

RF TEST REPORT

For

Dongguan Lingjie Electronics & Technology Co., Ltd

Product Name: wireless mouse

Test Model(s): N62

Report Reference No. : DACE251208002RF001

FCC ID : 2ANBU-N62

Applicant's Name : Dongguan Lingjie Electronics & Technology Co., Ltd

Address : No.23 Zhenxing North RD, Xiegang Town, Dongguan 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 15.249

Date of Receipt : December 8, 2025

Date of Test : December 8, 2025 to December 11, 2025

Data of Issue : December 11, 2025

Result : Pass

Note: This report shall not be reproduced except in full, without the written approval of Shenzhen DACE Testing Technology Co., Ltd. This document may be altered or revised by Shenzhen DACE Testing Technology Co., Ltd. personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample

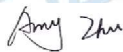
Apply for company information

Applicant's Name	:	Dongguan Lingjie Electronics & Technology Co., Ltd
Address	:	No.23 Zhenxing North RD, Xiegang Town, Dongguan China
Product Name	:	wireless mouse
Test Model(s)	:	N62
Series Model(s)	:	N32, N33, N36, N37, N38, N39, N40, N65, E370, E380
Test Specification Standard(s)	:	47 CFR Part 15.249

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:



Amy Zhu / Test Engineer

December 11, 2025

Supervised by:



Stone Yin / Project Engineer

December 11, 2025

Approved by:



Tom Chen / Manager

December 11, 2025

Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	DACE251208002RF001	December 11, 2025

CONTENTS

1	TEST SUMMARY	5
1.1	TEST STANDARDS	5
1.2	SUMMARY OF TEST RESULT	5
2	GENERAL INFORMATION	6
2.1	CLIENT INFORMATION	6
2.2	DESCRIPTION OF DEVICE (EUT)	6
2.3	DESCRIPTION OF TEST MODES	6
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	OCCUPIED BANDWIDTH	12
4.1.1	E.U.T. Operation:	12
4.1.2	Test Setup Diagram:	13
4.1.3	Test Data:	13
4.2	FIELD STRENGTH OF FUNDAMENTAL	14
4.2.1	E.U.T. Operation:	14
4.2.2	Test Data:	15
4.3	BAND EDGE EMISSIONS (RADIATED)	16
4.3.1	E.U.T. Operation:	16
4.3.2	Test Setup Diagram:	17
4.3.3	Test Data:	18
4.4	EMISSIONS IN FREQUENCY BANDS (BELOW 1GHz)	22
4.4.1	E.U.T. Operation:	23
4.4.2	Test Data:	24
4.5	EMISSIONS IN FREQUENCY BANDS (ABOVE 1GHz)	26
4.5.1	E.U.T. Operation:	27
4.5.2	Test Setup Diagram:	27
4.5.3	Test Data:	28
5	TEST SETUP PHOTOS	34
6	PHOTOS OF THE EUT	35
7	OCCUPIED BANDWIDTH	37

1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

47 CFR Part 15.249: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5875 MHz, and 24.0-24.25 GHz

1.2 Summary of Test Result

Item	Standard	Method	Requirement	Result
Antenna requirement	47 CFR Part 15.249		47 CFR Part 15.203	Pass
Occupied Bandwidth	47 CFR Part 15.249	ANSI C63.10-2020, section 6.9.2	47 CFR 15.215(c)	Pass
Field strength of fundamental	47 CFR Part 15.249	ANSI C63.10-2020 section 6.6	47 CFR 15.249(a) 47 CFR 15.249(b)(1)	Pass
Band edge emissions (Radiated)	47 CFR Part 15.249	ANSI C63.10-2020 section 6.6.4	47 CFR 15.249(d)	Pass
Emissions in frequency bands (below 1GHz)	47 CFR Part 15.249	ANSI C63.10-2020 section 6.5	47 CFR 15.249(a) 47 CFR 15.249(d) 47 CFR 15.249(e)	Pass
Emissions in frequency bands (above 1GHz)	47 CFR Part 15.249	ANSI C63.10-2020 section 6.6	47 CFR 15.249(a) 47 CFR 15.249(d) 47 CFR 15.249(e)	Pass

2 GENERAL INFORMATION

2.1 Client Information

Applicant's Name : Dongguan Lingjie Electronics & Technology Co., Ltd
Address : No.23 Zhenxing North RD, Xiegang Town, Dongguan China

Manufacturer : Dongguan Lingjie Electronics & Technology Co., Ltd
Address : No.23 Zhenxing North RD, Xiegang Town, Dongguan China

2.2 Description of Device (EUT)

Product Name:	wireless mouse
Model/Type reference:	N62
Sample No.	Q251203005
Series Model:	N32, N33, N36, N37, N38, N39, N40, N65, E370, E380
Model Difference:	There are multiple models of the product, with differences in the color of the appearance and customer requirements for different models in the market, resulting in multiple models. However, the internal circuit boards, PCBs, BOMs, and other electrical structures of these models are the same, and these differences will not affect RF&EMC performance. Test sample model: N62
Trade Mark:	 富德 /MINISO
Power Supply:	DC 1.5V by battery
Operation Frequency:	2402-2480MHz
Number of Channels:	79CH
Modulation Type:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	2.34dBi
Hardware Version:	V1.0
Software Version:	V1.0

2.3 Description of Test Modes

No	Title	Description
TM1	TX	Continuous transmission using GFSK modulation signal
Test Environment		Normal Voltage(DC): 1.5V

Operation Frequency each of channel

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467

6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	/	/

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)
	GFSK
Lowest channel	2402MHz
Middle channel	2440MHz
Highest channel	2480MHz

2.4 Description of Support Units

The EUT was tested as an independent device.

2.5 Equipments Used During The Test

Occupied Bandwidth					
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	/	/
Power divider	MIDEWEST	PWD-2533	SMA-79	2025-04-18	2026-05-10
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
Spectrum Analyzer	Keysight	N9020A	MY55338111	2025-09-16	2026-09-15
Power meter	Agilent	E4416	MY48200166	2025-12-06	2026-12-05

Emissions in frequency bands (above 1GHz)
Field strength of fundamental
Band edge emissions (Radiated)
Emissions in frequency bands (below 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

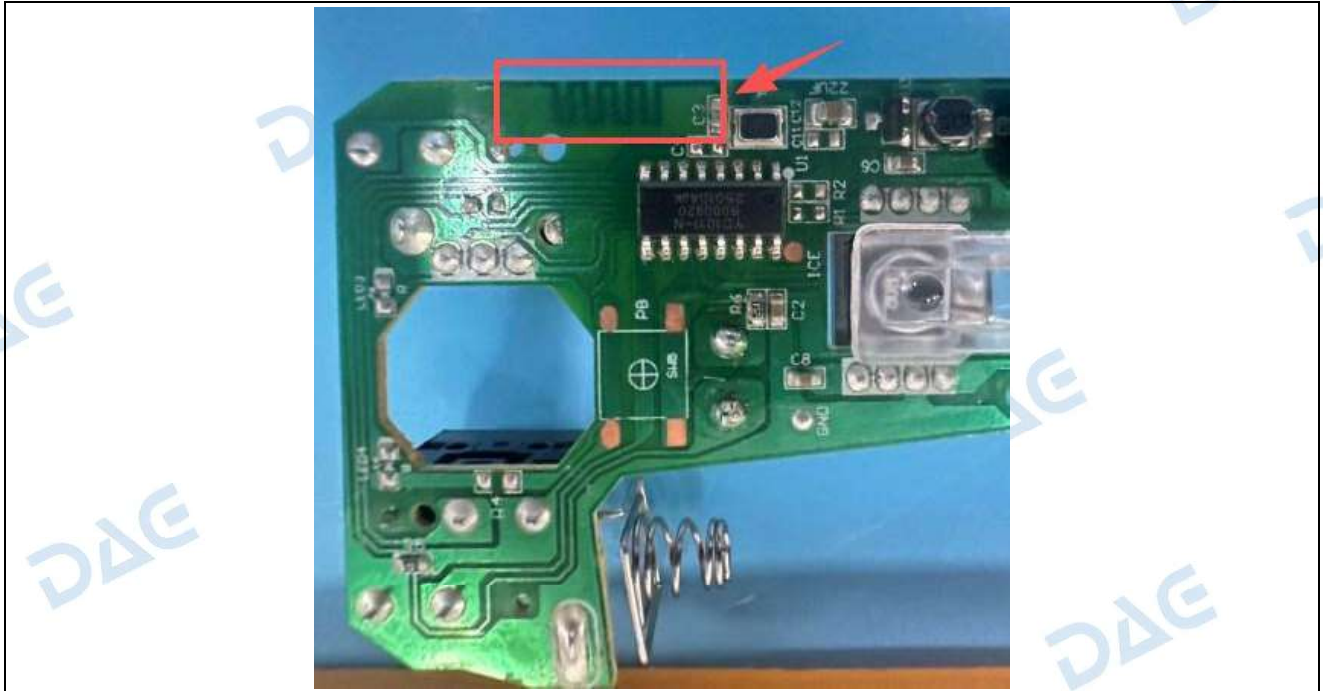
Test Item	Measurement Uncertainty
Occupied Bandwidth	$\pm 3.63\%$
Radiated Emission (Above 1GHz)	$\pm 5.46\text{dB}$
Radiated Emission (Below 1GHz)	$\pm 5.79\text{dB}$
Note: (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor 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.
-------------------	---

