

TEST REPORT

Applicant: NAYAX LTD
Address: 3 Arik Einstein St., Herzliya, 4659071, Israel
Equipment Type: POS Payment Device
Model Name: VPOSM S (refer to section 2.3)
Brand Name: Nayax
FCC ID: 2AK6L-VPOSMS
ISED Number: 10840A-VPOSMS
Test Standard: 47 CFR Part 15 Subpart E
RSS-Gen Issue 5
RSS-247 Issue 3
(refer to section 3.1)
Sample Arrival Date: Apr. 14, 2025
Test Date : Apr. 23, 2025 - Apr. 28, 2025
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ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center



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Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Jul. 07, 2025</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	4
1.1	Test Laboratory	4
1.2	Test Location	4
2	PRODUCT INFORMATION	5
2.1	Applicant Information	5
2.2	Manufacturer Information	5
2.3	General Description for Equipment under Test (EUT)	5
2.4	Technical Information	6
2.5	Channel List	7
3	SUMMARY OF TEST RESULTS	10
3.1	Test Standards	10
3.2	Test Verdict	10
4	GENERAL TEST CONFIGURATIONS	11
4.1	Test Environments	11
4.2	Test Equipment List	11
4.3	Test Software List	11
4.4	Decision Rule	12
4.5	Measurement Uncertainty	12
4.6	Description of Test Setup	13
5	TEST ITEMS	16
5.1	RF Output Power	16
5.2	Emission Bandwidth and 6 dB Bandwidth	18
5.3	Power Spectral density (PSD)	19
5.4	Conducted Emission	20
5.5	Radiated Spurious Emissions and Band Edge (Restricted-band)	21

ANNEX A	TEST RESULT	26
A.1	RF Output Power.....	26
A.2	Emission Bandwidth & 99% Bandwidth.....	28
A.3	6 dB Bandwidth	28
A.4	Power Spectral Density	28
A.5	Conducted Emission	30
A.6	Radiated Spurious Emissions and Band Edge (Restricted-band).....	32
ANNEX B	TEST SETUP PHOTOS	71
ANNEX C	EUT EXTERNAL PHOTOS	71
ANNEX D	EUT INTERNAL PHOTOS	71

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 29671.

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	POS Payment Device			
Model Name Under Test	VPOS M S			
Series Model Name	VPOS M S-CLS, VPOS M S-FM			
Description of Model name differentiation	Model name	VPOS M S	VPOS M S-CLS	VPOS M S-FM
	Machine head	Yellow	Yellow or Black	Yellow
	External charging board	VPOS M-S	VPOS M-S-CUBE	VPOS M-S-CUBE
	Enclosure structure	Structure 1	Structure 2	Structure 3
Except for the above differences, all other information is the same (this information provided by the customer).				
Sample Number	SC-SH2540026-S06(radiated)			
Hardware Version	VPOSMSx415223xxxx			
Software Version	6202.30.xxxx.xxx.xxx			
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 TDD LTE Band 38/41 Bluetooth (BR+EDR+BLE+HS3.0) 2.4G WiFi 802.11b, 802.11g, 802.11n(HT20) 5G WiFi 802.11a, 802.11n(HT20/40) GPS, 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
Modulation technology	OFDM
Modulation Type	256QAM, 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
Channel Bandwidth	802.11a: 20 MHz 802.11n: 20 MHz, 40 MHz
Maximum Output Power	U-NII-1: 25.64 mW U-NII-2A: 25.53 mW U-NII-3: 40.27 mW
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: 0.35 dBi U-NII-2A: 5250 MHz to 5350 MHz: 0.74 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.22 dBi
About the Product	The equipment is POS Payment Device, intended for used with information technology equipment.

2.5 Channel List

20 MHz		40 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	151	5755
56	5280	159	5795
60	5300		
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)

U-NII-1 (5150 - 5250 MHz)			U-NII-2A (5250 - 5350 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	52	Low	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	Low	5745
157	Mid	5785
165	High	5825

For 802.11n(HT40)

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

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

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
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
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
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
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
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

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	N/A
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	RSS-247, 6.2	ANNEX A.2	N/A
4	6 dB bandwidth	15.407(e)	RSS-247, 6.2	ANNEX A.3	N/A
5	Power Spectral Density	15.407(a)	RSS-247, 6.2	ANNEX A.4	N/A
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	53% to 58%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+23.1°C to +23.8°C
Working Voltage of the EUT	NV (Normal Voltage)	5.0 V

4.2 Test Equipment List

Description	Manufacturer	Model	Equipment No.	Cal. Date	Cal. Due
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L015	2024.07.09	2025.07.08
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519 B	BH-EMC-L067	2024.03.11	2027.03.10
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	BH-EMC-L008	2024.03.11	2027.03.10
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	BH-EMC-L044	2024.03.11	2027.03.10
Test Antenna-Horn (18-40 GHz)	A-INFO	LB-180400-KF	BH-EMC-L061	2024.03.11	2027.03.10
Anechoic Chamber	YiHeng	9m*6m*6m	BH-EMC-L001	2024.04.18	2027.04.17
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	2025.02.12	2026.02.11
LISN	SCHWARZBECK	NSLK 8127	BH-EMC-L011	2025.02.11	2026.02.10
10dB Limiter	SCHWARZBECK	VTSD 9561-F	BH-EMC-L014	2025.02.11	2026.02.10
Shielded Room	YiHeng	5m*4m*3.2m	BH-EMC-L006	2024.02.22	2027.02.21

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.	Applicable Test Setup
BL410E	BALUN	V21.919	N/A	The section 4.6.2&4.6.3&4.6.4&4.6.5

4.4 Decision Rule

☐ No Need

☒ Use General conformity decision rule (Consider uncertainty or not ☒No ☐Yes)

☐ Use Special Conformity Decision Rule (Consider uncertainty or not ☐No ☐Yes)

4.5 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	2.4 %
RF output power, conducted	0.41 dB
Power Spectral Density, conducted	1.73 dB
Unwanted Emissions, conducted	1.73 dB
All emissions, radiated	3.70 dB
Temperature	0.82 °C
Humidity	4.1 %

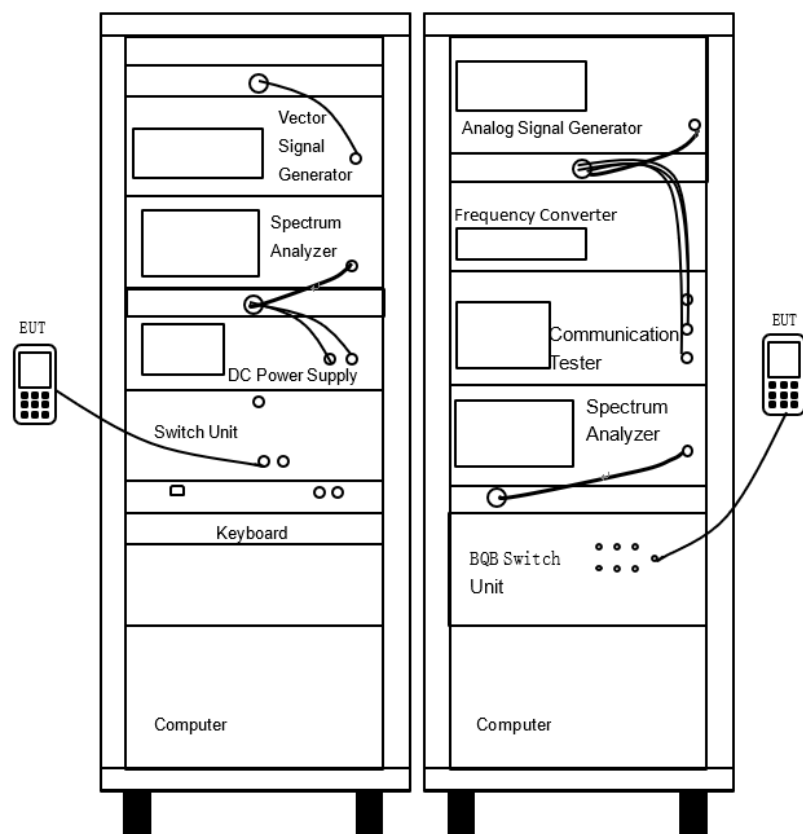
4.6 Description of Test Setup

4.6.1 For Antenna Port Test

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

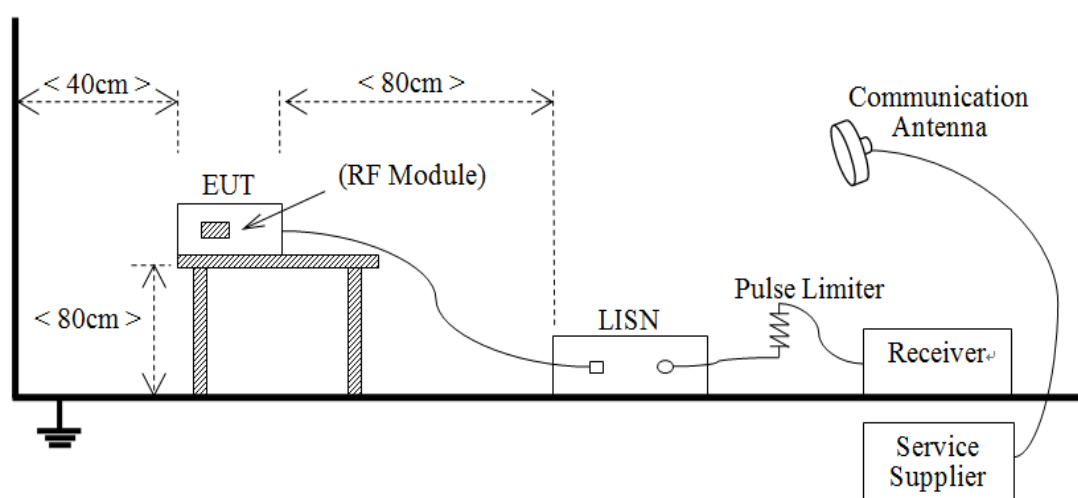
For example: the measurement value is 10 dBm and the cable 0.5 dB used, then the final result of EUT:

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



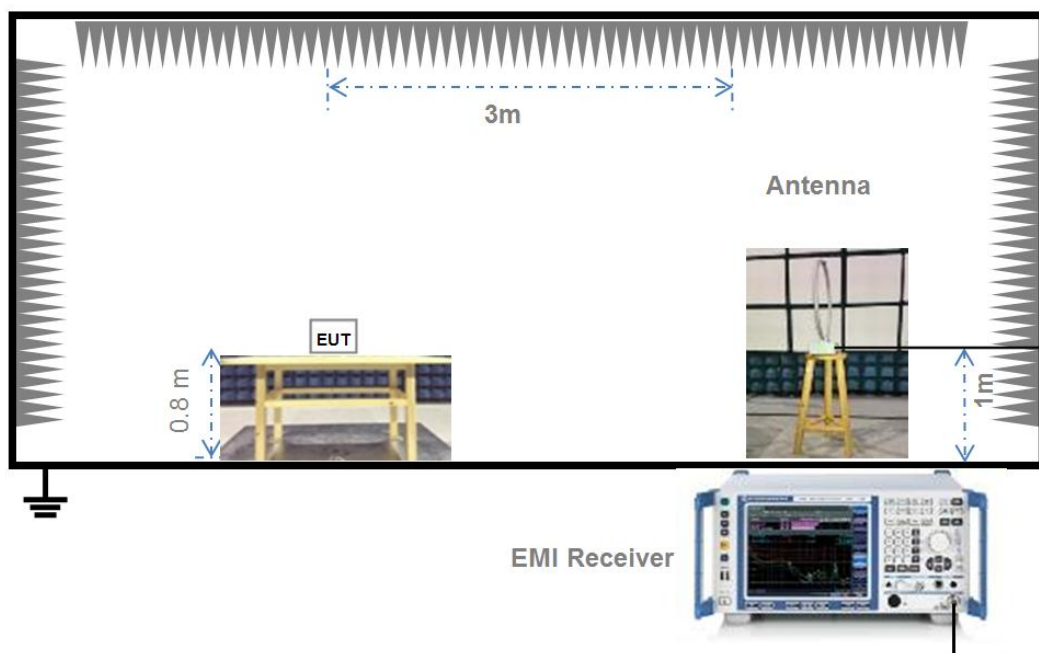
(Diagram 1)

4.6.2 For AC Power Supply Port Test



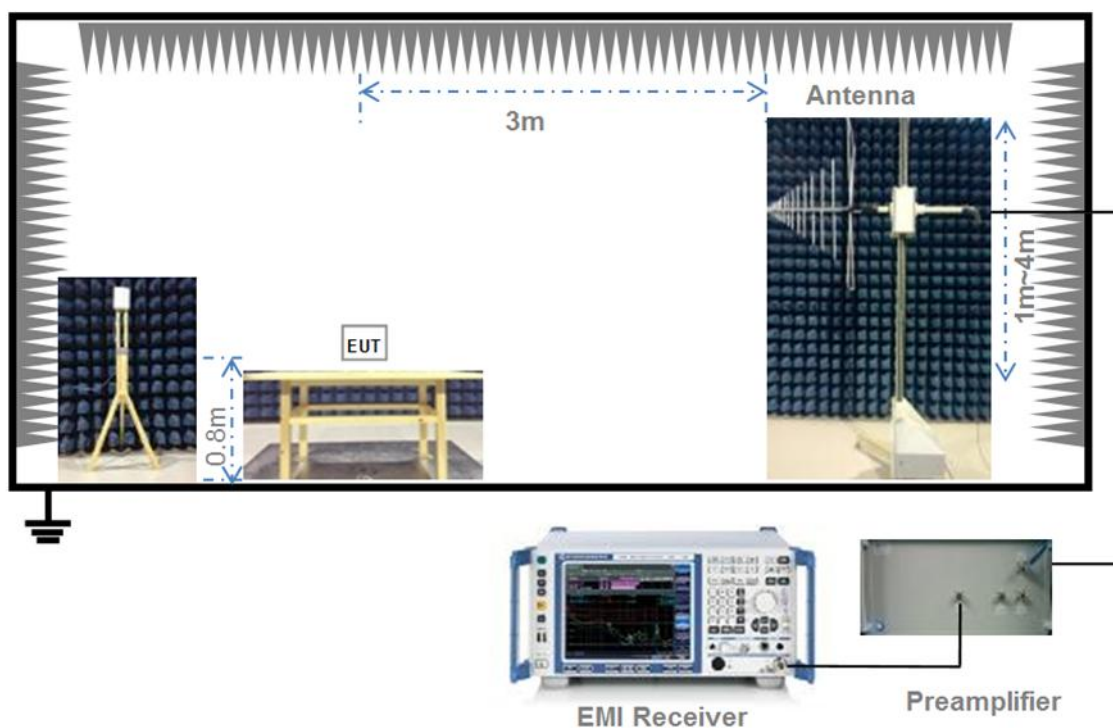
(Diagram 2)

4.6.3 For Radiated Test (Below 30 MHz)



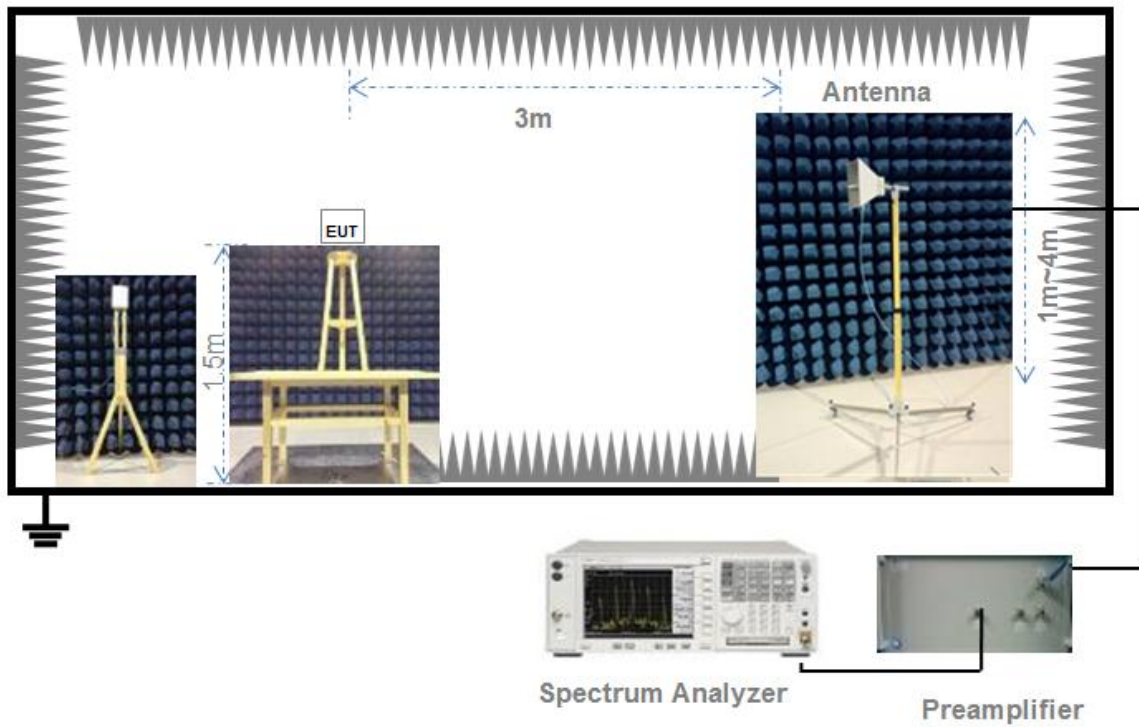
(Diagram 3)

4.6.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.6.5 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
Note: Where "B" is the 99% emissions bandwidth in MHz.	

5.1.2 Test Setup

The section 4.6.1 (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 4.6.1 (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,
4. Detector = Peak.
5. Trace mode = Max hold.
6. Use the 99% power bandwidth function of the instrument.

6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.
2. Detector = Peak.
3. Trace mode = Max hold.
4. Allow the trace to stabilize.
5. 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

5.3.2 Test Setup

The section 4.6.1 (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 4.6.2 (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)

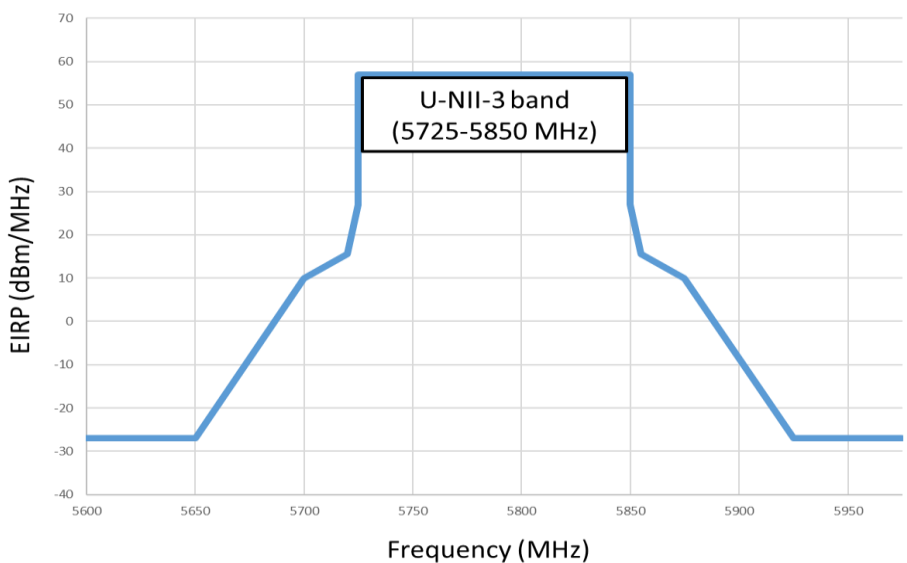
5.5.1 Limit

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	$2400/F(\text{kHz})$	300
0.490 - 1.705	$24000/F(\text{kHz})$	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 4.6.3-4.6.5 (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 maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)
- c) 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).
- d) 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).
- e) 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.

- f) Compare the resultant electric field strength level to the applicable limit.
- g) 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 $\geq 3 * \text{RBW}$.
- 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 $\geq 3 * \text{RBW}$.
- 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

Duty Cycle

Note: Not applicable.

Conducted Power

Note: Not applicable.

