



RF TEST REPORT

Report No.: SET2021-04295

Product Name: AX1800 Dual Band Wi-Fi6 Router

FCC ID: 2AZKI-COM-11

Model No. : AX1800

Applicant: Shenzhen Youbo Life Technology Co., Ltd

Room A3 523, building 9, Shenzhen Bay ecological science

Address: and Technology Park, Yuehai street, Nanshan District,
Shenzhen, China

Dates of Testing: 03/28/2021 —04/22/2021

Issued by: CCIC Southern Testing Co., Ltd.

Electronic Testing Building, No. 43 Shahe Road, Xili Street,

Lab Location: Nanshan District, Shenzhen, Guangdong, China.

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

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Test Report

Product Name : AX1800 Dual Band Wi-Fi6 Router

Brand Name : marsboy

Trade Name : marsboy

Applicant : Shenzhen Youbo Life Technology Co., Ltd

Applicant Address : Room A3 523, building 9, Shenzhen Bay ecological science and Technology Park, Yuehai street, Nanshan District, Shenzhen, China.

Manufacturer : Shenzhen Youbo Life Technology Co., Ltd

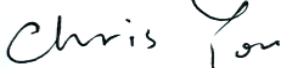
Manufacturer Address : Room A3 523, building 9, Shenzhen Bay ecological science and Technology Park, Yuehai street, Nanshan District, Shenzhen, China.

Test Standards : 47 CFR Part 15 Subpart E 15.407

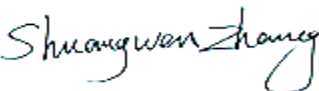
Test Result : PASS

Tested by : 
2021.04.22

Vincent, Test Engineer

Reviewed by : 
2021.04.22

Chris You, Senior Engineer

Approved by : 
2021.04.22

Shuangwen Zhang, Manager

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Change History		
Issue	Date	Reason for change
1.0	2021.04.22	First edition

1. General Information

1.1. EUT Description

EUT Type	AX1800 Dual Band Wi-Fi6 Router
EUT supports Radios application	WLAN 5.0GHz 802.11a/n/ac/ax
Product Type	Indoor
Modulation Type	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300.4 Mbps(2x2MIMO) 802.11ac: up to 866.6Mbps(2x2MIMO) 802.11ax:up to 1201 Mbps(2x2MIMO)
Frequency Range	Band UNII-1: 5150 ~ 5250MHz Band UNII-3: 5725 ~ 5850MHz
Channel Bandwidth	802.11a: 20MHz, 802.11n: 20MHz/40MHz 802.11ac/ax: 20MHz/40MHz/80MHz
Channel Number	5150 MHz ~ 5250MHz/5725 MHz ~ 5850MHz:4/5 for 802.11a, 802.11n (HT20), 802.11ac/ax(VHT20/HE20), 2 for 802.11n (HT40), 802.11ac/ax (VHT40/HE80), 1 for 802.11 ac/ax(VHT80/HE80)
Antenna Type	IFA
Antenna Gain	Antenna 1/2: 5dBi
Output Power (Max.)	Band UNII-1: 15.21dBm Band UNII-3: 15.25dBm

Note: The antenna gain and RF adapter/cable insert loss provided by manufacture.

Transmitter Information:

Frequency	Modulation Mode	TX / RX Function
5.0GHz Band UNII-1/3	802.11a	1TX / 1RX
	802.11n (HT20)	1TX / 1RX or 2TX / 2RX
	802.11n (HT40)	1TX / 1RX or 2TX / 2RX
	802.11ac (VHT20)	1TX / 1RX or 2TX / 2RX
	802.11ac (VHT40)	1TX / 1RX or 2TX / 2RX
	802.11ac (VHT80)	1TX / 1RX or 2TX / 2RX
	802.11ax (HE20)	1TX / 1RX or 2TX / 2RX
	802.11ax (HE40)	1TX / 1RX or 2TX / 2RX
	802.11ax (HE80)	1TX / 1RX or 2TX / 2RX

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	KDB Publication 789033D02v01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
6	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)	Maximum Conducted Output Power	PASS
3	15.407(a)	Emission Bandwidth (26 dB Bandwidth)	PASS
	15.407(e)	Emission Bandwidth (6 dB Bandwidth)	PASS
4	15.407(a)	Power spectral density (PSD)	PASS
5	15.207	AC Power Line Conducted Emission	PASS
6	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, 802.11ac-VHT20, and 802.11ax-HE20

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

2 channels are provided for 802.11n-HT40, 802.11ac-VHT40, and 802.11ax-HE40

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel are provided for 802.11ac-VHT80 and 802.11ax-HE80

Channel	Frequency	Channel	Frequency
42	5210 MHz	/	/

Operated band in 5725 MHz ~ 5850MHz

4 channels are provided for 802.11a, 802.11n-HT20, 802.11ac-VHT20, and 802.11ax-HE20

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, 802.11ac-VHT40, and 802.11ax-HE40

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel are provided for 802.11ac-VHT80 and 802.11ax-HE80

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 and MIMO, 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/ax – HT20/HE20	MCS 0	MCS 0	MCS 0
Frequency	5190 MHz		5230 MHz
802.11n/ac/ax – HT40/HE40	MCS 0		MCS 0
Frequency	5210 MHz		
802.11ac/ax – VHT80/HE80	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/ax – HT20/HE20	MCS 0	MCS 0	MCS 0
Frequency	5755 MHz		5795 MHz
802.11n/ac/ax – HT40/HE40	MCS 0		MCS 0
Frequency	5775 MHz		
802.11ac/ax – VHT80/HE80	MCS 0		

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible 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 AX20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 8	TX AX40 Mode / CH38, CH46 (UNII-1)
Mode 9	TX AX80 Mode / CH42 (UNII-1)
Mode 10	TX A Mode / CH149, CH157, CH165 (UNII-3)
Mode 11	TX N20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 12	TX N40 Mode / CH151, CH159 (UNII-3)
Mode 13	TX AC20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 14	TX AC40 Mode / CH151, CH159 (UNII-3)
Mode 15	TX AC80 Mode / CH155 (UNII-3)
Mode 16	TX AX20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 17	TX AX40 Mode / CH151, CH159 (UNII-3)
Mode 18	TX AX80 Mode / CH155 (UNII-3)
Mode 19	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 19	TX Mode

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 AX20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 8	TX AX40 Mode / CH38, CH46 (UNII-1)
Mode 9	TX AX80 Mode / CH42 (UNII-1)
Mode 10	TX A Mode / CH149, CH157, CH165 (UNII-3)
Mode 11	TX N20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 12	TX N40 Mode / CH151, CH159 (UNII-3)

Mode 13	TX AC20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 14	TX AC40 Mode / CH151, CH159 (UNII-3)
Mode 15	TX AC80 Mode / CH155 (UNII-3)
Mode 16	TX AX20 Mode / CH149, CH157, CH165 (UNII-3)
Mode 17	TX AX40 Mode / CH151, CH159 (UNII-3)
Mode 18	TX AX80 Mode / CH155 (UNII-3)
Mode 19	TX Mode

1.5. EUT Operation Test Setup

For RF test items, an engineering test program was provided and enable to make EUT transmitting.

1.6. Power level setup in software

Power level setup in software for 5G wifi			
UNII-1 (Antenna 0)			
Frequency (MHz)	5180	5220	5240
A mode	85	85	85
Frequency (MHz)	5180	5220	5240
N20 mode	83	83	83
Frequency (MHz)	5190	5230	\
N40 mode	81	81	\
Frequency (MHz)	5180	5220	5240
AC20 mode	85	85	
Frequency (MHz)	5190	5230	\
AC40 mode	81	81	\
Frequency (MHz)	5210	\	\
AC80 mode	82	\	\
Frequency (MHz)	5180	5220	5240
AX20 mode	86	86	86
Frequency (MHz)	5190	5230	\
AX40 mode	80	80	\
Frequency (MHz)	5210	\	\
AX80 mode	80	\	\

Power level setup in software for 5G wifi			
UNII-1 (Antenna 1)			
Frequency (MHz)	5180	5220	5240
A mode	88	88	88
Frequency (MHz)	5180	5220	5240
N20 mode	85	85	85
Frequency (MHz)	5190	5230	\
N40 mode	81	81	\
Frequency (MHz)	5180	5220	5240
AC20 mode	85	85	
Frequency (MHz)	5190	5230	\
AC40 mode	81	81	\
Frequency (MHz)	5210	\	\
AC80 mode	82	\	\
Frequency (MHz)	5180	5220	5240
AX20 mode	83	83	83
Frequency (MHz)	5190	5230	\
AX40 mode	81	81	\
Frequency (MHz)	5210	\	\
AX80 mode	80	\	\

Power level setup in software for 5G wifi			
UNII-3 (Antenna 0)			
Frequency (MHz)	5745	5785	5825
A mode	90	90	90
Frequency (MHz)	5745	5785	5825
N20 mode	83	83	83
Frequency (MHz)	5755	5795	\
N40 mode	84	84	\
Frequency (MHz)	5745	5785	5825
AC20 mode	85	85	85
Frequency (MHz)	5755	5795	\
AC40 mode	84	84	\
Frequency (MHz)	5775	\	\
AC80 mode	80	\	\
Frequency (MHz)	5745	5785	5825
AX20 mode	83	83	83
Frequency (MHz)	5190	5230	\
AX40 mode	81	81	\
Frequency (MHz)	5210	\	\
AX80 mode	80	\	\

Power level setup in software for 5G wifi			
UNII-3 (Antenna 1)			
Frequency (MHz)	5745	5785	5825
A mode	90	90	90
Frequency (MHz)	5745	5785	5825
N20 mode	83	83	83
Frequency (MHz)	5755	5795	\
N40 mode	84	84	\
Frequency (MHz)	5745	5785	5825
AC20 mode	85	85	85
Frequency (MHz)	5755	5795	\
AC40 mode	84	84	\
Frequency (MHz)	5775	\	\
AC80 mode	80	\	\
Frequency (MHz)	5745	5785	5825
AX20 mode	83	83	83
Frequency (MHz)	5190	5230	\
AX40 mode	81	81	\
Frequency (MHz)	5210	\	\
AX80 mode	80	\	\

1.7. Laboratory Facilities

FCC-Registration No.: CN1283

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 April 19th,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 System	STBC
	2 antennas are uncorrelated with each other
Antenna Type	IFA

2.1.3. Antenna Gain

Antenna	Gain(dBi)
0	5
1	5
0+1	5

Note: 1. for 802.11n/ac mode, antenna 0, 1 can transmit/receive simultaneously (MIMO mode), for 802.11a, both antennas 0, 1 can transmit/receive at single mode (SISO mode)

2. If all transmit signals are completely uncorrelated with each other, Directional gain = G_{ANT}

2.1.4. 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)

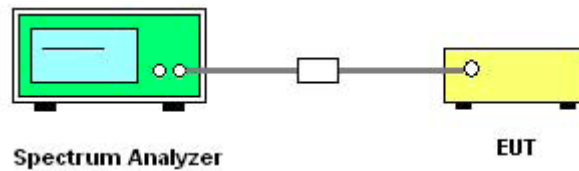
The maximum conducted output power should not exceed:

Band	EUT Category	Limit
U-NII-1	☐ 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)
	☐ Fixed point-to-point Access device	1 Watt (30 dBm)
	☒ Indoor Access Point	1 Watt (30 dBm)
	☐ Mobile and portable client device	250mW (24 dBm)
U-NII-2A	☐	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-2C	☐	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-3	☒	1 Watt (30 dBm)
Note: B* is the 26 dB emission bandwidth in MHz.		

2.2.2. Measuring Instruments

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

2.2.3. Test Setup



2.2.4. Test Procedures

1. The testing follows the 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

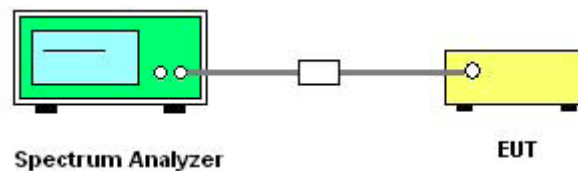
There is no limit bandwidth for bandU-NII-1, U-NII-2A and U-NII-2C.

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 function to find the 6dB 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)

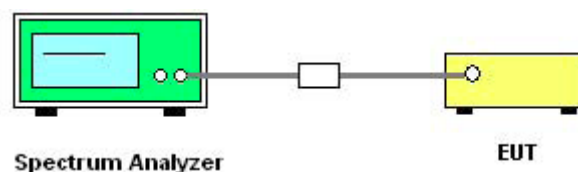
The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	☒ Access Point (Master device)	17 dBm/MHz
	☐ Fixed point-to-point Access device	
	☐ Mobile and portable client device	11 dBm/MHz
U-NII-2A	☐	11 dBm/MHz
U-NII-2C	☐	11 dBm/MHz
U-NII-3	☒	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, U-NII-2A, U-NII-2C 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

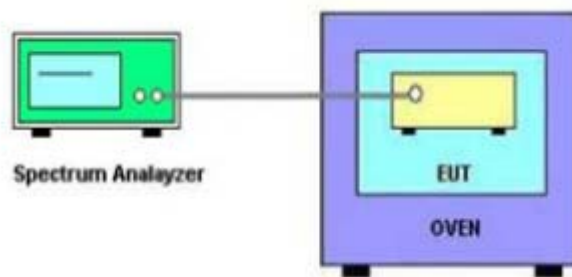
2.5.1. Limit

FCC 15.407(b) Frequency Stability	
Frequency Band(MHz)	Limit
5150~5250	Specified in the user's manual
5250~5350	
5470~5725	
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 ($\mu\text{V/m}$)	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 ($\mu\text{V/m}$).
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 $\mu\text{V/m}$)	AV:54 (dB $\mu\text{V/m}$)

Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dB $\mu\text{V/m}$)
5150 - 5250	Outside of the 5.15~5.35 GHz	-27	68.2
5250 - 5350	Outside of the 5.15~5.35 GHz		
5470 -5725	Outside of the 5.47~5.725 GHz		

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:

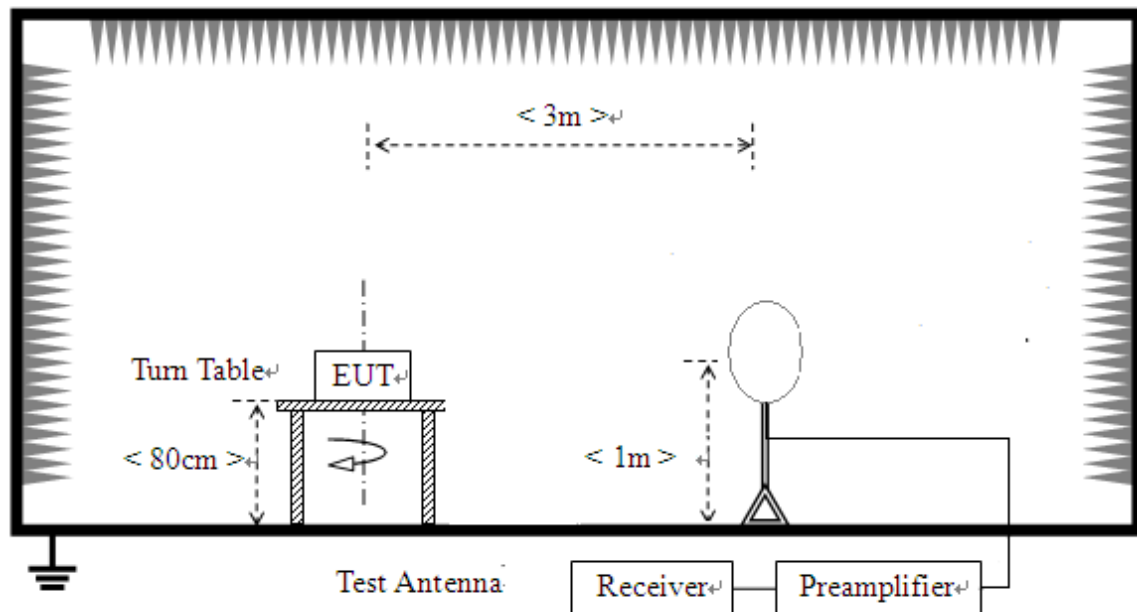
$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

2.6.2. Measuring Instruments

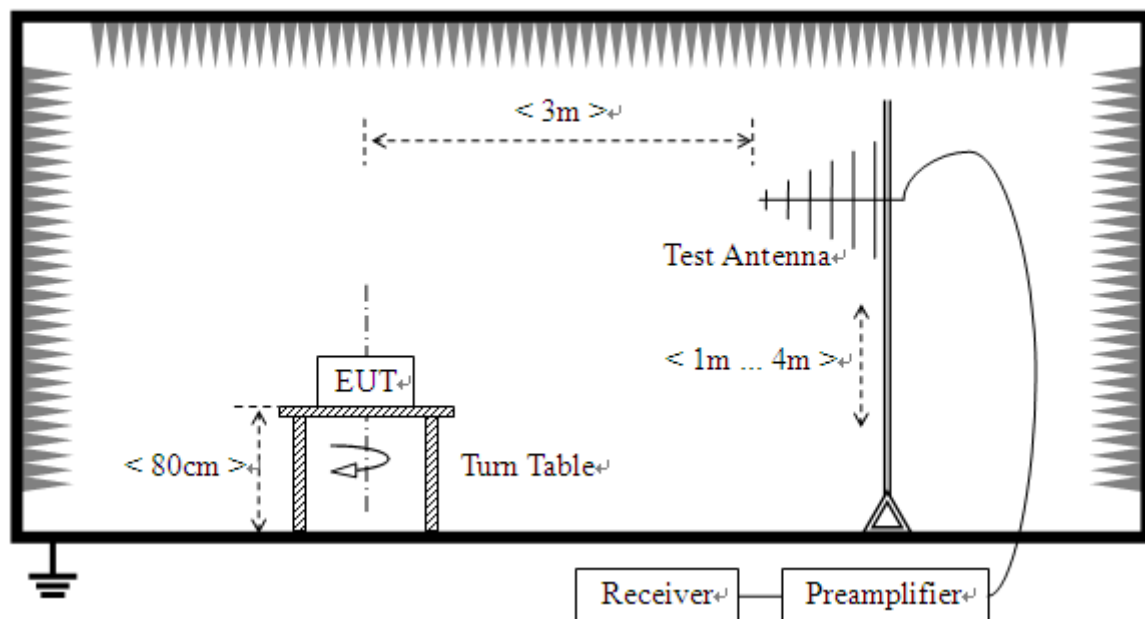
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

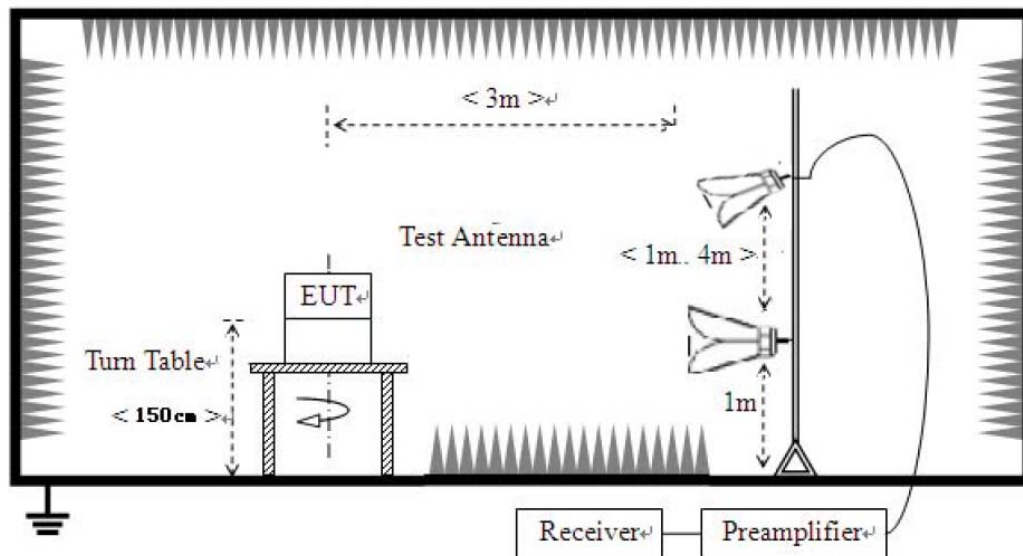
For radiated emissions from 9 KHz to 30 MHz



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:

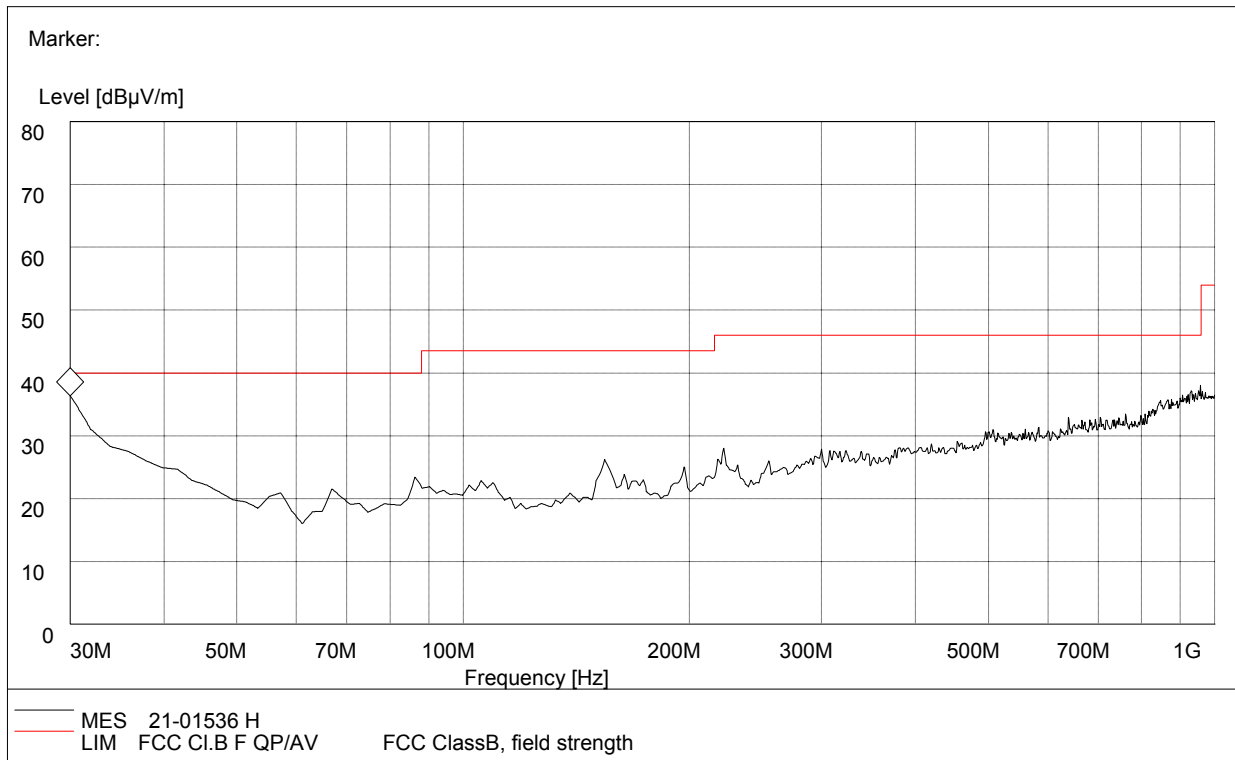
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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, ANT1 for 11a below 1GHz and above 1GHz, and MIMO mode for 11n/11n(40M), /11ac/ax(40M), /11ac/ax(80M) for above 1GHz.

