

# RF TEST REPORT

For

**Dongguan Miaomiao Electronic Technology Co.,Ltd.**

**Product Name: Smart Pet Feeder**

**Test Model(s): MC-W01-V**

**Report Reference No.** : DACE250313013RL003

**FCC ID** : 2BN4IMC-W01-V

**Applicant's Name** : Dongguan Miaomiao Electronic Technology Co.,Ltd.

**Address** : Room 401,Building 9,No.69 Fengqing Road,Fenggang Town,Dongguan City, Gunagdong Province

**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 15E

**Date of Receipt** : March 13, 2025

**Date of Test** : March 13, 2025 to April 11, 2025

**Data of Issue** : April 11, 2025

**Result** : Pass

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000004028

## Apply for company information

<b>Applicant's Name</b>	:	Dongguan Miaomiao Electronic Technology Co.,Ltd.
<b>Address</b>	:	Room 401,Building 9,No.69 Fengqing Road,Fenggang Town,Dongguan City, Gunagdong Province
<b>Product Name</b>	:	Smart Pet Feeder
<b>Test Model(s)</b>	:	MC-W01-V(Q250307005-4)
<b>Series Model(s)</b>	:	MC-W01-W
<b>Test Specification Standard(s)</b>	:	47 CFR Part 15E

### 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:

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Keren Huang / Test Engineer

April 11, 2025

Supervised by:

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Stone Yin / Project Engineer

April 11, 2025



Approved by:

*Tom Chen*

Tom Chen / Manager

April 11, 2025

## Revision History Of Report

Version	Description	REPORT No.	Issue Date
V1.0	Original	DACE250313013RL003	April 11, 2025

# CONTENTS

<b>1 TEST SUMMARY .....</b>	<b>6</b>
1.1 TEST STANDARDS .....	6
1.2 SUMMARY OF TEST RESULT .....	6
<b>2 GENERAL INFORMATION .....</b>	<b>7</b>
2.1 CLIENT INFORMATION .....	7
2.2 DESCRIPTION OF DEVICE (EUT) .....	7
2.3 DESCRIPTION OF TEST MODES .....	8
2.4 DESCRIPTION OF SUPPORT UNITS .....	9
2.5 EQUIPMENTS USED DURING THE TEST .....	9
2.6 STATEMENT OF THE MEASUREMENT UNCERTAINTY .....	10
2.7 AUTHORIZATIONS .....	11
2.8 ANNOUNCEMENT .....	11
<b>3 RADIO SPECTRUM MATTER TEST RESULTS (RF) .....</b>	<b>12</b>
3.1 CONDUCTED EMISSION AT AC POWER LINE .....	12
3.1.1 E.U.T. Operation: .....	12
3.1.2 Test Setup Diagram: .....	12
3.1.3 Test Data: .....	13
3.2 EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH .....	15
3.2.1 E.U.T. Operation: .....	16
3.2.2 Test Setup Diagram: .....	16
3.2.3 Test Data: .....	16
3.3 MAXIMUM CONDUCTED OUTPUT POWER .....	17
3.3.1 E.U.T. Operation: .....	17
3.3.2 Test Setup Diagram: .....	17
3.3.3 Test Data: .....	17
3.4 POWER SPECTRAL DENSITY .....	18
3.4.1 E.U.T. Operation: .....	18
3.4.2 Test Setup Diagram: .....	18
3.4.3 Test Data: .....	18
3.5 BAND EDGE EMISSIONS (RADIATED) .....	19
3.5.1 E.U.T. Operation: .....	21
3.5.2 Test Setup Diagram: .....	21
3.5.3 Test Data: .....	21
3.6 UNDESIRABLE EMISSION LIMITS (BELOW 1GHz) .....	34
3.6.1 E.U.T. Operation: .....	35
3.6.2 Test Setup Diagram: .....	35
3.6.3 Test Data: .....	35
3.7 UNDESIRABLE EMISSION LIMITS (ABOVE 1GHz) .....	37
3.7.1 E.U.T. Operation: .....	39
3.7.2 Test Setup Diagram: .....	39
3.7.3 Test Data: .....	39
<b>4 TEST SETUP PHOTOS .....</b>	<b>46</b>
<b>5 PHOTOS OF THE EUT .....</b>	<b>47</b>
<b>APPENDIX-5.2G .....</b>	<b>48</b>
1. -26dB AND 99% EMISSION BANDWIDTH .....	48
2. MAXIMUM CONDUCTED OUTPUT POWER .....	57
3. POWER SPECTRAL DENSITY .....	62

4. BANEDGE .....	67
5. SPURIOUS EMISSION .....	71
6. FREQUENCY STABILITY .....	76
APPENDIX-5.8G .....	77
1. -6dB EMISSION BANDWIDTH .....	77
2. MAXIMUM CONDUCTED OUTPUT POWER .....	82
3. POWER SPECTRAL DENSITY .....	87
4. BANEDGE .....	92
5. SPURIOUS EMISSION .....	96
6. FREQUENCY STABILITY .....	101



# 1 TEST SUMMARY

## 1.1 Test Standards

The tests were performed according to following standards:

**47 CFR Part 15E:** Unlicensed National Information Infrastructure Devices

## 1.2 Summary of Test Result

Item	Method	Requirement	Result
Antenna requirement	/	47 CFR 15.203	Pass
Conducted Emission at AC power line	ANSI C63.10-2020 section 6.2	47 CFR Part 15.207(a)	Pass
Emission bandwidth and occupied bandwidth	ANSI C63.10-2020, section 6.9 & 12.5 KDB 789033 D02, Clause C.2	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use. 47 CFR Part 15.407(e)	Pass
Maximum conducted output power	ANSI C63.10-2020, section 12.4	47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)	Pass
Power spectral density	ANSI C63.10-2020, section 12.6	47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)	Pass
Band edge emissions (Radiated)	ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass
Undesirable emission limits (below 1GHz)	ANSI C63.10-2020, section 12.7.4, 12.7.5	47 CFR Part 15.407(b)(9)	Pass
Undesirable emission limits (above 1GHz)	ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass

Note: 1.N/A -this device(EUT) is not applicable to this testing item

2. RF-conducted test results including cable loss.

## 2 GENERAL INFORMATION

### 2.1 Client Information

**Applicant's Name** : Dongguan Miaomiao Electronic Technology Co.,Ltd.  
**Address** : Room 401,Building 9,No.69 Fengqing Road,Fenggang Town,Dongguan City, Gunagdong Province

**Manufacturer** : Dongguan Miaomiao Electronic Technology Co.,Ltd.  
**Address** : Room 401,Building 9,No.69 Fengqing Road,Fenggang Town,Dongguan City, Gunagdong Province

### 2.2 Description of Device (EUT)

Product Name:	Smart Pet Feeder
Sample No.:	Q250307005-4
Model/Type reference:	MC-W01-V
Series Model:	MC-WO1-W
Model Difference:	The only difference between product models is the writing of the model due to market reasons, everything else is the same.
Trade Mark:	N/A
Product Description:	Smart Pet Feeder
Power Supply:	DC4.5V from battery; DC5.0V-1A from adapter
Operation Frequency:	802.11a/n(HT20): U-NII Band 1: 5180MHz to 5240MHz; U-NII Band 3: 5745MHz to 5825MHz; 802.11n(HT40): U-NII Band 1: 5190MHz to 5230MHz; U-NII Band 3: 5755MHz to 5795MHz;
Number of Channels:	802.11a/n(HT20):U-NII Band 1: 4;U-NII Band 3: 5; 802.11n(HT40):U-NII Band 1: 2; U-NII Band 3: 2;
Modulation Type:	802.11a: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM);
Antenna Type:	FPC ANTENNA
Antenna Gain:	3.0dBi
Hardware Version:	V1.0
Software Version:	SecureCRT

#### Operation Frequency each of channel

802.11a/n(HT20)

	U-NII Band 1	U-NII Band 3
Channel	Frequency	Frequency
1	5180 MHz	5745 MHz
2	5200 MHz	5765 MHz
3	5220 MHz	5785 MHz
4	5240 MHz	5805 MHz
5	/	5825 MHz

## 802.11n(HT40)

	U-NII Band 1	U-NII Band 3
Channel	Frequency	Frequency
1	5190 MHz	5755 MHz
2	5230 MHz	5795 MHz

## 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:

## 802.11a/n(HT20)

	U-NII Band 1	U-NII Band 3
Test channel	Frequency (MHz)	Frequency (MHz)
Lowest channel	5180 MHz	5745 MHz
Middle channel	5200 MHz	5785 MHz
Highest channel	5240 MHz	5825 MHz

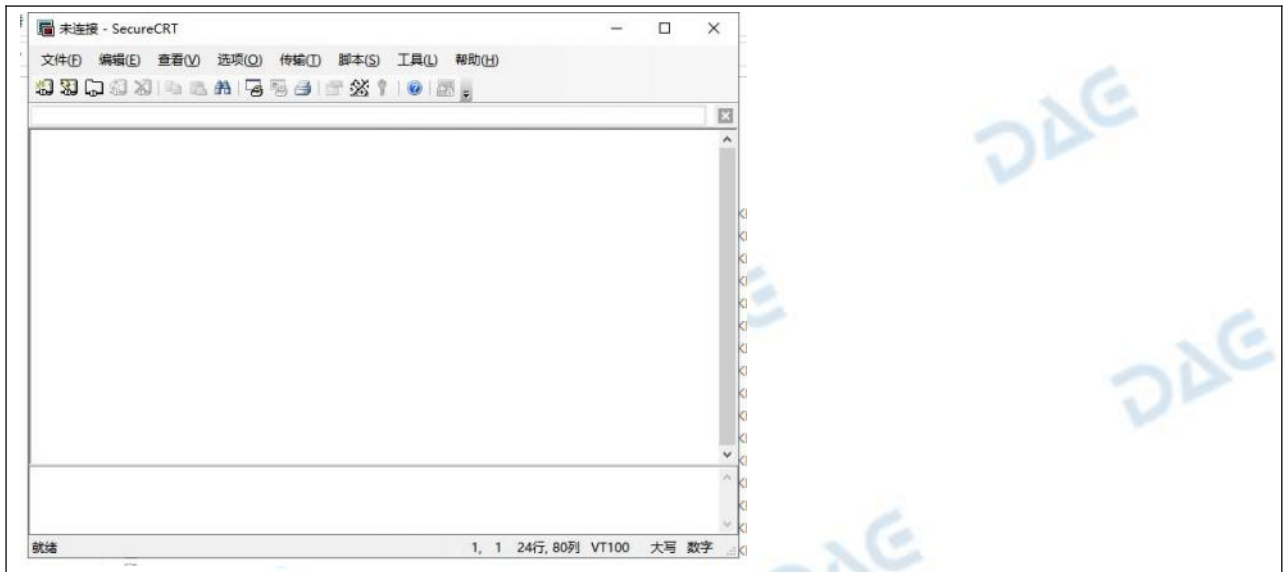
## 802.11n(HT40)

	U-NII Band 1	U-NII Band 3
Channel	Frequency	Frequency
1	5190 MHz	5755 MHz
2	5230 MHz	5795 MHz

## 2.3 Description of Test Modes

No	Title	Description
TM1	802.11a mode	Keep the EUT in continuously transmitting mode with 802.11a modulation type at lowest, middle and highest channel. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.
TM2	802.11n mode	Keep the EUT in continuously transmitting mode with 802.11n modulation type at lowest, middle and highest channel. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
<input type="checkbox"/> Special software is used. <input type="checkbox"/> Through engineering command into the engineering mode. engineering command: *##3646633##* <input checked="" type="checkbox"/> Other method: SecureCRT+Serial port command		





## 2.4 Description of Support Units

Equipment	Manufacturer	Model No	NOTE
Adaptor	SHENZHEN TIANYIN ELECTRONICS CO.,LTD.	Model:TPA-418G050100UU01 Input:100-240V~50160Hz 0.3A Output:5.0V--1.0A 5.0W	Provide by client

## 2.5 Equipments Used During The Test

### Conducted Emission at AC power line

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Cable	SCHWARZ BECK	/	/	2024-05-20	2025-05-19
Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Attenuation	561-G071	2024-12-06	2025-12-05
50ΩCoaxial Switch	Anritsu	MP59B	M20531	/	/
Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K0 3-102109-MH	2024-06-12	2025-06-11
L.I.S.N	R&S	ESH3-Z5	831.5518.52	2023-12-12	2025-12-11
L.I.S.N	SCHWARZ BECK	NSLK 8126	05055	2024-06-14	2025-06-13
Pulse Limiter	CYBERTEK	EM5010A	/	2024-09-27	2025-09-26
EMI test software	EZ -EMC	EZ	V1.1.42	/	/

### Emission bandwidth and occupied bandwidth

#### Maximum conducted output power

#### Power spectral density

#### Duty Cycle

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	2024-06-12	2025-06-11
Vector Signal Generator	Keysight	N5181A	MY50143455	2024-12-06	2025-12-05
Signal Generator	Keysight	N5182A	MY48180415	2024-12-06	2025-12-05
Spectrum Analyzer	Keysight	N9020A	MY53420323	2024-12-06	2025-12-05

**Band edge emissions (Radiated)****Undesirable emission limits (below 1GHz)****Undesirable emission limits (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	2023-05-19	2025-05-18
Horn antenna	COM-POWER	AH-1840 (18-40G)	10100008	2023-05-19	2025-05-18
Loop antenna	ZHINAN	ZN30900C	ZN30900C	2024-06-14	2026-06-13
Cable(LF)#2	Schwarzbeck	/	/	2024-12-19	2025-12-18
Cable(LF)#1	Schwarzbeck	/	/	2024-12-19	2025-12-18
Cable(HF)#2	Schwarzbeck	AK9515E	96250	2024-05-20	2025-05-19
Cable(HF)#1	Schwarzbeck	SYV-50-3-1	/	2024-05-20	2025-05-19
Power amplifier(LF)	Schwarzbeck	BBV9743	9743-151	2024-06-12	2025-06-11
Power amplifier(HF)	Schwarzbeck	BBV9718	9718-282	2024-06-12	2025-06-11
Wideband radio communication tester	R&S	CMW500	113410	2024-06-12	2025-06-11
Spectrum Analyzer	R&S	FSP30	1321.3008K40-101729-jR	2024-06-12	2025-06-11
Test Receiver	R&S	ESCI 3	1166.5950K03-101431-Jq	2024-06-13	2025-06-12
Horn Antenna	Sunol Sciences	DRH-118	A091114	2023-05-13	2025-05-12
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
Duty cycle	±3.1%
Occupied Bandwidth	±3.63%
RF conducted power	±0.733dB

RF power density	±0.234%
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.	

## 2.7 Authorizations

Company Name:	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
Phone Number:	+86-13267178997
Fax Number:	86-755-29113252

### Identification of the Responsible Testing Location

Company Name:	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
Phone Number:	+86-13267178997
Fax Number:	86-755-29113252
FCC Registration Number:	0032847402
Designation Number:	CN1342
Test Firm Registration No.:	778666
A2LA Certificate Number:	6270.01

## 2.8 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by DACE and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) We hereby declare that the laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant. the laboratory is not responsible for the accuracy of the information provided by the client(item 2.2). When the information provided by the customer may affect the effectiveness of the results, the responsibility lies with

### 3 Radio Spectrum Matter Test Results (RF)

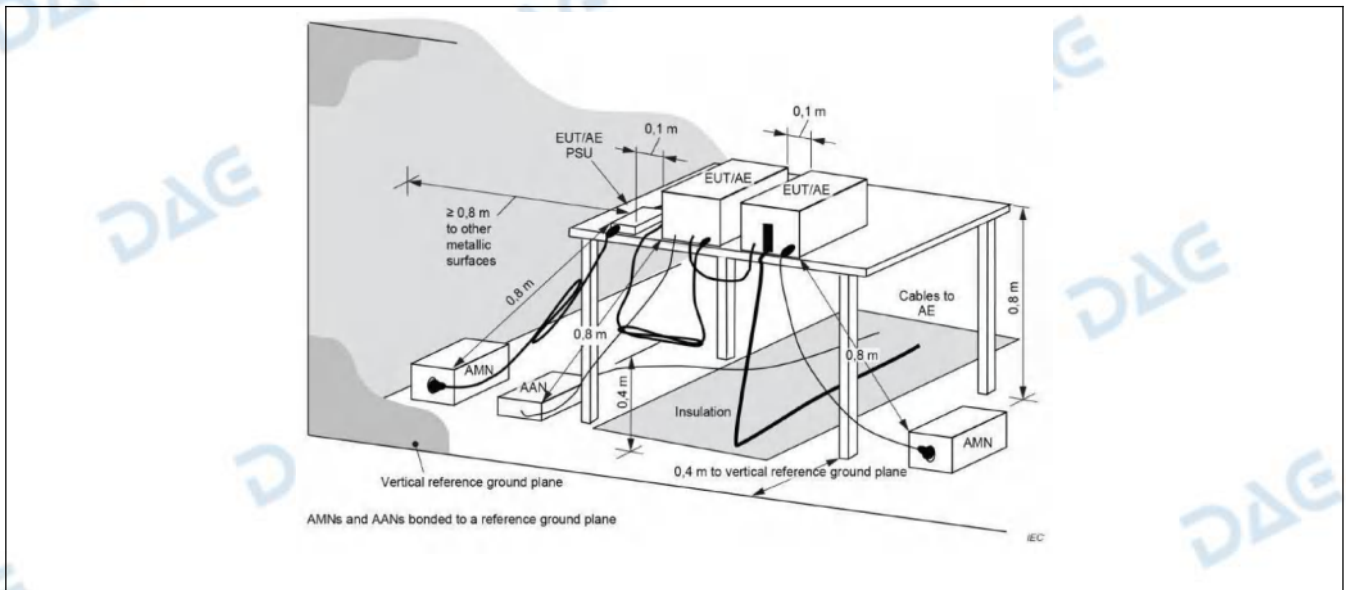
### 3.1 Conducted Emission at AC power line

Test Requirement:	47 CFR Part 15.207(a)		
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		

### 3.1.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:		TM1			
Final test mode:		TM1			

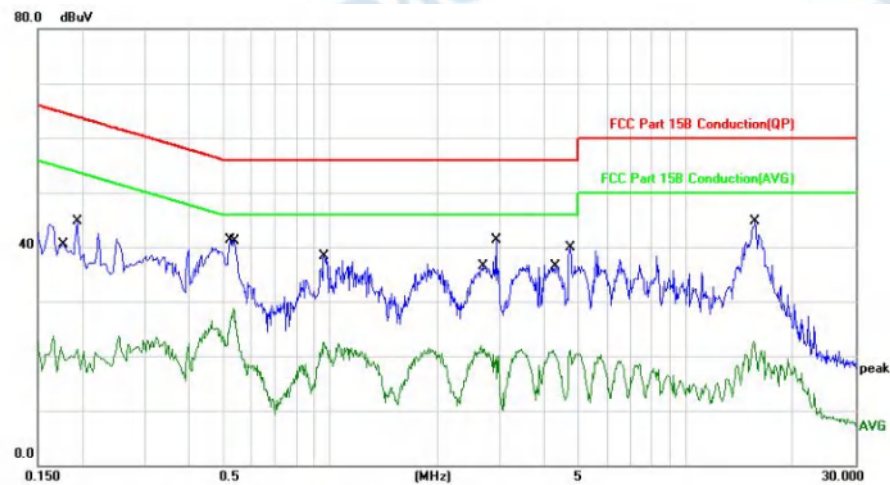
### 3.1.2 Test Setup Diagram:





### 3.1.3 Test Data:

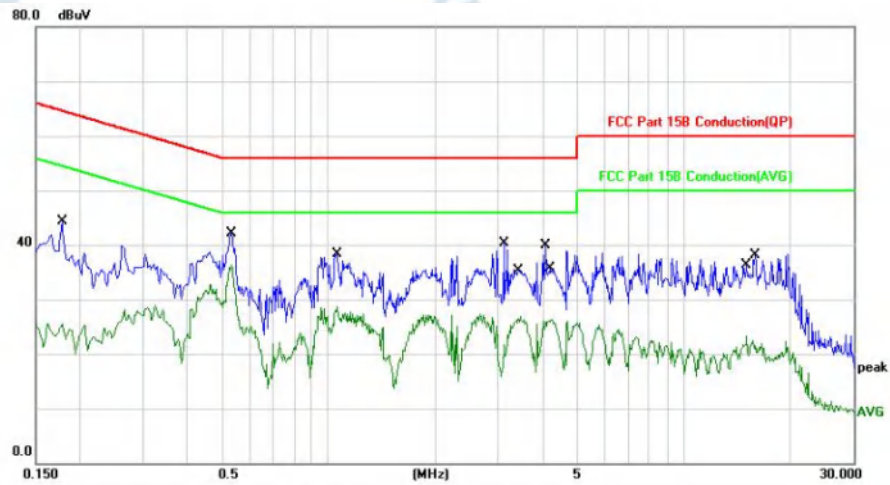
TM1 / Line: Line / Band: 5150-5250 MHz / BW: 20 / CH: L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1740	11.66	10.10	21.76	54.76	-33.00	AVG	
2		0.1940	34.55	10.10	44.65	63.86	-19.21	QP	
3		0.5220	31.28	10.08	41.36	56.00	-14.64	QP	
4		0.5340	18.56	10.08	28.64	46.00	-17.36	AVG	
5		0.9620	28.24	10.08	38.32	56.00	-17.68	QP	
6		0.9620	12.40	10.08	22.48	46.00	-23.52	AVG	
7		2.6540	11.79	10.04	21.83	46.00	-24.17	AVG	
8	*	2.9300	31.33	10.07	41.40	56.00	-14.60	QP	
9		4.2460	10.92	10.17	21.09	46.00	-24.91	AVG	
10		4.7340	29.62	10.19	39.81	56.00	-16.19	QP	
11		15.4780	12.19	10.47	22.66	50.00	-27.34	AVG	
12		15.6500	34.13	10.47	44.60	60.00	-15.40	QP	



TM1 / Line: Neutral / Band: 5150-5250 MHz / BW: 20 / CH: L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1780	34.29	10.10	44.39	64.57	-20.18	QP	
2		0.1780	15.48	10.10	25.58	54.57	-28.99	AVG	
3		0.5340	31.92	10.08	42.00	56.00	-14.00	QP	
4	*	0.5340	26.15	10.08	36.23	46.00	-9.77	AVG	
5		1.0580	28.25	10.07	38.32	56.00	-17.68	QP	
6		1.0580	18.58	10.07	28.65	46.00	-17.35	AVG	
7		3.1140	30.26	10.08	40.34	56.00	-15.66	QP	
8		3.4540	16.72	10.12	26.84	46.00	-19.16	AVG	
9		4.0739	29.76	10.17	39.93	56.00	-16.07	QP	
10		4.2300	16.17	10.17	26.34	46.00	-19.66	AVG	
11		14.9900	12.77	10.46	23.23	50.00	-26.77	AVG	
12		15.8820	27.66	10.48	38.14	60.00	-21.86	QP	

### 3.2 Emission bandwidth and occupied bandwidth

Test Requirement:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.  U-NII 3, U-NII 4: 47 CFR Part 15.407(e)
Test Limit:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.  U-NII 3, U-NII 4: Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
Test Method:	ANSI C63.10-2020, section 6.9 & 12.5 KDB 789033 D02, Clause C.2
Procedure:	<p>Emission bandwidth:</p> <ol style="list-style-type: none"> <li>Set RBW = approximately 1% of the emission bandwidth.</li> <li>Set the VBW &gt; RBW.</li> <li>Detector = peak.</li> <li>Trace mode = max hold.</li> <li>Measure the maximum width of the emission that is 26 dB down from the peak of the emission.</li> </ol> <p>Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.</p> <p>Occupied bandwidth:</p> <ol style="list-style-type: none"> <li>The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.</li> <li>The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.</li> <li>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 <math>[10 \log (OBW/RBW)]</math> below the reference level. Specific guidance is given in 4.1.5.2.</li> <li>Step a) through step c) might require iteration to adjust within the specified range.</li> <li>Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.</li> <li>Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.</li> <li>If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.</li> <li>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).</li> </ol> <p>6 dB emission bandwidth:</p> <ol style="list-style-type: none"> <li>Set RBW = 100 kHz.</li> <li>Set the video bandwidth (VBW) <math>\geq 3 \times</math> RBW.</li> <li>Detector = Peak.</li> <li>Trace mode = max hold.</li> <li>Sweep = auto couple.</li> <li>Allow the trace to stabilize.</li> <li>Measure the maximum width of the emission that is constrained by the</li> </ol>

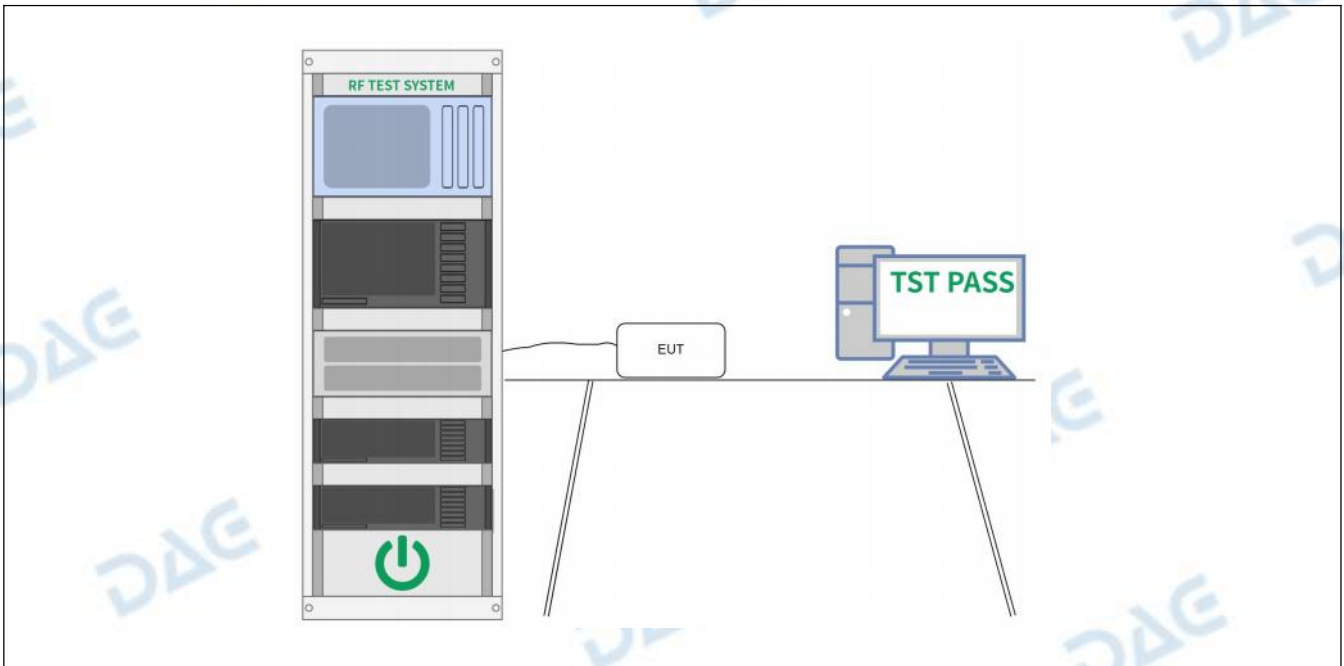
frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 3.2.1 E.U.T. Operation:

#### Operating Environment:

Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1, TM2				
Final test mode:	TM1, TM2				

### 3.2.2 Test Setup Diagram:



### 3.2.3 Test Data:

Please Refer to Appendix for Details.

