TEST REPORT

Applicant:	TECNO MOBILE LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Equipment Type:	Mobile phone
Model Name:	KL4h
Brand Name:	TECNO
FCC ID:	2ADYY-KL4H
Test Standard:	47 CFR Part 15 Subpart E (refer to section 3.1)
Sample Arrival Date:	Aug. 01, 2024
Test Date:	Aug. 06, 2024 - Aug. 14, 2024
Date of Issue:	Aug. 28, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Yu Yingyuan **Checked by:** Ye Hongji **Approved by:** Sunny Zou (Technical Director)

Revision History

Version	Issue Date	Revisions
Rev. 01	Aug. 28, 2024	Initial Issue

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 Measurement Uncertainty 12
4.5 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 29
A.3 6 dB Bandwidth 31
A.4 Power Spectral Density 32
A.5 Conducted Emissions 34
A.6 Radiated Spurious Emissions and Band Edge (Restricted-band) 36
ANNEX B TEST SETUP PHOTOS 114
ANNEX C EUT EXTERNAL PHOTOS 114
ANNEX D EUT INTERNAL PHOTOS 114

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.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.2 Manufacturer Information

Manufacturer	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile phone
Model Name Under Test	KL4h
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EGPRS 850/1900 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network FDD LTE Band 2/4/5/7/12//17/66 TDD LTE Band 38/41 Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) GPS, GLONASS, BDS, Galileo

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-2C: 5470 MHz to 5725 MHz, U-NII-3: 5725 MHz to 5850 MHz
Product Type	☐ Mobile ☒ Portable ☐ Fix Location
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 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: 30.83 mW U-NII-2A: 30.20 mW U-NII-2C: 30.48 mW U-NII-3: 30.90 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: -3.0 dBi U-NII-2A: 5250 MHz to 5350 MHz: -3.0 dBi U-NII-2C: 5470 MHz to 5725 MHz: -3.0 dBi U-NII-3: 5725 MHz to 5850 MHz: -3.0 dBi
About the Product	The equipment is Mobile phone, 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**	**106**	**5530**
48	**5240**	**62**	**5310**	**122**	**5610**
52	**5260**	**102**	**5510**	**155**	**5775**
56	5280	110	5550		
60	**5300**	**118**	5590		
64	**5320**	126	5630		
100	**5500**	134	5670		
104	5520	**151**	**5755**		
108	5540	**159**	**5795**		
112	5560				
116	**5580**				
120	5600				
124	5620				
128	5640				
132	5660				
136	5680				
140	**5700**				
149	**5745**				
153	5765				
157	**5785**				
161	5805				
165	**5825**				

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	Low	5180	52	Low	5260
44	Mid	5220	60	Mid	5300
48	High	5240	64	High	5320

U-NII-2C (5470 - 5725 MHz)			U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
100	Low	5500	149	Low	5745
116	Mid	5580	157	Mid	5785
140	High	5700	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	Low	5190	54	Low	5270
46	High	5230	62	High	5310

U-NII-2C (5470 - 5725 MHz)			U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
102	Low	5510	151	Low	5755
118	Mid	5590	159	High	5795
134	High	5670	--	--	--

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-2C (5470 - 5725 MHz)			U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
106	Low	5530	155	Mid	5775
122	High	5610	--	--	--

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 Channel	U-NII-2A Channel	U-NII-2C Channel	U-NII-3 Channel
RF Output Power	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(80 MHz)	29.3		42	58	122/106	155
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(80 MHz)	29.3		42	58	122/106	155
6 dB bandwidth	11a	6	BPSK	N/A	N/A	N/A	165/157/149
	11n(20 MHz)	6.5		N/A	N/A	N/A	165/157/149
	11n(40 MHz)	13.5		N/A	N/A	N/A	159/151
	11ac(20 MHz)	6.5		N/A	N/A	N/A	165/157/149
	11ac(40 MHz)	13.5		N/A	N/A	N/A	159/151
	11ac(80 MHz)	29.3		N/A	N/A	N/A	155
Power Spectral Density	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(80 MHz)	29.3		42	58	122/106	155
Radiated Spurious Emissions	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11n(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
	11ac(40 MHz)	13.5		46/38	62/54	134/118/102	159/151
	11ac(80 MHz)	29.3		42	58	122/106	155
Band Edge (Restricted-band)	11a	6	BPSK	48/36	64/52	140/100	165/149
	11n(20 MHz)	6.5		48/36	64/52	140/100	165/149
	11n(40 MHz)	13.5		46/38	62/54	134/102	159/151
	11ac(20 MHz)	6.5		48/36	64/52	140/100	165/149
	11ac(40 MHz)	13.5		46/38	62/54	134/102	159/151
	11ac(80 MHz)	29.3		42	58	122/106	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	KDB Publication 789033 D02v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Test Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	--	Pass[Note1]
2	RF Output Power	15.407(a)	ANNEX A.1	Pass
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	ANNEX A.2	Pass
4	6 dB bandwidth	15.407(e)	ANNEX A.3	Pass
5	Power Spectral Density	15.407(a)	ANNEX A.4	Pass
6	Conducted Emission	15.207	ANNEX A.5	Pass
7	Radiated Spurious Emissions and Band Edge (Restricted-band)	15.407(b)	ANNEX A.6	Pass

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

Note [2]: 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	54% to 62%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+22.1℃ to +24.7℃
Working Voltage of the EUT	NV (Normal Voltage)	3.85 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY50330200	2024.05.08	2025.05.07
Spectrum Analyzer	KEYSIGHT	N9020A	MY50531259	2023.09.05	2024.09.04
Signaling Unit	ROHDE&SCHWARZ	CMW500	171150	2024.05.22	2025.05.21
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	2460	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	140	2022.02.19	2024.08.15
Amplifier	COM-MV	ZT30-1000M	7210897	2023.09.05	2024.09.04
Amplifier	COM-MV	LSCX_LNA1-12G-01	7210214	2023.09.05	2024.09.04
Amplifier	COM-MV	XKu_LNA7-18G-01	7210209	2023.09.05	2024.09.04
Amplifier	COM-MV	KA LNA18 40G-01	18050001	2023.12.06	2024.12.05
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2023.09.05	2024.09.04
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2024.01.23	2025.01.22
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	130	2021.08.15	2024.08.14
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	9163-624	2021.08.20	2024.08.19
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2023.09.05	2024.09.04
Anechoic Chamber	RAINFORD	9m*6m*6m	101	2023.03.26	2026.03.03
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2023.09.05	2024.09.04
LISN	SCHWARZBECK	NSLK 8127	8127-687	2024.05.08	2025.05.07
Shielded Enclosure	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2022.02.19	2025.02.18

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.	Applicable test Setup
BL410R	BALUN	V2.1.1.488	N/A	The section 4.5.1
BL410E	BALUN	V22.930	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.

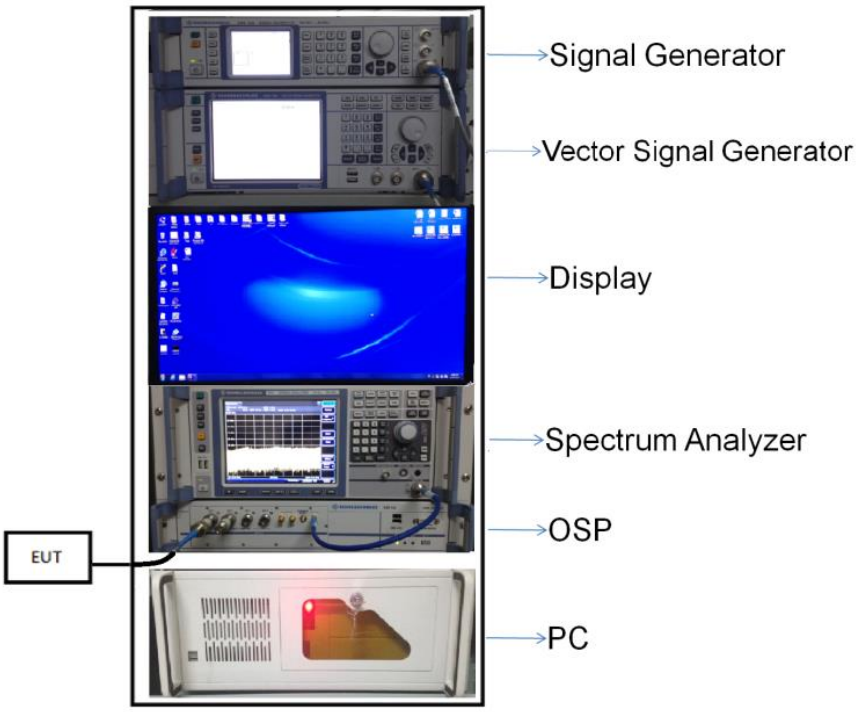
Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8°C
Humidity	4%

4.5 Description of Test Setup

4.5.1 For Antenna Port Test

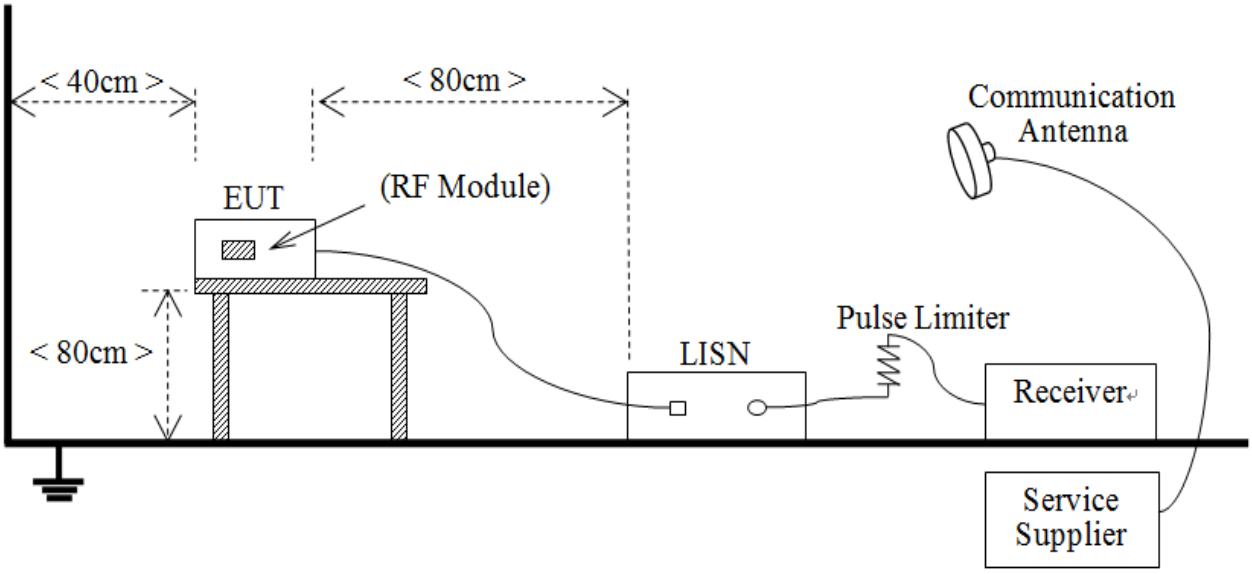
Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

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



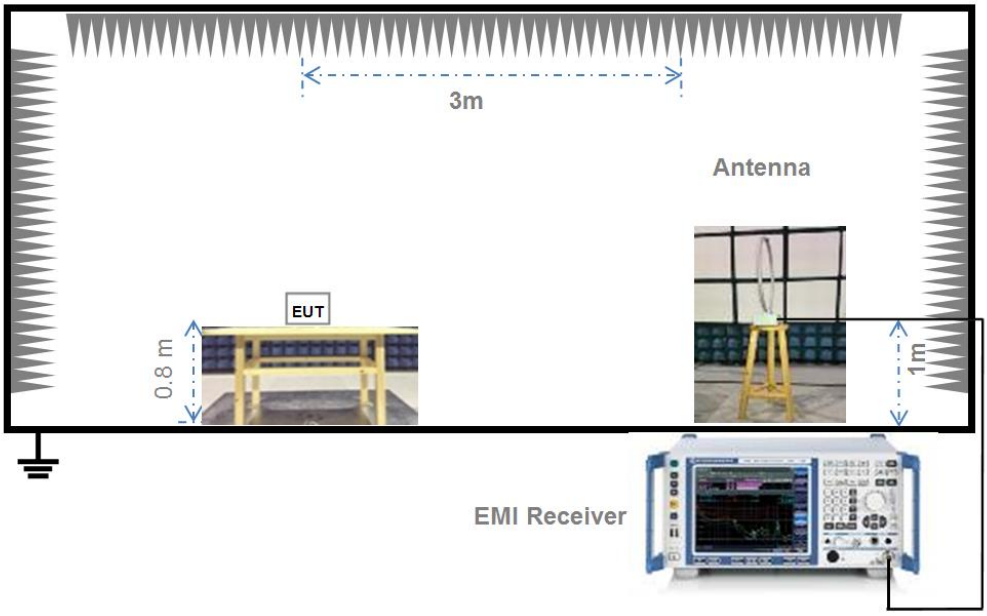
(Diagram 1)

4.5.2 For AC Power Supply Port Test



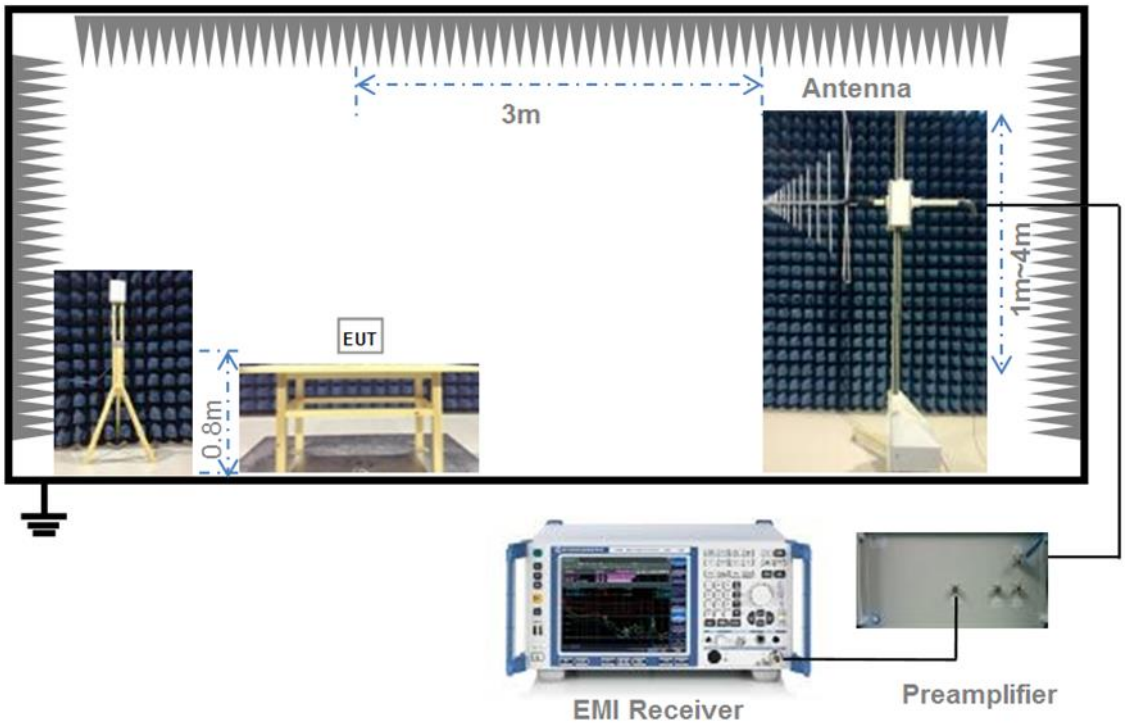
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



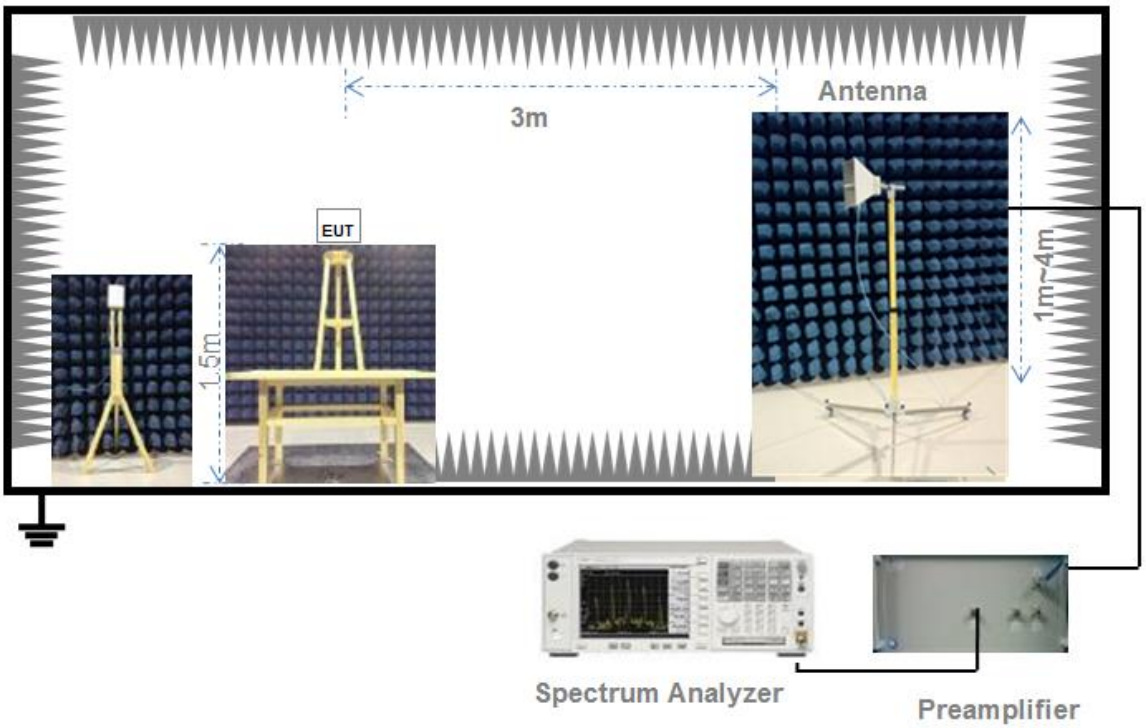
(Diagram 3)

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.	

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 ≥ OBW if possible; otherwise, set RBW to the largest available value.

Set VBW ≥ 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 ≤ 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)

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 ≥ 3*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 ≥ 3*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

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 ≥ 3*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

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 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	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.

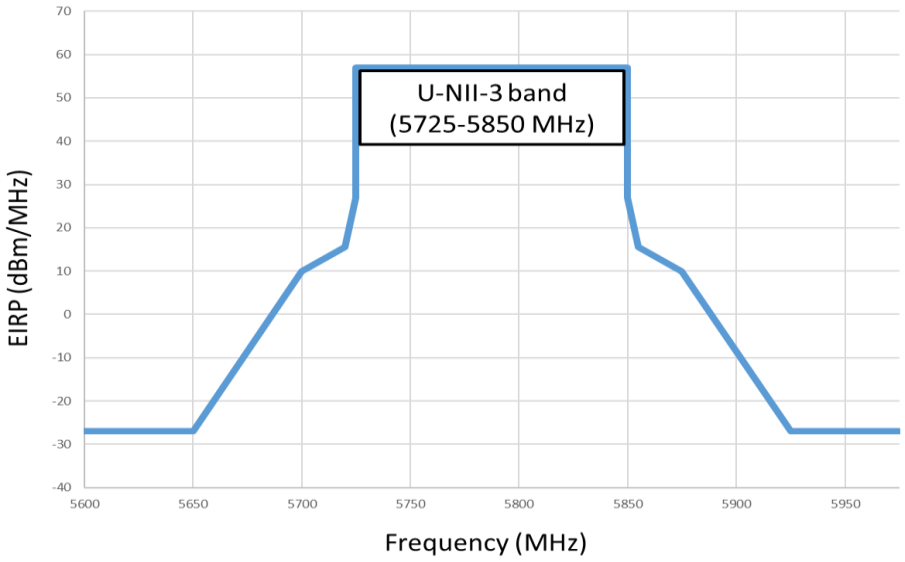
5.5 Radiated Spurious Emissions and Band Edge (Restricted-band)

5.5.1 Limit

FCC §15.209 & 15.407(b)

Frequency (MHz)	Field Strength (μV/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:

$E = EIRP – 20\log D + 104.8$

where:

E = electric field strength in dBμV/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 ≥ 3 x 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 ≥ 3 x RBW.

e) Detector = RMS, if span/(# of points in sweep) ≤ (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 ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ 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.

Duty Cycle

Test Mode	On Time (ms)	On+Off time (ms)	Duty Cycle
11a	1.390	1.436	96.80%
11n (HT20)	1.295	1.343	96.43%
11ac (VHT20)	0.647	0.694	93.23%
11n (HT40)	1.308	1.359	96.25%
1ac (VHT40)	0.650	0.698	93.13%
11ac (VHT80)	0.321	0.369	86.97%

Test Data

Conducted Power

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	13.89	24.49	250	Pass
11a	CH44	13.69	23.39	250	Pass
11a	CH48	13.80	23.99	250	Pass
11n (HT20)	CH36	14.54	28.44	250	Pass
11n (HT20)	CH44	14.74	29.79	250	Pass
11n (HT20)	CH48	14.89	30.83	250	Pass
11n (HT40)	CH38	14.72	29.65	250	Pass
11n (HT40)	CH46	14.70	29.51	250	Pass
11ac (VHT20)	CH36	11.22	13.24	250	Pass
11ac (VHT20)	CH44	11.65	14.62	250	Pass
11ac (VHT20)	CH48	11.58	14.39	250	Pass
11ac (VHT40)	CH38	11.64	14.59	250	Pass
11ac (VHT40)	CH46	11.48	14.06	250	Pass
11ac (VHT80)	CH42	11.89	15.45	250	Pass

U-NII-2A (5250 - 5350 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH52	13.60	22.91	250	Pass
11a	CH60	13.60	22.91	250	Pass
11a	CH64	13.54	22.59	250	Pass
11n (HT20)	CH52	14.80	30.20	250	Pass
11n (HT20)	CH60	14.65	29.17	250	Pass
11n (HT20)	CH64	14.59	28.77	250	Pass
11n (HT40)	CH54	14.47	27.99	250	Pass
11n (HT40)	CH62	14.46	27.93	250	Pass
11ac (VHT20)	CH52	11.56	14.32	250	Pass
11ac (VHT20)	CH60	11.48	14.06	250	Pass
11ac (VHT20)	CH64	11.55	14.29	250	Pass
11ac (VHT40)	CH54	11.45	13.96	250	Pass
11ac (VHT40)	CH62	11.37	13.71	250	Pass
11ac (VHT80)	CH58	11.73	14.89	250	Pass

U-NII-2C (5470 - 5725 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH100	12.25	16.79	250	Pass
11a	CH116	13.34	21.58	230	Pass
11a	CH140	12.06	16.07	250	Pass
11n (HT20)	CH100	14.84	30.48	250	Pass
11n (HT20)	CH116	14.83	30.41	250	Pass
11n (HT20)	CH140	11.91	15.52	250	Pass
11n (HT40)	CH102	11.27	13.40	250	Pass
11n (HT40)	CH118	14.71	29.58	250	Pass
11n (HT40)	CH134	14.78	30.06	250	Pass
11ac (VHT20)	CH100	11.58	14.39	250	Pass
11ac (VHT20)	CH116	11.60	14.45	250	Pass
11ac (VHT20)	CH140	11.74	14.93	250	Pass
11ac (VHT40)	CH102	11.33	13.58	250	Pass
11ac (VHT40)	CH118	11.64	14.59	250	Pass
11ac (VHT40)	CH134	11.76	15.00	250	Pass
11ac (VHT80)	CH106	11.68	14.72	250	Pass
11ac (VHT80)	CH122	11.88	15.42	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	13.55	22.65	1000	Pass
11a	CH157	13.29	21.33	1000	Pass
11a	CH165	13.70	23.44	1000	Pass
11n (HT20)	CH149	14.49	28.12	1000	Pass
11n (HT20)	CH157	14.76	29.92	1000	Pass
11n (HT20)	CH165	14.65	29.17	1000	Pass
11n (HT40)	CH151	14.90	30.90	1000	Pass
11n (HT40)	CH159	14.50	28.18	1000	Pass
11ac (VHT20)	CH149	11.90	15.49	1000	Pass
11ac (VHT20)	CH157	11.54	14.26	1000	Pass
11ac (VHT20)	CH165	11.86	15.35	1000	Pass
11ac (VHT40)	CH151	11.52	14.19	1000	Pass
11ac (VHT40)	CH159	11.42	13.87	1000	Pass
11ac (VHT80)	CH155	11.72	14.86	1000	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ2480027-604 Data Part 1.pdf”.

Test Data

U-NII-1 (5150 - 5250 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	20.41	16.53
11a	CH44	22.98	16.58
11a	CH48	23.25	16.54
11n (HT20)	CH36	25.42	17.72
11n (HT20)	CH44	20.42	17.64
11n (HT20)	CH48	20.47	17.64
11n (HT40)	CH38	53.87	36.31
11n (HT40)	CH46	52.15	36.25
11ac (VHT20)	CH36	20.22	17.55
11ac (VHT20)	CH44	20.34	17.57
11ac (VHT20)	CH48	20.42	17.55
11ac (VHT40)	CH38	40.73	35.97
11ac (VHT40)	CH46	40.68	35.98
11ac (VHT80)	CH42	81.13	75.21

U-NII-2A (5250 - 5350 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH52	20.07	16.50
11a	CH60	20.13	16.49
11a	CH64	20.05	16.51
11n (HT20)	CH52	20.19	17.61
11n (HT20)	CH60	20.42	17.63
11n (HT20)	CH64	20.87	17.67
11n (HT40)	CH54	40.75	36.12
11n (HT40)	CH62	40.65	36.11
11ac (VHT20)	CH52	20.21	17.55
11ac (VHT20)	CH60	20.31	17.57
11ac (VHT20)	CH64	20.27	17.55
11ac (VHT40)	CH54	40.75	36.00
11ac (VHT40)	CH62	40.58	35.99
11ac (VHT80)	CH58	81.06	75.21

U-NII-2C (5470 - 5725 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH100	20.15	16.54
11a	CH116	18.27	16.51
11a	CH140	20.19	16.52
11n (HT20)	CH100	23.24	17.72
11n (HT20)	CH116	20.70	17.68
11n (HT20)	CH140	24.69	17.73
11n (HT40)	CH102	43.66	36.25
11n (HT40)	CH118	44.04	36.18
11n (HT40)	CH134	42.10	36.24
11ac (VHT20)	CH100	20.33	17.54
11ac (VHT20)	CH116	20.28	17.56
11ac (VHT20)	CH140	20.30	17.57
11ac (VHT40)	CH102	40.52	36.01
11ac (VHT40)	CH118	40.58	35.98
11ac (VHT40)	CH134	40.77	36.03
11ac (VHT80)	CH106	81.08	75.37
11ac (VHT80)	CH122	81.11	75.14

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	20.16	16.53
11a	CH157	20.12	16.50
11a	CH165	20.45	16.58
11n (HT20)	CH149	20.71	17.66
11n (HT20)	CH157	21.50	17.66
11n (HT20)	CH165	21.92	17.69
11n (HT40)	CH151	42.12	36.18
11n (HT40)	CH159	42.16	36.21
11ac (VHT20)	CH149	20.33	17.57
11ac (VHT20)	CH157	20.36	17.56
11ac (VHT20)	CH165	20.33	17.60
11ac (VHT40)	CH151	40.73	35.97
11ac (VHT40)	CH159	40.98	35.99
11ac (VHT80)	CH155	81.18	75.26

A.3 6 dB Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ2480027-604 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	15.30	500.00	Pass
11a	CH165	16.00	500.00	Pass
11n (HT20)	CH149	16.30	500.00	Pass
11n (HT20)	CH157	15.30	500.00	Pass
11n (HT20)	CH165	15.30	500.00	Pass
11n (HT40)	CH151	35.30	500.00	Pass
11n (HT40)	CH159	35.30	500.00	Pass
11ac (VHT20)	CH149	15.30	500.00	Pass
11ac (VHT20)	CH157	14.40	500.00	Pass
11ac (VHT20)	CH165	15.30	500.00	Pass
11ac (VHT40)	CH151	35.30	500.00	Pass
11ac (VHT40)	CH159	35.30	500.00	Pass
11ac (VHT80)	CH155	75.30	500.00	Pass

A.4 Power Spectral Density

Note: Test plots please refer to the document “Annex No.: BL-SZ2480027-604 Data Part 3.pdf”.

Test Data

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH36	3.77	11.00	Pass
11a	CH44	4.26	11.00	Pass
11a	CH48	3.64	11.00	Pass
11n (HT20)	CH36	5.17	11.00	Pass
11n (HT20)	CH44	3.27	11.00	Pass
11n (HT20)	CH48	2.88	11.00	Pass
11n (HT40)	CH38	3.63	11.00	Pass
11n (HT40)	CH46	3.43	11.00	Pass
11ac (VHT20)	CH36	0.57	11.00	Pass
11ac (VHT20)	CH44	1.55	11.00	Pass
11ac (VHT20)	CH48	1.58	11.00	Pass
11ac (VHT40)	CH38	-1.93	11.00	Pass
11ac (VHT40)	CH46	-1.94	11.00	Pass
11ac (VHT80)	CH42	-4.68	11.00	Pass

U-NII-2A (5250 - 5350 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH52	3.58	11.00	Pass
11a	CH60	2.59	11.00	Pass
11a	CH64	2.99	11.00	Pass
11n (HT20)	CH52	3.71	11.00	Pass
11n (HT20)	CH60	4.14	11.00	Pass
11n (HT20)	CH64	4.73	11.00	Pass
11n (HT40)	CH54	1.00	11.00	Pass
11n (HT40)	CH62	0.99	11.00	Pass
11ac (VHT20)	CH52	1.52	11.00	Pass
11ac (VHT20)	CH60	1.49	11.00	Pass
11ac (VHT20)	CH64	1.43	11.00	Pass
11ac (VHT40)	CH54	-1.60	11.00	Pass
11ac (VHT40)	CH62	-1.58	11.00	Pass
11ac (VHT80)	CH58	-5.03	11.00	Pass

U-NII-2C (5470 - 5725 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH100	2.79	11.00	Pass
11a	CH116	2.82	11.00	Pass
11a	CH140	2.42	11.00	Pass
11n (HT20)	CH100	4.76	11.00	Pass
11n (HT20)	CH116	4.38	11.00	Pass
11n (HT20)	CH140	2.10	11.00	Pass
11n (HT40)	CH102	-1.21	11.00	Pass
11n (HT40)	CH118	1.80	11.00	Pass
11n (HT40)	CH134	1.35	11.00	Pass
11ac (VHT20)	CH100	0.81	11.00	Pass
11ac (VHT20)	CH116	0.96	11.00	Pass
11ac (VHT20)	CH140	1.15	11.00	Pass
11ac (VHT40)	CH102	-2.32	11.00	Pass
11ac (VHT40)	CH118	-2.00	11.00	Pass
11ac (VHT40)	CH134	-1.91	11.00	Pass
11ac (VHT80)	CH106	-5.27	11.00	Pass
11ac (VHT80)	CH122	-4.72	11.00	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
11a	CH149	1.53	30.00	Pass
11a	CH157	0.23	30.00	Pass
11a	CH165	0.58	30.00	Pass
11n (HT20)	CH149	1.69	30.00	Pass
11n (HT20)	CH157	1.45	30.00	Pass
11n (HT20)	CH165	1.22	30.00	Pass
11n (HT40)	CH151	-1.39	30.00	Pass
11n (HT40)	CH159	-1.83	30.00	Pass
11ac (VHT20)	CH149	-1.49	30.00	Pass
11ac (VHT20)	CH157	-1.80	30.00	Pass
11ac (VHT20)	CH165	-1.92	30.00	Pass
11ac (VHT40)	CH151	-4.63	30.00	Pass
11ac (VHT40)	CH159	-4.94	30.00	Pass
11ac (VHT80)	CH155	-7.42	30.00	Pass

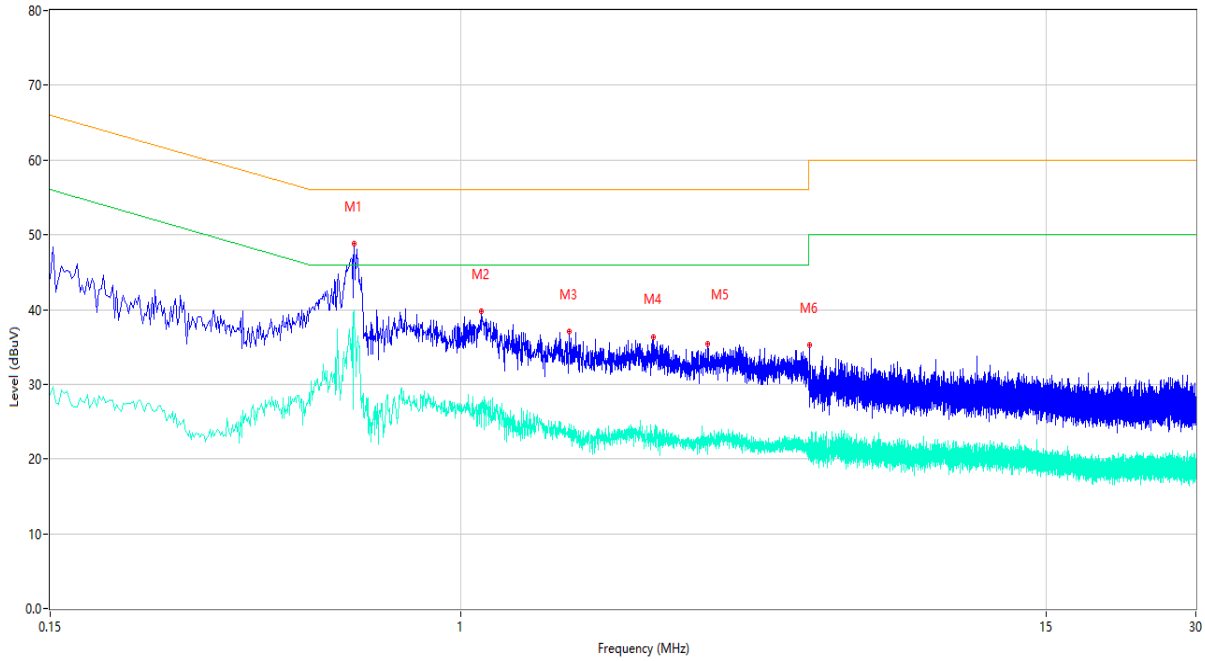
A.5 Conducted Emissions

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.