EIRP Power

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	EIRP Power (dBm)	EIRP Power (mW)	EIRP Limit (mW)	Verdict
11a	CH36	13.58	22.80	166	Pass
11a	CH44	13.95	24.83	166	Pass
11a	CH48	13.40	21.88	166	Pass
11n (HT20)	CH36	14.09	25.64	176	Pass
11n (HT20)	CH44	13.88	24.43	176	Pass
11n (HT20)	CH48	13.43	22.03	176	Pass
11n (HT40)	CH38	14.05	25.41	200	Pass
11n (HT40)	CH46	13.62	23.01	200	Pass

U-NII-2A (5250 - 5350 MHz)					
Mode	Channel	EIRP Power (dBm)	EIRP Power (mW)	EIRP Limit (mW)	Verdict
11a	CH52	13.15	20.65	830	Pass
11a	CH60	13.87	24.38	831	Pass
11a	CH64	13.79	23.93	831	Pass
11n (HT20)	CH52	13.95	24.83	883	Pass
11n (HT20)	CH60	13.35	21.63	882	Pass
11n (HT20)	CH64	13.77	23.82	883	Pass
11n (HT40)	CH54	14.07	25.53	1000	Pass
11n (HT40)	CH62	13.32	21.48	1000	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	EIRP Power (dBm)	EIRP Power (mW)	Verdict
11a	CH149	16.05	40.27	Pass
11a	CH157	15.80	38.02	Pass
11a	CH165	15.71	37.24	Pass
11n (HT20)	CH149	16.00	39.81	Pass
11n (HT20)	CH157	15.70	37.15	Pass
11n (HT20)	CH165	15.62	36.48	Pass
11n (HT40)	CH151	15.85	38.46	Pass
11n (HT40)	CH159	15.61	36.39	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Not applicable.

A.3 6 dB Bandwidth

Note: Not applicable.

A.4 Power Spectral Density

Conducted PSD

Note: Not applicable.

EIRP PSD

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	EIRP Limit (dBm/MHz)	Verdict
11a	CH36	2.81	10.00	Pass
11a	CH44	2.12	10.00	Pass
11a	CH48	2.69	10.00	Pass
11n (HT20)	CH36	2.73	10.00	Pass
11n (HT20)	CH44	2.40	10.00	Pass
11n (HT20)	CH48	2.03	10.00	Pass
11n (HT40)	CH38	-1.39	10.00	Pass
11n (HT40)	CH46	-1.46	10.00	Pass

U-NII-2A (5250 - 5350 MHz)			
Mode	Channel	PSD (dBm/MHz)	Verdict
11a	CH52	2.47	Pass
11a	CH60	2.16	Pass
11a	CH64	1.99	Pass
11n (HT20)	CH52	2.04	Pass
11n (HT20)	CH60	1.89	Pass
11n (HT20)	CH64	1.75	Pass
11n (HT40)	CH54	-1.43	Pass
11n (HT40)	CH62	-1.79	Pass

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	PSD (dBm/MHz)	Verdict
11a	CH149	1.21	Pass
11a	CH157	1.27	Pass
11a	CH165	1.38	Pass
11n (HT20)	CH149	1.02	Pass
11n (HT20)	CH157	1.03	Pass
11n (HT20)	CH165	0.93	Pass
11n (HT40)	CH151	-2.52	Pass
11n (HT40)	CH159	-2.36	Pass

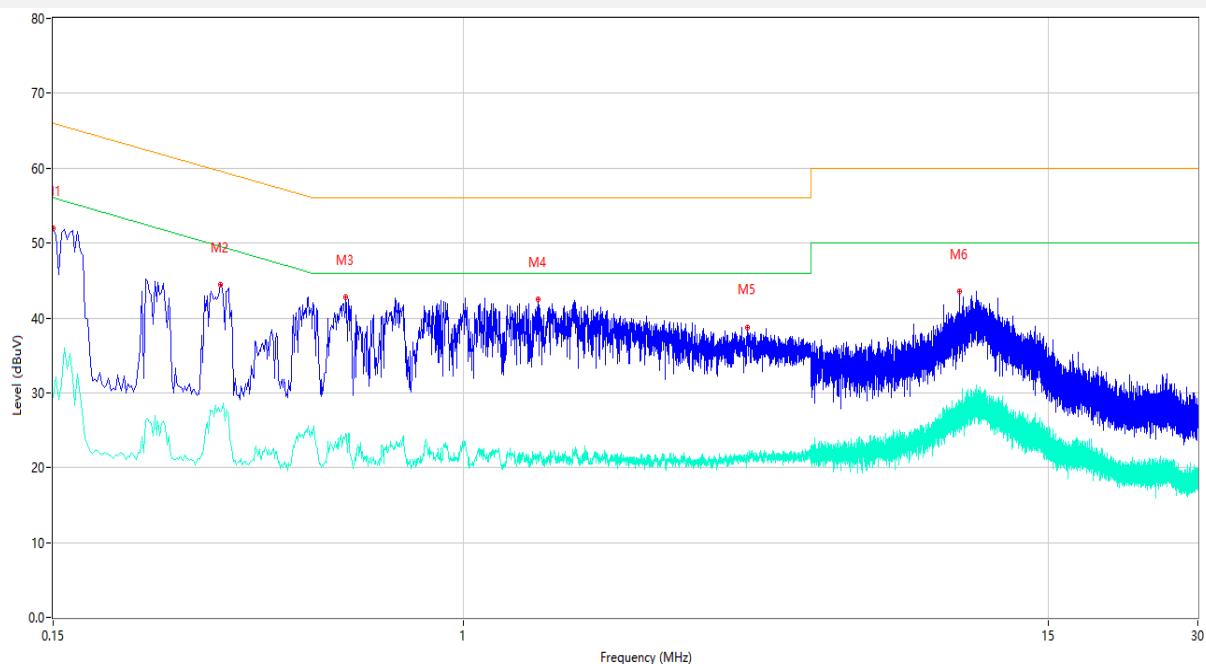
A.5 Conducted Emission

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

Note 2: 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.

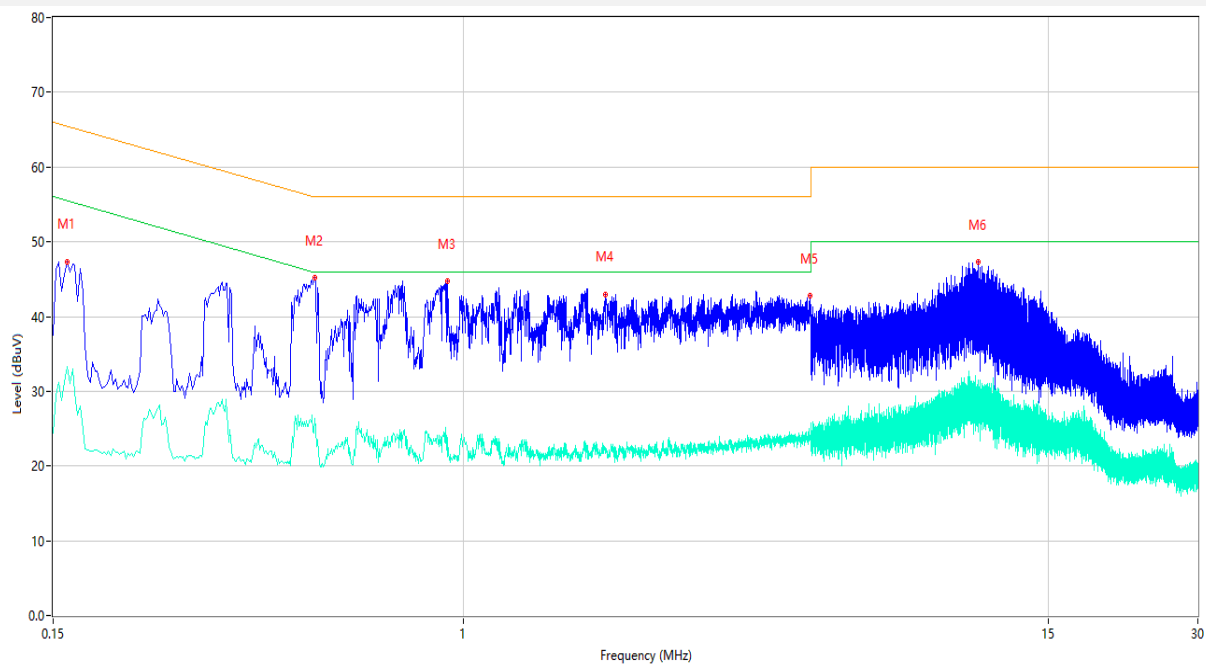
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	51.92	9.83	66.00	14.08	Peak	L	Pass
1**	0.150	29.43	9.83	56.00	26.57	AV	L	Pass
2	0.326	44.46	9.77	59.55	15.09	Peak	L	Pass
2**	0.326	27.42	9.77	49.55	22.13	AV	L	Pass
3	0.582	42.79	9.75	56.00	13.21	Peak	L	Pass
3**	0.582	24.51	9.75	46.00	21.49	AV	L	Pass
4	1.418	42.44	9.73	56.00	13.56	Peak	L	Pass
4**	1.418	21.65	9.73	46.00	24.35	AV	L	Pass
5	3.730	38.79	9.62	56.00	17.21	Peak	L	Pass
5**	3.730	21.47	9.62	46.00	24.53	AV	L	Pass
6	9.964	43.56	9.16	60.00	16.44	Peak	L	Pass
6**	9.964	28.90	9.16	50.00	21.10	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.160	47.38	9.73	65.46	18.08	Peak	N	Pass
1**	0.160	33.27	9.73	55.46	22.19	AV	N	Pass
2	0.504	45.14	9.75	56.00	10.86	Peak	N	Pass
2**	0.504	26.34	9.75	46.00	19.66	AV	N	Pass
3	0.930	44.78	9.72	56.00	11.22	Peak	N	Pass
3**	0.930	23.69	9.72	46.00	22.31	AV	N	Pass
4	1.936	42.99	9.76	56.00	13.01	Peak	N	Pass
4**	1.936	22.09	9.76	46.00	23.91	AV	N	Pass
5	4.982	42.72	9.60	56.00	13.28	Peak	N	Pass
5**	4.982	23.73	9.60	46.00	22.27	AV	N	Pass
6	10.852	47.28	9.13	60.00	12.72	Peak	N	Pass
6**	10.852	31.44	9.13	50.00	18.56	AV	N	Pass

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

A.6.1 Radiated Spurious Emissions

Test Data

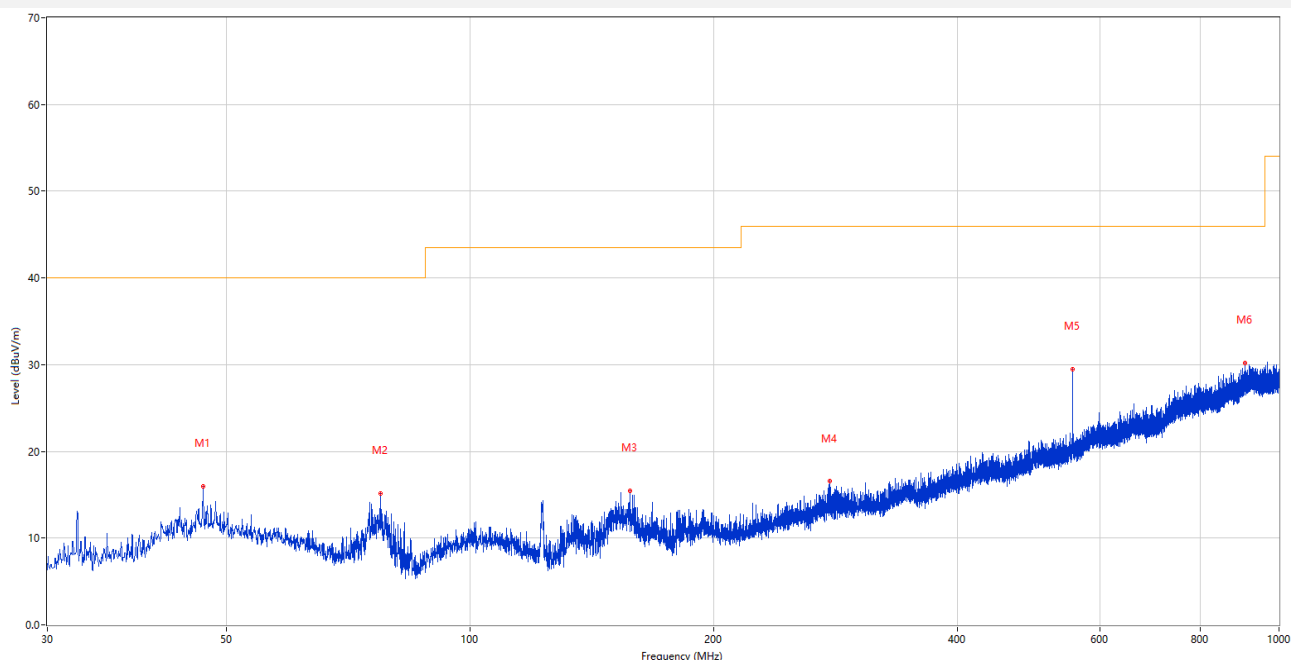
Note 1: The symbol of "--" in the table which means not application.

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 low 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.

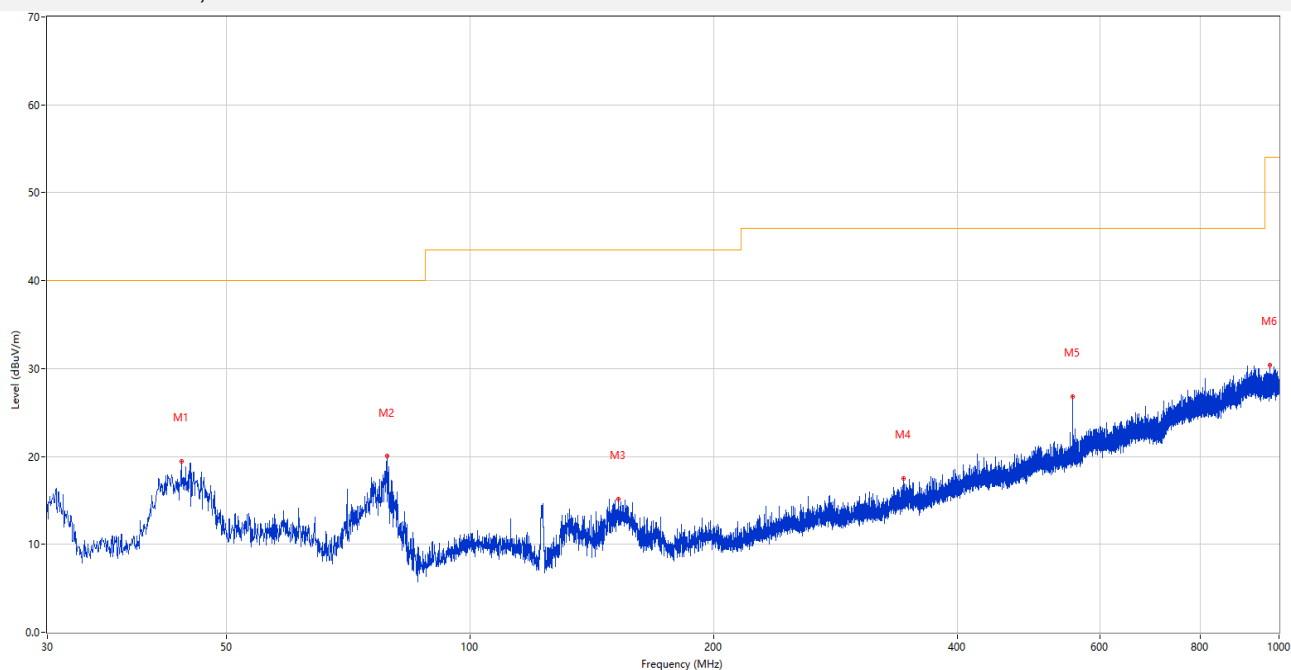
Note 4: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

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	46.733	15.94	-25.84	40.0	24.06	Peak	316.00	200	Horizontal	Pass
2	77.481	15.15	-31.73	40.0	24.85	Peak	101.00	200	Horizontal	Pass
3	157.555	15.47	-29.70	43.5	28.03	Peak	80.00	100	Horizontal	Pass
4	278.029	16.53	-24.49	46.0	29.47	Peak	269.00	100	Horizontal	Pass
5	556.031	29.50	-17.47	46.0	16.50	Peak	359.00	200	Horizontal	Pass
6	908.238	30.17	-9.54	46.0	15.83	Peak	79.00	200	Horizontal	Pass

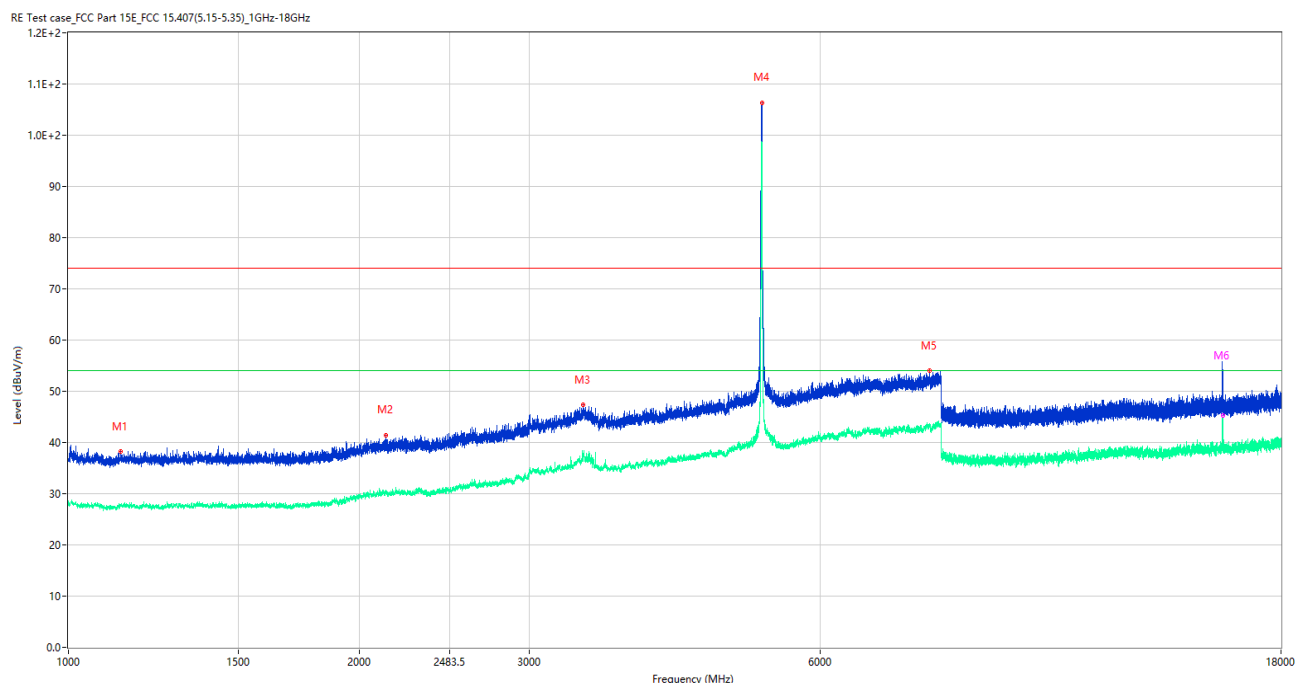
30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	43.968	19.48	-26.20	40.0	20.52	Peak	234.00	100	Vertical	Pass
2	78.888	20.02	-31.84	40.0	19.98	Peak	221.00	100	Vertical	Pass
3	152.317	15.20	-30.10	43.5	28.30	Peak	56.00	100	Vertical	Pass
4	343.698	17.47	-22.25	46.0	28.53	Peak	288.00	100	Vertical	Pass
5	556.031	26.85	-17.47	46.0	19.15	Peak	31.00	200	Vertical	Pass
6	974.247	30.42	-9.24	54.0	23.58	Peak	94.00	100	Vertical	Pass