3.1.1 Conclusion:



4 Radio Spectrum Matter Test Results (RF)

4.1 Occupied Bandwidth

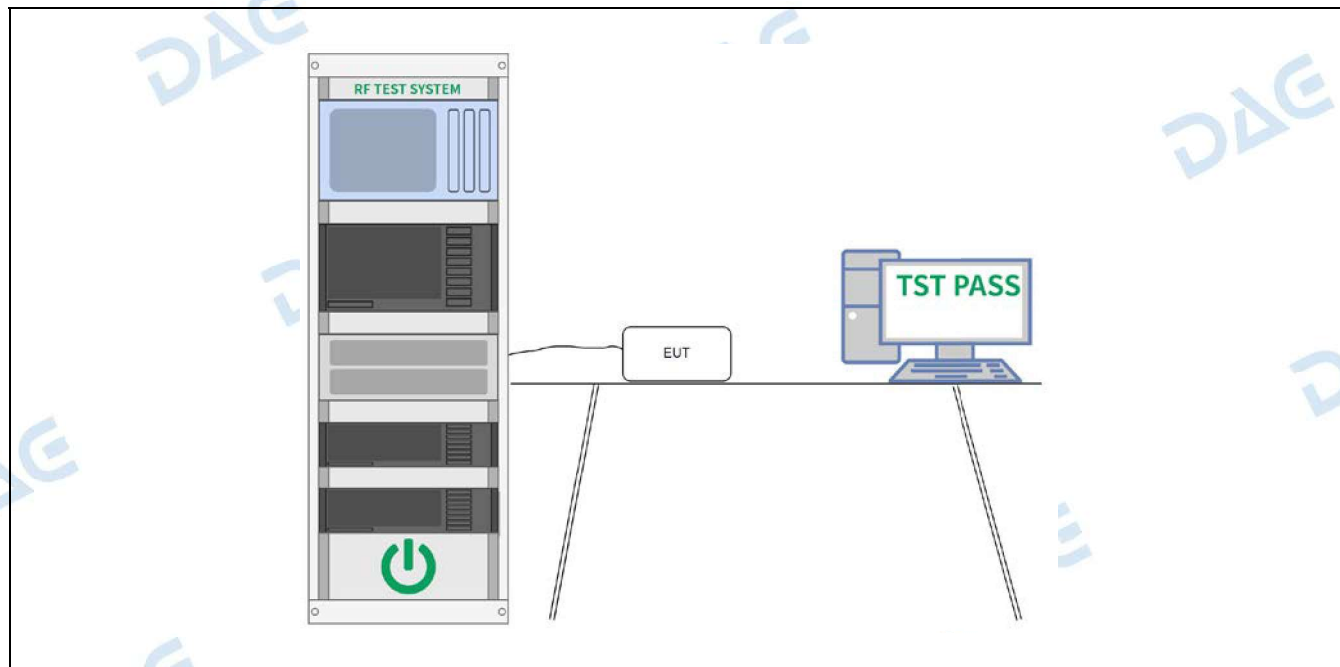
Test Requirement:	47 CFR 15.215(c)
Test Limit:	Refer to 47 CFR 15.215(c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.
Test Method:	ANSI C63.10-2020, section 6.9.2
Procedure:	a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW. b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement. c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2. d) Steps a) through c) might require iteration to adjust within the specified tolerances. e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value. f) Set detection mode to peak and trace mode to max hold. g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value). h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - \text{xx}]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument. i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j). j) Place 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 “-xx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “-xx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth. k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

4.1.1 E.U.T. Operation:

Operating Environment:

Temperature:	22.9 °C	Humidity:	46 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.1.2 Test Setup Diagram:



4.1.3 Test Data:

Please Refer to Appendix for Details.

4.2 Field strength of fundamental

Test Requirement:	Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:		
	Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
	902-928 MHz	50	500
	2400-2483.5 MHz	50	500
	5725-5875 MHz	50	500
	24.0-24.25 GHz	250	2500
	The field strength of emissions in this band shall not exceed 2500 millivolts/meter.		
Test Method:	ANSI C63.10-2020 section 6.6		
Procedure:	ANSI C63.10-2020 section 6.6 NOTE: For fundamental frequency, RBW>20dB BW ,VBW>3XRBW, PK detector is for PK value, RMS detector is for AV value.		

4.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.8 °C	Humidity:	46 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.2.2 Test Data:

Frequency (MHz)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dBuV/m)	Detector (PK/AV)	Polarization (H/V)
2402	95.21	114.00	-18.79	PK	H
2402	92.38	94.00	-1.62	PK	V
2440	91.89	114.00	-22.11	PK	H
2440	90.08	94.00	-3.92	PK	V
2480	93.45	114.00	-20.55	PK	H
2480	91.85	94.00	-2.15	PK	V

Note: Margin = Emission Level – Limit; For fundamental frequency, RBW>20dB BW, VBW>=3XRBW

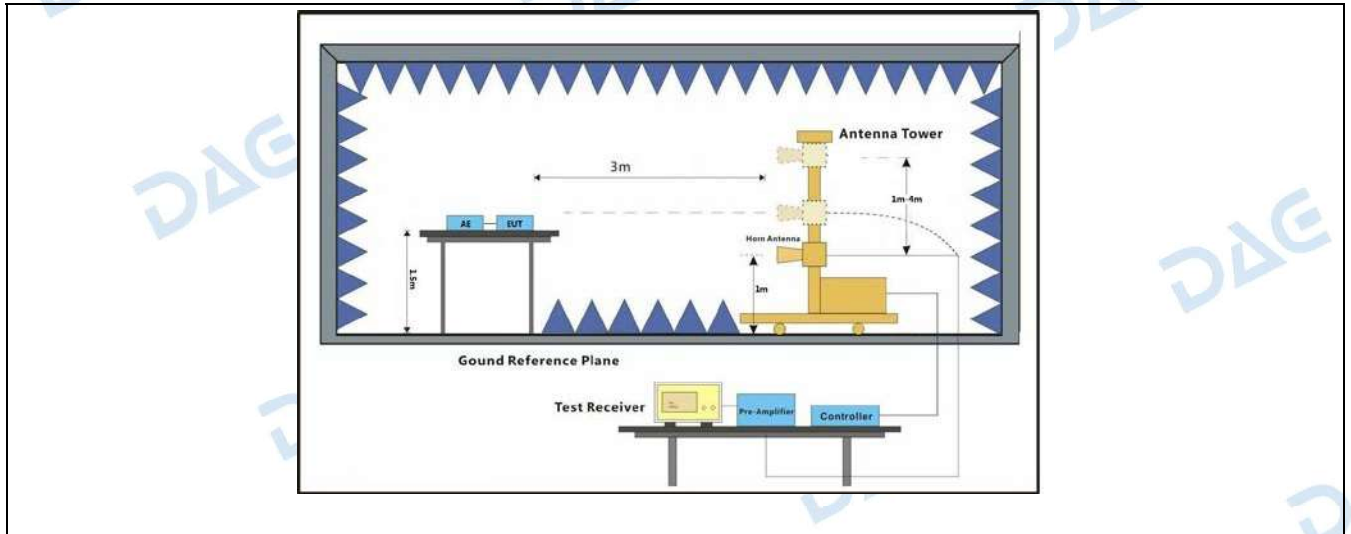
4.3 Band edge emissions (Radiated)

