

TEST REPORT

Applicant: MEIZU TECHNOLOGY CO., LTD.
Address: MEIZU Tech Bldg, Technology & Innovation Coast,
Zhuhai, 519085, Guangdong, China
Equipment Type: Mobile Phone
Model Name: M412H
Brand Name: MEIZU
Test Standard: 47 CFR Part 15 Subpart E
(refer to section 3.1)
Sample Arrival Date: May 06, 2024
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ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Julie Zhu

Checked by: Ye Hongji

Approved by: Liao Jianming
(Technical Director)

Julie Zhu

Ye Hongji

Liao Jianming

Revision History		
Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Jun. 13, 2024</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	4
1.1	Test Laboratory	4
1.2	Test Location	4
2	PRODUCT INFORMATION	5
2.1	Applicant Information	5
2.2	Manufacturer Information	5
2.3	General Description for Equipment under Test (EUT)	5
2.4	Technical Information	6
2.5	Channel List	7
3	SUMMARY OF TEST RESULTS	9
3.1	Test Standards	9
3.2	Test Verdict	9
4	GENERAL TEST CONFIGURATIONS	10
4.1	Test Environments	10
4.2	Test Equipment List	10
4.3	Test Software List	11
4.4	Measurement Uncertainty	11
4.5	Description of Test Setup	12
5	TEST ITEMS	15
5.1	RF Output Power	15
5.2	Emission Bandwidth and 6 dB Bandwidth	17
5.3	Power Spectral density (PSD)	18
5.4	Conducted Emission	19
5.5	Radiated Spurious Emissions and Band Edge (Restricted-band)	20

ANNEX A	TEST RESULT	24
A.1	RF Output Power.....	24
A.2	Emission Bandwidth & 99% Bandwidth.....	25
A.3	6 dB Bandwidth	26
A.4	Power Spectral Density	27
A.5	Conducted Emissions.....	28
A.6	Radiated Spurious Emissions and Band Edge (Restricted-band).....	30
ANNEX B	TEST SETUP PHOTOS	59
ANNEX C	EUT EXTERNAL PHOTOS	59
ANNEX D	EUT INTERNAL PHOTOS	59

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	MEIZU TECHNOLOGY CO., LTD.
Address	MEIZU Tech Bldg, Technology & Innovation Coast, Zhuhai, 519085, Guangdong, China

2.2 Manufacturer Information

Manufacturer	MEIZU TECHNOLOGY CO., LTD.
Address	MEIZU Tech Bldg, Technology & Innovation Coast, Zhuhai, 519085, Guangdong, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	M412H
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V1.0
Software Version	Android 14
Dimensions (Approx.)	168.5*76.6*8.35mm
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 1/5/8 4G Network LTE FDD Band 1/3/5/7/8/20/28 LTE TDD Band 38/40/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, Galileo, BDS, NFC, FM Receiver
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The requirement for the following technical information of the EUT was tested in this report:

Frequency Range	U-NII-3: 5725 MHz to 5850 MHz
Product Type	<input type="checkbox"/> Mobile <input checked="" 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-3: 22.03 mW
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	-0.7 dBi (In test items related to antenna gain, the final results reflect this figure. This value is provided by the applicant.)
About the Product	The equipment is Mobile Phone, intended for used with information technology equipment.

2.5 Channel List

20 MHz		40 MHz		80 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

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

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

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

For 802.11n(HT40)/ac(VHT40)

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

For 802.11ac(VHT80)

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

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

Test Items	Mode	Data Rate	Modulation Type	U-NII-3
				Channel
RF Output Power	11a	6	BPSK	165/157/149
	11n(20 MHz)	6.5		165/157/149
	11n(40 MHz)	13.5		159/151
	11ac(20 MHz)	6.5		165/157/149
	11ac(40 MHz)	13.5		159/151
	11ac(80 MHz)	29.3		155
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	165/157/149
	11n(20 MHz)	6.5		165/157/149
	11n(40 MHz)	13.5		159/151
	11ac(20 MHz)	6.5		165/157/149
	11ac(40 MHz)	13.5		159/151
	11ac(80 MHz)	29.3		155
6 dB bandwidth	11a	6	BPSK	165/157/149
	11n(20 MHz)	6.5		165/157/149
	11n(40 MHz)	13.5		159/151
	11ac(20 MHz)	6.5		165/157/149
	11ac(40 MHz)	13.5		159/151
	11ac(80 MHz)	29.3		155
Power Spectral Density	11a	6	BPSK	165/157/149
	11n(20 MHz)	6.5		165/157/149
	11n(40 MHz)	13.5		159/151
	11ac(20 MHz)	6.5		165/157/149
	11ac(40 MHz)	13.5		159/151
	11ac(80 MHz)	29.3		155
Radiated Spurious Emissions	11a	6	BPSK	165/157/149
	11n(20 MHz)	6.5		165/157/149
	11n(40 MHz)	13.5		159/151
	11ac(20 MHz)	6.5		165/157/149
	11ac(40 MHz)	13.5		159/151
	11ac(80 MHz)	29.3		155
Band Edge (Restricted-band)	11a	6	BPSK	165/149
	11n(20 MHz)	6.5		165/149
	11n(40 MHz)	13.5		159/151
	11ac(20 MHz)	6.5		165/149
	11ac(40 MHz)	13.5		159/151
	11ac(80 MHz)	29.3		155

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E	Unlicensed National Information Infrastructure Devices
2	KDB Publication 789033 D02v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Test Verdict

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

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

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

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	53% to 61%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+22.7°C to +25.1°C
	LT (Low Temperature)	0.0°C
	HT (High Temperature)	+35.0°C
Working Voltage of the EUT	NV (Normal Voltage)	3.87 V
	LV (Low Voltage)	3.50 V
	HV (High Voltage)	4.45 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY50330200	2023.05.16	2024.05.15
				2024.05.08	2025.05.07
Power Sensor	KEYSIGHT	U2063XA	MY58000251	2023.07.12	2024.07.11
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-40	101544	2023.12.27	2024.12.26
Spectrum Analyzer	KEYSIGHT	N9020A	MY52510065	2023.09.05	2024.09.04
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	01631	2022.02.23	2025.02.22
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2021.07.02	2024.07.01
Anechoic Chamber	RAINFORD	9m*6m*6m	144	2022.02.19	2024.09.03
Amplifier	COM-MV	LSCX_LNA1-12G-01	180602	2023.09.05	2024.09.04
Amplifier	COM-MV	XKu_LNA7-18G-01	180601	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	2025.01.22
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
				2024.05.09	2025.05.08
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%

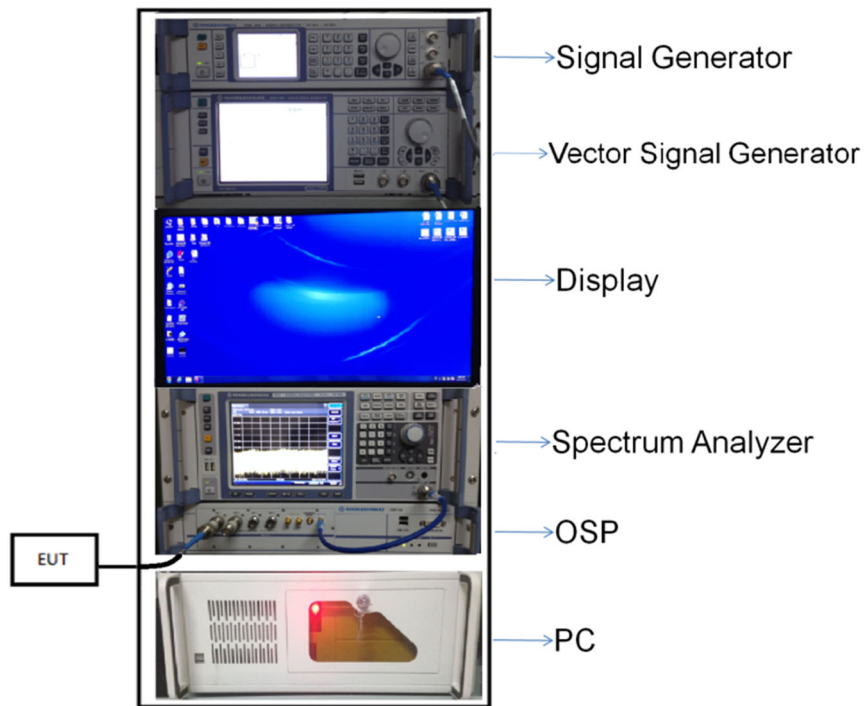
4.5 Description of Test Setup

4.5.1 For Antenna Port Test

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

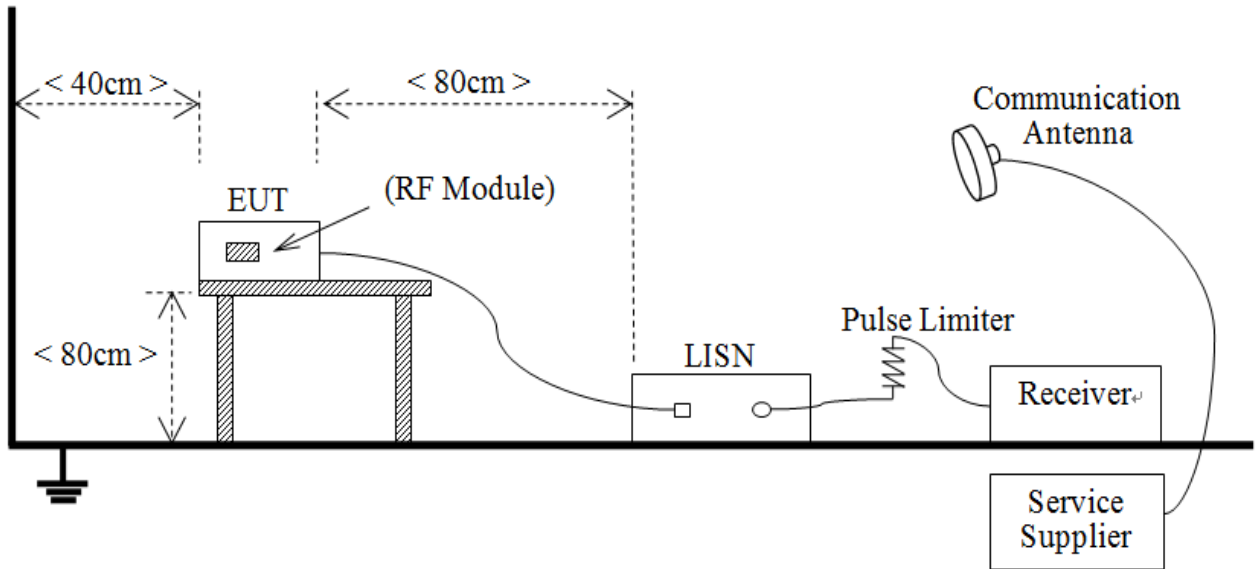
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

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



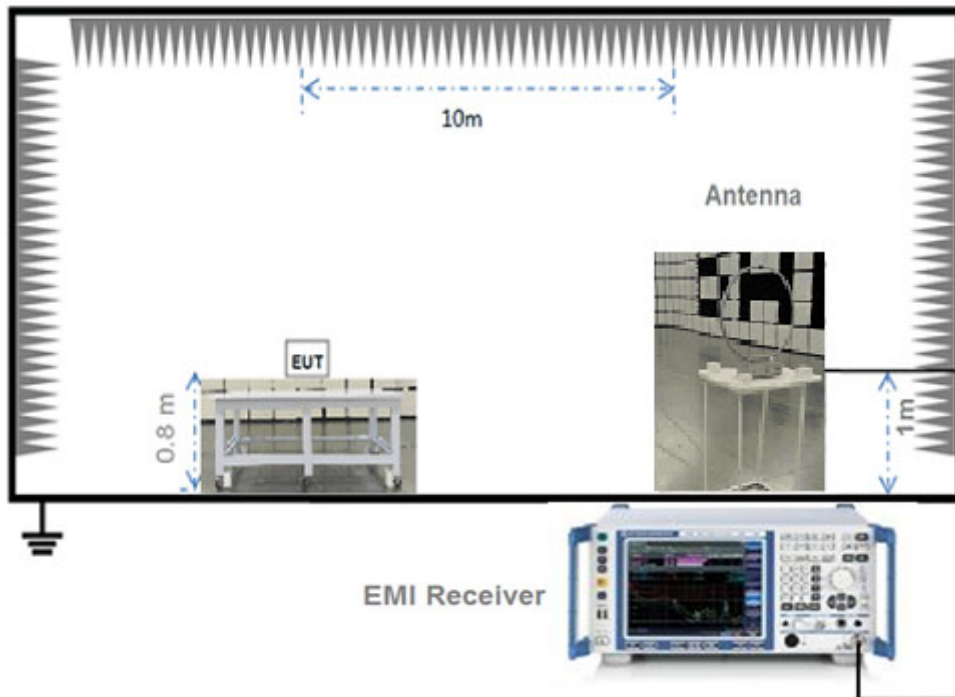
(Diagram 1)