2.6.5. Test Results of Radiated Band Edge and Spurious Emission

For 9 KHz to 30MHz

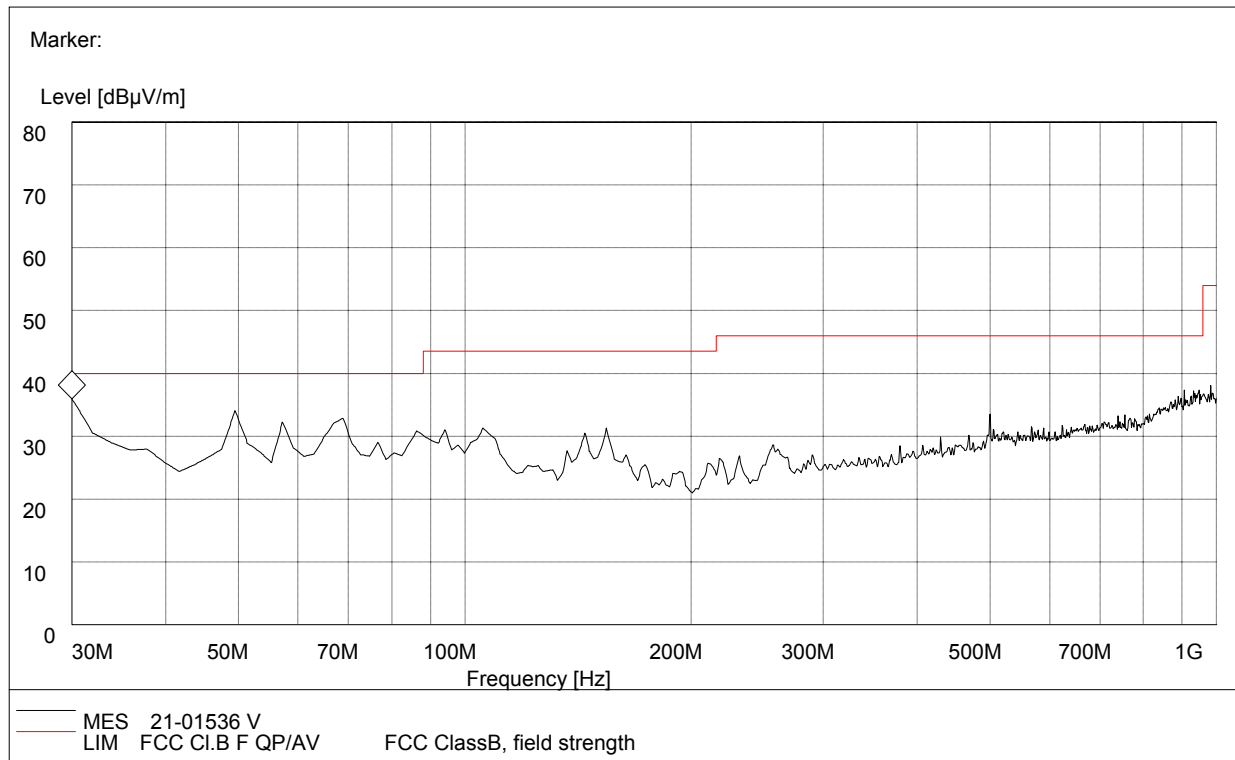
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For 30MHz to 1000 MHz



Plot A: 30MHz to 1GHz, Antenna Horizontal

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Corr. Factor (dB/m)	Antenna height (cm)	Limit (dBμV/m)	Margin	Antenna	Verdict
30.000000	35.73	120.000	11.2	100.0	40.0	4.27	Horizontal	Pass
41.620000	23.65	120.000	11.8	100.0	40.0	16.35	Horizontal	Pass
86.260000	22.39	120.000	11.9	100.0	40.0	17.61	Horizontal	Pass
105.660000	22.83	120.000	12.5	100.0	43.5	20.67	Horizontal	Pass
154.160000	23.69	120.000	19.3	100.0	43.5	19.81	Horizontal	Pass
196.840000	24.05	120.000	21.0	100.0	43.5	19.45	Horizontal	Pass



Plot B: 30MHz to 1GHz, Antenna Vertical

Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Corr. Factor (dB μ V/m)	Antenna height (cm)	Limit (dB μ V/m)	Margin	Antenna	Verdict
30.0000049.	33.25	120.000	12.3	100.0	40.0	6.75	Vertical	Pass
49.4000068.	32.52	120.000	12.3	100.0	40.0	7.48	Vertical	Pass
68.800000	32.15	120.000	11.2	100.0	40.0	7.85	Vertical	Pass
105.660000	31.92	120.000	11.2	100.0	43.5	11.58	Vertical	Pass
144.450000	29.25	120.000	19.3	100.0	43.5	14.25	Vertical	Pass
154.160000	31.29	120.000	21.0	100.0	43.5	12.21	Vertical	Pass

For 1GHz to 40 GHz
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5180MHz)

No.	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)
1	5150.00	51.24	PK	68.20	-16.96	1.60	320	43.74	7.50
2	5150.00	39.85	AV	54.00	-14.15	1.60	320	32.35	7.50
3	10360.00	52.89	PK	68.20	-15.31	1.60	320	33.09	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5180MHz)

No.	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)
1	5150.00	54.36	PK	68.20	-13.84	1.70	180	46.86	7.50
2	5150.00	42.71	AV	54.00	-11.29	1.70	180	35.21	7.50
3	10360.00	55.78	PK	68.20	-12.42	1.70	180	35.98	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5220MHz)

No.	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)
1	10400.00	54.62	PK	68.20	-13.58	1.70	350	34.72	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5220MHz)

No.	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)
1	10400.00	56.39	PK	68.20	-11.81	1.50	350	36.49	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5240MHz)

No.	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)
1	5350.00	55.95	PK	68.20	-12.25	1.60	250	47.95	8.00
2	5350.00	43.79	AV	54.00	-10.21	1.60	250	35.79	8.00
3	10480.00	54.36	PK	68.20	-13.84	1.60	250	34.46	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5240MHz)

No.	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)
1	5350.00	53.62	PK	68.20	-14.58	1.80	290	45.62	8.00
2	5350.00	41.68	AV	54.00	-12.32	1.80	290	33.68	8.00
3	10480.00	59.66	PK	68.20	-8.54	1.80	290	39.76	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5745MHz)

No.	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)
1	5725.00	52.62	PK	68.20	-15.58	1.60	320	42.97	9.65
2	11490.00	54.36	PK	68.20	-13.84	1.60	320	32.66	21.70
3	11490.00	42.49	AV	54.00	-11.51	1.60	320	20.79	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5745MHz)

No.	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)
1	5725.00	53.62	PK	68.20	-14.58	2.00	180	43.97	9.65
2	11490.00	52.97	PK	68.20	-15.23	2.00	180	31.27	21.70
3	11490.00	40.86	AV	54.00	-13.14	2.00	180	19.16	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5785MHz)

No.	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)
1	11570.00	54.32	PK	68.20	-13.88	1.50	300	32.62	21.70
2	11570.00	43.14	AV	54.00	-10.86	1.50	300	21.44	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5785MHz)

No.	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)
1	11570.00	53.62	PK	68.20	-14.58	1.50	280	31.92	21.70
2	11570.00	41.43	AV	54.00	-12.57	1.50	280	19.73	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5825MHz)

No.	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)
1	5850.00	53.22	PK	68.20	-14.98	1.50	300	43.44	9.78
2	11650.00	54.21	PK	68.20	-13.99	1.50	300	32.31	21.90
3	11650.00	42.23	AV	54.00	-11.77	1.50	300	20.33	21.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5825MHz)

No.	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)
1	5850.00	56.32	PK	68.20	-11.88	1.60	250	46.54	9.78
2	11650.00	55.78	PK	68.20	-12.42	1.60	250	33.88	21.90
3	11650.00	43.59	AV	54.00	-10.41	1.60	250	21.69	21.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5180MHz)

No.	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)
1	5150.00	53.24	PK	68.20	-14.96	1.60	320	45.74	7.50
2	5150.00	40.83	AV	54.00	-13.17	1.60	320	33.33	7.50
3	10360.00	54.62	PK	68.20	-13.58	1.60	320	34.82	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5180MHz)

No.	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)
1	5150.00	55.22	PK	68.20	-12.98	1.70	180	47.72	7.50
2	5150.00	43.25	AV	54.00	-10.75	1.70	180	35.75	7.50
3	10360.00	58.36	PK	68.20	-9.84	1.70	180	38.56	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5220MHz)

No.	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)
1	10400.00	55.54	PK	68.20	-12.66	1.70	350	35.64	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5220MHz)

No.	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)
1	10400.00	51.84	PK	68.20	-16.36	1.00	360	31.94	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5240MHz)

No.	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)
1	5350.00	56.32	PK	68.20	-11.88	1.60	250	48.32	8.00
2	5350.00	44.10	AV	54.00	-9.9	1.60	250	36.10	8.00
3	10480.00	55.24	PK	68.20	-12.96	1.60	250	35.34	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5240MHz)

No.	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)
1	5350.00	55.99	PK	68.20	-12.21	1.80	290	47.99	8.00
2	5350.00	43.90	AV	54.00	-10.1	1.80	290	35.90	8.00
3	10480.00	57.21	PK	68.20	-10.99	1.80	290	37.31	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5745MHz)

No.	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)
1	5725.00	56.32	PK	68.20	-11.88	1.60	320	46.67	9.65
2	11490.00	55.22	PK	68.20	-12.98	1.60	320	33.52	21.70
3	11490.00	42.89	AV	54.00	-11.11	1.60	320	21.19	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5745MHz)

No.	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)
1	5725.00	55.62	PK	68.20	-12.58	2.00	180	45.97	9.65
2	11490.00	54.13	PK	68.20	-14.07	2.00	180	32.43	21.70
3	11490.00	41.71	AV	54.00	-12.29	2.00	180	20.01	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5785MHz)

No.	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)
1	11570.00	55.69	PK	68.20	-12.51	1.50	300	33.99	21.70
2	11570.00	43.63	AV	54.00	-10.37	1.50	300	21.93	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5785MHz)

No.	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)
1	11570.00	54.29	PK	68.20	-13.91	1.50	280	32.59	21.70
2	11570.00	41.97	AV	54.00	-12.03	1.50	280	20.27	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5825MHz)

No.	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)
1	5850.00	52.98	PK	68.20	-15.22	1.50	300	43.20	9.78
2	11650.00	54.62	PK	68.20	-13.58	1.50	300	32.72	21.90
3	11650.00	42.83	AV	54.00	-11.17	1.50	300	20.93	21.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5825MHz)

No.	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)
1	5850.00	55.87	PK	68.20	-12.33	1.60	250	46.09	9.78
2	11650.00	56.32	PK	68.20	-11.88	1.60	250	34.42	21.90
3	11650.00	44.06	AV	54.00	-9.94	1.60	250	22.16	21.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5190MHz)

No.	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)
1	5150.00	56.32	PK	68.20	-11.88	1.80	200.00	48.82	7.50
2	5150.00	44.10	AV	54.00	-9.9	1.80	200.00	36.60	7.50
3	10380.00	57.23	PK	68.20	-10.97	1.80	200.00	37.43	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5190MHz)

No.	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)
1	5150.00	58.21	PK	68.20	-9.99	1.80	300.00	50.71	7.50
2	5150.00	46.64	AV	54.00	-7.36	1.80	300.00	39.14	7.50
3	10380.00	56.32	PK	68.20	-11.88	1.80	300.00	36.52	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5230MHz)

No.	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)
1	5350.00	56.29	PK	68.20	-11.91	1.70	120.00	48.29	8.00
2	5350.00	44.86	AV	54.00	-9.14	1.70	120.00	36.86	8.00
3	10460.00	57.12	PK	68.20	-11.08	1.70	120.00	37.22	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5230MHz)

No.	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)
1	5350.00	55.95	PK	68.20	-12.25	1.50	290.00	47.95	8.00
2	5350.00	44.75	AV	54.00	-9.25	1.50	290.00	36.75	8.00
3	10460.00	57.12	PK	68.20	-11.08	1.50	290.00	37.22	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5755MHz)									
No.	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)
1	5725.00	56.24	PK	68.20	-11.96	1.60	200.00	46.59	9.65
2	11510.00	55.95	PK	68.20	-12.25	1.60	200.00	34.25	21.70
3	11510.00	45.43	AV	54.00	-8.57	1.60	200.00	23.73	21.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5755MHz)									
No.	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)
1	5725.00	56.98	PK	68.20	-11.22	1.80	300.00	47.33	9.65
2	11510.00	57.35	PK	68.20	-10.85	1.80	300.00	35.65	21.70
3	11510.00	46.81	AV	54.00	-7.19	1.80	300.00	25.11	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5795MHz)

No.	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)
1	5850.00	56.98	PK	68.20	-11.22	1.80	270.00	47.20	9.78
2	11590.00	54.36	PK	68.20	-13.84	1.80	270.00	32.56	21.80
3	11590.00	43.68	AV	54.00	-10.32	1.80	270.00	21.88	21.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5795MHz)

No.	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)
1	5850.00	55.62	PK	68.20	-12.58	1.80	300.00	45.84	9.78
2	11590.00	55.78	PK	68.20	-12.42	1.80	300.00	33.98	21.80
3	11590.00	45.20	AV	54.00	-8.8	1.80	300.00	23.40	21.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5180MHz)

No.	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)
1	5150.00	42.65	PK	68.20	-25.55	1.00	120	35.15	7.50
2	5150.00	32.35	AV	54.00	-21.65	1.00	120	24.85	7.50
3	10360.00	50.32	PK	68.2	-17.88	1.50	140	30.52	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5180MHz)

No.	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)
1	5150.00	44.05	PK	68.20	-24.15	1.50	240	36.55	7.50
2	5150.00	34.07	AV	54.00	-19.93	1.50	240	26.57	7.50
3	10360.00	51.36	PK	68.2	-16.84	1.50	250	31.56	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5220MHz)

No.	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)
1	10400.00	52.05	PK	68.2	-16.15	1.50	200	32.15	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5220MHz)

No.	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)
1	10400.00	53.21	PK	68.2	-14.99	1.00	120	33.31	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5240MHz)

No.	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)
1	5350.00	45.52	PK	68.20	-22.68	1.00	240	37.52	8.00
2	5350.00	35.17	AV	54.00	-18.83	1.00	240	27.17	8.00
3	10480.00	47.00	PK	68.20	-21.20	2.00	160	27.10	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5240MHz)

No.	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)
1	5350.00	45.00	PK	68.20	-23.20	1.00	120	37.00	8.00
2	5350.00	34.86	AV	54.00	-19.14	1.00	120	26.86	8.00
3	10480.00	50.25	PK	68.20	-17.95	2.00	180	30.35	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5745MHz)

No.	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)
1	5700.00	41.25	PK	68.20	-26.95	1.00	100	31.60	9.65
2	11490.00	52.36	PK	68.20	-15.84	2.00	320	30.66	21.70
3	11490.00	45.84	AV	54.00	-8.16	2.00	320	24.14	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5745MHz)

No.	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)
1	5700.00	42.36	PK	68.20	-25.84	1.00	120	32.71	9.65
2	11490.00	51.25	PK	68.20	-16.95	2.00	250	29.55	21.70
3	11490.00	44.71	AV	54.00	-9.29	2.00	250	23.01	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5785MHz)

No.	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)
1	11570.00	53.36	PK	68.20	-14.84	1.00	250	31.66	21.70
2	11570.00	46.68	AV	54.00	-7.32	1.00	250	24.98	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5785MHz)

No.	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)
1	11570.00	50.26	PK	68.20	-17.94	1.00	260	28.56	21.70
2	11570.00	43.68	AV	54.00	-10.32	1.00	260	21.98	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5825MHz)

No.	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)
1	5850.00	38.65	PK	68.2	-29.55	1.50	200	28.87	9.78
2	11650.00	51.26	PK	68.20	-16.94	1.50	260	29.36	21.90
3	11650.00	44.91	AV	54.00	-9.09	1.50	260	23.01	21.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5825MHz)

No.	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)
1	5850.00	39.54	PK	68.2	-28.66	2.00	100	29.76	9.78
2	11650.00	52.00	PK	68.20	-16.20	1.80	270	30.10	21.90
3	11650.00	45.46	AV	54.00	-8.54	1.80	270	23.56	21.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac40_5190MHz)

No.	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)
1	5150.00	43.25	PK	68.20	-24.95	1.00	100.00	35.75	7.50
2	5150.00	32.47	AV	54.00	-21.53	1.00	100.00	24.97	7.50
3	10380.00	52.14	PK	68.20	-16.06	1.60	120.00	32.34	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac40_5190MHz)

No.	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)
1	5150.00	41.36	PK	68.20	-26.84	2.00	360.00	33.86	7.50
2	5150.00	31.38	AV	54.00	-22.62	2.00	360.00	23.88	7.50
3	10380.00	53.65	PK	68.20	-14.55	1.80	250.00	33.85	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac40_5230MHz)

No.	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)
1	5350.00	43.36	PK	68.20	-24.84	1.00	200.00	35.36	8.00
2	5350.00	33.01	AV	54.00	-20.99	1.00	200.00	25.01	8.00
3	10460.00	52.36	PK	68.2	-15.84	2.00	180.00	32.46	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac40_5230MHz)

No.	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)
1	5350.00	44.15	PK	68.20	-24.05	2.00	100.00	36.15	8.00
2	5350.00	34.01	AV	54.00	-19.99	2.00	100.00	26.01	8.00
3	10460.00	51.06	PK	68.2	-17.14	1.50	360.00	31.16	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac40_5755MHz)

No.	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)
1	5725.00	43.36	PK	68.2	-24.84	1.80	180.00	33.71	9.65
2	11510.00	50.15	PK	68.20	-18.05	2.00	120.00	28.45	21.70
3	11510.00	39.63	AV	54.00	-14.37	2.00	120.00	17.93	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac40_5755MHz)

No.	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)
1	5725.00	43.62	PK	68.2	-24.58	1.20	200.00	33.97	9.65
2	11510.00	52.29	PK	68.20	-15.91	2.00	180.00	30.59	21.70
3	11510.00	41.75	AV	54.00	-12.25	2.00	180.00	20.05	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac40_5795MHz)

