

# TEST REPORT

**Applicant:** BirdDog Australia Pty Ltd  
**Address:** Lvl 4, 1-9 Sackville St Collingwood, VIC, 3066, Australia  
**Equipment Type:** PTZ Video Camera  
**Model Name:** X1 Ultra  
**Brand Name:** BirdDog  
**FCC ID:** 2A6CJ-BDX1U  
**Test Standard:** 47 CFR Part 15 Subpart E (refer to section 3.1)  
**Sample Arrival Date:** Apr. 12, 2024  
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**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

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<b>Revision History</b>		
Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Jul. 08, 2024</u>	<u>Initial Issue</u>

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# 1 GENERAL INFORMATION

## 1.1 Test Laboratory

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

## 1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	<input checked="" type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	<input type="checkbox"/> 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	BirdDog Australia Pty Ltd
Address	Lvl 4, 1-9 Sackville St Collingwood, VIC, 3066, Australia

### 2.2 Manufacturer Information

Manufacturer	BirdDog Technology Ltd
Address	1-9 Sackville Street, Level4, Collingwood, VIC, 3066, Australia

### 2.3 General Description for Equipment under Test (EUT)

EUT Name	PTZ Video Camera
Under Test Model Name	X1 Ultra
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V1.0
Software Version	V1.0.2.5
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

## 2.4 Technical Information

Network and Wireless connectivity	WIFI 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac U-NII-1/3
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The requirement for the following technical information of the EUT was tested in this report:

Frequency Range	U-NII-1: 5150 MHz to 5250 MHz, U-NII-3: 5725 MHz to 5850 MHz
Product Type	<input checked="" type="checkbox"/> Mobile <input type="checkbox"/> Portable <input type="checkbox"/> 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: 121.90 mW U-NII-3: 70.96 mW
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	Dipole Antenna
Antenna Gain	U-NII-1: 5150 MHz to 5250 MHz: 1.98 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.39 dBi
About the Product	The equipment is PTZ Video Camera, 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)
<b>36</b>	<b>5180</b>	<b>38</b>	<b>5190</b>	<b>42</b>	<b>5210</b>
40	5200	<b>46</b>	<b>5230</b>	<b>155</b>	<b>5775</b>
<b>44</b>	<b>5220</b>	<b>151</b>	<b>5755</b>		
<b>48</b>	<b>5240</b>	<b>159</b>	<b>5795</b>		
<b>149</b>	<b>5745</b>				
153	5765				
<b>157</b>	<b>5785</b>				
161	5805				
<b>165</b>	<b>5825</b>				

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-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	149	Low	5745
44	Mid	5220	157	Mid	5785
48	High	5240	165	High	5825

For 802.11n(HT40)/ac(VHT40)

U-NII-1 (5150 - 5250 MHz)			U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
38	Low	5190	151	Low	5755
46	High	5230	159	High	5795

For 802.11ac(VHT80)

U-NII-1 (5150 - 5250 MHz)			U-NII-3 (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
42	Mid	5210	155	Mid	5775

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

Test Items	Mode	Data Rate	Modulation Type	U-NII-1	U-NII-3
				Channel	Channel
RF Output Power	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	29.3		42	155
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	29.3		42	155
6 dB bandwidth	11a	6	BPSK	N/A	165/157/149
	11n(20 MHz)	6.5		N/A	165/157/149
	11n(40 MHz)	13.5		N/A	159/151
	11ac(20 MHz)	6.5		N/A	165/157/149
	11ac(40 MHz)	13.5		N/A	159/151
	11ac(80 MHz)	29.3		N/A	155
Power Spectral Density	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	29.3		42	155
Radiated Spurious Emissions	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	29.3		42	155
Band Edge (Restricted-band)	11a	6	BPSK	48/36	165/149
	11n(20 MHz)	6.5		48/36	165/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/36	165/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	29.3		42	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 <sup>Note1</sup>
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 <sup>1</sup>: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note <sup>2</sup>: Under all normal operating conditions specified in the user manual, frequency stability can keep radiation within the operating frequency band.

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments

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

Relative Humidity	53% to 70%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+21.0°C to +25.0°C
	LT (Low Temperature)	-10.0°C
	HT (High Temperature)	+40.0°C
Working Voltage of the EUT	NV (Normal Voltage)	12.0 V
	LV (Low Voltage)	10.8 V
	HV (High Voltage)	13.2 V

### 4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY46471071	2023.07.25	2024.07.24
Power Sensor	KEYSIGHT	U2063XA	MY58000251	2023.07.12	2024.07.11
Spectrum Analyzer	KEYSIGHT	N9020A	MY50531259	2023.09.05	2024.09.04
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	02460	2021.05.20	2024.05.19
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2021.07.02	2024.07.01
Anechoic Chamber	RAINFORD	9m*6m*6m	140	2022.02.19	2024.08.15
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-Bi-Log	SCHWARZBECK	VULB 9168	9168-01162	2023.08.04	2024.08.03
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2024.01.23	2027.01.22
Amplifier	COM-MV	ZT30-1000M	B2018054558	2023.12.05	2024.12.04
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	130	2021.08.15	2024.08.14
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2023.09.05	2024.09.04
LISN	SCHWARZBECK	NSLK 8127	8127-687	2023.05.16	2024.05.15
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%

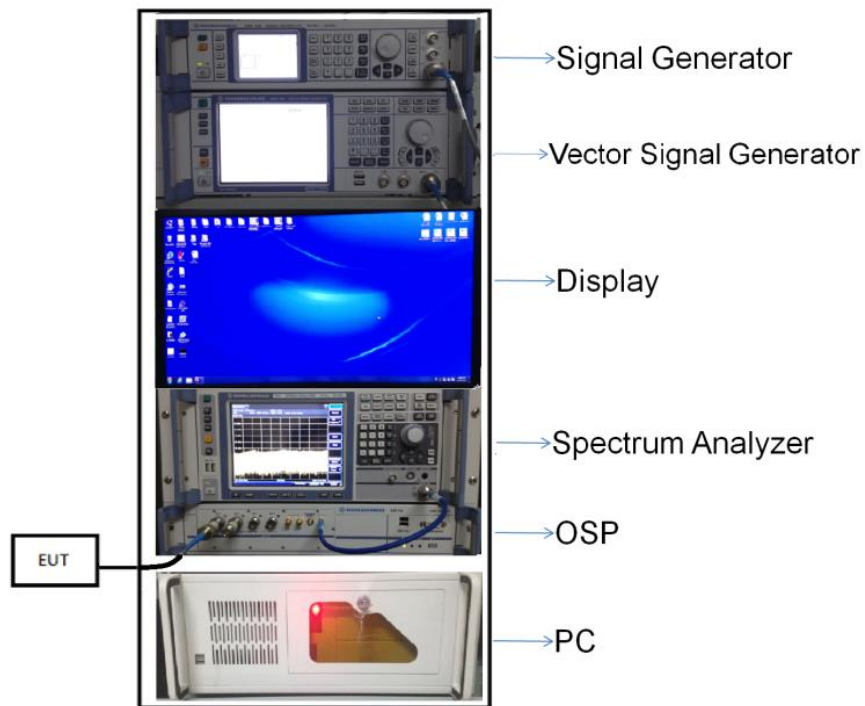
## 4.5 Description of Test Setup

### 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



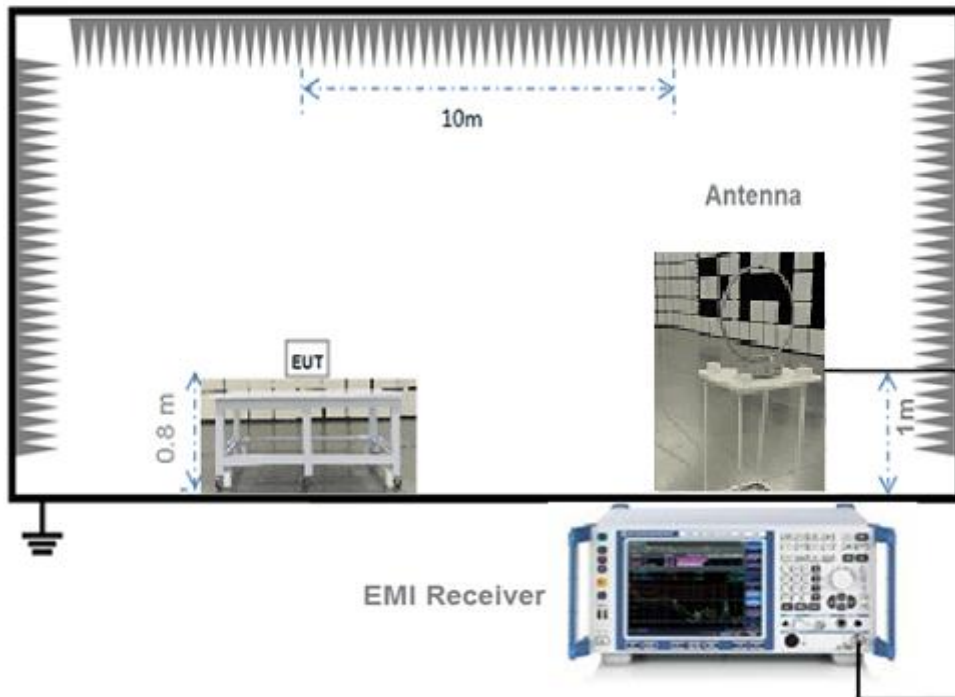
(Diagram 1)

4.5.2 For AC Power Supply Port Test



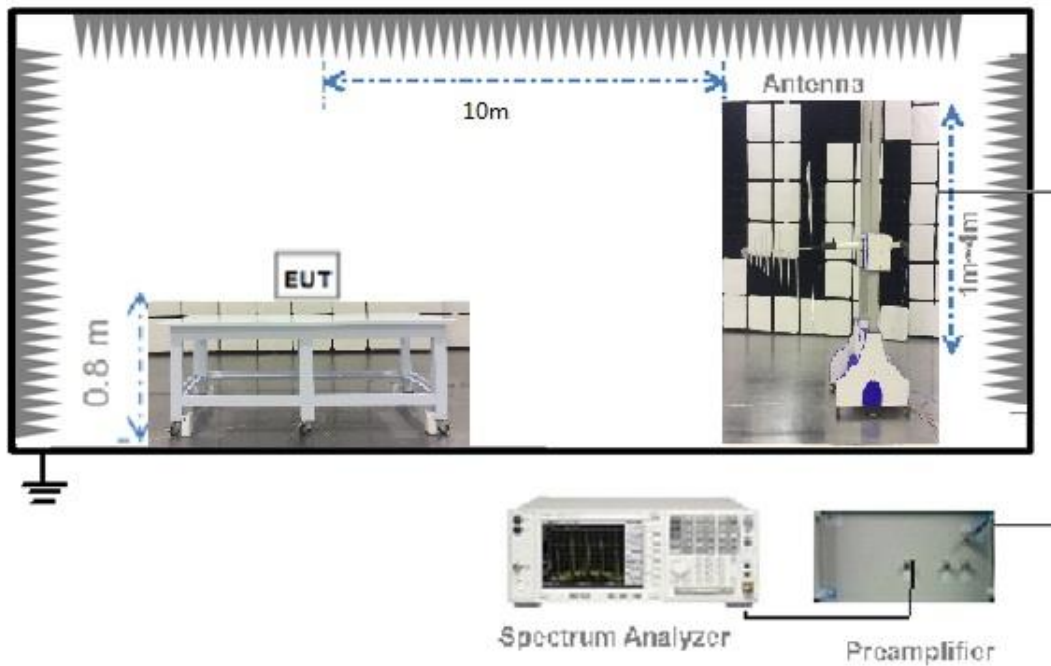
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



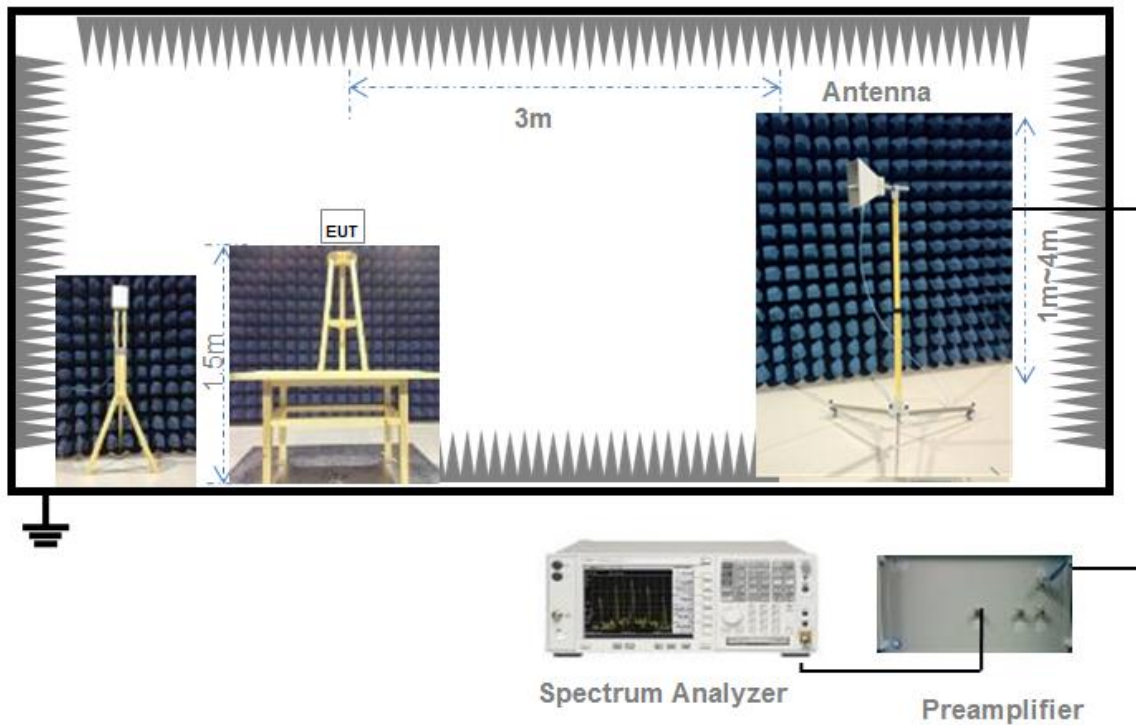
(Diagram 3)

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

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

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

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

#### 5.1.4 Test Result

Please refer to ANNEX A.1.



## 5.2 Emission Bandwidth and 6 dB Bandwidth

### 5.2.1 Limit

#### FCC §15.407(a)

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

### 5.2.2 Test Setup

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

### 5.2.3 Test Procedure

#### Emission bandwidth

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

#### Occupied Bandwidth

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

#### 6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.
2. Detector = Peak. Trace mode = Max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 5.2.4 Test Result

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

## 5.3 Power Spectral density (PSD)

### 5.3.1 Limit

FCC §15.407(a)

The maximum power spectral density should not exceed:

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

### 5.3.2 Test Setup

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

### 5.3.3 Test Procedure

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

1. Set RBW = 510 kHz/1 MHz, VBW  $\geq$  3\*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 50 $\mu$ H/50 $\Omega$  line impedance stabilization network (LISN).

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

### 5.4.2 Test Setup

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

### 5.4.3 Test Procedure

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

### 5.4.4 Test Result

Please refer to ANNEX A.5.

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

### 5.5.1 Limit

FCC §15.209 & 15.407(b)

Frequency (MHz)	Field Strength ( $\mu\text{V}/\text{m}$ )	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<sup>1</sup>: The Limit for radiated test was performed according to FCC Part 15C

Note<sup>2</sup>: The tighter limit applies at the band edge.

### 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

- 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).
- Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies  $\leq 30$  MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies  $> 1000$  MHz).
- 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).
- Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

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

where:

E = electric field strength in dB $\mu$ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

e) Compare the resultant electric field strength level to the applicable limit.

f) Perform radiated spurious emission test.

#### Quasi-Peak measurement procedure

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

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

#### Peak power measurement procedure

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

a) RBW = as specified in Table 1.

b) VBW  $\geq$  3 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  $\geq$  98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than  $\pm$  2 percent), then the following procedure shall be used:

- a) The EUT shall be configured to operate at the maximum achievable duty cycle.
- b) Measure the duty cycle,  $x$ , of the transmitter output signal as described in section 6.0.
- c) RBW = 1 MHz (unless otherwise specified).
- d) VBW  $\geq 3 \times$  RBW.
- e) Detector = RMS, if  $\text{span}/(\# \text{ of points in sweep}) \leq (\text{RBW}/2)$ . Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
- f) Averaging type = power (i.e., RMS).
  - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
  - 2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
- g) Sweep time = auto.
- h) Perform a trace average of at least 100 traces.
- i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:
  - 1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is  $10 \log(1/x)$ , where  $x$  is the duty cycle.
  - 2) If linear voltage averaging mode was used in step f), then the applicable correction factor is  $20 \log(1/x)$ , where  $x$  is the duty cycle.
  - 3) If a specific emission is demonstrated to be continuous ( $\geq 98$  percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

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

#### Determining the applicable transmit antenna gain

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

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that

is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

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

#### Radiated spurious emission test

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

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

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

The power of the EUT transmitting frequency should be ignored.

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

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

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

VBW  $\geq$  RBW

Sweep = auto

Detector function = peak

Trace = max hold

#### 5.5.4 Test Result

Please refer to ANNEX A.6.

## ANNEX A TEST RESULT

### A.1 RF Output Power

Note: 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	Duty Factor
11a	2.06	2.22	93.06%	0.31
11n (HT20)/11ac (VHT20)	1.93	2.09	92.57%	0.34
11n (HT40)/11ac (VHT40)	0.95	1.08	88.02%	0.55
11ac (VHT80)	0.46	0.59	78.05%	1.08

#### Test Data

##### Conducted Power

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	18.39	69.02	250	Pass
11a	CH44	20.86	121.90	250	Pass
11a	CH48	20.67	116.68	250	Pass
11n (HT20)	CH36	16.95	49.55	250	Pass
11n (HT20)	CH44	20.61	115.08	250	Pass
11n (HT20)	CH48	20.49	111.94	250	Pass
11n (HT40)	CH38	13.13	20.56	250	Pass
11n (HT40)	CH46	20.29	106.91	250	Pass
11ac (VHT20)	CH36	16.98	49.89	250	Pass
11ac (VHT20)	CH44	20.16	103.75	250	Pass
11ac (VHT20)	CH48	20.36	108.64	250	Pass
11ac (VHT40)	CH38	12.49	17.74	250	Pass
11ac (VHT40)	CH46	20.07	101.62	250	Pass
11ac (VHT80)	CH42	11.00	12.59	250	Pass



U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	18.51	70.96	1000	Pass
11a	CH157	18.28	67.30	1000	Pass
11a	CH165	18.18	65.77	1000	Pass
11n (HT20)	CH149	18.27	67.14	1000	Pass
11n (HT20)	CH157	18.22	66.37	1000	Pass
11n (HT20)	CH165	18.09	64.42	1000	Pass
11n (HT40)	CH151	18.19	65.92	1000	Pass
11n (HT40)	CH159	18.15	65.31	1000	Pass
11ac (VHT20)	CH149	18.29	67.45	1000	Pass
11ac (VHT20)	CH157	18.15	65.31	1000	Pass
11ac (VHT20)	CH165	17.99	62.95	1000	Pass
11ac (VHT40)	CH151	18.00	63.10	1000	Pass
11ac (VHT40)	CH159	17.90	61.66	1000	Pass
11ac (VHT80)	CH155	17.84	60.81	1000	Pass

## A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ2440604-602 Data Part 1.pdf".

### Test Data

U-NII-1 (5150 - 5250 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	40.66	21.98
11a	CH44	45.84	30.07
11a	CH48	49.70	30.46
11n (HT20)	CH36	41.55	20.35
11n (HT20)	CH44	46.85	30.74
11n (HT20)	CH48	48.50	31.84
11n (HT40)	CH38	45.85	36.42
11n (HT40)	CH46	97.26	65.92
11ac (VHT20)	CH36	41.97	21.03
11ac (VHT20)	CH44	48.72	31.02
11ac (VHT20)	CH48	47.59	31.53
11ac (VHT40)	CH38	44.60	36.33
11ac (VHT40)	CH46	98.66	63.88
11ac (VHT80)	CH42	85.49	75.66

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	41.23	20.66
11a	CH157	39.04	20.02
11a	CH165	38.54	19.09
11n (HT20)	CH149	41.15	21.10
11n (HT20)	CH157	42.23	20.52
11n (HT20)	CH165	40.73	19.26
11n (HT40)	CH151	85.57	44.36
11n (HT40)	CH159	88.21	44.61
11ac (VHT20)	CH149	42.12	21.86
11ac (VHT20)	CH157	42.95	20.36
11ac (VHT20)	CH165	42.37	22.11
11ac (VHT40)	CH151	95.33	49.52
11ac (VHT40)	CH159	93.18	47.61
11ac (VHT80)	CH155	178.70	96.07

### A.3 6 dB Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ2440604-602 Data Part 2.pdf".

#### Test Data

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	6 dB Bandwidth (MHz)	Limit (kHz)	Verdict
11a	CH149	16.50	500.00	Pass
11a	CH157	16.50	500.00	Pass
11a	CH165	16.50	500.00	Pass
11n (HT20)	CH149	17.10	500.00	Pass
11n (HT20)	CH157	16.80	500.00	Pass
11n (HT20)	CH165	17.10	500.00	Pass
11n (HT40)	CH151	35.70	500.00	Pass
11n (HT40)	CH159	35.60	500.00	Pass
11ac (VHT20)	CH149	17.30	500.00	Pass
11ac (VHT20)	CH157	17.20	500.00	Pass
11ac (VHT20)	CH165	17.20	500.00	Pass
11ac (VHT40)	CH151	35.60	500.00	Pass
11ac (VHT40)	CH159	35.50	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-SZ2440604-602 Data Part 3.pdf".