Test Requirement:	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.		
Test Limit:	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.		
	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 section 6.6.4		
Procedure:	ANSI C63.10-2020 section 6.6.4		

4.3.1 E.U.T. Operation:

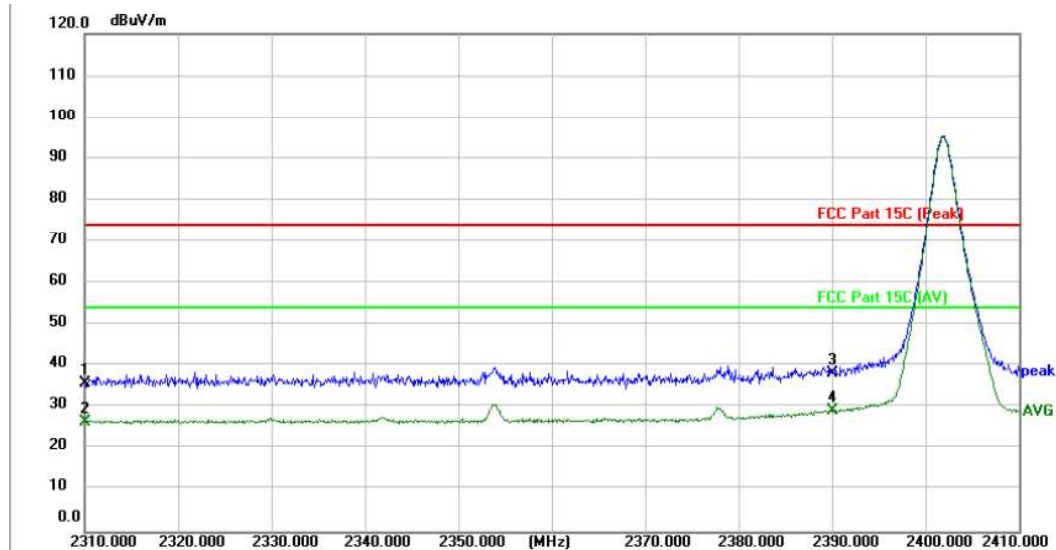
Operating Environment:					
Temperature:	22.4 °C	Humidity:	48 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.3.2 Test Setup Diagram:



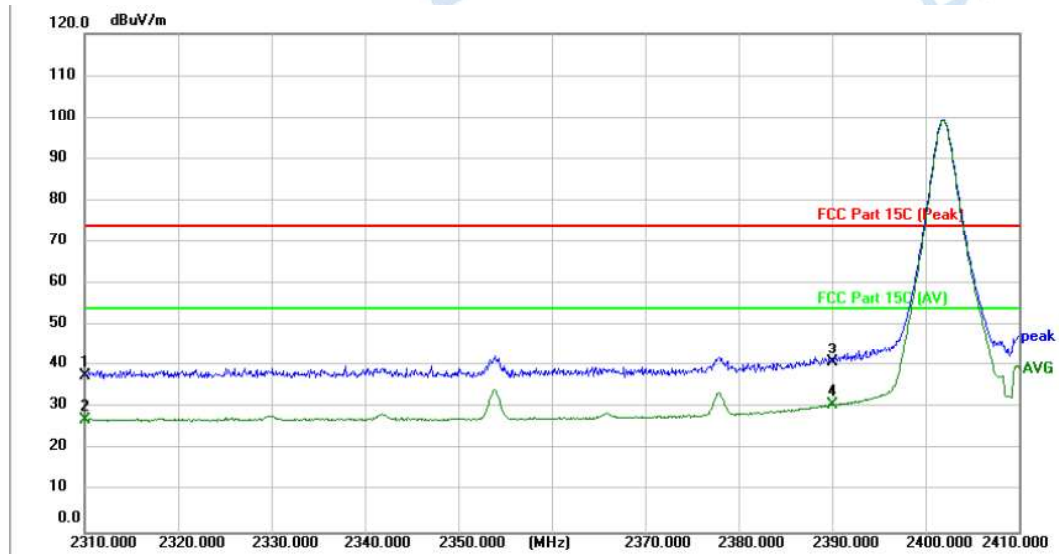
4.3.3 Test Data:

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: L



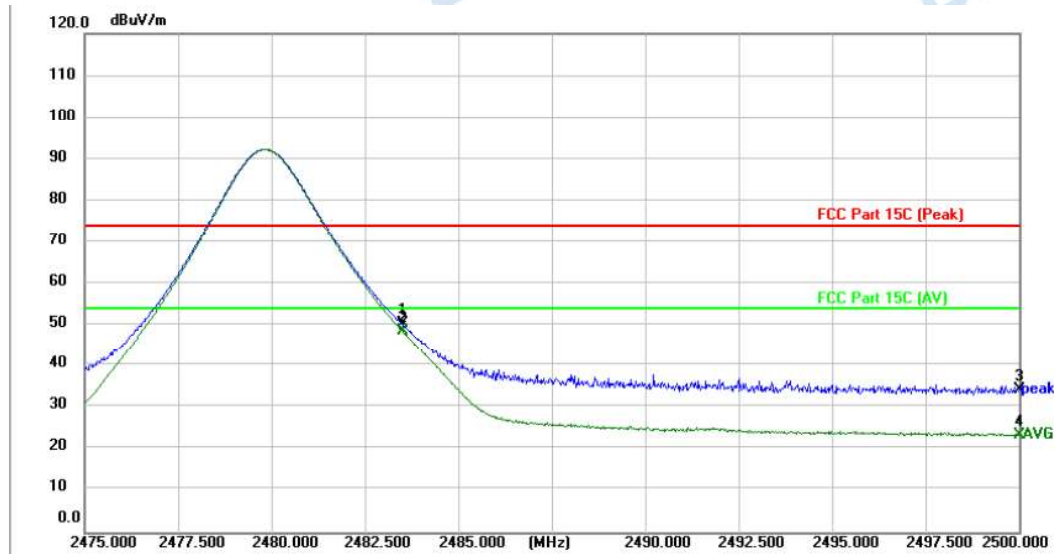
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector		P/F	Remark
1	2310.000	42.33	-6.63	35.70	74.00	-38.30	peak		P	
2	2310.000	33.23	-6.63	26.60	54.00	-27.40	AVG		P	
3	2390.000	44.58	-6.42	38.16	74.00	-35.84	peak		P	
4 *	2390.000	35.65	-6.42	29.23	54.00	-24.77	AVG		P	

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: L



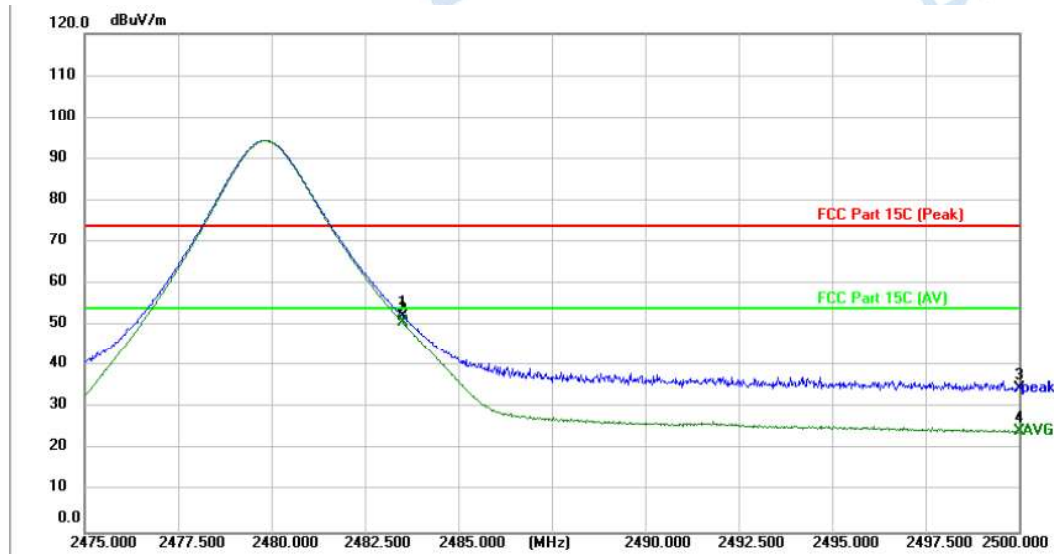
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector			P/F	Remark
1	2310.000	44.39	-6.63	37.76	74.00	-36.24	peak			P	
2	2310.000	33.89	-6.63	27.26	54.00	-26.74	AVG			P	
3	2390.000	47.51	-6.42	41.09	74.00	-32.91	peak			P	
4 *	2390.000	37.27	-6.42	30.85	54.00	-23.15	AVG			P	

