



# RF TEST REPORT

**Report No.:** 20230717G07506X-W6

**Product Name:** Mobile Computer

**Model No.:** XT40

**FCC ID:** UTWXT40WA

**IC:** 6914A-XT40WA

**Applicant:** Janam Technologies LLC

**Address:** 100 Crossways Park West Suite 105 Woodbury, NY 11797

**Dates of Testing:** 07/05/2023 - 08/17/2023

**Issued by:** CCIC Southern Testing Co., Ltd.

**Lab Location:** Electronic Testing Building, No. 43 Shahe Road, Xili Street,  
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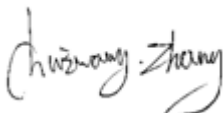
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### Test Report

**Product**.....: Mobile Computer  
**Brand Name**.....: Janam  
**Trade Name** .....: Janam  
**Applicant**.....: Janam Technologies LLC  
**Applicant Address**.....: 100 Crossways Park West Suite 105 Woodbury, NY 11797  
**Manufacturer**.....: Janam Technologies LLC  
**Manufacturer Address**.....: 100 Crossways Park West Suite 105 Woodbury, NY 11797  
**Test Standards**.....: 47 CFR Part 15 Subpart E 15.407  
 ANSI C63.10-2013  
 RSS-Gen Issue 5, Feb 2021  
 RSS-247 Issue 2, Feb 2017

**Test Result**.....: Pass

**Tested by** .....:  2023.08.18

Chuiwang Zhang, Test Engineer

**Reviewed by**.....:  2023.08.18

Chris You, Senior Engineer

**Approved by**.....:  2023.08.18

Yang Fan, Manager



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Change History		
Issue	Date	Reason for change
1.0	2023.08.18	First edition



## 1. GENERAL INFORMATION

### 1.1. EUT Description

Product Name	Mobile Computer	
Model No.	XT40	
Hardware Version	SQ51Q_MB	
Software Version	XT40_CN_XX_WE_DS_R02_D_20230604	
EUT supports Radios application	WLAN5.0GHz 802.11a/n/ac	
Product Type	Client devices	
Modulation Type	802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM) 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)	
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 433.333 Mbps	
Frequency Range	UNII-1: 5150 ~ 5250MHz, UNII-2a: 5250 ~ 5350MHz UNII-2c: 5470 ~ 5725MHz, UNII-3: 5725 ~ 5850MHz	
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz/40MHz 802.11ac: 20MHz/40MHz/80MHz	
Channel Number	UNII-1: 4 for 802.11a, 802.11n(HT20), 802.11ac(VHT20) 2 for 802.11n(HT40), 802.11ac(VHT40) 1 for 802.11ac(VHT80) UNII-2a: 4 for 802.11a, 802.11n(HT20), 802.11ac(VHT20) 2 for 802.11n(HT40), 802.11ac(VHT40), 1 for 802.11ac(VHT80) UNII-2c: 8 for 802.11a, 802.11n(HT20), 802.11ac(VHT20) 3 for 802.11n(HT40), 802.11ac(VHT40) 1 for 802.11ac(VHT80) UNII-3: 5 for 802.11a, 802.11n(HT20), 802.11ac(VHT20) 2 for 802.11n(HT40), 802.11ac(VHT40) 1 for 802.11ac(VHT80)	
Antenna Type	Internal Antenna	
Antenna Gain	2.43dBi	
Output Power (Max.)	UNII-1: 15.59dBm	UNII-2a: 16.07dBm
	UNII-2c: 16.53dBm	UNII-3: 16.88dBm
Test Control Software	QRCT 3.0	
Power supply	Rechargeable Li-ion Polymer Battery DC 3.85V/4500mAh	



## 1.2. Test Standards and Results

The purpose of the report is to conduct testing according to the following FCC/IC certification standards:

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E §15.407	Radio Frequency Devices
2	KDB789033 D02 General UNII Test Procedures New Rules v02r01	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
4	RSS-Gen Issue 5, Feb 2021	General Requirements for Compliance of Radio Apparatus
5	RSS-247 Issue 2, Feb 2017	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

Test detailed items/section required by FCC/IC rules and results are as below:

No.	FCC Rule	IC Rule	Description	Result
1	15.203 15.407(a)	RSS-GEN, 6.8	Antenna Requirement	PASS
2	15.407(a)(1)(iv) 15.407 (a)(2) 15.407(a)(3)(i)	RSS-247, 6.2.1.1 RSS-247, 6.2.2.1 RSS-247, 6.2.3.1 RSS-247, 6.2.4.1	Maximum Conducted Output Power	PASS
3	15.407(a)(12)	RSS-GEN, 6.7	26dB Emission Bandwidth 99% Occupied Bandwidth	PASS
4	15.407(e)	RSS-247, 6.2.4.1	6dB Emission Bandwidth	PASS
5	15.407(a)(1)(iv) 15.407 (a)(2) 15.407(a)(3)(i)	RSS-247, 6.2.1.1 RSS-247, 6.2.2.1 RSS-247, 6.2.3.1 RSS-247, 6.2.4.1	Power spectral density (PSD)	PASS
6	15.207	RSS-GEN, 8.8	AC Power Line Conducted Emission	PASS
7	15.205 15.209 15.407(b)(1) 15.407(b)(2) 15.407(b)(3) 15.407(b)(4)	RSS-GEN, 6.13 RSS-GEN, 8.10 RSS-247, 6.2.1.2 RSS-247, 6.2.2.2 RSS-247, 6.2.3.2 RSS-247, 6.2.4.2	Radiated Band Edges and Spurious Emission	PASS
8	15.407(g)	RSS-GEN, 6.11	Frequency Stability	PASS

### 1.3. Channel List

#### Operated band in 5150 MHz ~ 5250MHz

4 channels are provided for 802.11a, 802.11n-HT20 and 802.11ac-VHT20.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	44	5220
40	5200	48	5240

2 channels are provided for 802.11n-HT40 and 802.11ac-VHT40.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
38	5190	46	5230

1 channels are provided for 802.11ac-VHT80.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
42	5210	/	/

#### Operated band in 5250 MHz ~ 5350MHz

4 channels are provided for 802.11a, 802.11n-HT20 and 802.11ac-VHT20.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
52	5260	60	5300
56	5280	64	5320

2 channels are provided for 802.11n-HT40 and 802.11ac-VHT40.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
54	5270	62	5310

1 channels are provided for 802.11ac-VHT80.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
58	5290	/	/

#### Operated band in 5470 MHz ~ 5725MHz

8 channels are provided for 802.11a, 802.11n-HT20 and 802.11ac-VHT20.

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
100	5500	116	5580	/	/
104	5520	132	5660	/	/
108	5540	136	5680	/	/
112	5560	140	5700	/	/

3 channels are provided for 802.11n-HT40 and 802.11ac-VHT40.

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
102	5510	134	5670	/	/
110	5550	/	/	/	/

1 channels are provided for 802.11ac-VHT80.

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
106	5530	/	/	/	/

### Operated band in 5725 MHz ~ 5850MHz

5 channels are provided for 802.11a, 802.11n-HT20 and 802.11ac-VHT20.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
149	5745	161	5805
153	5765	165	5825
157	5785		

2 channels are provided for 802.11n-HT40 and 802.11ac-VHT40.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
151	5755	159	5795

1 channel are provided for 802.11ac-VHT80

Channel	Frequency(MHz)	Channel	Frequency(MHz)
155	5775	/	/

### 1.4. Test environment and mode

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

Operating Environment	
Temperature	15°C - 35°C
Humidity	30% -60%
Atmospheric Pressure	86kPa-106kPa
Test mode:	
Continuously transmitting mode	Keeps the EUT in 100% duty cycle transmitting with modulation in SISO, duty cycle factor is not required.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

For Frequency band 5150 ~ 5250 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5180	5220	5240	6 Mbps
802.11n-HT20/ac-VHT20				MCS 0
802.11n-HT40/ac-VHT40	5190	/	5230	MCS 0
802.11ac-VHT80	5210	/	/	MCS 0

Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.





For Frequency band 5250 ~ 5350 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5260	5300	5320	6 Mbps
802.11n-HT20/ac-VHT20				MCS 0
802.11n-HT40/ac-VHT40	5270	/	5310	MCS 0
802.11ac-VHT80	5290	/	/	MCS 0

Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.

For Frequency band 5470 ~ 5725 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5500	5580	5700	6 Mbps
802.11n-HT20/ac-VHT20				MCS 0
802.11n-HT40/ac-VHT40	5510	5550	5670	MCS 0
802.11ac-VHT80	5530	/	/	MCS 0

Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.

For Frequency band 5725 ~ 5850 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5745	5785	5825	6 Mbps
802.11n-HT20/ac-VHT20				MCS 0
802.11n-HT40/ac-VHT40	5755	/	5795	MCS 0
802.11ac-VHT80	5775	/	/	MCS 0

Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.

### 1.5. Table for Supporting Units

No.	Equipment	Brand Name	Model Name	Manufacturer	Serial No.	Note
1	Laptop	HP	TPN-Q221	HP	5CD14347QB	FCC DOC



## **1.6. Laboratory Facilities**

### **FCC-Registration No.: 406086**

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Sep. 30th, 2023.

### **ISED Registration: 11185A**

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Sep. 30th, 2023.

### **CAB number: CN0064**

### **A2LA Code: 5721.01**

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

## 2. Test Requirements

### 2.1. Antenna requirement

#### 2.1.1. Applicable Standard

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

According to FCC 15.407(a)(1): For client devices in the 5.15-5.25 GHz band, If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to FCC 15.407(a)(2): For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to FCC 15.407(a)(3): For the band 5.725-5.850 GHz, If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to RSS GEN 6.8, The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

#### 2.1.2. Antenna Information

**Antenna Category:** Internal Antenna

A internal Antenna was soldered to the antenna port of EUT via an adaptor cable, can't be removed.

##### Antenna General Information:

No.	EUT	Operating frequency range	Ant. Type	Ant. Gain
1	Mobile Computer	UNII-1, UNII-2a, UNII-2c, UNII-3	Internal	2.43dBi

#### 2.1.3. Result: comply

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

## 2.2. Maximum Conducted Output Power

### 2.2.1. Limit of Maximum Conducted Output Power

#### FCC Part 15.407(a):

The maximum conducted output power should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21dBm) at any elevation angle above 30 degrees as measured from the horizon)
	<input type="checkbox"/> Fixed point-to-point Access device	1 Watt (30 dBm)
	<input type="checkbox"/> Indoor Access Point	1 Watt (30 dBm)
	<input checked="" type="checkbox"/> Mobile and portable client device	250mW (24 dBm)
U-NII-2A	<input checked="" type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-2C	<input checked="" type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-3	<input checked="" type="checkbox"/>	1 Watt (30 dBm)

Note: B\* is the 26 dB emission bandwidth in MHz.

#### RSS-247, 6:

The maximum conducted output power should not exceed:

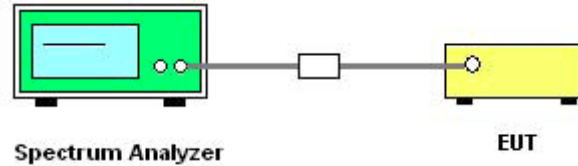
Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> For OEM devices installed in vehicles	Max. e.i.r.p $\leq$ 30mW(14.77dBm) or 1.76+10log <sub>10</sub> B* Whichever is less.
	<input checked="" type="checkbox"/> Equipment other than OEM equipment	Max. e.i.r.p $\leq$ 200mW(23dBm) or 10+10log <sub>10</sub> B* Whichever is less.
U-NII-2A U-NII-2C	<input type="checkbox"/> For OEM devices installed in vehicles	Max. e.i.r.p $\leq$ 30mW(14.77dBm) or 1.76+10log <sub>10</sub> B* Whichever is less.(U-NII-2A only)
	<input checked="" type="checkbox"/> Equipment other than OEM equipment	Max. Cop $\leq$ 250mW(24Bm) or 11+10log <sub>10</sub> B* Whichever is less. Max. e.i.r.p $\leq$ 1W(30Bm) or 17+10log <sub>10</sub> B* Whichever is less.
U-NII-3	<input checked="" type="checkbox"/>	1 Watt (30 dBm)

Note: B\* is the 99% emission bandwidth in MHz.

### 2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.2.3. Test Setup



### 2.2.4. Test Procedures

1. The testing follows the of KDB 789033 D02 v02r01 Section II.E.2.b and ANSI C63.10-2013 Section 12.3.2.2.
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Power is calculated by integrating over the spectrum of the entire 99% OBW signal using the instrument's band power measurement feature.
4. Set span to encompass the entire 99% OBW of the signal.
5. Set RBW = 1MHz, VBW  $\geq$  3MHz, Sweep time = Auto, Detector = power averaging (RMS).
6. Number of points in sweep  $\geq 2 \times$  span / RBW.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Replace the EUT center frequency and repeat steps 3~7.



### **2.2.5. Test Results of Maximum Conducted Output Power**

Please refer to APPENDIX A for detail

## 2.3. Power spectral density (PSD)

### 2.3.1. Limit of Power Spectral Density

#### FCC Part 15.407(a)

The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> Outdoor Access Point	17 dBm/MHz
	<input type="checkbox"/> Fixed point-to-point Access device	
	<input type="checkbox"/> Indoor Access Point	
	<input checked="" type="checkbox"/> Mobile and portable client device	11 dBm/MHz
U-NII-2A	<input checked="" type="checkbox"/>	11 dBm/MHz
U-NII-2C	<input checked="" type="checkbox"/>	11 dBm/MHz
U-NII-3	<input checked="" type="checkbox"/>	30dBm/500kHz

#### RSS-247, 6:

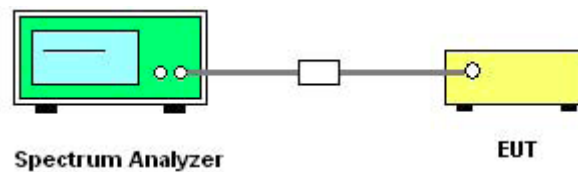
The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input checked="" type="checkbox"/> Equipment other than OEM equipment	10 dBm/MHz (EIRP)
U-NII-2A	<input checked="" type="checkbox"/>	11 dBm/MHz
U-NII-2C	<input checked="" type="checkbox"/>	11 dBm/MHz
U-NII-3	<input checked="" type="checkbox"/>	30dBm/500kHz

### 2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.3.3. Test Setup



### 2.3.4. Test Procedures

1. The testing follows the of KDB 789033 D02 v02r01 Section II.F and ANSI C63.10-2013 Section 12.5.
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set span to encompass the entire 99% OBW of the signal.
4. For U-NII-1, U-NII-2a, U-NII-2c Band: Set RBW = 1MHz, VBW  $\geq$  3MHz, Sweep time = Auto,



Detector = power averaging (RMS).

5. For U-NII-3 Band: Set RBW = 500kHz, VBW  $\geq$  3MHz, Sweep time = Auto, Detector = power averaging (RMS).
6. Number of points in sweep  $\geq 2 \times$  span / RBW.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Use the peak search function on the instrument to find the peak of the spectrum.
9. Replace the EUT center frequency and repeat steps 3~8.

### **2.3.5. Test Result of Power Spectral Density**

Please refer to APPENDIX A for detail



## 2.4. 26dB Emission Bandwidth and 99% Occupied Bandwidth

### 2.4.1. Limit of 26dB Emission Bandwidth and 99% Occupied Bandwidth

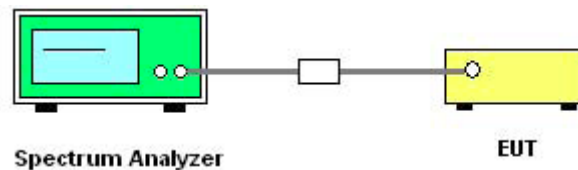
26dB Emission Bandwidth and 99% Occupied Bandwidth no Bandwidth limit.

The minimum 6dB bandwidth of U-NII-3 shall be at least 500 kHz.

### 2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.4.3. Test Description



### 2.4.4. Test Procedures

1. The testing follows the of KDB 789033 D02 v02r01 Section II.C.D and ANSI C63.10-2013 Section 12.4.
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Use the spectrum analyzer “Channel Bandwidth” function to easurement the 26dB EBW, 6dB EBW and 99% OBW.
4. Set center frequency to the nominal EUT channel center frequency.
5. Set span = 1.5 times to 5.0 times the OBW or EBW.
6. For 26dB EBW and 99% OBW Measurement:  
Set RBW = approximately 1% EBW or 1.5 times to 5.0 times the OBW,  $VBW \geq 3 \times RBW$ .
7. For 6dB EBW Measurement:  
Set RBW =100kHz,  $VBW \geq 3 \times RBW$ .
8. Set Detector = Peak, Trace mode = max hold and Sweep time = auto couple.
9. Allow the trace to stabilize.
10. Replace the EUT center frequency and repeat steps 3~9.



#### **2.4.5. Test Results of 26dB Emission Bandwidth and 99% Occupied Bandwidth**

Please refer to APPENDIX A for detail

## 2.5. Frequency Stability

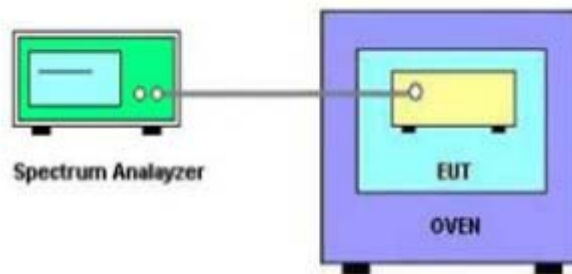
### 2.5.1. Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

### 2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.5.3. Test Setup



### 2.5.4. Test Procedures

1. The testing follows the of KDB 789033 D02 v02r01 Section II.A.3 and ANSI C63.10-2013 Section 6.8.
2. The EUT is installed in an environment test chamber with external power source, was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set the chamber to operate at 50°C and external power source to output at nominal voltage of EUT.
5. A sufficient stabilization period at each temperatures in used prior to each frequency measurement.
6. The test shall be performed under -30°C to 50°C and 85% to 115% of the nominal voltage. Change setting of chamber and external power source to complete all conditions.
7. Replace the EUT center frequency and repeat steps 3~6.



### **2.5.5. Test Result of Frequency Stability**

Please refer to APPENDIX A for detail

## 2.6. Radiated Band Edge and Spurious Emission

### 2.6.1. Limit of Radiated Band Edges and Spurious Emission

Radiated emission which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

#### Limits of unwanted emission out of the restricted bands

FCC Part 15.407(b)			
Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength @3m (dB $\mu\text{V/m}$ )
5150 - 5250	Outside of the 5.15~5.35 GHz	-27	68.2
5725 - 5850	< 5650	-27	68.2
	5650~5700	-27~10	68.2~105.2
	5700~5720	10~15.6	105.2~110.8
	5720~5725	15.6~27	110.8~122.2
	5850~5855	27~15.6	122.2~110.8
	5855~5875	15.6~10	110.8~105.2
	5875~5925	10~-27	105.2~68.2
	> 5925	-27	68.2

Note:

- 1)  $\text{EIRP}[\text{dBm}] = \text{E}[\text{dB}\mu\text{V/m}] + 20 \log(d[\text{m}]) - 104.77$ , d is the measurement distance in m.
- 2)  $\text{E}[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2 = 68.2 \text{ dBuV/m}$ , for  $\text{EIRP}[\text{dBm}] = -27\text{dBm}$ .  
 $\text{E}[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2 = 105.2 \text{ dBuV/m}$ , for  $\text{EIRP}[\text{dBm}] = 10\text{dBm}$ .  
 $\text{E}[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2 = 110.8 \text{ dBuV/m}$ , for  $\text{EIRP}[\text{dBm}] = 15.6\text{dBm}$ .  
 $\text{E}[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2 = 122.2 \text{ dBuV/m}$ , for  $\text{EIRP}[\text{dBm}] = 27\text{dBm}$ .



Applicable To	Limit	
KDB 789033 D02 General UNII Test Procedures New Rules v02r01	Field Strength at 3m	
	PK: 68.2(dBµV/m)	AV: 54 (dBµV/m)

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41	/	/	/

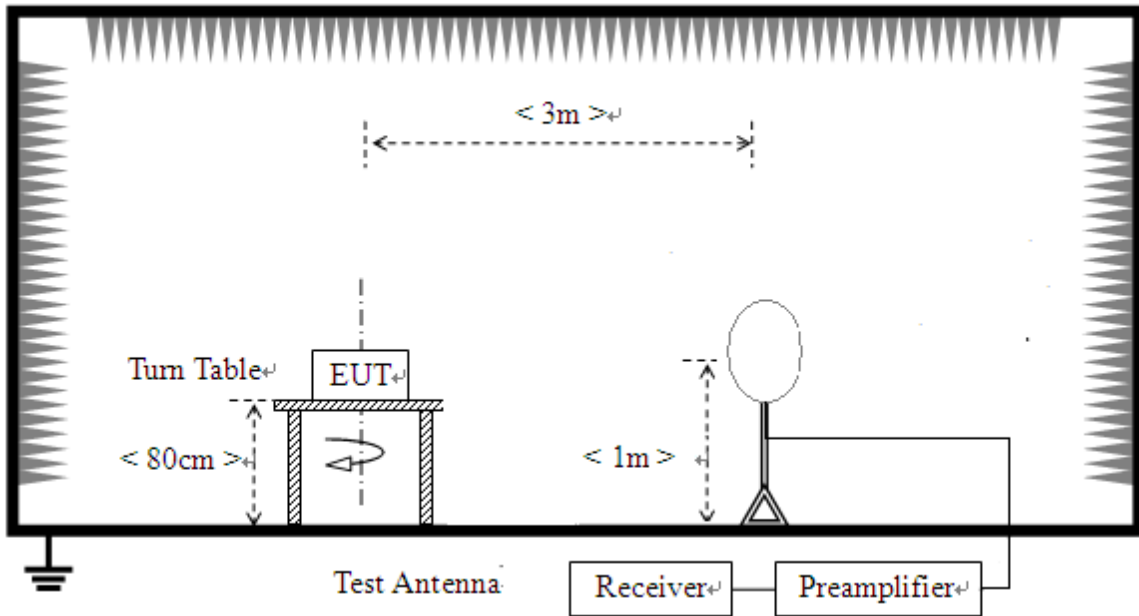
Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.  
<sup>2</sup>Above 38.6.

**2.6.2. Measuring Instruments**

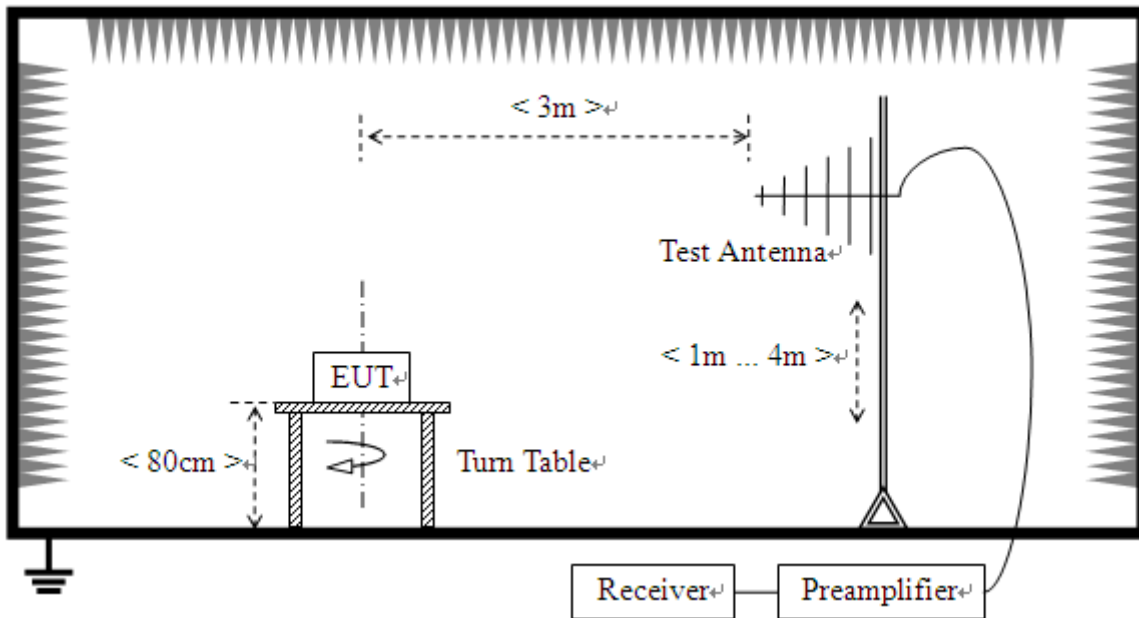
The measuring equipment is listed in the section 3 of this test report.

