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TEST REPORT

N°: 25751747-810078

Version : 02

Subject

Radio spectrum matters
tests according to standards:
47 CFR Part 15.247 & RSS-247 Issue 3 & RSS-Gen Issue 5.2

Issued to

NAOX Technologies
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75006 - Paris
France

Apparatus under test

- Product
- Trade mark
- Manufacturer
- Model under test
- Serial number
- FCC ID
- IC

Electroencephalograph
NAOX
NAOX Technologies
NX01
9
2BTIX-1SABT
-

Conclusion

See Test Program chapter

Test date

March 24, 2025 to September 1, 2025

Test location

Fontenay Aux Roses & Ecuelles

Test Site

6500A-1 & 6500A-3

Sample receipt date

March 24, 2025

Registration Number

157910

Designation Number

FR0006 for IC and FR0010 for FCC

Composition of document

57 pages

Document issued on

February 23, 2026

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PUBLICATION HISTORY

Version	Date	Author	Modification
01	Septembre 26, 2025	Julien Palard	Creation of the document
02	February 23, 2026	Julien Palard	Update to add FCC ID number on first page

Each new edition of this test report replaces and cancels the previous edition. The control of the old editions of report is under responsibility of client.



SUMMARY

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1. TEST PROGRAM

References

- 47 CFR Part 15.247
- RSS 247 Issue 3
- RSS Gen Issue 5.2
- KDB 558074 D01 DTS Meas Guidance v05r02
- ANSI C63.10-2013

Radio requirement:

Clause (47CFR Part 15.247 & RSS-247 Issue 3 & RSS-Gen Issue 5.2) Test Description	Test result - Comments
Occupied Bandwidth	☒ PASS ☐ FAIL ☐ NA ☐ NP(1)
6dB Bandwidth	☒ PASS ☐ FAIL ☐ NA() ☐ NP(1)
Duty Cycle	☒ PASS ☐ FAIL ☐ NA ☐ NP(1)
Maximum Conducted Output Power	☒ PASS ☐ FAIL ☐ NA ☐ NP(1)
Power Spectral Density	☒ PASS ☐ FAIL ☐ NA ☐ NP(1)
Conducted Spurious Emission at the Band Edge	☒ PASS ☐ FAIL ☐ NA() ☐ NP(1)
Unwanted Emissions into Non-Restricted Frequency Bands	☒ PASS ☐ FAIL ☐ NA() ☐ NP(1)
AC Power Line Conducted Emission	☒ PASS ☐ FAIL ☐ NA(2) ☐ NP(1)
Unwanted Emissions into Restricted Frequency Bands	☒ PASS ☐ FAIL ☐ NA ☐ NP(1)
Receiver Radiated emissions	☒ PASS ☐ FAIL ☒ NA ☐ NP(1)
This table is a summary of test report, see conclusion of each clause of this test report for detail.	

(1): Limited program

(2): EUT not directly or indirectly connected to the AC Power Public Network

PASS: EUT complies with standard's requirement

FAIL: EUT does not comply with standard's requirement

NA: Not Applicable

NP: Test Not Performed

2. EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER)

2.1. INFORMATIONS

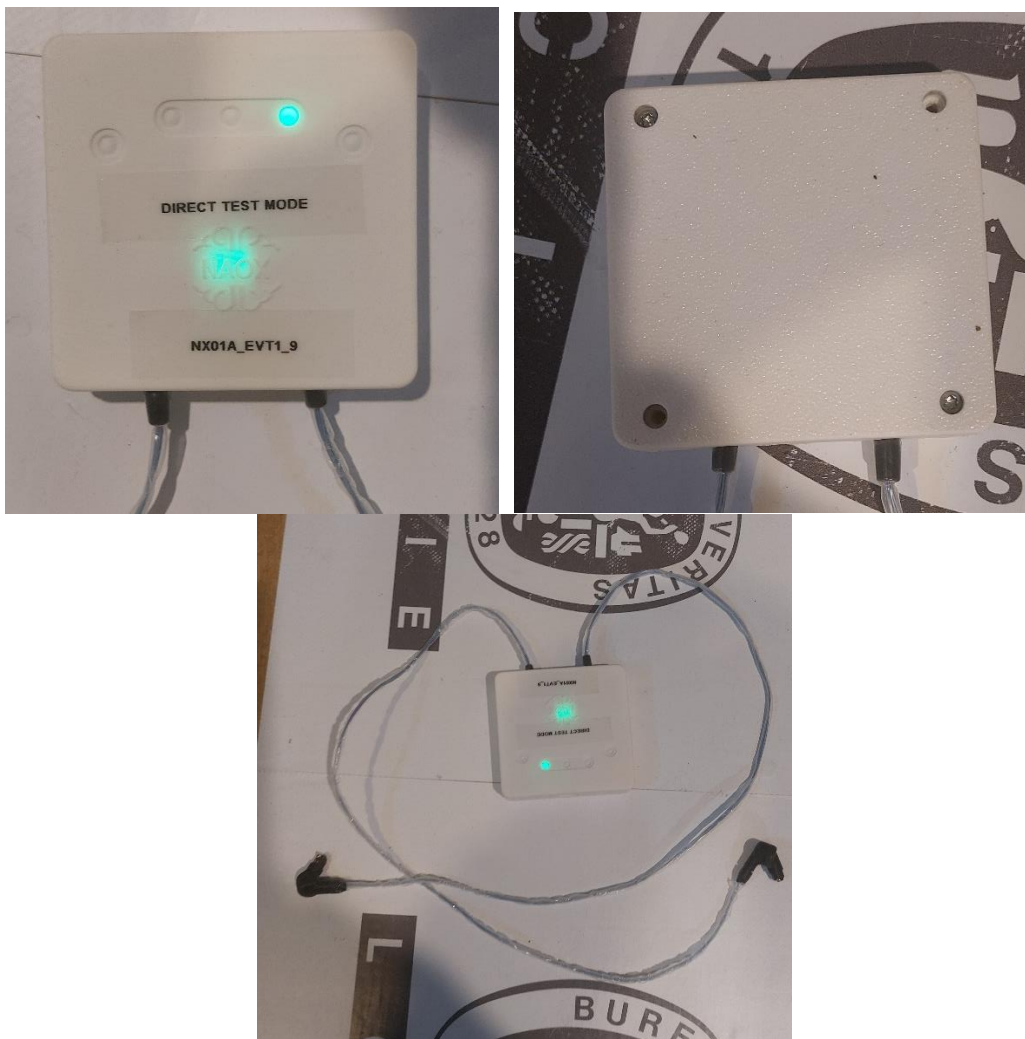
NAOX Buds model: NX01 enable extended EEG recordings for up to 10 hours, particularly from the comfort of the patient's home. This ability to capture long-term data enhances the detection of neurological anomalies and sleep disorders, providing detailed and essential information for an accurate diagnosis.

2.2. HARDWARE IDENTIFICATION (EUT AND AUXILIARIES):

Equipment under test (EUT):

NAOX NX01

Serial Number: 9



Equipment Under Test

Power supply:

Name	Type	Rating	Reference / Sn	Comments
Supply1	☐ AC ☒ DC ☐ Battery	USB 5VDC	-	-
Supply2	☐ AC ☐ DC ☒ Battery	3.7V 330mAh Lithium-ion	Renata 1ICP5/24/39	-

Inputs/outputs - Cable:

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
Data(Buds)	Input	Others	0.2	-	☒	☒
Power supply	Input	Others	-	-	☐	☒

Auxiliary equipment used during test:

Type	Reference	Sn	Comments
Laptop	-	-	Use to set the EUT
Power supply	-	-	Globtek

Equipment information:

Equipment Information:					
Bluetooth LE Type:	☒ BLE	☐ v4.0	☐ v4.1	☐ v4.2	☒ v5.0
Chipset :					
Frequency band:	[2400 – 2483.5] MHz				
Number of Channel:	40				
Spacing channel:	2MHz				
Channel bandwidth:	1MHz & 2MHz				
Antenna Type:	☒ Integral		☐ External		☐ Dedicated
Antenna connector:	☐ Yes		☒ No		☐ Temporary for test
Antenna Requirements §15.203	The transmitter uses an integral antenna and it permanently connected				
Transmit chains:	1				
	Single antenna				
Receiver chains	1				
Type of equipment:	☒ Stand-alone		☐ Plug-in		☐ Combined
Equipment arrangement:	☐ Tabletop		☐ Floor-standing		☒ Multiple orientations
Ad-Hoc mode:	☐ Yes			☒ No	
Duty cycle:	☒ Continuous duty		☐ Intermittent duty		☐ 100% duty
Equipment type:	☒ Production model			☐ Pre-production model	
Operating temperature range:	Tnom:		20°C		
Type of power source:	☐ AC power supply		☒ DC power supply		☒ Battery
Operating voltage range:	Vnom:		☒ 5VDC		☒ 3.7 VDC
			☒ X		☐ X VDC

Antenna Characteristic

Antenna assembly	Gain (dBi)	Frequency Band (MHz)	Impedance(Ω)
TAOGLASS, ref: WLA.01	1	2400-2500MHz	50

Hardware information

Software (if applicable):	V. :	NC
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CHANNEL PLAN			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
Cmin: 0	2402	Cmid: 20	2442
1	2404	21	2444
2	2406	22	2446
3	2408	23	2448
4	2410	24	2450
5	2412	25	2452
6	2414	26	2454
7	2416	27	2456
8	2418	28	2458
9	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	Cmax: 39	2480

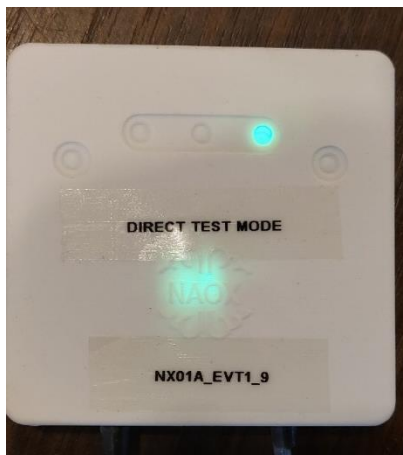
DATA RATE		
Data Rate (Mbps)	Modulation Type	Worst Case Modulation
1	GFSK	☐
2	GFSK	☒

2.3. RUNNING MODE

Test mode	Description of test mode
Test mode 1	Permanent emission with modulation on a fixed channel with power RF target set by NAOX at 0dBm
Test mode 2	Permanent reception
Test mode 3	Charging mode
Test	Running mode
Occupied Bandwidth	☒ Test mode 1 (1) ☐ Alternative test mode()
6dB Bandwidth	☒ Test mode 1 (1) ☐ Alternative test mode()
Duty Cycle	☒ Test mode 1 (1) ☐ Alternative test mode()
Maximum Conducted Output Power	☒ Test mode 1 (1) ☐ Alternative test mode()
Power Spectral Density	☒ Test mode 1 (1) ☐ Alternative test mode()
Conducted Spurious Emission at the Band Edge	☒ Test mode 1 (1) ☐ Alternative test mode()
Unwanted Emissions into Non-Restricted Frequency Bands	☒ Test mode 1 (1) ☐ Alternative test mode()
AC Power Line Conducted Emission	☒ Test mode 3 ☐ Alternative test mode()
Unwanted Emissions into Restricted Frequency Bands	☒ Test mode 1 (1) ☐ Alternative test mode()

(1) Following commands with the specific test software "Nordic Direct Test Mode V2.5" are used to set the product

2.4. EQUIPMENT LABELLING



2.5. EQUIPMENT MODIFICATION

☒ None ☐ Modification:

2.6. FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follow:

$$FS = RA + AF + CF - AG$$

Where

- FS = Field Strength
- RA = Receiver Amplitude
- AF = Antenna Factor
- CF = Cable Factor
- AG = Amplifier Gain

Assume a receiver reading of 52.5dB μ V is obtained. The antenna factor of 7.4 and a cable factor of 1.1 are added. The amplifier gain of 29dB is subtracted, giving a field strength of 32 dB μ V/m.

$$FS = 52.5 + 7.4 + 1.1 - 29 = 32 \text{ dB}\mu\text{V/m}$$

The 32 dB μ V/m value can be mathematically converted to its corresponding level in μ V/m.

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(32\text{dB}\mu\text{V/m})/20] = 39.8 \mu\text{V/m}.$$

2.7. Test distance extrapolation – FCC/ISED

The field strength is extrapolated to the new measurement distance using formula from FCC Part15.31 (f) and §6.5-6.6 RSS-GEN:

Below 30MHz,

$$FS_{\text{limit}} = FS_{\text{max}} - 40 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

Above 30MHz,

$$FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

Where:

FS_{limit} is the calculation of field strength at the limit distance, expressed in dB μ V/m

FS_{max} is the measured field strength, expressed in dB μ V/m

d_{measure} is the distance of the measurement point from the EUT

d_{limit} is the reference limit distance

2.8. CALIBRATION DATE

The calibration intervals are extended at 12+2 months. This extended interval is based on the fact that there is sufficient calibration data to statistically establish a trend or based on experience of use of the test equipment to assure good measurement results for a longer period.

3. OCCUPIED BANDWIDTH

3.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : August 29, 2025
Ambient temperature : 23 °C
Relative humidity : 44 %

3.2. TEST SETUP

- The Equipment under Test is installed:

- ☒ On a table
☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

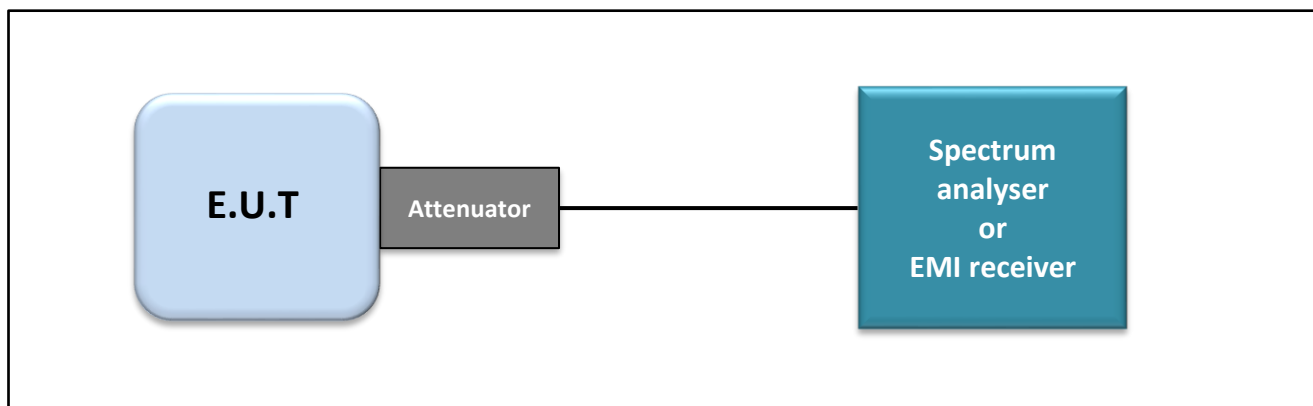
- ☒ Conducted Method
☐ Radiated Method

- Test Procedure:

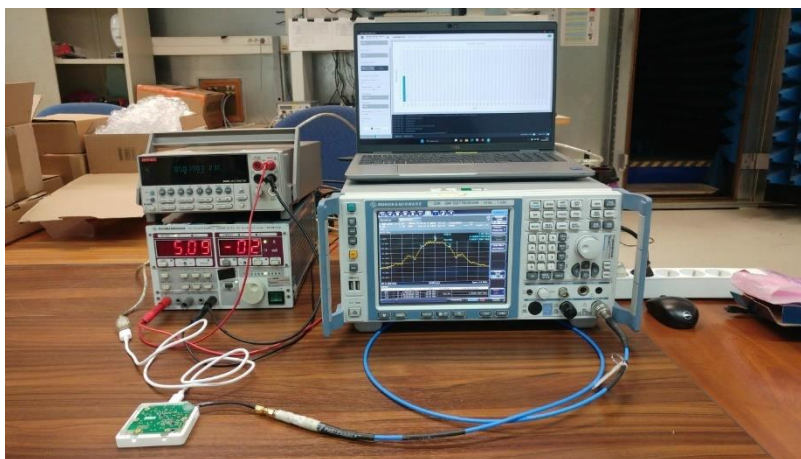
- ☐ RSS-Gen Issue 5.2 § 6.7
☒ ANSI C63.10 § 6.9.2

Measurement Procedure:

- RBW shall be in the range of 1% to 5% of the anticipated occupied bandwidth
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW
- SPAN = Capture all products of the modulation process
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- OBW 99% function of spectrum analyzer used