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

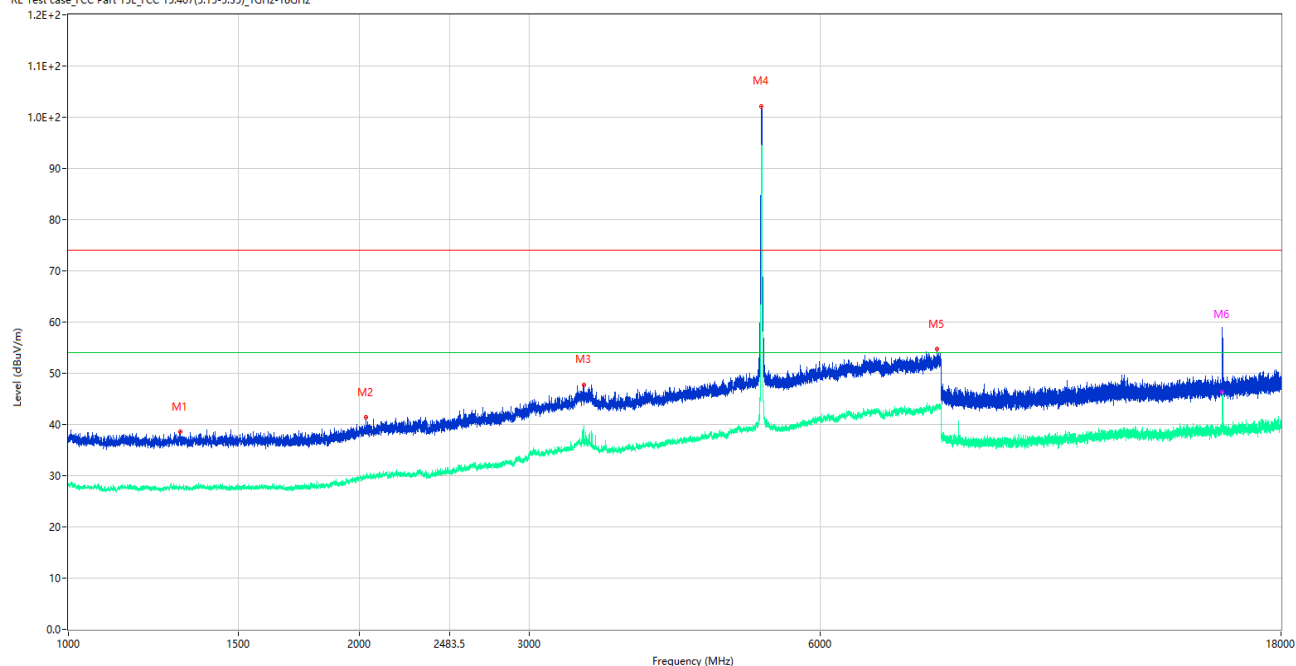
11a, U-NII-1, 1 GHz to 18 GHz, Middle Channel, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1133.250	38.19	-15.56	74.0	35.81	Peak	348.00	150	Horizontal	Pass
1**	1133.250	27.73	-15.56	54.0	26.27	AV	348.00	150	Horizontal	Pass
2	2133.250	41.45	-13.38	74.0	32.55	Peak	28.00	150	Horizontal	Pass
2**	2133.250	30.18	-13.38	54.0	23.82	AV	28.00	150	Horizontal	Pass
3	3413.500	47.34	-5.27	74.0	26.66	Peak	292.00	150	Horizontal	Pass
3**	3413.500	37.71	-5.27	54.0	16.29	AV	292.00	150	Horizontal	Pass
4	5221.000	106.36	-2.36	74.0	-32.36	Peak	185.00	150	Horizontal	N/A
4**	5221.000	97.81	-2.36	54.0	-43.81	AV	185.00	150	Horizontal	N/A
5	7796.000	53.98	1.69	74.0	20.02	Peak	242.00	150	Horizontal	Pass
5**	7796.000	43.54	1.69	54.0	10.46	AV	242.00	150	Horizontal	Pass
6	15661.125	52.72	-1.51	74.0	21.28	Peak	110.00	150	Horizontal	Pass
6**	15661.125	45.27	-1.51	54.0	8.73	AV	110.00	150	Horizontal	Pass

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

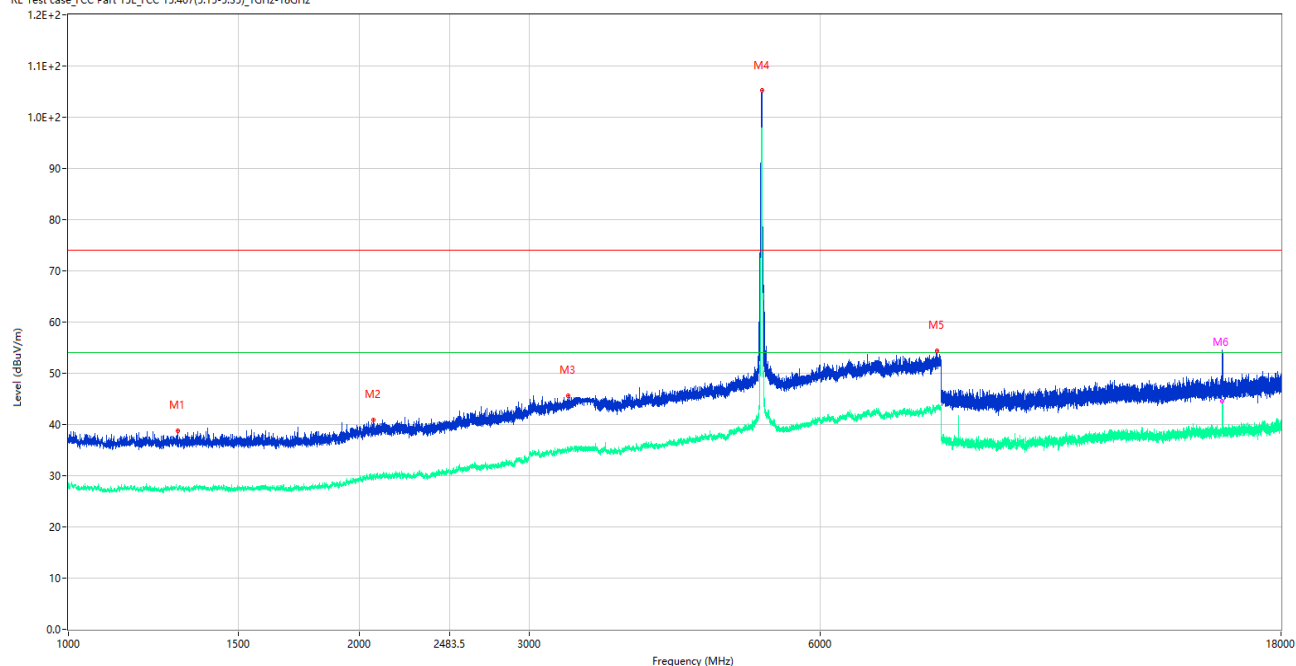
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1304.500	38.56	-15.59	74.0	35.44	Peak	16.00	150	Vertical	Pass
1**	1304.500	27.74	-15.59	54.0	26.26	AV	16.00	150	Vertical	Pass
2	2033.750	41.36	-13.44	74.0	32.64	Peak	335.00	150	Vertical	Pass
2**	2033.750	30.08	-13.44	54.0	23.92	AV	335.00	150	Vertical	Pass
3	3415.000	47.77	-5.19	74.0	26.23	Peak	172.00	150	Vertical	Pass
3**	3415.000	39.78	-5.19	54.0	14.22	AV	172.00	150	Vertical	Pass
4	5218.000	102.16	-2.38	74.0	-28.16	Peak	114.00	150	Vertical	N/A
4**	5218.000	93.99	-2.38	54.0	-39.99	AV	114.00	150	Vertical	N/A
5	7930.000	54.67	2.03	74.0	19.33	Peak	231.00	150	Vertical	Pass
5**	7930.000	43.49	2.03	54.0	10.51	AV	231.00	150	Vertical	Pass
6	15657.713	53.17	-1.38	74.0	20.83	Peak	345.00	150	Vertical	Pass
6**	15657.713	46.30	-1.38	54.0	7.70	AV	345.00	150	Vertical	Pass

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

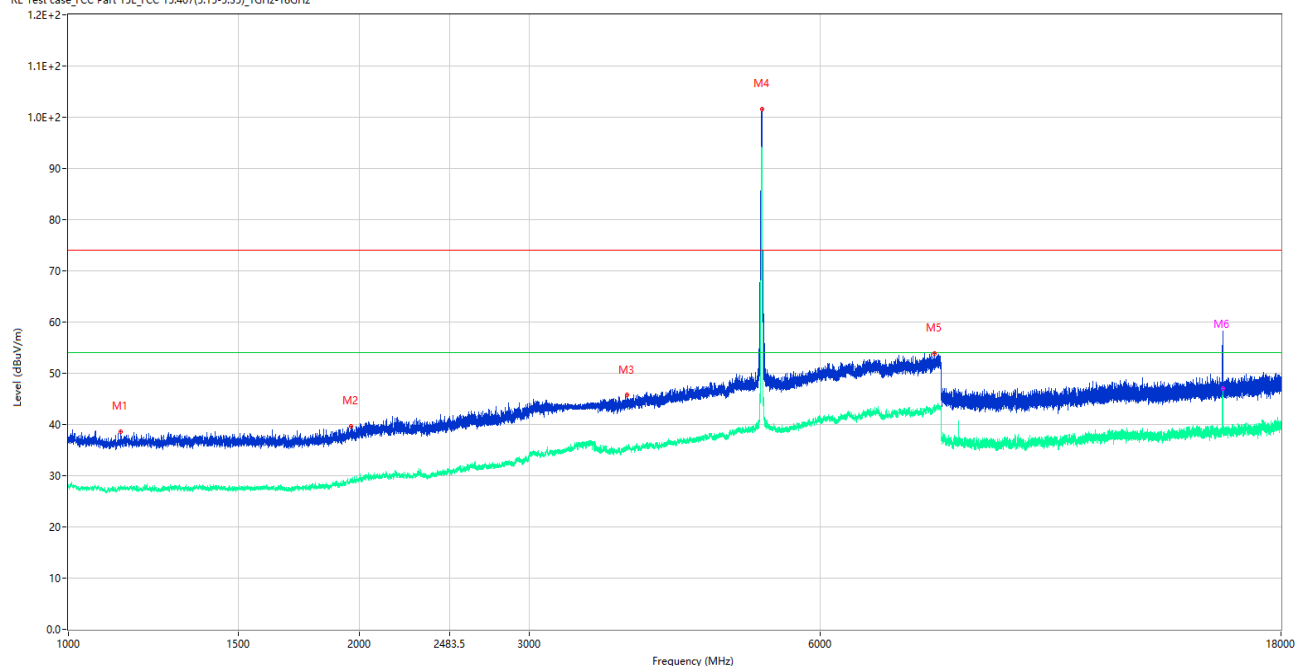
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1298.750	38.85	-15.63	74.0	35.15	Peak	214.00	150	Horizontal	Pass
1**	1298.750	27.43	-15.63	54.0	26.57	AV	214.00	150	Horizontal	Pass
2	2069.000	40.89	-13.79	74.0	33.11	Peak	192.00	150	Horizontal	Pass
2**	2069.000	29.44	-13.79	54.0	24.56	AV	192.00	150	Horizontal	Pass
3	3290.000	45.66	-6.78	74.0	28.34	Peak	35.00	150	Horizontal	Pass
3**	3290.000	35.35	-6.78	54.0	18.65	AV	35.00	150	Horizontal	Pass
4	5223.000	105.21	-2.35	74.0	-31.21	Peak	173.00	150	Horizontal	N/A
4**	5223.000	97.47	-2.35	54.0	-43.47	AV	173.00	150	Horizontal	N/A
5	7929.500	54.47	2.01	74.0	19.53	Peak	360.00	150	Horizontal	Pass
5**	7929.500	43.58	2.01	54.0	10.42	AV	360.00	150	Horizontal	Pass
6	15659.550	50.47	-1.44	74.0	23.53	Peak	143.00	150	Horizontal	Pass
6**	15659.550	44.51	-1.44	54.0	9.49	AV	143.00	150	Horizontal	Pass

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

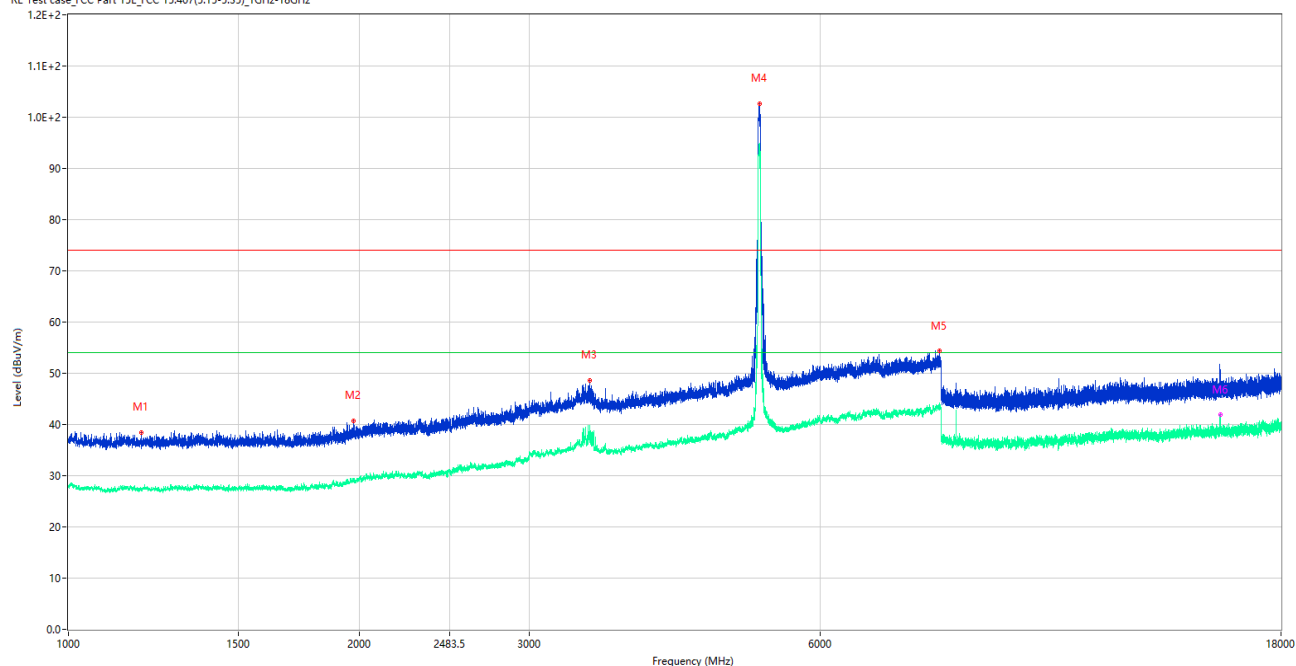
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1133.250	38.67	-15.56	74.0	35.33	Peak	0.00	150	Vertical	Pass
1**	1133.250	27.52	-15.56	54.0	26.48	AV	0.00	150	Vertical	Pass
2	1963.250	39.66	-14.99	74.0	34.34	Peak	0.00	150	Vertical	Pass
2**	1963.250	29.49	-14.99	54.0	24.51	AV	0.00	150	Vertical	Pass
3	3790.000	45.77	-5.24	74.0	28.23	Peak	3.00	150	Vertical	Pass
3**	3790.000	35.41	-5.24	54.0	18.59	AV	3.00	150	Vertical	Pass
4	5221.500	101.63	-2.37	74.0	-27.63	Peak	105.00	150	Vertical	N/A
4**	5221.500	94.06	-2.37	54.0	-40.06	AV	105.00	150	Vertical	N/A
5	7882.000	53.94	1.35	74.0	20.06	Peak	35.00	150	Vertical	Pass
5**	7882.000	42.57	1.35	54.0	11.43	AV	35.00	150	Vertical	Pass
6	15662.701	54.18	-1.45	74.0	19.82	Peak	360.00	150	Vertical	Pass
6**	15662.701	47.09	-1.45	54.0	6.91	AV	360.00	150	Vertical	Pass

11n40, U-NII-1, 1 GHz to 18 GHz, Low Channel, ANT H

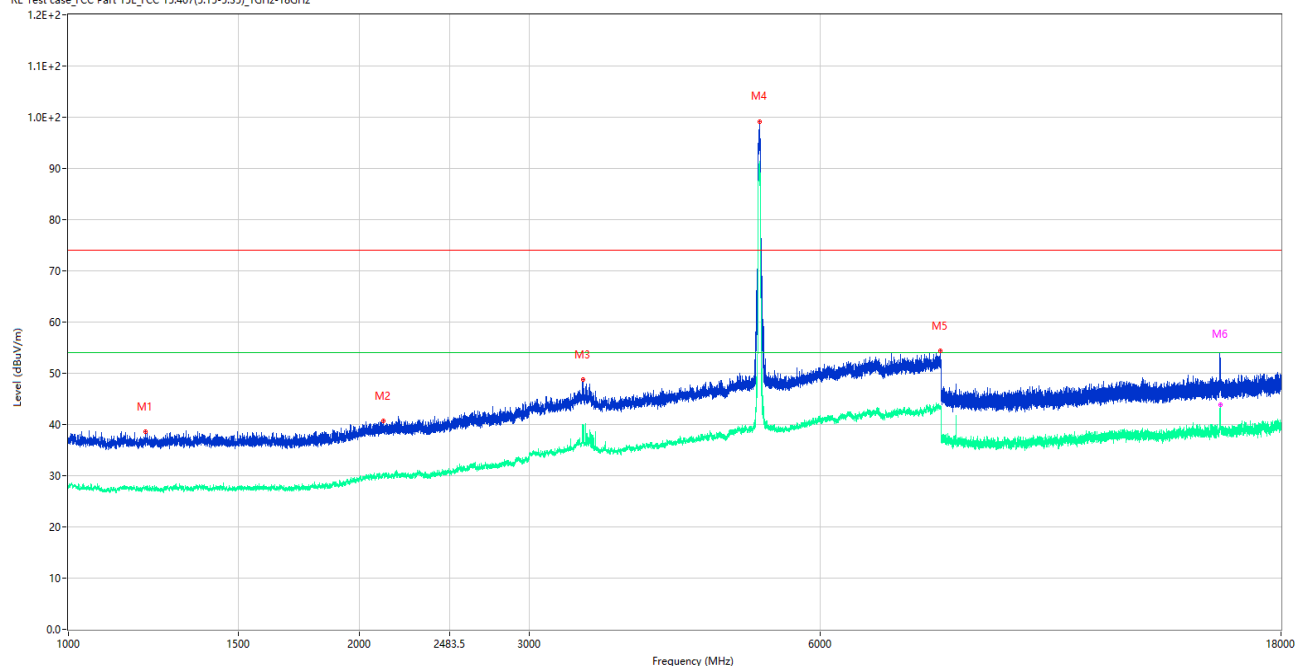
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1190.750	38.50	-15.83	74.0	35.50	Peak	337.00	150	Horizontal	Pass
1**	1190.750	27.20	-15.83	54.0	26.80	AV	337.00	150	Horizontal	Pass
2	1972.000	40.71	-14.83	74.0	33.29	Peak	347.00	150	Horizontal	Pass
2**	1972.000	29.29	-14.83	54.0	24.71	AV	347.00	150	Horizontal	Pass
3	3462.500	48.63	-5.06	74.0	25.37	Peak	106.00	150	Horizontal	Pass
3**	3462.500	39.77	-5.06	54.0	14.23	AV	106.00	150	Horizontal	Pass
4	5192.000	102.64	-2.30	74.0	-28.64	Peak	182.00	150	Horizontal	N/A
4**	5192.000	94.64	-2.30	54.0	-40.64	AV	182.00	150	Horizontal	N/A
5	7983.000	54.38	1.97	74.0	19.62	Peak	231.00	150	Horizontal	Pass
5**	7983.000	43.37	1.97	54.0	10.63	AV	231.00	150	Horizontal	Pass
6	15572.662	49.36	-2.60	74.0	24.64	Peak	144.00	150	Horizontal	Pass
6**	15572.662	41.90	-2.60	54.0	12.10	AV	144.00	150	Horizontal	Pass