4.5.2 For AC Power Supply Port Test



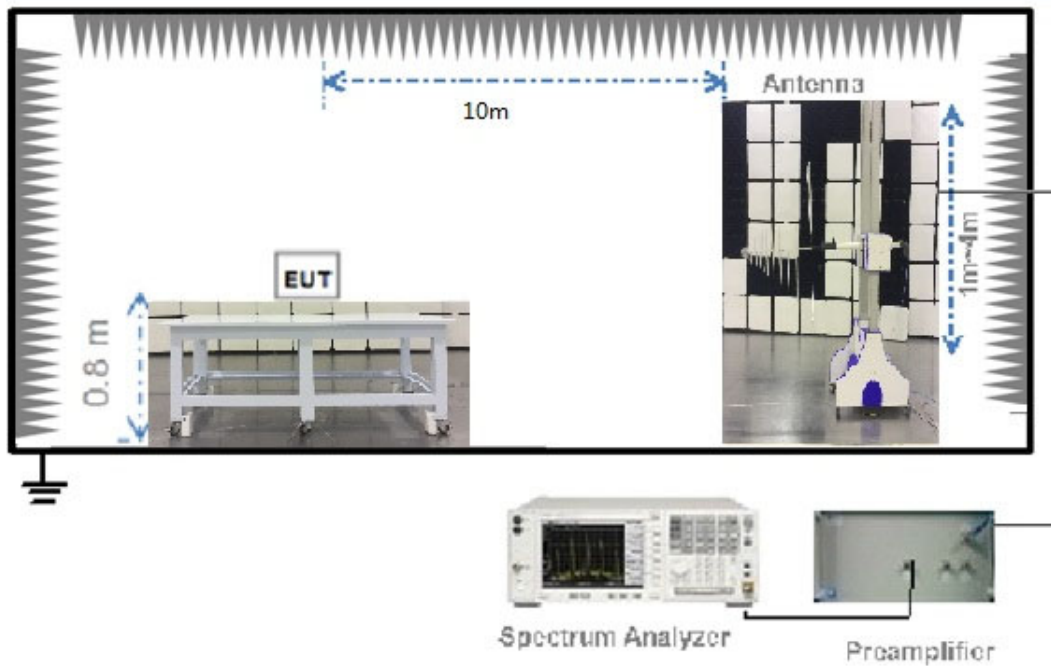
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



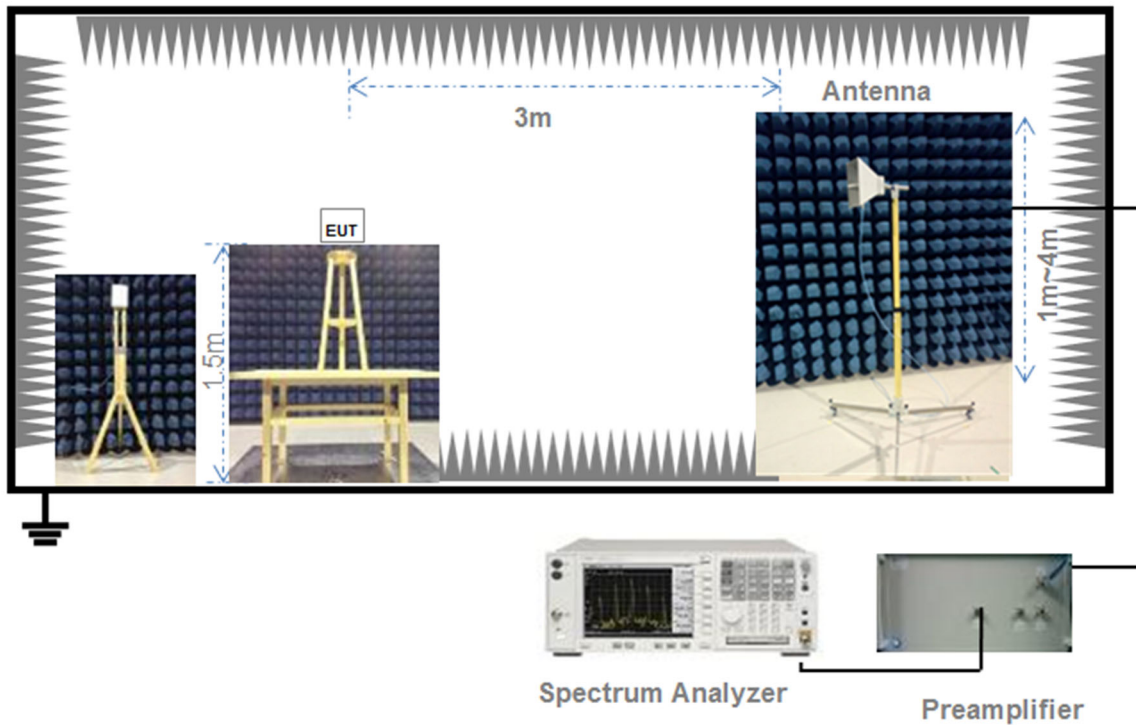
(Diagram 3)

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 μ H/50 Ω line impedance stabilization network (LISN).

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

5.4.2 Test Setup

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

5.4.3 Test Procedure

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

5.4.4 Test Result

Please refer to ANNEX A.5.

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

5.5.1 Limit

FCC §15.209 & 15.407(b)

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

Note¹: The Limit for radiated test was performed according to FCC Part 15C

Note²: 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 ≤ 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 μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

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

f) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

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

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

Peak power measurement procedure

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

a) RBW = as specified in Table 1.

b) VBW \geq 3 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 (≥ 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	1.38	1.43	96.64%	0.15
11n (HT20)/11ac (VHT20)	1.31	1.35	97.25%	0.12
11n (HT40)/11ac (VHT40)	0.65	0.69	94.98%	0.22
11ac (VHT80)	0.32	0.37	87.64%	0.57

Test Data

Conducted Power

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	13.22	20.99	1000	Pass
11a	CH157	13.31	21.43	1000	Pass
11a	CH165	13.43	22.03	1000	Pass
11n (HT20)	CH149	11.74	14.93	1000	Pass
11n (HT20)	CH157	11.84	15.28	1000	Pass
11n (HT20)	CH165	11.95	15.67	1000	Pass
11n (HT40)	CH151	11.67	14.69	1000	Pass
11n (HT40)	CH159	11.90	15.49	1000	Pass
11ac (VHT20)	CH149	10.79	11.99	1000	Pass
11ac (VHT20)	CH157	10.89	12.27	1000	Pass
11ac (VHT20)	CH165	10.45	11.09	1000	Pass
11ac (VHT40)	CH151	10.80	12.02	1000	Pass
11ac (VHT40)	CH159	10.92	12.36	1000	Pass
11ac (VHT80)	CH155	10.50	11.22	1000	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ2450037-606 Data Part 1.pdf".

Test Data

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	31.98	17.05
11a	CH157	33.41	17.16
11a	CH165	33.77	17.38
11n (HT20)	CH149	30.25	17.81
11n (HT20)	CH157	29.53	17.83
11n (HT20)	CH165	30.71	17.86
11n (HT40)	CH151	65.21	36.51
11n (HT40)	CH159	65.08	36.53
11ac (VHT20)	CH149	25.67	17.70
11ac (VHT20)	CH157	26.83	17.71
11ac (VHT20)	CH165	27.78	17.74
11ac (VHT40)	CH151	55.47	36.23
11ac (VHT40)	CH159	57.88	36.24
11ac (VHT80)	CH155	143.60	75.84

A.3 6 dB Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ2450037-606 Data Part 2.pdf".

Test Data

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

A.4 Power Spectral Density

Note: Test plots please refer to the document "Annex No.: BL-SZ2450037-606 Data Part 3.pdf".

Test Data

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
11a	CH149	0.06	30.00	Pass
11a	CH157	0.11	30.00	Pass
11a	CH165	0.19	30.00	Pass
11n (HT20)	CH149	-1.59	30.00	Pass
11n (HT20)	CH157	-1.57	30.00	Pass
11n (HT20)	CH165	-1.49	30.00	Pass
11n (HT40)	CH151	-4.56	30.00	Pass
11n (HT40)	CH159	-4.49	30.00	Pass
11ac (VHT20)	CH149	-2.59	30.00	Pass
11ac (VHT20)	CH157	-2.58	30.00	Pass
11ac (VHT20)	CH165	-3.07	30.00	Pass
11ac (VHT40)	CH151	-5.33	30.00	Pass
11ac (VHT40)	CH159	-5.54	30.00	Pass
11ac (VHT80)	CH155	-8.75	30.00	Pass

A.5 Conducted Emissions

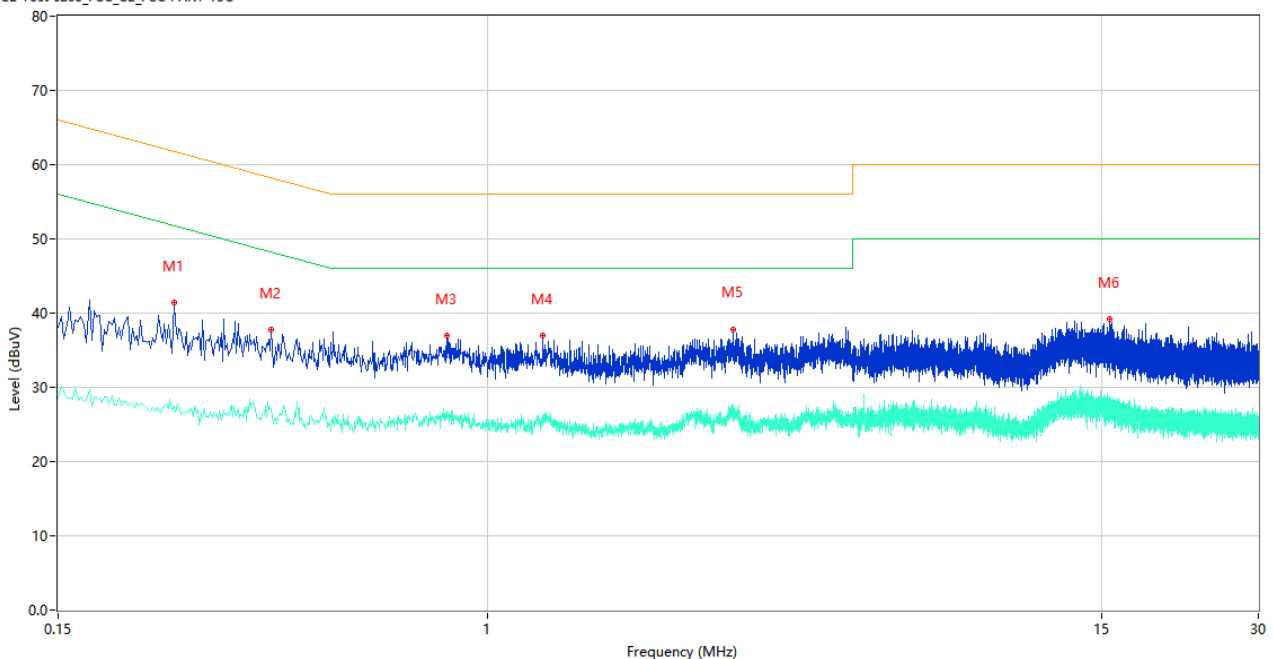
Note¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

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

Test Data and Plots

PHASE L

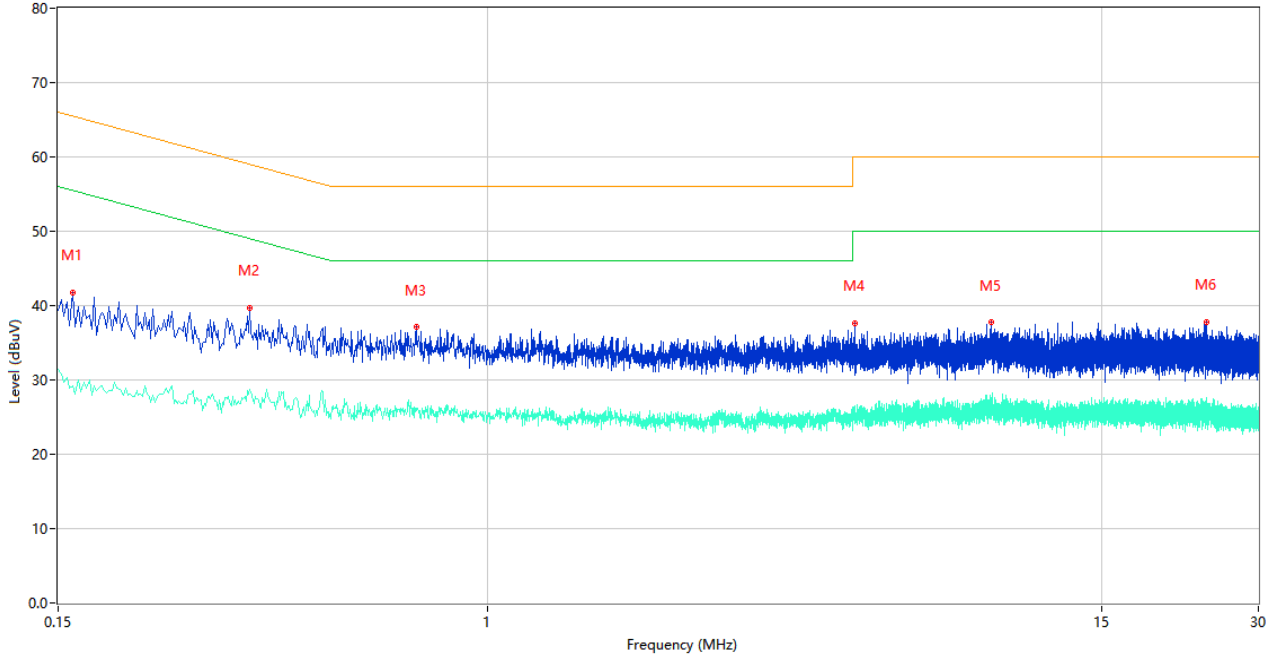
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.250	41.37	9.77	61.76	20.39	Peak	L	Pass
1**	0.250	27.54	9.77	51.76	24.22	AV	L	Pass
2	0.384	37.73	10.62	58.19	20.46	Peak	L	Pass
2**	0.384	27.10	10.62	48.19	21.09	AV	L	Pass
3	0.834	36.92	10.59	56.00	19.08	Peak	L	Pass
3**	0.834	26.85	10.59	46.00	19.15	AV	L	Pass
4	1.274	36.97	10.48	56.00	19.03	Peak	L	Pass
4**	1.274	26.05	10.48	46.00	19.95	AV	L	Pass
5	2.952	37.83	10.20	56.00	18.17	Peak	L	Pass
5**	2.952	27.63	10.20	46.00	18.37	AV	L	Pass
6	15.574	39.18	10.42	60.00	20.82	Peak	L	Pass
6**	15.574	27.11	10.42	50.00	22.89	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	0.160	41.76	9.78	65.46	23.70	Peak	N	Pass
1**	0.160	29.25	9.78	55.46	26.21	AV	N	Pass
2	0.350	39.70	10.76	58.96	19.26	Peak	N	Pass
2**	0.350	28.66	10.76	48.96	20.30	AV	N	Pass
3	0.728	37.08	10.38	56.00	18.92	Peak	N	Pass
3**	0.728	25.83	10.38	46.00	20.17	AV	N	Pass
4	5.056	37.63	10.32	60.00	22.37	Peak	N	Pass
4**	5.056	24.96	10.32	50.00	25.04	AV	N	Pass
5	9.238	37.75	10.44	60.00	22.25	Peak	N	Pass
5**	9.238	26.00	10.44	50.00	24.00	AV	N	Pass
6	23.914	37.78	11.14	60.00	22.22	Peak	N	Pass
6**	23.914	27.33	11.14	50.00	22.67	AV	N	Pass

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

Note¹: The symbol of "--" in the table which means not application.