### Test Data

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	FCC Limit (dBm/MHz)	Verdict
11a	CH36	6.21	11.00	Pass
11a	CH44	7.03	11.00	Pass
11a	CH48	6.98	11.00	Pass
11n (HT20)	CH36	5.09	11.00	Pass
11n (HT20)	CH44	6.62	11.00	Pass
11n (HT20)	CH48	6.63	11.00	Pass
11n (HT40)	CH38	-1.91	11.00	Pass
11n (HT40)	CH46	3.54	11.00	Pass
11ac (VHT20)	CH36	4.79	11.00	Pass
11ac (VHT20)	CH44	6.56	11.00	Pass
11ac (VHT20)	CH48	6.71	11.00	Pass
11ac (VHT40)	CH38	-2.41	11.00	Pass
11ac (VHT40)	CH46	3.38	11.00	Pass
11ac (VHT80)	CH42	-5.44	11.00	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	FCC Limit (dBm/500kHz)	Verdict
11a	CH149	1.73	30.00	Pass
11a	CH157	1.36	30.00	Pass
11a	CH165	1.35	30.00	Pass
11n (HT20)	CH149	1.53	30.00	Pass
11n (HT20)	CH157	1.05	30.00	Pass
11n (HT20)	CH165	1.01	30.00	Pass
11n (HT40)	CH151	-1.79	30.00	Pass
11n (HT40)	CH159	-1.99	30.00	Pass
11ac (VHT20)	CH149	1.60	30.00	Pass
11ac (VHT20)	CH157	1.05	30.00	Pass
11ac (VHT20)	CH165	0.90	30.00	Pass
11ac (VHT40)	CH151	-1.68	30.00	Pass
11ac (VHT40)	CH159	-2.05	30.00	Pass
11ac (VHT80)	CH155	-3.86	30.00	Pass

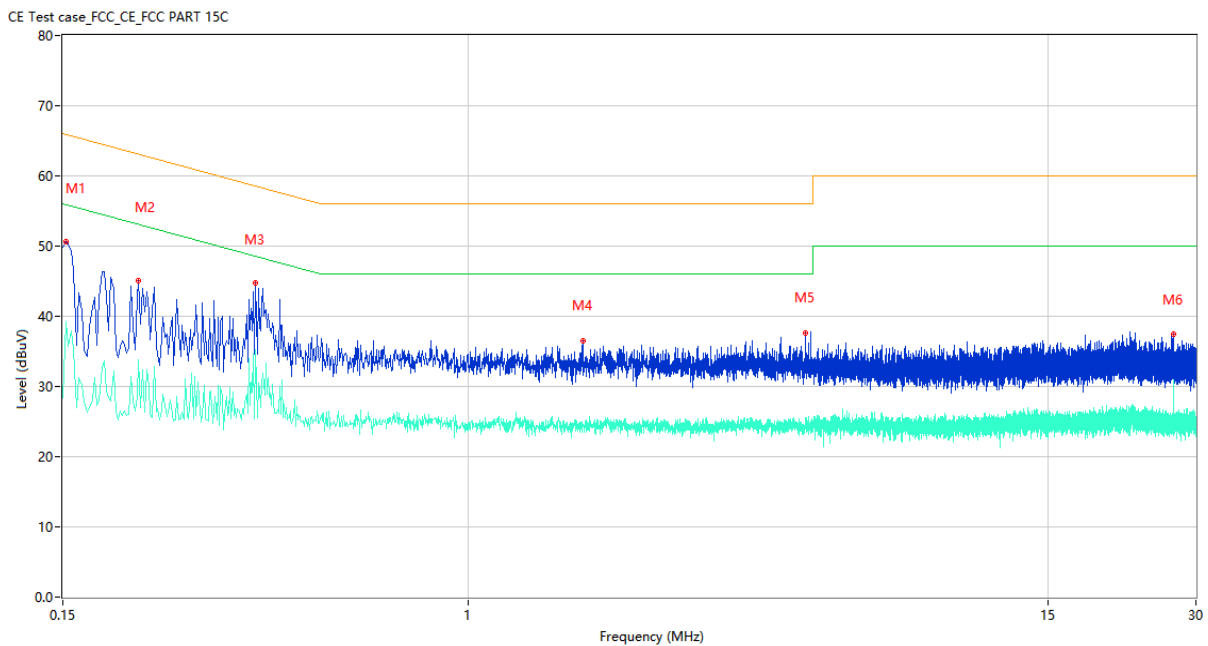
## A.5 Conducted Emissions

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

Note<sup>2</sup>: 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

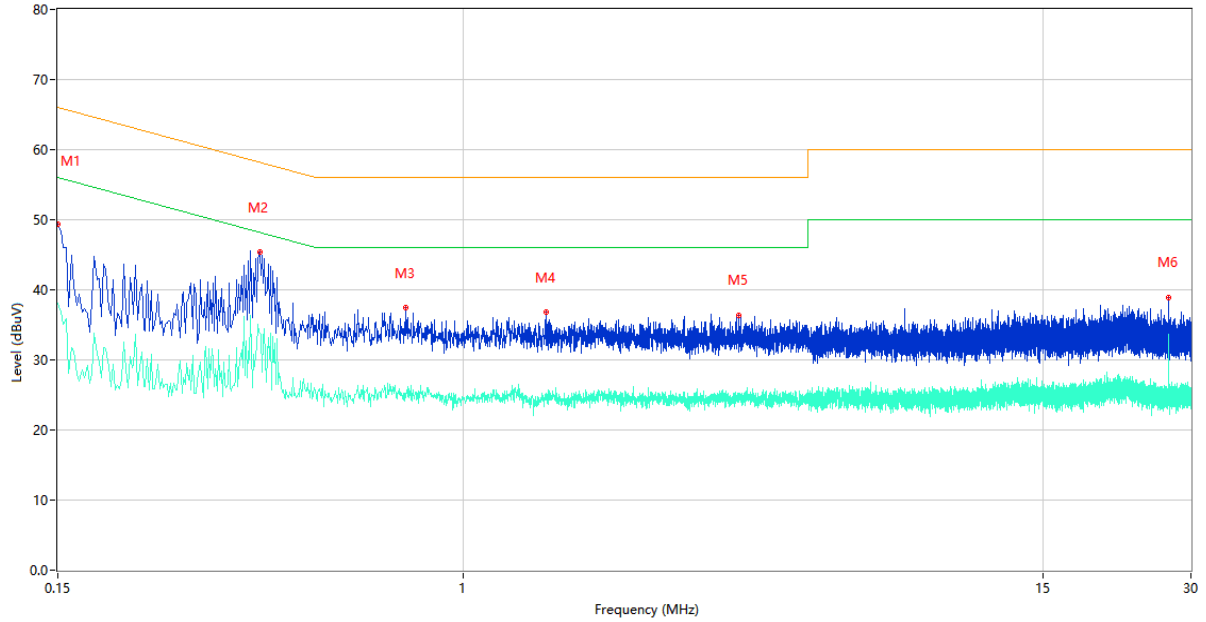
#### PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	50.57	9.78	65.89	15.32	Peak	L	Pass
1**	0.152	39.23	9.78	55.89	16.66	AV	L	Pass
2	0.214	45.07	9.77	63.05	17.98	Peak	L	Pass
2**	0.214	33.77	9.77	53.05	19.28	AV	L	Pass
3	0.370	44.82	10.68	58.50	13.68	Peak	L	Pass
3**	0.370	35.21	10.68	48.50	13.29	AV	L	Pass
4	1.708	36.58	10.19	56.00	19.42	Peak	L	Pass
4**	1.708	24.26	10.19	46.00	21.74	AV	L	Pass
5	4.842	37.70	10.25	56.00	18.30	Peak	L	Pass
5**	4.842	24.88	10.25	46.00	21.12	AV	L	Pass
6	27.000	37.52	10.82	60.00	22.48	Peak	L	Pass
6**	27.000	30.90	10.82	50.00	19.10	AV	L	Pass

PHASE N

CE Test case\_FCC\_CE\_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	49.34	9.78	66.00	16.66	Peak	N	Pass
1**	0.150	38.08	9.78	56.00	17.92	AV	N	Pass
2	0.386	45.47	10.61	58.15	12.68	Peak	N	Pass
2**	0.386	33.80	10.61	48.15	14.35	AV	N	Pass
3	0.762	37.45	10.26	56.00	18.55	Peak	N	Pass
3**	0.762	25.21	10.26	46.00	20.79	AV	N	Pass
4	1.468	36.78	10.14	56.00	19.22	Peak	N	Pass
4**	1.468	25.24	10.14	46.00	20.76	AV	N	Pass
5	3.618	36.37	10.38	56.00	19.63	Peak	N	Pass
5**	3.618	24.65	10.38	46.00	21.35	AV	N	Pass
6	26.996	38.97	10.83	60.00	21.03	Peak	N	Pass
6**	26.996	32.10	10.83	50.00	17.90	AV	N	Pass

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

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

Note<sup>2</sup>: 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.

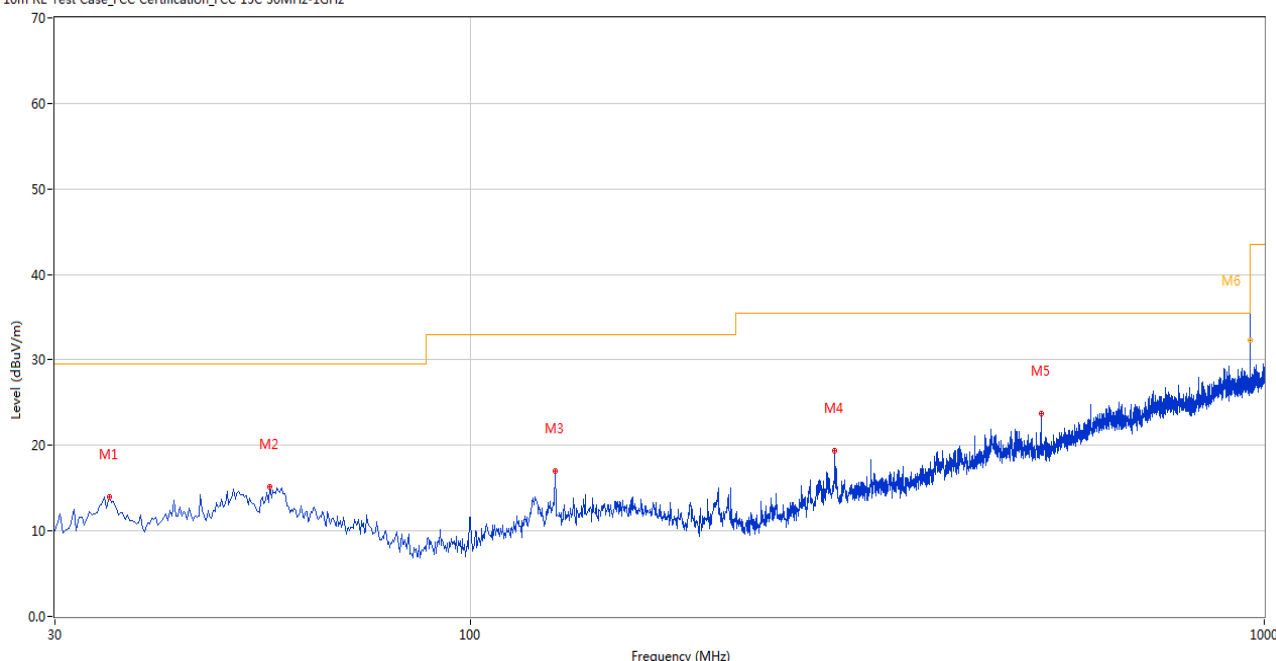
Note<sup>3</sup>: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note<sup>4</sup>: 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

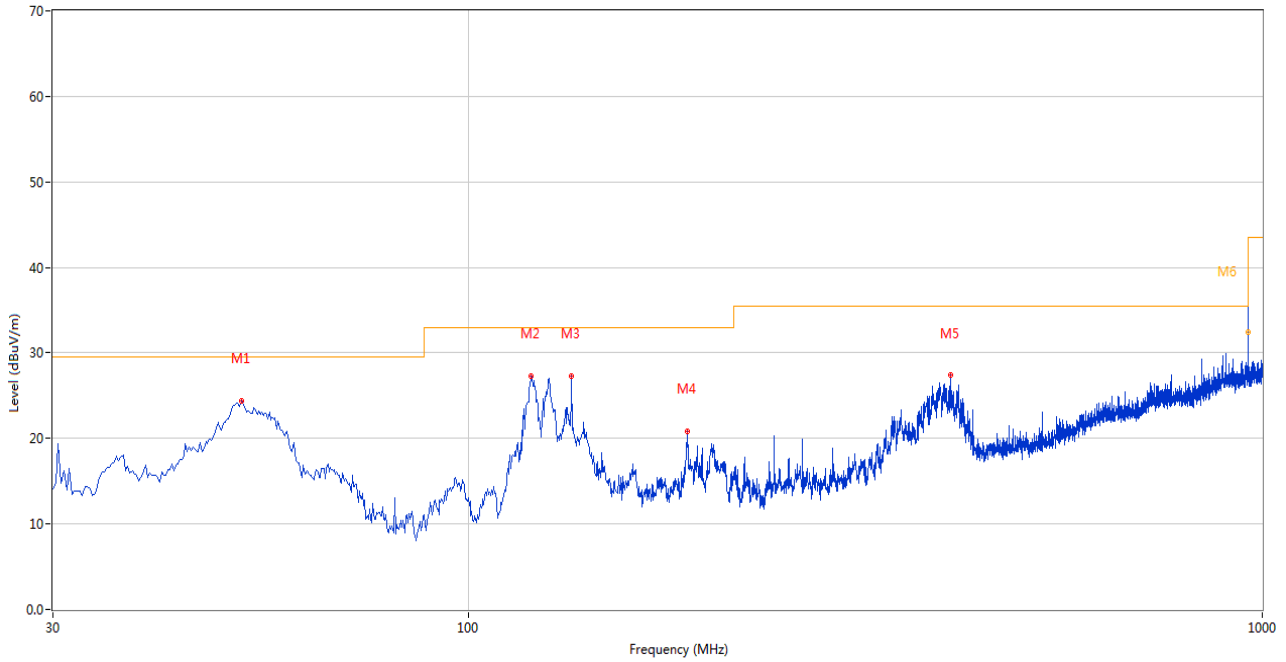
10m RE Test Case\_FCC Certification\_FCC 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.091	13.96	-26.71	29.5	15.54	Peak	267.00	100	Horizontal	Pass
2	55.941	15.17	-26.17	29.5	14.33	Peak	285.00	100	Horizontal	Pass
3	127.946	17.00	-27.49	33.0	16.00	Peak	217.00	100	Horizontal	Pass
4	287.956	19.42	-25.01	35.5	16.08	Peak	285.00	200	Horizontal	Pass
5	523.364	23.79	-18.99	35.5	11.71	Peak	236.00	200	Horizontal	Pass
6	959.998	35.96	-10.60	35.5	-0.46	Peak	248.00	100	Horizontal	N/A
6*	959.998	32.30	-10.60	35.5	3.20	QP	248.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

10m RE Test Case\_FCC Certification\_FCC 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	51.820	24.36	-25.93	29.5	5.14	Peak	254.00	200	Vertical	Pass
2	119.945	27.25	-28.26	33.0	5.75	Peak	360.00	200	Vertical	Pass
3	134.976	27.24	-26.77	33.0	5.76	Peak	223.00	200	Vertical	Pass
4	189.040	20.78	-28.20	33.0	12.22	Peak	97.00	100	Vertical	Pass
5	404.569	27.36	-22.33	35.5	8.14	Peak	236.00	100	Vertical	Pass
6	960.165	38.61	-10.60	35.5	-3.11	Peak	112.00	170	Vertical	N/A
6*	960.165	32.42	-10.60	35.5	3.08	QP	112.00	170	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, 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	1570.200	42.03	-19.94	74.0	31.97	Peak	360.00	300	Horizontal	Pass
1**	1570.200	33.94	-19.94	54.0	20.06	AV	360.00	300	Horizontal	Pass
2	2728.900	44.42	-11.48	74.0	29.58	Peak	42.00	200	Horizontal	Pass
2**	2728.900	34.12	-11.48	54.0	19.88	AV	42.00	200	Horizontal	Pass
3	4313.500	47.30	-6.02	74.0	26.70	Peak	321.00	100	Horizontal	Pass
3**	4313.500	38.45	-6.02	54.0	15.55	AV	321.00	100	Horizontal	Pass
4	5186.750	100.91	-4.45	--	--	Peak	128.00	200	Horizontal	N/A
4**	5186.750	94.39	-4.45	--	--	AV	128.00	200	Horizontal	N/A
5	7487.750	54.30	-0.35	74.0	19.70	Peak	259.00	150	Horizontal	Pass
5**	7487.750	45.44	-0.35	54.0	8.56	AV	259.00	150	Horizontal	Pass
6	12363.825	53.35	0.62	74.0	20.65	Peak	61.00	200	Horizontal	Pass
6**	12363.825	43.58	0.62	54.0	10.42	AV	61.00	200	Horizontal	Pass

11a, 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	1570.800	45.66	-19.94	74.0	28.34	Peak	266.00	200	Vertical	Pass
1**	1570.800	37.79	-19.94	54.0	16.21	AV	266.00	200	Vertical	Pass
2	2834.700	43.39	-12.52	74.0	30.61	Peak	240.00	150	Vertical	Pass
2**	2834.700	33.73	-12.52	54.0	20.27	AV	240.00	150	Vertical	Pass
3	4340.250	47.25	-6.27	74.0	26.75	Peak	0.00	150	Vertical	Pass
3**	4340.250	38.70	-6.27	54.0	15.30	AV	0.00	150	Vertical	Pass
4	5186.500	109.04	-4.48	--	--	Peak	300.00	100	Vertical	N/A
4**	5186.500	101.35	-4.48	--	--	AV	300.00	100	Vertical	N/A
5	7545.250	54.24	-0.50	74.0	19.76	Peak	265.00	150	Vertical	Pass
5**	7545.250	45.04	-0.50	54.0	8.96	AV	265.00	150	Vertical	Pass
6	12297.326	52.96	0.64	74.0	21.04	Peak	22.00	300	Vertical	Pass
6**	12297.326	43.84	0.64	54.0	10.16	AV	22.00	300	Vertical	Pass

## 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	1571.100	41.46	-19.94	74.0	32.54	Peak	0.00	100	Horizontal	Pass
1**	1571.100	34.37	-19.94	54.0	19.63	AV	0.00	100	Horizontal	Pass
2	2794.300	43.42	-12.53	74.0	30.58	Peak	30.00	300	Horizontal	Pass
2**	2794.300	33.85	-12.53	54.0	20.15	AV	30.00	300	Horizontal	Pass
3	4338.250	47.28	-6.16	74.0	26.72	Peak	103.00	100	Horizontal	Pass
3**	4338.250	38.33	-6.16	54.0	15.67	AV	103.00	100	Horizontal	Pass
4	5215.750	100.87	-4.70	--	--	Peak	129.00	200	Horizontal	N/A
4**	5215.750	93.38	-4.70	--	--	AV	129.00	200	Horizontal	N/A
5	7495.500	54.46	-0.45	74.0	19.54	Peak	77.00	100	Horizontal	Pass
5**	7495.500	45.15	-0.45	54.0	8.85	AV	77.00	100	Horizontal	Pass
6	12604.888	52.79	1.11	74.0	21.21	Peak	207.00	200	Horizontal	Pass
6**	12604.888	43.11	1.11	54.0	10.89	AV	207.00	200	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	1570.700	44.27	-19.94	74.0	29.73	Peak	279.00	400	Vertical	Pass
1**	1570.700	38.98	-19.94	54.0	15.02	AV	279.00	400	Vertical	Pass
2	2866.900	43.57	-12.34	74.0	30.43	Peak	0.00	200	Vertical	Pass
2**	2866.900	33.96	-12.34	54.0	20.04	AV	0.00	200	Vertical	Pass
3	4322.500	47.48	-5.92	74.0	26.52	Peak	360.00	100	Vertical	Pass
3**	4322.500	38.07	-5.92	54.0	15.93	AV	360.00	100	Vertical	Pass
4	5223.500	109.00	-4.76	--	--	Peak	302.00	400	Vertical	N/A
4**	5223.500	101.37	-4.76	--	--	AV	302.00	400	Vertical	N/A
5	7595.750	54.02	-0.47	74.0	19.98	Peak	51.00	200	Vertical	Pass
5**	7595.750	45.45	-0.47	54.0	8.55	AV	51.00	200	Vertical	Pass
6	12279.037	52.67	0.53	74.0	21.33	Peak	9.00	100	Vertical	Pass
6**	12279.037	42.44	0.53	54.0	11.56	AV	9.00	100	Vertical	Pass

## 11a, U-NII-1, 1 GHz to 18 GHz, 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	1570.600	42.76	-19.94	74.0	31.24	Peak	305.00	400	Horizontal	Pass
1**	1570.600	35.58	-19.94	54.0	18.42	AV	305.00	400	Horizontal	Pass
2	2878.900	43.34	-12.34	74.0	30.66	Peak	62.00	400	Horizontal	Pass
2**	2878.900	34.95	-12.34	54.0	19.05	AV	62.00	400	Horizontal	Pass
3	4322.500	47.94	-5.92	74.0	26.06	Peak	171.00	150	Horizontal	Pass
3**	4322.500	37.89	-5.92	54.0	16.11	AV	171.00	150	Horizontal	Pass
4	5245.750	100.78	-5.26	--	--	Peak	137.00	200	Horizontal	N/A
4**	5245.750	93.08	-5.26	--	--	AV	137.00	200	Horizontal	N/A
5	7580.500	54.09	-1.42	74.0	19.91	Peak	215.00	100	Horizontal	Pass
5**	7580.500	44.51	-1.42	54.0	9.49	AV	215.00	100	Horizontal	Pass
6	12605.125	52.81	1.11	74.0	21.19	Peak	360.00	100	Horizontal	Pass
6**	12605.125	43.34	1.11	54.0	10.66	AV	360.00	100	Horizontal	Pass

## 11a, U-NII-1, 1 GHz to 18 GHz, 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	1570.400	45.58	-19.94	74.0	28.42	Peak	264.00	100	Vertical	Pass
1**	1570.400	37.87	-19.94	54.0	16.13	AV	264.00	100	Vertical	Pass
2	2865.200	44.13	-12.32	74.0	29.87	Peak	185.00	300	Vertical	Pass
2**	2865.200	33.81	-12.32	54.0	20.19	AV	185.00	300	Vertical	Pass
3	4356.250	47.81	-6.65	74.0	26.19	Peak	111.00	100	Vertical	Pass
3**	4356.250	38.20	-6.65	54.0	15.80	AV	111.00	100	Vertical	Pass
4	5235.000	109.24	-5.10	--	--	Peak	295.00	300	Vertical	N/A
4**	5235.000	101.35	-5.10	--	--	AV	295.00	300	Vertical	N/A
5	7491.500	54.03	-0.36	74.0	19.97	Peak	7.00	100	Vertical	Pass
5**	7491.500	45.62	-0.36	54.0	8.38	AV	7.00	100	Vertical	Pass
6	12329.388	52.54	0.70	74.0	21.46	Peak	349.00	100	Vertical	Pass
6**	12329.388	43.85	0.70	54.0	10.15	AV	349.00	100	Vertical	Pass

## 11n20, 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	1571.000	42.29	-19.94	74.0	31.71	Peak	0.00	200	Horizontal	Pass
1**	1571.000	34.13	-19.94	54.0	19.87	AV	0.00	200	Horizontal	Pass
2	2859.300	43.52	-12.35	74.0	30.48	Peak	191.00	200	Horizontal	Pass
2**	2859.300	34.24	-12.35	54.0	19.76	AV	191.00	200	Horizontal	Pass
3	4333.000	48.32	-6.10	74.0	25.68	Peak	44.00	200	Horizontal	Pass
3**	4333.000	38.08	-6.10	54.0	15.92	AV	44.00	200	Horizontal	Pass
4	5186.500	101.14	-4.48	--	--	Peak	131.00	300	Horizontal	N/A
4**	5186.500	93.68	-4.48	--	--	AV	131.00	300	Horizontal	N/A
5	7492.000	54.29	-0.39	74.0	19.71	Peak	320.00	200	Horizontal	Pass
5**	7492.000	45.85	-0.39	54.0	8.15	AV	320.00	200	Horizontal	Pass
6	12580.662	53.07	1.33	74.0	20.93	Peak	126.00	100	Horizontal	Pass
6**	12580.662	44.89	1.33	54.0	9.11	AV	126.00	100	Horizontal	Pass