### 2.6.3. Test Setup

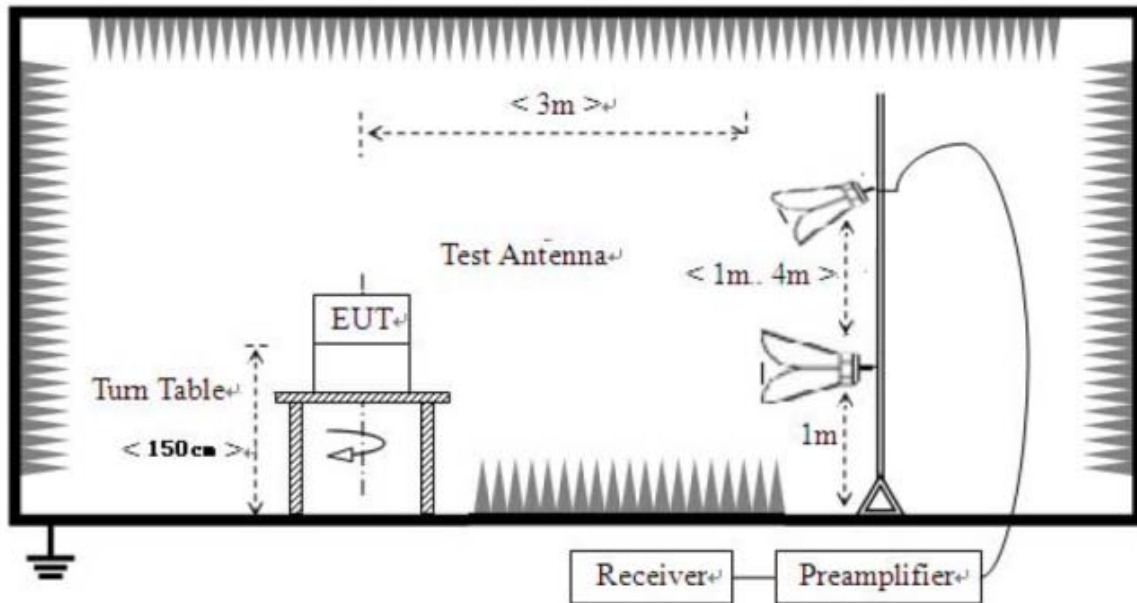
For radiated emissions from 9 kHz to 30 MHz



For radiated emissions from 30MHz to 1GHz



### For radiated emissions above 1GHz



#### 2.6.4. Test Procedures

1. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
6. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for



Quasi-peak detection (QP) at frequency below 1 GHz.

2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ( $10 \log(1/\text{duty cycle})$ ).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
5. Only worst-Case mode data provide here, 802.11a (20MHz) 5180MHz for Below 1GHz.

### **2.6.5. Test Result of Radiated Band Edge and Spurious Emission**

NOTE 1: For 9 kHz to 30MHz, The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

NOTE 2: For 30MHz to 1GHz, All of the EUT Configure mode were tested and found 802.11a 5825MHz channel is the worst mode, the worst case is recorded in this report.

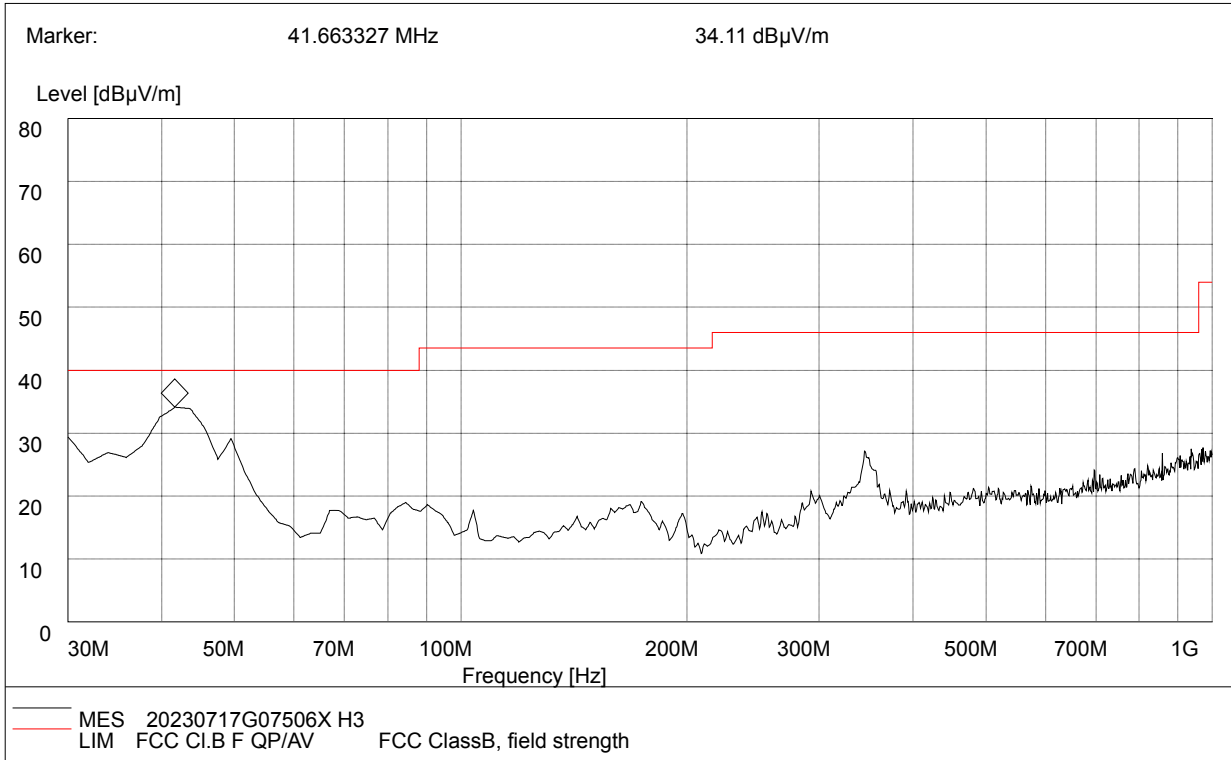
NOTE 3: For 1GHz to 40GHz, Only worst-case data is reported.

NOTE 4: Antenna height and turntable angle are the worst positions, the worst case is recorded in this report.



**For 30MHz to 1000 MHz**

Project Information			
Test site:	3M anechoic chamber	Environment:	Temp: 23°C; Humi:48%;101kPa
Operator:	HuangChaoMing	Test Date:	2023.07.13
Test Mode:	5G WIFI - TX	Polarization:	Horizontal



Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Corr.Factor (dB/m)	Antenna height (cm)	Limit (dBµV/m)	Margin (dB)	Polarity
30.42	28.40	120.0	19.3	100.0	40.0	11.6	Horizontal
41.66	33.11	120.0	14.0	100.0	40.0	6.89	Horizontal
90.26	17.96	120.0	9.9	100.0	43.5	25.54	Horizontal
173.84	18.10	120.0	11.9	100.0	43.5	25.4	Horizontal
282.42	19.81	120.0	15.0	100.0	46.0	26.19	Horizontal
344.90	26.14	120.0	15.7	100.0	46.0	19.86	Horizontal

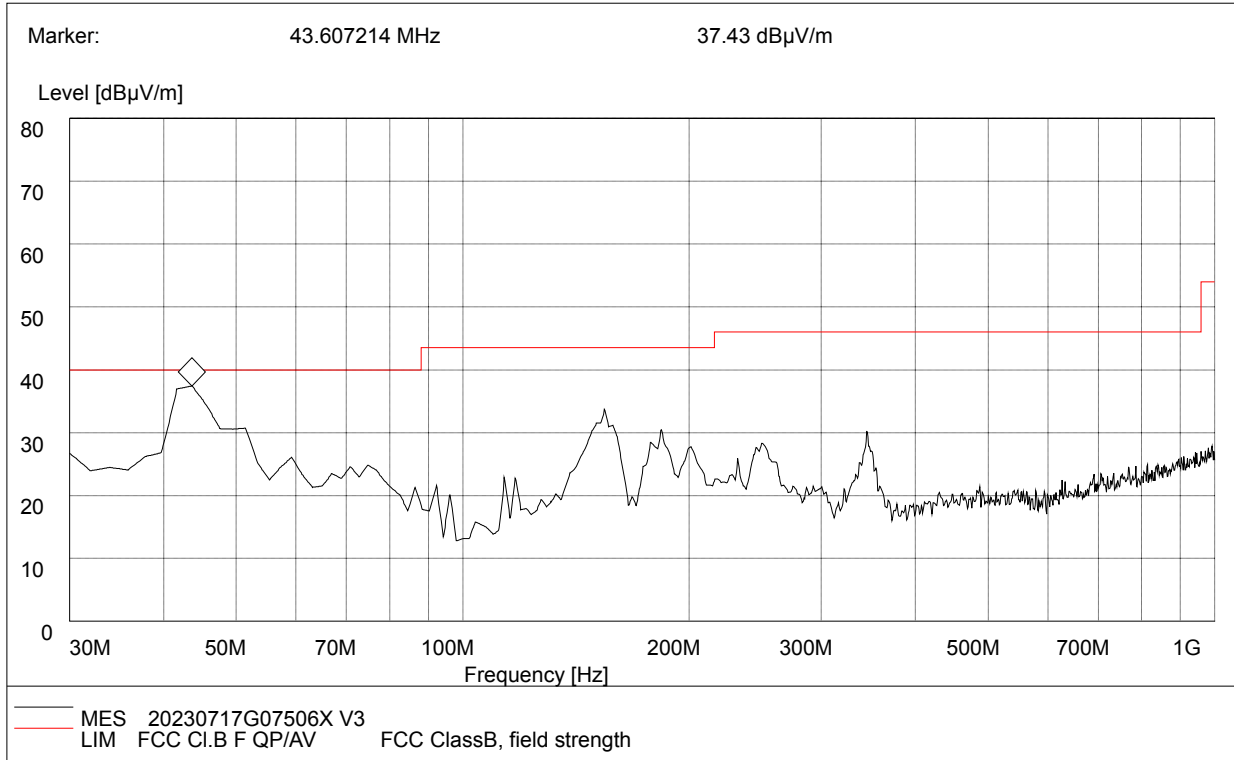
**Test Result : Pass**

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB).
3. Margin value = Limit value - Emission Level.
4. The other emission levels were very low against the limit.



Project Information			
Test site:	3M anechoic chamber	Environment:	Temp: 23°C; Humi:48%;101kPa
Operator:	HuangChaoMing	Test Date:	2023.07.13
Test Mode:	5G WIFI - TX	Polarization:	Vertical



Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Corr.Factor (dB/m)	Antenna height (cm)	Limit (dBµV/m)	Margin (dB)	Polarity
43.95	36.43	120.0	14.0	100.0	40.0	3.57	Vertical
51.36	29.70	120.0	8.6	100.0	40.0	10.3	Vertical
154.38	32.70	120.0	12.4	100.0	43.5	10.8	Vertical
183.56	29.40	120.0	11.1	100.0	43.5	14.1	Vertical
249.52	27.31	120.0	13.1	100.0	46.0	18.69	Vertical
344.86	29.19	120.0	15.7	100.0	46.0	16.81	Vertical

**Test Result : Pass**

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB).
3. Margin value = Limit value - Emission Level.
4. The other emission levels were very low against the limit.



**For 1GHz to 40 GHz**

U-NII-1_802.11a_5180MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.46	68.20	-19.74	1.60	180	48.02	0.44	Horizontal	Peak
5150.00	39.64	54.00	-14.36	1.60	180	39.20	0.44	Horizontal	Average
10360.00	52.39	68.20	-15.81	1.60	180	41.93	10.46	Horizontal	Peak
10360.00	43.57	54.00	-10.43	1.60	180	33.11	10.46	Horizontal	Average
5150.00	48.01	68.20	-20.19	1.50	320	47.57	0.44	Vertical	Peak
5150.00	39.09	54.00	-14.91	1.50	320	38.65	0.44	Vertical	Average
10360.00	53.56	68.20	-14.64	1.50	320	43.10	10.46	Vertical	Peak
10360.00	43.53	54.00	-10.47	1.50	320	33.07	10.46	Vertical	Average
U-NII-1_802.11a_5220MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
10440.00	52.44	68.20	-15.76	1.60	200	41.64	10.80	Horizontal	Peak
10440.00	43.68	54.00	-10.32	1.60	200	32.88	10.80	Horizontal	Average
10440.00	53.71	68.20	-14.49	1.70	180	42.91	10.80	Vertical	Peak
10440.00	43.59	54.00	-10.41	1.70	180	32.79	10.80	Vertical	Average
U-NII-1_802.11a_5240MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	48.12	68.20	-20.08	1.60	180	47.87	0.25	Horizontal	Peak
5350.00	38.82	54.00	-15.18	1.60	180	38.57	0.25	Horizontal	Average
10480.00	52.67	68.20	-15.53	1.60	180	41.67	11.00	Horizontal	Peak
10480.00	43.84	54.00	-10.16	1.60	180	32.84	11.00	Horizontal	Average
5350.00	48.00	68.20	-20.20	1.50	320	47.75	0.25	Vertical	Peak
5350.00	38.61	54.00	-15.39	1.50	320	38.36	0.25	Vertical	Average
10480.00	53.69	68.20	-14.51	1.50	320	42.69	11.00	Vertical	Peak
10480.00	43.79	54.00	-10.21	1.50	320	32.79	11.00	Vertical	Average
<p><i>Remark:</i></p> <ol style="list-style-type: none"> <li>1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)</li> <li>2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)</li> <li>3. Margin value = Emission Level – Limit value</li> <li>4. The emission levels of other frequencies are very lower than the limit and not show in test report.</li> </ol>									



U-NII-1_802.11n-HT40_5190MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	49.10	68.20	-19.10	1.60	180	48.66	0.44	Horizontal	Peak
5150.00	39.64	54.00	-14.36	1.60	180	39.20	0.44	Horizontal	Average
10380.00	53.02	68.20	-15.18	1.60	180	42.49	10.53	Horizontal	Peak
10380.00	43.40	54.00	-10.60	1.60	180	32.87	10.53	Horizontal	Average
5150.00	47.98	68.20	-20.22	1.50	320	47.54	0.44	Vertical	Peak
5150.00	38.36	54.00	-15.64	1.50	320	37.92	0.44	Vertical	Average
10380.00	52.45	68.20	-15.75	1.50	320	41.92	10.53	Vertical	Peak
10380.00	43.39	54.00	-10.61	1.50	320	32.86	10.53	Vertical	Average

U-NII-1_802.11n-HT40_5230MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	48.35	68.20	-19.85	1.60	180	48.10	0.25	Horizontal	Peak
5350.00	38.68	54.00	-15.32	1.60	180	38.43	0.25	Horizontal	Average
10460.00	52.66	68.20	-15.54	1.60	180	41.75	10.91	Horizontal	Peak
10460.00	43.89	54.00	-10.11	1.60	180	32.98	10.91	Horizontal	Average
5350.00	48.48	68.20	-19.72	1.50	320	48.23	0.25	Vertical	Peak
5350.00	38.64	54.00	-15.36	1.50	320	38.39	0.25	Vertical	Average
10460.00	53.84	68.20	-14.36	1.50	320	42.93	10.91	Vertical	Peak
10460.00	43.58	54.00	-10.42	1.50	320	32.67	10.91	Vertical	Average

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

**U-NII-1\_802.11ac-VHT80\_5210MHz**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	47.98	68.20	-20.22	1.60	180	47.54	0.44	Horizontal	Peak
5150.00	39.14	54.00	-14.86	1.60	180	38.70	0.44	Horizontal	Average
5350.00	48.20	68.20	-20.00	1.60	180	47.95	0.25	Horizontal	Peak
5350.00	38.61	54.00	-15.39	1.60	180	38.36	0.25	Horizontal	Average
10420.00	52.05	68.20	-16.15	1.60	180	41.34	10.71	Horizontal	Peak
10420.00	43.37	54.00	-10.63	1.60	180	32.66	10.71	Horizontal	Average
5150.00	48.15	68.20	-20.05	1.50	320	47.71	0.44	Vertical	Peak
5150.00	39.36	54.00	-14.64	1.50	320	38.92	0.44	Vertical	Average
5350.00	48.24	68.20	-19.96	1.50	320	47.99	0.25	Vertical	Peak
5350.00	38.64	54.00	-15.36	1.50	320	38.39	0.25	Vertical	Average
10420.00	53.39	68.20	-14.81	1.50	320	42.68	10.71	Vertical	Peak
10420.00	43.91	54.00	-10.09	1.50	320	33.20	10.71	Vertical	Average

**Remark:**

1.  $Emission\ Level(dBuV/m) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB)$
3.  $Margin\ value = Emission\ Level - Limit\ value$
4. *The emission levels of other frequencies are very lower than the limit and not show in test report.*



U-NII-2A_802.11a_5260MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.28	68.20	-19.92	1.60	180	47.84	0.44	Horizontal	Peak
5150.00	39.89	54.00	-14.11	1.60	180	39.45	0.44	Horizontal	Average
10520.00	52.50	68.20	-15.70	1.60	180	41.32	11.18	Horizontal	Peak
10520.00	43.66	54.00	-10.34	1.60	180	32.48	11.18	Horizontal	Average
5150.00	48.29	68.20	-19.91	1.50	320	47.85	0.44	Vertical	Peak
5150.00	38.73	54.00	-15.27	1.50	320	38.29	0.44	Vertical	Average
10520.00	54.04	68.20	-14.16	1.50	320	42.86	11.18	Vertical	Peak
10520.00	43.43	54.00	-10.57	1.50	320	32.25	11.18	Vertical	Average

U-NII-2A_802.11a_5300MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
10600.00	52.44	68.20	-15.76	1.60	180	40.92	11.52	Horizontal	Peak
10600.00	43.68	54.00	-10.32	1.60	180	32.16	11.52	Horizontal	Average
10600.00	53.71	68.20	-14.49	1.50	320	42.19	11.52	Vertical	Peak
10600.00	43.59	54.00	-10.41	1.50	320	32.07	11.52	Vertical	Average

U-NII-2A_802.11a_5320MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	47.76	68.20	-20.44	1.60	180	47.51	0.25	Horizontal	Peak
5350.00	38.77	54.00	-15.23	1.60	180	38.52	0.25	Horizontal	Average
10640.00	52.70	68.20	-15.50	1.60	180	41.38	11.32	Horizontal	Peak
10640.00	44.01	54.00	-9.99	1.60	180	32.69	11.32	Horizontal	Average
5350.00	48.48	68.20	-19.72	1.50	320	48.23	0.25	Vertical	Peak
5350.00	39.04	54.00	-14.96	1.50	320	38.79	0.25	Vertical	Average
10640.00	53.70	68.20	-14.50	1.50	320	42.38	11.32	Vertical	Peak
10640.00	43.60	54.00	-10.40	1.50	320	32.28	11.32	Vertical	Average

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

**U-NII-2A\_802.11n-HT40\_5270MHz**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.58	68.20	-19.62	1.60	180	48.14	0.44	Horizontal	Peak
5150.00	39.51	54.00	-14.49	1.60	180	39.07	0.44	Horizontal	Average
10540.00	51.94	68.20	-16.26	1.60	180	40.68	11.26	Horizontal	Peak
10540.00	42.75	54.00	-11.25	1.60	180	31.49	11.26	Horizontal	Average
5150.00	47.79	68.20	-20.41	1.50	320	47.35	0.44	Vertical	Peak
5150.00	39.33	54.00	-14.67	1.50	320	38.89	0.44	Vertical	Average
10540.00	54.33	68.20	-13.87	1.50	320	43.07	11.26	Vertical	Peak
10540.00	42.95	54.00	-11.05	1.50	320	31.69	11.26	Vertical	Average

**U-NII-2A\_802.11n-HT40\_5310MHz**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	47.24	68.20	-20.96	1.60	180	46.99	0.25	Horizontal	Peak
5350.00	37.76	54.00	-16.24	1.60	180	37.51	0.25	Horizontal	Average
10620.00	52.91	68.20	-15.29	1.60	180	41.50	11.41	Horizontal	Peak
10620.00	44.21	54.00	-9.79	1.60	180	32.80	11.41	Horizontal	Average
5350.00	49.06	68.20	-19.14	1.50	320	48.81	0.25	Vertical	Peak
5350.00	38.60	54.00	-15.40	1.50	320	38.35	0.25	Vertical	Average
10620.00	52.74	68.20	-15.46	1.50	320	41.33	11.41	Vertical	Peak
10620.00	44.24	54.00	-9.76	1.50	320	32.83	11.41	Vertical	Average

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The emission levels of other frequencies are very lower than the limit and not show in test report.



