

RF TEST REPORT

For

Yongkang Meixin Trading Co., Ltd

Product Name: exercise bike

Test Model(s): 703

Report Reference No. : DACE260709001RF001

FCC ID : 2BXCUI-703

Applicant's Name : Yongkang Meixin Trading Co., Ltd

Address : Room 508, Building 6, No.1082 Jiuling West Road, Xicheng Subdistrict,
Yongkang City, Jinhua City, Zhejiang Province, P.R.China

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

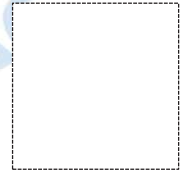
Date of Receipt : July 9, 2026

Date of Test : July 9, 2026 to July 17, 2026

Date of Issue : July 17, 2026

Result : Pass

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Apply for company information

Applicant's Name	:	Yongkang Meixin Trading Co., Ltd
Address	:	Room 508, Building 6, No.1082 Jiuling West Road, Xicheng Subdistrict, Yongkang City, Jinhua City, Zhejiang Province, P.R.China
Product Name	:	exercise bike
Test Model(s)	:	703
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.

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July 17, 2026

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July 17, 2026

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July 17, 2026

Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	DACE260709001RF001	July 17, 2026

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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+C63.10a-2024 section 6.2	47 CFR 15.207(a)	Pass
6dB Bandwidth	47 CFR Part 15.247	ANSI C63.10-2020+C63.10a-2024, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	ANSI C63.10-2020+C63.10a-2024 section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	47 CFR Part 15.247	ANSI C63.10-2020+C63.10a-2024, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02	47 CFR 15.247(e)	Pass
Emissions in non-restricted frequency bands	47 CFR Part 15.247	ANSI C63.10-2020+C63.10a-2024 section 11.11 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+C63.10a-2024 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+C63.10a-2024 section 6.5.4 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+C63.10a-2024 section 6.5.4 KDB 558074 D01	47 CFR 15.247(d), 15.209, 15.205	Pass

		15.247 Meas Guidance v05r02		
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2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : Yongkang Meixin Trading Co., Ltd
Address : Room 508, Building 6, No.1082 Jiuling West Road, Xicheng Subdistrict, Yongkang City, Jinhua City, Zhejiang Province, P.R.China

Manufacturer : Yongkang Meixin Trading Co., Ltd
Address : Room 508, Building 6, No.1082 Jiuling West Road, Xicheng Subdistrict, Yongkang City, Jinhua City, Zhejiang Province, P.R.China

2.2 Description of Device (EUT)

Product Name:	exercise bike
Model/Type reference:	703
Trade Mark:	N/A
Power Supply:	DC 5V charging from adapter DC 3.7V by battery
Operation Frequency:	2402-2480MHz
Number of Channels:	40CH
Modulation Type:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	3.85dBi
Bluetooth Version:	V5.2
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): 3.7V

2.4 Description of Support Units

Title	Manufacturer	Model No.	Serial No.
Adapter	PHOTON	ATXC-069AC65B	/

2.5 Operation Frequency each of channel

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

Note: In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)
	BLE(1Mbps, 2Mbps)
Lowest channel	2402MHz
Middle channel	2440MHz
Highest channel	2480MHz

2.6 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	/	2026-04-14	2027-04-13
Electric Network	SCHWARZ BECK	CAT5 8158	CAT5 8158#207	2026-04-14	2027-04-13
Cable	SCHWARZ BECK	/	/	2026-04-14	2027-04-13
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	2026-04-14	2027-04-13
L.I.S.N	R&S	ESH3-Z5	831.5518.52	2026-04-14	2027-04-13
L.I.S.N	SCHWARZ BECK	NSLK 8126	05055	2026-04-14	2027-04-13
Pulse Limiter	CYBERTEK	EM5010A	/	2026-04-14	2027-04-13
EMI test software	Farad	EZ -EMC	EMEC-3A1.1	/	/

6dB Bandwidth

Maximum Conducted Output Power

Power Spectral Density

Emissions in non-restricted frequency bands

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RF Control Unit	Tachoy Information Technology(she nzhn) Co.,Ltd.	TR1029-1	20220428C00 5	/	/

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	FA-03A2 RE+	/	/
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	2026-04-14	2027-04-13
Cable(LF)#2	Schwarzbeck	/	/	2026-04-13	2027-04-12
Cable(LF)#1	Schwarzbeck	/	/	2026-04-14	2027-04-13
Cable(HF)#2	Schwarzbeck	AK9515E	96250	2026-04-14	2027-04-13
Cable(HF)#1	Schwarzbeck	SYV-50-3-1	/	2026-04-14	2027-04-13
Power amplifier(LF)	Schwarzbeck	BBV9743	9743-151	2026-04-14	2027-04-13
Power amplifier(HF)	Schwarzbeck	BBV9718	9718-282	2026-04-14	2027-04-13
Wideband radio communication tester	R&S	CMW500	113410	2026-04-14	2027-04-13
Spectrum Analyzer	R&S	FSP30	1321.3008K40-101729-jR	2026-04-14	2027-04-13
Test Receiver	R&S	ESCI 3	1166.5950K03-101431-Jq	2026-04-14	2027-04-13
Horn Antenna	Sunol Sciences	DRH-118	A091114	2026-04-14	2027-04-13
Broadband Antenna	Sunol Sciences	JB6 Antenna	A090414	2026-04-29	2028-04-28

2.7 Statement Of The Measurement Uncertainty

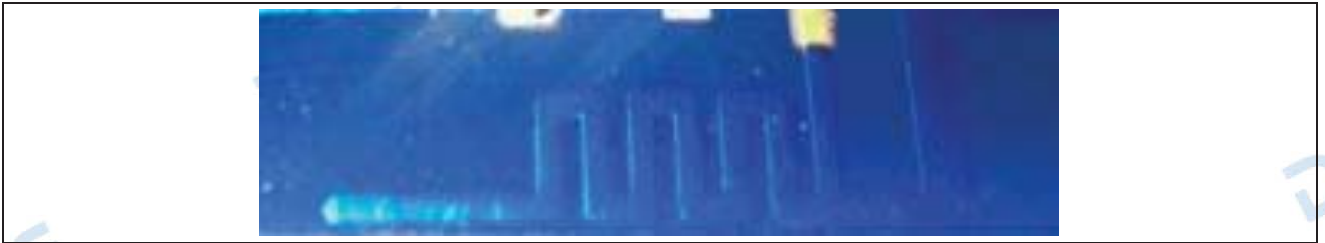
Test Item	Measurement Uncertainty
Conducted Disturbance (0.15~30MHz)	$\pm 3.41\text{dB}$
Occupied Bandwidth	$\pm 3.63\%$
RF conducted power	$\pm 0.733\text{dB}$
RF power density	$\pm 0.234\%$
Conducted Spurious emissions	$\pm 1.98\text{dB}$
Radiated Emission (Above 1GHz)	$\pm 5.46\text{dB}$
Radiated Emission (Below 1GHz)	$\pm 5.79\text{dB}$
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)

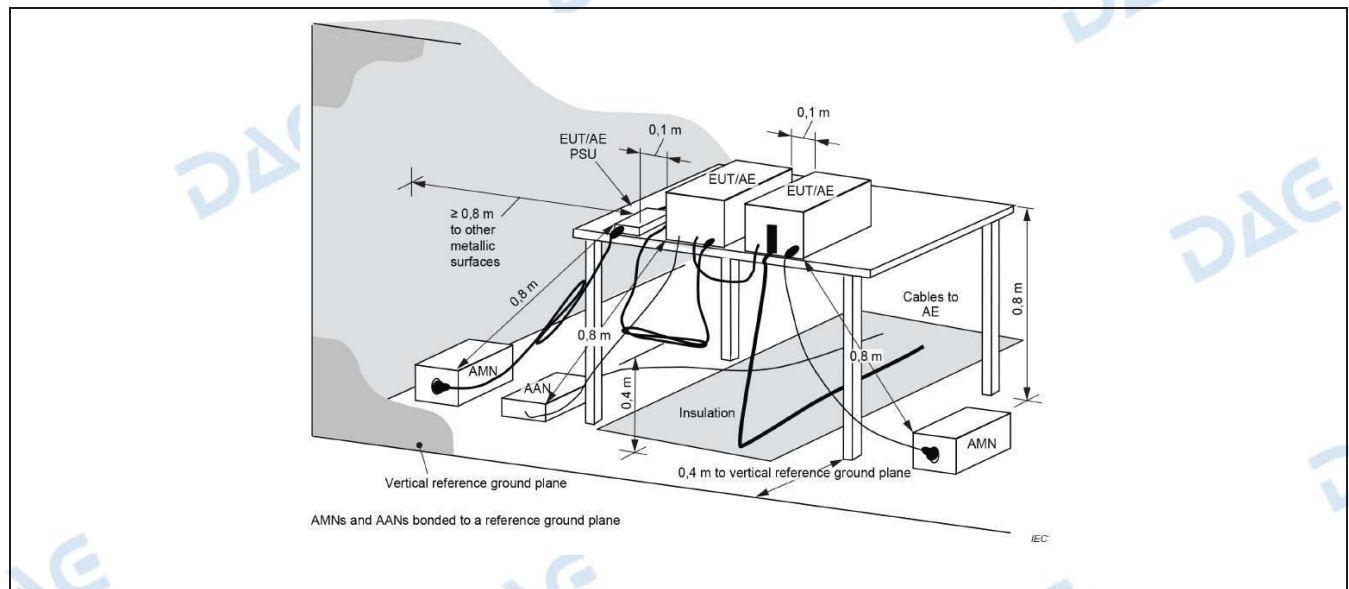
4.1 Conducted Emission at AC power line

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 μ H/50 ohms line impedance stabilization network (LISN).		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dB μ V)	
		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+C63.10a-2024 section 6.2		
Procedure:	Refer to ANSI C63.10-2020+C63.10a-2024 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

4.1.1 E.U.T. Operation:

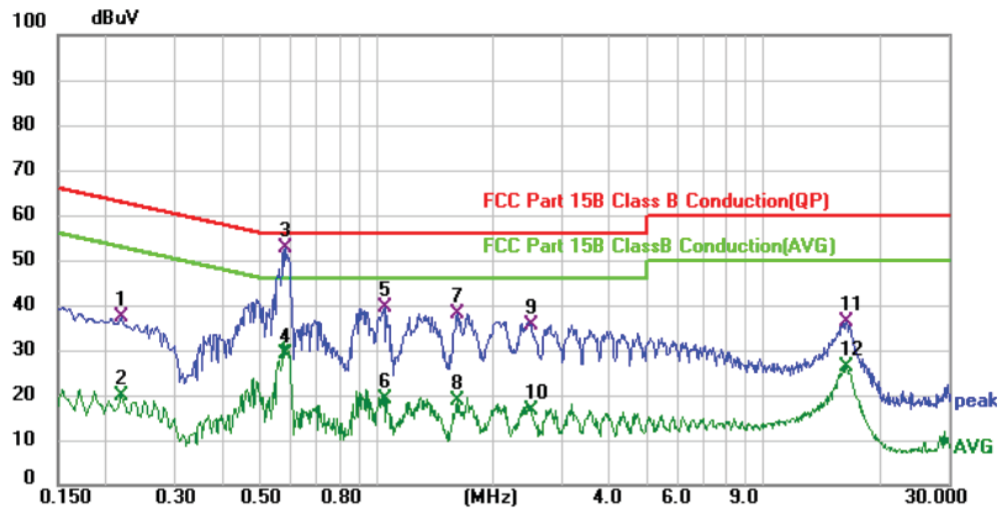
Operating Environment:					
Temperature:	23 °C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.1.2 Test Setup Diagram:



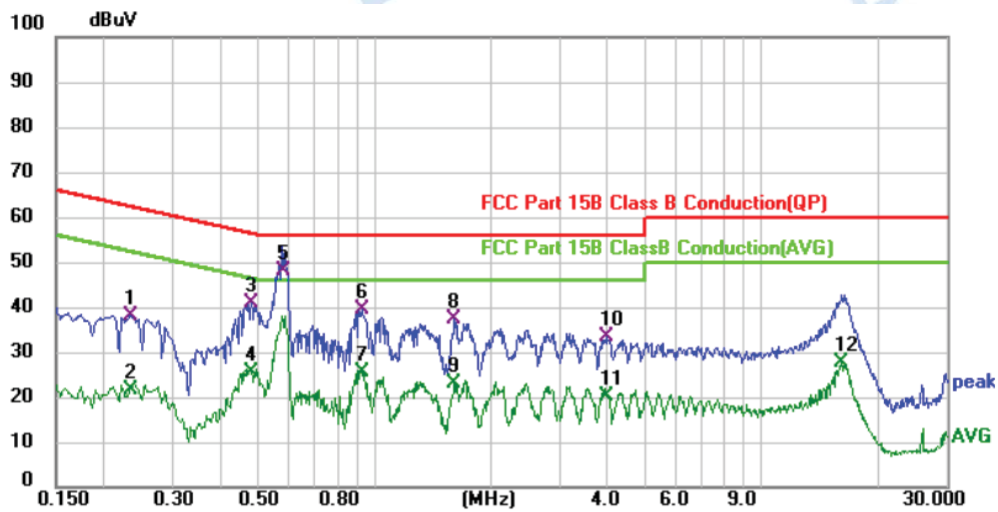
4.1.3 Test Data:

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



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2180	27.16	10.10	37.26	62.89	-25.63	QP	
2		0.2180	9.65	10.10	19.75	52.89	-33.14	AVG	
3	*	0.5820	42.46	10.09	52.55	56.00	-3.45	QP	
4		0.5820	19.15	10.09	29.24	46.00	-16.76	AVG	
5		1.0500	29.29	10.08	39.37	56.00	-16.63	QP	
6		1.0500	8.98	10.08	19.06	46.00	-26.94	AVG	
7		1.6260	27.94	10.10	38.04	56.00	-17.96	QP	
8		1.6260	8.61	10.10	18.71	46.00	-27.29	AVG	
9		2.5059	25.45	10.14	35.59	56.00	-20.41	QP	
10		2.5059	6.46	10.14	16.60	46.00	-29.40	AVG	
11		16.4780	25.78	10.63	36.41	60.00	-23.59	QP	
12		16.4780	15.54	10.63	26.17	50.00	-23.83	AVG	

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



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2340	27.97	10.09	38.06	62.31	-24.25	QP	
2		0.2340	11.40	10.09	21.49	52.31	-30.82	AVG	
3		0.4820	30.84	10.09	40.93	56.30	-15.37	QP	
4		0.4820	15.39	10.09	25.48	46.30	-20.82	AVG	
5	*	0.5793	38.11	10.09	48.20	56.00	-7.80	QP	
6		0.9260	29.46	10.07	39.53	56.00	-16.47	QP	
7		0.9260	15.32	10.07	25.39	46.00	-20.61	AVG	
8		1.6060	27.26	10.10	37.36	56.00	-18.64	QP	
9		1.6060	13.11	10.10	23.21	46.00	-22.79	AVG	
10		3.9900	23.34	10.17	33.51	56.00	-22.49	QP	
11		3.9900	9.97	10.17	20.14	46.00	-25.86	AVG	
12		16.0620	17.10	10.64	27.74	50.00	-22.26	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. Measurement Level = Reading level + Correct Factor, Over = Limit - Measurement

4.2 6dB Bandwidth

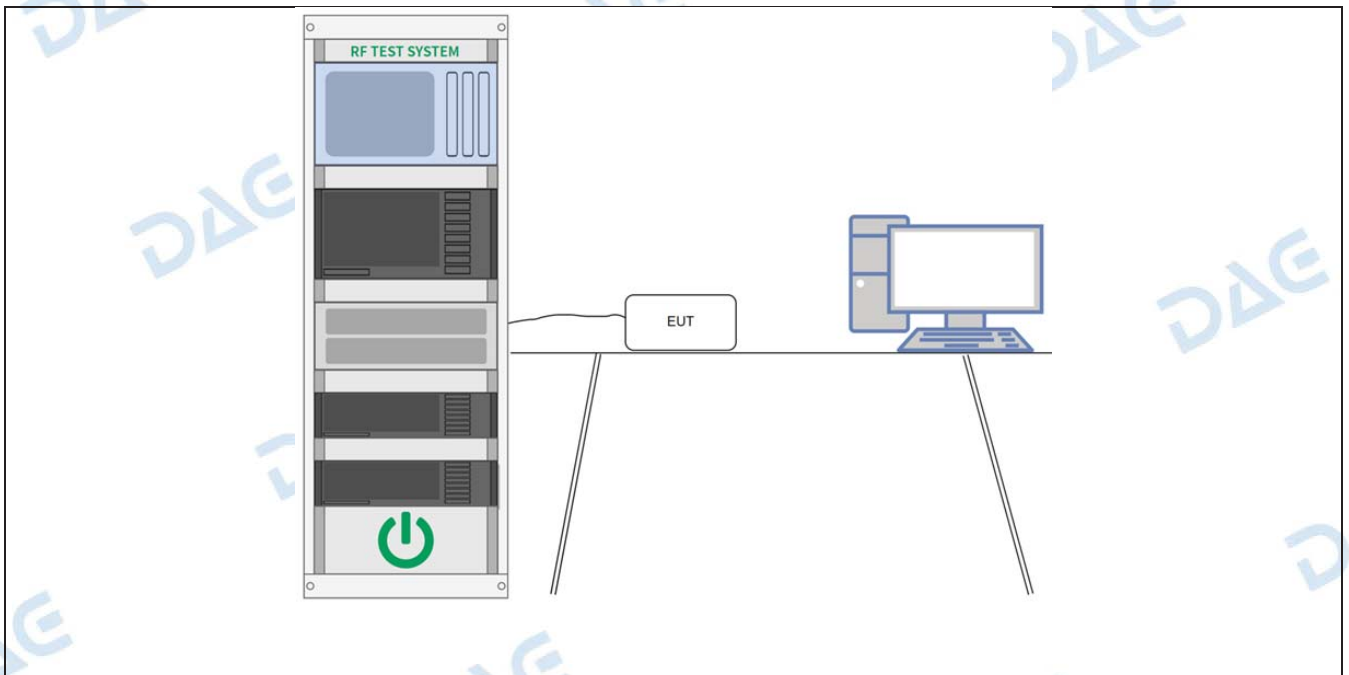
Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10-2020+C63.10a-2024, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	11.8.1 Option 1 The steps for the first option are as follows: a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz. b) Set the VBW $\geq [3 \times \text{RBW}]$. c) Detector = peak. d) Trace mode = max-hold. e) Sweep = No faster than coupled (auto) time. f) Allow the trace to stabilize. g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value. 11.8.2 Option 2 The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz, VBW $\geq 3 \times \text{RBW}$, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

4.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.5 °C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.2.2 Test Setup Diagram:

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4.2.3 Test Data:

Please Refer to Appendix for Details.

4.3 Maximum Conducted Output Power

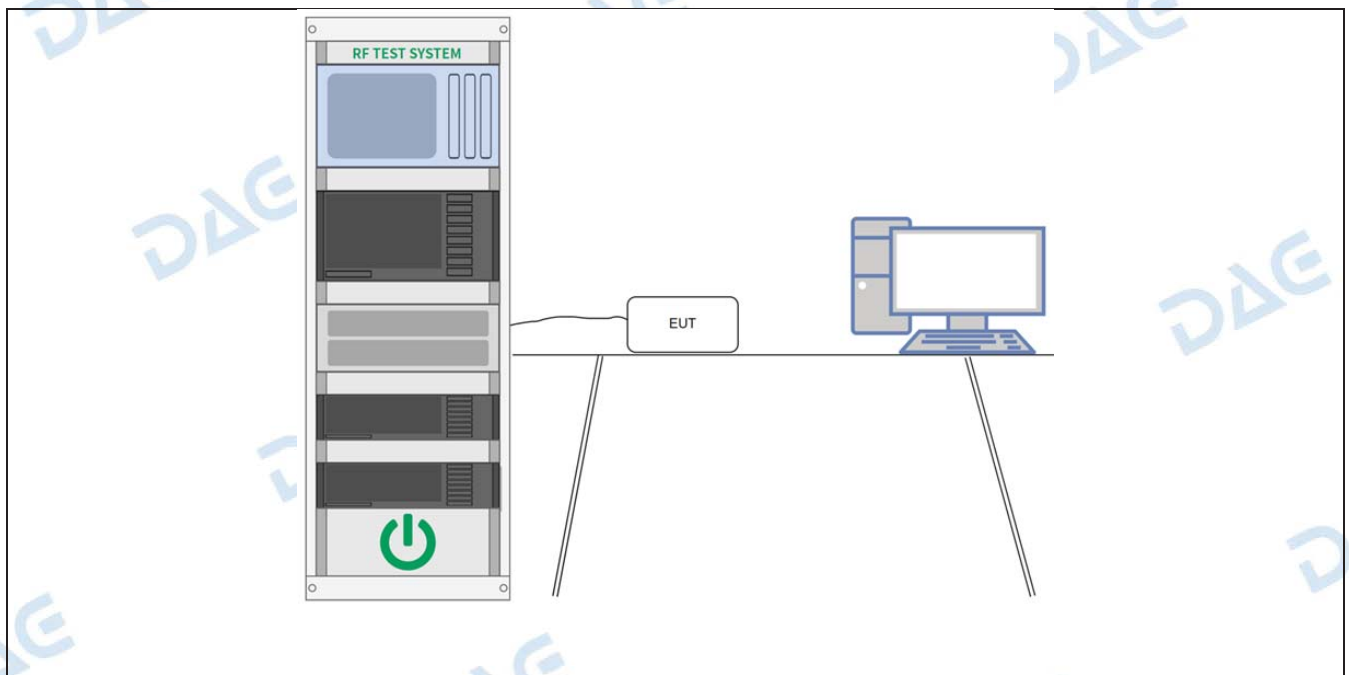
Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2020+C63.10a-2024 section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020, section 11.9.2 Maximum conducted (average) output power Note: Per ANSI C63.10-2020, if there are two or more antennas, the conducted powers at Core 0, Core 1, ..., Core i were first measured separately, as shown in the section above (this product only have one antenna). The measured values were then summed in linear power units then converted back to dBm. Per ANSI C63.10-2020 Section 14.4.3.2.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used. For correlated unequal antenna gain Directional gain = $10 \cdot \log[(10G_1/20 + 10G_2/20 + \dots + 10G_N/20)^2 / NANT]$ dBi For completely uncorrelated unequal antenna gain Directional gain = $10 \cdot \log[(10G_1/10 + 10G_2/10 + \dots + 10G_N/10) / NANT]$ dBi Sample Multiple antennas Calculation: Core 0 + Core 1 + ... Core i. = MIMO/CDD (i is the number of antennas) (#VALUE! mW + mW) = #VALUE! mW = dBm Sample e.i.r.p. Calculation: e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

4.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24 °C	Humidity:	46 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.3.2 Test Setup Diagram:

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4.3.3 Test Data:

Please Refer to Appendix for Details.