11n40, U-NII-1, 1 GHz to 18 GHz, Low Channel, ANT V

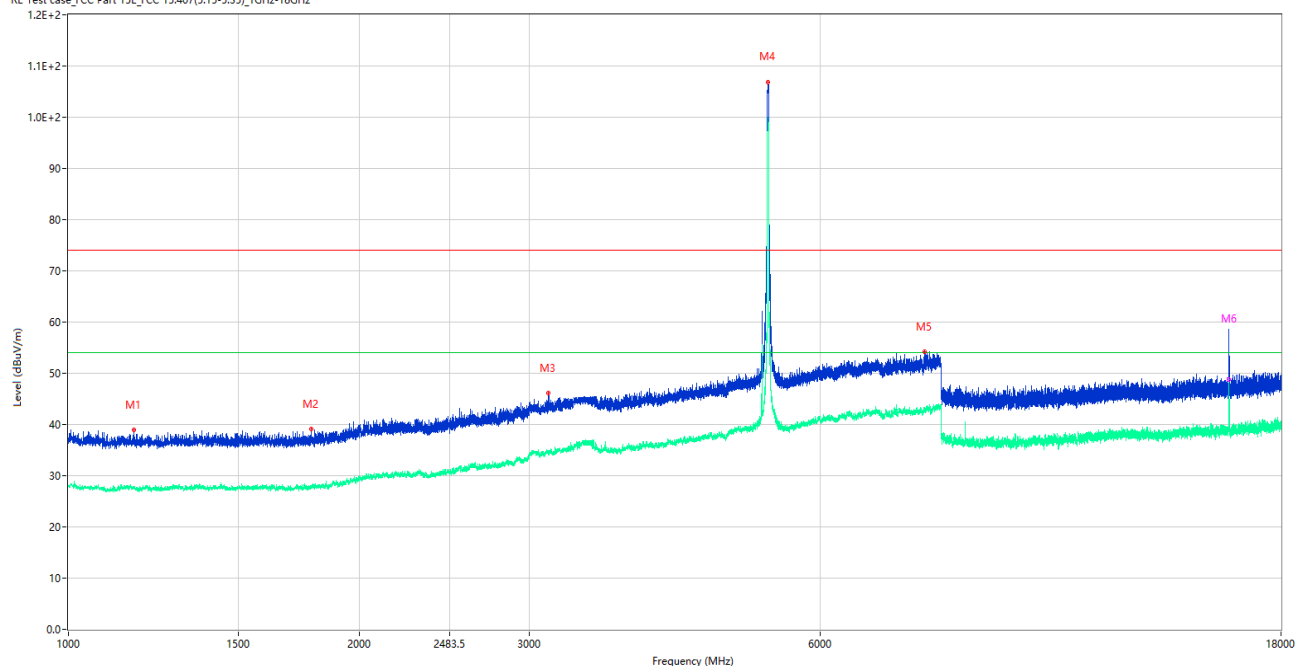
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1202.750	38.65	-15.75	74.0	35.35	Peak	239.00	150	Vertical	Pass
1**	1202.750	27.37	-15.75	54.0	26.63	AV	239.00	150	Vertical	Pass
2	2120.000	40.69	-13.38	74.0	33.31	Peak	102.00	150	Vertical	Pass
2**	2120.000	30.18	-13.38	54.0	23.82	AV	102.00	150	Vertical	Pass
3	3410.500	48.72	-5.31	74.0	25.28	Peak	360.00	150	Vertical	Pass
3**	3410.500	37.80	-5.31	54.0	16.20	AV	360.00	150	Vertical	Pass
4	5191.500	99.21	-2.30	74.0	-25.21	Peak	95.00	150	Vertical	N/A
4**	5191.500	90.64	-2.30	54.0	-36.64	AV	95.00	150	Vertical	N/A
5	7984.500	54.38	1.92	74.0	19.62	Peak	360.00	150	Vertical	Pass
5**	7984.500	43.28	1.92	54.0	10.72	AV	360.00	150	Vertical	Pass
6	15578.174	49.87	-2.37	74.0	24.13	Peak	360.00	150	Vertical	Pass
6**	15578.174	43.79	-2.37	54.0	10.21	AV	360.00	150	Vertical	Pass

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

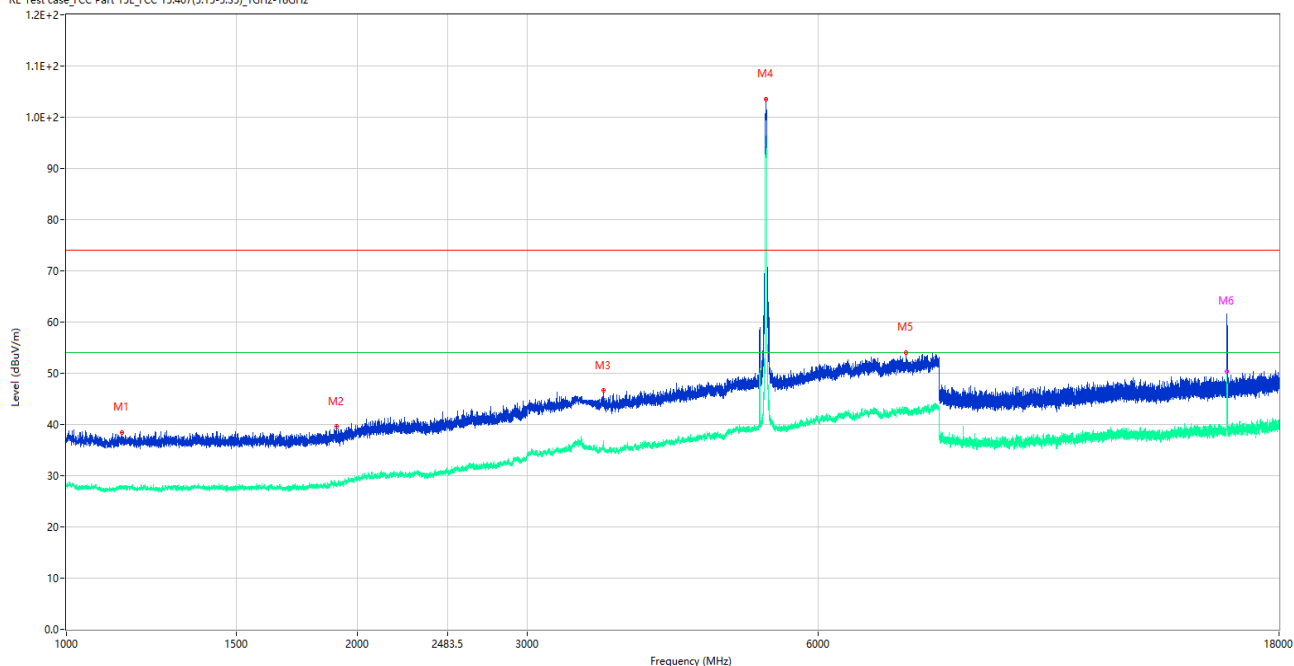
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1169.250	38.89	-15.51	74.0	35.11	Peak	107.00	150	Horizontal	Pass
1**	1169.250	27.79	-15.51	54.0	26.21	AV	107.00	150	Horizontal	Pass
2	1782.500	39.04	-16.04	74.0	34.96	Peak	263.00	150	Horizontal	Pass
2**	1782.500	27.94	-16.04	54.0	26.06	AV	263.00	150	Horizontal	Pass
3	3136.500	46.09	-7.66	74.0	27.91	Peak	221.00	150	Horizontal	Pass
3**	3136.500	34.57	-7.66	54.0	19.43	AV	221.00	150	Horizontal	Pass
4	5303.500	106.89	-2.02	74.0	-32.89	Peak	191.00	150	Horizontal	N/A
4**	5303.500	98.96	-2.02	54.0	-44.96	AV	191.00	150	Horizontal	N/A
5	7693.500	54.17	1.22	74.0	19.83	Peak	82.00	150	Horizontal	Pass
5**	7693.500	42.87	1.22	54.0	11.13	AV	82.00	150	Horizontal	Pass
6	15897.900	54.02	-1.78	74.0	19.98	Peak	142.00	150	Horizontal	Pass
6**	15897.900	48.71	-1.78	54.0	5.29	AV	142.00	150	Horizontal	Pass

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

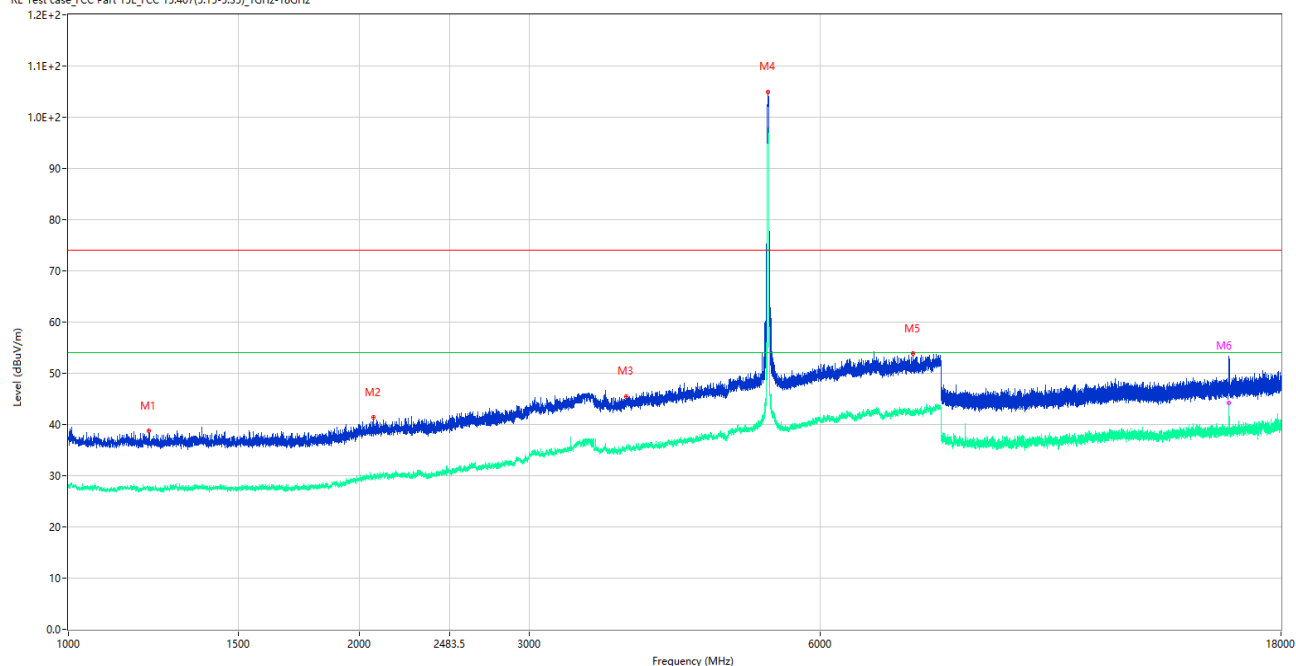
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1141.000	38.37	-15.58	74.0	35.63	Peak	235.00	150	Vertical	Pass
1**	1141.000	27.45	-15.58	54.0	26.55	AV	235.00	150	Vertical	Pass
2	1906.000	39.60	-15.49	74.0	34.40	Peak	104.00	150	Vertical	Pass
2**	1906.000	28.18	-15.49	54.0	25.82	AV	104.00	150	Vertical	Pass
3	3599.500	46.69	-4.99	74.0	27.31	Peak	107.00	150	Vertical	Pass
3**	3599.500	36.06	-4.99	54.0	17.94	AV	107.00	150	Vertical	Pass
4	5298.500	150.19	-2.03	74.0	-26.19	Peak	107.00	150	Vertical	N/A
4**	5298.500	94.35	-2.03	54.0	-40.35	AV	107.00	150	Vertical	N/A
5	7405.500	54.07	0.76	74.0	19.93	Peak	126.00	150	Vertical	Pass
5**	7405.500	42.85	0.76	54.0	11.15	AV	126.00	150	Vertical	Pass
6	15899.475	58.69	-1.84	74.0	15.31	Peak	360.00	150	Vertical	Pass
6**	15899.475	50.35	-1.84	54.0	3.65	AV	360.00	150	Vertical	Pass

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

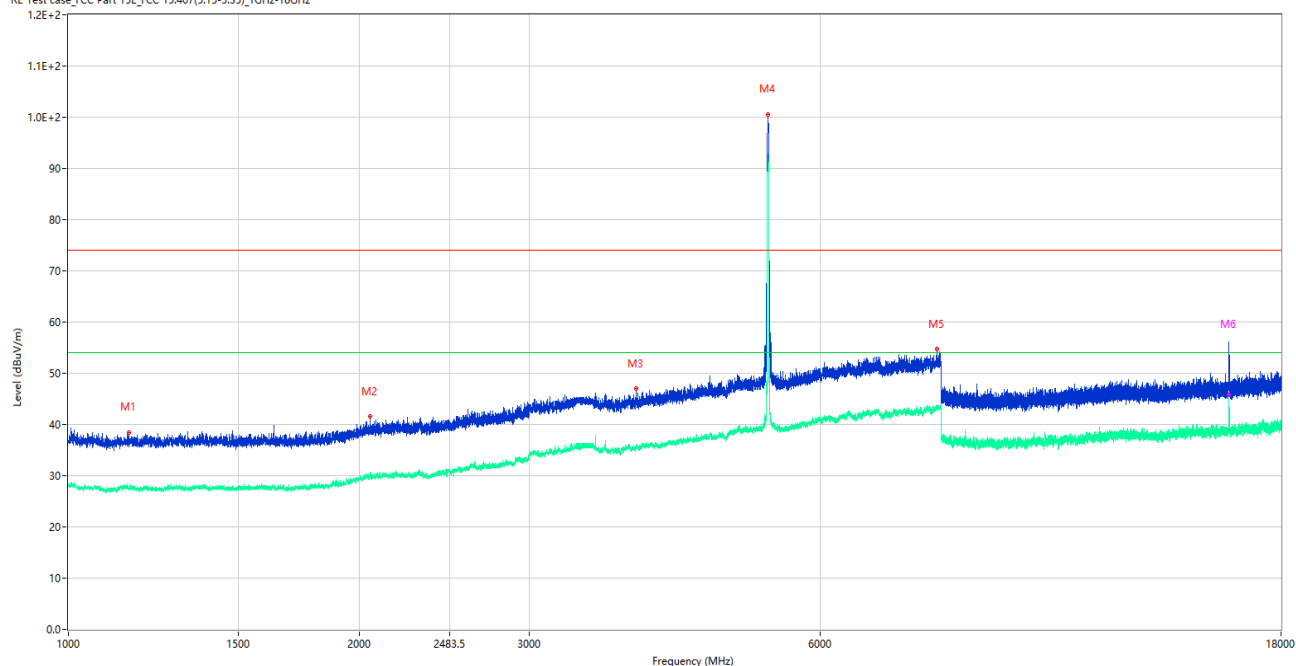
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1212.250	38.69	-15.89	74.0	35.31	Peak	0.00	150	Horizontal	Pass
1**	1212.250	27.16	-15.89	54.0	26.84	AV	0.00	150	Horizontal	Pass
2	2070.750	41.36	-13.74	74.0	32.64	Peak	24.00	150	Horizontal	Pass
2**	2070.750	29.80	-13.74	54.0	24.20	AV	24.00	150	Horizontal	Pass
3	3781.000	45.42	-5.38	74.0	28.58	Peak	360.00	150	Horizontal	Pass
3**	3781.000	35.54	-5.38	54.0	18.46	AV	360.00	150	Horizontal	Pass
4	5298.000	105.00	-2.04	74.0	-31.00	Peak	173.00	150	Horizontal	N/A
4**	5298.000	97.58	-2.04	54.0	-43.58	AV	173.00	150	Horizontal	N/A
5	7485.500	53.80	0.62	74.0	20.20	Peak	252.00	150	Horizontal	Pass
5**	7485.500	42.40	0.62	54.0	11.60	AV	252.00	150	Horizontal	Pass
6	15900.787	50.39	-1.94	74.0	23.61	Peak	212.00	150	Horizontal	Pass
6**	15900.787	44.14	-1.94	54.0	9.86	AV	212.00	150	Horizontal	Pass

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

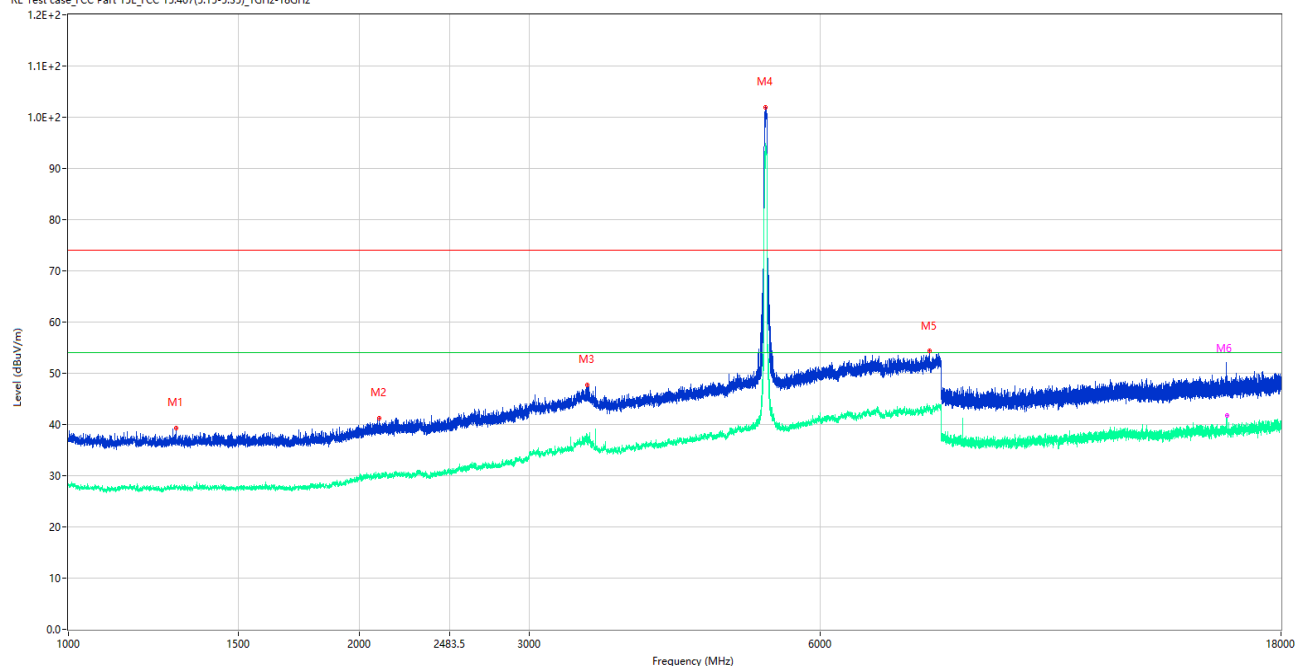
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1156.000	38.50	-15.60	74.0	35.50	Peak	124.00	150	Vertical	Pass
1**	1156.000	27.45	-15.60	54.0	26.55	AV	124.00	150	Vertical	Pass
2	2052.250	41.51	-13.73	74.0	32.49	Peak	16.00	150	Vertical	Pass
2**	2052.250	30.47	-13.73	54.0	23.53	AV	16.00	150	Vertical	Pass
3	3871.000	47.06	-5.14	74.0	26.94	Peak	72.00	150	Vertical	Pass
3**	3871.000	35.89	-5.14	54.0	18.11	AV	72.00	150	Vertical	Pass
4	5298.500	150.61	-2.03	74.0	-26.61	Peak	63.00	150	Vertical	N/A
4**	5298.500	91.72	-2.03	54.0	-37.72	AV	63.00	150	Vertical	N/A
5	7935.000	54.71	2.06	74.0	19.29	Peak	142.00	150	Vertical	Pass
5**	7935.000	43.29	2.06	54.0	10.71	AV	142.00	150	Vertical	Pass
6	15897.900	53.29	-1.78	74.0	20.71	Peak	0.00	150	Vertical	Pass
6**	15897.900	45.78	-1.78	54.0	8.22	AV	0.00	150	Vertical	Pass

11n40, U-NII-2A, 1 GHz to 18 GHz, Low Channel, ANT H

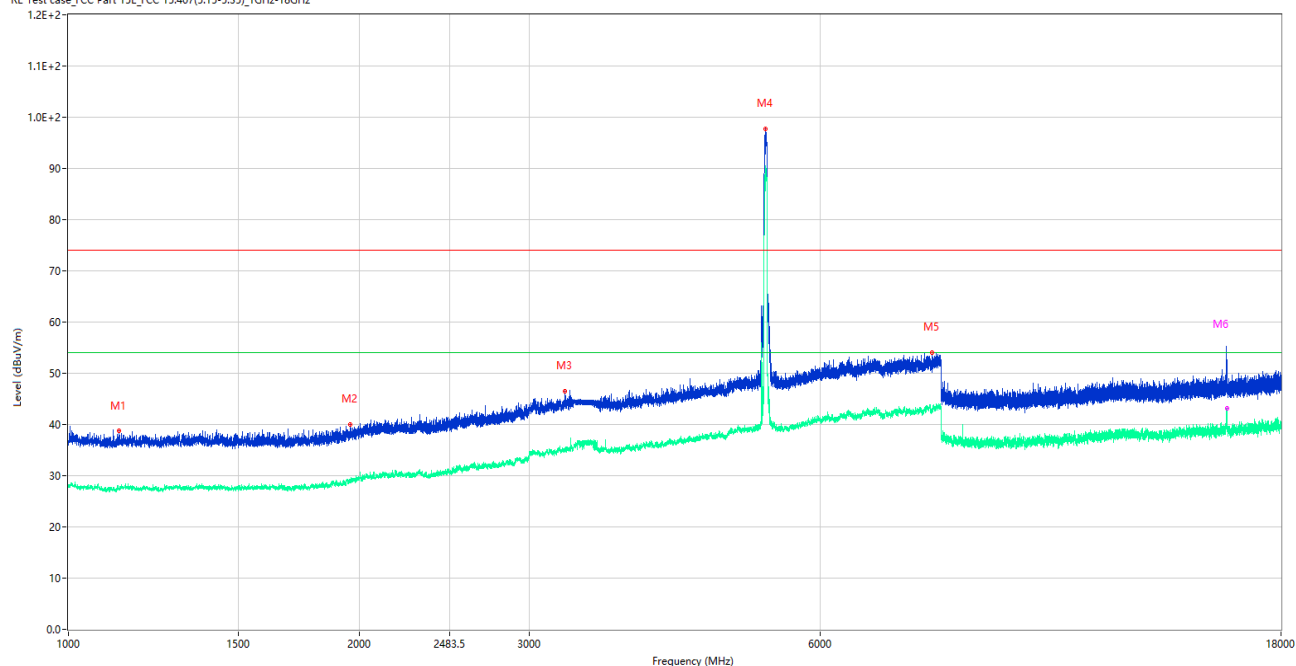
RE Test case_FCC Part 15E_FCC 15.407(5.15-5.35)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1291.750	39.36	-15.82	74.0	34.64	Peak	0.00	150	Horizontal	Pass
1**	1291.750	27.86	-15.82	54.0	26.14	AV	0.00	150	Horizontal	Pass
2	2097.500	41.26	-13.60	74.0	32.74	Peak	266.00	150	Horizontal	Pass
2**	2097.500	30.33	-13.60	54.0	23.67	AV	266.00	150	Horizontal	Pass
3	3447.000	47.76	-5.15	74.0	26.24	Peak	172.00	150	Horizontal	Pass
3**	3447.000	37.15	-5.15	54.0	16.85	AV	172.00	150	Horizontal	Pass
4	5272.000	101.93	-2.42	74.0	-27.93	Peak	181.00	150	Horizontal	N/A
4**	5272.000	94.86	-2.42	54.0	-40.86	AV	181.00	150	Horizontal	N/A
5	7785.500	54.31	1.55	74.0	19.69	Peak	321.00	150	Horizontal	Pass
5**	7785.500	43.36	1.55	54.0	10.64	AV	321.00	150	Horizontal	Pass
6	15819.412	47.19	-1.72	74.0	26.81	Peak	282.00	150	Horizontal	Pass
6**	15819.412	41.69	-1.72	54.0	12.31	AV	282.00	150	Horizontal	Pass

