RF TEST REPORT

For

Shenzhen Tengtai Technology Co.,Ltd
Product Name: Q3095M Bluetooth Module
Test Model(s): Q3095M

Report Reference No.	:	**DACE260108002RF001**
FCC ID	:	**2BUEN-Q3095M**
Applicant's Name	:	Shenzhen Tengtai Technology Co.,Ltd
Address	:	Room305,Building2,YoupinCulturalCreativePark,MinzhiSub-district, LonghuaDistrict ShenzhenCity,GuangdongProvince
Testing Laboratory	:	Shenzhen DACE Testing Technology Co., Ltd.
Address	:	102, Building H1, & 1/F., Building H, Hongfa Science & Technology Park, Tangtou Community, Shiyan Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Test Specification Standard	:	**47 CFR Part 15.247**
Date of Receipt	:	January 8, 2026
Date of Test	:	January 8, 2026 to January 12, 2026
Date of Issue	:	January 12, 2026
Result	:	**Pass**

Apply for company information

Applicant's Name	:	Shenzhen Tengtai Technology Co.,Ltd
Address	:	Room305,Building2,YoupinCulturalCreativePark,MinzhiSub-district, LonghuaDistrict ShenzhenCity,GuangdongProvince
Product Name	:	Q3095M Bluetooth Module
Test Model(s)	:	Q3095M
Test Specification Standard(s)	:	47 CFR Part 15.247

NOTE1:

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

Compiled by:	Supervised by:	Approved by:
Amy Zhu / Test Engineer	Stone Yin / Project Engineer	Tom Chen / Manager
January 12, 2026	January 12, 2026	January 12, 2026

Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	DACE260108002RF001	January 12, 2026

CONTENTS

1 TEST SUMMARY 6
1.1 TEST STANDARDS 6
1.2 SUMMARY OF TEST RESULT 6
2 GENERAL INFORMATION 7
2.1 CLIENT INFORMATION 7
2.2 DESCRIPTION OF DEVICE (EUT) 7
2.3 DESCRIPTION OF TEST MODES 7
2.4 DESCRIPTION OF SUPPORT UNITS 7
2.5 EQUIPMENTS USED DURING THE TEST 8
2.6 STATEMENT OF THE MEASUREMENT UNCERTAINTY 10
3 EVALUATION RESULTS (EVALUATION) 11
3.1 ANTENNA REQUIREMENT 11
3.1.1 Conclusion: 11
4 RADIO SPECTRUM MATTER TEST RESULTS (RF) 12
4.1 CONDUCTED EMISSION AT AC POWER LINE 12
4.1.1 E.U.T. Operation: 12
4.1.2 Test Setup Diagram: 12
4.1.3 Test Data: 13
4.2 MAXIMUM CONDUCTED OUTPUT POWER 15
4.2.1 E.U.T. Operation: 15
4.2.2 Test Setup Diagram: 15
4.2.3 Test Data: 16
4.3 EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS 17
4.3.1 E.U.T. Operation: 18
4.3.2 Test Setup Diagram: 18
4.3.3 Test Data: 18
4.4 BAND EDGE EMISSIONS (RADIATED) 19
4.4.1 E.U.T. Operation: 19
4.4.2 Test Data: 20
4.5 EMISSIONS IN FREQUENCY BANDS (BELOW 1GHZ) 24
4.5.1 E.U.T. Operation: 25
4.5.2 Test Data: 26
4.6 EMISSIONS IN FREQUENCY BANDS (ABOVE 1GHZ) 28
4.6.1 E.U.T. Operation: 29
4.6.2 Test Data: 30
5 TEST SETUP PHOTOS 36
6 PHOTOS OF THE EUT 38
1. DUTY CYCLE 40
2. -20DB BANDWIDTH 45
3. PEAK OUTPUT POWER 50
4. SPURIOUS EMISSIONS 55
5. BANDEDGE 65
6. CARRIER FREQUENCIES SEPARATION (HOPPING) 78
7. NUMBER OF HOPPING CHANNEL (HOPPING) 80

8. DWELL TIME (HOPPING)..... 82

1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

47 CFR Part 15.247: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

1.2 Summary of Test Result

Item	Standard	Method	Requirement	Result
Antenna requirement	47 CFR Part 15.247	---	47 CFR 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15.247	ANSI C63.10-2020 section 6.2	47 CFR 15.207(a)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	ANSI C63.10-2020, section 7.8.5 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(b)(1)	Pass
Emissions in non-restricted frequency bands	47 CFR Part 15.247	ANSI C63.10-2020 section 7.8.7 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d)	Pass
Band edge emissions (Radiated)	47 CFR Part 15.247	ANSI C63.10-2020 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass
Emissions in frequency bands (below 1GHz)	47 CFR Part 15.247	ANSI C63.10-2020 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass
Emissions in frequency bands (above 1GHz)	47 CFR Part 15.247	ANSI C63.10-2020 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(d), 15.209, 15.205	Pass

2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : Shenzhen Tengtai Technology Co.,Ltd

Address : Room305,Building2,YoupinCulturalCreativePark,MinzhiSub-district, LonghuaDistrict ShenzhenCity,GuangdongProvince

Manufacturer : Shenzhen Tengtai Technology Co.,Ltd

Address : Room305,Building2,YoupinCulturalCreativePark,MinzhiSub-district, LonghuaDistrict ShenzhenCity,GuangdongProvince

2.2 Description of Device (EUT)

Product Name:	Q3095M Bluetooth Module
Model/Type reference:	Q3095M
Trade Mark:	Q3095M
Power Supply:	DC 5V
Operation Frequency:	2402-2480MHz
Number of Channels:	79CH
Modulation Type:	GFSK, (π/4)DQPSK, 8DPSK
Antenna Type:	PCB Antennal
Antenna Gain:	4.6dBi
Bluetooth Version:	V6.1
Hardware Version:	V1.0
Software Version:	V1.0

2.3 Description of Test Modes

No	Title	Description
TM1	TX mode	Keep the EUT in TX mode.
Test Environment		Normal Voltage(DC): 5V

2.4 Description of Support Units

Title	Manufacturer	Model No.	Serial No.
PC	HP	TPN-Q304	/

2.5 Equipments Used During The Test

Conducted Emission at AC power line					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Power absorbing clamp	SCHWARZ BECK	MESS-ELEKTRONIK	/	2025-04-23	2026-04-22
Electric Network	SCHWARZ BECK	CAT5 8158	CAT5 8158#207	2025-04-18	2026-04-17
Cable	SCHWARZ BECK	/	/	2025-04-18	2026-04-17
Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Attenuation	561-G071	2025-12-02	2026-12-01
Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	1164.6607K03 -102109-MH	2025-04-25	2026-04-24
L.I.S.N	R&S	ESH3-Z5	831.5518.52	2025-04-18	2026-04-17
L.I.S.N	SCHWARZ BECK	NSLK 8126	05055	2025-04-18	2026-04-17
Pulse Limiter	CYBERTEK	EM5010A	/	2025-04-25	2026-04-24
EMI test software	EZ -EMC	EZ	V1.1.42	/	/

Emissions in non-restricted frequency bands Maximum Conducted Output Power					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
RF Test Software	Tachoy Information Technology(shenzhen) Co.,Ltd.	RTS-01	V1.0.0	/	/
RF Sensor Unit	Tachoy Information Technology(shenzhen) Co.,Ltd.	TR1029-2	000001	/	/
Wideband radio communication tester	R&S	CMW500	113410	2025-04-25	2026-04-24
Vector Signal Generator	Keysight	N5181A	MY50143455	2025-12-02	2026-12-01
Signal Generator	Keysight	N5182A	MY48180415	2025-12-02	2026-12-01
Spectrum Analyzer	Keysight	N9020A	MY53420323	2025-12-02	2026-12-01

Band edge emissions (Radiated) Emissions in frequency bands (below 1GHz) Emissions in frequency bands (above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI Test software	Farad	EZ -EMC	V1.1.42	/	/
Positioning Controller	MF	MF-7802	/	/	/
Amplifier(18-40G)	COM-POWER	AH-1840	10100008-1	2024-04-26	2027-04-25
Horn antenna	COM-POWER	AH-1840 (18-40G)	10100008	2024-04-26	2027-04-25
Loop antenna	ZHINAN	ZN30900C	ZN30900C	2025-04-28	2026-04-27
Cable(LF)#2	Schwarzbeck	/	/	2025-04-12	2026-04-11
Cable(LF)#1	Schwarzbeck	/	/	2025-04-17	2026-04-16
Cable(HF)#2	Schwarzbeck	AK9515E	96250	2025-04-25	2026-04-24
Cable(HF)#1	Schwarzbeck	SYV-50-3-1	/	2025-04-25	2026-04-24
Power amplifier(LF)	Schwarzbeck	BBV9743	9743-151	2025-04-29	2026-04-28
Power amplifier(HF)	Schwarzbeck	BBV9718	9718-282	2025-04-29	2026-04-28
Wideband radio communication tester	R&S	CMW500	113410	2025-04-25	2026-04-24
Spectrum Analyzer	R&S	FSP30	1321.3008K40 -101729-jR	2025-04-18	2026-04-17
Test Receiver	R&S	ESCI 3	1166.5950K03 -101431-Jq	2025-04-18	2026-04-17
Horn Antenna	Sunol Sciences	DRH-118	A091114	2025-04-21	2026-04-20
Broadband Antenna	Sunol Sciences	JB6 Antenna	A090414	2024-09-28	2026-09-27

2.6 Statement Of The Measurement Uncertainty

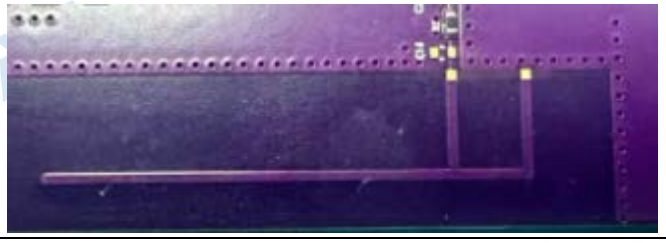
Test Item	Measurement Uncertainty
Conducted Disturbance (0.15~30MHz)	±3.41dB
RF conducted power	±0.733dB
Conducted Spurious emissions	±1.98dB
Radiated Emission (Above 1GHz)	±5.46dB
Radiated Emission (Below 1GHz)	±5.79dB
Note: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3 Evaluation Results (Evaluation)

3.1 Antenna requirement

Test Requirement:	Refer to 47 CFR Part 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.
Test Method:	---

3.1.1 Conclusion:



4 Radio Spectrum Matter Test Results (RF)

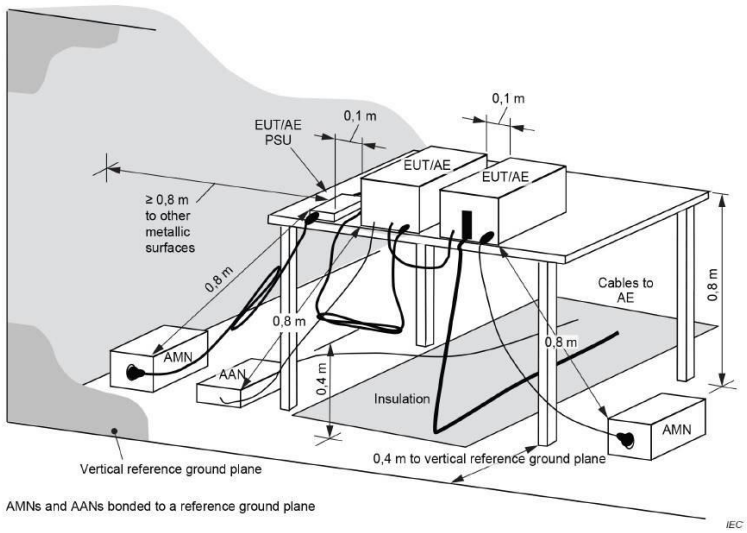
4.1 Conducted Emission at AC power line

Test Requirement:	Refer to 47 CFR 15.207(a), Except as shown in paragraphs (b)and (c)of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).
Test Limit:	Frequency of emission (MHz) / Conducted limit (dBμV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 *Decreases with the logarithm of the frequency.
Test Method:	ANSI C63.10-2020 section 6.2
Procedure:	Refer to ANSI C63.10-2020 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices

4.1.1 E.U.T. Operation:

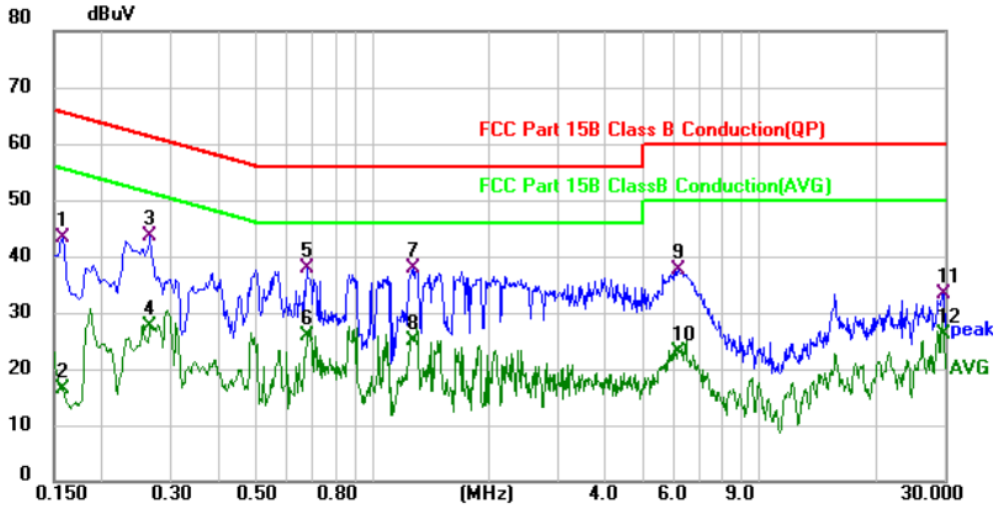
Operating Environment:					
Temperature:	24 °C	Humidity:	54 %	Atmospheric Pressure:	101.7 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.1.2 Test Setup Diagram:



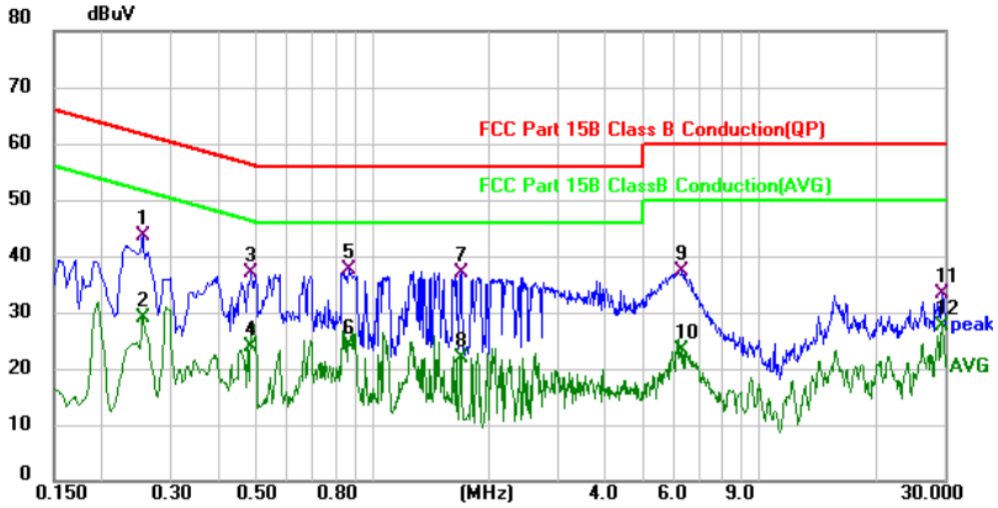
4.1.3 Test Data:

TM1 / Line: Line / Band: 2400-2483.5 MHz / BW: 1 / CH: L



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	33.14	10.11	43.25	65.57	-22.32	QP	
2		0.1580	6.42	10.11	16.53	55.57	-39.04	AVG	
3	*	0.2660	33.53	10.09	43.62	61.24	-17.62	QP	
4		0.2660	17.52	10.09	27.61	51.24	-23.63	AVG	
5		0.6780	27.66	10.11	37.77	56.00	-18.23	QP	
6		0.6780	15.86	10.11	25.97	46.00	-20.03	AVG	
7		1.2700	27.65	10.09	37.74	56.00	-18.26	QP	
8		1.2700	14.98	10.09	25.07	46.00	-20.93	AVG	
9		6.1620	27.48	10.21	37.69	60.00	-22.31	QP	
10		6.1620	12.86	10.21	23.07	50.00	-26.93	AVG	
11		29.8820	22.21	11.11	33.32	60.00	-26.68	QP	
12		29.8820	15.12	11.11	26.23	50.00	-23.77	AVG	

TM1 / Line: Neutral / Band: 2400-2483.5 MHz / BW: 1 / CH: L



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2540	33.46	10.09	43.55	61.63	-18.08	QP	
2		0.2540	18.80	10.09	28.89	51.63	-22.74	AVG	
3		0.4860	27.03	10.10	37.13	56.24	-19.11	QP	
4		0.4860	13.82	10.10	23.92	46.24	-22.32	AVG	
5		0.8740	27.48	10.10	37.58	56.00	-18.42	QP	
6		0.8740	14.18	10.10	24.28	46.00	-21.72	AVG	
7		1.6980	26.90	10.04	36.94	56.00	-19.06	QP	
8		1.6980	11.81	10.04	21.85	46.00	-24.15	AVG	
9		6.2940	27.08	10.21	37.29	60.00	-22.71	QP	
10		6.2940	13.04	10.21	23.25	50.00	-26.75	AVG	
11		29.6780	22.31	11.10	33.41	60.00	-26.59	QP	
12		29.6780	16.50	11.10	27.60	50.00	-22.40	AVG	

NOTE:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor, Over=Limit- Mesurement

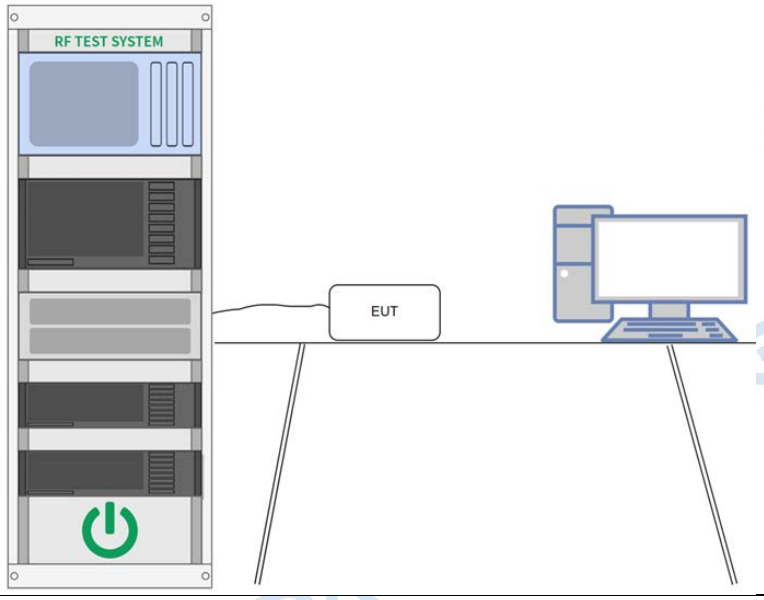
4.2 Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(1)
Test Limit:	Refer to 47 CFR 15.247(b)(1), For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
Test Method:	ANSI C63.10-2020, section 7.8.5 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. Frequency hopping shall be disabled for this test. Use the following spectrum analyzer settings: a) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel. b) RBW > 20 dB bandwidth of the emission being measured. c) VBW ≥ RBW. d) Sweep: No faster than coupled (auto) time. e) Detector function: Peak. f) Trace: Max-hold. g) Allow trace to stabilize. h) Use the marker-to-peak function to set the marker to the peak of the emission. i) The indicated level is the peak output power, after any corrections for external attenuators and cables. j) A spectral plot of the test results and setup description shall be included in the test report. NOTE—A peak responding power meter may be used, where the power meter and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.

4.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.4 °C	Humidity:	49 %	Atmospheric Pressure:	101.7 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.2.2 Test Setup Diagram:



4.2.3 Test Data:

Please Refer to Appendix for Details.

4.3 Emissions in non-restricted frequency bands

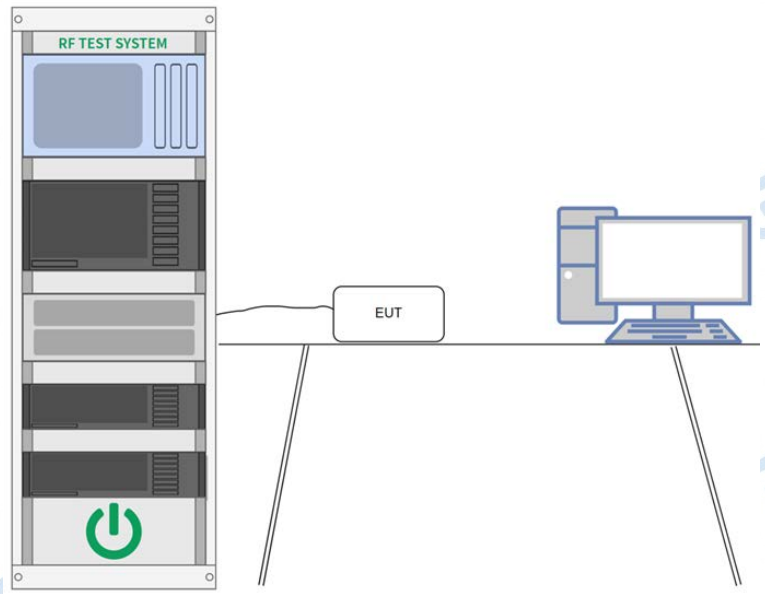
Test Requirement:	47 CFR 15.247(d)
Test Limit:	Refer to 47 CFR 15.247(d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 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.
Test Method:	ANSI C63.10-2020 section 7.8.7 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	7.8.7.1 General considerations To demonstrate compliance with the relative out-of-band emissions requirements conducted spurious emissions shall be measured for the transmit frequencies, per 5.5 and 5.6, and at the maximum transmit powers. Frequency hopping shall be disabled for this test with the exception of measurements at the allocated band-edges which shall be repeated with hopping enabled. Connect the primary antenna port through an attenuator to the spectrum analyzer input; in the results, account for all losses between the unlicensed wireless device output and the spectrum analyzer. The frequency range of testing shall span 30 MHz to 10 times the operating frequency and this may be done in a single sweep or, to aid resolution, across a number of sweeps. The resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector. The limit is based on the highest in-band level across all channels measured using the same instrument settings (resolution bandwidth of 100 kHz, video bandwidth of 300 kHz, and a coupled sweep time with a peak detector). To help clearly demonstrate compliance a display line may be set at the required offset (typically 20 dB) below the highest in-band level. Where the highest in-band level is not clearly identified in the out-of-band measurements a separate spectral plot showing the in-band level shall be provided. When conducted measurements cannot be made (for example a device with integrated, non-removable antenna) radiated measurements shall be used. The reference level for determining the limit shall be established by maximizing the field strength from the highest power channel and measuring using the resolution and video bandwidth settings and peak detector as described above. The field strength limit for spurious emissions outside of restricted-bands shall then be set at the required offset (typically 20 dB) below the highest in-band level. Radiated measurements will follow the standards measurement procedures described in Clause 6 with the exception that the resolution bandwidth shall be 100 kHz, video bandwidth 300 kHz, and a coupled sweep time with a peak detector. Note that use of wider measurement bandwidths are acceptable for measuring the spurious emissions provided that the peak detector is used and that the measured value of spurious emissions are compared to the highest in-band level measured with the 100 kHz / 300 kHz bandwidth settings to determine compliance. 7.8.7.2 Band-edges Compliance with a relative limit at the band-edges (e.g., −20 dBc) shall be made on the lowest and on the highest channels with frequency hopping disabled and repeated with frequency hopping enabled. For the latter test the hopping sequence shall include the lowest and highest channels.

