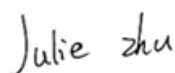
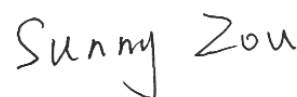


TEST REPORT

Applicant: NAYAX LTD
Address: 3 Arik Einstein St., Herzliya, 4659071, Israel
Equipment Type: Payment Terminal Device
Model Name: VPOSM4
Brand Name: NAYAX
FCC ID: 2AK6L-VPOSM4
ISED Number: 10840A-VPOSM4
Test Standard: 47 CFR Part 15 Subpart E
RSS-Gen Issue 5
RSS-247 Issue 3
(refer to section 3.1)
Sample Arrival Date: Aug. 16, 2024
Test Date: Aug. 17, 2024 - Mar. 12, 2025
Date of Issue: May 24, 2025

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Zhu Minjing**Checked by:** Ye Hongji**Approved by:** Sunny Zou
(Technical Director)

Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>May 24, 2025</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☒ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	NAYAX LTD
Address	3 Arik Einstein St., Herzliya, 4659071, Israel

2.2 Manufacturer Information

Manufacturer	NAYAX LTD
Address	3 Arik Einstein St., Herzliya, 4659071, Israel

2.3 General Description for Equipment under Test (EUT)

EUT Name	Payment Terminal Device
Model Name Under Test	VPOSM4
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	VPOSM405141217100
Software Version	p1611_oneant_combo_nayax_202408021255_userdebug
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	2G Network GPRS/EDGE 850/1900MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12/17/19 TDD LTE Band 38/41 Bluetooth (BR+EDR+BLE 1M 2M) 2.4G WiFi 802.11b, 802.11g, 802.11n(HT20/40) 5G WiFi 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) GPS, Galileo, BeiDou, GLONASS, NFC
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The requirement for the following technical information of the EUT was tested in this report:

Frequency Range	U-NII-1: 5150 MHz to 5250 MHz, U-NII-2A: 5250 MHz to 5350 MHz, U-NII-3: 5725 MHz to 5850 MHz
Product Type	☐ Mobile ☐ Portable ☒ Fix Location Indoor for IC standard
Modulation technology	OFDM
Modulation Type	64QAM, 16QAM, BPSK, QPSK
Transfer Rate (Mbps) (Single RF path)	802.11a: 54/ 48/ 36/ 24/ 18/ 12/ 9/ 6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to VHT-MCS9
Channel Bandwidth	802.11a: 20 MHz 802.11n: 20 MHz, 40 MHz 802.11ac: 20 MHz, 40 MHz, 80 MHz
Maximum Output Power	U-NII-1: 15.29 dBm U-NII-2A: 15.13 dBm U-NII-3: 15.89 dBm
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	U-NII-1: 5150 MHz to 5250 MHz: 2.73 dBi U-NII-2A: 5250 MHz to 5350 MHz: 2.66 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.34 dBi
About the Product	The equipment is Payment Terminal Device, intended for used with information technology equipment.

2.5 Channel List

20 MHz		40 MHz		80 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	58	5290
44	5220	54	5270	155	5775
48	5240	62	5310		
52	5260	142	5710		
56	5280	151	5755		
60	5300	159	5795		
64	5320				
149	5745				
153	5765				
157	5785				
161	5805				
165	5825				

Note: This report equipment will not transmit in the 5600-5650 MHz frequency band when used in Canada. This restriction is to protect weather radars operating in this frequency band.

The Lowest frequency, the middle frequency and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11a/n(HT20)/ac(VHT20)

U-NII-1 (5150 - 5250 MHz)			U-NII-2A (5250 - 5350 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Left	5180	52	Left	5260
44	Mid	5220	60	Mid	5300
48	High	5240	64	High	5320

U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)
149	Left	5745
157	Mid	5785
165	High	5825

For 802.11n(HT40)/ac(VHT40)

U-NII-1 (5150 - 5250 MHz)			U-NII-2A (5250 - 5350 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
38	Left	5190	54	Left	5270
46	High	5230	62	High	5310

U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)
151	Left	5755
159	High	5795

For 802.11ac(VHT80)

U-NII-1 (5150 - 5250 MHz)			U-NII-2A (5250 - 5350 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
42	Mid	5210	58	Mid	5290

U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)
155	Mid	5775

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Modulation Type	U-NII-1	U-NII-2A	U-NII-3
				Channel	Channel	Channel
RF Output Power	11a	6	BPSK	48/44/36	64/60/52	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	159/151
	11ac(80 MHz)	29.3		42	58	155
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	48/44/36	64/60/52	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	159/151
	11ac(80 MHz)	29.3		42	58	155
6 dB bandwidth	11a	6	BPSK	N/A	N/A	165/157/149
	11n(20 MHz)	6.5		N/A	N/A	165/157/149
	11n(40 MHz)	13.5		N/A	N/A	159/151
	11ac(20 MHz)	6.5		N/A	N/A	165/157/149
	11ac(40 MHz)	13.5		N/A	N/A	159/151
	11ac(80 MHz)	29.3		N/A	N/A	155
Power Spectral Density	11a	6	BPSK	48/44/36	64/60/52	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	159/151
	11ac(80 MHz)	29.3		42	58	155
Radiated Spurious Emissions	11a	6	BPSK	48/44/36	64/60/52	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	159/151
	11ac(80 MHz)	29.3		42	58	155
Band Edge (Restricted-band)	11a	6	BPSK	48/36	64/52	165/149
	11n(20 MHz)	6.5		48/36	64/52	165/149
	11n(40 MHz)	13.5		46/38	62/54	159/151
	11ac(20 MHz)	6.5		48/36	64/52	165/149
	11ac(40 MHz)	13.5		46/38	62/54	159/151
	11ac(80 MHz)	29.3		42	58	155

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E	Unlicensed National Information Infrastructure Devices
2	RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus
3	RSS-247 Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems(FHSs) and Licence-Exemp Local Area Network (LE-LAN) Devices
4	KDB Publication 789033 D02v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
5	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Test Verdict

No.	Description	FCC Part No.	RSS Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	RSS-247, 6.2	--	Pass ^{Note1}
2	RF Output Power	15.407(a)	RSS-247, 6.2	ANNEX A.1	Pass
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	RSS-247, 6.2	ANNEX A.2	Pass
4	6 dB bandwidth	15.407(e)	RSS-247, 6.2	ANNEX A.3	Pass
5	Power Spectral Density	15.407(a)	RSS-247, 6.2	ANNEX A.4	Pass
6	Conducted Emission	15.207	RSS-GEN, 8.8	ANNEX A.5	Pass
7	Radiated Spurious Emissions and Band Edge (Restricted-band)	15.407(b)	RSS-247, 6.2	ANNEX A.6	Pass
8	Receiver Spurious Emissions	--	RSS-Gen, 7.1.2	--	N/A ^{Note2}

Note ¹: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note ²: Only radio communication receivers operating in stand-alone mode within the U-NII-30-960 MHz, as well as scanner receivers, are subject to Industry Canada requirements, so this test is not applicable.

Note ³: Under all normal operating conditions specified in the user manual, frequency stability can keep radiation within the operating frequency band.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	51% to 59%	
Atmospheric Pressure	100 kPa to 101 kPa	
Temperature	NT (Normal Temperature)	+22.1°C to +24.5°C
Working Voltage of the EUT	NV (Normal Voltage)	24V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY46471071	2024.07.04	2025.07.03
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-40	101544	2023.12.27	2024.12.26
				2024.12.16	2025.12.15
Power Sensor	KEYSIGHT	U2063XA	MY58000247	2024.07.04	2025.07.03
Spectrum Analyzer	KEYSIGHT	N9020A	MY52510065	2024.08.01	2025.07.31
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	02460	2024.05.16	2027.05.15
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2024.06.15	2027.06.14
Anechoic Chamber	RAINFORD	9m*6m*6m	144	2022.02.19	2025.09.03
Amplifier	COM-MV	LSCX_LNA1-12G-01	180602	2024.08.01	2025.07.31
Amplifier	COM-MV	XKu_LNA7-18G-01	180601	2024.08.01	2025.07.31
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2024.08.01	2025.07.31
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2024.01.23	2027.01.22
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	130	2024.07.13	2027.07.12
EMI Receiver	Agilent	N9038A	MY55330120	2024.08.01	2025.07.31
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9168	9168-00867	2022.04.12	2025.04.11
Amplifier	COM-MV	ZT30-1000M	B2017119081	2023.12.05	2024.12.04
				2024.11.28	2025.11.27
Anechoic Chamber	YiHeng	9m*6m*6m	142	2024.07.21	2027.07.20
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2024.08.01	2025.07.31
LISN	SCHWARZBECK	NSLK 8127	8127-687	2024.05.09	2025.05.08

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.	Applicable test Setup
BL410R	BALUN	V2.1.1.496	N/A	The section 4.5.1
BL410E	BALUN	V21.919	N/A	The section 4.5.2&4.5.3&4.5.4&4.5.5

4.4 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8°C
Humidity	4%

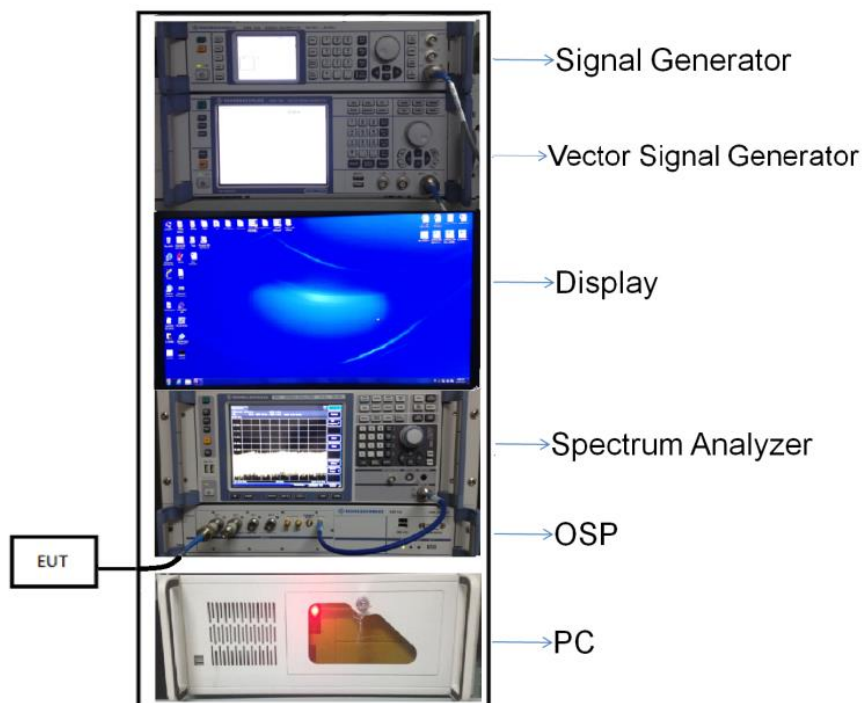
4.5 Description of Test Setup

4.5.1 For Antenna Port Test

Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

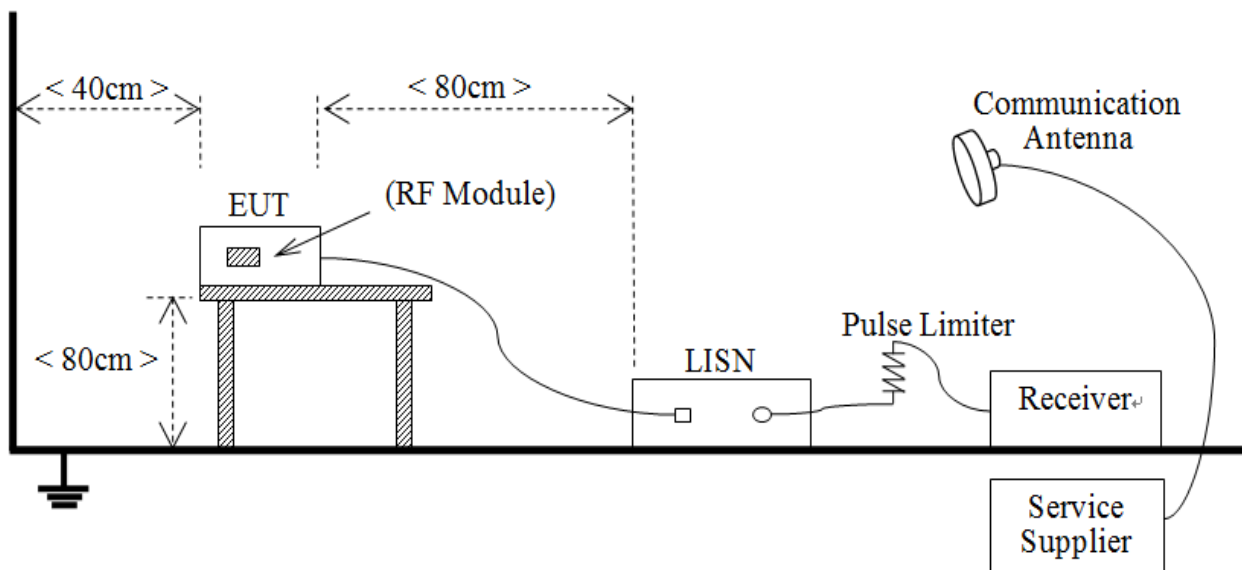
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

Conducted value (dBm) = 10 dBm + 0.5 dB = 10.5 dBm



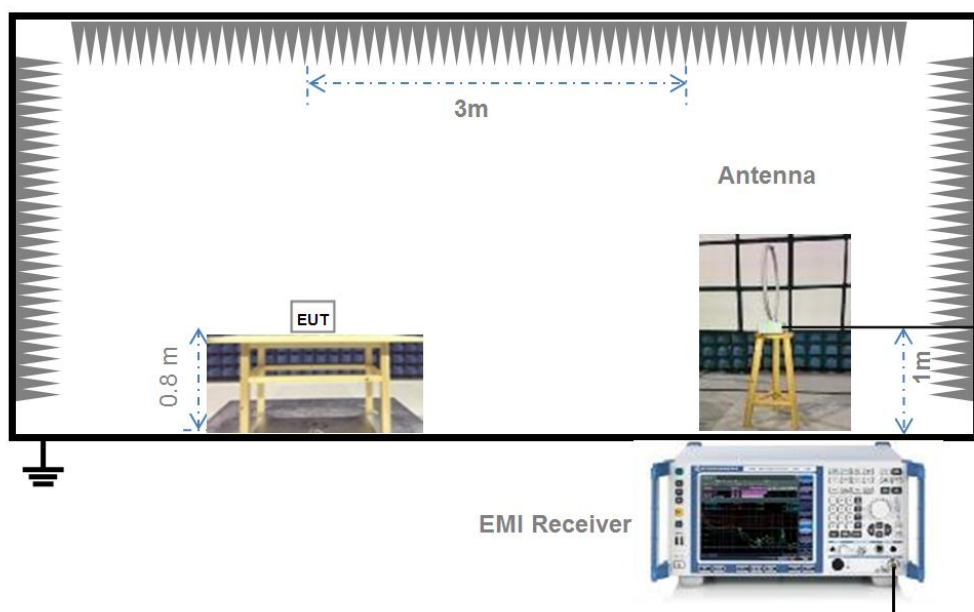
(Diagram 1)

4.5.2 For AC Power Supply Port Test



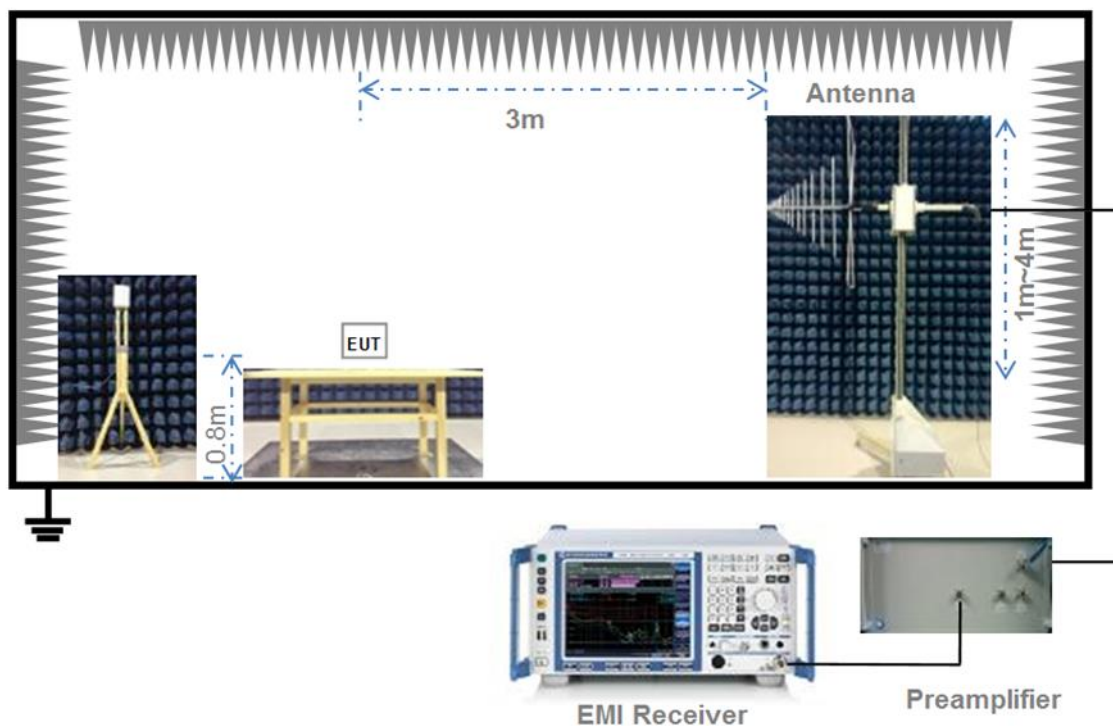
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



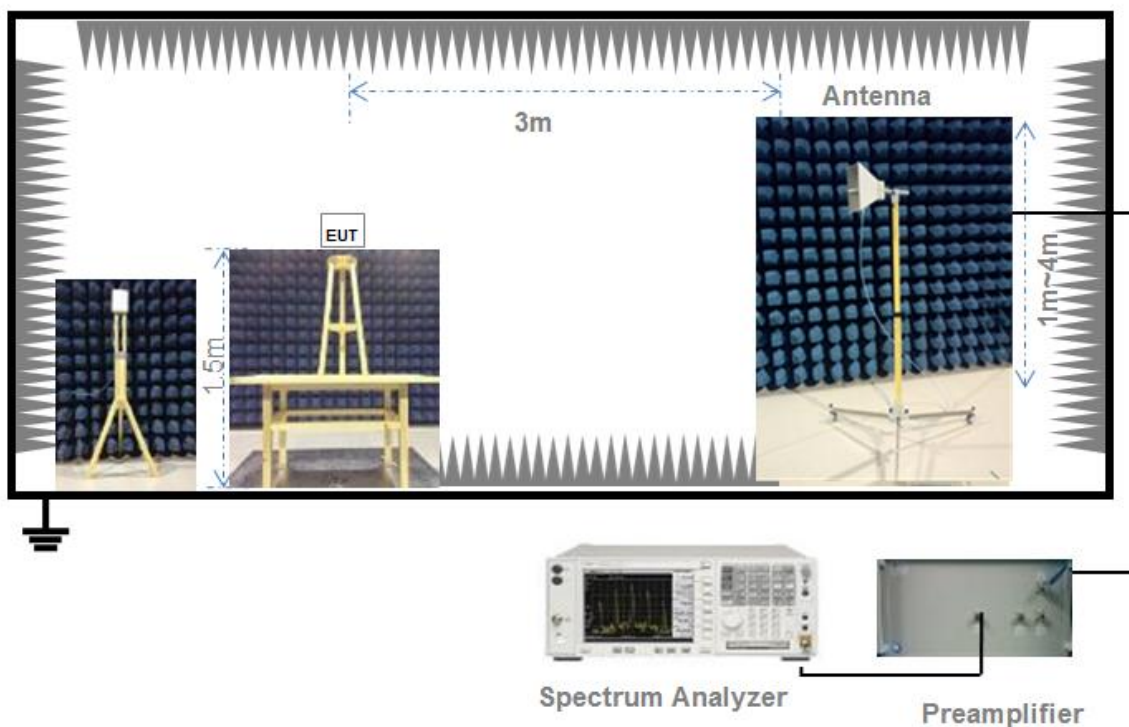
(Diagram 3)

4.5.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.5.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

5 TEST ITEMS

5.1 RF Output Power

5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

Frequency Band (MHz)	Limit
5150-5250	250 mW
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where “B” is the 26 dB emissions bandwidth in MHz.	

RSS-247, 6.2

The maximum conducted output power shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where “B” is the 99% emissions bandwidth in MHz.	

The maximum e.i.r.p. shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	200 mW or 10 dBm + 10log B, whichever is less.
5250-5350	1W or 17 dBm + 10log B, whichever is less.
5470-5725	1W or 17 dBm + 10log B, whichever is less.
5725-5850	N/A
Note1: Where “B” is the 99% emissions bandwidth in MHz.	
Note2: EIRP= maximum conducted output power+ Antenna Gain.	

5.1.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

Maximum conducted (average) output power

a) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.

- 1) The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
- 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
- 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by

at least a factor of five.

b) If the transmitter does not transmit continuously, measure the duty cycle (x) of the transmitter output signal.

c) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

d) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle.

Measurements of duty cycle

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal.

Set the center frequency of the instrument to the center frequency of the transmission.

Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.

Set $VBW \geq RBW$. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

The E.I.R.P used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Emission Bandwidth and 6 dB Bandwidth

5.2.1 Limit

FCC §15.407(a), RSS-247, 6.2

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.2.2 Test Setup

The test setup photo please refer to 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Emission bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set VBW $\geq 3 \times$ RBW,
3. Detector = Peak.
4. Trace mode = Max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Occupied Bandwidth

1. Set Span = 1.5 times to 5.0 times the OBW
2. Set RBW = 1% to 5% of the OBW.
3. Set VBW $\geq 3 \times$ RBW, Detector = Peak.
4. Trace mode = Max hold.
5. Use the 99% power bandwidth function of the instrument.

6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.
2. Detector = Peak. Trace mode = Max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the 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.

5.2.4 Test Result

Please refer to ANNEX A.2 and ANNEX A.3.

5.3 Power Spectral density (PSD)

5.3.1 Limit

FCC §15.407(a)

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	11 dBm/MHz
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

RSS-247, 6.2

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

The e.i.r.p. spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	10 dBm/MHz
5250-5350	N/A
5470-5725	N/A
5725-5850	N/A
e.i.r.p. spectral density= maximum power spectral density+ Antenna Gain.	

5.3.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.

1. Set RBW = 510 kHz/1 MHz, VBW $\geq 3 \times$ RBW, Sweep time = Auto, Detector = RMS.
2. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak marker function to determine the maximum amplitude level.
4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.3.4 Test Result

Please refer to ANNEX A.4.

5.4 Conducted Emission

5.4.1 Limit

FCC §15.207, RSS-GEN, 8.8

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the U-NII-150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.4.2 Test Setup

The section 4.5.2 (Diagram 2) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

5.4.4 Test Result

Please refer to ANNEX A.5.

5.5 Radiated Spurious Emissions and Band Edge (Restricted-band)

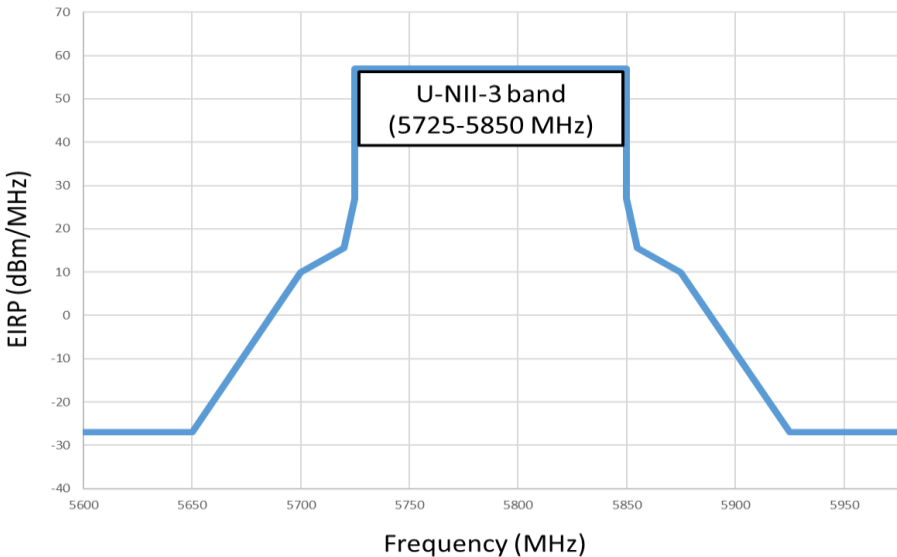
5.5.1 Limit

FCC §15.209 & 15.407(b), RSS-247, 6.2

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
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

Note ¹: The Limit for radiated test was performed according to FCC Part 15C

Note ²: The tighter limit applies at the band edge.

Un-restricted band emissions	
Out Operating Band (MHz)	Limit
5150 - 5250	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5250 - 5350	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5470 - 5725	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5725 - 5850	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. 

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength.

5.5.2 Test Setup

The section 4.5.3-4.5.5 (Diagram 3 - Diagram 5) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
- c) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
- d) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20\log D + 104.8$$

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

- e) Compare the resultant electric field strength level to the applicable limit.
- f) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable

emission limits using a peak detector.

Peak power measurement procedure

Peak emission levels are measured by setting the instrument as follows:

- a) RBW = as specified in Table 1.
- b) VBW $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Sweep time = auto.
- e) Trace mode = max hold.
- f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

- a) The EUT shall be configured to operate at the maximum achievable duty cycle.
- b) Measure the duty cycle, x , of the transmitter output signal as described in section 6.0.
- c) RBW = 1 MHz (unless otherwise specified).
- d) VBW $\geq 3 \times$ RBW.
- e) Detector = RMS, if $\text{span}/(\# \text{ of points in sweep}) \leq (\text{RBW}/2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
- f) Averaging type = power (i.e., RMS).
 - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
 - 2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
- g) Sweep time = auto.

h) Perform a trace average of at least 100 traces.

i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:

1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is $10 \log(1/x)$, where x is the duty cycle.

2) If linear voltage averaging mode was used in step f), then the applicable correction factor is $20 \log(1/x)$, where x is the duty cycle.

3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain

A conducted power measurement will determine the maximum output power associated with a restricted band emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30 MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.5.4 Test Result

Please refer to ANNEX A.6.

ANNEX A TEST RESULT

A.1 RF Output Power

Note ¹: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note ²: For IC standard, the U-NII-3 (5725 - 5850 MHz) maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note ³: All the configurations were tested, but only the worst data was shown in this report.

