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Sine Advanced Engineering, Inc. TEST REPORT

SCOPE OF WORK

EMC TESTING – DATA LINK SINE.LINK

REPORT NUMBER

106453342LEX-002

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EMC TEST REPORT (FULL COMPLIANCE)

Report Number: 106453342LEX-002

Project Number: G106453342

Report Issue Date: 1/29/2026

Model(s) Tested: Data Link Sine.link

Standards: FCC Title 47 CFR Part 15.247

Tested by:
Intertek Testing Services NA, Inc.
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Lexington, KY 40510
USA

Client:
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Big Sky, MT 59716
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Report prepared by



David Perry,
EMC Engineer

Report reviewed by



Michael Carlson,
Staff Engineer

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1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 4.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test full name	Result
6	Occupied/DTS Bandwidth, 47 CFR § 15.247(a)(2) (ANSI C63.10 (2020) §6.9.3 and §11.8)	Pass
7	Fundamental Emission Output Power, 47 CFR § 15.247(b) (ANSI C63.10 (2020) §11.9)	Pass
8	Maximum Power Spectral Density, 47 CFR 15.247(e) (ANSI C63.10 (2020) §11.10)	Pass
9	Conducted Spurious Emissions, 47 CFR 15.247(d) (ANSI C63.10 (2020) §11.11)	Pass
10	Radiated Spurious Emissions, 47 CFR 15.247(d) ANSI C63.10 (2020) §6.3 §6.5 and §6.6	Pass
11	Antenna Requirement, 47 CFR § 15.203 (FCC Part 15.203)	Pass



3 Client Information

This product was tested at the request of the following:

Client Information	
Client Name:	Sine Advanced Engineering, Inc.
Address:	140 Sage Hen Rd Big Sky, MT 59716 USA
Contact:	Eric Butcher
Telephone:	2064593600
Email:	ebutcher@sineeng.com
Manufacturer Information	
Manufacturer Name:	A2Z Electronics
Manufacturer Address:	410B Airport Rd Elgin, IL 60123
Telephone:	Chris Cadero
Email:	ccadero@a2zems.com
Manufacturer Information	
Manufacturer Name:	VSE
Manufacturer Address:	9295 Prototype Drive Building C Reno, NV 89521
Telephone:	Erin Orme
Email:	erin@vse.com



4 Description of Equipment under Test and Variant Models

Equipment Under Test	
Product Name	Data Link Sine.link
Model Number	Sine.link
Serial Number	SL02751034
US SKU	FG00035004
Software Used By EUT	v1.7.2-5-g9af0cd8d10c7f309
Receive Date	1/14/2026
Test Start Date	1/14/2026
Test End Date	1/20/2026
Device Received Condition	Good
Test Sample Type	Production
Transmit Band	904MHz – 926MHz LoRa (Chirp Spread Spectrum, CSS)
Nominal DTS Bandwidth	637.4kHz
Antenna Type	Half-wave Dipole with SMA-RP Connector
Antenna Gain ¹	2dBi
Rated Voltage	5VDC
Description of Equipment Under Test (provided by client)	
Data links Sine.link is a secure, anti-jamming radio communication components designed for control and telemetry transmission in various unmanned systems, including UAVs (Unmanned Aerial Vehicles) and UGVs (Unmanned Ground Vehicles).	

4.1 Variant Models:

There were no variant models covered under this evaluation.

¹ This information was provided by the client and may affect compliance. Intertek does not make any claim of compliance for values other than those shown.



5 System Setup and Method

5.1 Method:

Configuration as required by ANSI C63.10 (2020)

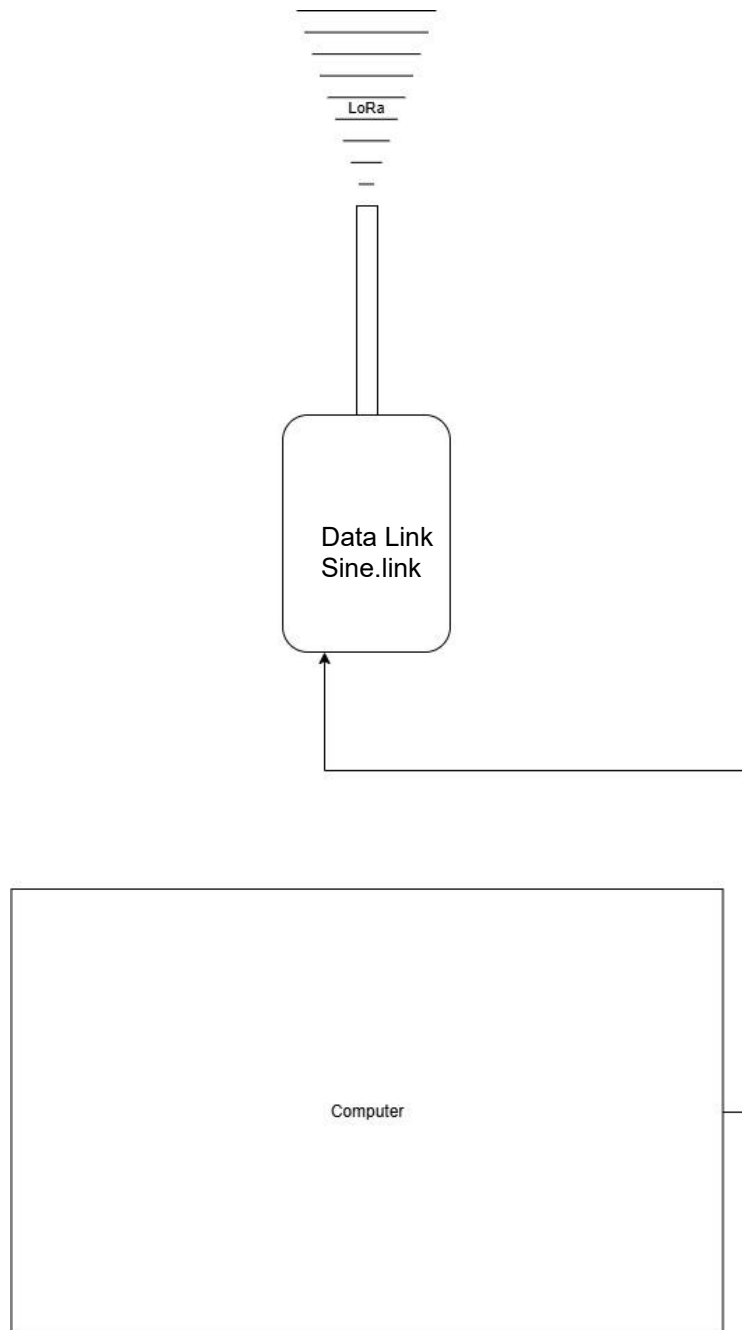
No.	Descriptions of EUT Exercising
1	Device was on and operating normally with radios set to transmit at highest power setting with 100% duty cycle at 904MHz, 915MHz, and 926MHz.

Cables					
QTY	Description	Length (m)	Shielding	Ferrites	Termination
1	USB C	1	No	No	Computer
1	SMA	.2	Yes	No	FSW26

Support Equipment (Accessories)		
Description	Manufacturer	Model Number
Computer	Dell	-

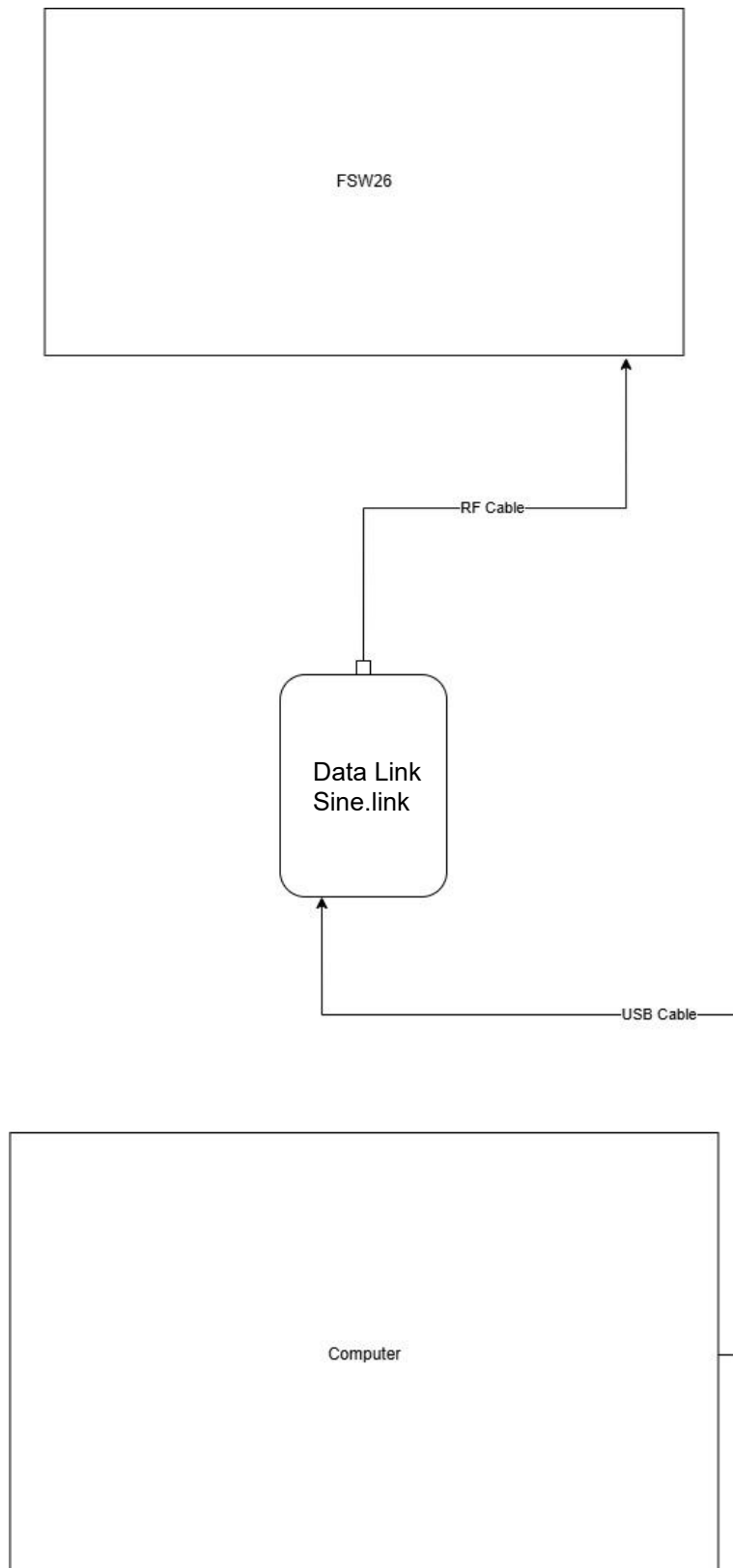


5.2 EUT Block Diagram (Radiated Setup):





5.3 EUT Block Diagram (Conducted Setup):





6 Occupied/DTS Bandwidth

6.1 Test Method:

Tests are performed in accordance with ANSI C63.10 §6.9.3 and §11.8.

6.2 Test Limits:

Title 47 CFR 15.247(a)

- (2) Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.



6.3 Test Equipment Used:

Description	Asset	Manufacturer	Model	Cal Date	Cal Due
Spectrum Analyzer	8305	Rohde & Schwarz	FSW26	9/9/2025	9/9/2026

6.4 Measurement Uncertainty

Description	Expanded Uncertainty (k=2)
Signal Chain Calibration	1.2

No measurement correction based on measurement uncertainty is performed.

6.5 Test Conditions

Test Personnel	Supervising Engineer	Test Date	Ambient Temperature	Relative Humidity	Pressure
David Perry	N/A	1/16/2026	23.7°C	14.4%	973.1mbar

6.6 Test Results:

The sample tested was found to Comply. The 6dB bandwidth was at least 500 kHz.