	For measurements with the hopping disabled the analyzer screen shall clearly show compliance with the requirement within 10 MHz of the allocated band-edge. For measurements with the hopping enabled the analyzer screen shall clearly show compliance with the requirement within 10 MHz of both of the allocated band-edges. This could require separate spectral plots for each band-edge.

4.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23 °C	Humidity:	50 %	Atmospheric Pressure:	101.7 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.3.2 Test Setup Diagram:



4.3.3 Test Data:

Please Refer to Appendix for Details.

4.4 Band edge emissions (Radiated)

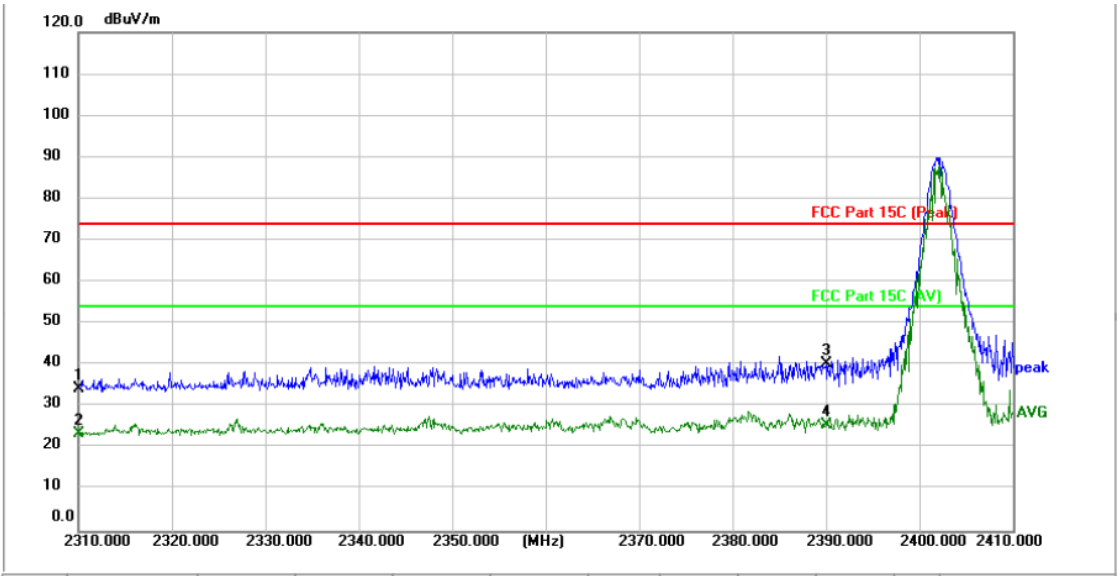
<table>
<tr><td>Test Requirement:</td><td>Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).</td></tr>
<tr><td>Test Limit:</td><td>
<table>
<tr><td>Frequency (MHz)</td><td>Field strength (microvolts/meter)</td><td>Measurement distance (meters)</td></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.
In the emission table above, the tighter limit applies at the band edges.
The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10-2020 section 6.10
KDB 558074 D01 15.247 Meas Guidance v05r02</td></tr>
<tr><td>Procedure:</td><td>ANSI C63.10-2020 section 6.10.5.2</td></tr>
</table>

4.4.1 E.U.T. Operation:

<table>
<tr><td colspan="6">Operating Environment:</td></tr>
<tr><td>Temperature:</td><td>22 °C</td><td>Humidity:</td><td>48 %</td><td>Atmospheric Pressure:</td><td>101.7 kPa</td></tr>
<tr><td colspan="2">Pretest mode:</td><td colspan="4">TM1</td></tr>
<tr><td colspan="2">Final test mode:</td><td colspan="4">TM1</td></tr>
</table>

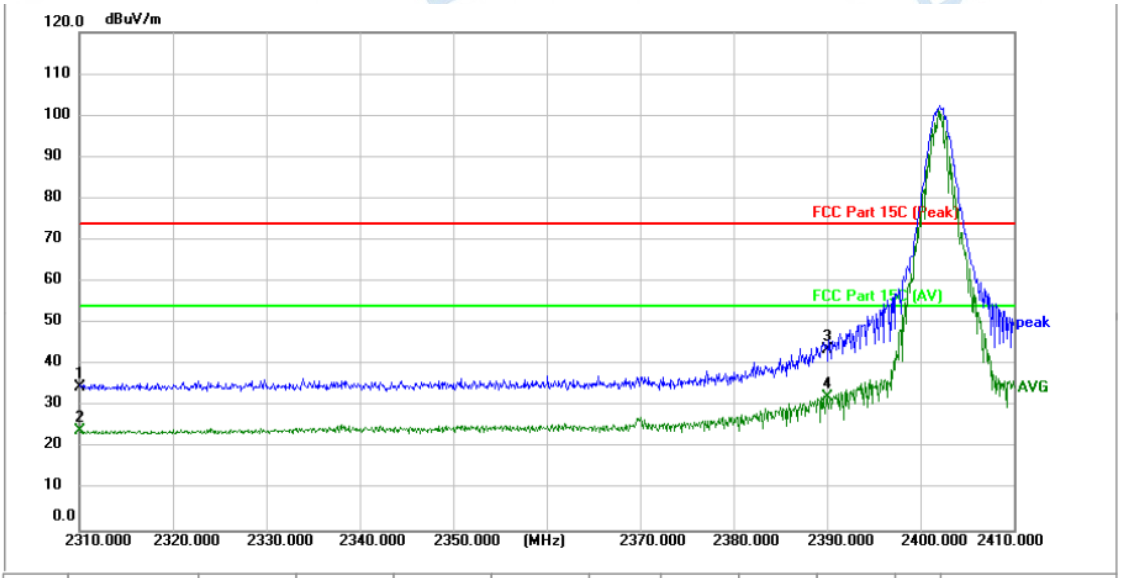
4.4.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: L



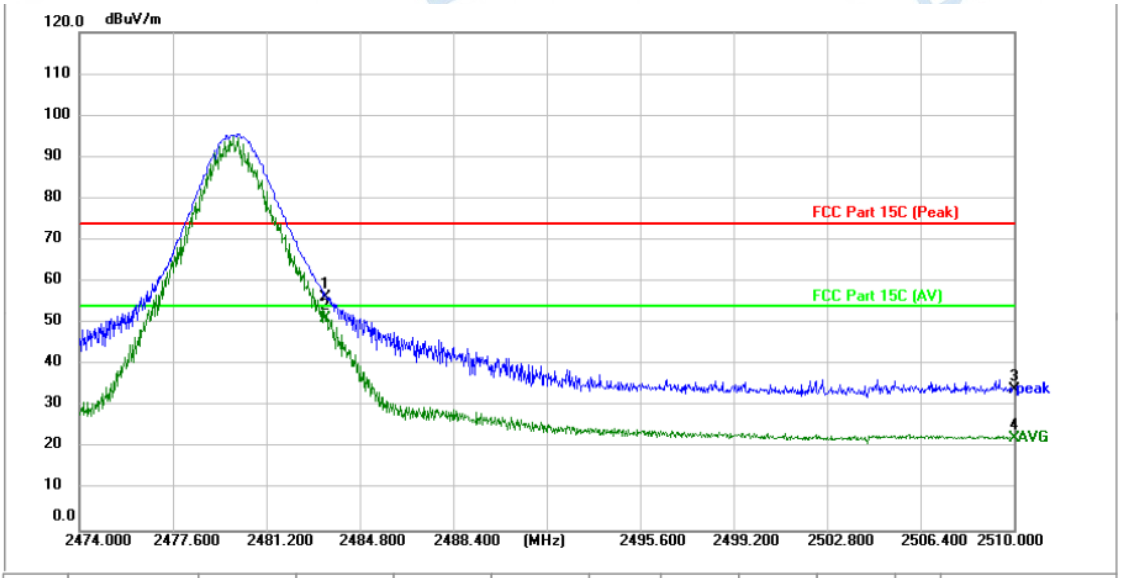
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	2310.000	40.83	-6.63	34.20	74.00	-39.80	peak			P	
2	2310.000	30.11	-6.63	23.48	54.00	-30.52	AVG			P	
3	2390.000	46.66	-6.42	40.24	74.00	-33.76	peak			P	
4 *	2390.000	32.10	-6.42	25.68	54.00	-28.32	AVG			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: L



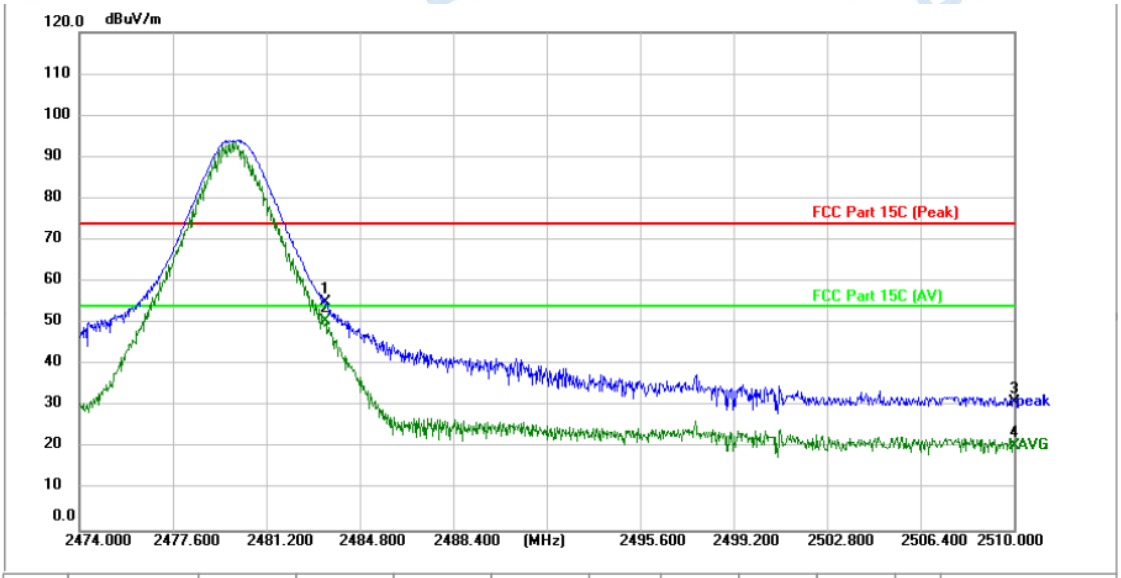
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	2310.000	41.31	-6.63	34.68	74.00	-39.32	peak			P	
2	2310.000	30.74	-6.63	24.11	54.00	-29.89	AVG			P	
3	2390.000	50.14	-6.42	43.72	74.00	-30.28	peak			P	
4 *	2390.000	38.52	-6.42	32.10	54.00	-21.90	AVG			P	

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	2483.500	62.50	-6.17	56.33	74.00	-17.67	peak			P	
2 *	2483.500	57.38	-6.17	51.21	54.00	-2.79	AVG			P	
3	2510.000	40.20	-6.11	34.09	74.00	-39.91	peak			P	
4	2510.000	28.41	-6.11	22.30	54.00	-31.70	AVG			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	2483.500	61.18	-6.17	55.01	74.00	-18.99	peak			P	
2 *	2483.500	56.73	-6.17	50.56	54.00	-3.44	AVG			P	
3	2510.000	37.19	-6.11	31.08	74.00	-42.92	peak			P	
4	2510.000	26.58	-6.11	20.47	54.00	-33.53	AVG			P	

Remark:Margin=Level - Limit, Level=Test receiver reading + correction factor
The test software will only record the worst test angle and height, and only the GFSK worst case will be recorded in the test report.

4.5 Emissions in frequency bands (below 1GHz)

<table>
<tr><td>Test Requirement:</td><td>Refer to 47 CFR 15.247(d), 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)).</td></tr>
<tr><td>Test Limit:</td><td>
<table>
<tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.
In the emission table above, the tighter limit applies at the band edges.
The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10-2020 section 6.6.4
KDB 558074 D01 15.247 Meas Guidance v05r02</td></tr>
<tr><td>Procedure:</td><td>a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
j. Repeat above procedures until all frequencies measured was complete.
Remark:
1) For emission below 1GHz, through pre-scan found the worst case is the lowest</td></tr>
</table>

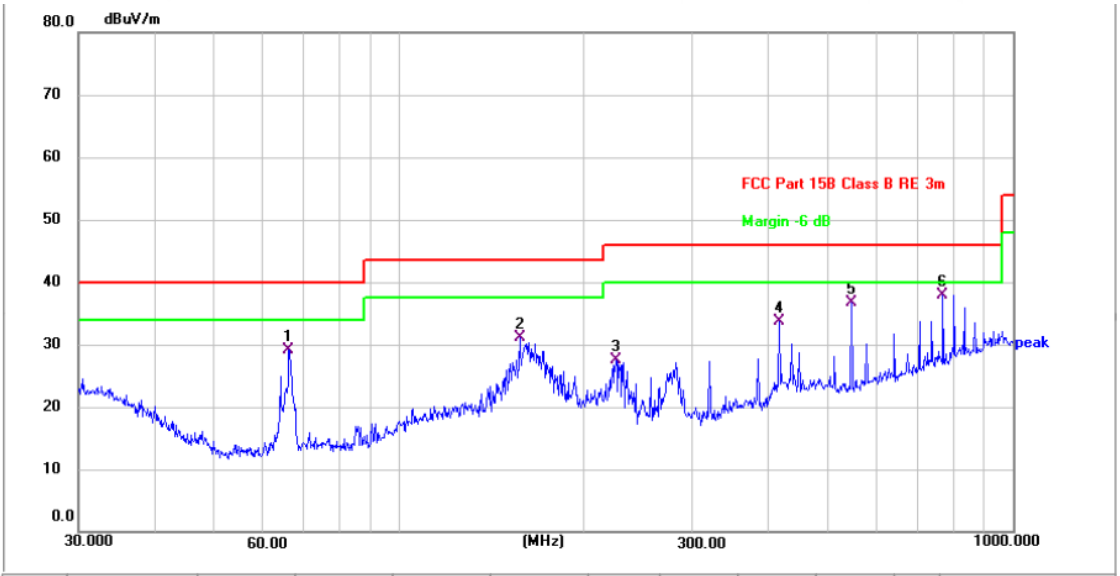
	channel. Only the worst case is recorded in the report. 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Final Test Level =Receiver Reading + Antenna Factor + Cable Factor ¨C Preamplifier Factor 3) Scan from 9kHz to 25GHz, the disturbance above 12.75GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. Fundamental frequency is blocked by filter, and only spurious emission is shown.

4.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.5 °C	Humidity:	48 %	Atmospheric Pressure:	101.7 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

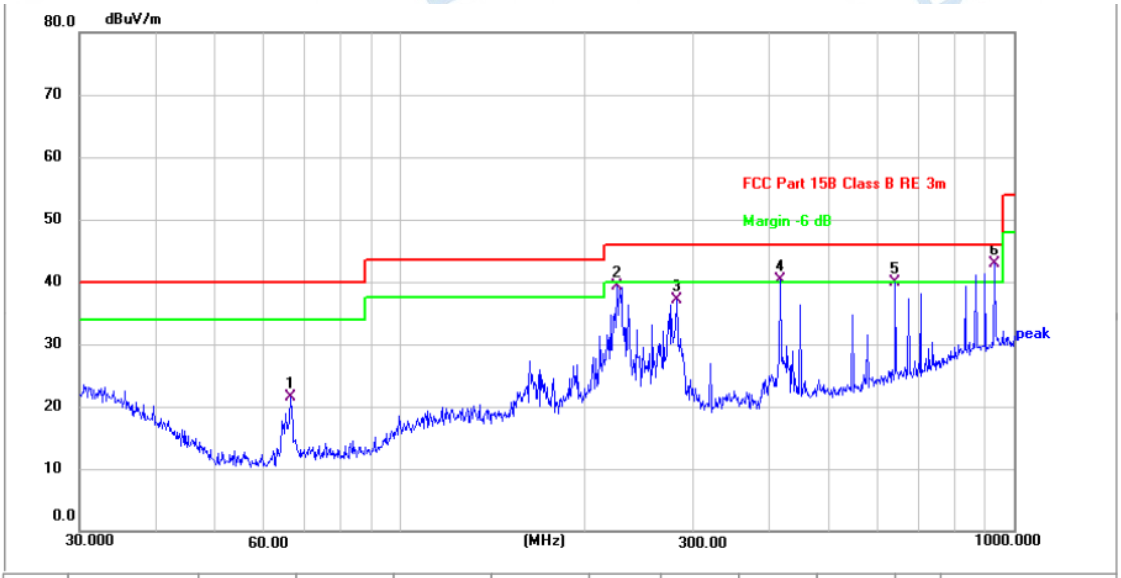
4.5.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	66.0342	42.58	-13.39	29.19	40.00	-10.81	QP			P	
2	157.0073	39.35	-8.32	31.03	43.50	-12.47	QP			P	
3	225.3080	37.38	-9.79	27.59	46.00	-18.41	QP			P	
4	416.1791	38.81	-5.01	33.80	46.00	-12.20	QP			P	
5	545.1825	39.87	-3.17	36.70	46.00	-9.30	QP			P	
6 *	768.7481	36.46	1.41	37.87	46.00	-8.13	QP			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	66.2660	34.98	-13.47	21.51	40.00	-18.49	QP			P	
2	225.3080	50.10	-10.78	39.32	46.00	-6.68	QP			P	
3	281.9945	45.12	-7.93	37.19	46.00	-8.81	QP			P	
4 !	416.1791	45.33	-5.12	40.21	46.00	-5.79	QP			P	
5	640.6110	41.04	-1.23	39.81	46.00	-6.19	QP			P	
6 *	929.0081	38.44	4.41	42.85	46.00	-3.15	QP			P	

Remark: Margin=Level - Limit, Level=Test receiver reading + correction factor

The test software will only record the worst test angle and height, and only the GFSK worst case will be recorded in the test report.

4.6 Emissions in frequency bands (above 1GHz)

<table>
<tr><td>Test Requirement:</td><td>Refer to 47 CFR 15.247(d), 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)).</td></tr>
<tr><td>Test Limit:</td><td>
<table>
<tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table>
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.
In the emission table above, the tighter limit applies at the band edges.
The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10-2020 section 6.6.4
KDB 558074 D01 15.247 Meas Guidance v05r02</td></tr>
<tr><td>Procedure:</td><td>a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
j. Repeat above procedures until all frequencies measured was complete.
Remark:</td></tr>
</table>

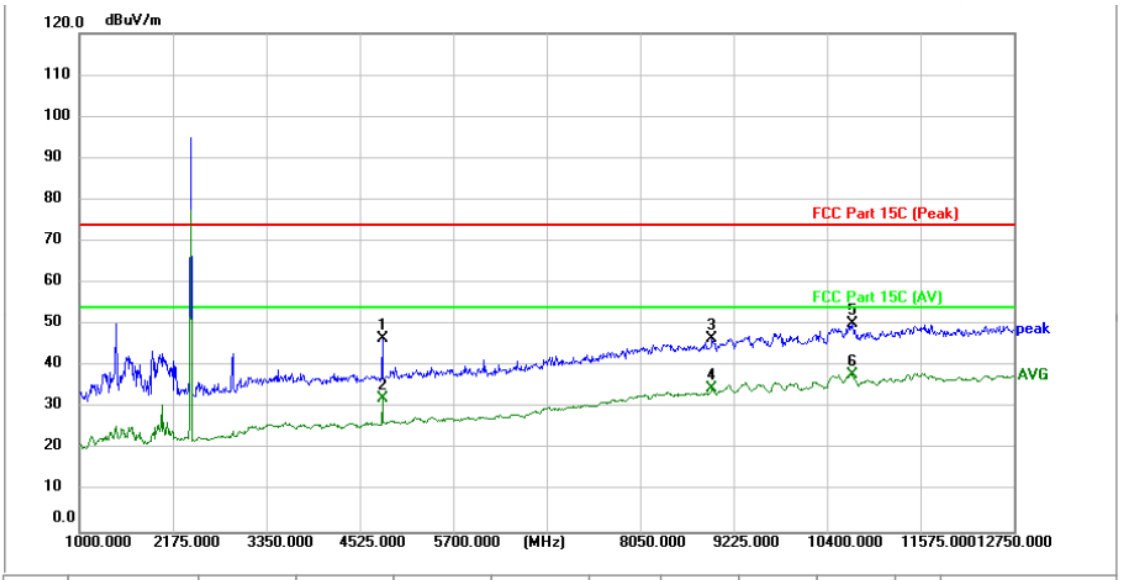
	1) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report. 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Final Test Level =Receiver Reading + Antenna Factor + Cable Factor ¨C Preamplifier Factor 3) Scan from 9kHz to 25GHz, the disturbance above 12.75GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. Fundamental frequency is blocked by filter, and only spurious emission is shown.

