



RF TEST REPORT

Report No.: 20240317G03829X-W5

Product Name: WIFI+BT Module

Model No.: WXT2PM2003

FCC ID: 2AC23-WXT2P

Applicant: Hui Zhou Gaoshengda Technology Co.,LTD

Address: No.2, Jin-da Road, Huinan High-tech Industrial Park, Huizhou,
Guangdong, China

Dates of Testing: 03/07/2024 - 05/14/2024

Issued by: CCIC Southern Testing Co., Ltd.

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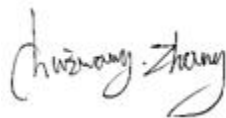
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Test Report

Product.....: WIFI+BT Module
Brand Name.....: GSD
Trade Name: GSD
Applicant.....: Hui Zhou Gaoshengda Technology Co.,LTD
Applicant Address.....: No.2, Jin-da Road, Huinan High-tech Industrial Park,
Huizhou, Guangdong, China
Manufacturer.....: Hui Zhou Gaoshengda Technology Co.,LTD
Manufacturer Address.....: No.2, Jin-da Road, Huinan High-tech Industrial Park,
Huizhou, Guangdong, China
Test Standards.....: 47 CFR Part 15 Subpart E 15.407
ANSI C63.10-2013
Test Result.....: Pass

Tested by:  2024.05.14
Chuiwang Zhang, Test Engineer

Reviewed by.....:  2024.05.14
Chris You, Senior Engineer

Approved by.....:  2024.05.14
Yang Fan, Manager



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Change History		
Issue	Date	Reason for change
1.0	2024.05.14	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	WIFI+BT Module
EUT supports Radios application	WLAN5.0GHz 802.11a/n/ac/ax
Product Type	Client devices
Modulation Type	802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM) 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) 802.11ax: OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n: up to 300 Mbps (2x2MIMO) 802.11ac: up to 866.667 Mbps (2x2MIMO) 802.11ax: up to 1200.98 Mbps (2x2MIMO)
Frequency Range	UNII-1: 5150 ~ 5250MHz UNII-2a: 5250 ~ 5350MHz UNII-2c: 5470 ~ 5725MHz UNII-3: 5725 ~ 5850MHz
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz/40MHz 802.11ac/ax: 20MHz/40MHz/80MHz
Channel Number	UNII-1: 4 for 802.11a, 802.11n(HT20), 802.11ac(VHT20), 802.11ax(HE20) 2 for 802.11n(HT40), 802.11ac(VHT40), 802.11ax(HE40) 1 for 802.11ac(VHT80), 802.11ax(HE80) UNII-2a: 4 for 802.11a, 802.11n(HT20), 802.11ac(VHT20), 802.11ax(HE20) 2 for 802.11n(HT40), 802.11ac(VHT40), 802.11ax(HE40) 1 for 802.11ac(VHT80), 802.11ax(HE80) UNII-2c: 11 for 802.11a, 802.11n(HT20), 802.11ac(VHT20), 802.11ax(HE20) 5 for 802.11n(HT40), 802.11ac(VHT40), 802.11ax(HE40) 2 for 802.11ac(VHT80), 802.11ax(HE80) UNII-3: 5 for 802.11a, 802.11n(HT20), 802.11ac(VHT20), 802.11ax(HE20) 2 for 802.11n(HT40), 802.11ac(VHT40), 802.11ax(HE40) 1 for 802.11ac(VHT80), 802.11ax(HE80)
Antenna Type	FPC Antenna
Antenna Gain	Antenna 0: 2.72dBi Antenna 1: 2.73dBi



Output Power (Max.)	UNII-1: 16.75dBm UNII-2a: 16.69dBm UNII-2c: 16.89dBm UNII-3: 16.64dBm
Power supply	DC 3.3V

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.



1.2. Test Standards and Results

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

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E §15.407	Radio Frequency Devices
2	KDB789033 D02 General UNII Test Procedures New Rules v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	KDB 662911 D01 Multiple Transmitter Output v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band
4	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 15.407(a)	Antenna Requirement	PASS
2	15.407(a)(1)(iv) 15.407 (a)(2) 15.407(a)(3)(i)	Maximum Conducted Output Power	PASS
3	15.407(a)(12)	26dB Emission Bandwidth 99% Occupied Bandwidth	PASS
4	15.407(e)	6dB Emission Bandwidth	PASS
5	15.407(a)(1)(iv) 15.407 (a)(2) 15.407(a)(3)(i)	Power spectral density (PSD)	PASS
6	15.207	AC Power Line Conducted Emission	PASS
7	15.205 15.209 15.407(b)(1) 15.407(b)(2) 15.407(b)(3) 15.407(b)(4)	Radiated Band Edges and Spurious Emission	PASS
8	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(MHz)	Channel	Frequency(MHz)
36	5180	44	5220
40	5200	48	5240

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

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

1 channels are provided for 802.11ac-VHT80 and 802.11ax-HE80.

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

Operated band in 5250 MHz ~ 5350MHz

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

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

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

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

1 channels are provided for 802.11ac-VHT80 and 802.11ax-HE80.

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

Operated band in 5470 MHz ~ 5725MHz

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

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
100	5500	116	5580	132	5660
104	5520	120	5600	136	5680
108	5540	124	5620	140	5700
112	5560	128	5640	/	/

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

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
102	5510	118	5590	134	5670
110	5550	126	5630	/	/

2 channels are provided for 802.11ac-VHT80 and 802.11ax-HE80.

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
106	5530	122	5610	/	/

Operated band in 5725 MHz ~ 5850MHz

5 channels are provided for 802.11a, 802.11n-HT20, 802.11ac-VHT20, 802.11ax-HE20.

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

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

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

1 channel are provided for 802.11ac-VHT80, 802.11ax-HE80.

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

1.4. Test environment and mode

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

Operating Environment	
Temperature	15°C - 35°C
Humidity	30% -60%
Atmospheric Pressure	86kPa-106kPa
Test mode:	
Continuously transmitting mode	Keep the EUT in continuous transmitting with modulation

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

For Frequency band 5150 ~ 5250 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5180	5220	5240	6 Mbps
802.11n-HT20/ac-VHT20/ax-HE20				MCS 0
802.11n-HT40/ac-VHT40/ax-HE40	5190	/	5230	MCS 0
802.11ac-VHT80/ax-HE80	5210	/	/	MCS 0
Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.				

For Frequency band 5250 ~ 5350 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5260	5300	5320	6 Mbps
802.11n-HT20/ac-VHT20/ax-HE20				MCS 0
802.11n-HT40/ac-VHT40/ax-HE40	5270	/	5310	MCS 0
802.11ac-VHT80/ax-HE80	5290	/	/	MCS 0
Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.				



For Frequency band 5470 ~ 5725 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5500	5580	5700	6 Mbps
802.11n-HT20/ac-VHT20/ax-HE20				MCS 0
802.11n-HT40/ac-VHT40/ax-HE40	5510	5550	5670	MCS 0
802.11ac-VHT80/ax-HE80	5530	/	/	MCS 0
Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.				

For Frequency band 5725 ~ 5850 MHz				
Test Mode	Frequency(MHz)			Data rate
	LCH	MCH	HCH	
802.11a	5745	5785	5825	6 Mbps
802.11n-HT20/ac-VHT20/ax-HE20				MCS 0
802.11n-HT40/ac-VHT40/ax-HE40	5755	/	5795	MCS 0
802.11ac-VHT80/ax-HE80	5775	/	/	MCS 0
Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.				

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 802.11a SISO Mode
Mode 2	TX 802.11n-HT20 SISO Mode
Mode 3	TX 802.11n-HT40 SISO Mode
Mode 4	TX 802.11ac-VHT20 SISO Mode
Mode 5	TX 802.11ac-VHT40 SISO Mode
Mode 6	TX 802.11ac-VHT80 SISO Mode
Mode 7	TX 802.11ax-HE20 SISO Mode
Mode 8	TX 802.11ax-HE40 SISO Mode
Mode 9	TX 802.11ax-HE80 SISO Mode
Mode 10	TX 802.11n-HT20 2*2MIMO Mode
Mode 11	TX 802.11n-HT40 2*2MIMO Mode
Mode 12	TX 802.11ac-VHT20 2*2MIMO Mode
Mode 13	TX 802.11ac-VHT40 2*2MIMO Mode
Mode 14	TX 802.11ac-VHT80 2*2MIMO Mode
Mode 15	TX 802.11ax-HE20 2*2MIMO Mode
Mode 16	TX 802.11ax-HE40 2*2MIMO Mode
Mode 17	TX 802.11ax-HE80 2*2MIMO Mode
Mode 18	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 18	TX Mode
For Radiated Test	
Final Test Mode	Description
Mode 1	TX 802.11a SISO Mode
Mode 2	TX 802.11n-HT20 SISO Mode
Mode 3	TX 802.11n-HT40 SISO Mode
Mode 4	TX 802.11ac-VHT20 SISO Mode
Mode 5	TX 802.11ac-VHT40 SISO Mode
Mode 6	TX 802.11ac-VHT80 SISO Mode
Mode 7	TX 802.11ax-HE20 SISO Mode
Mode 8	TX 802.11ax-HE40 SISO Mode
Mode 9	TX 802.11ax-HE80 SISO Mode
Mode 10	TX 802.11n-HT20 2*2MIMO Mode
Mode 11	TX 802.11n-HT40 2*2MIMO Mode
Mode 12	TX 802.11ac-VHT20 2*2MIMO Mode
Mode 13	TX 802.11ac-VHT40 2*2MIMO Mode
Mode 14	TX 802.11ac-VHT80 2*2MIMO Mode
Mode 15	TX 802.11ax-HE20 2*2MIMO Mode
Mode 16	TX 802.11ax-HE40 2*2MIMO Mode
Mode 17	TX 802.11ax-HE80 2*2MIMO Mode
Mode 18	TX Mode