Note²: 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.

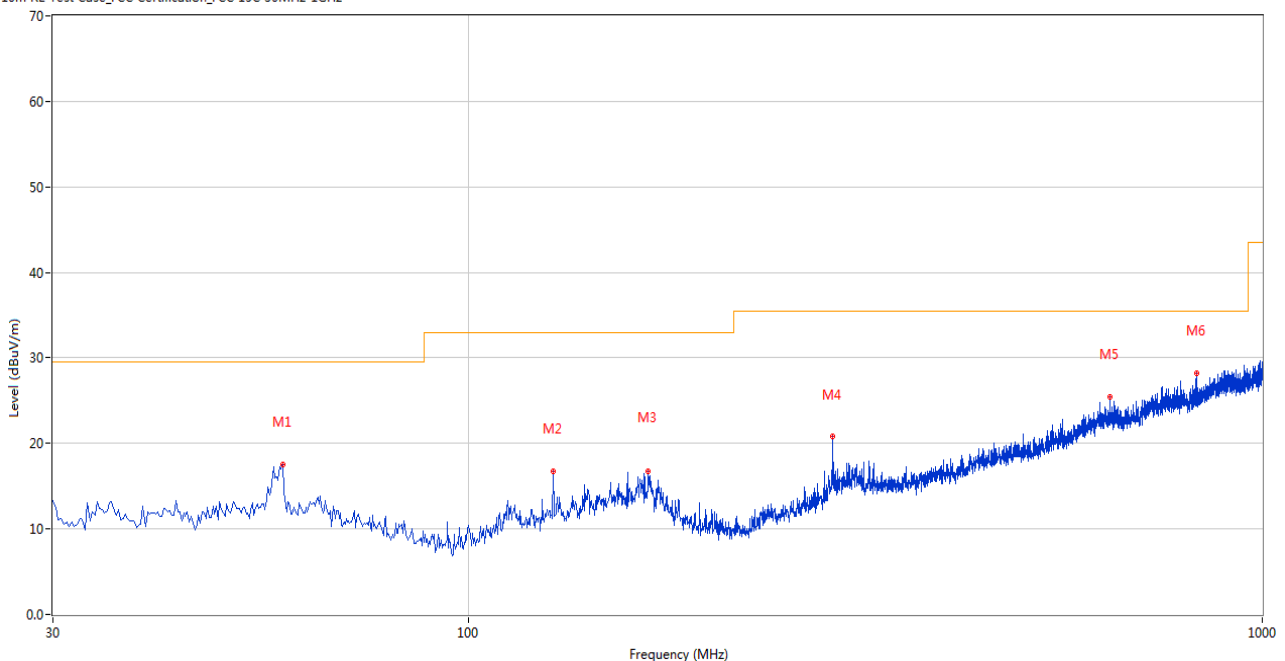
Note³: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note⁴: 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

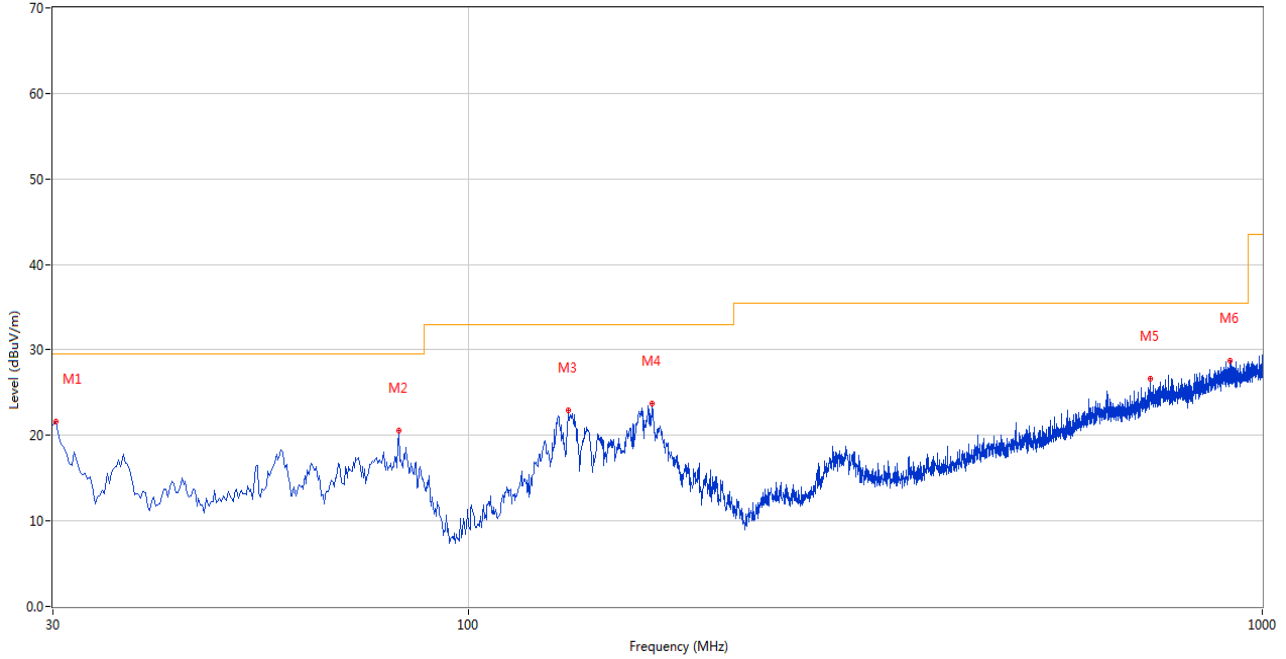
10m RE Test Case_FCC Certification_FCC 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	58.365	17.60	-26.37	29.5	11.90	Peak	128.00	200	Horizontal	Pass
2	127.946	16.70	-27.49	33.0	16.30	Peak	266.00	100	Horizontal	Pass
3	168.675	15.36	-26.00	33.0	17.64	Peak	291.00	100	Horizontal	Pass
4	287.956	20.78	-25.01	35.5	14.72	Peak	170.00	200	Horizontal	Pass
5	642.402	25.39	-15.84	35.5	10.11	Peak	226.00	100	Horizontal	Pass
6	826.413	28.27	-12.73	35.5	7.23	Peak	217.00	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	30.242	21.63	-28.19	29.5	7.87	Peak	183.00	100	Vertical	Pass
2	81.882	20.62	-30.78	29.5	8.88	Peak	183.00	100	Vertical	Pass
3	133.522	22.91	-26.98	33.0	10.09	Peak	297.00	100	Vertical	Pass
4	170.615	23.67	-26.07	33.0	9.33	Peak	229.00	100	Vertical	Pass
5	722.164	26.60	-13.99	35.5	8.90	Peak	257.00	100	Vertical	Pass
6	910.782	28.72	-10.55	35.5	6.78	Peak	0.00	200	Vertical	Pass