**U-NII-2A\_802.11ac-VHT80\_5290MHz**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.37	68.20	-19.83	1.60	180	47.93	0.44	Horizontal	Peak
5150.00	38.78	54.00	-15.22	1.60	180	38.34	0.44	Horizontal	Average
5350.00	47.81	68.20	-20.39	1.60	180	47.56	0.25	Horizontal	Peak
5350.00	39.08	54.00	-14.92	1.60	180	38.83	0.25	Horizontal	Average
10580.00	51.79	68.20	-16.41	1.60	180	40.35	11.44	Horizontal	Peak
10580.00	43.11	54.00	-10.89	1.60	180	31.67	11.44	Horizontal	Average
5150.00	48.35	68.20	-19.85	1.50	320	47.91	0.44	Vertical	Peak
5150.00	39.21	54.00	-14.79	1.50	320	38.77	0.44	Vertical	Average
5350.00	47.96	68.20	-20.24	1.50	320	47.71	0.25	Vertical	Peak
5350.00	38.69	54.00	-15.31	1.50	320	38.44	0.25	Vertical	Average
10580.00	53.31	68.20	-14.89	1.50	320	41.87	11.44	Vertical	Peak
10580.00	43.76	54.00	-10.24	1.50	320	32.32	11.44	Vertical	Average

**Remark:**

1.  $Emission\ Level(dBuV/m) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB)$
3.  $Margin\ value = Emission\ Level - Limit\ value$
4. *The emission levels of other frequencies are very lower than the limit and not show in test report.*



U-NII-2C_802.11a_5500MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	47.02	68.20	-21.18	1.60	180	47.06	-0.04	Horizontal	Peak
5470.00	38.37	54.00	-15.63	1.60	180	38.41	-0.04	Horizontal	Average
11000.00	52.11	68.20	-16.09	1.60	180	40.69	11.42	Horizontal	Peak
11000.00	44.50	54.00	-9.50	1.60	180	33.08	11.42	Horizontal	Average
5470.00	47.67	68.20	-20.53	1.50	320	47.71	-0.04	Vertical	Peak
5470.00	38.59	54.00	-15.41	1.50	320	38.63	-0.04	Vertical	Average
11000.00	53.03	68.20	-15.17	1.50	320	41.61	11.42	Vertical	Peak
11000.00	44.29	54.00	-9.71	1.50	320	32.87	11.42	Vertical	Average
U-NII-2C_802.11a_5580MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11160.00	52.24	68.20	-15.96	1.60	180	40.89	11.35	Horizontal	Peak
11160.00	44.61	54.00	-9.39	1.60	180	33.26	11.35	Horizontal	Average
11160.00	53.34	68.20	-14.86	1.50	320	41.99	11.35	Vertical	Peak
11160.00	44.49	54.00	-9.51	1.50	320	33.14	11.35	Vertical	Average
U-NII-2C_802.11a_5700MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5725.00	48.73	68.20	-19.47	1.60	180	47.43	1.30	Horizontal	Peak
5725.00	39.16	54.00	-14.84	1.60	180	37.86	1.30	Horizontal	Average
11400.00	52.69	68.20	-15.51	1.60	180	41.22	11.47	Horizontal	Peak
11400.00	44.57	54.00	-9.43	1.60	180	33.10	11.47	Horizontal	Average
5725.00	49.24	68.20	-18.96	1.50	320	47.94	1.30	Vertical	Peak
5725.00	39.48	54.00	-14.52	1.50	320	38.18	1.30	Vertical	Average
11400.00	53.52	68.20	-14.68	1.50	320	42.05	11.47	Vertical	Peak
11400.00	44.67	54.00	-9.33	1.50	320	33.20	11.47	Vertical	Average
<p>Remark:</p> <ol style="list-style-type: none"> <li>1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)</li> <li>2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)</li> <li>3. Margin value = Emission Level – Limit value</li> <li>4. The emission levels of other frequencies are very lower than the limit and not show in test report.</li> </ol>									



U-NII-2C_802.11n-HT40_5510MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	46.84	68.20	-21.36	1.60	180	46.88	-0.04	Horizontal	Peak
5470.00	39.31	54.00	-14.69	1.60	180	39.35	-0.04	Horizontal	Average
11020.00	50.89	68.20	-17.31	1.60	180	39.43	11.46	Horizontal	Peak
11020.00	44.62	54.00	-9.38	1.60	180	33.16	11.46	Horizontal	Average
5470.00	46.81	68.20	-21.39	1.50	320	46.85	-0.04	Vertical	Peak
5470.00	39.09	54.00	-14.91	1.50	320	39.13	-0.04	Vertical	Average
11020.00	52.54	68.20	-15.66	1.50	320	41.08	11.46	Vertical	Peak
11020.00	43.78	54.00	-10.22	1.50	320	32.32	11.46	Vertical	Average
U-NII-2C_802.11n-HT40_5550MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11100.00	51.77	68.20	-16.43	1.60	180	40.04	11.73	Horizontal	Peak
11100.00	44.84	54.00	-9.16	1.60	180	33.11	11.73	Horizontal	Average
11100.00	52.65	68.20	-15.55	1.50	320	40.92	11.73	Vertical	Peak
11100.00	44.53	54.00	-9.47	1.50	320	32.80	11.73	Vertical	Average
U-NII-2C_802.11n-HT40_5670MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5725.00	49.35	68.20	-18.85	1.60	180	48.05	1.30	Horizontal	Peak
5725.00	38.50	54.00	-15.50	1.60	180	37.20	1.30	Horizontal	Average
11340.00	52.44	68.20	-15.76	1.60	180	41.02	11.42	Horizontal	Peak
11340.00	43.93	54.00	-10.07	1.60	180	32.51	11.42	Horizontal	Average
5725.00	48.82	68.20	-19.38	1.50	320	47.52	1.30	Vertical	Peak
5725.00	39.66	54.00	-14.34	1.50	320	38.36	1.30	Vertical	Average
11340.00	53.75	68.20	-14.45	1.50	320	42.33	11.42	Vertical	Peak
11340.00	43.79	54.00	-10.21	1.50	320	32.37	11.42	Vertical	Average
<i>Remark:</i>									
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)									
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)									
3. Margin value = Emission Level – Limit value									
4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

**U-NII-2C\_802.11ac-VHT80\_5530MHz**

Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	47.47	68.20	-20.73	1.60	180	47.51	-0.04	Horizontal	Peak
5470.00	37.94	54.00	-16.06	1.60	180	37.98	-0.04	Horizontal	Average
11060.00	52.48	68.20	-15.72	1.60	180	40.95	11.53	Horizontal	Peak
11060.00	44.14	54.00	-9.86	1.60	180	32.61	11.53	Horizontal	Average
5470.00	48.19	68.20	-20.01	1.50	320	48.23	-0.04	Vertical	Peak
5470.00	37.85	54.00	-16.15	1.50	320	37.89	-0.04	Vertical	Average
11060.00	53.02	68.20	-15.18	1.50	320	41.49	11.53	Vertical	Peak
11060.00	44.24	54.00	-9.76	1.50	320	32.71	11.53	Vertical	Average

*Remark:*

1.  $Emission\ Level(dBuV/m) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB)$
3.  $Margin\ value = Emission\ Level - Limit\ value$
4. *The emission levels of other frequencies are very lower than the limit and not show in test report.*



U-NII-3_802.11a_5745MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	53.44	68.20	-14.76	1.60	180	52.64	0.80	Horizontal	Peak
5700.00	53.74	105.20	-51.46	1.60	180	52.50	1.24	Horizontal	Peak
5720.00	54.97	110.80	-55.83	1.60	180	53.69	1.28	Horizontal	Peak
5725.00	55.55	122.20	-66.65	1.60	180	54.25	1.30	Horizontal	Peak
11490.00	52.53	68.20	-15.67	1.60	180	40.98	11.55	Horizontal	Peak
11490.00	43.46	54.00	-10.54	1.60	180	31.91	11.55	Horizontal	Average
5650.00	54.07	68.20	-14.13	1.50	320	53.27	0.80	Vertical	Peak
5700.00	54.34	105.20	-50.86	1.50	320	53.10	1.24	Vertical	Peak
5720.00	53.67	110.80	-57.13	1.50	320	52.39	1.28	Vertical	Peak
5725.00	54.93	122.20	-67.27	1.50	320	53.63	1.30	Vertical	Peak
11490.00	52.46	68.20	-15.74	1.50	320	40.91	11.55	Vertical	Peak
11490.00	43.22	54.00	-10.78	1.50	320	31.67	11.55	Vertical	Average

U-NII-3_802.11a_5825MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	54.15	122.20	-68.05	1.60	180	52.33	1.82	Horizontal	Peak
5855.00	54.08	110.80	-56.72	1.60	180	52.23	1.85	Horizontal	Peak
5875.00	54.35	105.20	-50.85	1.60	180	52.37	1.98	Horizontal	Peak
5925.00	55.39	68.20	-12.81	1.60	180	53.27	2.12	Horizontal	Peak
11650.00	52.67	68.20	-15.53	1.60	180	41.03	11.64	Horizontal	Peak
11650.00	43.56	54.00	-10.44	1.60	180	31.92	11.64	Horizontal	Average
5850.00	54.13	122.20	-68.07	1.50	320	52.31	1.82	Vertical	Peak
5855.00	53.79	110.80	-57.01	1.50	320	51.94	1.85	Vertical	Peak
5875.00	54.35	105.20	-50.85	1.50	320	52.37	1.98	Vertical	Peak
5925.00	55.96	68.20	-12.24	1.50	320	53.84	2.12	Vertical	Peak
11650.00	52.57	68.20	-15.63	1.50	320	40.93	11.64	Vertical	Peak
11650.00	43.49	54.00	-10.51	1.50	320	31.85	11.64	Vertical	Average

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The emission levels of other frequencies are very lower than the limit and not show in test report.



**U-NII-3\_802.11n-HT40\_5755MHz**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	53.77	68.20	-14.43	1.60	180	52.97	0.80	Horizontal	Peak
5700.00	53.69	105.20	-51.51	1.60	180	52.45	1.24	Horizontal	Peak
5720.00	55.46	110.80	-55.34	1.60	180	54.18	1.28	Horizontal	Peak
5725.00	55.47	122.20	-66.73	1.60	180	54.17	1.30	Horizontal	Peak
11510.00	52.11	68.20	-16.09	1.60	180	40.55	11.56	Horizontal	Peak
11510.00	43.82	54.00	-10.18	1.60	180	32.26	11.56	Horizontal	Average
5650.00	54.48	68.20	-13.72	1.50	320	53.68	0.80	Vertical	Peak
5700.00	54.03	105.20	-51.17	1.50	320	52.79	1.24	Vertical	Peak
5720.00	53.89	110.80	-56.91	1.50	320	52.61	1.28	Vertical	Peak
5725.00	54.60	122.20	-67.60	1.50	320	53.30	1.30	Vertical	Peak
11510.00	52.37	68.20	-15.83	1.50	320	40.81	11.56	Vertical	Peak
11510.00	43.40	54.00	-10.60	1.50	320	31.84	11.56	Vertical	Average

**U-NII-3\_802.11n-HT40\_5795MHz**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	54.93	122.20	-67.27	1.60	180	53.11	1.82	Horizontal	Peak
5855.00	53.97	110.80	-56.83	1.60	180	52.12	1.85	Horizontal	Peak
5875.00	53.66	105.20	-51.54	1.60	180	51.68	1.98	Horizontal	Peak
5925.00	55.26	68.20	-12.94	1.60	180	53.14	2.12	Horizontal	Peak
11590.00	52.68	68.20	-15.52	1.60	180	41.17	11.51	Horizontal	Peak
11590.00	43.37	54.00	-10.63	1.60	180	31.86	11.51	Horizontal	Average
5850.00	53.78	122.20	-68.42	1.50	320	51.96	1.82	Vertical	Peak
5855.00	53.37	110.80	-57.43	1.50	320	51.52	1.85	Vertical	Peak
5875.00	54.94	105.20	-50.26	1.50	320	52.96	1.98	Vertical	Peak
5925.00	56.20	68.20	-12.00	1.50	320	54.08	2.12	Vertical	Peak
11590.00	52.39	68.20	-15.81	1.50	320	40.88	11.51	Vertical	Peak
11590.00	42.85	54.00	-11.15	1.50	320	31.34	11.51	Vertical	Average

*Remark:*

1.  $Emission\ Level(dBuV/m) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB)$
3.  $Margin\ value = Emission\ Level - Limit\ value$
4. *The emission levels of other frequencies are very lower than the limit and not show in test report.*



U-NII-3_802.11a_5875MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11570.00	52.25	68.20	-15.95	1.60	180	40.73	11.52	Horizontal	Peak
11570.00	43.56	54.00	-10.44	1.60	180	32.04	11.52	Horizontal	Average
11570.00	52.47	68.20	-15.73	1.50	320	40.95	11.52	Vertical	Peak
11570.00	42.69	54.00	-11.31	1.50	320	31.17	11.52	Vertical	Average

U-NII-3_802.11ac-VHT80_5775MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	53.89	68.20	-14.31	1.60	180	53.09	0.80	Horizontal	Peak
5700.00	53.67	105.20	-51.53	1.60	180	52.43	1.24	Horizontal	Peak
5720.00	56.05	110.80	-54.75	1.60	180	54.77	1.28	Horizontal	Peak
5725.00	55.59	122.20	-66.61	1.60	180	54.29	1.30	Horizontal	Peak
5850.00	55.27	122.20	-66.93	1.60	180	53.45	1.82	Horizontal	Peak
5855.00	53.89	110.80	-56.91	1.60	180	52.04	1.85	Horizontal	Peak
5875.00	53.40	105.20	-51.80	1.60	180	51.42	1.98	Horizontal	Peak
5925.00	54.87	68.20	-13.33	1.60	180	52.75	2.12	Horizontal	Peak
11550.00	52.18	68.20	-16.02	1.60	180	40.64	11.54	Horizontal	Peak
11550.00	44.49	54.00	-9.51	1.60	180	32.95	11.54	Horizontal	Average
5650.00	54.06	68.20	-14.14	1.50	320	53.26	0.80	Vertical	Peak
5700.00	53.84	105.20	-51.36	1.50	320	52.60	1.24	Vertical	Peak
5720.00	54.00	110.80	-56.80	1.50	320	52.72	1.28	Vertical	Peak
5725.00	54.97	122.20	-67.23	1.50	320	53.67	1.30	Vertical	Peak
5850.00	54.11	122.20	-68.09	1.50	320	52.29	1.82	Vertical	Peak
5855.00	53.40	110.80	-57.40	1.50	320	51.55	1.85	Vertical	Peak
5875.00	54.27	105.20	-50.93	1.50	320	52.29	1.98	Vertical	Peak
5925.00	56.40	68.20	-11.80	1.50	320	54.28	2.12	Vertical	Peak
11550.00	53.16	68.20	-15.04	1.50	320	41.62	11.54	Vertical	Peak
11550.00	43.66	54.00	-10.34	1.50	320	32.12	11.54	Vertical	Average

**Remark:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

## 2.7. AC Power Line Conducted Emission

### 2.7.1. Limit of AC Power Line Conducted Emission

FCC Part 15.207:

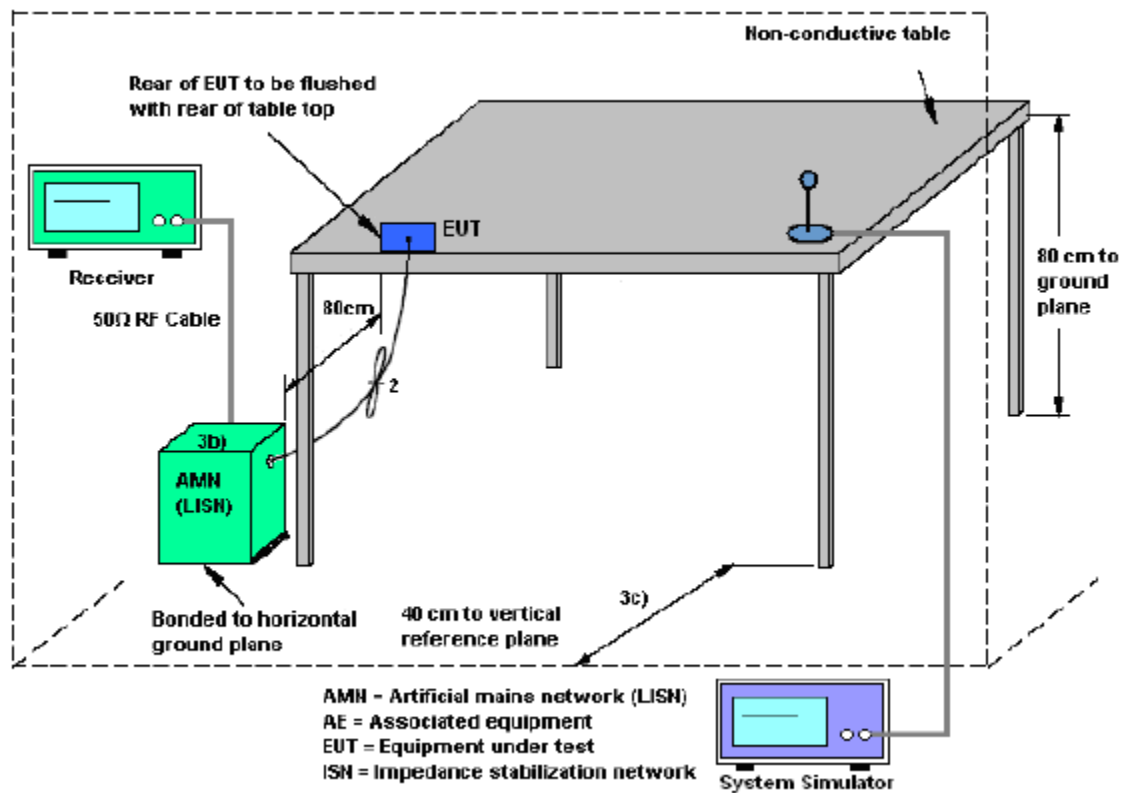
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

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

### 2.7.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.7.3. Test Setup





#### **2.7.4. Test Procedures**

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

#### **2.7.5. Test Result of AC Power Line Conducted Emission**

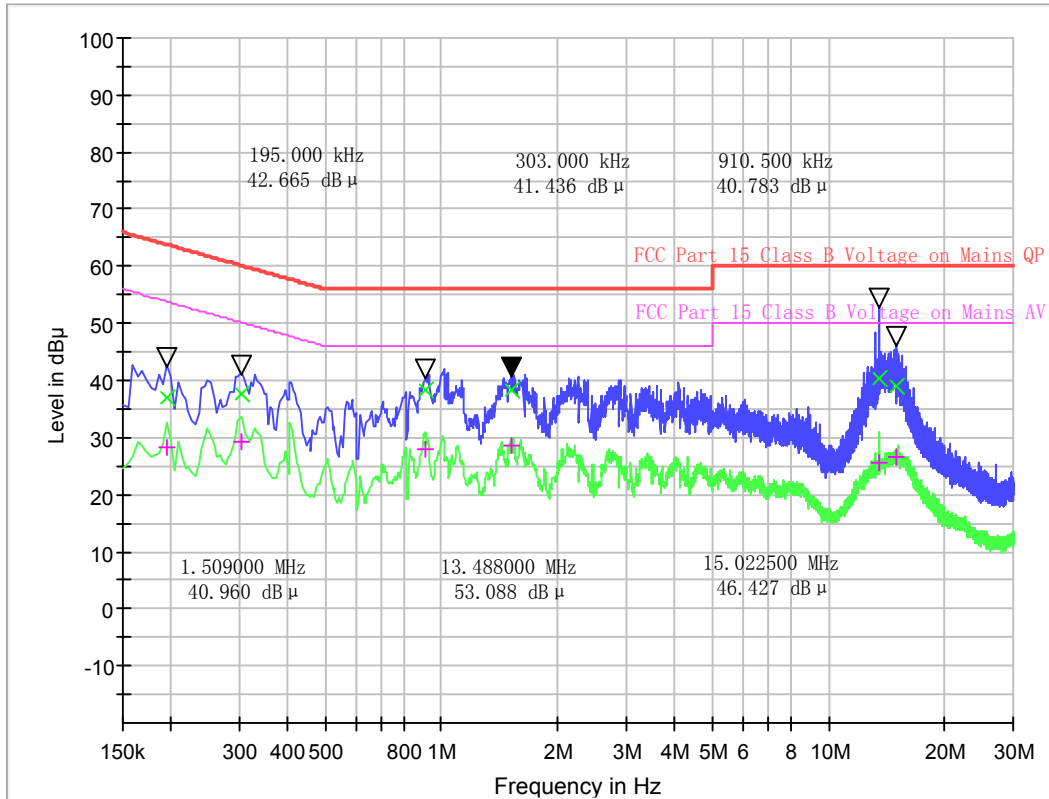
NOTE 1: The EUT configuration of the emission tests is 5G WLAN Link + USB Cable (Charging from Adapter).

NOTE 2: All of the EUT Configure mode were tested and found 802.11a 5825MHz channel is the worst mode, the worst case is recorded in this report.



### Project Information

Test site:	Shield ROOM 1	Environment:	Temp: 23°C; Humi:53%;101kPa
Operator:	LINDANQI	Test Date:	2023.07.17
Test Mode:	5G WIFI - TX	Test Part:	L



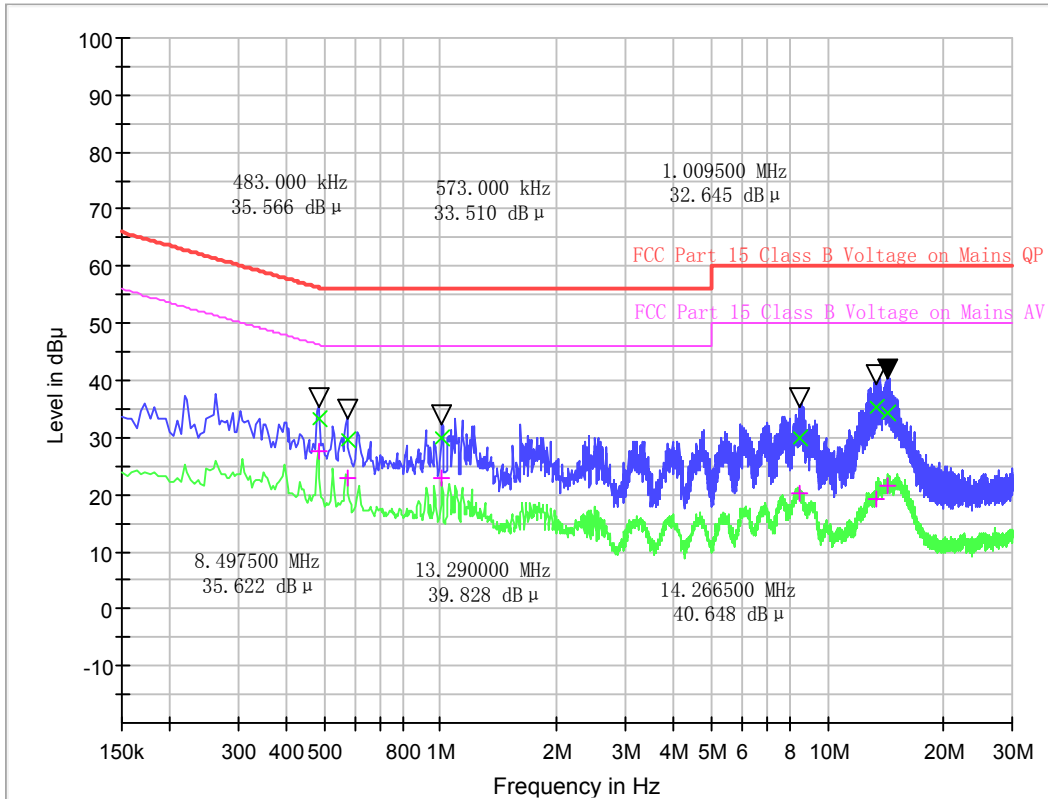
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Corr.Factor (dB)	Margin - QPK	Limit - QPK (dBμV)	Margin - AV (dB)	Limit - AV (dBμV)
0.195000	37.07	28.15	19.9	26.75	63.82	25.67	53.82
0.303000	37.56	29.39	19.9	22.60	60.16	20.77	50.16
0.910500	38.38	28.05	19.9	17.62	56.00	17.95	46.00
1.509000	38.20	28.63	19.9	17.80	56.00	17.37	46.00
13.488000	40.25	25.50	20.0	19.75	60.00	24.50	50.00
15.022500	39.02	26.54	20.0	20.98	60.00	23.46	50.00

**Test Result : Pass**

Note: Final Level = Receiver Read level + Correction factor.



Project Information			
Test site:	Shield ROOM 1	Environment:	Temp: 23°C; Humi:53%;101kPa
Operator:	LINDANQI	Test Date:	2023.07.17
Test Mode:	5G WIFI - TX	Test Part:	N



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Corr.Factor (dB)	Margin - QPK	Limit - QPK (dBμV)	Margin - AV (dB)	Limit - AV (dBμV)
0.483000	33.35	27.62	19.9	22.94	56.29	18.67	46.29
0.573000	29.71	22.78	19.9	26.29	56.00	23.22	46.00
1.009500	29.90	22.85	20.0	26.10	56.00	23.15	46.00
8.497500	29.81	20.11	20.1	30.19	60.00	29.89	50.00
13.290000	35.44	19.31	20.1	24.56	60.00	30.69	50.00
14.266500	34.32	21.51	20.1	25.68	60.00	28.49	50.00

**Test Result : Pass**

Note: Final Level = Receiver Read level + Correction factor.



