



FCC Test Report

Application No.: DNT2507240601R7959-14295
Applicant: Shenzhen Green Giant Energy Technology Development Co.,Ltd
Address of Applicant: Room 203,Building B,Minle Science Industrial Park,Minzhi St.,
LonghuaDist.Shenzhen
EUT Description: 4K Wireless Screen Projector (Mobile version)
Model No.: S450
FCC ID: 2A77D-S450
Power Supply DC 5V
Trade Mark: /
Standards: 47 CFR FCC Part 2, Subpart J
47 CFR Part 15, Subpart E
ANSI C63.10: 2020
Date of Receipt: 2025/8/14
Date of Test: 2025/8/15 to 2025/10/22
Date of Issue: 2025/11/09
Test Result: **PASS**

Prepared By: Wayne Lin (Testing Engineer)

Reviewed By: Percy Chen (Project Engineer)

Approved By: Hense Shen (Manager)



Note: If there is any objection to the results in this report, please submit a written inquiry to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp, and is issued by the company in accordance with the requirements of the "Conditions of Issuance of Test Reports" printed in the attached page. Unless otherwise stated, the results presented in this report only apply to the samples tested this time. Partial reproduction of this report is not allowed unless approved by the company in writing.

Dongguan DN Testing Co., Ltd.

Add: No. 1, West Fourth Street, Xingfa South Road, Wusha Community, Chang 'an Town, Dongguan City, Guangdong P.R.China

Web: www.dn-testing.com

Tel: +86-769-88087383

E-mail: service@dn-testing.com



Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Nov.09, 2025	Valid	Original Report



1 Test Summary

No.	Description of Test Item	FCC Standard Section	Results
1	6dB Bandwidth & 26dB Bandwidth & 99% Occupied Bandwidth	15.407(a) 15.407(e)	PASS
2	Maximum Conducted Output Power	15.407(a)	PASS
3	Peak Power Spectral Density	15.407(a)	PASS
4	Unwanted Emissions and Band Edge	15.205 15.209 15.407(b)	PASS
5	Frequency Stability	15.407(g)	PASS
6	AC Power Line Conducted Emissions	15.207 15.407(b)(9)	PASS
7	Antenna Requirement	15.203	PASS

Note:

1. "N/A" denotes test is not applicable in this test report.



Contents

1	Test Summary	3
2	General Information.....	5
2.1	Test Location.....	5
2.2	General Description of EUT	6
2.3	Channel List	7
2.4	Test Environment and Mode.....	8
2.5	Power Setting of Test Software	8
2.6	Description of Support Units	8
2.7	Test Facility	8
2.8	Measurement Uncertainty (95% confidence levels, k=2)	9
2.9	Equipment List	10
3	Test results and Measurement Data	12
3.1	Antenna Requirement	12
3.2	Duty Cycle.....	13
3.3	Emission Bandwidth.....	14
3.4	99% Occupied Bandwidth.....	15
3.5	Conducted Output Power.....	16
3.6	Power Spectral Density.....	17
3.7	Radiated Spurious Emissions	18
3.8	Restricted bands around fundamental frequency	30
3.9	AC Power Line Conducted Emissions	37
4	Appendix	40
	Appendix A: Duty Cycle	40
	Appendix B: Emission Bandwidth	45
	Appendix C:Occupied channel bandwidth.....	50
	Appendix D: Maximum conducted output power.....	55
	Appendix E: Maximum power spectral density.....	56
	Appendix F: Frequency Stability	61



2 General Information

2.1 Test Location

Company:	Dongguan DN Testing Co., Ltd
Address:	No. 1, West Fourth Street, South Xinfu Road, Wusha Liwu, Chang 'an Town, Dongguan City, Guangdong P.R.China
Test engineer:	Wayne Lin



2.2 General Description of EUT

Manufacturer:	Shenzhen Green Giant Energy Technology Development Co.,Ltd
Address of Manufacturer:	Room 203,Building B,Minle Science Industrial Park,Minzhi St., LonghuaDist.Shenzhen
EUT Description:	4K Wireless Screen Projector (Mobile version)
Test Model No.:	S450
Additional Model(s):	/
Power Supply:	DC 5V
Trade Mark:	/
Hardware Version:	V1.0
Software Version:	V1.0
Chip Type:	AM9421
Serial number	PR2507240601R7959
IEEE 802.11 WLAN Mode Supported	☒ 802.11a (20 MHz channel bandwidth), ☒ 802.11n (20 MHz channel bandwidth) ☐ 802.11n (40 MHz channel bandwidth),
Operation Frequency:	5150MHz to 5250MHz; 5725MHz to 5850MHz
Type of Modulation:	OFDM
Sample Type:	☐ Portable Device, ☐ Module, ☒ Mobile Device
Antenna Type:	☐ External, ☒ Integrated
Antenna Ports	☒ Ant 1, ☐ Ant 2, ☐ Ant 3
Smart System	☒ SISO (for 802.11a/n), ☐ MIMO (for 802.11n/ac/ax), ☐ Diversity (for 802.11a).
Antenna Gain*:	☒ Provided by applicant
	3.55dBi
RF Cable*:	☒ Provided by applicant
	0.5dB(0.6~1GHz); 0.8dB(1.4~2GHz); 1.0dB(2.1~2.7GHz); 1.5dB(3~4GHz); 1.8dB(4.4~6GHz);

Remark:

*All models are just color differences, motherboard, PCB circuit board, chip, electronic components, appearance is all the same.

*Since the above data and/or information is provided by the applicant relevant results or conclusions of this report are only made for these data and/or information , DNT is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.



2.3 Channel List

Band	Mode	Channel	Frequency (MHz)
U-NII-1	IEEE 802.11a & n HT20	36	5180
		40	5200
		44	5220
		48	5240
U-NII-3	IEEE 802.11a & n HT20	149	5745
		153	5765
		157	5785
		161	5805
		165	5825

Remark:

In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:

Frequency Range of Operation Operating Frequency Range (in each Band)	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre

For UNII-1:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n 20MHz	The Lowest channel	5180
	The Middle channel	5200
	The Highest channel	5240

For UNII-3:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n 20MHz	The Lowest channel	5745
	The Middle channel	5785
	The Highest channel	5850



2.4 Test Environment and Mode

Operating Environment:	
Temperature:	20~25.0 °C
Humidity:	45~56 % RH
Atmospheric Pressure:	101.0~101.30 KPa
Test mode:	
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.

2.5 Power Setting of Test Software

Software Name	MP Tool					
Frequency(MHz)	5180	5200	5240	5745	5785	5850
11A	Default	Default	Default	Default	Default	Default
11N20	Default	Default	Default	Default	Default	Default

2.6 Description of Support Units

The EUT has been tested independent unit.

2.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Lab A:

• FCC, USA

Designation Number: CN1348

• A2LA (Certificate No. 7050.01)

DONGGUAN DN TESTING CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 7050.01.

• Innovation, Science and Economic Development Canada

DONGGUAN DN TESTING CO., LTD. EMC Laboratory has been recognized by ISED as an accredited testing laboratory. CAB identifier is CN0149.

IC#: 30755.



2.8 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	DTS Bandwidth	$\pm 0.0196\%$
2	Maximum Conducted Output Power	± 0.686 dB
3	Maximum Power Spectral Density Level	± 0.743 dB
4	Band-edge Compliance	± 1.328 dB
5	Unwanted Emissions In Non-restricted Freq Bands	9KHz-1GHz: ± 0.746 dB 1GHz-26GHz: ± 1.328 dB

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.0 dB (150kHz to 30MHz)
2	Radiated Emission	± 4.8 dB (Below 1GHz)
		± 4.8 dB (1GHz to 6GHz)
		± 4.5 dB (6GHz to 18GHz)
		± 5.02 dB (Above 18GHz)



2.9 Equipment List

For Connect EUT Antenna Terminal Test					
Description	Manufacturer	Model	Serial Number	Cal date	Due date
Signal Generator	Keysight	N5181A-6G	MY48180415	2024-10-23	2025-10-22
Signal Generator	Keysight	N5182B	MY57300617	2024-10-23	2025-10-22
Power supply	Keysight	E3640A	ZB2022656	2024-10-23	2025-10-22
Radio Communication Tester	R&S	CMW500	105082	2024-10-23	2025-10-22
Spectrum Analyzer	Aglient	N9010A	MY52220200	2024-10-23	2025-10-22
BT/WIFI Test Software	Tonscend	JS1120 V3.1.83	NA	NA	NA
RF Control Unit	Tonscend	JS0806-2	22F8060581	NA	NA
Power Sensor	Anritsu	ML2495A	2129005	2024-10-23	2025-10-22
Pulse Power Sensor	Anritsu	MA2411B	1911397	2024-10-23	2025-10-22
temperature and humidity box	SCOTEK	SCD-C40-80PRO	6866682020008	2024-10-23	2025-10-22
RF Cable	ETS-LINDGREN	RFC-NMS-100-NMS-350-IN	NA	2024-10-23	2025-10-22

Test Equipment for Conducted Emission					
Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Receiver	R&S	ESCI3	101152	2024-10-23	2025-10-22
LISN	R&S	ENV216	102874	2024-10-23	2025-10-22
ISN	R&S	ENY81-CA6	1309.8590.03	2024-10-23	2025-10-22
RF Cable	ETS-LINDGREN	Cable-CE TS01	/	2024-10-23	2025-10-22

Test Equipment for Radiated Emission(30MHz-1000MHz)					
Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Receiver	R&S	ESR7	102497	2024-10-23	2025-10-22
Test Software	ETS-LINDGREN	TiLE-FULL	NA	NA	NA
RF Cable	ETS-LINDGREN	RE Cable-TS01	NA	2024-10-23	2025-10-22



Log periodic antenna	ETS-LINDGREN	VULB 9168	01475	2022-11-28	2025-11-27
Pre-amplifier	Schwarzbeck	BBV9743B	00423	2024-10-23	2025-10-22
Attenuator 1	Shanghai Huaxiang	TS2-6-18-A	22061803	2025-5-6	2026-5-5
Attenuator 2	Shanghai Huaxiang	TS2-6-6-A	230927163	2025-5-6	2026-5-5

Test Equipment for Radiated Emission(Above 1000MHz)					
Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Frequency analyser	Keysight	N9010A	MY52221458	2024-10-23	2025-10-22
RF Cable	ETS-LINDGREN	RE Cable-TS02	NA	2024-10-23	2025-10-22
Horn Antenna	ETS-LINDGREN	3117	00252567	2022-11-28	2025-11-27
Double ridged waveguide antenna	ETS-LINDGREN	3116C	00251780	2022-11-28	2025-11-27
Test Software	ETS-LINDGREN	TILE-FULL	NA	NA	NA
Pre-amplifier	ETS-LINDGREN	3117-PA	252567	2024-10-23	2025-10-22
Pre-amplifier	ETS-LINDGREN	3116C-PA	251780	2024-10-23	2025-10-22



3 Test results and Measurement Data

3.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement: 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
The PCB antenna is externally connected to the motherboard and no consideration of replacement. The best case gain of the antenna is 3.55dBi.	



3.2 Duty Cycle

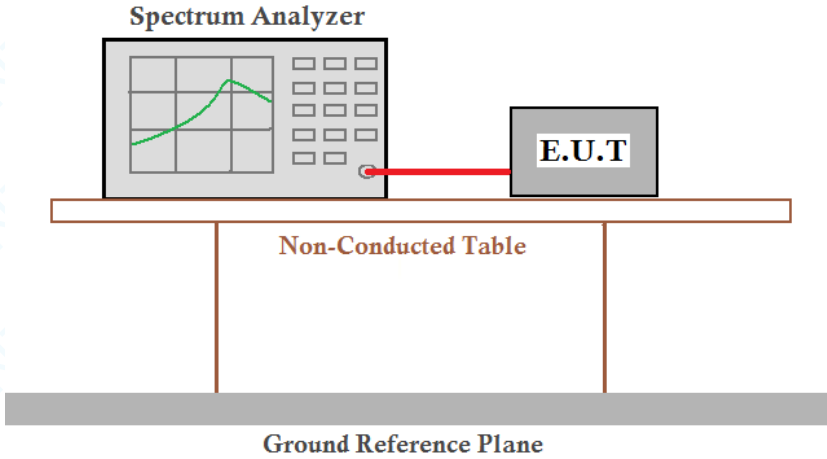
Refer to section : **Appendix A**

Note:

- 1.If duty cycle $< 98\%$, the conducted average output power and average power spectral density should be add duty factor.
- 2.If duty cycle $\geq 98\%$, the EUT is consider to be transmitting continuously, the conducted average output power and average power spectral density no need to add duty factor (consider to be zero).
- 3.The conducted peak output power and peak power spectral density no need to consider duty factor.
- 4.The on-time time is transmission duration (T).