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

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	1622.100	39.19	-16.87	74.0	34.81	Peak	320.00	400	Horizontal	Pass
1**	1622.100	29.29	-16.87	54.0	24.71	AV	320.00	400	Horizontal	Pass
2	4261.800	49.61	-4.62	74.0	24.39	Peak	279.00	400	Horizontal	Pass
2**	4261.800	40.52	-4.62	54.0	13.48	AV	279.00	400	Horizontal	Pass
3	5743.600	107.13	-2.09	--	--	Peak	187.00	200	Horizontal	N/A
3**	5743.600	99.76	-2.09	--	--	AV	187.00	200	Horizontal	N/A
4	7445.050	49.84	-3.18	74.0	24.16	Peak	140.00	100	Horizontal	Pass
4**	7445.050	40.47	-3.18	54.0	13.53	AV	140.00	100	Horizontal	Pass
5	12621.200	52.95	1.74	74.0	21.05	Peak	247.00	200	Horizontal	Pass
5**	12621.200	43.86	1.74	54.0	10.14	AV	247.00	200	Horizontal	Pass
6	16124.963	55.54	0.80	74.0	18.46	Peak	89.00	100	Horizontal	Pass
6**	16124.963	46.22	0.80	54.0	7.78	AV	89.00	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	1597.500	38.88	-17.20	74.0	35.12	Peak	213.00	400	Vertical	Pass
1**	1597.500	29.31	-17.20	54.0	24.69	AV	213.00	400	Vertical	Pass
2	4382.400	50.03	-3.64	74.0	23.97	Peak	178.00	200	Vertical	Pass
2**	4382.400	40.65	-3.64	54.0	13.35	AV	178.00	200	Vertical	Pass
3	5745.800	101.34	-2.19	--	--	Peak	115.00	150	Vertical	N/A
3**	5745.800	94.00	-2.19	--	--	AV	115.00	150	Vertical	N/A
4	7575.000	49.22	-3.03	74.0	24.78	Peak	15.00	200	Vertical	Pass
4**	7575.000	39.27	-3.03	54.0	14.73	AV	15.00	200	Vertical	Pass
5	12278.213	52.96	1.74	74.0	21.04	Peak	15.00	150	Vertical	Pass
5**	12278.213	43.92	1.74	54.0	10.08	AV	15.00	150	Vertical	Pass
6	16067.213	55.37	1.23	74.0	18.63	Peak	128.00	400	Vertical	Pass
6**	16067.213	45.71	1.23	54.0	8.29	AV	128.00	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	1620.000	38.80	-17.42	74.0	35.20	Peak	296.00	300	Horizontal	Pass
1**	1620.000	29.83	-17.42	54.0	24.17	AV	296.00	300	Horizontal	Pass
2	4284.000	49.51	-4.19	74.0	24.49	Peak	292.00	300	Horizontal	Pass
2**	4284.000	40.63	-4.19	54.0	13.37	AV	292.00	300	Horizontal	Pass
3	5786.000	107.06	-1.65	--	--	Peak	202.00	150	Horizontal	N/A
3**	5786.000	100.09	-1.65	--	--	AV	202.00	150	Horizontal	N/A
4	7681.087	49.62	-2.58	74.0	24.38	Peak	80.00	400	Horizontal	Pass
4**	7681.087	40.67	-2.58	54.0	13.33	AV	80.00	400	Horizontal	Pass
5	12693.075	52.88	0.83	74.0	21.12	Peak	0.00	100	Horizontal	Pass
5**	12693.075	43.59	0.83	54.0	10.41	AV	0.00	100	Horizontal	Pass
6	15797.888	56.34	2.26	74.0	17.66	Peak	220.00	300	Horizontal	Pass
6**	15797.888	46.96	2.26	54.0	7.04	AV	220.00	300	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	1617.200	38.43	-17.12	74.0	35.57	Peak	360.00	400	Vertical	Pass
1**	1617.200	29.11	-17.12	54.0	24.89	AV	360.00	400	Vertical	Pass
2	4359.400	49.49	-4.09	74.0	24.51	Peak	347.00	300	Vertical	Pass
2**	4359.400	40.62	-4.09	54.0	13.38	AV	347.00	300	Vertical	Pass
3	5785.800	102.46	-1.64	--	--	Peak	121.00	150	Vertical	N/A
3**	5785.800	94.35	-1.64	--	--	AV	121.00	150	Vertical	N/A
4	7445.625	49.55	-3.14	74.0	24.45	Peak	170.00	100	Vertical	Pass
4**	7445.625	40.31	-3.14	54.0	13.69	AV	170.00	100	Vertical	Pass
5	12628.100	53.32	1.49	74.0	20.68	Peak	78.00	200	Vertical	Pass
5**	12628.100	42.64	1.49	54.0	11.36	AV	78.00	200	Vertical	Pass
6	15801.037	56.14	2.32	74.0	17.86	Peak	27.00	400	Vertical	Pass
6**	15801.037	46.56	2.32	54.0	7.44	AV	27.00	400	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	1621.300	38.80	-16.94	74.0	35.20	Peak	0.00	200	Horizontal	Pass
1**	1621.300	29.37	-16.94	54.0	24.63	AV	0.00	200	Horizontal	Pass
2	4391.200	50.45	-3.40	74.0	23.55	Peak	127.00	400	Horizontal	Pass
2**	4391.200	41.96	-3.40	54.0	12.04	AV	127.00	400	Horizontal	Pass
3	5826.600	106.25	-2.01	--	--	Peak	182.00	150	Horizontal	N/A
3**	5826.600	99.16	-2.01	--	--	AV	182.00	150	Horizontal	N/A
4	7364.837	49.61	-3.42	74.0	24.39	Peak	360.00	400	Horizontal	Pass
4**	7364.837	40.33	-3.42	54.0	13.67	AV	360.00	400	Horizontal	Pass
5	11956.787	52.95	1.08	74.0	21.05	Peak	323.00	150	Horizontal	Pass
5**	11956.787	44.06	1.08	54.0	9.94	AV	323.00	150	Horizontal	Pass
6	15821.513	56.26	1.80	74.0	17.74	Peak	234.00	400	Horizontal	Pass
6**	15821.513	46.35	1.80	54.0	7.65	AV	234.00	400	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	1508.000	38.79	-17.02	74.0	35.21	Peak	289.00	300	Vertical	Pass
1**	1508.000	29.99	-17.02	54.0	24.01	AV	289.00	300	Vertical	Pass
2	4366.400	50.83	-3.85	74.0	23.17	Peak	88.00	300	Vertical	Pass
2**	4366.400	40.84	-3.85	54.0	13.16	AV	88.00	300	Vertical	Pass
3	5826.400	101.13	-2.02	--	--	Peak	113.00	100	Vertical	N/A
3**	5826.400	94.08	-2.02	--	--	AV	113.00	100	Vertical	N/A
4	7337.812	49.57	-2.88	74.0	24.43	Peak	140.00	400	Vertical	Pass
4**	7337.812	41.28	-2.88	54.0	12.72	AV	140.00	400	Vertical	Pass
5	12282.237	53.64	1.79	74.0	20.36	Peak	51.00	100	Vertical	Pass
5**	12282.237	44.31	1.79	54.0	9.69	AV	51.00	100	Vertical	Pass
6	15828.338	55.55	1.54	74.0	18.45	Peak	245.00	300	Vertical	Pass
6**	15828.338	45.91	1.54	54.0	8.09	AV	245.00	300	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	1587.300	38.84	-17.00	74.0	35.16	Peak	134.00	400	Horizontal	Pass
1**	1587.300	29.56	-17.00	54.0	24.44	AV	134.00	400	Horizontal	Pass
2	4385.800	50.37	-3.33	74.0	23.63	Peak	296.00	400	Horizontal	Pass
2**	4385.800	41.04	-3.33	54.0	12.96	AV	296.00	400	Horizontal	Pass
3	5743.600	105.81	-2.09	--	--	Peak	196.00	150	Horizontal	N/A
3**	5743.600	98.98	-2.09	--	--	AV	196.00	150	Horizontal	N/A
4	7320.563	50.02	-3.09	74.0	23.98	Peak	168.00	400	Horizontal	Pass
4**	7320.563	40.50	-3.09	54.0	13.50	AV	168.00	400	Horizontal	Pass
5	12268.151	53.41	1.39	74.0	20.59	Peak	302.00	200	Horizontal	Pass
5**	12268.151	43.48	1.39	54.0	10.52	AV	302.00	200	Horizontal	Pass
6	15848.813	55.63	1.34	74.0	18.37	Peak	84.00	400	Horizontal	Pass
6**	15848.813	46.47	1.34	54.0	7.53	AV	84.00	400	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	1488.300	38.59	-16.80	74.0	35.41	Peak	337.00	100	Vertical	Pass
1**	1488.300	29.42	-16.80	54.0	24.58	AV	337.00	100	Vertical	Pass
2	4379.800	50.42	-3.28	74.0	23.58	Peak	78.00	400	Vertical	Pass
2**	4379.800	42.08	-3.28	54.0	11.92	AV	78.00	400	Vertical	Pass
3	5746.000	100.35	-2.21	--	--	Peak	122.00	100	Vertical	N/A
3**	5746.000	93.18	-2.21	--	--	AV	122.00	100	Vertical	N/A
4	7356.788	49.63	-3.82	74.0	24.37	Peak	79.00	400	Vertical	Pass
4**	7356.788	39.77	-3.82	54.0	14.23	AV	79.00	400	Vertical	Pass
5	12280.800	53.74	1.80	74.0	20.26	Peak	210.00	200	Vertical	Pass
5**	12280.800	43.89	1.80	54.0	10.11	AV	210.00	200	Vertical	Pass
6	15574.237	55.69	1.42	74.0	18.31	Peak	2.00	100	Vertical	Pass
6**	15574.237	46.13	1.42	54.0	7.87	AV	2.00	100	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	1506.000	39.80	-16.83	74.0	34.20	Peak	76.00	100	Horizontal	Pass
1**	1506.000	29.34	-16.83	54.0	24.66	AV	76.00	100	Horizontal	Pass
2	4380.600	50.46	-3.42	74.0	23.54	Peak	39.00	200	Horizontal	Pass
2**	4380.600	41.47	-3.42	54.0	12.53	AV	39.00	200	Horizontal	Pass
3	5781.800	105.27	-1.41	--	--	Peak	202.00	150	Horizontal	N/A
3**	5781.800	97.59	-1.41	--	--	AV	202.00	150	Horizontal	N/A
4	7339.825	49.51	-2.95	74.0	24.49	Peak	360.00	100	Horizontal	Pass
4**	7339.825	41.20	-2.95	54.0	12.80	AV	360.00	100	Horizontal	Pass
5	12321.625	52.90	1.42	74.0	21.10	Peak	0.00	100	Horizontal	Pass
5**	12321.625	43.48	1.42	54.0	10.52	AV	0.00	100	Horizontal	Pass
6	15793.950	55.58	2.13	74.0	18.42	Peak	341.00	200	Horizontal	Pass
6**	15793.950	46.15	2.13	54.0	7.85	AV	341.00	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	1509.800	38.94	-17.19	74.0	35.06	Peak	56.00	200	Vertical	Pass
1**	1509.800	29.33	-17.19	54.0	24.67	AV	56.00	200	Vertical	Pass
2	4388.000	49.83	-3.39	74.0	24.17	Peak	252.00	400	Vertical	Pass
2**	4388.000	41.27	-3.39	54.0	12.73	AV	252.00	400	Vertical	Pass
3	5783.400	101.17	-1.48	--	--	Peak	120.00	200	Vertical	N/A
3**	5783.400	93.54	-1.48	--	--	AV	120.00	200	Vertical	N/A
4	7683.675	49.85	-2.67	74.0	24.15	Peak	249.00	200	Vertical	Pass
4**	7683.675	39.93	-2.67	54.0	14.07	AV	249.00	200	Vertical	Pass
5	12491.537	52.79	1.67	74.0	21.21	Peak	282.00	150	Vertical	Pass
5**	12491.537	44.01	1.67	54.0	9.99	AV	282.00	150	Vertical	Pass
6	15824.400	55.53	1.67	74.0	18.47	Peak	303.00	200	Vertical	Pass
6**	15824.400	46.39	1.67	54.0	7.61	AV	303.00	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	1506.700	38.50	-16.82	74.0	35.50	Peak	5.00	300	Horizontal	Pass
1**	1506.700	29.87	-16.82	54.0	24.13	AV	5.00	300	Horizontal	Pass
2	4382.000	49.61	-3.64	74.0	24.39	Peak	170.00	300	Horizontal	Pass
2**	4382.000	40.81	-3.64	54.0	13.19	AV	170.00	300	Horizontal	Pass
3	5823.800	104.77	-2.13	--	--	Peak	193.00	200	Horizontal	N/A
3**	5823.800	97.87	-2.13	--	--	AV	193.00	200	Horizontal	N/A
4	7692.588	49.33	-2.50	74.0	24.67	Peak	95.00	400	Horizontal	Pass
4**	7692.588	39.79	-2.50	54.0	14.21	AV	95.00	400	Horizontal	Pass
5	12455.599	52.66	1.87	74.0	21.34	Peak	180.00	200	Horizontal	Pass
5**	12455.599	42.67	1.87	54.0	11.33	AV	180.00	200	Horizontal	Pass
6	16038.075	55.98	0.78	74.0	18.02	Peak	273.00	300	Horizontal	Pass
6**	16038.075	46.17	0.78	54.0	7.83	AV	273.00	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	1598.000	39.21	-17.26	74.0	34.79	Peak	341.00	100	Vertical	Pass
1**	1598.000	29.33	-17.26	54.0	24.67	AV	341.00	100	Vertical	Pass
2	4257.000	49.63	-4.58	74.0	24.37	Peak	50.00	100	Vertical	Pass
2**	4257.000	39.44	-4.58	54.0	14.56	AV	50.00	100	Vertical	Pass
3	5823.600	100.40	-2.13	--	--	Peak	120.00	200	Vertical	N/A
3**	5823.600	92.37	-2.13	--	--	AV	120.00	200	Vertical	N/A
4	7339.825	50.32	-2.95	74.0	23.68	Peak	232.00	200	Vertical	Pass
4**	7339.825	42.01	-2.95	54.0	11.99	AV	232.00	200	Vertical	Pass
5	11853.575	53.03	1.07	74.0	20.97	Peak	14.00	150	Vertical	Pass
5**	11853.575	42.22	1.07	54.0	11.78	AV	14.00	150	Vertical	Pass
6	15796.575	56.02	2.22	74.0	17.98	Peak	301.00	200	Vertical	Pass
6**	15796.575	46.25	2.22	54.0	7.75	AV	301.00	200	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	1587.000	38.75	-16.96	74.0	35.25	Peak	360.00	200	Horizontal	Pass
1**	1587.000	29.32	-16.96	54.0	24.68	AV	360.00	200	Horizontal	Pass
2	4382.400	50.18	-3.64	74.0	23.82	Peak	240.00	100	Horizontal	Pass
2**	4382.400	40.94	-3.64	54.0	13.06	AV	240.00	100	Horizontal	Pass
3	5753.000	102.81	-2.00	--	--	Peak	218.00	200	Horizontal	N/A
3**	5753.000	95.81	-2.00	--	--	AV	218.00	200	Horizontal	N/A
4	7727.375	49.06	-2.50	74.0	24.94	Peak	173.00	200	Horizontal	Pass
4**	7727.375	40.34	-2.50	54.0	13.66	AV	173.00	200	Horizontal	Pass
5	12320.474	53.57	1.42	74.0	20.43	Peak	153.00	150	Horizontal	Pass
5**	12320.474	44.02	1.42	54.0	9.98	AV	153.00	150	Horizontal	Pass
6	15839.887	55.53	1.45	74.0	18.47	Peak	54.00	300	Horizontal	Pass
6**	15839.887	46.50	1.45	54.0	7.50	AV	54.00	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	1446.500	38.66	-17.20	74.0	35.34	Peak	260.00	200	Vertical	Pass
1**	1446.500	30.49	-17.20	54.0	23.51	AV	260.00	200	Vertical	Pass
2	4377.200	49.74	-3.65	74.0	24.26	Peak	325.00	200	Vertical	Pass
2**	4377.200	40.50	-3.65	54.0	13.50	AV	325.00	200	Vertical	Pass
3	5748.000	97.59	-2.21	--	--	Peak	117.00	200	Vertical	N/A