No.	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)
1	5850.00	42.25	PK	68.20	-25.95	1.40	100.00	32.47	9.78
2	11590.00	52.36	PK	68.20	-15.84	1.60	0.00	30.56	21.80
3	11590.00	41.68	AV	54.00	-12.32	1.60	0.00	19.88	21.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac40_5795MHz)

No.	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)
1	5850.00	44.15	PK	68.20	-24.05	1.20	360.00	34.37	9.78
2	11590.00	56.25	PK	68.20	-11.95	2.00	120.00	34.45	21.80
3	11590.00	45.67	AV	54.00	-8.33	2.00	120.00	23.87	21.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac-VHT80_5210MHz)									
No.	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)
1	5150.00	43.58	PK	68.20	-24.62	1.00	150.00	36.08	7.50
2	5150.00	32.92	AV	54.00	-21.08	1.00	150.00	25.42	7.50
3	10420.00	51.36	PK	68.20	-16.84	1.60	330.00	31.46	19.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac-VHT80_5210MHz)									
No.	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)
1	5150.00	43.15	PK	68.20	-25.05	2.00	0.00	35.65	7.50
2	5150.00	33.17	AV	54.00	-20.83	2.00	0.00	25.67	7.50
3	10420.00	50.36	PK	68.20	-17.84	1.60	180.00	30.46	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac-VHT80_5775MHz)									
No.	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)
1	5460.00	42.36	PK	68.20	-25.84	1.50	100.00	32.58	9.78
2	5460.00	34.62	AV	54.00	-19.38	1.50	100.00	24.84	9.78
3	11550.00	48.25	PK	68.20	-19.95	1.50	180.00	26.45	21.80
4	11550.00	40.51	AV	54.00	-13.49	1.50	180.00	18.71	21.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac-VHT80_5775MHz)									
No.	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)
1	5460.00	41.36	PK	68.20	-26.84	1.50	100.00	31.58	9.78
2	5460.00	32.71	AV	54.00	-21.29	1.50	100.00	22.93	9.78
3	11550.00	50.26	PK	68.20	-17.94	2.00	180.00	28.46	21.80
4	11550.00	42.68	AV	54.00	-11.32	2.00	180.00	20.88	21.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax_5180MHz)

No.	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)
1	5150.00	56.32	PK	68.20	-11.88	1.80	300	48.82	7.50
2	5150.00	46.07	AV	54.00	-7.93	1.80	300	38.57	7.50
3	10360.00	51.24	PK	68.20	-16.96	2.00	330	31.44	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax_5180MHz)

No.	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)
1	5150.00	51.18	PK	68.20	-17.02	1.00	180	43.68	7.50
2	5150.00	49.57	AV	54.00	-4.43	1.00	180	42.07	7.50
3	10360.00	51.99	PK	68.20	-16.21	2.00	320	32.19	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax_5220MHz)									
No.	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)
1	10400.00	56.64	PK	68.20	-11.56	1.60	360	36.74	19.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax_5220MHz)									
No.	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)
1	10400.00	55.34	PK	68.20	-12.86	1.80	350	35.44	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax_5240MHz)

No.	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)
1	5350.00	49.87	PK	68.20	-18.33	1.50	350	41.87	8.00
2	5350.00	39.52	AV	54.00	-14.48	1.50	350	31.52	8.00
3	10480.00	56.38	PK	68.20	-11.82	1.80	240	36.48	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax_5240MHz)

No.	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)
1	5350.00	50.49	PK	68.20	-17.71	1.80	320	42.49	8.00
2	5350.00	40.35	AV	54.00	-13.65	1.80	320	32.35	8.00
3	10480.00	52.27	PK	68.20	-15.93	1.80	220	32.37	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax_5745MHz)

No.	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)
1	5725.00	52.98	PK	68.20	-15.22	2.00	320	43.33	9.65
2	11490.00	54.18	PK	68.20	-14.02	2.00	200	32.48	21.70
3	11490.00	44.25	AV	54.00	-9.75	2.00	200	22.55	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax_5745MHz)

No.	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)
1	5725.00	53.31	PK	68.20	-14.89	2.00	220	43.66	9.65
2	11490.00	54.71	PK	68.20	-13.49	2.00	190	33.01	21.70
3	11490.00	45.17	AV	54.00	-8.83	2.00	190	23.47	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax_5785MHz)									
No.	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)
1	11570.00	51.68	PK	68.20	-16.52	1.60	320	29.98	21.70
2	11570.00	42.00	AV	54.00	-12	1.60	320	20.30	21.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax_5785MHz)									
No.	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)
1	11570.00	52.79	PK	68.20	-15.41	1.60	170	31.09	21.70
2	11570.00	44.21	AV	54.00	-9.79	1.60	170	22.51	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax_5825MHz)

No.	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)
1	5850.00	54.69	PK	68.20	-13.51	1.60	320	44.91	9.78
2	11650.00	55.14	PK	68.20	-13.06	2.00	310	33.24	21.90
3	11650.00	45.79	AV	54.00	-8.21	2.00	310	23.89	21.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax_5825MHz)

No.	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)
1	5850.00	58.94	PK	68.20	-9.26	1.60	180	49.16	9.78
2	11650.00	52.65	PK	68.20	-15.55	1.50	250	30.75	21.90
3	11650.00	43.11	AV	54.00	-10.89	1.50	250	21.21	21.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax40_5190MHz)

No.	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)
1	5150.00	43.25	PK	68.20	-24.95	1.00	100.00	35.75	7.50
2	5150.00	32.47	AV	54.00	-21.53	1.00	100.00	24.97	7.50
3	10380.00	52.14	PK	68.20	-16.06	1.60	120.00	32.34	19.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax40_5190MHz)

No.	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)
1	5150.00	41.36	PK	68.20	-26.84	2.00	360.00	33.86	7.50
2	5150.00	31.38	AV	54.00	-22.62	2.00	360.00	23.88	7.50
3	10380.00	53.65	PK	68.20	-14.55	1.80	250.00	33.85	19.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax40_5230MHz)

No.	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)
1	5350.00	43.36	PK	68.20	-24.84	1.00	200.00	35.36	8.00
2	5350.00	33.01	AV	54.00	-20.99	1.00	200.00	25.01	8.00
3	10460.00	52.36	PK	68.2	-15.84	2.00	180.00	32.46	19.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax40_5230MHz)

No.	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)
1	5350.00	44.15	PK	68.20	-24.05	2.00	100.00	36.15	8.00
2	5350.00	34.01	AV	54.00	-19.99	2.00	100.00	26.01	8.00
3	10460.00	51.06	PK	68.2	-17.14	1.50	360.00	31.16	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax40_5755MHz)

No.	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)
1	5725.00	43.36	PK	68.2	-24.84	1.80	180.00	33.71	9.65
2	11510.00	50.15	PK	68.20	-18.05	2.00	120.00	28.45	21.70
3	11510.00	39.63	AV	54.00	-14.37	2.00	120.00	17.93	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax40_5755MHz)

No.	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)
1	5725.00	43.62	PK	68.2	-24.58	1.20	200.00	33.97	9.65
2	11510.00	52.29	PK	68.20	-15.91	2.00	180.00	30.59	21.70
3	11510.00	41.75	AV	54.00	-12.25	2.00	180.00	20.05	21.70

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax40_5795MHz)

No.	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)
1	5850.00	42.25	PK	68.20	-25.95	1.40	100.00	32.47	9.78
2	11590.00	52.36	PK	68.20	-15.84	1.60	0.00	30.56	21.80
3	11590.00	41.68	AV	54.00	-12.32	1.60	0.00	19.88	21.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax40_5795MHz)

No.	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)
1	5850.00	44.15	PK	68.20	-24.05	1.20	360.00	34.37	9.78
2	11590.00	56.25	PK	68.20	-11.95	2.00	120.00	34.45	21.80
3	11590.00	45.67	AV	54.00	-8.33	2.00	120.00	23.87	21.80

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax 80_5210MHz)									
No.	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)
1	5150.00	54.87	PK	68.20	-13.33	1.50	320.00	47.37	7.50
2	5150.00	44.21	AV	54.00	-9.79	1.50	320.00	36.71	7.50
3	10420.00	55.68	PK	68.20	-12.52	1.50	320.00	35.78	19.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax 80_5210MHz)									
No.	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)
1	5150.00	55.34	PK	68.20	-12.86	1.60	320.00	47.84	7.50
2	5150.00	45.36	AV	54.00	-8.64	1.60	320.00	37.86	7.50
3	10420.00	56.35	PK	68.20	-11.85	1.60	320.00	36.45	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ax-VHT80_5775MHz)									
No.	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)
1	5460.00	49.96	PK	68.20	-18.24	1.50	270.00	40.18	9.78
2	5460.00	42.22	AV	54.00	-11.78	1.50	270.00	32.44	9.78
3	11550.00	52.37	PK	68.20	-15.83	1.80	190.00	30.57	21.80
4	11550.00	44.63	AV	54.00	-9.37	1.80	190.00	22.83	21.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ax-VHT80_5775MHz)									
No.	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)
1	5460.00	52.39	PK	68.20	-15.81	1.70	300.00	42.61	9.78
2	5460.00	43.74	AV	54.00	-10.26	1.70	300.00	33.96	9.78
3	11550.00	51.04	PK	68.20	-17.16	1.50	280.00	29.24	21.80
4	11550.00	43.46	AV	54.00	-10.54	1.50	280.00	21.66	21.80

REMARKS:

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

2.7. Conducted Emission

2.7.1. Limit of Conducted Emission

FCC 15.207,

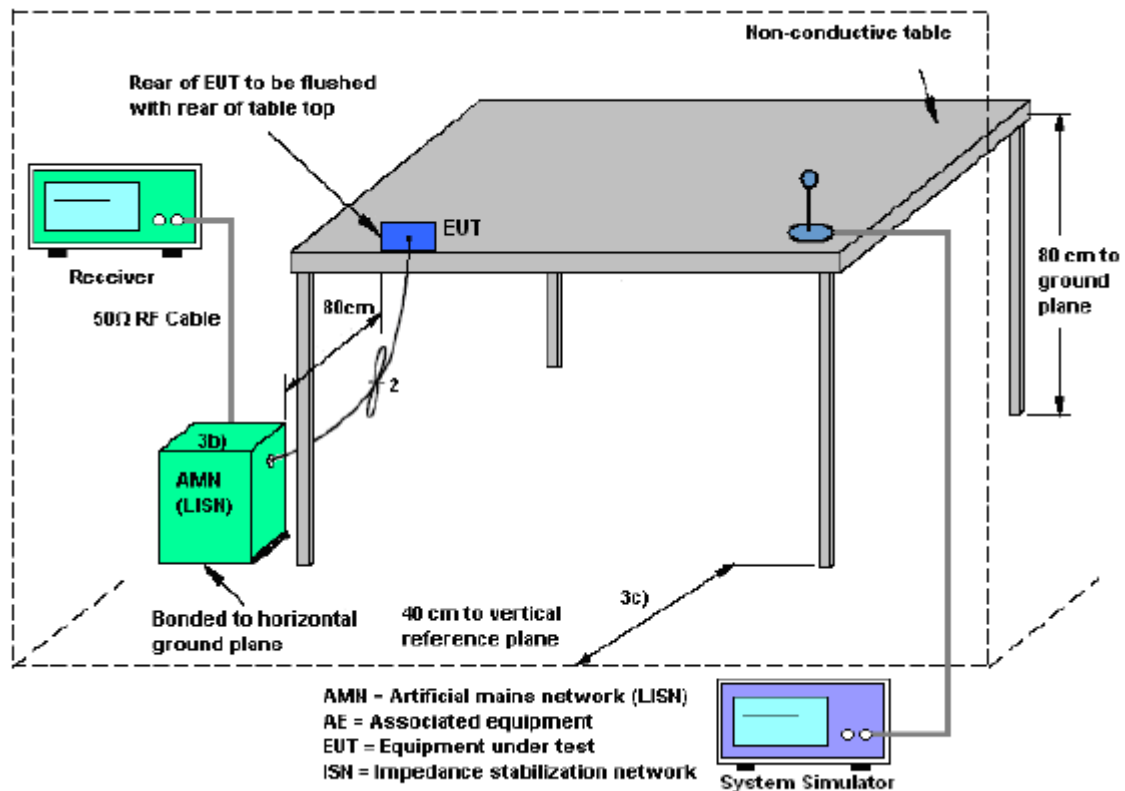
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency range (MHz)	Conducted Limit (dB μ 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

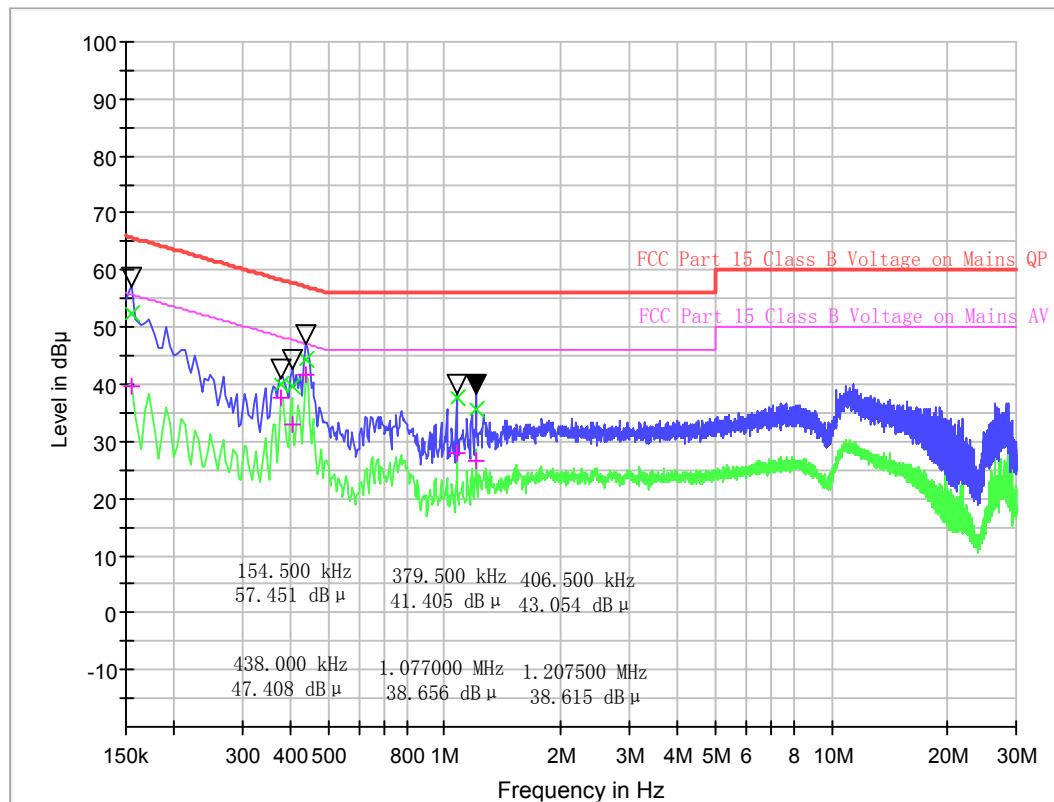


2.7.4. Test Procedures

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.

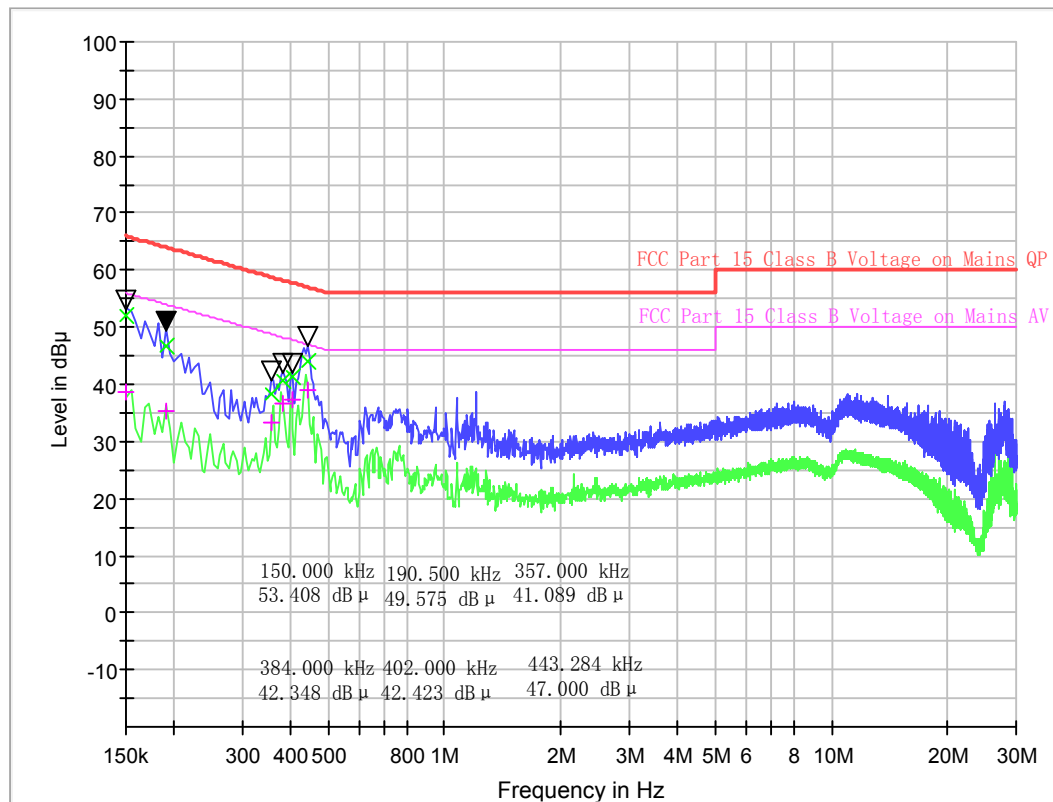
2.7.5. Test Results of Conducted Emission

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



(Plot A: L Phase)

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB μ V)
0.154500	52.45	39.76	0.1	10.1	13.30	65.8	15.99	55.8
0.379500	40.06	37.53	0.1	10.1	18.23	58.3	10.76	48.3
0.406500	39.52	33.07	0.6	10.6	18.20	57.7	14.65	47.7
0.438000	44.41	41.59	0.6	10.6	12.69	57.1	5.51	47.1
1.077000	37.65	28.01	0.6	10.6	18.35	56.0	17.99	46.0
1.207500	35.54	26.75	0.7	10.7	20.46	56.0	19.25	46.0



(Plot B: N Phase)

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB μ V)
0.150000	52.11	38.79	0.1	10.1	13.89	66.0	17.21	56.0
0.190500	46.80	35.45	0.1	10.1	17.21	64.0	18.56	54.0
0.357000	38.49	33.23	0.1	10.1	20.31	58.8	15.57	48.8
0.384000	40.65	36.49	0.1	10.1	17.54	58.2	11.70	48.2
0.402000	41.29	37.36	0.2	10.2	16.52	57.8	10.45	47.8
0.442500	44.15	39.16	0.2	10.2	12.86	57.0	7.85	47.0

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	2020.09.21	2021.09.20
2	Power Meter	R&S	NRP-Z31	102872	2020.05.18	2021.05.17
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	80RF1000-10004	A140101634	2021.01.26	2022.01.25
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/40 0	A160302517	2021.01.26	2022.01.25
9	High pass filter	Compliance Direction systems	BSU-6	34202	2020.11.10	2021.11.09
10	Horn Antenna	R&S	HF906	A0304225	2019.04.17	2022.04.16
11	Horn Antenna	R&S	ESIB7	A0501375	2020.06.24	2021.06.23
12	ULTRA-BROADBAND ANTENNA	SCHWARZBEC K	VULB9160	A0805560	2019.05.24	2022.05.23
13	Passive Loop Antenna	R&S	HFH2-Z2	100047	2019.04.26	2022.04.25
14	Temperature chamber	XSM	DNF810C	A0501375	2020.05.26	2021.05.25
15	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2020.05.18	2021.05.17
16	Power Supply	R&S	ESIB26	A0304218	2020.04.29	2021.04.28
17	LISN	ROHDE&SCH WARZ	ENV216	A140701847	2020.09.22	2021.09.21
18	Test software	ECIT	Eagle	V2.0	N/A	N/A

Appendix A

Conducted output power

Test results

Conducted Power Test results of band U-NII-1 (5150 ~ 5250 MHz)

