



# RF TEST REPORT

**Report No.:** SET2022-04867

**Product Name:** 5G NR Multi model smart phone

**Model No. :** ZTE 7540N

**FCC ID:** SRQ-ZTE7540N

**Applicant:** ZTE CORPORATION.

**Address:** ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China.

**Dates of Testing:** 2022.04.08-2022.04.27

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

**Lab Location:** Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

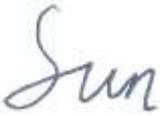
**Tel:** 86 755 26627338    **Fax:** 86 755 26627238

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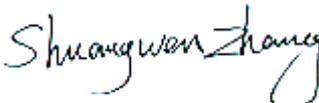


## Test Report

**Product Name**.....: 5G NR Multi model smart phone  
**Brand Name**.....: ZTE  
**Trade Name**.....: ZTE  
**Applicant**.....: ZTE CORPORATION.  
**Applicant Address**.....: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park,Nanshan District, Shenzhen, Guangdong, P.R.China.  
**Manufacturer**.....: ZTE CORPORATION.  
**Manufacturer Address** .....: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park,Nanshan District, Shenzhen, Guangdong, P.R.China.  
**Test Standards**.....: 47 CFR Part 15 Subpart E 15.407  
ANSI C63.10-2013  
**Test Result** .....: PASS

**Tested by** .....:  2022.04.29  
Sun, Test Engineer

**Reviewed by** .....:  2022.04.29  
Chris You, Senior Engineer

**Approved by** .....:  2022.04.29  
ShuangwenZhang, Manager



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Change History		
Issue	Date	Reason for change
1.0	2022.04.29	First edition



## 1. General Information

### 1.1. EUT Description

EUT Type	5G NR Multi model smart phone
Hardware Version	zs9A
Software Version	MyOS11.0.1_7540N_VFPT
Modulation Type	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 802.11ac mode only
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n : up to 150 Mbps 802.11ac: up to 433.33 Mbps
Frequency Range	Band UNII-1: 5150 ~ 5250MHz Band UNII-3: 5725 ~ 5850MHz
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz/40MHz 802.11ac: 20MHz/40MHz/80MHz
Channel Number	Band 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) Band 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	-1.9dBi
Output Power (Max.)	Band UNII-1: 16.39dBm Band UNII-3: 16.52dBm
Power supply	Rechargeable Li-Polymer Battery DC3.85V/3900mAh



## 1.2. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart E for the EUT FCC Certification:

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

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

No.	FCC Rule	Description	Result
1	15.203	Antenna Requirement	PASS
2	15.407 (a)(1)(iv) 15.407 (a)(2) 15.407 (a)(3)(i)	Maximum Conducted Output Power	PASS
3	15.407 (a)(12)	Emission Bandwidth(26 dB Bandwidth)	PASS
	15.407(e)	Emission Bandwidth(6 dB Bandwidth)	PASS
	-	Emission Bandwidth(99%)	PASS
4	15.407 (a)(1)(iv) 15.407 (a)(2) 15.407 (a)(3)(i)	Power spectral density (PSD)	PASS
5	15.207	AC Power Line Conducted Emission	PASS
6	15.205 15.209 15.407(b)	Radiated Band Edges and Spurious Emission	PASS
7	15.407(g)	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	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel are provided for 802.11ac-VHT80

Channel	Frequency	Channel	Frequency
42	5210 MHz	/	/

#### Operated band in 5725 MHz ~ 5850MHz

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel are provided for 802.11ac-VHT80

Channel	Frequency	Channel	Frequency
155	5775 MHz	/	/

## 1.4. Test environment and mode

Operating Environment	
Temperature	24°C
Humidity	57 % RH
Atmospheric Pressure	1010 mbar
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			
Mode	Modulation scheme / bandwidth		
	5180 MHz	5220 MHz	5240 MHz
802.11a	6 Mbps	6 Mbps	6 Mbps
802.11n/ac – HT20	MCS 0	MCS 0	MCS 0
Frequency	5190 MHz		5230 MHz
802.11n/ac – HT40	MCS 0		MCS 0
Frequency	5210 MHz		
802.11ac – VHT80	MCS 0		

For Frequency band 5725 ~ 5850 MHz			
Mode	Modulation scheme / bandwidth		
	5745 MHz	5785 MHz	5825 MHz
802.11a	6 Mbps	6 Mbps	6 Mbps
802.11n/ac – HT20	MCS 0	MCS 0	MCS 0
Frequency	5755 MHz		5795 MHz
802.11n/ac – HT40	MCS 0		MCS 0
Frequency	5775 MHz		
802.11ac – VHT80	MCS 0		

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation modes or test configuration modes mentioned above was evaluated respectively.

Pretest Test Mode	Description
Mode 1	TX A Mode / CH36, CH44, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149, CH157, CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151, CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151, CH159 (UNII-3)
Mode 12	TX AC80 Mode / CH155 (UNII-3)
Mode 13	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 25	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH44, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149, CH157, CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151, CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151, CH159 (UNII-3)
Mode 12	TX AC80 Mode / CH155 (UNII-3)

## 1.5. Power level setup in software

Power level setup in software for 5G wifi			
UNII-1			
Frequency (MHz)	5180	5220	5240
A mode	19.5	19.5	19.5
Frequency (MHz)	5180	5220	5240
N20 mode	18.5	18.5	18.5
Frequency (MHz)	5190	5230	\
N40 mode	18.5	18.5	\
Frequency (MHz)	5180	5220	5240
AC20 mode	17.5	17.5	17.5
Frequency (MHz)	5190	5230	\
AC40 mode	17.5	17.5	\
Frequency (MHz)	5210	\	\
AC80 mode	18.0	\	\

Power level setup in software for 5G wifi			
UNII-3			
Frequency (MHz)	5745	5785	5825
A mode	19.5	19.5	19.5
Frequency (MHz)	5745	5785	5825
N20 mode	18.5	18.5	18.5
Frequency (MHz)	5755	5795	\
N40 mode	18.5	18.5	\
Frequency (MHz)	5745	5785	5825
AC20 mode	17.5	17.5	17.5
Frequency (MHz)	5755	5795	\
AC40 mode	17.5	17.5	\
Frequency (MHz)	5775	\	\
AC80 mode	18.0		



## **1.6. Laboratory Facilities**

### **CNAS-Lab Code: L1659**

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

### **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 April 19th, 2023.

### **ISED Registration: 11185A-1**

### **CAB identifier: CN0064**

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-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2023.

### **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. 47 CFR Part 15E 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.

And according to FCC 47 CFR Section 15.407(E), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 2.1.2. Antenna Information

Antenna Type	Internal
Antenna Gain	-1.9dBi

#### 2.1.3. Result: comply

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

## 2.2. Output Power

### 2.2.1. Limit of Output Power

#### FCC 15.407(a)

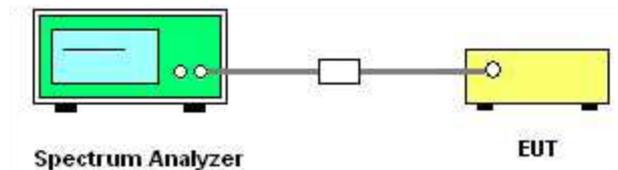
The maximum conducted output power should not exceed:

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-3	<input checked="" type="checkbox"/>	1 Watt (30 dBm)

### 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 Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02 Method SA-1
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 to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector=average (RMS), Compute power by integrating the spectrum across the 99%OBW.
5. Measure the conducted output power and record the results in the test report.

#### **2.2.5. Test Result**

Please refer to APPENDIX A for detail

## 2.3. Emission Bandwidth

### 2.3.1. Limit of Bandwidth

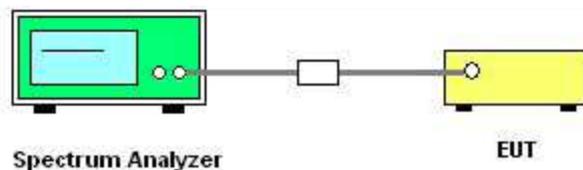
There is no limit bandwidth for bandU-NII-1.

The minimum of 6dB bandwidth measurement is 0.5 MHz for U-NII-3.

### 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 Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02.
2. The RF output of EUT 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. For 26dB bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = approximately 1%EBW, VBW  $\geq$  3RBW, Detector = Peak, Trace mode = max hold  
Span > 26 dB bandwidth and Sweep time = auto
5. Use the spectrum analyzer N dB down function to find the 26dB bandwidth.
6. For 6 Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 100kHz  
VBW = 300 kHz, Detector = Peak, Trace mode = max hold
7. Use the spectrum analyzer N dB down and 99%OBW function to find the 6dB and 99% bandwidth
8. Measure and record the worst results in the test report.



### **2.3.5. Test Results Bandwidth**

Please refer to APPENDIX A for detail

## 2.4. Power spectral density (PSD)

### 2.4.1. Limit of Power Spectral Density

FCC 15.407(a)

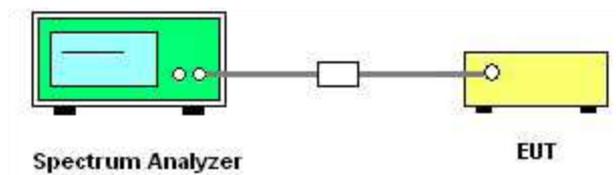
The maximum power spectral density should not exceed:

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

### 2.4.2. Measuring Instruments

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

### 2.4.3. Test Setup





#### **2.4.4. Test Procedures**

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.

##### **4. For U-NII-1 Band:**

Using method SA-1

Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = sample, traces 100 sweeps of averaging mode.

##### **For U-NII-3 Band:**

Set RBW=500 kHz,  $VBW \geq 3RBW$ , where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = sample, traces 100 sweeps of averaging mode.

5. Use peak search function on the instrument to find the peak of the spectrum and record its value
6. Repeat above procedures until all default test channel (low, middle, and high) was complete.

#### **2.4.5. Test Results of Power spectral density**

Please refer to APPENDIX A for detail

## 2.5. Frequency Stability

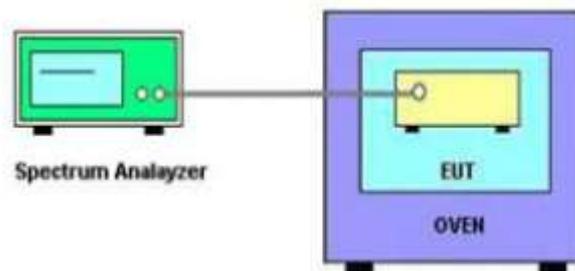
### 2.5.1. Limit

FCC 15.407(b) Frequency Stability	
Frequency Band(MHz)	Limit
5150~5250	Specified in the user's manual
5725~5850	

### 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 EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. The EUT is installed in an environment test chamber with external power source.
4. Set the chamber to operate at 50 centigrade 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 -10 to 55 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.
7. Measure and record the worst results in the test report.



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

**NOTE:**

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

Applicable To	Limit	
789033 D02 General UNII Test Procedures New Rules v01	Field Strength at 3m	
	PK:74(dB $\mu\text{V}/\text{m}$ )	AV:54 (dB $\mu\text{V}/\text{m}$ )

Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dB $\mu\text{V}/\text{m}$ )
5150 - 5250	Outside of the 5.15~5.35 GHz	-27	68.2

FCC 15.407			
Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dBμV/m)
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. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

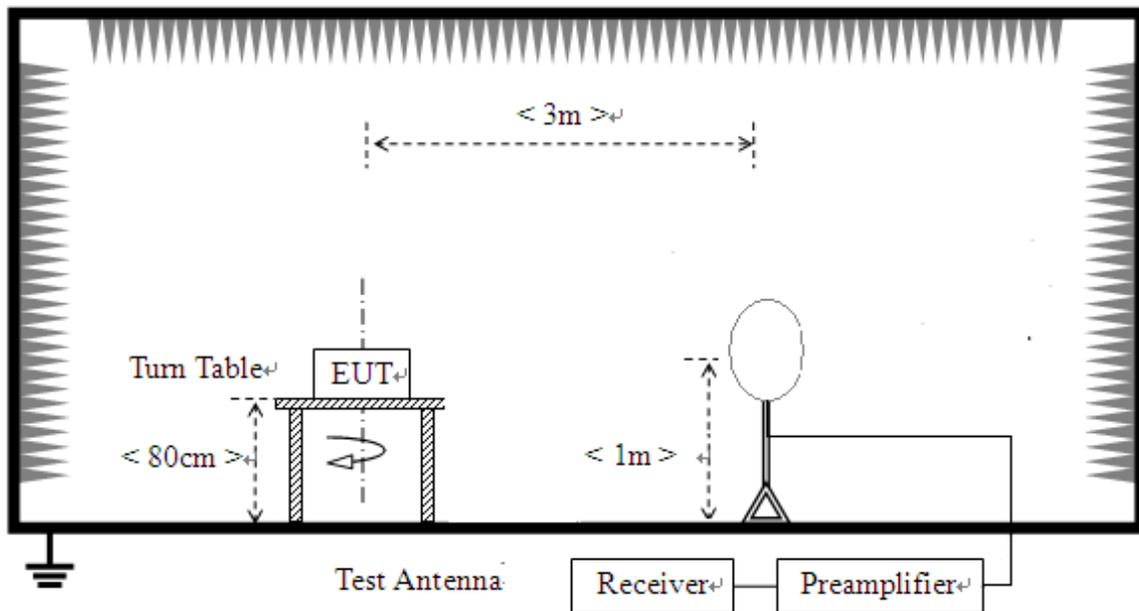
$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

### 2.6.2. Measuring Instruments

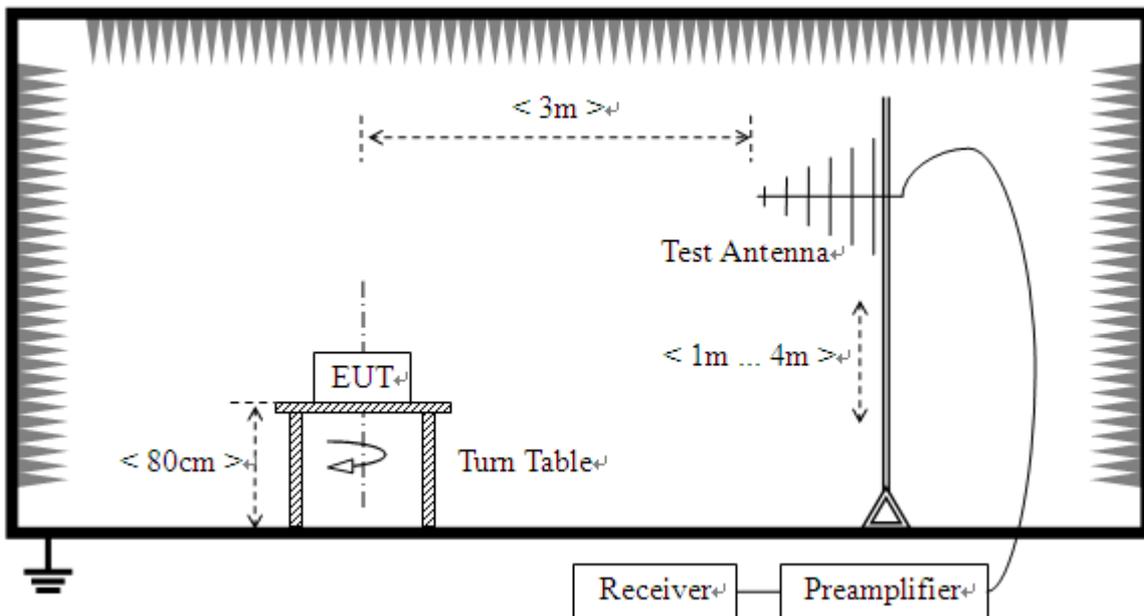
The measuring equipment is listed in the section 3 of this test report.

### 2.6.3. Test Setup

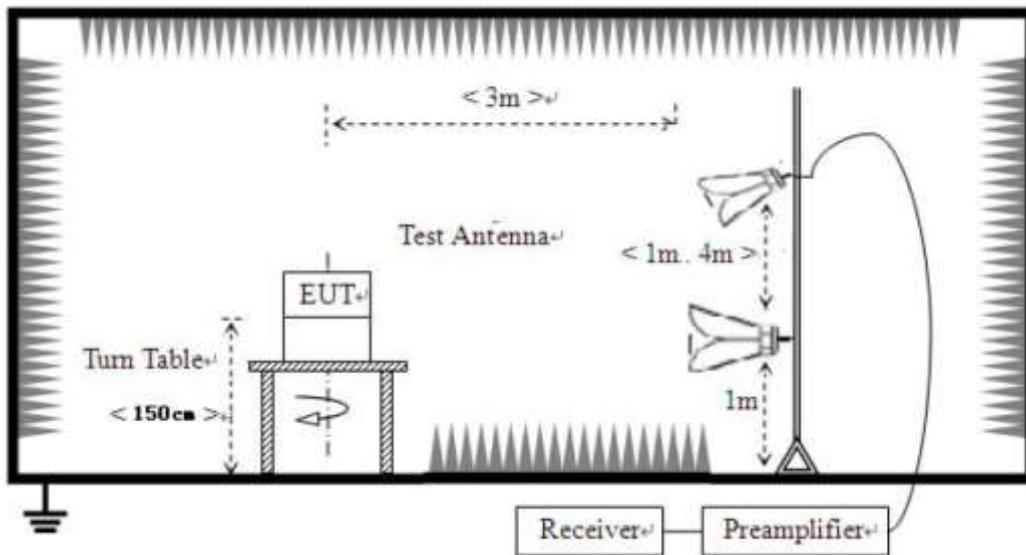
For radiated emissions from 9 KHz to 30 MHz



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:

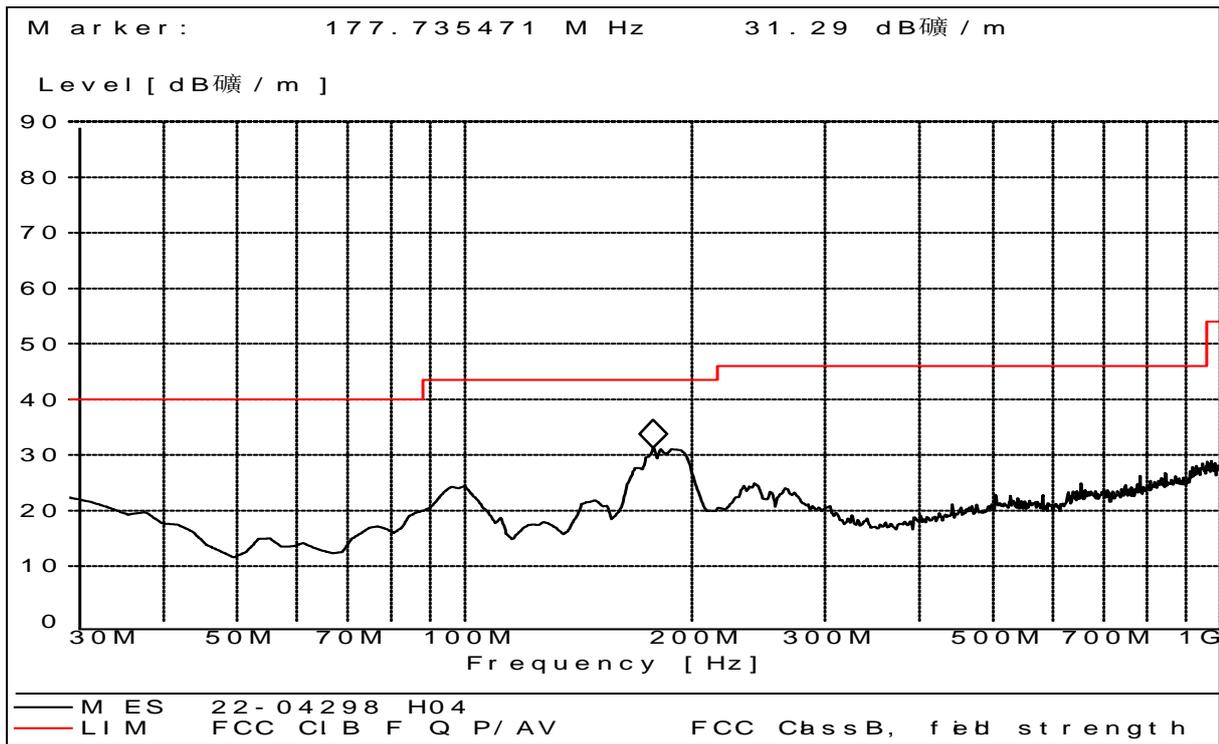
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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 provide worst-Case mode data provide here, 802.11a (20MHz) 5700MHz for Below 1GHz .

### 2.6.5. Test Results of Radiated Band Edge and Spurious Emission

#### 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.

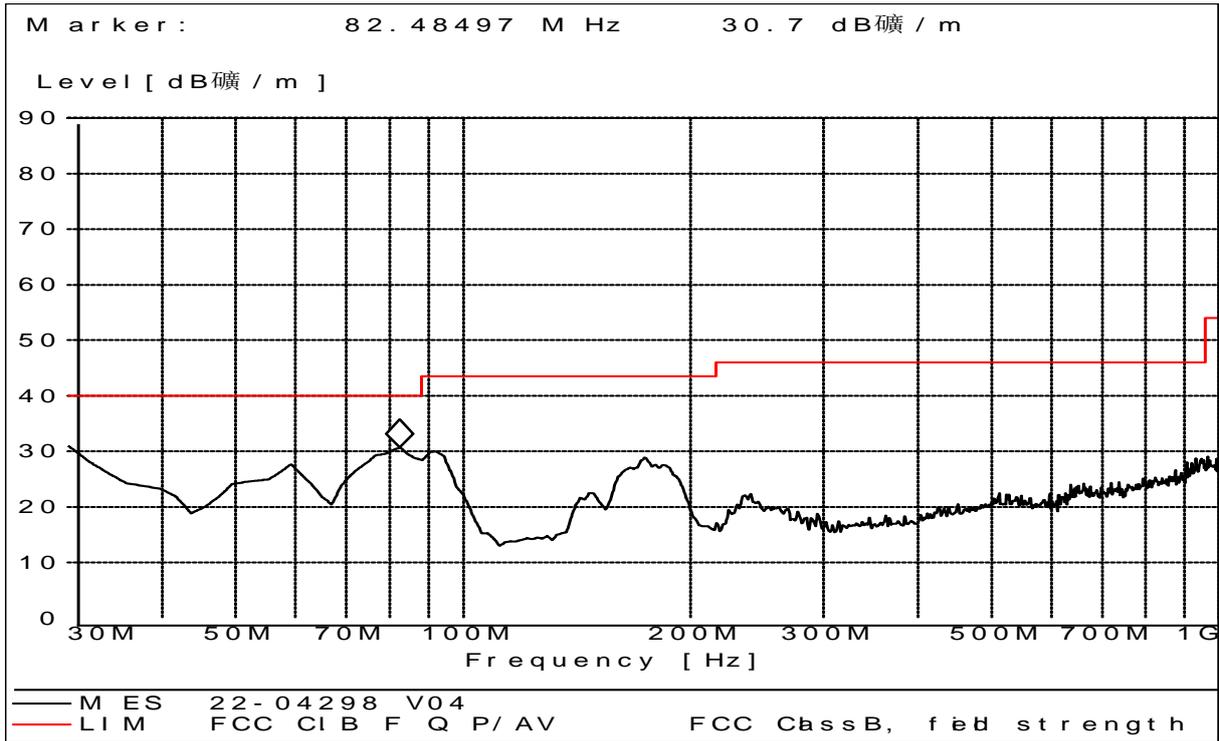
#### For 30MHz to 1000 MHz



30M

Hz to 1GHz, Antenna Horizontal

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Bandwidth (kHz)	Corr. Factor (dB/m)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin	Antenna	Verdict
30.270000	20.53	120.000	19.3	100.0	40.0	19.47	Horizontal	Pass
100.060000	22.97	120.000	10.9	100.0	43.5	20.53	Horizontal	Pass
147.570000	20.93	120.000	12.6	100.0	43.5	22.57	Horizontal	Pass
178.010000	30.08	120.000	11.9	100.0	43.5	13.42	Horizontal	Pass
195.230000	28.39	120.000	10.0	100.0	43.5	15.11	Horizontal	Pass
241.880000	22.74	120.000	11.9	100.0	46.0	23.26	Horizontal	Pass



30MHz to 1GHz, Antenna Vertical

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Bandwidth (kHz)	Corr. Factor (dB $\mu$ V/m)	Antenna height (cm)	Limit (dB $\mu$ V/m)	Margin	Antenna	Verdict
31.010000	30.82	120.000	19.3	100.0	40.0	9.18	Vertical	Pass
59.150000	27.10	120.000	8.6	100.0	40.0	12.90	Vertical	Pass
82.360000	29.10	120.000	8.5	100.0	40.0	10.90	Vertical	Pass
94.140000	29.37	120.000	9.9	100.0	43.5	14.13	Vertical	Pass
173.080000	28.90	120.000	11.9	100.0	43.5	14.60	Vertical	Pass
239.930000	22.36	120.000	12.6	100.0	46.0	23.64	Vertical	Pass

**For 1GHz to 40 GHz**

<b>U-NII-1_802.11a_5180MHz</b>									
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	61.60	68.20	-6.60	1.80	210	54.10	7.50	Horizontal	Peak
5150.00	49.51	54.00	-4.49	1.80	210	42.01	7.50	Horizontal	Average
10360.00	53.99	68.20	-14.21	1.80	210	34.19	19.80	Horizontal	Peak
10360.00	44.44	54.00	-9.56	1.80	210	24.64	19.80	Horizontal	Average
5150.00	60.10	68.20	-8.10	2.00	190	52.60	7.50	Vertical	Peak
5150.00	48.92	54.00	-5.08	2.00	190	41.42	7.50	Vertical	Average
10360.00	54.02	68.20	-14.18	2.00	190	34.22	19.80	Vertical	Peak
10360.00	43.22	54.00	-10.78	2.00	190	23.42	19.80	Vertical	Average
<b>U-NII-1_802.11a_5220MHz</b>									
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	54.68	68.20	-13.52	1.80	210	34.78	19.90	Horizontal	Peak
10440.00	45.03	54.00	-8.97	1.80	210	25.13	19.90	Horizontal	Average
10440.00	54.87	68.20	-13.33	2.00	190	34.97	19.90	Vertical	Peak
10440.00	44.12	54.00	-9.88	2.00	190	24.22	19.90	Vertical	Average
<b>U-NII-1_802.11a_5240MHz</b>									
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	61.33	68.20	-6.87	1.80	210	53.33	8.00	Horizontal	Peak
5350.00	49.85	54.00	-4.15	1.80	210	41.85	8.00	Horizontal	Average
10480.00	54.49	68.20	-13.71	1.80	210	34.59	19.90	Horizontal	Peak
10480.00	44.24	54.00	-9.76	1.80	210	24.34	19.90	Horizontal	Average
5350.00	59.86	68.20	-8.34	2.00	190	51.86	8.00	Vertical	Peak
5350.00	48.50	54.00	-5.50	2.00	190	40.50	8.00	Vertical	Average
10480.00	53.55	68.20	-14.65	2.00	190	33.65	19.90	Vertical	Peak
10480.00	43.12	54.00	-10.88	2.00	190	23.22	19.90	Vertical	Average
<b>Remark:</b>									
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\_802.11n-HT20\_5180MHz**

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	61.34	68.20	-6.86	1.80	210	53.84	7.50	Horizontal	Peak
5150.00	50.00	54.00	-4.00	1.80	210	42.50	7.50	Horizontal	Average
10360.00	54.07	68.20	-14.13	1.80	210	34.27	19.80	Horizontal	Peak
10360.00	43.99	54.00	-10.01	1.80	210	24.19	19.80	Horizontal	Average
5150.00	60.27	68.20	-7.93	2.00	190	52.77	7.50	Vertical	Peak
5150.00	48.93	54.00	-5.07	2.00	190	41.43	7.50	Vertical	Average
10360.00	53.94	68.20	-14.26	2.00	190	34.14	19.80	Vertical	Peak
10360.00	43.15	54.00	-10.85	2.00	190	23.35	19.80	Vertical	Average

