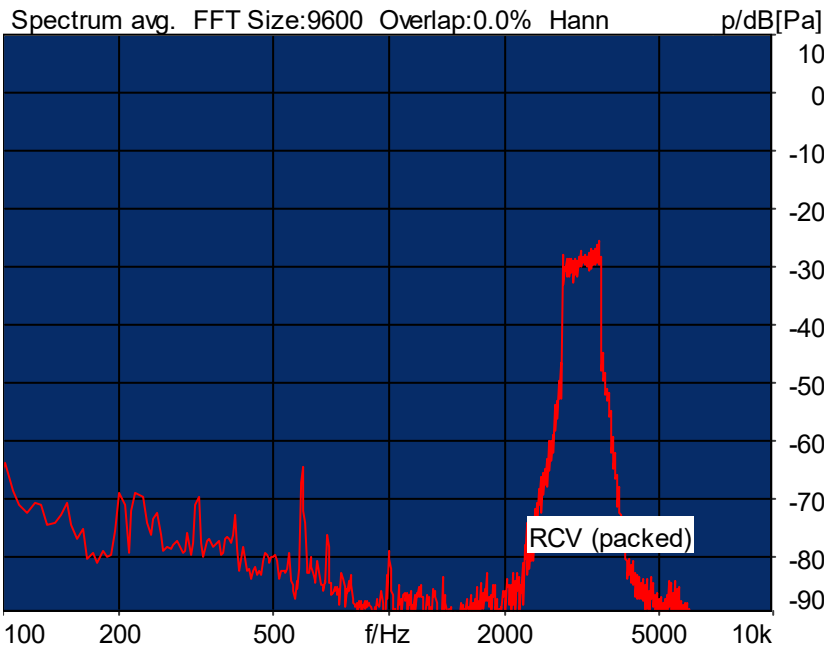
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 25.20 dB (5.49%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_3150Hz

Hardware Config Settings

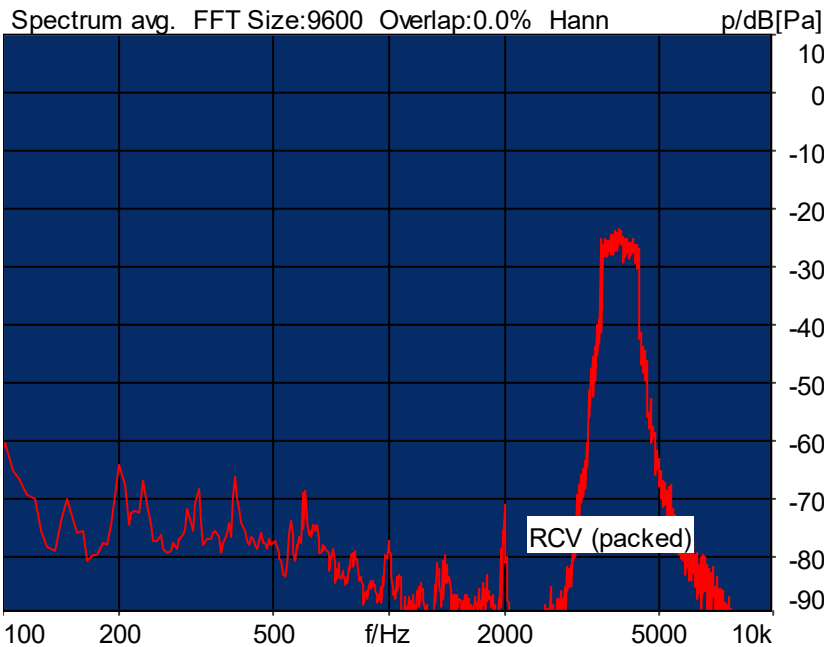
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 4000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 21.76 dB (8.16%) Ok

Ok

2025/12/16 19:42 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_4000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	3515.0 Hz	Stimulus max.	4500.0 Hz
Analysis min.	20.0 Hz	Analysis max.	3510.0 Hz
Analysis (2) min.	4505.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_4000Hz

Hardware Config Settings

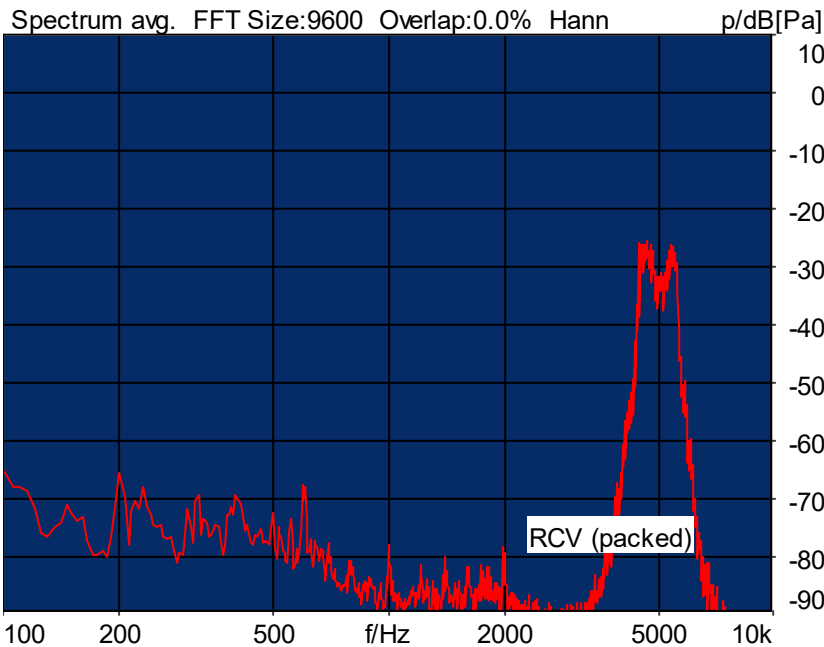
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 5000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 20.71 dB (9.22%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_5000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	4430.0 Hz	Stimulus max.	5660.0 Hz
Analysis min.	20.0 Hz	Analysis max.	4425.0 Hz
Analysis (2) min.	5665.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_5000Hz

Hardware Config Settings

Used Setting	TIA5050
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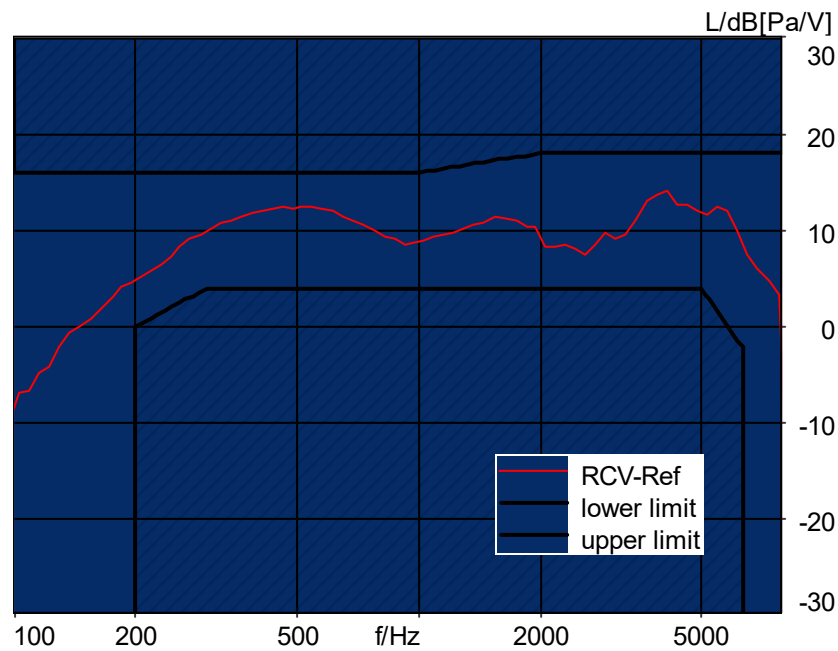
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Absolute minimal distance

3.57 dB at 2571.8 Hz Ok

Ok

2025/12/16 19:43 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_wb_r20_v01.dat

Level adjustment Channel 1 Gain -90.00 dB

WIDEBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -22,2 dBV, margin 15.9 dB +

Pause till end of file

Signal level (ch2): -22,2 dBV Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 8.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hawb.fft

Tol. scheme file 521_rcv_frq_man_hawb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 8000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(46#)

Measurement Object	BL-SZ25B0732-N38
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Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.64	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.40	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 315 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.39	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 400 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.97	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.84	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 630 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.82	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 800 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	37.75	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 1000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.84	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 1250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.24	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 1600 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	40.26	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 2000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	38.67	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 2500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.38	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 3150 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.70	BL-SZ25B0732-N38
5.2 RCV Distortion and Noise - 4000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.36	BL-SZ25B0732-N38

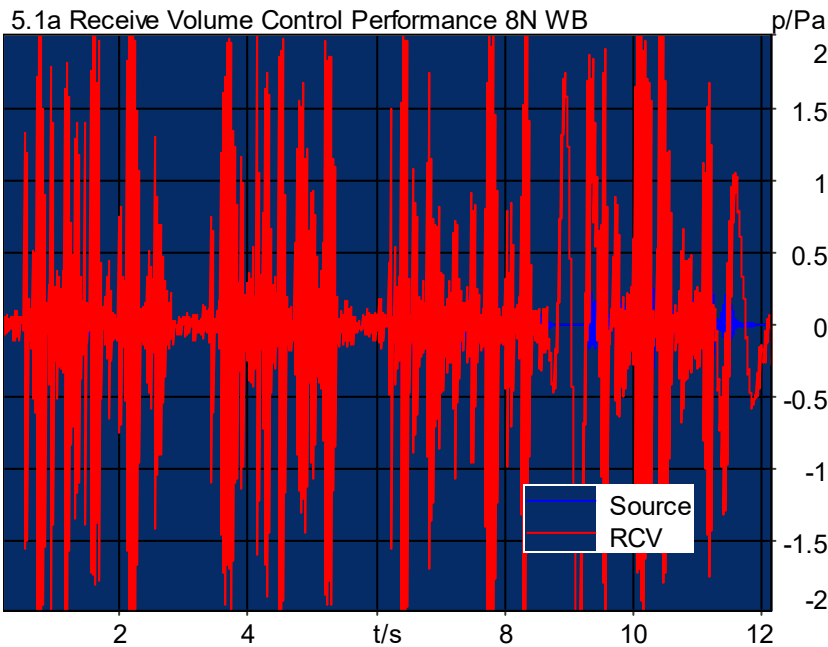
5.2 RCV Distortion and Noise - 5000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.26	BL-SZ25B073 2-N38
5.3 Frequency Response 8N FF	Ok	Min. dist. to tolerance scheme [dB], 487.0 Hz	3.27	BL-SZ25B073 2-N38

5.1a Receive Volume Control Performance 8N WB	1432
5.2 RCV Distortion and Noise - 250 Hz WB	1434
5.2 RCV Distortion and Noise - 315 Hz WB	1436
5.2 RCV Distortion and Noise - 400 Hz WB	1438
5.2 RCV Distortion and Noise - 500 Hz WB	1440
5.2 RCV Distortion and Noise - 630 Hz WB	1442
5.2 RCV Distortion and Noise - 800 Hz WB	1444
5.2 RCV Distortion and Noise - 1000 Hz WB	1446
5.2 RCV Distortion and Noise - 1250 Hz WB	1448
5.2 RCV Distortion and Noise - 1600 Hz WB	1450
5.2 RCV Distortion and Noise - 2000 Hz WB	1452
5.2 RCV Distortion and Noise - 2500 Hz WB	789
5.2 RCV Distortion and Noise - 3150 Hz WB	1456
5.2 RCV Distortion and Noise - 4000 Hz WB	1458
5.2 RCV Distortion and Noise - 5000 Hz WB	1460
5.3 Frequency Response 8N FF	1462

5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

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Channel	Speech level	Activity	
RCV	84.64 dB[SPL]	80.41%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

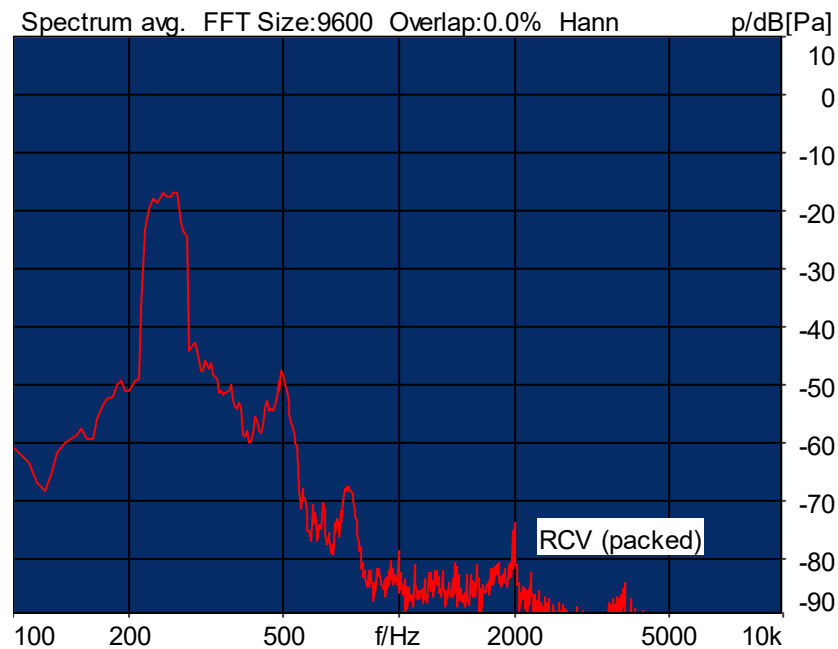
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N

EVS-WB-128



Distortion (Noise) RCV (packed): 32.40 dB (2.40%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_250hz_sr20dbm0_v02.dat.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	190.0 Hz	Stimulus max.	315.0 Hz
Analysis min.	20.0 Hz	Analysis max.	185.0 Hz
Analysis (2) min.	320.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_250Hz

Hardware Config Settings

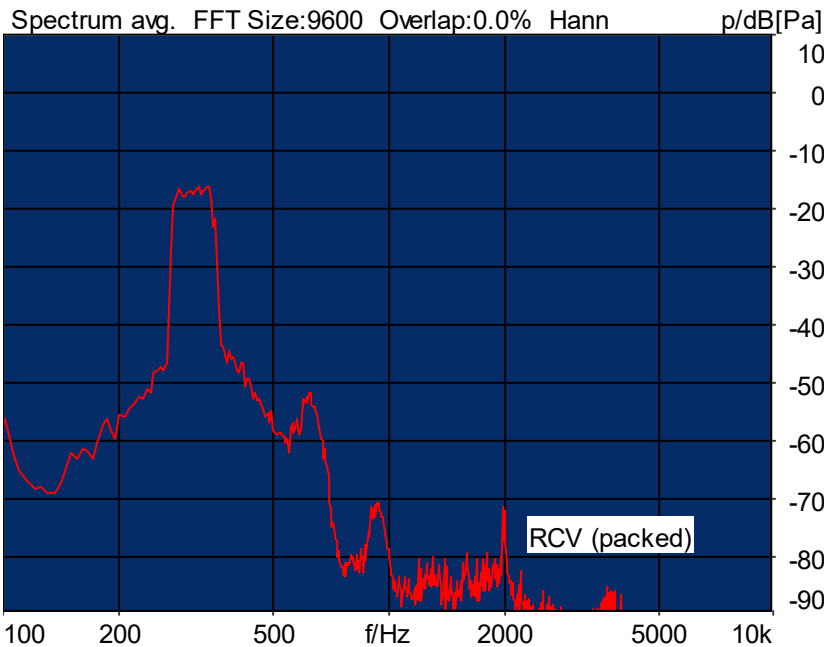
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 315 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 33.39 dB (2.14%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_315hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	245.0 Hz	Stimulus max.	390.0 Hz
Analysis min.	20.0 Hz	Analysis max.	240.0 Hz
Analysis (2) min.	395.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_315Hz

Hardware Config Settings

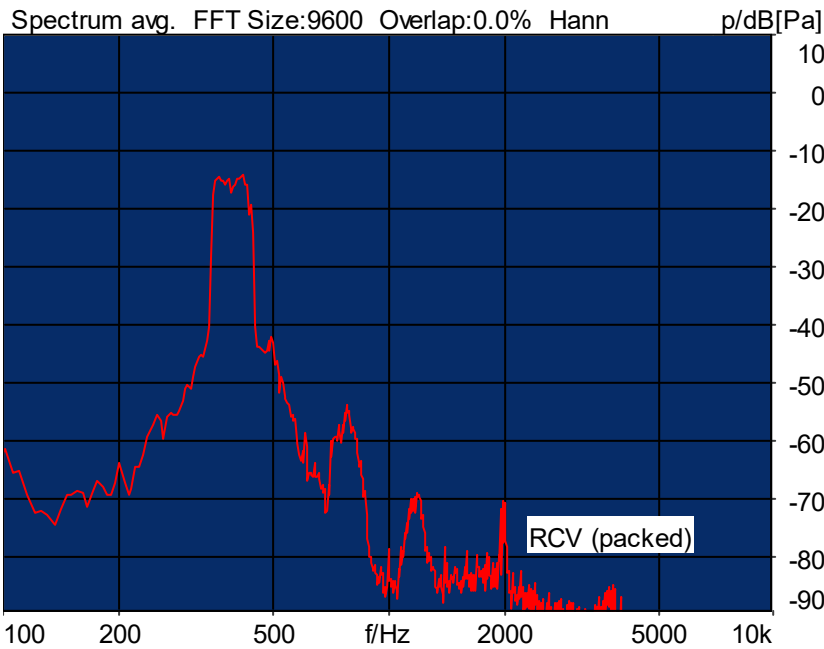
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 33.97 dB (2.00%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_400Hz

Hardware Config Settings

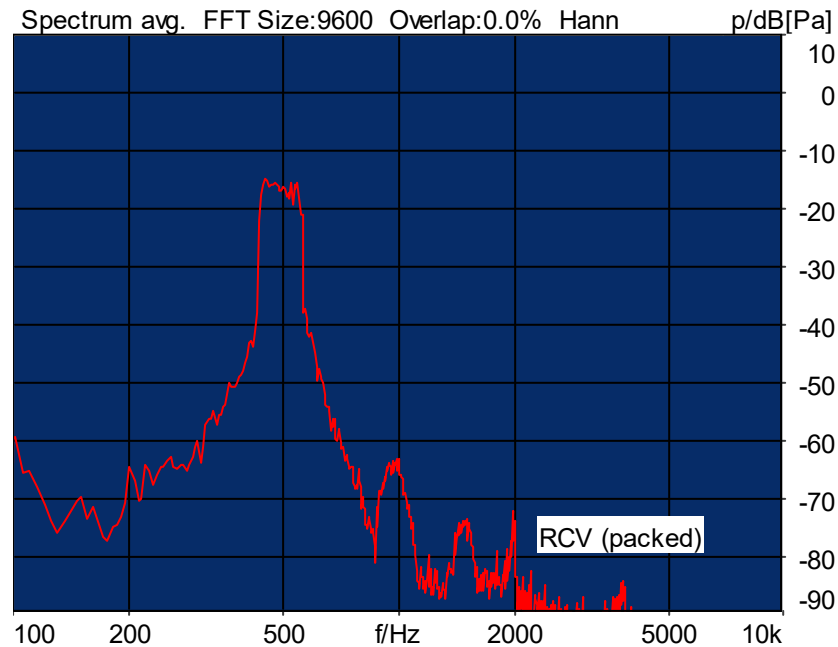
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.84 dB (1.81%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_500Hz

Hardware Config Settings

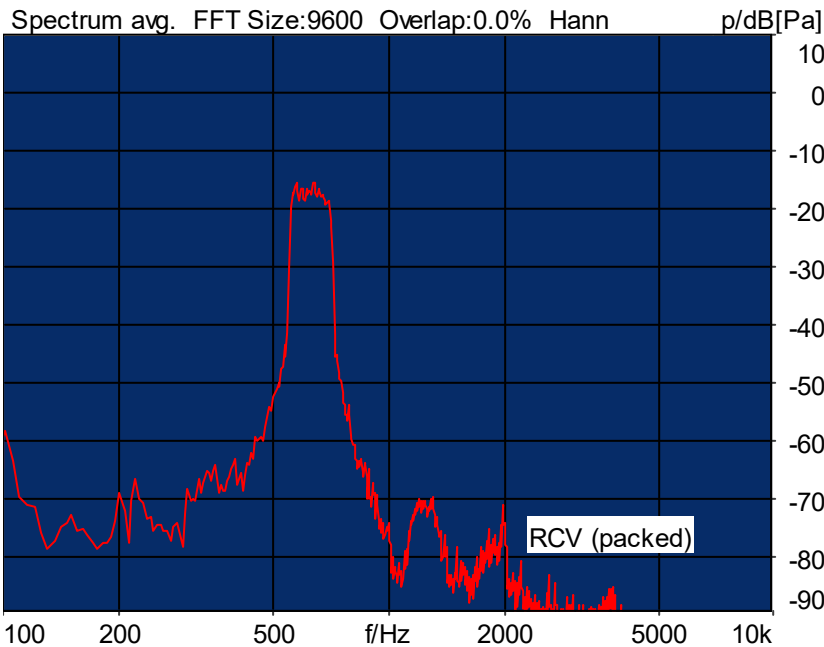
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 38.82 dB (1.15%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_630Hz

Hardware Config Settings

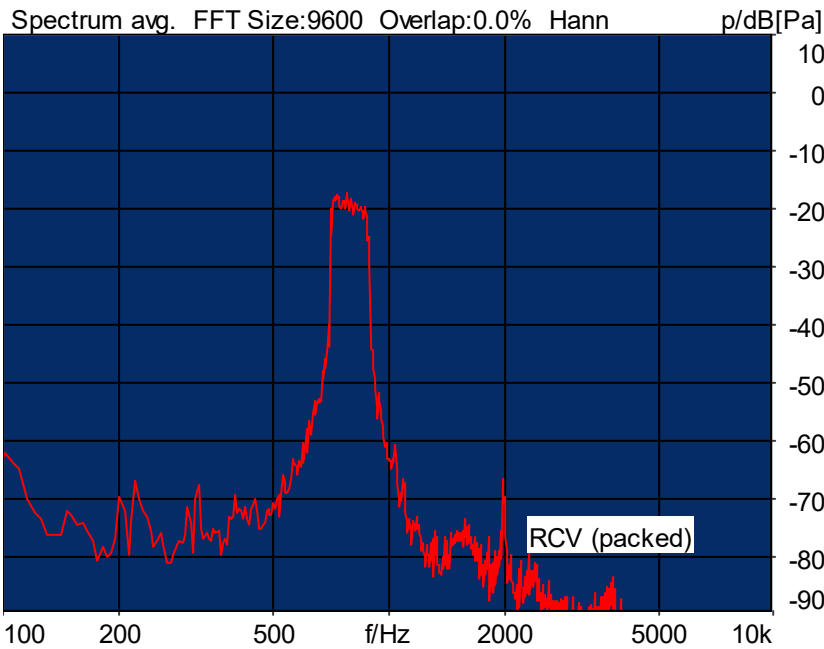
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 37.75 dB (1.30%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_800Hz

Hardware Config Settings

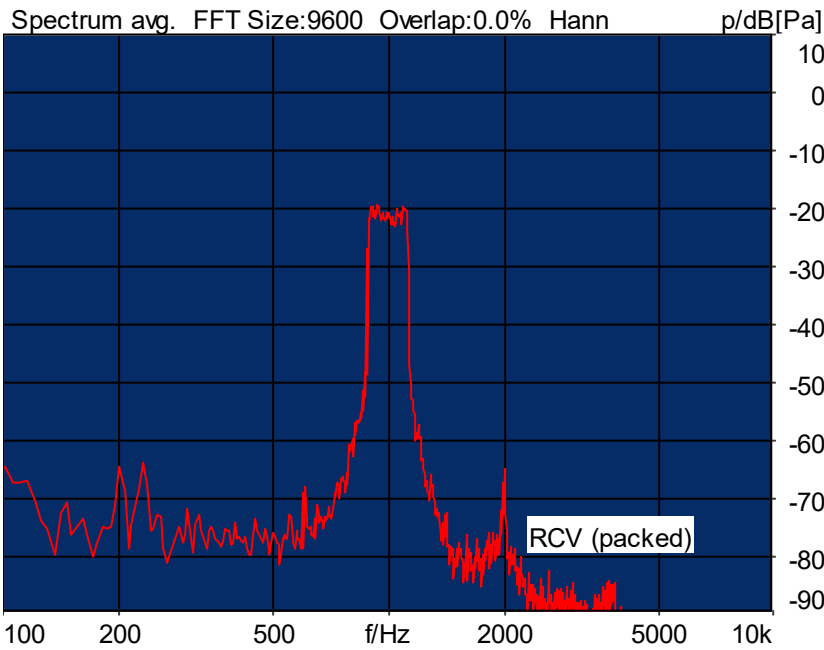
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N



Distortion (Noise) RCV (packed): 38.84 dB (1.14%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1000Hz

Hardware Config Settings

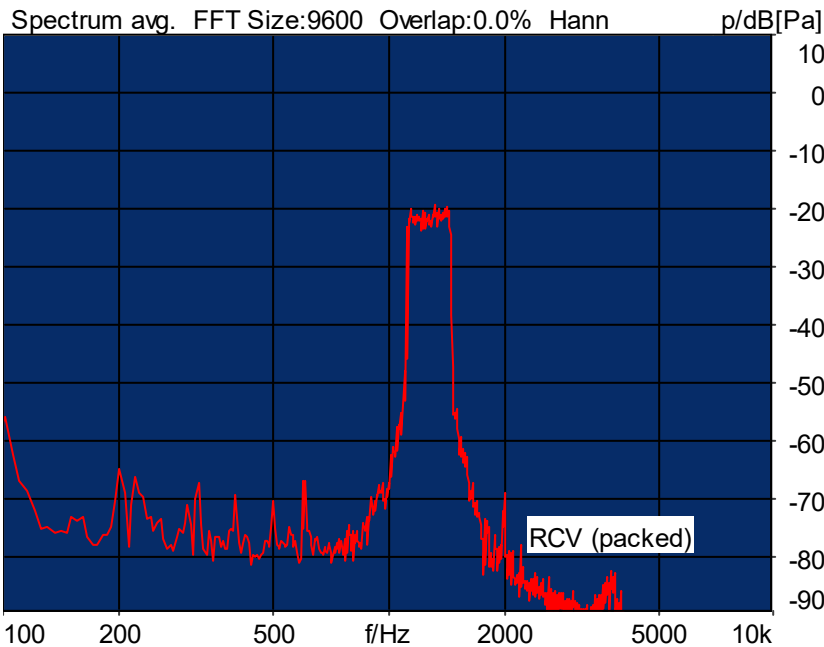
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.24 dB (2.44%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1250Hz

Hardware Config Settings

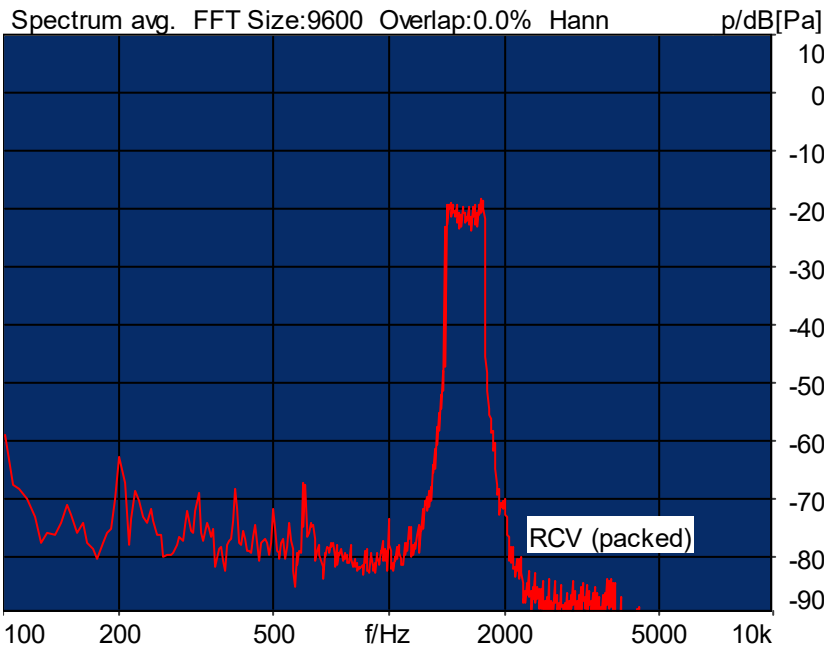
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 40.26 dB (0.97%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1600Hz

Hardware Config Settings

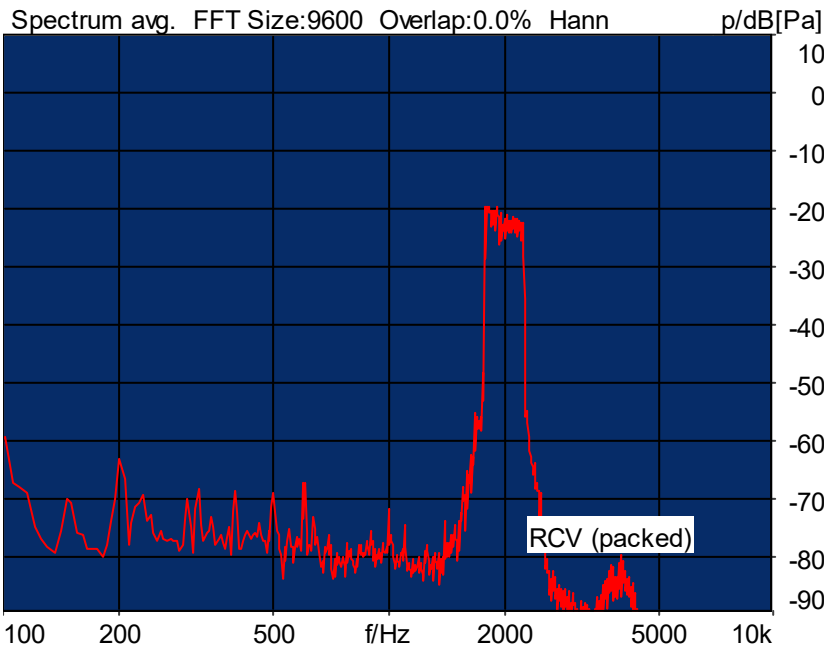
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 38.67 dB (1.16%) Ok

Ok

2025/12/16 19:32 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2000Hz

Hardware Config Settings

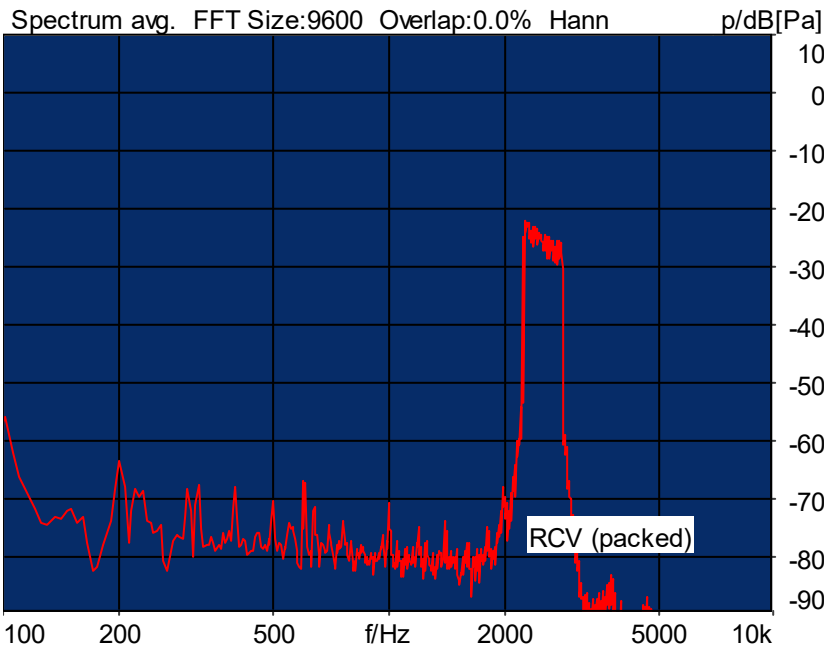
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 39.38 dB (1.07%) Ok

Ok

2025/12/16 19:32 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2500Hz

Hardware Config Settings

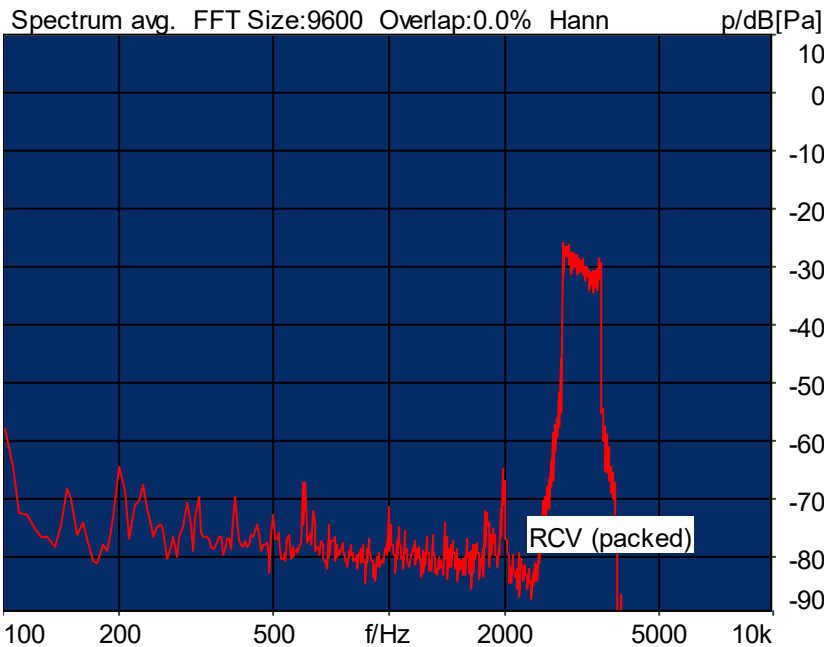
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.70 dB (2.60%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_3150Hz

Hardware Config Settings

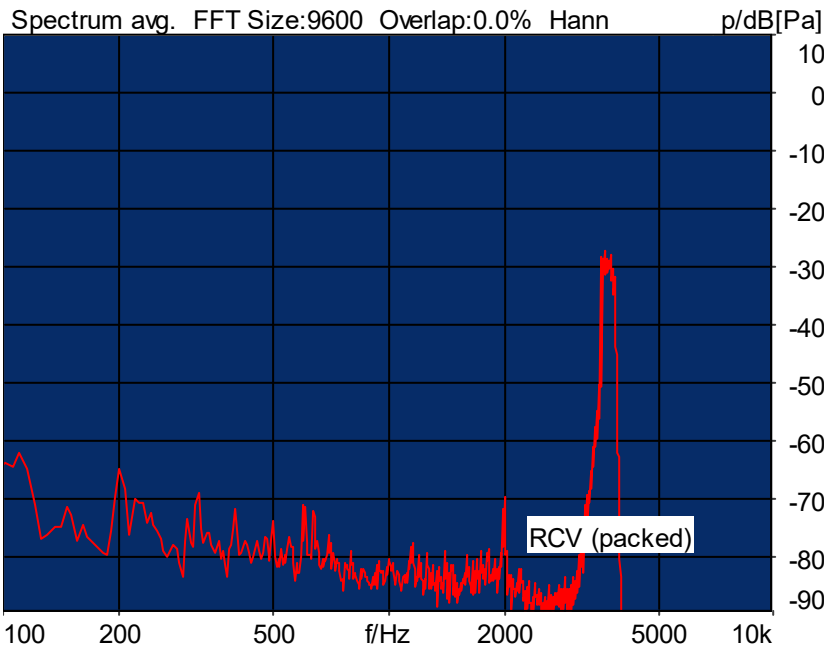
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 4000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 30.36 dB (3.04%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_4000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	3515.0 Hz	Stimulus max.	4500.0 Hz
Analysis min.	20.0 Hz	Analysis max.	3510.0 Hz
Analysis (2) min.	4505.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_4000Hz

Hardware Config Settings

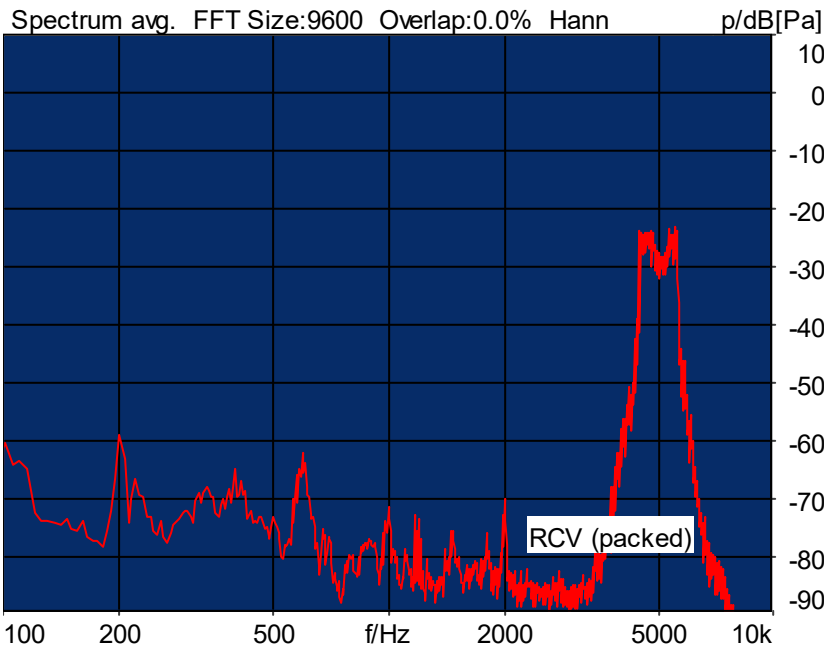
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 5000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 24.26 dB (6.13%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_5000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	4430.0 Hz	Stimulus max.	5660.0 Hz
Analysis min.	20.0 Hz	Analysis max.	4425.0 Hz
Analysis (2) min.	5665.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_5000Hz

Hardware Config Settings

Used Setting	TIA5050
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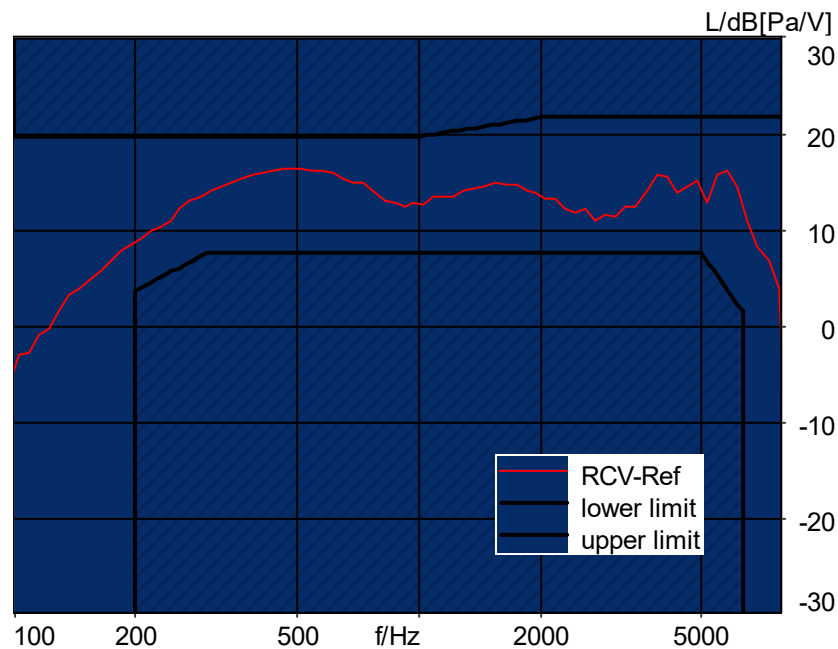
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Absolute minimal distance

3.27 dB at 487.0 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_wb_r20_v01.dat

Level adjustment Channel 1 Gain -90.00 dB

WIDEBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -22,2 dBV, margin 15.9 dB +

Pause till end of file

Signal level (ch2): -22,2 dBV Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 8.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hawb.fft

Tol. scheme file 521_rcv_frq_man_hawb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 8000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(47#)

Measurement Object	BL-SZ25B0732-N41-PC3
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Status Overview

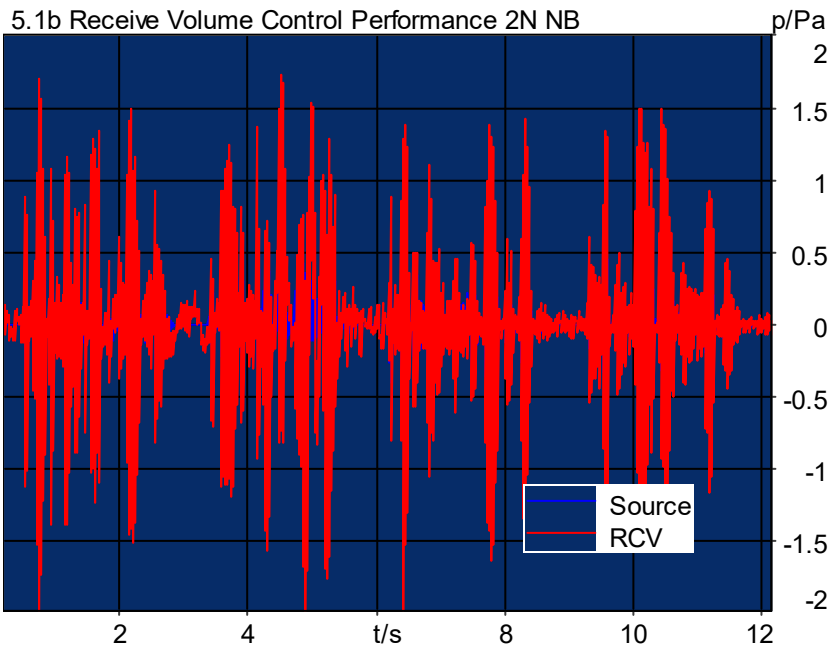
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.67	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.46	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.59	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.87	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.44	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.77	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.59	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.71	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.05	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.11	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.60	BL-SZ25B0732-N41-PC3
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3245.6 Hz	3.62	BL-SZ25B0732-N41-PC3

5.1b Receive Volume Control Performance 2N NB	1467
5.2 RCV Distortion and Noise - 400 Hz NB	1469
5.2 RCV Distortion and Noise - 500 Hz NB	1471
5.2 RCV Distortion and Noise - 630 Hz NB	1473
5.2 RCV Distortion and Noise - 800 Hz NB	1475
5.2 RCV Distortion and Noise - 1000 Hz NB	1477
5.2 RCV Distortion and Noise - 1250 Hz NB	1479
5.2 RCV Distortion and Noise - 1600 Hz NB	1481
5.2 RCV Distortion and Noise - 2000 Hz NB	1483
5.2 RCV Distortion and Noise - 2500 Hz NB	1485
5.2 RCV Distortion and Noise - 3150 Hz NB	1487
5.3 Frequency Response 2N FF HANB	1489

5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.67 dB[SPL]	80.35%	Ok

Ok

2025/12/16 20:01 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

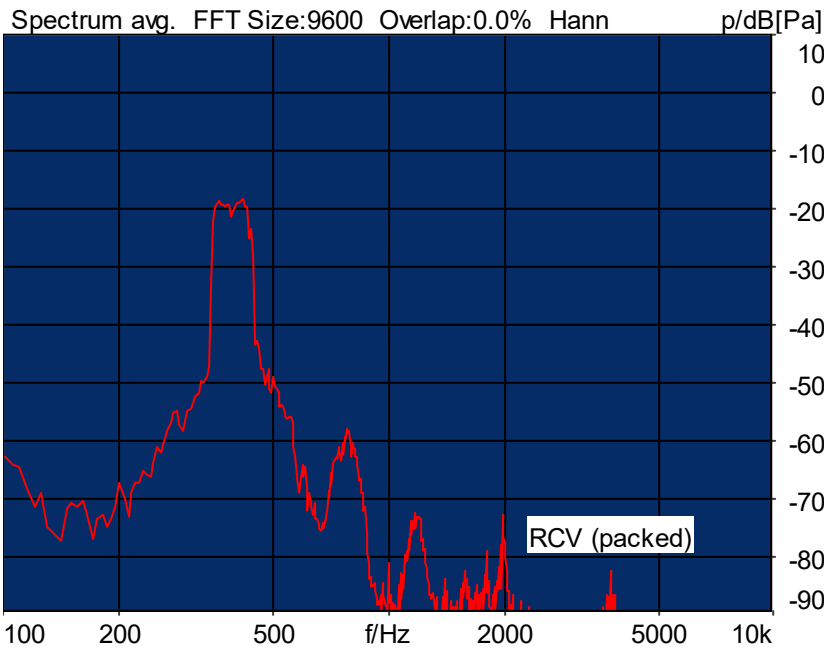
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.46 dB (1.89%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

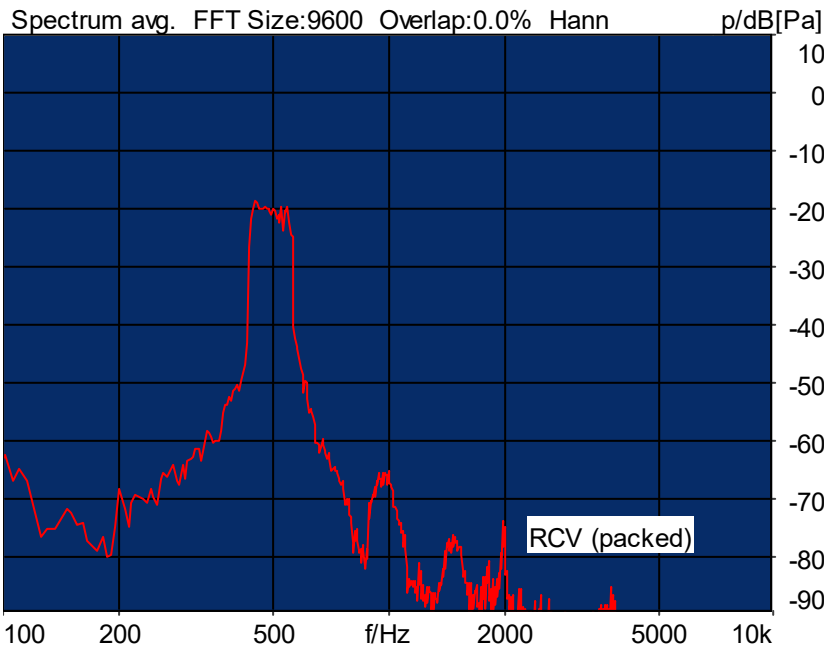
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.59 dB (1.66%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

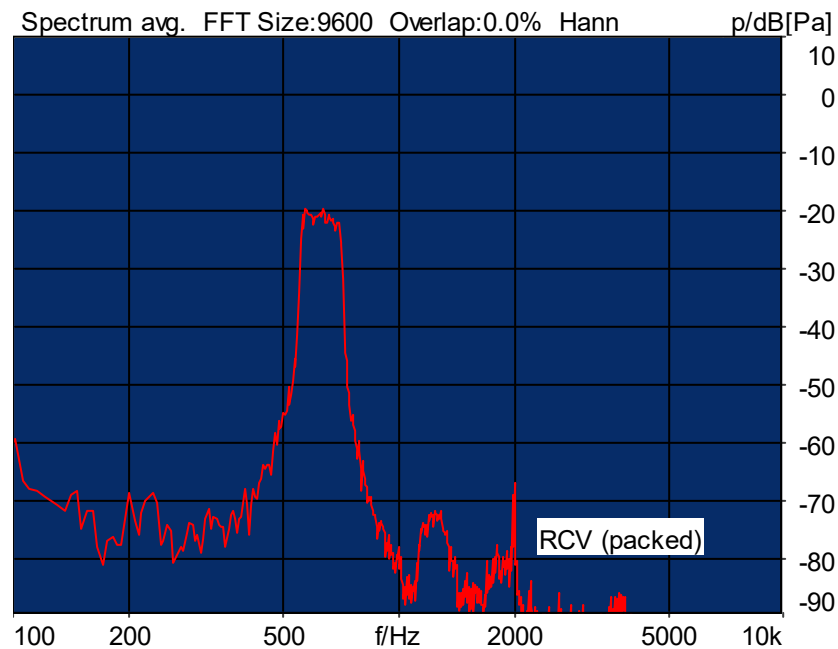
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.87 dB (1.14%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

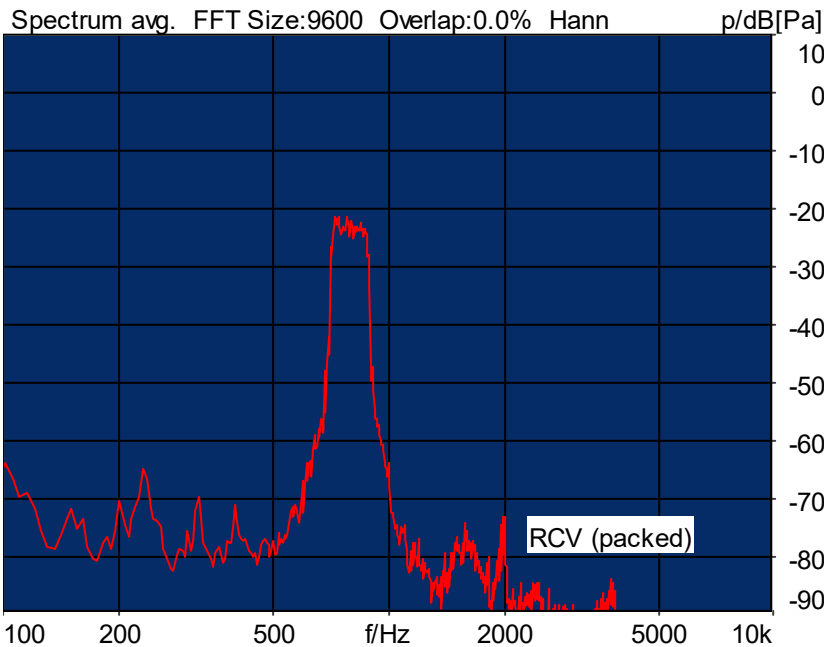
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.44 dB (1.20%) Ok

Ok

2025/12/16 20:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

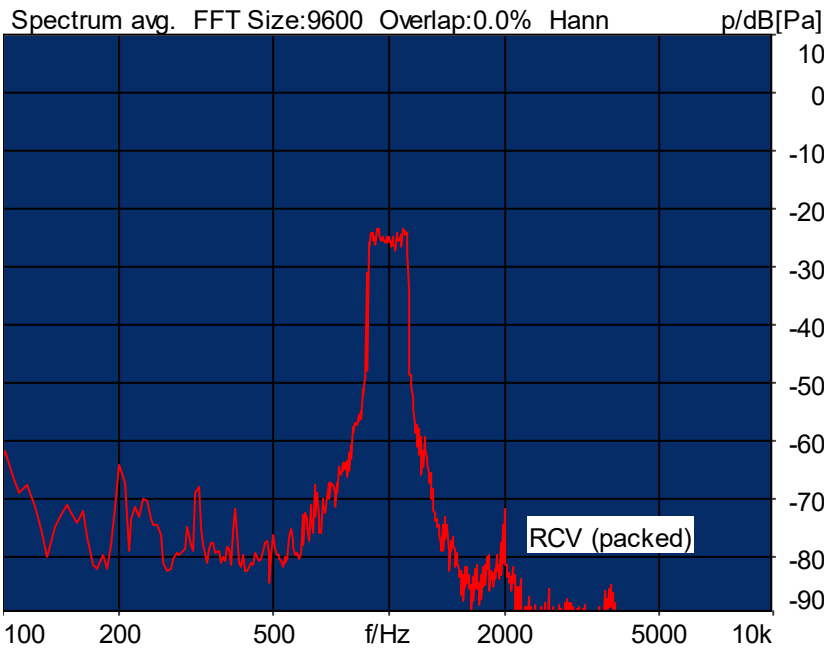
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.77 dB (1.83%) Ok

Ok

2025/12/16 20:03 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

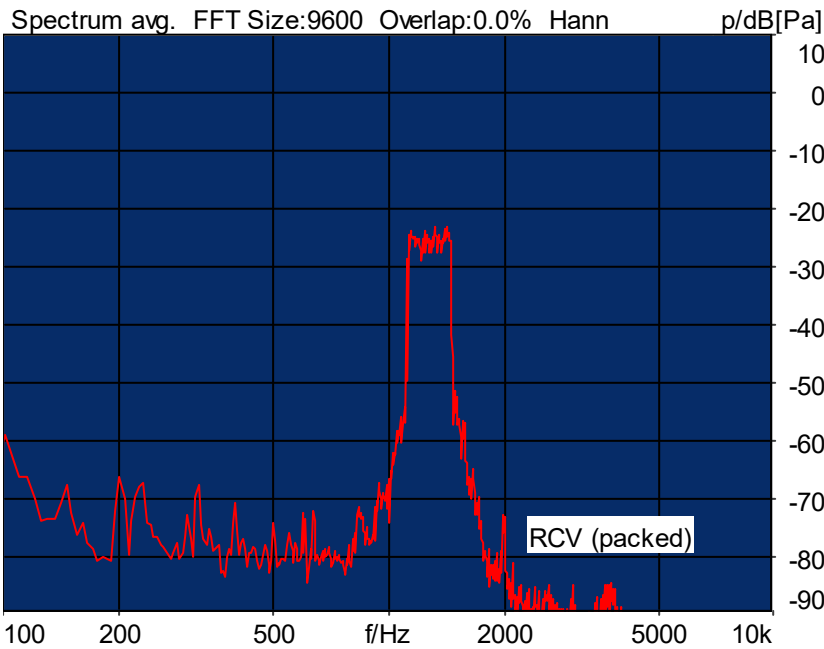
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.59 dB (3.32%) Ok

Ok

2025/12/16 20:03 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

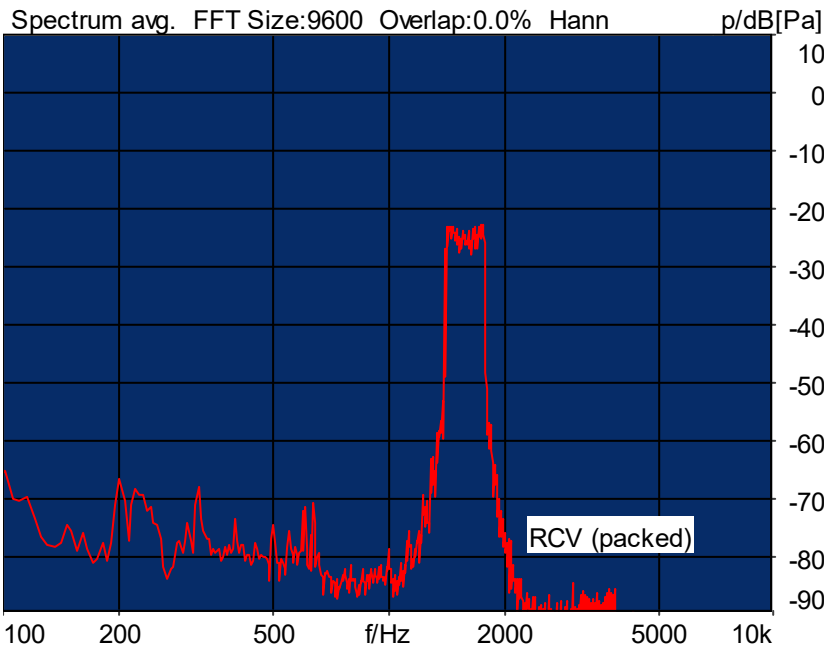
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.71 dB (1.16%) Ok

Ok

2025/12/16 20:03 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

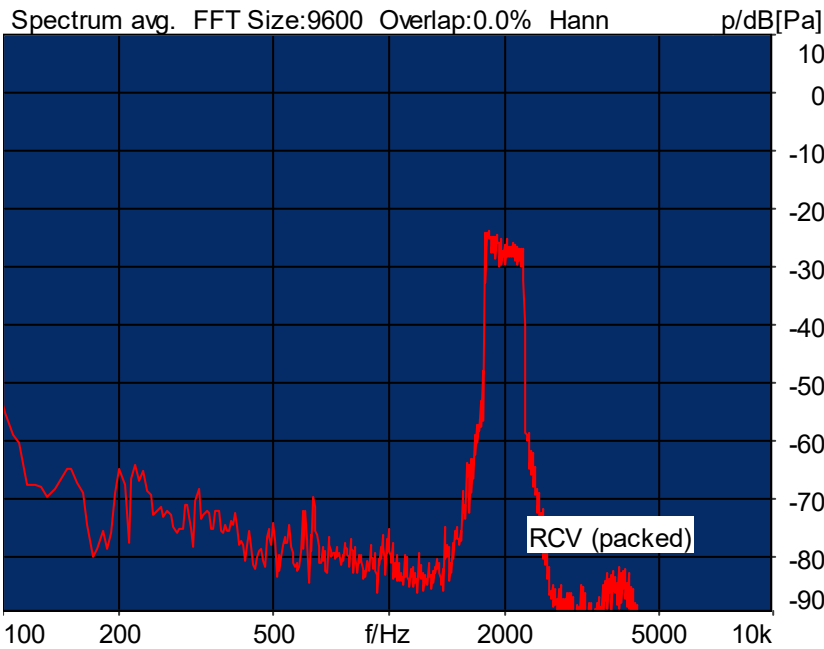
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.05 dB (1.77%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

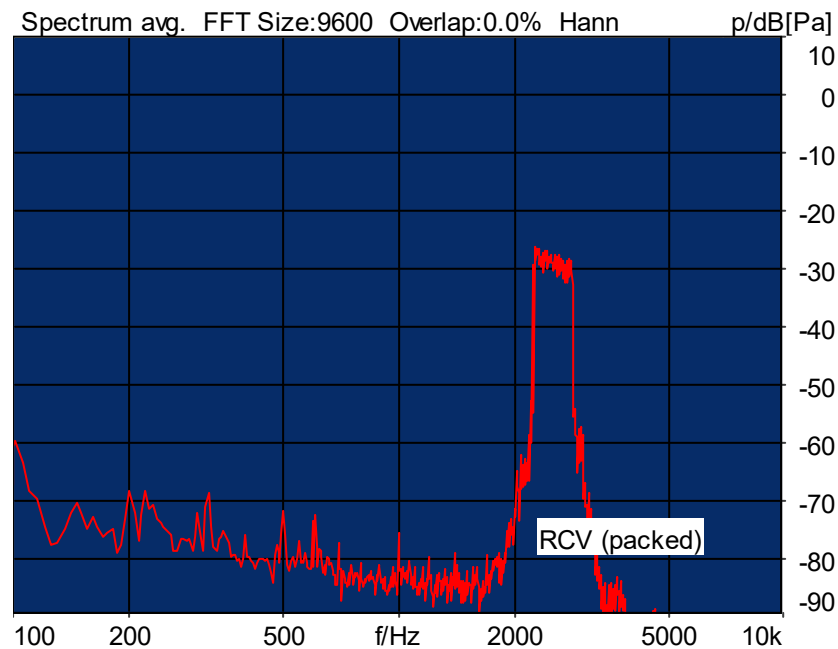
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.11 dB (2.21%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

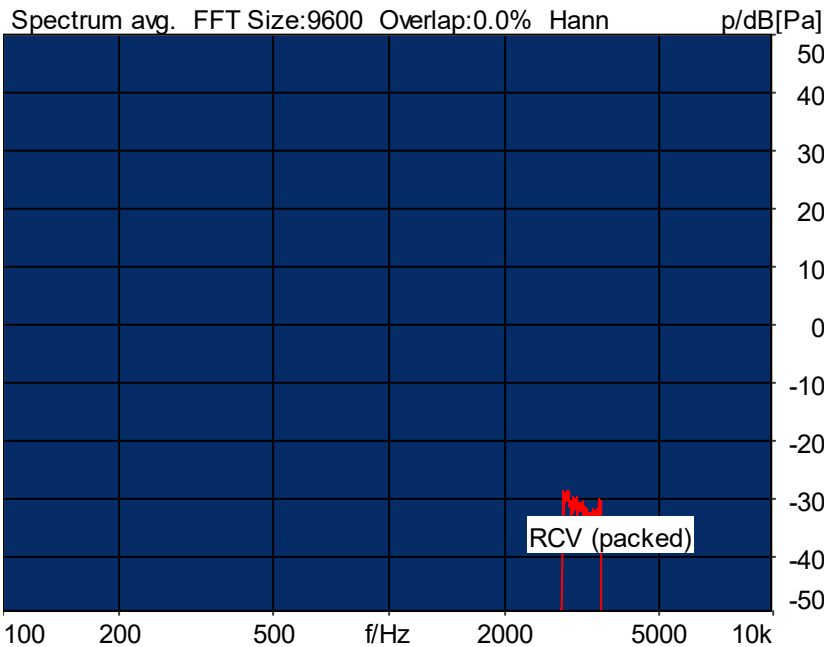
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.60 dB (2.34%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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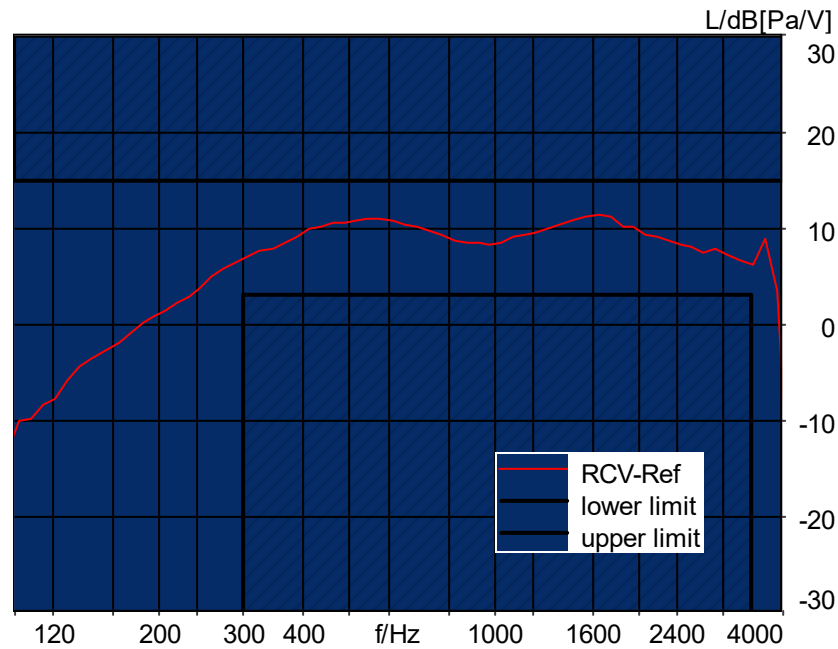
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.62 dB at 3245.6 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 120.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(48#)

Measurement Object	BL-SZ25B0732-N41-PC3
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Status Overview

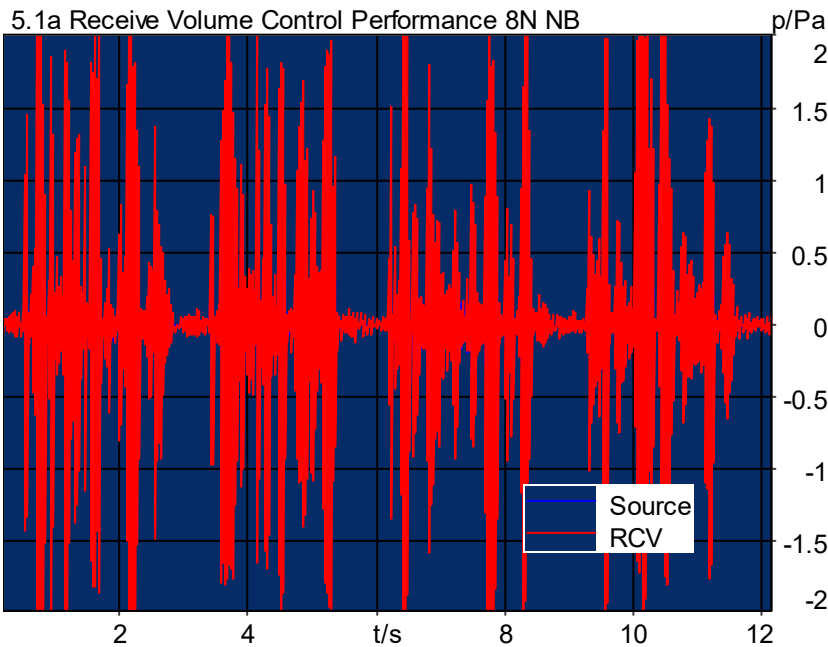
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.50	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.60	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.99	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.56	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.52	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.93	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.81	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.23	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.47	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.39	BL-SZ25B0732-N41-PC3
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.24	BL-SZ25B0732-N41-PC3
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3245.6 Hz	2.64	BL-SZ25B0732-N41-PC3

5.1a Receive Volume Control Performance 8N NB	41
5.2 RCV Distortion and Noise - 400 Hz NB	1496
5.2 RCV Distortion and Noise - 500 Hz NB	1498
5.2 RCV Distortion and Noise - 630 Hz NB	1500
5.2 RCV Distortion and Noise - 800 Hz NB	1502
5.2 RCV Distortion and Noise - 1000 Hz NB	1504
5.2 RCV Distortion and Noise - 1250 Hz NB	1506
5.2 RCV Distortion and Noise - 1600 Hz NB	1508
5.2 RCV Distortion and Noise - 2000 Hz NB	1510
5.2 RCV Distortion and Noise - 2500 Hz NB	1512
5.2 RCV Distortion and Noise - 3150 Hz NB	1514
5.3 Frequency Response 8N FF HANB	1516

5.1a Receive Volume Control Performance 8N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.50 dB[SPL]	80.35%	Ok

Ok

2025/12/16 20:06 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

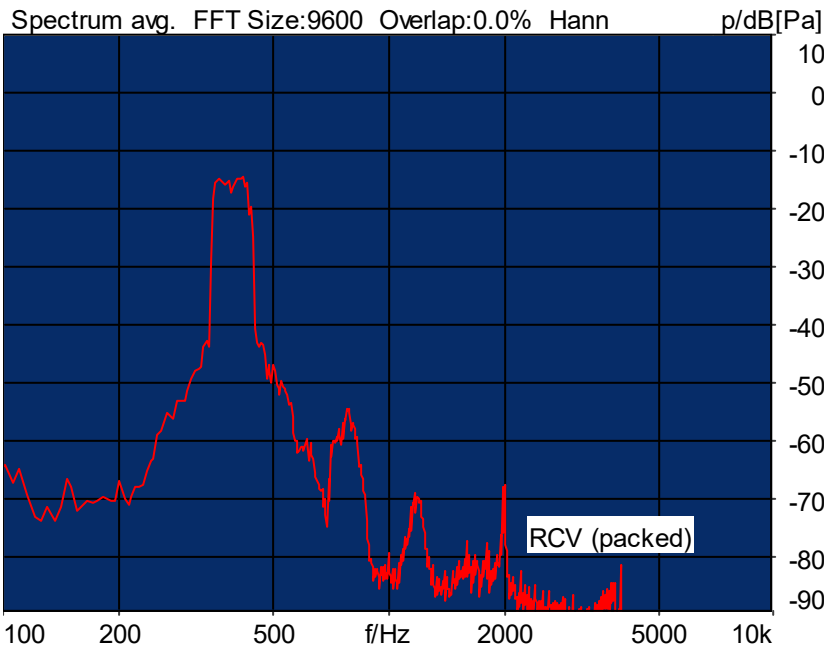
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.60 dB (1.66%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

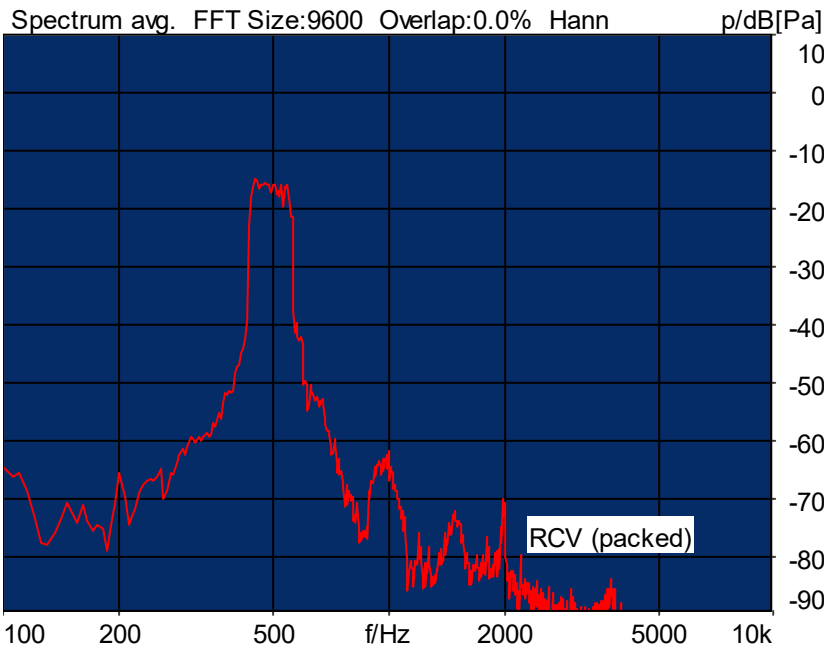
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.99 dB (1.41%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

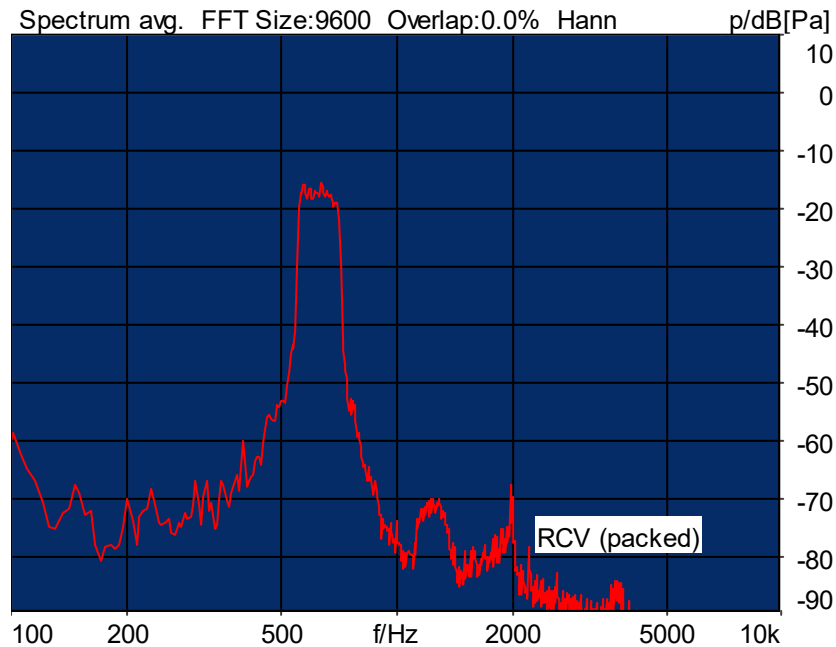
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.56 dB (1.05%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

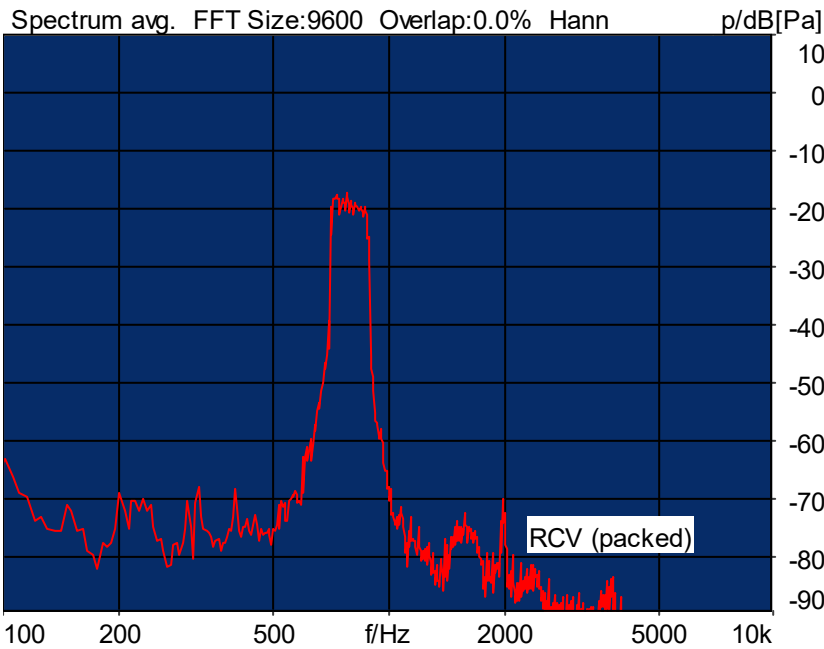
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.52 dB (0.94%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

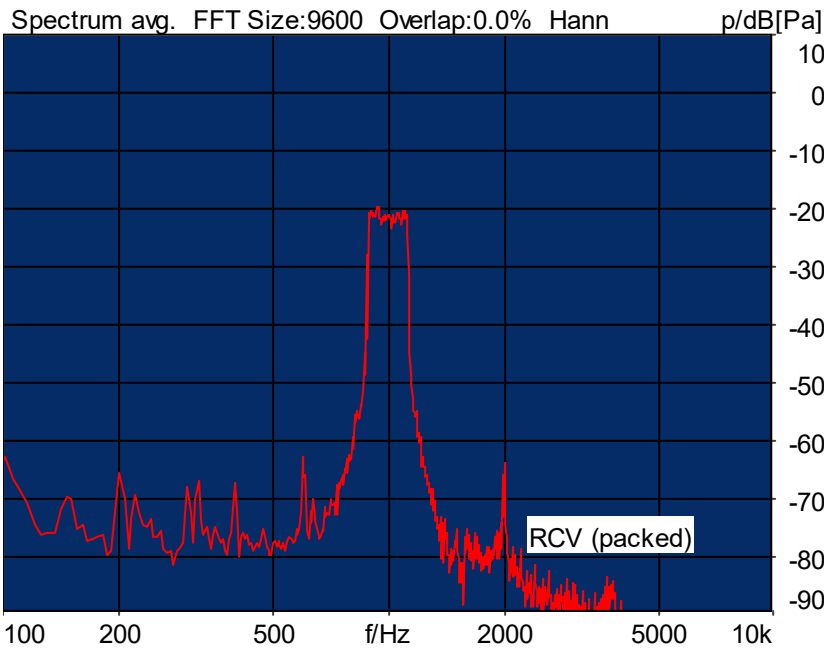
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.93 dB (1.27%) Ok

Ok

2025/12/16 20:08 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

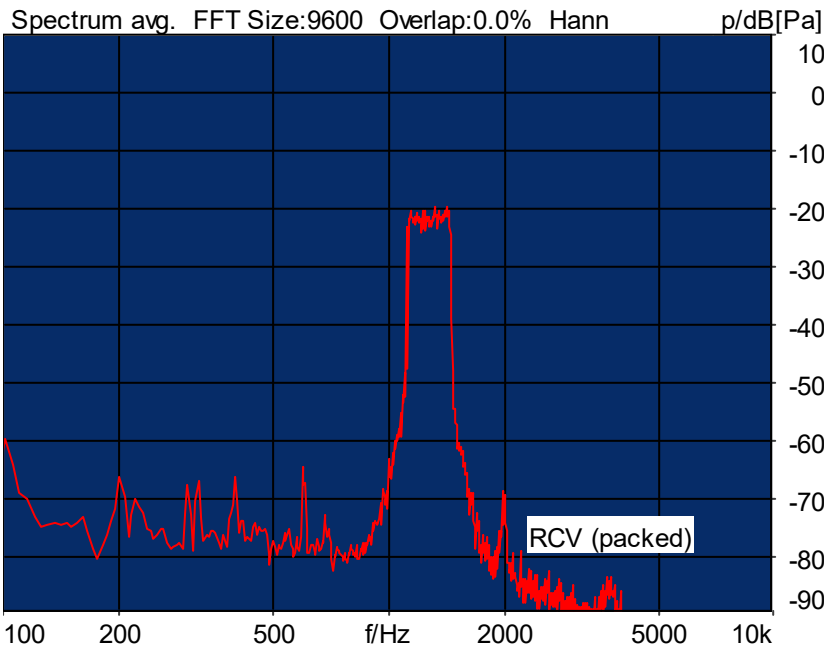
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.81 dB (2.29%) Ok

Ok

2025/12/16 20:08 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

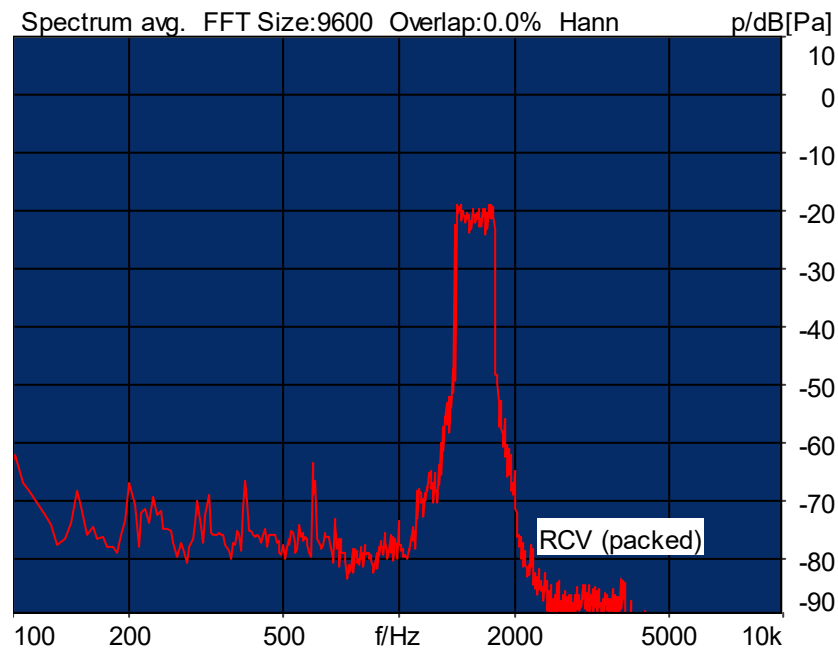
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.23 dB (1.38%) Ok