Test set up of Occupied Bandwidth



Photograph for Occupied bandwidth

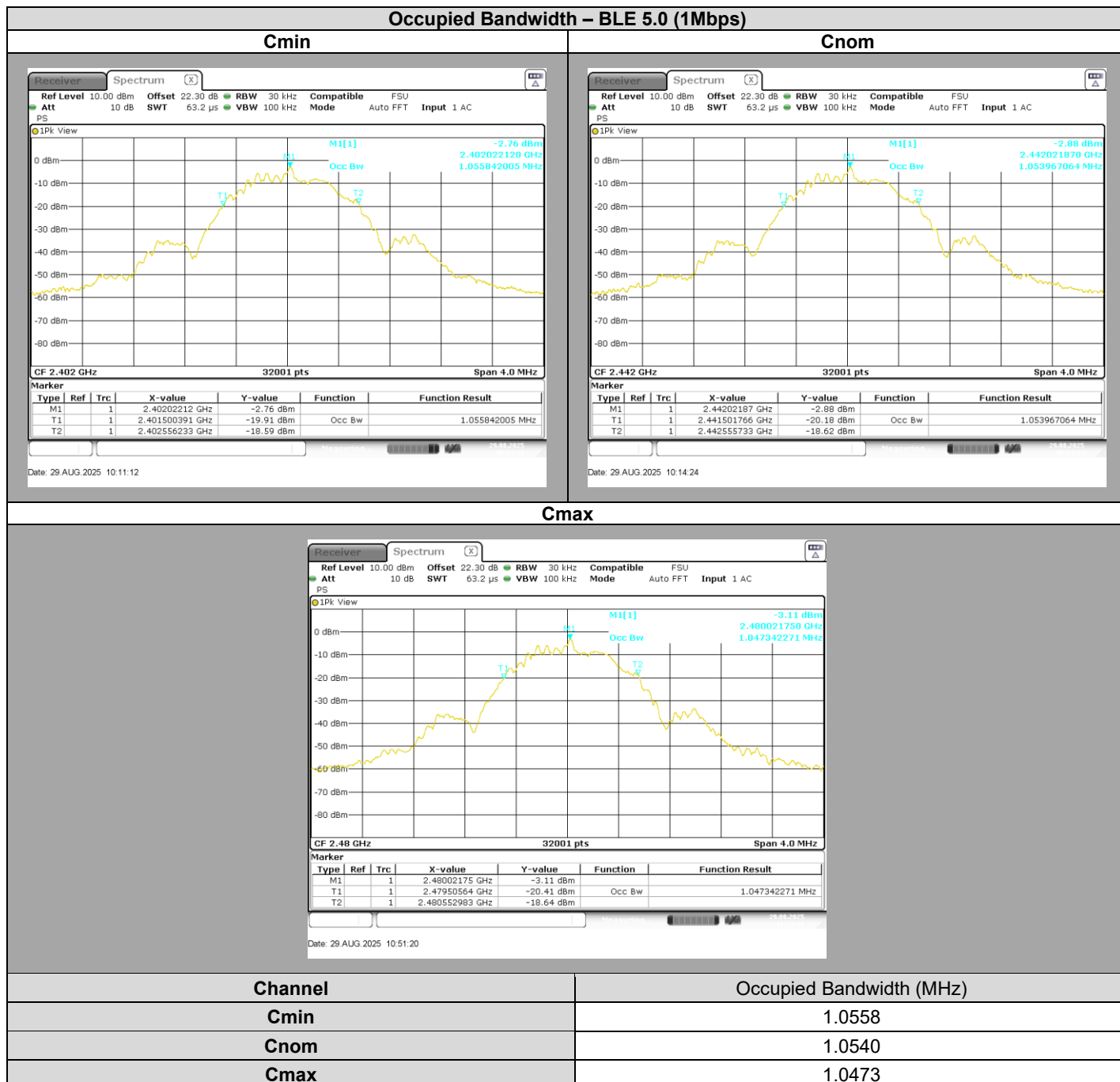
3.3. *LIMIT*

None

3.4. TEST EQUIPMENT LIST

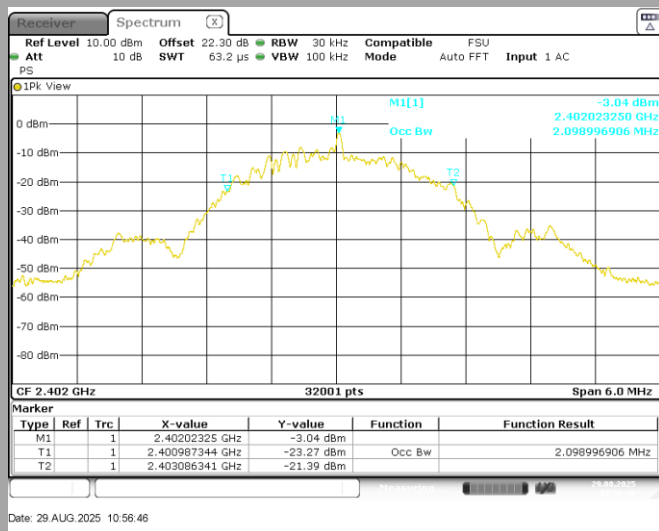
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
R&S Commander Software	ROHDE & SCHWARZ	Version 1.6.4	-	-	-
EMI receiver	ROHDE & SCHWARZ	ESR7_S36	A2642026	2024/04	2026/04
Cable SONDE 025 + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2025/07	2026/07
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

3.5. RESULTS

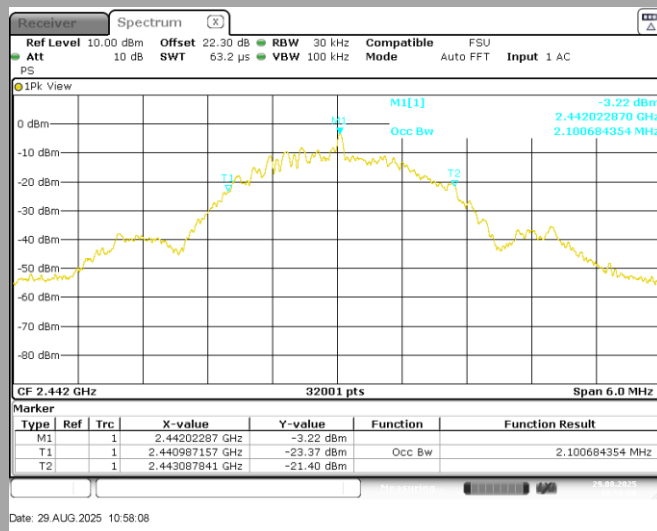


Occupied Bandwidth – BLE 5.0 (2Mbps)

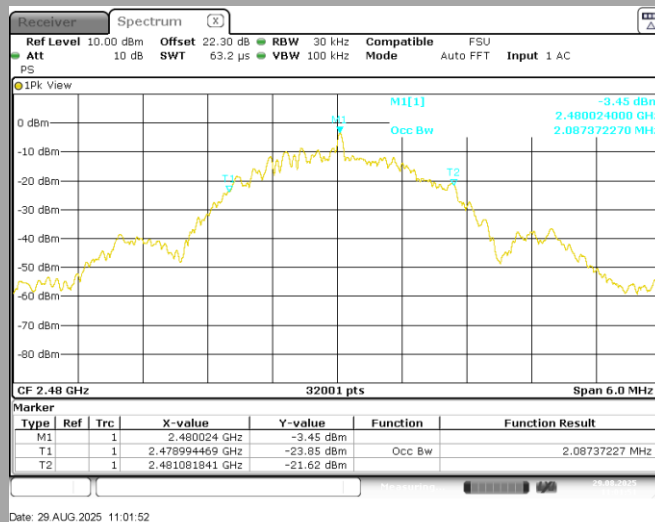
Cmin



Cnom



Cmax



Channel

Occupied Bandwidth (MHz)

Cmin

2.0990

Cnom

2.1007

Cmax

2.0874

3.6. CONCLUSION

Occupied Channel Bandwidth measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS-GEN ISSUE 5.2** limits.

4. 6dB EMISSION BANDWIDTH

4.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : August 29, 2025
Ambient temperature : 23 °C
Relative humidity : 44 %

4.2. TEST SETUP

- The Equipment under Test is installed:

- ☒ On a table
☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

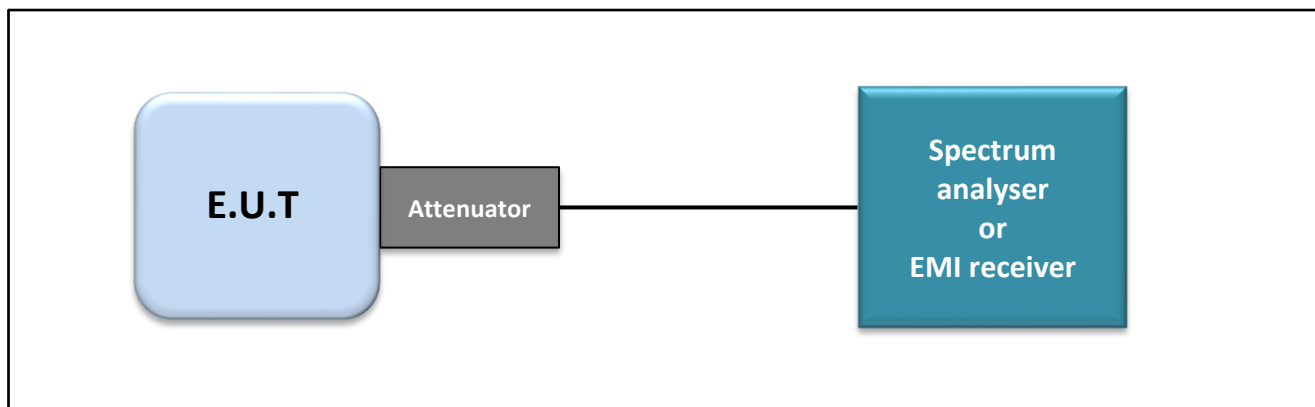
- ☒ Conducted Method
☐ Radiated Method

- Test Procedure:

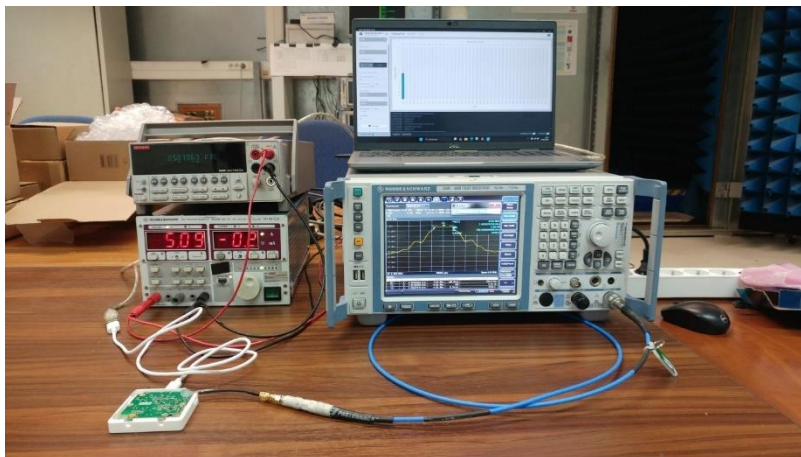
- ☒ ANSI C63.10 § 11.8.1
☐ ANSI C63.10 § 11.8.2

Measurement Procedure:

1. Set resolution bandwidth (RBW) = 100kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission. Compare the resultant bandwidth with the RBW setting of the analyzer.



Test set up of 6dB Emission Bandwidth



Photograph for 6dB emission bandwidth

4.3. LIMIT

Frequency range	The 6dB bandwidth Limit
2400MHz to 2483.5MHz	$\geq 500\text{kHz}$

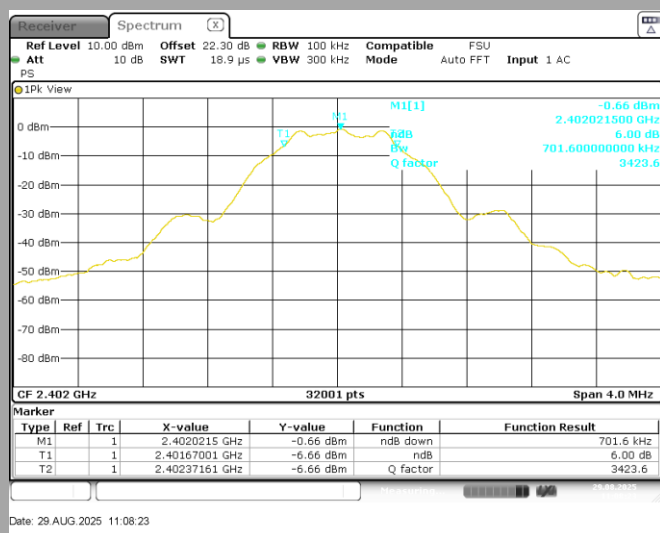
4.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
R&S Commander Software	ROHDE & SCHWARZ	Version 1.6.4	-	-	-
EMI receiver	ROHDE & SCHWARZ	ESR7_S36	A2642026	2024/04	2026/04
Cable SONDE 025 + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2025/07	2026/07
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

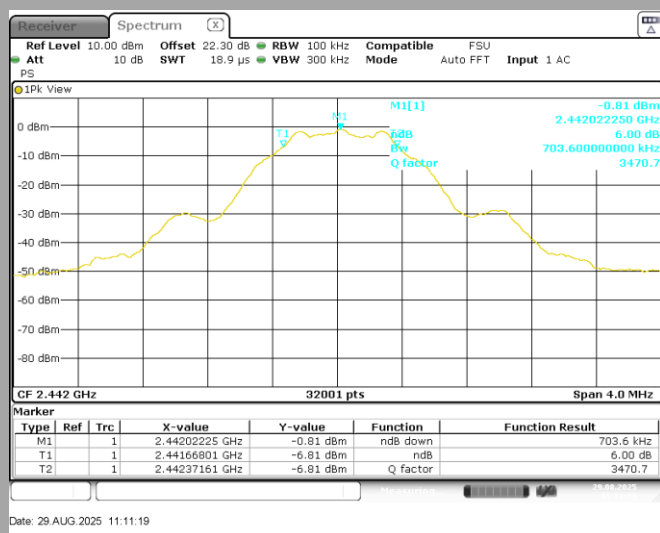
4.5. RESULTS

6dB Emission Bandwidth – BLE 5.0 (1Mbps)

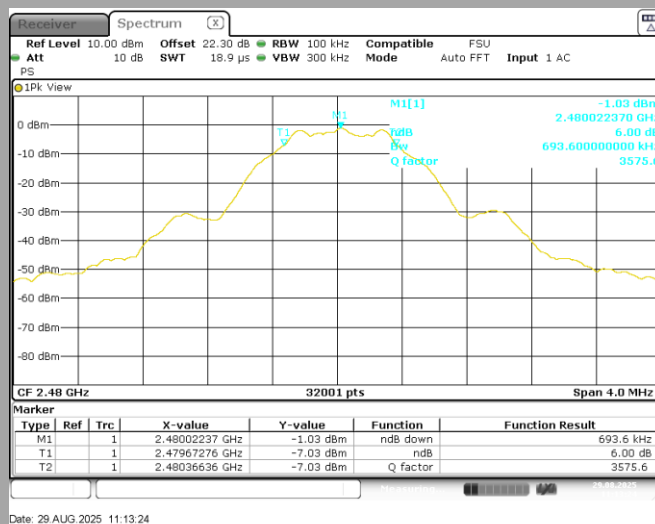
Cmin



Cnom



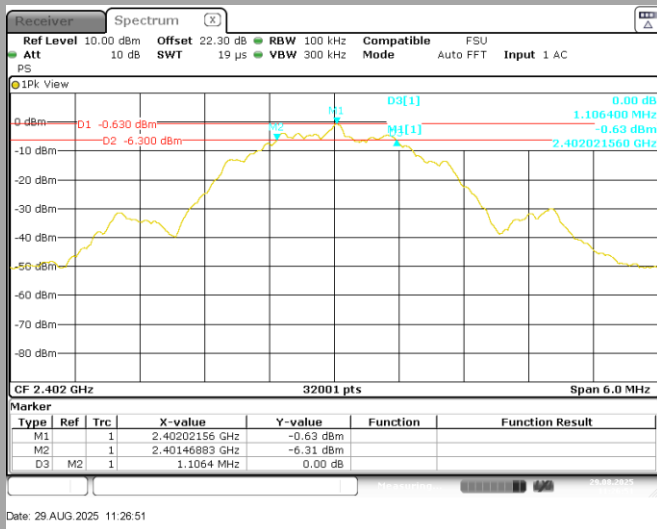
Cmax



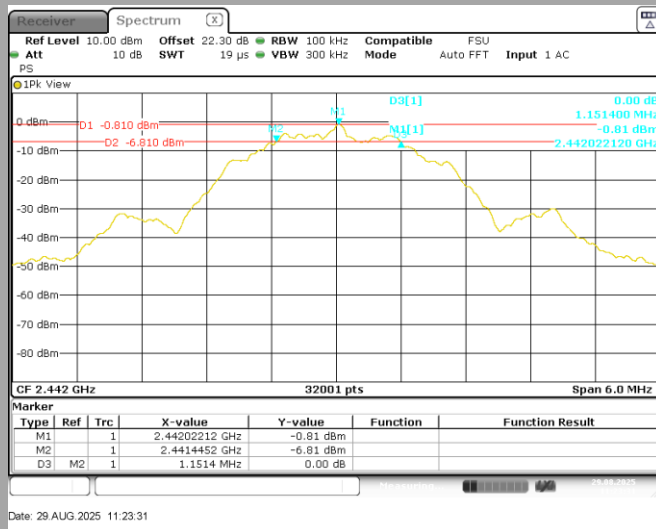
Channel	6dB Emission Bandwidth (MHz)	Limit (MHz)
Cmin	0.702	Minimum 0.5
Cnom	0.704	Minimum 0.5
Cmax	0.694	Minimum 0.5

6dB Emission Bandwidth – BLE 5.0 (2Mbps)

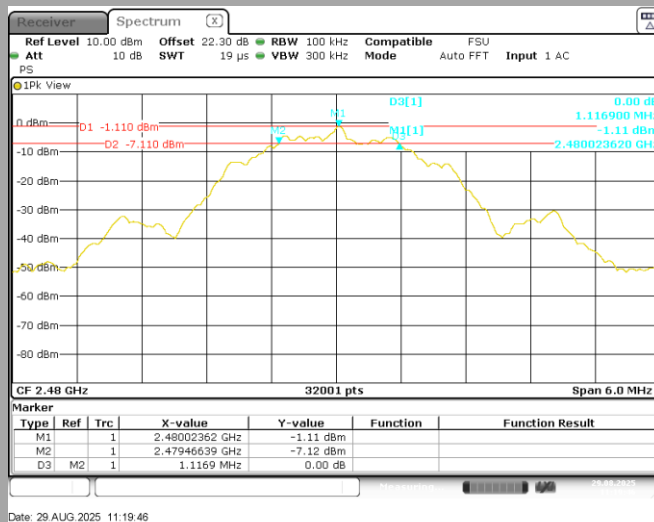
Cmin



Cnom



Cmax



Channel	6dB Emission Bandwidth (MHz)	Limit (MHz)
Cmin	1.106	Minimum 0.5
Cnom	1.151	Minimum 0.5
Cmax	1.117	Minimum 0.5

4.6. CONCLUSION

6dB Emission Bandwidth measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS 247 ISSUE 3** limits.