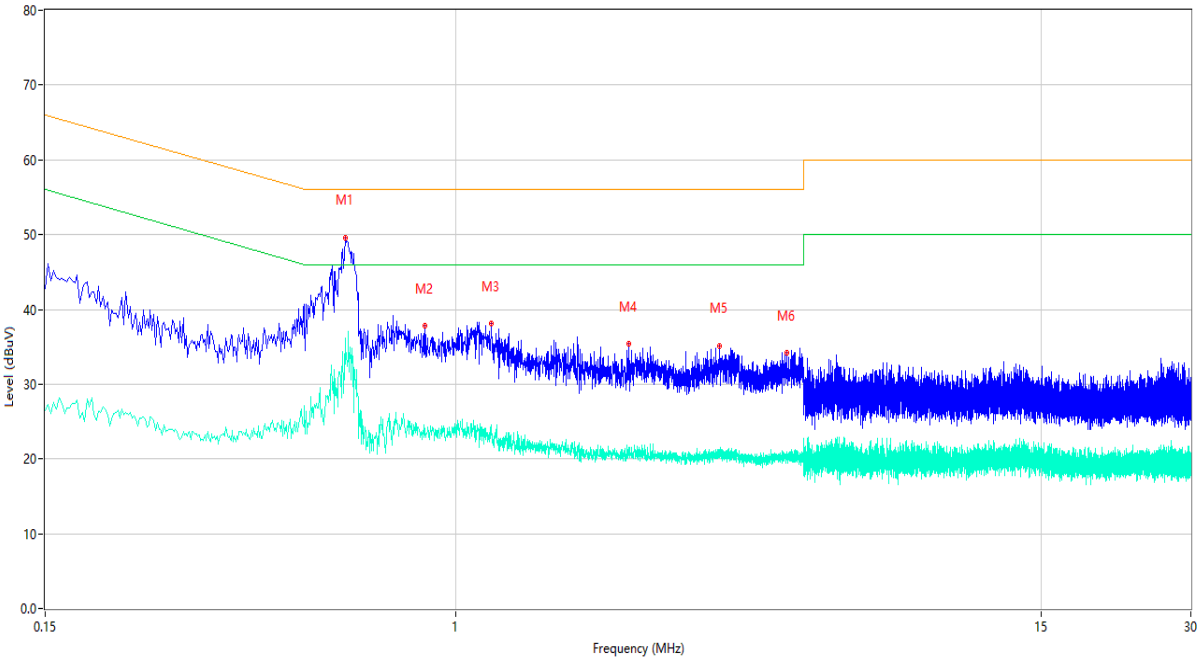
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.612	48.76	9.73	56.00	7.24	Peak	L	Pass
1**	0.612	39.88	9.73	46.00	6.12	AV	L	Pass
2	1.104	39.82	9.70	56.00	16.18	Peak	L	Pass
2**	1.104	27.59	9.70	46.00	18.41	AV	L	Pass
3	1.656	37.09	9.69	56.00	18.91	Peak	L	Pass
3**	1.656	23.97	9.69	46.00	22.03	AV	L	Pass
4	2.440	36.38	9.68	56.00	19.62	Peak	L	Pass
4**	2.440	22.83	9.68	46.00	23.17	AV	L	Pass
5	3.136	35.46	9.66	56.00	20.54	Peak	L	Pass
5**	3.136	22.01	9.66	46.00	23.99	AV	L	Pass
6	5.024	35.25	9.63	60.00	24.75	Peak	L	Pass
6**	5.024	21.43	9.63	50.00	28.57	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.600	49.62	9.84	56.00	6.38	Peak	N	Pass
1**	0.600	36.14	9.84	46.00	9.86	AV	N	Pass
2	0.868	37.79	9.87	56.00	18.21	Peak	N	Pass
2**	0.868	23.75	9.87	46.00	22.25	AV	N	Pass
3	1.182	38.12	9.87	56.00	17.88	Peak	N	Pass
3**	1.182	24.51	9.87	46.00	21.49	AV	N	Pass
4	2.232	35.39	9.86	56.00	20.61	Peak	N	Pass
4**	2.232	21.16	9.86	46.00	24.84	AV	N	Pass
5	3.396	35.17	9.84	56.00	20.83	Peak	N	Pass
5**	3.396	21.03	9.84	46.00	24.97	AV	N	Pass
6	4.630	34.22	9.82	56.00	21.78	Peak	N	Pass
6**	4.630	20.35	9.82	46.00	25.65	AV	N	Pass

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

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

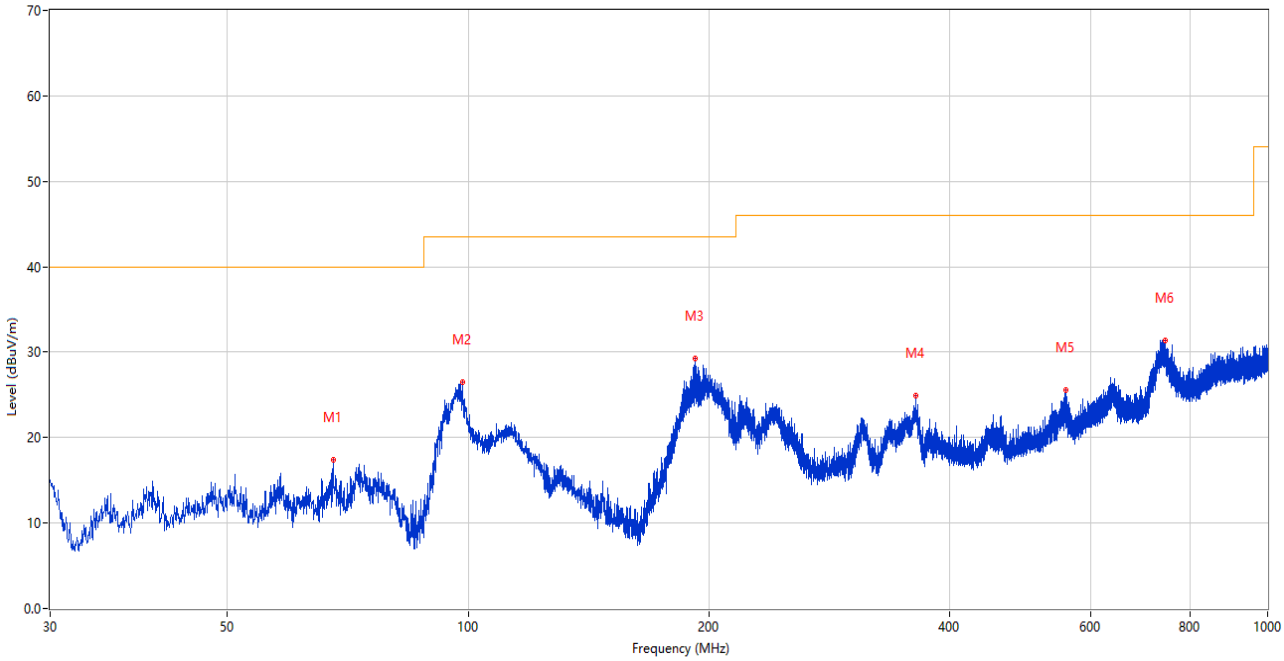
Note [2]: For the test data above 1 GHz，According the ANSI C63.4, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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.

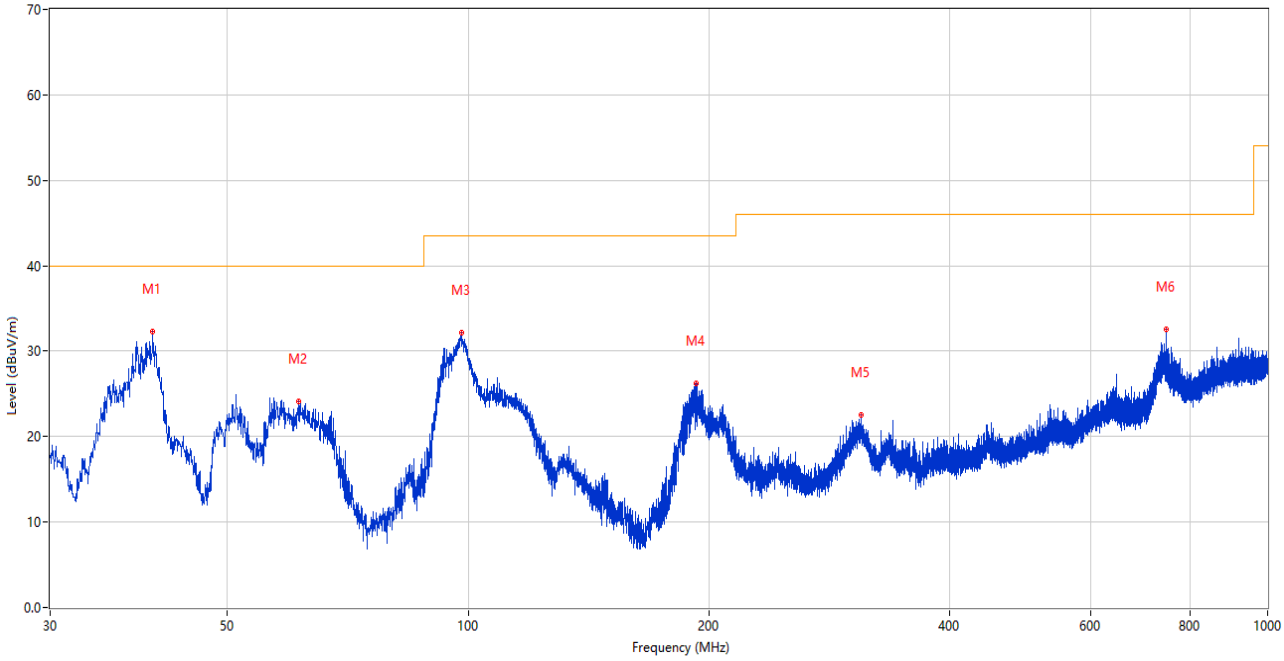
Test Data and Plots

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	67.830	17.39	-28.26	40.0	22.61	Peak	348.00	200	Horizontal	Pass
2	98.482	26.45	-26.22	43.5	17.05	Peak	197.00	200	Horizontal	Pass
3	192.426	29.21	-25.91	43.5	14.29	Peak	58.00	100	Horizontal	Pass
4	363.147	24.89	-21.67	46.0	21.11	Peak	58.00	100	Horizontal	Pass
5	559.959	25.54	-16.76	46.0	20.46	Peak	46.00	100	Horizontal	Pass
6	745.181	31.43	-11.97	46.0	14.57	Peak	354.00	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	40.331	32.34	-25.81	40.0	7.66	Peak	213.00	200	Vertical	Pass
2	61.428	24.13	-26.37	40.0	15.87	Peak	213.00	100	Vertical	Pass
3	98.143	32.19	-26.24	43.5	11.31	Peak	74.00	100	Vertical	Pass
4	192.814	26.21	-25.89	43.5	17.29	Peak	360.00	100	Vertical	Pass
5	310.087	22.55	-23.19	46.0	23.45	Peak	146.00	200	Vertical	Pass
6	745.957	32.57	-11.98	46.0	13.43	Peak	92.00	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	1209.750	43.85	-15.53	74.0	30.15	Peak	140.00	150	Horizontal	Pass
1**	1209.750	28.06	-15.53	54.0	25.94	AV	140.00	150	Horizontal	Pass
2	1368.750	43.67	-15.57	74.0	30.33	Peak	241.00	150	Horizontal	Pass
2**	1368.750	27.89	-15.57	54.0	26.11	AV	241.00	150	Horizontal	Pass
3	3935.500	49.17	-2.96	74.0	24.83	Peak	360.00	150	Horizontal	Pass
3**	3935.500	38.19	-2.96	54.0	15.81	AV	360.00	150	Horizontal	Pass
4	5217.500	104.73	-0.92	--	-50.73	Peak	54.00	150	Horizontal	N/A
4**	5217.500	96.69	-0.92	--	-96.69	AV	54.00	150	Horizontal	N/A
5	11423.799	50.20	-1.36	74.0	23.80	Peak	353.00	150	Horizontal	Pass
5**	11423.799	39.17	-1.36	54.0	14.83	AV	353.00	150	Horizontal	Pass
6	15845.925	51.22	1.67	74.0	22.78	Peak	261.00	150	Horizontal	Pass
6**	15845.925	41.31	1.67	54.0	12.69	AV	261.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1210.500	45.24	-15.55	74.0	28.76	Peak	196.00	150	Vertical	Pass
1**	1210.500	28.42	-15.55	54.0	25.58	AV	196.00	150	Vertical	Pass
2	1363.000	44.84	-15.39	74.0	29.16	Peak	216.00	150	Vertical	Pass
2**	1363.000	28.89	-15.39	54.0	25.11	AV	216.00	150	Vertical	Pass
3	4651.500	50.96	-2.04	74.0	23.04	Peak	5.00	150	Vertical	Pass
3**	4651.500	39.80	-2.04	54.0	14.20	AV	5.00	150	Vertical	Pass
4	5221.000	99.84	-0.85	--	-54.84	Peak	45.00	150	Vertical	N/A
4**	5221.000	91.95	-0.85	--	-91.95	AV	45.00	150	Vertical	N/A
5	11176.325	50.42	-1.46	74.0	23.58	Peak	160.00	150	Vertical	Pass
5**	11176.325	38.67	-1.46	54.0	15.33	AV	160.00	150	Vertical	Pass
6	15559.800	51.44	0.69	74.0	22.56	Peak	157.00	150	Vertical	Pass
6**	15559.800	40.98	0.69	54.0	13.02	AV	157.00	150	Vertical	Pass

11n20, 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	1208.000	42.96	-15.46	74.0	31.04	Peak	129.00	150	Horizontal	Pass
1**	1208.000	28.71	-15.46	54.0	25.29	AV	129.00	150	Horizontal	Pass
2	1363.500	43.36	-15.42	74.0	30.64	Peak	234.00	150	Horizontal	Pass
2**	1363.500	28.30	-15.42	54.0	25.70	AV	234.00	150	Horizontal	Pass
3	4636.500	50.98	-1.76	74.0	23.02	Peak	23.00	150	Horizontal	Pass
3**	4636.500	40.32	-1.76	54.0	13.68	AV	23.00	150	Horizontal	Pass
4	5219.000	104.55	-0.89	--	-60.55	Peak	44.00	150	Horizontal	N/A
4**	5219.000	96.71	-0.89	--	-96.71	AV	44.00	150	Horizontal	N/A
5	11989.287	49.60	-0.88	74.0	24.40	Peak	280.00	150	Horizontal	Pass
5**	11989.287	38.98	-0.88	54.0	15.02	AV	280.00	150	Horizontal	Pass
6	15713.625	51.78	1.20	74.0	22.22	Peak	360.00	150	Horizontal	Pass
6**	15713.625	41.50	1.20	54.0	12.50	AV	360.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1221.250	45.08	-15.68	74.0	28.92	Peak	198.00	150	Vertical	Pass
1**	1221.250	29.08	-15.68	54.0	24.92	AV	198.00	150	Vertical	Pass
2	1365.000	44.26	-15.47	74.0	29.74	Peak	213.00	150	Vertical	Pass
2**	1365.000	28.37	-15.47	54.0	25.63	AV	213.00	150	Vertical	Pass
3	4068.000	48.36	-3.34	74.0	25.64	Peak	359.00	150	Vertical	Pass
3**	4068.000	37.43	-3.34	54.0	16.57	AV	359.00	150	Vertical	Pass
4	5218.500	99.87	-0.91	--	-57.87	Peak	42.00	150	Vertical	N/A
4**	5218.500	92.08	-0.91	--	-92.08	AV	42.00	150	Vertical	N/A
5	11563.924	49.46	-1.17	74.0	24.54	Peak	360.00	150	Vertical	Pass
5**	11563.924	38.78	-1.17	54.0	15.22	AV	360.00	150	Vertical	Pass
6	15587.363	51.68	0.48	74.0	22.32	Peak	120.00	150	Vertical	Pass
6**	15587.363	40.27	0.48	54.0	13.73	AV	120.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1212.750	43.86	-15.60	74.0	30.14	Peak	228.00	150	Horizontal	Pass
1**	1212.750	28.76	-15.60	54.0	25.24	AV	228.00	150	Horizontal	Pass
2	1474.000	40.39	-15.59	74.0	33.61	Peak	237.00	150	Horizontal	Pass
2**	1474.000	27.84	-15.59	54.0	26.16	AV	237.00	150	Horizontal	Pass
3	3945.000	48.28	-3.65	74.0	25.72	Peak	191.00	150	Horizontal	Pass
3**	3945.000	37.69	-3.65	54.0	16.31	AV	191.00	150	Horizontal	Pass
4	5186.000	104.53	-0.99	--	-59.53	Peak	45.00	150	Horizontal	N/A
4**	5186.000	96.00	-0.99	--	-96.00	AV	45.00	150	Horizontal	N/A
5	11031.213	50.44	-0.72	74.0	23.56	Peak	305.00	150	Horizontal	Pass
5**	11031.213	39.09	-0.72	54.0	14.91	AV	305.00	150	Horizontal	Pass
6	15845.662	51.41	1.65	74.0	22.59	Peak	261.00	150	Horizontal	Pass
6**	15845.662	41.17	1.65	54.0	12.83	AV	261.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1218.250	45.99	-15.65	74.0	28.01	Peak	196.00	150	Vertical	Pass
1**	1218.250	28.93	-15.65	54.0	25.07	AV	196.00	150	Vertical	Pass
2	1362.250	44.73	-15.37	74.0	29.27	Peak	211.00	150	Vertical	Pass
2**	1362.250	28.89	-15.37	54.0	25.11	AV	211.00	150	Vertical	Pass
3	3880.500	49.11	-3.76	74.0	24.89	Peak	210.00	150	Vertical	Pass
3**	3880.500	37.73	-3.76	54.0	16.27	AV	210.00	150	Vertical	Pass
4	5192.000	100.18	-1.08	--	37.82	Peak	138.00	150	Vertical	Pass
4**	5192.000	92.53	-1.08	--	-92.53	AV	138.00	150	Vertical	N/A
5	12221.563	50.19	-1.31	74.0	23.81	Peak	62.00	150	Vertical	Pass
5**	12221.563	39.38	-1.31	54.0	14.62	AV	62.00	150	Vertical	Pass
6	15613.350	52.08	0.96	74.0	21.92	Peak	337.00	150	Vertical	Pass
6**	15613.350	41.10	0.96	54.0	12.90	AV	337.00	150	Vertical	Pass

11ac80, 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	1200.750	43.57	-15.30	74.0	30.43	Peak	164.00	150	Horizontal	Pass
1**	1200.750	28.86	-15.30	54.0	25.14	AV	164.00	150	Horizontal	Pass
2	1361.250	42.61	-15.36	74.0	31.39	Peak	230.00	150	Horizontal	Pass
2**	1361.250	28.53	-15.36	54.0	25.47	AV	230.00	150	Horizontal	Pass
3	3918.000	48.84	-3.19	74.0	25.16	Peak	0.00	150	Horizontal	Pass
3**	3918.000	37.60	-3.19	54.0	16.40	AV	0.00	150	Horizontal	Pass
4	5216.500	96.55	-0.93	--	-42.55	Peak	54.00	150	Horizontal	N/A
4**	5216.500	87.57	-0.93	--	-87.57	AV	54.00	150	Horizontal	N/A
5	11978.125	50.43	-1.01	74.0	23.57	Peak	135.00	150	Horizontal	Pass
5**	11978.125	39.26	-1.01	54.0	14.74	AV	135.00	150	Horizontal	Pass
6	15702.862	51.22	0.81	74.0	22.78	Peak	16.00	150	Horizontal	Pass
6**	15702.862	41.39	0.81	54.0	12.61	AV	16.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1210.000	44.63	-15.54	74.0	29.37	Peak	194.00	150	Vertical	Pass
1**	1210.000	28.36	-15.54	54.0	25.64	AV	194.00	150	Vertical	Pass
2	1357.500	44.42	-15.35	74.0	29.58	Peak	215.00	150	Vertical	Pass
2**	1357.500	28.56	-15.35	54.0	25.44	AV	215.00	150	Vertical	Pass
3	3990.000	48.99	-3.97	74.0	25.01	Peak	32.00	150	Vertical	Pass
3**	3990.000	37.14	-3.97	54.0	16.86	AV	32.00	150	Vertical	Pass
4	5205.500	92.07	-0.87	--	-39.07	Peak	53.00	150	Vertical	N/A
4**	5205.500	83.32	-0.87	--	-83.32	AV	53.00	150	Vertical	N/A
5	11426.888	50.14	-1.46	74.0	23.86	Peak	83.00	150	Vertical	Pass
5**	11426.888	39.59	-1.46	54.0	14.41	AV	83.00	150	Vertical	Pass
6	15721.500	52.79	1.40	74.0	21.21	Peak	156.00	150	Vertical	Pass
6**	15721.500	42.08	1.40	54.0	11.92	AV	156.00	150	Vertical	Pass

11a, U-NII-2A, 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	1203.500	43.77	-15.32	74.0	30.23	Peak	56.00	150	Horizontal	Pass
1**	1203.500	28.93	-15.32	54.0	25.07	AV	56.00	150	Horizontal	Pass
2	1352.750	43.65	-15.32	74.0	30.35	Peak	230.00	150	Horizontal	Pass
2**	1352.750	28.44	-15.32	54.0	25.56	AV	230.00	150	Horizontal	Pass
3	4629.000	51.25	-1.51	74.0	22.75	Peak	143.00	150	Horizontal	Pass
3**	4629.000	40.34	-1.51	54.0	13.66	AV	143.00	150	Horizontal	Pass
4	5301.500	105.35	-0.62	--	-71.35	Peak	34.00	150	Horizontal	N/A
4**	5301.500	97.62	-0.62	--	-97.62	AV	34.00	150	Horizontal	N/A
5	11036.675	50.57	-1.15	74.0	23.43	Peak	12.00	150	Horizontal	Pass
5**	11036.675	39.09	-1.15	54.0	14.91	AV	12.00	150	Horizontal	Pass
6	15559.276	51.71	0.76	74.0	22.29	Peak	355.00	150	Horizontal	Pass
6**	15559.276	41.11	0.76	54.0	12.89	AV	355.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1199.250	42.91	-15.30	74.0	31.09	Peak	196.00	150	Vertical	Pass
1**	1199.250	28.46	-15.30	54.0	25.54	AV	196.00	150	Vertical	Pass
2	1368.500	43.29	-15.56	74.0	30.71	Peak	211.00	150	Vertical	Pass
2**	1368.500	28.91	-15.56	54.0	25.09	AV	211.00	150	Vertical	Pass
3	3738.500	49.31	-4.66	74.0	24.69	Peak	138.00	150	Vertical	Pass
3**	3738.500	36.70	-4.66	54.0	17.30	AV	138.00	150	Vertical	Pass
4	5297.500	98.92	-0.52	--	-76.92	Peak	22.00	150	Vertical	N/A
4**	5297.500	90.78	-0.52	--	-90.78	AV	22.00	150	Vertical	N/A
5	11434.963	49.69	-1.14	74.0	24.31	Peak	354.00	150	Vertical	Pass
5**	11434.963	38.99	-1.14	54.0	15.01	AV	354.00	150	Vertical	Pass
6	15984.000	51.45	0.94	74.0	22.55	Peak	332.00	150	Vertical	Pass
6**	15984.000	40.15	0.94	54.0	13.85	AV	332.00	150	Vertical	Pass

11n20, U-NII-2A, 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	1190.250	43.95	-15.28	74.0	30.05	Peak	69.00	150	Horizontal	Pass
1**	1190.250	29.15	-15.28	54.0	24.85	AV	69.00	150	Horizontal	Pass
2	1352.500	43.19	-15.31	74.0	30.81	Peak	240.00	150	Horizontal	Pass
2**	1352.500	28.45	-15.31	54.0	25.55	AV	240.00	150	Horizontal	Pass
3	3937.500	48.51	-3.13	74.0	25.49	Peak	221.00	150	Horizontal	Pass
3**	3937.500	37.76	-3.13	54.0	16.24	AV	221.00	150	Horizontal	Pass
4	5298.500	104.93	-0.53	--	-60.93	Peak	44.00	150	Horizontal	N/A
4**	5298.500	97.57	-0.53	--	-97.57	AV	44.00	150	Horizontal	N/A
5	12504.424	50.43	-0.24	74.0	23.57	Peak	209.00	150	Horizontal	Pass
5**	12504.424	40.46	-0.24	54.0	13.54	AV	209.00	150	Horizontal	Pass
6	15890.025	51.38	1.56	74.0	22.62	Peak	16.00	150	Horizontal	Pass
6**	15890.025	41.32	1.56	54.0	12.68	AV	16.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1201.250	43.99	-15.29	74.0	30.01	Peak	203.00	150	Vertical	Pass
1**	1201.250	28.93	-15.29	54.0	25.07	AV	203.00	150	Vertical	Pass
2	1371.500	45.20	-15.58	74.0	28.80	Peak	213.00	150	Vertical	Pass
2**	1371.500	28.86	-15.58	54.0	25.14	AV	213.00	150	Vertical	Pass
3	3802.500	48.73	-3.99	74.0	25.27	Peak	307.00	150	Vertical	Pass
3**	3802.500	37.60	-3.99	54.0	16.40	AV	307.00	150	Vertical	Pass
4	5298.500	99.60	-0.53	--	26.40	Peak	126.00	150	Vertical	N/A
4**	5298.500	91.80	-0.53	--	-91.80	AV	126.00	150	Vertical	N/A
5	11859.613	50.93	-0.96	74.0	23.07	Peak	134.00	150	Vertical	Pass
5**	11859.613	39.00	-0.96	54.0	15.00	AV	134.00	150	Vertical	Pass
6	15988.463	52.01	1.02	74.0	21.99	Peak	15.00	150	Vertical	Pass
6**	15988.463	40.58	1.02	54.0	13.42	AV	15.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1199.750	43.41	-15.31	74.0	30.59	Peak	137.00	150	Horizontal	Pass
1**	1199.750	28.38	-15.31	54.0	25.62	AV	137.00	150	Horizontal	Pass
2	1346.250	42.62	-15.43	74.0	31.38	Peak	235.00	150	Horizontal	Pass
2**	1346.250	28.42	-15.43	54.0	25.58	AV	235.00	150	Horizontal	Pass
3	3936.000	48.28	-3.01	74.0	25.72	Peak	338.00	150	Horizontal	Pass
3**	3936.000	37.91	-3.01	54.0	16.09	AV	338.00	150	Horizontal	Pass
4	5268.500	103.07	-0.86	--	-60.07	Peak	43.00	150	Horizontal	N/A
4**	5268.500	95.30	-0.86	--	-95.30	AV	43.00	150	Horizontal	N/A
5	12343.162	50.35	-0.78	74.0	23.65	Peak	329.00	150	Horizontal	Pass
5**	12343.162	39.89	-0.78	54.0	14.11	AV	329.00	150	Horizontal	Pass
6	15681.599	51.63	1.08	74.0	22.37	Peak	0.00	150	Horizontal	Pass
6**	15681.599	41.12	1.08	54.0	12.88	AV	0.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1203.500	44.50	-15.32	74.0	29.50	Peak	194.00	150	Vertical	Pass
1**	1203.500	28.26	-15.32	54.0	25.74	AV	194.00	150	Vertical	Pass
2	1363.750	44.81	-15.43	74.0	29.19	Peak	215.00	150	Vertical	Pass
2**	1363.750	29.16	-15.43	54.0	24.84	AV	215.00	150	Vertical	Pass
3	4010.500	48.49	-3.60	74.0	25.51	Peak	12.00	150	Vertical	Pass
3**	4010.500	37.77	-3.60	54.0	16.23	AV	12.00	150	Vertical	Pass
4	5275.000	98.09	-0.86	--	30.91	Peak	129.00	150	Vertical	N/A
4**	5275.000	89.55	-0.86	--	-89.55	AV	129.00	150	Vertical	N/A
5	12212.537	50.59	-1.16	74.0	23.41	Peak	329.00	150	Vertical	Pass
5**	12212.537	39.93	-1.16	54.0	14.07	AV	329.00	150	Vertical	Pass
6	15485.513	51.72	0.83	74.0	22.28	Peak	360.00	150	Vertical	Pass
6**	15485.513	41.37	0.83	54.0	12.63	AV	360.00	150	Vertical	Pass

11ac80, U-NII-2A, 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	1210.500	43.96	-15.55	74.0	30.04	Peak	62.00	150	Horizontal	Pass
1**	1210.500	28.28	-15.55	54.0	25.72	AV	62.00	150	Horizontal	Pass
2	1355.250	42.90	-15.34	74.0	31.10	Peak	227.00	150	Horizontal	Pass
2**	1355.250	28.20	-15.34	54.0	25.80	AV	227.00	150	Horizontal	Pass
3	3858.500	48.49	-4.60	74.0	25.51	Peak	107.00	150	Horizontal	Pass
3**	3858.500	37.01	-4.60	54.0	16.99	AV	107.00	150	Horizontal	Pass
4	5296.000	98.22	-0.52	--	-64.22	Peak	34.00	150	Horizontal	N/A
4**	5296.000	89.53	-0.52	--	-89.53	AV	34.00	150	Horizontal	N/A
5	12360.025	50.08	-0.85	74.0	23.92	Peak	354.00	150	Horizontal	Pass
5**	12360.025	39.04	-0.85	54.0	14.96	AV	354.00	150	Horizontal	Pass
6	15606.787	50.96	0.78	74.0	23.04	Peak	86.00	150	Horizontal	Pass
6**	15606.787	40.48	0.78	54.0	13.52	AV	86.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1226.500	44.88	-15.61	74.0	29.12	Peak	196.00	150	Vertical	Pass
1**	1226.500	28.58	-15.61	54.0	25.42	AV	196.00	150	Vertical	Pass
2	1365.750	44.80	-15.49	74.0	29.20	Peak	207.00	150	Vertical	Pass
2**	1365.750	28.59	-15.49	54.0	25.41	AV	207.00	150	Vertical	Pass
3	3906.500	49.00	-3.56	74.0	25.00	Peak	284.00	150	Vertical	Pass
3**	3906.500	37.79	-3.56	54.0	16.21	AV	284.00	150	Vertical	Pass
4	5283.500	92.64	-0.74	--	13.36	Peak	106.00	150	Vertical	N/A
4**	5283.500	83.23	-0.74	--	-83.23	AV	106.00	150	Vertical	N/A
5	11567.963	50.01	-1.32	74.0	23.99	Peak	158.00	150	Vertical	Pass
5**	11567.963	38.39	-1.32	54.0	15.61	AV	158.00	150	Vertical	Pass
6	15675.300	51.31	1.47	74.0	22.69	Peak	50.00	150	Vertical	Pass
6**	15675.300	41.57	1.47	54.0	12.43	AV	50.00	150	Vertical	Pass