3**	5748.000	89.61	-2.21	--	--	AV	117.00	200	Vertical	N/A
4	7362.825	50.10	-3.81	74.0	23.90	Peak	342.00	300	Vertical	Pass
4**	7362.825	40.24	-3.81	54.0	13.76	AV	342.00	300	Vertical	Pass
5	12454.737	53.24	1.88	74.0	20.76	Peak	96.00	150	Vertical	Pass
5**	12454.737	43.00	1.88	54.0	11.00	AV	96.00	150	Vertical	Pass
6	16012.875	55.83	0.46	74.0	18.17	Peak	29.00	300	Vertical	Pass
6**	16012.875	46.02	0.46	54.0	7.98	AV	29.00	300	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	1506.800	38.74	-16.82	74.0	35.26	Peak	207.00	300	Horizontal	Pass
1**	1506.800	30.43	-16.82	54.0	23.57	AV	207.00	300	Horizontal	Pass
2	4380.400	49.95	-3.39	74.0	24.05	Peak	47.00	300	Horizontal	Pass
2**	4380.400	42.10	-3.39	54.0	11.90	AV	47.00	300	Horizontal	Pass
3	5796.800	102.17	-1.71	--	--	Peak	210.00	150	Horizontal	N/A
3**	5796.800	94.57	-1.71	--	--	AV	210.00	150	Horizontal	N/A
4	7321.425	49.42	-3.18	74.0	24.58	Peak	290.00	100	Horizontal	Pass
4**	7321.425	40.08	-3.18	54.0	13.92	AV	290.00	100	Horizontal	Pass
5	12283.388	52.76	1.78	74.0	21.24	Peak	235.00	200	Horizontal	Pass
5**	12283.388	44.44	1.78	54.0	9.56	AV	235.00	200	Horizontal	Pass
6	15850.912	55.44	1.31	74.0	18.56	Peak	137.00	300	Horizontal	Pass
6**	15850.912	46.66	1.31	54.0	7.34	AV	137.00	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	1488.900	38.80	-16.77	74.0	35.20	Peak	147.00	400	Vertical	Pass
1**	1488.900	29.88	-16.77	54.0	24.12	AV	147.00	400	Vertical	Pass
2	3675.800	49.89	-5.23	74.0	24.11	Peak	208.00	200	Vertical	Pass
2**	3675.800	39.50	-5.23	54.0	14.50	AV	208.00	200	Vertical	Pass
3	5784.400	97.18	-1.61	--	--	Peak	110.00	100	Vertical	N/A
3**	5784.400	88.65	-1.61	--	--	AV	110.00	100	Vertical	N/A
4	7627.325	49.49	-2.75	74.0	24.51	Peak	166.00	400	Vertical	Pass
4**	7627.325	40.16	-2.75	54.0	13.84	AV	166.00	400	Vertical	Pass
5	12396.375	52.79	1.60	74.0	21.21	Peak	223.00	100	Vertical	Pass
5**	12396.375	43.35	1.60	54.0	10.65	AV	223.00	100	Vertical	Pass
6	15849.338	55.85	1.34	74.0	18.15	Peak	258.00	400	Vertical	Pass
6**	15849.338	46.23	1.34	54.0	7.77	AV	258.00	400	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	1583.800	39.70	-17.07	74.0	34.30	Peak	263.00	400	Horizontal	Pass
1**	1583.800	29.74	-17.07	54.0	24.26	AV	263.00	400	Horizontal	Pass
2	4377.000	49.93	-3.71	74.0	24.07	Peak	118.00	100	Horizontal	Pass
2**	4377.000	40.94	-3.71	54.0	13.06	AV	118.00	100	Horizontal	Pass
3	5743.600	105.97	-2.09	--	--	Peak	202.00	200	Horizontal	N/A
3**	5743.600	98.35	-2.09	--	--	AV	202.00	200	Horizontal	N/A
4	7339.825	49.25	-2.95	74.0	24.75	Peak	317.00	100	Horizontal	Pass
4**	7339.825	41.08	-2.95	54.0	12.92	AV	317.00	100	Horizontal	Pass
5	12625.800	52.99	1.57	74.0	21.01	Peak	201.00	100	Horizontal	Pass
5**	12625.800	42.96	1.57	54.0	11.04	AV	201.00	100	Horizontal	Pass
6	15839.100	55.42	1.45	74.0	18.58	Peak	34.00	200	Horizontal	Pass
6**	15839.100	47.02	1.45	54.0	6.98	AV	34.00	200	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	1495.100	38.66	-16.86	74.0	35.34	Peak	360.00	200	Vertical	Pass
1**	1495.100	29.96	-16.86	54.0	24.04	AV	360.00	200	Vertical	Pass
2	4374.400	50.65	-4.00	74.0	23.35	Peak	332.00	300	Vertical	Pass
2**	4374.400	40.69	-4.00	54.0	13.31	AV	332.00	300	Vertical	Pass
3	5744.000	99.96	-2.06	--	--	Peak	124.00	100	Vertical	N/A
3**	5744.000	92.90	-2.06	--	--	AV	124.00	100	Vertical	N/A
4	7731.112	49.13	-2.43	74.0	24.87	Peak	159.00	200	Vertical	Pass
4**	7731.112	40.59	-2.43	54.0	13.41	AV	159.00	200	Vertical	Pass
5	12280.800	53.36	1.80	74.0	20.64	Peak	196.00	100	Vertical	Pass
5**	12280.800	43.63	1.80	54.0	10.37	AV	196.00	100	Vertical	Pass
6	16158.825	55.82	0.93	74.0	18.18	Peak	135.00	200	Vertical	Pass
6**	16158.825	46.56	0.93	54.0	7.44	AV	135.00	200	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	1508.100	38.87	-17.03	74.0	35.13	Peak	244.00	100	Horizontal	Pass
1**	1508.100	29.06	-17.03	54.0	24.94	AV	244.00	100	Horizontal	Pass
2	4389.800	49.72	-3.33	74.0	24.28	Peak	157.00	300	Horizontal	Pass
2**	4389.800	40.76	-3.33	54.0	13.24	AV	157.00	300	Horizontal	Pass
3	5782.600	104.84	-1.38	--	--	Peak	211.00	100	Horizontal	N/A
3**	5782.600	97.41	-1.38	--	--	AV	211.00	100	Horizontal	N/A
4	7466.900	49.33	-3.28	74.0	24.67	Peak	63.00	200	Horizontal	Pass
4**	7466.900	40.71	-3.28	54.0	13.29	AV	63.00	200	Horizontal	Pass
5	12242.275	53.39	1.04	74.0	20.61	Peak	112.00	100	Horizontal	Pass
5**	12242.275	43.60	1.04	54.0	10.40	AV	112.00	100	Horizontal	Pass
6	15812.325	55.62	2.12	74.0	18.38	Peak	230.00	100	Horizontal	Pass
6**	15812.325	46.60	2.12	54.0	7.40	AV	230.00	100	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	1486.100	38.76	-16.69	74.0	35.24	Peak	0.00	300	Vertical	Pass
1**	1486.100	29.35	-16.69	54.0	24.65	AV	0.00	300	Vertical	Pass
2	4386.000	49.66	-3.30	74.0	24.34	Peak	257.00	300	Vertical	Pass
2**	4386.000	40.97	-3.30	54.0	13.03	AV	257.00	300	Vertical	Pass
3	5786.600	100.46	-1.66	--	--	Peak	118.00	100	Vertical	N/A
3**	5786.600	92.35	-1.66	--	--	AV	118.00	100	Vertical	N/A
4	7340.112	49.68	-2.98	74.0	24.32	Peak	128.00	300	Vertical	Pass
4**	7340.112	41.36	-2.98	54.0	12.64	AV	128.00	300	Vertical	Pass
5	11617.537	52.86	-0.05	74.0	21.14	Peak	161.00	150	Vertical	Pass
5**	11617.537	43.65	-0.05	54.0	10.35	AV	161.00	150	Vertical	Pass
6	16193.475	55.90	1.59	74.0	18.10	Peak	339.00	200	Vertical	Pass
6**	16193.475	45.89	1.59	54.0	8.11	AV	339.00	200	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	1611.700	39.34	-17.16	74.0	34.66	Peak	27.00	400	Horizontal	Pass
1**	1611.700	29.03	-17.16	54.0	24.97	AV	27.00	400	Horizontal	Pass
2	4298.000	49.55	-4.04	74.0	24.45	Peak	49.00	300	Horizontal	Pass
2**	4298.000	40.42	-4.04	54.0	13.58	AV	49.00	300	Horizontal	Pass
3	5823.200	103.92	-2.13	--	--	Peak	202.00	150	Horizontal	N/A
3**	5823.200	96.83	-2.13	--	--	AV	202.00	150	Horizontal	N/A
4	7364.837	49.51	-3.42	74.0	24.49	Peak	262.00	400	Horizontal	Pass
4**	7364.837	41.03	-3.42	54.0	12.97	AV	262.00	400	Horizontal	Pass
5	12308.688	52.82	1.37	74.0	21.18	Peak	360.00	150	Horizontal	Pass
5**	12308.688	43.82	1.37	54.0	10.18	AV	360.00	150	Horizontal	Pass
6	15819.412	55.67	1.90	74.0	18.33	Peak	203.00	400	Horizontal	Pass
6**	15819.412	46.40	1.90	54.0	7.60	AV	203.00	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	1485.900	38.77	-16.68	74.0	35.23	Peak	0.00	300	Vertical	Pass
1**	1485.900	29.52	-16.68	54.0	24.48	AV	0.00	300	Vertical	Pass
2	4380.800	50.69	-3.46	74.0	23.31	Peak	216.00	400	Vertical	Pass
2**	4380.800	40.92	-3.46	54.0	13.08	AV	216.00	400	Vertical	Pass
3	5822.800	97.68	-2.13	--	--	Peak	123.00	150	Vertical	N/A
3**	5822.800	90.83	-2.13	--	--	AV	123.00	150	Vertical	N/A
4	7319.987	49.32	-3.06	74.0	24.68	Peak	356.00	300	Vertical	Pass
4**	7319.987	40.55	-3.06	54.0	13.45	AV	356.00	300	Vertical	Pass
5	12335.713	53.25	1.34	74.0	20.75	Peak	190.00	150	Vertical	Pass
5**	12335.713	43.10	1.34	54.0	10.90	AV	190.00	150	Vertical	Pass
6	15662.701	54.93	1.31	74.0	19.07	Peak	343.00	300	Vertical	Pass
6**	15662.701	45.49	1.31	54.0	8.51	AV	343.00	300	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	1458.700	39.41	-16.99	74.0	34.59	Peak	291.00	400	Horizontal	Pass
1**	1458.700	29.66	-16.99	54.0	24.34	AV	291.00	400	Horizontal	Pass
2	4390.800	50.07	-3.35	74.0	23.93	Peak	1.00	300	Horizontal	Pass
2**	4390.800	41.88	-3.35	54.0	12.12	AV	1.00	300	Horizontal	Pass
3	5757.200	102.44	-1.77	--	--	Peak	188.00	200	Horizontal	N/A
3**	5757.200	94.91	-1.77	--	--	AV	188.00	200	Horizontal	N/A
4	7512.325	49.50	-3.26	74.0	24.50	Peak	307.00	300	Horizontal	Pass
4**	7512.325	39.66	-3.26	54.0	14.34	AV	307.00	300	Horizontal	Pass
5	11954.487	53.15	1.19	74.0	20.85	Peak	12.00	100	Horizontal	Pass
5**	11954.487	44.43	1.19	54.0	9.57	AV	12.00	100	Horizontal	Pass
6	15851.437	55.90	1.29	74.0	18.10	Peak	344.00	400	Horizontal	Pass
6**	15851.437	45.90	1.29	54.0	8.10	AV	344.00	400	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	1617.100	39.10	-17.14	74.0	34.90	Peak	339.00	400	Vertical	Pass
1**	1617.100	29.32	-17.14	54.0	24.68	AV	339.00	400	Vertical	Pass
2	4374.400	49.73	-4.00	74.0	24.27	Peak	8.00	300	Vertical	Pass
2**	4374.400	40.09	-4.00	54.0	13.91	AV	8.00	300	Vertical	Pass
3	5753.200	96.70	-2.03	--	--	Peak	122.00	150	Vertical	N/A
3**	5753.200	89.50	-2.03	--	--	AV	122.00	150	Vertical	N/A
4	7321.713	49.72	-3.21	74.0	24.28	Peak	189.00	400	Vertical	Pass
4**	7321.713	39.95	-3.21	54.0	14.05	AV	189.00	400	Vertical	Pass
5	12522.588	53.76	1.42	74.0	20.24	Peak	302.00	200	Vertical	Pass
5**	12522.588	43.48	1.42	54.0	10.52	AV	302.00	200	Vertical	Pass
6	15837.263	55.99	1.45	74.0	18.01	Peak	270.00	200	Vertical	Pass
6**	15837.263	46.29	1.45	54.0	7.71	AV	270.00	200	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	1458.700	39.15	-16.99	74.0	34.85	Peak	214.00	300	Horizontal	Pass
1**	1458.700	29.49	-16.99	54.0	24.51	AV	214.00	300	Horizontal	Pass
2	4383.600	50.36	-3.64	74.0	23.64	Peak	360.00	300	Horizontal	Pass
2**	4383.600	40.67	-3.64	54.0	13.33	AV	360.00	300	Horizontal	Pass
3	5800.000	100.08	-1.72	--	--	Peak	212.00	150	Horizontal	N/A
3**	5800.000	92.40	-1.72	--	--	AV	212.00	150	Horizontal	N/A
4	7323.150	49.63	-3.36	74.0	24.37	Peak	360.00	100	Horizontal	Pass
4**	7323.150	40.20	-3.36	54.0	13.80	AV	360.00	100	Horizontal	Pass
5	11939.826	53.32	1.69	74.0	20.68	Peak	263.00	200	Horizontal	Pass
5**	11939.826	43.83	1.69	54.0	10.17	AV	263.00	200	Horizontal	Pass
6	15835.425	56.53	1.45	74.0	17.47	Peak	207.00	200	Horizontal	Pass
6**	15835.425	46.77	1.45	54.0	7.23	AV	207.00	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	1580.600	39.15	-17.22	74.0	34.85	Peak	87.00	100	Vertical	Pass
1**	1580.600	28.94	-17.22	54.0	25.06	AV	87.00	100	Vertical	Pass
2	4378.000	50.15	-3.46	74.0	23.85	Peak	321.00	400	Vertical	Pass
2**	4378.000	41.16	-3.46	54.0	12.84	AV	321.00	400	Vertical	Pass
3	5787.800	95.75	-1.70	--	--	Peak	126.00	150	Vertical	N/A
3**	5787.800	87.75	-1.70	--	--	AV	126.00	150	Vertical	N/A
4	7446.200	50.48	-3.13	74.0	23.52	Peak	108.00	100	Vertical	Pass
4**	7446.200	41.22	-3.13	54.0	12.78	AV	108.00	100	Vertical	Pass
5	12608.838	52.99	1.90	74.0	21.01	Peak	124.00	150	Vertical	Pass
5**	12608.838	43.89	1.90	54.0	10.11	AV	124.00	150	Vertical	Pass
6	16117.088	55.61	0.65	74.0	18.39	Peak	94.00	300	Vertical	Pass
6**	16117.088	46.91	0.65	54.0	7.09	AV	94.00	300	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	1458.900	38.73	-17.00	74.0	35.27	Peak	2.00	100	Horizontal	Pass
1**	1458.900	29.33	-17.00	54.0	24.67	AV	2.00	100	Horizontal	Pass
2	4366.400	50.81	-3.85	74.0	23.19	Peak	188.00	100	Horizontal	Pass
2**	4366.400	42.19	-3.85	54.0	11.81	AV	188.00	100	Horizontal	Pass
3	5781.800	99.21	-1.41	--	--	Peak	198.00	150	Horizontal	N/A
3**	5781.800	90.92	-1.41	--	--	AV	198.00	150	Horizontal	N/A
4	7341.550	49.45	-3.12	74.0	24.55	Peak	144.00	200	Horizontal	Pass
4**	7341.550	41.03	-3.12	54.0	12.97	AV	144.00	200	Horizontal	Pass
5	12089.326	53.14	0.53	74.0	20.86	Peak	242.00	100	Horizontal	Pass
5**	12089.326	42.25	0.53	54.0	11.75	AV	242.00	100	Horizontal	Pass
6	15828.600	55.35	1.54	74.0	18.65	Peak	82.00	100	Horizontal	Pass
6**	15828.600	46.08	1.54	54.0	7.92	AV	82.00	100	Horizontal	Pass