Duty Cycle

Test Mode	On Time (ms)	On+Off time (ms)	Duty Cycle	Duty Factor
11a	1.391	1.436	96.87%	0.14
11n (HT20)/11ac (VHT20)	1.312	1.356	96.76%	0.14
11n (HT40)/11ac (VHT40)	0.651	0.696	93.56%	0.29
11ac (VHT80)	0.324	0.368	87.91%	0.56

Conducted Power

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	15.25	33.48	250	Pass
11a	CH44	15.14	32.65	250	Pass
11a	CH48	15.07	32.12	250	Pass
11n (HT20)	CH36	15.19	33.02	250	Pass
11n (HT20)	CH44	15.14	32.65	250	Pass
11n (HT20)	CH48	15.08	32.20	250	Pass
11n (HT40)	CH38	15.29	33.83	250	Pass
11n (HT40)	CH46	15.06	32.09	250	Pass
11ac (VHT20)	CH36	15.26	33.60	250	Pass
11ac (VHT20)	CH44	15.12	32.53	250	Pass
11ac (HVT20)	CH48	15.08	32.23	250	Pass
11ac (VHT40)	CH38	15.32	34.03	250	Pass
11ac (VHT40)	CH46	15.09	32.28	250	Pass
11ac (VHT80)	CH42	15.22	33.26	250	Pass

U-NII-2A (5250 - 5350 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH52	15.13	32.57	250	Pass
11a	CH60	14.81	30.27	250	Pass
11a	CH64	14.98	31.48	250	Pass
11n (HT20)	CH52	14.95	31.26	250	Pass
11n (HT20)	CH60	14.76	29.92	250	Pass
11n (HT20)	CH64	14.89	30.83	250	Pass
11n (HT40)	CH54	14.66	29.24	250	Pass
11n (HT40)	CH62	14.77	29.99	250	Pass
11ac (VHT20)	CH52	14.94	31.19	250	Pass
11ac (VHT20)	CH60	14.75	29.85	250	Pass
11ac (HVT20)	CH64	14.93	31.12	250	Pass
11ac (VHT40)	CH54	14.85	30.55	250	Pass
11ac (VHT40)	CH62	14.77	29.99	250	Pass
11ac (VHT80)	CH58	14.56	28.58	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	15.89	38.80	1000	Pass
11a	CH157	15.63	36.54	1000	Pass
11a	CH165	15.67	36.88	1000	Pass
11n (HT20)	CH149	15.71	37.22	1000	Pass
11n (HT20)	CH157	15.47	35.22	1000	Pass
11n (HT20)	CH165	15.49	35.39	1000	Pass
11n (HT40)	CH151	15.41	34.78	1000	Pass
11n (HT40)	CH159	15.38	34.54	1000	Pass
11ac (VHT20)	CH149	15.50	35.51	1000	Pass
11ac (VHT20)	CH157	15.15	32.76	1000	Pass
11ac (VHT20)	CH165	15.15	32.76	1000	Pass
11ac (VHT40)	CH151	15.01	31.69	1000	Pass
11ac (VHT40)	CH159	15.47	35.23	1000	Pass
11ac (VHT80)	CH155	15.51	35.56	1000	Pass

E.I.R.P

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	E.I.R.P (dBm)	E.I.R.P (mW)	E.I.R.P Limit (mW)	Verdict
11a	CH36	17.84	60.81	165	Pass
11a	CH44	17.73	59.29	165	Pass
11a	CH48	17.66	58.34	165	Pass
11n (HT20)	CH36	17.78	59.98	176	Pass
11n (HT20)	CH44	17.73	59.29	176	Pass
11n (HT20)	CH48	17.67	58.48	176	Pass
11n (HT40)	CH38	17.74	59.43	200	Pass
11n (HT40)	CH46	17.51	56.36	200	Pass
11ac (VHT20)	CH36	17.85	60.95	176	Pass
11ac (VHT20)	CH44	17.71	59.02	176	Pass
11ac (HVT20)	CH48	17.67	58.48	176	Pass
11ac (VHT40)	CH38	17.76	59.70	200	Pass
11ac (VHT40)	CH46	17.53	56.62	200	Pass
11ac (VHT80)	CH42	17.39	54.83	200	Pass

U-NII-2A (5250 - 5350 MHz)					
Mode	Channel	E.I.R.P (dBm)	E.I.R.P (mW)	E.I.R.P Limit (mW)	Verdict
11a	CH52	17.68	58.59	165	Pass
11a	CH60	17.36	54.45	165	Pass
11a	CH64	17.53	56.62	165	Pass
11n (HT20)	CH52	17.50	56.23	176	Pass
11n (HT20)	CH60	17.31	53.83	176	Pass
11n (HT20)	CH64	17.44	55.46	176	Pass
11n (HT40)	CH54	17.21	52.60	200	Pass
11n (HT40)	CH62	17.32	53.95	200	Pass
11ac (VHT20)	CH52	17.49	56.10	176	Pass
11ac (VHT20)	CH60	17.30	53.70	175	Pass
11ac (HVT20)	CH64	17.48	55.98	176	Pass
11ac (VHT40)	CH54	17.40	54.95	200	Pass
11ac (VHT40)	CH62	17.32	53.95	200	Pass
11ac (VHT80)	CH58	17.11	51.40	200	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	E.I.R.P (dBm)	E.I.R.P (mW)	Verdict
11a	CH149	18.23	66.50	Pass
11a	CH157	17.97	62.64	Pass
11a	CH165	18.01	63.21	Pass
11n (HT20)	CH149	18.05	63.80	Pass
11n (HT20)	CH157	17.81	60.37	Pass
11n (HT20)	CH165	17.83	60.65	Pass
11n (HT40)	CH151	17.75	59.62	Pass
11n (HT40)	CH159	17.72	59.21	Pass
11ac (VHT20)	CH149	17.84	60.86	Pass
11ac (VHT20)	CH157	17.49	56.15	Pass
11ac (VHT20)	CH165	17.49	56.15	Pass
11ac (VHT40)	CH151	17.35	54.31	Pass
11ac (VHT40)	CH159	17.81	60.38	Pass
11ac (VHT80)	CH155	17.85	60.95	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SH2480553-604 Data Part 1.pdf”.

Test Data

U-NII-1 (5150 - 5250 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	20.090	16.476
11a	CH44	20.160	16.476
11a	CH48	20.060	16.473
11n (HT20)	CH36	20.320	17.581
11n (HT20)	CH44	20.410	17.606
11n (HT20)	CH48	20.300	17.593
11n (HT40)	CH38	40.570	36.044
11n (HT40)	CH46	40.570	36.076
11ac (VHT20)	CH36	20.330	17.583
11ac (VHT20)	CH44	20.360	17.584
11ac (VHT20)	CH48	20.330	17.556
11ac (VHT40)	CH38	40.620	36.006
11ac (VHT40)	CH46	40.500	36.033
11ac (VHT80)	CH42	81.160	75.291

U-NII-2A (5250 - 5350 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH52	20.010	16.457
11a	CH60	19.920	16.466
11a	CH64	20.100	16.472
11n (HT20)	CH52	20.310	17.587
11n (HT20)	CH60	20.430	17.578
11n (HT20)	CH64	20.290	17.595
11n (HT40)	CH54	40.690	36.062
11n (HT40)	CH62	40.430	36.047
11ac (VHT20)	CH52	20.350	17.562
11ac (VHT20)	CH60	20.300	17.547
11ac (VHT20)	CH64	20.250	17.555
11ac (VHT40)	CH54	40.620	36.012
11ac (VHT40)	CH62	40.700	36.006
11ac (VHT80)	CH58	81.300	75.215

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	20.200	16.475
11a	CH157	20.000	16.474
11a	CH165	20.010	16.487
11n (HT20)	CH149	20.310	17.592
11n (HT20)	CH157	20.370	17.605
11n (HT20)	CH165	20.290	17.597
11n (HT40)	CH151	40.530	36.097
11n (HT40)	CH159	41.180	36.088
11ac (VHT20)	CH149	20.350	17.566
11ac (VHT20)	CH157	20.400	17.583
11ac (VHT20)	CH165	20.090	17.565
11ac (VHT40)	CH151	40.370	36.024
11ac (VHT40)	CH159	40.480	36.017
11ac (VHT80)	CH155	81.150	75.236

A.3 6 dB Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SH2480553-604 Data Part 2.pdf".

Test Data

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	6 dB Bandwidth (MHz)	Limit (kHz)	Verdict
11a	CH149	15.30	500.00	Pass
11a	CH157	15.20	500.00	Pass
11a	CH165	15.30	500.00	Pass
11n (HT20)	CH149	15.30	500.00	Pass
11n (HT20)	CH157	15.30	500.00	Pass
11n (HT20)	CH165	15.30	500.00	Pass
11n (HT40)	CH151	35.40	500.00	Pass
11n (HT40)	CH159	35.30	500.00	Pass
11ac (VHT20)	CH149	15.40	500.00	Pass
11ac (VHT20)	CH157	15.30	500.00	Pass
11ac (VHT20)	CH165	15.40	500.00	Pass
11ac (VHT40)	CH151	35.20	500.00	Pass
11ac (VHT40)	CH159	35.30	500.00	Pass
11ac (VHT80)	CH155	75.30	500.00	Pass

A.4 Power Spectral Density

Note¹: Test plots please refer to the document “Annex No.: BL-SH2480553-604 Data Part 3.pdf”.

Note²: The RBW used in U-NII-3 is 1 MHz, and the PSD factor is: $10 \cdot \log(500 \text{ kHz/RBW}) = -3 \text{ dBm}$.

Test Data

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH36	4.66	11.00	Pass
11a	CH44	4.73	11.00	Pass
11a	CH48	4.80	11.00	Pass
11n (HT20)	CH36	3.57	11.00	Pass
11n (HT20)	CH44	3.79	11.00	Pass
11n (HT20)	CH48	3.78	11.00	Pass
11n (HT40)	CH38	0.94	11.00	Pass
11n (HT40)	CH46	1.02	11.00	Pass
11ac (VHT20)	CH36	4.44	11.00	Pass
11ac (VHT20)	CH44	4.35	11.00	Pass
11ac (VHT20)	CH48	4.52	11.00	Pass
11ac (VHT40)	CH38	1.54	11.00	Pass
11ac (VHT40)	CH46	1.49	11.00	Pass
11ac (VHT80)	CH42	-1.65	11.00	Pass

U-NII-2A (5250 - 5350 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH52	4.16	11.00	Pass
11a	CH60	4.32	11.00	Pass
11a	CH64	4.31	11.00	Pass
11n (HT20)	CH52	4.07	11.00	Pass
11n (HT20)	CH60	4.22	11.00	Pass
11n (HT20)	CH64	4.22	11.00	Pass
11n (HT40)	CH54	1.37	11.00	Pass
11n (HT40)	CH62	1.30	11.00	Pass
11ac (VHT20)	CH52	3.96	11.00	Pass
11ac (VHT20)	CH60	4.14	11.00	Pass
11ac (VHT20)	CH64	4.12	11.00	Pass
11ac (VHT40)	CH54	1.64	11.00	Pass
11ac (VHT40)	CH62	1.87	11.00	Pass
11ac (VHT80)	CH58	-1.79	11.00	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
11a	CH149	2.47	30.00	Pass
11a	CH157	2.15	30.00	Pass
11a	CH165	2.03	30.00	Pass
11n (HT20)	CH149	1.57	30.00	Pass
11n (HT20)	CH157	1.84	30.00	Pass
11n (HT20)	CH165	1.59	30.00	Pass
11n (HT40)	CH151	-0.81	30.00	Pass
11n (HT40)	CH159	-0.63	30.00	Pass
11ac (VHT20)	CH149	1.71	30.00	Pass
11ac (VHT20)	CH157	1.80	30.00	Pass
11ac (VHT20)	CH165	1.52	30.00	Pass
11ac (VHT40)	CH151	-0.83	30.00	Pass
11ac (VHT40)	CH159	-0.79	30.00	Pass
11ac (VHT80)	CH155	-4.30	30.00	Pass

EIRP PSD

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	EIRP Limit (dBm/MHz)	Verdict
11a	CH36	7.39	10.00	Pass
11a	CH44	7.46	10.00	Pass
11a	CH48	7.53	10.00	Pass
11n (HT20)	CH36	6.30	10.00	Pass
11n (HT20)	CH44	6.52	10.00	Pass
11n (HT20)	CH48	6.51	10.00	Pass
11n (HT40)	CH38	3.67	10.00	Pass
11n (HT40)	CH46	3.75	10.00	Pass
11ac (VHT20)	CH36	7.17	10.00	Pass
11ac (VHT20)	CH44	7.08	10.00	Pass
11ac (VHT20)	CH48	7.25	10.00	Pass
11ac (VHT40)	CH38	4.27	10.00	Pass
11ac (VHT40)	CH46	4.22	10.00	Pass
11ac (VHT80)	CH42	1.08	10.00	Pass

U-NII-2A (5250 - 5350 MHz)			
Mode	Channel	PSD (dBm/MHz)	Verdict
11a	CH52	6.82	Pass
11a	CH60	6.98	Pass
11a	CH64	6.97	Pass
11n (HT20)	CH52	6.73	Pass
11n (HT20)	CH60	6.88	Pass
11n (HT20)	CH64	6.88	Pass
11n (HT40)	CH54	4.03	Pass
11n (HT40)	CH62	3.96	Pass
11ac (VHT20)	CH52	6.62	Pass
11ac (VHT20)	CH60	6.80	Pass
11ac (VHT20)	CH64	6.78	Pass
11ac (VHT40)	CH54	4.30	Pass
11ac (VHT40)	CH62	4.53	Pass
11ac (VHT80)	CH58	0.87	Pass

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	PSD (dBm/MHz)	Verdict
11a	CH149	4.81	Pass
11a	CH157	4.49	Pass
11a	CH165	4.37	Pass
11n (HT20)	CH149	3.91	Pass
11n (HT20)	CH157	4.18	Pass
11n (HT20)	CH165	3.93	Pass
11n (HT40)	CH151	1.53	Pass
11n (HT40)	CH159	1.71	Pass
11ac (VHT20)	CH149	4.05	Pass
11ac (VHT20)	CH157	4.14	Pass
11ac (VHT20)	CH165	3.86	Pass
11ac (VHT40)	CH151	1.51	Pass
11ac (VHT40)	CH159	1.55	Pass
11ac (VHT80)	CH155	-1.96	Pass

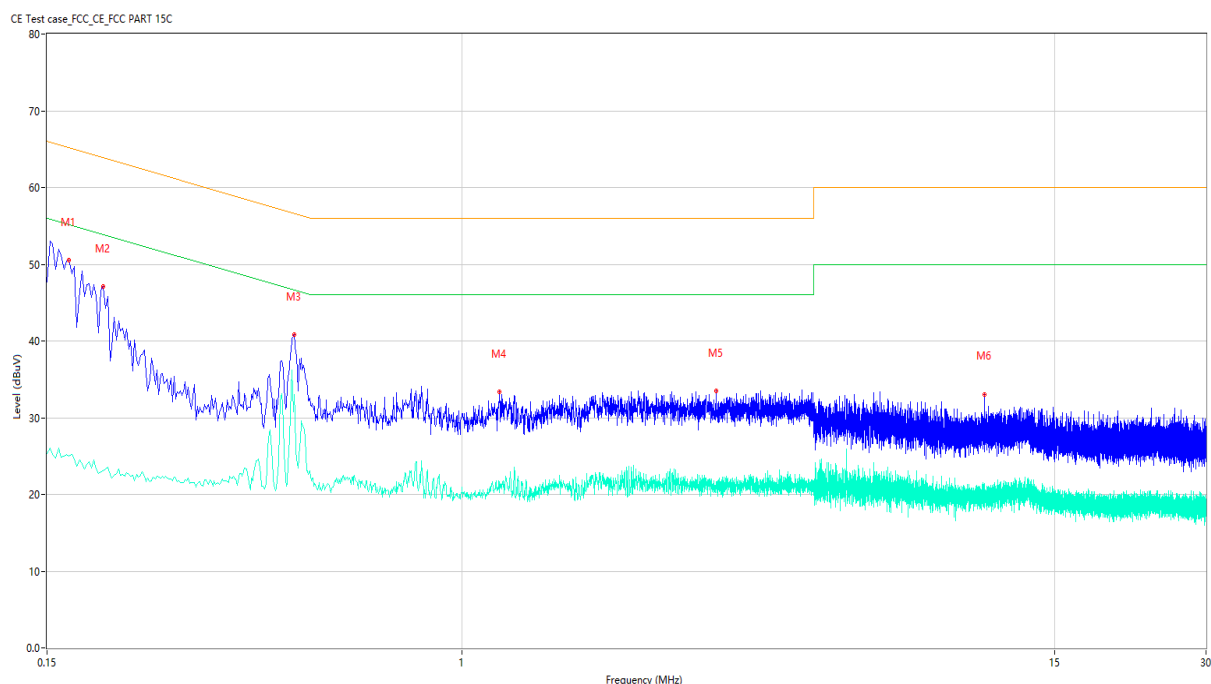
A.5 Conducted Emissions

Note¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

Note²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Test Data and Plots

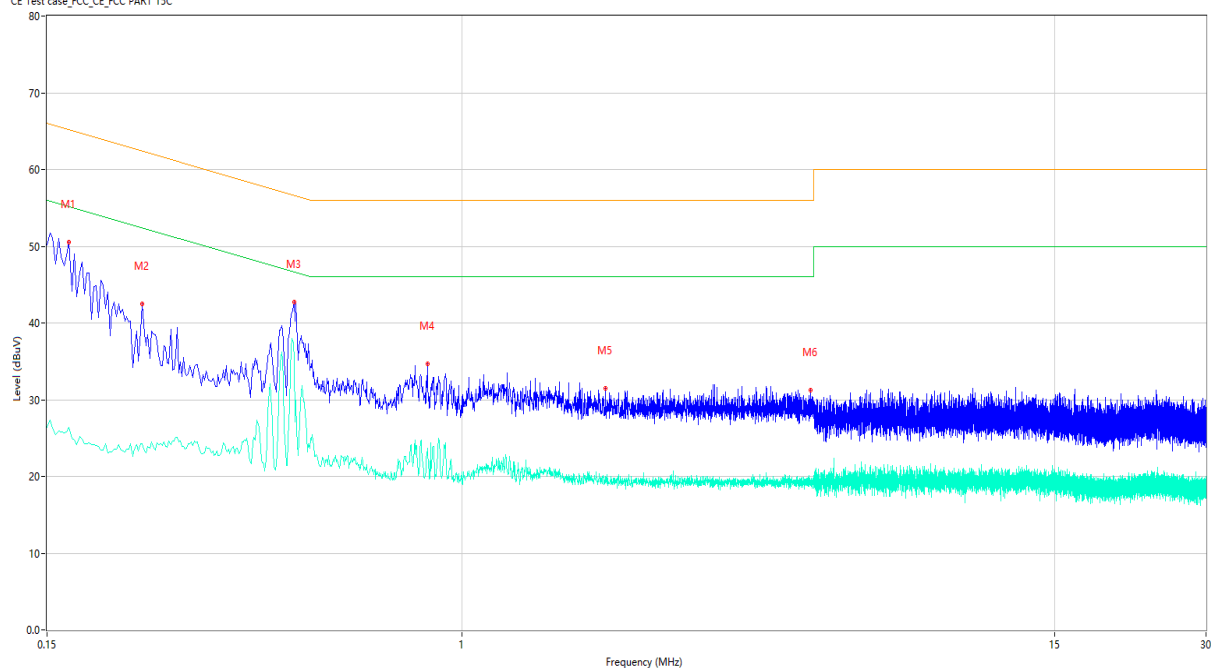
PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.166	50.56	9.75	65.16	14.60	Peak	L	Pass
1**	0.166	24.92	9.75	55.16	30.24	AV	L	Pass
2	0.194	47.06	9.75	63.86	16.80	Peak	L	Pass
2**	0.194	23.10	9.75	53.86	30.76	AV	L	Pass
3	0.464	40.79	9.74	56.62	15.83	Peak	L	Pass
3**	0.464	33.02	9.74	46.62	13.60	AV	L	Pass
4	1.188	33.38	9.70	56.00	22.62	Peak	L	Pass
4**	1.188	21.61	9.70	46.00	24.39	AV	L	Pass
5	3.200	33.45	9.67	56.00	22.55	Peak	L	Pass
5**	3.200	21.51	9.67	46.00	24.49	AV	L	Pass
6	10.892	33.05	9.44	60.00	26.95	Peak	L	Pass
6**	10.892	21.05	9.44	50.00	28.95	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.166	50.49	9.75	65.16	14.67	Peak	N	Pass
1**	0.166	26.36	9.75	55.16	28.80	AV	N	Pass
2	0.232	42.44	9.74	62.38	19.94	Peak	N	Pass
2**	0.232	24.28	9.74	52.38	28.10	AV	N	Pass
3	0.464	42.74	9.74	56.62	13.88	Peak	N	Pass
3**	0.464	35.19	9.74	46.62	11.43	AV	N	Pass
4	0.854	34.67	9.71	56.00	21.33	Peak	N	Pass
4**	0.854	23.71	9.71	46.00	22.29	AV	N	Pass
5	1.926	31.44	9.68	56.00	24.56	Peak	N	Pass
5**	1.926	19.51	9.68	46.00	26.49	AV	N	Pass
6	4.922	31.23	9.64	56.00	24.77	Peak	N	Pass
6**	4.922	19.27	9.64	46.00	26.73	AV	N	Pass

A.6 Radiated Spurious Emissions and Band Edge (Restricted-band)

Test Data

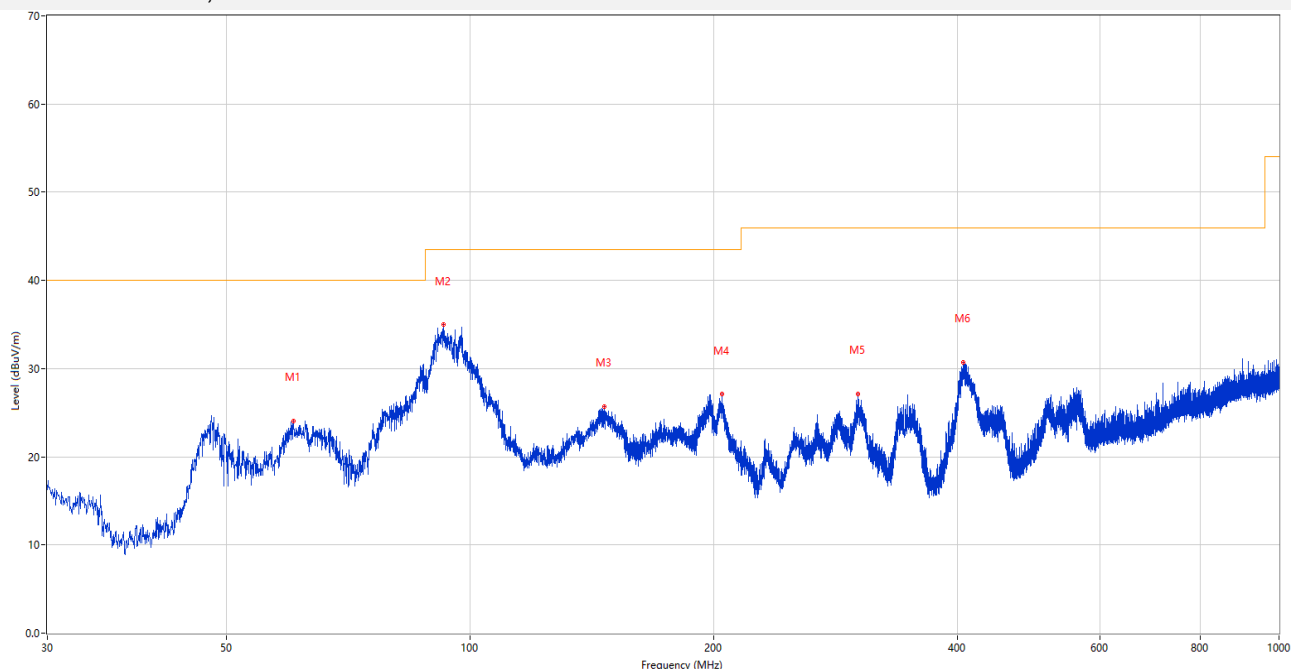
Note ¹: The symbol of "--" in the table which means not application.

Note ²: For the test data above 1 GHz, According the ANSI C63.4, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note ³: The Left frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB Lower than the limit line per 15.31(o) was not reported.

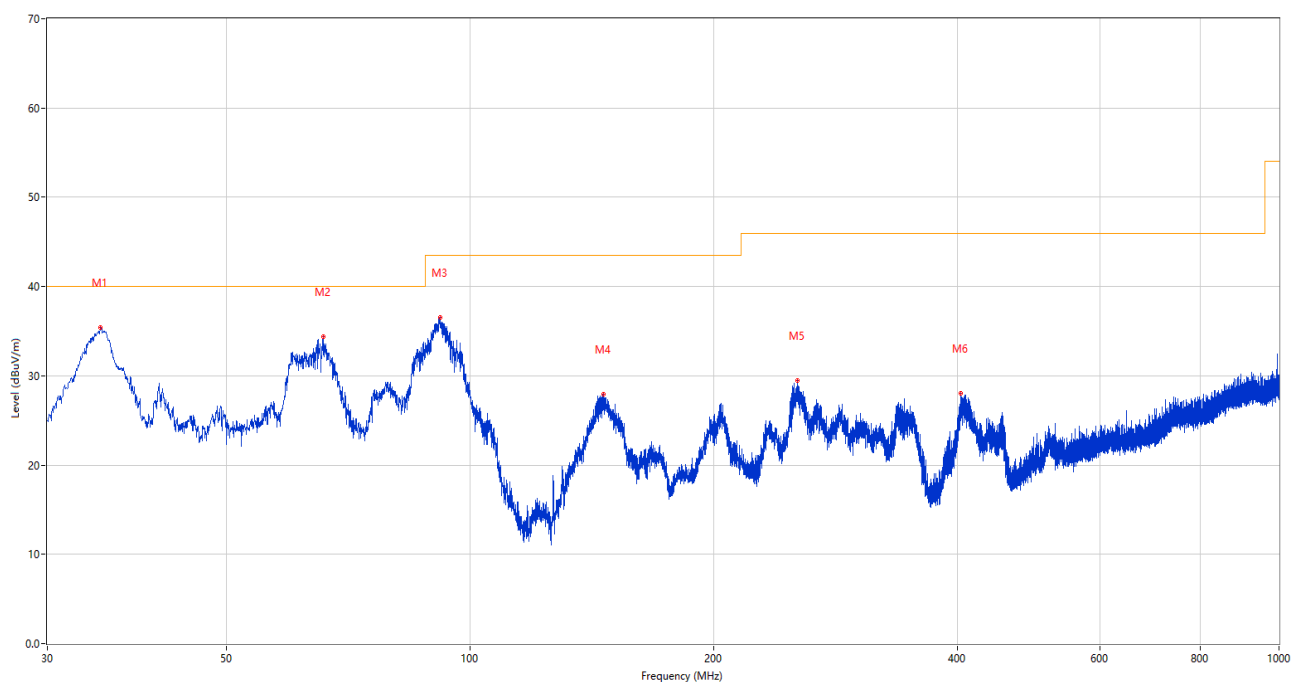
Note ⁴: The EUT is working in the Normal link mode beLeft 1 GHz. All modes have been tested and normal link mode is worst.

