

TEST REPORT

Applicant: E&S International Enterprises, Inc.
Address: 7801 Hayvenhurst Avenue, Van Nuys, California
91406 USA
Equipment Type: Laptop
Model Name: GWCN11554-GRY (refer to section 2.3)
Brand Name: GATEWAY
FCC ID: 2AYPE-GWCN11554
Test Standard: 47 CFR Part 15 Subpart E
(refer to section 3.1)
Sample Arrival Date: Jun. 03, 2025
Test Date: Jun. 05, 2025 - Jun. 17, 2025
Date of Issue: Jul. 08, 2025

ISSUED BY:

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Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Jul. 08, 2025</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☒ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	E&S International Enterprises, Inc.
Address	7801 Hayvenhurst Avenue, Van Nuys, California 91406 USA

2.2 Manufacturer Information

Manufacturer	Shenzhen Yuko Technology Co., Ltd.
Address	6th, A9 Bldg, Tianrui Industrial Park, Fuyuan 1st Rd, Fuyong, Boanan, Shenzhen

2.3 General Description for Equipment under Test (EUT)

EUT Name	Laptop
Model Name Under Test	GWCN11554-GRY
Series Model Name	GWCN11554, RWCN11554-GRY, RWCN11554, AL1510
Description of Model name differentiation	All models are same with electrical parameters and internal circuit structure, but only differ in model name. (this information provided by the applicant)
Hardware Version	EM_IDN8139
Software Version	Windows 11 Home in S mode
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n and 802.11ac
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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	☐ Mobile ☒ Portable ☐ Fix Location	
Modulation technology	OFDM	
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK	
Transfer Rate (Mbps) (Single RF path)	802.11a: 54/ 48/ 36/ 24/ 18/ 12/ 9/ 6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to VHT-MCS9	
Channel Bandwidth	802.11a: 20 MHz 802.11n: 20 MHz, 40 MHz 802.11ac: 20 MHz, 40 MHz, 80 MHz	
Maximum Output Power	U-NII-1: 22.28 mW U-NII-3: 22.34 mW	
Antenna System (eg., MIMO, Smart Antenna)	Cyclic Delay Diversity (CDD) for 802.11a Multi Input Multi Output (MIMO) for 802.11n/ac	
Categorization as Correlated or Completely Uncorrelated	Categorization as Correlated for 802.11a Categorization as Uncorrelated for 802.11n/ac	
Antenna Type	Main Antenna	FPC Antenna
	Aux. Antenna	
Antenna Gain	Main Antenna	U-NII-1: 5150 MHz to 5250 MHz: 2.99 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.25 dBi
	Aux. Antenna	U-NII-1: 5150 MHz to 5250 MHz: 2.82 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.67 dBi
Total directional gain	For power spectral density (PSD) measurements	Correlated: U-NII-1: 5150 MHz to 5250 MHz: 5.92 dBi U-NII-3: 5725 MHz to 5850 MHz: 5.47 dBi Formulas: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / NANT]$ dBi Uncorrelated: U-NII-1: 5150 MHz to 5250 MHz: 2.91 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.47 dBi Formulas: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / NANT]$ dBi
	For power measurement	Correlated: U-NII-1: 5150 MHz to 5250 MHz: 5.92 dBi U-NII-3: 5725 MHz to 5850 MHz: 5.47 dBi

		Formulas: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / \text{NANT}] \text{ dBi}$ Uncorrelated: U-NII-1: 5150 MHz to 5250 MHz: 2.91 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.47 dBi Formulas: Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / \text{NANT}] \text{ dBi}$
About the Product		The equipment is Laptop, intended for used with information technology equipment.

Mode	Antenna		
	Main Antenna	Aux. Antenna	MIMO
802.11a	√	√	√
802.11n20	√	√	√
802.11n40	√	√	√
802.11ac20	√	√	√
802.11ac40	√	√	√
802.11ac80	√	√	√
Note: All the configurations were tested, but only the worst data was shown in this report.			

Note: The above EUT information in section 2.4 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

2.5 Channel List

20 MHz		40 MHz		80 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	155	5775
44	5220	151	5755		
48	5240	159	5795		
149	5745				
153	5765				
157	5785				
161	5805				
165	5825				

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

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

U-NII-1 (5150 - 5250 MHz)			U-NII-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	KDB Publication 662911 D01v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)
4	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

Note¹: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note²: 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	52% to 65%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+21.8℃ to +26.3℃
Working Voltage of the EUT	NV (Normal Voltage)	7.7 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY46471071	2024.07.04	2025.07.03
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-40	101544	2024.12.16	2025.12.15
Power Sensor	KEYSIGHT	U2063XA	MY58000247	2024.07.04	2025.07.03
Spectrum Analyzer	KEYSIGHT	N9020A	MY50531259	2024.08.01	2025.07.31
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	02460	2024.05.16	2027.05.15
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2024.06.15	2027.06.14
Anechoic Chamber	RAINFORD	9m*6m*6m	140	2024.07.28	2027.07.27
Amplifier	COM-MV	LSCX_LNA1-12G-01	7210214	2024.08.01	2025.07.31
Amplifier	COM-MV	XKu_LNA7-18G-01	7210209	2024.08.01	2025.07.31
Amplifier	COM-MV	KA LNA18 40G-01	18050001	2024.12.05	2025.12.04
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2024.08.01	2025.07.31
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2024.01.23	2027.01.22
Amplifier	COM-MV	ZT30-1000M	B2018054558	2024.11.28	2025.11.27
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	130	2024.07.13	2027.07.12
EMI Receiver	Agilent	N9038A	MY55330120	2024.08.01	2025.07.31
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9168	9168-00867	2025.04.12	2028.04.11
Amplifier	COM-MV	ZT30-1000M	B2017119081	2024.11.28	2025.11.27
Anechoic Chamber	YiHeng	9m*6m*6m	142	2024.07.21	2027.07.20
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2024.08.01	2025.07.31
LISN	SCHWARZBECK	NSLK 8127	8127-687	2025.04.29	2026.04.28
Shielded Enclosure	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2025.02.14	2028.02.13

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.	Applicable test Setup
BL410R	BALUN	V2.1.1.488	N/A	The section 4.5.1
BL410E	BALUN	V22.930	N/A	The section 4.5.2&4.5.3&4.5.4&4.5.5

4.4 Measurement Uncertainty

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

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

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

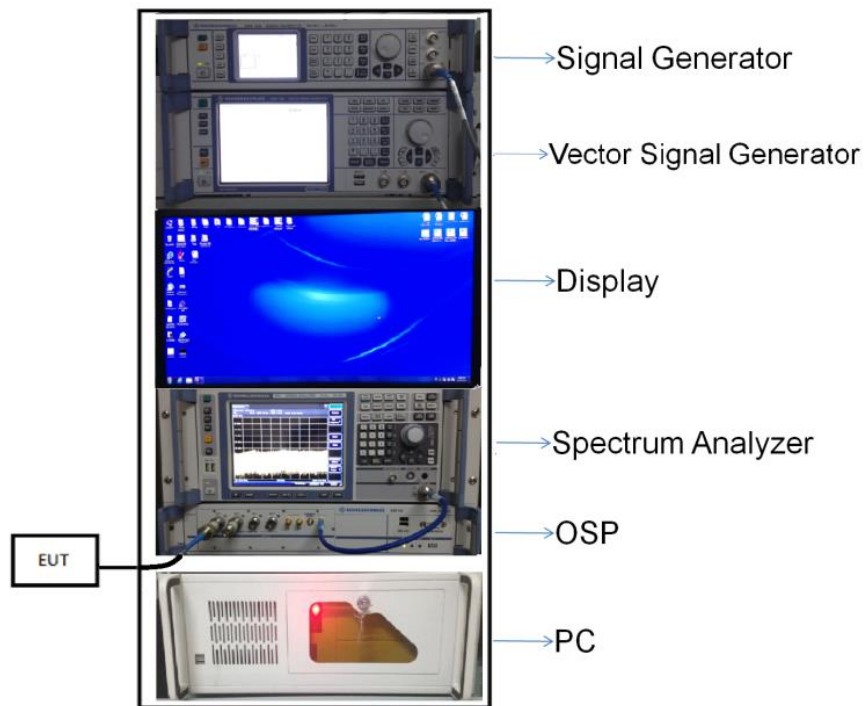
4.5 Description of Test Setup

4.5.1 For Antenna Port Test

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

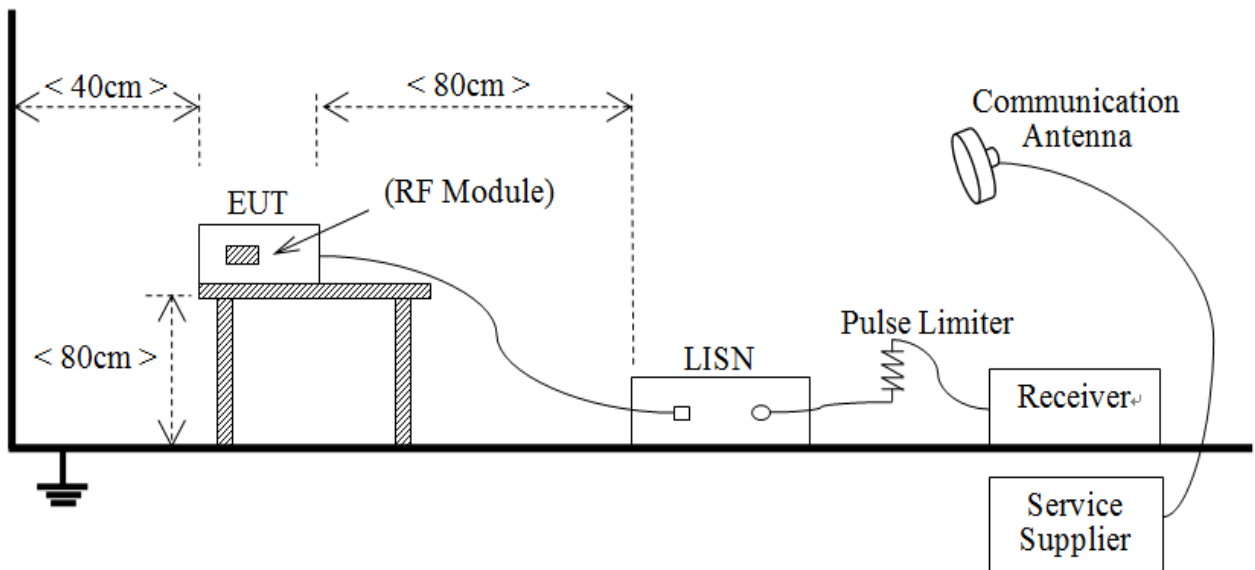
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

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



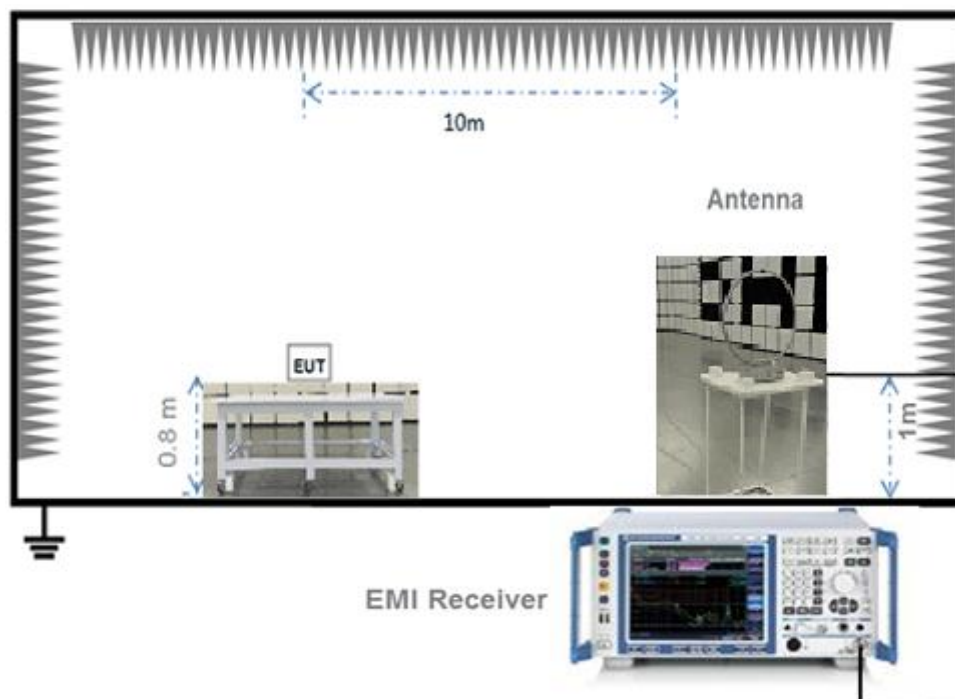
(Diagram 1)

4.5.2 For AC Power Supply Port Test



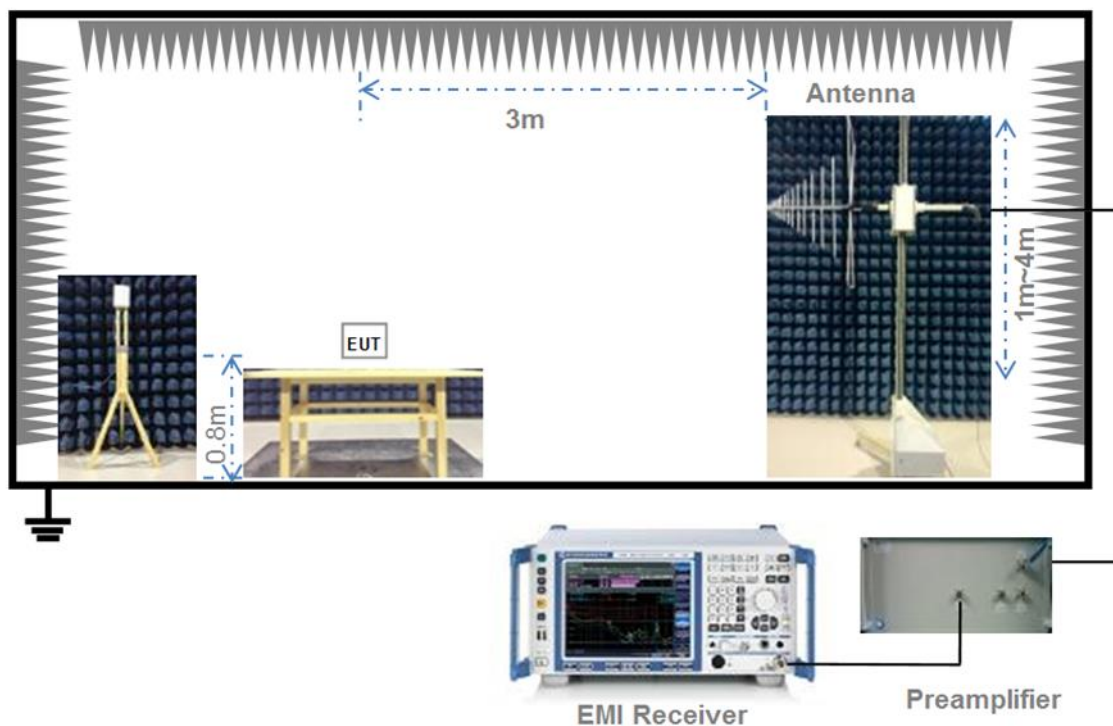
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