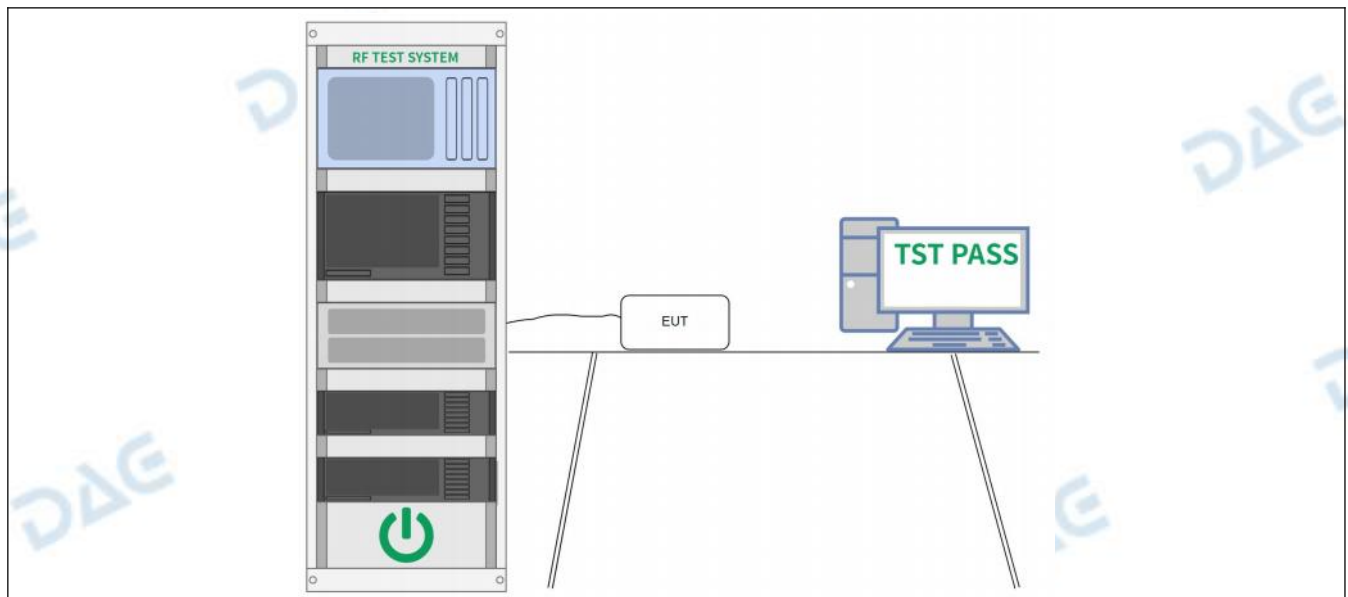
### 3.3 Maximum conducted output power

Test Requirement:	47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)
Test Limit:	<p>For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.</p> <p>If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> <p>For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.</p> <p>If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> <p>However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.</p>
Test Method:	ANSI C63.10-2020, section 12.4
Procedure:	Refer to ANSI C63.10-2020 section 12.4

#### 3.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1, TM2				
Final test mode:	TM1, TM2				

#### 3.3.2 Test Setup Diagram:



#### 3.3.3 Test Data:

Please Refer to Appendix for Details.



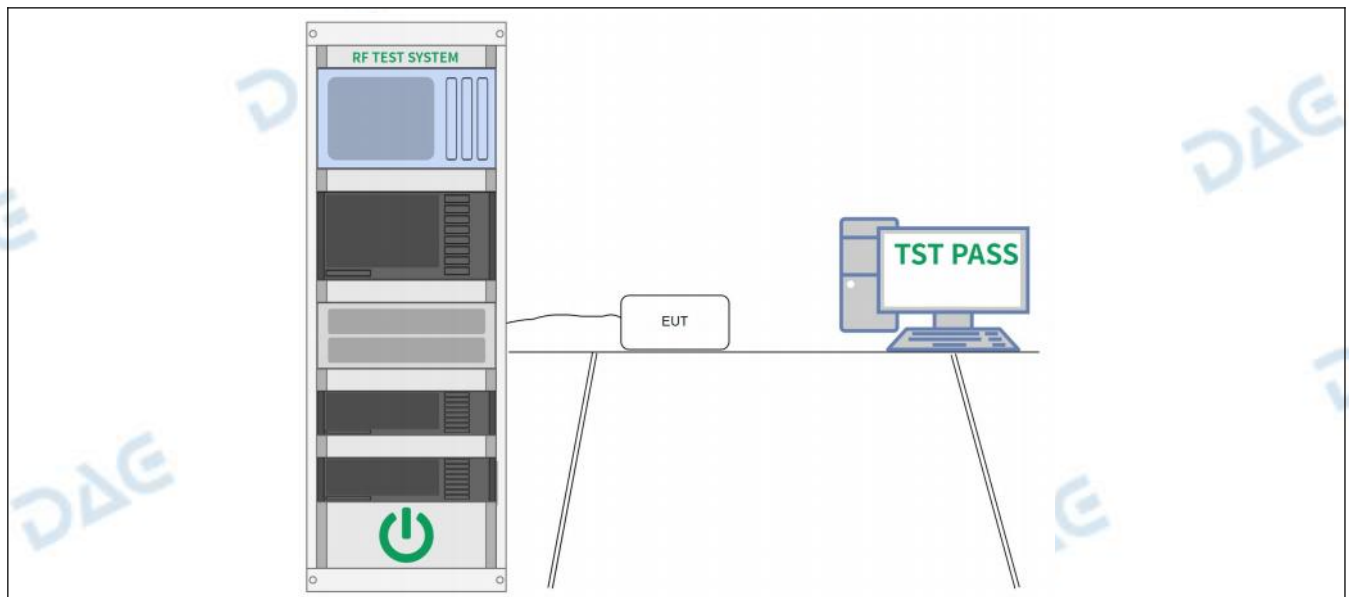
### 3.4 Power spectral density

Test Requirement:	47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(3)(i)
Test Limit:	For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.  For the band 5.725-5.850 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
Test Method:	ANSI C63.10-2020, section 12.6
Procedure:	Refer to ANSI C63.10-2020, section 12.6

#### 3.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1, TM2				
Final test mode:	TM1, TM2				

#### 3.4.2 Test Setup Diagram:



#### 3.4.3 Test Data:

Please Refer to Appendix for Details.



### 3.5 Band edge emissions (Radiated)

Test Requirement:	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)																																																																										
Test Limit:	<p>For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>For transmitters operating solely in the 5.725-5.850 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <table border="1"> <thead> <tr> <th>MHz</th><th>MHz</th><th>MHz</th><th>GHz</th></tr> </thead> <tbody> <tr> <td>0.090-0.110</td><td>16.42-16.423</td><td>399.9-410</td><td>4.5-5.15</td></tr> <tr> <td><sup>1</sup> 0.495-0.505</td><td>16.69475-16.69525</td><td>608-614</td><td>5.35-5.46</td></tr> <tr> <td>2.1735-2.1905</td><td>16.80425-16.80475</td><td>960-1240</td><td>7.25-7.75</td></tr> <tr> <td>4.125-4.128</td><td>25.5-25.67</td><td>1300-1427</td><td>8.025-8.5</td></tr> <tr> <td>4.17725-4.17775</td><td>37.5-38.25</td><td>1435-1626.5</td><td>9.0-9.2</td></tr> <tr> <td>4.20725-4.20775</td><td>73-74.6</td><td>1645.5-1646.5</td><td>9.3-9.5</td></tr> <tr> <td>6.215-6.218</td><td>74.8-75.2</td><td>1660-1710</td><td>10.6-12.7</td></tr> <tr> <td>6.26775-6.26825</td><td>108-121.94</td><td>1718.8-1722.2</td><td>13.25-13.4</td></tr> <tr> <td>6.31175-6.31225</td><td>123-138</td><td>2200-2300</td><td>14.47-14.5</td></tr> <tr> <td>8.291-8.294</td><td>149.9-150.05</td><td>2310-2390</td><td>15.35-16.2</td></tr> <tr> <td>8.362-8.366</td><td>156.52475-156.52525</td><td>2483.5-2500</td><td>17.7-21.4</td></tr> <tr> <td>8.37625-8.38675</td><td>156.7-156.9</td><td>2690-2900</td><td>22.01-23.12</td></tr> <tr> <td>8.41425-8.41475</td><td>162.0125-167.17</td><td>3260-3267</td><td>23.6-24.0</td></tr> <tr> <td>12.29-12.293</td><td>167.72-173.2</td><td>3332-3339</td><td>31.2-31.8</td></tr> <tr> <td>12.51975-12.52025</td><td>240-285</td><td>3345.8-3358</td><td>36.43-36.5</td></tr> <tr> <td>12.57675-12.57725</td><td>322-335.4</td><td>3600-4400</td><td>(<sup>2</sup>)</td></tr> <tr> <td>13.36-13.41</td><td></td><td></td><td></td></tr> </tbody> </table> <p><sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.</p> <p><sup>2</sup> Above 38.6</p> <p>The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35 apply to these measurements.</p> <p>Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:</p>			MHz	MHz	MHz	GHz	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15	<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46	2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2	4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7	6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4	6.31175-6.31225	123-138	2200-2300	14.47-14.5	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2	8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5	12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )	13.36-13.41			
MHz	MHz	MHz	GHz																																																																								
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15																																																																								
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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 12.7.4, 12.7.6, 12.7.7

Procedure:

Above 1GHz:

- 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.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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 or average method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- 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.
- Repeat above procedures until all frequencies measured was complete.

Remark:

- Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- Scan from 18GHz to 40GHz, the disturbance above 18GHz 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.
- As shown in this section, for frequencies above 1GHz, the field strength limits 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 the emissions whose peak level is lower

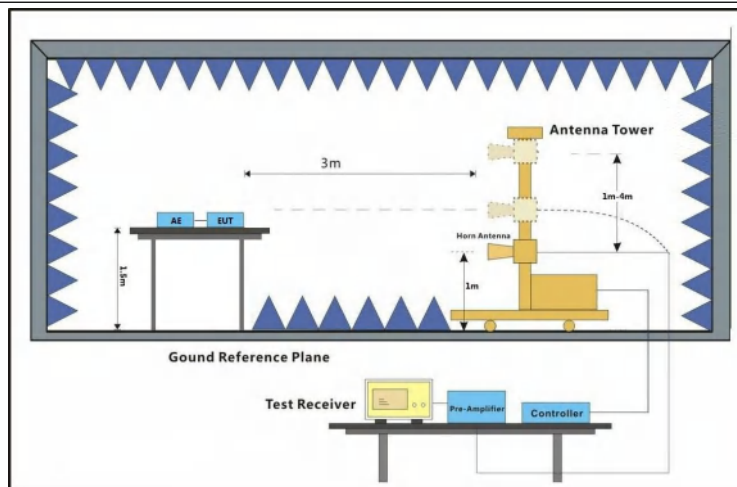
than the average limit, only the peak measurement is shown in the report.  
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

### 3.5.1 E.U.T. Operation:

Operating Environment:

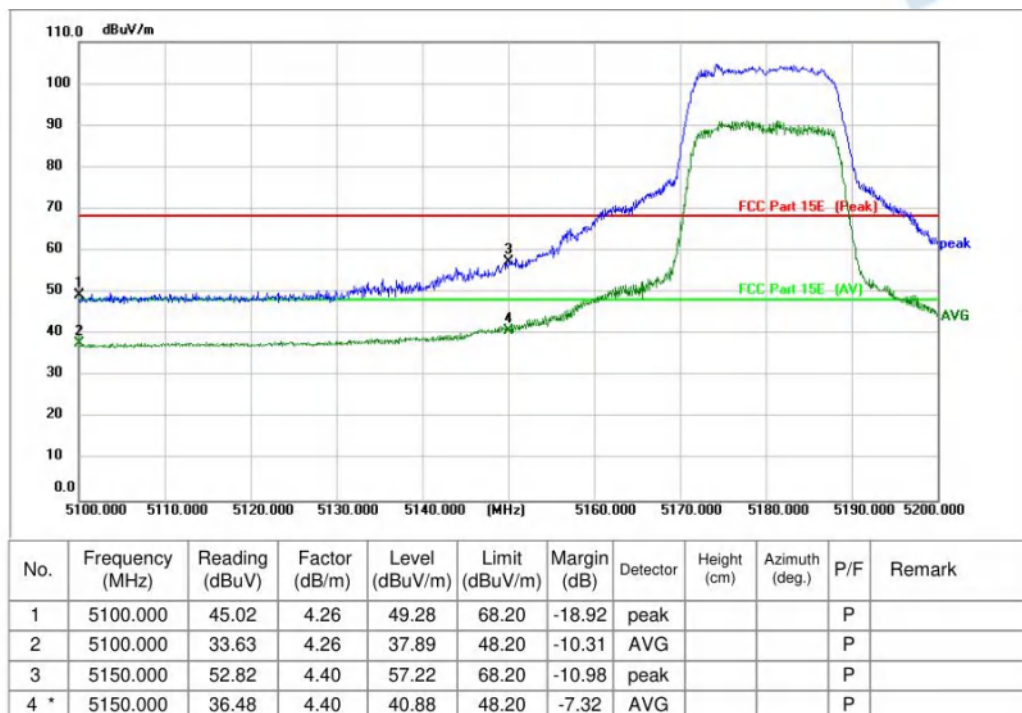
Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1, TM2				
Final test mode:	TM1, TM2				

### 3.5.2 Test Setup Diagram:



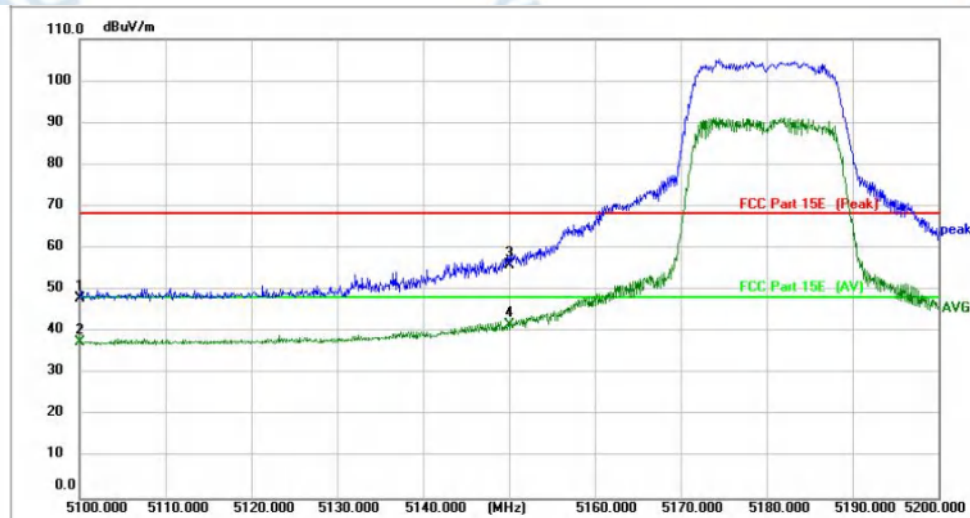
### 3.5.3 Test Data:

TM1 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: L



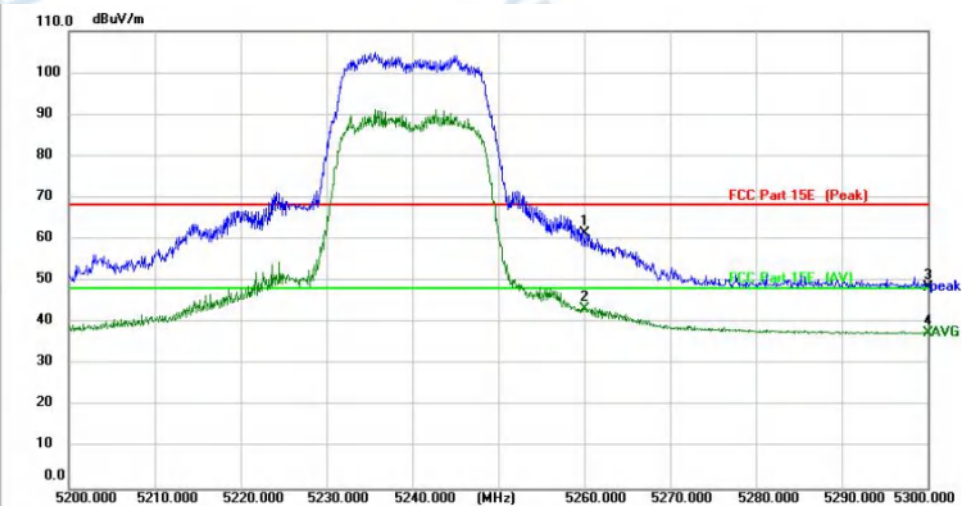


TM1 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: L



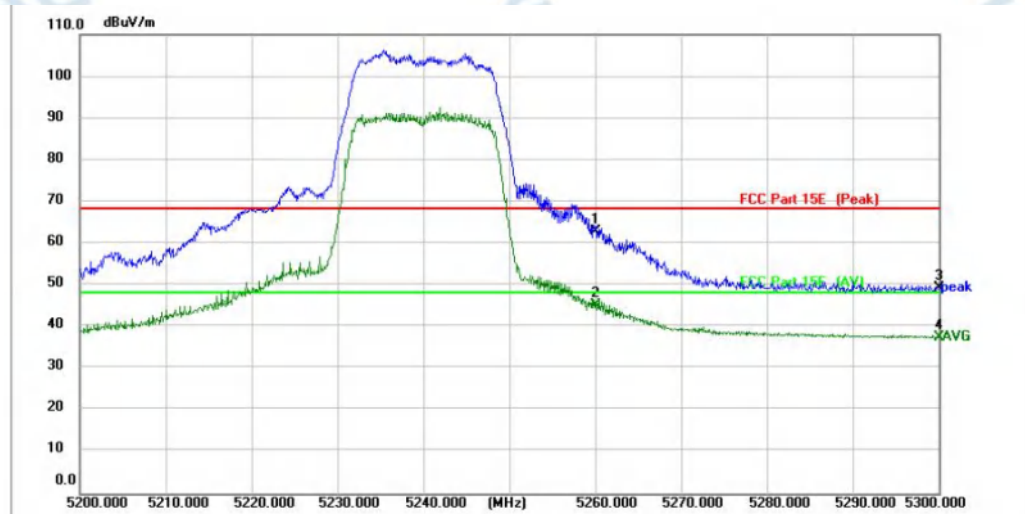
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5100.000	43.72	4.26	47.98	68.20	-20.22	peak	150		P	
2	5100.000	33.18	4.26	37.44	48.20	-10.76	AVG	150		P	
3	5150.000	51.58	4.40	55.98	68.20	-12.22	peak	150		P	
4 *	5150.000	37.39	4.40	41.79	48.20	-6.41	AVG	150		P	

TM1 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / 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	5260.000	56.62	4.73	61.35	68.20	-6.85	peak	150		P	
2 *	5260.000	38.46	4.73	43.19	48.20	-5.01	AVG	150		P	
3	5300.000	43.82	4.85	48.67	68.20	-19.53	peak	150		P	
4	5300.000	32.74	4.85	37.59	48.20	-10.61	AVG	150		P	

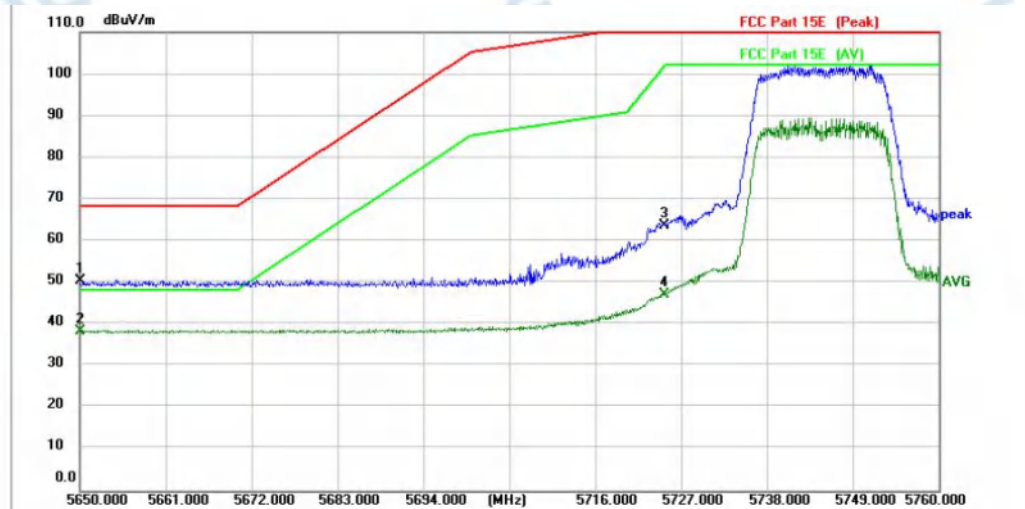
TM1 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: H



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	5260.000	58.14	4.73	62.87	68.20	-5.33	peak			P	
2 *	5260.000	40.60	4.73	45.33	48.20	-2.87	AVG			P	
3	5300.000	44.63	4.85	49.48	68.20	-18.72	peak			P	
4	5300.000	32.74	4.85	37.59	48.20	-10.61	AVG			P	