1.5. Table for Supporting Units

No.	Equipment	Brand Name	Model Name	Manufacturer	Serial No.	Note
1	PC	Lenovo	M2630d	Lenovo	SS24506713	FCC DOC
2	Display	HP	HSD-0115-W	HP	CN41231F0L	FCC DOC
3	Keypad	Lenovo	LXH-JME220 9U	Lenovo	30159069	FCC DOC
4	Mouse	Logitech	M-U0026	Logitech	1603HS03C8F8	FCC DOC



1.6. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Jun. 30th, 2025.

ISED Registration: 11185A

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Jun. 30th, 2025.

CAB number: CN0064

A2LA Code: 5721.01

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

2. 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.

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

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

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

2.1.2. Antenna Information

Antenna Category: FPC Antenna

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

Antenna General Information:

For SISO, there is only one transmitter output therefore the directional gain is equal to the antenna gain.

For MIMO, since the EUT is uncorrelated with each other across all Tx chains. The directional gains are as follows:

Operating frequency range	Ant0. Gain (dBi)	Ant1. Gain (dBi)	Uncorrelated Chains Directional gain (dBi)
UNII-1, UNII-2a, UNII-2c, UNII-3	2.72	2.73	2.73

Note 1: Uncorrelated directional gain = $10 \log[(10^{\text{Ant0}/10} + 10^{\text{Ant1}/10}) / N_{\text{ANT}}]$ dBi.

2.1.3. Result: comply

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

2.2. Maximum Conducted Output Power

2.2.1. Limit of Maximum Conducted Output Power

FCC Part 15.407(a):

The maximum conducted output power should not exceed:

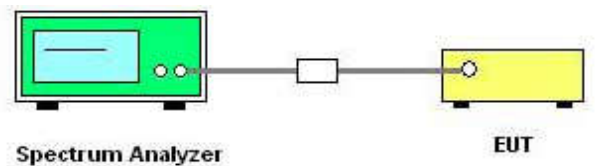
Band	EUT Category	Limit
U-NII-1	☐ Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21dBm) at any elevation angle above 30 degrees as measured from the horizon)
	☐ Fixed point-to-point Access device	1 Watt (30 dBm)
	☐ Indoor Access Point	1 Watt (30 dBm)
	☒ Mobile and portable client device	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 of KDB 789033 D02 v02r01 Section II.E.2.b and ANSI C63.10-2013 Section 12.3.2.2.
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Power is calculated by integrating over the spectrum of the entire 99% OBW signal using the instrument's band power measurement feature.
4. Set span to encompass the entire 99% OBW of the signal.
5. Set RBW = 1MHz, VBW $\geq$ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).



6. Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Replace the EUT center frequency and repeat steps 3~7.



2.2.5. Test Results of Maximum Conducted Output Power

Please refer to APPENDIX A for detail.

2.3. Power spectral density (PSD)

2.3.1. Limit of Power Spectral Density

FCC Part 15.407(a)

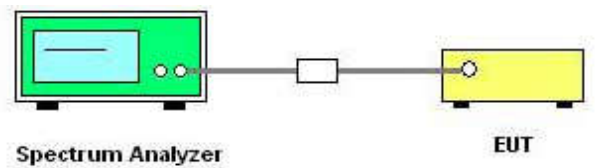
The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	☐ Outdoor Access Point	17 dBm/MHz
	☐ Fixed point-to-point Access device	
	☐ Indoor Access Point	
	☒ 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

2.3.2. Measuring Instruments

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

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows the of KDB 789033 D02 v02r01 Section II.F and ANSI C63.10-2013 Section 12.5.
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set span to encompass the entire 99% OBW of the signal.
4. For U-NII-1, U-NII-2a, U-NII-2c Band: Set RBW = 1MHz, VBW $\geq$ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).
5. For U-NII-3 Band: Set RBW = 500kHz, VBW $\geq$ 2MHz, Sweep time = Auto, Detector = power averaging (RMS).
6. Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Use the peak search function on the instrument to find the peak of the spectrum.



9. Replace the EUT center frequency and repeat steps 3~8.

2.3.5. Test Result of Power Spectral Density

Please refer to APPENDIX A for detail.

2.4. 26dB Emission Bandwidth and 99% Occupied Bandwidth

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

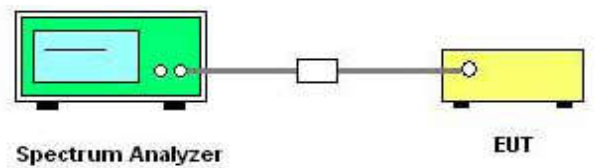
26dB Emission Bandwidth and 99% Occupied Bandwidth no Bandwidth limit.

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

2.4.2. Measuring Instruments

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

2.4.3. Test Description



2.4.4. Test Procedures

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



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

Please refer to APPENDIX A for detail.

2.5. Frequency Stability

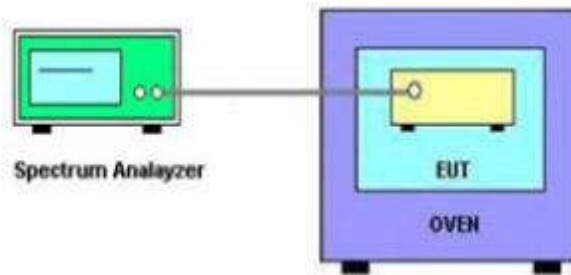
2.5.1. Limit of Frequency Stability

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

2.5.2. Measuring Instruments

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

2.5.3. Test Setup



2.5.4. Test Procedures

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



2.5.5. Test Result of Frequency Stability

Please refer to APPENDIX A for detail.

2.6. Radiated Band Edge and Spurious Emission

2.6.1. Limit of Radiated Band Edges and Spurious Emission

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

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

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level ($\mu\text{V/m}$).
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

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

Note:

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



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

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

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41	/	/	/

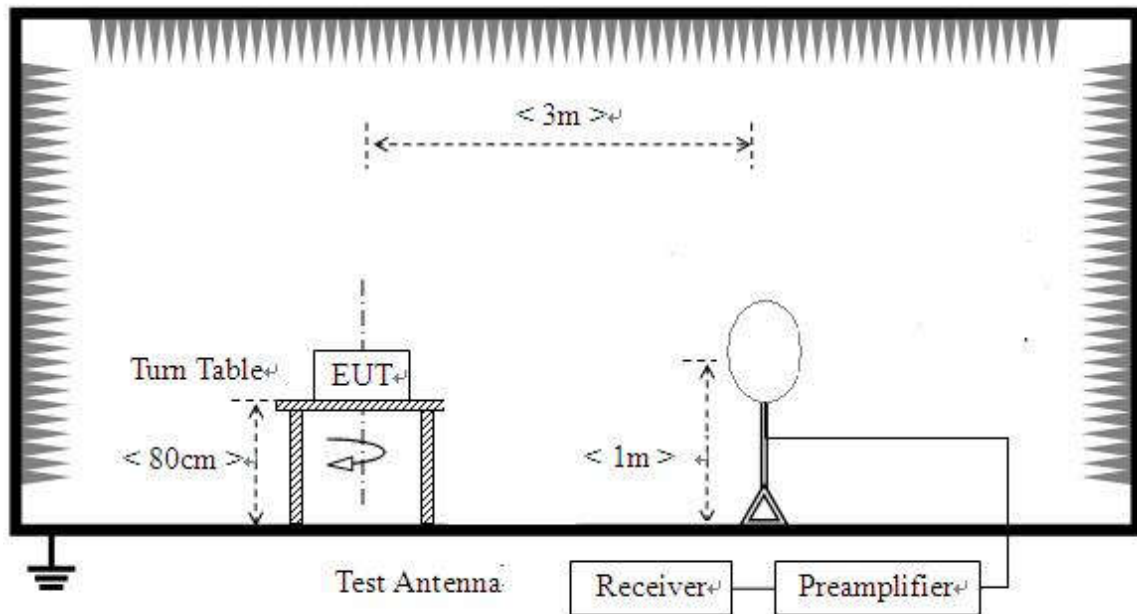
Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
²Above 38.6.