4.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.6 °C	Humidity:	55 %	Atmospheric Pressure:	101.7 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

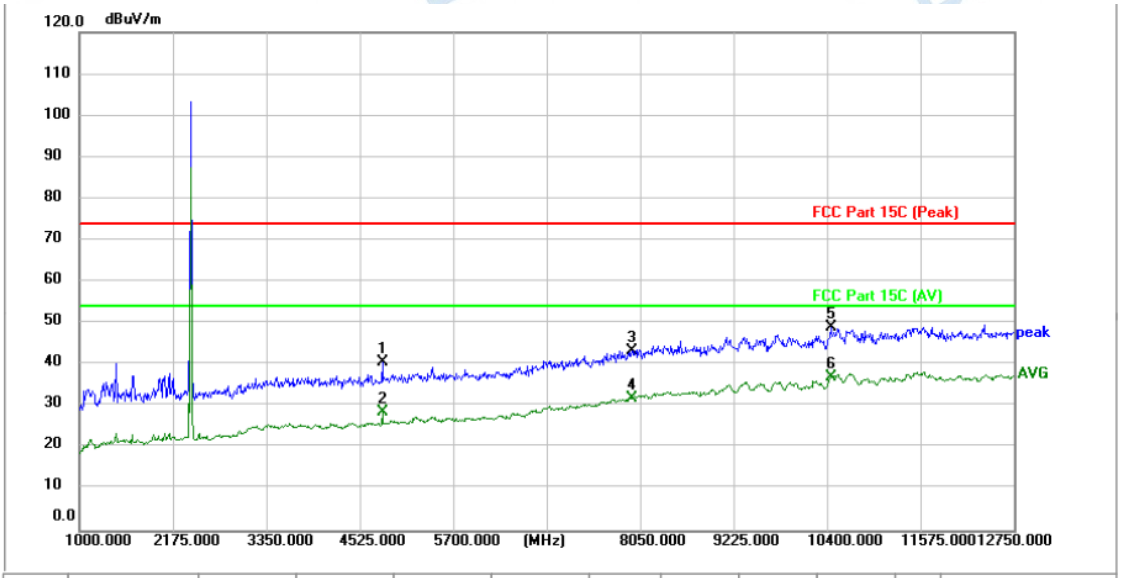
4.6.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: L



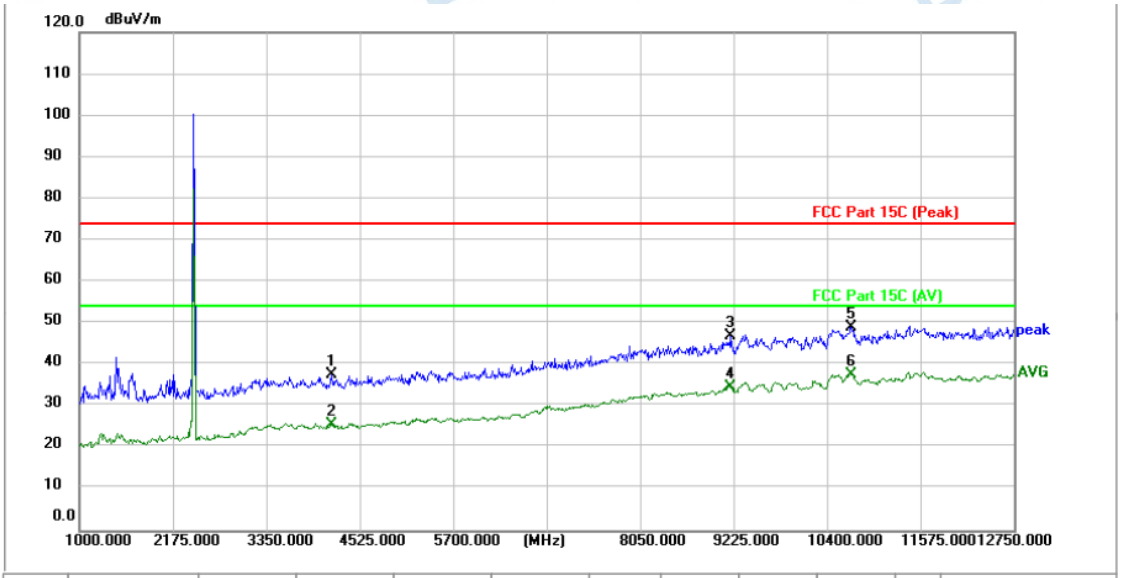
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	4807.000	47.40	-0.69	46.71	74.00	-27.29	peak			P	
2	4807.000	32.84	-0.69	32.15	54.00	-21.85	AVG			P	
3	8954.750	38.30	8.21	46.51	74.00	-27.49	peak			P	
4	8954.750	26.34	8.21	34.55	54.00	-19.45	AVG			P	
5	10717.250	41.21	9.17	50.38	74.00	-23.62	peak			P	
6 *	10717.250	28.68	9.17	37.85	54.00	-16.15	AVG			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: L



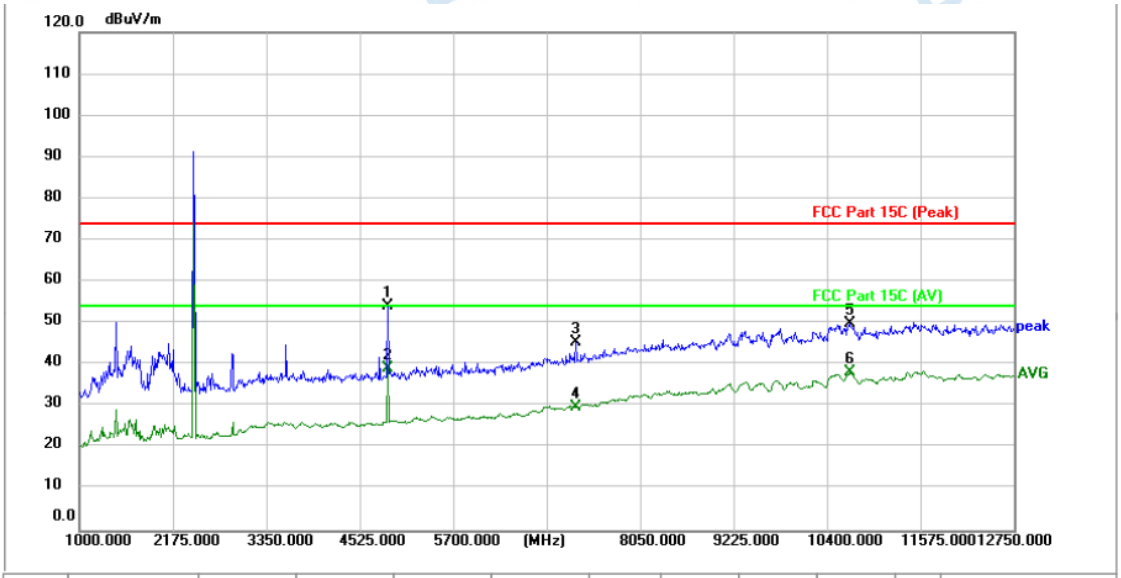
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	4807.000	41.46	-0.69	40.77	74.00	-33.23	peak			P	
2	4807.000	29.48	-0.69	28.79	54.00	-25.21	AVG			P	
3	7944.250	36.89	6.48	43.37	74.00	-30.63	peak			P	
4	7944.250	25.58	6.48	32.06	54.00	-21.94	AVG			P	
5	10447.000	40.24	8.91	49.15	74.00	-24.85	peak			P	
6 *	10447.000	28.06	8.91	36.97	54.00	-17.03	AVG			P	

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: M



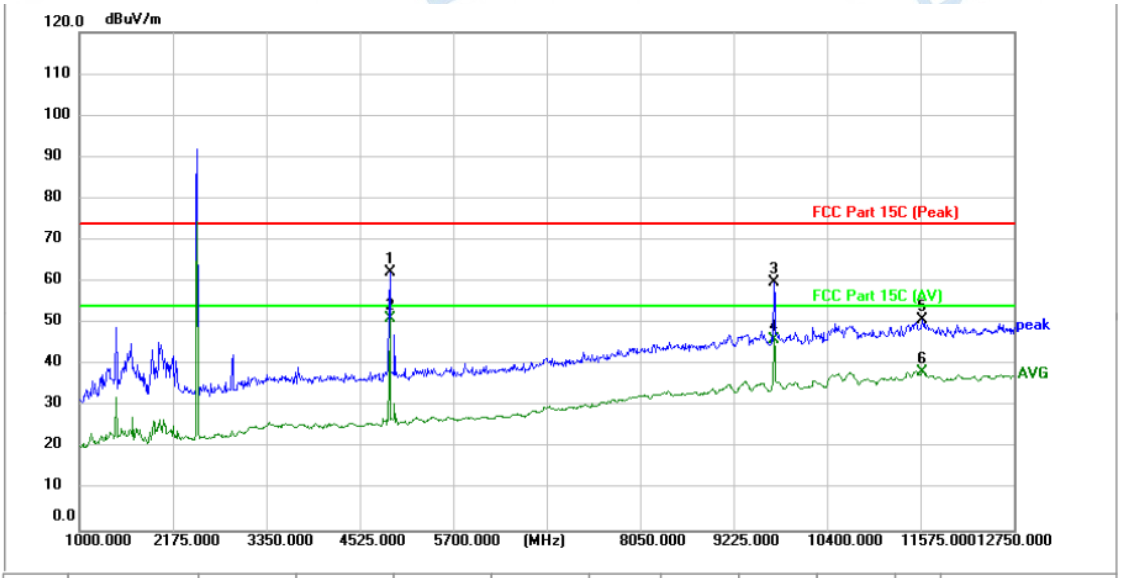
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	4172.500	40.01	-2.34	37.67	74.00	-36.33	peak			P	
2	4172.500	27.88	-2.34	25.54	54.00	-28.46	AVG			P	
3	9189.750	38.77	8.22	46.99	74.00	-27.01	peak			P	
4	9189.750	26.33	8.22	34.55	54.00	-19.45	AVG			P	
5	10705.500	39.96	9.15	49.11	74.00	-24.89	peak			P	
6 *	10705.500	28.59	9.15	37.74	54.00	-16.26	AVG			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: M



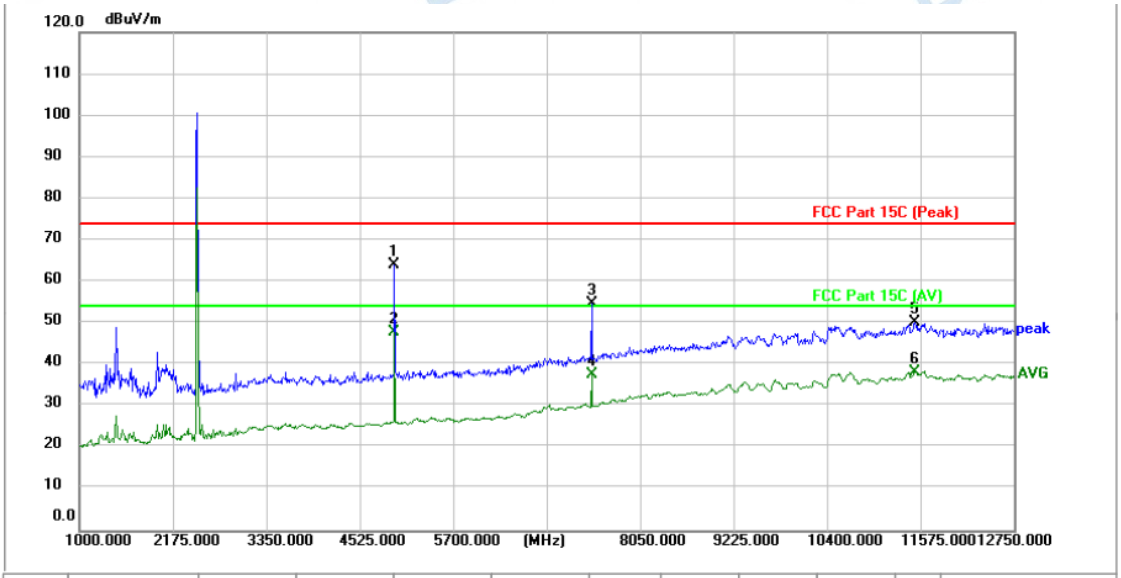
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	4877.500	54.68	-0.45	54.23	74.00	-19.77	peak			P	
2 *	4877.500	39.62	-0.45	39.17	54.00	-14.83	AVG			P	
3	7239.250	40.91	4.42	45.33	74.00	-28.67	peak			P	
4	7239.250	25.37	4.42	29.79	54.00	-24.21	AVG			P	
5	10682.000	40.76	9.13	49.89	74.00	-24.11	peak			P	
6	10682.000	29.00	9.13	38.13	54.00	-15.87	AVG			P	

TM1 / Polarization: Horizontal / Band: 2400-2483.5 MHz / BW: 1 / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	4901.000	62.52	-0.37	62.15	74.00	-11.85	peak			P	
2 *	4901.000	51.66	-0.37	51.29	54.00	-2.71	AVG			P	
3	9730.250	51.73	8.10	59.83	74.00	-14.17	peak			P	
4	9730.250	37.90	8.10	46.00	54.00	-8.00	AVG			P	
5	11598.500	41.24	9.73	50.97	74.00	-23.03	peak			P	
6	11598.500	28.43	9.73	38.16	54.00	-15.84	AVG			P	

TM1 / Polarization: Vertical / Band: 2400-2483.5 MHz / BW: 1 / CH: H

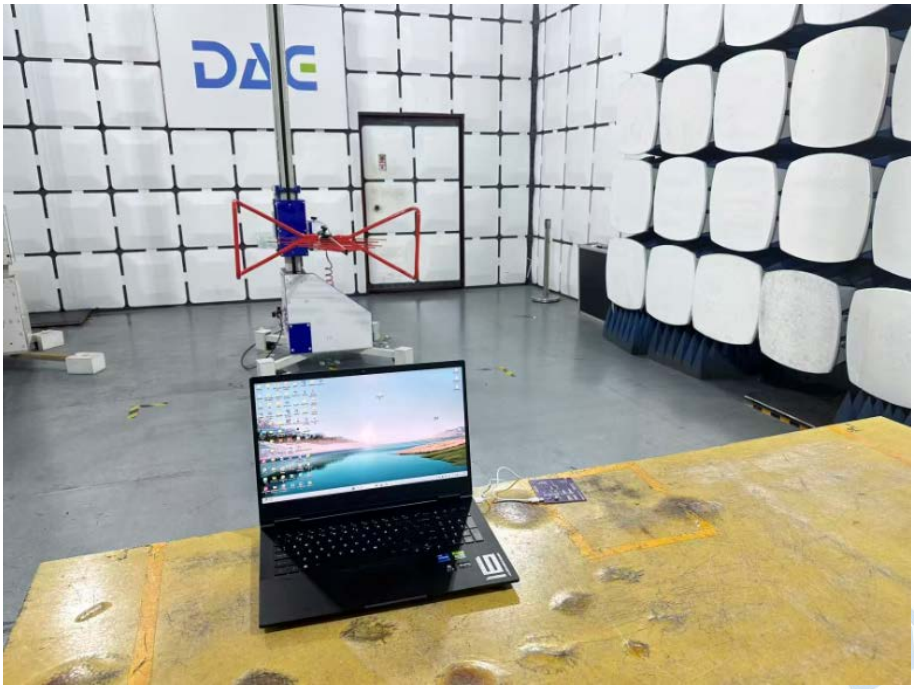


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	4959.750	64.26	-0.17	64.09	74.00	-9.91	peak			P	
2 *	4959.750	47.87	-0.17	47.70	54.00	-6.30	AVG			P	
3	7439.000	49.84	4.78	54.62	74.00	-19.38	peak			P	
4	7439.000	32.87	4.78	37.65	54.00	-16.35	AVG			P	
5	11504.500	40.50	9.67	50.17	74.00	-23.83	peak			P	
6	11504.500	28.67	9.67	38.34	54.00	-15.66	AVG			P	

Remark:Margin=Level - Limit, Level=Test receiver reading + correction factor
The test software will only record the worst test angle and height, and only the GFSK worst case will be recorded in the test report.

5 TEST SETUP PHOTOS

Conducted Emission at AC power line

Emissions in frequency bands (below 1GHz)


Emissions in frequency bands (above 1GHz)

6 PHOTOS OF THE EUT

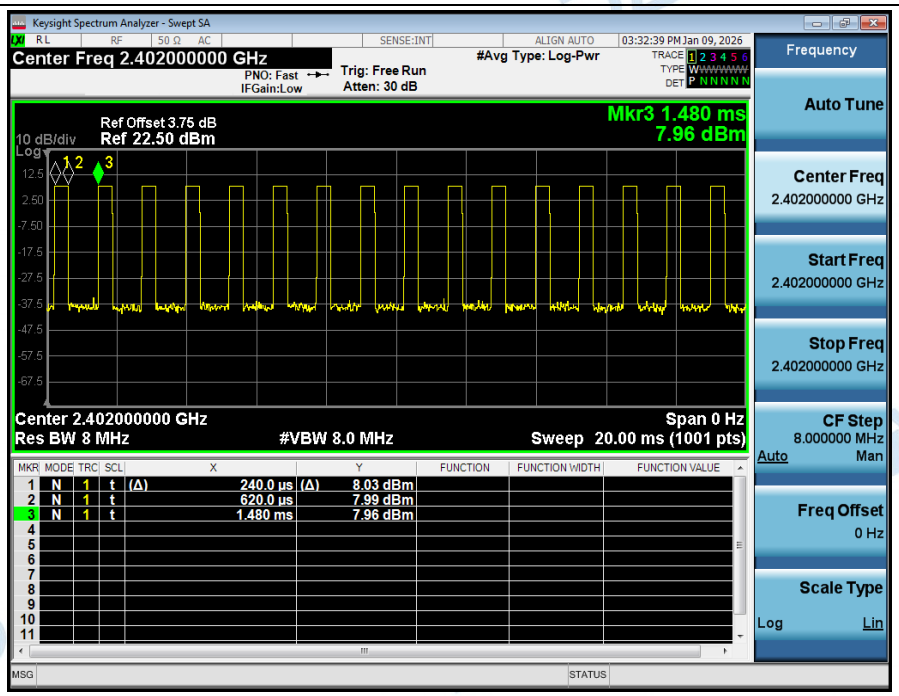
Refer to Appendix - EUT Photos for EUT External Photo and Internal Photo.

Appendix

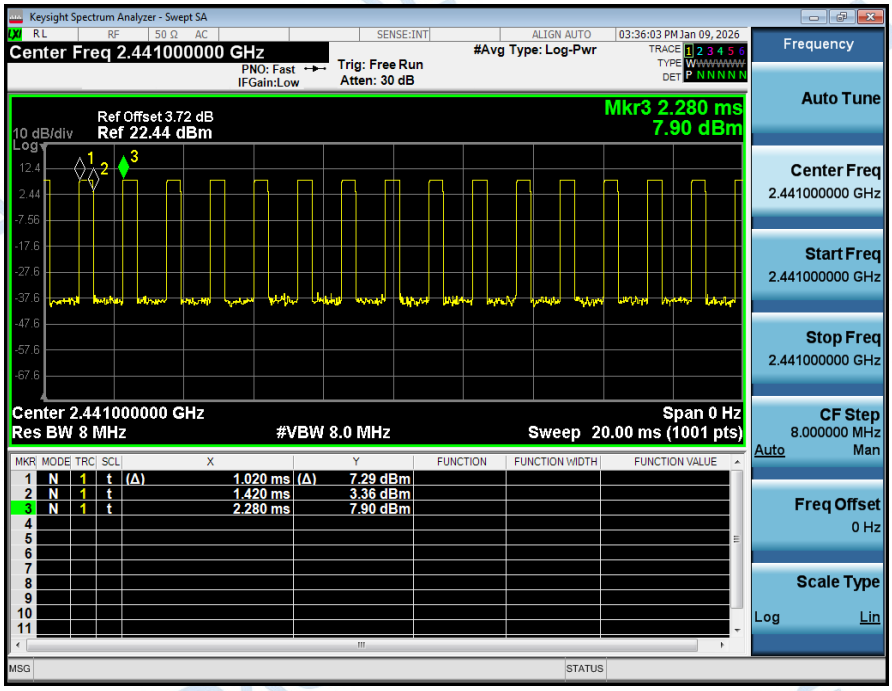
1. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1-DH1	2402.00	30.65	5.14
NVNT	ANT1	1-DH1	2441.00	33.33	4.77
NVNT	ANT1	1-DH1	2480.00	30.65	5.14
NVNT	ANT1	2-DH3	2402.00	65.60	1.83
NVNT	ANT1	2-DH3	2441.00	66.40	1.78
NVNT	ANT1	2-DH3	2480.00	66.40	1.78
NVNT	ANT1	3-DH5	2402.00	77.66	1.10
NVNT	ANT1	3-DH5	2441.00	77.54	1.10
NVNT	ANT1	3-DH5	2480.00	77.54	1.10