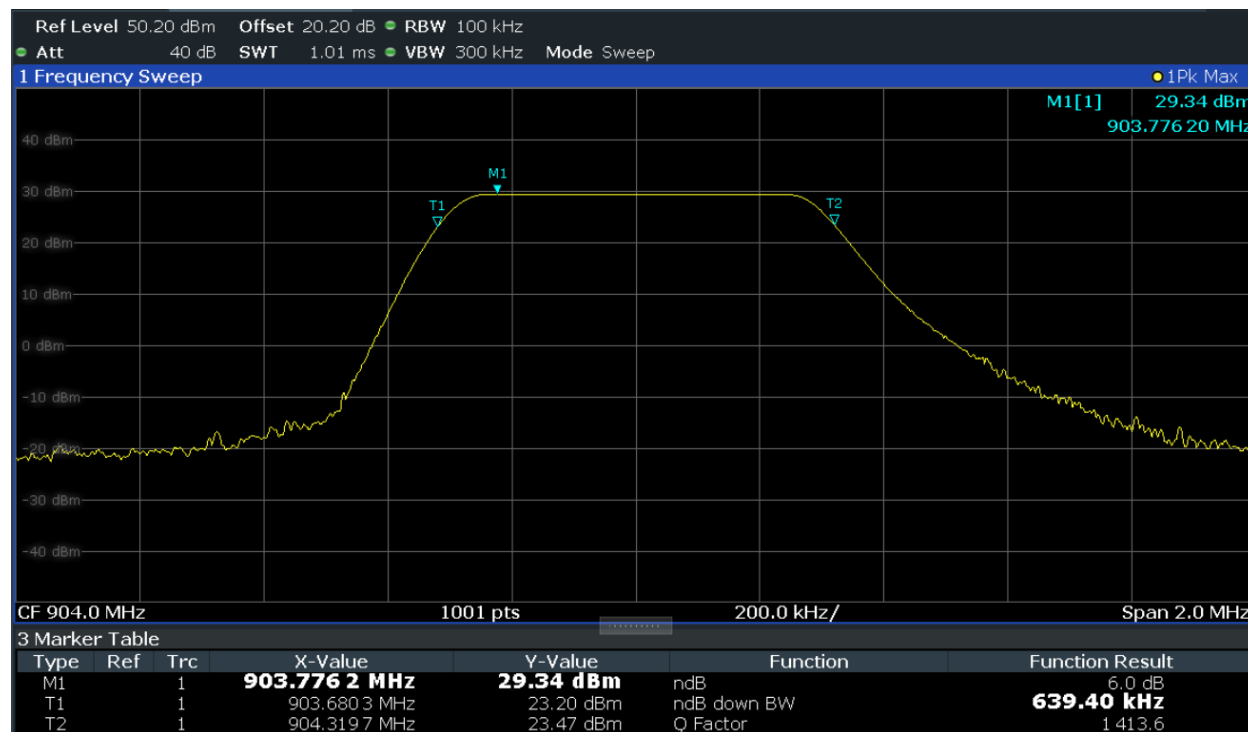
6.7 Test Data:

Frequency (MHz)	6dB Bandwidth (kHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)	Limit (kHz)
904.0	639.4	585.4	516.42	500
915.0	639.4	587.4	517.47	500
926.0	637.4	579.4	514.26	500



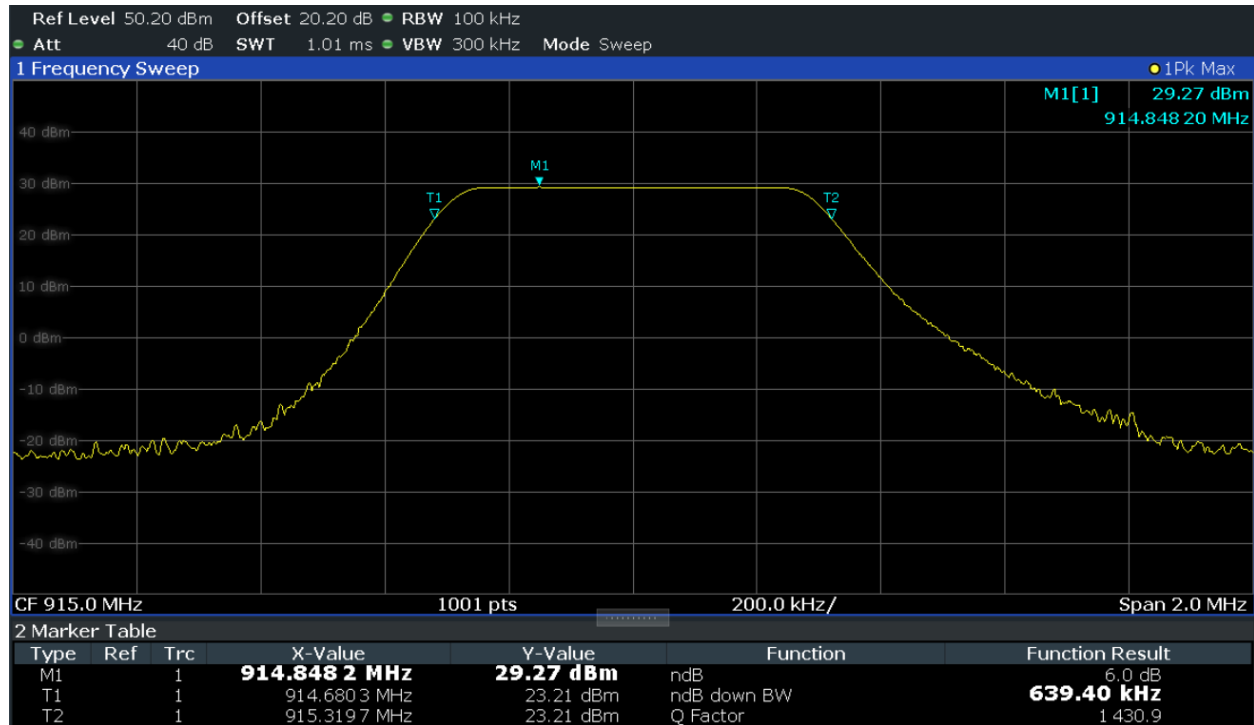
6.8 Test Plots: Occupied Channel Bandwidth (6dB Bandwidth)