2.6.2. Measuring Instruments

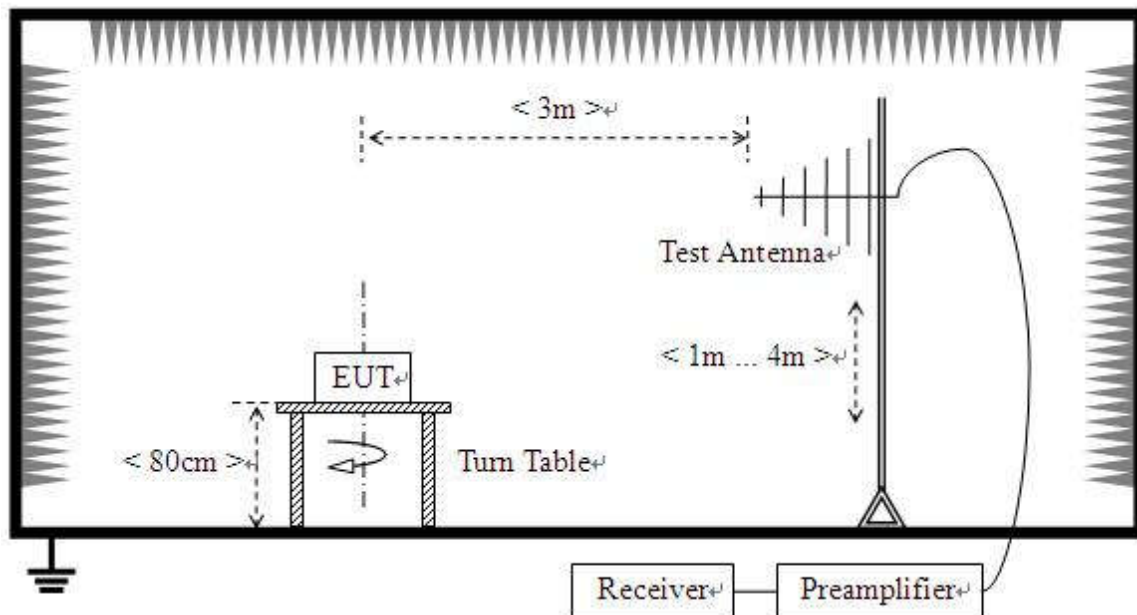
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

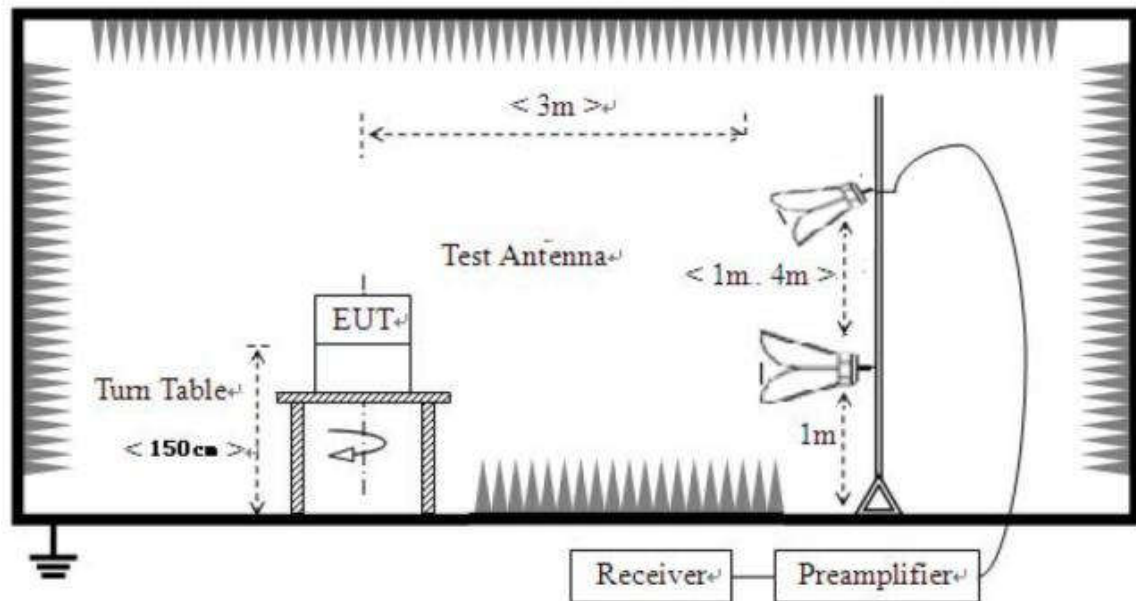
For radiated emissions from 9 kHz to 30 MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.4. Test Procedures

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

Note:

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

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

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

2.6.5. Test Result of Radiated Band Edge and Spurious Emission

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 1GHz, All of the EUT Configure mode were tested and found 802.11a_5500MHz (ANT0) channel is the worst mode, the worst case is recorded in this report.

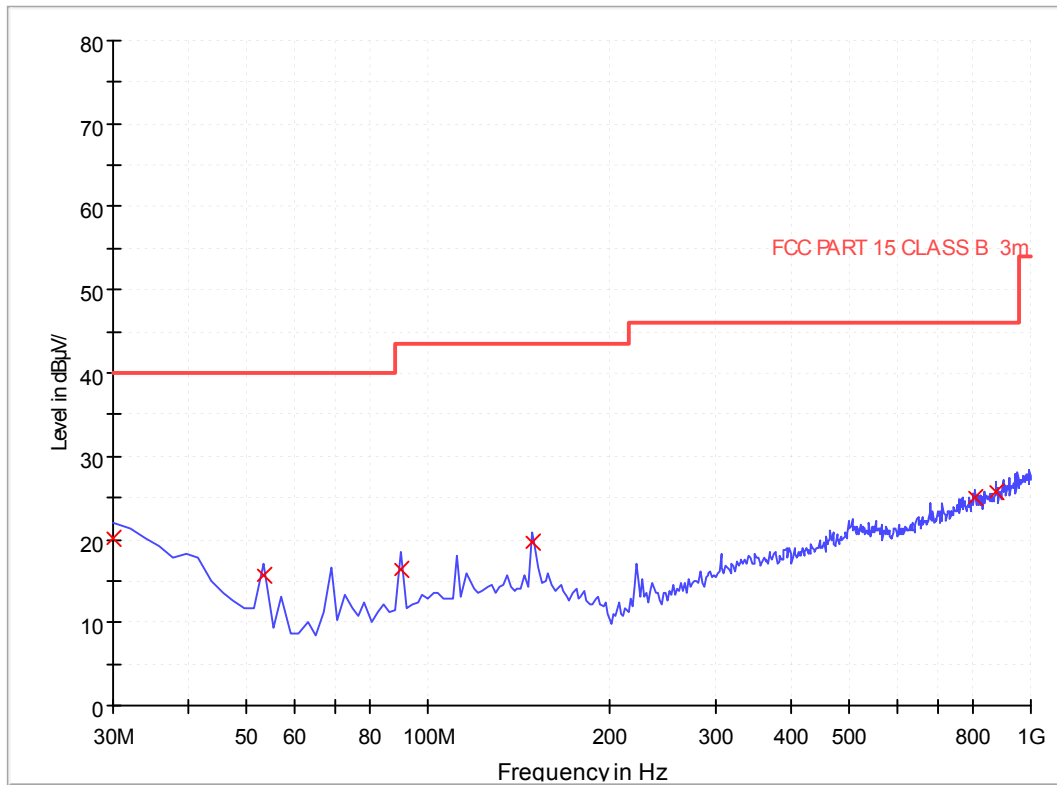
For 1GHz to 18GHz, Only worst-case data is reported.