5. DUTY CYCLE

5.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : August 29, 2025
Ambient temperature : 23 °C
Relative humidity : 44 %

5.2. TEST SETUP

- The Equipment under Test is installed:

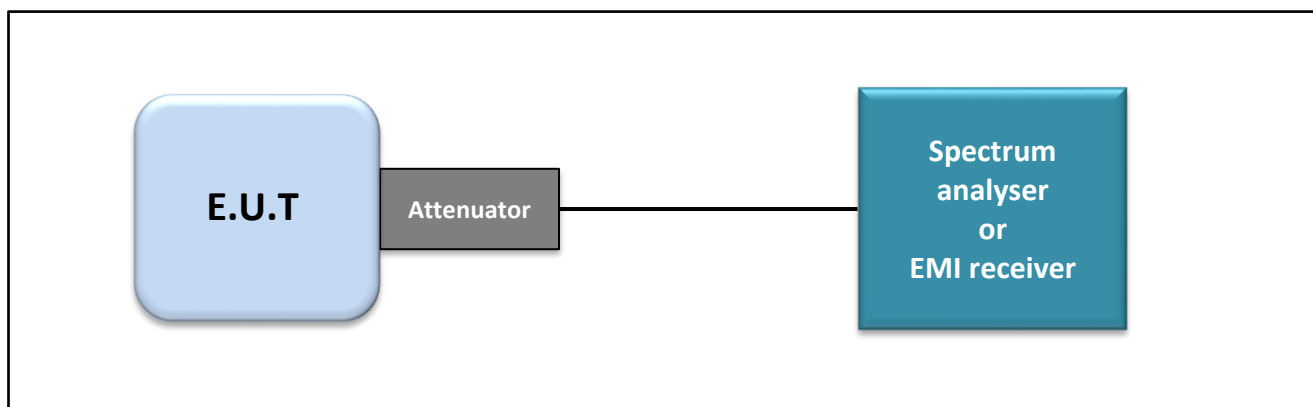
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

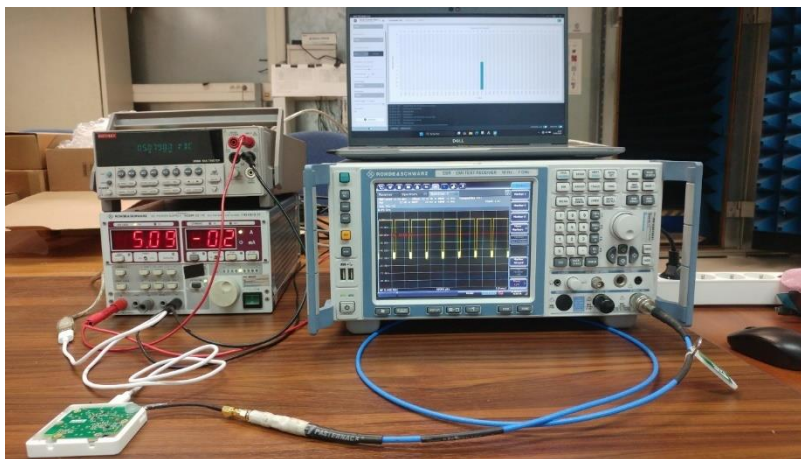
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ ANSI C63.10 § 11.6



Test set up of Duty Cycle



Photograph for Duty Cycle

5.3. LIMIT

None

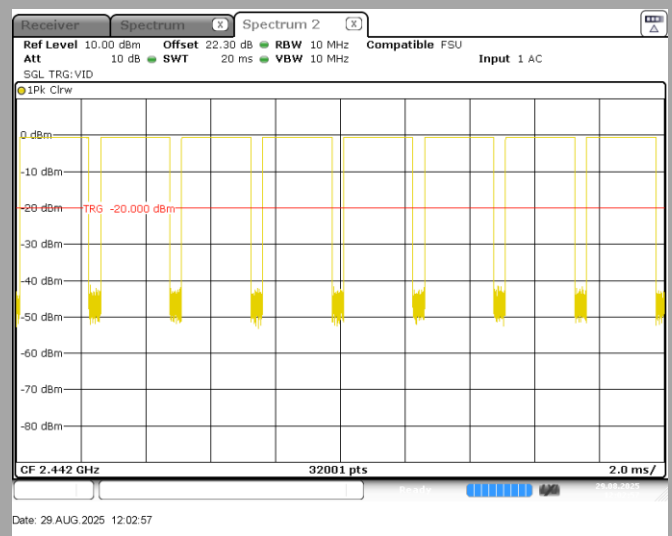
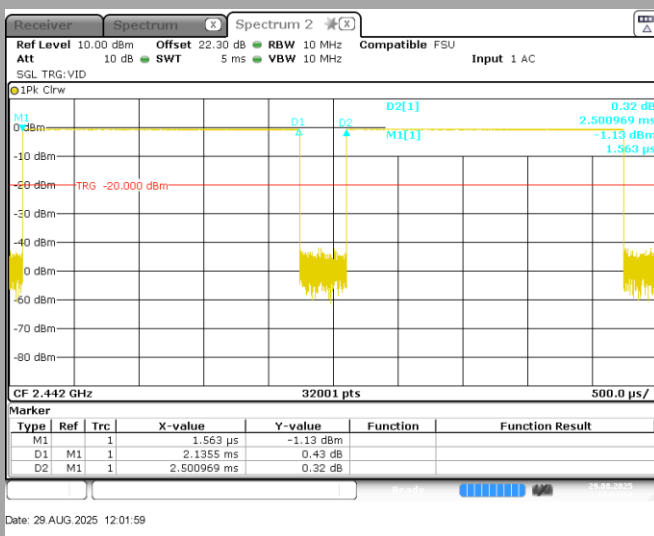
5.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
R&S Commander Software	ROHDE & SCHWARZ	Version 1.6.4	-	-	-
EMI receiver	ROHDE & SCHWARZ	ESR7_S36	A2642026	2024/04	2026/04
Cable SONDE 025 + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2025/07	2026/07
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

5.5. RESULTS

Duty Cycle – BLE 5.0 (1Mbps)

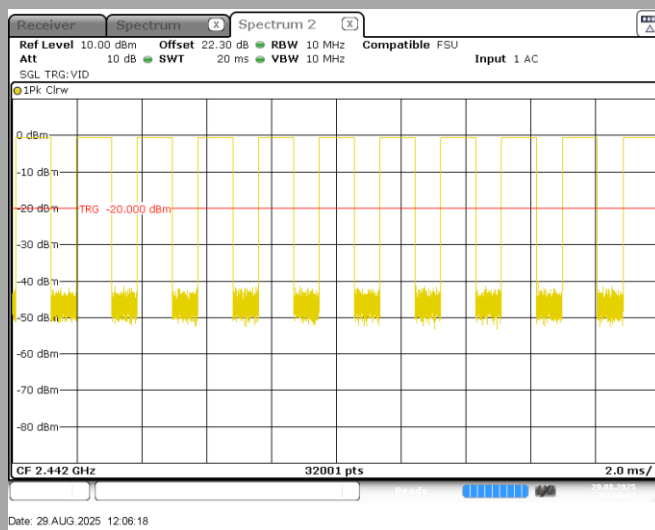
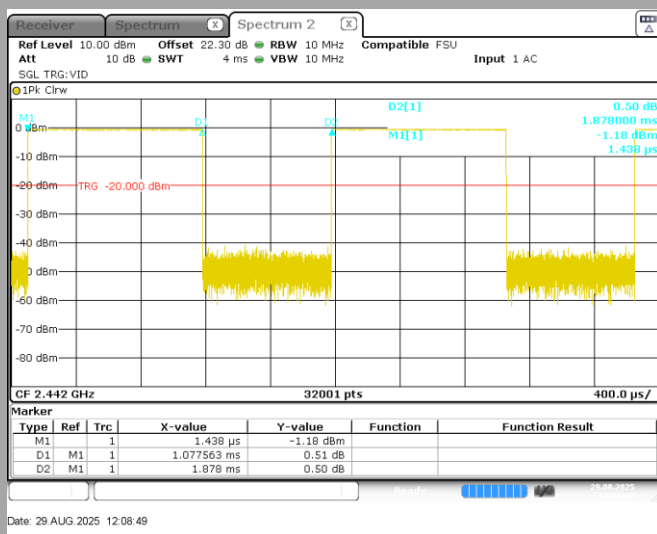
Cmin



Channel	Duty Cycle (%)	Duty Cycle Correction (dB)
Cnom	85.6	$20\log\left(\frac{1}{\text{duty cycle}}\right) = 1.35$

Duty Cycle – BLE 5.0 (2Mbps)

Cmin



Channel	Duty Cycle (%)	Duty Cycle Correction (dB)
Cnom	57.5	$20\log\left(\frac{1}{\text{duty cycle}}\right) = 4.8$

5.6. CONCLUSION

Duty Cycle measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS 247 ISSUE 3** limits.

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : August 29, 2025
Ambient temperature : 23 °C
Relative humidity : 44 %

6.2. TEST SETUP

- The Equipment under Test is installed:

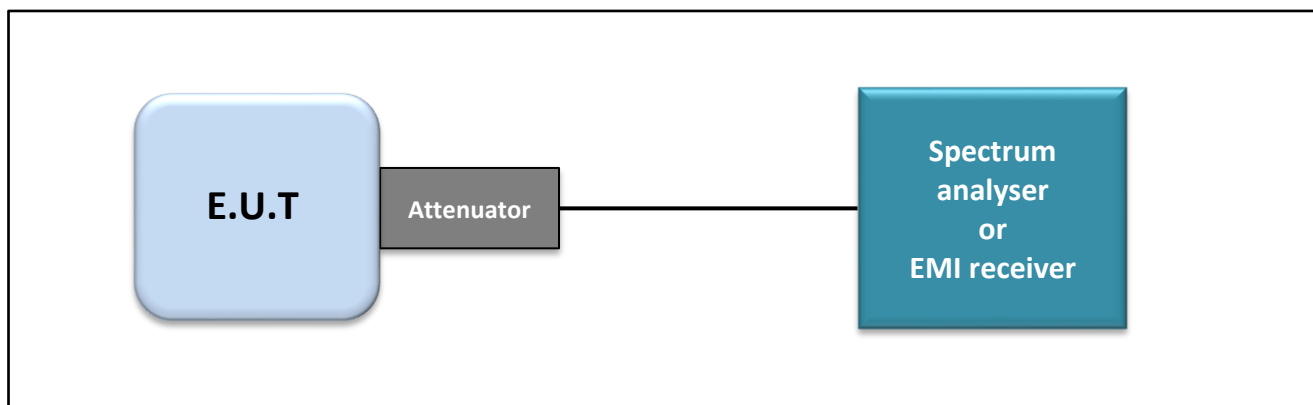
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

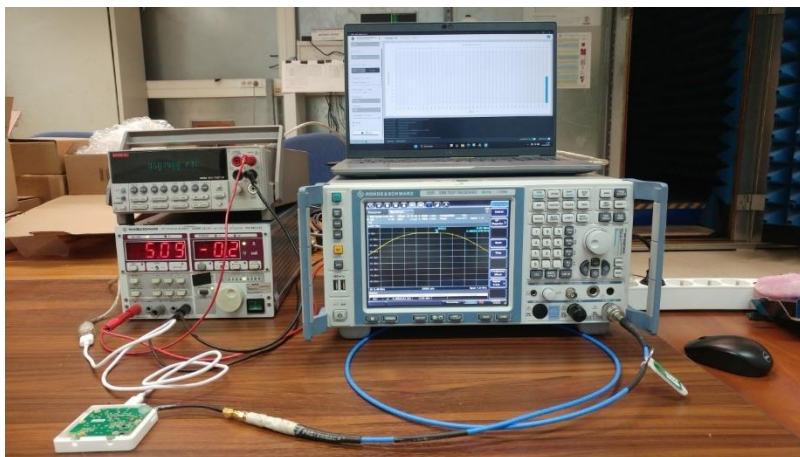
- ☐ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ ANSI C63.10 § 11.9.1.1
- ☐ ANSI C63.10 § 11.9.1.2
- ☐ ANSI C63.10 § 11.9.2.2.2 (Method AVGSA-1)
- ☐ ANSI C63.10 § 11.9.2.2.4 (Method AVGSA-2)



Test set up of Maximum Conducted Output Power



Photograph for Maximum Conducted Output Power

6.3. LIMIT

Frequency range	Maximum Conducted Output Power
2400MHz to 2483.5MHz	≤30dBm*

*Remark: Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

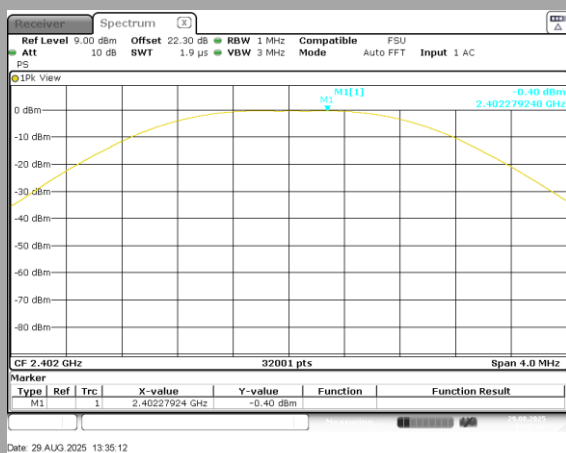
6.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
R&S Commander Software	ROHDE & SCHWARZ	Version 1.6.4	-	-	-
EMI receiver	ROHDE & SCHWARZ	ESR7_S36	A2642026	2024/04	2026/04
Cable SONDE 025 + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2025/07	2026/07
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

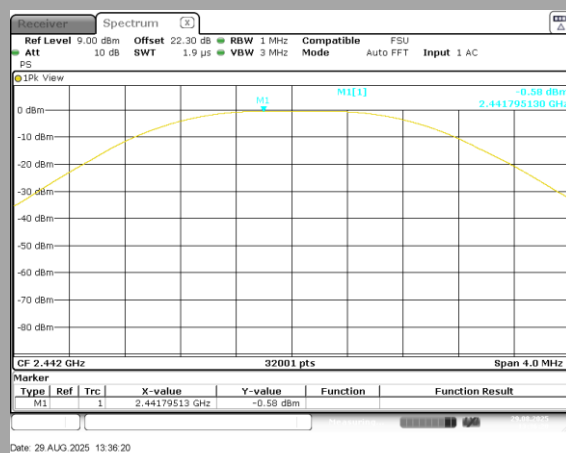
6.5. RESULTS

Maximum Conducted Output Power – BLE 5.0 (1Mbps)

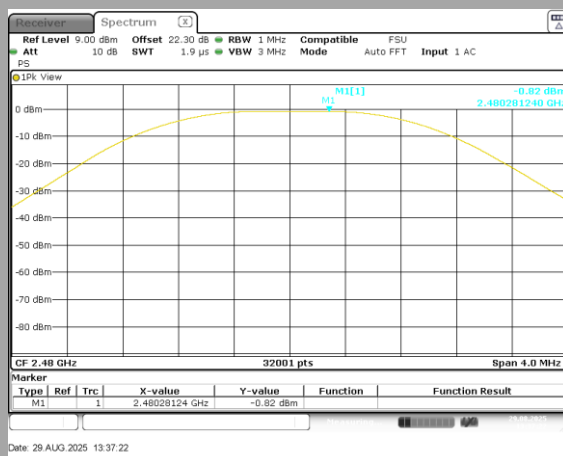
Cmin



Cnom



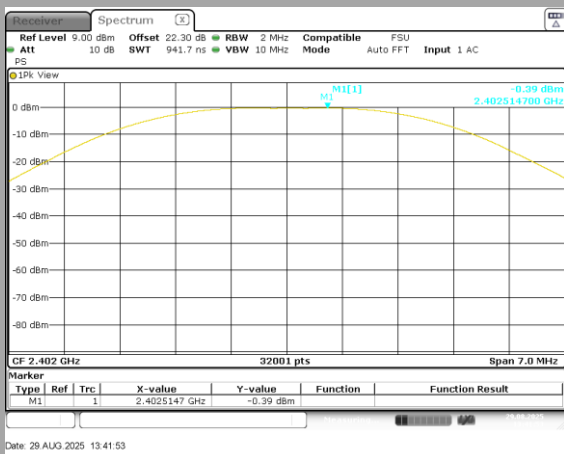
Cmax



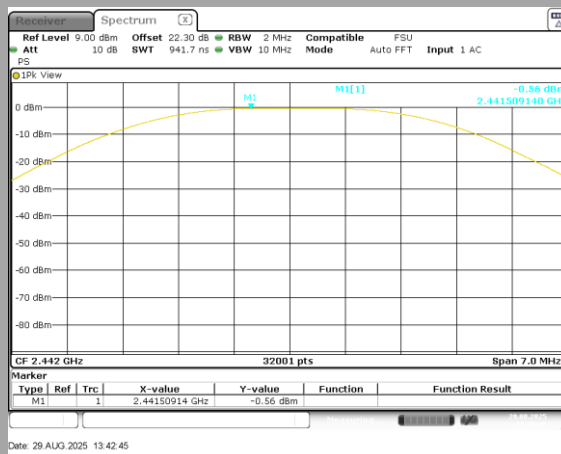
Channel	Offset Cable + Att (dB)	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Limit (dBm)
Cmin	22.3	1	-0.40	30
Cnom	22.3	1	-0.58	30
Cmax	22.3	1	-0.82	30

Maximum Conducted Output Power – BLE 5.0 (2Mbps)

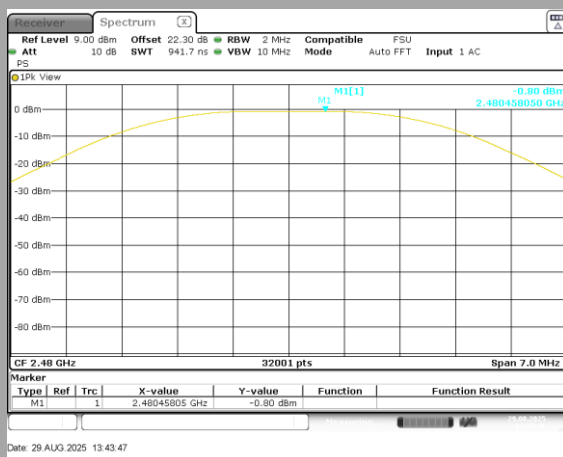
Cmin



Cnom



Cmax



Channel	Offset Cable + Att (dB)	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Limit (dBm)
Cmin	22.3	1	-0.39	30
Cnom	22.3	1	-0.56	30
Cmax	22.3	1	-0.80	30

6.6. CONCLUSION

Maximum Conducted Output Power measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS 247 ISSUE 3** limits.