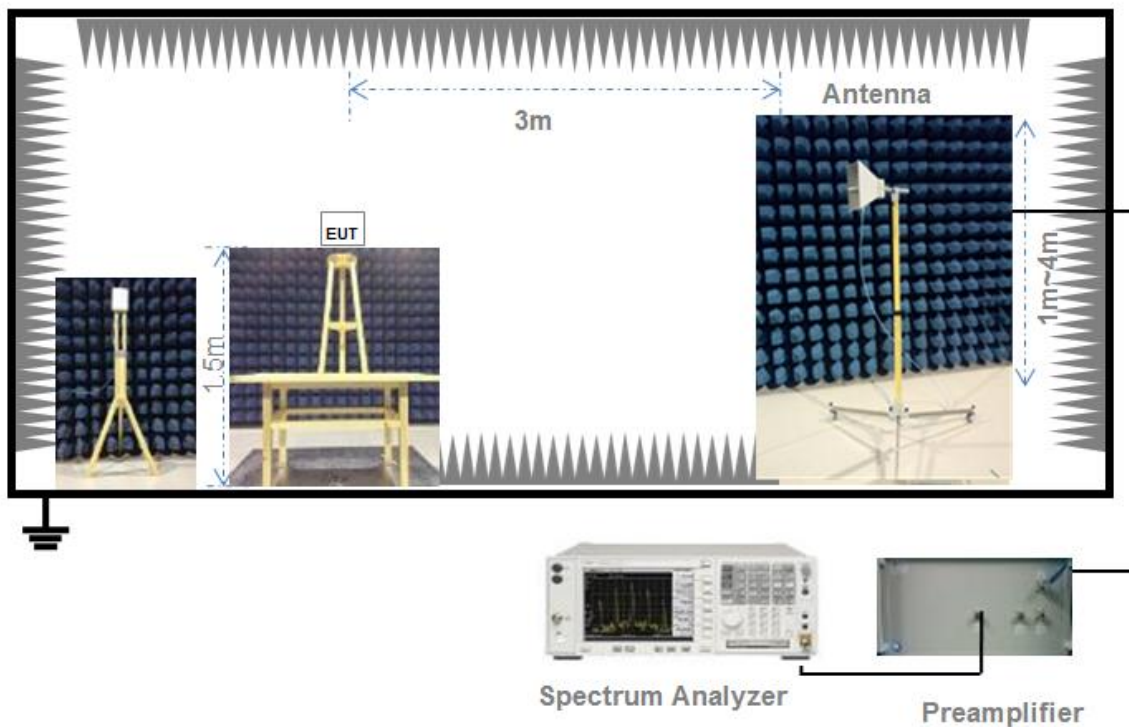
(Diagram 3)

4.5.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.5.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

5 TEST ITEMS

5.1 RF Output Power

5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

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

5.1.2 Test Setup

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

5.1.3 Test Procedure

Maximum conducted (average) output power

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

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

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

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

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

Measurements of duty cycle

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

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

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

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

5.3.4 Test Result

Please refer to ANNEX A.4.

5.4 Conducted Emission

5.4.1 Limit

FCC §15.207

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 ($\mu\text{V/m}$)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

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

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

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 $\geq 3 \times$ RBW.

c) Detector = Peak.

d) Sweep time = auto.

e) Trace mode = max hold.

f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

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

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

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

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

be used:

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

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

Determining the applicable transmit antenna gain

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

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

antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

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

Radiated spurious emission test

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

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

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

The power of the EUT transmitting frequency should be ignored.

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

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

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

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.5.4 Test Result

Please refer to ANNEX A.6.

ANNEX A TEST RESULT

A.1 RF Output Power

Note: 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	1.36	1.47	92.91%	0.32
11n(HT20)/11ac(VHT20)	1.27	1.38	92.25%	0.35
11n(HT40)/11ac(VHT40)	0.63	0.73	85.76%	0.67
11ac(VHT80)	0.31	0.42	74.82%	1.26

Test DataConducted PowerSISO-Main Antenna

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	12.91	19.54	250	Pass
11a	CH44	13.07	20.28	250	Pass
11a	CH48	13.48	22.28	250	Pass
11n(HT20)	CH36	12.49	17.74	250	Pass
11n(HT20)	CH44	12.37	17.26	250	Pass
11n(HT20)	CH48	12.43	17.50	250	Pass
11n(HT40)	CH38	11.34	13.61	250	Pass
11n(HT40)	CH46	12.49	17.74	250	Pass
11ac(VHT20)	CH36	12.24	16.75	250	Pass
11ac(VHT20)	CH44	12.69	18.58	250	Pass
11ac(VHT20)	CH48	12.85	19.28	250	Pass
11ac(VHT40)	CH38	11.94	15.63	250	Pass
11ac(VHT40)	CH46	12.64	18.37	250	Pass
11ac(VHT80)	CH42	8.58	7.21	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	13.31	21.43	1000	Pass
11a	CH157	12.88	19.41	1000	Pass
11a	CH165	13.49	22.34	1000	Pass
11n(HT20)	CH149	12.41	17.42	1000	Pass
11n(HT20)	CH157	12.91	19.54	1000	Pass
11n(HT20)	CH165	12.67	18.49	1000	Pass
11n(HT40)	CH151	12.46	17.62	1000	Pass
11n(HT40)	CH159	12.22	16.67	1000	Pass
11ac(VHT20)	CH149	12.73	18.75	1000	Pass
11ac(VHT20)	CH157	12.47	17.66	1000	Pass
11ac(VHT20)	CH165	12.44	17.54	1000	Pass
11ac(VHT40)	CH151	12.47	17.66	1000	Pass
11ac(VHT40)	CH159	12.21	16.63	1000	Pass
11ac(VHT80)	CH155	12.32	17.06	1000	Pass

SISO-Aux. Antenna

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	13.31	21.43	250	Pass
11a	CH44	13.37	21.73	250	Pass
11a	CH48	13.38	21.78	250	Pass
11n(HT20)	CH36	12.39	17.34	250	Pass
11n(HT20)	CH44	12.77	18.92	250	Pass
11n(HT20)	CH48	12.73	18.75	250	Pass
11n(HT40)	CH38	11.74	14.93	250	Pass
11n(HT40)	CH46	12.69	18.58	250	Pass
11ac(VHT20)	CH36	12.64	18.37	250	Pass
11ac(VHT20)	CH44	12.59	18.16	250	Pass
11ac(VHT20)	CH48	12.75	18.84	250	Pass
11ac(VHT40)	CH38	11.74	14.93	250	Pass
11ac(VHT40)	CH46	12.64	18.37	250	Pass
11ac(VHT80)	CH42	8.68	7.38	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	13.21	20.94	1000	Pass
11a	CH157	13.08	20.32	1000	Pass
11a	CH165	13.39	21.83	1000	Pass
11n(HT20)	CH149	12.71	18.66	1000	Pass
11n(HT20)	CH157	12.81	19.10	1000	Pass
11n(HT20)	CH165	12.67	18.49	1000	Pass
11n(HT40)	CH151	12.46	17.62	1000	Pass
11n(HT40)	CH159	12.52	17.86	1000	Pass
11ac(VHT20)	CH149	12.83	19.19	1000	Pass
11ac(VHT20)	CH157	12.87	19.36	1000	Pass
11ac(VHT20)	CH165	12.74	18.79	1000	Pass
11ac(VHT40)	CH151	12.47	17.66	1000	Pass
11ac(VHT40)	CH159	12.41	17.42	1000	Pass
11ac(VHT80)	CH155	12.42	17.46	1000	Pass

MIMO-Main Antenna

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	10.51	11.25	250	Pass
11a	CH44	10.17	10.40	250	Pass
11a	CH48	9.88	9.73	250	Pass
11n(HT20)	CH36	9.29	8.49	250	Pass
11n(HT20)	CH44	9.97	9.93	250	Pass
11n(HT20)	CH48	9.23	8.38	250	Pass
11n(HT40)	CH38	8.74	7.48	250	Pass
11n(HT40)	CH46	9.89	9.75	250	Pass
11ac(VHT20)	CH36	9.54	8.99	250	Pass
11ac(VHT20)	CH44	9.49	8.89	250	Pass
11ac(VHT20)	CH48	9.65	9.23	250	Pass
11ac(VHT40)	CH38	8.44	6.98	250	Pass
11ac(VHT40)	CH46	9.14	8.20	250	Pass
11ac(VHT80)	CH42	5.68	3.70	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	10.21	10.50	1000	Pass
11a	CH157	9.78	9.51	1000	Pass
11a	CH165	9.89	9.75	1000	Pass
11n(HT20)	CH149	9.21	8.34	1000	Pass
11n(HT20)	CH157	9.71	9.35	1000	Pass
11n(HT20)	CH165	9.27	8.45	1000	Pass
11n(HT40)	CH151	8.86	7.69	1000	Pass
11n(HT40)	CH159	8.92	7.80	1000	Pass
11ac(VHT20)	CH149	9.33	8.57	1000	Pass
11ac(VHT20)	CH157	9.67	9.27	1000	Pass
11ac(VHT20)	CH165	9.34	8.59	1000	Pass
11ac(VHT40)	CH151	9.07	8.07	1000	Pass
11ac(VHT40)	CH159	9.51	8.93	1000	Pass
11ac(VHT80)	CH155	9.22	8.36	1000	Pass

MIMO-Aux. Antenna

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	10.41	10.99	250	Pass
11a	CH44	10.57	11.40	250	Pass
11a	CH48	9.98	9.95	250	Pass
11n(HT20)	CH36	9.59	9.10	250	Pass
11n(HT20)	CH44	9.97	9.93	250	Pass
11n(HT20)	CH48	9.43	8.77	250	Pass
11n(HT40)	CH38	8.84	7.66	250	Pass
11n(HT40)	CH46	9.69	9.31	250	Pass
11ac(VHT20)	CH36	9.44	8.79	250	Pass
11ac(VHT20)	CH44	9.79	9.53	250	Pass
11ac(VHT20)	CH48	9.45	8.81	250	Pass
11ac(VHT40)	CH38	8.84	7.66	250	Pass
11ac(VHT40)	CH46	9.34	8.59	250	Pass
11ac(VHT80)	CH42	5.58	3.61	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	10.11	10.26	1000	Pass
11a	CH157	9.78	9.51	1000	Pass
11a	CH165	10.29	10.69	1000	Pass
11n(HT20)	CH149	9.31	8.53	1000	Pass
11n(HT20)	CH157	9.81	9.57	1000	Pass
11n(HT20)	CH165	9.47	8.85	1000	Pass
11n(HT40)	CH151	9.16	8.24	1000	Pass
11n(HT40)	CH159	9.32	8.55	1000	Pass
11ac(VHT20)	CH149	9.53	8.97	1000	Pass
11ac(VHT20)	CH157	9.77	9.48	1000	Pass
11ac(VHT20)	CH165	9.74	9.42	1000	Pass
11ac(VHT40)	CH151	9.07	8.07	1000	Pass
11ac(VHT40)	CH159	9.61	9.14	1000	Pass
11ac(VHT80)	CH155	9.02	7.98	1000	Pass

MIMO

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	13.47	22.24	250	Pass
11a	CH44	13.38	21.80	250	Pass
11a	CH48	12.94	19.68	250	Pass
11n(HT20)	CH36	12.45	17.59	250	Pass
11n(HT20)	CH44	12.98	19.86	250	Pass
11n(HT20)	CH48	12.34	17.15	250	Pass
11n(HT40)	CH38	11.80	15.14	250	Pass
11n(HT40)	CH46	12.80	19.06	250	Pass
11ac(VHT20)	CH36	12.50	17.79	250	Pass
11ac(VHT20)	CH44	12.65	18.42	250	Pass
11ac(VHT20)	CH48	12.56	18.04	250	Pass
11ac(VHT40)	CH38	11.65	14.64	250	Pass
11ac(VHT40)	CH46	12.25	16.79	250	Pass
11ac(VHT80)	CH42	8.64	7.31	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	13.17	20.75	1000	Pass
11a	CH157	12.79	19.01	1000	Pass
11a	CH165	13.10	20.44	1000	Pass
11n(HT20)	CH149	12.27	16.87	1000	Pass
11n(HT20)	CH157	12.77	18.93	1000	Pass
11n(HT20)	CH165	12.38	17.30	1000	Pass
11n(HT40)	CH151	12.02	15.93	1000	Pass
11n(HT40)	CH159	12.13	16.35	1000	Pass
11ac(VHT20)	CH149	12.44	17.54	1000	Pass
11ac(VHT20)	CH157	12.73	18.75	1000	Pass
11ac(VHT20)	CH165	12.55	18.01	1000	Pass
11ac(VHT40)	CH151	12.08	16.14	1000	Pass
11ac(VHT40)	CH159	12.57	18.07	1000	Pass
11ac(VHT80)	CH155	12.13	16.34	1000	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note ¹: Test plots please refer to the document “Annex No.: BL-SZ2560125-604 Data Part 1.pdf”.

Note ²: All antenna were pre tested, but only the worst case has been reported in this report.