For above 18GHz, 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

Test site:	3M anechoic chamber	Environment:	Temp: 23℃; Humi:48%;101kPa
Operator:	Deng ShanFei	Test Date:	2024.03.14
Test Mode:	5G WIFI - TX	Test Result:	Pass

EMI Sweep-3M(30-1G)



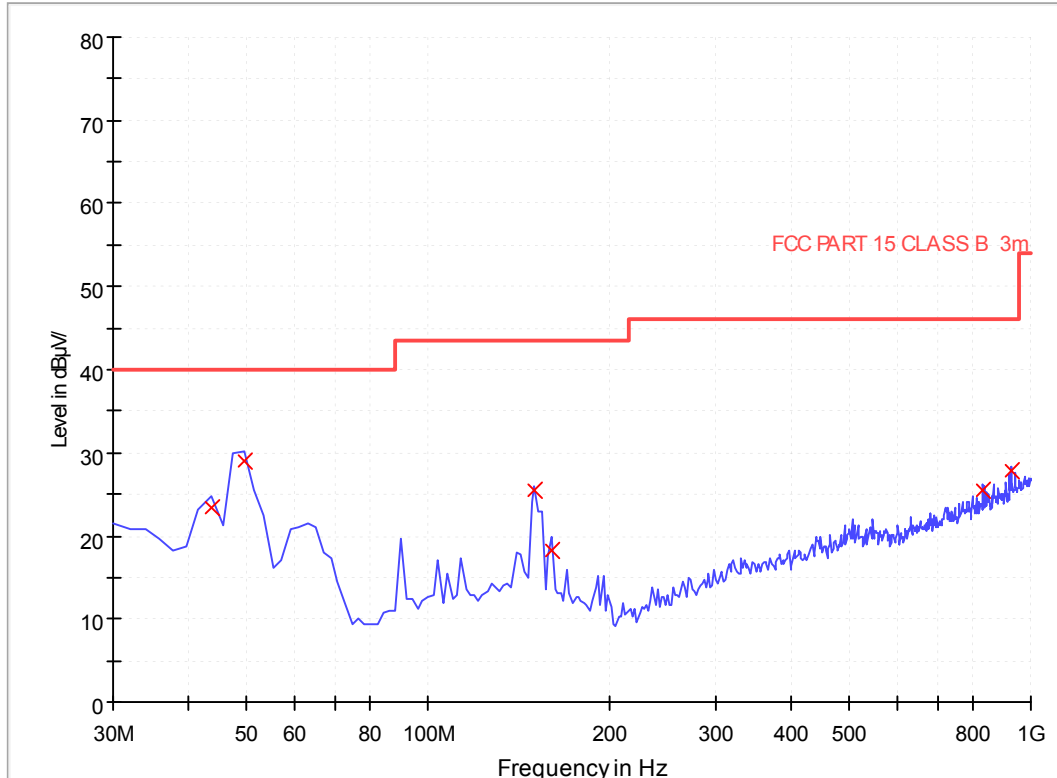
Frequency (MHz)	QuasiPeak (dBuV/m)	Bandwidth (kHz)	Height (cm)	Polarity	Corr. (dB/m)	Margin - QPK	Limit - QPK
30.000000	20.07	120.000	100.0	H	21.1	19.93	40.0
53.320000	15.71	120.000	100.0	H	9.1	24.29	40.0
90.280000	16.28	120.000	100.0	H	11.3	27.22	43.5
148.560000	19.76	120.000	100.0	H	13.8	23.74	43.5
809.480000	24.94	120.000	100.0	H	23.5	21.06	46.0
875.600000	25.83	120.000	100.0	H	24.1	20.17	46.0

Remark:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB).
- Margin value = Limit value - Emission Level.
- The emission levels of other frequencies are very lower than the limit and not show in test report.
- Only the antenna height (from 1m to 4m) at maximum reading are recorded.

Test site:	3M anechoic chamber	Environment:	Temp: 23℃; Humi:48%;101kPa
Operator:	Deng ShanFei	Test Date:	2024.03.14
Test Mode:	5G WIFI - TX	Test Result:	Pass

EMI Sweep-3M(30-1G)



Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarity	Corr. (dB/m)	Margin - QPK	Limit - QPK
43.600000	23.37	120.000	100.0	V	14.2	16.63	40.0
49.440000	29.00	120.000	100.0	V	10.5	11.00	40.0
150.520000	25.47	120.000	100.0	V	13.8	18.03	43.5
160.240000	18.34	120.000	100.0	V	13.3	25.16	43.5
832.840000	25.43	120.000	100.0	V	23.7	20.57	46.0
928.080000	27.81	120.000	100.0	V	24.8	18.19	46.0

Remark:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB).
- Margin value = Limit value - Emission Level.
- The emission levels of other frequencies are very lower than the limit and not show in test report.
- Only the antenna height (from 1m to 4m) at maximum reading are recorded.

For 1GHz to 40 GHz

U-NII-1_802.11a_5180MHz - Ant0									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	49.81	68.20	-18.39	1.50	220	49.37	0.44	Horizontal	Peak
5150.00	39.75	54.00	-14.25	1.50	220	39.31	0.44	Horizontal	Average
10360.00	53.15	68.20	-15.05	1.50	220	42.69	10.46	Horizontal	Peak
10360.00	43.27	54.00	-10.73	1.50	220	32.81	10.46	Horizontal	Average
5150.00	49.64	68.20	-18.56	1.50	140	49.20	0.44	Vertical	Peak
5150.00	40.51	54.00	-13.49	1.50	140	40.07	0.44	Vertical	Average
10360.00	52.40	68.20	-15.80	1.50	140	41.94	10.46	Vertical	Peak
10360.00	43.29	54.00	-10.71	1.50	140	32.83	10.46	Vertical	Average
U-NII-1_802.11a_5240MHz - Ant0									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	47.59	68.20	-20.61	1.50	220	47.34	0.25	Horizontal	Peak
5350.00	37.99	54.00	-16.01	1.50	220	37.74	0.25	Horizontal	Average
10480.00	53.64	68.20	-14.56	1.50	220	42.64	11.00	Horizontal	Peak
10480.00	43.48	54.00	-10.52	1.50	220	32.48	11.00	Horizontal	Average
5350.00	47.41	68.20	-20.79	1.50	140	47.16	0.25	Vertical	Peak
5350.00	37.64	54.00	-16.36	1.50	140	37.39	0.25	Vertical	Average
10480.00	52.77	68.20	-15.43	1.50	140	41.77	11.00	Vertical	Peak
10480.00	43.62	54.00	-10.38	1.50	140	32.62	11.00	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-1_802.11n-HT40_5190MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	49.36	68.20	-18.84	1.50	220	48.92	0.44	Horizontal	Peak
5150.00	39.56	54.00	-14.44	1.50	220	39.12	0.44	Horizontal	Average
10380.00	53.56	68.20	-14.64	1.50	220	43.03	10.53	Horizontal	Peak
10380.00	43.44	54.00	-10.56	1.50	220	32.91	10.53	Horizontal	Average
5150.00	49.32	68.20	-18.88	1.50	140	48.88	0.44	Vertical	Peak
5150.00	41.15	54.00	-12.85	1.50	140	40.71	0.44	Vertical	Average
10380.00	51.75	68.20	-16.45	1.50	140	41.22	10.53	Vertical	Peak
10380.00	42.91	54.00	-11.09	1.50	140	32.38	10.53	Vertical	Average

U-NII-1_802.11n-HT40_5230MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	47.58	68.20	-20.62	1.50	220	47.33	0.25	Horizontal	Peak
5350.00	37.90	54.00	-16.10	1.50	220	37.65	0.25	Horizontal	Average
10460.00	53.88	68.20	-14.32	1.50	220	42.97	10.91	Horizontal	Peak
10460.00	43.73	54.00	-10.27	1.50	220	32.82	10.91	Horizontal	Average
5350.00	47.34	68.20	-20.86	1.50	140	47.09	0.25	Vertical	Peak
5350.00	37.43	54.00	-16.57	1.50	140	37.18	0.25	Vertical	Average
10460.00	53.56	68.20	-14.64	1.50	140	42.65	10.91	Vertical	Peak
10460.00	43.96	54.00	-10.04	1.50	140	33.05	10.91	Vertical	Average

Remark:

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

**U-NII-1_802.11ac-VHT80_5210MHz - 2×2 MIMO**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	49.12	68.20	-19.08	1.50	220	48.68	0.44	Horizontal	Peak
5150.00	39.50	54.00	-14.50	1.50	220	39.06	0.44	Horizontal	Average
5350.00	47.99	68.20	-20.21	1.50	220	47.74	0.25	Horizontal	Peak
5350.00	37.79	54.00	-16.21	1.50	220	37.54	0.25	Horizontal	Average
10420.00	53.72	68.20	-14.48	1.50	220	43.01	10.71	Horizontal	Peak
10420.00	43.10	54.00	-10.90	1.50	220	32.39	10.71	Horizontal	Average
5150.00	49.19	68.20	-19.01	1.50	140	48.75	0.44	Vertical	Peak
5150.00	41.26	54.00	-12.74	1.50	140	40.82	0.44	Vertical	Average
5350.00	49.16	68.20	-19.04	1.50	140	48.91	0.25	Vertical	Peak
5350.00	41.83	54.00	-12.17	1.50	140	41.58	0.25	Vertical	Average
10420.00	52.15	68.20	-16.05	1.50	140	41.44	10.71	Vertical	Peak
10420.00	43.09	54.00	-10.91	1.50	140	32.38	10.71	Vertical	Average

Remark:

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



U-NII-2A_802.11a_5260MHz - Ant0									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	50.11	68.20	-18.09	1.50	220	49.67	0.44	Horizontal	Peak
5150.00	40.12	54.00	-13.88	1.50	220	39.68	0.44	Horizontal	Average
10520.00	52.69	68.20	-15.51	1.50	220	41.51	11.18	Horizontal	Peak
10520.00	43.20	54.00	-10.80	1.50	220	32.02	11.18	Horizontal	Average
5150.00	49.39	68.20	-18.81	1.50	140	48.95	0.44	Vertical	Peak
5150.00	40.10	54.00	-13.90	1.50	140	39.66	0.44	Vertical	Average
10520.00	52.25	68.20	-15.95	1.50	140	41.07	11.18	Vertical	Peak
10520.00	43.34	54.00	-10.66	1.50	140	32.16	11.18	Vertical	Average
U-NII-2A_802.11a_5320MHz - Ant0									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	47.72	68.20	-20.48	1.50	220	47.47	0.25	Horizontal	Peak
5350.00	38.03	54.00	-15.97	1.50	220	37.78	0.25	Horizontal	Average
10640.00	53.46	68.20	-14.74	1.50	220	42.14	11.32	Horizontal	Peak
10640.00	43.42	54.00	-10.58	1.50	220	32.10	11.32	Horizontal	Average
5350.00	47.19	68.20	-21.01	1.50	140	46.94	0.25	Vertical	Peak
5350.00	37.24	54.00	-16.76	1.50	140	36.99	0.25	Vertical	Average
10640.00	52.63	68.20	-15.57	1.50	140	41.31	11.32	Vertical	Peak
10640.00	43.68	54.00	-10.32	1.50	140	32.36	11.32	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

**U-NII-2A_802.11n-HT40_5270MHz - 2×2 MIMO**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	50.60	68.20	-17.60	1.50	220	50.16	0.44	Horizontal	Peak
5150.00	40.46	54.00	-13.54	1.50	220	40.02	0.44	Horizontal	Average
10540.00	52.59	68.20	-15.61	1.50	220	41.33	11.26	Horizontal	Peak
10540.00	41.92	54.00	-12.08	1.50	220	30.66	11.26	Horizontal	Average
5150.00	49.12	68.20	-19.08	1.50	140	48.68	0.44	Vertical	Peak
5150.00	39.05	54.00	-14.95	1.50	140	38.61	0.44	Vertical	Average
10540.00	51.61	68.20	-16.59	1.50	140	40.35	11.26	Vertical	Peak
10540.00	43.36	54.00	-10.64	1.50	140	32.10	11.26	Vertical	Average

U-NII-2A_802.11n-HT40_5310MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	46.99	68.20	-21.21	1.50	220	46.74	0.25	Horizontal	Peak
5350.00	37.91	54.00	-16.09	1.50	220	37.66	0.25	Horizontal	Average
10620.00	53.23	68.20	-14.97	1.50	220	41.82	11.41	Horizontal	Peak
10620.00	44.15	54.00	-9.85	1.50	220	32.74	11.41	Horizontal	Average
5350.00	47.28	68.20	-20.92	1.50	140	47.03	0.25	Vertical	Peak
5350.00	37.89	54.00	-16.11	1.50	140	37.64	0.25	Vertical	Average
10620.00	53.34	68.20	-14.86	1.50	140	41.93	11.41	Vertical	Peak
10620.00	42.82	54.00	-11.18	1.50	140	31.41	11.41	Vertical	Average

Remark:

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

**U-NII-2A_802.11ac-VHT80_5290MHz - 2×2 MIMO**

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	49.58	68.20	-18.62	1.50	220	49.14	0.44	Horizontal	Peak
5150.00	38.69	54.00	-15.31	1.50	220	38.25	0.44	Horizontal	Average
5350.00	47.54	68.20	-20.66	1.50	220	47.29	0.25	Horizontal	Peak
5350.00	37.73	54.00	-16.27	1.50	220	37.48	0.25	Horizontal	Average
10580.00	53.77	68.20	-14.43	1.50	220	42.33	11.44	Horizontal	Peak
10580.00	43.45	54.00	-10.55	1.50	220	32.01	11.44	Horizontal	Average
5150.00	49.88	68.20	-18.32	1.50	140	49.44	0.44	Vertical	Peak
5150.00	40.44	54.00	-13.56	1.50	140	40.00	0.44	Vertical	Average
5350.00	48.90	68.20	-19.30	1.50	140	48.65	0.25	Vertical	Peak
5350.00	42.03	54.00	-11.97	1.50	140	41.78	0.25	Vertical	Average
10580.00	51.71	68.20	-16.49	1.50	140	40.27	11.44	Vertical	Peak
10580.00	42.42	54.00	-11.58	1.50	140	30.98	11.44	Vertical	Average

Remark:

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

U-NII-2C_802.11a_5500MHz - Ant0									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	52.35	68.20	-15.85	1.50	220	52.39	-0.04	Horizontal	Peak
5470.00	40.64	54.00	-13.36	1.50	220	40.68	-0.04	Horizontal	Average
11000.00	54.03	68.20	-14.17	1.50	220	42.61	11.42	Horizontal	Peak
11000.00	43.69	54.00	-10.31	1.50	220	32.27	11.42	Horizontal	Average
5470.00	52.48	68.20	-15.72	1.50	140	52.52	-0.04	Vertical	Peak
5470.00	40.75	54.00	-13.25	1.50	140	40.79	-0.04	Vertical	Average
11000.00	53.23	68.20	-14.97	1.50	140	41.81	11.42	Vertical	Peak
11000.00	43.76	54.00	-10.24	1.50	140	32.34	11.42	Vertical	Average
U-NII-2C_802.11a_5700MHz - Ant0									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5725.00	47.80	68.20	-20.40	1.50	220	46.50	1.30	Horizontal	Peak
5725.00	39.41	54.00	-14.59	1.50	220	38.11	1.30	Horizontal	Average
11400.00	54.12	68.20	-14.08	1.50	220	42.65	11.47	Horizontal	Peak
11400.00	44.34	54.00	-9.66	1.50	220	32.87	11.47	Horizontal	Average
5725.00	48.05	68.20	-20.15	1.50	140	46.75	1.30	Vertical	Peak
5725.00	39.05	54.00	-14.95	1.50	140	37.75	1.30	Vertical	Average
11400.00	52.31	68.20	-15.89	1.50	140	40.84	11.47	Vertical	Peak
11400.00	43.47	54.00	-10.53	1.50	140	32.00	11.47	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-2C_802.11n-HT40_5510MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	51.53	68.20	-16.67	1.50	220	51.57	-0.04	Horizontal	Peak
5470.00	39.03	54.00	-14.97	1.50	220	39.07	-0.04	Horizontal	Average
11020.00	55.28	68.20	-12.92	1.50	220	43.82	11.46	Horizontal	Peak
11020.00	43.22	54.00	-10.78	1.50	220	31.76	11.46	Horizontal	Average
5470.00	51.45	68.20	-16.75	1.50	140	51.49	-0.04	Vertical	Peak
5470.00	41.08	54.00	-12.92	1.50	140	41.12	-0.04	Vertical	Average
11020.00	54.38	68.20	-13.82	1.50	140	42.92	11.46	Vertical	Peak
11020.00	43.71	54.00	-10.29	1.50	140	32.25	11.46	Vertical	Average

U-NII-2C_802.11n-HT40_5670MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5725.00	47.66	68.20	-20.54	1.50	220	46.36	1.30	Horizontal	Peak
5725.00	39.09	54.00	-14.91	1.50	220	37.79	1.30	Horizontal	Average
11340.00	54.15	68.20	-14.05	1.50	220	42.73	11.42	Horizontal	Peak
11340.00	43.48	54.00	-10.52	1.50	220	32.06	11.42	Horizontal	Average
5725.00	47.86	68.20	-20.34	1.50	140	46.56	1.30	Vertical	Peak
5725.00	38.22	54.00	-15.78	1.50	140	36.92	1.30	Vertical	Average
11340.00	51.50	68.20	-16.70	1.50	140	40.08	11.42	Vertical	Peak
11340.00	43.64	54.00	-10.36	1.50	140	32.22	11.42	Vertical	Average

Remark:

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

U-NII-2C_802.11ac-VHT80_5530MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	51.24	68.20	-16.96	1.50	220	51.28	-0.04	Horizontal	Peak
5470.00	39.56	54.00	-14.44	1.50	220	39.60	-0.04	Horizontal	Average
11060.00	54.76	68.20	-13.44	1.50	220	43.23	11.53	Horizontal	Peak
11060.00	43.39	54.00	-10.61	1.50	220	31.86	11.53	Horizontal	Average
5470.00	51.35	68.20	-16.85	1.50	140	51.39	-0.04	Vertical	Peak
5470.00	40.61	54.00	-13.39	1.50	140	40.65	-0.04	Vertical	Average
11060.00	54.80	68.20	-13.40	1.50	140	43.27	11.53	Vertical	Peak
11060.00	43.50	54.00	-10.50	1.50	140	31.97	11.53	Vertical	Average