11a, U-NII-2C, 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	1201.250	45.45	-15.29	74.0	28.55	Peak	242.00	150	Horizontal	Pass
1**	1201.250	29.41	-15.29	54.0	24.59	AV	242.00	150	Horizontal	Pass
2	2838.000	45.53	-7.69	74.0	28.47	Peak	212.00	150	Horizontal	Pass
2**	2838.000	34.31	-7.69	54.0	19.69	AV	212.00	150	Horizontal	Pass
3	4280.000	49.43	-2.56	74.0	24.57	Peak	0.00	150	Horizontal	Pass
3**	4280.000	37.55	-2.56	54.0	16.45	AV	0.00	150	Horizontal	Pass
4	5579.000	105.37	-0.74	--	-18.37	Peak	87.00	150	Horizontal	N/A
4**	5579.000	97.65	-0.74	--	-97.65	AV	87.00	150	Horizontal	N/A
5	11900.225	51.22	-0.91	74.0	22.78	Peak	27.00	150	Horizontal	Pass
5**	11900.225	40.15	-0.91	54.0	13.85	AV	27.00	150	Horizontal	Pass
6	15943.050	52.44	1.42	74.0	21.56	Peak	15.00	150	Horizontal	Pass
6**	15943.050	42.47	1.42	54.0	11.53	AV	15.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1370.500	45.11	-15.56	74.0	28.89	Peak	108.00	150	Vertical	Pass
1**	1370.500	29.20	-15.56	54.0	24.80	AV	108.00	150	Vertical	Pass
2	2862.750	46.08	-7.54	74.0	27.92	Peak	239.00	150	Vertical	Pass
2**	2862.750	35.13	-7.54	54.0	18.87	AV	239.00	150	Vertical	Pass
3	4241.500	48.91	-2.52	74.0	25.09	Peak	148.00	150	Vertical	Pass
3**	4241.500	37.47	-2.52	54.0	16.53	AV	148.00	150	Vertical	Pass
4	5579.000	104.53	-0.74	--	4.47	Peak	109.00	150	Vertical	N/A
4**	5579.000	97.40	-0.74	--	-97.40	AV	109.00	150	Vertical	N/A
5	11854.151	50.61	-1.25	74.0	23.39	Peak	72.00	150	Vertical	Pass
5**	11854.151	40.18	-1.25	54.0	13.82	AV	72.00	150	Vertical	Pass
6	15711.787	52.28	1.41	74.0	21.72	Peak	360.00	150	Vertical	Pass
6**	15711.787	41.71	1.41	54.0	12.29	AV	360.00	150	Vertical	Pass

11n20, U-NII-2C, 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	1235.500	45.57	-15.48	74.0	28.43	Peak	248.00	150	Horizontal	Pass
1**	1235.500	29.23	-15.48	54.0	24.77	AV	248.00	150	Horizontal	Pass
2	2280.250	43.07	-12.06	74.0	30.93	Peak	336.00	150	Horizontal	Pass
2**	2280.250	31.67	-12.06	54.0	22.33	AV	336.00	150	Horizontal	Pass
3	4736.000	50.25	-1.95	74.0	23.75	Peak	205.00	150	Horizontal	Pass
3**	4736.000	39.30	-1.95	54.0	14.70	AV	205.00	150	Horizontal	Pass
4	5581.500	105.89	-0.71	--	-16.89	Peak	89.00	150	Horizontal	N/A
4**	5581.500	98.31	-0.71	--	-98.31	AV	89.00	150	Horizontal	N/A
5	7668.500	55.56	3.04	74.0	18.44	Peak	29.00	150	Horizontal	Pass
5**	7668.500	44.65	3.04	54.0	9.35	AV	29.00	150	Horizontal	Pass
6	12462.625	51.15	0.03	74.0	22.85	Peak	285.00	150	Horizontal	Pass
6**	12462.625	40.39	0.03	54.0	13.61	AV	285.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	v	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1363.750	44.95	-15.43	74.0	29.05	Peak	111.00	150	Vertical	Pass
1**	1363.750	29.17	-15.43	54.0	24.83	AV	111.00	150	Vertical	Pass
2	2248.500	42.94	-11.39	74.0	31.06	Peak	360.00	150	Vertical	Pass
2**	2248.500	32.34	-11.39	54.0	21.66	AV	360.00	150	Vertical	Pass
3	4908.000	51.53	-1.16	74.0	22.47	Peak	303.00	150	Vertical	Pass
3**	4908.000	40.04	-1.16	54.0	13.96	AV	303.00	150	Vertical	Pass
4	5579.500	105.51	-0.74	--	2.49	Peak	108.00	150	Vertical	N/A
4**	5579.500	98.27	-0.74	--	-98.27	AV	108.00	150	Vertical	N/A
5	7630.500	57.48	3.01	74.0	16.52	Peak	21.00	150	Vertical	Pass
5**	7630.500	45.48	3.01	54.0	8.52	AV	21.00	150	Vertical	Pass
6	11230.713	51.03	-1.46	74.0	22.97	Peak	360.00	150	Vertical	Pass
6**	11230.713	39.91	-1.46	54.0	14.09	AV	360.00	150	Vertical	Pass

11n40, U-NII-2C, 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	1207.750	42.43	-15.45	74.0	31.57	Peak	242.00	150	Horizontal	Pass
1**	1207.750	28.13	-15.45	54.0	25.87	AV	242.00	150	Horizontal	Pass
2	2804.750	45.27	-8.38	74.0	28.73	Peak	360.00	150	Horizontal	Pass
2**	2804.750	34.17	-8.38	54.0	19.83	AV	360.00	150	Horizontal	Pass
3	4191.500	48.40	-2.81	74.0	25.60	Peak	197.00	150	Horizontal	Pass
3**	4191.500	37.50	-2.81	54.0	16.50	AV	197.00	150	Horizontal	Pass
4	5591.500	103.95	-0.60	--	-14.95	Peak	89.00	150	Horizontal	N/A
4**	5591.500	95.71	-0.60	--	-95.71	AV	89.00	150	Horizontal	N/A
5	7528.500	56.04	2.69	74.0	17.96	Peak	314.00	150	Horizontal	Pass
5**	7528.500	44.06	2.69	54.0	9.94	AV	314.00	150	Horizontal	Pass
6	11899.513	50.57	-0.92	74.0	23.43	Peak	360.00	150	Horizontal	Pass
6**	11899.513	40.53	-0.92	54.0	13.47	AV	360.00	150	Horizontal	Pass

11n40, U-NII-2C, 1 GHz to 18 GHz, Middle Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1351.500	44.57	-15.30	74.0	29.43	Peak	109.00	150	Vertical	Pass
1**	1351.500	28.43	-15.30	54.0	25.57	AV	109.00	150	Vertical	Pass
2	2290.500	43.76	-11.67	74.0	30.24	Peak	263.00	150	Vertical	Pass
2**	2290.500	31.67	-11.67	54.0	22.33	AV	263.00	150	Vertical	Pass
3	4053.500	47.82	-3.04	74.0	26.18	Peak	3.00	150	Vertical	Pass
3**	4053.500	36.99	-3.04	54.0	17.01	AV	3.00	150	Vertical	Pass
4	5587.000	104.77	-0.61	--	1.23	Peak	106.00	150	Vertical	N/A
4**	5587.000	96.74	-0.61	--	-96.74	AV	106.00	150	Vertical	N/A
5	7732.000	55.81	3.19	74.0	18.19	Peak	359.00	150	Vertical	Pass
5**	7732.000	45.11	3.19	54.0	8.89	AV	359.00	150	Vertical	Pass
6	11954.850	50.56	-0.98	74.0	23.44	Peak	310.00	150	Vertical	Pass
6**	11954.850	40.19	-0.98	54.0	13.81	AV	310.00	150	Vertical	Pass

11ac80, U-NII-2C, 1 GHz to 18 GHz, Low Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1201.250	45.96	-15.29	74.0	28.04	Peak	239.00	150	Horizontal	Pass
1**	1201.250	29.08	-15.29	54.0	24.92	AV	239.00	150	Horizontal	Pass
2	2246.000	43.53	-11.41	74.0	30.47	Peak	23.00	150	Horizontal	Pass
2**	2246.000	32.14	-11.41	54.0	21.86	AV	23.00	150	Horizontal	Pass
3	4943.000	50.74	-0.56	74.0	23.26	Peak	223.00	150	Horizontal	Pass
3**	4943.000	40.17	-0.56	54.0	13.83	AV	223.00	150	Horizontal	Pass
4	5536.500	96.50	-0.69	--	28.50	Peak	125.00	150	Horizontal	N/A
4**	5536.500	88.00	-0.69	--	-88.00	AV	125.00	150	Horizontal	N/A
5	11079.425	50.90	-1.43	74.0	23.10	Peak	261.00	150	Horizontal	Pass
5**	11079.425	38.55	-1.43	54.0	15.45	AV	261.00	150	Horizontal	Pass
6	15625.950	52.40	1.40	74.0	21.60	Peak	359.00	150	Horizontal	Pass
6**	15625.950	42.28	1.40	54.0	11.72	AV	359.00	150	Horizontal	Pass

11ac80, U-NII-2C, 1 GHz to 18 GHz, Low Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1360.500	45.04	-15.35	74.0	28.96	Peak	114.00	150	Vertical	Pass
1**	1360.500	29.41	-15.35	54.0	24.59	AV	114.00	150	Vertical	Pass
2	2802.250	45.82	-8.40	74.0	28.18	Peak	2.00	150	Vertical	Pass
2**	2802.250	34.07	-8.40	54.0	19.93	AV	2.00	150	Vertical	Pass
3	4183.500	48.02	-3.02	74.0	25.98	Peak	4.00	150	Vertical	Pass
3**	4183.500	37.86	-3.02	54.0	16.14	AV	4.00	150	Vertical	Pass
4	5523.500	96.69	-0.70	--	18.31	Peak	115.00	150	Vertical	N/A
4**	5523.500	88.20	-0.70	--	-88.20	AV	115.00	150	Vertical	N/A
5	11270.612	50.18	-1.45	74.0	23.82	Peak	360.00	150	Vertical	Pass
5**	11270.612	39.82	-1.45	54.0	14.18	AV	360.00	150	Vertical	Pass
6	15983.737	52.25	0.96	74.0	21.75	Peak	0.00	150	Vertical	Pass
6**	15983.737	42.14	0.96	54.0	11.86	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	1202.250	45.34	-15.28	74.0	28.66	Peak	242.00	150	Horizontal	Pass
1**	1202.250	29.15	-15.28	54.0	24.85	AV	242.00	150	Horizontal	Pass
2	2784.000	45.29	-8.03	74.0	28.71	Peak	298.00	150	Horizontal	Pass
2**	2784.000	33.87	-8.03	54.0	20.13	AV	298.00	150	Horizontal	Pass
3	5090.500	51.46	-0.85	74.0	22.54	Peak	359.00	150	Horizontal	Pass
3**	5090.500	40.63	-0.85	54.0	13.37	AV	359.00	150	Horizontal	Pass
4	5786.500	104.36	0.39	--	-6.36	Peak	98.00	150	Horizontal	N/A
4**	5786.500	97.30	0.39	--	-97.30	AV	98.00	150	Horizontal	N/A
5	11261.112	50.64	-1.48	74.0	23.36	Peak	332.00	150	Horizontal	Pass
5**	11261.112	39.72	-1.48	54.0	14.28	AV	332.00	150	Horizontal	Pass
6	15918.113	52.13	1.06	74.0	21.87	Peak	15.00	150	Horizontal	Pass
6**	15918.113	41.34	1.06	54.0	12.66	AV	15.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1366.500	45.57	-15.48	74.0	28.43	Peak	102.00	150	Vertical	Pass
1**	1366.500	29.49	-15.48	54.0	24.51	AV	102.00	150	Vertical	Pass
2	2241.500	42.90	-11.50	74.0	31.10	Peak	6.00	150	Vertical	Pass
2**	2241.500	31.77	-11.50	54.0	22.23	AV	6.00	150	Vertical	Pass
3	4286.500	48.68	-3.00	74.0	25.32	Peak	127.00	150	Vertical	Pass
3**	4286.500	37.62	-3.00	54.0	16.38	AV	127.00	150	Vertical	Pass
4	5786.000	106.22	0.38	--	1.78	Peak	108.00	150	Vertical	N/A
4**	5786.000	98.23	0.38	--	-98.23	AV	108.00	150	Vertical	N/A
5	7724.500	56.10	3.05	74.0	17.90	Peak	0.00	150	Vertical	Pass
5**	7724.500	45.15	3.05	54.0	8.85	AV	0.00	150	Vertical	Pass
6	11895.474	51.01	-0.90	74.0	22.99	Peak	192.00	150	Vertical	Pass
6**	11895.474	40.77	-0.90	54.0	13.23	AV	192.00	150	Vertical	Pass

11n20, 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	1201.500	45.42	-15.28	74.0	28.58	Peak	242.00	150	Horizontal	Pass
1**	1201.500	28.89	-15.28	54.0	25.11	AV	242.00	150	Horizontal	Pass
2	2283.250	43.12	-11.97	74.0	30.88	Peak	32.00	150	Horizontal	Pass
2**	2283.250	31.71	-11.97	54.0	22.29	AV	32.00	150	Horizontal	Pass
3	4105.000	48.00	-3.31	74.0	26.00	Peak	0.00	150	Horizontal	Pass
3**	4105.000	36.92	-3.31	54.0	17.08	AV	0.00	150	Horizontal	Pass
4	5786.000	106.29	0.38	--	-8.29	Peak	98.00	150	Horizontal	N/A
4**	5786.000	98.58	0.38	--	-98.58	AV	98.00	150	Horizontal	N/A
5	11810.925	50.85	-1.36	74.0	23.15	Peak	355.00	150	Horizontal	Pass
5**	11810.925	39.21	-1.36	54.0	14.79	AV	355.00	150	Horizontal	Pass
6	15891.599	52.36	1.63	74.0	21.64	Peak	253.00	150	Horizontal	Pass
6**	15891.599	42.17	1.63	54.0	11.83	AV	253.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1361.250	45.98	-15.36	74.0	28.02	Peak	109.00	150	Vertical	Pass
1**	1361.250	30.28	-15.36	54.0	23.72	AV	109.00	150	Vertical	Pass
2	2349.750	42.83	-10.41	74.0	31.17	Peak	260.00	150	Vertical	Pass
2**	2349.750	32.34	-10.41	54.0	21.66	AV	260.00	150	Vertical	Pass
3	4899.500	50.93	-1.14	74.0	23.07	Peak	0.00	150	Vertical	Pass
3**	4899.500	39.62	-1.14	54.0	14.38	AV	0.00	150	Vertical	Pass
4	5786.500	106.80	0.39	--	187.20	Peak	294.00	150	Vertical	N/A
4**	5786.500	99.24	0.39	--	-99.24	AV	294.00	150	Vertical	N/A
5	7732.000	55.98	3.19	74.0	18.02	Peak	0.00	150	Vertical	Pass
5**	7732.000	45.18	3.19	54.0	8.82	AV	0.00	150	Vertical	Pass
6	12506.800	50.58	-0.12	74.0	23.42	Peak	334.00	150	Vertical	Pass
6**	12506.800	41.14	-0.12	54.0	12.86	AV	334.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1203.750	45.34	-15.32	74.0	28.66	Peak	250.00	150	Horizontal	Pass
1**	1203.750	29.83	-15.32	54.0	24.17	AV	250.00	150	Horizontal	Pass
2	2852.250	45.86	-7.62	74.0	28.14	Peak	276.00	150	Horizontal	Pass
2**	2852.250	34.63	-7.62	54.0	19.37	AV	276.00	150	Horizontal	Pass
3	5060.000	51.61	-0.93	74.0	22.39	Peak	0.00	150	Horizontal	Pass
3**	5060.000	40.32	-0.93	54.0	13.68	AV	0.00	150	Horizontal	Pass
4	5756.500	104.19	0.05	--	33.81	Peak	138.00	150	Horizontal	N/A
4**	5756.500	96.19	0.05	--	-96.19	AV	138.00	150	Horizontal	N/A
5	7649.000	56.35	2.84	74.0	17.65	Peak	82.00	150	Horizontal	Pass
5**	7649.000	44.49	2.84	54.0	9.51	AV	82.00	150	Horizontal	Pass
6	12525.325	51.48	-0.29	74.0	22.52	Peak	32.00	150	Horizontal	Pass
6**	12525.325	40.30	-0.29	54.0	13.70	AV	32.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1362.750	45.89	-15.38	74.0	28.11	Peak	111.00	150	Vertical	Pass
1**	1362.750	29.50	-15.38	54.0	24.50	AV	111.00	150	Vertical	Pass
2	2839.250	45.46	-7.60	74.0	28.54	Peak	323.00	150	Vertical	Pass
2**	2839.250	34.56	-7.60	54.0	19.44	AV	323.00	150	Vertical	Pass
3	4292.000	48.54	-3.14	74.0	25.46	Peak	43.00	150	Vertical	Pass
3**	4292.000	38.25	-3.14	54.0	15.75	AV	43.00	150	Vertical	Pass
4	5758.000	104.90	0.03	--	151.10	Peak	256.00	150	Vertical	N/A
4**	5758.000	97.00	0.03	--	-97.00	AV	256.00	150	Vertical	N/A
5	7743.500	56.55	3.43	74.0	17.45	Peak	0.00	150	Vertical	Pass
5**	7743.500	45.27	3.43	54.0	8.73	AV	0.00	150	Vertical	Pass
6	12496.349	50.94	0.20	74.0	23.06	Peak	285.00	150	Vertical	Pass
6**	12496.349	40.72	0.20	54.0	13.28	AV	285.00	150	Vertical	Pass

11ac80, 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	1201.500	44.90	-15.28	74.0	29.10	Peak	247.00	150	Horizontal	Pass
1**	1201.500	29.10	-15.28	54.0	24.90	AV	247.00	150	Horizontal	Pass
2	2242.500	43.50	-11.47	74.0	30.50	Peak	50.00	150	Horizontal	Pass
2**	2242.500	31.71	-11.47	54.0	22.29	AV	50.00	150	Horizontal	Pass
3	3939.000	48.79	-3.25	74.0	25.21	Peak	203.00	150	Horizontal	Pass
3**	3939.000	38.25	-3.25	54.0	15.75	AV	203.00	150	Horizontal	Pass
4	5768.500	99.25	0.41	--	-1.25	Peak	98.00	150	Horizontal	N/A
4**	5768.500	88.90	0.41	--	-88.90	AV	98.00	150	Horizontal	N/A
5	7255.000	55.35	2.91	74.0	18.65	Peak	203.00	150	Horizontal	Pass
5**	7255.000	43.92	2.91	54.0	10.08	AV	203.00	150	Horizontal	Pass
6	15649.313	51.57	1.41	74.0	22.43	Peak	359.00	150	Horizontal	Pass
6**	15649.313	41.07	1.41	54.0	12.93	AV	359.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1201.500	44.43	-15.28	74.0	29.57	Peak	241.00	150	Vertical	Pass
1**	1201.500	28.59	-15.28	54.0	25.41	AV	241.00	150	Vertical	Pass
2	2825.250	44.91	-8.37	74.0	29.09	Peak	360.00	150	Vertical	Pass
2**	2825.250	34.33	-8.37	54.0	19.67	AV	360.00	150	Vertical	Pass
3	5111.500	51.88	-1.00	74.0	22.12	Peak	0.00	150	Vertical	Pass
3**	5111.500	41.11	-1.00	54.0	12.89	AV	0.00	150	Vertical	Pass
4	5768.500	99.41	0.41	--	186.59	Peak	286.00	150	Vertical	N/A
4**	5768.500	90.32	0.41	--	-90.32	AV	286.00	150	Vertical	N/A
5	12337.225	50.62	-0.77	74.0	23.38	Peak	360.00	150	Vertical	Pass
5**	12337.225	39.89	-0.77	54.0	14.11	AV	360.00	150	Vertical	Pass
6	15772.162	51.64	0.99	74.0	22.36	Peak	0.00	150	Vertical	Pass
6**	15772.162	41.23	0.99	54.0	12.77	AV	0.00	150	Vertical	Pass

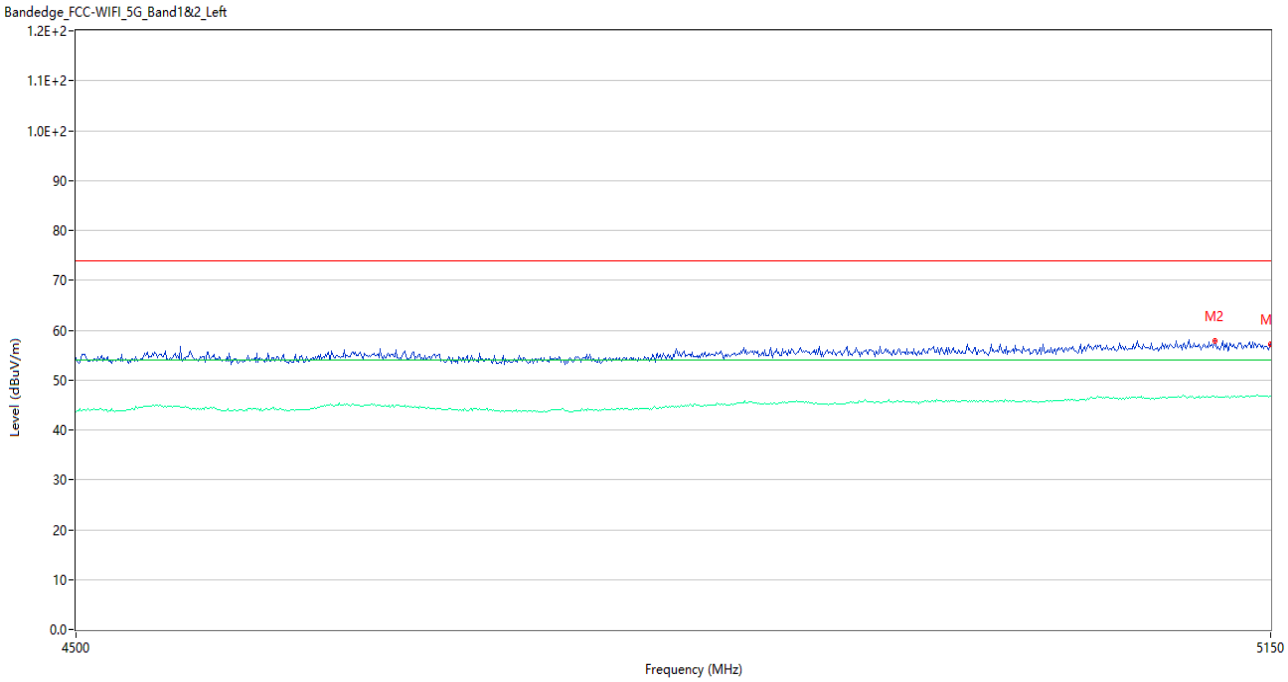
A.6.2 Band Edge (Restricted-band)

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
	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass
U-NII-2A	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass
U-NII-2C	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	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

	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass

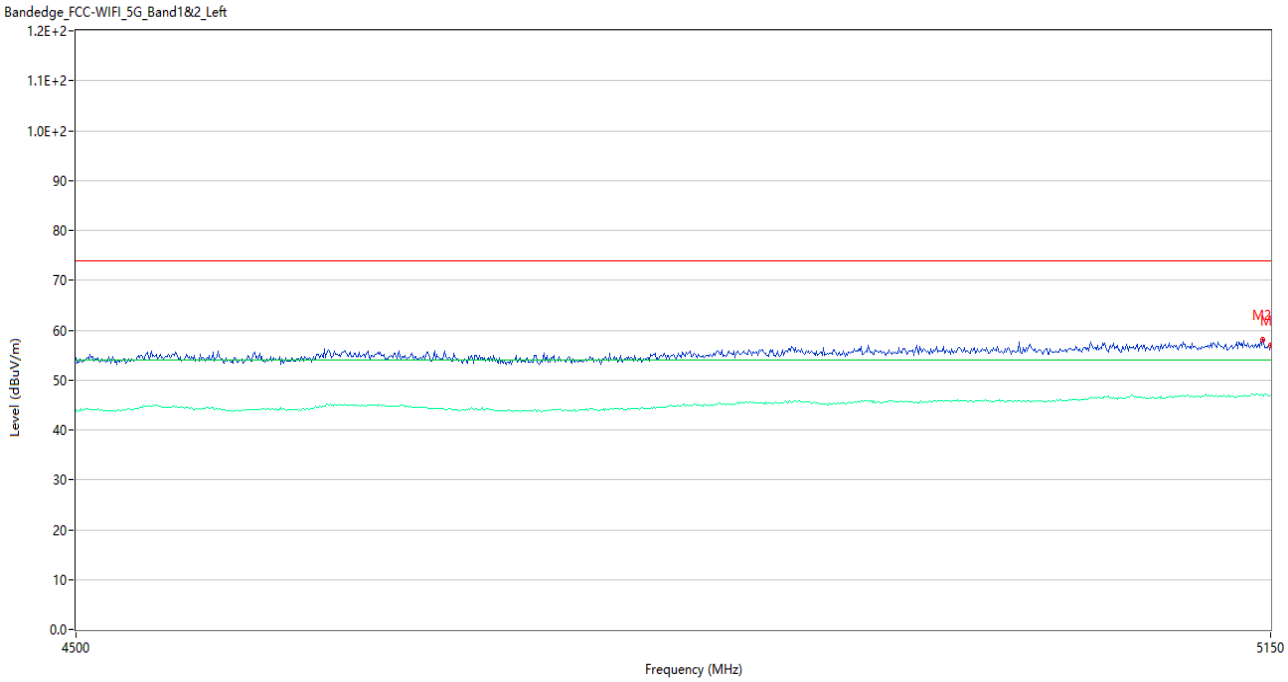
Test Data and Plots

U-NII-1 11a Low Channel ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.41	5.21	74.0	17.59	Peak	109.02	150	Vertical	Pass
1**	5150.000	46.76	5.21	54.0	7.24	AV	109.02	150	Vertical	Pass
2	5117.500	57.92	5.16	74.0	16.08	Peak	112.00	150	Vertical	Pass
2**	5117.500	46.59	5.16	54.0	7.41	AV	112.00	150	Vertical	Pass

U-NII-1 11a Low Channel ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.86	5.21	74.0	17.14	Peak	341.97	150	Horizontal	Pass
1**	5150.000	47.10	5.21	54.0	6.90	AV	341.97	150	Horizontal	Pass
2	5145.450	58.08	5.41	74.0	15.92	Peak	343.00	150	Horizontal	Pass
2**	5145.450	46.97	5.41	54.0	7.03	AV	343.00	150	Horizontal	Pass

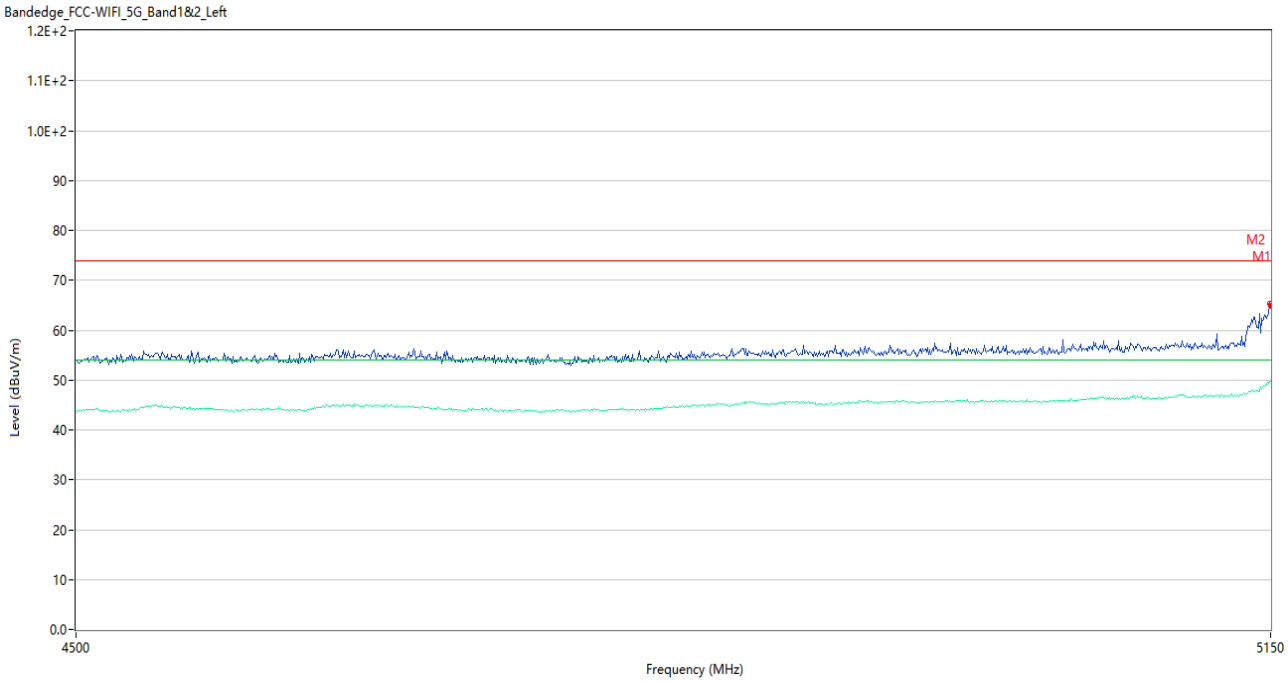
U-NII-1 11a High Channel ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	57.21	5.40	74.0	16.79	Peak	290.00	150	Vertical	Pass
1**	5350.000	45.99	5.40	54.0	8.01	AV	290.00	150	Vertical	Pass
2	5368.700	57.98	5.42	74.0	16.02	Peak	170.00	150	Vertical	Pass
2**	5368.700	46.18	5.42	54.0	7.82	AV	170.00	150	Vertical	Pass

U-NII-1 11a High Channel ANT H

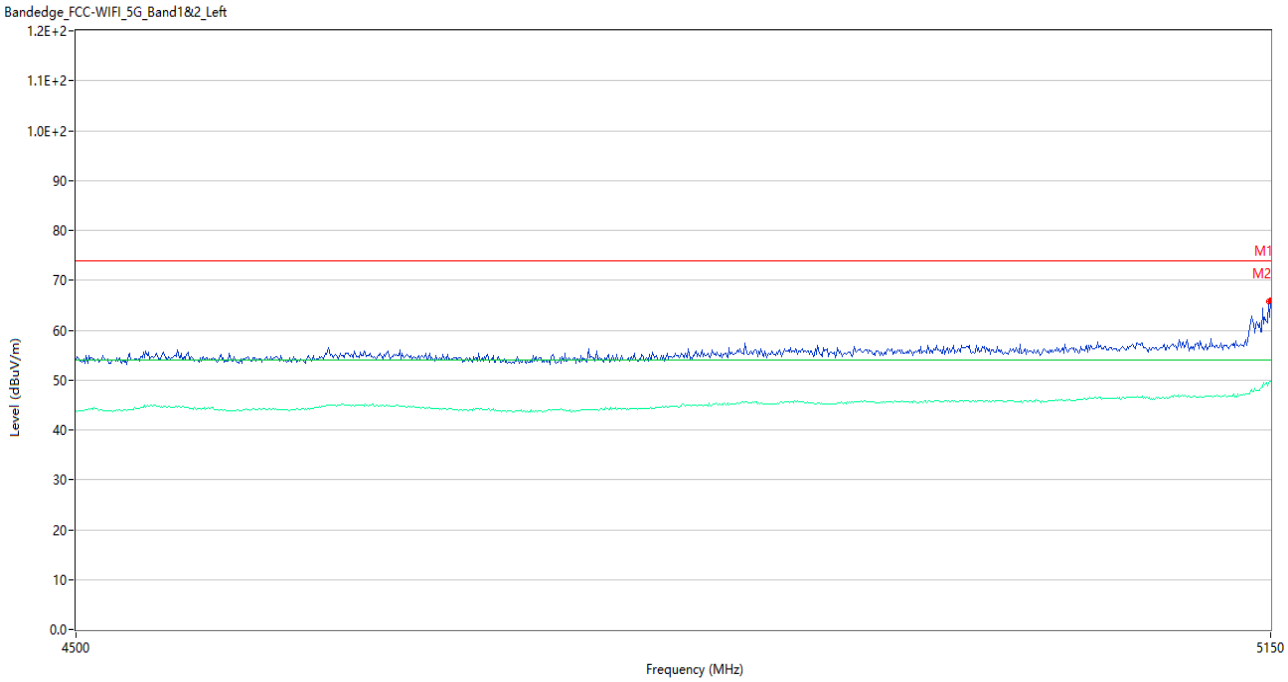
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.86	5.40	74.0	18.14	Peak	222.00	150	Horizontal	Pass
1**	5350.000	46.15	5.40	54.0	7.85	AV	222.00	150	Horizontal	Pass
2	5423.040	58.34	5.32	74.0	15.66	Peak	92.00	150	Horizontal	Pass
2**	5423.040	46.10	5.32	54.0	7.90	AV	92.00	150	Horizontal	Pass