**U-NII-1\_802.11n-HT20\_5220MHz**

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
10440.00	54.77	68.20	-13.43	1.80	210	34.87	19.90	Horizontal	Peak
10440.00	44.58	54.00	-9.42	1.80	210	24.68	19.90	Horizontal	Average
10440.00	55.01	68.20	-13.19	2.00	190	35.11	19.90	Vertical	Peak
10440.00	44.48	54.00	-9.52	2.00	190	24.58	19.90	Vertical	Average

**U-NII-1\_802.11n-HT20\_5240MHz**

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	61.06	68.20	-7.14	1.80	210	53.06	8.00	Horizontal	Peak
5350.00	49.73	54.00	-4.27	1.80	210	41.73	8.00	Horizontal	Average
10480.00	54.13	68.20	-14.07	1.80	210	34.23	19.90	Horizontal	Peak
10480.00	43.78	54.00	-10.22	1.80	210	23.88	19.90	Horizontal	Average
5350.00	59.70	68.20	-8.50	2.00	190	51.70	8.00	Vertical	Peak
5350.00	48.92	54.00	-5.08	2.00	190	40.92	8.00	Vertical	Average
10480.00	53.53	68.20	-14.67	2.00	190	33.63	19.90	Vertical	Peak
10480.00	42.81	54.00	-11.19	2.00	190	22.91	19.90	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-VHT\_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	61.18	68.20	-7.02	1.80	210	53.68	7.50	Horizontal	Peak
5150.00	49.78	54.00	-4.22	1.80	210	42.28	7.50	Horizontal	Average
10360.00	54.27	68.20	-13.93	1.80	210	34.47	19.80	Horizontal	Peak
10360.00	43.63	54.00	-10.37	1.80	210	23.83	19.80	Horizontal	Average
5150.00	60.63	68.20	-7.57	2.00	190	53.13	7.50	Vertical	Peak
5150.00	48.97	54.00	-5.03	2.00	190	41.47	7.50	Vertical	Average
10360.00	54.15	68.20	-14.05	2.00	190	34.35	19.80	Vertical	Peak
10360.00	43.34	54.00	-10.66	2.00	190	23.54	19.80	Vertical	Average

**U-NII-1\_802.11ac-VHT\_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	54.60	68.20	-13.60	1.80	210	34.70	19.90	Horizontal	Peak
10440.00	44.36	54.00	-9.64	1.80	210	24.46	19.90	Horizontal	Average
10440.00	55.47	68.20	-12.73	2.00	190	35.57	19.90	Vertical	Peak
10440.00	44.12	54.00	-9.88	2.00	190	24.22	19.90	Vertical	Average

**U-NII-1\_802.11ac-VHT\_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	61.43	68.20	-6.77	1.80	210	53.43	8.00	Horizontal	Peak
5350.00	50.06	54.00	-3.94	1.80	210	42.06	8.00	Horizontal	Average
10480.00	54.15	68.20	-14.05	1.80	210	34.25	19.90	Horizontal	Peak
10480.00	43.97	54.00	-10.03	1.80	210	24.07	19.90	Horizontal	Average
5350.00	59.35	68.20	-8.85	2.00	190	51.35	8.00	Vertical	Peak
5350.00	49.29	54.00	-4.71	2.00	190	41.29	8.00	Vertical	Average
10480.00	54.02	68.20	-14.18	2.00	190	34.12	19.90	Vertical	Peak
10480.00	42.41	54.00	-11.59	2.00	190	22.51	19.90	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\_802.11n-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	60.78	68.20	-7.42	1.80	210	53.28	7.50	Horizontal	Peak
5150.00	50.20	54.00	-3.80	1.80	210	42.70	7.50	Horizontal	Average
10380.00	53.85	68.20	-14.35	1.80	210	34.05	19.80	Horizontal	Peak
10380.00	43.73	54.00	-10.27	1.80	210	23.93	19.80	Horizontal	Average
5150.00	60.16	68.20	-8.04	2.00	190	52.66	7.50	Vertical	Peak
5150.00	49.30	54.00	-4.70	2.00	190	41.80	7.50	Vertical	Average
10380.00	53.44	68.20	-14.76	2.00	190	33.64	19.80	Vertical	Peak
10380.00	42.96	54.00	-11.04	2.00	190	23.16	19.80	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	60.65	68.20	-7.55	1.80	210	52.65	8.00	Horizontal	Peak
5350.00	50.16	54.00	-3.84	1.80	210	42.16	8.00	Horizontal	Average
10460.00	54.04	68.20	-14.16	1.80	210	34.14	19.90	Horizontal	Peak
10460.00	43.77	54.00	-10.23	1.80	210	23.87	19.90	Horizontal	Average
5350.00	60.20	68.20	-8.00	2.00	190	52.20	8.00	Vertical	Peak
5350.00	49.60	54.00	-4.40	2.00	190	41.60	8.00	Vertical	Average
10460.00	53.45	68.20	-14.75	2.00	190	33.55	19.90	Vertical	Peak
10460.00	43.35	54.00	-10.65	2.00	190	23.45	19.90	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-VHT40\_5190MHz**

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	61.06	68.20	-7.14	1.80	210	53.56	7.50	Horizontal	Peak
5150.00	49.76	54.00	-4.24	1.80	210	42.26	7.50	Horizontal	Average
10380.00	53.84	68.20	-14.36	1.80	210	34.04	19.80	Horizontal	Peak
10380.00	43.75	54.00	-10.25	1.80	210	23.95	19.80	Horizontal	Average
5150.00	59.89	68.20	-8.31	2.00	190	52.39	7.50	Vertical	Peak
5150.00	49.16	54.00	-4.84	2.00	190	41.66	7.50	Vertical	Average
10380.00	53.44	68.20	-14.76	2.00	190	33.64	19.80	Vertical	Peak
10380.00	43.33	54.00	-10.67	2.00	190	23.53	19.80	Vertical	Average

**U-NII-1\_802.11ac-VHT40\_5230MHz**

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	61.36	68.20	-6.84	1.80	210	53.36	8.00	Horizontal	Peak
5350.00	50.04	54.00	-3.96	1.80	210	42.04	8.00	Horizontal	Average
10460.00	53.83	68.20	-14.37	1.80	210	33.93	19.90	Horizontal	Peak
10460.00	43.26	54.00	-10.74	1.80	210	23.36	19.90	Horizontal	Average
5350.00	60.08	68.20	-8.12	2.00	190	52.08	8.00	Vertical	Peak
5350.00	49.52	54.00	-4.48	2.00	190	41.52	8.00	Vertical	Average
10460.00	53.19	68.20	-15.01	2.00	190	33.29	19.90	Vertical	Peak
10460.00	43.15	54.00	-10.85	2.00	190	23.25	19.90	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)	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	60.88	68.20	-7.32	1.80	210	53.38	7.50	Horizontal	Peak
5150.00	49.48	54.00	-4.52	1.80	210	41.98	7.50	Horizontal	Average
5350.00	61.23	68.20	-6.97	1.80	210	53.23	8.00	Horizontal	Peak
5350.00	49.88	54.00	-4.12	1.80	210	41.88	8.00	Horizontal	Average
10420.00	53.34	68.20	-14.86	1.80	210	33.44	19.90	Horizontal	Peak
10420.00	43.89	54.00	-10.11	1.80	210	23.99	19.90	Horizontal	Average
5150.00	60.34	68.20	-7.86	2.00	190	52.84	7.50	Vertical	Peak
5150.00	49.22	54.00	-4.78	2.00	190	41.72	7.50	Vertical	Average
5350.00	59.83	68.20	-8.37	2.00	190	51.83	8.00	Vertical	Peak
5350.00	49.07	54.00	-4.93	2.00	190	41.07	8.00	Vertical	Average
10420.00	53.51	68.20	-14.69	2.00	190	33.61	19.90	Vertical	Peak
10420.00	43.58	54.00	-10.42	2.00	190	23.68	19.90	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	60.07	68.20	-8.13	1.50	170	50.61	9.46	Horizontal	Peak
5700.00	59.98	105.20	-45.22	1.50	170	50.39	9.59	Horizontal	Peak
5720.00	61.22	110.80	-49.58	1.50	170	51.58	9.64	Horizontal	Peak
5725.00	64.07	122.20	-58.13	1.50	170	54.42	9.65	Horizontal	Peak
11490.00	53.49	68.20	-14.71	1.50	170	31.79	21.70	Horizontal	Peak
11490.00	44.30	54.00	-9.70	1.50	170	22.60	21.70	Horizontal	Average
5650.00	59.89	68.20	-8.31	1.80	150	50.43	9.46	Vertical	Peak
5700.00	59.42	105.20	-45.78	1.80	150	49.83	9.59	Vertical	Peak
5720.00	60.39	110.80	-50.41	1.80	150	50.75	9.64	Vertical	Peak
5725.00	61.69	122.20	-60.51	1.80	150	52.04	9.65	Vertical	Peak
11490.00	52.91	68.20	-15.29	1.80	150	31.21	21.70	Vertical	Peak
11490.00	44.47	54.00	-9.53	1.80	150	22.77	21.70	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	60.21	122.20	-61.99	1.50	170	50.43	9.78	Horizontal	Peak
5855.00	59.84	110.80	-50.96	1.50	170	50.05	9.79	Horizontal	Peak
5875.00	61.47	105.20	-43.73	1.50	170	51.63	9.84	Horizontal	Peak
5925.00	63.62	68.20	-4.58	1.50	170	53.65	9.97	Horizontal	Peak
11650.00	53.12	68.20	-15.08	1.50	170	31.22	21.90	Horizontal	Peak
11650.00	43.77	54.00	-10.23	1.50	170	21.87	21.90	Horizontal	Average
5850.00	59.94	122.20	-62.26	1.80	150	50.16	9.78	Vertical	Peak
5855.00	59.39	110.80	-51.41	1.80	150	49.60	9.79	Vertical	Peak
5875.00	60.14	105.20	-45.06	1.80	150	50.30	9.84	Vertical	Peak
5925.00	61.83	68.20	-6.37	1.80	150	51.86	9.97	Vertical	Peak
11650.00	53.04	68.20	-15.16	1.80	150	31.14	21.90	Vertical	Peak
11650.00	44.67	54.00	-9.33	1.80	150	22.77	21.90	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-HT20\_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	59.84	68.20	-8.36	1.50	170	50.38	9.46	Horizontal	Peak
5700.00	59.48	105.20	-45.72	1.50	170	49.89	9.59	Horizontal	Peak
5720.00	61.05	110.80	-49.75	1.50	170	51.41	9.64	Horizontal	Peak
5725.00	64.12	122.20	-58.08	1.50	170	54.47	9.65	Horizontal	Peak
11490.00	53.17	68.20	-15.03	1.50	170	31.47	21.70	Horizontal	Peak
11490.00	43.87	54.00	-10.13	1.50	170	22.17	21.70	Horizontal	Average
5650.00	60.28	68.20	-7.92	1.80	150	50.82	9.46	Vertical	Peak
5700.00	59.84	105.20	-45.36	1.80	150	50.25	9.59	Vertical	Peak
5720.00	60.28	110.80	-50.52	1.80	150	50.64	9.64	Vertical	Peak
5725.00	61.39	122.20	-60.81	1.80	150	51.74	9.65	Vertical	Peak
11490.00	52.84	68.20	-15.36	1.80	150	31.14	21.70	Vertical	Peak
11490.00	44.96	54.00	-9.04	1.80	150	23.26	21.70	Vertical	Average

**U-NII-3\_802.11n-HT20\_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	60.43	122.20	-61.77	1.50	170	50.65	9.78	Horizontal	Peak
5855.00	59.79	110.80	-51.01	1.50	170	50.00	9.79	Horizontal	Peak
5875.00	61.01	105.20	-44.19	1.50	170	51.17	9.84	Horizontal	Peak
5925.00	64.10	68.20	-4.10	1.50	170	54.13	9.97	Horizontal	Peak
11650.00	53.23	68.20	-14.97	1.50	170	31.33	21.90	Horizontal	Peak
11650.00	43.79	54.00	-10.21	1.50	170	21.89	21.90	Horizontal	Average
5850.00	60.04	122.20	-62.16	1.80	150	50.26	9.78	Vertical	Peak
5855.00	59.50	110.80	-51.30	1.80	150	49.71	9.79	Vertical	Peak
5875.00	60.47	105.20	-44.73	1.80	150	50.63	9.84	Vertical	Peak
5925.00	61.98	68.20	-6.22	1.80	150	52.01	9.97	Vertical	Peak
11650.00	53.02	68.20	-15.18	1.80	150	31.12	21.90	Vertical	Peak
11650.00	44.20	54.00	-9.80	1.80	150	22.30	21.90	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_802.11ac-VHT20_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	60.33	68.20	-7.87	1.50	170	50.87	9.46	Horizontal	Peak
5700.00	58.98	105.20	-46.22	1.50	170	49.39	9.59	Horizontal	Peak
5720.00	61.17	110.80	-49.63	1.50	170	51.53	9.64	Horizontal	Peak
5725.00	64.28	122.20	-57.92	1.50	170	54.63	9.65	Horizontal	Peak
11490.00	52.99	68.20	-15.21	1.50	170	31.29	21.70	Horizontal	Peak
11490.00	44.36	54.00	-9.64	1.50	170	22.66	21.70	Horizontal	Average
5650.00	60.13	68.20	-8.07	1.80	150	50.67	9.46	Vertical	Peak
5700.00	59.73	105.20	-45.47	1.80	150	50.14	9.59	Vertical	Peak
5720.00	60.69	110.80	-50.11	1.80	150	51.05	9.64	Vertical	Peak
5725.00	61.63	122.20	-60.57	1.80	150	51.98	9.65	Vertical	Peak
11490.00	52.94	68.20	-15.26	1.80	150	31.24	21.70	Vertical	Peak
11490.00	44.64	54.00	-9.36	1.80	150	22.94	21.70	Vertical	Average

U-NII-3_802.11ac-VHT20_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	60.84	122.20	-61.36	1.50	170	51.06	9.78	Horizontal	Peak
5855.00	59.93	110.80	-50.87	1.50	170	50.14	9.79	Horizontal	Peak
5875.00	61.18	105.20	-44.02	1.50	170	51.34	9.84	Horizontal	Peak
5925.00	64.45	68.20	-3.75	1.50	170	54.48	9.97	Horizontal	Peak
11650.00	52.86	68.20	-15.34	1.50	170	30.96	21.90	Horizontal	Peak
11650.00	44.06	54.00	-9.94	1.50	170	22.16	21.90	Horizontal	Average
5850.00	59.81	122.20	-62.39	1.80	150	50.03	9.78	Vertical	Peak
5855.00	59.27	110.80	-51.53	1.80	150	49.48	9.79	Vertical	Peak
5875.00	60.38	105.20	-44.82	1.80	150	50.54	9.84	Vertical	Peak
5925.00	61.69	68.20	-6.51	1.80	150	51.72	9.97	Vertical	Peak
11650.00	52.58	68.20	-15.62	1.80	150	30.68	21.90	Vertical	Peak
11650.00	44.43	54.00	-9.57	1.80	150	22.53	21.90	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\_5785MHz**

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
11570.00	52.87	68.20	-15.33	1.50	170	31.17	21.70	Horizontal	Peak
11570.00	43.90	54.00	-10.10	1.50	170	22.20	21.70	Horizontal	Average
11570.00	53.09	68.20	-15.11	1.80	150	31.39	21.70	Vertical	Peak
11570.00	44.38	54.00	-9.62	1.80	150	22.68	21.70	Vertical	Average

**U-NII-3\_802.11n-HT20\_5785MHz**

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
11570.00	52.51	68.20	-15.69	1.50	170	30.81	21.70	Horizontal	Peak
11570.00	44.30	54.00	-9.70	1.50	170	22.60	21.70	Horizontal	Average
11570.00	53.36	68.20	-14.84	1.80	150	31.66	21.70	Vertical	Peak
11570.00	43.90	54.00	-10.10	1.80	150	22.20	21.70	Vertical	Average

**U-NII-3\_802.11ac--VHT20\_5785MHz**

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
11570.00	52.07	68.20	-16.13	1.50	170	30.37	21.70	Horizontal	Peak
11570.00	44.53	54.00	-9.47	1.50	170	22.83	21.70	Horizontal	Average
11570.00	52.95	68.20	-15.25	1.80	150	31.25	21.70	Vertical	Peak
11570.00	43.54	54.00	-10.46	1.80	150	21.84	21.70	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)	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
5650.00	60.05	68.20	-8.15	1.50	170	50.59	9.46	Horizontal	Peak
5700.00	59.64	105.20	-45.56	1.50	170	50.05	9.59	Horizontal	Peak
5720.00	60.59	110.80	-50.21	1.50	170	50.95	9.64	Horizontal	Peak
5725.00	63.78	122.20	-58.42	1.50	170	54.13	9.65	Horizontal	Peak
11510.00	53.70	68.20	-14.50	1.50	170	32.00	21.70	Horizontal	Peak
11510.00	44.08	54.00	-9.92	1.50	170	22.38	21.70	Horizontal	Average
5650.00	59.86	68.20	-8.34	1.80	150	50.40	9.46	Vertical	Peak
5700.00	59.22	105.20	-45.98	1.80	150	49.63	9.59	Vertical	Peak
5720.00	60.82	110.80	-49.98	1.80	150	51.18	9.64	Vertical	Peak
5725.00	61.66	122.20	-60.54	1.80	150	52.01	9.65	Vertical	Peak
11510.00	53.46	68.20	-14.74	1.80	150	31.76	21.70	Vertical	Peak
11510.00	44.32	54.00	-9.68	1.80	150	22.62	21.70	Vertical	Average

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

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
5850.00	60.37	122.20	-61.83	1.50	170	50.59	9.78	Horizontal	Peak
5855.00	59.71	110.80	-51.09	1.50	170	49.92	9.79	Horizontal	Peak
5875.00	60.64	105.20	-44.56	1.50	170	50.80	9.84	Horizontal	Peak
5925.00	64.44	68.20	-3.76	1.50	170	54.47	9.97	Horizontal	Peak
11590.00	53.56	68.20	-14.64	1.50	170	31.66	21.90	Horizontal	Peak
11590.00	43.80	54.00	-10.20	1.50	170	21.90	21.90	Horizontal	Average
5850.00	60.50	122.20	-61.70	1.80	150	50.72	9.78	Vertical	Peak
5855.00	59.43	110.80	-51.37	1.80	150	49.64	9.79	Vertical	Peak
5875.00	60.94	105.20	-44.26	1.80	150	51.10	9.84	Vertical	Peak
5925.00	61.50	68.20	-6.70	1.80	150	51.53	9.97	Vertical	Peak
11590.00	52.69	68.20	-15.51	1.80	150	30.79	21.90	Vertical	Peak
11590.00	44.83	54.00	-9.17	1.80	150	22.93	21.90	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_802.11ac-VHT40_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	60.12	68.20	-8.08	1.50	170	50.66	9.46	Horizontal	Peak
5700.00	59.46	105.20	-45.74	1.50	170	49.87	9.59	Horizontal	Peak
5720.00	60.67	110.80	-50.13	1.50	170	51.03	9.64	Horizontal	Peak
5725.00	64.10	122.20	-58.10	1.50	170	54.45	9.65	Horizontal	Peak
11510.00	53.31	68.20	-14.89	1.50	170	31.61	21.70	Horizontal	Peak
11510.00	43.62	54.00	-10.38	1.50	170	21.92	21.70	Horizontal	Average
5650.00	60.13	68.20	-8.07	1.80	150	50.67	9.46	Vertical	Peak
5700.00	59.20	105.20	-46.00	1.80	150	49.61	9.59	Vertical	Peak
5720.00	61.01	110.80	-49.79	1.80	150	51.37	9.64	Vertical	Peak
5725.00	61.96	122.20	-60.24	1.80	150	52.31	9.65	Vertical	Peak
11510.00	52.98	68.20	-15.22	1.80	150	31.28	21.70	Vertical	Peak
11510.00	44.34	54.00	-9.66	1.80	150	22.64	21.70	Vertical	Average

U-NII-3_802.11ac-VHT40_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	60.62	122.20	-61.58	1.50	170	50.84	9.78	Horizontal	Peak
5855.00	59.41	110.80	-51.39	1.50	170	49.62	9.79	Horizontal	Peak
5875.00	60.98	105.20	-44.22	1.50	170	51.14	9.84	Horizontal	Peak
5925.00	64.30	68.20	-3.90	1.50	170	54.33	9.97	Horizontal	Peak
11590.00	53.10	68.20	-15.10	1.50	170	31.20	21.90	Horizontal	Peak
11590.00	44.10	54.00	-9.90	1.50	170	22.20	21.90	Horizontal	Average
5850.00	60.40	122.20	-61.80	1.80	150	50.62	9.78	Vertical	Peak
5855.00	59.19	110.80	-51.61	1.80	150	49.40	9.79	Vertical	Peak
5875.00	60.49	105.20	-44.71	1.80	150	50.65	9.84	Vertical	Peak
5925.00	61.38	68.20	-6.82	1.80	150	51.41	9.97	Vertical	Peak
11590.00	52.27	68.20	-15.93	1.80	150	30.37	21.90	Vertical	Peak
11590.00	45.27	54.00	-8.73	1.80	150	23.37	21.90	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\_802.11ac-VHT80\_5775MHz**

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
5650.00	59.91	68.20	-8.29	1.50	170	50.45	9.46	Horizontal	Peak
5700.00	59.02	105.20	-46.18	1.50	170	49.43	9.59	Horizontal	Peak
5720.00	60.86	110.80	-49.94	1.50	170	51.22	9.64	Horizontal	Peak
5725.00	63.77	122.20	-58.43	1.50	170	54.12	9.65	Horizontal	Peak
5850.00	60.19	122.20	-62.01	1.50	170	50.41	9.78	Horizontal	Peak
5855.00	59.25	110.80	-51.55	1.50	170	49.46	9.79	Horizontal	Peak
5875.00	60.91	105.20	-44.29	1.50	170	51.07	9.84	Horizontal	Peak
5925.00	64.36	68.20	-3.84	1.50	170	54.39	9.97	Horizontal	Peak
11550.00	53.64	68.20	-14.56	1.50	170	31.84	21.80	Horizontal	Peak
11550.00	43.62	54.00	-10.38	1.50	170	21.82	21.80	Horizontal	Average
5650.00	60.25	68.20	-7.95	1.80	150	50.79	9.46	Vertical	Peak
5700.00	59.61	105.20	-45.59	1.80	150	50.02	9.59	Vertical	Peak
5720.00	60.93	110.80	-49.87	1.80	150	51.29	9.64	Vertical	Peak
5725.00	61.72	122.20	-60.48	1.80	150	52.07	9.65	Vertical	Peak
5850.00	59.94	122.20	-62.26	1.80	150	50.16	9.78	Vertical	Peak
5855.00	59.65	110.80	-51.15	1.80	150	49.86	9.79	Vertical	Peak
5875.00	60.55	105.20	-44.65	1.80	150	50.71	9.84	Vertical	Peak
5925.00	61.06	68.20	-7.14	1.80	150	51.09	9.97	Vertical	Peak
11550.00	53.33	68.20	-14.87	1.80	150	31.53	21.80	Vertical	Peak
11550.00	44.53	54.00	-9.47	1.80	150	22.73	21.80	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 15.207,

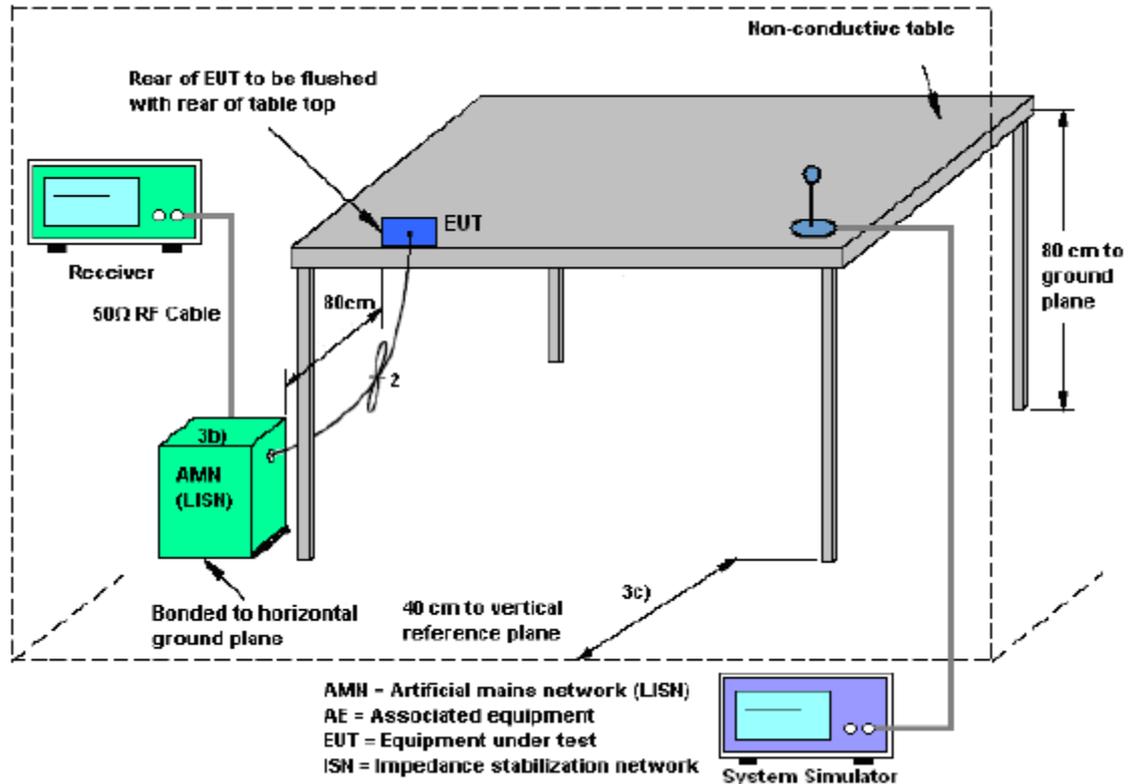
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

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

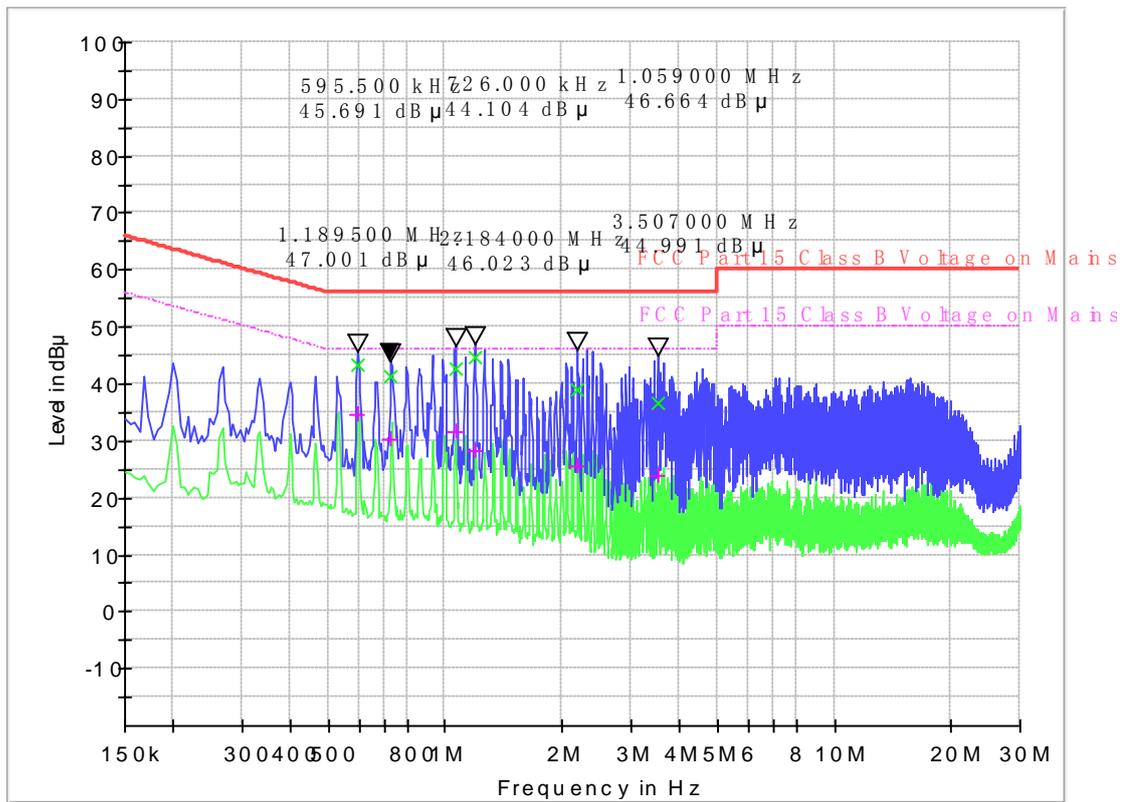


#### **2.7.4. Test Procedures**

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.