Test Data

SISO-Aux. Antenna

U-NII-1 (5150 - 5250 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	20.76	16.58
11a	CH44	20.67	16.60
11a	CH48	20.72	16.59
11n(HT20)	CH36	20.90	17.64
11n(HT20)	CH44	20.88	17.63
11n(HT20)	CH48	20.87	17.64
11n(HT40)	CH38	42.36	36.33
11n(HT40)	CH46	42.27	36.36
11ac(VHT20)	CH36	21.05	17.66
11ac(VHT20)	CH44	21.09	17.67
11ac(VHT20)	CH48	20.99	17.66
11ac(VHT40)	CH38	41.66	36.31
11ac(VHT40)	CH46	41.82	36.32
11ac(VHT80)	CH42	81.80	75.72

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	21.49	16.66
11a	CH157	21.56	16.67
11a	CH165	24.85	16.72
11n(HT20)	CH149	20.92	17.67
11n(HT20)	CH157	20.91	17.68
11n(HT20)	CH165	21.00	17.69
11n(HT40)	CH151	53.28	36.50
11n(HT40)	CH159	52.12	36.47
11ac(VHT20)	CH149	20.91	17.68
11ac(VHT20)	CH157	20.95	17.68
11ac(VHT20)	CH165	21.04	17.71
11ac(VHT40)	CH151	67.04	36.49
11ac(VHT40)	CH159	67.04	36.51
11ac(VHT80)	CH155	114.30	76.15

A.3 6 dB Bandwidth

Note ¹: Test plots please refer to the document “Annex No.: BL-SZ2560125-604 Data Part 2.pdf”.

Note ²: All antenna were pre tested, but only the worst case has been reported in this report.

Test Data

SISO-Aux. Antenna

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	17.10	500.00	Pass
11n(HT20)	CH165	17.20	500.00	Pass
11n(HT40)	CH151	35.70	500.00	Pass
11n(HT40)	CH159	35.80	500.00	Pass
11ac(VHT20)	CH149	17.50	500.00	Pass
11ac(VHT20)	CH157	17.60	500.00	Pass
11ac(VHT20)	CH165	17.30	500.00	Pass
11ac(VHT40)	CH151	35.30	500.00	Pass
11ac(VHT40)	CH159	35.30	500.00	Pass
11ac(VHT80)	CH155	75.30	500.00	Pass

A.4 Power Spectral Density

Note ¹: Test plots please refer to the document “Annex No.: BL-SZ2560125-604 Data Part 3.pdf”.

Note ²: All antenna were pre tested, but only the worst case has been reported in this report.

Test Data

SISO-Aux. Antenna

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	FCC Limit (dBm/MHz)	Verdict
11a	CH36	2.74	11.00	Pass
11a	CH44	2.56	11.00	Pass
11a	CH48	2.14	11.00	Pass
11n(HT20)	CH36	0.78	11.00	Pass
11n(HT20)	CH44	0.71	11.00	Pass
11n(HT20)	CH48	0.64	11.00	Pass
11n(HT40)	CH38	-3.07	11.00	Pass
11n(HT40)	CH46	-2.45	11.00	Pass
11ac(VHT20)	CH36	0.83	11.00	Pass
11ac(VHT20)	CH44	0.68	11.00	Pass
11ac(VHT20)	CH48	1.13	11.00	Pass
11ac(VHT40)	CH38	-2.78	11.00	Pass
11ac(VHT40)	CH46	-2.20	11.00	Pass
11ac(VHT80)	CH42	-6.36	11.00	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	FCC Limit (dBm/500kHz)	Verdict
11a	CH149	-0.39	30.00	Pass
11a	CH157	-0.69	30.00	Pass
11a	CH165	-0.89	30.00	Pass
11n(HT20)	CH149	-1.58	30.00	Pass
11n(HT20)	CH157	-1.96	30.00	Pass
11n(HT20)	CH165	-2.10	30.00	Pass
11n(HT40)	CH151	-4.38	30.00	Pass
11n(HT40)	CH159	-4.54	30.00	Pass
11ac(VHT20)	CH149	-1.49	30.00	Pass
11ac(VHT20)	CH157	-1.99	30.00	Pass
11ac(VHT20)	CH165	-2.07	30.00	Pass
11ac(VHT40)	CH151	-4.22	30.00	Pass
11ac(VHT40)	CH159	-4.38	30.00	Pass
11ac(VHT80)	CH155	-6.28	30.00	Pass

A.5 Conducted Emissions

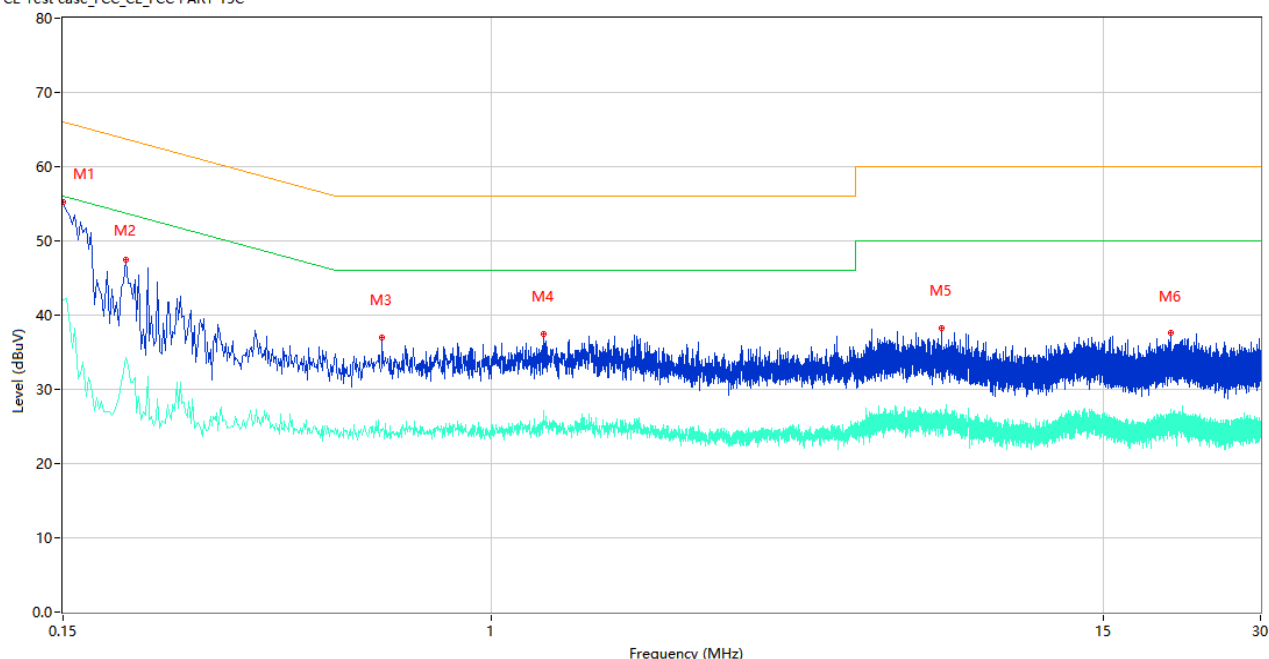
Note¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

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

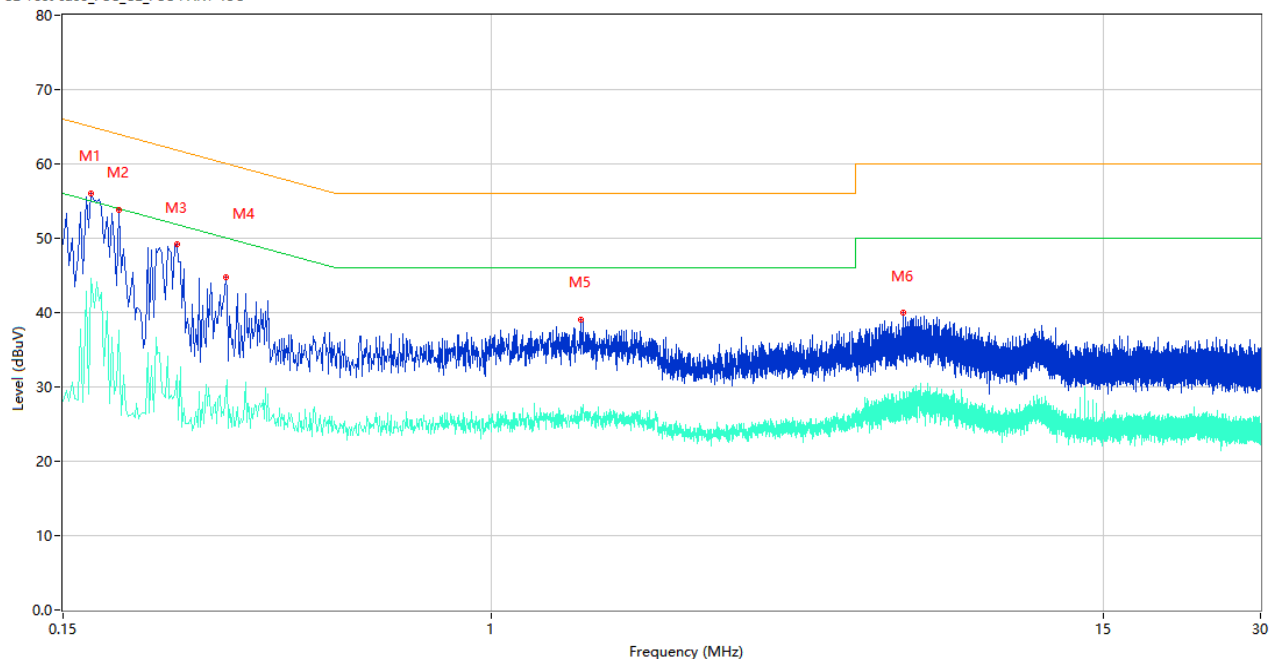
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	55.27	9.86	66.00	10.73	Peak	L	Pass
1**	0.150	42.03	9.86	56.00	13.97	AV	L	Pass
2	0.198	47.40	9.84	63.69	16.29	Peak	L	Pass
2**	0.198	34.30	9.84	53.69	19.39	AV	L	Pass
3	0.616	37.01	10.24	56.00	18.99	Peak	L	Pass
3**	0.616	24.38	10.24	46.00	21.62	AV	L	Pass
4	1.256	37.47	10.51	56.00	18.53	Peak	L	Pass
4**	1.256	27.08	10.51	46.00	18.92	AV	L	Pass
5	7.332	38.32	10.05	60.00	21.68	Peak	L	Pass
5**	7.332	26.33	10.05	50.00	23.67	AV	L	Pass
6	20.138	37.61	11.05	60.00	22.39	Peak	L	Pass
6**	20.138	27.26	11.05	50.00	22.74	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	0.170	56.07	9.85	64.96	8.89	Peak	N	Pass
1**	0.170	44.53	9.85	54.96	10.43	AV	N	Pass
2	0.192	53.87	9.84	63.95	10.08	Peak	N	Pass
2**	0.192	37.64	9.84	53.95	16.31	AV	N	Pass
3	0.248	49.16	9.83	61.82	12.66	Peak	N	Pass
3**	0.248	31.64	9.83	51.82	20.18	AV	N	Pass
4	0.308	44.76	9.98	60.02	15.26	Peak	N	Pass
4**	0.308	29.45	9.98	50.02	20.57	AV	N	Pass
5	1.484	39.09	10.27	56.00	16.91	Peak	N	Pass
5**	1.484	26.55	10.27	46.00	19.45	AV	N	Pass
6	6.178	39.95	10.32	60.00	20.05	Peak	N	Pass
6**	6.178	29.38	10.32	50.00	20.62	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.

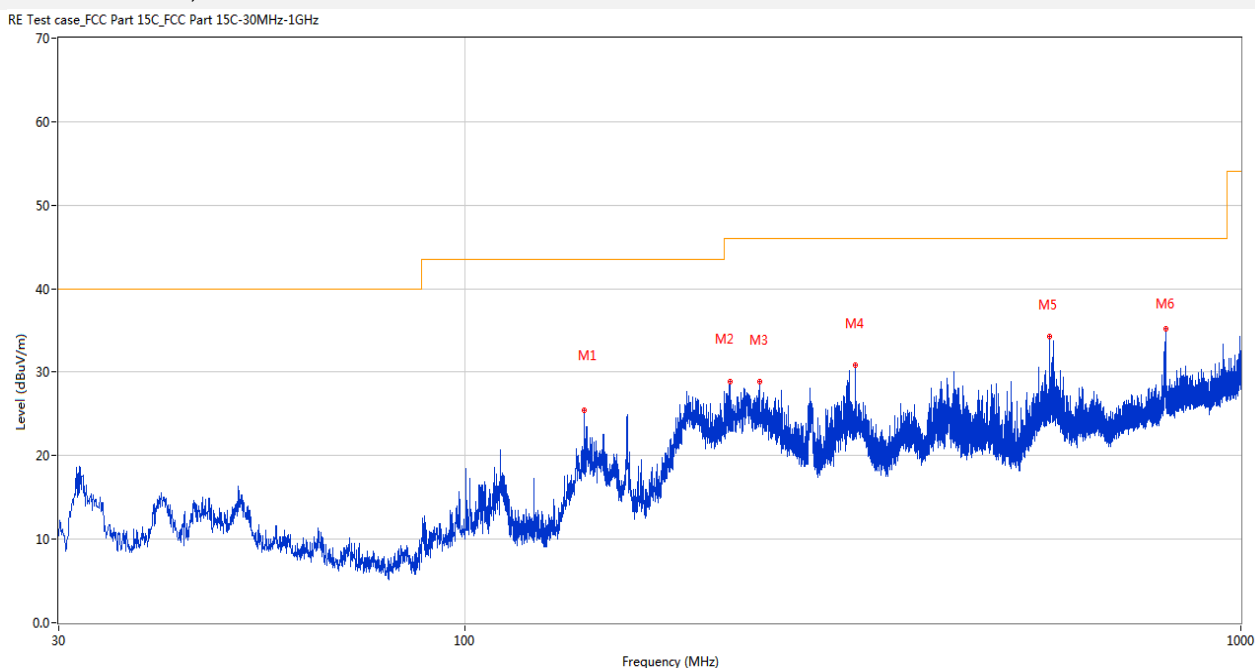
Note³: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

Note⁵: For Multiple transmitter output, the quantity $10 \log (NANT)$ dB is added to each spectrum value before comparing to the emission limit. When testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding $10 \log (NANT)$ if the measurements are made relative to the in-band emissions on the individual outputs.