7. POWER SPECTRAL DENSITY

7.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : August 29, 2025
Ambient temperature : 23 °C
Relative humidity : 44 %

7.2. TEST SETUP

- The Equipment Under Test is installed:

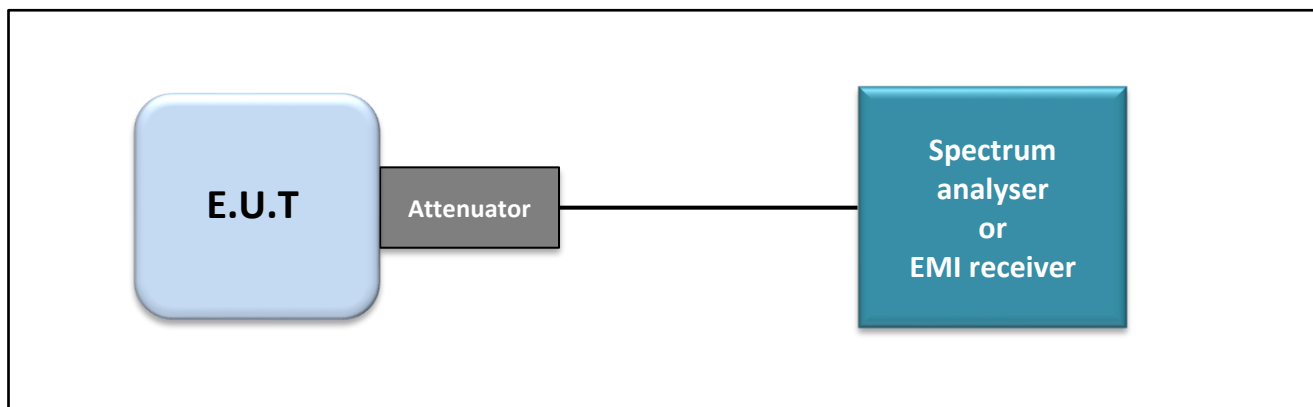
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

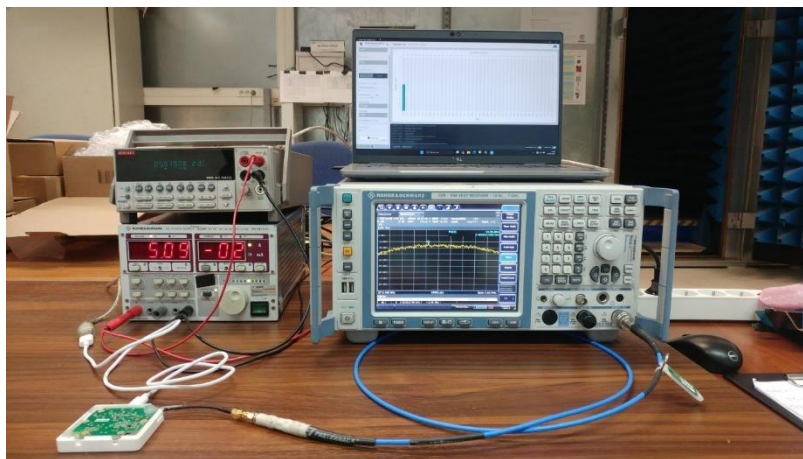
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ ANSI C63.10 § 11.10.2 (Method PKPSD)
- ☐ ANSI C63.10 § 11.10.3 (Method AVGPSD-1)



Test set up of Power Spectral Density



Photograph for Power Spectral Density

7.3. LIMIT

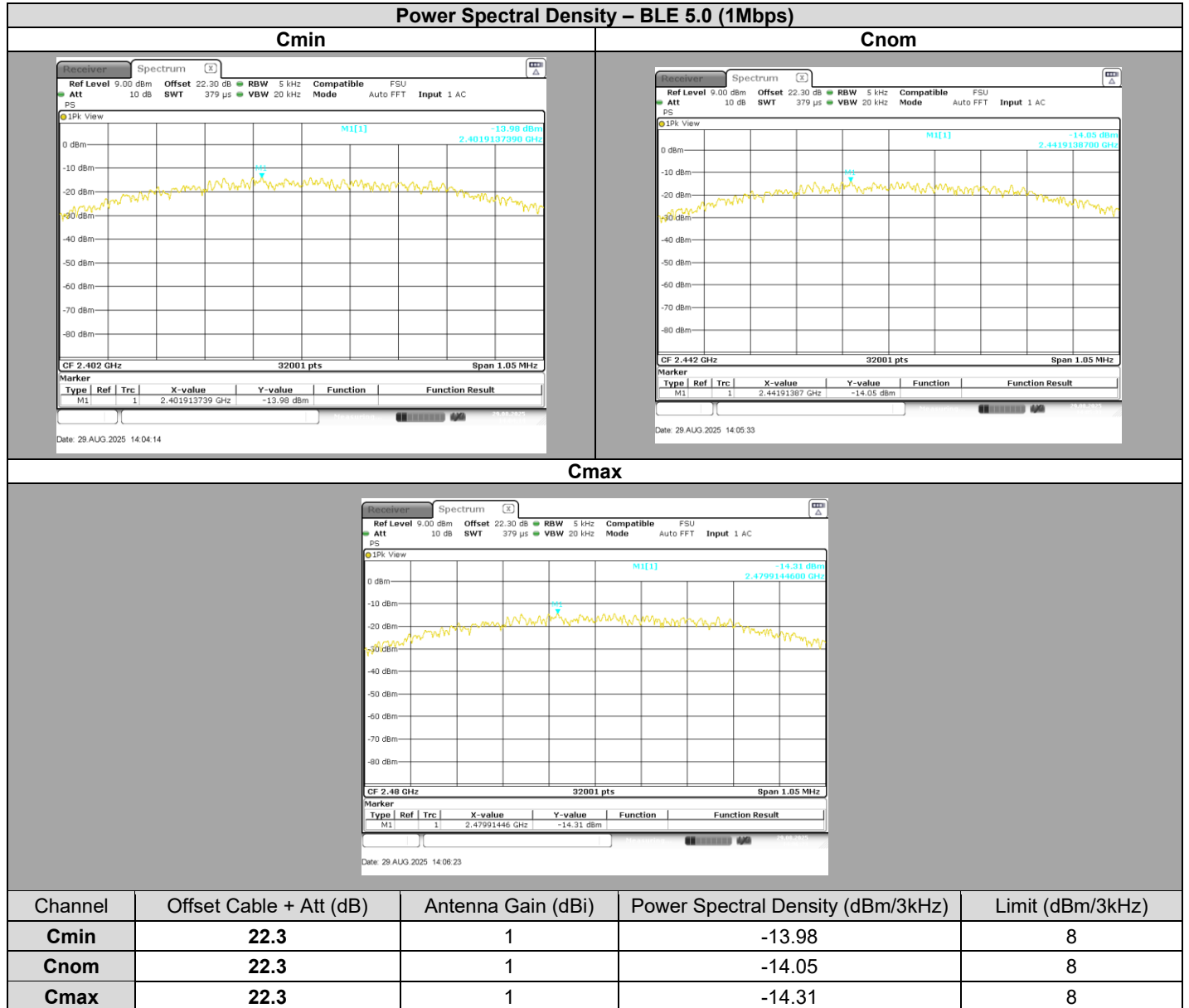
Frequency range	Power Spectral Density
2400MHz to 2483.5MHz	$\leq 8\text{dBm}/3\text{kHz}^*$

*Remark: Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

7.4. TEST EQUIPMENT LIST

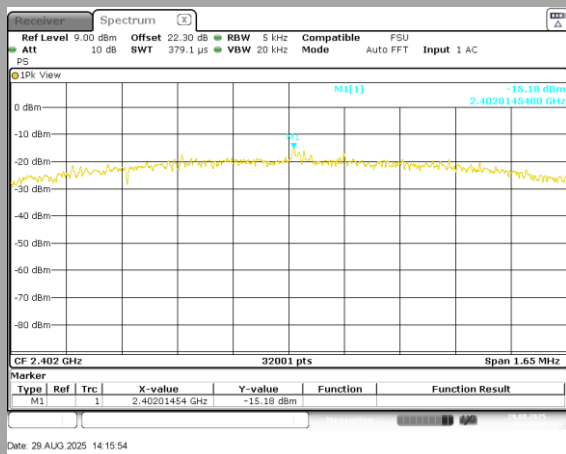
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
R&S Commander Software	ROHDE & SCHWARZ	Version 1.6.4	-	-	-
EMI receiver	ROHDE & SCHWARZ	ESR7_S36	A2642026	2024/04	2026/04
Cable SONDE 025 + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2025/07	2026/07
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

7.5. RESULTS

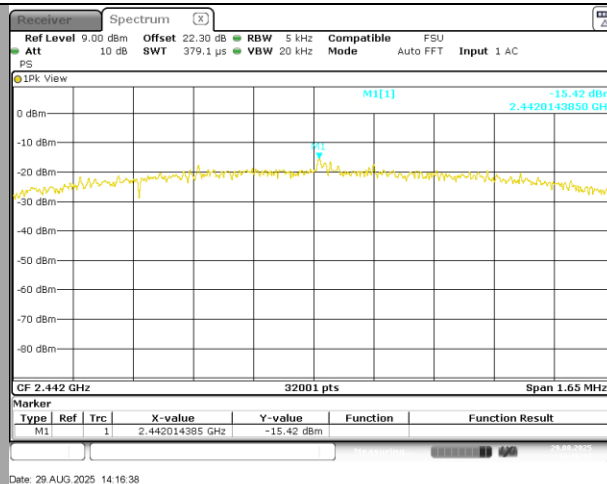


Power Spectral Density – BLE 5.0 (2Mbps)

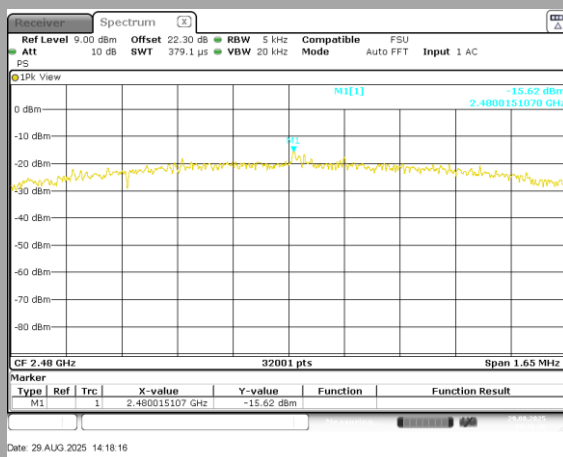
Cmin



Cnom



Cmax



Channel	Offset Cable + Att (dB)	Antenna Gain (dBi)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
Cmin	22.3	1	-15.18	8
Cnom	22.3	1	-15.42	8
Cmax	22.3	1	-15.62	8

7.6. CONCLUSION

Power Spectral Density measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS 247 ISSUE 3** limits.

8. UNWANTED EMISSIONS INTO NON-RESTRICTED FREQUENCY BANDS AT THE BAND EDGE

8.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : August 29, 2025
Ambient temperature : 23 °C
Relative humidity : 44 %

8.2. TEST SETUP

- The Equipment Under Test is installed:

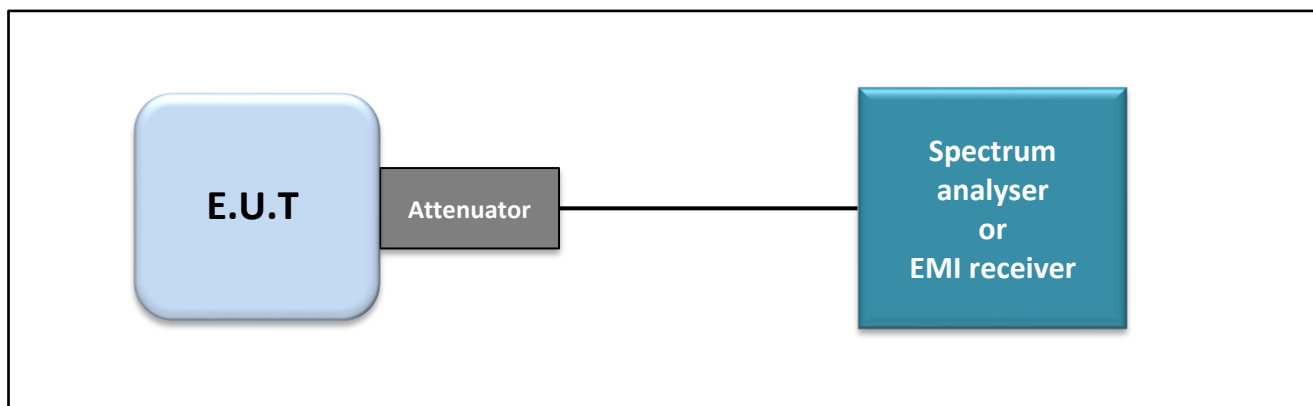
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

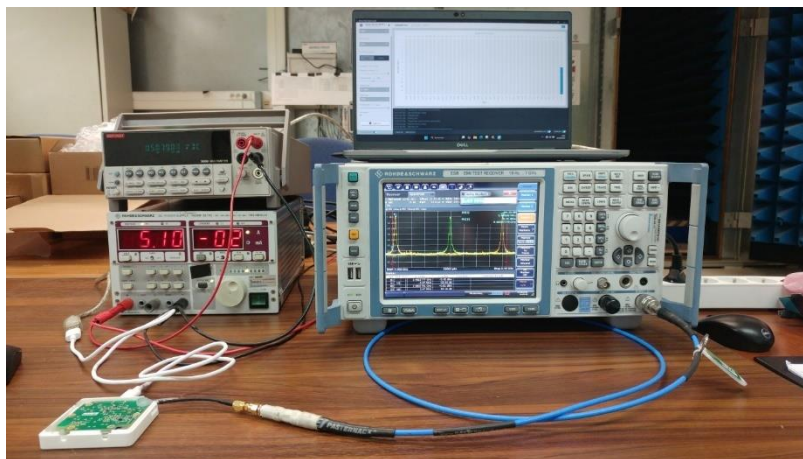
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ ANSI C63.10 § 11.11



Test set up of Unwanted Emissions into Non-Restricted Frequency Bands at the Band Edge



Photograph for Unwanted Emission into non-restricted frequency bands at the band edge