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	60.458	24.10	-26.14	40.0	15.90	Peak	214.00	200	Horizontal	Pass
2	92.759	34.96	-27.24	43.5	8.54	Peak	65.00	200	Horizontal	Pass
3	146.448	25.70	-29.57	43.5	17.80	Peak	246.00	100	Horizontal	Pass
4	204.746	27.08	-26.32	43.5	16.42	Peak	105.00	100	Horizontal	Pass
5	301.406	27.17	-23.24	46.0	18.83	Peak	288.00	200	Horizontal	Pass
6	406.699	30.70	-20.24	46.0	15.30	Peak	27.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

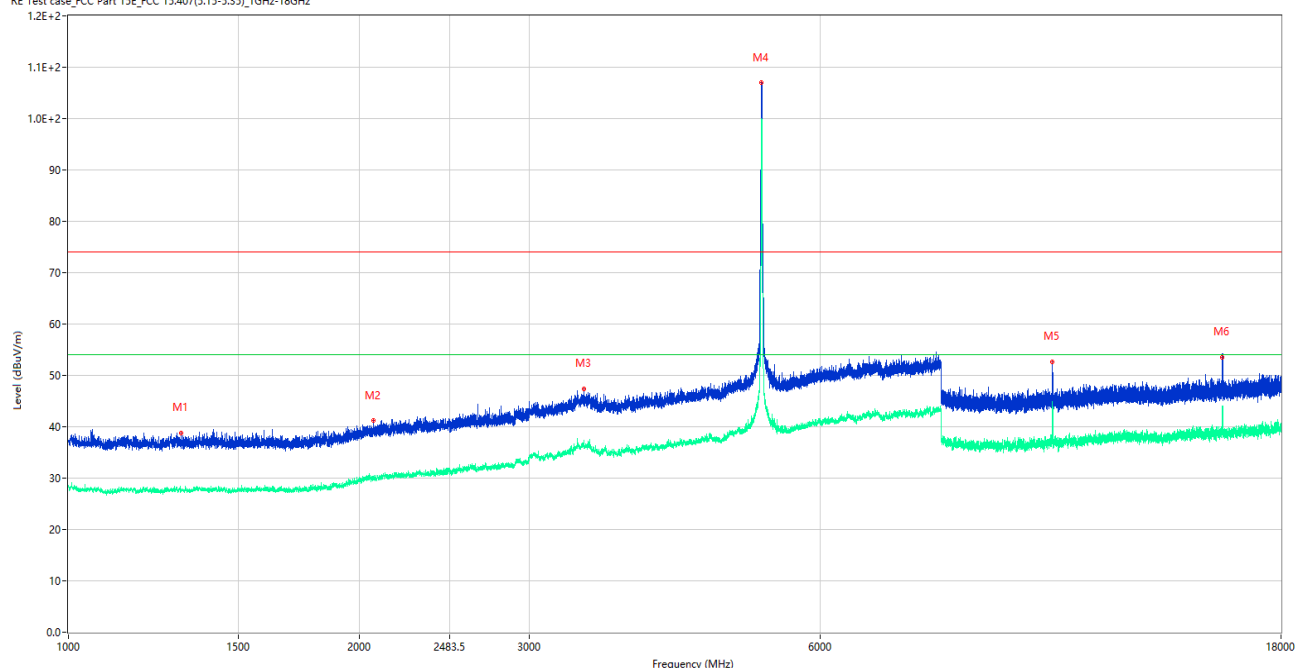


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	34.850	35.42	-27.81	40.0	4.58	Peak	87.00	100	Vertical	Pass
2	65.793	34.42	-27.60	40.0	5.58	Peak	125.00	100	Vertical	Pass
3	91.789	36.54	-27.53	43.5	6.96	Peak	172.00	100	Vertical	Pass
4	146.206	27.97	-29.57	43.5	15.53	Peak	119.00	200	Vertical	Pass
5	254.070	29.46	-24.03	46.0	16.54	Peak	111.00	100	Vertical	Pass
6	404.274	28.01	-20.28	46.0	17.99	Peak	197.00	200	Vertical	Pass

Note: The spurious above 18G is noise only, do not show on the report.

11a, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT H

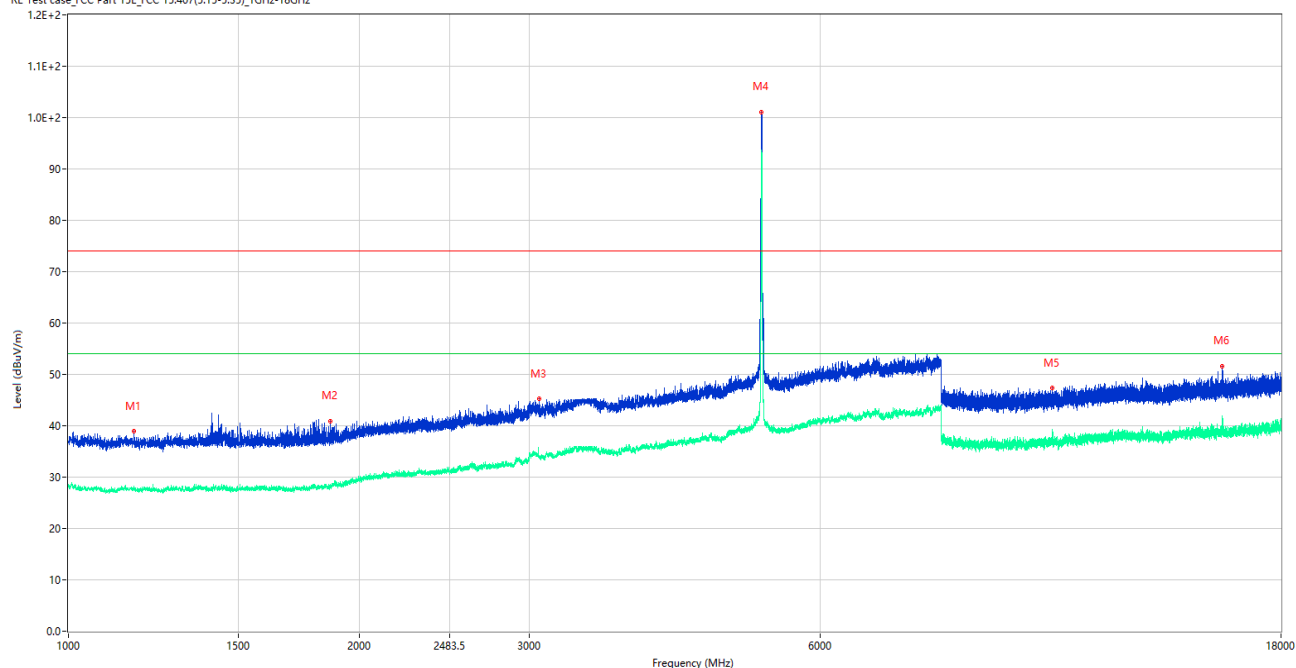
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1307.250	38.82	-15.65	74.0	35.18	Peak	151.00	150	Horizontal	Pass
1**	1307.250	27.53	-15.65	54.0	26.47	AV	151.00	150	Horizontal	Pass
2	2070.500	41.17	-13.75	74.0	32.83	Peak	225.00	150	Horizontal	Pass
2**	2070.500	29.94	-13.75	54.0	24.06	AV	225.00	150	Horizontal	Pass
3	3414.000	47.39	-5.27	74.0	26.61	Peak	150.00	150	Horizontal	Pass
3**	3414.000	36.42	-5.27	54.0	17.58	AV	150.00	150	Horizontal	Pass
4	5217.000	106.98	-2.34	74.0	-32.98	Peak	109.00	150	Horizontal	N/A
4**	5217.000	98.92	-2.34	54.0	-44.92	AV	109.00	150	Horizontal	N/A
5	10439.838	52.68	-3.44	74.0	21.32	Peak	69.00	150	Horizontal	Pass
5**	10439.838	44.09	-3.44	54.0	9.91	AV	69.00	150	Horizontal	Pass
6	15658.762	53.53	-1.35	74.0	20.47	Peak	0.00	150	Horizontal	Pass
6**	15658.762	43.52	-1.35	54.0	10.48	AV	0.00	150	Horizontal	Pass

11a, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT V

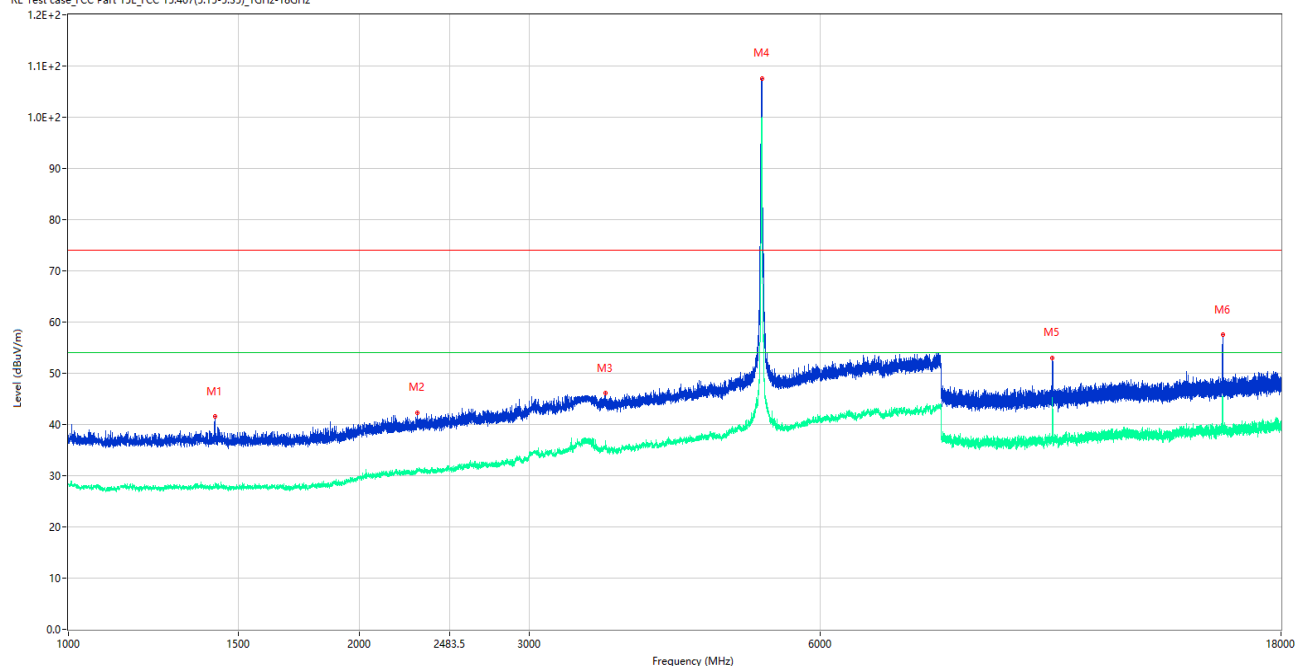
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1169.750	38.88	-15.51	74.0	35.12	Peak	360.00	150	Vertical	Pass
1**	1169.750	27.70	-15.51	54.0	26.30	AV	360.00	150	Vertical	Pass
2	1868.750	40.96	-15.77	74.0	33.04	Peak	201.00	150	Vertical	Pass
2**	1868.750	28.20	-15.77	54.0	25.80	AV	201.00	150	Vertical	Pass
3	3071.000	45.25	-7.76	74.0	28.75	Peak	248.00	150	Vertical	Pass
3**	3071.000	33.92	-7.76	54.0	20.08	AV	248.00	150	Vertical	Pass
4	5218.500	101.10	-2.37	74.0	-27.10	Peak	217.00	150	Vertical	N/A
4**	5218.500	93.25	-2.37	54.0	-39.25	AV	217.00	150	Vertical	N/A
5	10441.737	47.42	-3.31	74.0	26.58	Peak	333.00	150	Vertical	Pass
5**	10441.737	37.66	-3.31	54.0	16.34	AV	333.00	150	Vertical	Pass
6	15658.500	51.61	-1.32	74.0	22.39	Peak	360.00	150	Vertical	Pass
6**	15658.500	41.35	-1.32	54.0	12.65	AV	360.00	150	Vertical	Pass

11ac20, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT H

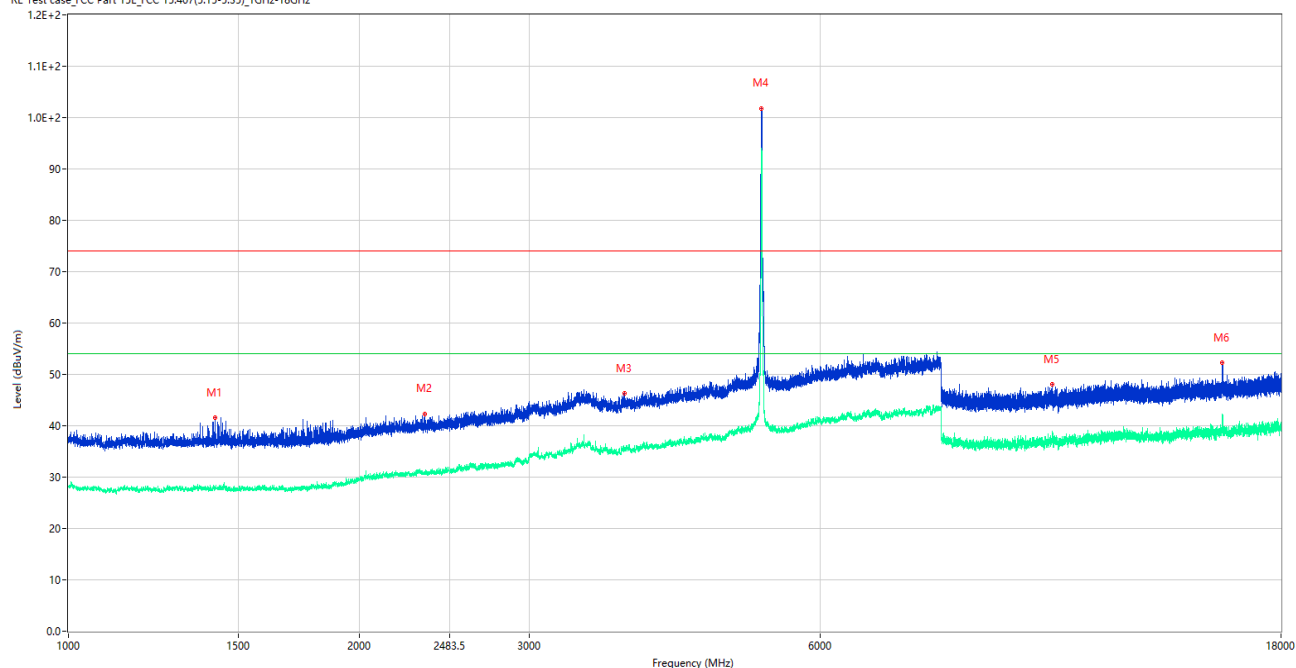
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1418.000	41.53	-15.91	74.0	32.47	Peak	205.00	150	Horizontal	Pass
1**	1418.000	27.79	-15.91	54.0	26.21	AV	205.00	150	Horizontal	Pass
2	2298.750	42.33	-13.14	74.0	31.67	Peak	252.00	150	Horizontal	Pass
2**	2298.750	30.80	-13.14	54.0	23.20	AV	252.00	150	Horizontal	Pass
3	3596.000	46.20	-5.13	74.0	27.80	Peak	190.00	150	Horizontal	Pass
3**	3596.000	36.11	-5.13	54.0	17.89	AV	190.00	150	Horizontal	Pass
4	5221.000	107.54	-2.36	74.0	-33.54	Peak	66.00	150	Horizontal	N/A
4**	5221.000	99.55	-2.36	54.0	-45.55	AV	66.00	150	Horizontal	N/A
5	10440.549	53.02	-3.38	74.0	20.98	Peak	72.00	150	Horizontal	Pass
5**	10440.549	45.33	-3.38	54.0	8.67	AV	72.00	150	Horizontal	Pass
6	15662.437	57.47	-1.44	74.0	16.53	Peak	0.00	150	Horizontal	Pass
6**	15662.437	45.13	-1.44	54.0	8.87	AV	0.00	150	Horizontal	Pass

11ac20, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT V

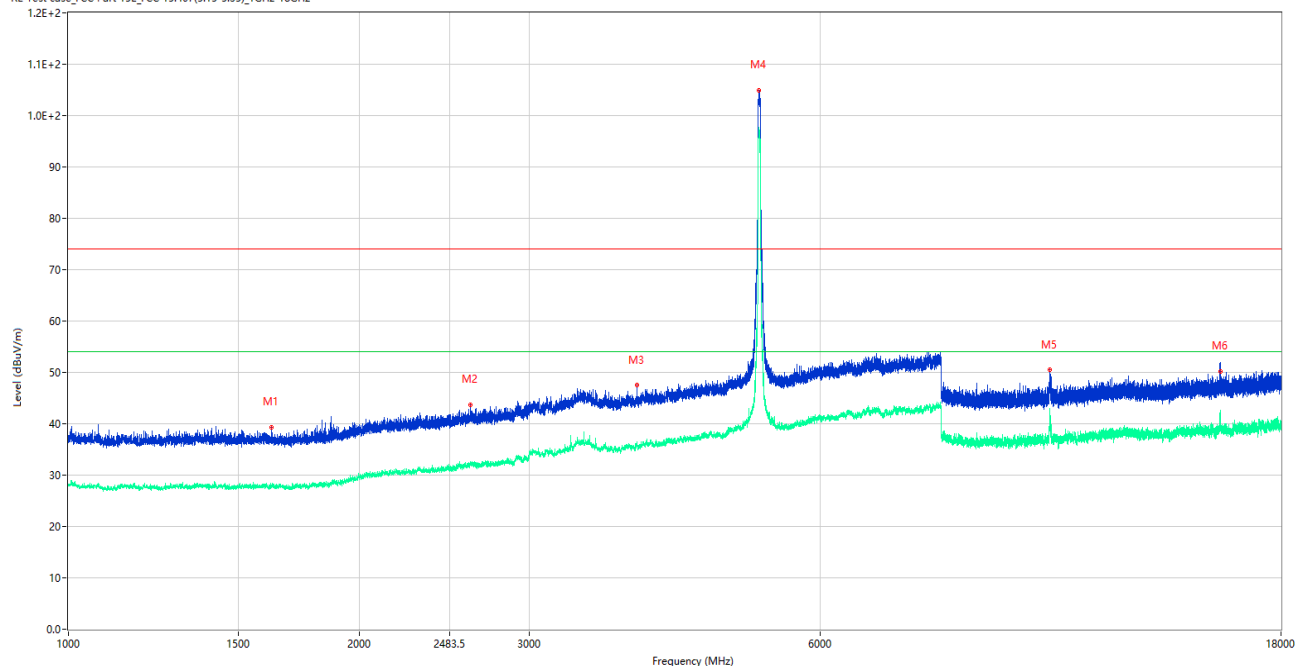
RE Test case FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1418.250	41.53	-15.91	74.0	32.47	Peak	207.00	150	Vertical	Pass
1**	1418.250	27.63	-15.91	54.0	26.37	AV	207.00	150	Vertical	Pass
2	2340.500	42.32	-11.94	74.0	31.68	Peak	320.00	150	Vertical	Pass
2**	2340.500	30.54	-11.94	54.0	23.46	AV	320.00	150	Vertical	Pass
3	3767.500	46.29	-4.72	74.0	27.71	Peak	0.00	150	Vertical	Pass
3**	3767.500	35.34	-4.72	54.0	18.66	AV	0.00	150	Vertical	Pass
4	5218.000	101.83	-2.38	74.0	-27.83	Peak	16.00	150	Vertical	N/A
4**	5218.000	93.80	-2.38	54.0	-39.80	AV	16.00	150	Vertical	N/A
5	10438.651	47.99	-3.41	74.0	26.01	Peak	332.00	150	Vertical	Pass
5**	10438.651	38.52	-3.41	54.0	15.48	AV	332.00	150	Vertical	Pass
6	15657.450	52.29	-1.41	74.0	21.71	Peak	360.00	150	Vertical	Pass
6**	15657.450	41.39	-1.41	54.0	12.61	AV	360.00	150	Vertical	Pass

11ac40, U-NII-1, 1 GHz to 18 GHz, Left Channel, ANT H

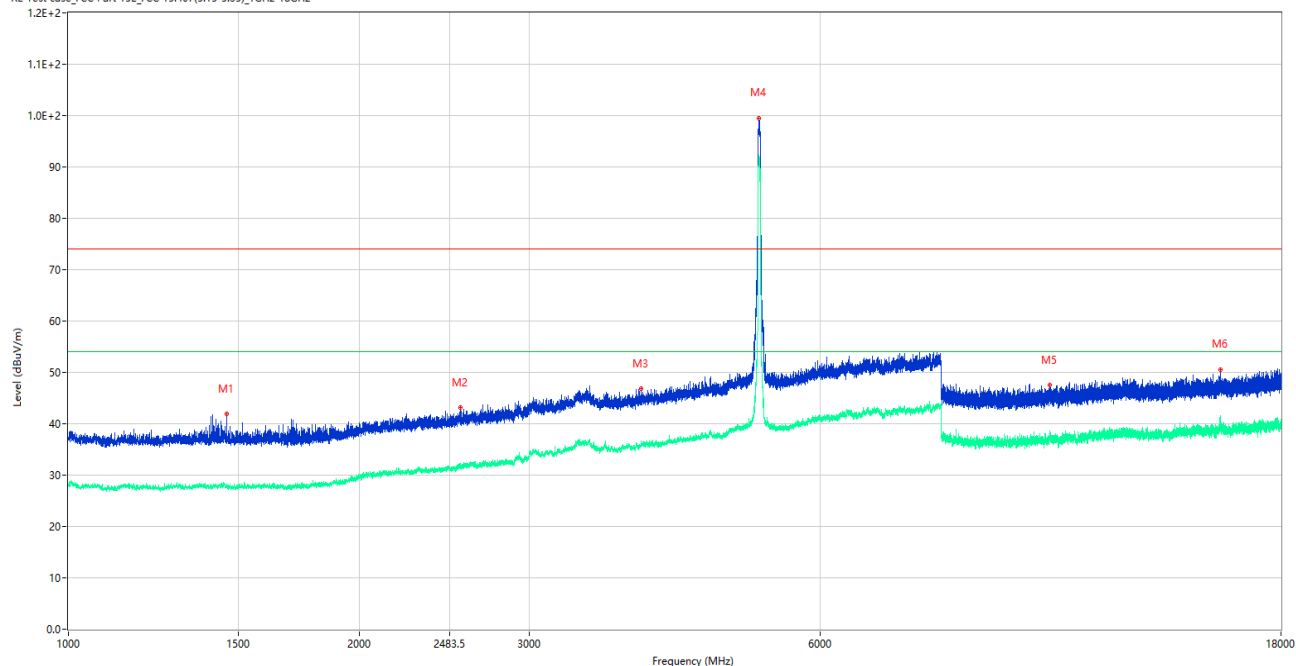
RE Test case FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1622.000	39.35	-16.01	74.0	34.65	Peak	357.00	150	Horizontal	Pass
1**	1622.000	27.71	-16.01	54.0	26.29	AV	357.00	150	Horizontal	Pass
2	2605.750	43.68	-11.12	74.0	30.32	Peak	108.00	150	Horizontal	Pass
2**	2605.750	32.40	-11.12	54.0	21.60	AV	108.00	150	Horizontal	Pass
3	3876.000	47.59	-4.80	74.0	26.41	Peak	188.00	150	Horizontal	Pass
3**	3876.000	35.81	-4.80	54.0	18.19	AV	188.00	150	Horizontal	Pass
4	5186.000	104.93	-2.32	74.0	-30.93	Peak	80.00	150	Horizontal	N/A
4**	5186.000	97.16	-2.32	54.0	-43.16	AV	80.00	150	Horizontal	N/A
5	10382.125	50.45	-3.24	74.0	23.55	Peak	74.00	150	Horizontal	Pass
5**	10382.125	41.02	-3.24	54.0	12.98	AV	74.00	150	Horizontal	Pass
6	15578.438	50.26	-2.37	74.0	23.74	Peak	14.00	150	Horizontal	Pass
6**	15578.438	41.08	-2.37	54.0	12.92	AV	14.00	150	Horizontal	Pass

11ac40, U-NII-1, 1 GHz to 18 GHz, Left Channel, ANT V

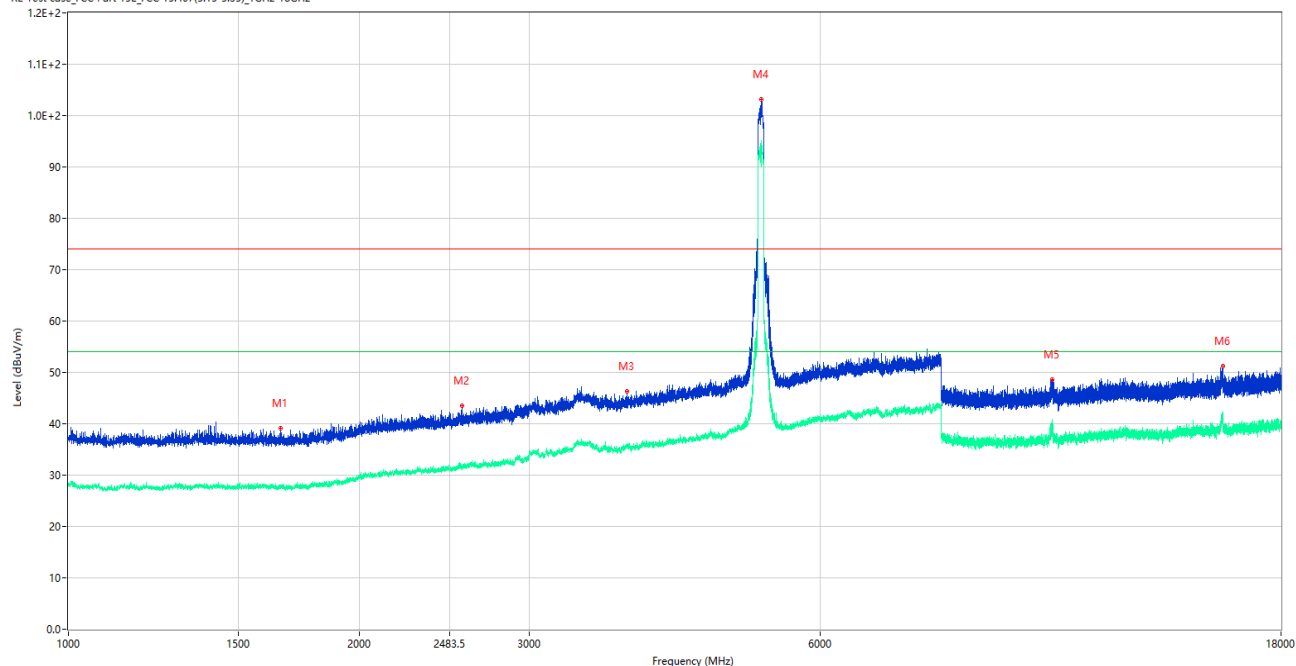
RE Test case FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1458.250	41.91	-16.17	74.0	32.09	Peak	188.00	150	Vertical	Pass
1**	1458.250	28.02	-16.17	54.0	25.98	AV	188.00	150	Vertical	Pass
2	2544.250	43.11	-11.10	74.0	30.89	Peak	360.00	150	Vertical	Pass
2**	2544.250	31.61	-11.10	54.0	22.39	AV	360.00	150	Vertical	Pass
3	3919.000	46.80	-3.91	74.0	27.20	Peak	139.00	150	Vertical	Pass
3**	3919.000	35.72	-3.91	54.0	18.28	AV	139.00	150	Vertical	Pass
4	5185.000	99.48	-2.32	74.0	-25.48	Peak	9.00	150	Vertical	N/A
4**	5185.000	91.53	-2.32	54.0	-37.53	AV	9.00	150	Vertical	N/A
5	10377.612	47.53	-3.42	74.0	26.47	Peak	121.00	150	Vertical	Pass
5**	10377.612	37.38	-3.42	54.0	16.62	AV	121.00	150	Vertical	Pass
6	15568.987	50.61	-2.76	74.0	23.39	Peak	48.00	150	Vertical	Pass
6**	15568.987	40.89	-2.76	54.0	13.11	AV	48.00	150	Vertical	Pass