802.11a mode					
Frequency (MHz)	Conducted Output Power (dBm)		FCC Limit (dBm)	Result	
	Antenna 0	Antenna 1			
5180	11.97	12.38	30	PASS	
5220	11.88	12.33	30	PASS	
5240	11.88	12.28	30	PASS	
802.11n-HT20 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5180	11.59	11.87	14.74	30	PASS
5220	11.40	11.58	14.50	30	PASS
5240	11.29	11.22	14.27	30	PASS
802.11n-HT40 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5190	11.82	12.54	15.21	30	PASS
5230	10.95	12.31	14.69	30	PASS
802.11ac-VHT20 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5180	11.90	12.06	14.99	30	PASS
5220	11.44	11.76	14.61	30	PASS
5240	11.46	11.78	14.63	30	PASS

802.11ac-VHT40 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5190	11.93	11.78	14.87	30	PASS
5230	11.54	11.31	14.44	30	PASS
802.11ac-VHT80 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5210	11.16	11.10	14.14	30	PASS
802.11ax-HE20 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5180	11.94	11.87	14.92	30	PASS
5220	11.44	11.49	14.48	30	PASS
5240	11.48	11.47	14.49	30	PASS
802.11ax-HE 40 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5190	11.85	11.87	14.87	30	PASS
5230	11.62	11.61	14.63	30	PASS
802.11ax-HE 80 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5210	11.20	11.25	14.24	30	PASS

Conducted Power Test results of band U-NII-3 (5725 ~ 5850 MHz)

802.11a mode					
Frequency (MHz)	Conducted Output Power (dBm)		FCC Limit (dBm)	Result	
	Antenna 0	Antenna 1			
5745	12.18	12.17	30	PASS	
5785	12.26	12.11	30	PASS	
5825	12.31	12.12	30	PASS	
802.11n-HT20 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5745	11.88	12.57	15.25	30	PASS
5785	11.22	11.96	14.62	30	PASS
5825	11.26	11.73	14.51	30	PASS
802.11n-HT40 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5755	11.88	11.83	14.87	30	PASS
5795	11.26	11.39	14.34	30	PASS
802.11ac-VHT20 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5745	11.73	11.54	14.65	30	PASS
5785	11.31	11.34	14.34	30	PASS
5825	11.00	11.14	14.08	30	PASS

802.11ac-VHT40 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5755	11.59	11.92	14.77	30	PASS
5795	11.60	11.96	14.79	30	PASS
802.11ac-VHT80 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5775	11.78	11.34	14.58	30	PASS
802.11ax-HE20 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5745	11.60	11.59	14.61	30	PASS
5785	11.22	11.15	14.20	30	PASS
5825	11.05	11.02	14.05	30	PASS
802.11ax-HE40 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5755	11.63	11.65	14.65	30	PASS
5795	11.20	11.13	14.18	30	PASS
802.11ax-HE80 mode					
Test Frequency (MHz)	Conducted Output Power (dBm)			FCC Limit (dBm)	Result
	Antenna 0	Antenna 1	Total		
5775	11.15	11.04	14.11	30	PASS

AVGSA Power Spectral Density

Conducted PSD Test results of band U-NII-1 (5150~5250MHz)

802.11a mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)		Limit (dBm/MHz)	Result	
	Antenna 0	Antenna 1			
5180	0.483	0.840	17	PASS	
5220	0.567	0.640	17	PASS	
5240	0.626	1.165	17	PASS	
802.11n-HT20 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5180	-0.136	0.016	2.95	17	PASS
5220	-0.389	0.171	2.91	17	PASS
5240	-0.242	-0.341	2.72	17	PASS
802.11n-HT40 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5190	-2.469	-1.748	0.92	17	PASS
5230	-3.413	-2.384	0.14	17	PASS
802.11ac-VHT20 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5180	0.233	0.343	3.30	17	PASS
5220	-0.213	0.093	2.95	17	PASS
5240	-0.111	0.094	3.00	17	PASS
802.11ac-VHT40 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5190	-2.096	-2.037	0.94	17	PASS
5230	-2.782	-3.066	0.09	17	PASS
802.11n-VHT80 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5210	-6.084	-6.245	-3.15	17	PASS

802.11ax-HE20 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5180	-0.151	0.184	3.03	17	PASS
5220	-0.251	-0.300	2.73	17	PASS
5240	-0.260	-0.380	2.69	17	PASS
802.11ax-HE 40 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5190	-2.351	-2.682	0.50	17	PASS
5230	-2.837	-2.719	0.23	17	PASS
802.11ax-HE 80 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/MHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5210	-5.822	-5.969	-2.88	17	PASS

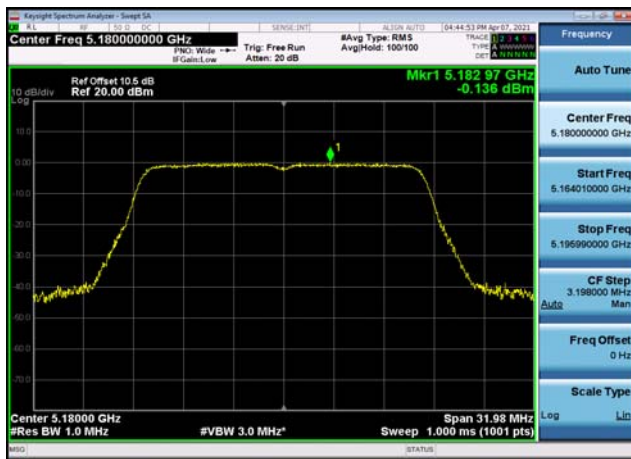
Conducted PSD Test results of band U-NII-3 (5725 ~ 5850 MHz)

802.11a mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)		Limit (dBm/MHz)	Result	
	Antenna 0	Antenna 1			
5745	-2.046	-1.606	30	PASS	
5785	-2.374	-1.697	30	PASS	
5825	-1.600	-1.668	30	PASS	
802.11n-HT20 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5745	-2.386	-1.931	0.86	30	PASS
5785	-4.048	-2.104	0.04	30	PASS
5825	-3.610	-2.460	0.01	30	PASS
802.11n-HT40 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5755	-4.884	-4.858	-1.86	30	PASS
5795	-5.619	-5.425	-2.51	30	PASS
802.11ac-VHT20 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5745	-2.286	-1.437	1.17	30	PASS
5785	-2.906	-2.903	0.11	30	PASS
5825	-3.207	-2.981	-0.08	30	PASS
802.11ac-VHT40 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5755	-4.602	-4.405	-1.49	30	PASS
5795	-5.010	-4.891	-1.94	30	PASS
802.11n-VHT80 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5775	-8.091	-8.430	-5.25	30	PASS

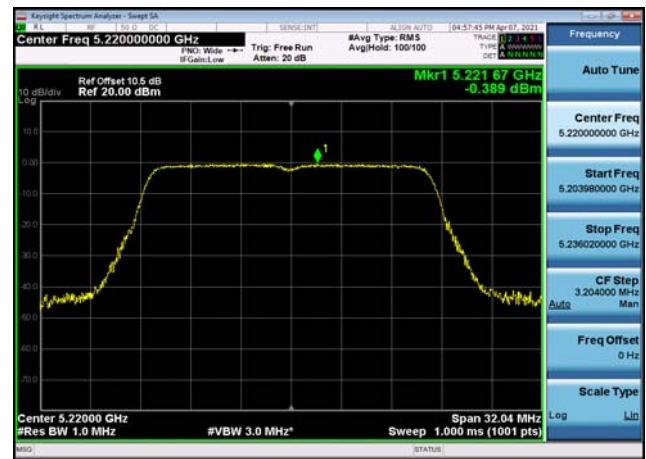
802.11ax-HE20 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5745	-2.659	-2.604	0.38	30	PASS
5785	-2.929	-3.027	0.03	30	PASS
5825	-3.240	-3.284	-0.25	30	PASS
802.11ax-HE40 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5755	-5.383	-5.140	-2.25	30	PASS
5795	-5.397	-5.596	-2.49	30	PASS
802.11ax-HE80 mode					
Test Frequency (MHz)	Power Spectral Density (dBm/500kHz)			Limit (dBm/MHz)	Result
	Antenna 0	Antenna 1	Total		
5775	-8.294	-8.592	-5.43	30	PASS

Test Plots

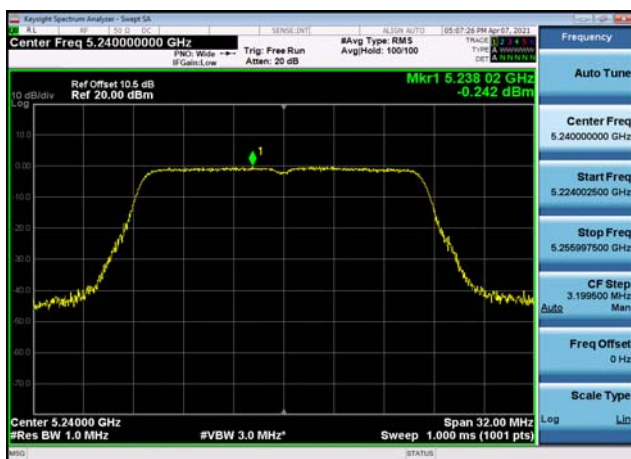
U-NII-1 Power spectral density-802.11
n(20MHz),5180MHz,Ant0



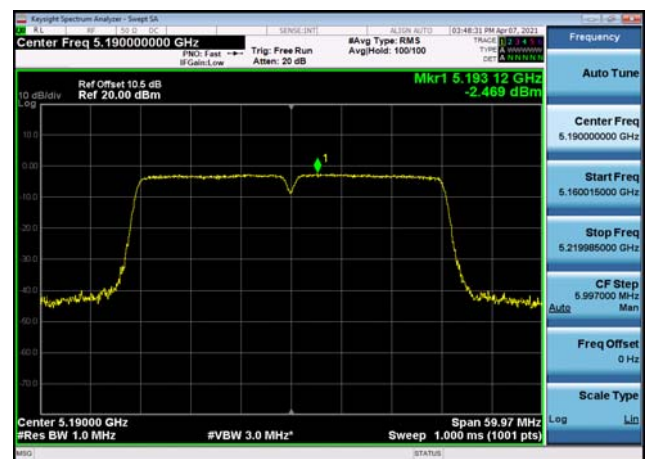
U-NII-1 Power spectral density-802.11
n(20MHz),5220MHz,Ant0



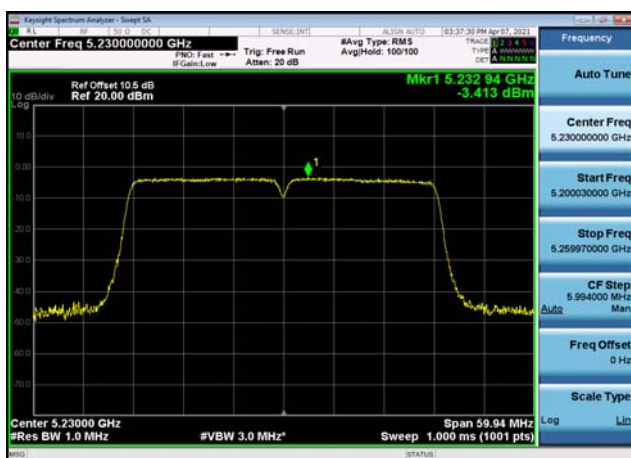
U-NII-1 Power spectral density-802.11
n(20MHz),5240MHz,Ant0



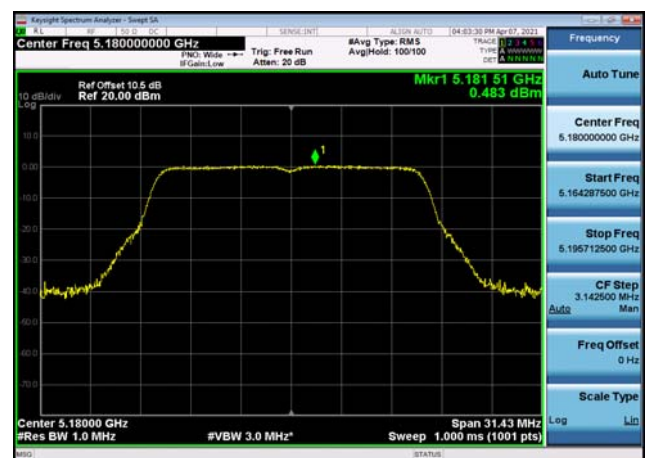
U-NII-1 Power spectral density-802.11
n(40MHz),5190MHz,Ant0



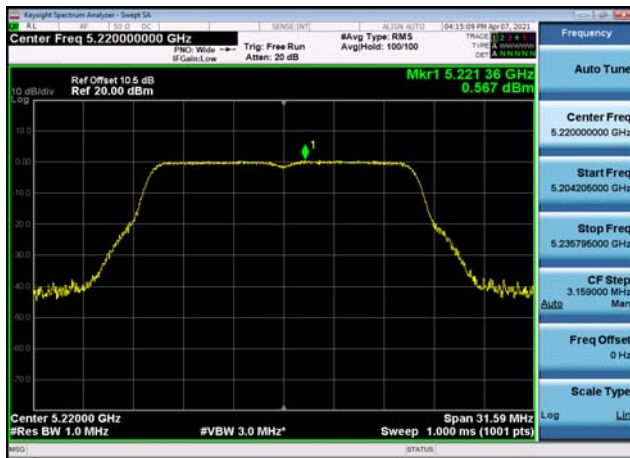
U-NII-1 Power spectral density-802.11
n(40MHz),5230MHz,Ant0



U-NII-1 Power spectral density-802.11
a(20MHz),5180MHz,Ant0



U-NII-1 Power spectral density-802.11
a(20MHz),5220MHz,Ant0



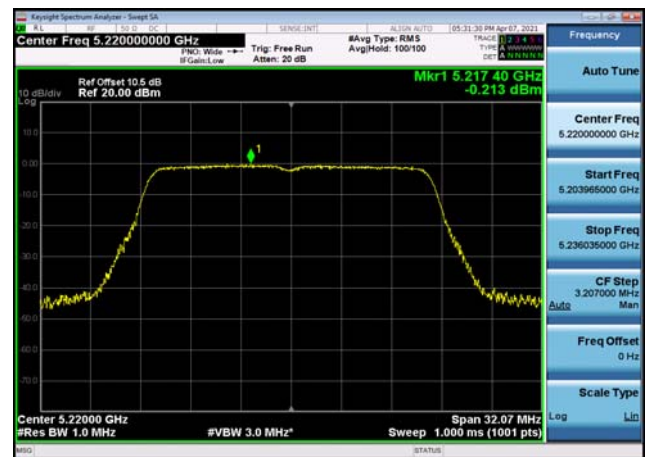
U-NII-1 Power spectral density-802.11
a(20MHz),5240MHz,Ant0



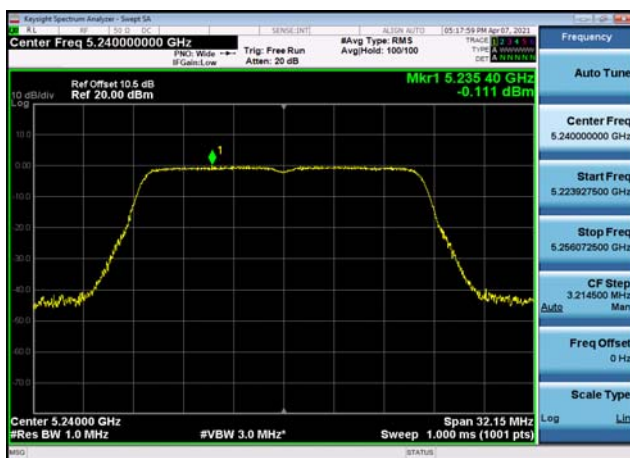
U-NII-1 Power spectral density-802.11
ac(20MHz),5180MHz,Ant0



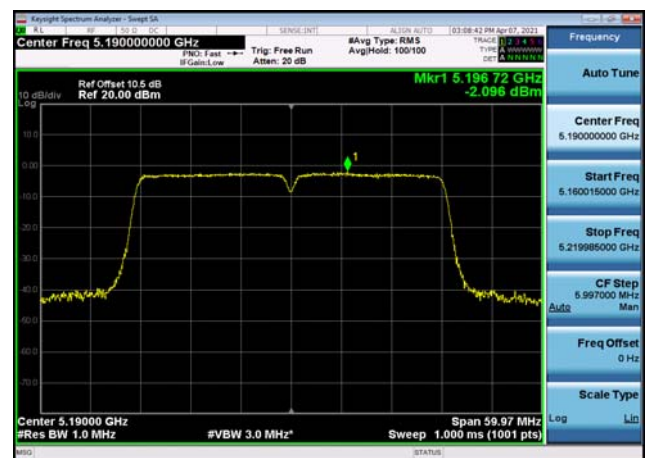
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ac(20MHz),5220MHz,Ant0



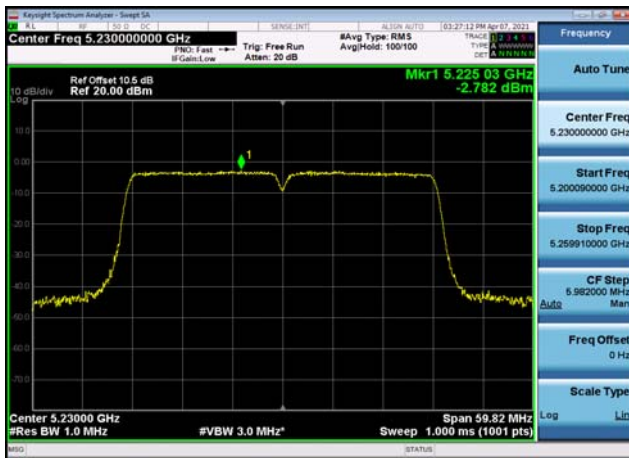
U-NII-1 Power spectral density-802.11
ac(20MHz),5240MHz,Ant0



U-NII-1 Power spectral density-802.11
ac(40MHz),5190MHz,Ant0



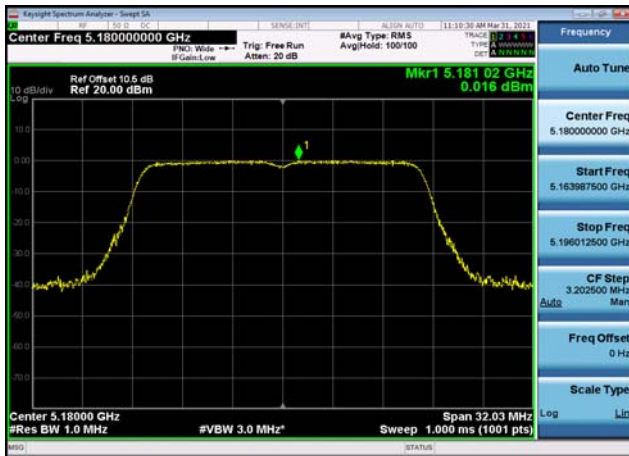
U-NII-1 Power spectral density-802.11
ac(40MHz),5230MHz,Ant0



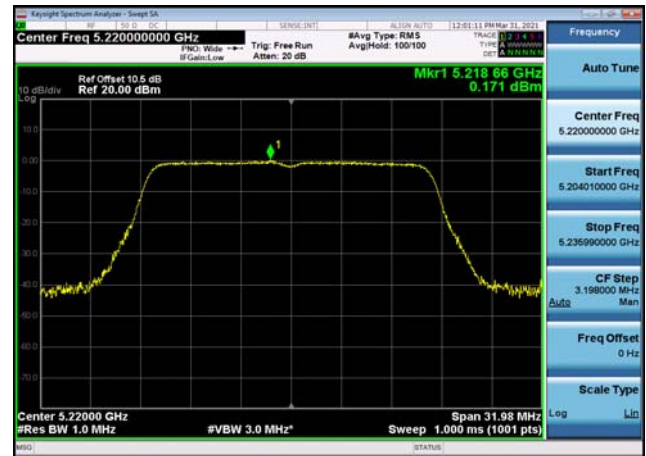
U-NII-1 Power spectral density-802.11
ac(80MHz),5210MHz,Ant0



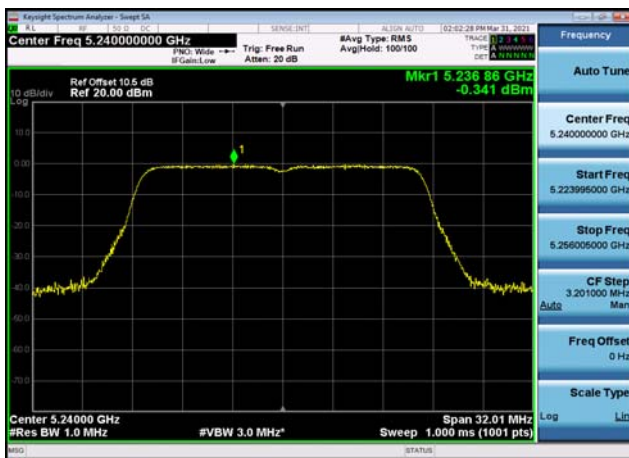
U-NII-1 Power spectral density-802.11
n(20MHz),5180MHz,Ant1