## 11n20, 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	1570.800	43.28	-19.94	74.0	30.72	Peak	274.00	400	Vertical	Pass
1**	1570.800	35.98	-19.94	54.0	18.02	AV	274.00	400	Vertical	Pass
2	2839.100	43.84	-12.53	74.0	30.16	Peak	360.00	200	Vertical	Pass
2**	2839.100	33.62	-12.53	54.0	20.38	AV	360.00	200	Vertical	Pass
3	4354.750	46.96	-6.61	74.0	27.04	Peak	71.00	150	Vertical	Pass
3**	4354.750	38.33	-6.61	54.0	15.67	AV	71.00	150	Vertical	Pass
4	5186.000	108.33	-4.52	--	--	Peak	309.00	400	Vertical	N/A
4**	5186.000	101.47	-4.52	--	--	AV	309.00	400	Vertical	N/A
5	7502.250	54.73	-0.88	74.0	19.27	Peak	309.00	150	Vertical	Pass
5**	7502.250	45.39	-0.88	54.0	8.61	AV	309.00	150	Vertical	Pass
6	12642.175	52.64	0.79	74.0	21.36	Peak	340.00	300	Vertical	Pass
6**	12642.175	42.39	0.79	54.0	11.61	AV	340.00	300	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	1570.500	42.93	-19.94	74.0	31.07	Peak	360.00	200	Horizontal	Pass
1**	1570.500	34.12	-19.94	54.0	19.88	AV	360.00	200	Horizontal	Pass
2	2703.300	43.67	-12.72	74.0	30.33	Peak	185.00	300	Horizontal	Pass
2**	2703.300	34.20	-12.72	54.0	19.80	AV	185.00	300	Horizontal	Pass
3	4326.750	47.22	-5.95	74.0	26.78	Peak	360.00	200	Horizontal	Pass
3**	4326.750	37.91	-5.95	54.0	16.09	AV	360.00	200	Horizontal	Pass
4	5214.750	100.28	-4.69	--	--	Peak	135.00	200	Horizontal	N/A
4**	5214.750	92.79	-4.69	--	--	AV	135.00	200	Horizontal	N/A
5	7528.250	54.29	-0.80	74.0	19.71	Peak	356.00	150	Horizontal	Pass
5**	7528.250	44.90	-0.80	54.0	9.10	AV	356.00	150	Horizontal	Pass
6	12557.862	53.86	1.54	74.0	20.14	Peak	244.00	400	Horizontal	Pass
6**	12557.862	43.22	1.54	54.0	10.78	AV	244.00	400	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	1570.500	45.08	-19.94	74.0	28.92	Peak	268.00	400	Vertical	Pass
1**	1570.500	38.06	-19.94	54.0	15.94	AV	268.00	400	Vertical	Pass
2	2732.000	44.35	-11.61	74.0	29.65	Peak	326.00	400	Vertical	Pass
2**	2732.000	34.11	-11.61	54.0	19.89	AV	326.00	400	Vertical	Pass
3	4353.750	47.19	-6.60	74.0	26.81	Peak	355.00	100	Vertical	Pass
3**	4353.750	38.59	-6.60	54.0	15.41	AV	355.00	100	Vertical	Pass
4	5226.750	108.66	-4.94	--	--	Peak	311.00	200	Vertical	N/A
4**	5226.750	101.33	-4.94	--	--	AV	311.00	200	Vertical	N/A
5	7494.500	54.77	-0.41	74.0	19.23	Peak	347.00	200	Vertical	Pass
5**	7494.500	45.49	-0.41	54.0	8.51	AV	347.00	200	Vertical	Pass
6	12300.412	53.02	0.66	74.0	20.98	Peak	78.00	400	Vertical	Pass
6**	12300.412	43.91	0.66	54.0	10.09	AV	78.00	400	Vertical	Pass

## 11n20, U-NII-1, 1 GHz to 18 GHz, 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	1570.600	42.87	-19.94	74.0	31.13	Peak	3.00	400	Horizontal	Pass
1**	1570.600	34.94	-19.94	54.0	19.06	AV	3.00	400	Horizontal	Pass
2	2749.200	43.61	-12.87	74.0	30.39	Peak	200.00	400	Horizontal	Pass
2**	2749.200	33.58	-12.87	54.0	20.42	AV	200.00	400	Horizontal	Pass
3	4331.500	47.15	-6.03	74.0	26.85	Peak	20.00	200	Horizontal	Pass
3**	4331.500	38.45	-6.03	54.0	15.55	AV	20.00	200	Horizontal	Pass
4	5242.500	99.54	-5.25	--	--	Peak	135.00	200	Horizontal	N/A
4**	5242.500	92.45	-5.25	--	--	AV	135.00	200	Horizontal	N/A
5	7501.250	55.47	-0.81	74.0	18.53	Peak	161.00	150	Horizontal	Pass
5**	7501.250	45.86	-0.81	54.0	8.14	AV	161.00	150	Horizontal	Pass
6	12545.512	53.29	1.51	74.0	20.71	Peak	0.00	100	Horizontal	Pass
6**	12545.512	43.59	1.51	54.0	10.41	AV	0.00	100	Horizontal	Pass

## 11n20, U-NII-1, 1 GHz to 18 GHz, 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	1570.500	45.40	-19.94	74.0	28.60	Peak	264.00	100	Vertical	Pass
1**	1570.500	37.12	-19.94	54.0	16.88	AV	264.00	100	Vertical	Pass
2	2871.400	43.33	-12.41	74.0	30.67	Peak	185.00	200	Vertical	Pass
2**	2871.400	35.23	-12.41	54.0	18.77	AV	185.00	200	Vertical	Pass
3	4323.750	47.57	-5.93	74.0	26.43	Peak	110.00	200	Vertical	Pass
3**	4323.750	38.17	-5.93	54.0	15.83	AV	110.00	200	Vertical	Pass
4	5233.750	108.68	-5.12	--	--	Peak	303.00	400	Vertical	N/A
4**	5233.750	101.08	-5.12	--	--	AV	303.00	400	Vertical	N/A
5	7530.000	54.19	-0.71	74.0	19.81	Peak	356.00	100	Vertical	Pass
5**	7530.000	44.95	-0.71	54.0	9.05	AV	356.00	100	Vertical	Pass
6	12365.250	53.49	0.61	74.0	20.51	Peak	178.00	400	Vertical	Pass
6**	12365.250	43.83	0.61	54.0	10.17	AV	178.00	400	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	1570.500	42.33	-19.94	74.0	31.67	Peak	0.00	200	Horizontal	Pass
1**	1570.500	34.69	-19.94	54.0	19.31	AV	0.00	200	Horizontal	Pass
2	2773.600	43.61	-12.95	74.0	30.39	Peak	135.00	200	Horizontal	Pass
2**	2773.600	33.90	-12.95	54.0	20.10	AV	135.00	200	Horizontal	Pass
3	4332.000	47.04	-6.05	74.0	26.96	Peak	346.00	200	Horizontal	Pass
3**	4332.000	38.36	-6.05	54.0	15.64	AV	346.00	200	Horizontal	Pass
4	5188.500	97.88	-4.40	--	--	Peak	132.00	100	Horizontal	N/A
4**	5188.500	90.40	-4.40	--	--	AV	132.00	100	Horizontal	N/A
5	7544.000	54.04	-0.36	74.0	19.96	Peak	79.00	100	Horizontal	Pass
5**	7544.000	45.42	-0.36	54.0	8.58	AV	79.00	100	Horizontal	Pass
6	12669.487	52.90	0.64	74.0	21.10	Peak	358.00	200	Horizontal	Pass
6**	12669.487	42.76	0.64	54.0	11.24	AV	358.00	200	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	1570.600	45.24	-19.94	74.0	28.76	Peak	266.00	200	Vertical	Pass
1**	1570.600	39.01	-19.94	54.0	14.99	AV	266.00	200	Vertical	Pass
2	2876.200	43.44	-12.37	74.0	30.56	Peak	128.00	300	Vertical	Pass
2**	2876.200	34.39	-12.37	54.0	19.61	AV	128.00	300	Vertical	Pass
3	4322.500	48.15	-5.92	74.0	25.85	Peak	338.00	200	Vertical	Pass
3**	4322.500	38.58	-5.92	54.0	15.42	AV	338.00	200	Vertical	Pass
4	5188.500	105.69	-4.40	--	--	Peak	304.00	100	Vertical	N/A
4**	5188.500	98.23	-4.40	--	--	AV	304.00	100	Vertical	N/A
5	7479.750	54.72	-0.95	74.0	19.28	Peak	287.00	150	Vertical	Pass
5**	7479.750	43.91	-0.95	54.0	10.09	AV	287.00	150	Vertical	Pass
6	12579.951	53.34	1.34	74.0	20.66	Peak	360.00	200	Vertical	Pass
6**	12579.951	43.63	1.34	54.0	10.37	AV	360.00	200	Vertical	Pass

## 11n40, U-NII-1, 1 GHz to 18 GHz, 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	1570.500	41.44	-19.94	74.0	32.56	Peak	360.00	200	Horizontal	Pass
1**	1570.500	34.98	-19.94	54.0	19.02	AV	360.00	200	Horizontal	Pass
2	2889.500	44.10	-12.15	74.0	29.90	Peak	35.00	100	Horizontal	Pass
2**	2889.500	34.90	-12.15	54.0	19.10	AV	35.00	100	Horizontal	Pass
3	4312.750	47.72	-6.07	74.0	26.28	Peak	243.00	200	Horizontal	Pass
3**	4312.750	38.01	-6.07	54.0	15.99	AV	243.00	200	Horizontal	Pass
4	5219.250	97.74	-4.80	--	--	Peak	131.00	200	Horizontal	N/A
4**	5219.250	89.14	-4.80	--	--	AV	131.00	200	Horizontal	N/A
5	7530.500	54.06	-0.68	74.0	19.94	Peak	217.00	200	Horizontal	Pass
5**	7530.500	45.44	-0.68	54.0	8.56	AV	217.00	200	Horizontal	Pass
6	12424.625	52.91	0.59	74.0	21.09	Peak	243.00	200	Horizontal	Pass
6**	12424.625	43.75	0.59	54.0	10.25	AV	243.00	200	Horizontal	Pass

## 11n40, U-NII-1, 1 GHz to 18 GHz, 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	1570.700	44.95	-19.94	74.0	29.05	Peak	269.00	300	Vertical	Pass
1**	1570.700	38.51	-19.94	54.0	15.49	AV	269.00	300	Vertical	Pass
2	2888.900	43.86	-12.14	74.0	30.14	Peak	62.00	100	Vertical	Pass
2**	2888.900	35.05	-12.14	54.0	18.95	AV	62.00	100	Vertical	Pass
3	4361.250	47.80	-6.70	74.0	26.20	Peak	86.00	100	Vertical	Pass
3**	4361.250	38.35	-6.70	54.0	15.65	AV	86.00	100	Vertical	Pass
4	5217.000	106.28	-4.71	--	--	Peak	312.00	300	Vertical	N/A
4**	5217.000	98.63	-4.71	--	--	AV	312.00	300	Vertical	N/A
5	7497.000	54.28	-0.57	74.0	19.72	Peak	339.00	150	Vertical	Pass
5**	7497.000	45.56	-0.57	54.0	8.44	AV	339.00	150	Vertical	Pass
6	12634.100	53.55	0.86	74.0	20.45	Peak	92.00	300	Vertical	Pass
6**	12634.100	43.57	0.86	54.0	10.43	AV	92.00	300	Vertical	Pass



## 11ac20, 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	1570.300	41.32	-19.94	74.0	32.68	Peak	360.00	100	Horizontal	Pass
1**	1570.300	34.34	-19.94	54.0	19.66	AV	360.00	100	Horizontal	Pass
2	2789.300	43.51	-12.65	74.0	30.49	Peak	3.00	300	Horizontal	Pass
2**	2789.300	33.95	-12.65	54.0	20.05	AV	3.00	300	Horizontal	Pass
3	4166.000	47.17	-6.93	74.0	26.83	Peak	1.00	150	Horizontal	Pass
3**	4166.000	37.69	-6.93	54.0	16.31	AV	1.00	150	Horizontal	Pass
4	5184.500	101.25	-4.62	--	--	Peak	132.00	200	Horizontal	N/A
4**	5184.500	92.39	-4.62	--	--	AV	132.00	200	Horizontal	N/A
5	7494.750	54.85	-0.40	74.0	19.15	Peak	80.00	150	Horizontal	Pass
5**	7494.750	46.05	-0.40	54.0	7.95	AV	80.00	150	Horizontal	Pass
6	12275.000	52.79	0.51	74.0	21.21	Peak	302.00	300	Horizontal	Pass
6**	12275.000	43.70	0.51	54.0	10.30	AV	302.00	300	Horizontal	Pass

## 11ac20, 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	1570.800	44.08	-19.94	74.0	29.92	Peak	275.00	100	Vertical	Pass
1**	1570.800	36.98	-19.94	54.0	17.02	AV	275.00	100	Vertical	Pass
2	2883.700	43.57	-12.29	74.0	30.43	Peak	232.00	400	Vertical	Pass
2**	2883.700	34.23	-12.29	54.0	19.77	AV	232.00	400	Vertical	Pass
3	4117.500	47.55	-7.10	74.0	26.45	Peak	297.00	200	Vertical	Pass
3**	4117.500	38.46	-7.10	54.0	15.54	AV	297.00	200	Vertical	Pass
4	5184.750	108.73	-4.62	--	--	Peak	306.00	300	Vertical	N/A
4**	5184.750	100.70	-4.62	--	--	AV	306.00	300	Vertical	N/A
5	7537.500	54.21	-0.25	74.0	19.79	Peak	48.00	100	Vertical	Pass
5**	7537.500	44.70	-0.25	54.0	9.30	AV	48.00	100	Vertical	Pass
6	12611.537	52.57	1.05	74.0	21.43	Peak	49.00	200	Vertical	Pass
6**	12611.537	42.99	1.05	54.0	11.01	AV	49.00	200	Vertical	Pass

## 11ac20, 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	1570.200	41.89	-19.94	74.0	32.11	Peak	2.00	300	Horizontal	Pass
1**	1570.200	38.23	-19.94	54.0	15.77	AV	2.00	300	Horizontal	Pass
2	2853.300	44.44	-12.24	74.0	29.56	Peak	354.00	400	Horizontal	Pass
2**	2853.300	34.31	-12.24	54.0	19.69	AV	354.00	400	Horizontal	Pass
3	4366.750	48.11	-6.80	74.0	25.89	Peak	277.00	150	Horizontal	Pass
3**	4366.750	38.27	-6.80	54.0	15.73	AV	277.00	150	Horizontal	Pass
4	5225.000	100.17	-4.89	--	--	Peak	136.00	300	Horizontal	N/A
4**	5225.000	93.17	-4.89	--	--	AV	136.00	300	Horizontal	N/A
5	7602.750	54.07	-0.50	74.0	19.93	Peak	101.00	100	Horizontal	Pass
5**	7602.750	45.83	-0.50	54.0	8.17	AV	101.00	100	Horizontal	Pass
6	12450.987	53.20	0.88	74.0	20.80	Peak	138.00	100	Horizontal	Pass
6**	12450.987	44.02	0.88	54.0	9.98	AV	138.00	100	Horizontal	Pass

## 11ac20, 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	1570.800	45.14	-19.94	74.0	28.86	Peak	269.00	100	Vertical	Pass
1**	1570.800	37.77	-19.94	54.0	16.23	AV	269.00	100	Vertical	Pass
2	2879.100	43.18	-12.33	74.0	30.82	Peak	253.00	400	Vertical	Pass
2**	2879.100	34.77	-12.33	54.0	19.23	AV	253.00	400	Vertical	Pass
3	4341.000	47.19	-6.30	74.0	26.81	Peak	335.00	150	Vertical	Pass
3**	4341.000	38.79	-6.30	54.0	15.21	AV	335.00	150	Vertical	Pass
4	5212.750	109.09	-4.71	--	--	Peak	306.00	200	Vertical	N/A
4**	5212.750	100.86	-4.71	--	--	AV	306.00	200	Vertical	N/A
5	7606.250	54.05	-0.75	74.0	19.95	Peak	91.00	100	Vertical	Pass
5**	7606.250	44.69	-0.75	54.0	9.31	AV	91.00	100	Vertical	Pass
6	12551.451	53.07	1.60	74.0	20.93	Peak	66.00	100	Vertical	Pass
6**	12551.451	43.55	1.60	54.0	10.45	AV	66.00	100	Vertical	Pass

## 11ac20, U-NII-1, 1 GHz to 18 GHz, 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	1570.700	43.80	-19.94	74.0	30.20	Peak	302.00	300	Horizontal	Pass
1**	1570.700	39.66	-19.94	54.0	14.34	AV	302.00	300	Horizontal	Pass
2	2870.800	43.99	-12.40	74.0	30.01	Peak	18.00	200	Horizontal	Pass
2**	2870.800	34.11	-12.40	54.0	19.89	AV	18.00	200	Horizontal	Pass
3	4310.000	48.14	-6.25	74.0	25.86	Peak	142.00	200	Horizontal	Pass
3**	4310.000	37.50	-6.25	54.0	16.50	AV	142.00	200	Horizontal	Pass
4	5245.500	100.05	-5.27	--	--	Peak	142.00	100	Horizontal	N/A
4**	5245.500	93.96	-5.27	--	--	AV	142.00	100	Horizontal	N/A
5	7497.000	54.62	-0.57	74.0	19.38	Peak	238.00	100	Horizontal	Pass
5**	7497.000	45.03	-0.57	54.0	8.97	AV	238.00	100	Horizontal	Pass
6	12602.512	53.19	1.13	74.0	20.81	Peak	185.00	300	Horizontal	Pass
6**	12602.512	44.19	1.13	54.0	9.81	AV	185.00	300	Horizontal	Pass

## 11ac20, U-NII-1, 1 GHz to 18 GHz, 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	1570.200	45.43	-19.94	74.0	28.57	Peak	268.00	400	Vertical	Pass
1**	1570.200	37.50	-19.94	54.0	16.50	AV	268.00	400	Vertical	Pass
2	2890.000	45.94	-12.17	74.0	28.06	Peak	190.00	300	Vertical	Pass
2**	2890.000	34.83	-12.17	54.0	19.17	AV	190.00	300	Vertical	Pass
3	4332.250	47.07	-6.06	74.0	26.93	Peak	0.00	150	Vertical	Pass
3**	4332.250	39.57	-6.06	54.0	14.43	AV	0.00	150	Vertical	Pass
4	5244.750	108.68	-5.27	--	--	Peak	307.00	200	Vertical	N/A
4**	5244.750	100.61	-5.27	--	--	AV	307.00	200	Vertical	N/A
5	7592.750	54.12	-0.61	74.0	19.88	Peak	221.00	100	Vertical	Pass
5**	7592.750	44.98	-0.61	54.0	9.02	AV	221.00	100	Vertical	Pass
6	12576.388	53.55	1.37	74.0	20.45	Peak	168.00	100	Vertical	Pass
6**	12576.388	45.18	1.37	54.0	8.82	AV	168.00	100	Vertical	Pass

## 11ac40, 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	1570.900	41.30	-19.94	74.0	32.70	Peak	360.00	200	Horizontal	Pass
1**	1570.900	33.77	-19.94	54.0	20.23	AV	360.00	200	Horizontal	Pass
2	2887.100	44.38	-12.15	74.0	29.62	Peak	300.00	200	Horizontal	Pass
2**	2887.100	34.05	-12.15	54.0	19.95	AV	300.00	200	Horizontal	Pass
3	4337.750	47.51	-6.12	74.0	26.49	Peak	142.00	200	Horizontal	Pass
3**	4337.750	38.99	-6.12	54.0	15.01	AV	142.00	200	Horizontal	Pass
4	5191.750	97.73	-4.39	--	--	Peak	133.00	300	Horizontal	N/A
4**	5191.750	89.91	-4.39	--	--	AV	133.00	300	Horizontal	N/A
5	7602.750	54.24	-0.50	74.0	19.76	Peak	236.00	200	Horizontal	Pass
5**	7602.750	45.34	-0.50	54.0	8.66	AV	236.00	200	Horizontal	Pass
6	12608.925	53.50	1.07	74.0	20.50	Peak	20.00	300	Horizontal	Pass
6**	12608.925	44.11	1.07	54.0	9.89	AV	20.00	300	Horizontal	Pass

## 11ac40, 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	1570.400	45.06	-19.94	74.0	28.94	Peak	270.00	400	Vertical	Pass
1**	1570.400	41.20	-19.94	54.0	12.80	AV	270.00	400	Vertical	Pass
2	2882.700	44.20	-12.26	74.0	29.80	Peak	94.00	200	Vertical	Pass
2**	2882.700	33.97	-12.26	54.0	20.03	AV	94.00	200	Vertical	Pass
3	4360.000	47.23	-6.68	74.0	26.77	Peak	291.00	100	Vertical	Pass
3**	4360.000	38.02	-6.68	54.0	15.98	AV	291.00	100	Vertical	Pass
4	5191.500	105.66	-4.39	--	--	Peak	308.00	200	Vertical	N/A
4**	5191.500	98.64	-4.39	--	--	AV	308.00	200	Vertical	N/A
5	7535.500	54.41	-0.41	74.0	19.59	Peak	257.00	100	Vertical	Pass
5**	7535.500	44.93	-0.41	54.0	9.07	AV	257.00	100	Vertical	Pass
6	12569.975	52.91	1.43	74.0	21.09	Peak	69.00	400	Vertical	Pass
6**	12569.975	43.36	1.43	54.0	10.64	AV	69.00	400	Vertical	Pass

## 11ac40, U-NII-1, 1 GHz to 18 GHz, 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	1569.900	41.83	-19.94	74.0	32.17	Peak	360.00	300	Horizontal	Pass
1**	1569.900	31.26	-19.94	54.0	22.74	AV	360.00	300	Horizontal	Pass
2	2863.300	43.80	-12.37	74.0	30.20	Peak	102.00	200	Horizontal	Pass
2**	2863.300	34.25	-12.37	54.0	19.75	AV	102.00	200	Horizontal	Pass
3	4327.750	47.02	-5.94	74.0	26.98	Peak	49.00	200	Horizontal	Pass
3**	4327.750	38.46	-5.94	54.0	15.54	AV	49.00	200	Horizontal	Pass
4	5218.000	97.58	-4.76	--	--	Peak	136.00	100	Horizontal	N/A
4**	5218.000	91.44	-4.76	--	--	AV	136.00	100	Horizontal	N/A
5	7500.750	54.43	-0.78	74.0	19.57	Peak	360.00	200	Horizontal	Pass
5**	7500.750	46.61	-0.78	54.0	7.39	AV	360.00	200	Horizontal	Pass
6	12573.300	53.40	1.40	74.0	20.60	Peak	360.00	200	Horizontal	Pass
6**	12573.300	44.07	1.40	54.0	9.93	AV	360.00	200	Horizontal	Pass