11ac80, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT H

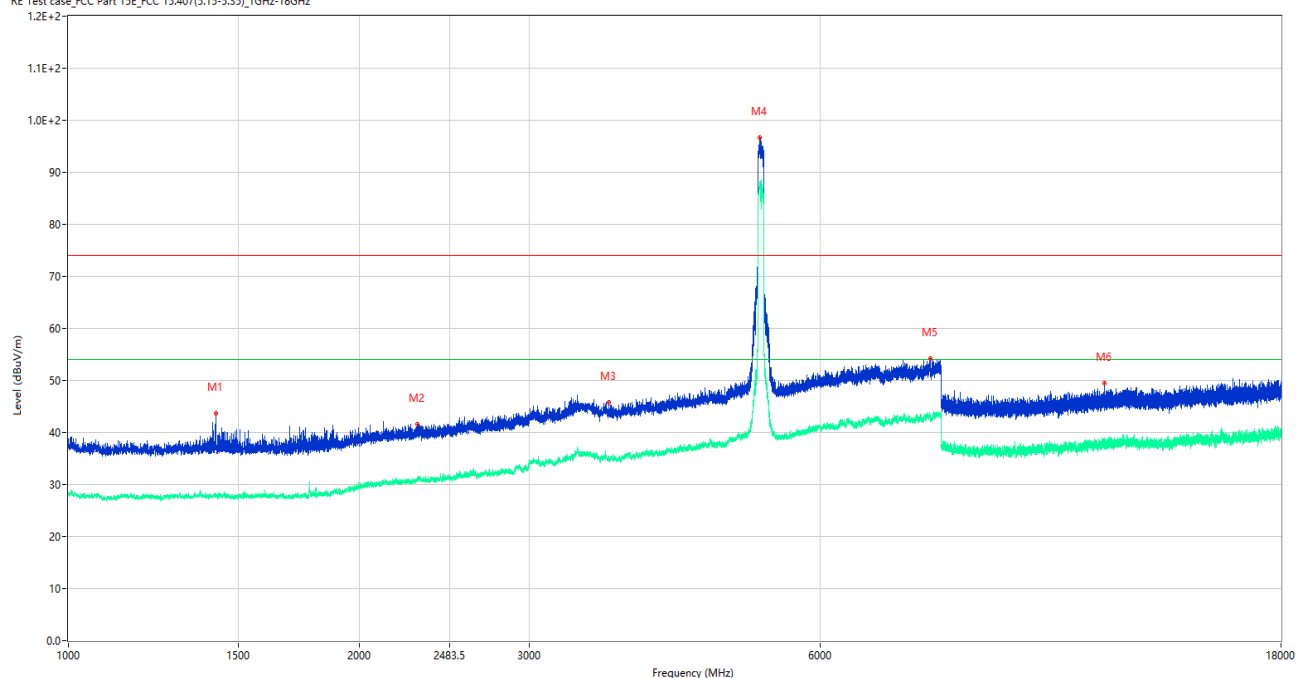
RE Test case FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1659.250	39.13	-16.20	74.0	34.87	Peak	313.00	150	Horizontal	Pass
1**	1659.250	27.55	-16.20	54.0	26.45	AV	313.00	150	Horizontal	Pass
2	2553.500	43.47	-11.32	74.0	30.53	Peak	59.00	150	Horizontal	Pass
2**	2553.500	31.72	-11.32	54.0	22.28	AV	59.00	150	Horizontal	Pass
3	3786.500	46.39	-5.35	74.0	27.61	Peak	0.00	150	Horizontal	Pass
3**	3786.500	35.49	-5.35	54.0	18.51	AV	0.00	150	Horizontal	Pass
4	5215.500	103.09	-2.32	74.0	-29.09	Peak	114.00	150	Horizontal	N/A
4**	5215.500	94.81	-2.32	54.0	-40.81	AV	114.00	150	Horizontal	N/A
5	10441.975	48.66	-3.31	74.0	25.34	Peak	72.00	150	Horizontal	Pass
5**	10441.975	39.07	-3.31	54.0	14.93	AV	72.00	150	Horizontal	Pass
6	15662.437	51.16	-1.44	74.0	22.84	Peak	0.00	150	Horizontal	Pass
6**	15662.437	39.73	-1.44	54.0	14.27	AV	0.00	150	Horizontal	Pass

11ac80, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT V

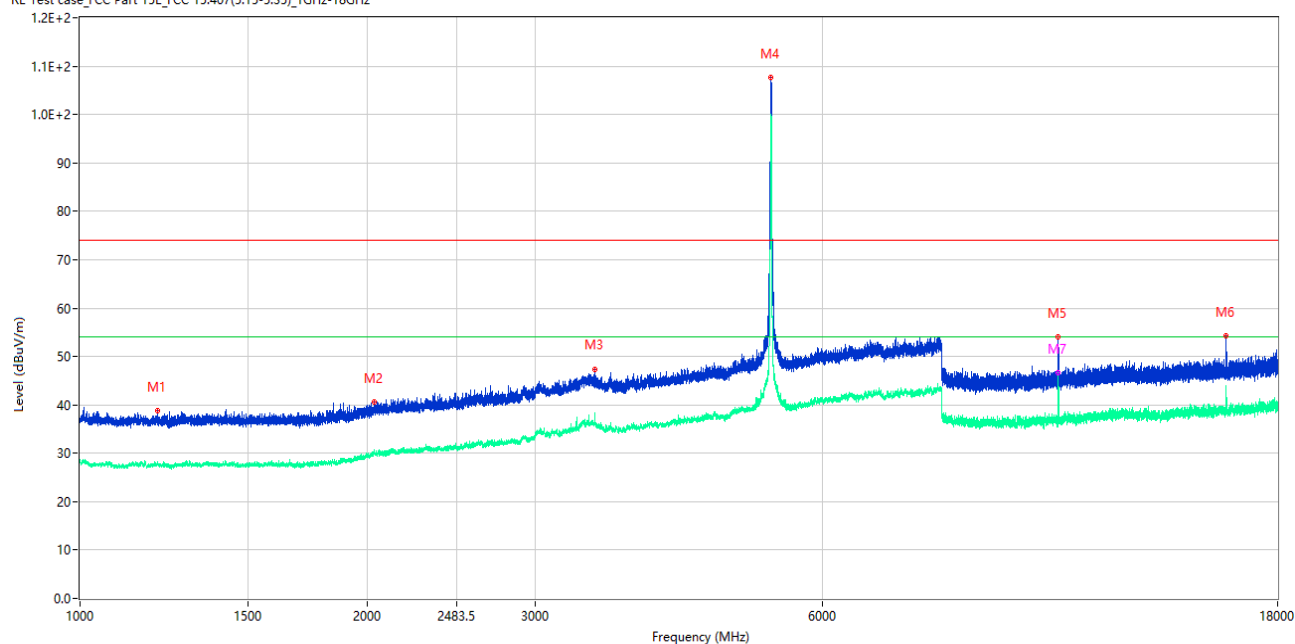
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1421.500	43.77	-15.94	74.0	30.23	Peak	197.00	150	Vertical	Pass
1**	1421.500	28.19	-15.94	54.0	25.81	AV	197.00	150	Vertical	Pass
2	2298.750	41.56	-13.14	74.0	32.44	Peak	360.00	150	Vertical	Pass
2**	2298.750	30.70	-13.14	54.0	23.30	AV	360.00	150	Vertical	Pass
3	3623.000	45.82	-5.22	74.0	28.18	Peak	124.00	150	Vertical	Pass
3**	3623.000	34.92	-5.22	54.0	19.08	AV	124.00	150	Vertical	Pass
4	5196.000	96.74	-2.34	74.0	-22.74	Peak	8.00	150	Vertical	N/A
4**	5196.000	87.01	-2.34	54.0	-33.01	AV	8.00	150	Vertical	N/A
5	7797.500	54.20	1.68	74.0	19.80	Peak	173.00	150	Vertical	Pass
5**	7797.500	43.06	1.68	54.0	10.94	AV	173.00	150	Vertical	Pass
6	11806.412	49.47	-3.56	74.0	24.53	Peak	95.00	150	Vertical	Pass
6**	11806.412	38.64	-3.56	54.0	15.36	AV	95.00	150	Vertical	Pass

11a, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT H

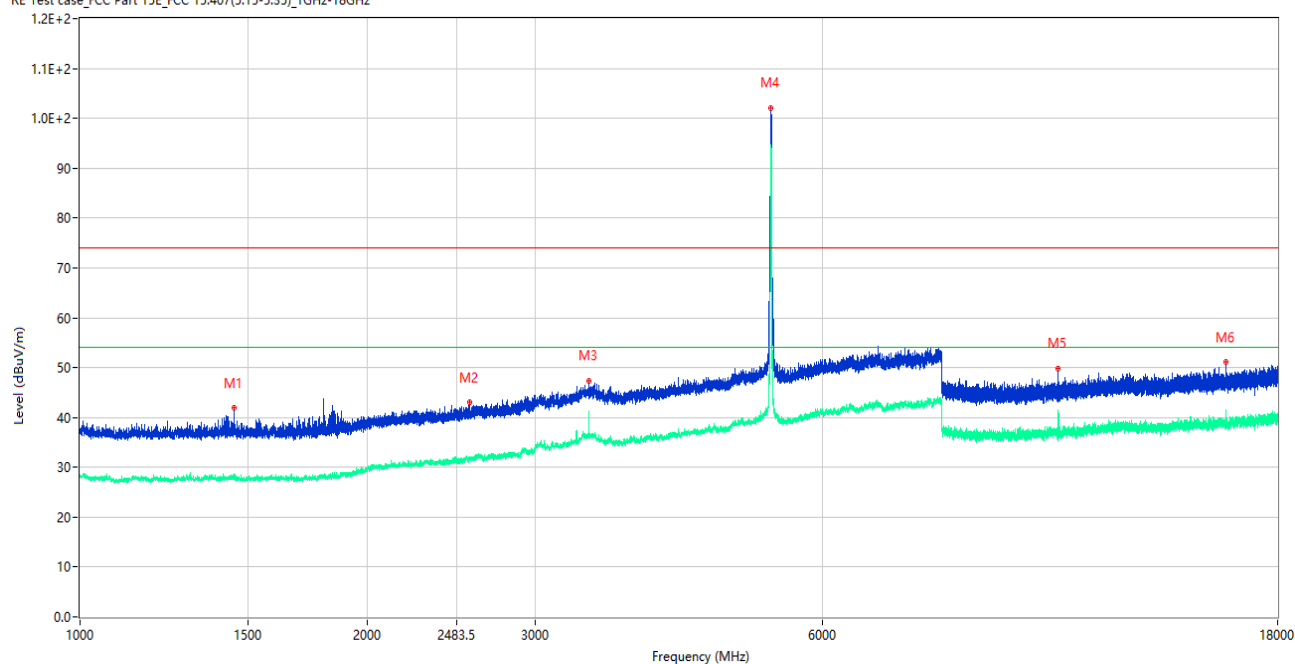
RE Test case_FCC Part 15E_FCC 15.407(5,15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1206.750	38.79	-15.79	74.0	35.21	Peak	60.00	150	Horizontal	Pass
1**	1206.750	27.76	-15.79	54.0	26.24	AV	60.00	150	Horizontal	Pass
2	2032.750	40.62	-13.46	74.0	33.38	Peak	356.00	150	Horizontal	Pass
2**	2032.750	29.92	-13.46	54.0	24.08	AV	356.00	150	Horizontal	Pass
3	3464.500	47.38	-5.08	74.0	26.62	Peak	291.00	150	Horizontal	Pass
3**	3464.500	36.43	-5.08	54.0	17.57	AV	291.00	150	Horizontal	Pass
4	5297.500	107.58	-2.03	74.0	-33.58	Peak	111.00	150	Horizontal	N/A
4**	5297.500	99.32	-2.03	54.0	-45.32	AV	111.00	150	Horizontal	N/A
5	10601.338	54.04	-3.67	74.0	19.96	Peak	98.00	150	Horizontal	Pass
5**	10601.338	44.88	-3.67	54.0	9.12	AV	98.00	150	Horizontal	Pass
6	15896.849	54.28	-1.75	74.0	19.72	Peak	0.00	150	Horizontal	Pass
6**	15896.849	42.09	-1.75	54.0	11.91	AV	0.00	150	Horizontal	Pass
7	10598.487	50.86	-3.67	74.0	23.14	Peak	98.00	150	Horizontal	Pass
7**	10598.487	46.63	-3.67	54.0	7.37	AV	98.00	150	Horizontal	Pass

11a, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT V

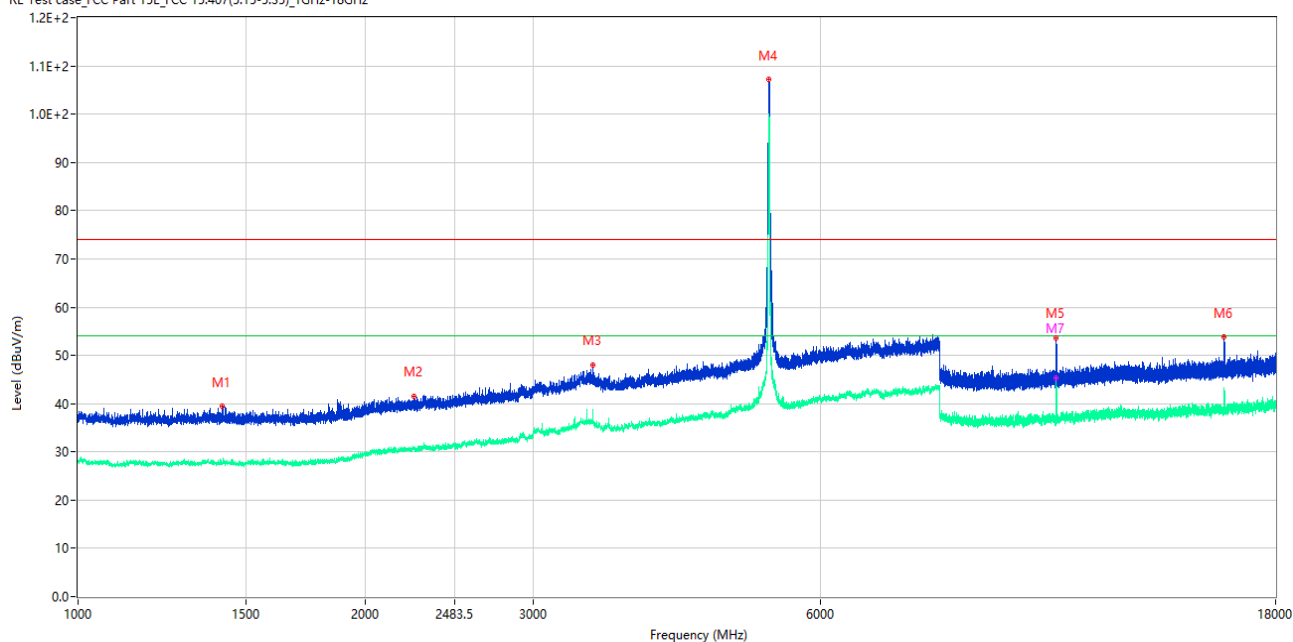
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1449.750	41.84	-15.96	74.0	32.16	Peak	202.00	150	Vertical	Pass
1**	1449.750	27.73	-15.96	54.0	26.27	AV	202.00	150	Vertical	Pass
2	2558.250	43.04	-11.17	74.0	30.96	Peak	51.00	150	Vertical	Pass
2**	2558.250	31.49	-11.17	54.0	22.51	AV	51.00	150	Vertical	Pass
3	3415.000	47.40	-5.19	74.0	26.60	Peak	124.00	150	Vertical	Pass
3**	3415.000	36.56	-5.19	54.0	17.44	AV	124.00	150	Vertical	Pass
4	5299.000	102.14	-2.01	74.0	-28.14	Peak	233.00	150	Vertical	N/A
4**	5299.000	94.39	-2.01	54.0	-40.39	AV	233.00	150	Vertical	N/A
5	10595.637	49.90	-3.56	74.0	24.10	Peak	98.00	150	Vertical	Pass
5**	10595.637	39.25	-3.56	54.0	14.75	AV	98.00	150	Vertical	Pass
6	15892.650	51.08	-1.58	74.0	22.92	Peak	360.00	150	Vertical	Pass
6**	15892.650	39.54	-1.58	54.0	14.46	AV	360.00	150	Vertical	Pass

11n20, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT H

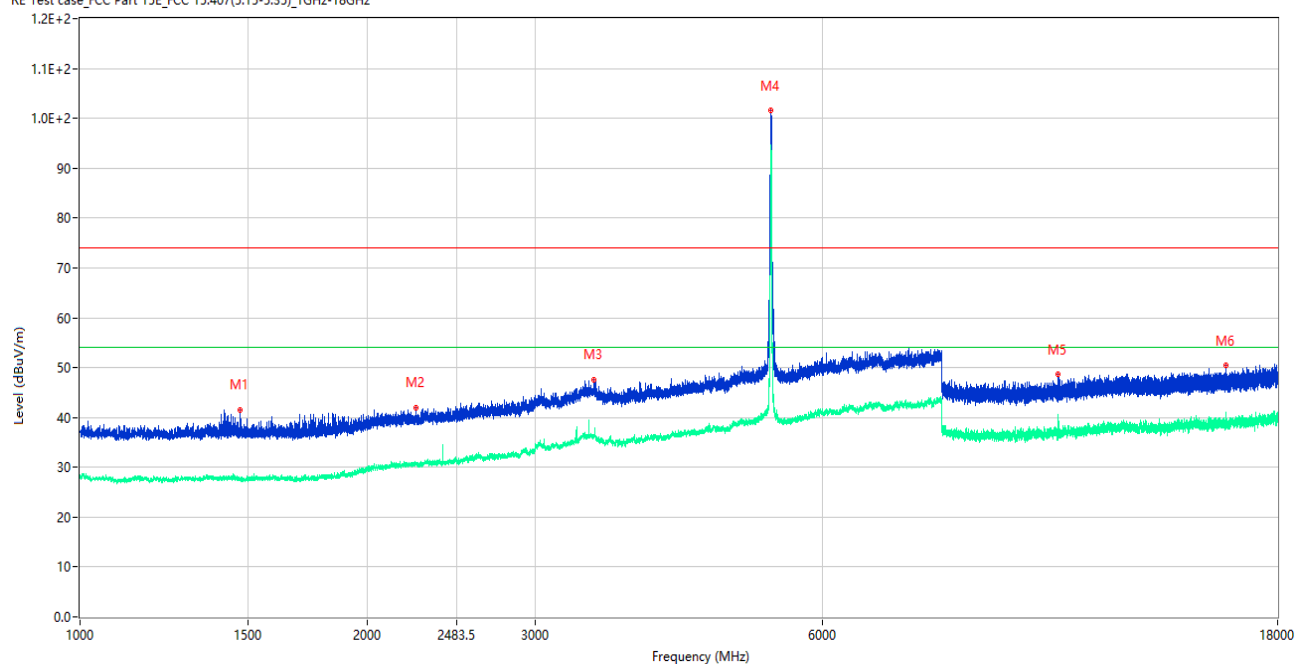
RE Test case_FCC Part 15E_FCC 15.407(5,15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1414.500	39.50	-15.93	74.0	34.50	Peak	168.00	150	Horizontal	Pass
1**	1414.500	27.71	-15.93	54.0	26.29	AV	168.00	150	Horizontal	Pass
2	2247.000	41.57	-12.84	74.0	32.43	Peak	119.00	150	Horizontal	Pass
2**	2247.000	30.56	-12.84	54.0	23.44	AV	119.00	150	Horizontal	Pass
3	3465.000	48.11	-5.10	74.0	25.89	Peak	82.00	150	Horizontal	Pass
3**	3465.000	37.84	-5.10	54.0	16.16	AV	82.00	150	Horizontal	Pass
4	5298.000	107.10	-2.04	74.0	-33.10	Peak	92.00	150	Horizontal	N/A
4**	5298.000	99.26	-2.04	54.0	-45.26	AV	92.00	150	Horizontal	N/A
5	10601.338	53.69	-3.67	74.0	20.31	Peak	99.00	150	Horizontal	Pass
5**	10601.338	43.90	-3.67	54.0	10.10	AV	99.00	150	Horizontal	Pass
6	15895.012	53.72	-1.69	74.0	20.28	Peak	360.00	150	Horizontal	Pass
6**	15895.012	41.85	-1.69	54.0	12.15	AV	360.00	150	Horizontal	Pass
7	10598.963	51.88	-3.67	74.0	22.12	Peak	99.00	150	Horizontal	Pass
7**	10598.963	45.30	-3.67	54.0	8.70	AV	99.00	150	Horizontal	Pass

11n20, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT V

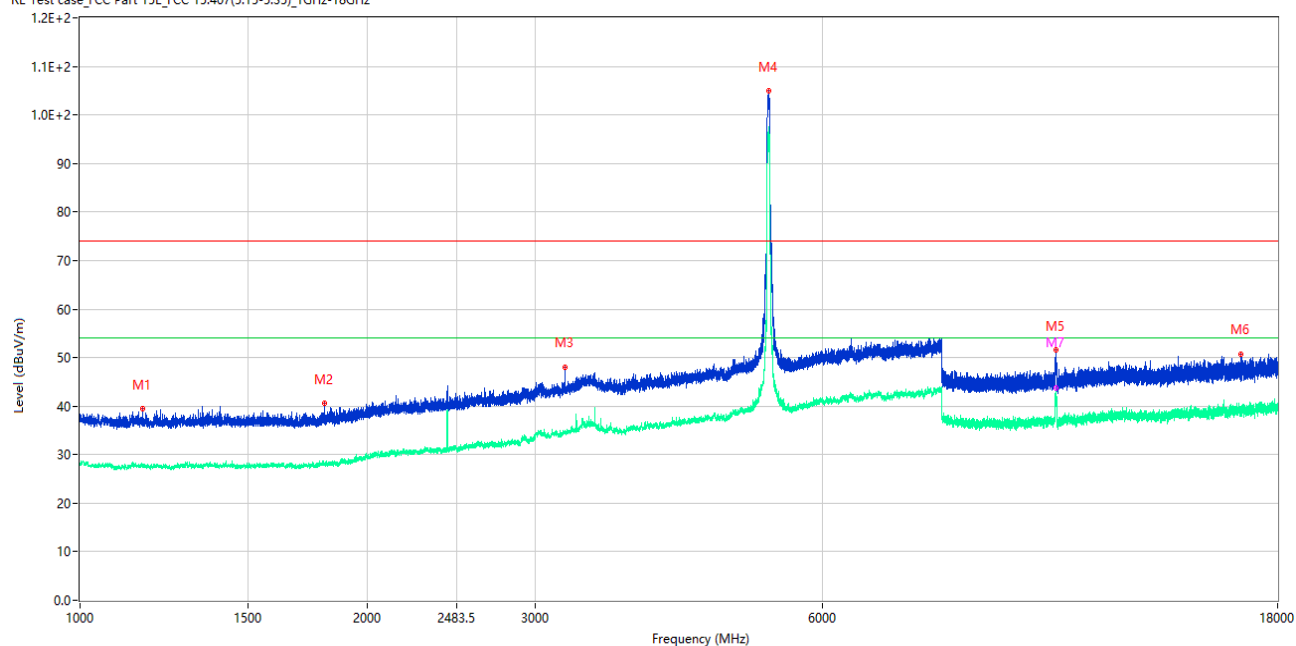
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1472.500	41.60	-16.32	74.0	32.40	Peak	194.00	150	Vertical	Pass
1**	1472.500	27.41	-16.32	54.0	26.59	AV	194.00	150	Vertical	Pass
2	2248.000	42.00	-12.85	74.0	32.00	Peak	243.00	150	Vertical	Pass
2**	2248.000	30.87	-12.85	54.0	23.13	AV	243.00	150	Vertical	Pass
3	3453.000	47.61	-4.94	74.0	26.39	Peak	62.00	150	Vertical	Pass
3**	3453.000	35.95	-4.94	54.0	18.05	AV	62.00	150	Vertical	Pass
4	5298.000	101.59	-2.04	74.0	-27.59	Peak	231.00	150	Vertical	N/A
4**	5298.000	93.67	-2.04	54.0	-39.67	AV	231.00	150	Vertical	N/A
5	10606.325	48.59	-3.64	74.0	25.41	Peak	312.00	150	Vertical	Pass
5**	10606.325	38.08	-3.64	54.0	15.92	AV	312.00	150	Vertical	Pass
6	15903.674	50.36	-2.12	74.0	23.64	Peak	243.00	150	Vertical	Pass
6**	15903.674	39.62	-2.12	54.0	14.38	AV	243.00	150	Vertical	Pass

11ac40, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT H

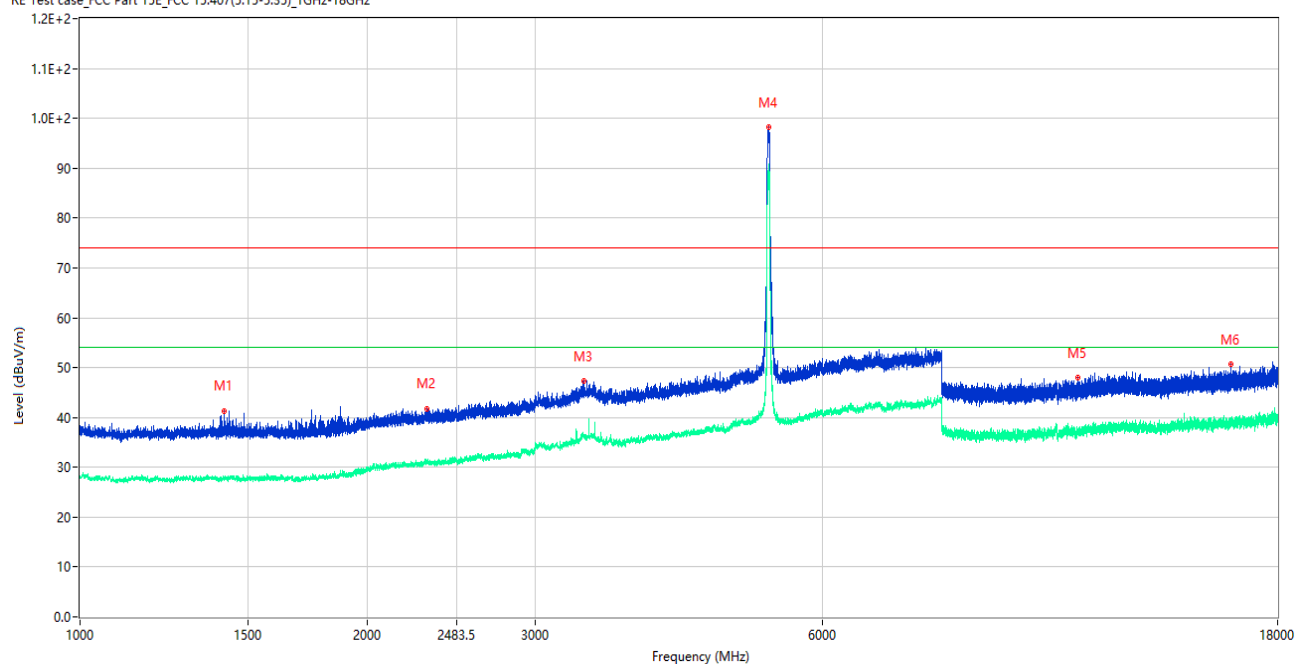
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1163.250	39.49	-15.48	74.0	34.51	Peak	142.00	150	Horizontal	Pass
1**	1163.250	27.34	-15.48	54.0	26.66	AV	142.00	150	Horizontal	Pass
2	1805.750	40.50	-15.90	74.0	33.50	Peak	228.00	150	Horizontal	Pass
2**	1805.750	27.87	-15.90	54.0	26.13	AV	228.00	150	Horizontal	Pass
3	3222.000	48.07	-6.41	74.0	25.93	Peak	166.00	150	Horizontal	Pass
3**	3222.000	34.73	-6.41	54.0	19.27	AV	166.00	150	Horizontal	Pass
4	5272.000	104.95	-2.42	74.0	-30.95	Peak	53.00	150	Horizontal	N/A
4**	5272.000	97.11	-2.42	54.0	-43.11	AV	53.00	150	Horizontal	N/A
5	10544.812	51.49	-3.06	74.0	22.51	Peak	59.00	150	Horizontal	Pass
5**	10544.812	43.53	-3.06	54.0	10.47	AV	59.00	150	Horizontal	Pass
6	16465.162	50.77	-1.83	74.0	23.23	Peak	358.00	150	Horizontal	Pass
6**	16465.162	39.04	-1.83	54.0	14.96	AV	358.00	150	Horizontal	Pass
7	10541.250	48.83	-3.03	74.0	25.17	Peak	59.00	150	Horizontal	Pass
7**	10541.250	43.76	-3.03	54.0	10.24	AV	59.00	150	Horizontal	Pass