Test Data and Plots

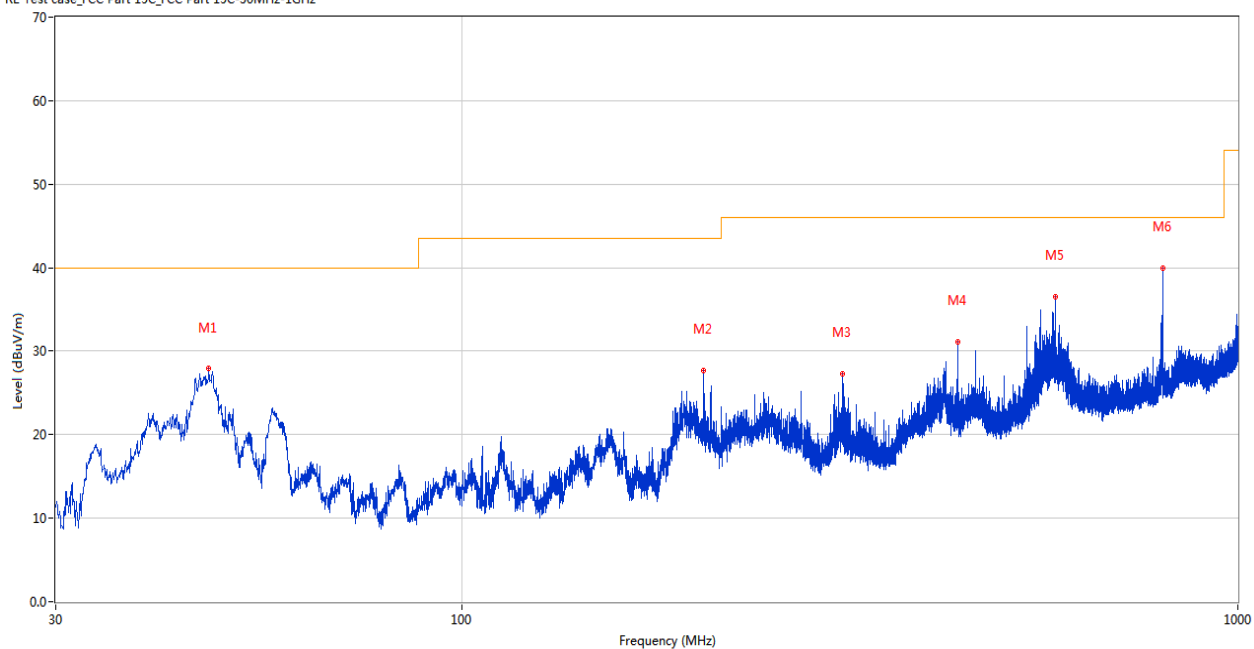
30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	142.666	25.42	-26.38	43.5	18.08	Peak	223.00	100	Horizontal	Pass
2	219.538	28.89	-28.75	46.0	17.11	Peak	63.00	100	Horizontal	Pass
3	239.860	28.93	-27.25	46.0	17.07	Peak	87.00	100	Horizontal	Pass
4	318.430	30.87	-24.03	46.0	15.13	Peak	249.00	100	Horizontal	Pass
5	566.750	34.24	-17.25	46.0	11.76	Peak	320.00	200	Horizontal	Pass
6	799.744	35.20	-11.78	46.0	10.80	Peak	263.00	200	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	47.218	27.89	-26.62	40.0	12.11	Peak	133.00	100	Vertical	Pass
2	205.182	27.71	-29.05	43.5	15.79	Peak	131.00	100	Vertical	Pass
3	309.457	27.30	-24.09	46.0	18.70	Peak	352.00	200	Vertical	Pass
4	436.042	31.06	-20.66	46.0	14.94	Peak	35.00	100	Vertical	Pass
5	581.591	36.51	-16.55	46.0	9.49	Peak	42.00	100	Vertical	Pass
6	799.889	39.90	-11.77	46.0	6.10	Peak	345.00	200	Vertical	Pass

Note ¹: The spurious above 18G is noise only, do not show on the report.

Note ²: All antenna were pre tested, but only the worst case has been reported in this report.

