

FCC

RF

TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
laptop

ISSUED TO
E&S International Enterprises, Inc.

7801 Hayvenhurst Avenue, Van Nuys, California 91406 USA



Prepared by:

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Date

Mar. 30, 2021

Approved by:

Wei Yanquan
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(Chief Engineer)

Date

Mar. 30, 2021

Report No.: BL-SZ2130117-604

EUT Name: laptop

Model Name: GWTN156-9 (refer section 2.4)

Brand Name: Gateway

Test Standard: 47 CFR Part 15 Subpart E

FCC ID: 2AYPE-GWTN156-TLK

Test Conclusion: Pass

Test Date: Mar. 05, 2021 ~ Mar. 25, 2021

Date of Issue: Mar. 30, 2021

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Mar. 30, 2021</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	ADMINISTRATIVE DATA (GENERAL INFORMATION)	4
1.1	Identification of the Testing Laboratory	4
1.2	Identification of the Responsible Testing Location	4
1.3	Laboratory Condition	4
1.4	Announce	4
2	PRODUCT INFORMATION	5
2.1	Applicant Information	5
2.2	Manufacturer Information	5
2.3	Factory Information	5
2.4	General Description for Equipment under Test (EUT)	5
2.5	Technical Information	6
2.6	Additional Instructions	7
2.7	Channel List	9
3	SUMMARY OF TEST RESULTS	11
3.1	Test Standards	11
3.2	Verdict	11
4	GENERAL TEST CONFIGURATIONS	12
4.1	Test Environments	12
4.2	Test Equipment List	12
4.3	Measurement Uncertainty	13
4.4	Description of Test Setup	14
5	TEST ITEMS	17
5.1	RF Output Power	17
5.2	Emission Bandwidth and 6 dB Bandwidth	18
5.3	Power Spectral density (PSD)	19
5.4	Conducted Emission	20
5.5	Radiated Spurious Emissions and Band Edge (Restricted-band)	21

ANNEX A	TEST RESULT	26
A.1	RF Output Power	26
A.2	Emission Bandwidth & 99% Bandwidth	27
A.3	6 dB Bandwidth	28
A.4	Power Spectral Density	29
A.5	Conducted Emissions	30
A.6	Radiated Spurious Emissions and Band Edge (Restricted-band).....	32
ANNEX B	TEST SETUP PHOTOS	68
ANNEX C	EUT EXTERNAL PHOTOS	68
ANNEX D	EUT INTERNAL PHOTOS	68

1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

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

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, 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.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Laboratory Condition

Ambient Temperature	20°C to 25°C
Ambient Relative Humidity	45% to 55%
Ambient Pressure	100 kPa to 102 kPa

1.4 Announce

- (1) The test report reference to the report template version v4.4.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

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

2.3 Factory Information

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

2.4 General Description for Equipment under Test (EUT)

EUT Name	laptop
Model Name Under Test	GWTN156-9
Series Model Name	GWTN156-7, GWTN156-9BK, GWTN156-9BL, GWTN156-9RG, GWTN156-9GR, GWTN156-9SL, GWTN156-7BK, GWTN156-7BL, GWTN156-7RG, GWTN156-7GR, GWTN156-7SL, GWTN156-7PR
Description of Model name differentiation	Refer to the configuration table.
Serial Number	N/A
Hardware Version	N14TRB110
Software Version	20H2
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

Configuration Table:

Key parts	Configuration 1	Configuration 2
Model Name	GWTN156-9	GWTN156-7
Main board	The same	The same
CPU	I5-1135G7	I3-1115G4
eMMC	512 GB	256 GB
Memory	16 GB	8 GB

Note: GWTN156-9 and GWTN156-7 are color differences with BK, BL, RG, GR, SL.

Antenna Information:

Model Name	Antenna Manufacturer	Antenna Type	Antenna Gain (dBi)		
			2.4 GHz	5.15-5.25 GHz	5.725-5.85 GHz
N15TS9	kenhaitong	PIFA	2.25	2.53	2.98
W1576T	Xing Yuan Chuang	PIFA	1.21	1.60	2.09

Note: The report only shown the antenna which matches the antenna with the highest antenna gain.

2.5 Technical Information

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

Frequency Range	U-NII-1: 5150 MHz to 5250 MHz, U-NII-3: 5725 MHz to 5850 MHz
Product Type	☐ Mobile ☒ Portable ☐ Fix Location
Modulation technology	OFDM
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK
Product Type	Portable for FCC standard
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: 14.20 dBm U-NII-3: 14.22 dBm
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	U-NII-1: 5150 MHz to 5250 MHz: 2.53 dBi U-NII-3: 5725 MHz to 5850 MHz: 2.98 dBi (In test items related to antenna gain, the final results reflect this figure. This value is provided by the applicant.)
About the Product	The equipment is laptop, intended for used with information technology equipment.

2.6 Additional Instructions

EUT Software Settings:

Mode	☒ Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.
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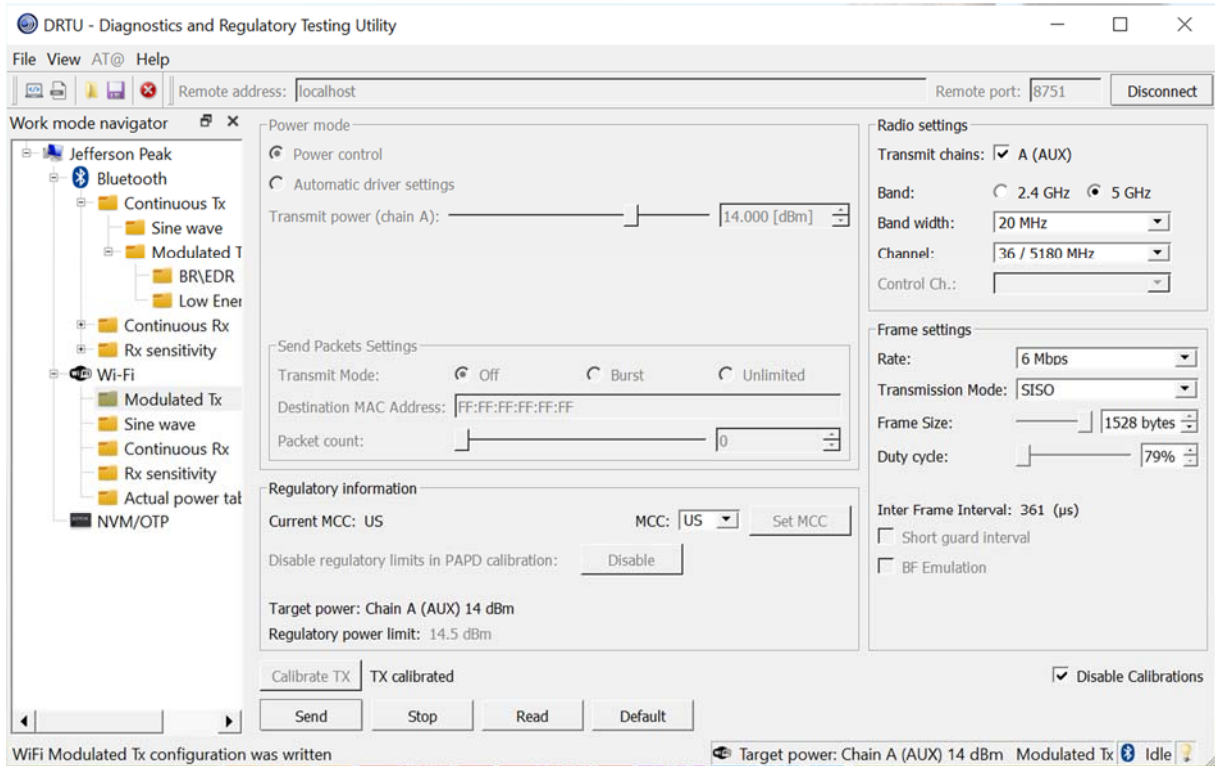
During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Test Software Version	DRTU
-----------------------	------

U-NII-1 (5150 - 5250 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH36	5180	13.5
11a	CH44	5220	13.5
11a	CH48	5240	13.5
11n (HT20)	CH36	5180	13.5
11n (HT20)	CH44	5220	13.5
11n (HT20)	CH48	5240	13.5
11n (HT40)	CH38	5190	13.5
11n (HT40)	CH46	5230	13.0
11ac (VHT20)	CH36	5180	13.5
11ac (VHT20)	CH44	5220	13.5
11ac (VHT20)	CH48	5240	13.5
11ac (VHT40)	CH38	5190	13.5
11ac (VHT40)	CH46	5230	13.0
11ac (VHT80)	CH42	5210	13.5

U-NII-3 (5725 - 5850 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH149	5745	13.5
11a	CH157	5785	13.0
11a	CH165	5825	13.0
11n (HT20)	CH149	5745	13.5
11n (HT20)	CH157	5785	13.5
11n (HT20)	CH165	5825	13.0
11n (HT40)	CH151	5755	13.5
11n (HT40)	CH159	5795	13.0
11ac (VHT20)	CH149	5745	13.5
11ac (VHT20)	CH157	5785	13.0
11ac (VHT20)	CH165	5825	13.0
11ac (VHT40)	CH151	5755	13.5
11ac (VHT40)	CH159	5795	13.0
11ac (VHT80)	CH155	5775	13.5

Run Software:



2.7 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 (10-1-16 Edition)	Unlicensed National Information Infrastructure Devices
2	KDB Publication 789033 D02v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 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
8	Receiver Spurious Emissions	--	--	N/A ^{Note2}

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

Note ²: Only radio communication receivers operating in stand-alone mode within the U-NII-30-960 MHz, as well as scanner receivers, are subject to Industry Canada requirements, so this test is not applicable.

Note ³: Under all normal operating conditions specified in the user manual, frequency stability can keep radiation within the operating frequency band.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	45% to 55%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+22°C to +25°C
	LT (Low Temperature)	0°C
	HT (High Temperature)	+45°C
Working Voltage of the EUT	NV (Normal Voltage)	120 V
	LV (Low Voltage)	108 V
	HV (High Voltage)	264 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2020.06.08	2021.06.07
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2020.06.08	2021.06.07
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2020.06.09	2021.06.08
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2020.06.09	2021.06.08
LISN	SCHWARZBECK	NSLK 8127	8127-687	2020.06.09	2021.06.08
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2020.06.08	2021.06.07
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2020.06.08	2021.06.07
Power Splitter	KMW	DCPD-LDC	1305003215	--	--
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2020.06.08	2021.06.07
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
Temperature Chamber	AHK	SP20	1412	2020.06.10	2021.06.09
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2019.10.29	2021.10.28
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2021.07.01
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1917	2019.07.02	2021.07.01
Test Antenna-Horn (18-40 GHz)	A-INFO	LB-180400KF	J211060273	2021.01.05	2023.01.04
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2022.02.20
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	N/A	2018.08.08	2021.08.07
Shielded Enclosure	ChangNing	CN-130701	130703	--	--
Signal Generator	ROHDE&SCHWARZ	SMB100A	177746	2020.06.08	2021.06.07
Power Amplifier	OPHIR RF	5225F	1037	2021.02.18	2022.02.17
Power Amplifier	OPHIR RF	5273F	1016	2021.02.18	2022.02.17
Directional Coupler	Werlantone	C5982-10	109275	N/A	N/A
Directional Coupler	Werlantone	CHP-273E	S00801z-01	N/A	N/A

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Sound Level Meter	B&K	NL-20	00844023	2020.10.23	2021.10.22
Ear Simulator	B&K	4192-L-001	3038758	2021.02.18	2022.02.17
Audio analyzer	B&K	UPL 16	100129	2021.02.27	2022.02.26

4.3 Measurement Uncertainty

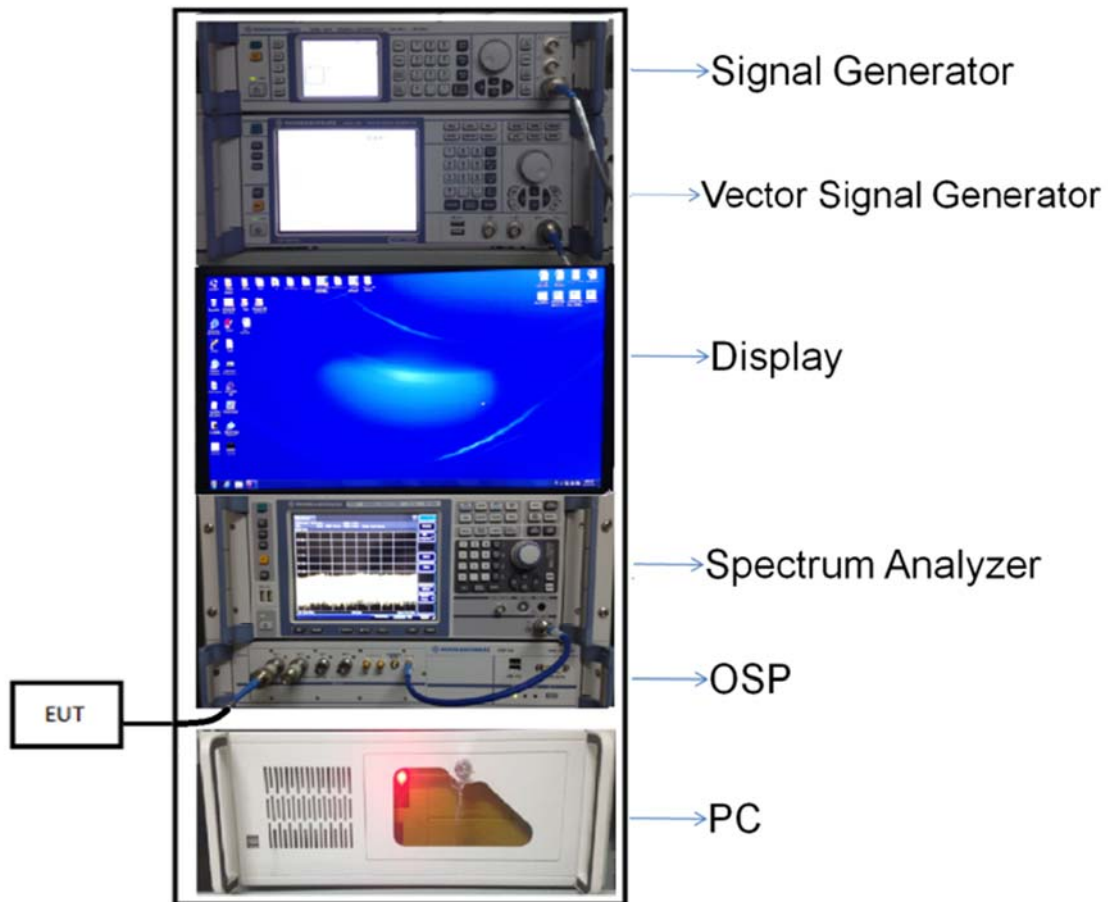
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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

Measurement	Value
Occupied Channel Bandwidth	±4%
RF output power, conducted	±1.4 dB
Power Spectral Density, conducted	±2.5 dB
Unwanted Emissions, conducted	±2.8 dB
All emissions, radiated	±5.4 dB
Temperature	±1°C
Humidity	±4%

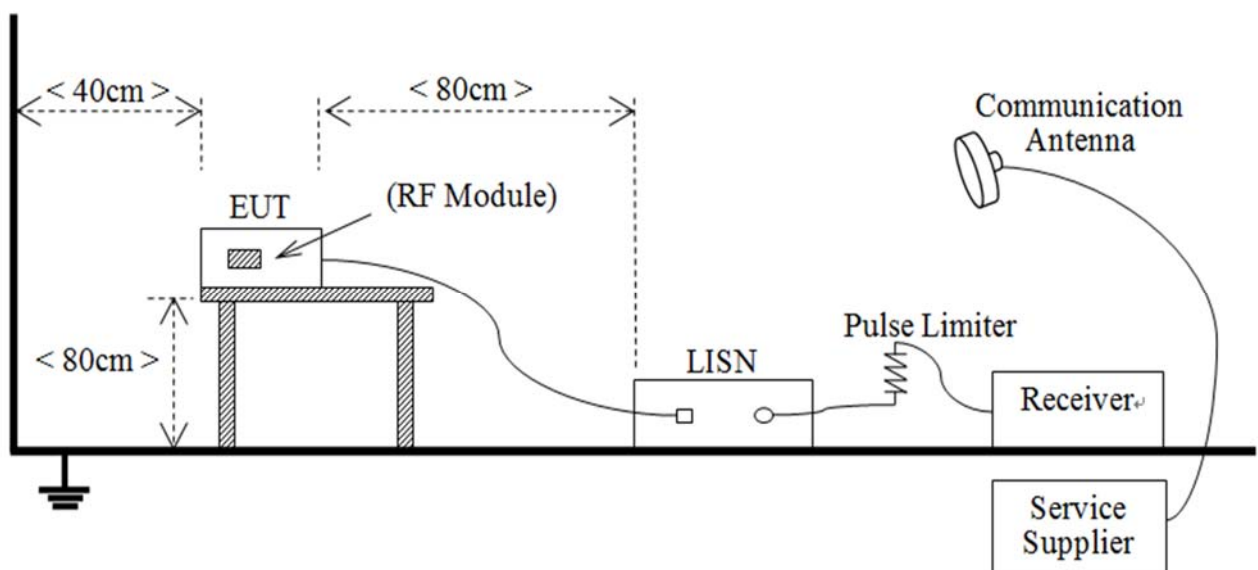
4.4 Description of Test Setup

4.4.1 For Antenna Port Test



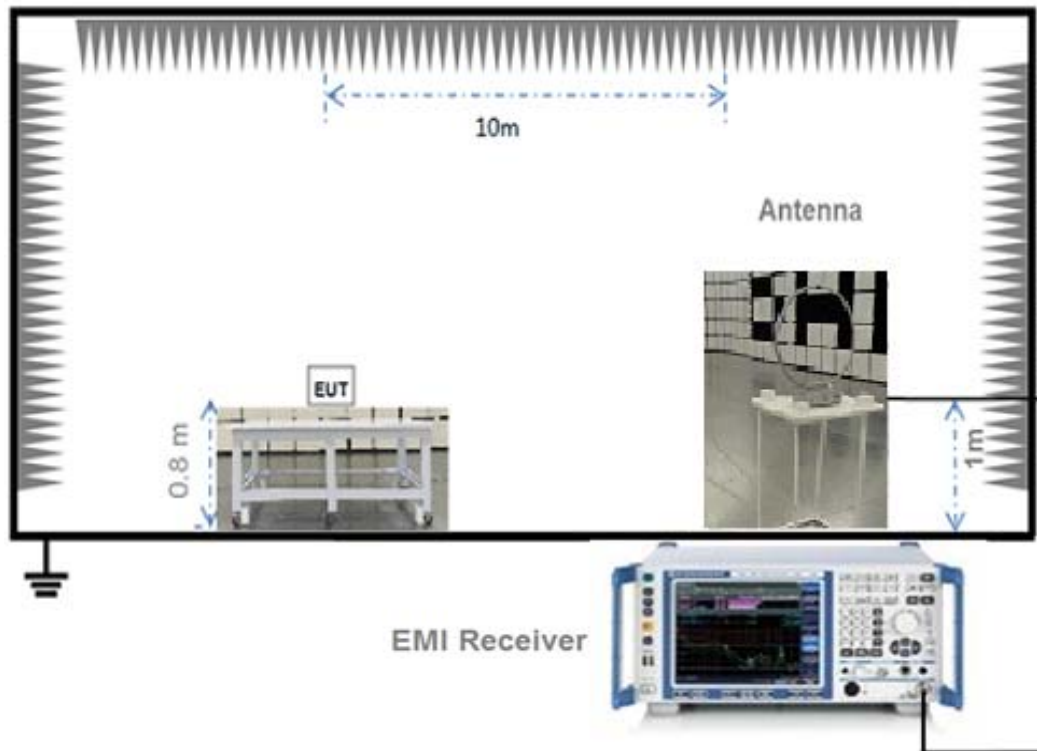
(Diagram 1)