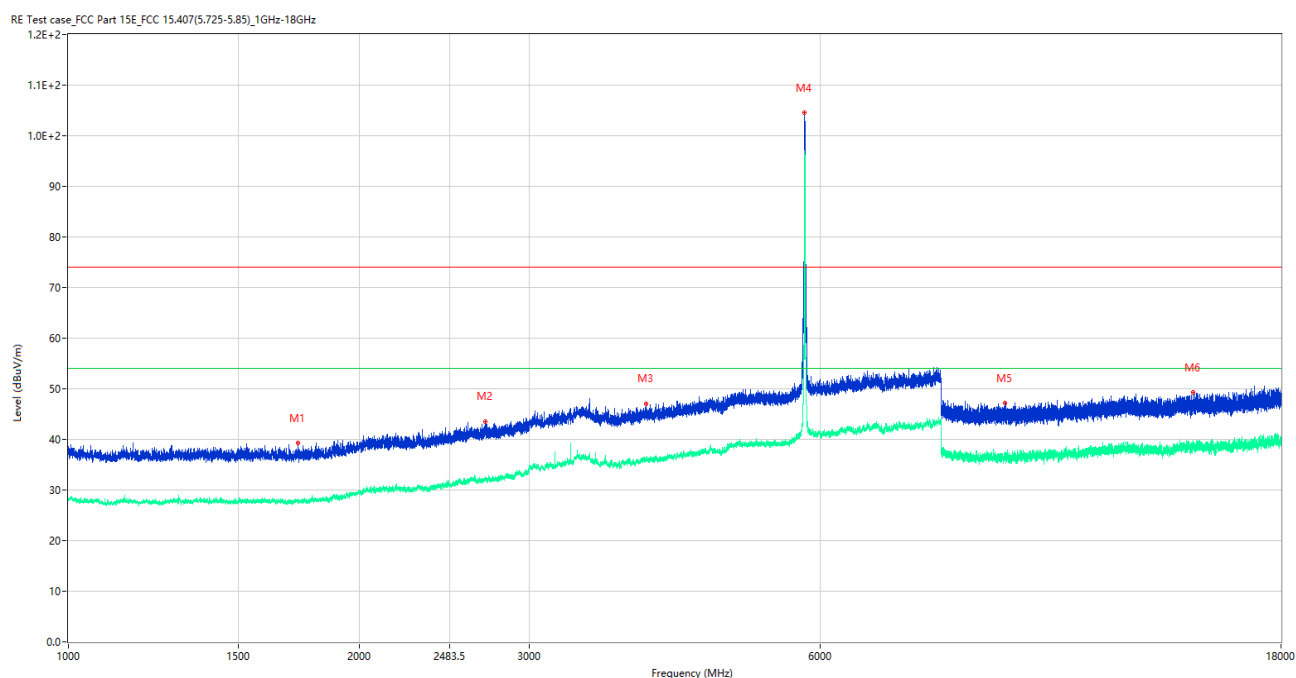
11n40, U-NII-2A, 1 GHz to 18 GHz, Low Channel, ANT V

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	1128.500	38.74	-15.57	74.0	35.26	Peak	186.00	150	Vertical	Pass
1**	1128.500	27.37	-15.57	54.0	26.63	AV	186.00	150	Vertical	Pass
2	1959.500	40.03	-14.95	74.0	33.97	Peak	1.00	150	Vertical	Pass
2**	1959.500	29.01	-14.95	54.0	24.99	AV	1.00	150	Vertical	Pass
3	3264.500	46.40	-6.91	74.0	27.60	Peak	43.00	150	Vertical	Pass
3**	3264.500	35.03	-6.91	54.0	18.97	AV	43.00	150	Vertical	Pass
4	5268.000	97.80	-2.42	74.0	-23.80	Peak	102.00	150	Vertical	N/A
4**	5268.000	90.35	-2.42	54.0	-36.35	AV	102.00	150	Vertical	N/A
5	7830.000	54.04	1.58	74.0	19.96	Peak	211.00	150	Vertical	Pass
5**	7830.000	42.61	1.58	54.0	11.39	AV	211.00	150	Vertical	Pass
6	15818.362	50.76	-1.74	74.0	23.24	Peak	0.00	150	Vertical	Pass
6**	15818.362	43.09	-1.74	54.0	10.91	AV	0.00	150	Vertical	Pass

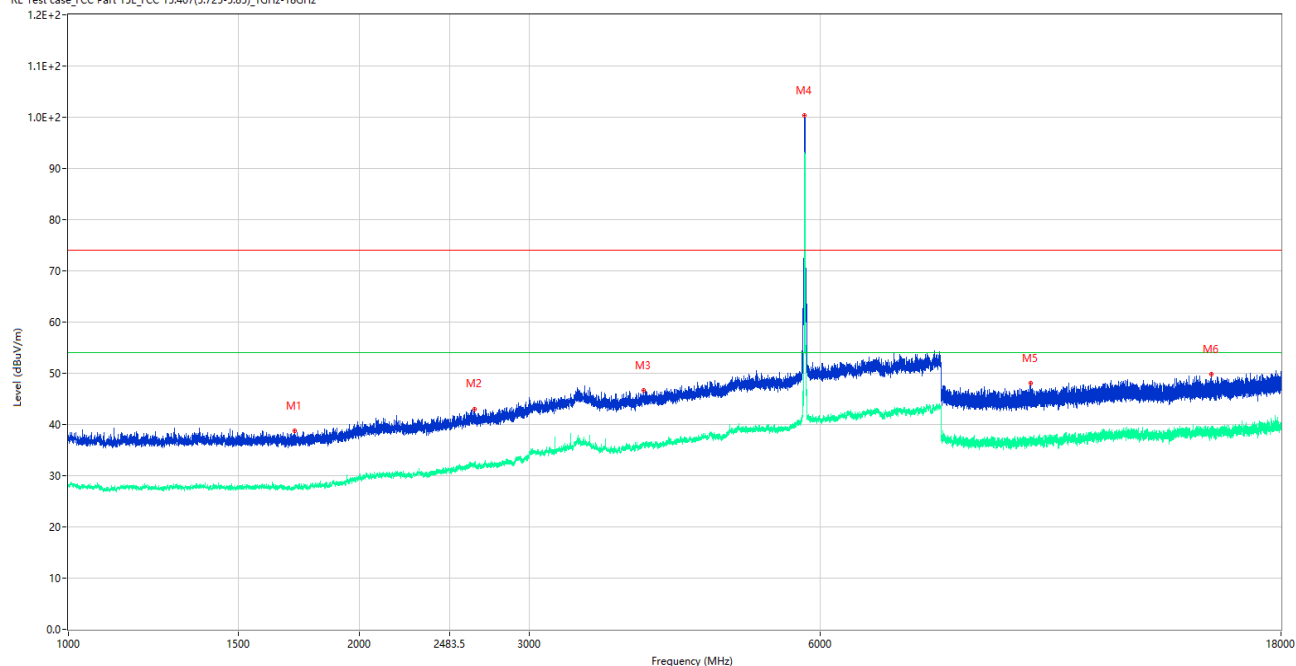
11a, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1729.250	39.30	-16.18	74.0	34.70	Peak	123.00	150	Horizontal	Pass
1**	1729.250	27.63	-16.18	54.0	26.37	AV	123.00	150	Horizontal	Pass
2	2699.500	43.54	-10.51	74.0	30.46	Peak	360.00	150	Horizontal	Pass
2**	2699.500	32.20	-10.51	54.0	21.80	AV	360.00	150	Horizontal	Pass
3	3967.000	46.96	-3.86	74.0	27.04	Peak	77.00	150	Horizontal	Pass
3**	3967.000	36.23	-3.86	54.0	17.77	AV	77.00	150	Horizontal	Pass
4	5784.000	104.52	-1.54	74.0	-30.52	Peak	187.00	150	Horizontal	N/A
4**	5784.000	96.93	-1.54	54.0	-42.93	AV	187.00	150	Horizontal	N/A
5	9314.326	47.11	-5.43	74.0	26.89	Peak	51.00	150	Horizontal	Pass
5**	9314.326	36.67	-5.43	54.0	17.33	AV	51.00	150	Horizontal	Pass
6	14594.062	49.27	-2.22	74.0	24.73	Peak	82.00	150	Horizontal	Pass
6**	14594.062	38.96	-2.22	54.0	15.04	AV	82.00	150	Horizontal	Pass

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

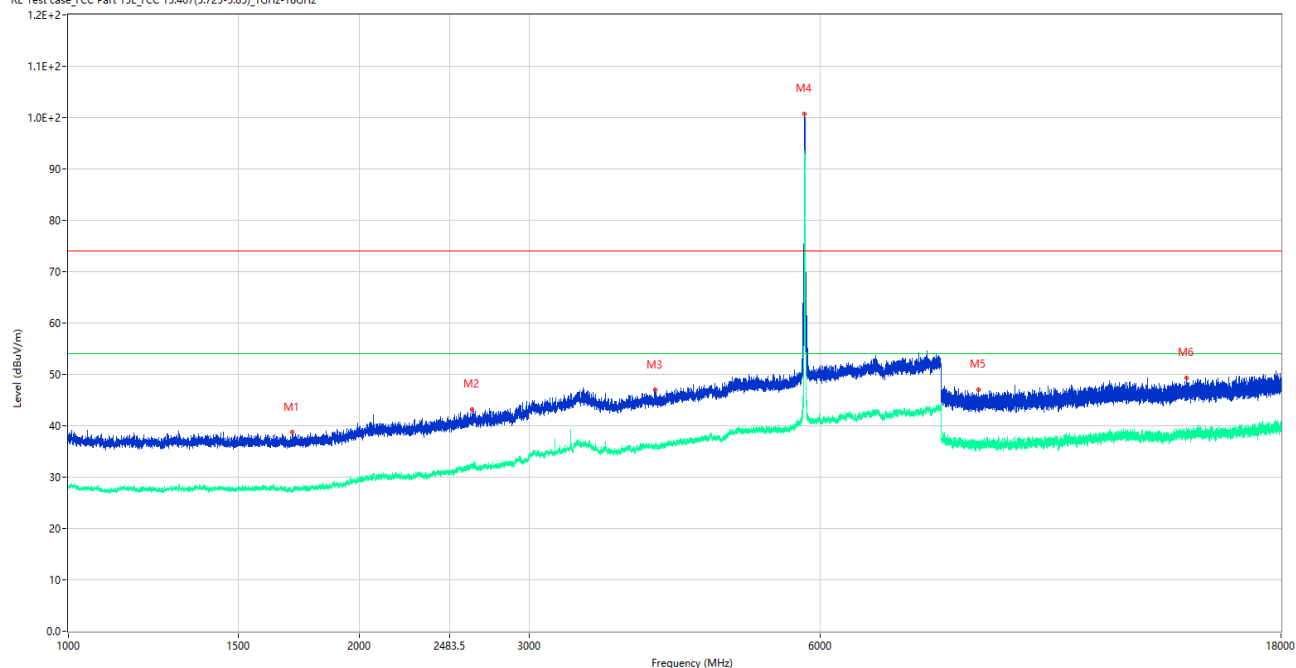
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1713.250	38.74	-16.28	74.0	35.26	Peak	123.00	150	Vertical	Pass
1**	1713.250	27.50	-16.28	54.0	26.50	AV	123.00	150	Vertical	Pass
2	2635.000	42.92	-9.96	74.0	31.08	Peak	357.00	150	Vertical	Pass
2**	2635.000	32.34	-9.96	54.0	21.66	AV	357.00	150	Vertical	Pass
3	3937.000	46.63	-3.81	74.0	27.37	Peak	308.00	150	Vertical	Pass
3**	3937.000	36.02	-3.81	54.0	17.98	AV	308.00	150	Vertical	Pass
4	5784.000	100.32	-1.54	74.0	-26.32	Peak	218.00	150	Vertical	N/A
4**	5784.000	93.13	-1.54	54.0	-39.13	AV	218.00	150	Vertical	N/A
5	9905.463	48.00	-4.43	74.0	26.00	Peak	308.00	150	Vertical	Pass
5**	9905.463	36.72	-4.43	54.0	17.28	AV	308.00	150	Vertical	Pass
6	15262.125	49.78	-1.08	74.0	24.22	Peak	115.00	150	Vertical	Pass
6**	15262.125	39.27	-1.08	54.0	14.73	AV	115.00	150	Vertical	Pass

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

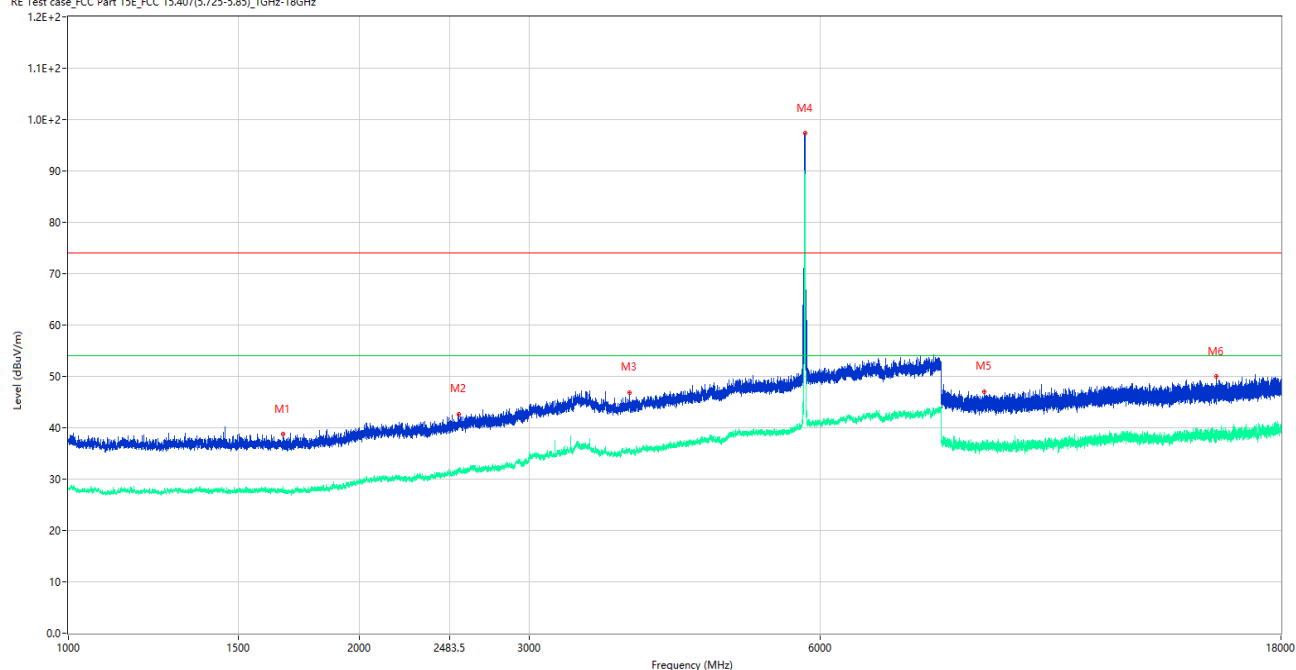
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1704.000	38.83	-16.47	74.0	35.17	Peak	4.00	150	Horizontal	Pass
1**	1704.000	27.31	-16.47	54.0	26.69	AV	4.00	150	Horizontal	Pass
2	2617.250	43.23	-10.34	74.0	30.77	Peak	15.00	150	Horizontal	Pass
2**	2617.250	32.10	-10.34	54.0	21.90	AV	15.00	150	Horizontal	Pass
3	4048.500	47.04	-4.19	74.0	26.96	Peak	89.00	150	Horizontal	Pass
3**	4048.500	36.07	-4.19	54.0	17.93	AV	89.00	150	Horizontal	Pass
4	5783.000	100.75	-1.53	74.0	-26.75	Peak	188.00	150	Horizontal	N/A
4**	5783.000	92.99	-1.53	54.0	-38.99	AV	188.00	150	Horizontal	N/A
5	8754.062	47.09	-4.96	74.0	26.91	Peak	309.00	150	Horizontal	Pass
5**	8754.062	36.24	-4.96	54.0	17.76	AV	309.00	150	Horizontal	Pass
6	14362.013	49.32	-1.55	74.0	24.68	Peak	0.00	150	Horizontal	Pass
6**	14362.013	38.62	-1.55	54.0	15.38	AV	0.00	150	Horizontal	Pass

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

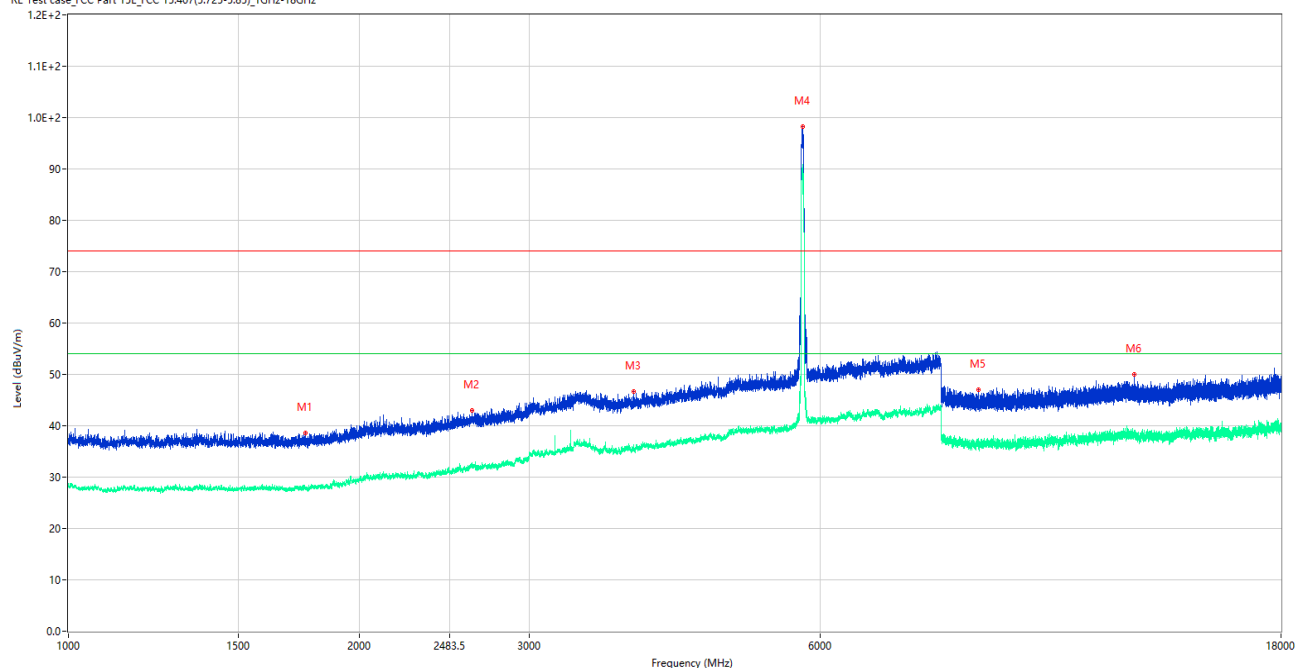
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1669.750	38.82	-16.33	74.0	35.18	Peak	88.00	150	Vertical	Pass
1**	1669.750	27.51	-16.33	54.0	26.49	AV	88.00	150	Vertical	Pass
2	2534.750	42.58	-11.07	74.0	31.42	Peak	202.00	150	Vertical	Pass
2**	2534.750	31.66	-11.07	54.0	22.34	AV	202.00	150	Vertical	Pass
3	3807.500	46.83	-4.34	74.0	27.17	Peak	236.00	150	Vertical	Pass
3**	3807.500	36.05	-4.34	54.0	17.95	AV	236.00	150	Vertical	Pass
4	5786.000	97.32	-1.53	74.0	-23.32	Peak	20.00	150	Vertical	N/A
4**	5786.000	89.08	-1.53	54.0	-35.08	AV	20.00	150	Vertical	N/A
5	8872.575	46.97	-4.55	74.0	27.03	Peak	355.00	150	Vertical	Pass
5**	8872.575	36.37	-4.55	54.0	17.63	AV	355.00	150	Vertical	Pass
6	15437.213	50.00	-1.72	74.0	24.00	Peak	0.00	150	Vertical	Pass
6**	15437.213	38.86	-1.72	54.0	15.14	AV	0.00	150	Vertical	Pass