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



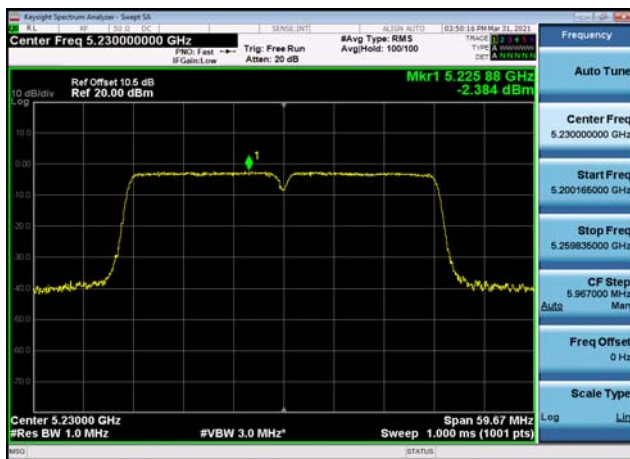
U-NII-1 Power spectral density-802.11
n(20MHz),5240MHz,Ant1



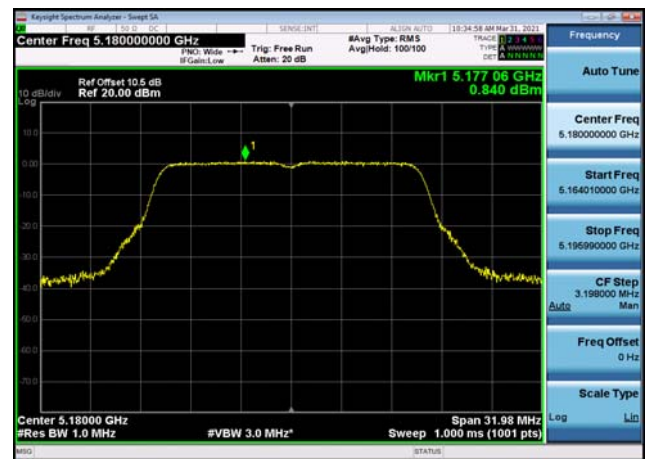
U-NII-1 Power spectral density-802.11
n(40MHz),5190MHz,Ant1



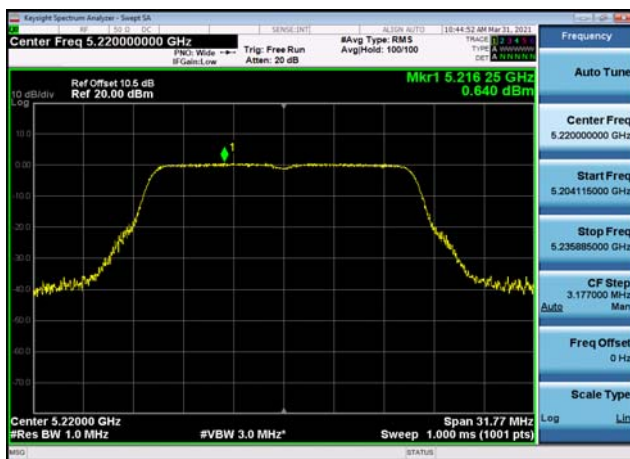
U-NII-1 Power spectral density-802.11
n(40MHz),5230MHz,Ant1



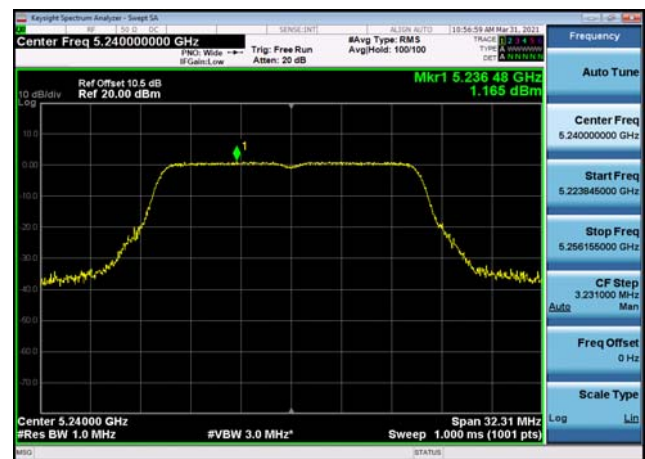
U-NII-1 Power spectral density-802.11
a(20MHz),5180MHz,Ant1



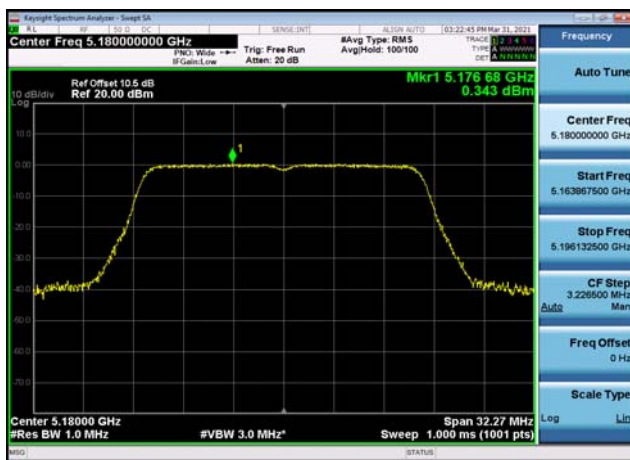
U-NII-1 Power spectral density-802.11
a(20MHz),5220MHz,Ant1



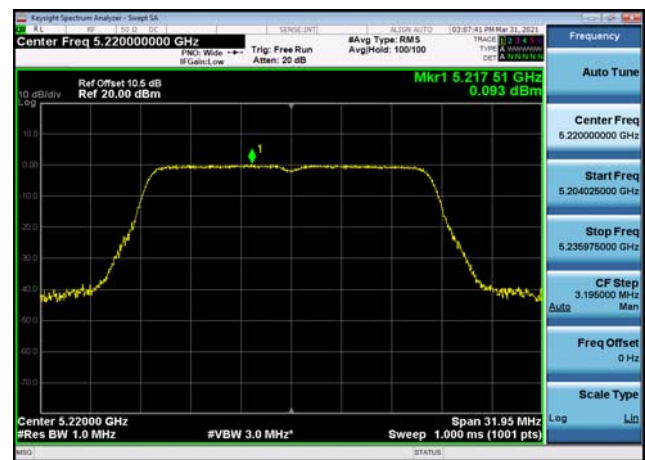
U-NII-1 Power spectral density-802.11
a(20MHz),5240MHz,Ant1



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



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



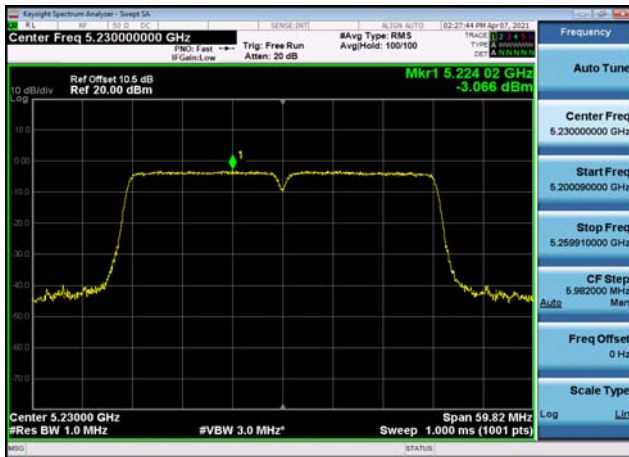
U-NII-1 Power spectral density-802.11
ac(20MHz),5240MHz,Ant1



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



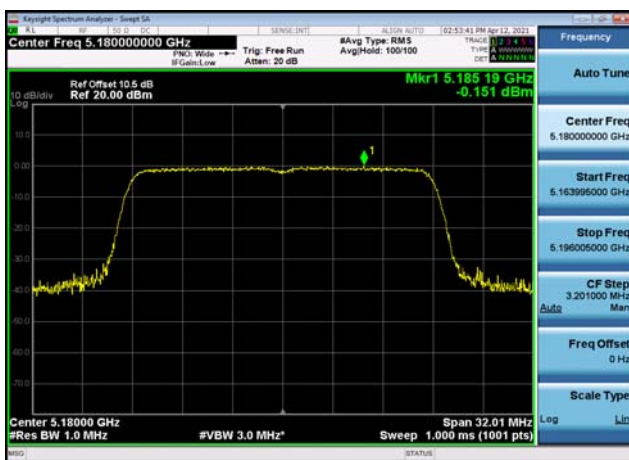
U-NII-1 Power spectral density-802.11
ac(40MHz),5230MHz,Ant1



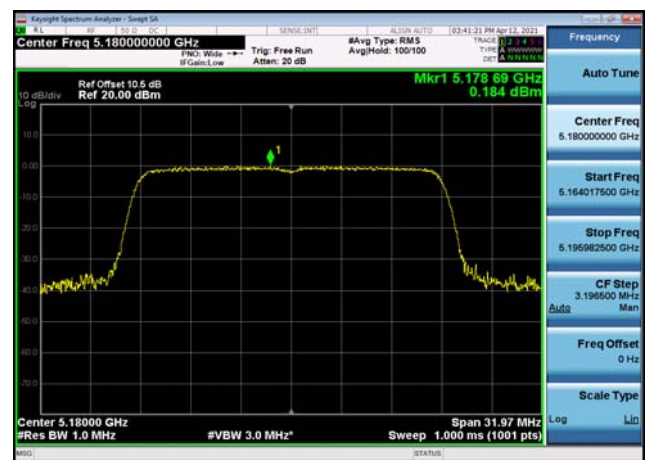
U-NII-1 Power spectral density-802.11
ac(80MHz),5210MHz,Ant1



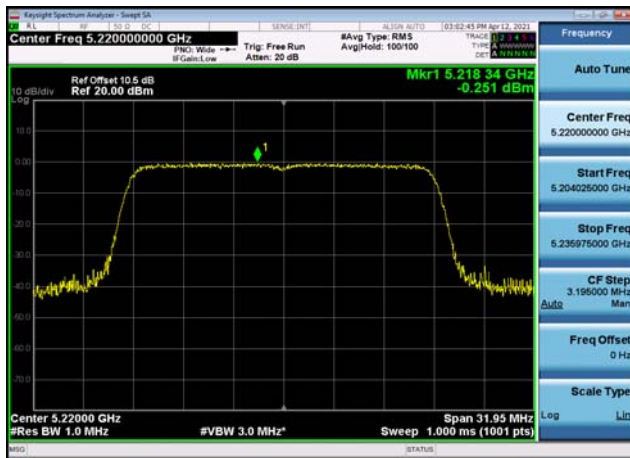
U-NII-1 Power spectral density-802.11
ax(20MHz),5180MHz,Ant0



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



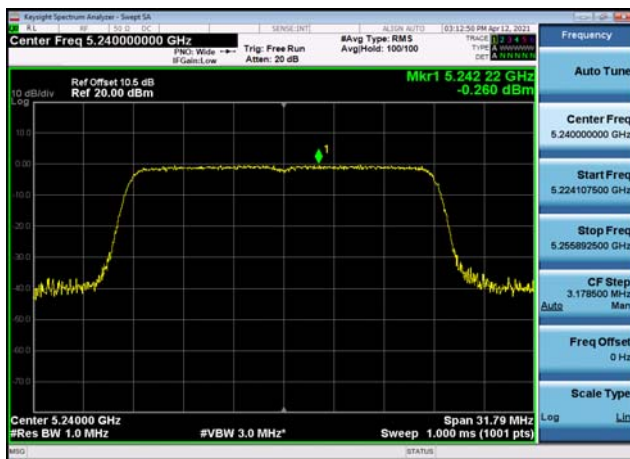
U-NII-1 Power spectral density-802.11
ax(20MHz),5220MHz,Ant0



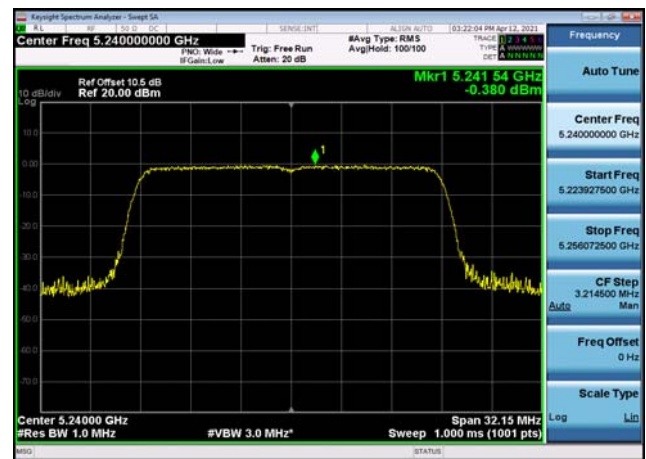
U-NII-1 Power spectral density-802.11
ax(20MHz),5220MHz,Ant1



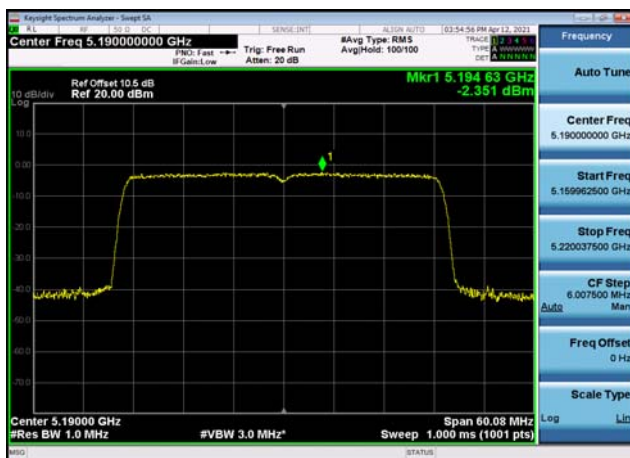
U-NII-1 Power spectral density-802.11
ax(20MHz),5240MHz,Ant0



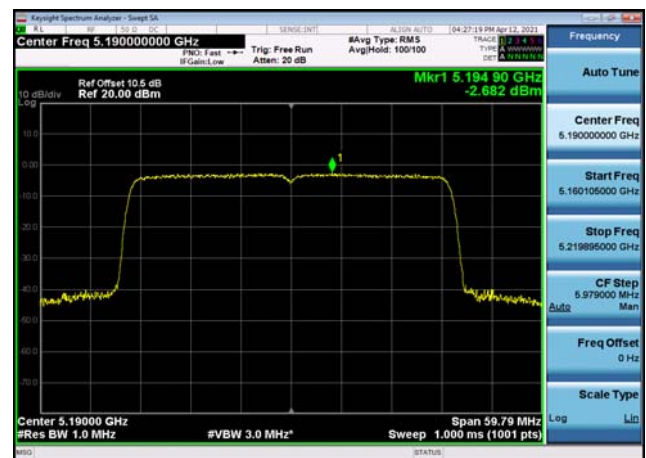
U-NII-1 Power spectral density-802.11
ax(20MHz),5240MHz,Ant1



U-NII-1 Power spectral density-802.11
ax(40MHz),5190MHz,Ant0



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



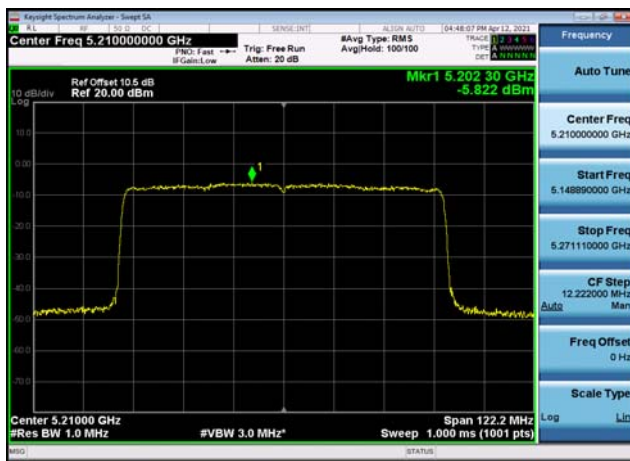
U-NII-1 Power spectral density-802.11
ax(40MHz),5230MHz,Ant0



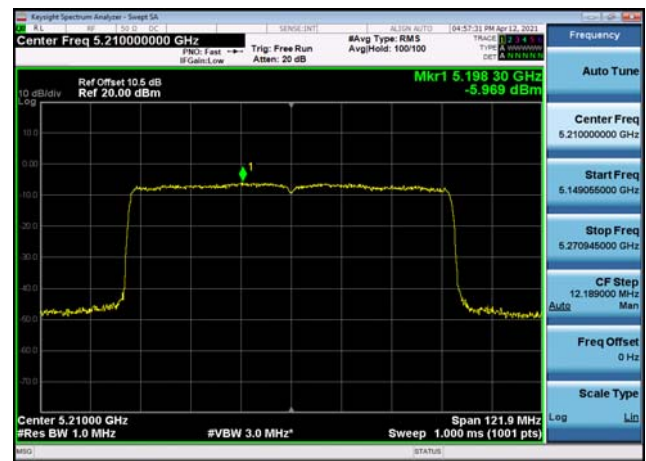
U-NII-1 Power spectral density-802.11
ax(40MHz),5230MHz,Ant1



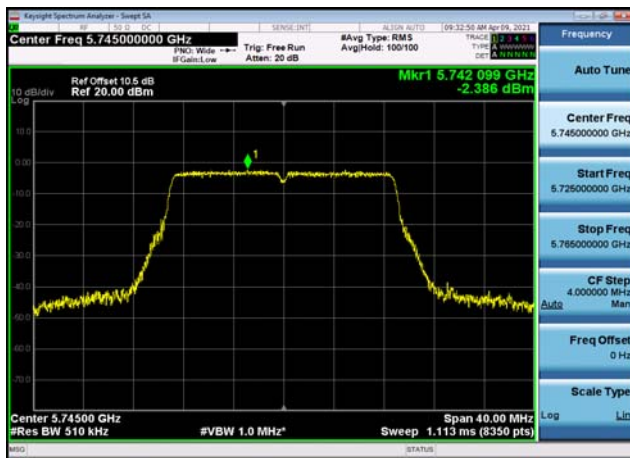
U-NII-1 Power spectral density-802.11
ax(80MHz),5210MHz,Ant0



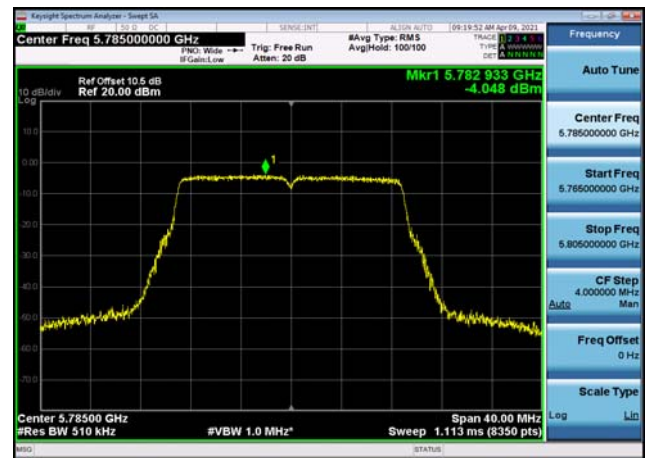
U-NII-1 Power spectral density-802.11
ax(80MHz),5210MHz,Ant1



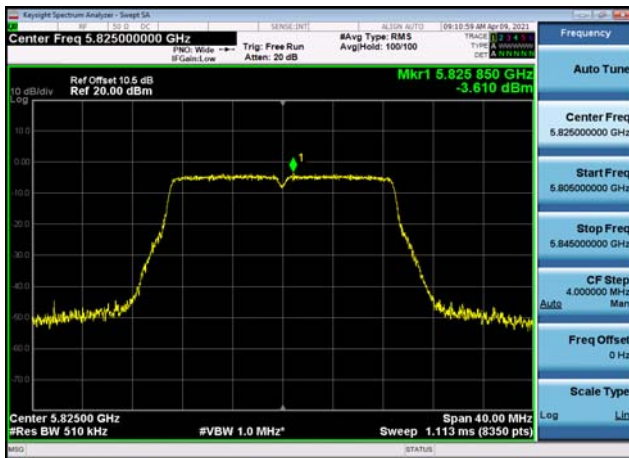
U-NII-3 Power spectral density-802.11
n(20MHz),5745MHz,Ant0