U-NII-1 11ac20 Low Channel ANT V



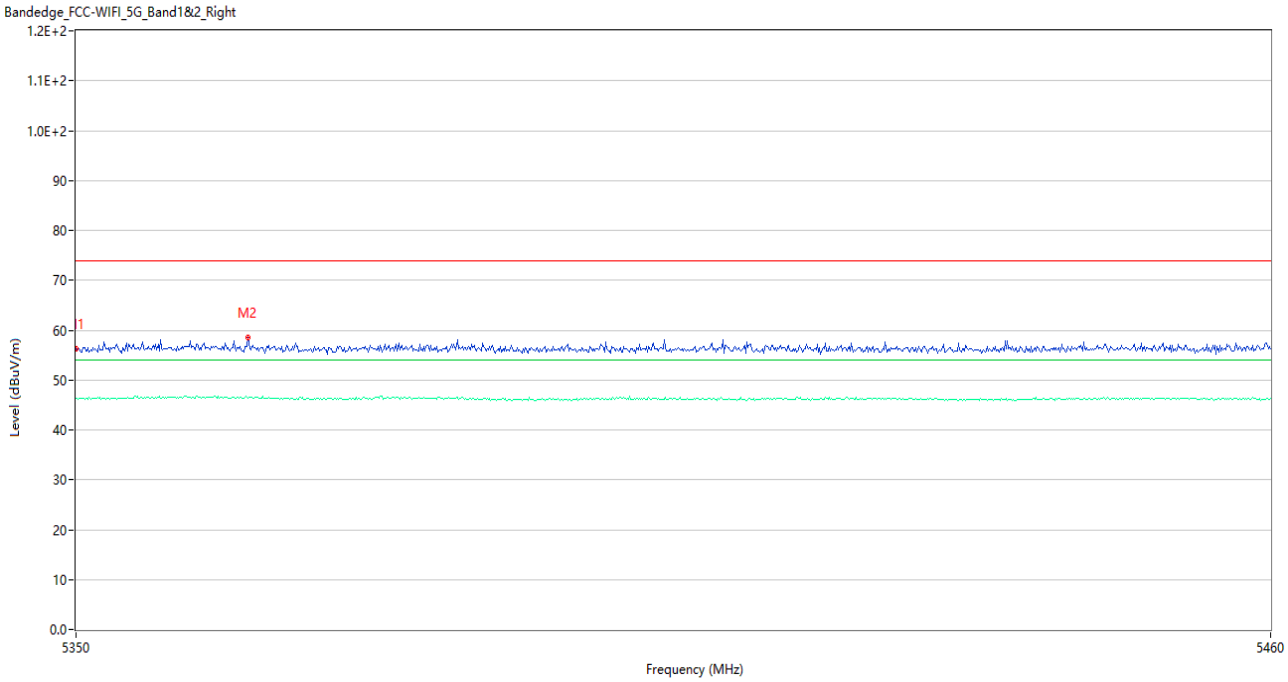
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	64.89	5.21	74.0	9.11	Peak	211.98	150	Vertical	Pass
1**	5150.000	49.62	5.21	54.0	4.38	AV	211.98	150	Vertical	Pass
2	5149.350	65.28	5.21	74.0	8.72	Peak	115.00	150	Vertical	Pass
2**	5149.350	49.73	5.21	54.0	4.27	AV	115.00	150	Vertical	Pass

U-NII-1 11ac20 Low Channel ANT H



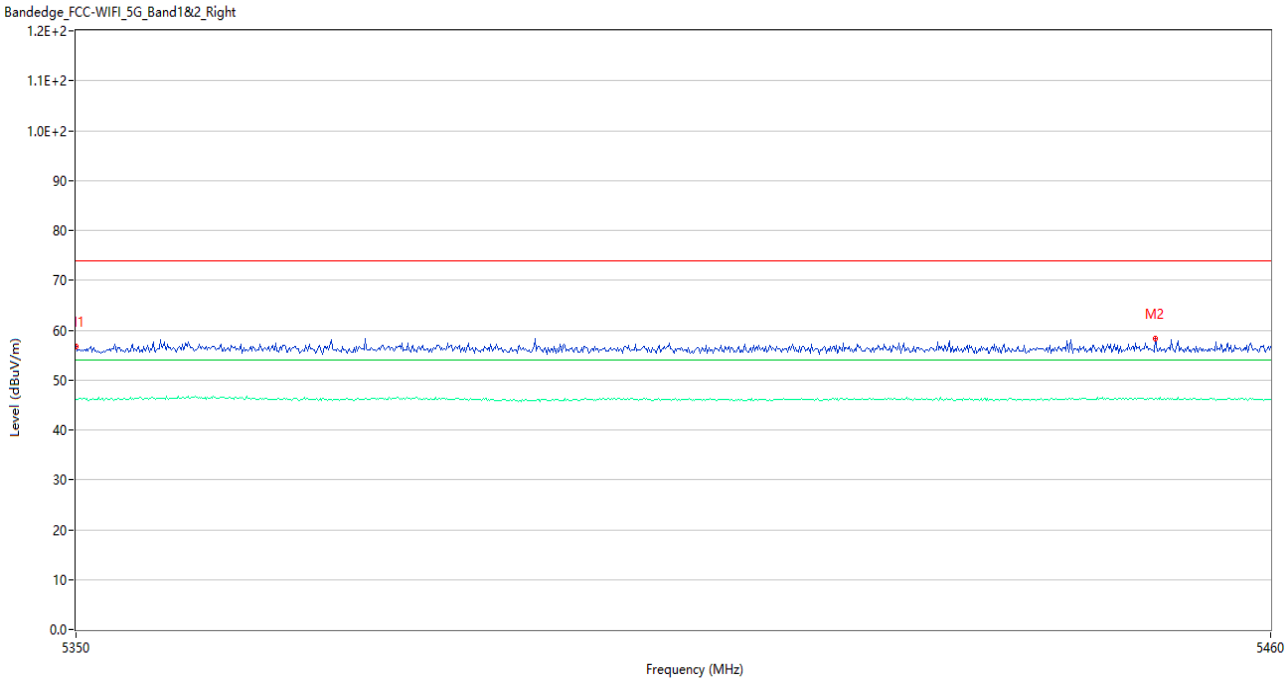
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	65.94	5.21	74.0	8.06	Peak	97.00	150	Horizontal	Pass
1**	5150.000	49.73	5.21	54.0	4.27	AV	97.00	150	Horizontal	Pass
2	5148.700	65.82	5.23	74.0	8.18	Peak	118.00	150	Horizontal	Pass
2**	5148.700	49.60	5.23	54.0	4.40	AV	118.00	150	Horizontal	Pass

U-NII-1 11ac20 High Channel ANT V



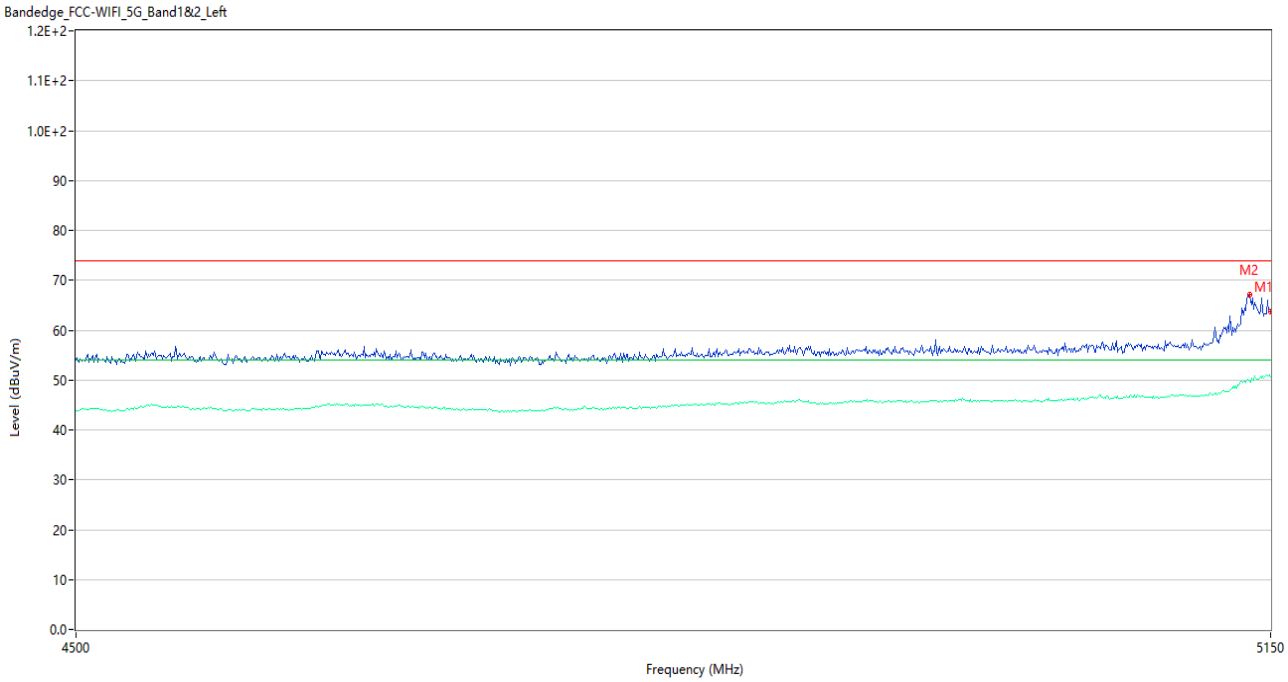
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.29	5.40	74.0	17.71	Peak	3.00	150	Vertical	Pass
1**	5350.000	46.31	5.40	54.0	7.69	AV	3.00	150	Vertical	Pass
2	5365.730	58.52	5.53	74.0	15.48	Peak	188.00	150	Vertical	Pass
2**	5365.730	46.39	5.53	54.0	7.61	AV	188.00	150	Vertical	Pass

U-NII-1 11ac20 High Channel ANT H



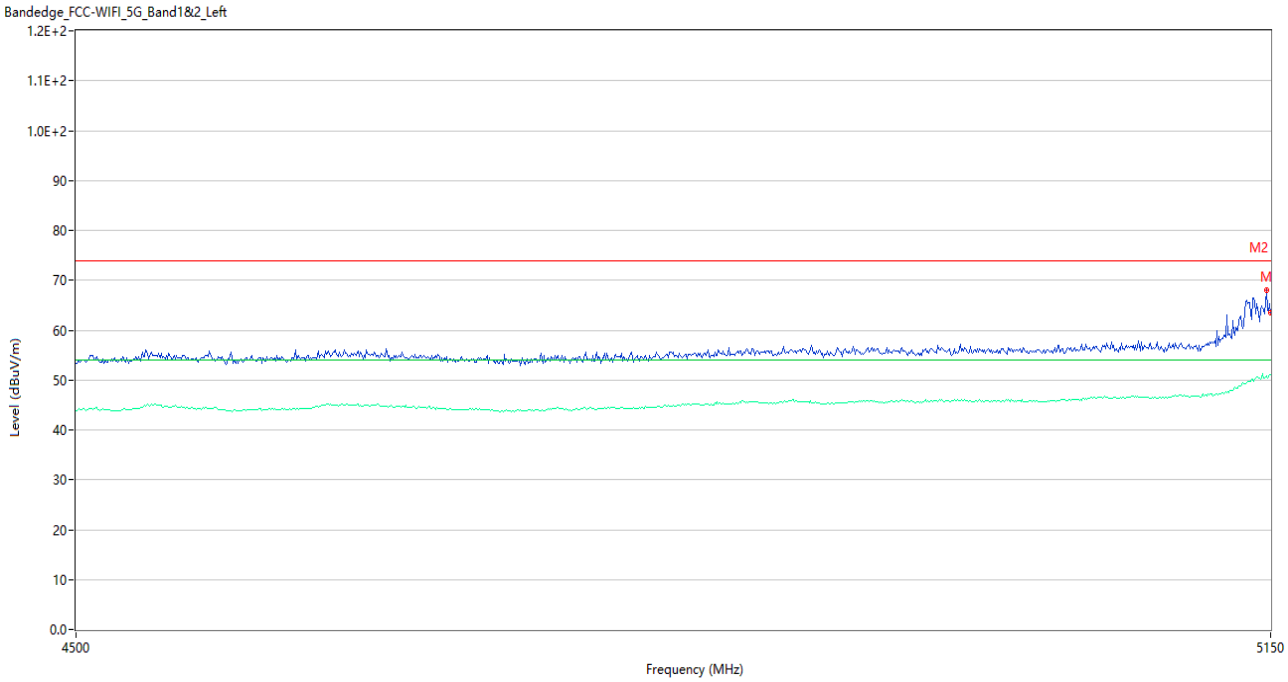
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.66	5.40	74.0	17.34	Peak	129.00	150	Horizontal	Pass
1**	5350.000	45.99	5.40	54.0	8.01	AV	129.00	150	Horizontal	Pass
2	5449.330	58.28	5.60	74.0	15.72	Peak	196.00	150	Horizontal	Pass
2**	5449.330	46.23	5.60	54.0	7.77	AV	196.00	150	Horizontal	Pass

U-NII-1 11ac40 Low Channel ANT V



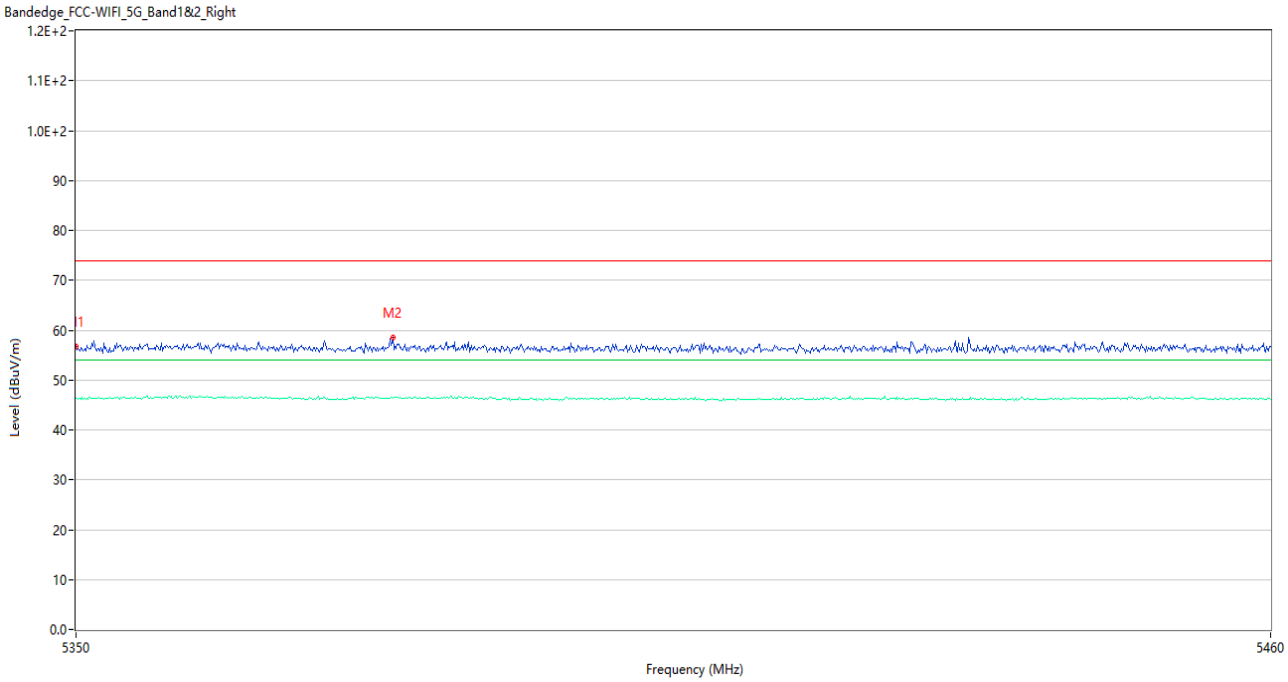
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	63.74	5.21	74.0	10.26	Peak	5.04	150	Vertical	Pass
1**	5150.000	50.71	5.21	54.0	3.29	AV	5.04	150	Vertical	Pass
2	5137.650	67.09	5.53	74.0	6.91	Peak	177.00	150	Vertical	Pass
2**	5137.650	49.63	5.53	54.0	4.37	AV	177.00	150	Vertical	Pass

U-NII-1 11ac40 Low Channel ANT H



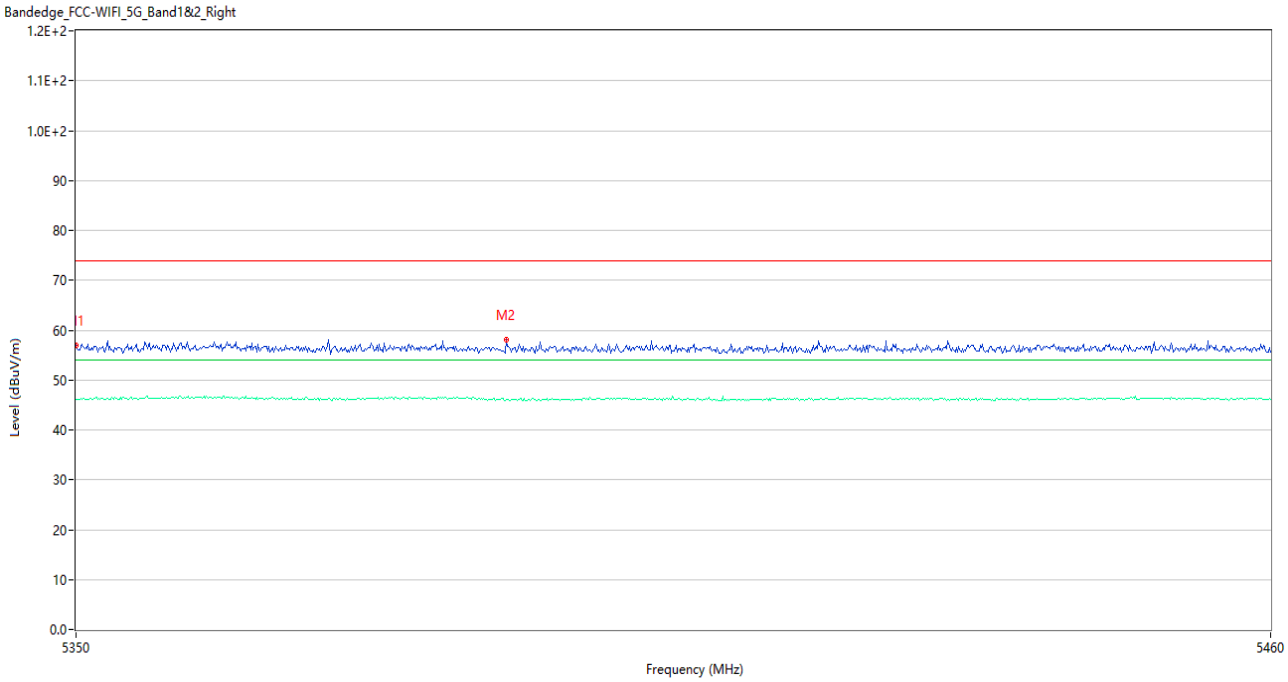
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	63.42	5.21	74.0	10.58	Peak	141.99	150	Horizontal	Pass
1**	5150.000	51.03	5.21	54.0	2.97	AV	141.99	150	Horizontal	Pass
2	5147.400	68.11	5.29	74.0	5.89	Peak	127.00	150	Horizontal	Pass
2**	5147.400	50.76	5.29	54.0	3.24	AV	127.00	150	Horizontal	Pass

U-NII-1 11ac40 High Channel ANT V



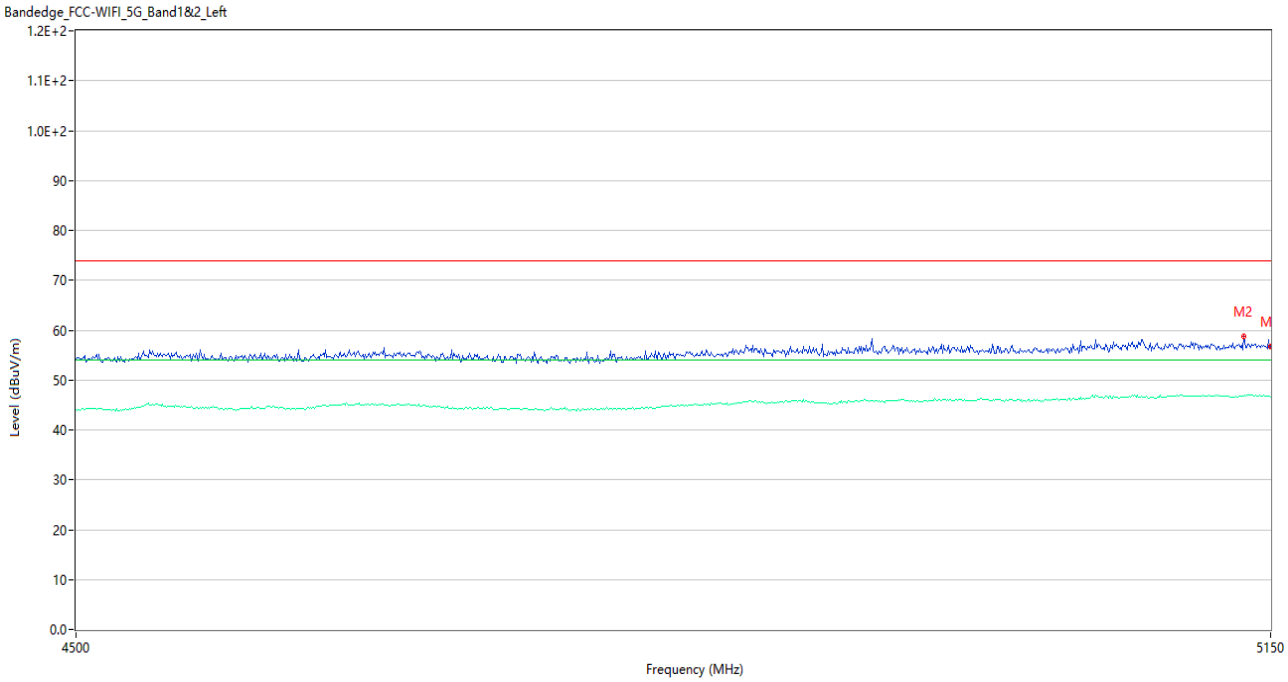
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.71	5.40	74.0	17.29	Peak	314.00	150	Vertical	Pass
1**	5350.000	46.43	5.40	54.0	7.57	AV	314.00	150	Vertical	Pass
2	5378.930	58.57	5.66	74.0	15.43	Peak	240.00	150	Vertical	Pass
2**	5378.930	46.31	5.66	54.0	7.69	AV	240.00	150	Vertical	Pass

U-NII-1 11ac40 High Channel ANT H



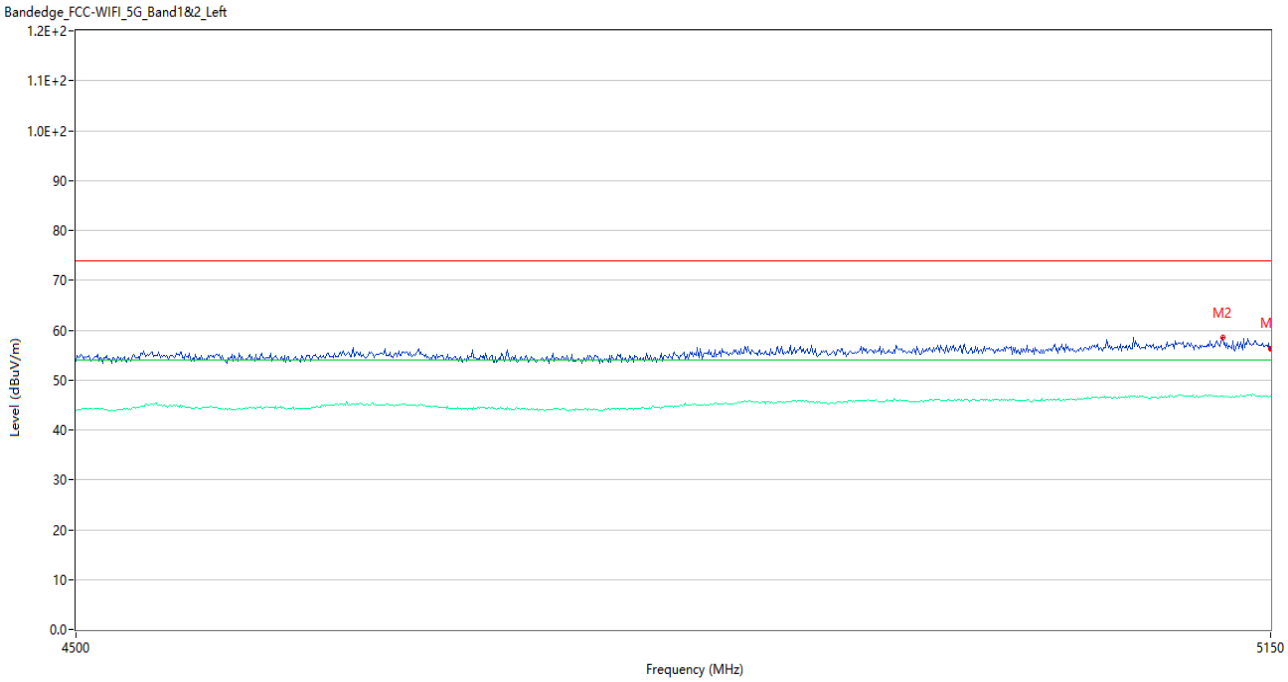
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	57.03	5.40	74.0	16.97	Peak	71.00	150	Horizontal	Pass
1**	5350.000	46.11	5.40	54.0	7.89	AV	71.00	150	Horizontal	Pass
2	5389.380	58.12	5.53	74.0	15.88	Peak	62.00	150	Horizontal	Pass
2**	5389.380	46.07	5.53	54.0	7.93	AV	62.00	150	Horizontal	Pass

U-NII-1 11ac80 Middle Channel ANT V



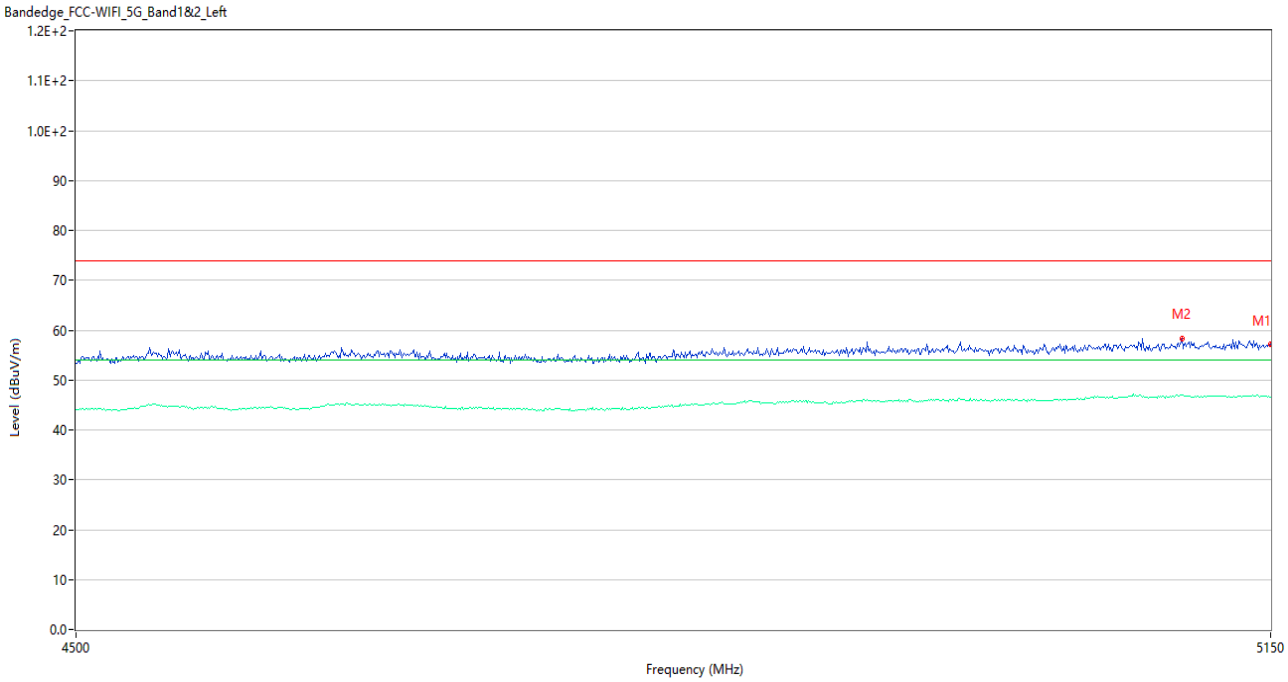
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.69	5.21	74.0	17.31	Peak	296.96	150	Vertical	Pass
1**	5150.000	46.67	5.21	54.0	7.33	AV	296.96	150	Vertical	Pass
2	5134.400	58.82	5.42	74.0	15.18	Peak	360.00	150	Vertical	Pass
2**	5134.400	46.83	5.42	54.0	7.17	AV	360.00	150	Vertical	Pass

U-NII-1 11ac80 Middle Channel ANT H



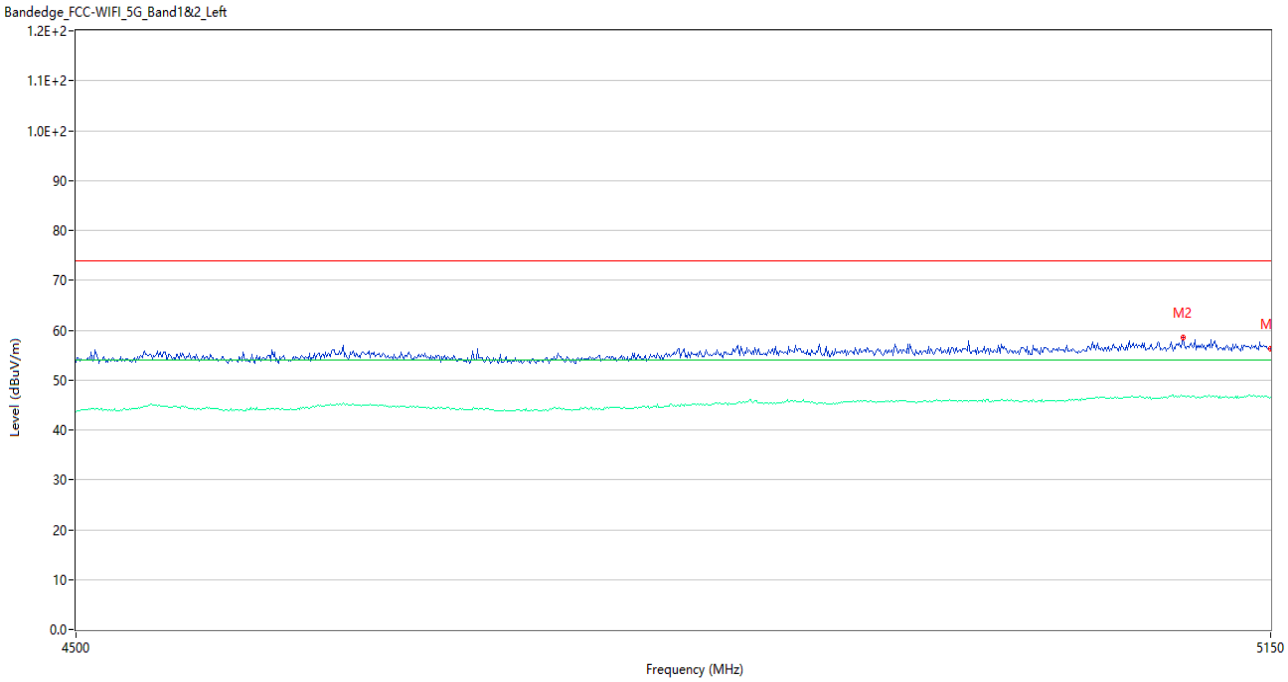
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.38	5.21	74.0	17.62	Peak	324.94	150	Horizontal	Pass
1**	5150.000	46.68	5.21	54.0	7.32	AV	324.94	150	Horizontal	Pass
2	5122.050	58.50	5.17	74.0	15.50	Peak	225.00	150	Horizontal	Pass
2**	5122.050	46.80	5.17	54.0	7.20	AV	225.00	150	Horizontal	Pass