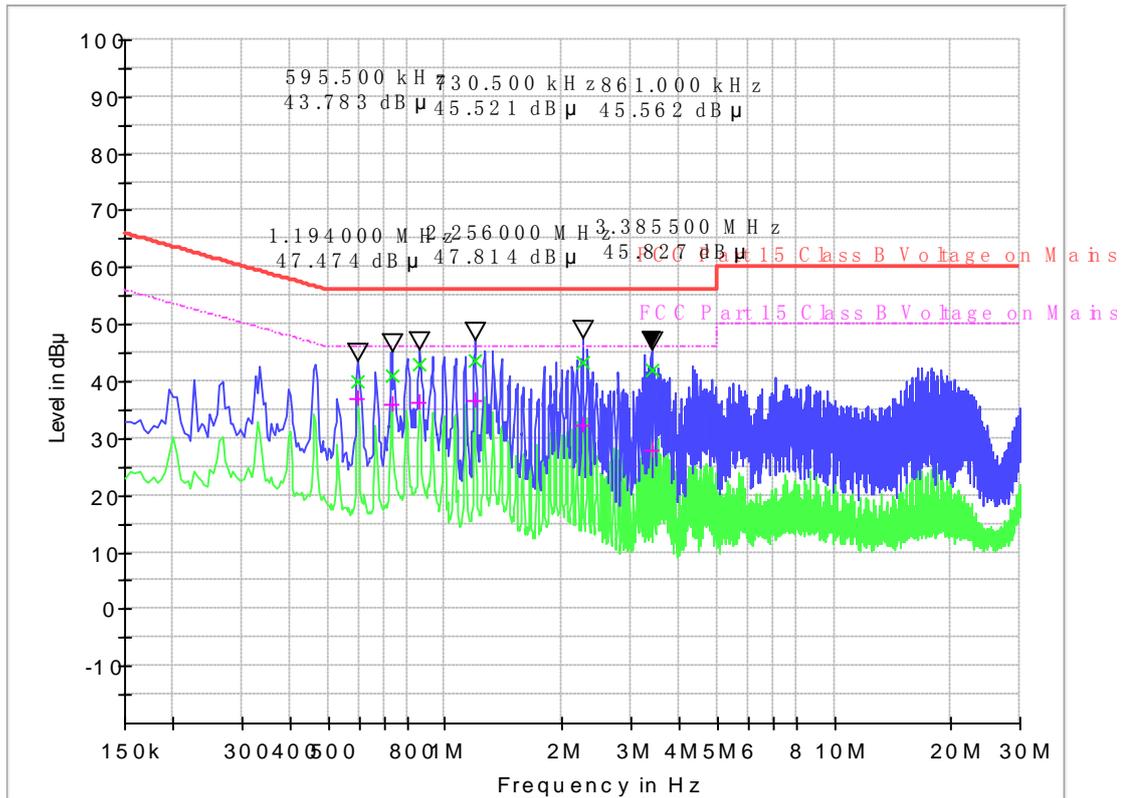
#### **2.7.5. Test Results of Conducted Emission**

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



(Plot A: L Phase)

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	CAverage (dB $\mu$ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB $\mu$ V)	Margin - AV (dB)	Limit - AV (dB $\mu$ V)
0.595500	43.30	34.69	0.2	10.2	12.70	56.0	11.31	46.0
0.726000	41.40	30.19	0.2	10.2	14.60	56.0	15.81	46.0
1.059000	42.53	31.52	0.2	10.2	13.47	56.0	14.48	46.0
1.189500	44.67	28.34	0.2	10.2	11.33	56.0	17.66	46.0
2.184000	38.99	25.48	0.2	10.2	17.01	56.0	20.52	46.0
3.507000	36.59	23.76	0.5	10.5	19.41	56.0	22.24	46.0



(Plot A: NPhase)

Frequency (MHz)	QuasiPeak (dB μV)	CAverage (dB μV)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dB)	Margin - AV (dB)	Limit - AV (dB μV)
0.595500	40.13	37.07	0.2	10.2	15.87	56.0	8.93	46.0
0.730500	41.12	35.82	0.2	10.2	14.88	56.0	10.18	46.0
0.861000	42.96	36.33	0.2	10.2	13.04	56.0	9.67	46.0
1.194000	43.72	36.78	0.2	10.2	12.28	56.0	9.22	46.0
2.256000	43.37	32.45	0.2	10.2	12.63	56.0	13.55	46.0
3.385500	41.96	28.08	0.3	10.3	14.04	56.0	17.92	46.0

**Test result:PASS**

Note: Correction factor=Cabel loss+ attenuation factor  
 attenuation factor=10dB



### 3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI TEST RECEIVER	KEYSIGHT	N9038A	A141202036	2021.08.03	2022.08.02
2	Power Meter	R&S	NRP-Z31	102872	2021.05.08	2022.05.07
3	TURNTABLE	ETS	2088	2149	N/A	N/A
4	ANTENNA MAST	ETS	2075	2346	N/A	N/A
5	EMI TEST Software	R&S	ESK1	N/A	N/A	N/A
6	Horn antenna (18GHz~26.5GHz)	AR	AT4003A	325306	2020.09.16	2022.09.15
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-1000	A140101634	2021.12.23	2022.12.22
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2021.12.23	2022.12.22
9	High pass filter	Compliance Direction systems	BSU-6	34202	2021.11.09	2022.11.08
10	Horn Antenna	R&S	ESIB7	A0501375	2020.06.24	2022.06.22
11	ULTRA-BROADBAND ANTENNA	SCHWARZBECK	VULB9160	A0805560	2019.05.24	2022.05.23
12	Passive Loop Antenna	SCHWARZBECK	FMZB 1519B	A180903206	2020.07.22	2023.07.21
13	Temperature chamber	TABAI	PS-232	A8708054	2021.09.24	2022.09.23
14	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2022.03.25	2023.03.24
15	Power Supply	R&S	ESIB26	A0304218	2021.12.23	2022.12.22
16	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2021.08.11	2022.08.10
17	Test software	ECIT	Eagle	V2.0	N/A	N/A



#### 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%( $U=2U_c(y)$ )	2.8dB
---	-------

##### Uncertainty of Radiated Emission Measurement (9KHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2U_c(y)$ )	3.5dB
---	-------

##### Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2U_c(y)$ )	3.91dB
---	--------

##### Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2U_c(y)$ )	4.5dB
---	-------

##### Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2U_c(y)$ )	4.9dB
---	-------

##### Uncertainty of RF Conducted Measurement (9KHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%( $U=2U_c(y)$ )	1.3dB
---	-------



## Appendix A

### Output power

#### Test results

U-NII-1 AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5180	15.75	24	Pass
802.11n (20MHz)	5220	15.73	24	Pass
802.11n (20MHz)	5240	15.75	24	Pass
802.11n (40MHz)	5190	15.72	24	Pass
802.11n (40MHz)	5230	15.57	24	Pass
802.11ac (20MHz)	5180	14.29	24	Pass
802.11ac (20MHz)	5220	14.23	24	Pass
802.11ac (20MHz)	5240	14.15	24	Pass
802.11ac (40MHz)	5190	14.57	24	Pass
802.11ac (40MHz)	5230	14.31	24	Pass
802.11ac (80MHz)	5210	14.39	24	Pass
802.11a (20MHz)	5180	16.25	24	Pass
802.11a (20MHz)	5220	16.39	24	Pass
802.11a (20MHz)	5240	16.39	24	Pass



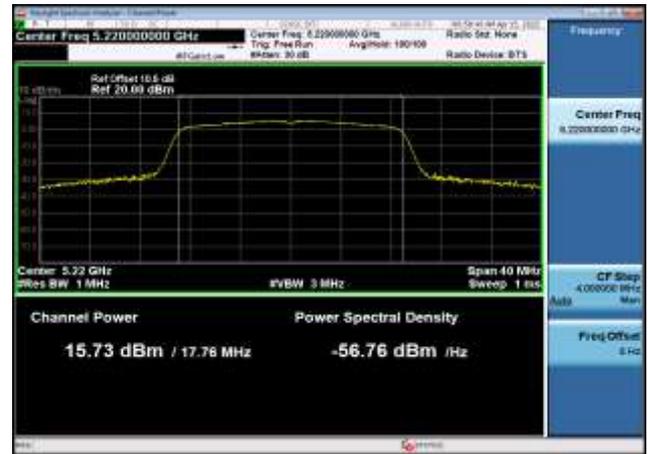
U-NII-3 AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5745	15.98	30	Pass
802.11n (20MHz)	5785	15.68	30	Pass
802.11n (20MHz)	5825	15.37	30	Pass
802.11n (40MHz)	5755	15.83	30	Pass
802.11n (40MHz)	5795	15.29	30	Pass
802.11ac (20MHz)	5745	15.96	30	Pass
802.11ac (20MHz)	5785	15.71	30	Pass
802.11ac (20MHz)	5825	15.36	30	Pass
802.11ac (40MHz)	5755	15.86	30	Pass
802.11ac (40MHz)	5795	16.10	30	Pass
802.11ac (80MHz)	5775	14.50	30	Pass
802.11a (20MHz)	5745	16.52	30	Pass
802.11a (20MHz)	5785	16.28	30	Pass
802.11a (20MHz)	5825	15.94	30	Pass

### Test plots

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



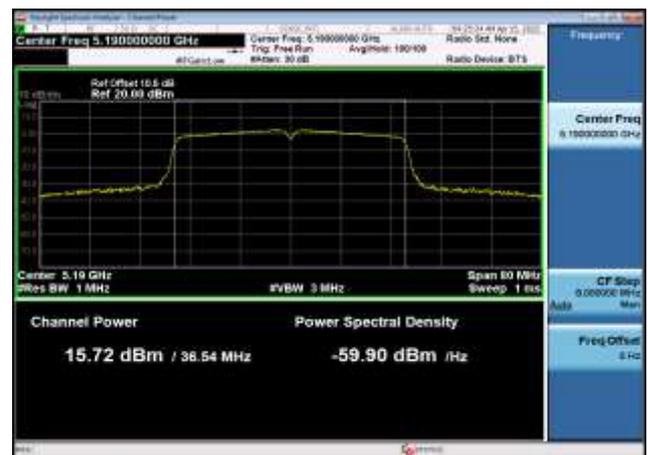
U-NII-1 Output Power-802.11n(20MHz)  
,5220MHz,Ant1



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



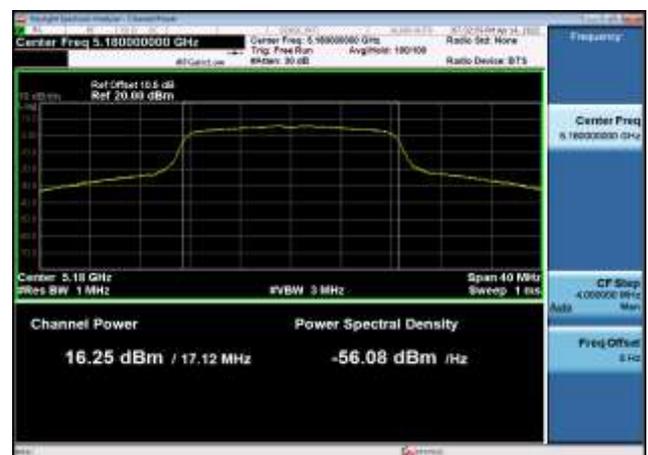
U-NII-1 Output Power-802.11n(40MHz)  
,5190MHz,Ant1



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



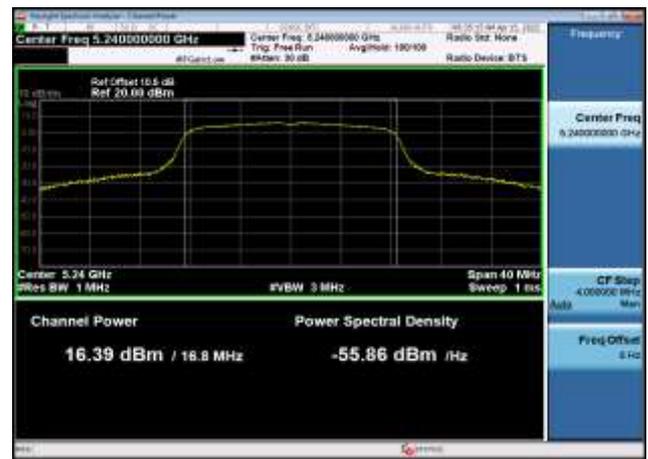
U-NII-1 Output Power-802.11a(20MHz)  
,5180MHz,Ant1



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



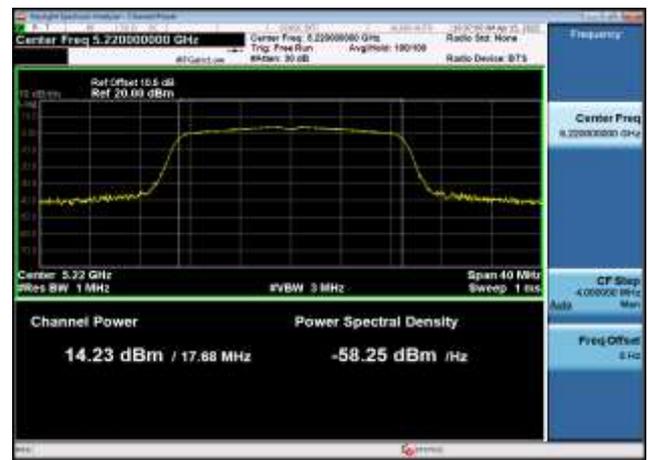
U-NII-1 Output Power-802.11a(20MHz)  
,5240MHz,Ant1



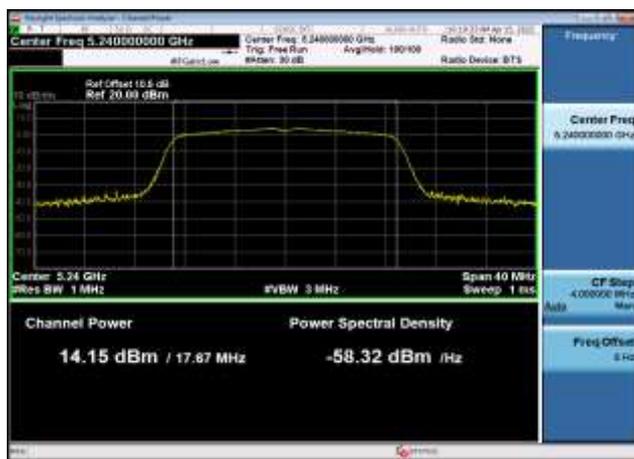
U-NII-1 Output Power-802.11ac(20MHz)  
,5180MHz,Ant1



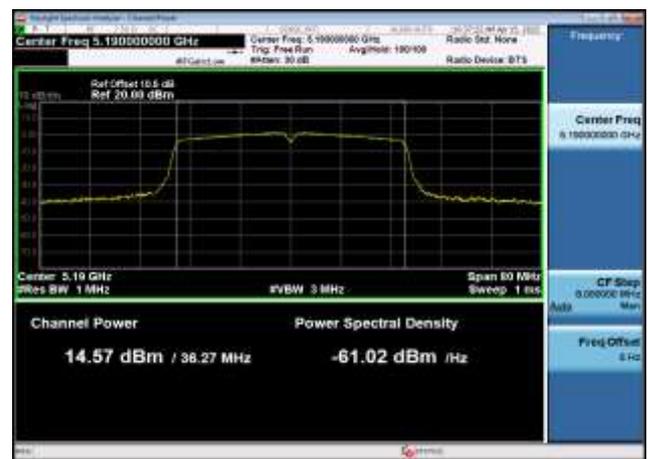
U-NII-1 Output Power-802.11ac(20MHz)  
,5220MHz,Ant1



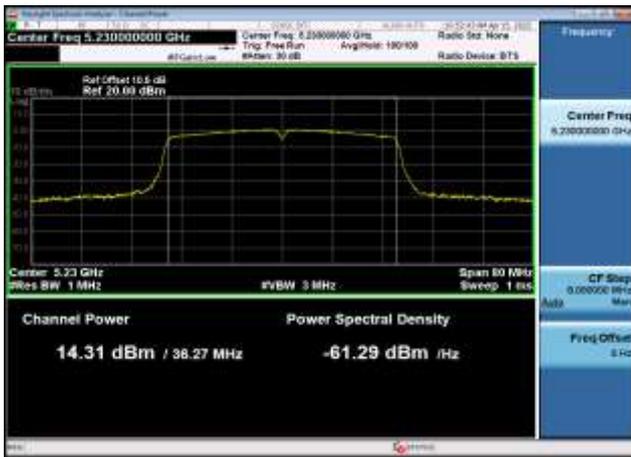
U-NII-1 Output Power-802.11ac(20MHz)  
,5240MHz,Ant1



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



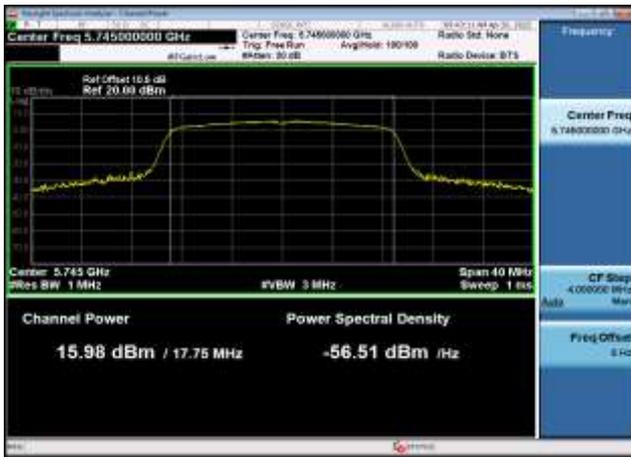
U-NII-1 Output Power-802.11ac(40MHz)  
,5230MHz,Ant1



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



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



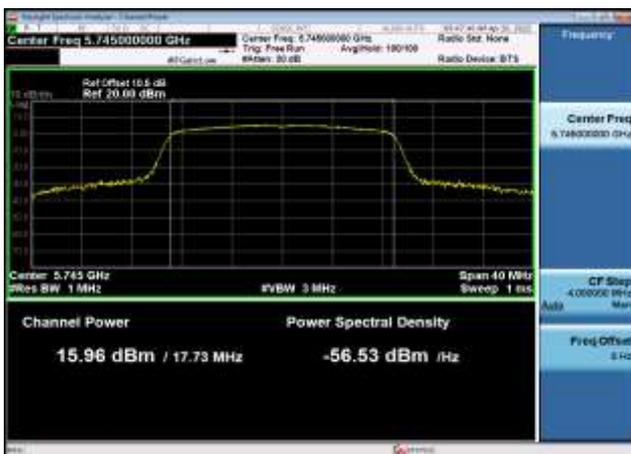
U-NII-3 Output Power-802.11a(20MHz)  
,5785MHz,Ant1



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)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5180	5.302	11	Pass
802.11n (20MHz)	5220	5.481	11	Pass
802.11n (20MHz)	5240	5.448	11	Pass
802.11n (40MHz)	5190	2.726	11	Pass
802.11n (40MHz)	5230	2.547	11	Pass
802.11ac (20MHz)	5180	3.960	11	Pass
802.11ac (20MHz)	5220	3.755	11	Pass
802.11ac (20MHz)	5240	3.785	11	Pass
802.11ac (40MHz)	5190	1.435	11	Pass
802.11ac (40MHz)	5230	1.173	11	Pass
802.11ac (80MHz)	5210	-1.783	11	Pass
802.11a (20MHz)	5180	6.070	11	Pass
802.11a (20MHz)	5220	6.164	11	Pass
802.11a (20MHz)	5240	6.256	11	Pass



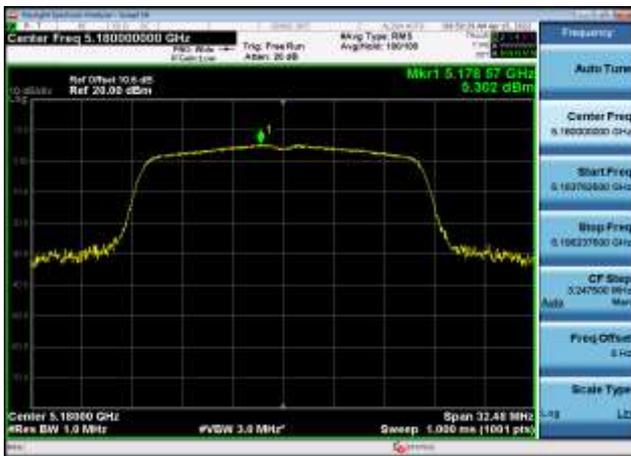
U-NII-3 AVGSA Power Spectral Density						
Mode	Test Frequency (MHz)	PSD (dBm/510KHz)	Correction factor	Total PSD (dBm/500KHz)	Limit (dBm/500KHz)	Result
802.11n (20MHz)	5745	3.157	-0.086	3.071	30	Pass
802.11n (20MHz)	5785	2.587	-0.086	2.501	30	Pass
802.11n (20MHz)	5825	2.416	-0.086	2.33	30	Pass
802.11n (40MHz)	5755	-0.041	-0.086	-0.127	30	Pass
802.11n (40MHz)	5795	-0.086	-0.086	-0.172	30	Pass
802.11ac (20MHz)	5745	2.914	-0.086	2.828	30	Pass
802.11ac (20MHz)	5785	2.665	-0.086	2.579	30	Pass
802.11ac (20MHz)	5825	2.499	-0.086	2.413	30	Pass
802.11ac (40MHz)	5755	0.275	-0.086	0.189	30	Pass
802.11ac (40MHz)	5795	0.166	-0.086	0.08	30	Pass
802.11ac (80MHz)	5775	-4.319	-0.086	-4.405	30	Pass
802.11a (20MHz)	5745	3.719	-0.086	3.633	30	Pass
802.11a (20MHz)	5785	3.618	-0.086	3.532	30	Pass
802.11a (20MHz)	5825	3.288	-0.086	3.202	30	Pass

Remark: Final result showed in report was corrected by reading level showed in test plots + correction factor.

Correction factor =  $10 \log (500 \text{ kHz Reference} / 510 \text{ KHz Measured}) = -0.086$

### 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



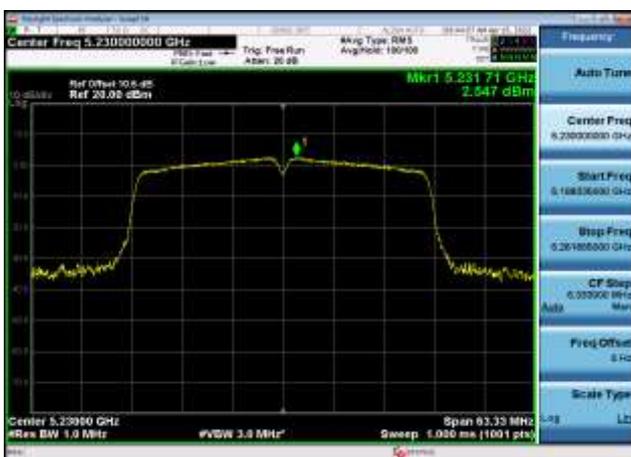
U-NII-1 Power spectral density-802.11  
n(20MHz),5240MHz,Ant1



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



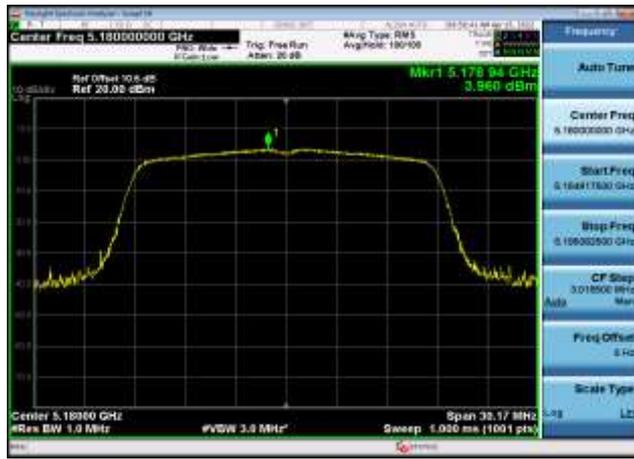
U-NII-1 Power spectral density-802.11  
a(20MHz),5220MHz,Ant1



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



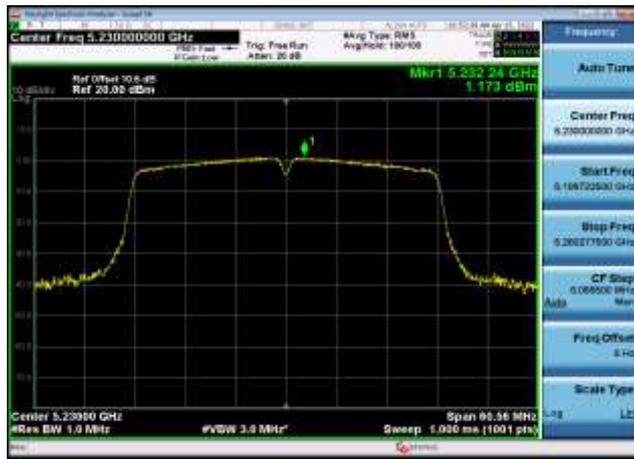
U-NII-1 Power spectral density-802.11  
ac(20MHz),5240MHz,Ant1



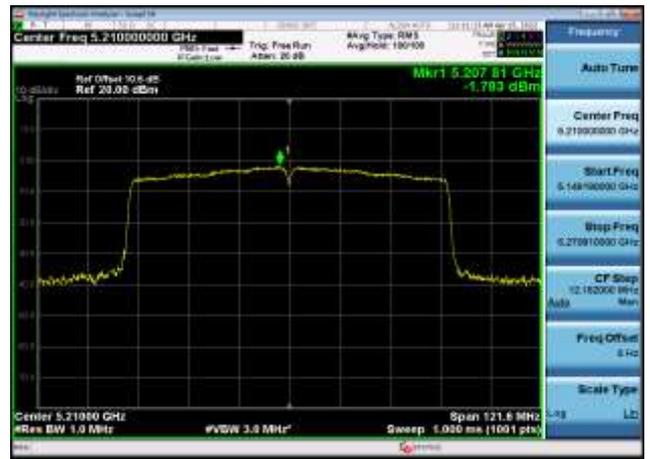
U-NII-1 Power spectral density-802.11  
ac(40MHz),5190MHz,Ant1