4.4.2 For AC Power Supply Port Test



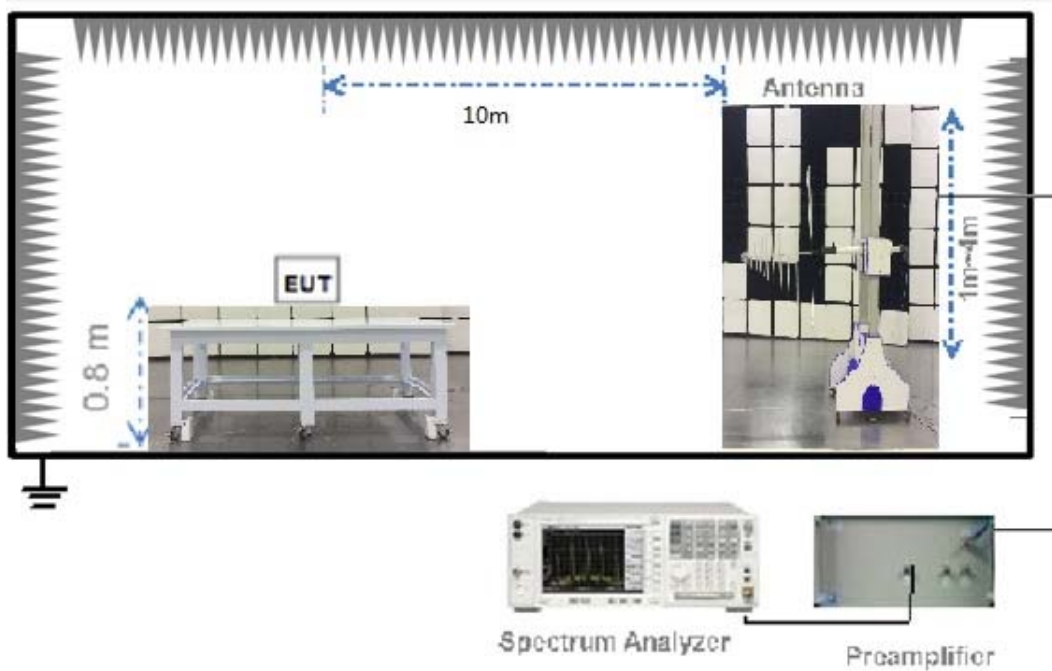
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



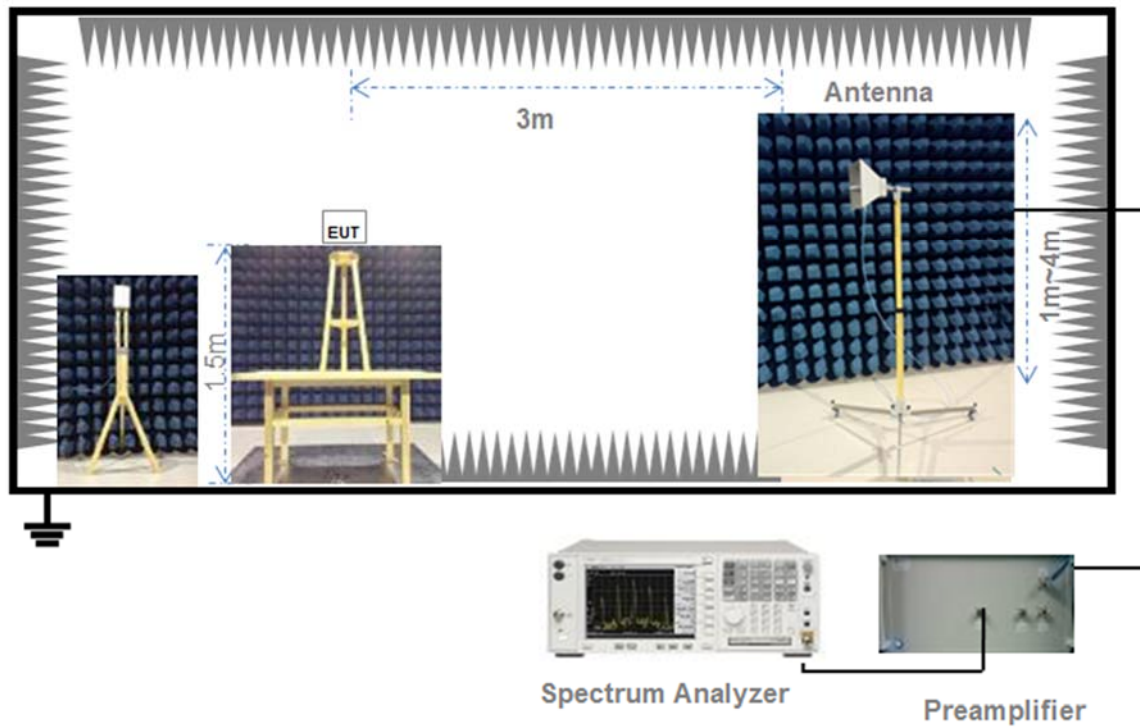
(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

5 TEST ITEMS

5.1 RF Output Power

5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

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

RSS-247, 6.2

The maximum conducted output power shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where "B" is the 99% emissions bandwidth in MHz.	

The maximum e.i.r.p. shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	200 mW or 10 dBm + 10log B, whichever is less.
5250-5350	1W or 17 dBm + 10log B, whichever is less.
5470-5725	1W or 17 dBm + 10log B, whichever is less.
5725-5850	N/A
Note: Where "B" is the 99% emissions bandwidth in MHz.	

5.1.2 Test Setup

The section 4.4.1 (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

The maximum peak conducted output power may be measured using a broadband Average RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector.

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

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Emission Bandwidth and 6 dB Bandwidth

5.2.1 Limit

FCC §15.407(a), RSS-247, 6.2

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

5.2.2 Test Setup

The test setup photo please refer to 4.4.1 (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

RSS-247, 6.2

The maximum power spectral density should not exceed:

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

The e.i.r.p. spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	10 dBm/MHz
5250-5350	N/A
5470-5725	N/A
5725-5850	N/A

5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

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

1. Set RBW = 510 kHz/1 MHz, VBW $\geq 3 \times$ RBW, Sweep time = Auto, Detector = RMS.
2. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak marker function to determine the maximum amplitude level.
4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.3.4 Test Result

Please refer to ANNEX A.4.

5.4 Conducted Emission

5.4.1 Limit

FCC §15.207, RSS-GEN, 8.8

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the U-NII-150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

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

5.4.2 Test Setup

The section 4.4.2 (Diagram 2) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

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

5.4.4 Test Result

Please refer to ANNEX A.5.

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

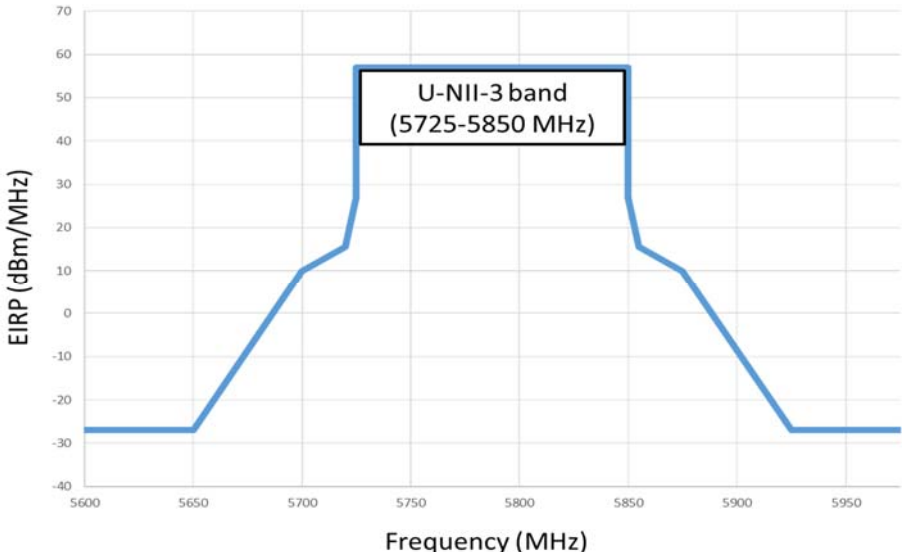
5.5.1 Limit

FCC §15.209 & 15.407(b), RSS-247, 6.2

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

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

Note²: The tighter limit applies at the band edge.

Un-restricted band emissions	
Out Operating Band (MHz)	Limit
5150 - 5250	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5250 - 5350	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5470 - 5725	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5725 - 5850	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. 

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength.

5.5.2 Test Setup

The section 4.4.3-4.4.5 (Diagram 3 - Diagram 5) test setup description was used for this test. The photo of test

setup please refer to ANNEX B.

5.5.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

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

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

- f) Compare the resultant electric field strength level to the applicable limit.
- g) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

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

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

Peak power measurement procedure

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

- a) RBW = as specified in Table 1.
- b) VBW $\geq 3 \times$ 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 1: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Data

Conducted Power

U-NII-1 (5150 - 5250 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	13.93	24.72	250	Pass
11a	CH44	14.01	25.18	250	Pass
11a	CH48	14.06	25.47	250	Pass
11n (HT20)	CH36	13.89	24.49	250	Pass
11n (HT20)	CH44	13.97	24.95	250	Pass
11n (HT20)	CH48	14.02	25.23	250	Pass
11n (HT40)	CH38	14.12	25.82	250	Pass
11n (HT40)	CH46	13.77	23.82	250	Pass
11ac (VHT20)	CH36	13.89	24.49	250	Pass
11ac (VHT20)	CH44	13.99	25.06	250	Pass
11ac (VHT20)	CH48	14.02	25.23	250	Pass
11ac (VHT40)	CH38	14.10	25.70	250	Pass
11ac (VHT40)	CH46	13.78	23.88	250	Pass
11ac (VHT80)	CH42	14.20	26.30	250	Pass

U-NII-3 (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	13.83	24.15	1000	Pass
11a	CH157	13.61	22.96	1000	Pass
11a	CH165	13.62	23.01	1000	Pass
11n (HT20)	CH149	13.81	24.04	1000	Pass
11n (HT20)	CH157	14.07	25.53	1000	Pass
11n (HT20)	CH165	13.57	22.75	1000	Pass
11n (HT40)	CH151	14.12	25.82	1000	Pass
11n (HT40)	CH159	13.88	24.43	1000	Pass
11ac (VHT20)	CH149	13.84	24.21	1000	Pass
11ac (VHT20)	CH157	13.56	22.70	1000	Pass
11ac (VHT20)	CH165	13.55	22.65	1000	Pass
11ac (VHT40)	CH151	14.15	26.00	1000	Pass
11ac (VHT40)	CH159	13.80	23.99	1000	Pass
11ac (VHT80)	CH155	14.22	26.42	1000	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ2130117-604 Data Part 1.pdf".

Test Data

U-NII-1 (5150 - 5250 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	23.72	16.90
11a	CH44	23.48	16.90
11a	CH48	23.48	16.90
11n (HT20)	CH36	24.24	18.00
11n (HT20)	CH44	23.88	17.95
11n (HT20)	CH48	23.72	18.00
11n (HT40)	CH38	45.30	36.82
11n (HT40)	CH46	45.00	36.70
11ac (VHT20)	CH36	24.16	18.00
11ac (VHT20)	CH44	23.96	17.95
11ac (VHT20)	CH48	23.88	17.95
11ac (VHT40)	CH38	45.20	36.82
11ac (VHT40)	CH46	44.60	36.70
11ac (VHT80)	CH42	84.00	75.25

U-NII-3 (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	24.00	16.90
11a	CH157	23.48	16.90
11a	CH165	23.96	17.02
11n (HT20)	CH149	24.04	18.00
11n (HT20)	CH157	24.08	18.00
11n (HT20)	CH165	24.24	18.00
11n (HT40)	CH151	45.00	36.70
11n (HT40)	CH159	44.90	36.70
11ac (VHT20)	CH149	24.20	17.95
11ac (VHT20)	CH157	24.12	17.95
11ac (VHT20)	CH165	24.12	18.00
11ac (VHT40)	CH151	45.30	36.70
11ac (VHT40)	CH159	44.60	36.70
11ac (VHT80)	CH155	83.60	75.25

A.3 6 dB Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ2130117-604 Data Part 2.pdf".

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	6 dB Bandwidth (MHz)	Limit (kHz)	Verdict
11a	CH149	16.47	500.00	Pass
11a	CH157	16.42	500.00	Pass
11a	CH165	16.47	500.00	Pass
11n (HT20)	CH149	17.67	500.00	Pass
11n (HT20)	CH157	17.67	500.00	Pass
11n (HT20)	CH165	17.67	500.00	Pass
11n (HT40)	CH151	36.42	500.00	Pass
11n (HT40)	CH159	36.42	500.00	Pass
11ac (VHT20)	CH149	17.67	500.00	Pass
11ac (VHT20)	CH157	17.67	500.00	Pass
11ac (VHT20)	CH165	17.72	500.00	Pass
11ac (VHT40)	CH151	36.42	500.00	Pass
11ac (VHT40)	CH159	36.42	500.00	Pass
11ac (VHT80)	CH155	75.17	500.00	Pass

A.4 Power Spectral Density

Note: Test plots please refer to the document “Annex No.: BL-SZ2130117-604 Data Part 3.pdf”.

Test Data

Note 1: The RBW used in U-NII-3 is 1 MHz, and the PSD factor is: $10 \cdot \log(500 \text{ kHz/RBW}) = -3 \text{ dBm}$.

U-NII-1 (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH36	1.77	11.00	Pass
11a	CH44	1.83	11.00	Pass
11a	CH48	1.48	11.00	Pass
11n (HT20)	CH36	1.28	11.00	Pass
11n (HT20)	CH44	1.52	11.00	Pass
11n (HT20)	CH48	1.04	11.00	Pass
11n (HT40)	CH38	-1.83	11.00	Pass
11n (HT40)	CH46	-1.75	11.00	Pass
11ac (VHT20)	CH36	1.72	11.00	Pass
11ac (VHT20)	CH44	1.93	11.00	Pass
11ac (VHT20)	CH48	1.73	11.00	Pass
11ac (VHT40)	CH38	-1.31	11.00	Pass
11ac (VHT40)	CH46	-1.88	11.00	Pass
11ac (VHT80)	CH42	-4.45	11.00	Pass

U-NII-3 (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
11a	CH149	-1.28	30.00	Pass
11a	CH157	-1.36	30.00	Pass
11a	CH165	-1.59	30.00	Pass
11n (HT20)	CH149	-1.72	30.00	Pass
11n (HT20)	CH157	-1.21	30.00	Pass
11n (HT20)	CH165	-1.91	30.00	Pass
11n (HT40)	CH151	-4.09	30.00	Pass
11n (HT40)	CH159	-4.37	30.00	Pass
11ac (VHT20)	CH149	-1.68	30.00	Pass
11ac (VHT20)	CH157	-1.64	30.00	Pass
11ac (VHT20)	CH165	-1.97	30.00	Pass
11ac (VHT40)	CH151	-4.13	30.00	Pass
11ac (VHT40)	CH159	-4.27	30.00	Pass
11ac (VHT80)	CH155	-7.36	30.00	Pass

A.5 Conducted Emissions

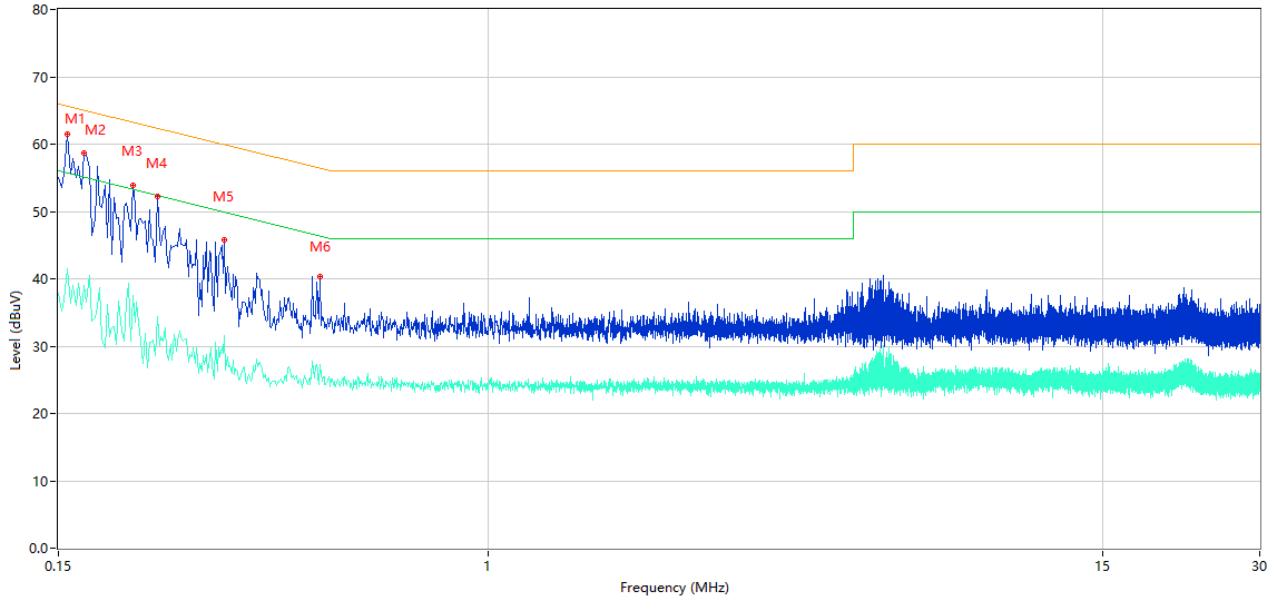
Note¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