Ok

2025/12/16 20:09 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

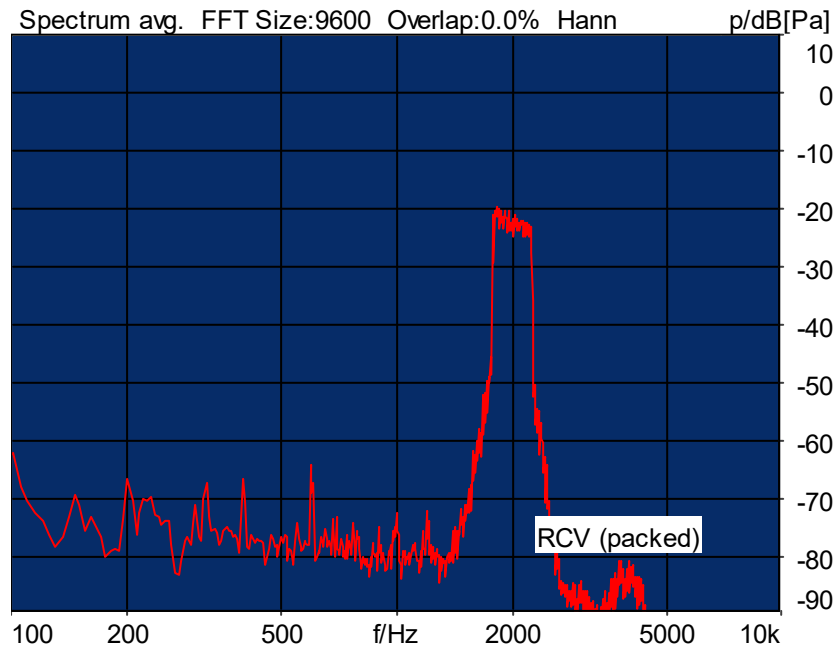
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.47 dB (1.89%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

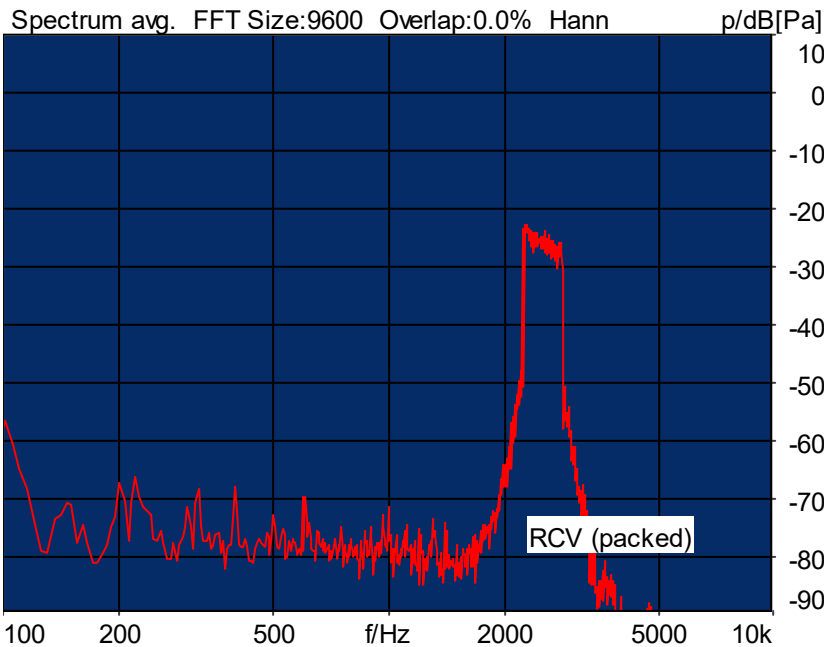
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.39 dB (2.69%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

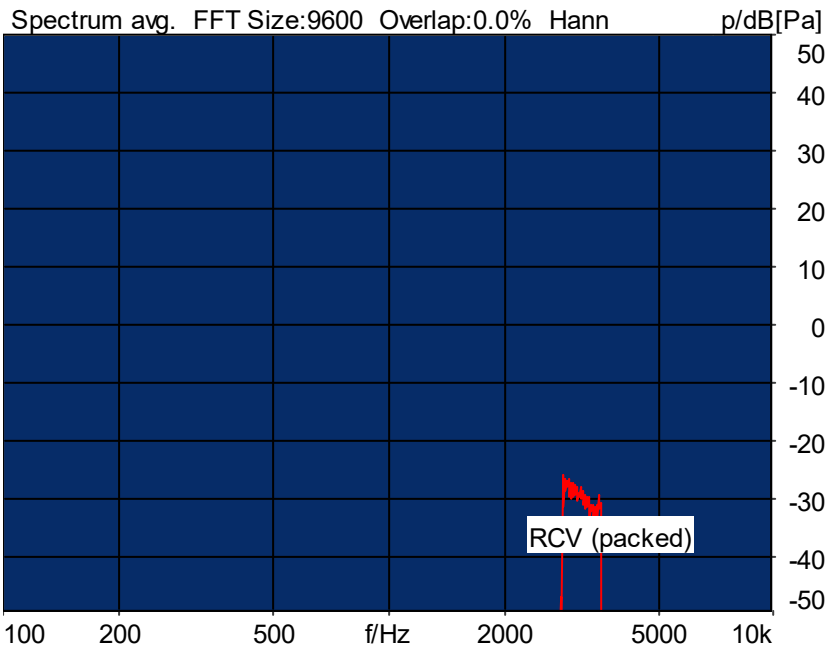
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.24 dB (3.07%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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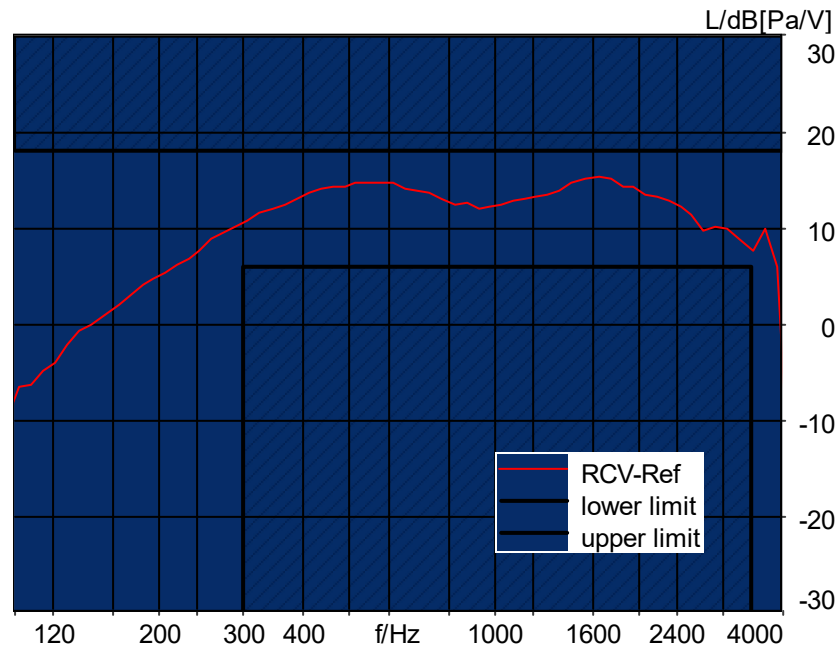
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

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Absolute minimal distance

2.64 dB at 3245.6 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(49#)

Measurement Object	BL-SZ25B0732-N41-PC2
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Status Overview

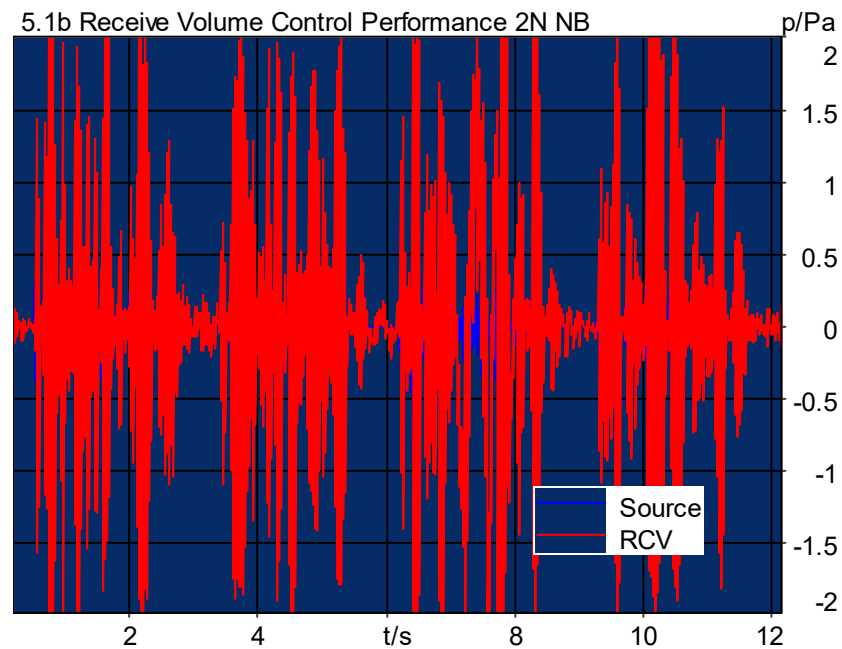
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	85.04	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.59	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.84	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.82	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.88	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.93	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.92	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.89	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.53	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.31	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	24.02	BL-SZ25B0732-N41-PC2
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3882.4 Hz	2.69	BL-SZ25B0732-N41-PC2

5.1b Receive Volume Control Performance 2N NB	1521
5.2 RCV Distortion and Noise - 400 Hz NB	1523
5.2 RCV Distortion and Noise - 500 Hz NB	1525
5.2 RCV Distortion and Noise - 630 Hz NB	1527
5.2 RCV Distortion and Noise - 800 Hz NB	1529
5.2 RCV Distortion and Noise - 1000 Hz NB	1531
5.2 RCV Distortion and Noise - 1250 Hz NB	1533
5.2 RCV Distortion and Noise - 1600 Hz NB	1535
5.2 RCV Distortion and Noise - 2000 Hz NB	1537
5.2 RCV Distortion and Noise - 2500 Hz NB	1539
5.2 RCV Distortion and Noise - 3150 Hz NB	1541
5.3 Frequency Response 2N FF HANB	1543

5.1b Receive Volume Control Performance 2N NB

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Channel	Speech level	Activity	
RCV	85.04 dB[SPL]	83.94%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

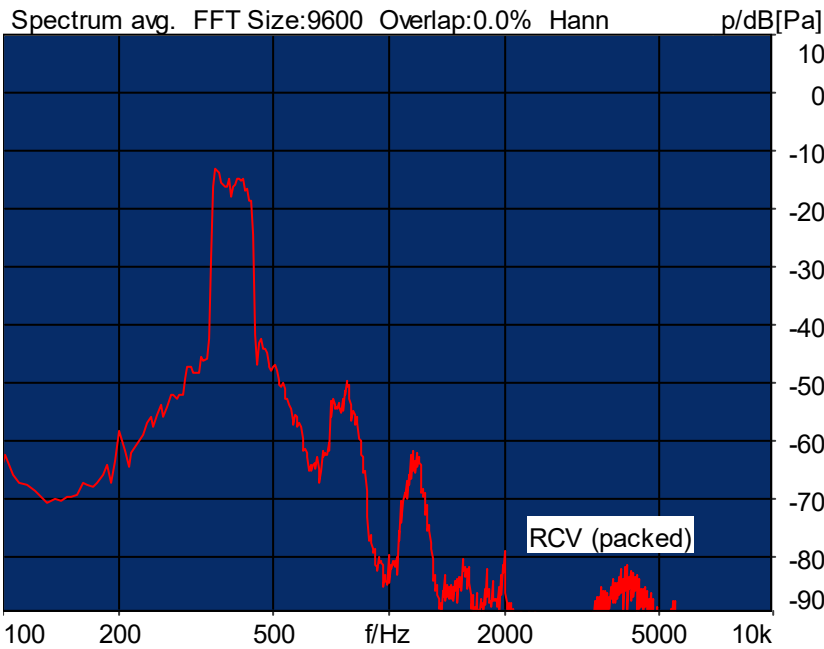
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.59 dB (2.09%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

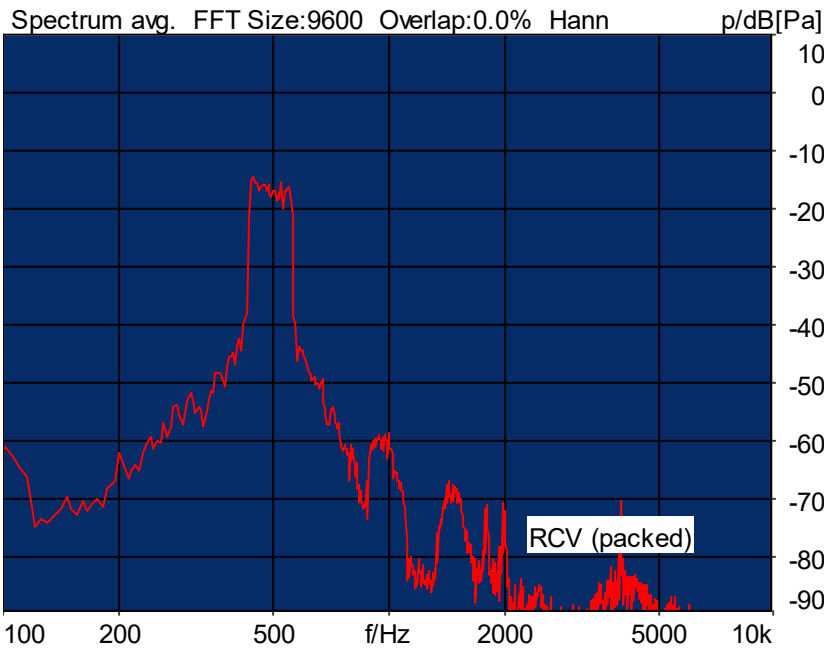
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.84 dB (2.28%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

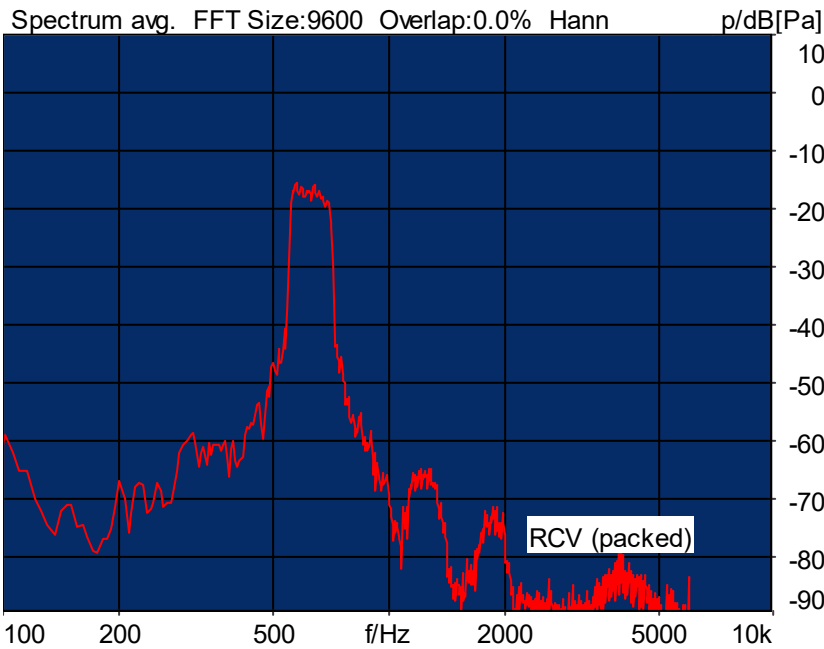
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.82 dB (1.82%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

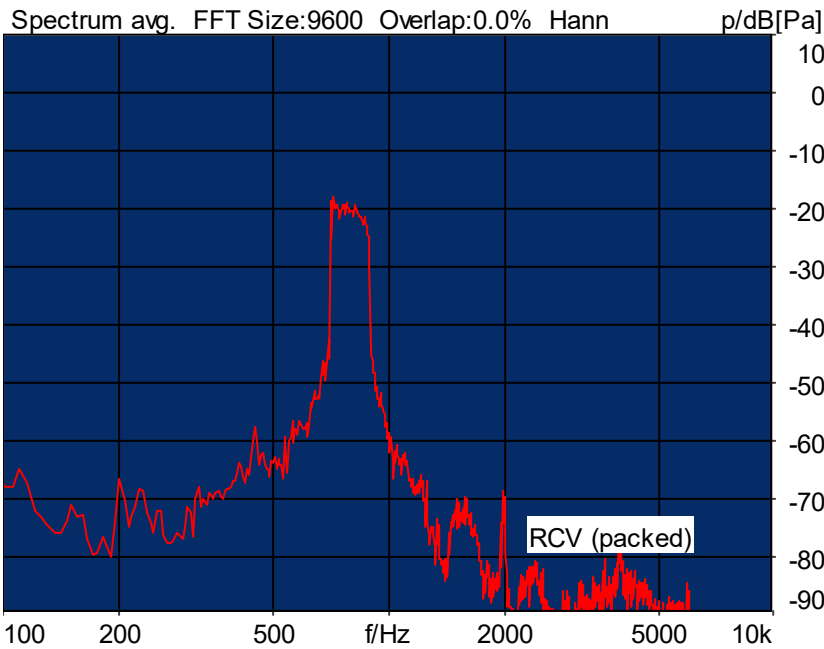
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.88 dB (2.02%) Ok

Ok

2025/12/16 21:05 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

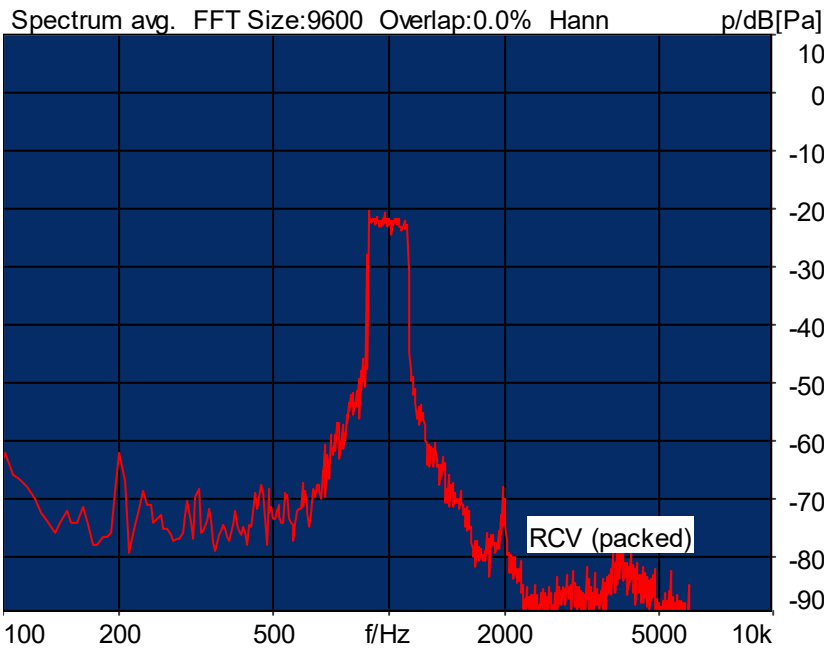
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.93 dB (2.53%) Ok

Ok

2025/12/16 21:06 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

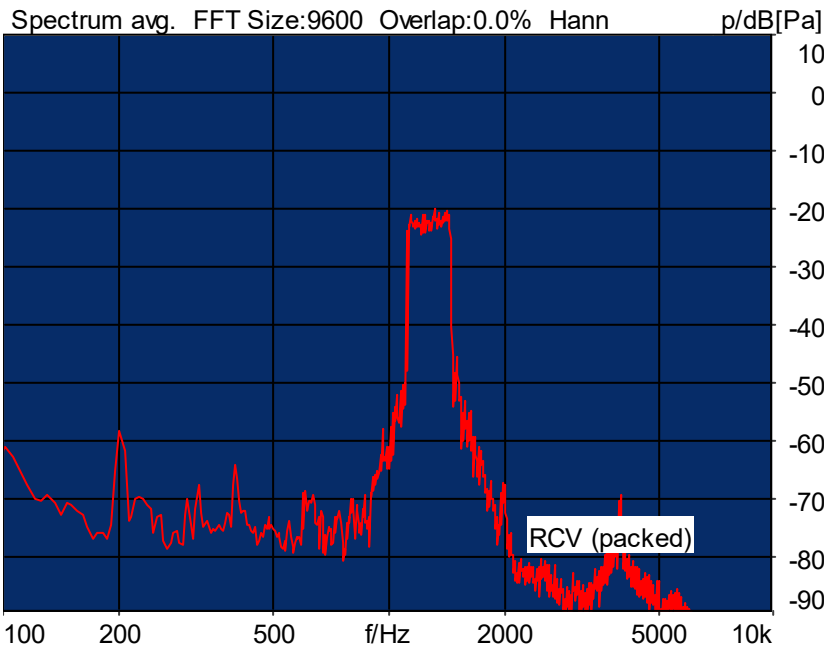
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 28.92 dB (3.58%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

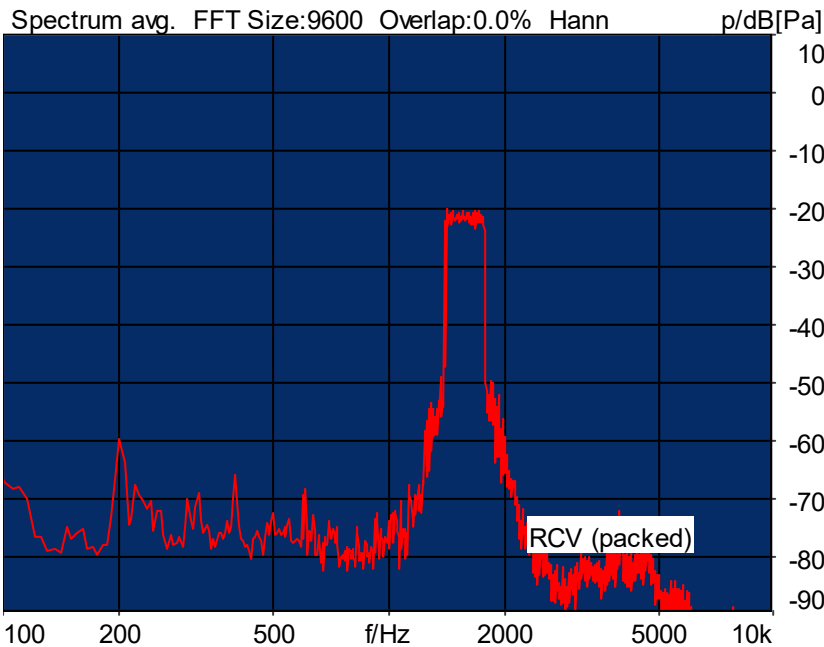
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.89 dB (2.02%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

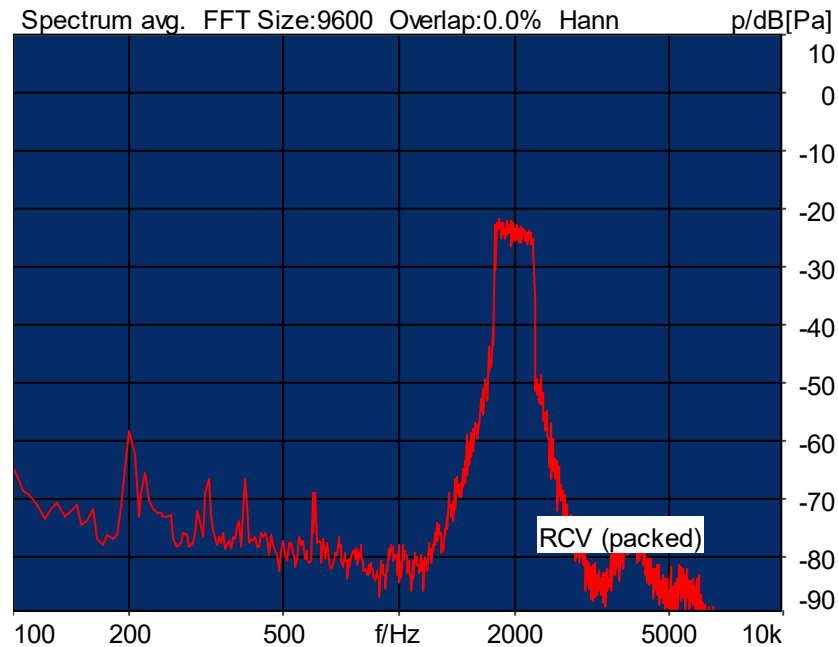
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 27.53 dB (4.20%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

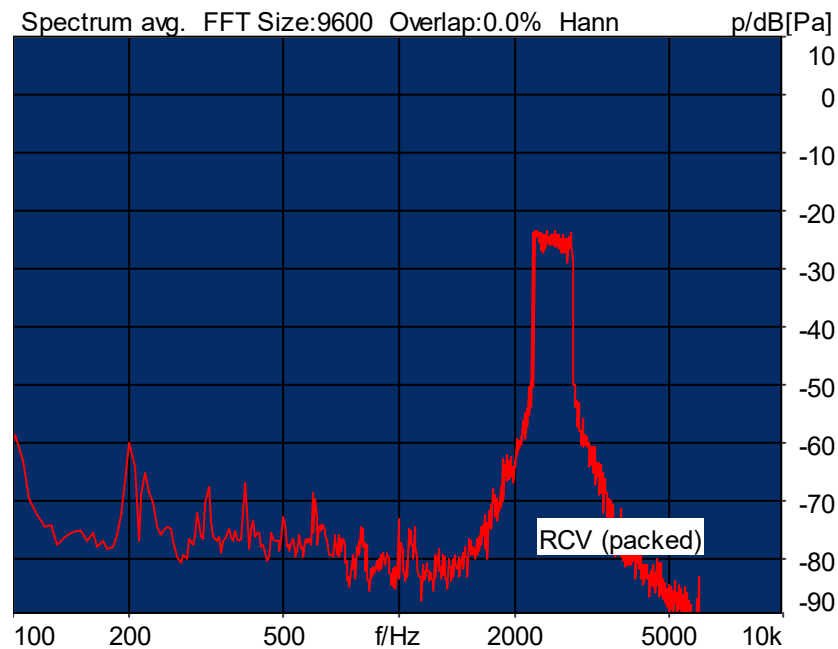
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.31 dB (3.05%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

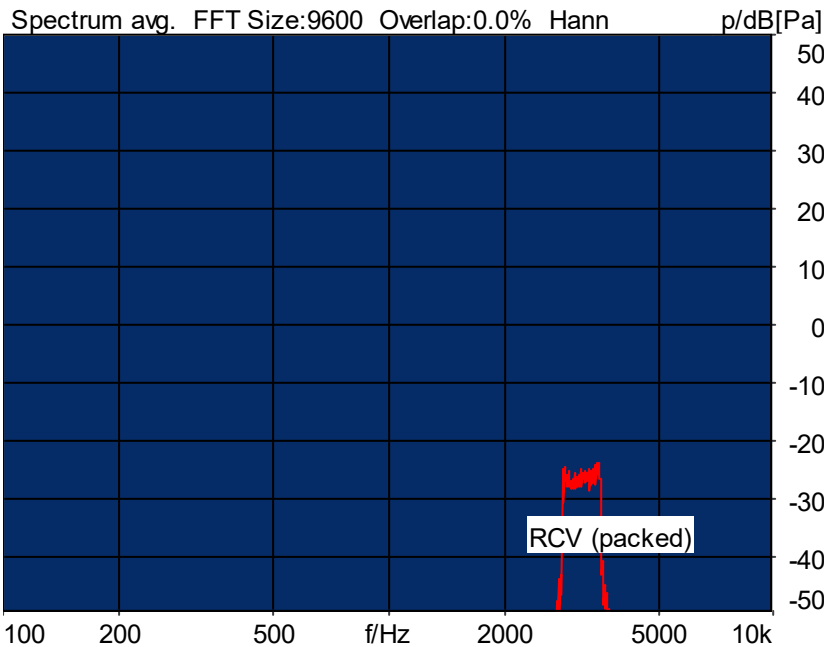
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 24.02 dB (6.30%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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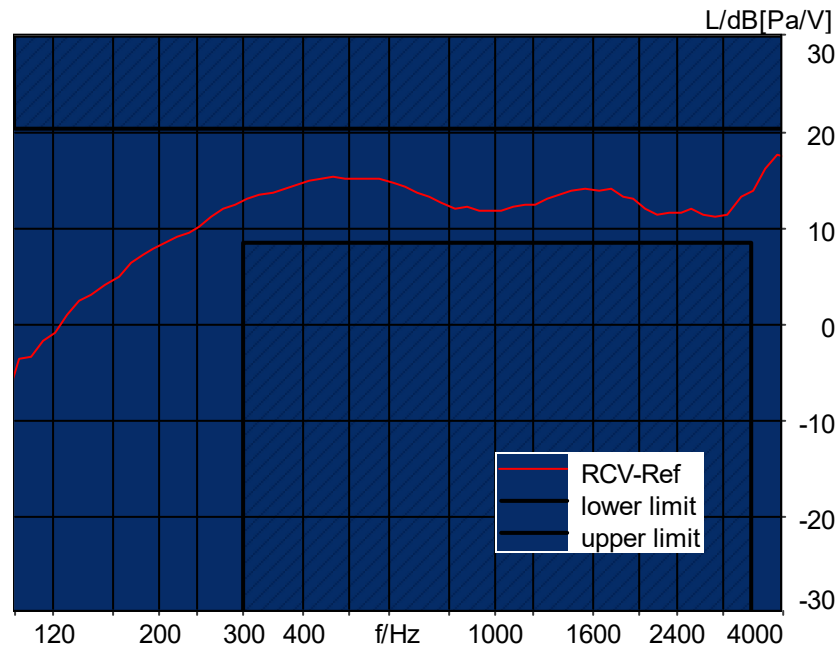
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

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EVS-NB-24.4



Absolute minimal distance

2.69 dB at 3882.4 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 99.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(50#)

Measurement Object	BL-SZ25B0732-N41-PC2
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Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	87.48	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.92	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.32	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.75	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.25	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.29	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.70	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.84	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.30	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.20	BL-SZ25B0732-N41-PC2
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.71	BL-SZ25B0732-N41-PC2

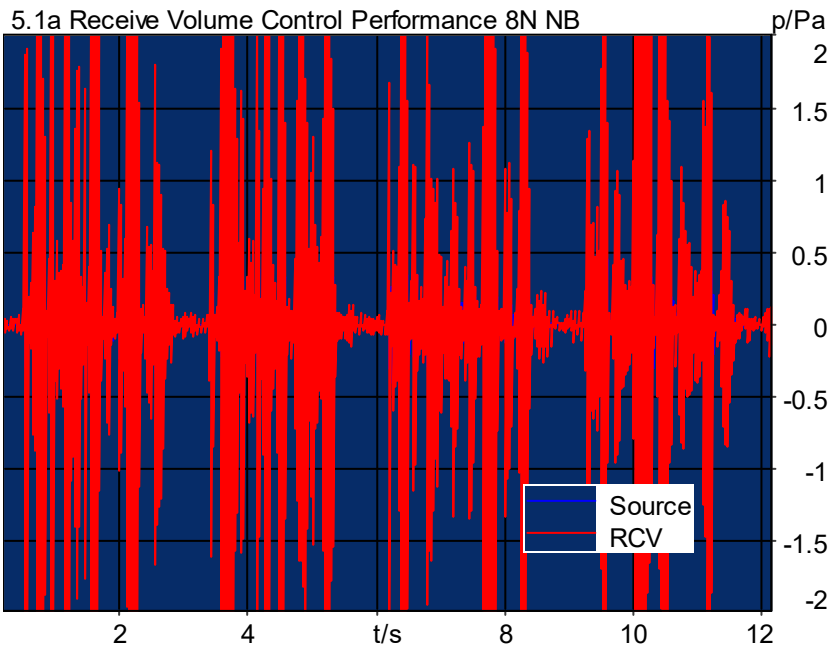
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	2.80	BL-SZ25B0732- N41-PC2
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5.1a Receive Volume Control Performance 8N NB	1548
5.2 RCV Distortion and Noise - 400 Hz NB	1550
5.2 RCV Distortion and Noise - 500 Hz NB	1552
5.2 RCV Distortion and Noise - 630 Hz NB	1554
5.2 RCV Distortion and Noise - 800 Hz NB	1556
5.2 RCV Distortion and Noise - 1000 Hz NB	1558
5.2 RCV Distortion and Noise - 1250 Hz NB	1560
5.2 RCV Distortion and Noise - 1600 Hz NB	1562
5.2 RCV Distortion and Noise - 2000 Hz NB	1564
5.2 RCV Distortion and Noise - 2500 Hz NB	1566
5.2 RCV Distortion and Noise - 3150 Hz NB	1568
5.3 Frequency Response 8N FF HANB	1570

5.1a Receive Volume Control Performance 8N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	87.48 dB[SPL]	80.34%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

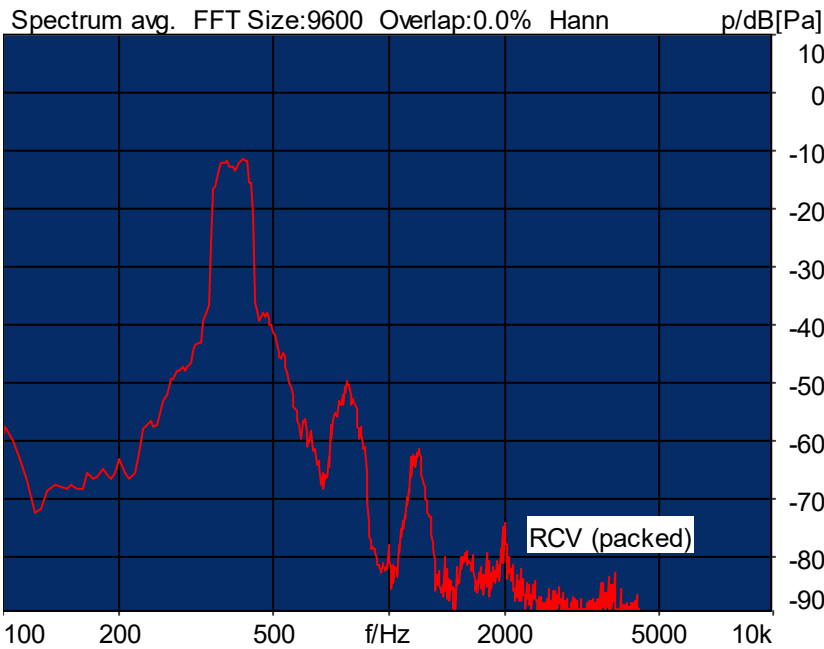
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.92 dB (2.26%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

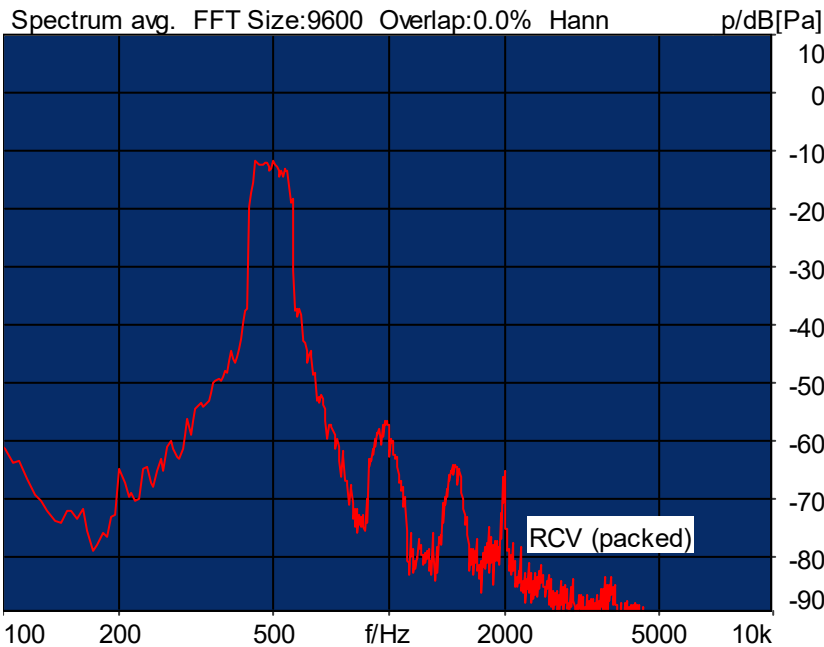
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.32 dB (1.71%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

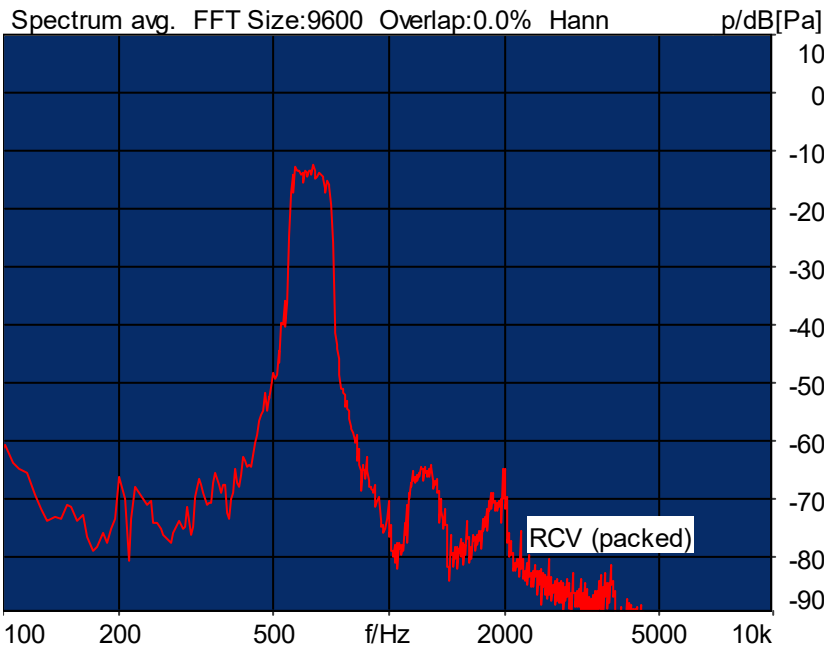
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.75 dB (1.03%) Ok

Ok

2025/12/16 21:16 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

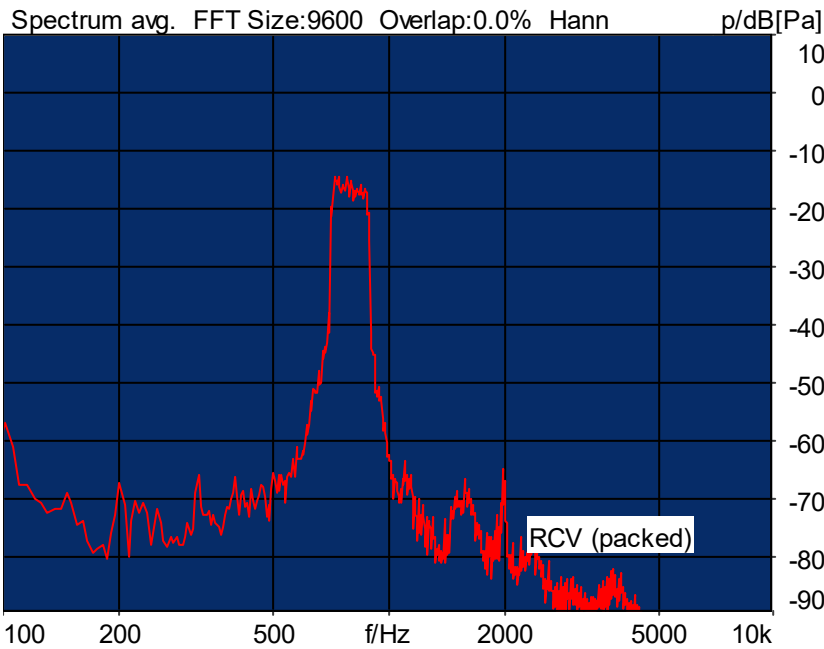
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.25 dB (1.22%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

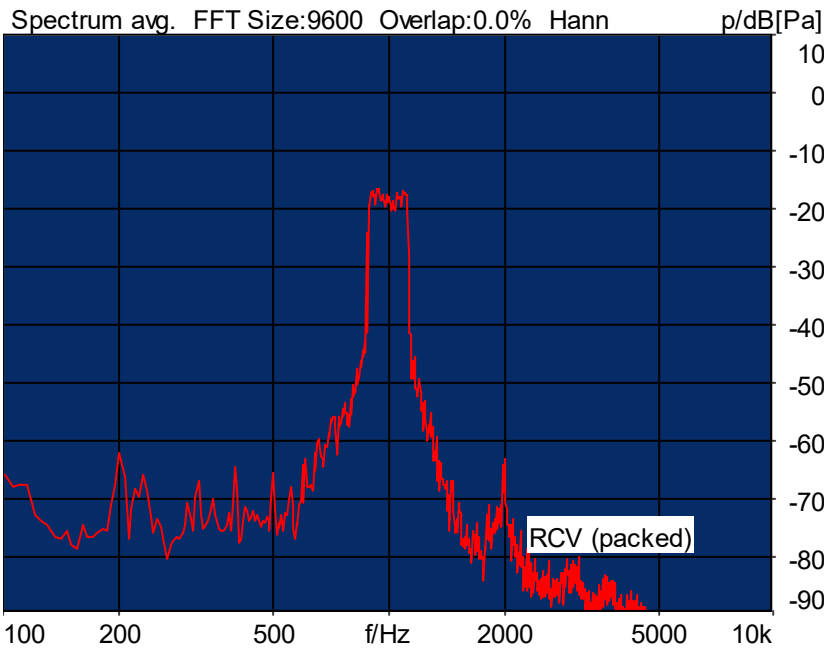
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.29 dB (2.17%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

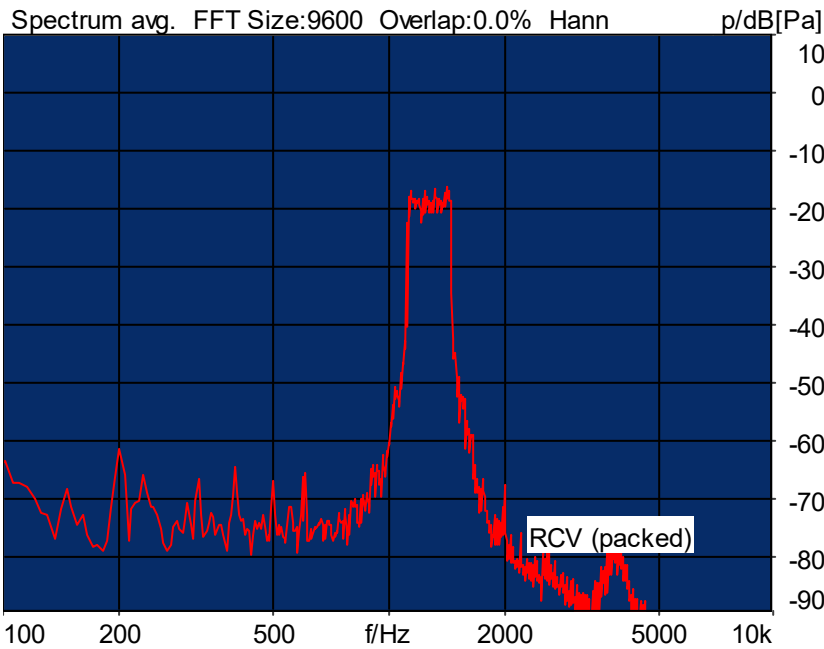
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.70 dB (3.27%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

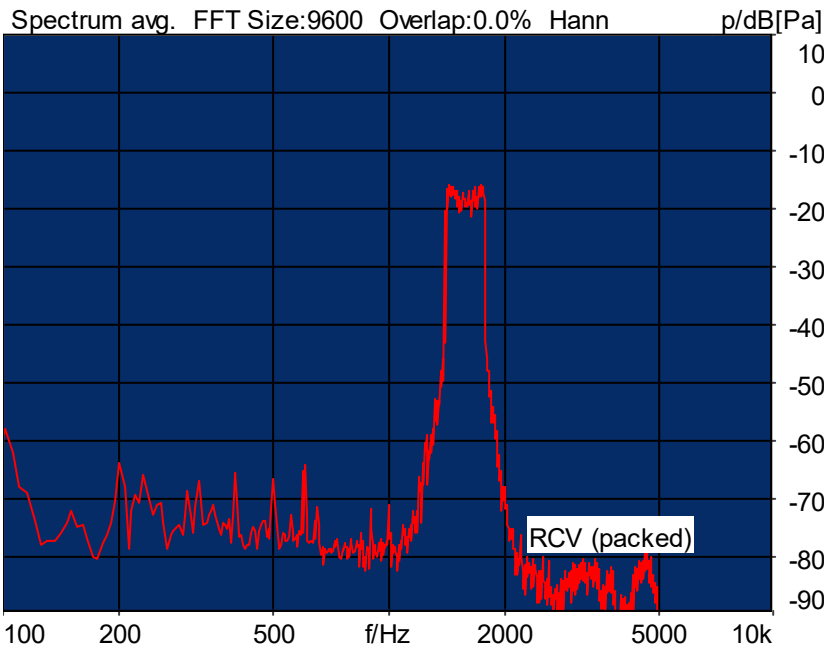
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.84 dB (1.14%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

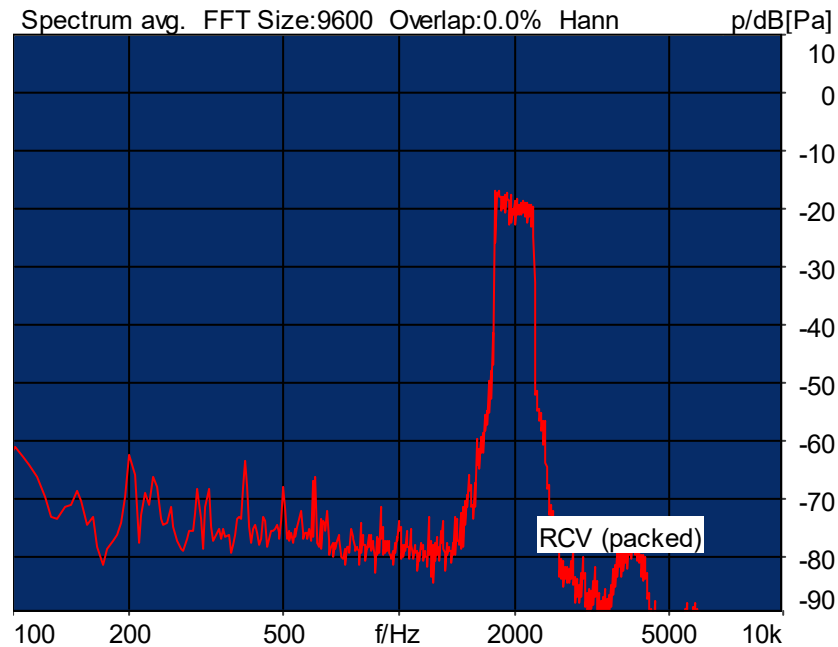
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.30 dB (1.37%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

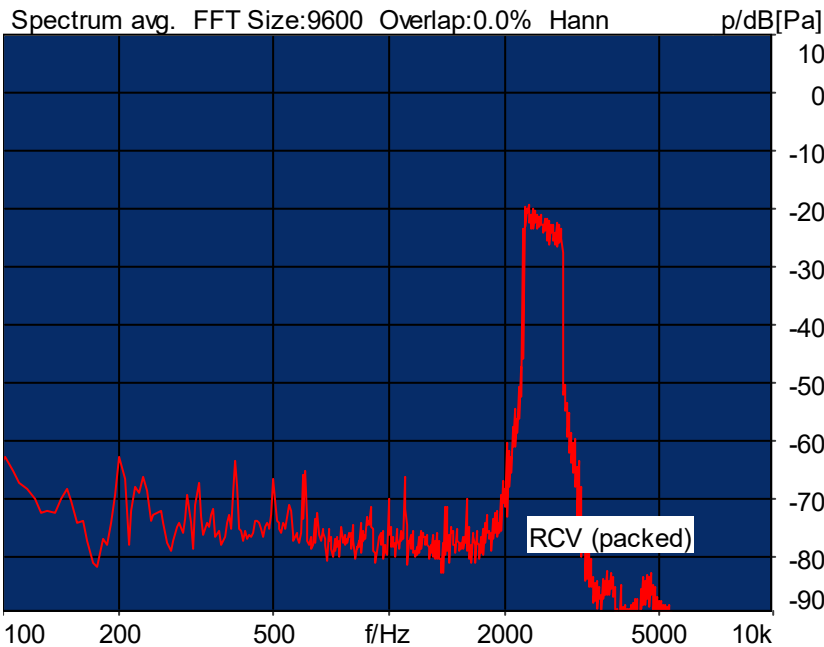
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.20 dB (1.74%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

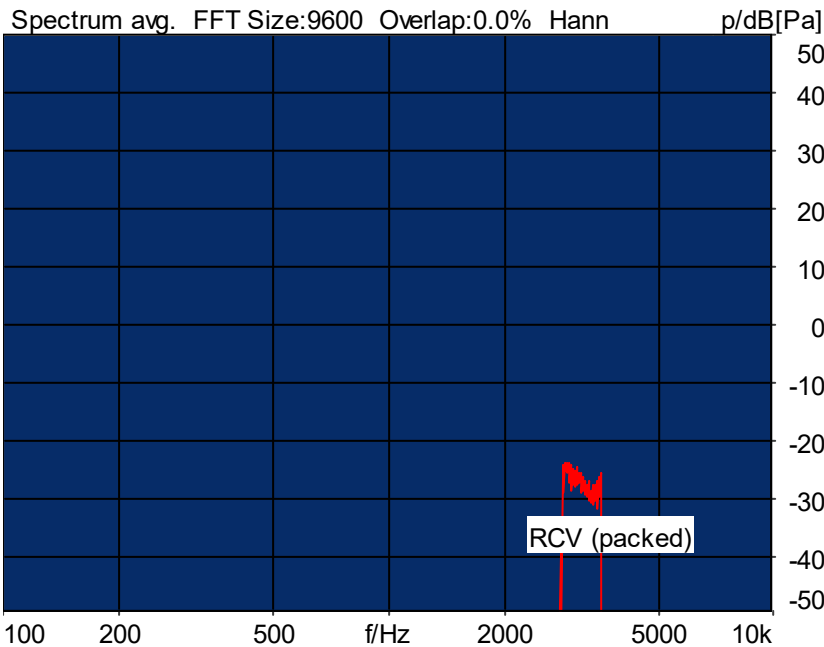
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.71 dB (2.32%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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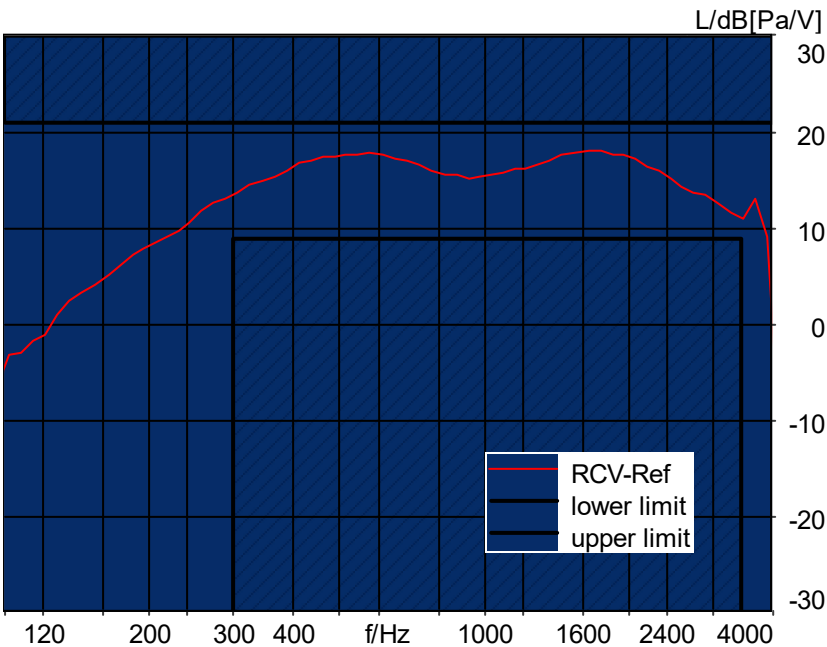
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

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Absolute minimal distance

2.80 dB at 1747.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 138.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(51#)

Measurement Object	BL-SZ25B0732-N48
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Status Overview

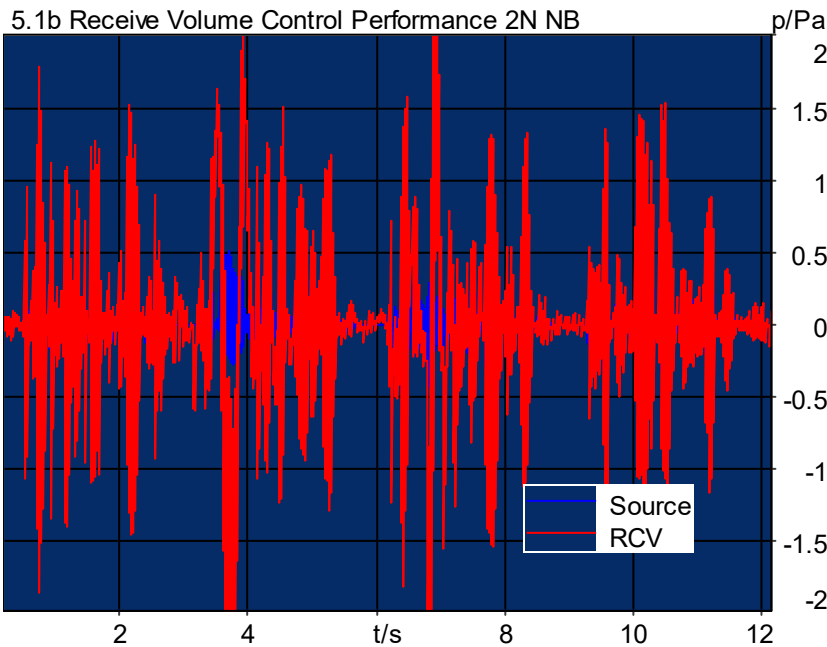
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.58	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.36	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.42	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.47	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.51	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.90	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.49	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.51	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.10	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.57	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.50	BL-SZ25B0732-N48
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3245.6 Hz	3.83	BL-SZ25B0732-N48

5.1b Receive Volume Control Performance 2N NB	1575
5.2 RCV Distortion and Noise - 400 Hz NB	1577
5.2 RCV Distortion and Noise - 500 Hz NB	1579
5.2 RCV Distortion and Noise - 630 Hz NB	1581
5.2 RCV Distortion and Noise - 800 Hz NB	1583
5.2 RCV Distortion and Noise - 1000 Hz NB	1585
5.2 RCV Distortion and Noise - 1250 Hz NB	1587
5.2 RCV Distortion and Noise - 1600 Hz NB	1589
5.2 RCV Distortion and Noise - 2000 Hz NB	1591
5.2 RCV Distortion and Noise - 2500 Hz NB	1593
5.2 RCV Distortion and Noise - 3150 Hz NB	1595
5.3 Frequency Response 2N FF HANB	1597

5.1b Receive Volume Control Performance 2N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.58 dB[SPL]	80.38%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

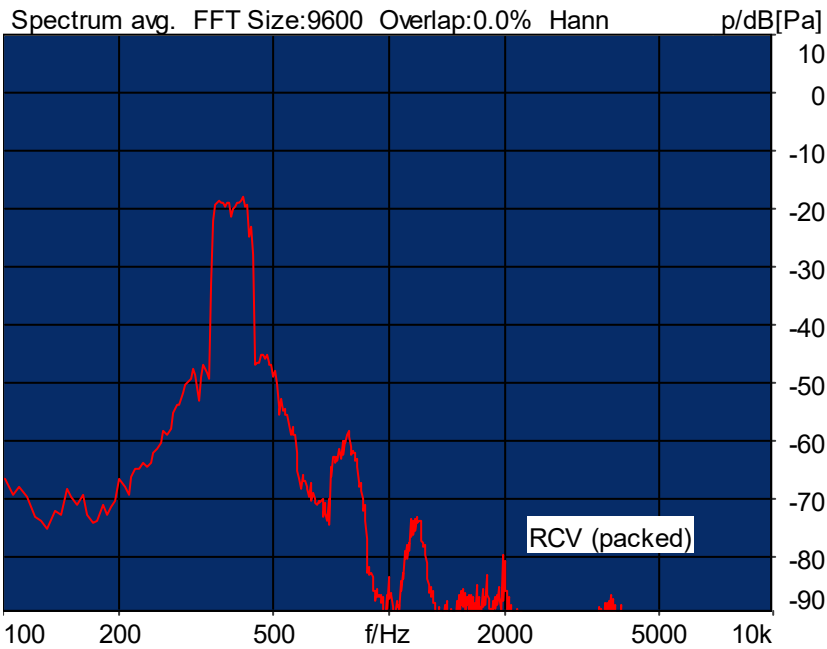
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.36 dB (2.15%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

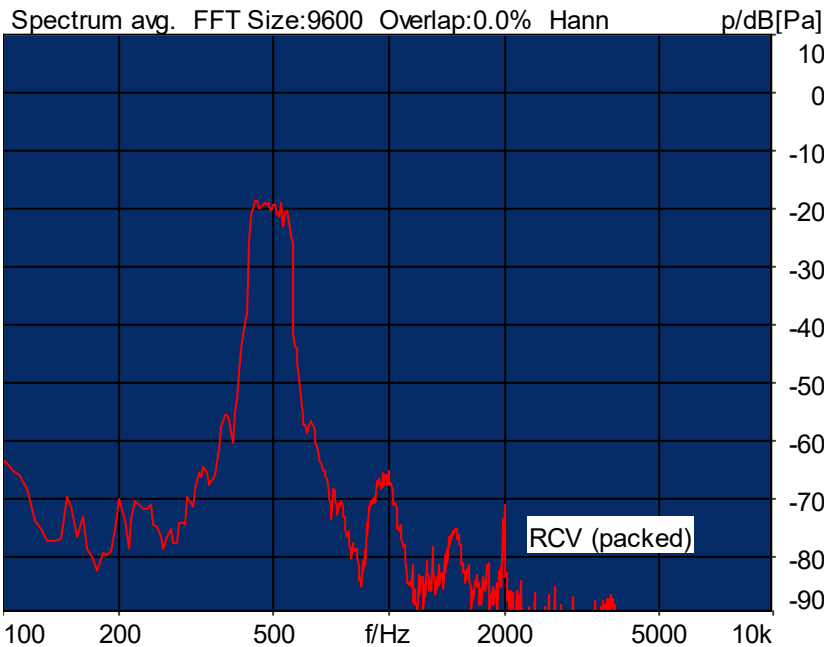
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.42 dB (1.07%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

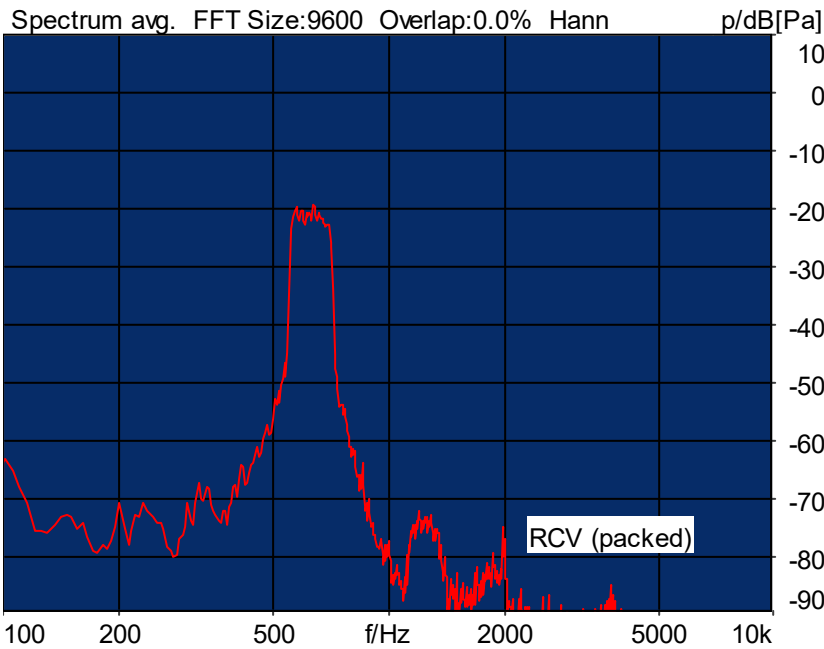
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.47 dB (1.34%) Ok

Ok

2025/12/16 18:40 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

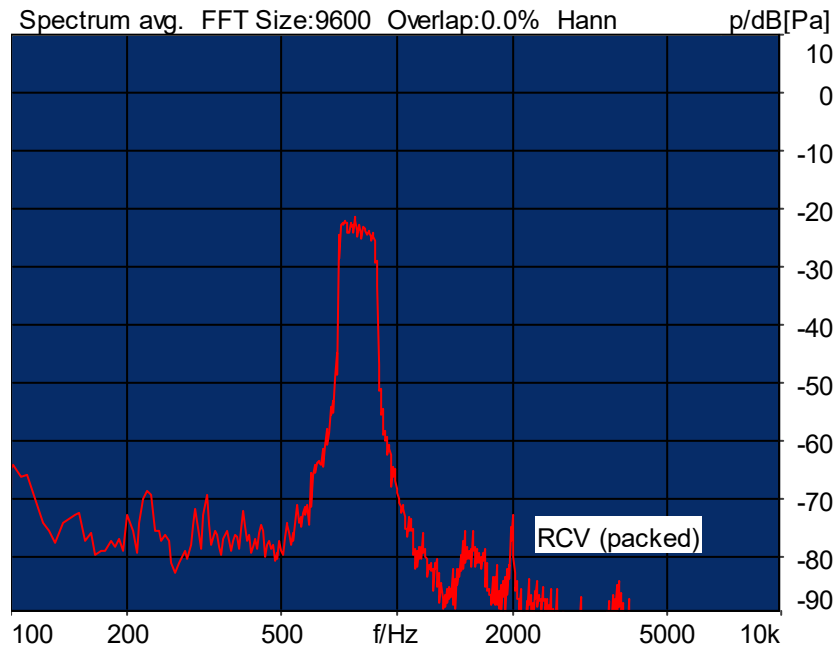
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.51 dB (1.06%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

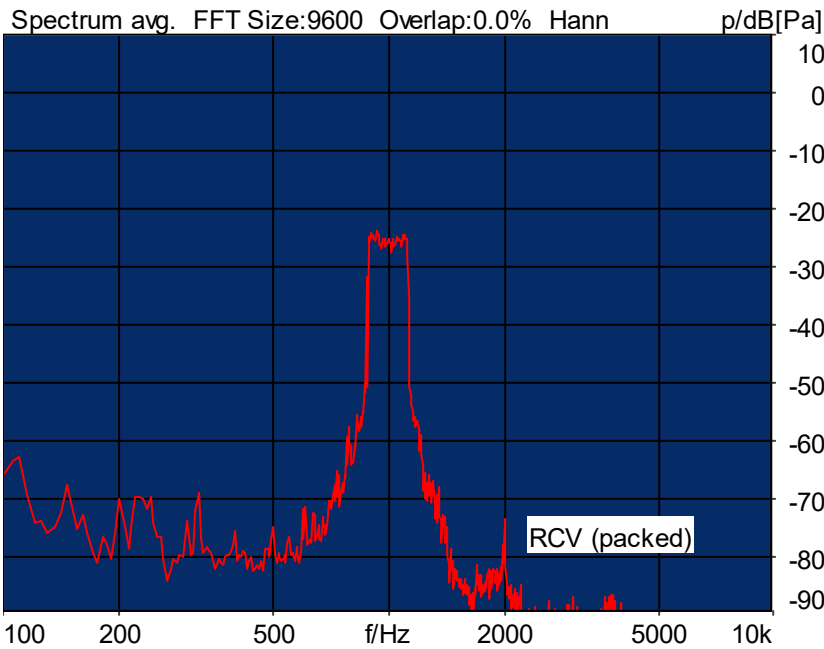
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.90 dB (1.80%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

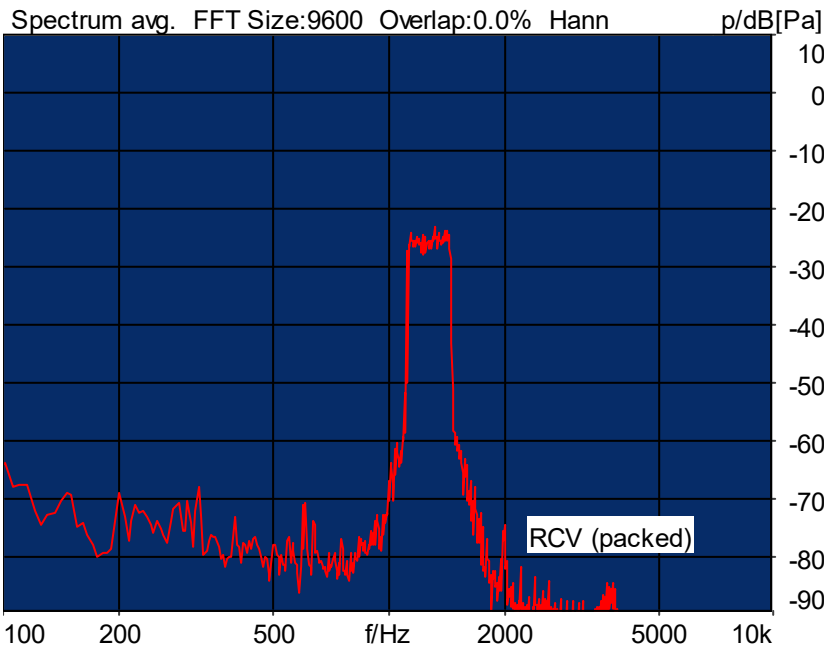
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.49 dB (2.37%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

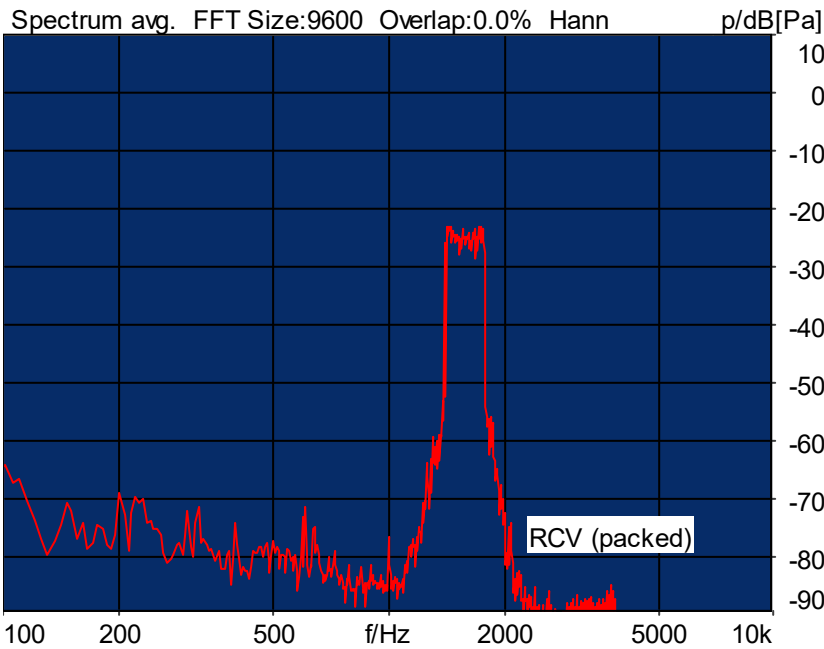
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.51 dB (1.33%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

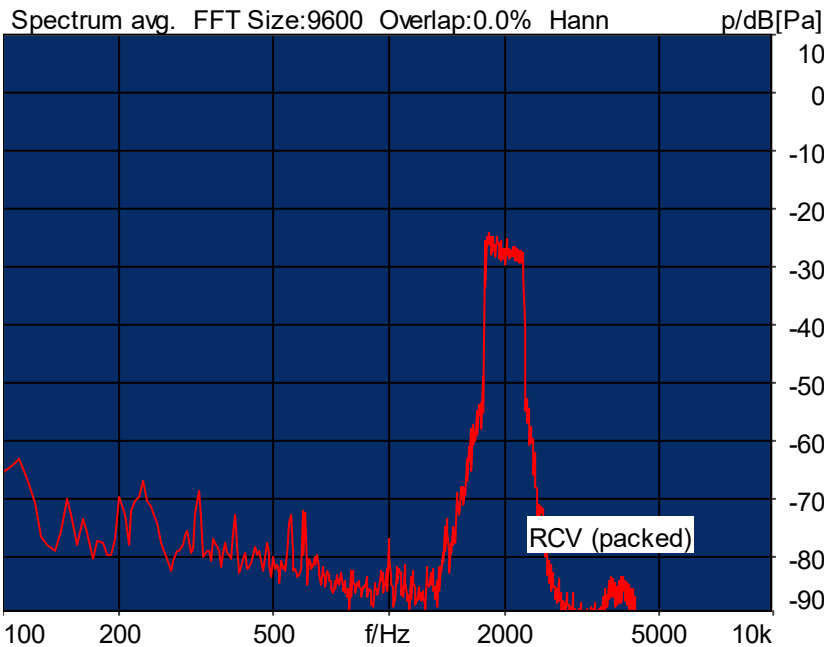
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.10 dB (2.48%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

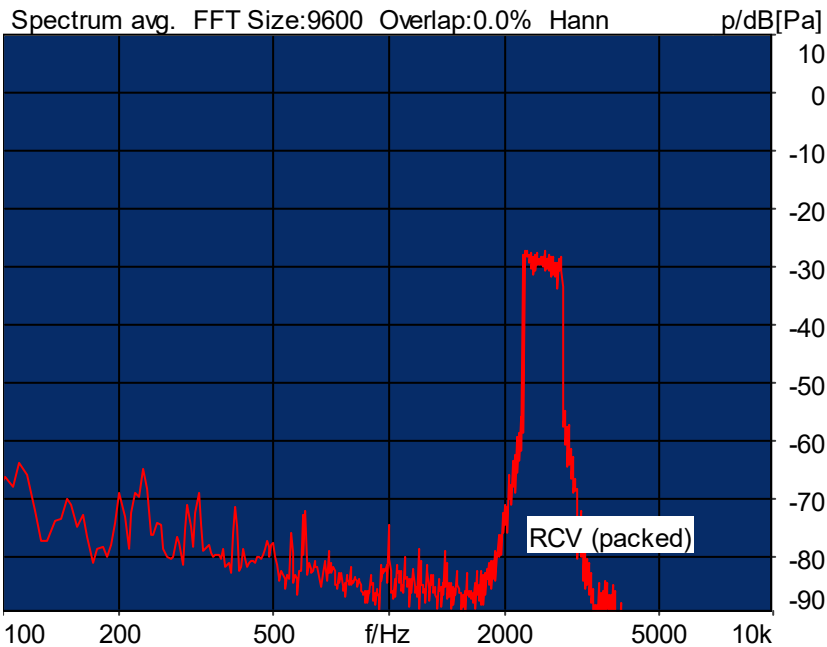
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.57 dB (2.10%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

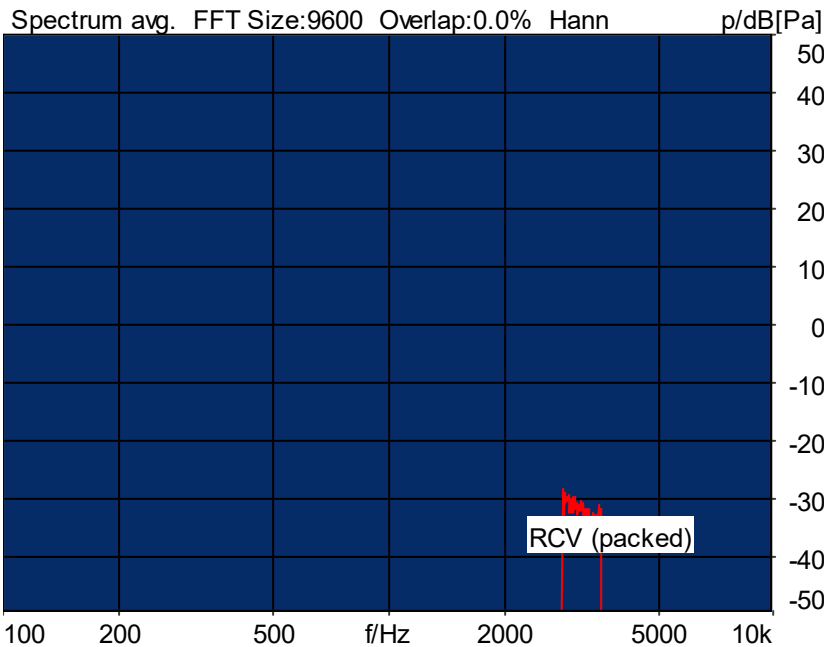
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.50 dB (2.11%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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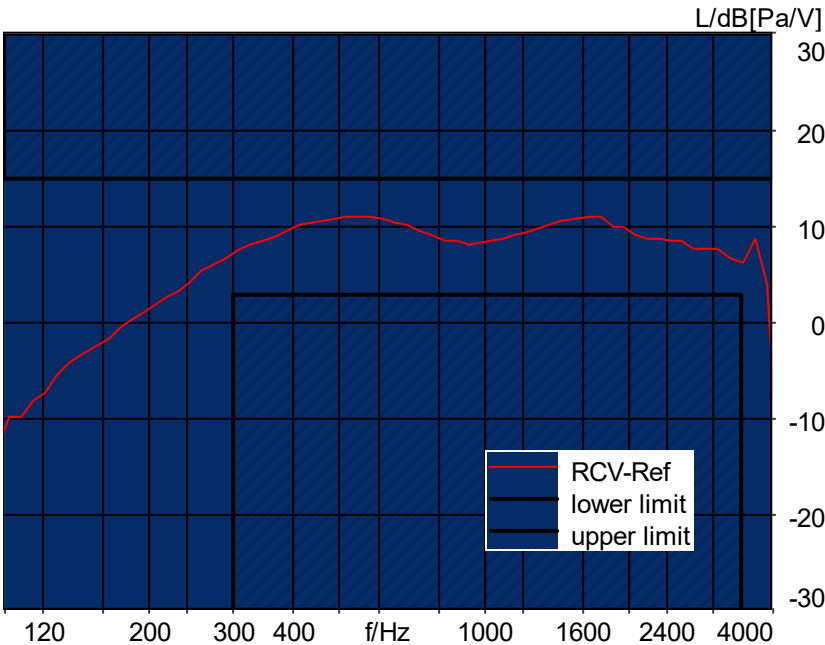
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.83 dB at 3245.6 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol (52#)

Measurement Object	BL-SZ25B0732-N48
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Status Overview

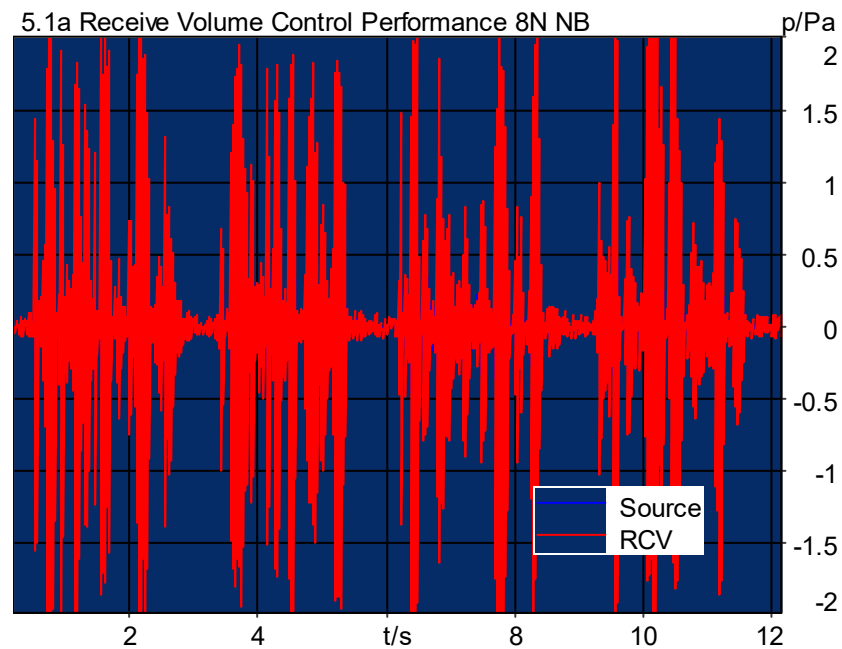
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.64	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.15	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.91	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.61	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.57	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.43	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.53	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.78	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.82	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.96	BL-SZ25B0732-N48
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.82	BL-SZ25B0732-N48
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 3245.6 Hz	2.74	BL-SZ25B0732-N48

5.1a Receive Volume Control Performance 8N NB	1602
5.2 RCV Distortion and Noise - 400 Hz NB	1604
5.2 RCV Distortion and Noise - 500 Hz NB	1606
5.2 RCV Distortion and Noise - 630 Hz NB	1608
5.2 RCV Distortion and Noise - 800 Hz NB	1610
5.2 RCV Distortion and Noise - 1000 Hz NB	1612
5.2 RCV Distortion and Noise - 1250 Hz NB	1614
5.2 RCV Distortion and Noise - 1600 Hz NB	1616
5.2 RCV Distortion and Noise - 2000 Hz NB	1618
5.2 RCV Distortion and Noise - 2500 Hz NB	1620
5.2 RCV Distortion and Noise - 3150 Hz NB	1622
5.3 Frequency Response 8N FF HANB	1624