11ac40, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT V

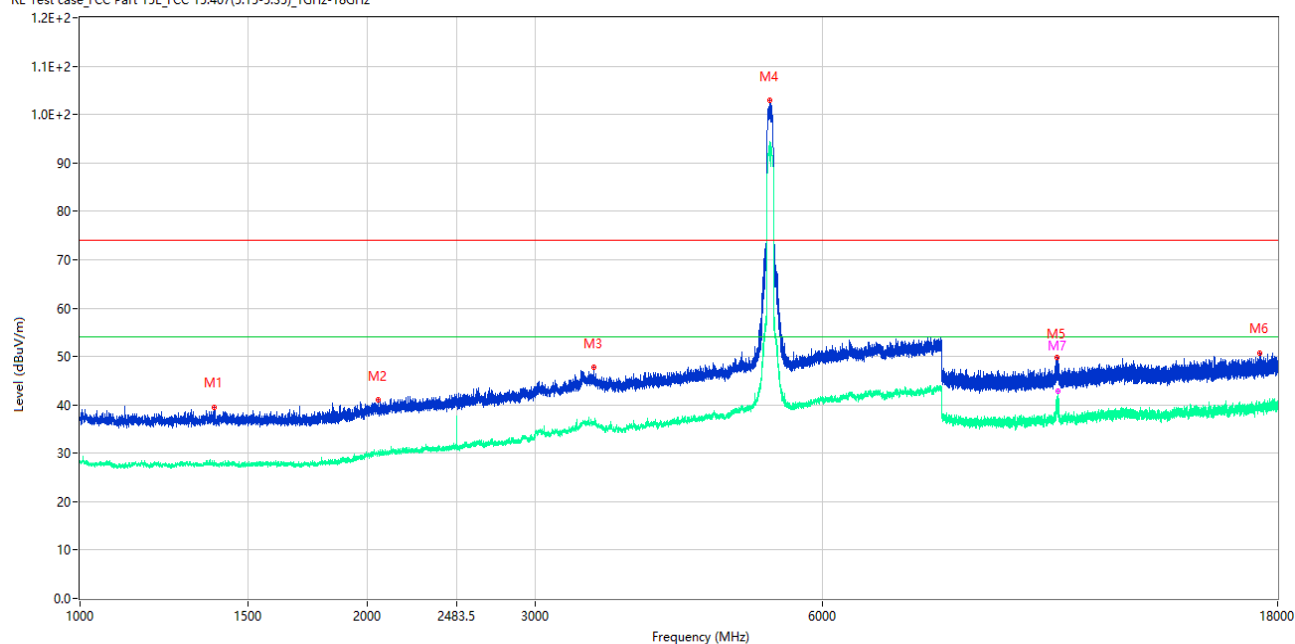
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1417.500	41.33	-15.93	74.0	32.67	Peak	204.00	150	Vertical	Pass
1**	1417.500	27.77	-15.93	54.0	26.23	AV	204.00	150	Vertical	Pass
2	2309.250	41.81	-12.51	74.0	32.19	Peak	298.00	150	Vertical	Pass
2**	2309.250	31.05	-12.51	54.0	22.95	AV	298.00	150	Vertical	Pass
3	3374.500	47.29	-4.81	74.0	26.71	Peak	158.00	150	Vertical	Pass
3**	3374.500	35.83	-4.81	54.0	18.17	AV	158.00	150	Vertical	Pass
4	5268.000	98.28	-2.42	74.0	-24.28	Peak	356.00	150	Vertical	N/A
4**	5268.000	90.15	-2.42	54.0	-36.15	AV	356.00	150	Vertical	N/A
5	11101.275	47.99	-3.90	74.0	26.01	Peak	104.00	150	Vertical	Pass
5**	11101.275	37.00	-3.90	54.0	17.00	AV	104.00	150	Vertical	Pass
6	16098.713	50.68	-1.43	74.0	23.32	Peak	144.00	150	Vertical	Pass
6**	16098.713	39.01	-1.43	54.0	14.99	AV	144.00	150	Vertical	Pass

11ac80, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT H

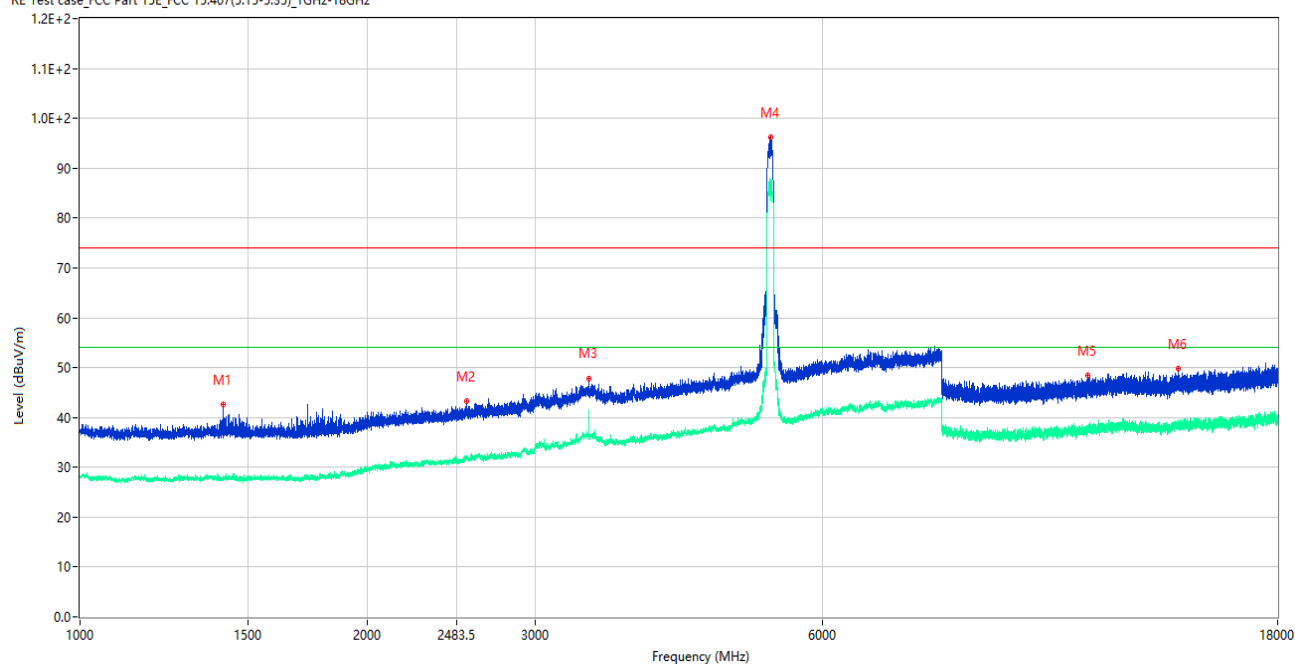
RE Test case_FCC Part 15E_FCC 15.407(5,15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1380.750	39.54	-15.98	74.0	34.46	Peak	204.00	150	Horizontal	Pass
1**	1380.750	27.46	-15.98	54.0	26.54	AV	204.00	150	Horizontal	Pass
2	2052.000	41.01	-13.73	74.0	32.99	Peak	1.00	150	Horizontal	Pass
2**	2052.000	30.33	-13.73	54.0	23.67	AV	1.00	150	Horizontal	Pass
3	3459.500	47.68	-4.94	74.0	26.32	Peak	39.00	150	Horizontal	Pass
3**	3459.500	36.21	-4.94	54.0	17.79	AV	39.00	150	Horizontal	Pass
4	5283.000	102.95	-2.20	74.0	-28.95	Peak	89.00	150	Horizontal	N/A
4**	5283.000	93.91	-2.20	54.0	-39.91	AV	89.00	150	Horizontal	N/A
5	10556.687	49.75	-3.34	74.0	24.25	Peak	74.00	150	Horizontal	Pass
5**	10556.687	40.40	-3.34	54.0	13.60	AV	74.00	150	Horizontal	Pass
6	17251.613	50.66	-0.65	74.0	23.34	Peak	50.00	150	Horizontal	Pass
6**	17251.613	40.10	-0.65	54.0	13.90	AV	50.00	150	Horizontal	Pass
7	10601.575	46.95	-3.67	74.0	27.05	Peak	74.00	150	Horizontal	Pass
7**	10601.575	42.79	-3.67	54.0	11.21	AV	74.00	150	Horizontal	Pass

11ac80, U-NII-2A, 1 GHz to 18 GHz, Middle Channel, ANT V

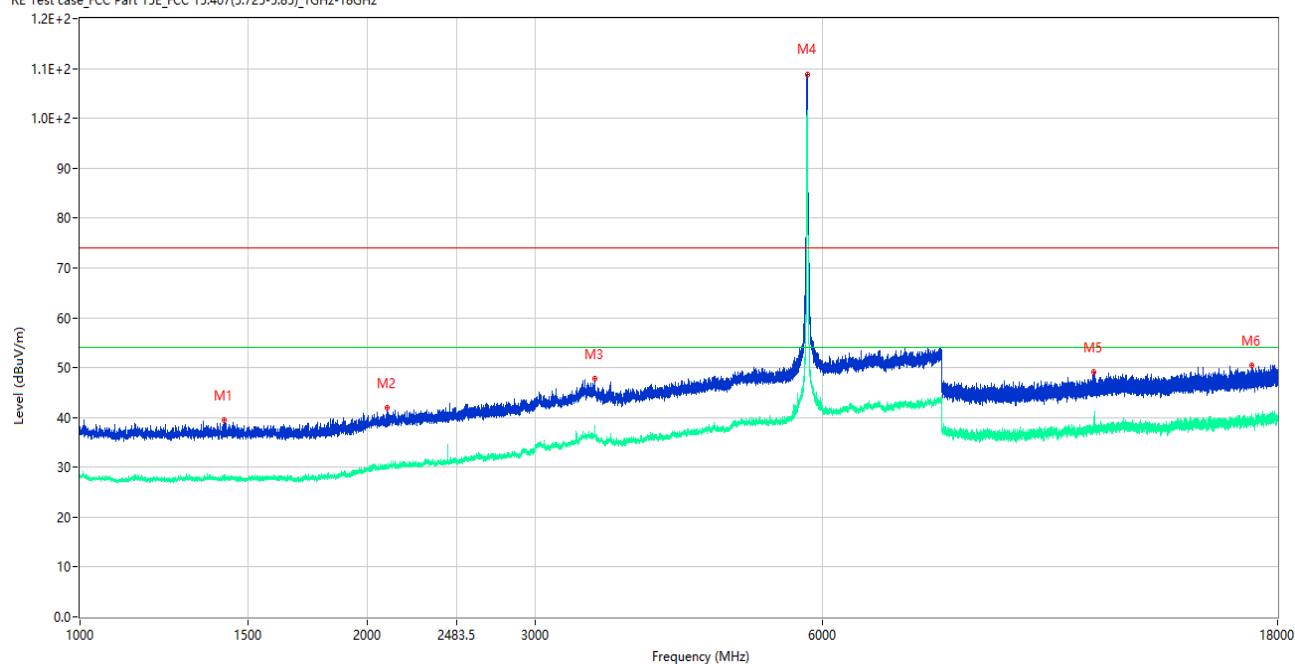
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1414.250	42.63	-15.93	74.0	31.37	Peak	192.00	150	Vertical	Pass
1**	1414.250	27.83	-15.93	54.0	26.17	AV	192.00	150	Vertical	Pass
2	2545.000	43.25	-11.15	74.0	30.75	Peak	206.00	150	Vertical	Pass
2**	2545.000	31.62	-11.15	54.0	22.38	AV	206.00	150	Vertical	Pass
3	3415.500	47.86	-5.15	74.0	26.14	Peak	178.00	150	Vertical	Pass
3**	3415.500	40.38	-5.15	54.0	13.62	AV	178.00	150	Vertical	Pass
4	5295.500	96.21	-2.00	74.0	-22.21	Peak	0.00	150	Vertical	N/A
4**	5295.500	87.15	-2.00	54.0	-33.15	AV	0.00	150	Vertical	N/A
5	11394.588	48.46	-3.50	74.0	25.54	Peak	190.00	150	Vertical	Pass
5**	11394.588	38.20	-3.50	54.0	15.80	AV	190.00	150	Vertical	Pass
6	14152.275	49.71	-1.28	74.0	24.29	Peak	82.00	150	Vertical	Pass
6**	14152.275	38.51	-1.28	54.0	15.49	AV	82.00	150	Vertical	Pass

11a, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT H

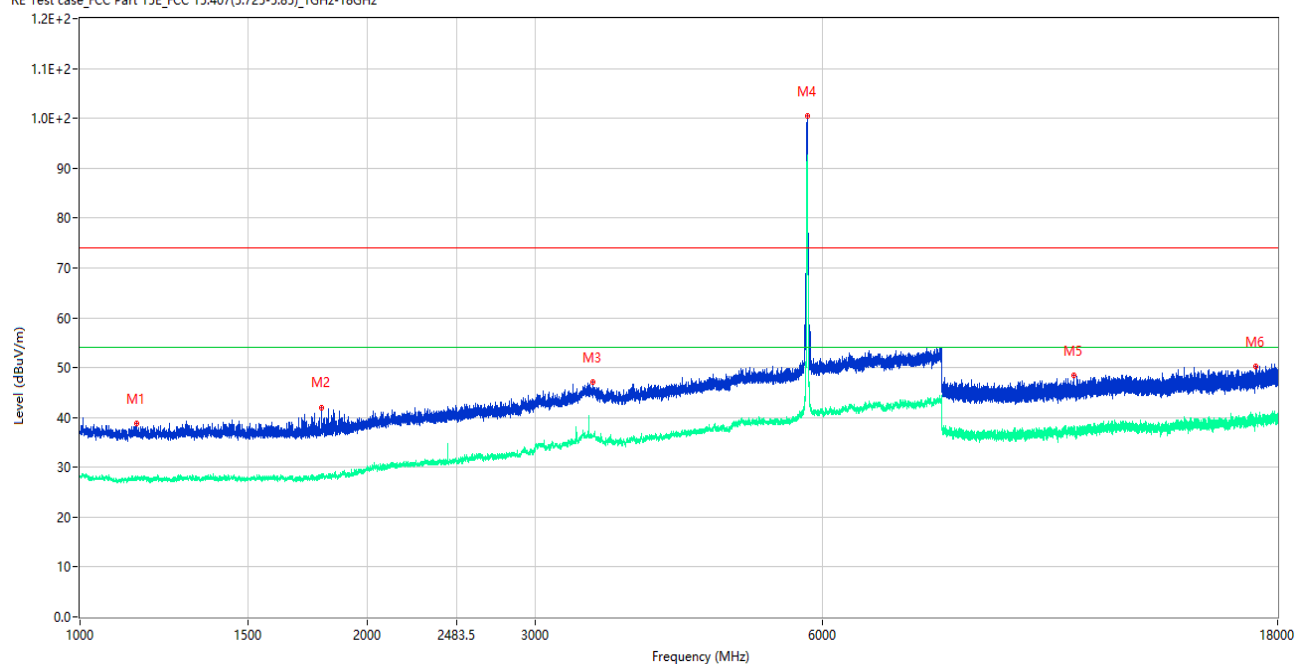
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1415.000	39.38	-15.93	74.0	34.62	Peak	106.00	150	Horizontal	Pass
1**	1415.000	27.52	-15.93	54.0	26.48	AV	106.00	150	Horizontal	Pass
2	2100.000	41.90	-13.54	74.0	32.10	Peak	342.00	150	Horizontal	Pass
2**	2100.000	30.21	-13.54	54.0	23.79	AV	342.00	150	Horizontal	Pass
3	3465.000	47.77	-5.10	74.0	26.23	Peak	262.00	150	Horizontal	Pass
3**	3465.000	37.48	-5.10	54.0	16.52	AV	262.00	150	Horizontal	Pass
4	5783.500	108.89	-1.54	74.0	-34.89	Peak	111.00	150	Horizontal	N/A
4**	5783.500	101.12	-1.54	54.0	-47.12	AV	111.00	150	Horizontal	N/A
5	11560.600	49.11	-2.48	74.0	24.89	Peak	119.00	150	Horizontal	Pass
5**	11560.600	38.04	-2.48	54.0	15.96	AV	119.00	150	Horizontal	Pass
6	16892.511	50.48	-0.46	74.0	23.52	Peak	42.00	150	Horizontal	Pass
6**	16892.511	40.06	-0.46	54.0	13.94	AV	42.00	150	Horizontal	Pass

11a, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT V

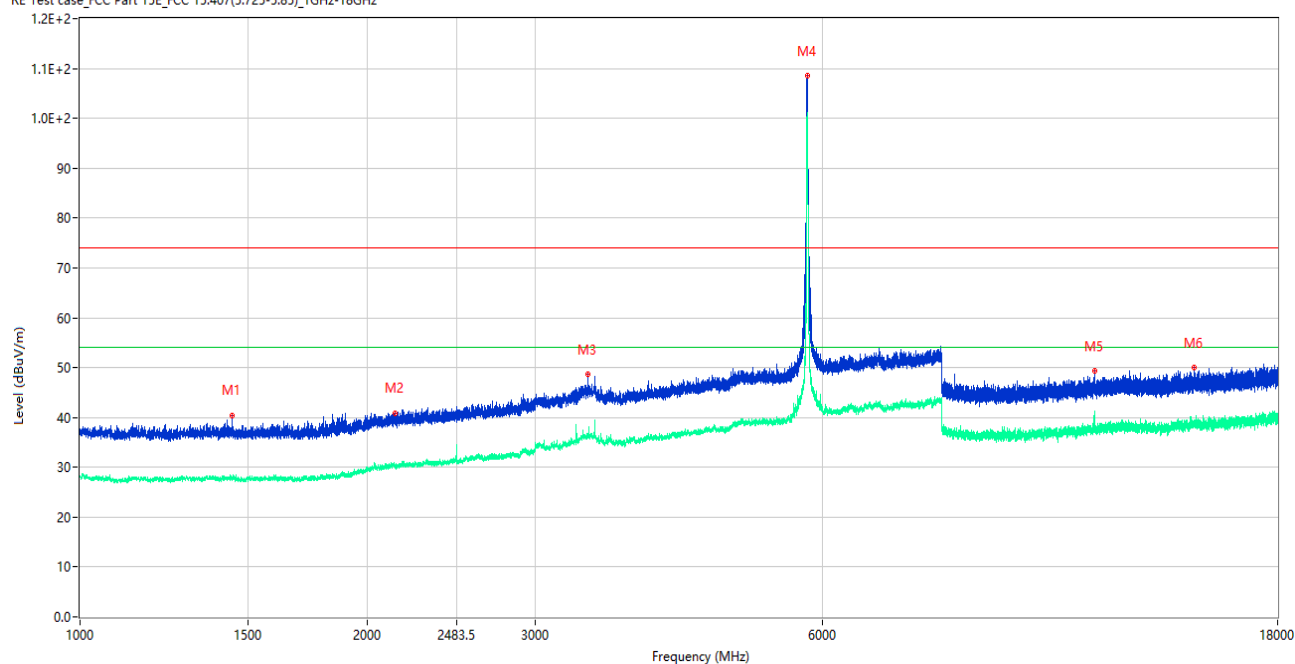
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1145.250	38.70	-15.62	74.0	35.30	Peak	53.00	150	Vertical	Pass
1**	1145.250	27.85	-15.62	54.0	26.15	AV	53.00	150	Vertical	Pass
2	1791.750	41.95	-15.77	74.0	32.05	Peak	194.00	150	Vertical	Pass
2**	1791.750	28.31	-15.77	54.0	25.69	AV	194.00	150	Vertical	Pass
3	3451.000	47.10	-4.97	74.0	26.90	Peak	81.00	150	Vertical	Pass
3**	3451.000	36.00	-4.97	54.0	18.00	AV	81.00	150	Vertical	Pass
4	5783.500	100.38	-1.54	74.0	-26.38	Peak	350.00	150	Vertical	N/A
4**	5783.500	92.22	-1.54	54.0	-38.22	AV	350.00	150	Vertical	N/A
5	10996.300	48.47	-2.85	74.0	25.53	Peak	121.00	150	Vertical	Pass
5**	10996.300	37.95	-2.85	54.0	16.05	AV	121.00	150	Vertical	Pass
6	17066.812	50.26	-0.88	74.0	23.74	Peak	40.00	150	Vertical	Pass
6**	17066.812	39.80	-0.88	54.0	14.20	AV	40.00	150	Vertical	Pass

11n20, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT H

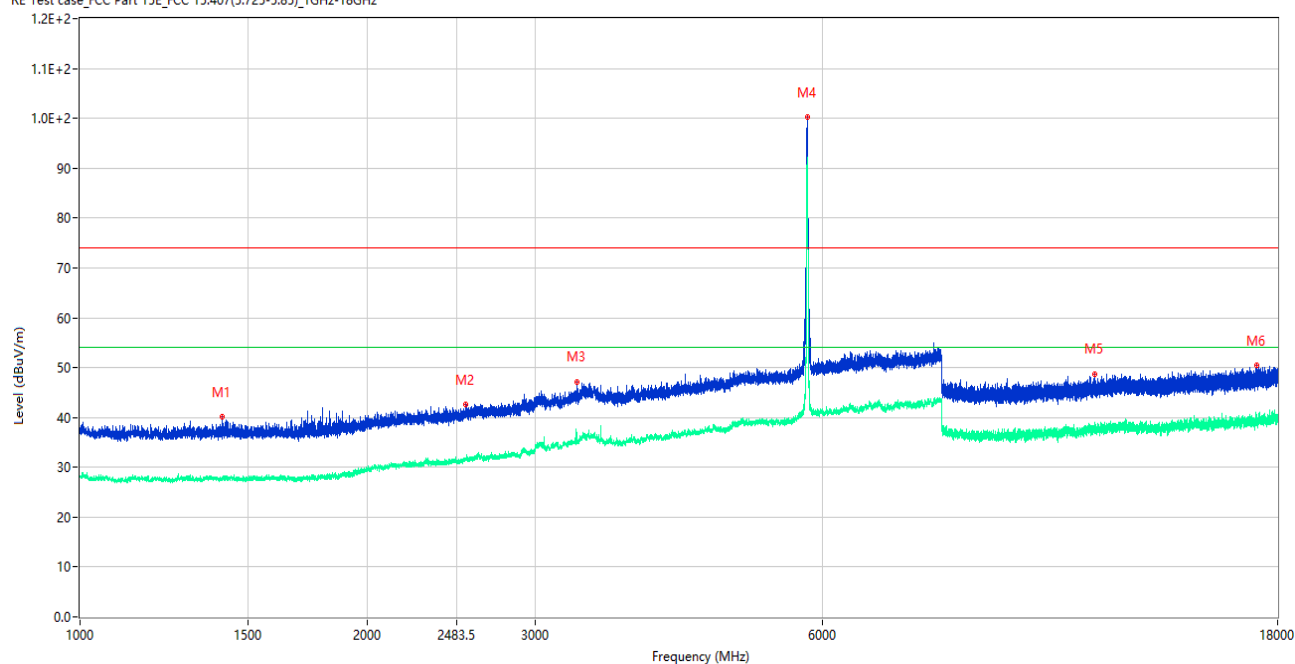
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1443.750	40.43	-15.93	74.0	33.57	Peak	77.00	150	Horizontal	Pass
1**	1443.750	27.56	-15.93	54.0	26.44	AV	77.00	150	Horizontal	Pass
2	2138.750	40.92	-13.72	74.0	33.08	Peak	314.00	150	Horizontal	Pass
2**	2138.750	30.56	-13.72	54.0	23.44	AV	314.00	150	Horizontal	Pass
3	3409.000	48.67	-5.35	74.0	25.33	Peak	360.00	150	Horizontal	Pass
3**	3409.000	36.16	-5.35	54.0	17.84	AV	360.00	150	Horizontal	Pass
4	5787.500	108.53	-1.56	74.0	-34.53	Peak	114.00	150	Horizontal	N/A
4**	5787.500	100.93	-1.56	54.0	-46.93	AV	114.00	150	Horizontal	N/A
5	11564.637	49.31	-2.23	74.0	24.69	Peak	96.00	150	Horizontal	Pass
5**	11564.637	40.77	-2.23	54.0	13.23	AV	96.00	150	Horizontal	Pass
6	14722.688	50.04	-1.76	74.0	23.96	Peak	345.00	150	Horizontal	Pass
6**	14722.688	38.96	-1.76	54.0	15.04	AV	345.00	150	Horizontal	Pass