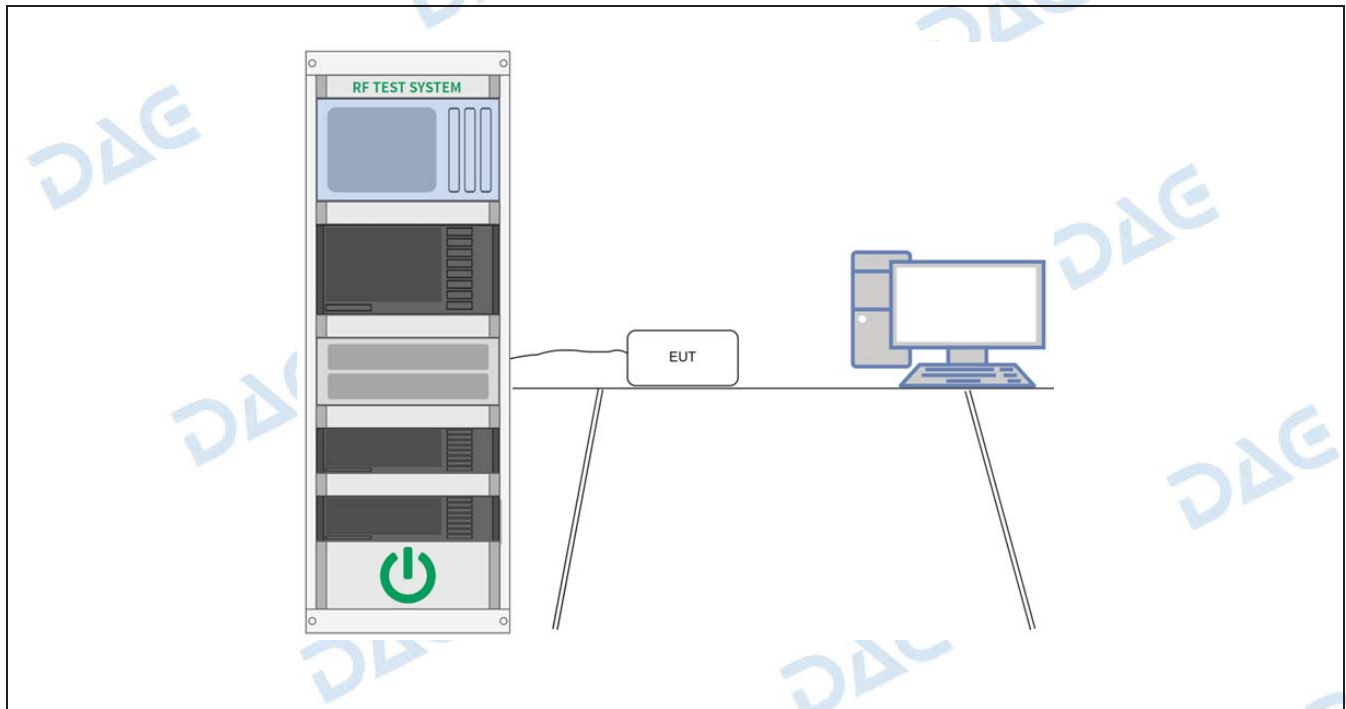
4.4 Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Limit:	Refer to 47 CFR 15.247(e), For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	ANSI C63.10-2020+C63.10a-2024, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020+C63.10a-2024, section 11.10, Maximum power spectral density level in the fundamental emission

4.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.5 °C	Humidity:	47 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.4.2 Test Setup Diagram:



4.4.3 Test Data:

Please Refer to Appendix for Details.

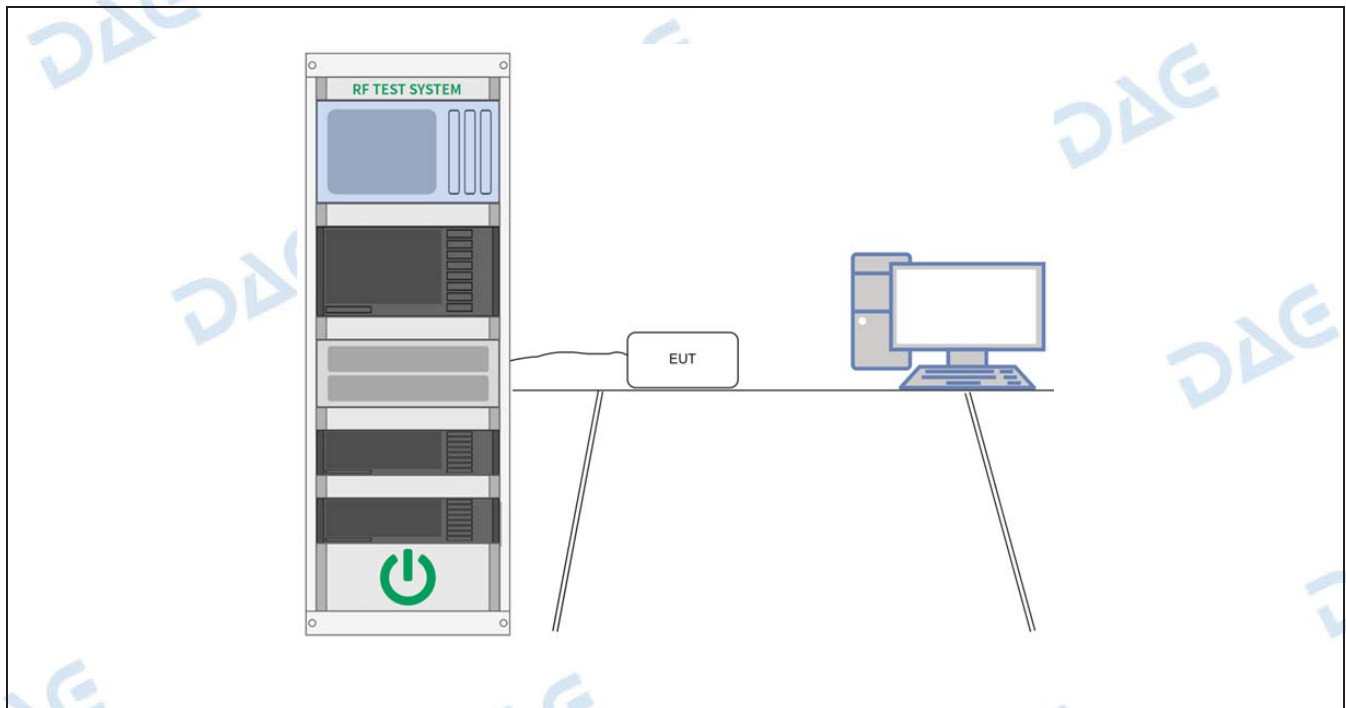
4.5 Emissions in non-restricted frequency bands

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+C63.10a-2024 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2020+C63.10a-2024 Section 11.11.1, Section 11.11.2, Section 11.11.3

4.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.7 °C	Humidity:	55 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.5.2 Test Setup Diagram:



4.5.3 Test Data:

Please Refer to Appendix for Details.

4.6 Band edge emissions (Radiated)

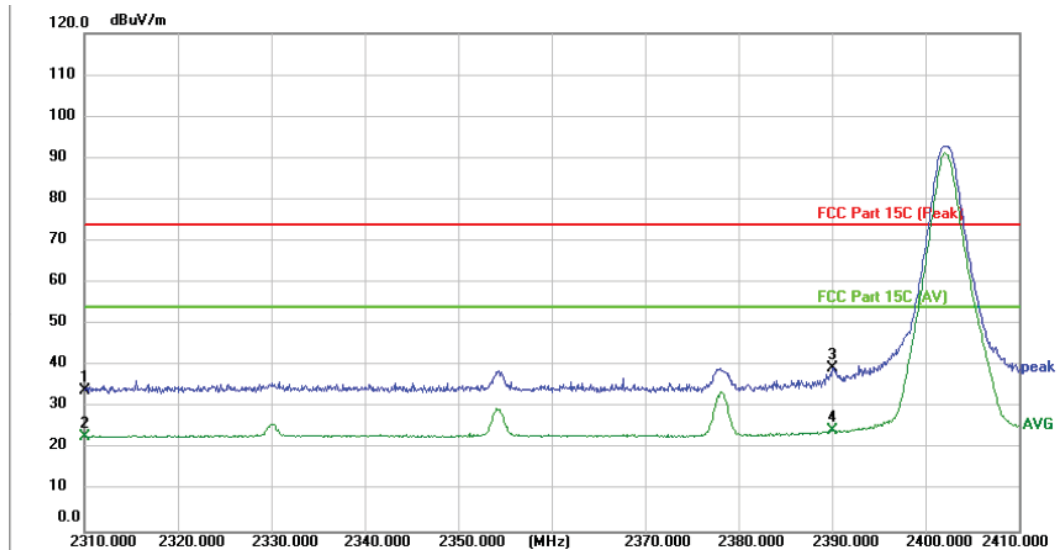
Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** 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.			
Test Method:	ANSI C63.10-2020+C63.10a-2024 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2020+C63.10a-2024 section 6.10.5.2		

4.6.1 E.U.T. Operation:

Operating Environment:			
Temperature:	24 °C	Humidity:	54 %
		Atmospheric Pressure:	101 kPa
Pretest mode:	TM1		
Final test mode:	TM1		

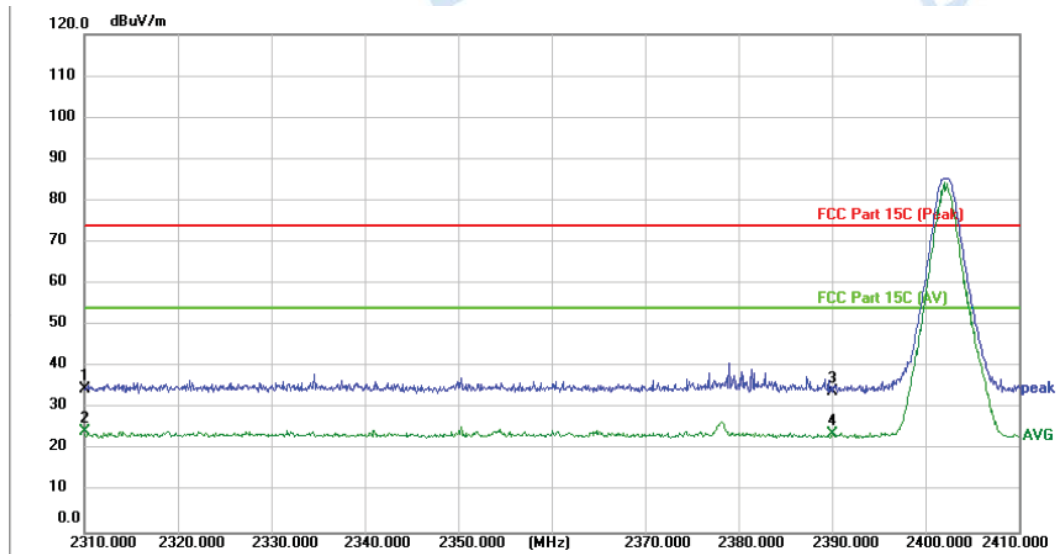
4.6.2 Test Data:

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



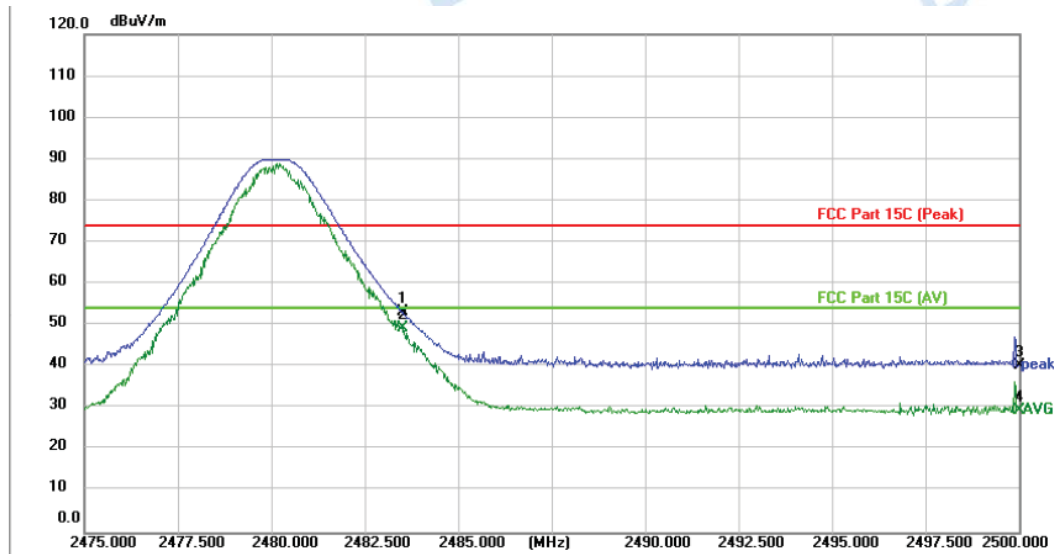
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2310.000	40.74	-6.63	34.11	74.00	-39.89	peak	150		P	
2	2310.000	29.71	-6.63	23.08	54.00	-30.92	AVG	150		P	
3	2390.000	45.90	-6.42	39.48	74.00	-34.52	peak	150		P	
4 *	2390.000	30.89	-6.42	24.47	54.00	-29.53	AVG	150		P	

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



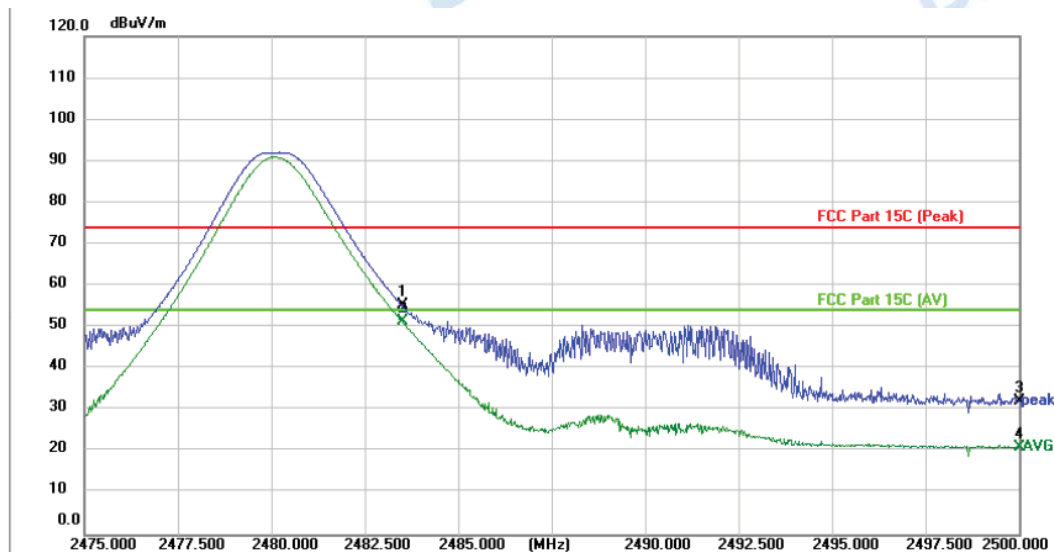
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2310.000	41.19	-6.63	34.56	74.00	-39.44	peak	150		P	
2 *	2310.000	30.97	-6.63	24.34	54.00	-29.66	AVG	150		P	
3	2390.000	40.53	-6.42	34.11	74.00	-39.89	peak	150		P	
4	2390.000	30.22	-6.42	23.80	54.00	-30.20	AVG	150		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	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	59.43	-6.17	53.26	74.00	-20.74	peak			P	
2 *	2483.500	55.39	-6.17	49.22	54.00	-4.78	AVG			P	
3	2500.000	46.47	-6.13	40.34	74.00	-33.66	peak			P	
4	2500.000	35.75	-6.13	29.62	54.00	-24.38	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	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	61.67	-6.17	55.50	74.00	-18.50	peak			P	
2 *	2483.500	57.58	-6.17	51.41	54.00	-2.59	AVG			P	
3	2500.000	38.36	-6.13	32.23	74.00	-41.77	peak			P	
4	2500.000	27.24	-6.13	21.11	54.00	-32.89	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 worst case will be recorded in the test report.

4.7 Emissions in frequency bands (below 1GHz)

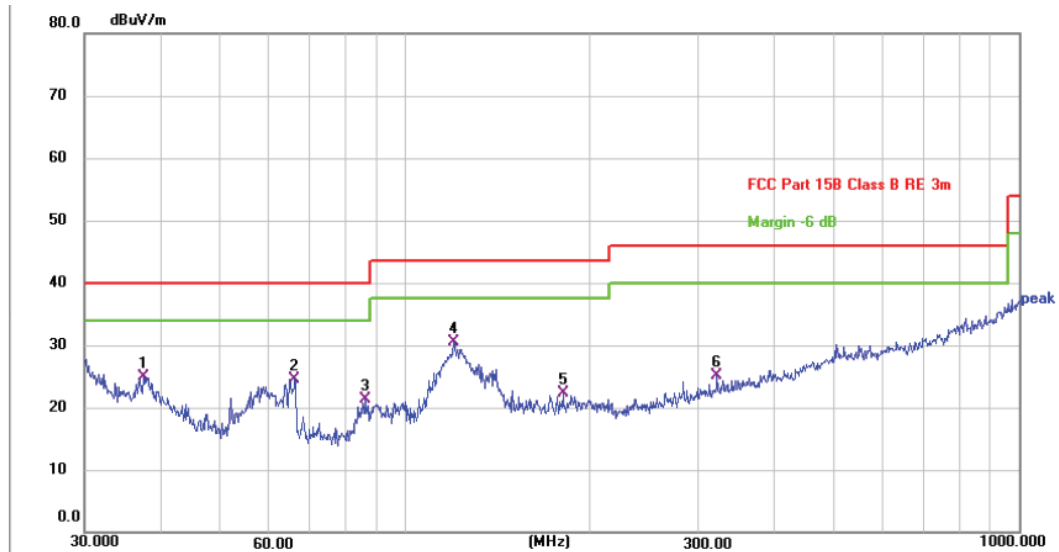
Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
	** 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.		
Test Method:	ANSI C63.10-2020+C63.10a-2024 section 6.5.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2020+C63.10a-2024 section 6.5.4		

4.7.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.8 °C	Humidity:	46 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

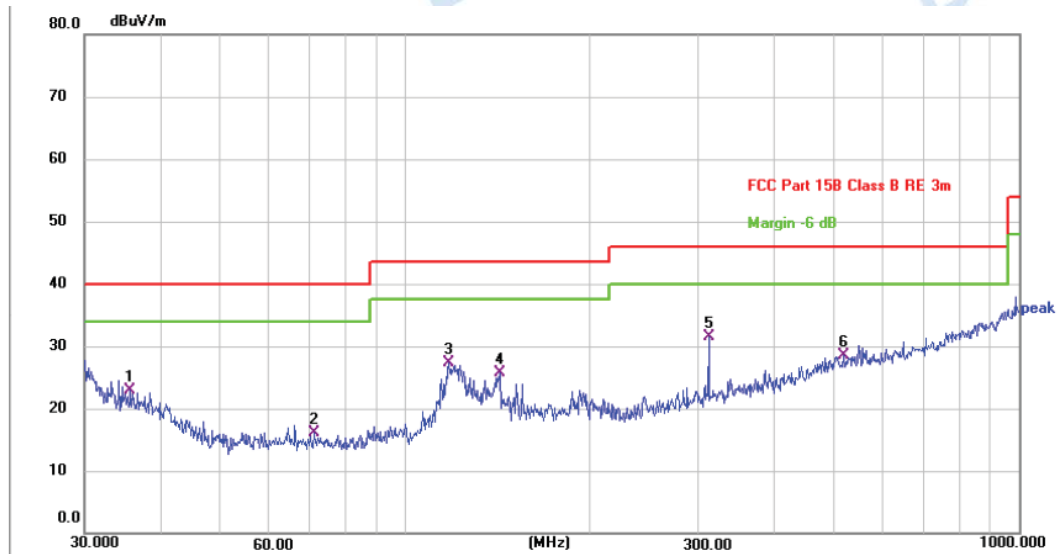
4.7.2 Test Data:

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	37.4164	37.08	-12.24	24.84	40.00	-15.16	QP			P	
2	66.0342	43.33	-18.73	24.60	40.00	-15.40	QP			P	
3	85.8983	39.58	-18.18	21.40	40.00	-18.60	QP			P	
4 *	119.8556	42.89	-12.46	30.43	43.50	-13.07	QP			P	
5	180.6488	36.01	-13.67	22.34	43.50	-21.16	QP			P	
6	322.1885	36.03	-10.91	25.12	46.00	-20.88	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	35.6240	34.79	-11.80	22.99	40.00	-17.01	QP			P	
2	71.0803	34.42	-18.26	16.16	40.00	-23.84	QP			P	
3	117.7725	40.39	-13.10	27.29	43.50	-16.21	QP			P	
4	142.8243	38.43	-12.66	25.77	43.50	-17.73	QP			P	
5 *	312.1794	42.65	-11.06	31.59	46.00	-14.41	QP			P	
6	517.2480	33.89	-5.43	28.46	46.00	-17.54	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 worst case will be of GFSK 1MHz recorded in the test report.