6.8.1 Low Channel



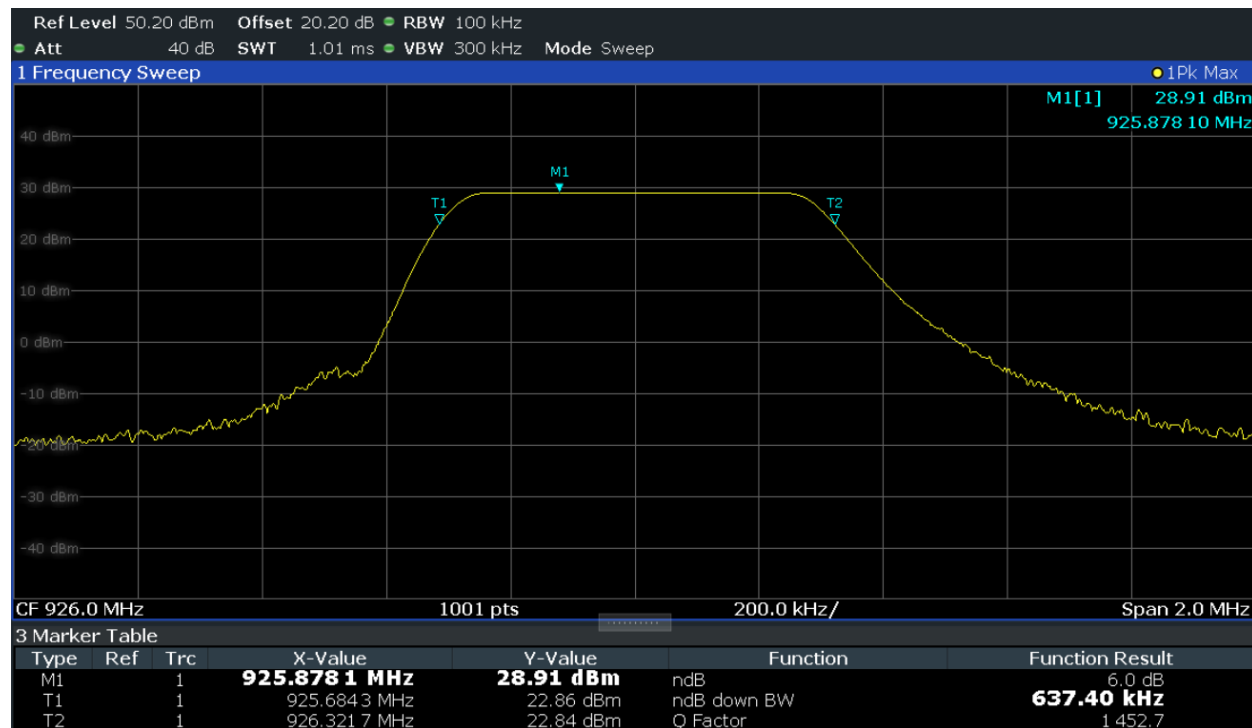


6.8.2 Mid Channel





6.8.3 High Channel





EMC Test Report

6.9 Test Plots: Occupied Channel Bandwidth (20dB Bandwidth)

6.9.1 Low Channel



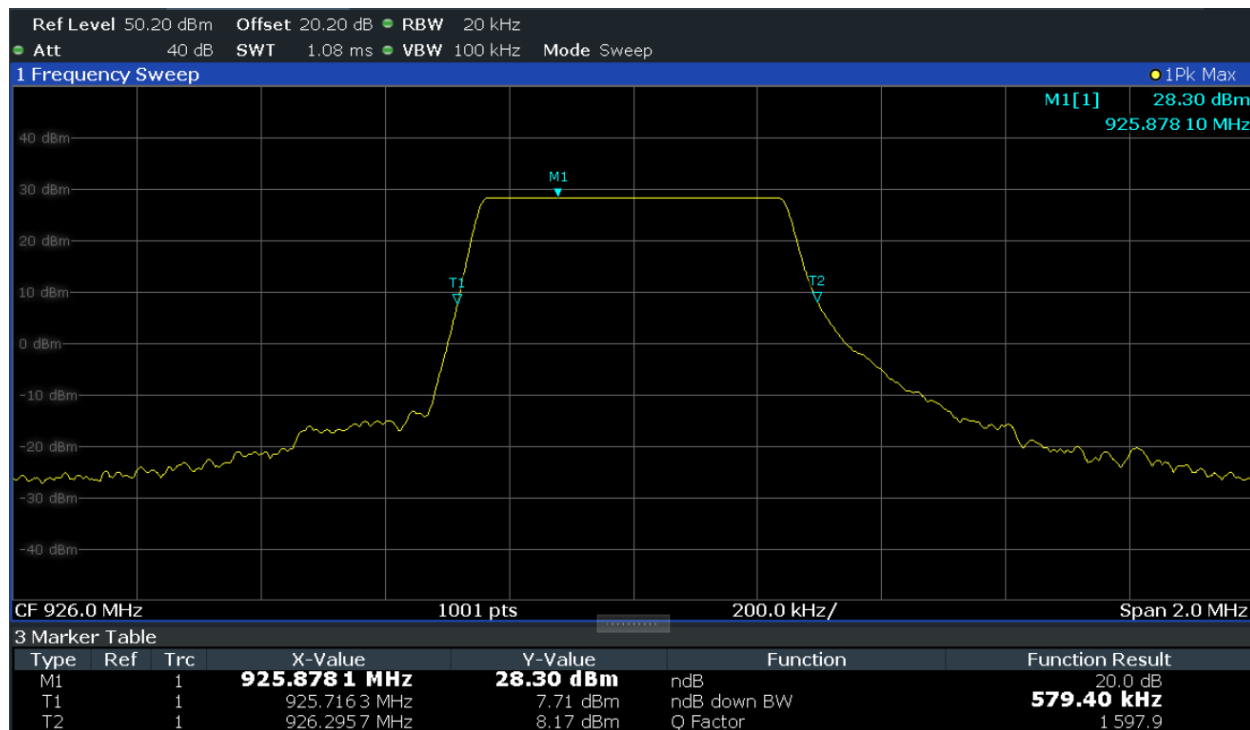


6.9.2 Mid Channel





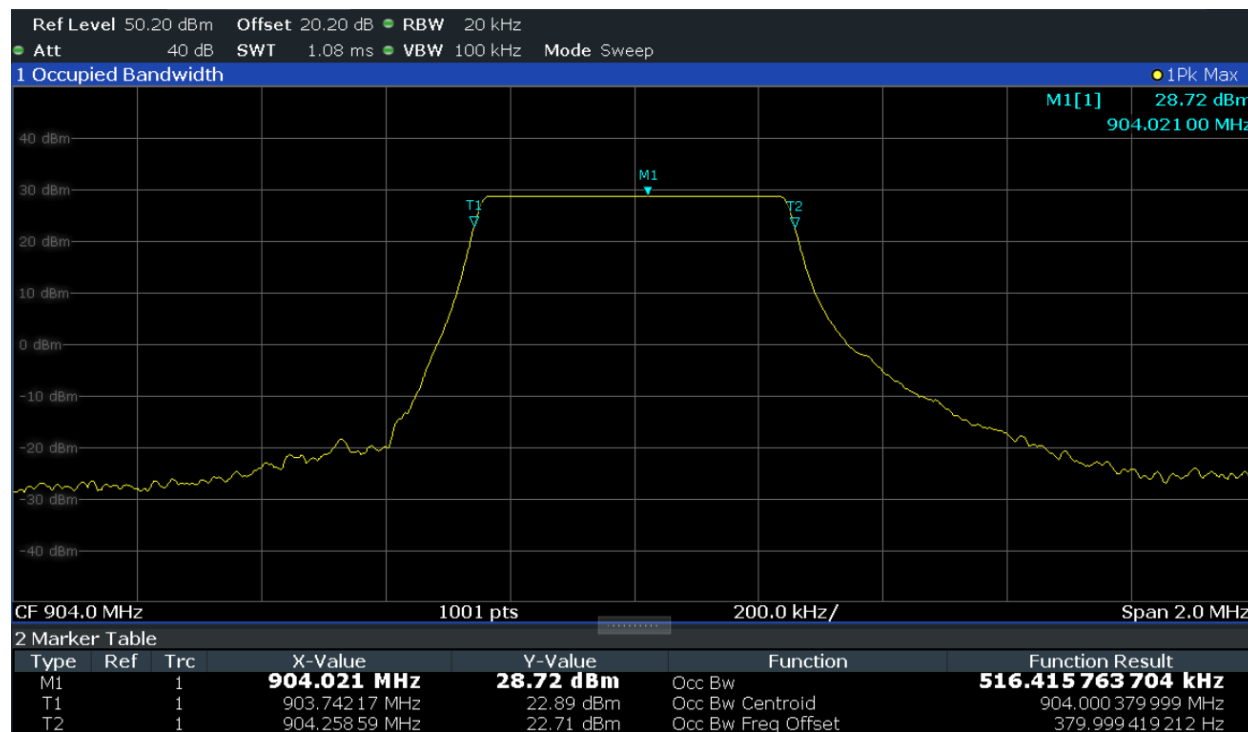
6.9.3 High Channel





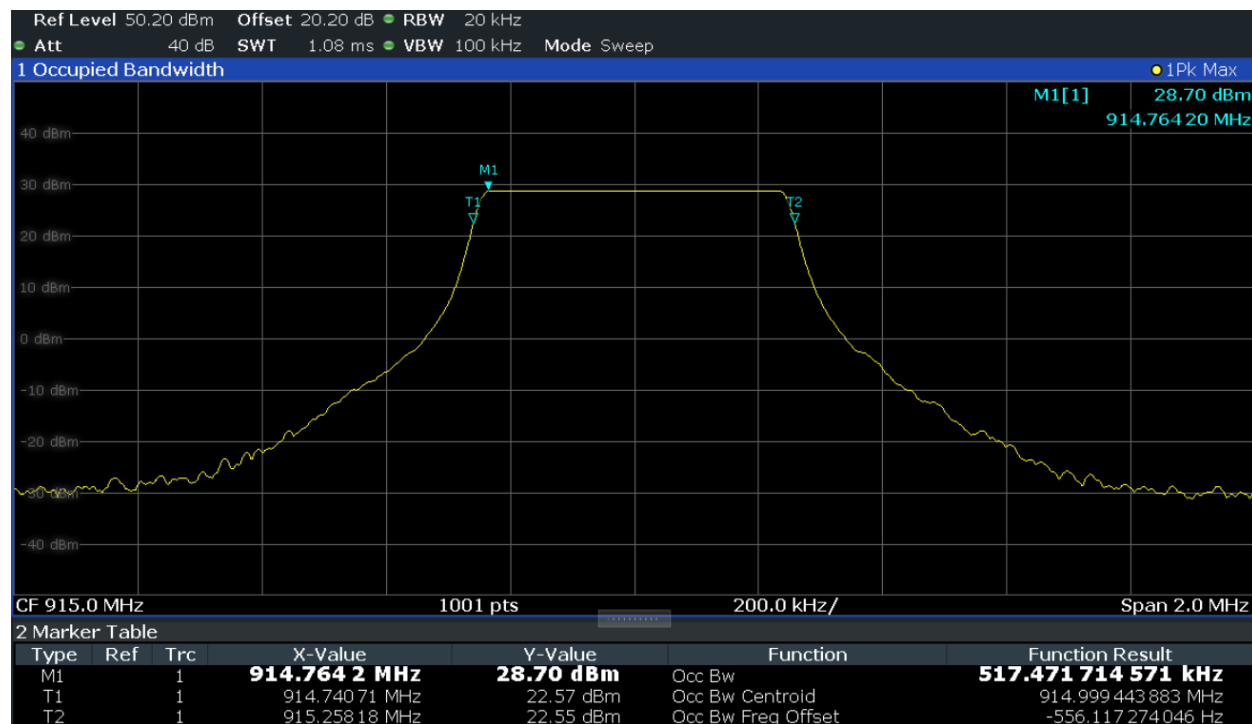
6.10 Test Plots: Occupied Channel Bandwidth (99% Bandwidth)

6.10.1 Low Channel



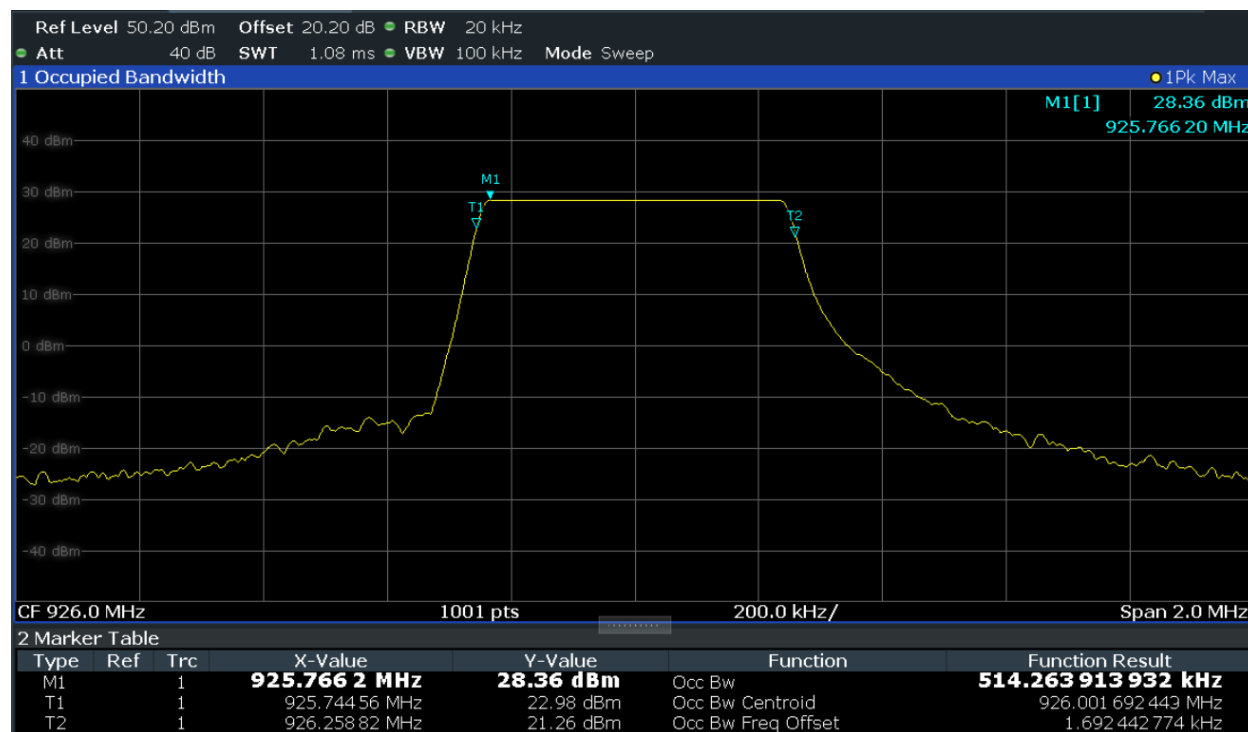


6.10.2 Mid Channel





6.10.3 High Channel





7 Fundamental Emissions Output Power

7.1 Test Method:

Tests are performed in accordance with ANSI C63.10 §11.9.2.2.2 Method AVGSA-1 with device operating at 100% duty cycle.

7.2 Test Limits:

47 CFR 15.247(b)

- (3) For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the *maximum conducted output power* is the highest total transmit power occurring in any mode.



7.3 Test Equipment Used:

Description	Asset	Manufacturer	Model	Cal Date	Cal Due
Spectrum Analyzer	8305	Rohde & Schwarz	FSW26	9/9/2025	9/9/2026

7.4 Measurement Uncertainty

Description	Expanded Uncertainty (k=2)
Signal Chain Calibration	1.2

No measurement correction based on measurement uncertainty is performed.

7.5 Test Conditions

Test Personnel	Supervising Engineer	Test Date	Ambient Temperature	Relative Humidity	Pressure
David Perry	N/A	1/16/2026	23.7°C	14.4%	973.1mbar

7.6 Test Results:

The sample tested was found to Comply. The conducted output power was less than 1 W. The EIRP was less than 4 W.

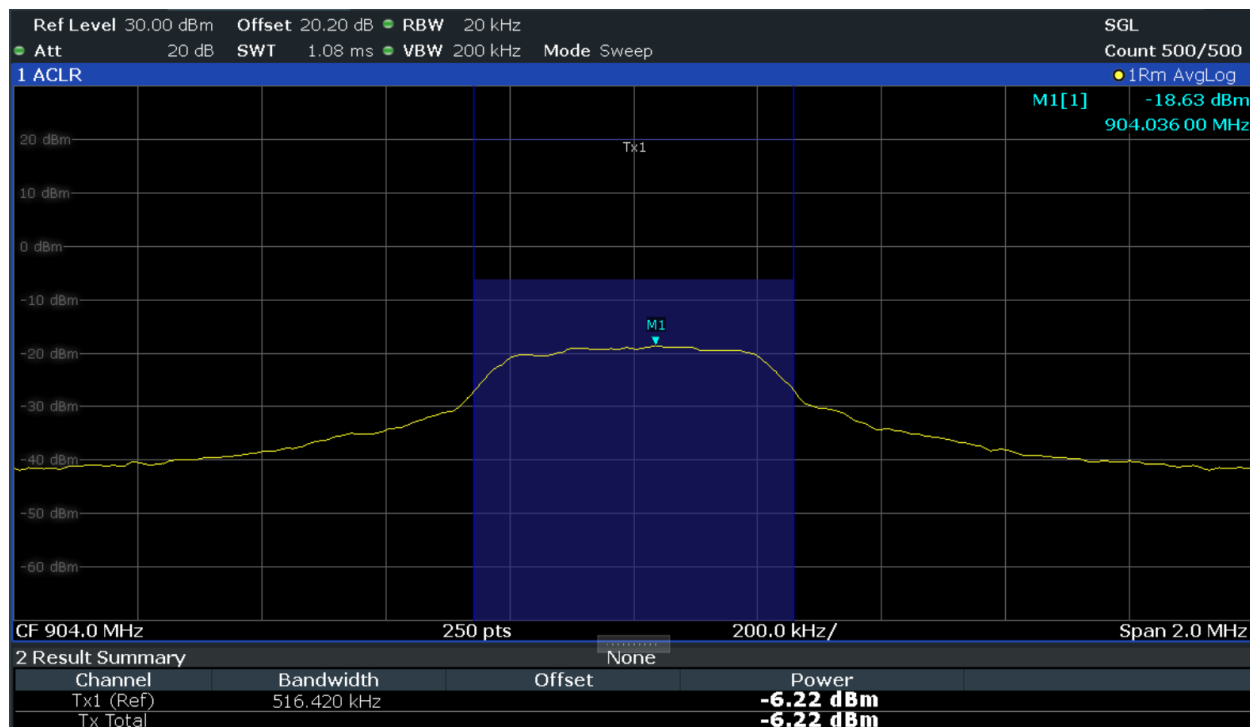
7.7 Test Data:

Frequency (MHz)	Output Power (dBm)	Output Power (W)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Output Power Limit (W)	EIRP Limit (W)
904	-6.22	0.0002	2	-4.22	0.0004	1	4
915	-6.20	0.0002	2	-4.20	0.0004	1	4
926	-5.99	0.0003	2	-3.99	0.0004	1	4



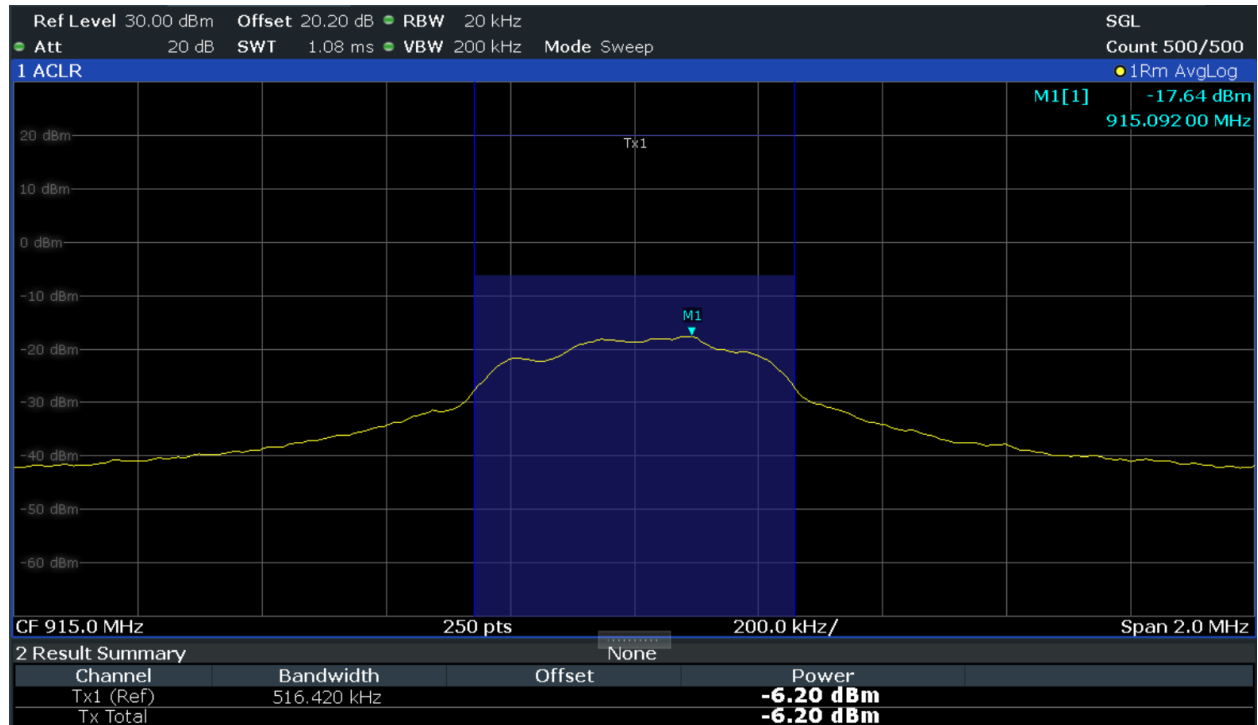
7.8 Test Plots: Output Power

7.8.1 Low Channel



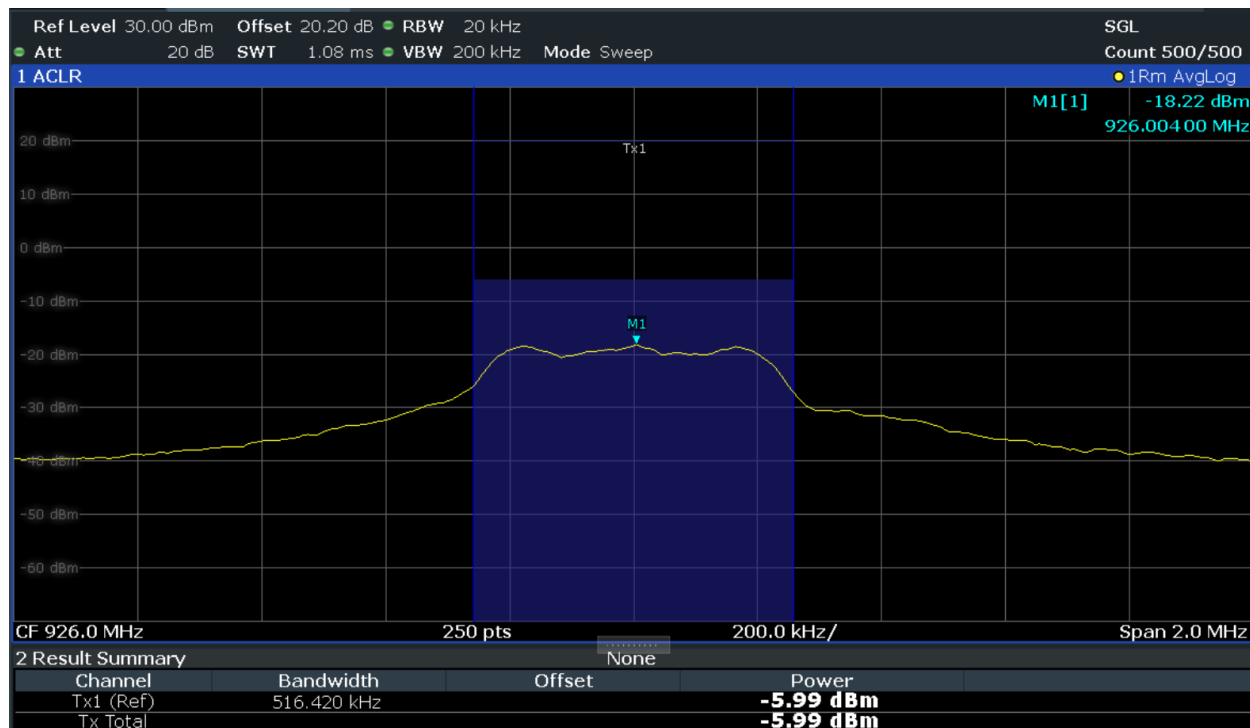


7.8.2 Mid Channel





7.8.3 High Channel





8 Maximum Power Spectral Density (PSD)

8.1 Test Method:

Tests are performed in accordance with ANSI C63.10 §11.10.3 Method AVGPSD-1 with device operating at 100% duty cycle.

8.2 Test Limits:

47 CFR 15.247(e)

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.



8.3 Test Equipment Used:

Description	Asset	Manufacturer	Model	Cal Date	Cal Due
Spectrum Analyzer	8305	Rohde & Schwarz	FSW26	9/9/2025	9/9/2026

8.4 Measurement Uncertainty

Description	Expanded Uncertainty (k=2)
Signal Chain Calibration	1.2

No measurement correction based on measurement uncertainty is performed.

8.5 Test Conditions

Test Personnel	Supervising Engineer	Test Date	Ambient Temperature	Relative Humidity	Pressure
David Perry	N/A	1/16/2026	23.7°C	14.4%	973.1mbar

8.6 Test Results:

The sample tested was found to Comply. The power spectral density was less than 8 dBm/3kHz.

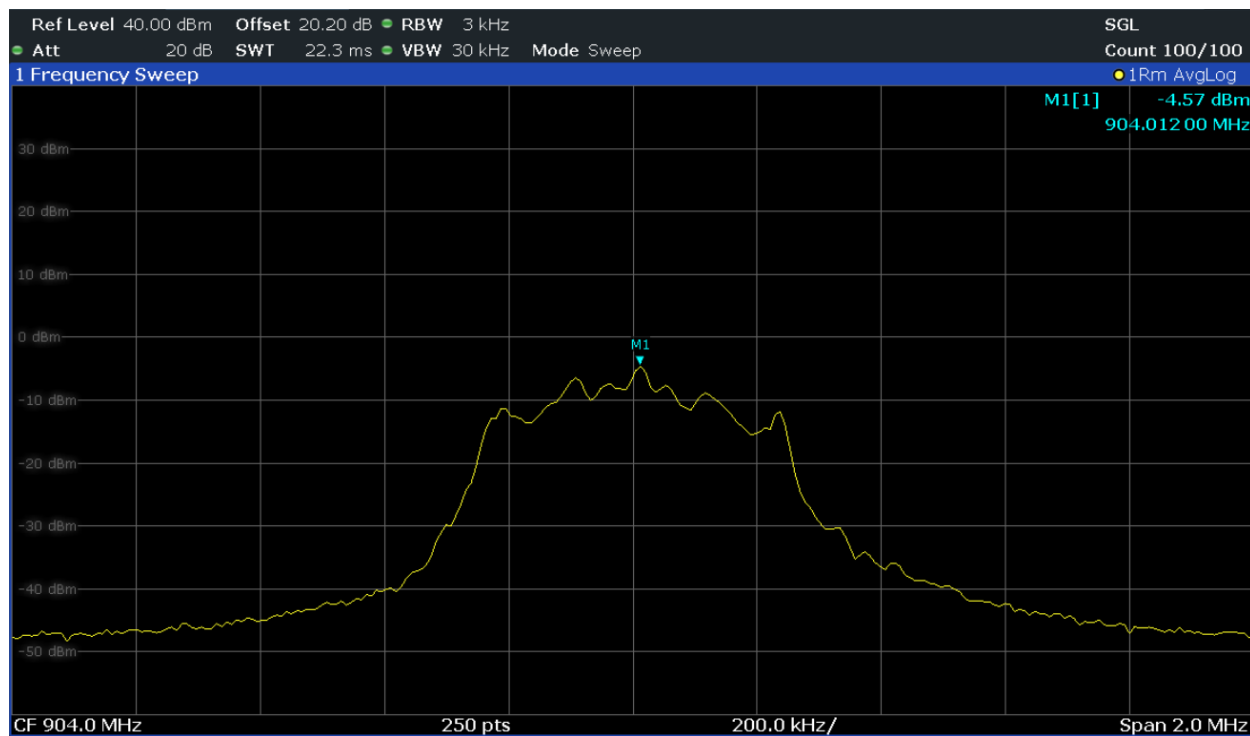
8.7 Test Data:

Frequency (MHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)
902.5	-4.57	8
915.0	-5.64	8
927.5	-6.92	8