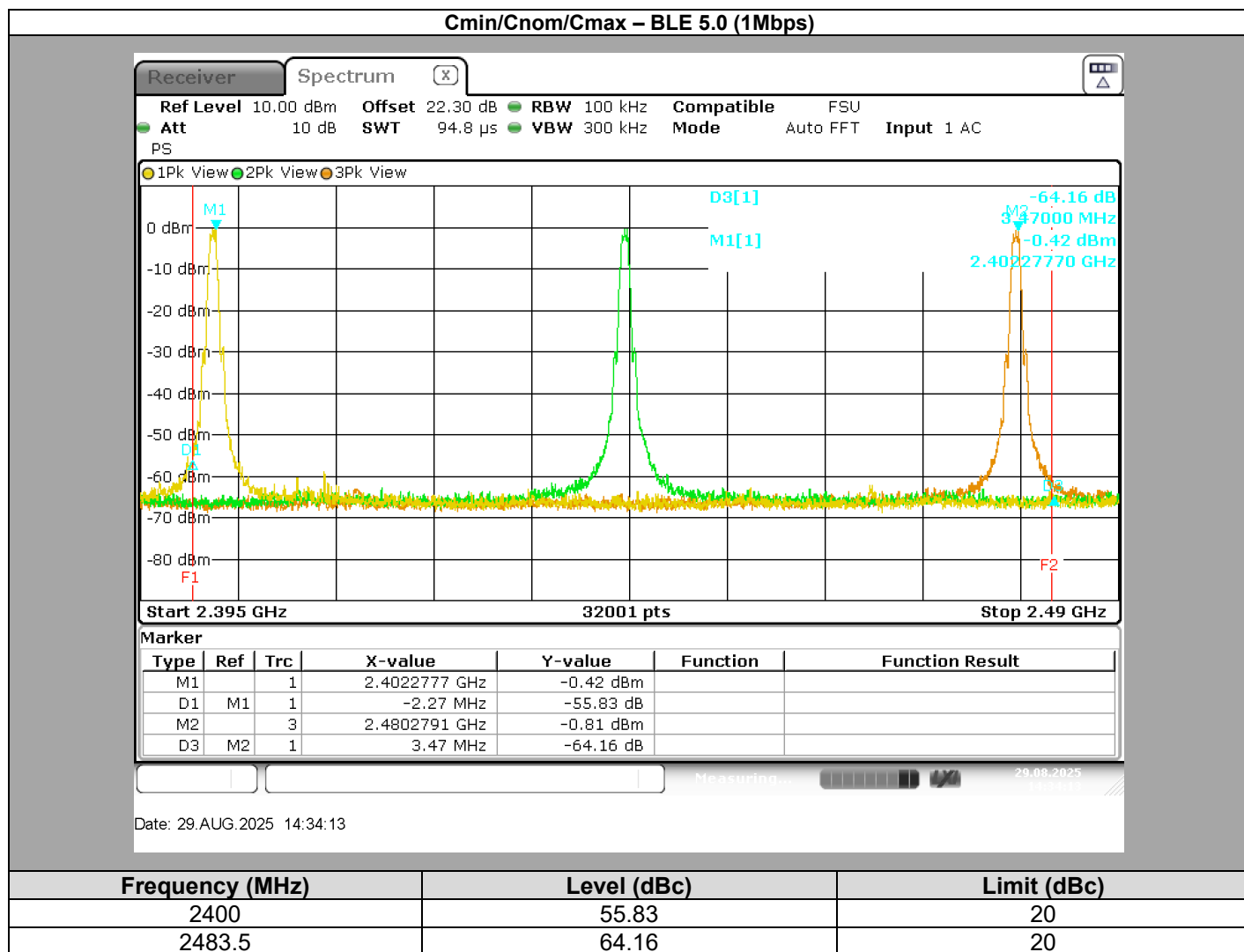
8.3. LIMIT

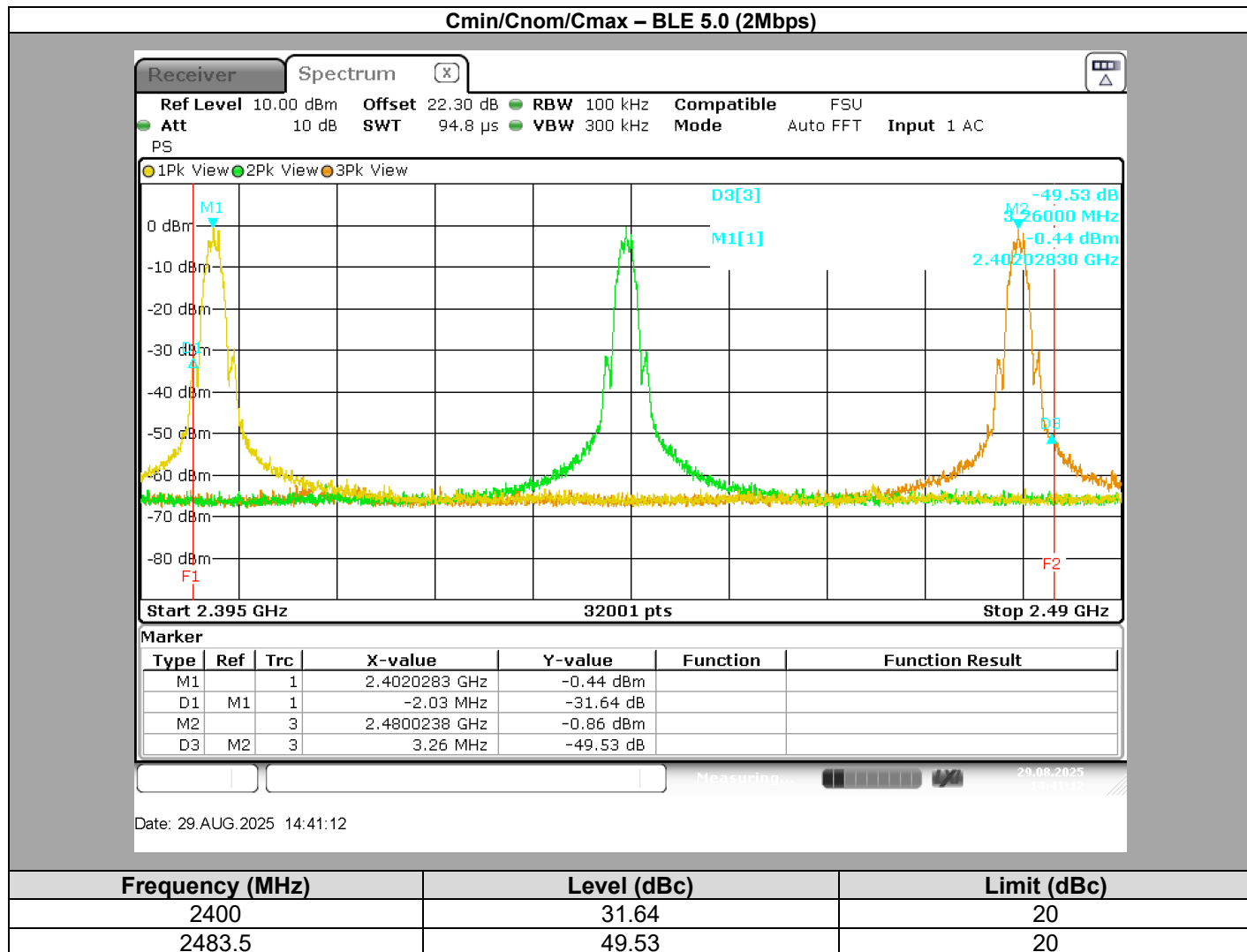
All Spurious Emissions must be at least 20dB (Maximum Conduced Power) below the Fundamental Radiator Level at the Band Edge "2400MHz & 2483,5MHz"

8.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
R&S Commander Software	ROHDE & SCHWARZ	Version 1.6.4	-	-	-
EMI receiver	ROHDE & SCHWARZ	ESR7_S36	A2642026	2024/04	2026/04
Cable SONDE 025 + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329970	2025/07	2026/07
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

8.5. RESULTS





8.6. CONCLUSION

Unwanted Emission into non-restricted frequency bands at the band edge measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS 247 ISSUE 3** limits.

9. UNWANTED EMISSIONS INTO NON-RESTRICTED FREQUENCY BANDS

9.1. TEST CONDITIONS

Test performed by : Julien Palard
Date of test : September 1, 2025
Ambient temperature : 24 °C
Relative humidity : 48 %

9.2. TEST SETUP

- The Equipment under Test is installed:

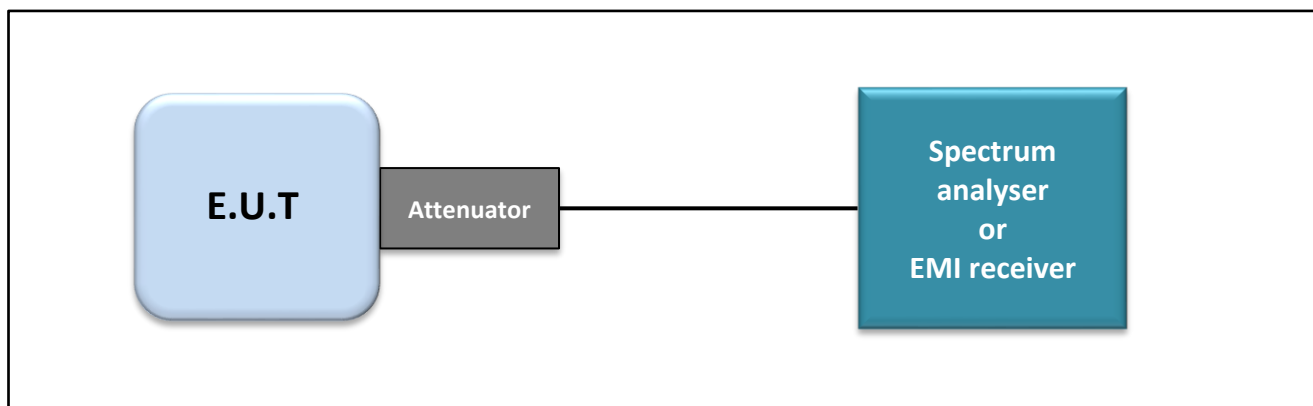
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

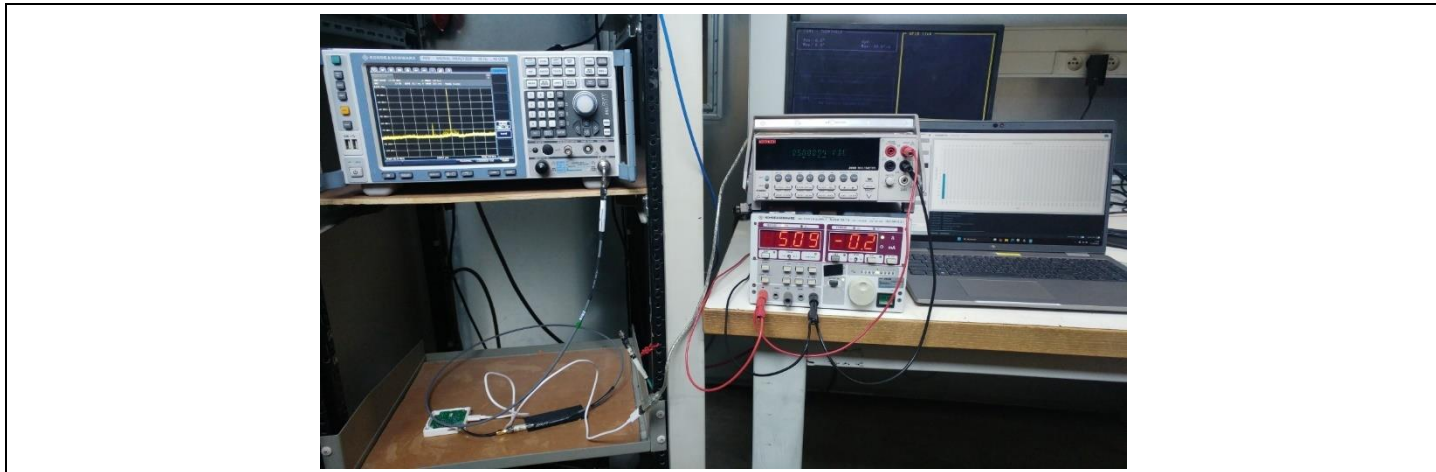
- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ ANSI C63.10 § 11.11



Test set up of Unwanted Emissions into Non-Restricted Frequency Bands



Photograph for Unwanted Emission into non-restricted frequency bands

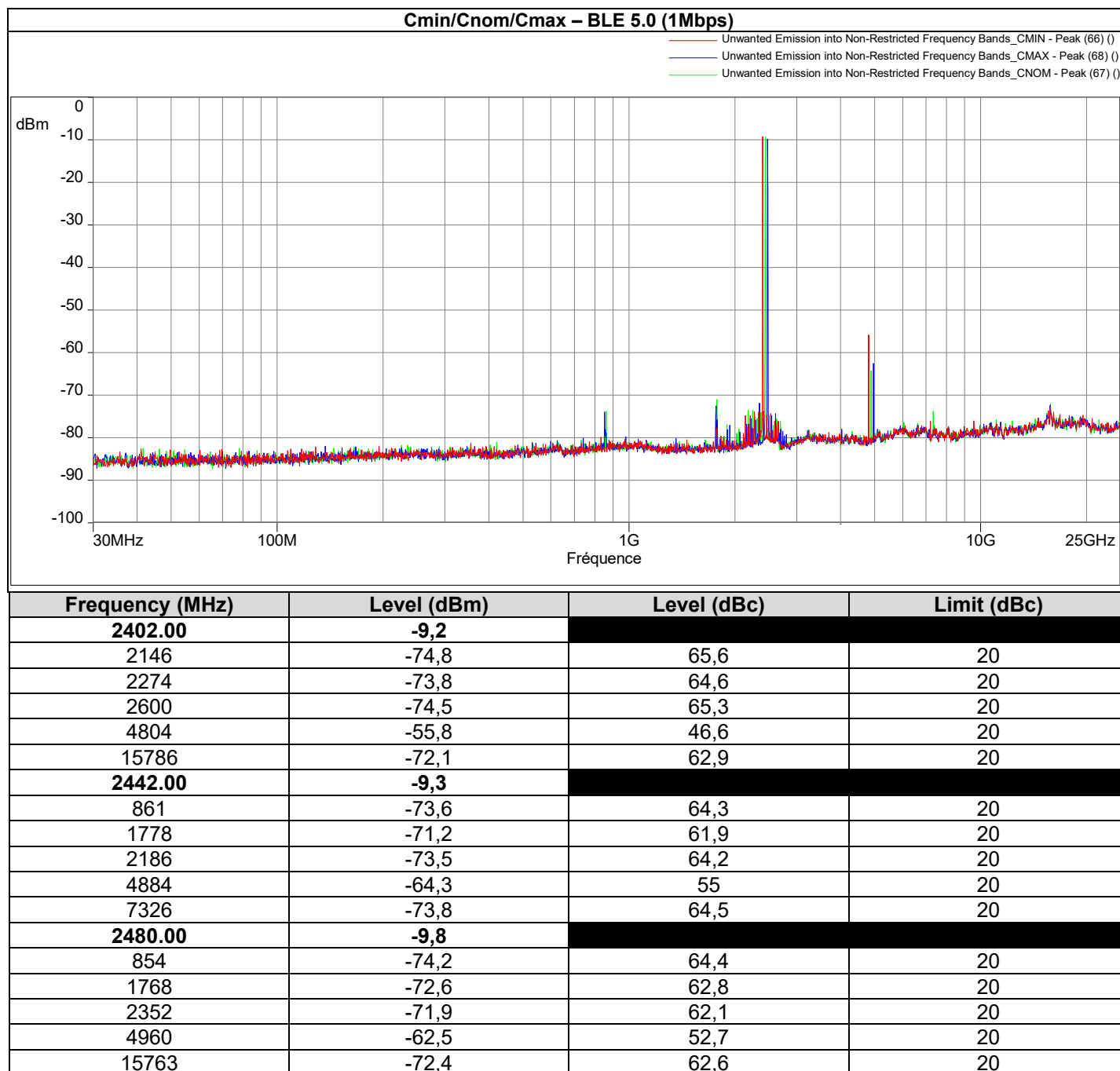
9.3. LIMIT

All Spurious Emissions must be at least 20dB (Maximum Conduced Power) below the Fundamental Radiator Level