4.8 Emissions in frequency bands (above 1GHz)

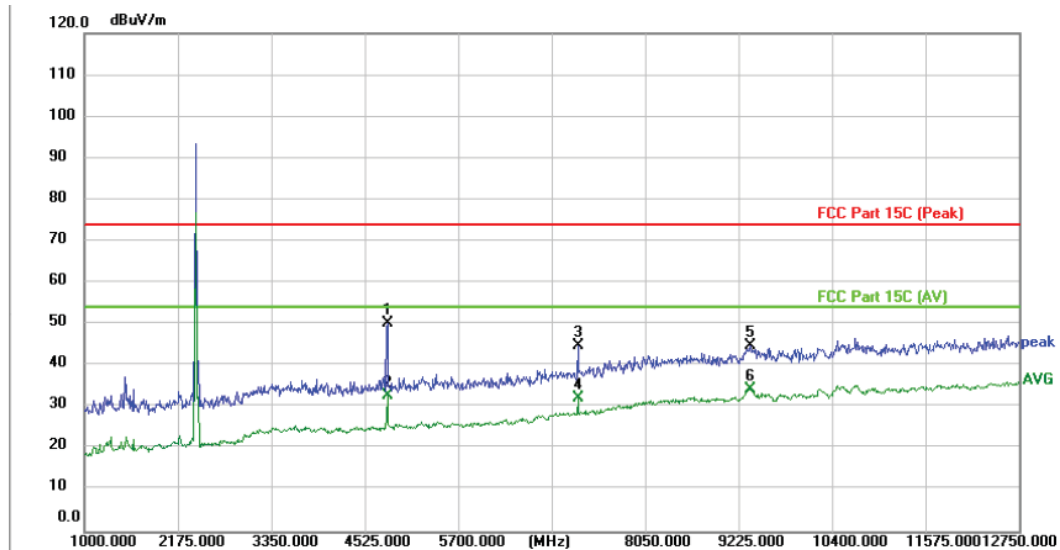
Test Requirement:	Refer to 47 CFR 15.247(d), in addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** 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.			
Test Method:	ANSI C63.10-2020+C63.10a-2024 section 6.5.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2020+C63.10a-2024 section 6.5.4		

4.8.1 E.U.T. Operation:

Operating Environment:			
Temperature:	23.8 °C	Humidity:	54 %
Atmospheric Pressure:	101 kPa		
Pretest mode:	TM1		
Final test mode:	TM1		

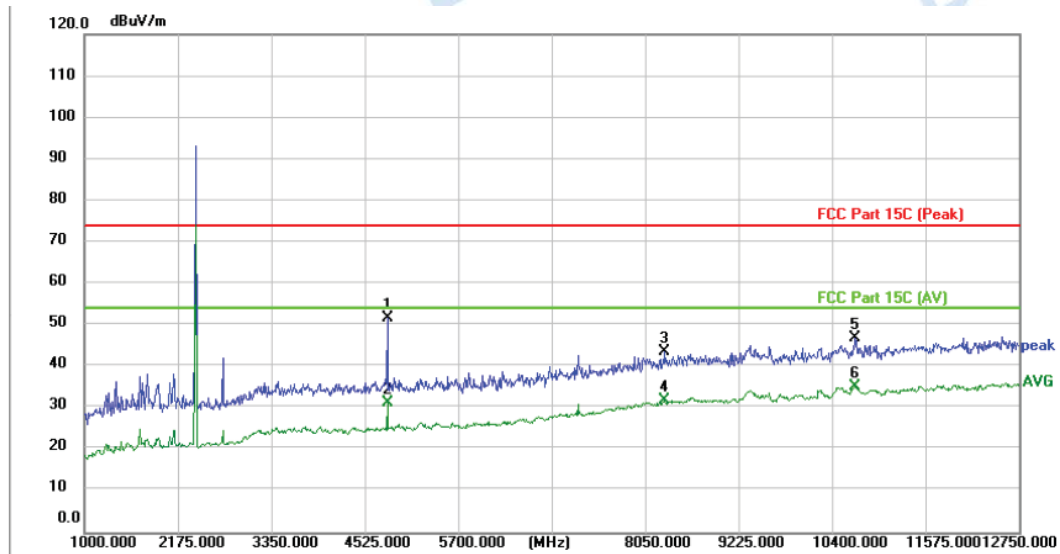
4.8.2 Test Data:

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



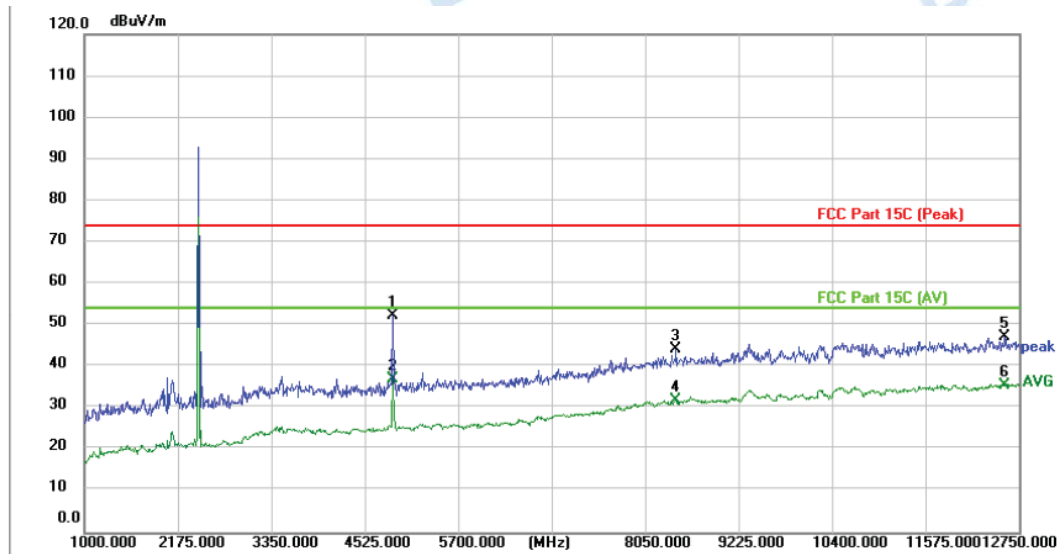
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4807.000	50.81	-0.69	50.12	74.00	-23.88	peak			P	
2	4807.000	33.49	-0.69	32.80	54.00	-21.20	AVG			P	
3	7204.000	40.43	4.37	44.80	74.00	-29.20	peak			P	
4	7204.000	27.91	4.37	32.28	54.00	-21.72	AVG			P	
5	9377.750	36.63	8.14	44.77	74.00	-29.23	peak			P	
6 *	9377.750	26.14	8.14	34.28	54.00	-19.72	AVG			P	

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



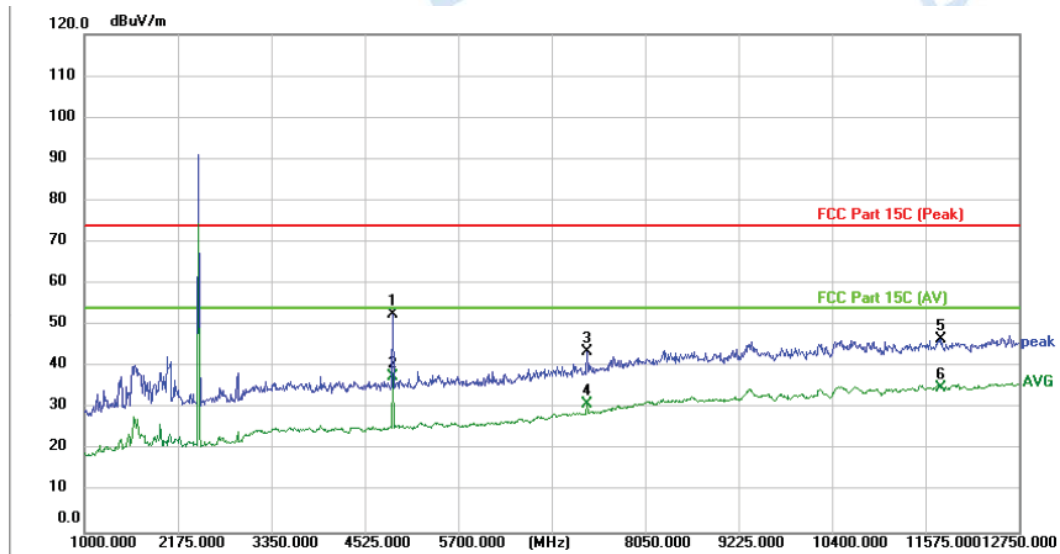
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4807.000	52.30	-0.69	51.61	74.00	-22.39	peak	150		P	
2	4807.000	32.05	-0.69	31.36	54.00	-22.64	AVG	150		P	
3	8296.750	36.38	7.14	43.52	74.00	-30.48	peak	150		P	
4	8296.750	24.75	7.14	31.89	54.00	-22.11	AVG	150		P	
5	10693.750	37.69	9.15	46.84	74.00	-27.16	peak	150		P	
6 *	10693.750	26.23	9.15	35.38	54.00	-18.62	AVG	150		P	

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



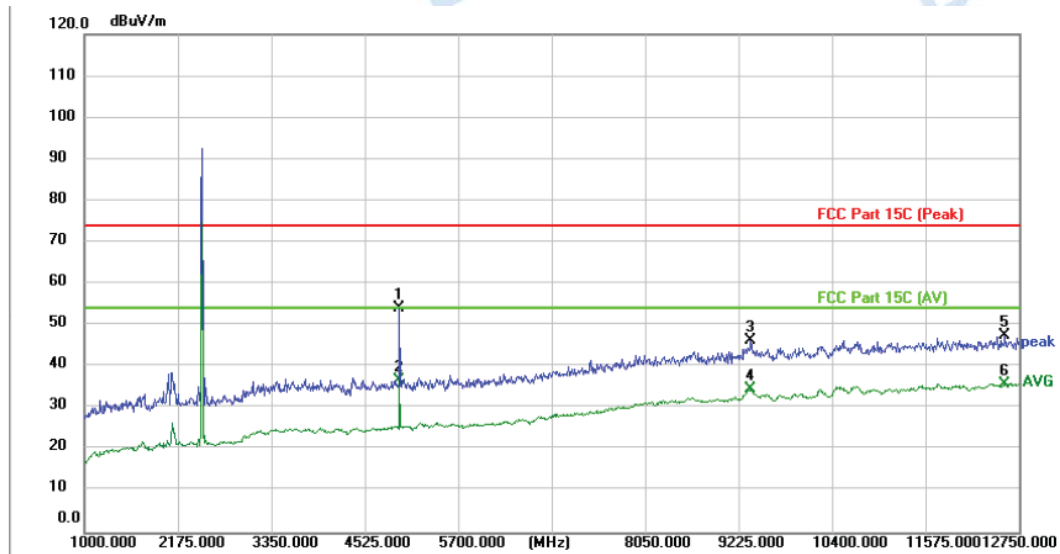
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4877.500	52.83	-0.45	52.38	74.00	-21.62	peak	150		P	
2 *	4877.500	37.38	-0.45	36.93	54.00	-17.07	AVG	150		P	
3	8437.750	36.82	7.34	44.16	74.00	-29.84	peak	150		P	
4	8437.750	24.50	7.34	31.84	54.00	-22.16	AVG	150		P	
5	12573.750	36.06	11.15	47.21	74.00	-26.79	peak	150		P	
6	12573.750	24.54	11.15	35.69	54.00	-18.31	AVG	150		P	

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



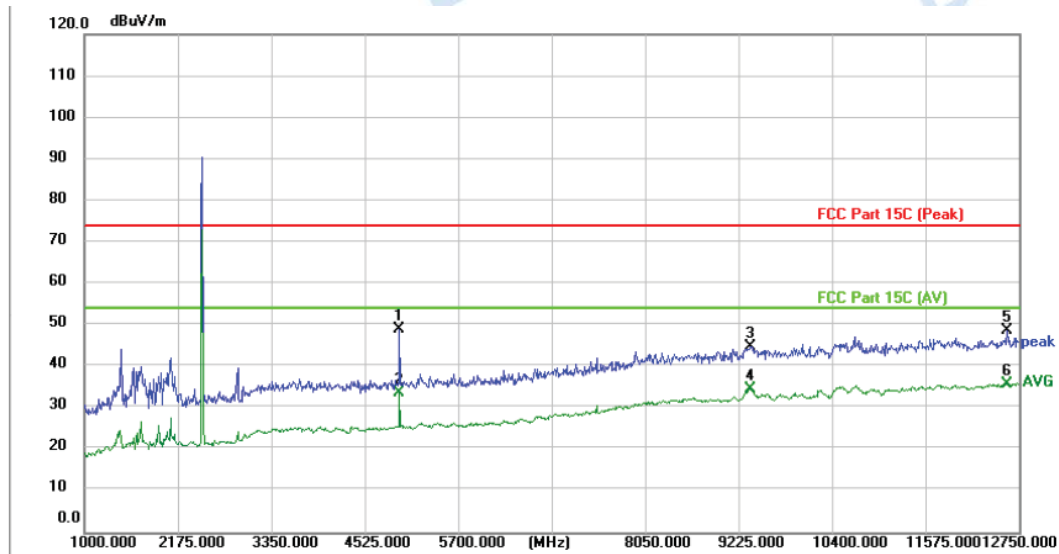
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4877.500	53.02	-0.45	52.57	74.00	-21.43	peak			P	
2 *	4877.500	37.98	-0.45	37.53	54.00	-16.47	AVG			P	
3	7321.500	38.98	4.57	43.55	74.00	-30.45	peak			P	
4	7321.500	26.39	4.57	30.96	54.00	-23.04	AVG			P	
5	11774.750	36.84	9.86	46.70	74.00	-27.30	peak			P	
6	11774.750	25.17	9.86	35.03	54.00	-18.97	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	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4959.750	54.32	-0.17	54.15	74.00	-19.85	peak			P	
2 *	4959.750	37.01	-0.17	36.84	54.00	-17.16	AVG			P	
3	9377.750	38.21	8.14	46.35	74.00	-27.65	peak			P	
4	9377.750	26.48	8.14	34.62	54.00	-19.38	AVG			P	
5	12573.750	36.35	11.15	47.50	74.00	-26.50	peak			P	
6	12573.750	24.75	11.15	35.90	54.00	-18.10	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	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4959.750	49.14	-0.17	48.97	74.00	-25.03	peak	150		P	
2	4959.750	33.81	-0.17	33.64	54.00	-20.36	AVG	150		P	
3	9377.750	36.57	8.14	44.71	74.00	-29.29	peak	150		P	
4	9377.750	26.48	8.14	34.62	54.00	-19.38	AVG	150		P	
5	12597.250	37.65	11.19	48.84	74.00	-25.16	peak	150		P	
6 *	12597.250	24.56	11.19	35.75	54.00	-18.25	AVG	150		P	

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

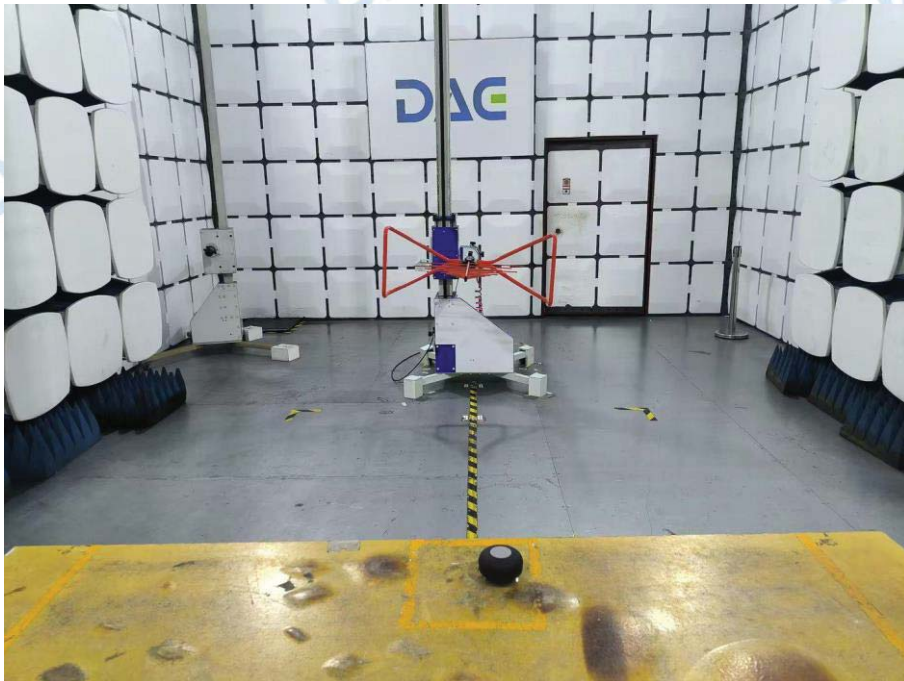
The test software will only record the worst test angle and height, and only the worst case will be of GFSK 1MHz recorded in the test report.

5 TEST SETUP PHOTOS

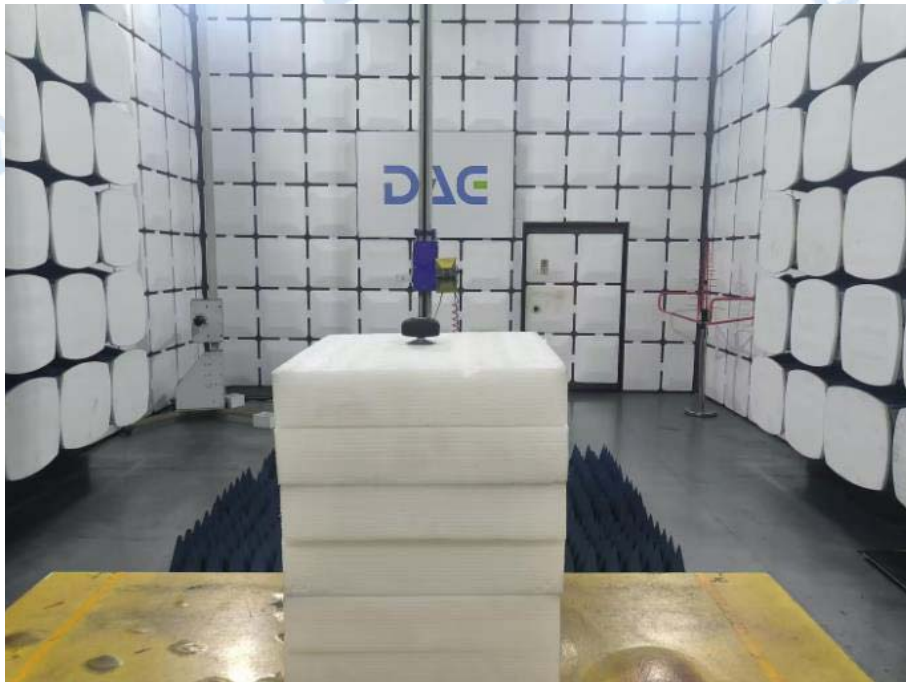
Conducted Emission at AC power line



Emissions in frequency bands (below 1GHz)



Emissions in frequency bands (above 1GHz)



6 PHOTOS OF THE EUT

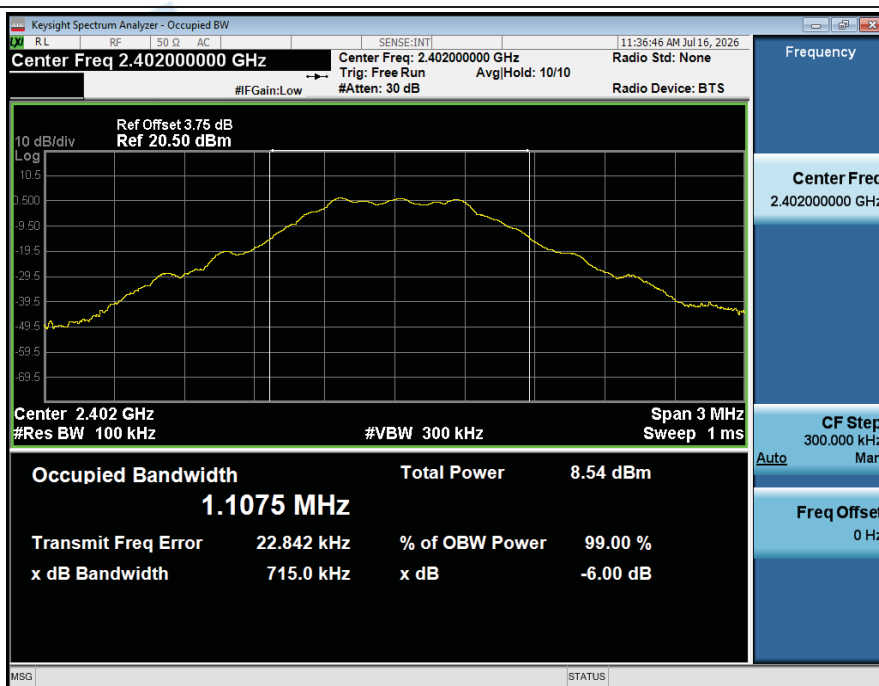
Refer to Appendix - EUT Photos for EUT External Photo and Internal Photo.