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

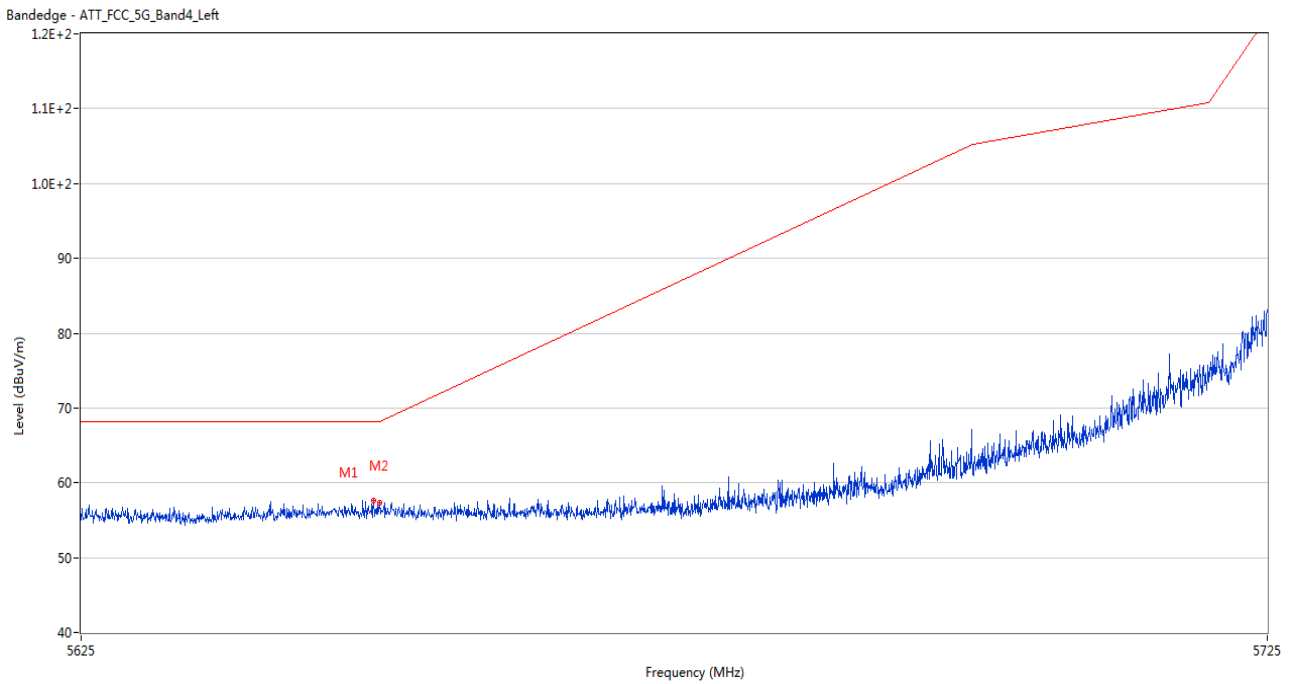
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1503.300	38.98	-16.99	74.0	35.02	Peak	149.00	400	Vertical	Pass
1**	1503.300	30.14	-16.99	54.0	23.86	AV	149.00	400	Vertical	Pass
2	4392.600	50.60	-3.58	74.0	23.40	Peak	42.00	300	Vertical	Pass
2**	4392.600	41.19	-3.58	54.0	12.81	AV	42.00	300	Vertical	Pass
3	5782.400	93.64	-1.35	--	--	Peak	125.00	100	Vertical	N/A
3**	5782.400	85.74	-1.35	--	--	AV	125.00	100	Vertical	N/A
4	7675.050	49.86	-2.45	74.0	24.14	Peak	76.00	200	Vertical	Pass
4**	7675.050	40.56	-2.45	54.0	13.44	AV	76.00	200	Vertical	Pass
5	12273.613	53.20	1.57	74.0	20.80	Peak	123.00	150	Vertical	Pass
5**	12273.613	43.42	1.57	54.0	10.58	AV	123.00	150	Vertical	Pass
6	15802.613	55.82	2.30	74.0	18.18	Peak	226.00	150	Vertical	Pass
6**	15802.613	46.18	2.30	54.0	7.82	AV	226.00	150	Vertical	Pass

A.6.2 Band Edge (Restricted-band)

Test Band	Mode	Channel	Verdict
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

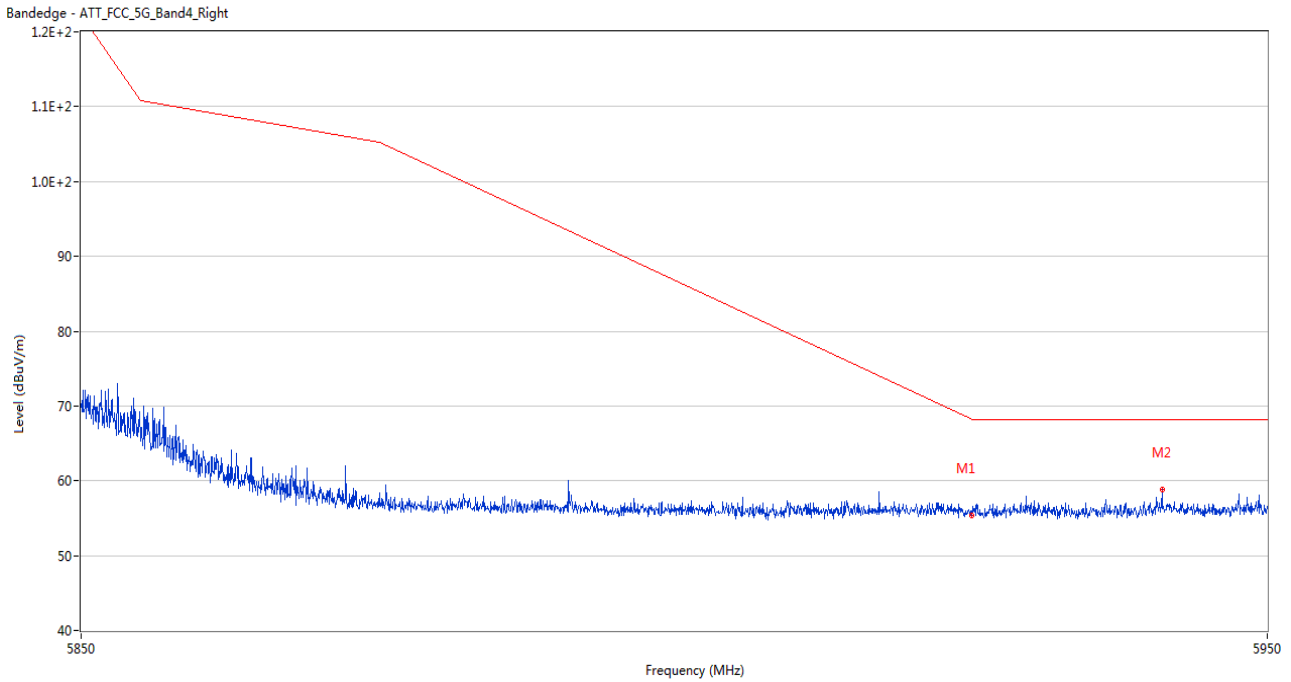
Test Data and Plots

U-NII-3 11a Low Channel



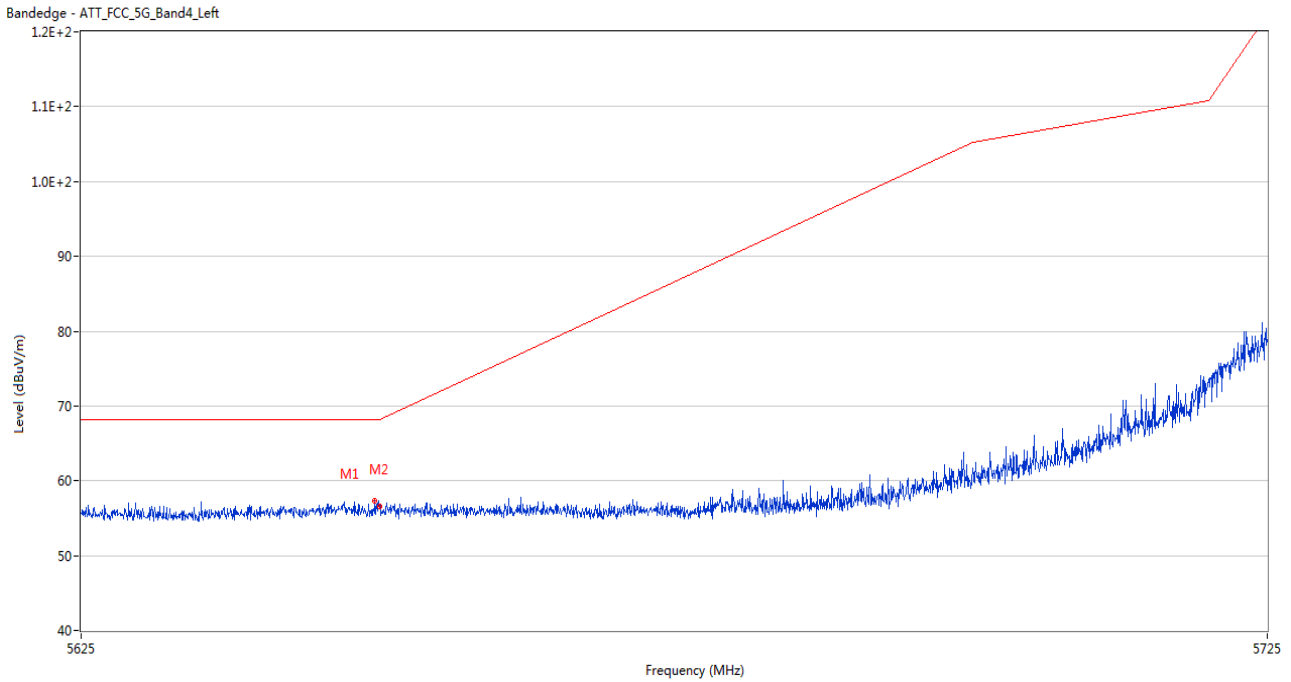
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5649.500	57.68	2.53	68.2	10.52	Peak	184.00	200	Horizontal	Pass
2	5650.000	57.27	2.54	68.2	10.93	Peak	184.00	200	Horizontal	Pass

U-NII-3 11a High Channel



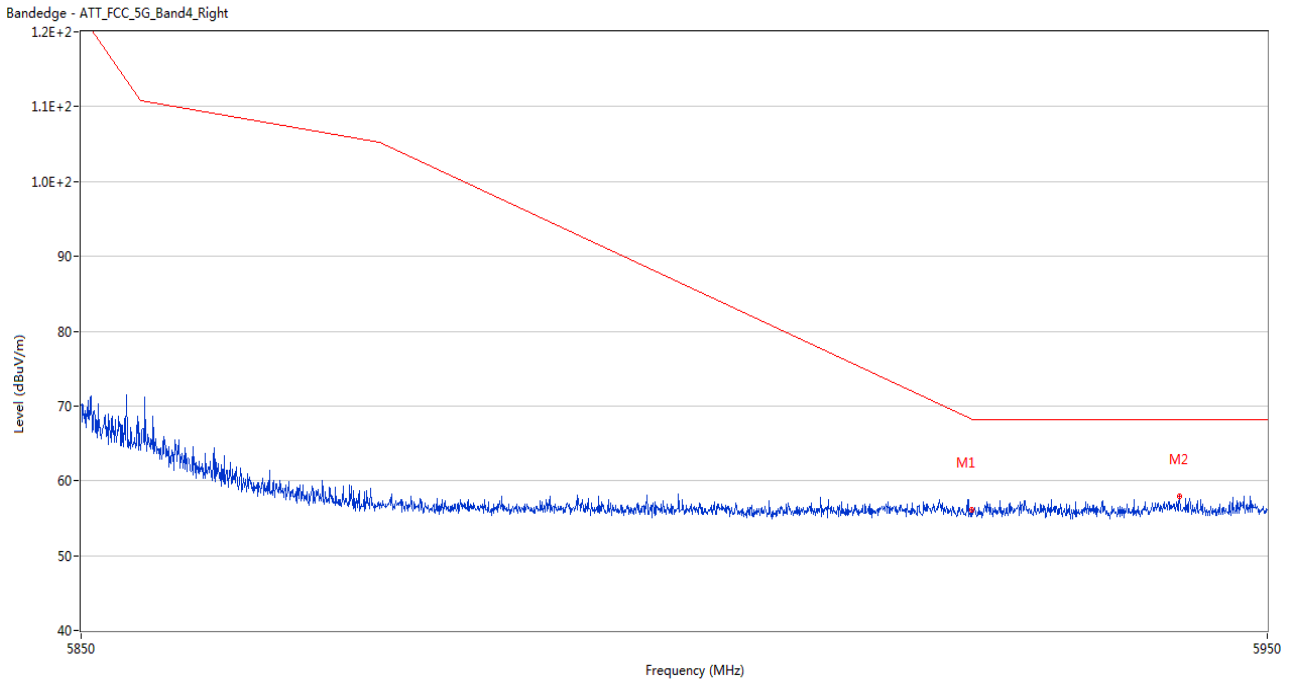
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.950	55.30	2.32	68.2	12.90	Peak	304.00	150	Horizontal	Pass
2	5941.050	58.85	2.76	68.2	9.35	Peak	43.00	150	Horizontal	Pass