5.1a Receive Volume Control Performance 8N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.64 dB[SPL]	80.41%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

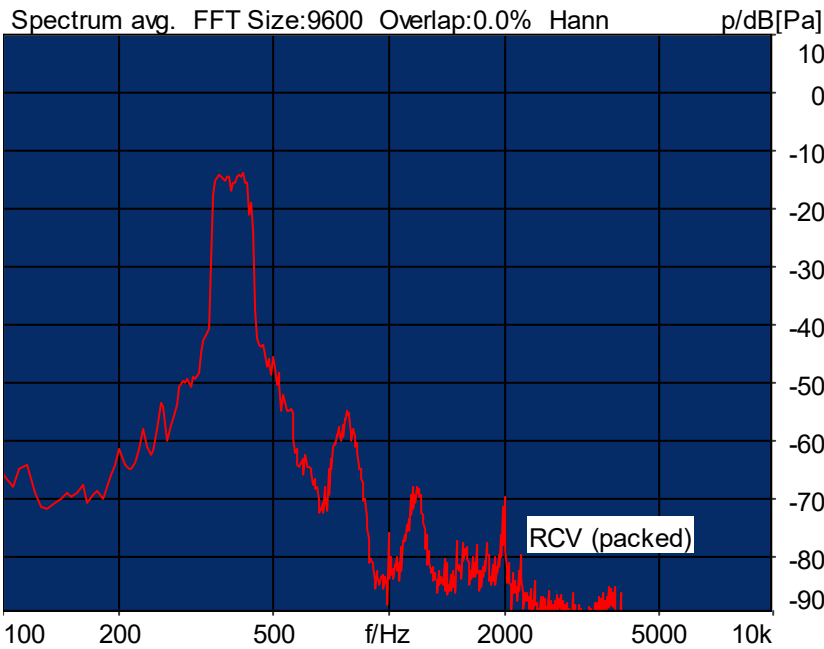
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.15 dB (1.56%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

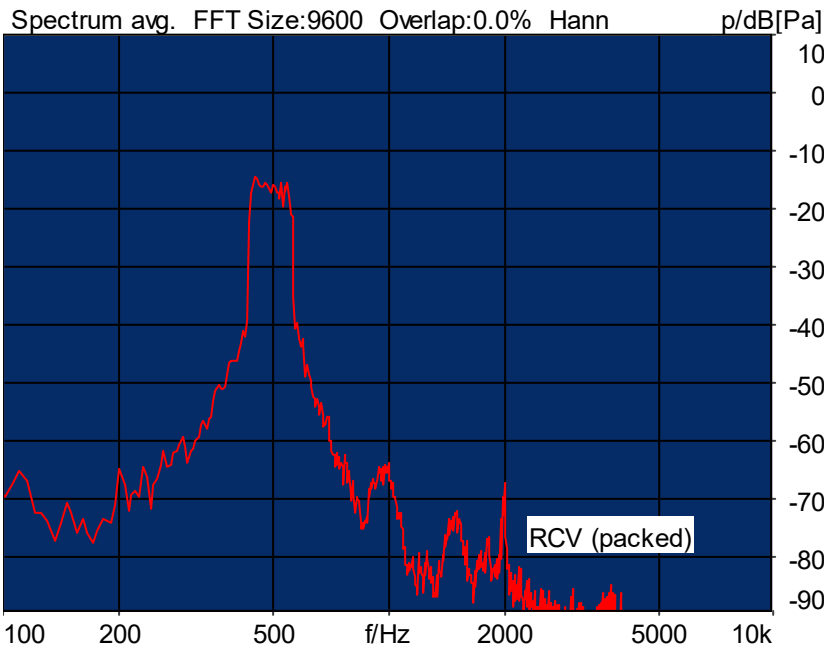
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.91 dB (1.80%) Ok

Ok

2025/12/16 18:33 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

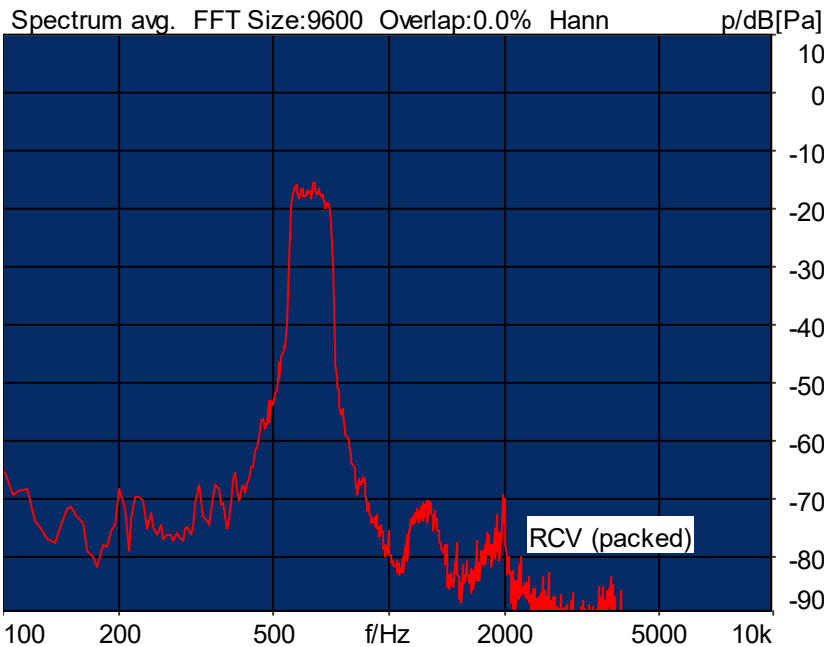
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.61 dB (0.93%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

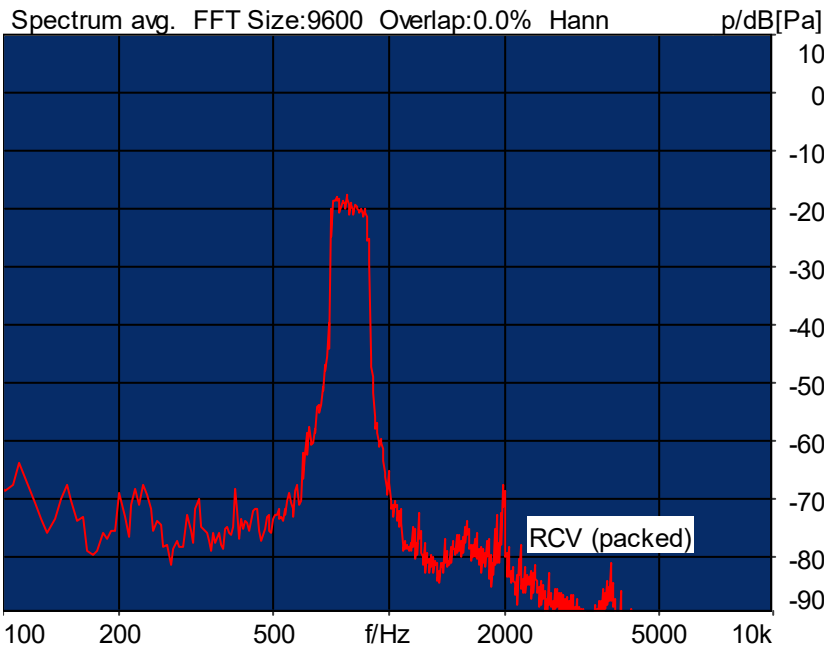
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.57 dB (0.94%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

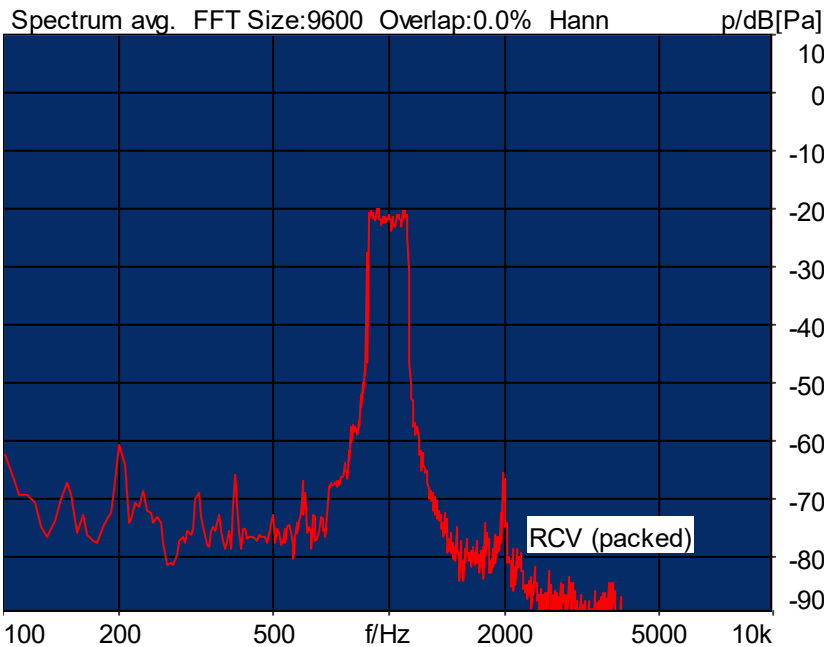
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.43 dB (1.20%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

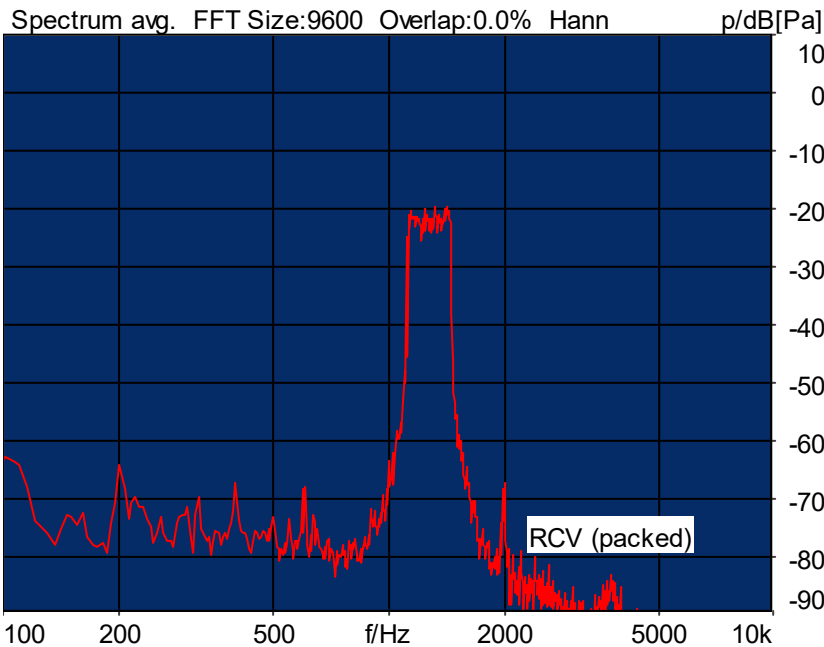
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.53 dB (2.65%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

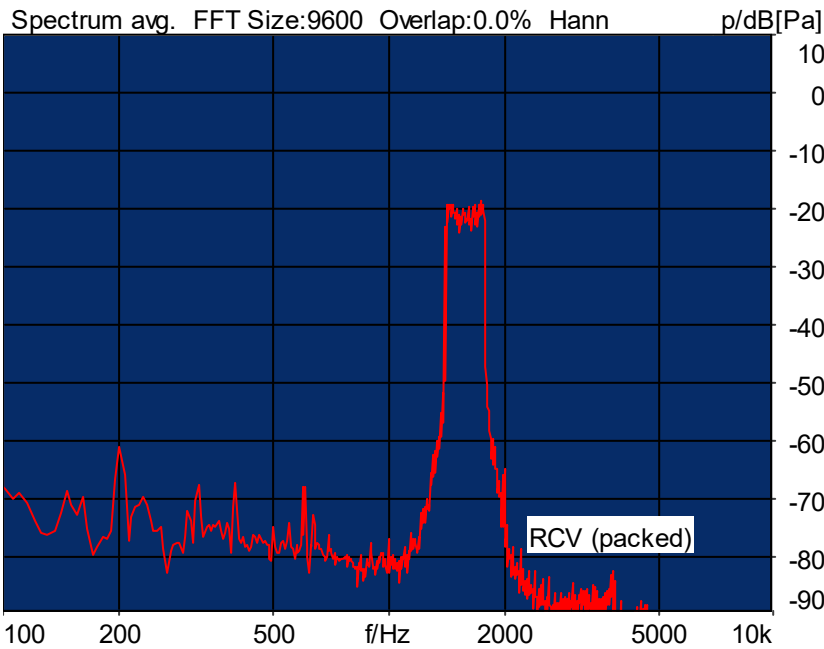
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.78 dB (0.81%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

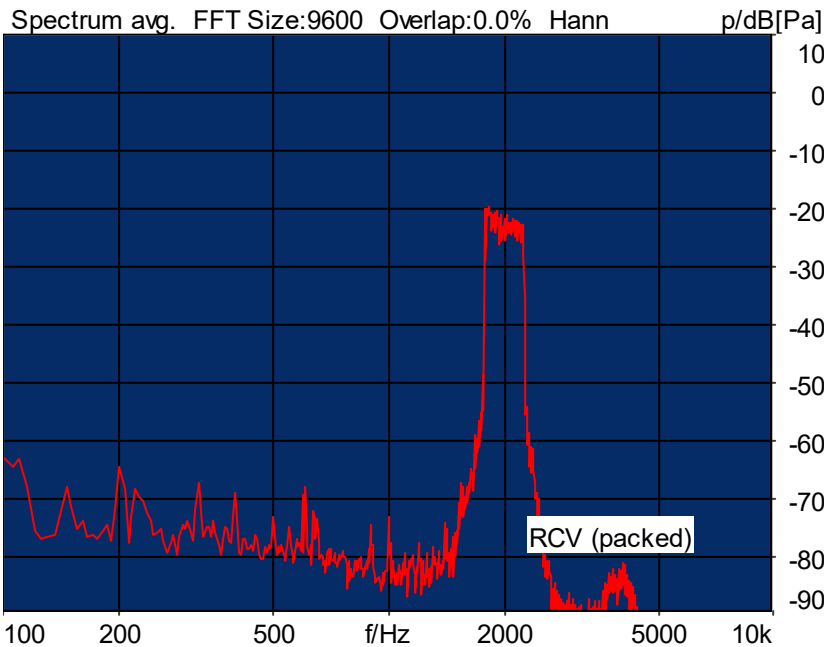
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.82 dB (1.02%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

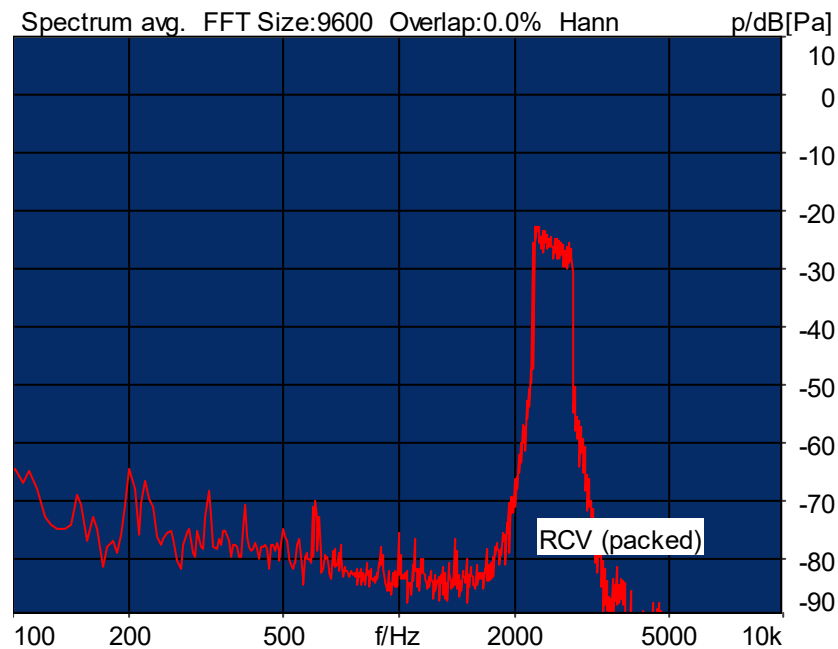
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.96 dB (2.52%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

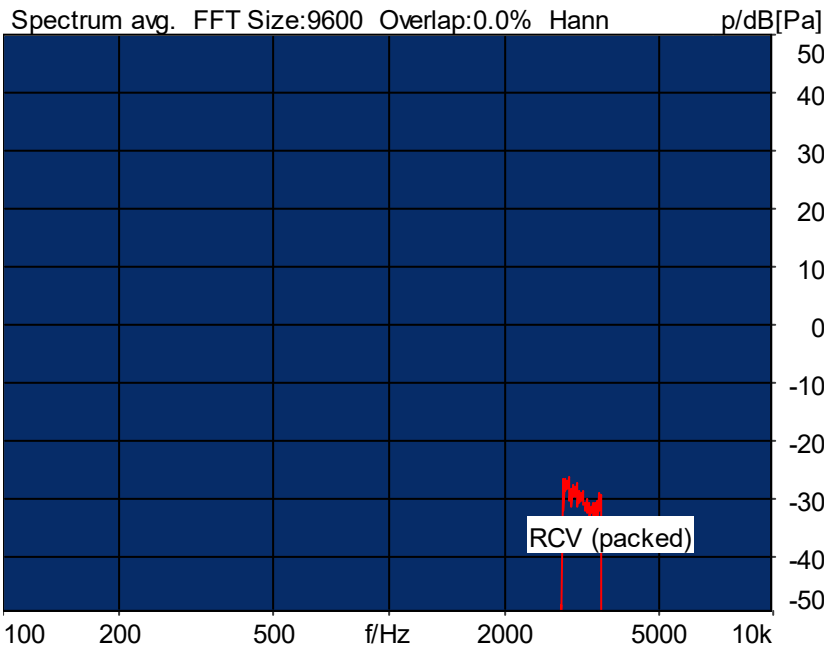
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 28.82 dB (3.62%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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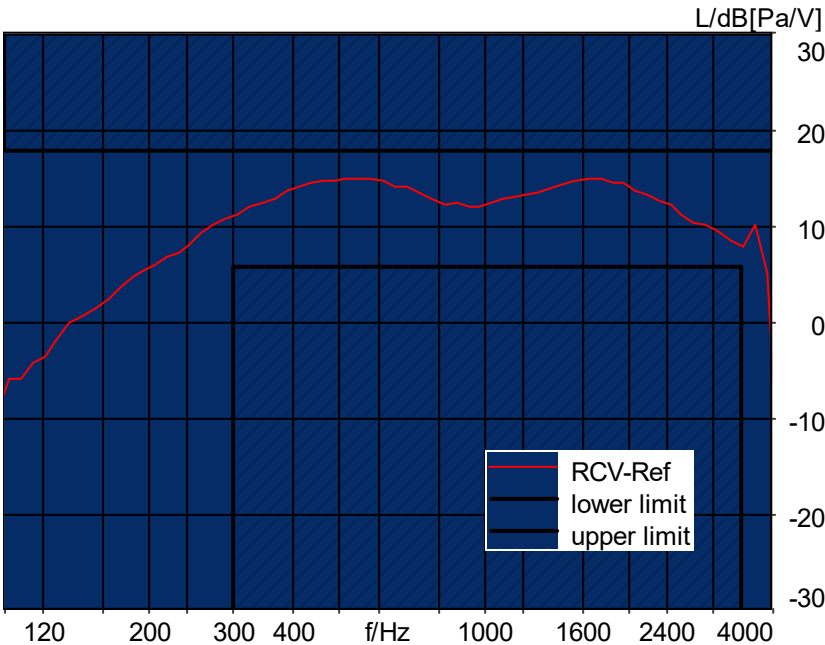
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

2.74 dB at 3245.6 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(53#)

Measurement Object	BL-SZ25B0732-N77
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Status Overview

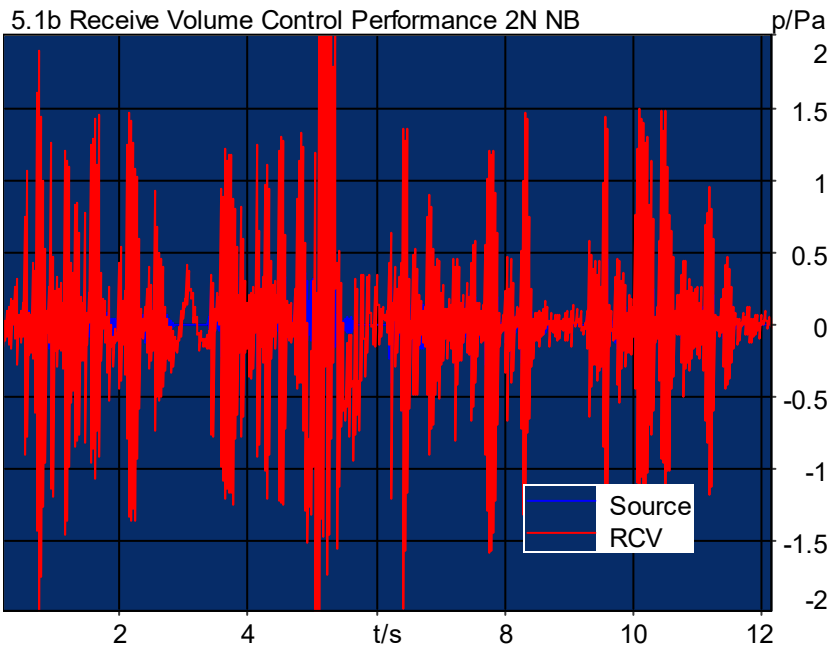
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.67	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.24	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.36	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.44	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.74	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.00	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.96	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.15	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.64	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.31	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.44	BL-SZ25B0732-N77
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 576.7 Hz	3.88	BL-SZ25B0732-N77

5.1b Receive Volume Control Performance 2N NB	1629
5.2 RCV Distortion and Noise - 400 Hz NB	1631
5.2 RCV Distortion and Noise - 500 Hz NB	1633
5.2 RCV Distortion and Noise - 630 Hz NB	1635
5.2 RCV Distortion and Noise - 800 Hz NB	1637
5.2 RCV Distortion and Noise - 1000 Hz NB	1639
5.2 RCV Distortion and Noise - 1250 Hz NB	1641
5.2 RCV Distortion and Noise - 1600 Hz NB	1643
5.2 RCV Distortion and Noise - 2000 Hz NB	1645
5.2 RCV Distortion and Noise - 2500 Hz NB	1647
5.2 RCV Distortion and Noise - 3150 Hz NB	1649
5.3 Frequency Response 2N FF HANB	1651

5.1b Receive Volume Control Performance 2N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.67 dB[SPL]	80.41%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

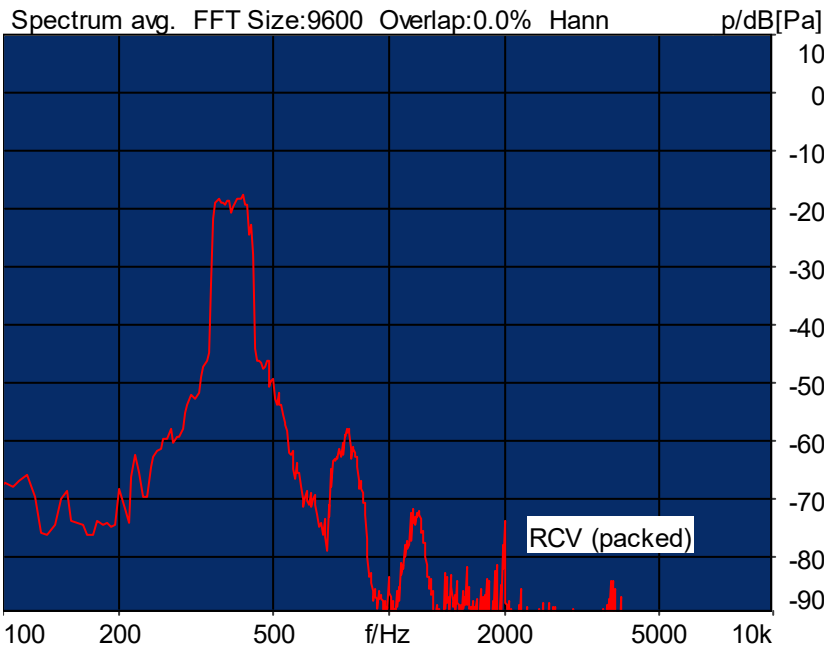
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.24 dB (1.73%) Ok

Ok

2025/12/16 18:01 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

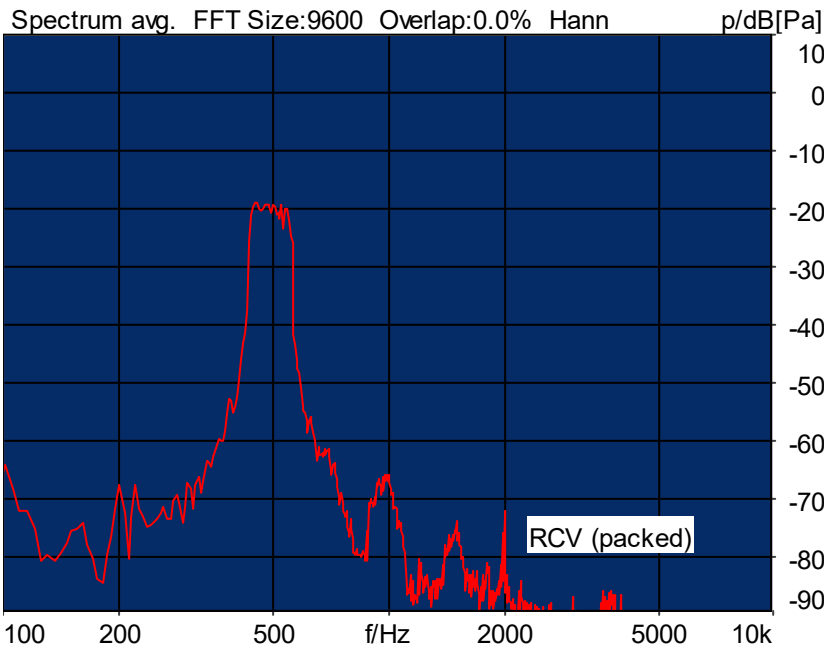
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.36 dB (1.21%) Ok

Ok

2025/12/16 18:01 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

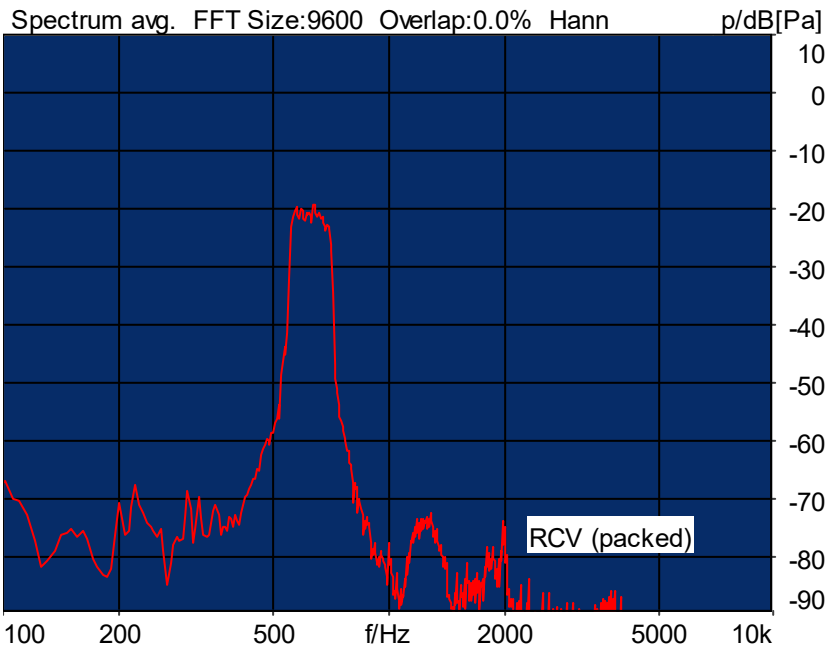
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.44 dB (0.95%) Ok

Ok

2025/12/16 18:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

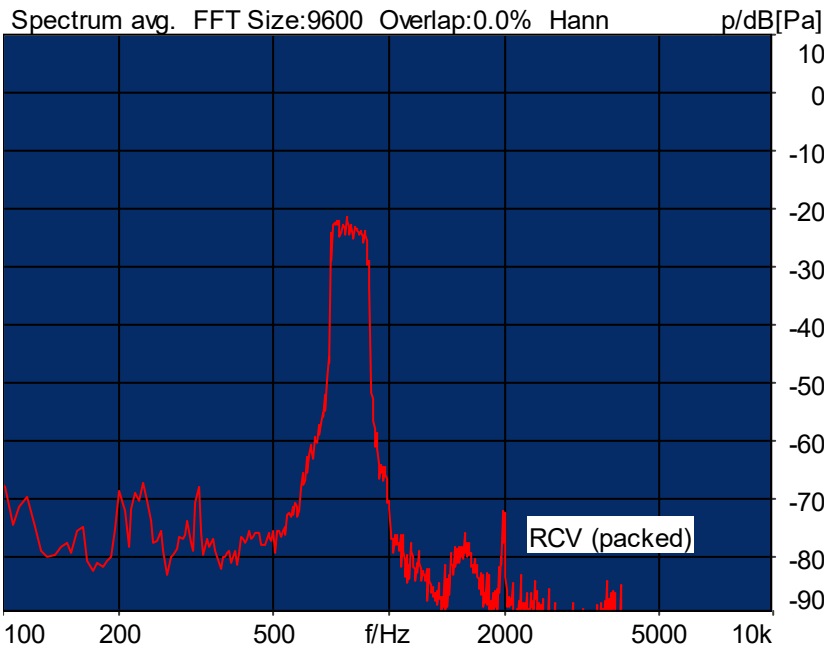
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.74 dB (1.03%) Ok

Ok

2025/12/16 18:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

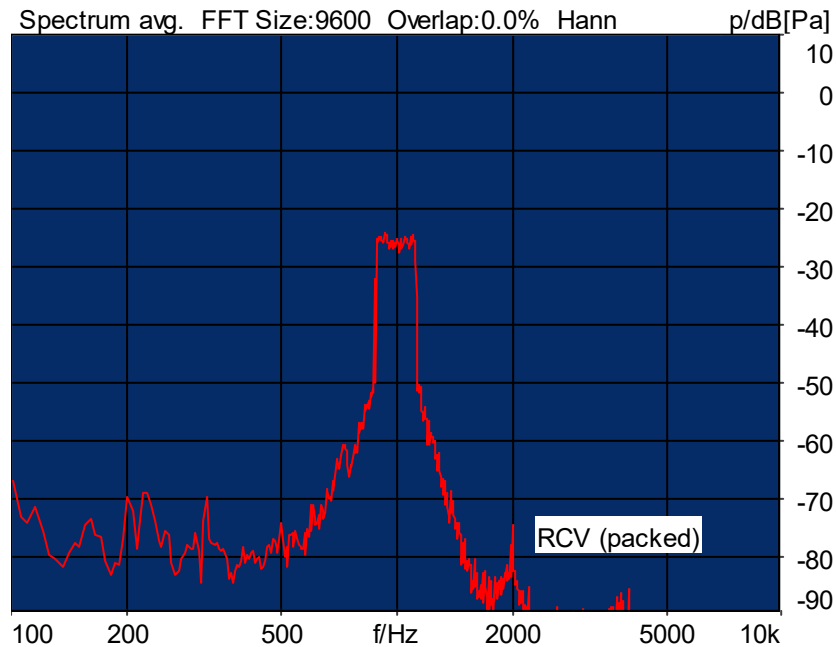
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.00 dB (2.51%) Ok

Ok

2025/12/16 18:03 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

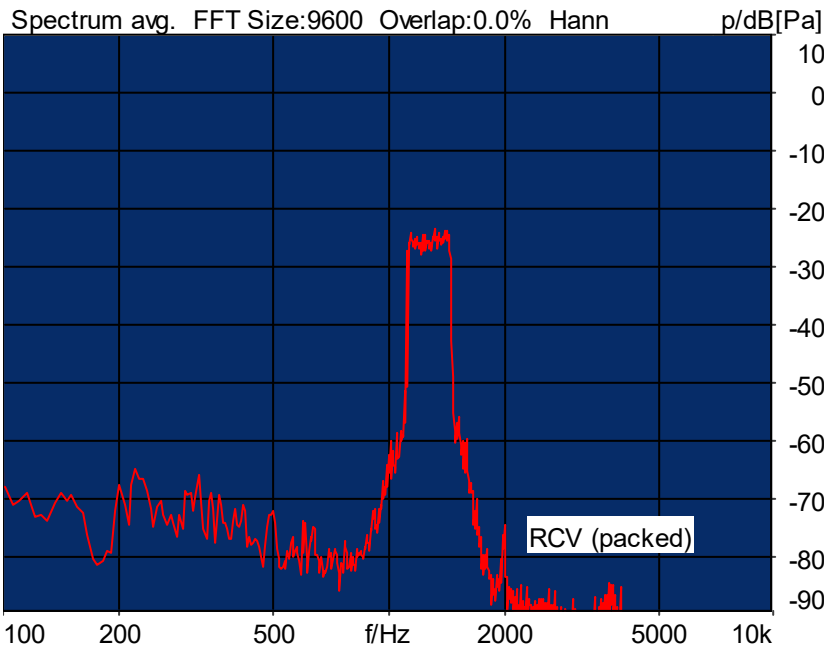
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.96 dB (2.83%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

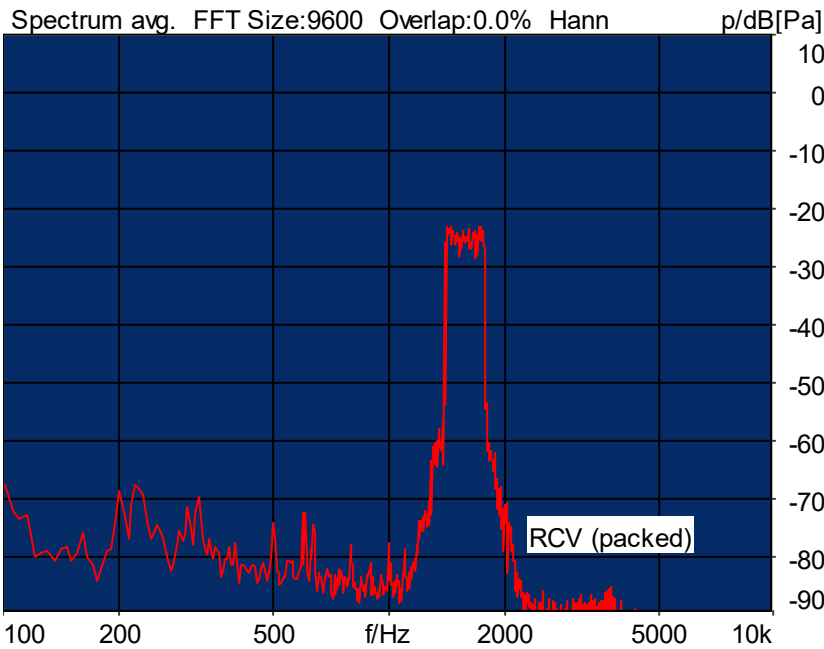
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.15 dB (1.10%) Ok

Ok

2025/12/16 18:03 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

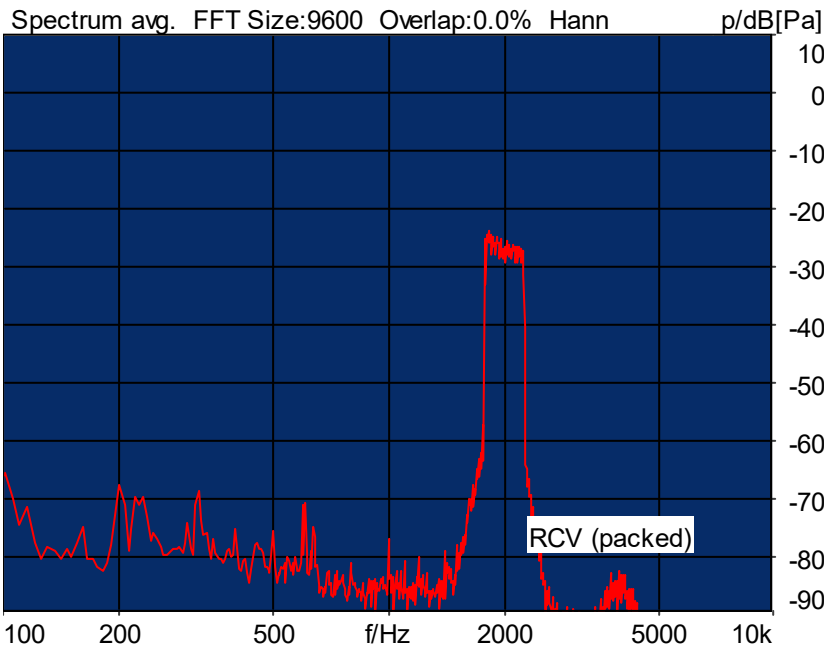
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.64 dB (0.83%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

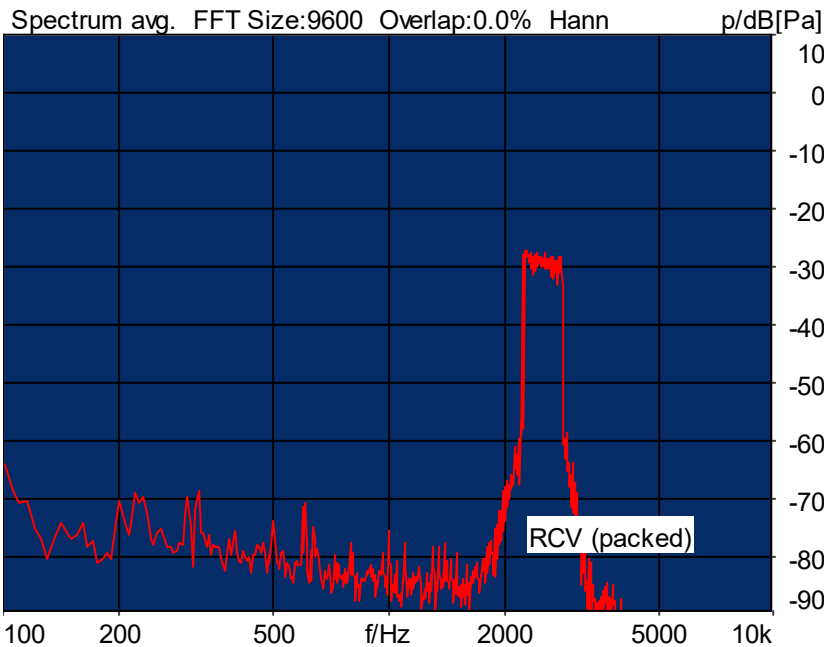
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.31 dB (1.72%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

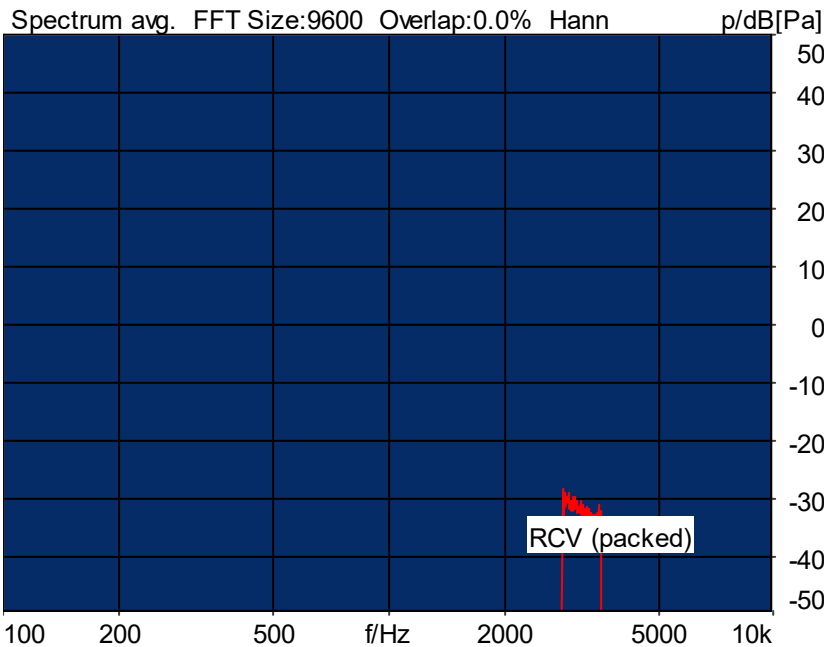
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.44 dB (3.00%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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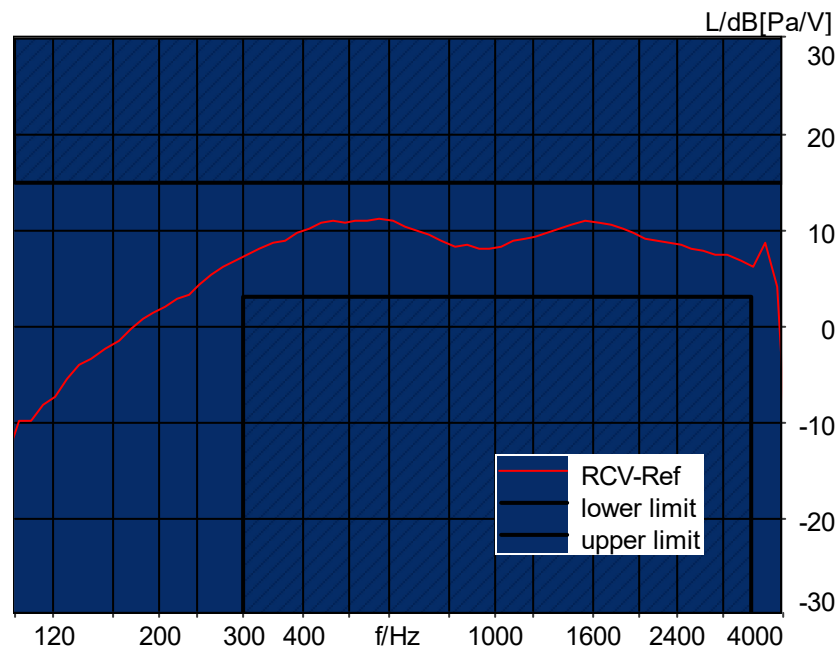
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.88 dB at 576.7 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(54#)

Measurement Object	BL-SZ25B0732-N77
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Status Overview

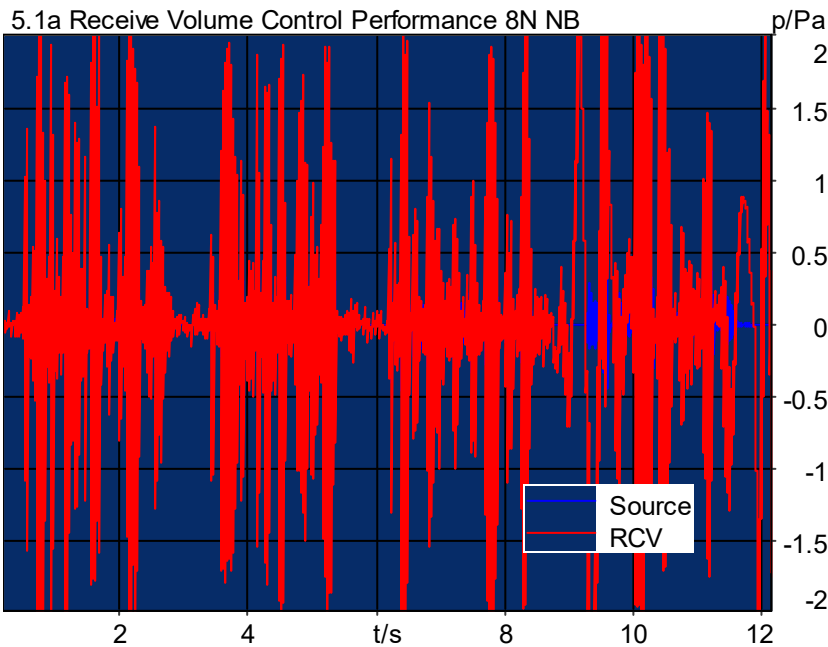
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.56	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.47	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.49	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.50	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.55	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.11	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.99	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.51	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.68	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.65	BL-SZ25B0732-N77
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.32	BL-SZ25B0732-N77
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	2.49	BL-SZ25B0732-N77

5.1a Receive Volume Control Performance 8N NB (BL-SZ25B0732-N77)	1656
5.2 RCV Distortion and Noise - 400 Hz NB (BL-SZ25B0732-N77)	1658
5.2 RCV Distortion and Noise - 500 Hz NB (BL-SZ25B0732-N77)	1660
5.2 RCV Distortion and Noise - 630 Hz NB (BL-SZ25B0732-N77)	1662
5.2 RCV Distortion and Noise - 800 Hz NB (BL-SZ25B0732-N77)	1664
5.2 RCV Distortion and Noise - 1000 Hz NB (BL-SZ25B0732-N77)	1666
5.2 RCV Distortion and Noise - 1250 Hz NB (BL-SZ25B0732-N77)	1668
5.2 RCV Distortion and Noise - 1600 Hz NB (BL-SZ25B0732-N77)	1670
5.2 RCV Distortion and Noise - 2000 Hz NB (BL-SZ25B0732-N77)	1672
5.2 RCV Distortion and Noise - 2500 Hz NB (BL-SZ25B0732-N77)	1674
5.2 RCV Distortion and Noise - 3150 Hz NB (BL-SZ25B0732-N77)	1676
5.3 Frequency Response 8N FF HANB (BL-SZ25B0732-N77)	1678

5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.56 dB[SPL]	80.41%	Ok

Ok

2025/12/16 17:54 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

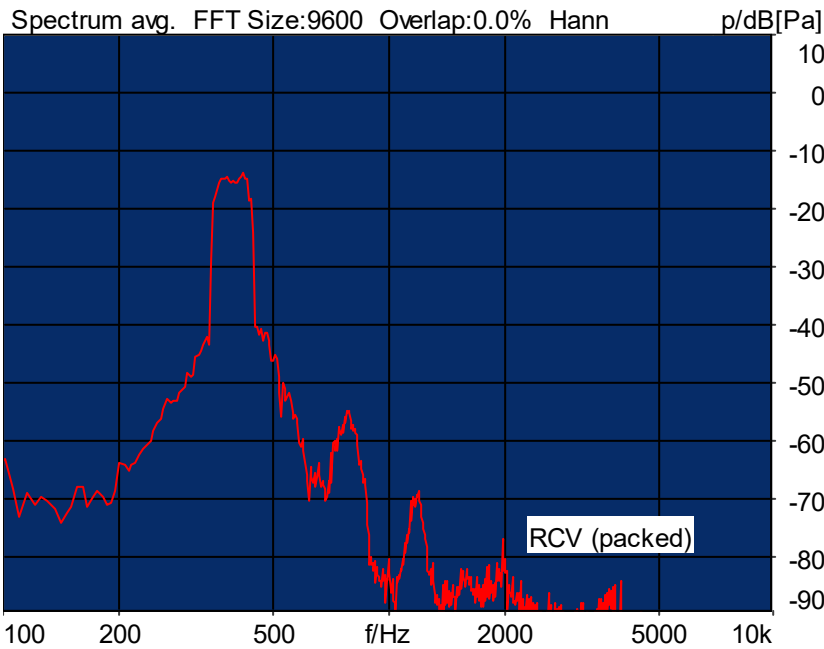
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB (BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.47 dB (1.89%) Ok

Ok

2025/12/16 17:54 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

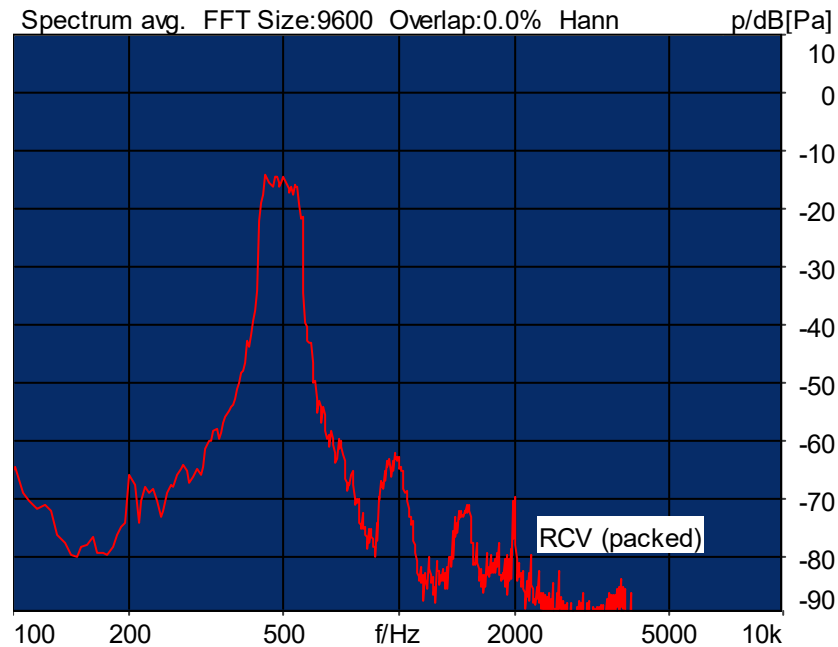
Used Setting	TIA5050
--------------	---------

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB (BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.49 dB (1.19%) Ok

Ok

2025/12/16 17:55 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

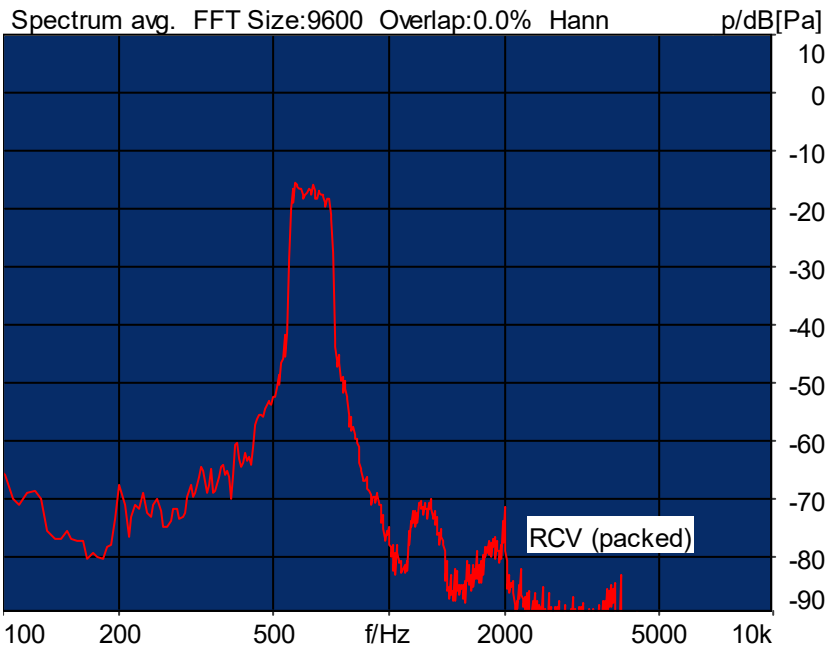
Used Setting	TIA5050
--------------	---------

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB (BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.50 dB (1.33%) Ok

Ok

2025/12/16 17:55 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

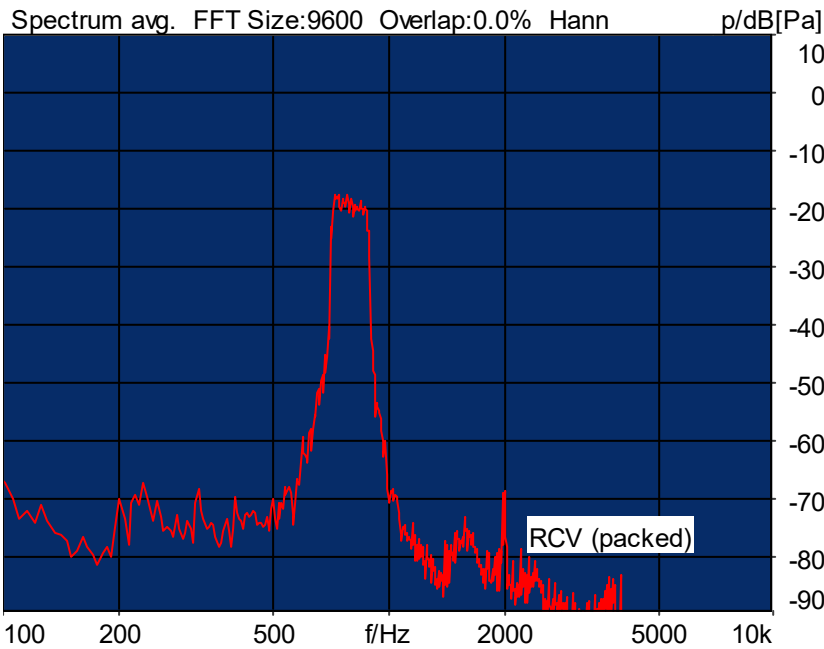
Used Setting	TIA5050
--------------	---------

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB (BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.55 dB (1.18%) Ok

Ok

2025/12/16 17:55 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

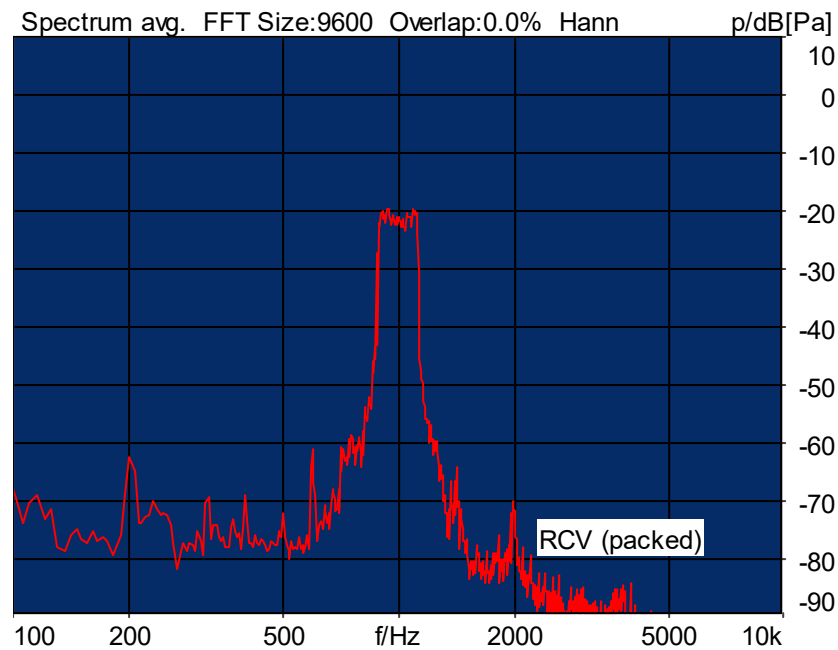
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

(BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.11 dB (1.57%) Ok

Ok

2025/12/16 17:56 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

MFE VI Settings

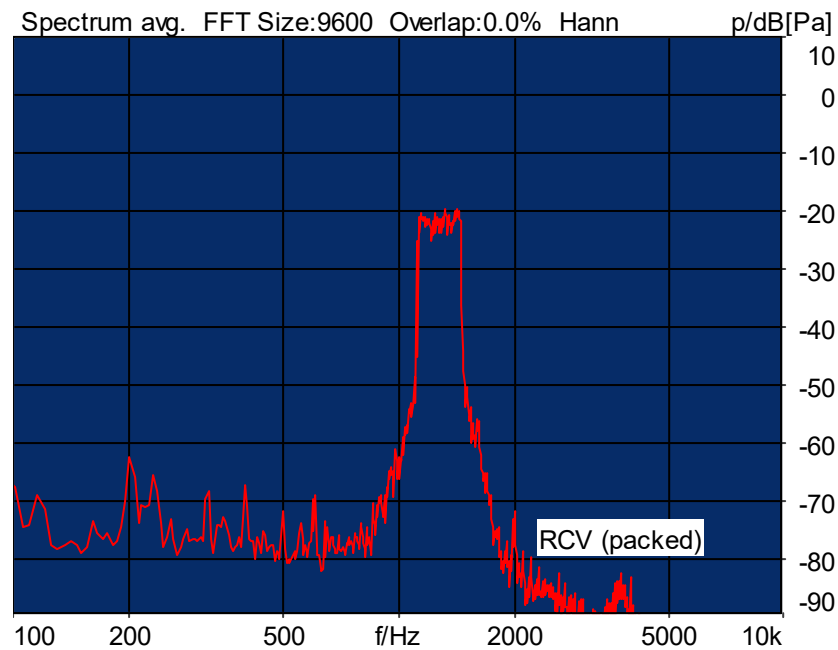
Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

(BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N

EVS-NB-24.4



Distortion (Noise) RCV (packed): 28.99 dB (3.55%) Ok

Ok

2025/12/16 17:56 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment	Channel 1	Gain	-90.00 dB
------------------	-----------	------	-----------

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

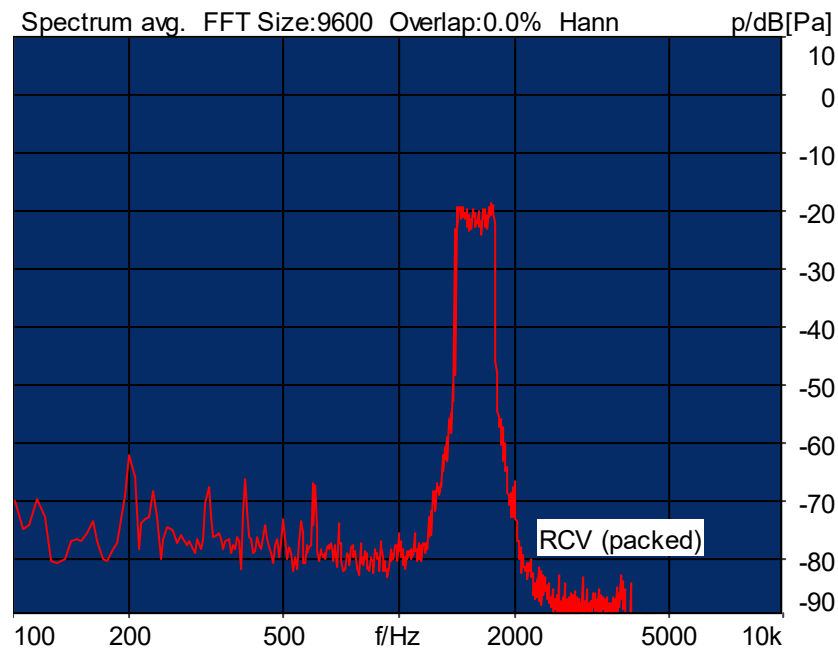
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

(BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.51 dB (0.94%) Ok

Ok

2025/12/16 17:57 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment	Channel 1	Gain	-90.00 dB
------------------	-----------	------	-----------

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

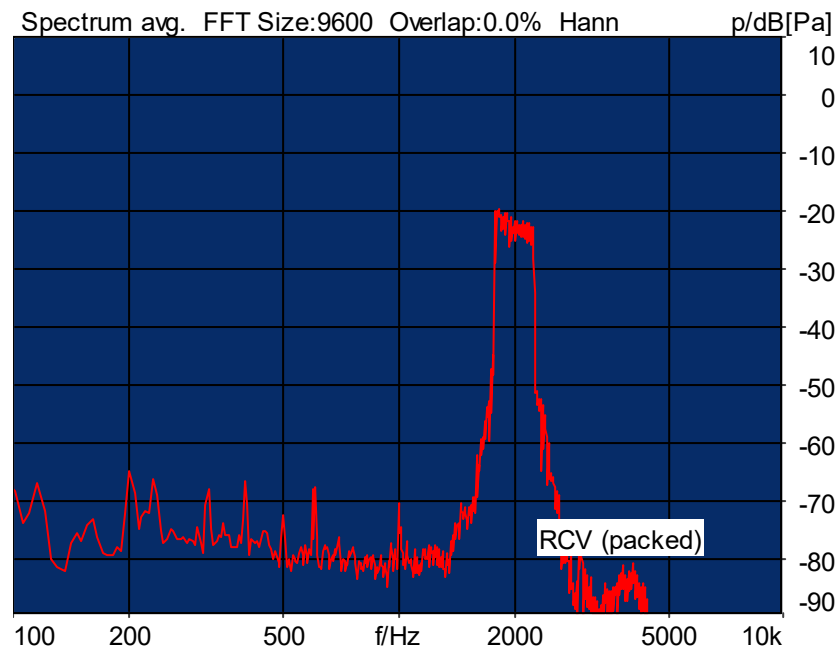
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

(BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.68 dB (2.07%) Ok

Ok

2025/12/16 17:57 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment	Channel 1	Gain	-90.00 dB
------------------	-----------	------	-----------

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fff
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

MFE VI Settings

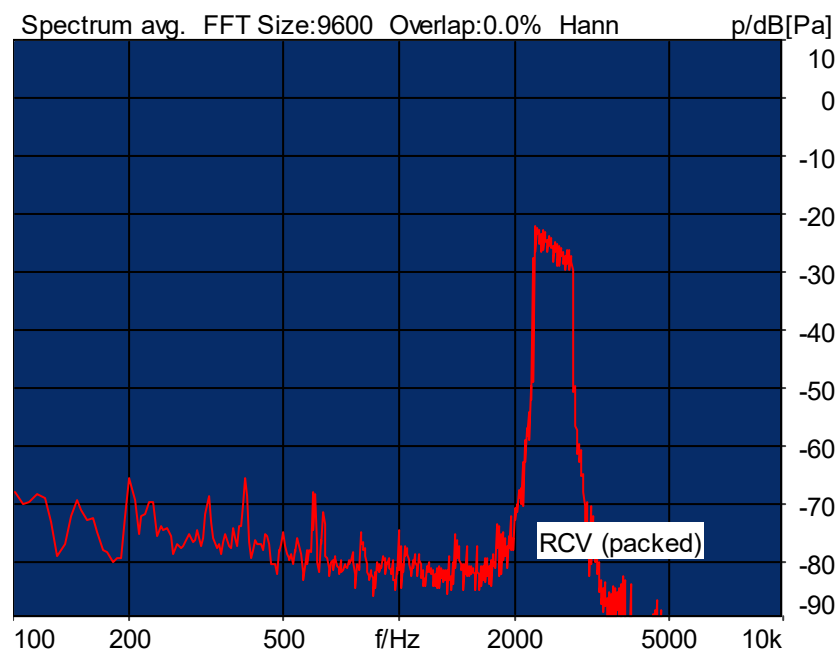
Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

(BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N

EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.65 dB (1.85%) Ok

Ok

2025/12/16 17:57 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment	Channel 1	Gain	-90.00 dB
------------------	-----------	------	-----------

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

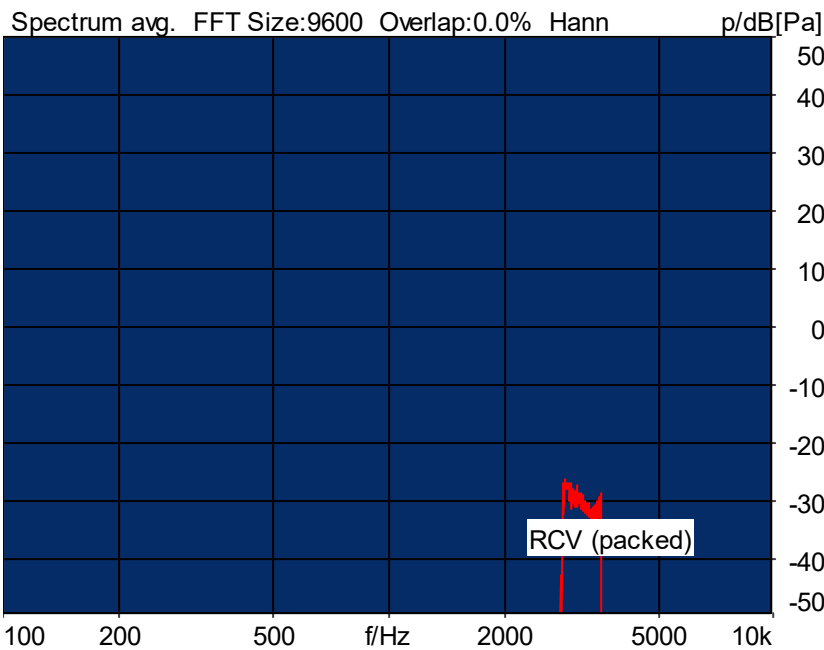
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

(BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.32 dB (3.05%) Ok

Ok

2025/12/16 17:58 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment	Channel 1	Gain	-90.00 dB
------------------	-----------	------	-----------

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
------------	-----------	----------	---------------------

Special Features

Compensate delay	139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
--------------	---------

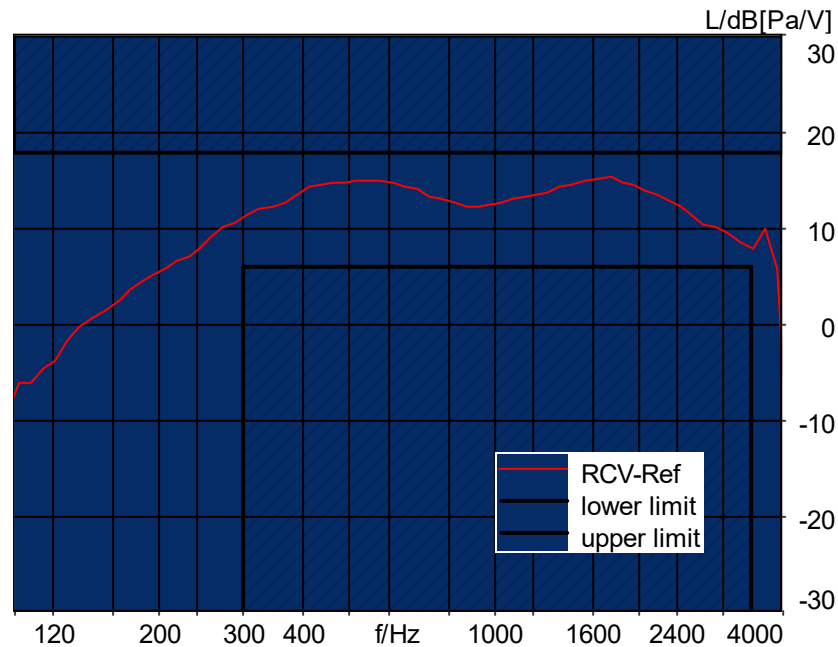
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB (BL-SZ25B0732-N77)

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

2.49 dB at 1747.8 Hz Ok

Ok

2025/12/16 17:58 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
------------------	-----------	------	----------

NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(55#)

Measurement Object	BL-SZ25 B0732-wifi2.4g
--------------------	------------------------

Status Overview

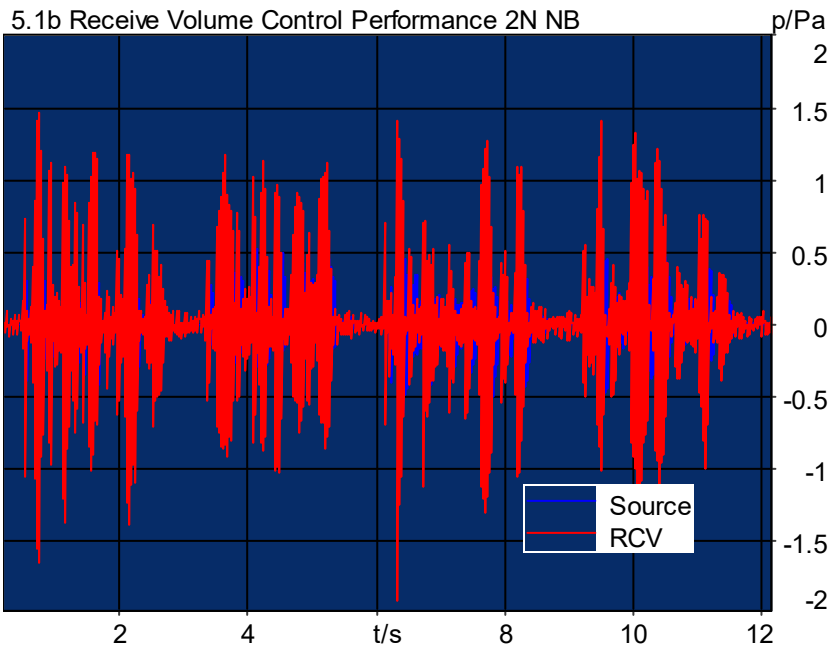
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.35	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.21	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.99	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.52	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.67	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.56	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.14	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.50	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.79	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	44.36	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.97	BL-SZ25 B0732-wifi2.4g
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1647.8 Hz	3.25	BL-SZ25 B0732-wifi2.4g

5.1b Receive Volume Control Performance 2N NB	1683
5.2 RCV Distortion and Noise - 400 Hz NB	1685
5.2 RCV Distortion and Noise - 500 Hz NB	1687
5.2 RCV Distortion and Noise - 630 Hz NB	1689
5.2 RCV Distortion and Noise - 800 Hz NB	1691
5.2 RCV Distortion and Noise - 1000 Hz NB	1693
5.2 RCV Distortion and Noise - 1250 Hz NB	1695
5.2 RCV Distortion and Noise - 1600 Hz NB	1697
5.2 RCV Distortion and Noise - 2000 Hz NB	1699
5.2 RCV Distortion and Noise - 2500 Hz NB	1701
5.2 RCV Distortion and Noise - 3150 Hz NB	403
5.3 Frequency Response 2N FF HANB	1705

5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.35 dB[SPL]	80.92%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

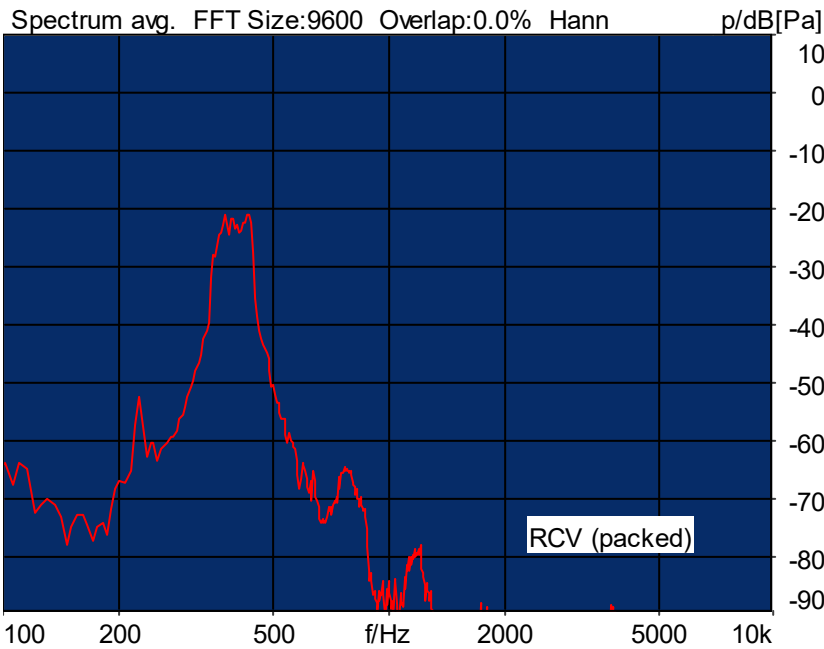
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.21 dB (2.45%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

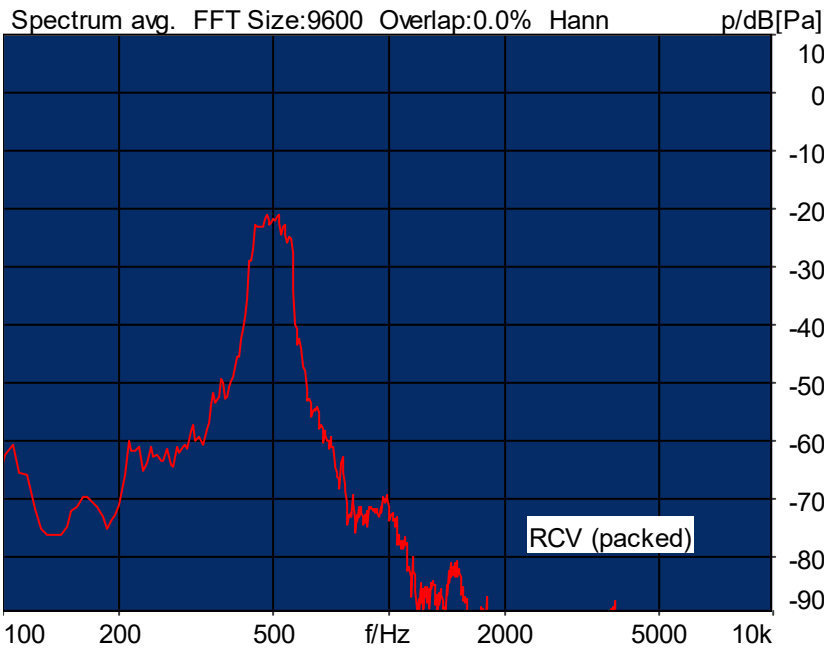
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.99 dB (2.82%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

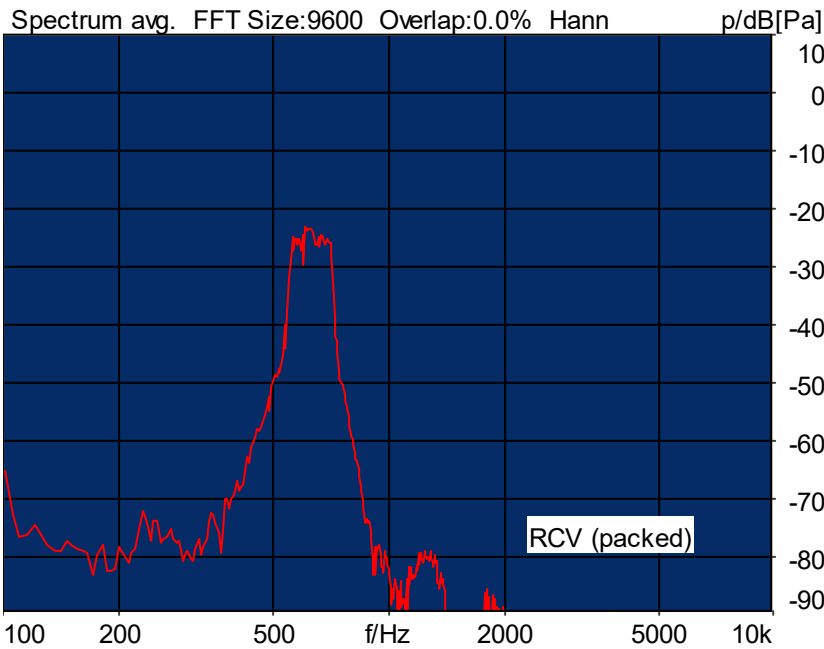
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.52 dB (2.98%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

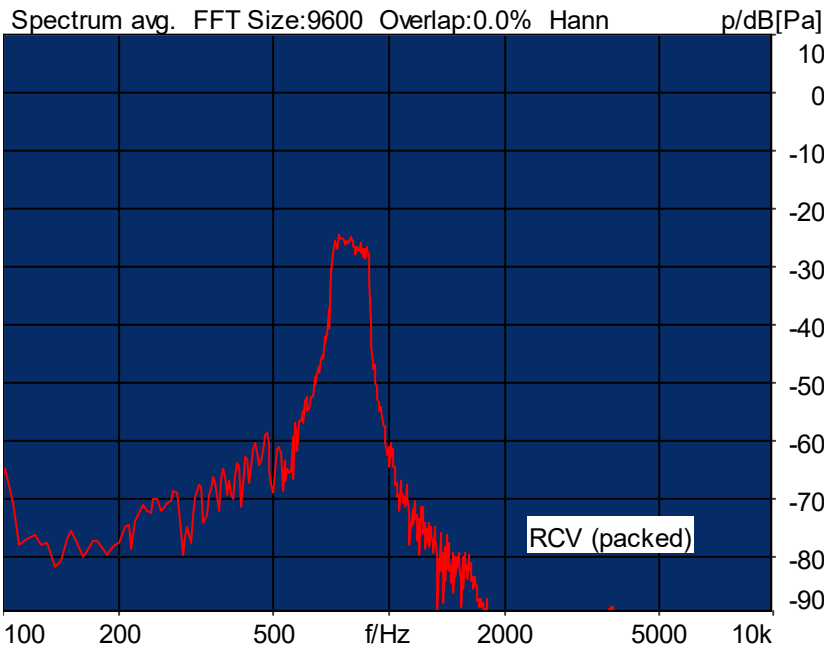
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 27.67 dB (4.14%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

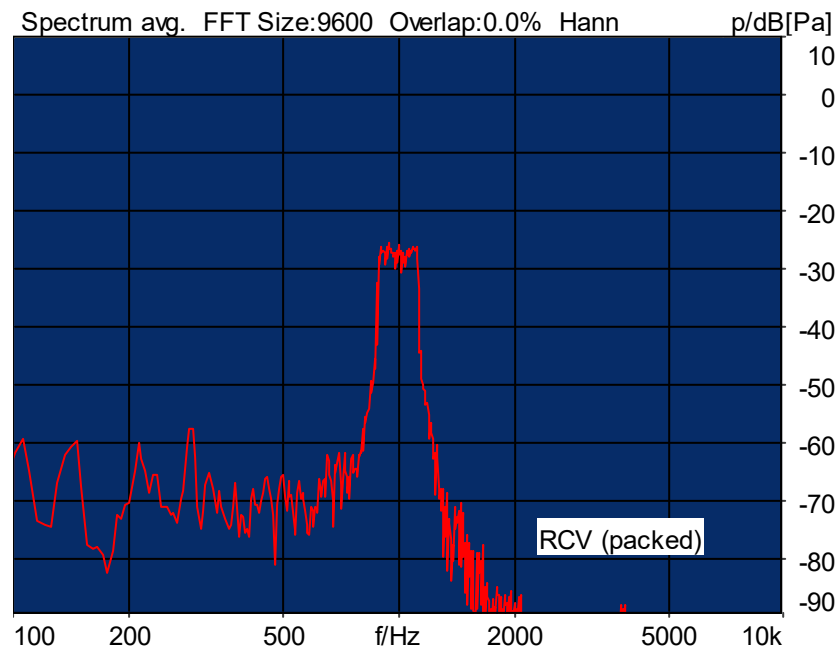
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.56 dB (3.33%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