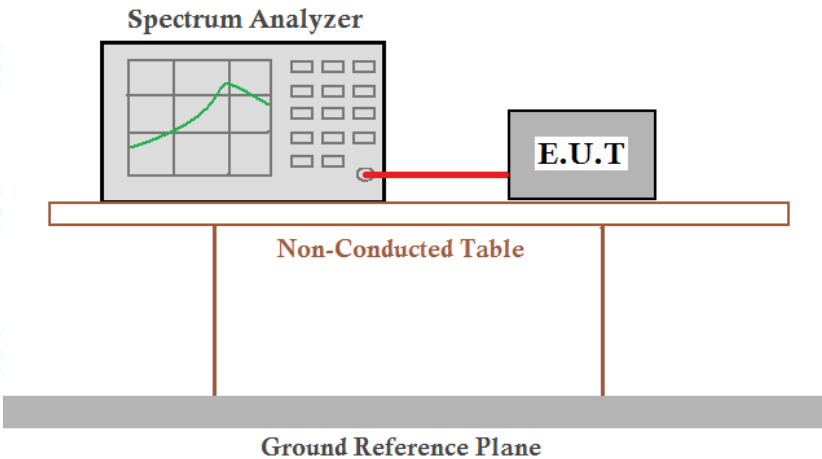
3.3 Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a)			
Test Method:	ANSI C63.10: 2020			
Test Setup:				
Instruments Used:	Refer to section 6 for details			
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates			
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20) ; Only the worst case is recorded in the report.			
Limit	Band	Frequency (MHz)	Test Item	Limit
	U-NII-1	5150-5250	26dB Bandwidth&99% Occupied Bandwidth	N/A
	U-NII-2A	5250-5350	26dB Bandwidth&99% Occupied Bandwidth	N/A
	U-NII-2C	5470-5725	26dB Bandwidth&99% Occupied Bandwidth	N/A
	U-NII-3	5725-5850	6dB Bandwidth&99% Occupied Bandwidth	6dB Bandwidth ≥ 500KHz

The detailed test data see: **Appendix B**



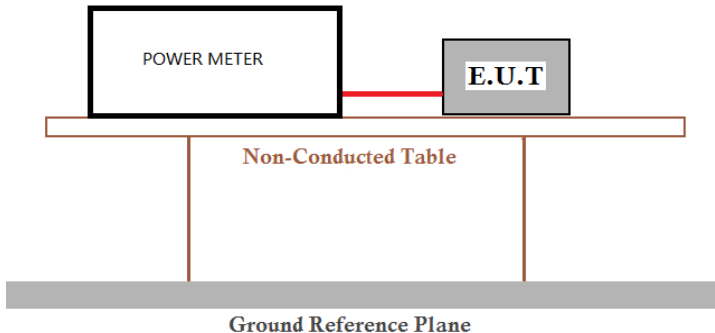
3.4 99% Occupied Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a)																							
Test Method:	ANSI C63.10: 2020																							
Test Setup:																								
Instruments Used:	Refer to section 6 for details																							
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates																							
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20) ; Only the worst case is recorded in the report.																							
Limit:	<table><tr><th>Band</th><th>Frequency (MHz)</th><th>Test Item</th><th>Limit</th></tr><tr><td>U-NII-1</td><td>5150-5250</td><td>26dB Bandwidth&99% Occupied Bandwidth</td><td>N/A</td></tr><tr><td>U-NII-2A</td><td>5250-5350</td><td>26dB Bandwidth&99% Occupied Bandwidth</td><td>N/A</td></tr><tr><td>U-NII-2C</td><td>5470-5725</td><td>26dB Bandwidth&99% Occupied Bandwidth</td><td>N/A</td></tr><tr><td>U-NII-3</td><td>5725-5850</td><td>6dB Bandwidth&99% Occupied Bandwidth</td><td>6dB Bandwidth ≥ 500KHz</td></tr></table>				Band	Frequency (MHz)	Test Item	Limit	U-NII-1	5150-5250	26dB Bandwidth&99% Occupied Bandwidth	N/A	U-NII-2A	5250-5350	26dB Bandwidth&99% Occupied Bandwidth	N/A	U-NII-2C	5470-5725	26dB Bandwidth&99% Occupied Bandwidth	N/A	U-NII-3	5725-5850	6dB Bandwidth&99% Occupied Bandwidth	6dB Bandwidth ≥ 500KHz
Band	Frequency (MHz)	Test Item	Limit																					
U-NII-1	5150-5250	26dB Bandwidth&99% Occupied Bandwidth	N/A																					
U-NII-2A	5250-5350	26dB Bandwidth&99% Occupied Bandwidth	N/A																					
U-NII-2C	5470-5725	26dB Bandwidth&99% Occupied Bandwidth	N/A																					
U-NII-3	5725-5850	6dB Bandwidth&99% Occupied Bandwidth	6dB Bandwidth ≥ 500KHz																					
Test Results:	Pass																							

The detailed test data see: **Appendix C**



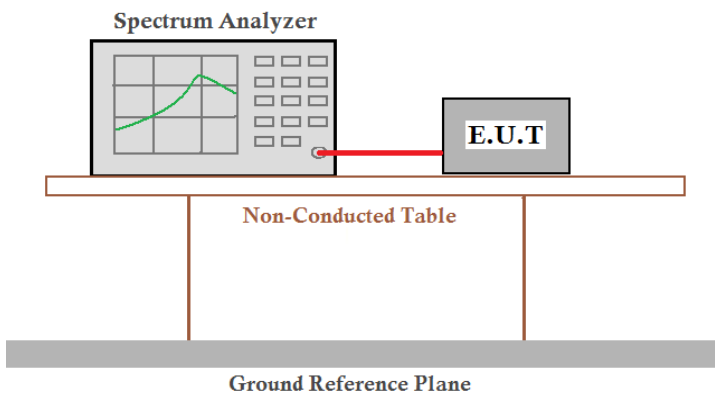
3.5 Conducted Output Power

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10 :2020	
Test Setup:		
Test Instruments:	Refer to section 2.9 for details	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20) ;	
Limit:	Frequency Band	Limit
	5150-5250MHz	Not exceed 250mW(24dBm)
	5250-5350MHz	The lesser of 250mW(24dBm) or $11 + 10\log B$
	5470-5725MHz	The lesser of 250mW(24dBm) or $11 + 10\log B$
	5725-5850MHz	Not exceed 1W(30dBm)
Test Results:	Pass	

The detailed test data see: **Appendix D**



3.6 Power Spectral Density

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10: 2020 KDB 789033 D02 v02r01, Section F.	
Test Setup:		
Test Instruments:	Refer to section 2.9 for details	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20) ;	
Limit:	Frequency Band	Limit
	5150-5250MHz	The power spectral density less than 11dBm/1MHz
	5250-5350MHz	The power spectral density less than 11dBm/1MHz
	5470-5725MHz	The power spectral density less than 11dBm/1MHz
	5725-5850MHz	The power spectral density less than <30dBm/500KHz
Test Results:	Pass	

The detailed test data see: **Appendix E**



3.7 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15 Section 15.407(b)				
Test Method:	ANSI C63.10: 2020				
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Peak		1MHz	10Hz (DC≥0.98) ≥1/T (DC<0.98)	Average	
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	Remark: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.				

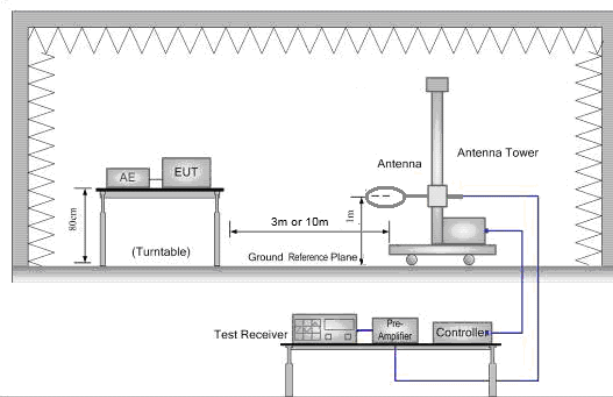
**Test Setup:**

Figure 1. Below 30MHz

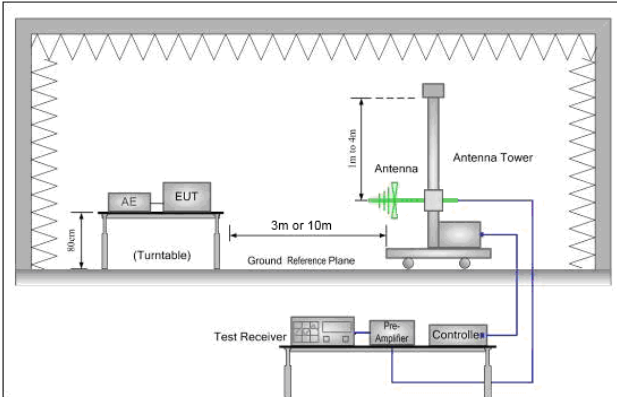


Figure 2. 30MHz to 1GHz

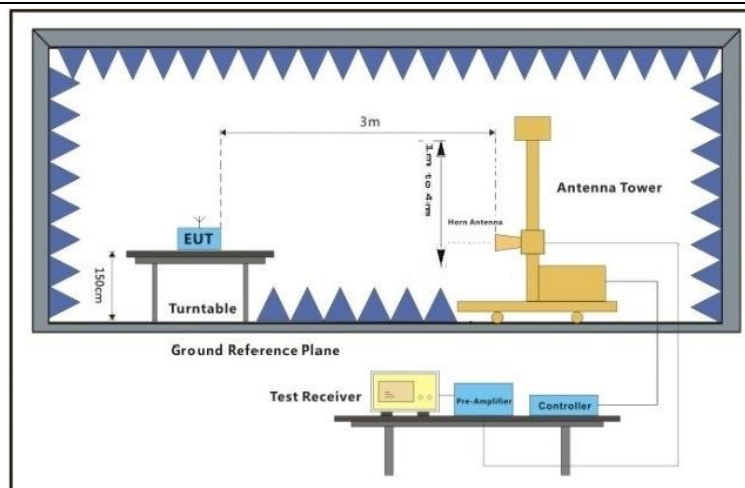


Figure 3. Above 1 GHz

Test Procedure:

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 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.
- 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.
- 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, quasi-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 worse case.



	j. Repeat above procedures until all frequencies measured was complete.
Test Configuration:	Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW $\geq$ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10 Hz, when duty cycle is no less than 98 percent. • VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Charge + Transmitting mode.
Final Test Mode:	Pretest the EUT at Transmitting mode. Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20) ; For below 1GHz, through Pre-scan, find the the worst case. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 2.9 for details
Test Results:	Pass

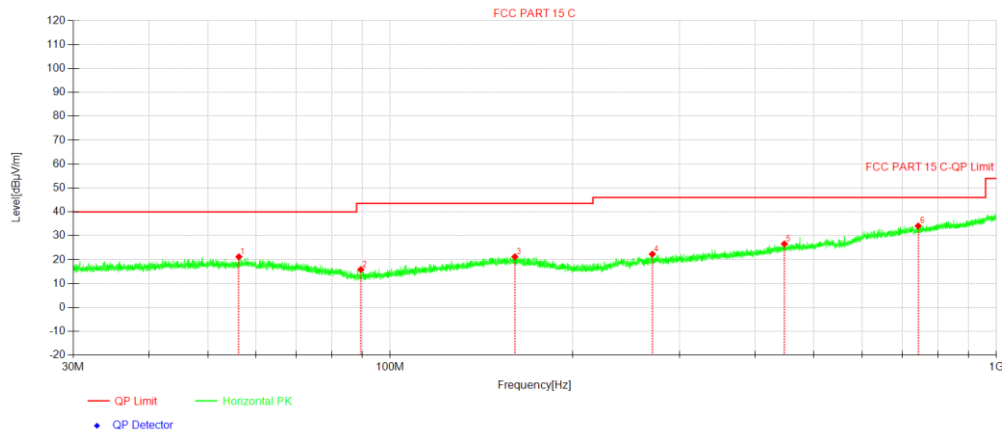


Test data

For 30-1000MHz

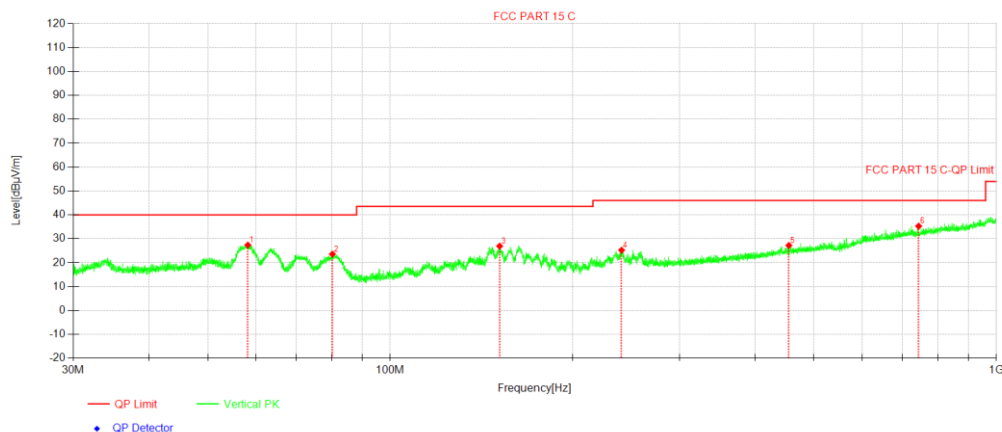
5.1G_H_TX LF

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]
1	56.28	29.57	-8.37	21.20	40.00	18.80	100	184
2	89.43	29.72	-13.86	15.86	43.50	27.64	100	30
3	160.57	29.03	-7.80	21.23	43.50	22.27	100	312
4	270.66	30.33	-8.00	22.33	46.00	23.67	100	359
5	446.88	29.51	-2.91	26.60	46.00	19.40	100	30
6	743.04	30.88	3.23	34.11	46.00	11.89	100	198