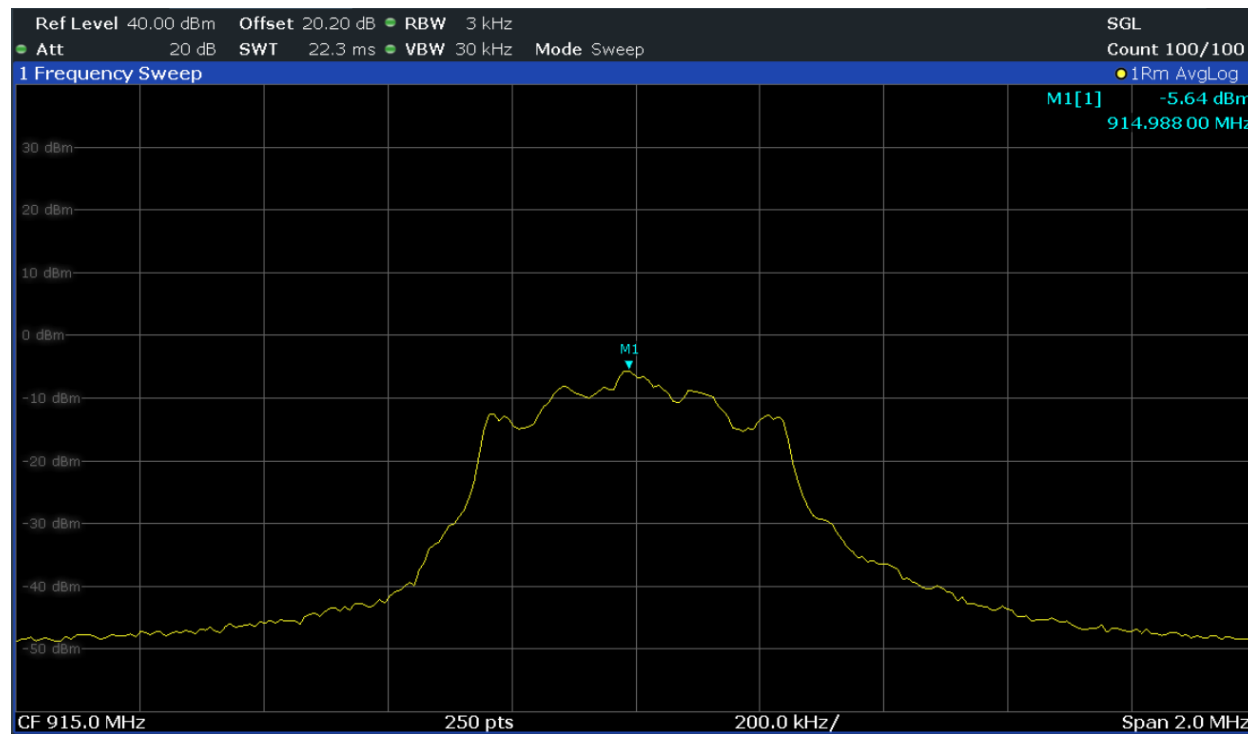
8.8 Test Plots: Power Spectral Density

8.8.1 Low Channel



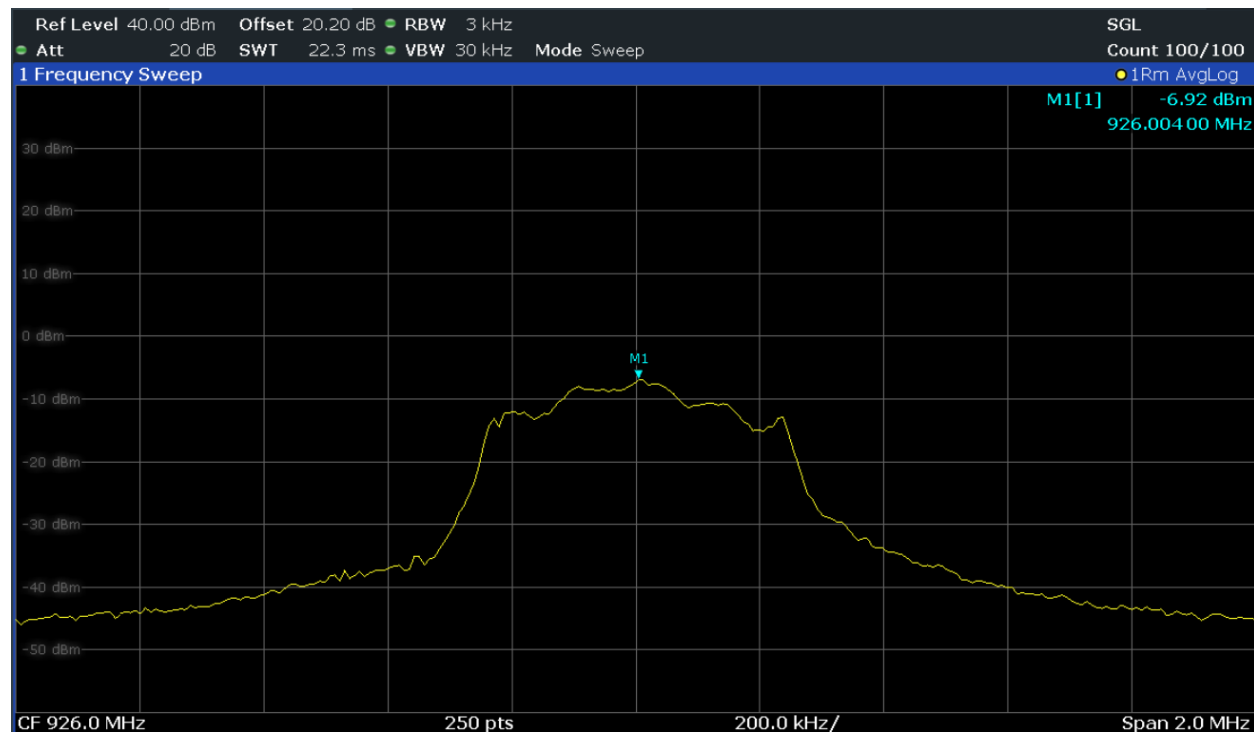


8.8.2 Mid Channel





8.8.3 High Channel





9 Conducted Spurious Emissions

9.1 Test Method:

Tests are performed in accordance with ANSI C63.10 §11.11.

9.2 Test Limits:

47 CFR 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).



9.3 Test Equipment Used:

Description	Asset	Manufacturer	Model	Cal Date	Cal Due
Spectrum Analyzer	8305	Rohde & Schwarz	FSW26	9/9/2025	9/9/2026

9.4 Measurement Uncertainty

Description	Expanded Uncertainty (k=2)
Signal Chain Calibration	1.2

No measurement correction based on measurement uncertainty is performed.

9.5 Test Conditions

Test Personnel	Supervising Engineer	Test Date	Ambient Temperature	Relative Humidity	Pressure
David Perry	N/A	1/20/2026	23.9°C	8%	998.1mbar

9.6 Test Results:

The sample tested was found to Comply.

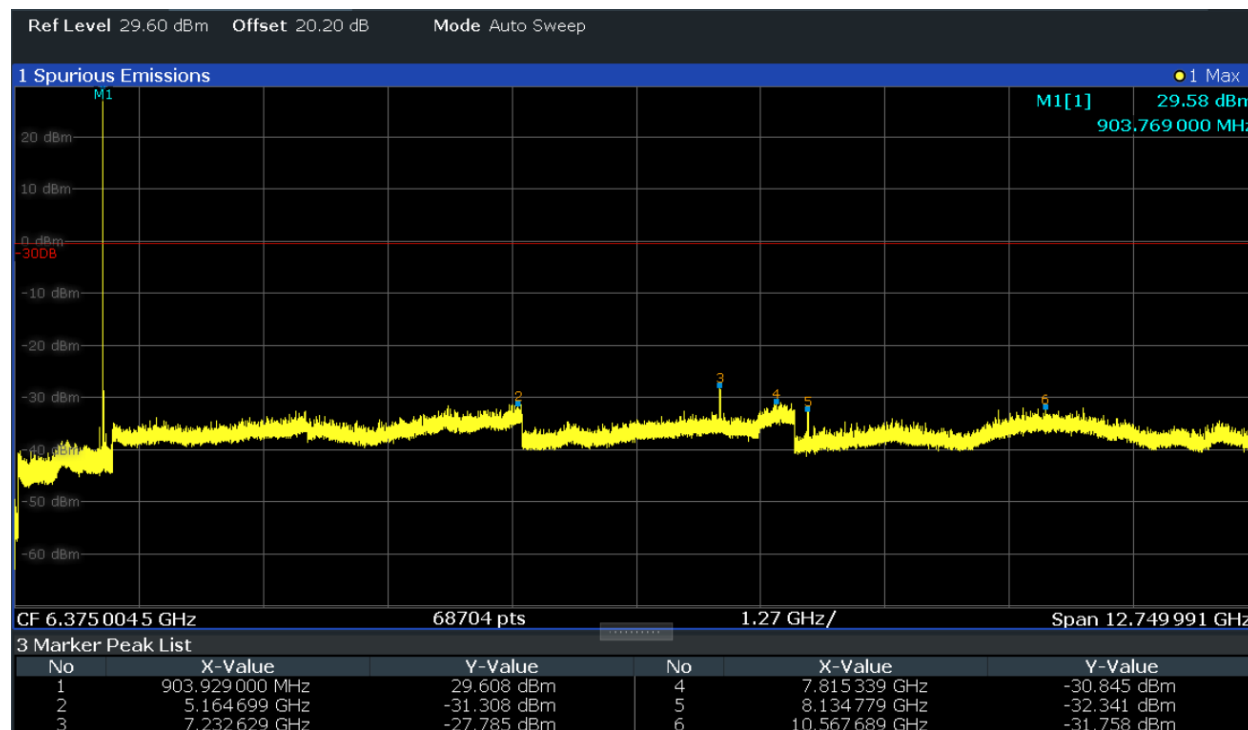
9.7 Test Data:

Frequency (MHz)	Reference Level PSD (dBm/100kHz)	Highest 3 Unwanted Emissions Level (dBm/100kHz)	Margin (dB)	Limit (dBm)
904	29.58	-27.785	27.365	-0.42
		-30.845	30.425	
		-31.308	30.888	
915	29.33	-24.254	23.584	-0.67
		-31.418	30.748	
		-31.517	30.847	
926	29.17	-19.434	18.604	-0.83
		-30.206	29.376	
		-30.244	29.414	



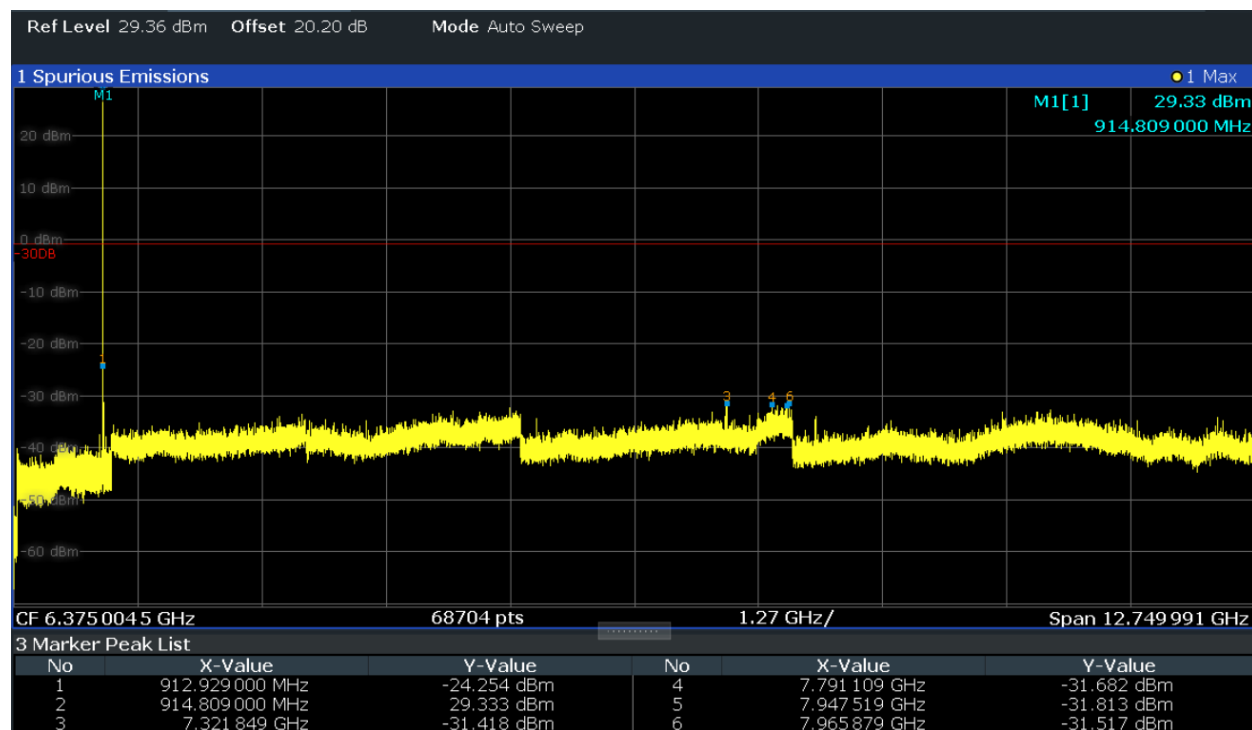
9.8 Test Plots: Emissions in Non-Restrictive Bands