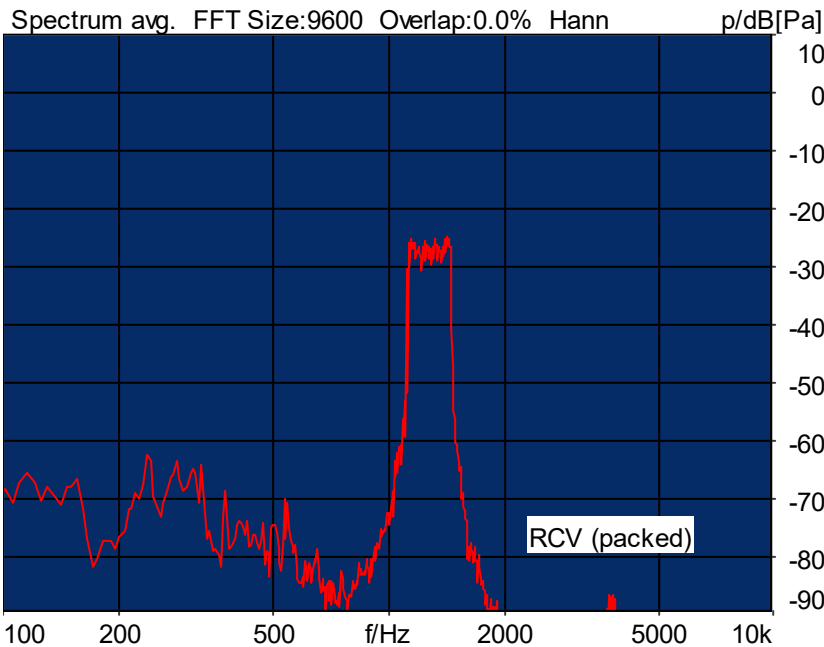
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.14 dB (3.49%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

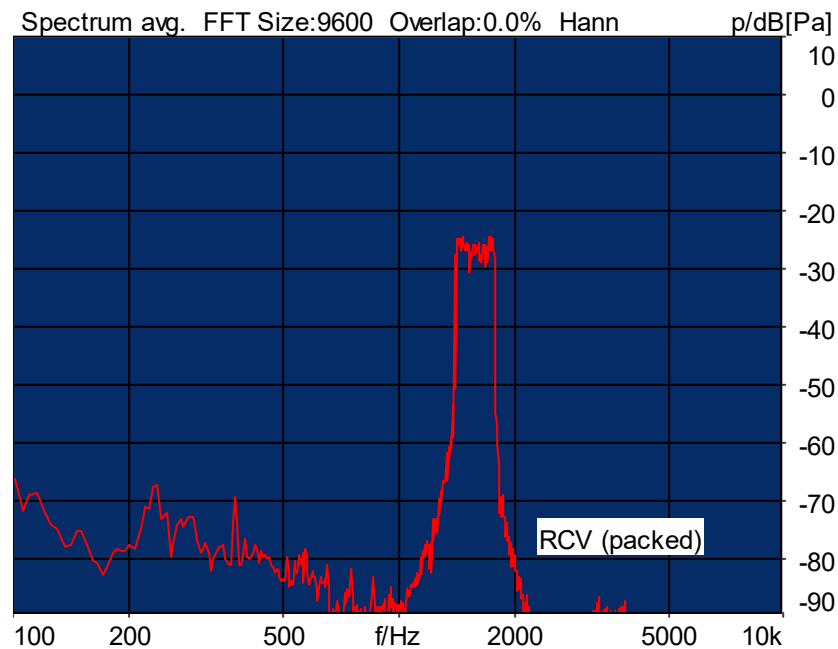
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.50 dB (0.84%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

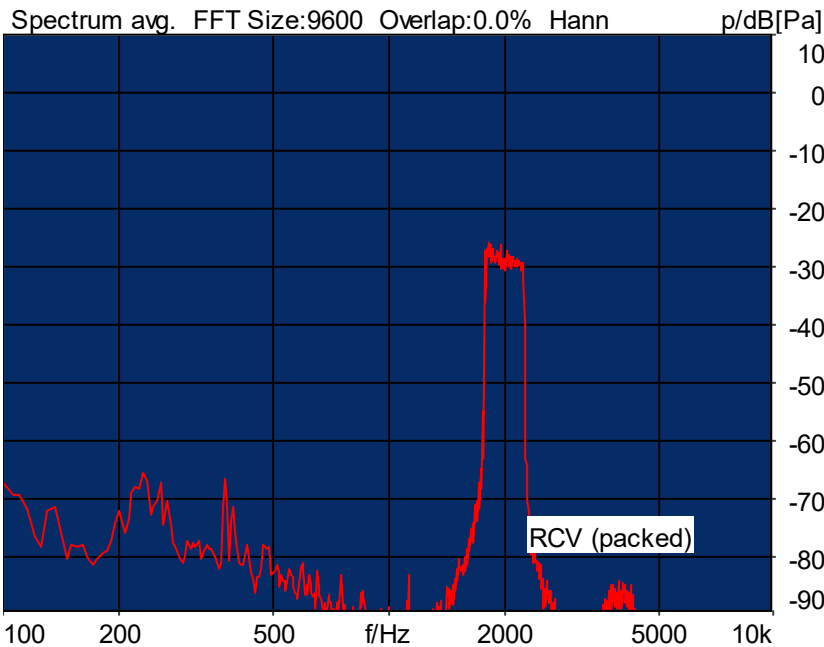
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.79 dB (0.65%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

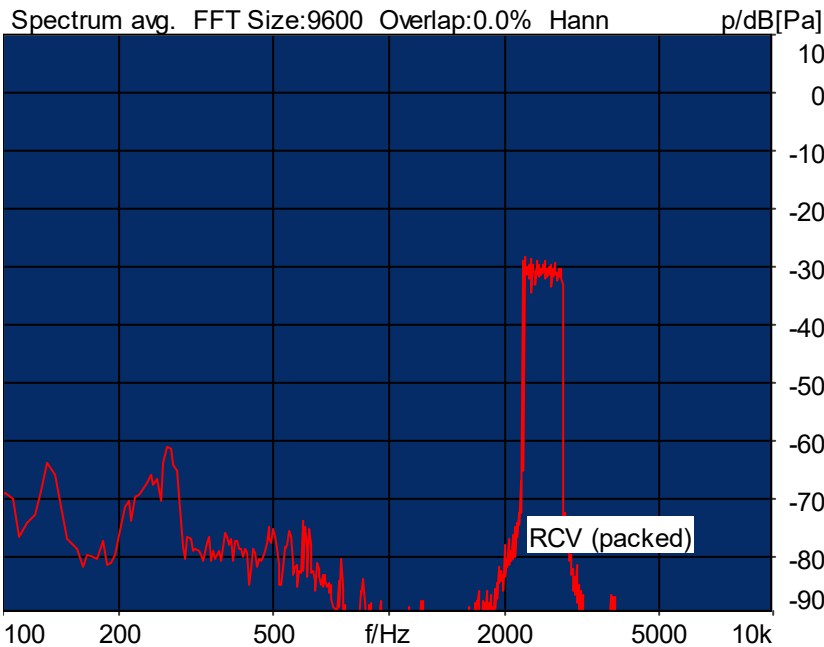
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 44.36 dB (0.61%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

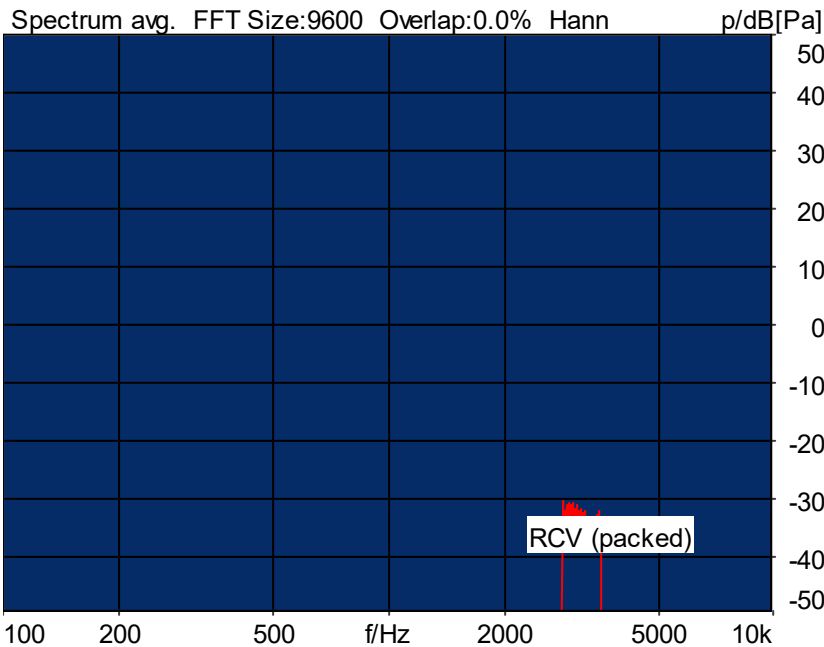
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.97 dB (0.63%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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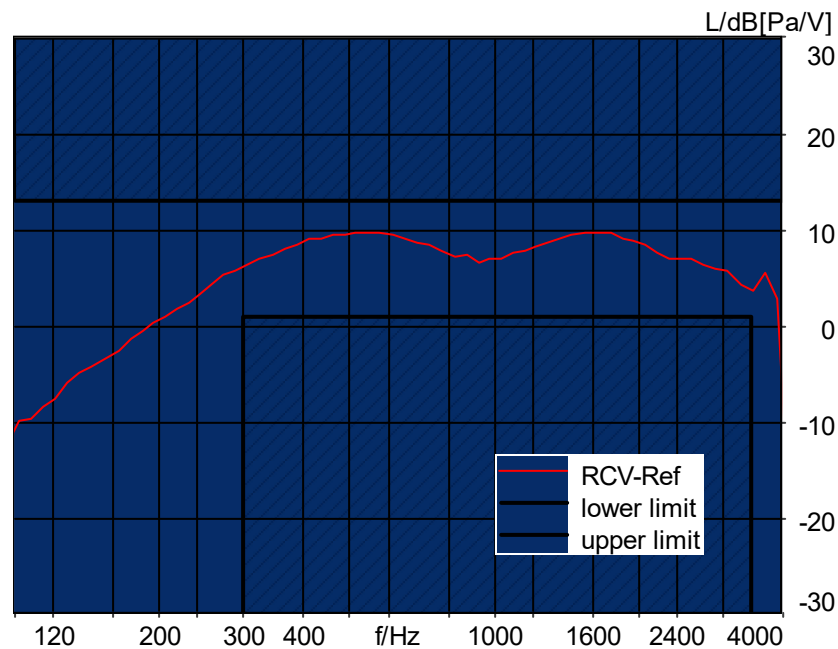
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

3.25 dB at 1647.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(56#)

Measurement Object	BL-SZ25 B0732-wifi2.4g
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Status Overview

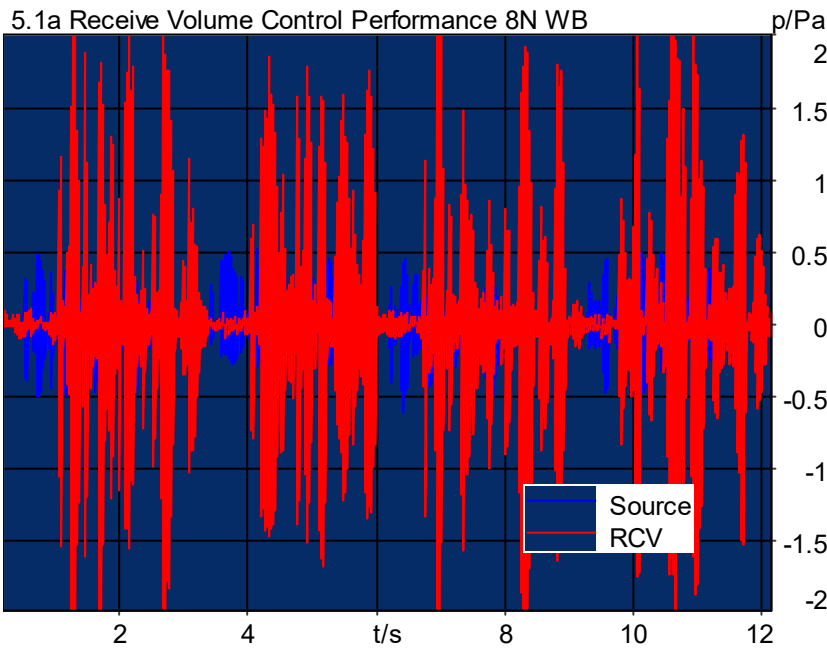
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	83.78	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.28	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 315 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.22	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 400 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.68	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	35.04	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 630 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	28.87	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 800 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.37	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 1000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.06	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 1250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	25.02	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 1600 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.06	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 2000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	26.72	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 2500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	41.13	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 3150 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	39.44	BL-SZ25 B0732-wifi2.4g
5.2 RCV Distortion and Noise - 4000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	27.84	BL-SZ25 B0732-wifi2.4g

5.2 RCV Distortion and Noise - 5000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.78	BL-SZ25 B0732-wifi2.4g
5.3 Frequency Response 8N FF	Ok	Min. dist. to tolerance scheme [dB], 3882.4 Hz	3.92	BL-SZ25 B0732-wifi2.4g

5.1a Receive Volume Control Performance 8N WB	1711
5.2 RCV Distortion and Noise - 250 Hz WB	1713
5.2 RCV Distortion and Noise - 315 Hz WB	1715
5.2 RCV Distortion and Noise - 400 Hz WB	1717
5.2 RCV Distortion and Noise - 500 Hz WB	1610
5.2 RCV Distortion and Noise - 630 Hz WB	1721
5.2 RCV Distortion and Noise - 800 Hz WB	1723
5.2 RCV Distortion and Noise - 1000 Hz WB	1725
5.2 RCV Distortion and Noise - 1250 Hz WB	1727
5.2 RCV Distortion and Noise - 1600 Hz WB	1729
5.2 RCV Distortion and Noise - 2000 Hz WB	1731
5.2 RCV Distortion and Noise - 2500 Hz WB	1733
5.2 RCV Distortion and Noise - 3150 Hz WB	1735
5.2 RCV Distortion and Noise - 4000 Hz WB	1737
5.2 RCV Distortion and Noise - 5000 Hz WB	1739
5.3 Frequency Response 8N FF	1741

5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	83.78 dB[SPL]	79.51%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

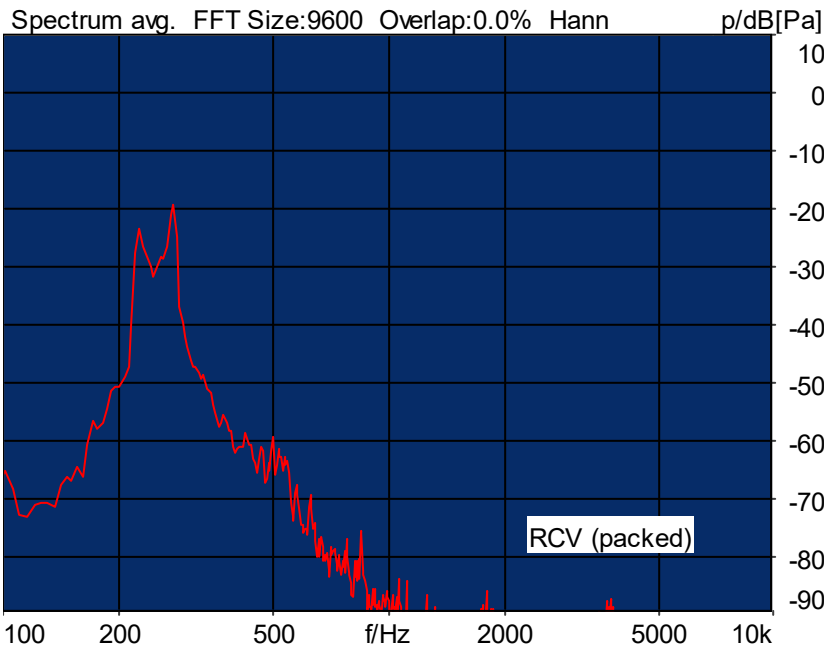
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.28 dB (2.73%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_250hz_sr20dbm0_v02.dat.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	190.0 Hz	Stimulus max.	315.0 Hz
Analysis min.	20.0 Hz	Analysis max.	185.0 Hz
Analysis (2) min.	320.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_250Hz

Hardware Config Settings

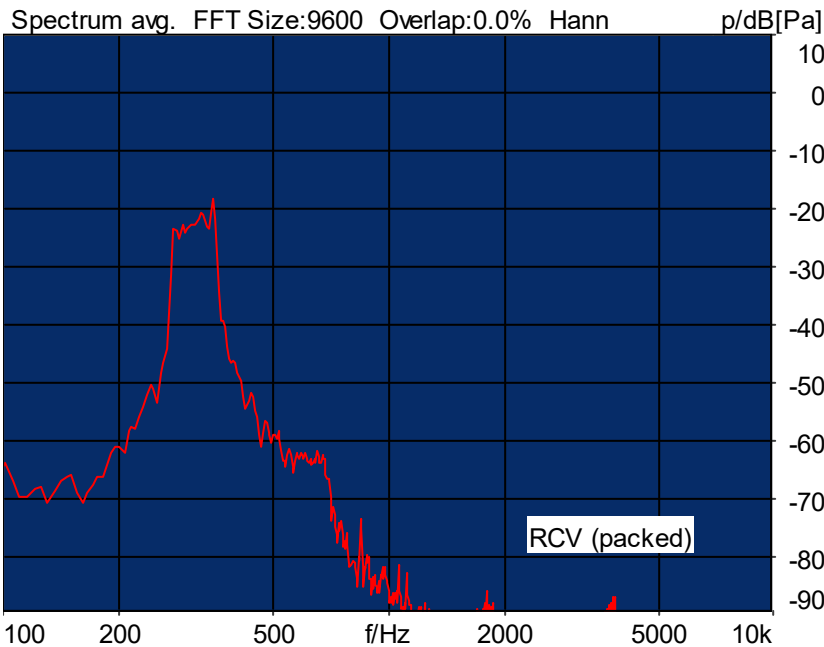
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 315 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.22 dB (2.45%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_315hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	245.0 Hz	Stimulus max.	390.0 Hz
Analysis min.	20.0 Hz	Analysis max.	240.0 Hz
Analysis (2) min.	395.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_315Hz

Hardware Config Settings

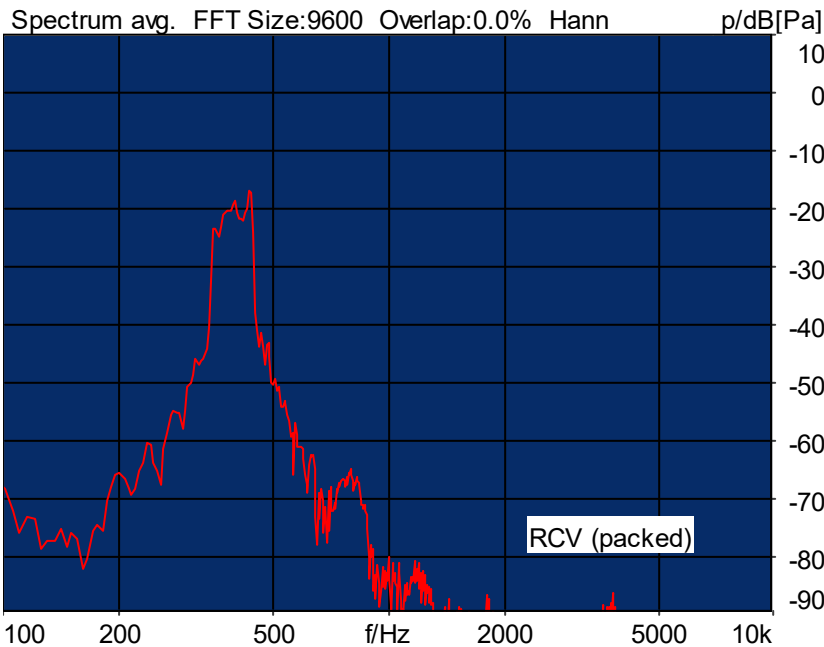
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.68 dB (2.32%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_400Hz

Hardware Config Settings

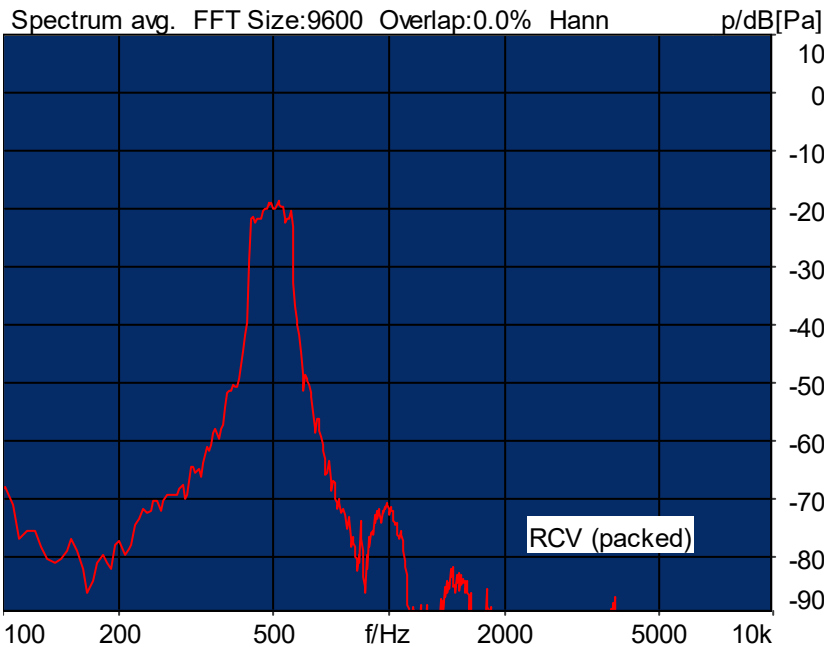
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 35.04 dB (1.77%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_500Hz

Hardware Config Settings

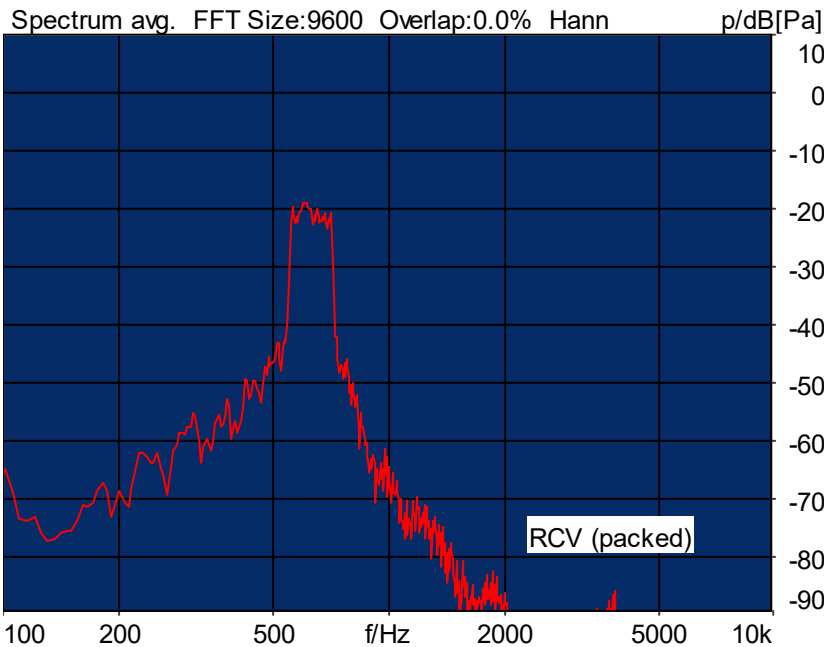
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 28.87 dB (3.60%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_630Hz

Hardware Config Settings

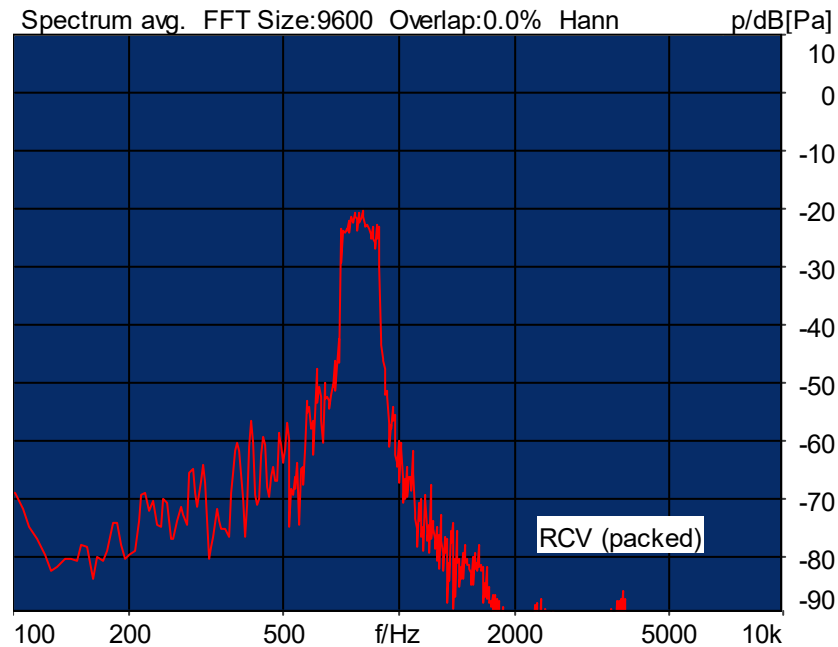
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.37 dB (2.41%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_800Hz

Hardware Config Settings

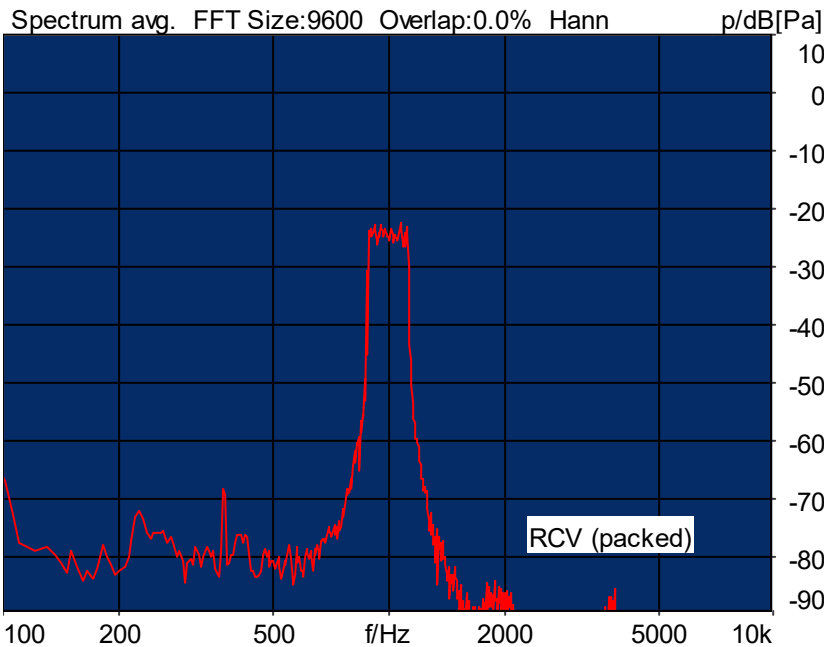
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 39.06 dB (1.11%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1000Hz

Hardware Config Settings

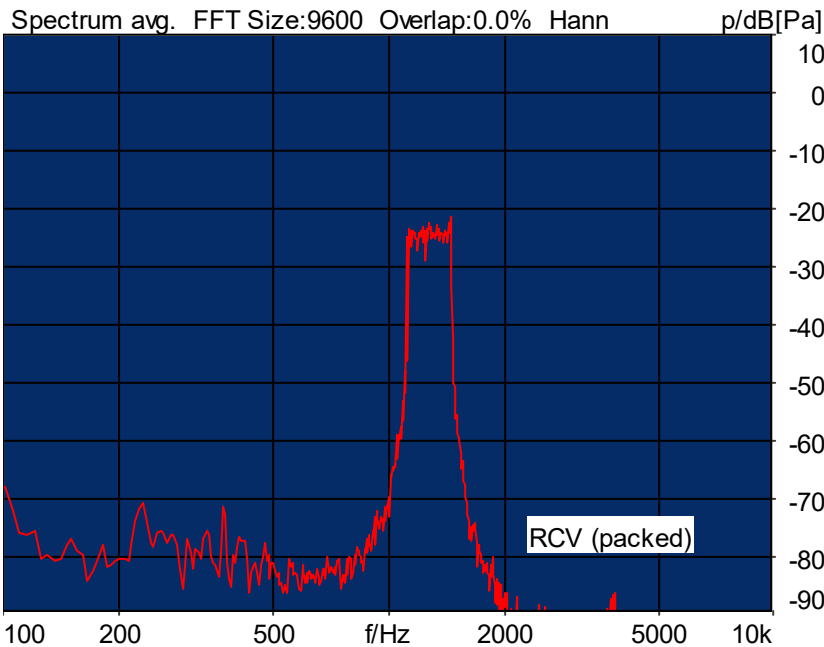
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 25.02 dB (5.61%) Ok

Ok

2025/12/17 15:57 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1250Hz

Hardware Config Settings

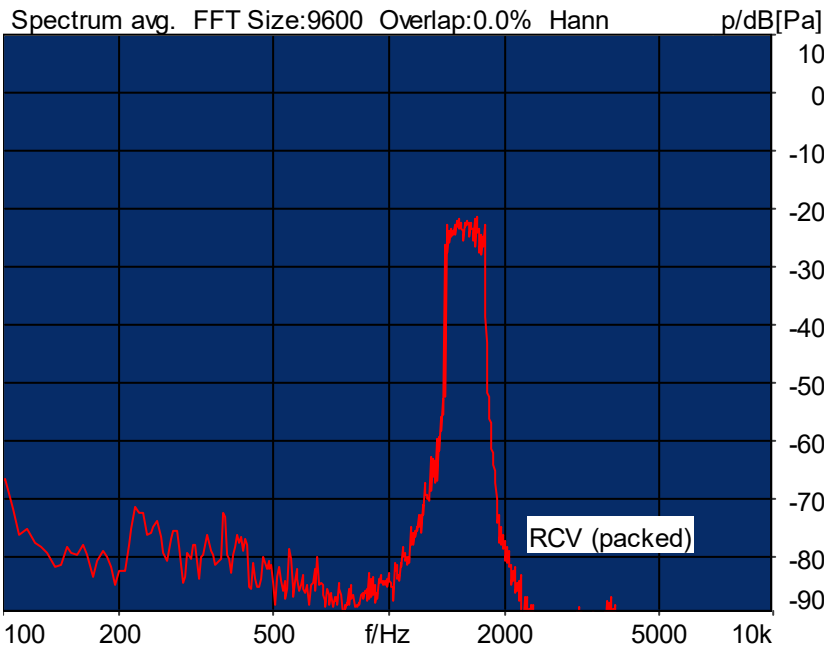
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 39.06 dB (1.11%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1600Hz

Hardware Config Settings

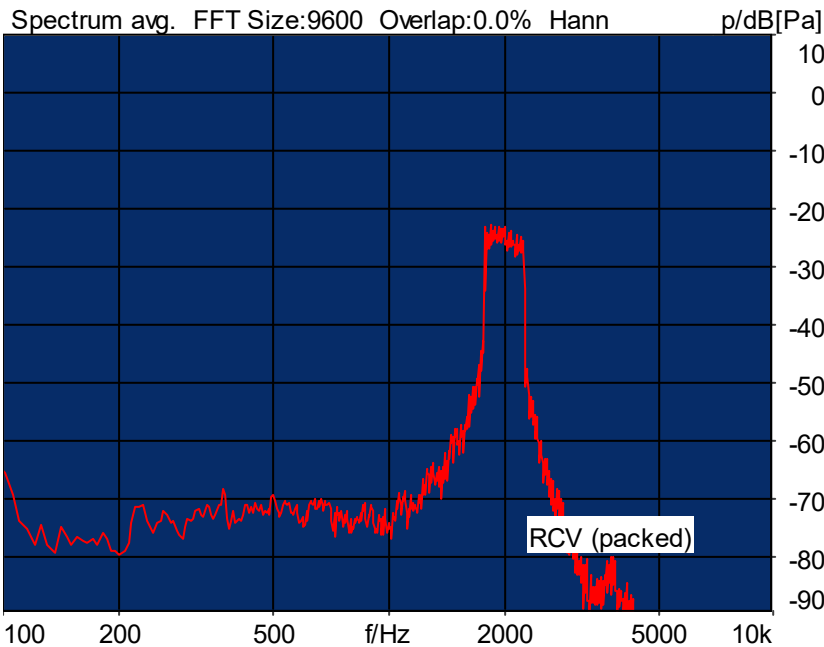
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 26.72 dB (4.61%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2000Hz

Hardware Config Settings

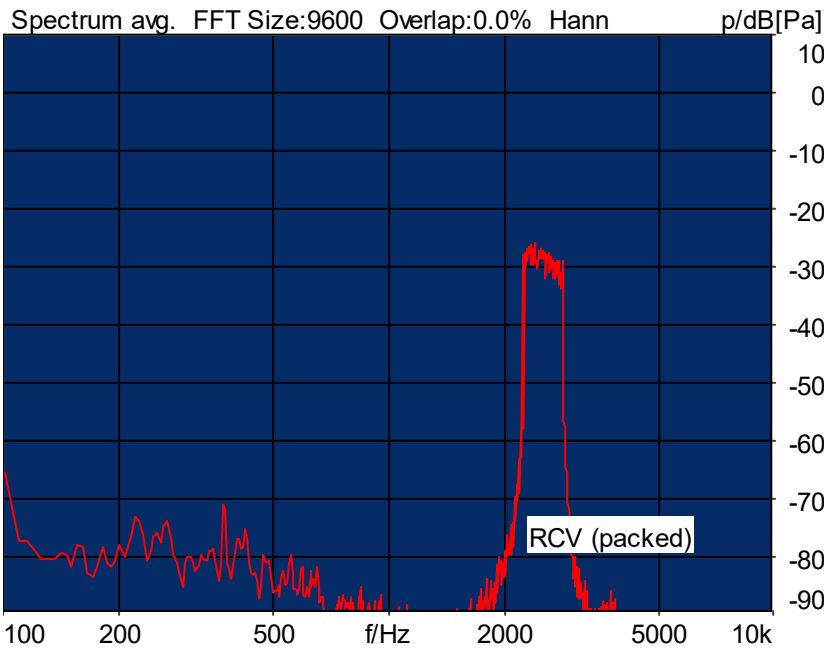
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 41.13 dB (0.88%) Ok

Ok

2025/12/17 15:58 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2500Hz

Hardware Config Settings

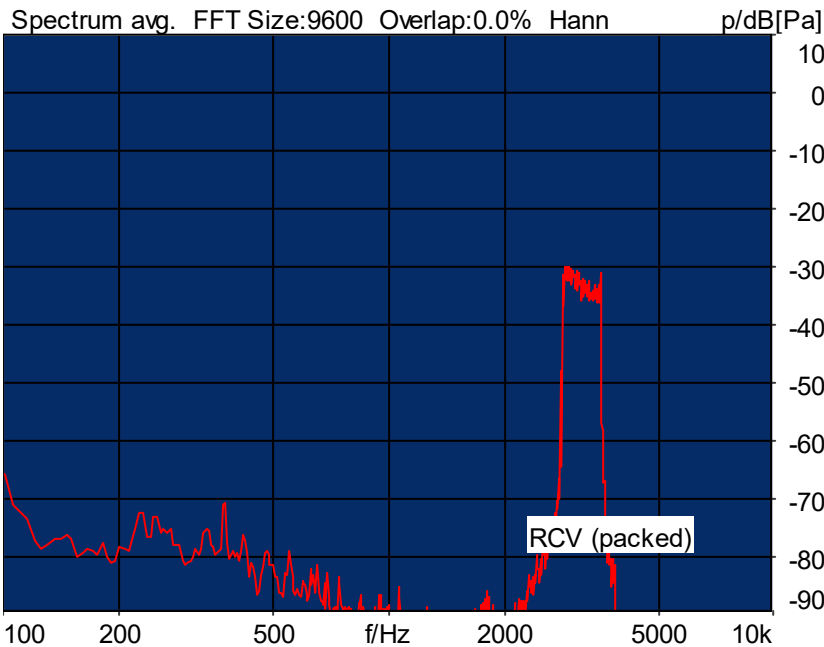
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 39.44 dB (1.07%) Ok

Ok

2025/12/17 15:59 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_3150Hz

Hardware Config Settings

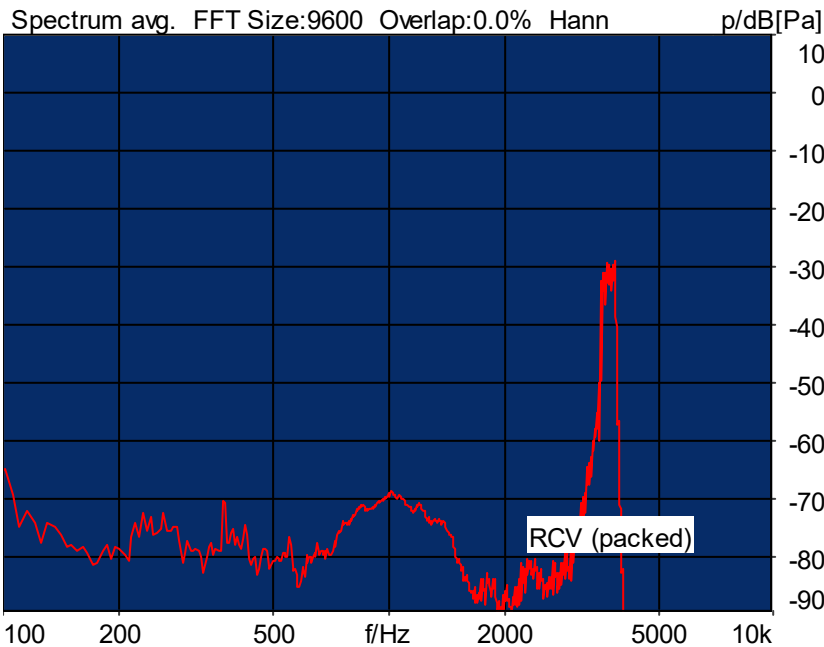
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 4000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 27.84 dB (4.06%) Ok

Ok

2025/12/17 15:59 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_4000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	3515.0 Hz	Stimulus max.	4500.0 Hz
Analysis min.	20.0 Hz	Analysis max.	3510.0 Hz
Analysis (2) min.	4505.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_4000Hz

Hardware Config Settings

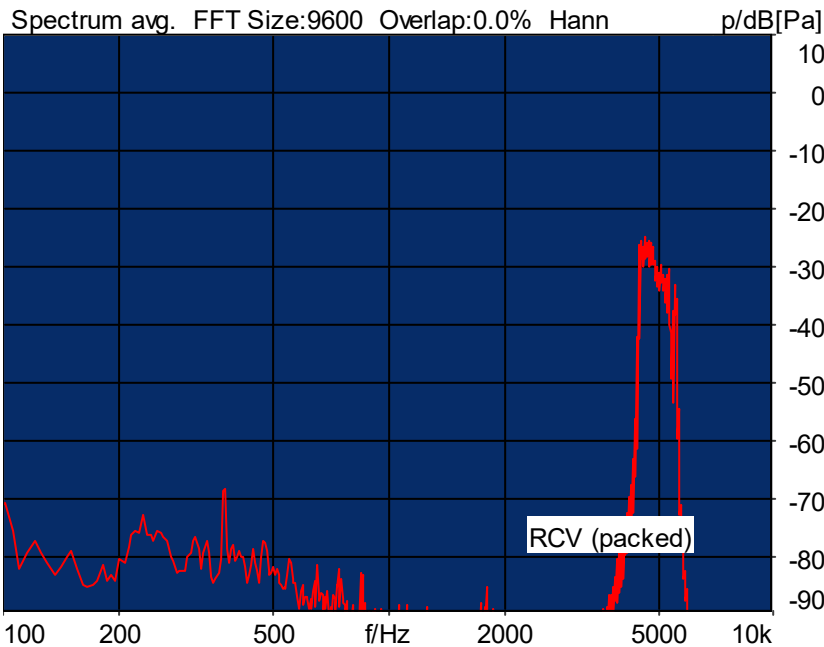
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 5000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 8N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.78 dB (1.82%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_5000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	4430.0 Hz	Stimulus max.	5660.0 Hz
Analysis min.	20.0 Hz	Analysis max.	4425.0 Hz
Analysis (2) min.	5665.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_5000Hz

Hardware Config Settings

Used Setting	TIA5050
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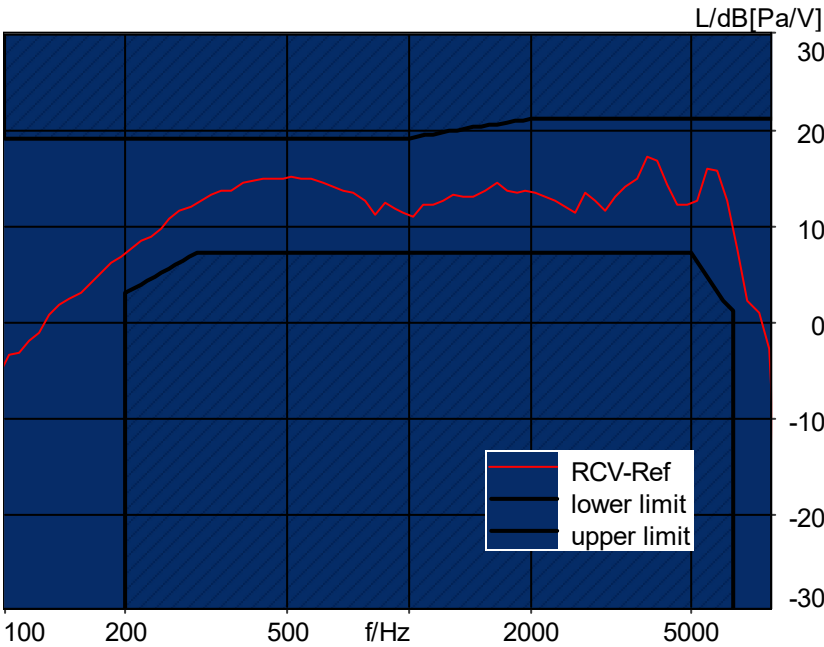
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Absolute minimal distance

3.92 dB at 3882.4 Hz Ok

Ok

2025/12/17 16:33 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_wb_r20_v01.dat

Level adjustment Channel 1 Gain -90.00 dB

WIDEBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -22,2 dBV, margin 15.9 dB +

Pause till end of file

Signal level (ch2): -22,2 dBV Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 8.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hawb.fft

Tol. scheme file 521_rcv_frq_man_hawb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 8000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(57#)

Measurement Object	BL-SZ25B0732-wifi5.2G
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Status Overview

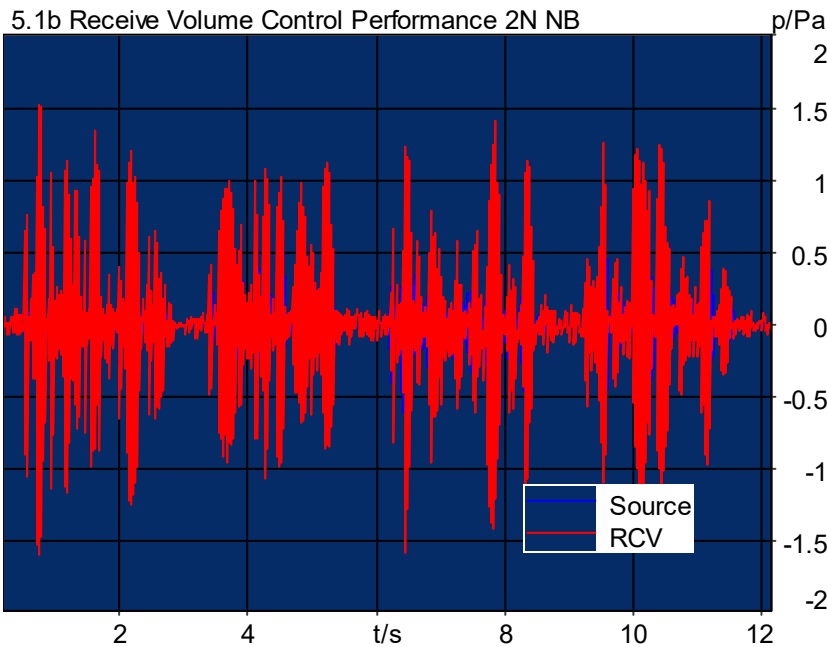
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.33	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.10	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.98	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.67	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.31	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.01	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	26.35	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.21	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.14	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	36.11	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.70	BL-SZ25B0732-wifi5.2G
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1647.8 Hz	3.36	BL-SZ25B0732-wifi5.2G

5.1b Receive Volume Control Performance 2N NB	1746
5.2 RCV Distortion and Noise - 400 Hz NB	1748
5.2 RCV Distortion and Noise - 500 Hz NB	1750
5.2 RCV Distortion and Noise - 630 Hz NB	1752
5.2 RCV Distortion and Noise - 800 Hz NB	1754
5.2 RCV Distortion and Noise - 1000 Hz NB	1756
5.2 RCV Distortion and Noise - 1250 Hz NB	1758
5.2 RCV Distortion and Noise - 1600 Hz NB	1760
5.2 RCV Distortion and Noise - 2000 Hz NB	1762
5.2 RCV Distortion and Noise - 2500 Hz NB	1764
5.2 RCV Distortion and Noise - 3150 Hz NB	1766
5.3 Frequency Response 2N FF HANB	1768

5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.33 dB[SPL]	80.56%	Ok

Ok

2025/12/17 18:46 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

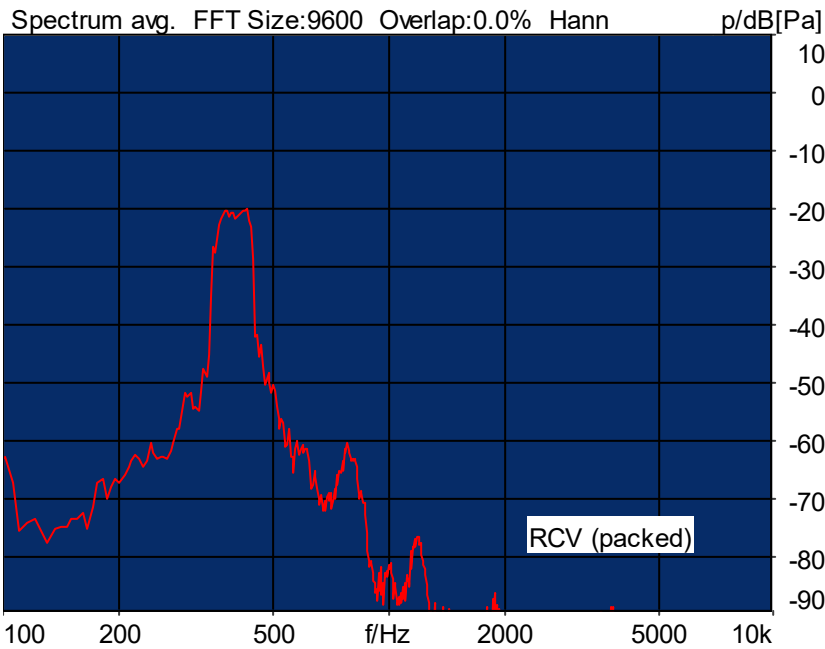
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.10 dB (1.97%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

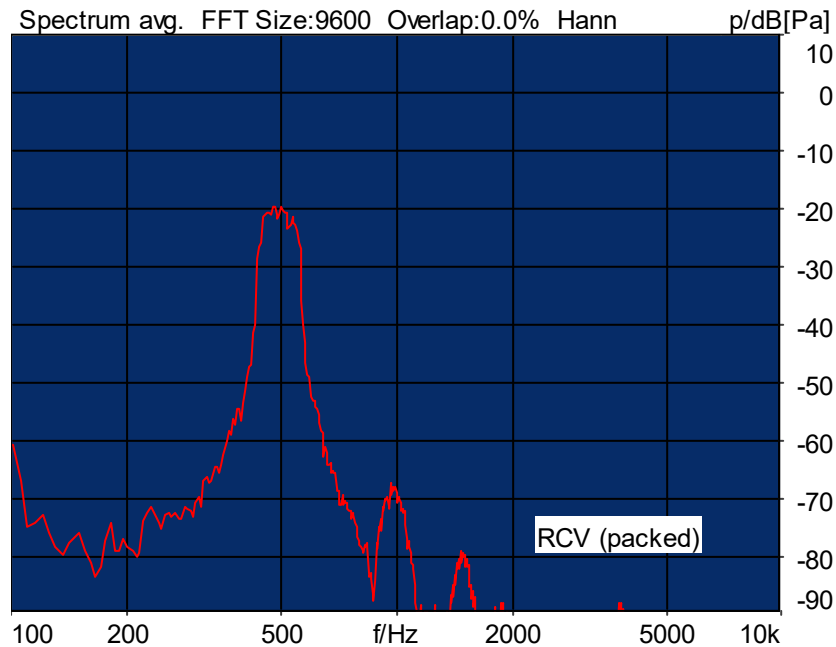
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.98 dB (1.42%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

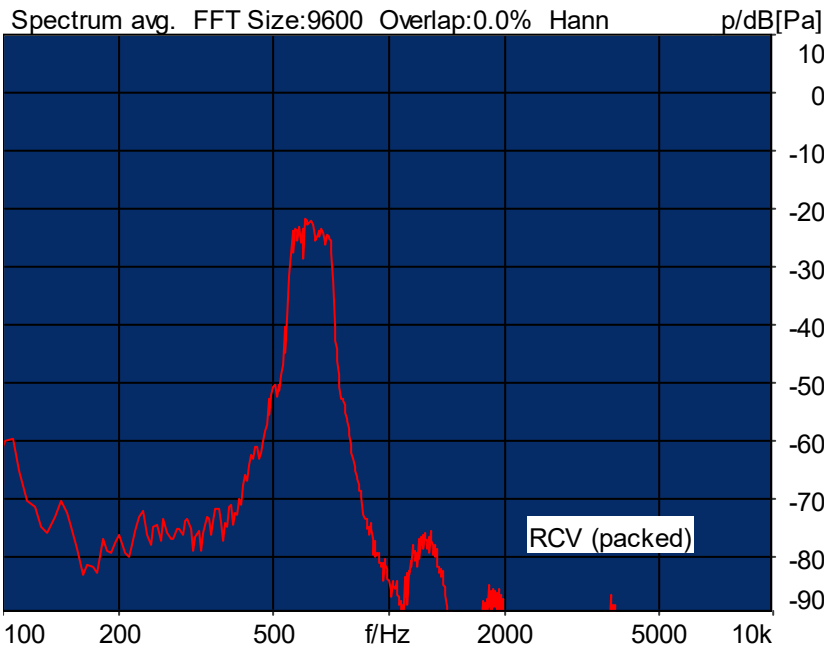
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.67 dB (2.07%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

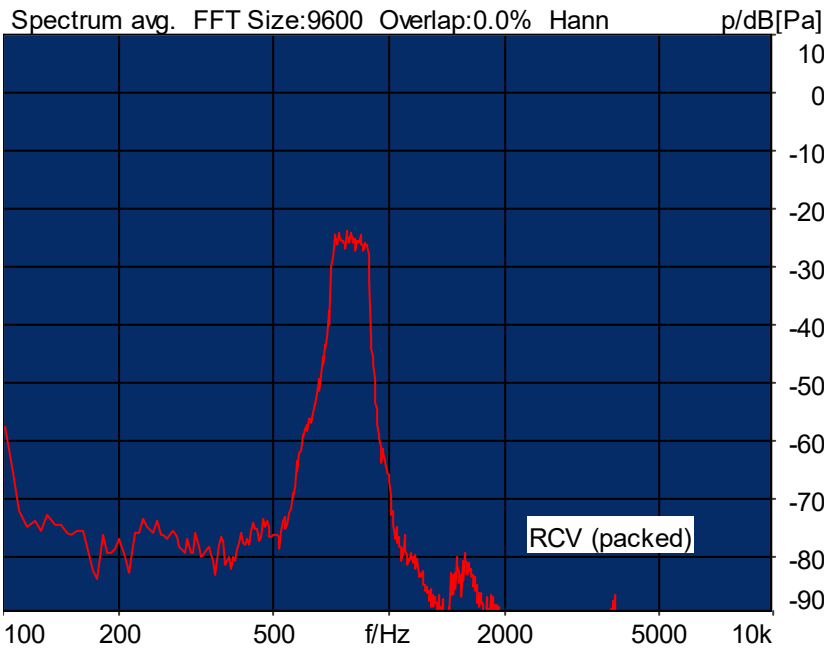
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.31 dB (2.42%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

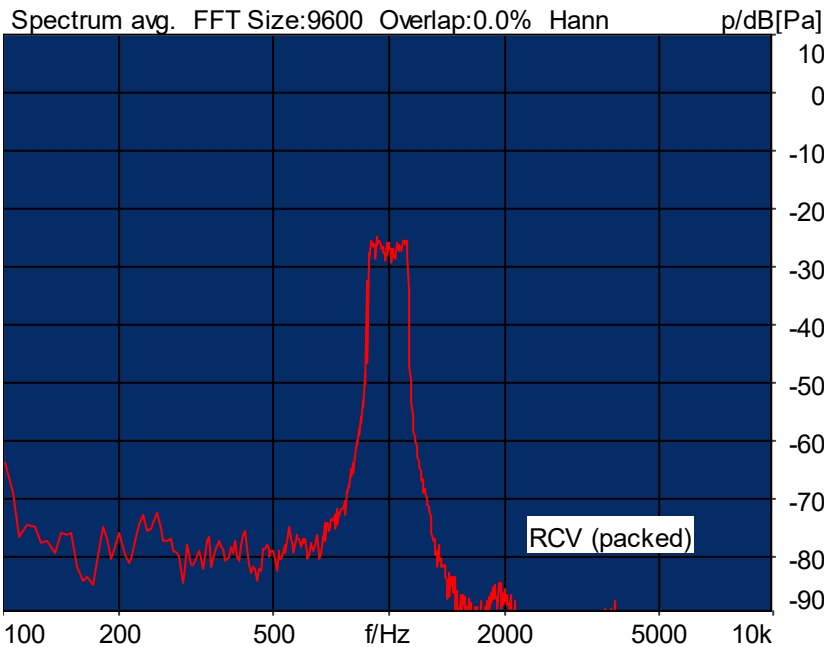
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.01 dB (1.41%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

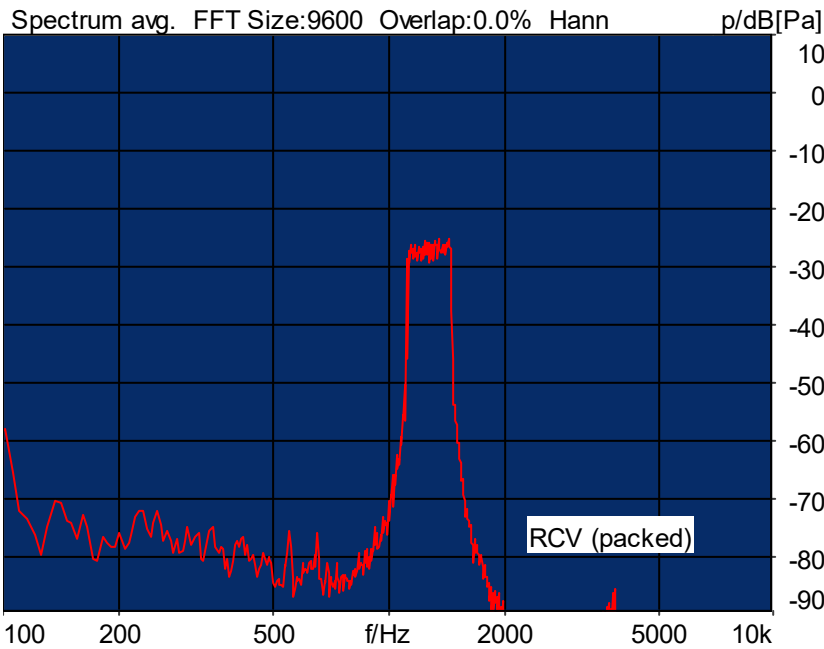
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 26.35 dB (4.81%) Ok

Ok

2025/12/17 18:49 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

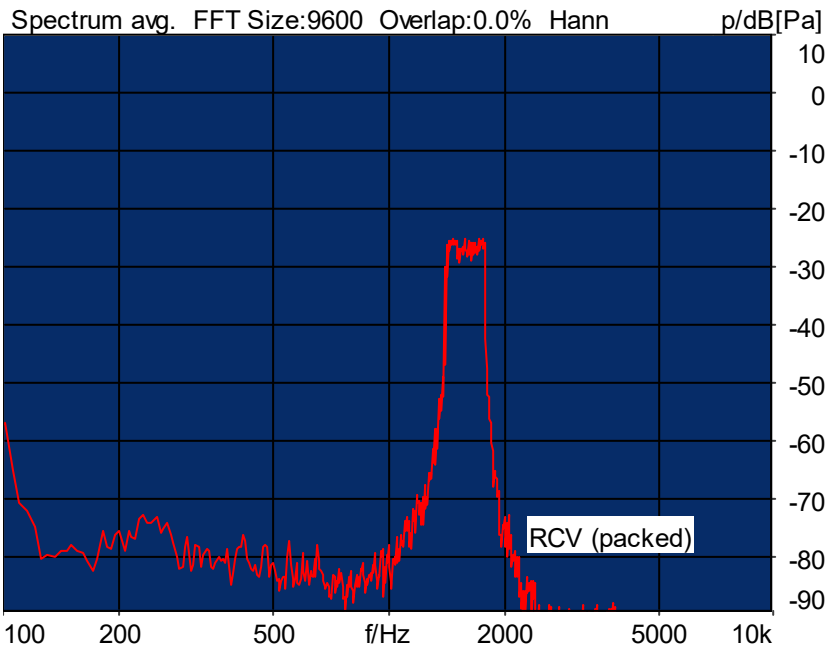
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.21 dB (1.95%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

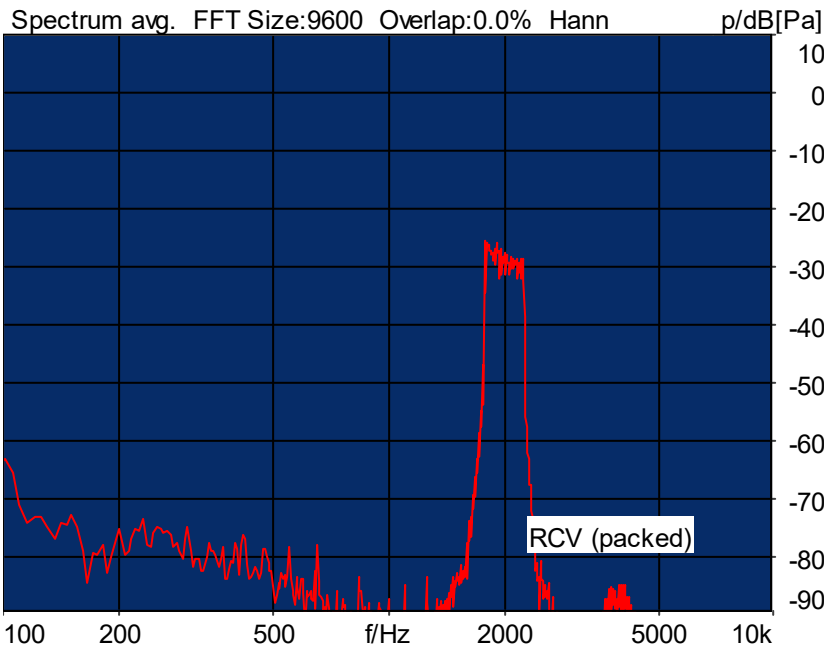
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.14 dB (1.39%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

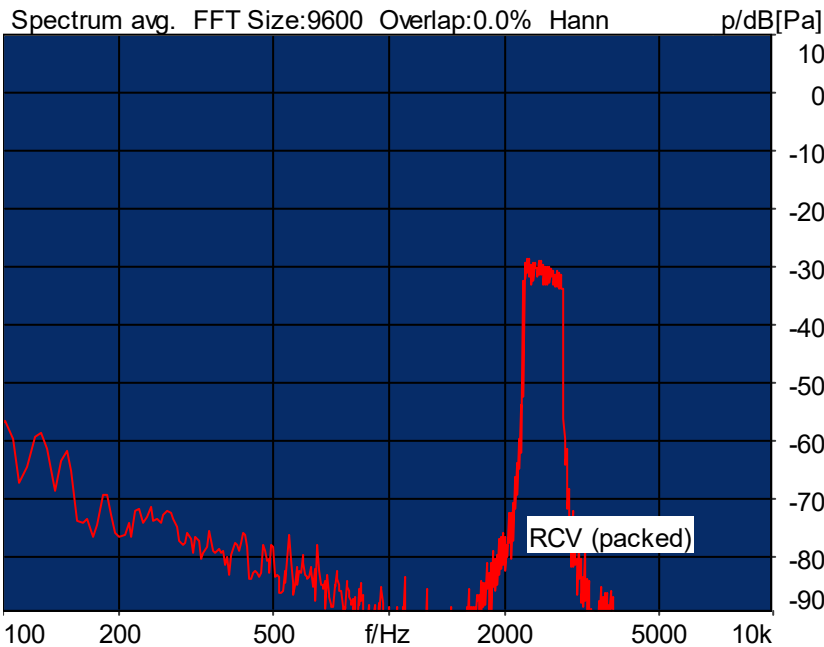
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 36.11 dB (1.56%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

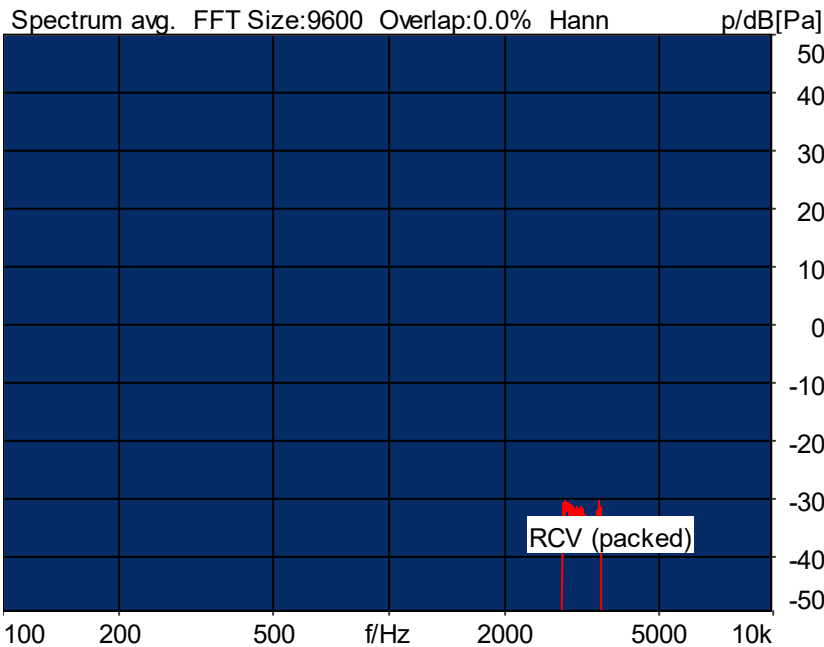
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.70 dB (1.03%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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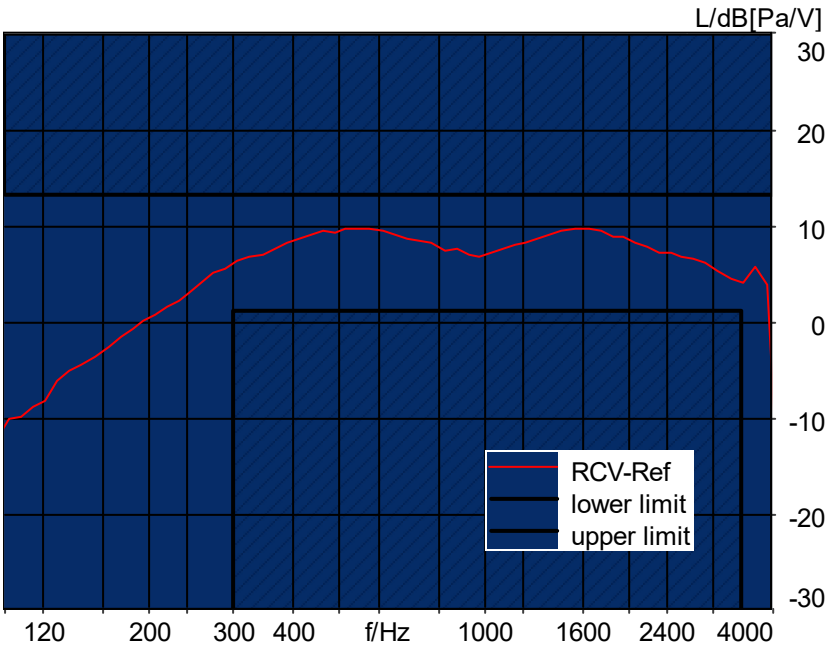
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

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Absolute minimal distance

3.36 dB at 1647.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(58#)

Measurement Object	BL-SZ25B0732-wifi5.2G
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Status Overview

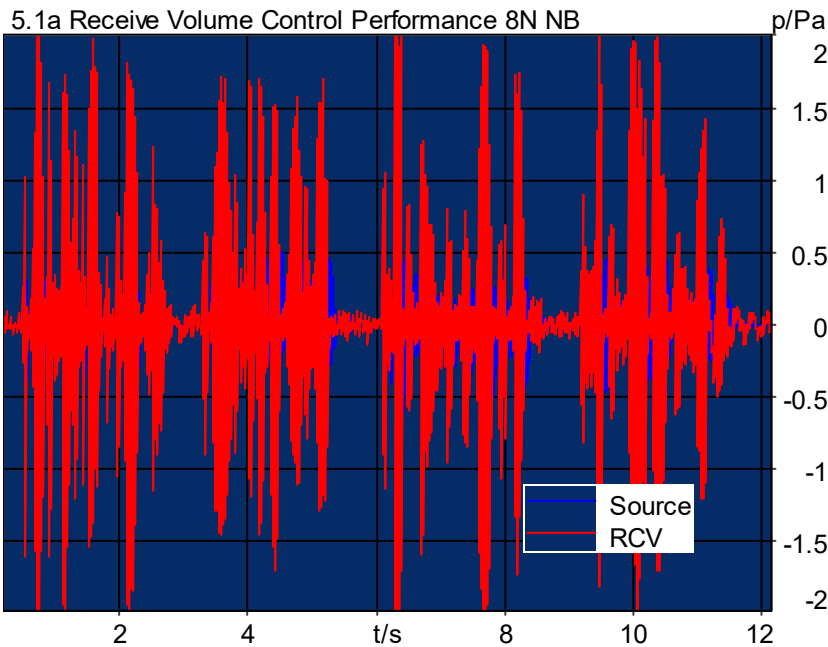
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.47	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.16	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.32	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.56	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.94	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	25.64	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	21.33	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.49	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.71	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.17	BL-SZ25B0732-wifi5.2G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.08	BL-SZ25B0732-wifi5.2G
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	2.42	BL-SZ25B0732-wifi5.2G

5.1a Receive Volume Control Performance 8N NB	1773
5.2 RCV Distortion and Noise - 400 Hz NB	1775
5.2 RCV Distortion and Noise - 500 Hz NB	1777
5.2 RCV Distortion and Noise - 630 Hz NB	1779
5.2 RCV Distortion and Noise - 800 Hz NB	1781
5.2 RCV Distortion and Noise - 1000 Hz NB	1783
5.2 RCV Distortion and Noise - 1250 Hz NB	1785
5.2 RCV Distortion and Noise - 1600 Hz NB	1787
5.2 RCV Distortion and Noise - 2000 Hz NB	1789
5.2 RCV Distortion and Noise - 2500 Hz NB	1791
5.2 RCV Distortion and Noise - 3150 Hz NB	1793
5.3 Frequency Response 8N FF HANB	1795

5.1a Receive Volume Control Performance 8N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	83.47 dB[SPL]	80.34%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

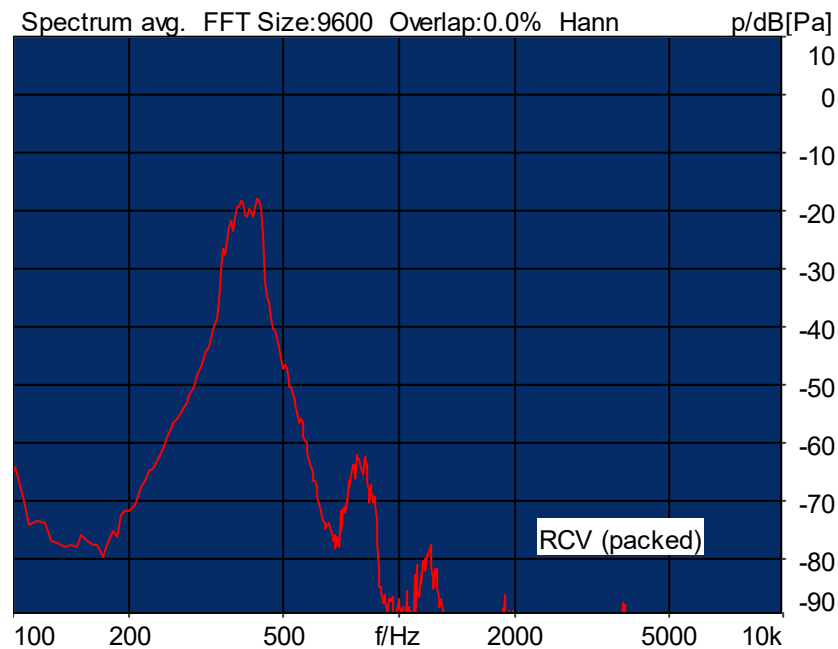
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.16 dB (2.77%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

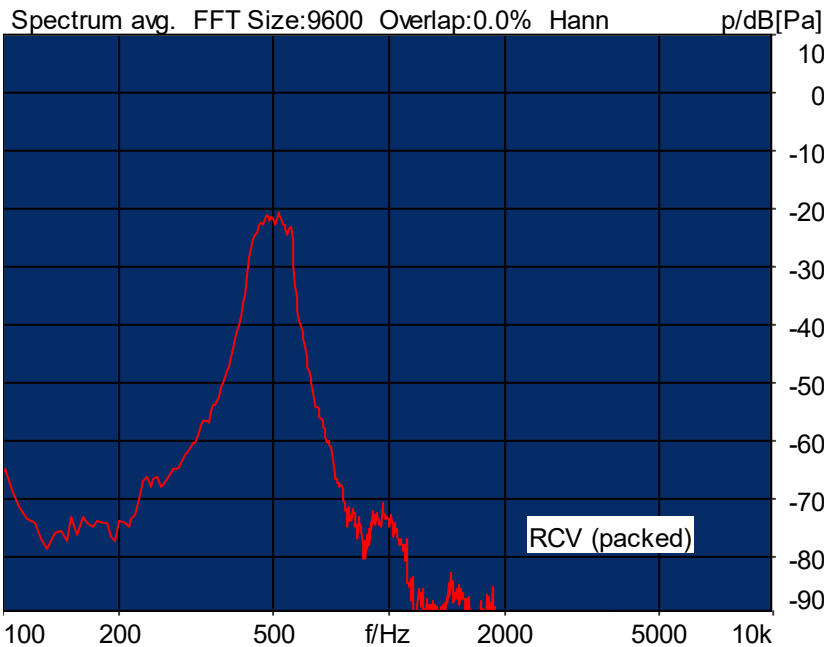
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 28.32 dB (3.84%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

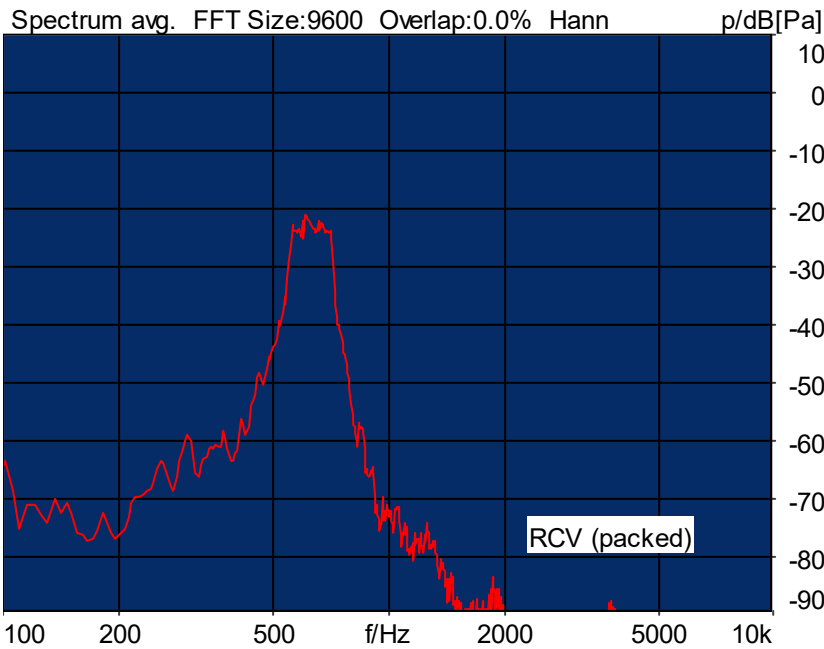
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 25.56 dB (5.27%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

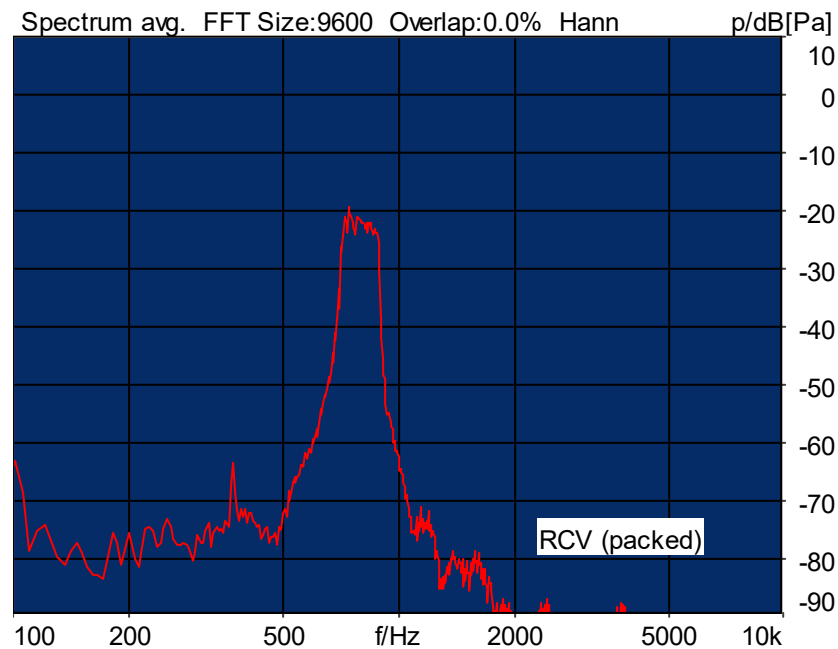
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 33.94 dB (2.01%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

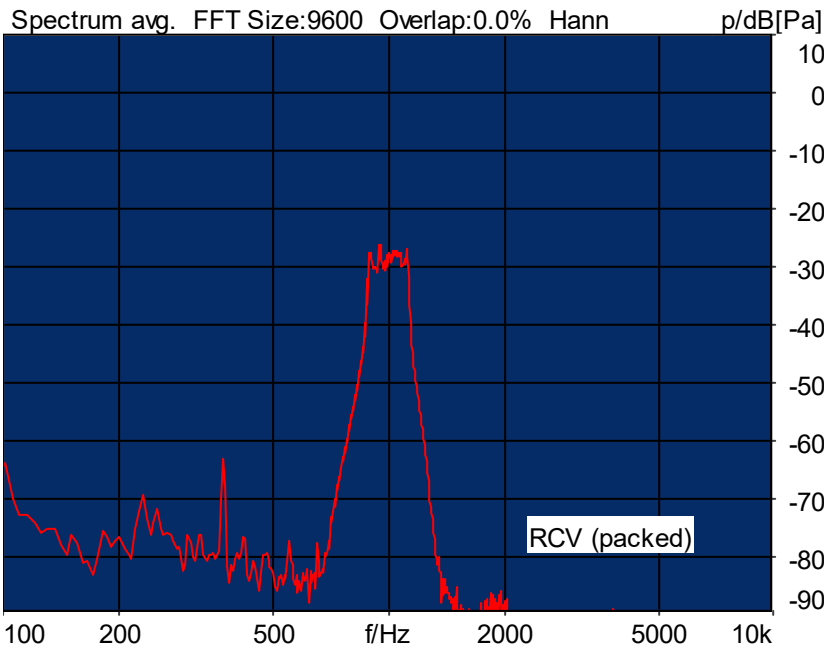
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 25.64 dB (5.22%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