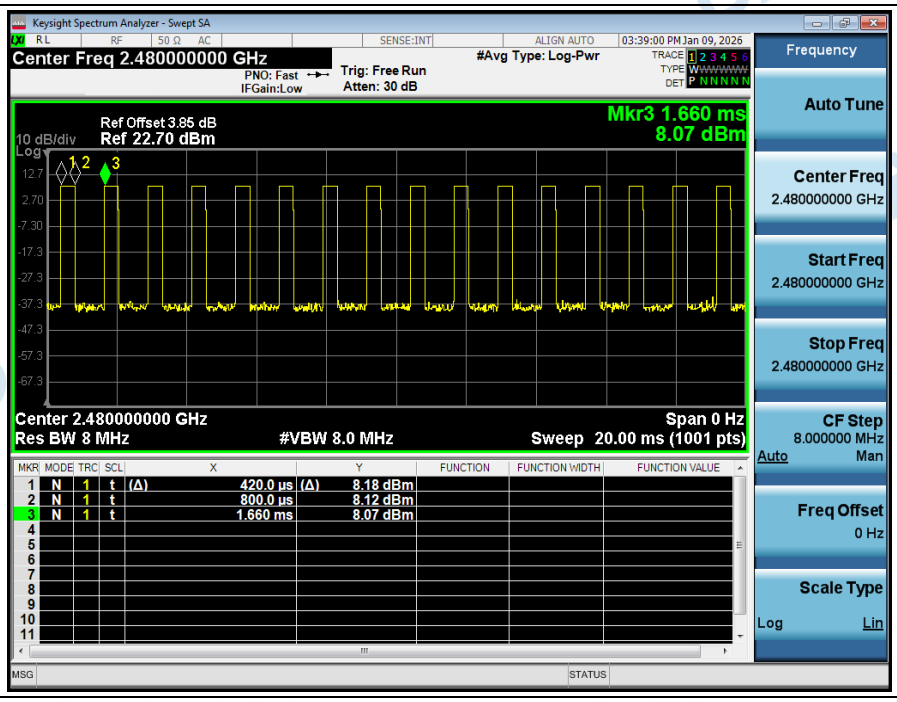
Duty_Cycle_NVNT_ANT1_1-DH1_2402



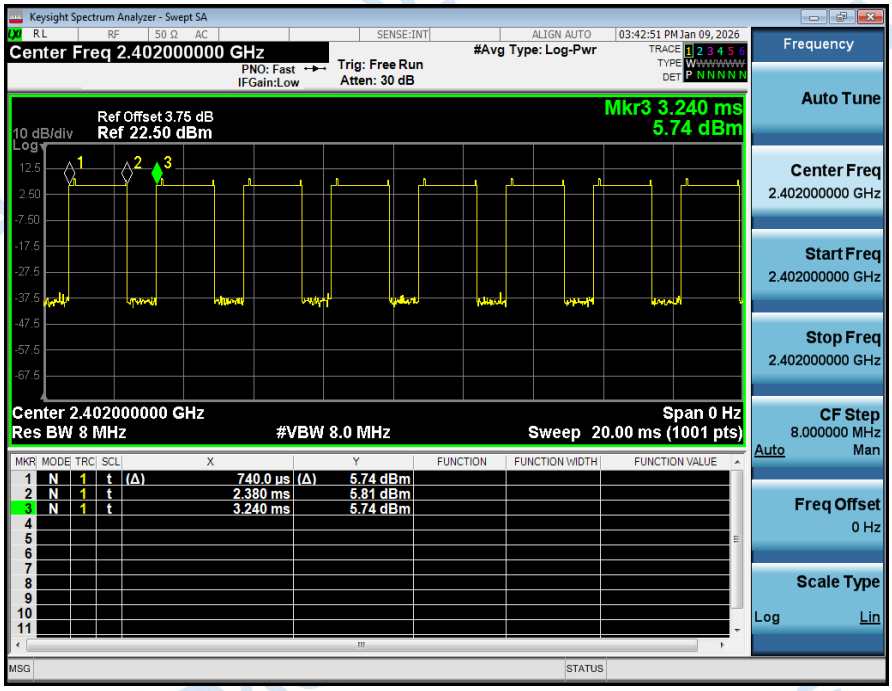
Duty_Cycle_NVNT_ANT1_1-DH1_2441



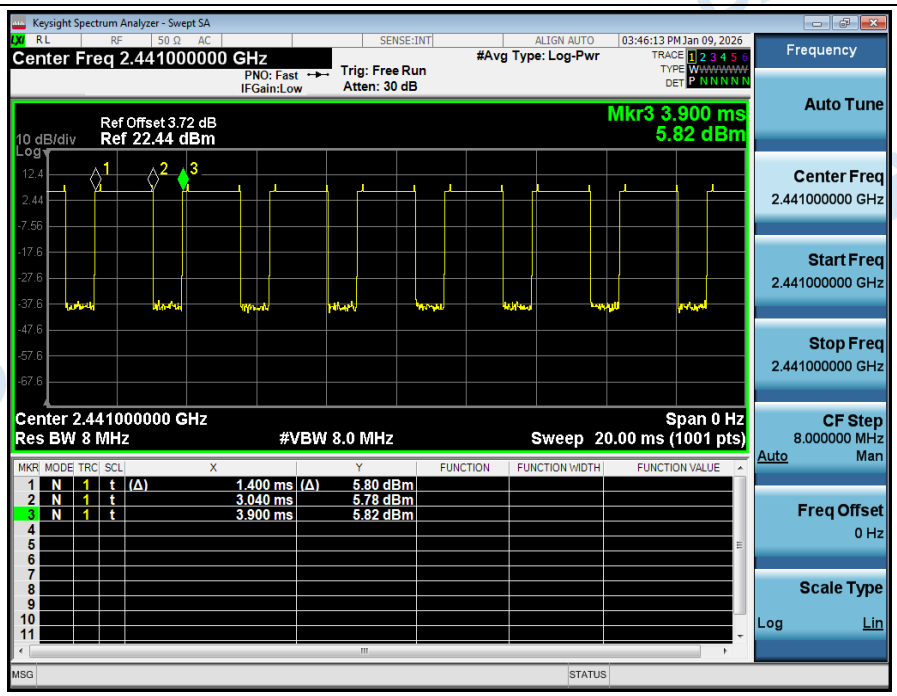
Duty_Cycle_NVNT_ANT1_1-DH1_2480



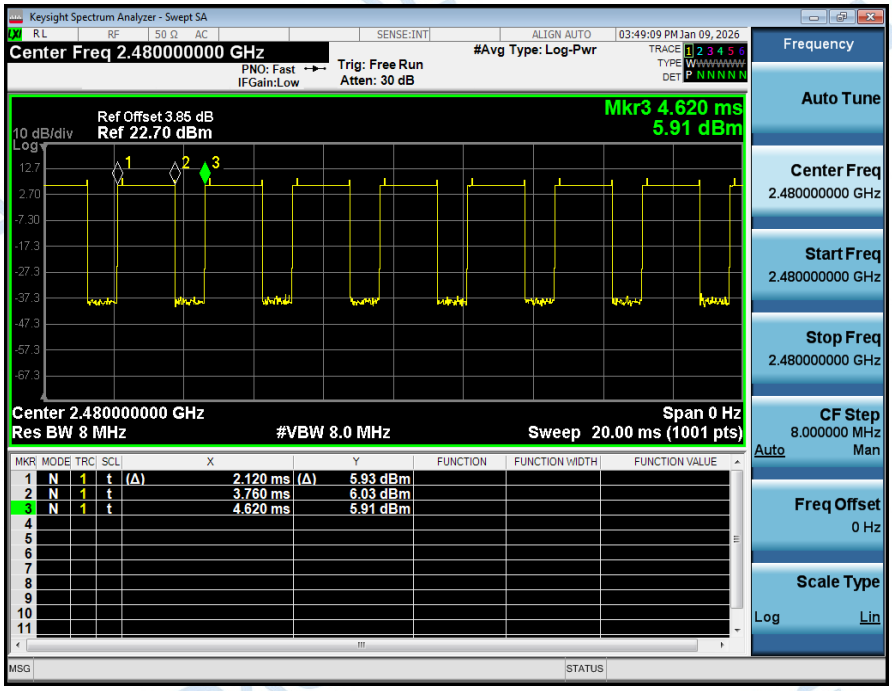
Duty_Cycle_NVNT_ANT1_2-DH3_2402



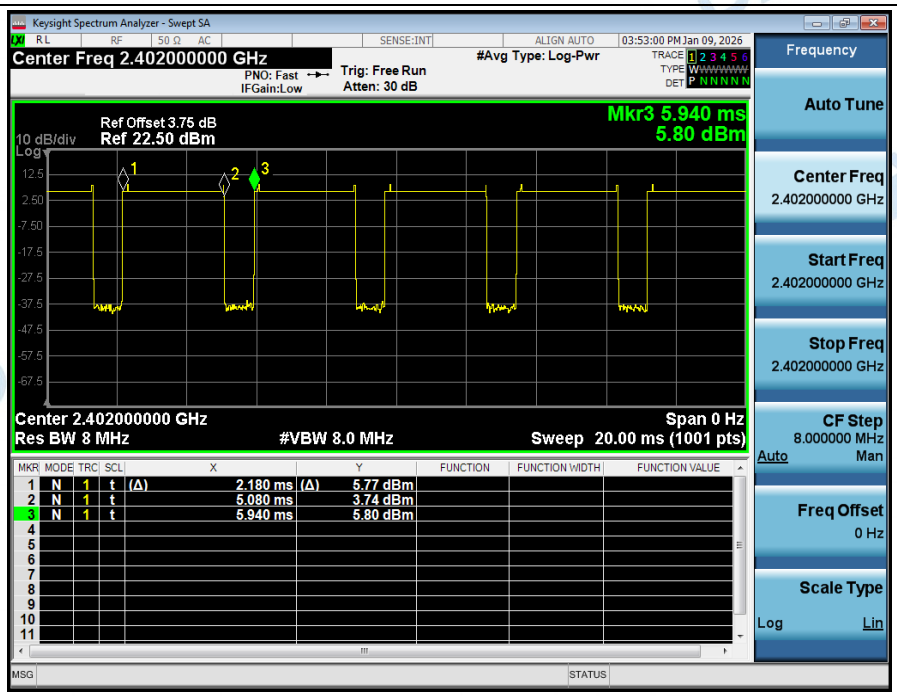
Duty_Cycle_NVNT_ANT1_2-DH3_2441



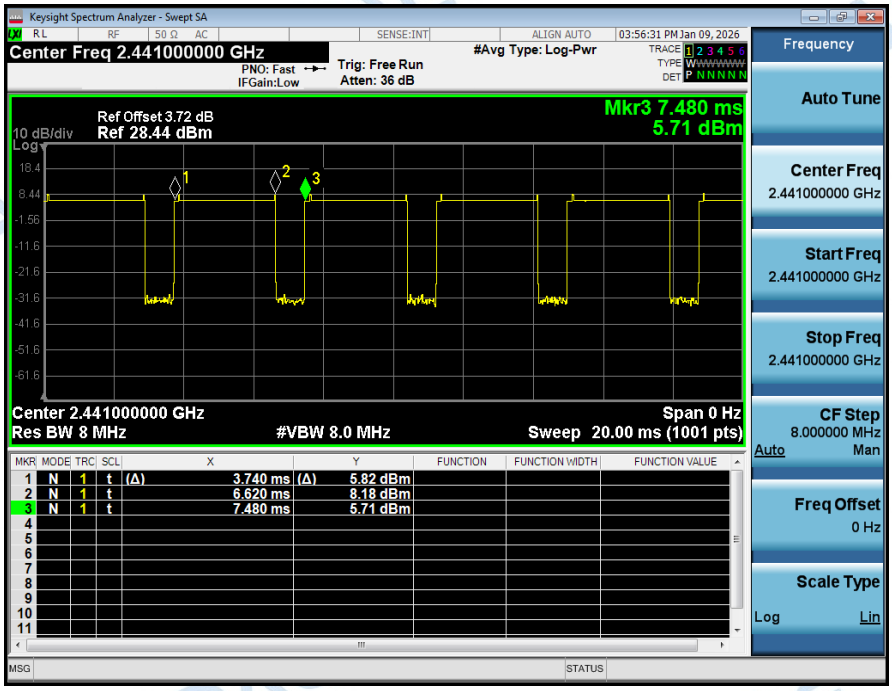
Duty_Cycle_NVNT_ANT1_2-DH3_2480



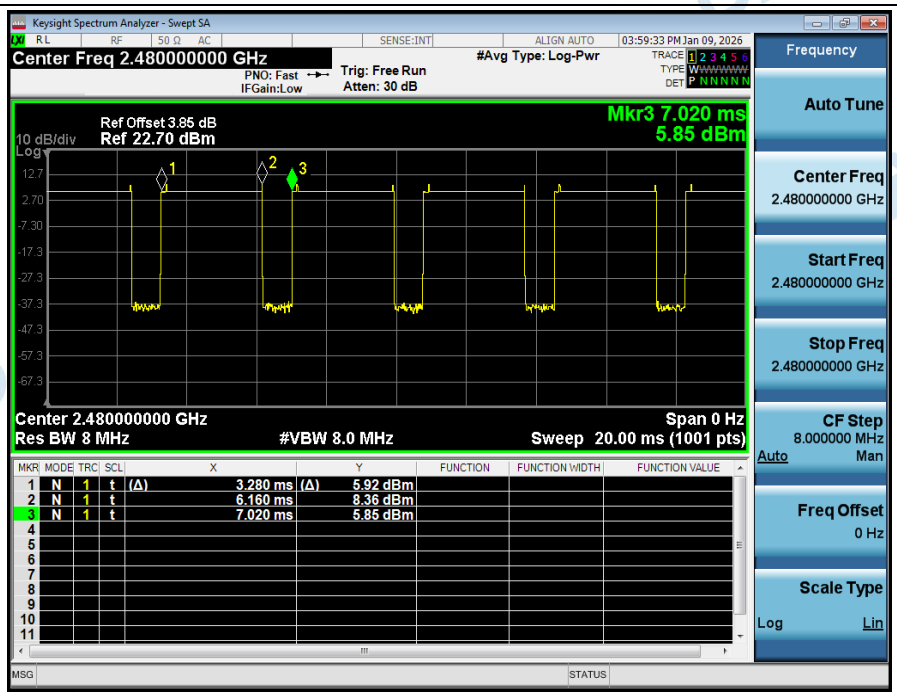
Duty_Cycle_NVNT_ANT1_3-DH5_2402



Duty_Cycle_NVNT_ANT1_3-DH5_2441



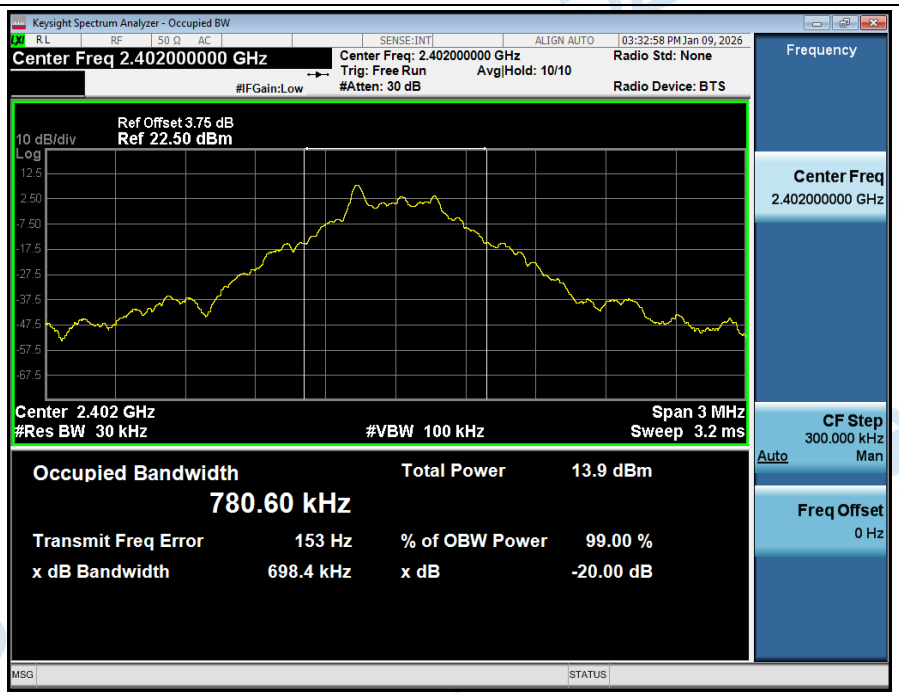
Duty_Cycle_NVNT_ANT1_3-DH5_2480



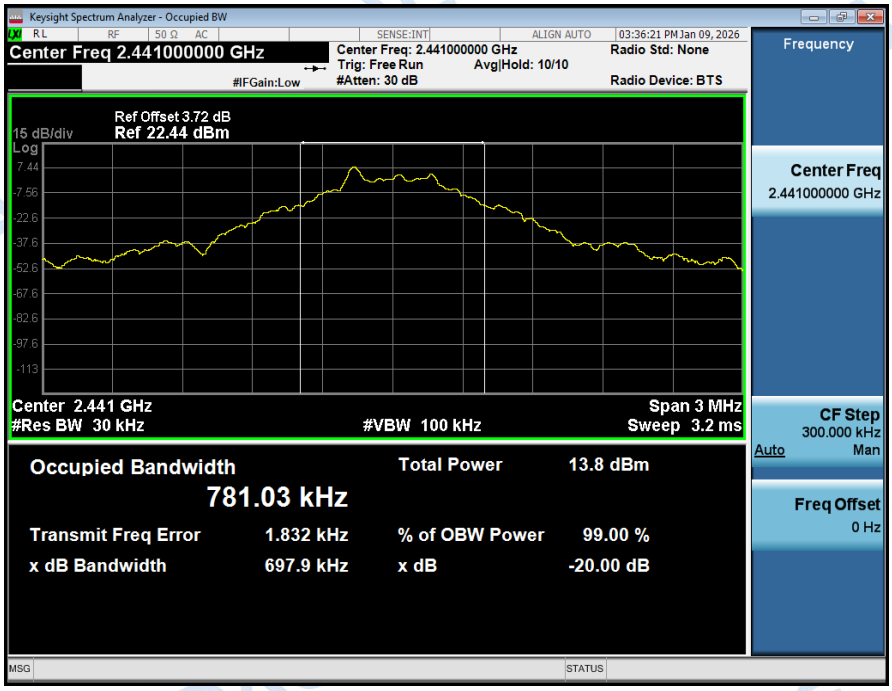
2. -20dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	1-DH1	2402.00	0.698	No
NVNT	ANT1	1-DH1	2441.00	0.698	No
NVNT	ANT1	1-DH1	2480.00	0.700	No
NVNT	ANT1	2-DH3	2402.00	1.129	Yes
NVNT	ANT1	2-DH3	2441.00	1.127	Yes
NVNT	ANT1	2-DH3	2480.00	1.129	Yes
NVNT	ANT1	3-DH5	2402.00	1.106	Yes
NVNT	ANT1	3-DH5	2441.00	1.136	Yes
NVNT	ANT1	3-DH5	2480.00	1.149	Yes