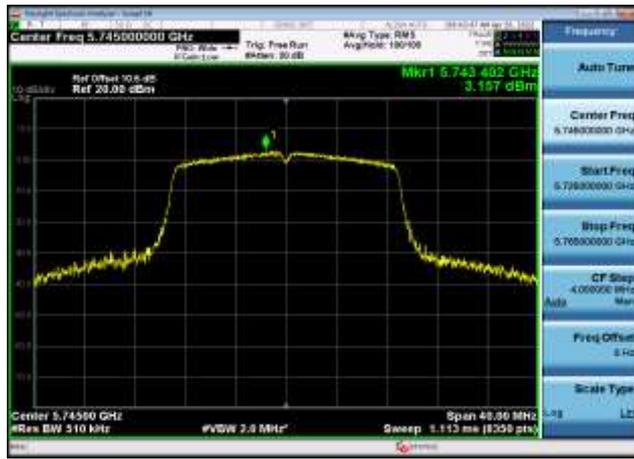
U-NII-1 Power spectral density-802.11  
ac(40MHz),5230MHz,Ant1



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



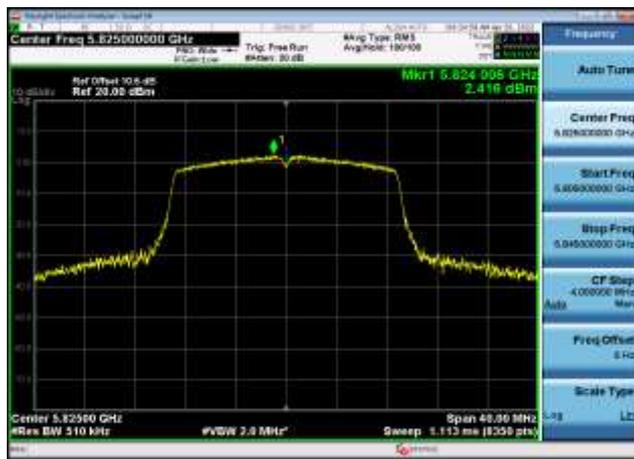
U-NII-3 Power spectral density-802.11  
n(20MHz),5745MHz,Ant1



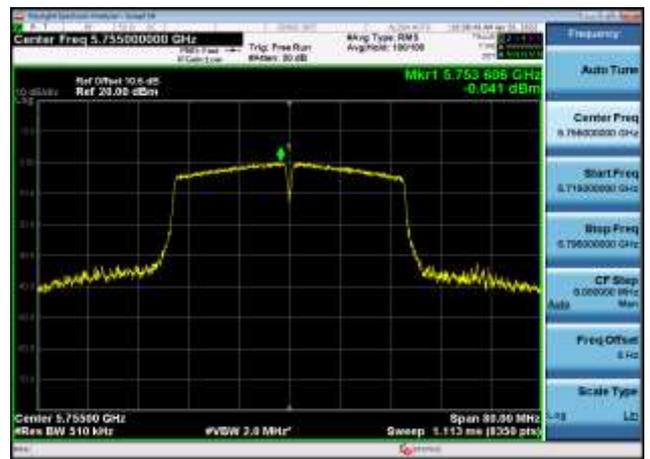
U-NII-3 Power spectral density-802.11  
n(20MHz),5785MHz,Ant1



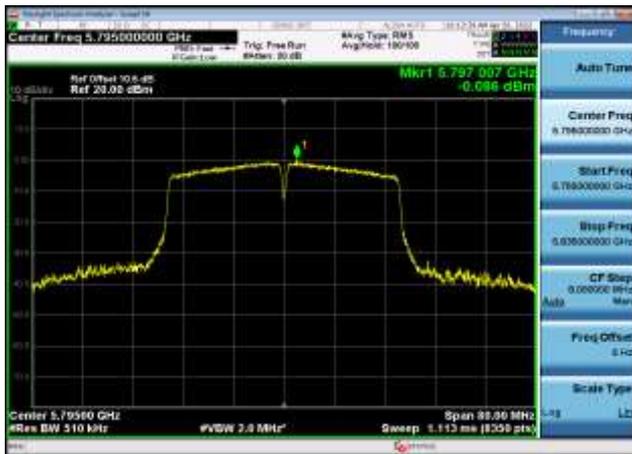
U-NII-3 Power spectral density-802.11  
n(20MHz),5825MHz,Ant1



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



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



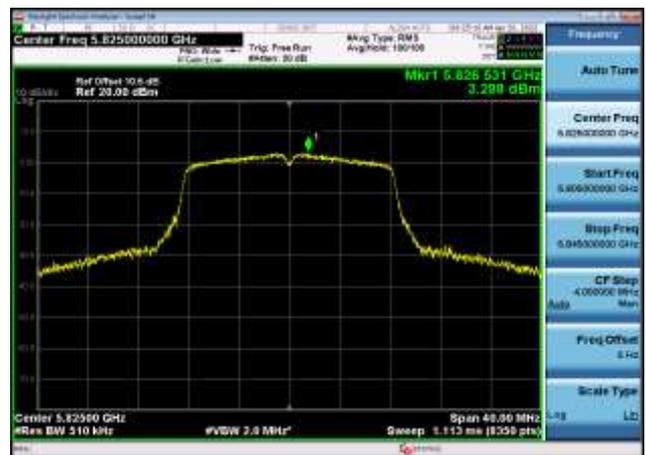
U-NII-3 Power spectral density-802.11  
a(20MHz),5745MHz,Ant1



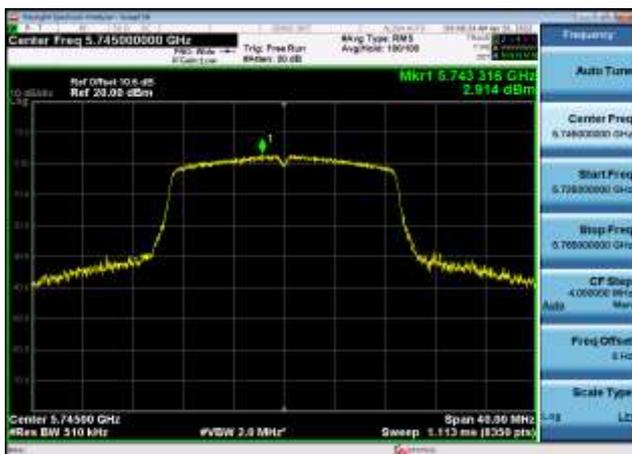
U-NII-3 Power spectral density-802.11  
a(20MHz),5785MHz,Ant1



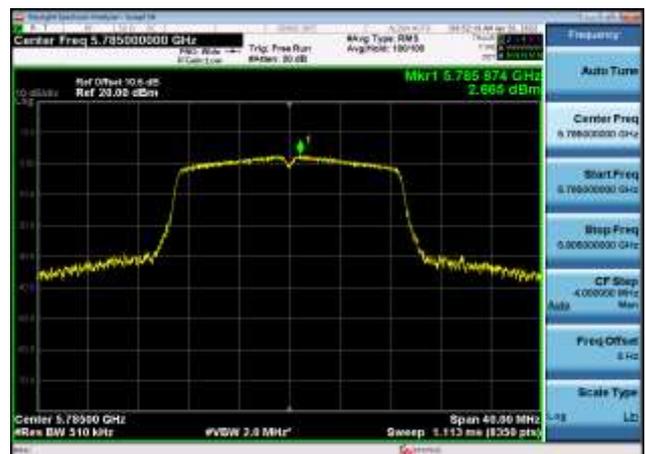
U-NII-3 Power spectral density-802.11  
a(20MHz),5825MHz,Ant1



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



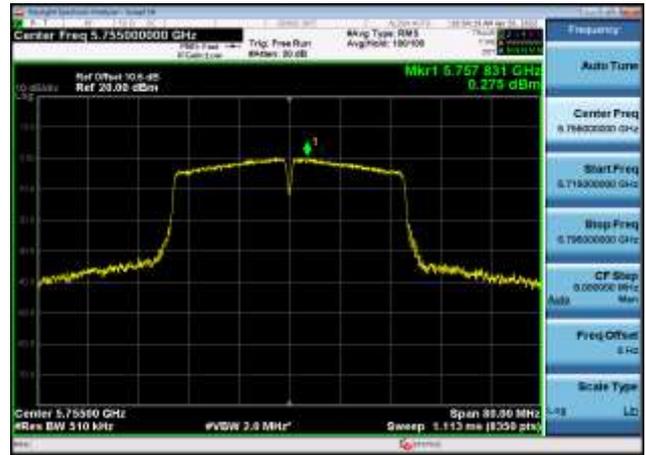
U-NII-3 Power spectral density-802.11  
ac(20MHz),5785MHz,Ant1



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



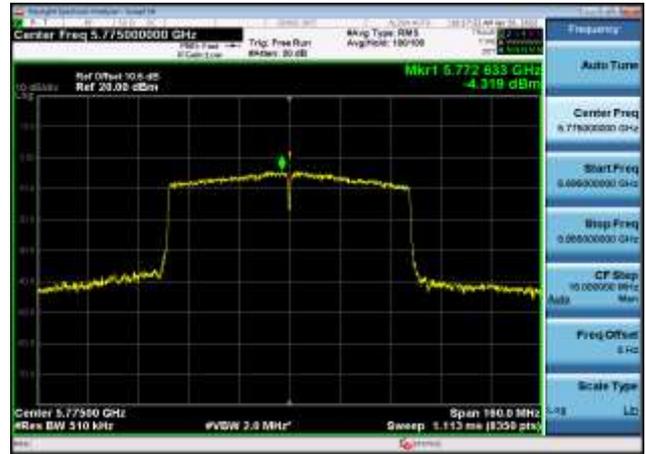
U-NII-3 Power spectral density-802.11  
ac(40MHz),5755MHz,Ant1



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



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





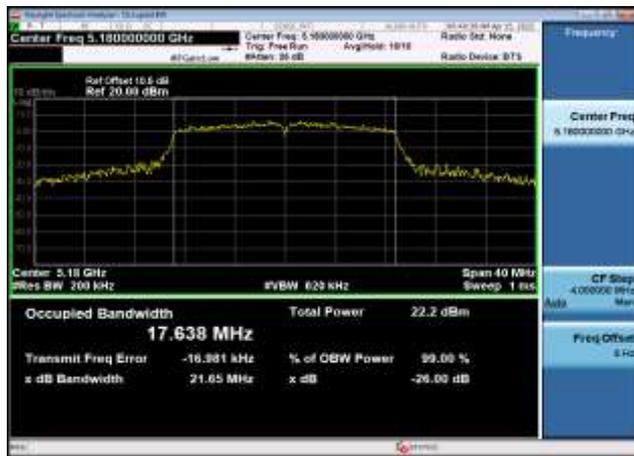
## 26dB Down Bandwidth

### Test Result and Data

U-NII-1 Occupied 26dB Bandwidth			
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5180	21.65	Pass
802.11n (20MHz)	5220	21.81	Pass
802.11n (20MHz)	5240	22.95	Pass
802.11n (40MHz)	5190	48.95	Pass
802.11n (40MHz)	5230	42.22	Pass
802.11ac (20MHz)	5180	20.11	Pass
802.11ac (20MHz)	5220	20.20	Pass
802.11ac (20MHz)	5240	20.37	Pass
802.11ac (40MHz)	5190	40.16	Pass
802.11ac (40MHz)	5230	40.37	Pass
802.11ac (80MHz)	5210	81.08	Pass
802.11a (20MHz)	5180	22.33	Pass
802.11a (20MHz)	5220	22.18	Pass
802.11a (20MHz)	5240	24.87	Pass

### Test Plots

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



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



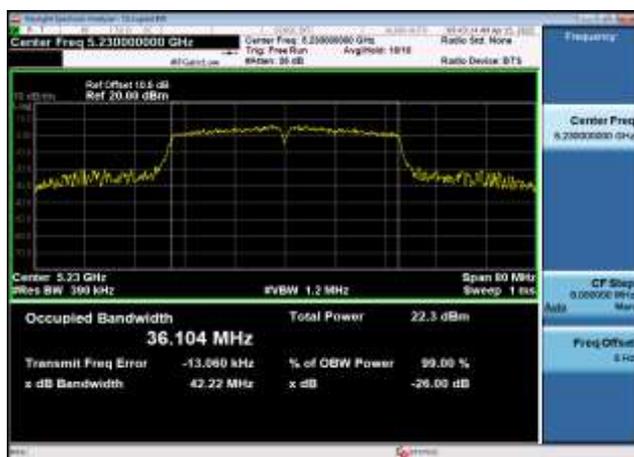
U-NII-1 26dB Bandwidth-802.11n(20MHz)  
,5240MHz,Ant1



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



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



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



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



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



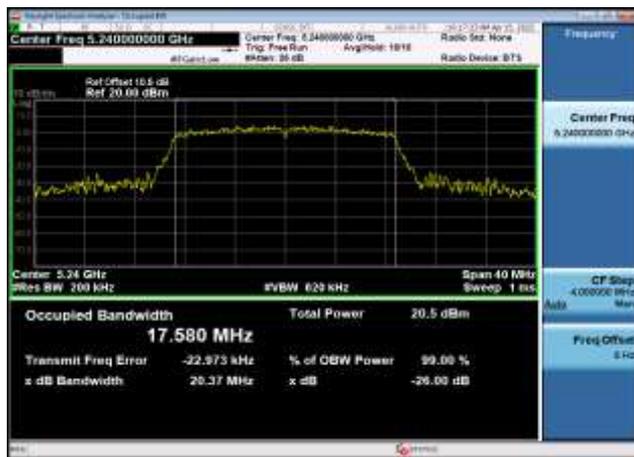
U-NII-1 26dB Bandwidth-802.11ac(20MHz)  
,5180MHz,Ant1



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



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



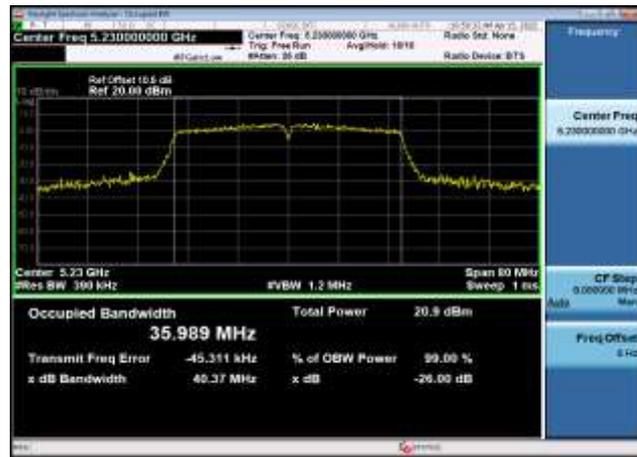
U-NII-1 26dB Bandwidth-802.11ac(40MHz)  
,5190MHz,Ant1





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

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





## 6dB Down Bandwidth

### Test Result and Data

U-NII-3 Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Min Limit (KHz)	Result
802.11n (20MHz)	5745	14.07	500	Pass
802.11n (20MHz)	5785	16.03	500	Pass
802.11n (20MHz)	5825	15.13	500	Pass
802.11n (40MHz)	5755	35.14	500	Pass
802.11n (40MHz)	5795	33.92	500	Pass
802.11ac (20MHz)	5745	13.93	500	Pass
802.11ac (20MHz)	5785	15.08	500	Pass
802.11ac (20MHz)	5825	15.00	500	Pass
802.11ac (40MHz)	5755	35.15	500	Pass
802.11ac (40MHz)	5795	35.09	500	Pass
802.11ac (80MHz)	5775	75.30	500	Pass
802.11a (20MHz)	5745	13.86	500	Pass
802.11a (20MHz)	5785	15.07	500	Pass
802.11a (20MHz)	5825	15.10	500	Pass

## Test Plots

U-NII-3 6dB Bandwidth-802.11n(20MHz)  
,5745MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(20MHz)  
,5785MHz,Ant1



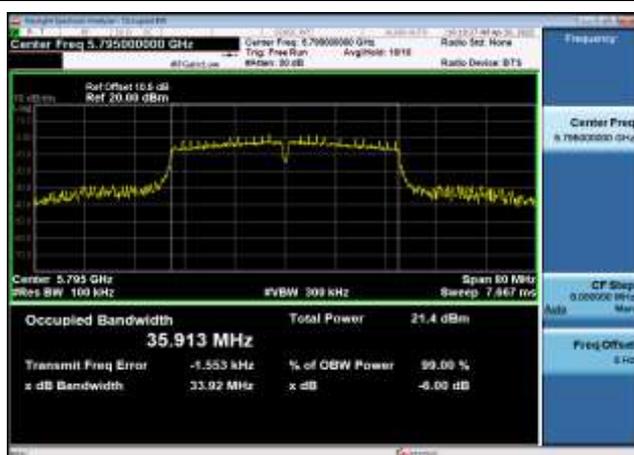
U-NII-3 6dB Bandwidth-802.11n(20MHz)  
,5825MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(40MHz)  
,5755MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(40MHz)  
,5795MHz,Ant1



U-NII-3 6dB Bandwidth-802.11a(20MHz)  
,5745MHz,Ant1



U-NII-3 6dB Bandwidth-802.11a(20MHz)  
,5785MHz,Ant1



U-NII-3 6dB Bandwidth-802.11a(20MHz)  
,5825MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(20MHz)  
,5745MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(20MHz)  
,5785MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(20MHz)  
,5825MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(40MHz)  
,5755MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(40MHz)  
,5795MHz,Ant1

U-NII-3 6dB Bandwidth-802.11ac(80MHz)  
,5775MHz,Ant1





## 99% Occupied Bandwidth

### Test Result and Data

U-NII-1 99% Occupied Bandwidth			
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5180	17.759	Pass
802.11n (20MHz)	5220	17.759	Pass
802.11n (20MHz)	5240	17.817	Pass
802.11n (40MHz)	5190	36.538	Pass
802.11n (40MHz)	5230	36.573	Pass
802.11ac (20MHz)	5180	17.710	Pass
802.11ac (20MHz)	5220	17.680	Pass
802.11ac (20MHz)	5240	17.671	Pass
802.11ac (40MHz)	5190	36.267	Pass
802.11ac (40MHz)	5230	36.270	Pass
802.11ac (80MHz)	5210	75.375	Pass
802.11a (20MHz)	5180	16.893	Pass
802.11a (20MHz)	5220	16.768	Pass
802.11a (20MHz)	5240	16.800	Pass



U-NII-3 99% Occupied Bandwidth			
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5745	17.747	Pass
802.11n (20MHz)	5785	17.756	Pass
802.11n (20MHz)	5825	17.842	Pass
802.11n (40MHz)	5755	36.457	Pass
802.11n (40MHz)	5795	36.466	Pass
802.11ac (20MHz)	5745	17.733	Pass
802.11ac (20MHz)	5785	17.724	Pass
802.11ac (20MHz)	5825	17.803	Pass
802.11ac (40MHz)	5755	36.255	Pass
802.11ac (40MHz)	5795	36.370	Pass
802.11ac (80MHz)	5775	75.373	Pass
802.11a (20MHz)	5745	16.768	Pass
802.11a (20MHz)	5785	16.748	Pass
802.11a (20MHz)	5825	16.805	Pass

**Test Plots**

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

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

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

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

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

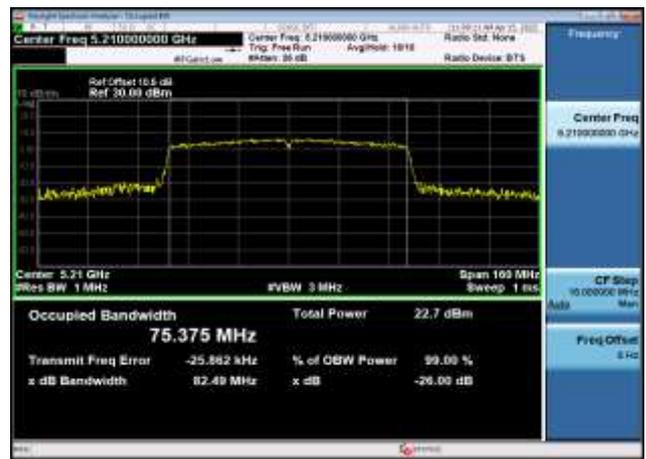
 U-NII-1 99% Bandwidth-802.11a(20MHz)  
 ,5180MHz,Ant1




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



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



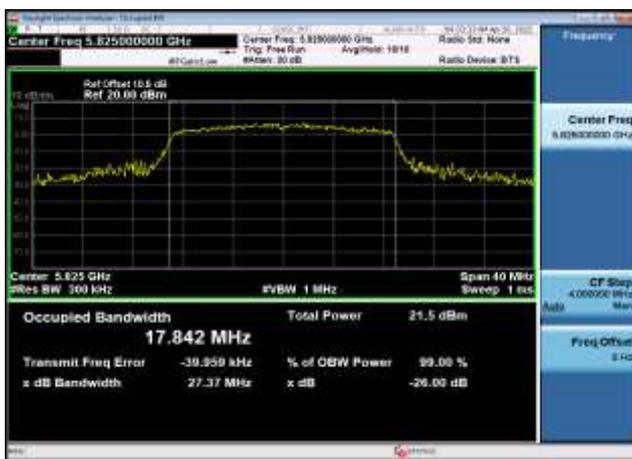
U-NII-3 99% Bandwidth-802.11n(20MHz)  
,5745MHz,Ant1



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



U-NII-3 99% Bandwidth-802.11n(40MHz)  
,5795MHz,Ant1



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



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



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



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



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



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



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



U-NII-3 99% Bandwidth-802.11ac(40MHz)  
,5795MHz,Ant1



U-NII-3 99% Bandwidth-802.11ac(80MHz)  
,5775MHz,Ant1



**Frequency Stability**

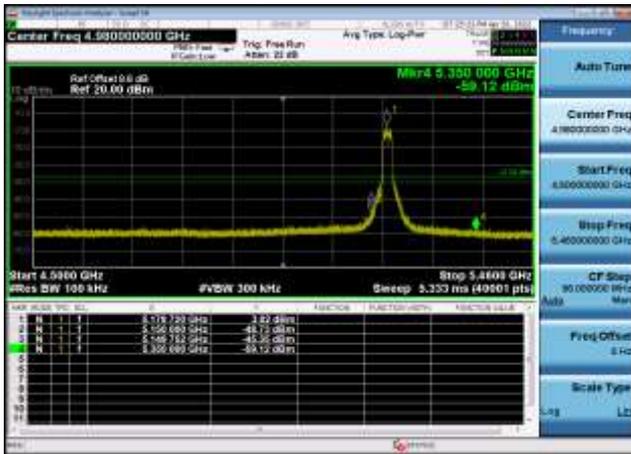
U-NII-1 Centre Frequency						
Mode	Test Frequency (MHz)	Ant	LF (MHz)	HF (MHz)	CF (MHz)	Test Result
802.11n (20MHz)	5180	Ant1	5171.187	5188.797	5179.992	Pass
802.11n (20MHz)	5220	Ant1	5211.200	5228.791	5219.995	Pass
802.11n (20MHz)	5240	Ant1	5231.199	5248.790	5239.995	Pass
802.11n (40MHz)	5190	Ant1	5171.826	5208.171	5189.999	Pass
802.11n (40MHz)	5230	Ant1	5211.846	5248.159	5230.002	Pass
802.11ac (20MHz)	5180	Ant1	5171.160	5188.881	5180.020	Pass
802.11ac (20MHz)	5220	Ant1	5211.122	5228.899	5220.010	Pass
802.11ac (20MHz)	5240	Ant1	5231.198	5248.795	5239.996	Pass
802.11ac (40MHz)	5190	Ant1	5171.837	5208.162	5189.999	Pass
802.11ac (40MHz)	5230	Ant1	5211.844	5248.152	5229.998	Pass
802.11ac (80MHz)	5210	Ant1	5171.833	5248.153	5209.993	Pass
802.11a (20MHz)	5180	Ant1	5171.739	5188.288	5180.014	Pass
802.11a (20MHz)	5220	Ant1	5211.835	5228.180	5220.008	Pass
802.11a (20MHz)	5240	Ant1	5231.805	5248.261	5240.033	Pass



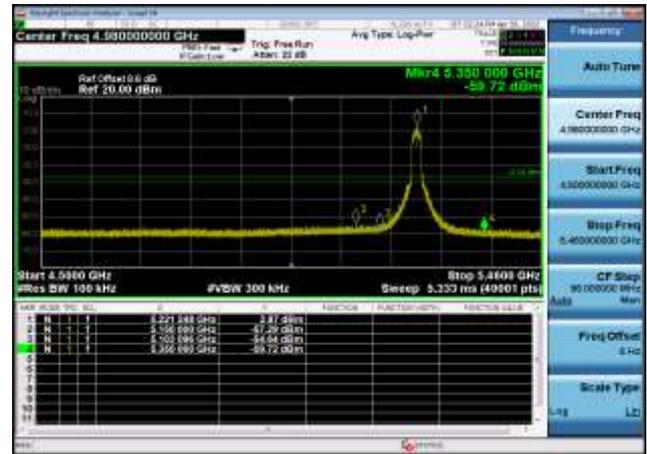
U-NII-3 Centre Frequency						
Mode	Test Frequency (MHz)	Ant	LF (MHz)	HF (MHz)	CF (MHz)	Test Result
802.11n (20MHz)	5745	Ant1	5736.108	5753.853	5744.981	Pass
802.11n (20MHz)	5785	Ant1	5776.125	5793.830	5784.978	Pass
802.11n (20MHz)	5825	Ant1	5816.178	5833.819	5824.999	Pass
802.11n (40MHz)	5755	Ant1	5736.835	5773.144	5754.990	Pass
802.11n (40MHz)	5795	Ant1	5776.811	5813.159	5794.985	Pass
802.11ac (20MHz)	5745	Ant1	5736.191	5753.806	5744.998	Pass
802.11ac (20MHz)	5785	Ant1	5776.193	5793.798	5784.996	Pass
802.11ac (20MHz)	5825	Ant1	5816.194	5833.791	5824.993	Pass
802.11ac (40MHz)	5755	Ant1	5736.823	5773.132	5754.978	Pass
802.11ac (40MHz)	5795	Ant1	5776.832	5813.144	5794.988	Pass
802.11ac (80MHz)	5775	Ant1	5736.823	5813.140	5774.982	Pass
802.11a (20MHz)	5745	Ant1	5736.763	5753.269	5745.016	Pass
802.11a (20MHz)	5785	Ant1	5776.813	5793.188	5785.000	Pass
802.11a (20MHz)	5825	Ant1	5816.822	5833.173	5824.998	Pass

### Conducted Band Edges and spurious emission

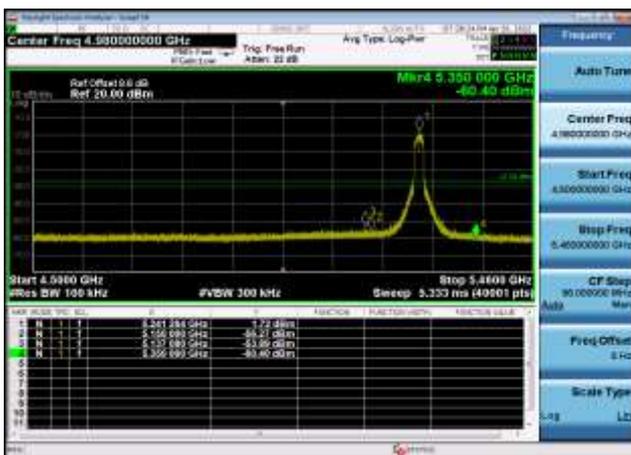
U-NII-1 ,Plot 1,Band Edge-802.11n(20M Hz),5180MHz,Ant1