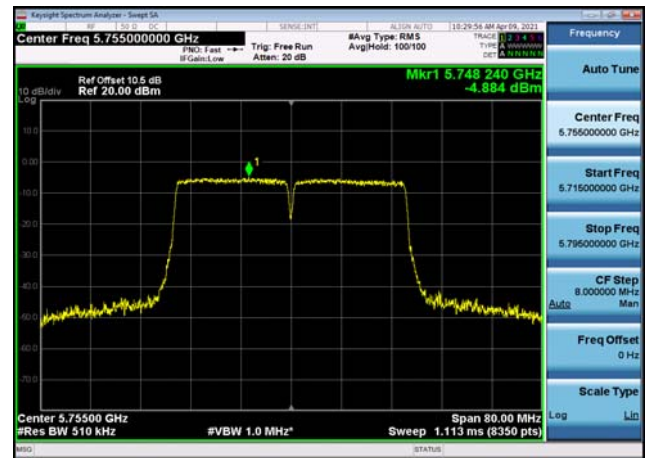
U-NII-3 Power spectral density-802.11
n(20MHz),5785MHz,Ant0



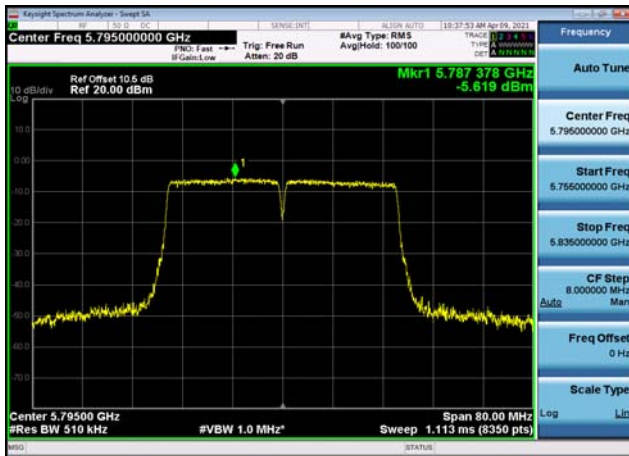
U-NII-3 Power spectral density-802.11
n(20MHz),5825MHz,Ant0



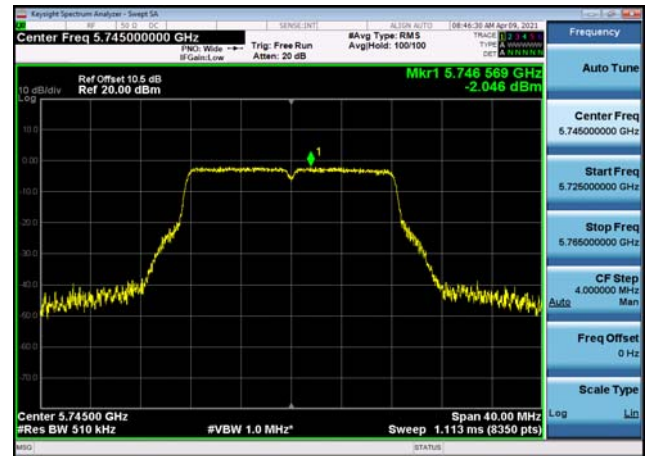
U-NII-3 Power spectral density-802.11
n(40MHz),5755MHz,Ant0



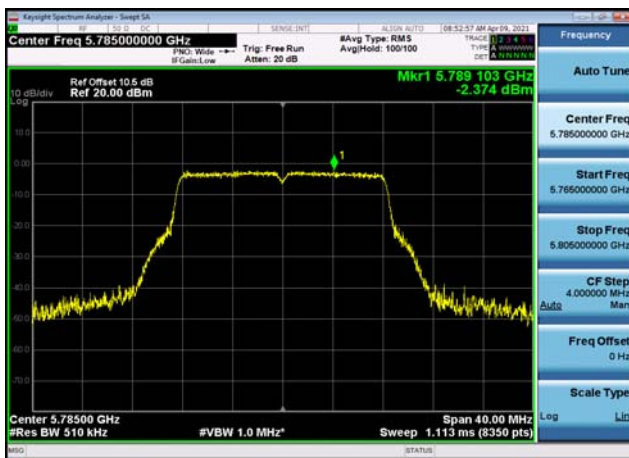
U-NII-3 Power spectral density-802.11
n(40MHz),5795MHz,Ant0



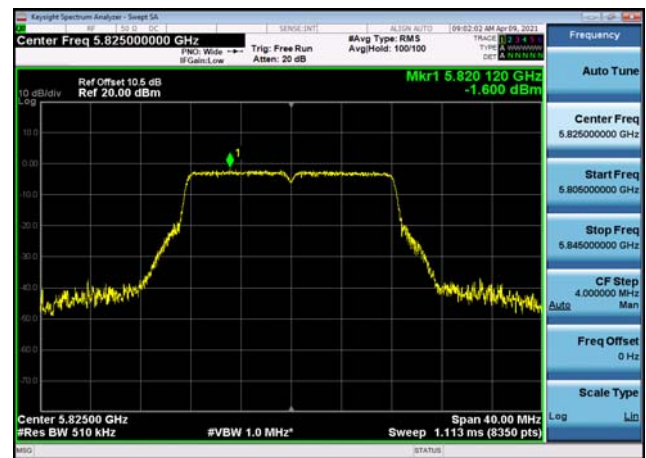
U-NII-3 Power spectral density-802.11
a(20MHz),5745MHz,Ant0



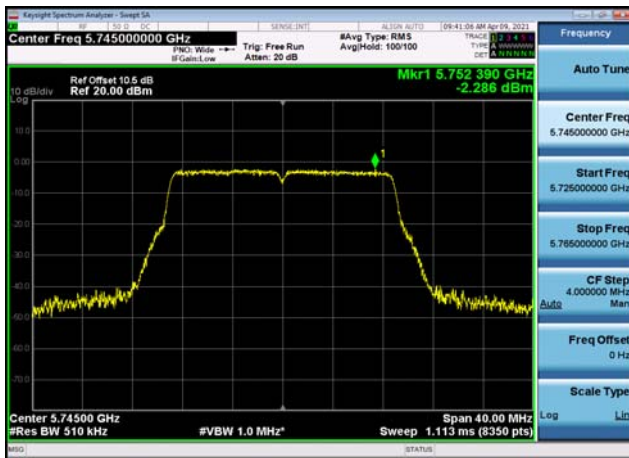
U-NII-3 Power spectral density-802.11
a(20MHz),5785MHz,Ant0



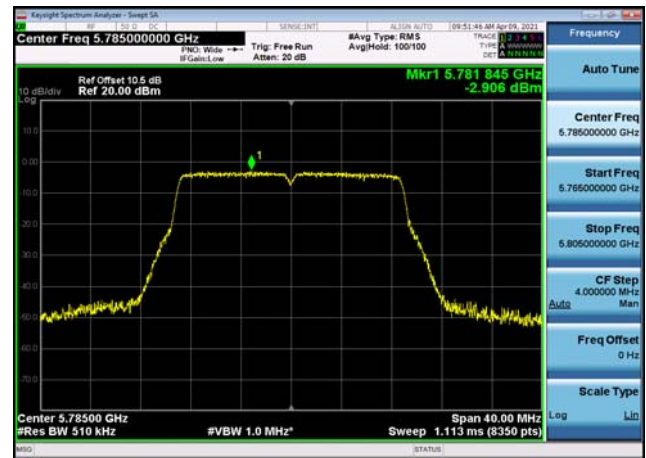
U-NII-3 Power spectral density-802.11
a(20MHz),5825MHz,Ant0



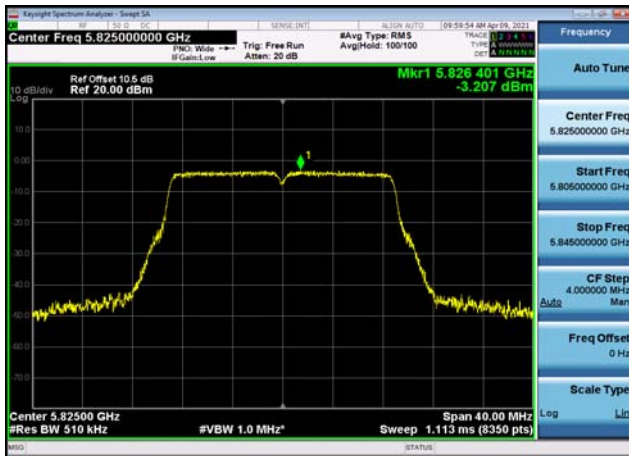
U-NII-3 Power spectral density-802.11
ac(20MHz),5745MHz,Ant0



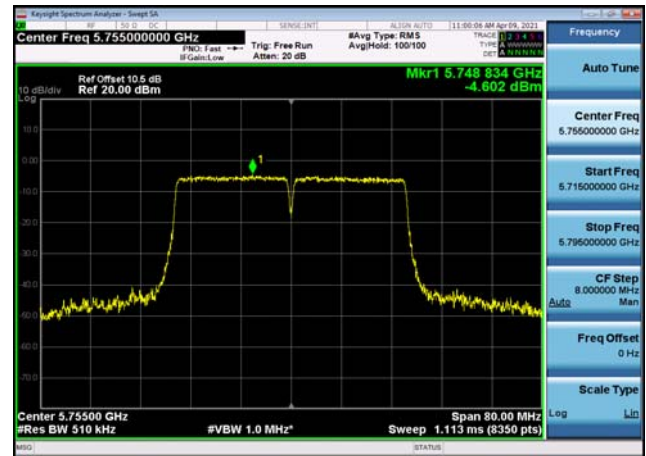
U-NII-3 Power spectral density-802.11
ac(20MHz),5785MHz,Ant0



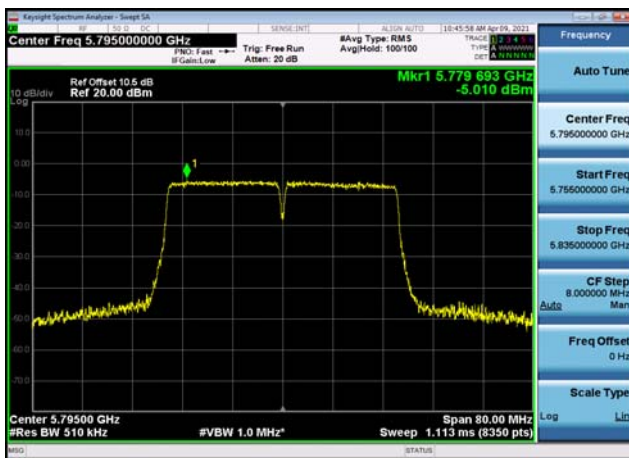
U-NII-3 Power spectral density-802.11
ac(20MHz),5825MHz,Ant0



U-NII-3 Power spectral density-802.11
ac(40MHz),5755MHz,Ant0



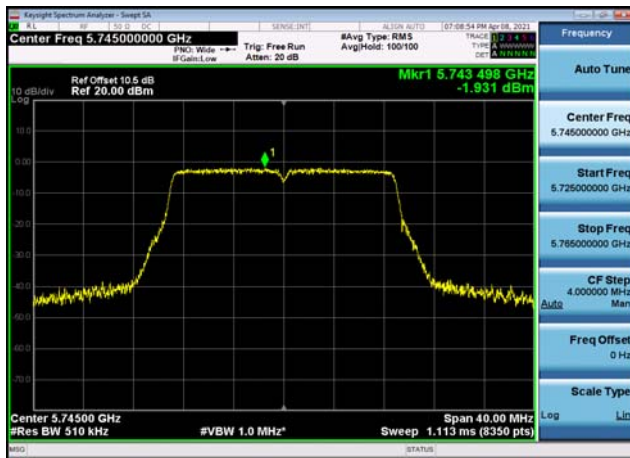
U-NII-3 Power spectral density-802.11
ac(40MHz),5795MHz,Ant0



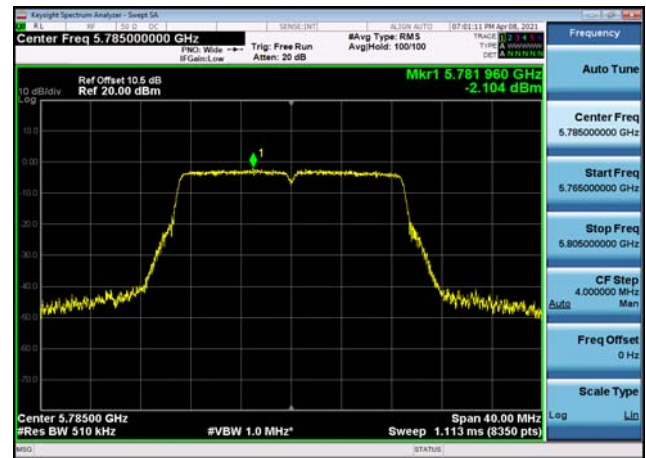
U-NII-3 Power spectral density-802.11
ac(80MHz),5775MHz,Ant0



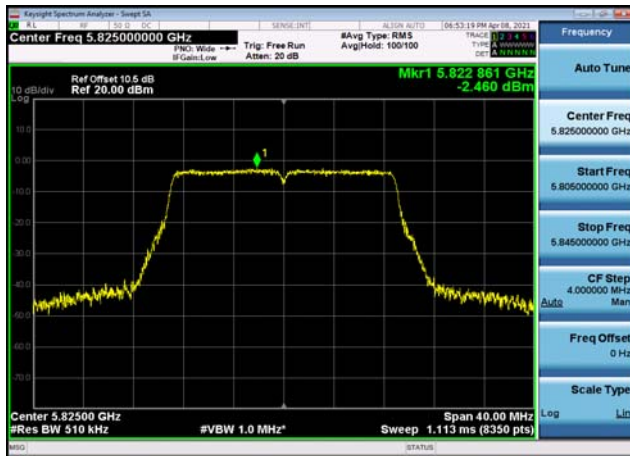
U-NII-3 Power spectral density-802.11
n(20MHz),5745MHz,Ant1



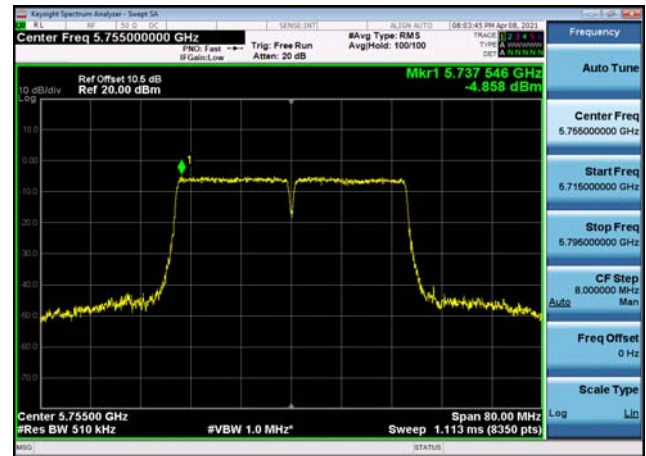
U-NII-3 Power spectral density-802.11
n(20MHz),5785MHz,Ant1



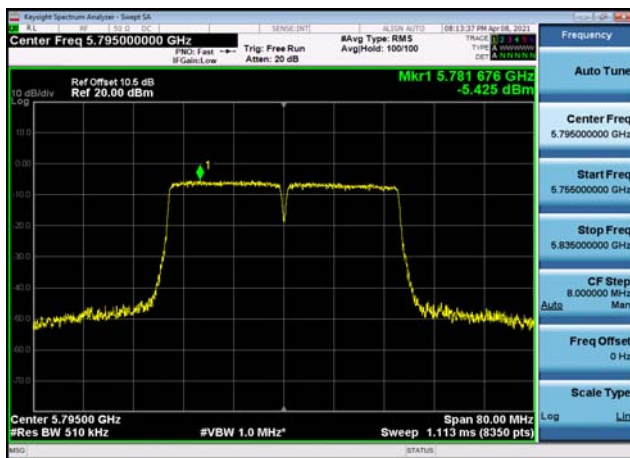
U-NII-3 Power spectral density-802.11
n(20MHz),5825MHz,Ant1



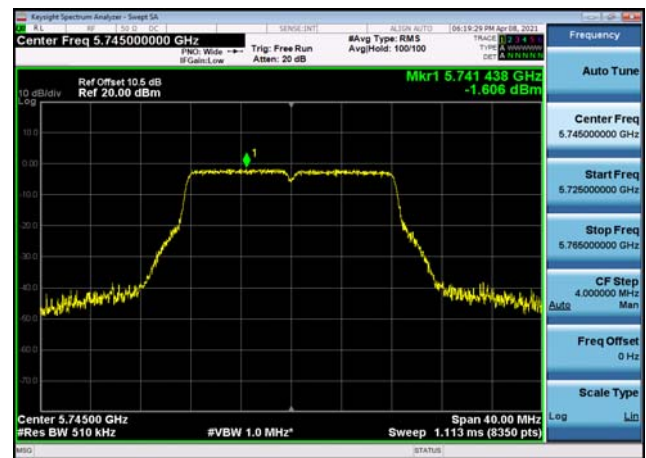
U-NII-3 Power spectral density-802.11
n(40MHz),5755MHz,Ant1



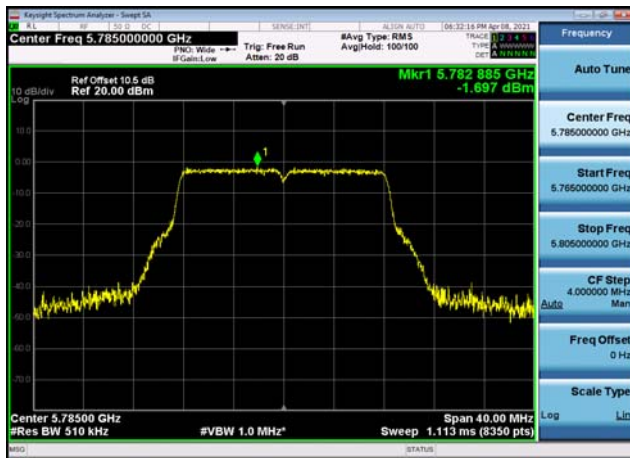
U-NII-3 Power spectral density-802.11
n(40MHz),5795MHz,Ant1



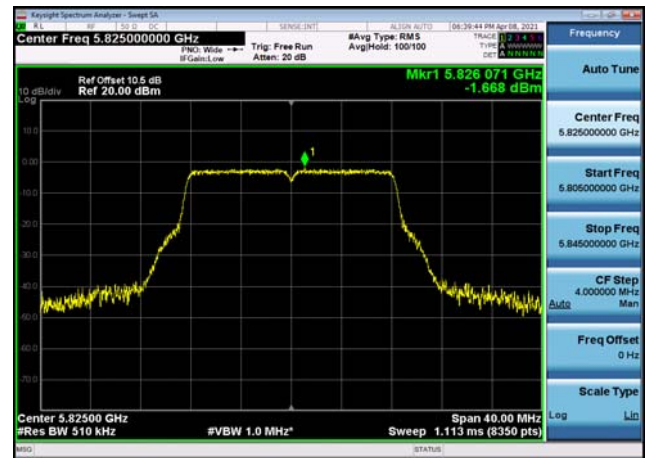
U-NII-3 Power spectral density-802.11
a(20MHz),5745MHz,Ant1



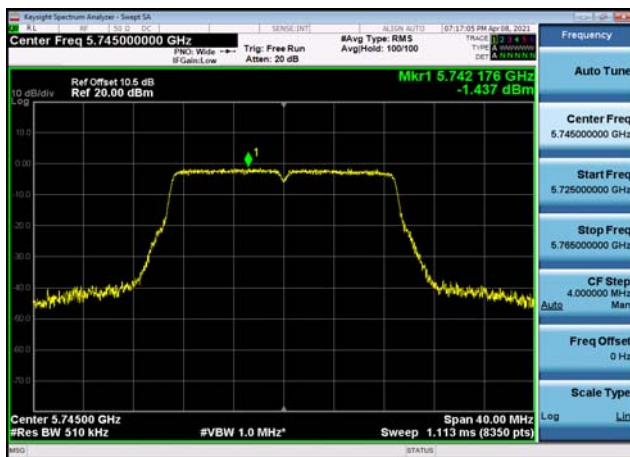
U-NII-3 Power spectral density-802.11
a(20MHz),5785MHz,Ant1



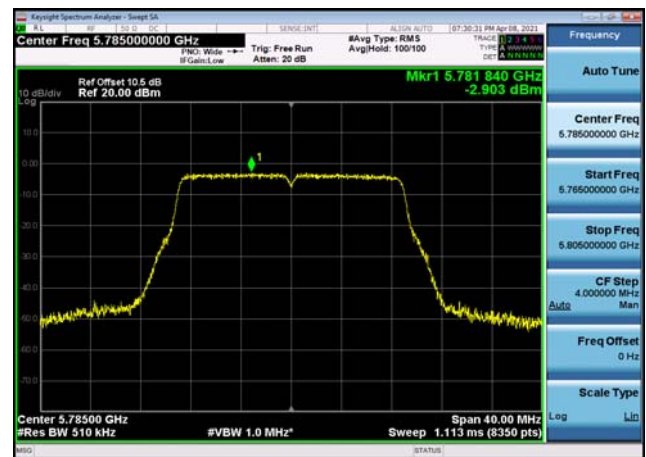
U-NII-3 Power spectral density-802.11
a(20MHz),5825MHz,Ant1