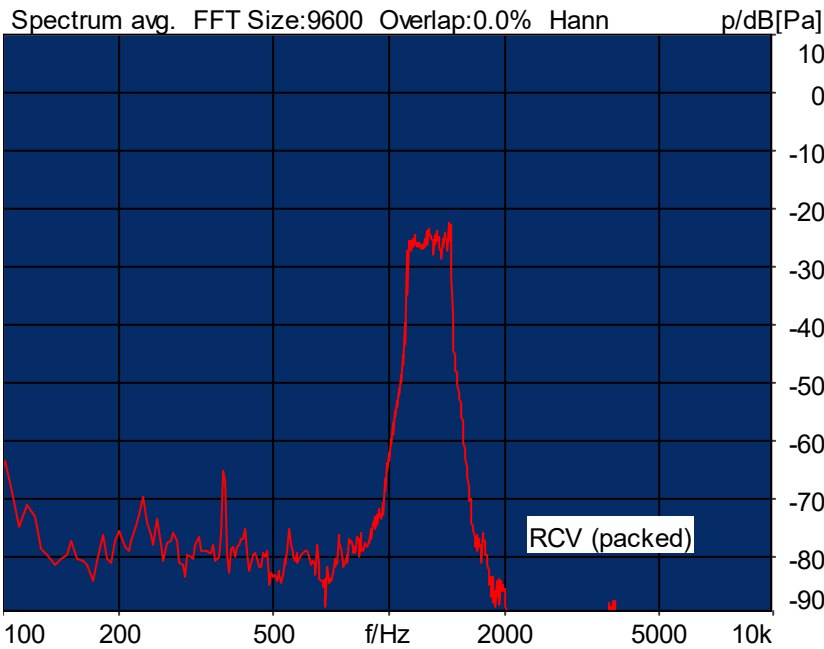
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 21.33 dB (8.58%) Ok

Ok

2025/12/17 18:58 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

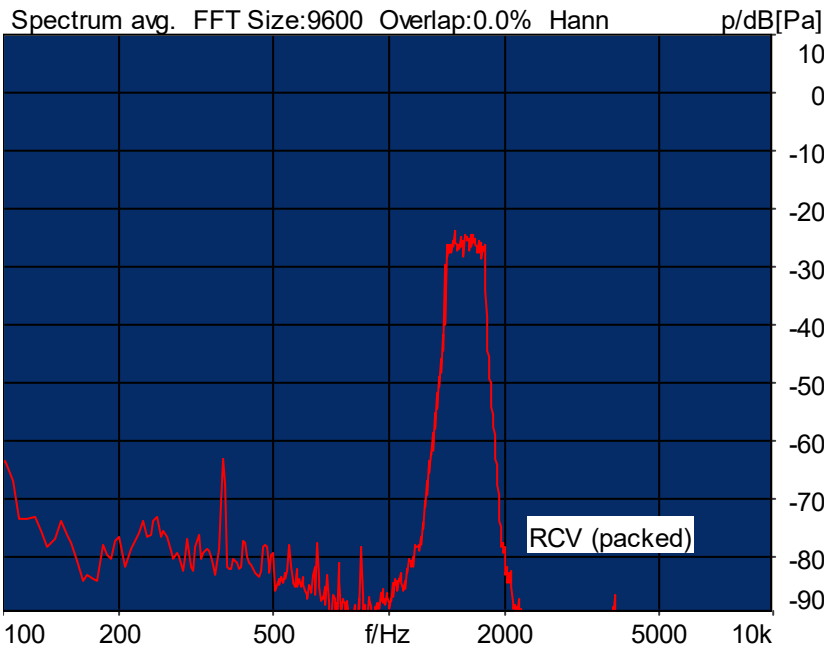
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.49 dB (3.35%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

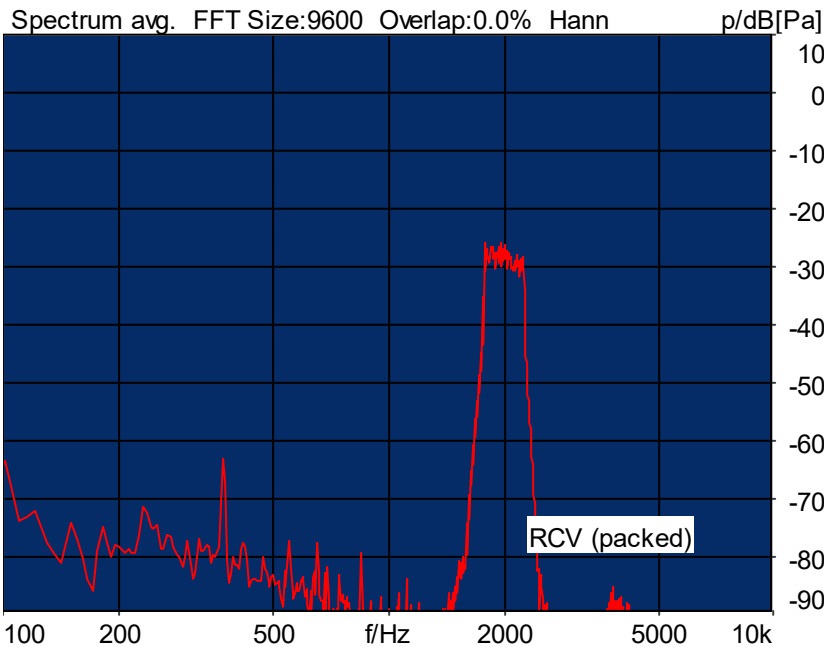
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 27.71 dB (4.12%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

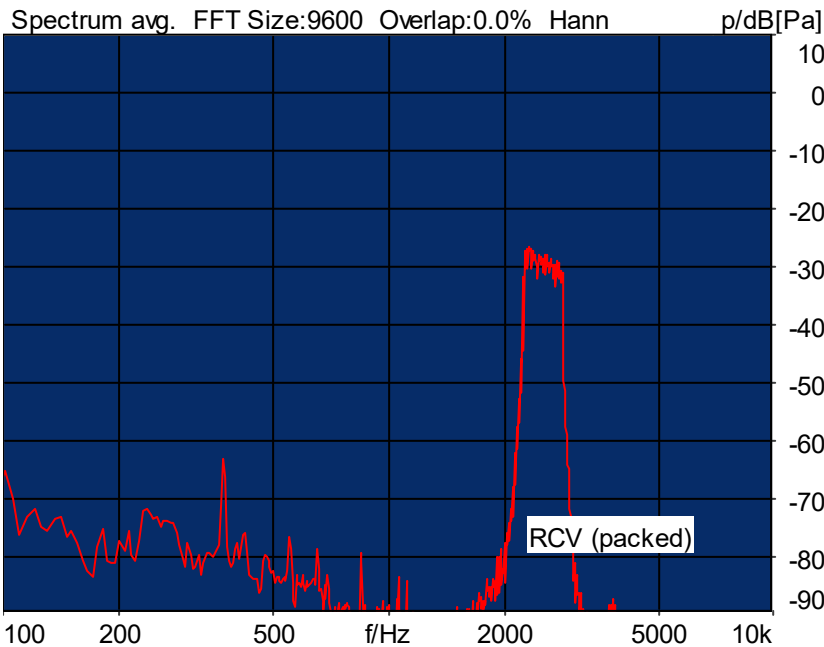
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.17 dB (2.46%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

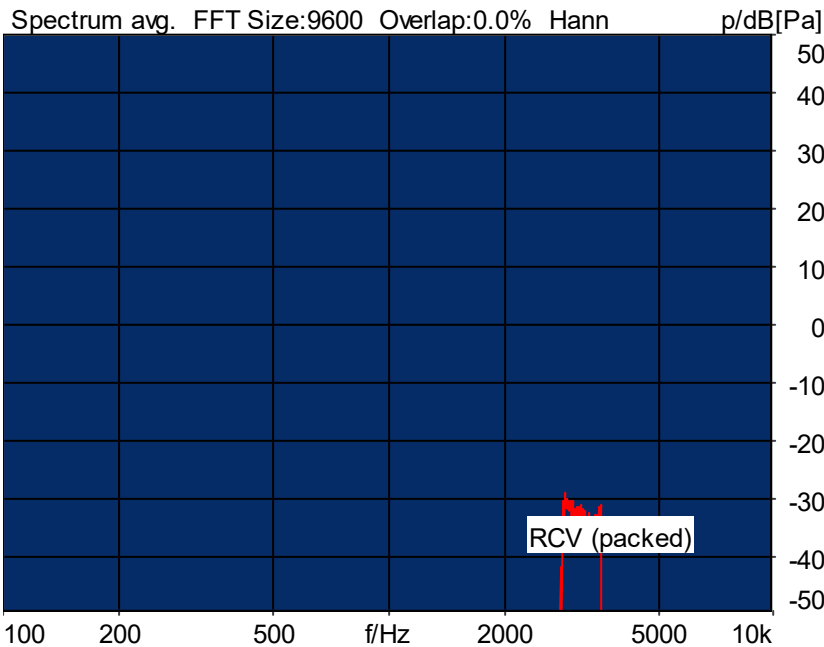
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.08 dB (2.49%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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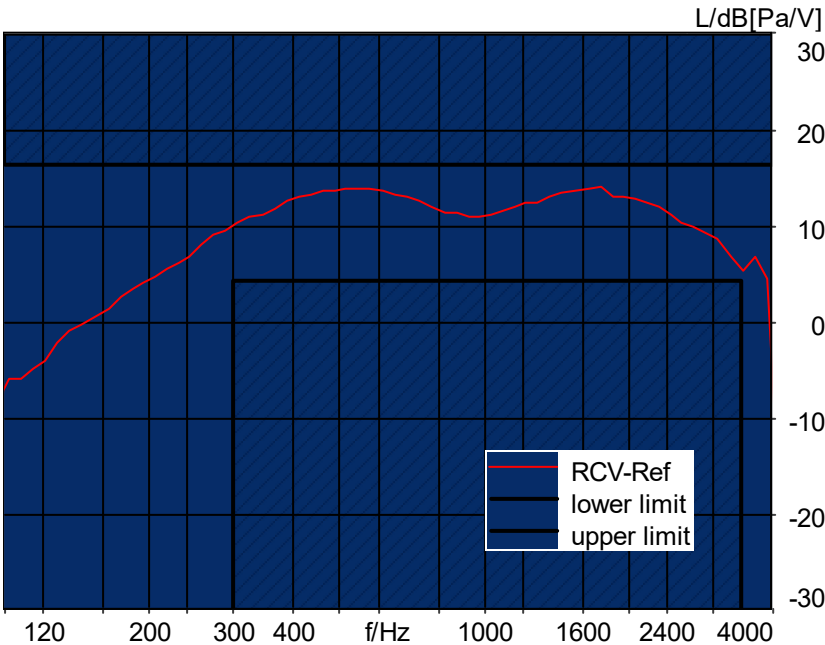
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

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Absolute minimal distance

2.42 dB at 1747.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(59#)

Measurement Object	BL-SZ25B0732-WIIF5.3G
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Status Overview

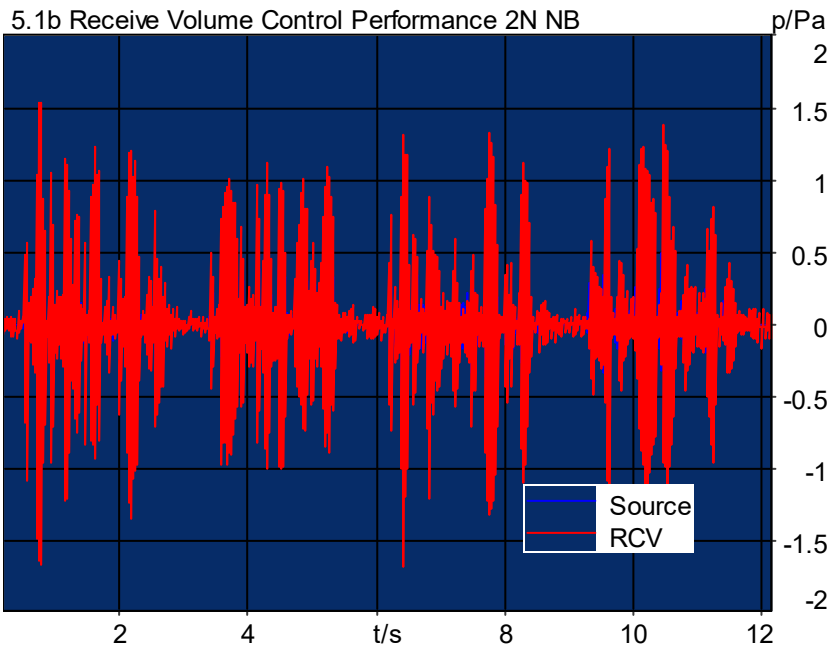
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.58	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.39	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.55	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.49	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.26	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.66	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.46	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.40	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.55	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.23	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.27	BL-SZ25B0732-WIIF5.3G
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 576.7 Hz	3.40	BL-SZ25B0732-WIIF5.3G

5.1b Receive Volume Control Performance 2N NB	1800
5.2 RCV Distortion and Noise - 400 Hz NB	1802
5.2 RCV Distortion and Noise - 500 Hz NB	1804
5.2 RCV Distortion and Noise - 630 Hz NB	1806
5.2 RCV Distortion and Noise - 800 Hz NB	1808
5.2 RCV Distortion and Noise - 1000 Hz NB	1810
5.2 RCV Distortion and Noise - 1250 Hz NB	1812
5.2 RCV Distortion and Noise - 1600 Hz NB	1814
5.2 RCV Distortion and Noise - 2000 Hz NB	1816
5.2 RCV Distortion and Noise - 2500 Hz NB	1818
5.2 RCV Distortion and Noise - 3150 Hz NB	1820
5.3 Frequency Response 2N FF HANB	1822

5.1b Receive Volume Control Performance 2N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.58 dB[SPL]	80.49%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

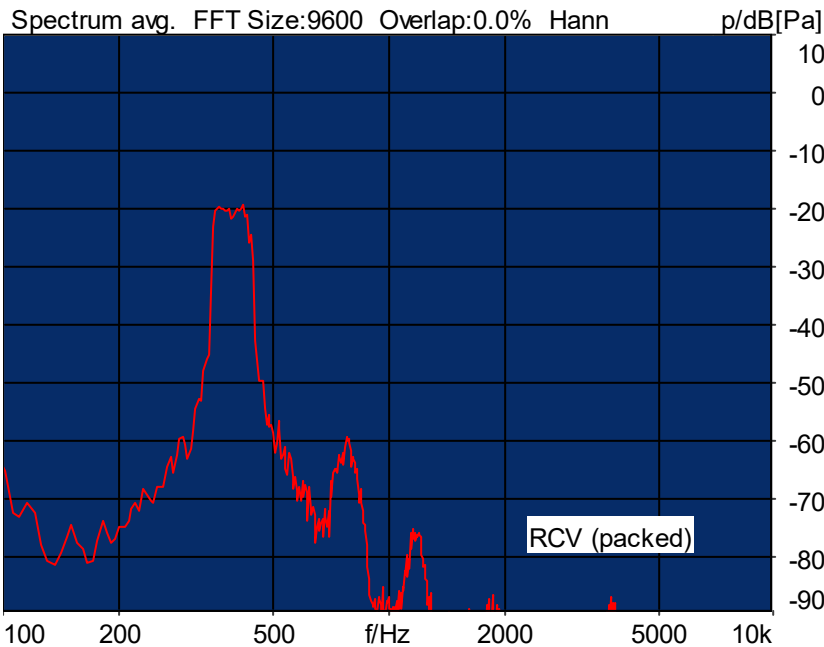
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.39 dB (1.20%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

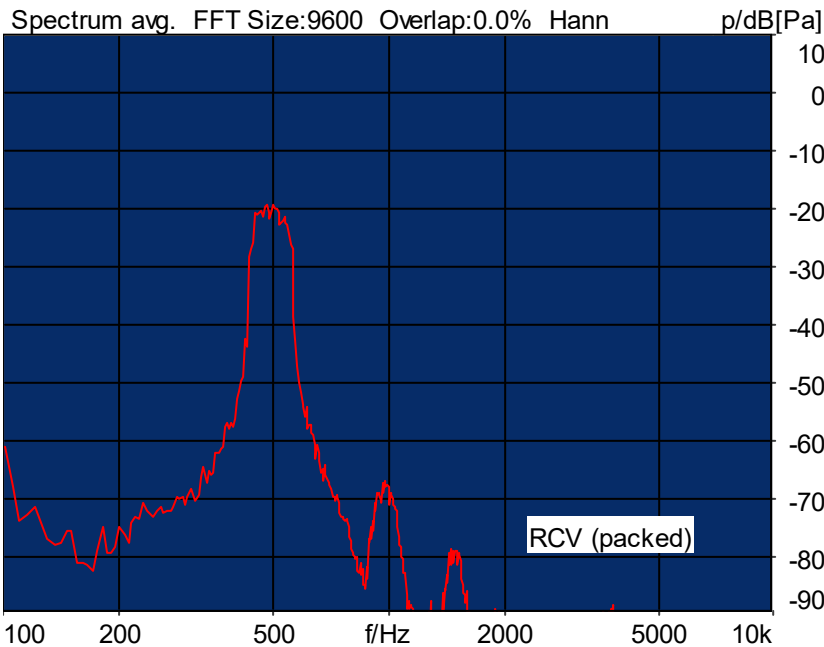
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.55 dB (1.18%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

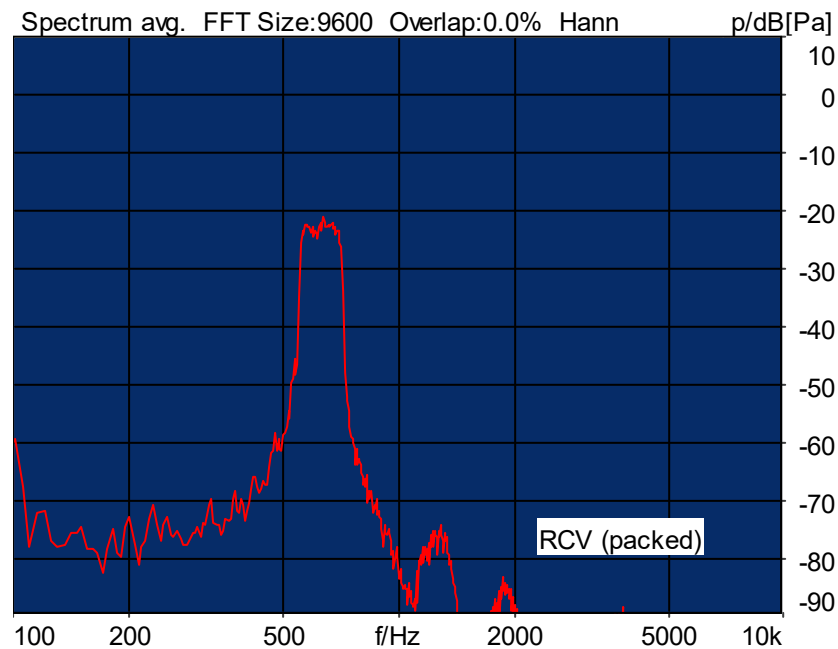
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.49 dB (1.06%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

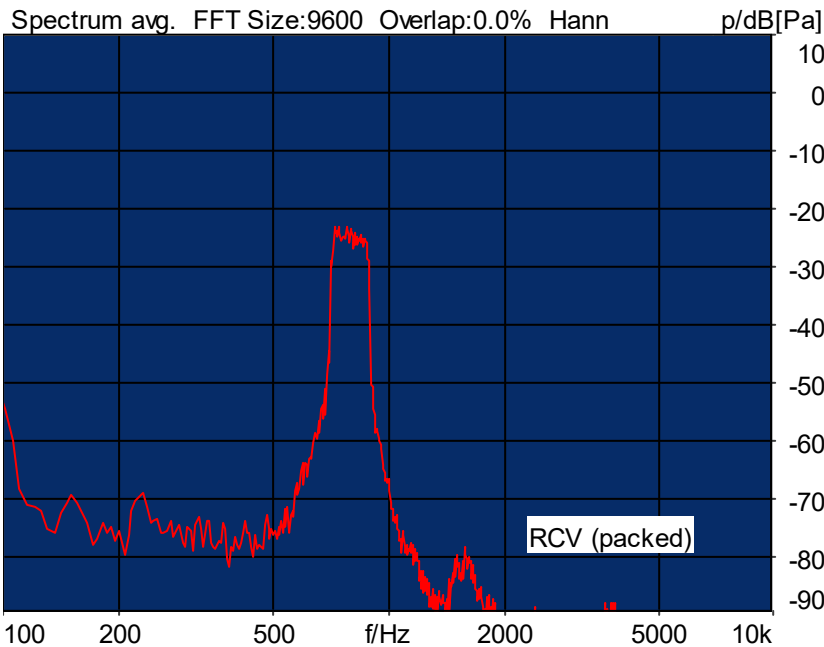
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.26 dB (1.37%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

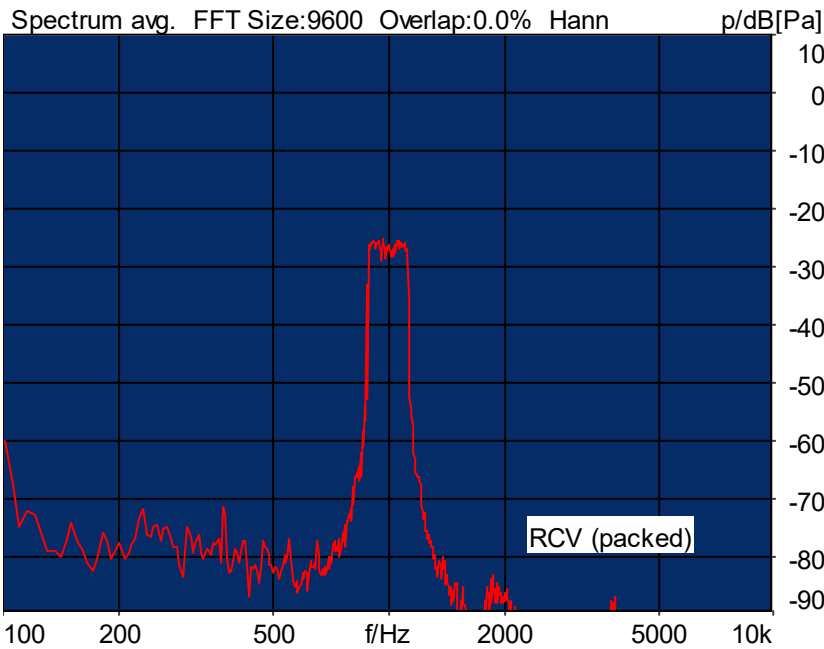
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.66 dB (0.83%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

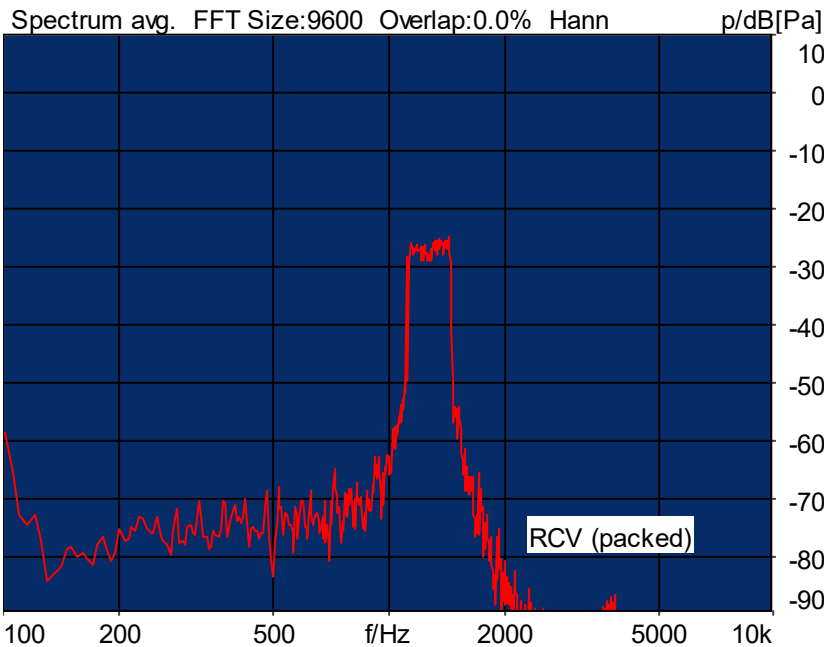
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 28.46 dB (3.78%) Ok

Ok

2025/12/17 18:44 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

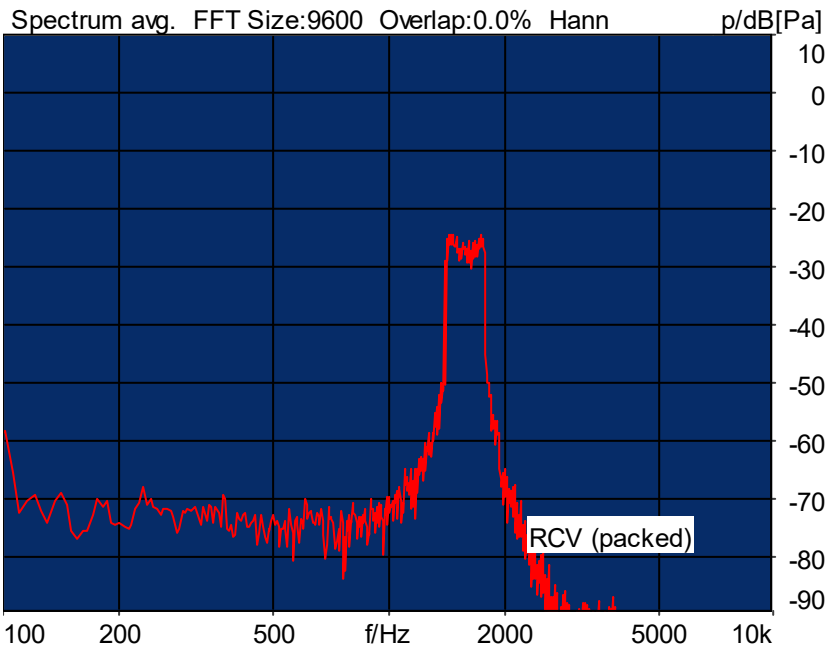
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.40 dB (3.02%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

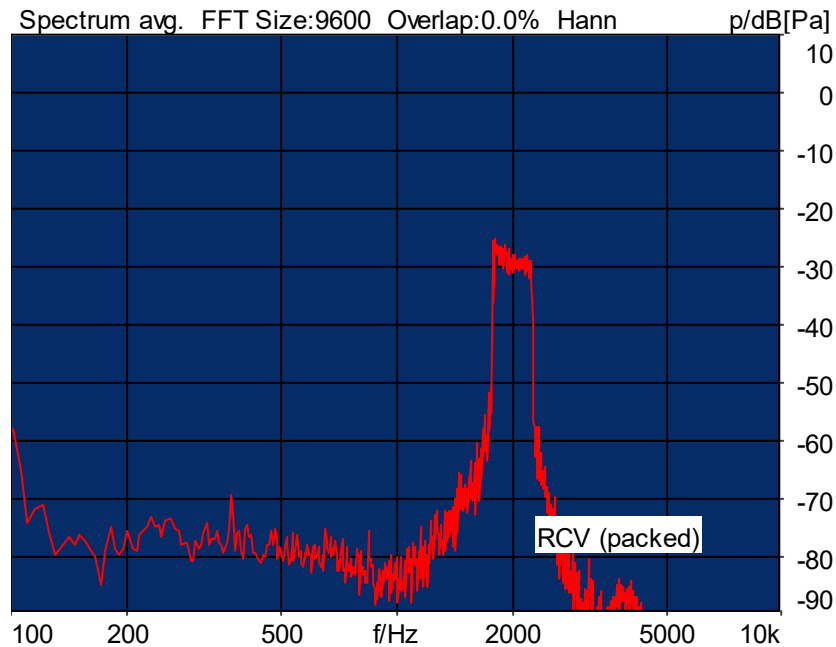
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.55 dB (2.36%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

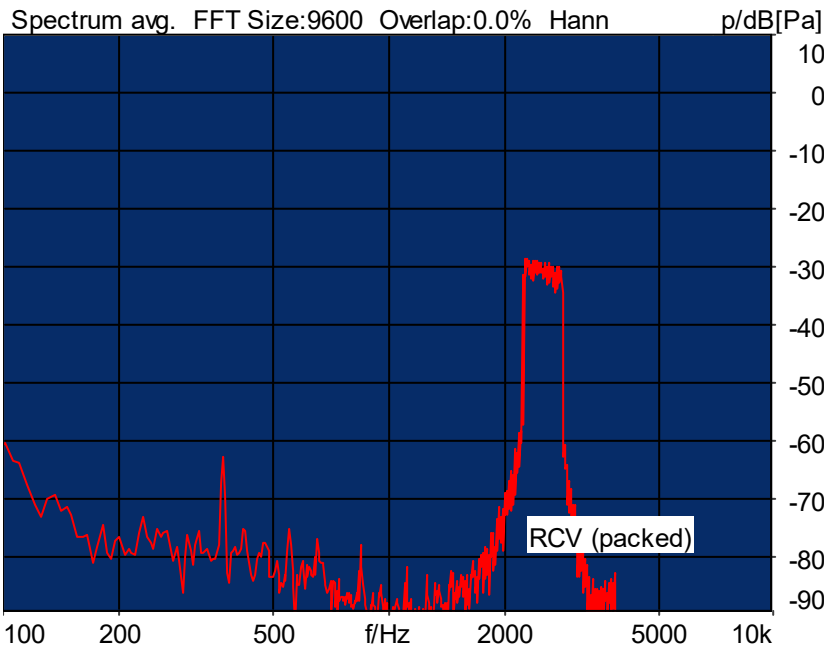
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.23 dB (1.73%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

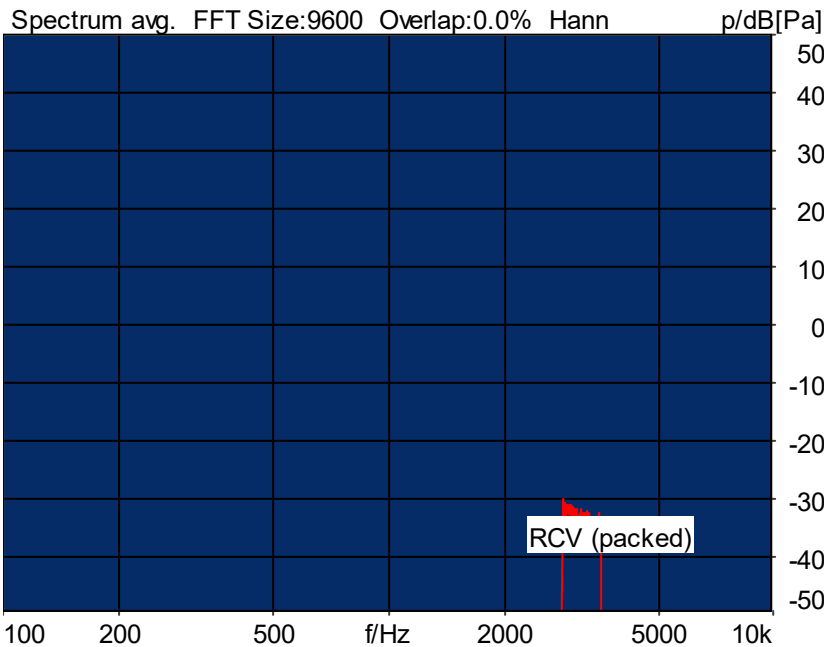
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.27 dB (0.69%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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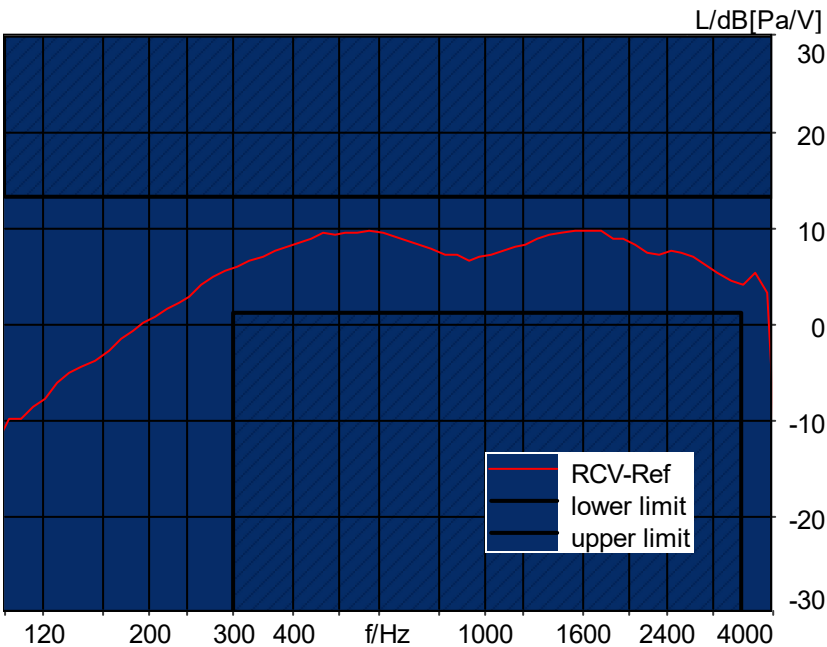
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

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Absolute minimal distance

3.40 dB at 576.7 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(60#)

Measurement Object	BL-SZ25B0732-WIIF5.3G
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Status Overview

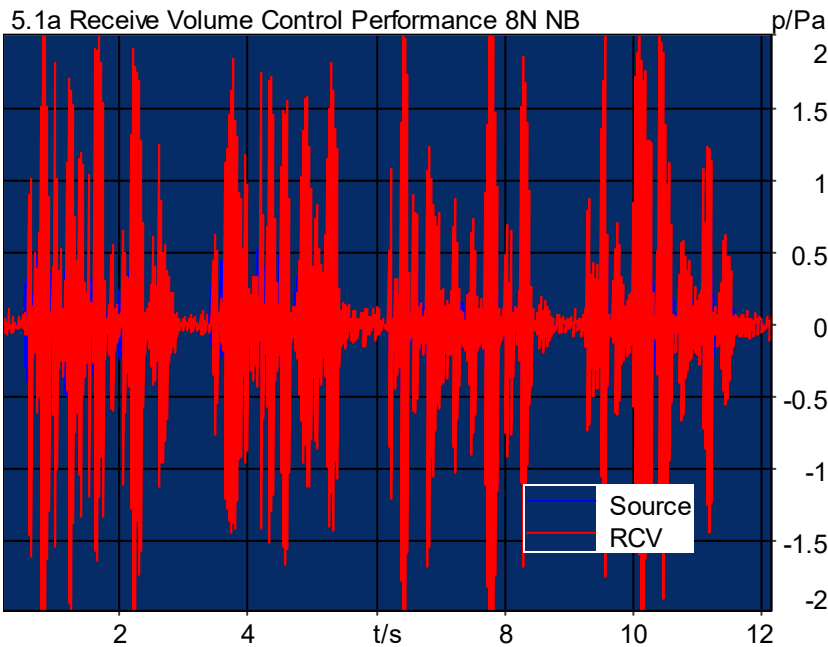
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.66	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	39.91	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.40	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.26	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.27	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.24	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.66	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.35	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	45.04	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	45.88	BL-SZ25B0732-WIIF5.3G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	42.69	BL-SZ25B0732-WIIF5.3G
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	2.27	BL-SZ25B0732-WIIF5.3G

5.1a Receive Volume Control Performance 8N NB	1827
5.2 RCV Distortion and Noise - 400 Hz NB	1829
5.2 RCV Distortion and Noise - 500 Hz NB	1831
5.2 RCV Distortion and Noise - 630 Hz NB	1833
5.2 RCV Distortion and Noise - 800 Hz NB	1835
5.2 RCV Distortion and Noise - 1000 Hz NB	1837
5.2 RCV Distortion and Noise - 1250 Hz NB	1839
5.2 RCV Distortion and Noise - 1600 Hz NB	1841
5.2 RCV Distortion and Noise - 2000 Hz NB	1843
5.2 RCV Distortion and Noise - 2500 Hz NB	1845
5.2 RCV Distortion and Noise - 3150 Hz NB	1847
5.3 Frequency Response 8N FF HANB	1849

5.1a Receive Volume Control Performance 8N NB

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Channel	Speech level	Activity	
RCV	83.66 dB[SPL]	80.52%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

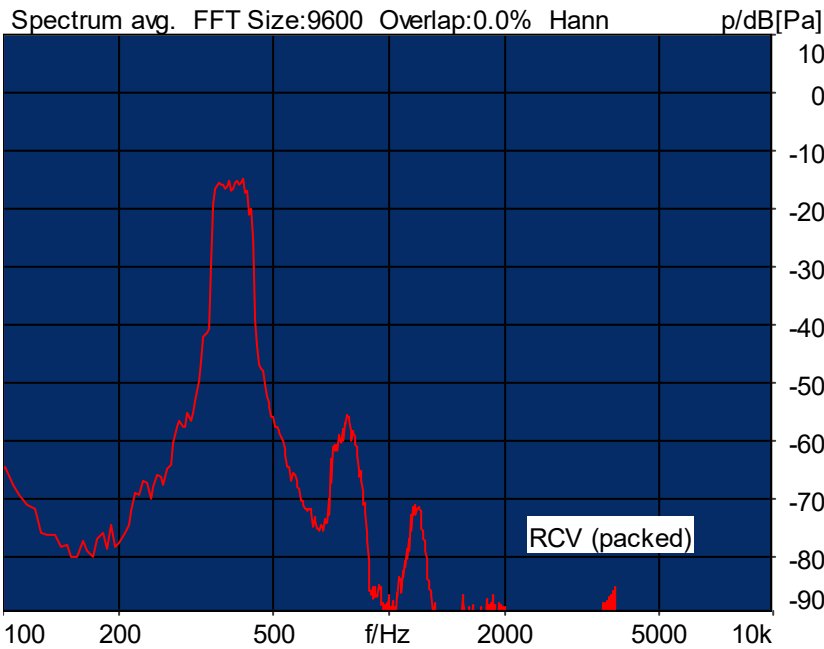
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 39.91 dB (1.01%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

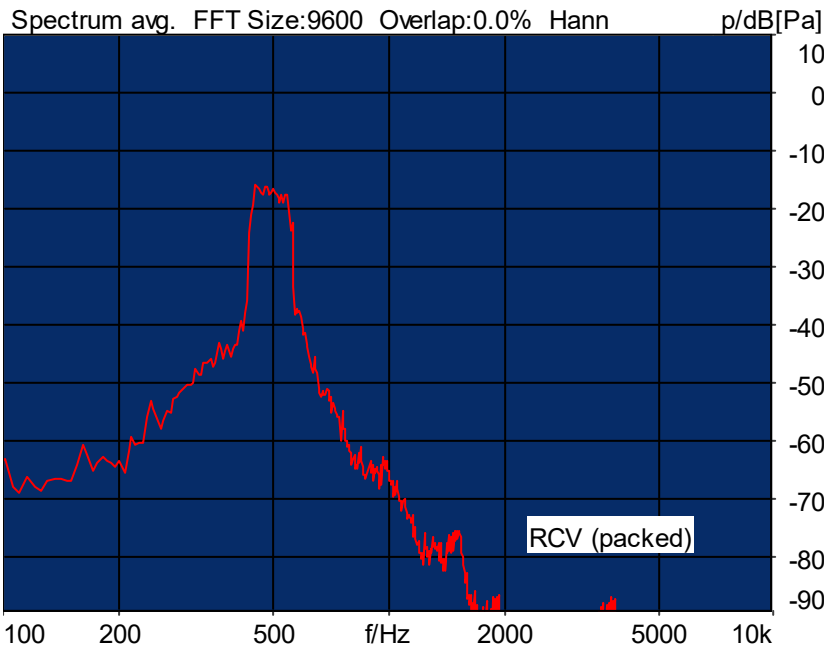
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.40 dB (3.39%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

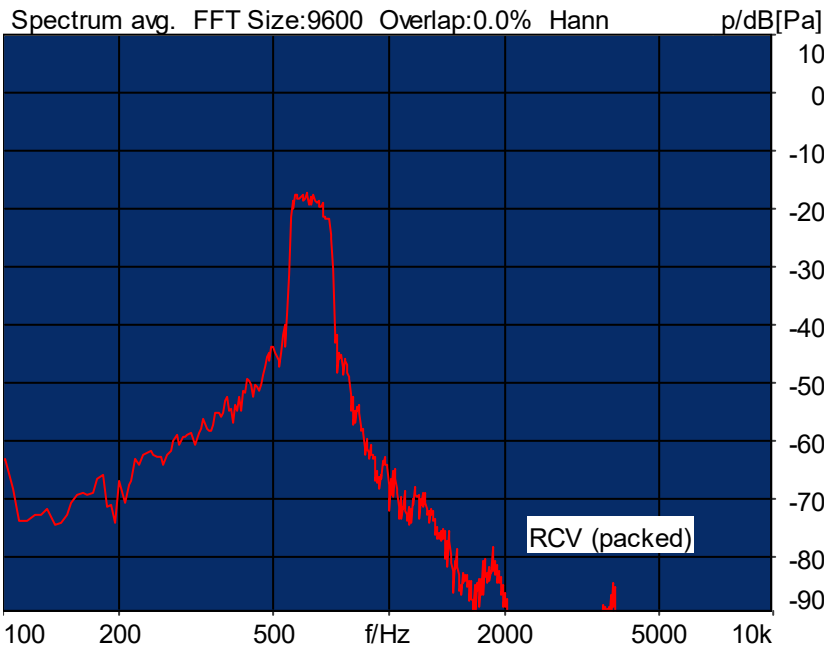
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.26 dB (3.07%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

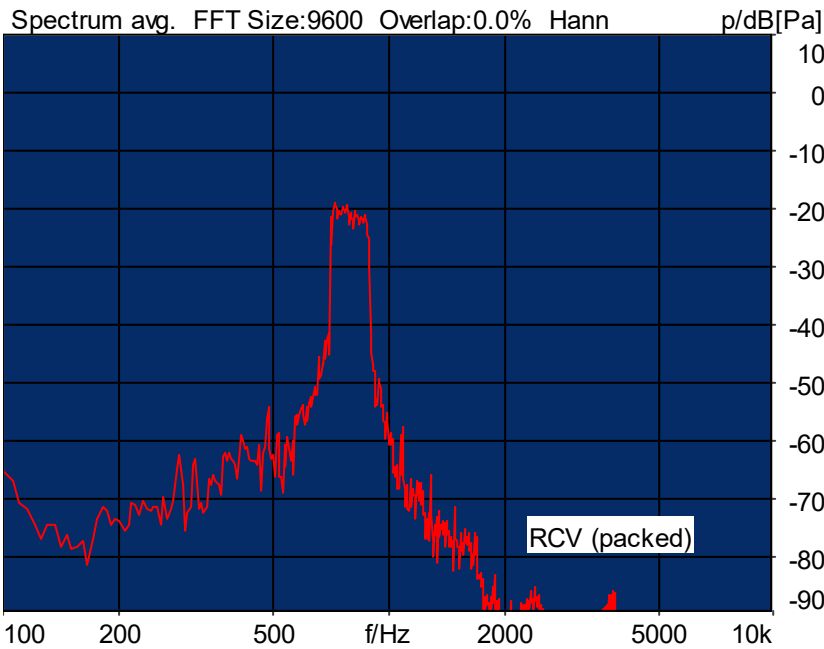
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.27 dB (2.44%) Ok

Ok

2025/12/17 19:01 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

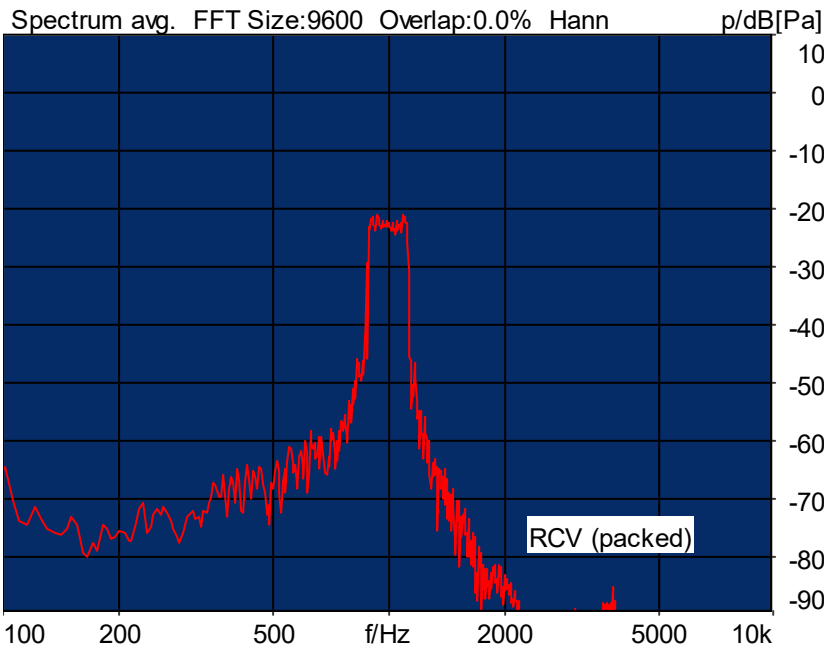
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.24 dB (3.08%) Ok

Ok

2025/12/17 19:01 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

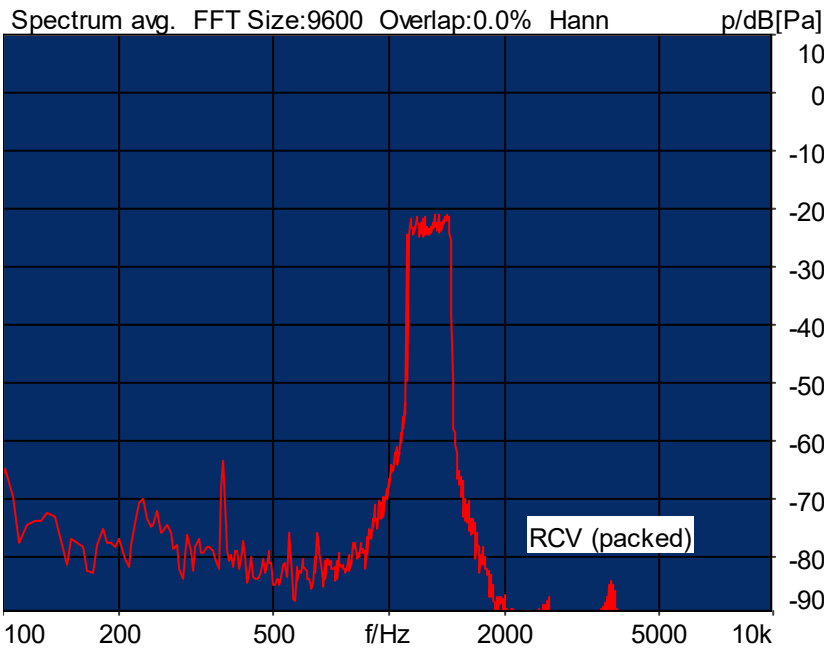
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.66 dB (2.61%) Ok

Ok

2025/12/17 19:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

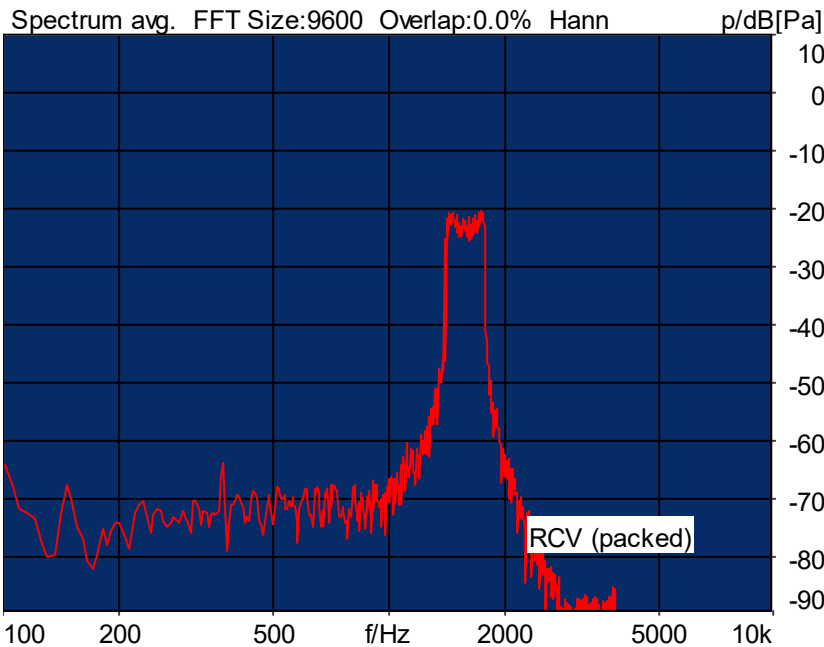
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.35 dB (2.71%) Ok

Ok

2025/12/17 19:02 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

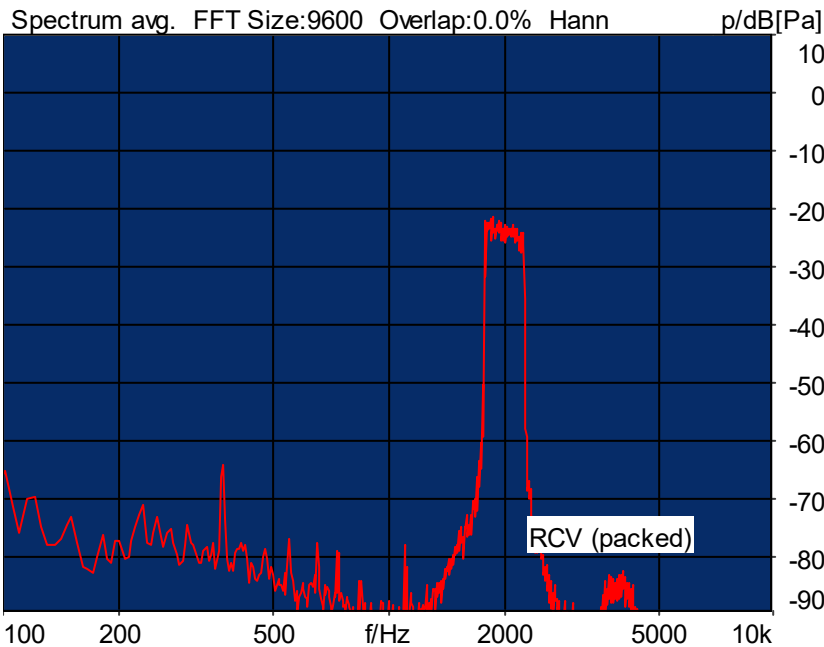
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 45.04 dB (0.56%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

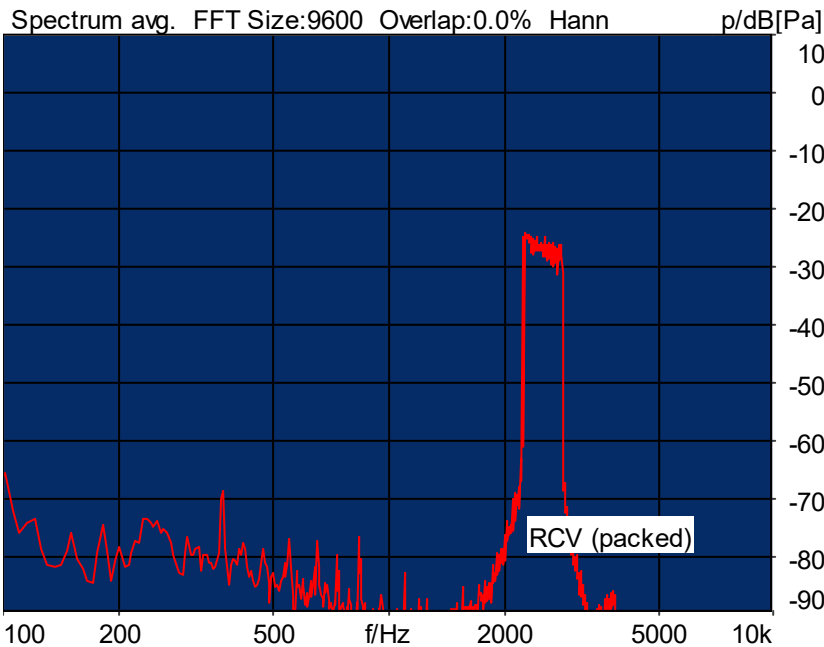
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 45.88 dB (0.51%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

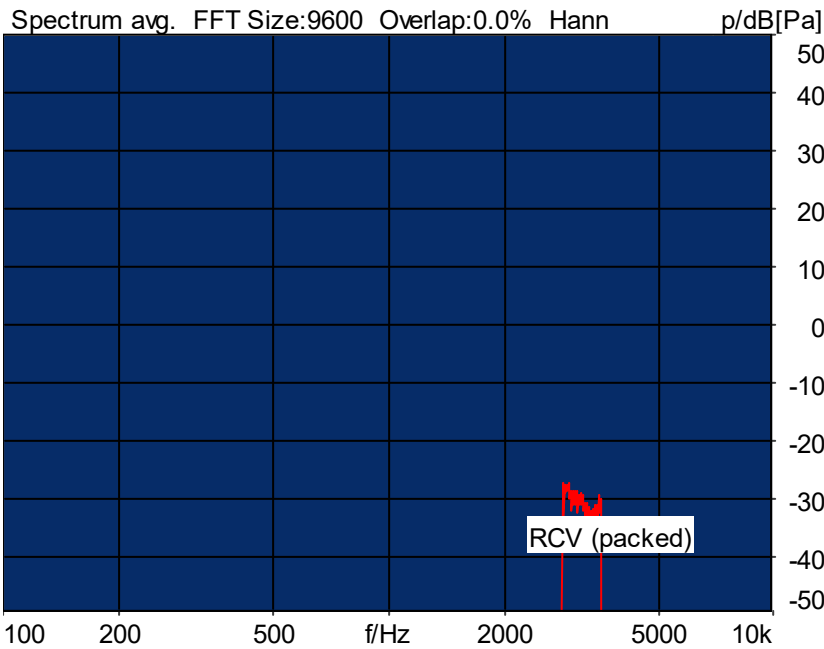
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 42.69 dB (0.73%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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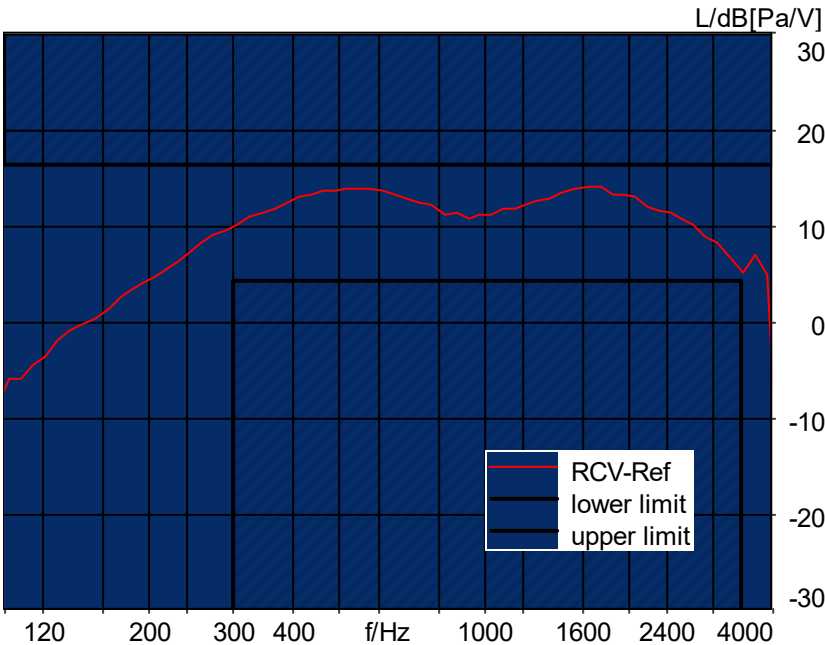
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

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EVS-NB-24.4



Absolute minimal distance

2.27 dB at 1747.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(61#)

Measurement Object	BL-SZ25B0732-WiFi5.6G
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Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	79.32	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	32.66	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 315 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.50	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 400 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	34.76	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.05	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 630 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	36.84	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 800 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	33.13	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 1000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.20	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 1250 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	24.32	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 1600 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	43.73	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 2000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.37	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 2500 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	30.27	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 3150 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	44.41	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 4000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	43.85	BL-SZ25B0732-WiFi5.6G

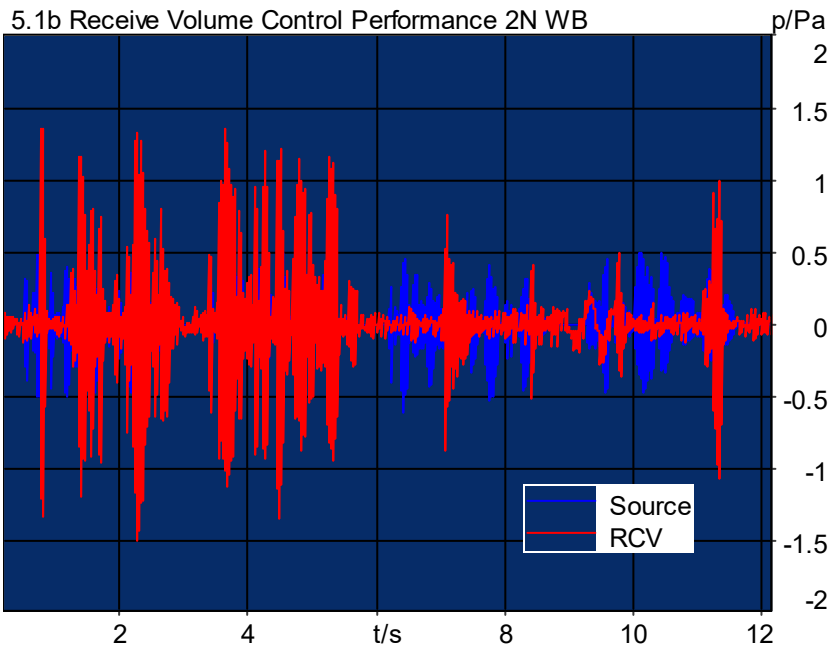
5.2 RCV Distortion and Noise - 5000 Hz WB	Ok	Distortion (Noise) [dB], 0.0 dB	31.51	BL-SZ25B0732- WiFi5.6G
5.3 Frequency Response 2N FF	Ok	Min. dist. to tolerance scheme [dB], 3882.4 Hz	3.70	BL-SZ25B0732- WiFi5.6G

5.1b Receive Volume Control Performance 2N WB	1855
5.2 RCV Distortion and Noise - 250 Hz WB	1857
5.2 RCV Distortion and Noise - 315 Hz WB	1859
5.2 RCV Distortion and Noise - 400 Hz WB	1861
5.2 RCV Distortion and Noise - 500 Hz WB	1863
5.2 RCV Distortion and Noise - 630 Hz WB	1865
5.2 RCV Distortion and Noise - 800 Hz WB	1867
5.2 RCV Distortion and Noise - 1000 Hz WB	1869
5.2 RCV Distortion and Noise - 1250 Hz WB	1871
5.2 RCV Distortion and Noise - 1600 Hz WB	1873
5.2 RCV Distortion and Noise - 2000 Hz WB	1875
5.2 RCV Distortion and Noise - 2500 Hz WB	1877
5.2 RCV Distortion and Noise - 3150 Hz WB	1879
5.2 RCV Distortion and Noise - 4000 Hz WB	1881
5.2 RCV Distortion and Noise - 5000 Hz WB	1883
5.3 Frequency Response 2N FF	1885

5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	79.32 dB[SPL]	55.18%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

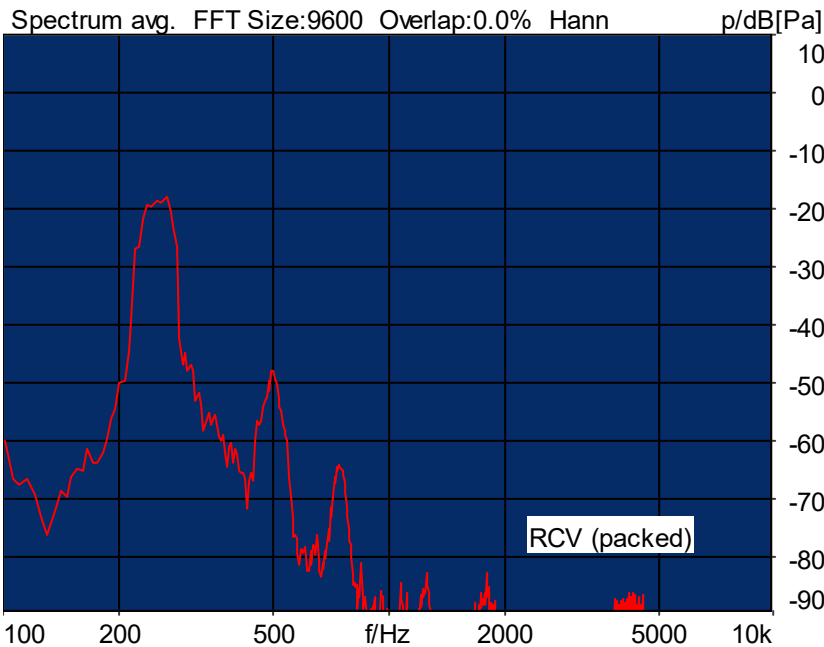
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 32.66 dB (2.33%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_250hz_sr20dbm0_v02.dat.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	190.0 Hz	Stimulus max.	315.0 Hz
Analysis min.	20.0 Hz	Analysis max.	185.0 Hz
Analysis (2) min.	320.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_250Hz

Hardware Config Settings

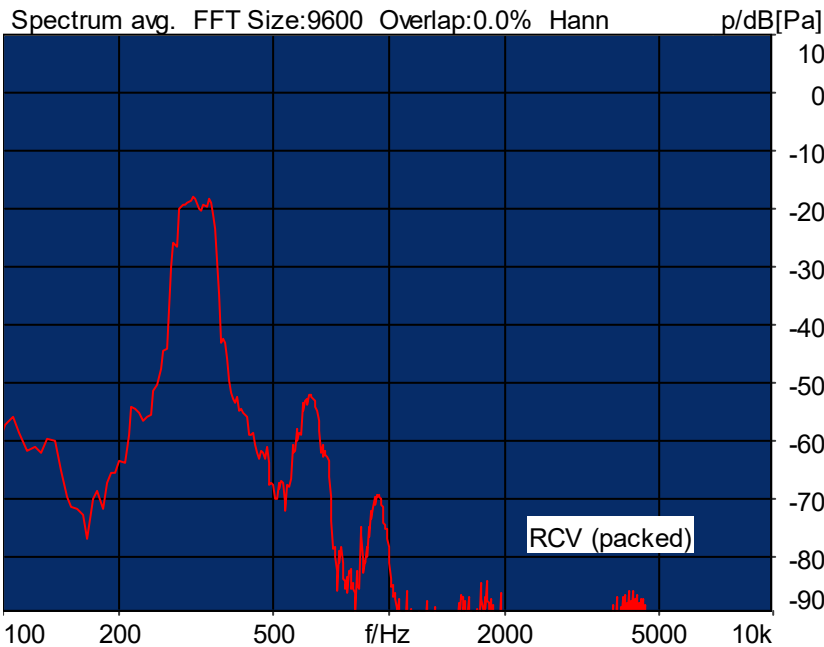
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 315 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.50 dB (1.88%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_315hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	245.0 Hz	Stimulus max.	390.0 Hz
Analysis min.	20.0 Hz	Analysis max.	240.0 Hz
Analysis (2) min.	395.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_315Hz

Hardware Config Settings

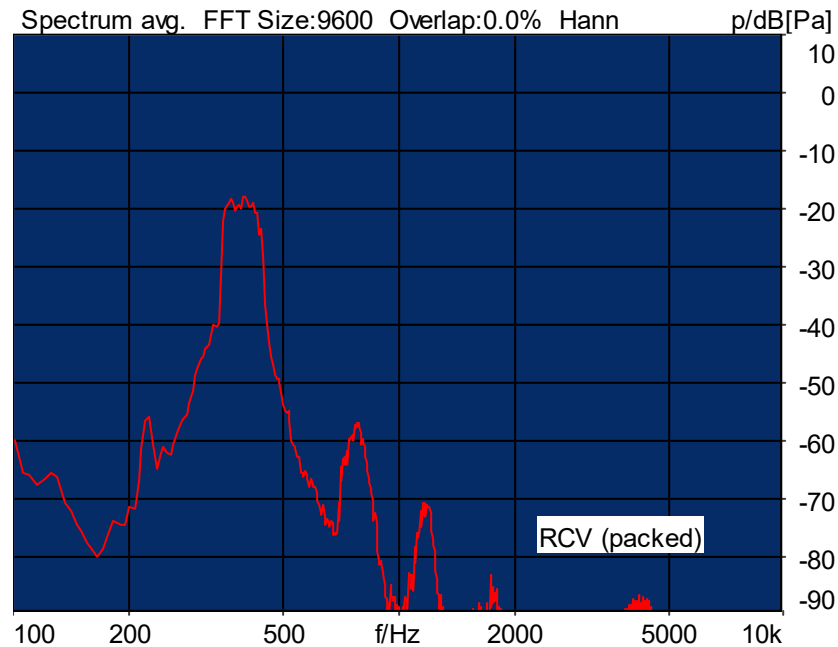
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 34.76 dB (1.83%) Ok

Ok

2025/12/17 18:14 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_400Hz

Hardware Config Settings

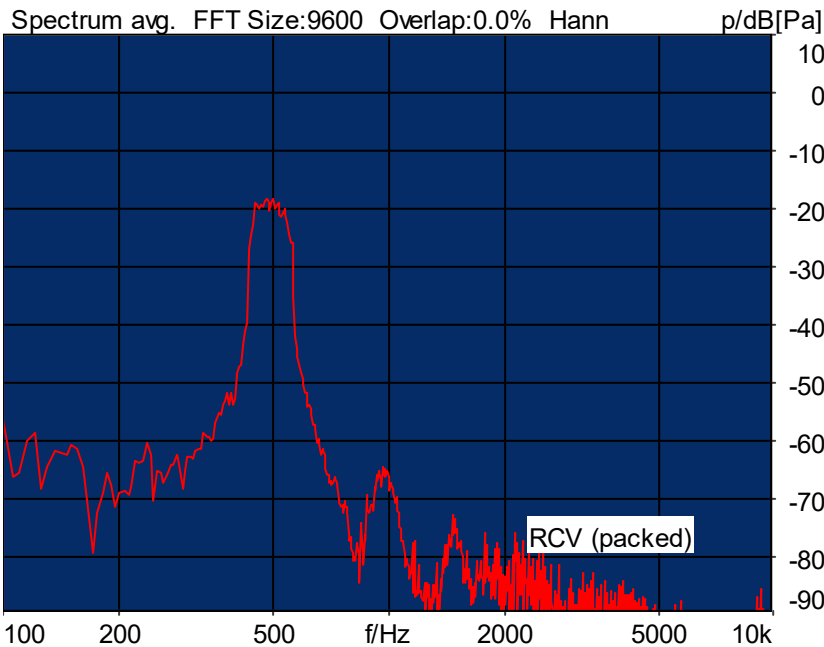
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.05 dB (1.58%) Ok

Ok

2025/12/17 18:14 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_500Hz

Hardware Config Settings

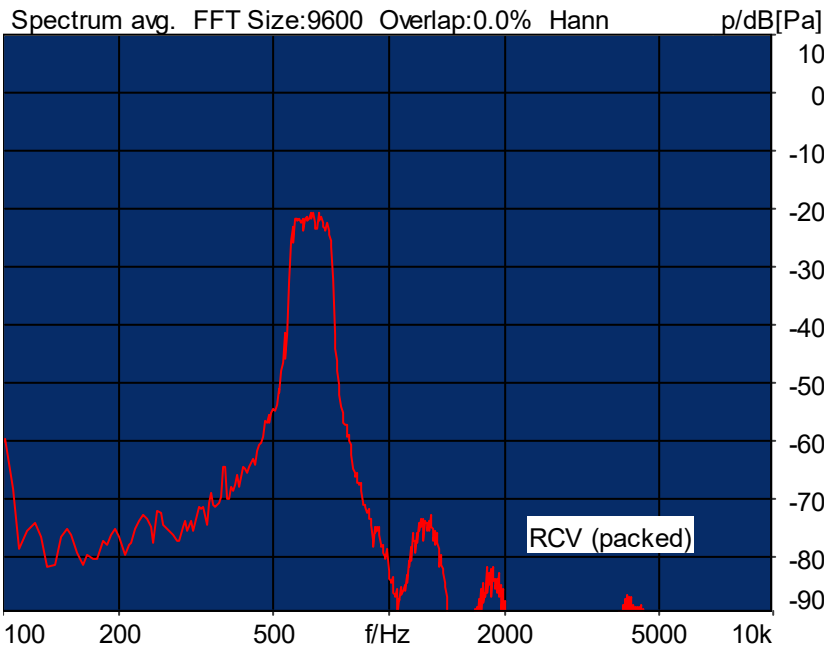
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 36.84 dB (1.44%) Ok

Ok

2025/12/17 18:15 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_630Hz

Hardware Config Settings

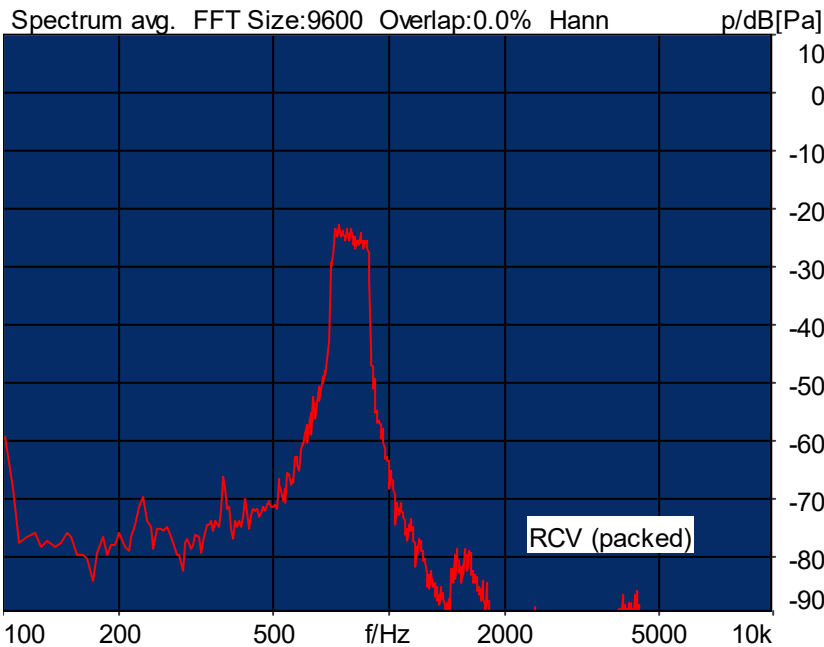
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 33.13 dB (2.20%) Ok

Ok

2025/12/17 18:15 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_800Hz

Hardware Config Settings

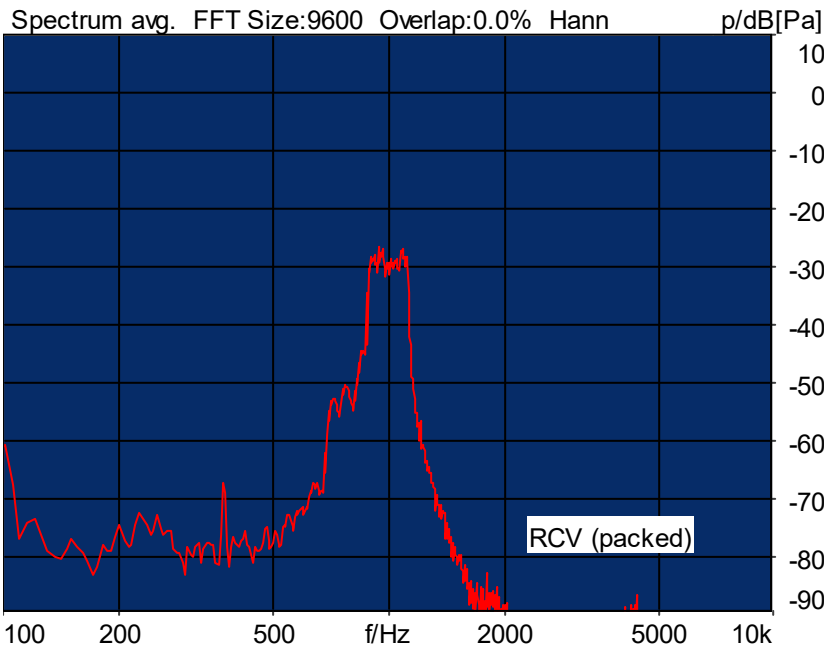
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 24.20 dB (6.17%) Ok

Ok

2025/12/17 18:15 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1000Hz

Hardware Config Settings

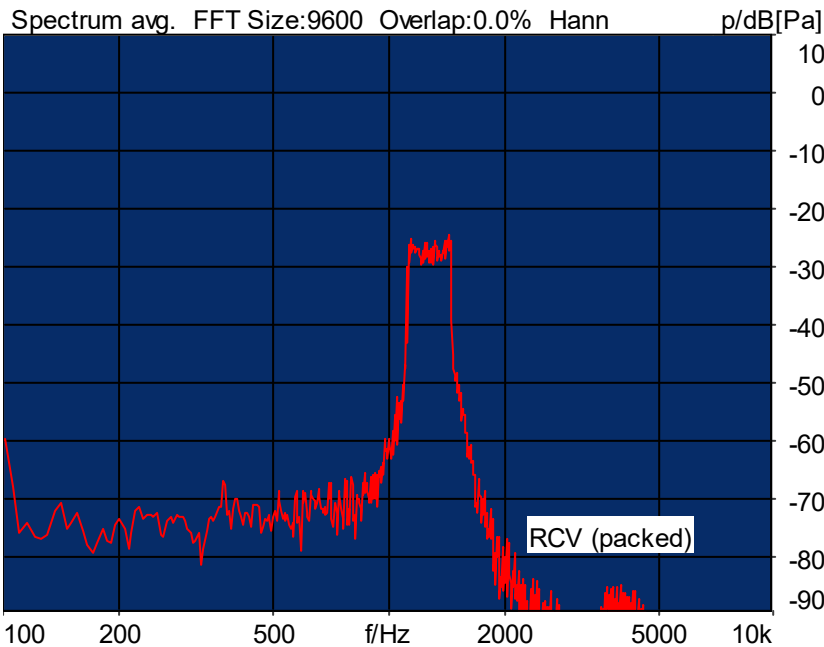
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 24.32 dB (6.08%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1250Hz

Hardware Config Settings

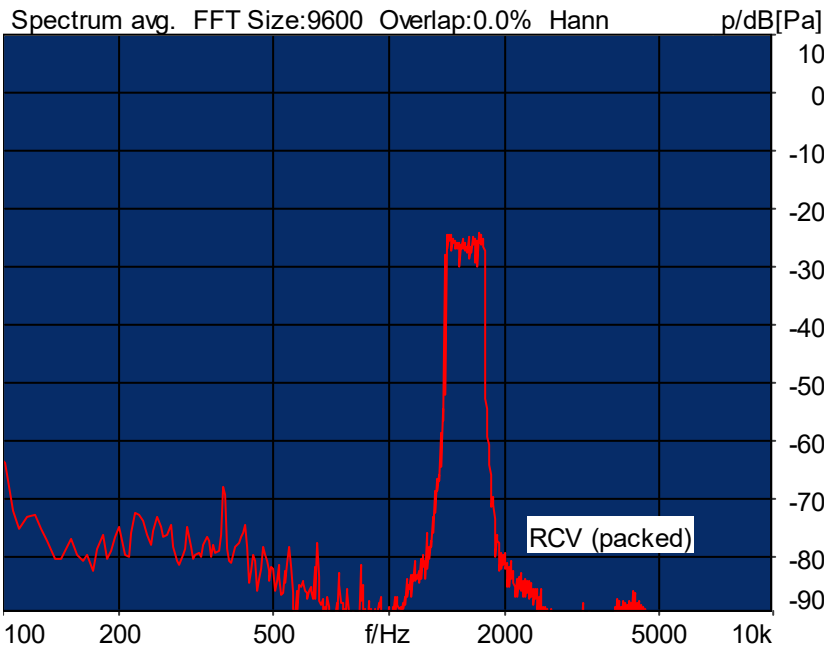
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 43.73 dB (0.65%) Ok

Ok

2025/12/17 18:16 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_1600Hz

Hardware Config Settings

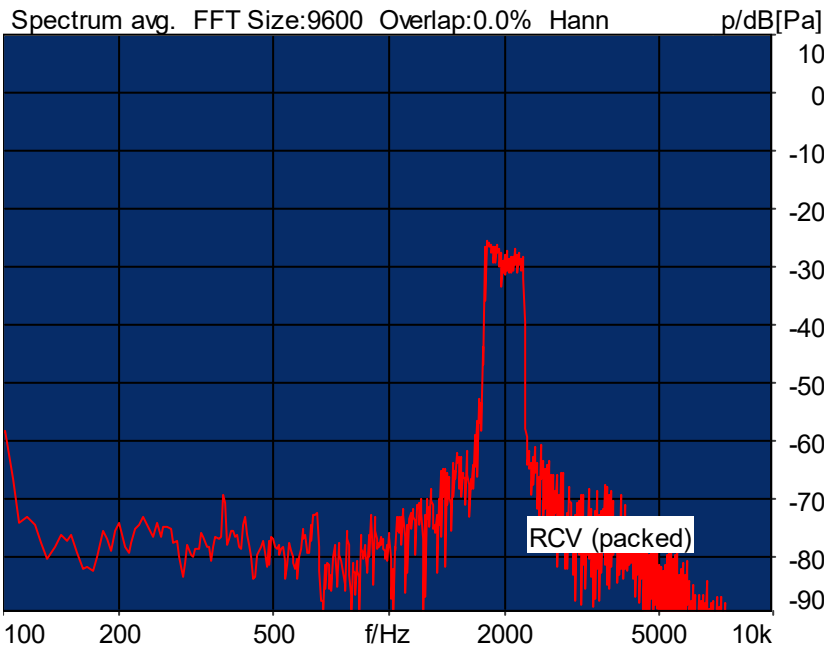
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.37 dB (2.70%) Ok