11n20, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT V

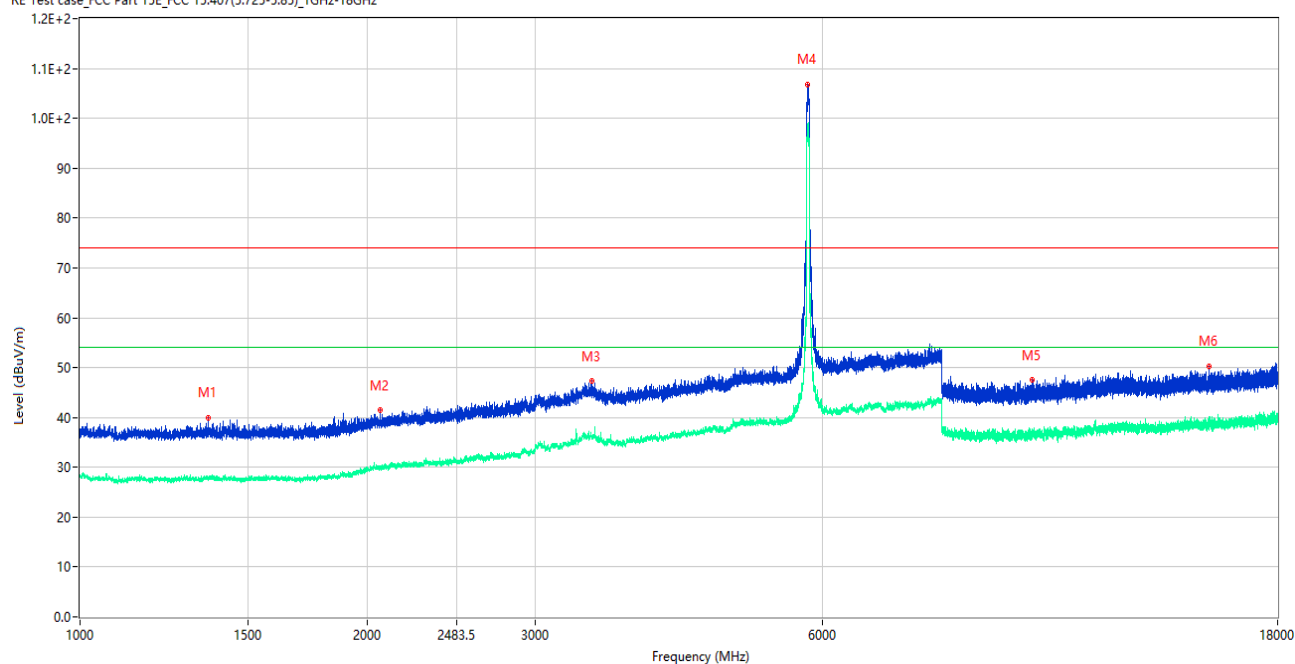
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1408.000	40.07	-15.98	74.0	33.93	Peak	157.00	150	Vertical	Pass
1**	1408.000	27.53	-15.98	54.0	26.47	AV	157.00	150	Vertical	Pass
2	2534.500	42.65	-11.08	74.0	31.35	Peak	0.00	150	Vertical	Pass
2**	2534.500	31.63	-11.08	54.0	22.37	AV	0.00	150	Vertical	Pass
3	3317.000	47.17	-6.38	74.0	26.83	Peak	233.00	150	Vertical	Pass
3**	3317.000	37.09	-6.38	54.0	16.91	AV	233.00	150	Vertical	Pass
4	5786.500	100.20	-1.53	74.0	-26.20	Peak	350.00	150	Vertical	N/A
4**	5786.500	92.28	-1.53	54.0	-38.28	AV	350.00	150	Vertical	N/A
5	11565.350	48.69	-2.25	74.0	25.31	Peak	358.00	150	Vertical	Pass
5**	11565.350	37.85	-2.25	54.0	16.15	AV	358.00	150	Vertical	Pass
6	17115.375	50.39	-0.20	74.0	23.61	Peak	11.00	150	Vertical	Pass
6**	17115.375	39.04	-0.20	54.0	14.96	AV	11.00	150	Vertical	Pass

11ac40, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT H

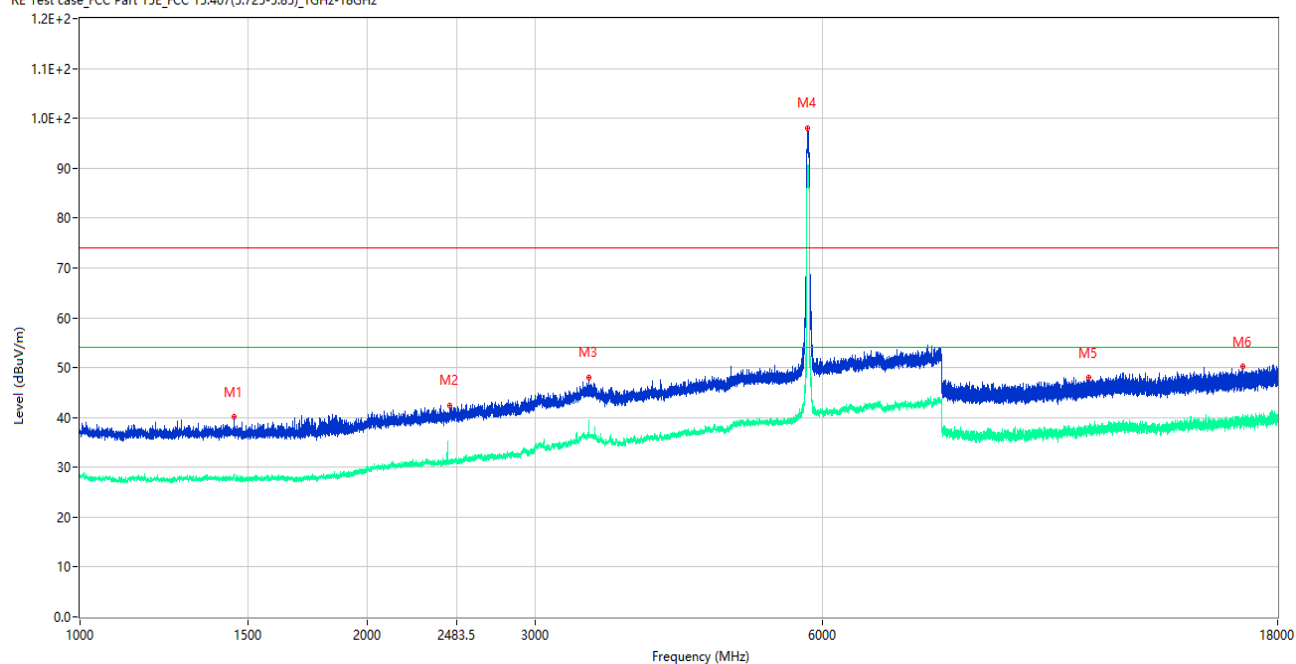
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1363.500	40.03	-15.85	74.0	33.97	Peak	172.00	150	Horizontal	Pass
1**	1363.500	27.53	-15.85	54.0	26.47	AV	172.00	150	Horizontal	Pass
2	2065.000	41.43	-13.81	74.0	32.57	Peak	22.00	150	Horizontal	Pass
2**	2065.000	29.77	-13.81	54.0	24.23	AV	22.00	150	Horizontal	Pass
3	3435.500	47.29	-5.20	74.0	26.71	Peak	92.00	150	Horizontal	Pass
3**	3435.500	36.13	-5.20	54.0	17.87	AV	92.00	150	Horizontal	Pass
4	5793.500	106.84	-1.51	74.0	-32.84	Peak	101.00	150	Horizontal	N/A
4**	5793.500	98.98	-1.51	54.0	-44.98	AV	101.00	150	Horizontal	N/A
5	9948.213	47.49	-4.00	74.0	26.51	Peak	263.00	150	Horizontal	Pass
5**	9948.213	36.87	-4.00	54.0	17.13	AV	263.00	150	Horizontal	Pass
6	15263.175	50.33	-1.05	74.0	23.67	Peak	212.00	150	Horizontal	Pass
6**	15263.175	39.71	-1.05	54.0	14.29	AV	212.00	150	Horizontal	Pass

11ac40, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT V

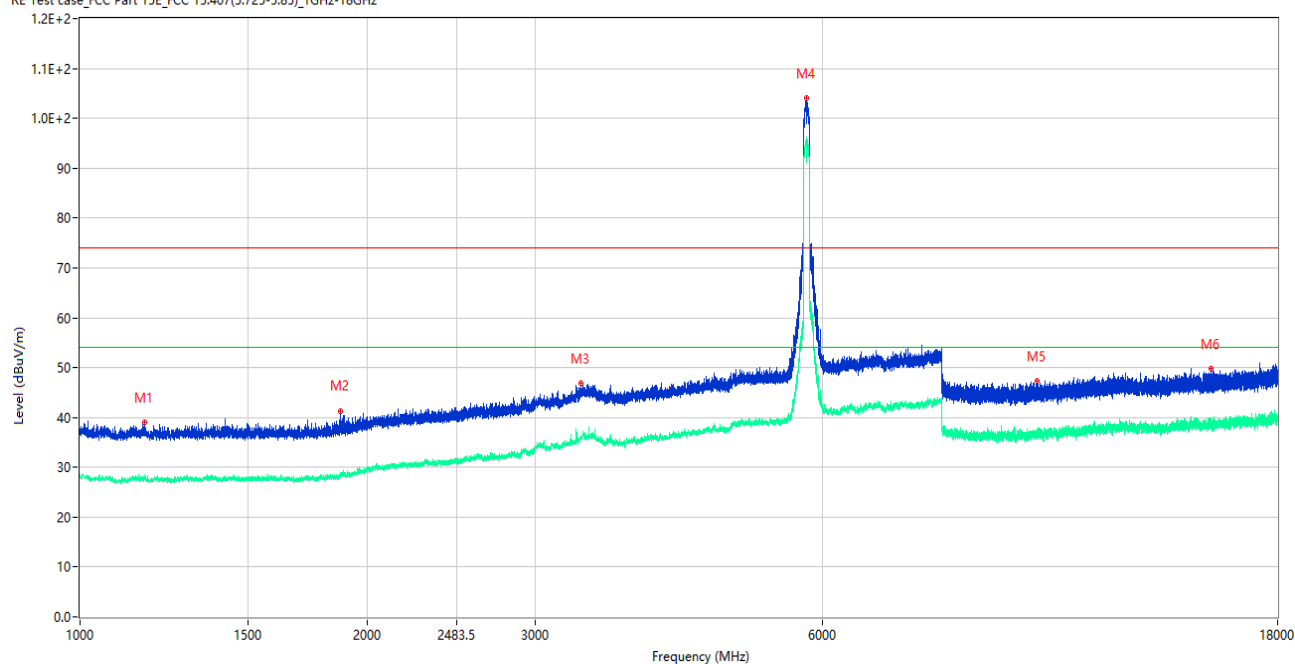
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1449.750	40.15	-15.96	74.0	33.85	Peak	204.00	150	Vertical	Pass
1**	1449.750	27.78	-15.96	54.0	26.22	AV	204.00	150	Vertical	Pass
2	2442.750	42.47	-12.45	74.0	31.53	Peak	224.00	150	Vertical	Pass
2**	2442.750	30.94	-12.45	54.0	23.06	AV	224.00	150	Vertical	Pass
3	3415.000	48.09	-5.19	74.0	25.91	Peak	180.00	150	Vertical	Pass
3**	3415.000	36.70	-5.19	54.0	17.30	AV	180.00	150	Vertical	Pass
4	5793.000	98.07	-1.52	74.0	-24.07	Peak	349.00	150	Vertical	N/A
4**	5793.000	89.51	-1.52	54.0	-35.51	AV	349.00	150	Vertical	N/A
5	11405.038	47.94	-3.42	74.0	26.06	Peak	27.00	150	Vertical	Pass
5**	11405.038	37.51	-3.42	54.0	16.49	AV	27.00	150	Vertical	Pass
6	16557.301	50.20	-0.91	74.0	23.80	Peak	360.00	150	Vertical	Pass
6**	16557.301	40.50	-0.91	54.0	13.50	AV	360.00	150	Vertical	Pass

11ac80, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT H

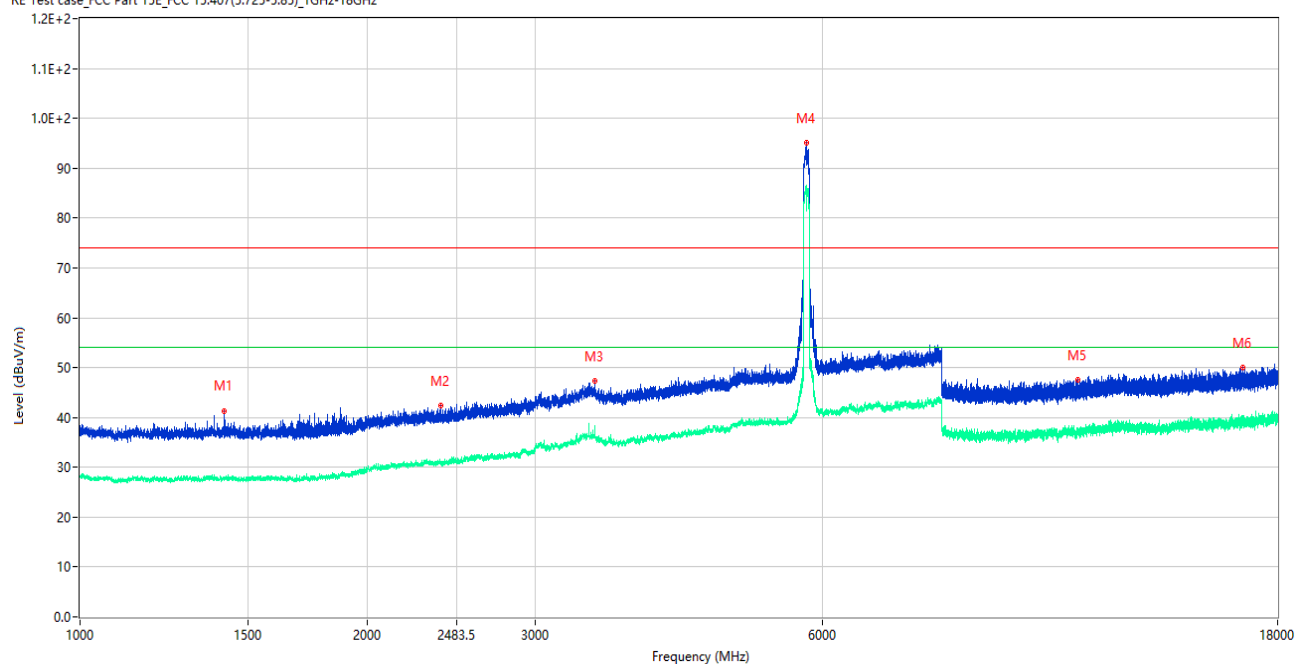
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1169.500	39.01	-15.51	74.0	34.99	Peak	149.00	150	Horizontal	Pass
1**	1169.500	27.65	-15.51	54.0	26.35	AV	149.00	150	Horizontal	Pass
2	1875.250	41.36	-15.50	74.0	32.64	Peak	153.00	150	Horizontal	Pass
2**	1875.250	28.54	-15.50	54.0	25.46	AV	153.00	150	Horizontal	Pass
3	3347.500	46.91	-6.31	74.0	27.09	Peak	9.00	150	Horizontal	Pass
3**	3347.500	36.15	-6.31	54.0	17.85	AV	9.00	150	Horizontal	Pass
4	5770.000	104.12	-1.68	74.0	-30.12	Peak	113.00	150	Horizontal	N/A
4**	5770.000	95.66	-1.68	54.0	-41.66	AV	113.00	150	Horizontal	N/A
5	10070.762	47.32	-3.85	74.0	26.68	Peak	0.00	150	Horizontal	Pass
5**	10070.762	36.42	-3.85	54.0	17.58	AV	0.00	150	Horizontal	Pass
6	15310.425	49.80	-1.88	74.0	24.20	Peak	345.00	150	Horizontal	Pass
6**	15310.425	38.87	-1.88	54.0	15.13	AV	345.00	150	Horizontal	Pass

11ac80, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT V

RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1415.250	41.38	-15.94	74.0	32.62	Peak	167.00	150	Vertical	Pass
1**	1415.250	27.72	-15.94	54.0	26.28	AV	167.00	150	Vertical	Pass
2	2386.250	42.34	-12.37	74.0	31.66	Peak	89.00	150	Vertical	Pass
2**	2386.250	30.83	-12.37	54.0	23.17	AV	89.00	150	Vertical	Pass
3	3461.000	47.23	-4.96	74.0	26.77	Peak	356.00	150	Vertical	Pass
3**	3461.000	36.29	-4.96	54.0	17.71	AV	356.00	150	Vertical	Pass
4	5770.000	95.02	-1.68	74.0	-21.02	Peak	348.00	150	Vertical	N/A
4**	5770.000	86.07	-1.68	54.0	-32.07	AV	348.00	150	Vertical	N/A
5	11120.987	47.54	-4.14	74.0	26.46	Peak	98.00	150	Vertical	Pass
5**	11120.987	36.94	-4.14	54.0	17.06	AV	98.00	150	Vertical	Pass
6	16562.551	50.00	-1.09	74.0	24.00	Peak	178.00	150	Vertical	Pass
6**	16562.551	39.83	-1.09	54.0	14.17	AV	178.00	150	Vertical	Pass

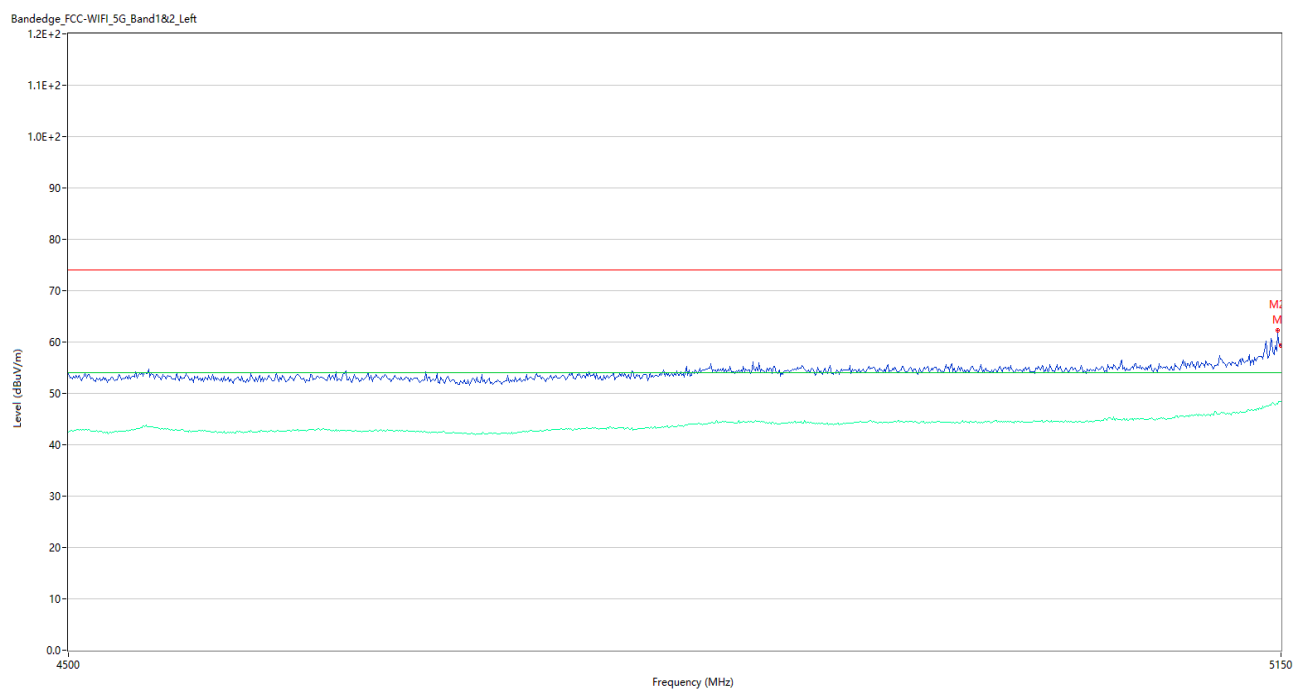
A.7 Band Edge (Restricted-band)

Test Band	Mode	Channel	Verdict
U-NII-1	802.11a	Left	Pass
		High	Pass
	802.11n(HT20)	Left	Pass
		High	Pass
	802.11n(HT40)	Left	Pass
		High	Pass
	802.11ac(VHT20)	Left	Pass
		High	Pass
	802.11ac(VHT40)	Left	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass
U-NII-2A	802.11a	Left	Pass
		High	Pass
	802.11n(HT20)	Left	Pass
		High	Pass
	802.11n(HT40)	Left	Pass
		High	Pass
	802.11ac(VHT20)	Left	Pass
		High	Pass
	802.11ac(VHT40)	Left	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass
U-NII-3	802.11a	Left	Pass
		High	Pass
	802.11n(HT20)	Left	Pass
		High	Pass
	802.11n(HT40)	Left	Pass
		High	Pass
	802.11ac(VHT20)	Left	Pass
		High	Pass
	802.11ac(VHT40)	Left	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass

Note 1: All the configurations were pre tested, only the worst configuration has been reported in this report.

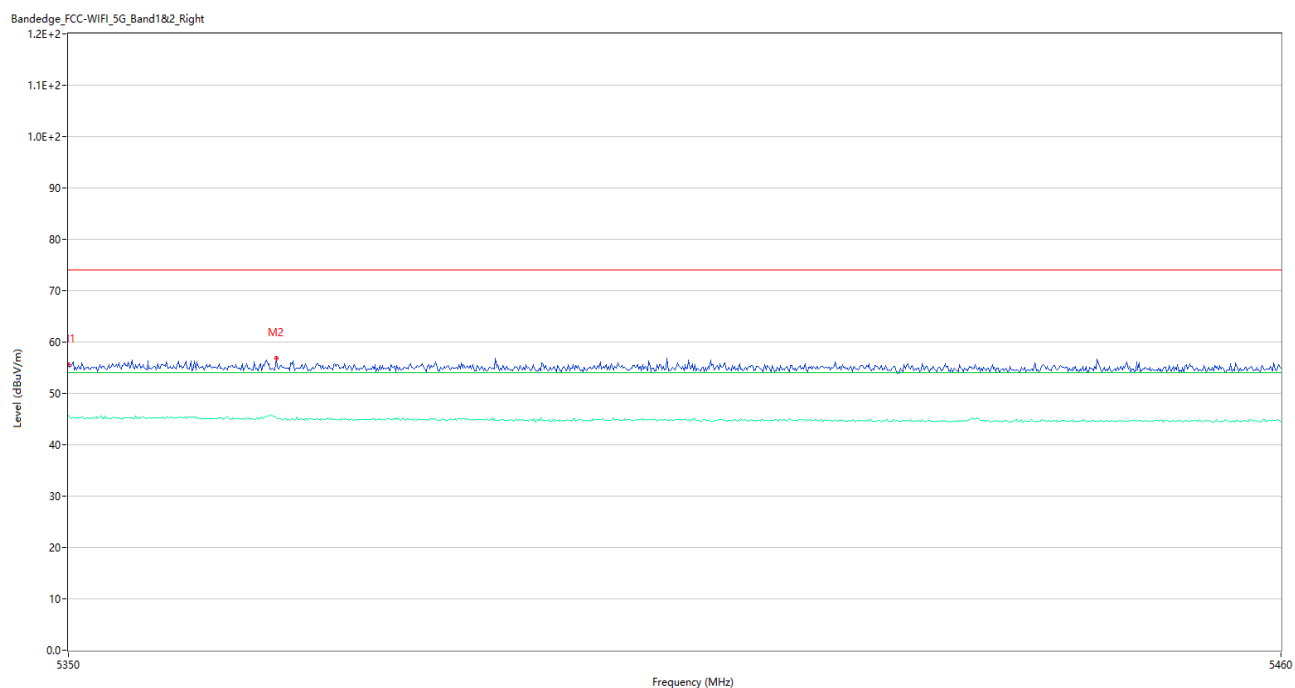
Test Data and Plots

U-NII-1 11a CH36



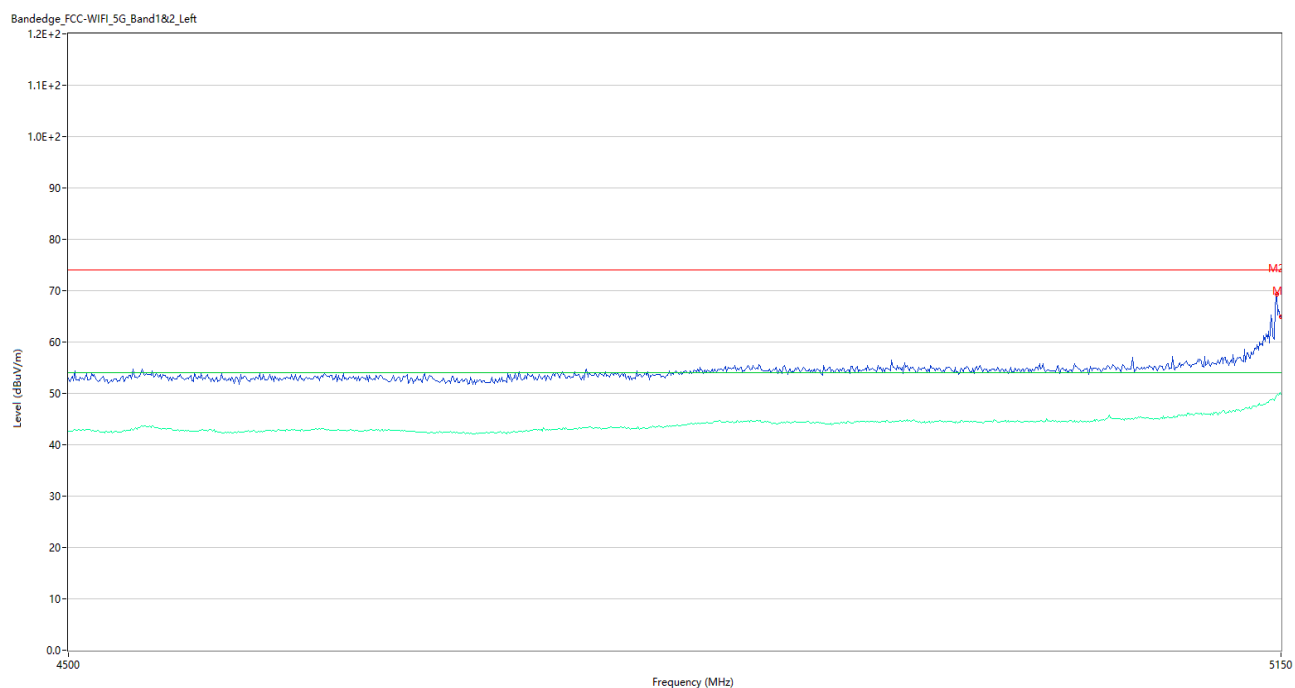
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	59.34	3.82	74.0	14.66	Peak	0.01	150	Horizontal	Pass
1**	5150.000	48.49	3.82	54.0	5.51	AV	0.01	150	Horizontal	Pass
2	5148.050	62.30	3.87	74.0	11.70	Peak	56.00	150	Horizontal	Pass
2**	5148.050	47.98	3.87	54.0	6.02	AV	56.00	150	Horizontal	Pass