U-NII-2A 11a Low Channel ANT V



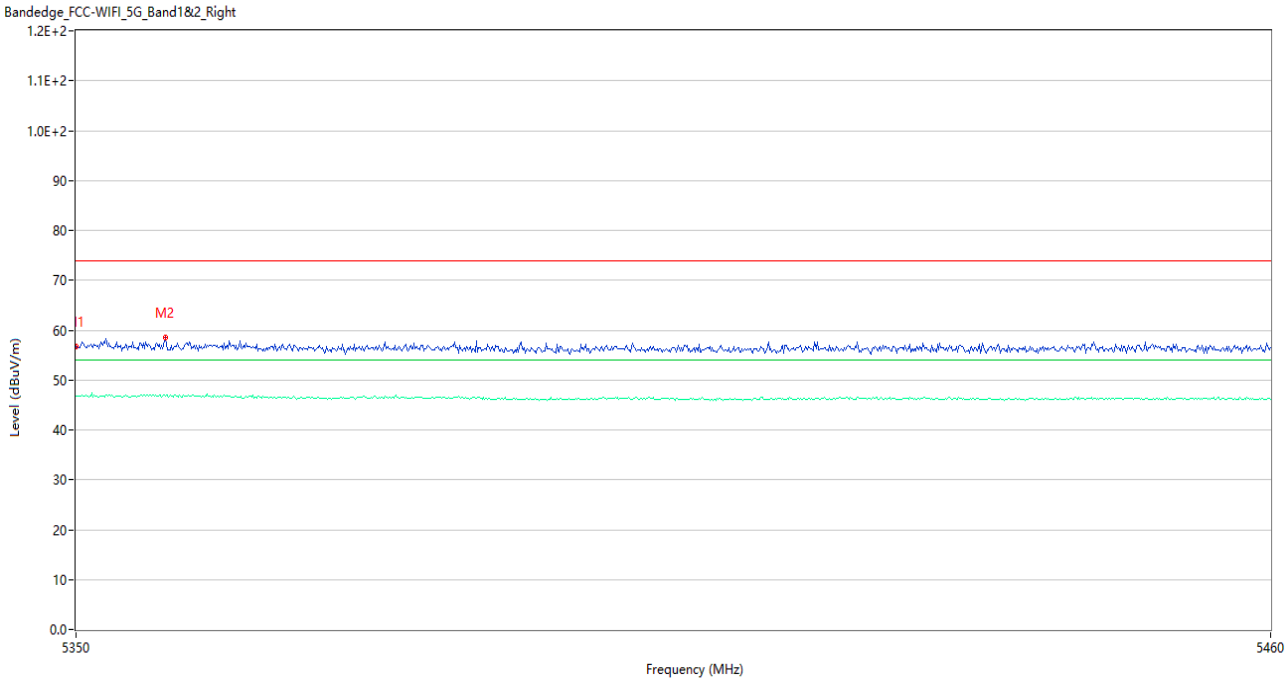
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	57.24	5.21	74.0	16.76	Peak	224.99	150	Vertical	Pass
1**	5150.000	46.59	5.21	54.0	7.41	AV	224.99	150	Vertical	Pass
2	5098.650	58.34	5.42	74.0	15.66	Peak	240.00	150	Vertical	Pass
2**	5098.650	46.94	5.42	54.0	7.06	AV	240.00	150	Vertical	Pass

U-NII-2A 11a Low Channel ANT H



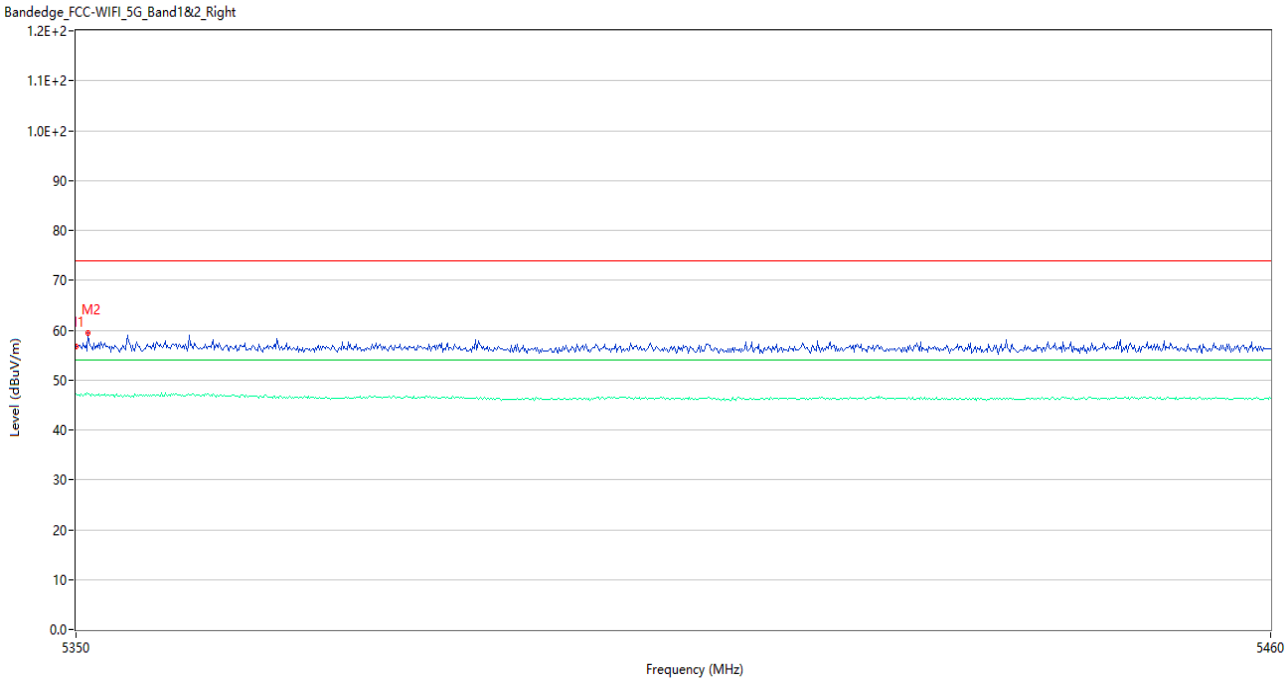
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.32	5.21	74.0	17.68	Peak	40.06	150	Horizontal	Pass
1**	5150.000	46.50	5.21	54.0	7.50	AV	40.06	150	Horizontal	Pass
2	5099.300	58.47	5.45	74.0	15.53	Peak	252.00	150	Horizontal	Pass
2**	5099.300	46.88	5.45	54.0	7.12	AV	252.00	150	Horizontal	Pass

U-NII-2A 11a High Channel ANT V



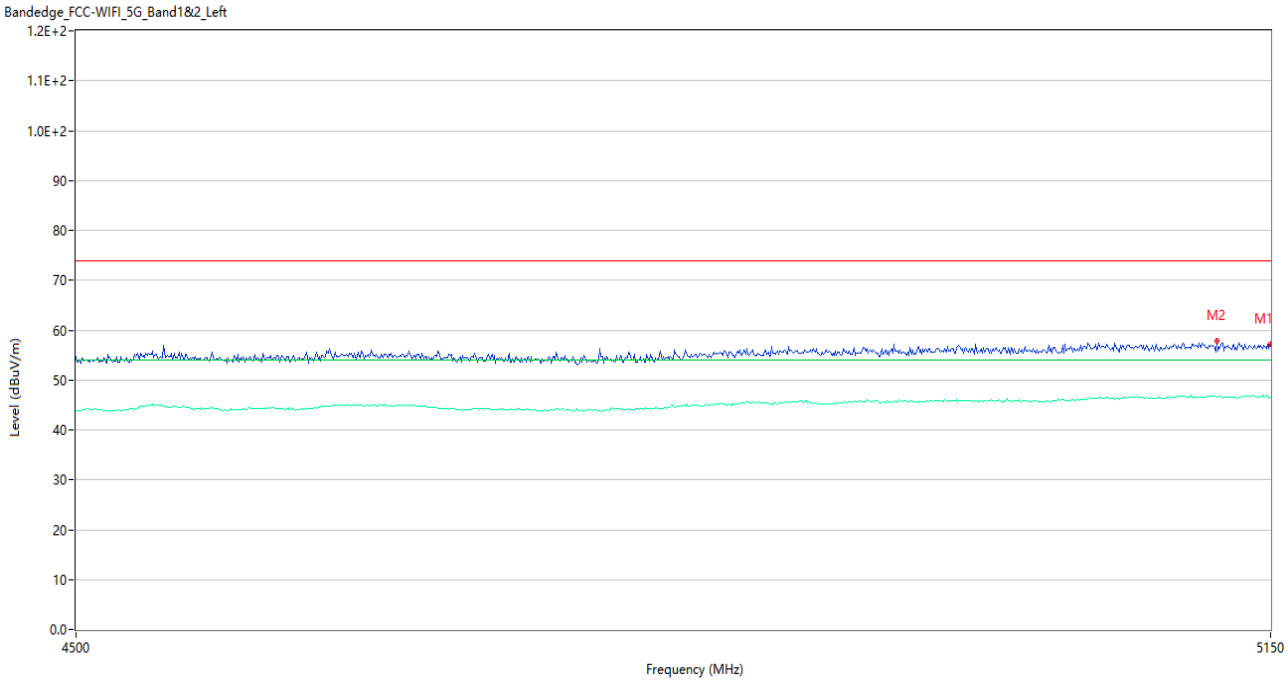
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.82	5.40	74.0	17.18	Peak	197.00	150	Vertical	Pass
1**	5350.000	46.80	5.40	54.0	7.20	AV	197.00	150	Vertical	Pass
2	5358.140	58.43	5.65	74.0	15.57	Peak	218.00	150	Vertical	Pass
2**	5358.140	46.80	5.65	54.0	7.20	AV	218.00	150	Vertical	Pass

U-NII-2A 11a High Channel ANT H



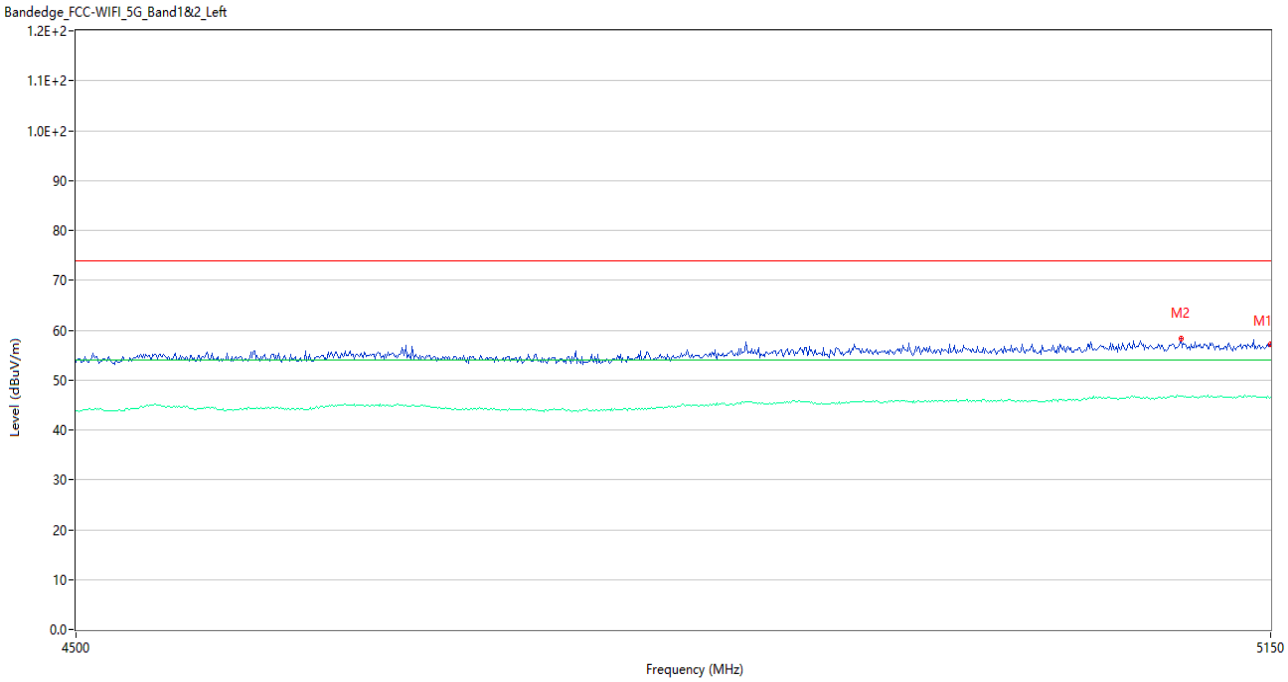
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.71	5.40	74.0	17.29	Peak	279.00	150	Horizontal	Pass
1**	5350.000	47.33	5.40	54.0	6.67	AV	279.00	150	Horizontal	Pass
2	5351.100	59.50	5.43	74.0	14.50	Peak	139.00	150	Horizontal	Pass
2**	5351.100	47.12	5.43	54.0	6.88	AV	139.00	150	Horizontal	Pass

U-NII-2A 11ac20 Low Channel ANT V



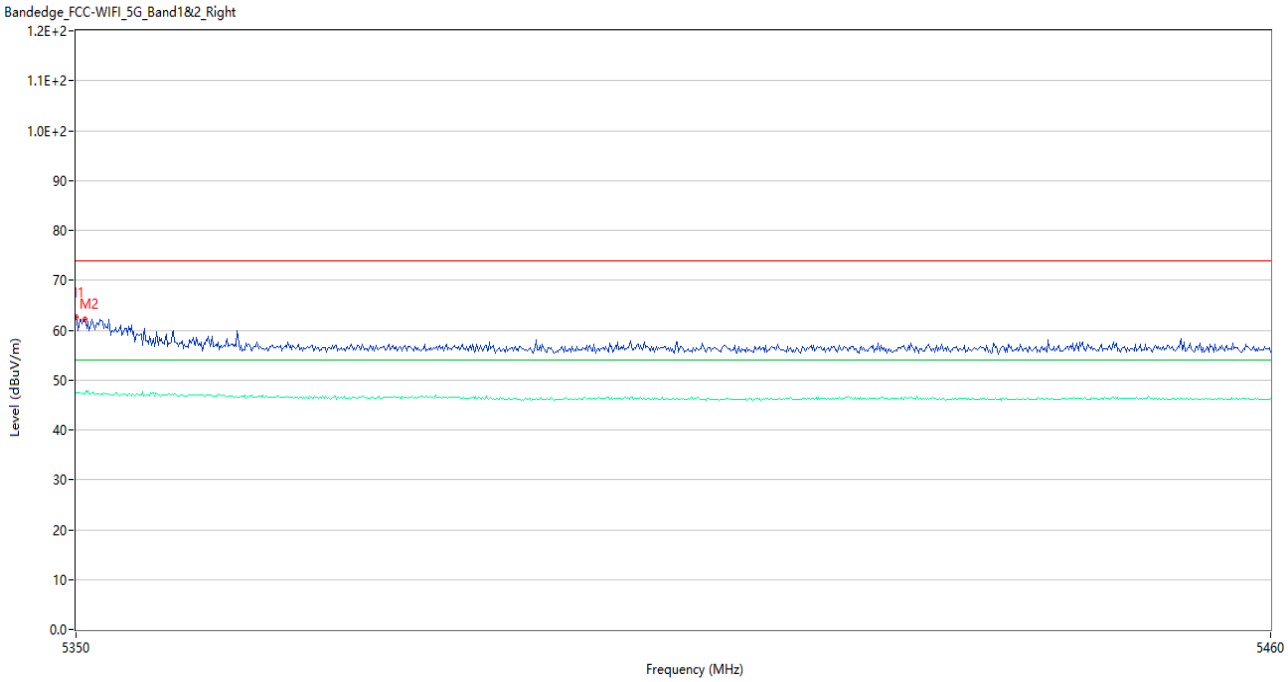
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	57.07	5.21	74.0	16.93	Peak	220.98	150	Vertical	Pass
1**	5150.000	46.51	5.21	54.0	7.49	AV	220.98	150	Vertical	Pass
2	5118.800	57.96	5.15	74.0	16.04	Peak	7.00	150	Vertical	Pass
2**	5118.800	46.52	5.15	54.0	7.48	AV	7.00	150	Vertical	Pass

U-NII-2A 11ac20 Low Channel ANT H



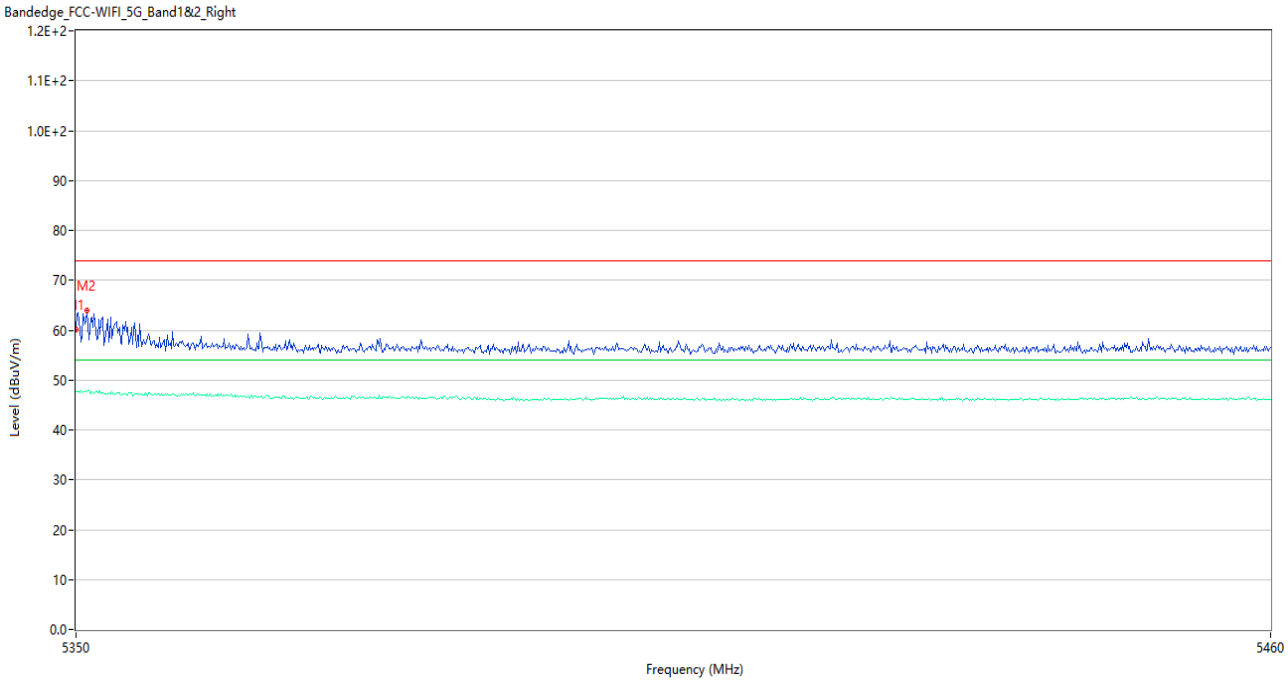
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	57.13	5.21	74.0	16.87	Peak	59.99	150	Horizontal	Pass
1**	5150.000	46.66	5.21	54.0	7.34	AV	59.99	150	Horizontal	Pass
2	5098.000	58.41	5.39	74.0	15.59	Peak	19.00	150	Horizontal	Pass
2**	5098.000	46.67	5.39	54.0	7.33	AV	19.00	150	Horizontal	Pass

U-NII-2A 11ac20 High Channel ANT V



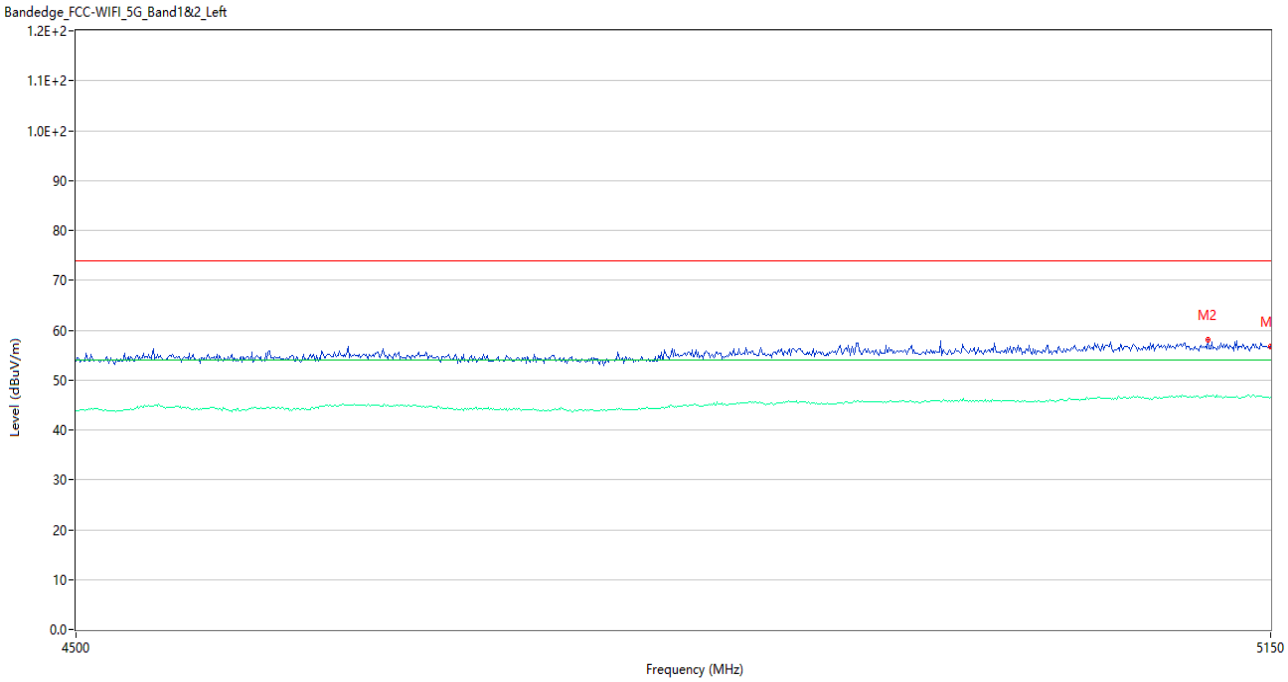
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	62.64	5.40	74.0	11.36	Peak	118.00	150	Vertical	Pass
1**	5350.000	47.47	5.40	54.0	6.53	AV	118.00	150	Vertical	Pass
2	5350.770	62.20	5.42	74.0	11.80	Peak	255.00	150	Vertical	Pass
2**	5350.770	47.34	5.42	54.0	6.66	AV	255.00	150	Vertical	Pass

U-NII-2A 11ac20 High Channel ANT H



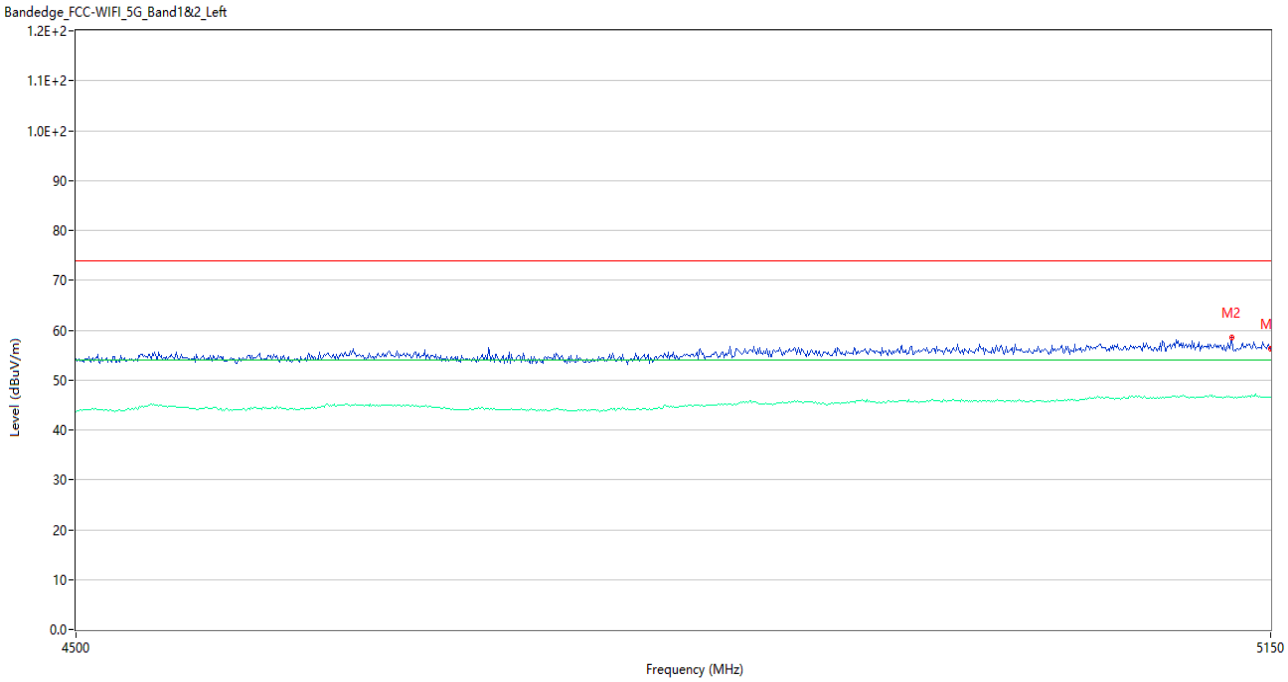
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	60.21	5.40	74.0	13.79	Peak	149.00	150	Horizontal	Pass
1**	5350.000	47.66	5.40	54.0	6.34	AV	149.00	150	Horizontal	Pass
2	5350.990	63.88	5.43	74.0	10.12	Peak	143.00	150	Horizontal	Pass
2**	5350.990	47.61	5.43	54.0	6.39	AV	143.00	150	Horizontal	Pass

U-NII-2A 11ac40 Low Channel ANT V



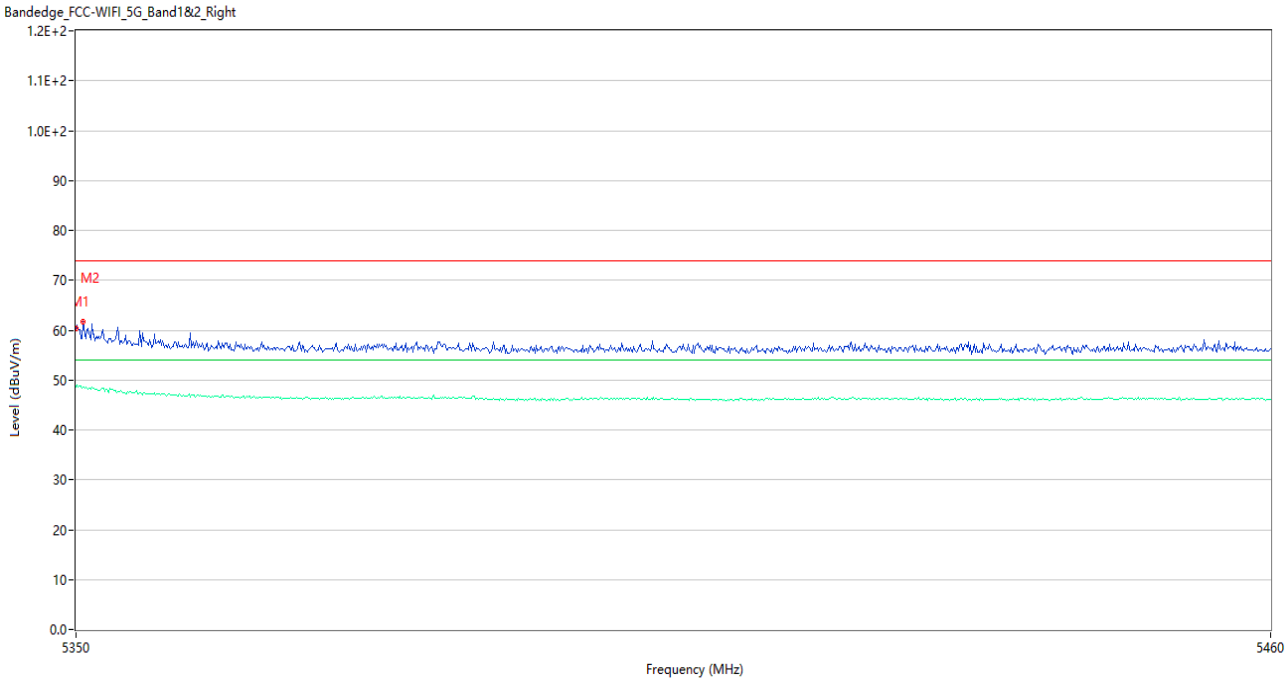
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.78	5.21	74.0	17.22	Peak	271.02	150	Vertical	Pass
1**	5150.000	46.61	5.21	54.0	7.39	AV	271.02	150	Vertical	Pass
2	5113.600	58.08	5.16	74.0	15.92	Peak	360.00	150	Vertical	Pass
2**	5113.600	46.70	5.16	54.0	7.30	AV	360.00	150	Vertical	Pass

U-NII-2A 11ac40 Low Channel ANT H



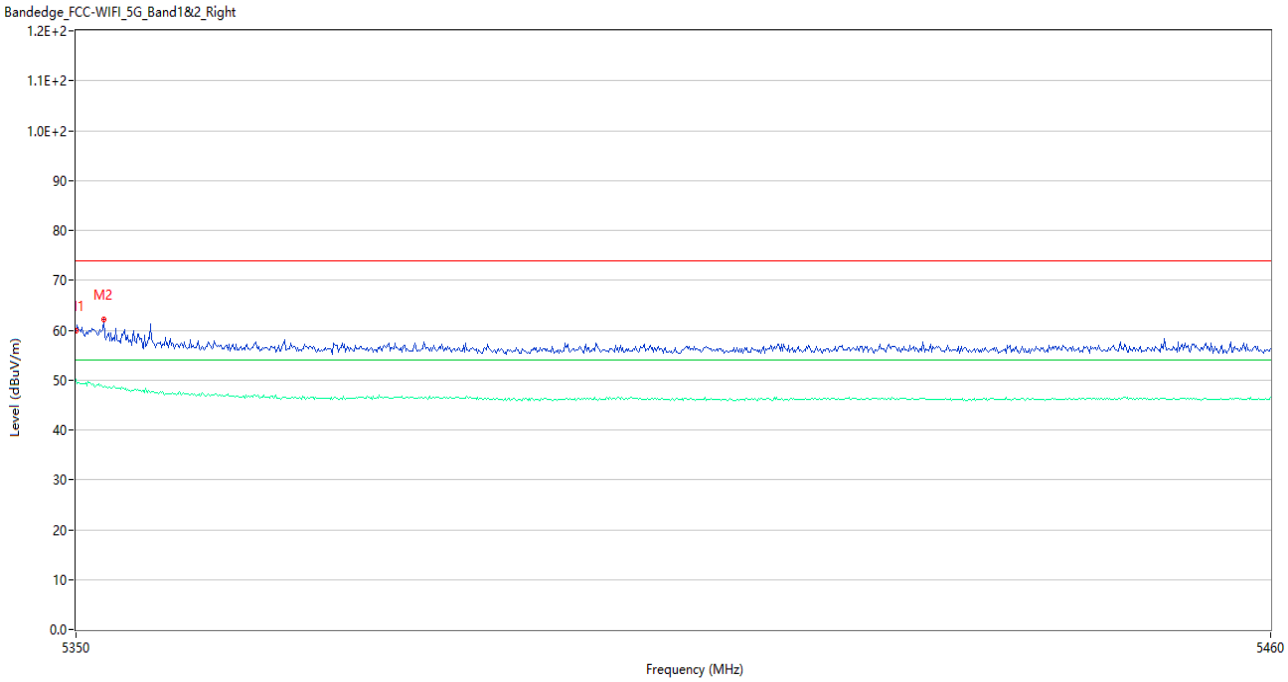
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	56.21	5.21	74.0	17.79	Peak	308.94	150	Horizontal	Pass
1**	5150.000	46.64	5.21	54.0	7.36	AV	308.94	150	Horizontal	Pass
2	5127.250	58.55	5.18	74.0	15.45	Peak	43.00	150	Horizontal	Pass
2**	5127.250	46.59	5.18	54.0	7.41	AV	43.00	150	Horizontal	Pass