### 3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2022.06.09	2026.06.08
2	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2023.06.08	2024.06.07
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2023.06.08	2024.06.07
5	EMI Horn Ant. (1-18G)	ETC	1209	A150402241	2021.01.02	2024.01.01
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2023.06.01	2024.05.31
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2022.12.13	2023.12.12
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2022.12.13	2023.12.12
9	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2023.02.20	2024.02.19
10	Test Receiver	R&S	ESIB7	A0501375	2023.03.16	2024.03.15
11	Broadband Ant.	2786	ETC	A150402240	2021.09.16	2024.03.03
12	3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2019.03.26	2024.03.25
13	Temperature chamber	TABAI	PS-232	A8708054	2022.08.18	2023.08.17
14	Test Receiver	KEYSIGHT	N9038A	A141202036	2023.06.12	2024.06.11
15	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2023.06.08	2024.06.07
16	Power Supply	R&S	WYJ-60100	A141102031	2023.07.12	2026.07.11



#### 4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage  $K=2$  to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

##### Uncertainty of AC Power Line Conducted Emission Measurement (150kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2Uc(y)$ )	2.8dB
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##### Uncertainty of Radiated Emission Measurement (9kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2Uc(y)$ )	3.5dB
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##### Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2Uc(y)$ )	3.91dB
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##### Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2Uc(y)$ )	4.5dB
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##### Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2Uc(y)$ )	4.9dB
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##### Uncertainty of RF Conducted Measurement (9kHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2Uc(y)$ )	1.2dB
--	-------



## Appendix A

### Output power Test Result and Data

U-NII-1 AVGSA Output Power						
Mode	Frequency (MHz)	Power (dBm)	EIRP (dBm)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Result
802.11n (20MHz)	5180	14.44	16.87	24	22.52	Pass
802.11n (20MHz)	5220	14.30	16.73	24	22.52	Pass
802.11n (20MHz)	5240	14.74	17.17	24	22.51	Pass
802.11n (40MHz)	5190	14.83	17.26	24	23.00	Pass
802.11n (40MHz)	5230	14.91	17.34	24	23.00	Pass
802.11ac (20MHz)	5180	14.51	16.94	24	22.52	Pass
802.11ac (20MHz)	5220	14.31	16.74	24	22.52	Pass
802.11ac (20MHz)	5240	14.77	17.20	24	22.51	Pass
802.11ac (40MHz)	5190	14.89	17.32	24	23.00	Pass
802.11ac (40MHz)	5230	14.93	17.36	24	23.00	Pass
802.11ac (80MHz)	5210	14.86	17.29	24	23.00	Pass
802.11a (20MHz)	5180	15.14	17.57	24	22.23	Pass
802.11a (20MHz)	5220	15.06	17.49	24	22.21	Pass
802.11a (20MHz)	5240	15.59	18.02	24	22.22	Pass

Note 1: Ant. Gain. = 2.43dBi.

Note 2: EIRP = Conducted Power + Ant. Gain.



U-NII-2a AVGSA Output Power							
Mode	Frequency (MHz)	Power (dBm)	EIRP (dBm)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Result
802.11n (20MHz)	5260	14.98	17.41	24.00	23.53	29.53	Pass
802.11n (20MHz)	5300	15.11	17.54	24.00	23.52	29.52	Pass
802.11n (20MHz)	5320	14.88	17.31	24.00	23.52	29.52	Pass
802.11n (40MHz)	5270	15.26	17.69	24.00	24.00	30.00	Pass
802.11n (40MHz)	5310	15.04	17.47	24.00	24.00	30.00	Pass
802.11ac (20MHz)	5260	14.89	17.32	24.00	23.51	29.51	Pass
802.11ac (20MHz)	5300	15.13	17.56	24.00	23.53	29.53	Pass
802.11ac (20MHz)	5320	14.84	17.27	24.00	23.52	29.52	Pass
802.11ac (40MHz)	5270	15.19	17.62	24.00	24.00	30.00	Pass
802.11ac (40MHz)	5310	14.98	17.41	24.00	24.00	30.00	Pass
802.11ac (80MHz)	5290	14.93	17.36	24.00	24.00	30.00	Pass
802.11a (20MHz)	5260	15.16	17.59	24.00	23.22	29.22	Pass
802.11a (20MHz)	5300	15.28	17.71	24.00	23.23	29.23	Pass
802.11a (20MHz)	5320	16.07	18.50	24.00	23.22	29.22	Pass

Note 1: Ant. Gain. = 2.43dBi.

Note 2: EIRP = Conducted Power + Ant. Gain.



U-NII-2c AVGSA Output Power							
Mode	Frequency (MHz)	Power (dBm)	EIRP (dBm)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Result
802.11n (20MHz)	5500	14.75	17.18	24	23.53	29.53	Pass
802.11n (20MHz)	5580	15.27	17.70	24	23.52	29.52	Pass
802.11n (20MHz)	5700	15.38	17.81	24	23.51	29.51	Pass
802.11n (40MHz)	5510	14.88	17.31	24	24.00	30.00	Pass
802.11n (40MHz)	5550	15.11	17.54	24	24.00	30.00	Pass
802.11n (40MHz)	5670	15.59	18.02	24	24.00	30.00	Pass
802.11ac (20MHz)	5500	15.88	18.31	24	23.52	29.52	Pass
802.11ac (20MHz)	5580	15.70	18.13	24	23.52	29.52	Pass
802.11ac (20MHz)	5700	15.05	17.48	24	23.52	29.52	Pass
802.11ac (40MHz)	5510	14.90	17.33	24	24.00	30.00	Pass
802.11ac (40MHz)	5550	15.12	17.55	24	24.00	30.00	Pass
802.11ac (40MHz)	5670	15.77	18.20	24	24.00	30.00	Pass
802.11ac (80MHz)	5530	15.10	17.53	24	24.00	30.00	Pass
802.11a (20MHz)	5500	16.22	18.65	24	23.21	29.21	Pass
802.11a (20MHz)	5580	16.46	18.89	24	23.23	29.23	Pass
802.11a (20MHz)	5700	16.53	18.96	24	23.21	29.21	Pass

Note 1: Ant. Gain. = 2.43dBi.

Note 2: EIRP = Conducted Power + Ant. Gain.

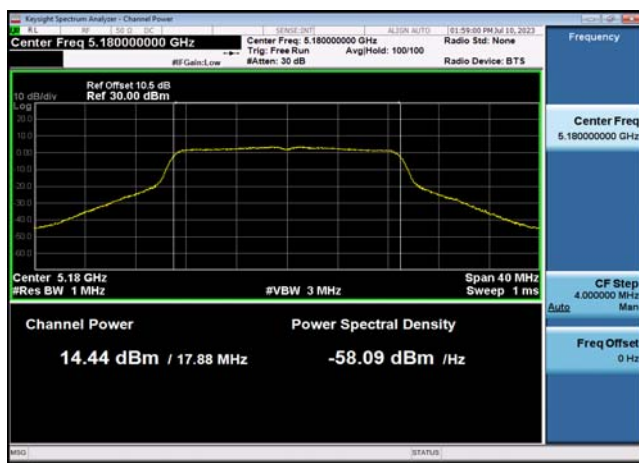




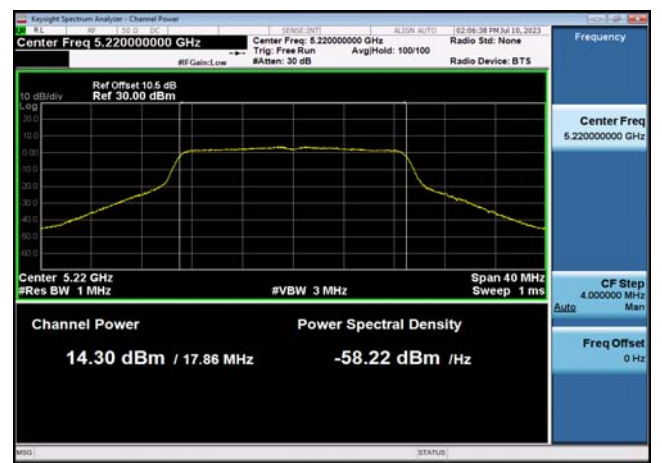
U-NII-3 AVGSA Output Power				
Mode	Frequency (MHz)	Power (dBm)	FCC&IC Limit (dBm)	Result
802.11n (20MHz)	5745	15.42	30	Pass
802.11n (20MHz)	5785	15.23	30	Pass
802.11n (20MHz)	5825	15.12	30	Pass
802.11n (40MHz)	5755	15.34	30	Pass
802.11n (40MHz)	5795	15.89	30	Pass
802.11ac (20MHz)	5745	15.46	30	Pass
802.11ac (20MHz)	5785	15.05	30	Pass
802.11ac (20MHz)	5825	15.61	30	Pass
802.11ac (40MHz)	5755	15.91	30	Pass
802.11ac (40MHz)	5795	15.42	30	Pass
802.11ac (80MHz)	5775	15.51	30	Pass
802.11a (20MHz)	5745	16.30	30	Pass
802.11a (20MHz)	5785	16.76	30	Pass
802.11a (20MHz)	5825	16.88	30	Pass

### Test plots

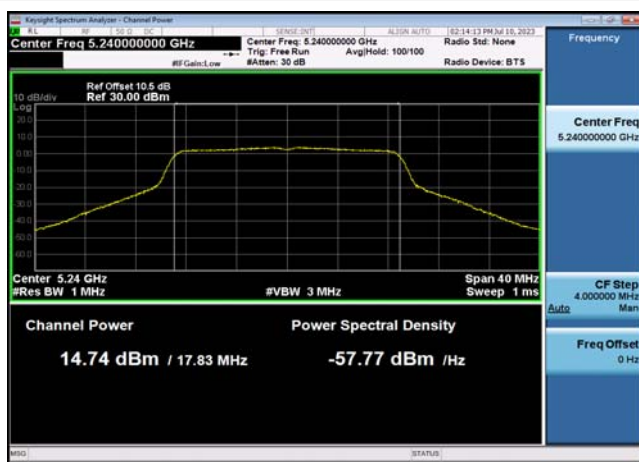
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U-NII-1 Output Power-802.11n(20MHz)  
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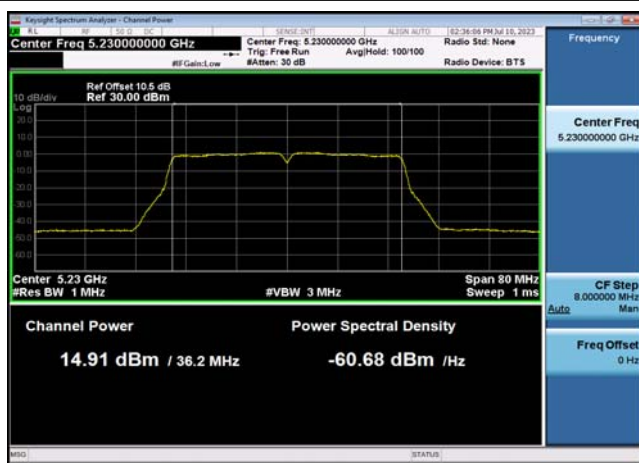
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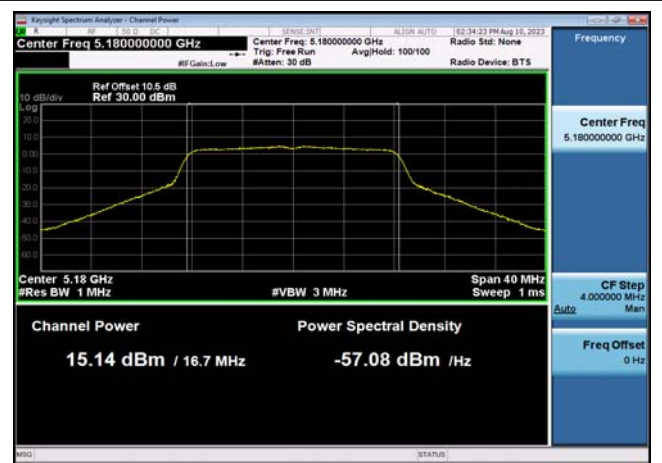
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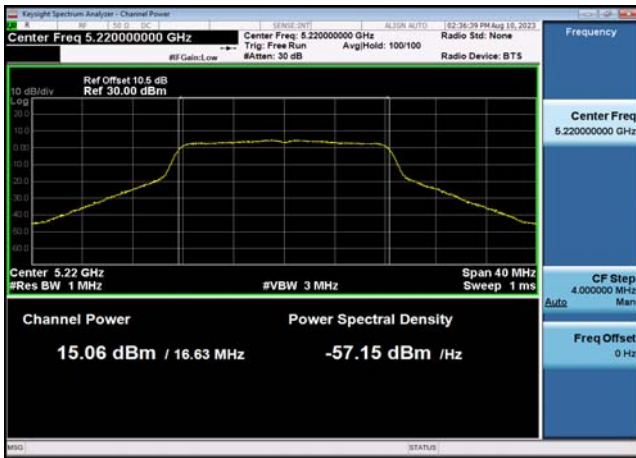
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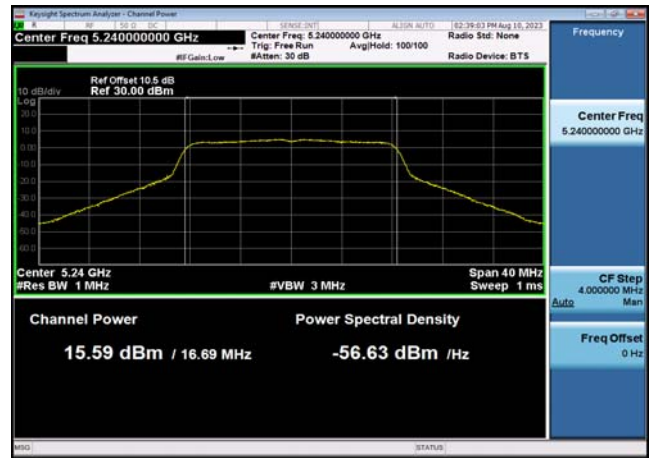
U-NII-1 Output Power-802.11a(20MHz)  
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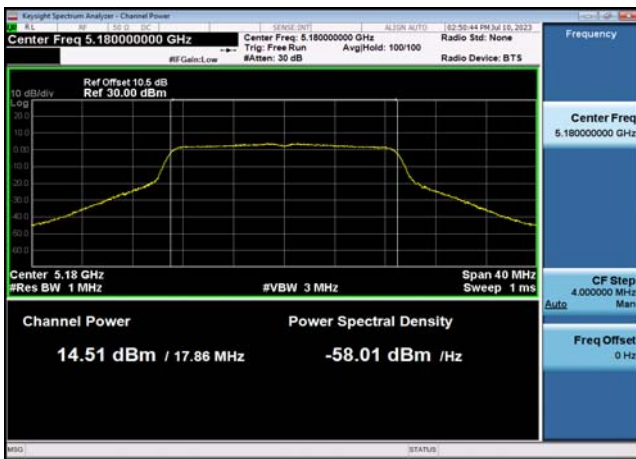
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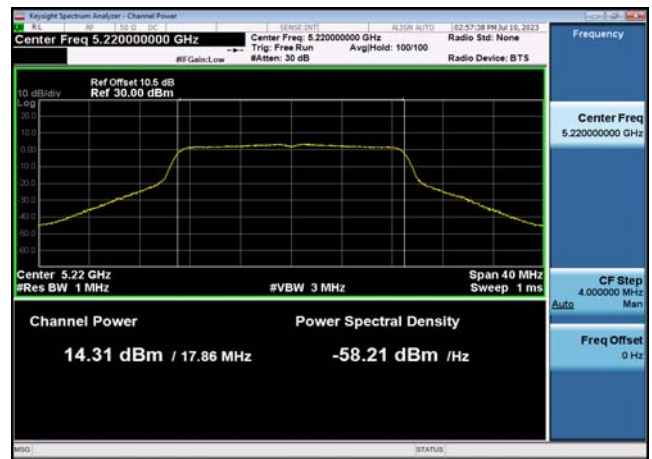
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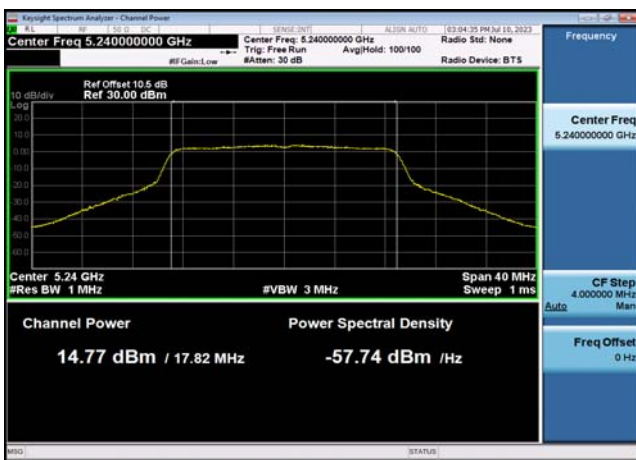
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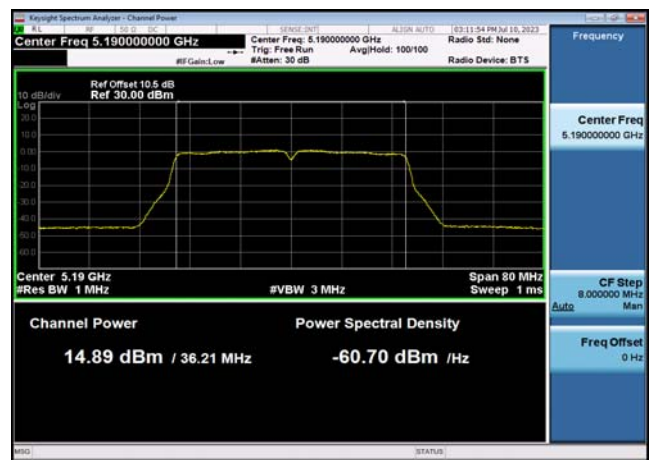
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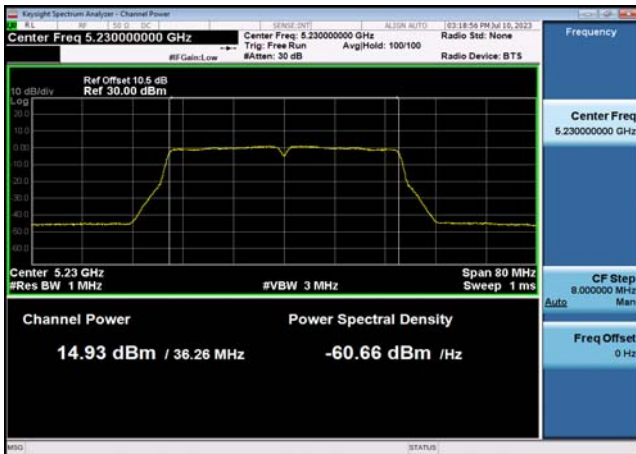
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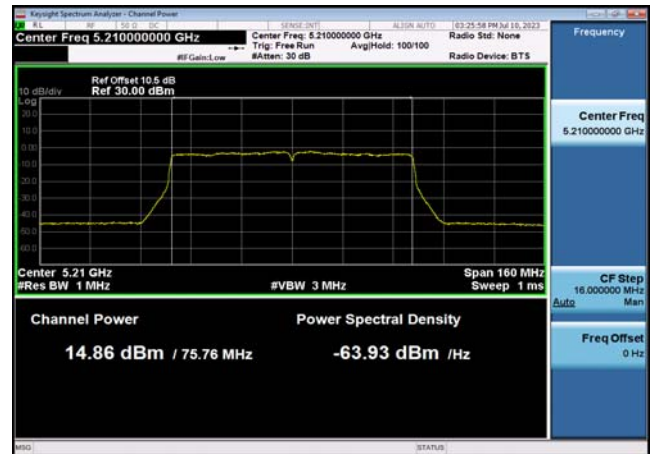
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U-NII-1 Output Power-802.11ac(40MHz)  
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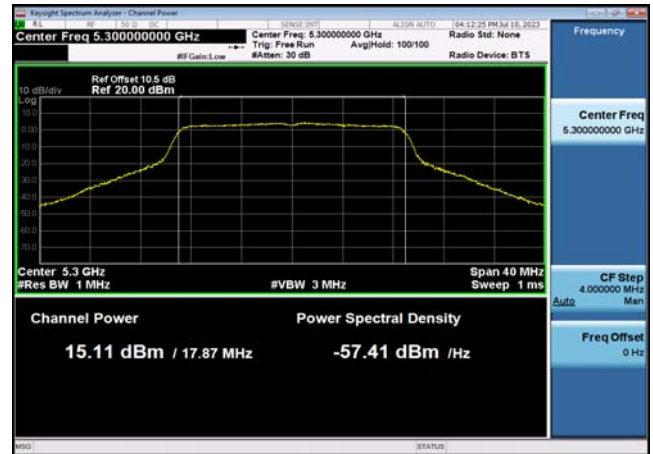
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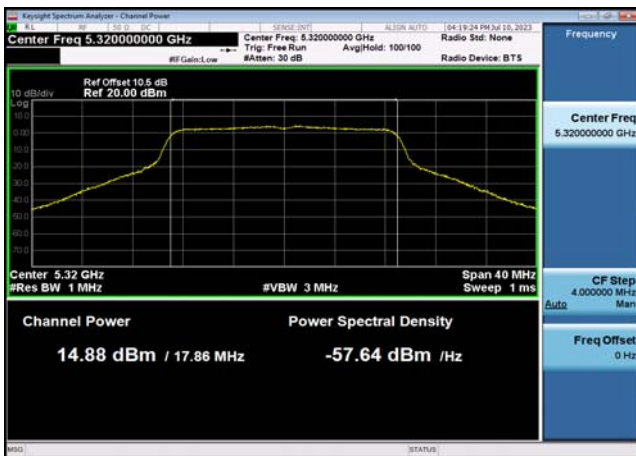
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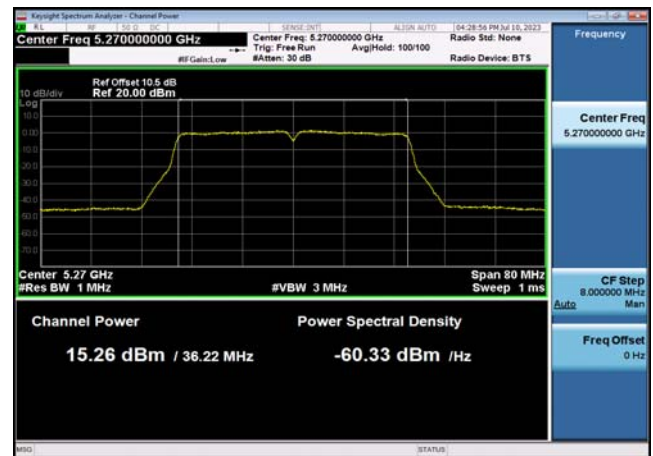
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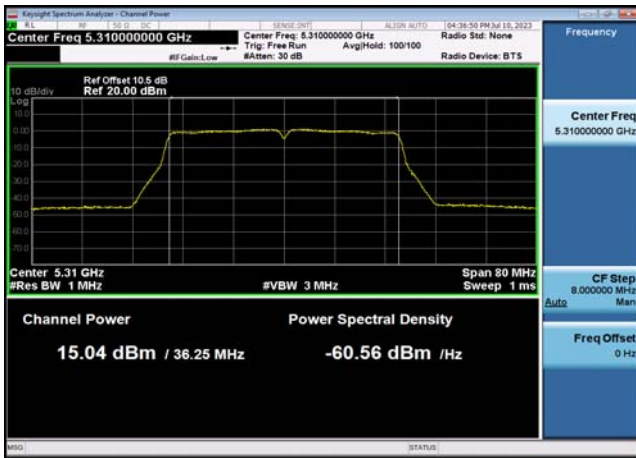
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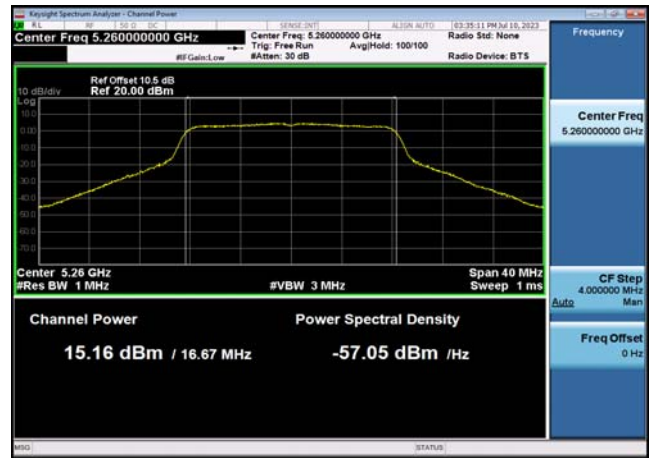
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,5310MHz,Ant1