SISO-Aux. Antenna

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1514.331	38.52	74.0	35.48	Peak	313.00	200	Horizontal	Pass
1**	1514.331	30.20	54.0	23.80	AV	313.00	200	Horizontal	Pass
2	2349.840	44.35	74.0	29.65	Peak	187.00	300	Horizontal	Pass
2**	2349.840	38.79	54.0	15.21	AV	187.00	300	Horizontal	Pass
3	4203.678	49.49	74.0	24.51	Peak	271.00	200	Horizontal	Pass
3**	4203.678	38.41	54.0	15.59	AV	271.00	200	Horizontal	Pass
4	7434.567	55.35	74.0	18.65	Peak	1.00	100	Horizontal	Pass
4**	7434.567	44.59	54.0	9.41	AV	1.00	100	Horizontal	Pass
5	12516.389	55.00	74.0	19.00	Peak	28.00	400	Horizontal	Pass
5**	12516.389	47.93	54.0	6.07	AV	28.00	400	Horizontal	Pass
6	16144.491	51.48	74.0	22.52	Peak	119.00	100	Horizontal	Pass
6**	16144.491	40.84	54.0	13.16	AV	119.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1568.181	38.78	74.0	35.22	Peak	356.00	300	Vertical	Pass
1**	1568.181	29.54	54.0	24.46	AV	356.00	300	Vertical	Pass
2	2350.175	45.81	74.0	28.19	Peak	67.00	300	Vertical	Pass
2**	2350.175	35.41	54.0	18.59	AV	67.00	300	Vertical	Pass
3	3917.234	45.83	74.0	28.17	Peak	128.00	200	Vertical	Pass
3**	3917.234	36.33	54.0	17.67	AV	128.00	200	Vertical	Pass
4	7684.033	50.60	74.0	23.40	Peak	30.00	200	Vertical	Pass
4**	7684.033	46.75	54.0	7.25	AV	30.00	200	Vertical	Pass
5	12532.201	56.07	74.0	17.93	Peak	294.00	400	Vertical	Pass
5**	12532.201	41.49	54.0	12.51	AV	294.00	400	Vertical	Pass
6	15378.756	56.18	74.0	17.82	Peak	2.00	300	Vertical	Pass
6**	15378.756	44.21	54.0	9.79	AV	2.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1509.269	36.88	74.0	37.12	Peak	229.00	400	Horizontal	Pass
1**	1509.269	27.08	54.0	26.92	AV	229.00	400	Horizontal	Pass
2	2351.501	42.21	74.0	31.79	Peak	14.00	200	Horizontal	Pass
2**	2351.501	39.42	54.0	14.58	AV	14.00	200	Horizontal	Pass
3	4208.684	46.62	74.0	27.38	Peak	352.00	200	Horizontal	Pass
3**	4208.684	38.78	54.0	15.22	AV	352.00	200	Horizontal	Pass
4	7432.755	56.62	74.0	17.38	Peak	59.00	200	Horizontal	Pass
4**	7432.755	42.25	54.0	11.75	AV	59.00	200	Horizontal	Pass
5	12520.373	57.08	74.0	16.92	Peak	137.00	100	Horizontal	Pass
5**	12520.373	46.18	54.0	7.82	AV	137.00	100	Horizontal	Pass
6	16146.005	51.87	74.0	22.13	Peak	145.00	200	Horizontal	Pass
6**	16146.005	44.35	54.0	9.65	AV	145.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1567.554	36.84	74.0	37.16	Peak	206.00	300	Vertical	Pass
1**	1567.554	29.20	54.0	24.80	AV	206.00	300	Vertical	Pass
2	2350.136	42.11	74.0	31.89	Peak	155.00	300	Vertical	Pass
2**	2350.136	31.83	54.0	22.17	AV	155.00	300	Vertical	Pass
3	3919.281	42.99	74.0	31.01	Peak	17.00	200	Vertical	Pass
3**	3919.281	34.56	54.0	19.44	AV	17.00	200	Vertical	Pass
4	7682.016	53.47	74.0	20.53	Peak	98.00	400	Vertical	Pass
4**	7682.016	44.28	54.0	9.72	AV	98.00	400	Vertical	Pass
5	12533.003	57.78	74.0	16.22	Peak	321.00	200	Vertical	Pass
5**	12533.003	40.12	54.0	13.88	AV	321.00	200	Vertical	Pass
6	15382.067	51.39	74.0	22.61	Peak	5.00	400	Vertical	Pass
6**	15382.067	46.54	54.0	7.46	AV	5.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1515.001	39.88	74.0	34.12	Peak	91.00	300	Horizontal	Pass
1**	1515.001	30.57	54.0	23.43	AV	91.00	300	Horizontal	Pass
2	2346.614	44.46	74.0	29.54	Peak	71.00	300	Horizontal	Pass
2**	2346.614	36.19	54.0	17.81	AV	71.00	300	Horizontal	Pass
3	4205.492	46.38	74.0	27.62	Peak	124.00	200	Horizontal	Pass
3**	4205.492	36.96	54.0	17.04	AV	124.00	200	Horizontal	Pass
4	7431.445	55.07	74.0	18.93	Peak	333.00	100	Horizontal	Pass
4**	7431.445	41.41	54.0	12.59	AV	333.00	100	Horizontal	Pass
5	12517.706	52.66	74.0	21.34	Peak	157.00	200	Horizontal	Pass
5**	12517.706	47.04	54.0	6.96	AV	157.00	200	Horizontal	Pass
6	16146.877	54.05	74.0	19.95	Peak	302.00	400	Horizontal	Pass
6**	16146.877	45.37	54.0	8.63	AV	302.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1568.990	36.08	74.0	37.92	Peak	166.00	100	Vertical	Pass
1**	1568.990	26.66	54.0	27.34	AV	166.00	100	Vertical	Pass
2	2347.456	43.69	74.0	30.31	Peak	131.00	400	Vertical	Pass
2**	2347.456	32.91	54.0	21.09	AV	131.00	400	Vertical	Pass
3	3913.265	44.28	74.0	29.72	Peak	274.00	200	Vertical	Pass
3**	3913.265	35.54	54.0	18.46	AV	274.00	200	Vertical	Pass
4	7678.329	53.33	74.0	20.67	Peak	336.00	400	Vertical	Pass
4**	7678.329	45.02	54.0	8.98	AV	336.00	400	Vertical	Pass
5	12528.808	57.62	74.0	16.38	Peak	304.00	400	Vertical	Pass
5**	12528.808	43.40	54.0	10.60	AV	304.00	400	Vertical	Pass
6	15379.987	54.07	74.0	19.93	Peak	252.00	100	Vertical	Pass
6**	15379.987	46.99	54.0	7.01	AV	252.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1512.817	37.63	74.0	36.37	Peak	288.00	400	Horizontal	Pass
1**	1512.817	30.44	54.0	23.56	AV	288.00	400	Horizontal	Pass
2	2346.527	43.88	74.0	30.12	Peak	337.00	100	Horizontal	Pass
2**	2346.527	38.65	54.0	15.35	AV	337.00	100	Horizontal	Pass
3	4204.766	49.87	74.0	24.13	Peak	274.00	200	Horizontal	Pass
3**	4204.766	38.05	54.0	15.95	AV	274.00	200	Horizontal	Pass
4	7434.710	55.36	74.0	18.64	Peak	184.00	400	Horizontal	Pass
4**	7434.710	45.31	54.0	8.69	AV	184.00	400	Horizontal	Pass
5	12517.273	55.16	74.0	18.84	Peak	79.00	300	Horizontal	Pass
5**	12517.273	46.67	54.0	7.33	AV	79.00	300	Horizontal	Pass
6	16143.302	56.61	74.0	17.39	Peak	359.00	200	Horizontal	Pass
6**	16143.302	46.73	54.0	7.27	AV	359.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1571.517	35.20	74.0	38.80	Peak	55.00	100	Vertical	Pass
1**	1571.517	29.57	54.0	24.43	AV	55.00	100	Vertical	Pass
2	2348.887	43.51	74.0	30.49	Peak	133.00	400	Vertical	Pass
2**	2348.887	31.23	54.0	22.77	AV	133.00	400	Vertical	Pass
3	3913.141	42.88	74.0	31.12	Peak	353.00	200	Vertical	Pass
3**	3913.141	36.18	54.0	17.82	AV	353.00	200	Vertical	Pass
4	7680.733	49.76	74.0	24.24	Peak	232.00	400	Vertical	Pass
4**	7680.733	46.72	54.0	7.28	AV	232.00	400	Vertical	Pass
5	12526.386	53.35	74.0	20.65	Peak	53.00	100	Vertical	Pass
5**	12526.386	41.46	54.0	12.54	AV	53.00	100	Vertical	Pass
6	15381.561	52.81	74.0	21.19	Peak	355.00	100	Vertical	Pass
6**	15381.561	47.13	54.0	6.87	AV	355.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1508.900	37.83	74.0	36.17	Peak	133.00	100	Horizontal	Pass
1**	1508.900	27.87	54.0	26.13	AV	133.00	100	Horizontal	Pass
2	2348.256	45.30	74.0	28.70	Peak	293.00	200	Horizontal	Pass
2**	2348.256	38.73	54.0	15.27	AV	293.00	200	Horizontal	Pass
3	4206.749	48.84	74.0	25.16	Peak	11.00	200	Horizontal	Pass
3**	4206.749	36.97	54.0	17.03	AV	11.00	200	Horizontal	Pass
4	7430.602	55.94	74.0	18.06	Peak	210.00	400	Horizontal	Pass
4**	7430.602	43.98	54.0	10.02	AV	210.00	400	Horizontal	Pass
5	12520.201	56.51	74.0	17.49	Peak	315.00	400	Horizontal	Pass
5**	12520.201	48.04	54.0	5.96	AV	315.00	400	Horizontal	Pass
6	16145.717	56.76	74.0	17.24	Peak	0.00	100	Horizontal	Pass
6**	16145.717	40.81	54.0	13.19	AV	0.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1570.734	37.92	74.0	36.08	Peak	136.00	300	Vertical	Pass
1**	1570.734	27.44	54.0	26.56	AV	136.00	300	Vertical	Pass
2	2347.113	47.10	74.0	26.90	Peak	179.00	100	Vertical	Pass
2**	2347.113	32.95	54.0	21.05	AV	179.00	100	Vertical	Pass
3	3919.923	45.01	74.0	28.99	Peak	303.00	200	Vertical	Pass
3**	3919.923	34.39	54.0	19.61	AV	303.00	200	Vertical	Pass
4	7682.673	50.66	74.0	23.34	Peak	120.00	300	Vertical	Pass
4**	7682.673	42.77	54.0	11.23	AV	120.00	300	Vertical	Pass
5	12533.383	53.12	74.0	20.88	Peak	264.00	300	Vertical	Pass
5**	12533.383	43.04	54.0	10.96	AV	264.00	300	Vertical	Pass
6	15385.884	54.47	74.0	19.53	Peak	204.00	400	Vertical	Pass
6**	15385.884	44.25	54.0	9.75	AV	204.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1515.586	42.03	74.0	31.97	Peak	335.00	200	Horizontal	Pass
1**	1515.586	31.55	54.0	22.45	AV	335.00	200	Horizontal	Pass
2	2348.628	42.83	74.0	31.17	Peak	216.00	200	Horizontal	Pass
2**	2348.628	38.53	54.0	15.47	AV	216.00	200	Horizontal	Pass
3	4204.533	50.29	74.0	23.71	Peak	187.00	200	Horizontal	Pass
3**	4204.533	36.93	54.0	17.07	AV	187.00	200	Horizontal	Pass
4	7437.619	54.72	74.0	19.28	Peak	217.00	100	Horizontal	Pass
4**	7437.619	42.97	54.0	11.03	AV	217.00	100	Horizontal	Pass
5	12516.480	56.03	74.0	17.97	Peak	193.00	100	Horizontal	Pass
5**	12516.480	49.75	54.0	4.25	AV	193.00	100	Horizontal	Pass
6	16150.912	56.16	74.0	17.84	Peak	105.00	200	Horizontal	Pass
6**	16150.912	44.50	54.0	9.50	AV	105.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1572.148	35.98	74.0	38.02	Peak	331.00	300	Vertical	Pass
1**	1572.148	29.53	54.0	24.47	AV	331.00	300	Vertical	Pass
2	2347.311	42.69	74.0	31.31	Peak	118.00	400	Vertical	Pass
2**	2347.311	34.54	54.0	19.46	AV	118.00	400	Vertical	Pass
3	3921.012	46.91	74.0	27.09	Peak	39.00	200	Vertical	Pass
3**	3921.012	37.79	54.0	16.21	AV	39.00	200	Vertical	Pass
4	7679.275	51.88	74.0	22.12	Peak	241.00	200	Vertical	Pass
4**	7679.275	45.46	54.0	8.54	AV	241.00	200	Vertical	Pass
5	12529.144	54.33	74.0	19.67	Peak	71.00	300	Vertical	Pass
5**	12529.144	45.67	54.0	8.33	AV	71.00	300	Vertical	Pass
6	15381.183	55.07	74.0	18.93	Peak	248.00	100	Vertical	Pass
6**	15381.183	43.81	54.0	10.19	AV	248.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1508.536	40.06	74.0	33.94	Peak	102.00	100	Horizontal	Pass
1**	1508.536	29.05	54.0	24.95	AV	102.00	100	Horizontal	Pass
2	2350.581	42.78	74.0	31.22	Peak	283.00	200	Horizontal	Pass
2**	2350.581	38.08	54.0	15.92	AV	283.00	200	Horizontal	Pass
3	4205.142	48.81	74.0	25.19	Peak	168.00	200	Horizontal	Pass
3**	4205.142	39.53	54.0	14.47	AV	168.00	200	Horizontal	Pass
4	7434.153	52.63	74.0	21.37	Peak	218.00	200	Horizontal	Pass
4**	7434.153	43.92	54.0	10.08	AV	218.00	200	Horizontal	Pass
5	12519.354	55.27	74.0	18.73	Peak	281.00	200	Horizontal	Pass
5**	12519.354	48.84	54.0	5.16	AV	281.00	200	Horizontal	Pass
6	16147.189	53.05	74.0	20.95	Peak	263.00	300	Horizontal	Pass
6**	16147.189	42.25	54.0	11.75	AV	263.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1572.673	37.44	74.0	36.56	Peak	231.00	300	Vertical	Pass
1**	1572.673	29.64	54.0	24.36	AV	231.00	300	Vertical	Pass
2	2350.940	46.62	74.0	27.38	Peak	319.00	400	Vertical	Pass
2**	2350.940	35.24	54.0	18.76	AV	319.00	400	Vertical	Pass
3	3920.193	42.04	74.0	31.96	Peak	310.00	200	Vertical	Pass
3**	3920.193	33.83	54.0	20.17	AV	310.00	200	Vertical	Pass
4	7681.599	51.06	74.0	22.94	Peak	146.00	200	Vertical	Pass
4**	7681.599	43.99	54.0	10.01	AV	146.00	200	Vertical	Pass
5	12528.325	53.89	74.0	20.11	Peak	245.00	300	Vertical	Pass
5**	12528.325	42.71	54.0	11.29	AV	245.00	300	Vertical	Pass
6	15383.409	53.24	74.0	20.76	Peak	314.00	200	Vertical	Pass
6**	15383.409	45.46	54.0	8.54	AV	314.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1507.774	40.24	74.0	33.76	Peak	123.00	200	Horizontal	Pass
1**	1507.774	30.60	54.0	23.40	AV	123.00	200	Horizontal	Pass
2	2351.877	43.49	74.0	30.51	Peak	59.00	200	Horizontal	Pass
2**	2351.877	39.20	54.0	14.80	AV	59.00	200	Horizontal	Pass
3	4202.140	48.52	74.0	25.48	Peak	26.00	200	Horizontal	Pass
3**	4202.140	36.71	54.0	17.29	AV	26.00	200	Horizontal	Pass
4	7433.550	56.81	74.0	17.19	Peak	27.00	200	Horizontal	Pass
4**	7433.550	44.25	54.0	9.75	AV	27.00	200	Horizontal	Pass
5	12518.243	58.34	74.0	15.66	Peak	145.00	100	Horizontal	Pass
5**	12518.243	47.53	54.0	6.47	AV	145.00	100	Horizontal	Pass
6	16151.264	53.44	74.0	20.56	Peak	172.00	100	Horizontal	Pass
6**	16151.264	44.58	54.0	9.42	AV	172.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1572.599	33.79	74.0	40.21	Peak	328.00	200	Vertical	Pass
1**	1572.599	26.02	54.0	27.98	AV	328.00	200	Vertical	Pass
2	2348.100	43.19	74.0	30.81	Peak	296.00	300	Vertical	Pass
2**	2348.100	33.30	54.0	20.70	AV	296.00	300	Vertical	Pass
3	3916.491	47.62	74.0	26.38	Peak	112.00	200	Vertical	Pass
3**	3916.491	33.81	54.0	20.19	AV	112.00	200	Vertical	Pass
4	7680.804	52.87	74.0	21.13	Peak	19.00	300	Vertical	Pass
4**	7680.804	46.40	54.0	7.60	AV	19.00	300	Vertical	Pass
5	12532.213	57.12	74.0	16.88	Peak	69.00	100	Vertical	Pass
5**	12532.213	42.06	54.0	11.94	AV	69.00	100	Vertical	Pass
6	15385.349	55.45	74.0	18.55	Peak	153.00	300	Vertical	Pass
6**	15385.349	46.89	54.0	7.11	AV	153.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1513.231	40.04	74.0	33.96	Peak	257.00	100	Horizontal	Pass
1**	1513.231	30.42	54.0	23.58	AV	257.00	100	Horizontal	Pass
2	2345.702	46.54	74.0	27.46	Peak	189.00	100	Horizontal	Pass
2**	2345.702	37.01	54.0	16.99	AV	189.00	100	Horizontal	Pass
3	4203.051	49.49	74.0	24.51	Peak	263.00	200	Horizontal	Pass
3**	4203.051	36.95	54.0	17.05	AV	263.00	200	Horizontal	Pass
4	7436.064	55.13	74.0	18.87	Peak	133.00	300	Horizontal	Pass
4**	7436.064	43.79	54.0	10.21	AV	133.00	300	Horizontal	Pass
5	12516.901	52.77	74.0	21.23	Peak	118.00	100	Horizontal	Pass
5**	12516.901	48.01	54.0	5.99	AV	118.00	100	Horizontal	Pass
6	16146.881	51.99	74.0	22.01	Peak	238.00	200	Horizontal	Pass
6**	16146.881	43.58	54.0	10.42	AV	238.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1567.327	35.22	74.0	38.78	Peak	17.00	300	Vertical	Pass
1**	1567.327	29.06	54.0	24.94	AV	17.00	300	Vertical	Pass
2	2348.476	44.72	74.0	29.28	Peak	167.00	200	Vertical	Pass
2**	2348.476	32.14	54.0	21.86	AV	167.00	200	Vertical	Pass
3	3919.953	44.48	74.0	29.52	Peak	124.00	200	Vertical	Pass
3**	3919.953	36.82	54.0	17.18	AV	124.00	200	Vertical	Pass
4	7676.790	52.62	74.0	21.38	Peak	357.00	400	Vertical	Pass
4**	7676.790	45.96	54.0	8.04	AV	357.00	400	Vertical	Pass
5	12525.735	57.02	74.0	16.98	Peak	185.00	400	Vertical	Pass
5**	12525.735	42.00	54.0	12.00	AV	185.00	400	Vertical	Pass
6	15381.494	55.01	74.0	18.99	Peak	297.00	400	Vertical	Pass
6**	15381.494	45.39	54.0	8.61	AV	297.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1509.452	37.25	74.0	36.75	Peak	205.00	100	Horizontal	Pass
1**	1509.452	32.48	54.0	21.52	AV	205.00	100	Horizontal	Pass
2	2345.860	44.35	74.0	29.65	Peak	133.00	100	Horizontal	Pass
2**	2345.860	36.30	54.0	17.70	AV	133.00	100	Horizontal	Pass
3	4204.114	44.84	74.0	29.16	Peak	36.00	200	Horizontal	Pass
3**	4204.114	39.83	54.0	14.17	AV	36.00	200	Horizontal	Pass
4	7435.345	56.77	74.0	17.23	Peak	90.00	300	Horizontal	Pass
4**	7435.345	42.24	54.0	11.76	AV	90.00	300	Horizontal	Pass
5	12520.812	52.97	74.0	21.03	Peak	171.00	200	Horizontal	Pass
5**	12520.812	45.47	54.0	8.53	AV	171.00	200	Horizontal	Pass
6	16144.954	55.80	74.0	18.20	Peak	232.00	400	Horizontal	Pass
6**	16144.954	42.47	54.0	11.53	AV	232.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1573.771	34.50	74.0	39.50	Peak	241.00	300	Vertical	Pass
1**	1573.771	25.29	54.0	28.71	AV	241.00	300	Vertical	Pass
2	2344.369	47.85	74.0	26.15	Peak	335.00	400	Vertical	Pass
2**	2344.369	32.07	54.0	21.93	AV	335.00	400	Vertical	Pass
3	3916.002	44.04	74.0	29.96	Peak	118.00	200	Vertical	Pass
3**	3916.002	33.41	54.0	20.59	AV	118.00	200	Vertical	Pass
4	7681.112	54.16	74.0	19.84	Peak	271.00	400	Vertical	Pass
4**	7681.112	46.78	54.0	7.22	AV	271.00	400	Vertical	Pass
5	12530.468	54.27	74.0	19.73	Peak	140.00	300	Vertical	Pass
5**	12530.468	44.43	54.0	9.57	AV	140.00	300	Vertical	Pass
6	15379.979	55.00	74.0	19.00	Peak	244.00	300	Vertical	Pass
6**	15379.979	47.09	54.0	6.91	AV	244.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1508.554	37.21	74.0	36.79	Peak	48.00	300	Horizontal	Pass
1**	1508.554	29.52	54.0	24.48	AV	48.00	300	Horizontal	Pass
2	2349.032	42.80	74.0	31.20	Peak	348.00	300	Horizontal	Pass
2**	2349.032	36.49	54.0	17.51	AV	348.00	300	Horizontal	Pass
3	4207.629	46.09	74.0	27.91	Peak	81.00	200	Horizontal	Pass
3**	4207.629	39.52	54.0	14.48	AV	81.00	200	Horizontal	Pass
4	7430.513	52.58	74.0	21.42	Peak	122.00	300	Horizontal	Pass
4**	7430.513	41.15	54.0	12.85	AV	122.00	300	Horizontal	Pass
5	12521.942	53.41	74.0	20.59	Peak	142.00	300	Horizontal	Pass
5**	12521.942	47.15	54.0	6.85	AV	142.00	300	Horizontal	Pass
6	16143.652	52.81	74.0	21.19	Peak	273.00	300	Horizontal	Pass
6**	16143.652	42.31	54.0	11.69	AV	273.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1571.223	38.05	74.0	35.95	Peak	292.00	100	Vertical	Pass
1**	1571.223	28.81	54.0	25.19	AV	292.00	100	Vertical	Pass
2	2347.492	42.83	74.0	31.17	Peak	314.00	300	Vertical	Pass
2**	2347.492	33.83	54.0	20.17	AV	314.00	300	Vertical	Pass
3	3915.084	45.91	74.0	28.09	Peak	103.00	200	Vertical	Pass
3**	3915.084	33.91	54.0	20.09	AV	103.00	200	Vertical	Pass
4	7683.952	50.24	74.0	23.76	Peak	360.00	300	Vertical	Pass
4**	7683.952	44.54	54.0	9.46	AV	360.00	300	Vertical	Pass
5	12531.627	58.36	74.0	15.64	Peak	61.00	300	Vertical	Pass
5**	12531.627	44.25	54.0	9.75	AV	61.00	300	Vertical	Pass
6	15381.353	50.36	74.0	23.64	Peak	94.00	200	Vertical	Pass