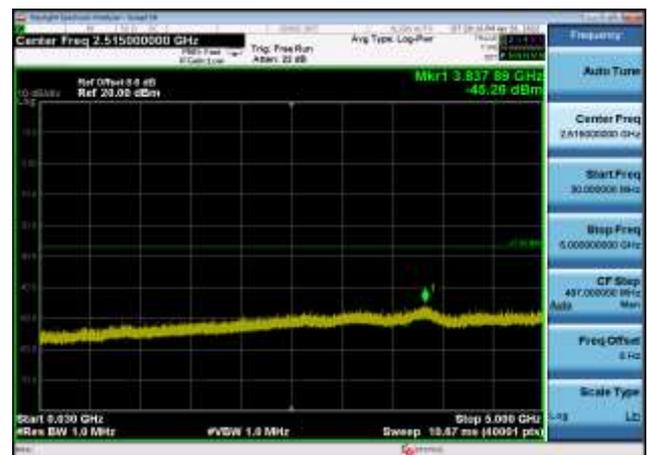
U-NII-1 ,Plot 1,Band Edge-802.11n(20M Hz),5220MHz,Ant1



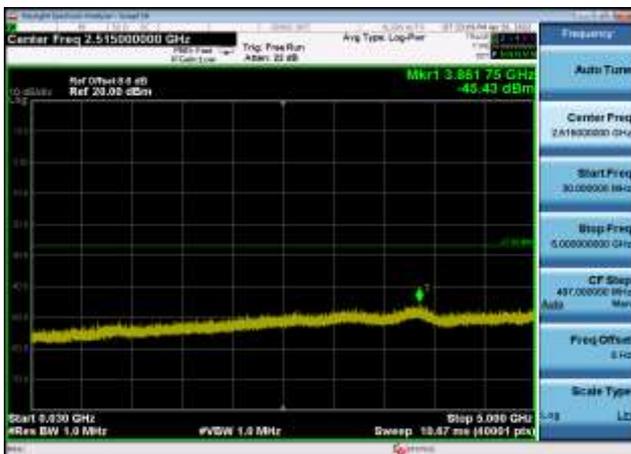
U-NII-1 ,Plot 1,Band Edge-802.11n(20M Hz),5240MHz,Ant1



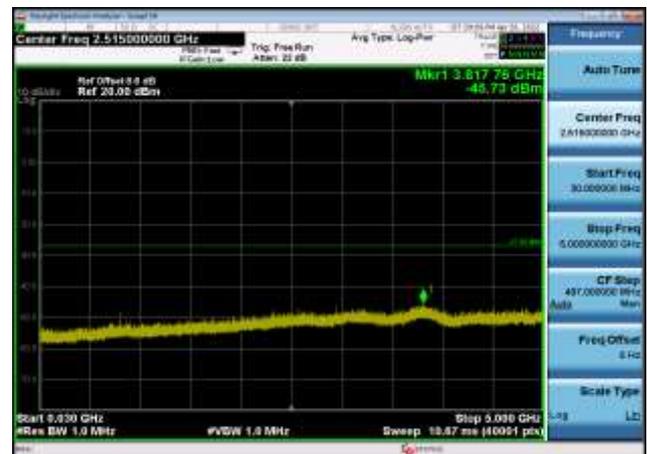
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n (20MHz),5180MHz,Ant1



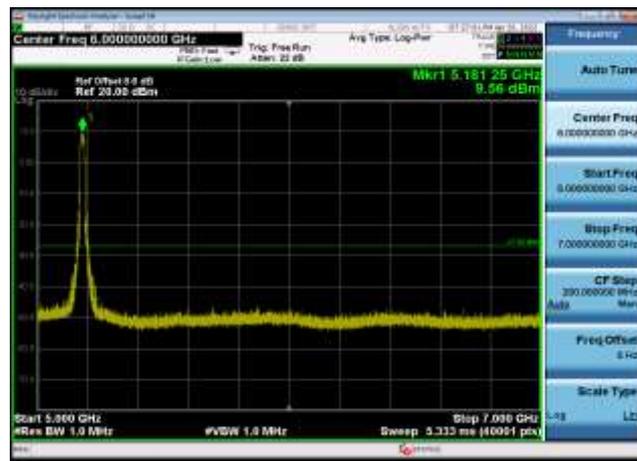
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n (20MHz),5220MHz,Ant1



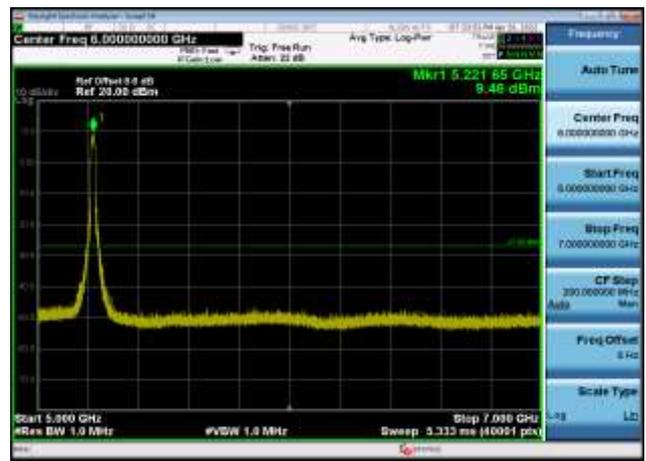
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n (20MHz),5240MHz,Ant1



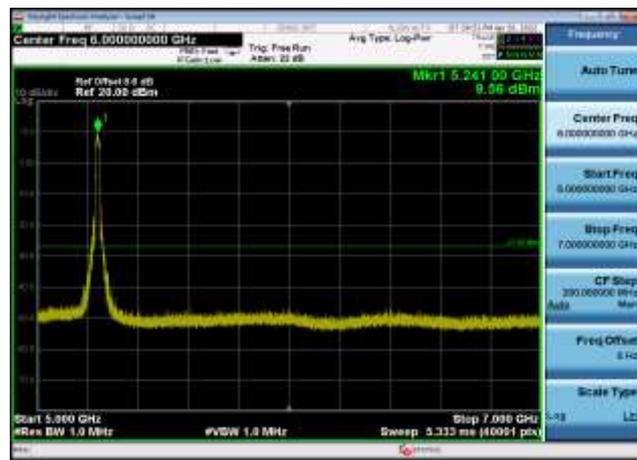
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1n(20MHz),5180MHz,Ant1



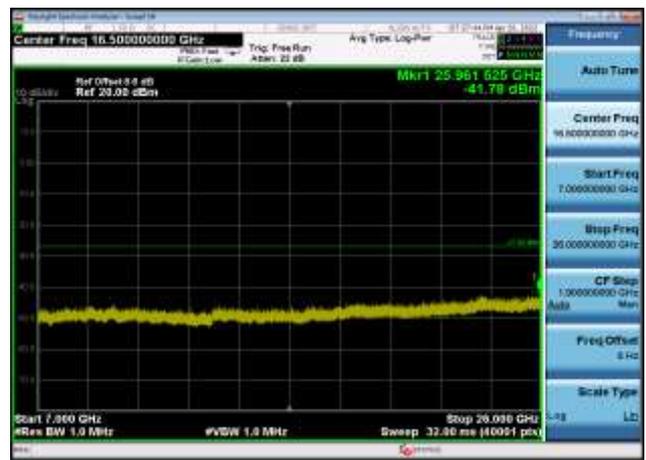
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1n(20MHz),5220MHz,Ant1



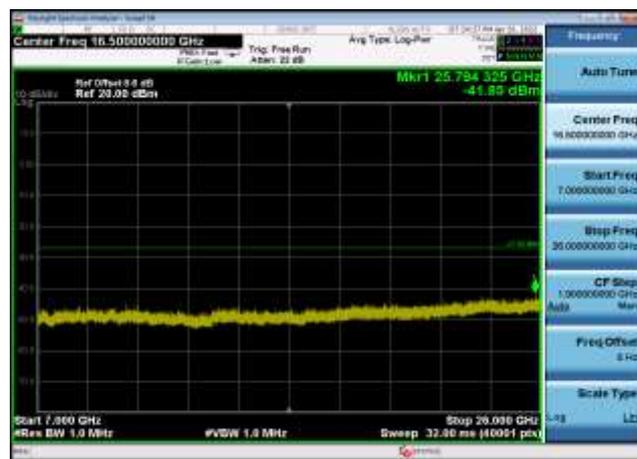
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1n(20MHz),5240MHz,Ant1



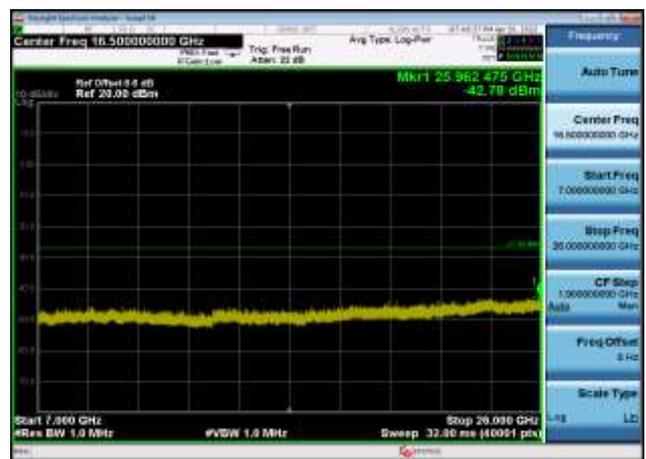
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11n(20MHz),5180MHz,Ant1



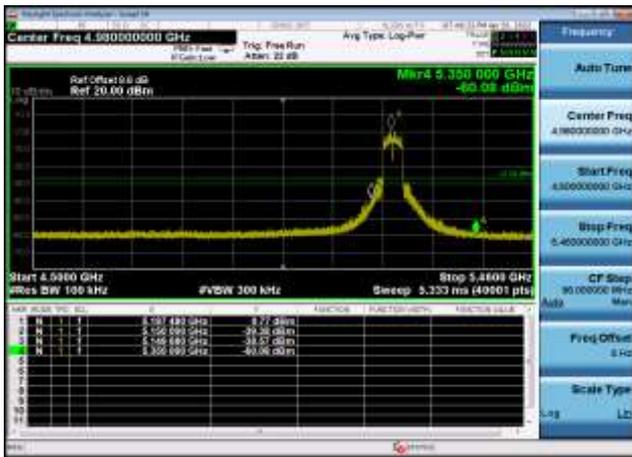
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11n(20MHz),5220MHz,Ant1



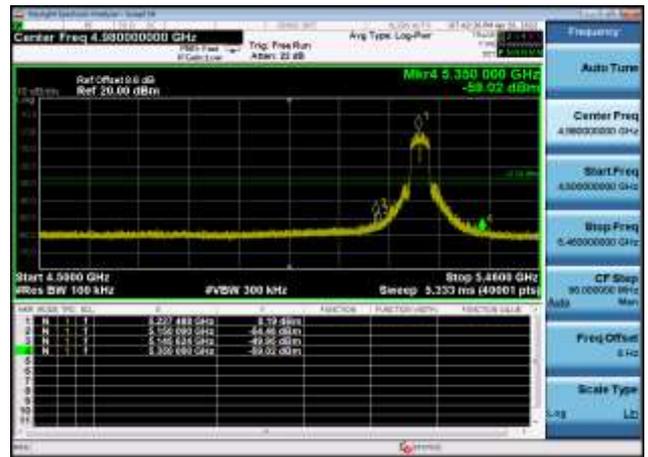
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11n(20MHz),5240MHz,Ant1



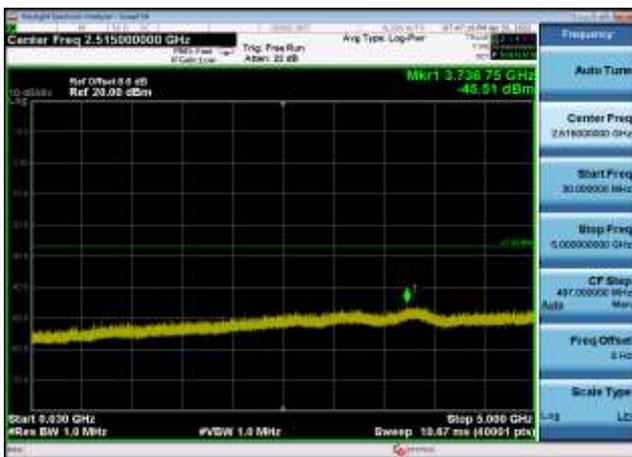
U-NII-1 ,Plot 1,Band Edge-802.11n(40M Hz),5190MHz,Ant1



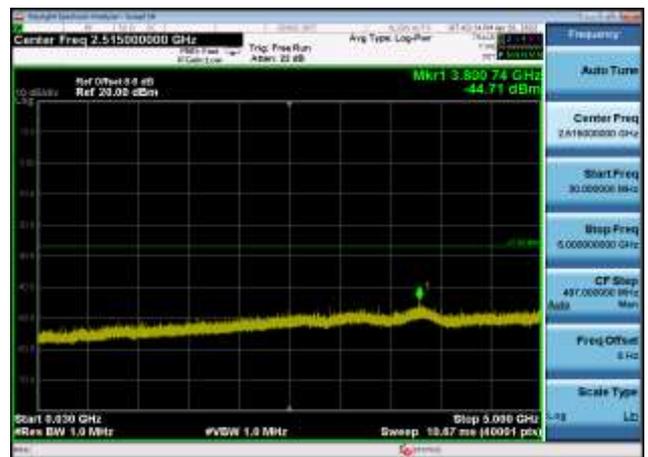
U-NII-1 ,Plot 1,Band Edge-802.11n(40M Hz),5230MHz,Ant1



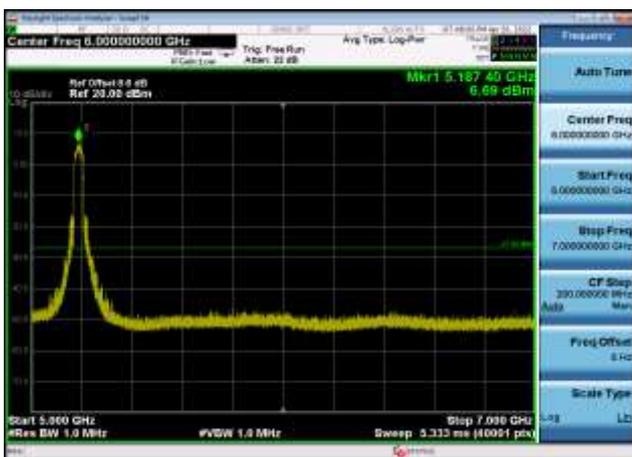
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n (40MHz),5190MHz,Ant1



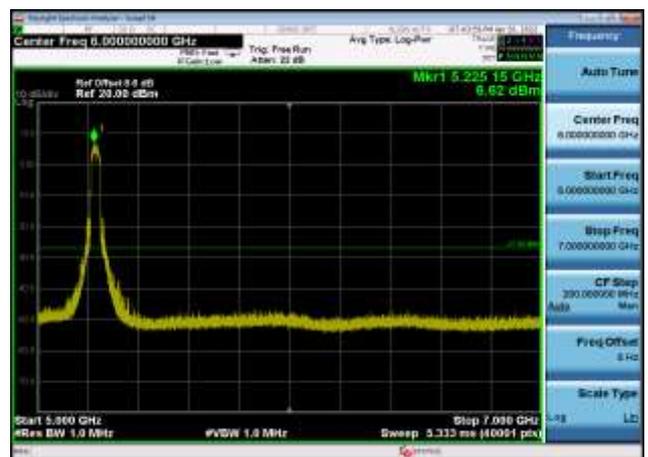
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n (40MHz),5230MHz,Ant1



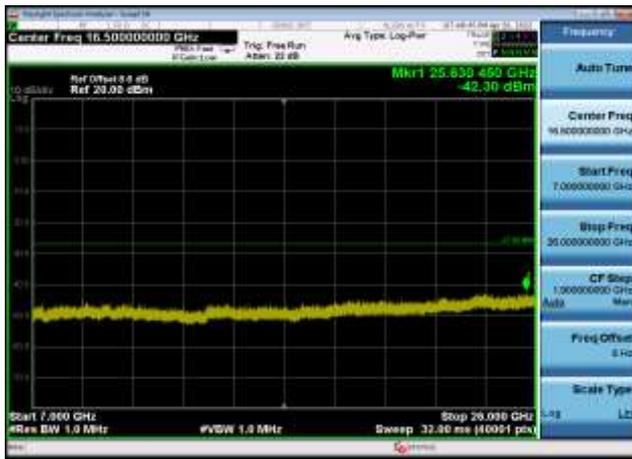
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1 n(40MHz),5190MHz,Ant1



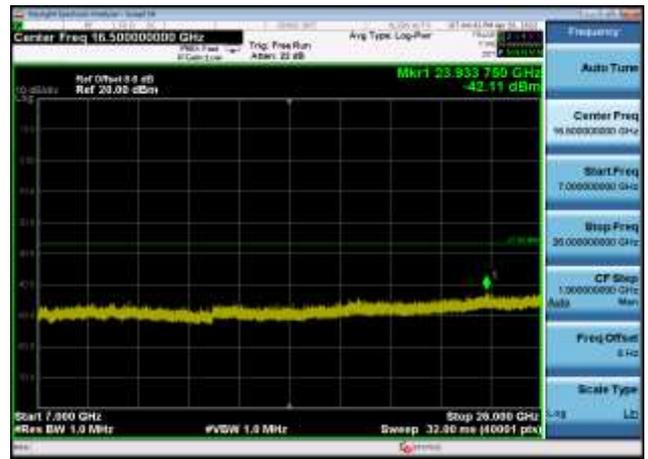
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1 n(40MHz),5230MHz,Ant1



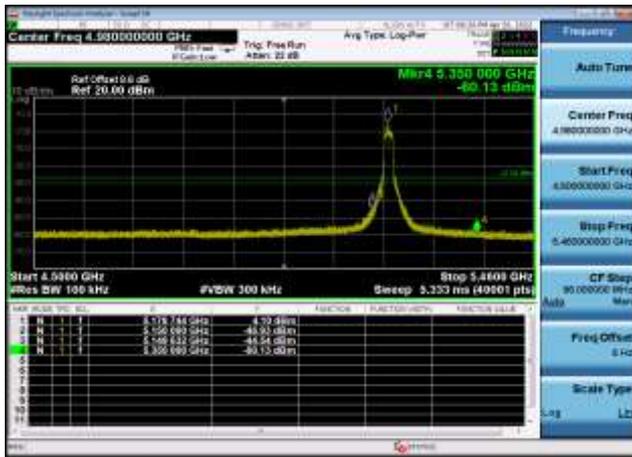
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11n(40MHz),5190MHz,Ant1



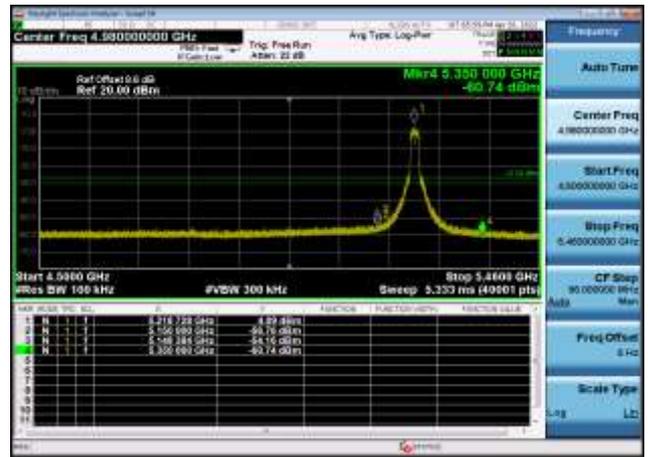
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11n(40MHz),5230MHz,Ant1



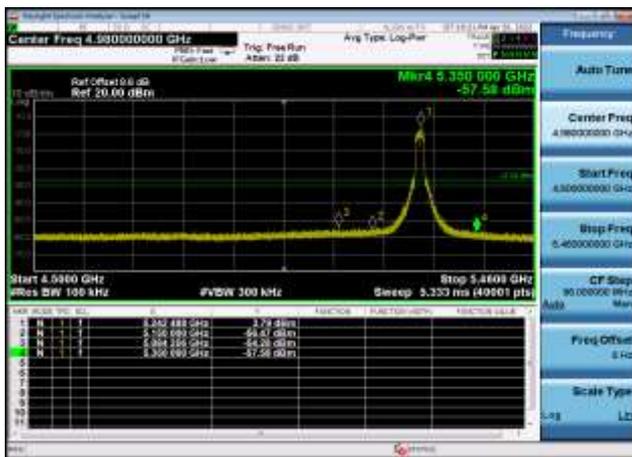
U-NII-1 ,Plot 1,Band Edge-802.11a(20  
Hz),5180MHz,Ant1



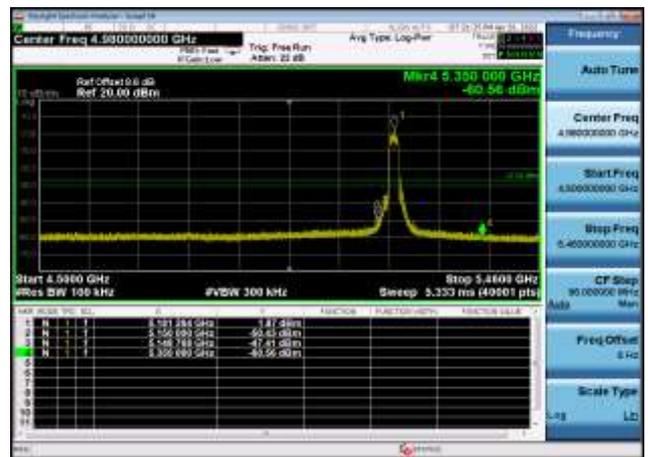
U-NII-1 ,Plot 1,Band Edge-802.11a(20  
Hz),5220MHz,Ant1



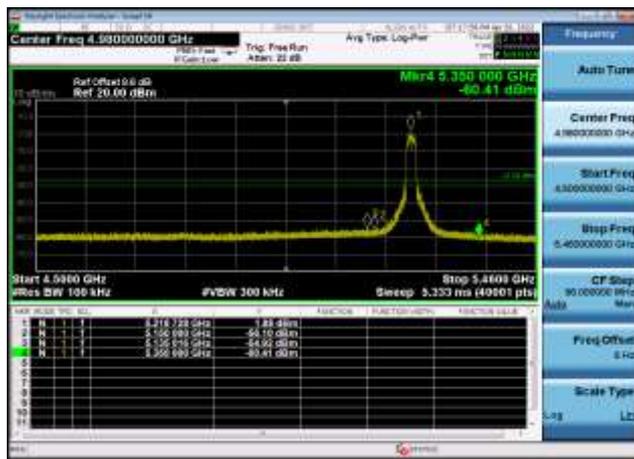
U-NII-1 ,Plot 1,Band Edge-802.11a(20  
Hz),5240MHz,Ant1



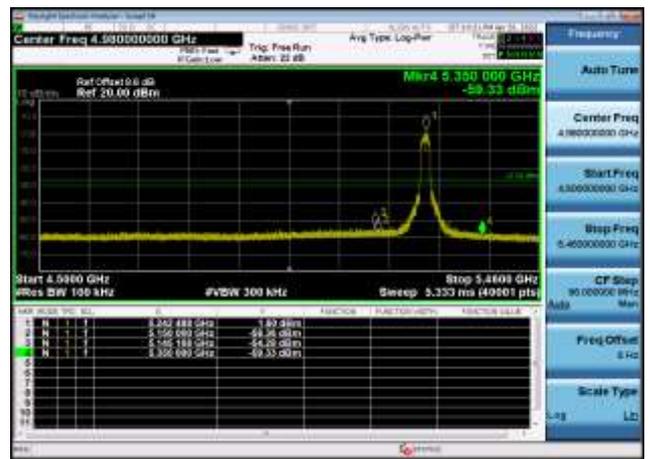
U-NII-1 ,Plot 1,Band Edge-802.11ac(20  
MHz),5180MHz,Ant1



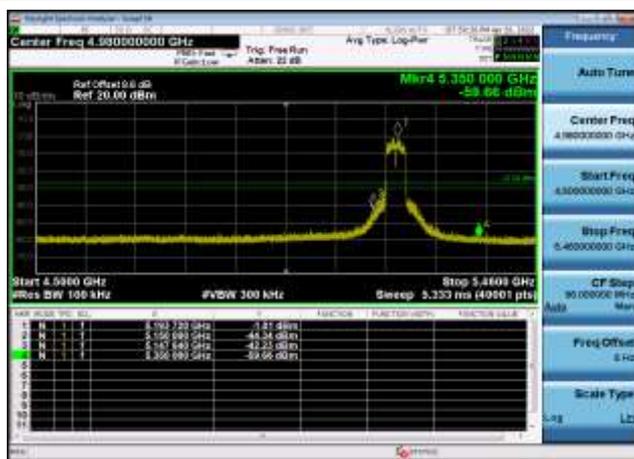
U-NII-1 ,Plot 1,Band Edge-802.11ac(20 MHz),5220MHz,Ant1



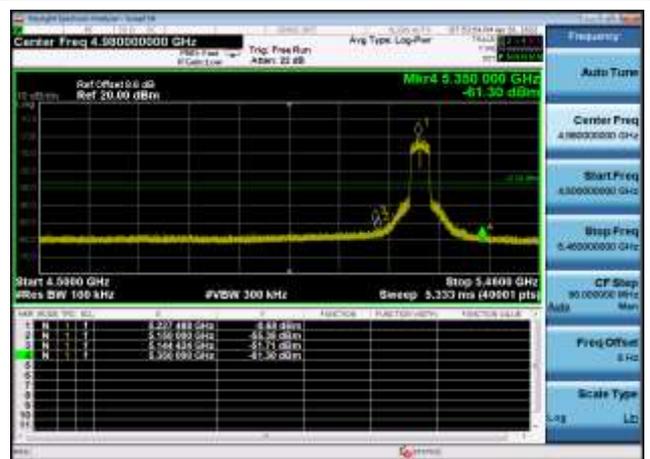
U-NII-1 ,Plot 1,Band Edge-802.11ac(20 MHz),5240MHz,Ant1



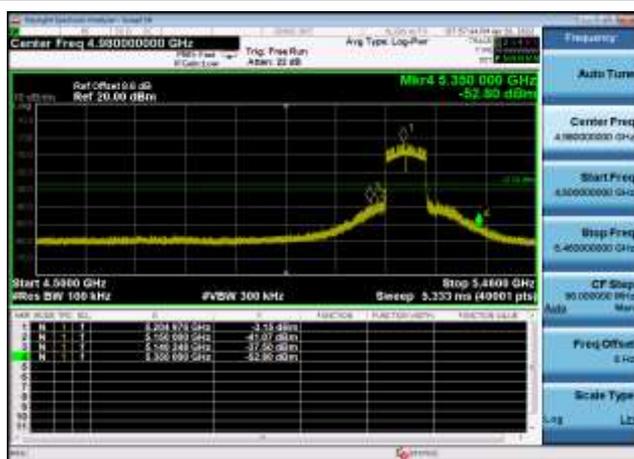
U-NII-1 ,Plot 1,Band Edge-802.11ac(40 MHz),5190MHz,Ant1



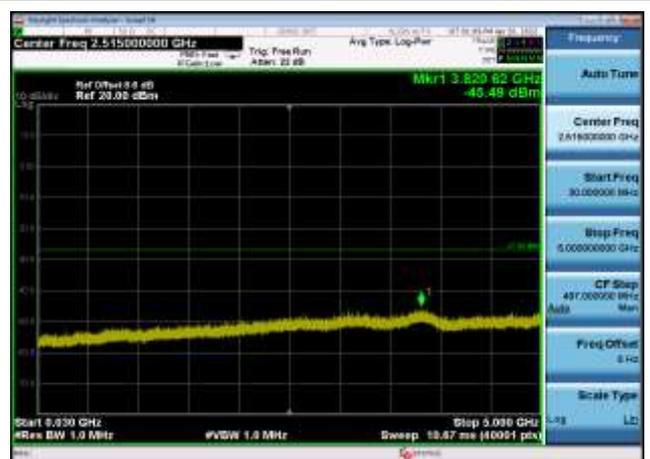
U-NII-1 ,Plot 1,Band Edge-802.11ac(40 MHz),5230MHz,Ant1