U-NII-2A 11ac40 High Channel ANT V



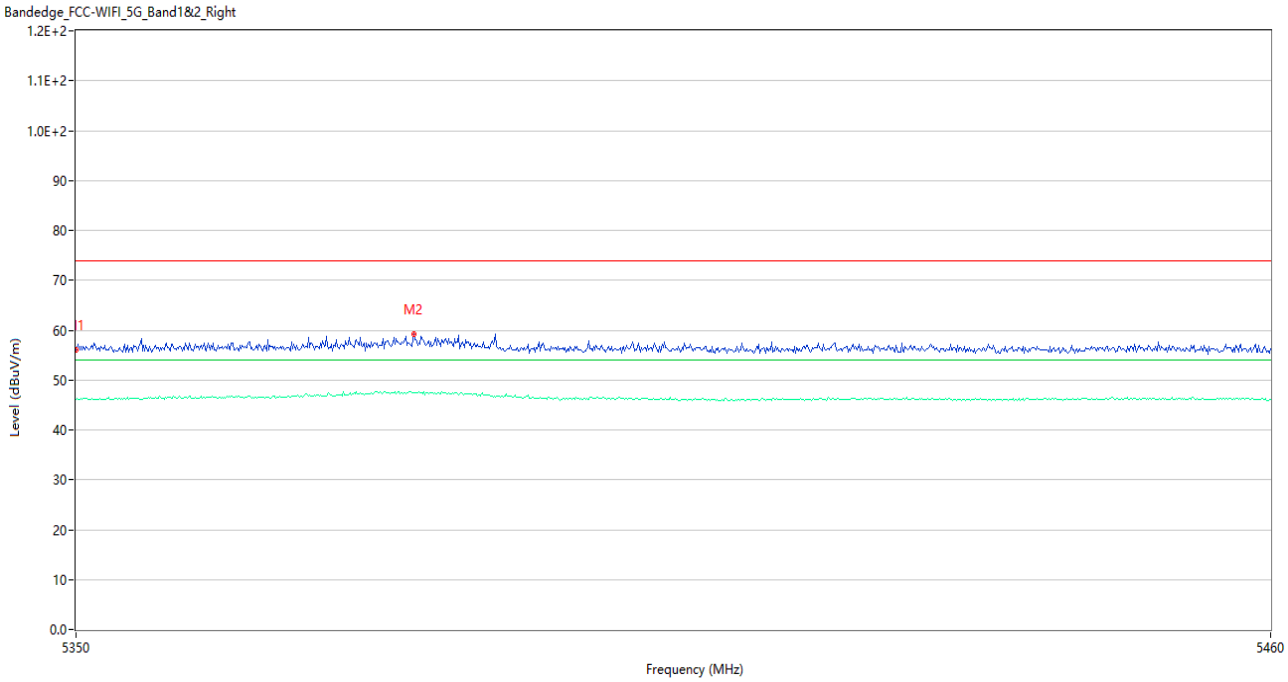
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	60.27	5.40	74.0	13.73	Peak	166.00	150	Vertical	Pass
1**	5350.000	48.51	5.40	54.0	5.49	AV	166.00	150	Vertical	Pass
2	5350.660	61.65	5.42	74.0	12.35	Peak	209.00	150	Vertical	Pass
2**	5350.660	48.50	5.42	54.0	5.50	AV	209.00	150	Vertical	Pass

U-NII-2A 11ac40 High Channel ANT H



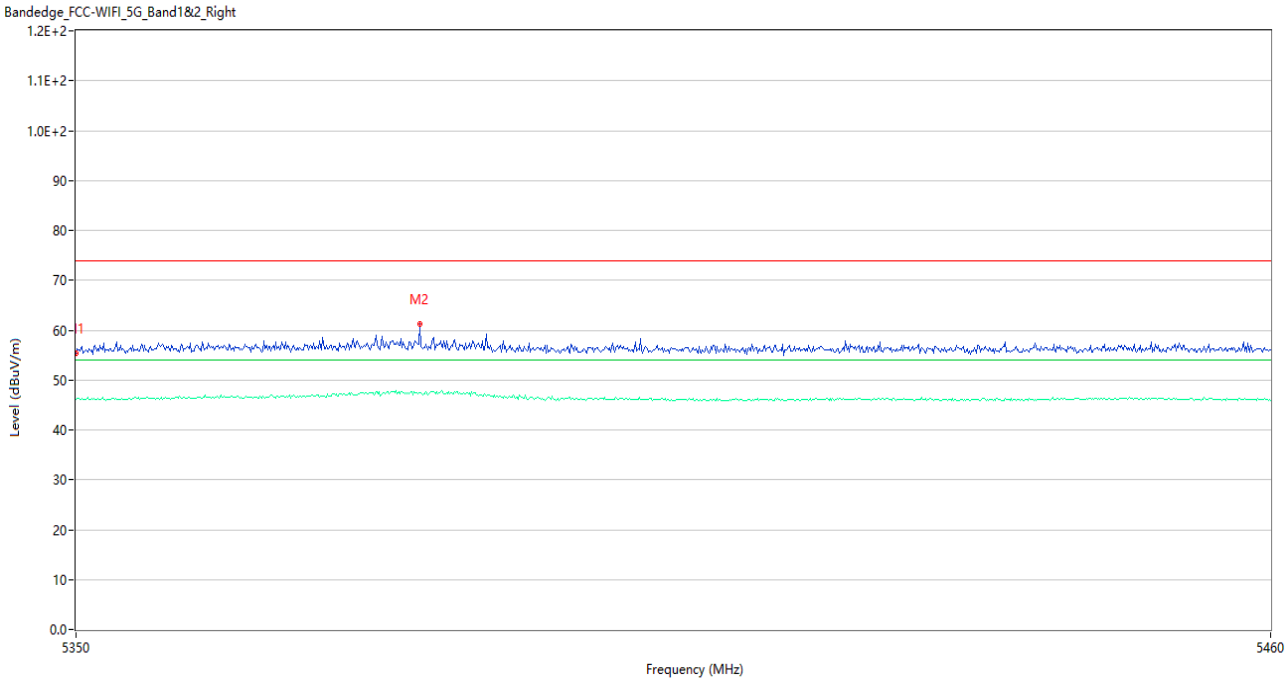
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	59.99	5.40	74.0	14.01	Peak	136.00	150	Horizontal	Pass
1**	5350.000	50.16	5.40	54.0	3.84	AV	136.00	150	Horizontal	Pass
2	5352.530	62.10	5.47	74.0	11.90	Peak	88.00	150	Horizontal	Pass
2**	5352.530	48.65	5.47	54.0	5.35	AV	88.00	150	Horizontal	Pass

U-NII-2A 11ac80 Middle Channel ANT V



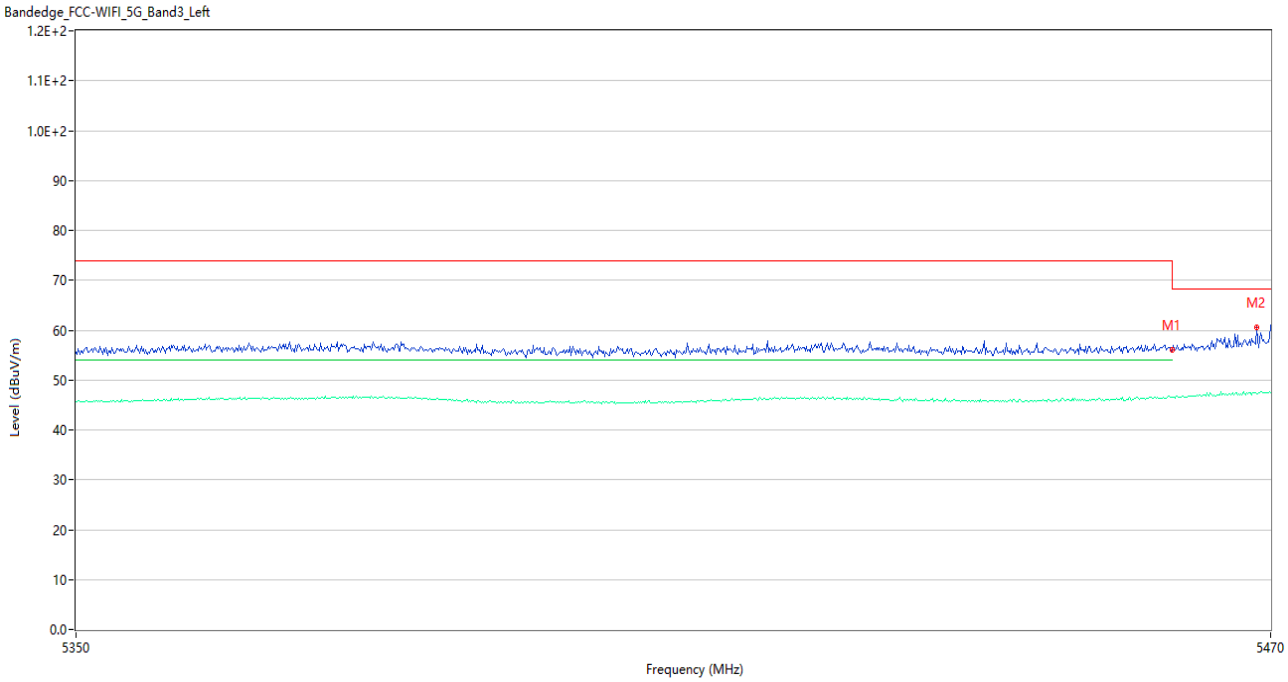
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.05	5.40	74.0	17.95	Peak	75.00	150	Vertical	Pass
1**	5350.000	46.15	5.40	54.0	7.85	AV	75.00	150	Vertical	Pass
2	5380.910	59.23	5.68	74.0	14.77	Peak	108.00	150	Vertical	Pass
2**	5380.910	47.37	5.68	54.0	6.63	AV	108.00	150	Vertical	Pass

U-NII-2A 11ac80 Middle Channel ANT H



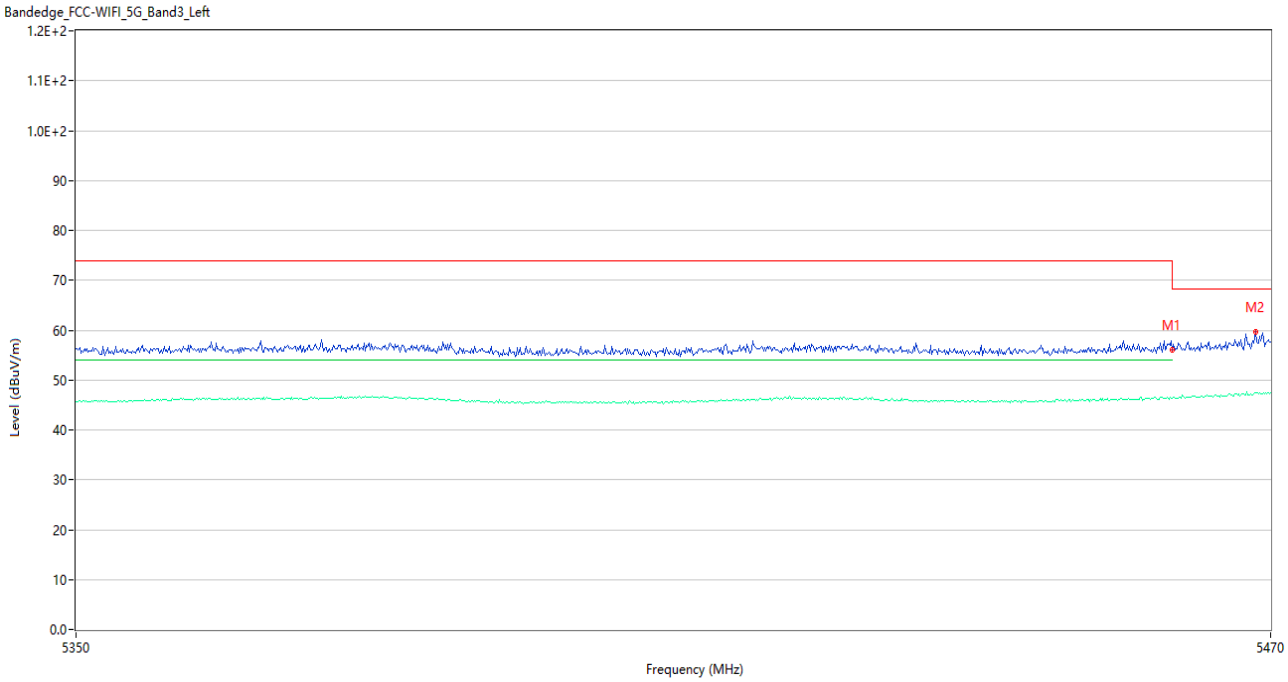
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.32	5.40	74.0	18.68	Peak	0.00	150	Horizontal	Pass
1**	5350.000	46.10	5.40	54.0	7.90	AV	0.00	150	Horizontal	Pass
2	5381.460	61.32	5.69	74.0	12.68	Peak	142.00	150	Horizontal	Pass
2**	5381.460	47.45	5.69	54.0	6.55	AV	142.00	150	Horizontal	Pass

U-NII-2C 11a Low Channel ANT V



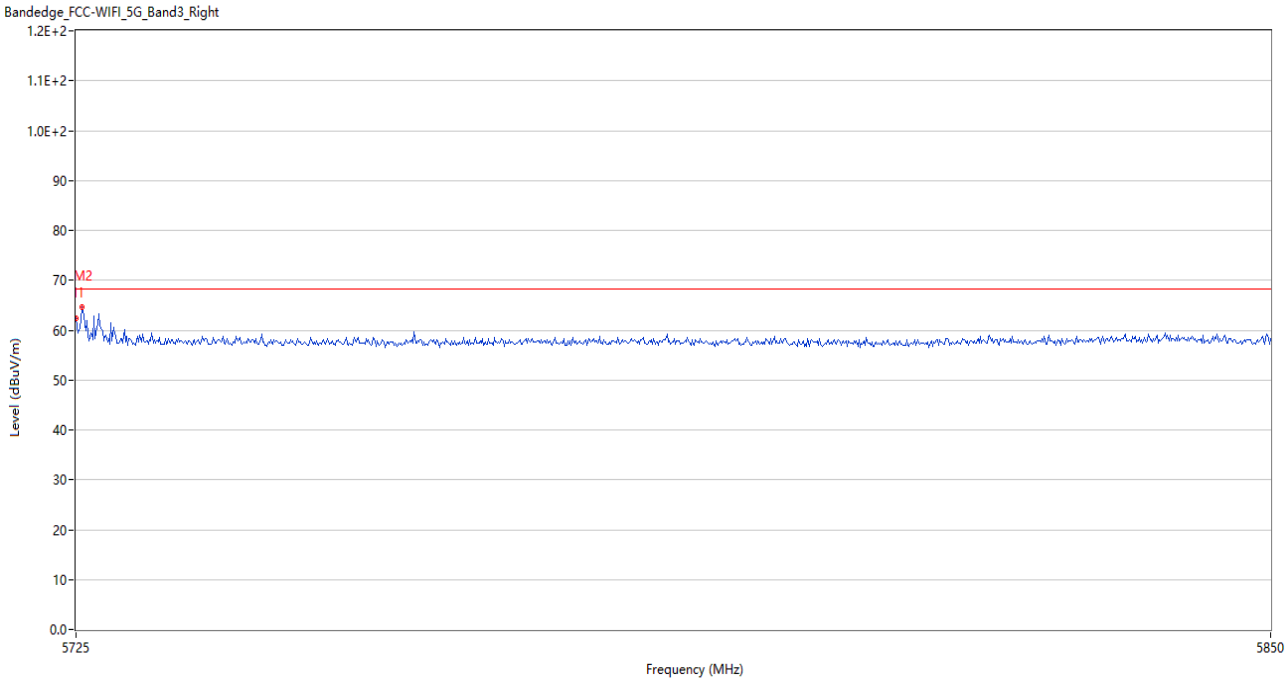
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	56.04	5.38	68.2	12.16	Peak	140.23	150	Vertical	Pass
1**	5460.000	46.46	5.38	54.0	7.54	AV	140.23	150	Vertical	Pass
2	5468.560	60.64	5.77	68.2	7.56	Peak	126.00	150	Vertical	Pass
2**	5468.560	47.32	5.77	--	-47.32	AV	126.00	150	Vertical	N/A

U-NII-2C 11a Low Channel ANT H



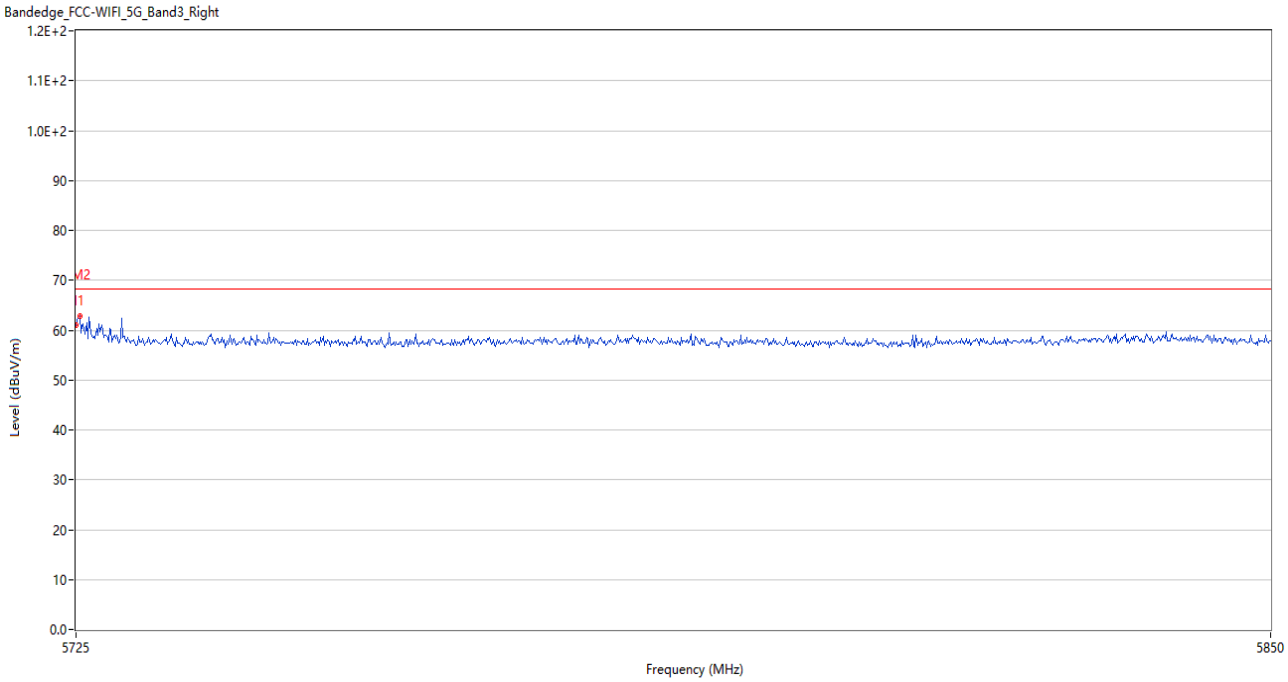
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	56.55	5.38	68.2	11.65	Peak	165.73	150	Horizontal	Pass
1**	5460.000	46.39	5.38	54.0	7.61	AV	165.73	150	Horizontal	Pass
2	5468.440	59.69	5.76	68.2	8.51	Peak	130.00	150	Horizontal	Pass
2**	5468.440	47.43	5.76	--	-47.43	AV	130.00	150	Horizontal	N/A

U-NII-2C 11a High Channel ANT V



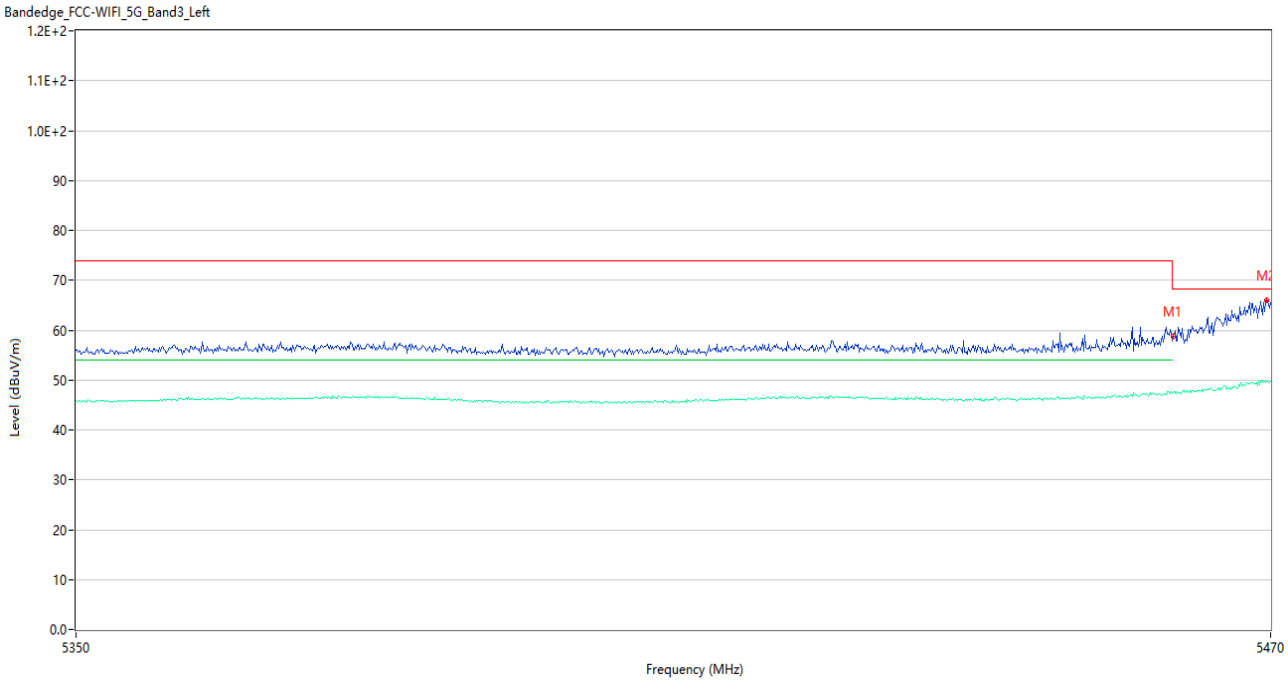
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	62.39	6.57	68.2	5.81	Peak	282.00	150	Vertical	Pass
2	5725.625	64.72	6.56	68.2	3.48	Peak	126.00	150	Vertical	Pass

U-NII-2C 11a High Channel ANT H



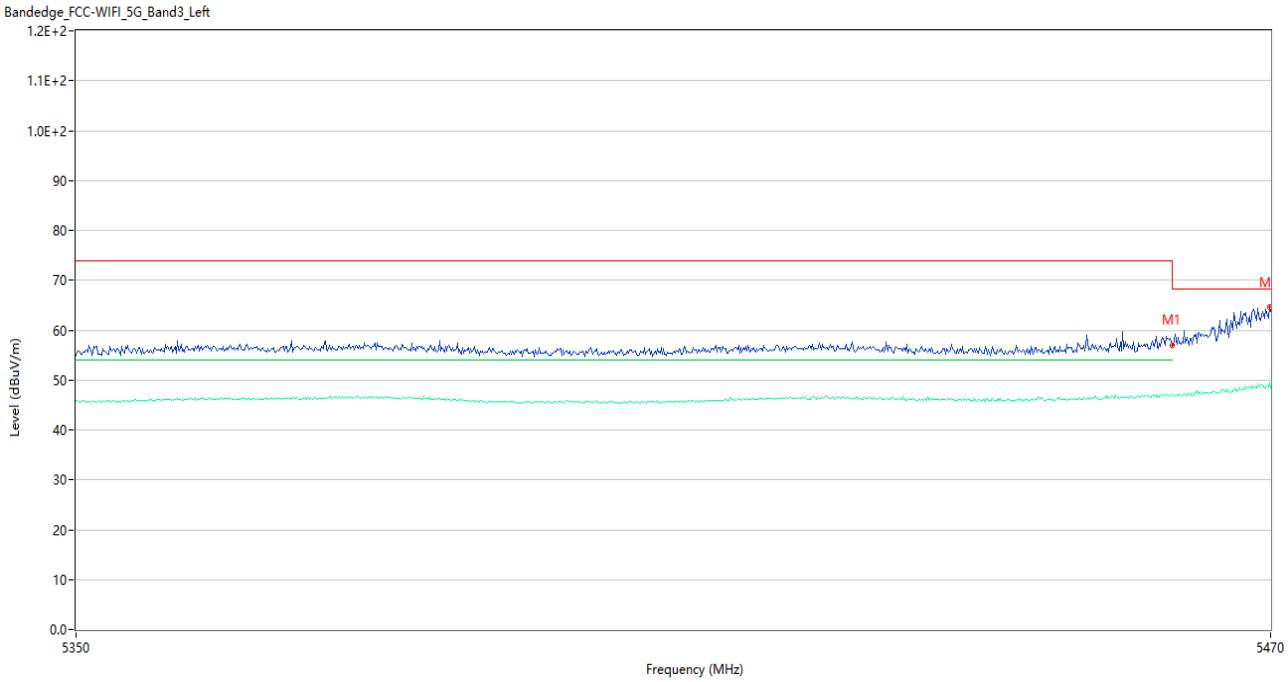
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	61.01	6.57	68.2	7.19	Peak	7.00	150	Horizontal	Pass
2	5725.375	62.88	6.56	68.2	5.32	Peak	44.00	150	Horizontal	Pass

U-NII-2C 11ac20 Low Channel ANT V



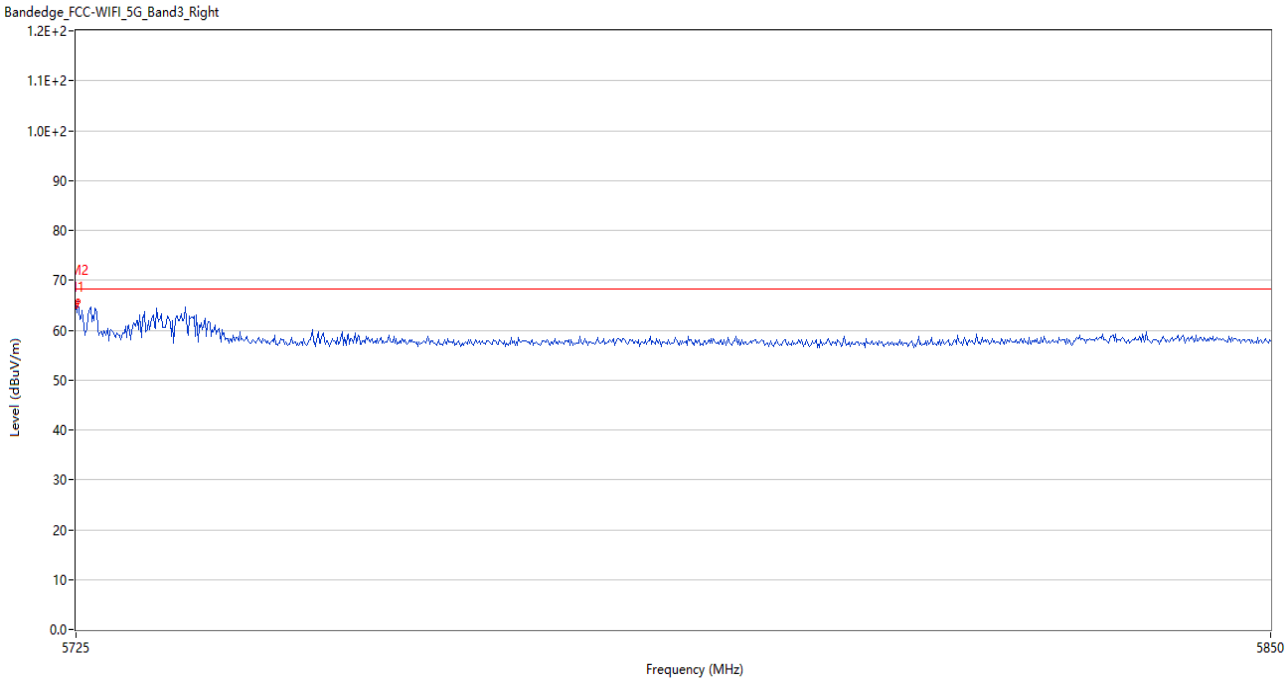
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	58.53	5.38	68.2	9.67	Peak	116.33	150	Vertical	Pass
1**	5460.000	47.49	5.38	54.0	6.51	AV	116.33	150	Vertical	Pass
2	5469.640	65.94	5.80	68.2	2.26	Peak	116.00	150	Vertical	Pass
2**	5469.640	49.69	5.80	--	-49.69	AV	116.00	150	Vertical	N/A

U-NII-2C 11ac20 Low Channel ANT H



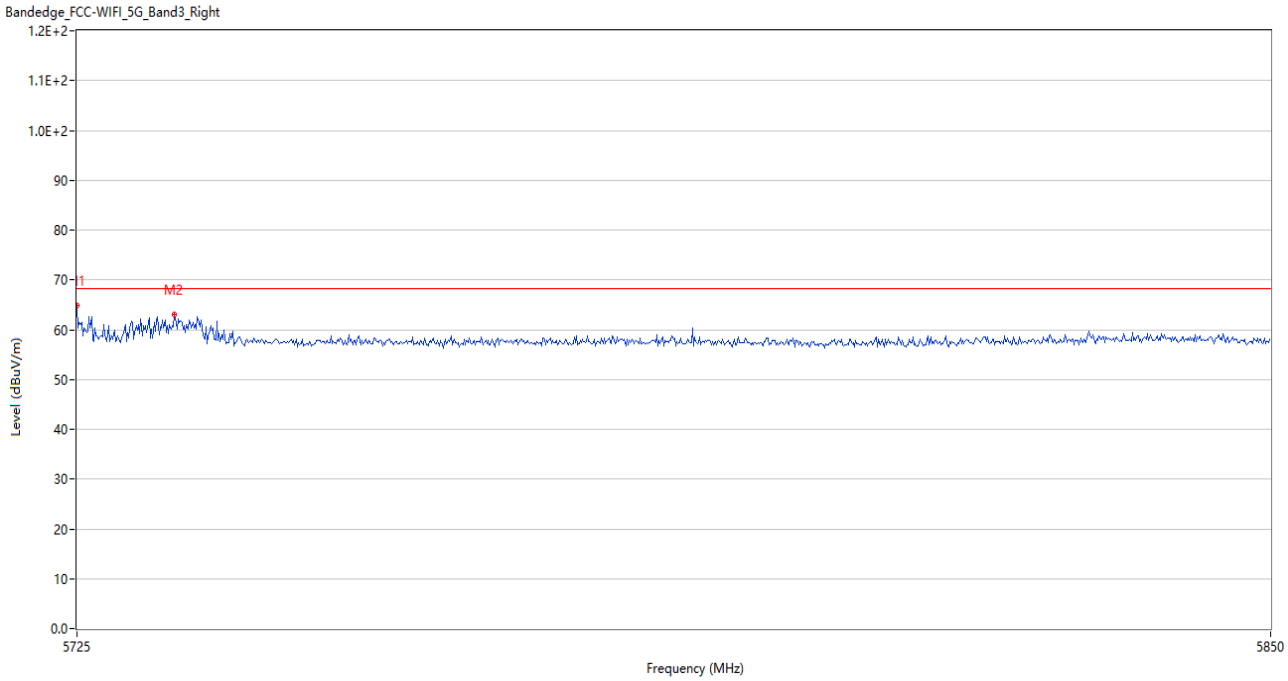
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	57.28	5.38	68.2	10.92	Peak	269.49	150	Horizontal	Pass
1**	5460.000	47.12	5.38	54.0	6.88	AV	269.49	150	Horizontal	Pass
2	5469.880	64.66	5.80	68.2	3.54	Peak	96.00	150	Horizontal	Pass
2**	5469.880	49.60	5.80	--	-49.60	AV	96.00	150	Horizontal	N/A

U-NII-2C 11ac20 High Channel ANT V



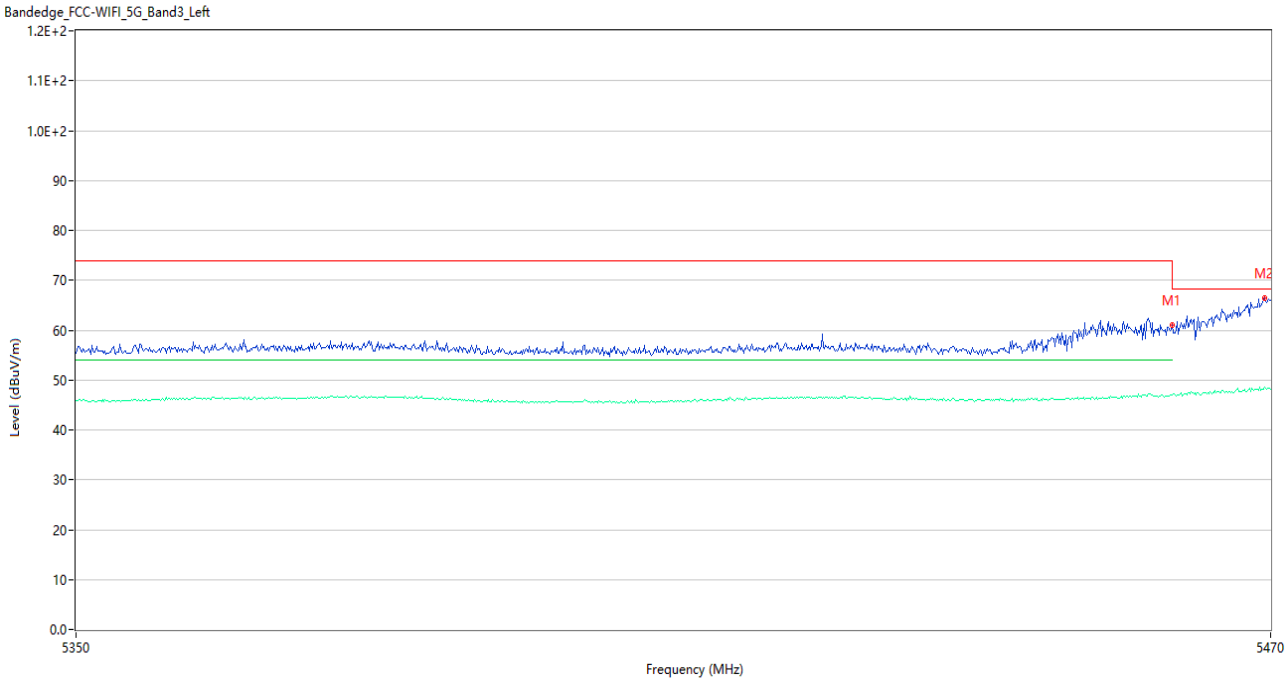
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	64.75	6.57	68.2	3.45	Peak	281.00	150	Vertical	Pass
2	5725.250	65.67	6.56	68.2	2.53	Peak	276.00	150	Vertical	Pass