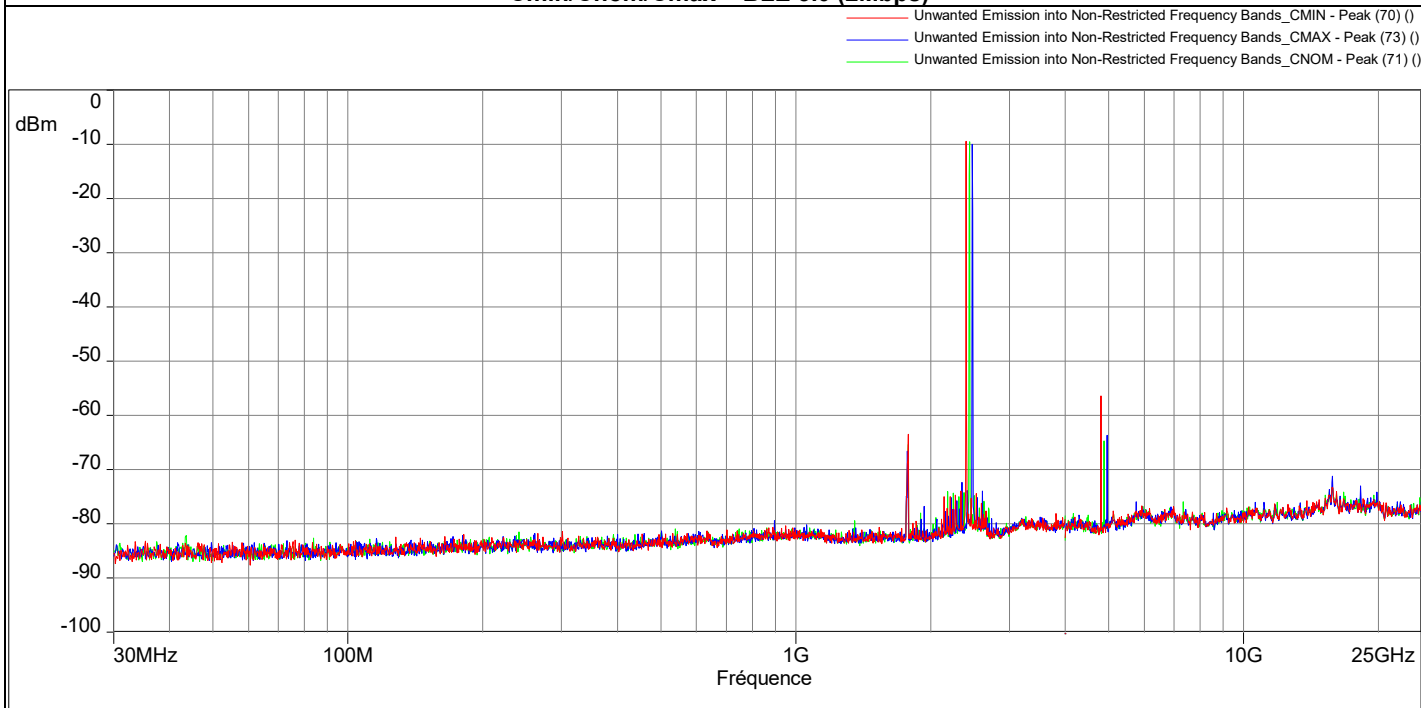
9.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
BAT EMC Software	NEXIO	Version V3.21.0.32	-	-	-
EMI receiver	ROHDE & SCHWARZ	FSV40GHz	A4060061	2024/07	2026/07
Attenuator 3dB Cable Spurious Conducted	-	WA54-3-12	A7122223	2024/01	2026/01
Cable S36 chamber	PASTERNAK	PE360-150CM	A5329940	2025/01	2026/01
Power supply	ROHDE & SCHWARZ	NGSM 32/10	A7040074	Calibrated with Multimeter	
Multimeter	KEITHLEY	2000	A1242090	2025/06	2027/06
Thermo-hygrometer	OREGON	-	B4204075	2024/05	2026/05

9.5. RESULTS



Cmin/Cnom/Cmax – BLE 5.0 (2Mbps)



Frequency (MHz)	Level (dBm)	Level (dBc)	Limit (dBc)
2402.00	-9,4		
1783	-63,5	54,1	20
2380	-73,9	64,5	20
2530	-74,4	65	20
4804	-56,4	47	20
15765	-73,3	63,9	20
2442.00	-9,5		
1783	-65,3	55,8	20
2186	-74,1	64,6	20
2506	-74,8	65,3	20
4884	-64,7	55,2	20
15778	-73,1	63,6	20
2480.00	-9,9		
1774	-66,6	56,7	20
2352	-72,4	62,5	20
2608	-73,9	64	20
4960	-63,6	53,7	20
15775	-71,2	61,3	20

9.6. CONCLUSION

Unwanted Emission into non-restricted frequency bands measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.247 & RSS 247 ISSUE 3** limits.

10. AC POWER LINE CONDUCTED EMISSIONS

10.1. TEST CONDITIONS

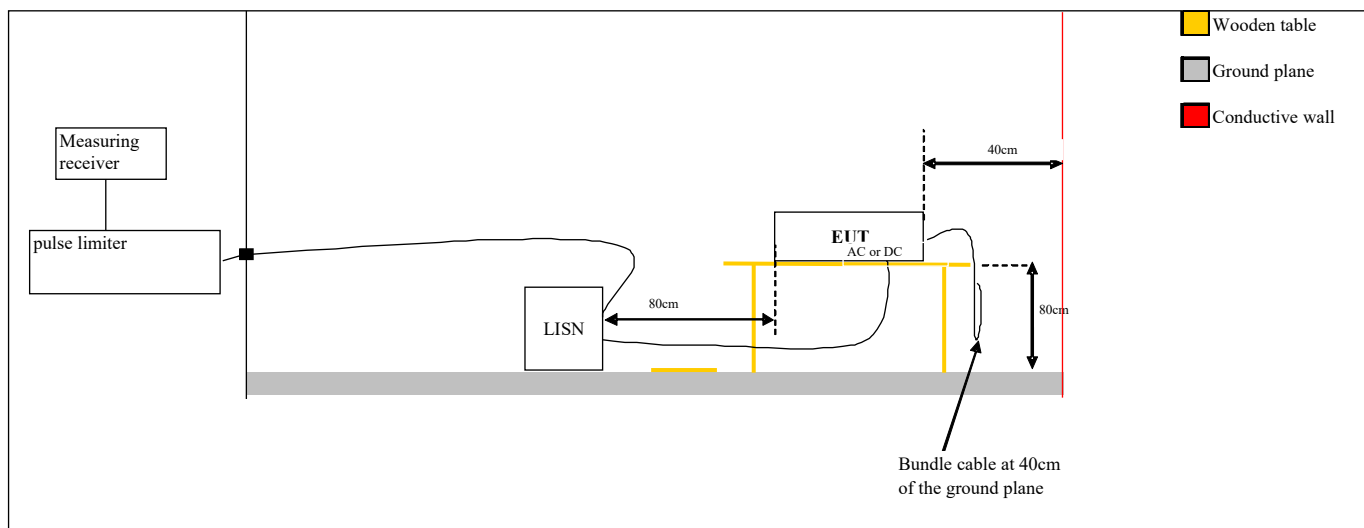
Test performed by : **Willy Daclinat**
 Date of test : March 24, 2025
 Ambient temperature : 20°C
 Relative humidity : 38%

10.2. TEST SETUP

The product has been tested according to ANSI C63.10 method. The EUT is placed on the ground reference plane, at 80cm from the LISN. The distance between the EUT and the vertical ground plane is 40cm. Auxiliaries are powered by another LISN. The cable has been shorted to 1meter length. The EUT is powered through the LISN. Measurement is made with a receiver in peak mode. This was followed by a Quasi-Peak, i.e. CISPR measurement for any strong signal. If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary. The LISN (measure) is 50Ω / 50μH. Interconnecting cables and equipment's were moved to position that maximized emission.

Voltage table used (for Power Line Conducted Emissions):

Type	Measurement performed:	
☒ AC / ☒ DC (Auxiliary used)	☒ 120VAC/60Hz	☒ 240VAC/50Hz
☐ USB (Laptop auxiliary)	☐ 120VAC/60Hz (Laptop auxiliary)	☐ 240VAC/50Hz(Laptop auxiliary)



Test set up of AC Power Line Conducted Emissions



Photograph for AC Power Line Conducted Emissions (Front view)

10.3. LIMIT

Frequency range	Level	Detector
0,15kHz to 0,5MHz	66dB μ V to 56 μ V*	QPeak
	56dB μ V to 46 μ V*	Average
0,5MHz to 5MHz	56dB μ V	QPeak
	46dB μ V	Average
5MHz to 30MHz	60B μ V	QPeak
	50dB μ V	Average

*Decreases with the logarithm of the frequency



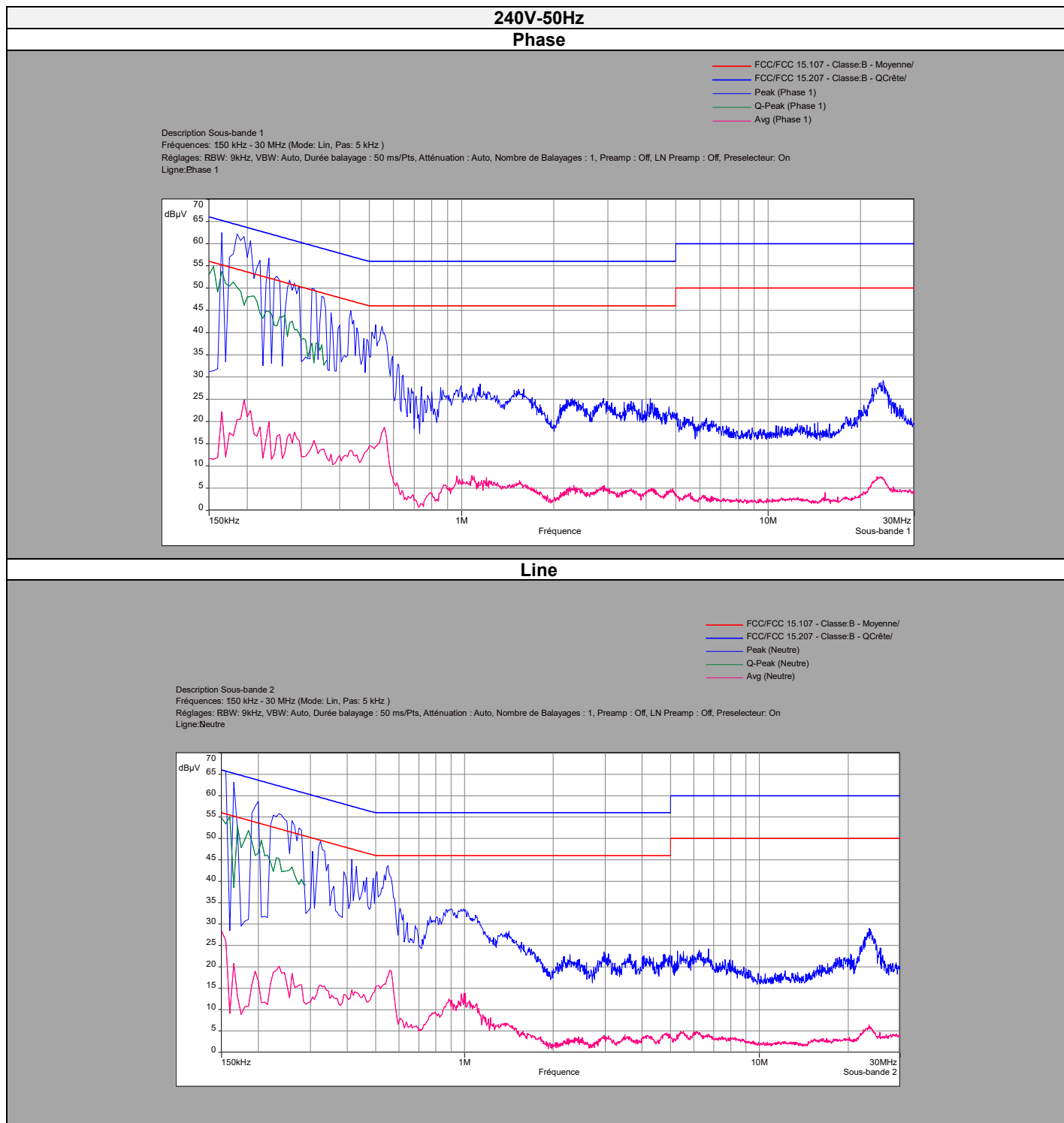
10.4. TEST EQUIPMENT LIST

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Reference ground plane 3 x 6,5 m	LCIE	V03	-	-	-
Software v3.21.0.32	NEXIO	BAT-EMC	LCIE	-	-
Receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2023/06	2025/06
Cable		BNC/BNC_1,5m	A5330088	2024/06	2025/06
Cable		BNC/BNC_1,5m	A5330089	2024/06	2025/06
RSIL	ROHDE & SCHWARZ	ENV216	C2320162	2024/12	2025/12
Thermo-hygrometer	OTIO	-	B4204095	2024/01	2026/01
Multimeter	FLUKE	76	A1240150	2024/06	2026/06
Variable power supply AC	DANA	DSC 10.000M	-	-	-

10.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

☒ None ☐ Divergence:

10.6. RESULTS CHANNEL

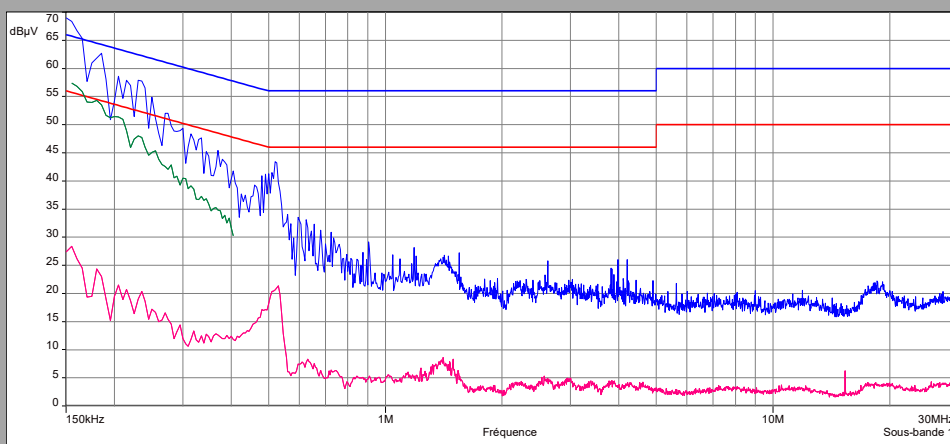


120V-60Hz

Phase

— FCC/FCC 15.107 - Classe:B - Moyenne/
 — FCC/FCC 15.107 - Classe:B - QCrête/
 — Peak (Phase 1)
 — Q-Peak (Phase 1)
 — Avg (Phase 1)

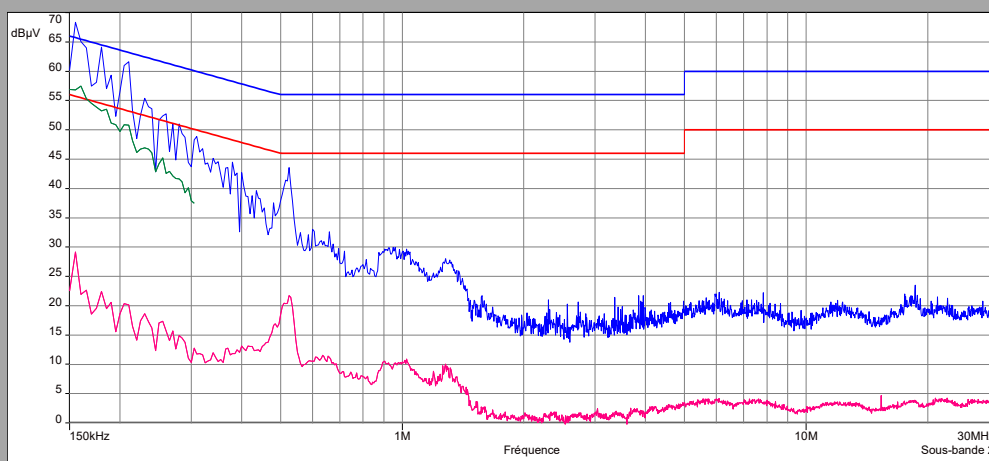
Description Sous-bande 1
 Fréquences: 150 kHz - 30 MHz (Mode: Lin, Pas: 5 kHz)
 Réglages: RBW: 9kHz, VBW: Auto, Durée balayage : 50 ms/Pts, Atténuation : Auto, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: On
 Ligne:Phase 1



Line

— FCC/FCC 15.107 - Classe:B - Moyenne/
 — FCC/FCC 15.107 - Classe:B - QCrête/
 — Peak (Neutre)
 — Q-Peak (Neutre)
 — Avg (Neutre)

Description Sous-bande 2
 Fréquences: 150 kHz - 30 MHz (Mode: Lin, Pas: 5 kHz)
 Réglages: RBW: 9kHz, VBW: Auto, Durée balayage : 50 ms/Pts, Atténuation : Auto, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: On
 Ligne:Neutre





10.7. CONCLUSION

Ac Power Line Conducted Emission measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.247 & RSS 247 ISSUE 3 limits.