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

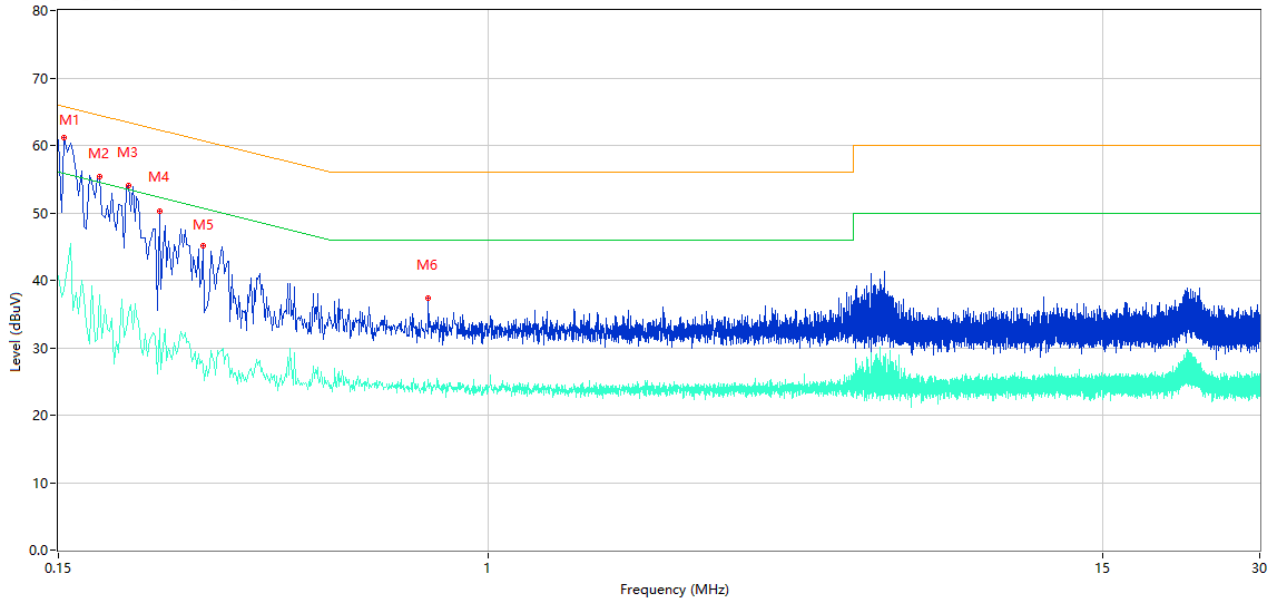
CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBUV)	Factor (dB)	Limit (dBUV)	Over Limit (dB)	Detector	Line	Verdict
1	0.156	61.48	10.41	65.67	-4.19	Peak	L	Pass
1**	0.156	41.52	10.41	55.67	-14.15	AV	L	Pass
2	0.168	58.73	10.40	65.06	-6.33	Peak	L	Pass
2**	0.168	39.02	10.40	55.06	-16.04	AV	L	Pass
3	0.208	53.94	10.38	63.28	-9.34	Peak	L	Pass
3**	0.208	37.54	10.38	53.28	-15.74	AV	L	Pass
4	0.232	52.25	10.36	62.38	-10.13	Peak	L	Pass
4**	0.232	34.39	10.36	52.38	-17.99	AV	L	Pass
5	0.312	45.72	10.33	59.92	-14.20	Peak	L	Pass
5**	0.312	31.57	10.33	49.92	-18.35	AV	L	Pass
6	0.476	40.35	10.29	56.41	-16.06	Peak	L	Pass
6**	0.476	27.30	10.29	46.41	-19.11	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.154	61.15	10.41	65.78	-4.63	Peak	N	Pass
1**	0.154	38.58	10.41	55.78	-17.20	AV	N	Pass
2	0.180	55.30	10.39	64.49	-9.19	Peak	N	Pass
2**	0.180	37.81	10.39	54.49	-16.68	AV	N	Pass
3	0.204	54.00	10.38	63.45	-9.45	Peak	N	Pass
3**	0.204	35.15	10.38	53.45	-18.30	AV	N	Pass
4	0.234	50.31	10.35	62.31	-12.00	Peak	N	Pass
4**	0.234	32.96	10.35	52.31	-19.35	AV	N	Pass
5	0.284	45.05	10.34	60.70	-15.65	Peak	N	Pass
5**	0.284	27.48	10.34	50.70	-23.22	AV	N	Pass
6	0.766	37.28	10.26	56.00	-18.72	Peak	N	Pass
6**	0.766	25.24	10.26	46.00	-20.76	AV	N	Pass

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

Test Data

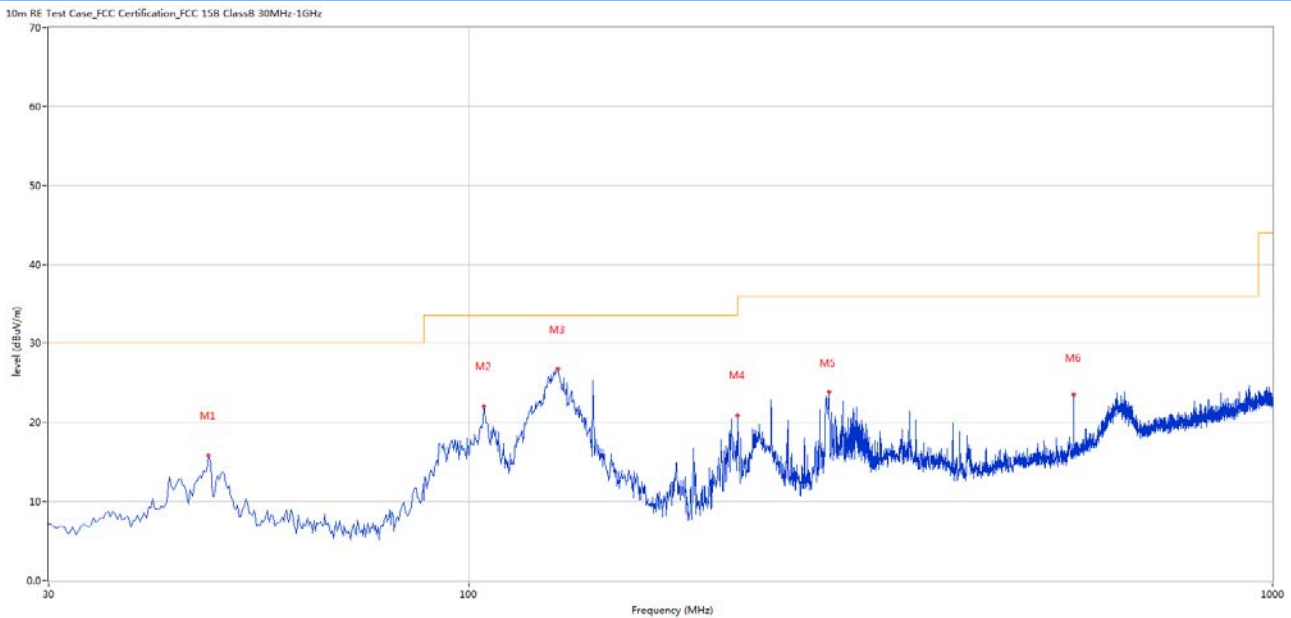
Note¹: The symbol of “--” in the table which means not application.

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.

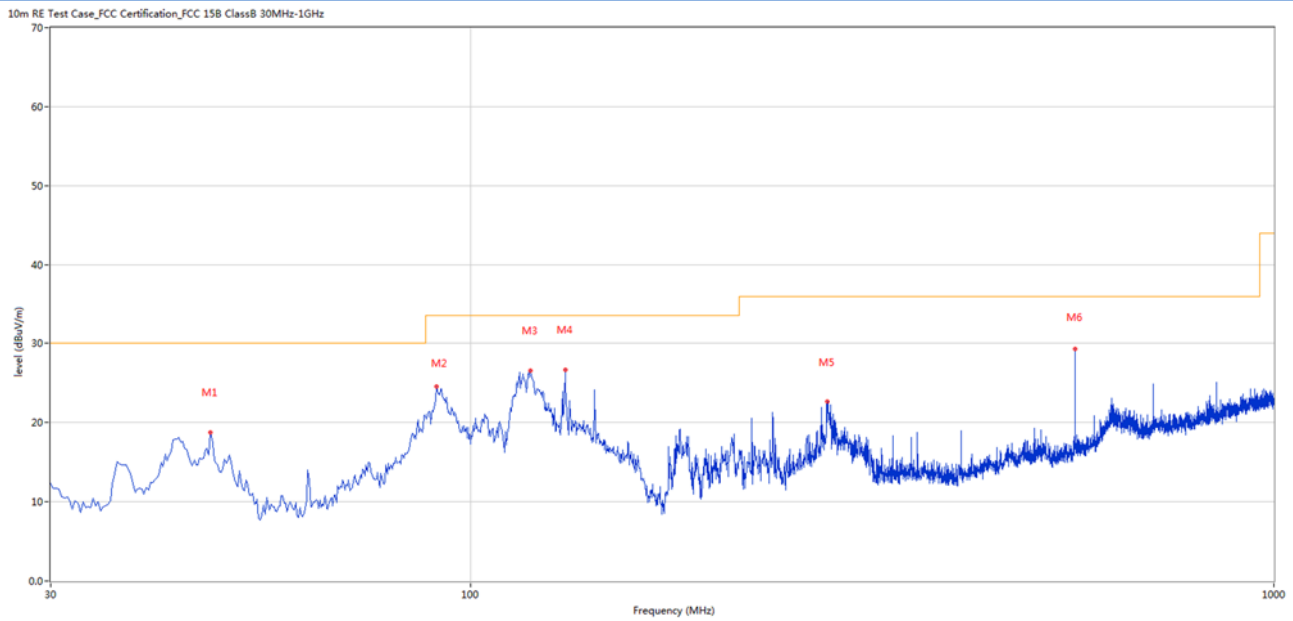
Note⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	47.456	15.84	-27.09	30.0	-14.16	Peak	40.00	400	Horizontal	Pass
2	104.429	22.04	-29.77	33.5	-11.46	Peak	83.00	300	Horizontal	Pass
3	129.158	26.70	-27.36	33.5	-6.80	Peak	241.00	400	Horizontal	Pass
4	215.951	20.88	-28.83	33.5	-12.62	Peak	0.00	400	Horizontal	Pass
5	280.440	23.83	-26.33	36.0	-12.17	Peak	0.00	400	Horizontal	Pass
6	566.033	23.50	-19.12	36.0	-12.50	Peak	227.00	200	Horizontal	Pass

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	47.456	18.78	-27.09	30.0	-11.22	Peak	262.00	400	Vertical	Pass
2	90.610	24.49	-31.09	33.5	-9.01	Peak	360.00	300	Vertical	Pass
3	118.733	26.47	-28.19	33.5	-7.03	Peak	0.00	200	Vertical	Pass
4	131.097	26.64	-27.24	33.5	-6.86	Peak	325.00	100	Vertical	Pass
5	278.258	22.63	-26.37	36.0	-13.37	Peak	360.00	100	Vertical	Pass
6	566.033	29.30	-19.12	36.0	-6.70	Peak	360.00	300	Vertical	Pass

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

Note 2: All the configurations were pre tested, only the worst configuration has been reported in this report.