Appendix

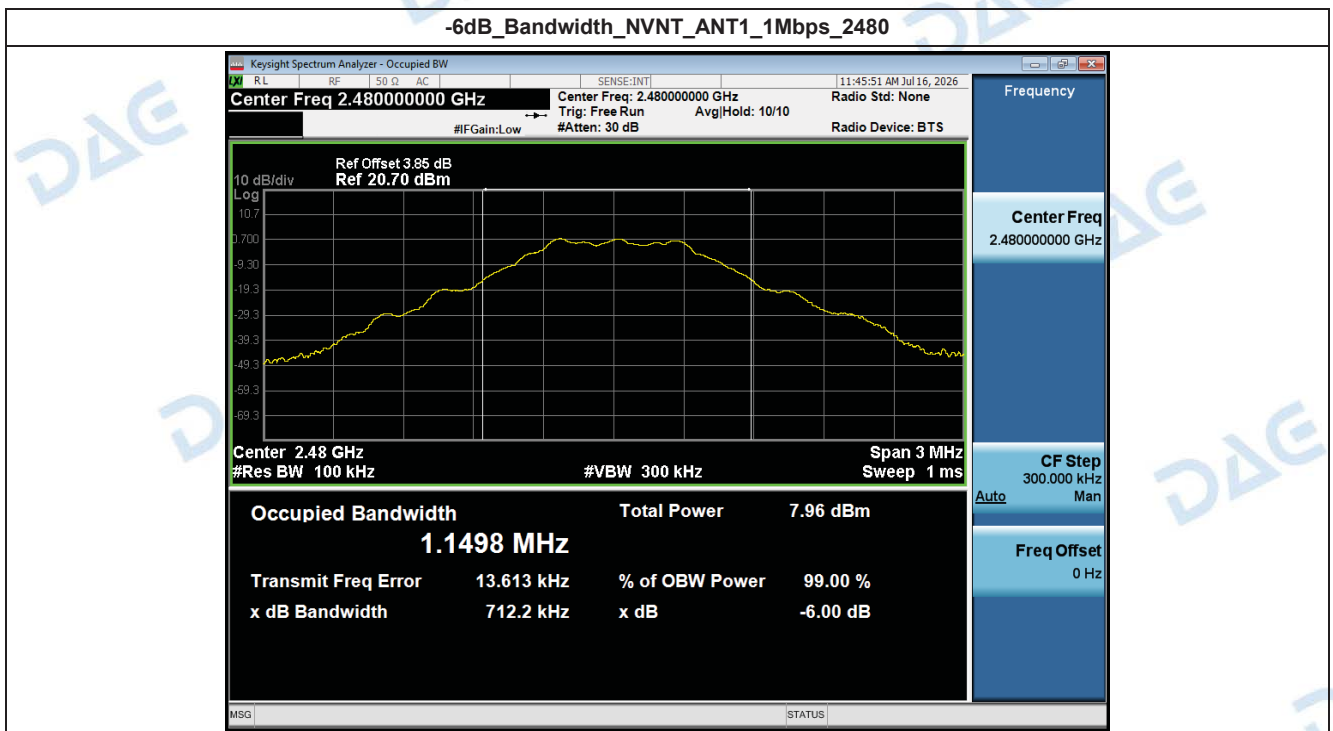
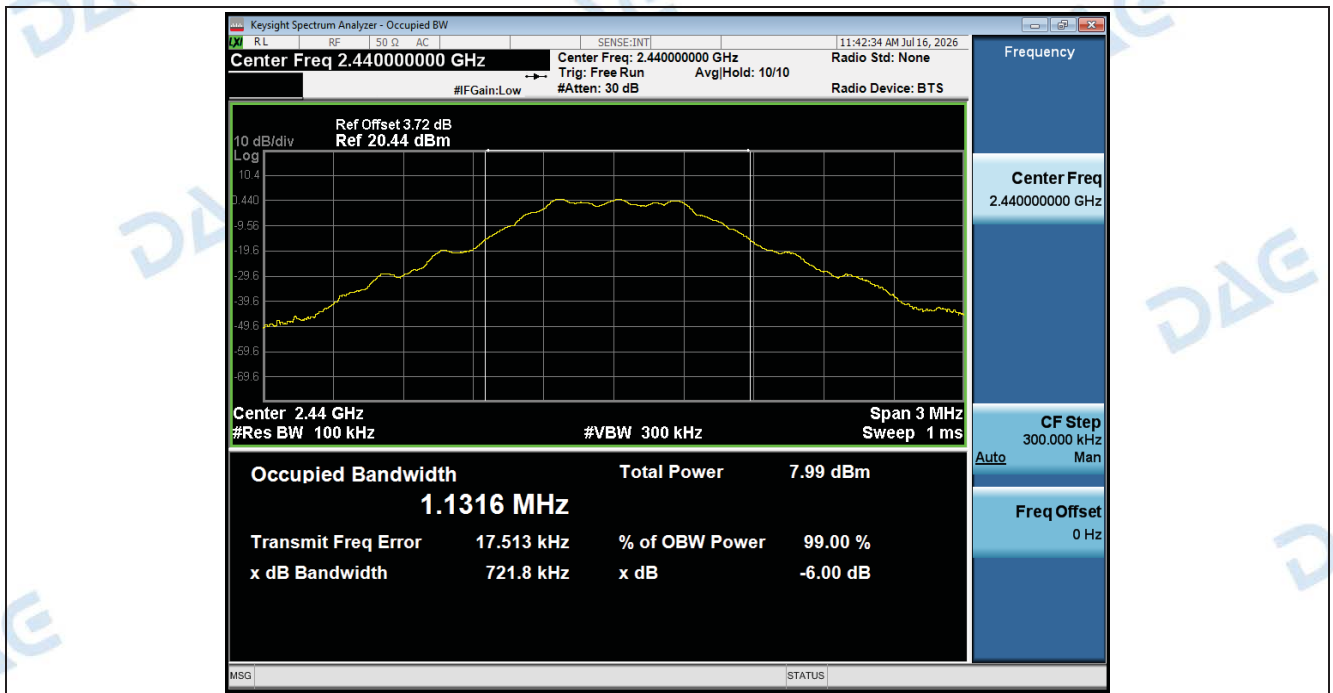
1. -6dB Bandwidth

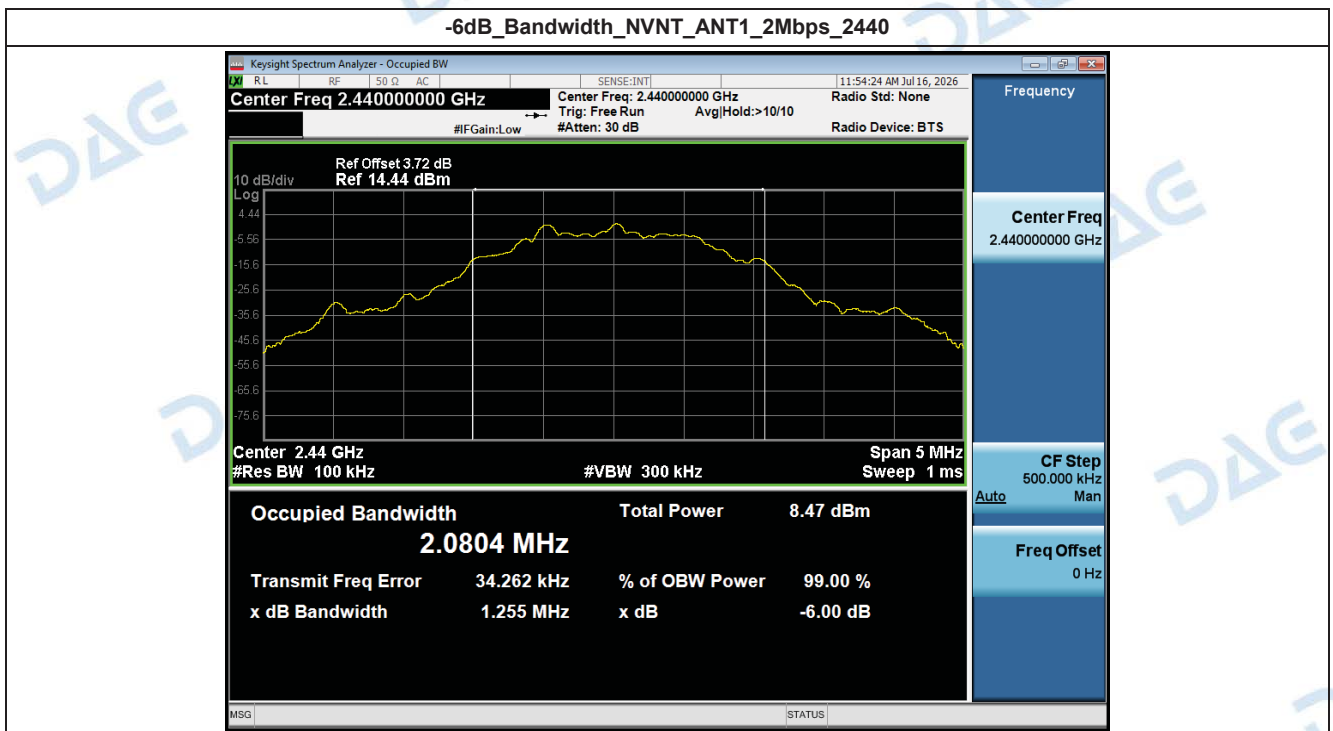
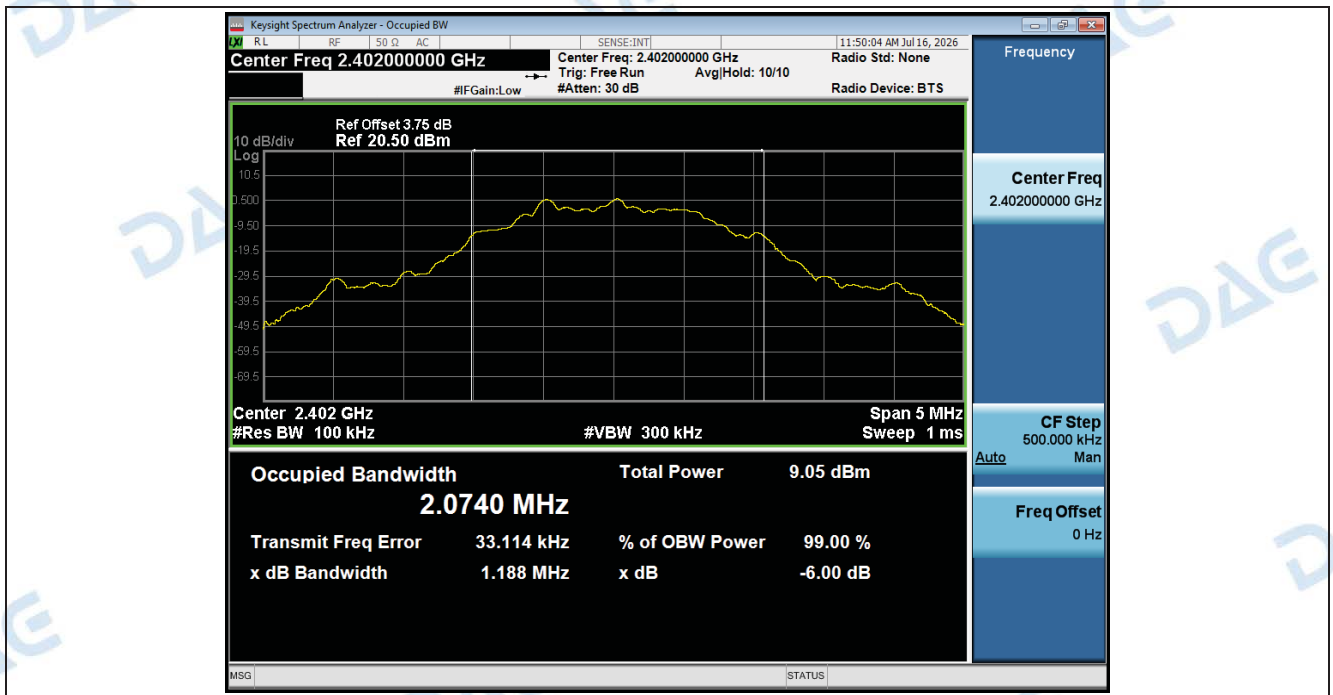
Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	714.99	500	Pass
NVNT	ANT1	1Mbps	2440.00	721.76	500	Pass
NVNT	ANT1	1Mbps	2480.00	712.23	500	Pass
NVNT	ANT1	2Mbps	2402.00	1187.84	500	Pass
NVNT	ANT1	2Mbps	2440.00	1255.13	500	Pass
NVNT	ANT1	2Mbps	2480.00	1191.22	500	Pass

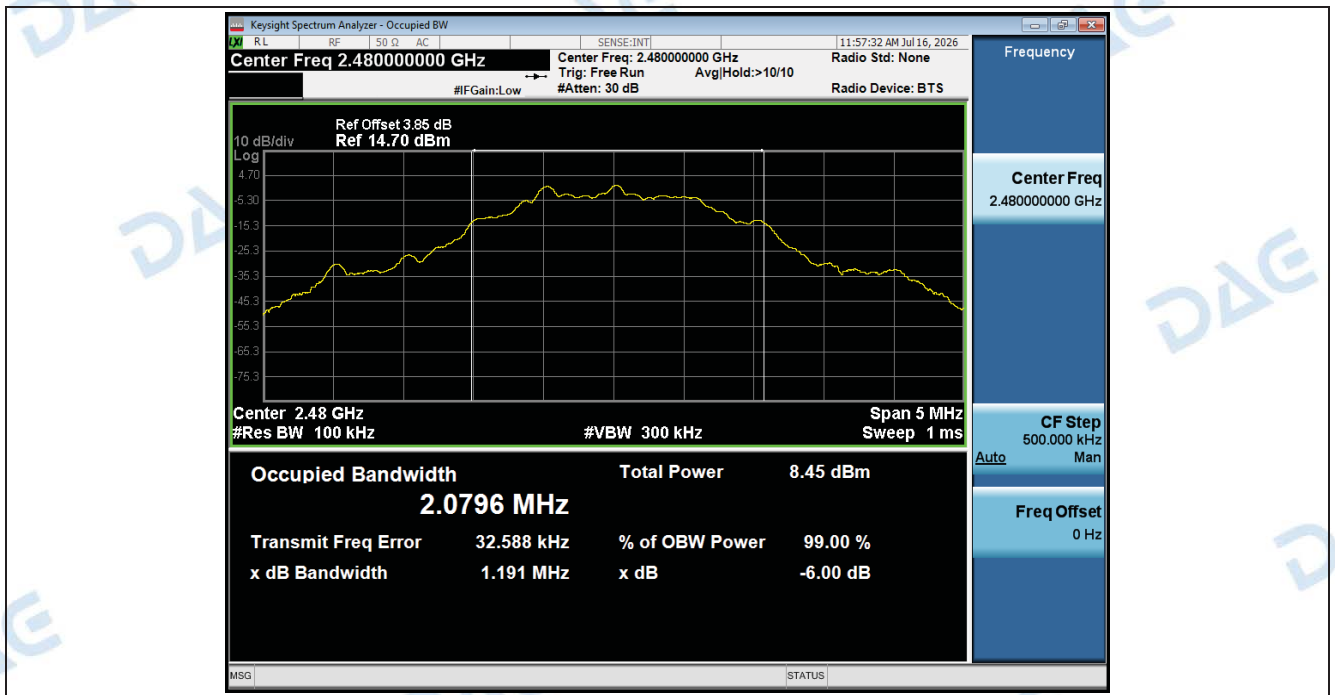
-6dB_Bandwidth_NVNT_ANT1_1Mbps_2402



-6dB_Bandwidth_NVNT_ANT1_1Mbps_2440



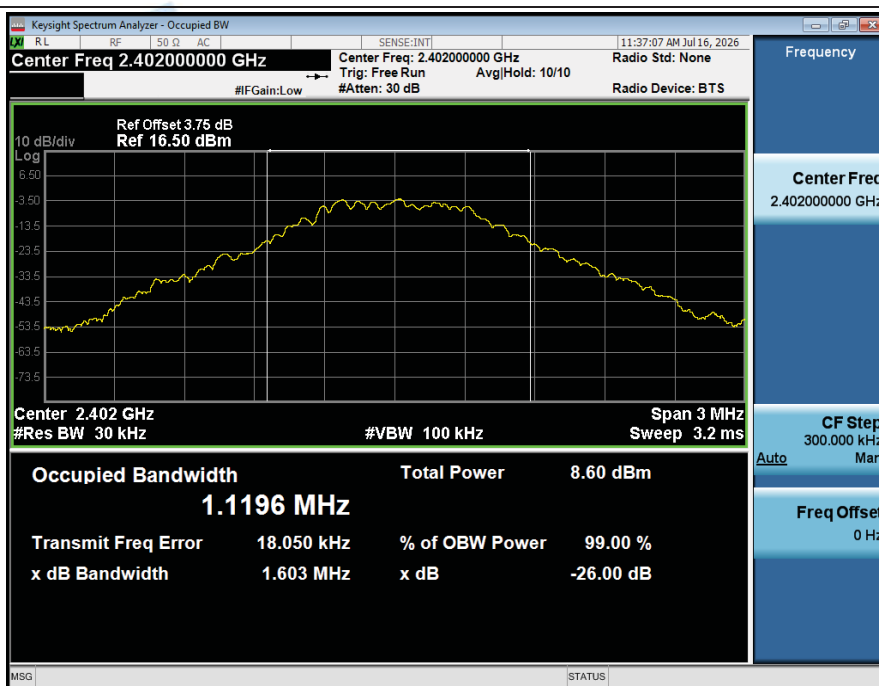




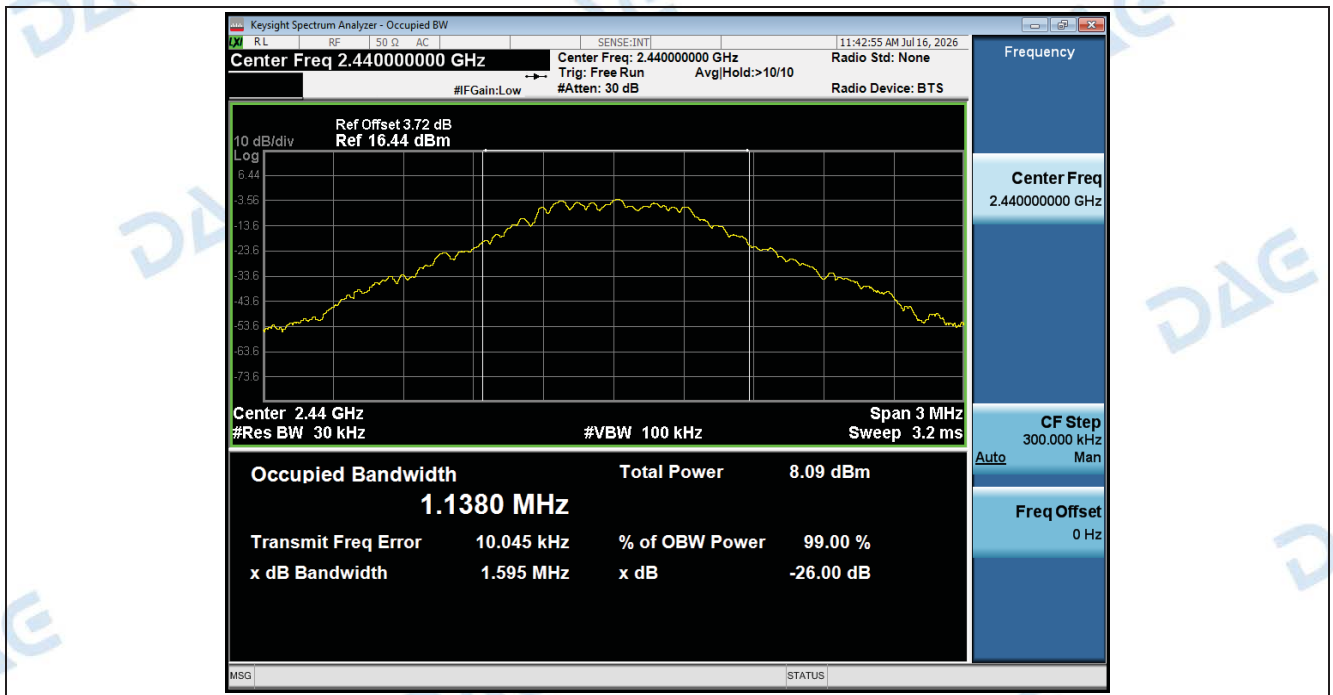
2. 99% Occupied Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1Mbps	2402.00	1.120
NVNT	ANT1	1Mbps	2440.00	1.138
NVNT	ANT1	1Mbps	2480.00	1.143
NVNT	ANT1	2Mbps	2402.00	2.051
NVNT	ANT1	2Mbps	2440.00	2.055
NVNT	ANT1	2Mbps	2480.00	2.055