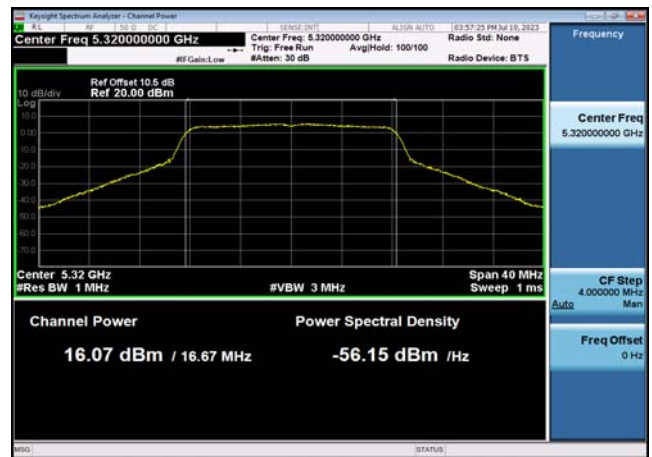
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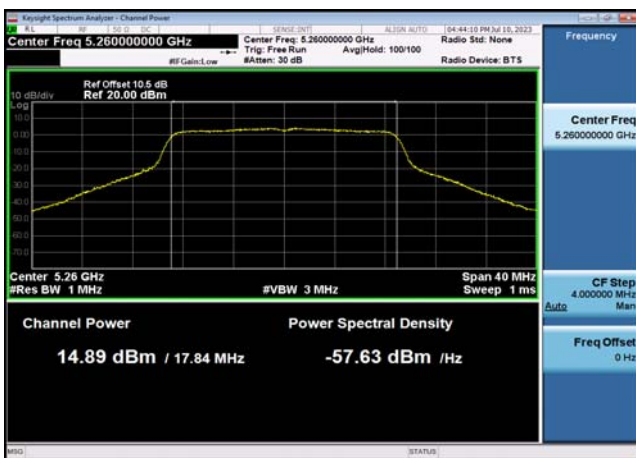
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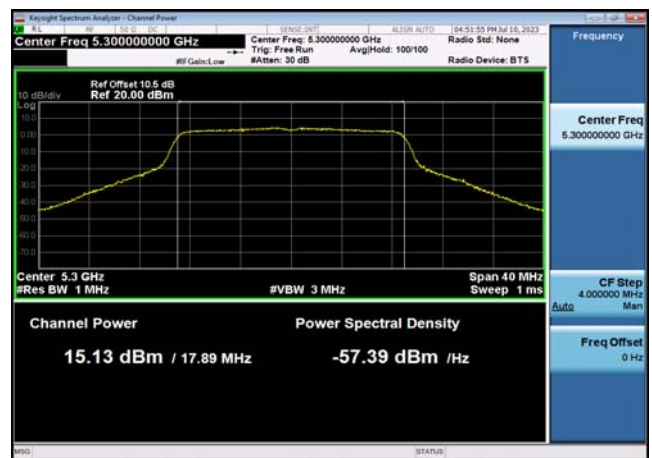
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U-NII-2a Output Power-802.11ac(20MHz)  
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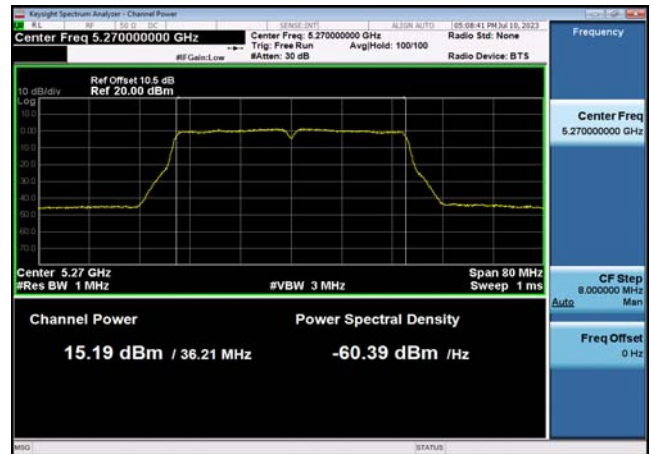




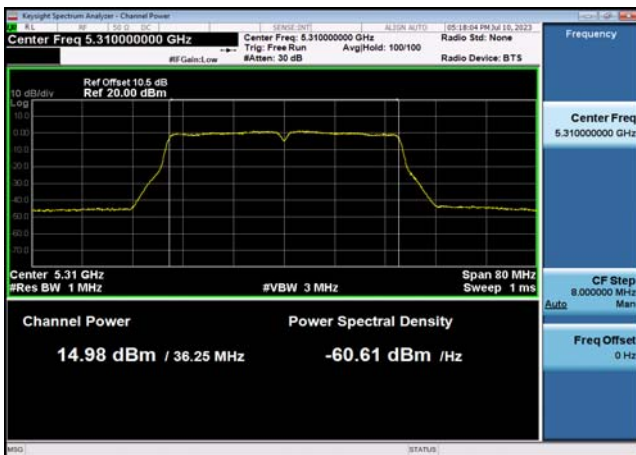
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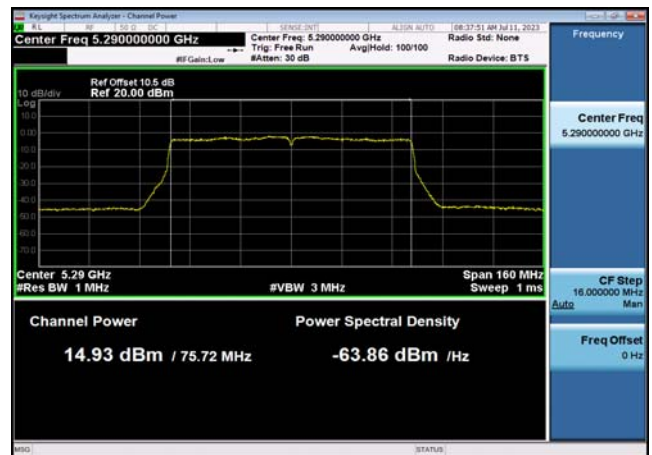
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U-NII-2a Output Power-802.11ac(40MHz)  
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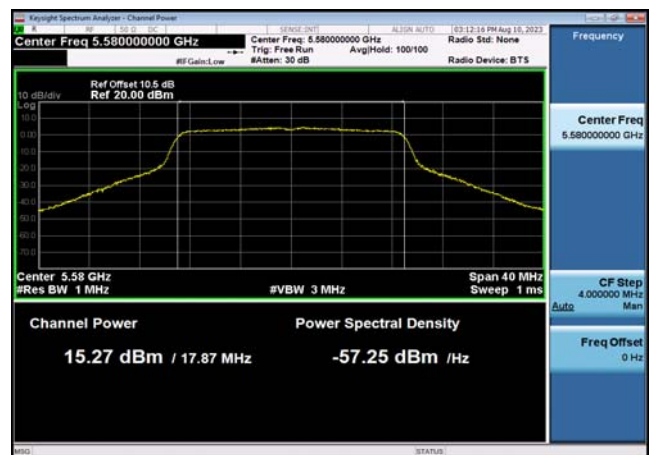
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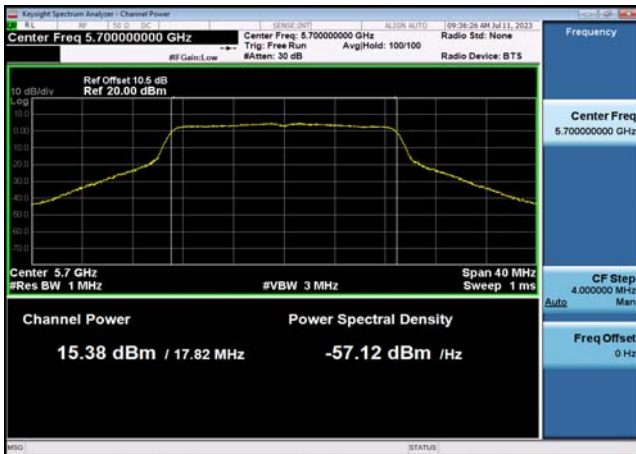
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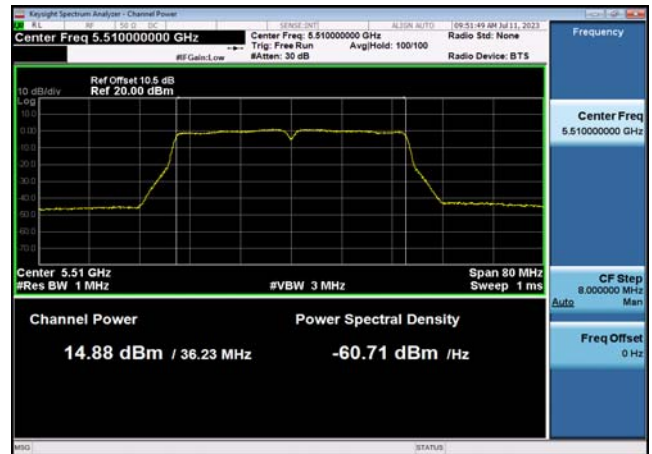
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U-NII-2c Output Power-802.11n(20MHz)  
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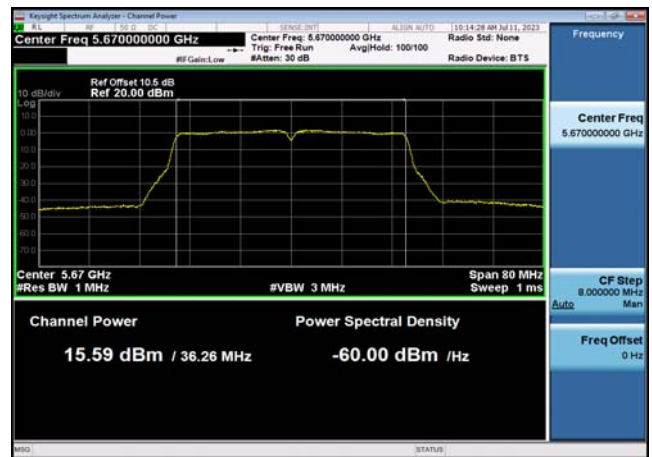
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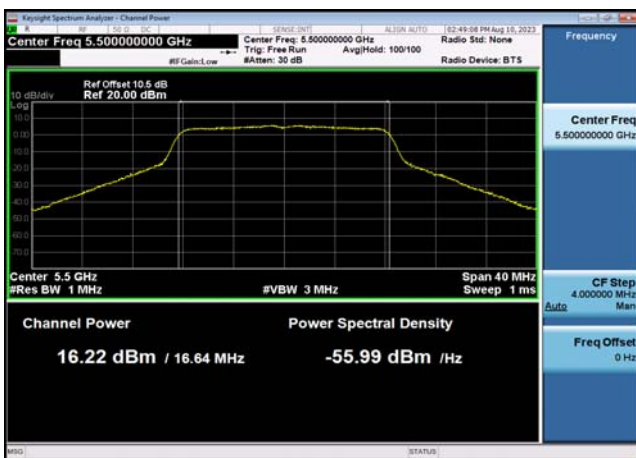
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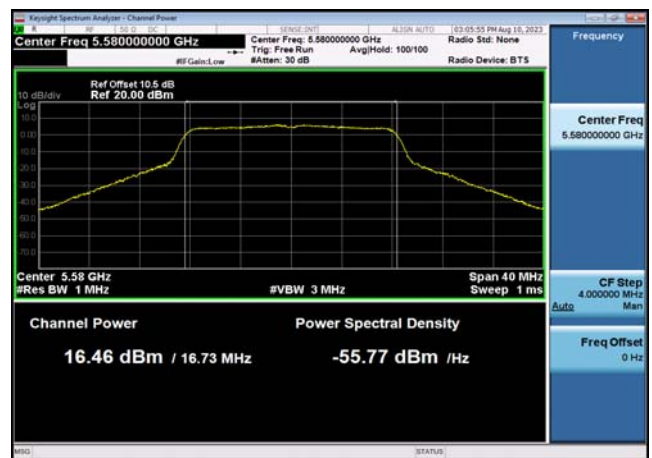
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U-NII-2c Output Power-802.11a(20MHz)  
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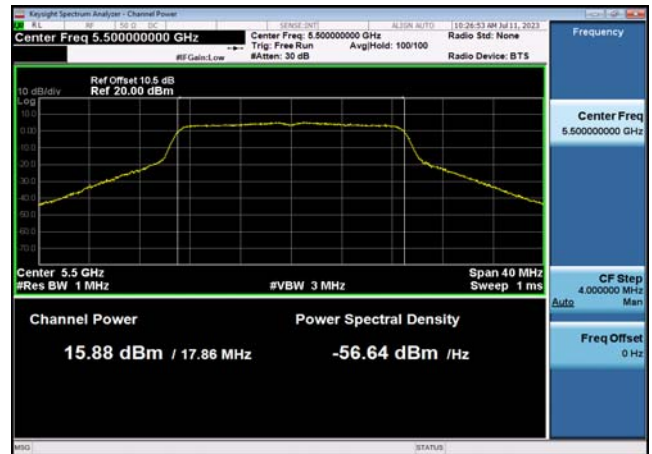
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U-NII-2c Output Power-802.11a(20MHz)  
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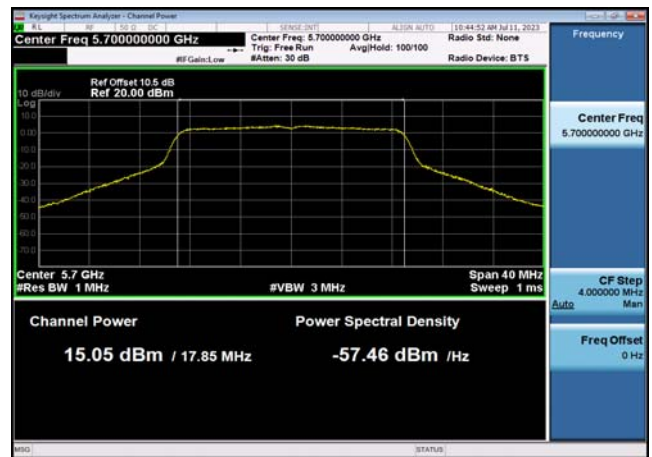
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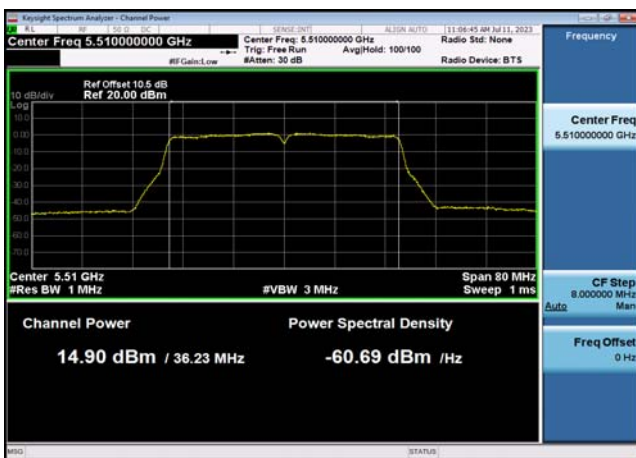
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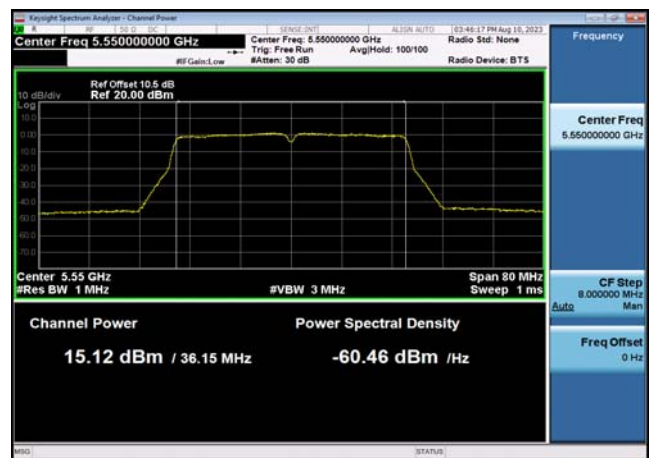
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U-NII-2c Output Power-802.11ac(40MHz)  
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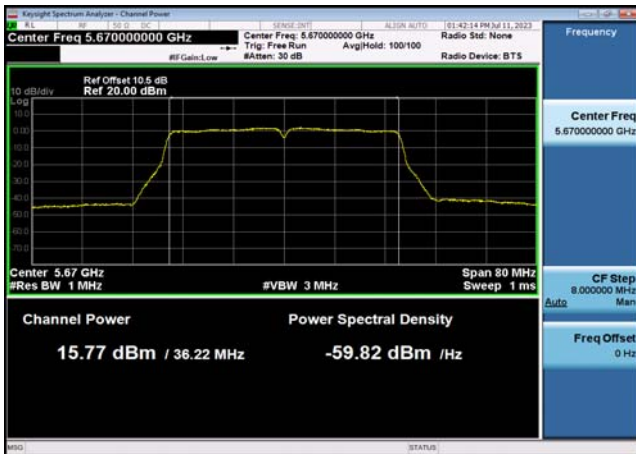


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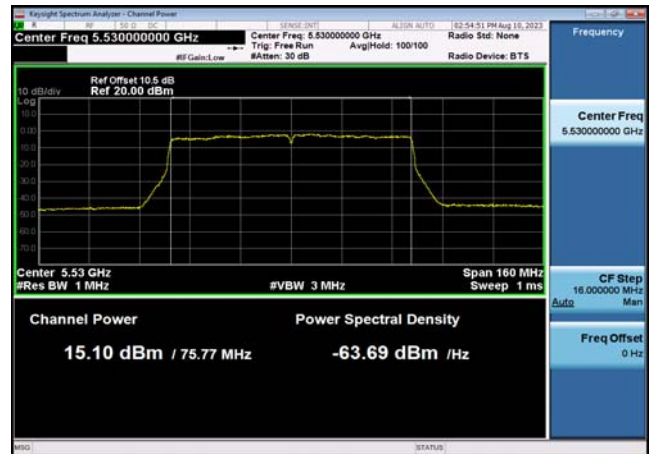




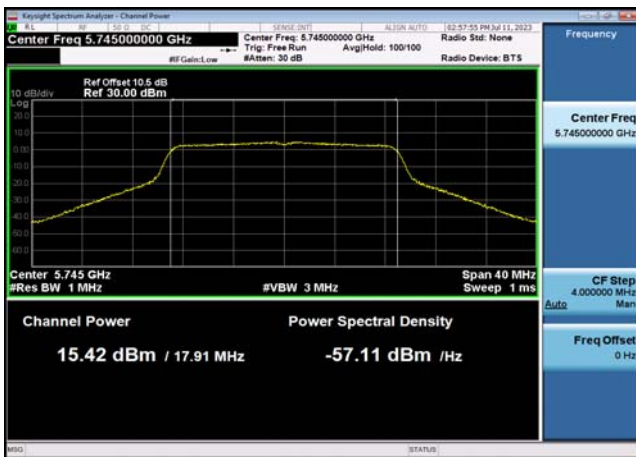
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U-NII-2c Output Power-802.11ac(80MHz)  
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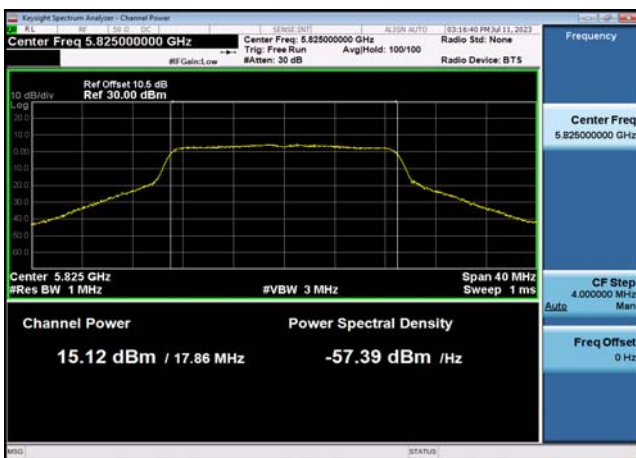
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,5745MHz,Ant1



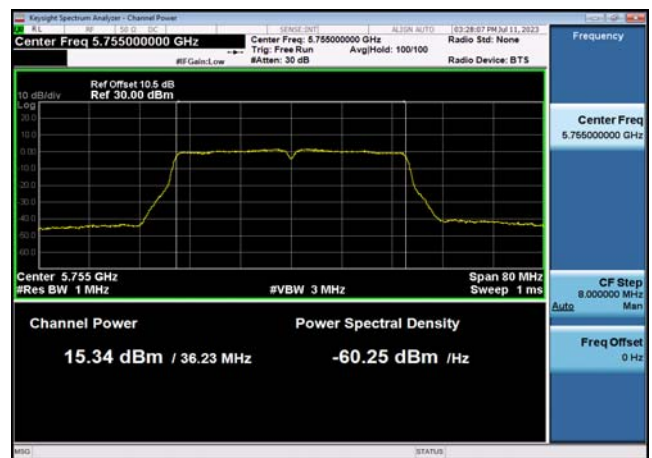
U-NII-3 Output Power-802.11n(20MHz)  
,5785MHz,Ant1



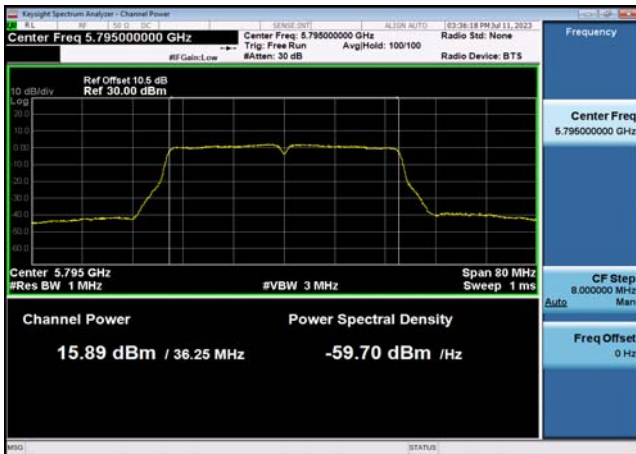
U-NII-3 Output Power-802.11n(20MHz)  
,5825MHz,Ant1



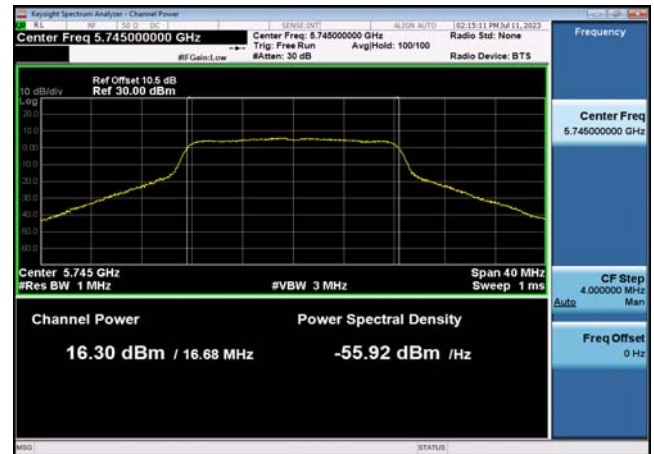
U-NII-3 Output Power-802.11n(40MHz)  
,5755MHz,Ant1