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1119.600	43.56	-18.54	74.0	-30.44	Peak	170.00	150	Horizontal	Pass
1**	1119.600	33.83	-18.54	54.0	-20.17	AV	170.00	150	Horizontal	Pass
2	1402.500	42.98	-17.76	74.0	-31.02	Peak	193.00	150	Horizontal	Pass
2**	1402.500	34.81	-17.76	54.0	-19.19	AV	193.00	150	Horizontal	Pass
3	4065.800	47.44	-5.60	74.0	-26.56	Peak	69.00	150	Horizontal	Pass
3**	4065.800	37.68	-5.60	54.0	-16.32	AV	69.00	150	Horizontal	Pass
4	5179.000	105.73	-3.94	--	--	Peak	295.00	150	Horizontal	N/A
4**	5179.000	97.19	-3.94	--	--	AV	295.00	150	Horizontal	N/A
5	7397.325	48.32	-4.24	74.0	-25.68	Peak	359.00	150	Horizontal	Pass
5**	7397.325	38.68	-4.24	54.0	-15.32	AV	359.00	150	Horizontal	Pass
6	12242.562	50.91	-0.26	74.0	-23.09	Peak	95.00	150	Horizontal	Pass
6**	12242.562	41.26	-0.26	54.0	-12.74	AV	95.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1119.500	42.04	-18.54	74.0	-31.96	Peak	211.00	150	Vertical	Pass
1**	1119.500	32.95	-18.54	54.0	-21.05	AV	211.00	150	Vertical	Pass
2	1594.600	41.45	-17.90	74.0	-32.55	Peak	254.00	150	Vertical	Pass
2**	1594.600	28.62	-17.90	54.0	-25.38	AV	254.00	150	Vertical	Pass
3	4150.400	47.25	-6.02	74.0	-26.75	Peak	19.00	150	Vertical	Pass
3**	4150.400	37.57	-6.02	54.0	-16.43	AV	19.00	150	Vertical	Pass
4	5182.200	100.62	-3.91	--	--	Peak	152.00	150	Vertical	N/A
4**	5182.200	93.15	-3.91	--	--	AV	152.00	150	Vertical	N/A
5	7521.525	49.04	-4.27	74.0	-24.96	Peak	275.00	150	Vertical	Pass
5**	7521.525	39.47	-4.27	54.0	-14.53	AV	275.00	150	Vertical	Pass
6	11593.675	50.91	-0.10	74.0	-23.09	Peak	231.00	150	Vertical	Pass
6**	11593.675	42.01	-0.10	54.0	-11.99	AV	231.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1114.500	42.80	-18.61	74.0	-31.20	Peak	188.00	150	Horizontal	Pass
1**	1114.500	33.16	-18.61	54.0	-20.84	AV	188.00	150	Horizontal	Pass
2	1597.500	43.29	-17.89	74.0	-30.71	Peak	188.00	150	Horizontal	Pass
2**	1597.500	33.47	-17.89	54.0	-20.53	AV	188.00	150	Horizontal	Pass
3	4010.000	47.22	-6.52	74.0	-26.78	Peak	9.00	150	Horizontal	Pass
3**	4010.000	37.73	-6.52	54.0	-16.27	AV	9.00	150	Horizontal	Pass
4	5216.600	105.13	-3.97	--	--	Peak	282.00	150	Horizontal	N/A
4**	5216.600	97.45	-3.97	--	--	AV	282.00	150	Horizontal	N/A
5	7527.850	49.03	-4.28	74.0	-24.97	Peak	360.00	150	Horizontal	Pass
5**	7527.850	39.92	-4.28	54.0	-14.08	AV	360.00	150	Horizontal	Pass
6	12256.650	50.77	-0.01	74.0	-23.23	Peak	342.00	150	Horizontal	Pass
6**	12256.650	41.74	-0.01	54.0	-12.26	AV	342.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1200.000	41.48	-18.16	74.0	-32.52	Peak	20.00	150	Vertical	Pass
1**	1200.000	37.68	-18.16	54.0	-16.32	AV	20.00	150	Vertical	Pass
2	2239.700	43.77	-13.48	74.0	-30.23	Peak	220.00	150	Vertical	Pass
2**	2239.700	34.31	-13.48	54.0	-19.69	AV	220.00	150	Vertical	Pass
3	4038.000	47.52	-5.78	74.0	-26.48	Peak	291.00	150	Vertical	Pass
3**	4038.000	37.84	-5.78	54.0	-16.16	AV	291.00	150	Vertical	Pass
4	5222.200	99.42	-4.13	--	--	Peak	116.00	150	Vertical	N/A
4**	5222.200	92.73	-4.13	--	--	AV	116.00	150	Vertical	N/A
5	7556.025	48.13	-4.46	74.0	-25.87	Peak	142.00	150	Vertical	Pass
5**	7556.025	39.08	-4.46	54.0	-14.92	AV	142.00	150	Vertical	Pass
6	12177.875	50.81	-0.97	74.0	-23.19	Peak	324.00	150	Vertical	Pass
6**	12177.875	40.38	-0.97	54.0	-13.62	AV	324.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1114.200	42.51	-18.62	74.0	-31.49	Peak	180.00	150	Horizontal	Pass
1**	1114.200	33.95	-18.62	54.0	-20.05	AV	180.00	150	Horizontal	Pass
2	1401.600	42.62	-17.75	74.0	-31.38	Peak	196.00	150	Horizontal	Pass
2**	1401.600	32.89	-17.75	54.0	-21.11	AV	196.00	150	Horizontal	Pass
3	4075.000	47.15	-5.42	74.0	-26.85	Peak	105.00	150	Horizontal	Pass
3**	4075.000	38.89	-5.42	54.0	-15.11	AV	105.00	150	Horizontal	Pass
4	5242.400	104.57	-4.26	--	--	Peak	283.00	150	Horizontal	N/A
4**	5242.400	97.16	-4.26	--	--	AV	283.00	150	Horizontal	N/A
5	7535.325	48.64	-4.37	74.0	-25.36	Peak	134.00	150	Horizontal	Pass
5**	7535.325	38.65	-4.37	54.0	-15.35	AV	134.00	150	Horizontal	Pass
6	11627.025	50.26	-0.23	74.0	-23.74	Peak	240.00	150	Horizontal	Pass
6**	11627.025	41.17	-0.23	54.0	-12.83	AV	240.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1120.800	40.91	-18.59	74.0	-33.09	Peak	215.00	150	Vertical	Pass
1**	1120.800	31.97	-18.59	54.0	-22.03	AV	215.00	150	Vertical	Pass
2	1395.900	40.18	-17.75	74.0	-33.82	Peak	149.00	150	Vertical	Pass
2**	1395.900	29.96	-17.75	54.0	-24.04	AV	149.00	150	Vertical	Pass
3	4054.200	47.32	-5.55	74.0	-26.68	Peak	251.00	150	Vertical	Pass
3**	4054.200	38.30	-5.55	54.0	-15.70	AV	251.00	150	Vertical	Pass
4	5243.800	100.23	-4.23	--	--	Peak	104.00	150	Vertical	N/A
4**	5243.800	91.93	-4.23	--	--	AV	104.00	150	Vertical	N/A
5	7422.050	48.23	-4.06	74.0	-25.77	Peak	255.00	150	Vertical	Pass
5**	7422.050	39.51	-4.06	54.0	-14.49	AV	255.00	150	Vertical	Pass
6	11586.775	51.20	-0.04	74.0	-22.80	Peak	346.00	150	Vertical	Pass
6**	11586.775	41.89	-0.04	54.0	-12.11	AV	346.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1119.200	42.75	-18.54	74.0	-31.25	Peak	189.00	150	Horizontal	Pass
1**	1119.200	33.43	-18.54	54.0	-20.57	AV	189.00	150	Horizontal	Pass
2	1596.500	43.72	-17.84	74.0	-30.28	Peak	189.00	150	Horizontal	Pass
2**	1596.500	36.73	-17.84	54.0	-17.27	AV	189.00	150	Horizontal	Pass
3	4207.800	47.94	-6.18	74.0	-26.06	Peak	246.00	150	Horizontal	Pass
3**	4207.800	37.84	-6.18	54.0	-16.16	AV	246.00	150	Horizontal	Pass
4	5184.600	105.69	-3.91	--	--	Peak	294.00	150	Horizontal	N/A
4**	5184.600	97.81	-3.91	--	--	AV	294.00	150	Horizontal	N/A
5	7445.913	48.79	-4.49	74.0	-25.21	Peak	193.00	150	Horizontal	Pass
5**	7445.913	38.98	-4.49	54.0	-15.02	AV	193.00	150	Horizontal	Pass
6	12340.888	50.43	-0.99	74.0	-23.57	Peak	176.00	150	Horizontal	Pass
6**	12340.888	41.68	-0.99	54.0	-12.32	AV	176.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1118.500	40.31	-18.53	74.0	-33.69	Peak	221.00	150	Vertical	Pass
1**	1118.500	32.40	-18.53	54.0	-21.60	AV	221.00	150	Vertical	Pass
2	1598.100	43.41	-17.92	74.0	-30.59	Peak	265.00	150	Vertical	Pass
2**	1598.100	34.05	-17.92	54.0	-19.95	AV	265.00	150	Vertical	Pass
3	4082.800	47.20	-5.06	74.0	-26.80	Peak	118.00	150	Vertical	Pass
3**	4082.800	37.77	-5.06	54.0	-16.23	AV	118.00	150	Vertical	Pass
4	5182.200	99.91	-3.91	--	--	Peak	155.00	150	Vertical	N/A
4**	5182.200	92.15	-3.91	--	--	AV	155.00	150	Vertical	N/A
5	7536.763	48.97	-4.43	74.0	-25.03	Peak	360.00	150	Vertical	Pass
5**	7536.763	38.33	-4.43	54.0	-15.67	AV	360.00	150	Vertical	Pass
6	11619.550	50.57	-0.16	74.0	-23.43	Peak	105.00	150	Vertical	Pass
6**	11619.550	40.93	-0.16	54.0	-13.07	AV	105.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1122.200	42.84	-18.68	74.0	-31.16	Peak	186.00	150	Horizontal	Pass
1**	1122.200	34.92	-18.68	54.0	-19.08	AV	186.00	150	Horizontal	Pass
2	1599.800	43.41	-17.93	74.0	-30.59	Peak	194.00	150	Horizontal	Pass
2**	1599.800	34.16	-17.93	54.0	-19.84	AV	194.00	150	Horizontal	Pass
3	4086.400	47.62	-5.27	74.0	-26.38	Peak	134.00	150	Horizontal	Pass
3**	4086.400	37.69	-5.27	54.0	-16.31	AV	134.00	150	Horizontal	Pass
4	5219.000	104.45	-4.12	--	--	Peak	293.00	150	Horizontal	N/A
4**	5219.000	97.17	-4.12	--	--	AV	293.00	150	Horizontal	N/A
5	7464.312	48.33	-4.59	74.0	-25.67	Peak	69.00	150	Horizontal	Pass
5**	7464.312	38.29	-4.59	54.0	-15.71	AV	69.00	150	Horizontal	Pass
6	11591.375	50.40	-0.08	74.0	-23.60	Peak	249.00	150	Horizontal	Pass
6**	11591.375	41.22	-0.08	54.0	-12.78	AV	249.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.200	40.84	-18.62	74.0	-33.16	Peak	223.00	150	Vertical	Pass
1**	1121.200	32.64	-18.62	54.0	-21.36	AV	223.00	150	Vertical	Pass
2	2223.100	43.79	-13.57	74.0	-30.21	Peak	215.00	150	Vertical	Pass
2**	2223.100	33.84	-13.57	54.0	-20.16	AV	215.00	150	Vertical	Pass
3	4205.800	47.88	-6.23	74.0	-26.12	Peak	178.00	150	Vertical	Pass
3**	4205.800	38.24	-6.23	54.0	-15.76	AV	178.00	150	Vertical	Pass
4	5224.800	98.57	-4.10	--	--	Peak	105.00	150	Vertical	N/A
4**	5224.800	91.64	-4.10	--	--	AV	105.00	150	Vertical	N/A
5	7422.913	48.47	-4.09	74.0	-25.53	Peak	203.00	150	Vertical	Pass
5**	7422.913	39.06	-4.09	54.0	-14.94	AV	203.00	150	Vertical	Pass
6	11462.862	50.63	-1.41	74.0	-23.37	Peak	308.00	150	Vertical	Pass
6**	11462.862	39.83	-1.41	54.0	-14.17	AV	308.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.000	42.48	-18.60	74.0	-31.52	Peak	193.00	150	Horizontal	Pass
1**	1121.000	33.11	-18.60	54.0	-20.89	AV	193.00	150	Horizontal	Pass
2	1397.400	42.87	-17.77	74.0	-31.13	Peak	193.00	150	Horizontal	Pass
2**	1397.400	31.16	-17.77	54.0	-22.84	AV	193.00	150	Horizontal	Pass
3	4159.600	47.05	-5.66	74.0	-26.95	Peak	146.00	150	Horizontal	Pass
3**	4159.600	37.62	-5.66	54.0	-16.38	AV	146.00	150	Horizontal	Pass
4	5243.800	104.86	-4.23	--	--	Peak	285.00	150	Horizontal	N/A
4**	5243.800	97.74	-4.23	--	--	AV	285.00	150	Horizontal	N/A
5	7358.800	48.76	-4.85	74.0	-25.24	Peak	89.00	150	Horizontal	Pass
5**	7358.800	39.16	-4.85	54.0	-14.84	AV	89.00	150	Horizontal	Pass
6	12360.438	50.47	-1.51	74.0	-23.53	Peak	33.00	150	Horizontal	Pass
6**	12360.438	41.45	-1.51	54.0	-12.55	AV	33.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.500	41.28	-18.64	74.0	-32.72	Peak	225.00	150	Vertical	Pass
1**	1121.500	32.84	-18.64	54.0	-21.16	AV	225.00	150	Vertical	Pass
2	1593.000	42.66	-17.95	74.0	-31.34	Peak	225.00	150	Vertical	Pass
2**	1593.000	32.25	-17.95	54.0	-21.75	AV	225.00	150	Vertical	Pass
3	4175.600	48.43	-5.39	74.0	-25.57	Peak	36.00	150	Vertical	Pass
3**	4175.600	38.14	-5.39	54.0	-15.86	AV	36.00	150	Vertical	Pass
4	5241.600	99.15	-4.22	--	--	Peak	151.00	150	Vertical	N/A
4**	5241.600	91.50	-4.22	--	--	AV	151.00	150	Vertical	N/A
5	7532.450	49.32	-4.21	74.0	-24.68	Peak	291.00	150	Vertical	Pass
5**	7532.450	39.78	-4.21	54.0	-14.22	AV	291.00	150	Vertical	Pass
6	11616.099	50.65	-0.16	74.0	-23.35	Peak	201.00	150	Vertical	Pass
6**	11616.099	40.99	-0.16	54.0	-13.01	AV	201.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1124.200	42.66	-18.59	74.0	-31.34	Peak	190.00	150	Horizontal	Pass
1**	1124.200	32.69	-18.59	54.0	-21.31	AV	190.00	150	Horizontal	Pass
2	1393.000	42.65	-17.58	74.0	-31.35	Peak	190.00	150	Horizontal	Pass
2**	1393.000	34.48	-17.58	54.0	-19.52	AV	190.00	150	Horizontal	Pass
3	4084.000	47.75	-5.10	74.0	-26.25	Peak	166.00	150	Horizontal	Pass
3**	4084.000	38.38	-5.10	54.0	-15.62	AV	166.00	150	Horizontal	Pass
4	5182.800	102.85	-3.90	--	--	Peak	291.00	150	Horizontal	N/A
4**	5182.800	94.66	-3.90	--	--	AV	291.00	150	Horizontal	N/A
5	7435.275	48.37	-4.35	74.0	-25.63	Peak	273.00	150	Horizontal	Pass
5**	7435.275	39.40	-4.35	54.0	-14.60	AV	273.00	150	Horizontal	Pass
6	11597.412	50.64	-0.13	74.0	-23.36	Peak	113.00	150	Horizontal	Pass
6**	11597.412	41.46	-0.13	54.0	-12.54	AV	113.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1123.800	40.75	-18.61	74.0	-33.25	Peak	216.00	150	Vertical	Pass
1**	1123.800	29.83	-18.61	54.0	-24.17	AV	216.00	150	Vertical	Pass
2	1596.400	41.40	-17.84	74.0	-32.60	Peak	265.00	150	Vertical	Pass
2**	1596.400	29.64	-17.84	54.0	-24.36	AV	265.00	150	Vertical	Pass
3	4197.000	48.21	-5.89	74.0	-25.79	Peak	59.00	150	Vertical	Pass
3**	4197.000	38.14	-5.89	54.0	-15.86	AV	59.00	150	Vertical	Pass
4	5180.200	98.17	-3.94	--	--	Peak	155.00	150	Vertical	N/A
4**	5180.200	89.10	-3.94	--	--	AV	155.00	150	Vertical	N/A
5	7500.825	48.75	-4.38	74.0	-25.25	Peak	10.00	150	Vertical	Pass
5**	7500.825	38.64	-4.38	54.0	-15.36	AV	10.00	150	Vertical	Pass
6	12298.625	50.86	0.03	74.0	-23.14	Peak	45.00	150	Vertical	Pass
6**	12298.625	41.21	0.03	54.0	-12.79	AV	45.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1113.300	41.58	-18.66	74.0	-32.42	Peak	185.00	150	Horizontal	Pass
1**	1113.300	31.98	-18.66	54.0	-22.02	AV	185.00	150	Horizontal	Pass
2	1400.100	43.06	-17.74	74.0	-30.94	Peak	198.00	150	Horizontal	Pass
2**	1400.100	34.24	-17.74	54.0	-19.76	AV	198.00	150	Horizontal	Pass
3	4077.800	47.12	-5.20	74.0	-26.88	Peak	89.00	150	Horizontal	Pass
3**	4077.800	38.60	-5.20	54.0	-15.40	AV	89.00	150	Horizontal	Pass
4	5233.200	102.60	-4.20	--	--	Peak	284.00	150	Horizontal	N/A
4**	5233.200	94.00	-4.20	--	--	AV	284.00	150	Horizontal	N/A
5	7420.325	49.56	-4.00	74.0	-24.44	Peak	5.00	150	Horizontal	Pass
5**	7420.325	40.69	-4.00	54.0	-13.31	AV	5.00	150	Horizontal	Pass
6	12239.112	50.32	-0.32	74.0	-23.68	Peak	343.00	150	Horizontal	Pass
6**	12239.112	41.49	-0.32	54.0	-12.51	AV	343.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1119.600	40.85	-18.54	74.0	-33.15	Peak	227.00	150	Vertical	Pass
1**	1119.600	32.56	-18.54	54.0	-21.44	AV	227.00	150	Vertical	Pass
2	1597.200	42.15	-17.88	74.0	-31.85	Peak	295.00	150	Vertical	Pass
2**	1597.200	28.99	-17.88	54.0	-25.01	AV	295.00	150	Vertical	Pass
3	4819.600	50.55	-4.26	74.0	-23.45	Peak	0.00	150	Vertical	Pass
3**	4819.600	39.69	-4.26	54.0	-14.31	AV	0.00	150	Vertical	Pass
4	5228.200	96.20	-4.08	--	--	Peak	162.00	150	Vertical	N/A
4**	5228.200	88.88	-4.08	--	--	AV	162.00	150	Vertical	N/A
5	7447.063	48.73	-4.52	74.0	-25.27	Peak	287.00	150	Vertical	Pass
5**	7447.063	38.35	-4.52	54.0	-15.65	AV	287.00	150	Vertical	Pass
6	11681.075	50.28	-0.95	74.0	-23.72	Peak	306.00	150	Vertical	Pass
6**	11681.075	41.63	-0.95	54.0	-12.37	AV	306.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1114.900	41.39	-18.58	74.0	-32.61	Peak	190.00	150	Horizontal	Pass
1**	1114.900	32.08	-18.58	54.0	-21.92	AV	190.00	150	Horizontal	Pass
2	1599.300	44.49	-17.93	74.0	-29.51	Peak	190.00	150	Horizontal	Pass
2**	1599.300	33.36	-17.93	54.0	-20.64	AV	190.00	150	Horizontal	Pass
3	4083.000	47.89	-5.07	74.0	-26.11	Peak	360.00	150	Horizontal	Pass
3**	4083.000	38.64	-5.07	54.0	-15.36	AV	360.00	150	Horizontal	Pass
4	5183.000	105.31	-3.90	--	--	Peak	283.00	150	Horizontal	N/A
4**	5183.000	99.06	-3.90	--	--	AV	283.00	150	Horizontal	N/A
5	7420.900	48.72	-4.00	74.0	-25.28	Peak	17.00	150	Horizontal	Pass
5**	7420.900	40.10	-4.00	54.0	-13.90	AV	17.00	150	Horizontal	Pass
6	11567.799	50.73	0.08	74.0	-23.27	Peak	269.00	150	Horizontal	Pass
6**	11567.799	40.24	0.08	54.0	-13.76	AV	269.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.700	39.61	-18.65	74.0	-34.39	Peak	322.00	150	Vertical	Pass
1**	1121.700	30.79	-18.65	54.0	-23.21	AV	322.00	150	Vertical	Pass
2	2233.500	44.53	-13.73	74.0	-29.47	Peak	203.00	150	Vertical	Pass
2**	2233.500	36.18	-13.73	54.0	-17.82	AV	203.00	150	Vertical	Pass
3	4059.600	47.67	-5.54	74.0	-26.33	Peak	254.00	150	Vertical	Pass
3**	4059.600	37.61	-5.54	54.0	-16.39	AV	254.00	150	Vertical	Pass
4	5178.600	99.82	-3.95	--	--	Peak	147.00	150	Vertical	N/A
4**	5178.600	93.02	-3.95	--	--	AV	147.00	150	Vertical	N/A
5	7475.812	47.87	-4.68	74.0	-26.13	Peak	184.00	150	Vertical	Pass
5**	7475.812	39.15	-4.68	54.0	-14.85	AV	184.00	150	Vertical	Pass
6	12335.713	51.82	-0.84	74.0	-22.18	Peak	87.00	150	Vertical	Pass
6**	12335.713	41.37	-0.84	54.0	-12.63	AV	87.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1122.200	42.11	-18.68	74.0	-31.89	Peak	179.00	150	Horizontal	Pass
1**	1122.200	34.43	-18.68	54.0	-19.57	AV	179.00	150	Horizontal	Pass
2	1399.200	44.08	-17.75	74.0	-29.92	Peak	198.00	150	Horizontal	Pass