## 11ac40, U-NII-1, 1 GHz to 18 GHz, 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	1570.100	43.76	-19.94	74.0	30.24	Peak	267.00	100	Vertical	Pass
1**	1570.100	36.80	-19.94	54.0	17.20	AV	267.00	100	Vertical	Pass
2	2874.200	43.58	-12.39	74.0	30.42	Peak	350.00	200	Vertical	Pass
2**	2874.200	34.24	-12.39	54.0	19.76	AV	350.00	200	Vertical	Pass
3	4338.500	48.08	-6.17	74.0	25.92	Peak	286.00	200	Vertical	Pass
3**	4338.500	38.54	-6.17	54.0	15.46	AV	286.00	200	Vertical	Pass
4	5216.500	105.98	-4.70	--	--	Peak	306.00	300	Vertical	N/A
4**	5216.500	98.38	-4.70	--	--	AV	306.00	300	Vertical	N/A
5	7502.000	54.30	-0.86	74.0	19.70	Peak	334.00	150	Vertical	Pass
5**	7502.000	45.40	-0.86	54.0	8.60	AV	334.00	150	Vertical	Pass
6	12576.388	52.69	1.37	74.0	21.31	Peak	163.00	300	Vertical	Pass
6**	12576.388	43.94	1.37	54.0	10.06	AV	163.00	300	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	1570.400	41.84	-19.94	74.0	32.16	Peak	0.00	100	Horizontal	Pass
1**	1570.400	33.38	-19.94	54.0	20.62	AV	0.00	100	Horizontal	Pass
2	2880.800	43.94	-12.26	74.0	30.06	Peak	82.00	300	Horizontal	Pass
2**	2880.800	34.20	-12.26	54.0	19.80	AV	82.00	300	Horizontal	Pass
3	4345.250	47.94	-6.43	74.0	26.06	Peak	346.00	200	Horizontal	Pass
3**	4345.250	38.98	-6.43	54.0	15.02	AV	346.00	200	Horizontal	Pass
4	5182.500	95.37	-4.63	--	--	Peak	130.00	400	Horizontal	N/A
4**	5182.500	87.64	-4.63	--	--	AV	130.00	400	Horizontal	N/A
5	7542.500	54.25	-0.28	74.0	19.75	Peak	337.00	150	Horizontal	Pass
5**	7542.500	44.95	-0.28	54.0	9.05	AV	337.00	150	Horizontal	Pass
6	12539.575	52.93	1.38	74.0	21.07	Peak	184.00	100	Horizontal	Pass
6**	12539.575	43.01	1.38	54.0	10.99	AV	184.00	100	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	1570.600	44.30	-19.94	74.0	29.70	Peak	272.00	100	Vertical	Pass
1**	1570.600	38.67	-19.94	54.0	15.33	AV	272.00	100	Vertical	Pass
2	2821.400	43.30	-12.78	74.0	30.70	Peak	208.00	150	Vertical	Pass
2**	2821.400	34.13	-12.78	54.0	19.87	AV	208.00	150	Vertical	Pass
3	4324.500	47.48	-5.93	74.0	26.52	Peak	1.00	100	Vertical	Pass
3**	4324.500	38.25	-5.93	54.0	15.75	AV	1.00	100	Vertical	Pass
4	5237.250	104.22	-5.16	--	--	Peak	304.00	400	Vertical	N/A
4**	5237.250	96.60	-5.16	--	--	AV	304.00	400	Vertical	N/A
5	7581.500	54.10	-1.41	74.0	19.90	Peak	79.00	200	Vertical	Pass
5**	7581.500	44.64	-1.41	54.0	9.36	AV	79.00	200	Vertical	Pass
6	12453.363	52.80	0.86	74.0	21.20	Peak	233.00	100	Vertical	Pass
6**	12453.363	43.52	0.86	54.0	10.48	AV	233.00	100	Vertical	Pass

## 11a, 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	1570.900	43.12	-19.94	74.0	30.88	Peak	0.00	300	Horizontal	Pass
1**	1570.900	34.04	-19.94	54.0	19.96	AV	0.00	300	Horizontal	Pass
2	2705.200	43.34	-12.80	74.0	30.66	Peak	191.00	300	Horizontal	Pass
2**	2705.200	33.72	-12.80	54.0	20.28	AV	191.00	300	Horizontal	Pass
3	4334.750	47.43	-6.14	74.0	26.57	Peak	52.00	100	Horizontal	Pass
3**	4334.750	38.50	-6.14	54.0	15.50	AV	52.00	100	Horizontal	Pass
4	5748.750	101.12	-5.27	--	--	Peak	123.00	300	Horizontal	N/A
4**	5748.750	94.33	-5.27	--	--	AV	123.00	300	Horizontal	N/A
5	7590.250	54.59	-0.80	74.0	19.41	Peak	131.00	200	Horizontal	Pass
5**	7590.250	45.51	-0.80	54.0	8.49	AV	131.00	200	Horizontal	Pass
6	12550.500	53.48	1.61	74.0	20.52	Peak	9.00	100	Horizontal	Pass
6**	12550.500	44.29	1.61	54.0	9.71	AV	9.00	100	Horizontal	Pass

## 11a, 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	1570.600	43.96	-19.94	74.0	30.04	Peak	270.00	200	Vertical	Pass
1**	1570.600	37.17	-19.94	54.0	16.83	AV	270.00	200	Vertical	Pass
2	2854.100	43.46	-12.28	74.0	30.54	Peak	28.00	200	Vertical	Pass
2**	2854.100	35.05	-12.28	54.0	18.95	AV	28.00	200	Vertical	Pass
3	4307.250	47.76	-6.32	74.0	26.24	Peak	146.00	100	Vertical	Pass
3**	4307.250	37.79	-6.32	54.0	16.21	AV	146.00	100	Vertical	Pass
4	5748.250	105.46	-5.28	--	--	Peak	355.00	400	Vertical	N/A
4**	5748.250	97.71	-5.28	--	--	AV	355.00	400	Vertical	N/A
5	7543.250	54.98	-0.31	74.0	19.02	Peak	233.00	200	Vertical	Pass
5**	7543.250	44.93	-0.31	54.0	9.07	AV	233.00	200	Vertical	Pass
6	12431.275	53.31	0.67	74.0	20.69	Peak	337.00	400	Vertical	Pass
6**	12431.275	43.61	0.67	54.0	10.39	AV	337.00	400	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	1570.800	40.97	-19.94	74.0	33.03	Peak	0.00	300	Horizontal	Pass
1**	1570.800	35.24	-19.94	54.0	18.76	AV	0.00	300	Horizontal	Pass
2	2786.400	44.27	-12.78	74.0	29.73	Peak	258.00	100	Horizontal	Pass
2**	2786.400	33.50	-12.78	54.0	20.50	AV	258.00	100	Horizontal	Pass
3	4337.000	47.40	-6.08	74.0	26.60	Peak	238.00	100	Horizontal	Pass
3**	4337.000	38.68	-6.08	54.0	15.32	AV	238.00	100	Horizontal	Pass
4	5781.000	100.97	-4.65	--	--	Peak	43.00	300	Horizontal	N/A
4**	5781.000	93.92	-4.65	--	--	AV	43.00	300	Horizontal	N/A
5	7497.500	54.13	-0.60	74.0	19.87	Peak	221.00	150	Horizontal	Pass
5**	7497.500	45.68	-0.60	54.0	8.32	AV	221.00	150	Horizontal	Pass
6	12296.138	52.73	0.63	74.0	21.27	Peak	359.00	200	Horizontal	Pass
6**	12296.138	43.66	0.63	54.0	10.34	AV	359.00	200	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	1570.600	45.09	-19.94	74.0	28.91	Peak	270.00	200	Vertical	Pass
1**	1570.600	37.21	-19.94	54.0	16.79	AV	270.00	200	Vertical	Pass
2	2775.600	43.45	-13.02	74.0	30.55	Peak	87.00	200	Vertical	Pass
2**	2775.600	34.19	-13.02	54.0	19.81	AV	87.00	200	Vertical	Pass
3	4343.750	47.92	-6.27	74.0	26.08	Peak	311.00	200	Vertical	Pass
3**	4343.750	38.85	-6.27	54.0	15.15	AV	311.00	200	Vertical	Pass
4	5787.250	105.41	-4.73	--	--	Peak	302.00	300	Vertical	N/A
4**	5787.250	97.21	-4.73	--	--	AV	302.00	300	Vertical	N/A
5	7493.500	53.97	-0.42	74.0	20.03	Peak	92.00	200	Vertical	Pass
5**	7493.500	45.12	-0.42	54.0	8.88	AV	92.00	200	Vertical	Pass
6	12613.675	52.79	1.03	74.0	21.21	Peak	312.00	300	Vertical	Pass
6**	12613.675	43.51	1.03	54.0	10.49	AV	312.00	300	Vertical	Pass



## 11a, U-NII-3, 1 GHz to 18 GHz, 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	1570.300	42.46	-19.94	74.0	31.54	Peak	0.00	400	Horizontal	Pass
1**	1570.300	38.52	-19.94	54.0	15.48	AV	0.00	400	Horizontal	Pass
2	2724.200	43.81	-11.74	74.0	30.19	Peak	63.00	300	Horizontal	Pass
2**	2724.200	34.28	-11.74	54.0	19.72	AV	63.00	300	Horizontal	Pass
3	4357.250	48.03	-6.62	74.0	25.97	Peak	268.00	200	Horizontal	Pass
3**	4357.250	38.16	-6.62	54.0	15.84	AV	268.00	200	Horizontal	Pass
4	5831.750	100.49	-4.69	--	--	Peak	330.00	200	Horizontal	N/A
4**	5831.750	92.67	-4.69	--	--	AV	330.00	200	Horizontal	N/A
5	7606.250	54.36	-0.75	74.0	19.64	Peak	189.00	100	Horizontal	Pass
5**	7606.250	44.51	-0.75	54.0	9.49	AV	189.00	100	Horizontal	Pass
6	12581.137	52.99	1.32	74.0	21.01	Peak	55.00	200	Horizontal	Pass
6**	12581.137	43.62	1.32	54.0	10.38	AV	55.00	200	Horizontal	Pass

## 11a, U-NII-3, 1 GHz to 18 GHz, 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	1570.700	44.35	-19.94	74.0	29.65	Peak	268.00	300	Vertical	Pass
1**	1570.700	37.86	-19.94	54.0	16.14	AV	268.00	300	Vertical	Pass
2	2885.600	43.58	-12.22	74.0	30.42	Peak	20.00	100	Vertical	Pass
2**	2885.600	34.34	-12.22	54.0	19.66	AV	20.00	100	Vertical	Pass
3	4339.500	47.76	-6.24	74.0	26.24	Peak	360.00	200	Vertical	Pass
3**	4339.500	38.52	-6.24	54.0	15.48	AV	360.00	200	Vertical	Pass
4	5823.750	105.19	-4.72	--	--	Peak	302.00	300	Vertical	N/A
4**	5823.750	96.98	-4.72	--	--	AV	302.00	300	Vertical	N/A
5	7545.000	54.37	-0.48	74.0	19.63	Peak	0.00	100	Vertical	Pass
5**	7545.000	45.35	-0.48	54.0	8.65	AV	0.00	100	Vertical	Pass
6	12261.463	52.80	0.43	74.0	21.20	Peak	360.00	200	Vertical	Pass
6**	12261.463	43.08	0.43	54.0	10.92	AV	360.00	200	Vertical	Pass

## 11n20, 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	1570.500	42.21	-19.94	74.0	31.79	Peak	0.00	300	Horizontal	Pass
1**	1570.500	35.85	-19.94	54.0	18.15	AV	0.00	300	Horizontal	Pass
2	2867.300	43.77	-12.36	74.0	30.23	Peak	230.00	300	Horizontal	Pass
2**	2867.300	35.39	-12.36	54.0	18.61	AV	230.00	300	Horizontal	Pass
3	4318.500	47.08	-5.95	74.0	26.92	Peak	262.00	150	Horizontal	Pass
3**	4318.500	38.38	-5.95	54.0	15.62	AV	262.00	150	Horizontal	Pass
4	5746.250	101.05	-5.27	--	--	Peak	124.00	200	Horizontal	N/A
4**	5746.250	93.30	-5.27	--	--	AV	124.00	200	Horizontal	N/A
5	7490.500	54.12	-0.32	74.0	19.88	Peak	325.00	200	Horizontal	Pass
5**	7490.500	45.55	-0.32	54.0	8.45	AV	325.00	200	Horizontal	Pass
6	12277.613	53.07	0.52	74.0	20.93	Peak	106.00	100	Horizontal	Pass
6**	12277.613	43.25	0.52	54.0	10.75	AV	106.00	100	Horizontal	Pass

## 11n20, 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	1570.400	43.46	-19.94	74.0	30.54	Peak	271.00	200	Vertical	Pass
1**	1570.400	34.57	-19.94	54.0	19.43	AV	271.00	200	Vertical	Pass
2	2877.500	44.05	-12.39	74.0	29.95	Peak	185.00	200	Vertical	Pass
2**	2877.500	34.49	-12.39	54.0	19.51	AV	185.00	200	Vertical	Pass
3	4368.500	47.47	-6.86	74.0	26.53	Peak	136.00	100	Vertical	Pass
3**	4368.500	38.14	-6.86	54.0	15.86	AV	136.00	100	Vertical	Pass
4	5739.750	105.47	-5.33	--	--	Peak	302.00	400	Vertical	N/A
4**	5739.750	98.05	-5.33	--	--	AV	302.00	400	Vertical	N/A
5	7517.250	54.19	-1.23	74.0	19.81	Peak	302.00	100	Vertical	Pass
5**	7517.250	44.75	-1.23	54.0	9.25	AV	302.00	100	Vertical	Pass
6	12579.713	53.34	1.34	74.0	20.66	Peak	320.00	300	Vertical	Pass
6**	12579.713	44.50	1.34	54.0	9.50	AV	320.00	300	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	1570.800	41.79	-19.94	74.0	32.21	Peak	360.00	400	Horizontal	Pass
1**	1570.800	35.61	-19.94	54.0	18.39	AV	360.00	400	Horizontal	Pass
2	2849.500	44.27	-12.20	74.0	29.73	Peak	304.00	400	Horizontal	Pass
2**	2849.500	33.49	-12.20	54.0	20.51	AV	304.00	400	Horizontal	Pass
3	4340.000	47.49	-6.26	74.0	26.51	Peak	180.00	100	Horizontal	Pass
3**	4340.000	38.66	-6.26	54.0	15.34	AV	180.00	100	Horizontal	Pass
4	5781.500	101.28	-4.68	--	--	Peak	43.00	200	Horizontal	N/A
4**	5781.500	93.76	-4.68	--	--	AV	43.00	200	Horizontal	N/A
5	7595.250	54.15	-0.48	74.0	19.85	Peak	43.00	100	Horizontal	Pass
5**	7595.250	45.44	-0.48	54.0	8.56	AV	43.00	100	Horizontal	Pass
6	12552.162	52.75	1.59	74.0	21.25	Peak	105.00	200	Horizontal	Pass
6**	12552.162	43.74	1.59	54.0	10.26	AV	105.00	200	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	1570.400	44.79	-19.94	74.0	29.21	Peak	275.00	100	Vertical	Pass
1**	1570.400	38.21	-19.94	54.0	15.79	AV	275.00	100	Vertical	Pass
2	2791.300	43.62	-12.58	74.0	30.38	Peak	49.00	100	Vertical	Pass
2**	2791.300	34.36	-12.58	54.0	19.64	AV	49.00	100	Vertical	Pass
3	4337.000	47.60	-6.08	74.0	26.40	Peak	243.00	200	Vertical	Pass
3**	4337.000	38.95	-6.08	54.0	15.05	AV	243.00	200	Vertical	Pass
4	5791.000	105.09	-4.73	--	--	Peak	304.00	400	Vertical	N/A
4**	5791.000	97.17	-4.73	--	--	AV	304.00	400	Vertical	N/A
5	7528.250	54.25	-0.80	74.0	19.75	Peak	111.00	200	Vertical	Pass
5**	7528.250	45.51	-0.80	54.0	8.49	AV	111.00	200	Vertical	Pass
6	12423.200	52.89	0.58	74.0	21.11	Peak	194.00	200	Vertical	Pass
6**	12423.200	43.74	0.58	54.0	10.26	AV	194.00	200	Vertical	Pass

## 11n20, U-NII-3, 1 GHz to 18 GHz, 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	1570.300	41.36	-19.94	74.0	32.64	Peak	360.00	300	Horizontal	Pass
1**	1570.300	34.32	-19.94	54.0	19.68	AV	360.00	300	Horizontal	Pass
2	2722.400	43.86	-11.88	74.0	30.14	Peak	299.00	400	Horizontal	Pass
2**	2722.400	33.96	-11.88	54.0	20.04	AV	299.00	400	Horizontal	Pass
3	4103.250	47.30	-7.52	74.0	26.70	Peak	136.00	150	Horizontal	Pass
3**	4103.250	36.91	-7.52	54.0	17.09	AV	136.00	150	Horizontal	Pass
4	5818.500	100.35	-4.77	--	--	Peak	127.00	300	Horizontal	N/A
4**	5818.500	92.77	-4.77	--	--	AV	127.00	300	Horizontal	N/A
5	7536.500	54.53	-0.32	74.0	19.47	Peak	84.00	150	Horizontal	Pass
5**	7536.500	45.66	-0.32	54.0	8.34	AV	84.00	150	Horizontal	Pass
6	12566.175	52.93	1.46	74.0	21.07	Peak	343.00	300	Horizontal	Pass
6**	12566.175	43.44	1.46	54.0	10.56	AV	343.00	300	Horizontal	Pass

## 11n20, U-NII-3, 1 GHz to 18 GHz, 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	1570.400	43.71	-19.94	74.0	30.29	Peak	270.00	200	Vertical	Pass
1**	1570.400	36.43	-19.94	54.0	17.57	AV	270.00	200	Vertical	Pass
2	2772.800	44.31	-12.92	74.0	29.69	Peak	159.00	200	Vertical	Pass
2**	2772.800	33.85	-12.92	54.0	20.15	AV	159.00	200	Vertical	Pass
3	4332.500	47.33	-6.08	74.0	26.67	Peak	72.00	200	Vertical	Pass
3**	4332.500	38.88	-6.08	54.0	15.12	AV	72.00	200	Vertical	Pass
4	5828.000	105.01	-4.75	--	--	Peak	304.00	400	Vertical	N/A
4**	5828.000	97.43	-4.75	--	--	AV	304.00	400	Vertical	N/A
5	7542.500	54.08	-0.28	74.0	19.92	Peak	312.00	200	Vertical	Pass
5**	7542.500	45.14	-0.28	54.0	8.86	AV	312.00	200	Vertical	Pass
6	12574.963	53.10	1.38	74.0	20.90	Peak	360.00	100	Vertical	Pass
6**	12574.963	43.67	1.38	54.0	10.33	AV	360.00	100	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	1570.200	42.47	-19.94	74.0	31.53	Peak	297.00	400	Horizontal	Pass
1**	1570.200	32.47	-19.94	54.0	21.53	AV	297.00	400	Horizontal	Pass
2	2870.400	43.69	-12.41	74.0	30.31	Peak	68.00	100	Horizontal	Pass
2**	2870.400	34.58	-12.41	54.0	19.42	AV	68.00	100	Horizontal	Pass
3	4339.000	47.35	-6.21	74.0	26.65	Peak	278.00	150	Horizontal	Pass
3**	4339.000	38.87	-6.21	54.0	15.13	AV	278.00	150	Horizontal	Pass
4	5764.500	98.78	-4.91	--	--	Peak	330.00	200	Horizontal	N/A
4**	5764.500	90.02	-4.91	--	--	AV	330.00	200	Horizontal	N/A
5	7595.500	54.23	-0.47	74.0	19.77	Peak	8.00	150	Horizontal	Pass
5**	7595.500	45.46	-0.47	54.0	8.54	AV	8.00	150	Horizontal	Pass
6	12300.650	53.74	0.66	74.0	20.26	Peak	294.00	300	Horizontal	Pass
6**	12300.650	44.65	0.66	54.0	9.35	AV	294.00	300	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	1570.500	44.81	-19.94	74.0	29.19	Peak	268.00	200	Vertical	Pass
1**	1570.500	40.51	-19.94	54.0	13.49	AV	268.00	200	Vertical	Pass
2	2796.700	43.74	-12.71	74.0	30.26	Peak	210.00	200	Vertical	Pass
2**	2796.700	33.86	-12.71	54.0	20.14	AV	210.00	200	Vertical	Pass
3	4356.250	47.35	-6.65	74.0	26.65	Peak	360.00	200	Vertical	Pass
3**	4356.250	38.42	-6.65	54.0	15.58	AV	360.00	200	Vertical	Pass
4	5742.000	102.23	-5.33	--	--	Peak	0.00	100	Vertical	N/A
4**	5742.000	95.00	-5.33	--	--	AV	0.00	100	Vertical	N/A
5	7486.250	54.37	-0.38	74.0	19.63	Peak	343.00	150	Vertical	Pass
5**	7486.250	44.71	-0.38	54.0	9.29	AV	343.00	150	Vertical	Pass
6	12543.612	53.34	1.47	74.0	20.66	Peak	360.00	100	Vertical	Pass
6**	12543.612	43.90	1.47	54.0	10.10	AV	360.00	100	Vertical	Pass

## 11n40, U-NII-3, 1 GHz to 18 GHz, 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	1570.700	41.40	-19.94	74.0	32.60	Peak	4.00	400	Horizontal	Pass
1**	1570.700	34.10	-19.94	54.0	19.90	AV	4.00	400	Horizontal	Pass
2	2722.800	43.85	-11.85	74.0	30.15	Peak	158.00	400	Horizontal	Pass
2**	2722.800	34.07	-11.85	54.0	19.93	AV	158.00	400	Horizontal	Pass
3	4364.750	47.82	-6.74	74.0	26.18	Peak	66.00	150	Horizontal	Pass
3**	4364.750	38.27	-6.74	54.0	15.73	AV	66.00	150	Horizontal	Pass
4	5779.250	98.15	-4.62	--	--	Peak	48.00	400	Horizontal	N/A
4**	5779.250	90.48	-4.62	--	--	AV	48.00	400	Horizontal	N/A
5	7481.500	54.12	-0.80	74.0	19.88	Peak	232.00	100	Horizontal	Pass
5**	7481.500	44.69	-0.80	54.0	9.31	AV	232.00	100	Horizontal	Pass
6	12583.987	52.96	1.30	74.0	21.04	Peak	337.00	300	Horizontal	Pass
6**	12583.987	44.24	1.30	54.0	9.76	AV	337.00	300	Horizontal	Pass

## 11n40, U-NII-3, 1 GHz to 18 GHz, 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	1570.600	44.20	-19.94	74.0	29.80	Peak	271.00	400	Vertical	Pass
1**	1570.600	36.87	-19.94	54.0	17.13	AV	271.00	400	Vertical	Pass
2	2736.400	43.77	-11.92	74.0	30.23	Peak	90.00	300	Vertical	Pass
2**	2736.400	34.59	-11.92	54.0	19.41	AV	90.00	300	Vertical	Pass
3	4336.500	47.87	-6.10	74.0	26.13	Peak	360.00	100	Vertical	Pass
3**	4336.500	38.83	-6.10	54.0	15.17	AV	360.00	100	Vertical	Pass
4	5809.500	102.68	-4.80	--	--	Peak	303.00	200	Vertical	N/A
4**	5809.500	94.11	-4.80	--	--	AV	303.00	200	Vertical	N/A
5	7493.000	54.03	-0.42	74.0	19.97	Peak	269.00	150	Vertical	Pass
5**	7493.000	45.78	-0.42	54.0	8.22	AV	269.00	150	Vertical	Pass
6	12451.700	53.07	0.88	74.0	20.93	Peak	330.00	200	Vertical	Pass
6**	12451.700	43.62	0.88	54.0	10.38	AV	330.00	200	Vertical	Pass