U-NII-2C 11ac20 High Channel ANT H



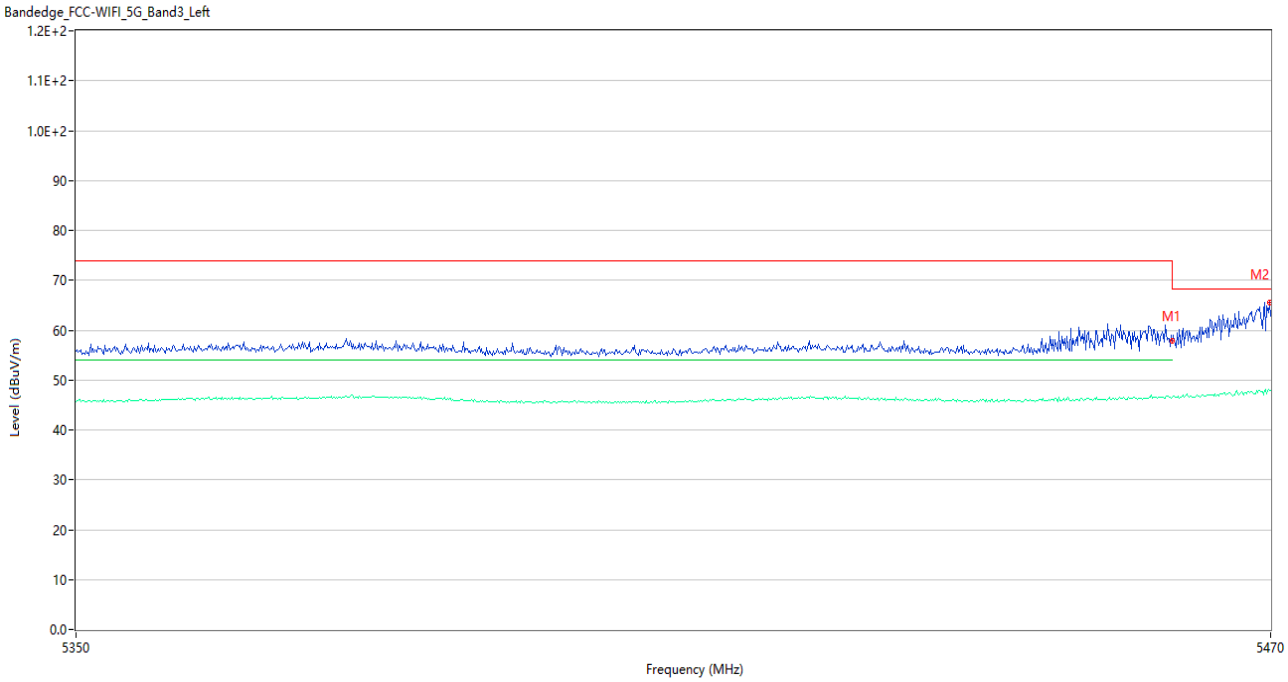
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	64.93	6.57	68.2	3.27	Peak	32.00	150	Horizontal	Pass
2	5735.125	63.14	6.29	68.2	5.06	Peak	98.00	150	Horizontal	Pass

U-NII-2C 11ac40 Low Channel ANT V



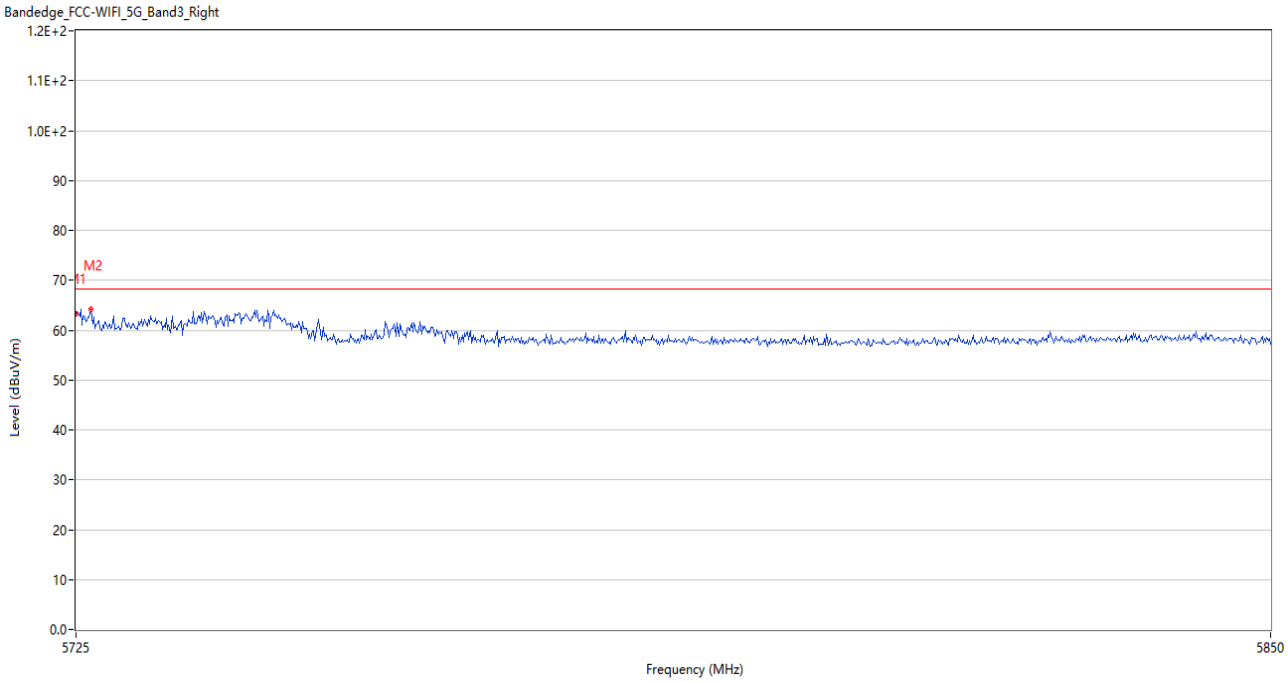
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	60.69	5.38	68.2	7.51	Peak	155.75	150	Vertical	Pass
1**	5460.000	47.00	5.38	54.0	7.00	AV	155.75	150	Vertical	Pass
2	5469.400	66.40	5.80	68.2	1.80	Peak	100.00	150	Vertical	Pass
2**	5469.400	48.56	5.80	--	-48.56	AV	100.00	150	Vertical	N/A

U-NII-2C 11ac40 Low Channel ANT H



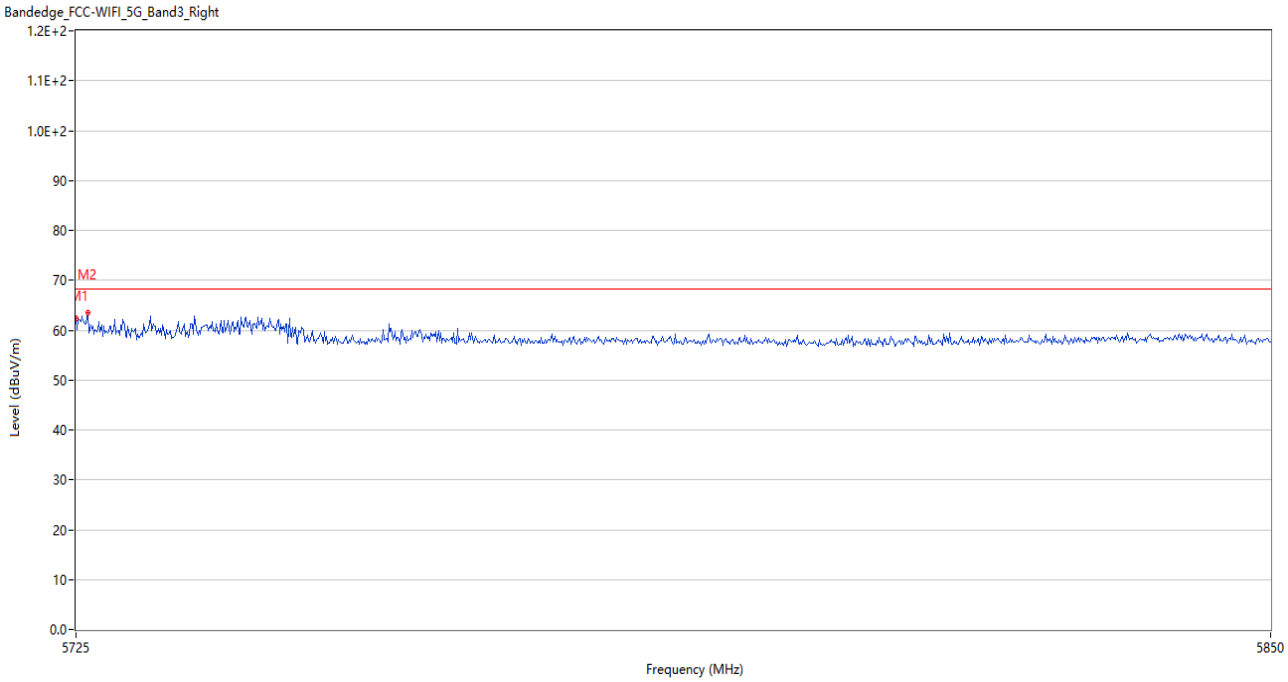
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	58.32	5.38	68.2	9.88	Peak	129.00	150	Horizontal	Pass
1**	5460.000	46.46	5.38	54.0	7.54	AV	129.00	150	Horizontal	Pass
2	5469.880	65.48	5.80	68.2	2.72	Peak	88.00	150	Horizontal	Pass
2**	5469.880	47.89	5.80	--	-47.89	AV	88.00	150	Horizontal	N/A

U-NII-2C 11ac40 High Channel ANT V



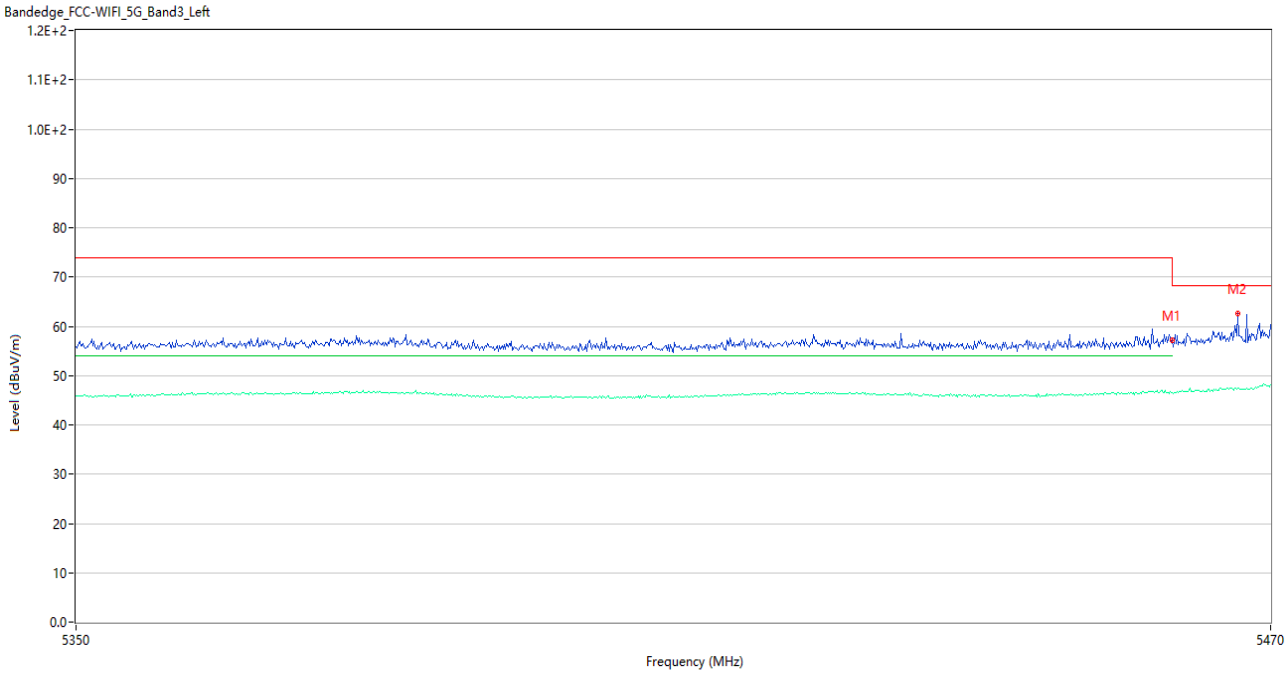
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	63.16	6.57	68.2	5.04	Peak	283.00	150	Vertical	Pass
2	5726.500	64.18	6.53	68.2	4.02	Peak	283.00	150	Vertical	Pass

U-NII-2C 11ac40 High Channel ANT H



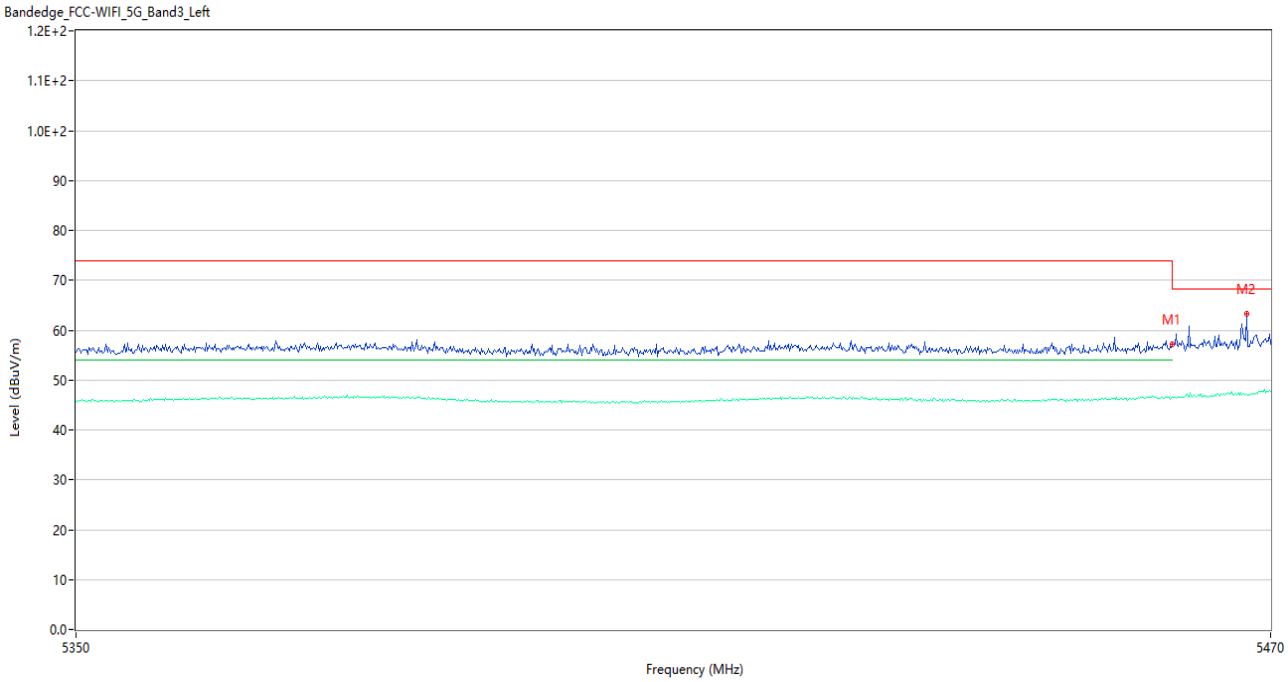
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	62.39	6.57	68.2	5.81	Peak	121.00	150	Horizontal	Pass
2	5726.250	63.55	6.54	68.2	4.65	Peak	347.00	150	Horizontal	Pass

U-NII-2C 11ac80 Low Channel ANT V



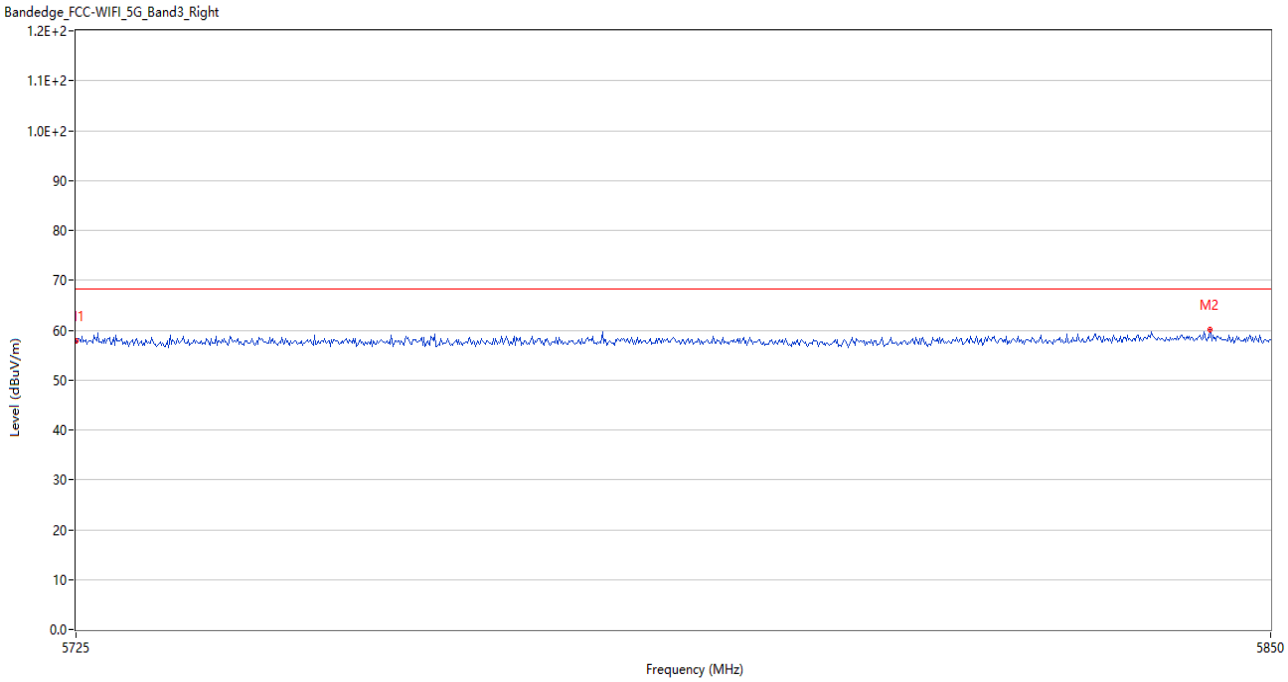
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	57.18	5.38	68.2	11.02	Peak	153.94	150	Vertical	Pass
1**	5460.000	46.60	5.38	54.0	7.40	AV	153.94	150	Vertical	Pass
2	5466.640	62.51	5.63	68.2	5.69	Peak	112.00	150	Vertical	Pass
2**	5466.640	47.43	5.63	--	-47.43	AV	112.00	150	Vertical	N/A

U-NII-2C 11ac80 Low Channel ANT H



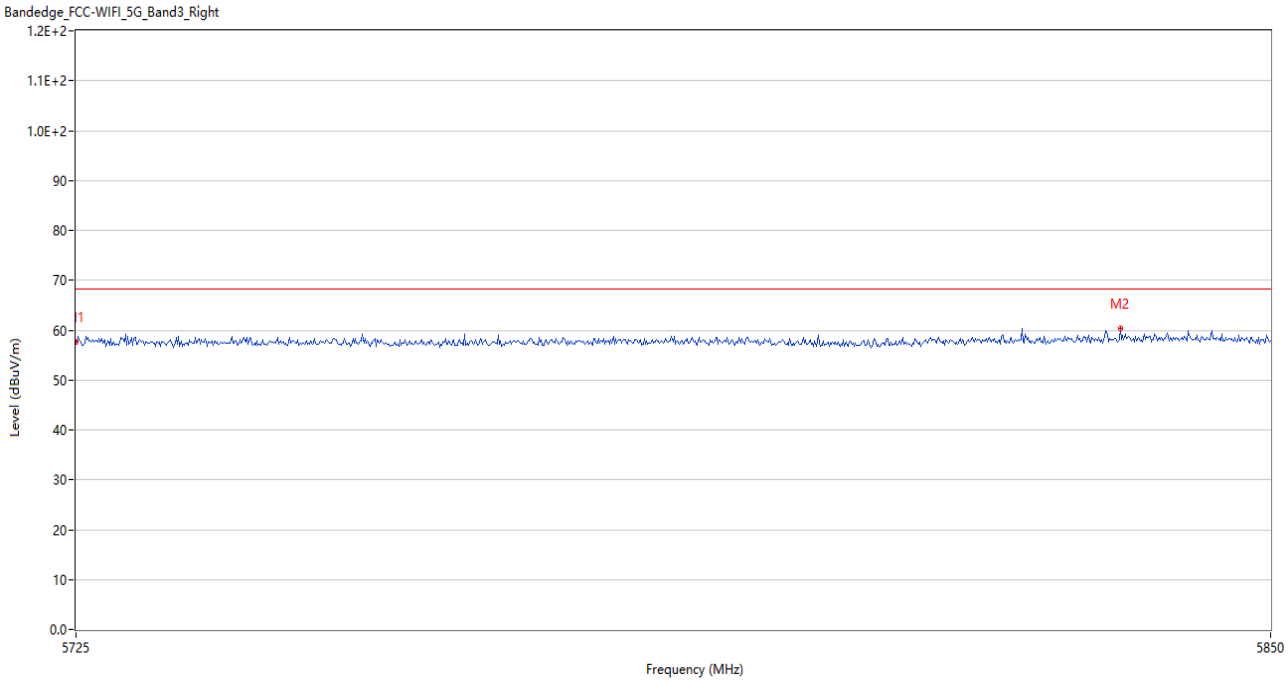
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5460.000	56.90	5.38	68.2	11.30	Peak	98.69	150	Horizontal	Pass
1**	5460.000	46.53	5.38	54.0	7.47	AV	98.69	150	Horizontal	Pass
2	5467.600	63.19	5.69	68.2	5.01	Peak	360.00	150	Horizontal	Pass
2**	5467.600	47.03	5.69	--	-47.03	AV	360.00	150	Horizontal	N/A

U-NII-2C 11ac80 High Channel ANT V



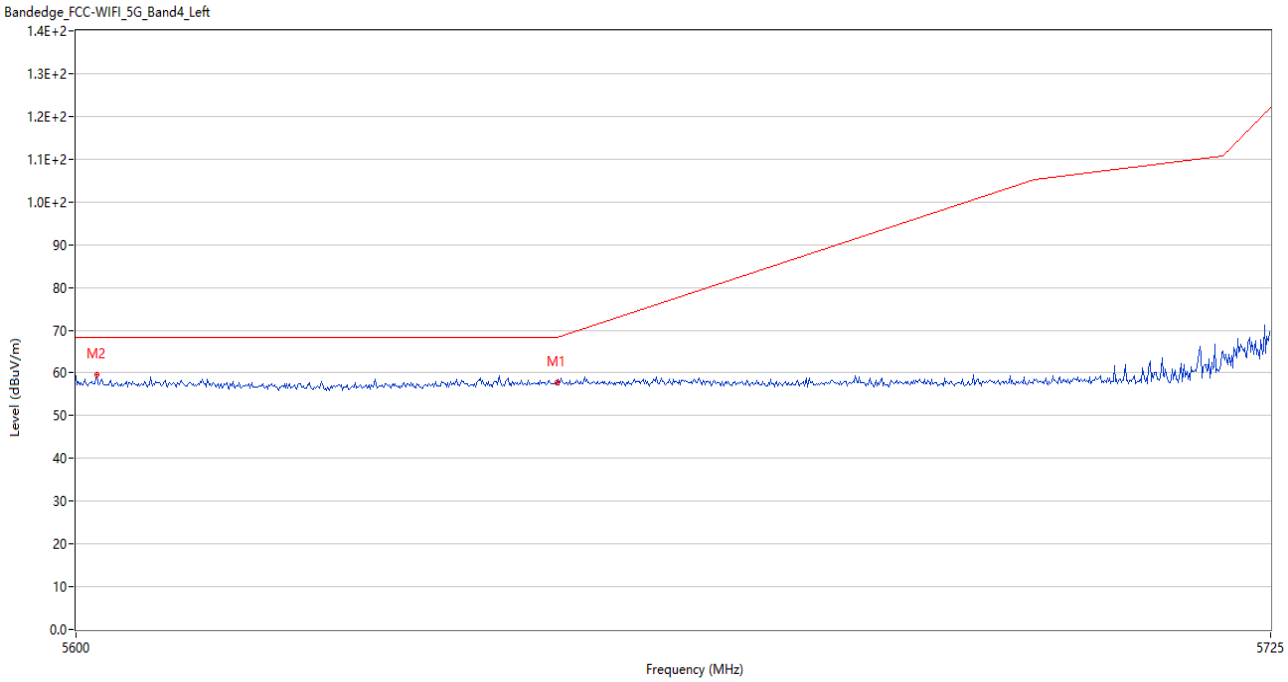
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	57.84	6.57	68.2	10.36	Peak	266.00	150	Vertical	Pass
2	5843.625	60.02	7.10	68.2	8.18	Peak	0.00	150	Vertical	Pass

U-NII-2C 11ac80 High Channel ANT H



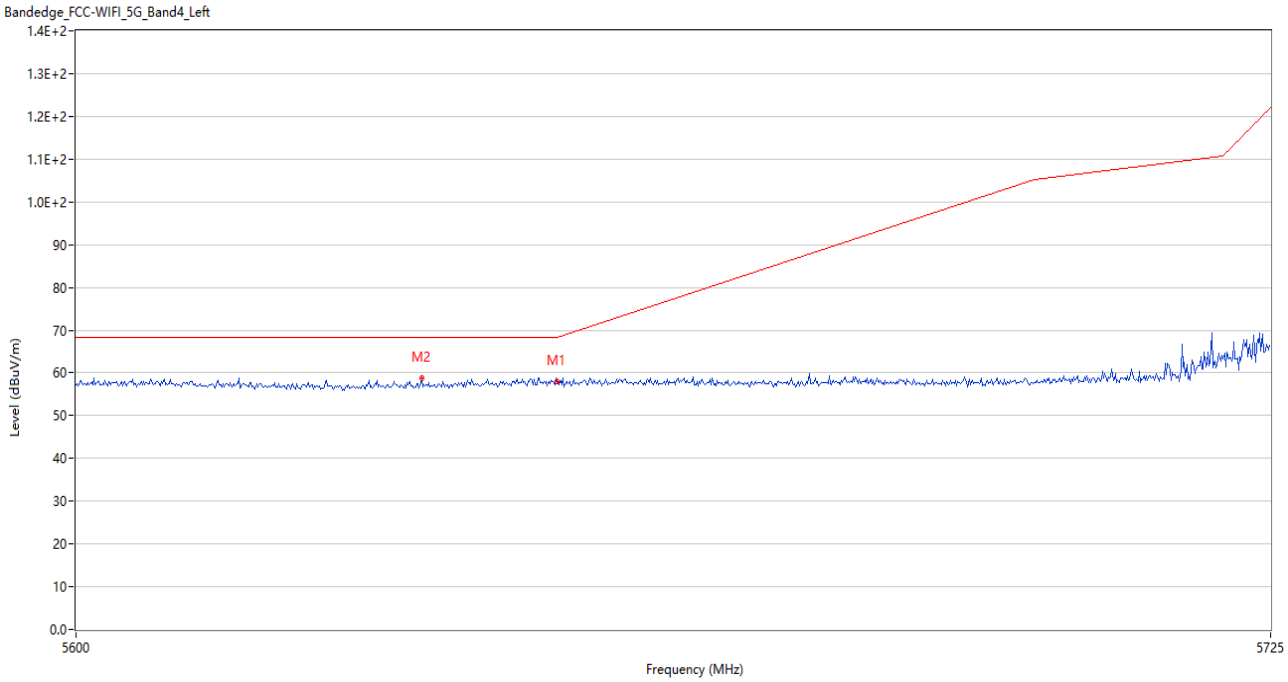
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5725.000	57.57	6.57	68.2	10.63	Peak	34.00	150	Horizontal	Pass
2	5834.125	60.31	7.16	68.2	7.89	Peak	344.00	150	Horizontal	Pass

U-NII-3 11a Low Channel ANT V



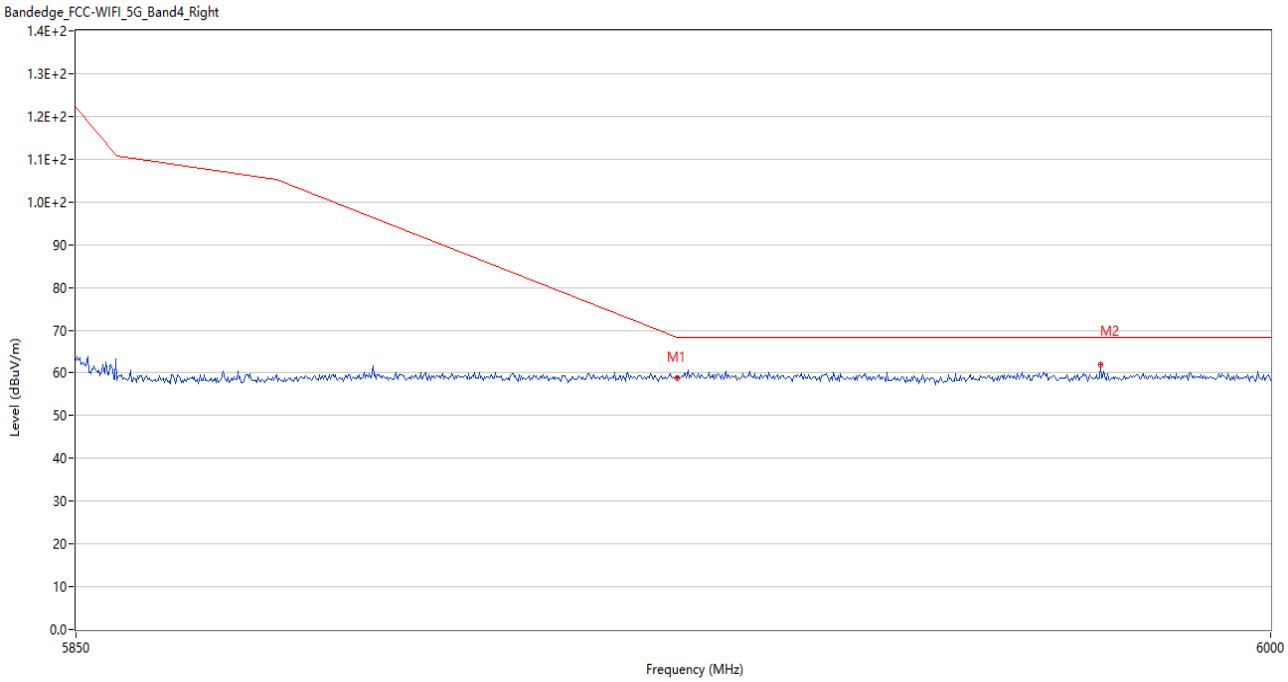
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	57.84	5.94	68.2	10.36	Peak	236.80	150	Vertical	Pass
2	5602.125	59.46	5.99	68.2	8.74	Peak	297.00	150	Vertical	Pass