6**	15381.353	45.48	54.0	8.52	AV	94.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1515.132	39.67	74.0	34.33	Peak	215.00	300	Horizontal	Pass
1**	1515.132	30.49	54.0	23.51	AV	215.00	300	Horizontal	Pass
2	2351.406	45.62	74.0	28.38	Peak	20.00	400	Horizontal	Pass
2**	2351.406	36.78	54.0	17.22	AV	20.00	400	Horizontal	Pass
3	4204.742	50.26	74.0	23.74	Peak	60.00	200	Horizontal	Pass
3**	4204.742	37.98	54.0	16.02	AV	60.00	200	Horizontal	Pass
4	7437.209	55.61	74.0	18.39	Peak	281.00	100	Horizontal	Pass
4**	7437.209	42.85	54.0	11.15	AV	281.00	100	Horizontal	Pass
5	12519.763	54.61	74.0	19.39	Peak	216.00	100	Horizontal	Pass
5**	12519.763	46.61	54.0	7.39	AV	216.00	100	Horizontal	Pass
6	16144.908	56.42	74.0	17.58	Peak	168.00	200	Horizontal	Pass
6**	16144.908	45.04	54.0	8.96	AV	168.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1572.651	35.36	74.0	38.64	Peak	287.00	200	Vertical	Pass
1**	1572.651	24.21	54.0	29.79	AV	287.00	200	Vertical	Pass
2	2347.228	46.78	74.0	27.22	Peak	17.00	300	Vertical	Pass
2**	2347.228	33.13	54.0	20.87	AV	17.00	300	Vertical	Pass
3	3916.408	47.60	74.0	26.40	Peak	161.00	200	Vertical	Pass
3**	3916.408	36.00	54.0	18.00	AV	161.00	200	Vertical	Pass
4	7684.388	54.01	74.0	19.99	Peak	243.00	100	Vertical	Pass
4**	7684.388	45.08	54.0	8.92	AV	243.00	100	Vertical	Pass
5	12528.943	53.26	74.0	20.74	Peak	70.00	400	Vertical	Pass
5**	12528.943	43.89	54.0	10.11	AV	70.00	400	Vertical	Pass
6	15382.392	54.85	74.0	19.15	Peak	46.00	100	Vertical	Pass
6**	15382.392	46.97	54.0	7.03	AV	46.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1514.879	39.76	74.0	34.24	Peak	285.00	300	Horizontal	Pass
1**	1514.879	27.85	54.0	26.15	AV	285.00	300	Horizontal	Pass
2	2345.562	46.27	74.0	27.73	Peak	192.00	100	Horizontal	Pass
2**	2345.562	38.72	54.0	15.28	AV	192.00	100	Horizontal	Pass
3	4206.340	50.42	74.0	23.58	Peak	357.00	200	Horizontal	Pass
3**	4206.340	36.34	54.0	17.66	AV	357.00	200	Horizontal	Pass
4	7435.840	52.80	74.0	21.20	Peak	16.00	400	Horizontal	Pass
4**	7435.840	44.23	54.0	9.77	AV	16.00	400	Horizontal	Pass
5	12522.016	57.69	74.0	16.31	Peak	265.00	100	Horizontal	Pass
5**	12522.016	44.12	54.0	9.88	AV	265.00	100	Horizontal	Pass
6	16150.773	56.45	74.0	17.55	Peak	208.00	300	Horizontal	Pass
6**	16150.773	42.60	54.0	11.40	AV	208.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1570.318	34.22	74.0	39.78	Peak	167.00	300	Vertical	Pass
1**	1570.318	27.91	54.0	26.09	AV	167.00	300	Vertical	Pass
2	2348.758	47.68	74.0	26.32	Peak	13.00	100	Vertical	Pass
2**	2348.758	34.34	54.0	19.66	AV	13.00	100	Vertical	Pass
3	3916.132	45.44	74.0	28.56	Peak	234.00	200	Vertical	Pass
3**	3916.132	33.75	54.0	20.25	AV	234.00	200	Vertical	Pass
4	7680.372	54.62	74.0	19.38	Peak	127.00	300	Vertical	Pass
4**	7680.372	44.14	54.0	9.86	AV	127.00	300	Vertical	Pass
5	12531.847	55.52	74.0	18.48	Peak	343.00	300	Vertical	Pass
5**	12531.847	42.06	54.0	11.94	AV	343.00	300	Vertical	Pass
6	15380.023	53.48	74.0	20.52	Peak	100.00	100	Vertical	Pass
6**	15380.023	41.87	54.0	12.13	AV	100.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1514.714	38.76	74.0	35.24	Peak	44.00	300	Horizontal	Pass
1**	1514.714	31.10	54.0	22.90	AV	44.00	300	Horizontal	Pass
2	2350.798	45.02	74.0	28.98	Peak	156.00	400	Horizontal	Pass
2**	2350.798	39.09	54.0	14.91	AV	156.00	400	Horizontal	Pass
3	4203.212	46.95	74.0	27.05	Peak	120.00	200	Horizontal	Pass
3**	4203.212	39.74	54.0	14.26	AV	120.00	200	Horizontal	Pass
4	7434.716	51.67	74.0	22.33	Peak	128.00	400	Horizontal	Pass
4**	7434.716	44.84	54.0	9.16	AV	128.00	400	Horizontal	Pass
5	12516.577	56.12	74.0	17.88	Peak	176.00	400	Horizontal	Pass
5**	12516.577	45.81	54.0	8.19	AV	176.00	400	Horizontal	Pass
6	16144.434	53.73	74.0	20.27	Peak	296.00	400	Horizontal	Pass
6**	16144.434	45.77	54.0	8.23	AV	296.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1572.656	36.40	74.0	37.60	Peak	54.00	200	Vertical	Pass
1**	1572.656	24.27	54.0	29.73	AV	54.00	200	Vertical	Pass
2	2343.090	45.75	74.0	28.25	Peak	328.00	100	Vertical	Pass
2**	2343.090	34.35	54.0	19.65	AV	328.00	100	Vertical	Pass
3	3917.189	43.27	74.0	30.73	Peak	60.00	200	Vertical	Pass
3**	3917.189	38.45	54.0	15.55	AV	60.00	200	Vertical	Pass
4	7682.031	53.34	74.0	20.66	Peak	183.00	300	Vertical	Pass
4**	7682.031	45.16	54.0	8.84	AV	183.00	300	Vertical	Pass
5	12533.532	54.65	74.0	19.35	Peak	346.00	100	Vertical	Pass
5**	12533.532	43.59	54.0	10.41	AV	346.00	100	Vertical	Pass
6	15379.130	53.83	74.0	20.17	Peak	33.00	400	Vertical	Pass
6**	15379.130	44.65	54.0	9.35	AV	33.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1524.356	39.63	74.0	34.37	Peak	304.00	100	Horizontal	Pass
1**	1524.356	28.63	54.0	25.37	AV	304.00	100	Horizontal	Pass
2	4020.809	47.55	74.0	26.45	Peak	259.00	300	Horizontal	Pass
2**	4020.809	38.19	54.0	15.81	AV	259.00	300	Horizontal	Pass
3	7597.448	53.49	74.0	20.51	Peak	240.00	200	Horizontal	Pass
3**	7597.448	44.67	54.0	9.33	AV	240.00	200	Horizontal	Pass
4	12456.750	50.69	74.0	23.31	Peak	163.00	200	Horizontal	Pass
4**	12456.750	44.10	54.0	9.90	AV	163.00	200	Horizontal	Pass
5	16091.590	52.38	74.0	21.62	Peak	6.00	100	Horizontal	Pass
5**	16091.590	45.84	54.0	8.16	AV	6.00	100	Horizontal	Pass
6	17419.282	53.88	74.0	20.12	Peak	1.00	200	Horizontal	Pass
6**	17419.282	45.77	54.0	8.23	AV	1.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1333.879	43.88	74.0	30.12	Peak	186.00	300	Vertical	Pass
1**	1333.879	32.57	54.0	21.43	AV	186.00	300	Vertical	Pass
2	1437.831	38.97	74.0	35.03	Peak	246.00	200	Vertical	Pass
2**	1437.831	35.40	54.0	18.60	AV	246.00	200	Vertical	Pass
3	4313.047	44.64	74.0	29.36	Peak	248.00	200	Vertical	Pass
3**	4313.047	36.23	54.0	17.77	AV	248.00	200	Vertical	Pass
4	7597.214	54.90	74.0	19.10	Peak	72.00	400	Vertical	Pass
4**	7597.214	44.88	54.0	9.12	AV	72.00	400	Vertical	Pass
5	12533.942	55.50	74.0	18.50	Peak	195.00	400	Vertical	Pass
5**	12533.942	43.57	54.0	10.43	AV	195.00	400	Vertical	Pass
6	15908.157	53.80	74.0	20.20	Peak	149.00	300	Vertical	Pass
6**	15908.157	44.24	54.0	9.76	AV	149.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1521.172	37.09	74.0	36.91	Peak	58.00	200	Horizontal	Pass
1**	1521.172	27.14	54.0	26.86	AV	58.00	200	Horizontal	Pass
2	4018.098	49.43	74.0	24.57	Peak	129.00	100	Horizontal	Pass
2**	4018.098	34.47	54.0	19.53	AV	129.00	100	Horizontal	Pass
3	7598.457	53.60	74.0	20.40	Peak	158.00	200	Horizontal	Pass
3**	7598.457	43.86	54.0	10.14	AV	158.00	200	Horizontal	Pass
4	12459.022	52.56	74.0	21.44	Peak	183.00	300	Horizontal	Pass
4**	12459.022	45.79	54.0	8.21	AV	183.00	300	Horizontal	Pass
5	16097.732	56.33	74.0	17.67	Peak	9.00	400	Horizontal	Pass
5**	16097.732	44.27	54.0	9.73	AV	9.00	400	Horizontal	Pass
6	17417.126	58.66	74.0	15.34	Peak	217.00	200	Horizontal	Pass
6**	17417.126	44.99	54.0	9.01	AV	217.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1337.348	45.78	74.0	28.22	Peak	226.00	400	Vertical	Pass
1**	1337.348	31.29	54.0	22.71	AV	226.00	400	Vertical	Pass
2	1442.206	43.26	74.0	30.74	Peak	47.00	100	Vertical	Pass
2**	1442.206	37.48	54.0	16.52	AV	47.00	100	Vertical	Pass
3	4313.235	45.02	74.0	28.98	Peak	224.00	200	Vertical	Pass
3**	4313.235	37.26	54.0	16.74	AV	224.00	200	Vertical	Pass
4	7593.711	50.09	74.0	23.91	Peak	173.00	300	Vertical	Pass
4**	7593.711	42.66	54.0	11.34	AV	173.00	300	Vertical	Pass
5	12532.349	51.48	74.0	22.52	Peak	44.00	100	Vertical	Pass
5**	12532.349	46.26	54.0	7.74	AV	44.00	100	Vertical	Pass
6	15904.766	55.87	74.0	18.13	Peak	233.00	200	Vertical	Pass
6**	15904.766	42.62	54.0	11.38	AV	233.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1517.933	40.74	74.0	33.26	Peak	101.00	400	Horizontal	Pass
1**	1517.933	30.76	54.0	23.24	AV	101.00	400	Horizontal	Pass
2	4017.114	46.47	74.0	27.53	Peak	292.00	300	Horizontal	Pass
2**	4017.114	39.15	54.0	14.85	AV	292.00	300	Horizontal	Pass
3	7595.384	50.34	74.0	23.66	Peak	297.00	200	Horizontal	Pass
3**	7595.384	42.37	54.0	11.63	AV	297.00	200	Horizontal	Pass
4	12458.913	56.24	74.0	17.76	Peak	83.00	100	Horizontal	Pass
4**	12458.913	41.20	54.0	12.80	AV	83.00	100	Horizontal	Pass
5	16096.070	52.01	74.0	21.99	Peak	62.00	300	Horizontal	Pass
5**	16096.070	47.49	54.0	6.51	AV	62.00	300	Horizontal	Pass
6	17417.865	53.42	74.0	20.58	Peak	146.00	300	Horizontal	Pass
6**	17417.865	46.38	54.0	7.62	AV	146.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1336.136	46.65	74.0	27.35	Peak	0.00	400	Vertical	Pass
1**	1336.136	30.78	54.0	23.22	AV	0.00	400	Vertical	Pass
2	1439.633	39.22	74.0	34.78	Peak	46.00	400	Vertical	Pass
2**	1439.633	39.13	54.0	14.87	AV	46.00	400	Vertical	Pass
3	4307.950	46.76	74.0	27.24	Peak	205.00	200	Vertical	Pass
3**	4307.950	36.46	54.0	17.54	AV	205.00	200	Vertical	Pass
4	7591.329	53.54	74.0	20.46	Peak	34.00	200	Vertical	Pass
4**	7591.329	44.61	54.0	9.39	AV	34.00	200	Vertical	Pass
5	12535.551	51.57	74.0	22.43	Peak	49.00	300	Vertical	Pass
5**	12535.551	40.75	54.0	13.25	AV	49.00	300	Vertical	Pass
6	15909.185	53.15	74.0	20.85	Peak	187.00	200	Vertical	Pass
6**	15909.185	44.53	54.0	9.47	AV	187.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1524.645	38.86	74.0	35.14	Peak	321.00	100	Horizontal	Pass
1**	1524.645	29.84	54.0	24.16	AV	321.00	100	Horizontal	Pass
2	4019.241	48.73	74.0	25.27	Peak	123.00	200	Horizontal	Pass
2**	4019.241	38.39	54.0	15.61	AV	123.00	200	Horizontal	Pass
3	7601.489	55.98	74.0	18.02	Peak	197.00	200	Horizontal	Pass
3**	7601.489	42.06	54.0	11.94	AV	197.00	200	Horizontal	Pass
4	12454.333	52.13	74.0	21.87	Peak	356.00	200	Horizontal	Pass
4**	12454.333	43.49	54.0	10.51	AV	356.00	200	Horizontal	Pass
5	16092.132	55.10	74.0	18.90	Peak	16.00	200	Horizontal	Pass
5**	16092.132	46.51	54.0	7.49	AV	16.00	200	Horizontal	Pass
6	17418.206	56.65	74.0	17.35	Peak	258.00	100	Horizontal	Pass
6**	17418.206	46.49	54.0	7.51	AV	258.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1336.480	44.97	74.0	29.03	Peak	45.00	100	Vertical	Pass
1**	1336.480	32.43	54.0	21.57	AV	45.00	100	Vertical	Pass
2	1439.878	40.25	74.0	33.75	Peak	247.00	400	Vertical	Pass
2**	1439.878	34.53	54.0	19.47	AV	247.00	400	Vertical	Pass
3	4309.485	48.49	74.0	25.51	Peak	336.00	200	Vertical	Pass
3**	4309.485	39.73	54.0	14.27	AV	336.00	200	Vertical	Pass
4	7591.917	54.38	74.0	19.62	Peak	136.00	300	Vertical	Pass
4**	7591.917	43.90	54.0	10.10	AV	136.00	300	Vertical	Pass
5	12536.099	52.48	74.0	21.52	Peak	261.00	300	Vertical	Pass
5**	12536.099	42.58	54.0	11.42	AV	261.00	300	Vertical	Pass
6	15905.478	53.99	74.0	20.01	Peak	64.00	200	Vertical	Pass
6**	15905.478	46.21	54.0	7.79	AV	64.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1519.162	37.40	74.0	36.60	Peak	264.00	400	Horizontal	Pass
1**	1519.162	29.18	54.0	24.82	AV	264.00	400	Horizontal	Pass
2	4021.923	49.26	74.0	24.74	Peak	113.00	300	Horizontal	Pass
2**	4021.923	37.01	54.0	16.99	AV	113.00	300	Horizontal	Pass
3	7598.487	53.10	74.0	20.90	Peak	336.00	200	Horizontal	Pass
3**	7598.487	43.71	54.0	10.29	AV	336.00	200	Horizontal	Pass
4	12459.641	53.93	74.0	20.07	Peak	317.00	300	Horizontal	Pass
4**	12459.641	45.64	54.0	8.36	AV	317.00	300	Horizontal	Pass
5	16096.990	53.78	74.0	20.22	Peak	243.00	100	Horizontal	Pass
5**	16096.990	47.73	54.0	6.27	AV	243.00	100	Horizontal	Pass
6	17420.115	53.65	74.0	20.35	Peak	29.00	200	Horizontal	Pass
6**	17420.115	47.85	54.0	6.15	AV	29.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.610	41.64	74.0	32.36	Peak	71.00	100	Vertical	Pass
1**	1330.610	35.88	54.0	18.12	AV	71.00	100	Vertical	Pass
2	1443.675	39.49	74.0	34.51	Peak	77.00	100	Vertical	Pass
2**	1443.675	34.37	54.0	19.63	AV	77.00	100	Vertical	Pass
3	4310.436	45.08	74.0	28.92	Peak	287.00	200	Vertical	Pass
3**	4310.436	36.68	54.0	17.32	AV	287.00	200	Vertical	Pass
4	7597.771	55.79	74.0	18.21	Peak	350.00	300	Vertical	Pass
4**	7597.771	43.03	54.0	10.97	AV	350.00	300	Vertical	Pass
5	12531.984	51.93	74.0	22.07	Peak	311.00	300	Vertical	Pass
5**	12531.984	46.36	54.0	7.64	AV	311.00	300	Vertical	Pass
6	15906.504	51.67	74.0	22.33	Peak	125.00	400	Vertical	Pass
6**	15906.504	47.68	54.0	6.32	AV	125.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1523.591	36.25	74.0	37.75	Peak	215.00	400	Horizontal	Pass
1**	1523.591	32.63	54.0	21.37	AV	215.00	400	Horizontal	Pass
2	4022.728	47.60	74.0	26.40	Peak	38.00	400	Horizontal	Pass
2**	4022.728	36.44	54.0	17.56	AV	38.00	400	Horizontal	Pass
3	7602.096	54.67	74.0	19.33	Peak	330.00	200	Horizontal	Pass
3**	7602.096	43.52	54.0	10.48	AV	330.00	200	Horizontal	Pass
4	12455.387	54.50	74.0	19.50	Peak	107.00	300	Horizontal	Pass
4**	12455.387	46.81	54.0	7.19	AV	107.00	300	Horizontal	Pass
5	16093.107	50.52	74.0	23.48	Peak	261.00	400	Horizontal	Pass
5**	16093.107	46.79	54.0	7.21	AV	261.00	400	Horizontal	Pass
6	17420.541	54.46	74.0	19.54	Peak	242.00	100	Horizontal	Pass
6**	17420.541	49.25	54.0	4.75	AV	242.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.921	44.92	74.0	29.08	Peak	306.00	300	Vertical	Pass
1**	1332.921	32.96	54.0	21.04	AV	306.00	300	Vertical	Pass
2	1440.801	44.34	74.0	29.66	Peak	113.00	200	Vertical	Pass
2**	1440.801	35.47	54.0	18.53	AV	113.00	200	Vertical	Pass
3	4309.178	49.42	74.0	24.58	Peak	178.00	200	Vertical	Pass
3**	4309.178	39.90	54.0	14.10	AV	178.00	200	Vertical	Pass
4	7596.921	51.77	74.0	22.23	Peak	245.00	400	Vertical	Pass
4**	7596.921	44.53	54.0	9.47	AV	245.00	400	Vertical	Pass
5	12537.907	54.64	74.0	19.36	Peak	350.00	100	Vertical	Pass
5**	12537.907	46.53	54.0	7.47	AV	350.00	100	Vertical	Pass
6	15903.642	51.48	74.0	22.52	Peak	317.00	300	Vertical	Pass
6**	15903.642	48.43	54.0	5.57	AV	317.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1522.191	37.61	74.0	36.39	Peak	24.00	300	Horizontal	Pass
1**	1522.191	32.05	54.0	21.95	AV	24.00	300	Horizontal	Pass
2	4022.179	47.86	74.0	26.14	Peak	312.00	400	Horizontal	Pass
2**	4022.179	35.85	54.0	18.15	AV	312.00	400	Horizontal	Pass
3	7602.339	51.19	74.0	22.81	Peak	145.00	200	Horizontal	Pass
3**	7602.339	41.06	54.0	12.94	AV	145.00	200	Horizontal	Pass
4	12454.815	55.46	74.0	18.54	Peak	340.00	300	Horizontal	Pass
4**	12454.815	43.38	54.0	10.62	AV	340.00	300	Horizontal	Pass
5	16097.395	52.90	74.0	21.10	Peak	131.00	300	Horizontal	Pass
5**	16097.395	45.74	54.0	8.26	AV	131.00	300	Horizontal	Pass
6	17418.177	54.75	74.0	19.25	Peak	198.00	300	Horizontal	Pass
6**	17418.177	44.94	54.0	9.06	AV	198.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.208	44.69	74.0	29.31	Peak	300.00	400	Vertical	Pass
1**	1330.208	34.16	54.0	19.84	AV	300.00	400	Vertical	Pass
2	1438.586	41.72	74.0	32.28	Peak	79.00	200	Vertical	Pass
2**	1438.586	37.79	54.0	16.21	AV	79.00	200	Vertical	Pass
3	4308.047	48.18	74.0	25.82	Peak	301.00	200	Vertical	Pass
3**	4308.047	35.57	54.0	18.43	AV	301.00	200	Vertical	Pass
4	7590.537	50.84	74.0	23.16	Peak	293.00	200	Vertical	Pass
4**	7590.537	45.83	54.0	8.17	AV	293.00	200	Vertical	Pass
5	12537.282	51.99	74.0	22.01	Peak	356.00	200	Vertical	Pass
5**	12537.282	43.48	54.0	10.52	AV	356.00	200	Vertical	Pass
6	15908.819	57.29	74.0	16.71	Peak	87.00	200	Vertical	Pass
6**	15908.819	46.45	54.0	7.55	AV	87.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1517.307	36.36	74.0	37.64	Peak	248.00	300	Horizontal	Pass
1**	1517.307	31.80	54.0	22.20	AV	248.00	300	Horizontal	Pass
2	4023.883	47.63	74.0	26.37	Peak	265.00	300	Horizontal	Pass
2**	4023.883	36.37	54.0	17.63	AV	265.00	300	Horizontal	Pass
3	7597.113	53.82	74.0	20.18	Peak	344.00	200	Horizontal	Pass
3**	7597.113	45.39	54.0	8.61	AV	344.00	200	Horizontal	Pass
4	12453.123	52.97	74.0	21.03	Peak	356.00	400	Horizontal	Pass
4**	12453.123	45.76	54.0	8.24	AV	356.00	400	Horizontal	Pass
5	16094.371	52.70	74.0	21.30	Peak	281.00	200	Horizontal	Pass
5**	16094.371	46.36	54.0	7.64	AV	281.00	200	Horizontal	Pass
6	17418.689	54.11	74.0	19.89	Peak	105.00	200	Horizontal	Pass
6**	17418.689	46.30	54.0	7.70	AV	105.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1335.518	46.04	74.0	27.96	Peak	285.00	300	Vertical	Pass
1**	1335.518	34.04	54.0	19.96	AV	285.00	300	Vertical	Pass
2	1442.874	38.95	74.0	35.05	Peak	264.00	200	Vertical	Pass
2**	1442.874	36.31	54.0	17.69	AV	264.00	200	Vertical	Pass
3	4312.650	44.92	74.0	29.08	Peak	186.00	200	Vertical	Pass
3**	4312.650	36.65	54.0	17.35	AV	186.00	200	Vertical	Pass
4	7591.121	53.37	74.0	20.63	Peak	284.00	400	Vertical	Pass
4**	7591.121	44.51	54.0	9.49	AV	284.00	400	Vertical	Pass
5	12533.212	51.95	74.0	22.05	Peak	282.00	300	Vertical	Pass
5**	12533.212	44.55	54.0	9.45	AV	282.00	300	Vertical	Pass
6	15902.660	56.56	74.0	17.44	Peak	272.00	400	Vertical	Pass
6**	15902.660	46.31	54.0	7.69	AV	272.00	400	Vertical	Pass