9.8.1 Low Channel



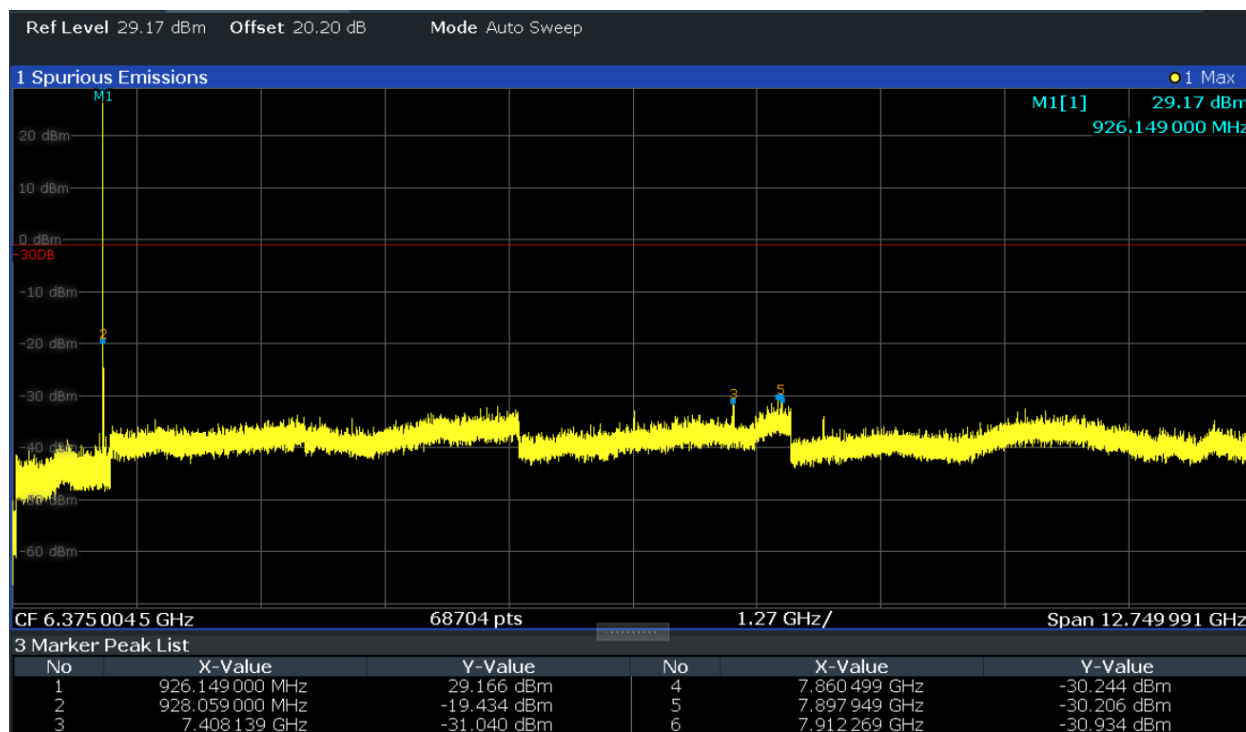


9.8.2 Mid Channel





9.8.3 High Channel





10 Radiated Spurious Emissions

10.1 Test Method:

Tests are performed in accordance with ANSI C63.10 §6.3 §6.5 and §6.6.

10.2 Test Limits:

47 CFR 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

**10.3 Test Equipment Used:**

Description	Asset	Manufacturer	Model	Cal Date	Cal Due
EMI Test Receiver	8258	Rohde & Schwarz	ESW44	5/25/2025	5/25/2026
Magnetic Loop Antenna	2366	ETS	6502	9/23/2025	9/23/2026
Bilog Antenna (30MHz-1GHz)	7085	SunAR	JB6	3/14/2025	3/14/2026
Horn Antenna (1-18GHz)	3780	ETS	3117	7/16/2025	7/16/2026
System Controller	4096	ETS Lindgren	2090	Verify at Time of Use	Verify at Time of Use
System Controller	3957	Sunol Sciences	SC99V	Verify at Time of Use	Verify at Time of Use
30M-1G 3m Signal Path without Preamplifier	8311 2593 8188 8185	-	-	11/18/2025	11/18/2026
Preamplifier	3918	Rohde & Schwarz	TS-PR18	11/18/2025	11/18/2026
1-18GHz Signal Path with Preamplifier	3074 3918 8310 2593 8188 8185	-	-	11/18/2025	11/18/2026

10.4 Measurement Uncertainty

Measurement	Frequency Range	Expanded Uncertainty (k=2)	U _{CISPR}
Radiated Emissions, 3m	30-1000 MHz	4.0dB	6.3 dB
Radiated Emissions, 3m	1-6 GHz	4.7dB	5.2 dB
Radiated Emissions, 3m	6-15 GHz	4.7dB	5.5 dB
Radiated Emissions, 3m	15-18 GHz	4.7dB	5.5 dB
Radiated Emissions, 3m	18-40 GHz	4.7dB	5.5 dB

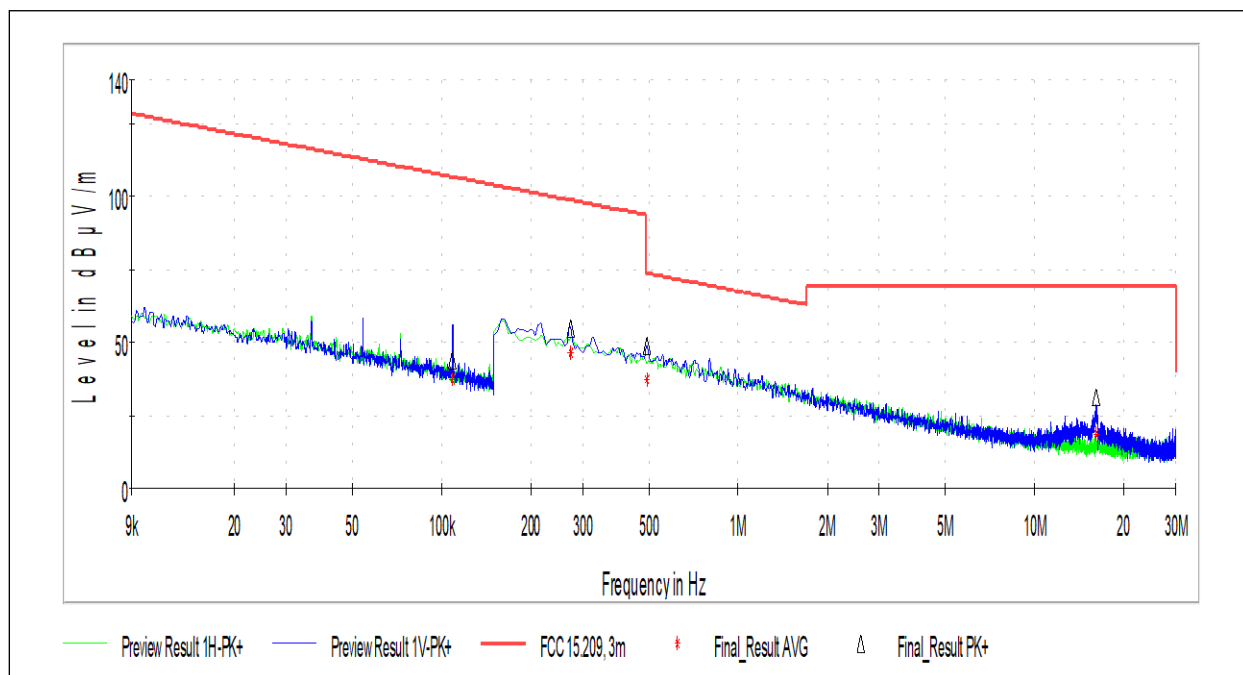
As shown in the table above our radiated emissions U_{Lab} is less than the corresponding U_{CISPR} reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required.

10.5 Test Software Used:

Description	Manufacturer	Version
EMC32	Rohde & Schwarz	10.60.20

10.6 Test Results:

The sample tested was found to Comply. The device was investigated in three orthogonal axes.

**10.7 Test Data: Radiated Spurious Emissions, General****10.7.1 Frequency Range 9kHz – 30MHz****10.7.1.1 Low Channel¹**

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.108707	44.27	106.87	62.60	100.0	V	16.0	12.2
0.272912	55.02	98.88	43.86	100.0	V	326.0	11.9
0.492397	48.68	73.76	25.08	100.0	V	318.0	11.9
16.168037	31.23	69.5	38.27	100.0	V	339.0	10.9

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.108707	37.62	106.87	69.26	100.0	V	16.0	12.2
0.272912	46.76	98.88	52.12	100.0	V	326.0	11.9
0.492397	37.12	73.76	36.64	100.0	V	318.0	11.9
16.168037	18.98	69.50	50.52	100.0	V	339.0	10.9

Test Personnel: David Perry
Supervising/Reviewing Engineer: NA
(Where Applicable)
Product Standard: FCC 15.247
Input Voltage: 5VDC

Test Date: 1/16/2026
Limit Applied: See Section 10.2
Ambient Temperature: 22.0°C
Relative Humidity: 18.3%
Atmospheric Pressure: 971.9mbar

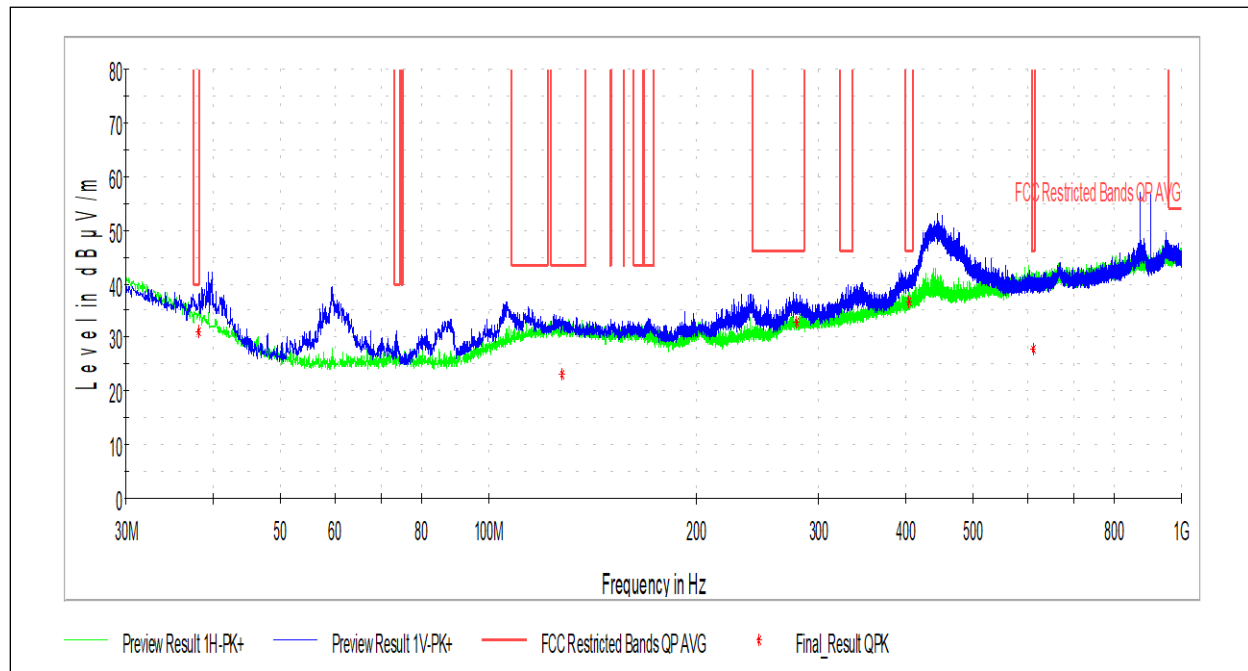
Deviations, Additions, or Exclusions: Peak emissions comply with the quasi-peak limits and thereby the device is deemed to comply.

¹ Testing represents the worst case of low, middle, and high channels.