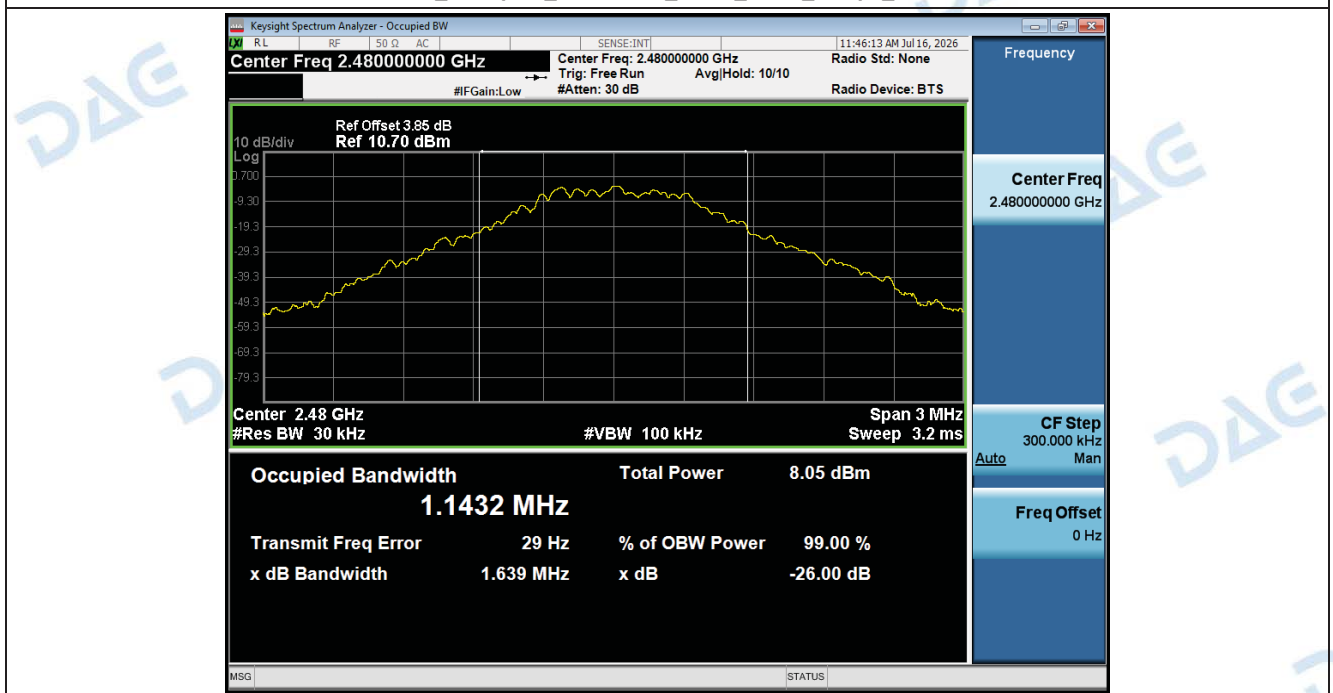
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2402



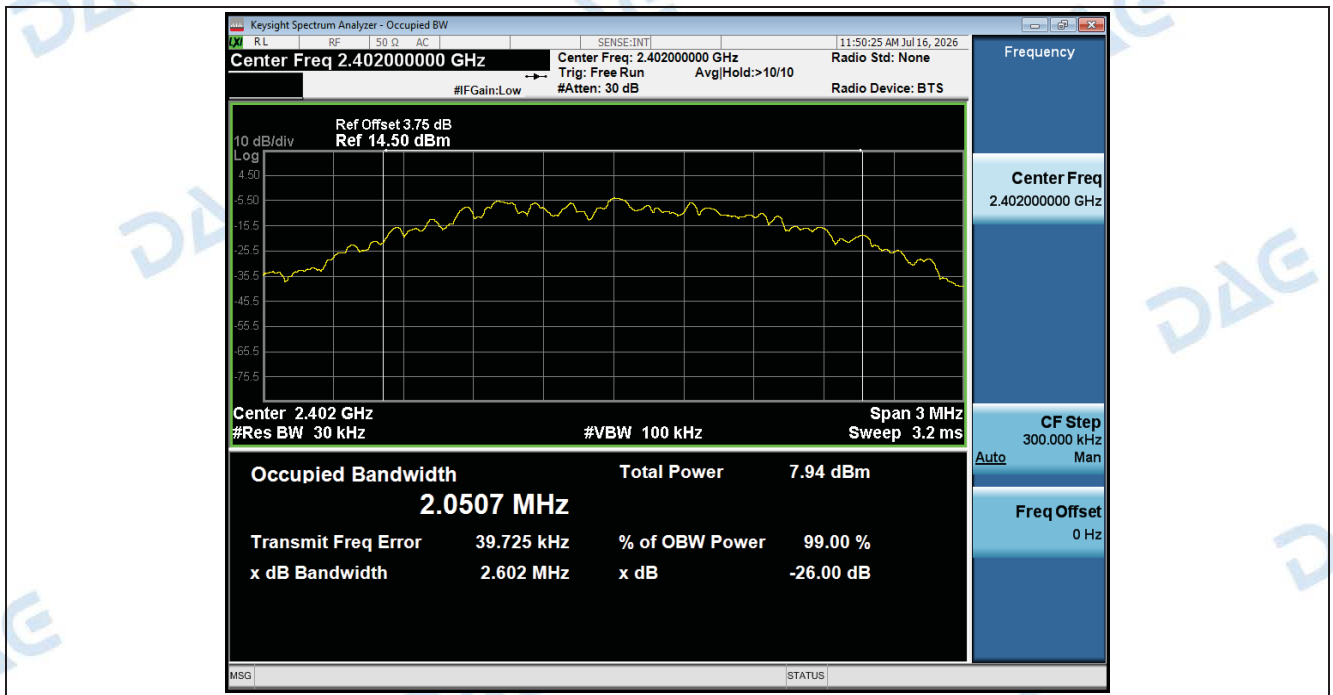
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2440



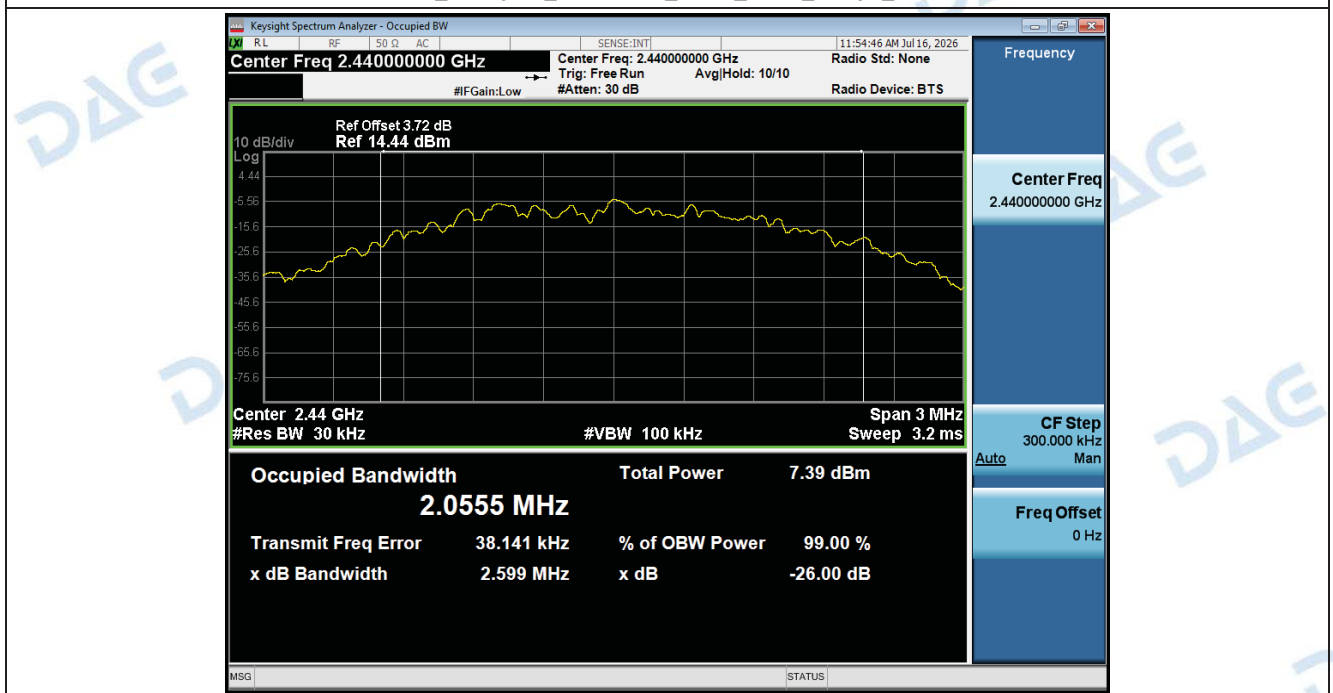
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2480



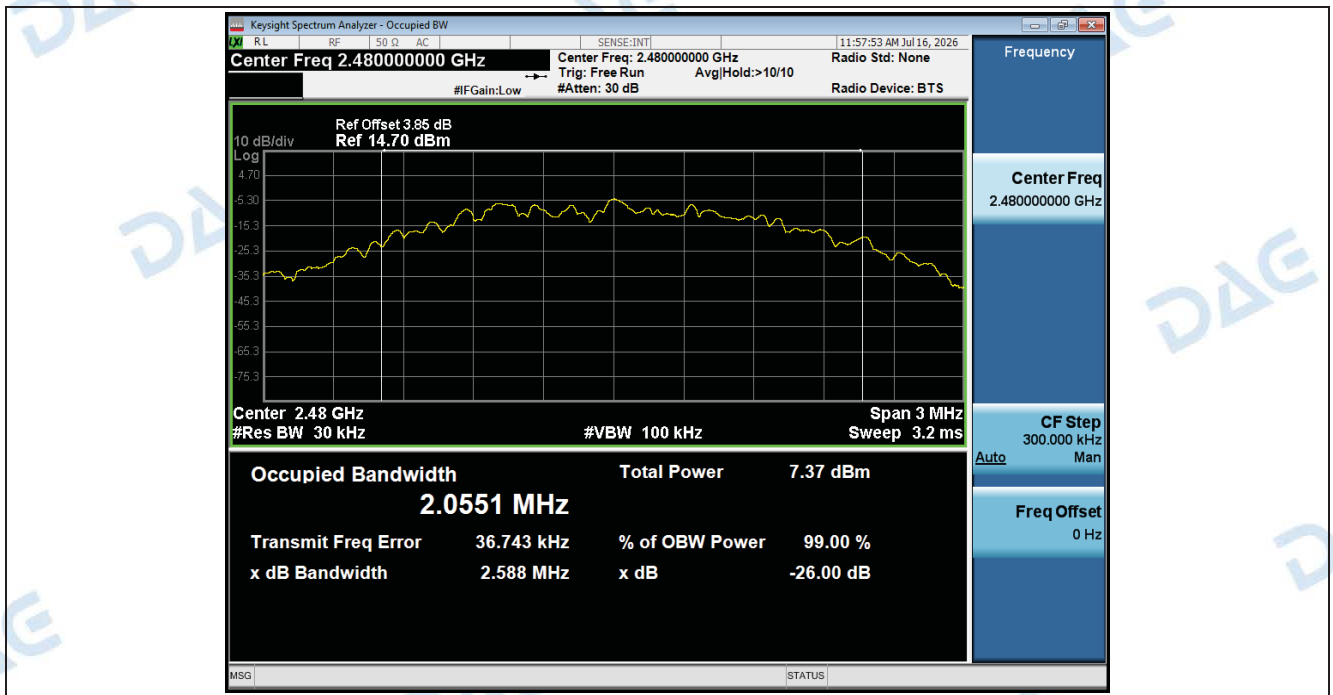
99%_Occupied_Bandwidth_NVNT_ANT1_2Mbps_2402



99%_Occupied_Bandwidth_NVNT_ANT1_2Mbps_2440



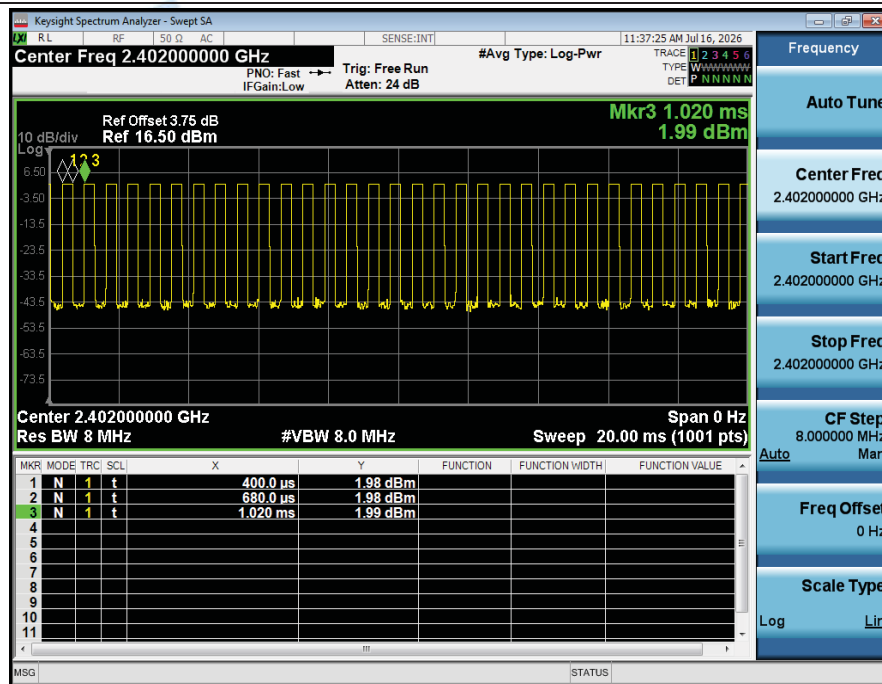
99%_Occupied_Bandwidth_NVNT_ANT1_2Mbps_2480



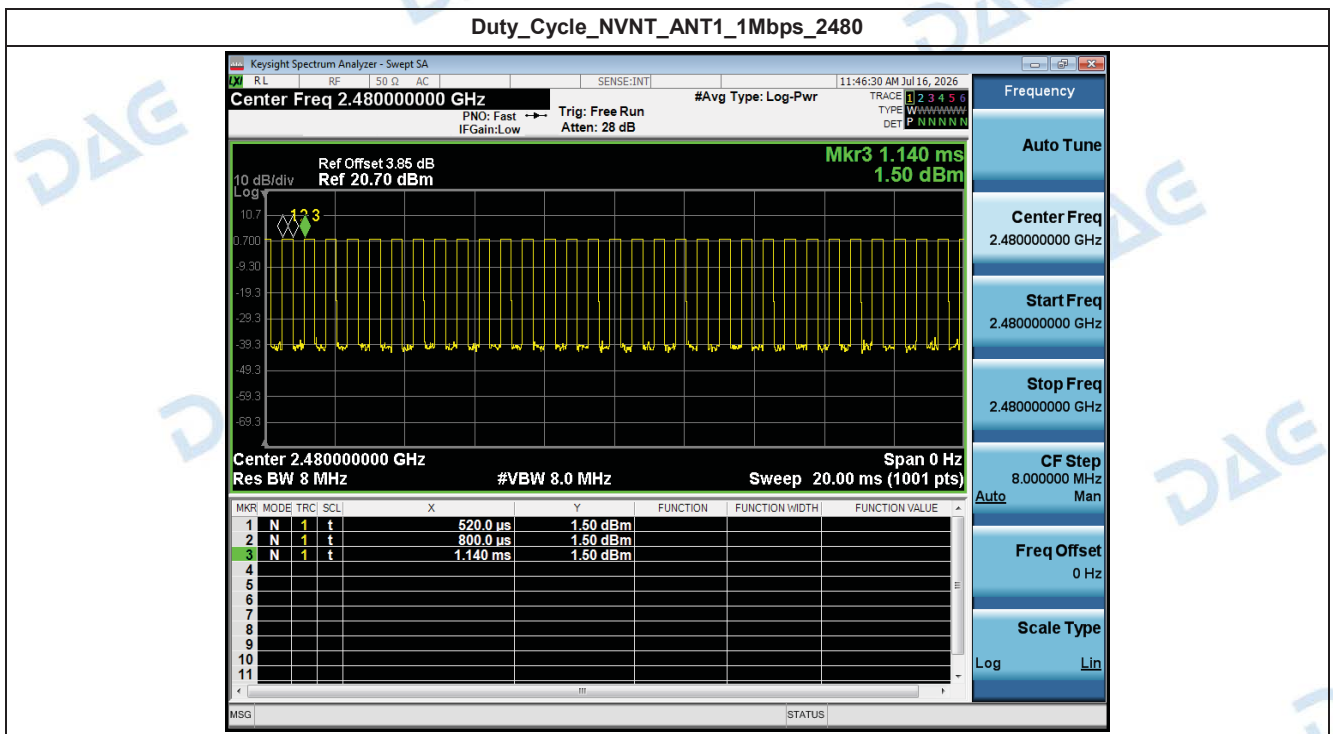
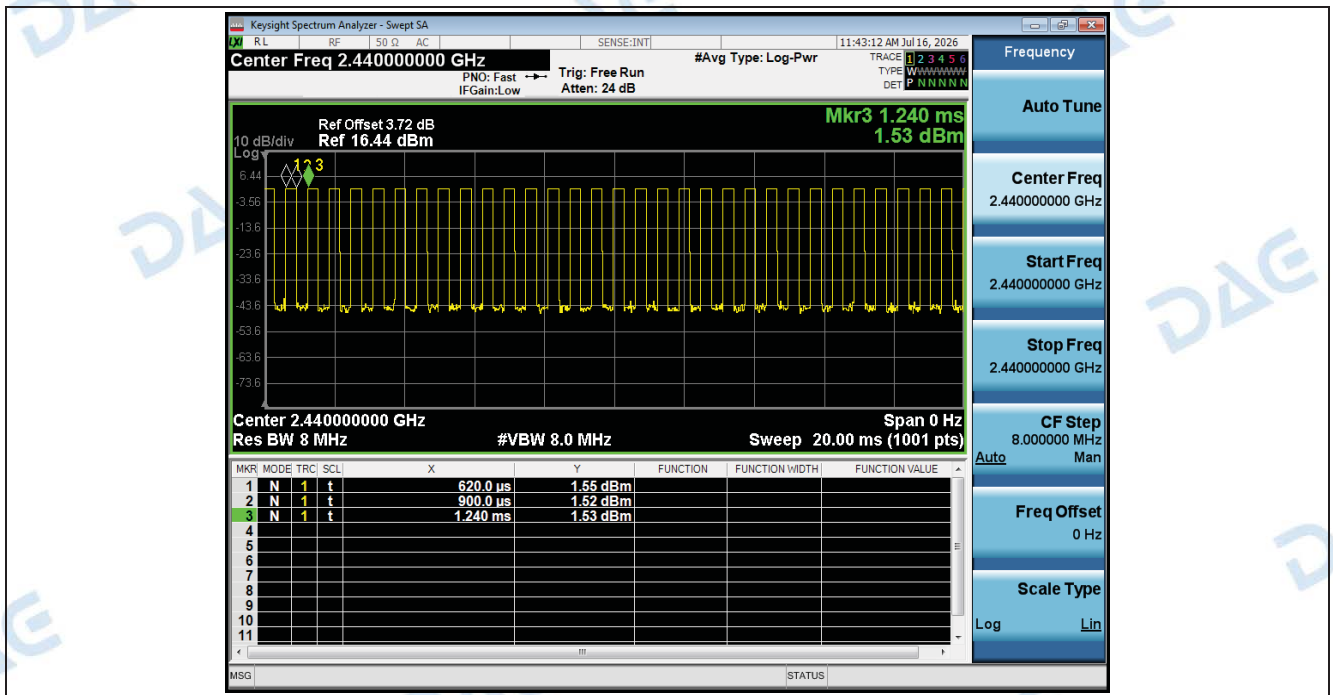
3. Duty Cycle