U-NII-3 11n20 Low Channel



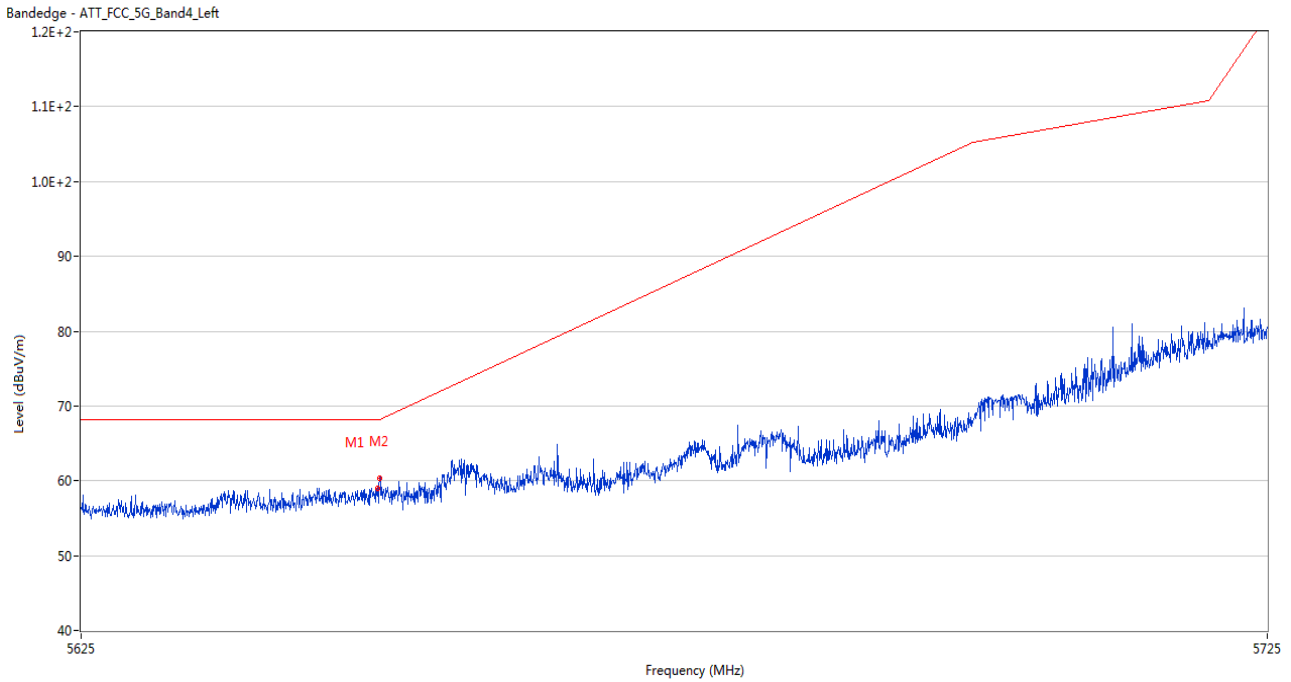
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5649.600	57.40	2.53	68.2	10.80	Peak	120.00	100	Horizontal	Pass
2	5650.000	56.51	2.54	68.2	11.69	Peak	80.00	100	Horizontal	Pass

U-NII-3 11n20 High Channel



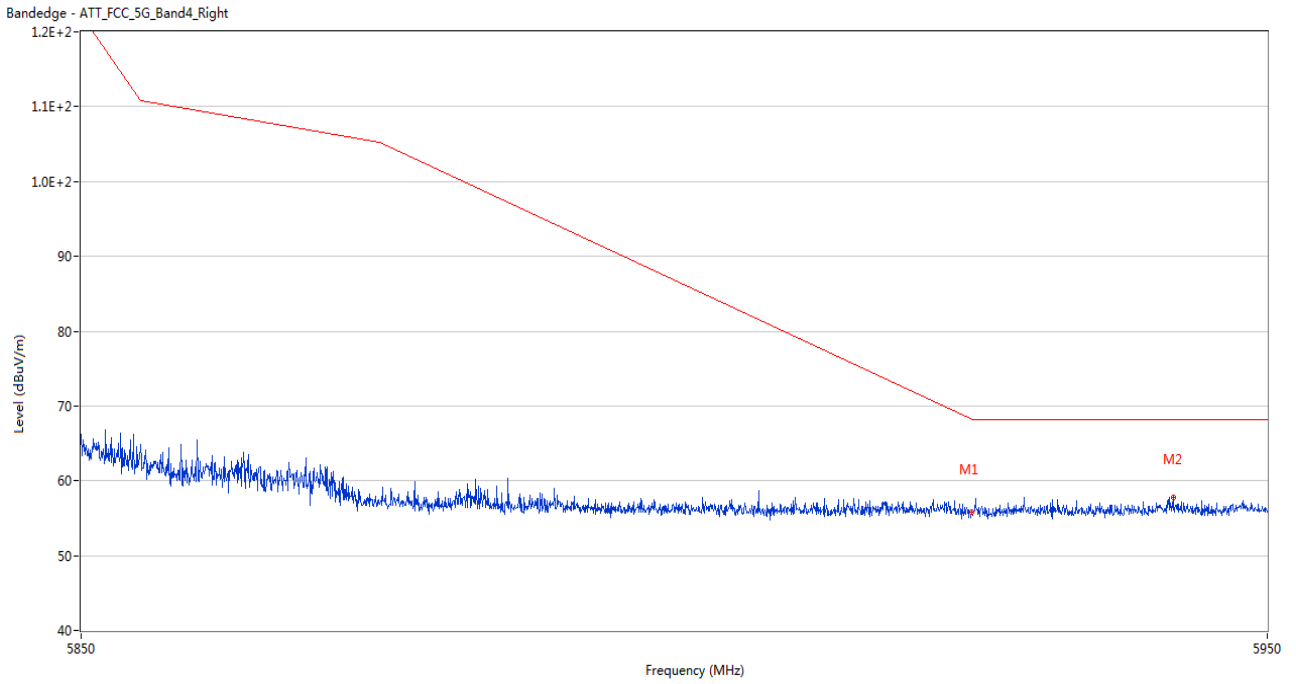
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.950	56.08	2.32	68.2	12.12	Peak	247.00	150	Horizontal	Pass
2	5942.550	57.96	2.70	68.2	10.24	Peak	54.00	100	Horizontal	Pass

U-NII-3 11n40 Low Channel



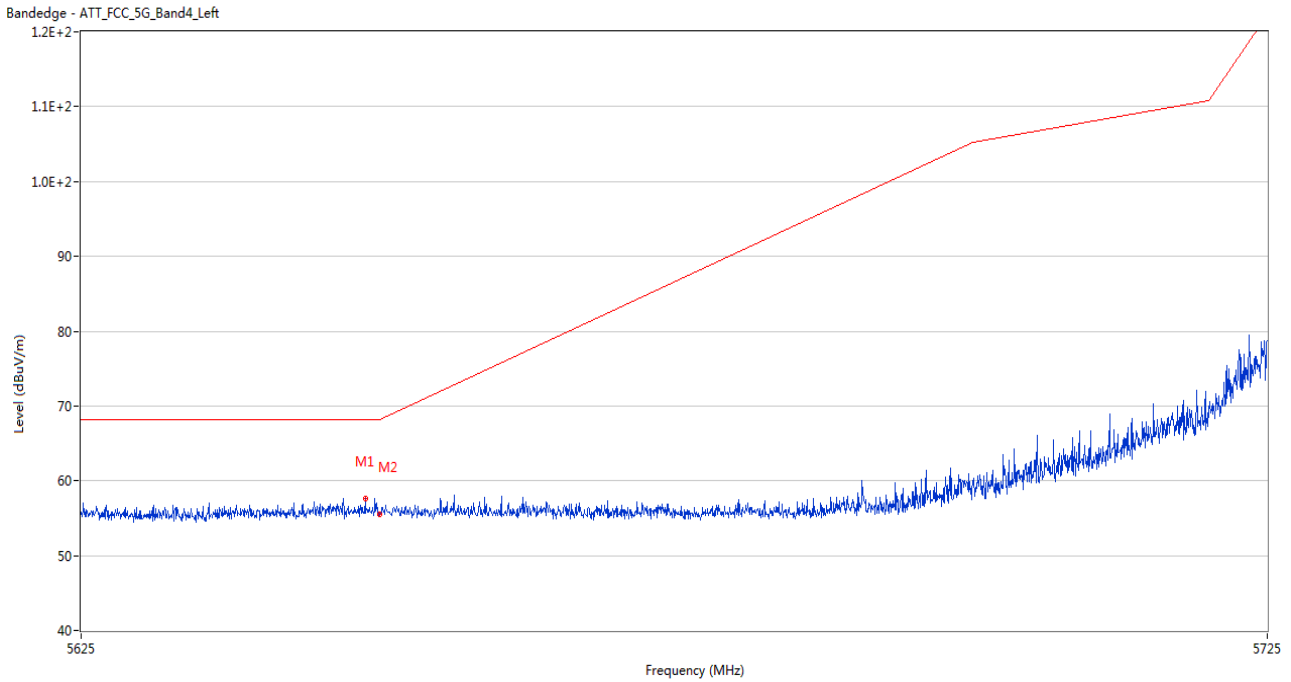
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5649.800	59.05	2.53	68.2	9.15	Peak	180.00	100	Horizontal	Pass
2	5650.000	60.37	2.54	68.2	7.83	Peak	239.00	200	Horizontal	Pass

U-NII-3 11n40 High Channel



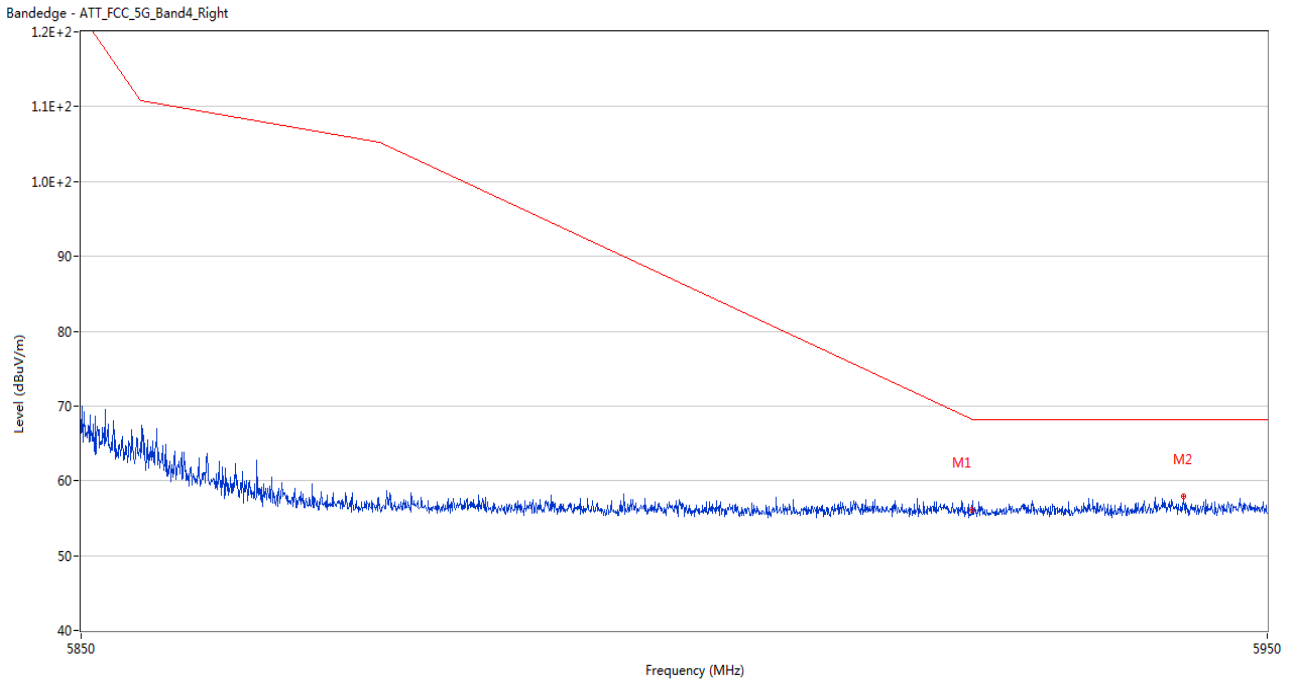
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.950	55.85	2.32	68.2	12.35	Peak	158.00	100	Horizontal	Pass
2	5942.000	57.84	2.82	68.2	10.36	Peak	221.00	100	Horizontal	Pass