10.7.2 Frequency Range 30MHz – 1GHz

10.7.2.1 Low Channel

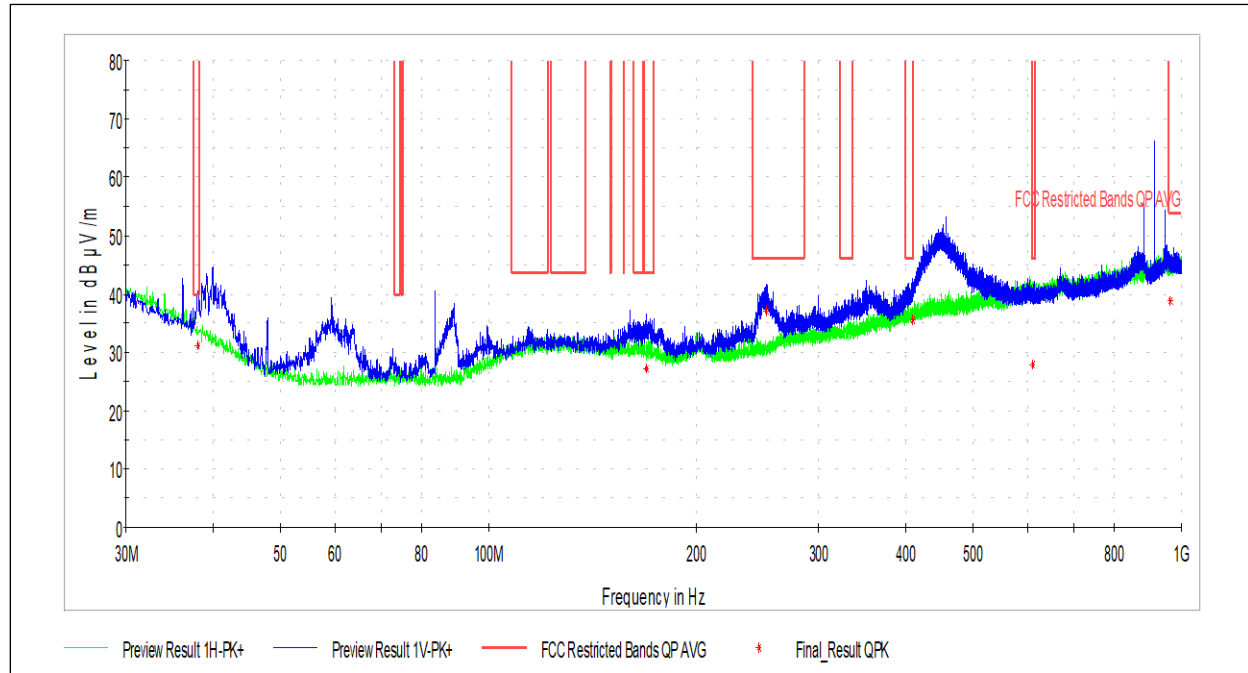


Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
38.191111	30.92	40.00	9.08	105.0	V	48.0	21.2
127.700556	22.98	43.52	20.54	105.0	V	79.0	21.2
278.212222	32.67	46.02	13.35	161.0	V	18.0	21.5
404.958889	36.54	46.02	9.48	105.0	V	185.0	24.3
611.353333	27.83	46.02	18.19	383.0	H	107.0	28.7

Test Personnel: David Perry
Supervising/Reviewing Engineer: NA
(Where Applicable)
Product Standard: FCC 15.247
Input Voltage: 5VDC

Test Date: 1/16/2026
Limit Applied: See Section 10.2
Ambient Temperature: 22.0°C
Relative Humidity: 18.3%
Atmospheric Pressure: 971.9mbar

Deviations, Additions, or Exclusions: Band reject filter used to attenuate fundamental operating frequency.

**10.7.2.2 Mid Channel**

Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
38.083333	31.12	40.00	8.88	100.0	V	60.0	21.3
168.925556	27.22	43.52	16.31	100.0	V	231.0	20.1
251.698889	36.98	46.02	9.04	148.0	V	237.0	20.2
409.647222	35.55	46.02	10.47	207.0	V	257.0	24.3
610.545000	27.92	46.02	18.11	269.0	H	0.0	28.7
962.762778	38.72	53.98	15.25	120.0	V	0.0	32.4

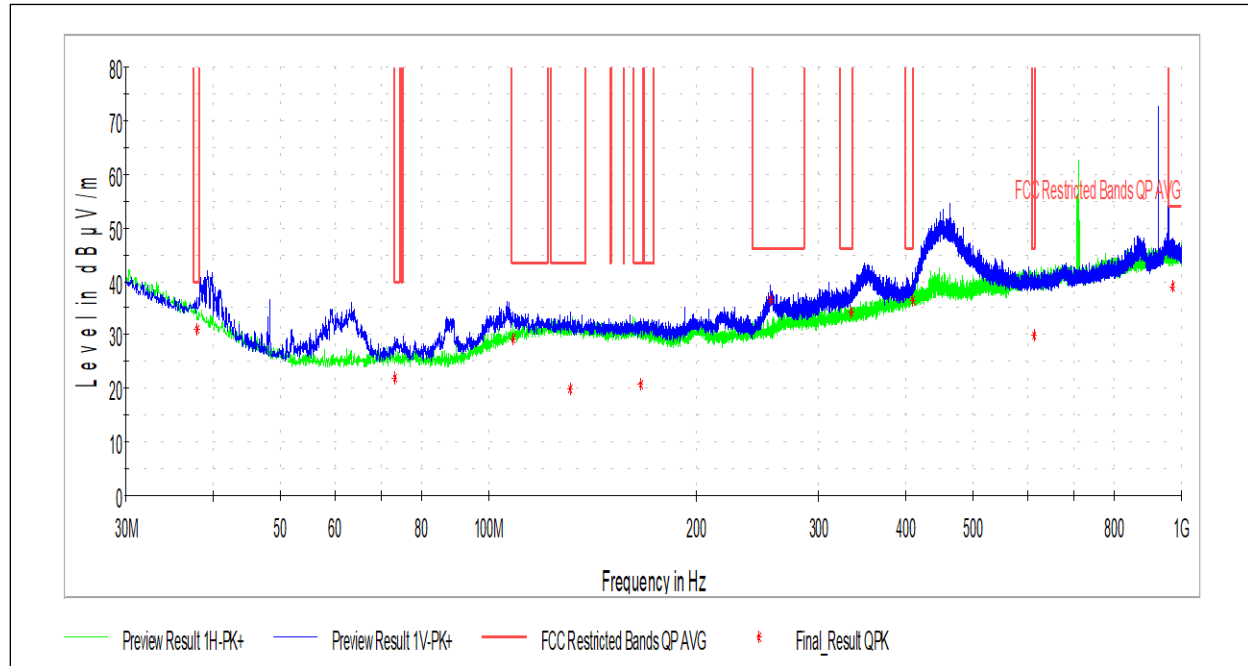
Test Personnel: David Perry
Supervising/Reviewing Engineer: _____
(Where Applicable) NA
Product Standard: FCC 15.247
Input Voltage: 5VDC

Test Date: 1/15/2026
Limit Applied: See Section 10.2
Ambient Temperature: 24.0°C
Relative Humidity: 17.5%
Atmospheric Pressure: 978.7mbar

Deviations, Additions, or Exclusions: Band reject filter used to attenuate fundamental operating frequency.



10.7.2.3 High Channel



Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.975556	31.00	40.00	9.00	101.0	V	184.0	21.4
73.272778	21.98	40.00	18.02	105.0	V	324.0	14.5
108.623889	29.36	43.52	14.17	101.0	V	106.0	19.9
131.149444	19.82	43.52	23.70	327.0	V	308.0	21.2
165.907778	20.74	43.52	22.78	250.0	V	330.0	20.2
255.632778	36.74	46.02	9.28	163.0	V	341.0	20.4
334.364444	34.21	46.02	11.81	124.0	V	19.0	22.4
409.647222	36.43	46.02	9.59	208.0	V	122.0	24.3
613.077778	29.80	46.02	16.22	99.0	V	80.0	28.2
971.816111	38.97	53.98	15.01	101.0	V	106.0	32.5

Test Personnel: David Perry
Supervising/Reviewing Engineer: _____
(Where Applicable) NA
Product Standard: FCC 15.247
Input Voltage: 5VDC

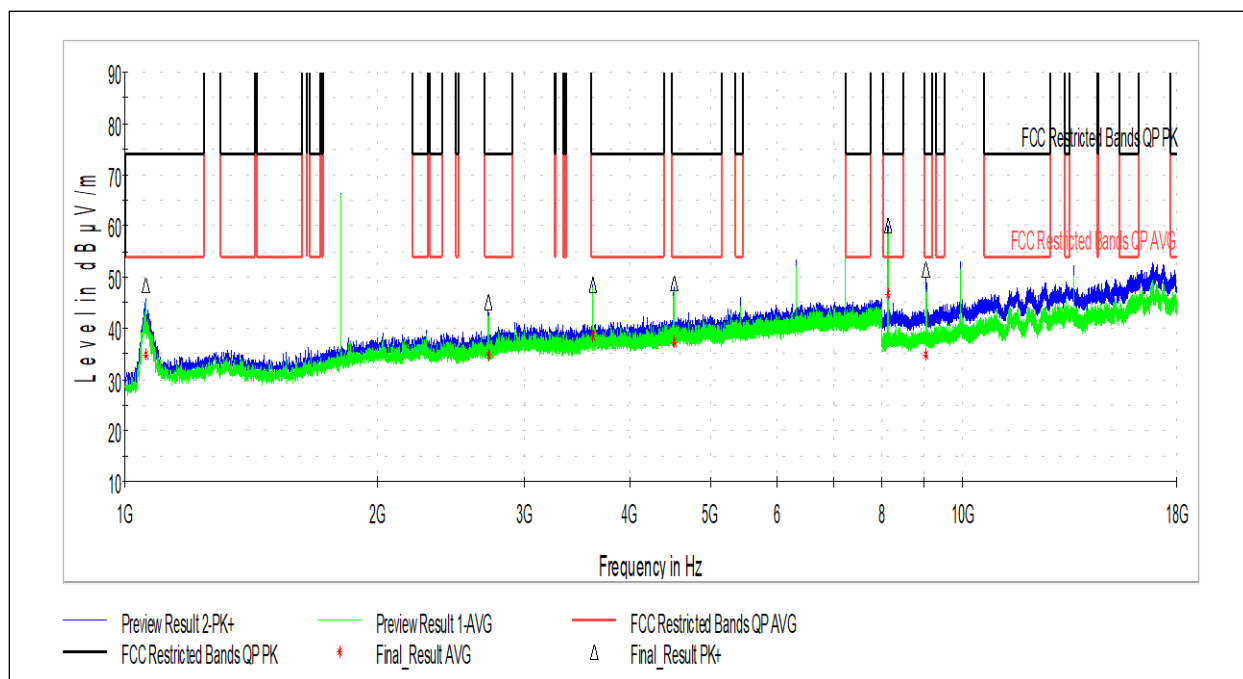
Test Date: 1/16/2026
Limit Applied: See Section 10.2
Ambient Temperature: 22.0°C
Relative Humidity: 18.3%
Atmospheric Pressure: 971.9mbar

Deviations, Additions, or Exclusions: Band reject filter used to attenuate fundamental operating frequency.



10.7.3 Frequency Range 1GHz – 18GHz

10.7.3.1 Low Channel



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1057.944444	48.57	73.98	25.41	136.0	V	0.0	-2.7
2712.277778	45.05	73.98	28.93	151.0	H	229.0	5.8
3616.444444	48.36	73.98	25.62	297.0	V	310.0	7.7
4520.611111	48.84	73.98	25.14	319.0	H	311.0	9.3
8134.375000	59.94	73.98	14.04	235.0	V	143.0	14.5
9037.500000	51.48	73.98	22.50	318.0	V	108.0	15.5

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1057.944444	34.76	53.98	19.22	136.0	V	0.0	-2.7
2712.277778	34.62	53.98	19.36	151.0	H	229.0	5.8
3616.444444	38.46	53.98	15.52	297.0	V	310.0	7.7
4520.611111	37.19	53.98	16.79	319.0	H	311.0	9.3
8134.375000	46.72	53.98	7.26	235.0	V	143.0	14.5
9037.500000	34.61	53.98	19.37	318.0	V	108.0	15.5