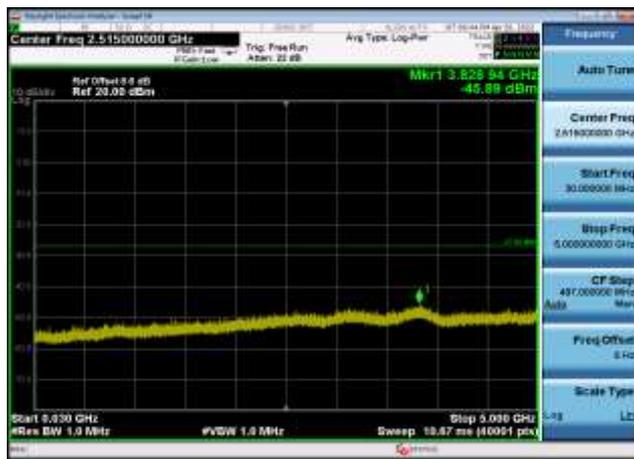
U-NII-1 ,Plot 1,Band Edge-802.11ac(80 MHz),5210MHz,Ant1



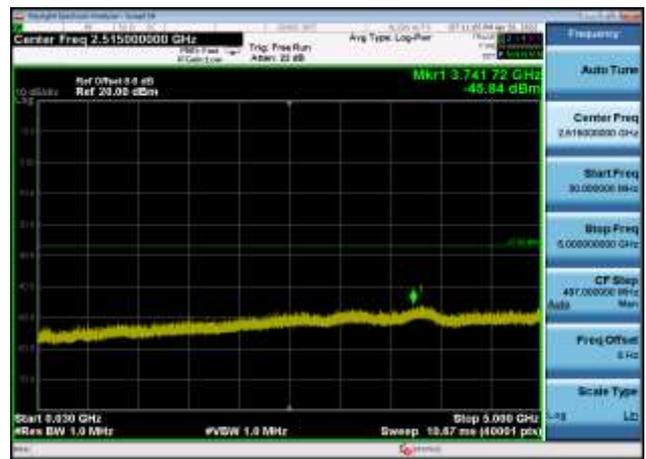
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a (20MHz),5180MHz,Ant1



U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
(20MHz),5220MHz,Ant1



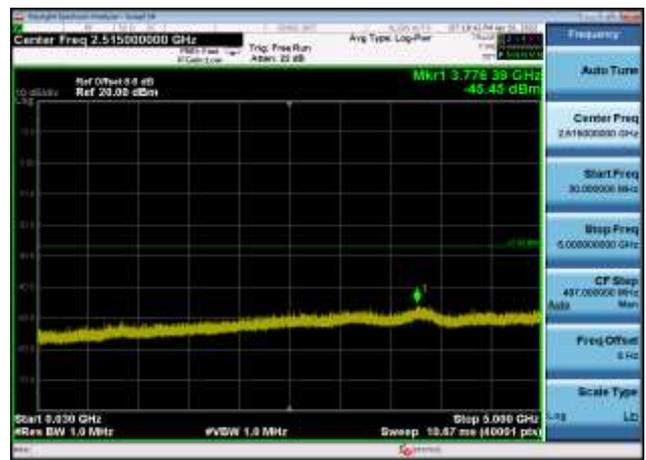
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
(20MHz),5240MHz,Ant1



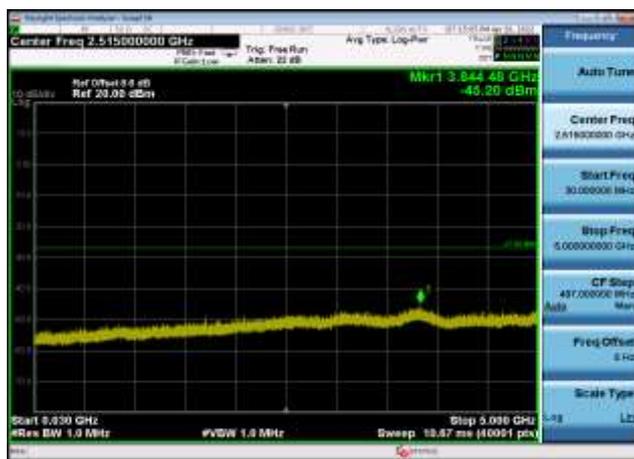
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
c(20MHz),5180MHz,Ant1



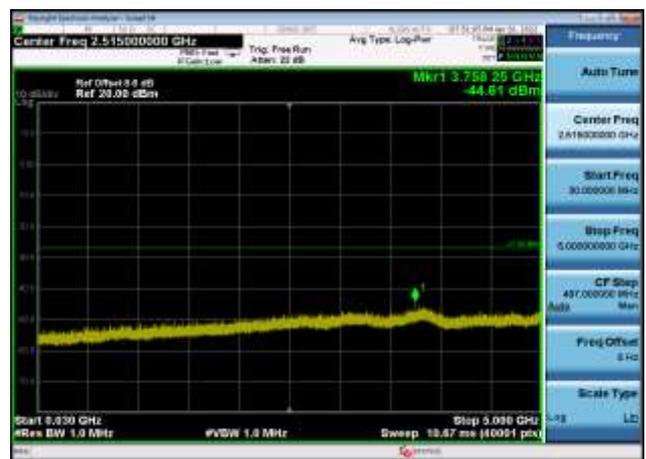
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
c(20MHz),5220MHz,Ant1



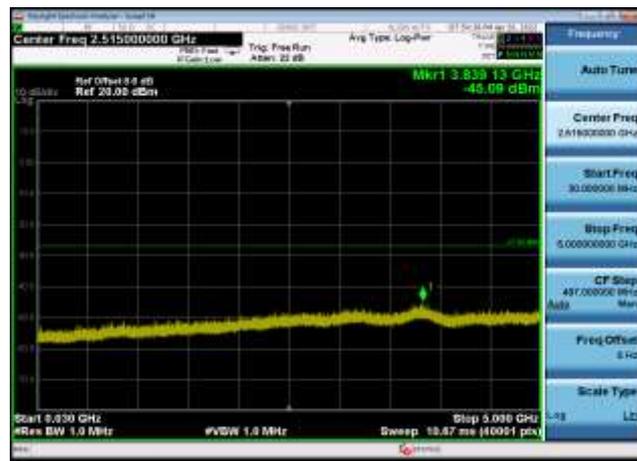
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
c(20MHz),5240MHz,Ant1



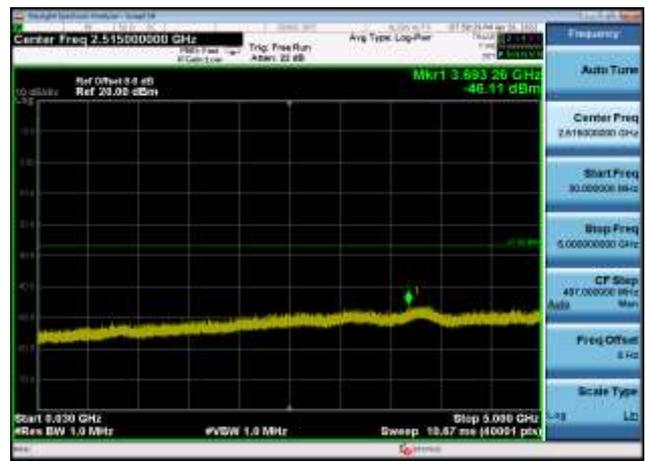
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
c(40MHz),5190MHz,Ant1



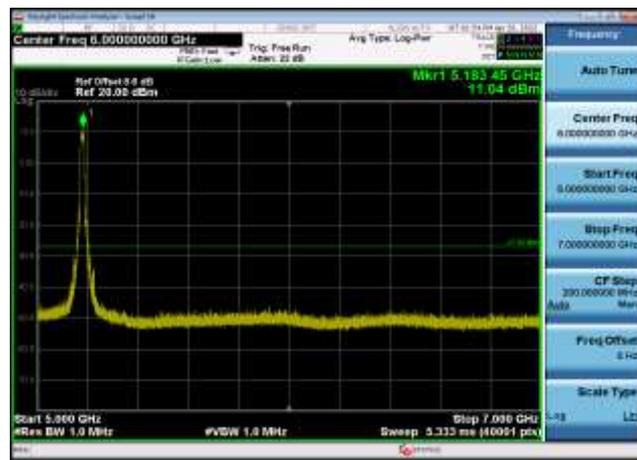
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
c(40MHz),5230MHz,Ant1



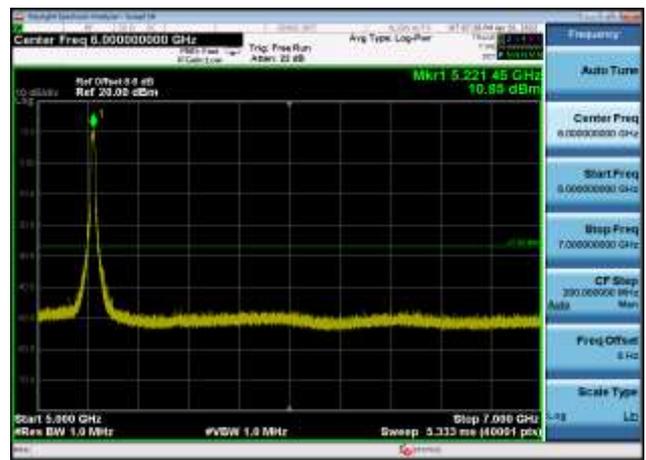
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11a  
c(80MHz),5210MHz,Ant1



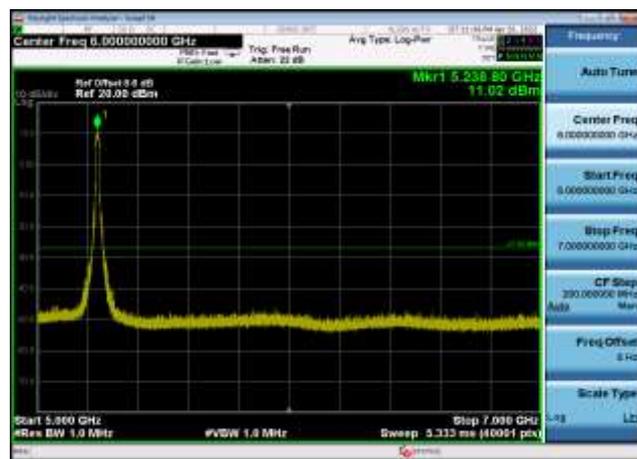
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1a(20MHz),5180MHz,Ant1



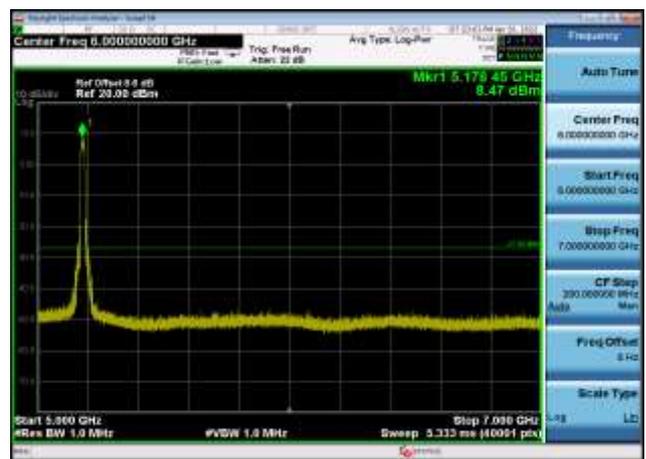
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1a(20MHz),5220MHz,Ant1



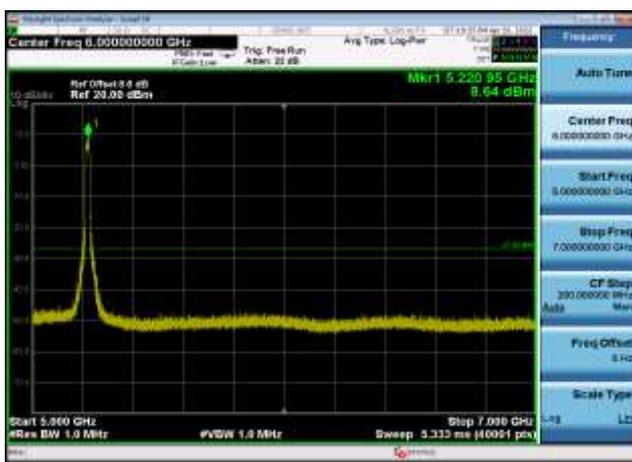
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1a(20MHz),5240MHz,Ant1



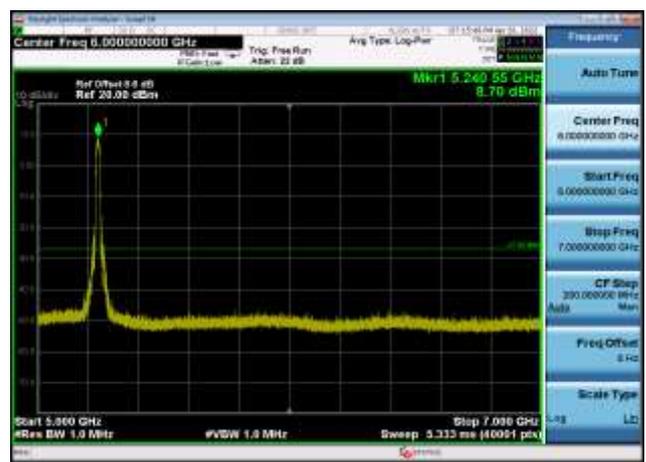
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(20MHz),5180MHz,Ant1



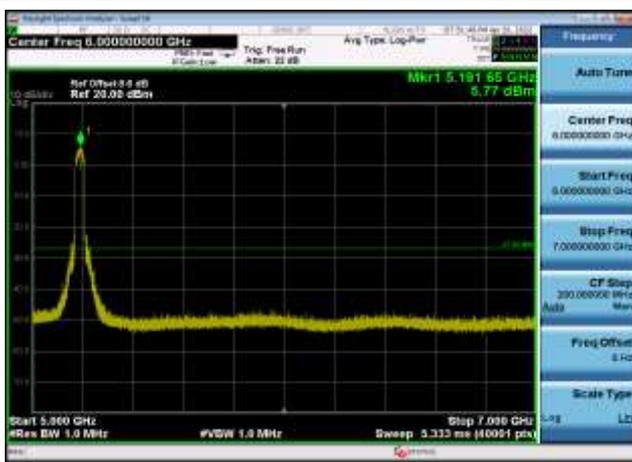
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(20MHz),5220MHz,Ant1



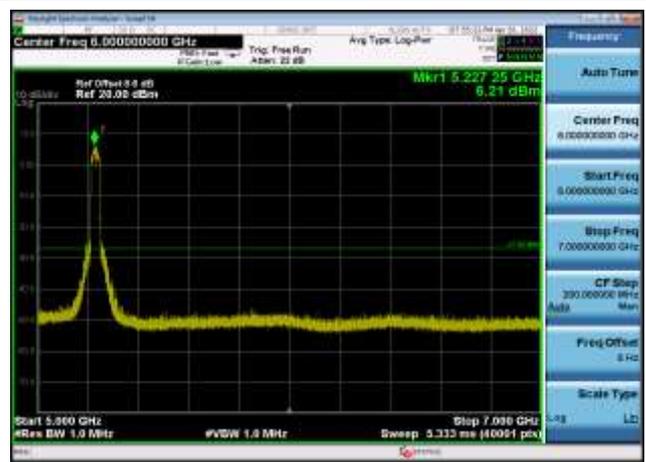
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(20MHz),5240MHz,Ant1



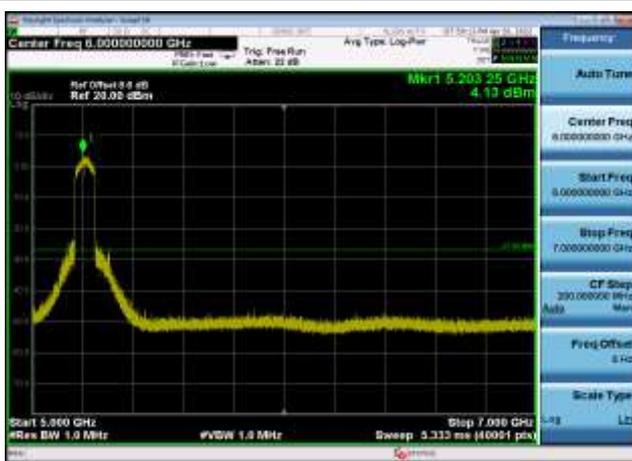
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(40MHz),5190MHz,Ant1



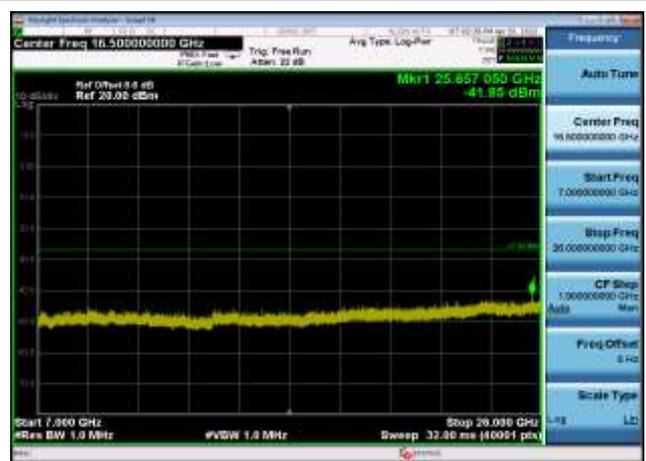
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(40MHz),5230MHz,Ant1



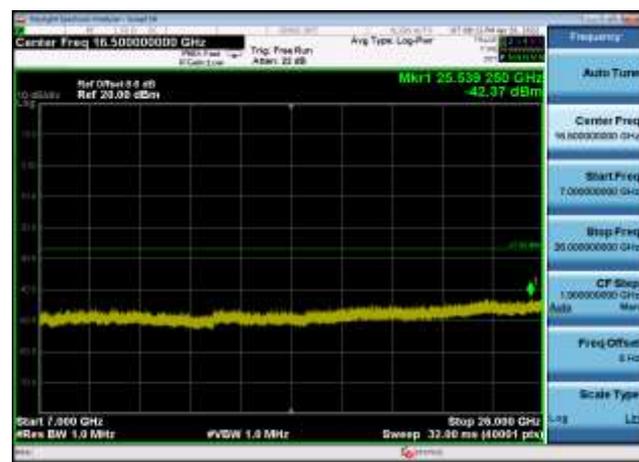
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(80MHz),5210MHz,Ant1



U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11a(20MHz),5180MHz,Ant1



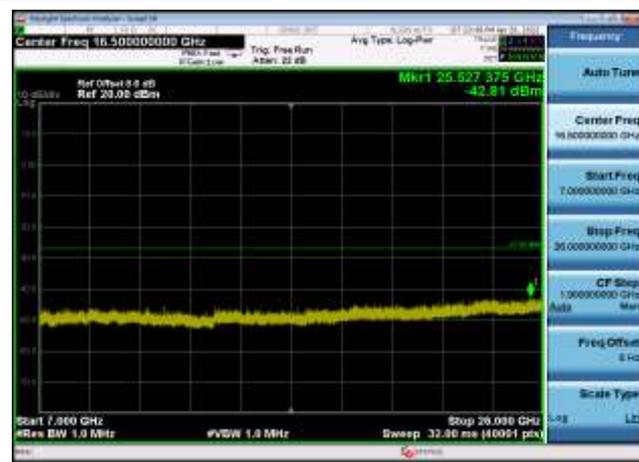
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11a(20MHz),5220MHz,Ant1



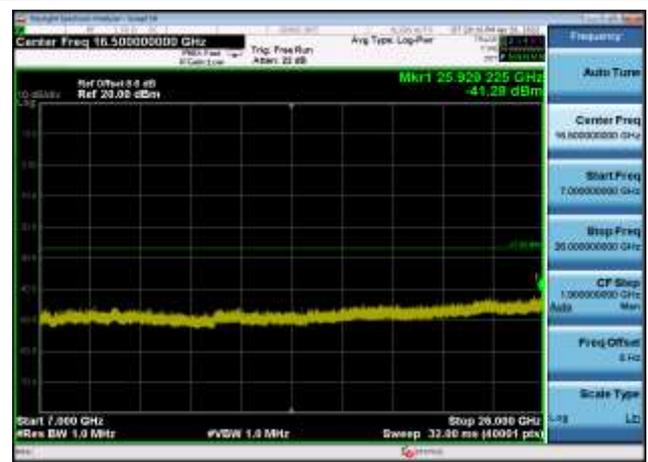
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11a(20MHz),5240MHz,Ant1



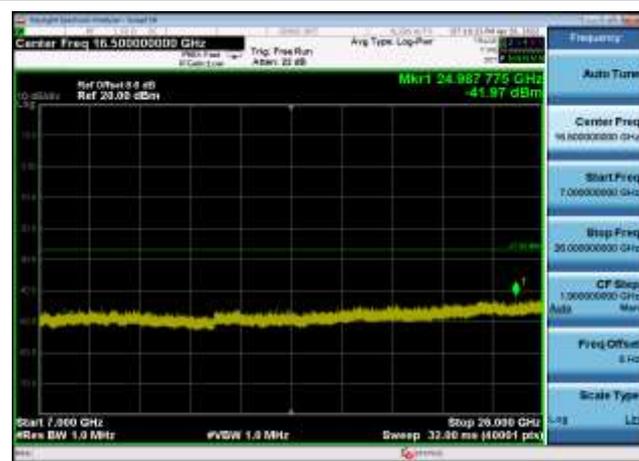
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11ac(20MHz),5180MHz,Ant1



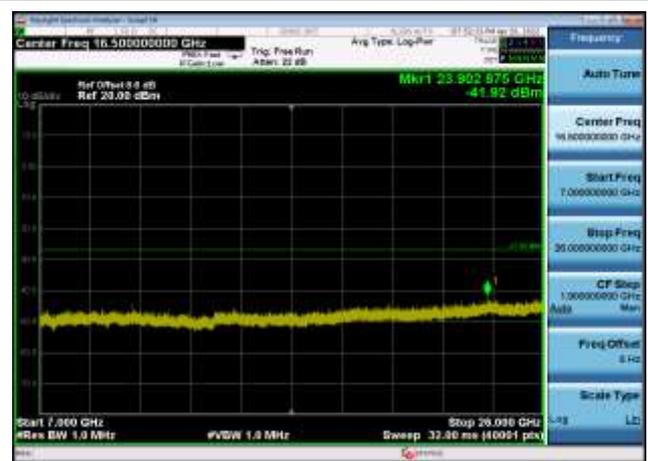
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11ac(20MHz),5220MHz,Ant1



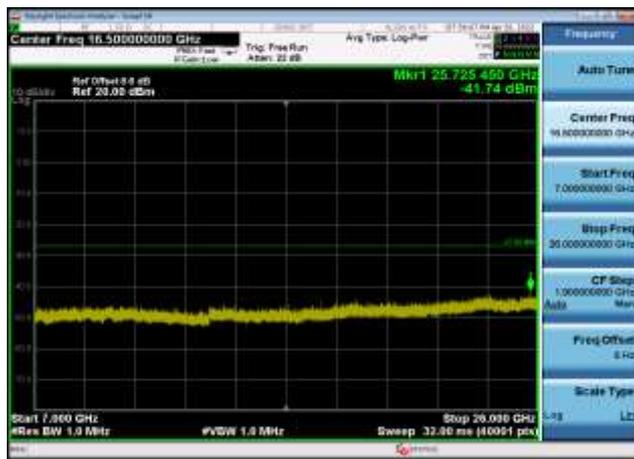
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11ac(20MHz),5240MHz,Ant1



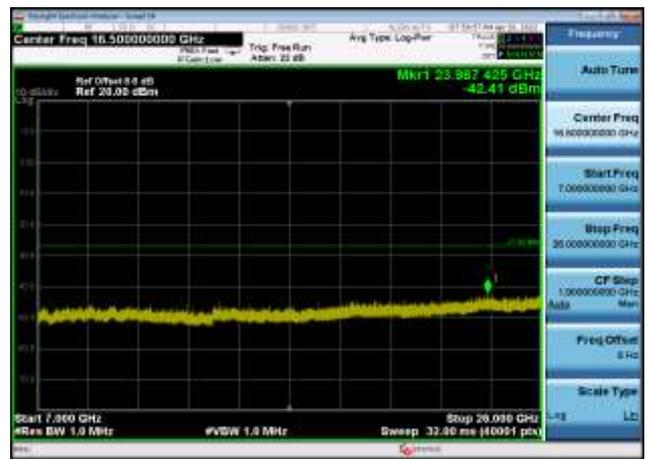
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.  
11ac(40MHz),5190MHz,Ant1



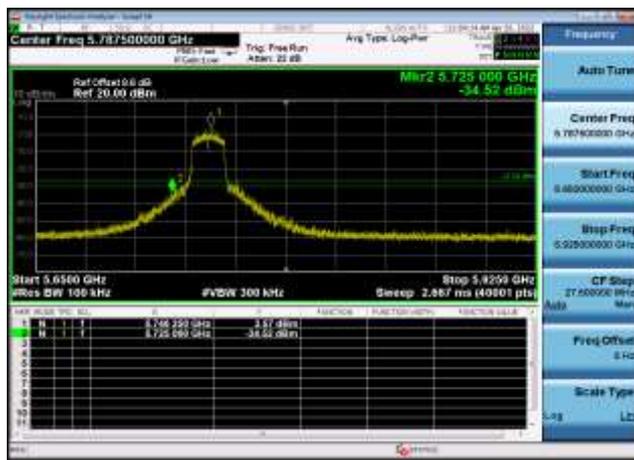
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.11ac(40MHz),5230MHz,Ant1



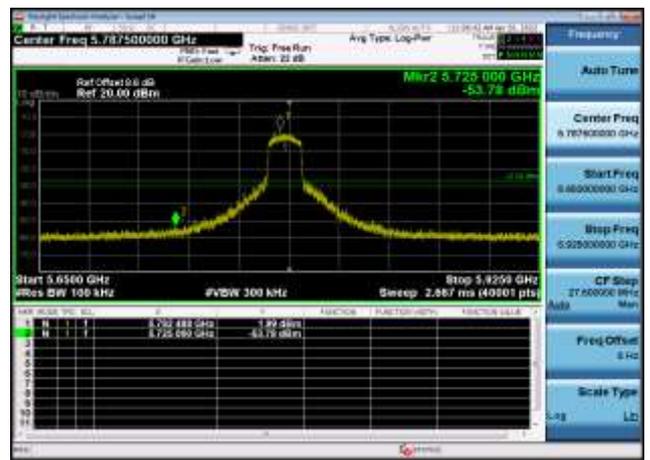
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.11ac(80MHz),5210MHz,Ant1



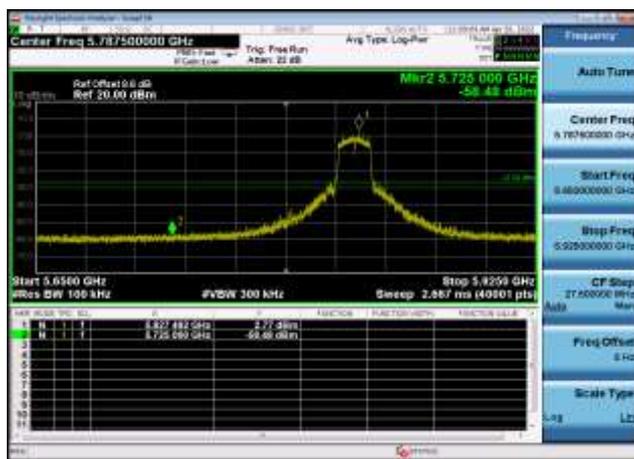
U-NII-3 ,Plot 1,Band Edge-802.11n(20MHz),5745MHz,Ant1