U-NII-1 11a CH48



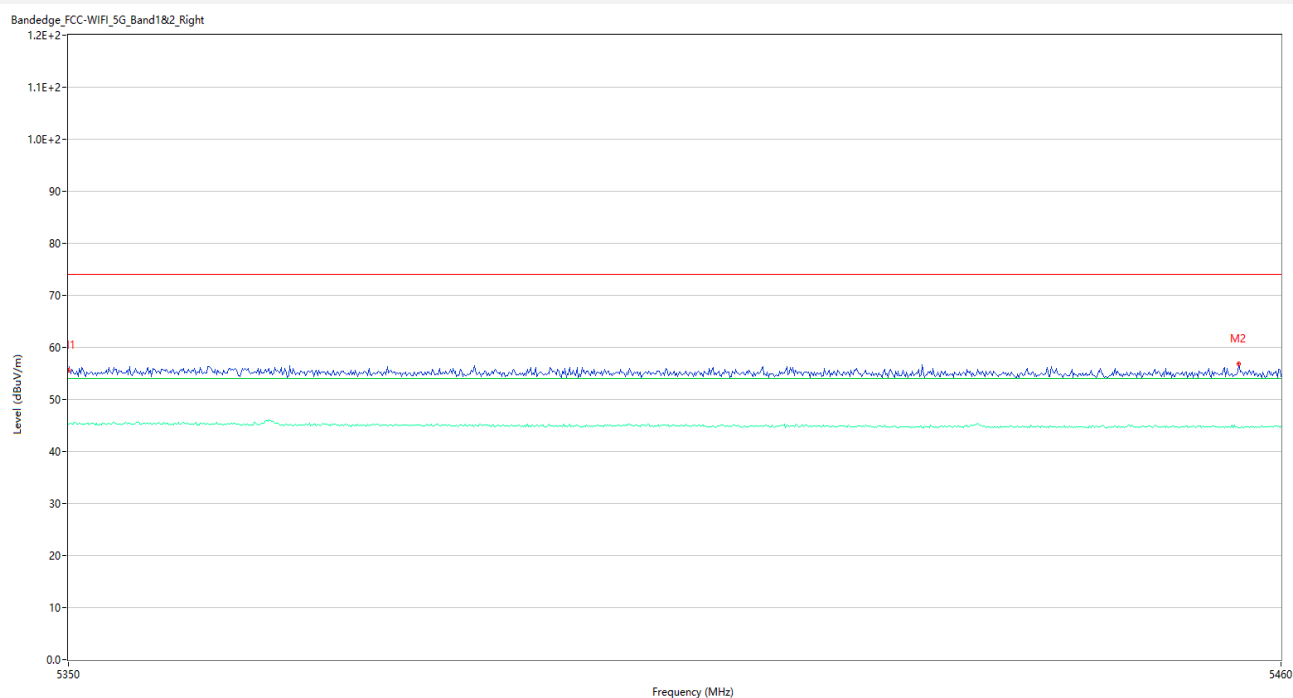
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.64	4.04	74.0	18.36	Peak	1.00	150	Horizontal	Pass
1**	5350.000	45.57	4.04	54.0	8.43	AV	1.00	150	Horizontal	Pass
2	5368.700	56.88	4.00	74.0	17.12	Peak	75.00	150	Horizontal	Pass
2**	5368.700	45.32	4.00	54.0	8.68	AV	75.00	150	Horizontal	Pass

U-NII-1 11ac20 CH36



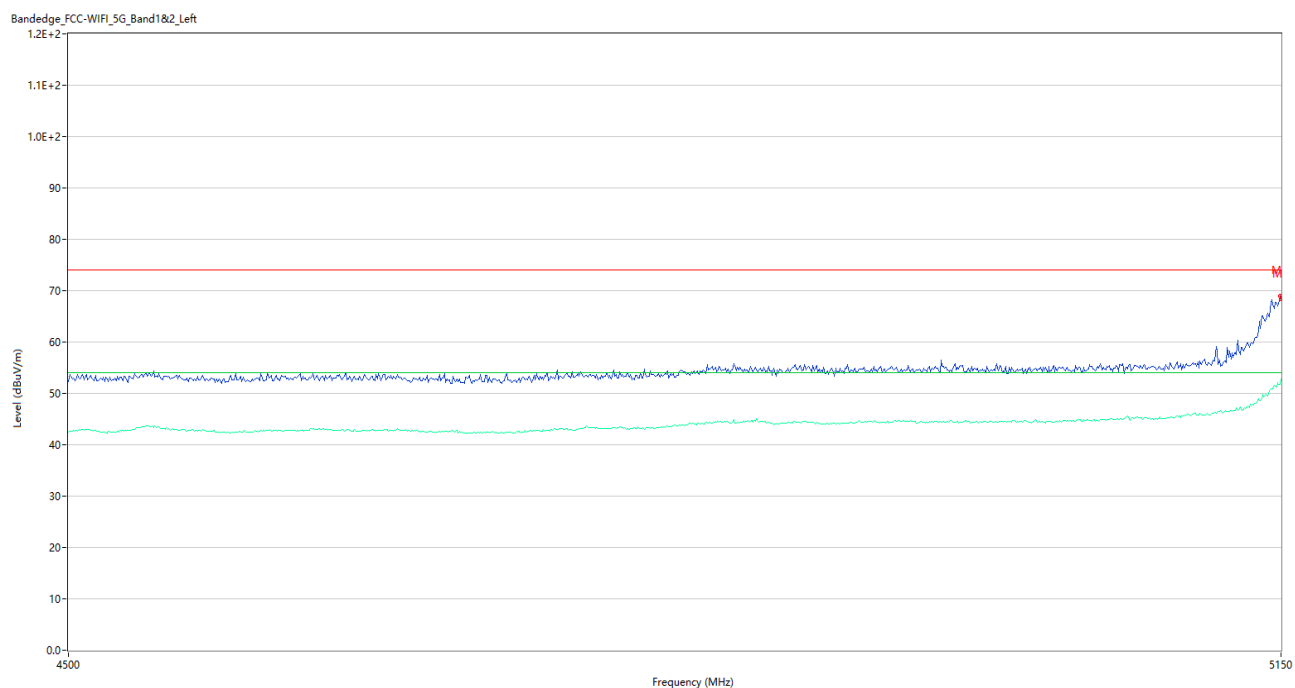
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	64.98	3.82	74.0	9.02	Peak	116.99	150	Horizontal	Pass
1**	5150.000	49.87	3.82	54.0	4.13	AV	116.99	150	Horizontal	Pass
2	5147.400	69.33	3.89	74.0	4.67	Peak	116.00	150	Horizontal	Pass
2**	5147.400	49.67	3.89	54.0	4.33	AV	116.00	150	Horizontal	Pass

U-NII-1 11ac20 CH48



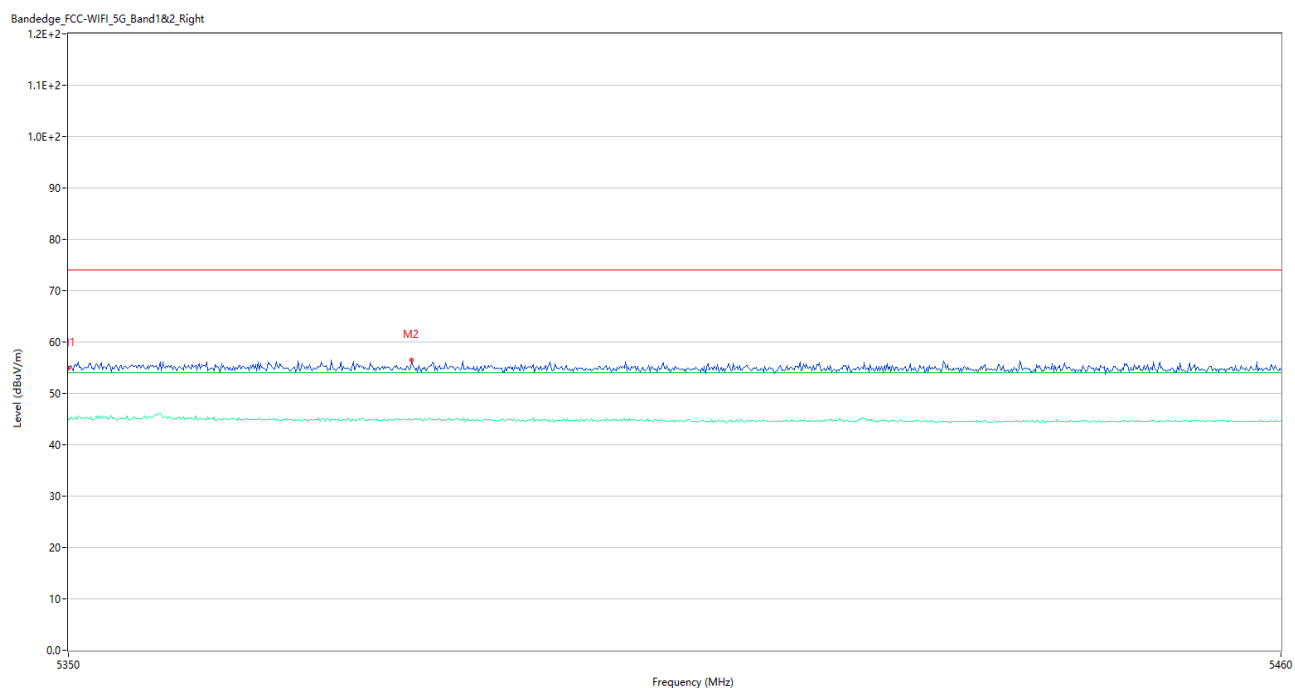
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.63	4.04	74.0	18.37	Peak	0.00	150	Horizontal	Pass
1**	5350.000	45.34	4.04	54.0	8.66	AV	0.00	150	Horizontal	Pass
2	5456.150	56.78	3.83	74.0	17.22	Peak	357.00	150	Horizontal	Pass
2**	5456.150	44.56	3.83	54.0	9.44	AV	357.00	150	Horizontal	Pass

U-NII-1 11ac40 CH38



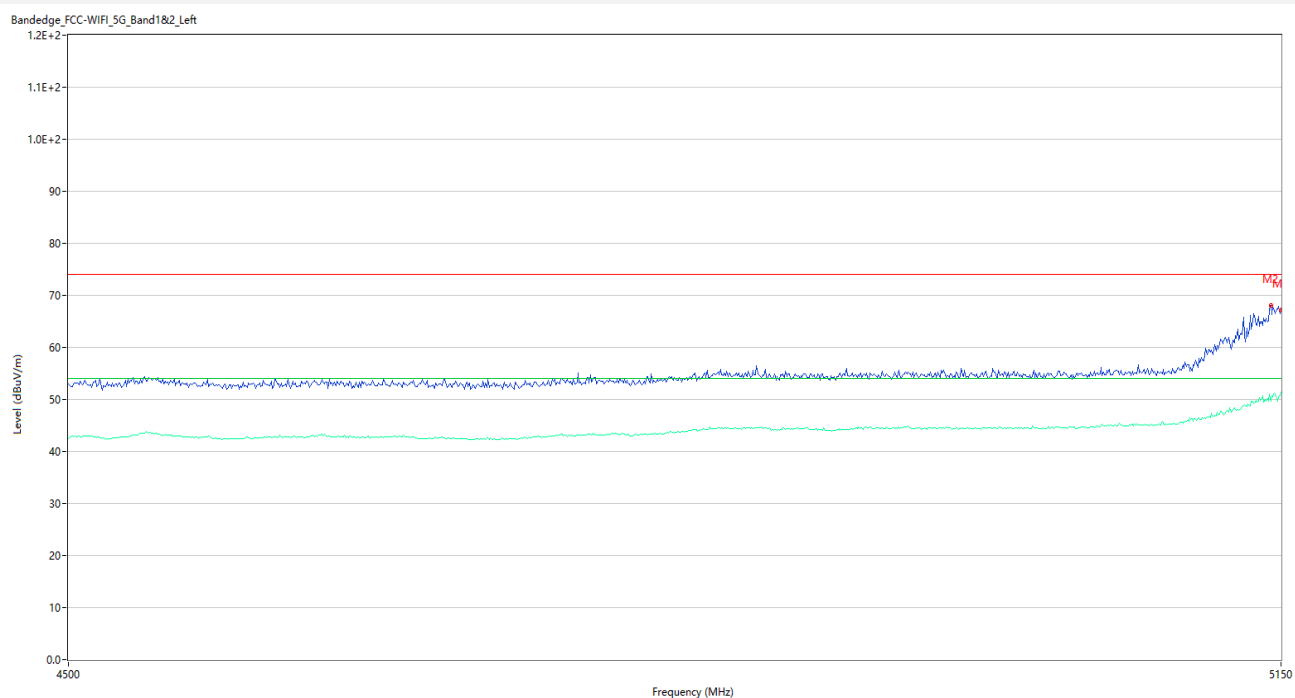
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	68.36	3.82	74.0	5.64	Peak	58.01	150	Horizontal	Pass
1**	5150.000	52.86	3.82	54.0	1.14	AV	58.01	150	Horizontal	Pass
2	5149.350	68.98	3.84	74.0	5.02	Peak	108.00	150	Horizontal	Pass
2**	5149.350	51.70	3.84	54.0	2.30	AV	108.00	150	Horizontal	Pass

U-NII-1 11ac40 CH46



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	54.85	4.04	74.0	19.15	Peak	204.00	150	Horizontal	Pass
1**	5350.000	45.04	4.04	54.0	8.96	AV	204.00	150	Horizontal	Pass
2	5380.910	56.54	4.05	74.0	17.46	Peak	6.00	150	Horizontal	Pass
2**	5380.910	44.76	4.05	54.0	9.24	AV	6.00	150	Horizontal	Pass

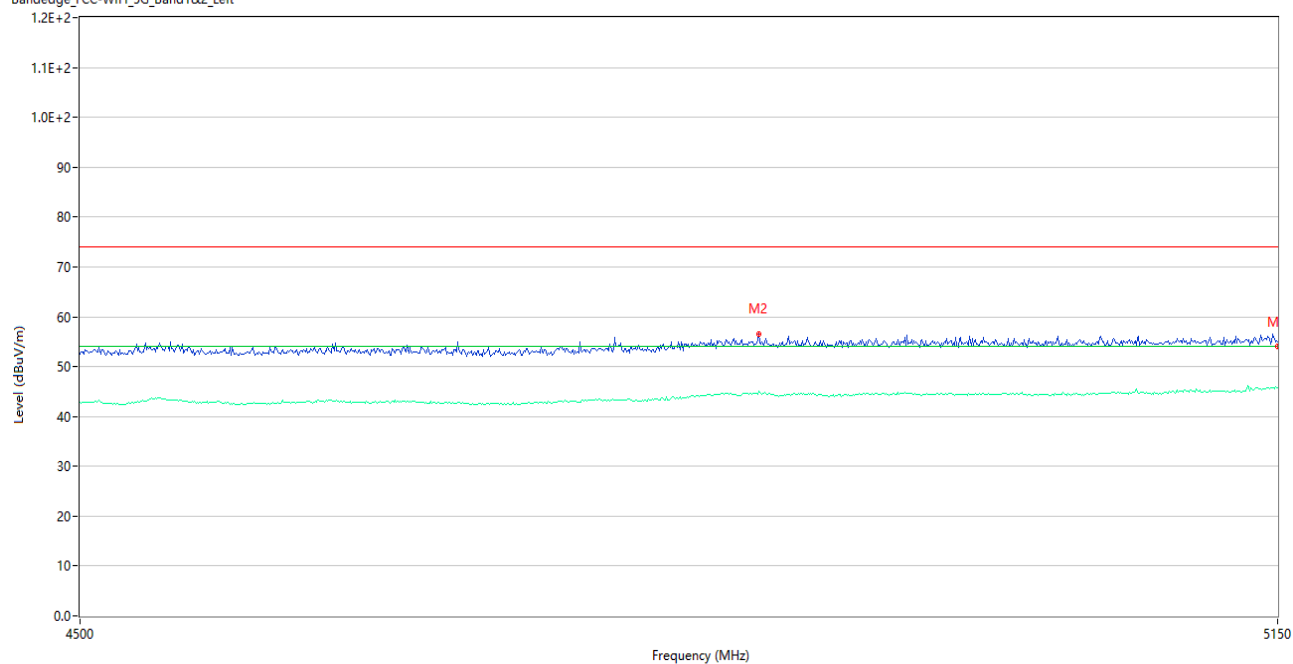
U-NII-1 11ac80 CH42



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	67.20	3.82	74.0	6.80	Peak	111.99	150	Horizontal	Pass
1**	5150.000	51.46	3.82	54.0	2.54	AV	111.99	150	Horizontal	Pass
2	5144.150	68.10	3.99	74.0	5.90	Peak	56.00	150	Horizontal	Pass
2**	5144.150	49.58	3.99	54.0	4.42	AV	56.00	150	Horizontal	Pass

U-NII-2A 11a CH52

Bandedge_FCC-WIFI_5G_Band1&2_Left



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	54.96	3.82	74.0	19.04	Peak	359.99	150	Horizontal	Pass
1**	5150.000	45.83	3.82	54.0	8.17	AV	359.99	150	Horizontal	Pass
2	4857.500	56.60	4.09	74.0	17.40	Peak	276.00	150	Horizontal	Pass
2**	4857.500	44.98	4.09	54.0	9.02	AV	276.00	150	Horizontal	Pass

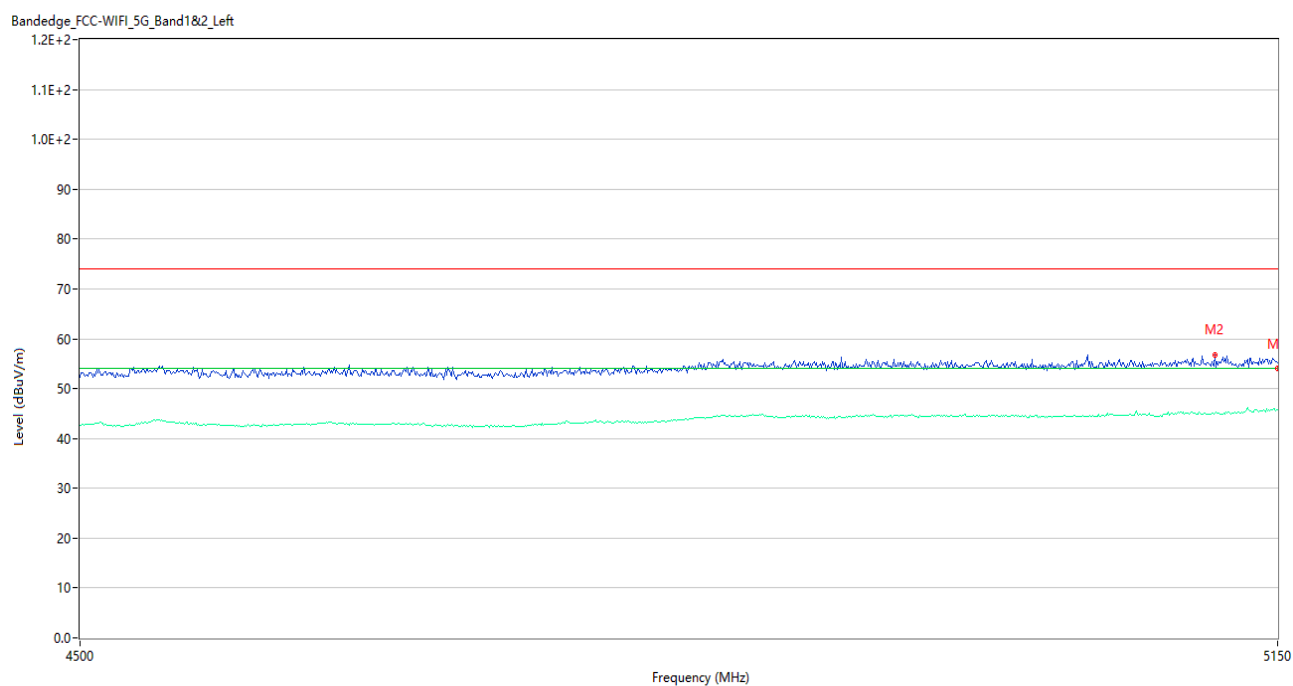
U-NII-2A 11a CH64

Bandedge_FCC-WIFI_5G_Band1&2_Right



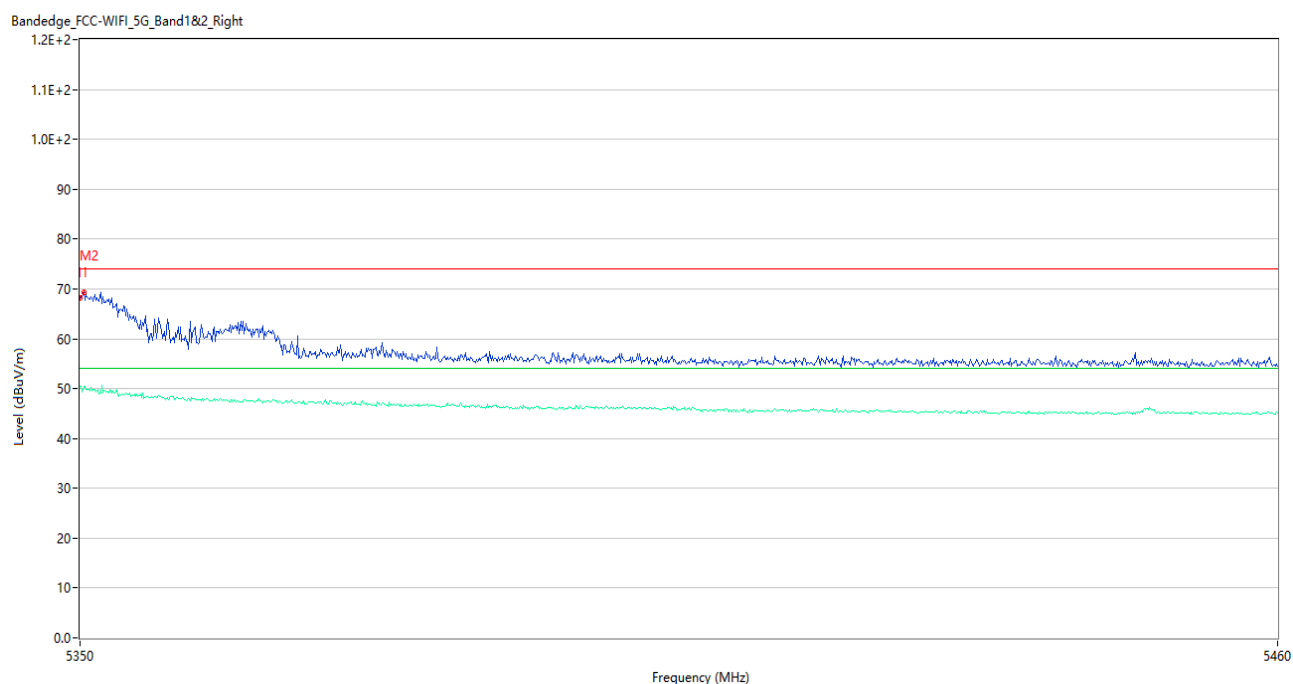
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	66.43	4.04	74.0	7.57	Peak	109.00	150	Horizontal	Pass
1**	5350.000	49.72	4.04	54.0	4.28	AV	109.00	150	Horizontal	Pass
2	5350.880	67.36	4.06	74.0	6.64	Peak	80.00	150	Horizontal	Pass
2**	5350.880	50.01	4.06	54.0	3.99	AV	80.00	150	Horizontal	Pass
3	5350.330	63.76	4.05	74.0	10.24	Peak	60.00	150	Horizontal	Pass
3**	5350.330	50.85	4.05	54.0	3.15	AV	60.00	150	Horizontal	Pass

U-NII-2A 11n20 CH52



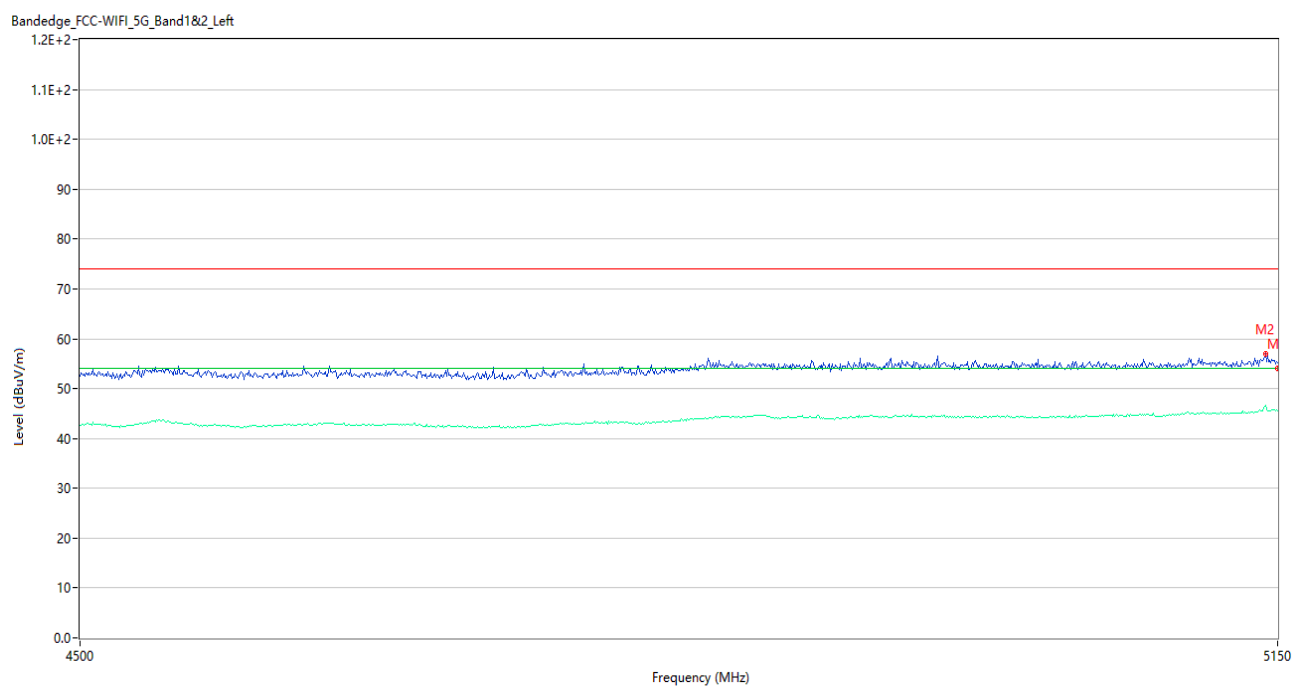
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	55.15	3.82	74.0	18.85	Peak	108.00	150	Horizontal	Pass
1**	5150.000	45.66	3.82	54.0	8.34	AV	108.00	150	Horizontal	Pass
2	5113.600	56.81	3.63	74.0	17.19	Peak	51.00	150	Horizontal	Pass
2**	5113.600	44.98	3.63	54.0	9.02	AV	51.00	150	Horizontal	Pass

U-NII-2A 11n20 CH64



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	68.17	4.04	74.0	5.83	Peak	74.00	150	Horizontal	Pass
1**	5350.000	50.53	4.04	54.0	3.47	AV	74.00	150	Horizontal	Pass
2	5350.330	69.39	4.05	74.0	4.61	Peak	108.00	150	Horizontal	Pass
2**	5350.330	50.49	4.05	54.0	3.51	AV	108.00	150	Horizontal	Pass

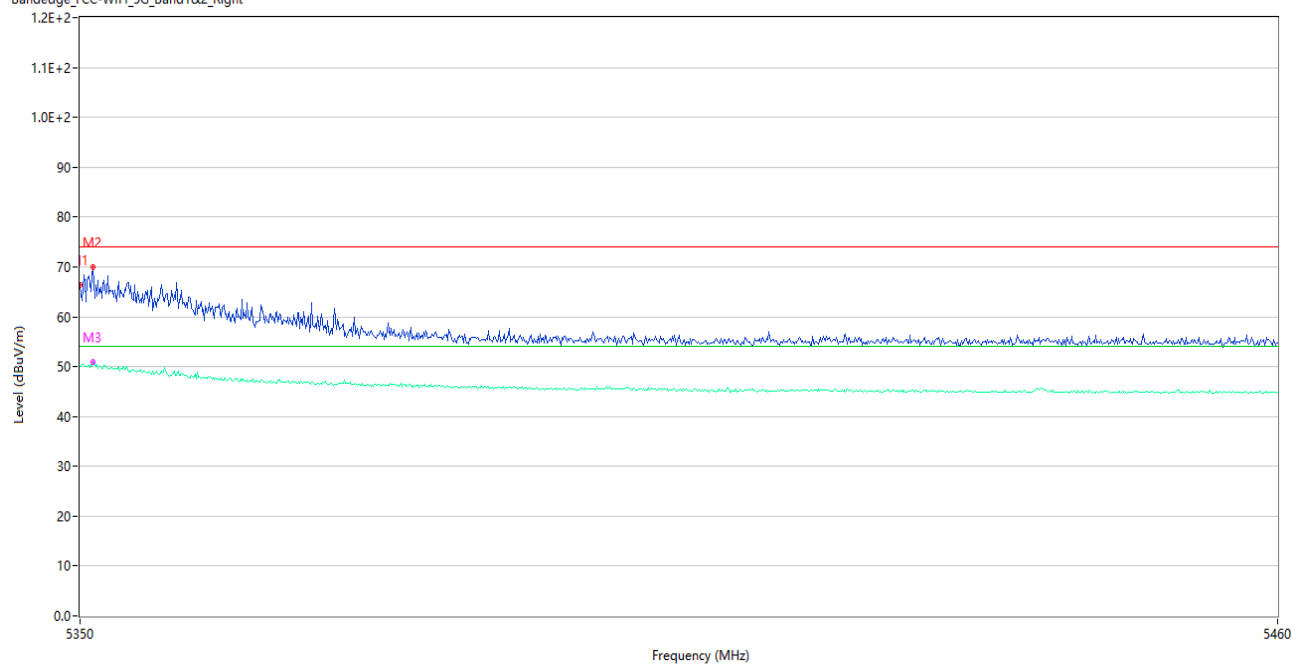
U-NII-2A 11ac40 CH54



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	55.21	3.82	74.0	18.79	Peak	104.00	150	Horizontal	Pass
1**	5150.000	45.61	3.82	54.0	8.39	AV	104.00	150	Horizontal	Pass
2	5142.850	56.89	4.02	74.0	17.11	Peak	57.00	150	Horizontal	Pass
2**	5142.850	46.58	4.02	54.0	7.42	AV	57.00	150	Horizontal	Pass