11ac20, U-NII-3, 1 GHz to 18 GHz, Low Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1524.209	40.99	74.0	33.01	Peak	359.00	400	Horizontal	Pass
1**	1524.209	27.24	54.0	26.76	AV	359.00	400	Horizontal	Pass
2	4017.959	46.39	74.0	27.61	Peak	286.00	200	Horizontal	Pass
2**	4017.959	35.26	54.0	18.74	AV	286.00	200	Horizontal	Pass
3	7595.117	54.94	74.0	19.06	Peak	344.00	200	Horizontal	Pass
3**	7595.117	43.03	54.0	10.97	AV	344.00	200	Horizontal	Pass
4	12458.670	55.38	74.0	18.62	Peak	316.00	100	Horizontal	Pass
4**	12458.670	43.84	54.0	10.16	AV	316.00	100	Horizontal	Pass
5	16097.700	55.91	74.0	18.09	Peak	220.00	300	Horizontal	Pass
5**	16097.700	45.75	54.0	8.25	AV	220.00	300	Horizontal	Pass
6	17416.102	58.03	74.0	15.97	Peak	187.00	100	Horizontal	Pass
6**	17416.102	48.57	54.0	5.43	AV	187.00	100	Horizontal	Pass

11ac20, U-NII-3, 1 GHz to 18 GHz, Low Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.963	41.77	74.0	32.23	Peak	220.00	100	Vertical	Pass
1**	1329.963	36.39	54.0	17.61	AV	220.00	100	Vertical	Pass
2	1444.139	39.23	74.0	34.77	Peak	8.00	200	Vertical	Pass
2**	1444.139	37.06	54.0	16.94	AV	8.00	200	Vertical	Pass
3	4307.624	47.89	74.0	26.11	Peak	54.00	200	Vertical	Pass
3**	4307.624	37.59	54.0	16.41	AV	54.00	200	Vertical	Pass
4	7590.645	55.00	74.0	19.00	Peak	322.00	300	Vertical	Pass
4**	7590.645	44.29	54.0	9.71	AV	322.00	300	Vertical	Pass
5	12538.110	52.20	74.0	21.80	Peak	78.00	100	Vertical	Pass
5**	12538.110	45.73	54.0	8.27	AV	78.00	100	Vertical	Pass
6	15903.629	55.75	74.0	18.25	Peak	353.00	300	Vertical	Pass
6**	15903.629	47.01	54.0	6.99	AV	353.00	300	Vertical	Pass

11ac20, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1518.558	36.00	74.0	38.00	Peak	35.00	200	Horizontal	Pass
1**	1518.558	28.06	54.0	25.94	AV	35.00	200	Horizontal	Pass
2	4023.476	49.60	74.0	24.40	Peak	202.00	200	Horizontal	Pass
2**	4023.476	37.45	54.0	16.55	AV	202.00	200	Horizontal	Pass
3	7598.051	54.55	74.0	19.45	Peak	51.00	200	Horizontal	Pass
3**	7598.051	41.17	54.0	12.83	AV	51.00	200	Horizontal	Pass
4	12456.128	51.34	74.0	22.66	Peak	37.00	100	Horizontal	Pass
4**	12456.128	45.68	54.0	8.32	AV	37.00	100	Horizontal	Pass
5	16091.880	53.14	74.0	20.86	Peak	22.00	200	Horizontal	Pass
5**	16091.880	42.63	54.0	11.37	AV	22.00	200	Horizontal	Pass
6	17419.702	55.09	74.0	18.91	Peak	154.00	300	Horizontal	Pass
6**	17419.702	44.94	54.0	9.06	AV	154.00	300	Horizontal	Pass

11ac20, U-NII-3, 1 GHz to 18 GHz, Middle Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.291	43.21	74.0	30.79	Peak	102.00	300	Vertical	Pass
1**	1332.291	31.01	54.0	22.99	AV	102.00	300	Vertical	Pass
2	1438.359	44.06	74.0	29.94	Peak	50.00	300	Vertical	Pass
2**	1438.359	38.44	54.0	15.56	AV	50.00	300	Vertical	Pass
3	4308.700	46.48	74.0	27.52	Peak	149.00	200	Vertical	Pass
3**	4308.700	40.99	54.0	13.01	AV	149.00	200	Vertical	Pass
4	7596.688	55.86	74.0	18.14	Peak	220.00	300	Vertical	Pass
4**	7596.688	42.72	54.0	11.28	AV	220.00	300	Vertical	Pass
5	12537.255	54.50	74.0	19.50	Peak	87.00	200	Vertical	Pass
5**	12537.255	41.27	54.0	12.73	AV	87.00	200	Vertical	Pass
6	15909.607	56.28	74.0	17.72	Peak	213.00	400	Vertical	Pass
6**	15909.607	43.17	54.0	10.83	AV	213.00	400	Vertical	Pass

11ac20, U-NII-3, 1 GHz to 18 GHz, High Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1522.363	40.63	74.0	33.37	Peak	261.00	300	Horizontal	Pass
1**	1522.363	30.64	54.0	23.36	AV	261.00	300	Horizontal	Pass
2	4022.060	44.26	74.0	29.74	Peak	130.00	300	Horizontal	Pass
2**	4022.060	34.69	54.0	19.31	AV	130.00	300	Horizontal	Pass
3	7599.902	53.11	74.0	20.89	Peak	247.00	200	Horizontal	Pass
3**	7599.902	45.91	54.0	8.09	AV	247.00	200	Horizontal	Pass
4	12458.970	55.16	74.0	18.84	Peak	270.00	300	Horizontal	Pass
4**	12458.970	42.39	54.0	11.61	AV	270.00	300	Horizontal	Pass
5	16093.063	54.67	74.0	19.33	Peak	250.00	200	Horizontal	Pass
5**	16093.063	46.05	54.0	7.95	AV	250.00	200	Horizontal	Pass
6	17417.465	58.55	74.0	15.45	Peak	320.00	400	Horizontal	Pass
6**	17417.465	45.64	54.0	8.36	AV	320.00	400	Horizontal	Pass