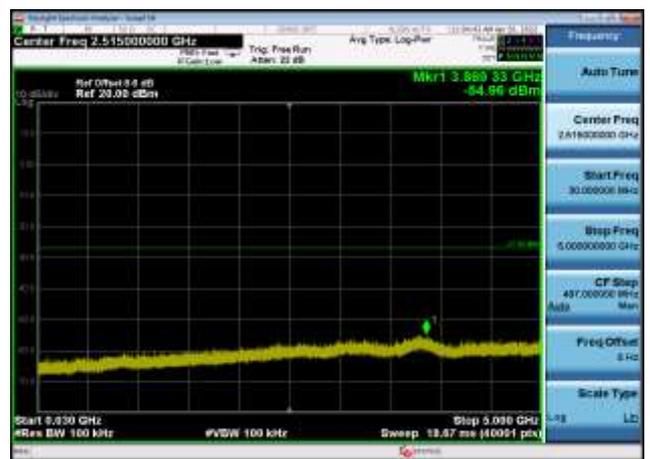
U-NII-3 ,Plot 1,Band Edge-802.11n(20MHz),5785MHz,Ant1



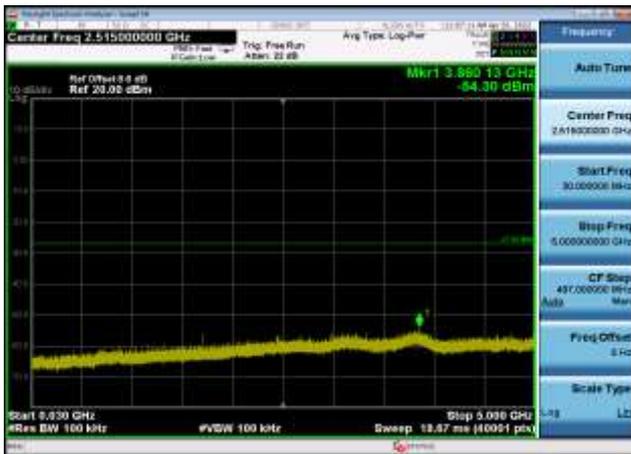
U-NII-3 ,Plot 1,Band Edge-802.11n(20MHz),5825MHz,Ant1



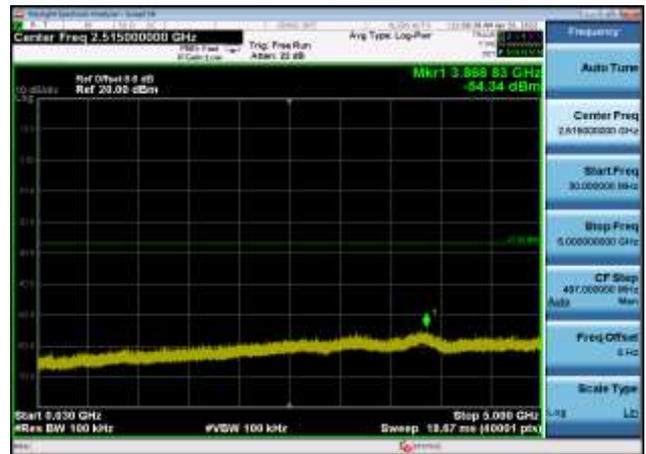
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n(20MHz),5745MHz,Ant1



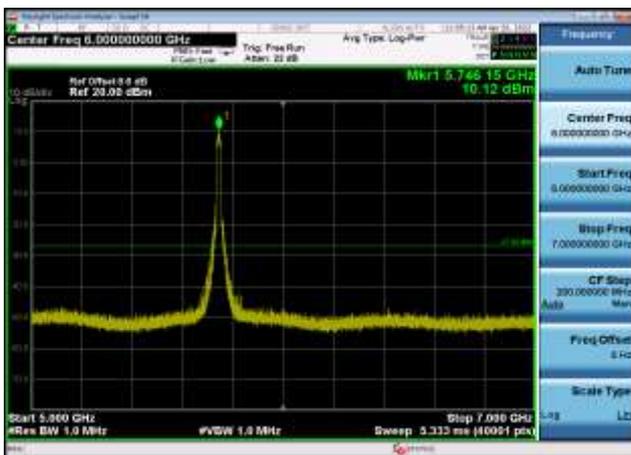
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n  
(20MHz),5785MHz,Ant1



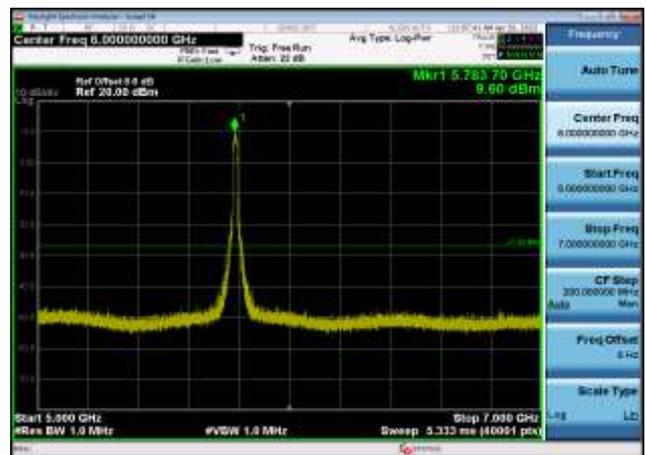
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n  
(20MHz),5825MHz,Ant1



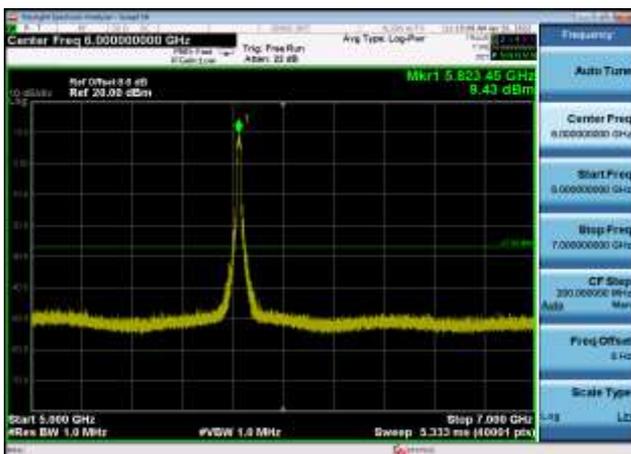
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1n(20MHz),5745MHz,Ant1



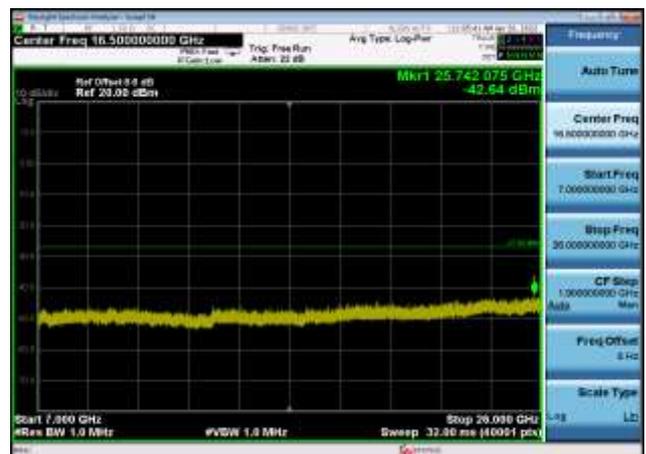
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1n(20MHz),5785MHz,Ant1



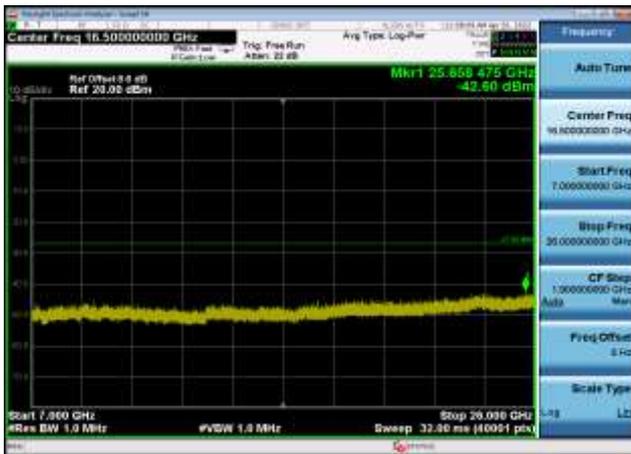
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1n(20MHz),5825MHz,Ant1



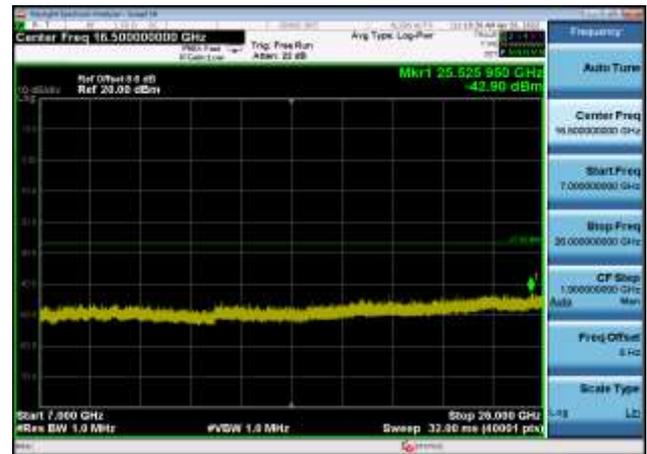
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11n(20MHz),5745MHz,Ant1



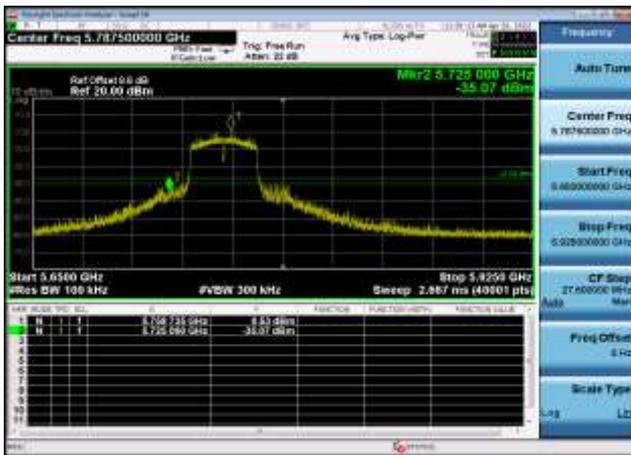
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11n(20MHz),5785MHz,Ant1



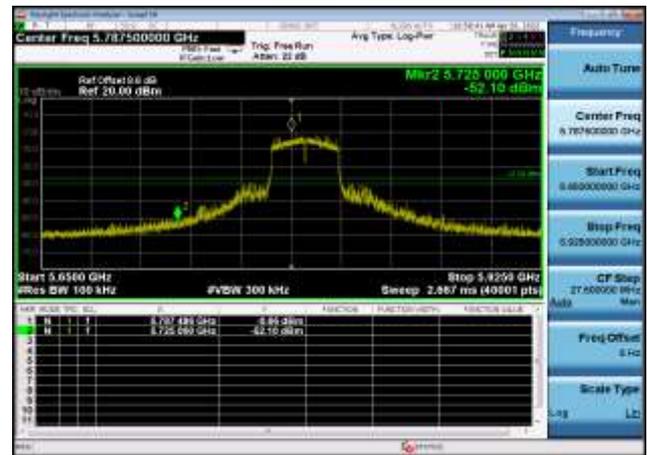
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11n(20MHz),5825MHz,Ant1



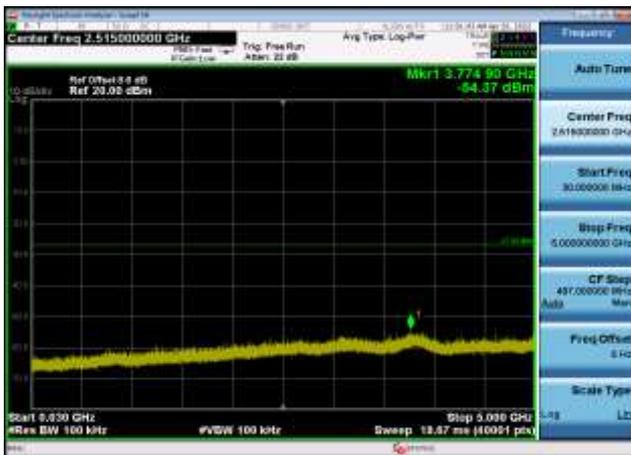
U-NII-3 ,Plot 1,Band Edge-802.11n(40M  
Hz),5755MHz,Ant1



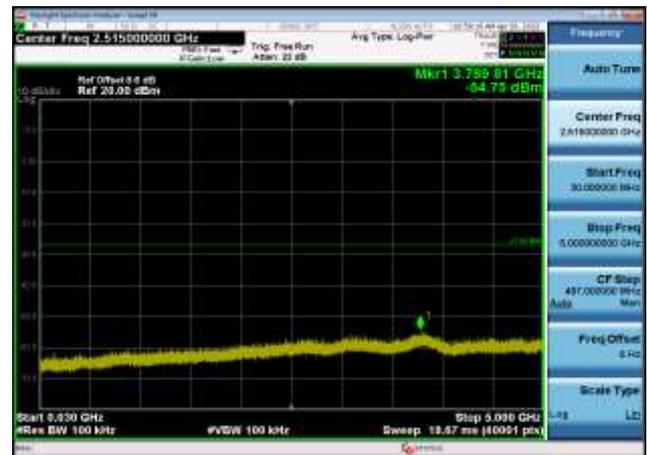
U-NII-3 ,Plot 1,Band Edge-802.11n(40M  
Hz),5795MHz,Ant1



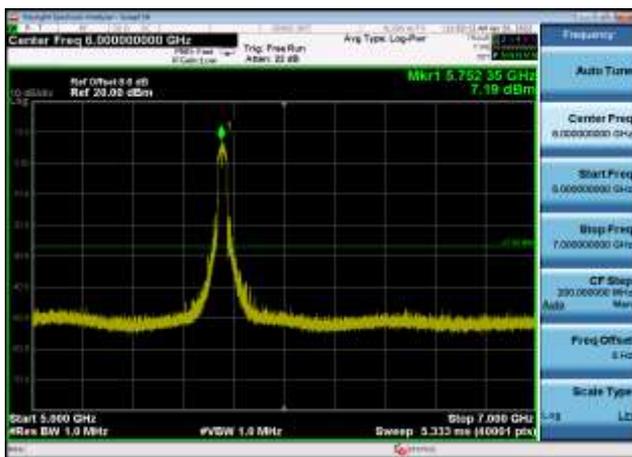
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n  
(40MHz),5755MHz,Ant1



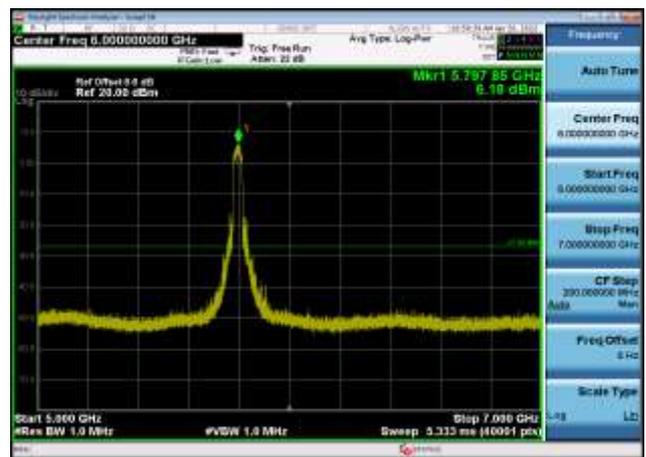
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n  
(40MHz),5795MHz,Ant1



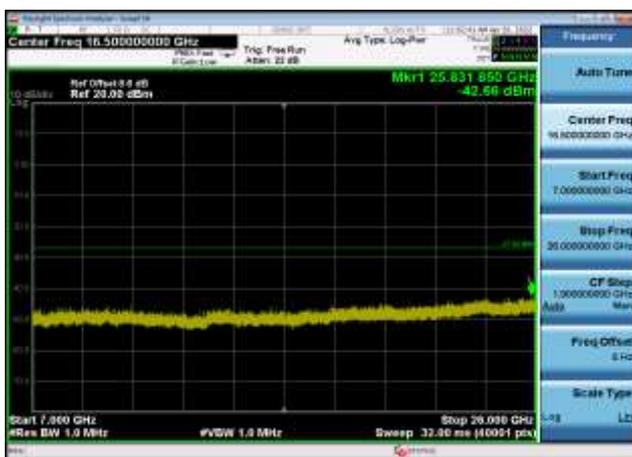
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1n(40MHz),5755MHz,Ant1



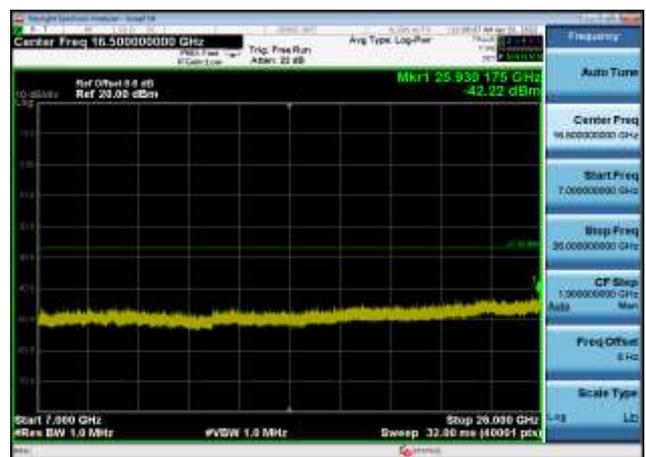
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1n(40MHz),5795MHz,Ant1



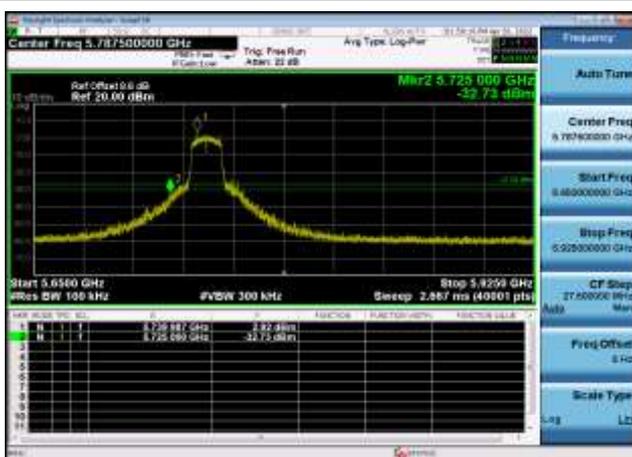
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11n(40MHz),5755MHz,Ant1



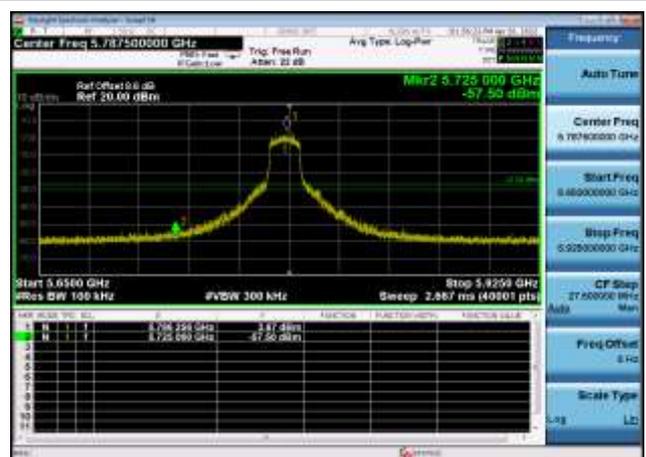
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11n(40MHz),5795MHz,Ant1



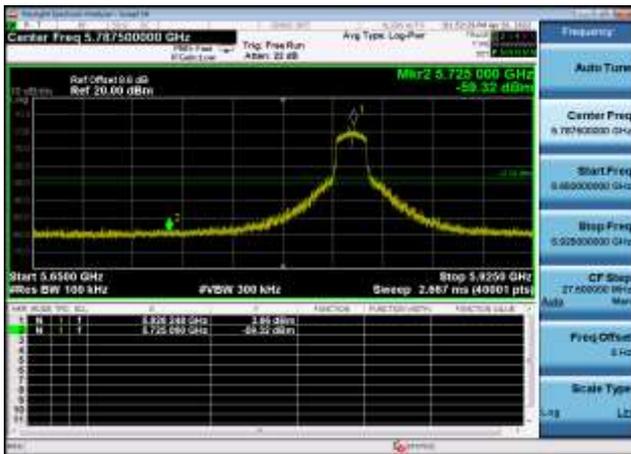
U-NII-3 ,Plot 1,Band Edge-802.11a(20  
Hz),5745MHz,Ant1



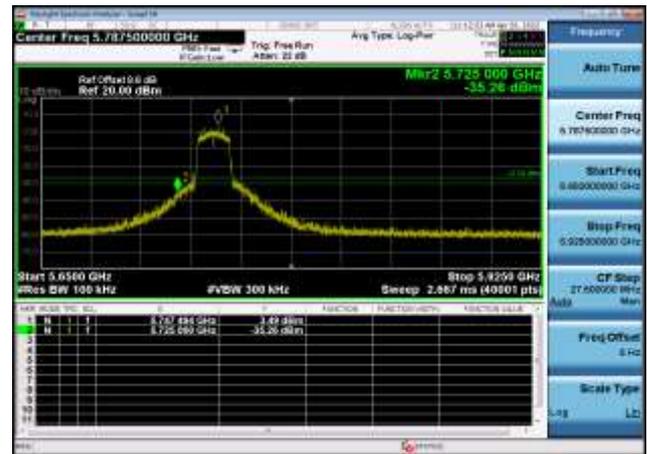
U-NII-3 ,Plot 1,Band Edge-802.11a(20  
Hz),5785MHz,Ant1



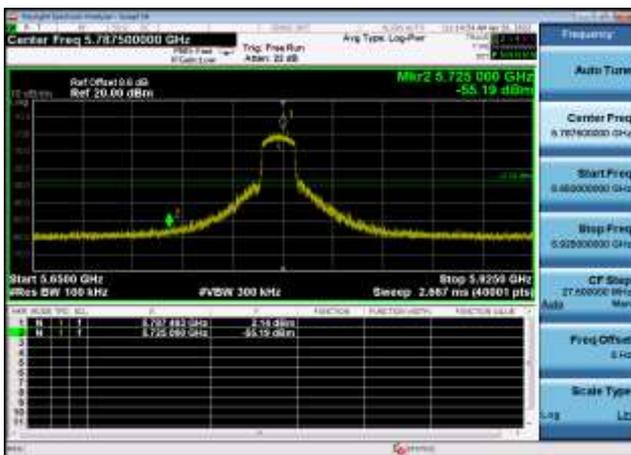
U-NII-3 ,Plot 1,Band Edge-802.11a(20 MHz),5825MHz,Ant1



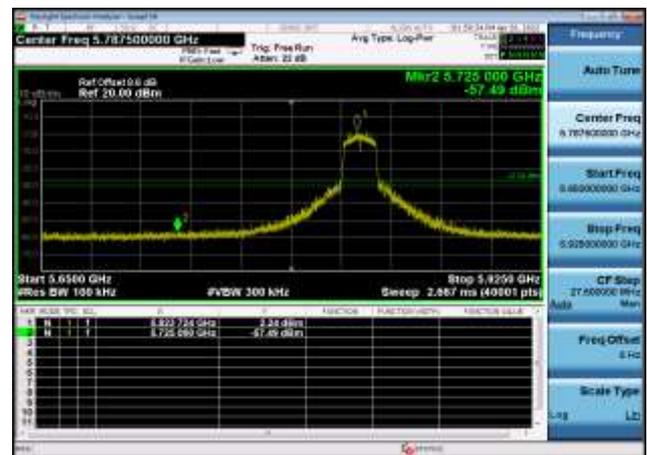
U-NII-3 ,Plot 1,Band Edge-802.11ac(20 MHz),5745MHz,Ant1



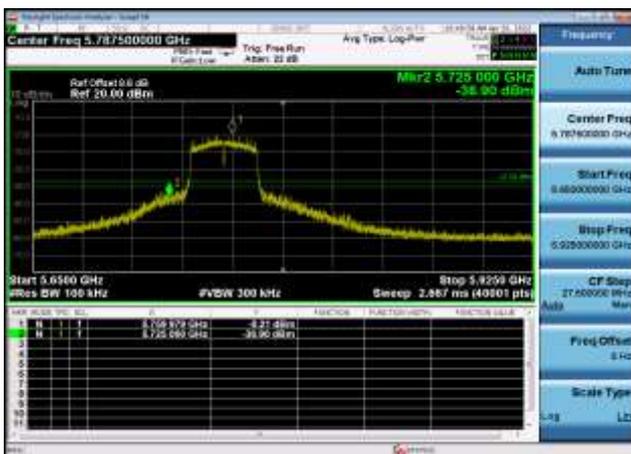
U-NII-3 ,Plot 1,Band Edge-802.11ac(20 MHz),5785MHz,Ant1



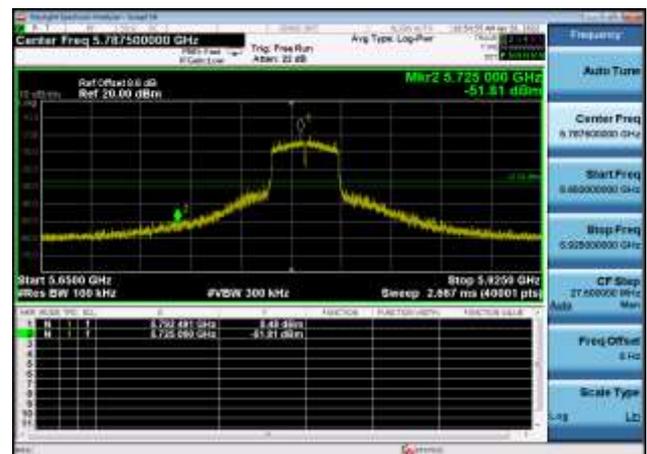
U-NII-3 ,Plot 1,Band Edge-802.11ac(20 MHz),5825MHz,Ant1



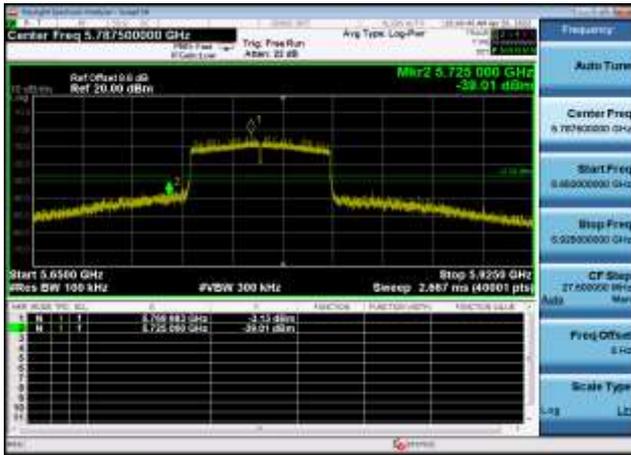
U-NII-3 ,Plot 1,Band Edge-802.11ac(40 MHz),5755MHz,Ant1



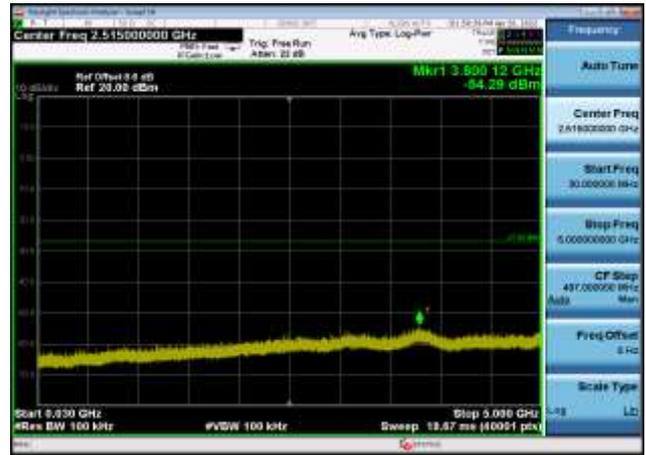
U-NII-3 ,Plot 1,Band Edge-802.11ac(40 MHz),5795MHz,Ant1