11n40, U-NII-3, 1 GHz to 18 GHz, Low Channel, ANT H

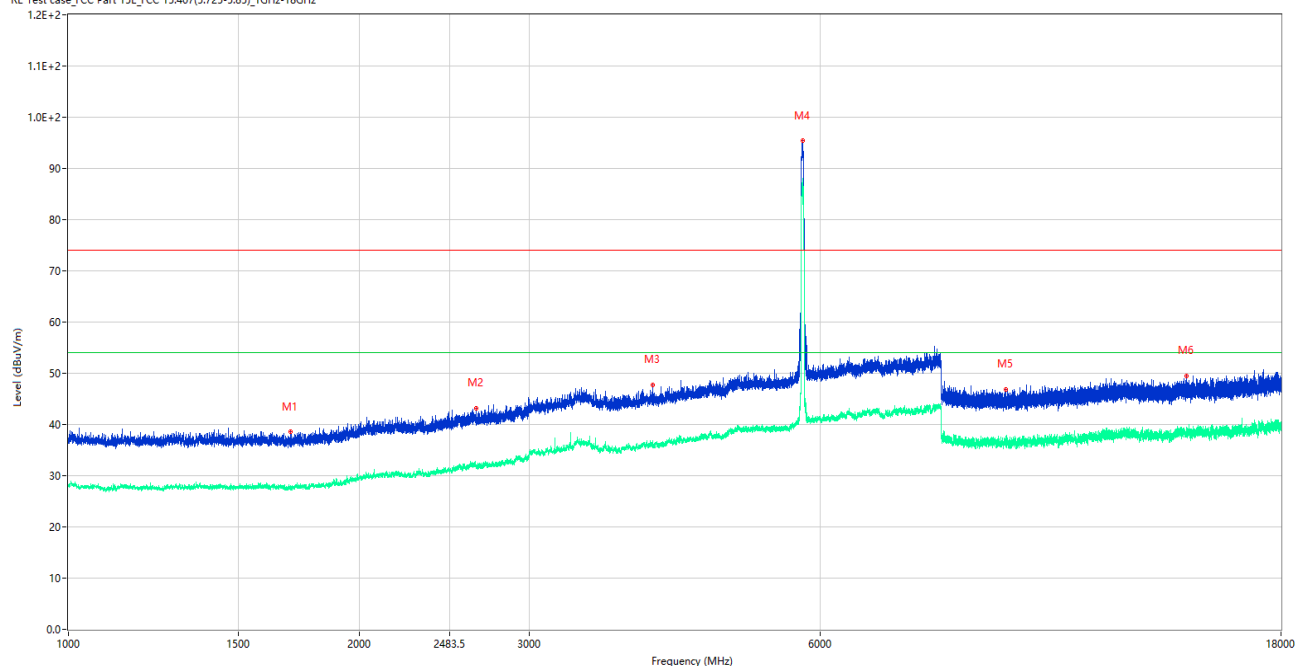
RE Test case_FCC Part 15E_FCC 15.407(5.725-5.85)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1759.500	38.54	-16.00	74.0	35.46	Peak	109.00	150	Horizontal	Pass
1**	1759.500	28.00	-16.00	54.0	26.00	AV	109.00	150	Horizontal	Pass
2	2614.750	42.95	-10.49	74.0	31.05	Peak	4.00	150	Horizontal	Pass
2**	2614.750	32.28	-10.49	54.0	21.72	AV	4.00	150	Horizontal	Pass
3	3849.000	46.68	-5.27	74.0	27.32	Peak	179.00	150	Horizontal	Pass
3**	3849.000	35.49	-5.27	54.0	18.51	AV	179.00	150	Horizontal	Pass
4	5752.500	98.28	-2.10	74.0	-24.28	Peak	167.00	150	Horizontal	N/A
4**	5752.500	90.15	-2.10	54.0	-36.15	AV	167.00	150	Horizontal	N/A
5	8745.513	46.94	-5.14	74.0	27.06	Peak	353.00	150	Horizontal	Pass
5**	8745.513	35.34	-5.14	54.0	18.66	AV	353.00	150	Horizontal	Pass
6	12689.438	50.05	-2.99	74.0	23.95	Peak	332.00	150	Horizontal	Pass
6**	12689.438	38.42	-2.99	54.0	15.58	AV	332.00	150	Horizontal	Pass

11n40, U-NII-3, 1 GHz to 18 GHz, Low Channel, ANT V

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



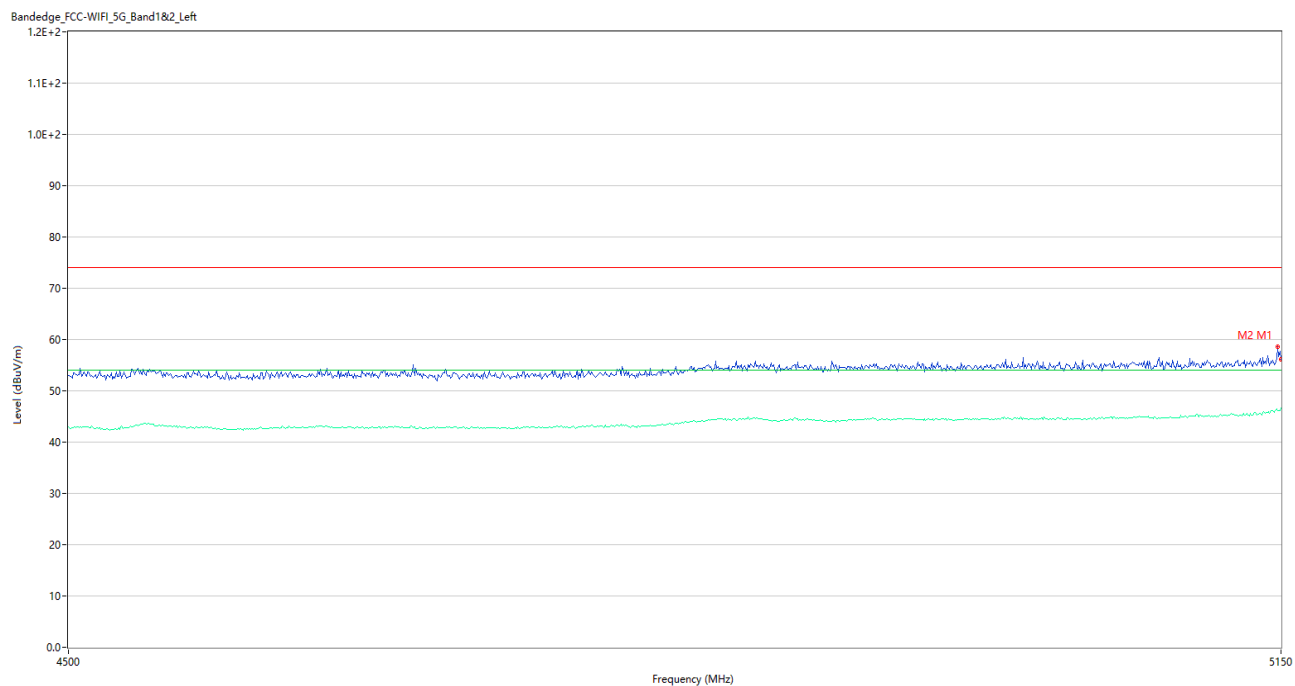
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1697.000	38.59	-16.50	74.0	35.41	Peak	34.00	150	Vertical	Pass
1**	1697.000	27.41	-16.50	54.0	26.59	AV	34.00	150	Vertical	Pass
2	2644.500	43.19	-10.57	74.0	30.81	Peak	34.00	150	Vertical	Pass
2**	2644.500	31.62	-10.57	54.0	22.38	AV	34.00	150	Vertical	Pass
3	4024.500	47.77	-3.92	74.0	26.23	Peak	0.00	150	Vertical	Pass
3**	4024.500	36.20	-3.92	54.0	17.80	AV	0.00	150	Vertical	Pass
4	5752.000	95.38	-2.10	74.0	-21.38	Peak	216.00	150	Vertical	N/A
4**	5752.000	87.42	-2.10	54.0	-33.42	AV	216.00	150	Vertical	N/A
5	9333.088	46.76	-5.09	74.0	27.24	Peak	9.00	150	Vertical	Pass
5**	9333.088	36.12	-5.09	54.0	17.88	AV	9.00	150	Vertical	Pass
6	14369.625	49.47	-1.43	74.0	24.53	Peak	0.00	150	Vertical	Pass
6**	14369.625	38.59	-1.43	54.0	15.41	AV	0.00	150	Vertical	Pass

A.6.2 Band Edge (Restricted-band)

Test Band	Mode	Channel	Verdict
U-NII-1	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
U-NII-2A	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
U-NII-3	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass

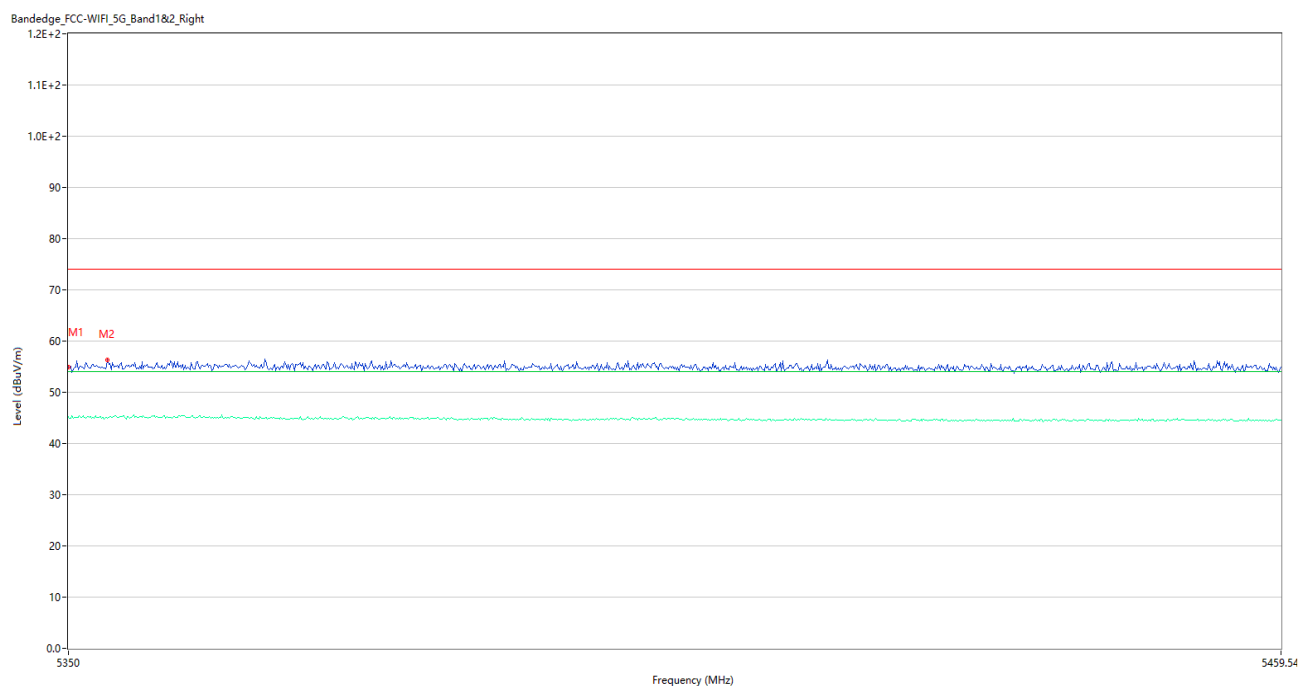
Test Data and Plots

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	56.22	3.82	74.0	17.78	Peak	180.99	150	Horizontal	Pass
1**	5150.000	46.65	3.82	54.0	7.35	AV	180.99	150	Horizontal	Pass
2	5148.050	58.55	3.87	74.0	15.45	Peak	202.00	150	Horizontal	Pass
2**	5148.050	46.06	3.87	54.0	7.94	AV	202.00	150	Horizontal	Pass

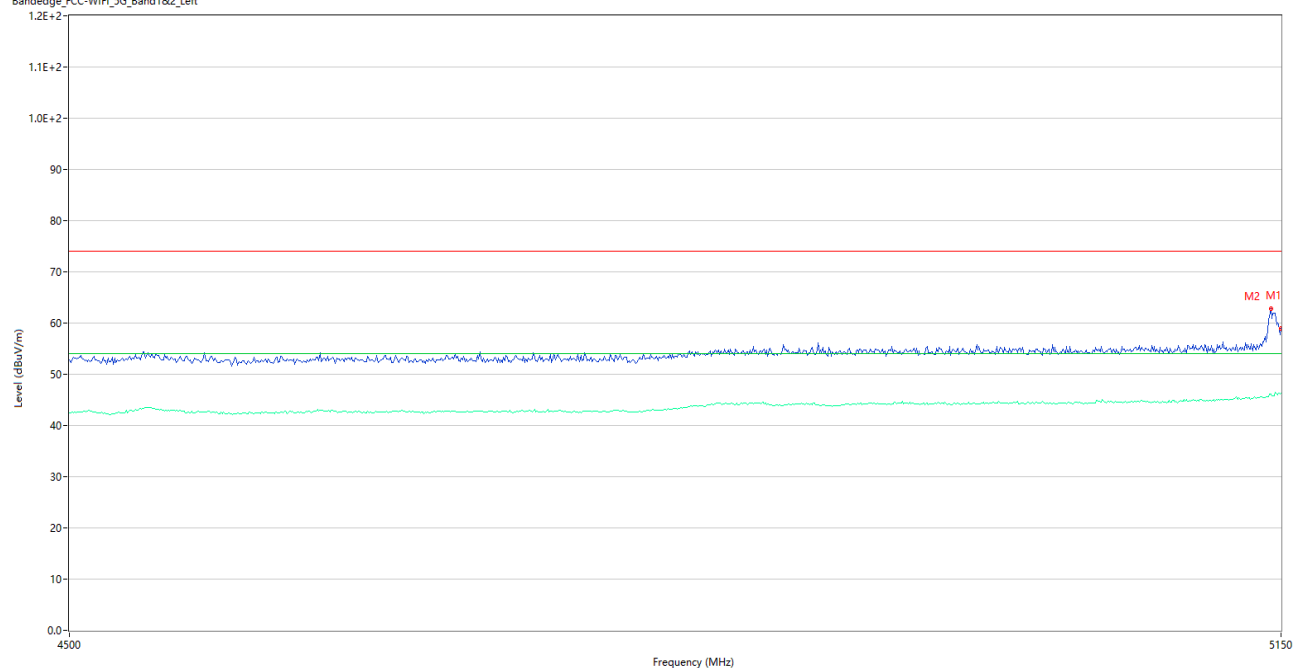
U-NII-1 11a CH48



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	54.87	4.04	74.0	19.13	Peak	56.00	150	Horizontal	Pass
1**	5350.000	45.28	4.04	54.0	8.72	AV	56.00	150	Horizontal	Pass
2	5353.520	56.24	4.10	74.0	17.76	Peak	155.00	150	Horizontal	Pass
2**	5353.520	44.94	4.10	54.0	9.06	AV	155.00	150	Horizontal	Pass

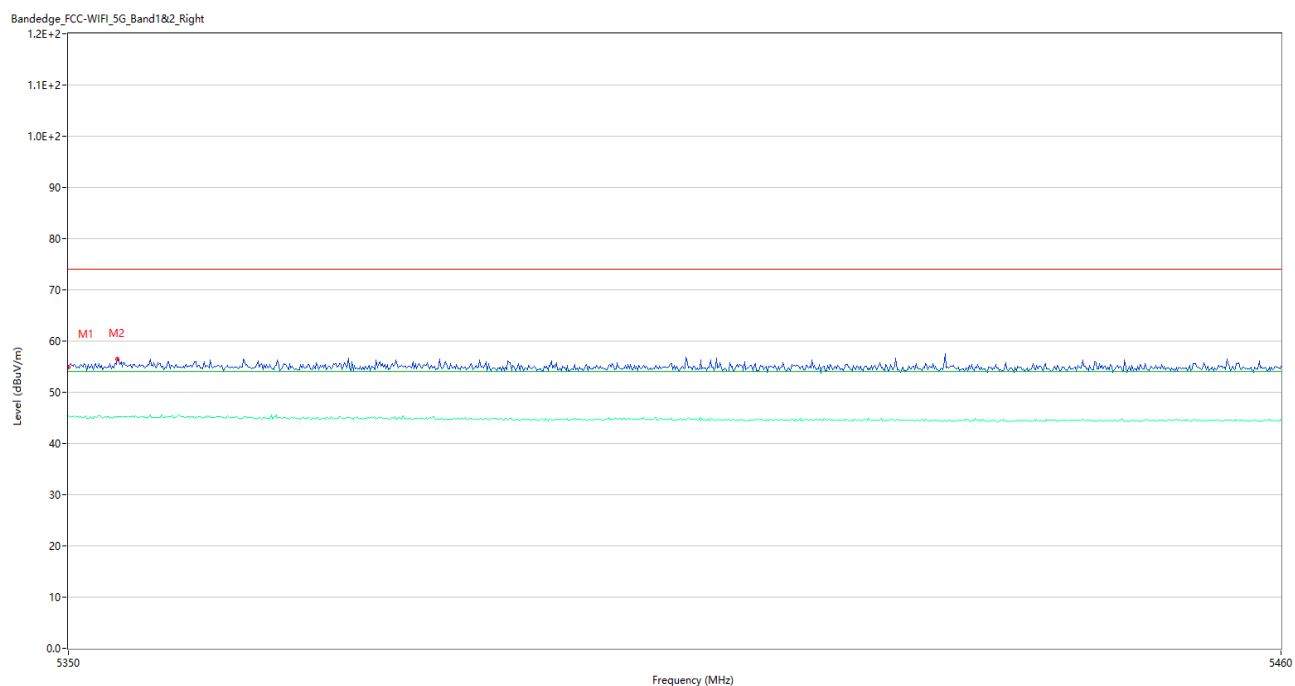
U-NII-1 11n20 CH36

Bandedge_FCC-WIFI_5G_Band1&2_Left



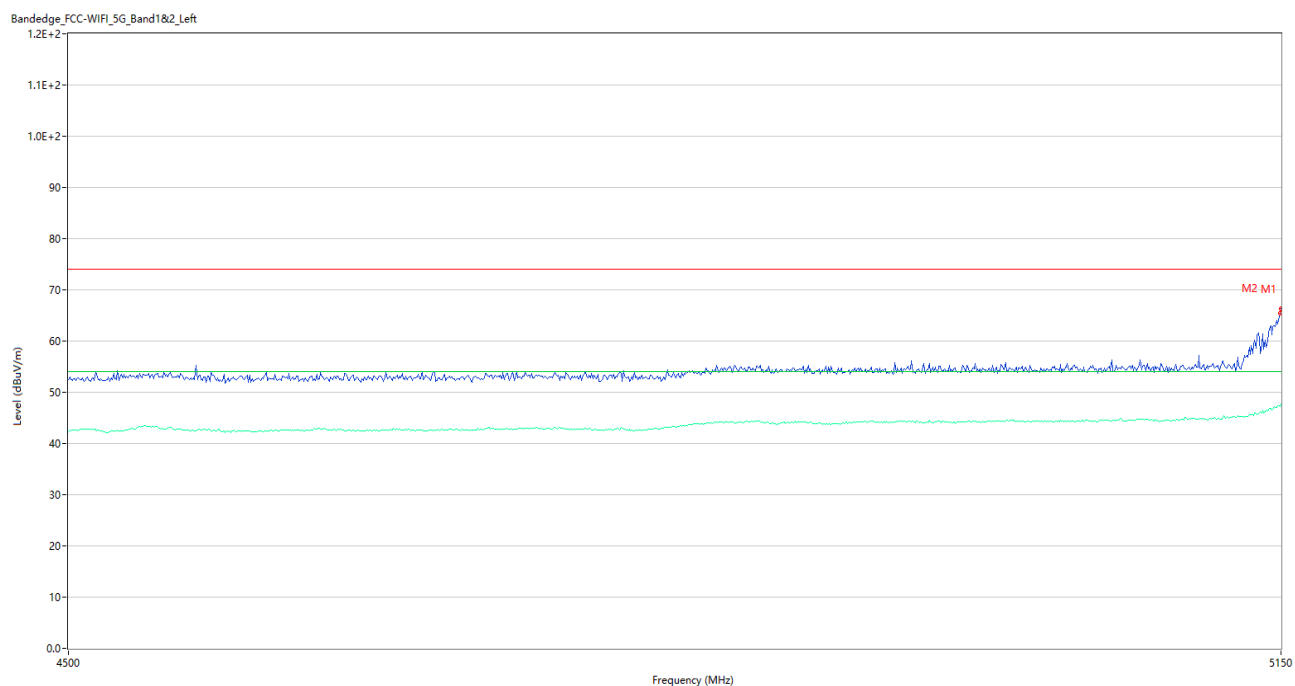
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	58.98	3.82	74.0	15.02	Peak	31.03	150	Horizontal	Pass
1**	5150.000	46.35	3.82	54.0	7.65	AV	31.03	150	Horizontal	Pass
2	5144.150	62.78	3.99	74.0	11.22	Peak	160.00	150	Horizontal	Pass
2**	5144.150	46.15	3.99	54.0	7.85	AV	160.00	150	Horizontal	Pass