2**	1399.200	36.58	-17.75	54.0	-17.42	AV	198.00	150	Horizontal	Pass
3	4078.400	47.71	-5.18	74.0	-26.29	Peak	32.00	150	Horizontal	Pass
3**	4078.400	38.00	-5.18	54.0	-16.00	AV	32.00	150	Horizontal	Pass
4	5219.200	105.10	-4.13	--	--	Peak	299.00	150	Horizontal	N/A
4**	5219.200	97.93	-4.13	--	--	AV	299.00	150	Horizontal	N/A
5	7430.675	47.74	-4.37	74.0	-26.26	Peak	239.00	150	Horizontal	Pass
5**	7430.675	39.79	-4.37	54.0	-14.21	AV	239.00	150	Horizontal	Pass
6	11679.062	51.04	-0.94	74.0	-22.96	Peak	345.00	150	Horizontal	Pass
6**	11679.062	41.12	-0.94	54.0	-12.88	AV	345.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1123.900	40.36	-18.61	74.0	-33.64	Peak	223.00	150	Vertical	Pass
1**	1123.900	31.25	-18.61	54.0	-22.75	AV	223.00	150	Vertical	Pass
2	2227.700	44.34	-13.58	74.0	-29.66	Peak	223.00	150	Vertical	Pass
2**	2227.700	34.90	-13.58	54.0	-19.10	AV	223.00	150	Vertical	Pass
3	4092.200	47.38	-5.64	74.0	-26.62	Peak	129.00	150	Vertical	Pass
3**	4092.200	37.66	-5.64	54.0	-16.34	AV	129.00	150	Vertical	Pass
4	5216.400	99.37	-3.96	--	--	Peak	113.00	150	Vertical	N/A
4**	5216.400	91.67	-3.96	--	--	AV	113.00	150	Vertical	N/A
5	7431.825	48.35	-4.40	74.0	-25.65	Peak	236.00	150	Vertical	Pass
5**	7431.825	39.19	-4.40	54.0	-14.81	AV	236.00	150	Vertical	Pass
6	12263.262	50.42	0.05	74.0	-23.58	Peak	309.00	150	Vertical	Pass
6**	12263.262	42.55	0.05	54.0	-11.45	AV	309.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1123.000	41.92	-18.65	74.0	-32.08	Peak	195.00	150	Horizontal	Pass
1**	1123.000	31.98	-18.65	54.0	-22.02	AV	195.00	150	Horizontal	Pass
2	1392.200	44.06	-17.55	74.0	-29.94	Peak	195.00	150	Horizontal	Pass
2**	1392.200	32.48	-17.55	54.0	-21.52	AV	195.00	150	Horizontal	Pass
3	4059.200	47.00	-5.54	74.0	-27.00	Peak	13.00	150	Horizontal	Pass
3**	4059.200	37.11	-5.54	54.0	-16.89	AV	13.00	150	Horizontal	Pass
4	5241.400	105.38	-4.21	--	--	Peak	284.00	150	Horizontal	N/A
4**	5241.400	97.04	-4.21	--	--	AV	284.00	150	Horizontal	N/A
5	8066.337	50.28	-3.26	74.0	-23.72	Peak	6.00	150	Horizontal	Pass
5**	8066.337	39.98	-3.26	54.0	-14.02	AV	6.00	150	Horizontal	Pass
6	12349.225	51.02	-1.22	74.0	-22.98	Peak	215.00	150	Horizontal	Pass
6**	12349.225	41.56	-1.22	54.0	-12.44	AV	215.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1120.700	40.05	-18.59	74.0	-33.95	Peak	222.00	150	Vertical	Pass
1**	1120.700	30.77	-18.59	54.0	-23.23	AV	222.00	150	Vertical	Pass
2	1594.600	40.86	-17.90	74.0	-33.14	Peak	239.00	150	Vertical	Pass
2**	1594.600	33.71	-17.90	54.0	-20.29	AV	239.00	150	Vertical	Pass
3	3990.400	46.67	-6.26	74.0	-27.33	Peak	0.00	150	Vertical	Pass
3**	3990.400	38.44	-6.26	54.0	-15.56	AV	0.00	150	Vertical	Pass
4	5236.200	98.84	-4.31	--	--	Peak	156.00	150	Vertical	N/A
4**	5236.200	91.33	-4.31	--	--	AV	156.00	150	Vertical	N/A
5	7526.987	49.65	-4.30	74.0	-24.35	Peak	199.00	150	Vertical	Pass
5**	7526.987	39.03	-4.30	54.0	-14.97	AV	199.00	150	Vertical	Pass
6	12276.200	50.77	0.08	74.0	-23.23	Peak	95.00	150	Vertical	Pass
6**	12276.200	40.68	0.08	54.0	-13.32	AV	95.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.900	41.85	-18.66	74.0	-32.15	Peak	190.00	150	Horizontal	Pass
1**	1121.900	34.26	-18.66	54.0	-19.74	AV	190.00	150	Horizontal	Pass
2	1393.300	44.70	-17.59	74.0	-29.30	Peak	190.00	150	Horizontal	Pass
2**	1393.300	35.28	-17.59	54.0	-18.72	AV	190.00	150	Horizontal	Pass
3	4275.600	48.31	-5.05	74.0	-25.69	Peak	343.00	150	Horizontal	Pass
3**	4275.600	39.89	-5.05	54.0	-14.11	AV	343.00	150	Horizontal	Pass
4	5184.200	102.94	-3.91	--	--	Peak	289.00	150	Horizontal	N/A
4**	5184.200	95.16	-3.91	--	--	AV	289.00	150	Horizontal	N/A
5	7401.062	48.55	-4.17	74.0	-25.45	Peak	250.00	150	Horizontal	Pass
5**	7401.062	38.98	-4.17	54.0	-15.02	AV	250.00	150	Horizontal	Pass
6	12264.988	51.09	0.05	74.0	-22.91	Peak	250.00	150	Horizontal	Pass
6**	12264.988	41.71	0.05	54.0	-12.29	AV	250.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1117.000	39.91	-18.53	74.0	-34.09	Peak	170.00	150	Vertical	Pass
1**	1117.000	31.22	-18.53	54.0	-22.78	AV	170.00	150	Vertical	Pass
2	2244.200	43.55	-13.23	74.0	-30.45	Peak	204.00	150	Vertical	Pass
2**	2244.200	34.88	-13.23	54.0	-19.12	AV	204.00	150	Vertical	Pass
3	4825.200	50.69	-4.10	74.0	-23.31	Peak	85.00	150	Vertical	Pass
3**	4825.200	40.86	-4.10	54.0	-13.14	AV	85.00	150	Vertical	Pass
4	5183.200	97.14	-3.90	--	--	Peak	158.00	150	Vertical	N/A
4**	5183.200	88.72	-3.90	--	--	AV	158.00	150	Vertical	N/A
5	7594.838	48.95	-4.88	74.0	-25.05	Peak	138.00	150	Vertical	Pass
5**	7594.838	39.09	-4.88	54.0	-14.91	AV	138.00	150	Vertical	Pass
6	11686.250	51.00	-0.89	74.0	-23.00	Peak	232.00	150	Vertical	Pass
6**	11686.250	40.75	-0.89	54.0	-13.25	AV	232.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1122.400	41.26	-18.68	74.0	-32.74	Peak	190.00	150	Horizontal	Pass
1**	1122.400	31.28	-18.68	54.0	-22.72	AV	190.00	150	Horizontal	Pass
2	1388.200	44.09	-17.63	74.0	-29.91	Peak	190.00	150	Horizontal	Pass
2**	1388.200	32.39	-17.63	54.0	-21.61	AV	190.00	150	Horizontal	Pass
3	4008.800	46.43	-6.50	74.0	-27.57	Peak	360.00	150	Horizontal	Pass
3**	4008.800	38.65	-6.50	54.0	-15.35	AV	360.00	150	Horizontal	Pass
4	5221.400	102.12	-4.10	--	--	Peak	287.00	150	Horizontal	N/A
4**	5221.400	93.54	-4.10	--	--	AV	287.00	150	Horizontal	N/A
5	7423.775	48.27	-4.08	74.0	-25.73	Peak	283.00	150	Horizontal	Pass
5**	7423.775	39.69	-4.08	54.0	-14.31	AV	283.00	150	Horizontal	Pass
6	11611.787	50.43	-0.16	74.0	-23.57	Peak	122.00	150	Horizontal	Pass
6**	11611.787	41.30	-0.16	54.0	-12.70	AV	122.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.100	39.50	-18.61	74.0	-34.50	Peak	178.00	150	Vertical	Pass
1**	1121.100	30.73	-18.61	54.0	-23.27	AV	178.00	150	Vertical	Pass
2	1599.100	39.41	-17.93	74.0	-34.59	Peak	178.00	150	Vertical	Pass
2**	1599.100	28.41	-17.93	54.0	-25.59	AV	178.00	150	Vertical	Pass
3	4052.800	48.09	-5.56	74.0	-25.91	Peak	116.00	150	Vertical	Pass
3**	4052.800	37.48	-5.56	54.0	-16.52	AV	116.00	150	Vertical	Pass
4	5231.400	95.71	-4.21	--	--	Peak	116.00	150	Vertical	N/A
4**	5231.400	88.03	-4.21	--	--	AV	116.00	150	Vertical	N/A
5	7439.300	48.23	-4.37	74.0	-25.77	Peak	208.00	150	Vertical	Pass
5**	7439.300	39.62	-4.37	54.0	-14.38	AV	208.00	150	Vertical	Pass
6	11667.849	50.24	-0.66	74.0	-23.76	Peak	341.00	150	Vertical	Pass
6**	11667.849	41.19	-0.66	54.0	-12.81	AV	341.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1125.100	41.90	-18.61	74.0	-32.10	Peak	185.00	150	Horizontal	Pass
1**	1125.100	28.20	-18.61	54.0	-25.80	AV	185.00	150	Horizontal	Pass
2	1399.500	42.56	-17.75	74.0	-31.44	Peak	185.00	150	Horizontal	Pass
2**	1399.500	33.97	-17.75	54.0	-20.03	AV	185.00	150	Horizontal	Pass
3	4264.600	48.96	-5.38	74.0	-25.04	Peak	267.00	150	Horizontal	Pass
3**	4264.600	39.49	-5.38	54.0	-14.51	AV	267.00	150	Horizontal	Pass
4	5221.400	99.46	-4.10	--	--	Peak	288.00	150	Horizontal	N/A
4**	5221.400	92.21	-4.10	--	--	AV	288.00	150	Horizontal	N/A
5	7440.737	48.56	-4.31	74.0	-25.44	Peak	230.00	150	Horizontal	Pass
5**	7440.737	39.68	-4.31	54.0	-14.32	AV	230.00	150	Horizontal	Pass
6	11616.388	49.87	-0.16	74.0	-24.13	Peak	39.00	150	Horizontal	Pass
6**	11616.388	42.25	-0.16	54.0	-11.75	AV	39.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1123.000	39.69	-18.65	74.0	-34.31	Peak	226.00	150	Vertical	Pass
1**	1123.000	30.50	-18.65	54.0	-23.50	AV	226.00	150	Vertical	Pass
2	2237.000	44.20	-13.59	74.0	-29.80	Peak	206.00	150	Vertical	Pass
2**	2237.000	34.18	-13.59	54.0	-19.82	AV	206.00	150	Vertical	Pass
3	4198.400	48.14	-5.99	74.0	-25.86	Peak	63.00	150	Vertical	Pass
3**	4198.400	38.50	-5.99	54.0	-15.50	AV	63.00	150	Vertical	Pass
4	5185.400	93.65	-3.92	--	--	Peak	151.00	150	Vertical	N/A
4**	5185.400	85.64	-3.92	--	--	AV	151.00	150	Vertical	N/A
5	7433.550	48.30	-4.39	74.0	-25.70	Peak	66.00	150	Vertical	Pass
5**	7433.550	39.20	-4.39	54.0	-14.80	AV	66.00	150	Vertical	Pass
6	12335.138	51.66	-0.83	74.0	-22.34	Peak	86.00	150	Vertical	Pass
6**	12335.138	41.20	-0.83	54.0	-12.80	AV	86.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1122.600	41.56	-18.67	74.0	-32.44	Peak	195.00	150	Horizontal	Pass
1**	1122.600	31.94	-18.67	54.0	-22.06	AV	195.00	150	Horizontal	Pass
2	1391.000	43.78	-17.66	74.0	-30.22	Peak	202.00	150	Horizontal	Pass
2**	1391.000	33.94	-17.66	54.0	-20.06	AV	202.00	150	Horizontal	Pass
3	4219.600	47.48	-6.02	74.0	-26.52	Peak	165.00	150	Horizontal	Pass
3**	4219.600	38.30	-6.02	54.0	-15.70	AV	165.00	150	Horizontal	Pass
4	5741.800	104.85	-4.10	--	--	Peak	250.00	150	Horizontal	N/A
4**	5741.800	96.41	-4.10	--	--	AV	250.00	150	Horizontal	N/A
5	7464.888	48.55	-4.57	74.0	-25.45	Peak	191.00	150	Horizontal	Pass
5**	7464.888	39.26	-4.57	54.0	-14.74	AV	191.00	150	Horizontal	Pass
6	12251.187	50.91	-0.08	74.0	-23.09	Peak	346.00	150	Horizontal	Pass
6**	12251.187	41.94	-0.08	54.0	-12.06	AV	346.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1119.000	39.18	-18.54	74.0	-34.82	Peak	224.00	150	Vertical	Pass
1**	1119.000	30.53	-18.54	54.0	-23.47	AV	224.00	150	Vertical	Pass
2	1596.900	39.94	-17.86	74.0	-34.06	Peak	179.00	150	Vertical	Pass
2**	1596.900	31.93	-17.86	54.0	-22.07	AV	179.00	150	Vertical	Pass
3	4839.200	51.07	-3.95	74.0	-22.93	Peak	155.00	150	Vertical	Pass
3**	4839.200	41.51	-3.95	54.0	-12.49	AV	155.00	150	Vertical	Pass
4	5749.000	99.39	-3.78	--	--	Peak	94.00	150	Vertical	N/A
4**	5749.000	91.56	-3.78	--	--	AV	94.00	150	Vertical	N/A
5	7483.000	48.25	-4.50	74.0	-25.75	Peak	346.00	150	Vertical	Pass
5**	7483.000	39.64	-4.50	54.0	-14.36	AV	346.00	150	Vertical	Pass
6	12261.826	50.36	0.04	74.0	-23.64	Peak	35.00	150	Vertical	Pass
6**	12261.826	41.20	0.04	54.0	-12.80	AV	35.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.400	42.56	-18.63	74.0	-31.44	Peak	190.00	150	Horizontal	Pass
1**	1121.400	35.36	-18.63	54.0	-18.64	AV	190.00	150	Horizontal	Pass
2	2234.300	43.16	-13.71	74.0	-30.84	Peak	84.00	150	Horizontal	Pass
2**	2234.300	33.28	-13.71	54.0	-20.72	AV	84.00	150	Horizontal	Pass
3	4223.200	47.96	-5.88	74.0	-26.04	Peak	129.00	150	Horizontal	Pass
3**	4223.200	37.89	-5.88	54.0	-16.11	AV	129.00	150	Horizontal	Pass
4	5781.200	105.48	-3.23	--	--	Peak	252.00	150	Horizontal	N/A
4**	5781.200	96.29	-3.23	--	--	AV	252.00	150	Horizontal	N/A
5	8095.088	49.31	-3.44	74.0	-24.69	Peak	219.00	150	Horizontal	Pass
5**	8095.088	38.70	-3.44	54.0	-15.30	AV	219.00	150	Horizontal	Pass
6	11589.363	50.37	-0.06	74.0	-23.63	Peak	330.00	150	Horizontal	Pass
6**	11589.363	40.75	-0.06	54.0	-13.25	AV	330.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1120.200	39.24	-18.56	74.0	-34.76	Peak	225.00	150	Vertical	Pass
1**	1120.200	30.87	-18.56	54.0	-23.13	AV	225.00	150	Vertical	Pass
2	2240.500	43.78	-13.45	74.0	-30.22	Peak	209.00	150	Vertical	Pass
2**	2240.500	34.58	-13.45	54.0	-19.42	AV	209.00	150	Vertical	Pass
3	4075.600	47.15	-5.35	74.0	-26.85	Peak	294.00	150	Vertical	Pass
3**	4075.600	37.88	-5.35	54.0	-16.12	AV	294.00	150	Vertical	Pass
4	5781.800	98.24	-3.21	--	--	Peak	95.00	150	Vertical	N/A
4**	5781.800	90.53	-3.21	--	--	AV	95.00	150	Vertical	N/A
5	7527.850	48.16	-4.28	74.0	-25.84	Peak	180.00	150	Vertical	Pass
5**	7527.850	39.09	-4.28	54.0	-14.91	AV	180.00	150	Vertical	Pass
6	12277.349	51.09	0.08	74.0	-22.91	Peak	310.00	150	Vertical	Pass
6**	12277.349	40.59	0.08	54.0	-13.41	AV	310.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1123.600	42.13	-18.62	74.0	-31.87	Peak	196.00	150	Horizontal	Pass
1**	1123.600	29.51	-18.62	54.0	-24.49	AV	196.00	150	Horizontal	Pass
2	1407.100	43.34	-17.71	74.0	-30.66	Peak	196.00	150	Horizontal	Pass
2**	1407.100	28.89	-17.71	54.0	-25.11	AV	196.00	150	Horizontal	Pass
3	4107.200	47.04	-5.99	74.0	-26.96	Peak	315.00	150	Horizontal	Pass
3**	4107.200	37.34	-5.99	54.0	-16.66	AV	315.00	150	Horizontal	Pass
4	5827.800	105.19	-2.92	--	--	Peak	252.00	150	Horizontal	N/A
4**	5827.800	97.78	-2.92	--	--	AV	252.00	150	Horizontal	N/A
5	7532.450	49.19	-4.21	74.0	-24.81	Peak	165.00	150	Horizontal	Pass
5**	7532.450	39.20	-4.21	54.0	-14.80	AV	165.00	150	Horizontal	Pass
6	12332.262	50.93	-0.74	74.0	-23.07	Peak	182.00	150	Horizontal	Pass
6**	12332.262	41.77	-0.74	54.0	-12.23	AV	182.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1122.400	39.41	-18.68	74.0	-34.59	Peak	196.00	150	Vertical	Pass
1**	1122.400	30.44	-18.68	54.0	-23.56	AV	196.00	150	Vertical	Pass
2	2239.300	44.00	-13.49	74.0	-30.00	Peak	204.00	150	Vertical	Pass
2**	2239.300	32.97	-13.49	54.0	-21.03	AV	204.00	150	Vertical	Pass
3	4091.200	47.23	-5.58	74.0	-26.77	Peak	329.00	150	Vertical	Pass
3**	4091.200	38.31	-5.58	54.0	-15.69	AV	329.00	150	Vertical	Pass
4	5828.000	99.52	-2.92	--	--	Peak	98.00	150	Vertical	N/A
4**	5828.000	91.97	-2.92	--	--	AV	98.00	150	Vertical	N/A
5	7422.913	48.90	-4.09	74.0	-25.10	Peak	183.00	150	Vertical	Pass
5**	7422.913	39.89	-4.09	54.0	-14.11	AV	183.00	150	Vertical	Pass
6	12159.475	51.04	-0.88	74.0	-22.96	Peak	275.00	150	Vertical	Pass
6**	12159.475	40.51	-0.88	54.0	-13.49	AV	275.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1393.500	40.41	-17.60	74.0	-33.59	Peak	234.00	150	Horizontal	Pass
1**	1393.500	32.34	-17.60	54.0	-21.66	AV	234.00	150	Horizontal	Pass
2	2777.700	43.60	-11.46	74.0	-30.40	Peak	271.00	150	Horizontal	Pass
2**	2777.700	33.96	-11.46	54.0	-20.04	AV	271.00	150	Horizontal	Pass
3	4085.800	47.55	-5.22	74.0	-26.45	Peak	206.00	150	Horizontal	Pass
3**	4085.800	38.32	-5.22	54.0	-15.68	AV	206.00	150	Horizontal	Pass
4	5746.600	103.91	-4.00	--	--	Peak	243.00	150	Horizontal	N/A
4**	5746.600	95.57	-4.00	--	--	AV	243.00	150	Horizontal	N/A
5	7434.700	49.02	-4.37	74.0	-24.98	Peak	57.00	150	Horizontal	Pass
5**	7434.700	39.98	-4.37	54.0	-14.02	AV	57.00	150	Horizontal	Pass
6	12235.662	50.88	-0.31	74.0	-23.12	Peak	0.00	150	Horizontal	Pass
6**	12235.662	41.67	-0.31	54.0	-12.33	AV	0.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1126.000	42.77	-18.65	74.0	-31.23	Peak	196.00	150	Vertical	Pass
1**	1126.000	27.58	-18.65	54.0	-26.42	AV	196.00	150	Vertical	Pass
2	2799.200	43.02	-11.41	74.0	-30.98	Peak	319.00	150	Vertical	Pass
2**	2799.200	33.54	-11.41	54.0	-20.46	AV	319.00	150	Vertical	Pass
3	4079.800	49.02	-5.16	74.0	-24.98	Peak	20.00	150	Vertical	Pass
3**	4079.800	38.38	-5.16	54.0	-15.62	AV	20.00	150	Vertical	Pass
4	5746.200	98.94	-4.04	--	--	Peak	153.00	150	Vertical	N/A
4**	5746.200	92.41	-4.04	--	--	AV	153.00	150	Vertical	N/A
5	7501.975	48.91	-4.39	74.0	-25.09	Peak	1.00	150	Vertical	Pass
5**	7501.975	38.39	-4.39	54.0	-15.61	AV	1.00	150	Vertical	Pass
6	12328.526	51.13	-0.63	74.0	-22.87	Peak	70.00	150	Vertical	Pass
6**	12328.526	42.03	-0.63	54.0	-11.97	AV	70.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1400.900	40.77	-17.74	74.0	-33.23	Peak	193.00	150	Horizontal	Pass
1**	1400.900	34.02	-17.74	54.0	-19.98	AV	193.00	150	Horizontal	Pass
2	2793.500	42.90	-11.14	74.0	-31.10	Peak	314.00	150	Horizontal	Pass
2**	2793.500	33.68	-11.14	54.0	-20.32	AV	314.00	150	Horizontal	Pass
3	4090.000	47.72	-5.51	74.0	-26.28	Peak	158.00	150	Horizontal	Pass
3**	4090.000	38.07	-5.51	54.0	-15.93	AV	158.00	150	Horizontal	Pass
4	5783.800	104.88	-3.05	--	--	Peak	244.00	150	Horizontal	N/A
4**	5783.800	97.38	-3.05	--	--	AV	244.00	150	Horizontal	N/A