U-NII-2A 11ac40 CH62

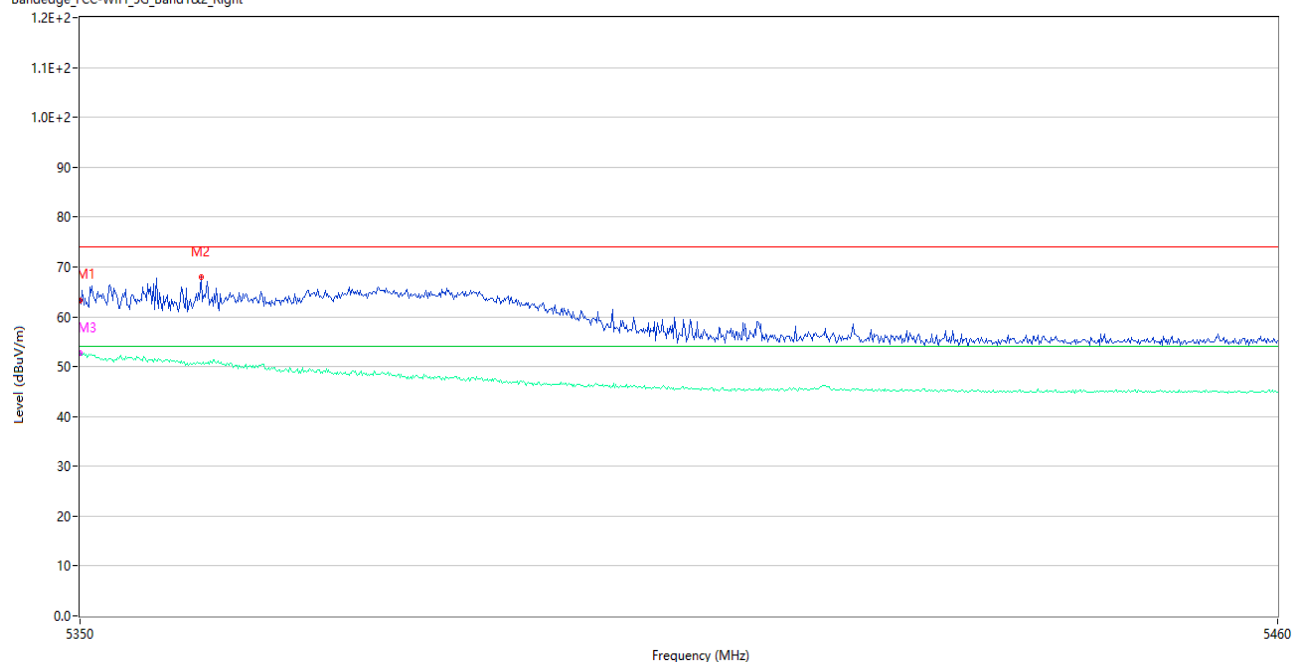
Bandedge_FCC-WIFI_5G_Band1&2_Right



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	66.50	4.04	74.0	7.50	Peak	83.00	150	Horizontal	Pass
1**	5350.000	50.01	4.04	54.0	3.99	AV	83.00	150	Horizontal	Pass
2	5351.210	69.92	4.06	74.0	4.08	Peak	115.00	150	Horizontal	Pass
2**	5351.210	50.82	4.06	54.0	3.18	AV	115.00	150	Horizontal	Pass
3	5351.210	69.92	4.06	74.0	4.08	Peak	115.00	150	Horizontal	Pass
3**	5351.210	50.82	4.06	54.0	3.18	AV	115.00	150	Horizontal	Pass

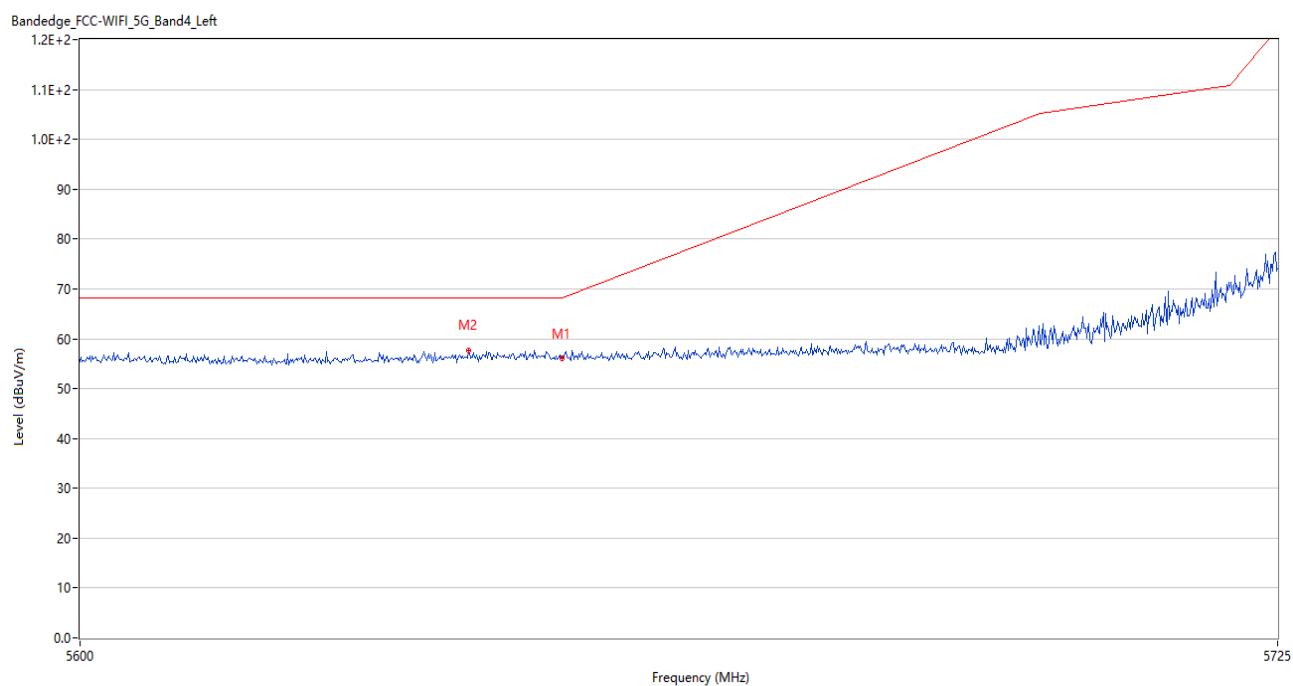
U-NII-2A 11ac80 CH58

Bandedge_FCC-WIFI_5G_Band1&2_Right



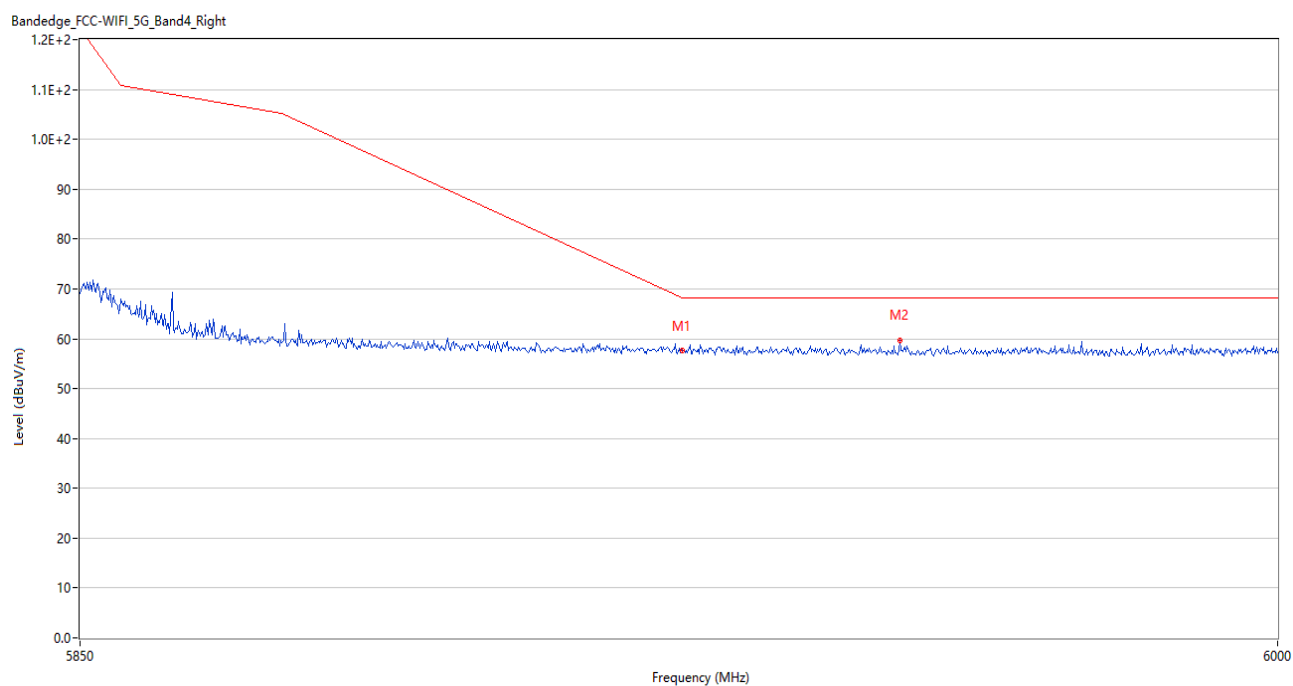
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	63.18	4.04	74.0	10.82	Peak	100.00	150	Horizontal	Pass
1**	5350.000	52.62	4.04	54.0	1.38	AV	100.00	150	Horizontal	Pass
2	5361.000	68.04	4.21	74.0	5.96	Peak	108.00	150	Horizontal	Pass
2**	5361.000	50.39	4.21	54.0	3.61	AV	108.00	150	Horizontal	Pass
3	5350.000	63.18	4.04	74.0	10.82	Peak	100.00	150	Horizontal	Pass
3**	5350.000	52.62	4.04	54.0	1.38	AV	100.00	150	Horizontal	Pass

U-NII-3 11a CH149 Left



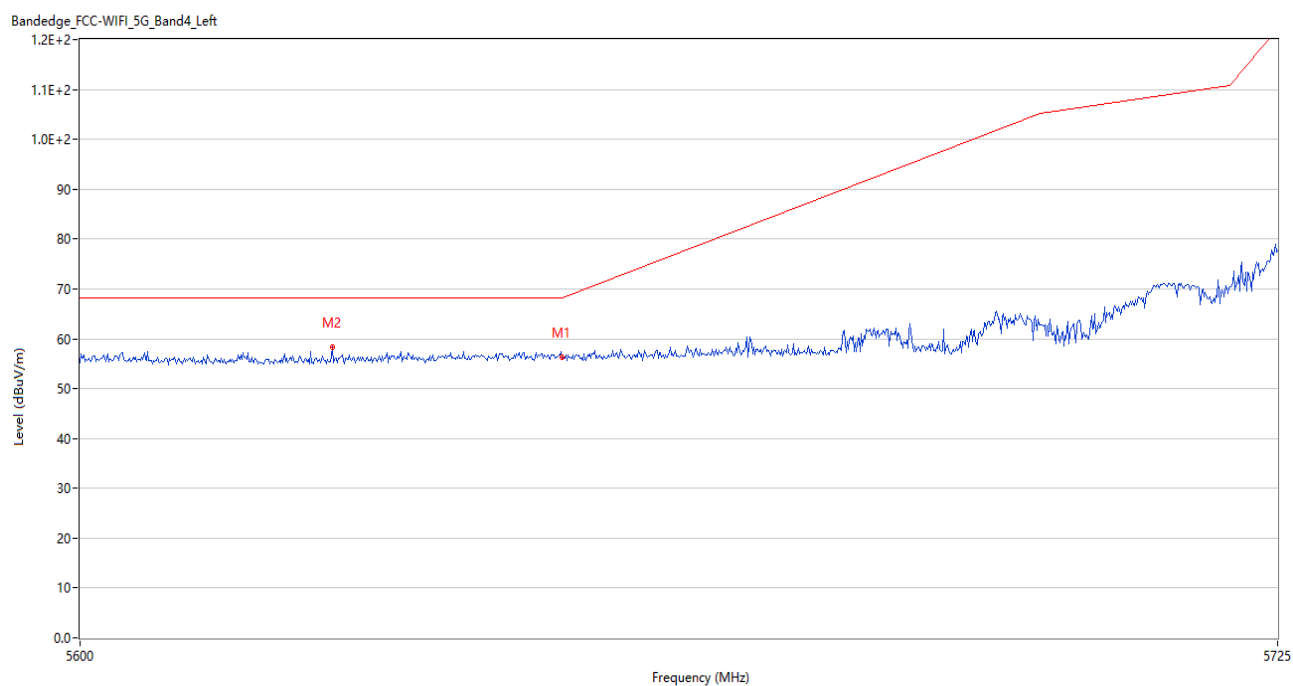
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	56.00	3.81	68.2	12.20	Peak	155.84	150	Horizontal	Pass
2	5640.250	57.68	3.74	68.2	10.52	Peak	119.00	150	Horizontal	Pass

U-NII-3 11a CH149 Right



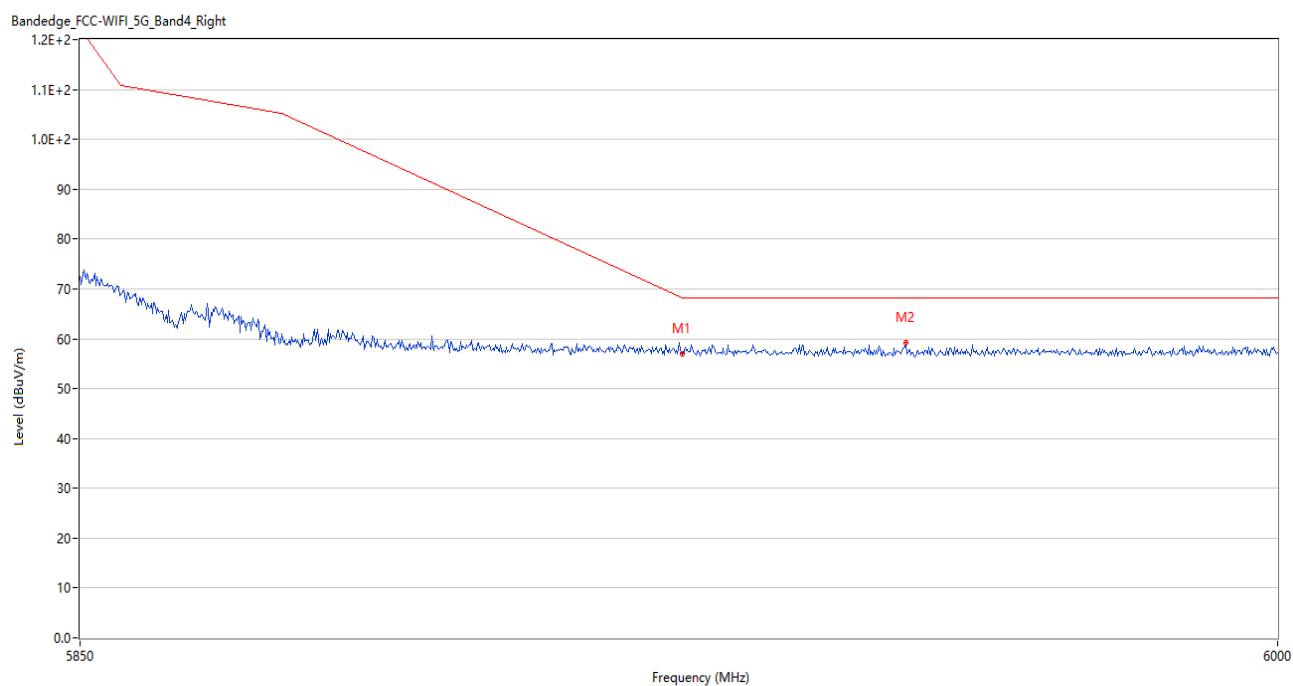
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	57.64	6.44	68.2	10.56	Peak	122.94	150	Horizontal	Pass
2	5952.300	59.64	6.18	68.2	8.56	Peak	17.00	150	Horizontal	Pass

U-NII-3 11n20 CH149 Left



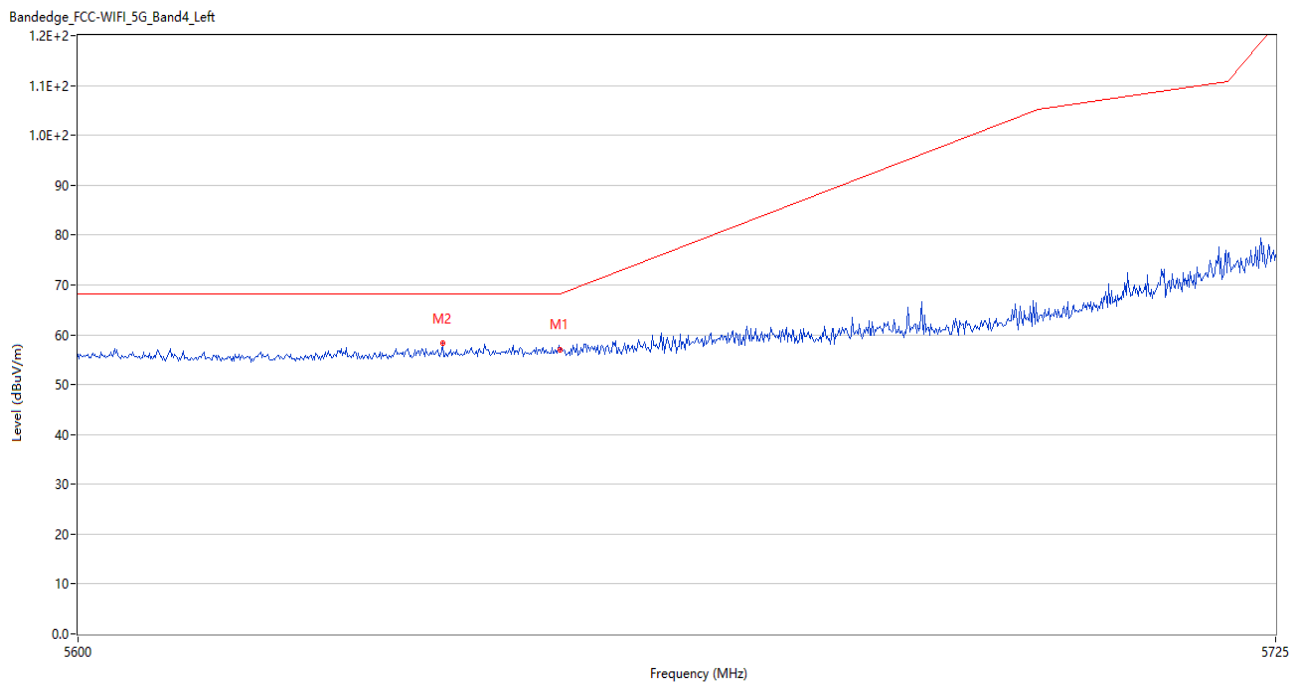
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	56.20	3.81	68.2	12.00	Peak	356.76	150	Horizontal	Pass
2	5626.125	58.27	3.63	68.2	9.93	Peak	94.00	150	Horizontal	Pass

U-NII-3 11n20 CH149 Right



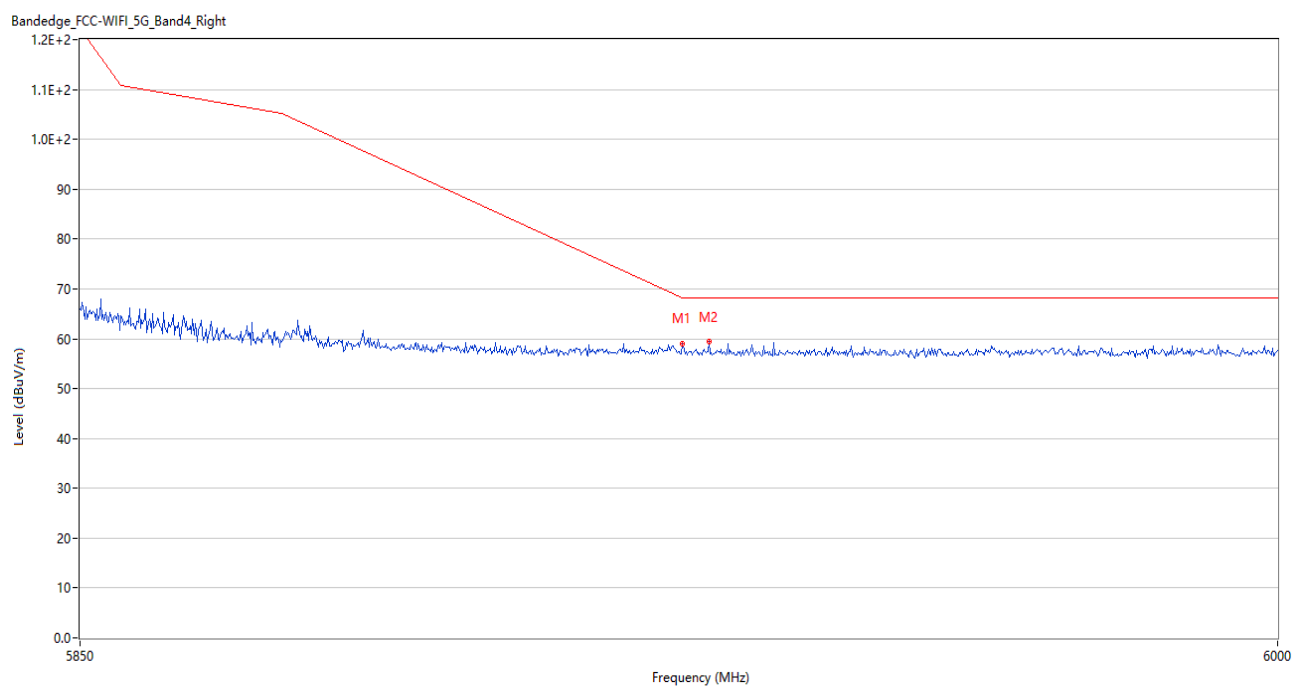
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	57.07	6.44	68.2	11.13	Peak	149.95	150	Horizontal	Pass
2	5953.050	59.11	6.17	68.2	9.09	Peak	108.00	150	Horizontal	Pass

U-NII-3 11ac40 CH151 Left



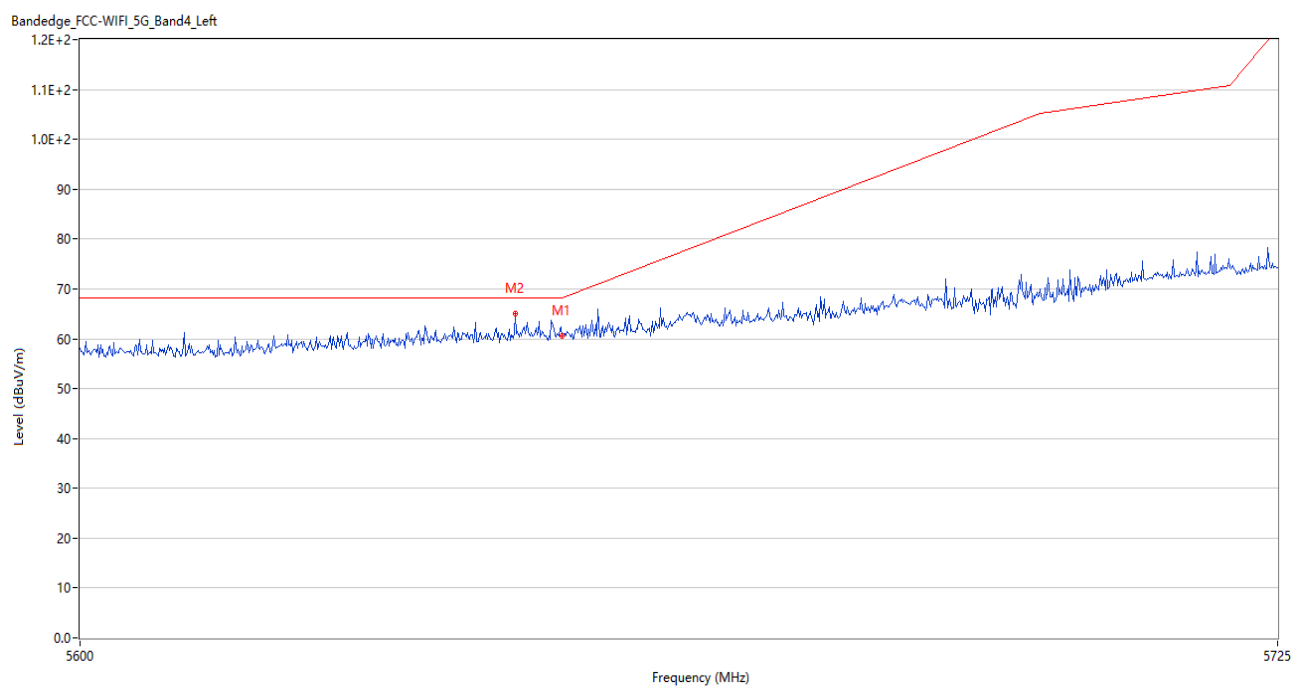
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	57.02	3.81	68.2	11.18	Peak	120.02	150	Horizontal	Pass
2	5637.750	58.35	3.73	68.2	9.85	Peak	83.00	150	Horizontal	Pass

U-NII-3 11ac40 CH151 Right



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	59.05	6.44	68.2	9.15	Peak	104.04	150	Horizontal	Pass
2	5928.300	59.37	6.36	68.2	8.83	Peak	136.00	150	Horizontal	Pass

U-NII-3 11ac80 CH155 Middle



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	60.67	3.81	68.2	7.53	Peak	109.01	150	Horizontal	Pass
2	5645.125	65.08	3.77	68.2	3.12	Peak	115.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SH2480553-AR-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2480553-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SH2480553-AI.PDF”.

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--END OF REPORT--