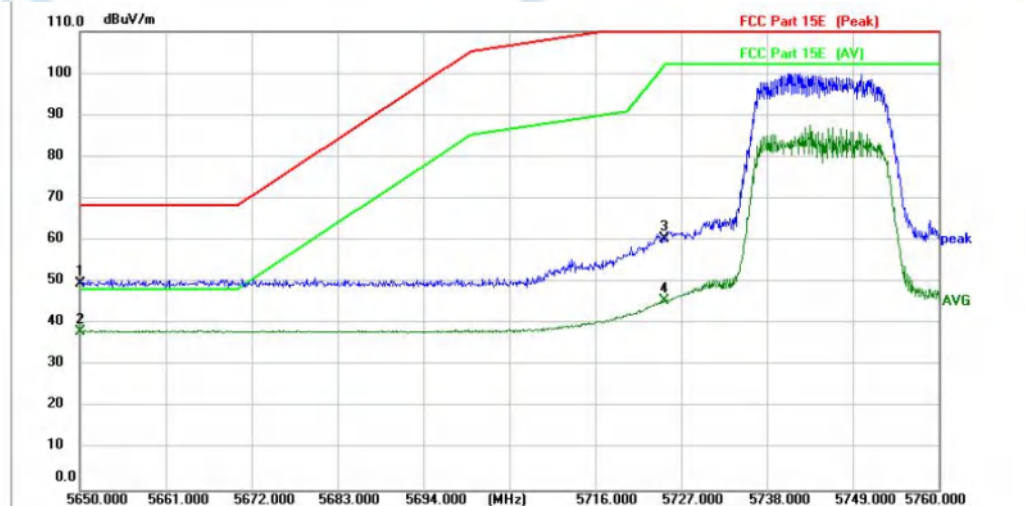


TM1 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: L



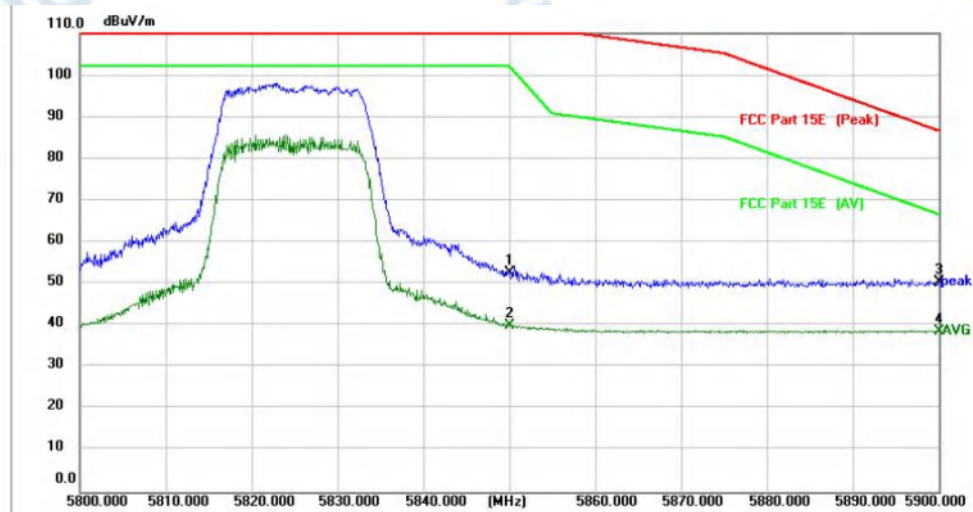
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5650.000	44.84	5.74	50.58	68.20	-17.62	peak	149		P	
2 *	5650.000	32.64	5.74	38.38	48.20	-9.82	AVG	149		P	
3	5725.000	57.84	5.90	63.74	122.20	-58.46	peak	149		P	
4	5725.000	41.40	5.90	47.30	102.20	-54.90	AVG	149		P	

TM1 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: L



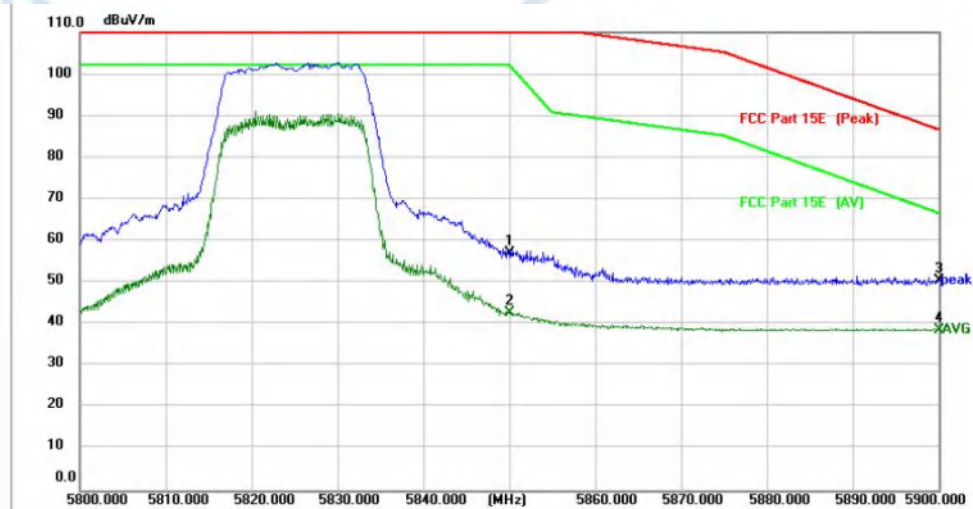
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5650.000	43.99	5.74	49.73	68.20	-18.47	peak	149		P	
2 *	5650.000	32.37	5.74	38.11	48.20	-10.09	AVG	149		P	
3	5725.000	54.46	5.90	60.36	122.20	-61.84	peak	149		P	
4	5725.000	39.51	5.90	45.41	102.20	-56.79	AVG	149		P	

TM1 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: H



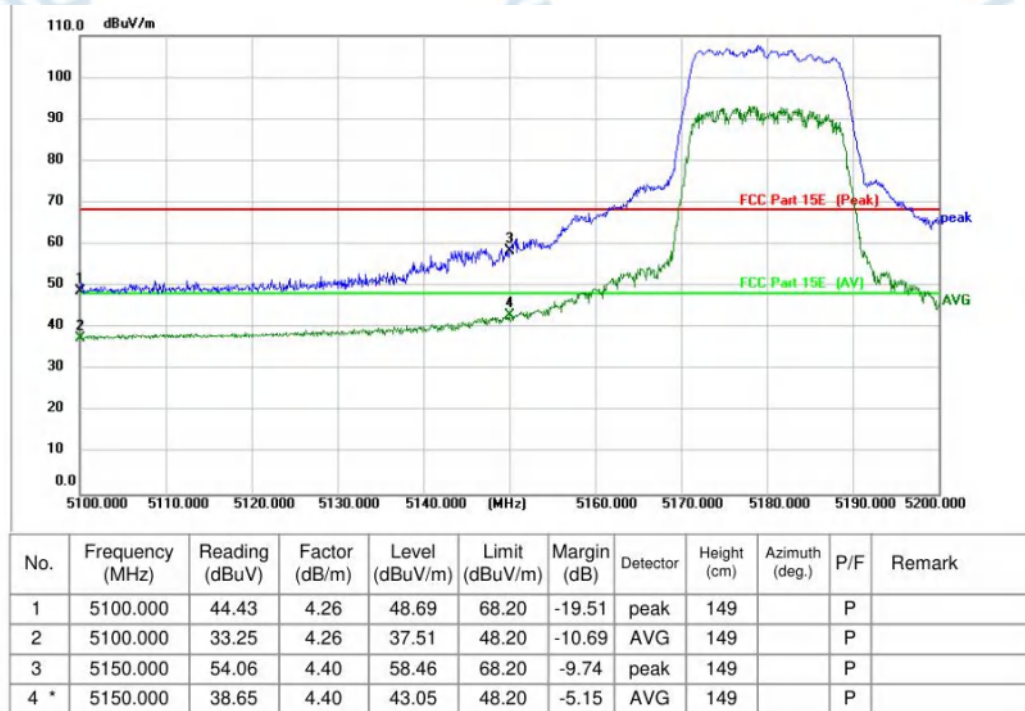
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5850.000	46.60	6.18	52.78	122.20	-69.42	peak	149		P	
2	5850.000	33.97	6.18	40.15	102.20	-62.05	AVG	149		P	
3	5900.000	44.13	6.28	50.41	86.66	-36.25	peak	149		P	
4 *	5900.000	32.23	6.28	38.51	66.66	-28.15	AVG	149		P	

TM1 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: H

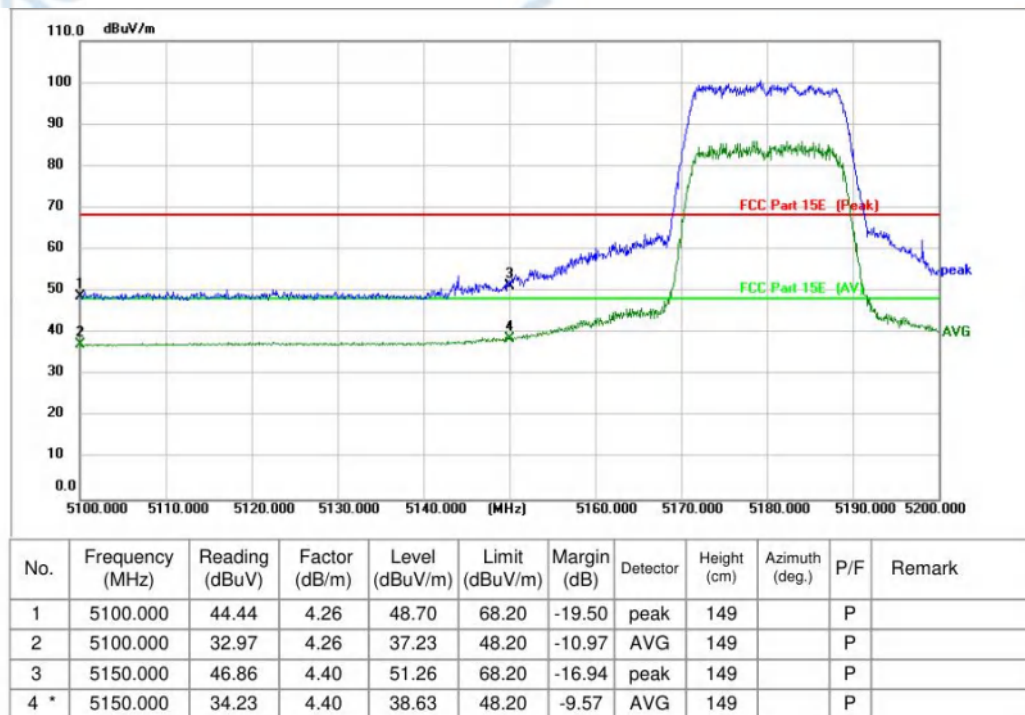


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5850.000	50.76	6.18	56.94	122.20	-65.26	peak	149		P	
2	5850.000	36.53	6.18	42.71	102.20	-59.49	AVG	149		P	
3	5900.000	44.12	6.28	50.40	86.66	-36.26	peak	149		P	
4 *	5900.000	32.34	6.28	38.62	66.66	-28.04	AVG	149		P	

TM2 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: L

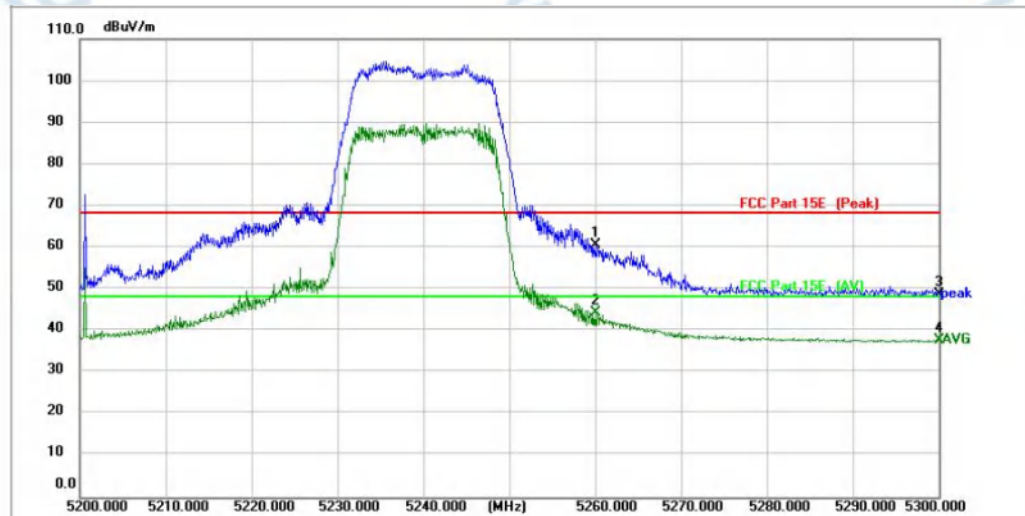


TM2 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: L



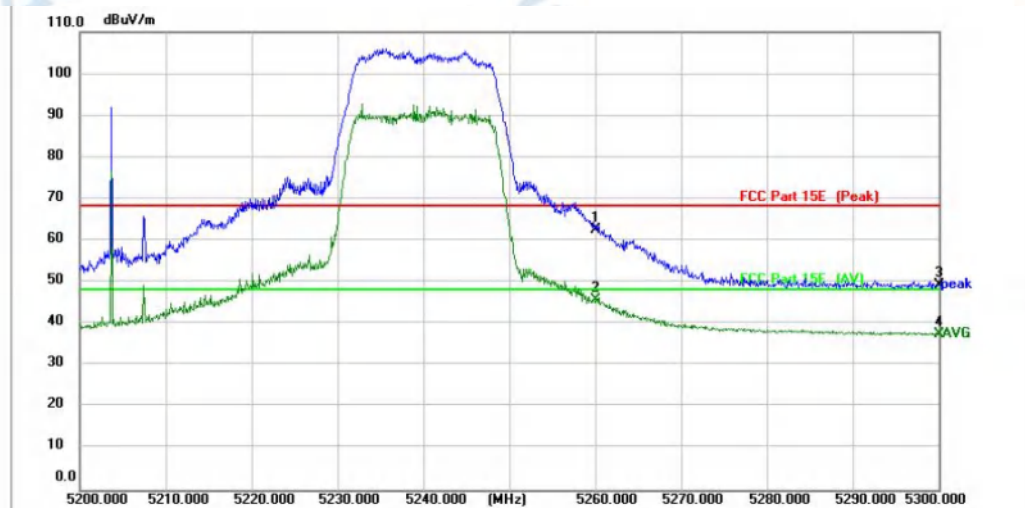


TM2 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: H



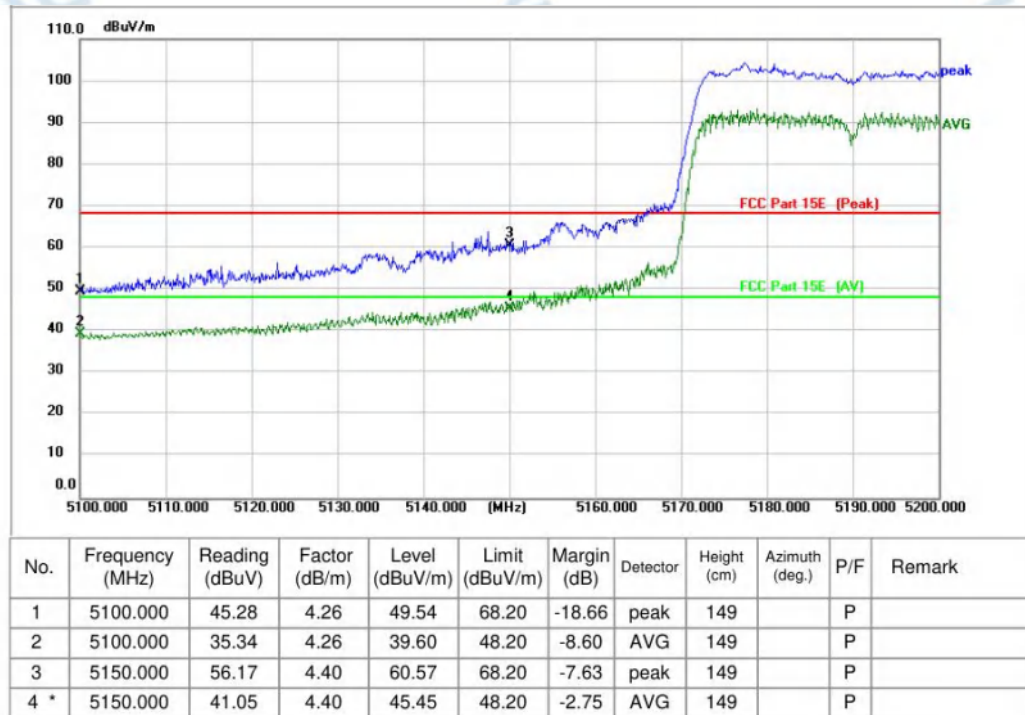
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5260.000	55.99	4.73	60.72	68.20	-7.48	peak	150		P	
2 *	5260.000	39.69	4.73	44.42	48.20	-3.78	AVG	150		P	
3	5300.000	44.05	4.85	48.90	68.20	-19.30	peak	150		P	
4	5300.000	32.86	4.85	37.71	48.20	-10.49	AVG	150		P	

TM2 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: H

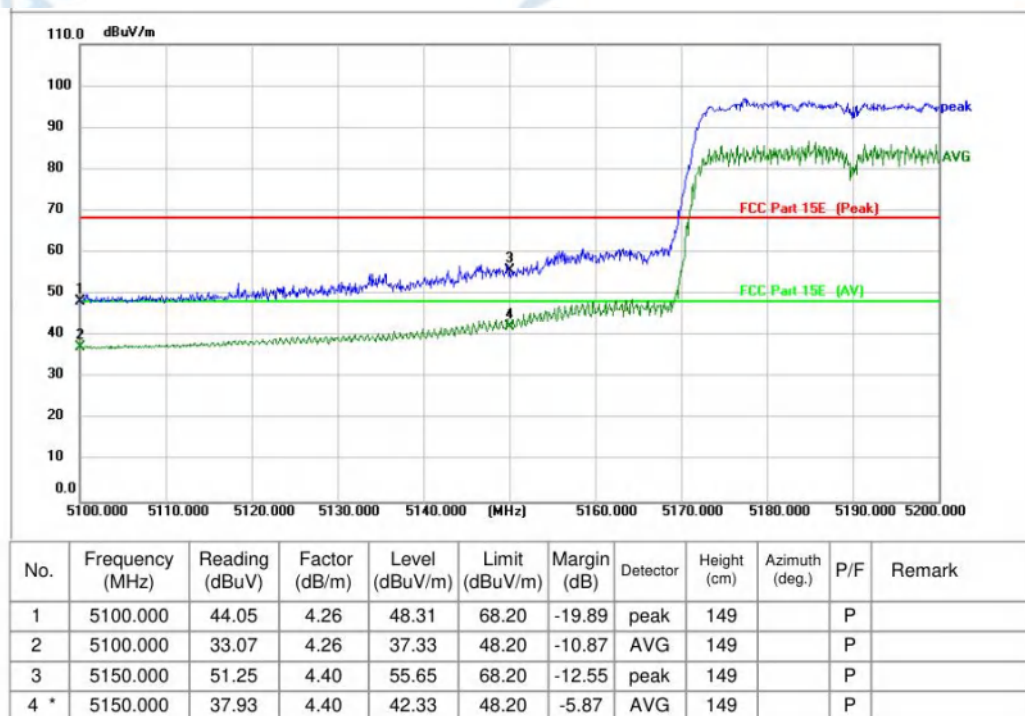


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5260.000	57.84	4.73	62.57	68.20	-5.63	peak	150		P	
2 *	5260.000	41.07	4.73	45.80	48.20	-2.40	AVG	150		P	
3	5300.000	44.60	4.85	49.45	68.20	-18.75	peak	150		P	
4	5300.000	32.75	4.85	37.60	48.20	-10.60	AVG	150		P	

TM2 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 40 / CH: L

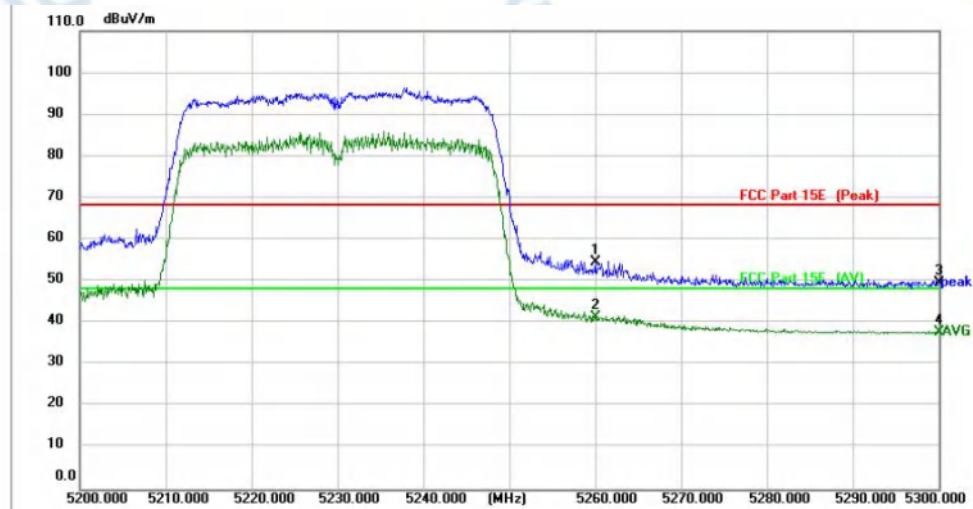


TM2 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 40 / CH: L



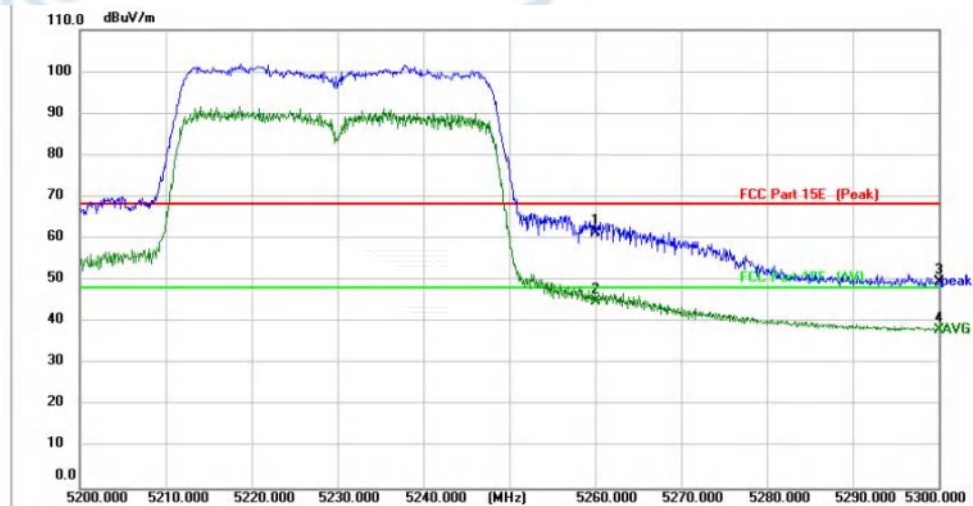


TM2 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 40 / CH: H



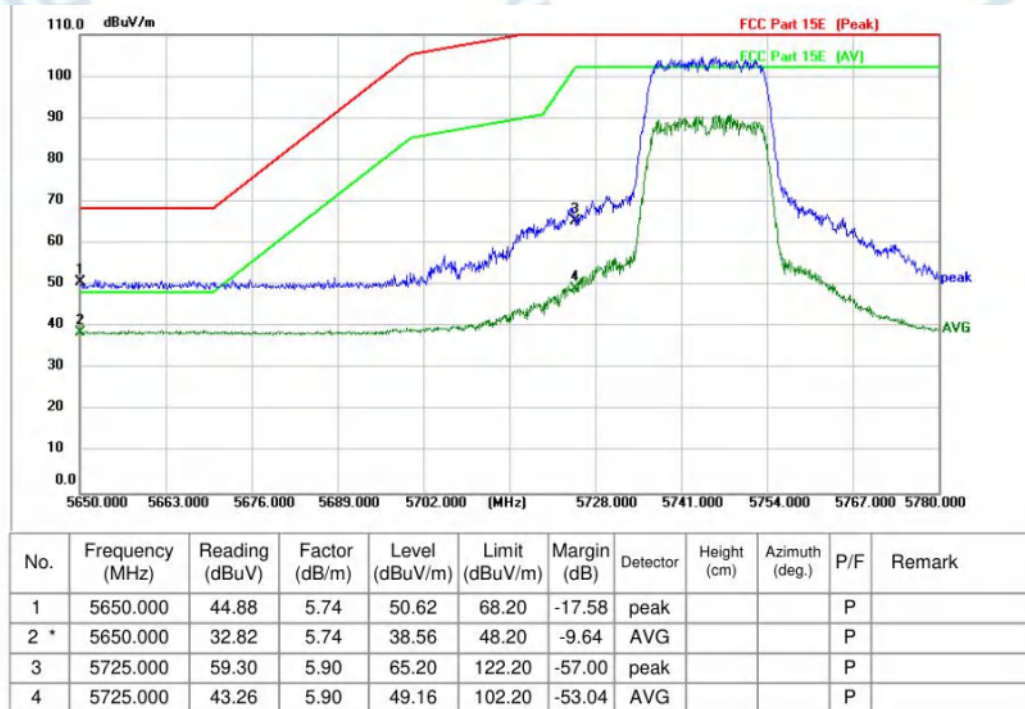
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5260.000	49.83	4.73	54.56	68.20	-13.64	peak	149		P	
2 *	5260.000	36.64	4.73	41.37	48.20	-6.83	AVG	149		P	
3	5300.000	44.71	4.85	49.56	68.20	-18.64	peak	149		P	
4	5300.000	32.91	4.85	37.76	48.20	-10.44	AVG	149		P	