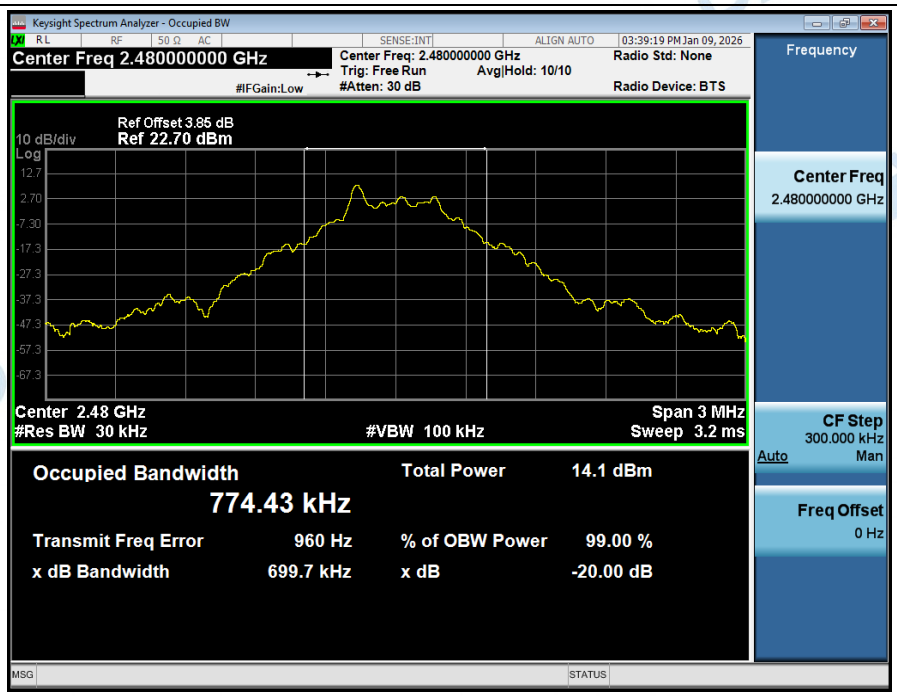
-20dB_Bandwidth_NVNT_ANT1_1-DH1_2402_00



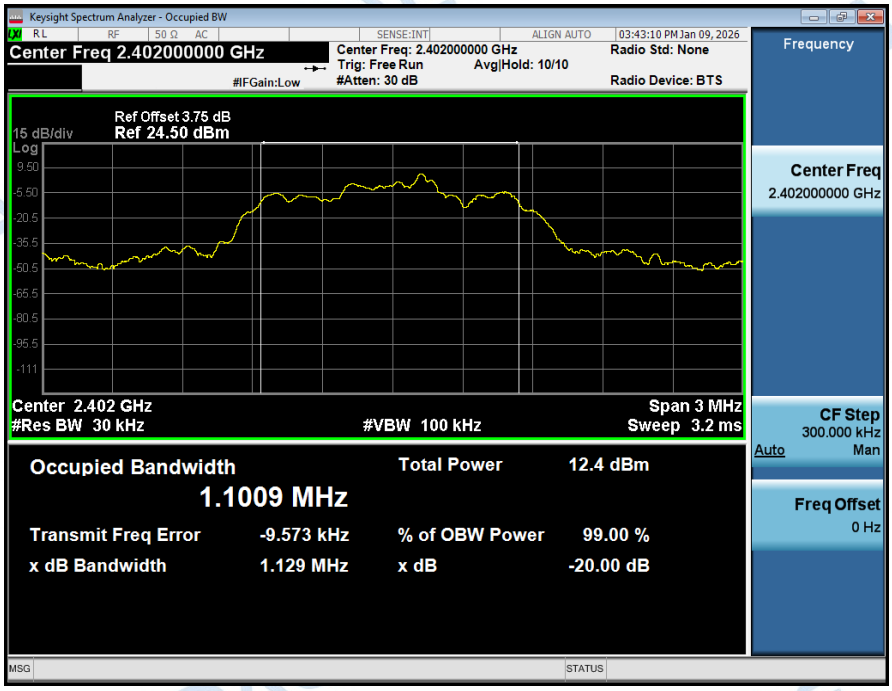
-20dB_Bandwidth_NVNT_ANT1_1-DH1_2441_00



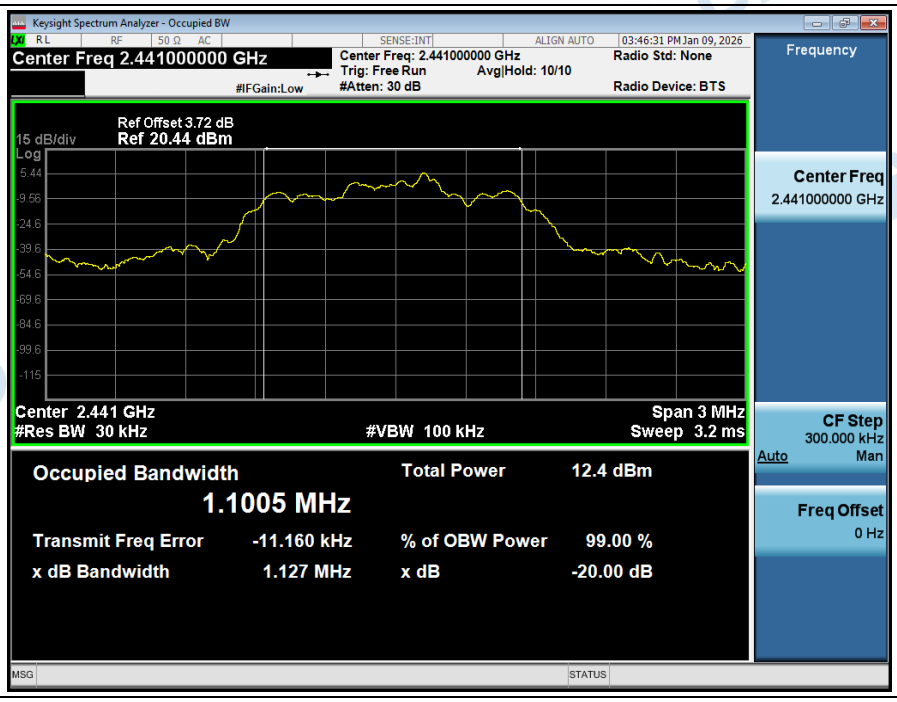
-20dB_Bandwidth_NVNT_ANT1_1-DH1_2480_00



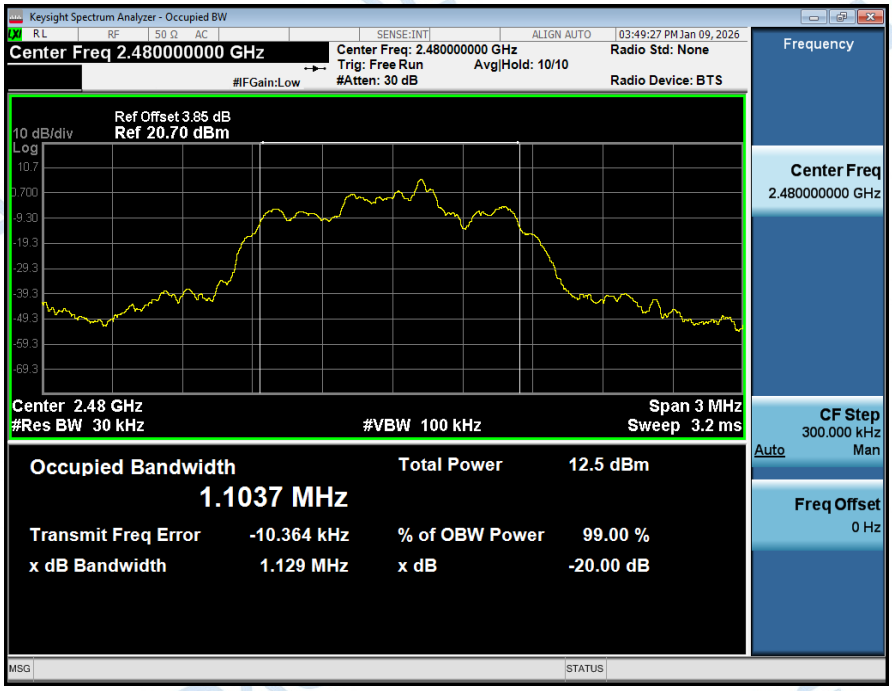
-20dB_Bandwidth_NVNT_ANT1_2-DH3_2402_00



-20dB_Bandwidth_NVNT_ANT1_2-DH3_2441_00

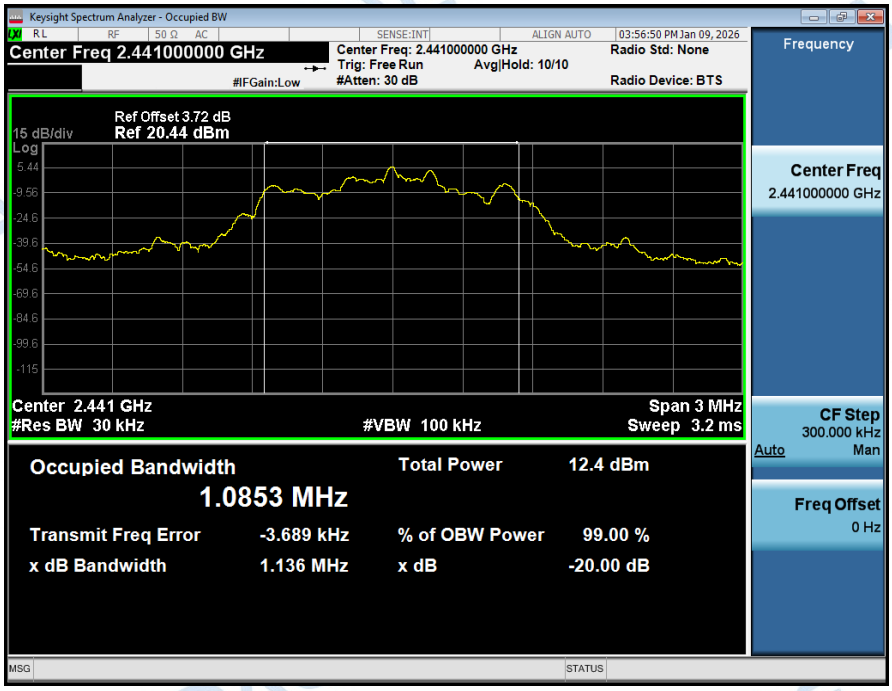


-20dB_Bandwidth_NVNT_ANT1_2-DH3_2480_00

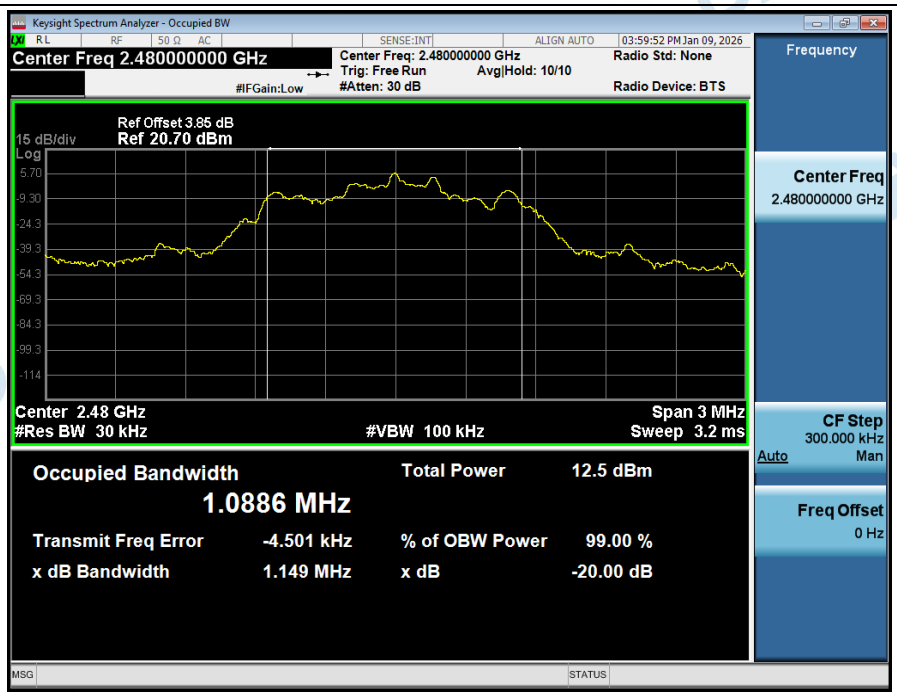


-20dB_Bandwidth_NVNT_ANT1_3-DH5_2402_00

-20dB_Bandwidth_NVNT_ANT1_3-DH5_2441_00



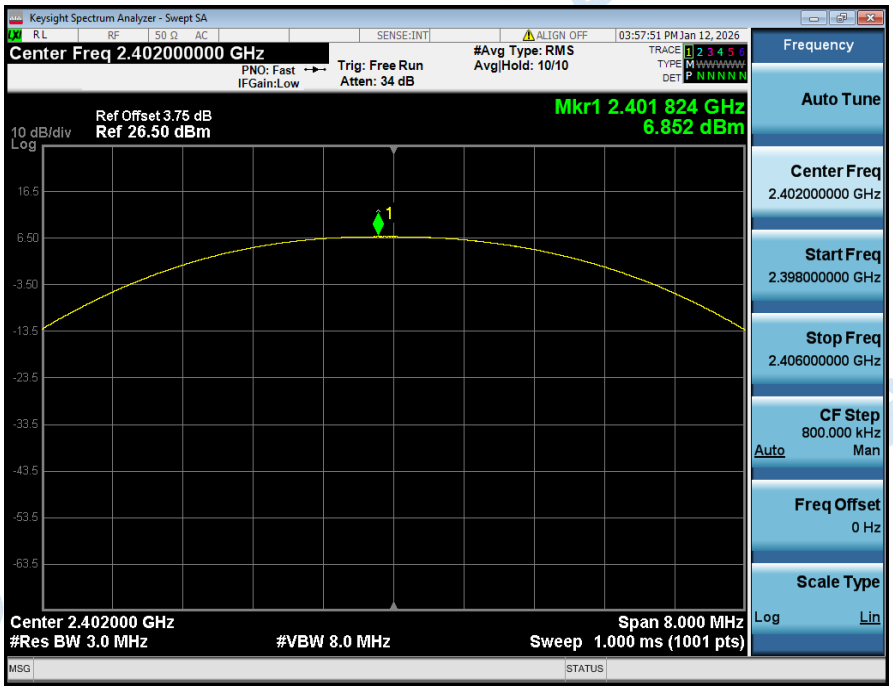
-20dB_Bandwidth_NVNT_ANT1_3-DH5_2480_00



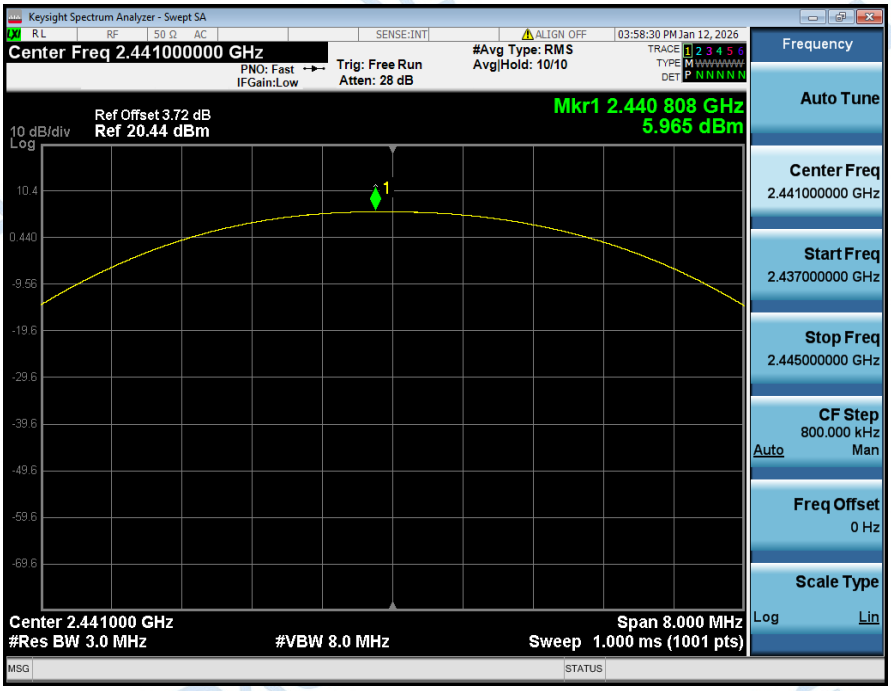
3. Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1-DH1	2402.00	6.85	4.84	1000	Pass
NVNT	ANT1	1-DH1	2441.00	5.96	3.95	1000	Pass
NVNT	ANT1	1-DH1	2480.00	9.42	8.74	1000	Pass
NVNT	ANT1	2-DH3	2402.00	8.34	6.82	1000	Pass
NVNT	ANT1	2-DH3	2441.00	8.43	6.96	1000	Pass
NVNT	ANT1	2-DH3	2480.00	8.56	7.18	1000	Pass
NVNT	ANT1	3-DH5	2402.00	8.41	6.93	1000	Pass
NVNT	ANT1	3-DH5	2441.00	8.38	6.89	1000	Pass
NVNT	ANT1	3-DH5	2480.00	8.49	7.07	1000	Pass

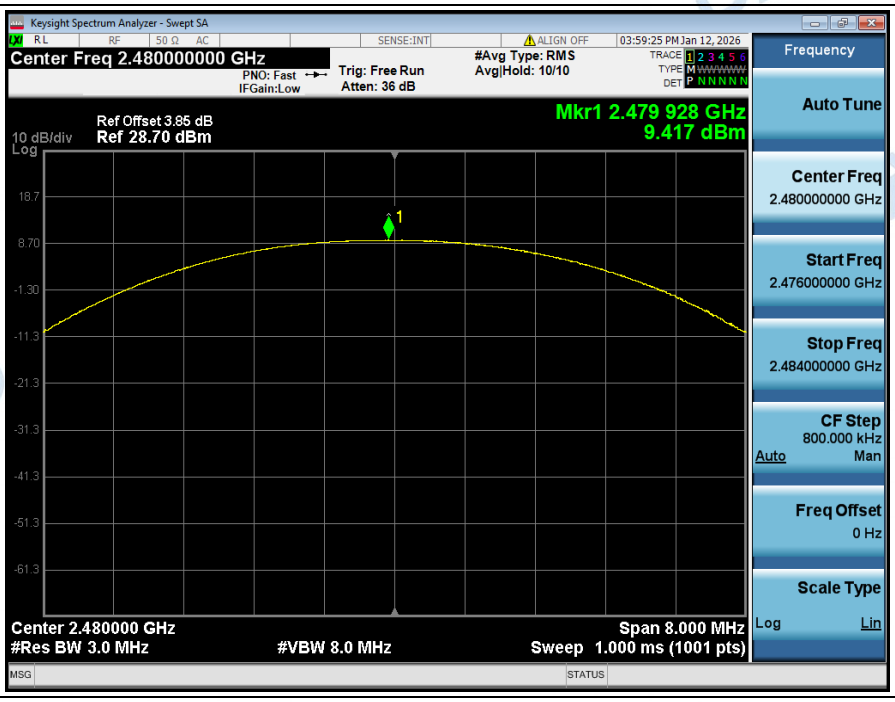
Peak_Output_Power_NVNT_ANT1_1-DH1_2402_00



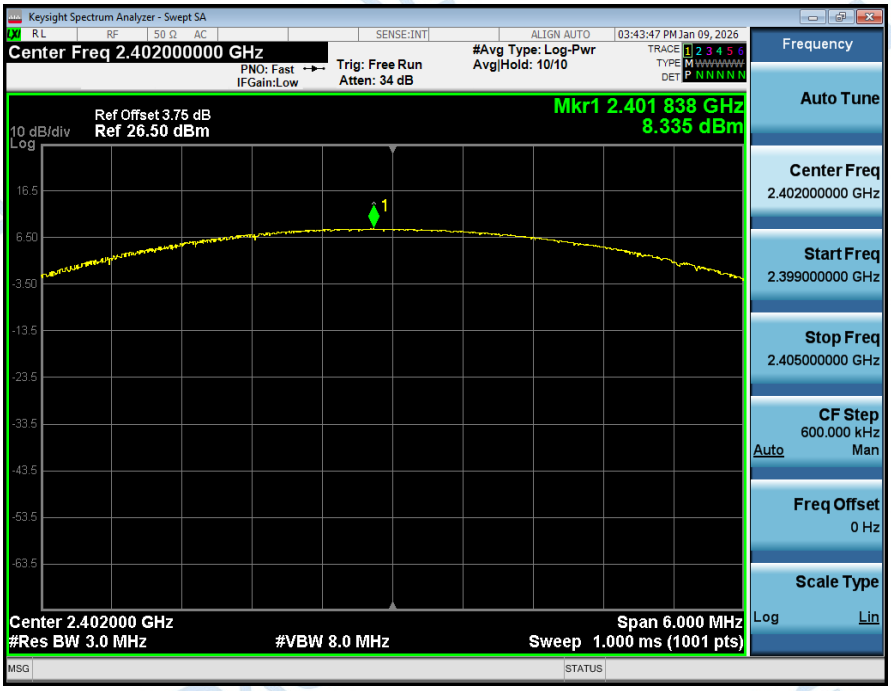
Peak_Output_Power_NVNT_ANT1_1-DH1_2441_00



Peak_Output_Power_NVNT_ANT1_1-DH1_2480_00

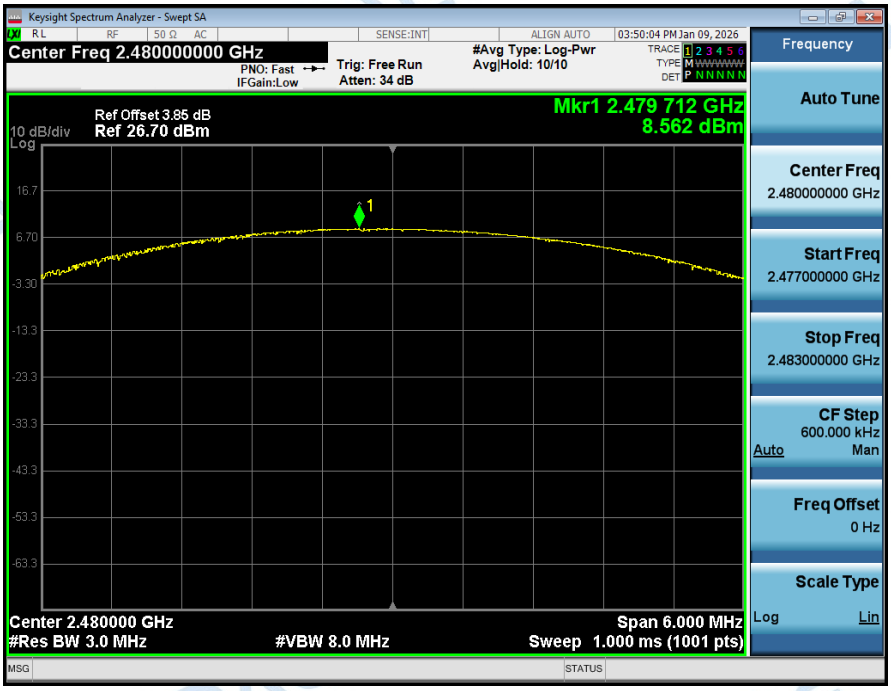


Peak_Output_Power_NVNT_ANT1_2-DH3_2402_00

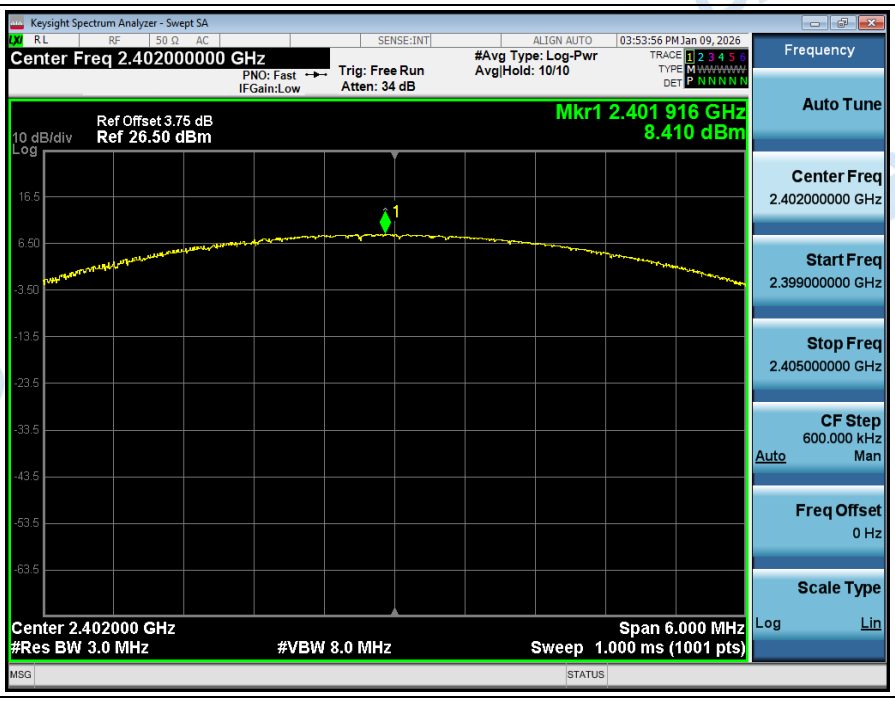


Peak_Output_Power_NVNT_ANT1_2-DH3_2441_00

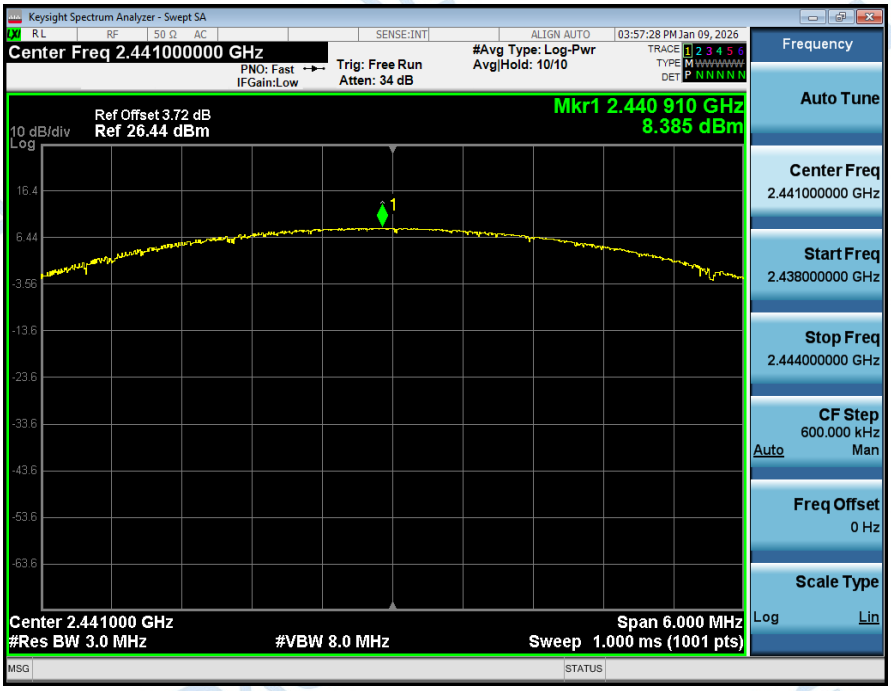
Peak_Output_Power_NVNT_ANT1_2-DH3_2480_00



Peak_Output_Power_NVNT_ANT1_3-DH5_2402_00



Peak_Output_Power_NVNT_ANT1_3-DH5_2441_00



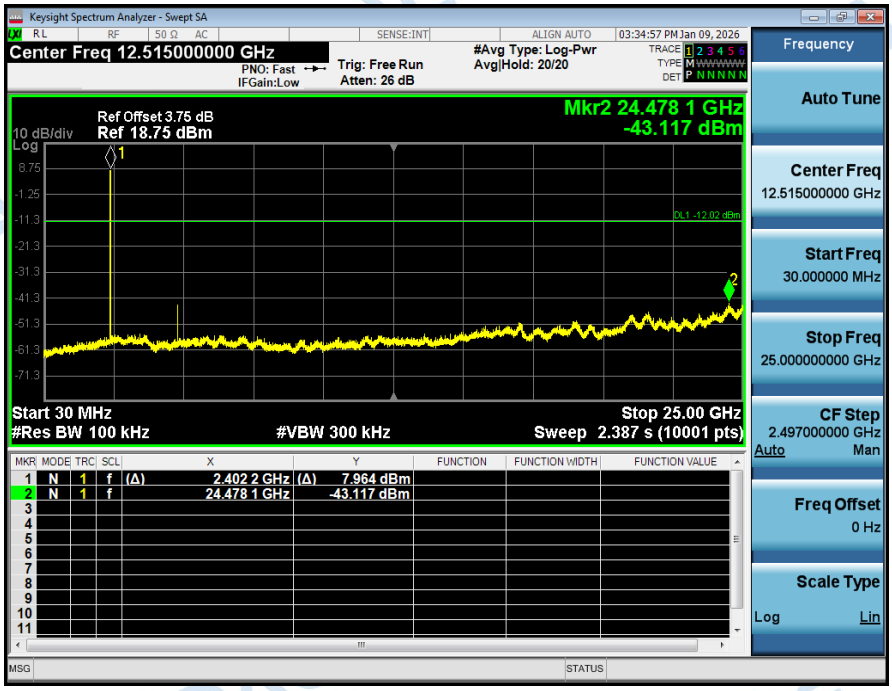
Peak_Output_Power_NVNT_ANT1_3-DH5_2480_00

4. Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1-DH1	2402.00	7.976	-43.117	-12.024	Pass
NVNT	ANT1	1-DH1	2441.00	7.849	-42.965	-12.151	Pass
NVNT	ANT1	1-DH1	2480.00	8.142	-43.122	-11.858	Pass
NVNT	ANT1	2-DH3	2402.00	5.759	-41.174	-14.241	Pass
NVNT	ANT1	2-DH3	2441.00	5.799	-45.631	-14.201	Pass
NVNT	ANT1	2-DH3	2480.00	5.944	-43.924	-14.056	Pass
NVNT	ANT1	3-DH5	2402.00	5.825	-45.098	-14.175	Pass
NVNT	ANT1	3-DH5	2441.00	5.810	-44.564	-14.190	Pass
NVNT	ANT1	3-DH5	2480.00	5.927	-45.317	-14.073	Pass

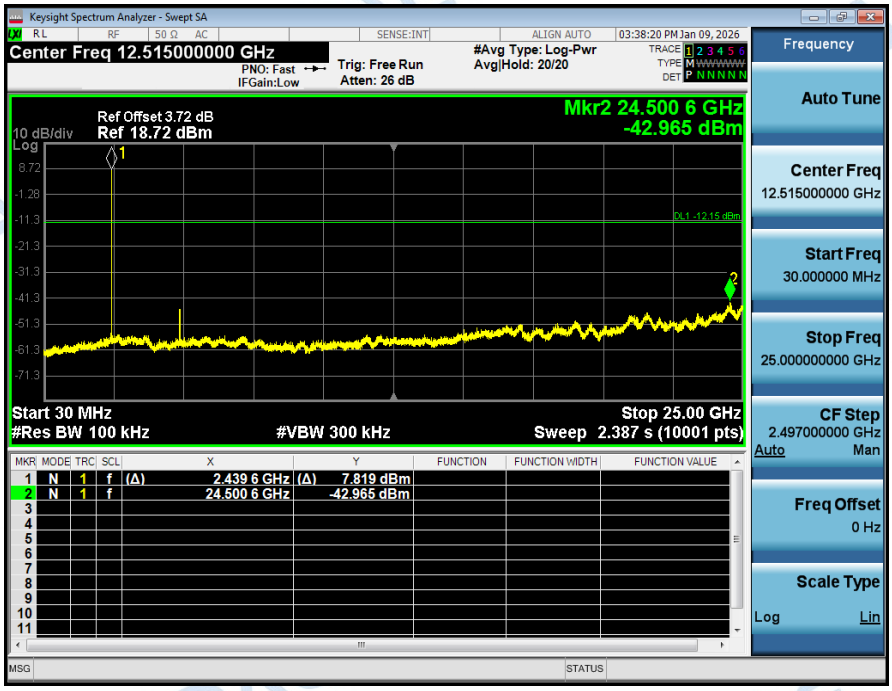
1_Reference_Level_NVNT_ANT1_1-DH1_2402_00

2_Spurious_Emissions_NVNT_ANT1_1-DH1_2402_00



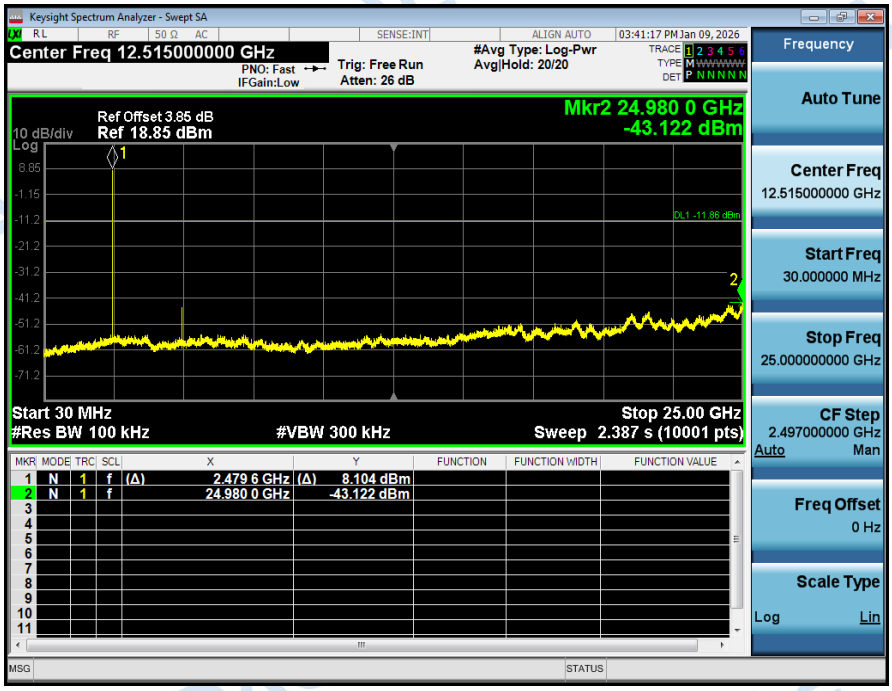
1_Reference_Level_NVNT_ANT1_1-DH1_2441_00