U-NII-3 Output Power-802.11n(40MHz)  
,5795MHz,Ant1



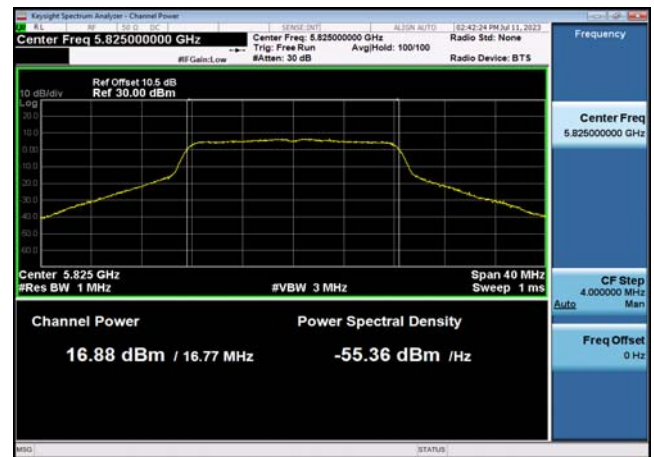
U-NII-3 Output Power-802.11a(20MHz)  
,5745MHz,Ant1



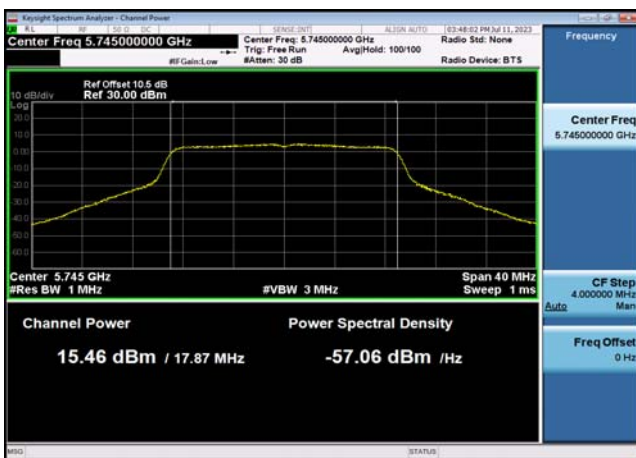
U-NII-3 Output Power-802.11a(20MHz)  
,5785MHz,Ant1



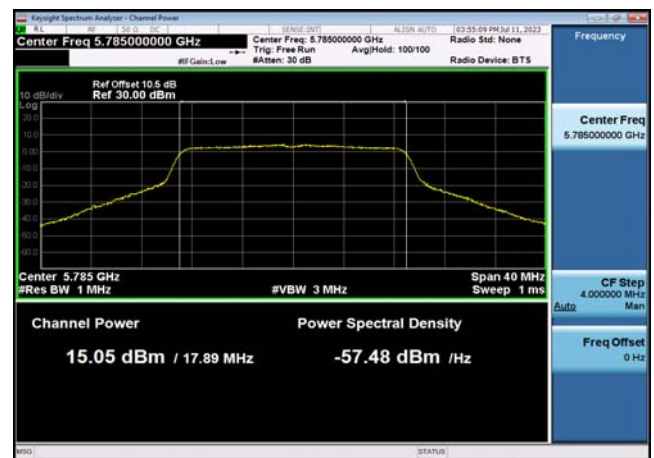
U-NII-3 Output Power-802.11a(20MHz)  
,5825MHz,Ant1



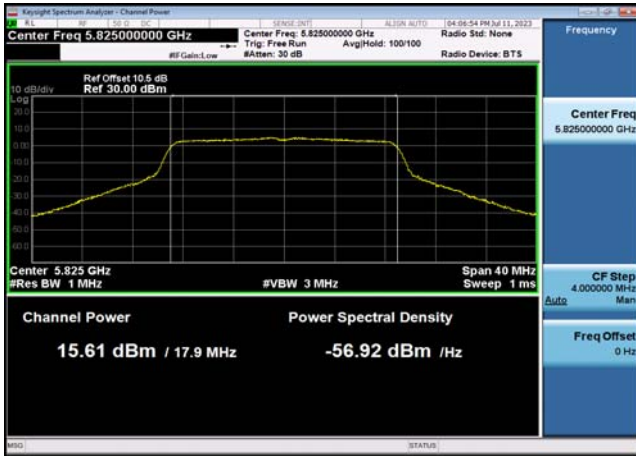
U-NII-3 Output Power-802.11ac(20MHz)  
,5745MHz,Ant1



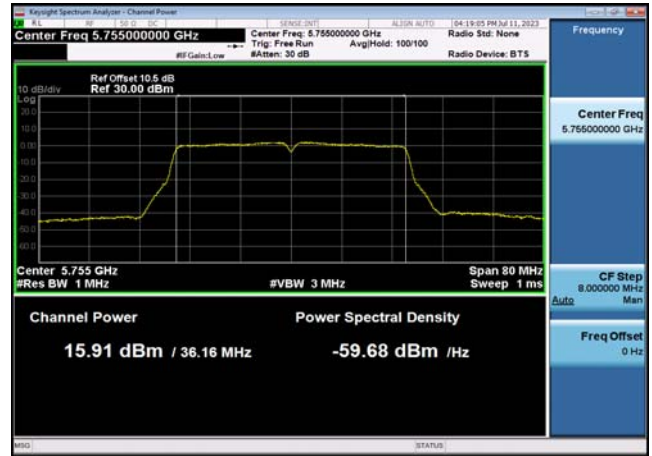
U-NII-3 Output Power-802.11ac(20MHz)  
,5785MHz,Ant1



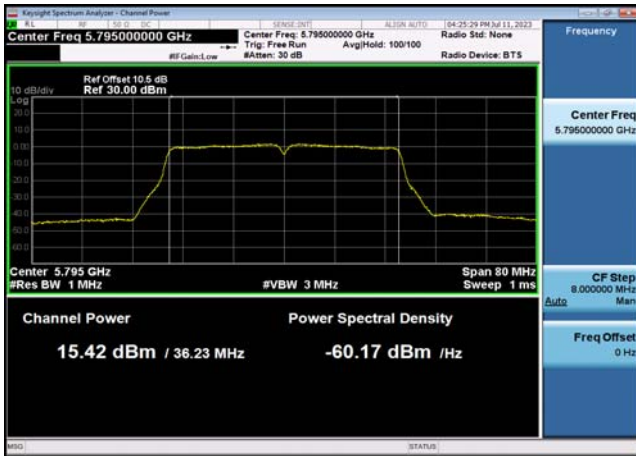
U-NII-3 Output Power-802.11ac(20MHz)  
,5825MHz,Ant1



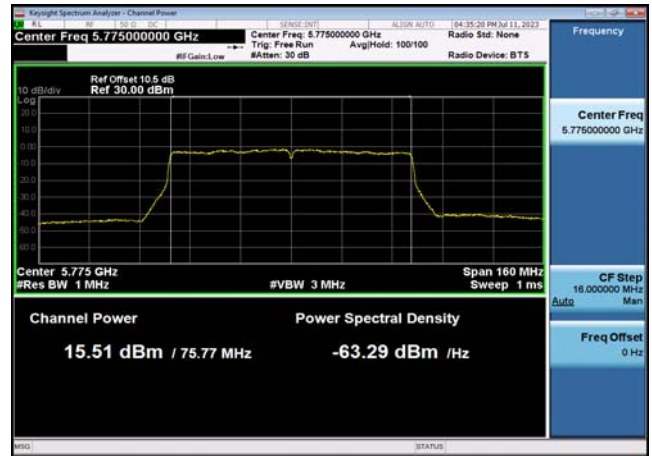
U-NII-3 Output Power-802.11ac(40MHz)  
,5755MHz,Ant1



U-NII-3 Output Power-802.11ac(40MHz)  
,5795MHz,Ant1



U-NII-3 Output Power-802.11ac(80MHz)  
,5775MHz,Ant1



**AVGSA Power Spectral Density****Test Result and Data**

U-NII-1 AVGSA Power Spectral Density						
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	EIRP PSD (dBm/1MHz)	FCC Limit (dBm/1MHz)	IC EIRP Limit (dBm/1MHz)	Result
802.11n (20MHz)	5180	3.668	6.10	11	10	Pass
802.11n (20MHz)	5220	3.536	5.97	11	10	Pass
802.11n (20MHz)	5240	4.179	6.61	11	10	Pass
802.11n (40MHz)	5190	1.003	3.43	11	10	Pass
802.11n (40MHz)	5230	1.363	3.79	11	10	Pass
802.11ac (20MHz)	5180	3.724	6.15	11	10	Pass
802.11ac (20MHz)	5220	3.691	6.12	11	10	Pass
802.11ac (20MHz)	5240	4.006	6.44	11	10	Pass
802.11ac (40MHz)	5190	1.158	3.59	11	10	Pass
802.11ac (40MHz)	5230	1.105	3.54	11	10	Pass
802.11ac (80MHz)	5210	-1.884	0.55	11	10	Pass
802.11a (20MHz)	5180	4.014	6.44	11	10	Pass
802.11a (20MHz)	5220	4.019	6.45	11	10	Pass
802.11a (20MHz)	5240	4.402	6.83	11	10	Pass

Note: EIRP PSD = PSD + Ant Gain.



U-NII-2a AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5260	4.754	11	Pass
802.11n (20MHz)	5300	4.617	11	Pass
802.11n (20MHz)	5320	4.766	11	Pass
802.11n (40MHz)	5270	2.219	11	Pass
802.11n (40MHz)	5310	1.731	11	Pass
802.11ac (20MHz)	5260	4.696	11	Pass
802.11ac (20MHz)	5300	4.695	11	Pass
802.11ac (20MHz)	5320	4.810	11	Pass
802.11ac (40MHz)	5270	1.781	11	Pass
802.11ac (40MHz)	5310	1.611	11	Pass
802.11ac (80MHz)	5290	-1.279	11	Pass
802.11a (20MHz)	5260	5.079	11	Pass
802.11a (20MHz)	5300	5.453	11	Pass
802.11a (20MHz)	5320	6.116	11	Pass



U-NII-2c AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5500	4.618	11	Pass
802.11n (20MHz)	5580	4.828	11	Pass
802.11n (20MHz)	5700	4.634	11	Pass
802.11n (40MHz)	5510	1.464	11	Pass
802.11n (40MHz)	5550	2.111	11	Pass
802.11n (40MHz)	5670	2.151	11	Pass
802.11ac (20MHz)	5500	5.430	11	Pass
802.11ac (20MHz)	5580	5.315	11	Pass
802.11ac (20MHz)	5700	4.486	11	Pass
802.11ac (40MHz)	5510	1.490	11	Pass
802.11ac (40MHz)	5550	1.265	11	Pass
802.11ac (40MHz)	5670	2.535	11	Pass
802.11ac (80MHz)	5530	-2.352	11	Pass
802.11a (20MHz)	5500	6.402	11	Pass
802.11a (20MHz)	5580	6.654	11	Pass
802.11a (20MHz)	5700	6.144	11	Pass



U-NII-3 AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/510kHz)	Limit (dBm/510kHz)	Result
802.11n (20MHz)	5745	2.386	30	Pass
802.11n (20MHz)	5785	1.730	30	Pass
802.11n (20MHz)	5825	1.972	30	Pass
802.11n (40MHz)	5755	-0.739	30	Pass
802.11n (40MHz)	5795	-0.367	30	Pass
802.11ac (20MHz)	5745	2.047	30	Pass
802.11ac (20MHz)	5785	1.803	30	Pass
802.11ac (20MHz)	5825	2.292	30	Pass
802.11ac (40MHz)	5755	-0.457	30	Pass
802.11ac (40MHz)	5795	-0.392	30	Pass
802.11ac (80MHz)	5775	-3.707	30	Pass
802.11a (20MHz)	5745	3.365	30	Pass
802.11a (20MHz)	5785	3.592	30	Pass
802.11a (20MHz)	5825	4.285	30	Pass



### Test Plots

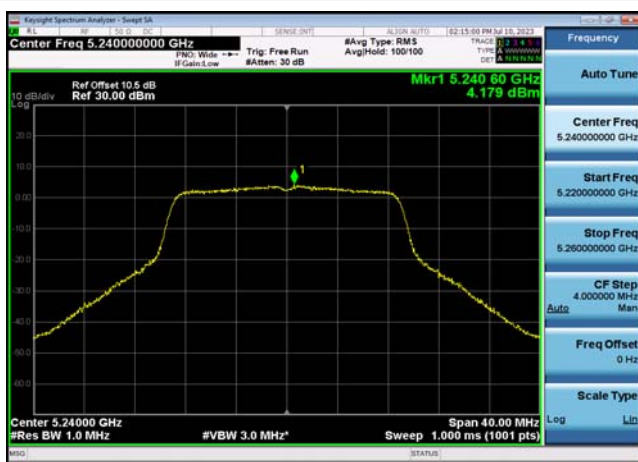
U-NII-1 Power spectral density-802.11  
n(20MHz),5180MHz,Ant1



U-NII-1 Power spectral density-802.11  
n(20MHz),5220MHz,Ant1



U-NII-1 Power spectral density-802.11  
n(20MHz),5240MHz,Ant1



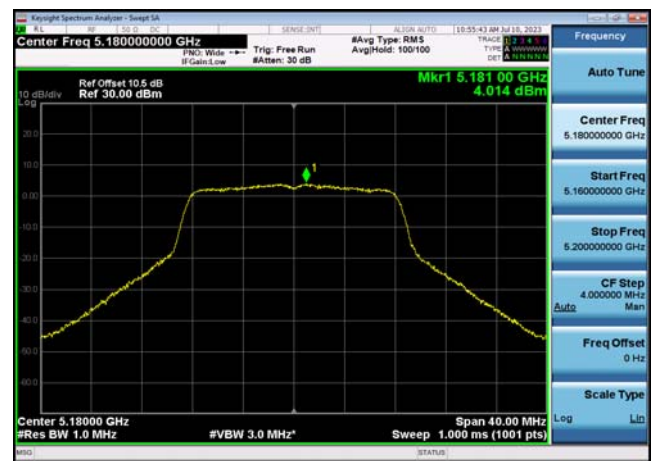
U-NII-1 Power spectral density-802.11  
n(40MHz),5190MHz,Ant1



U-NII-1 Power spectral density-802.11  
n(40MHz),5230MHz,Ant1



U-NII-1 Power spectral density-802.11  
a(20MHz),5180MHz,Ant1

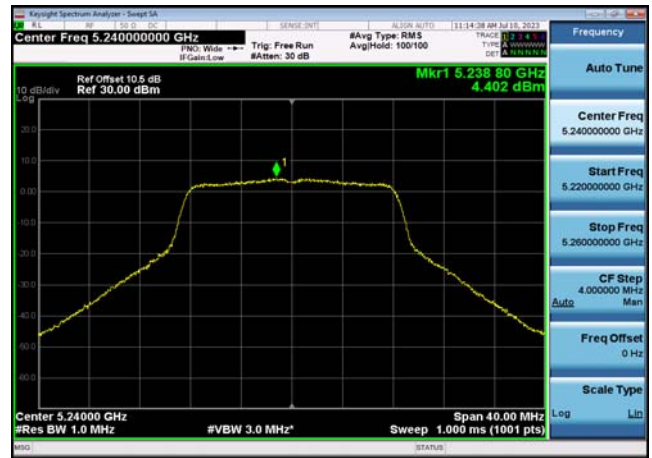




U-NII-1 Power spectral density-802.11  
a(20MHz),5220MHz,Ant1



U-NII-1 Power spectral density-802.11  
a(20MHz),5240MHz,Ant1



U-NII-1 Power spectral density-802.11  
ac(20MHz),5180MHz,Ant1



U-NII-1 Power spectral density-802.11  
ac(20MHz),5220MHz,Ant1



U-NII-1 Power spectral density-802.11  
ac(20MHz),5240MHz,Ant1



U-NII-1 Power spectral density-802.11  
ac(40MHz),5190MHz,Ant1



U-NII-1 Power spectral density-802.11  
ac(40MHz),5230MHz,Ant1



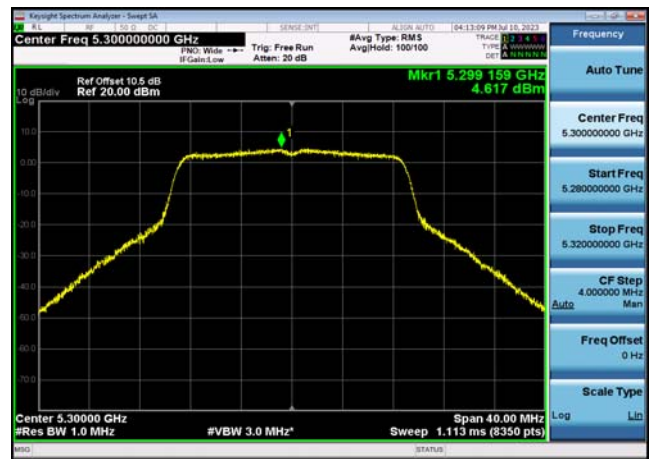
U-NII-1 Power spectral density-802.11  
ac(80MHz),5210MHz,Ant1



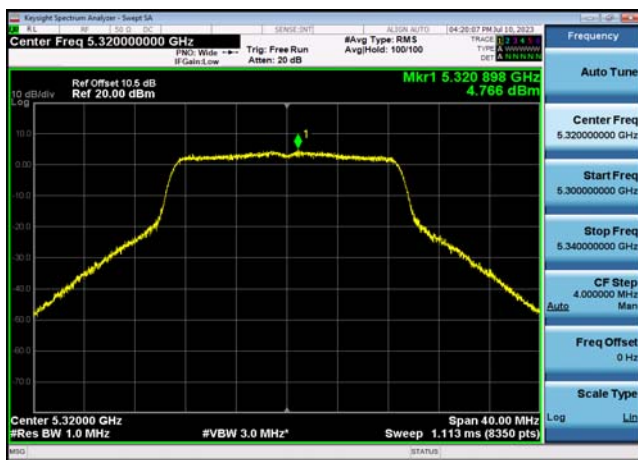
U-NII-2a Power spectral density-802.1  
1n(20MHz),5260MHz,Ant1



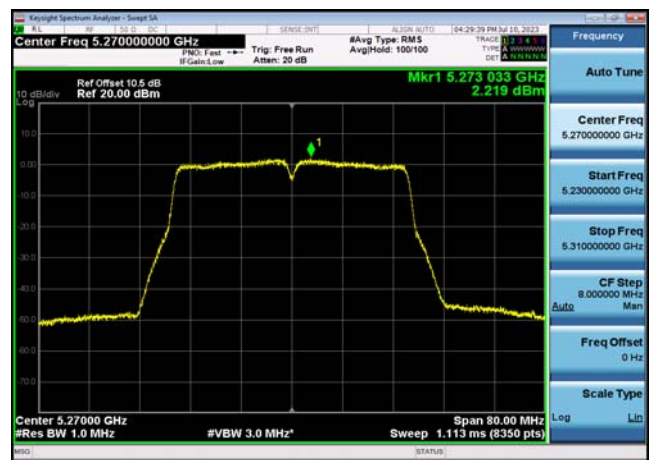
U-NII-2a Power spectral density-802.1  
1n(20MHz),5300MHz,Ant1



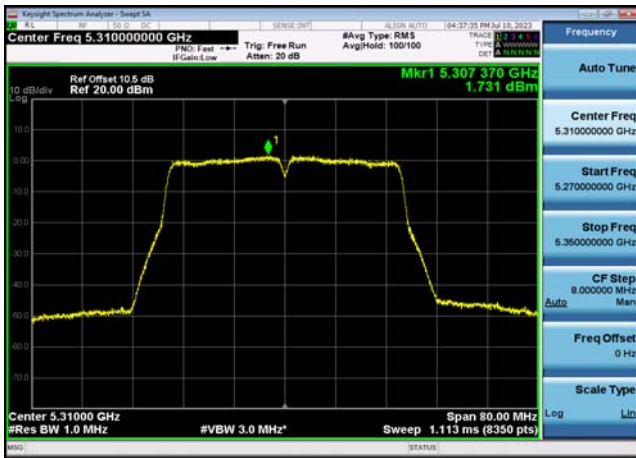
U-NII-2a Power spectral density-802.1  
1n(20MHz),5320MHz,Ant1



U-NII-2a Power spectral density-802.1  
1n(40MHz),5270MHz,Ant1



U-NII-2a Power spectral density-802.1  
1n(40MHz),5310MHz,Ant1



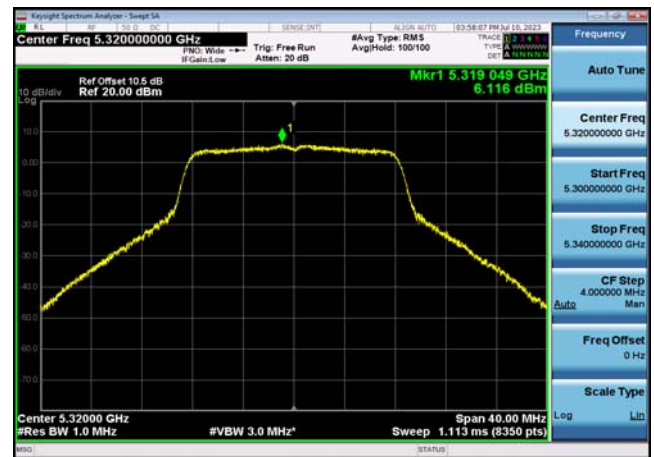
U-NII-2a Power spectral density-802.1  
1a(20MHz),5260MHz,Ant1



U-NII-2a Power spectral density-802.1  
1a(20MHz),5300MHz,Ant1



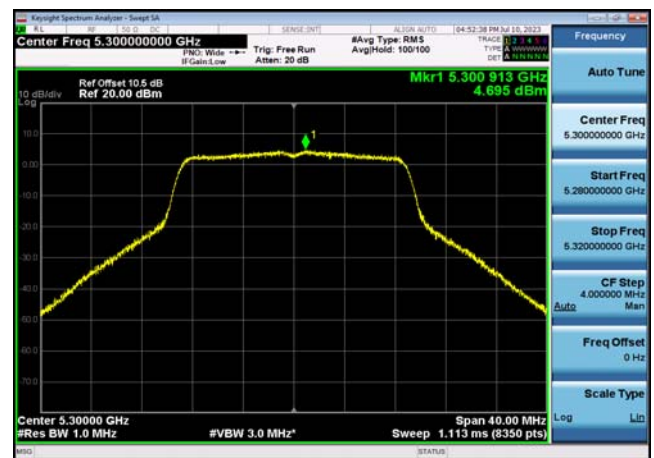
U-NII-2a Power spectral density-802.1  
1a(20MHz),5320MHz,Ant1



U-NII-2a Power spectral density-802.1  
1ac(20MHz),5260MHz,Ant1



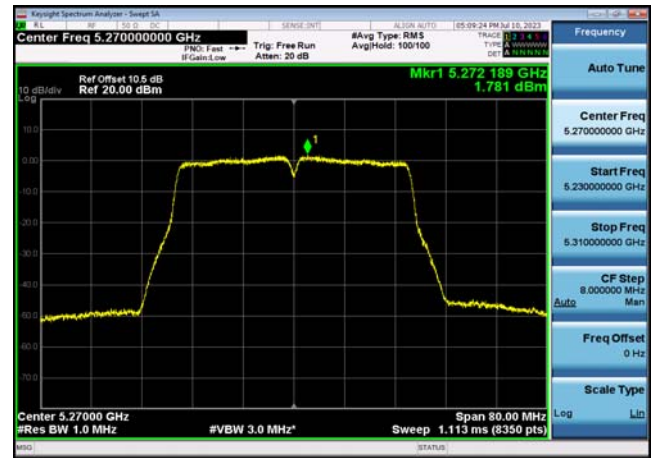
U-NII-2a Power spectral density-802.1  
1ac(20MHz),5300MHz,Ant1