TM2 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 40 / CH: H

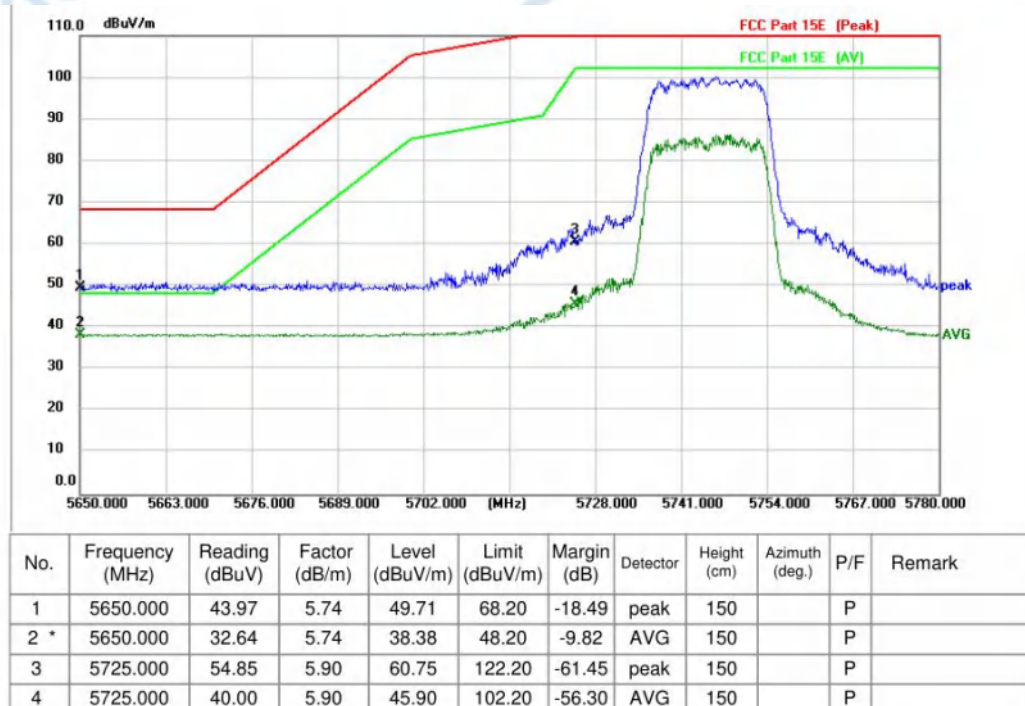


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5260.000	56.61	4.73	61.34	68.20	-6.86	peak	149		P	
2 *	5260.000	40.22	4.73	44.95	48.20	-3.25	AVG	149		P	
3	5300.000	44.83	4.85	49.68	68.20	-18.52	peak	149		P	
4	5300.000	33.24	4.85	38.09	48.20	-10.11	AVG	149		P	

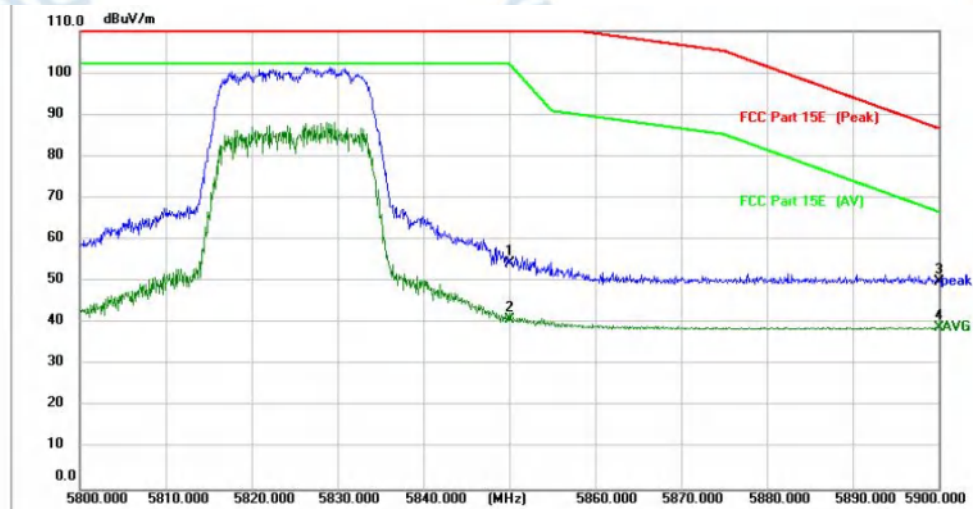
TM2 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: L



TM2 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: L

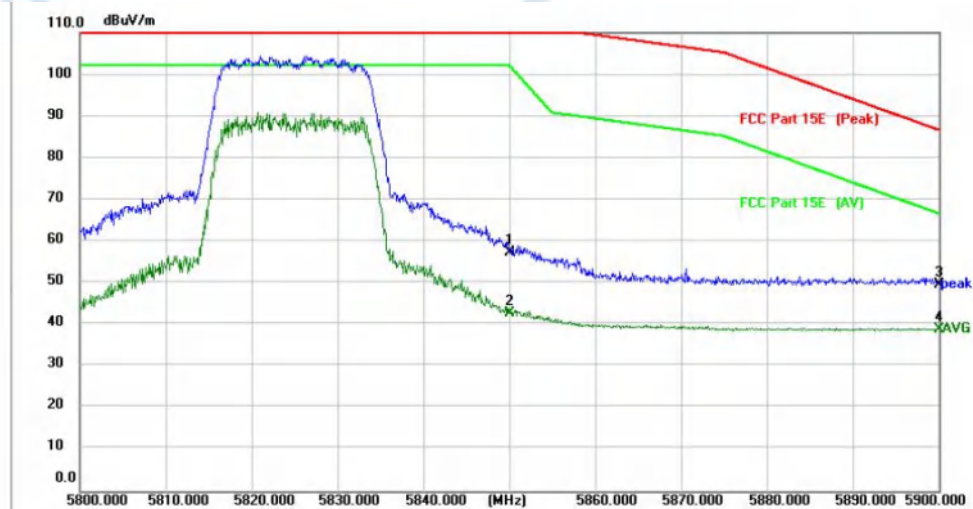


TM2 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: H



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	5850.000	48.21	6.18	54.39	122.20	-67.81	peak	100		P	
2	5850.000	34.66	6.18	40.84	102.20	-61.36	AVG	100		P	
3	5900.000	43.60	6.28	49.88	86.66	-36.78	peak	100		P	
4 *	5900.000	32.56	6.28	38.84	66.66	-27.82	AVG	100		P	

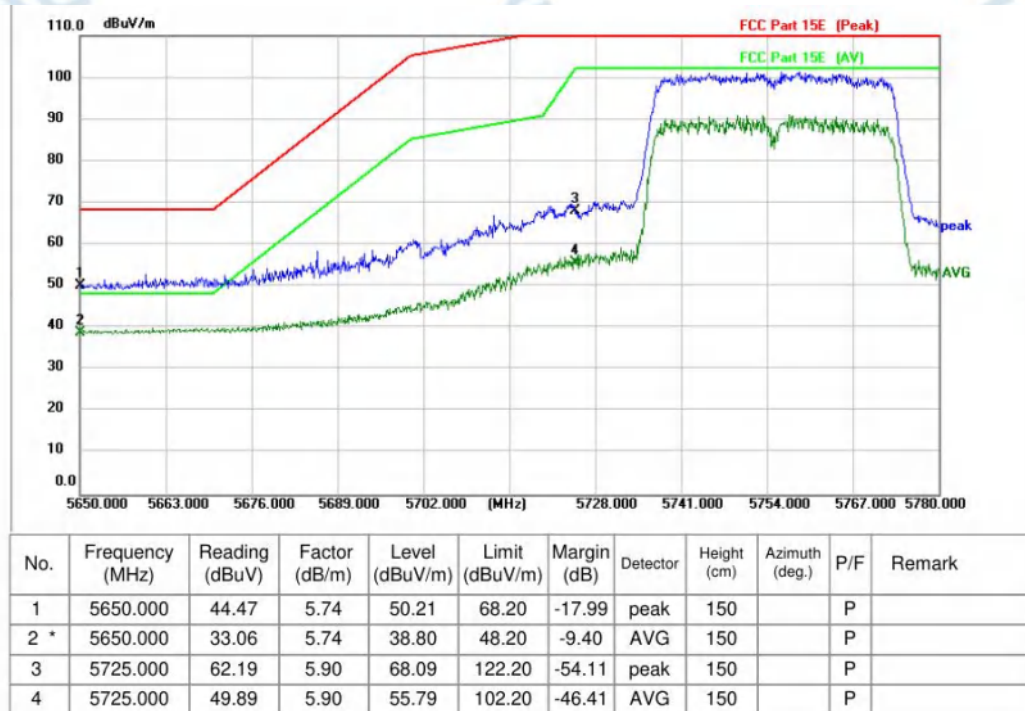
TM2 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: H



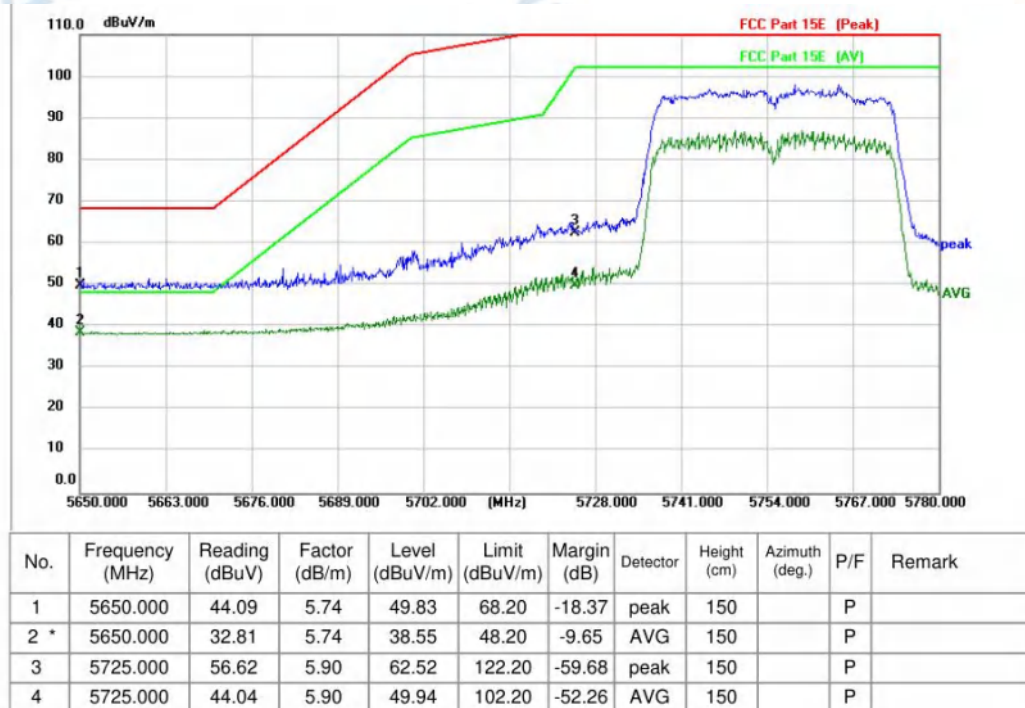
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5850.000	51.18	6.18	57.36	122.20	-64.84	peak	100		P	
2	5850.000	36.67	6.18	42.85	102.20	-59.35	AVG	100		P	
3	5900.000	43.48	6.28	49.76	86.66	-36.90	peak	100		P	
4 *	5900.000	32.51	6.28	38.79	66.66	-27.87	AVG	100		P	



TM2 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 40 / CH: L

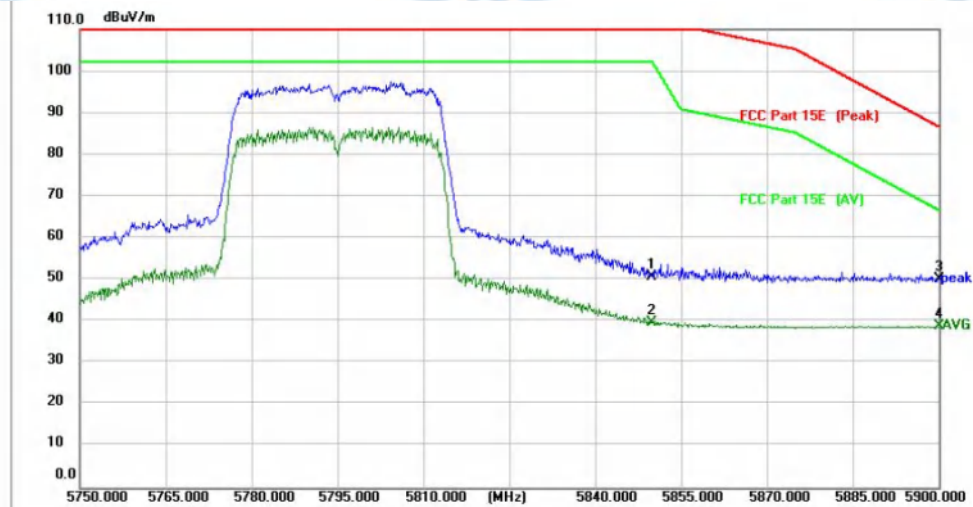


TM2 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 40 / CH: L



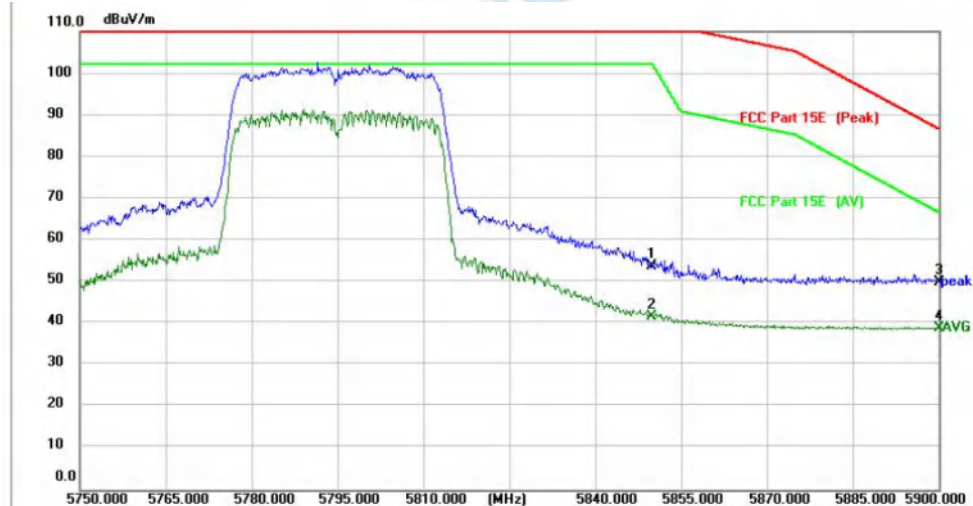


TM2 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 40 / CH: H



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	5850.000	44.46	6.18	50.64	122.20	-71.56	peak	150		P	
2	5850.000	33.62	6.18	39.80	102.20	-62.40	AVG	150		P	
3	5900.000	43.90	6.28	50.18	86.66	-36.48	peak	150		P	
4 *	5900.000	32.50	6.28	38.78	66.66	-27.88	AVG	150		P	

TM2 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 40 / 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	5850.000	47.62	6.18	53.80	122.20	-68.40	peak	150		P	
2	5850.000	35.43	6.18	41.61	102.20	-60.59	AVG	150		P	
3	5900.000	43.74	6.28	50.02	86.66	-36.64	peak	150		P	
4 *	5900.000	32.65	6.28	38.93	66.66	-27.73	AVG	150		P	

### 3.6 Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9)																								
Test Limit:	<p>Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.</p> <p>Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:</p> <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> <p>** 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.</p> <p>In the emission table above, the tighter limit applies at the band edges.</p> <p>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.</p>	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
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 12.7.4, 12.7.5																								
Procedure:	<p>Below 1GHz:</p> <p>a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>b. 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.</p> <p>c. 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.</p> <p>d. 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.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>f. 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 quasi-peak method as specified and then reported in a data sheet.</p> <p>g. Test the EUT in the lowest channel, the middle channel, the Highest channel.</p> <p>h. 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.</p> <p>i. Repeat above procedures until all frequencies measured was complete.</p> <p>Remark:</p> <p>1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor</p> <p>2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when</p>																								

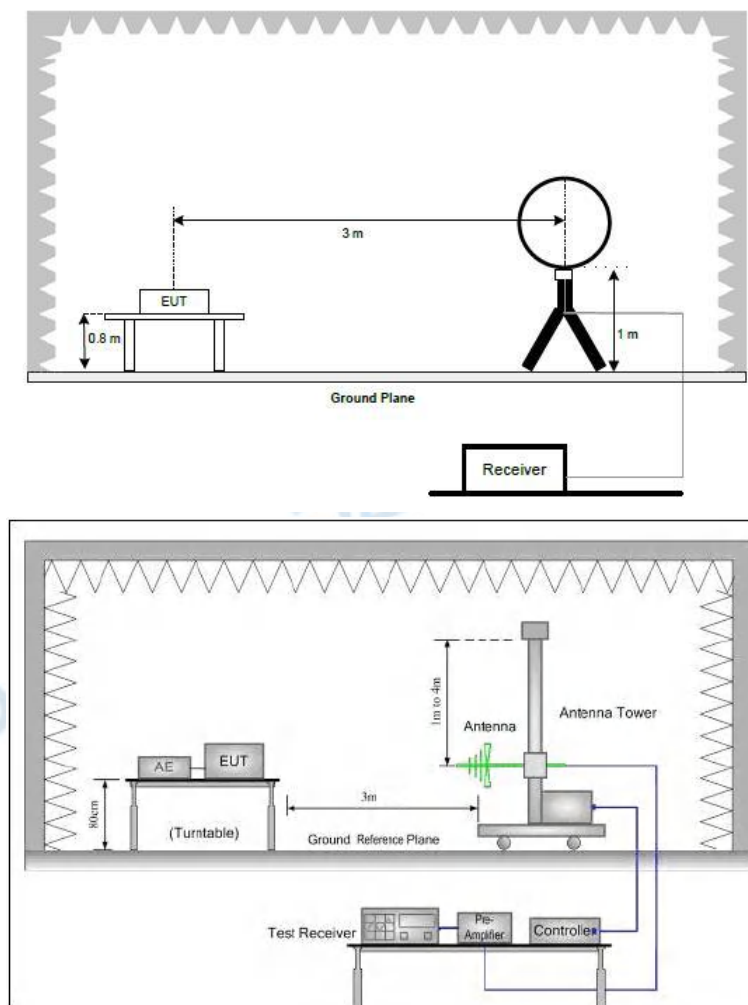
testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.  
3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

### 3.6.1 E.U.T. Operation:

Operating Environment:

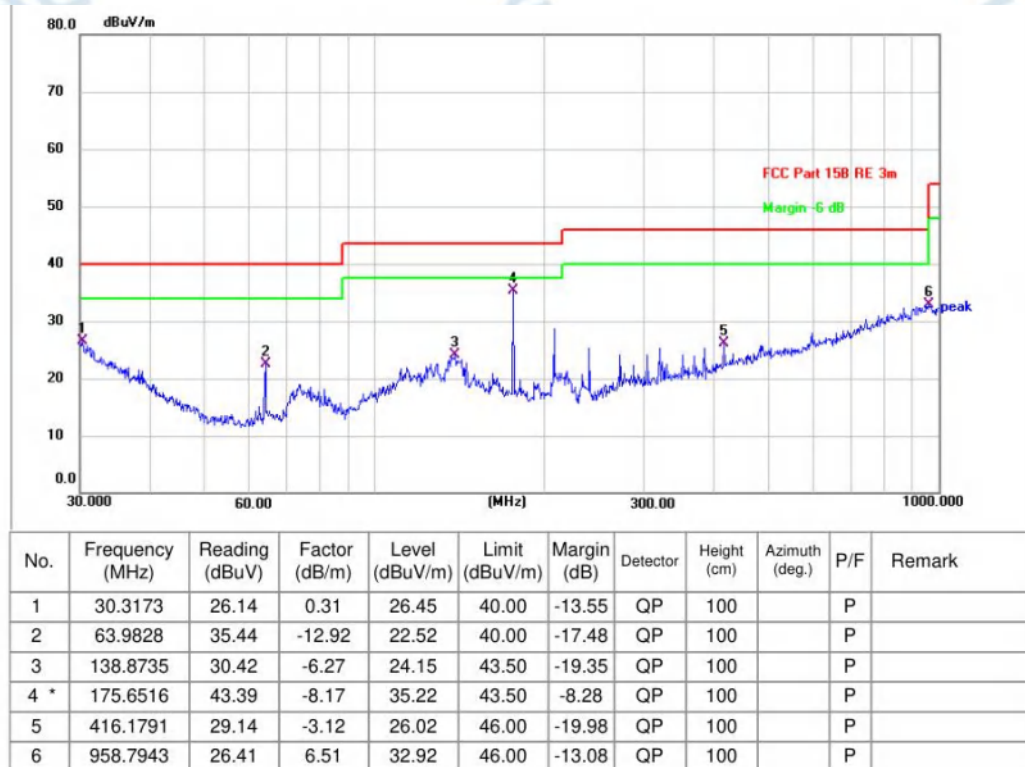
Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1, TM2				
Final test mode:	TM1, TM2				

### 3.6.2 Test Setup Diagram:

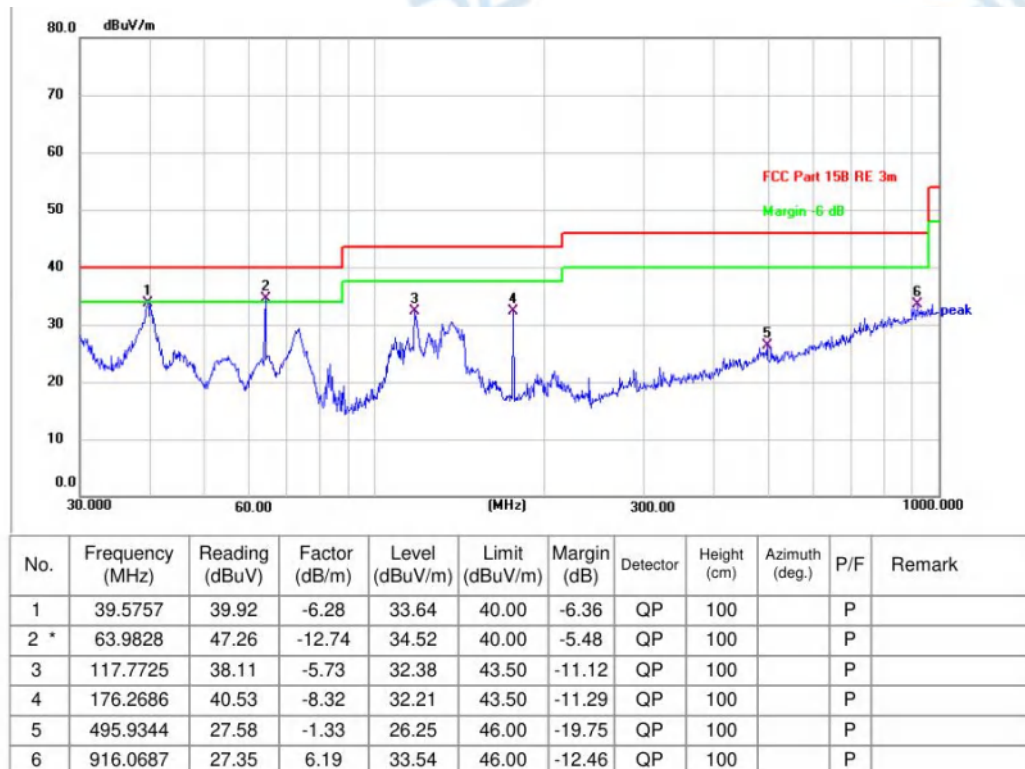


### 3.6.3 Test Data:

TM1 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: L



TM1 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: L





### 3.7 Undesirable emission limits (above 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)																																																																										
Test Limit:	<p>For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>For transmitters operating solely in the 5.725-5.850 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <table border="1"> <thead> <tr> <th>MHz</th><th>MHz</th><th>MHz</th><th>GHz</th></tr> </thead> <tbody> <tr> <td>0.090-0.110</td><td>16.42-16.423</td><td>399.9-410</td><td>4.5-5.15</td></tr> <tr> <td><sup>1</sup> 0.495-0.505</td><td>16.69475-16.69525</td><td>608-614</td><td>5.35-5.46</td></tr> <tr> <td>2.1735-2.1905</td><td>16.80425-16.80475</td><td>960-1240</td><td>7.25-7.75</td></tr> <tr> <td>4.125-4.128</td><td>25.5-25.67</td><td>1300-1427</td><td>8.025-8.5</td></tr> <tr> <td>4.17725-4.17775</td><td>37.5-38.25</td><td>1435-1626.5</td><td>9.0-9.2</td></tr> <tr> <td>4.20725-4.20775</td><td>73-74.6</td><td>1645.5-1646.5</td><td>9.3-9.5</td></tr> <tr> <td>6.215-6.218</td><td>74.8-75.2</td><td>1660-1710</td><td>10.6-12.7</td></tr> <tr> <td>6.26775-6.26825</td><td>108-121.94</td><td>1718.8-1722.2</td><td>13.25-13.4</td></tr> <tr> <td>6.31175-6.31225</td><td>123-138</td><td>2200-2300</td><td>14.47-14.5</td></tr> <tr> <td>8.291-8.294</td><td>149.9-150.05</td><td>2310-2390</td><td>15.35-16.2</td></tr> <tr> <td>8.362-8.366</td><td>156.52475-156.52525</td><td>2483.5-2500</td><td>17.7-21.4</td></tr> <tr> <td>8.37625-8.38675</td><td>156.7-156.9</td><td>2690-2900</td><td>22.01-23.12</td></tr> <tr> <td>8.41425-8.41475</td><td>162.0125-167.17</td><td>3260-3267</td><td>23.6-24.0</td></tr> <tr> <td>12.29-12.293</td><td>167.72-173.2</td><td>3332-3339</td><td>31.2-31.8</td></tr> <tr> <td>12.51975-12.52025</td><td>240-285</td><td>3345.8-3358</td><td>36.43-36.5</td></tr> <tr> <td>12.57675-12.57725</td><td>322-335.4</td><td>3600-4400</td><td>(<sup>2</sup>)</td></tr> <tr> <td>13.36-13.41</td><td></td><td></td><td></td></tr> </tbody> </table> <p><sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.</p> <p><sup>2</sup> Above 38.6</p> <p>The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35 apply to these measurements.</p> <p>Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:</p>			MHz	MHz	MHz	GHz	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15	<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46	2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2	4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7	6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4	6.31175-6.31225	123-138	2200-2300	14.47-14.5	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2	8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5	12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )	13.36-13.41			
MHz	MHz	MHz	GHz																																																																								
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15																																																																								
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46																																																																								
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75																																																																								
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5																																																																								
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2																																																																								
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5																																																																								
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7																																																																								
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4																																																																								
6.31175-6.31225	123-138	2200-2300	14.47-14.5																																																																								
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2																																																																								
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4																																																																								
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12																																																																								
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0																																																																								
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8																																																																								
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5																																																																								
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )																																																																								
13.36-13.41																																																																											