TM1 / Polarization: Horizontal / Band: 2.4G / 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	56.66	-6.17	50.49	74.00	-23.51	peak			P	
2 *	2483.500	54.88	-6.17	48.71	54.00	-5.29	AVG			P	
3	2500.000	40.54	-6.13	34.41	74.00	-39.59	peak			P	
4	2500.000	29.79	-6.13	23.66	54.00	-30.34	AVG			P	

TM1 / Polarization: Vertical / Band: 2.4G / 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	58.55	-6.17	52.38	74.00	-21.62	peak			P	
2 *	2483.500	56.97	-6.17	50.80	54.00	-3.20	AVG			P	
3	2500.000	40.73	-6.13	34.60	74.00	-39.40	peak			P	
4	2500.000	30.47	-6.13	24.34	54.00	-29.66	AVG			P	

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

4.4 Emissions in frequency bands (below 1GHz)

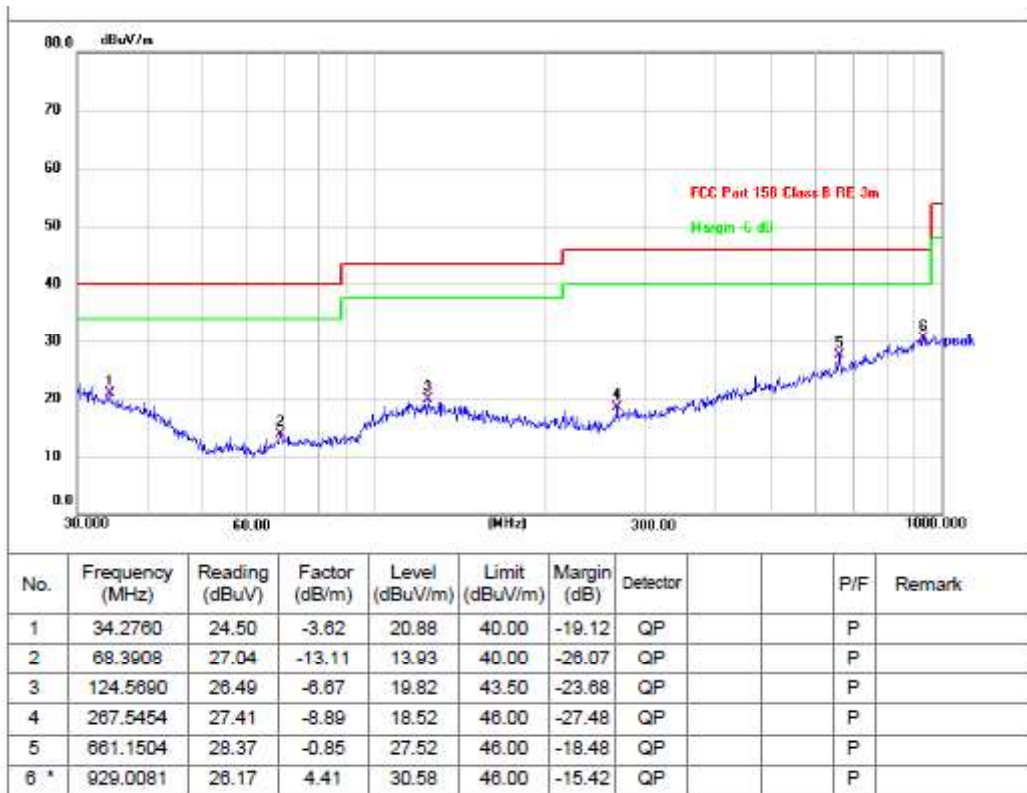
Test Requirement:	47 CFR 15.249(a) 47 CFR 15.249(d) 47 CFR 15.249(e)																																								
Test Limit:	Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following: <table border="1"> <thead> <tr> <th>Fundamental frequency</th><th>Field strength of fundamental (millivolts/meter)</th><th>Field strength of harmonics (microvolts/meter)</th></tr> </thead> <tbody> <tr> <td>902-928 MHz</td><td>50</td><td>500</td></tr> <tr> <td>2400-2483.5 MHz</td><td>50</td><td>500</td></tr> <tr> <td>5725-5875 MHz</td><td>50</td><td>500</td></tr> <tr> <td>24.0-24.25 GHz</td><td>250</td><td>2500</td></tr> </tbody> </table> Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation. <table border="1"> <thead> <tr> <th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr> </thead> <tbody> <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> </tbody> </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. As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.		Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)	902-928 MHz	50	500	2400-2483.5 MHz	50	500	5725-5875 MHz	50	500	24.0-24.25 GHz	250	2500	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
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)																																							
902-928 MHz	50	500																																							
2400-2483.5 MHz	50	500																																							
5725-5875 MHz	50	500																																							
24.0-24.25 GHz	250	2500																																							
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																																							
Test Method:	ANSI C63.10-2020 section 6.5																																								
Procedure:	ANSI C63.10-2020 section 6.5																																								

4.4.1 E.U.T. Operation:

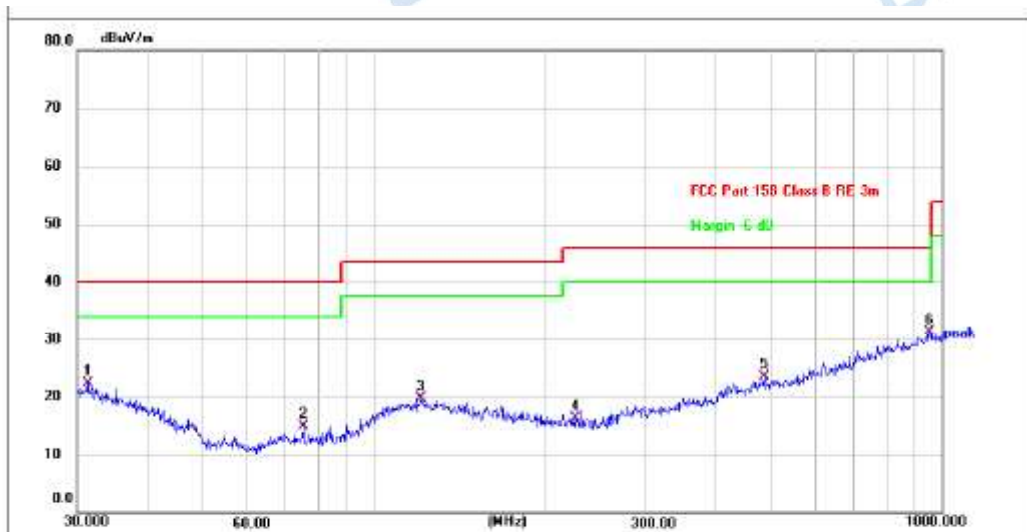
Operating Environment:					
Temperature:	22.5 °C	Humidity:	56 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.4.2 Test Data:

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: L



TM1 / Polarization: Vertical / Band: 2.4G / 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	31.2893	26.53	-4.32	22.21	40.00	-17.79	QP		P	
2	75.1822	27.64	-12.74	14.90	40.00	-25.10	QP		P	
3	121.1231	26.49	-6.81	19.68	43.50	-23.82	QP		P	
4	226.0994	26.12	-9.83	16.29	46.00	-29.71	QP		P	
5	487.3151	26.75	-3.33	23.42	46.00	-22.58	QP		P	
6 *	952.0937	27.00	4.35	31.35	46.00	-14.65	QP		P	