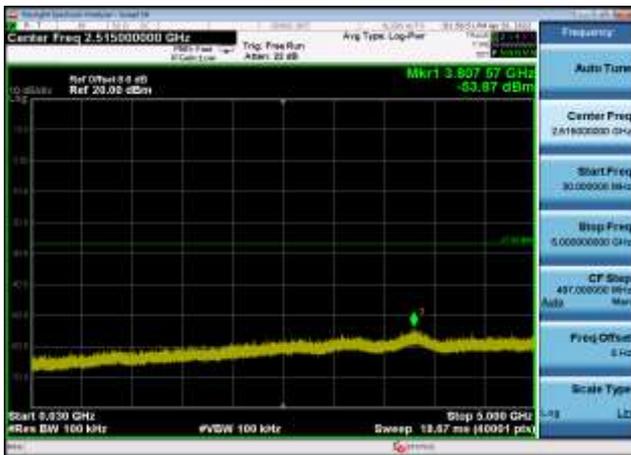
U-NII-3 ,Plot 1,Band Edge-802.11ac(80 MHz),5775MHz,Ant1



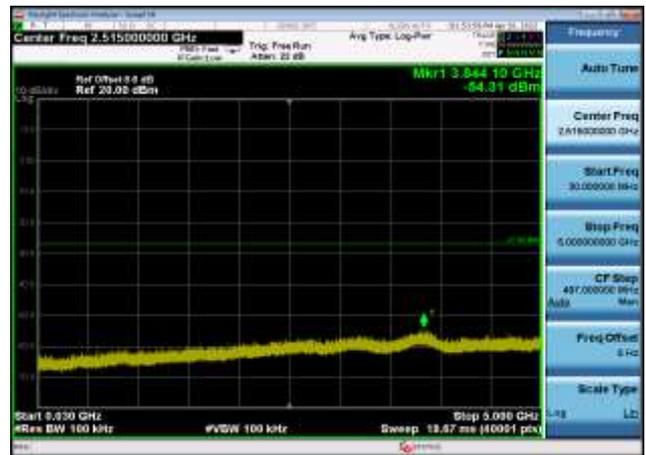
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a (20MHz),5745MHz,Ant1



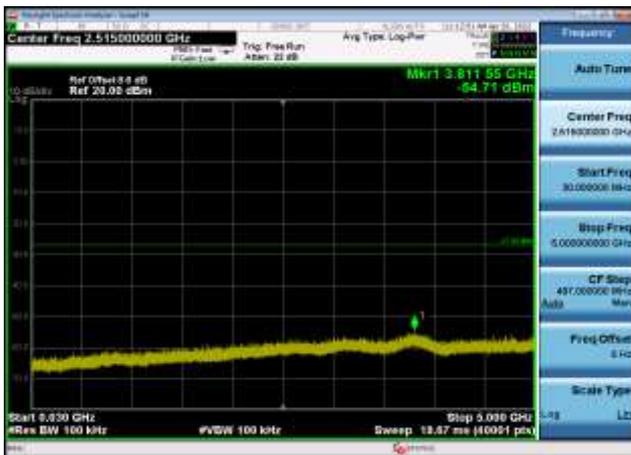
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a (20MHz),5785MHz,Ant1



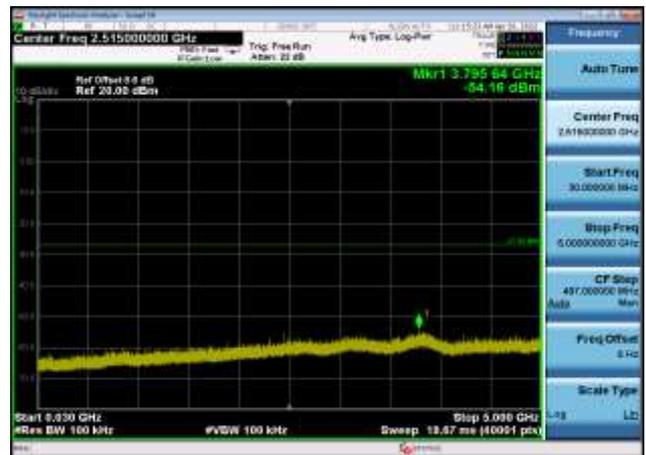
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a (20MHz),5825MHz,Ant1



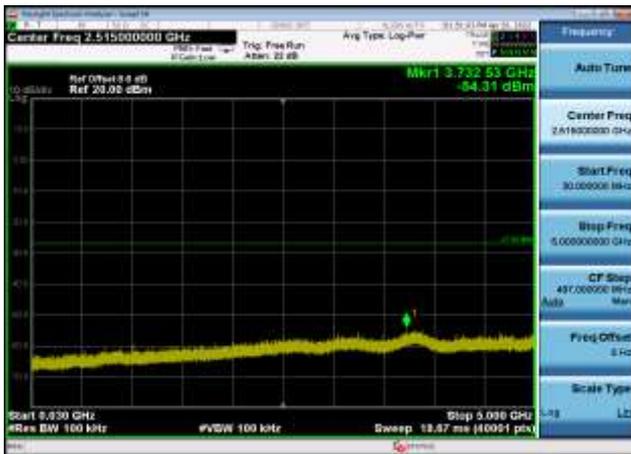
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a c(20MHz),5745MHz,Ant1



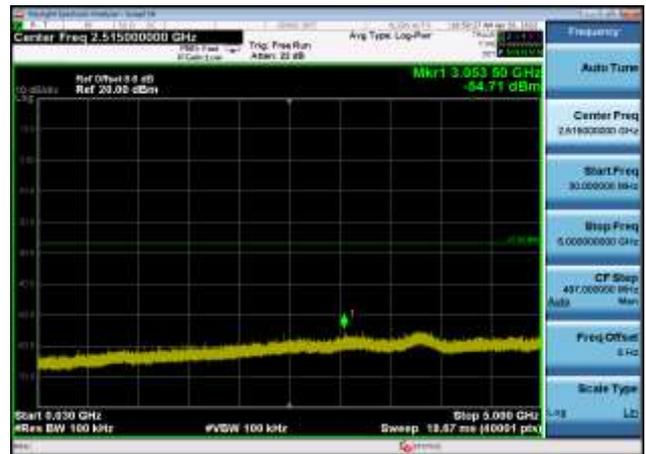
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a c(20MHz),5785MHz,Ant1



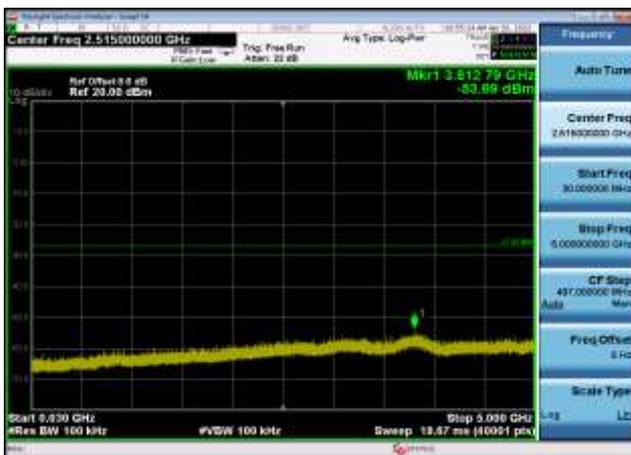
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a  
c(20MHz),5825MHz,Ant1



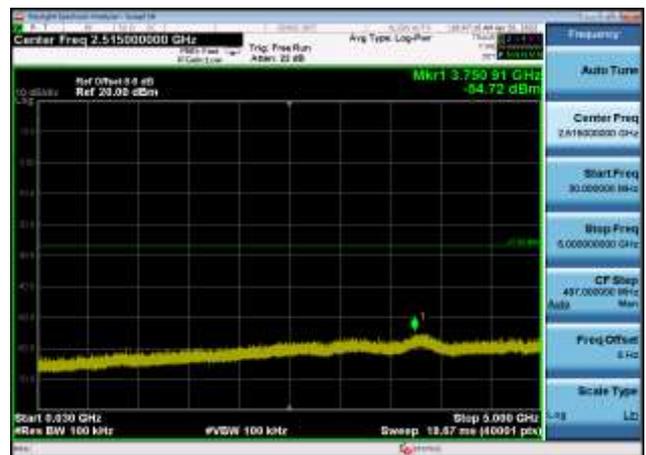
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a  
c(40MHz),5755MHz,Ant1



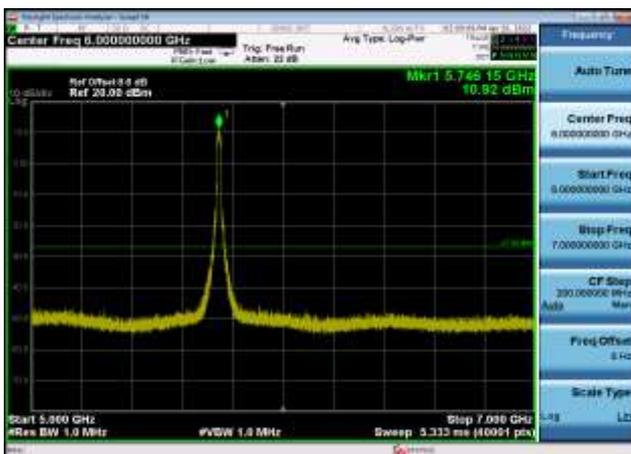
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a  
c(40MHz),5795MHz,Ant1



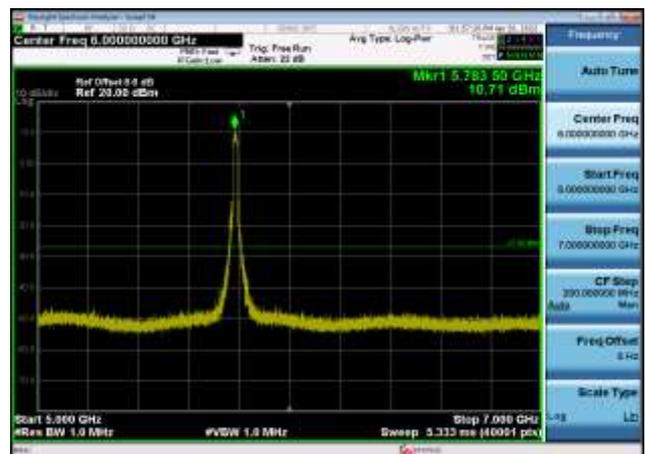
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a  
c(80MHz),5775MHz,Ant1



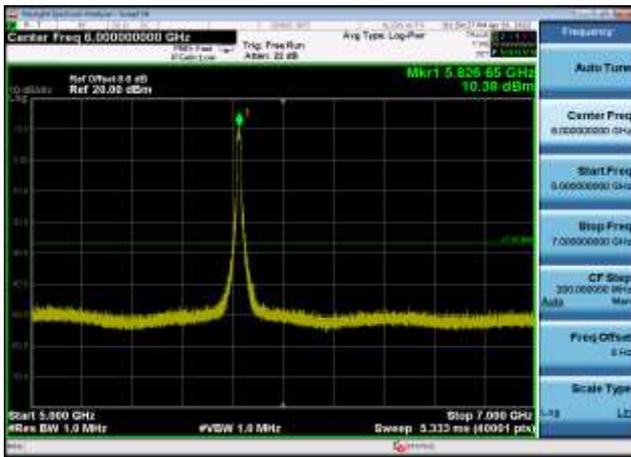
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1a(20MHz),5745MHz,Ant1



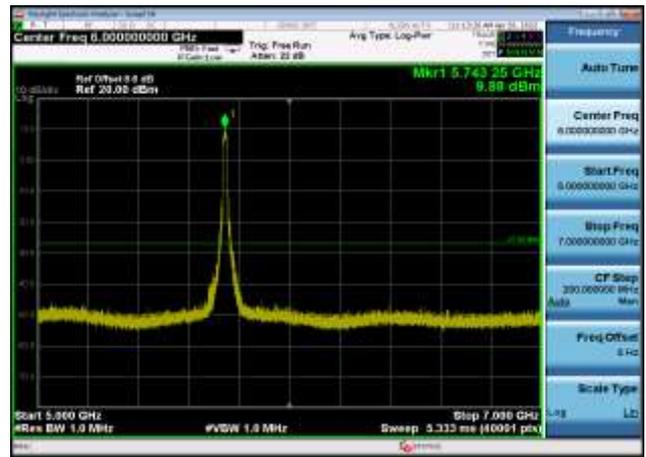
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1a(20MHz),5785MHz,Ant1



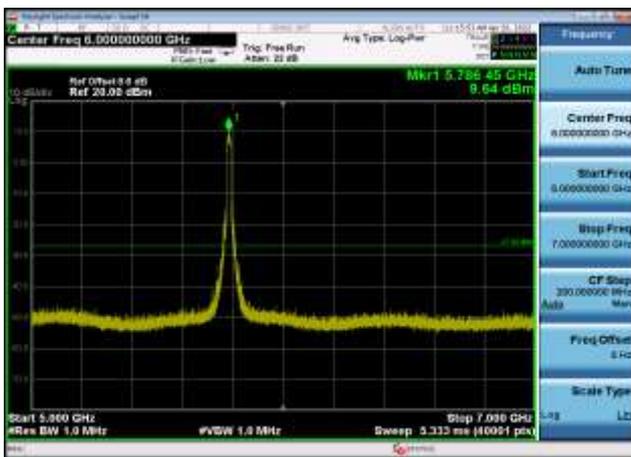
U-NII-3 ,Plot 3,500MHz~7000MHz-802.1  
1a(20MHz),5825MHz,Ant1



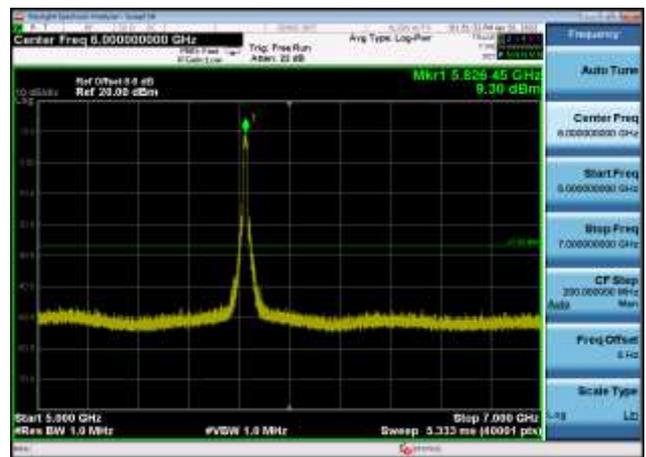
U-NII-3 ,Plot 3,500MHz~7000MHz-802.1  
1ac(20MHz),5745MHz,Ant1



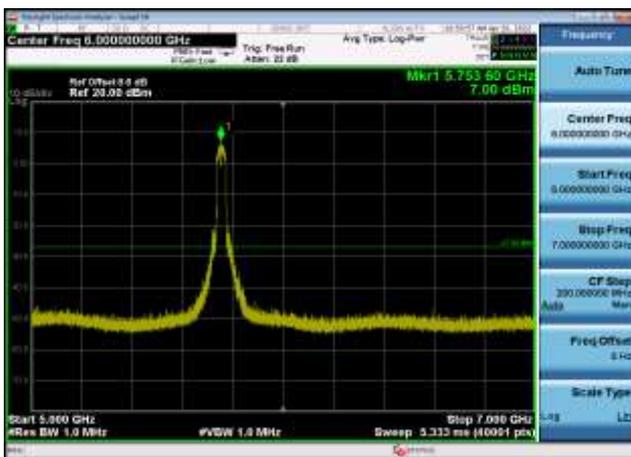
U-NII-3 ,Plot 3,500MHz~7000MHz-802.1  
1ac(20MHz),5785MHz,Ant1



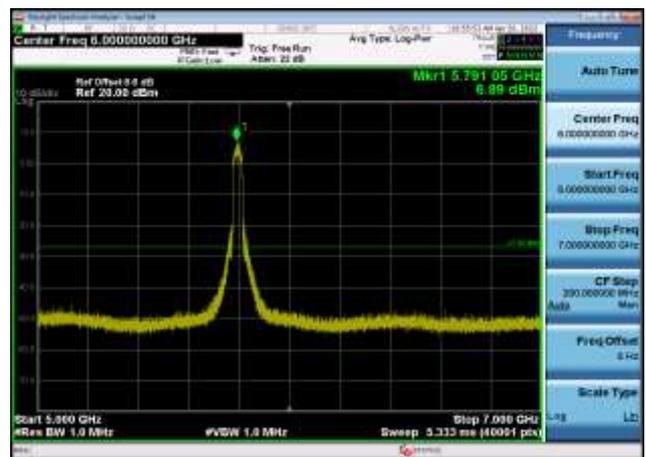
U-NII-3 ,Plot 3,500MHz~7000MHz-802.1  
1ac(20MHz),5825MHz,Ant1



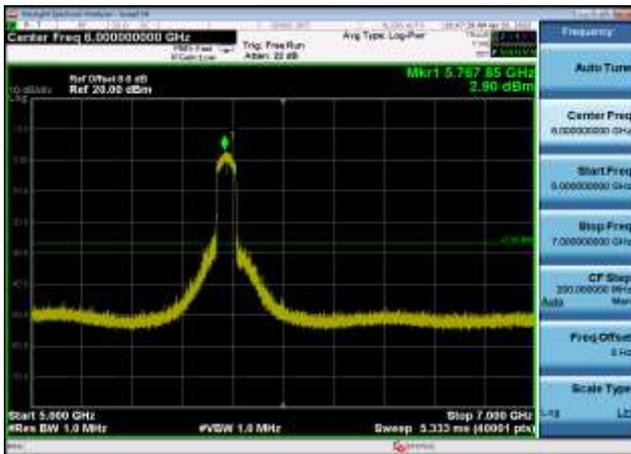
U-NII-3 ,Plot 3,500MHz~7000MHz-802.1  
1ac(40MHz),5755MHz,Ant1



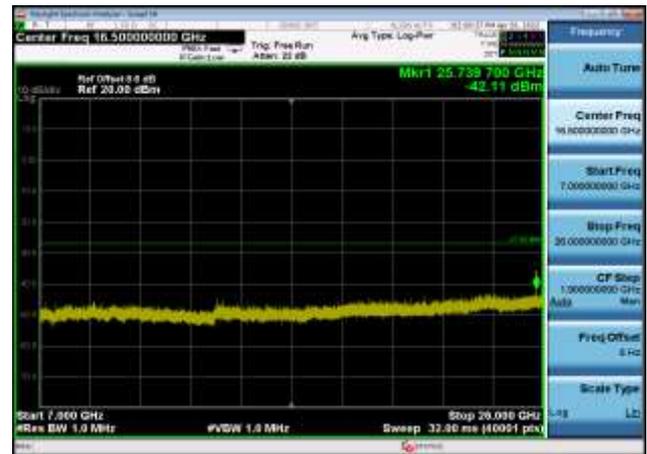
U-NII-3 ,Plot 3,500MHz~7000MHz-802.1  
1ac(40MHz),5795MHz,Ant1



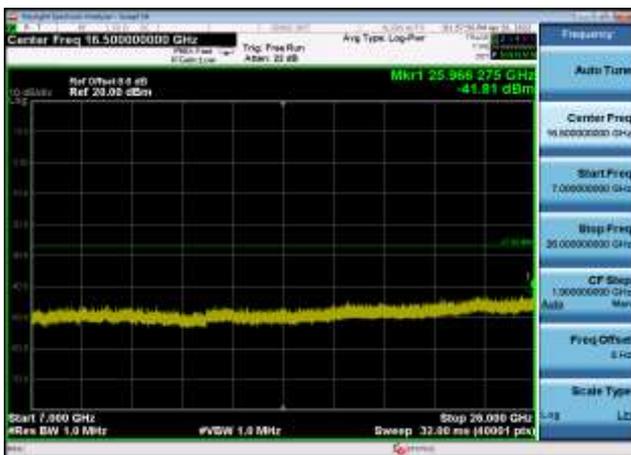
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1  
1ac(80MHz),5775MHz,Ant1



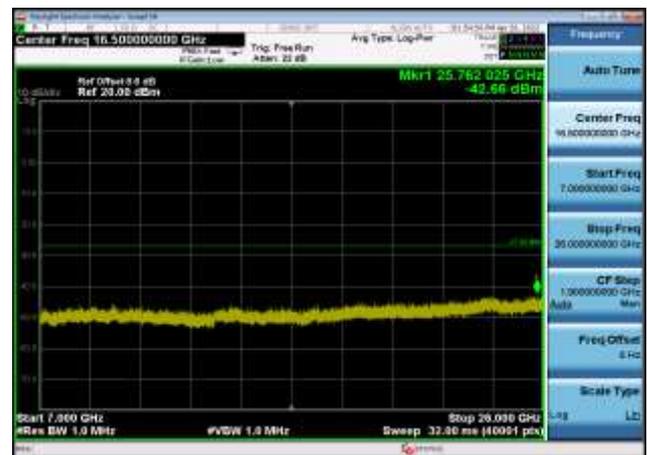
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11a(20MHz),5745MHz,Ant1



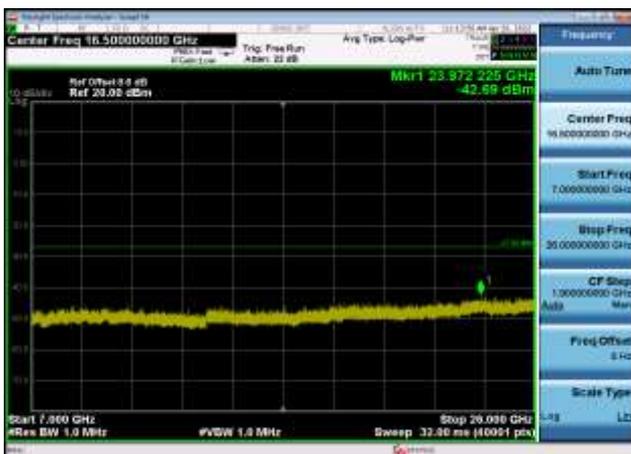
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11a(20MHz),5785MHz,Ant1



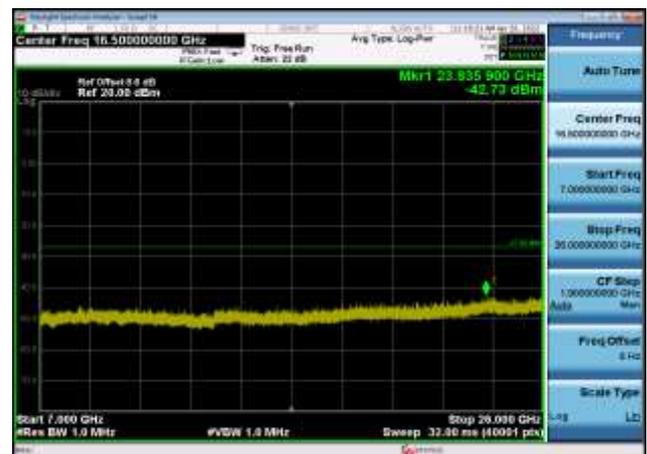
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11a(20MHz),5825MHz,Ant1



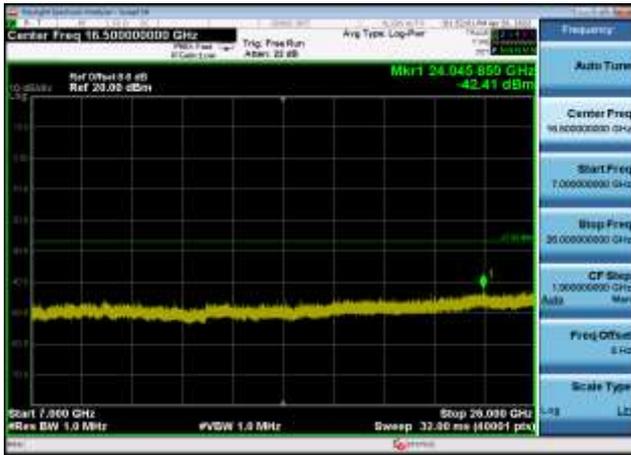
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11ac(20MHz),5745MHz,Ant1



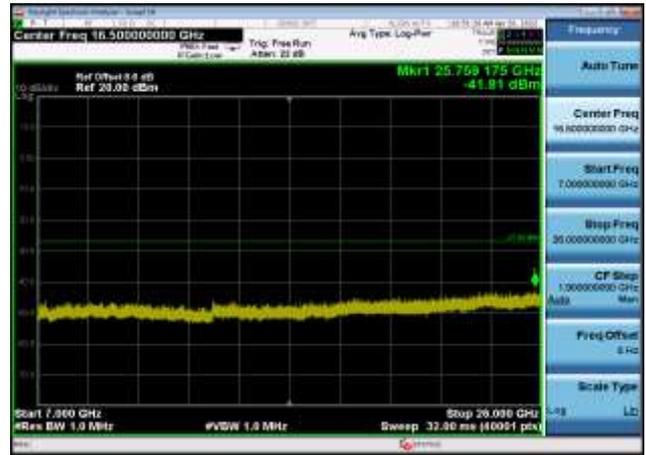
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11ac(20MHz),5785MHz,Ant1



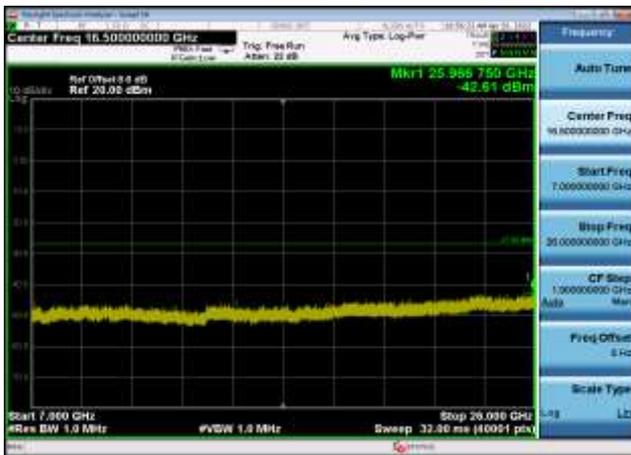
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11ac(20MHz),5825MHz,Ant1



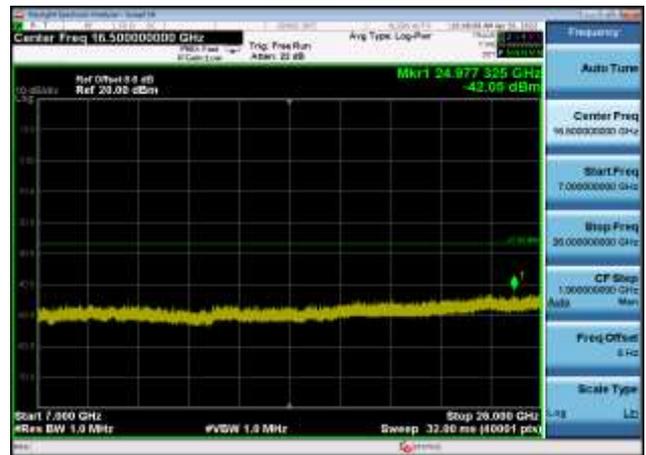
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11ac(40MHz),5755MHz,Ant1



U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11ac(40MHz),5795MHz,Ant1



U-NII-3 ,Plot 4,7000MHz~26000MHz-802.  
11ac(80MHz),5775MHz,Ant1



\*\* END OF REPORT \*\*