Ok

2025/12/17 18:17 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2000Hz

Hardware Config Settings

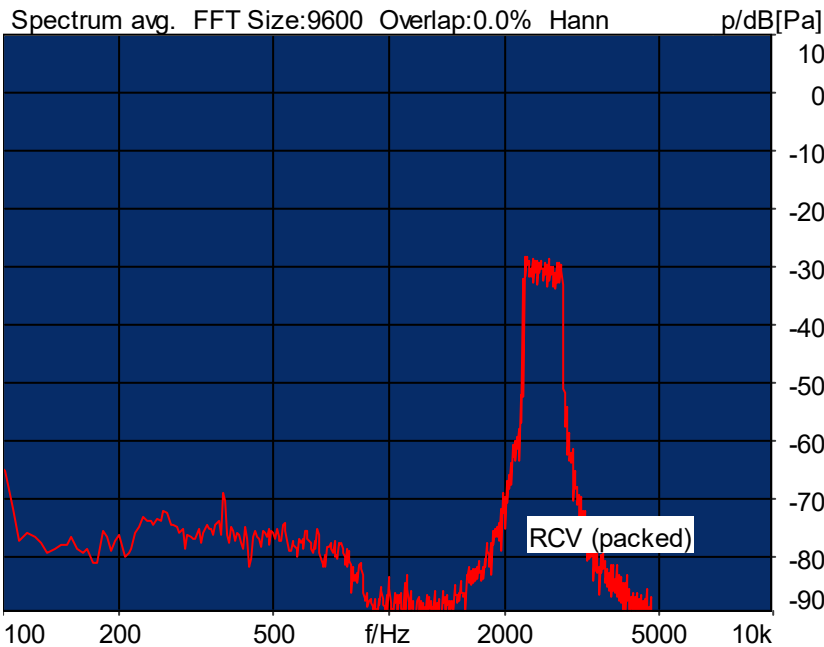
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 30.27 dB (3.07%) Ok

Ok

2025/12/17 18:17 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_2500Hz

Hardware Config Settings

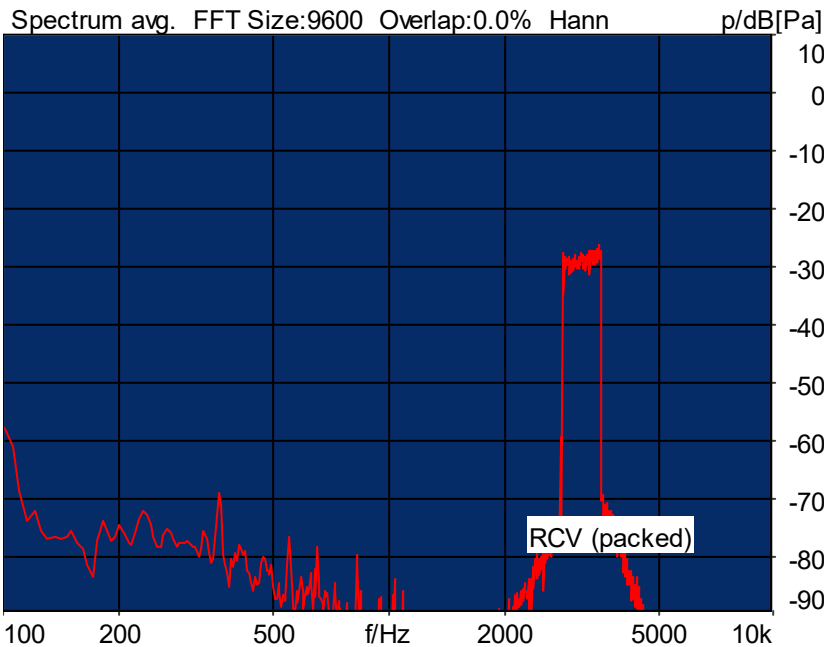
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 44.41 dB (0.60%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	125.4000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_3150Hz

Hardware Config Settings

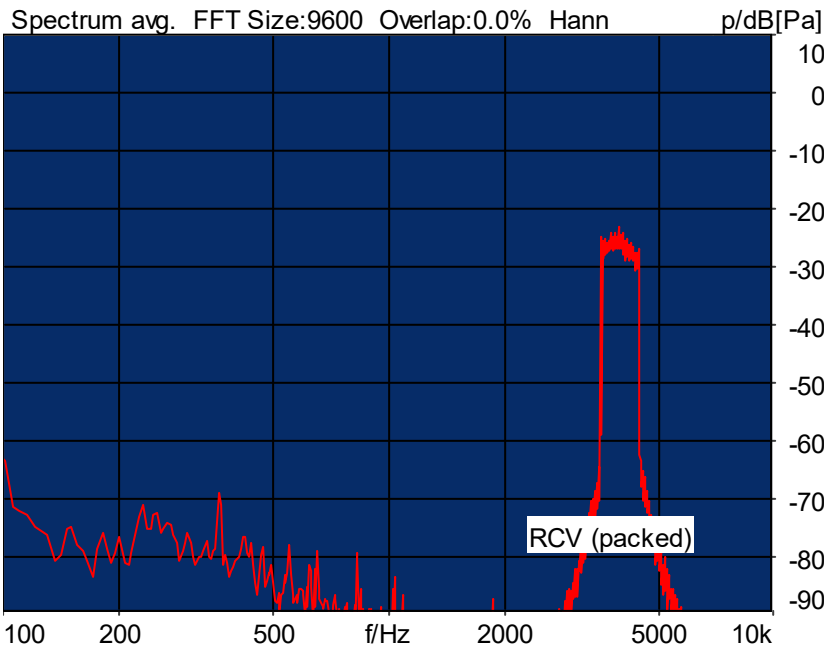
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 4000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 43.85 dB (0.64%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_4000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	3515.0 Hz	Stimulus max.	4500.0 Hz
Analysis min.	20.0 Hz	Analysis max.	3510.0 Hz
Analysis (2) min.	4505.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	125.4000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_4000Hz

Hardware Config Settings

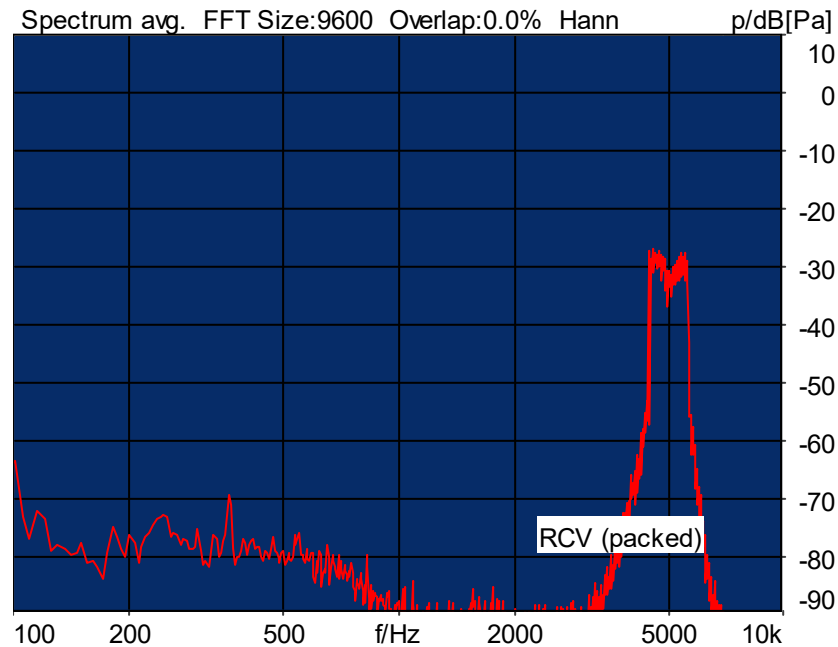
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 5000 Hz WB

TIA-5050 (2018-01) \ Measurements \ Wideband \ 5.2 Receive Distortion and Noise 2N
EVS-WB-128



Distortion (Noise) RCV (packed): 31.51 dB (2.66%) Ok

Ok

2025/12/17 19:48 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_5000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	4430.0 Hz	Stimulus max.	5660.0 Hz
Analysis min.	20.0 Hz	Analysis max.	4425.0 Hz
Analysis (2) min.	5665.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	125.4000 ms (D_RCV_WB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVWB10_5000Hz

Hardware Config Settings

Used Setting	TIA5050
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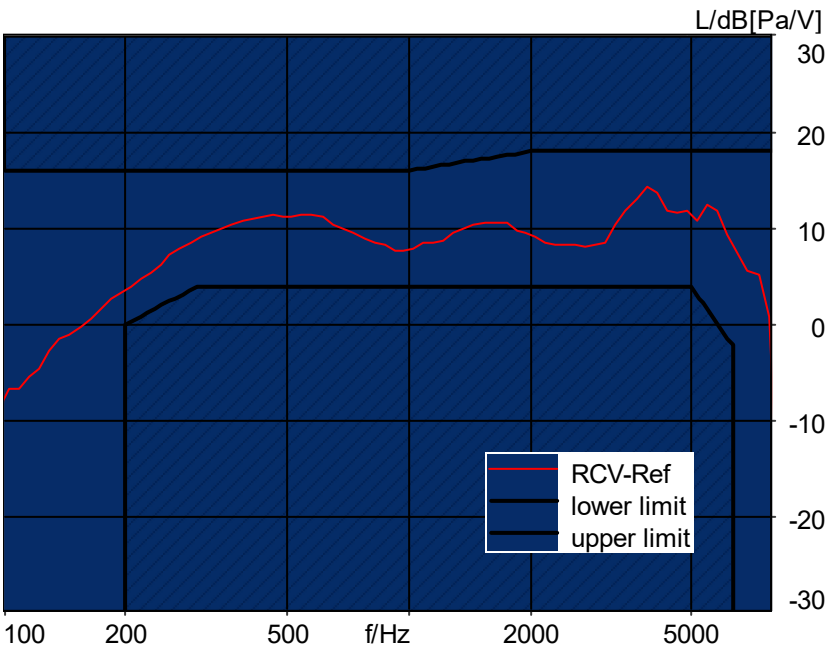
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Absolute minimal distance

3.70 dB at 3882.4 Hz Ok

Ok

2025/12/17 19:49 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_wb_r20_v01.dat

Level adjustment Channel 1 Gain -90.00 dB

WIDEBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -22,2 dBV, margin 15.9 dB +

Pause till end of file

Signal level (ch2): -22,2 dBV Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 8.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hawb.fft

Tol. scheme file 521_rcv_frq_man_hawb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 8000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 125.4000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(62#)

Measurement Object	BL-SZ25B0732-WiFi5.6G
--------------------	-----------------------

Status Overview

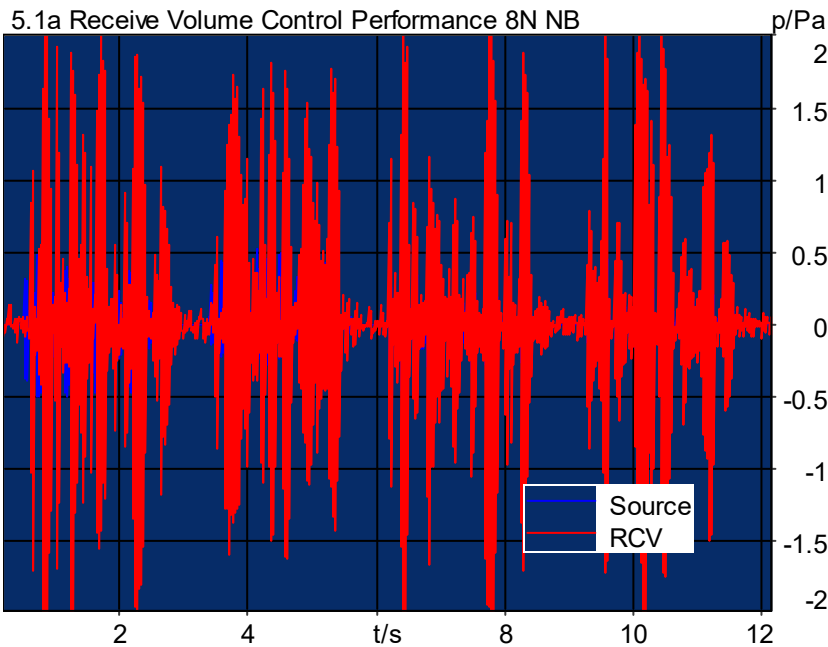
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.58	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	34.18	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.64	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	32.52	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.05	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.36	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.20	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	41.36	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.72	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.40	BL-SZ25B0732-WiFi5.6G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.45	BL-SZ25B0732-WiFi5.6G
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1647.8 Hz	2.28	BL-SZ25B0732-WiFi5.6G

5.1a Receive Volume Control Performance 8N NB	1890
5.2 RCV Distortion and Noise - 400 Hz NB	1892
5.2 RCV Distortion and Noise - 500 Hz NB	1894
5.2 RCV Distortion and Noise - 630 Hz NB	1896
5.2 RCV Distortion and Noise - 800 Hz NB	1898
5.2 RCV Distortion and Noise - 1000 Hz NB	1900
5.2 RCV Distortion and Noise - 1250 Hz NB	1902
5.2 RCV Distortion and Noise - 1600 Hz NB	1904
5.2 RCV Distortion and Noise - 2000 Hz NB	1906
5.2 RCV Distortion and Noise - 2500 Hz NB	1908
5.2 RCV Distortion and Noise - 3150 Hz NB	1910
5.3 Frequency Response 8N FF HANB	1912

5.1a Receive Volume Control Performance 8N NB

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EVS-NB-24.4



Channel	Speech level	Activity	
RCV	83.58 dB[SPL]	80.49%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

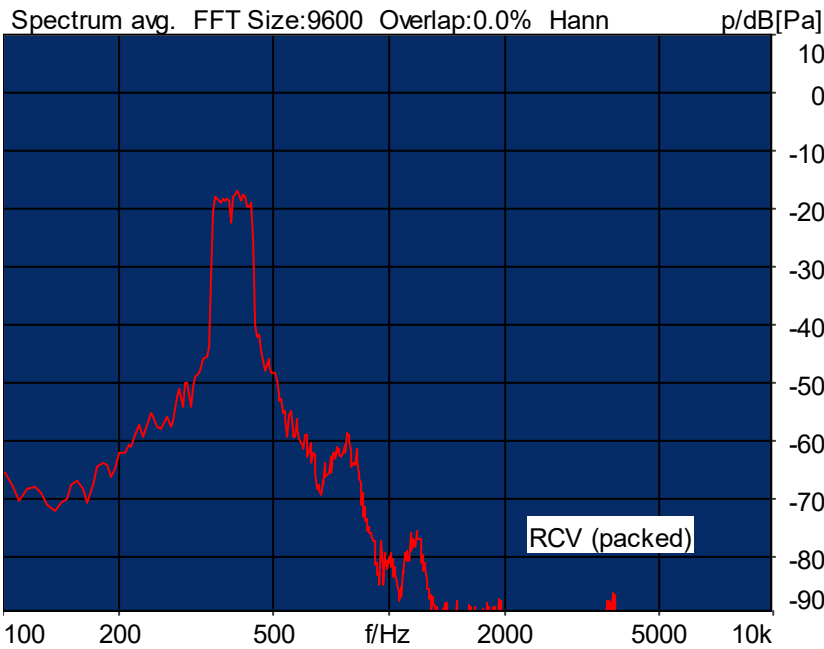
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 34.18 dB (1.95%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

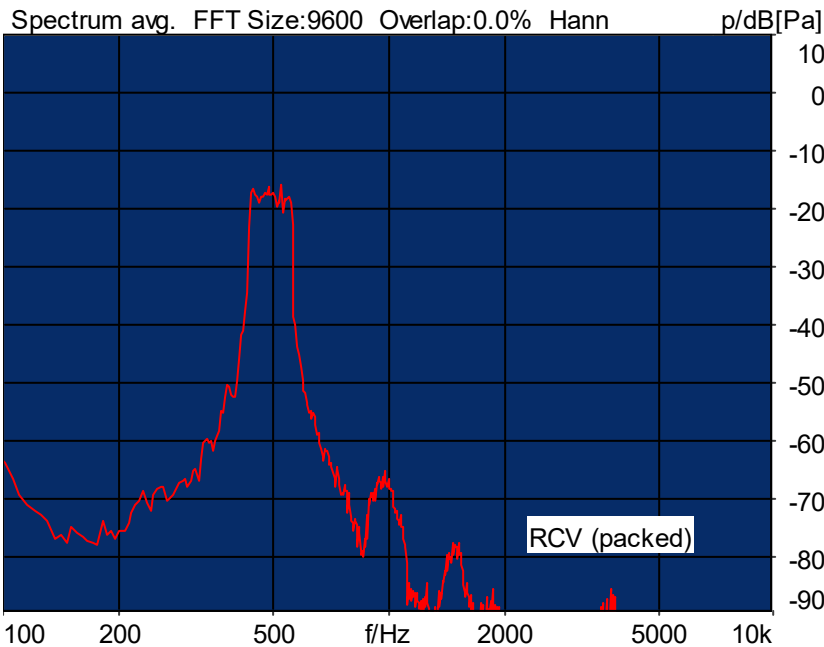
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.64 dB (1.17%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

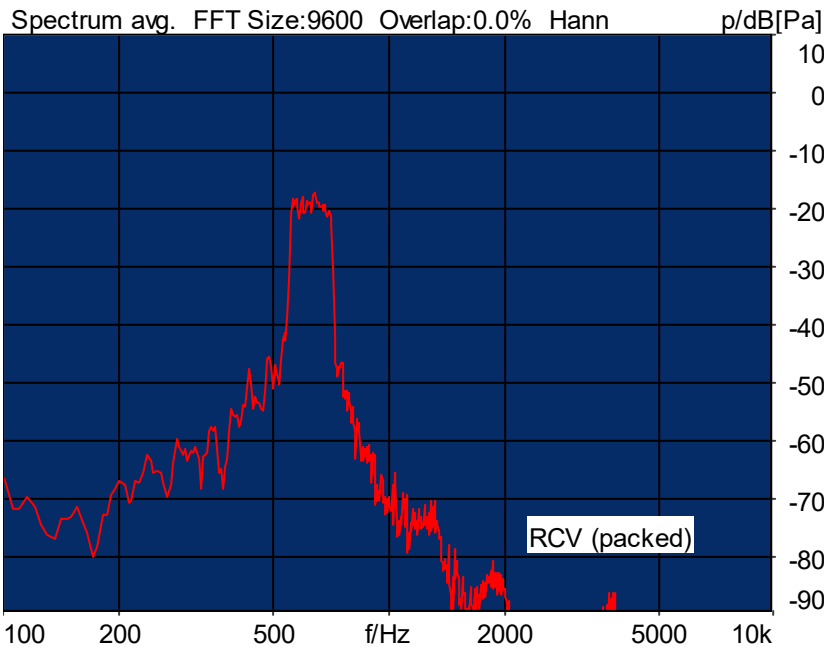
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 32.52 dB (2.37%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

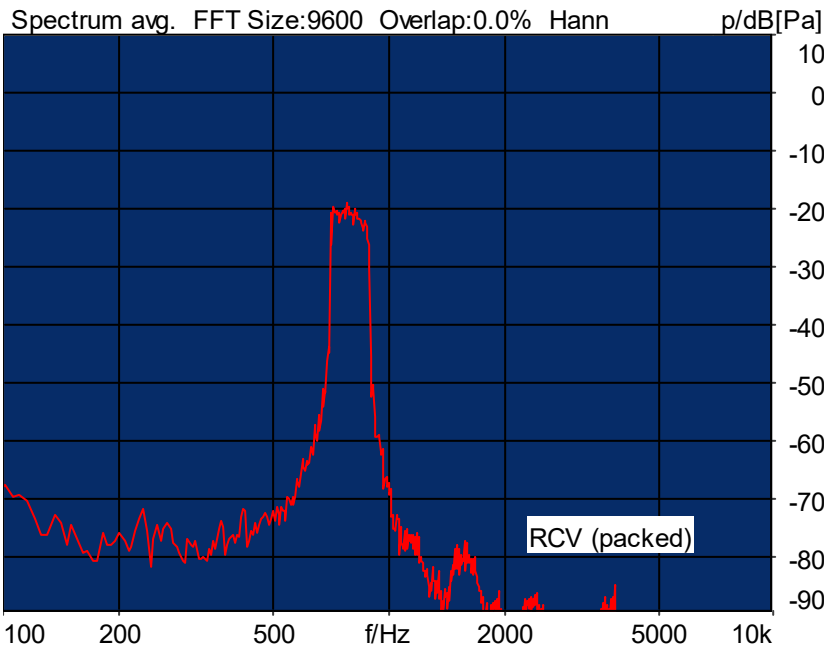
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.05 dB (0.89%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

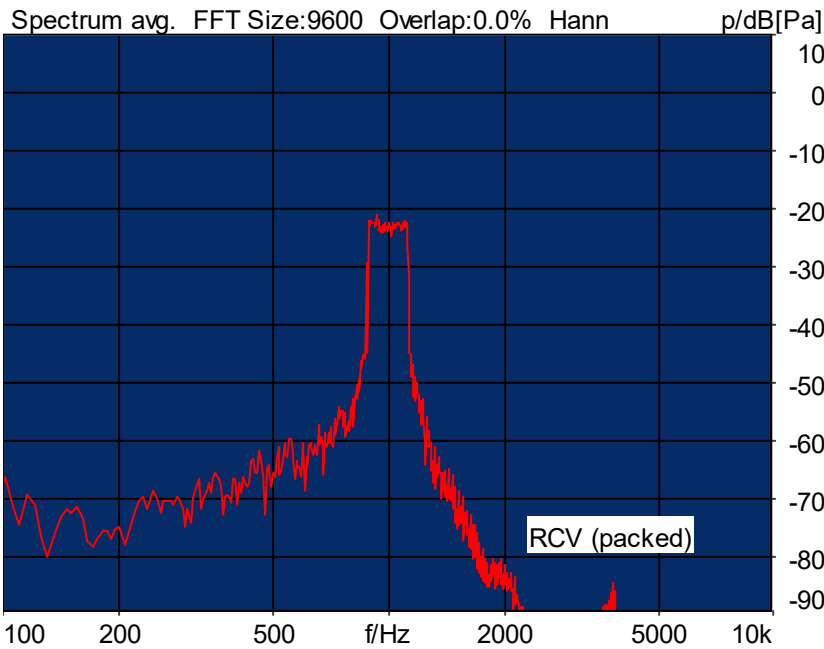
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.36 dB (3.04%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

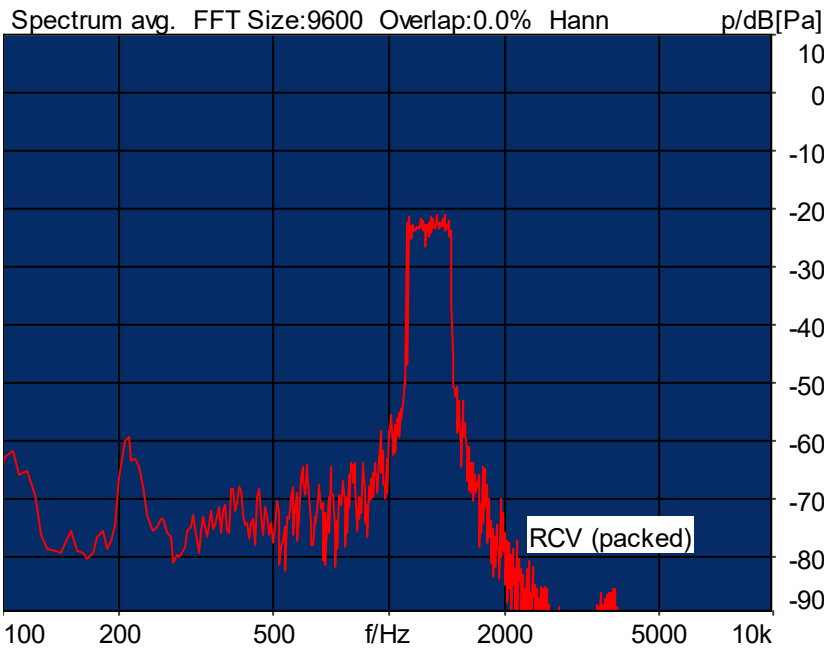
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 28.20 dB (3.89%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

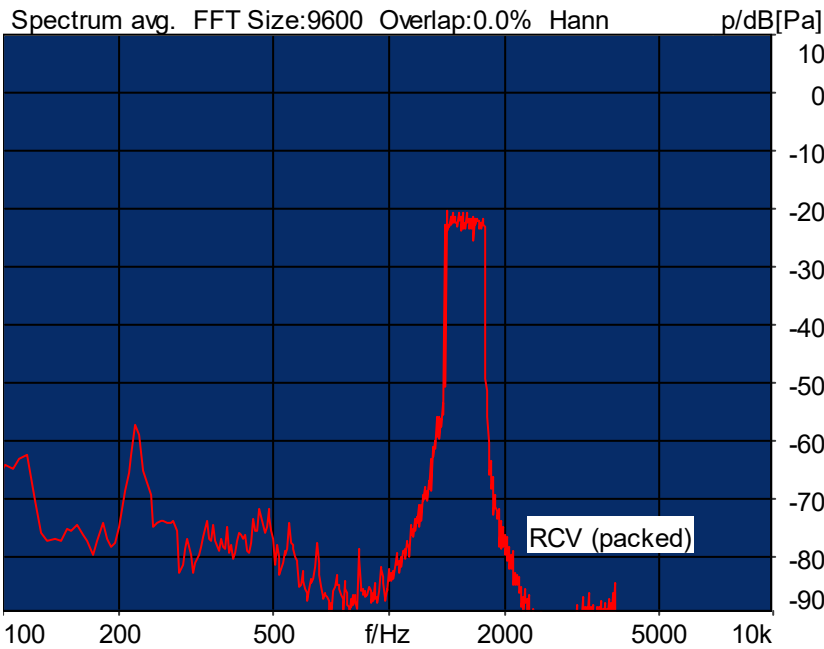
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 41.36 dB (0.86%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

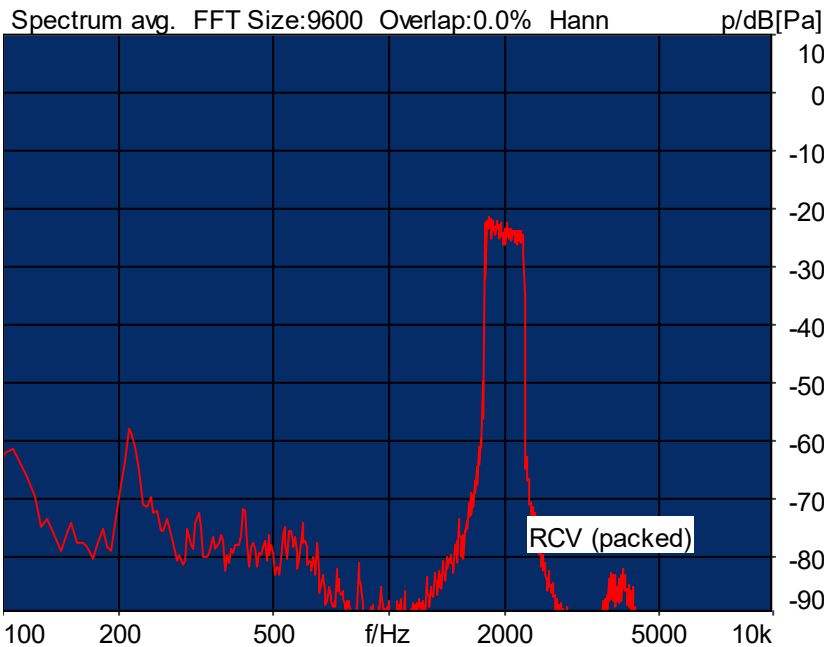
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.72 dB (0.65%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

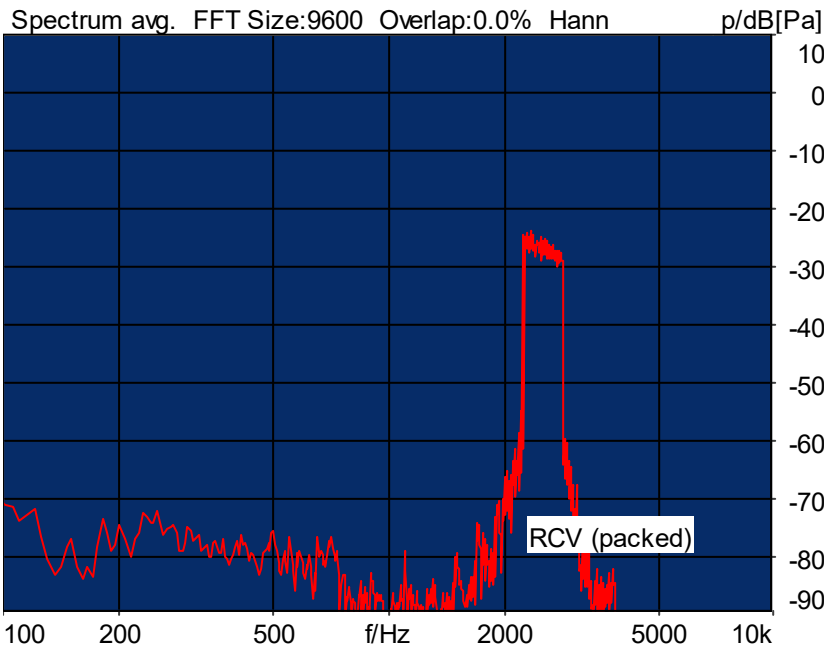
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.40 dB (1.20%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

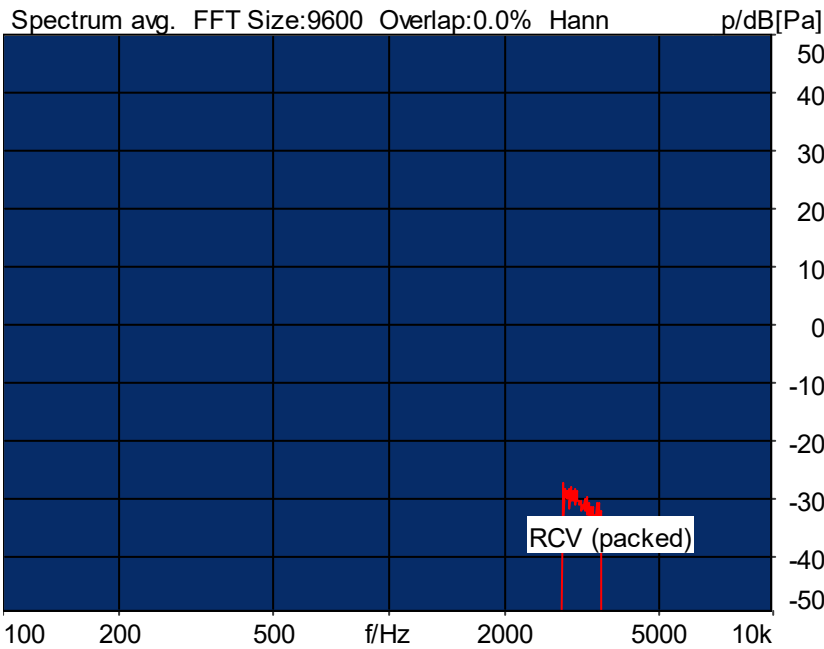
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.45 dB (0.67%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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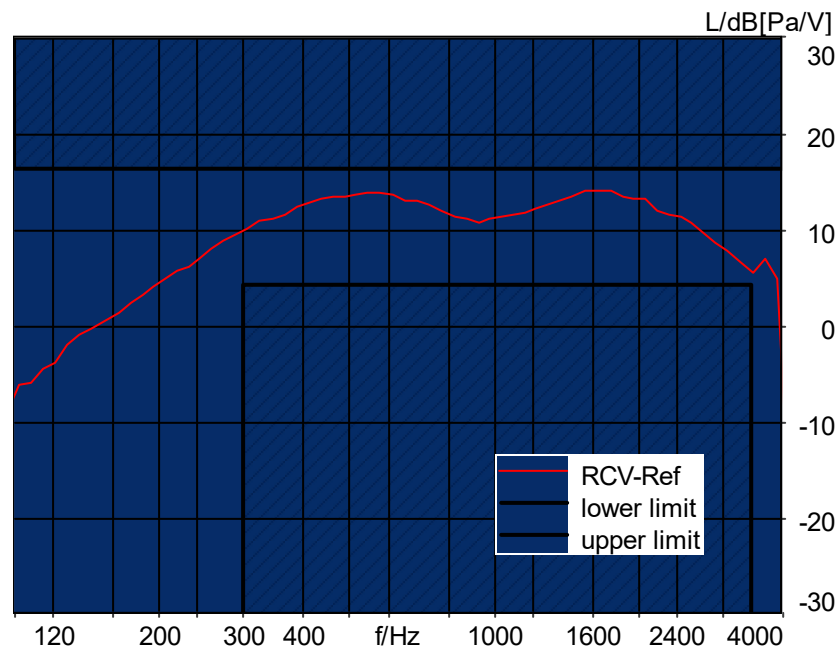
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

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Absolute minimal distance

2.28 dB at 1647.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Compensate delay 102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(63#)

Measurement Object	BL-SZ25B0732-WiFi5.8G
--------------------	-----------------------

Status Overview

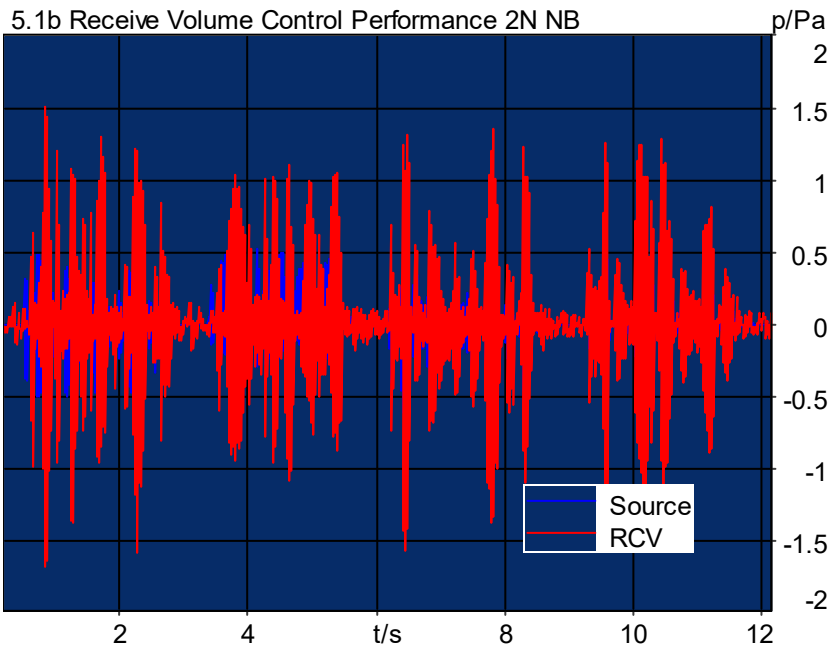
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.51	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	38.17	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	30.62	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.27	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	42.26	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	42.67	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	28.11	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	29.38	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	44.31	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	45.48	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.95	BL-SZ25B0732-WiFi5.8G
5.3 Frequency Response 2N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1647.8 Hz	3.39	BL-SZ25B0732-WiFi5.8G

5.1b Receive Volume Control Performance 2N NB	1917
5.2 RCV Distortion and Noise - 400 Hz NB	1919
5.2 RCV Distortion and Noise - 500 Hz NB	1921
5.2 RCV Distortion and Noise - 630 Hz NB	1923
5.2 RCV Distortion and Noise - 800 Hz NB	1925
5.2 RCV Distortion and Noise - 1000 Hz NB	1927
5.2 RCV Distortion and Noise - 1250 Hz NB	1929
5.2 RCV Distortion and Noise - 1600 Hz NB	1931
5.2 RCV Distortion and Noise - 2000 Hz NB	1933
5.2 RCV Distortion and Noise - 2500 Hz NB	1063
5.2 RCV Distortion and Noise - 3150 Hz NB	1937
5.3 Frequency Response 2N FF HANB	1939

5.1b Receive Volume Control Performance 2N NB

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Channel	Speech level	Activity	
RCV	79.51 dB[SPL]	80.30%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

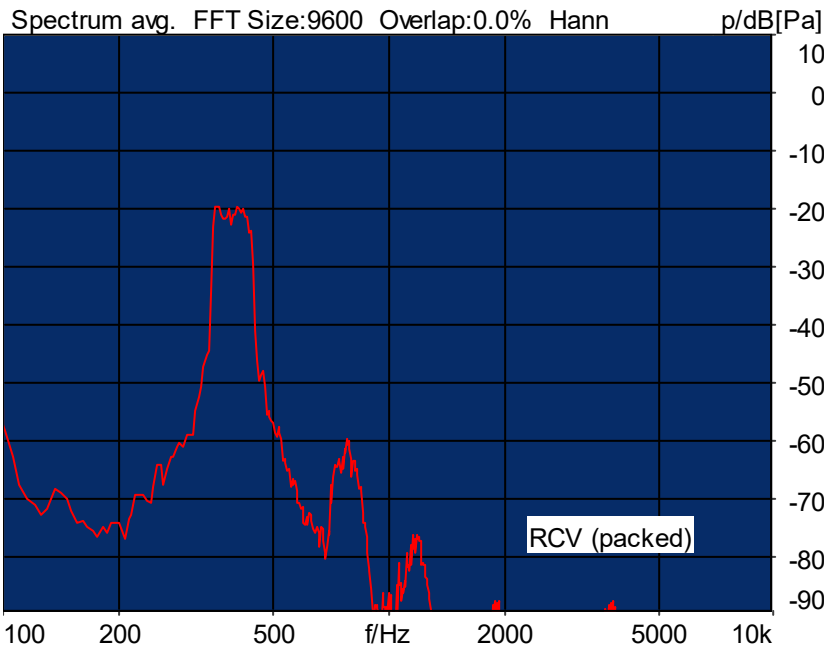
Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 38.17 dB (1.23%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

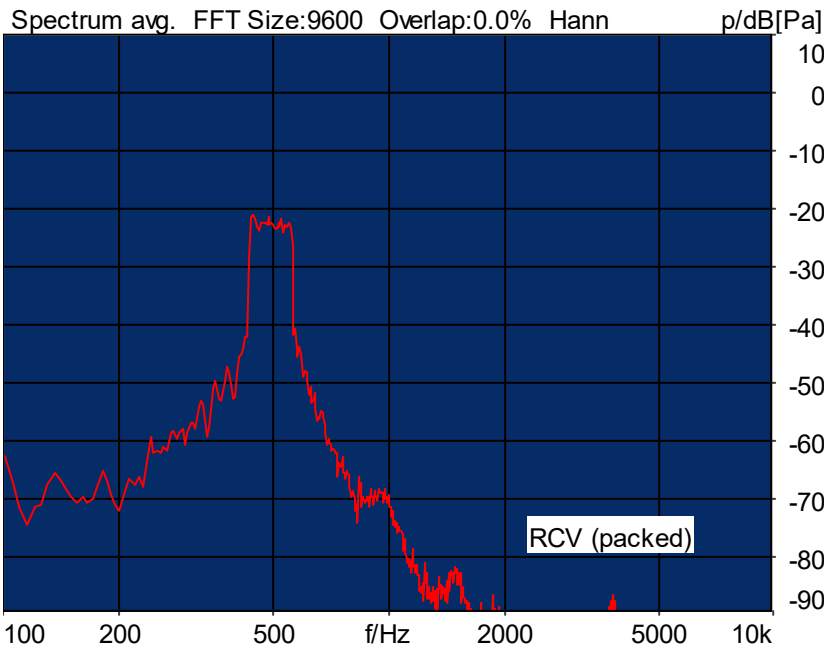
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 30.62 dB (2.94%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

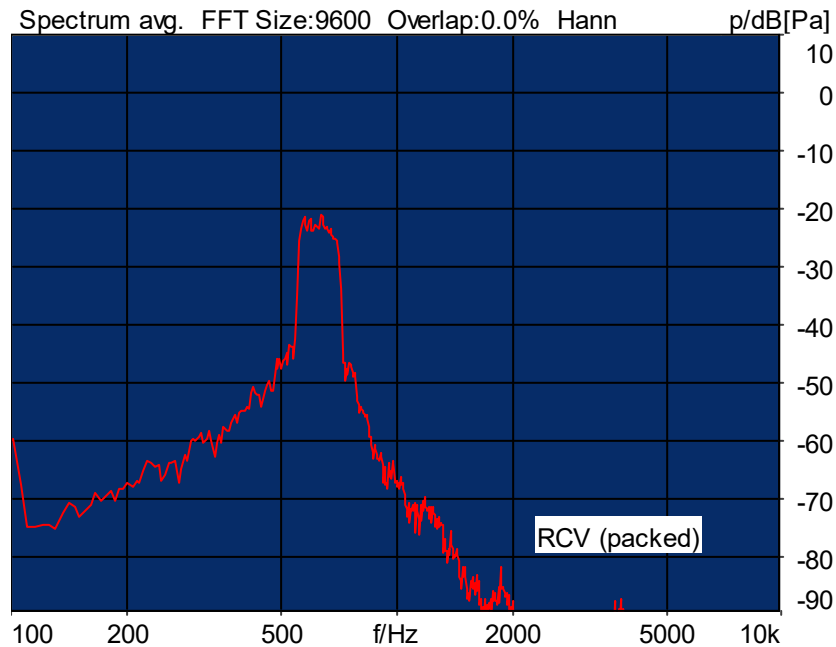
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 27.27 dB (4.33%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

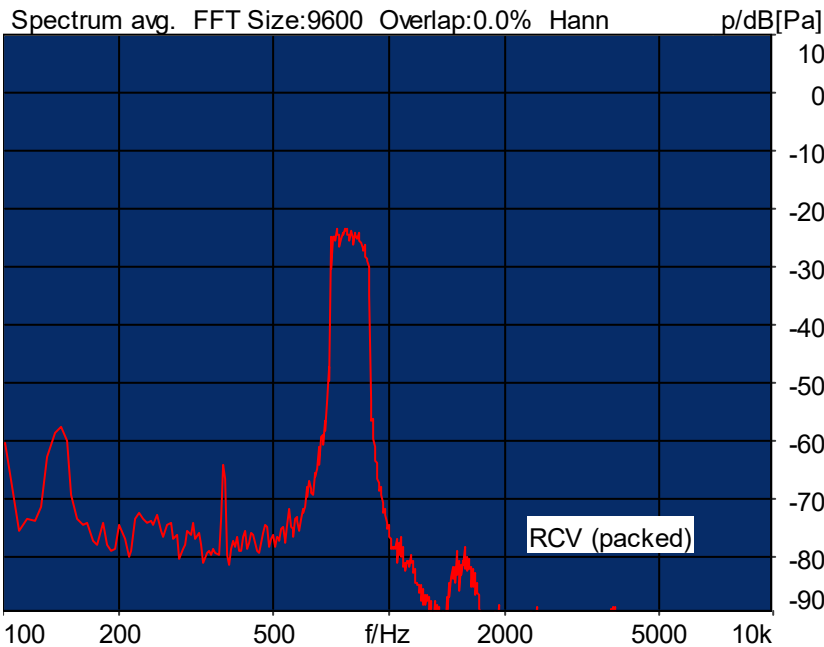
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 42.26 dB (0.77%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

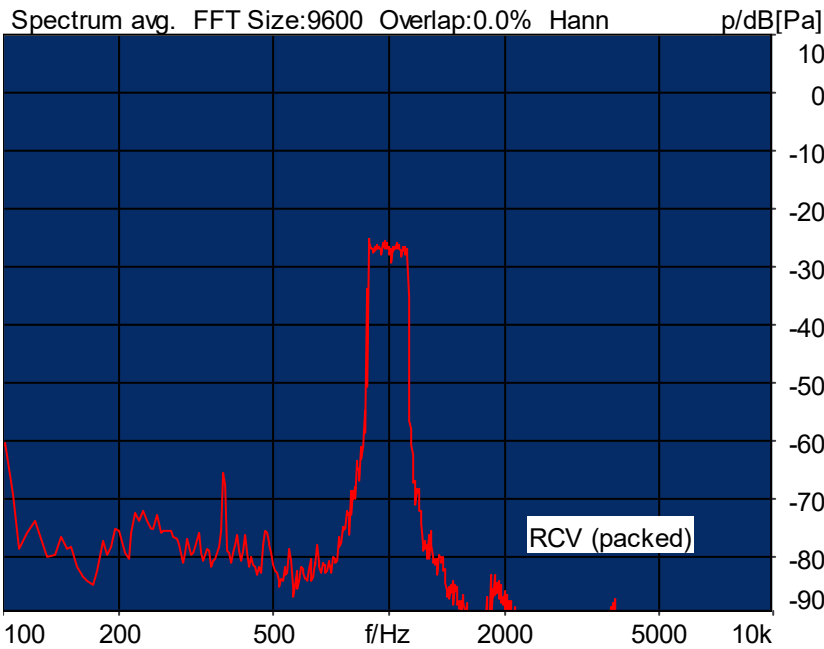
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 42.67 dB (0.74%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

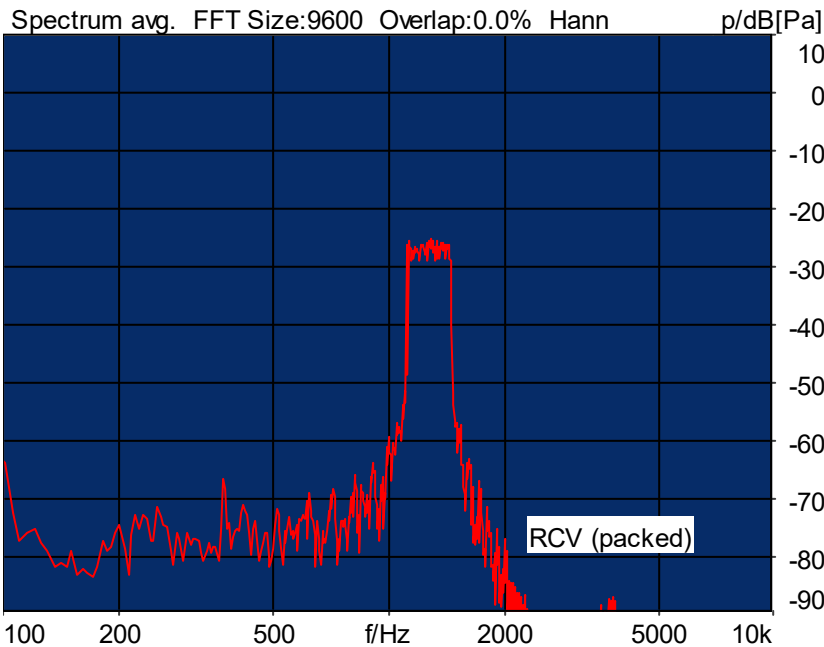
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
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Distortion (Noise) RCV (packed): 28.11 dB (3.93%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

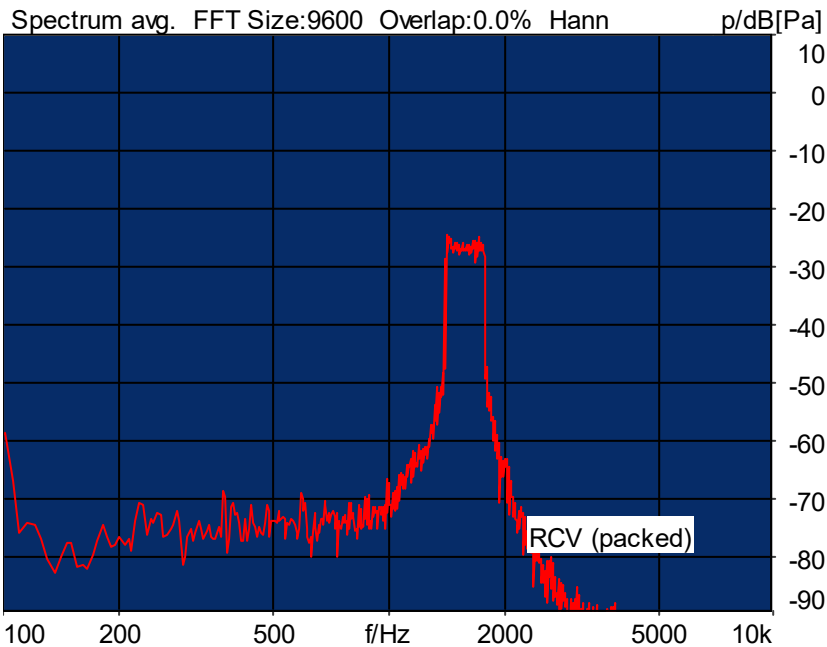
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 29.38 dB (3.40%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

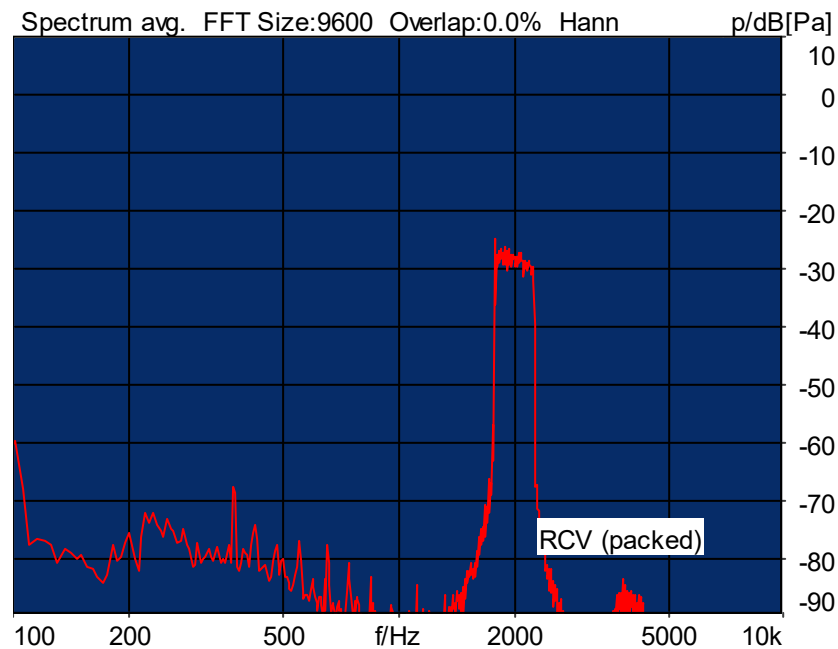
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 44.31 dB (0.61%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

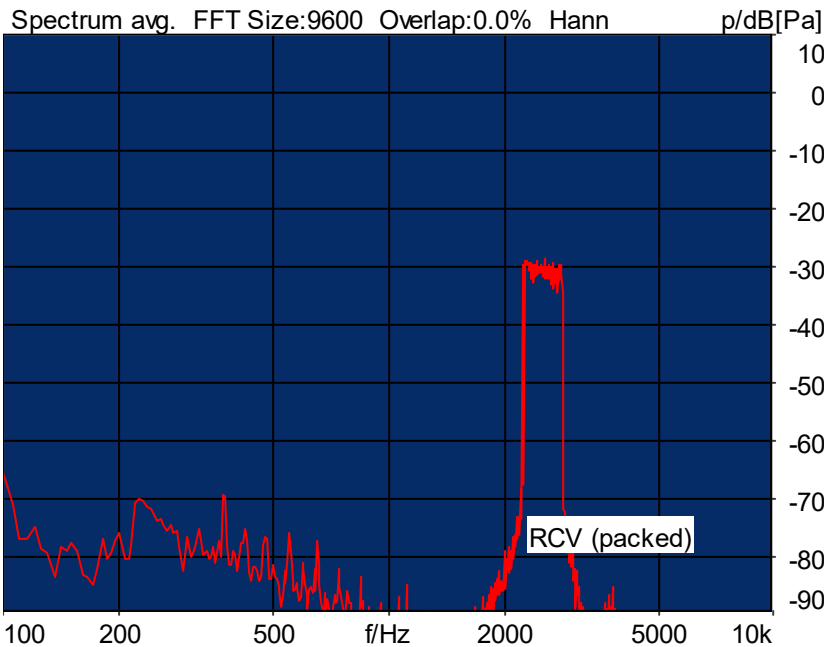
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 45.48 dB (0.53%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

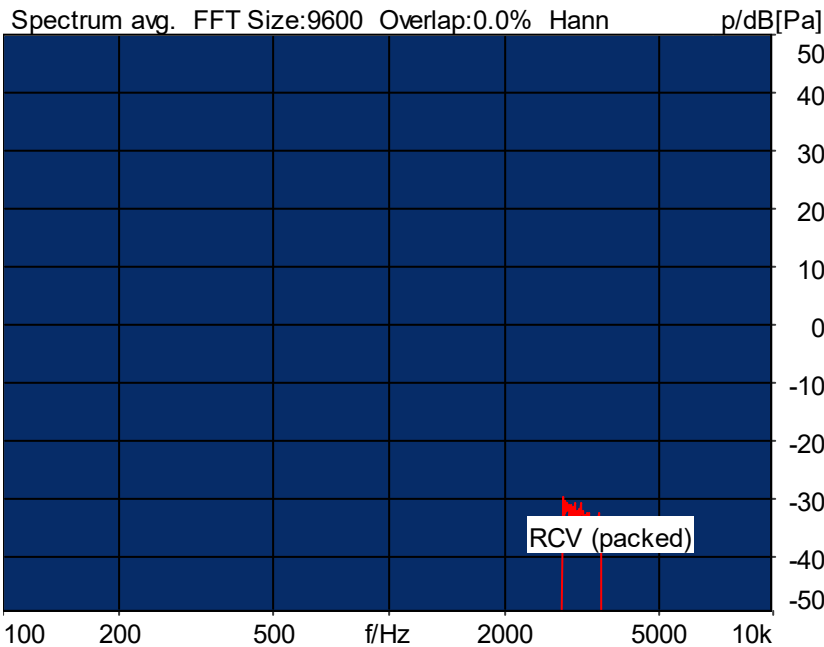
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 2N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.95 dB (0.63%) Ok

Ok

2025/12/17 18:40 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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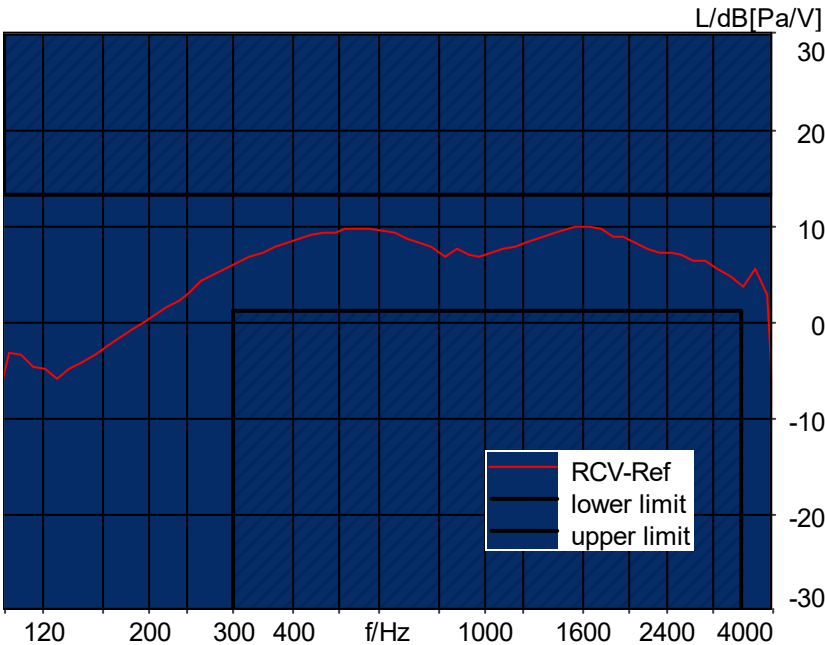
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 2N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

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Absolute minimal distance

3.39 dB at 1647.8 Hz Ok

Ok

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Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start 500.00 ms Range length 11500.00 ms

Frequency base 12th octave DIN Row Row A

Method FFT

FFT size 4096 Overlap 75 %

Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file 521_rcv_frq_man_hanb.tol Min. freq. for tol. 100.0 Hz

Auto adjust Centrate Max. freq. for tol. 4000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(64#)

Measurement Object	BL-SZ25B0732-WiFi5.8G
--------------------	-----------------------

Status Overview

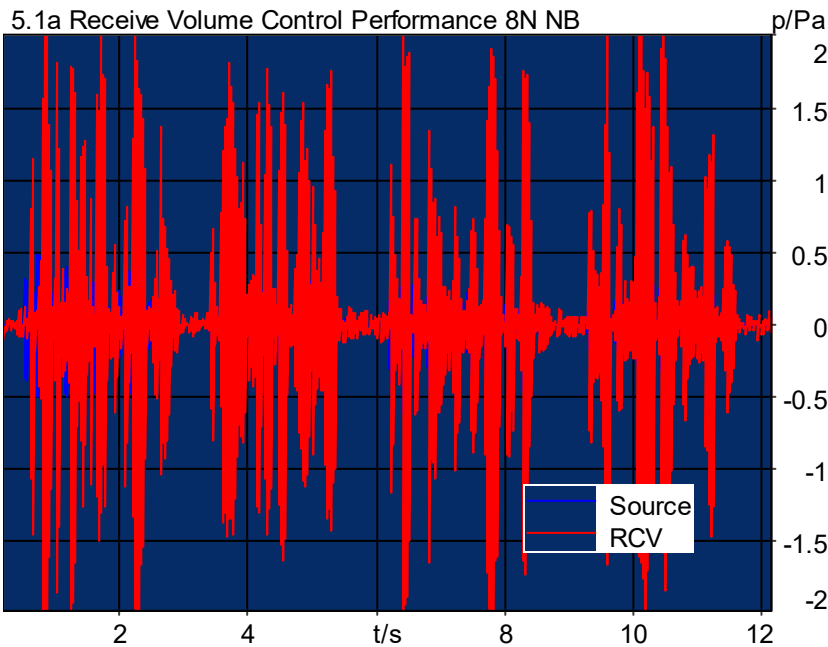
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.67	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 400 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	35.72	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	37.00	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 630 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.00	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 800 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	33.33	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 1000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.53	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 1250 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	27.20	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 1600 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	31.75	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 2000 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	45.65	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 2500 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	40.38	BL-SZ25B0732-WiFi5.8G
5.2 RCV Distortion and Noise - 3150 Hz NB	Ok	Distortion (Noise) [dB], 0.0 dB	43.50	BL-SZ25B0732-WiFi5.8G
5.3 Frequency Response 8N FF HANB	Ok	Min. dist. to tolerance scheme [dB], 1747.8 Hz	2.25	BL-SZ25B0732-WiFi5.8G

5.1a Receive Volume Control Performance 8N NB	1944
5.2 RCV Distortion and Noise - 400 Hz NB	1946
5.2 RCV Distortion and Noise - 500 Hz NB	1948
5.2 RCV Distortion and Noise - 630 Hz NB	1950
5.2 RCV Distortion and Noise - 800 Hz NB	1952
5.2 RCV Distortion and Noise - 1000 Hz NB	1954
5.2 RCV Distortion and Noise - 1250 Hz NB	1956
5.2 RCV Distortion and Noise - 1600 Hz NB	1958
5.2 RCV Distortion and Noise - 2000 Hz NB	1960
5.2 RCV Distortion and Noise - 2500 Hz NB	1962
5.2 RCV Distortion and Noise - 3150 Hz NB	1964
5.3 Frequency Response 8N FF HANB	1966

5.1a Receive Volume Control Performance 8N NB

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Channel	Speech level	Activity	
RCV	83.67 dB[SPL]	80.37%	Ok

Ok

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Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

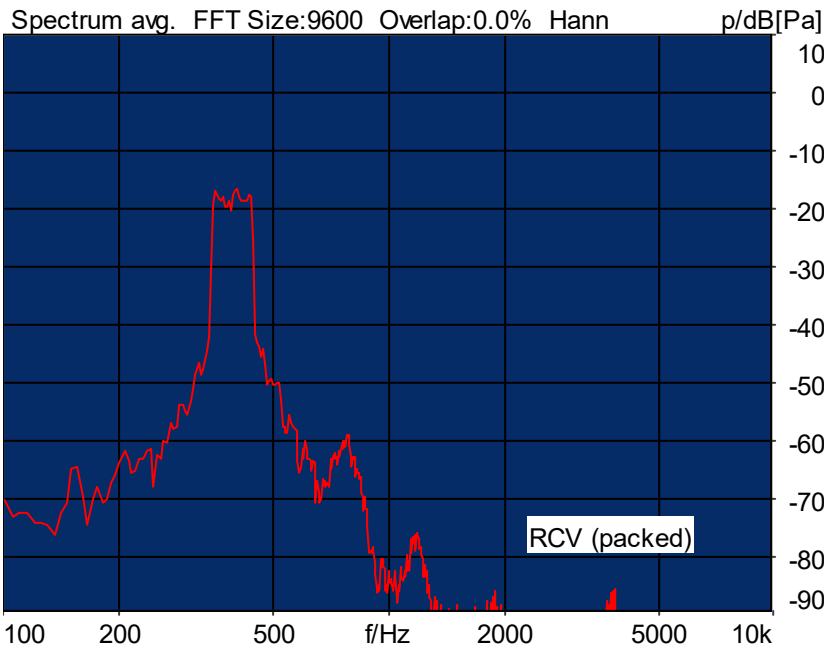
Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 400 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 35.72 dB (1.64%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_400hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	320.0 Hz	Stimulus max.	480.0 Hz
Analysis min.	20.0 Hz	Analysis max.	315.0 Hz
Analysis (2) min.	485.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_400Hz

Hardware Config Settings

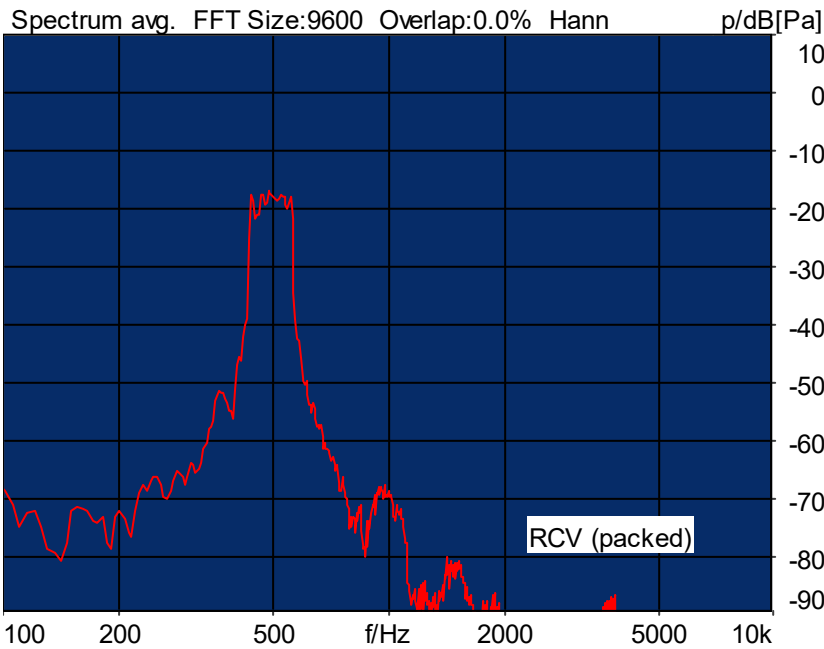
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 500 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 37.00 dB (1.41%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	410.0 Hz	Stimulus max.	595.0 Hz
Analysis min.	20.0 Hz	Analysis max.	405.0 Hz
Analysis (2) min.	600.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_500Hz

Hardware Config Settings

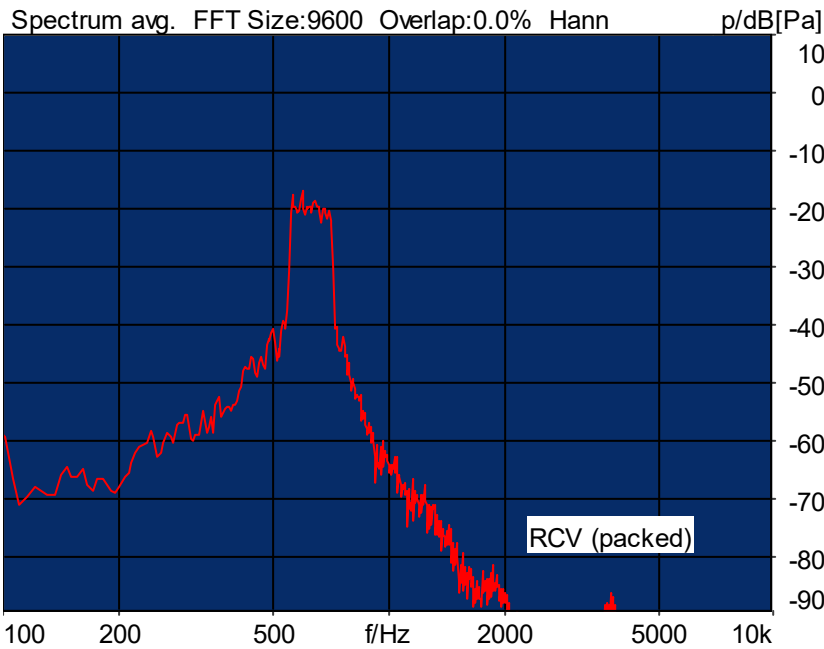
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 630 Hz NB

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Distortion (Noise) RCV (packed): 27.00 dB (4.47%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_630hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	525.0 Hz	Stimulus max.	745.0 Hz
Analysis min.	20.0 Hz	Analysis max.	520.0 Hz
Analysis (2) min.	750.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_630Hz

Hardware Config Settings

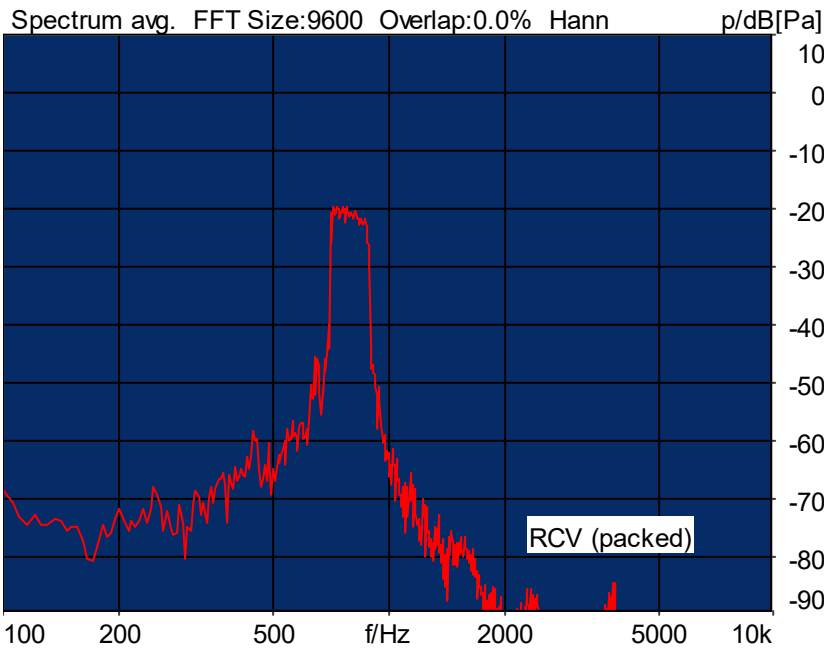
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 800 Hz NB

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Distortion (Noise) RCV (packed): 33.33 dB (2.15%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_800hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	675.0 Hz	Stimulus max.	925.0 Hz
Analysis min.	20.0 Hz	Analysis max.	670.0 Hz
Analysis (2) min.	930.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_800Hz

Hardware Config Settings

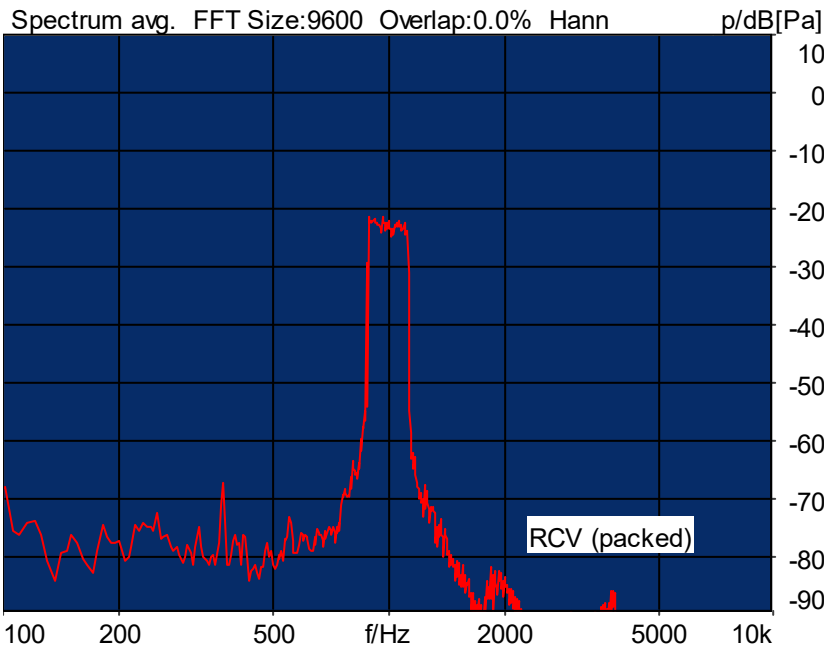
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1000 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.53 dB (0.67%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	855.0 Hz	Stimulus max.	1155.0 Hz
Analysis min.	20.0 Hz	Analysis max.	850.0 Hz
Analysis (2) min.	1160.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1000Hz

Hardware Config Settings

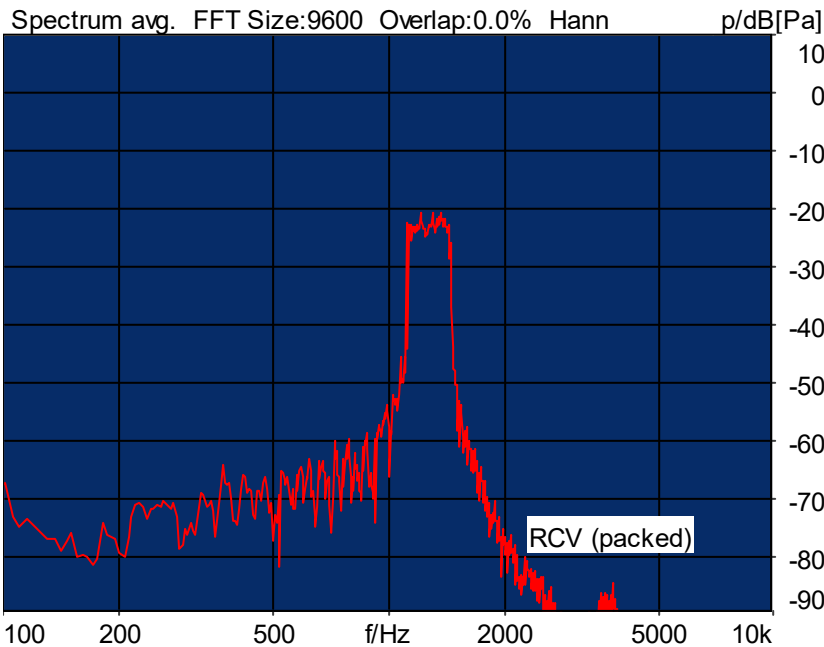
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1250 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 27.20 dB (4.36%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1250hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1085.0 Hz	Stimulus max.	1450.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1080.0 Hz
Analysis (2) min.	1455.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1250Hz

Hardware Config Settings

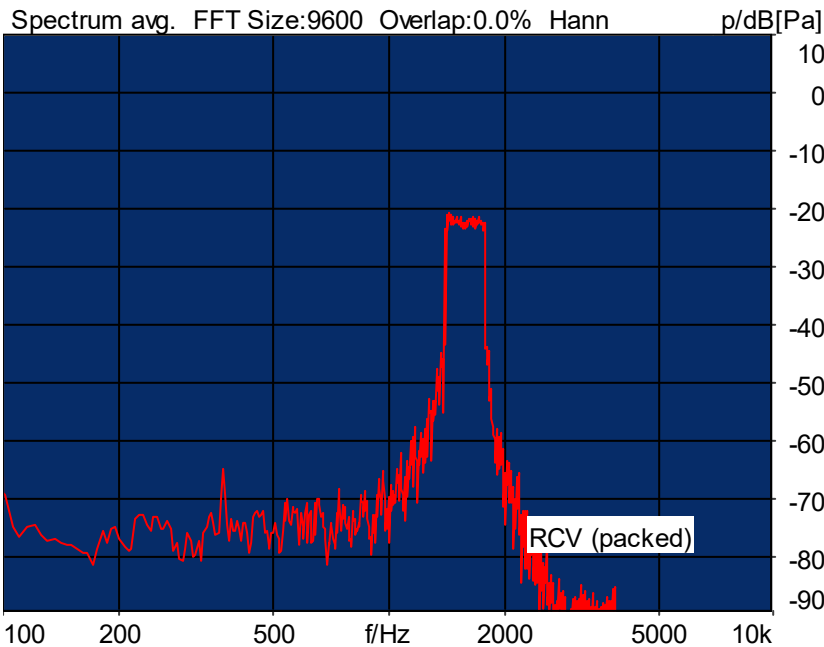
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 1600 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 31.75 dB (2.59%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_1600hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1375.0 Hz	Stimulus max.	1815.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1370.0 Hz
Analysis (2) min.	1820.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_1600Hz

Hardware Config Settings

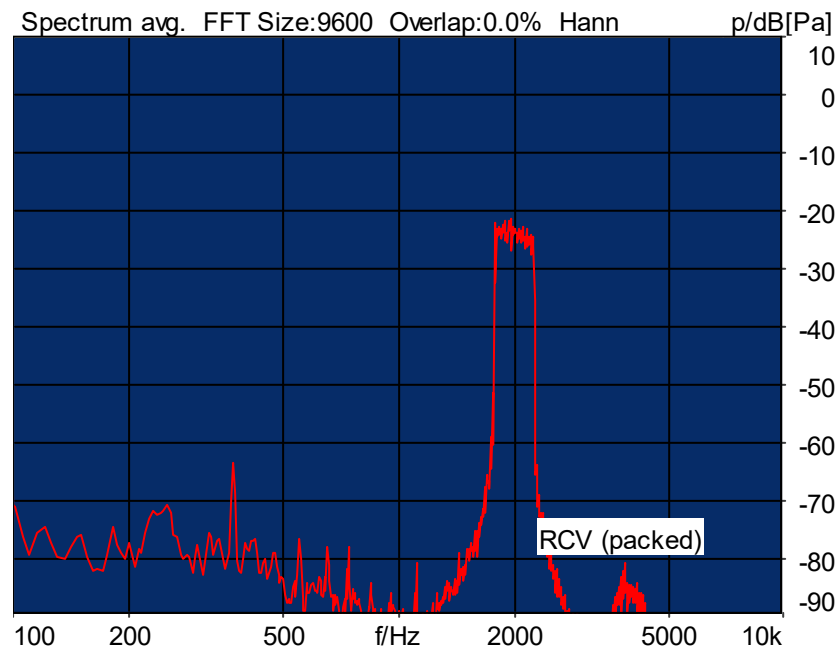
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2000 Hz NB

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EVS-NB-24.4



Distortion (Noise) RCV (packed): 45.65 dB (0.52%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2000hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	1745.0 Hz	Stimulus max.	2275.0 Hz
Analysis min.	20.0 Hz	Analysis max.	1740.0 Hz
Analysis (2) min.	2280.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2000Hz

Hardware Config Settings

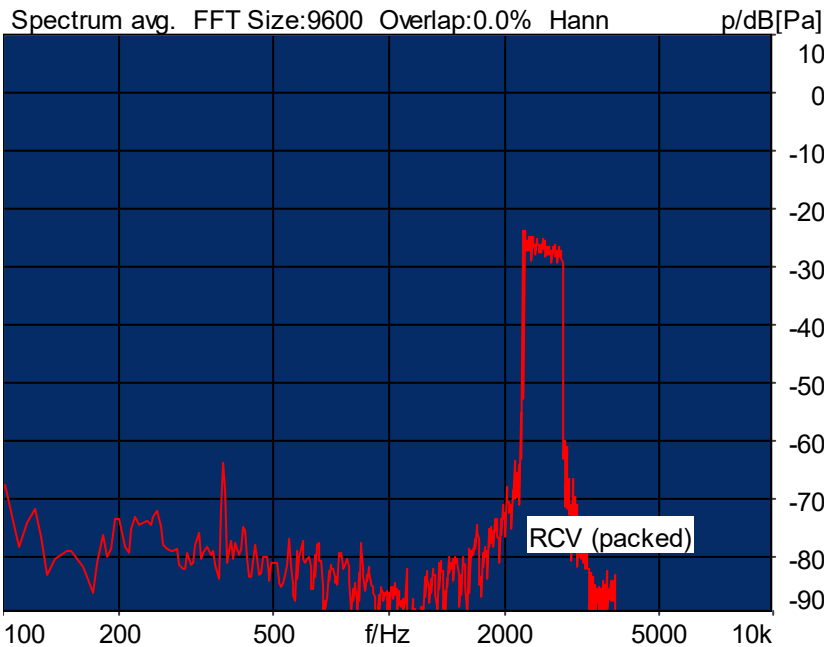
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 2500 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 40.38 dB (0.96%) Ok

Ok

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Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)
Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_2500hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2205.0 Hz	Stimulus max.	2855.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2200.0 Hz
Analysis (2) min.	2860.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_2500Hz

Hardware Config Settings

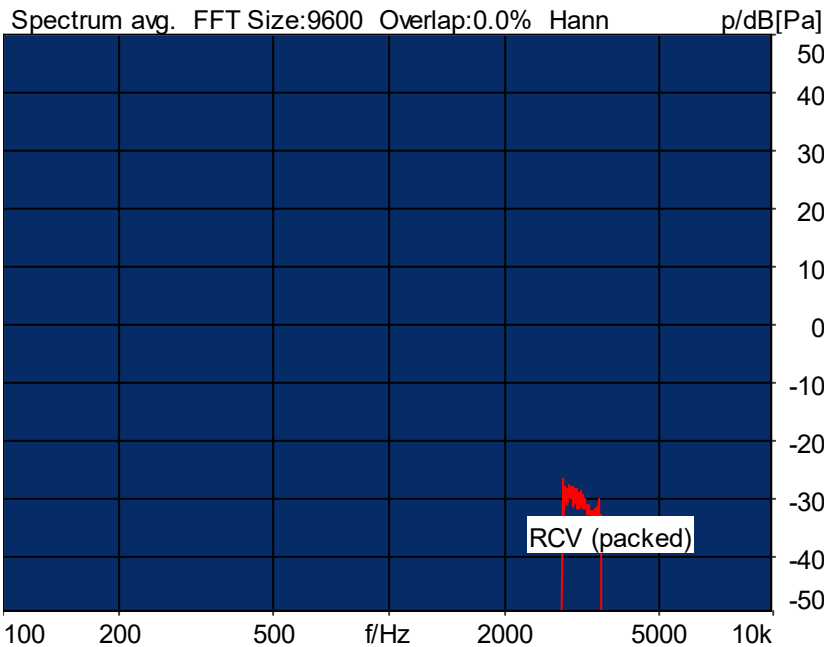
Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.2 RCV Distortion and Noise - 3150 Hz NB

TIA-5050 (2018-01) \ Measurements \ Narrowband \ 5.2 Receive Distortion and Noise 8N
EVS-NB-24.4



Distortion (Noise) RCV (packed): 43.50 dB (0.67%) Ok

Ok

2025/12/17 19:14 ACQUA 6.2.100

Limits

lower
20.00 dB

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: act_rpn_b250ms_3150hz_sr20dbm0_v02.dat

Level adjustment Channel 1 Gain -90.00 dB

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	13550.00 ms	Range length	200.00 ms
Number of seq.	10	Sequence length	400.00 ms
Frequency base	Transformation		
FFT size	9600	Overlap	0 %
Window function	Hann	Smooth	Off
dB weighting	A Weighting		
Stimulus min.	2785.0 Hz	Stimulus max.	3585.0 Hz
Analysis min.	20.0 Hz	Analysis max.	2780.0 Hz
Analysis (2) min.	3590.0 Hz	Analysis (2) max.	20000.0 Hz

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay	93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)		
Channels	2	Store to variable	RCVNB10_3150Hz

Hardware Config Settings

Used Setting	TIA5050
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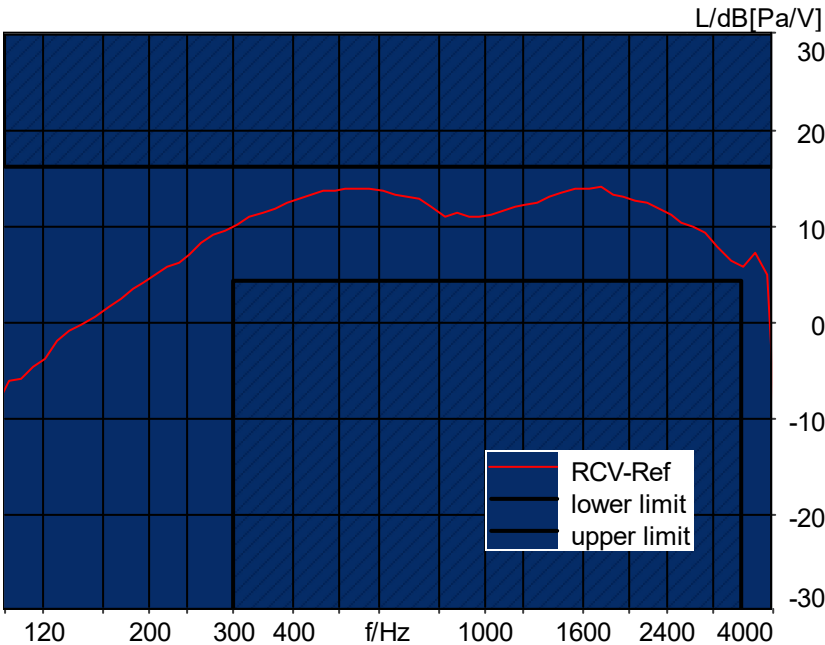
MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

5.3 Frequency Response 8N FF HANB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Absolute minimal distance

2.25 dB at 1747.8 Hz Ok

Ok

2025/12/17 19:14 ACQUA 6.2.100

Limits

lower
Fit into tolerance

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Source: respmaleieee269_nb_r16.dat

Level adjustment	Channel 1	Gain	-90.00 dB
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Level adjustment	Channel 2	Gain	-4.00 dB
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NARROWBAND IEEE-269-2010 Real Speech Signal at Channel 2

Pause 0.5 s +

Real Speech (english, male speaker) 11.5 s, Active Speech Level: -16 dBm0, margin 15.9 dB +

Pause till end of file

Signal level (ch1): -16 dBm0 Active Speech Level, margin 15.9 dB

Signal taken from "IEEE_269-2010_Male_mono_48_kHz.wav"

Alteration:

0.2 s Pause added at the beginning of the file.