2_Spurious_Emissions_NVNT_ANT1_1-DH1_2441_00



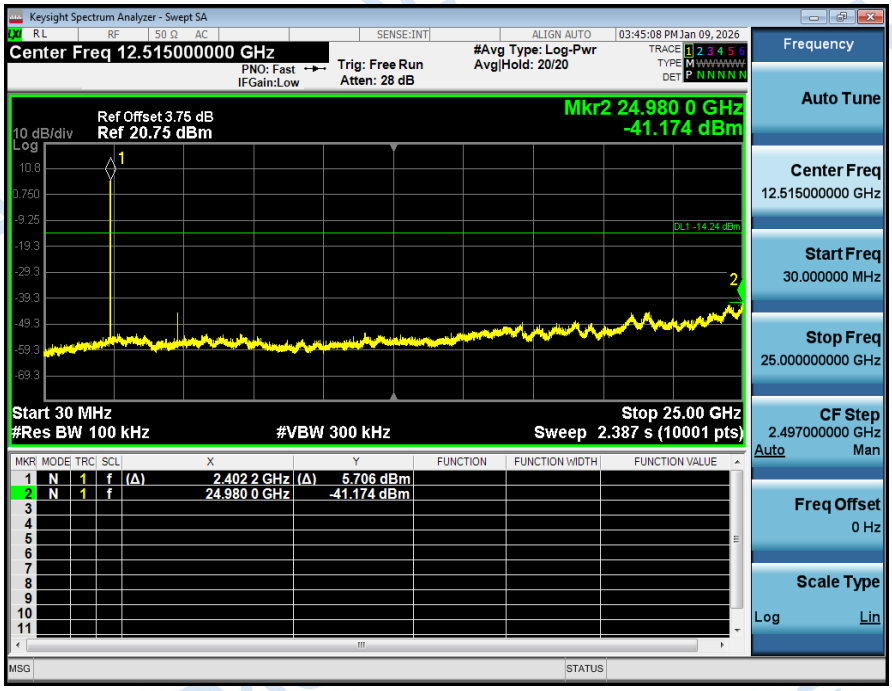
1_Reference_Level_NVNT_ANT1_1-DH1_2480_00

2_Spurious_Emissions_NVNT_ANT1_1-DH1_2480_00



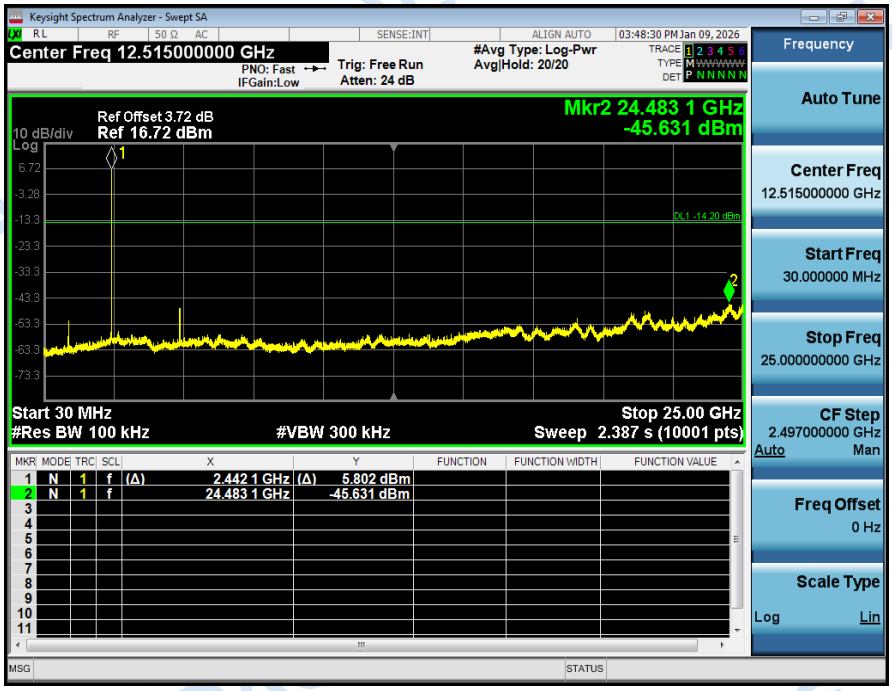
1_Reference_Level_NVNT_ANT1_2-DH3_2402_00

2_Spurious_Emissions_NVNT_ANT1_2-DH3_2402_00



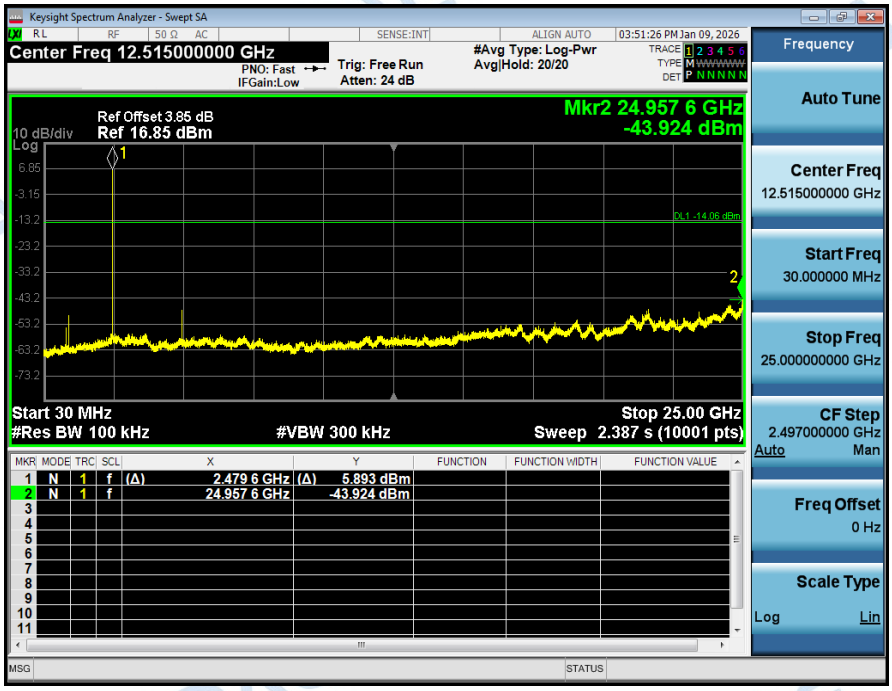
1_Reference_Level_NVNT_ANT1_2-DH3_2441_00

2_Spurious_Emissions_NVNT_ANT1_2-DH3_2441_00



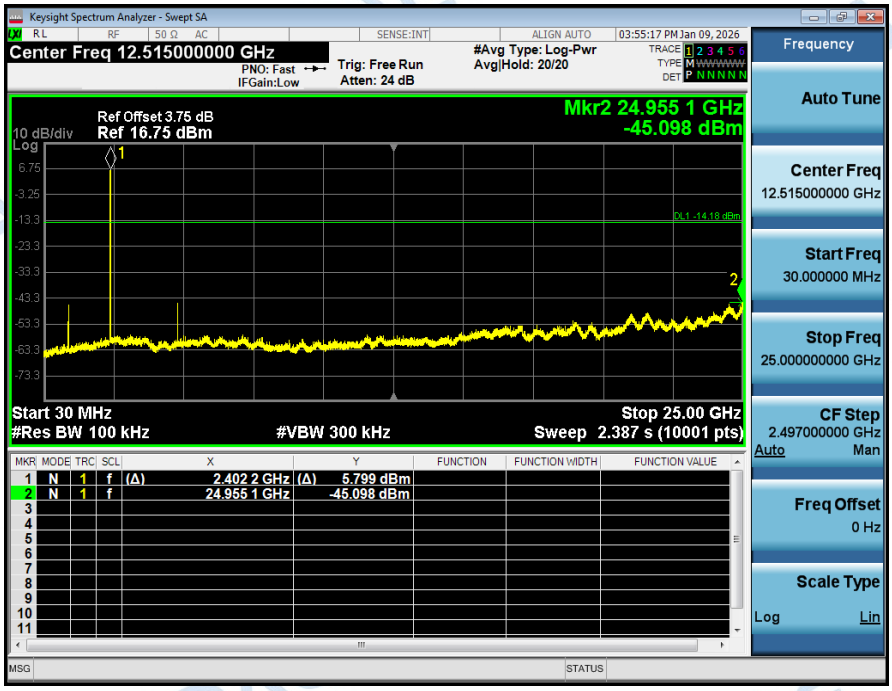
1_Reference_Level_NVNT_ANT1_2-DH3_2480_00

2_Spurious_Emissions_NVNT_ANT1_2-DH3_2480_00



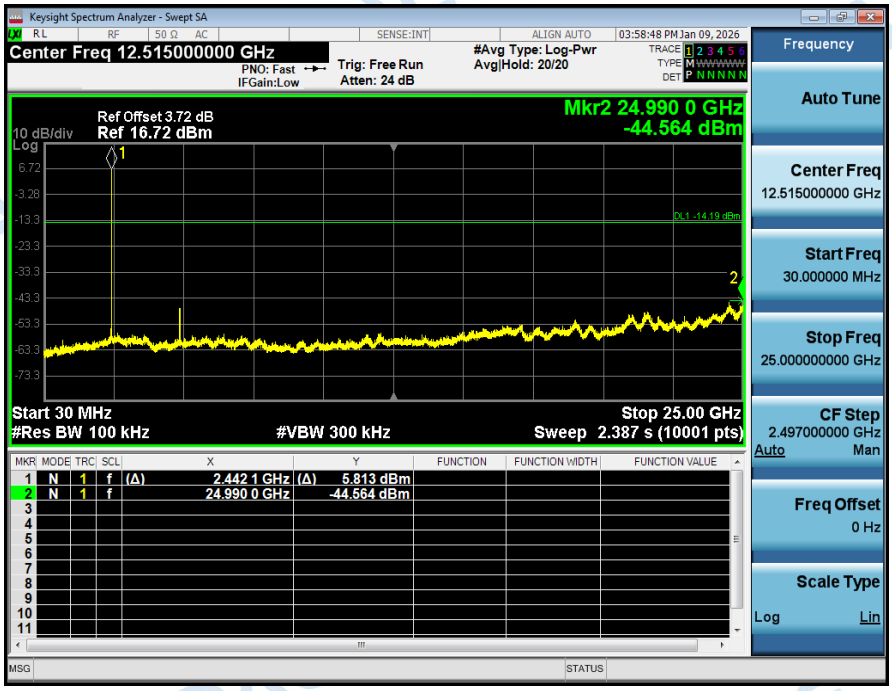
1_Reference_Level_NVNT_ANT1_3-DH5_2402_00

2_Spurious_Emissions_NVNT_ANT1_3-DH5_2402_00



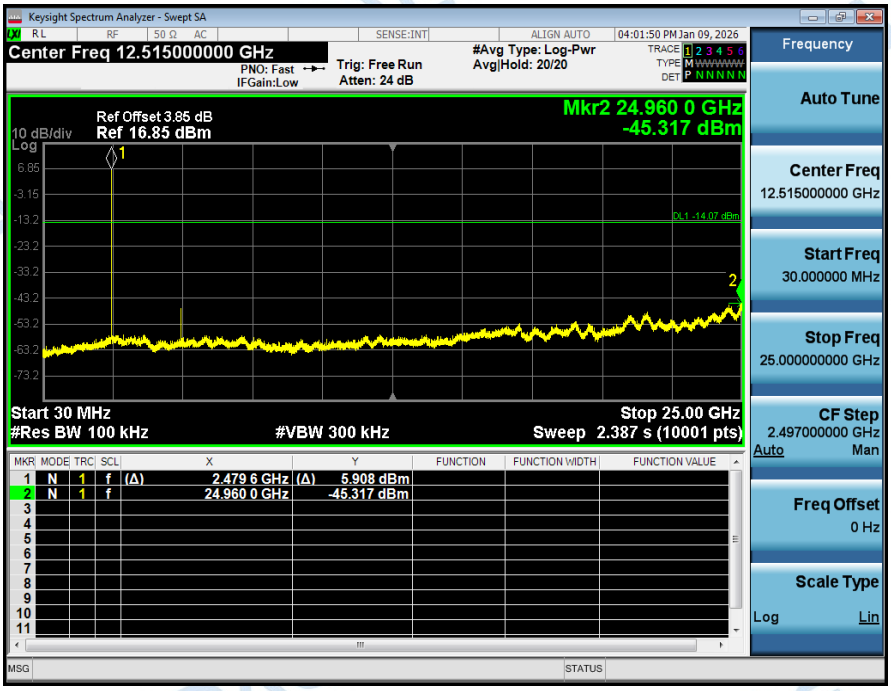
1_Reference_Level_NVNT_ANT1_3-DH5_2441_00

2_Spurious_Emissions_NVNT_ANT1_3-DH5_2441_00



1_Reference_Level_NVNT_ANT1_3-DH5_2480_00

2_Spurious_Emissions_NVNT_ANT1_3-DH5_2480_00

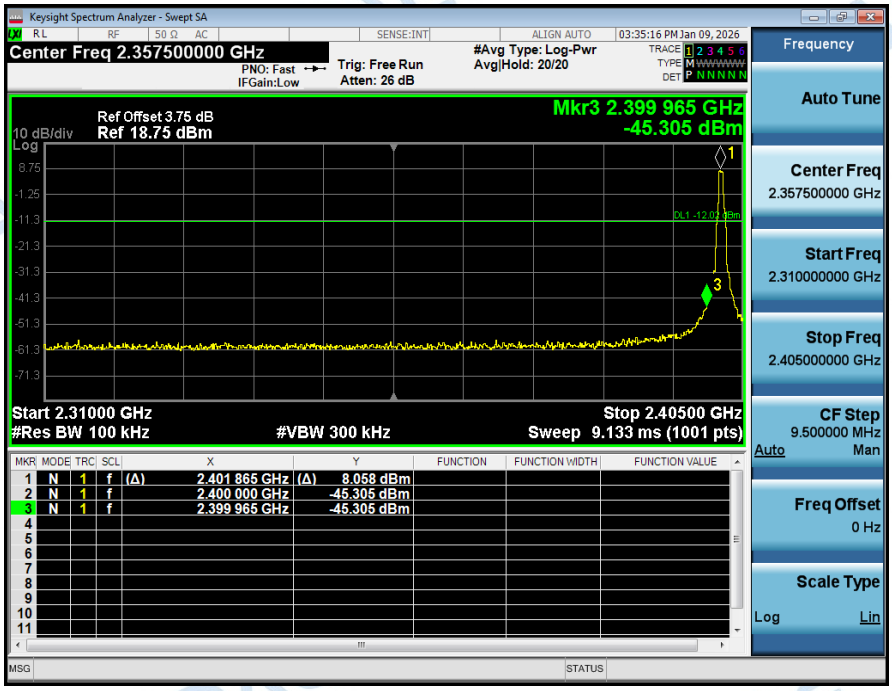

Keysight Spectrum Analyzer - Swept SA
Center Freq 12.515000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 24 dB
#Avg Type: Log-Pwr
Avg|Hold: 20/20
04:01:50 PM Jan 09, 2026
Ref Offset 3.85 dB
10 dB/div
Log
Ref 16.85 dBm
Mkr2 24.960 0 GHz
-45.317 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 2.387 s (10001 pts)
1 N 1 f (Δ) 2.479 6 GHz (Δ) 5.908 dBm
2 N 1 f 24.960 0 GHz -45.317 dBm
Frequency
Auto Tune
Center Freq
12.515000000 GHz
Start Freq
30.000000 MHz
Stop Freq
25.000000000 GHz
CF Step
2.497000000 GHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

5. Bandedge

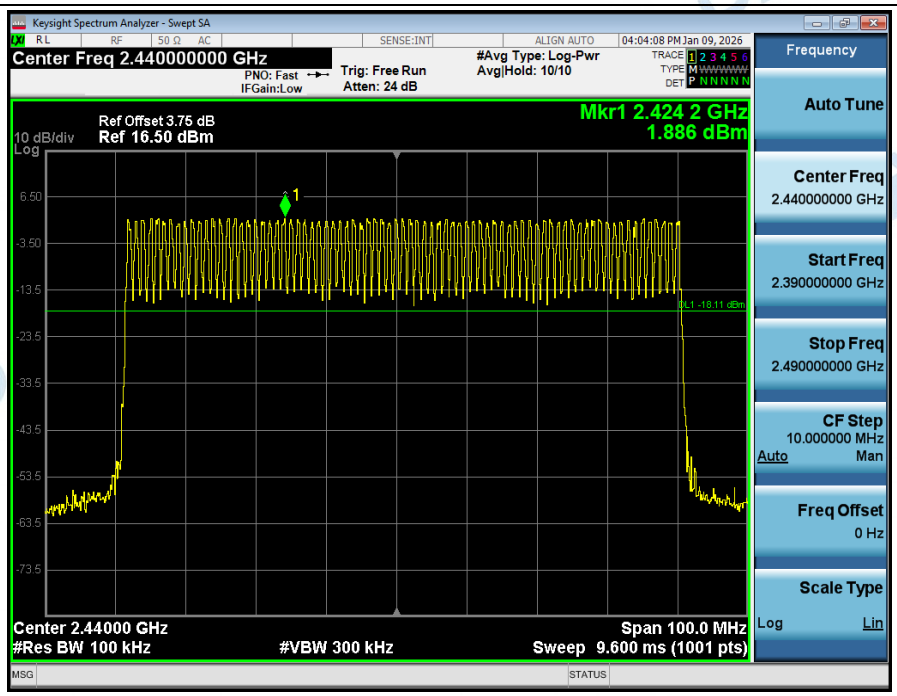
Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	1-DH1	2402.00	7.976	-45.305	-12.024	Pass
NVNT	ANT1	1-DH1	Hopping_LCH	1.886	-57.174	-18.114	Pass
NVNT	ANT1	1-DH1	2480.00	8.142	-50.320	-11.858	Pass
NVNT	ANT1	1-DH1	Hopping_HCH	2.058	-57.166	-17.942	Pass
NVNT	ANT1	2-DH3	2402.00	5.759	-48.103	-14.241	Pass
NVNT	ANT1	2-DH3	Hopping_LCH	1.637	-53.044	-18.363	Pass
NVNT	ANT1	2-DH3	2480.00	5.944	-52.881	-14.056	Pass
NVNT	ANT1	2-DH3	Hopping_HCH	1.740	-55.616	-18.260	Pass
NVNT	ANT1	3-DH5	2402.00	5.825	-47.640	-14.175	Pass
NVNT	ANT1	3-DH5	Hopping_LCH	1.892	-54.141	-18.108	Pass
NVNT	ANT1	3-DH5	2480.00	5.927	-52.688	-14.073	Pass
NVNT	ANT1	3-DH5	Hopping_HCH	2.011	-55.457	-17.989	Pass

1_Reference_Level_NVNT_ANT1_1-DH1_2402_00

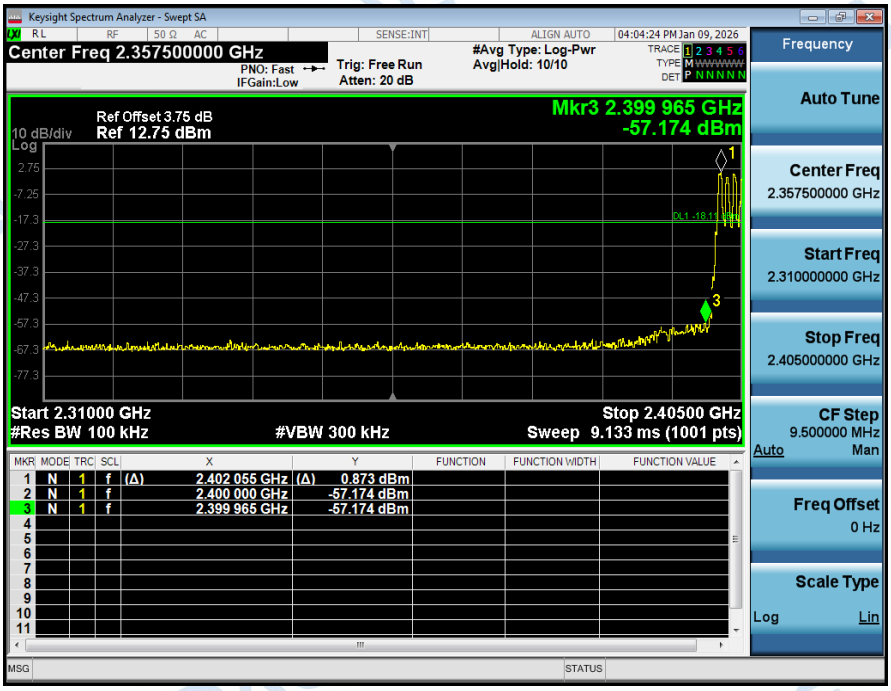
2_Bandedge_NVNT_ANT1_1-DH1_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_1-DH1_Hopping

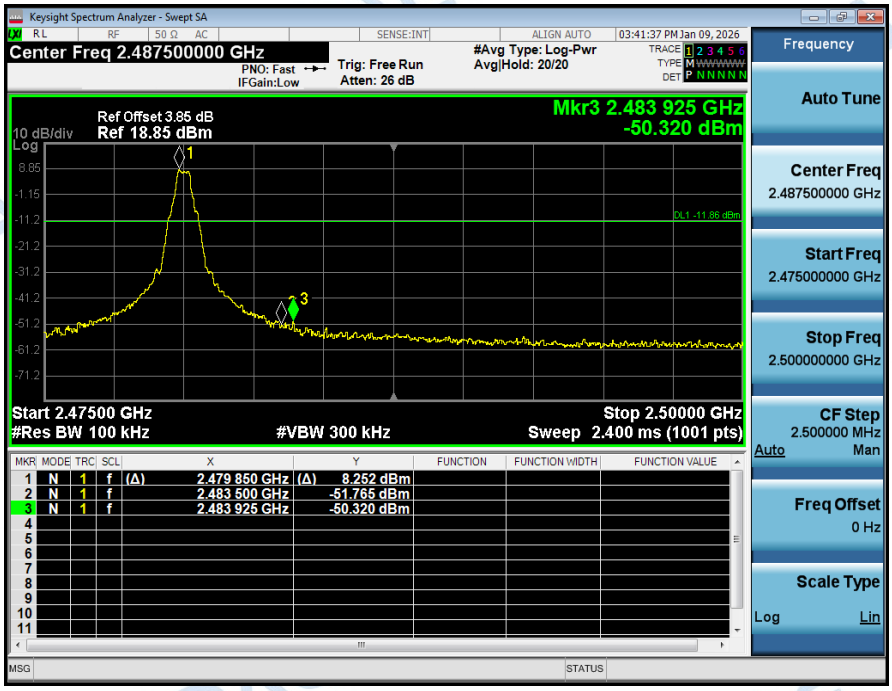


2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH1_Hopping



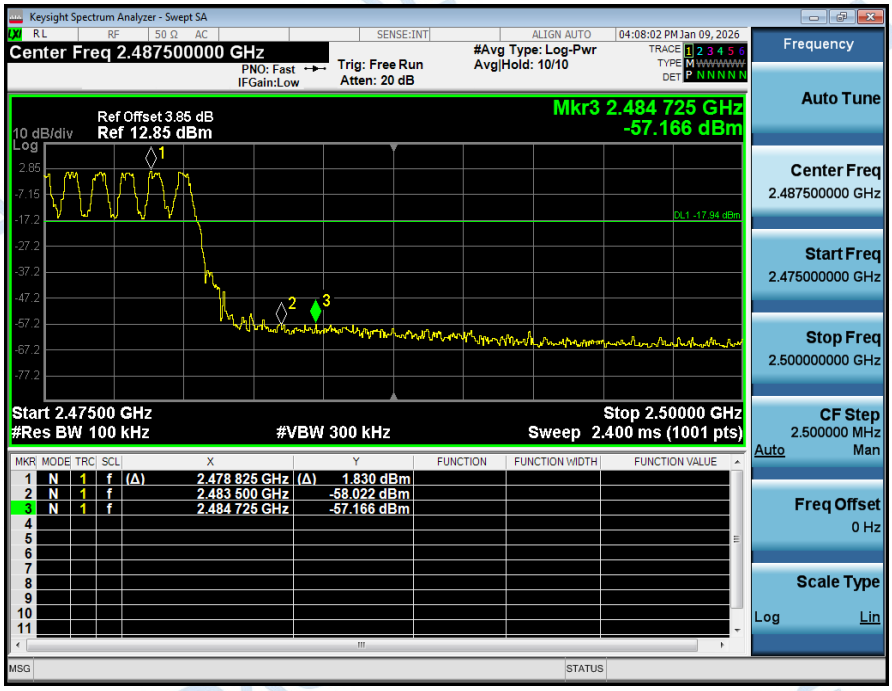
1_Reference_Level_NVNT_ANT1_1-DH1_2480_00