	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
<p>** 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.</p> <p>In the emission table above, the tighter limit applies at the band edges.</p> <p>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.</p>			
Test Method:	ANSI C63.10-2020, section 12.7.4, 12.7.6, 12.7.7		
Procedure:	<p>Above 1GHz:</p> <p>a. 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.</p> <p>b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</p> <p>c. 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.</p> <p>d. 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.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>f. 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 or average method as specified and then reported in a data sheet.</p> <p>g. Test the EUT in the lowest channel, the middle channel, the Highest channel.</p> <p>h. 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.</p> <p>i. Repeat above procedures until all frequencies measured was complete.</p> <p>Remark:</p> <p>1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor</p> <p>2. Scan from 18GHz to 40GHz, the disturbance above 18GHz 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.</p> <p>3. As shown in this section, for frequencies above 1GHz, the field strength limits 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 the emissions whose peak level is lower</p>		

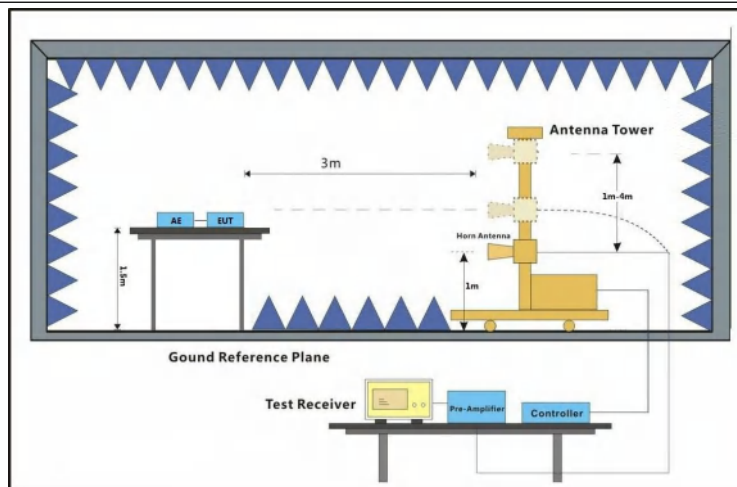
than the average limit, only the peak measurement is shown in the report.  
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

### 3.7.1 E.U.T. Operation:

Operating Environment:

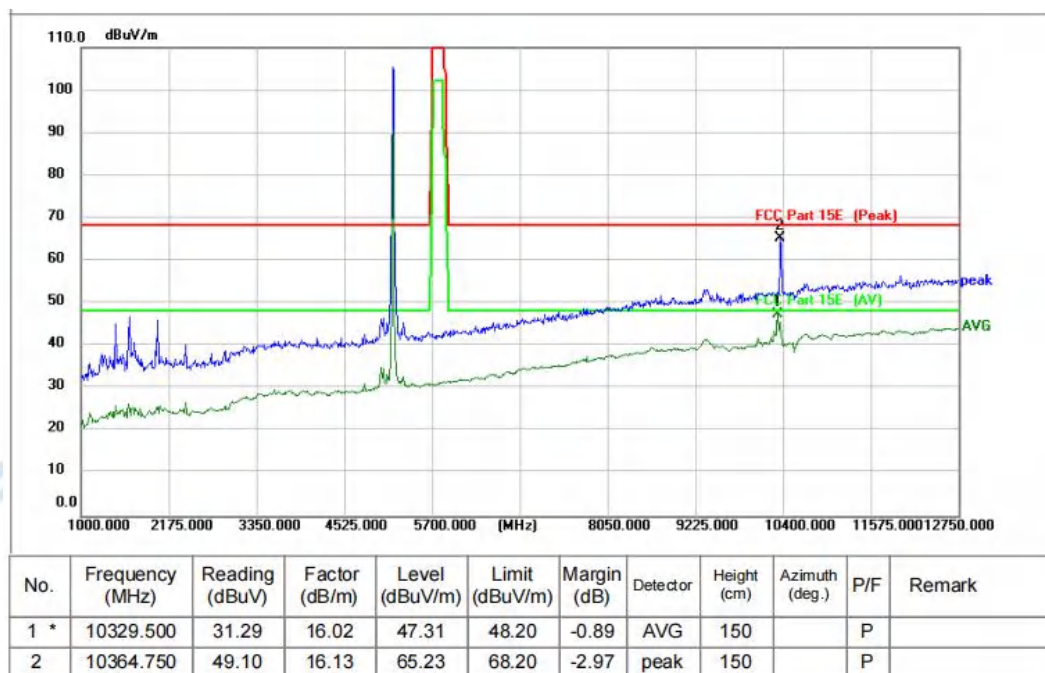
Temperature:	22.7 °C	Humidity:	51 %	Atmospheric Pressure:	101 kPa
Pretest mode:	TM1, TM2				
Final test mode:	TM1, TM2				

### 3.7.2 Test Setup Diagram:



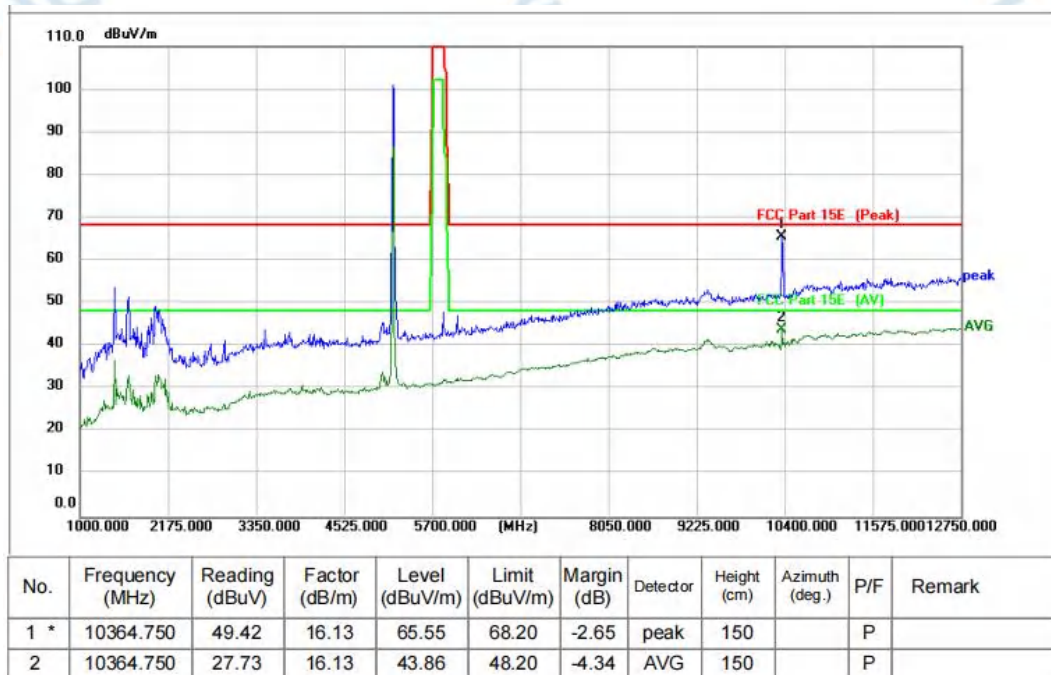
### 3.7.3 Test Data:

TM1 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: L

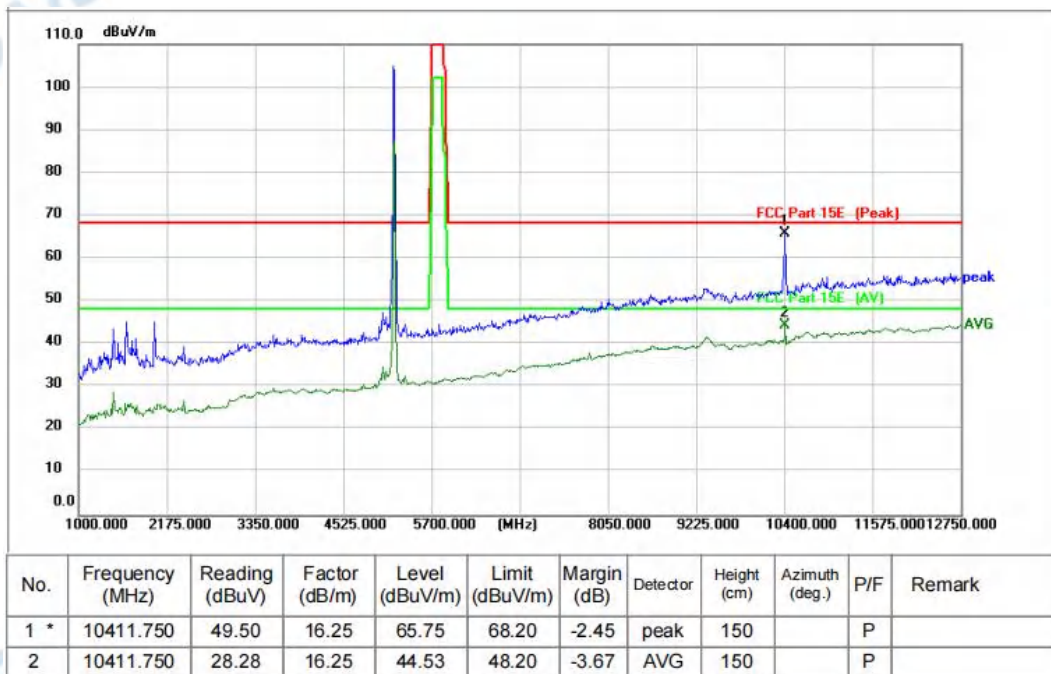




TM1 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: L

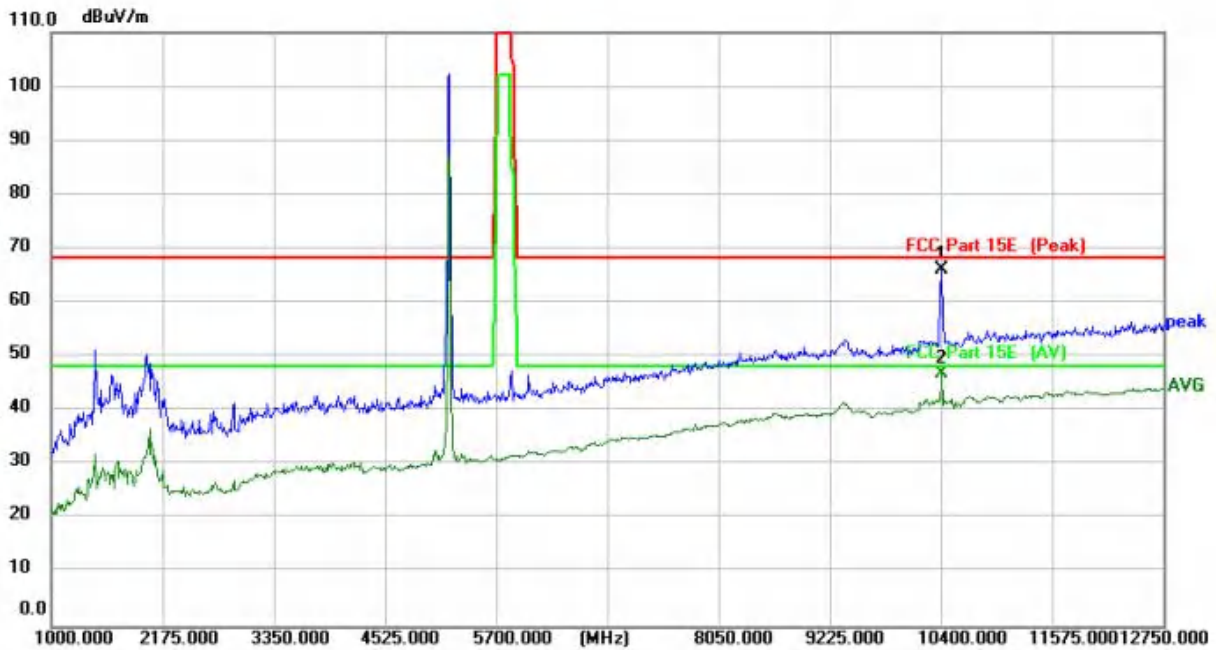


TM1 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: M



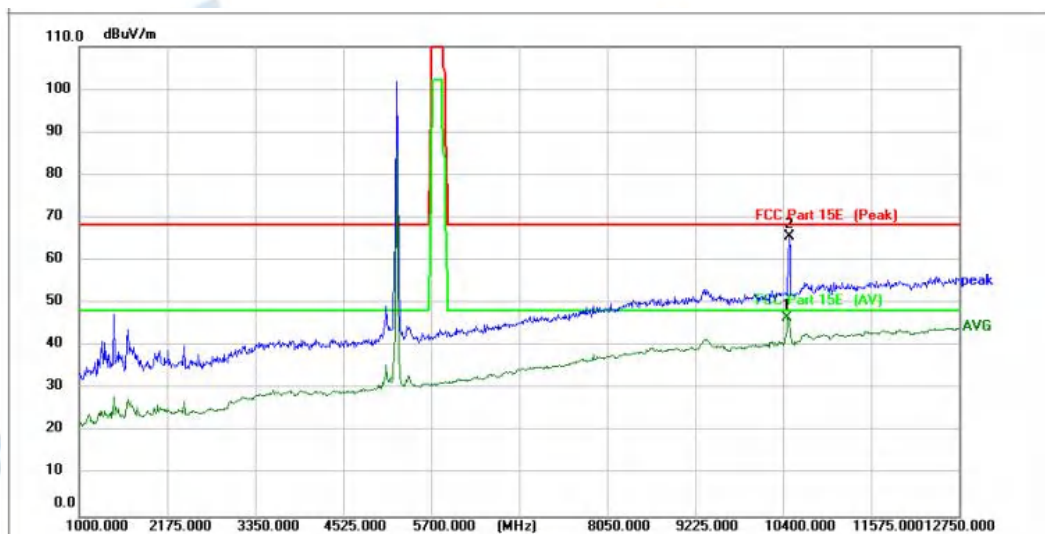


TM1 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: M



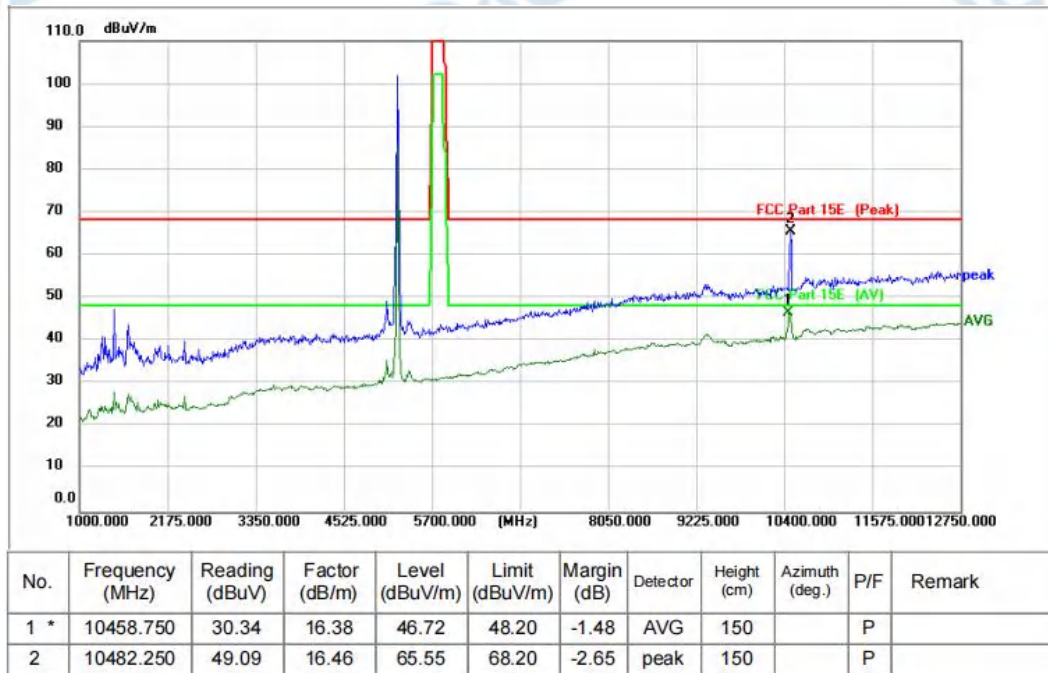
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	10400.000	49.97	16.22	66.19	68.20	-2.01	peak	150		P	
2 *	10411.750	30.67	16.25	46.92	48.20	-1.28	AVG	150		P	

TM1 / Polarization: Horizontal / Band: 5150-5250 MHz / BW: 20 / CH: H

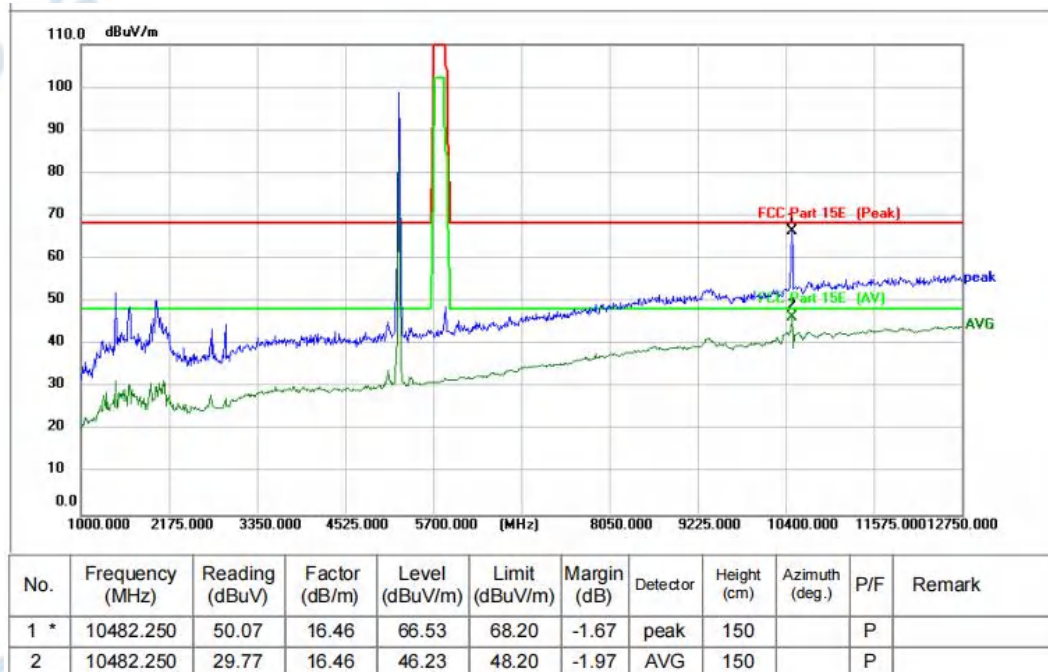


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	10458.750	30.34	16.38	46.72	48.20	-1.48	AVG	150		P	
2	10482.250	49.09	16.46	65.55	68.20	-2.65	peak	150		P	

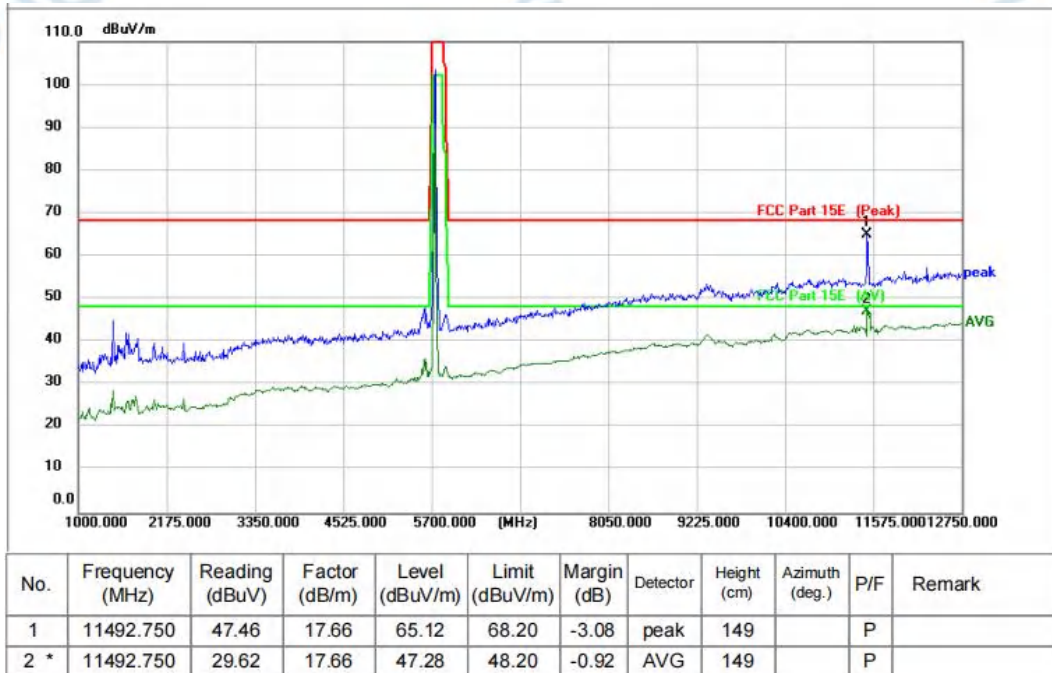
TM1 / Polarization: Vertical / Band: 5150-5250 MHz / BW: 20 / CH: H



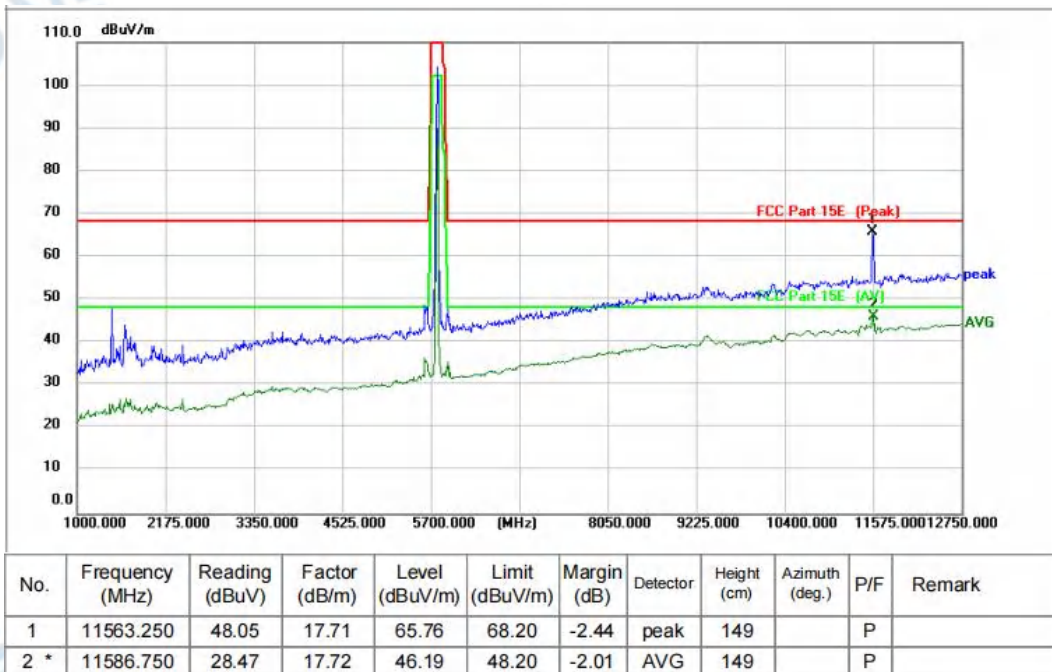
TM1 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: L