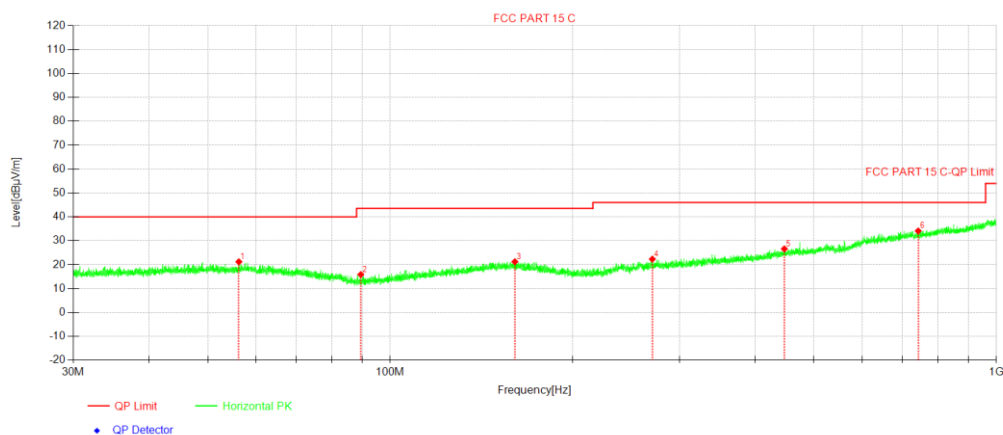
Vertical :



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]
1	58.22	35.92	-8.57	27.35	40.00	12.65	100	350
2	80.28	36.19	-12.62	23.57	40.00	16.43	100	43
3	151.54	34.74	-7.82	26.92	43.50	16.58	100	271
4	240.83	34.46	-9.22	25.24	46.00	20.76	100	212
5	454.63	29.95	-2.73	27.22	46.00	18.78	100	168
6	744.34	32.02	3.27	35.29	46.00	10.71	100	282

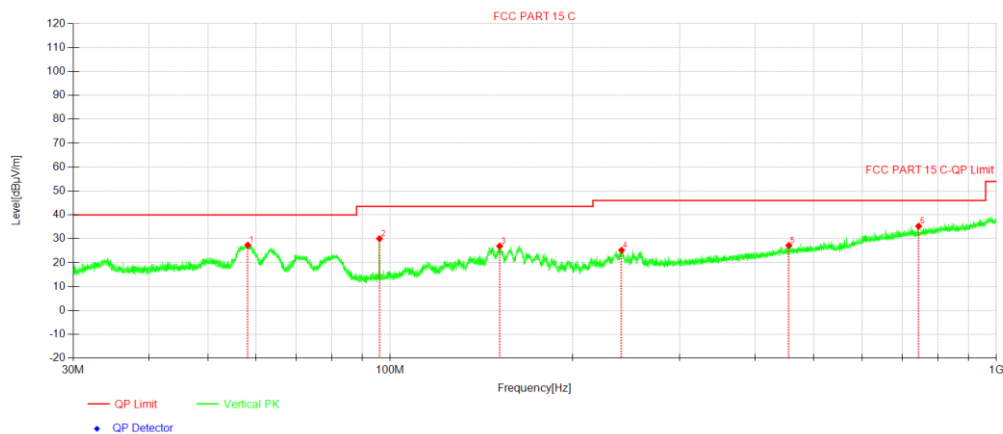
**5.8G_H_TX LF**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]
1	56.28	29.57	-8.37	21.20	40.00	18.80	100	184
2	89.43	29.72	-13.86	15.86	43.50	27.64	100	30
3	160.57	29.03	-7.80	21.23	43.50	22.27	100	312
4	270.66	30.33	-8.00	22.33	46.00	23.67	100	359
5	446.88	29.51	-2.91	26.60	46.00	19.40	100	30
6	743.04	30.88	3.23	34.11	46.00	11.89	100	198

Vertical :



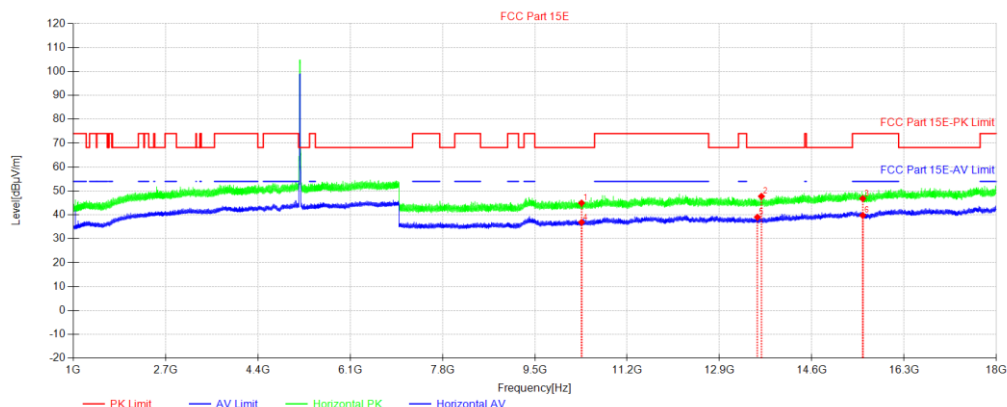
NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]
1	58.22	35.92	-8.57	27.35	40.00	12.65	100	350
2	96.00	43.27	-13.22	30.05	43.50	13.45	100	241
3	151.54	34.74	-7.82	26.92	43.50	16.58	100	271
4	240.83	34.46	-9.22	25.24	46.00	20.76	100	212
5	454.63	29.95	-2.73	27.22	46.00	18.78	100	168
6	744.34	32.02	3.27	35.29	46.00	10.71	100	282



For above 1GHz

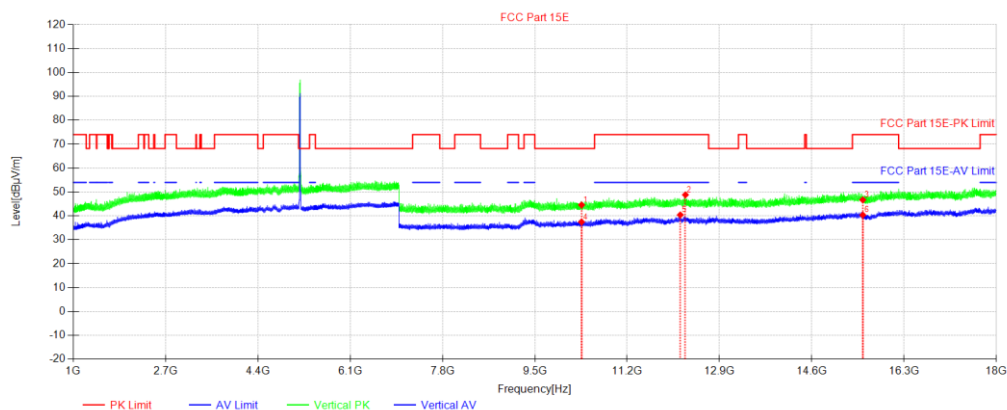
11A 5180MHz

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10360.41	44.56	0.40	44.96	68.20	23.24	150	301	PK
2	13672.87	43.33	4.43	47.76	68.20	20.44	150	28	PK
3	15540.30	41.29	5.56	46.85	74.00	27.15	150	320	PK
4	10360.41	36.49	0.40	36.89	54.00	17.11	150	28	AV
5	13599.38	34.74	4.31	39.05	54.00	14.95	150	356	AV
6	15540.30	34.22	5.56	39.78	54.00	14.22	150	264	AV

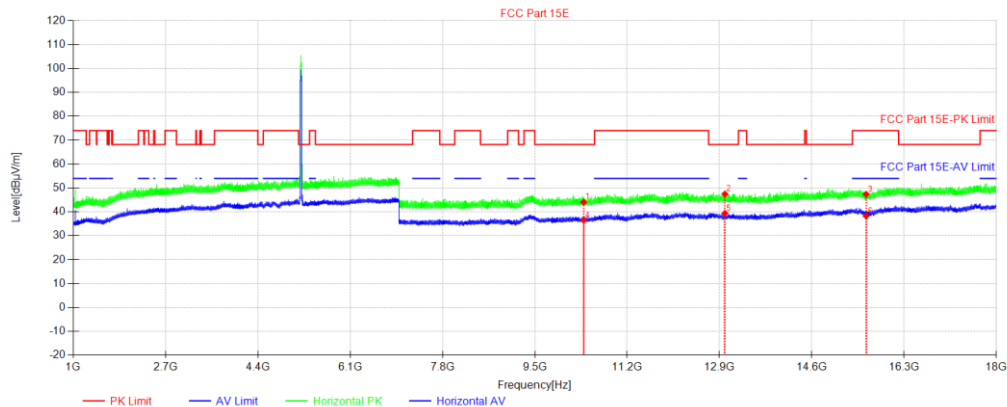
Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10360.41	44.17	0.40	44.57	68.20	23.63	150	356	PK
2	12273.61	47.09	1.71	48.80	74.00	25.20	150	337	PK
3	15540.30	41.14	5.56	46.70	74.00	27.30	150	43	PK
4	10360.41	37.05	0.40	37.45	54.00	16.55	150	83	AV
5	12179.01	38.60	1.81	40.41	54.00	13.59	150	180	AV
6	15540.30	34.81	5.56	40.37	54.00	13.63	150	356	AV

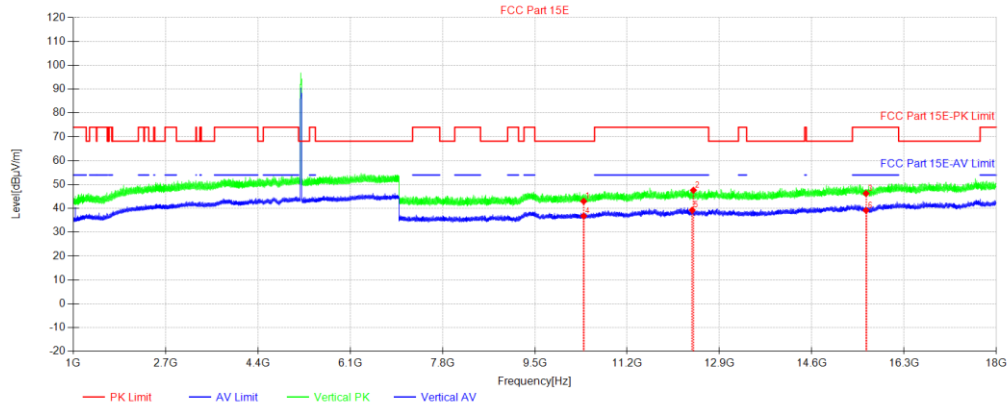
**11A 5200MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10400.02	43.68	0.36	44.04	68.20	24.16	150	357	PK
2	13000.52	44.19	3.26	47.45	68.20	20.75	150	224	PK
3	15600.14	41.95	5.43	47.38	74.00	26.62	150	31	PK
4	10400.02	36.14	0.36	36.50	54.00	17.5	150	130	AV
5	13000.96	36.13	3.26	39.39	54.00	14.61	150	224	AV
6	15600.14	32.86	5.43	38.29	54.00	15.71	150	89	AV

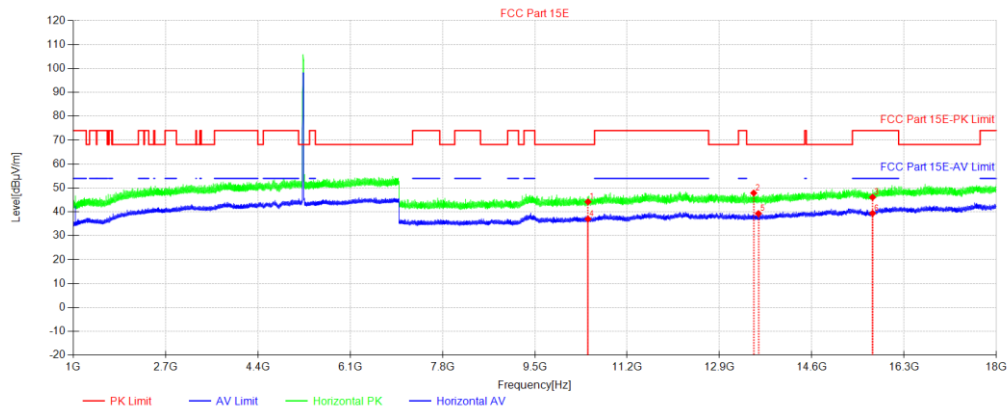
Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10400.02	42.62	0.36	42.98	68.20	25.22	150	204	PK
2	12420.14	46.04	1.58	47.62	74.00	26.38	150	125	PK
3	15600.14	40.81	5.43	46.24	74.00	27.76	150	187	PK
4	10400.02	36.40	0.36	36.76	54.00	17.24	150	68	AV
5	12398.14	37.73	1.52	39.25	54.00	14.75	150	319	AV
6	15600.14	33.71	5.43	39.14	54.00	14.86	150	261	AV