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

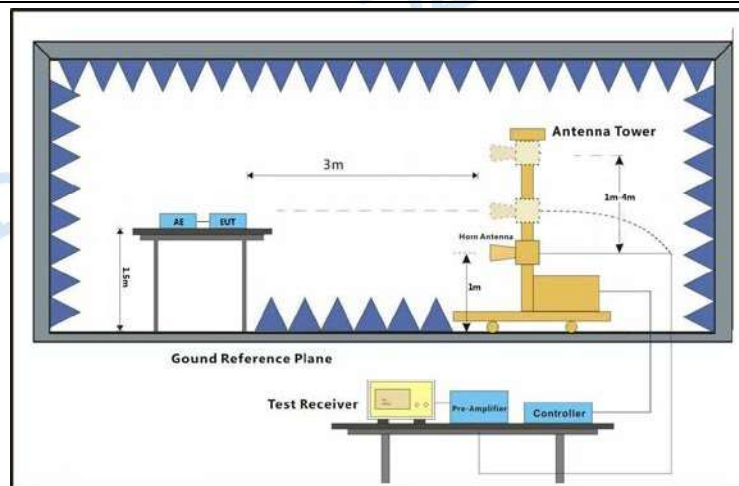
4.5 Emissions in frequency bands (above 1GHz)

Test Requirement:	47 CFR 15.249(a) 47 CFR 15.249(d) 47 CFR 15.249(e)																																								
Test Limit:	Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following: <table border="1"> <thead> <tr> <th>Fundamental frequency</th><th>Field strength of fundamental (millivolts/meter)</th><th>Field strength of harmonics (microvolts/meter)</th></tr> </thead> <tbody> <tr> <td>902-928 MHz</td><td>50</td><td>500</td></tr> <tr> <td>2400-2483.5 MHz</td><td>50</td><td>500</td></tr> <tr> <td>5725-5875 MHz</td><td>50</td><td>500</td></tr> <tr> <td>24.0-24.25 GHz</td><td>250</td><td>2500</td></tr> </tbody> </table> Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation. <table border="1"> <thead> <tr> <th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr> </thead> <tbody> <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> </tbody> </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. As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.		Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)	902-928 MHz	50	500	2400-2483.5 MHz	50	500	5725-5875 MHz	50	500	24.0-24.25 GHz	250	2500	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
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)																																							
902-928 MHz	50	500																																							
2400-2483.5 MHz	50	500																																							
5725-5875 MHz	50	500																																							
24.0-24.25 GHz	250	2500																																							
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																																							
Test Method:	ANSI C63.10-2020 section 6.6																																								
Procedure:	ANSI C63.10-2020 section 6.6																																								

4.5.1 E.U.T. Operation:

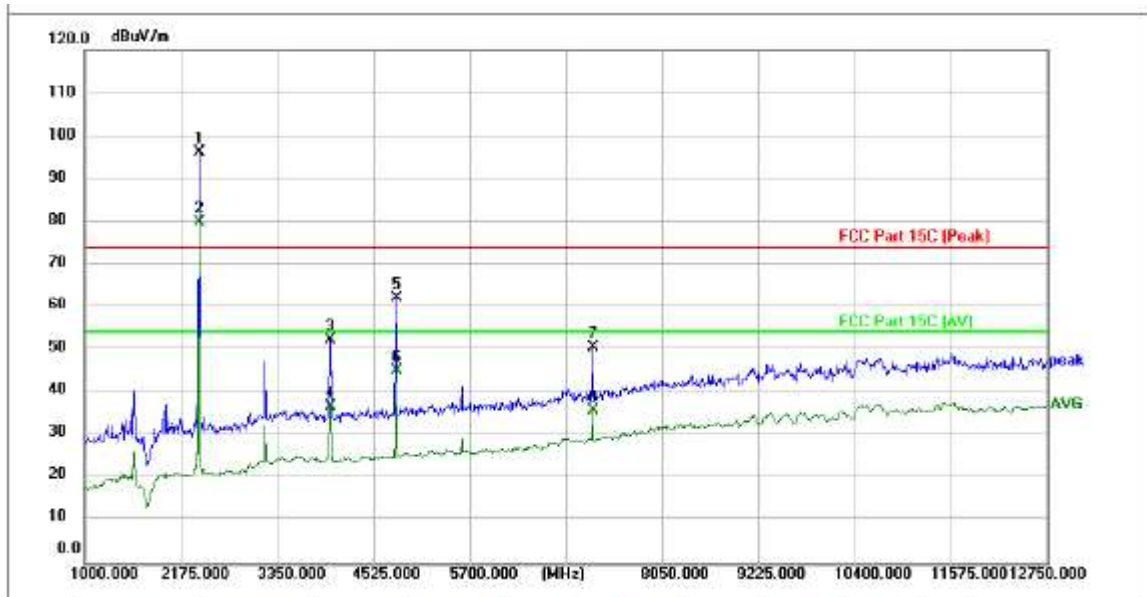
Operating Environment:					
Temperature:	23 °C	Humidity:	48 %	Atmospheric Pressure:	101.1 kPa
Pretest mode:	TM1				
Final test mode:	TM1				

4.5.2 Test Setup Diagram:



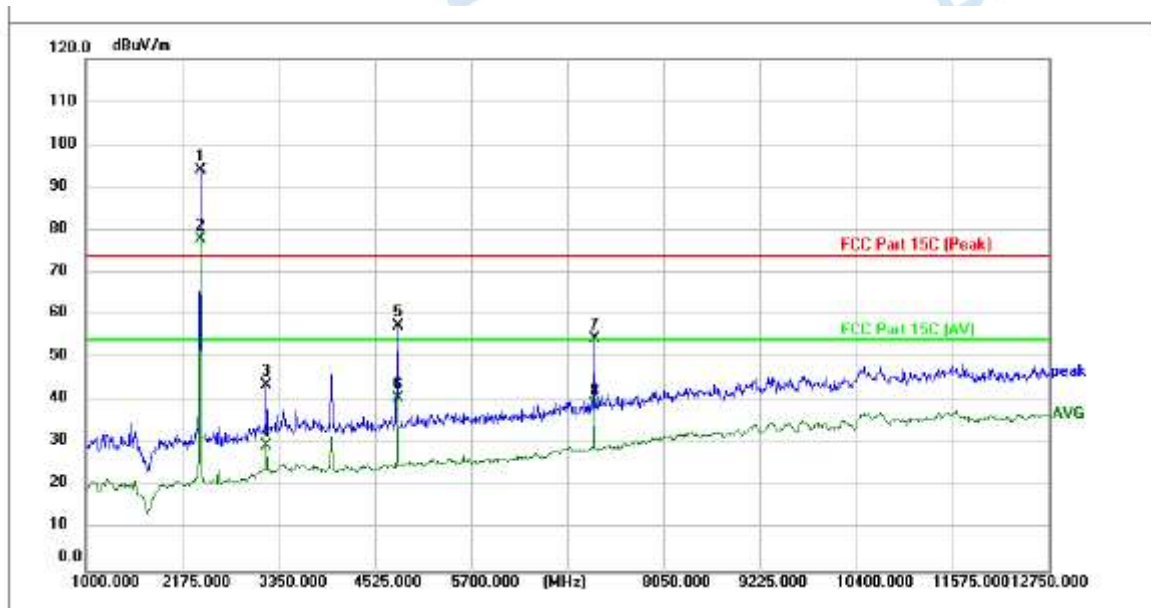
4.5.3 Test Data:

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: L



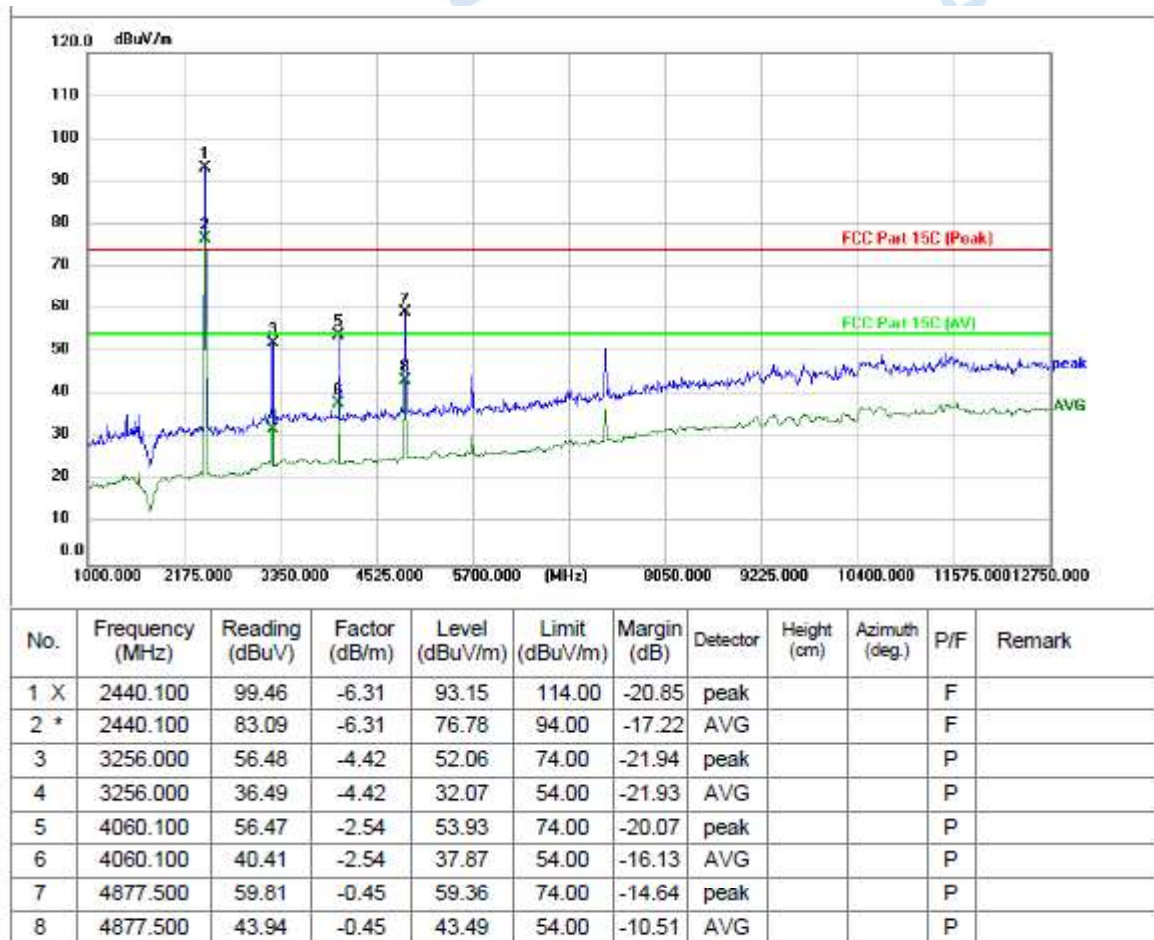
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 X	2402.250	102.62	-6.40	96.22	114.00	-17.78	peak			F	
2 *	2402.250	86.35	-6.40	79.95	94.00	-14.05	AVG			F	
3	3996.250	55.08	-2.67	52.41	74.00	-21.59	peak			P	
4	3996.250	39.42	-2.67	36.75	54.00	-17.25	AVG			P	
5	4804.000	62.96	-0.69	62.27	74.00	-11.73	peak			P	
6	4804.000	45.85	-0.69	45.16	54.00	-8.84	AVG			P	
7	7206.000	46.14	4.37	50.51	74.00	-23.49	peak			P	
8	7206.000	31.47	4.37	35.84	54.00	-18.16	AVG			P	

TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: L

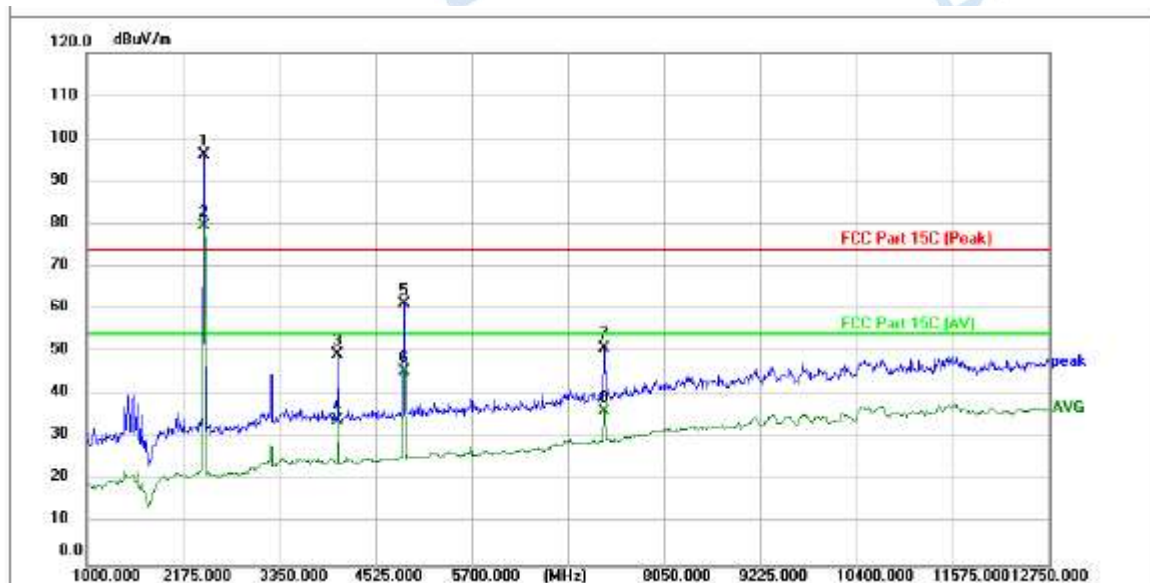


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 X	2402.250	100.33	-6.40	93.93	114.00	-20.07	peak			F	
2 *	2402.250	84.12	-6.40	77.72	94.00	-16.28	AVG			F	
3	3197.250	48.35	-4.63	43.72	74.00	-30.28	peak			P	
4	3197.250	34.23	-4.63	29.60	54.00	-24.40	AVG			P	
5	4804.000	58.07	-0.69	57.38	74.00	-16.62	peak			P	
6	4804.000	41.32	-0.69	40.63	54.00	-13.37	AVG			P	
7	7206.000	50.06	4.37	54.43	74.00	-19.57	peak			P	
8	7206.000	34.88	4.37	39.25	54.00	-14.75	AVG			P	