## 11ac20, 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	1570.300	41.33	-19.94	74.0	32.67	Peak	0.00	400	Horizontal	Pass
1**	1570.300	35.98	-19.94	54.0	18.02	AV	0.00	400	Horizontal	Pass
2	2718.600	43.58	-12.29	74.0	30.42	Peak	319.00	100	Horizontal	Pass
2**	2718.600	33.73	-12.29	54.0	20.27	AV	319.00	100	Horizontal	Pass
3	4372.500	47.77	-7.05	74.0	26.23	Peak	50.00	150	Horizontal	Pass
3**	4372.500	37.51	-7.05	54.0	16.49	AV	50.00	150	Horizontal	Pass
4	5749.250	101.04	-5.26	--	--	Peak	129.00	200	Horizontal	N/A
4**	5749.250	94.80	-5.26	--	--	AV	129.00	200	Horizontal	N/A
5	7502.000	54.04	-0.86	74.0	19.96	Peak	320.00	100	Horizontal	Pass
5**	7502.000	45.83	-0.86	54.0	8.17	AV	320.00	100	Horizontal	Pass
6	12301.362	52.85	0.66	74.0	21.15	Peak	56.00	400	Horizontal	Pass
6**	12301.362	43.84	0.66	54.0	10.16	AV	56.00	400	Horizontal	Pass

## 11ac20, 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	1570.200	44.79	-19.94	74.0	29.21	Peak	266.00	200	Vertical	Pass
1**	1570.200	36.38	-19.94	54.0	17.62	AV	266.00	200	Vertical	Pass
2	2879.800	43.48	-12.30	74.0	30.52	Peak	192.00	200	Vertical	Pass
2**	2879.800	34.62	-12.30	54.0	19.38	AV	192.00	200	Vertical	Pass
3	4349.000	48.20	-6.56	74.0	25.80	Peak	147.00	100	Vertical	Pass
3**	4349.000	38.46	-6.56	54.0	15.54	AV	147.00	100	Vertical	Pass
4	5741.000	105.67	-5.32	--	--	Peak	302.00	100	Vertical	N/A
4**	5741.000	98.28	-5.32	--	--	AV	302.00	100	Vertical	N/A
5	7583.750	53.87	-1.32	74.0	20.13	Peak	360.00	200	Vertical	Pass
5**	7583.750	44.46	-1.32	54.0	9.54	AV	360.00	200	Vertical	Pass
6	12277.850	52.81	0.53	74.0	21.19	Peak	154.00	400	Vertical	Pass
6**	12277.850	43.37	0.53	54.0	10.63	AV	154.00	400	Vertical	Pass

## 11ac20, 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	1570.600	42.32	-19.94	74.0	31.68	Peak	308.00	400	Horizontal	Pass
1**	1570.600	40.12	-19.94	54.0	13.88	AV	308.00	400	Horizontal	Pass
2	2888.300	43.84	-12.13	74.0	30.16	Peak	170.00	100	Horizontal	Pass
2**	2888.300	34.29	-12.13	54.0	19.71	AV	170.00	100	Horizontal	Pass
3	4320.500	47.53	-5.98	74.0	26.47	Peak	87.00	200	Horizontal	Pass
3**	4320.500	38.78	-5.98	54.0	15.22	AV	87.00	200	Horizontal	Pass
4	5780.000	100.61	-4.59	--	--	Peak	131.00	100	Horizontal	N/A
4**	5780.000	93.83	-4.59	--	--	AV	131.00	100	Horizontal	N/A
5	7544.750	54.18	-0.45	74.0	19.82	Peak	360.00	150	Horizontal	Pass
5**	7544.750	45.15	-0.45	54.0	8.85	AV	360.00	150	Horizontal	Pass
6	12363.350	53.00	0.62	74.0	21.00	Peak	137.00	200	Horizontal	Pass
6**	12363.350	43.50	0.62	54.0	10.50	AV	137.00	200	Horizontal	Pass

## 11ac20, 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	1570.500	45.64	-19.94	74.0	28.36	Peak	268.00	400	Vertical	Pass
1**	1570.500	38.67	-19.94	54.0	15.33	AV	268.00	400	Vertical	Pass
2	2723.400	43.86	-11.80	74.0	30.14	Peak	193.00	200	Vertical	Pass
2**	2723.400	34.23	-11.80	54.0	19.77	AV	193.00	200	Vertical	Pass
3	4339.500	48.57	-6.24	74.0	25.43	Peak	182.00	150	Vertical	Pass
3**	4339.500	38.90	-6.24	54.0	15.10	AV	182.00	150	Vertical	Pass
4	5791.750	104.98	-4.73	--	--	Peak	303.00	300	Vertical	N/A
4**	5791.750	98.31	-4.73	--	--	AV	303.00	300	Vertical	N/A
5	7507.750	54.02	-1.22	74.0	19.98	Peak	130.00	150	Vertical	Pass
5**	7507.750	45.67	-1.22	54.0	8.33	AV	130.00	150	Vertical	Pass
6	12330.812	52.94	0.70	74.0	21.06	Peak	326.00	300	Vertical	Pass
6**	12330.812	43.28	0.70	54.0	10.72	AV	326.00	300	Vertical	Pass



## 11ac20, U-NII-3, 1 GHz to 18 GHz, 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	1570.500	41.83	-19.94	74.0	32.17	Peak	4.00	200	Horizontal	Pass
1**	1570.500	35.05	-19.94	54.0	18.95	AV	4.00	200	Horizontal	Pass
2	2733.500	44.23	-11.70	74.0	29.77	Peak	173.00	100	Horizontal	Pass
2**	2733.500	35.05	-11.70	54.0	18.95	AV	173.00	100	Horizontal	Pass
3	4355.500	47.27	-6.63	74.0	26.73	Peak	88.00	100	Horizontal	Pass
3**	4355.500	38.53	-6.63	54.0	15.47	AV	88.00	100	Horizontal	Pass
4	5831.750	100.57	-4.69	--	--	Peak	324.00	300	Horizontal	N/A
4**	5831.750	93.13	-4.69	--	--	AV	324.00	300	Horizontal	N/A
5	7292.500	54.11	-2.05	74.0	19.89	Peak	0.00	150	Horizontal	Pass
5**	7292.500	43.81	-2.05	54.0	10.19	AV	0.00	150	Horizontal	Pass
6	12365.250	52.77	0.61	74.0	21.23	Peak	172.00	400	Horizontal	Pass
6**	12365.250	44.04	0.61	54.0	9.96	AV	172.00	400	Horizontal	Pass

## 11ac20, U-NII-3, 1 GHz to 18 GHz, 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	1570.600	44.13	-19.94	74.0	29.87	Peak	273.00	400	Vertical	Pass
1**	1570.600	39.79	-19.94	54.0	14.21	AV	273.00	400	Vertical	Pass
2	2716.300	44.08	-12.50	74.0	29.92	Peak	30.00	200	Vertical	Pass
2**	2716.300	33.28	-12.50	54.0	20.72	AV	30.00	200	Vertical	Pass
3	4337.750	48.16	-6.12	74.0	25.84	Peak	294.00	200	Vertical	Pass
3**	4337.750	39.12	-6.12	54.0	14.88	AV	294.00	200	Vertical	Pass
4	5830.750	104.73	-4.70	--	--	Peak	305.00	400	Vertical	N/A
4**	5830.750	96.88	-4.70	--	--	AV	305.00	400	Vertical	N/A
5	7492.250	54.52	-0.40	74.0	19.48	Peak	155.00	150	Vertical	Pass
5**	7492.250	45.24	-0.40	54.0	8.76	AV	155.00	150	Vertical	Pass
6	12579.474	53.87	1.34	74.0	20.13	Peak	339.00	400	Vertical	Pass
6**	12579.474	44.41	1.34	54.0	9.59	AV	339.00	400	Vertical	Pass

## 11ac40, 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	1570.600	41.98	-19.94	74.0	32.02	Peak	360.00	300	Horizontal	Pass
1**	1570.600	34.90	-19.94	54.0	19.10	AV	360.00	300	Horizontal	Pass
2	2718.700	43.89	-12.28	74.0	30.11	Peak	359.00	300	Horizontal	Pass
2**	2718.700	33.50	-12.28	54.0	20.50	AV	359.00	300	Horizontal	Pass
3	4309.250	48.20	-6.29	74.0	25.80	Peak	360.00	150	Horizontal	Pass
3**	4309.250	38.00	-6.29	54.0	16.00	AV	360.00	150	Horizontal	Pass
4	5769.250	98.68	-4.73	--	--	Peak	52.00	300	Horizontal	N/A
4**	5769.250	90.44	-4.73	--	--	AV	52.00	300	Horizontal	N/A
5	7683.250	54.18	-1.43	74.0	19.82	Peak	278.00	150	Horizontal	Pass
5**	7683.250	44.49	-1.43	54.0	9.51	AV	278.00	150	Horizontal	Pass
6	12378.313	52.78	0.49	74.0	21.22	Peak	20.00	100	Horizontal	Pass
6**	12378.313	42.86	0.49	54.0	11.14	AV	20.00	100	Horizontal	Pass

## 11ac40, 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	1570.300	44.49	-19.94	74.0	29.51	Peak	272.00	200	Vertical	Pass
1**	1570.300	36.73	-19.94	54.0	17.27	AV	272.00	200	Vertical	Pass
2	2860.100	43.64	-12.36	74.0	30.36	Peak	161.00	400	Vertical	Pass
2**	2860.100	34.33	-12.36	54.0	19.67	AV	161.00	400	Vertical	Pass
3	4332.500	47.94	-6.08	74.0	26.06	Peak	223.00	100	Vertical	Pass
3**	4332.500	38.75	-6.08	54.0	15.25	AV	223.00	100	Vertical	Pass
4	5739.750	102.55	-5.33	--	--	Peak	360.00	400	Vertical	N/A
4**	5739.750	94.92	-5.33	--	--	AV	360.00	400	Vertical	N/A
5	7488.250	54.13	-0.34	74.0	19.87	Peak	24.00	100	Vertical	Pass
5**	7488.250	45.37	-0.34	54.0	8.63	AV	24.00	100	Vertical	Pass
6	12357.650	53.44	0.67	74.0	20.56	Peak	307.00	300	Vertical	Pass
6**	12357.650	43.35	0.67	54.0	10.65	AV	307.00	300	Vertical	Pass

## 11ac40, U-NII-3, 1 GHz to 18 GHz, 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	1570.200	41.74	-19.94	74.0	32.26	Peak	0.00	200	Horizontal	Pass
1**	1570.200	34.92	-19.94	54.0	19.08	AV	0.00	200	Horizontal	Pass
2	2872.000	44.21	-12.43	74.0	29.79	Peak	0.00	200	Horizontal	Pass
2**	2872.000	34.24	-12.43	54.0	19.76	AV	0.00	200	Horizontal	Pass
3	4340.500	47.42	-6.28	74.0	26.58	Peak	241.00	100	Horizontal	Pass
3**	4340.500	38.63	-6.28	54.0	15.37	AV	241.00	100	Horizontal	Pass
4	5781.750	98.37	-4.69	--	--	Peak	37.00	400	Horizontal	N/A
4**	5781.750	89.68	-4.69	--	--	AV	37.00	400	Horizontal	N/A
5	7499.250	54.22	-0.71	74.0	19.78	Peak	257.00	100	Horizontal	Pass
5**	7499.250	45.15	-0.71	54.0	8.85	AV	257.00	100	Horizontal	Pass
6	12267.162	53.13	0.46	74.0	20.87	Peak	360.00	200	Horizontal	Pass
6**	12267.162	42.68	0.46	54.0	11.32	AV	360.00	200	Horizontal	Pass

## 11ac40, U-NII-3, 1 GHz to 18 GHz, 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	1570.500	44.01	-19.94	74.0	29.99	Peak	273.00	200	Vertical	Pass
1**	1570.500	37.84	-19.94	54.0	16.16	AV	273.00	200	Vertical	Pass
2	2734.500	43.63	-11.80	74.0	30.37	Peak	297.00	200	Vertical	Pass
2**	2734.500	34.77	-11.80	54.0	19.23	AV	297.00	200	Vertical	Pass
3	4330.000	47.57	-5.97	74.0	26.43	Peak	360.00	150	Vertical	Pass
3**	4330.000	38.99	-5.97	54.0	15.01	AV	360.00	150	Vertical	Pass
4	5810.000	102.35	-4.80	--	--	Peak	306.00	300	Vertical	N/A
4**	5810.000	94.36	-4.80	--	--	AV	306.00	300	Vertical	N/A
5	7496.000	54.14	-0.49	74.0	19.86	Peak	338.00	100	Vertical	Pass
5**	7496.000	45.11	-0.49	54.0	8.89	AV	338.00	100	Vertical	Pass
6	12405.387	53.18	0.37	74.0	20.82	Peak	65.00	400	Vertical	Pass
6**	12405.387	42.76	0.37	54.0	11.24	AV	65.00	400	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	1570.600	41.96	-19.94	74.0	32.04	Peak	360.00	400	Horizontal	Pass
1**	1570.600	34.42	-19.94	54.0	19.58	AV	360.00	400	Horizontal	Pass
2	2872.900	43.65	-12.45	74.0	30.35	Peak	45.00	400	Horizontal	Pass
2**	2872.900	34.54	-12.45	54.0	19.46	AV	45.00	400	Horizontal	Pass
3	4322.750	47.43	-5.92	74.0	26.57	Peak	155.00	150	Horizontal	Pass
3**	4322.750	38.35	-5.92	54.0	15.65	AV	155.00	150	Horizontal	Pass
4	5793.250	96.11	-4.73	--	--	Peak	129.00	400	Horizontal	N/A
4**	5793.250	88.56	-4.73	--	--	AV	129.00	400	Horizontal	N/A
5	7597.000	53.89	-0.44	74.0	20.11	Peak	207.00	100	Horizontal	Pass
5**	7597.000	46.30	-0.44	54.0	7.70	AV	207.00	100	Horizontal	Pass
6	12549.787	52.99	1.61	74.0	21.01	Peak	0.00	100	Horizontal	Pass
6**	12549.787	44.49	1.61	54.0	9.51	AV	0.00	100	Horizontal	Pass

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

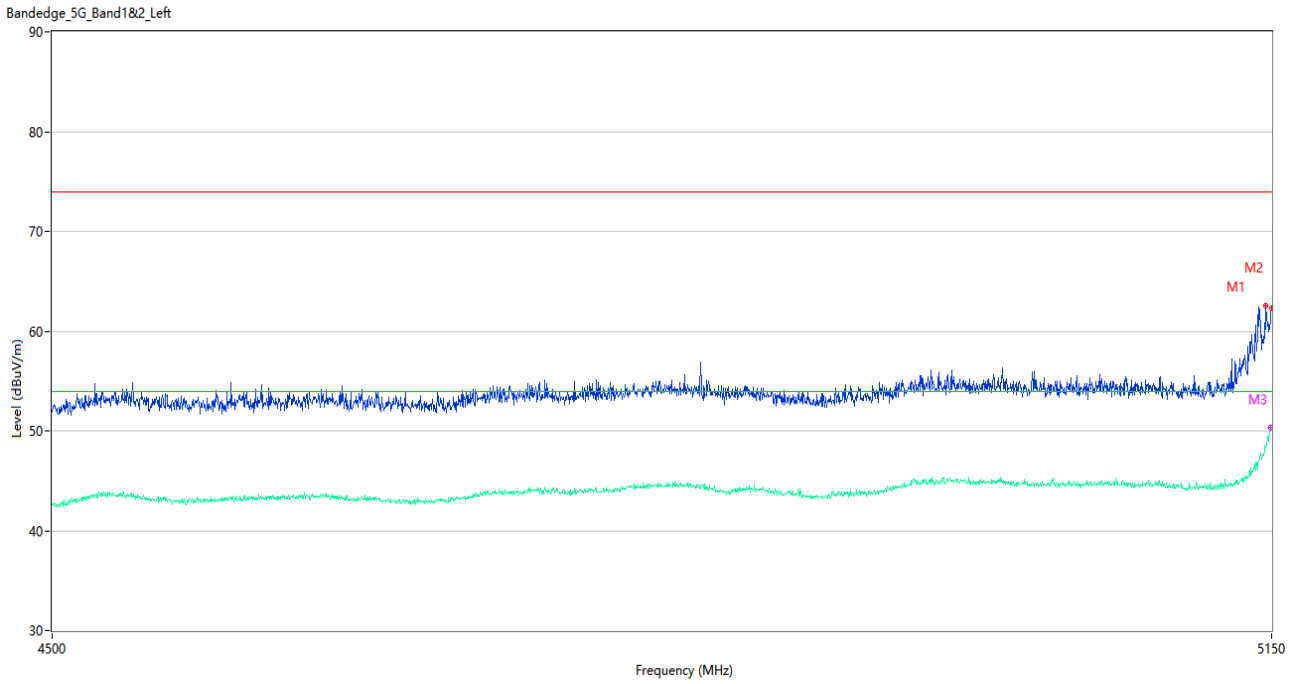
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1570.800	44.19	-19.94	74.0	29.81	Peak	270.00	100	Vertical	Pass
1**	1570.800	36.87	-19.94	54.0	17.13	AV	270.00	100	Vertical	Pass
2	2863.800	44.32	-12.35	74.0	29.68	Peak	351.00	300	Vertical	Pass
2**	2863.800	33.98	-12.35	54.0	20.02	AV	351.00	300	Vertical	Pass
3	4339.000	47.53	-6.21	74.0	26.47	Peak	100.00	200	Vertical	Pass
3**	4339.000	38.43	-6.21	54.0	15.57	AV	100.00	200	Vertical	Pass
4	5747.250	100.34	-5.28	--	--	Peak	360.00	300	Vertical	N/A
4**	5747.250	93.31	-5.28	--	--	AV	360.00	300	Vertical	N/A
5	7485.000	54.23	-0.46	74.0	19.77	Peak	141.00	100	Vertical	Pass
5**	7485.000	45.10	-0.46	54.0	8.90	AV	141.00	100	Vertical	Pass
6	12582.799	52.71	1.31	74.0	21.29	Peak	268.00	400	Vertical	Pass
6**	12582.799	44.42	1.31	54.0	9.58	AV	268.00	400	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-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	

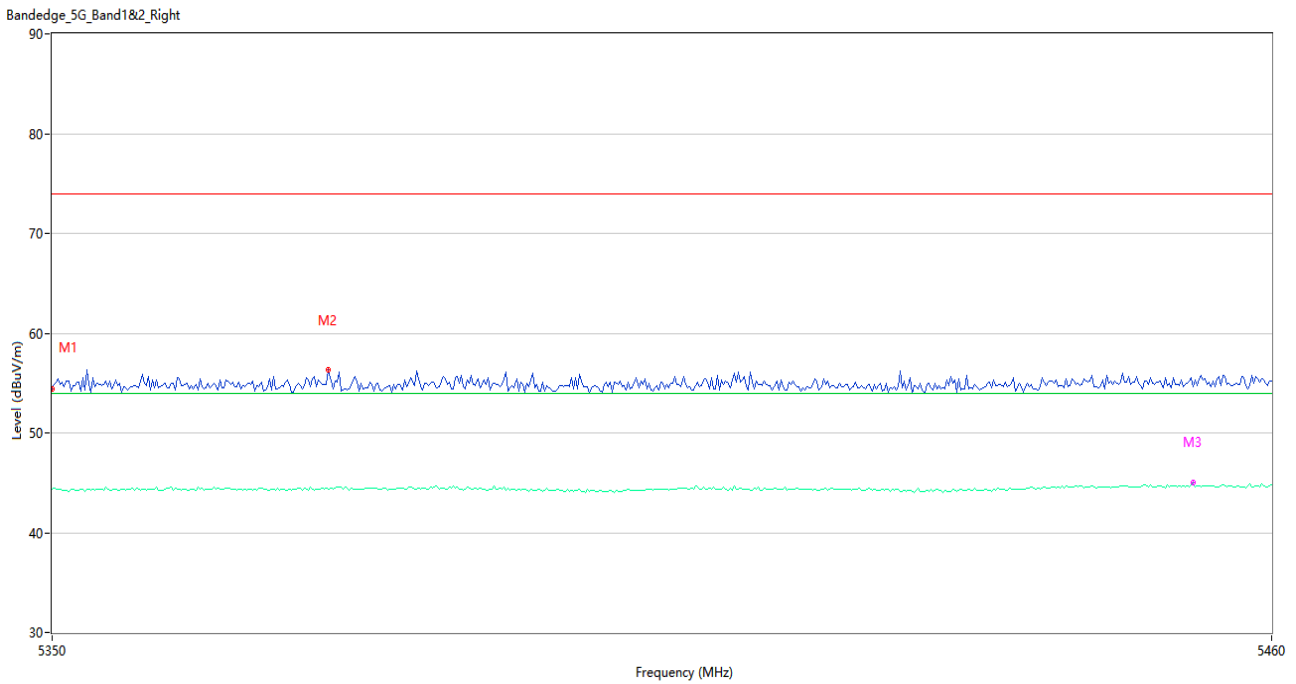
Test Data and Plots

U-NII-1 11a Low Channel



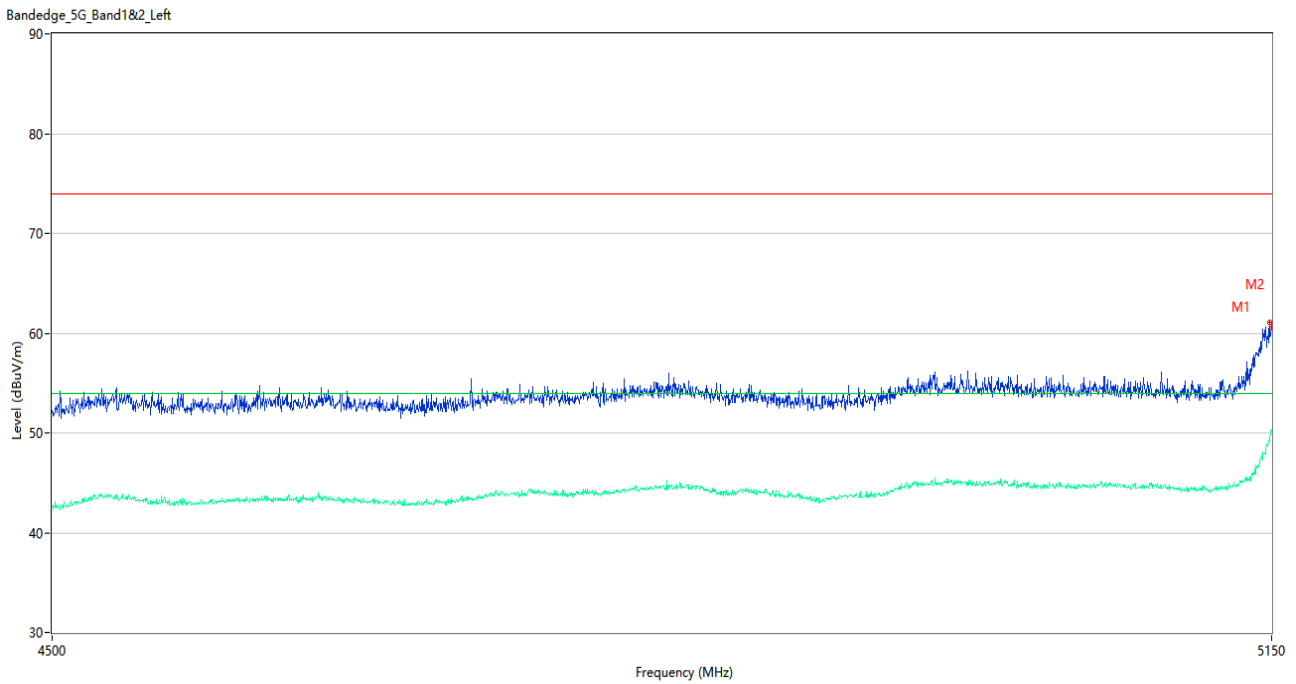
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5146.425	62.51	0.93	74.0	11.49	Peak	63.00	150	Vertical	Pass
1**	5146.425	48.41	0.93	54.0	5.59	AV	63.00	150	Vertical	Pass
2	5150.000	62.28	0.84	74.0	11.72	Peak	311.00	200	Vertical	Pass
2**	5150.000	50.13	0.84	54.0	3.87	AV	311.00	200	Vertical	Pass
3	5149.350	61.19	0.84	74.0	12.81	Peak	63.00	150	Vertical	Pass
3**	5149.350	50.31	0.84	54.0	3.69	AV	63.00	150	Vertical	Pass