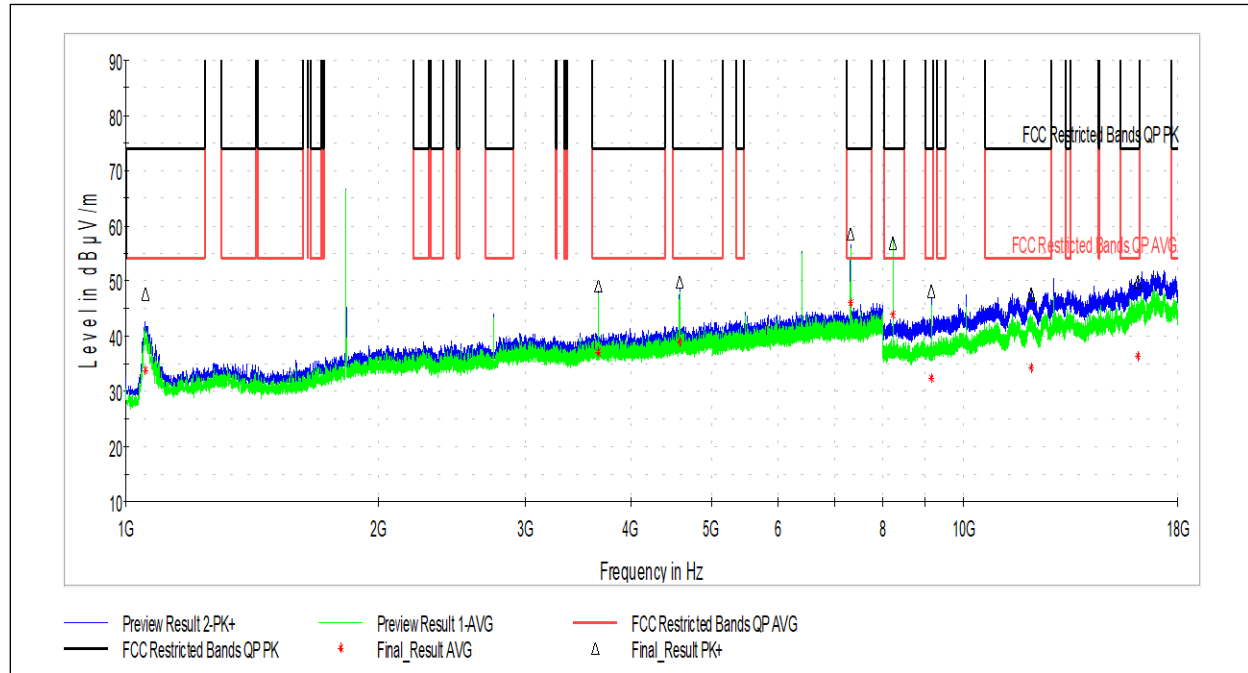
Test Personnel: David Perry
Supervising/Reviewing Engineer: _____
(Where Applicable) NA
Product Standard: FCC 15.247
Input Voltage: 5VDC

Test Date: 1/16/2026
Limit Applied: See Section 10.2
Ambient Temperature: 22.0°C
Relative Humidity: 18.3%
Atmospheric Pressure: 971.9mbar

Deviations, Additions, or Exclusions: None



10.7.3.2 Mid Channel



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1054.833333	47.57	73.98	26.41	204.0	V	0.0	-2.7
3659.222222	49.04	73.98	24.94	144.0	V	35.0	7.7
4575.444444	49.77	73.98	24.21	109.0	H	341.0	9.5
7320.222222	58.46	73.98	15.52	146.0	V	0.0	13.4
8233.750000	56.84	73.98	17.14	217.0	V	119.0	14.6
9147.500000	48.17	73.98	25.81	289.0	V	180.0	15.7
12021.250000	47.59	73.98	26.39	410.0	V	247.0	20.2
16140.625000	49.75	73.98	24.23	100.0	H	245.0	24.5

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1054.833333	33.74	53.98	20.24	204.0	V	0.0	-2.7
3659.222222	37.17	53.98	16.81	144.0	V	35.0	7.7
4575.444444	38.92	53.98	15.06	109.0	H	341.0	9.5
7320.222222	46.06	53.98	7.92	146.0	V	0.0	13.4
8233.750000	43.89	53.98	10.09	217.0	V	119.0	14.6
9147.500000	32.37	53.98	21.61	289.0	V	180.0	15.7
12021.250000	34.27	53.98	19.71	410.0	V	247.0	20.2
16140.625000	36.40	53.98	17.58	100.0	H	245.0	24.5

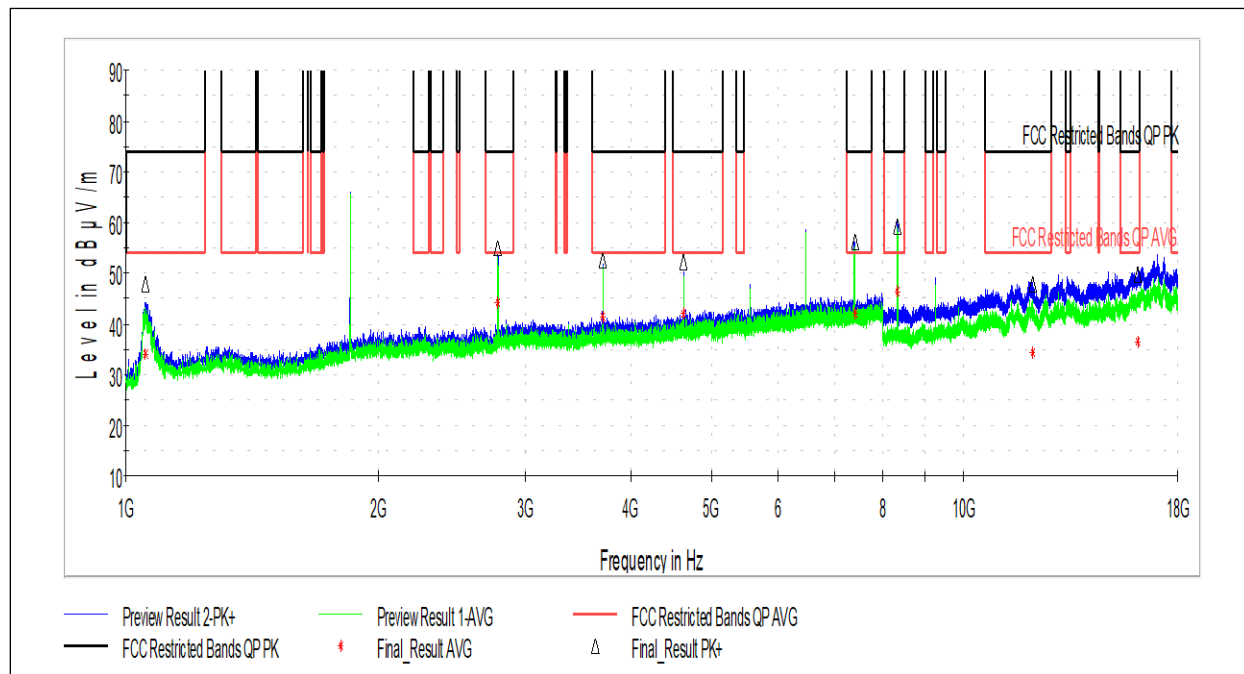
Test Personnel: David Perry
Supervising/Reviewing Engineer: _____
(Where Applicable) NA
Product Standard: FCC 15.247
Input Voltage: 5VDC

Test Date: 1/15/2026
Limit Applied: See Section 10.2
Ambient Temperature: 24.0°C
Relative Humidity: 17.5%
Atmospheric Pressure: 978.7mbar

Deviations, Additions, or Exclusions: None



10.7.3.3 High Channel



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1053.277778	47.81	73.98	26.17	136.0	V	343.0	-2.7
2777.222222	54.93	73.98	19.05	162.0	H	35.0	6.0
3703.166667	52.46	73.98	21.52	109.0	V	23.0	7.8
4630.277778	52.11	73.98	21.87	170.0	H	0.0	9.6
7409.666667	56.03	73.98	17.95	325.0	V	0.0	13.4
8334.375000	59.22	73.98	14.76	290.0	V	71.0	14.5
12085.625000	47.89	73.98	26.09	410.0	V	143.0	20.3
16118.125000	49.76	73.98	24.22	399.0	V	0.0	24.5

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1053.277778	33.97	53.98	20.01	136.0	V	343.0	-2.7
2777.222222	44.10	53.98	9.88	162.0	H	35.0	6.0
3703.166667	41.34	53.98	12.64	109.0	V	23.0	7.8
4630.277778	42.12	53.98	11.86	170.0	H	0.0	9.6
7409.666667	42.03	53.98	11.95	325.0	V	0.0	13.4
8334.375000	46.39	53.98	7.59	290.0	V	71.0	14.5
12085.625000	34.26	53.98	19.72	410.0	V	143.0	20.3
16118.125000	36.43	53.98	17.55	399.0	V	0.0	24.5

Test Personnel: David Perry
Supervising/Reviewing Engineer: _____
(Where Applicable) NA
Product Standard: FCC 15.247
Input Voltage: 5VDC

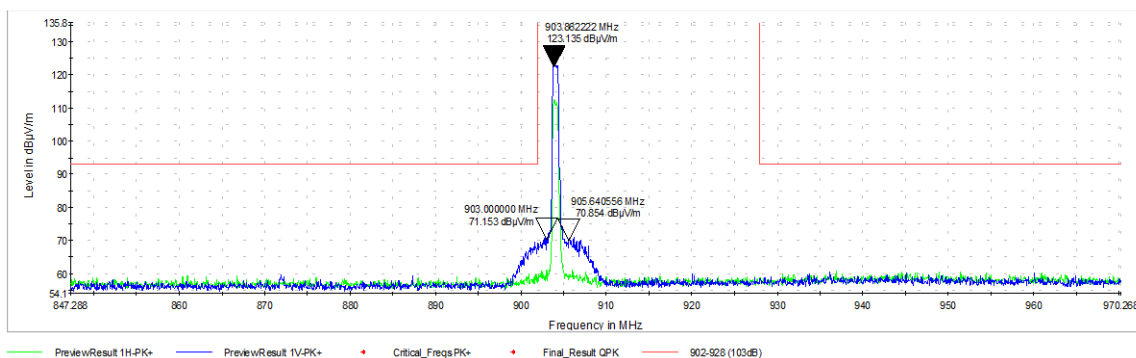
Test Date: 1/16/2026
Limit Applied: See Section 10.2
Ambient Temperature: 22.0°C
Relative Humidity: 18.3%
Atmospheric Pressure: 971.9mbar

Deviations, Additions, or Exclusions: None



10.8 Test Data: Radiated Emissions, Band Edge

10.8.1 Low Channel Band Edge



Test Personnel: David Perry

Supervising/Reviewing Engineer: NA

(Where Applicable)

Product Standard: FCC 15.247

Input Voltage: 5VDC

Test Date: 1/15/2026

Limit Applied: See Section 10.2

Ambient Temperature: 24.0°C

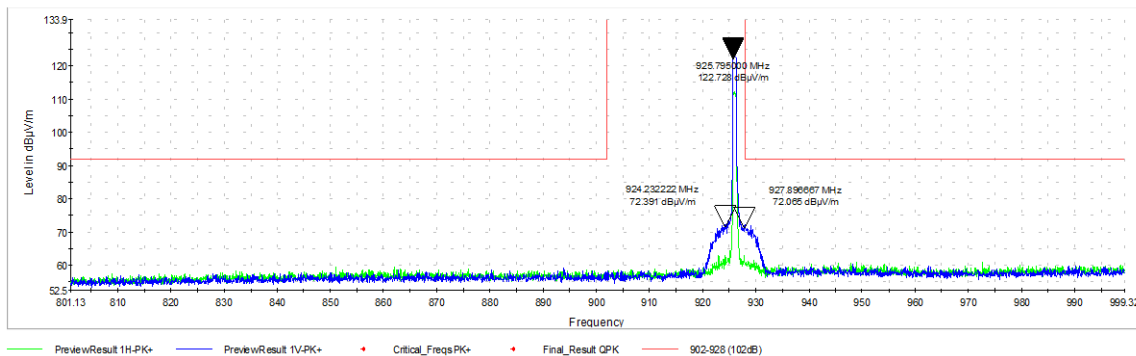
Relative Humidity: 17.5%

Atmospheric Pressure: 978.7mbar

Deviations, Additions, or Exclusions: None



10.8.2 High Channel Band Edge



Test Personnel: David Perry
Supervising/Reviewing Engineer: NA
(Where Applicable)
Product Standard: FCC 15.247
Input Voltage: 5VDC

Test Date: 1/15/2026
Limit Applied: See Section 10.2
Ambient Temperature: 24.0°C
Relative Humidity: 17.5%
Atmospheric Pressure: 978.7mbar

Deviations, Additions, or Exclusions: None



11 Antenna Requirement

11.1 Test Limits

47 CFR § 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

11.2 Test Results

The device was found to be **compliant**. The device has a dedicated polarity reversed antenna attached.



12 Revision History

Revision Level	Date	Report Number	Prepared By	Reviewed By	Notes
0	1/29/2026	106453342LEX-002	JP	MC	Original Issue



END OF REPORT