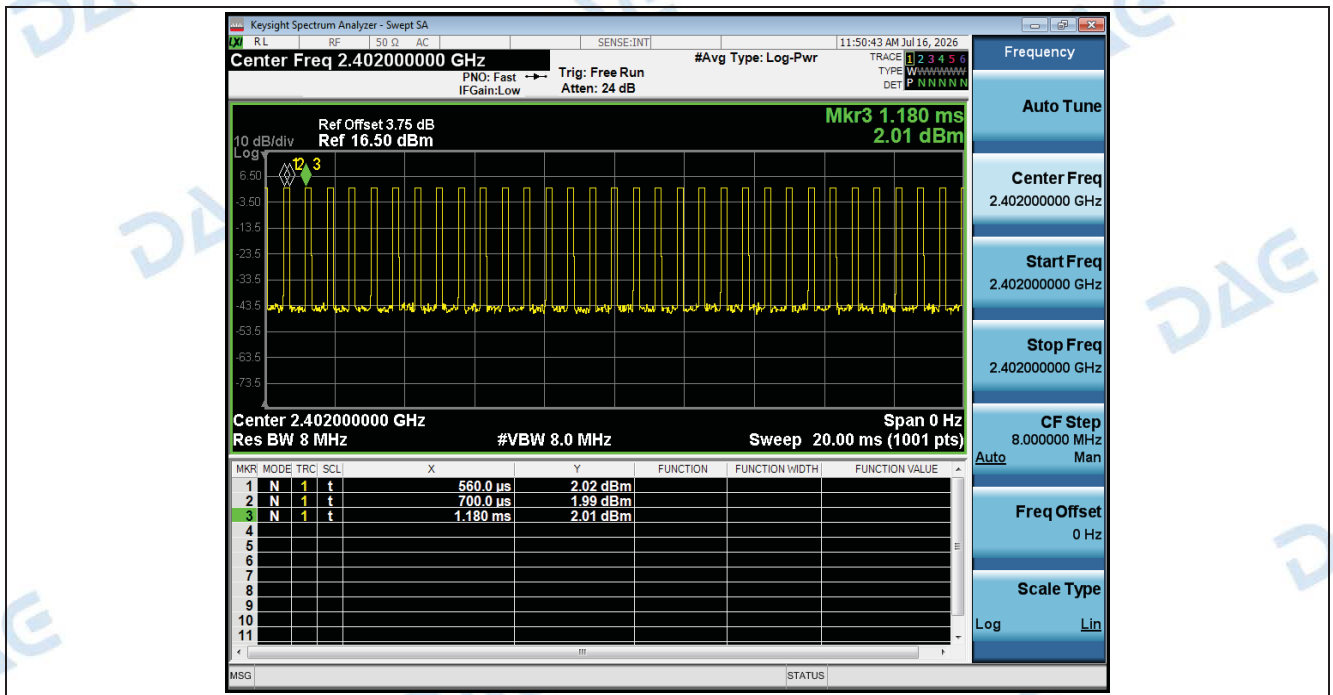
Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	48.39	3.15
NVNT	ANT1	1Mbps	2440.00	48.39	3.15
NVNT	ANT1	1Mbps	2480.00	48.39	3.15
NVNT	ANT1	2Mbps	2402.00	25.81	5.88
NVNT	ANT1	2Mbps	2440.00	25.81	5.88
NVNT	ANT1	2Mbps	2480.00	25.81	5.88

Duty_Cycle_NVNT_ANT1_1Mbps_2402

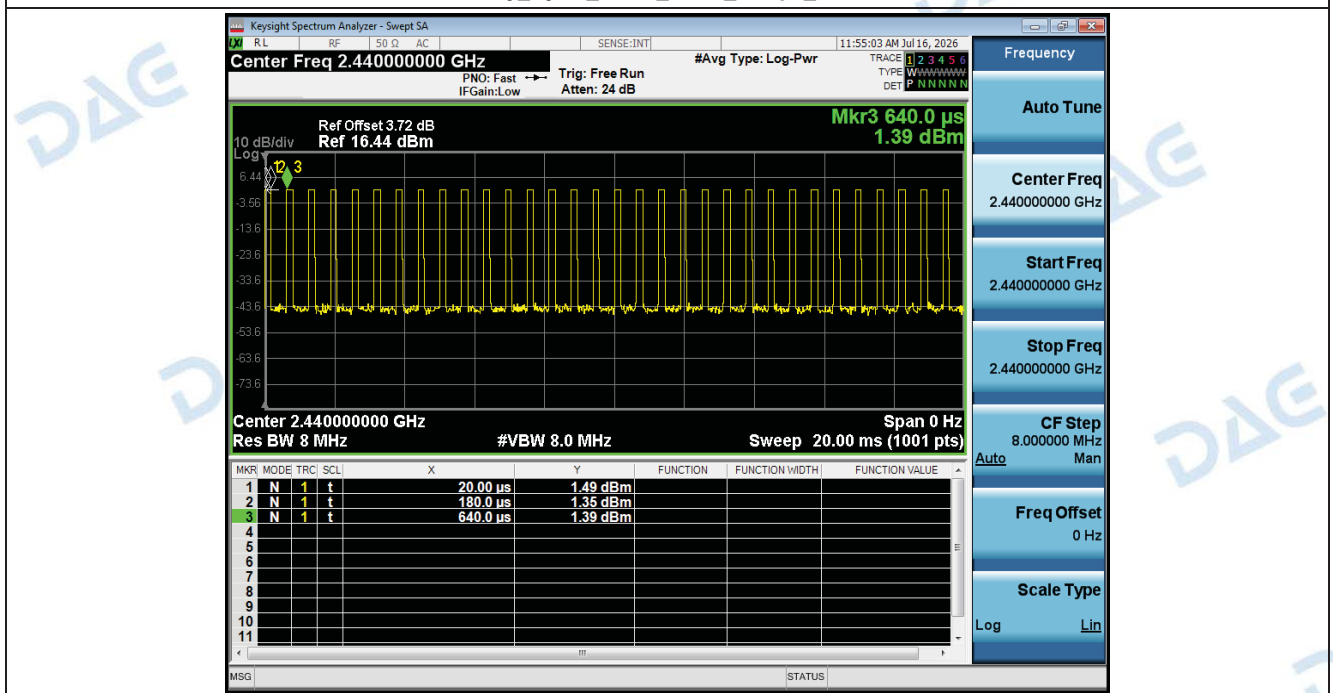


Duty_Cycle_NVNT_ANT1_1Mbps_2440

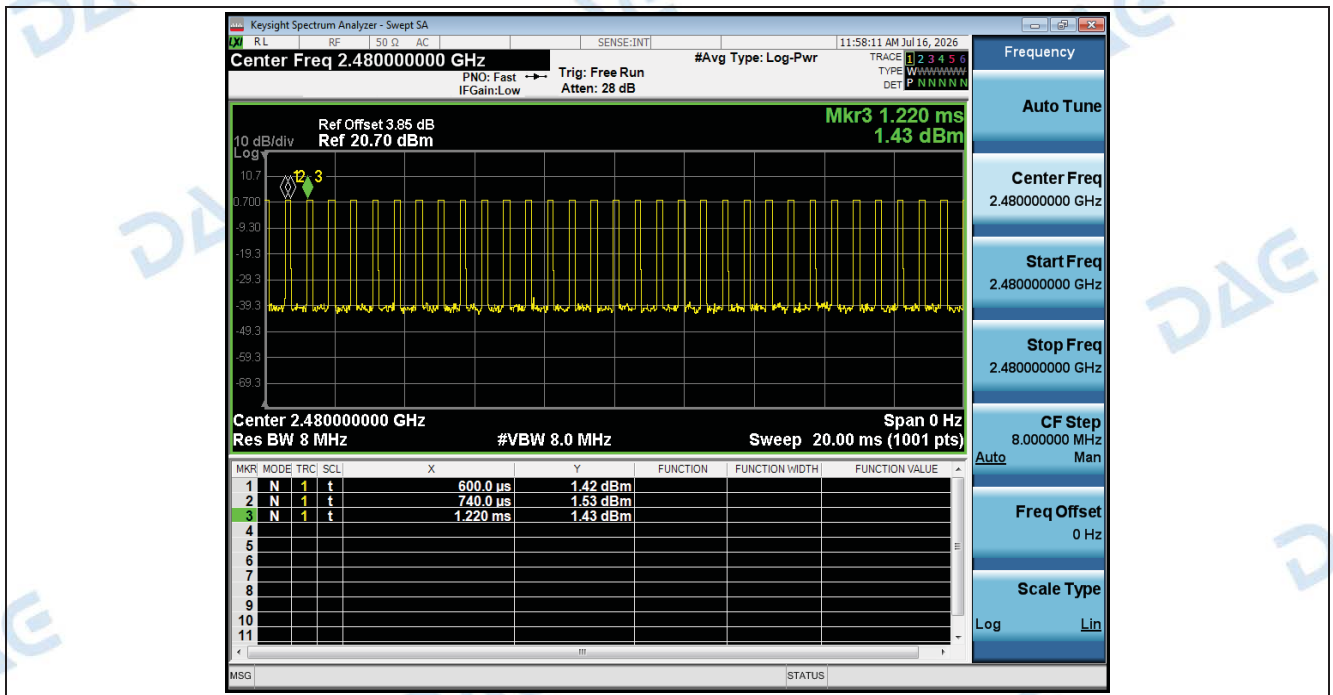




Duty_Cycle_NVNT_ANT1_2Mbps_2440



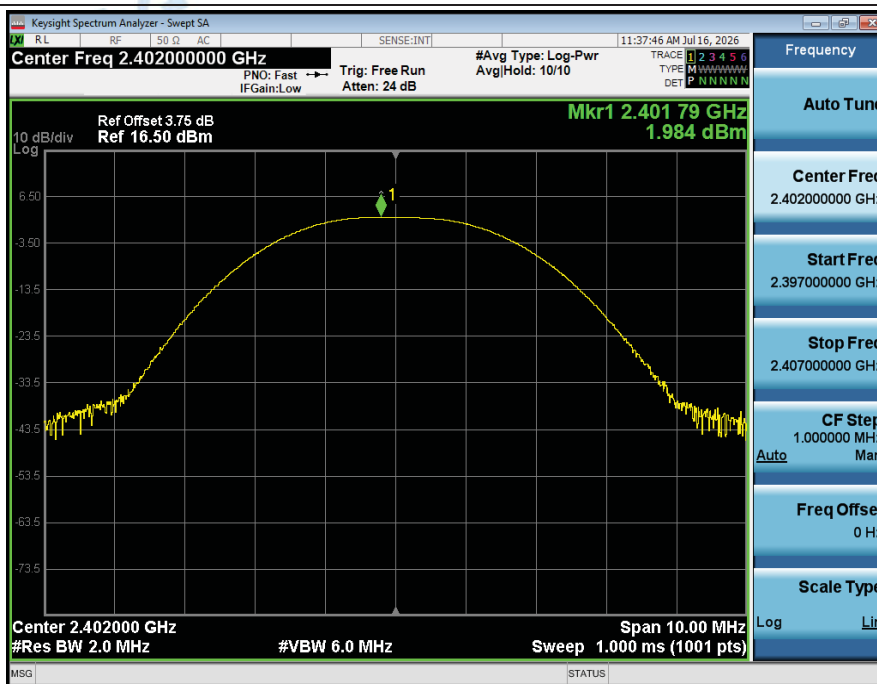
Duty_Cycle_NVNT_ANT1_2Mbps_2480



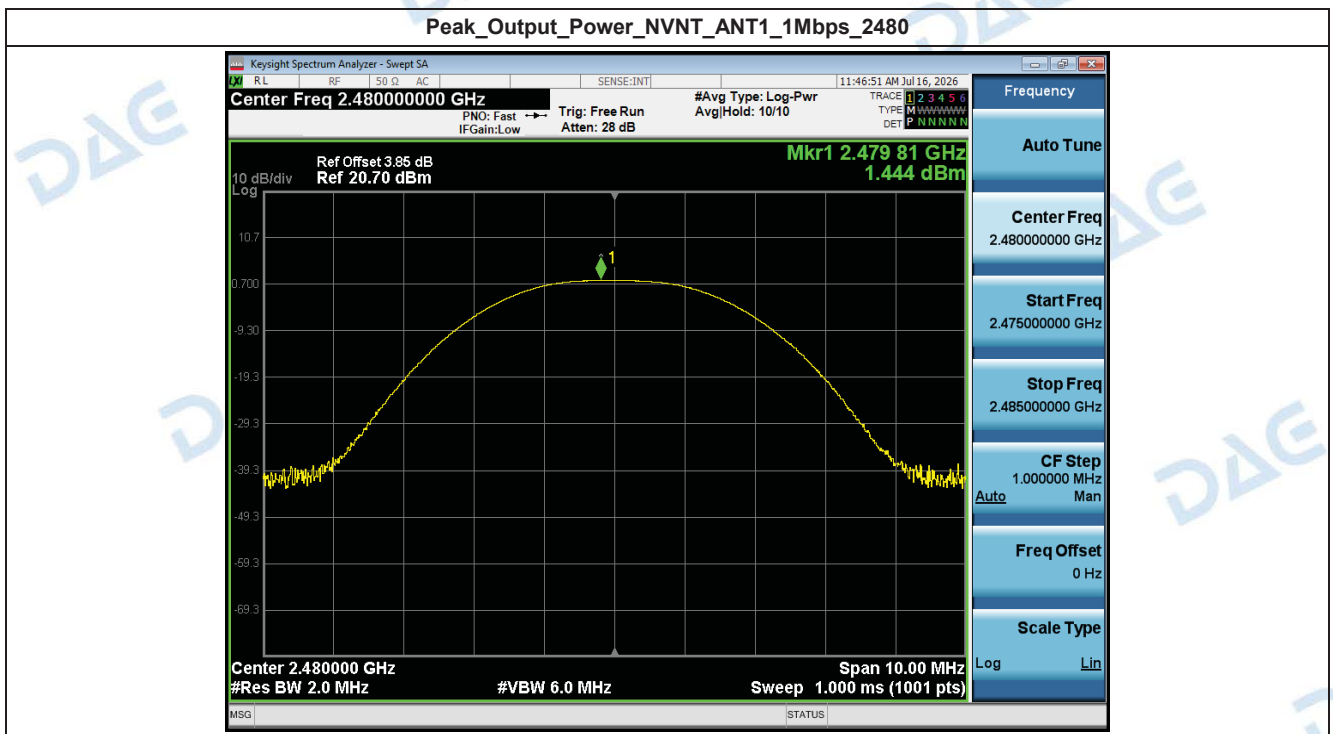
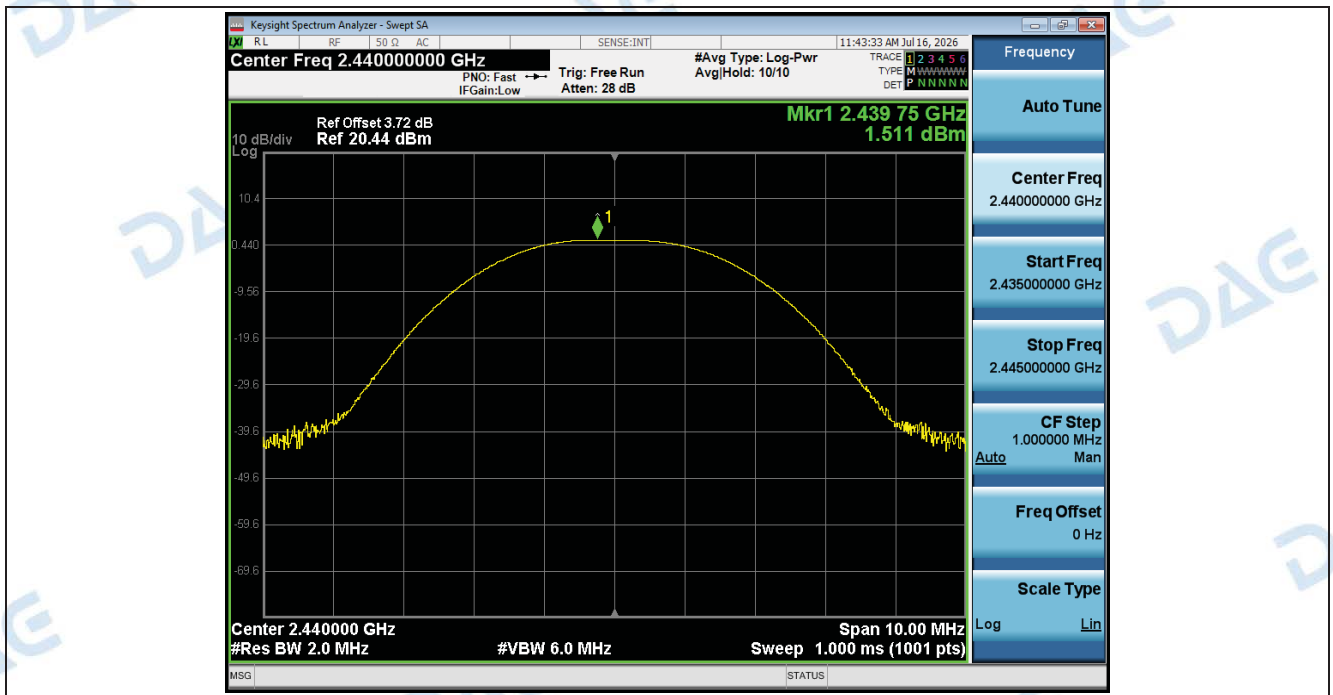
4. Peak Output Power

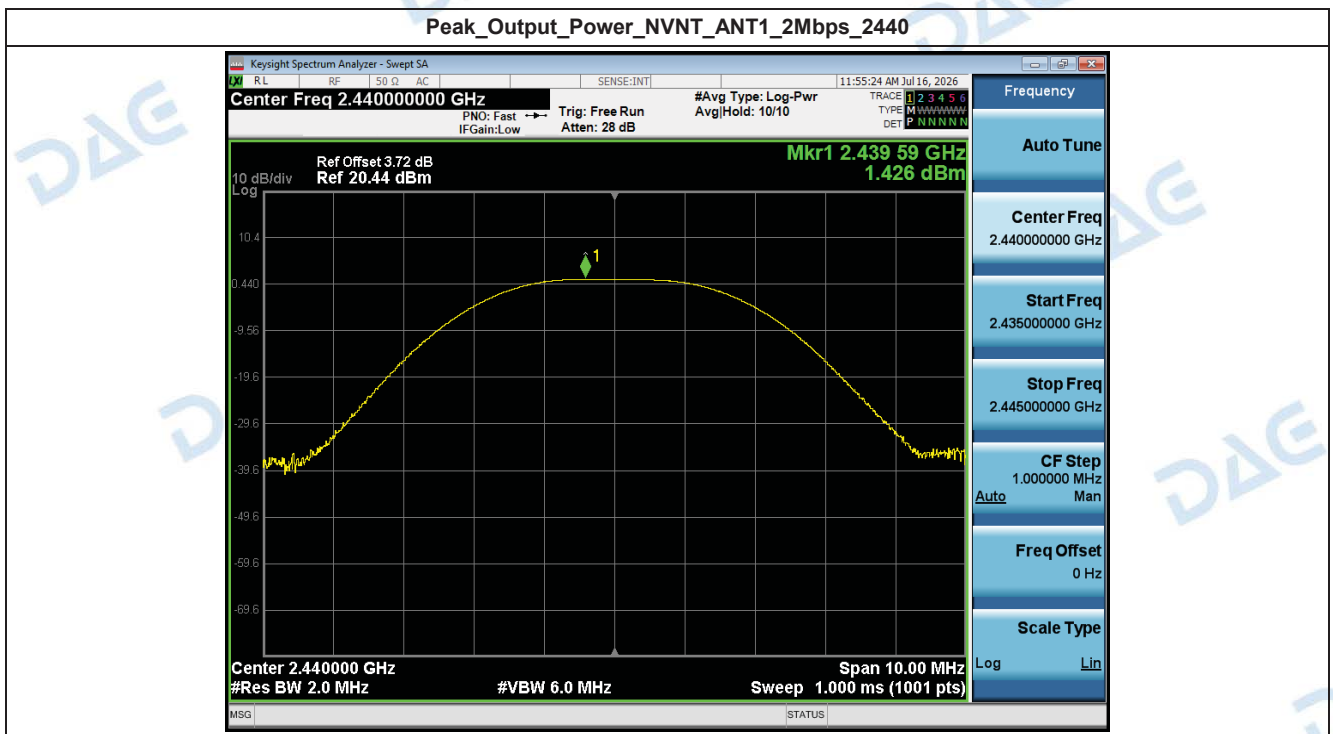
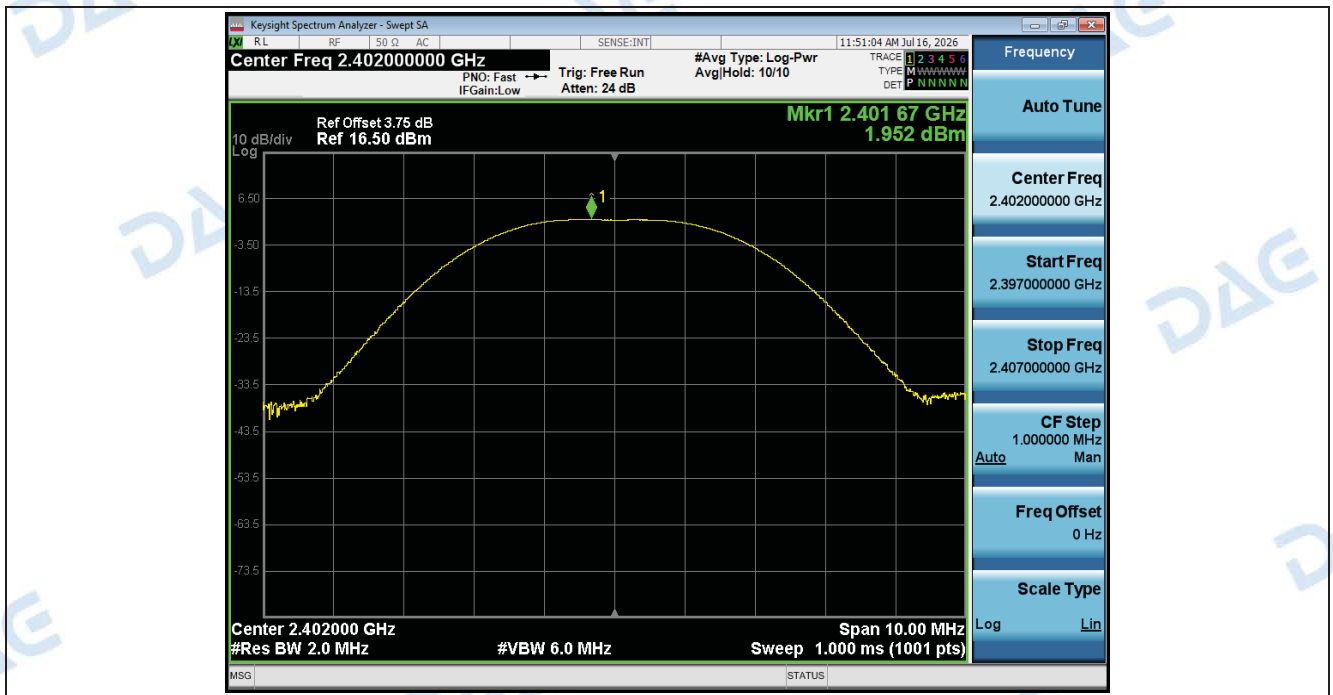
Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1Mbps	2402.00	1.98	1.58	1000	Pass
NVNT	ANT1	1Mbps	2440.00	1.51	1.42	1000	Pass
NVNT	ANT1	1Mbps	2480.00	1.44	1.39	1000	Pass
NVNT	ANT1	2Mbps	2402.00	1.95	1.57	1000	Pass
NVNT	ANT1	2Mbps	2440.00	1.43	1.39	1000	Pass
NVNT	ANT1	2Mbps	2480.00	1.37	1.37	1000	Pass