U-NII-3 11a Low Channel ANT H



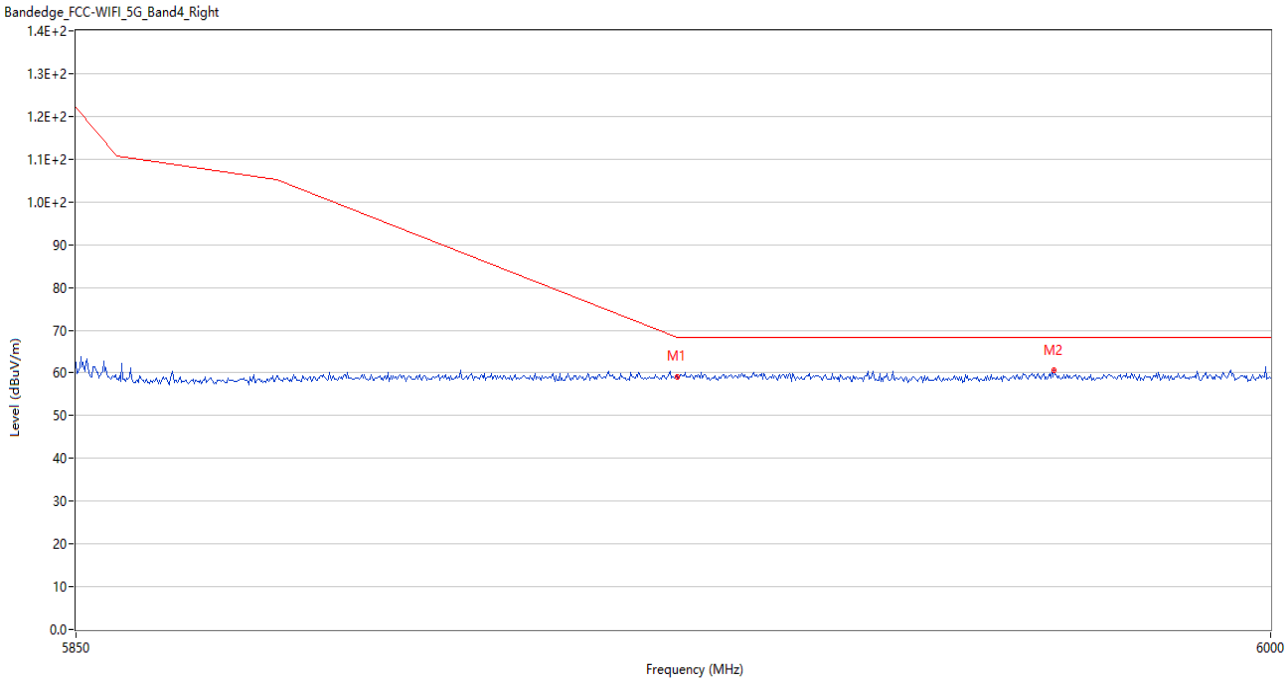
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	58.01	5.94	68.2	10.19	Peak	136.11	150	Horizontal	Pass
2	5635.875	58.84	5.87	68.2	9.36	Peak	0.00	150	Horizontal	Pass

U-NII-3 11a High Channel ANT V



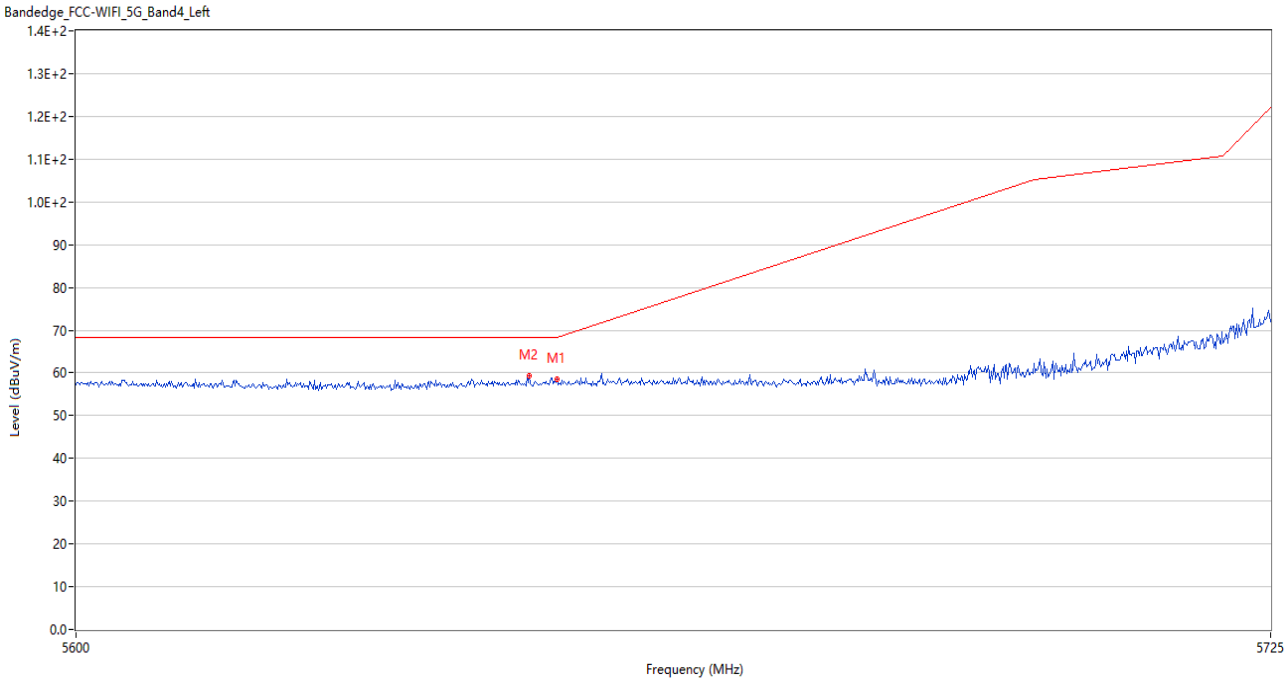
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	58.88	7.83	68.2	9.32	Peak	167.08	150	Vertical	Pass
2	5978.400	61.93	7.44	68.2	6.27	Peak	133.00	150	Vertical	Pass

U-NII-3 11a High Channel ANT H



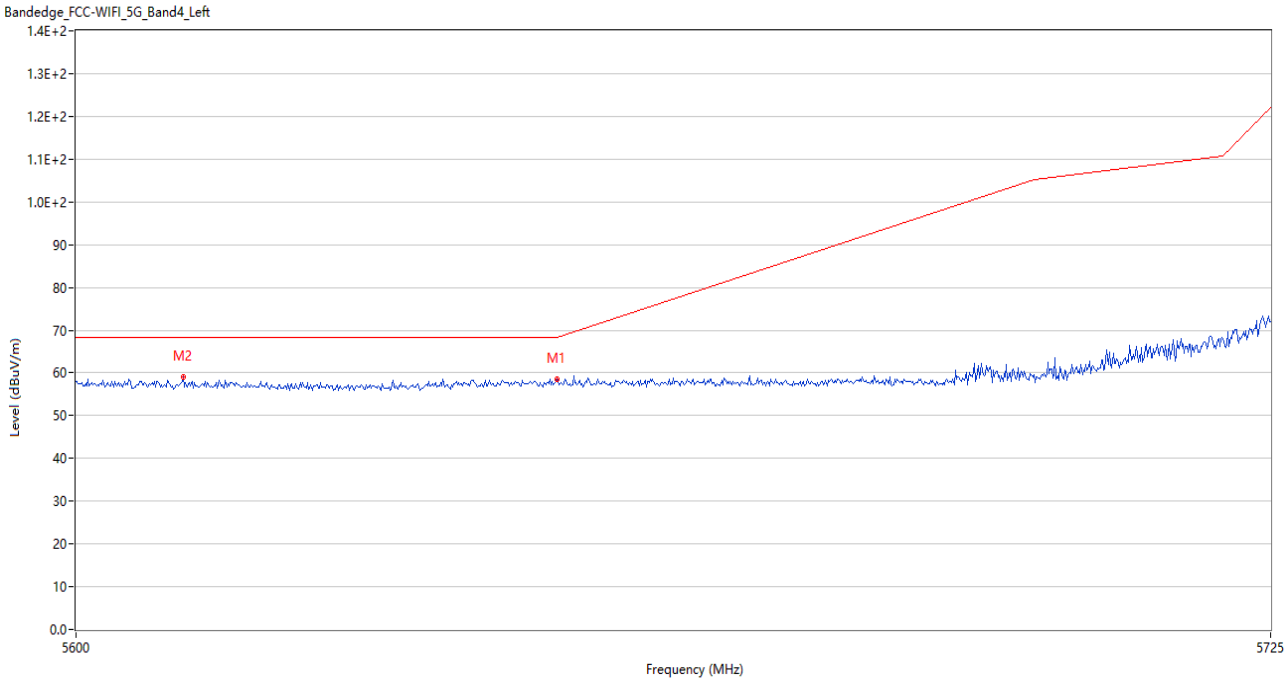
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	59.16	7.83	68.2	9.04	Peak	126.97	150	Horizontal	Pass
2	5972.550	60.54	7.51	68.2	7.66	Peak	46.00	150	Horizontal	Pass

U-NII-3 11ac20 Low Channel ANT V



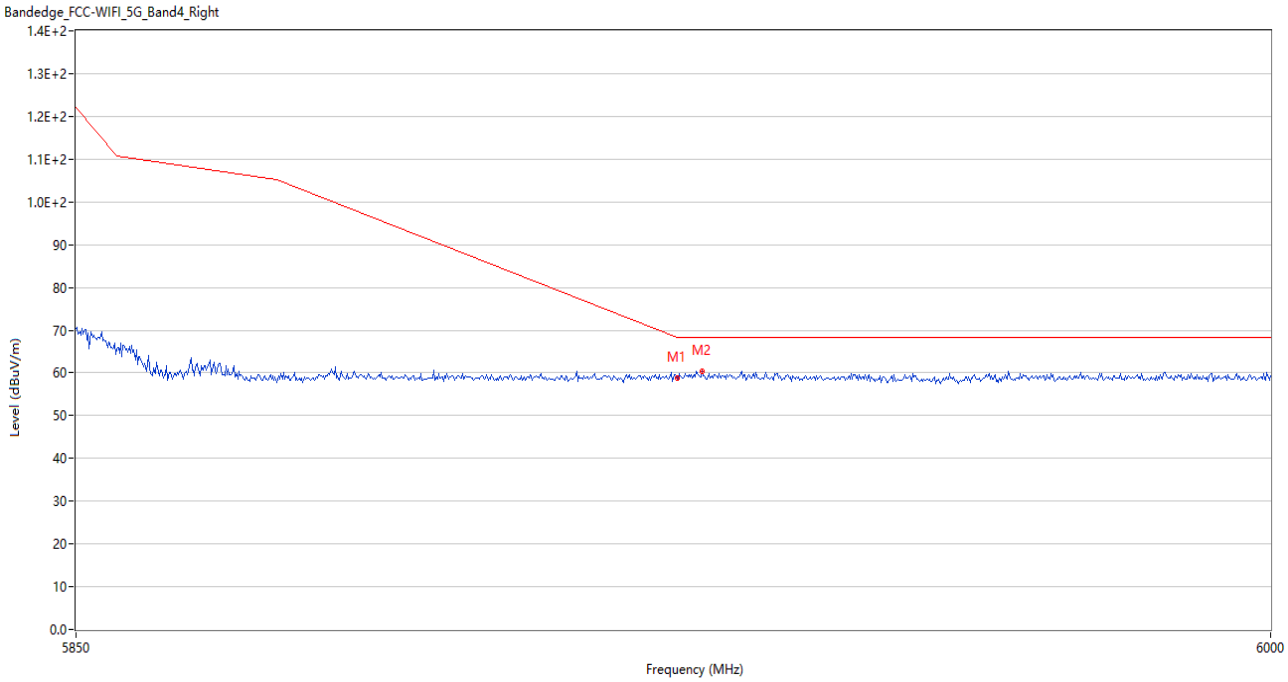
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	58.51	5.94	68.2	9.69	Peak	124.08	150	Vertical	Pass
2	5647.125	59.22	5.95	68.2	8.98	Peak	114.00	150	Vertical	Pass

U-NII-3 11ac20 Low Channel ANT H



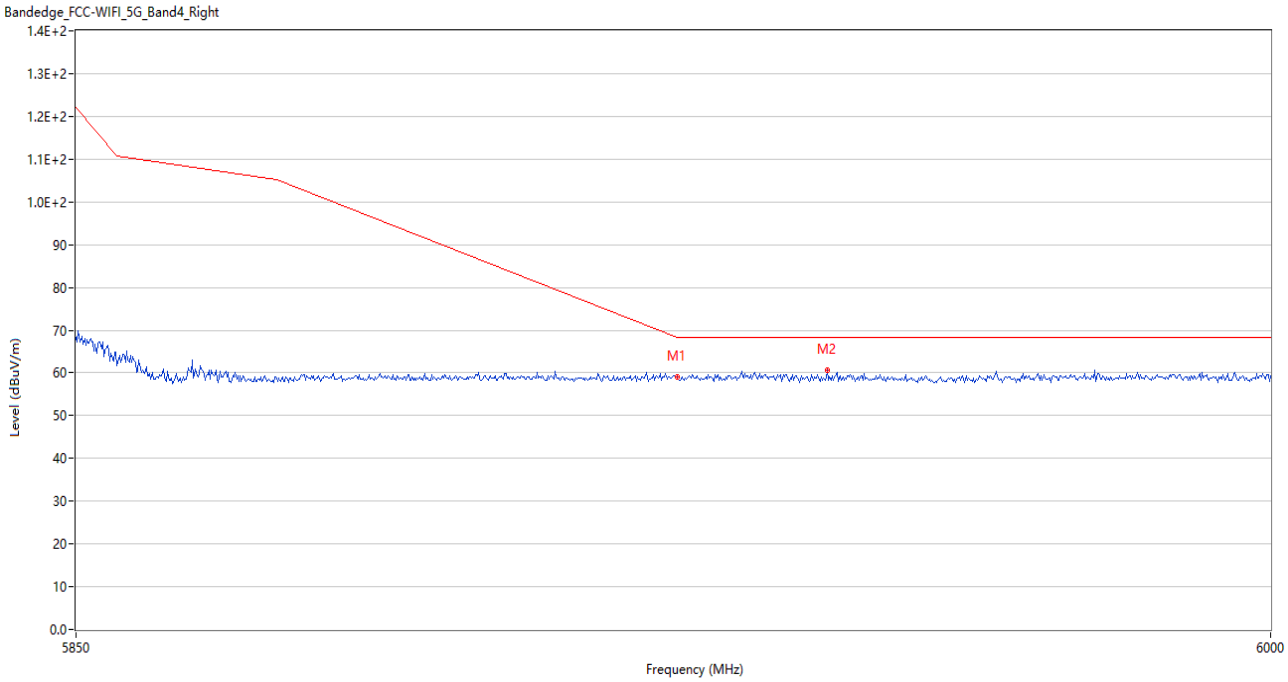
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	58.42	5.94	68.2	9.78	Peak	134.90	150	Horizontal	Pass
2	5611.125	58.93	5.85	68.2	9.27	Peak	32.00	150	Horizontal	Pass

U-NII-3 11ac20 High Channel ANT V



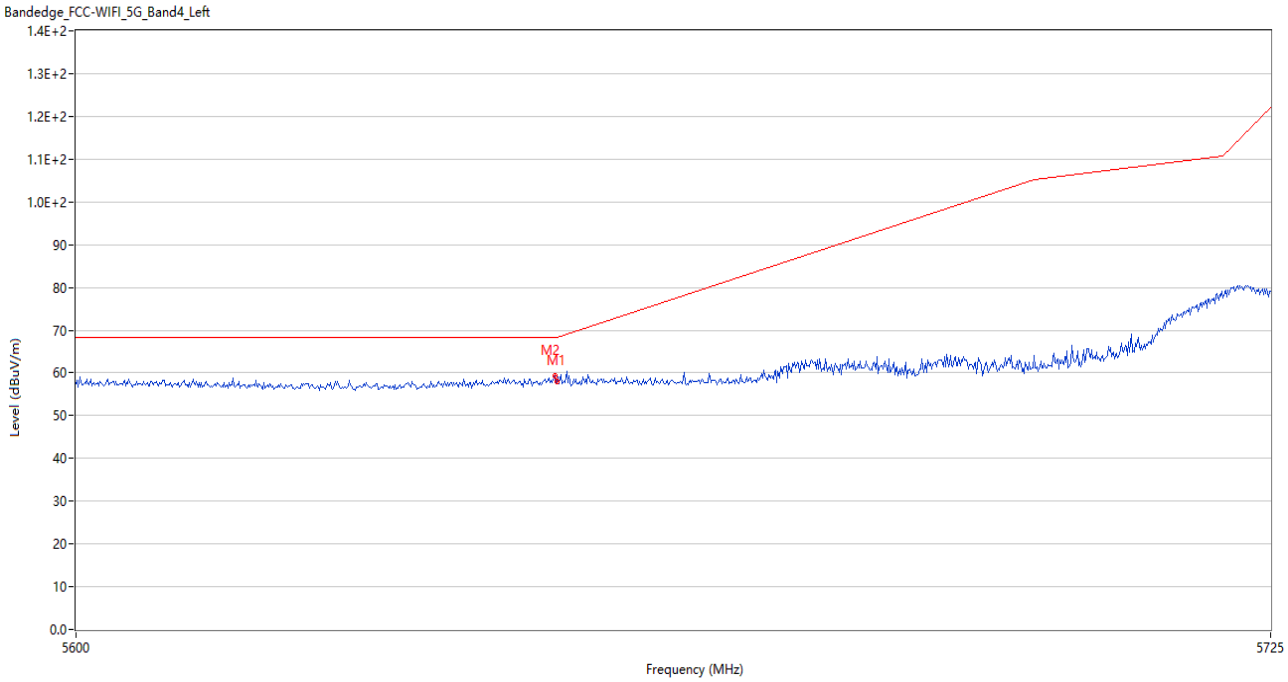
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	58.71	7.83	68.2	9.49	Peak	272.74	150	Vertical	Pass
2	5928.150	60.49	7.73	68.2	7.71	Peak	63.00	150	Vertical	Pass

U-NII-3 11ac20 High Channel ANT H



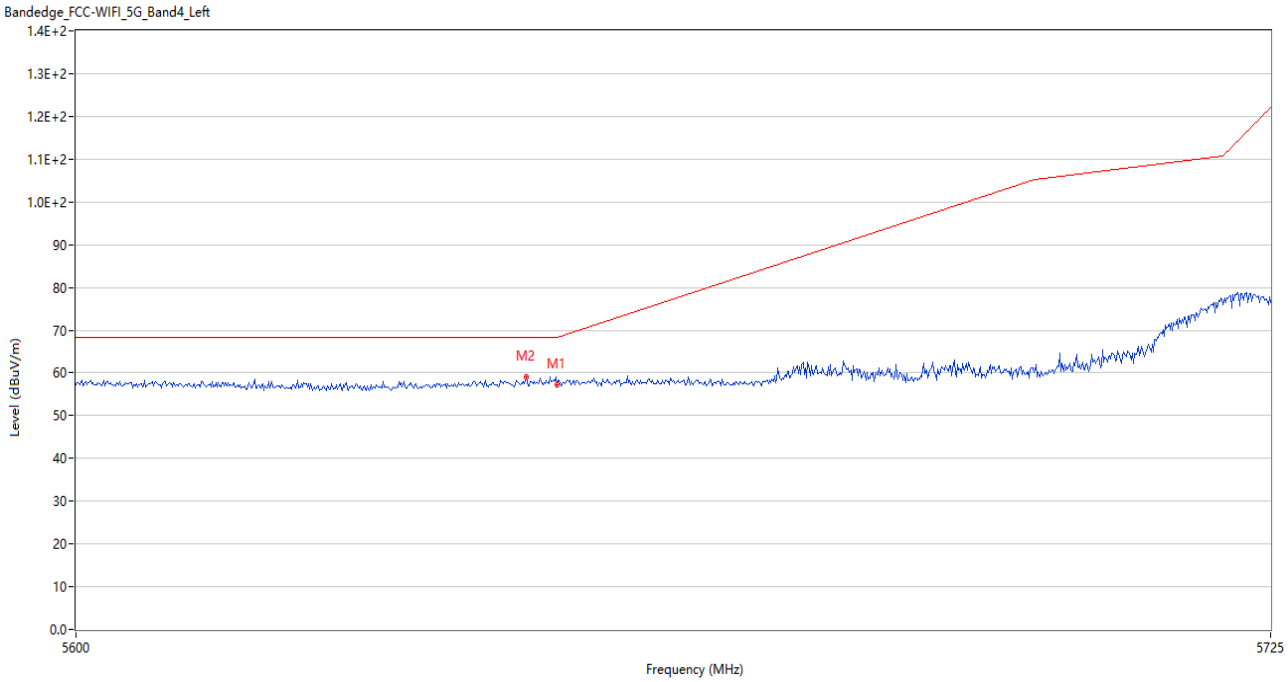
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	59.02	7.83	68.2	9.18	Peak	99.03	150	Horizontal	Pass
2	5943.900	60.55	7.38	68.2	7.65	Peak	320.00	150	Horizontal	Pass

U-NII-3 11ac40 Low Channel ANT V



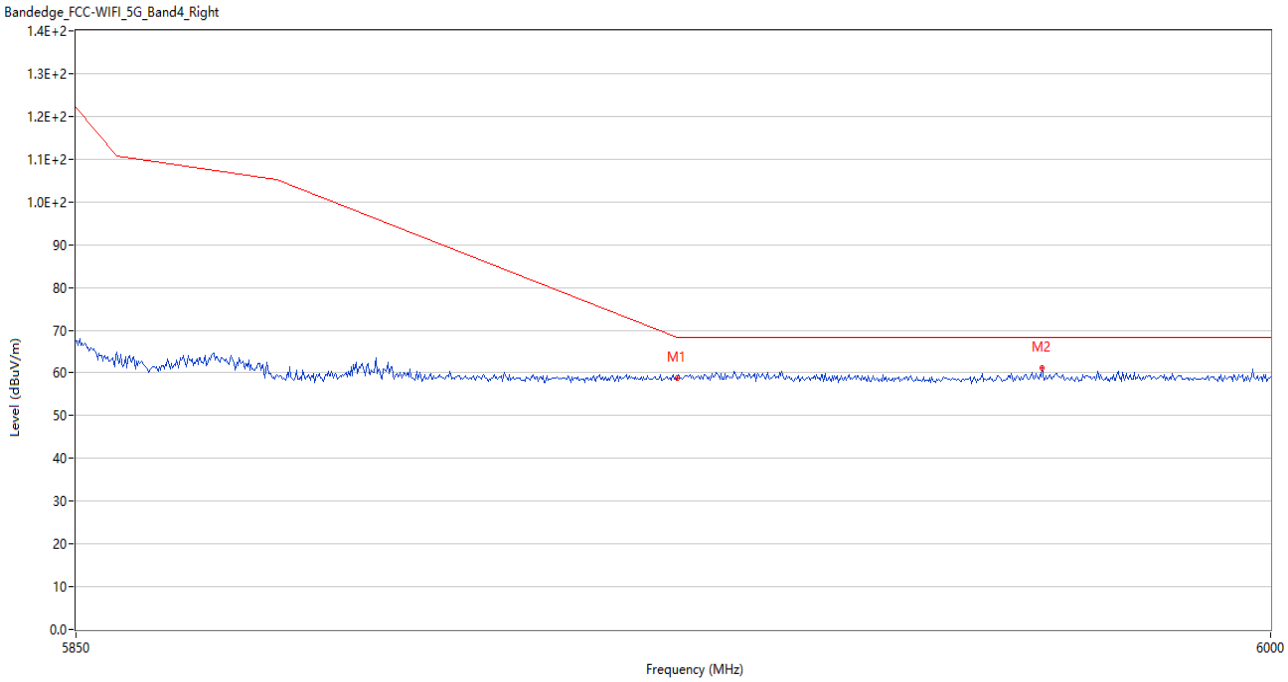
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	58.10	5.94	68.2	10.10	Peak	111.99	150	Vertical	Pass
2	5649.750	59.27	5.94	68.2	8.93	Peak	115.00	150	Vertical	Pass

U-NII-3 11ac40 Low Channel ANT H



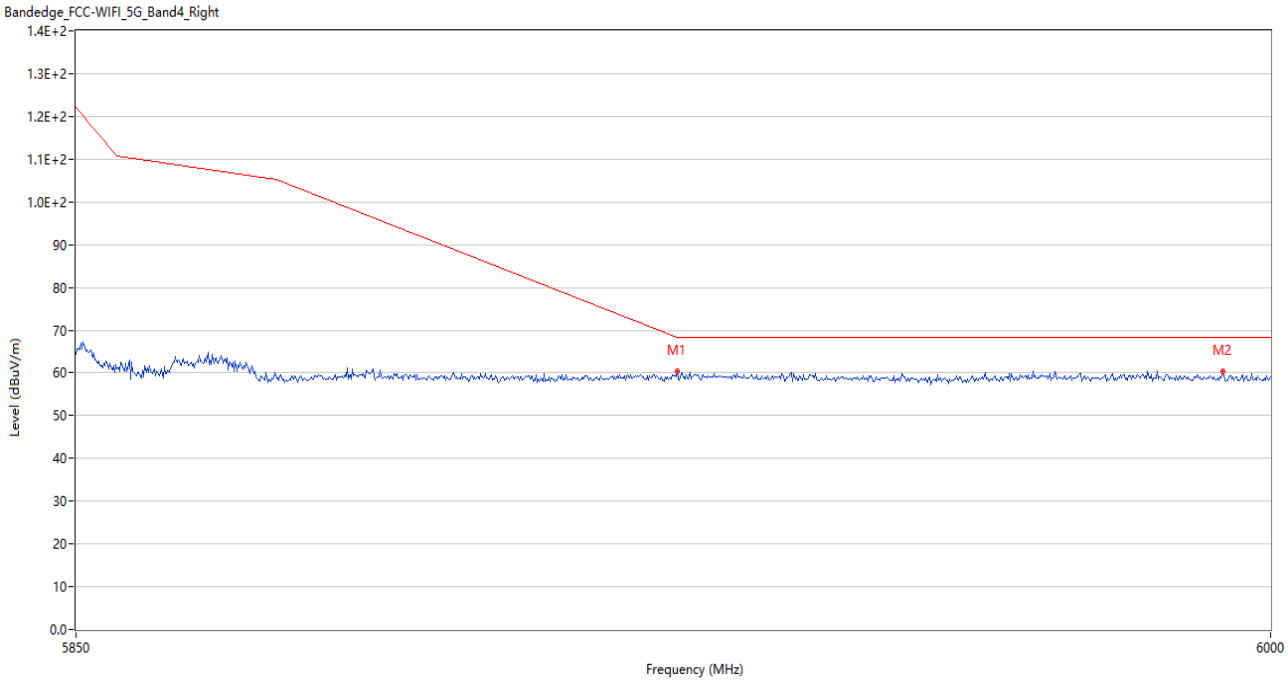
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	57.27	5.94	68.2	10.93	Peak	359.64	150	Horizontal	Pass
2	5646.750	59.08	5.96	68.2	9.12	Peak	360.00	150	Horizontal	Pass

U-NII-3 11ac40 High Channel ANT V



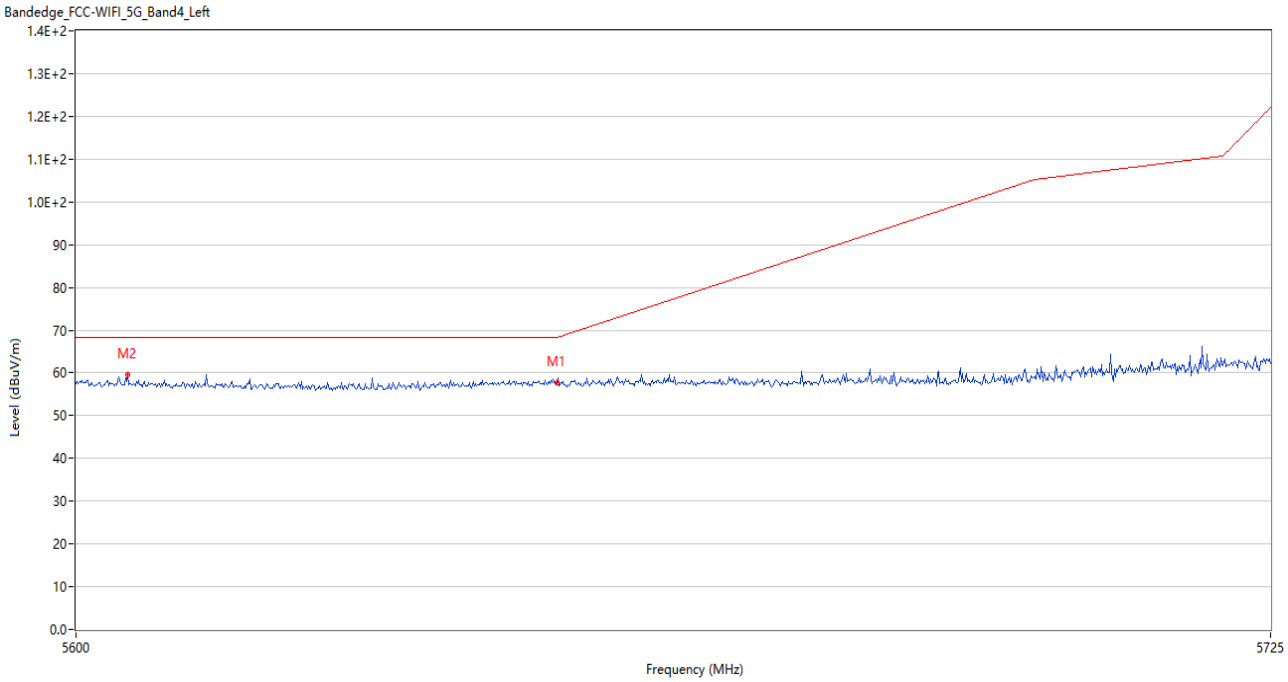
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	58.70	7.83	68.2	9.50	Peak	236.13	150	Vertical	Pass
2	5971.050	61.15	7.58	68.2	7.05	Peak	236.00	150	Vertical	Pass

U-NII-3 11ac40 High Channel ANT H



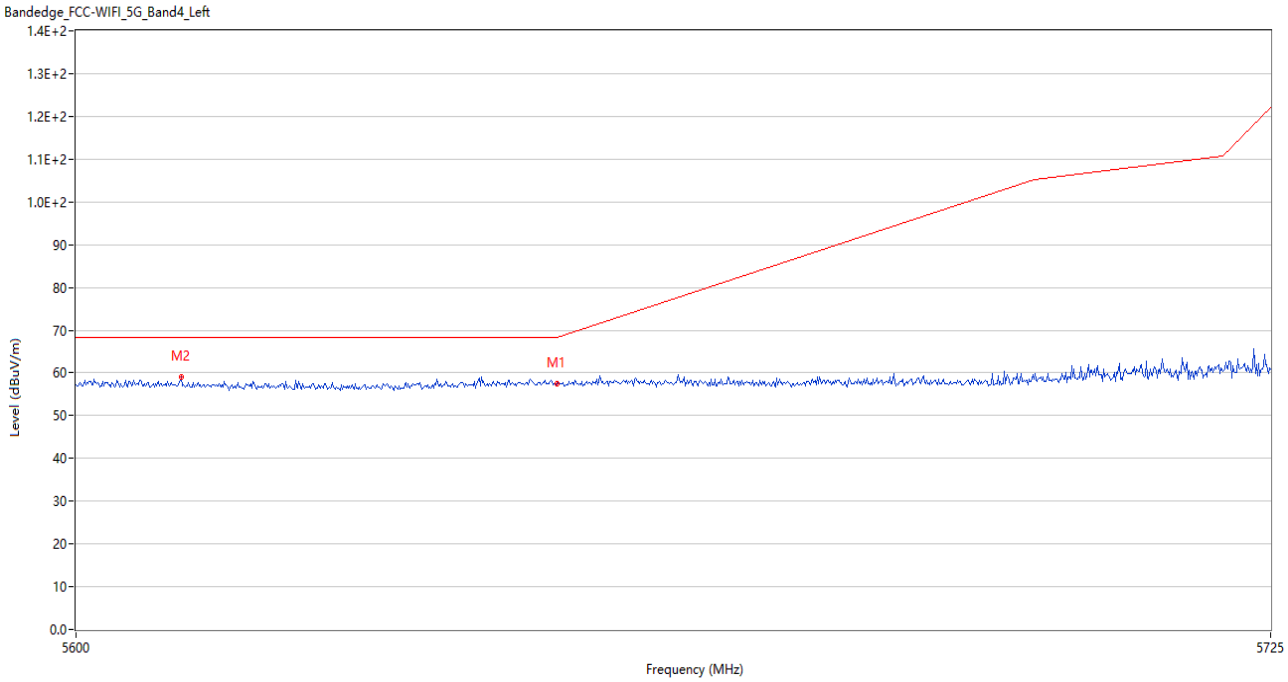
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	60.28	7.83	68.2	7.92	Peak	117.20	150	Horizontal	Pass
2	5994.000	60.45	8.00	68.2	7.75	Peak	225.00	150	Horizontal	Pass

U-NII-3 11ac80 Middle Channel ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5650.000	57.78	5.94	68.2	10.42	Peak	284.71	150	Vertical	Pass
2	5605.375	59.71	5.89	68.2	8.49	Peak	252.00	150	Vertical	Pass

U-NII-3 11ac80 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	5650.000	57.52	5.94	68.2	10.68	Peak	343.75	150	Horizontal	Pass
2	5610.875	59.05	5.85	68.2	9.15	Peak	66.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2480027-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2480027-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2480027-AI.PDF”.

Statement

1. The laboratory 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. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the “inspection and testing dedicated stamp” or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--