0.8 s Pause added at the and of the file.

filtered with 4.0 kHz low-pass filter

signal level changed

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB

Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2

Range start	500.00 ms	Range length	11500.00 ms
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Frequency base	12th octave	DIN Row	Row A
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Method FFT

FFT size	4096	Overlap	75 %
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Window function Hann

Reference file r521_rcv_frq_spee269_hanb.fft

Tol. scheme file	521_rcv_frq_man_hanb.tol	Min. freq. for tol.	100.0 Hz
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Auto adjust	Centrate	Max. freq. for tol.	4000.0 Hz
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Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Compensate delay 93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(65#)

Measurement Object	BL-SZ25B0732-GSM850
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Status Overview

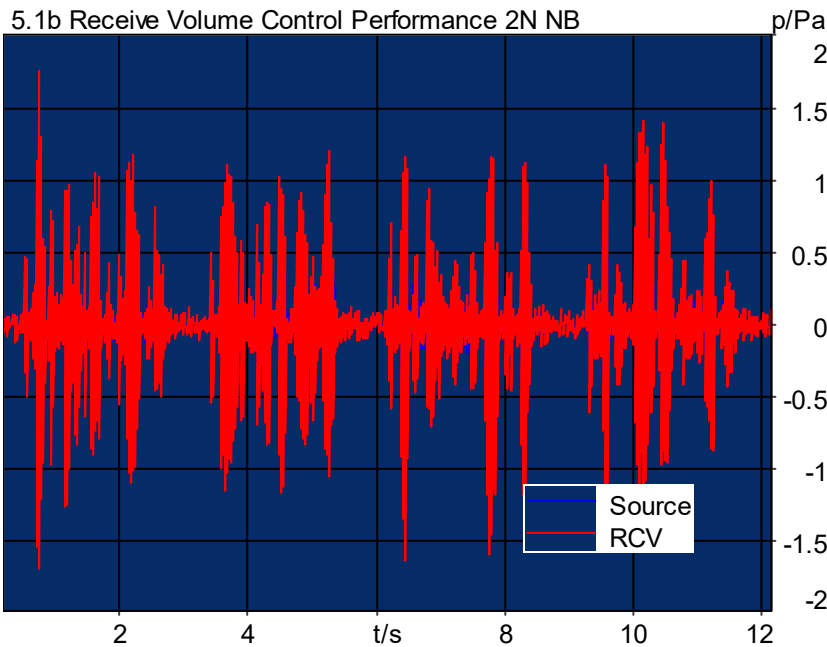
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.26	BL-SZ25B0732-GS M850

5.1b Receive Volume Control Performance 2N NB	1971
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	79.26 dB[SPL]	80.64%	Ok

Ok

2025/12/18 14:53 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 165.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(66#)

Measurement Object	BL-SZ25B0732-GSM850
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Status Overview

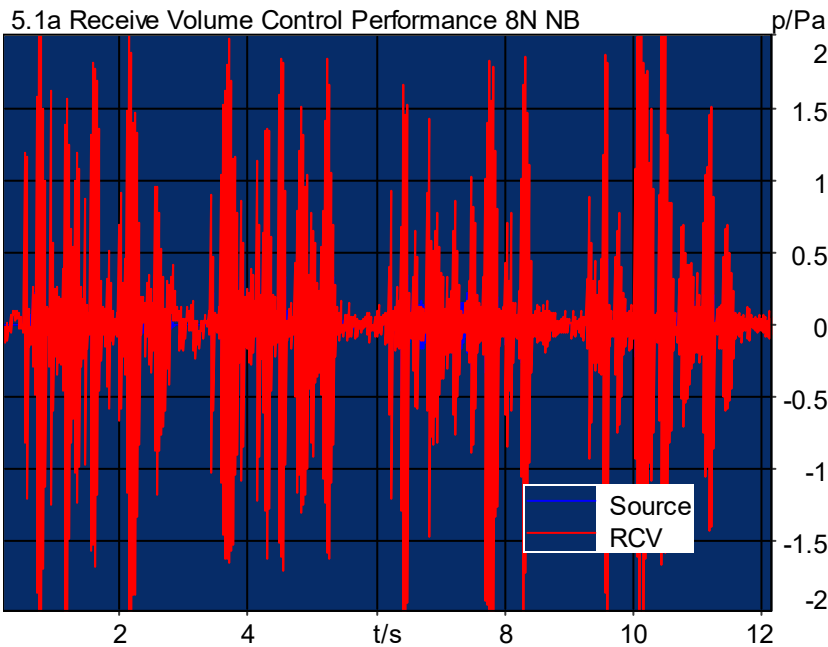
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.41	BL-SZ25B0732-GS M850

5.1a Receive Volume Control Performance 8N NB	1975
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	83.41 dB[SPL]	80.69%	Ok

Ok

2025/12/18 14:56 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 178.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(67#)

Measurement Object	BL-SZ25B0732-GSM1900
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Status Overview

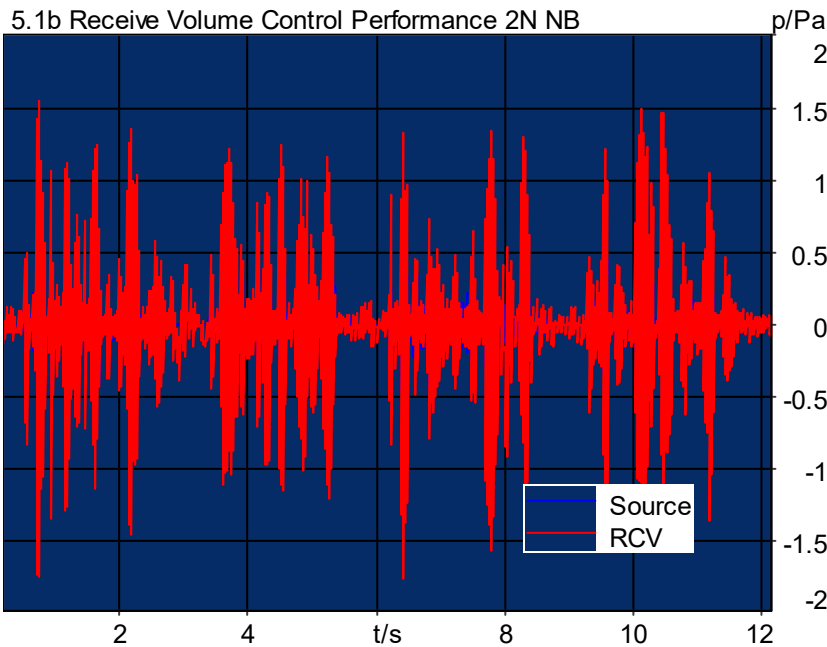
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.63	BL-SZ25B0732-GSM 1900

5.1b Receive Volume Control Performance 2N NB	1979
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	79.63 dB[SPL]	80.05%	Ok

Ok

2025/12/18 15:46 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 176.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(68#)

Measurement Object	BL-SZ25B0732-GSM1900
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Status Overview

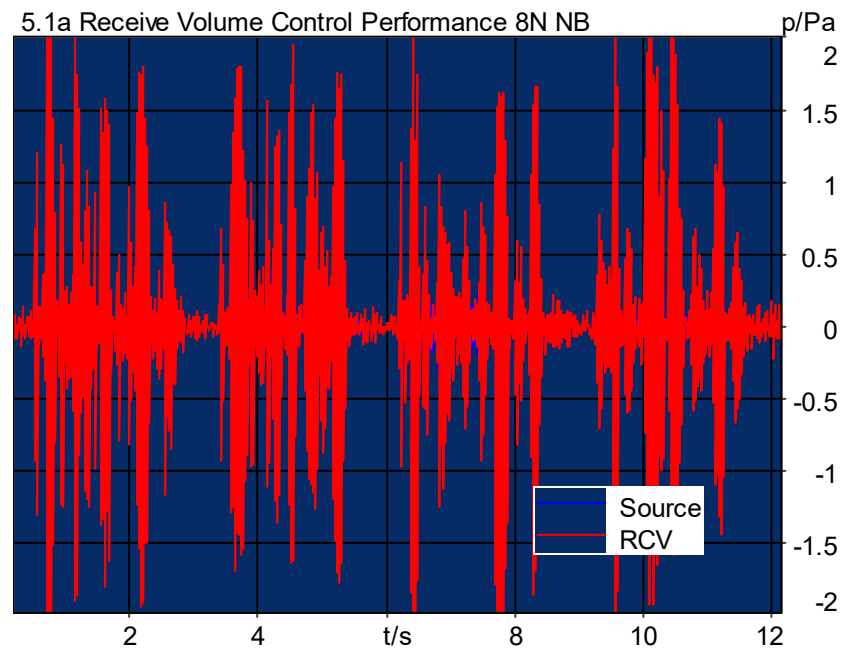
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.45	BL-SZ25B0732-GSM 1900

5.1a Receive Volume Control Performance 8N NB	1983
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	83.45 dB[SPL]	80.27%	Ok

Ok

2025/12/18 15:47 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 176.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(69#)

Measurement Object	BL-SZ25B0732-WCDMAB2
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Status Overview

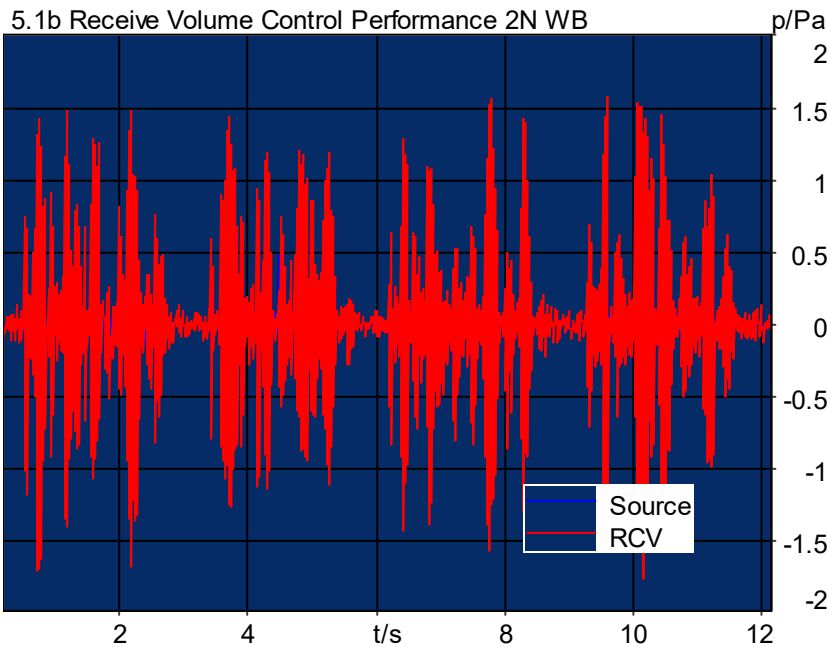
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	79.63	BL-SZ25B0732-WCD MAB2

5.1b Receive Volume Control Performance 2N WB	1987
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

AMR-WB-6.6



Channel	Speech level	Activity	
RCV	79.63 dB[SPL]	82.06%	Ok

Ok

2025/12/18 16:50 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 186.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(70#)

Measurement Object	BL-SZ25B0732-WCDMAB2
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Status Overview

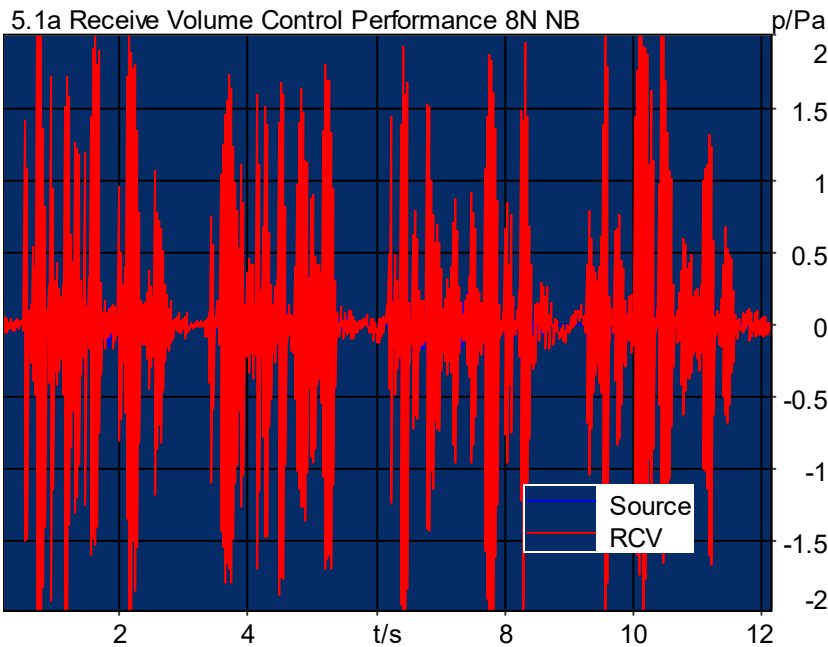
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.05	BL-SZ25B0732-WCD MAB2

5.1a Receive Volume Control Performance 8N NB	1991
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-12.2



Channel	Speech level	Activity	
RCV	84.05 dB[SPL]	80.55%	Ok

Ok

2025/12/18 16:31 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 175.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(71#)

Measurement Object	BL-SZ25B0732-WCDMAB4
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Status Overview

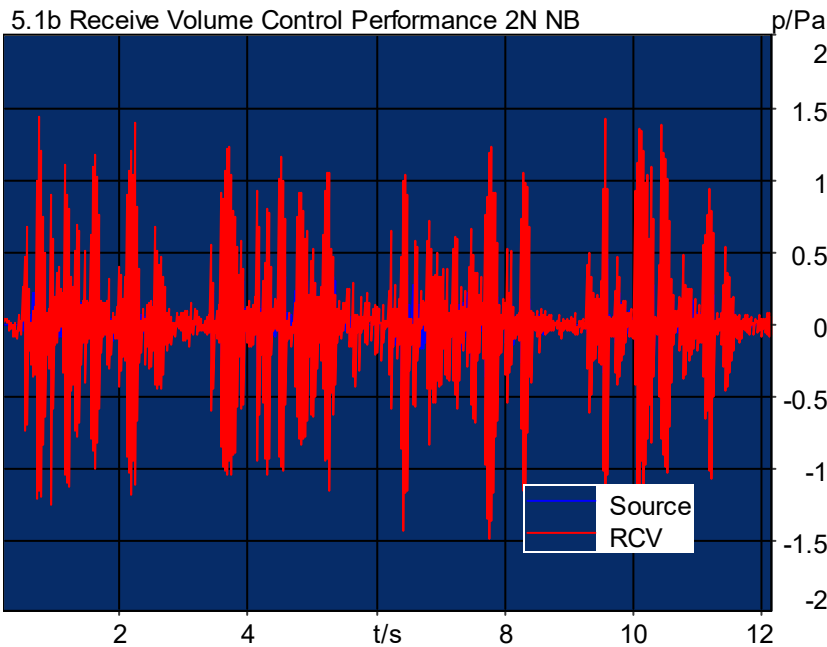
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.45	BL-SZ25B0732-WCD MAB4

5.1b Receive Volume Control Performance 2N NB	1995
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	79.45 dB[SPL]	80.33%	Ok

Ok

2025/12/18 16:29 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 185.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(72#)

Measurement Object	BL-SZ25B0732-WCDMAB4
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Status Overview

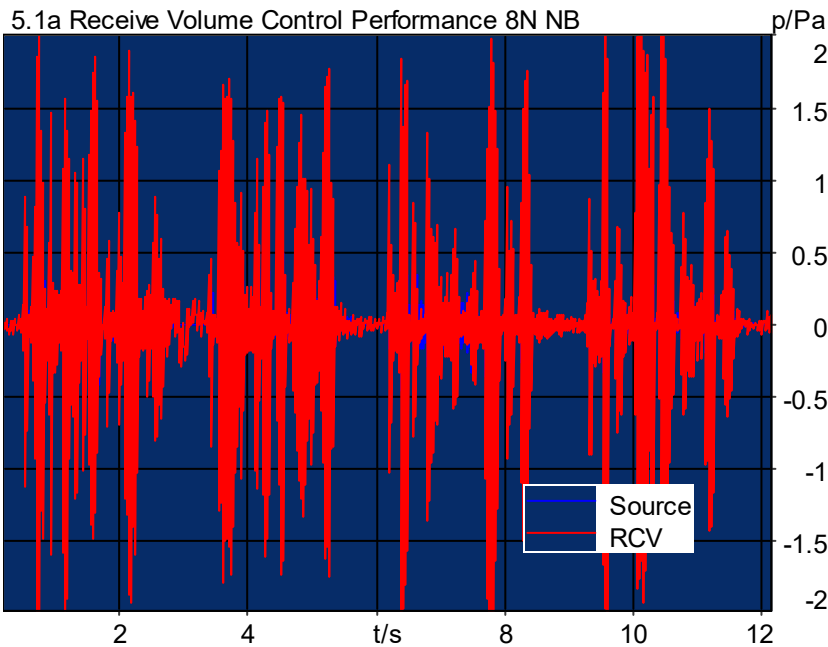
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.23	BL-SZ25B0732-WCD MAB4

5.1a Receive Volume Control Performance 8N NB	1999
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	83.23 dB[SPL]	80.82%	Ok

Ok

2025/12/18 16:29 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 185.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(73#)

Measurement Object	BL-SZ25B0732-WCDMAB5
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Status Overview

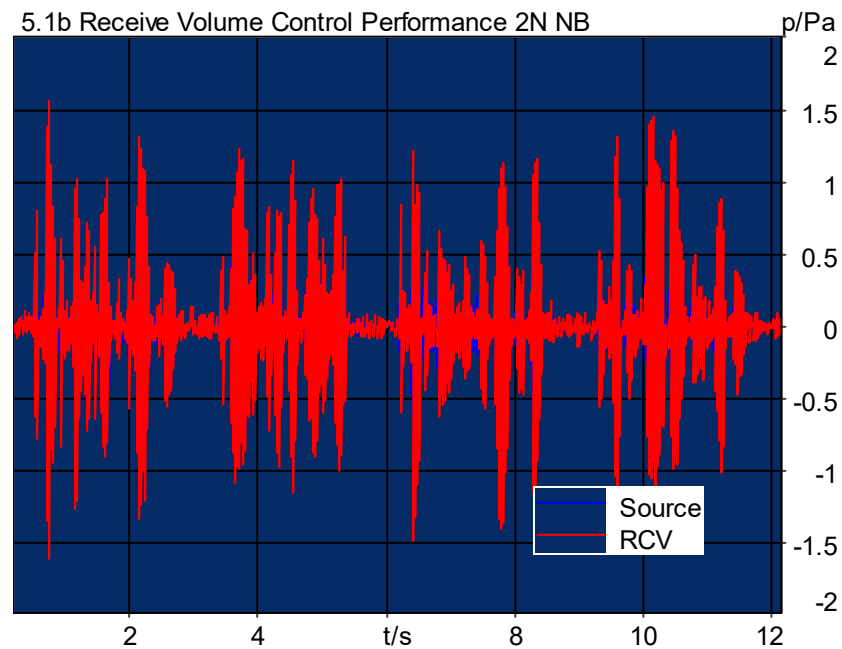
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.46	BL-SZ25B0732-WCD MAB5

5.1b Receive Volume Control Performance 2N NB	2003
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

AMR-NB-4.75



Channel	Speech level	Activity	
RCV	79.46 dB[SPL]	80.12%	Ok

Ok

2025/12/18 17:20 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 173.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(74#)

Measurement Object	BL-SZ25B0732-WCDMAB5
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Status Overview

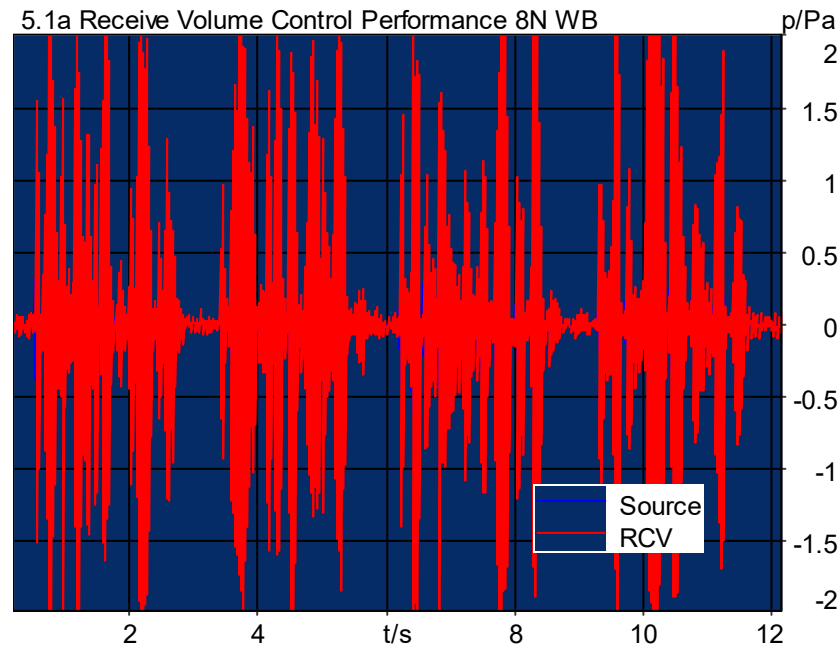
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	85.25	BL-SZ25B0732-WCD MAB5

5.1a Receive Volume Control Performance 8N WB	2007
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

AMR-WB-6.6



Channel	Speech level	Activity	
RCV	85.25 dB[SPL]	80.56%	Ok

Ok

2025/12/18 16:58 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 177.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(75#)

Measurement Object	BL-SZ25B0732-B2
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Status Overview

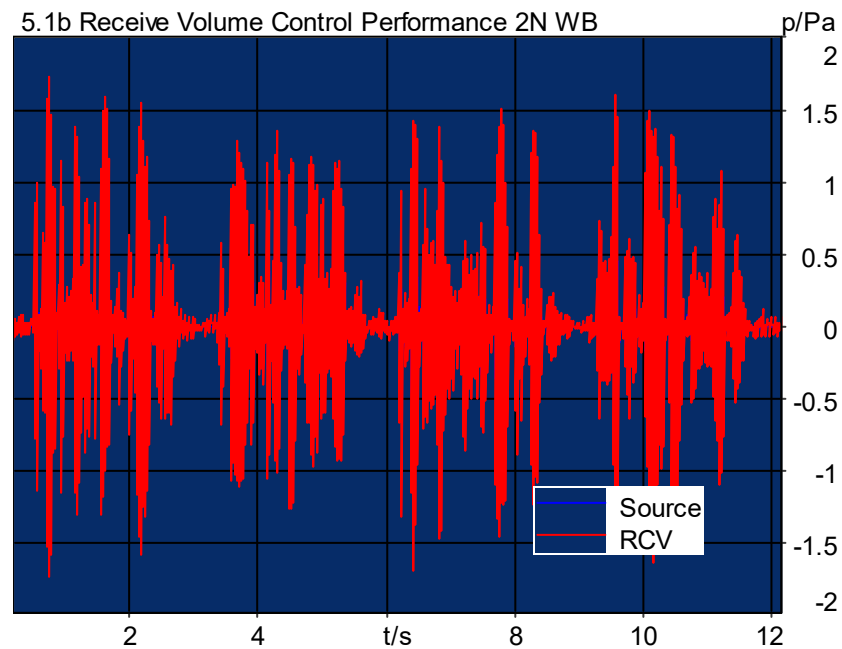
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	81.08	BL-SZ25B0732-B2

5.1b Receive Volume Control Performance 2N WB	2011
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	81.08 dB[SPL]	84.03%	Ok

Ok

2025/12/17 20:04 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 142.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(76#)

Measurement Object	BL-SZ25B0732-B2
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Status Overview

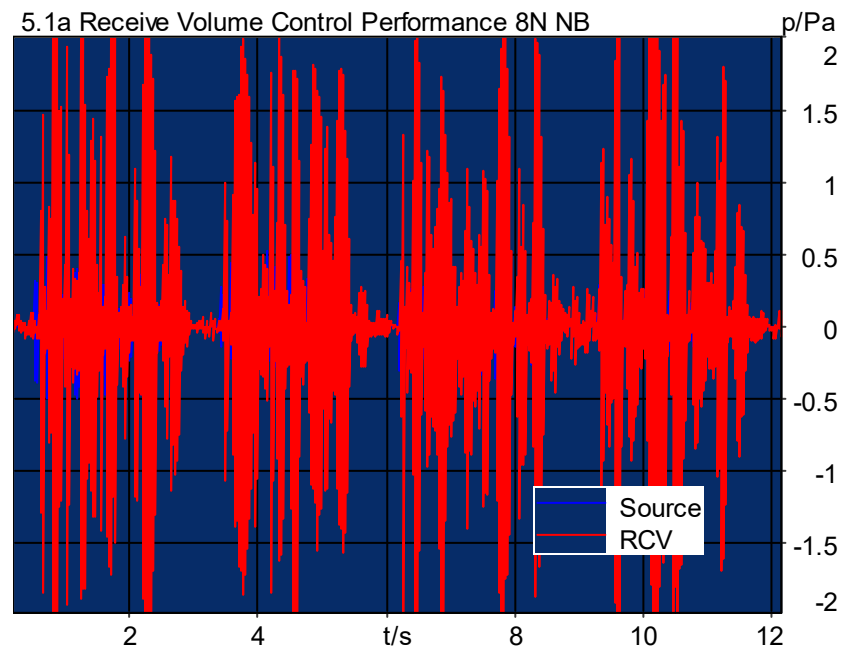
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	85.25	BL-SZ25B0732-B2

5.1a Receive Volume Control Performance 8N NB	2015
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	85.25 dB[SPL]	82.46%	Ok

Ok

2025/12/17 20:20 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 93.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(77#)

Measurement Object	BL-SZ52B0732-B4
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Status Overview

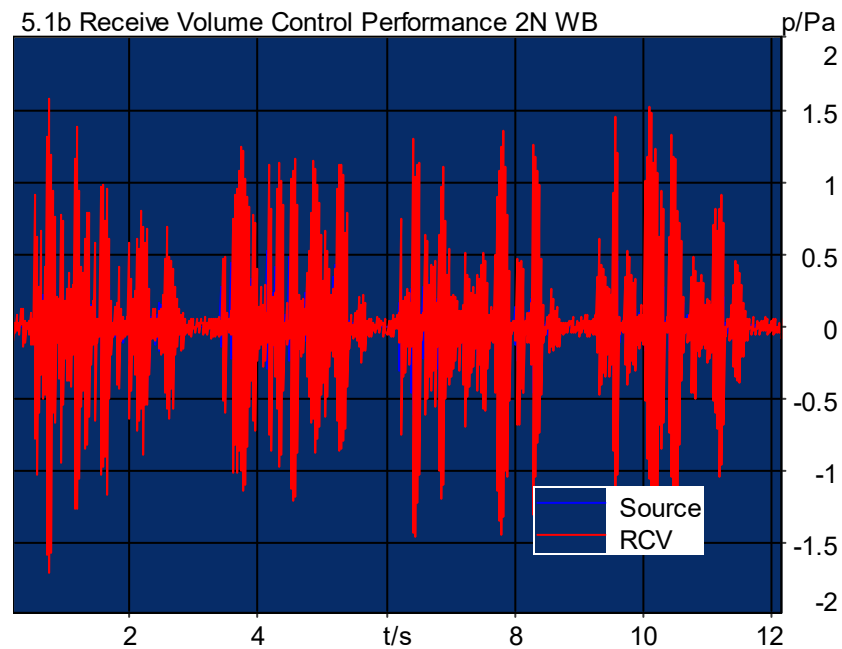
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.03	BL-SZ52B0732-B4

5.1b Receive Volume Control Performance 2N WB	2019
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.03 dB[SPL]	83.53%	Ok

Ok

2025/12/15 23:42 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 147.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(78#)

Measurement Object	BL-SZ52B0732-B4
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Status Overview

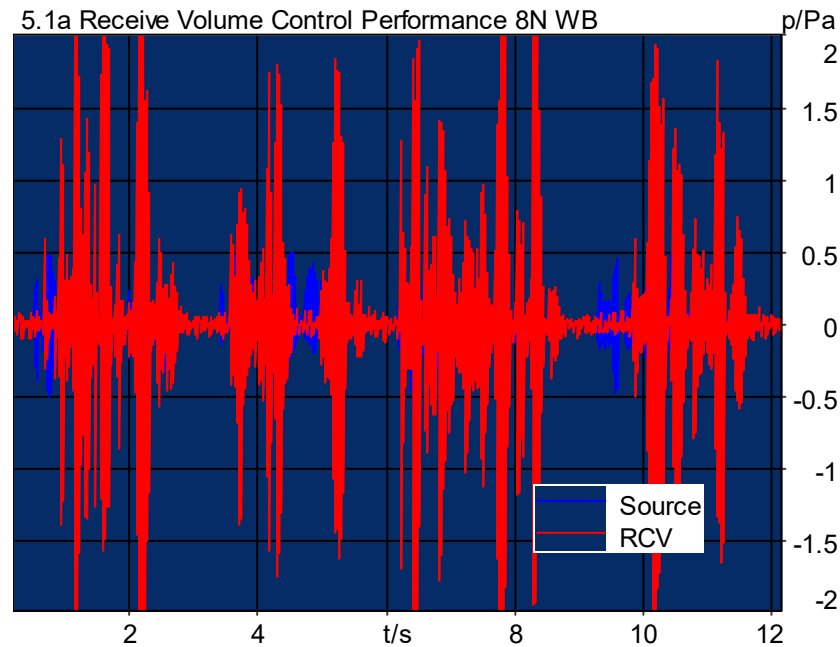
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	83.11	BL-SZ52B0732-B4

5.1a Receive Volume Control Performance 8N WB	2023
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-NB-24.4; EVS-WB-128



Channel	Speech level	Activity	
RCV	83.11 dB[SPL]	70.60%	Ok

Ok

2025/12/15 23:46 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 144.6000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(79#)

Measurement Object	BL-SZ25B0732-B5
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Status Overview

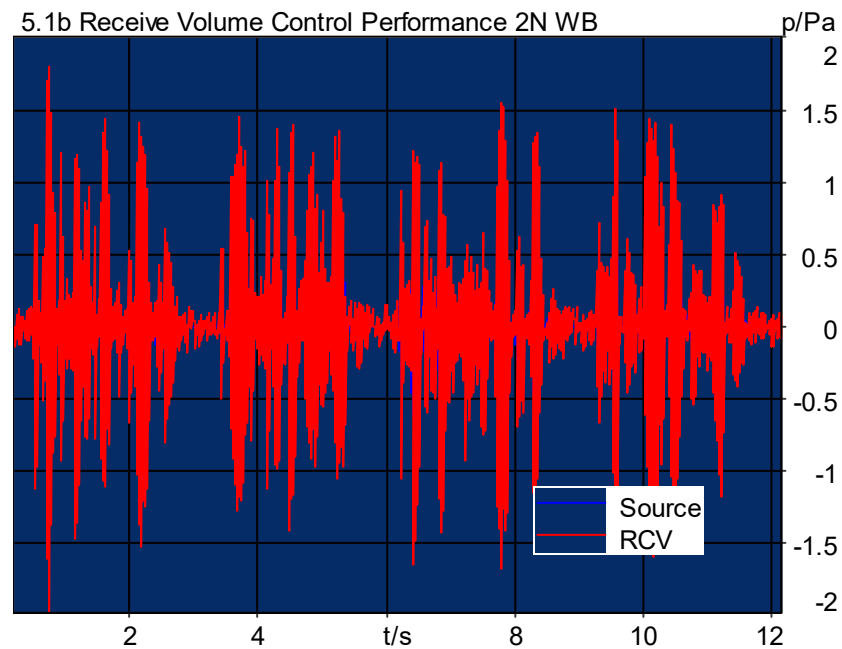
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	81.00	BL-SZ25B0732-B5

5.1b Receive Volume Control Performance 2N WB	2027
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	81.00 dB[SPL]	80.65%	Ok

Ok

2025/12/15 23:21 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 109.0000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(80#)

Measurement Object	BL-SZ25B0732-B5
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Status Overview

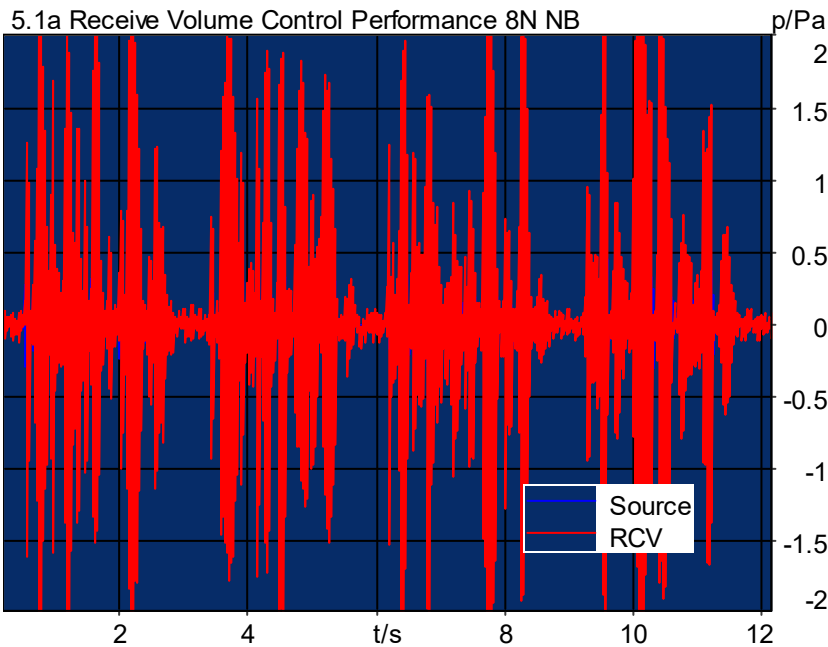
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.78	BL-SZ25B0732-B5

5.1a Receive Volume Control Performance 8N NB	2031
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.78 dB[SPL]	82.13%	Ok

Ok

2025/12/15 23:18 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 130.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(81#)

Measurement Object	BL-SZ25B0732-B7
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Status Overview

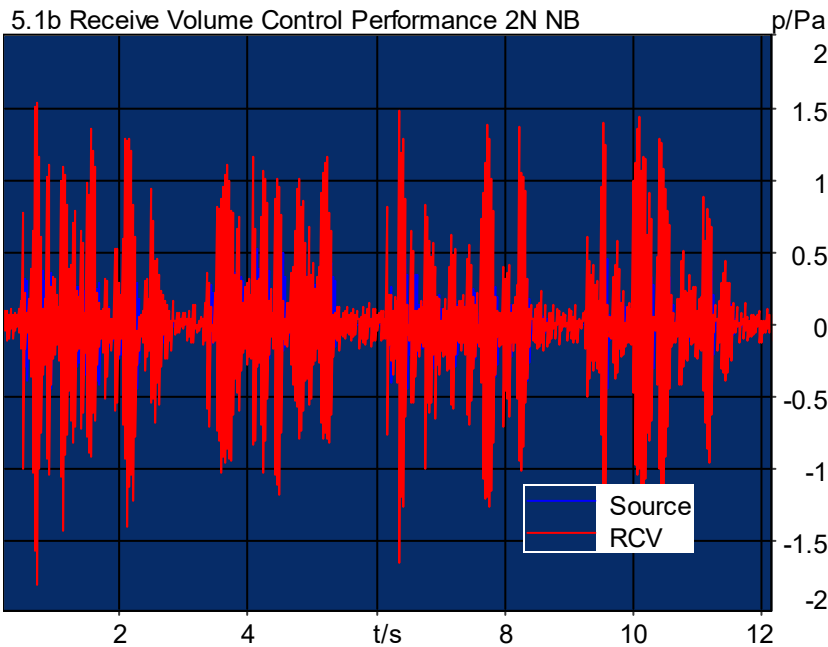
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.77	BL-SZ25B0732-B7

5.1b Receive Volume Control Performance 2N NB	2035
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4-Max-3



Channel	Speech level	Activity	
RCV	79.77 dB[SPL]	80.84%	Ok

Ok

2025/12/15 19:01 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 154.4000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(82#)

Measurement Object	BL-SZ25B0732-B7
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Status Overview

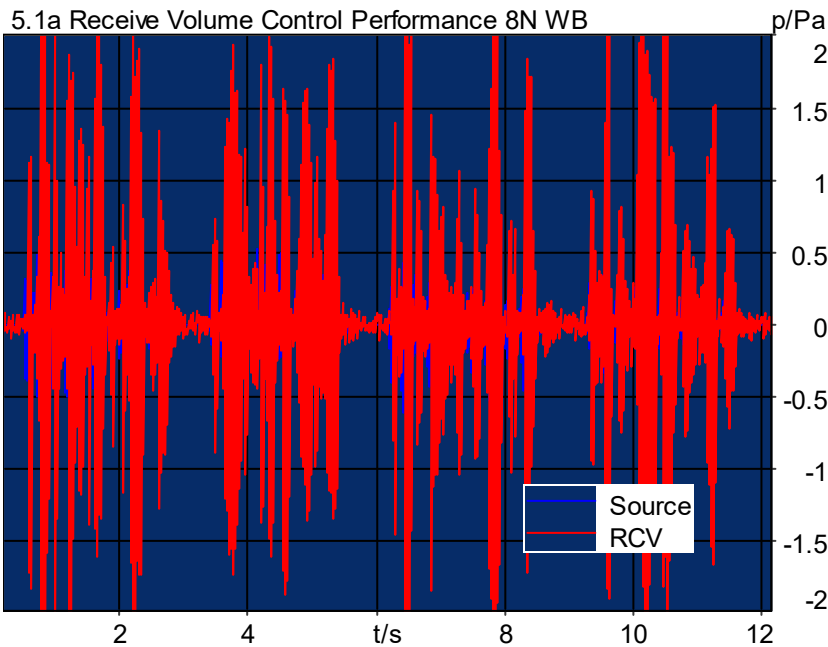
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.31	BL-SZ25B0732-B7

5.1a Receive Volume Control Performance 8N WB	2039
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.31 dB[SPL]	80.77%	Ok

Ok

2025/12/15 19:10 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 87.5000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(83#)

Measurement Object	BL-SZ25B0732-B12
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Status Overview

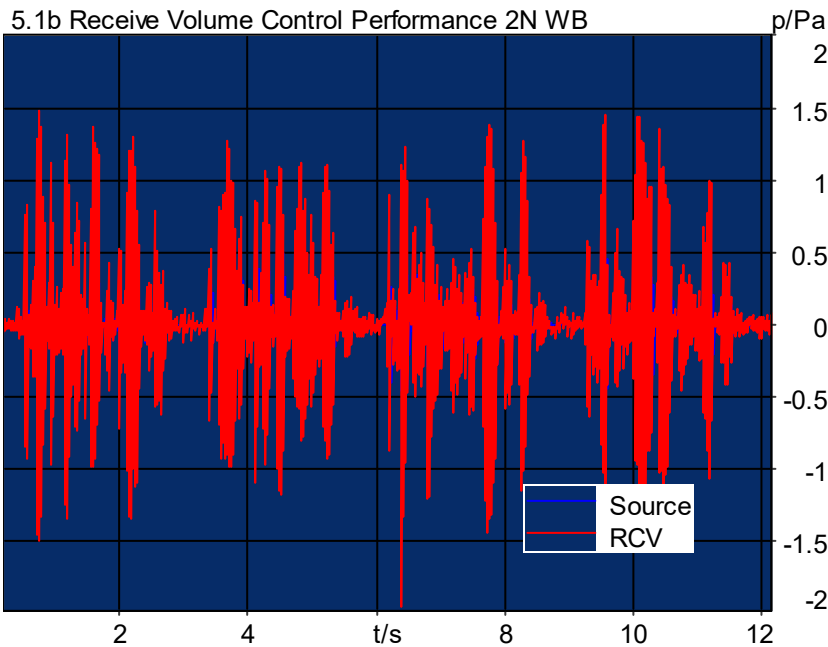
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.19	BL-SZ25B0732-B 12

5.1b Receive Volume Control Performance 2N WB	2043
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.19 dB[SPL]	82.37%	Ok

Ok

2025/12/17 22:21 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 153.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(84#)

Measurement Object	BL-SZ25B0732-B12
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Status Overview

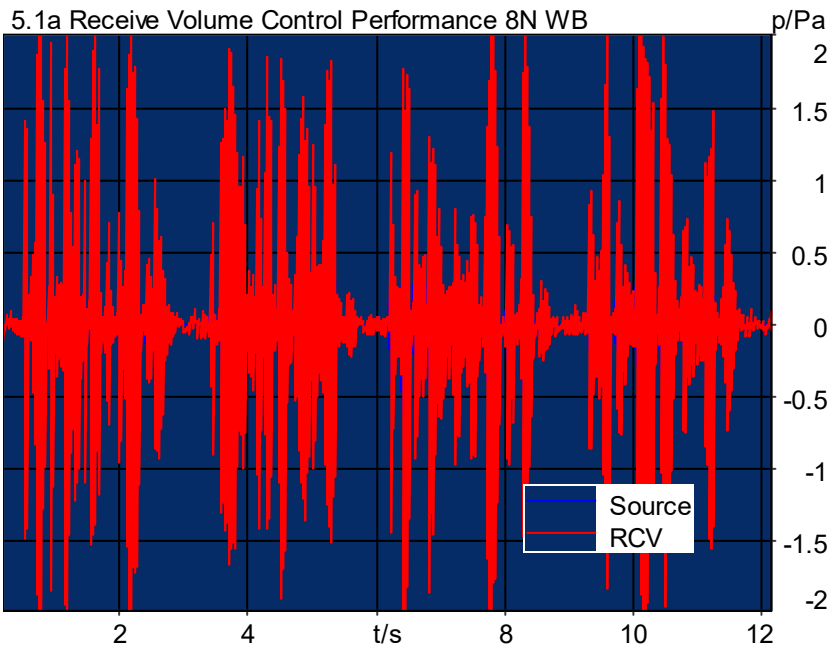
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.28	BL-SZ25B0732-B 12

5.1a Receive Volume Control Performance 8N WB	2047
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.28 dB[SPL]	80.71%	Ok

Ok

2025/12/17 22:22 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 118.0000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(85#)

Measurement Object	BL-SZ25B0732-B17
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Status Overview

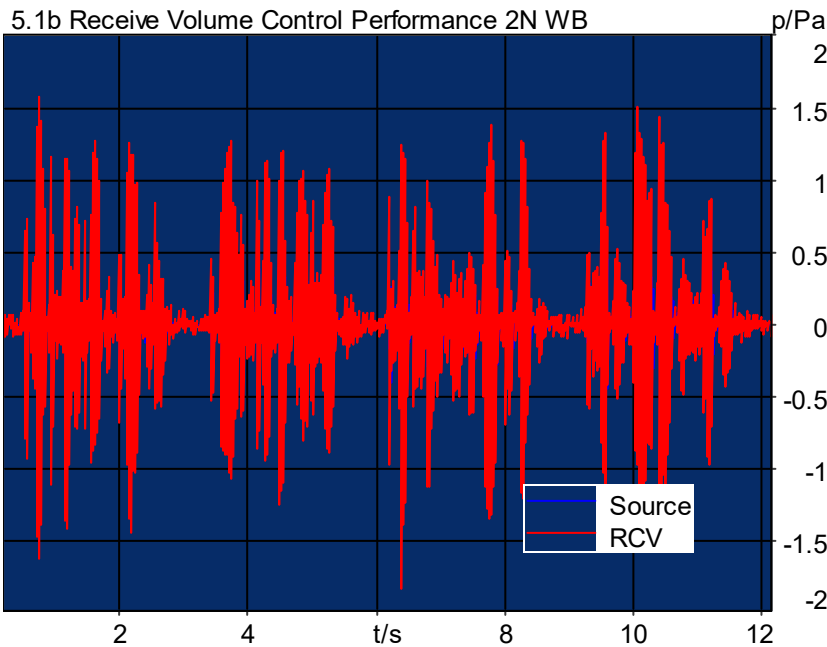
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.24	BL-SZ25B0732-B 17

5.1b Receive Volume Control Performance 2N WB	2051
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.24 dB[SPL]	82.75%	Ok

Ok

2025/12/15 21:33 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 157.5000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(86#)

Measurement Object	BL-SZ25B0732-B17
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Status Overview

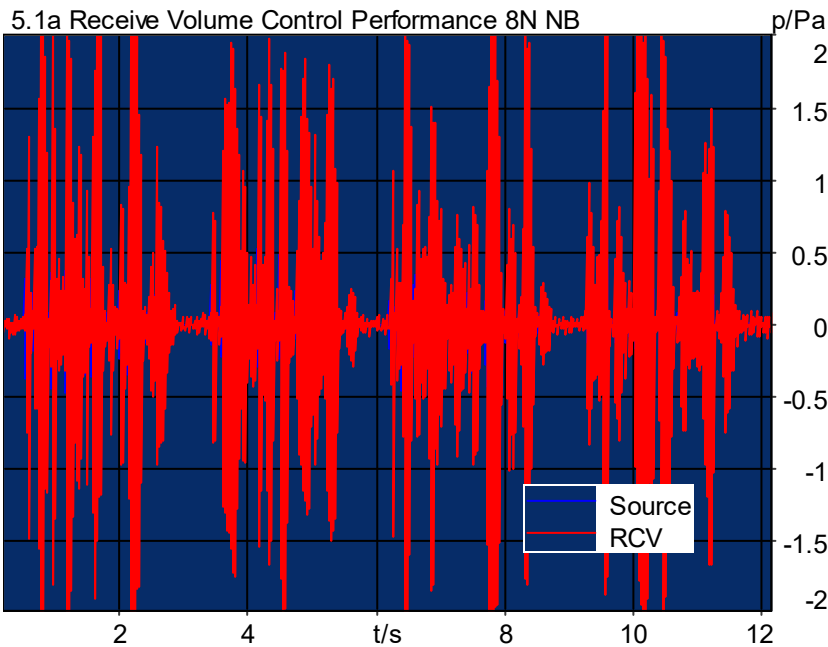
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.71	BL-SZ25B0732-B 17

5.1a Receive Volume Control Performance 8N NB	2055
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.71 dB[SPL]	80.20%	Ok

Ok

2025/12/15 21:48 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 108.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(87#)

Measurement Object	BL-SZ25B0732-B18
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Status Overview

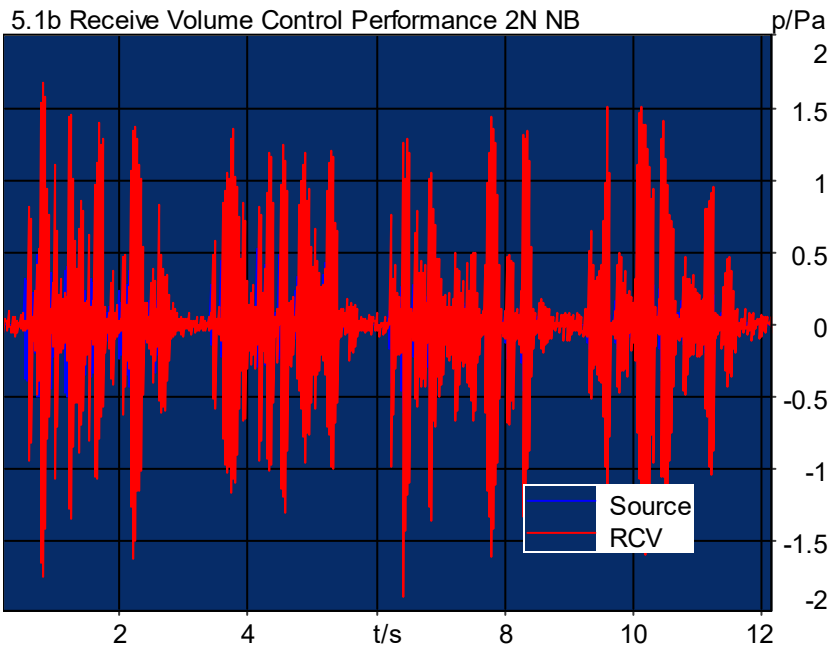
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.84	BL-SZ25B0732-B 18

5.1b Receive Volume Control Performance 2N NB	2059
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.84 dB[SPL]	80.45%	Ok

Ok

2025/12/15 22:02 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 104.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(88#)

Measurement Object	BL-SZ25B0732-B18
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Status Overview

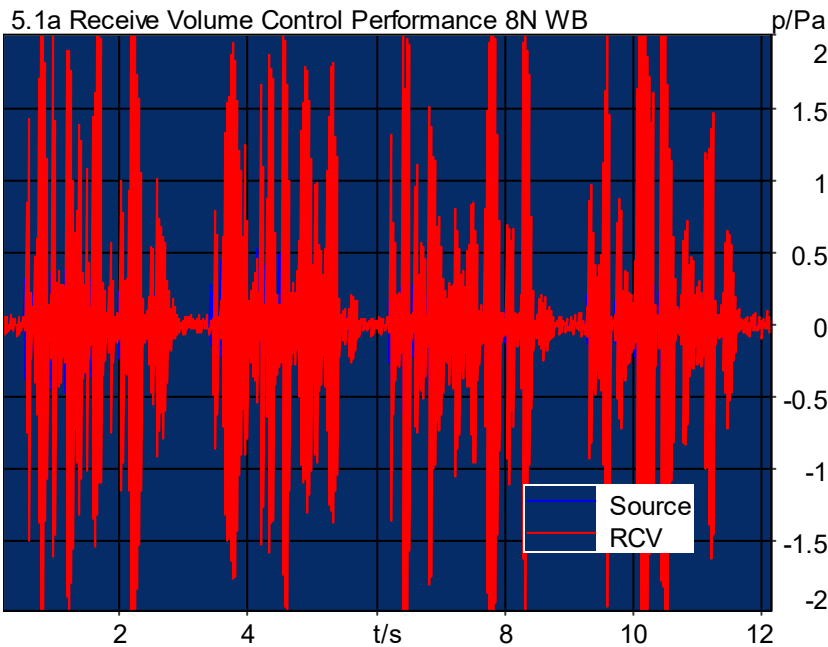
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.67	BL-SZ25B0732-B 18

5.1a Receive Volume Control Performance 8N WB	2063
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.67 dB[SPL]	80.34%	Ok

Ok

2025/12/15 22:16 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 110.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(89#)

Measurement Object	BL-SZ25B0732-B19
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Status Overview

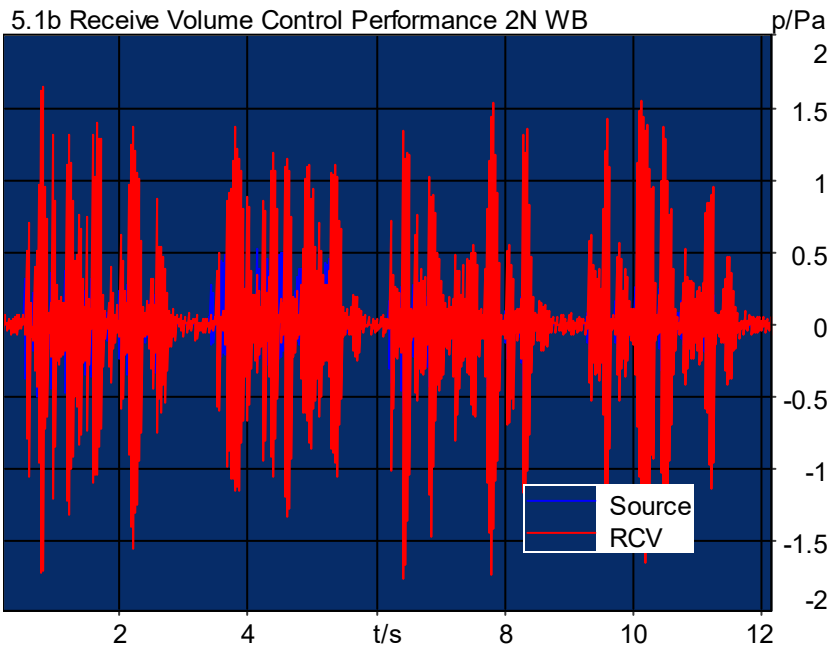
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.77	BL-SZ25B0732-B 19

5.1b Receive Volume Control Performance 2N WB	2067
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.77 dB[SPL]	82.34%	Ok

Ok

2025/12/15 22:31 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 103.0000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting	TIA5050
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MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(90#)

Measurement Object	BL-SZ25B0732-B19
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Status Overview

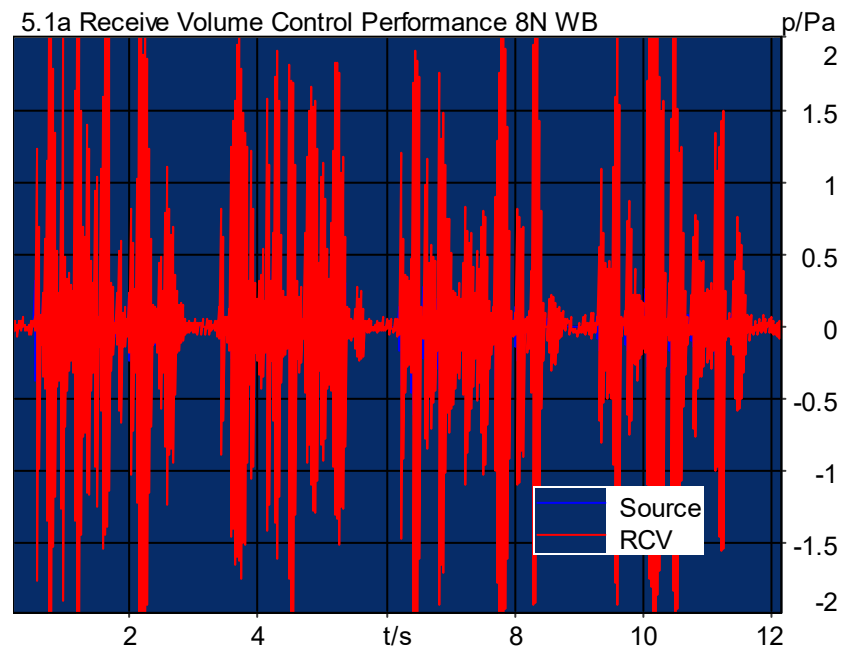
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.90	BL-SZ25B0732-B 19

5.1a Receive Volume Control Performance 8N WB	2071
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.90 dB[SPL]	80.73%	Ok

Ok

2025/12/15 22:39 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 107.6000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(91#)

Measurement Object	BL-SZ25B0732-B25
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Status Overview

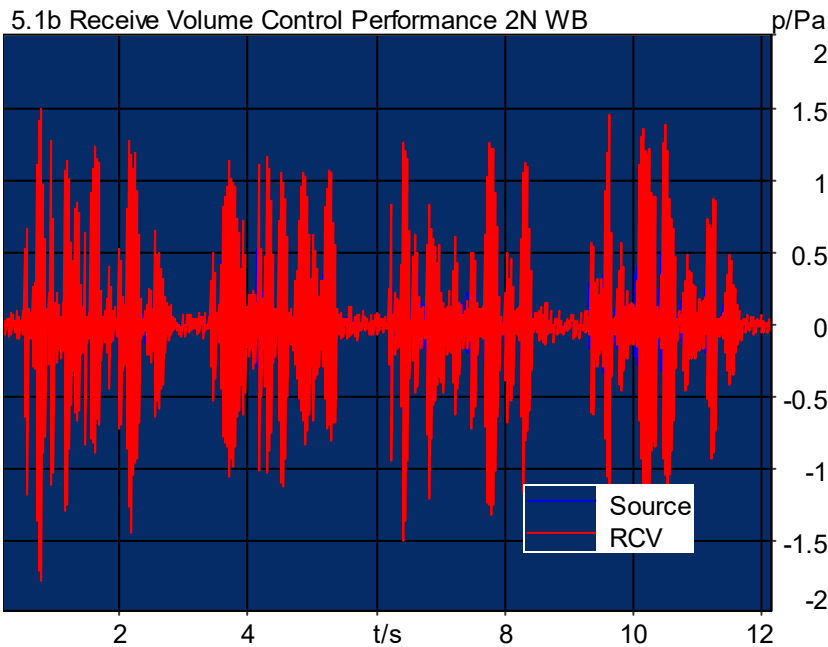
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.24	BL-SZ25B0732-B 25

5.1b Receive Volume Control Performance 2N WB	2075
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.24 dB[SPL]	80.73%	Ok

Ok

2025/12/15 19:39 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 95.3000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(92#)

Measurement Object	BL-SZ25B0732-B25
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Status Overview

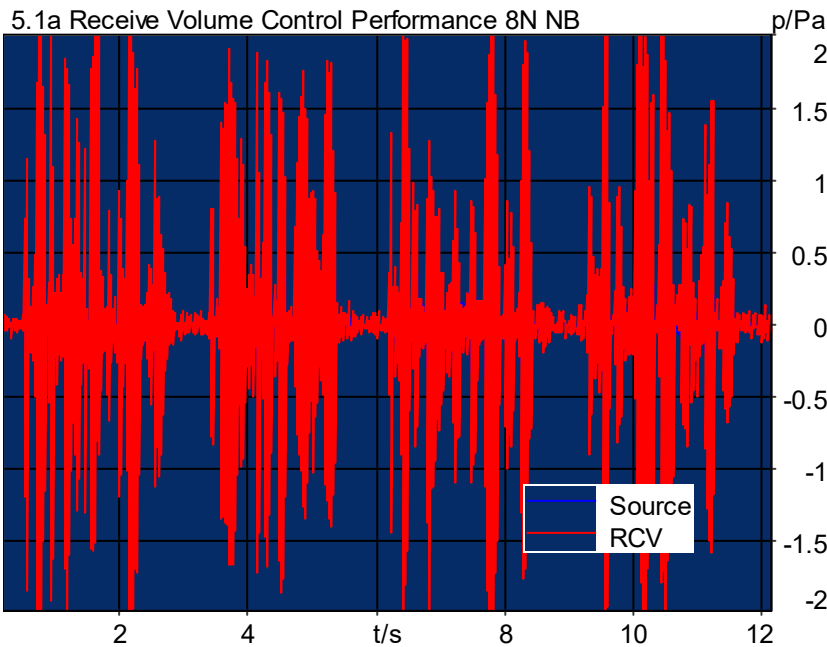
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.47	BL-SZ25B0732-B 25

5.1a Receive Volume Control Performance 8N NB	2079
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.47 dB[SPL]	80.78%	Ok

Ok

2025/12/15 19:43 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 99.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(93#)

Measurement Object	BL-SZ25B0732-B26
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Status Overview

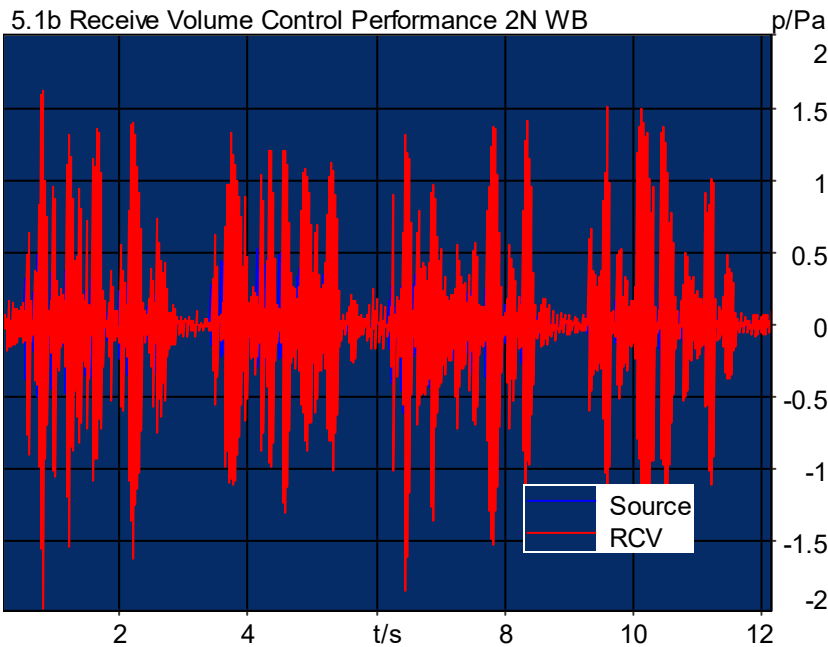
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.77	BL-SZ25B0732-B 26

5.1b Receive Volume Control Performance 2N WB	2083
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.77 dB[SPL]	82.06%	Ok

Ok

2025/12/15 23:01 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 99.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(94#)

Measurement Object	BL-SZ25B0732-B26
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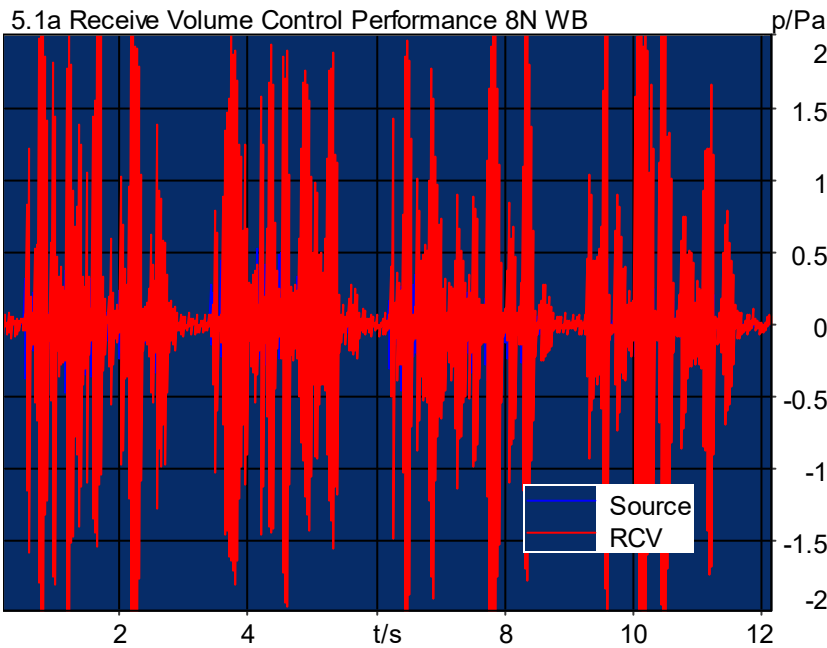
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.79	BL-SZ25B0732-B 26

5.1a Receive Volume Control Performance 8N WB	2087
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	84.79 dB[SPL]	80.44%	Ok

Ok

2025/12/15 23:08 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 111.5000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(95#)

Measurement Object	BL-SZ25B0732-B66
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Status Overview

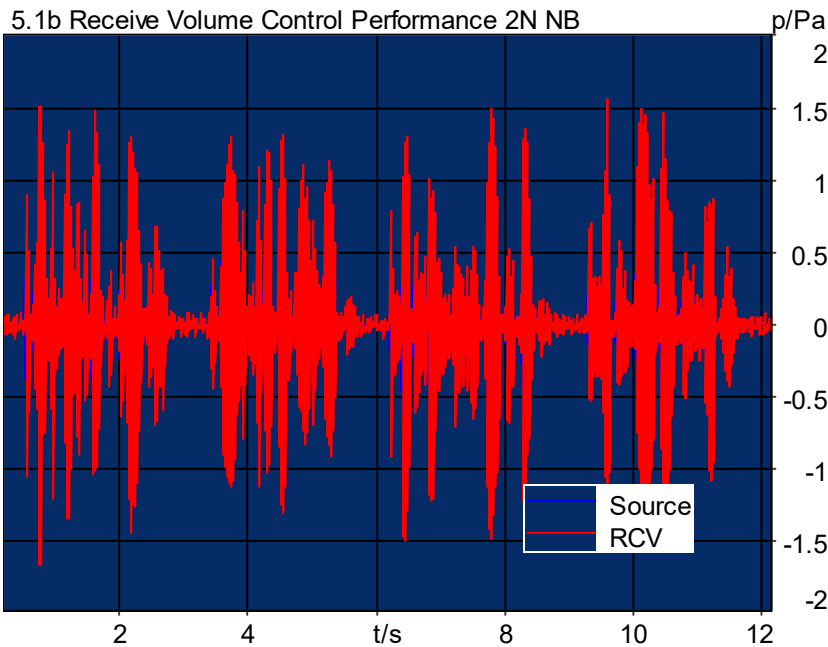
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.78	BL-SZ25B0732-B 66

5.1b Receive Volume Control Performance 2N NB	2091
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.78 dB[SPL]	81.69%	Ok

Ok

2025/12/15 23:50 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 123.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(96#)

Measurement Object	BL-SZ25B0732-B66
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Status Overview

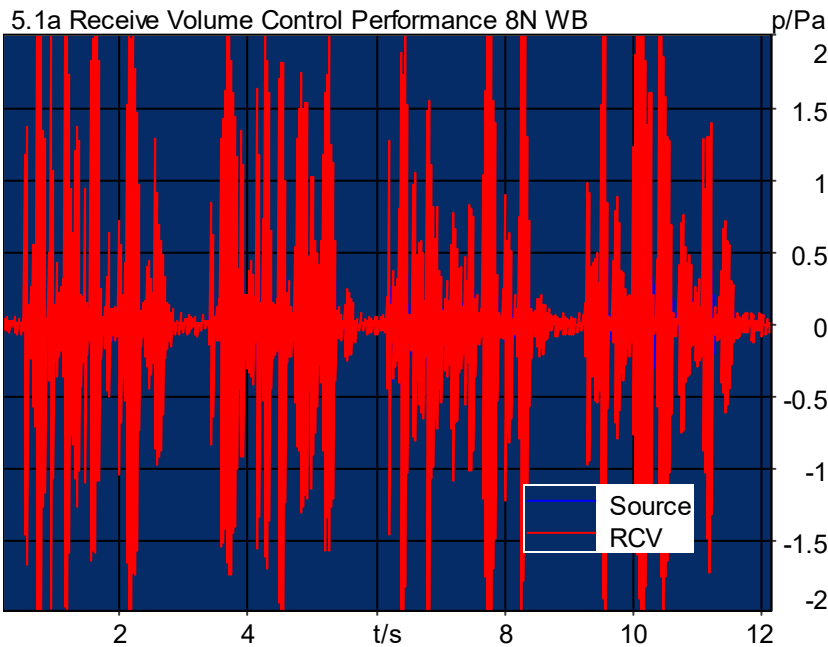
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.73	BL-SZ25B0732-B 66

5.1a Receive Volume Control Performance 8N WB	2095
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.73 dB[SPL]	80.56%	Ok

Ok

2025/12/15 23:48 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 153.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(97#)

Measurement Object	BL-SZ25B0732-B71
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Status Overview

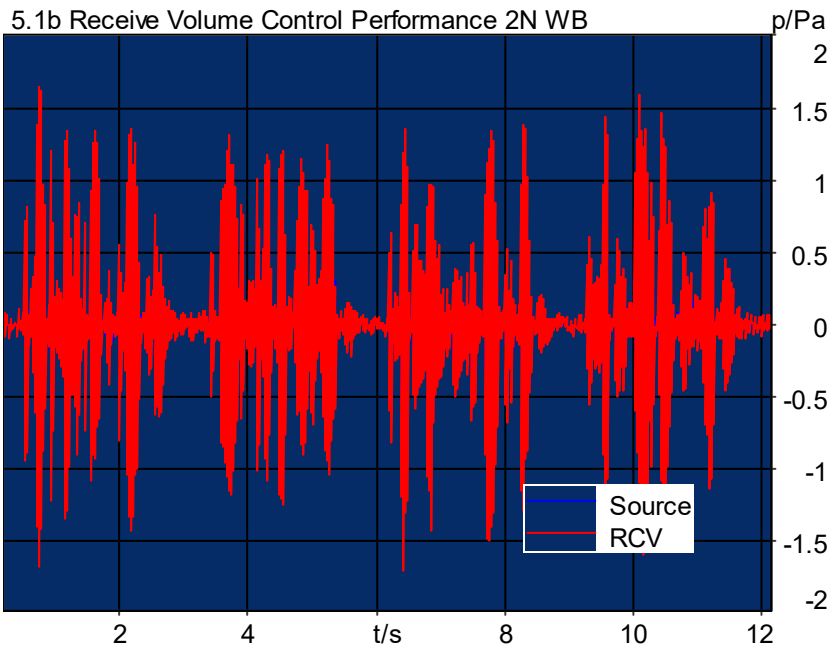
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.74 71	BL-SZ25B0732-B

5.1b Receive Volume Control Performance 2N WB	2099
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.74 dB[SPL]	81.48%	Ok

Ok

2025/12/15 23:52 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 108.1000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(98#)

Measurement Object	BL-SZ25B0732-B71
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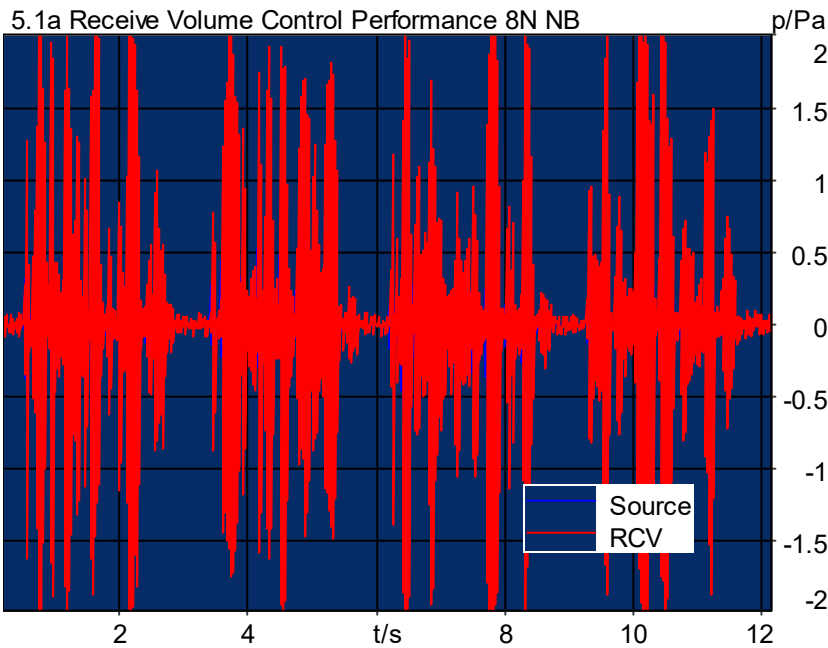
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.80 71	BL-SZ25B0732-B

5.1a Receive Volume Control Performance 8N NB	2103
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband



Channel	Speech level	Activity	
RCV	84.80 dB[SPL]	80.31%	Ok

Ok

2025/12/15 23:54 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 115.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(99#)

Measurement Object	BL-SZ25B0732-B38
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Status Overview

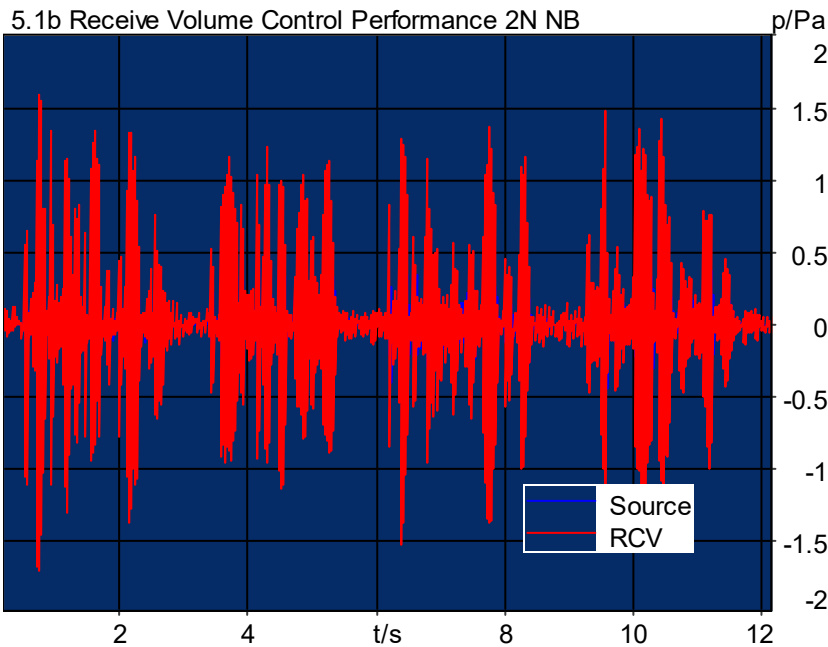
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.96	BL-SZ25B0732-B 38

5.1b Receive Volume Control Performance 2N NB	2107
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.96 dB[SPL]	80.62%	Ok