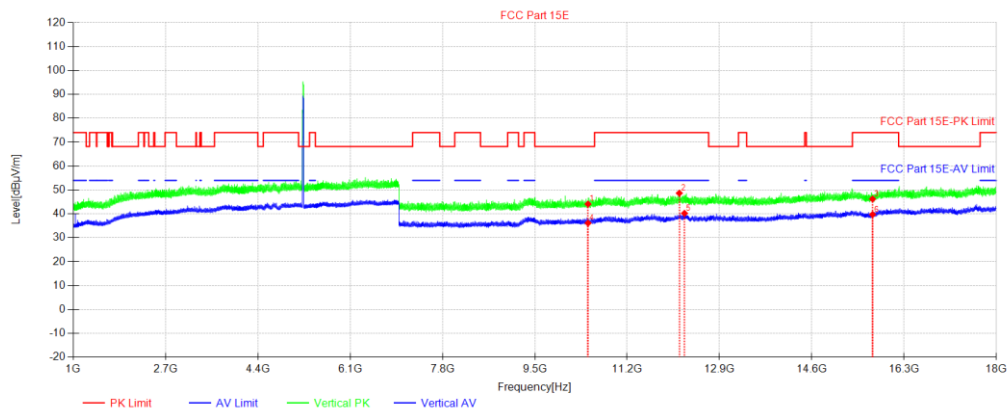
**11A 5240MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10480.10	43.74	0.47	44.21	68.20	23.99	150	264	PK
2	13531.18	43.54	4.34	47.88	68.20	20.32	150	166	PK
3	15720.27	40.77	5.35	46.12	74.00	27.88	150	166	PK
4	10480.10	36.54	0.47	37.01	54.00	16.99	150	69	AV
5	13617.86	34.97	4.33	39.30	54.00	14.7	150	340	AV
6	15720.27	34.05	5.35	39.40	54.00	14.60	150	322	AV

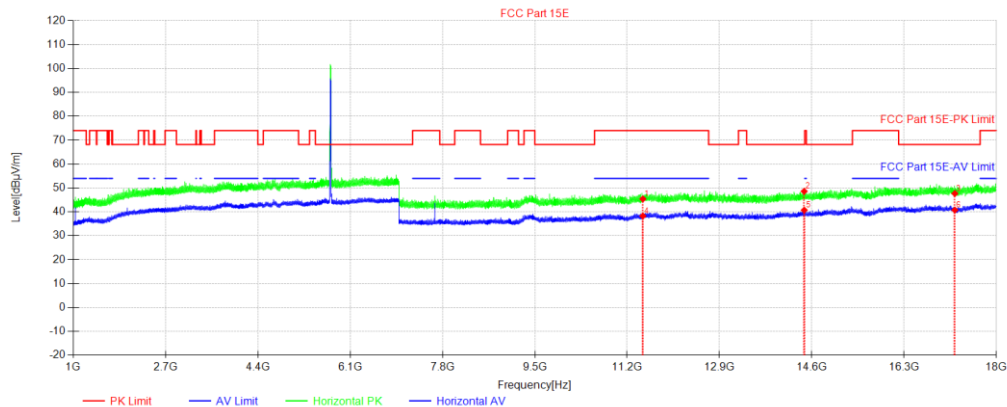
Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	10480.10	43.63	0.47	44.10	68.20	24.10	150	262	PK
2	12160.97	46.89	1.76	48.65	74.00	25.35	150	241	PK
3	15720.27	40.87	5.35	46.22	74.00	27.78	150	224	PK
4	10480.10	35.66	0.47	36.13	54.00	17.87	150	94	AV
5	12256.45	38.48	1.75	40.23	54.00	13.77	150	224	AV
6	15720.27	34.40	5.35	39.75	54.00	14.25	150	94	AV

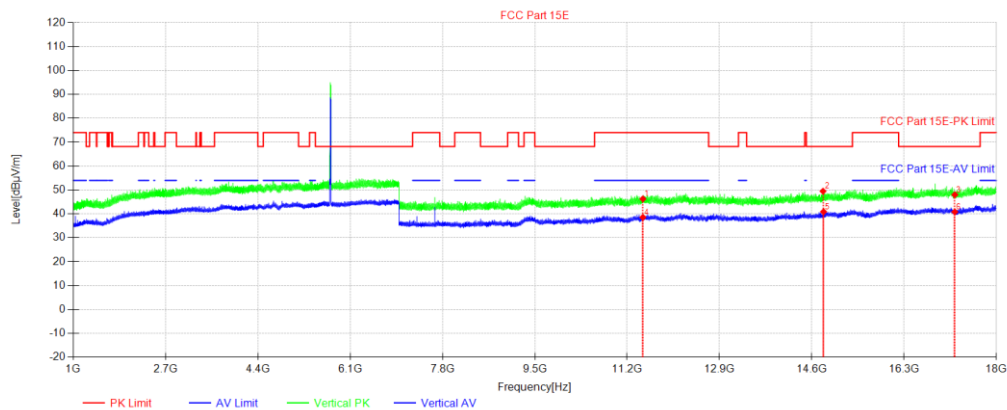
**11A 5745MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11490.38	43.38	2.03	45.41	74.00	28.59	150	47	PK
2	14460.50	42.98	5.63	48.61	68.20	19.59	150	146	PK
3	17235.25	38.82	8.86	47.68	68.20	20.52	150	47	PK
4	11490.38	36.24	2.03	38.27	54.00	15.73	150	47	AV
5	14461.82	35.11	5.62	40.73	54.00	13.27	150	84	AV
6	17235.25	31.89	8.86	40.75	54.00	13.25	150	124	AV

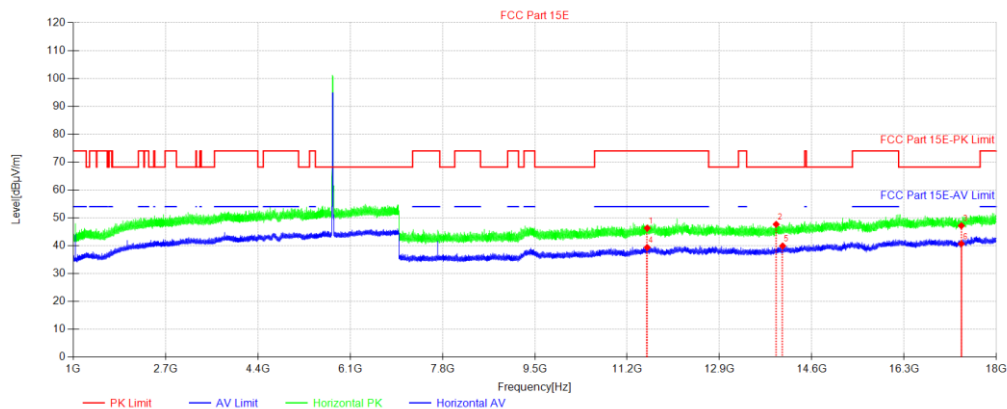
Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11490.38	44.25	2.03	46.28	74.00	27.72	150	265	PK
2	14807.23	44.21	5.26	49.47	68.20	18.73	150	357	PK
3	17235.25	39.15	8.86	48.01	68.20	20.19	150	61	PK
4	11490.38	36.54	2.03	38.57	54.00	15.43	150	133	AV
5	14817.79	35.59	5.29	40.88	54.00	13.12	150	357	AV
6	17235.25	31.95	8.86	40.81	54.00	13.19	150	116	AV

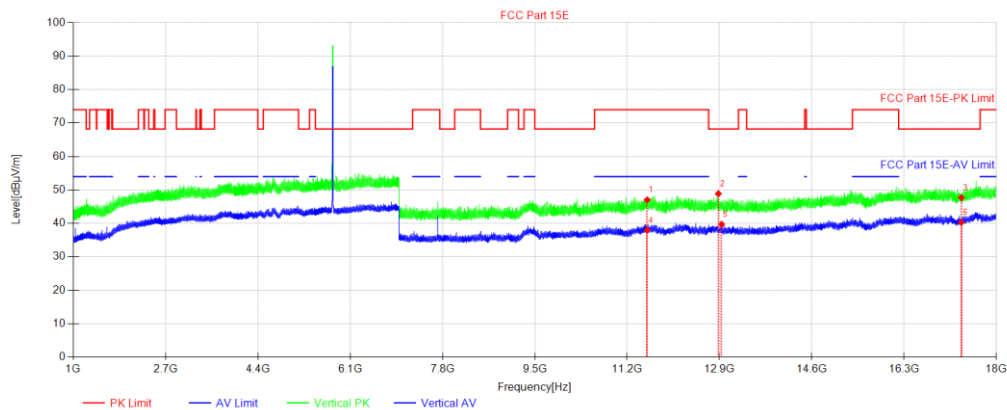
**11A 5785MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11570.02	43.99	2.33	46.32	74.00	27.68	150	212	PK
2	13945.24	42.91	4.77	47.68	68.20	20.52	150	53	PK
3	17355.37	38.20	8.97	47.17	68.20	21.03	150	278	PK
4	11570.02	37.07	2.33	39.40	54.00	14.60	150	5	AV
5	14064.04	34.83	5.09	39.92	54.00	14.08	150	179	AV
6	17355.37	31.73	8.97	40.70	54.00	13.3	150	179	AV

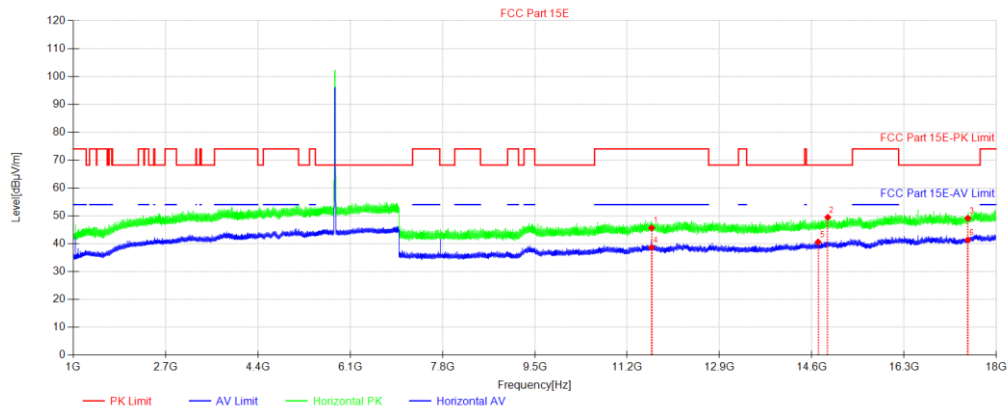
Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11570.02	44.71	2.33	47.04	74.00	26.96	150	117	PK
2	12879.52	45.60	3.28	48.88	68.20	19.32	150	117	PK
3	17355.37	38.75	8.97	47.72	68.20	20.48	150	0	PK
4	11570.02	35.66	2.33	37.99	54.00	16.01	150	117	AV
5	12939.36	36.50	3.27	39.77	54.00	14.23	150	335	AV
6	17355.37	31.32	8.97	40.29	54.00	13.71	150	90	AV

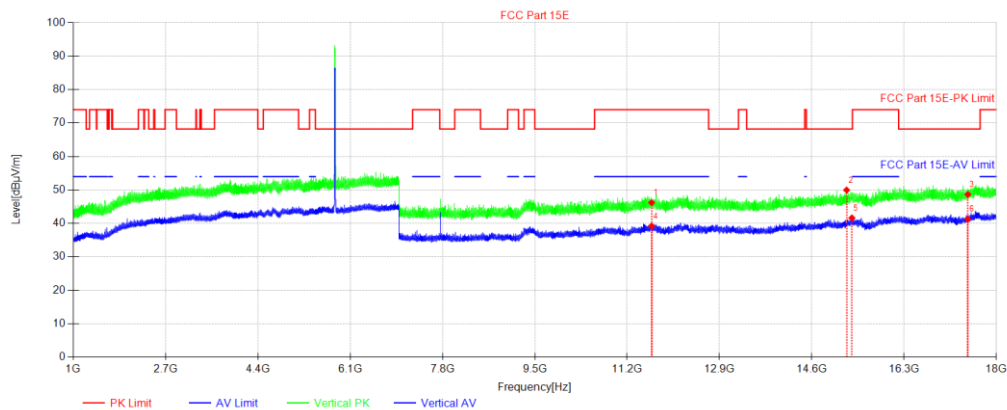
**11A 5825MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11650.11	43.35	2.32	45.67	74.00	28.33	150	303	PK
2	14896.12	43.97	5.51	49.48	68.20	18.72	150	96	PK
3	17475.06	39.58	9.55	49.13	68.20	19.07	150	244	PK
4	11650.11	36.35	2.32	38.67	54.00	15.33	150	321	AV
5	14717.47	35.38	5.24	40.62	54.00	13.38	150	188	AV
6	17475.06	31.83	9.55	41.38	54.00	12.62	150	152	AV

Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	11650.11	43.90	2.32	46.22	74.00	27.78	150	160	PK
2	15241.97	43.93	6.04	49.97	68.20	18.23	150	79	PK
3	17475.06	39.12	9.55	48.67	68.20	19.53	150	119	PK
4	11650.11	36.89	2.32	39.21	54.00	14.79	150	241	AV
5	15339.21	35.68	5.97	41.65	54.00	12.35	150	356	AV
6	17475.06	31.73	9.55	41.28	54.00	12.72	150	139	AV



Note:

1. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including Ant.Factor and the Cable Factor etc.), The basic equation is as follows:

Result Level= Reading Level + Correct Factor(including Ant.Factor, Cable Factor etc.)