11. UNWANTED EMISSIONS IN RESTRICTED FREQUENCY BANDS

11.1. TEST CONDITIONS

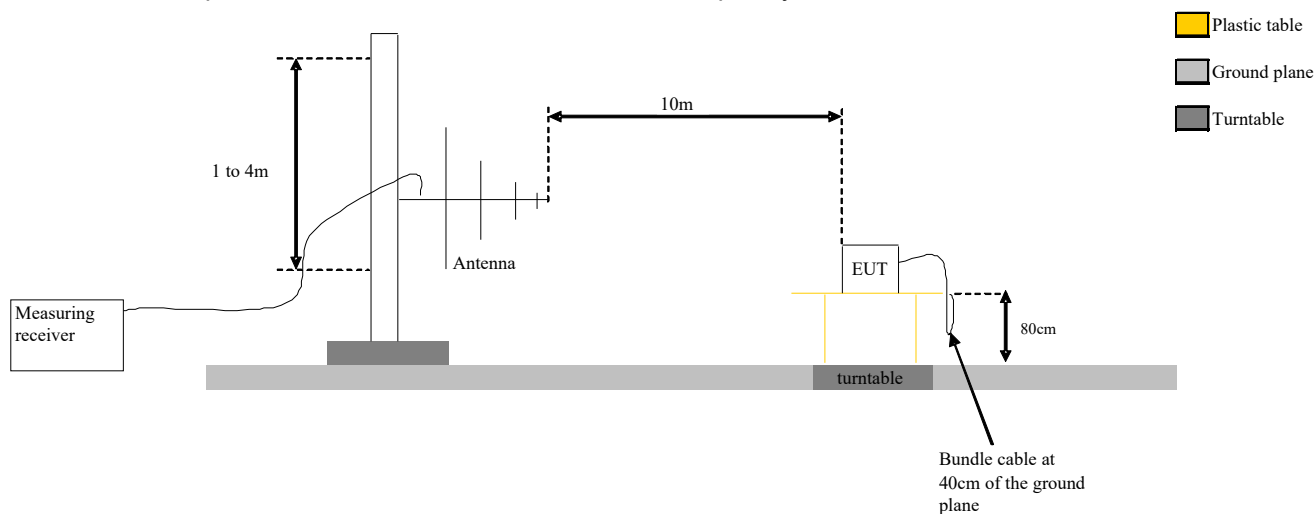
Test performed by : Laurent DENEUX
 Date of test : June 18, 2025 to June 19, 2025
 Ambient temperature : 24 °C
 Relative humidity : 45 %

11.2. TEST SETUP

The product has been tested according to ANSI C63.10 and FCC part 15 subpart C:

Frequency range :	Below 30MHz	From 30MHz to 1GHz	Above 1GHz
Antenna Polarization :	Parallel, Perpendicular And Ground parallel	Horizontal And Vertical	Horizontal And Vertical
Antenna Height :	1m	Varied from 1m to 4m	Centered on EUT (§6.6.5 ANSI C63-10)
Antenna Type :	Loop	Biconical & Bi-Log	Horn
RBW Filter :	200Hz below 150kHz 9kHz above 150kHz	120kHz	1MHz
Maximization :	Turntable rotation of 360 degrees range		
EUT height :	0.8m		1.5m
Test site :	Open Aera Test Site	Open Aera Test Site	Open Aera Test Site
Distance EUT-Antenna :	10m	3m	3m

Test set up of Unwanted Emissions in Restricted Frequency Bands in semi anechoic chamber



Test Set up for radiated measurement in open area test site



Photograph for Unwanted Emission in restricted frequency bands

11.3. LIMIT

Measure at 300m		
Frequency range	Level	Detector
9kHz-490kHz	67.6dB μ V/m /F(kHz)	QPeak
Measure at 30m		
Frequency range	Level	Detector
490kHz-1.705MHz	87.6dB μ V/m /F(kHz)	QPeak
1.705MHz-30MHz	29.5dB μ V/m	QPeak
Measure at 10m		
Frequency range	Level	Detector
30MHz to 88MHz	29.5dB μ V/m	QPeak
88MHz to 216MHz	33dB μ V/m	QPeak
216MHz to 960MHz	35.5dB μ V/m	QPeak
960MHz to 1000MHz	43.5dB μ V/m	QPeak
Above 1000MHz	63.5dB μ V/m	Peak
	43.5dB μ V/m	Average



Measure at 3m		
Frequency range	Level	Detector
30MHz to 88MHz	40dB μ V/m	QPeak
88MHz to 216MHz	43.5dB μ V/m	QPeak
216MHz to 960MHz	46B μ V/m	QPeak
960MHz to 1000MHz	54dB μ V/m	QPeak
Above 1000MHz	74dB μ V/m	Peak
	54dB μ V/m	Average

11.4. TEST EQUIPMENT LIST

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
OATS	-	-	F2000400	2024/03	2027/03
Receiver	ROHDE & SCHWARZ	ESU	A2642018	2023/03	2025/07
Preamplifier	BONN	BLNA 3018-8F305	A7080053	2023/11	2025/11
Antenna bilog	Schwarzbeck	VULB9160	C2040150	2023/09	2025/09
Horn antenna	ETS	3115	C2042016	2023/09	2025/09
Cable	-	-	A5329449	2024/11	2025/11
Cable	-	-	A5330051	2024/12	2025/12
Cable			A5329368	2025/04	2026/04
Antenne bico	Schwarzbeck	VHBB9124 + BBA 9106	C2040295	2024/01	2026/01
Cable			A5330084	11/2024	2025/11
Loop antenna	R&S	HFH2-Z2	C2040269	2025/01	2027/01
Cable	-	-	A5329418	2024/12	2025/12
Cable			A5330071	2024/10	2025/10
Antenne cornet	AH SYSTEMS	SAS-572	C2042025	2023/05	2025/06
Hydro-Thermometer	RS-PRO	RS-235	B3281020	2025/04	2027/04
Cable			A5330052	2025/04	2027/04
Cable sma			A5330053	2024/12	2025/12
Table 0,8m	-	-	D3044037	-	-
Table 1,5m			D3044038	-	-
Software V3.21.0.9	NEXIO	BAT-EMC	-	-	-

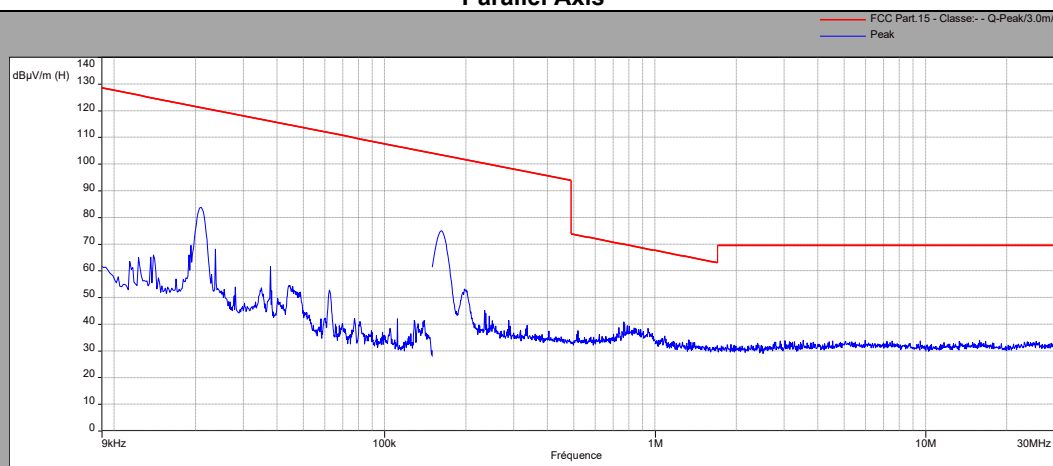
11.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

☒ None ☐ Divergence:

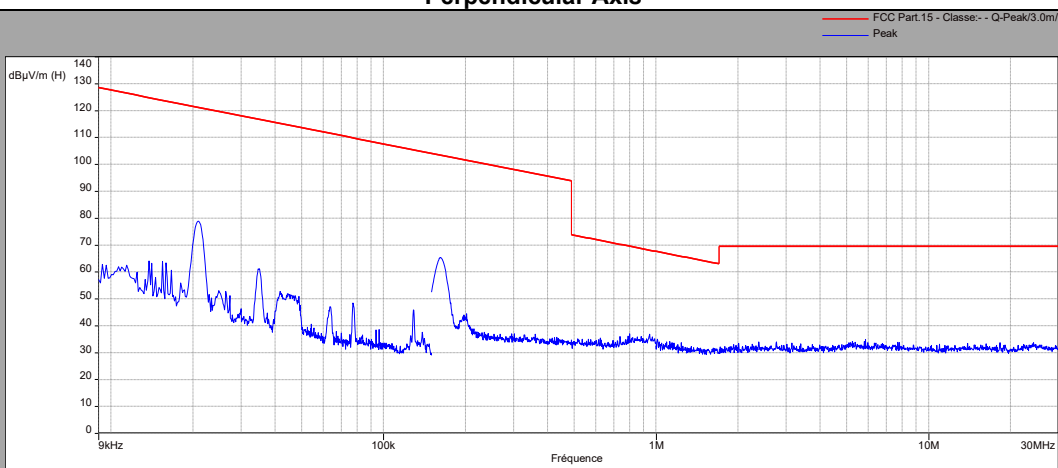
11.6. RESULTS

9kHz to 30MHz BLE 5.0 (1Mbps)

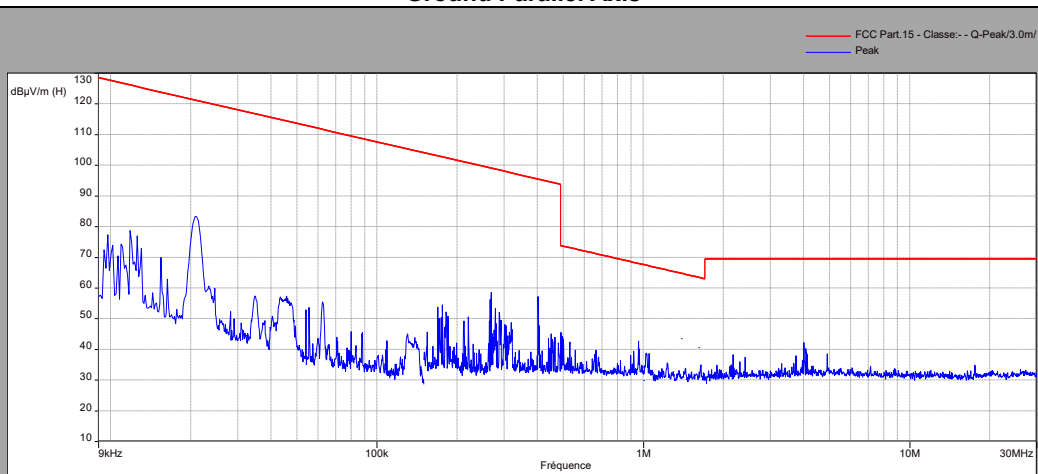
Parallel Axis

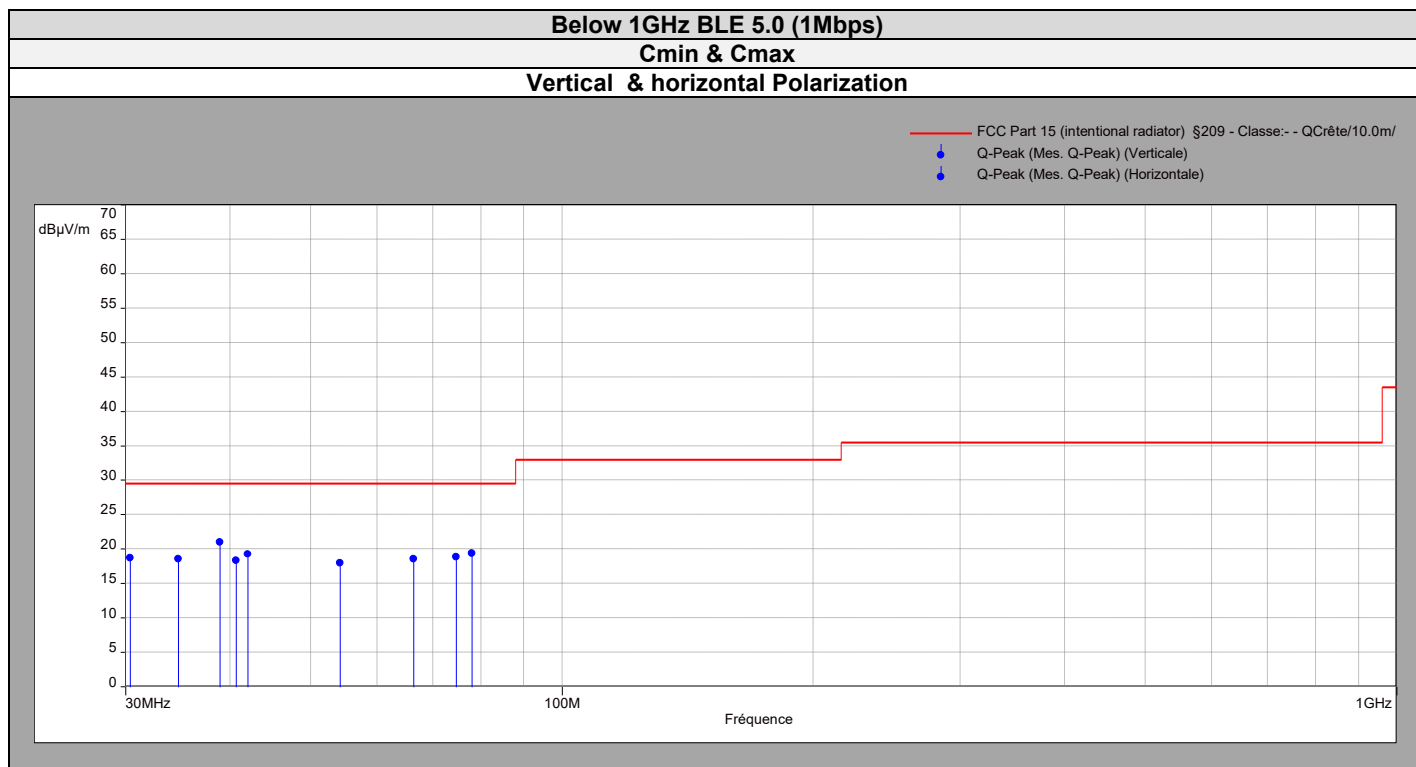


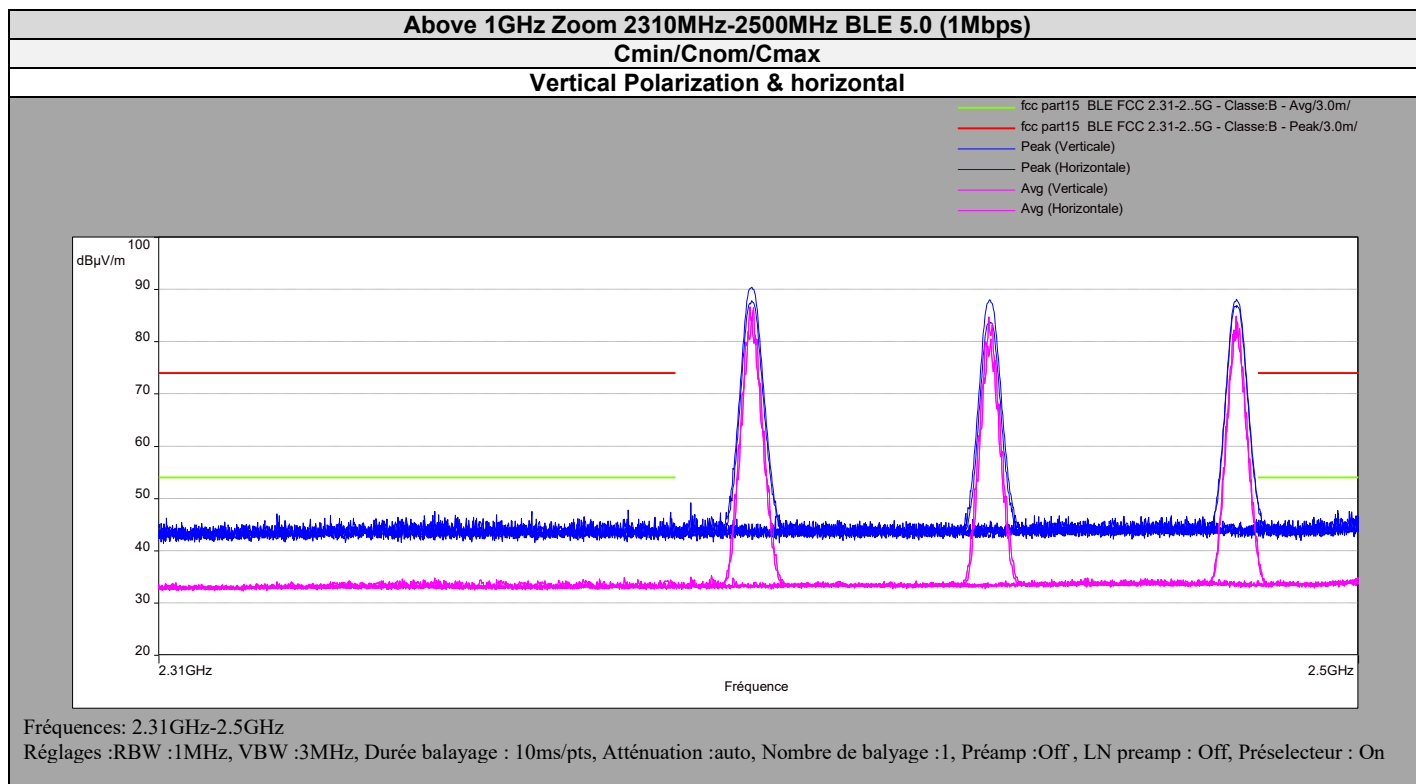
Perpendicular Axis



Ground Parallel Axis







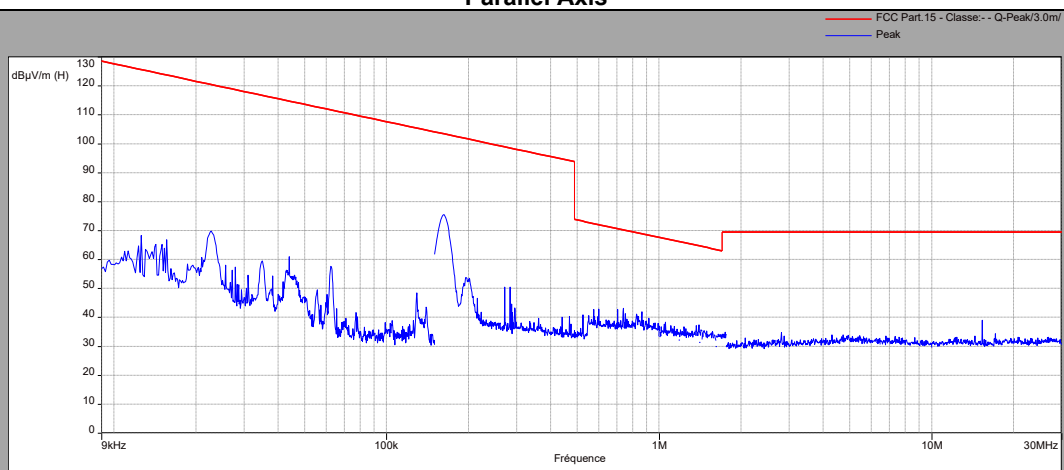
9kHz to 30MHz BLE 5.0 (1Mbps)				
Polarization	Frequency (MHz)	Peak Level (dBμV/m)	QPeak Level (dBμV/m)	Limit (dBμV/m)
all emissions were greater than 20 dB below the limit				