U-NII-1 11a High Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	54.38	0.85	74.0	19.62	Peak	337.00	100	Vertical	Pass
1**	5350.000	44.35	0.85	54.0	9.65	AV	337.00	100	Vertical	Pass
2	5374.750	56.34	0.77	74.0	17.66	Peak	0.00	200	Vertical	Pass
2**	5374.750	44.33	0.77	54.0	9.67	AV	0.00	200	Vertical	Pass
3	5452.850	54.58	1.29	74.0	19.42	Peak	188.00	200	Vertical	Pass
3**	5452.850	44.98	1.29	54.0	9.02	AV	188.00	200	Vertical	Pass

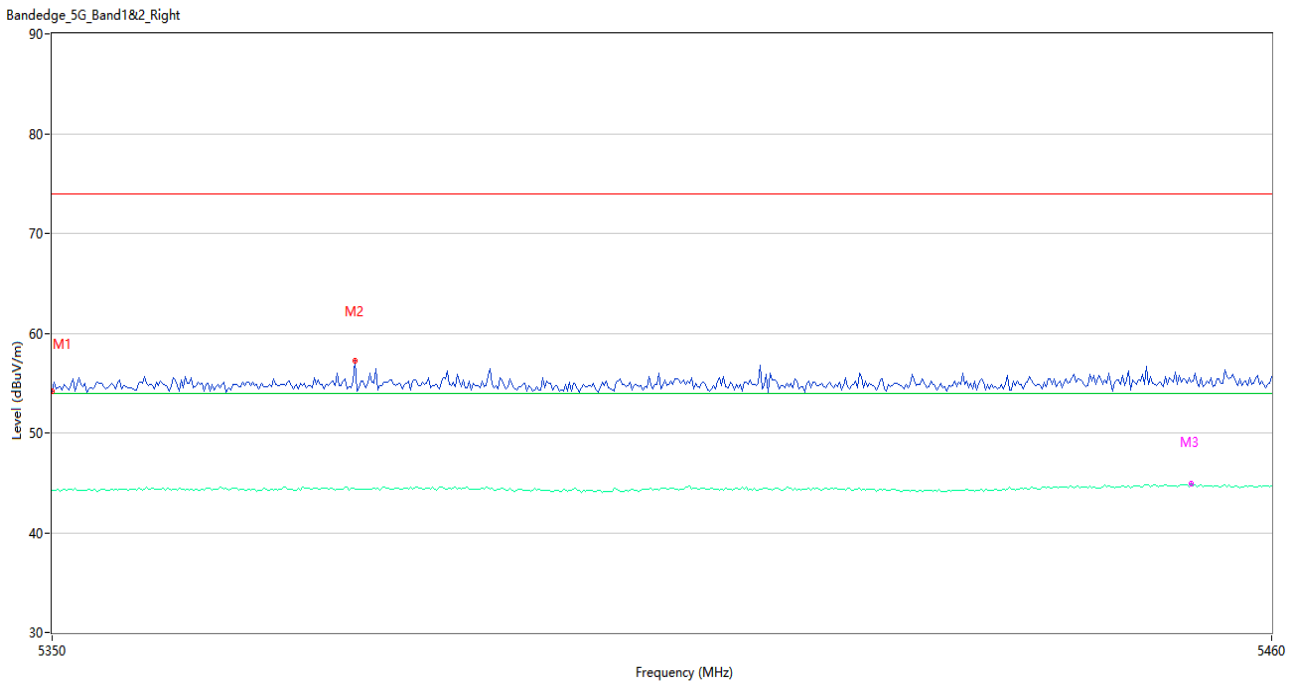
U-NII-1 11n20 Low Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5148.700	61.08	0.85	74.0	12.92	Peak	306.00	100	Vertical	Pass
1**	5148.700	49.19	0.85	54.0	4.81	AV	306.00	100	Vertical	Pass
2	5150.000	60.63	0.84	74.0	13.37	Peak	316.00	100	Vertical	Pass
2**	5150.000	50.35	0.84	54.0	3.65	AV	316.00	100	Vertical	Pass

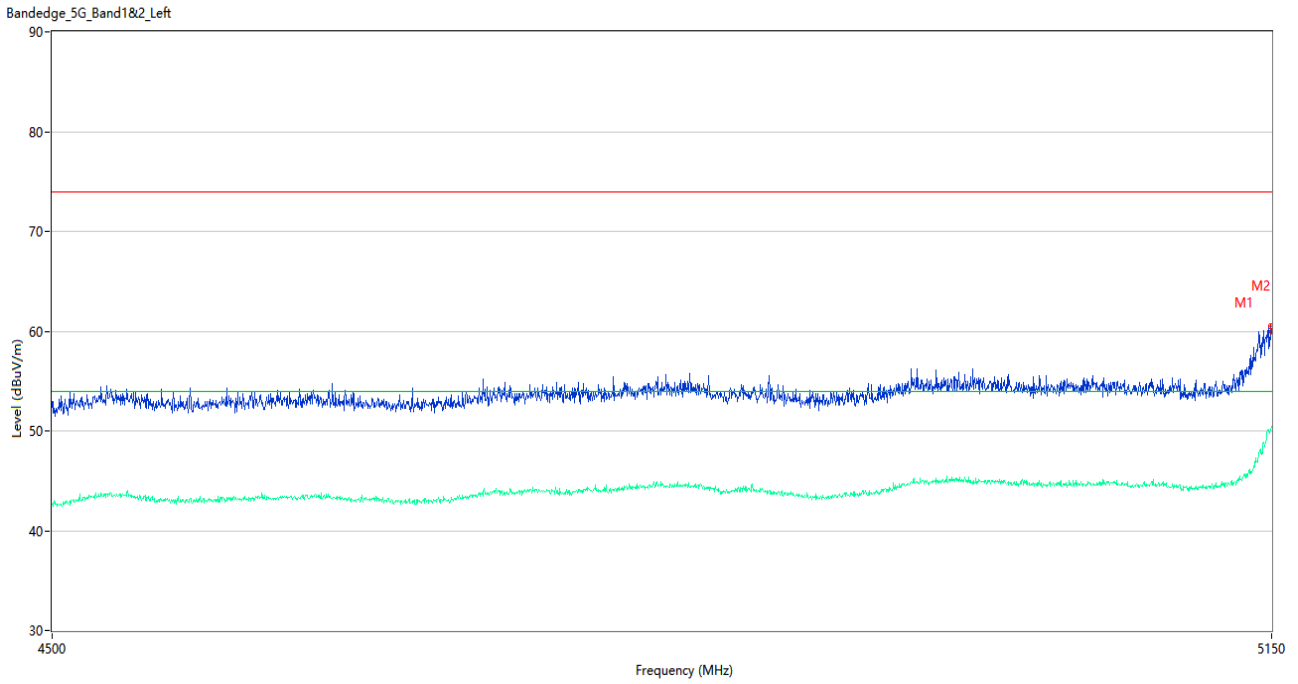


U-NII-1 11n20 High Channel



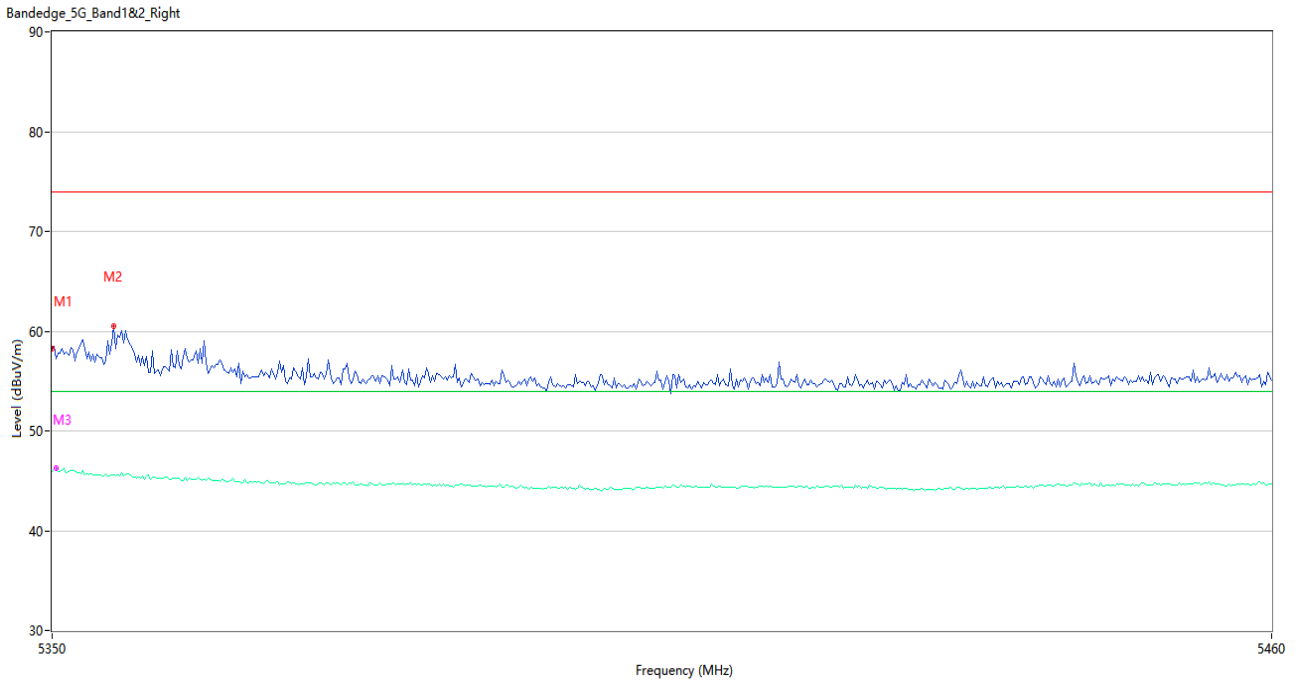
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	54.23	0.85	74.0	19.77	Peak	246.00	200	Vertical	Pass
1**	5350.000	44.27	0.85	54.0	9.73	AV	246.00	200	Vertical	Pass
2	5377.133	57.23	0.79	74.0	16.77	Peak	225.00	150	Vertical	Pass
2**	5377.133	44.40	0.79	54.0	9.60	AV	225.00	150	Vertical	Pass
3	5452.666	55.12	1.30	74.0	18.88	Peak	64.00	150	Vertical	Pass
3**	5452.666	44.88	1.30	54.0	9.12	AV	64.00	150	Vertical	Pass

U-NII-1 11n40 Low Channel



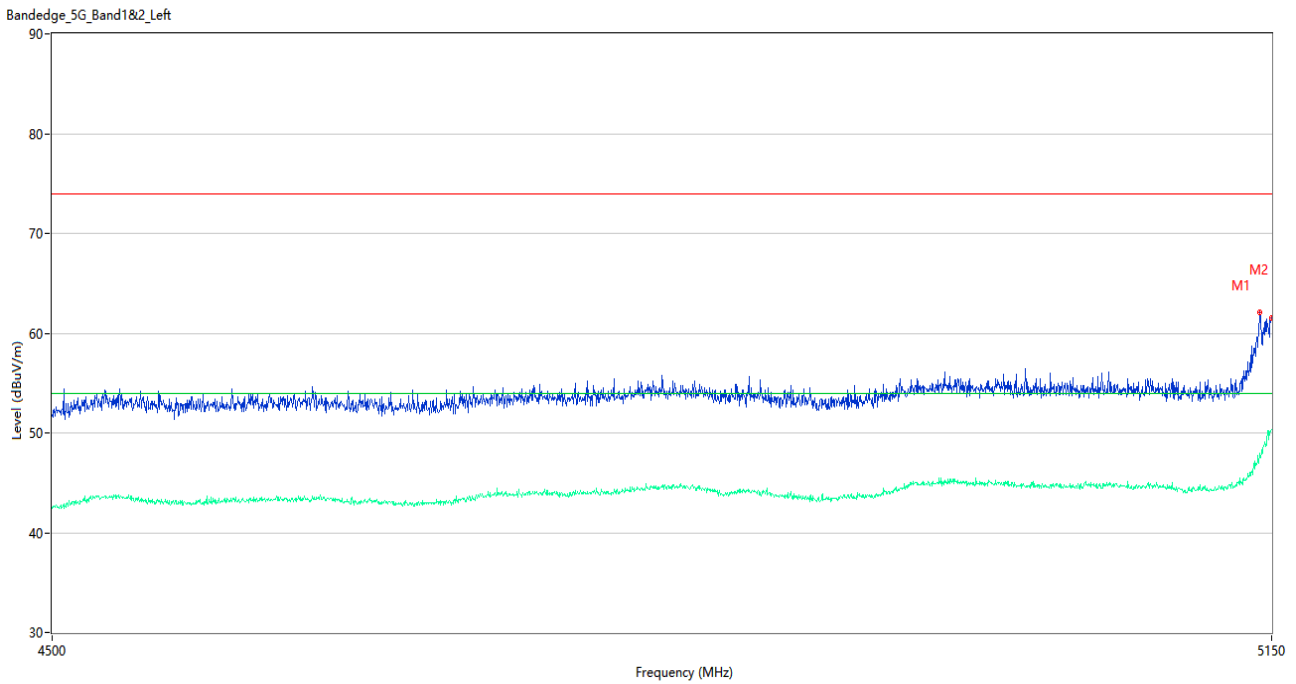
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5149.675	60.46	0.84	74.0	13.54	Peak	55.00	200	Vertical	Pass
1**	5149.675	50.11	0.84	54.0	3.89	AV	55.00	200	Vertical	Pass
2	5150.000	59.93	0.84	74.0	14.07	Peak	65.00	150	Vertical	Pass
2**	5150.000	50.50	0.84	54.0	3.50	AV	65.00	150	Vertical	Pass

U-NII-1 11n40 High Channel



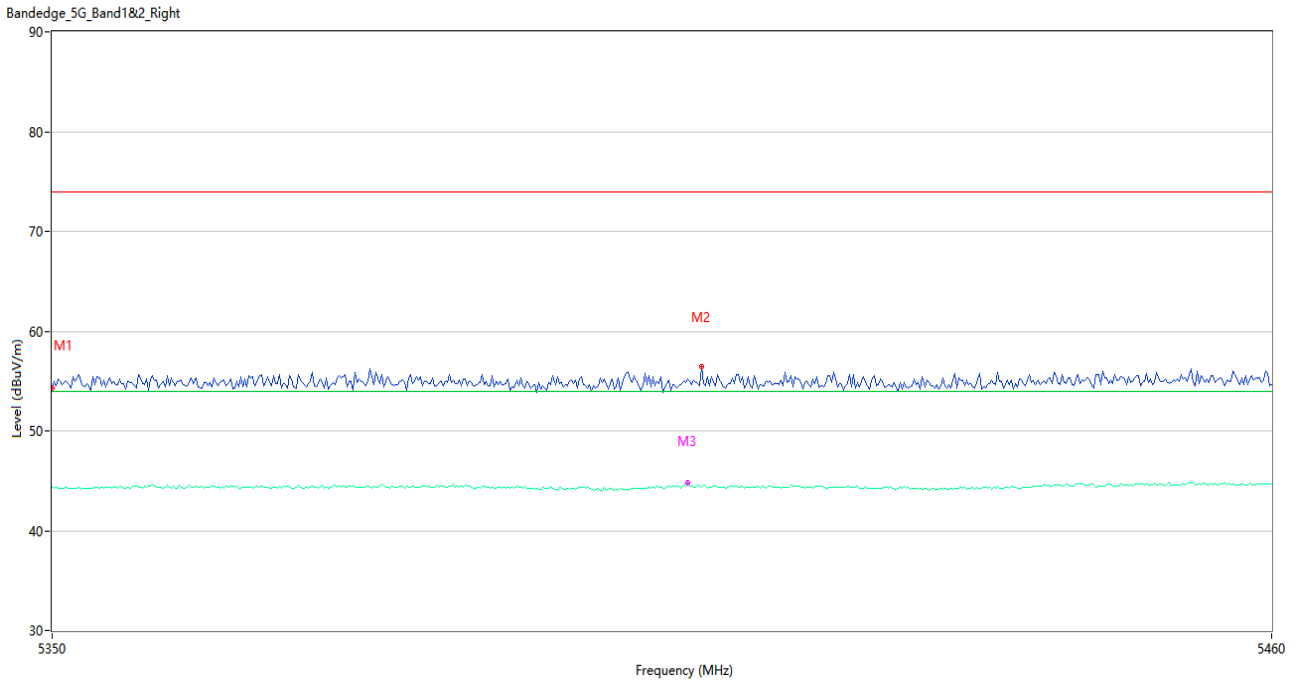
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	58.28	0.85	74.0	15.72	Peak	52.00	200	Vertical	Pass
1**	5350.000	45.93	0.85	54.0	8.07	AV	52.00	200	Vertical	Pass
2	5355.500	60.52	0.83	74.0	13.48	Peak	302.00	100	Vertical	Pass
2**	5355.500	45.58	0.83	54.0	8.42	AV	302.00	100	Vertical	Pass
3	5350.367	57.25	0.86	74.0	16.75	Peak	360.00	150	Vertical	Pass
3**	5350.367	46.28	0.86	54.0	7.72	AV	360.00	150	Vertical	Pass

U-NII-1 11ac20 Low Channel



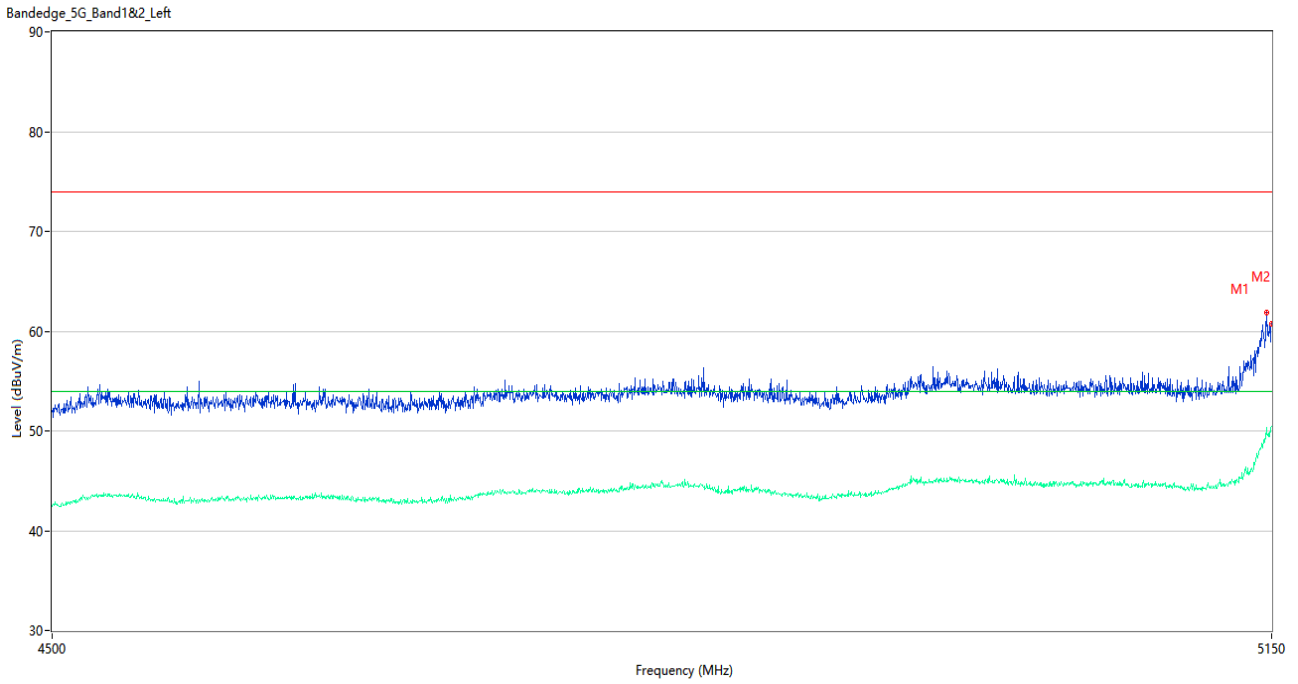
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5143.175	62.05	0.93	74.0	11.95	Peak	306.00	200	Vertical	Pass
1**	5143.175	47.92	0.93	54.0	6.08	AV	306.00	200	Vertical	Pass
2	5150.000	61.56	0.84	74.0	12.44	Peak	309.00	200	Vertical	Pass
2**	5150.000	50.38	0.84	54.0	3.62	AV	309.00	200	Vertical	Pass

U-NII-1 11ac20 High Channel



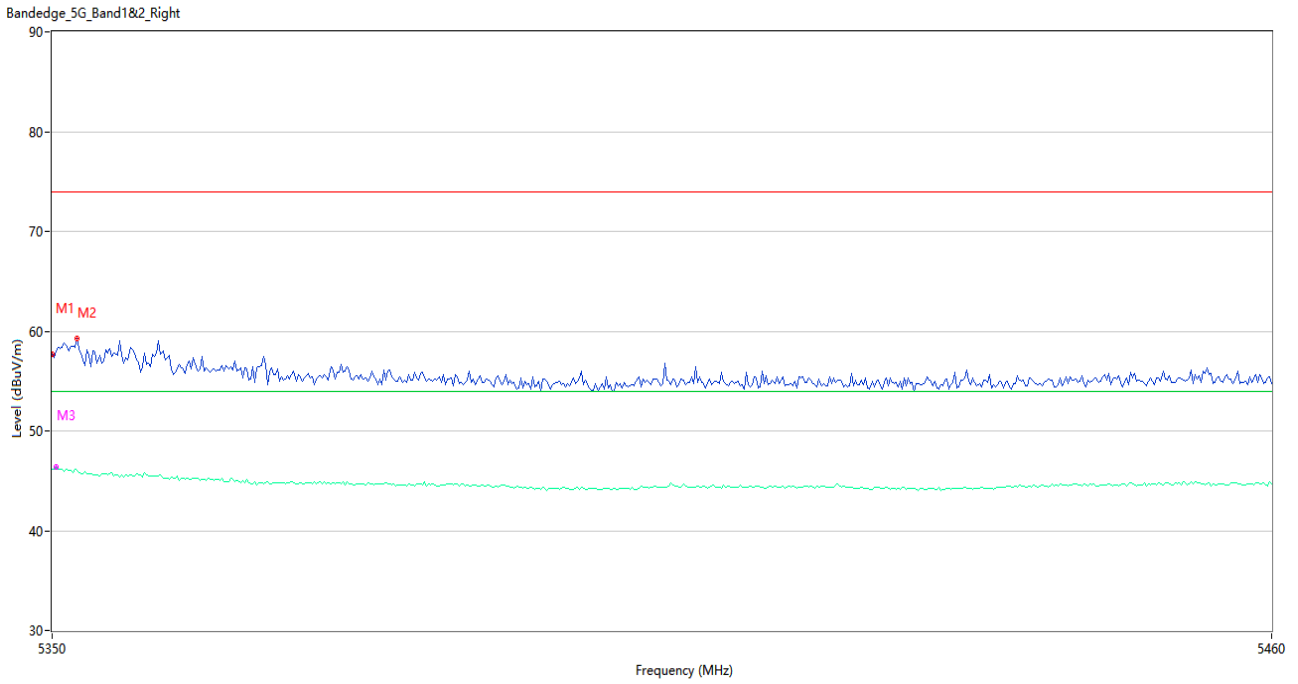
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	54.26	0.85	74.0	19.74	Peak	112.00	150	Vertical	Pass
1**	5350.000	44.31	0.85	54.0	9.69	AV	112.00	150	Vertical	Pass
2	5408.300	56.41	1.21	74.0	17.59	Peak	357.00	200	Vertical	Pass
2**	5408.300	44.36	1.21	54.0	9.64	AV	357.00	200	Vertical	Pass
3	5407.016	55.23	1.21	74.0	18.77	Peak	280.00	150	Vertical	Pass
3**	5407.016	44.83	1.21	54.0	9.17	AV	280.00	150	Vertical	Pass