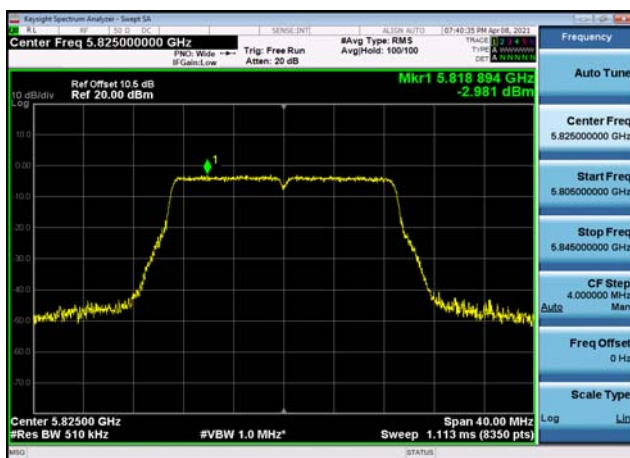
U-NII-3 Power spectral density-802.11
ac(20MHz),5745MHz,Ant1



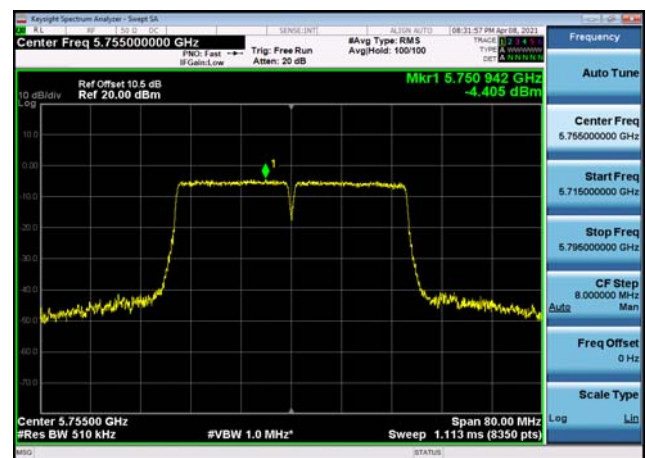
U-NII-3 Power spectral density-802.11
ac(20MHz),5785MHz,Ant1



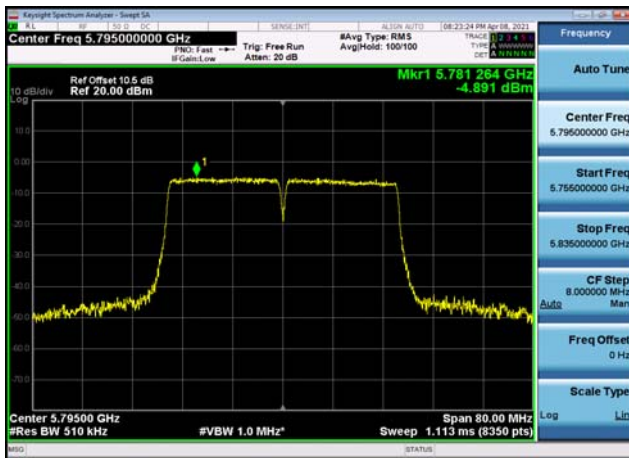
U-NII-3 Power spectral density-802.11
ac(20MHz),5825MHz,Ant1



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



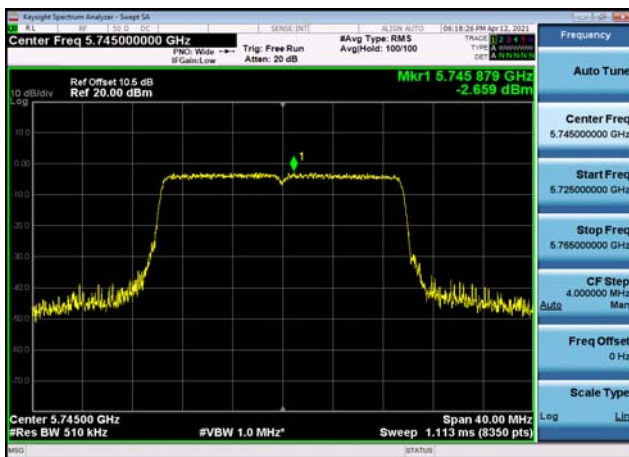
U-NII-3 Power spectral density-802.11
ac(40MHz),5795MHz,Ant1



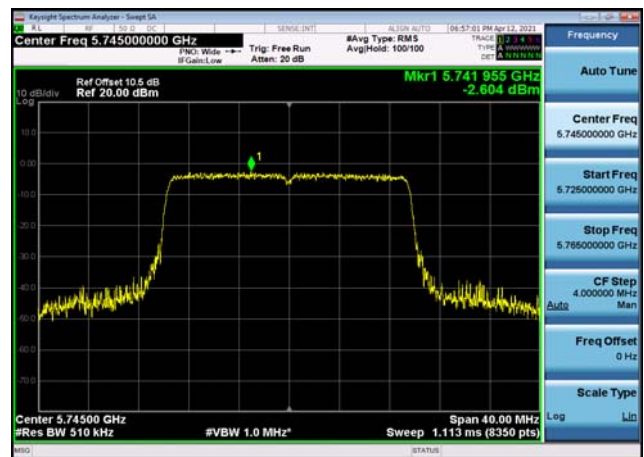
U-NII-3 Power spectral density-802.11
ac(80MHz),5775MHz,Ant1



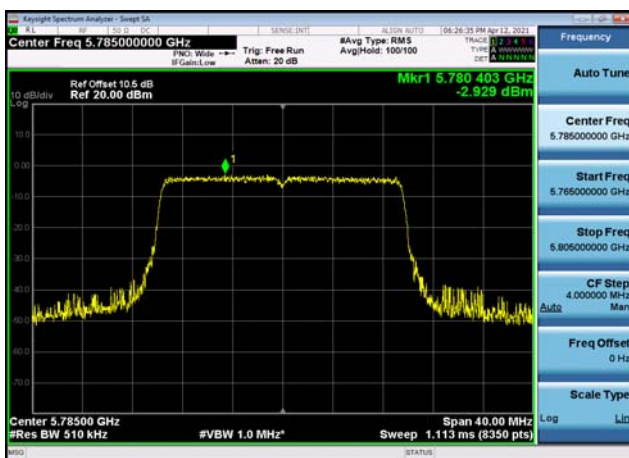
U-NII-3 Power spectral density-802.11
ax(20MHz),5745MHz,Ant0



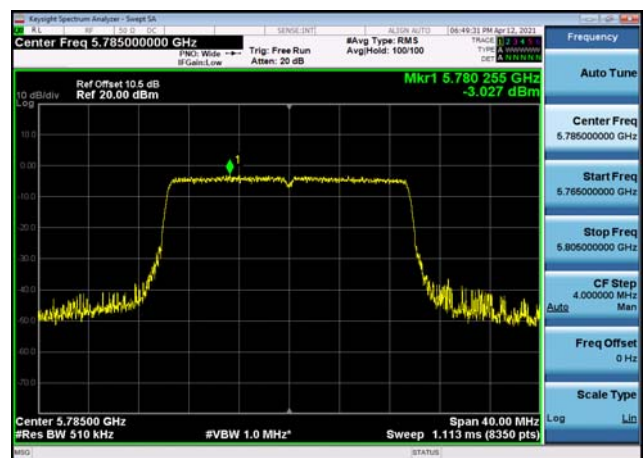
U-NII-3 Power spectral density-802.11
ax(20MHz),5745MHz,Ant1



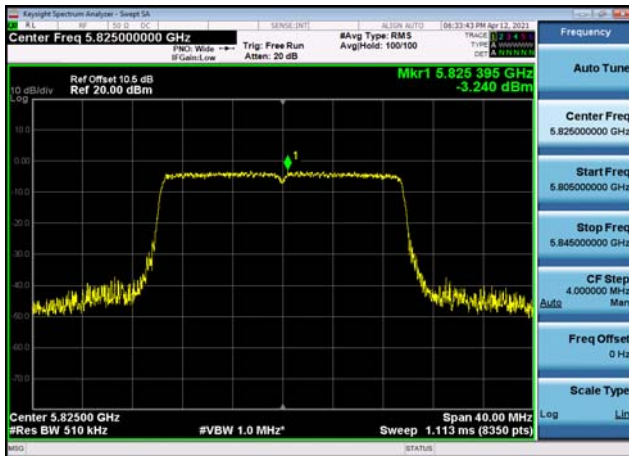
U-NII-3 Power spectral density-802.11
ax(20MHz),5785MHz,Ant0



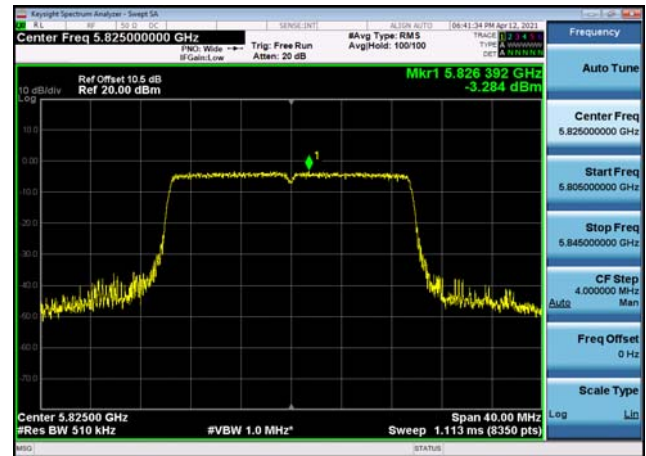
U-NII-3 Power spectral density-802.11
ax(20MHz),5785MHz,Ant1



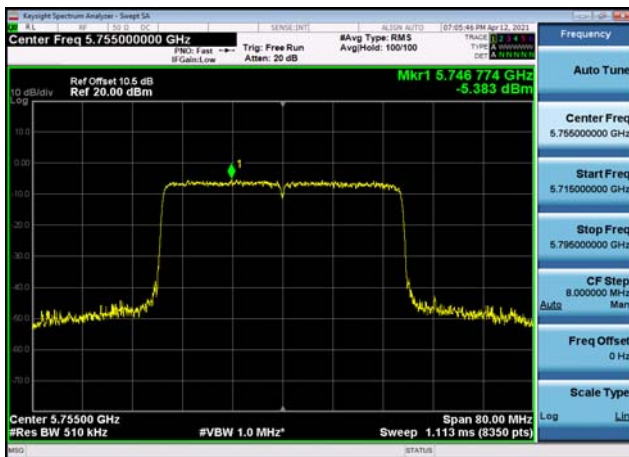
U-NII-3 Power spectral density-802.11
ax(20MHz),5825MHz,Ant0



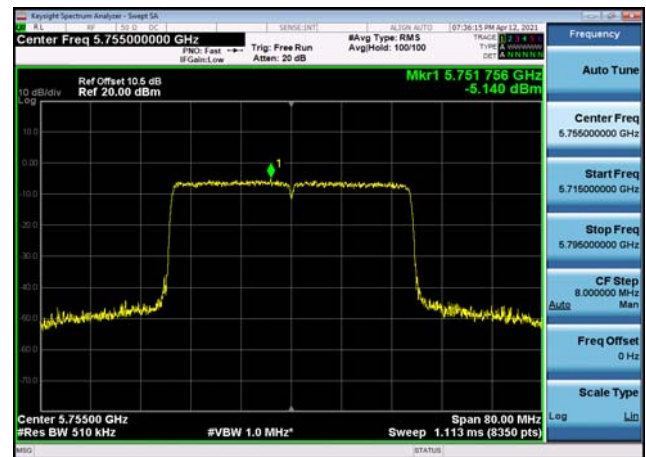
U-NII-3 Power spectral density-802.11
ax(20MHz),5825MHz,Ant1



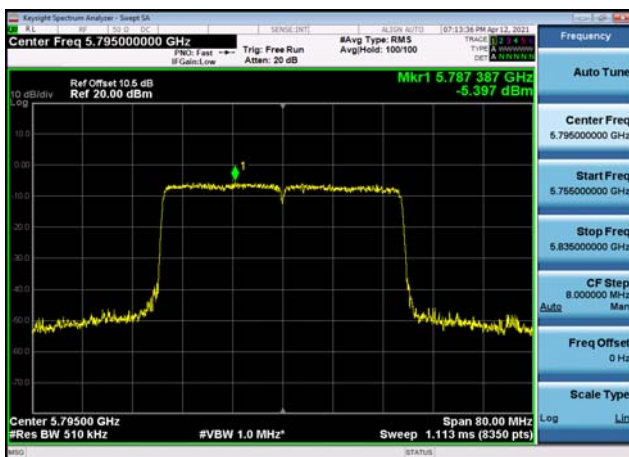
U-NII-3 Power spectral density-802.11
ax(40MHz),5755MHz,Ant0



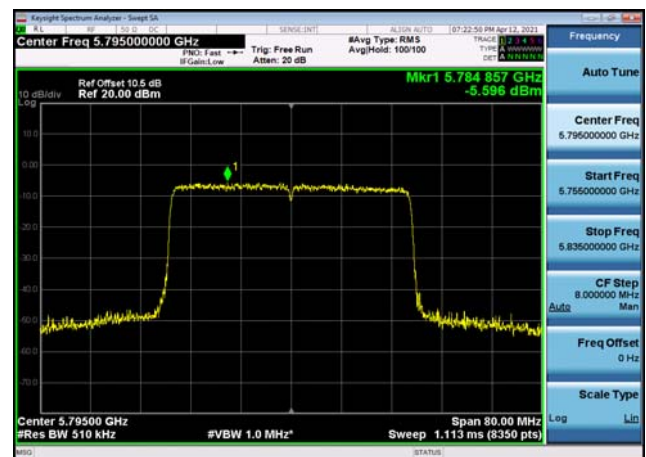
U-NII-3 Power spectral density-802.11
ax(40MHz),5755MHz,Ant1



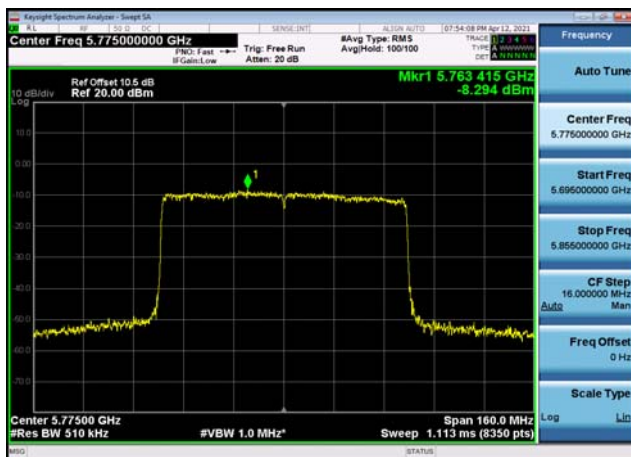
U-NII-3 Power spectral density-802.11
ax(40MHz),5795MHz,Ant0



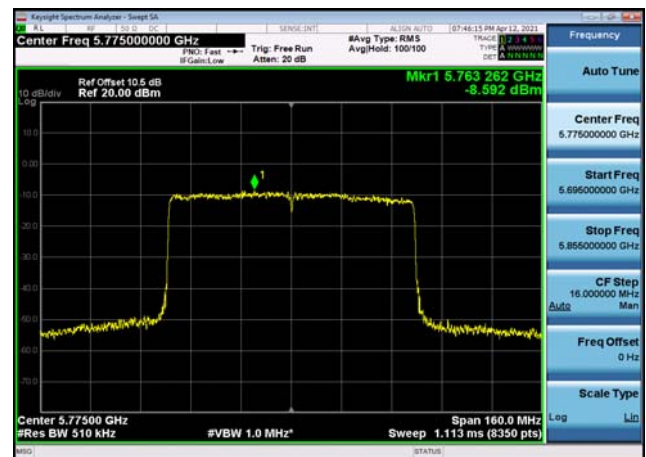
U-NII-3 Power spectral density-802.11
ax(40MHz),5795MHz,Ant1



U-NII-3 Power spectral density-802.11
ax(80MHz),5775MHz,Ant0



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



**6dB Down Bandwidth****Test Result and Data**

U-NII-3 Occupied N dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5745	Ant0	17.62	Pass
802.11n (20MHz)	5785	Ant0	17.60	Pass
802.11n (20MHz)	5825	Ant0	17.61	Pass
802.11n (40MHz)	5755	Ant0	36.37	Pass
802.11n (40MHz)	5795	Ant0	36.34	Pass
802.11ac (20MHz)	5745	Ant0	17.63	Pass
802.11ac (20MHz)	5785	Ant0	17.61	Pass
802.11ac (20MHz)	5825	Ant0	17.59	Pass
802.11ac (40MHz)	5755	Ant0	36.38	Pass
802.11ac (40MHz)	5795	Ant0	36.34	Pass
802.11ac (80MHz)	5775	Ant0	75.48	Pass
802.11a (20MHz)	5745	Ant0	16.39	Pass
802.11a (20MHz)	5785	Ant0	16.36	Pass
802.11a (20MHz)	5825	Ant0	16.39	Pass

U-NII-3 Occupied N dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5745	Ant1	17.64	Pass
802.11n (20MHz)	5785	Ant1	17.61	Pass
802.11n (20MHz)	5825	Ant1	17.61	Pass
802.11n (40MHz)	5755	Ant1	36.35	Pass
802.11n (40MHz)	5795	Ant1	36.07	Pass
802.11ac (20MHz)	5745	Ant1	17.63	Pass
802.11ac (20MHz)	5785	Ant1	17.60	Pass
802.11ac (20MHz)	5825	Ant1	17.60	Pass
802.11ac (40MHz)	5755	Ant1	36.37	Pass
802.11ac (40MHz)	5795	Ant1	36.33	Pass
802.11ac (80MHz)	5775	Ant1	75.63	Pass
802.11a (20MHz)	5745	Ant1	16.38	Pass
802.11a (20MHz)	5785	Ant1	16.37	Pass
802.11a (20MHz)	5825	Ant1	16.37	Pass

U-NII-3 Occupied N dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11ax (20MHz)	5745	Ant0	18.96	Pass
802.11ax (20MHz)	5745	Ant1	19.02	Pass
802.11ax (20MHz)	5785	Ant0	18.84	Pass
802.11ax (20MHz)	5785	Ant1	18.96	Pass
802.11ax (20MHz)	5825	Ant0	19.02	Pass
802.11ax (20MHz)	5825	Ant1	18.97	Pass
802.11ax (40MHz)	5755	Ant0	37.70	Pass
802.11ax (40MHz)	5755	Ant1	37.28	Pass
802.11ax (40MHz)	5795	Ant0	37.09	Pass
802.11ax (40MHz)	5795	Ant1	37.43	Pass
802.11ax (80MHz)	5775	Ant0	75.81	Pass
802.11ax (80MHz)	5775	Ant1	75.67	Pass

Test Plots

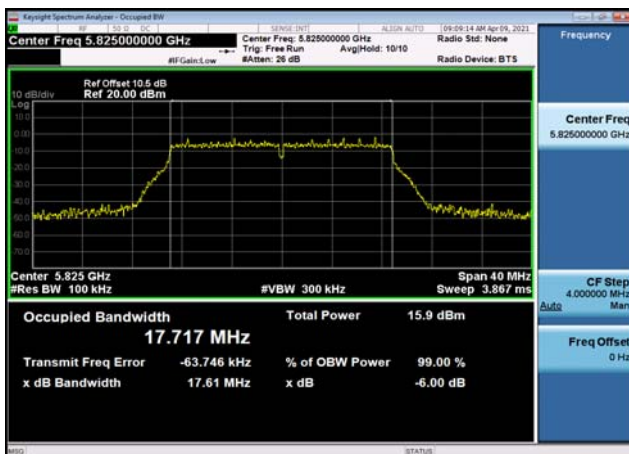
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5745MHz,Ant0



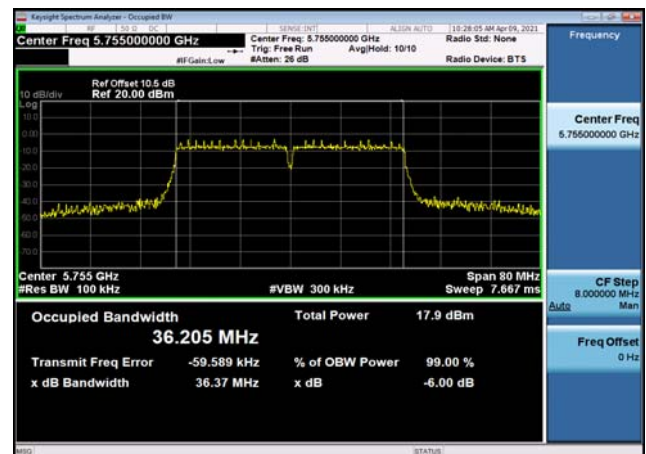
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5785MHz,Ant0