Ok

2025/12/17 22:33 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 155.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(100#)

Measurement Object	BL-SZ25B0732-B38
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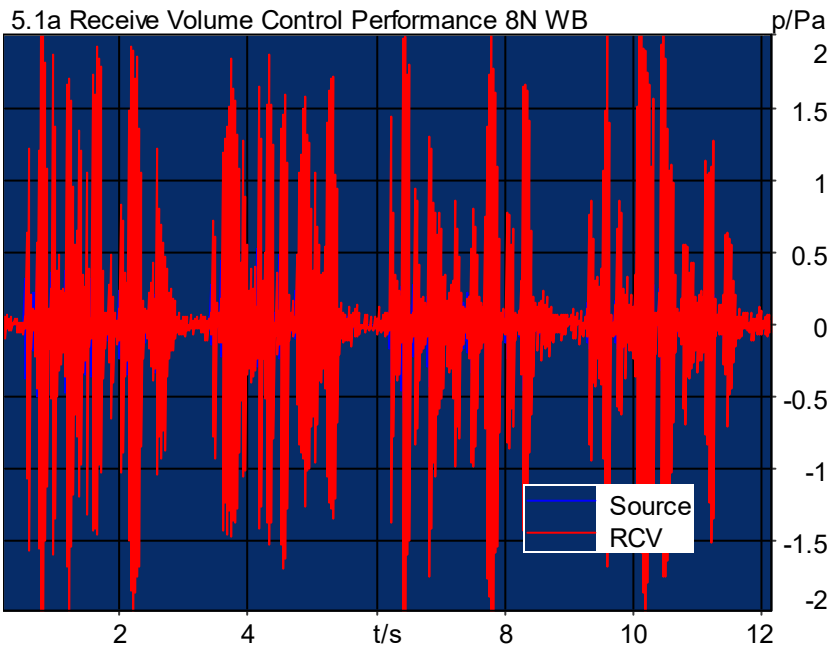
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.02	BL-SZ25B0732-B 38

5.1a Receive Volume Control Performance 8N WB	898
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	84.02 dB[SPL]	80.65%	Ok

Ok

2025/12/17 22:35 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 104.4000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(101#)

Measurement Object	BL-SZ25B0732-B41
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Status Overview

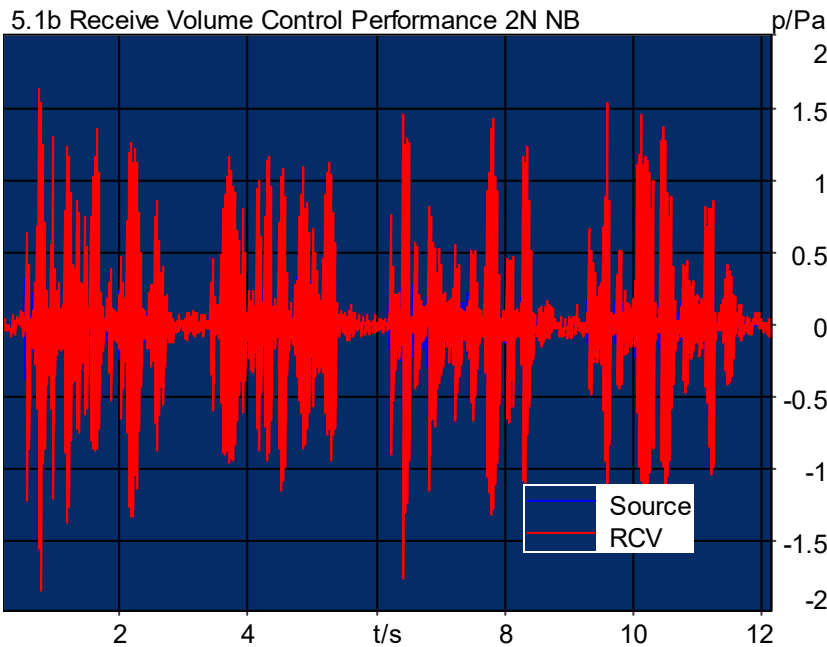
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.36	BL-SZ25B0732-B 41

5.1b Receive Volume Control Performance 2N NB	2115
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.36 dB[SPL]	80.83%	Ok

Ok

2025/12/17 22:40 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 110.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(102#)

Measurement Object	BL-SZ25B0732-B41
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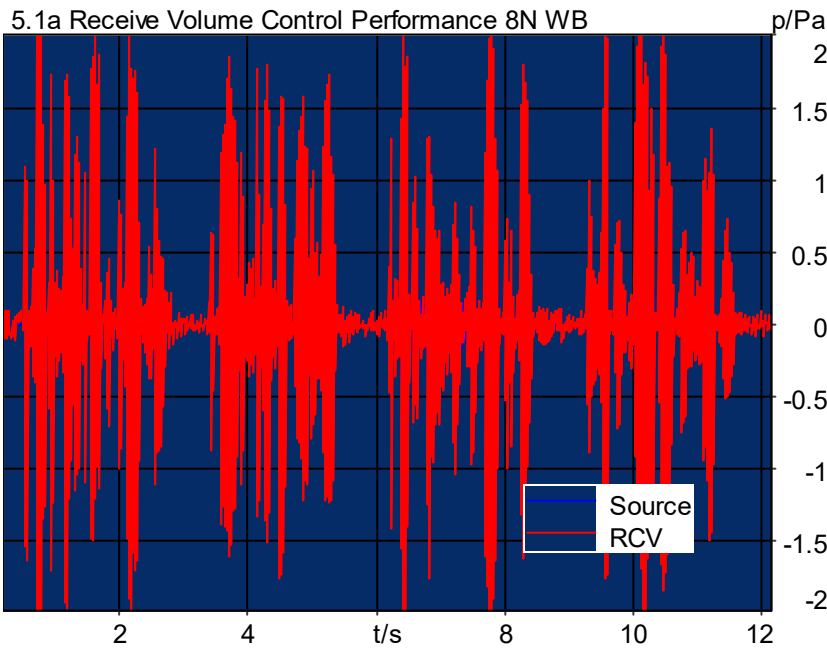
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	83.85 41	BL-SZ25B0732-B 41

5.1a Receive Volume Control Performance 8N WB	2119
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	83.85 dB[SPL]	80.50%	Ok

Ok

2025/12/17 22:38 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 122.4000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(103#)

Measurement Object	BL-SZ25B0732-B48
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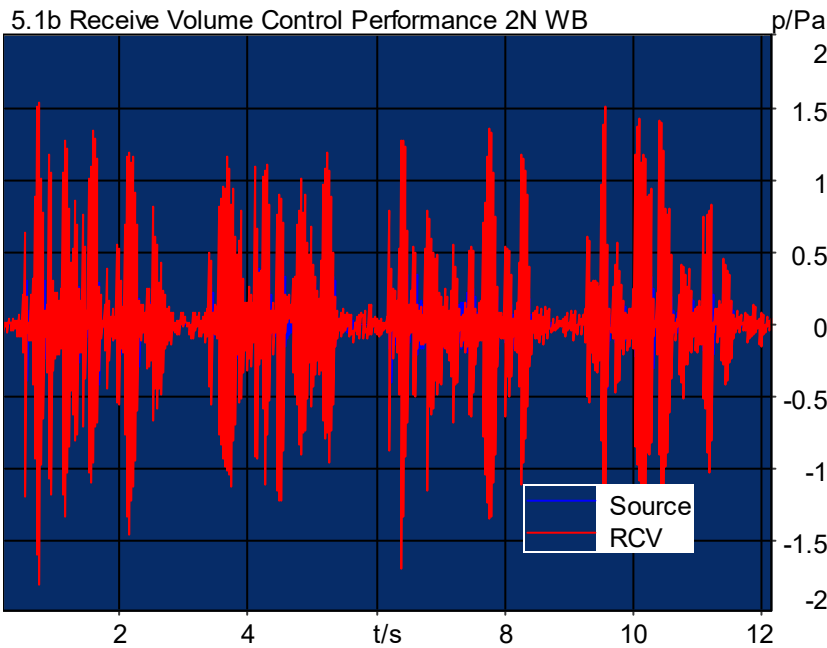
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.17 48	BL-SZ25B0732-B

5.1b Receive Volume Control Performance 2N WB	2123
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	80.17 dB[SPL]	80.84%	Ok

Ok

2025/12/17 22:52 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 123.0000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(104#)

Measurement Object	BL-SZ25B0732-B48
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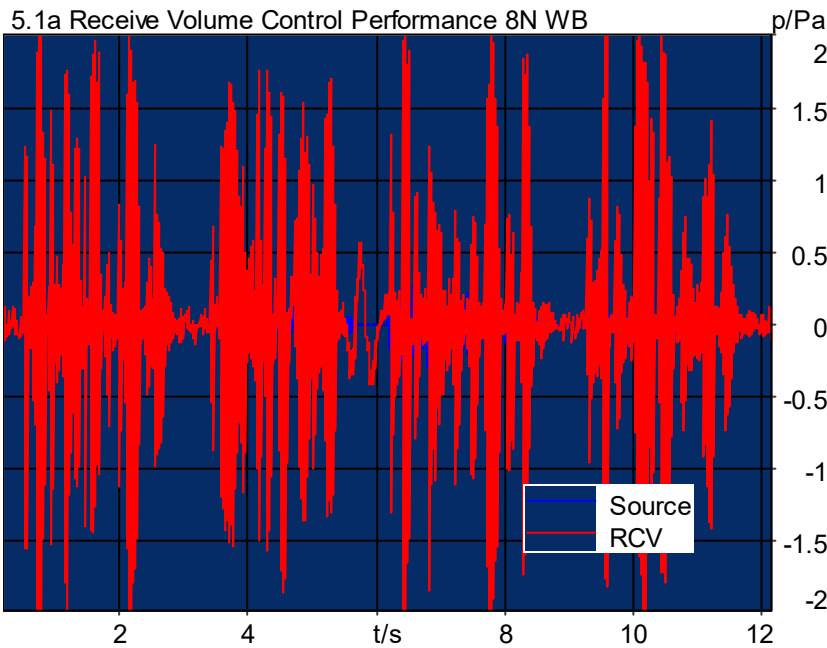
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.0748	BL-SZ25B0732-B48

5.1a Receive Volume Control Performance 8N WB	2127
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	84.07 dB[SPL]	80.76%	Ok

Ok

2025/12/17 22:44 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 119.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(105#)

Measurement Object	BL-SZ25B0732-N2
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Status Overview

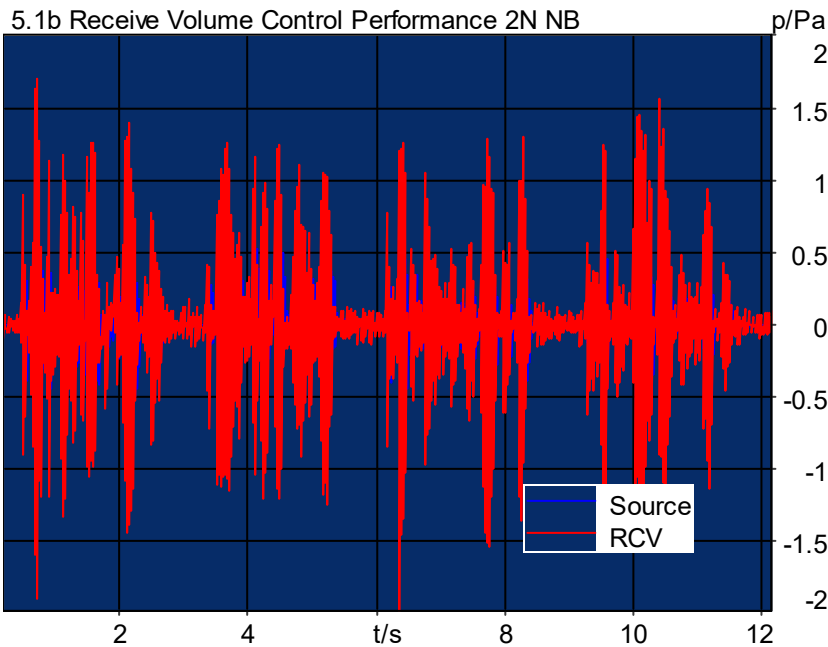
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.37	BL-SZ25B0732- N2

5.1b Receive Volume Control Performance 2N NB	2131
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.37 dB[SPL]	80.59%	Ok

Ok

2025/12/17 9:43 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 153.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(106#)

Measurement Object	BL-SZ25B0732-N2
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Status Overview

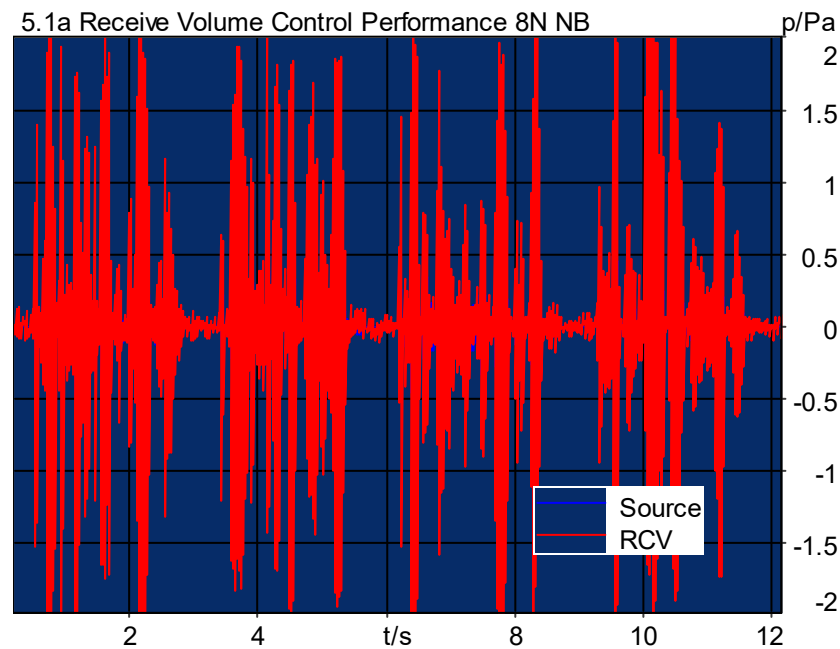
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.49	BL-SZ25B0732-N2

5.1a Receive Volume Control Performance 8N NB	2135
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.49 dB[SPL]	80.47%	Ok

Ok

2025/12/17 10:02 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 95.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(107#)

Measurement Object	BL-SZ25B0732-N5
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Status Overview

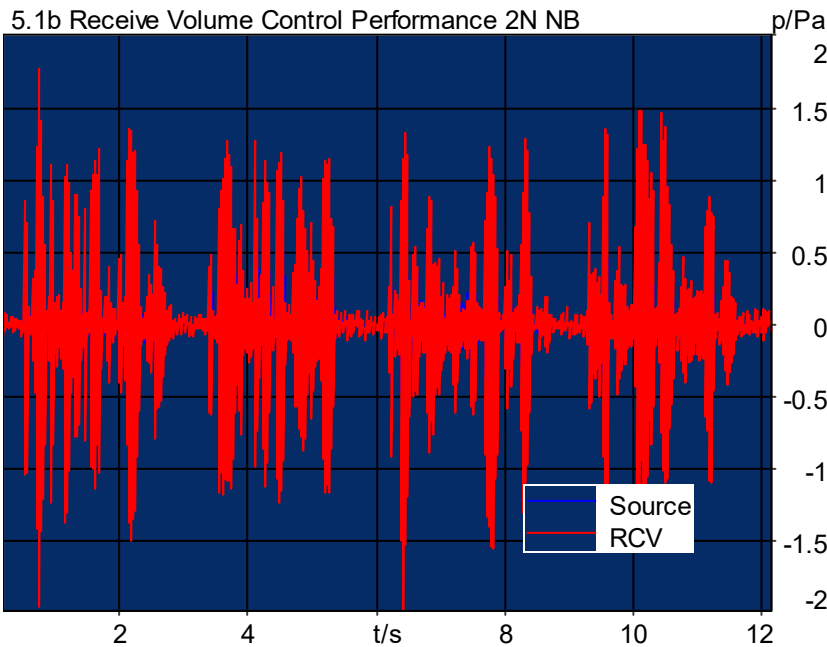
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.37	BL-SZ25B0732- N5

5.1b Receive Volume Control Performance 2N NB	2139
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4; EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.37 dB[SPL]	80.57%	Ok

Ok

2025/12/17 9:46 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 127.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(108#)

Measurement Object	BL-SZ25B0732-N5
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Status Overview

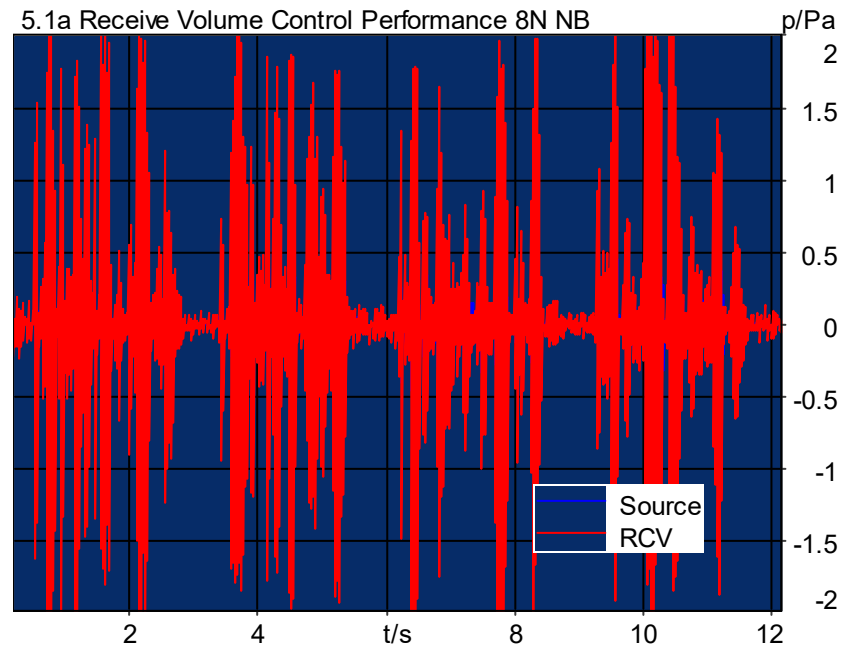
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.51	BL-SZ25B0732- N5

5.1a Receive Volume Control Performance 8N NB	2143
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.51 dB[SPL]	80.30%	Ok

Ok

2025/12/17 9:56 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 110.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(109#)

Measurement Object	BL-SZ25B0732-N7
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Status Overview

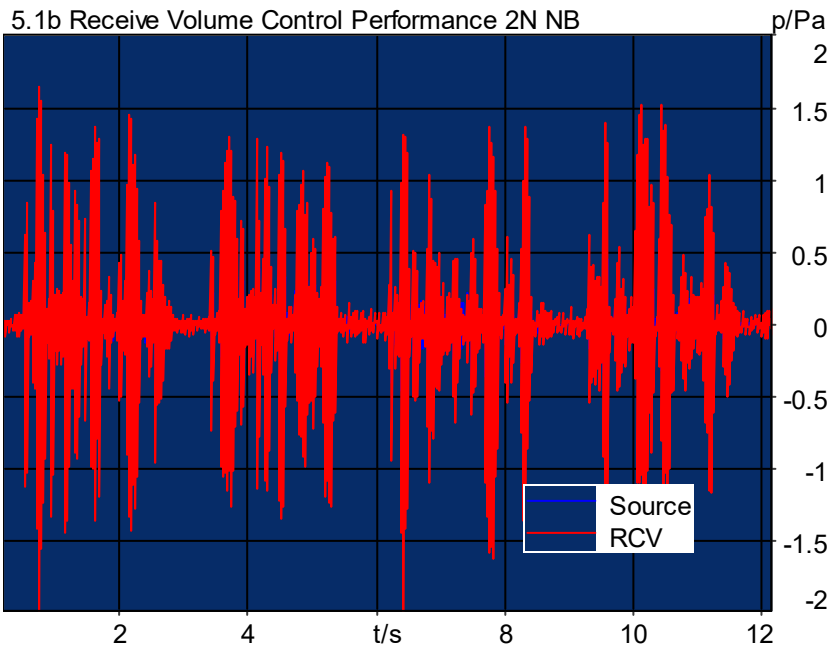
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.61	BL-SZ25B0732- N7

5.1b Receive Volume Control Performance 2N NB	2147
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.61 dB[SPL]	80.49%	Ok

Ok

2025/12/16 21:29 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 108.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(110#)

Measurement Object	BL-SZ25B0732-N7
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Status Overview

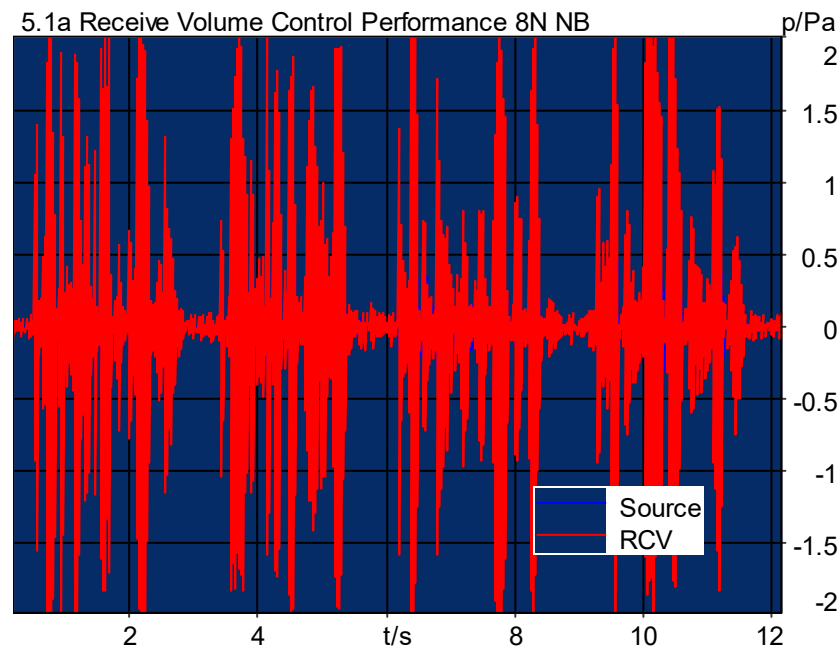
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.61	BL-SZ25B0732- N7

5.1a Receive Volume Control Performance 8N NB	2151
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.61 dB[SPL]	80.38%	Ok

Ok

2025/12/16 21:23 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 145.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(111#)

Measurement Object	BL-SZ25B0732-N12
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Status Overview

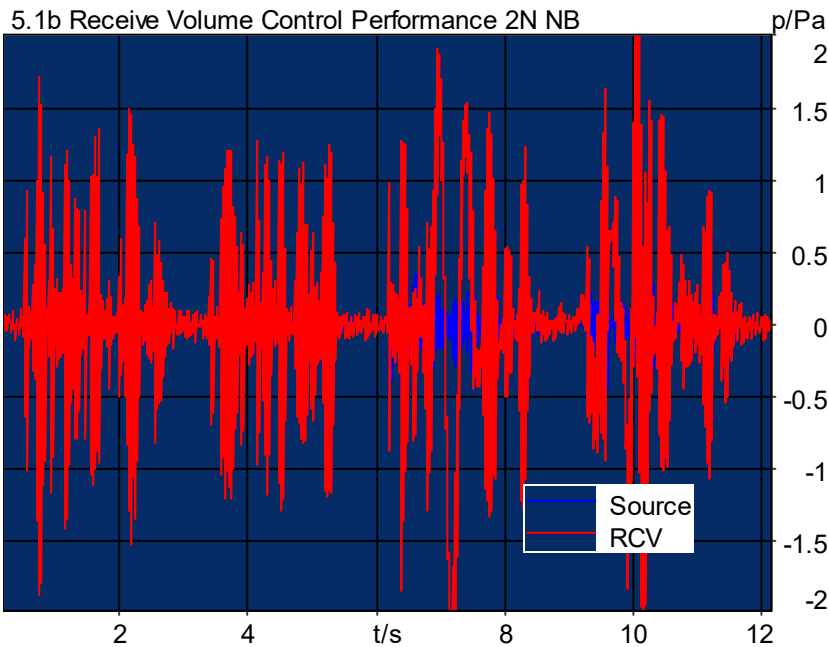
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.35	BL-SZ25B0732-N 12

5.1b Receive Volume Control Performance 2N NB	2155
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.35 dB[SPL]	80.66%	Ok

Ok

2025/12/16 22:44 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 138.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(112#)

Measurement Object	BL-SZ25B0732-N12
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Status Overview

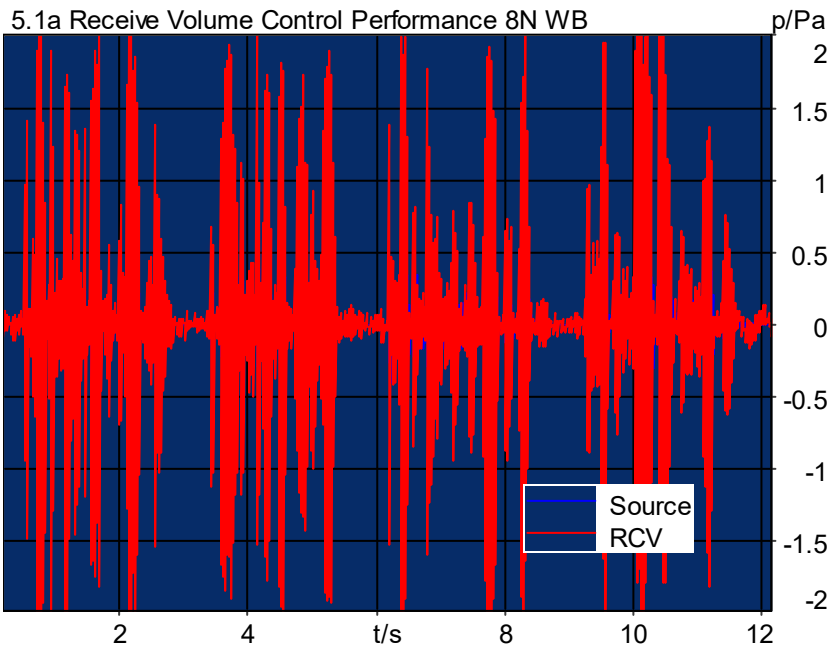
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.48	BL-SZ25B0732-N 12

5.1a Receive Volume Control Performance 8N WB	2159
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.48 dB[SPL]	80.43%	Ok

Ok

2025/12/16 22:58 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 137.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(113#)

Measurement Object	BL-SZ25B0732-N25
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Status Overview

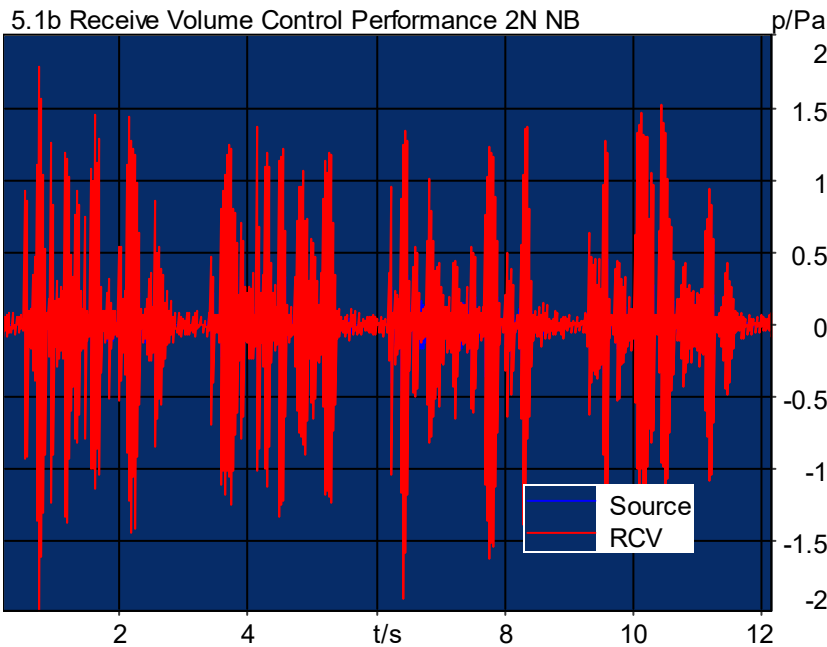
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.70	BL-SZ25B0732-N 25

5.1b Receive Volume Control Performance 2N NB	2163
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.70 dB[SPL]	80.46%	Ok

Ok

2025/12/16 22:07 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 115.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(114#)

Measurement Object	BL-SZ25B0732-N25
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Status Overview

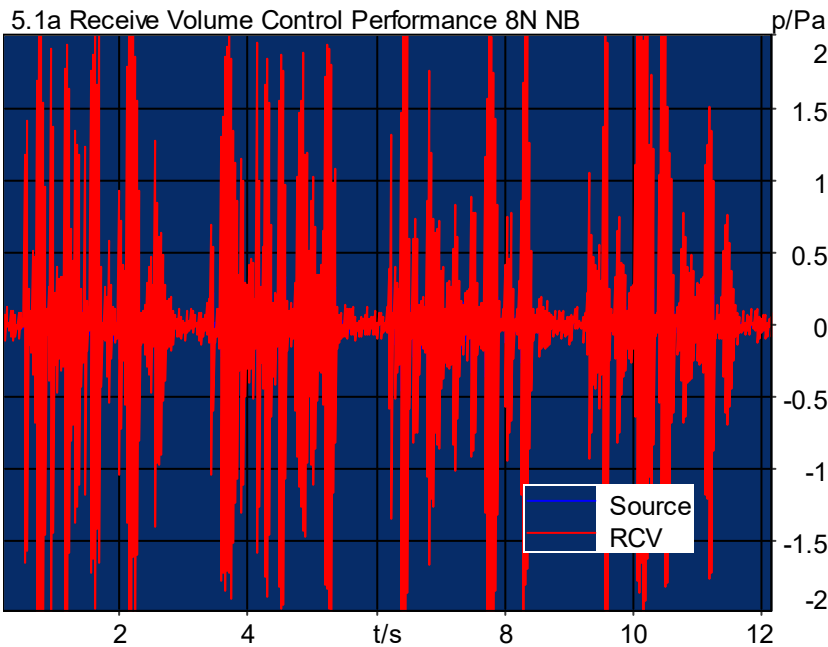
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.72	BL-SZ25B0732-N 25

5.1a Receive Volume Control Performance 8N NB	2167
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.72 dB[SPL]	80.55%	Ok

Ok

2025/12/16 22:01 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 112.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(115#)

Measurement Object	BL-SZ25B0732-n66
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Status Overview

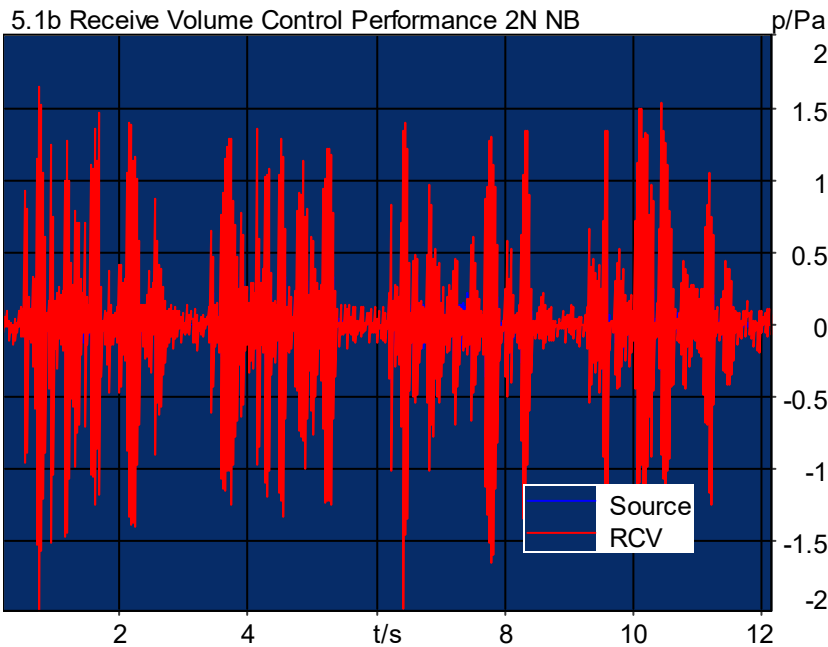
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.63	BL-SZ25B0732-n 66

5.1b Receive Volume Control Performance 2N NB	2171
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.63 dB[SPL]	80.31%	Ok

Ok

2025/12/06 9:25 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 128.2000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(116#)

Measurement Object	BL-SZ25B0732-n66
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Status Overview

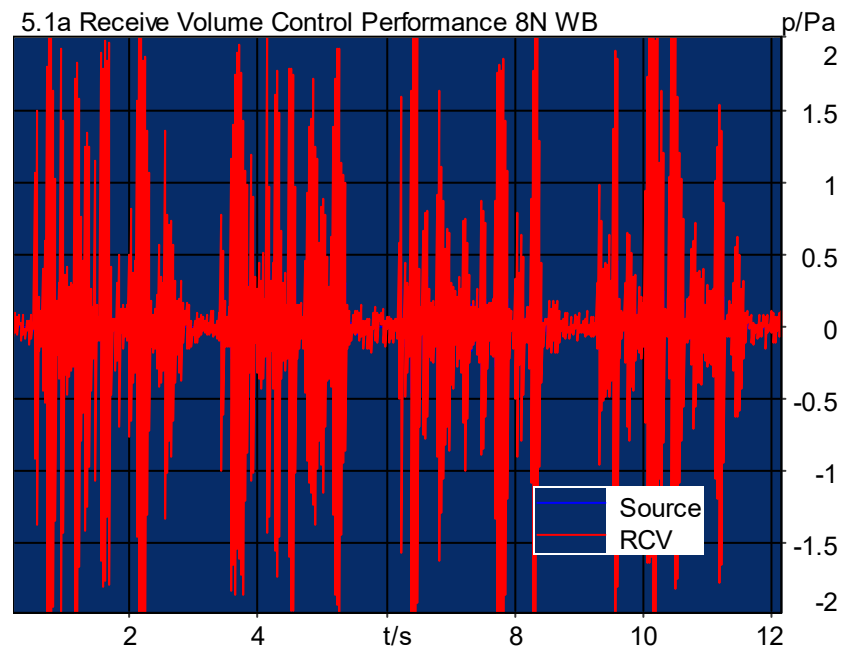
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.47	BL-SZ25B0732-n66

5.1a Receive Volume Control Performance 8N WB	868
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.47 dB[SPL]	80.31%	Ok

Ok

2025/12/06 10:32 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 130.8000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(117#)

Measurement Object	BL-SZ25B0732-N71
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Status Overview

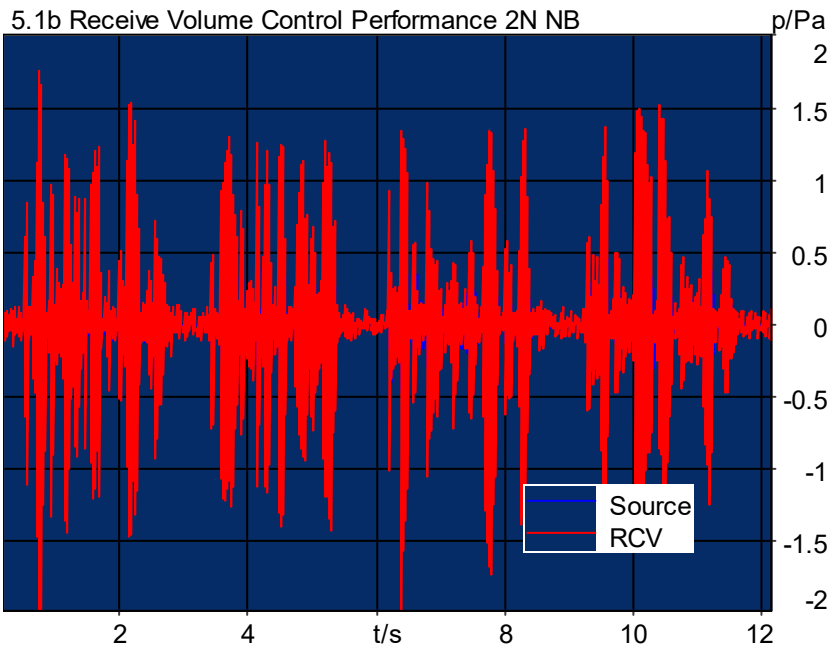
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.93 71	BL-SZ25B0732-N

5.1b Receive Volume Control Performance 2N NB	2179
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.93 dB[SPL]	80.59%	Ok

Ok

2025/12/17 0:56 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 134.3000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(118#)

Measurement Object	BL-SZ25B0732-N71
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Status Overview

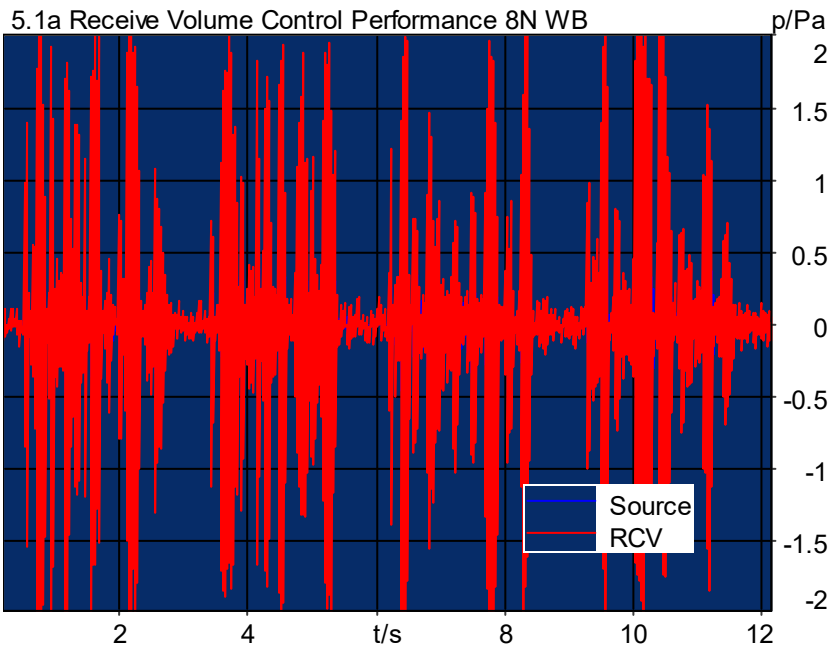
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.63 71	BL-SZ25B0732-N

5.1a Receive Volume Control Performance 8N WB	2183
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.63 dB[SPL]	80.40%	Ok

Ok

2025/12/17 1:09 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 140.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(119#)

Measurement Object	BL-SZ25B0732-N38
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Status Overview

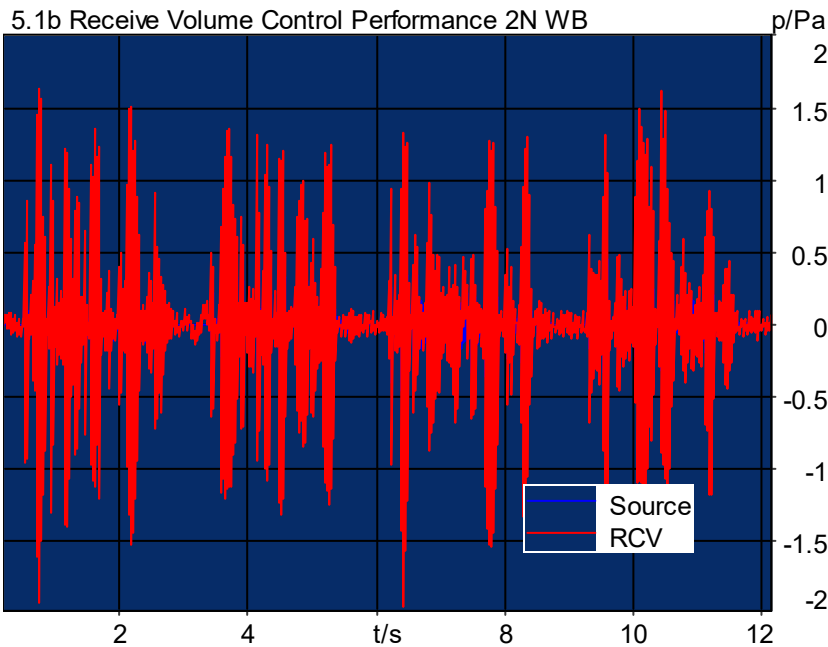
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.60	BL-SZ25B0732-N 38

5.1b Receive Volume Control Performance 2N WB	2187
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.60 dB[SPL]	80.40%	Ok

Ok

2025/12/16 19:37 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 106.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(120#)

Measurement Object	BL-SZ25B0732-N38
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Status Overview

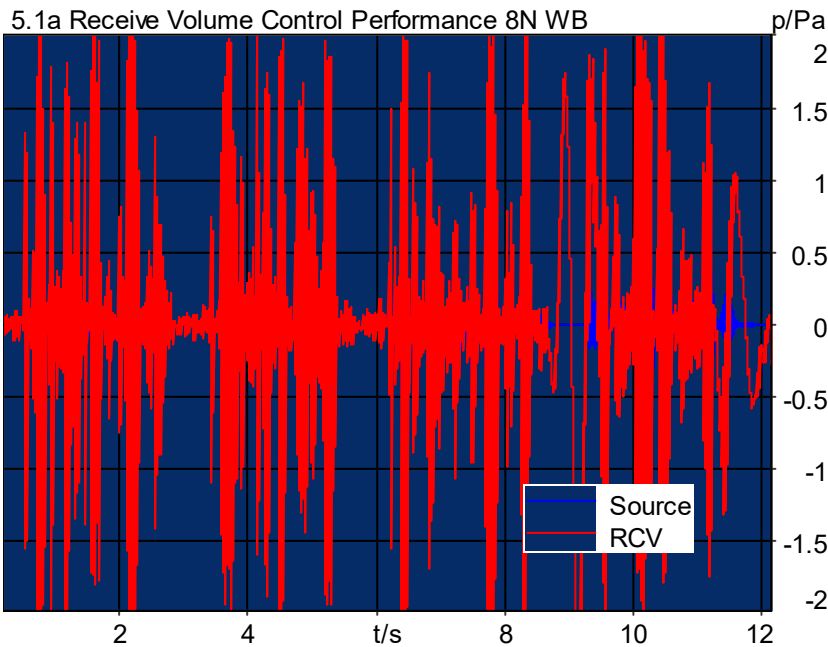
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	84.64	BL-SZ25B0732-N38

5.1a Receive Volume Control Performance 8N WB	2191
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	84.64 dB[SPL]	80.41%	Ok

Ok

2025/12/16 19:28 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 123.7000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(121#)

Measurement Object	BL-SZ25B0732-N41-PC3
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Status Overview

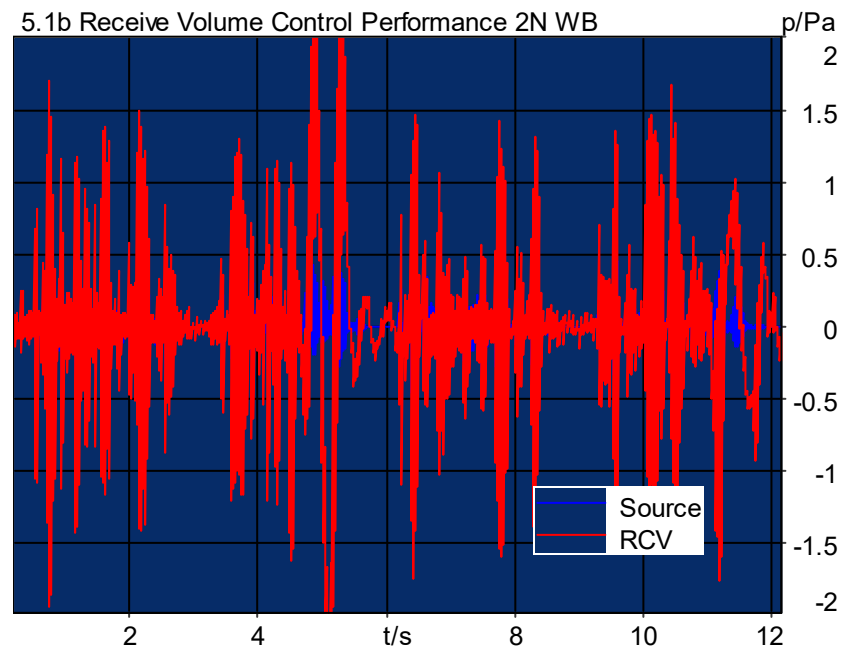
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	80.67	BL-SZ25B0732-N41-PC3

5.1b Receive Volume Control Performance 2N WB	2195
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	80.67 dB[SPL]	80.35%	Ok

Ok

2025/12/16 20:21 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 89.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(122#)

Measurement Object	BL-SZ25B0732-N41-PC3
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Status Overview

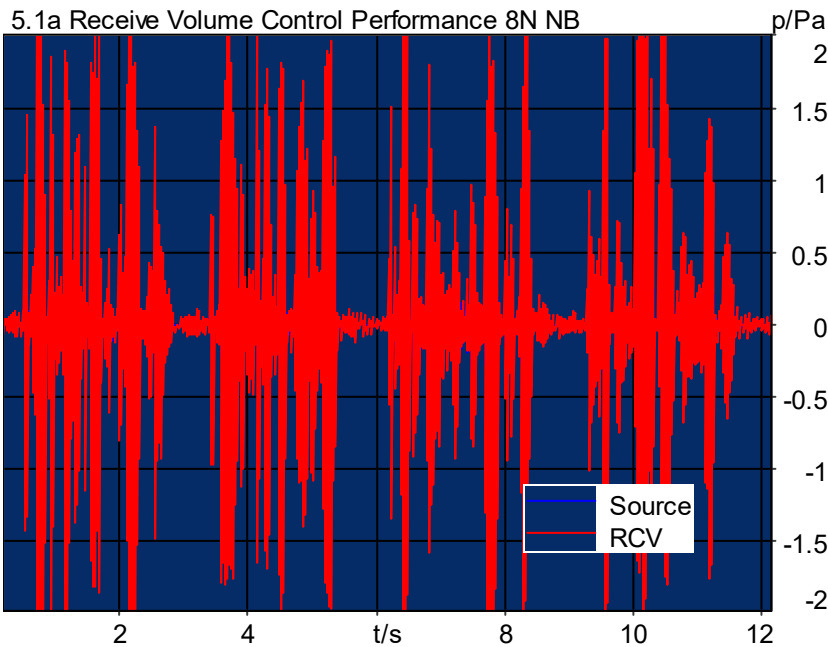
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.50	BL-SZ25B0732-N41-PC3

5.1a Receive Volume Control Performance 8N NB	2199
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.50 dB[SPL]	80.35%	Ok

Ok

2025/12/16 20:06 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 101.9000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(123#)

Measurement Object	BL-SZ25B0732-N48
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Status Overview

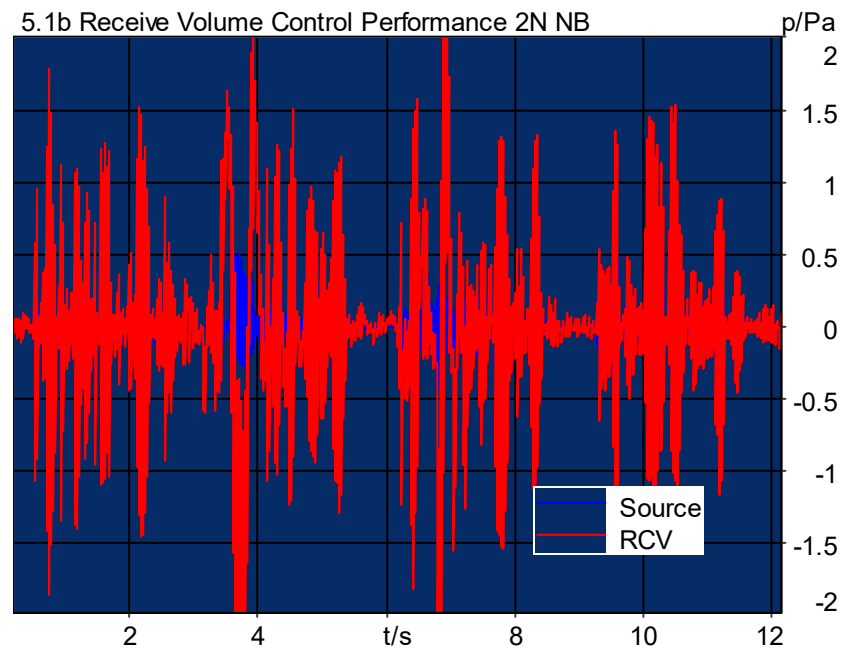
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.58	BL-SZ25B0732-N 48

5.1b Receive Volume Control Performance 2N NB	2203
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.58 dB[SPL]	80.38%	Ok

Ok

2025/12/16 18:39 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 96.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(124#)

Measurement Object	BL-SZ25B0732-N48
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Status Overview

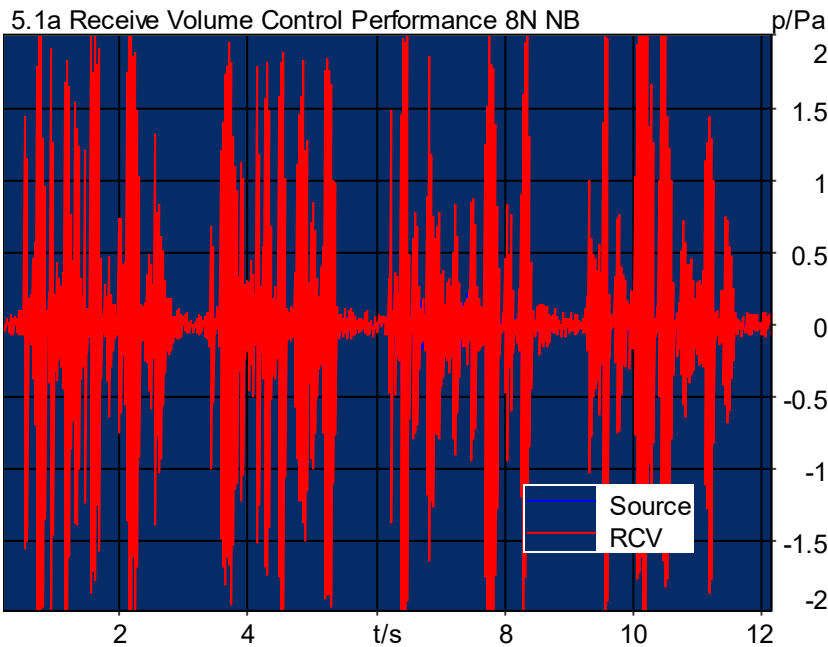
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.64 48	BL-SZ25B0732-N 48

5.1a Receive Volume Control Performance 8N NB	2207
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.64 dB[SPL]	80.41%	Ok

Ok

2025/12/16 18:32 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 114.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(125#)

Measurement Object	BL-SZ25B0732-N77
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Status Overview

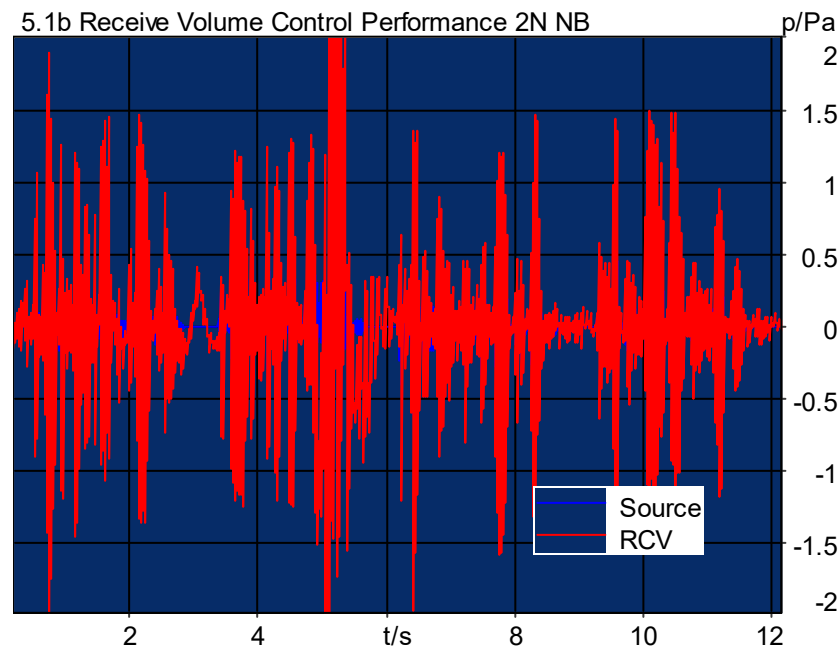
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	80.67 77	BL-SZ25B0732-N

5.1b Receive Volume Control Performance 2N NB	2211
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	80.67 dB[SPL]	80.41%	Ok

Ok

2025/12/16 18:01 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 101.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(126#)

Measurement Object	BL-SZ25B0732-N77
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Status Overview

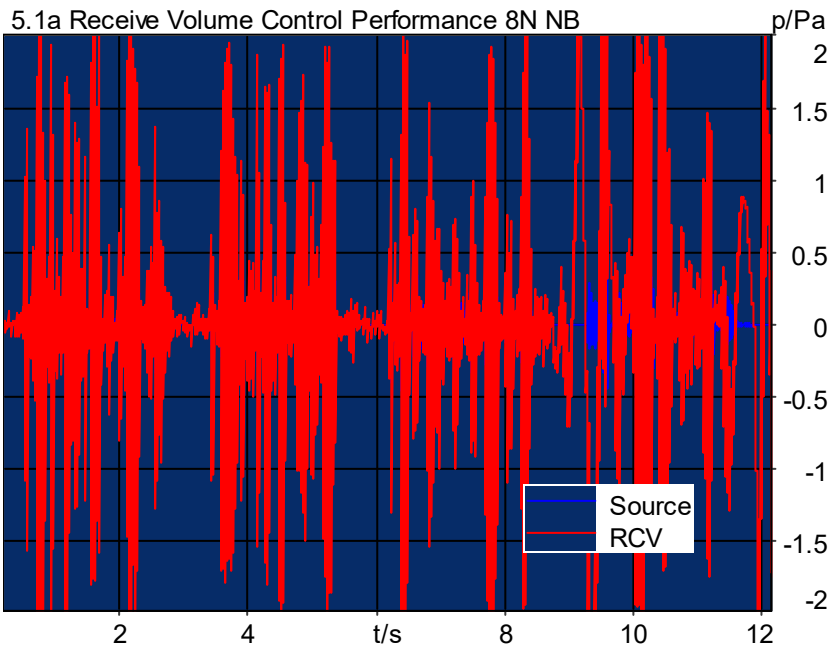
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	84.56 77	BL-SZ25B0732-N

5.1a Receive Volume Control Performance 8N NB	2215
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	84.56 dB[SPL]	80.41%	Ok

Ok

2025/12/16 17:54 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 139.5000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(127#)

Measurement Object	BL-SZ25 B0732-wifi2.4g
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Status Overview

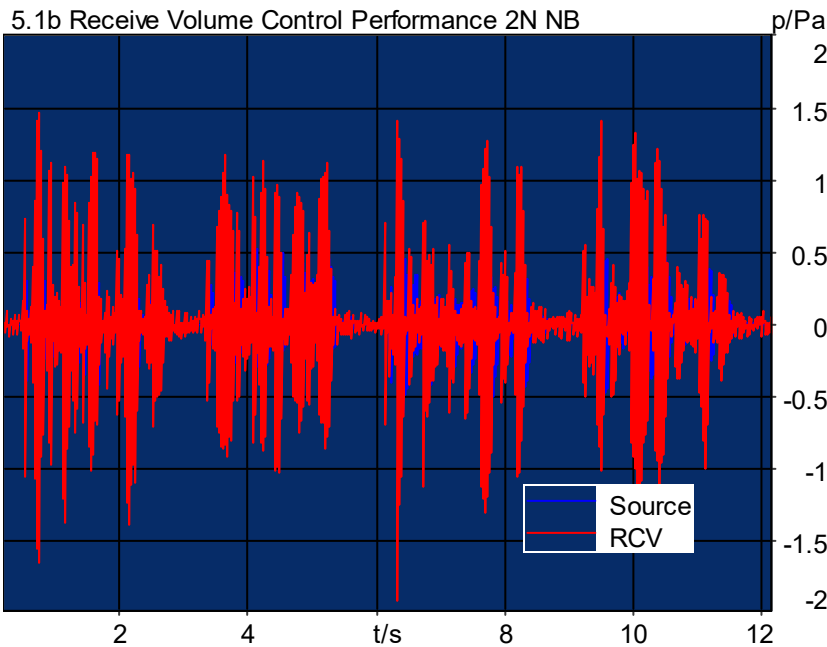
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.35	BL-SZ25 B0732-wifi2.4g

5.1b Receive Volume Control Performance 2N NB	2219
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.35 dB[SPL]	80.92%	Ok

Ok

2025/12/17 15:37 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 224.6000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(128#)

Measurement Object	BL-SZ25 B0732-wifi2.4g
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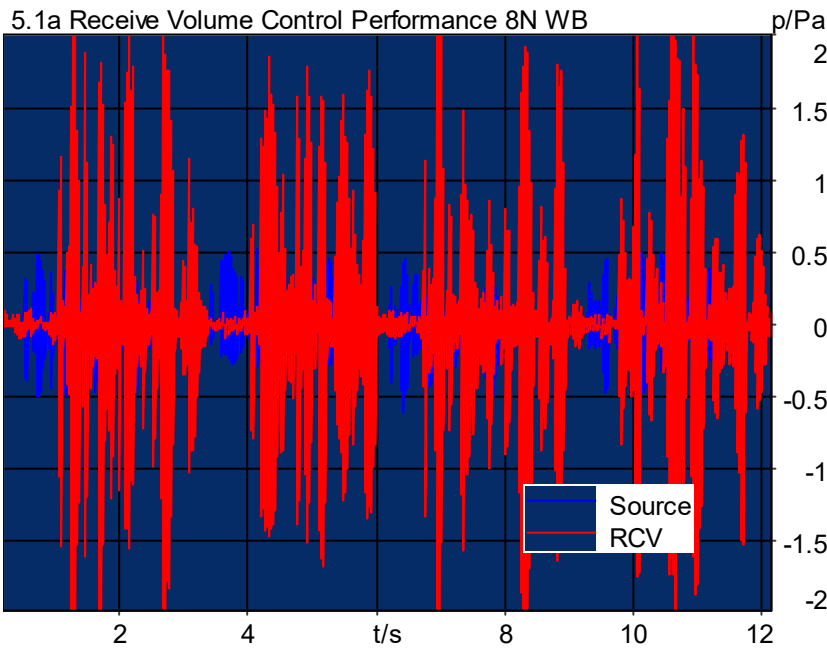
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	83.78	BL-SZ25 B0732-wifi2.4g

5.1a Receive Volume Control Performance 8N WB	2223
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband



Channel	Speech level	Activity	
RCV	83.78 dB[SPL]	79.51%	Ok

Ok

2025/12/17 15:54 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))

Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 106.9000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(129#)

Measurement Object	BL-SZ25B0732-wifi5.2G
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Status Overview

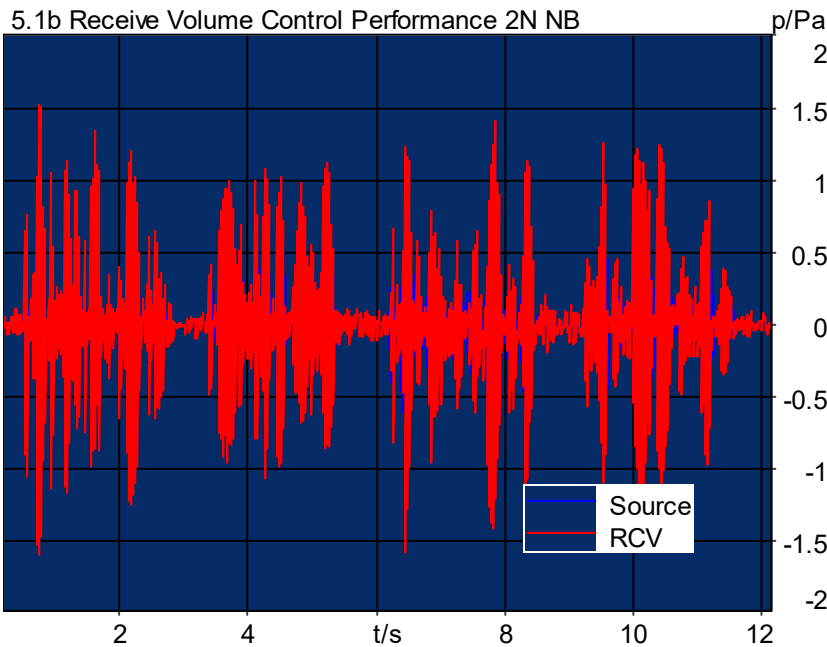
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.33	BL-SZ25B0732-wifi5 .2G

5.1b Receive Volume Control Performance 2N NB	2227
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.33 dB[SPL]	80.56%	Ok

Ok

2025/12/17 18:46 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 168.1000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(130#)

Measurement Object	BL-SZ25B0732-wifi5.2G
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Status Overview

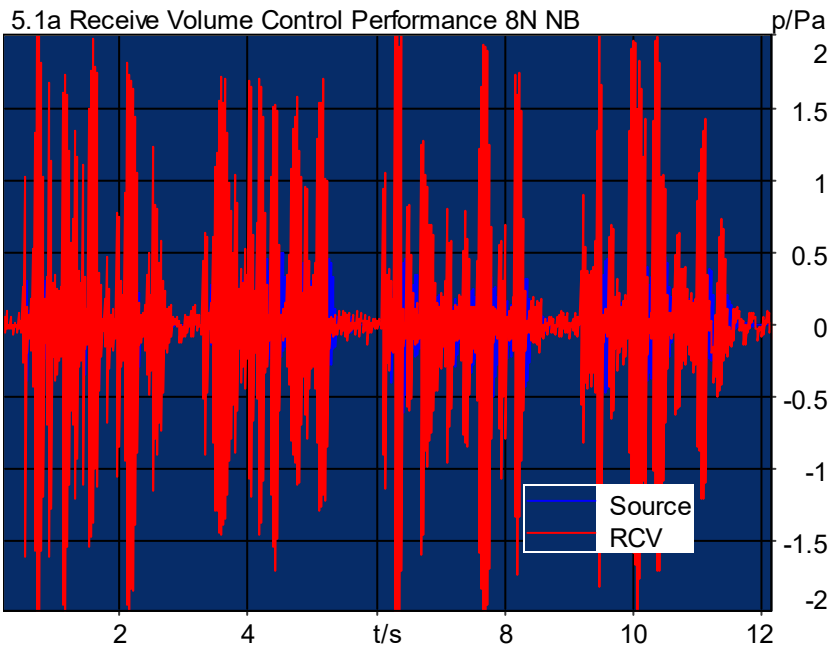
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.47	BL-SZ25B0732-wifi 5.2G

5.1a Receive Volume Control Performance 8N NB	2231
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	83.47 dB[SPL]	80.34%	Ok

Ok

2025/12/17 18:53 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 220.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(131#)

Measurement Object	BL-SZ25B0732-WIIF5.3G
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Status Overview

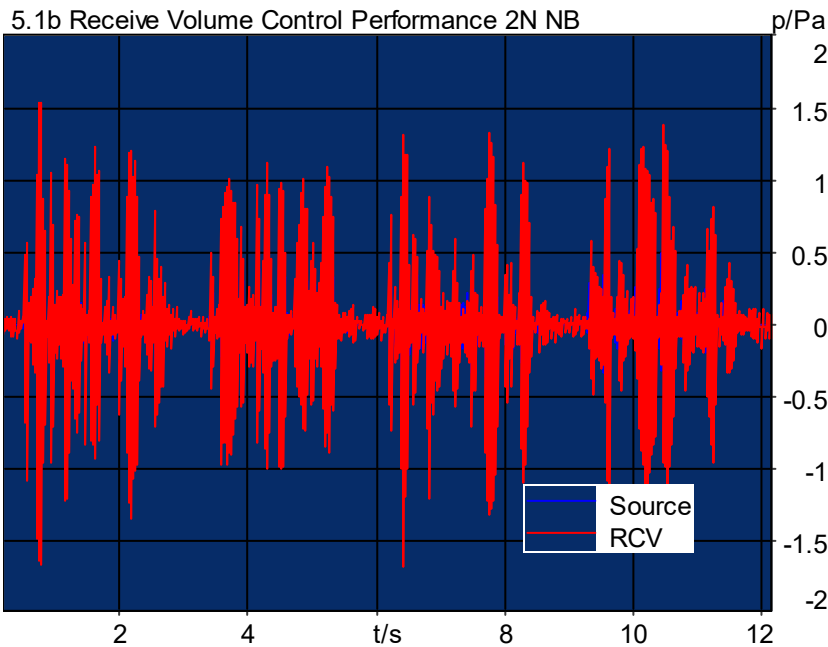
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.58	BL-SZ25B0732-WIIF 5.3G

5.1b Receive Volume Control Performance 2N NB	2235
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.58 dB[SPL]	80.49%	Ok

Ok

2025/12/17 18:41 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 136.0000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(132#)

Measurement Object	BL-SZ25B0732-WIIF5.3G
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Status Overview

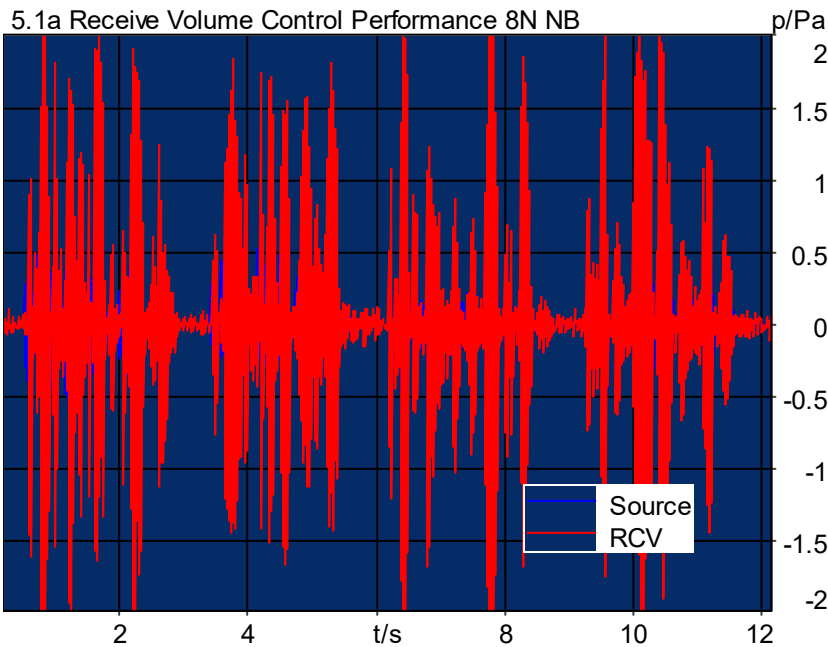
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.66	BL-SZ25B0732-WIIF 5.3G

5.1a Receive Volume Control Performance 8N NB	2239
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	83.66 dB[SPL]	80.52%	Ok

Ok

2025/12/17 18:59 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 132.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(133#)

Measurement Object	BL-SZ25B0732-WiFi5.6G
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Status Overview

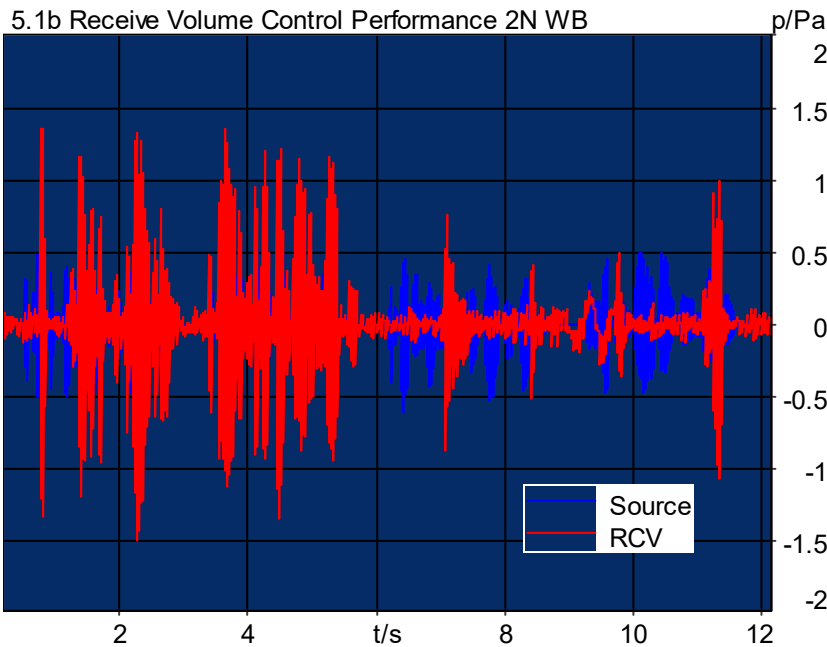
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N WB	Ok	Speech Level [dB[SPL]]	79.32	BL-SZ25B0732-WiFi 5.6G

5.1b Receive Volume Control Performance 2N WB	2243
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5.1b Receive Volume Control Performance 2N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	79.32 dB[SPL]	55.18%	Ok

Ok

2025/12/17 18:13 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2)	0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1	0.00 dB
Output ch. 2	0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse	Channel 2		
Range start	200.00 ms	Range length	12000.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Input Filters

FIR Filter	Channel 2	Filename	drp2ff_ieee1652.fft
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Special Features

Show source signal Source ch.2

Compensate delay 169.2000 ms (D_RCV_WB, Delay (Cross) RCV*Source)

Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1	Line	Output Ch.2	Line
Input Ch.1	Microphone	Input Ch.2	Microphone

Measurement Protocol(134#)

Measurement Object	BL-SZ25B0732-WiFi5.6G
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Status Overview

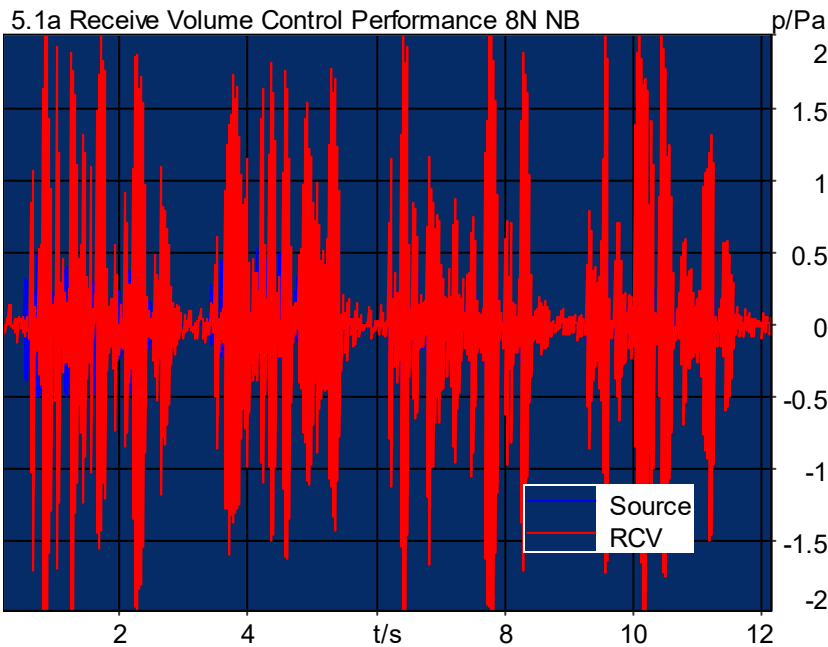
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N NB	Ok	Speech Level [dB[SPL]]	83.58	BL-SZ25B0732-WiFi 5.6G

5.1a Receive Volume Control Performance 8N NB	2247
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5.1a Receive Volume Control Performance 8N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	83.58 dB[SPL]	80.49%	Ok

Ok

2025/12/17 19:05 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 102.8000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(135#)

Measurement Object	BL-SZ25B0732-WiFi5.8G
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Status Overview

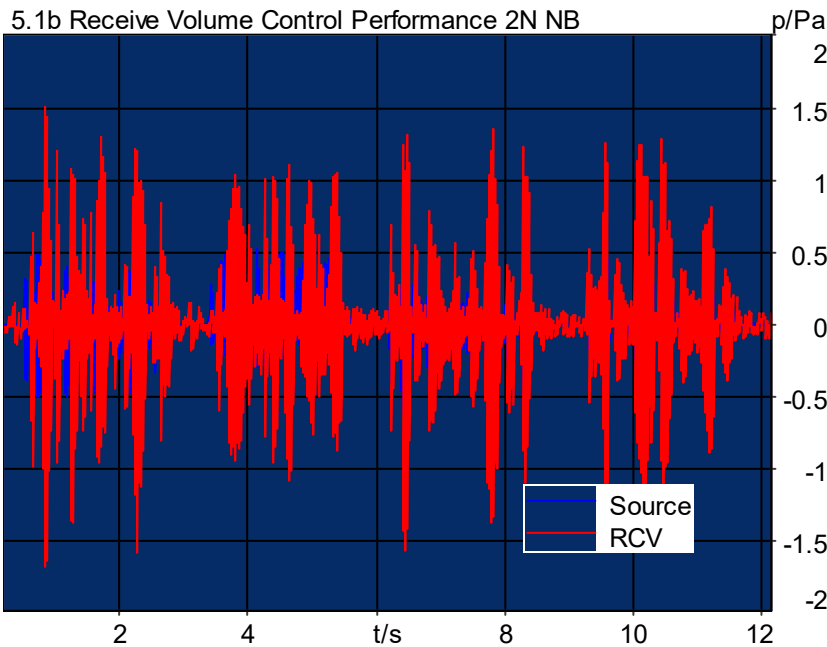
SMD	Status	Single Value Description	Single Value	Object
5.1b Receive Volume Control Performance 2N NB	Ok	Speech Level [dB[SPL]]	79.51	BL-SZ25B0732-WiFi 5.8G

5.1b Receive Volume Control Performance 2N NB	2251
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5.1b Receive Volume Control Performance 2N NB

TIA-5050 (2018-01) \ Measurements \ Narrowband

EVS-NB-24.4



Channel	Speech level	Activity	
RCV	79.51 dB[SPL]	80.30%	Ok

Ok

2025/12/26 18:36 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Narrow Band Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 105.7000 ms (D_RCV_NB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone

Measurement Protocol(136#)

Measurement Object	BL-SZ25B0732-WiFi5.8G
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Status Overview

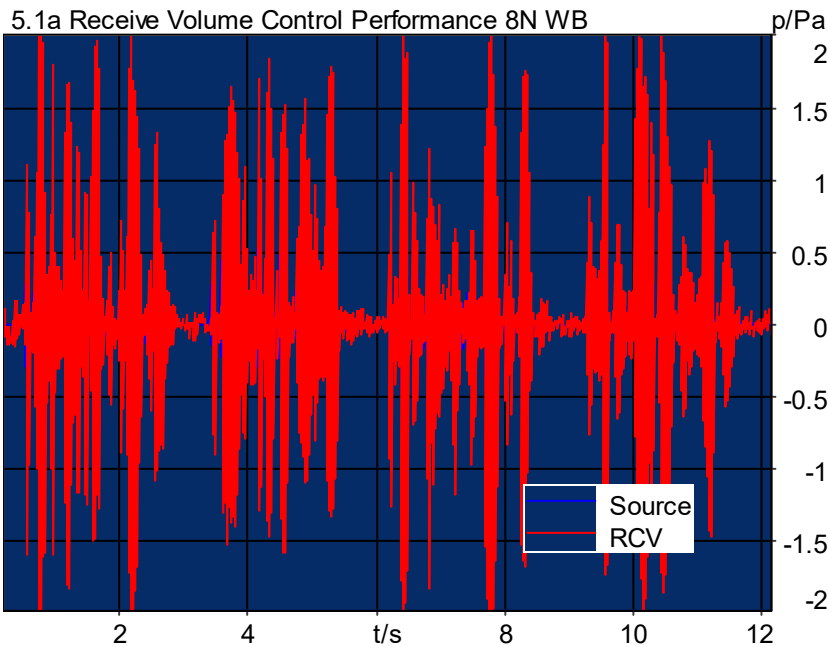
SMD	Status	Single Value Description	Single Value	Object
5.1a Receive Volume Control Performance 8N WB	Ok	Speech Level [dB[SPL]]	83.67	BL-SZ25B0732-WiFi 5.8G

5.1a Receive Volume Control Performance 8N WB	2255
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5.1a Receive Volume Control Performance 8N WB

TIA-5050 (2018-01) \ Measurements \ Wideband

EVS-WB-128



Channel	Speech level	Activity	
RCV	83.67 dB[SPL]	80.58%	Ok

Ok

2025/12/26 19:17 ACQUA 6.2.100

Limits

lower
76.00 dB[SPL]

Meas. Setting DRP

Underlying Standard: TIA-5050 (2018-01)

Database Version: 40_HAC_Suite_Rev03

Calibration

RCV (2) 0.04 dB 2025/12/05 (HATS 1 (HMS II.3))
Output ch. 1 0.00 dB
Output ch. 2 0.00 dB (Radio Tester 1 (CMW500))

Analysis

Analyse Channel 2
Range start 200.00 ms Range length 12000.00 ms
Bandpass filter Super Wideband Margin (15.9dB nom) 15.90 dB

Input Filters

FIR Filter Channel 2 Filename drp2ff_ieee1652.fft

Special Features

Show source signal Source ch.2
Compensate delay 143.6000 ms (D_RCV_WB, Delay (Cross) RCV*Source)
Channels 2

Hardware Config Settings

Used Setting TIA5050

MFE VI Settings

Output Ch.1 Line Output Ch.2 Line
Input Ch.1 Microphone Input Ch.2 Microphone