U-NII-2C_802.11ac-VHT80_5610MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5725.00	48.52	68.20	-19.68	1.50	220	47.22	1.30	Horizontal	Peak
5725.00	39.95	54.00	-14.05	1.50	220	38.65	1.30	Horizontal	Average
11220.00	54.16	68.20	-14.04	1.50	220	43.11	11.05	Horizontal	Peak
11220.00	43.60	54.00	-10.40	1.50	220	32.55	11.05	Horizontal	Average
5725.00	47.82	68.20	-20.38	1.50	140	46.52	1.30	Vertical	Peak
5725.00	38.07	54.00	-15.93	1.50	140	36.77	1.30	Vertical	Average
11220.00	50.71	68.20	-17.49	1.50	140	39.66	11.05	Vertical	Peak
11220.00	43.13	54.00	-10.87	1.50	140	32.08	11.05	Vertical	Average

Remark:

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

**U-NII-3_802.11a_5745MHz - Ant0**

Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	51.04	68.20	-17.16	1.50	220	50.24	0.80	Horizontal	Peak
5700.00	50.54	105.20	-54.66	1.50	220	49.30	1.24	Horizontal	Peak
5720.00	51.77	110.80	-59.03	1.50	220	50.49	1.28	Horizontal	Peak
5725.00	51.22	122.20	-70.98	1.50	220	49.92	1.30	Horizontal	Peak
11490.00	53.16	68.20	-15.04	1.50	220	41.61	11.55	Horizontal	Peak
11490.00	43.20	54.00	-10.80	1.50	220	31.65	11.55	Horizontal	Average
5650.00	49.60	68.20	-18.60	1.50	140	48.80	0.80	Vertical	Peak
5700.00	52.50	105.20	-52.70	1.50	140	51.26	1.24	Vertical	Peak
5720.00	51.31	110.80	-59.49	1.50	140	50.03	1.28	Vertical	Peak
5725.00	52.03	122.20	-70.17	1.50	140	50.73	1.30	Vertical	Peak
11490.00	53.00	68.20	-15.20	1.50	140	41.45	11.55	Vertical	Peak
11490.00	43.23	54.00	-10.77	1.50	140	31.68	11.55	Vertical	Average

U-NII-3_802.11a_5825MHz - Ant0

Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	52.14	122.20	-70.06	1.50	220	50.32	1.82	Horizontal	Peak
5855.00	51.27	110.80	-59.53	1.50	220	49.42	1.85	Horizontal	Peak
5875.00	52.32	105.20	-52.88	1.50	220	50.34	1.98	Horizontal	Peak
5925.00	52.38	68.20	-15.82	1.50	220	50.26	2.12	Horizontal	Peak
11650.00	53.34	68.20	-14.86	1.50	220	41.70	11.64	Horizontal	Peak
11650.00	43.47	54.00	-10.53	1.50	220	31.83	11.64	Horizontal	Average
5850.00	51.92	122.20	-70.28	1.50	140	50.10	1.82	Vertical	Peak
5855.00	51.61	110.80	-59.19	1.50	140	49.76	1.85	Vertical	Peak
5875.00	52.20	105.20	-53.00	1.50	140	50.22	1.98	Vertical	Peak
5925.00	51.74	68.20	-16.46	1.50	140	49.62	2.12	Vertical	Peak
11650.00	52.87	68.20	-15.33	1.50	140	41.23	11.64	Vertical	Peak
11650.00	43.54	54.00	-10.46	1.50	140	31.90	11.64	Vertical	Average

Remark:

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

**U-NII-3_802.11n-HT40_5755MHz - 2×2 MIMO**

Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	51.27	68.20	-16.93	1.50	220	50.47	0.80	Horizontal	Peak
5700.00	50.70	105.20	-54.50	1.50	220	49.46	1.24	Horizontal	Peak
5720.00	50.93	110.80	-59.87	1.50	220	49.65	1.28	Horizontal	Peak
5725.00	51.23	122.20	-70.97	1.50	220	49.93	1.30	Horizontal	Peak
11510.00	52.23	68.20	-15.97	1.50	220	40.67	11.56	Horizontal	Peak
11510.00	42.41	54.00	-11.59	1.50	220	30.85	11.56	Horizontal	Average
5650.00	49.96	68.20	-18.24	1.50	140	49.16	0.80	Vertical	Peak
5700.00	52.67	105.20	-52.53	1.50	140	51.43	1.24	Vertical	Peak
5720.00	50.66	110.80	-60.14	1.50	140	49.38	1.28	Vertical	Peak
5725.00	51.03	122.20	-71.17	1.50	140	49.73	1.30	Vertical	Peak
11510.00	53.37	68.20	-14.83	1.50	140	41.81	11.56	Vertical	Peak
11510.00	43.33	54.00	-10.67	1.50	140	31.77	11.56	Vertical	Average

U-NII-3_802.11n-HT40_5795MHz - 2×2 MIMO

Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	51.70	122.20	-70.50	1.50	220	49.88	1.82	Horizontal	Peak
5855.00	50.88	110.80	-59.92	1.50	220	49.03	1.85	Horizontal	Peak
5875.00	51.49	105.20	-53.71	1.50	220	49.51	1.98	Horizontal	Peak
5925.00	52.14	68.20	-16.06	1.50	220	50.02	2.12	Horizontal	Peak
11590.00	54.15	68.20	-14.05	1.50	220	42.64	11.51	Horizontal	Peak
11590.00	42.41	54.00	-11.59	1.50	220	30.90	11.51	Horizontal	Average
5850.00	52.36	122.20	-69.84	1.50	140	50.54	1.82	Vertical	Peak
5855.00	50.87	110.80	-59.93	1.50	140	49.02	1.85	Vertical	Peak
5875.00	51.87	105.20	-53.33	1.50	140	49.89	1.98	Vertical	Peak
5925.00	51.05	68.20	-17.15	1.50	140	48.93	2.12	Vertical	Peak
11590.00	52.66	68.20	-15.54	1.50	140	41.15	11.51	Vertical	Peak
11590.00	43.26	54.00	-10.74	1.50	140	31.75	11.51	Vertical	Average

Remark:

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

U-NII-3_802.11ac-VHT80_5775MHz - 2×2 MIMO

Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	50.96	68.20	-17.24	1.50	220	50.16	0.80	Horizontal	Peak
5700.00	50.48	105.20	-54.72	1.50	220	49.24	1.24	Horizontal	Peak
5720.00	50.65	110.80	-60.15	1.50	220	49.37	1.28	Horizontal	Peak
5725.00	50.76	122.20	-71.44	1.50	220	49.46	1.30	Horizontal	Peak
5850.00	51.74	122.20	-70.46	1.50	220	49.92	1.82	Horizontal	Peak
5855.00	51.28	110.80	-59.52	1.50	220	49.43	1.85	Horizontal	Peak
5875.00	51.57	105.20	-53.63	1.50	220	49.59	1.98	Horizontal	Peak
5925.00	51.79	68.20	-16.41	1.50	220	49.67	2.12	Horizontal	Peak
11550.00	53.71	68.20	-14.49	1.50	220	42.17	11.54	Horizontal	Peak
11550.00	42.38	54.00	-11.62	1.50	220	30.84	11.54	Horizontal	Average
5650.00	50.05	68.20	-18.15	1.50	140	49.25	0.80	Vertical	Peak
5700.00	52.59	105.20	-52.61	1.50	140	51.35	1.24	Vertical	Peak
5720.00	50.43	110.80	-60.37	1.50	140	49.15	1.28	Vertical	Peak
5725.00	51.02	122.20	-71.18	1.50	140	49.72	1.30	Vertical	Peak
5850.00	51.55	122.20	-70.65	1.50	140	49.73	1.82	Vertical	Peak
5855.00	50.76	110.80	-60.04	1.50	140	48.91	1.85	Vertical	Peak
5875.00	52.36	105.20	-52.84	1.50	140	50.38	1.98	Vertical	Peak
5925.00	50.73	68.20	-17.47	1.50	140	48.61	2.12	Vertical	Peak
11550.00	52.75	68.20	-15.45	1.50	140	41.21	11.54	Vertical	Peak
11550.00	43.97	54.00	-10.03	1.50	140	32.43	11.54	Vertical	Average

Remark:

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

2.7. AC Power Line Conducted Emission

2.7.1. Limit of AC Power Line Conducted Emission

FCC Part 15.207:

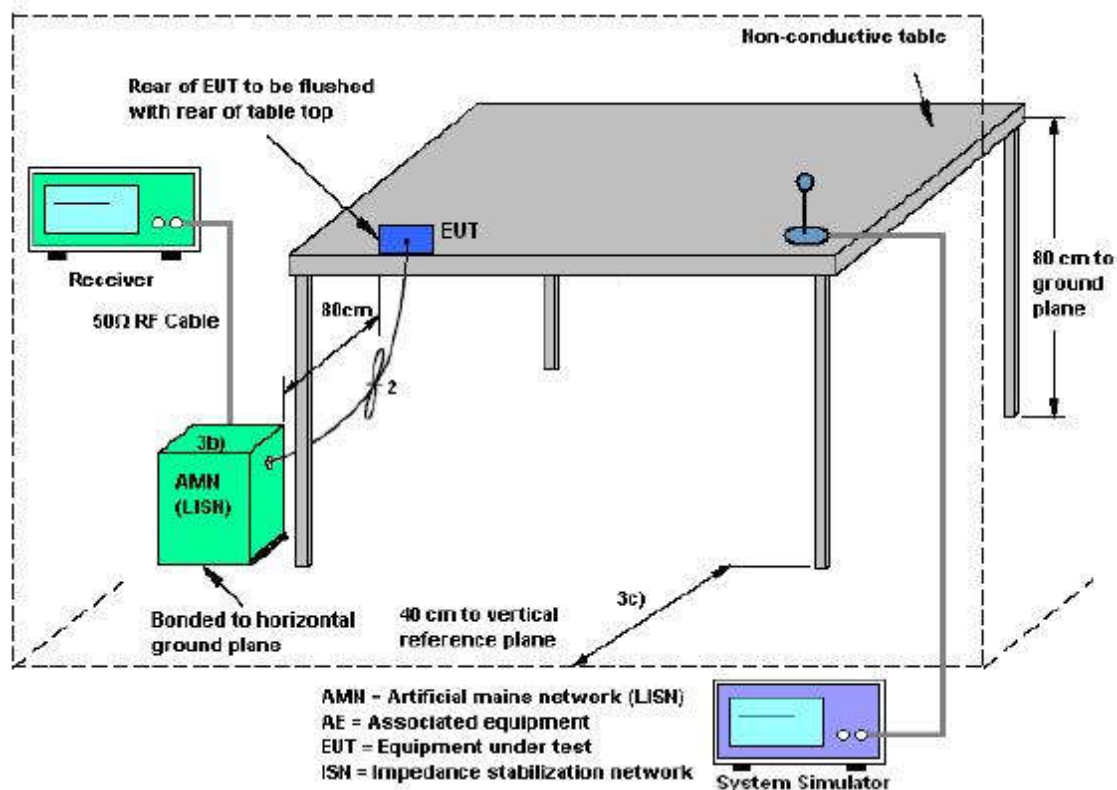
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency range (MHz)	Conducted Limit (dB 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.

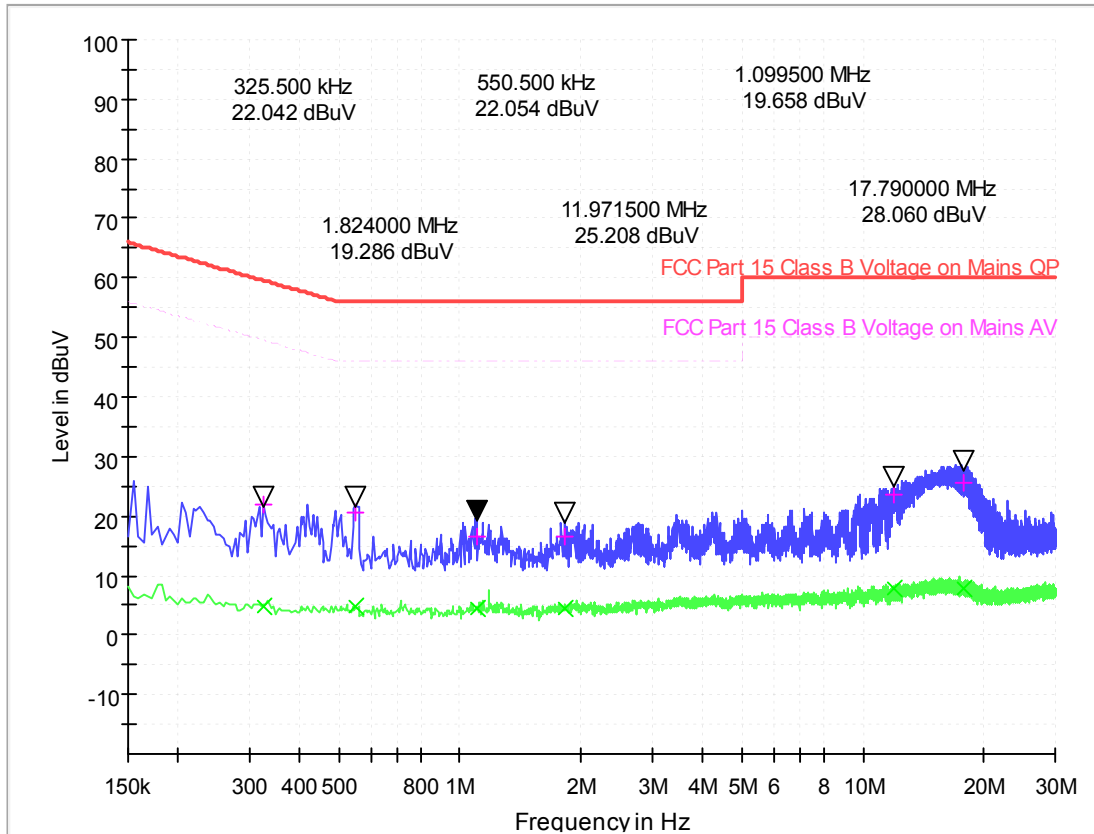
2.7.5. Test Result of AC Power Line Conducted Emission

The EUT configuration of the emission tests is 5G WLAN Link + Charging from Adapter.

All of the EUT Configure mode were tested and found 802.11a_5500MHz(Ant0) channel is the worst mode, the worst case is recorded in this report.

Project Information

Test site:	Shield ROOM 1	Environment:	Temp: 23°C; Humi:53%;101kPa
Operator:	LI QINGLONG	Test Date:	2024.03.07
Test Mode:	5G WIFI - TX	Test Part:	L



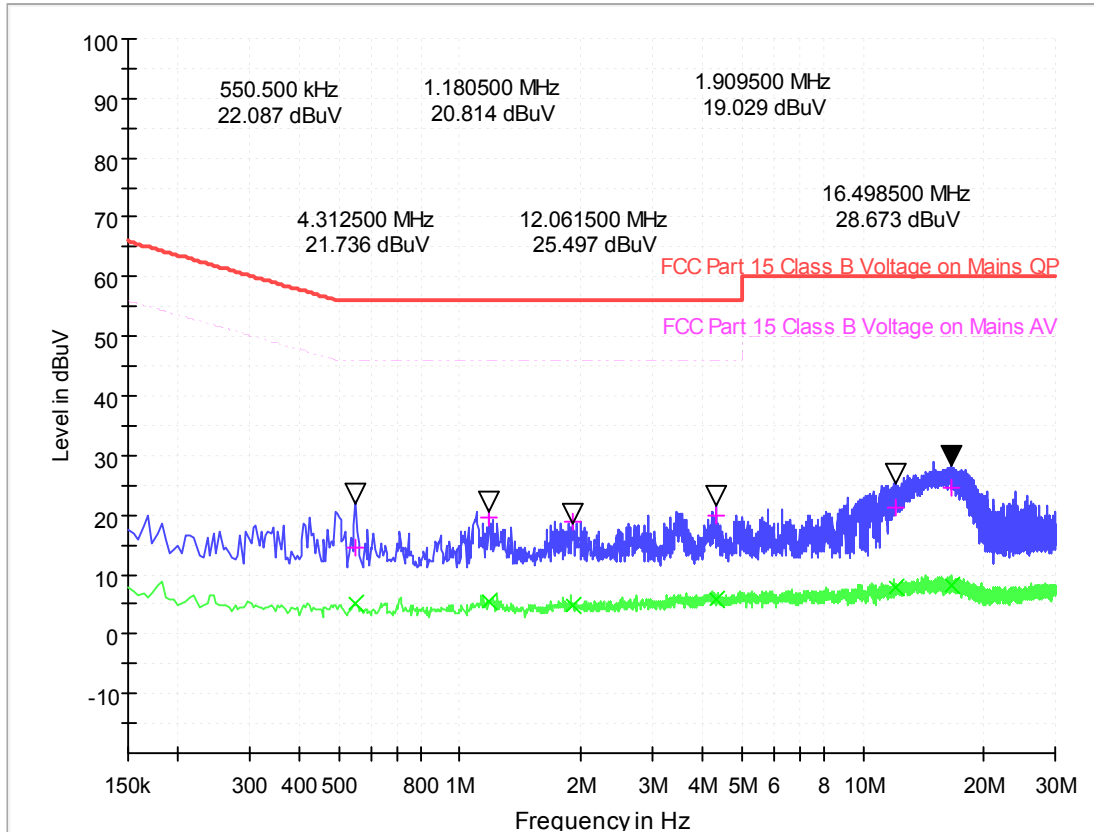
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Corr.Factor (dB)	Margin - QPK	Limit - QPK (dBμV)	Margin - AV (dB)	Limit - AV (dBμV)
0.325500	21.83	4.86	10.8	37.74	59.6	44.71	49.6
0.550500	20.47	4.95	10.8	35.53	56.0	41.05	46.0
1.099500	16.44	4.32	10.7	39.56	56.0	41.68	46.0
1.824000	16.43	4.33	10.7	39.57	56.0	41.67	46.0
11.971500	23.50	7.90	10.7	36.50	60.0	42.10	50.0
17.790000	25.42	7.97	11.0	34.58	60.0	42.03	50.0