U-NII-1 11n20 CH48



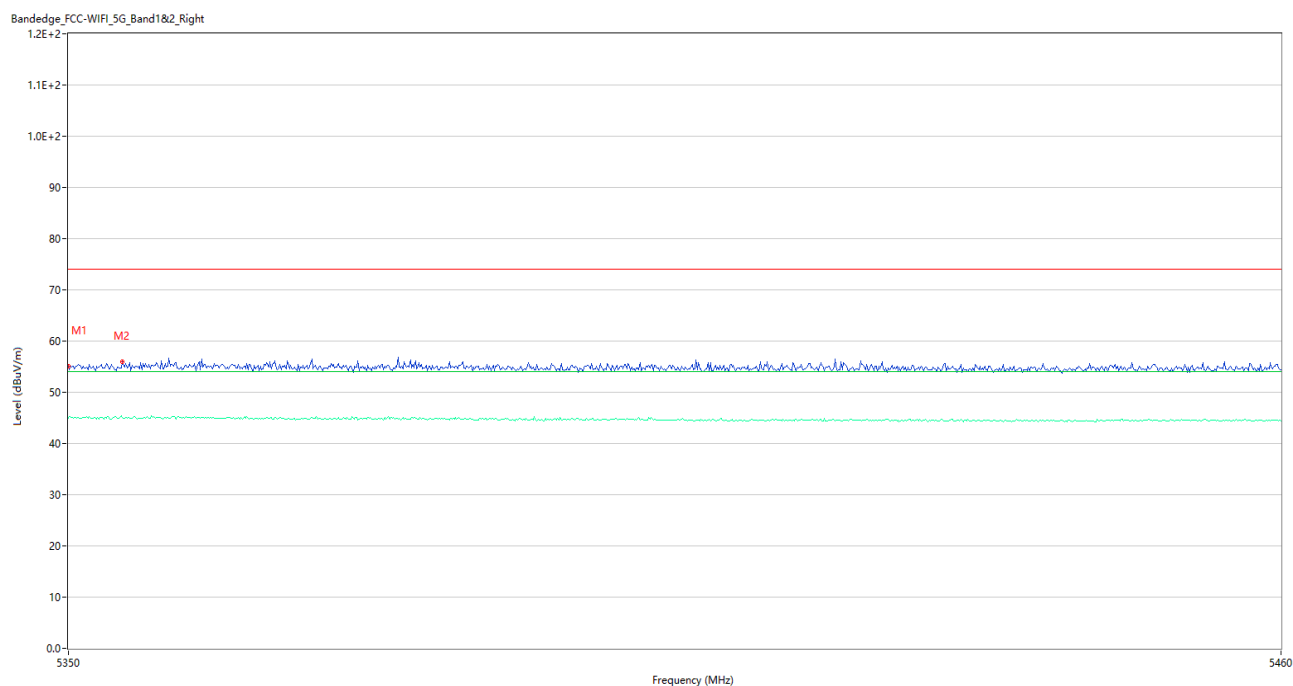
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	54.86	4.04	74.0	19.14	Peak	224.00	150	Horizontal	Pass
1**	5350.000	45.51	4.04	54.0	8.49	AV	224.00	150	Horizontal	Pass
2	5354.400	56.57	4.12	74.0	17.43	Peak	188.00	150	Horizontal	Pass
2**	5354.400	45.27	4.12	54.0	8.73	AV	188.00	150	Horizontal	Pass

U-NII-1 11n40 CH38



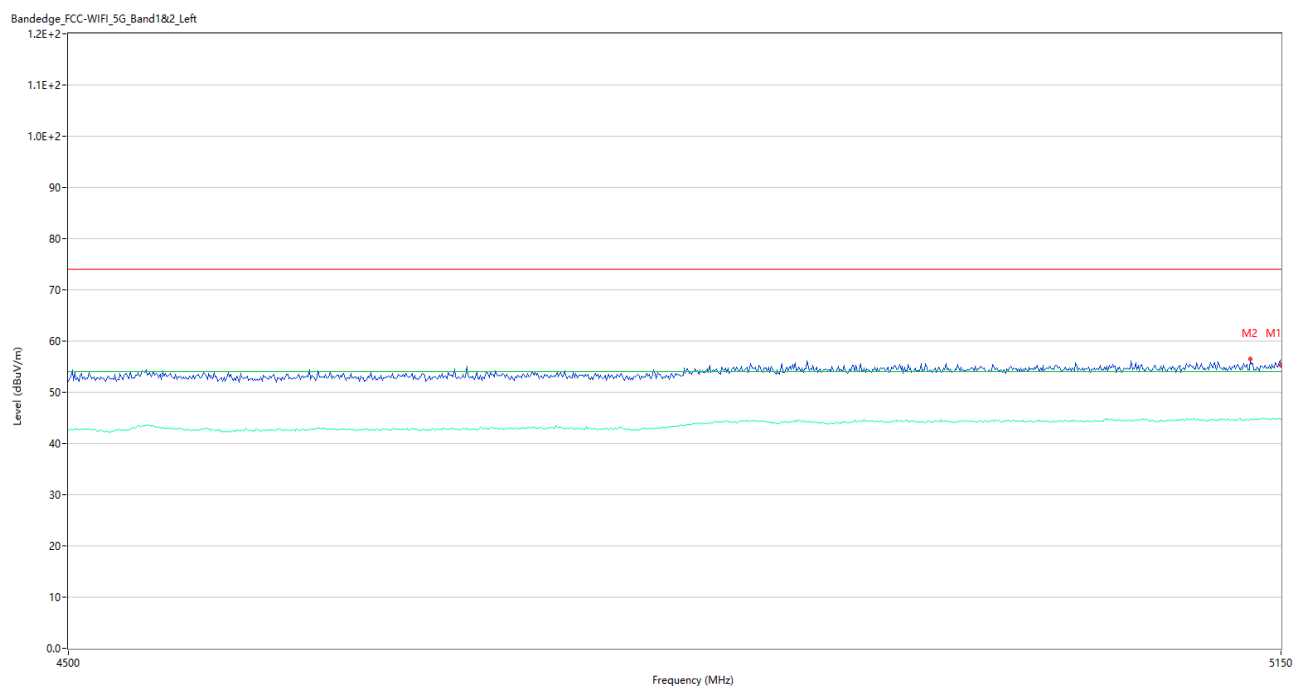
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	66.32	3.82	74.0	7.68	Peak	172.00	150	Horizontal	Pass
1**	5150.000	47.65	3.82	54.0	6.35	AV	172.00	150	Horizontal	Pass
2	5149.350	65.37	3.84	74.0	8.63	Peak	178.00	150	Horizontal	Pass
2**	5149.350	47.23	3.84	54.0	6.77	AV	178.00	150	Horizontal	Pass

U-NII-1 11n40 CH46



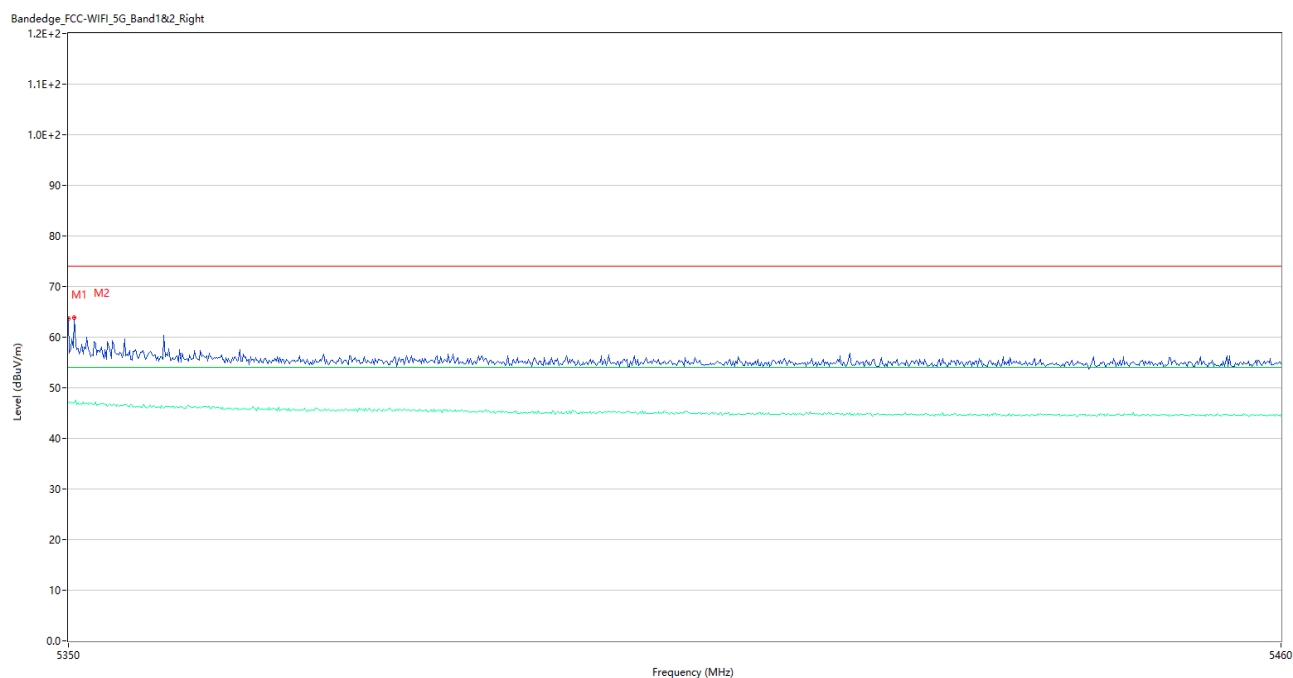
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.04	4.04	74.0	18.96	Peak	186.00	150	Horizontal	Pass
1**	5350.000	44.84	4.04	54.0	9.16	AV	186.00	150	Horizontal	Pass
2	5354.840	55.91	4.14	74.0	18.09	Peak	192.00	150	Horizontal	Pass
2**	5354.840	45.04	4.14	54.0	8.96	AV	192.00	150	Horizontal	Pass

U-NII-2A 11a CH52



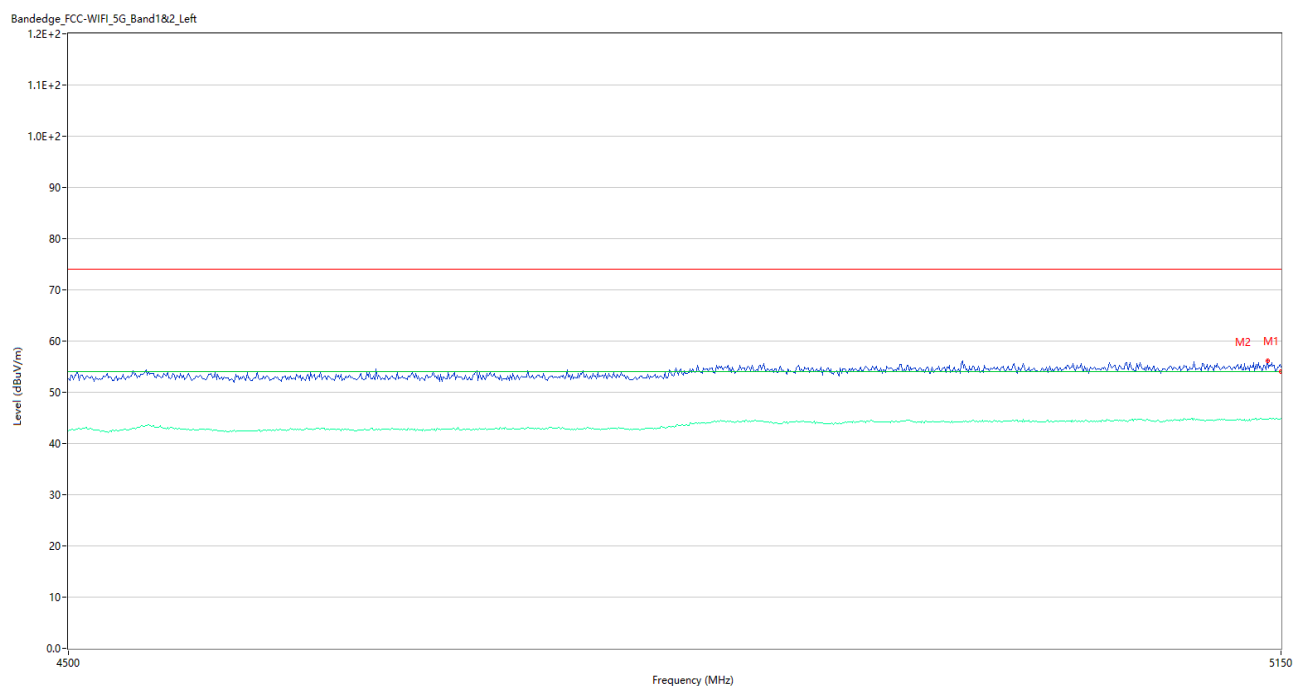
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	55.28	3.82	74.0	18.72	Peak	0.00	150	Horizontal	Pass
1**	5150.000	44.74	3.82	54.0	9.26	AV	0.00	150	Horizontal	Pass
2	5132.450	56.57	3.89	74.0	17.43	Peak	138.00	150	Horizontal	Pass
2**	5132.450	44.70	3.89	54.0	9.30	AV	138.00	150	Horizontal	Pass

U-NII-2A 11a CH64



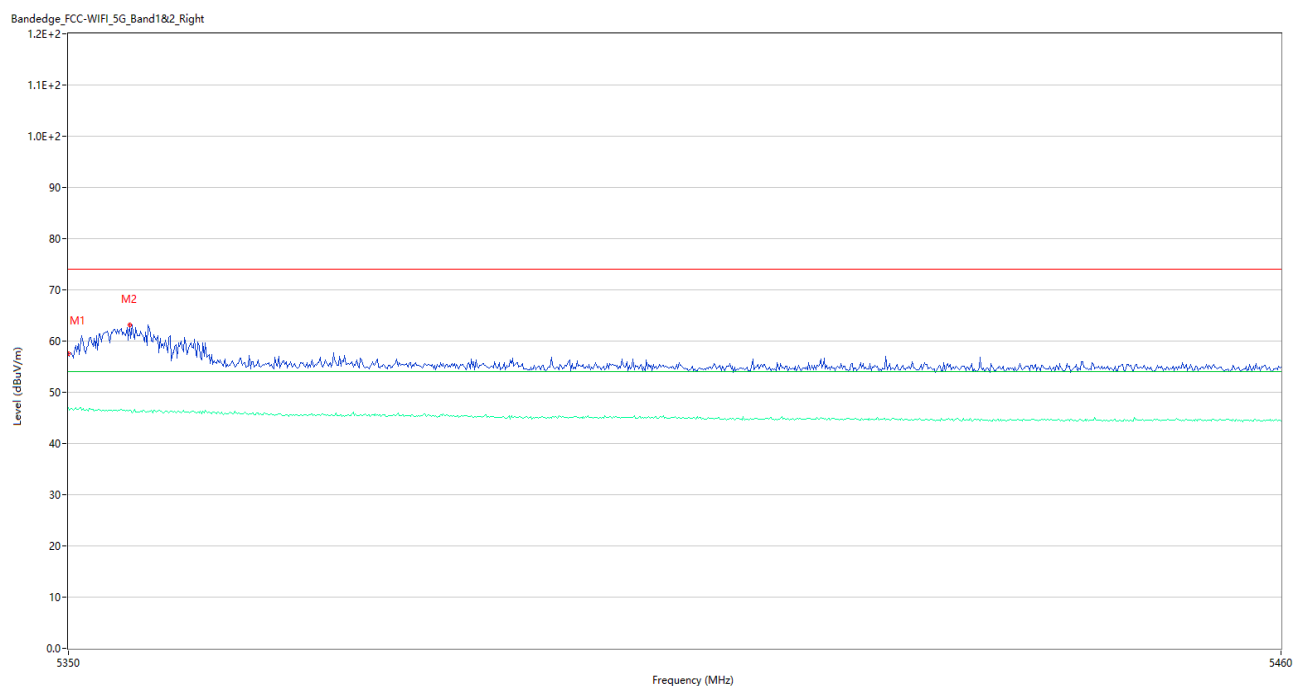
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	63.72	4.04	74.0	10.28	Peak	198.00	150	Horizontal	Pass
1**	5350.000	47.01	4.04	54.0	6.99	AV	198.00	150	Horizontal	Pass
2	5350.550	63.87	4.05	74.0	10.13	Peak	194.00	150	Horizontal	Pass
2**	5350.550	47.01	4.05	54.0	6.99	AV	194.00	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	54.93	3.82	74.0	19.07	Peak	40.02	150	Horizontal	Pass
1**	5150.000	44.85	3.82	54.0	9.15	AV	40.02	150	Horizontal	Pass
2	5142.200	56.22	4.04	74.0	17.78	Peak	169.00	150	Horizontal	Pass
2**	5142.200	44.70	4.04	54.0	9.30	AV	169.00	150	Horizontal	Pass

U-NII-2A 11n20 CH64



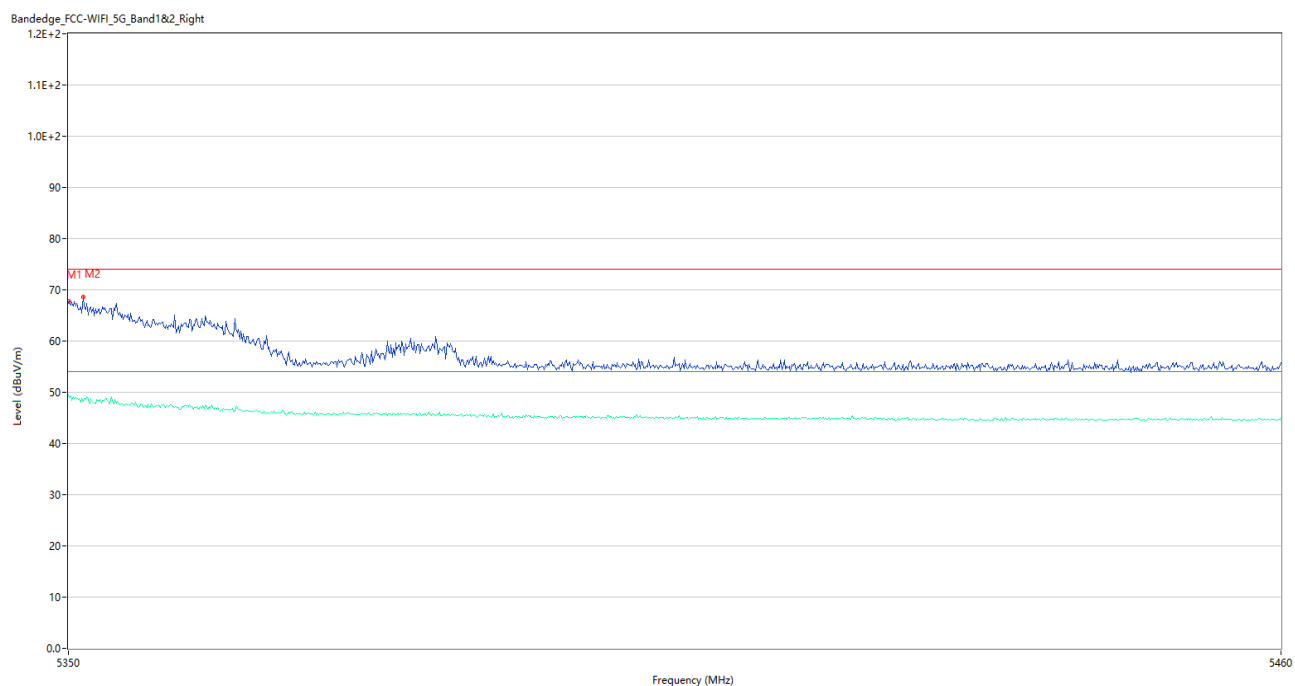
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	57.61	4.04	74.0	16.39	Peak	184.00	150	Horizontal	Pass
1**	5350.000	46.97	4.04	54.0	7.03	AV	184.00	150	Horizontal	Pass
2	5355.500	63.20	4.16	74.0	10.80	Peak	184.00	150	Horizontal	Pass
2**	5355.500	46.44	4.16	54.0	7.56	AV	184.00	150	Horizontal	Pass