Peak_Output_Power_NVNT_ANT1_1Mbps_2402



Peak_Output_Power_NVNT_ANT1_1Mbps_2440





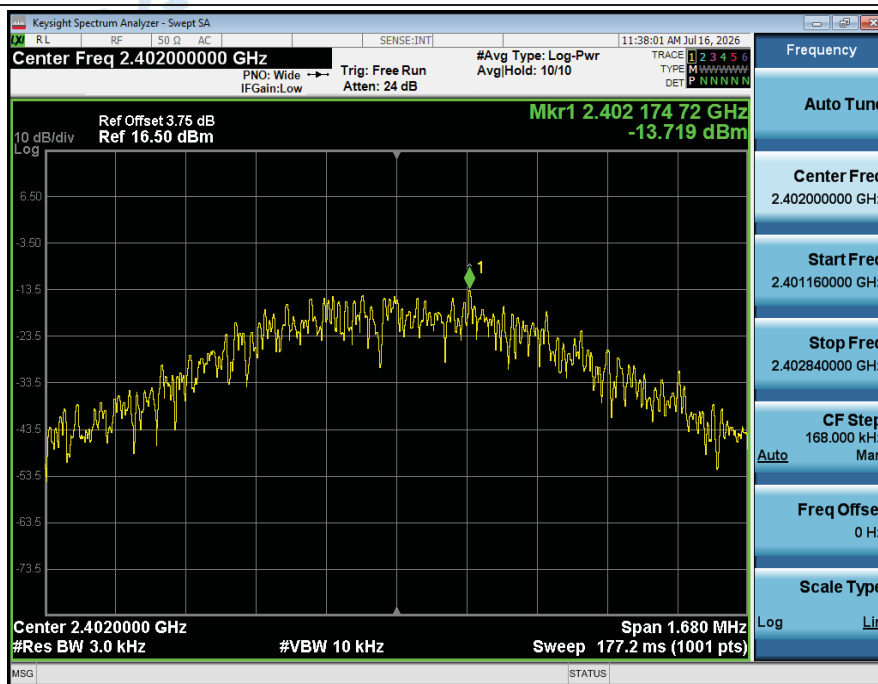
Peak_Output_Power_NVNT_ANT1_2Mbps_2480



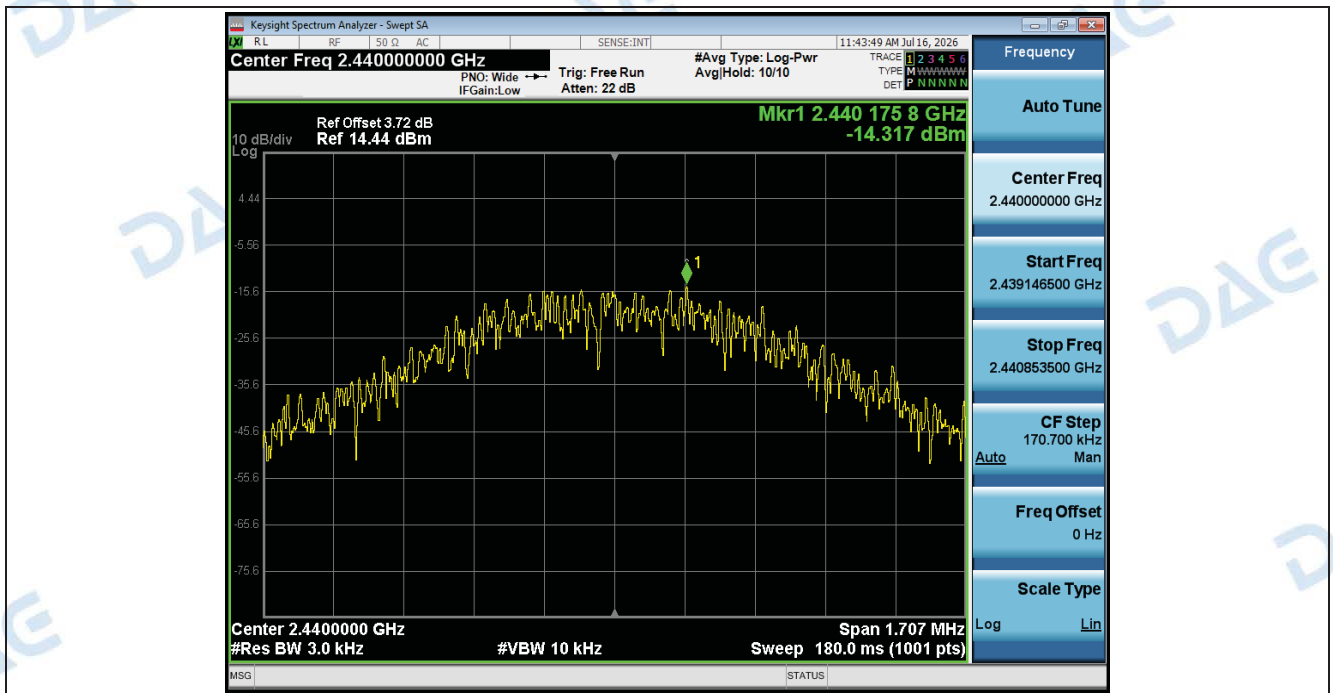
5. Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm/3kHz)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-13.72	8	Pass
NVNT	ANT1	1Mbps	2440.00	-14.32	8	Pass
NVNT	ANT1	1Mbps	2480.00	-14.49	8	Pass
NVNT	ANT1	2Mbps	2402.00	-17.89	8	Pass
NVNT	ANT1	2Mbps	2440.00	-18.43	8	Pass
NVNT	ANT1	2Mbps	2480.00	-18.61	8	Pass

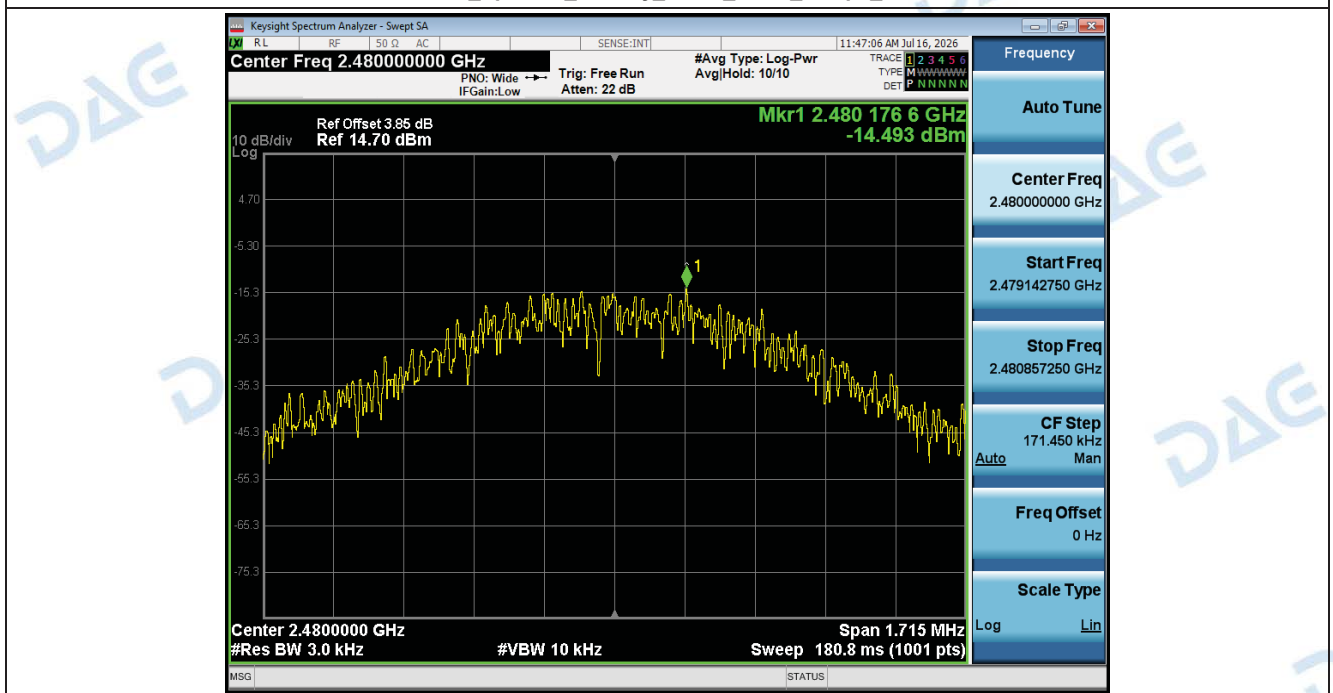
Power_Spectral_Density_NVNT_ANT1_1Mbps_2402



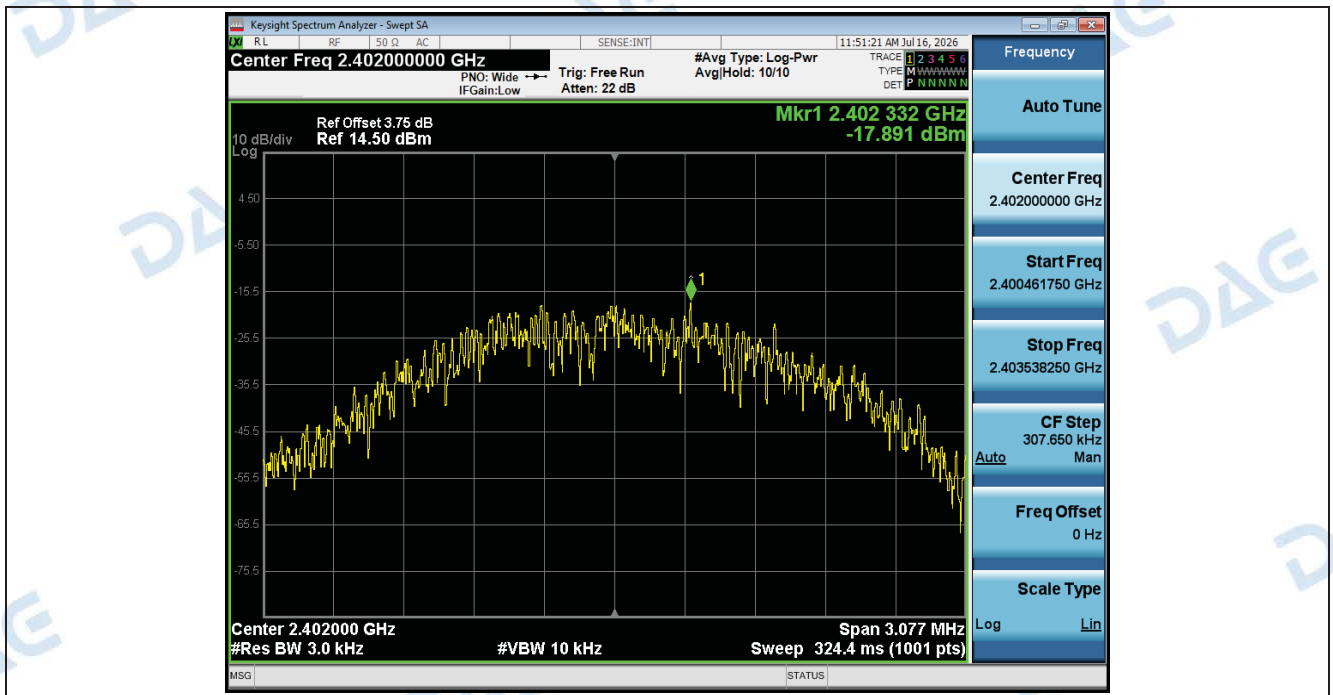
Power_Spectral_Density_NVNT_ANT1_1Mbps_2440



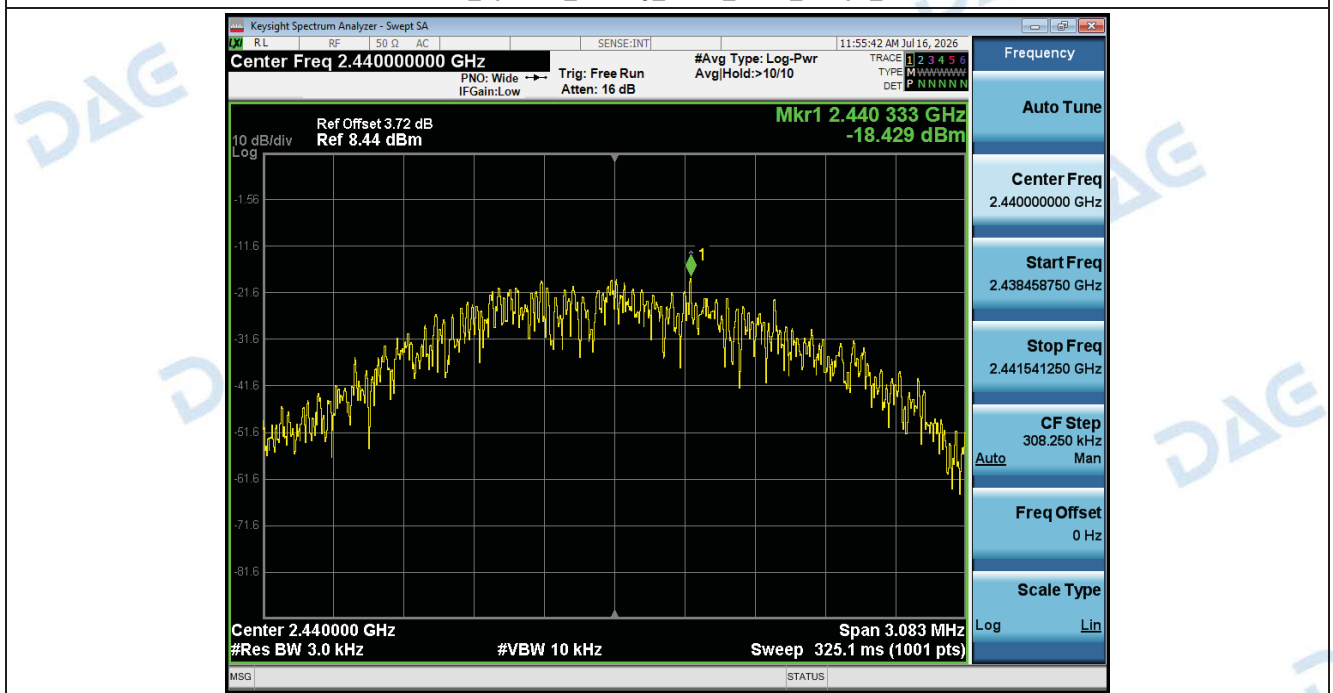
Power_Spectral_Density_NVNT_ANT1_1Mbps_2480



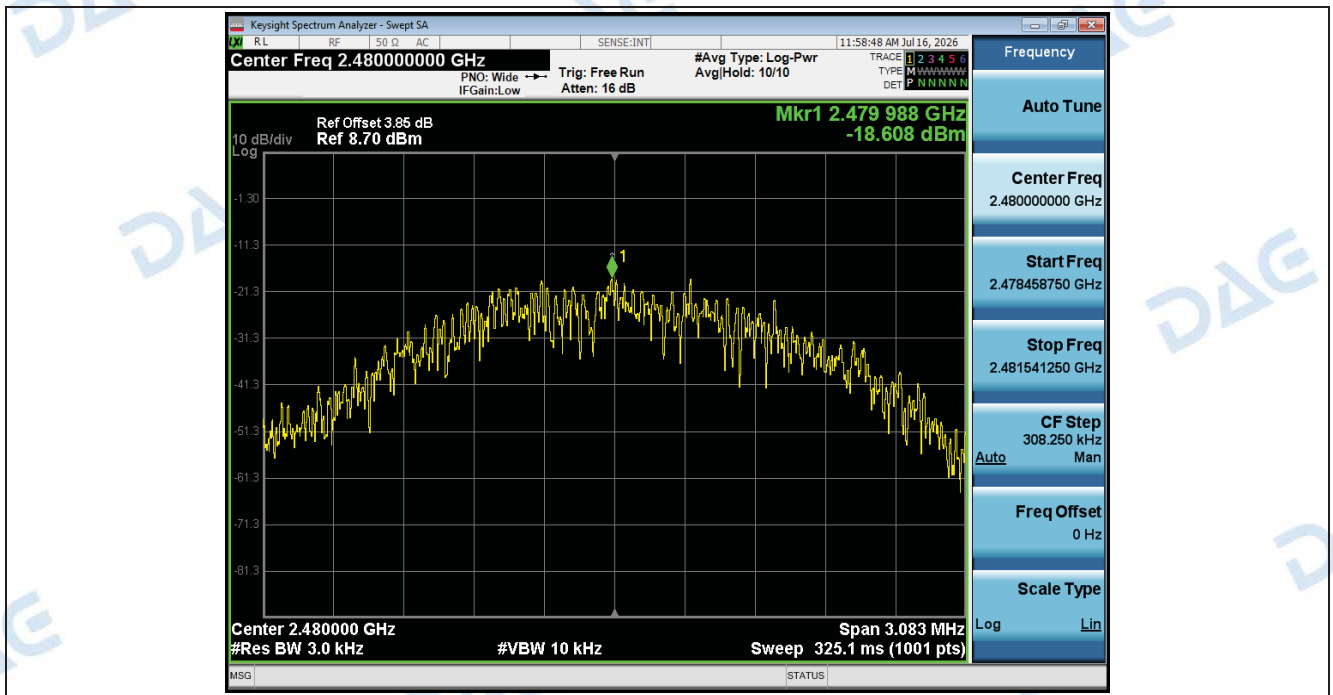
Power_Spectral_Density_NVNT_ANT1_2Mbps_2402