U-NII-1 11ac40 Low Channel



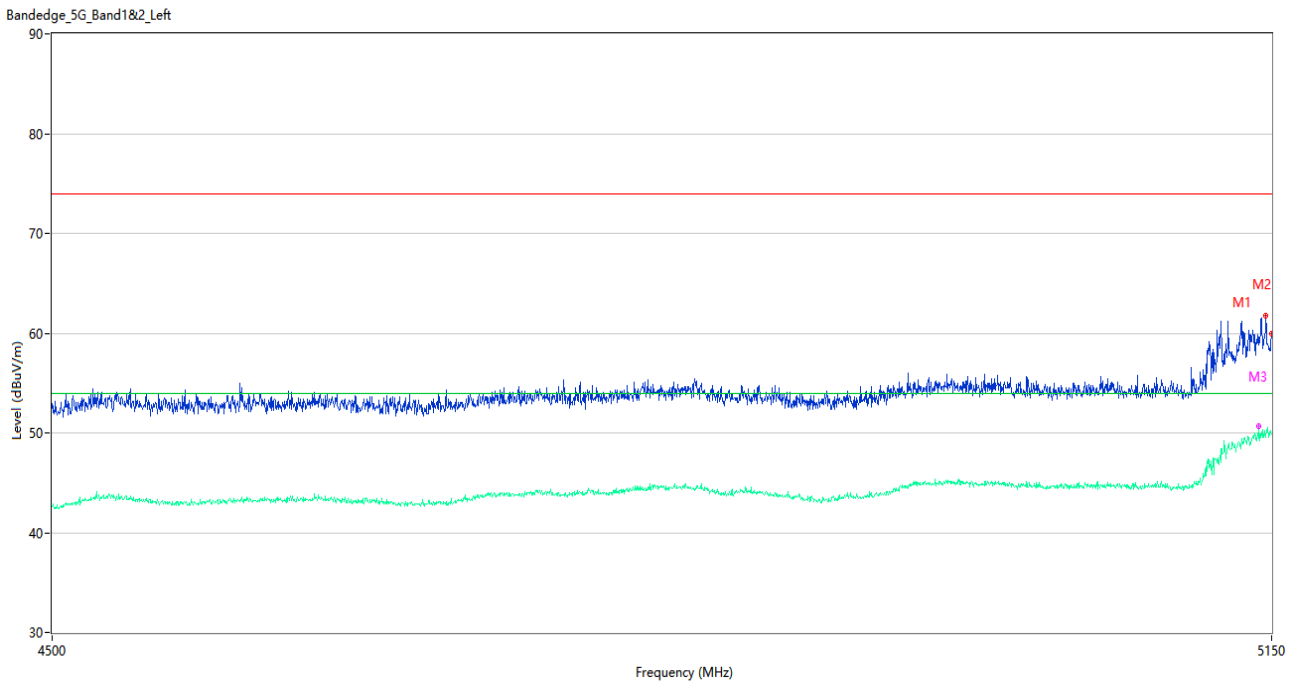
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5147.400	61.82	0.90	74.0	12.18	Peak	306.00	100	Vertical	Pass
1**	5147.400	49.67	0.90	54.0	4.33	AV	306.00	100	Vertical	Pass
2	5150.000	60.68	0.84	74.0	13.32	Peak	306.00	200	Vertical	Pass
2**	5150.000	50.41	0.84	54.0	3.59	AV	306.00	200	Vertical	Pass

U-NII-1 11ac40 High Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	57.65	0.85	74.0	16.35	Peak	311.00	200	Vertical	Pass
1**	5350.000	46.21	0.85	54.0	7.79	AV	311.00	200	Vertical	Pass
2	5352.200	59.28	0.83	74.0	14.72	Peak	44.00	300	Vertical	Pass
2**	5352.200	46.00	0.83	54.0	8.00	AV	44.00	300	Vertical	Pass
3	5350.367	58.05	0.86	74.0	15.95	Peak	44.00	100	Vertical	Pass
3**	5350.367	46.35	0.86	54.0	7.65	AV	44.00	100	Vertical	Pass

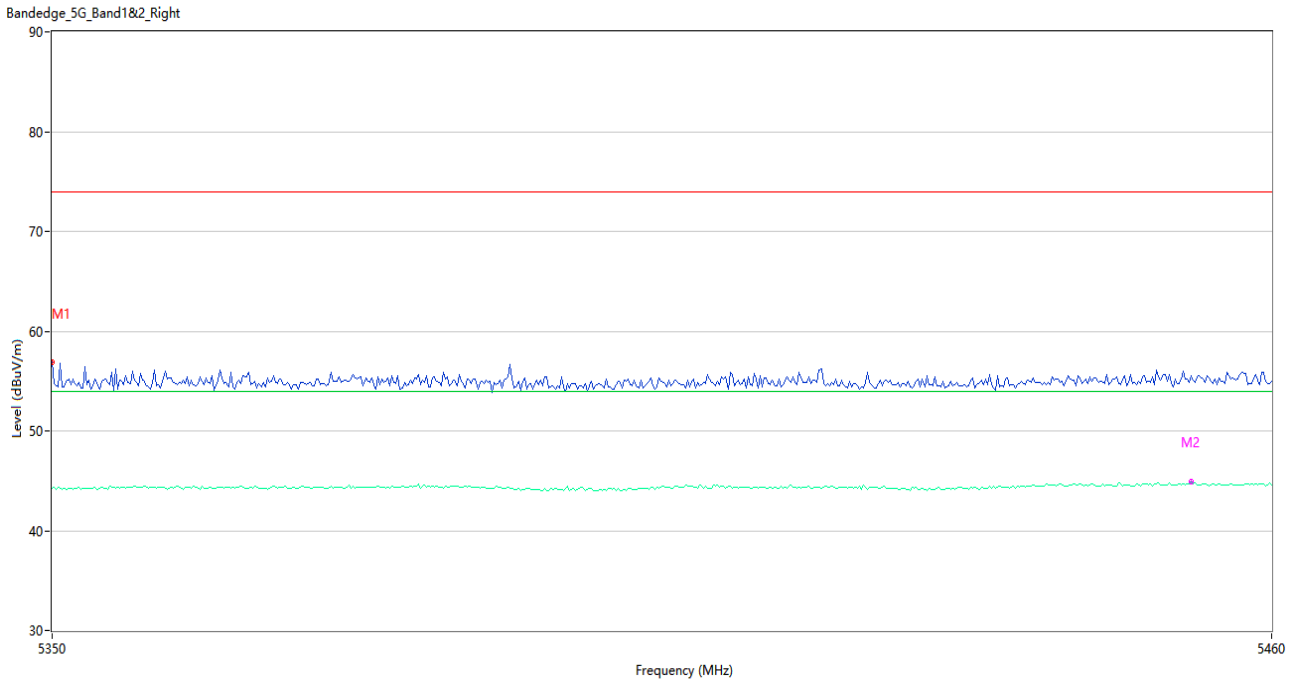
U-NII-1 11ac80 Middle Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5146.750	61.75	0.93	74.0	12.25	Peak	311.00	200	Vertical	Pass
1**	5146.750	49.56	0.93	54.0	4.44	AV	311.00	200	Vertical	Pass
2	5150.000	59.93	0.84	74.0	14.07	Peak	311.00	100	Vertical	Pass
2**	5150.000	49.94	0.84	54.0	4.06	AV	311.00	100	Vertical	Pass
3	5142.850	58.77	0.93	74.0	15.23	Peak	48.00	150	Vertical	Pass
3**	5142.850	50.62	0.93	54.0	3.38	AV	48.00	150	Vertical	Pass

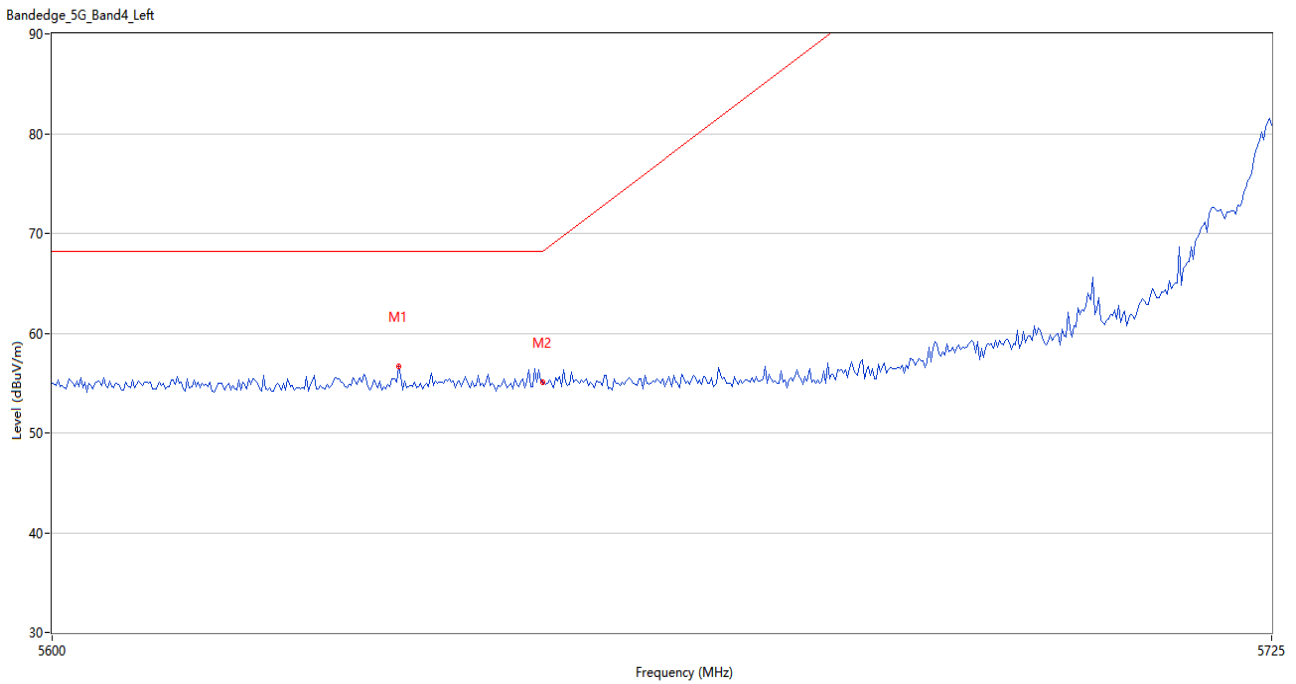


U-NII-1 11ac80 Middle Channel



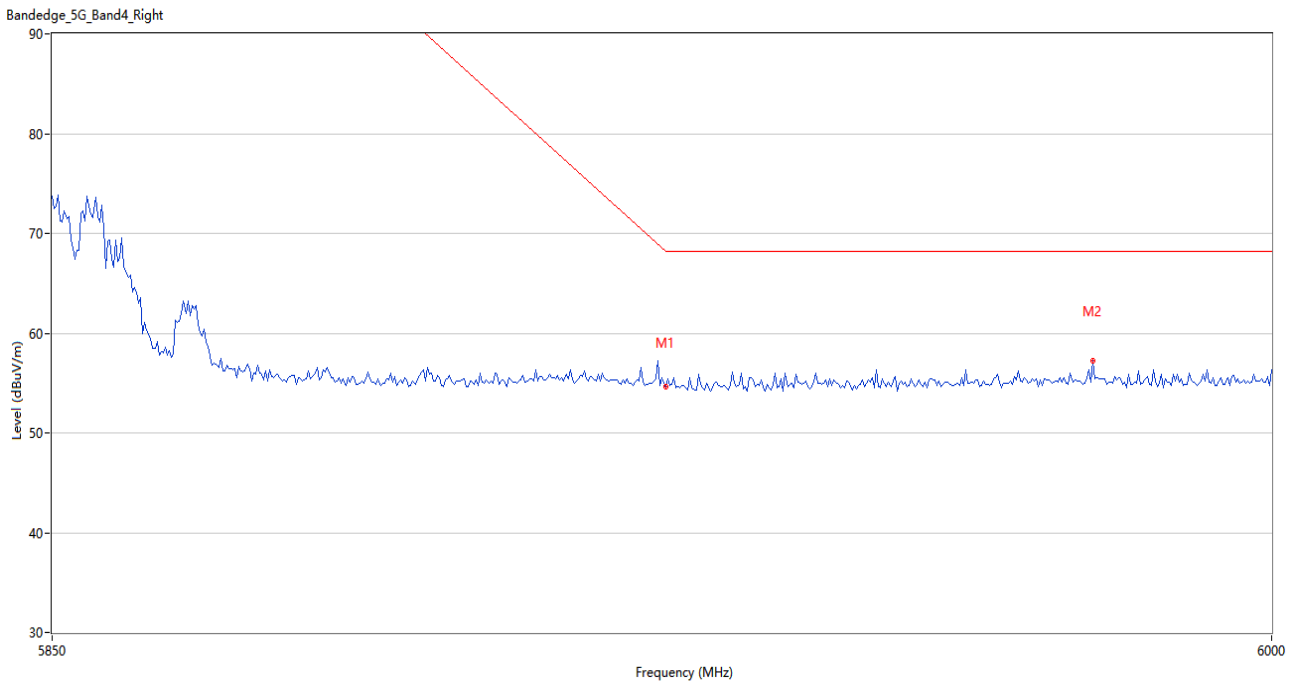
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.90	0.85	74.0	17.10	Peak	72.00	200	Vertical	Pass
1**	5350.000	44.19	0.85	54.0	9.81	AV	72.00	200	Vertical	Pass
2	5452.666	55.49	1.30	74.0	18.51	Peak	117.00	100	Vertical	Pass
2**	5452.666	44.86	1.30	54.0	9.14	AV	117.00	100	Vertical	Pass

U-NII-3 11a Low Channel



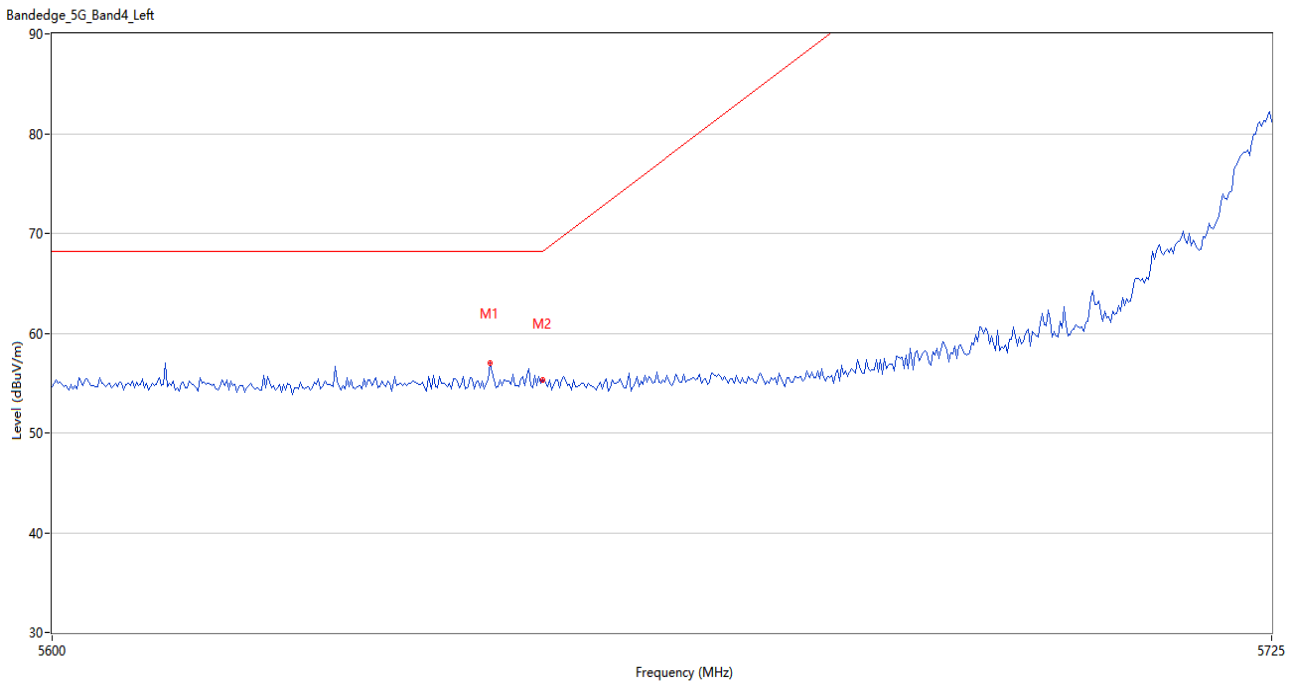
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5635.209	56.61	0.95	68.2	11.59	Peak	62.00	200	Vertical	Pass
2	5650.000	55.07	0.79	68.2	13.13	Peak	353.00	150	Vertical	Pass

U-NII-3 11a High Channel



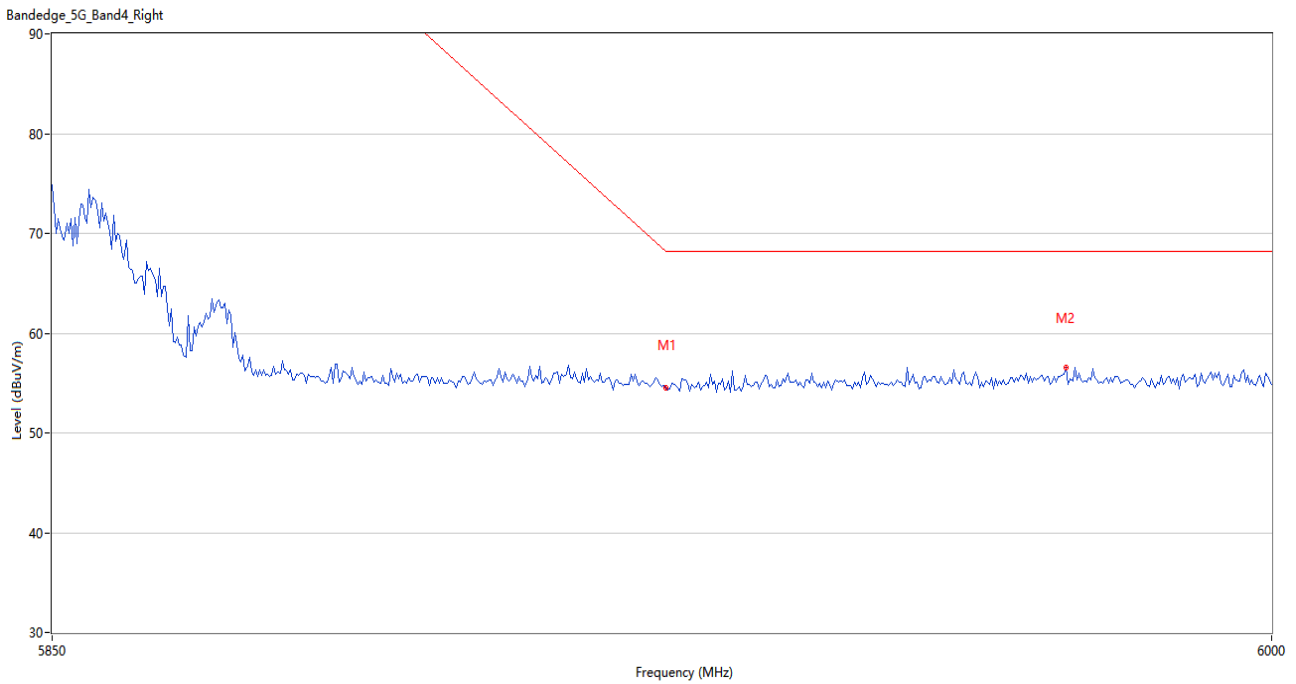
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	54.64	1.08	68.2	13.56	Peak	157.00	200	Vertical	Pass
2	5977.750	57.21	1.01	68.2	10.99	Peak	71.00	100	Vertical	Pass

U-NII-3 11n20 Low Channel



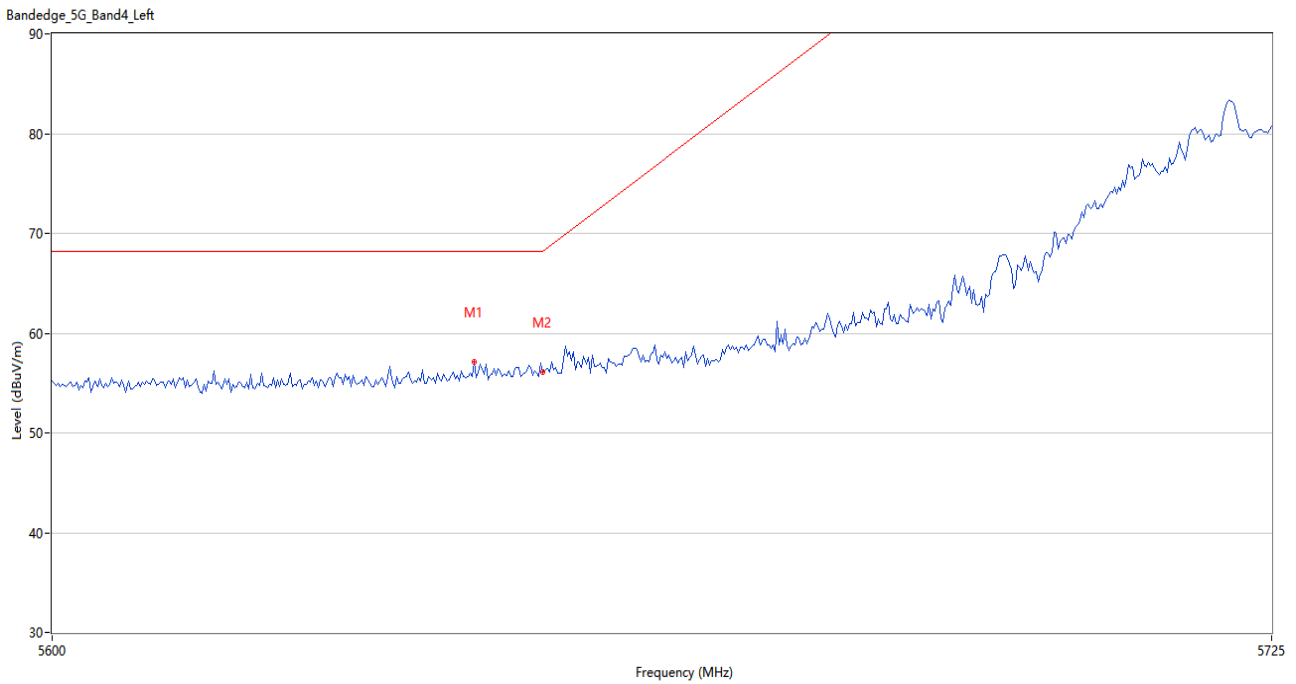
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5644.583	57.03	0.88	68.2	11.17	Peak	274.00	200	Vertical	Pass
2	5650.000	55.32	0.79	68.2	12.88	Peak	70.00	200	Vertical	Pass