TM1 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: L

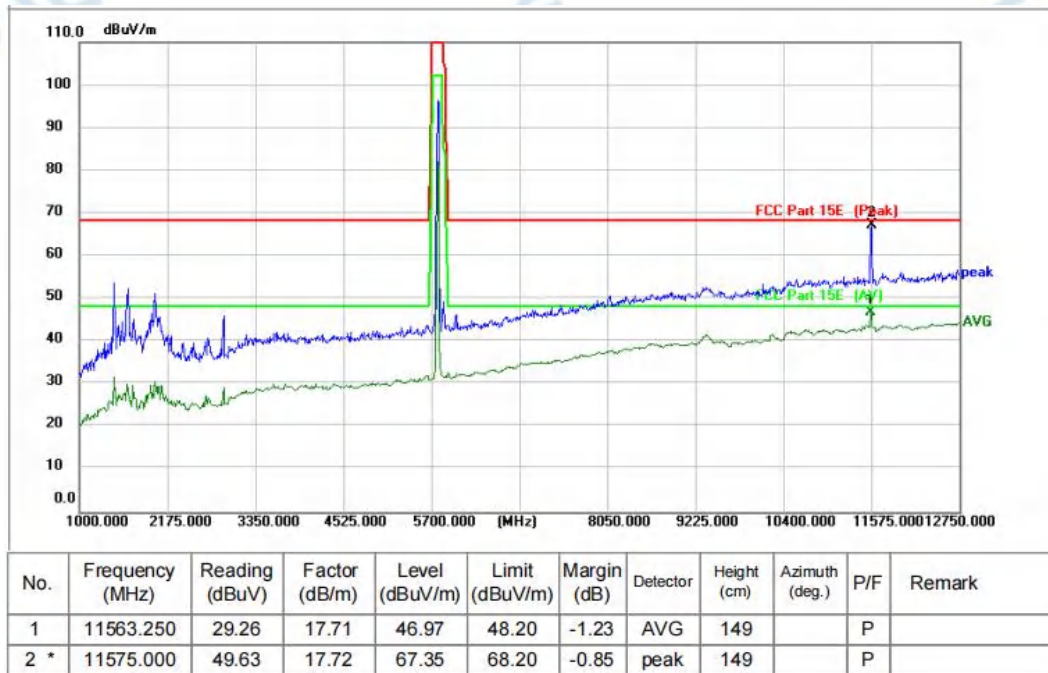


TM1 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: M

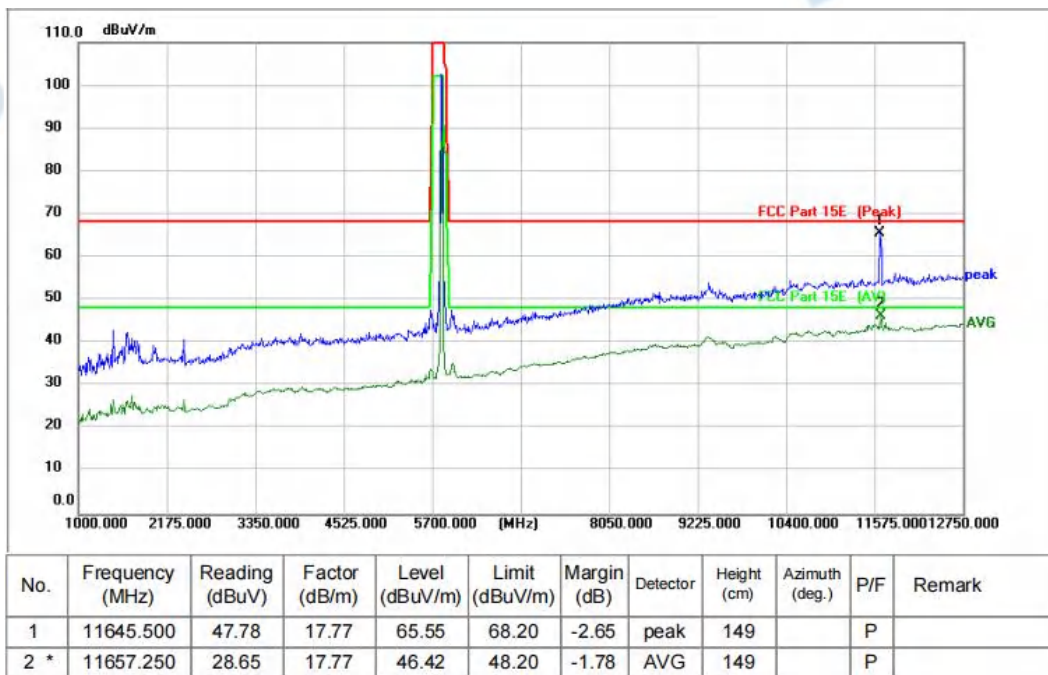




TM1 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: M

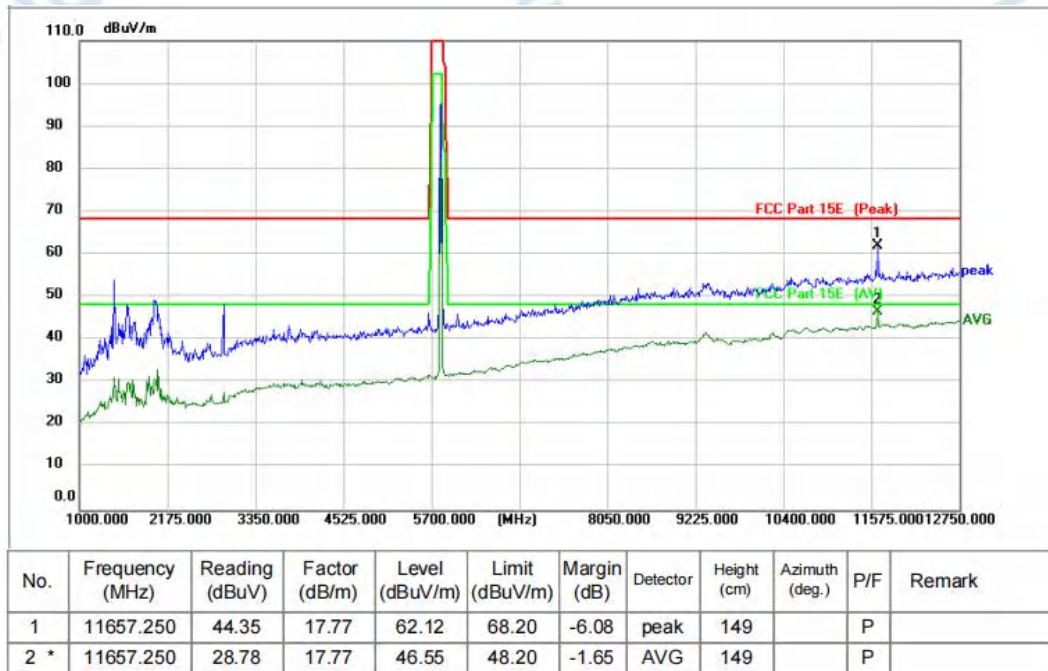


TM1 / Polarization: Horizontal / Band: 5725-5850 MHz / BW: 20 / CH: H





TM1 / Polarization: Vertical / Band: 5725-5850 MHz / BW: 20 / CH: H



Remark: 1.Margin= Level – Limit; Level=Test receiver reading + correction factor

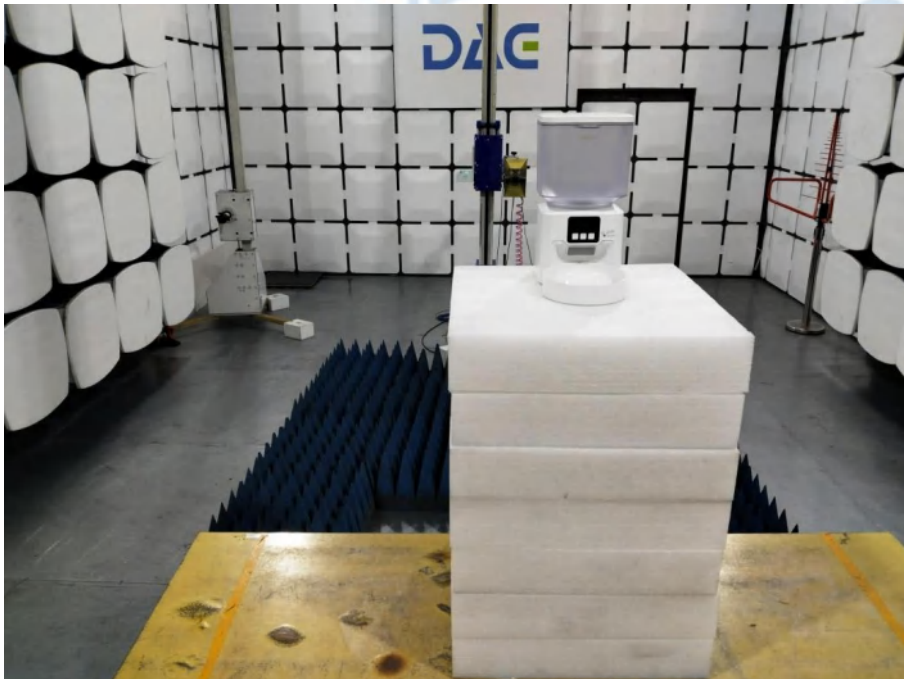
2.The test software will only record the worst test angle and height, and only the worst case will be recorded in the test report.

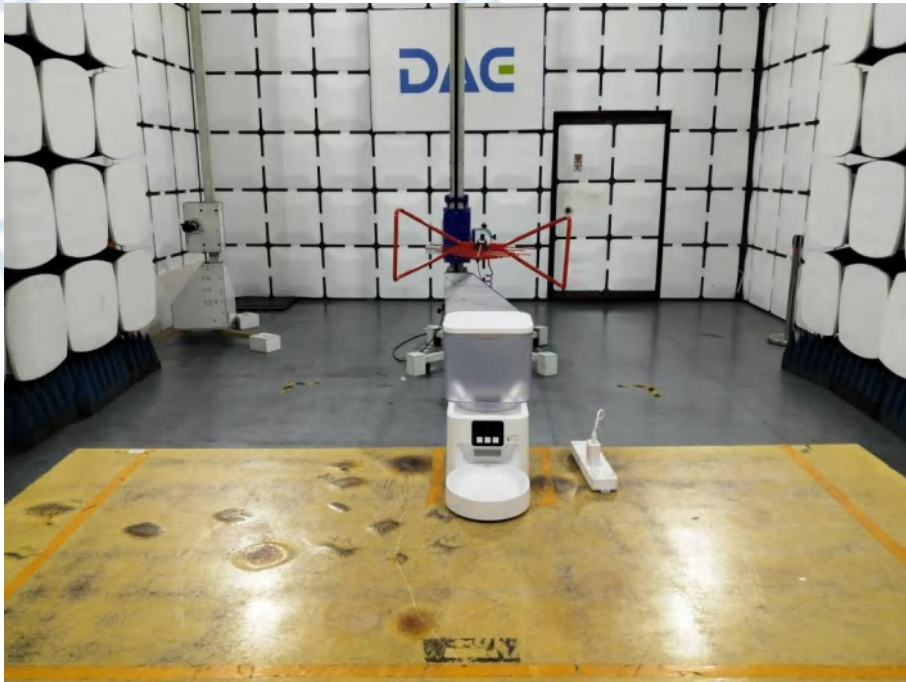
## 4 TEST SETUP PHOTOS

**Conducted Emission at AC power line**



**Band edge emissions (Radiated)  
Undesirable emission limits (above 1GHz)**



**Undesirable emission limits (below 1GHz)****5 PHOTOS OF THE EUT**

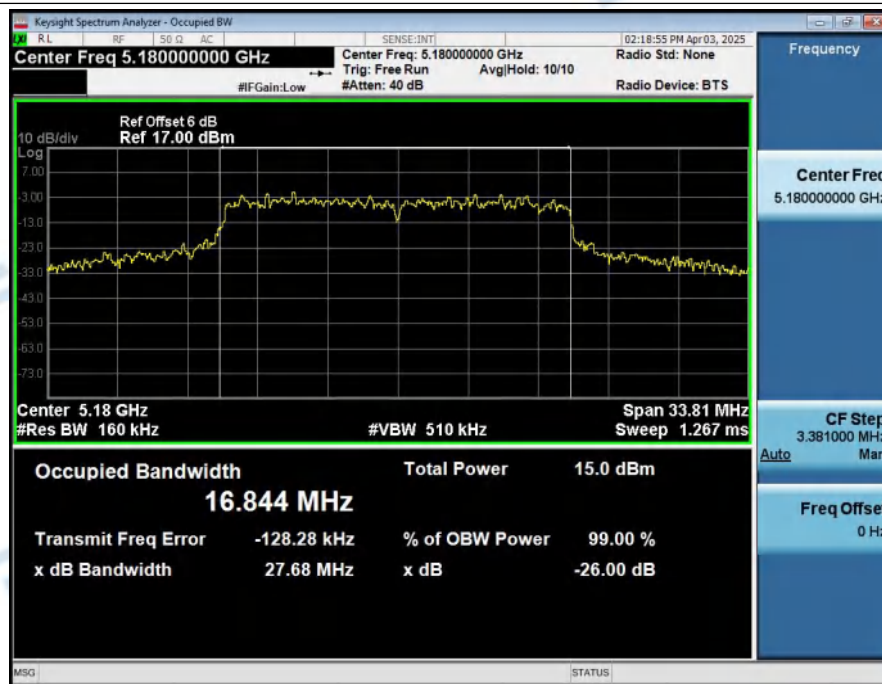
Please Refer to report DACE250313013RL001 for Details.

# Appendix-5.2G

## 1. -26dB and 99% Emission Bandwidth

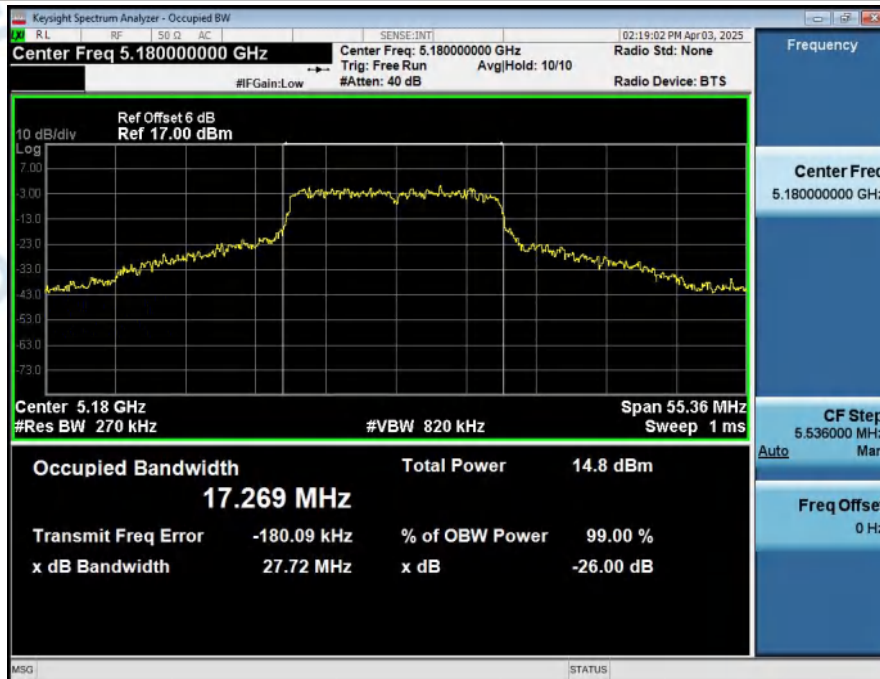
Condition	Antenna	Modulation	Frequency(MHz)	-26dB_Emission_Bandwidth(MHz)	Occupied Bandwidth(MHz)
NVNT	ANT1	802.11a	5180.00	27.72	16.84
NVNT	ANT1	802.11a	5200.00	25.56	17.64
NVNT	ANT1	802.11a	5240.00	20.02	16.44
NVNT	ANT1	802.11n(HT20)	5180.00	26.32	17.57
NVNT	ANT1	802.11n(HT20)	5200.00	27.83	17.54
NVNT	ANT1	802.11n(HT20)	5240.00	19.84	17.49
NVNT	ANT1	802.11n(HT40)	5190.00	54.62	36.11
NVNT	ANT1	802.11n(HT40)	5230.00	45.36	35.98

99%\_OCB\_NVNT\_ANT1\_802\_11a\_5180

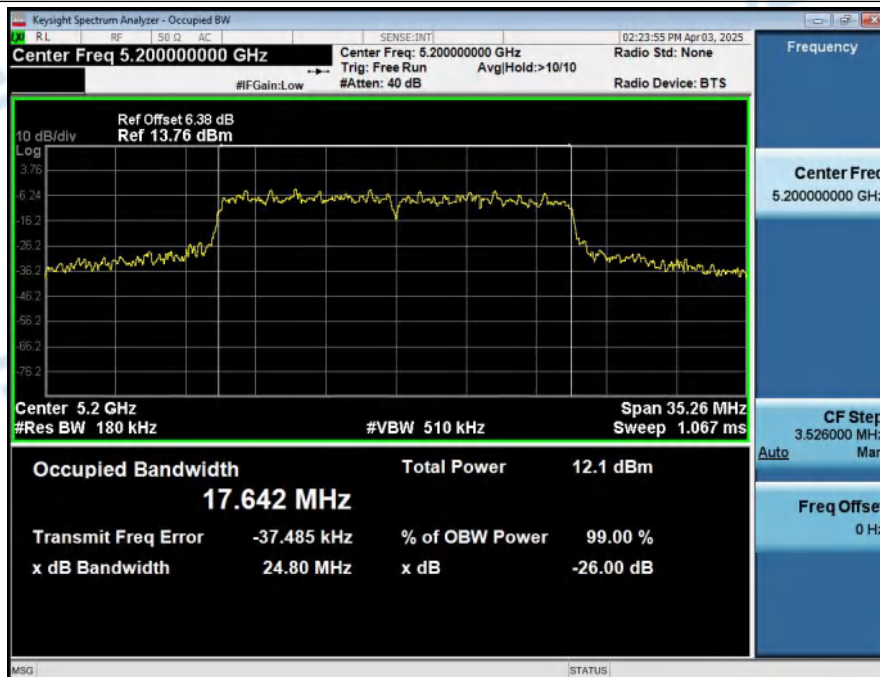




### -26BW\_NVNT\_ANT1\_802\_11a\_5180



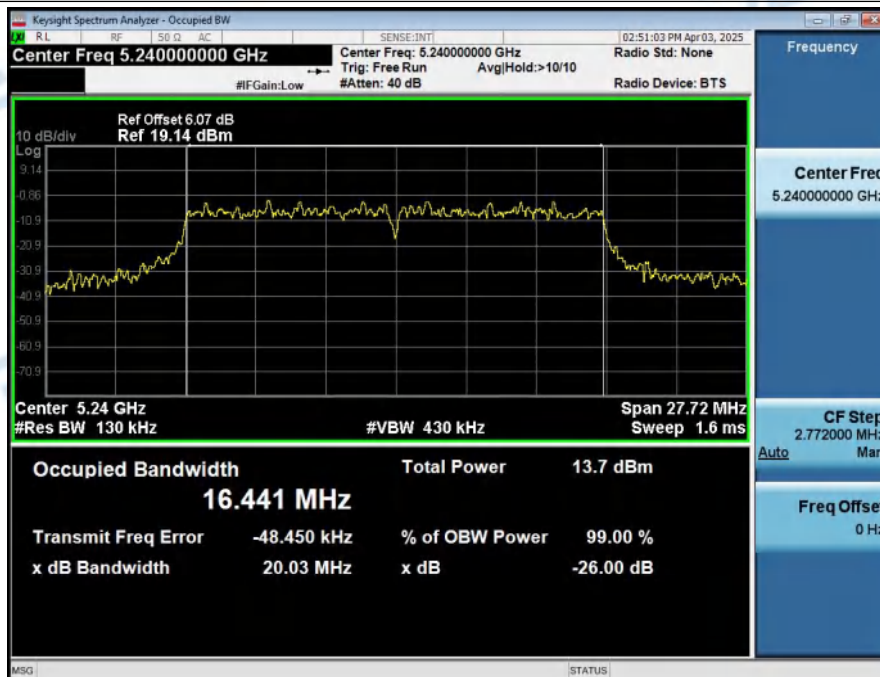
### 99%\_OCB\_NVNT\_ANT1\_802\_11a\_5200



### -26BW\_NVNT\_ANT1\_802\_11a\_5200



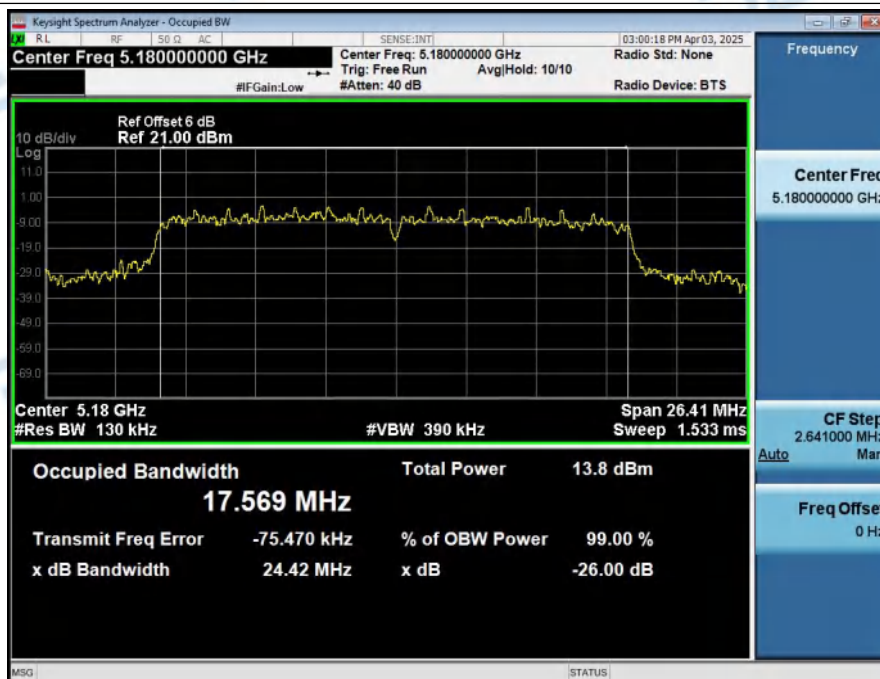
### 99%\_OCB\_NVNT\_ANT1\_802\_11a\_5240