Below 1GHz BLE 5.0 (1Mbps)					
Polarization	Frequency (MHz)	Peak Level (dBμV/m)	QPeak Level (dBμV/m)	Limit (dBμV/m)	Margin (dBμV/m)
Vertical	30,4	-	18,72	29,5	10,78
Vertical	34,7	-	18,59	29,5	10,91
Vertical	38,9	-	20,97	29,5	8,53
Vertical	40,7	-	18,33	29,5	11,17
Vertical	42	-	19,3	29,5	10,2
Vertical	54,2	-	17,94	29,5	11,56
Horizontal	66,4	-	18,58	29,5	10,92
Horizontal	74,7	-	18,85	29,5	10,65
Horizontal	78,01	-	19,39	29,5	10,11

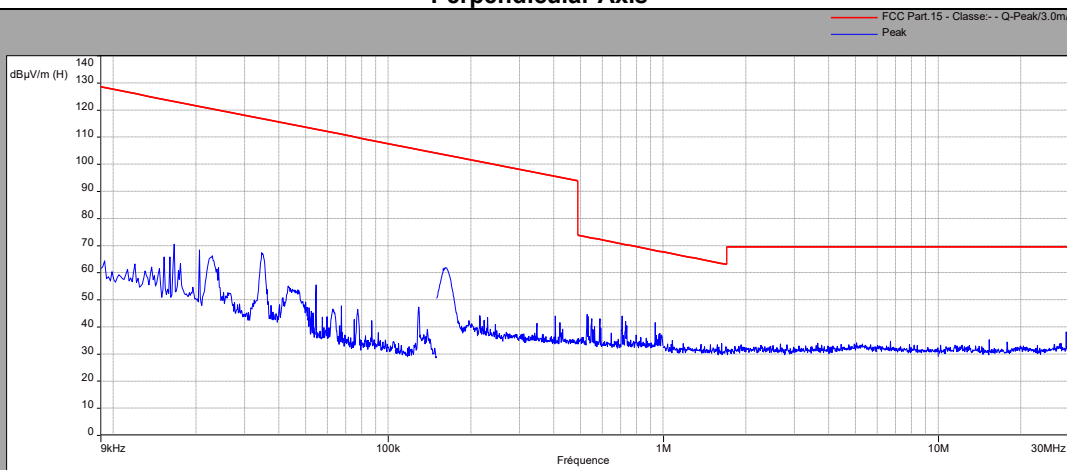
Above 1GHz BLE 5.0 (1Mbps)								
Cmin/Cnom/Cmax								
Polarization	Frequency (MHz)	Average Level (dBμV/m)	Average Level + Duty Cycle Factor (dBμV/m)	Average Limit (dBμV/m)	Average Margin Level (dBμV/m)	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Peak Margin Level (dBμV/m)
No significant spurious has been observed								
Horizontale	2390	34.4	35.75	54	18.25	47.3	74	26.7
Verticale	2390	34	35.35	54	18.65	46.2	74	27.8
Horizontale	2483.5	35.2	36.55	54	17.45	44.9	74	29.1
Verticale	2483.5	37.3	38.65	54	15.35	47.5	74	26.5

9kHz to 30MHz BLE 5.0 (2Mbps)

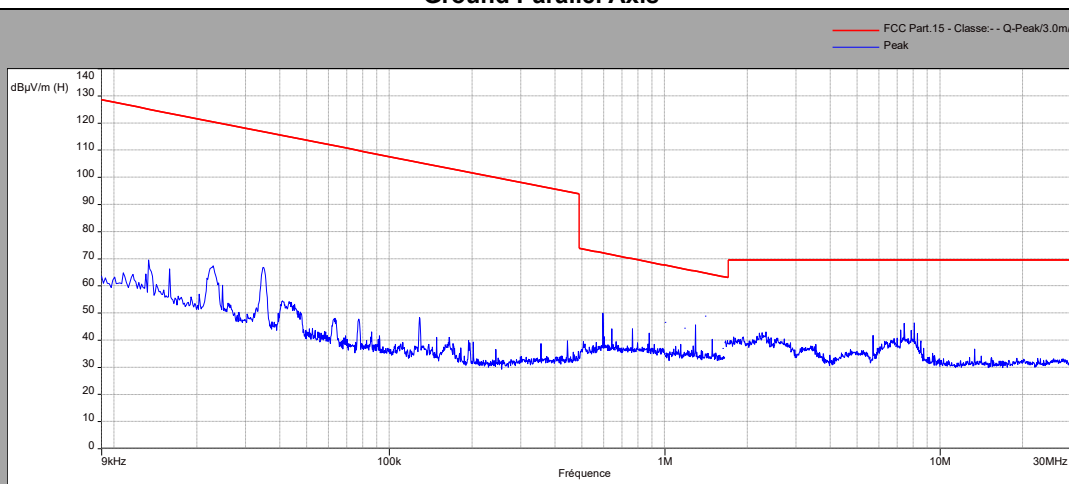
Parallel Axis



Perpendicular Axis



Ground Parallel Axis

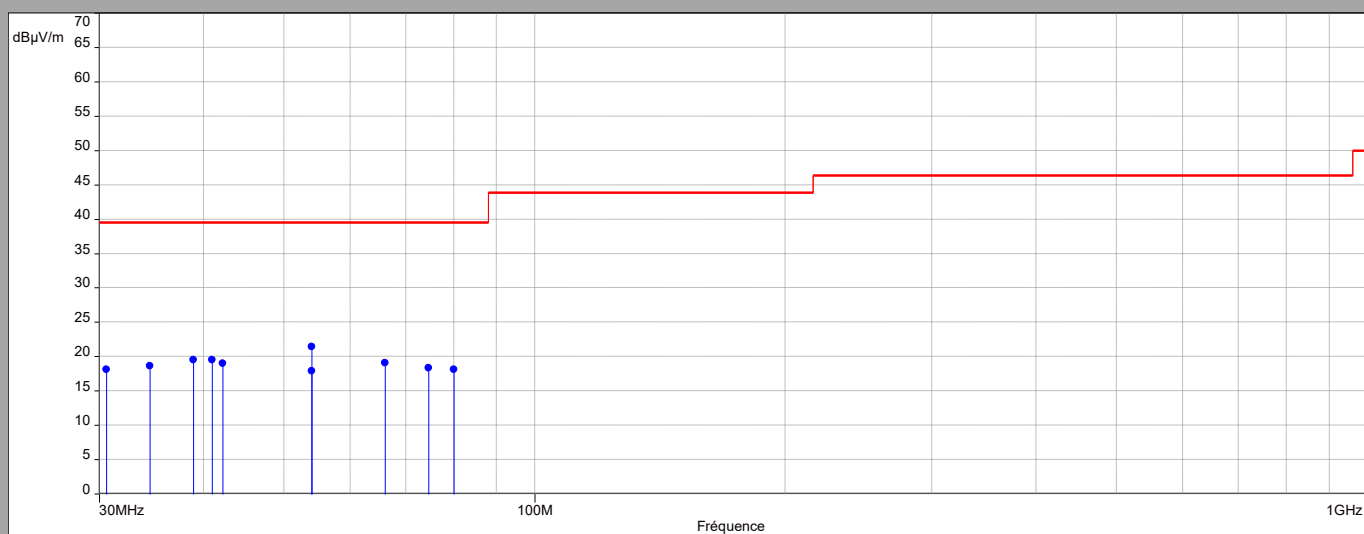


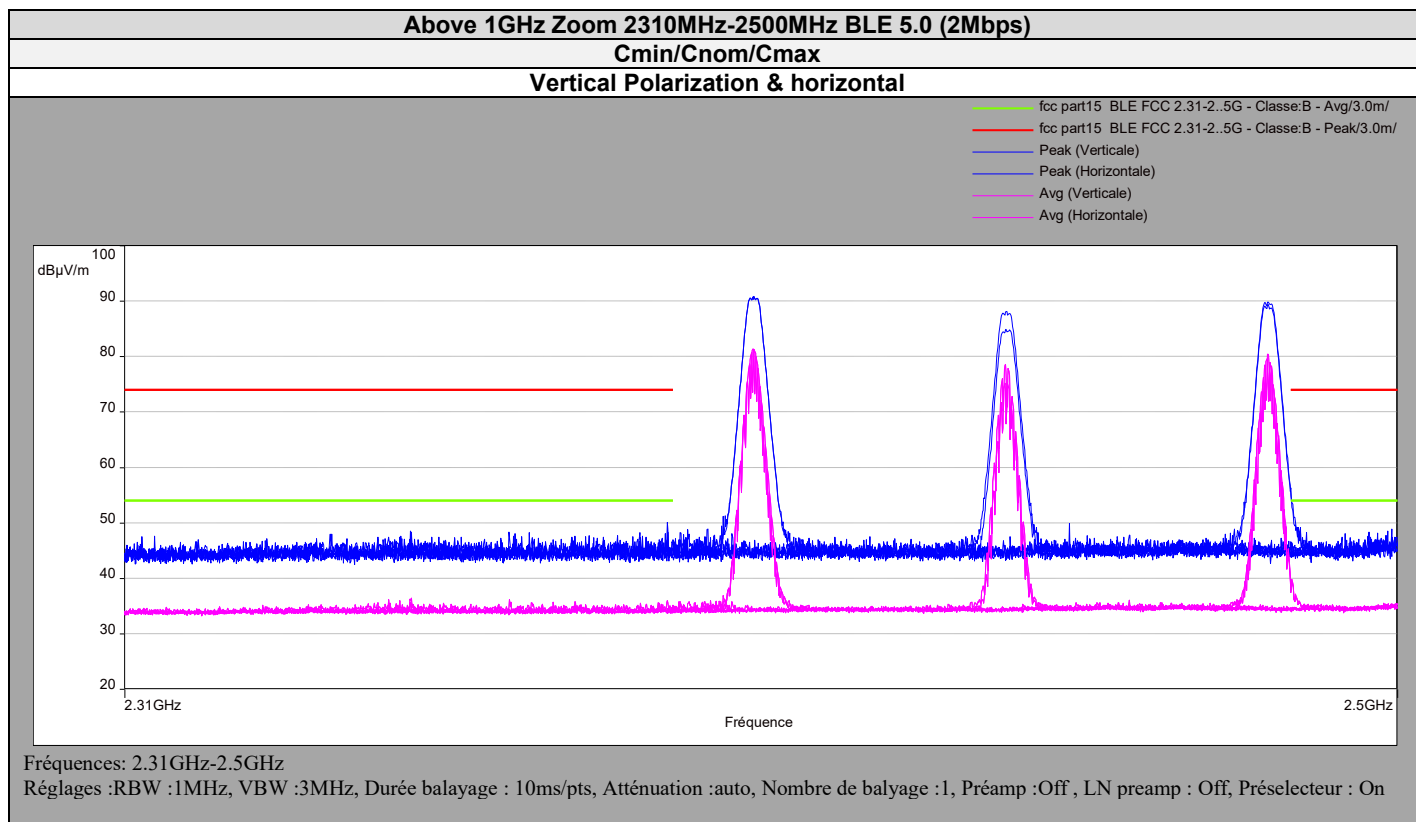
Below 1GHz BLE 5.0 (2Mbps)

Cmin & Cmax

Vertical & horizontal Polarization

— FCC Part 15 (unintentional radiator) §109 10m - Classe:A - Q-Peak/10.0m/
 • Mes. Q-Peak (Verticale)
 • Mes. Q-Peak (Horizontale)





9kHz to 30MHz BLE 5.0 (2Mbps)				
Polarization	Frequency (MHz)	Peak Level (dBμV/m)	QPeak Level (dBμV/m)	Limit (dBμV/m)
all emissions were greater than 20 dB below the limit				

Below 1GHz BLE 5.0 (2Mbps)					
Polarization	Frequency (MHz)	Peak Level (dBμV/m)	QPeak Level (dBμV/m)	Limit (dBμV/m)	Margin (dBμV/m)
Vertical	30,60	-	18,12	29,5	11,38
Vertical	34,48	-	18,65	29,5	10,85
Vertical	38,90	-	19,51	29,5	9,99
Vertical	40,97	-	19,53	29,5	9,97
Vertical	42,18	-	19,01	29,5	10,49
Vertical	54,00	-	21,41	29,5	8,09
Horizontal	54,00	-	17,89	29,5	11,61
Horizontal	66,10	-	19,07	29,5	10,43
Horizontal	74,64	-	18,33	29,5	11,17
Horizontal	80,00	-	18,09	29,5	11,41

Above 1GHz BLE 5.0 (2Mbps)								
Cmin/Cnom/Cmax								
Polarization	Frequency (MHz)	Average Level (dBμV/m)	Average Level + Duty Cycle Factor (dBμV/m)	Average Limit (dBμV/m)	Average Margin Level (dBμV/m)	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Peak Margin Level (dBμV/m)
Horizontal	2390	35.6	40.4	54	13.6	47.2	74	26.8
Vertical	2390	35	39.8	54	14.2	48	74	26
Horizontal	2483.5	37.7	42.5	54	11.5	54.8	74	19.2
Vertical	2483.5	39.6	44.6	54	9.4	56.3	74	17.7

11.7. CONCLUSION

Unwanted Emission in restricted frequency bands measurement performed on the sample of the product **NAOX NX01**, SN: **9**, in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.247 & RSS 247 ISSUE 3 limits.

12. UNCERTAINTIES CHART

Type de mesure / Kind of measurement	Incertitude élargie laboratoire / Wide uncertainty laboratory (k=1.96) ±x	Incertitude limite du CISPR / CISPR uncertainty limit ±y
Mesure des perturbations conduites en tension sur le réseau d'énergie <i>Measurement of conducted disturbances in voltage on the power port</i> RSIL / LISN - 50Ω/50μH		
9kHz - 150kHz	3.64 dB	3.8 dB
150kHz - 30MHz	3.21 dB	3.4 dB
Mesure des perturbations rayonnées <i>Measurement of radiated disturbances</i> OATS & SAC @3m		
30MHz - 200MHz, Antenne biconique / <i>Biconical antenna</i>	5.74 dB	6.3 dB
30MHz - 1GHz, Antenne hybride / <i>Hybrid antenna</i>	5.65 dB	6.3 dB
Mesure des perturbations rayonnées <i>Measurement of radiated disturbances</i> OATS @10m		
30MHz - 200MHz, Antenne biconique / <i>Biconical antenna</i>	5.72 dB	6.3 dB
30MHz - 1GHz, Antenne hybride / <i>Hybrid antenna</i>	5.91 dB	6.3 dB
Mesure des perturbations rayonnées <i>Measurement of radiated disturbances</i> FAR @3m		
1GHz - 6GHz, Antenne cornet ou hybride / <i>Horn or hybride antenna</i>	4.77 dB	5.2 dB
1GHz - 6GHz, Antenne cornet ou hybride et préamplificateur / <i>Horn or hybride antenna and preamplifier</i>	5.02 dB	5.2 dB
6GHz - 18GHz, Antenne cornet et préamplificateur / <i>Horn antenna and preamplifier</i>	5.41 dB	5.5 dB
Type de mesure / Kind of measurement	Incertitude élargie laboratoire / Wide uncertainty laboratory (k=1.96) ± x	Incertitude limite du CISPR / CISPR uncertainty limit ± y
<i>Spurious emission, radiated (Semi anechoic chamber & open test site)</i>	5.60 dB	6 dB
<i>Spurious emission, radiated (Full anechoic chamber above 1GHz)</i>	±3.8 dB	±6 dB
<i>Occupied Channel Bandwidth</i>	±2.8 %	±5 %
<i>RF power, conducted</i>	±1.2 dB	±1.5 dB
<i>Power Spectral Density, Conducted</i>	±1.7 dB	±3 dB
<i>Spurious emission, conducted</i>	±2.3 dB	±3 dB
<i>Temperature</i>	±0.75 °C	±3 °C
<i>Supply Voltages</i>	±1.7 %	±3 %
<i>Time</i>	±2.3 %	±5 %

Les valeurs d'incertitudes calculées du laboratoire étant inférieures aux valeurs d'incertitudes limites établies par le CISPR, la conformité de l'échantillon est établie directement par les niveaux limites applicables. Ce tableau regroupe l'ensemble des incertitudes maximales pour les essais réalisables dans le laboratoire, qu'ils aient été ou non réalisés dans le cadre du présent rapport / *The uncertainty values calculated by the laboratory are lower than limit uncertainty values defined by the CISPR. The conformity of the sample is directly established by the applicable limits values. This table includes all uncertainties maximum feasible for testing in the laboratory, whether or not made in this report*

Note - L'incertitude de mesure instrumentale est déterminée selon la CISPR 16-4-2. / *The instrumentation measurement uncertainty is determined according to CISPR16-4-2*