2. The amplitude of 9KHz to 30MHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

3. The amplitude of 18GHz to 40GHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be report.

4. All channels had been pre-test, 802.11a is the worst case, only the worst case was reported.



3.8 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2020		
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m)	Remark
	30MHz-88MHz	40.0	Quasi-peak
	88MHz-216MHz	43.5	Quasi-peak
	216MHz-960MHz	46.0	Quasi-peak
	960MHz-1GHz	54.0	Quasi-peak
	Above 1GHz	54.0	Average Value
		74.0	Peak Value
	MHz	MHz	MHz
	MHz	MHz	GHz
	0.090 - 0.110	16.42 - 16.423	399.9 - 410

0.495 - 0.505	16.69475 - 16.69525	608 - 614	4.5 - 5.15
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	5.35 - 5.46
4.125 - 4.128	25.5 - 25.67	1300 - 1427	7.25 - 7.75
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	8.025 - 8.5
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.0 - 9.2
6.215 - 6.218	74.8 - 75.2	1660 - 1710	9.3 - 9.5
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	10.6 - 12.7
6.31175 - 6.31225	123 - 138	2200 - 2300	13.25 - 13.4
8.291 - 8.294	149.9 - 150.05	2310 - 2390	14.47 - 14.5
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	15.35 - 16.2
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	17.7 - 21.4
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	22.01 - 23.12
12.29 - 12.293	167.72 - 173.2	3332 - 3339	23.6 - 24.0
12.51975 - 12.52025	240 - 285	3345.8 - 3358	31.2 - 31.8
12.57675 - 12.57725	322 - 335.4	3600 - 4400	36.43 - 36.5
			(2)

Test Setup:

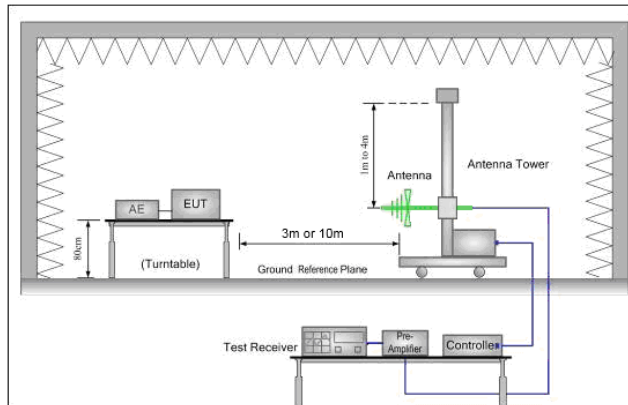


Figure 1. 30MHz to 1GHz

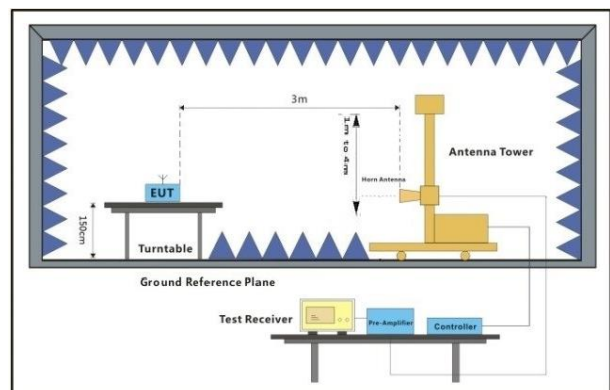


Figure 2. Above 1 GHz



Test Procedure:	- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. - For above 1GHz, the EUT was placed on the top of a rotating table 1.5 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. - 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. - 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 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. - Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel - Test the EUT in the lowest 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 worse case. - Repeat above procedures until all frequencies measured was complete.
Test Configuration:	Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW $\geq$ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10 Hz, when duty cycle is no less than 98 percent. • VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Transmitting mode.
Final Test Mode:	Pretest the EUT at Charge + Transmitting mode. Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20) ;

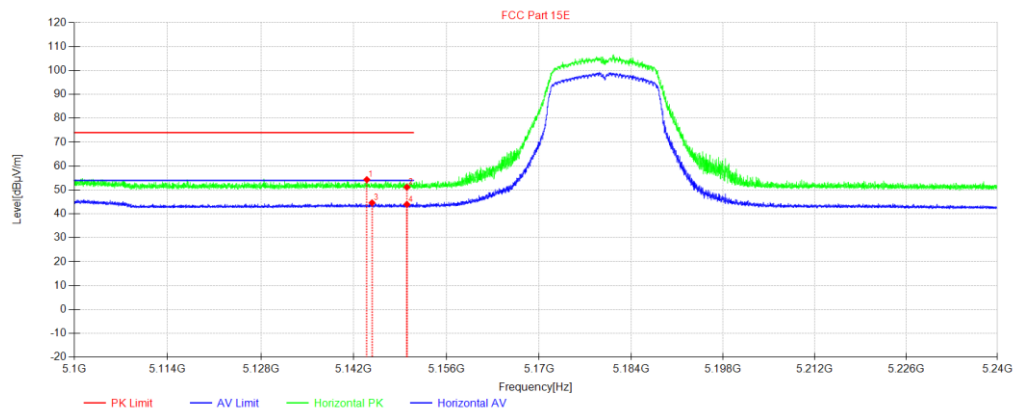


	MCS0 of rate is the worst case of 802.11n(HT40); Only the worst case is recorded in the report.
Instruments Used:	Refer to section 2.9 for details
Test Results:	Pass



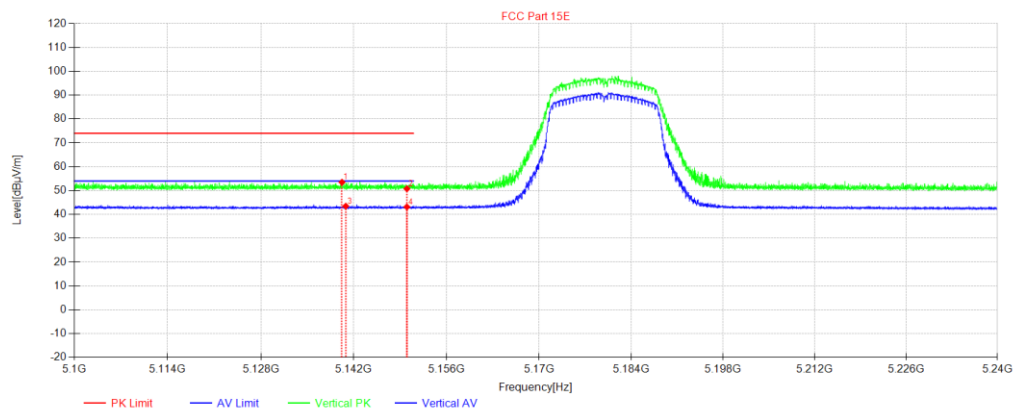
Test Date
11A 5180MHz

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5143.96	49.34	4.99	54.33	74.00	19.67	150	46	PK
2	5150.01	46.16	5.01	51.17	74.00	22.83	150	325	PK
3	5144.75	39.63	4.99	44.62	54.00	9.38	150	91	AV
4	5150.01	38.96	5.01	43.97	54.00	10.03	150	46	AV

Vertical:

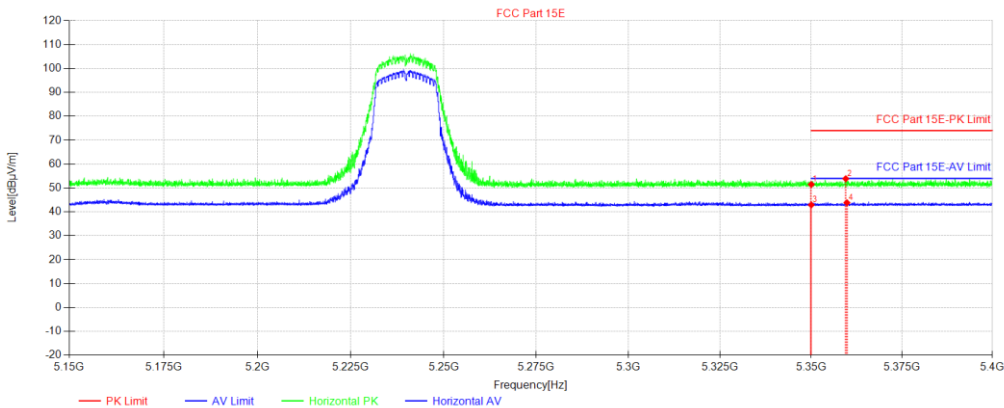


NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5140.21	48.49	4.98	53.47	74.00	20.53	150	270	PK
2	5150.01	45.76	5.01	50.77	74.00	23.23	150	356	PK
3	5140.79	38.47	4.98	43.45	54.00	10.55	150	91	AV
4	5150.01	38.11	5.01	43.12	54.00	10.88	150	59	AV



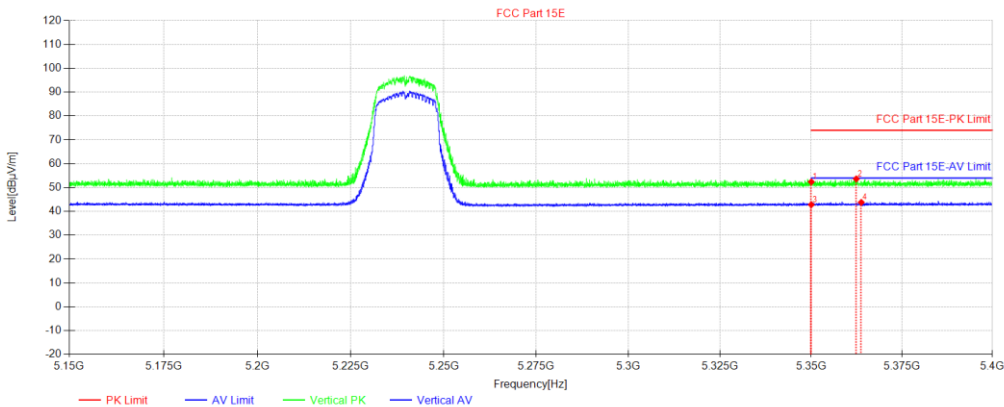
11A 5240MHz

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBµV]	Correct Factor [dB/m]	Result Level [dBµV/m]	AV Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5350.02	46.33	5.15	51.48	74.00	22.52	150	38	PK
2	5359.50	48.74	5.13	53.87	74.00	20.13	150	325	PK
3	5350.02	37.76	5.15	42.91	54.00	11.09	150	118	AV
4	5359.82	38.71	5.13	43.84	54.00	10.16	150	206	AV

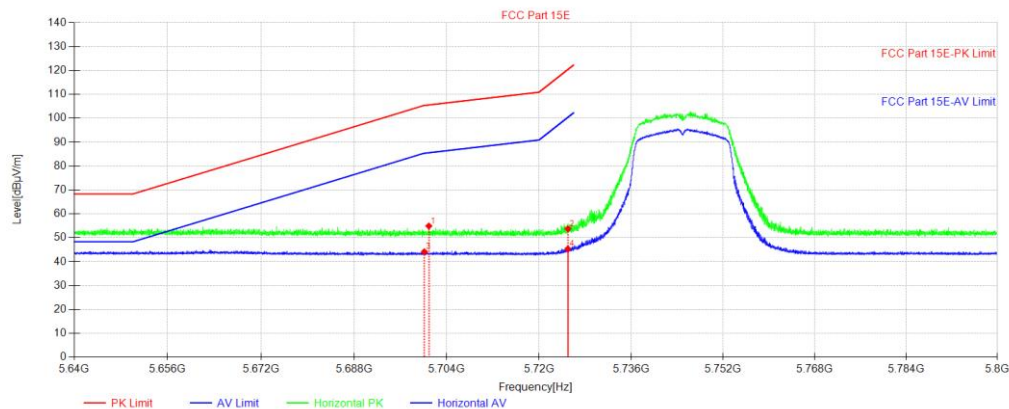
Vertical:



NO.	Freq. [MHz]	Reading Level [dBµV]	Correct Factor [dB/m]	Result Level [dBµV/m]	AV Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5350.02	47.22	5.15	52.37	74.00	21.63	150	292	PK
2	5362.40	48.50	5.13	53.63	74.00	20.37	150	312	PK
3	5350.02	37.65	5.15	42.80	54.00	11.20	150	335	AV
4	5363.77	38.66	5.12	43.78	54.00	10.22	150	24	AV

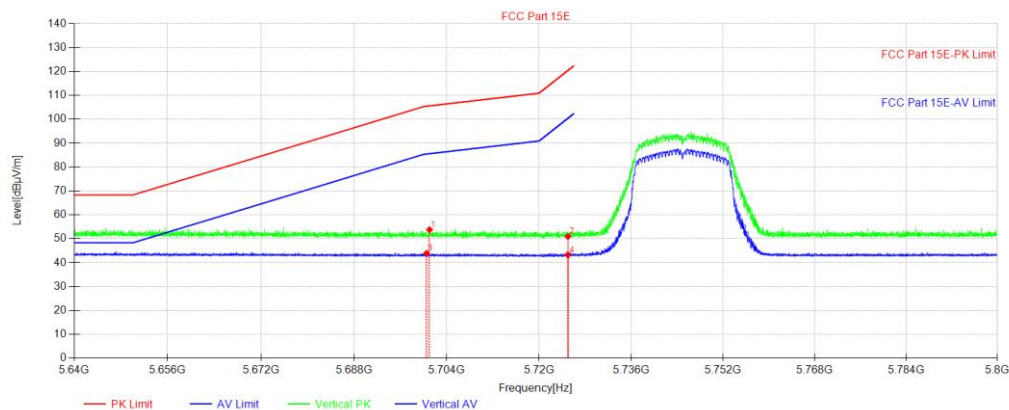
**11A 5745MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5700.93	49.75	5.16	54.91	105.56	50.65	150	319	PK
2	5725.00	48.55	5.21	53.76	120.40	66.64	150	295	PK
3	5700.15	38.99	5.16	44.15	85.34	41.19	150	332	AV
4	5725.00	40.17	5.21	45.38	100.40	55.02	150	332	AV