**-26BW\_NVNT\_ANT1\_802\_11a\_5240**

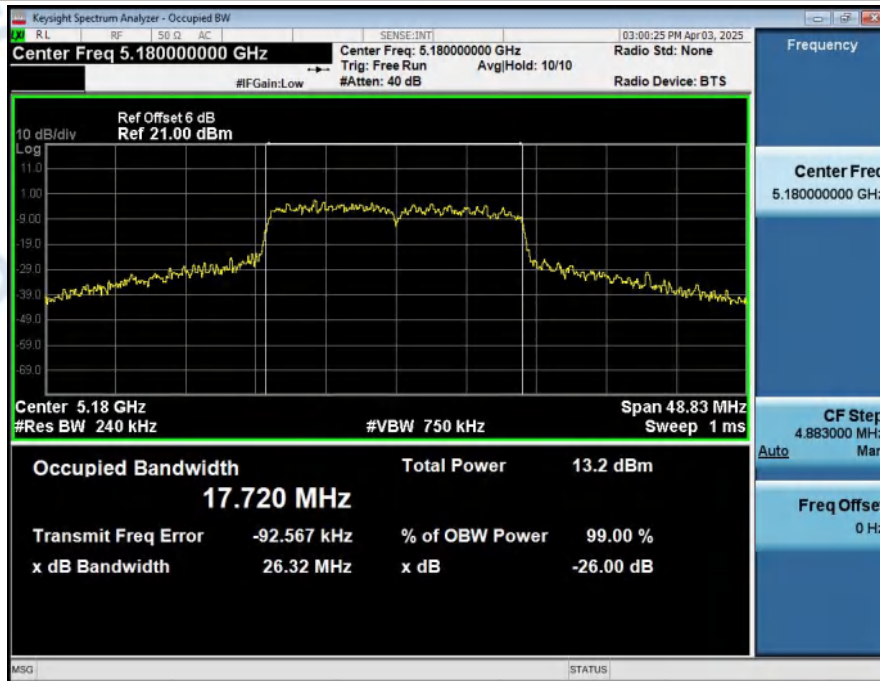


99%\_OCB\_NVNT\_ANT1\_802\_11n(HT20)\_5180





### -26BW\_NVNT\_ANT1\_802\_11n(HT20)\_5180

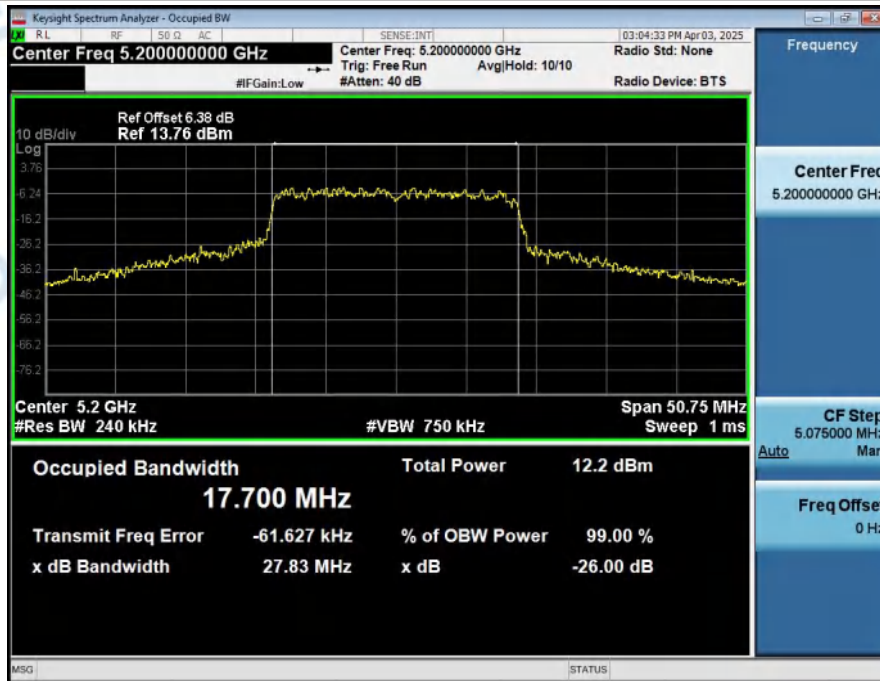


### 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT20)\_5200





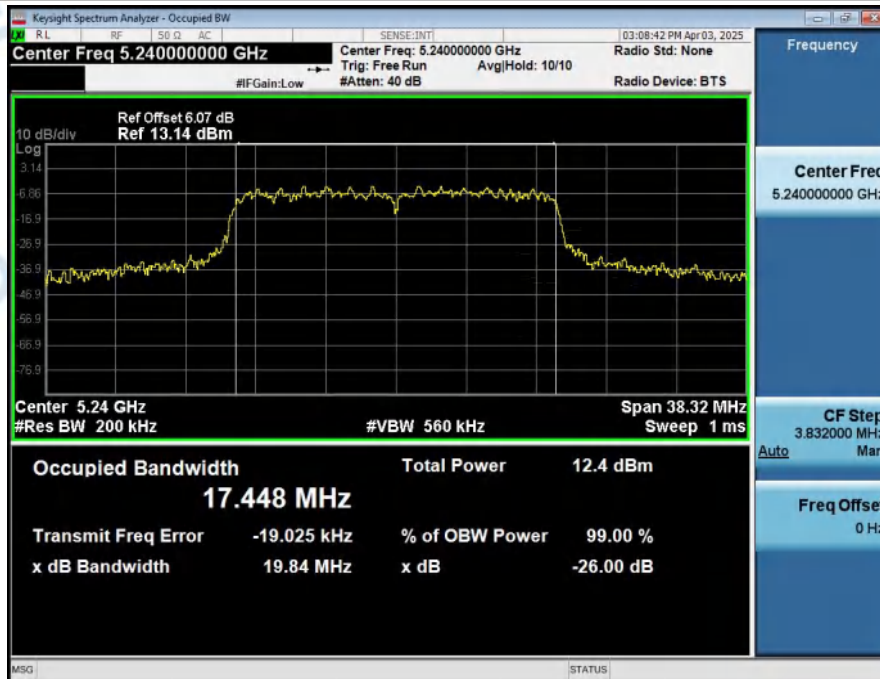
### -26BW\_NVNT\_ANT1\_802\_11n(HT20)\_5200



### 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT20)\_5240



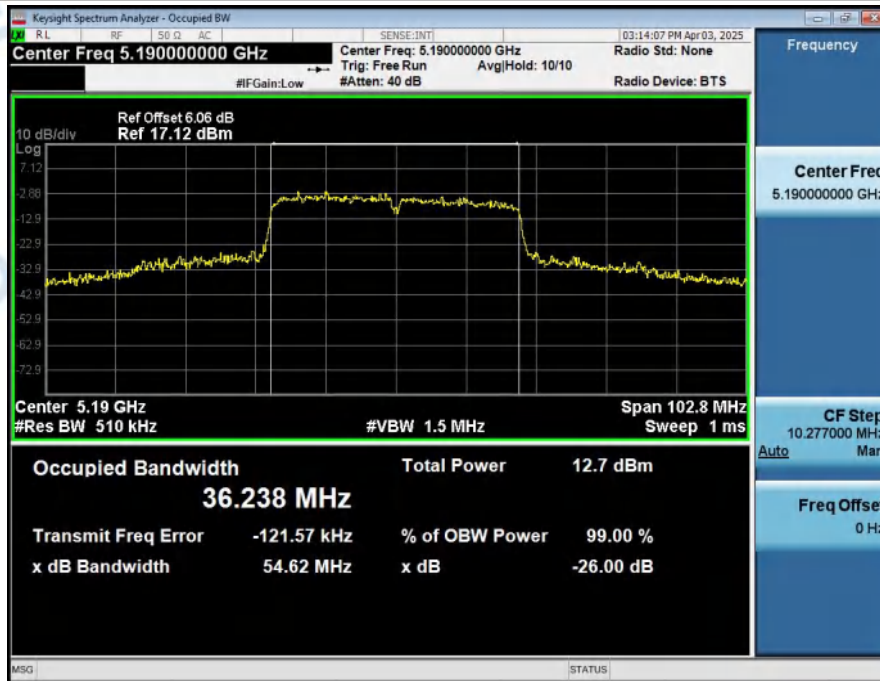
### -26BW\_NVNT\_ANT1\_802\_11n(HT20)\_5240



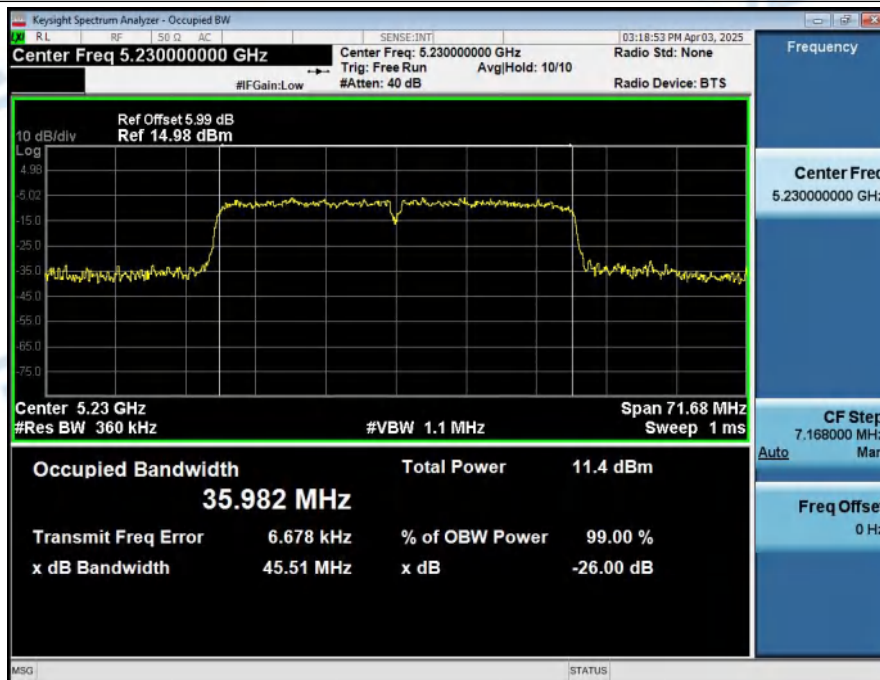
### 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT40)\_5190



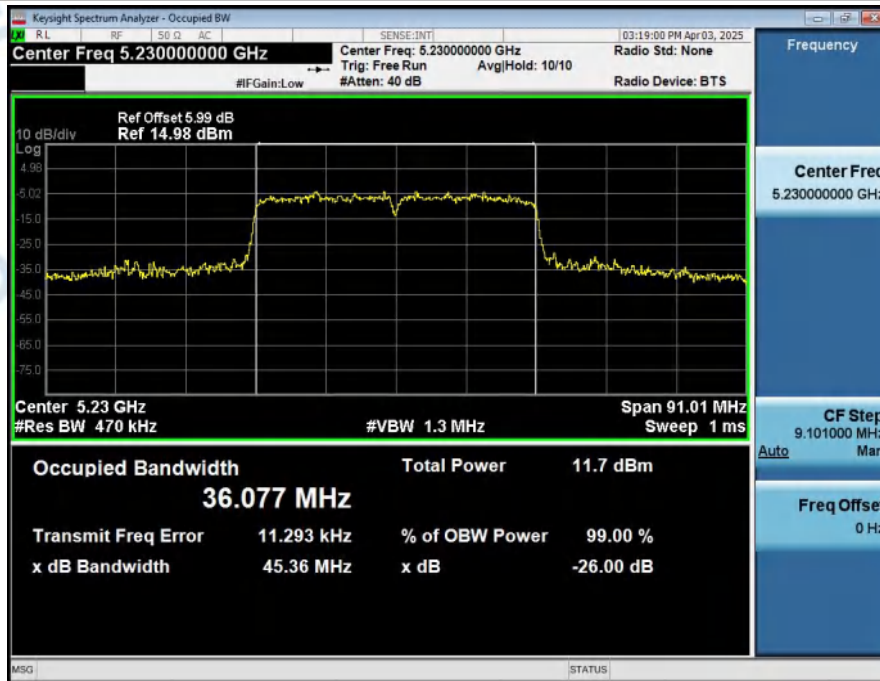
### -26BW\_NVNT\_ANT1\_802\_11n(HT40)\_5190



### 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT40)\_5230



-26BW\_NVNT\_ANT1\_802\_11n(HT40)\_5230

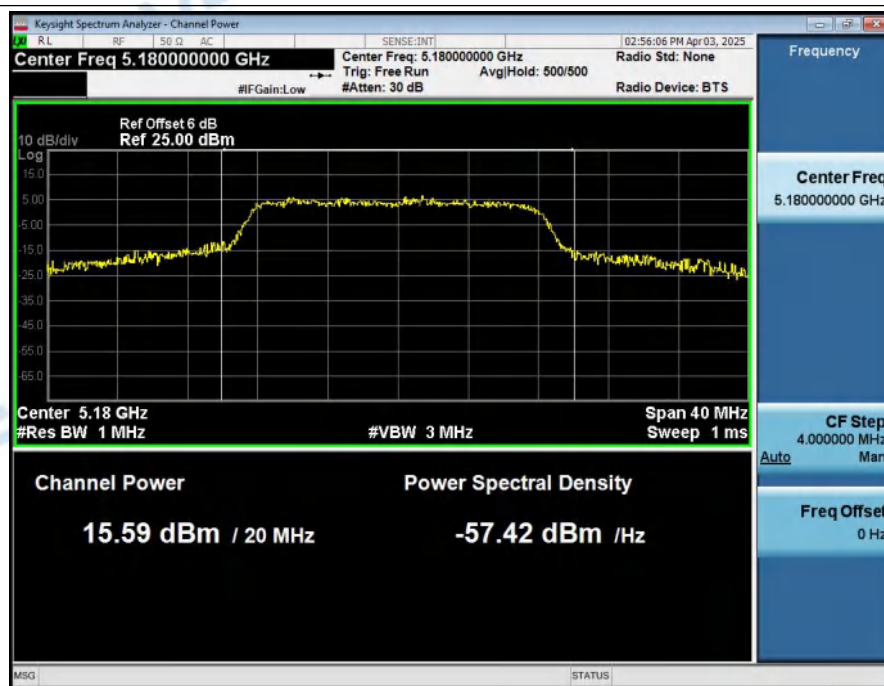




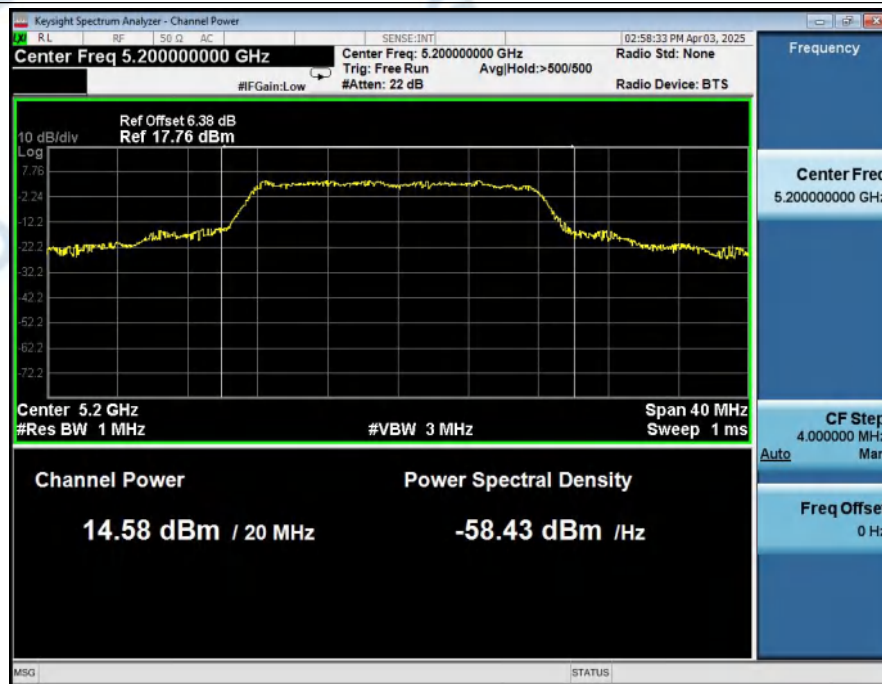
## 2. Maximum Conducted Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	15.59	24	Pass
NVNT	ANT1	802.11a	5200.00	14.50	24	Pass
NVNT	ANT1	802.11a	5240.00	12.01	24	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	12.04	24	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	11.03	24	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	13.05	24	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	11.23	24	Pass
NVNT	ANT1	802.11n(HT40)	5230.00	10.26	24	Pass

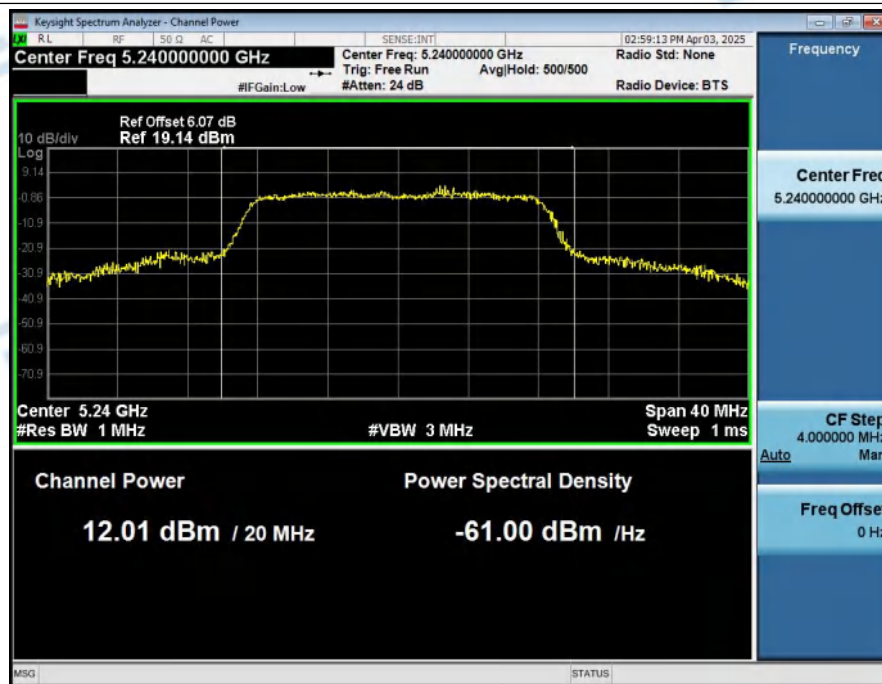
Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11a\_5180\_20M



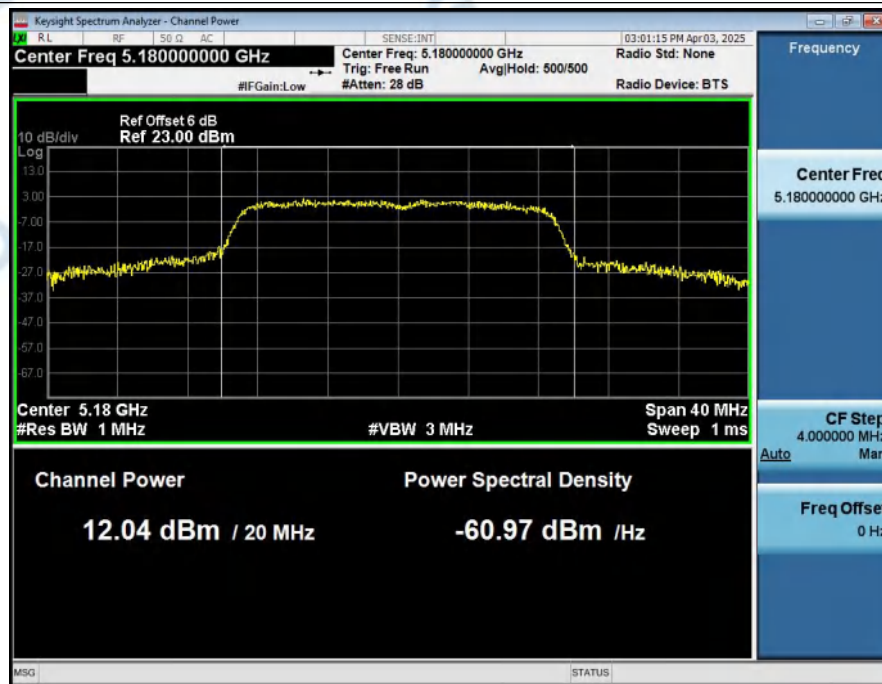
### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11a\_5200\_20M



### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11a\_5240\_20M



### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11n(HT20)\_5180\_20M



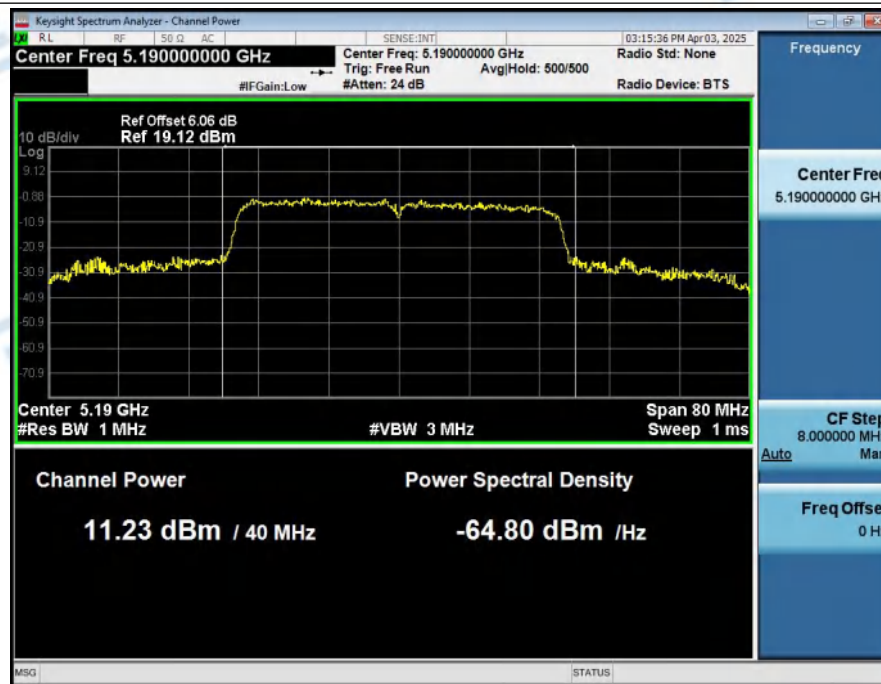
### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11n(HT20)\_5200\_20M



### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11n(HT20)\_5240\_20M

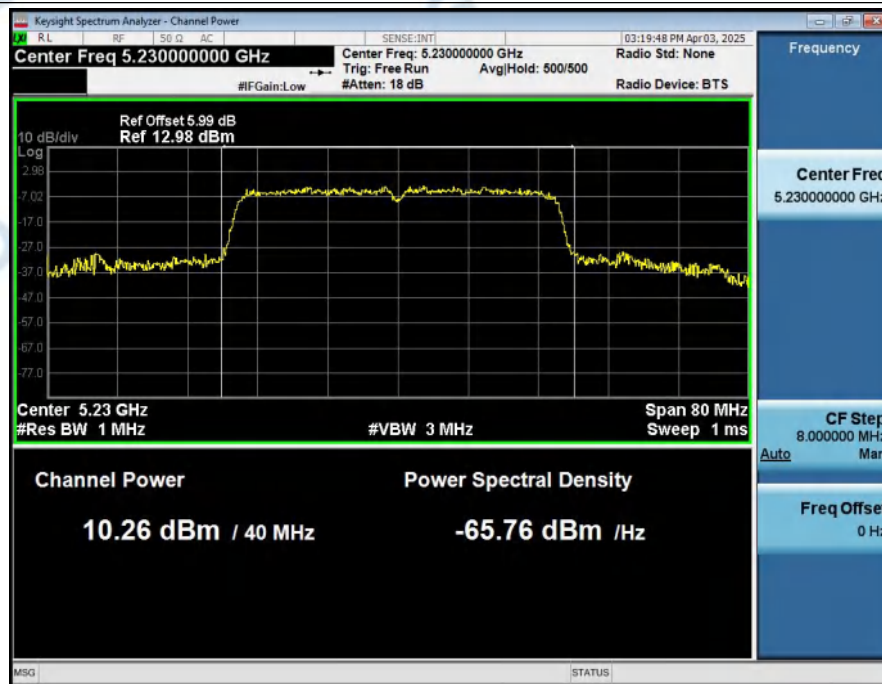


### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11n(HT40)\_5190\_40M





### Maximum\_Conducted\_Output\_Power\_NVNT\_ANT1\_802\_11n(HT40)\_5230\_40M



### 3. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	PSD(dBm/MHz)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	2.32	11.00	Pass
NVNT	ANT1	802.11a	5200.00	1.23	11.00	Pass
NVNT	ANT1	802.11a	5240.00	2.25	11.00	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	1.80	11.00	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	0.14	11.00	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	0.56	11.00	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	-2.54	11.00	Pass
NVNT	ANT1	802.11n(HT40)	5230.00	-3.56	11.00	Pass

Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11a\_5180



### Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11a\_5200



### Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11a\_5240



### Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT20)\_5180



### Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT20)\_5200





Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT20)\_5240



Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT40)\_5190



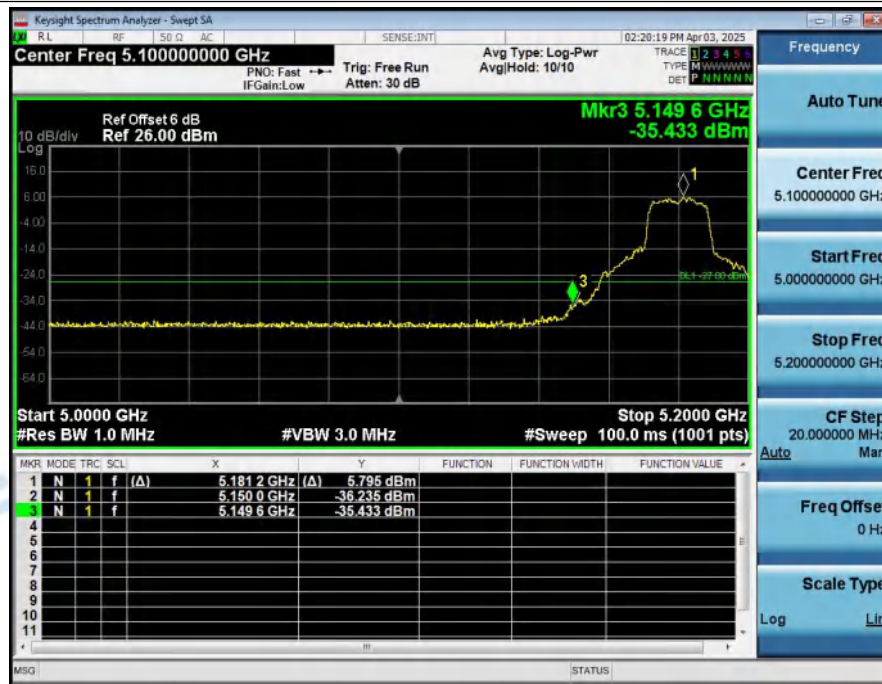
Power\_Spectral\_Density\_NVNT\_ANT1\_802\_11n(HT40)\_5230



#### 4. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark Frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5180.00	5149.60	-35.43	-27	Pass
NVNT	ANT1	802.11a	5240.00	5400.60	-40.45	-27	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	5149.00	-38.66	-27	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	5375.20	-41.49	-27	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	5149.94	-26.31	-27	Fail
NVNT	ANT1	802.11n(HT40)	5230.00	5361.62	-40.96	-27	Pass