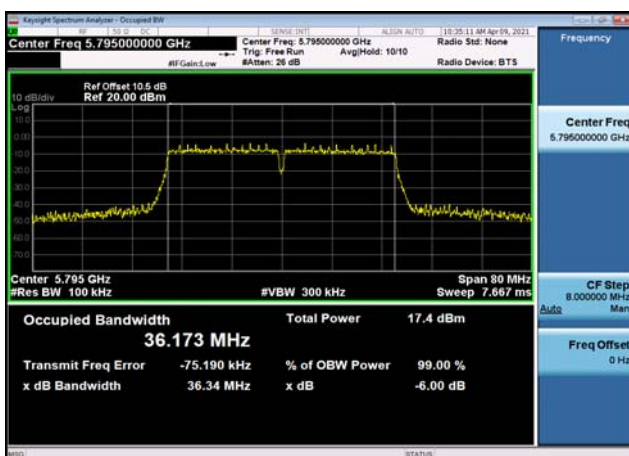
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5825MHz,Ant0



U-NII-3 6dB Bandwidth-802.11n(40MHz)
,5755MHz,Ant0



U-NII-3 6dB Bandwidth-802.11n(40MHz)
,5795MHz,Ant0



U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5745MHz,Ant0



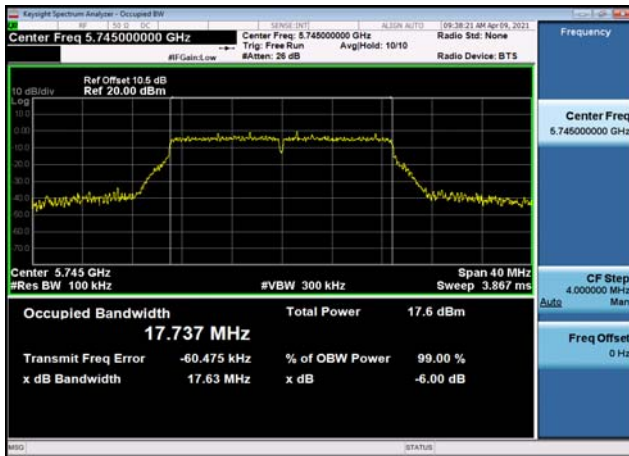
U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5785MHz,Ant0



U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5825MHz,Ant0



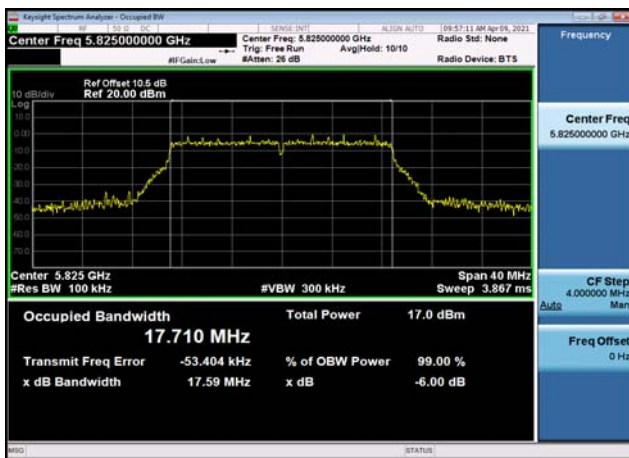
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
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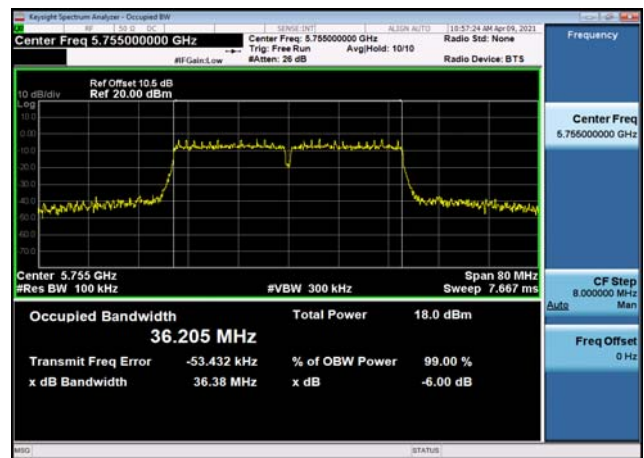
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5785MHz,Ant0



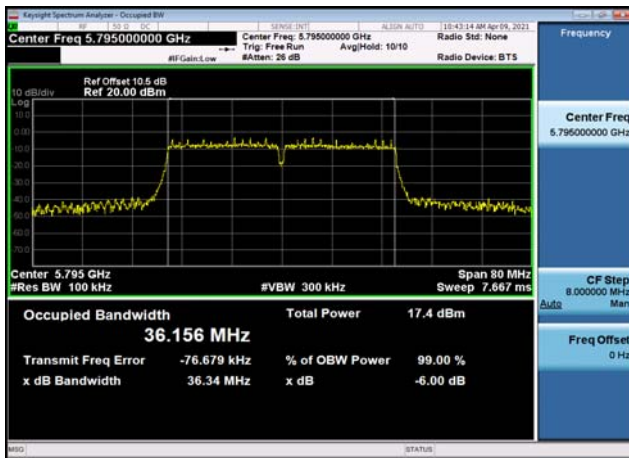
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5825MHz,Ant0



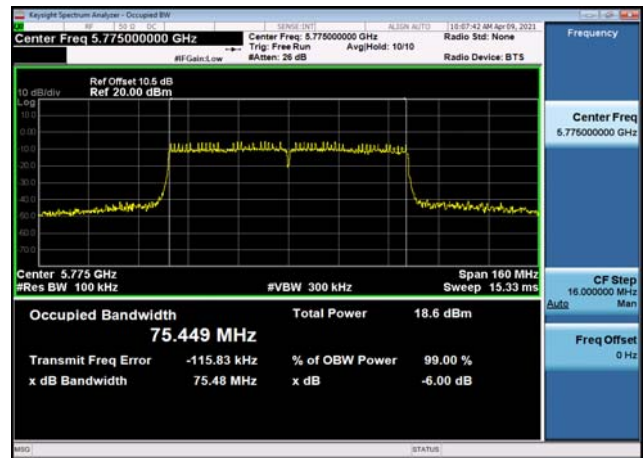
U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5755MHz,Ant0



U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5795MHz,Ant0



U-NII-3 6dB Bandwidth-802.11ac(80MHz)
,5775MHz,Ant0



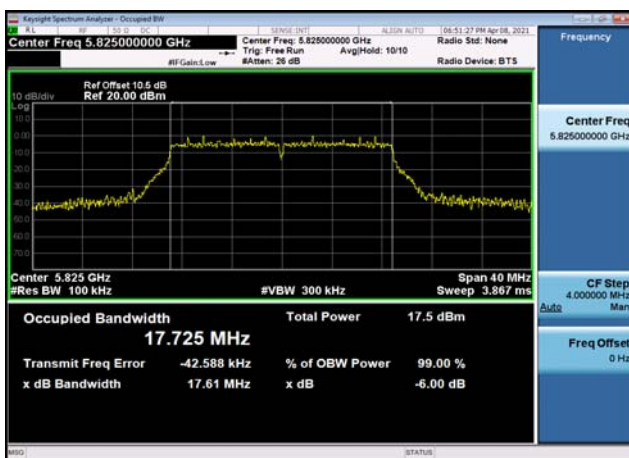
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5745MHz,Ant1



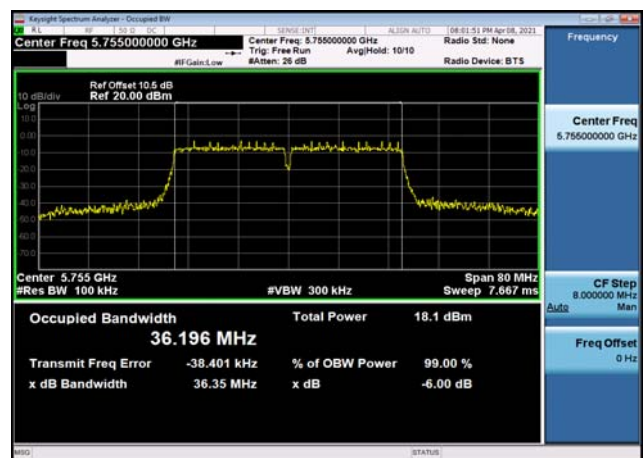
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5785MHz,Ant1



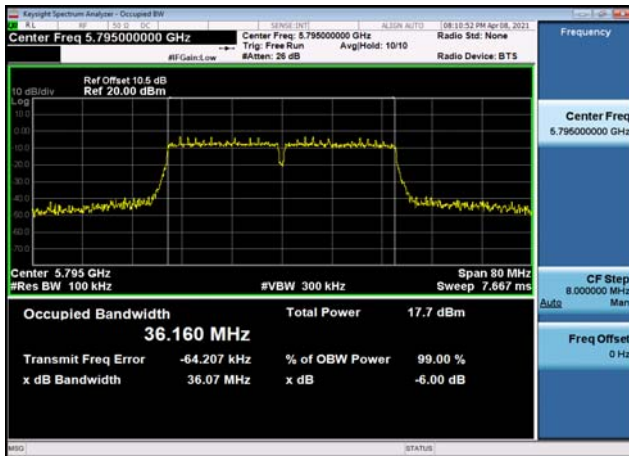
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5825MHz,Ant1



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



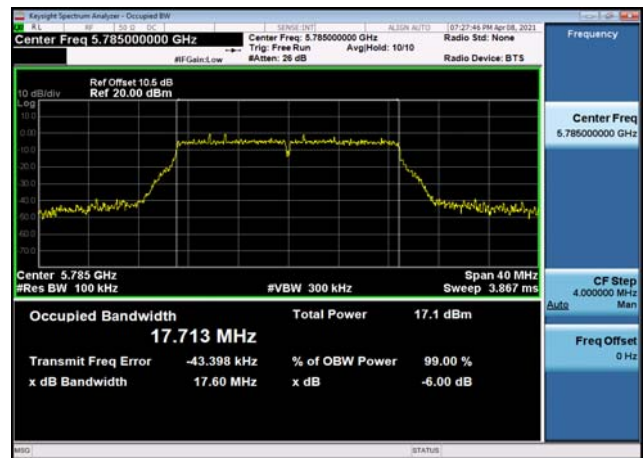
U-NII-3 6dB Bandwidth-802.11a(20MHz)
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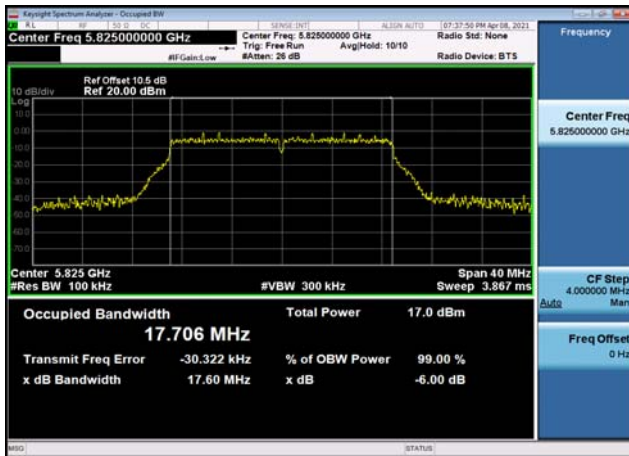
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5745MHz,Ant1



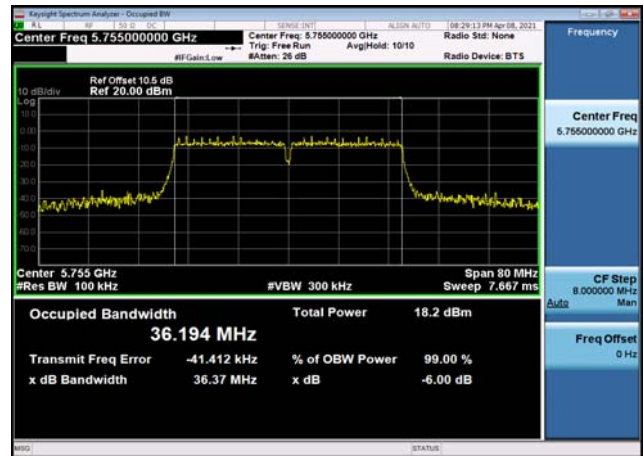
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5785MHz,Ant1



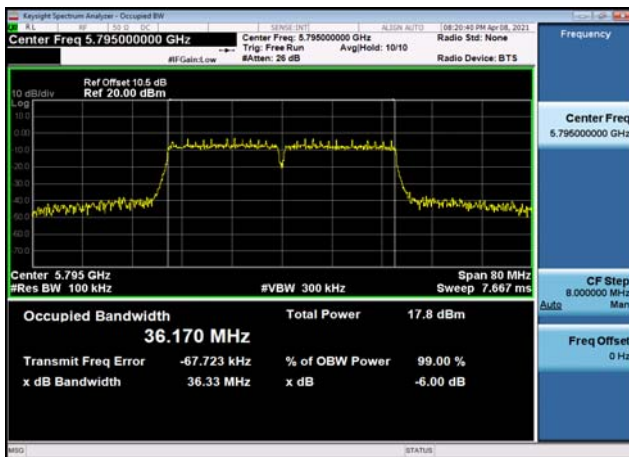
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5825MHz,Ant1



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



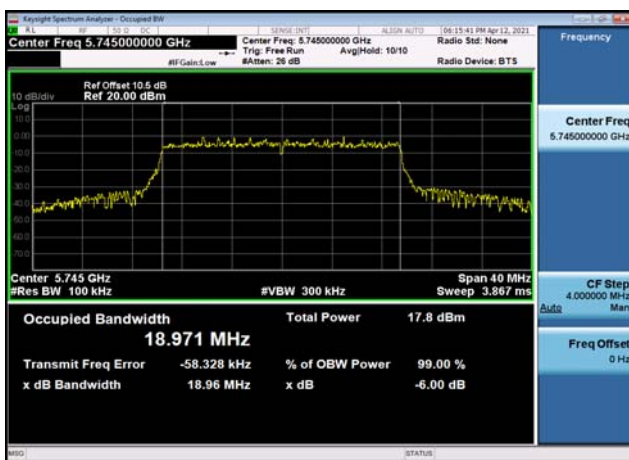
U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5795MHz,Ant1



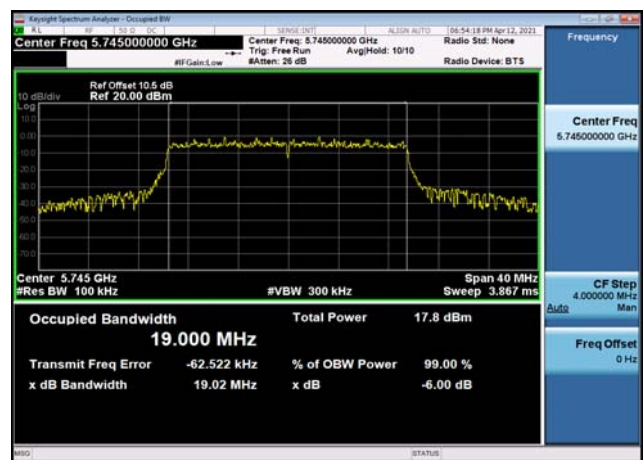
U-NII-3 6dB Bandwidth-802.11ac(80MHz)
,5775MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5745MHz,Ant0



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



U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5785MHz,Ant0



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



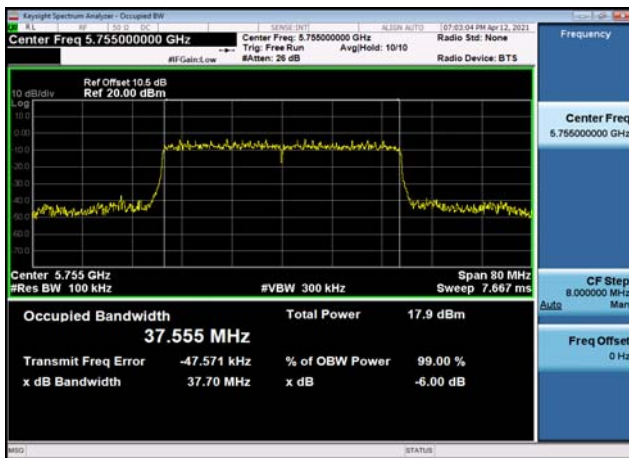
U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5825MHz,Ant0



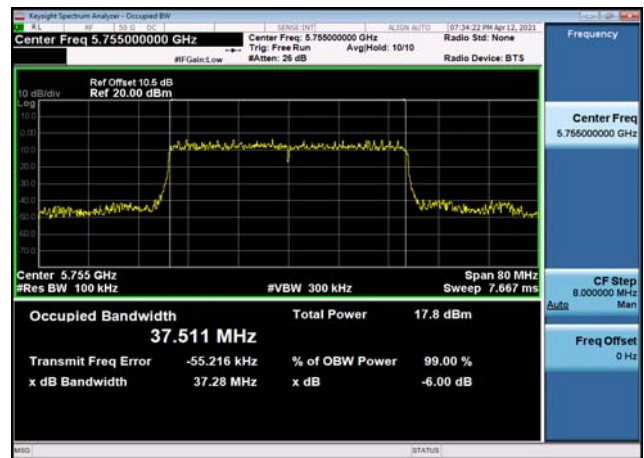
U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5825MHz,Ant1



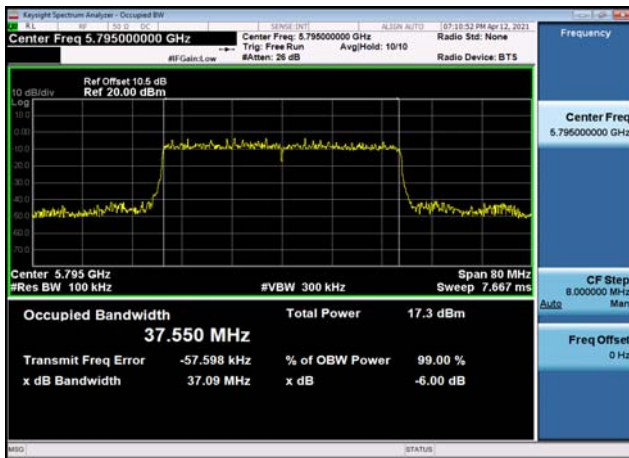
U-NII-3 6dB Bandwidth-802.11ax(40MHz)
,5755MHz,Ant0



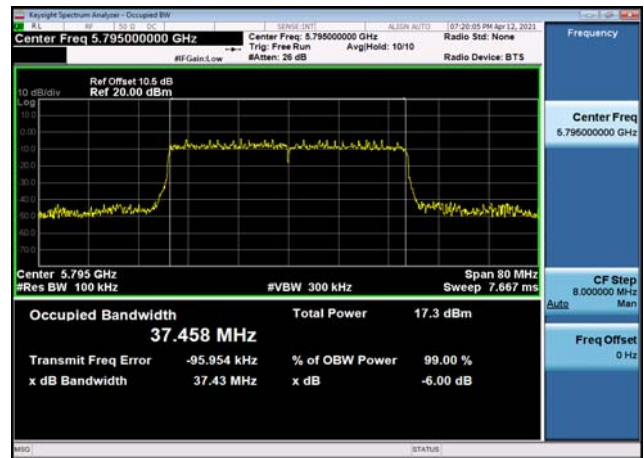
U-NII-3 6dB Bandwidth-802.11ax(40MHz)
,5755MHz,Ant1



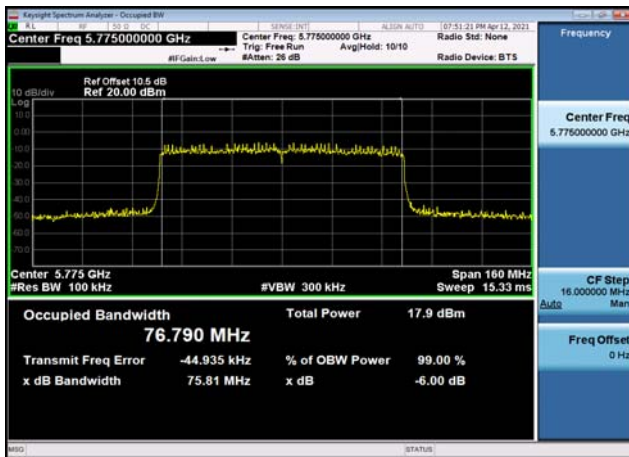
U-NII-3 6dB Bandwidth-802.11ax(40MHz)
,5795MHz,Ant0



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



U-NII-3 6dB Bandwidth-802.11ax(80MHz)
,5775MHz,Ant0



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