U-NII-3 11n20 High Channel



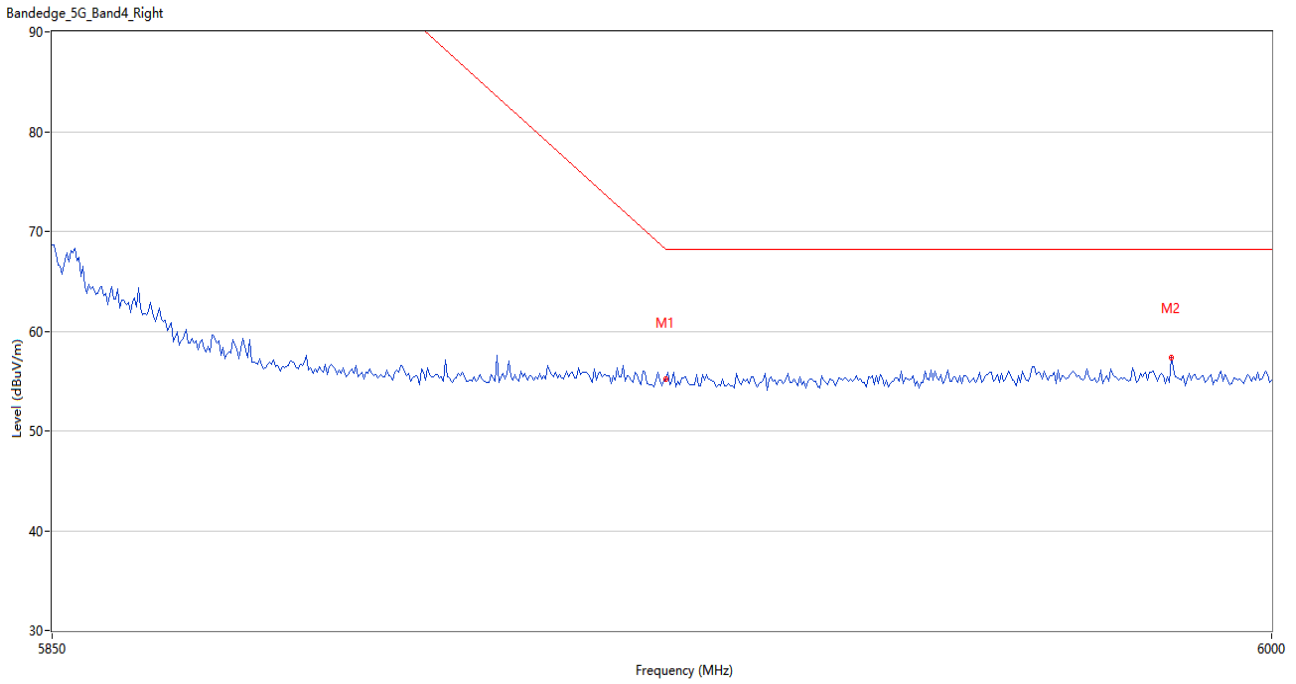
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	54.47	1.08	68.2	13.73	Peak	200.00	150	Vertical	Pass
2	5974.500	56.57	1.14	68.2	11.63	Peak	154.00	200	Vertical	Pass

U-NII-3 11n40 Low Channel



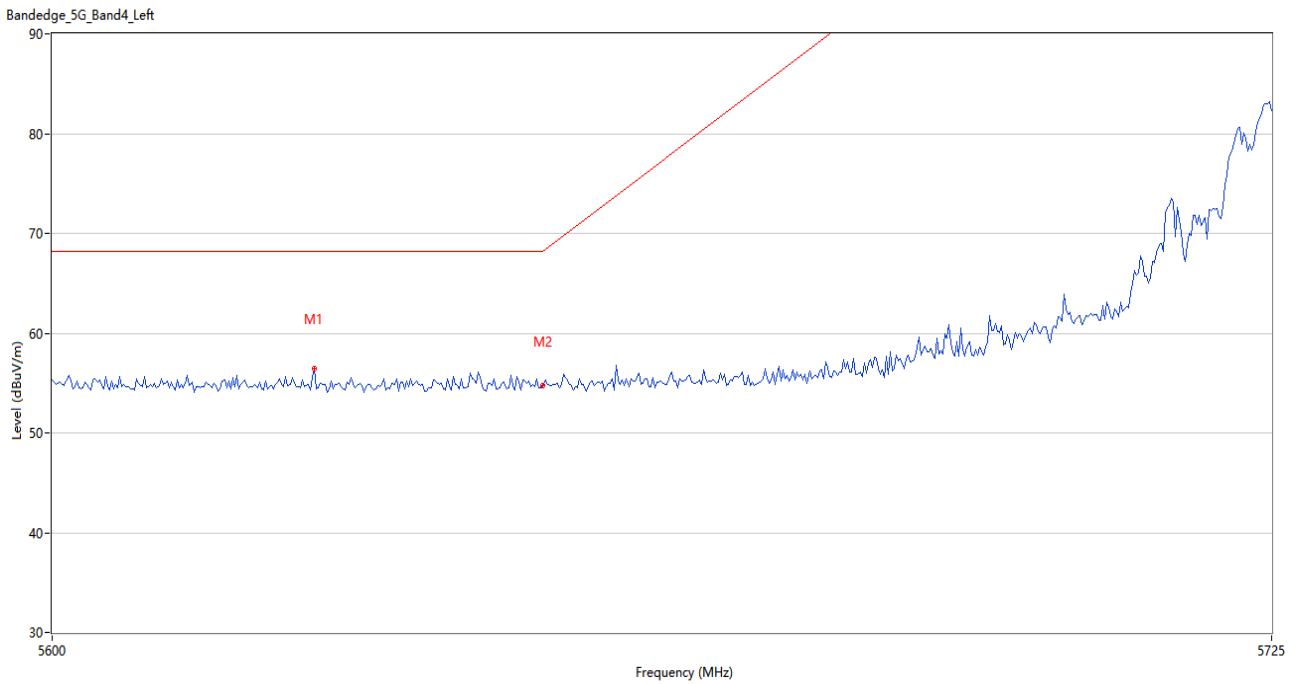
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5642.916	57.09	0.90	68.2	11.11	Peak	274.00	100	Vertical	Pass
2	5650.000	56.11	0.79	68.2	12.09	Peak	304.00	100	Vertical	Pass

U-NII-3 11n40 High Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	55.25	1.08	68.2	12.95	Peak	3.00	200	Vertical	Pass
2	5987.500	57.33	0.92	68.2	10.87	Peak	313.00	100	Vertical	Pass

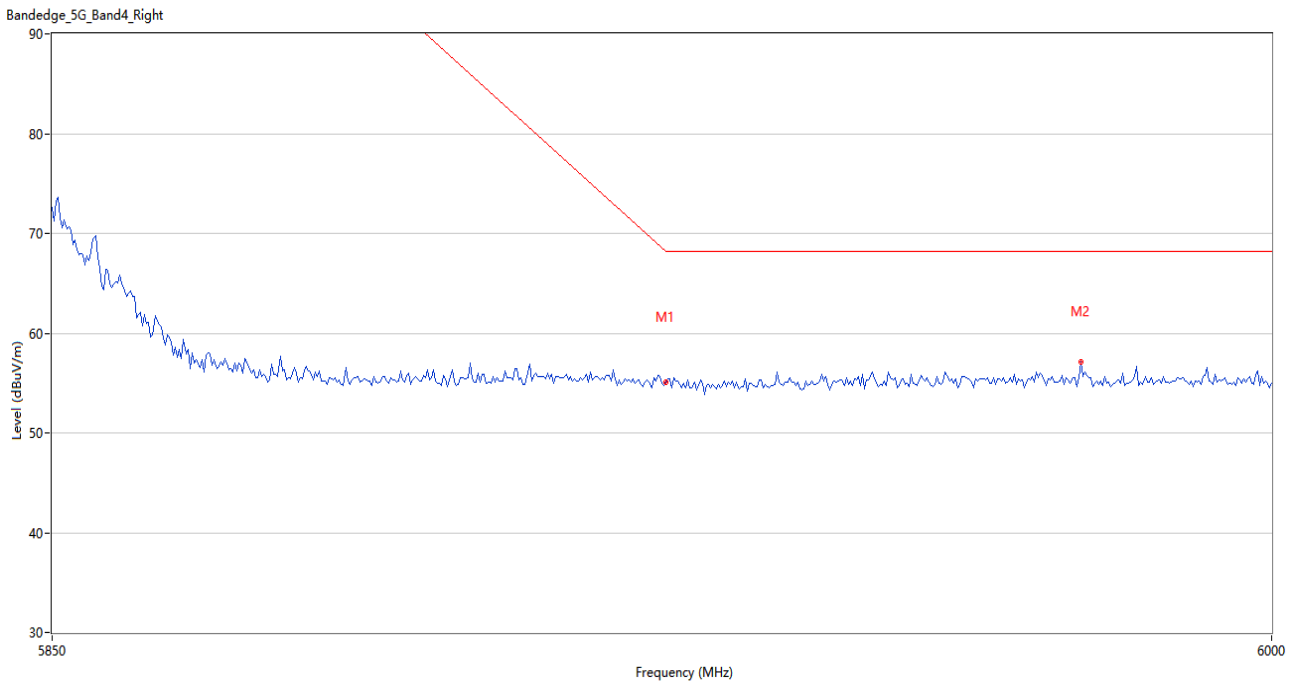
U-NII-3 11ac20 Low Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5626.666	56.41	0.82	68.2	11.79	Peak	27.00	200	Vertical	Pass
2	5650.000	54.73	0.79	68.2	13.47	Peak	336.00	200	Vertical	Pass

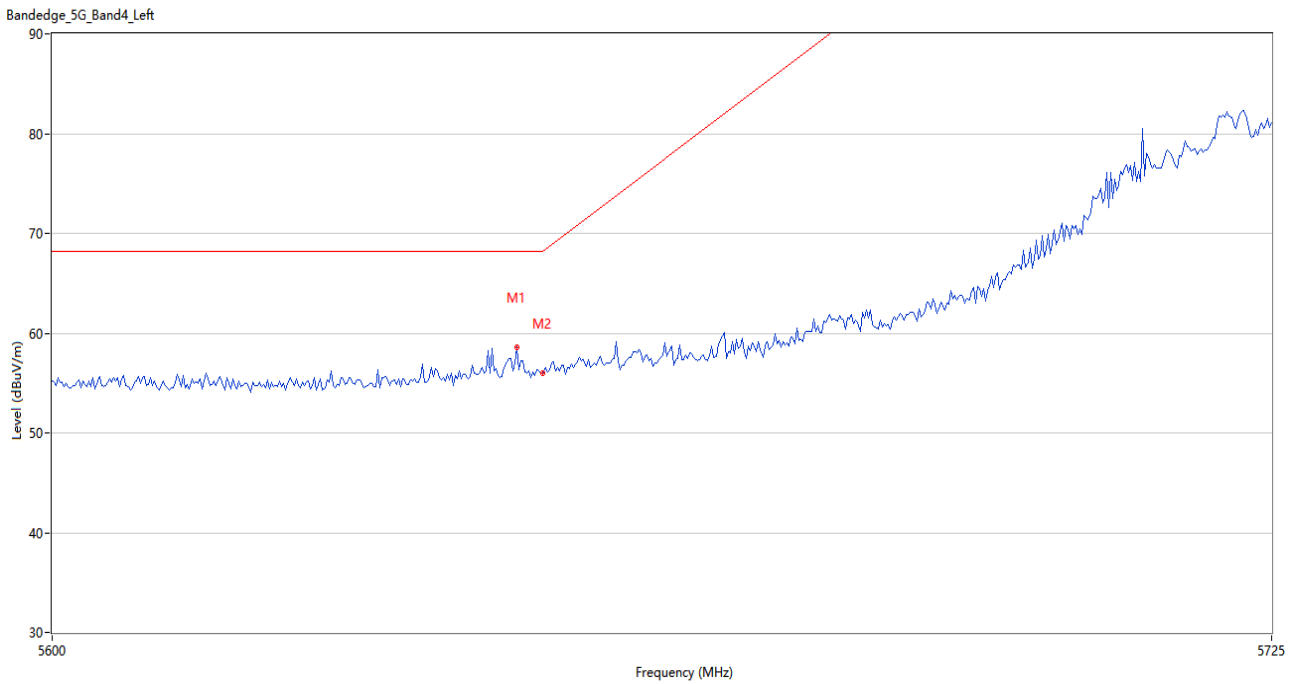


U-NII-3 11ac20 High Channel



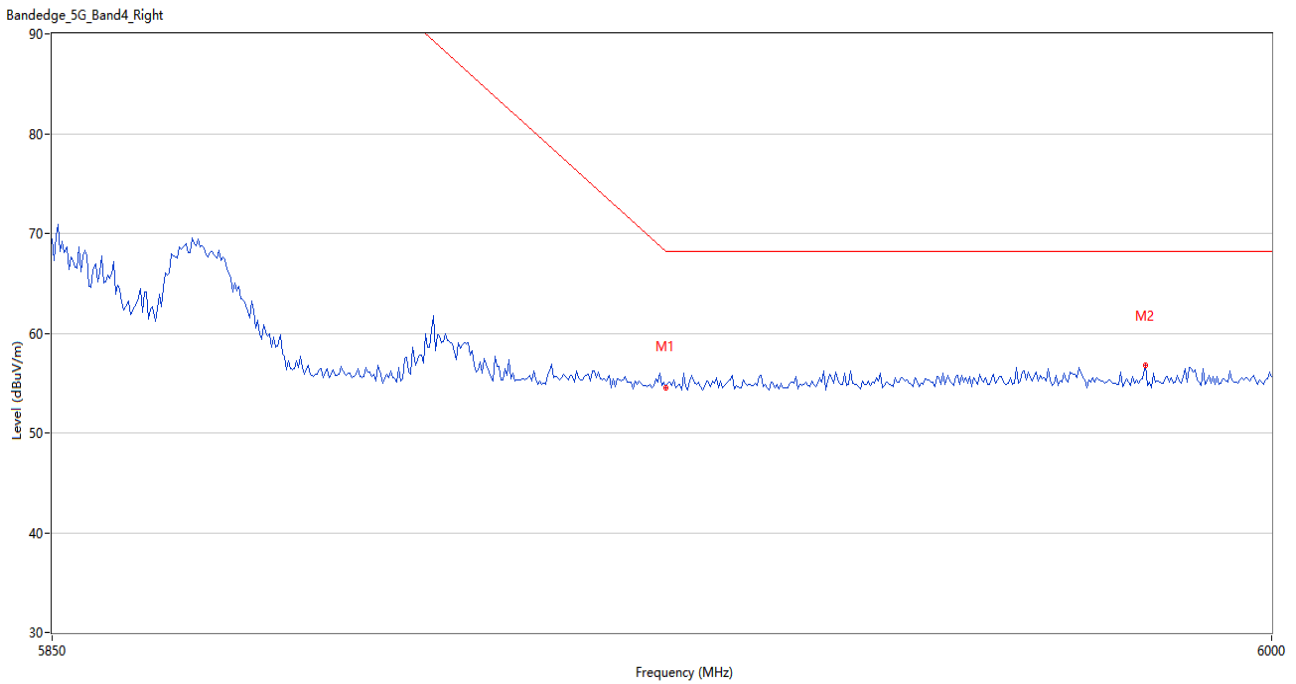
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	55.13	1.08	68.2	13.07	Peak	9.00	200	Vertical	Pass
2	5976.250	57.15	1.08	68.2	11.05	Peak	163.00	150	Vertical	Pass

U-NII-3 11ac40 Low Channel



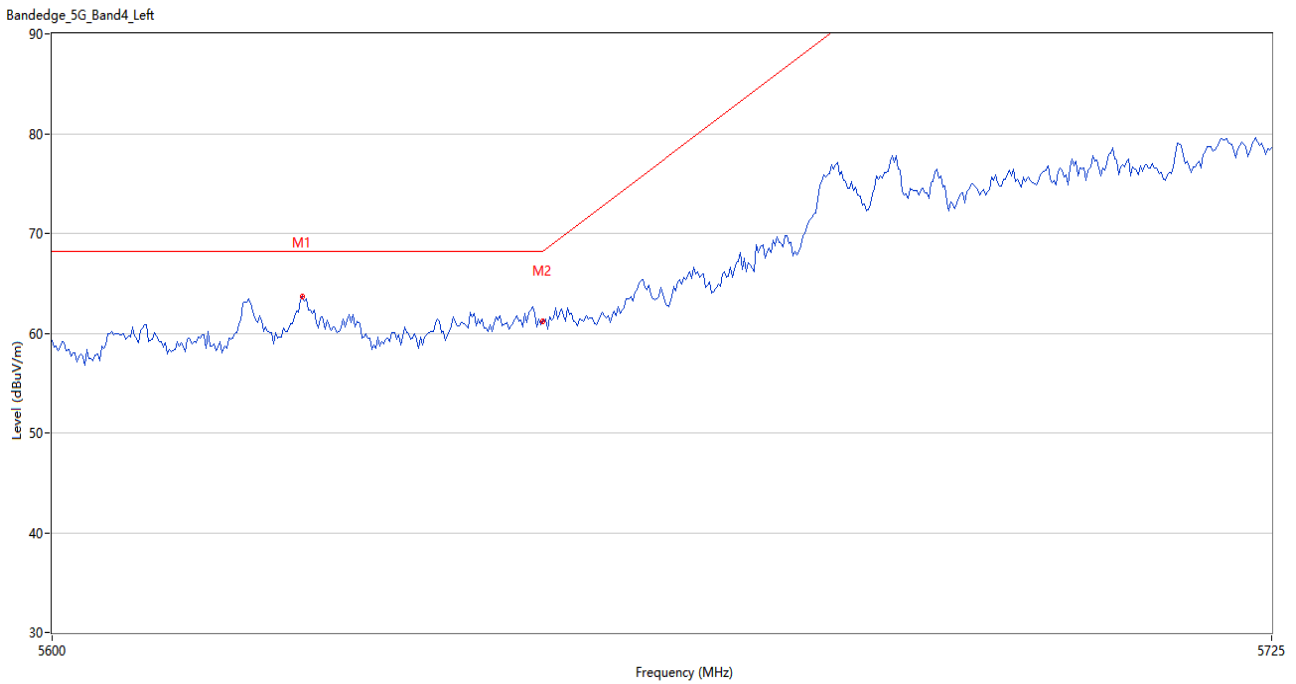
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5647.291	58.59	0.81	68.2	9.61	Peak	305.00	150	Vertical	Pass
2	5650.000	55.95	0.79	68.2	12.25	Peak	70.00	150	Vertical	Pass

U-NII-3 11ac40 High Channel



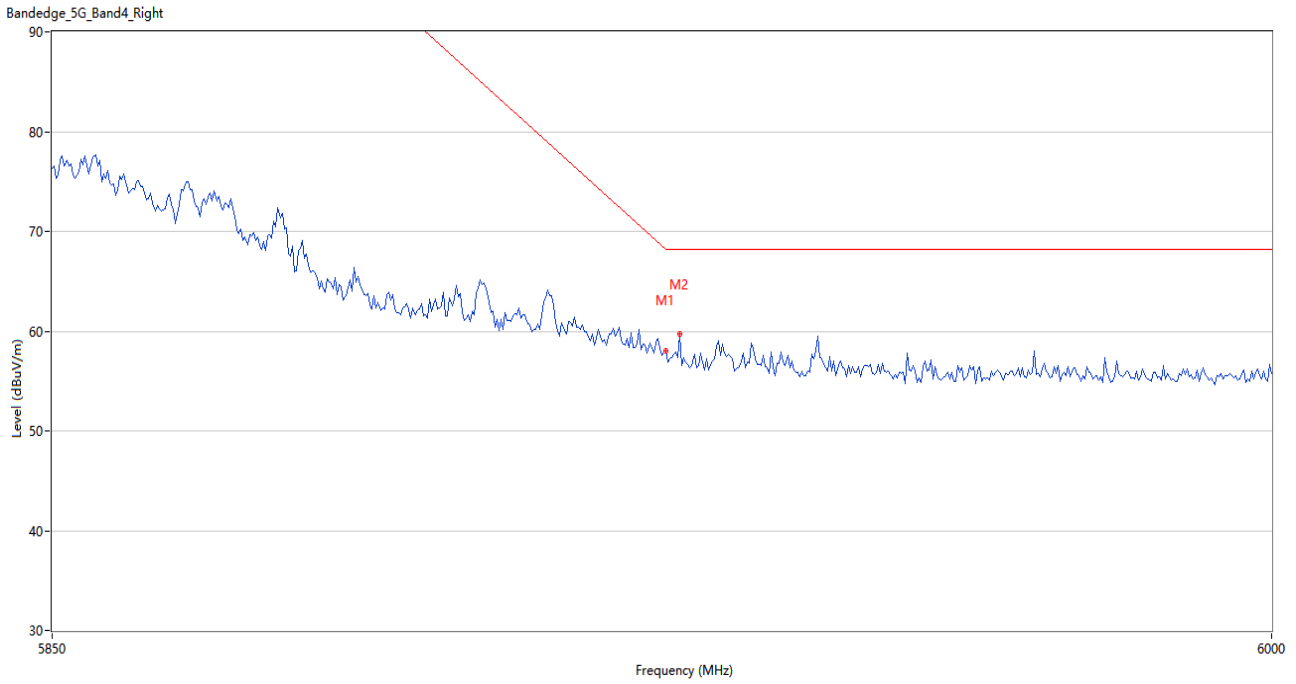
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	54.52	1.08	68.2	13.68	Peak	107.00	150	Vertical	Pass
2	5984.250	56.75	0.93	68.2	11.45	Peak	92.00	150	Vertical	Pass

U-NII-3 11ac80 Middle Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5625.417	63.64	0.72	68.2	4.56	Peak	310.00	100	Vertical	Pass
2	5650.000	61.24	0.79	68.2	6.96	Peak	127.00	150	Vertical	Pass

U-NII-3 11ac80 Middle Channel



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5925.000	58.06	1.08	68.2	10.14	Peak	25.00	200	Vertical	Pass
2	5926.750	59.74	0.94	68.2	8.46	Peak	25.00	100	Vertical	Pass

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ2440604-AR.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ2440604-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ2440604-AI.PDF”.

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--END OF REPORT--