2_Bandedge_NVNT_ANT1_1-DH1_2480_00



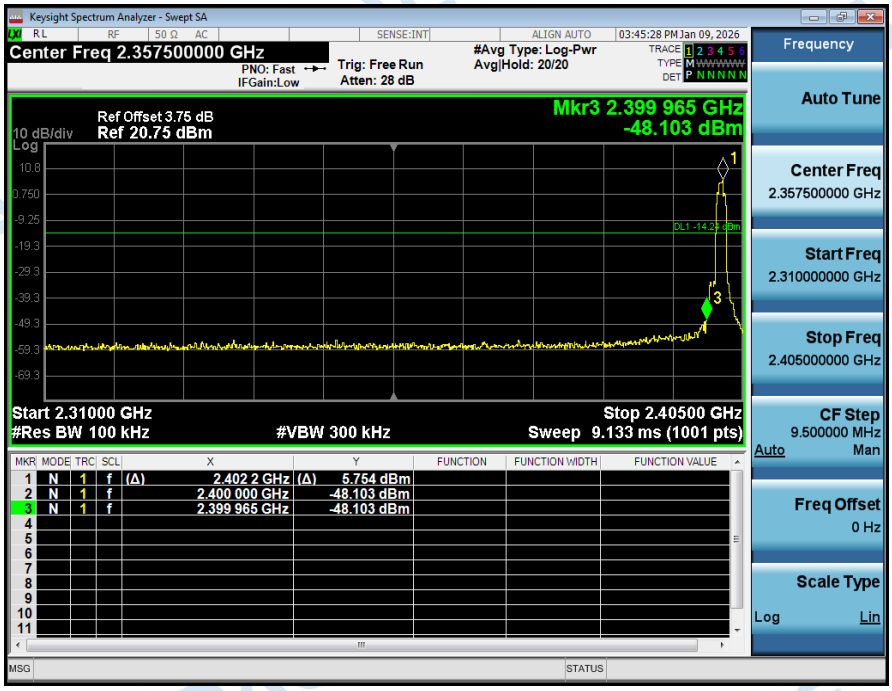
1_Reference_Level_Hopping_NVNT_ANT1_1-DH1_Hopping

2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH1_Hopping

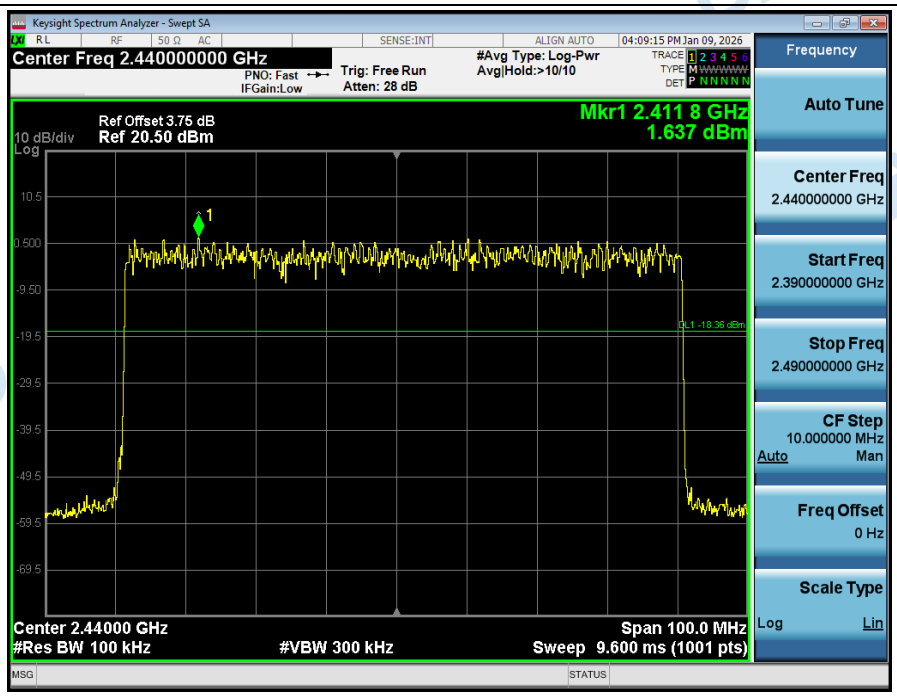


1_Reference_Level_NVNT_ANT1_2-DH3_2402_00

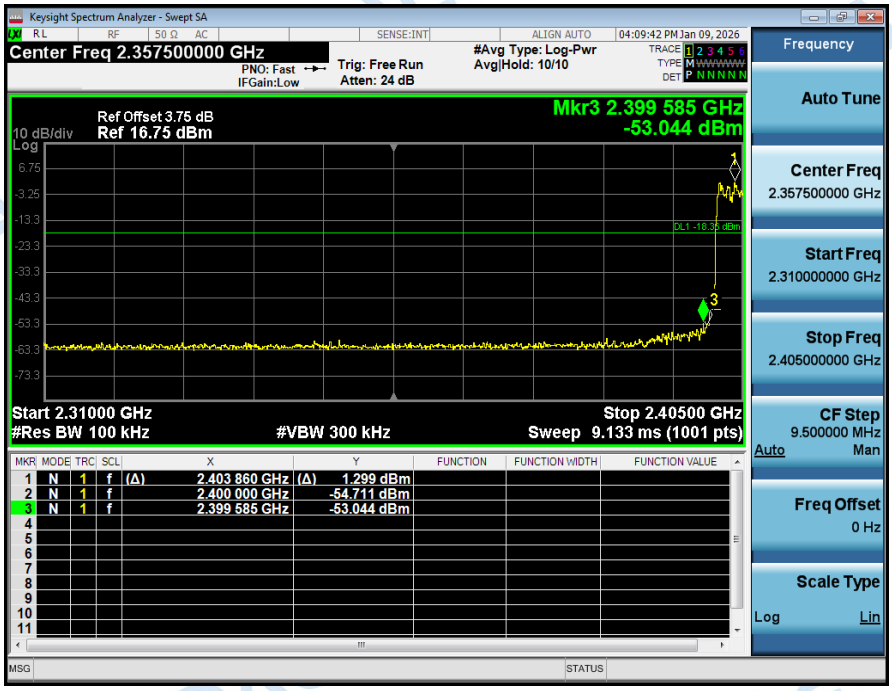
2_Bandedge_NVNT_ANT1_2-DH3_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_2-DH3_Hopping

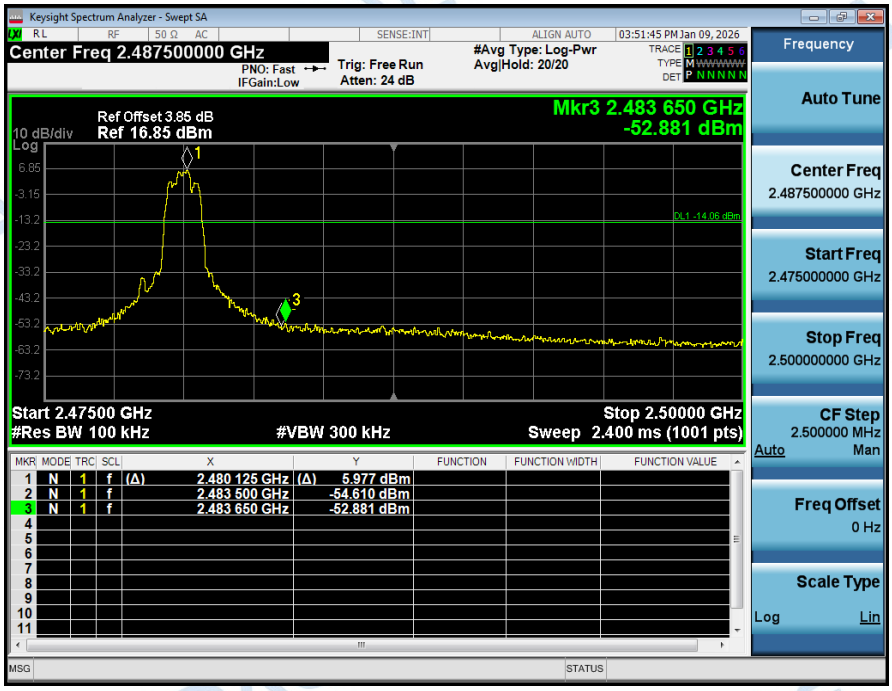


2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH3_Hopping

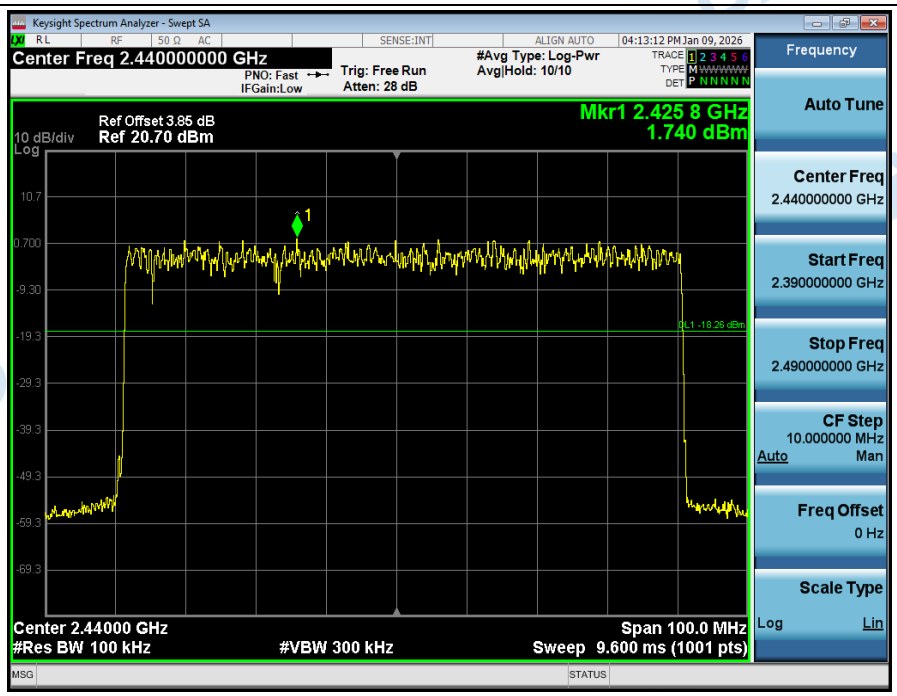


1_Reference_Level_NVNT_ANT1_2-DH3_2480_00

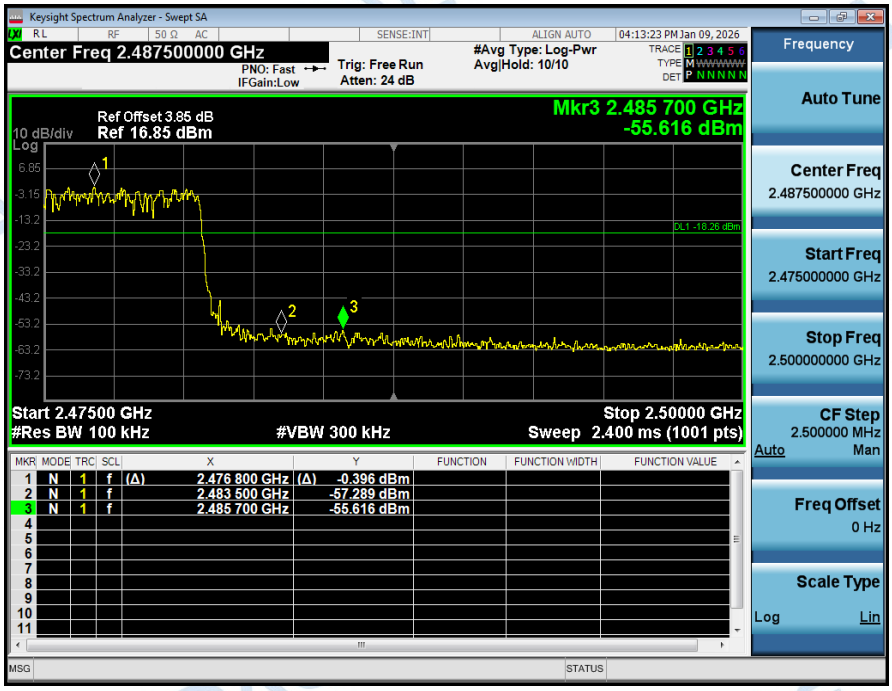
2_Bandedge_NVNT_ANT1_2-DH3_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_2-DH3_Hopping

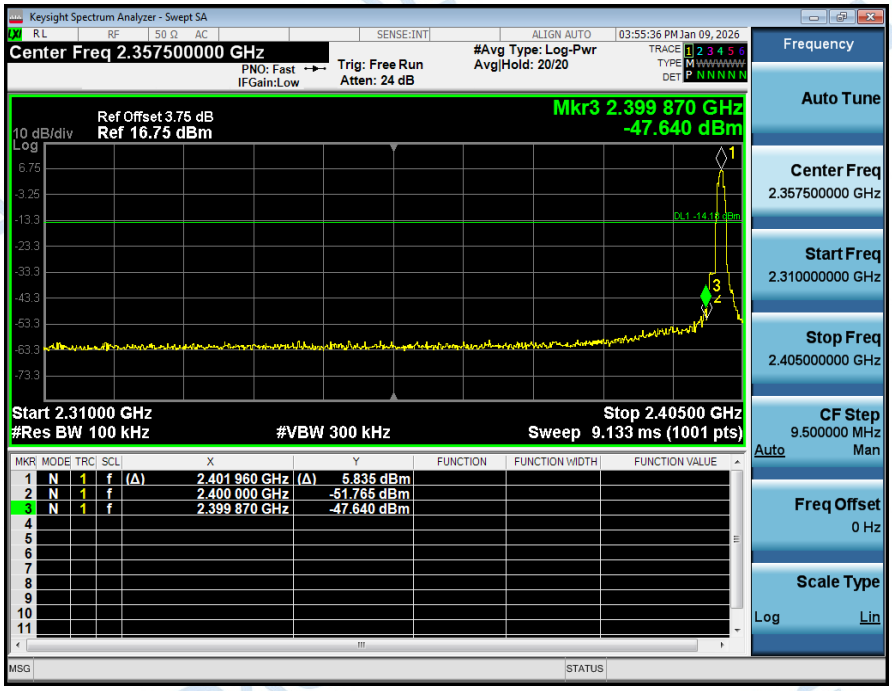


2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH3_Hopping

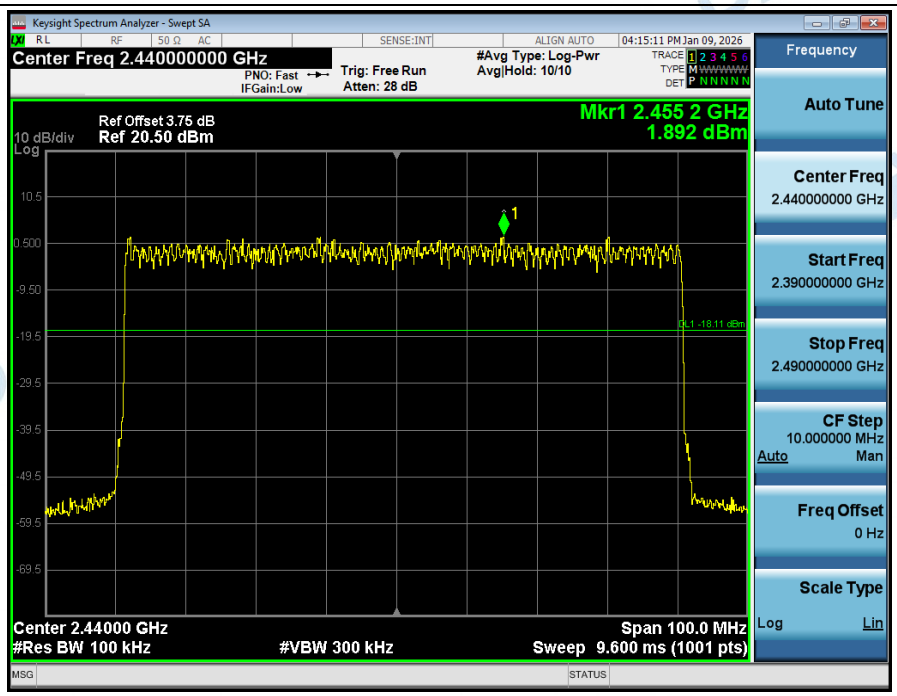


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00

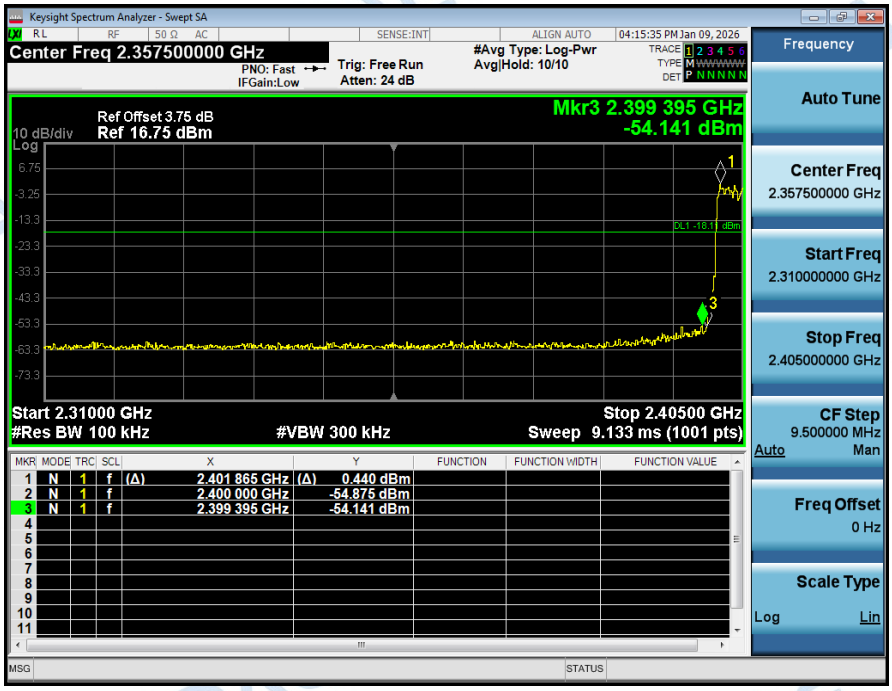
2_Bandedge_NVNT_ANT1_3-DH5_2402_00



1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping

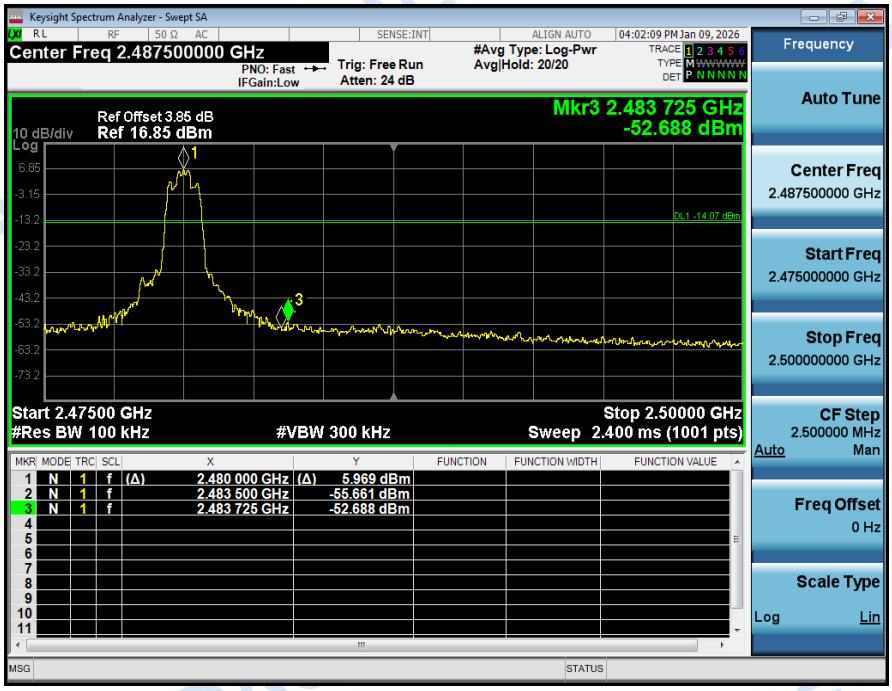


2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping

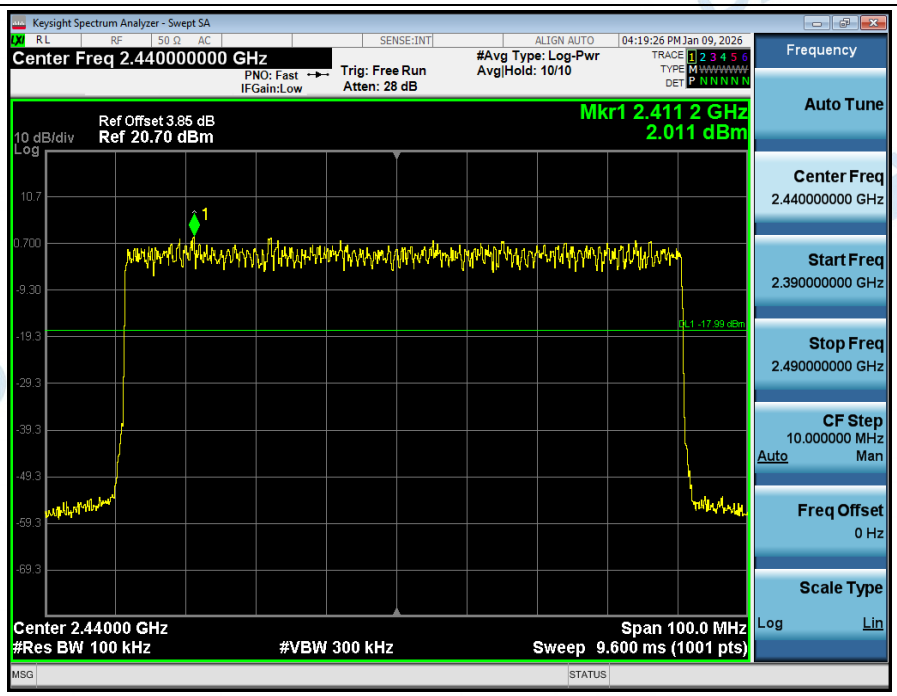


1_Reference_Level_NVNT_ANT1_3-DH5_2480_00

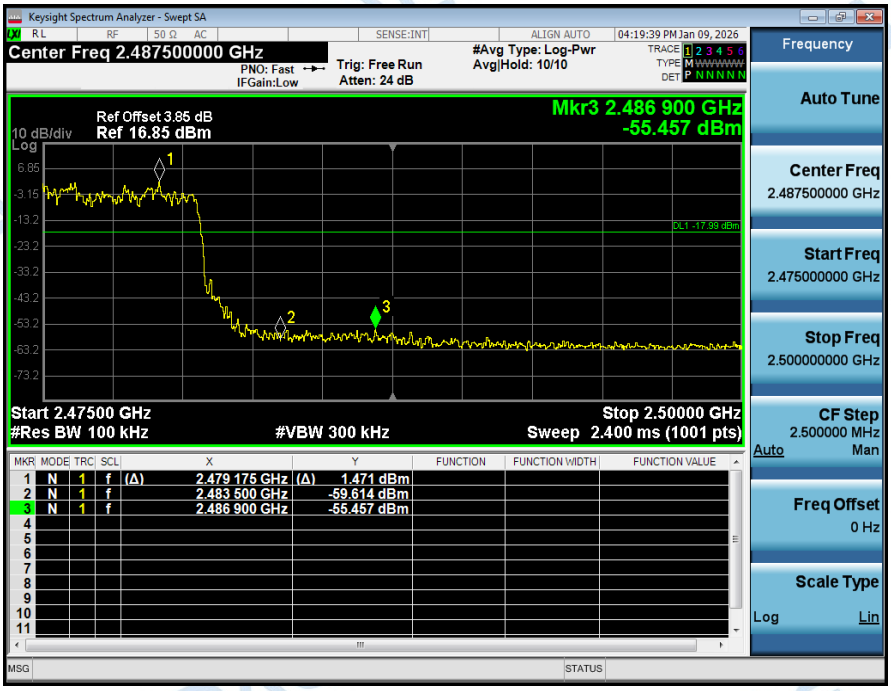
2_Bandedge_NVNT_ANT1_3-DH5_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping



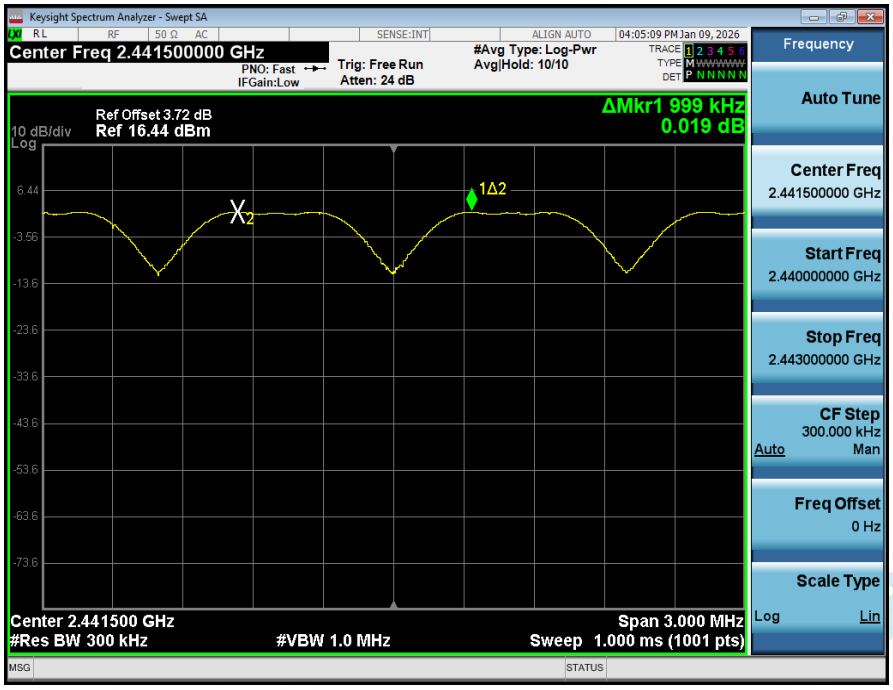
2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.487500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 24 dB
#Avg Type: Log-Pwr
Avg|Hold: 10/10
04:19:39 PM Jan 09, 2026
Ref Offset 3.85 dB
10 dB/div
Ref 16.85 dBm
Log
Mkr3 2.486 900 GHz
-55.457 dBm
DL1 -17.99 dBm
Start 2.47500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 2.400 ms (1001 pts)
1 N 1 f (Δ) 2.479 175 GHz (Δ) 1.471 dBm
2 N 1 f 2.483 500 GHz -59.614 dBm
3 N 1 f 2.486 900 GHz -55.457 dBm
Frequency
Auto Tune
Center Freq
2.487500000 GHz
Start Freq
2.475000000 GHz
Stop Freq
2.500000000 GHz
CF Step
2.500000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

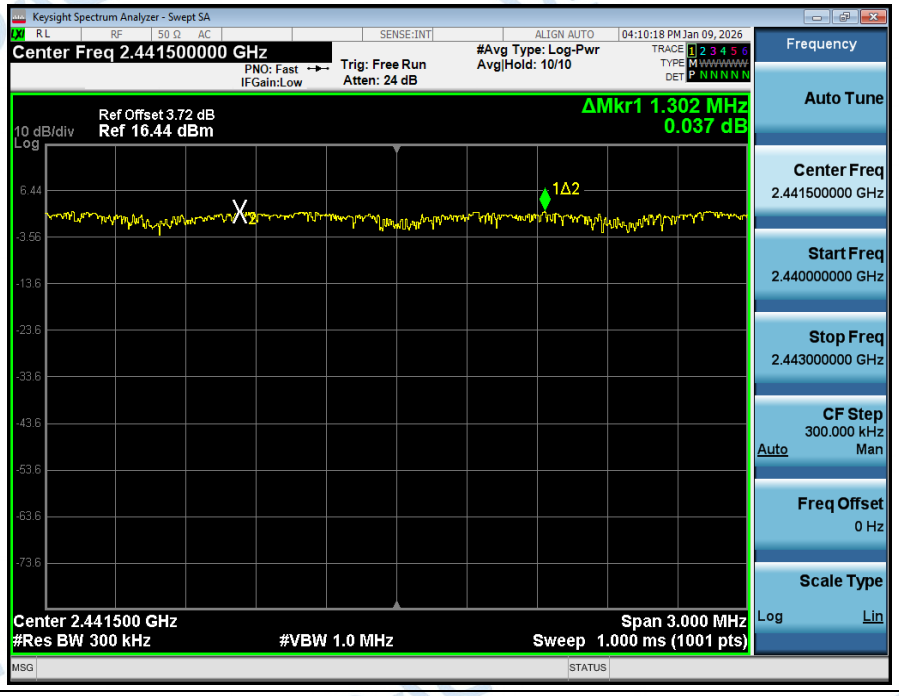
6. Carrier Frequencies Separation (Hopping)

Condition	Antenna	Modulation	Frequency(MHz)	Hopping NO.0 (MHz)	Hopping NO.1 (MHz)	Carrier Frequencies Separation(MHz)	Limit(MHz)	Result
NVNT	ANT1	1-DH1	2441.00	2440.834	2441.833	1.00	0.698	Pass
NVNT	ANT1	2-DH3	2441.00	2440.831	2442.133	1.30	0.751	Pass
NVNT	ANT1	3-DH5	2441.00	2440.855	2441.713	0.86	0.757	Pass

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH1_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH3_Hopping

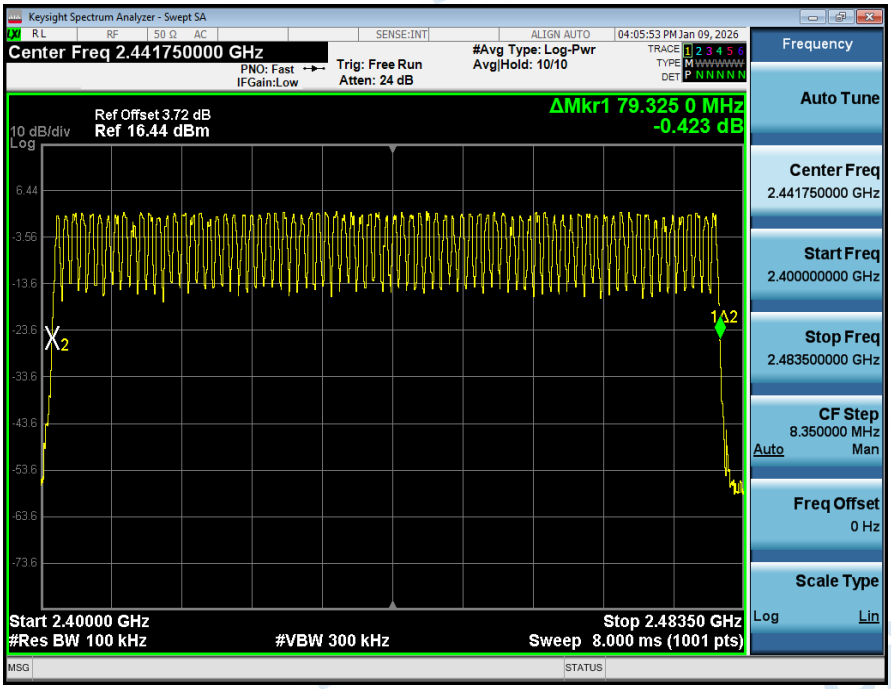


Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping

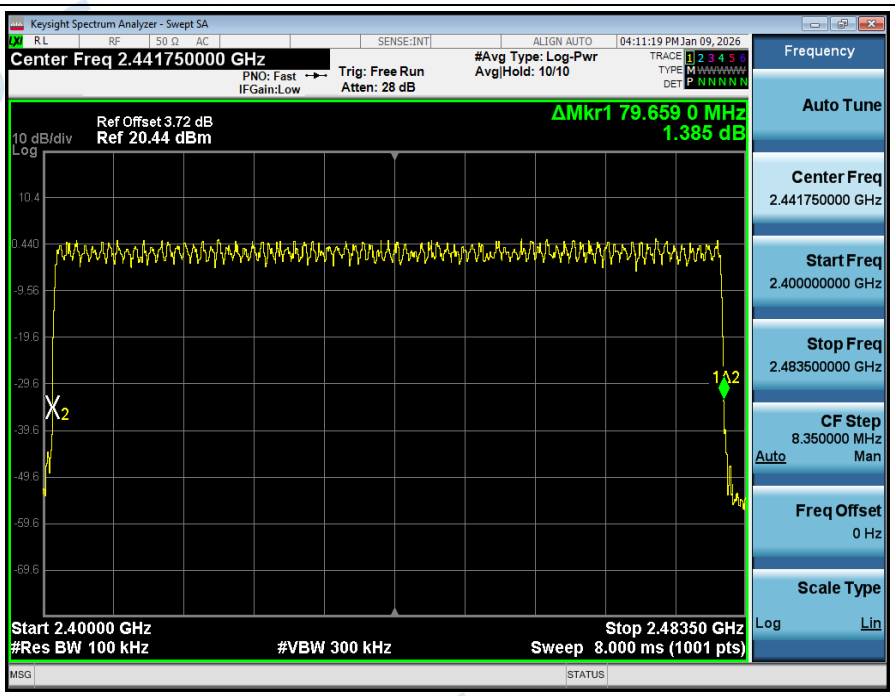

7. Number of Hopping Channel (Hopping)

Condition	Antenna	Modulation	Hopping Num	Limit	Result
NVNT	ANT1	1-DH1	79	15	Pass
NVNT	ANT1	2-DH3	79	15	Pass
NVNT	ANT1	3-DH5	79	15	Pass

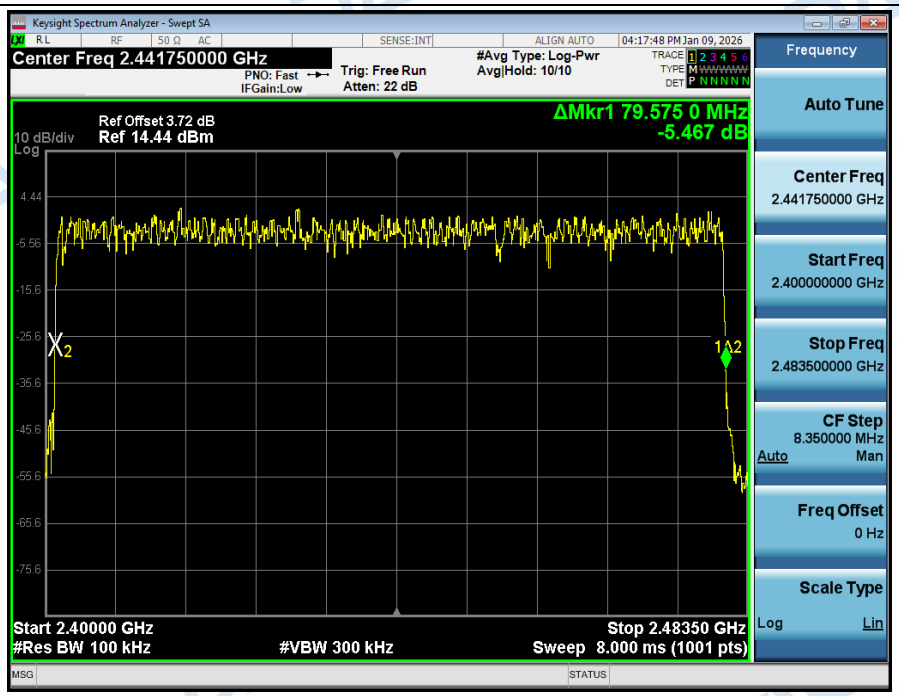
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_1-DH1_Hopping



Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2-DH3_Hopping



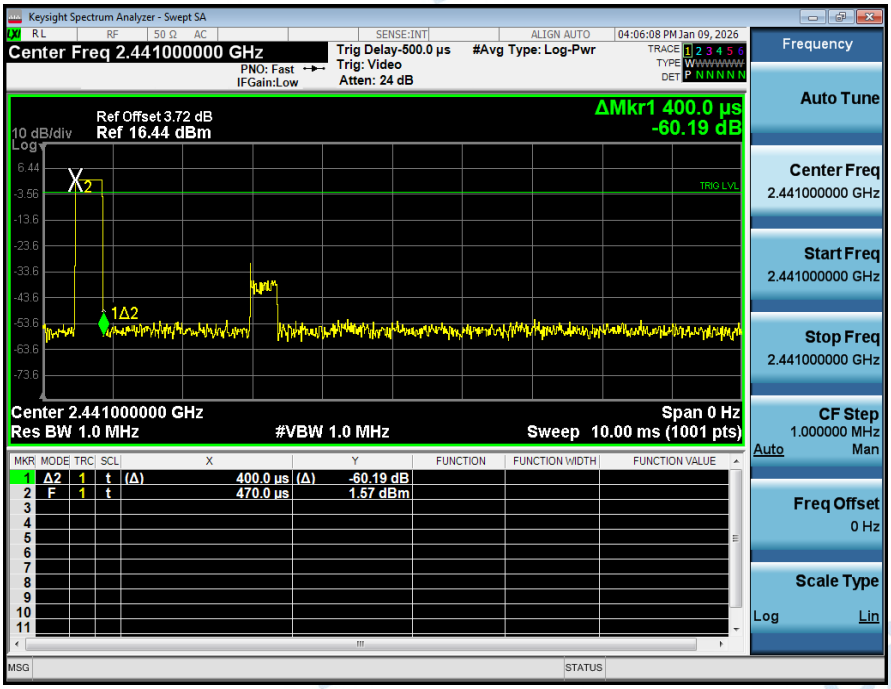
Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_3-DH5_Hopping



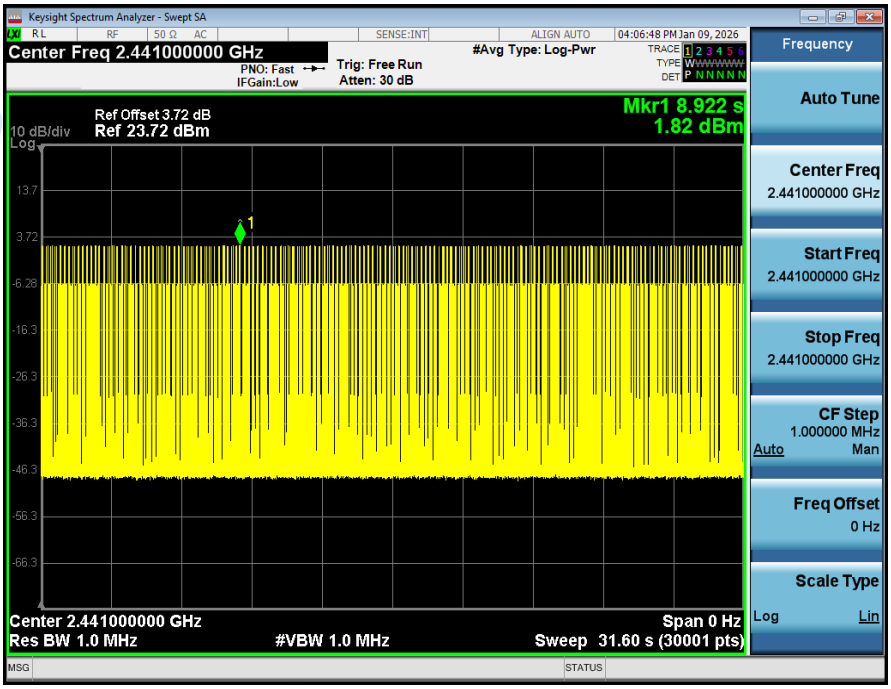
8. Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	1-DH1	0.400	320.00	128.000	0.40	Pass
NVNT	ANT1	2-DH3	1.650	162.00	267.300	0.40	Pass
NVNT	ANT1	3-DH5	2.900	100.00	290.000	0.40	Pass

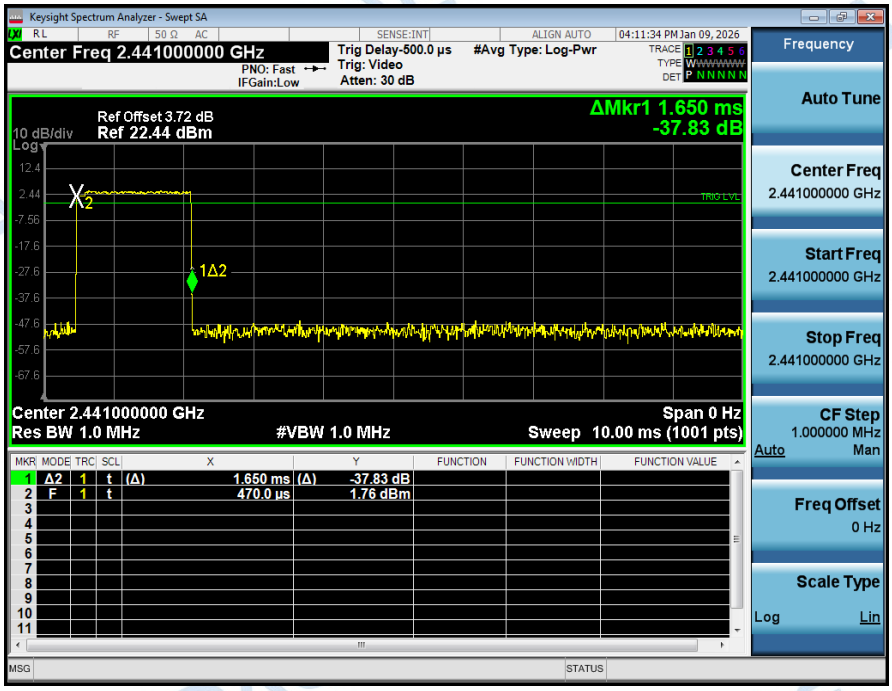
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH1_2441_00_One_Burst_Time



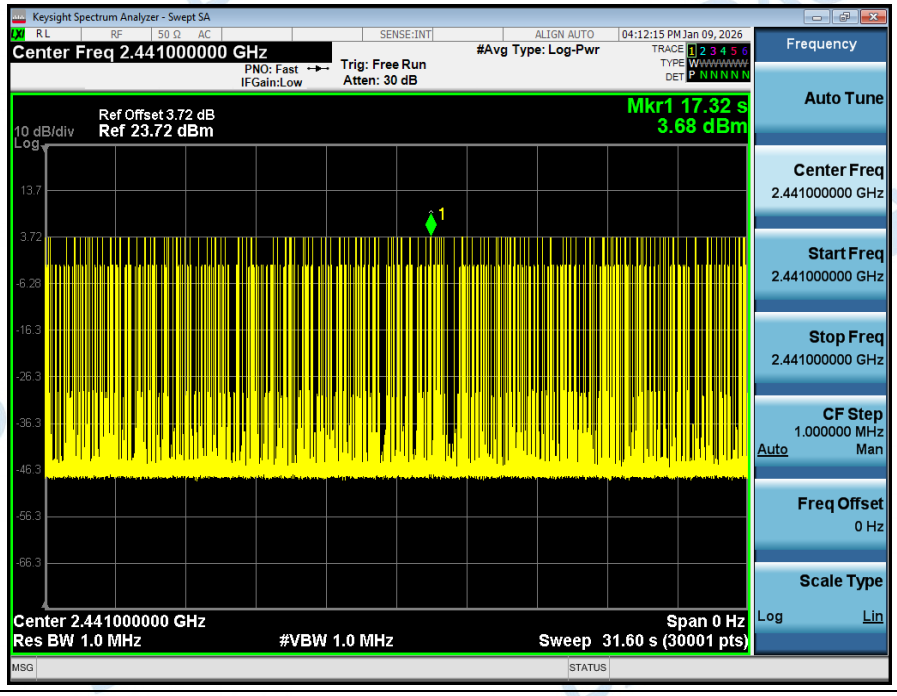
Dwell_Time_(Hopping)_NVNT_ANT1_1-DH1_2441_00_Accumulated



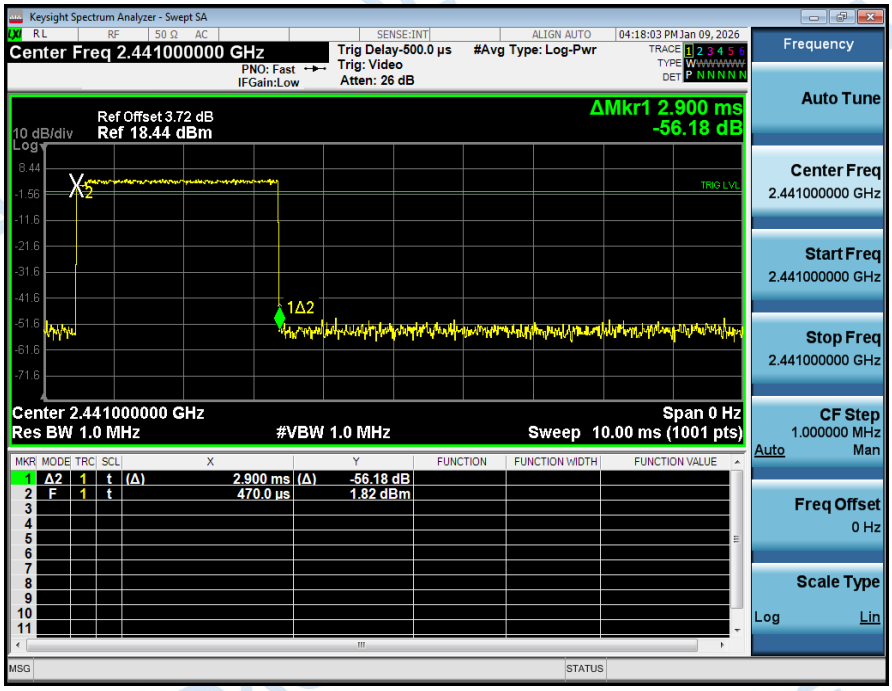
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH3_2441_00_One_Burst_Time



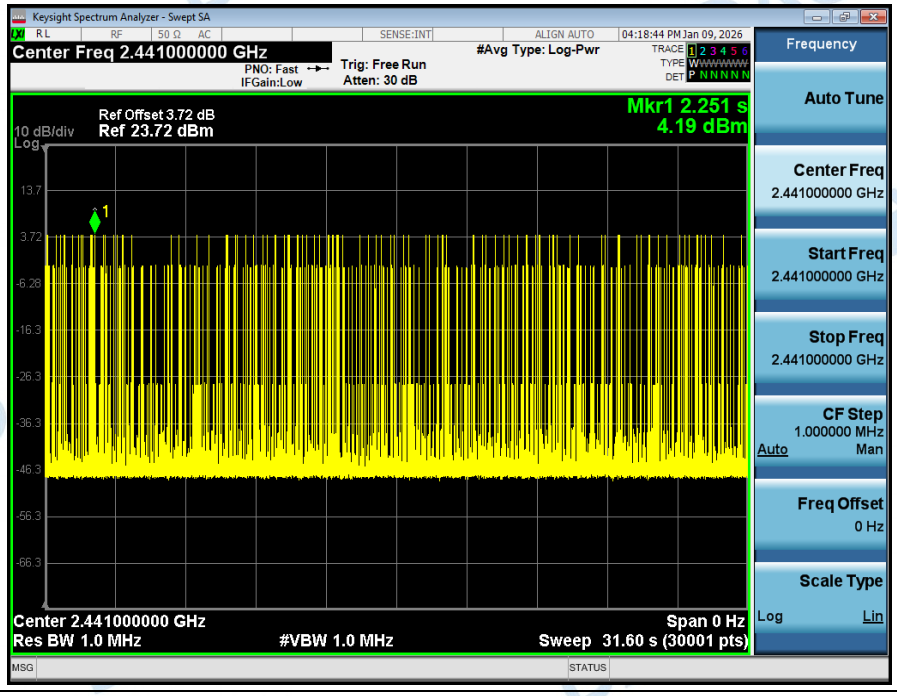
Dwell_Time_(Hopping)_NVNT_ANT1_2-DH3_2441_00_Accumulated



Dwell_Time_(Hopping)_NVNT_ANT1_3-DH5_2441_00_One_Burst_Time



Dwell_Time_(Hopping)_NVNT_ANT1_3-DH5_2441_00_Accumulated



********** End of Report **********