5	7431.250	48.76	-4.40	74.0	-25.24	Peak	0.00	150	Horizontal	Pass
5**	7431.250	39.31	-4.40	54.0	-14.69	AV	0.00	150	Horizontal	Pass
6	12326.799	50.72	-0.58	74.0	-23.28	Peak	81.00	150	Horizontal	Pass
6**	12326.799	42.16	-0.58	54.0	-11.84	AV	81.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1594.900	42.51	-17.89	74.0	-31.49	Peak	161.00	150	Vertical	Pass
1**	1594.900	32.98	-17.89	54.0	-21.02	AV	161.00	150	Vertical	Pass
2	2757.800	43.62	-11.45	74.0	-30.38	Peak	61.00	150	Vertical	Pass
2**	2757.800	34.09	-11.45	54.0	-19.91	AV	61.00	150	Vertical	Pass
3	4074.200	47.10	-5.50	74.0	-26.90	Peak	177.00	150	Vertical	Pass
3**	4074.200	38.20	-5.50	54.0	-15.80	AV	177.00	150	Vertical	Pass
4	5783.600	98.57	-3.07	--	--	Peak	102.00	150	Vertical	N/A
4**	5783.600	90.38	-3.07	--	--	AV	102.00	150	Vertical	N/A
5	7452.812	49.20	-4.47	74.0	-24.80	Peak	103.00	150	Vertical	Pass
5**	7452.812	38.98	-4.47	54.0	-15.02	AV	103.00	150	Vertical	Pass
6	12225.599	51.33	-0.29	74.0	-22.67	Peak	121.00	150	Vertical	Pass
6**	12225.599	41.44	-0.29	54.0	-12.56	AV	121.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1397.100	41.98	-17.78	74.0	-32.02	Peak	199.00	150	Horizontal	Pass
1**	1397.100	32.39	-17.78	54.0	-21.61	AV	199.00	150	Horizontal	Pass
2	2809.200	43.51	-11.56	74.0	-30.49	Peak	319.00	150	Horizontal	Pass
2**	2809.200	33.35	-11.56	54.0	-20.65	AV	319.00	150	Horizontal	Pass
3	4067.400	47.43	-5.48	74.0	-26.57	Peak	0.00	150	Horizontal	Pass
3**	4067.400	38.35	-5.48	54.0	-15.65	AV	0.00	150	Horizontal	Pass
4	5826.800	105.32	-2.89	--	--	Peak	243.00	150	Horizontal	N/A
4**	5826.800	97.49	-2.89	--	--	AV	243.00	150	Horizontal	N/A
5	7424.062	48.78	-4.08	74.0	-25.22	Peak	294.00	150	Horizontal	Pass
5**	7424.062	39.81	-4.08	54.0	-14.19	AV	294.00	150	Horizontal	Pass
6	12337.438	50.50	-0.89	74.0	-23.50	Peak	345.00	150	Horizontal	Pass
6**	12337.438	41.10	-0.89	54.0	-12.90	AV	345.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1597.600	42.53	-17.90	74.0	-31.47	Peak	158.00	150	Vertical	Pass
1**	1597.600	28.60	-17.90	54.0	-25.40	AV	158.00	150	Vertical	Pass
2	2822.600	42.57	-11.84	74.0	-31.43	Peak	251.00	150	Vertical	Pass
2**	2822.600	33.89	-11.84	54.0	-20.11	AV	251.00	150	Vertical	Pass
3	4080.000	47.53	-5.16	74.0	-26.47	Peak	136.00	150	Vertical	Pass
3**	4080.000	38.08	-5.16	54.0	-15.92	AV	136.00	150	Vertical	Pass
4	5826.400	99.28	-2.90	--	--	Peak	97.00	150	Vertical	N/A
4**	5826.400	90.81	-2.90	--	--	AV	97.00	150	Vertical	N/A
5	7428.087	48.85	-4.17	74.0	-25.15	Peak	28.00	150	Vertical	Pass
5**	7428.087	39.93	-4.17	54.0	-14.07	AV	28.00	150	Vertical	Pass
6	12317.887	50.77	-0.34	74.0	-23.23	Peak	28.00	150	Vertical	Pass
6**	12317.887	40.56	-0.34	54.0	-13.44	AV	28.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1390.300	41.68	-17.73	74.0	-32.32	Peak	248.00	150	Horizontal	Pass
1**	1390.300	32.63	-17.73	54.0	-21.37	AV	248.00	150	Horizontal	Pass
2	2801.000	43.10	-11.40	74.0	-30.90	Peak	69.00	150	Horizontal	Pass
2**	2801.000	33.86	-11.40	54.0	-20.14	AV	69.00	150	Horizontal	Pass
3	4021.800	46.88	-6.50	74.0	-27.12	Peak	326.00	150	Horizontal	Pass
3**	4021.800	36.96	-6.50	54.0	-17.04	AV	326.00	150	Horizontal	Pass
4	5766.400	101.55	-3.39	--	--	Peak	249.00	150	Horizontal	N/A
4**	5766.400	93.71	-3.39	--	--	AV	249.00	150	Horizontal	N/A
5	7430.962	48.01	-4.39	74.0	-25.99	Peak	267.00	150	Horizontal	Pass
5**	7430.962	40.20	-4.39	54.0	-13.80	AV	267.00	150	Horizontal	Pass
6	11612.075	50.22	-0.16	74.0	-23.78	Peak	191.00	150	Horizontal	Pass
6**	11612.075	41.05	-0.16	54.0	-12.95	AV	191.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1595.300	41.56	-17.87	74.0	-32.44	Peak	220.00	150	Vertical	Pass
1**	1595.300	28.57	-17.87	54.0	-25.43	AV	220.00	150	Vertical	Pass
2	2815.700	43.21	-11.77	74.0	-30.79	Peak	276.00	150	Vertical	Pass
2**	2815.700	33.51	-11.77	54.0	-20.49	AV	276.00	150	Vertical	Pass
3	4089.000	47.05	-5.45	74.0	-26.95	Peak	292.00	150	Vertical	Pass
3**	4089.000	38.32	-5.45	54.0	-15.68	AV	292.00	150	Vertical	Pass
4	5749.200	95.48	-3.76	--	--	Peak	92.00	150	Vertical	N/A
4**	5749.200	87.36	-3.76	--	--	AV	92.00	150	Vertical	N/A
5	7526.987	48.65	-4.30	74.0	-25.35	Peak	323.00	150	Vertical	Pass
5**	7526.987	40.02	-4.30	54.0	-13.98	AV	323.00	150	Vertical	Pass
6	11666.413	50.81	-0.63	74.0	-23.19	Peak	0.00	150	Vertical	Pass
6**	11666.413	41.60	-0.63	54.0	-12.40	AV	0.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1394.700	41.41	-17.66	74.0	-32.59	Peak	247.00	150	Horizontal	Pass
1**	1394.700	31.12	-17.66	54.0	-22.88	AV	247.00	150	Horizontal	Pass
2	2800.800	43.23	-11.40	74.0	-30.77	Peak	276.00	150	Horizontal	Pass
2**	2800.800	34.92	-11.40	54.0	-19.08	AV	276.00	150	Horizontal	Pass
3	3992.200	46.65	-6.25	74.0	-27.35	Peak	107.00	150	Horizontal	Pass
3**	3992.200	37.55	-6.25	54.0	-16.45	AV	107.00	150	Horizontal	Pass
4	5806.600	101.90	-3.08	--	--	Peak	241.00	150	Horizontal	N/A
4**	5806.600	94.68	-3.08	--	--	AV	241.00	150	Horizontal	N/A
5	7425.212	49.43	-4.07	74.0	-24.57	Peak	148.00	150	Horizontal	Pass
5**	7425.212	39.43	-4.07	54.0	-14.57	AV	148.00	150	Horizontal	Pass
6	12324.213	50.49	-0.51	74.0	-23.51	Peak	309.00	150	Horizontal	Pass
6**	12324.213	41.17	-0.51	54.0	-12.83	AV	309.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1392.400	39.52	-17.56	74.0	-34.48	Peak	222.00	150	Vertical	Pass
1**	1392.400	30.38	-17.56	54.0	-23.62	AV	222.00	150	Vertical	Pass
2	2813.700	43.11	-11.58	74.0	-30.89	Peak	82.00	150	Vertical	Pass
2**	2813.700	33.48	-11.58	54.0	-20.52	AV	82.00	150	Vertical	Pass
3	4157.000	47.95	-5.79	74.0	-26.05	Peak	360.00	150	Vertical	Pass
3**	4157.000	37.97	-5.79	54.0	-16.03	AV	360.00	150	Vertical	Pass
4	5788.000	95.26	-3.10	--	--	Peak	97.00	150	Vertical	N/A
4**	5788.000	86.69	-3.10	--	--	AV	97.00	150	Vertical	N/A
5	7617.263	49.53	-5.15	74.0	-24.47	Peak	330.00	150	Vertical	Pass
5**	7617.263	38.69	-5.15	54.0	-15.31	AV	330.00	150	Vertical	Pass
6	11602.013	50.18	-0.15	74.0	-23.82	Peak	225.00	150	Vertical	Pass
6**	11602.013	40.99	-0.15	54.0	-13.01	AV	225.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1400.100	40.60	-17.74	74.0	-33.40	Peak	201.00	150	Horizontal	Pass
1**	1400.100	31.11	-17.74	54.0	-22.89	AV	201.00	150	Horizontal	Pass
2	2865.700	44.85	-11.36	74.0	-29.15	Peak	122.00	150	Horizontal	Pass
2**	2865.700	34.11	-11.36	54.0	-19.89	AV	122.00	150	Horizontal	Pass
3	3863.800	46.82	-7.11	74.0	-27.18	Peak	237.00	150	Horizontal	Pass
3**	3863.800	36.40	-7.11	54.0	-17.60	AV	237.00	150	Horizontal	Pass
4	5743.000	103.13	-4.04	--	--	Peak	261.00	150	Horizontal	N/A
4**	5743.000	96.97	-4.04	--	--	AV	261.00	150	Horizontal	N/A
5	7424.637	49.25	-4.07	74.0	-24.75	Peak	347.00	150	Horizontal	Pass
5**	7424.637	40.45	-4.07	54.0	-13.55	AV	347.00	150	Horizontal	Pass
6	12263.262	50.21	0.05	74.0	-23.79	Peak	156.00	150	Horizontal	Pass
6**	12263.262	41.60	0.05	54.0	-12.40	AV	156.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1115.600	41.85	-18.55	74.0	-32.15	Peak	194.00	150	Vertical	Pass
1**	1115.600	32.38	-18.55	54.0	-21.62	AV	194.00	150	Vertical	Pass
2	2781.800	43.08	-11.29	74.0	-30.92	Peak	311.00	150	Vertical	Pass
2**	2781.800	34.21	-11.29	54.0	-19.79	AV	311.00	150	Vertical	Pass
3	4027.200	47.85	-6.32	74.0	-26.15	Peak	154.00	150	Vertical	Pass
3**	4027.200	37.77	-6.32	54.0	-16.23	AV	154.00	150	Vertical	Pass
4	5748.000	98.59	-3.86	--	--	Peak	94.00	150	Vertical	N/A
4**	5748.000	91.25	-3.86	--	--	AV	94.00	150	Vertical	N/A
5	7418.888	48.68	-4.10	74.0	-25.32	Peak	241.00	150	Vertical	Pass
5**	7418.888	40.05	-4.10	54.0	-13.95	AV	241.00	150	Vertical	Pass
6	12325.650	50.66	-0.55	74.0	-23.34	Peak	224.00	150	Vertical	Pass
6**	12325.650	41.19	-0.55	54.0	-12.81	AV	224.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1394.600	41.34	-17.65	74.0	-32.66	Peak	246.00	150	Horizontal	Pass
1**	1394.600	32.20	-17.65	54.0	-21.80	AV	246.00	150	Horizontal	Pass
2	2813.900	42.93	-11.60	74.0	-31.07	Peak	360.00	150	Horizontal	Pass
2**	2813.900	33.76	-11.60	54.0	-20.24	AV	360.00	150	Horizontal	Pass
3	4142.800	47.67	-6.07	74.0	-26.33	Peak	145.00	150	Horizontal	Pass
3**	4142.800	38.64	-6.07	54.0	-15.36	AV	145.00	150	Horizontal	Pass
4	5786.800	104.26	-3.08	--	--	Peak	246.00	150	Horizontal	N/A
4**	5786.800	96.03	-3.08	--	--	AV	246.00	150	Horizontal	N/A
5	7426.362	48.64	-4.07	74.0	-25.36	Peak	188.00	150	Horizontal	Pass
5**	7426.362	39.92	-4.07	54.0	-14.08	AV	188.00	150	Horizontal	Pass
6	11587.063	50.41	-0.04	74.0	-23.59	Peak	188.00	150	Horizontal	Pass
6**	11587.063	42.03	-0.04	54.0	-11.97	AV	188.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1119.100	41.98	-18.54	74.0	-32.02	Peak	203.00	150	Vertical	Pass
1**	1119.100	33.10	-18.54	54.0	-20.90	AV	203.00	150	Vertical	Pass
2	2779.600	42.99	-11.37	74.0	-31.01	Peak	329.00	150	Vertical	Pass
2**	2779.600	33.59	-11.37	54.0	-20.41	AV	329.00	150	Vertical	Pass
3	3898.400	47.12	-7.42	74.0	-26.88	Peak	219.00	150	Vertical	Pass
3**	3898.400	37.07	-7.42	54.0	-16.93	AV	219.00	150	Vertical	Pass
4	5782.000	97.37	-3.20	--	--	Peak	107.00	150	Vertical	N/A
4**	5782.000	89.75	-3.20	--	--	AV	107.00	150	Vertical	N/A
5	7436.425	48.39	-4.35	74.0	-25.61	Peak	0.00	150	Vertical	Pass
5**	7436.425	40.73	-4.35	54.0	-13.27	AV	0.00	150	Vertical	Pass
6	12239.400	51.29	-0.32	74.0	-22.71	Peak	253.00	150	Vertical	Pass
6**	12239.400	41.82	-0.32	54.0	-12.18	AV	253.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1391.600	41.41	-17.60	74.0	-32.59	Peak	243.00	150	Horizontal	Pass
1**	1391.600	32.38	-17.60	54.0	-21.62	AV	243.00	150	Horizontal	Pass
2	2782.400	43.92	-11.29	74.0	-30.08	Peak	300.00	150	Horizontal	Pass
2**	2782.400	33.93	-11.29	54.0	-20.07	AV	300.00	150	Horizontal	Pass
3	4023.000	47.78	-6.43	74.0	-26.22	Peak	121.00	150	Horizontal	Pass
3**	4023.000	37.45	-6.43	54.0	-16.55	AV	121.00	150	Horizontal	Pass
4	5820.600	105.01	-2.75	--	--	Peak	248.00	150	Horizontal	N/A
4**	5820.600	96.59	-2.75	--	--	AV	248.00	150	Horizontal	N/A
5	7486.450	48.78	-4.53	74.0	-25.22	Peak	81.00	150	Horizontal	Pass
5**	7486.450	39.16	-4.53	54.0	-14.84	AV	81.00	150	Horizontal	Pass
6	11585.338	51.51	-0.03	74.0	-22.49	Peak	81.00	150	Horizontal	Pass
6**	11585.338	40.77	-0.03	54.0	-13.23	AV	81.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.700	42.03	-18.65	74.0	-31.97	Peak	188.00	150	Vertical	Pass
1**	1121.700	33.43	-18.65	54.0	-20.57	AV	188.00	150	Vertical	Pass
2	2780.600	43.09	-11.33	74.0	-30.91	Peak	290.00	150	Vertical	Pass
2**	2780.600	33.46	-11.33	54.0	-20.54	AV	290.00	150	Vertical	Pass
3	4060.600	47.30	-5.54	74.0	-26.70	Peak	97.00	150	Vertical	Pass
3**	4060.600	38.54	-5.54	54.0	-15.46	AV	97.00	150	Vertical	Pass
4	5828.200	98.30	-2.93	--	--	Peak	97.00	150	Vertical	N/A
4**	5828.200	91.27	-2.93	--	--	AV	97.00	150	Vertical	N/A
5	7448.500	48.55	-4.51	74.0	-25.45	Peak	99.00	150	Vertical	Pass
5**	7448.500	39.59	-4.51	54.0	-14.41	AV	99.00	150	Vertical	Pass
6	11652.901	50.81	-0.38	74.0	-23.19	Peak	310.00	150	Vertical	Pass
6**	11652.901	41.11	-0.38	54.0	-12.89	AV	310.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1400.300	41.02	-17.74	74.0	-32.98	Peak	238.00	150	Horizontal	Pass
1**	1400.300	31.16	-17.74	54.0	-22.84	AV	238.00	150	Horizontal	Pass
2	2801.200	43.32	-11.41	74.0	-30.68	Peak	60.00	150	Horizontal	Pass
2**	2801.200	34.16	-11.41	54.0	-19.84	AV	60.00	150	Horizontal	Pass
3	4043.000	47.45	-5.67	74.0	-26.55	Peak	300.00	150	Horizontal	Pass
3**	4043.000	37.80	-5.67	54.0	-16.20	AV	300.00	150	Horizontal	Pass
4	5745.600	101.40	-4.03	--	--	Peak	248.00	150	Horizontal	N/A
4**	5745.600	93.04	-4.03	--	--	AV	248.00	150	Horizontal	N/A
5	7422.338	48.91	-4.07	74.0	-25.09	Peak	360.00	150	Horizontal	Pass
5**	7422.338	39.86	-4.07	54.0	-14.14	AV	360.00	150	Horizontal	Pass
6	12242.275	50.47	-0.27	74.0	-23.53	Peak	294.00	150	Horizontal	Pass
6**	12242.275	41.83	-0.27	54.0	-12.17	AV	294.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1121.000	41.77	-18.60	74.0	-32.23	Peak	188.00	150	Vertical	Pass
1**	1121.000	33.13	-18.60	54.0	-20.87	AV	188.00	150	Vertical	Pass
2	2813.000	43.41	-11.60	74.0	-30.59	Peak	220.00	150	Vertical	Pass
2**	2813.000	33.71	-11.60	54.0	-20.29	AV	220.00	150	Vertical	Pass
3	4137.000	47.82	-6.19	74.0	-26.18	Peak	199.00	150	Vertical	Pass
3**	4137.000	37.46	-6.19	54.0	-16.54	AV	199.00	150	Vertical	Pass
4	5750.200	96.29	-3.68	--	--	Peak	98.00	150	Vertical	N/A
4**	5750.200	87.79	-3.68	--	--	AV	98.00	150	Vertical	N/A
5	7479.550	48.10	-4.61	74.0	-25.90	Peak	7.00	150	Vertical	Pass
5**	7479.550	38.08	-4.61	54.0	-15.92	AV	7.00	150	Vertical	Pass
6	12356.125	50.80	-1.41	74.0	-23.20	Peak	274.00	150	Vertical	Pass
6**	12356.125	40.99	-1.41	54.0	-13.01	AV	274.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1399.500	41.53	-17.75	74.0	-32.47	Peak	246.00	150	Horizontal	Pass
1**	1399.500	31.31	-17.75	54.0	-22.69	AV	246.00	150	Horizontal	Pass
2	2784.300	42.64	-11.28	74.0	-31.36	Peak	0.00	150	Horizontal	Pass
2**	2784.300	33.77	-11.28	54.0	-20.23	AV	0.00	150	Horizontal	Pass
3	4084.400	47.16	-5.11	74.0	-26.84	Peak	145.00	150	Horizontal	Pass
3**	4084.400	38.55	-5.11	54.0	-15.45	AV	145.00	150	Horizontal	Pass
4	5799.000	101.62	-3.17	--	--	Peak	242.00	150	Horizontal	N/A
4**	5799.000	93.56	-3.17	--	--	AV	242.00	150	Horizontal	N/A
5	7419.175	48.88	-4.08	74.0	-25.12	Peak	227.00	150	Horizontal	Pass
5**	7419.175	39.18	-4.08	54.0	-14.82	AV	227.00	150	Horizontal	Pass
6	11418.013	50.73	-1.26	74.0	-23.27	Peak	40.00	150	Horizontal	Pass
6**	11418.013	39.69	-1.26	54.0	-14.31	AV	40.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1120.200	41.98	-18.56	74.0	-32.02	Peak	192.00	150	Vertical	Pass
1**	1120.200	34.77	-18.56	54.0	-19.23	AV	192.00	150	Vertical	Pass
2	2777.000	43.28	-11.45	74.0	-30.72	Peak	0.00	150	Vertical	Pass
2**	2777.000	33.59	-11.45	54.0	-20.41	AV	0.00	150	Vertical	Pass
3	3963.600	46.46	-6.81	74.0	-27.54	Peak	10.00	150	Vertical	Pass
3**	3963.600	37.52	-6.81	54.0	-16.48	AV	10.00	150	Vertical	Pass
4	5797.400	94.90	-3.20	--	--	Peak	97.00	150	Vertical	N/A
4**	5797.400	88.34	-3.20	--	--	AV	97.00	150	Vertical	N/A
5	7426.650	48.91	-4.07	74.0	-25.09	Peak	310.00	150	Vertical	Pass
5**	7426.650	39.28	-4.07	54.0	-14.72	AV	310.00	150	Vertical	Pass
6	11397.313	50.70	-1.30	74.0	-23.30	Peak	360.00	150	Vertical	Pass
6**	11397.313	40.03	-1.30	54.0	-13.97	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1392.500	41.19	-17.56	74.0	-32.81	Peak	330.00	150	Horizontal	Pass
1**	1392.500	31.70	-17.56	54.0	-22.30	AV	330.00	150	Horizontal	Pass
2	2753.900	43.34	-11.58	74.0	-30.66	Peak	183.00	150	Horizontal	Pass
2**	2753.900	33.07	-11.58	54.0	-20.93	AV	183.00	150	Horizontal	Pass
3	4087.600	47.57	-5.35	74.0	-26.43	Peak	253.00	150	Horizontal	Pass
3**	4087.600	38.11	-5.35	54.0	-15.89	AV	253.00	150	Horizontal	Pass
4	5778.200	98.85	-3.30	--	--	Peak	253.00	150	Horizontal	N/A
4**	5778.200	91.10	-3.30	--	--	AV	253.00	150	Horizontal	N/A
5	7430.675	48.64	-4.37	74.0	-25.36	Peak	214.00	150	Horizontal	Pass
5**	7430.675	39.29	-4.37	54.0	-14.71	AV	214.00	150	Horizontal	Pass
6	12342.038	51.14	-1.02	74.0	-22.86	Peak	159.00	150	Horizontal	Pass
6**	12342.038	41.57	-1.02	54.0	-12.43	AV	159.00	150	Horizontal	Pass