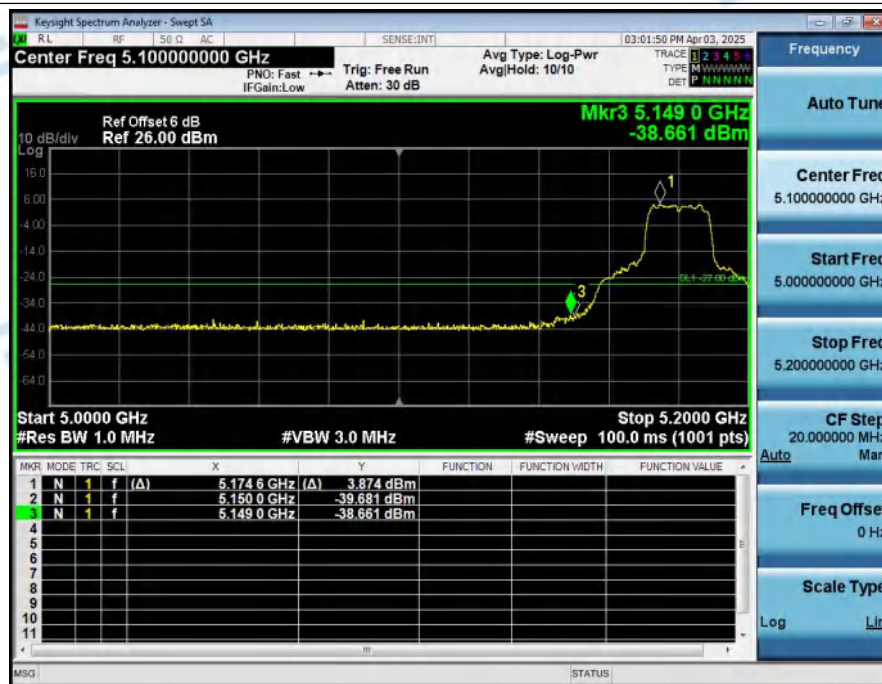
Bandedge\_NVNT\_ANT1\_802\_11a\_5180



## Bandedge\_NVNT\_ANT1\_802\_11a\_5240

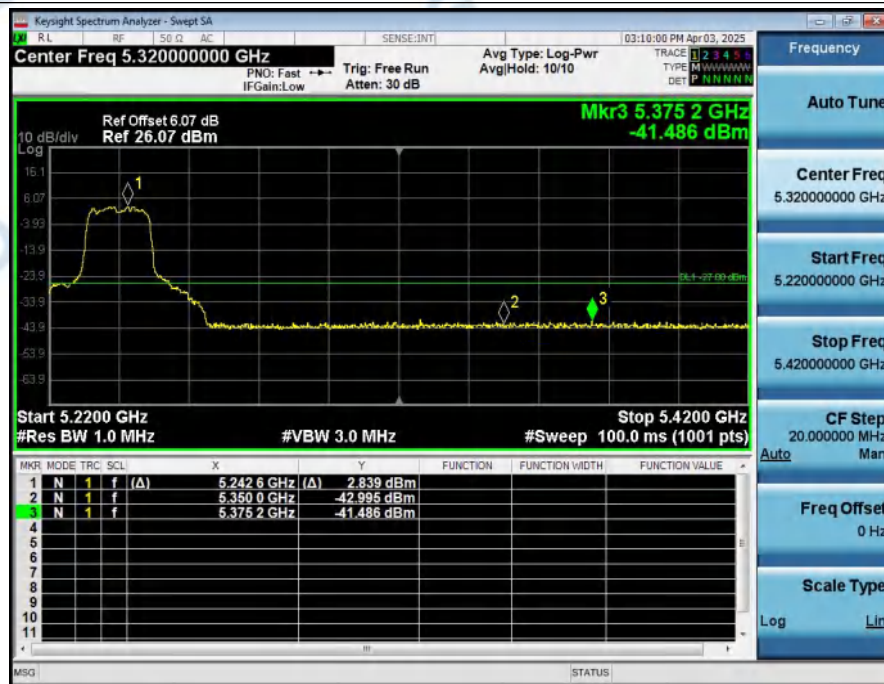


## Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_5180

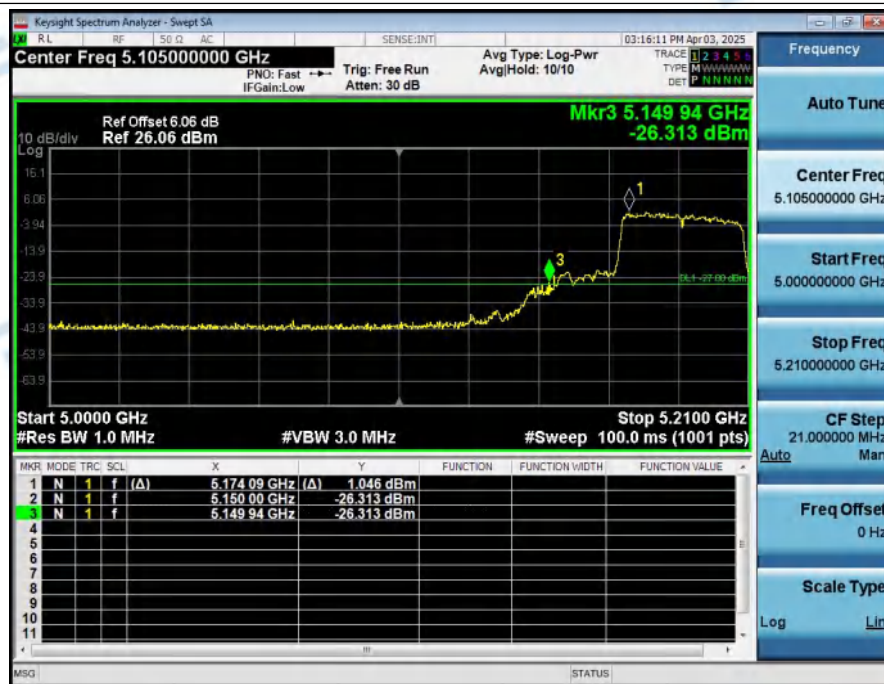




## Bandedge\_NVNT\_ANT1\_802\_11n(HT20)\_5240



## Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_5190



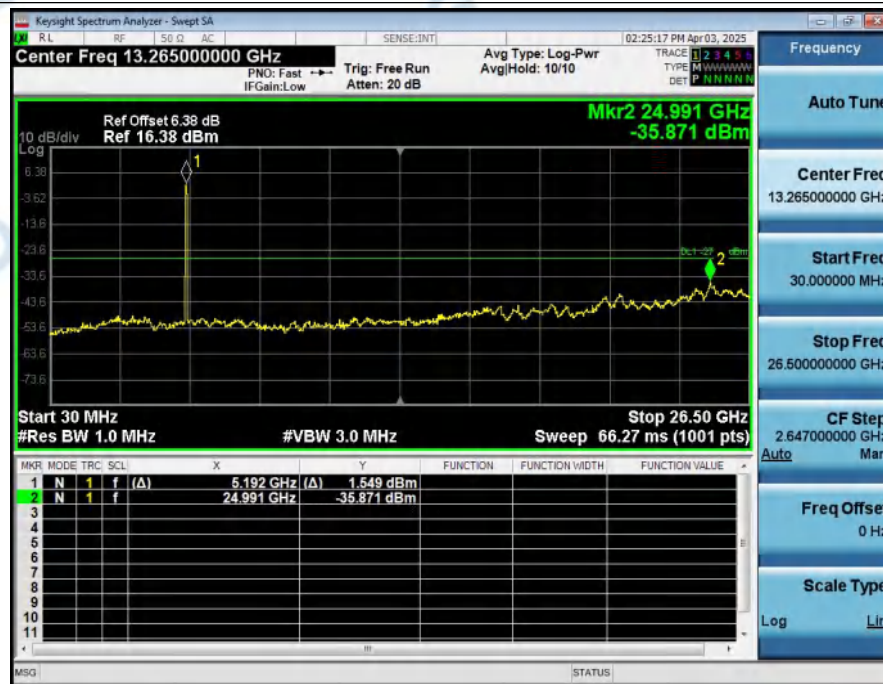
Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_5230



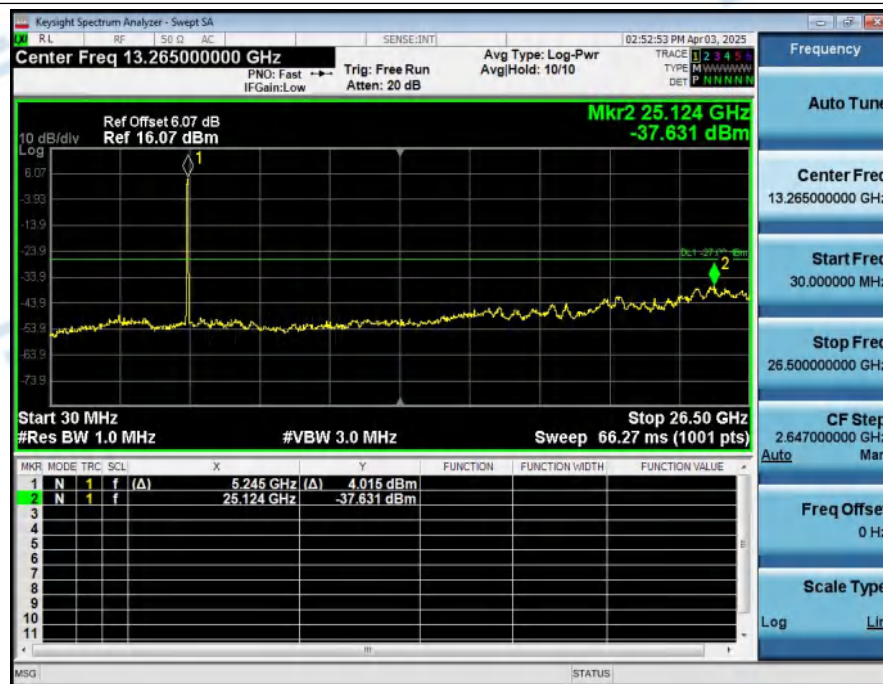




### Spurious\_Emission\_NVNT\_ANT1\_802\_11a\_5200\_20M

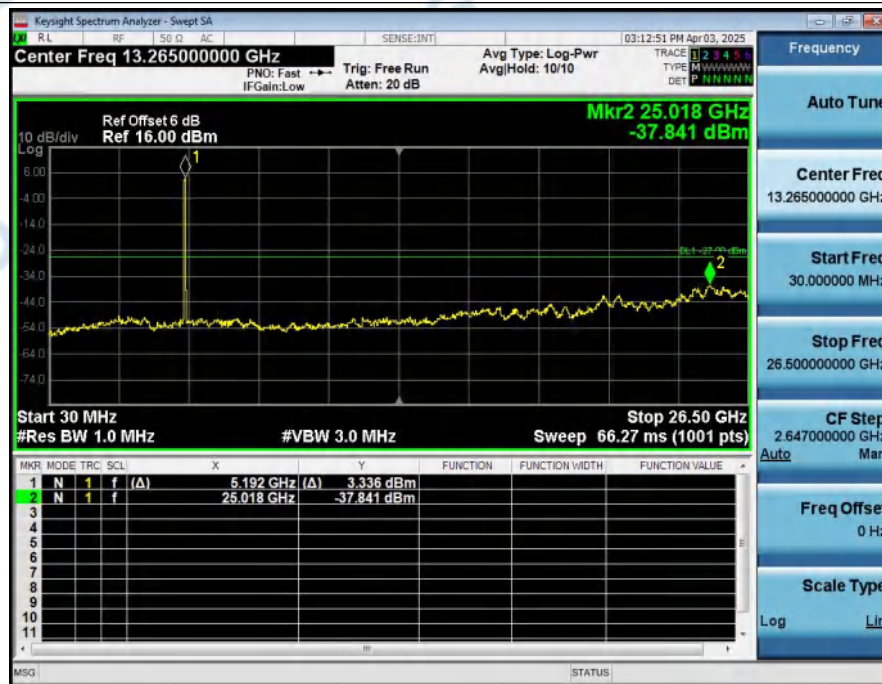


### Spurious\_Emission\_NVNT\_ANT1\_802\_11a\_5240\_20M

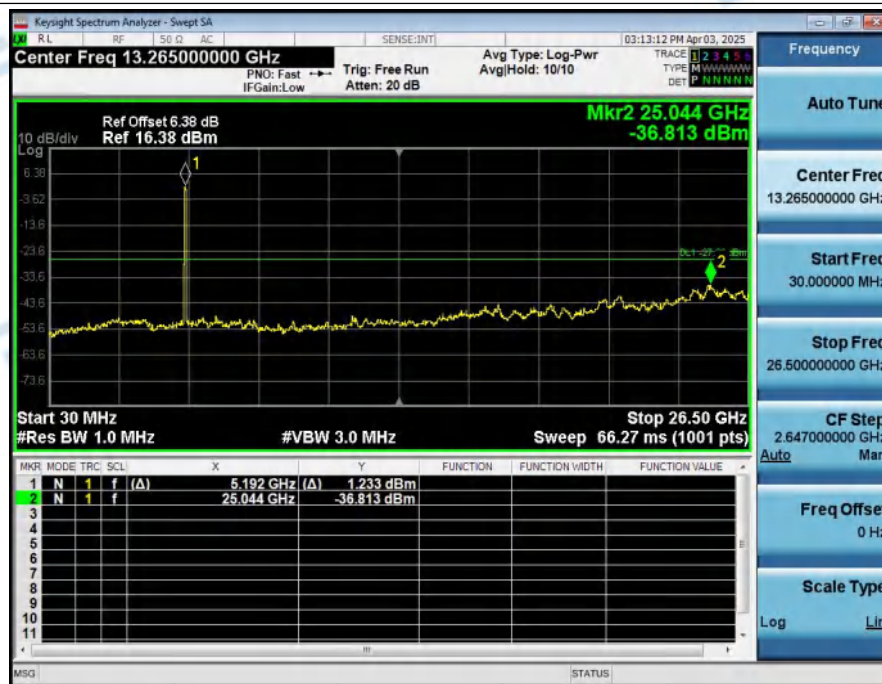




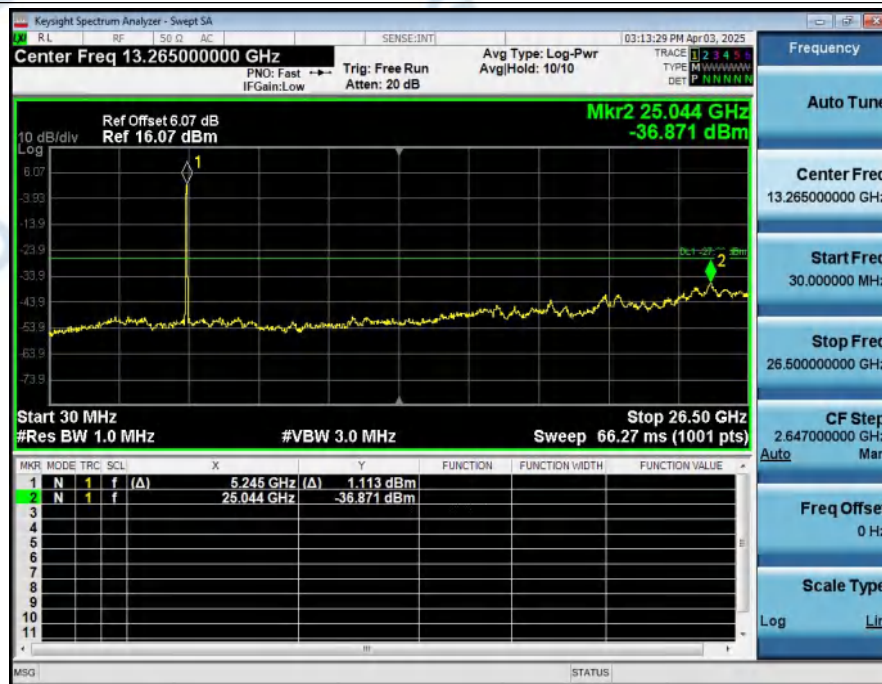
### Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT20)\_5180\_20M



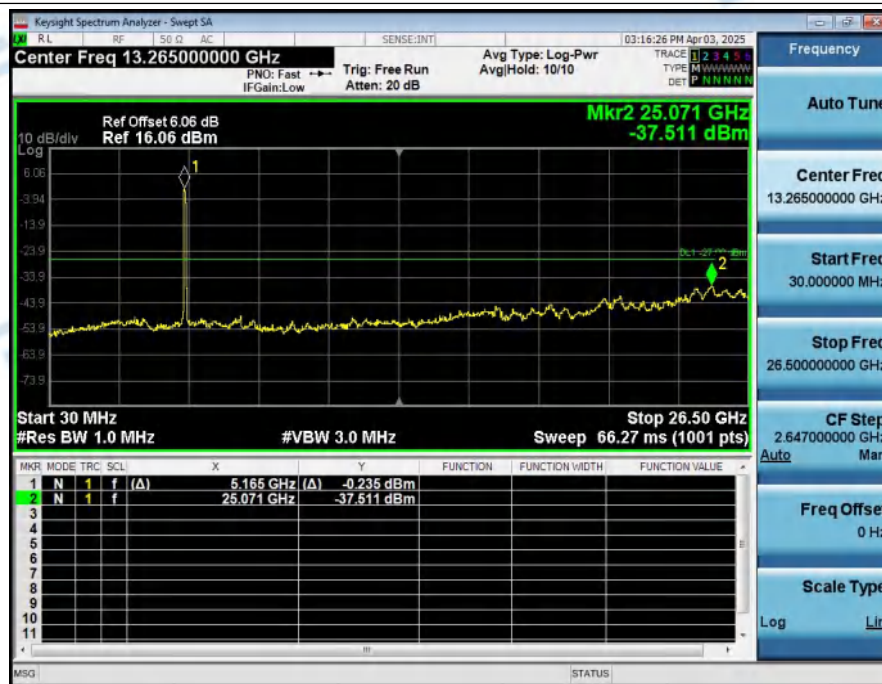
### Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT20)\_5200\_20M



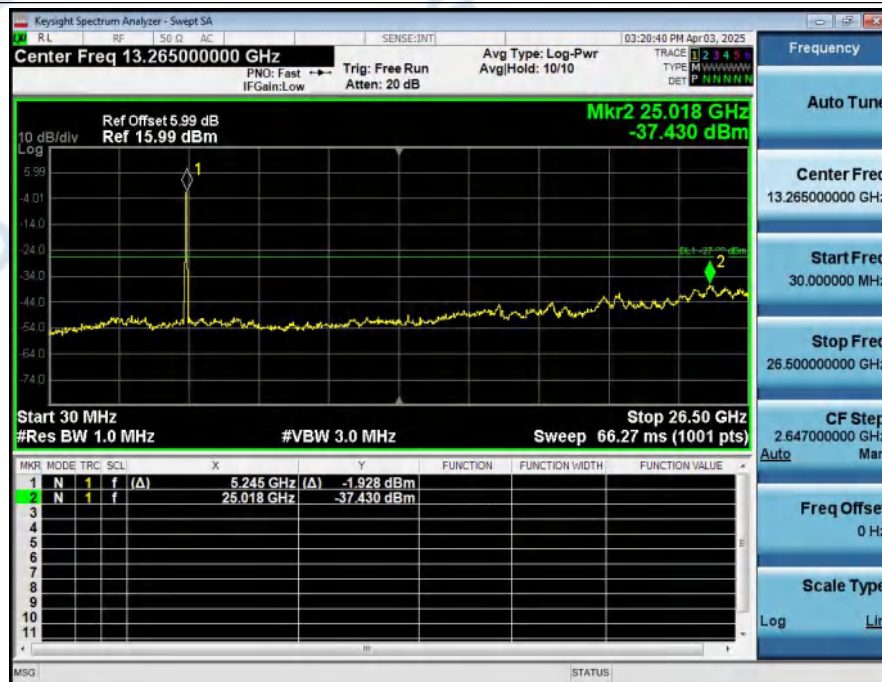
### Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT20)\_5240\_20M



### Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT40)\_5190\_40M



Spurious\_Emission\_NVNT\_ANT1\_802\_11n(HT40)\_5230\_40M





## 6. Frequency Stability

Condition	Antenna	Modulation	Frequency (MHz)	Fc(MHz)	Fl(MHz)	Fh(MHz)	Limit(MHz)	Result
NVHT	ANT1	802.11a	5180.00	5179.562	5169.440	5189.684	5150~5250	Pass
NVNT	ANT1	802.11a	5180.00	5179.860	5171.328	5188.392	5150~5250	Pass
NVLT	ANT1	802.11a	5180.00	5179.932	5171.616	5188.248	5150~5250	Pass
HVNT	ANT1	802.11a	5180.00	5179.942	5171.732	5188.152	5150~5250	Pass
LVNT	ANT1	802.11a	5180.00	5179.922	5171.788	5188.056	5150~5250	Pass
NVHT	ANT1	802.11a	5200.00	5199.964	5190.936	5208.992	5150~5250	Pass
NVNT	ANT1	802.11a	5200.00	5199.942	5191.140	5208.744	5150~5250	Pass
NVLT	ANT1	802.11a	5200.00	5199.962	5191.236	5208.688	5150~5250	Pass
HVNT	ANT1	802.11a	5200.00	5199.926	5191.284	5208.568	5150~5250	Pass
LVNT	ANT1	802.11a	5200.00	5199.942	5191.336	5208.548	5150~5250	Pass
NVHT	ANT1	802.11a	5240.00	5239.970	5231.440	5248.500	5150~5250	Pass
NVNT	ANT1	802.11a	5240.00	5239.956	5231.660	5248.252	5150~5250	Pass
NVLT	ANT1	802.11a	5240.00	5239.962	5231.756	5248.168	5150~5250	Pass
HVNT	ANT1	802.11a	5240.00	5239.970	5231.824	5248.116	5150~5250	Pass
LVNT	ANT1	802.11a	5240.00	5239.972	5231.884	5248.060	5150~5250	Pass
NVHT	ANT1	802.11n(HT20)	5180.00	5179.914	5170.872	5188.956	5150~5250	Pass
NVNT	ANT1	802.11n(HT20)	5180.00	5179.922	5171.096	5188.748	5150~5250	Pass
NVLT	ANT1	802.11n(HT20)	5180.00	5179.952	5171.228	5188.676	5150~5250	Pass
HVNT	ANT1	802.11n(HT20)	5180.00	5179.924	5171.300	5188.548	5150~5250	Pass
LVNT	ANT1	802.11n(HT20)	5180.00	5179.924	5171.396	5188.452	5150~5250	Pass
NVHT	ANT1	802.11n(HT20)	5200.00	5199.950	5190.872	5209.028	5150~5250	Pass
NVNT	ANT1	802.11n(HT20)	5200.00	5199.930	5191.096	5208.764	5150~5250	Pass
NVLT	ANT1	802.11n(HT20)	5200.00	5199.934	5191.200	5208.668	5150~5250	Pass
HVNT	ANT1	802.11n(HT20)	5200.00	5199.910	5191.272	5208.548	5150~5250	Pass
LVNT	ANT1	802.11n(HT20)	5200.00	5199.892	5191.356	5208.428	5150~5250	Pass
NVHT	ANT1	802.11n(HT20)	5240.00	5239.972	5231.068	5248.876	5150~5250	Pass
NVNT	ANT1	802.11n(HT20)	5240.00	5239.970	5231.220	5248.720	5150~5250	Pass
NVLT	ANT1	802.11n(HT20)	5240.00	5239.962	5231.320	5248.604	5150~5250	Pass
HVNT	ANT1	802.11n(HT20)	5240.00	5239.958	5231.392	5248.524	5150~5250	Pass
LVNT	ANT1	802.11n(HT20)	5240.00	5239.968	5231.468	5248.468	5150~5250	Pass
NVHT	ANT1	802.11n(HT40)	5190.00	5189.976	5171.656	5208.296	5150~5250	Pass
NVNT	ANT1	802.11n(HT40)	5190.00	5189.848	5171.824	5207.872	5150~5250	Pass
NVLT	ANT1	802.11n(HT40)	5190.00	5189.884	5172.008	5207.760	5150~5250	Pass
HVNT	ANT1	802.11n(HT40)	5190.00	5189.820	5172.112	5207.528	5150~5250	Pass
LVNT	ANT1	802.11n(HT40)	5190.00	5189.788	5172.232	5207.344	5150~5250	Pass
NVHT	ANT1	802.11n(HT40)	5230.00	5229.976	5211.824	5248.128	5150~5250	Pass
NVNT	ANT1	802.11n(HT40)	5230.00	5229.952	5212.040	5247.864	5150~5250	Pass
NVLT	ANT1	802.11n(HT40)	5230.00	5230.000	5212.240	5247.760	5150~5250	Pass
HVNT	ANT1	802.11n(HT40)	5230.00	5229.996	5212.416	5247.576	5150~5250	Pass
LVNT	ANT1	802.11n(HT40)	5230.00	5230.008	5212.544	5247.472	5150~5250	Pass