Power_Spectral_Density_NVNT_ANT1_2Mbps_2440



Power_Spectral_Density_NVNT_ANT1_2Mbps_2480



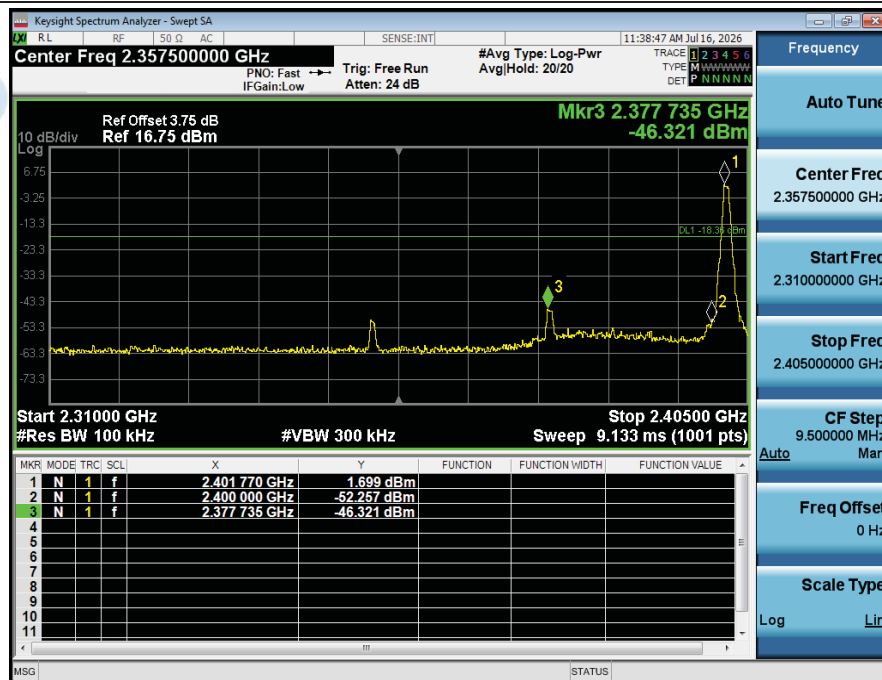
6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2377.735	1.639	-46.321	-18.361	Pass
NVNT	ANT1	1Mbps	2480.00	2491.300	1.033	-54.507	-18.967	Pass
NVNT	ANT1	2Mbps	2402.00	2399.965	1.184	-30.377	-18.816	Pass
NVNT	ANT1	2Mbps	2480.00	2485.350	0.681	-49.128	-19.319	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402



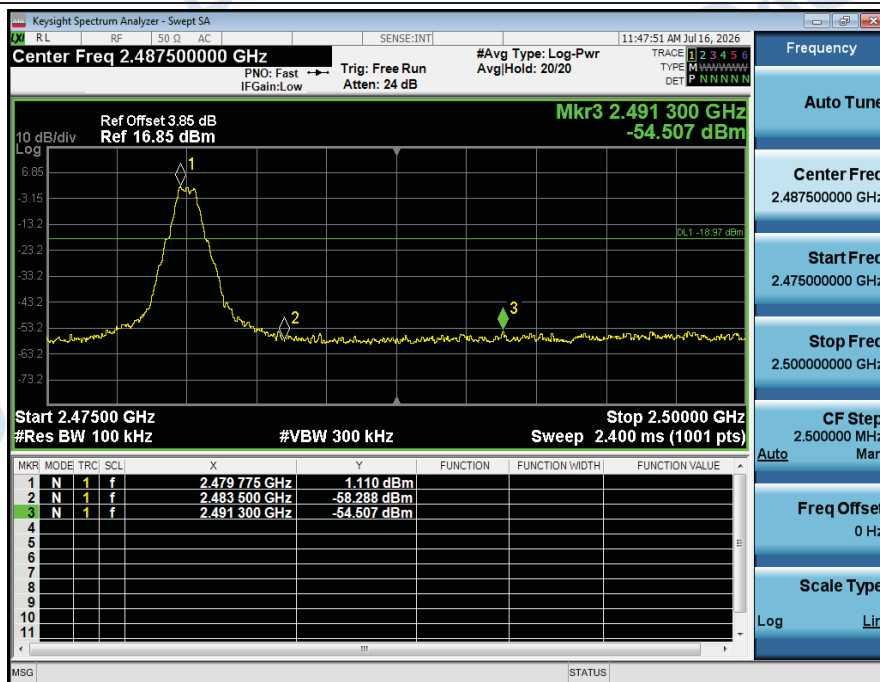
2_Bandedge_NVNT_ANT1_1Mbps_2402



1_Reference_Level_NVNT_ANT1_1Mbps_2480



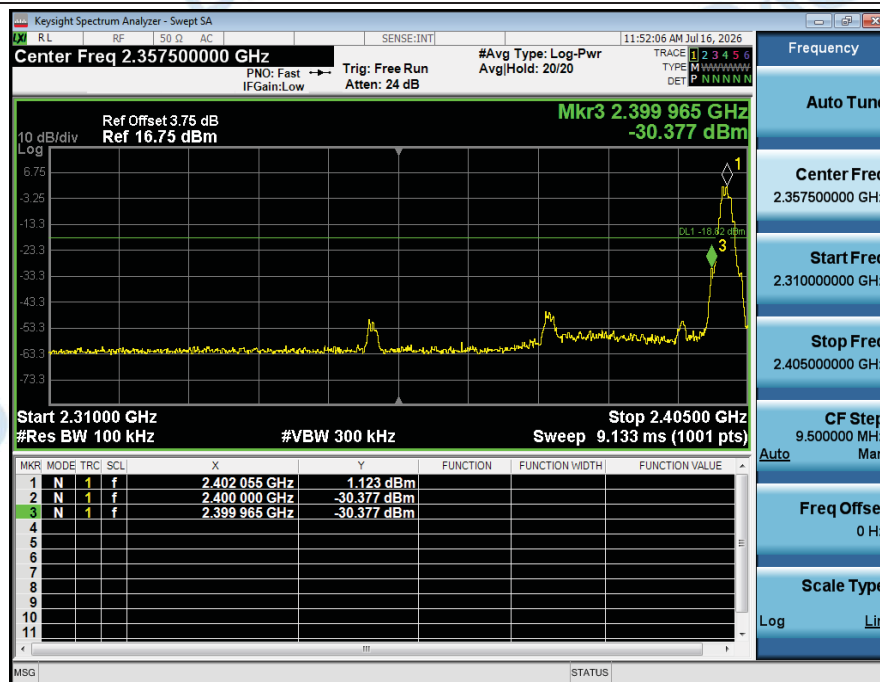
2_Bandedge_NVNT_ANT1_1Mbps_2480



1_Reference_Level_NVNT_ANT1_2Mbps_2402



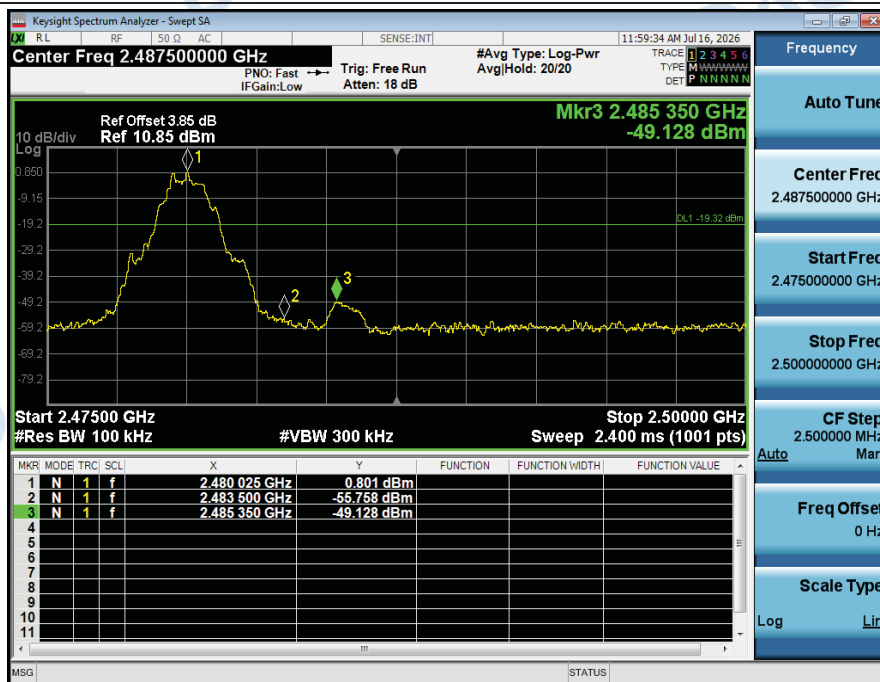
2_Bandedge_NVNT_ANT1_2Mbps_2402



1_Reference_Level_NVNT_ANT1_2Mbps_2480



2_Bandedge_NVNT_ANT1_2Mbps_2480



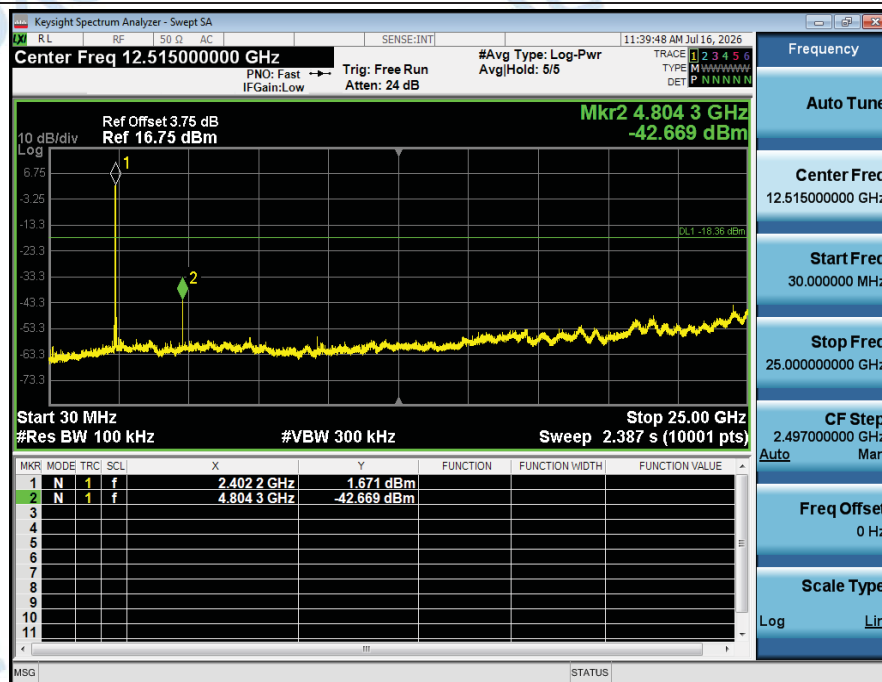
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	1.639	-42.669	-18.361	Pass
NVNT	ANT1	1Mbps	2440.00	1.073	-42.502	-18.927	Pass
NVNT	ANT1	1Mbps	2480.00	1.033	-42.124	-18.967	Pass
NVNT	ANT1	2Mbps	2402.00	1.184	-43.918	-18.816	Pass
NVNT	ANT1	2Mbps	2440.00	0.725	-44.421	-19.275	Pass
NVNT	ANT1	2Mbps	2480.00	0.681	-40.701	-19.319	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402



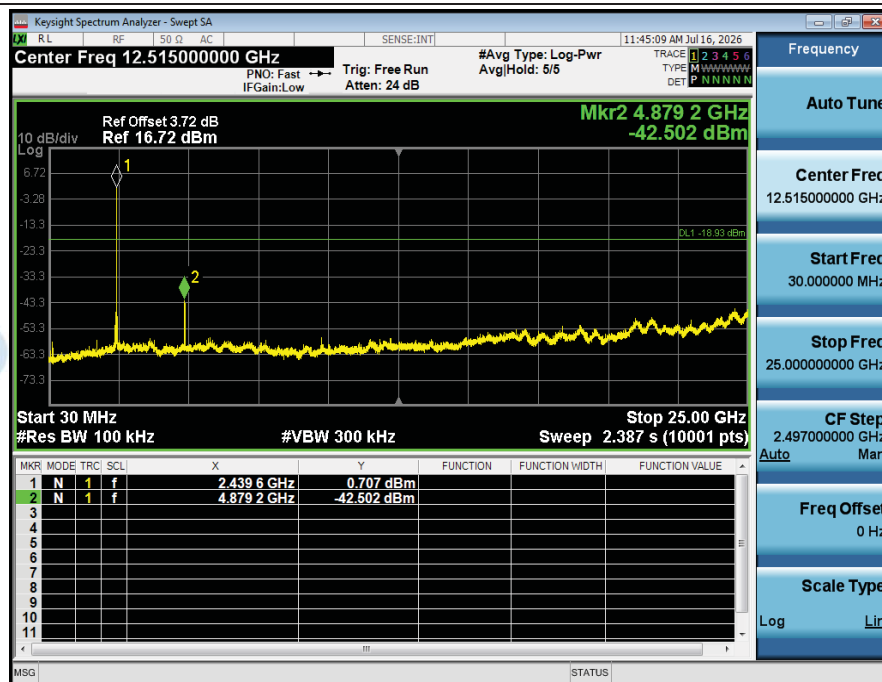
2_Spurious_Emission_NVNT_ANT1_1Mbps_2402



1_Reference_Level_NVNT_ANT1_1Mbps_2440



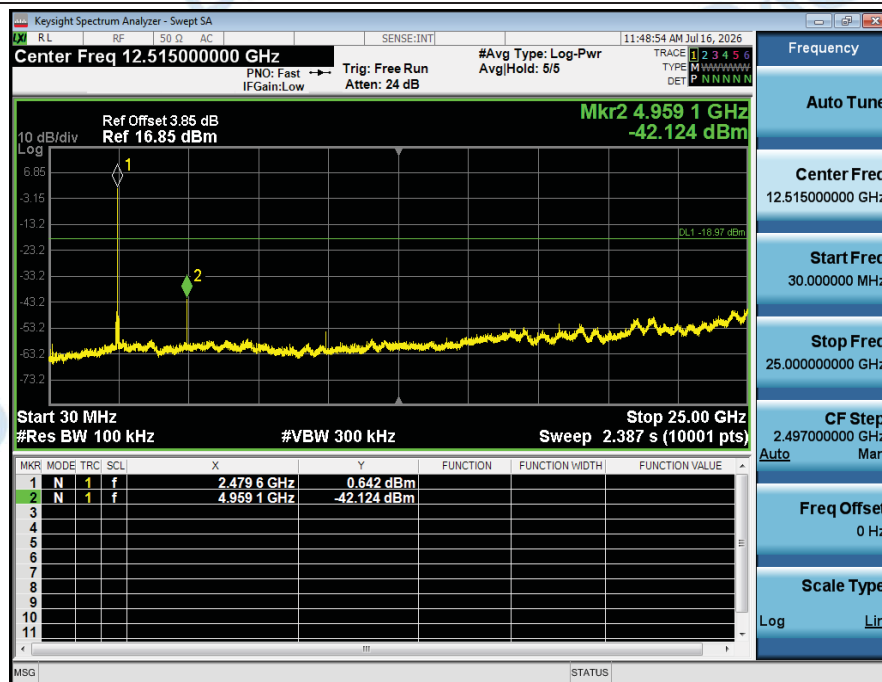
2_Spurious_Emission_NVNT_ANT1_1Mbps_2440



1_Reference_Level_NVNT_ANT1_1Mbps_2480



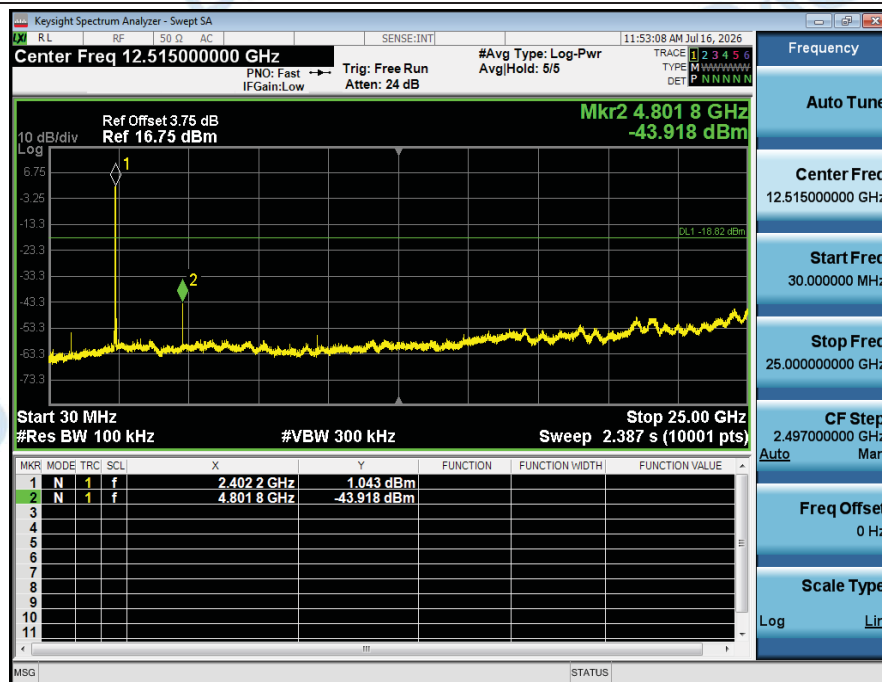
2_Spurious_Emission_NVNT_ANT1_1Mbps_2480



1_Reference_Level_NVNT_ANT1_2Mbps_2402



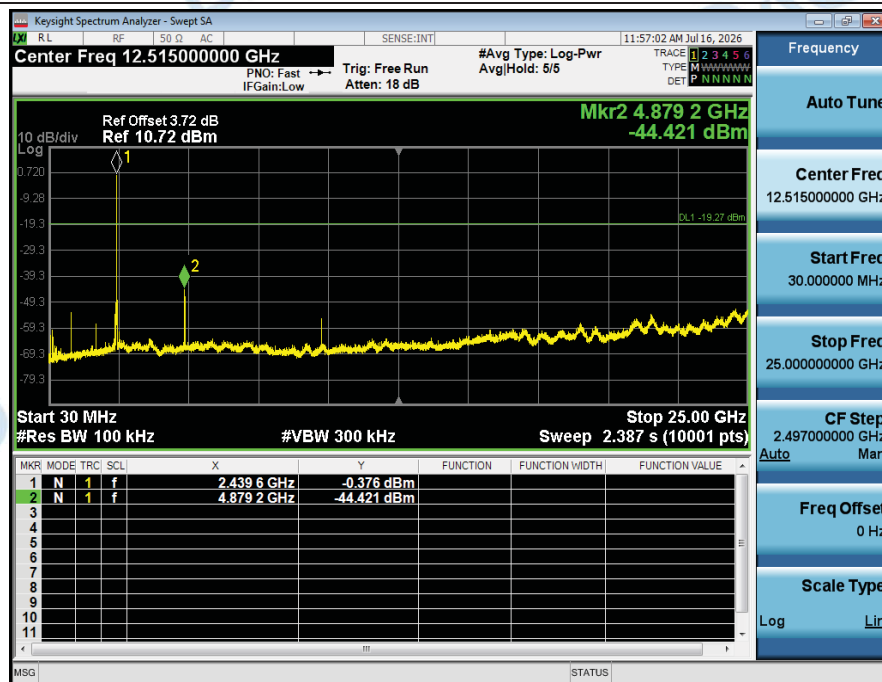
2_Spurious_Emission_NVNT_ANT1_2Mbps_2402



1_Reference_Level_NVNT_ANT1_2Mbps_2440



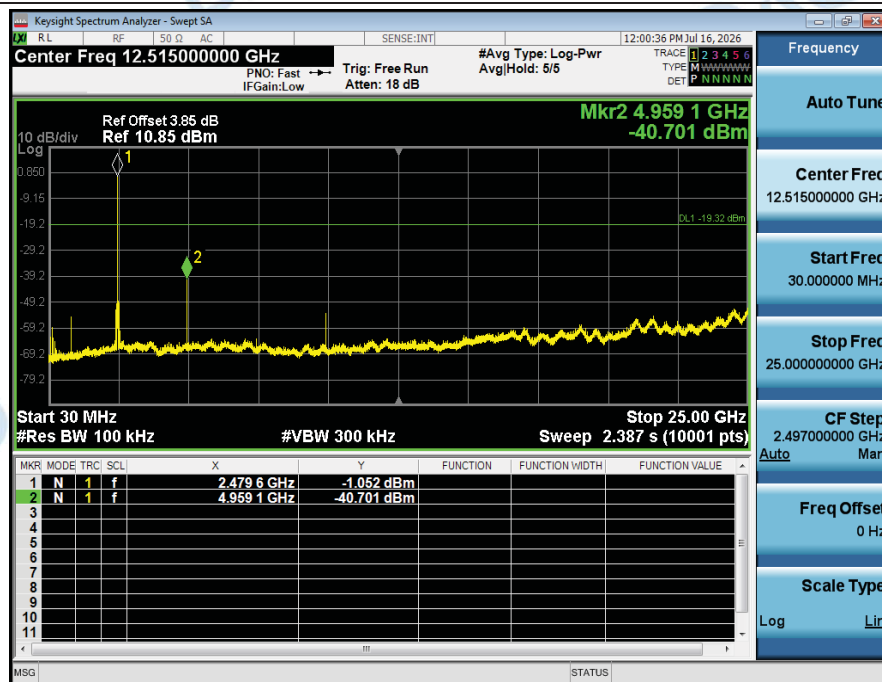
2_Spurious_Emission_NVNT_ANT1_2Mbps_2440



1_Reference_Level_NVNT_ANT1_2Mbps_2480



2_Spurious_Emission_NVNT_ANT1_2Mbps_2480



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