U-NII-3 11ac20 Low Channel



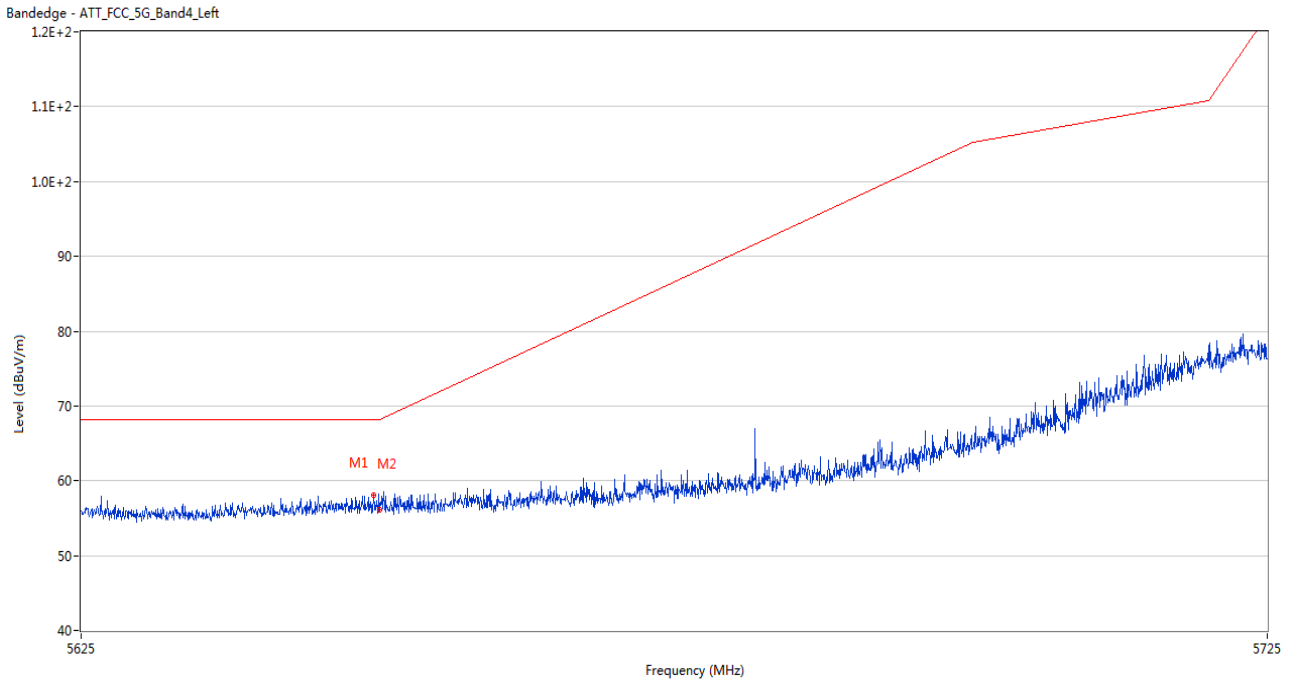
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5648.800	57.67	2.52	68.2	10.53	Peak	202.00	100	Horizontal	Pass
2	5650.000	55.54	2.54	68.2	12.66	Peak	89.00	150	Horizontal	Pass

U-NII-3 11ac20 High Channel



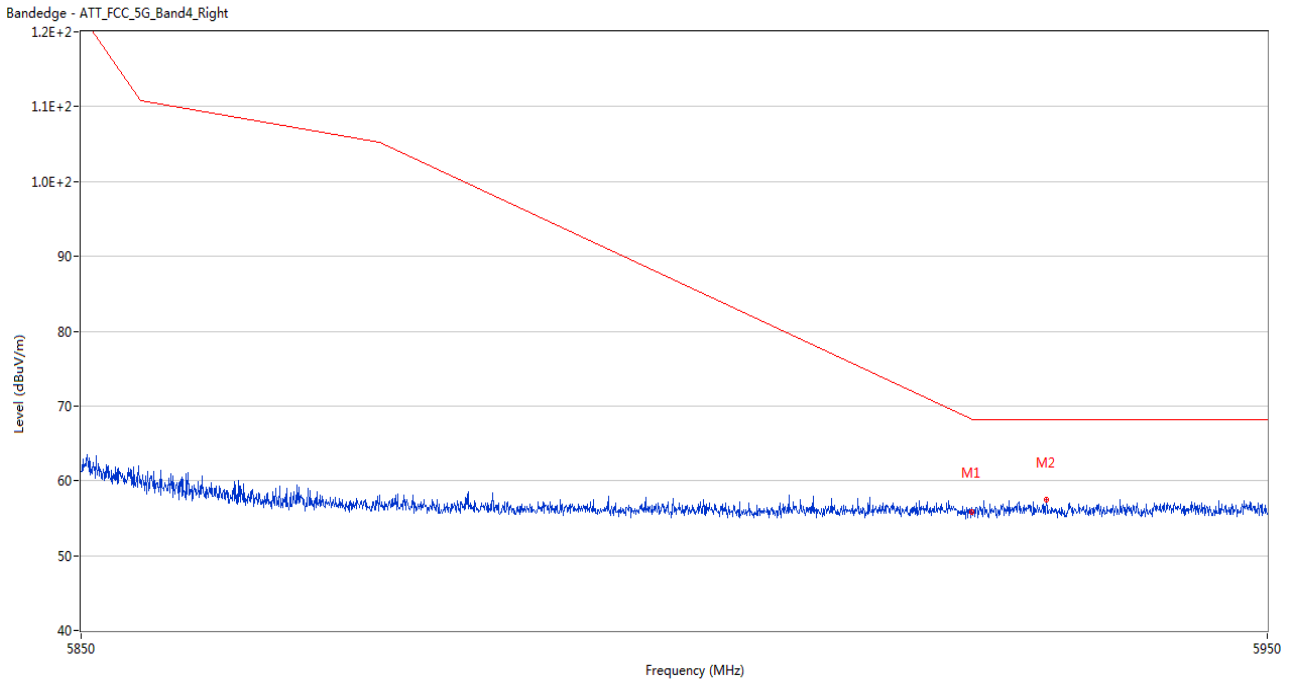
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.950	56.19	2.32	68.2	12.01	Peak	199.00	200	Horizontal	Pass
2	5942.850	57.97	2.64	68.2	10.23	Peak	257.00	150	Horizontal	Pass

U-NII-3 11ac40 Low Channel



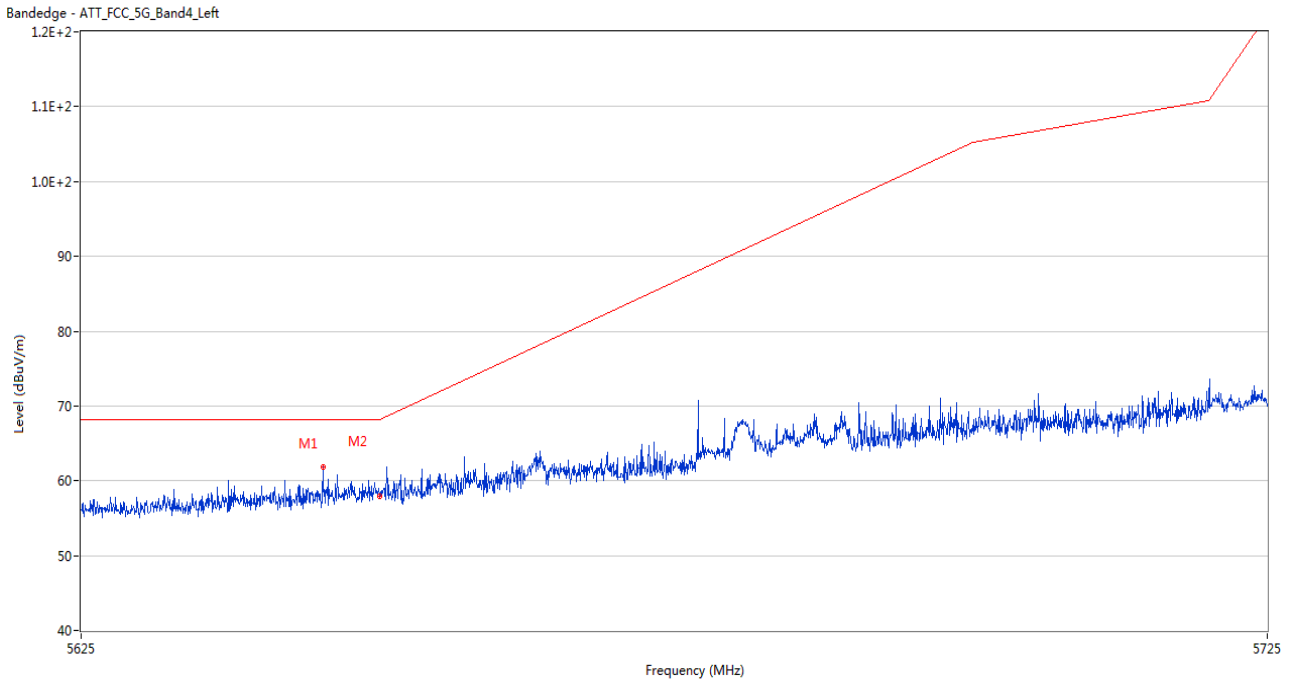
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5649.500	58.06	2.53	68.2	10.14	Peak	196.00	100	Horizontal	Pass
2	5650.000	56.11	2.54	68.2	12.09	Peak	81.00	100	Horizontal	Pass

U-NII-3 11ac40 High Channel



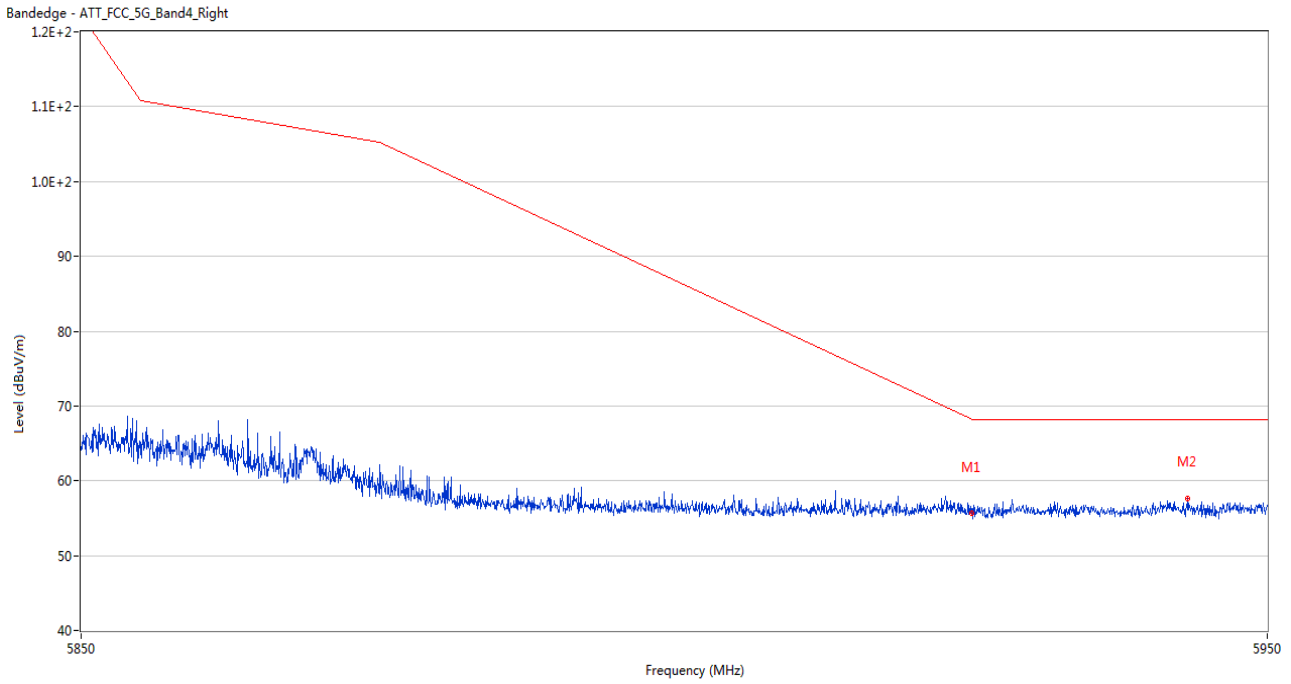
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.950	55.82	2.32	68.2	12.38	Peak	10.00	100	Horizontal	Pass
2	5931.250	57.49	2.49	68.2	10.71	Peak	152.00	200	Horizontal	Pass

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	5645.250	61.91	2.57	68.2	6.29	Peak	222.00	150	Horizontal	Pass
2	5650.000	57.90	2.54	68.2	10.30	Peak	182.00	100	Horizontal	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	5924.950	55.73	2.32	68.2	12.47	Peak	154.00	100	Horizontal	Pass
2	5943.250	57.56	2.56	68.2	10.64	Peak	360.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2450037-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2450037-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2450037-AI.PDF”.

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