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

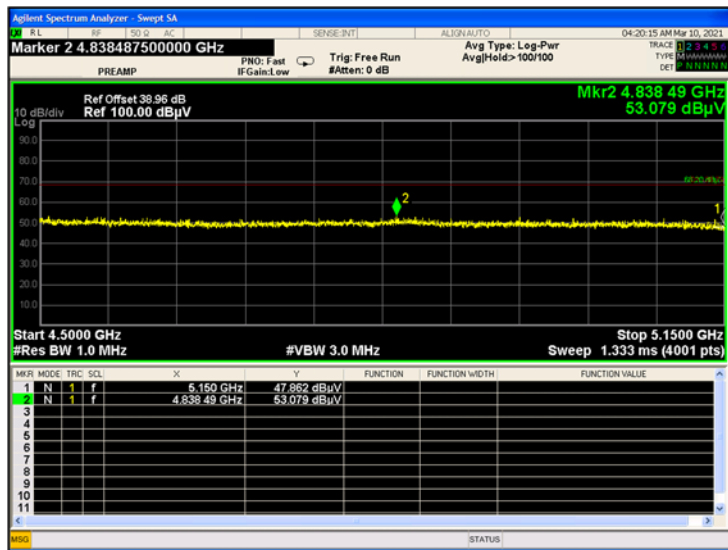
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1116.000	41.51	-18.53	74.0	-32.49	Peak	181.00	150	Vertical	Pass
1**	1116.000	34.97	-18.53	54.0	-19.03	AV	181.00	150	Vertical	Pass
2	2779.300	42.81	-11.39	74.0	-31.19	Peak	238.00	150	Vertical	Pass
2**	2779.300	34.33	-11.39	54.0	-19.67	AV	238.00	150	Vertical	Pass
3	4084.600	47.35	-5.13	74.0	-26.65	Peak	321.00	150	Vertical	Pass
3**	4084.600	38.57	-5.13	54.0	-15.43	AV	321.00	150	Vertical	Pass
4	5786.600	92.71	-3.08	--	--	Peak	100.00	150	Vertical	N/A
4**	5786.600	84.99	-3.08	--	--	AV	100.00	150	Vertical	N/A
5	7444.188	48.70	-4.41	74.0	-25.30	Peak	1.00	150	Vertical	Pass
5**	7444.188	40.46	-4.41	54.0	-13.54	AV	1.00	150	Vertical	Pass
6	11617.250	50.47	-0.16	74.0	-23.53	Peak	1.00	150	Vertical	Pass
6**	11617.250	41.11	-0.16	54.0	-12.89	AV	1.00	150	Vertical	Pass

A.6.2 Band Edge (Restricted-band)

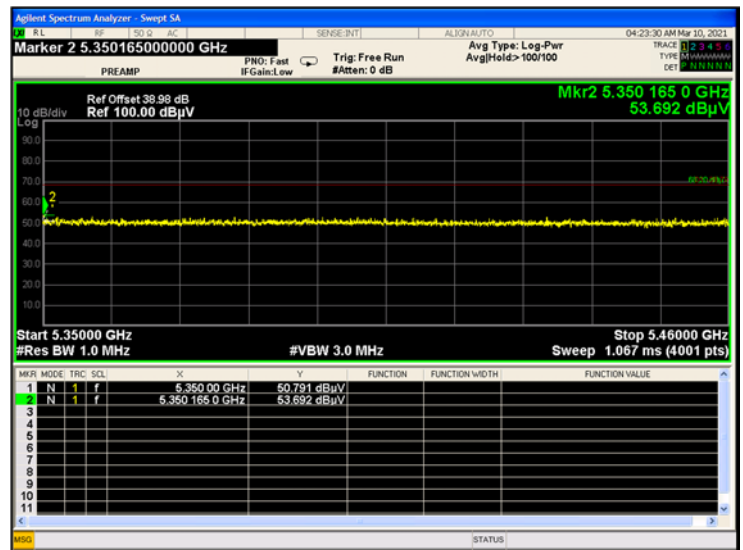
Test Band	Mode	Channel	Verdict
U-NII-1	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass
U-NII-3	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(VHT20)	Low	Pass
		High	Pass
	802.11ac(VHT40)	Low	Pass
		High	Pass
	802.11ac(VHT80)	Middle	Pass