U-NII-2A 11n40 CH54



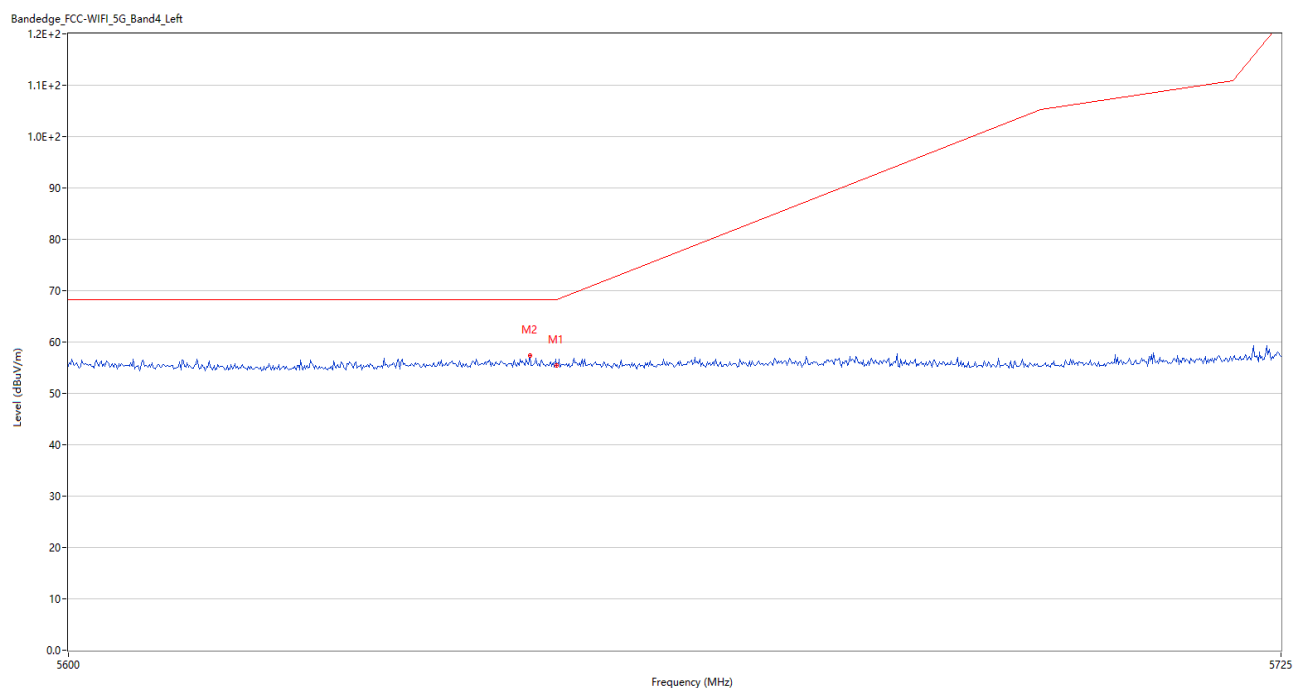
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	54.96	3.82	74.0	19.04	Peak	352.93	150	Vertical	Pass
1**	5150.000	44.84	3.82	54.0	9.16	AV	352.93	150	Vertical	Pass
2	5075.900	56.63	3.55	74.0	17.37	Peak	153.00	150	Vertical	Pass
2**	5075.900	44.45	3.55	54.0	9.55	AV	153.00	150	Vertical	Pass

U-NII-2A 11n40 CH62



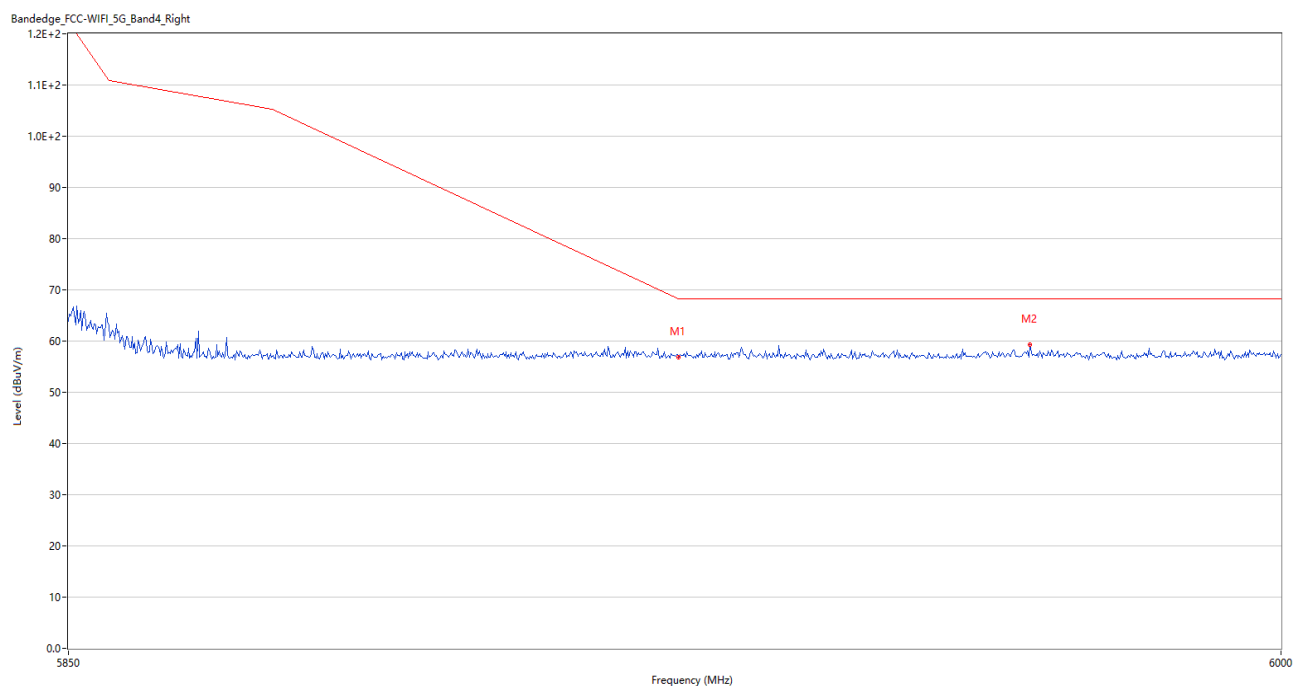
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.110	67.72	4.04	74.0	6.28	Peak	188.00	150	Horizontal	Pass
1**	5350.110	48.93	4.04	54.0	5.07	AV	188.00	150	Horizontal	Pass
2	5351.320	68.64	4.07	74.0	5.36	Peak	184.00	150	Horizontal	Pass
2**	5351.320	48.24	4.07	54.0	5.76	AV	184.00	150	Horizontal	Pass

U-NII-3 11a CH149



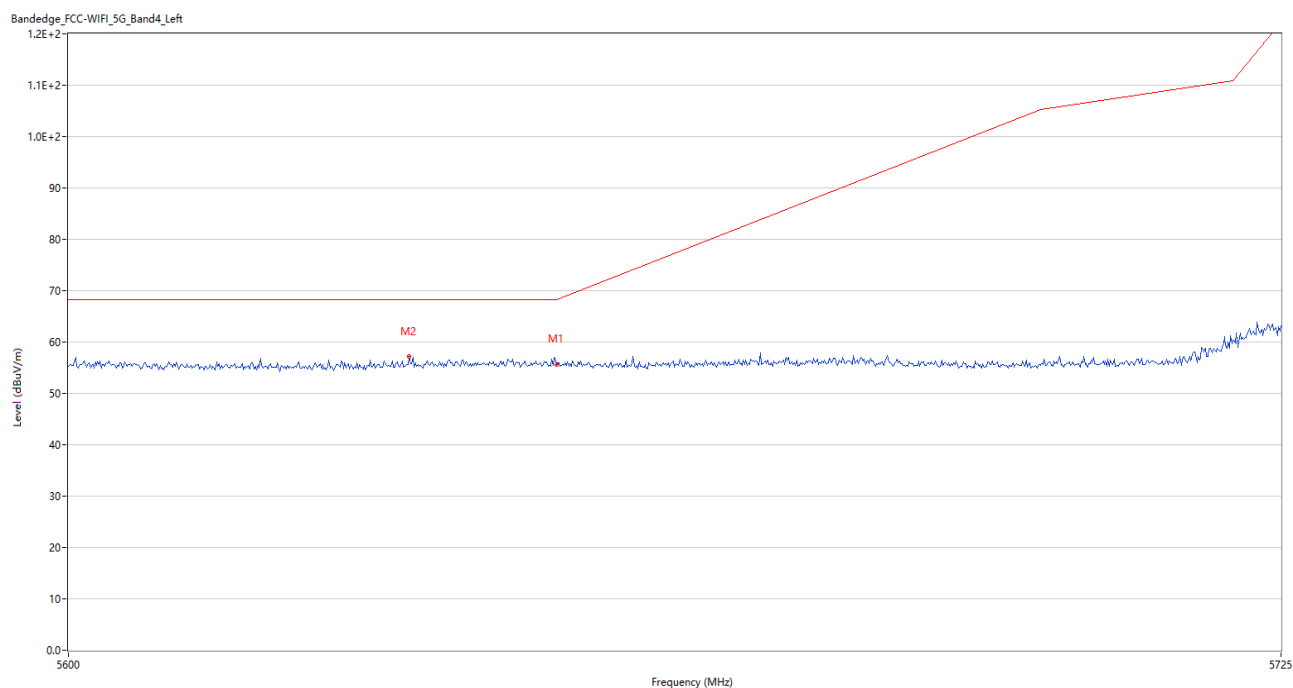
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	55.48	3.81	68.2	12.72	Peak	221.05	150	Horizontal	Pass
2	5647.250	57.30	3.79	68.2	10.90	Peak	137.00	150	Horizontal	Pass

U-NII-3 11a CH165



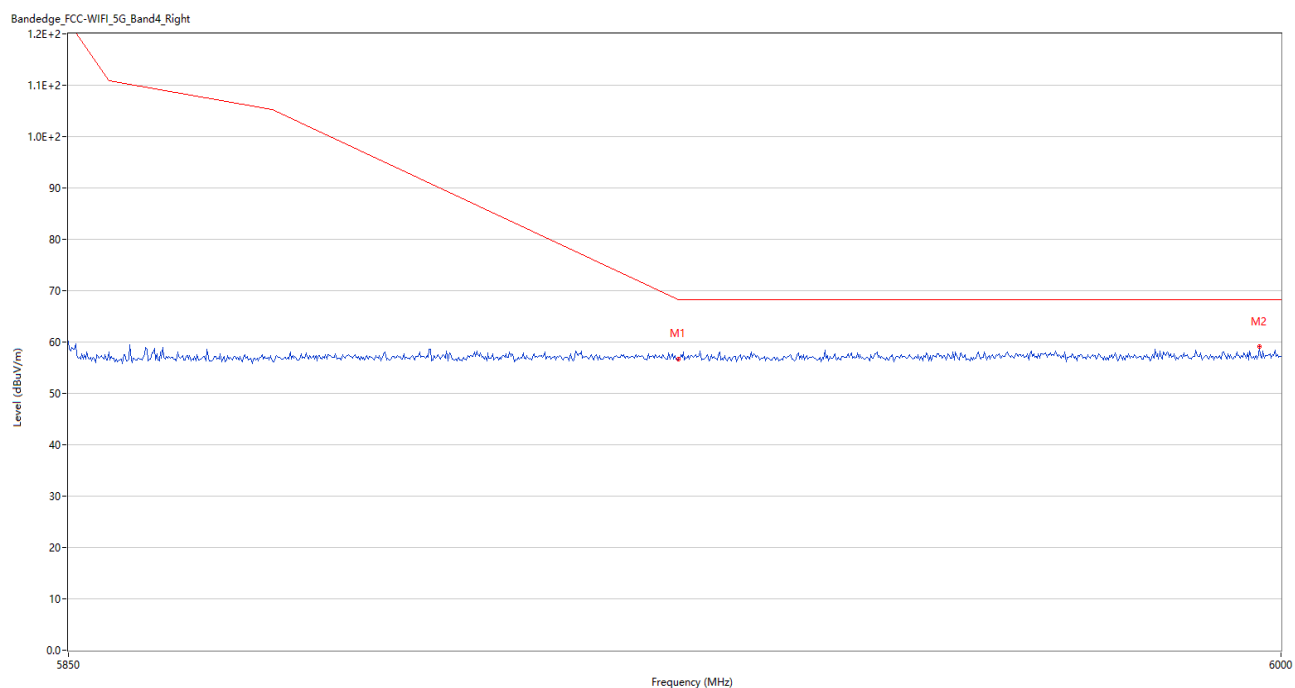
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	56.91	6.44	68.2	11.29	Peak	357.54	150	Horizontal	Pass
2	5968.650	59.27	6.31	68.2	8.93	Peak	317.00	150	Horizontal	Pass

U-NII-3 11n20 CH149



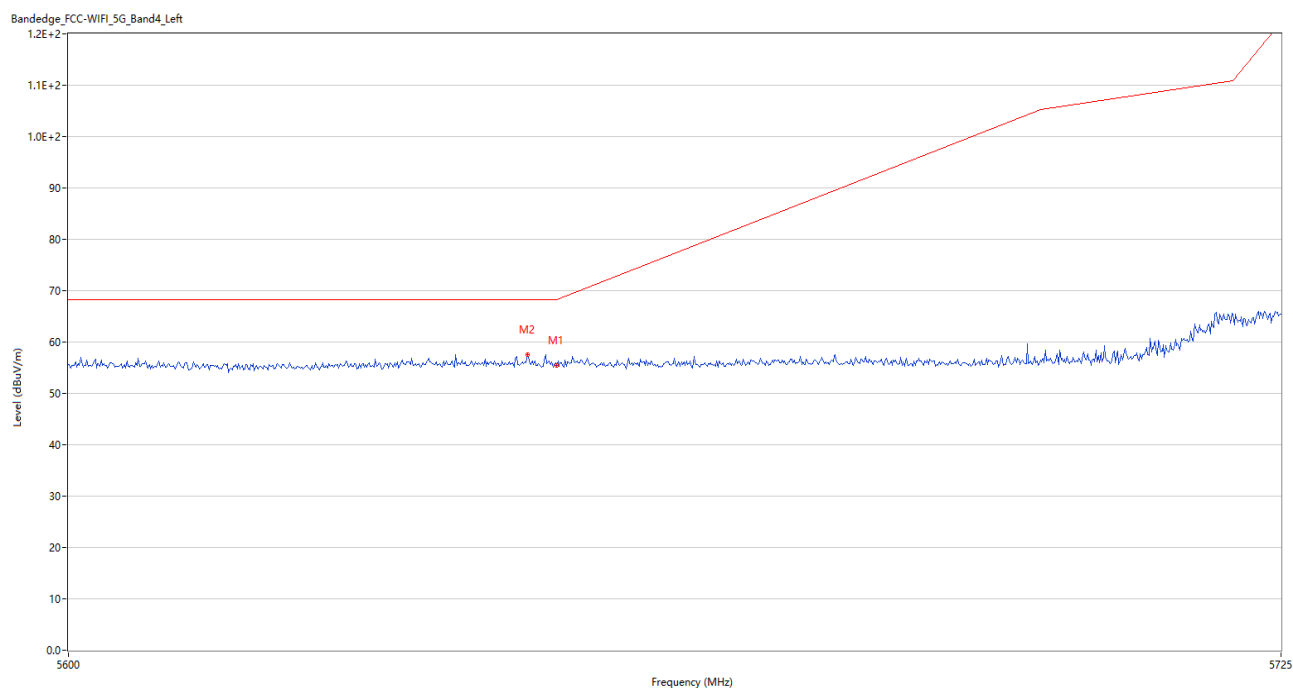
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	55.66	3.81	68.2	12.54	Peak	95.90	150	Vertical	Pass
2	5634.875	57.16	3.71	68.2	11.04	Peak	356.00	150	Vertical	Pass

U-NII-3 11n20 CH165



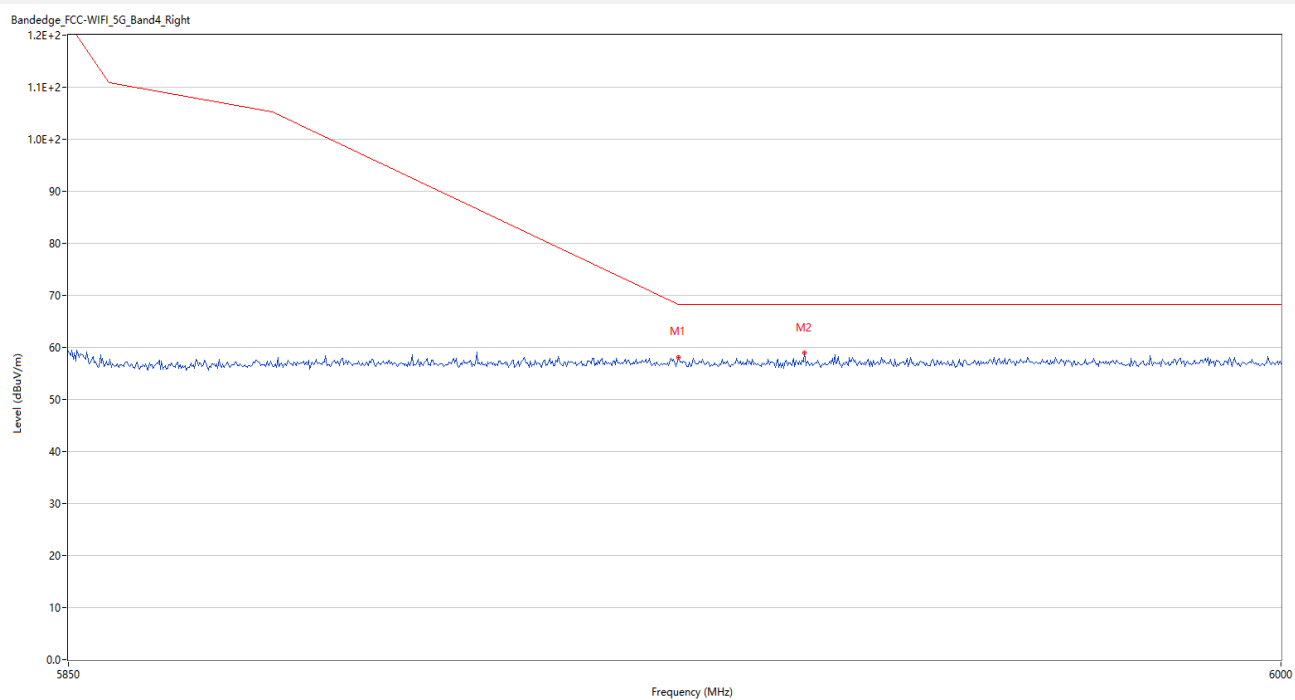
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	56.73	6.44	68.2	11.47	Peak	23.13	150	Vertical	Pass
2	5997.300	59.16	6.48	68.2	9.04	Peak	114.00	150	Vertical	Pass

U-NII-3 11n40 CH151



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	55.37	3.81	68.2	12.83	Peak	77.92	150	Horizontal	Pass
2	5647.000	57.61	3.79	68.2	10.59	Peak	0.00	150	Horizontal	Pass

U-NII-3 11n40 CH159



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	57.37	6.44	68.2	10.83	Peak	106.11	150	Horizontal	Pass
2	5940.600	58.97	6.06	68.2	9.23	Peak	66.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SH2540355-AR-1.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2540355-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SH2540355-AI.PDF”.

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1. The Testing Center guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. For the report with Accreditation Symbol, the items marked with "☆" are not within the accredited scope.
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--END OF REPORT--