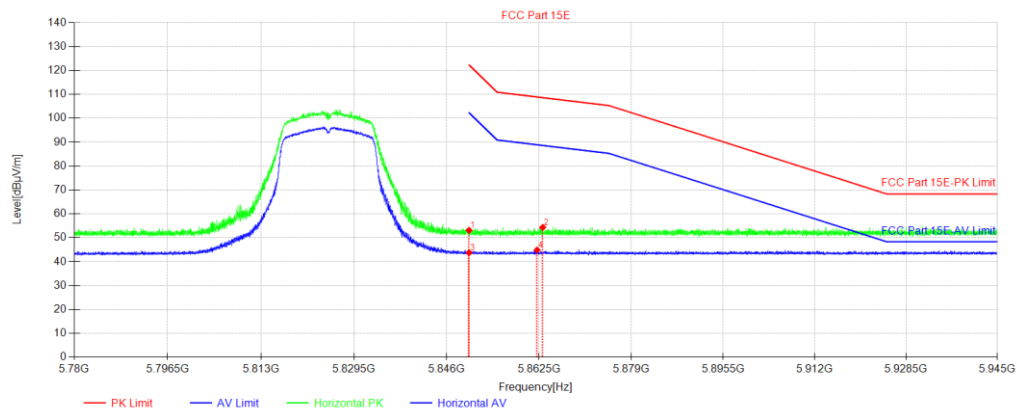
Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5701.05	48.64	5.16	53.80	105.59	51.79	150	280	PK
2	5725.00	45.77	5.21	50.98	120.40	69.42	150	356	PK
3	5700.53	38.76	5.16	43.92	85.45	41.53	150	94	AV
4	5725.00	38.03	5.21	43.24	100.40	57.16	150	117	AV

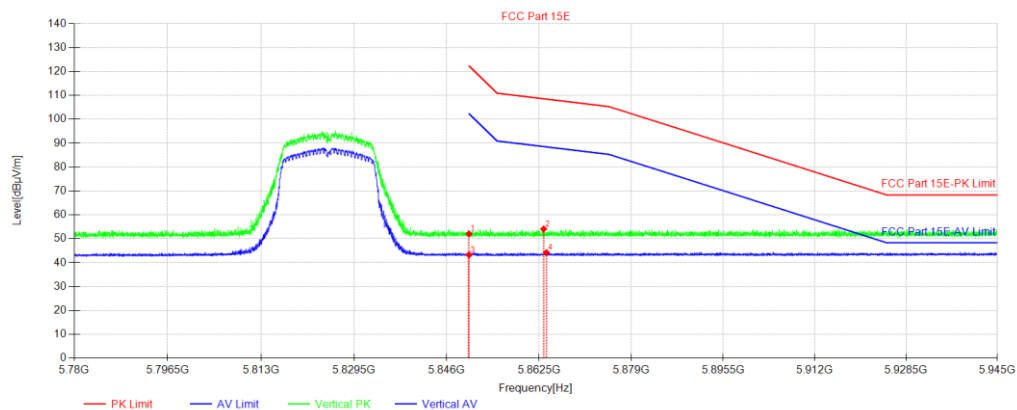
**11A 5825MHz**

Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5850.00	47.61	5.50	53.11	122.30	69.19	150	108	PK
2	5863.15	48.83	5.52	54.35	108.62	54.27	150	61	PK
3	5850.00	38.24	5.50	43.74	102.30	58.56	150	298	AV
4	5862.15	39.34	5.53	44.87	88.90	44.03	150	326	AV

Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector
1	5850.00	46.54	5.50	52.04	122.30	70.26	150	104	PK
2	5863.32	48.56	5.52	54.08	108.57	54.49	150	248	PK
3	5850.00	37.77	5.50	43.27	102.30	59.03	150	173	AV
4	5863.81	38.68	5.52	44.20	88.43	44.23	150	7	AV

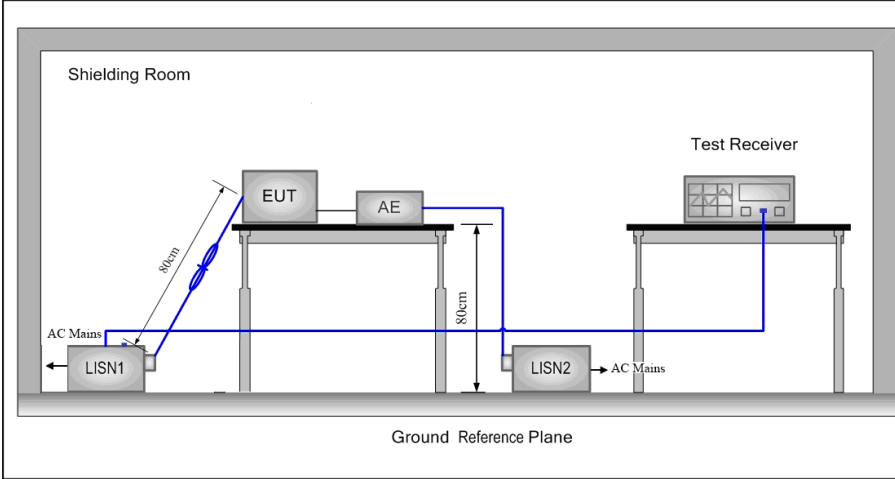
1. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including Ant.Factor and the Cable Factor etc.), The basic equation is as follows:

$$\text{Result Level} = \text{Reading Level} + \text{Correct Factor}(\text{including Ant.Factor, Cable Factor etc.})$$

2. All channels had been pre-test, 802.11a is the worst case, only the worst case was reported.



3.9 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2020		
Test Frequency Range:	150kHz to 30MHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		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 Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 2020 on conducted measurement.		
Test Setup:			
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.		

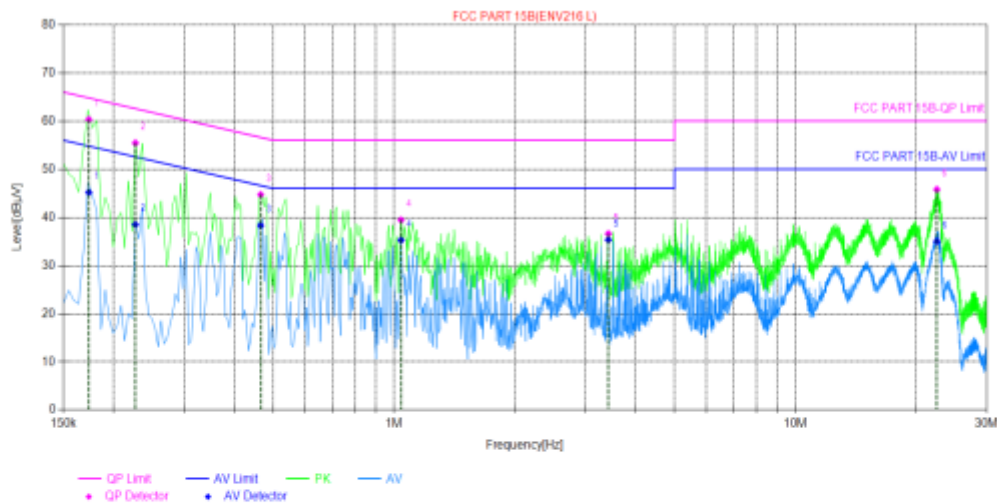


	Charge + Transmitting mode.
Final Test Mode:	Through Pre-scan, find the 6.5Mbps of rate of 802.11n(HT20) at lowest channel is the worst case. Charge + Transmitting mode. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 2.9 for details
Test Results:	PASS

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

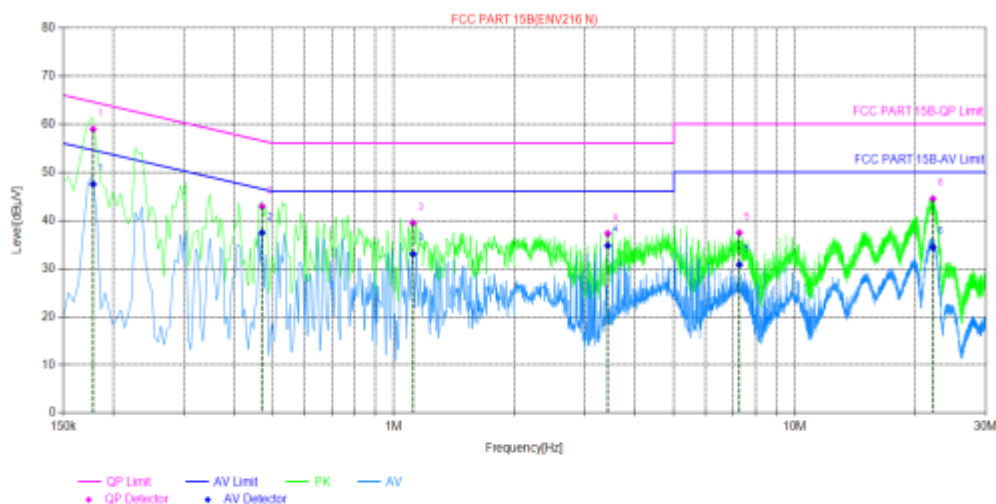
Live Line:



Final Data List									
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1734	9.91	60.32	64.80	4.48	45.19	54.80	9.61	PASS
2	0.2285	9.92	55.43	62.58	7.15	38.50	52.58	14.08	PASS
3	0.465	9.84	44.72	56.60	11.88	38.31	46.60	8.29	PASS
4	1.041	9.72	39.43	56.00	16.57	35.25	46.00	10.75	PASS
5	3.4215	9.75	36.59	56.00	19.41	35.33	46.00	10.67	PASS
6	22.5465	10.17	45.79	60.00	14.21	35.02	50.00	14.98	PASS



Neutral Line:



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBuV]	QP Limit [dBuV]	QP Margin [dB]	AV Value [dBuV]	AV Limit [dBuV]	AV Margin [dB]	Verdict
1	0.1779	9.83	58.91	64.58	5.67	47.52	54.58	7.06	PASS
2	0.4695	9.76	42.90	56.52	13.62	37.43	46.52	9.09	PASS
3	1.1175	9.69	39.41	56.00	16.59	33.00	46.00	13.00	PASS
4	3.4215	9.91	37.26	56.00	18.74	34.75	46.00	11.25	PASS
5	7.287	9.97	37.41	60.00	22.59	30.78	50.00	19.22	PASS
6	22.1595	10.10	44.47	60.00	15.53	34.41	50.00	15.59	PASS

Remark:

1. The 802.11n(HT20) is the worse case.
2. The following Quasi-Peak and Average measurements were performed on the EUT:
3. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including LISN Factor and the Cable Factor etc.), The basic equation is as follows:

Result Level= Reading Level + Correct Factor(including LISN Factor, Cable Factor etc.)



4 Appendix

Appendix A: Duty Cycle

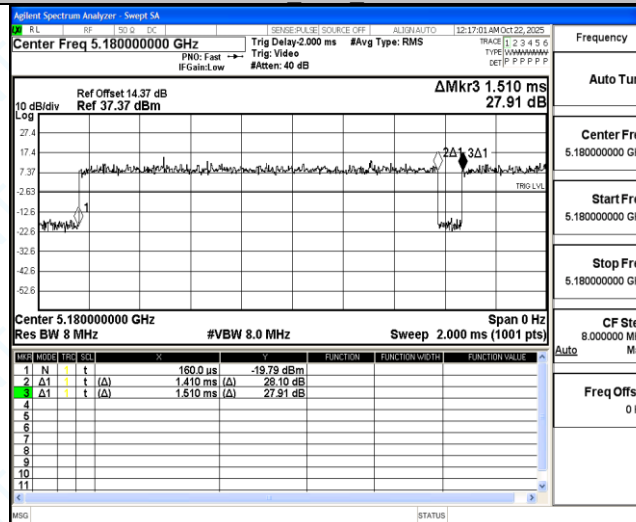
Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5180	1.41	1.51	93.38	---	---
		5200	1.41	1.55	90.97	---	---
		5240	1.41	1.63	86.50	---	---
		5745	1.41	1.57	89.81	---	---
		5785	1.40	1.56	89.74	---	---
		5825	1.41	1.59	88.68	---	---
11N20SISO	Ant1	5180	1.32	1.42	92.96	---	---
		5200	1.32	1.55	85.16	---	---
		5240	1.31	1.48	88.51	---	---
		5745	1.32	1.55	85.16	---	---
		5785	1.31	1.46	89.73	---	---
		5825	1.31	1.52	86.18	---	---