TM1 / Polarization: Horizontal / Band: 2.4G / BW: 1 / CH: M

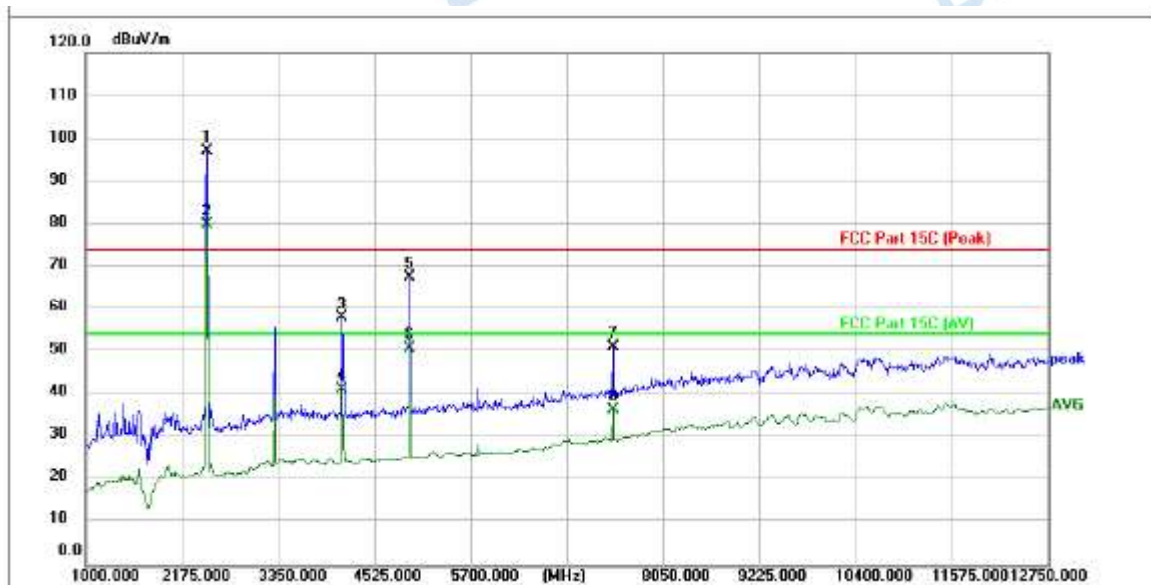


TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: M



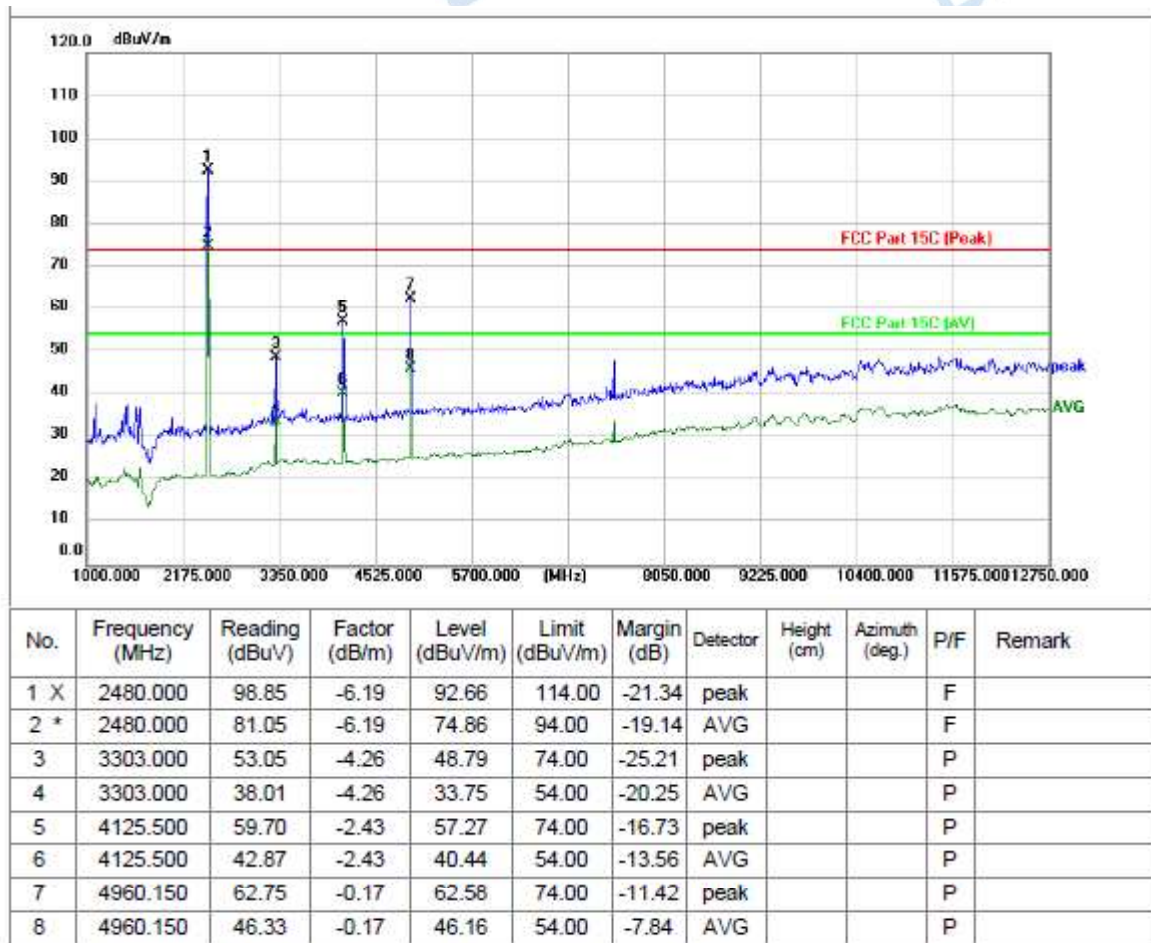
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 X	2440.100	102.49	-6.31	96.18	114.00	-17.82	peak			F	
2 *	2440.100	85.91	-6.31	79.60	94.00	-14.40	AVG			F	
3	4066.750	52.00	-2.54	49.46	74.00	-24.54	peak			P	
4	4066.750	36.64	-2.54	34.10	54.00	-19.90	AVG			P	
5	4880.100	61.80	-0.45	61.35	74.00	-12.65	peak			P	
6	4880.100	45.84	-0.45	45.39	54.00	-8.61	AVG			P	
7	7320.100	46.17	4.57	50.74	74.00	-23.26	peak			P	
8	7320.100	31.47	4.57	36.04	54.00	-17.96	AVG			P	

TM1 / Polarization: Horizontal / Band: 2.4G / 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 X	2480.000	103.27	-6.19	97.08	114.00	-16.92	peak			F	
2 *	2480.000	86.10	-6.19	79.91	94.00	-14.09	AVG			F	
3	4125.500	60.54	-2.43	58.11	74.00	-15.89	peak			P	
4	4125.500	43.60	-2.43	41.17	54.00	-12.83	AVG			P	
5	4960.150	67.72	-0.17	67.55	74.00	-6.45	peak			P	
6	4960.150	51.16	-0.17	50.99	54.00	-3.01	AVG			P	
7	7439.000	46.23	4.78	51.01	74.00	-22.99	peak			P	
8	7439.000	31.53	4.78	36.31	54.00	-17.69	AVG			P	

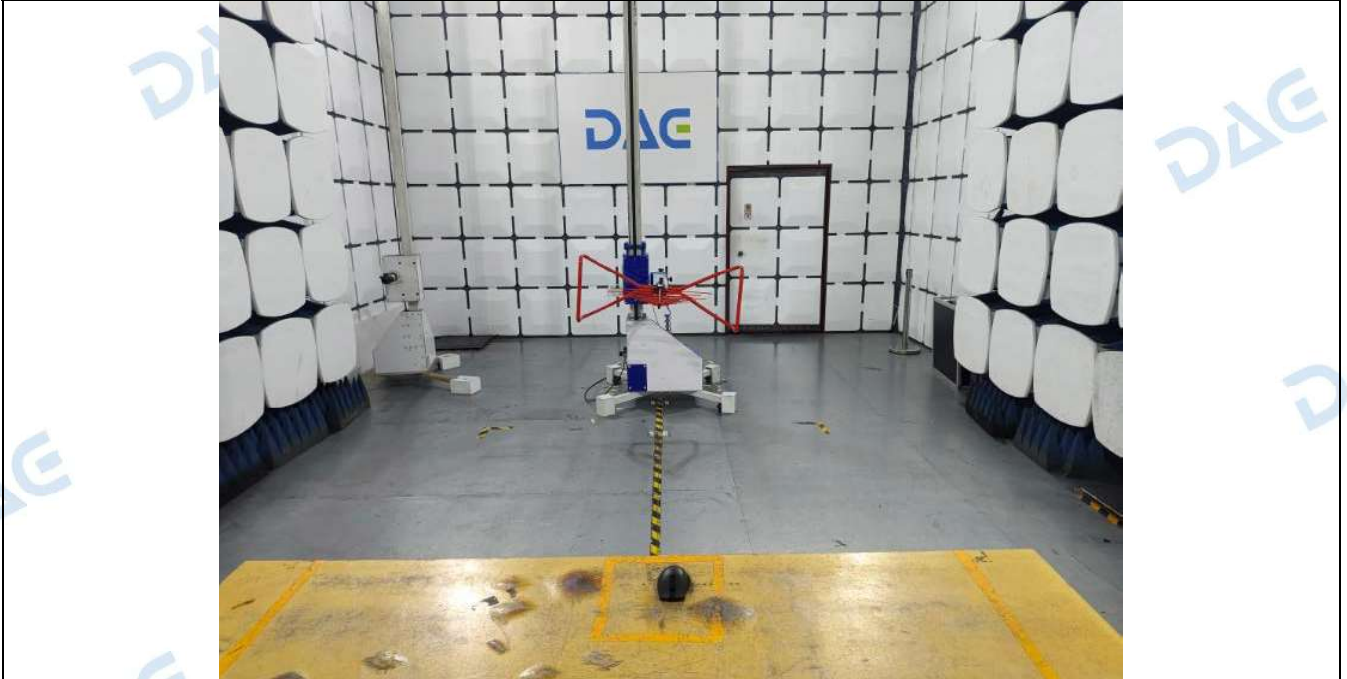
TM1 / Polarization: Vertical / Band: 2.4G / BW: 1 / CH: H



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

5 TEST SETUP PHOTOS

Emissions in frequency bands (below 1GHz)



Emissions in frequency bands (above 1GHz)