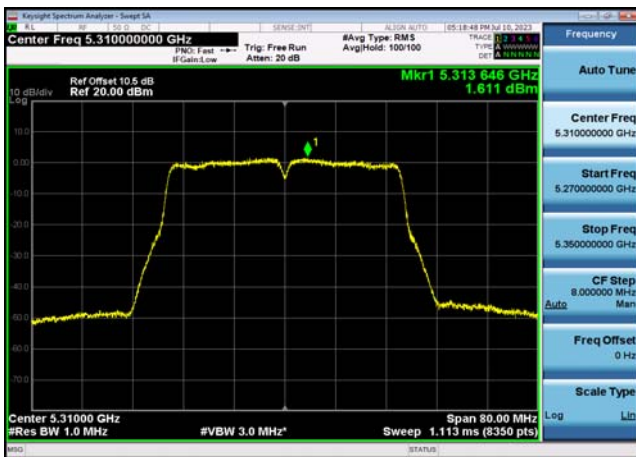
U-NII-2a Power spectral density-802.1  
1ac(20MHz),5320MHz,Ant1



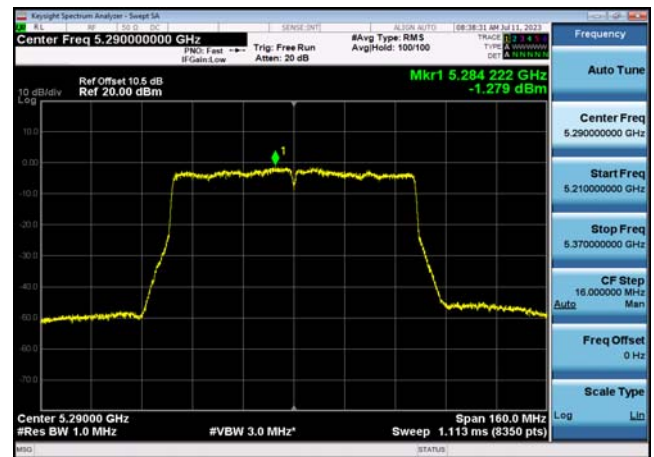
U-NII-2a Power spectral density-802.1  
1ac(40MHz),5270MHz,Ant1



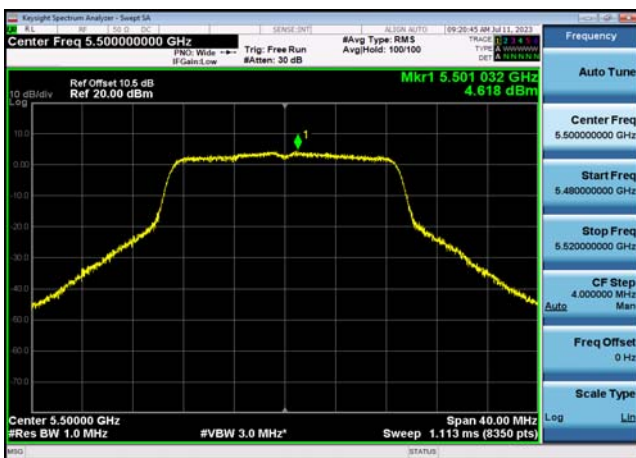
U-NII-2a Power spectral density-802.1  
1ac(40MHz),5310MHz,Ant1



U-NII-2a Power spectral density-802.1  
1ac(80MHz),5290MHz,Ant1



U-NII-2c Power spectral density-802.1  
1n(20MHz),5500MHz,Ant1



U-NII-2c Power spectral density-802.1  
1n(20MHz),5580MHz,Ant1

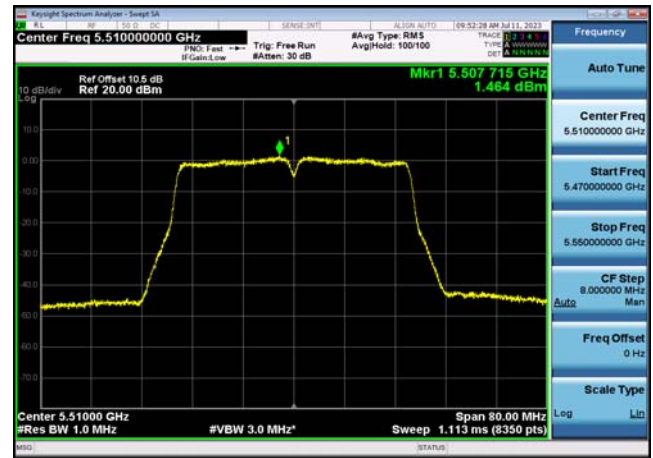




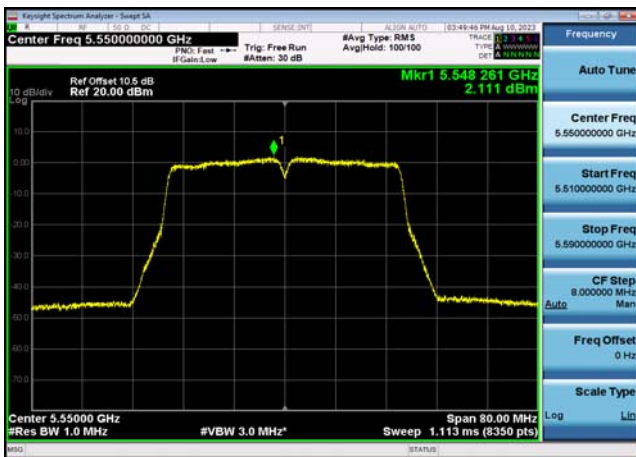
U-NII-2c Power spectral density-802.1  
1n(20MHz),5700MHz,Ant1



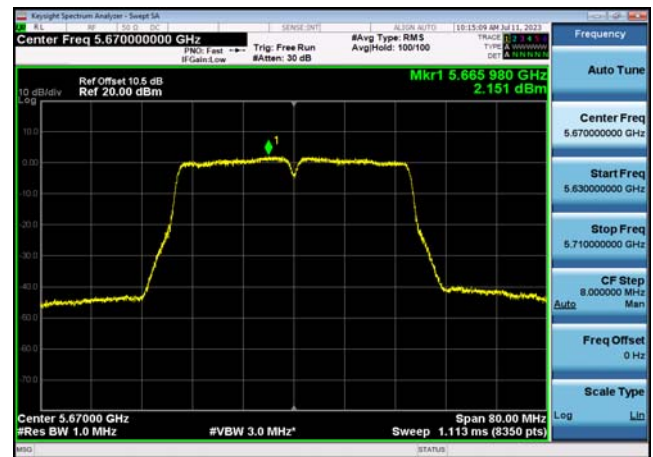
U-NII-2c Power spectral density-802.1  
1n(40MHz),5510MHz,Ant1



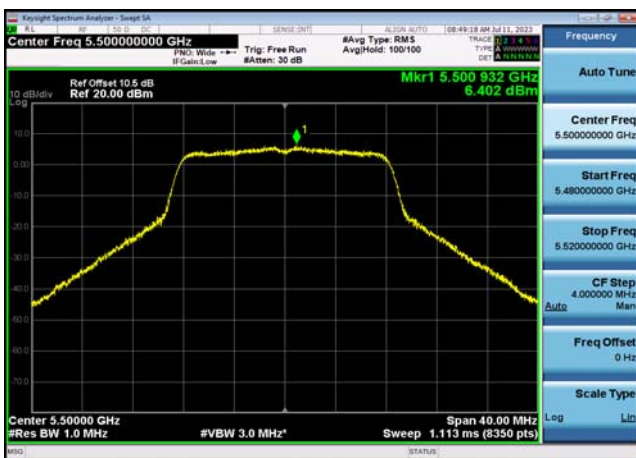
U-NII-2c Power spectral density-802.1  
1n(40MHz),5550MHz,Ant1



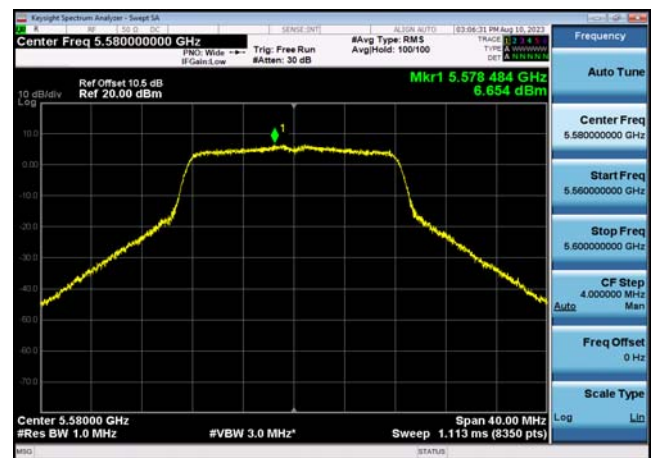
U-NII-2c Power spectral density-802.1  
1n(40MHz),5670MHz,Ant1



U-NII-2c Power spectral density-802.1  
1a(20MHz),5500MHz,Ant1



U-NII-2c Power spectral density-802.1  
1a(20MHz),5580MHz,Ant1



U-NII-2c Power spectral density-802.1  
1a(20MHz),5700MHz,Ant1



U-NII-2c Power spectral density-802.1  
1ac(20MHz),5500MHz,Ant1



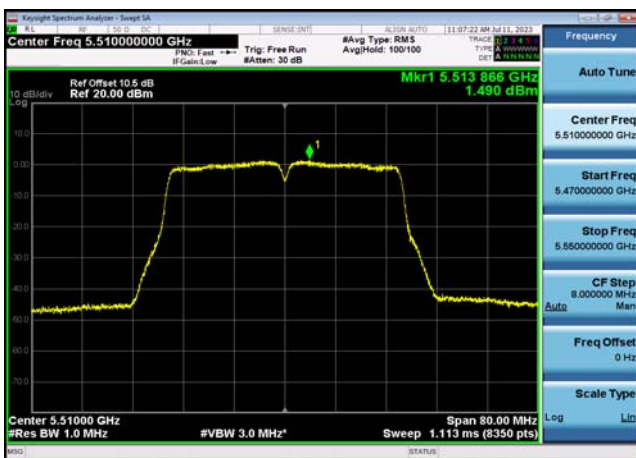
U-NII-2c Power spectral density-802.1  
1ac(20MHz),5580MHz,Ant1



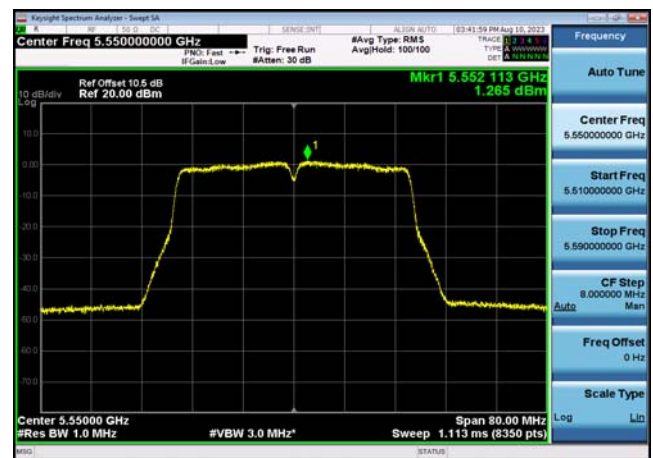
U-NII-2c Power spectral density-802.1  
1ac(20MHz),5700MHz,Ant1



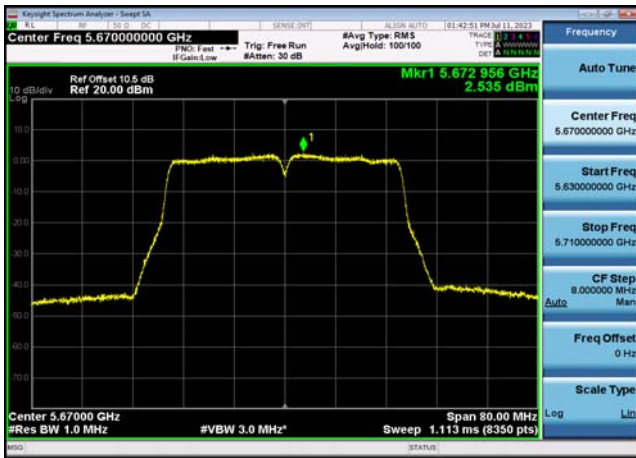
U-NII-2c Power spectral density-802.1  
1ac(40MHz),5510MHz,Ant1



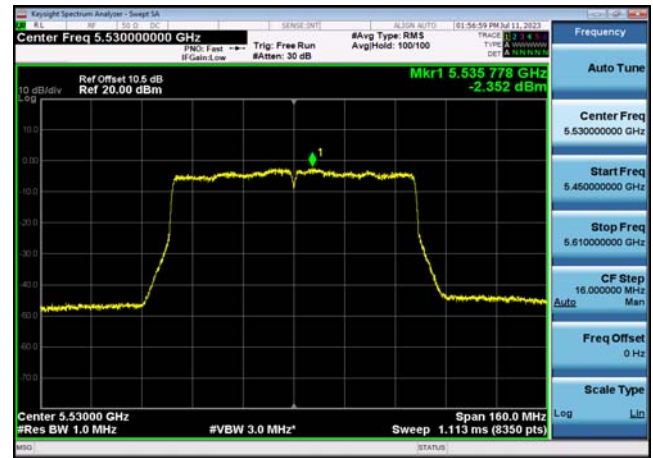
U-NII-2c Power spectral density-802.1  
1ac(40MHz),5550MHz,Ant1



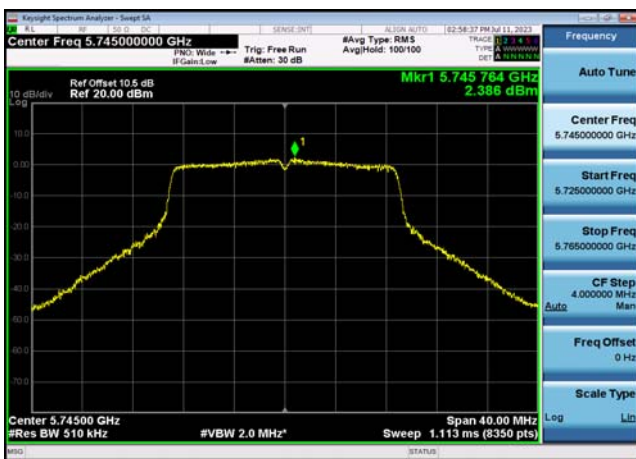
U-NII-2c Power spectral density-802.1  
1ac(40MHz),5670MHz,Ant1



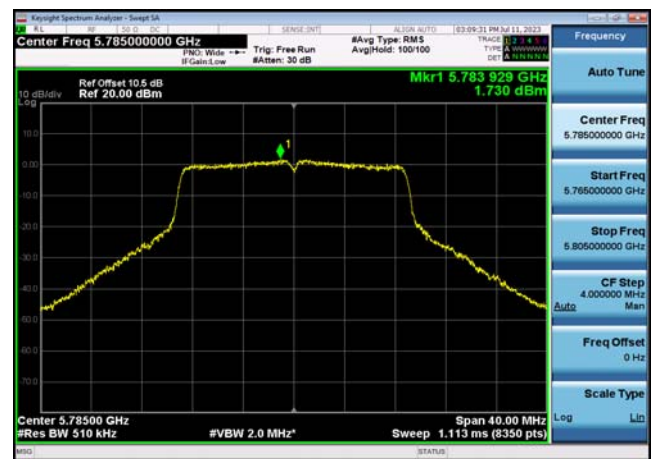
U-NII-2c Power spectral density-802.1  
1ac(80MHz),5530MHz,Ant1



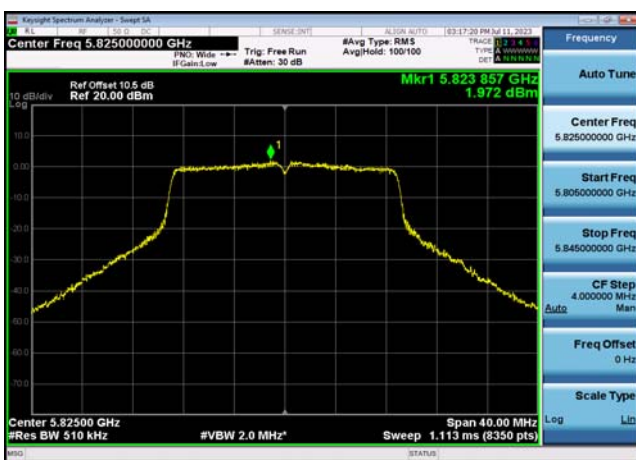
U-NII-3 Power spectral density-802.11  
n(20MHz),5745MHz,Ant1



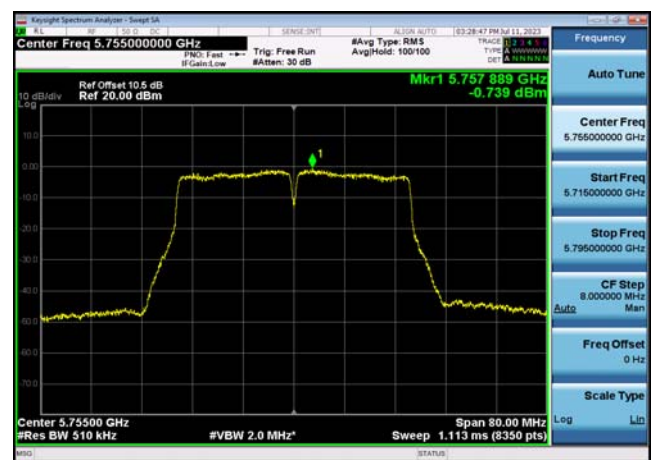
U-NII-3 Power spectral density-802.11  
n(20MHz),5785MHz,Ant1



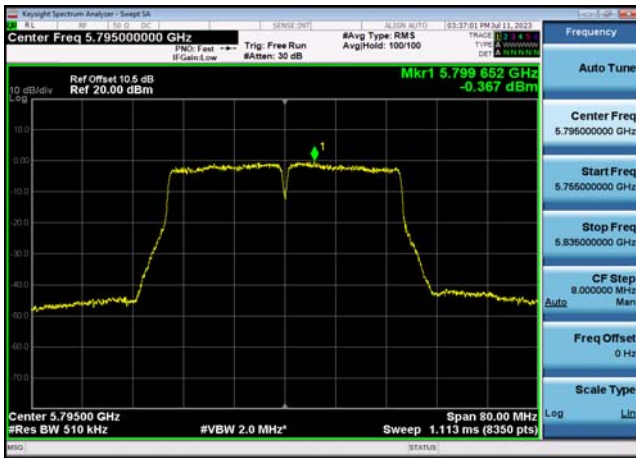
U-NII-3 Power spectral density-802.11  
n(20MHz),5825MHz,Ant1



U-NII-3 Power spectral density-802.11  
n(40MHz),5755MHz,Ant1



U-NII-3 Power spectral density-802.11  
n(40MHz),5795MHz,Ant1



U-NII-3 Power spectral density-802.11  
a(20MHz),5745MHz,Ant1



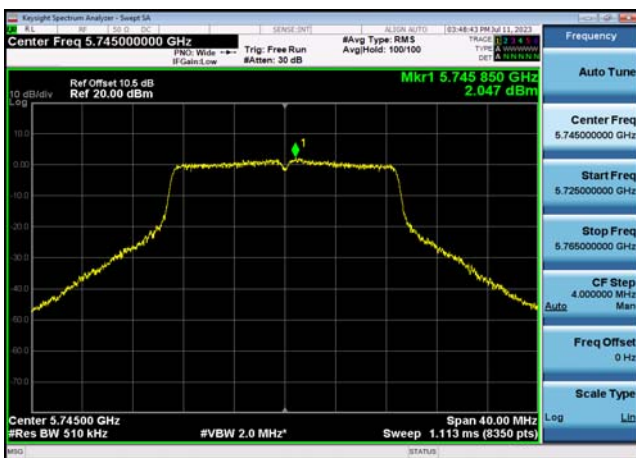
U-NII-3 Power spectral density-802.11  
a(20MHz),5785MHz,Ant1



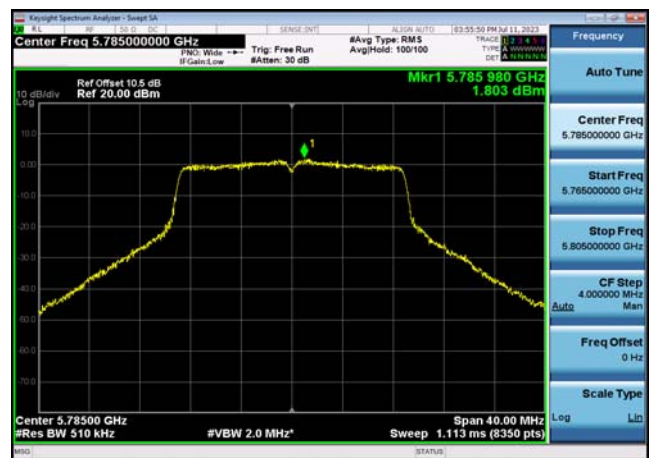
U-NII-3 Power spectral density-802.11  
a(20MHz),5825MHz,Ant1



U-NII-3 Power spectral density-802.11  
ac(20MHz),5745MHz,Ant1



U-NII-3 Power spectral density-802.11  
ac(20MHz),5785MHz,Ant1



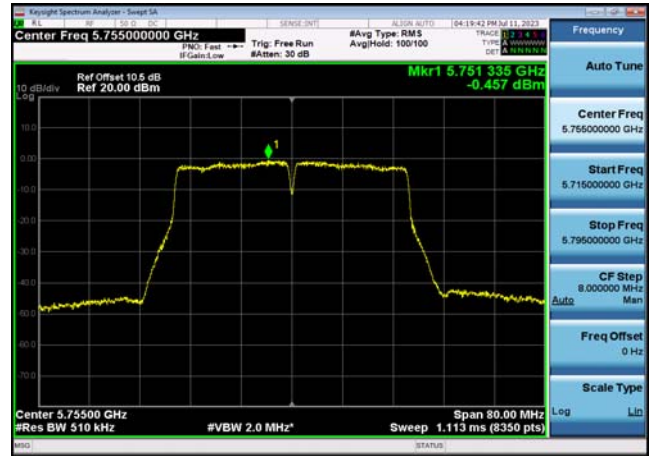




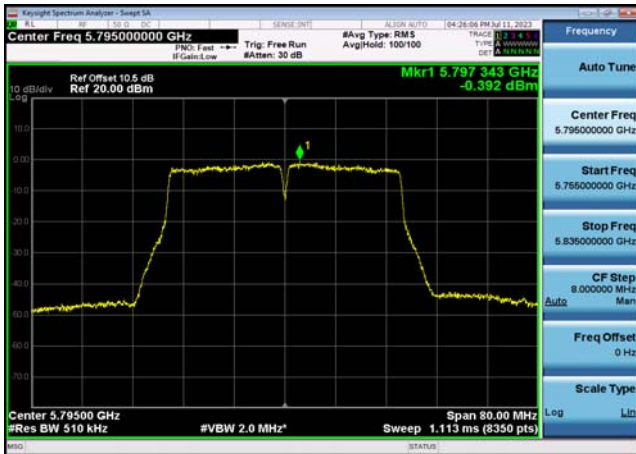
U-NII-3 Power spectral density-802.11  
ac(20MHz),5825MHz,Ant1