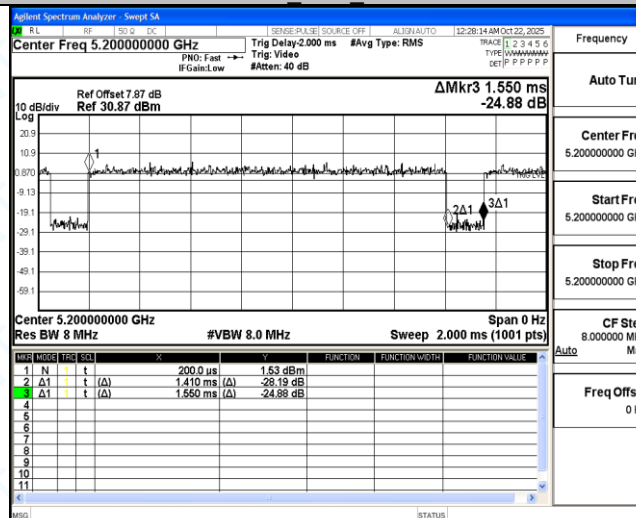


Test Graphs

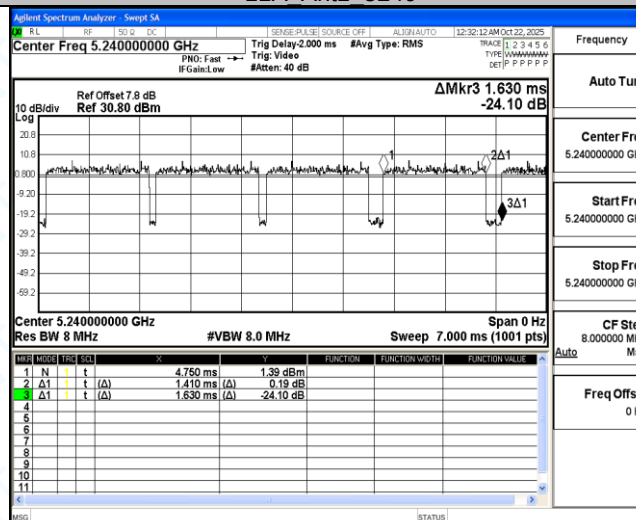
11A Ant1 5180



11A Ant1 5200

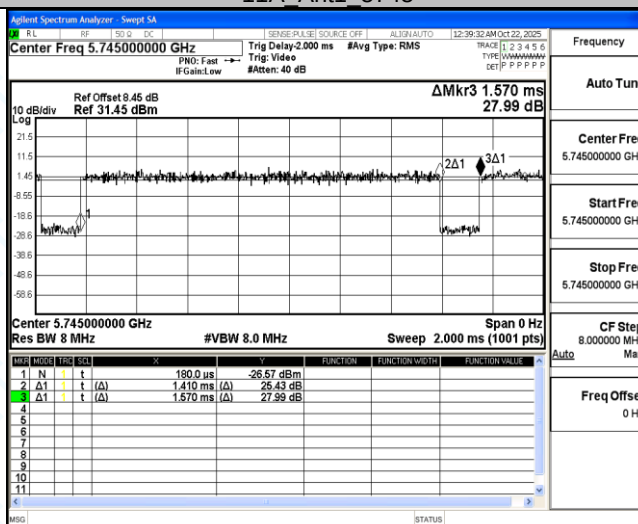


11A Ant1 5240

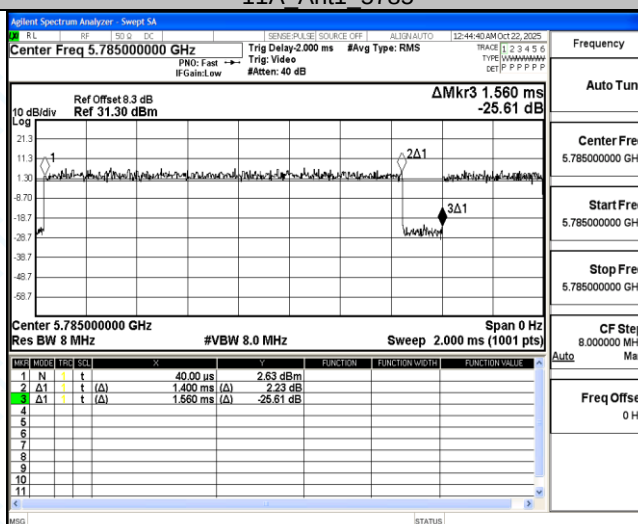




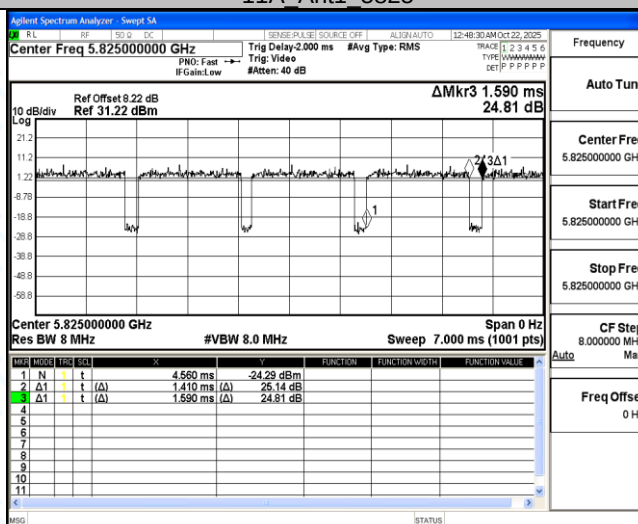
11A_Ant1_5745



11A_Ant1_5785

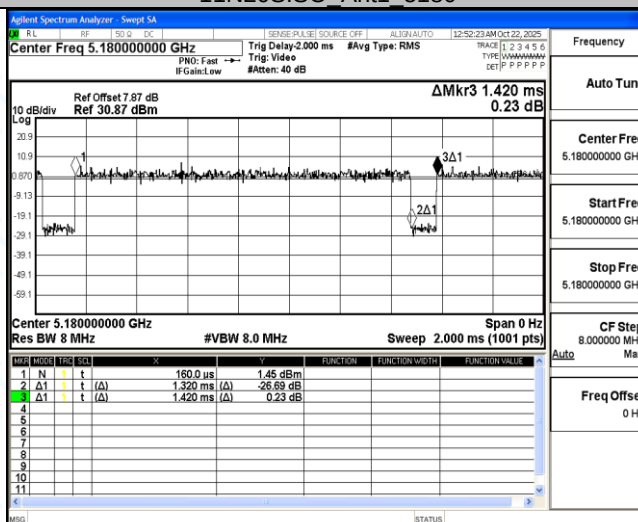


11A_Ant1_5825

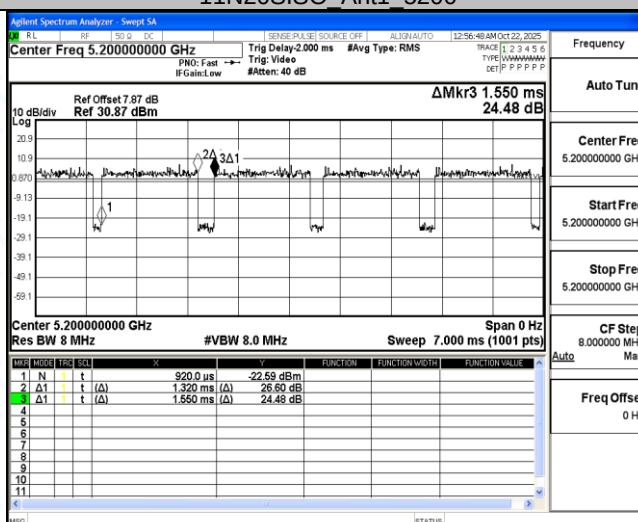




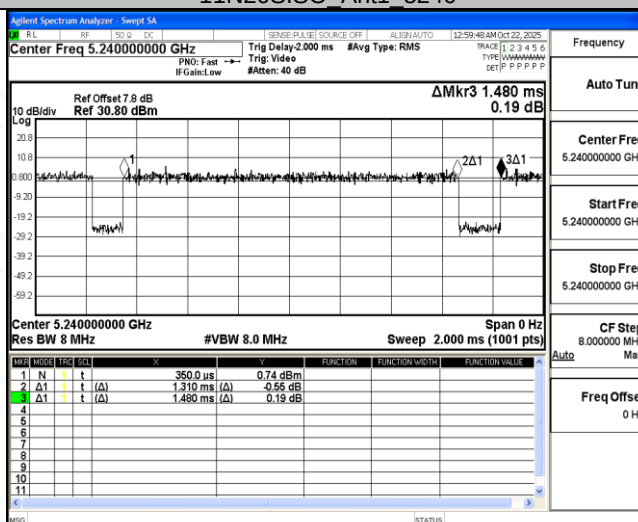
11N20SISO Ant1 5180



11N20SISO Ant1 5200

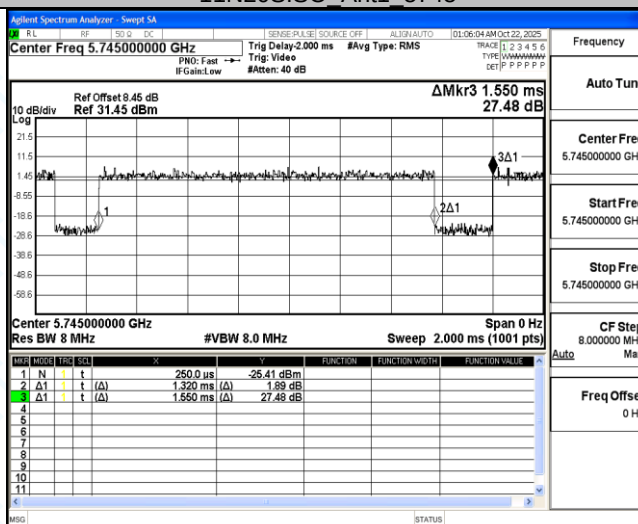


11N20SISO Ant1 5240

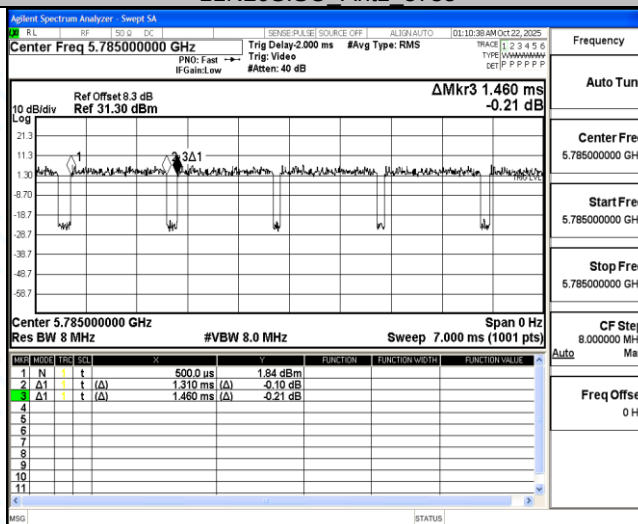




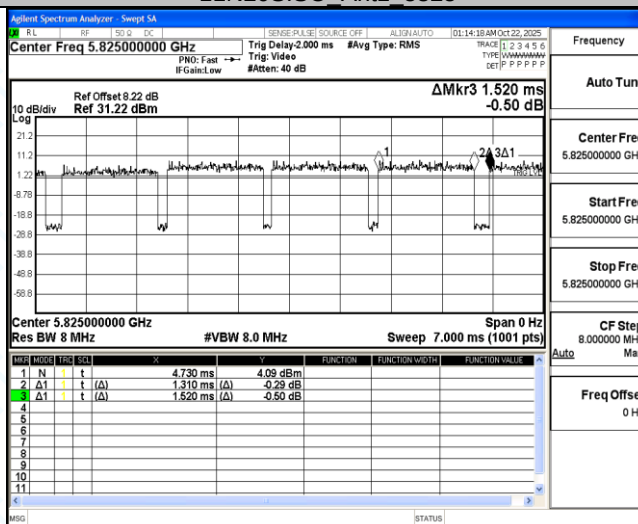
11N20SISO Ant1 5745



11N20SISO Ant1 5785



11N20SISO Ant1 5825





Appendix B: Emission Bandwidth

Test Result

B1

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.240	5170.200	5189.440	---	---
		5200	19.560	5190.160	5209.720	---	---
		5240	19.600	5230.360	5249.960	---	---
11N20SISO	Ant1	5180	20.280	5169.840	5190.120	---	---
		5200	19.960	5190.120	5210.080	---	---
		5240	20.360	5229.920	5250.280	---	---

B4

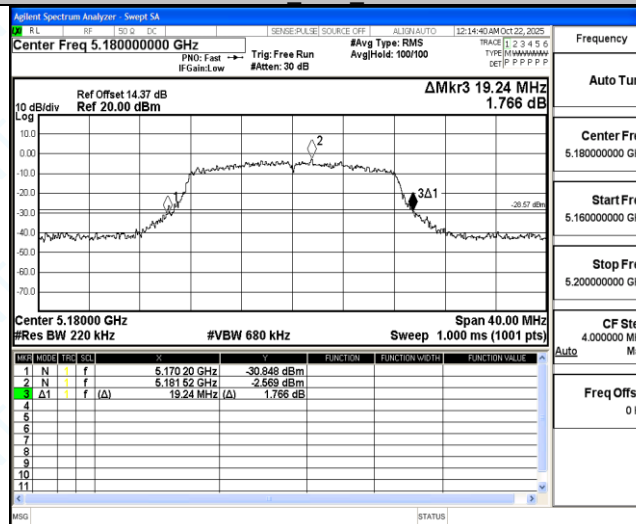
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	9.960	5740.080	5750.040	0.5	PASS
		5785	15.400	5777.520	5792.920	0.5	PASS
		5825	15.000	5817.560	5832.560	0.5	PASS
11N20SISO	Ant1	5745	13.800	5738.800	5752.600	0.5	PASS
		5785	11.840	5778.520	5790.360	0.5	PASS
		5825	15.040	5817.480	5832.520	0.5	PASS