Test Plots

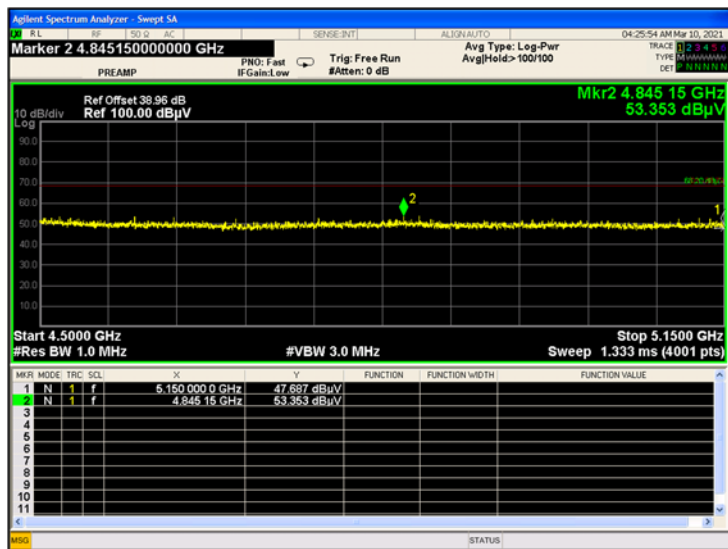
U-NII-1 11a CH36 Peak



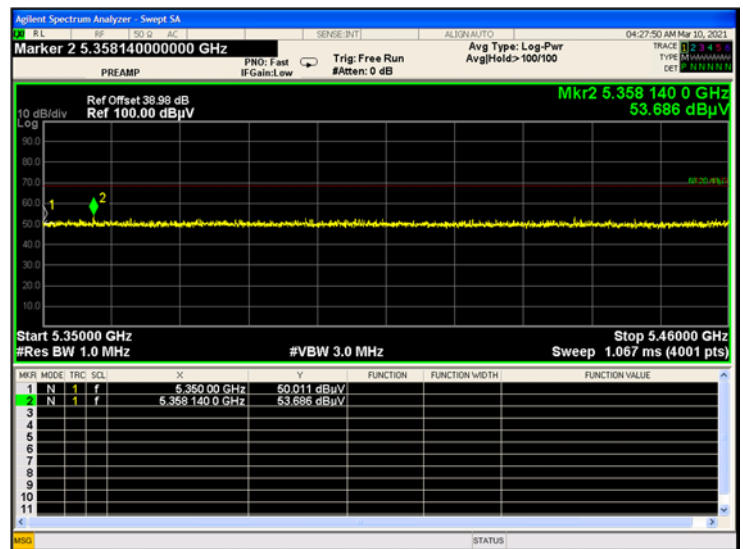
U-NII-1 11a CH48 Peak



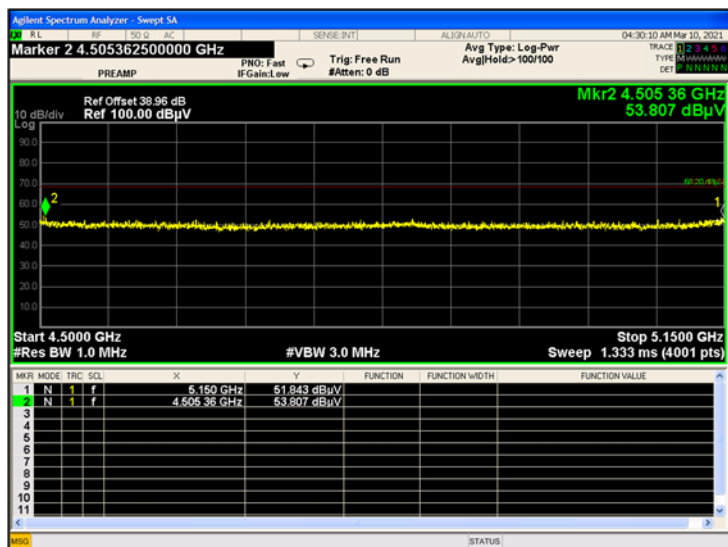
U-NII-1 11n20 CH36 Peak



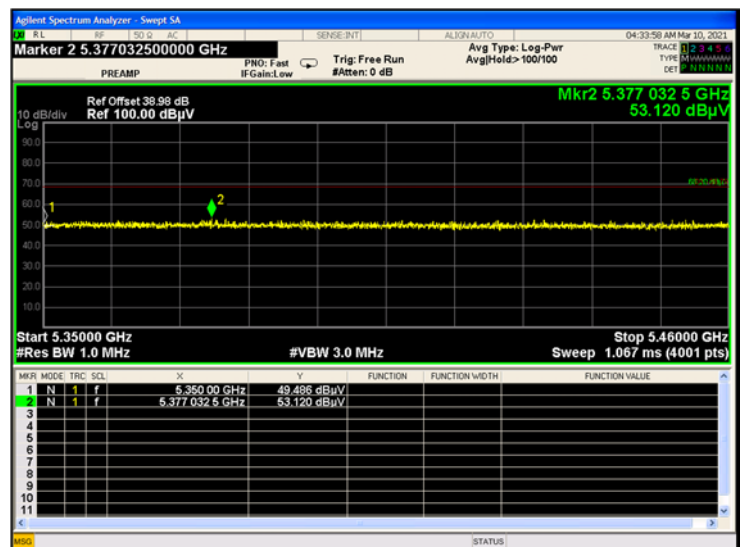
U-NII-1 11n20 CH48 Peak



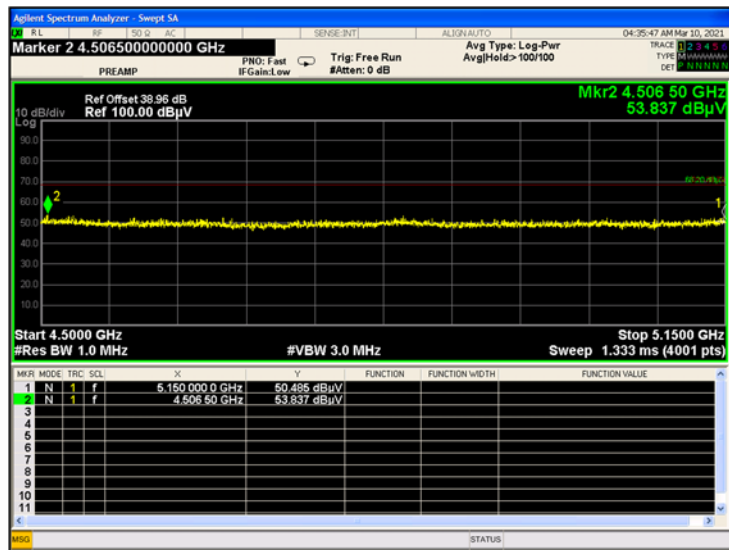
U-NII-1 11n40 CH38 Peak



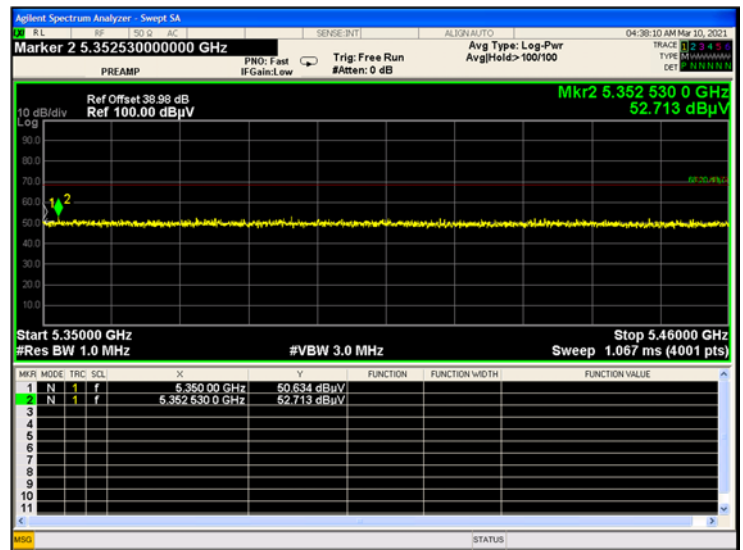
U-NII-1 11n40 CH46 Peak



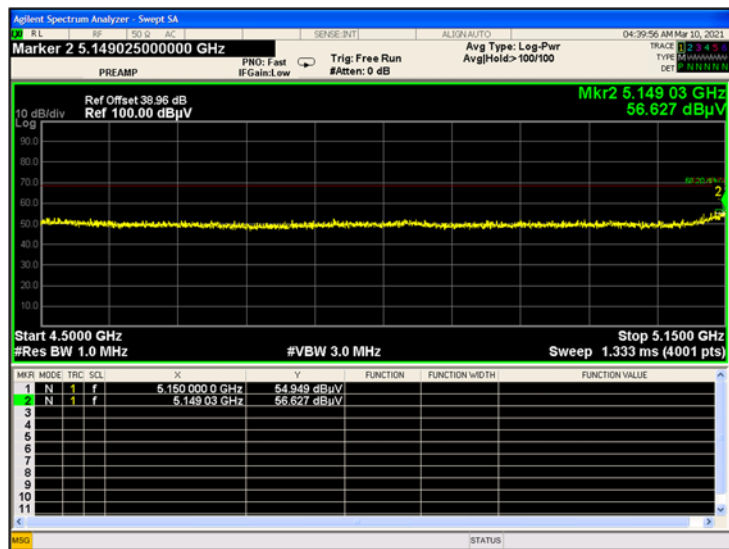
U-NII-1 11ac20 CH36 Peak



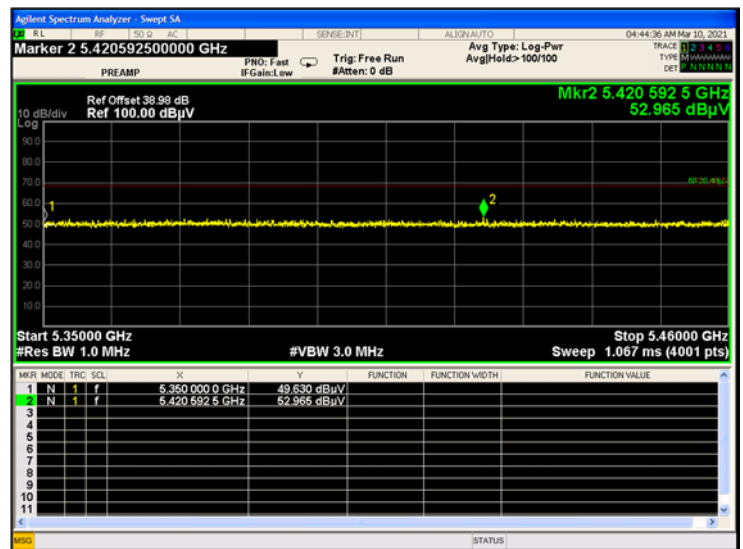
U-NII-1 11ac20 CH48 Peak



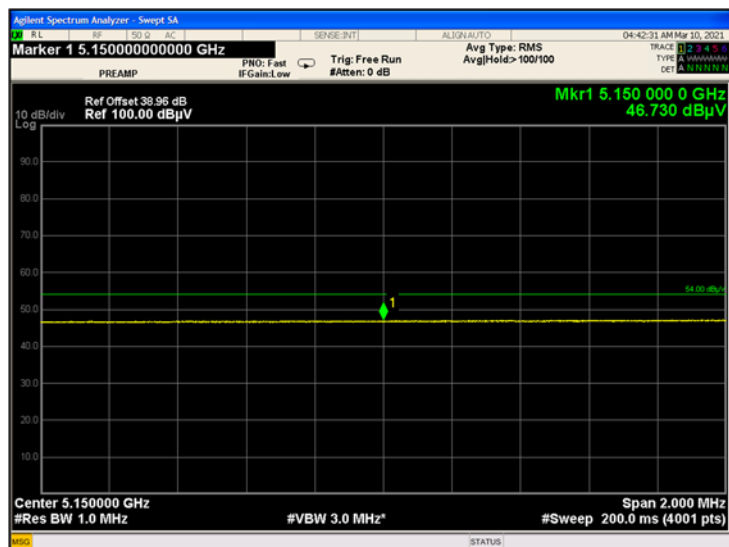
U-NII-1 11ac40 CH38 Peak



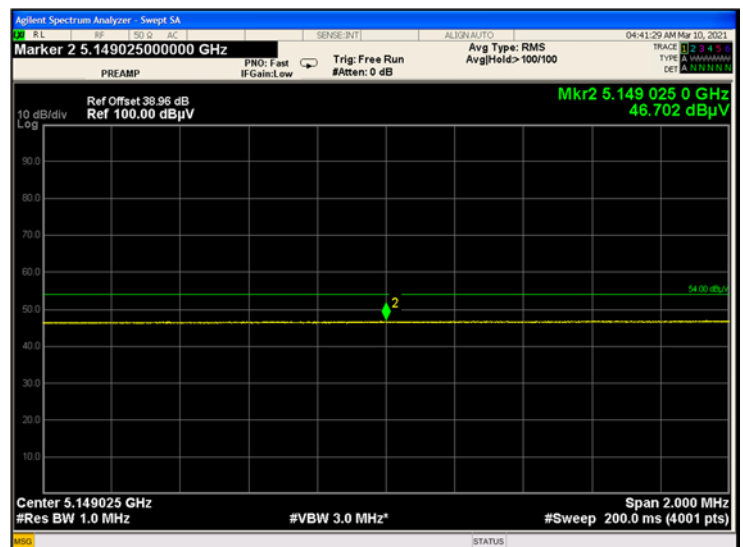
U-NII-1 11ac40 CH46 Peak



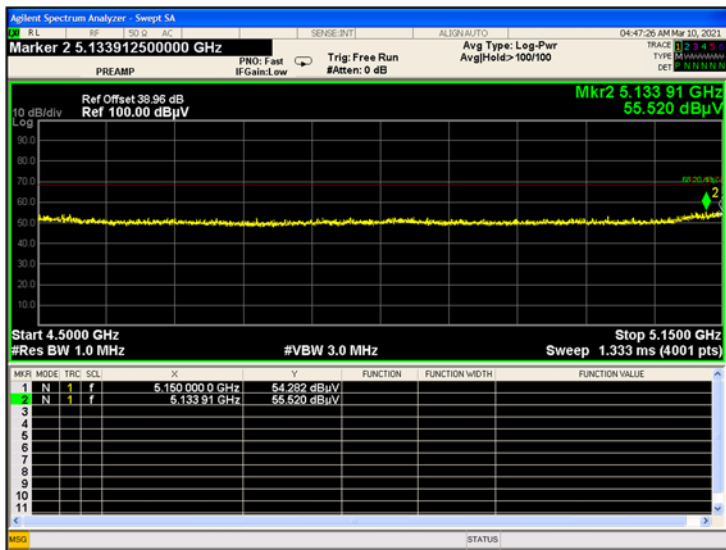
U-NII-1 11ac40 CH38 AV



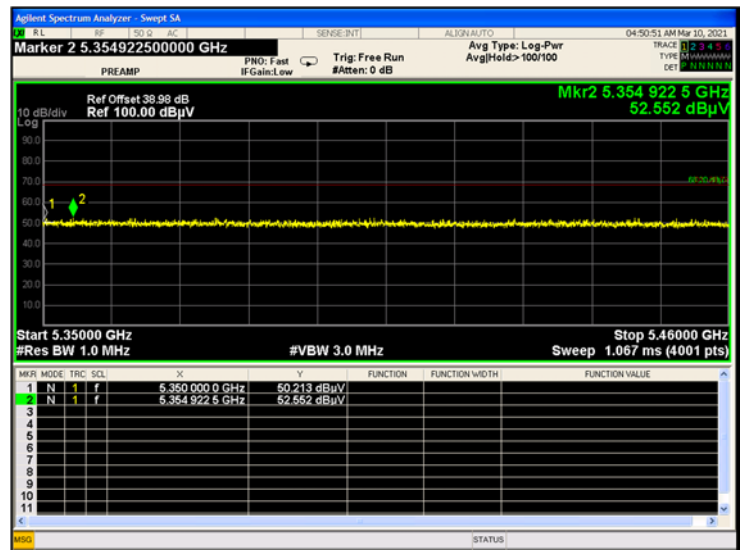
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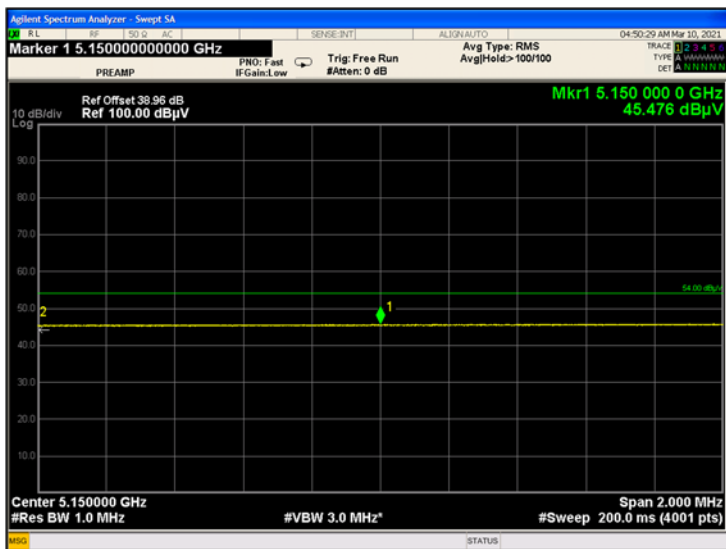
U-NII-1 11ac80 CH42 Peak



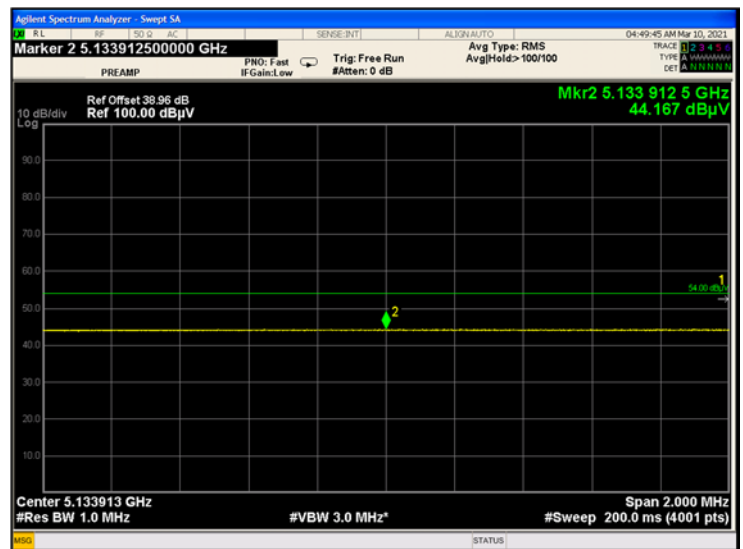
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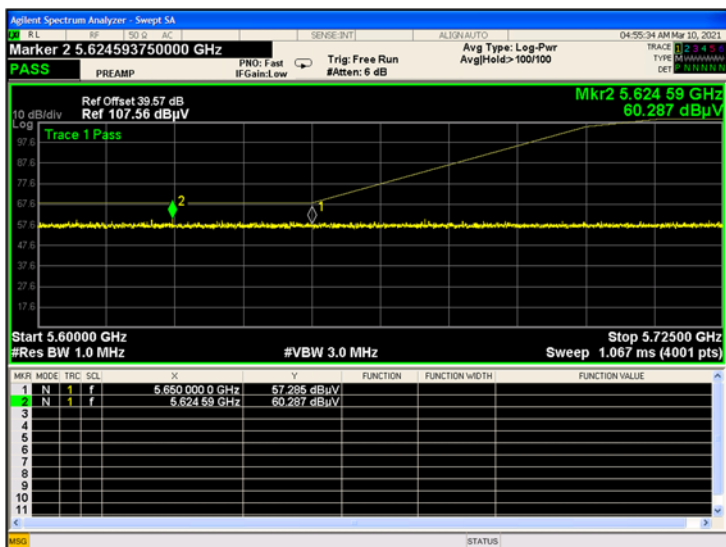
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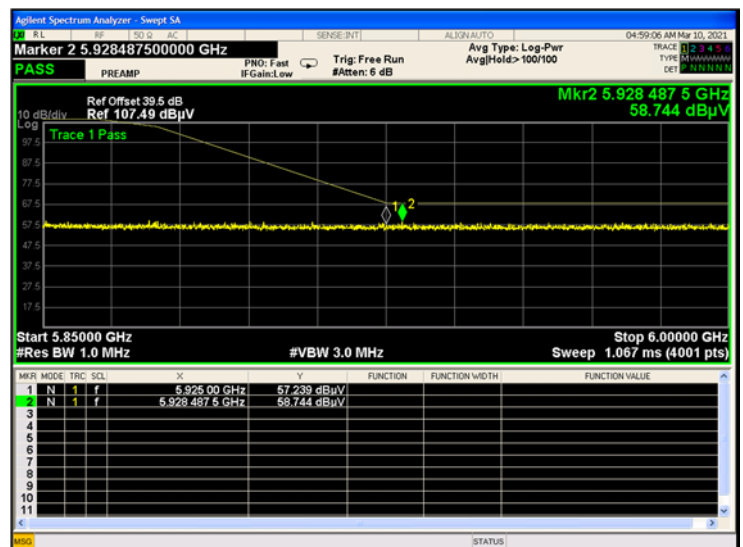
U-NII-1 11ac80 CH42 AV



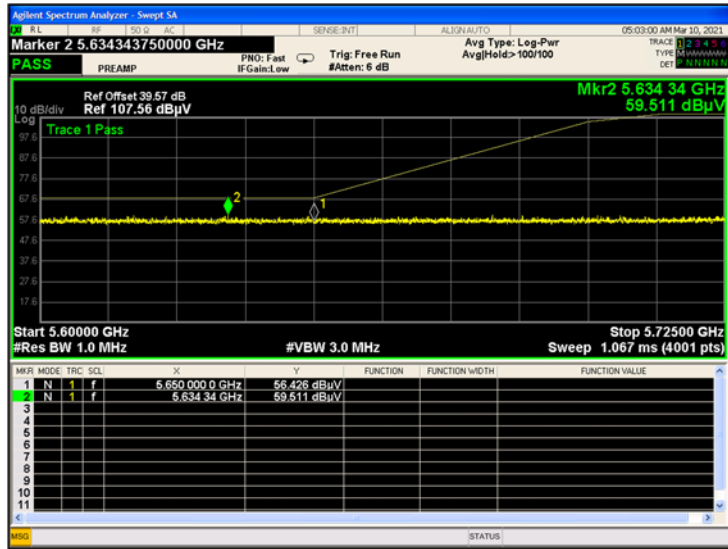
U-NII-3 11a CH149 Peak



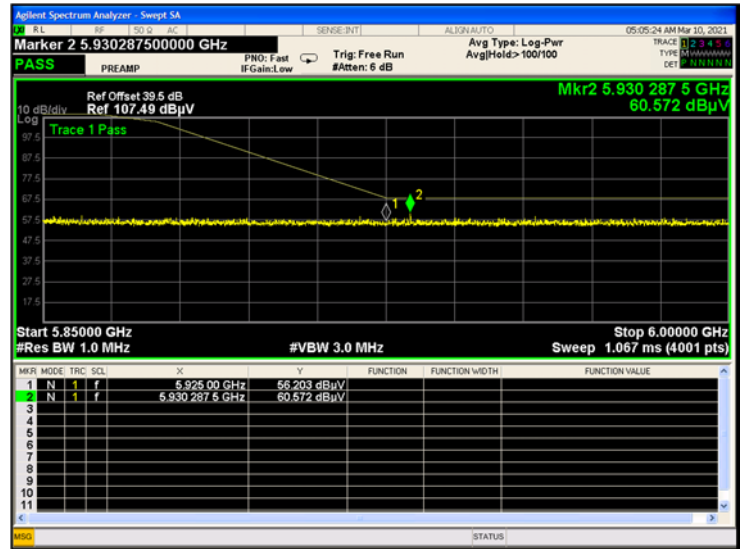
U-NII-3 11a CH165 Peak



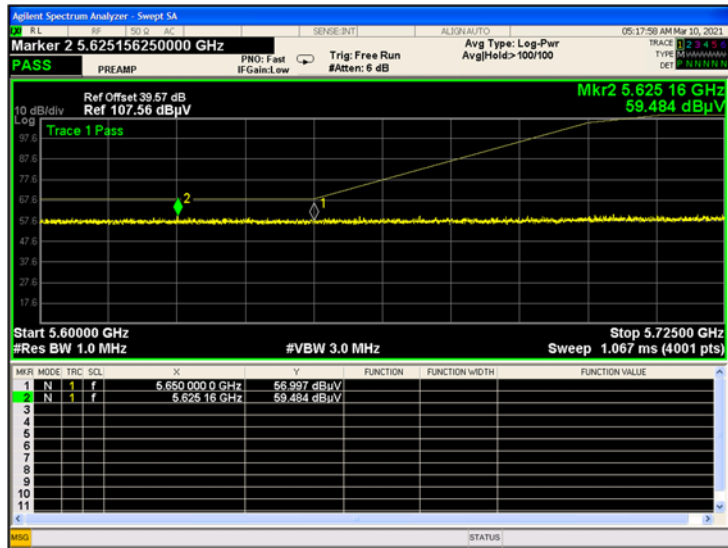
U-NII-3 11n20 CH149 Peak



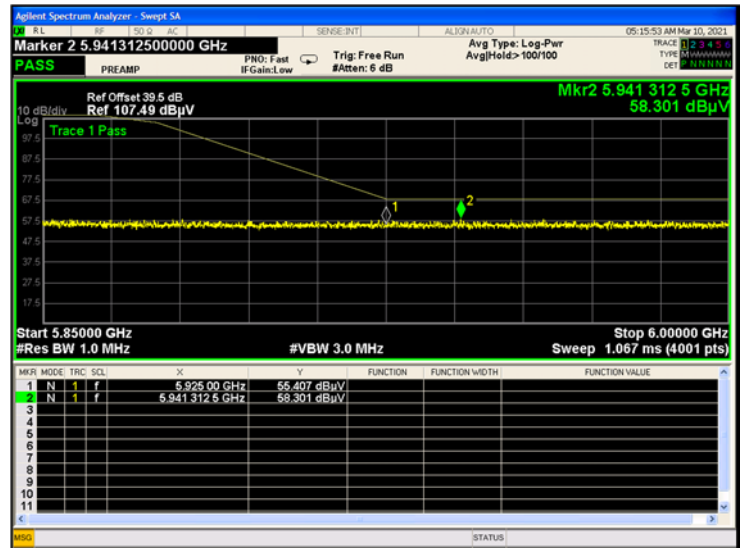
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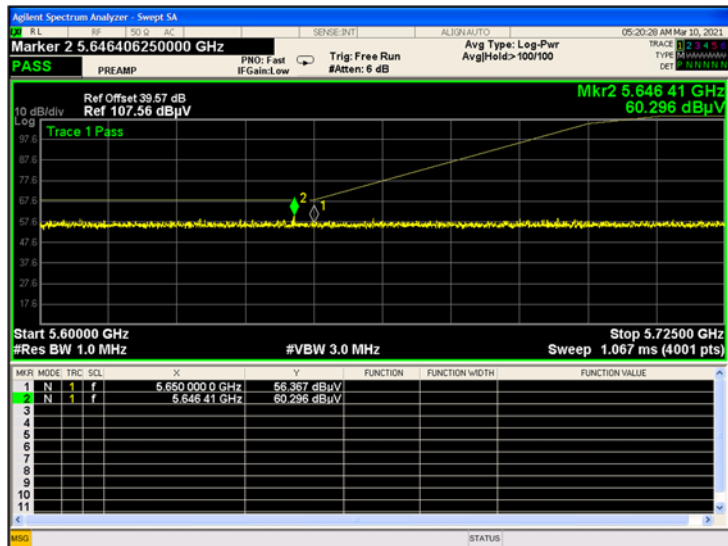
U-NII-3 11n40 CH151 Peak



U-NII-3 11n40 CH159 Peak



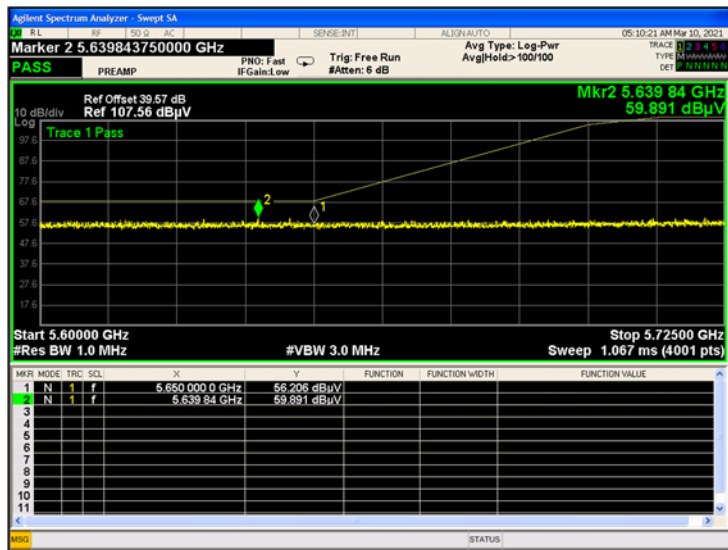
U-NII-3 11ac20 CH149 Peak



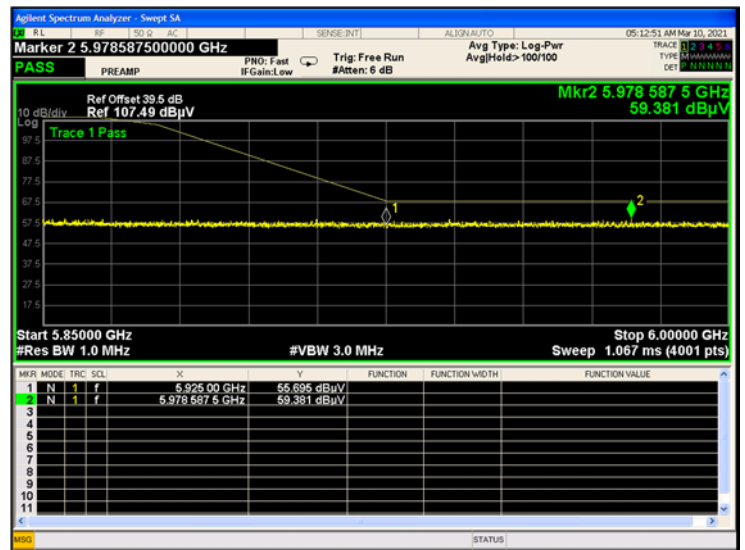
U-NII-3 11ac20 CH165 Peak



U-NII-3 11ac40 CH151 Peak



U-NII-3 11ac40 CH159 Peak



U-NII-3 11ac80 CH155 Peak



U-NII-3 11ac80 CH155 Peak



ANNEX B TEST SETUP PHOTOS

Please refer the document "BL-SZ2130117-AR.PDF".

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ2130117-AW.PDF".

ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-SZ2130117-AI.PDF".

--END OF REPORT--