6 PHOTOS OF THE EUT

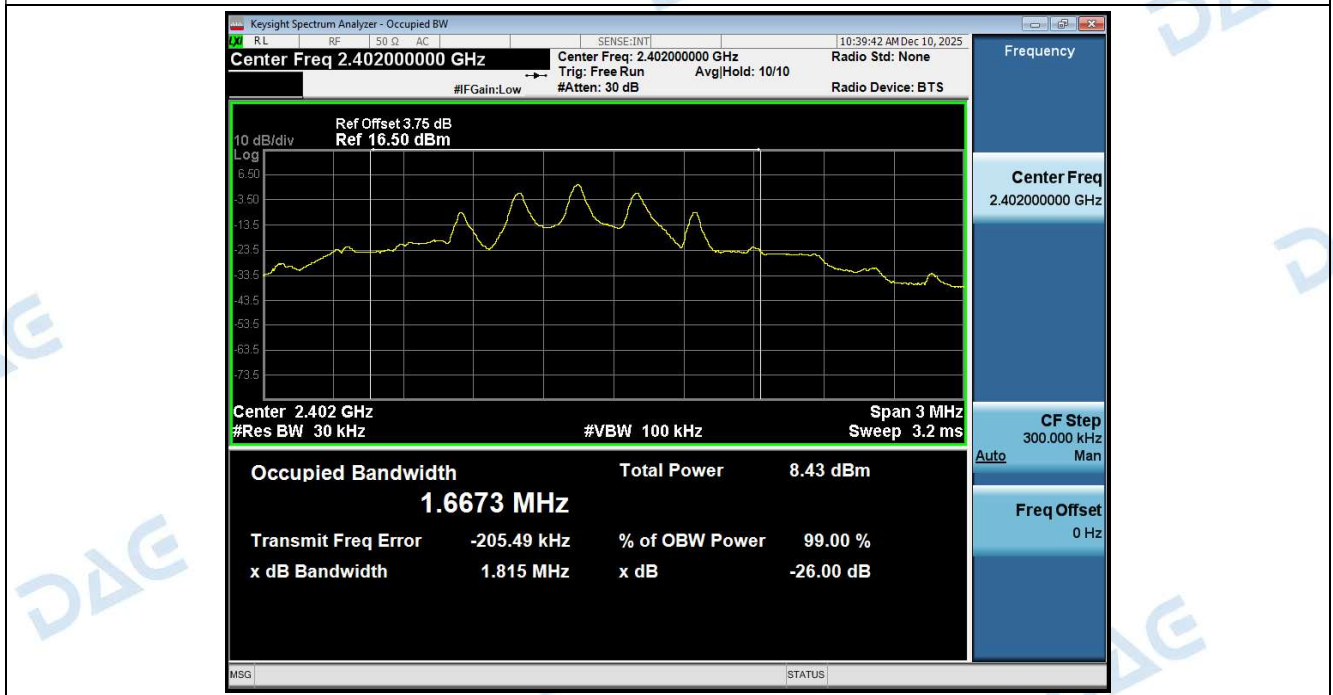
Refer to Appendix - EUT Photos for EUT External Photo and Internal Photo.

Appendix

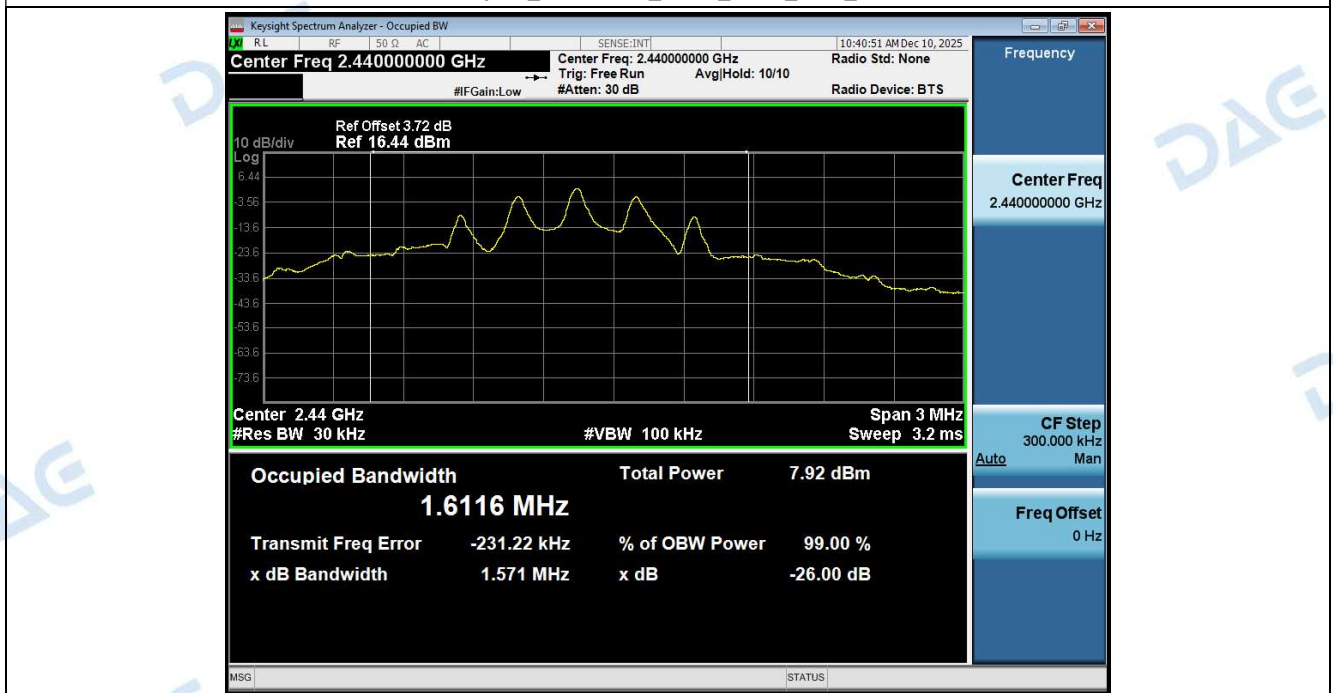
7 Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	GFSK	2402.00	1.815
NVNT	ANT1	GFSK	2440.00	1.571
NVNT	ANT1	GFSK	2480.00	1.568

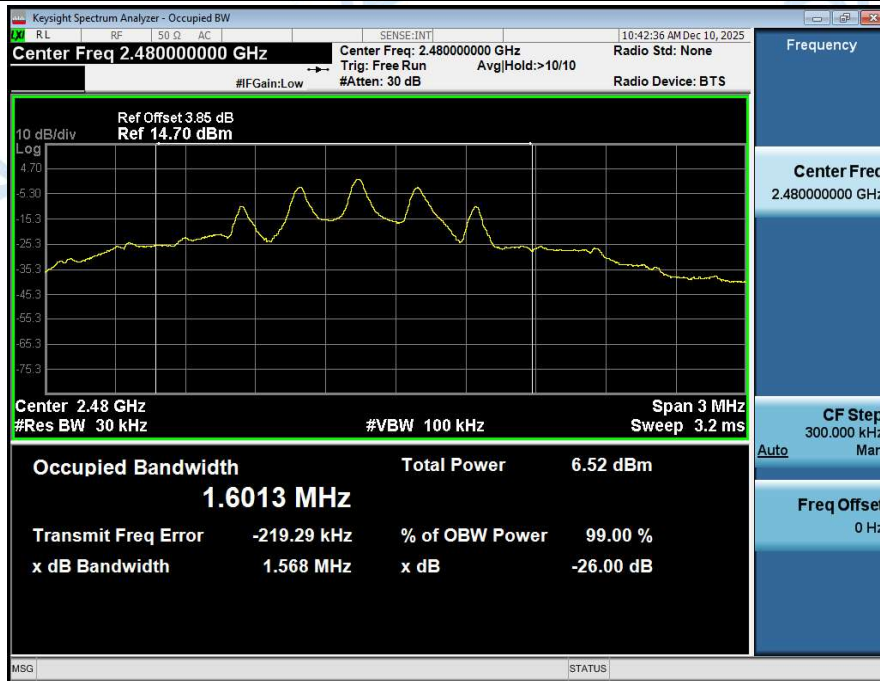
Occupied_Bandwidth_NVNT_ANT1_User_2402



Occupied_Bandwidth_NVNT_ANT1_User_2440



Occupied_Bandwidth_NVNT_ANT1_User_2480



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