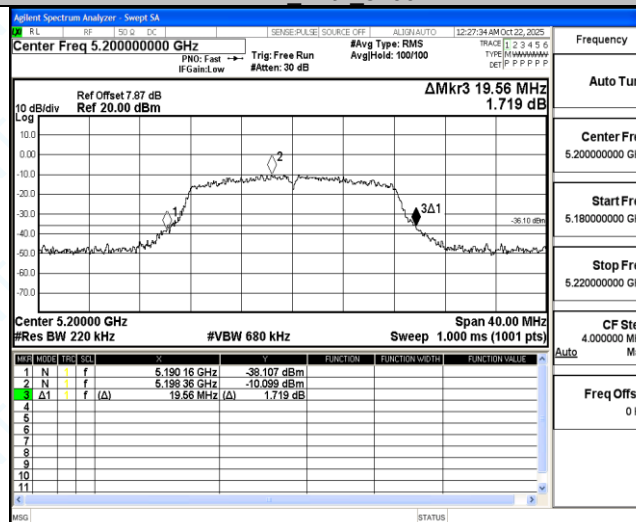
Test Graphs

B1

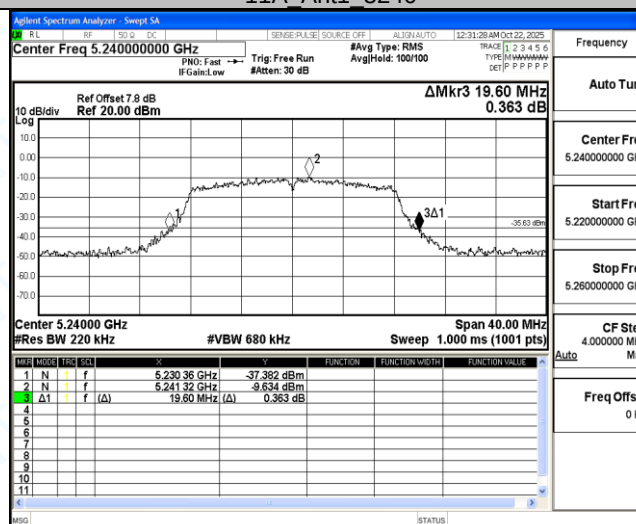
11A Ant1 5180



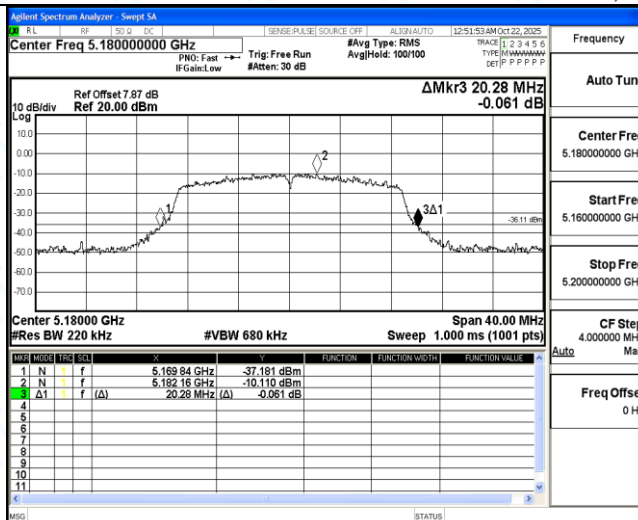
11A Ant1 5200



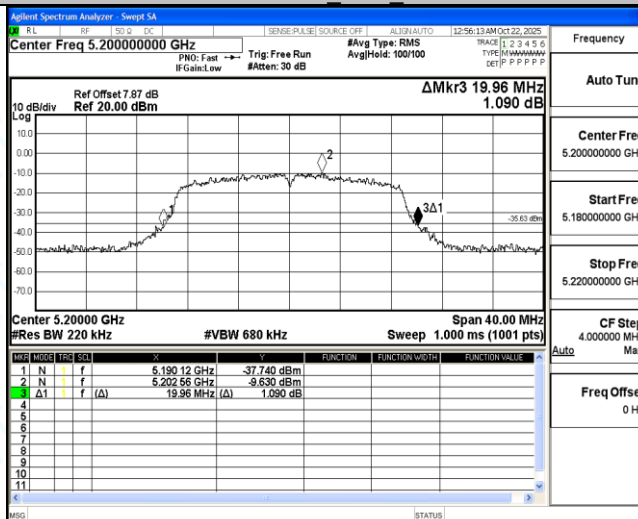
11A Ant1 5240



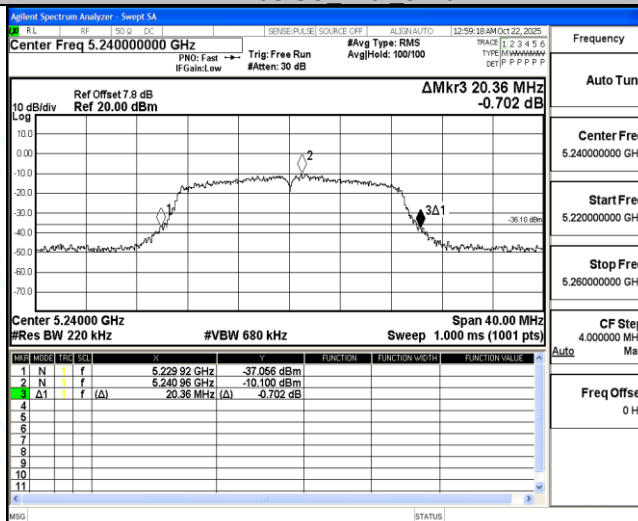
11N20SISO Ant1 5180



11N20SISO Ant1 5200



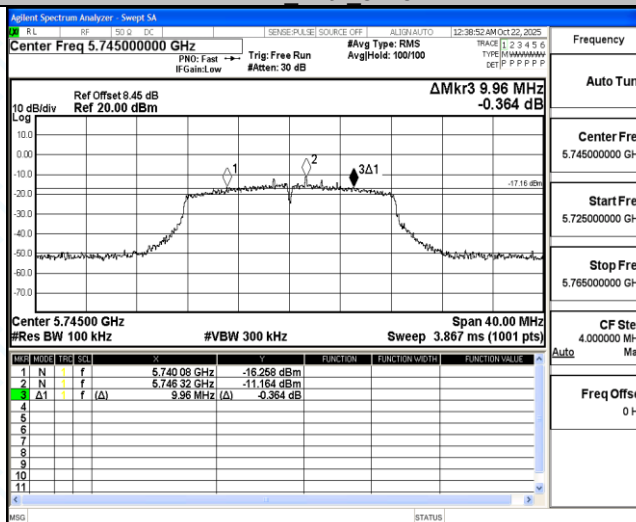
11N20SISO Ant1 5240



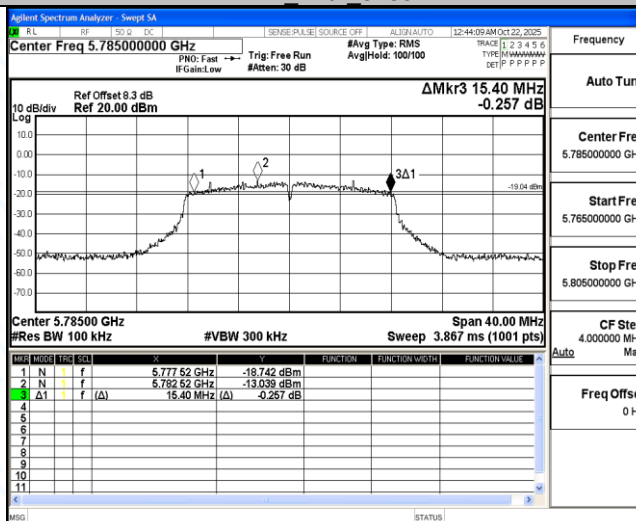


B4

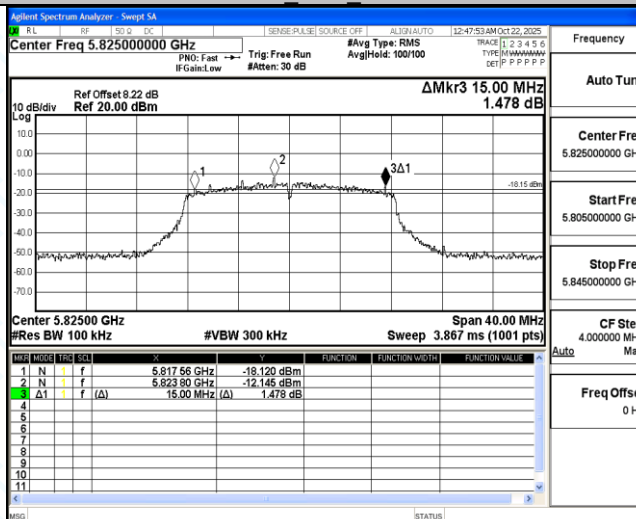
11A_Ant1_5745



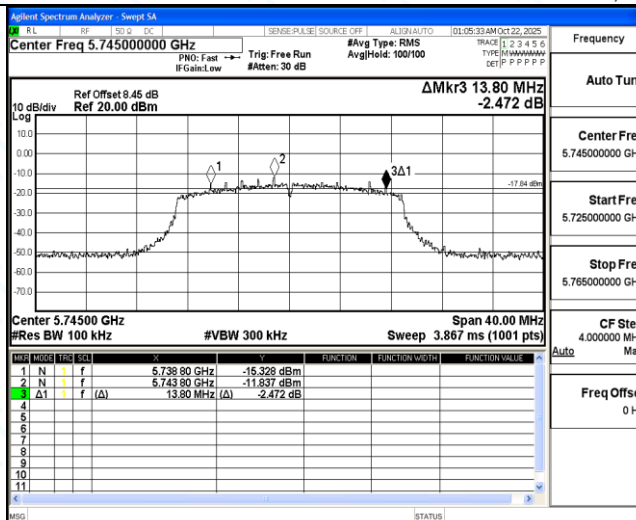
11A_Ant1_5785



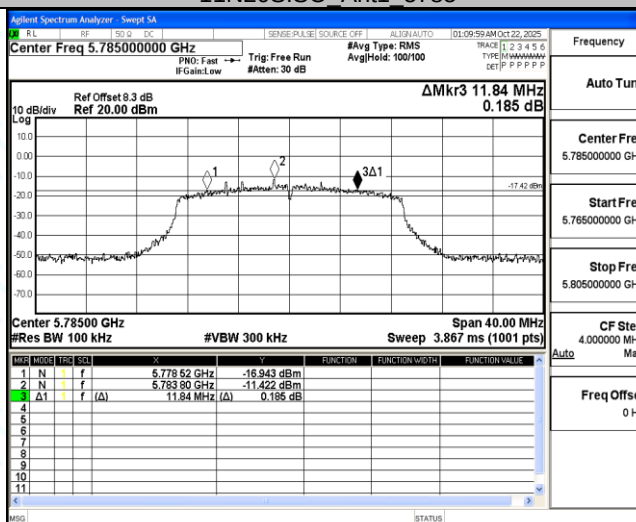
11A_Ant1_5825



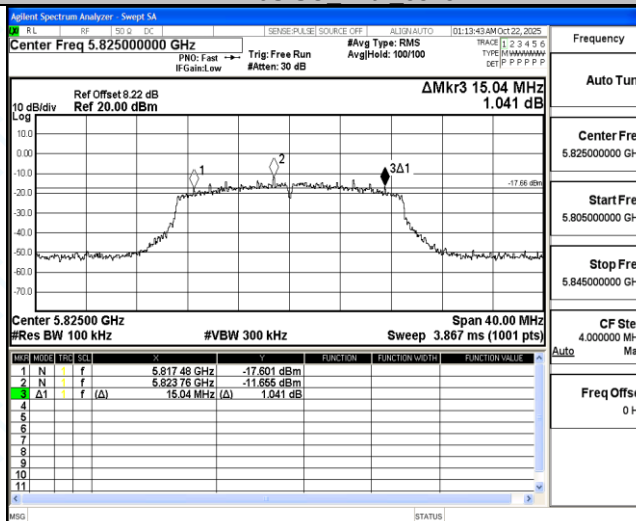
11N20SISO_Ant1_5745



11N20SISO Ant1 5785



11N20SISO Ant1 5825





Appendix C:Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.515	5171.7774	5188.2924	---	---
		5200	16.432	5191.8241	5208.2561	---	---
		5240	16.422	5231.8587	5248.2807	---	---
		5745	16.508	5736.8531	5753.3611	---	---
		5785	16.428	5776.8693	5793.2973	---	---
		5825	16.355	5816.9003	5833.2553	---	---
11N20SISO	Ant1	5180	17.505	5171.2783	5188.7833	---	---
		5200	17.489	5191.3412	5208.8302	---	---
		5240	17.507	5231.2983	5248.8053	---	---
		5745	17.584	5736.3267	5753.9107	---	---
		5785	17.536	5776.2955	5793.8315	---	---
		5825	17.530	5816.3482	5833.8782	---	---