11ac20, U-NII-3, 1 GHz to 18 GHz, High Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1334.218	45.82	74.0	28.18	Peak	360.00	300	Vertical	Pass
1**	1334.218	33.92	54.0	20.08	AV	360.00	300	Vertical	Pass
2	1443.587	44.03	74.0	29.97	Peak	86.00	400	Vertical	Pass
2**	1443.587	36.78	54.0	17.22	AV	86.00	400	Vertical	Pass
3	4309.670	47.95	74.0	26.05	Peak	265.00	200	Vertical	Pass
3**	4309.670	37.37	54.0	16.63	AV	265.00	200	Vertical	Pass
4	7595.723	53.66	74.0	20.34	Peak	113.00	400	Vertical	Pass
4**	7595.723	40.70	54.0	13.30	AV	113.00	400	Vertical	Pass
5	12531.193	51.83	74.0	22.17	Peak	301.00	200	Vertical	Pass
5**	12531.193	42.45	54.0	11.55	AV	301.00	200	Vertical	Pass
6	15907.873	53.45	74.0	20.55	Peak	317.00	100	Vertical	Pass
6**	15907.873	44.60	54.0	9.40	AV	317.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1521.685	39.61	74.0	34.39	Peak	319.00	100	Horizontal	Pass
1**	1521.685	32.63	54.0	21.37	AV	319.00	100	Horizontal	Pass
2	4022.769	44.29	74.0	29.71	Peak	183.00	200	Horizontal	Pass
2**	4022.769	38.83	54.0	15.17	AV	183.00	200	Horizontal	Pass
3	7600.361	50.79	74.0	23.21	Peak	184.00	200	Horizontal	Pass
3**	7600.361	42.10	54.0	11.90	AV	184.00	200	Horizontal	Pass
4	12453.812	51.69	74.0	22.31	Peak	192.00	400	Horizontal	Pass
4**	12453.812	42.63	54.0	11.37	AV	192.00	400	Horizontal	Pass
5	16095.094	52.10	74.0	21.90	Peak	329.00	300	Horizontal	Pass
5**	16095.094	44.30	54.0	9.70	AV	329.00	300	Horizontal	Pass
6	17419.570	55.24	74.0	18.76	Peak	110.00	400	Horizontal	Pass
6**	17419.570	47.64	54.0	6.36	AV	110.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1331.126	41.63	74.0	32.37	Peak	341.00	100	Vertical	Pass
1**	1331.126	35.38	54.0	18.62	AV	341.00	100	Vertical	Pass
2	1440.901	39.57	74.0	34.43	Peak	95.00	200	Vertical	Pass
2**	1440.901	35.95	54.0	18.05	AV	95.00	200	Vertical	Pass
3	4314.389	46.21	74.0	27.79	Peak	277.00	200	Vertical	Pass
3**	4314.389	38.78	54.0	15.22	AV	277.00	200	Vertical	Pass
4	7596.432	52.11	74.0	21.89	Peak	329.00	400	Vertical	Pass
4**	7596.432	44.09	54.0	9.91	AV	329.00	400	Vertical	Pass
5	12532.551	51.85	74.0	22.15	Peak	298.00	300	Vertical	Pass
5**	12532.551	43.25	54.0	10.75	AV	298.00	300	Vertical	Pass
6	15909.901	56.52	74.0	17.48	Peak	0.00	200	Vertical	Pass
6**	15909.901	43.78	54.0	10.22	AV	0.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1523.201	37.21	74.0	36.79	Peak	37.00	200	Horizontal	Pass
1**	1523.201	32.65	54.0	21.35	AV	37.00	200	Horizontal	Pass
2	4022.927	48.30	74.0	25.70	Peak	88.00	200	Horizontal	Pass
2**	4022.927	37.58	54.0	16.42	AV	88.00	200	Horizontal	Pass
3	7595.219	50.42	74.0	23.58	Peak	187.00	200	Horizontal	Pass
3**	7595.219	44.95	54.0	9.05	AV	187.00	200	Horizontal	Pass
4	12455.443	54.41	74.0	19.59	Peak	91.00	300	Horizontal	Pass
4**	12455.443	44.13	54.0	9.87	AV	91.00	300	Horizontal	Pass
5	16097.107	54.16	74.0	19.84	Peak	151.00	200	Horizontal	Pass
5**	16097.107	43.92	54.0	10.08	AV	151.00	200	Horizontal	Pass
6	17418.813	54.30	74.0	19.70	Peak	306.00	400	Horizontal	Pass
6**	17418.813	46.09	54.0	7.91	AV	306.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1336.050	45.15	74.0	28.85	Peak	349.00	400	Vertical	Pass
1**	1336.050	35.10	54.0	18.90	AV	349.00	400	Vertical	Pass
2	1439.152	42.34	74.0	31.66	Peak	221.00	300	Vertical	Pass
2**	1439.152	34.29	54.0	19.71	AV	221.00	300	Vertical	Pass
3	4312.663	50.30	74.0	23.70	Peak	228.00	200	Vertical	Pass
3**	4312.663	36.61	54.0	17.39	AV	228.00	200	Vertical	Pass
4	7597.855	55.04	74.0	18.96	Peak	197.00	200	Vertical	Pass
4**	7597.855	43.36	54.0	10.64	AV	197.00	200	Vertical	Pass
5	12535.849	53.80	74.0	20.20	Peak	99.00	300	Vertical	Pass
5**	12535.849	44.65	54.0	9.35	AV	99.00	300	Vertical	Pass
6	15909.591	53.08	74.0	20.92	Peak	77.00	400	Vertical	Pass
6**	15909.591	46.54	54.0	7.46	AV	77.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1519.921	36.77	74.0	37.23	Peak	65.00	300	Horizontal	Pass
1**	1519.921	27.01	54.0	26.99	AV	65.00	300	Horizontal	Pass
2	4022.834	48.71	74.0	25.29	Peak	93.00	400	Horizontal	Pass
2**	4022.834	37.78	54.0	16.22	AV	93.00	400	Horizontal	Pass
3	7600.044	56.16	74.0	17.84	Peak	159.00	200	Horizontal	Pass
3**	7600.044	44.45	54.0	9.55	AV	159.00	200	Horizontal	Pass
4	12452.617	55.17	74.0	18.83	Peak	111.00	200	Horizontal	Pass
4**	12452.617	43.05	54.0	10.95	AV	111.00	200	Horizontal	Pass
5	16094.842	53.59	74.0	20.41	Peak	334.00	300	Horizontal	Pass
5**	16094.842	44.89	54.0	9.11	AV	334.00	300	Horizontal	Pass
6	17421.288	53.99	74.0	20.01	Peak	56.00	200	Horizontal	Pass
6**	17421.288	45.63	54.0	8.37	AV	56.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1331.242	47.40	74.0	26.60	Peak	208.00	200	Vertical	Pass
1**	1331.242	33.20	54.0	20.80	AV	208.00	200	Vertical	Pass
2	1439.442	39.80	74.0	34.20	Peak	284.00	400	Vertical	Pass
2**	1439.442	38.12	54.0	15.88	AV	284.00	400	Vertical	Pass
3	4308.592	50.13	74.0	23.87	Peak	279.00	200	Vertical	Pass
3**	4308.592	36.59	54.0	17.41	AV	279.00	200	Vertical	Pass
4	7591.194	55.68	74.0	18.32	Peak	252.00	200	Vertical	Pass
4**	7591.194	42.53	54.0	11.47	AV	252.00	200	Vertical	Pass
5	12537.604	54.74	74.0	19.26	Peak	341.00	300	Vertical	Pass
5**	12537.604	43.52	54.0	10.48	AV	341.00	300	Vertical	Pass
6	15910.548	52.60	74.0	21.40	Peak	11.00	100	Vertical	Pass
6**	15910.548	46.03	54.0	7.97	AV	11.00	100	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

Note: All antenna were pre tested, but only the worst case has been reported in this report.

Test Data

SISO-Aux. Antenna

U-NII-1 11a Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5148.917	64.36	74.0	9.64	Peak	122.00	100	Horizontal	Pass
1**	5148.917	48.78	54.0	5.22	AV	122.00	100	Horizontal	Pass
2	5150.000	65.29	74.0	8.71	Peak	113.00	150	Horizontal	Pass
2**	5150.000	49.25	54.0	4.75	AV	113.00	150	Horizontal	Pass

U-NII-1 11a High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.93	74.0	18.07	Peak	103.00	150	Horizontal	Pass
1**	5350.000	45.20	54.0	8.80	AV	103.00	150	Horizontal	Pass
2	5352.016	57.04	74.0	16.96	Peak	143.00	100	Horizontal	Pass
2**	5352.016	45.01	54.0	8.99	AV	143.00	100	Horizontal	Pass

U-NII-1 11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5144.584	62.89	74.0	11.11	Peak	87.00	200	Horizontal	Pass
1**	5144.584	45.75	54.0	8.25	AV	87.00	200	Horizontal	Pass
2	5150.000	62.30	74.0	11.70	Peak	116.00	100	Horizontal	Pass
2**	5150.000	47.69	54.0	6.31	AV	116.00	100	Horizontal	Pass

U-NII-1 11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	56.08	74.0	17.92	Peak	21.00	100	Horizontal	Pass
1**	5350.000	45.21	54.0	8.79	AV	21.00	100	Horizontal	Pass
2	5381.717	56.78	74.0	17.22	Peak	295.00	200	Horizontal	Pass
2**	5381.717	45.14	54.0	8.86	AV	295.00	200	Horizontal	Pass

U-NII-1 11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5148.917	61.04	74.0	12.96	Peak	86.00	100	Horizontal	Pass
1**	5148.917	49.95	54.0	4.05	AV	86.00	100	Horizontal	Pass
2	5150.000	63.68	74.0	10.32	Peak	122.00	150	Horizontal	Pass
2**	5150.000	50.62	54.0	3.38	AV	122.00	150	Horizontal	Pass

U-NII-1 11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.34	74.0	18.66	Peak	51.00	100	Horizontal	Pass
1**	5350.000	45.30	54.0	8.70	AV	51.00	100	Horizontal	Pass
2	5389.416	56.77	74.0	17.23	Peak	354.00	150	Horizontal	Pass
2**	5389.416	44.70	54.0	9.30	AV	354.00	150	Horizontal	Pass

U-NII-1 11ac20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5148.917	63.29	74.0	10.71	Peak	116.00	200	Horizontal	Pass
1**	5148.917	47.65	54.0	6.35	AV	116.00	200	Horizontal	Pass
2	5150.000	62.49	74.0	11.51	Peak	116.00	150	Horizontal	Pass
2**	5150.000	48.15	54.0	5.85	AV	116.00	150	Horizontal	Pass

U-NII-1 11ac20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.56	74.0	18.44	Peak	154.00	100	Horizontal	Pass
1**	5350.000	45.27	54.0	8.73	AV	154.00	100	Horizontal	Pass
2	5353.483	57.35	74.0	16.65	Peak	256.00	200	Horizontal	Pass
2**	5353.483	45.08	54.0	8.92	AV	256.00	200	Horizontal	Pass

U-NII-1 11ac40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5147.833	60.92	74.0	13.08	Peak	120.00	100	Horizontal	Pass
1**	5147.833	50.07	54.0	3.93	AV	120.00	100	Horizontal	Pass
2	5150.000	64.08	74.0	9.92	Peak	91.00	100	Horizontal	Pass
2**	5150.000	50.96	54.0	3.04	AV	91.00	100	Horizontal	Pass

U-NII-1 11ac40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.71	74.0	18.29	Peak	333.00	200	Horizontal	Pass
1**	5350.000	45.20	54.0	8.80	AV	333.00	200	Horizontal	Pass
2	5358.067	57.29	74.0	16.71	Peak	90.00	150	Horizontal	Pass
2**	5358.067	45.04	54.0	8.96	AV	90.00	150	Horizontal	Pass

U-NII-1 11ac80 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5146.750	61.08	74.0	12.92	Peak	116.00	200	Horizontal	Pass
1**	5146.750	49.92	54.0	4.08	AV	116.00	200	Horizontal	Pass
2	5150.000	60.23	74.0	13.77	Peak	121.00	200	Horizontal	Pass
2**	5150.000	50.26	54.0	3.74	AV	121.00	200	Horizontal	Pass
3	5145.667	60.77	74.0	13.23	Peak	119.00	150	Horizontal	Pass
3**	5145.667	50.43	54.0	3.57	AV	119.00	150	Horizontal	Pass

U-NII-1 11ac80 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5350.000	55.34	74.0	18.66	Peak	195.00	150	Horizontal	Pass
1**	5350.000	45.19	54.0	8.81	AV	195.00	150	Horizontal	Pass
2	5378.417	57.13	74.0	16.87	Peak	27.00	100	Horizontal	Pass
2**	5378.417	45.10	54.0	8.90	AV	27.00	100	Horizontal	Pass

U-NII-3 11a Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5646.667	56.62	68.2	11.58	Peak	303.00	200	Horizontal	Pass
2	5650.000	55.35	68.2	12.85	Peak	329.00	200	Horizontal	Pass

U-NII-3 11a High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.750	55.56	68.4	12.84	Peak	179.00	100	Horizontal	Pass
2	5967.250	57.11	68.2	11.09	Peak	307.00	150	Horizontal	Pass

U-NII-3 11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5630.416	57.39	68.2	10.81	Peak	159.00	200	Horizontal	Pass
2	5650.000	56.33	68.2	11.87	Peak	248.00	100	Horizontal	Pass

U-NII-3 11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.750	55.42	68.4	12.98	Peak	84.00	150	Horizontal	Pass
2	5990.500	57.21	68.2	10.99	Peak	83.00	150	Horizontal	Pass

U-NII-3 11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5625.417	56.60	68.2	11.60	Peak	91.00	100	Horizontal	Pass
2	5650.000	56.16	68.2	12.04	Peak	122.00	200	Horizontal	Pass

U-NII-3 11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.750	55.08	68.4	13.32	Peak	308.00	150	Horizontal	Pass
2	5946.750	57.72	68.2	10.48	Peak	186.00	200	Horizontal	Pass

U-NII-3 11ac20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5649.375	56.47	68.2	11.73	Peak	360.00	200	Horizontal	Pass
2	5650.000	55.21	68.2	12.99	Peak	116.00	100	Horizontal	Pass

U-NII-3 11ac20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.750	55.50	68.4	12.90	Peak	319.00	100	Horizontal	Pass
2	5993.750	57.12	68.2	11.08	Peak	293.00	100	Horizontal	Pass

U-NII-3 11ac40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5647.084	56.53	68.2	11.67	Peak	224.00	150	Horizontal	Pass
2	5650.000	55.67	68.2	12.53	Peak	89.00	100	Horizontal	Pass

U-NII-3 11ac40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.750	55.58	68.4	12.82	Peak	73.00	100	Horizontal	Pass
2	5983.750	57.61	68.2	10.59	Peak	66.00	100	Horizontal	Pass

U-NII-3 11ac80 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5649.166	56.97	68.2	11.23	Peak	173.00	200	Horizontal	Pass
2	5650.000	55.95	68.2	12.25	Peak	168.00	200	Horizontal	Pass

U-NII-3 11ac80 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.750	55.63	68.4	12.77	Peak	235.00	150	Horizontal	Pass
2	5999.000	57.30	68.2	10.90	Peak	1.00	150	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2560125-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2560125-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2560125-AI.PDF”.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
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--END OF REPORT--