U-NII-3 Power spectral density-802.11  
ac(40MHz),5755MHz,Ant1



U-NII-3 Power spectral density-802.11  
ac(40MHz),5795MHz,Ant1



U-NII-3 Power spectral density-802.11  
ac(80MHz),5775MHz,Ant1



**99% Occupied Bandwidth and 26dB Emission Bandwidth  
Test Result and Data**

U-NII-1 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5180	17.883	23.08	Pass
802.11n (20MHz)	5220	17.861	23.04	Pass
802.11n (20MHz)	5240	17.833	22.98	Pass
802.11n (40MHz)	5190	36.231	41.23	Pass
802.11n (40MHz)	5230	36.204	41.77	Pass
802.11ac (20MHz)	5180	17.859	23.41	Pass
802.11ac (20MHz)	5220	17.860	22.85	Pass
802.11ac (20MHz)	5240	17.825	23.02	Pass
802.11ac (40MHz)	5190	36.209	40.98	Pass
802.11ac (40MHz)	5230	36.257	41.20	Pass
802.11ac (80MHz)	5210	75.755	82.91	Pass
802.11a (20MHz)	5180	16.695	22.02	Pass
802.11a (20MHz)	5220	16.630	21.58	Pass
802.11a (20MHz)	5240	16.688	22.38	Pass



U-NII-2a 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5260	17.896	22.99	Pass
802.11n (20MHz)	5300	17.872	22.93	Pass
802.11n (20MHz)	5320	17.859	22.68	Pass
802.11n (40MHz)	5270	36.215	41.53	Pass
802.11n (40MHz)	5310	36.248	41.40	Pass
802.11ac (20MHz)	5260	17.840	23.41	Pass
802.11ac (20MHz)	5300	17.887	22.25	Pass
802.11ac (20MHz)	5320	17.856	23.38	Pass
802.11ac (40MHz)	5270	36.212	41.33	Pass
802.11ac (40MHz)	5310	36.246	41.63	Pass
802.11ac (80MHz)	5290	75.722	83.27	Pass
802.11a (20MHz)	5260	16.673	21.70	Pass
802.11a (20MHz)	5300	16.724	23.30	Pass
802.11a (20MHz)	5320	16.674	23.13	Pass



U-NII-2c 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5500	17.888	22.89	Pass
802.11n (20MHz)	5580	17.871	23.03	Pass
802.11n (20MHz)	5700	17.825	23.44	Pass
802.11n (40MHz)	5510	36.227	41.34	Pass
802.11n (40MHz)	5550	36.253	41.55	Pass
802.11n (40MHz)	5670	36.263	41.04	Pass
802.11ac (20MHz)	5500	17.856	23.50	Pass
802.11ac (20MHz)	5580	17.881	23.28	Pass
802.11ac (20MHz)	5700	17.853	23.28	Pass
802.11ac (40MHz)	5510	36.233	40.93	Pass
802.11ac (40MHz)	5550	36.151	41.33	Pass
802.11ac (40MHz)	5670	36.218	40.83	Pass
802.11ac (80MHz)	5530	75.769	83.50	Pass
802.11a (20MHz)	5500	16.645	21.91	Pass
802.11a (20MHz)	5580	16.727	23.25	Pass
802.11a (20MHz)	5700	16.629	22.82	Pass



U-NII-3 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5745	17.907	23.37	Pass
802.11n (20MHz)	5785	17.864	23.30	Pass
802.11n (20MHz)	5825	17.863	23.61	Pass
802.11n (40MHz)	5755	36.233	41.44	Pass
802.11n (40MHz)	5795	36.249	41.56	Pass
802.11ac (20MHz)	5745	17.870	23.40	Pass
802.11ac (20MHz)	5785	17.890	23.14	Pass
802.11ac (20MHz)	5825	17.905	22.80	Pass
802.11ac (40MHz)	5755	36.162	41.12	Pass
802.11ac (40MHz)	5795	36.230	41.10	Pass
802.11ac (80MHz)	5775	75.771	83.87	Pass
802.11a (20MHz)	5745	16.675	22.81	Pass
802.11a (20MHz)	5785	16.706	24.29	Pass
802.11a (20MHz)	5825	16.774	22.88	Pass

### Test Plots

U-NII-1 26dB&99% Bandwidth-802.11n(20MHz)  
,5180MHz,Ant1



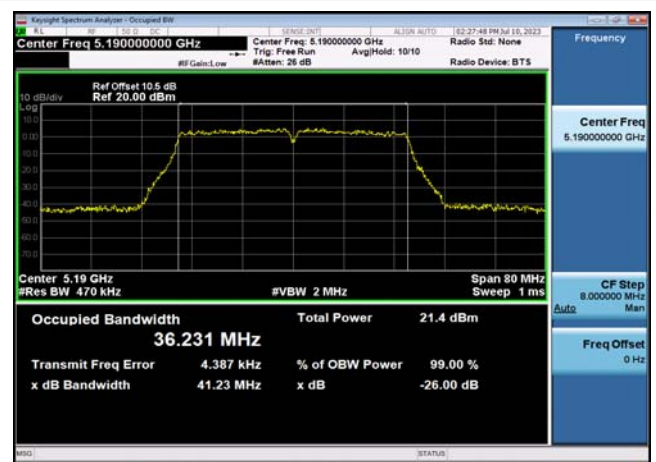
U-NII-1 26dB&99% Bandwidth-802.11n(20MHz)  
,5220MHz,Ant1



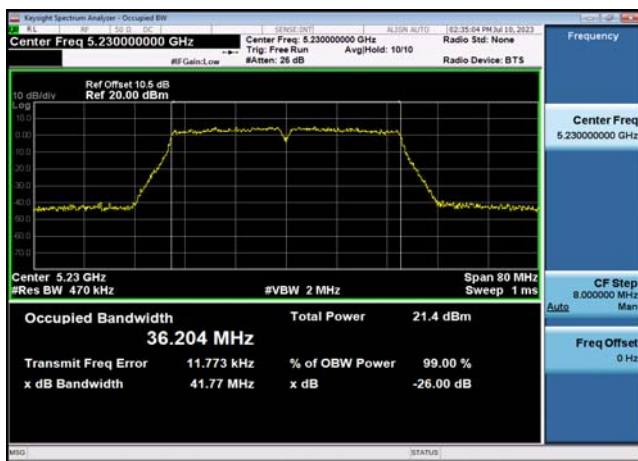
U-NII-1 26dB&99% Bandwidth-802.11n(20MHz)  
,5240MHz,Ant1



U-NII-1 26dB&99% Bandwidth-802.11n(40MHz)  
,5190MHz,Ant1



U-NII-1 26dB&99% Bandwidth-802.11n(40MHz)  
,5230MHz,Ant1



U-NII-1 26dB&99% Bandwidth-802.11a(20MHz)  
,5180MHz,Ant1





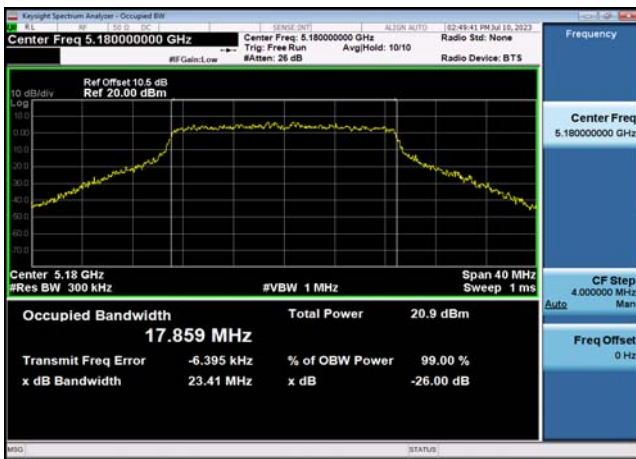
U-NII-1 26dB&99% Bandwidth-802.11a(20MHz)  
,5220MHz,Ant1



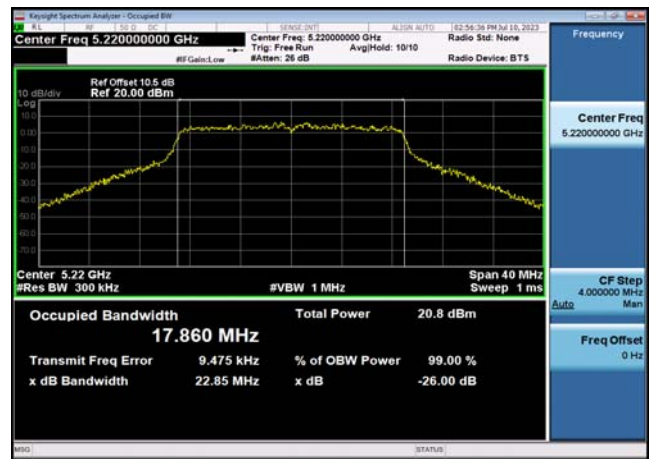
U-NII-1 26dB&99% Bandwidth-802.11a(20MHz)  
,5240MHz,Ant1



U-NII-1 26dB&99% Bandwidth-802.11ac(20MHz)  
,5180MHz,Ant1



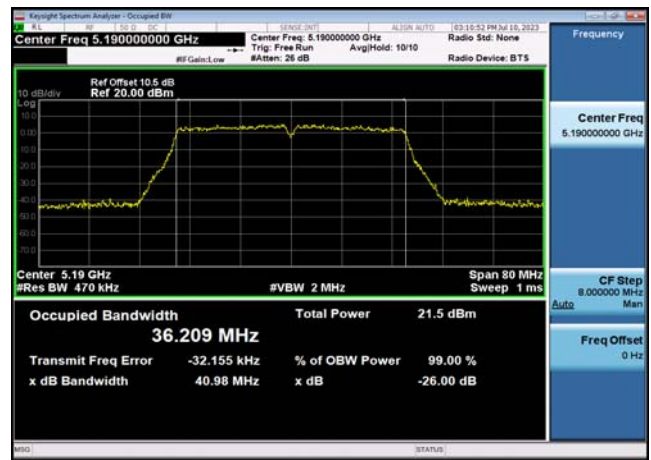
U-NII-1 26dB&99% Bandwidth-802.11ac(20MHz)  
,5220MHz,Ant1



U-NII-1 26dB&99% Bandwidth-802.11ac(20MHz)  
,5240MHz,Ant1

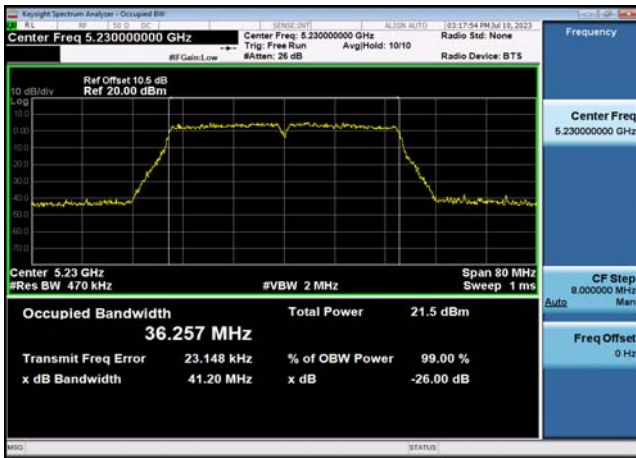


U-NII-1 26dB&99% Bandwidth-802.11ac(40MHz)  
,5190MHz,Ant1





U-NII-1 26dB&99% Bandwidth-802.11ac(40MHz)  
,5230MHz,Ant1



U-NII-1 26dB&99% Bandwidth-802.11ac(80MHz)  
,5210MHz,Ant1



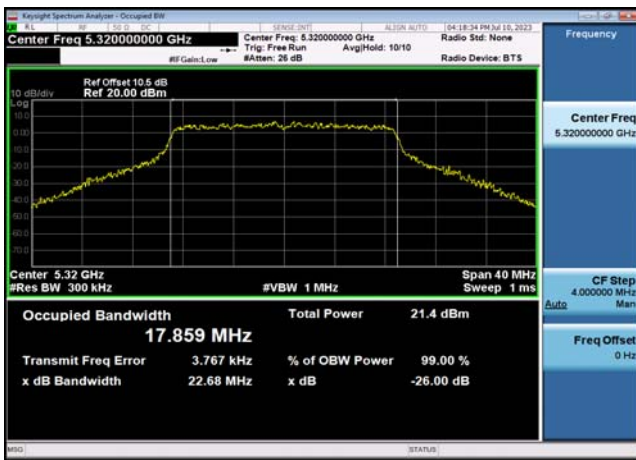
U-NII-2a 26dB&99% Bandwidth-802.11n(20MHz)  
,5260MHz,Ant1



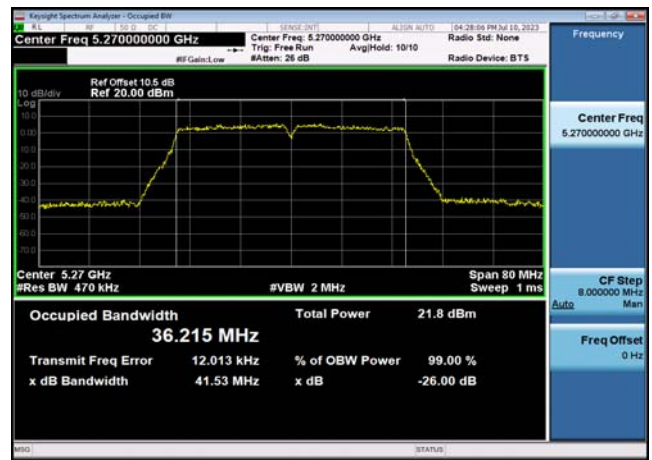
U-NII-2a 26dB&99% Bandwidth-802.11n(20MHz)  
,5300MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11n(20MHz)  
,5320MHz,Ant1

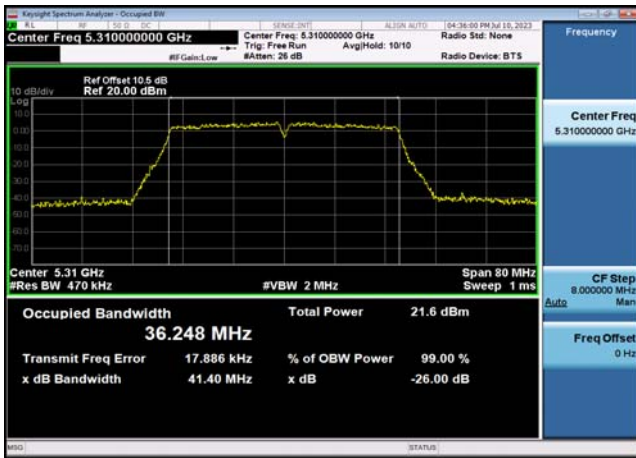


U-NII-2a 26dB&99% Bandwidth-802.11n(40MHz)  
,5270MHz,Ant1





U-NII-2a 26dB&99% Bandwidth-802.11n(40MHz)  
,5310MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11a(20MHz)  
,5260MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11a(20MHz)  
,5300MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11a(20MHz)  
,5320MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11ac(20MHz)  
,5260MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11ac(20MHz)  
,5300MHz,Ant1

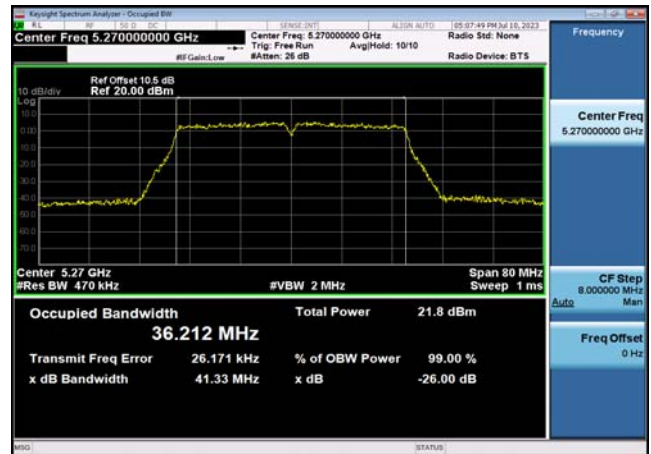




U-NII-2a 26dB&99% Bandwidth-802.11ac(20MHz),5320MHz,Ant1



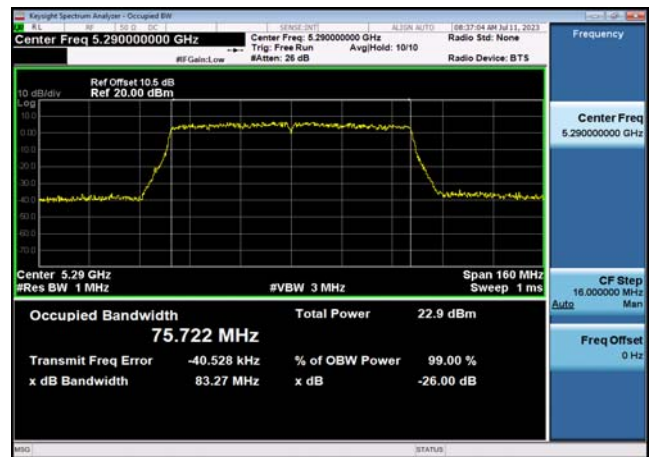
U-NII-2a 26dB&99% Bandwidth-802.11ac(40MHz),5270MHz,Ant1



U-NII-2a 26dB&99% Bandwidth-802.11ac(40MHz),5310MHz,Ant1



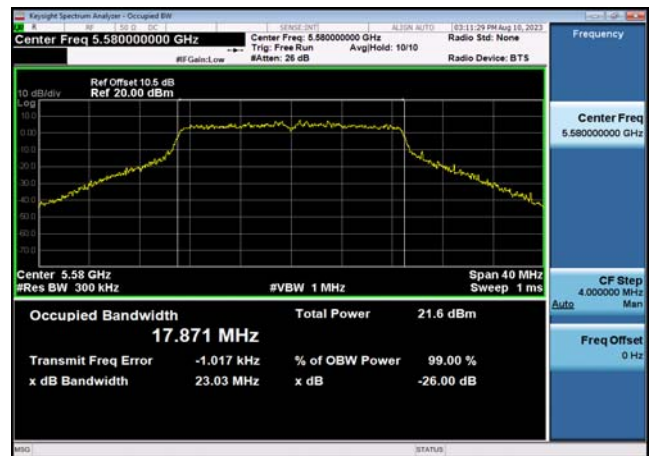
U-NII-2a 26dB&99% Bandwidth-802.11ac(80MHz),5290MHz,Ant1



U-NII-2c 26dB&99% Bandwidth-802.11n(20MHz),5500MHz,Ant1



U-NII-2c 26dB&99% Bandwidth-802.11n(20MHz),5580MHz,Ant1





U-NII-2c 26dB&99% Bandwidth-802.11a(20MHz),5700MHz,Ant1



U-NII-2c 26dB&99% Bandwidth-802.11ac(20MHz),5500MHz,Ant1



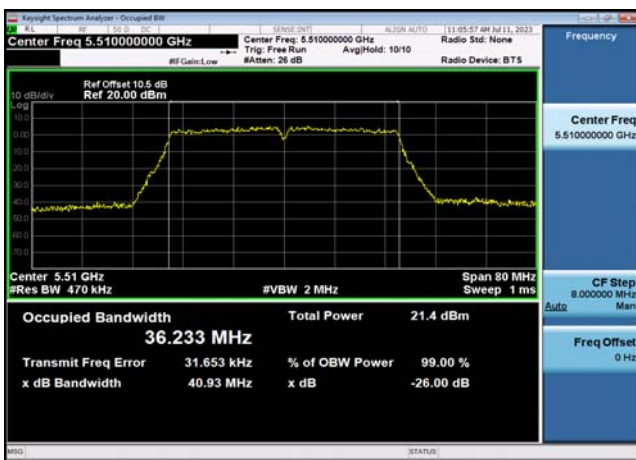
U-NII-2c 26dB&99% Bandwidth-802.11ac(20MHz),5580MHz,Ant1



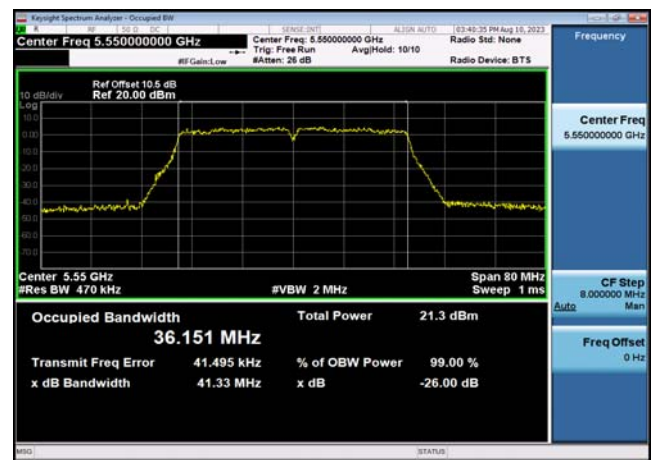
U-NII-2c 26dB&99% Bandwidth-802.11ac(20MHz),5700MHz,Ant1



U-NII-2c 26dB&99% Bandwidth-802.11ac(40MHz),5510MHz,Ant1

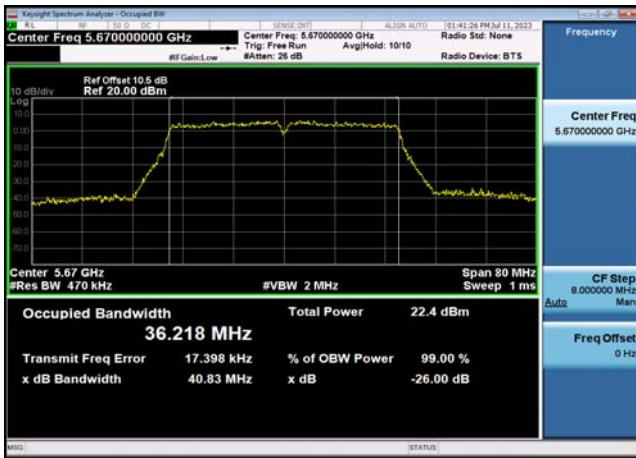


U-NII-2c 26dB&99% Bandwidth-802.11ac(40MHz),5550MHz,Ant1





U-NII-2c 26dB&99% Bandwidth-802.11ac(40MHz),5670MHz,Ant1



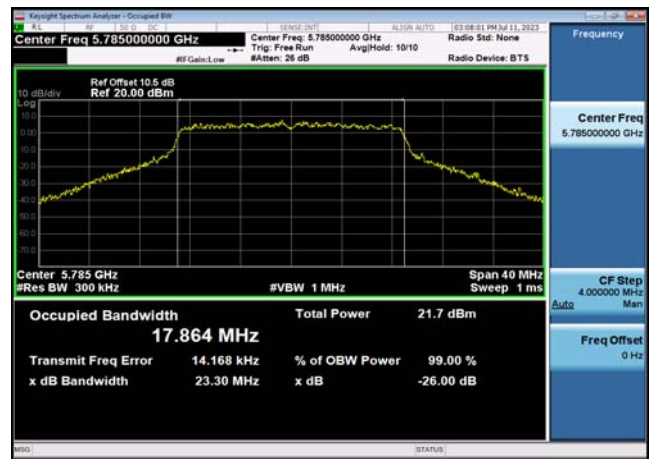
U-NII-2c 26dB&99% Bandwidth-802.11ac(80MHz),5530MHz,Ant1



U-NII-3 99% Bandwidth-802.11n(20MHz),5745MHz,Ant1



U-NII-3 99% Bandwidth-802.11n(20MHz),5785MHz,Ant1



U-NII-3 99% Bandwidth-802.11n(20MHz),5825MHz,Ant1



U-NII-3 99% Bandwidth-802.11n(40MHz),5755MHz,Ant1