Test Result : Pass

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

Project Information

Test site:	Shield ROOM 1	Environment:	Temp: 23℃; Humi:53%;101kPa
Operator:	LI QINGLONG	Test Date:	2024.03.07
Test Mode:	5G WIFI - TX	Test Part:	N



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Corr.Factor (dB)	Margin - QPK	Limit - QPK (dBμV)	Margin - AV (dB)	Limit - AV (dBμV)
0.550500	14.36	5.02	10.9	41.64	56.0	40.98	46.0
1.180500	19.65	5.52	10.8	36.35	56.0	40.48	46.0
1.909500	18.97	4.73	10.8	37.03	56.0	41.27	46.0
4.312500	19.93	5.94	10.5	36.07	56.0	40.06	46.0
12.061500	21.34	7.67	10.8	38.66	60.0	42.33	50.0
16.498500	24.66	8.13	11.0	35.34	60.0	41.87	50.0

Test Result : Pass

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

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2023.08.01	2026.07.31
2	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2023.06.08	2024.06.07
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2023.06.08	2024.06.07
5	EMI Horn Ant. (1-18G)	ETC	MCTD-1209	A150402241	2023.05.16	2026.05.15
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2023.06.01	2024.05.31
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2023.10.20	2024.10.19
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2023.10.20	2024.10.19
9	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2024.01.18	2025.01.17
10	Test Receiver	R&S	ESIB7	A0501375	2024.02.28	2025.02.27
11	Broadband Ant.	ETC	MCTD 2786	A150402240	2023.05.22	2026.05.21
12	3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2024.02.27	2027.02.26
13	Temperature chamber	ESPEC	SU-642	A150802409	2024.02.22	2025.02.21
14	Test Receiver	KEYSIGHT	N9038A	A141202036	2023.06.12	2024.06.11
15	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2023.06.08	2024.06.07

4. Uncertainty of Evaluation

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

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

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

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

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

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

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

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

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

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

Uncertainty of RF Conducted Measurement (9kHz~40GHz)

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

Uncertainty of Occupied Bandwidth Measurement

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



Appendix A

Duty Cycle

Test Result and Data

Mode	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11n (20MHz)	77.38	1.11
802.11n (40MHz)	47.93	3.19
802.11ac (20MHz)	76.90	1.14
802.11ac (40MHz)	48.40	3.15
802.11ac (80MHz)	34.45	4.63
802.11a (20MHz)	78.81	1.03
802.11ax (20MHz)	66.91	1.75
802.11ax (40MHz)	45.81	3.39
802.11ax (80MHz)	61.38	2.12

**Output power
Test Result and Data**

U-NII-1 AVGSA Output Power						
Mode	Test Frequency (MHz)	Ant	Power (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5180	Ant0	13.17	15.96	24	Pass
802.11n (20MHz)	5180	Ant1	12.72			
802.11n (20MHz)	5220	Ant0	12.63	15.50	24	Pass
802.11n (20MHz)	5220	Ant1	12.35			
802.11n (20MHz)	5240	Ant0	12.42	15.36	24	Pass
802.11n (20MHz)	5240	Ant1	12.28			
802.11n (40MHz)	5190	Ant0	12.55	15.72	24	Pass
802.11n (40MHz)	5190	Ant1	12.86			
802.11n (40MHz)	5230	Ant0	11.89	14.89	24	Pass
802.11n (40MHz)	5230	Ant1	11.87			
802.11ac (20MHz)	5180	Ant0	13.21	16.29	24	Pass
802.11ac (20MHz)	5180	Ant1	13.35			
802.11ac (20MHz)	5220	Ant0	12.67	15.55	24	Pass
802.11ac (20MHz)	5220	Ant1	12.40			
802.11ac (20MHz)	5240	Ant0	12.43	15.36	24	Pass
802.11ac (20MHz)	5240	Ant1	12.26			
802.11ac (40MHz)	5190	Ant0	12.51	15.71	24	Pass
802.11ac (40MHz)	5190	Ant1	12.88			
802.11ac (40MHz)	5230	Ant0	11.87	14.90	24	Pass
802.11ac (40MHz)	5230	Ant1	11.90			
802.11ac (80MHz)	5210	Ant0	12.79	15.86	24	Pass
802.11ac (80MHz)	5210	Ant1	12.91			
802.11a (20MHz)	5180	Ant0	16.71	/	24	Pass
802.11a (20MHz)	5180	Ant1	16.50	/	24	Pass
802.11a (20MHz)	5220	Ant0	16.68	/	24	Pass
802.11a (20MHz)	5220	Ant1	16.66	/	24	Pass
802.11a (20MHz)	5240	Ant0	16.75	/	24	Pass
802.11a (20MHz)	5240	Ant1	16.58	/	24	Pass
802.11ax (20MHz)	5180	Ant0	12.65	16.21	24	Pass



802.11ax (20MHz)	5180	Ant1	13.69			
802.11ax (20MHz)	5220	Ant0	12.30	15.69	24	Pass
802.11ax (20MHz)	5220	Ant1	13.03			
802.11ax (20MHz)	5240	Ant0	11.77	15.40	24	Pass
802.11ax (20MHz)	5240	Ant1	12.93			
802.11ax (40MHz)	5190	Ant0	12.82	15.97	24	Pass
802.11ax (40MHz)	5190	Ant1	13.09			
802.11ax (40MHz)	5230	Ant0	12.24	15.17	24	Pass
802.11ax (40MHz)	5230	Ant1	12.08			
802.11ax (80MHz)	5210	Ant0	12.38	15.46	24	Pass
802.11ax (80MHz)	5210	Ant1	12.52			

Note:

- 1) Power has added duty cycle factor.
- 2) Ant0 and Ant1 is 2*2MIMO.
- 3) Total Power = $10 \cdot \log \{10^{(\text{Ant0 Power}/10)} + 10^{(\text{Ant1 Power}/10)}\}$.

,



U-NII-2a AVGSA Output Power

Mode	Test Frequency (MHz)	Ant	Power (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5260	Ant0	13.14	15.93	24	Pass
802.11n (20MHz)	5260	Ant1	12.69			
802.11n (20MHz)	5300	Ant0	12.83	15.80	24	Pass
802.11n (20MHz)	5300	Ant1	12.75			
802.11n (20MHz)	5320	Ant0	12.72	15.64	24	Pass
802.11n (20MHz)	5320	Ant1	12.54			
802.11n (40MHz)	5270	Ant0	12.34	15.44	24	Pass
802.11n (40MHz)	5270	Ant1	12.51			
802.11n (40MHz)	5310	Ant0	11.96	14.86	24	Pass
802.11n (40MHz)	5310	Ant1	11.73			
802.11ac (20MHz)	5260	Ant0	12.96	15.92	24	Pass
802.11ac (20MHz)	5260	Ant1	12.85			
802.11ac (20MHz)	5300	Ant0	12.83	15.79	24	Pass
802.11ac (20MHz)	5300	Ant1	12.72			
802.11ac (20MHz)	5320	Ant0	12.52	15.47	24	Pass
802.11ac (20MHz)	5320	Ant1	12.39			
802.11ac (40MHz)	5270	Ant0	12.49	15.55	24	Pass
802.11ac (40MHz)	5270	Ant1	12.59			
802.11ac (40MHz)	5310	Ant0	12.54	15.57	24	Pass
802.11ac (40MHz)	5310	Ant1	12.58			
802.11ac (80MHz)	5290	Ant0	12.94	15.93	24	Pass
802.11ac (80MHz)	5290	Ant1	12.89			
802.11a (20MHz)	5260	Ant0	16.69	/	24	Pass
802.11a (20MHz)	5260	Ant1	16.54	/	24	Pass
802.11a (20MHz)	5300	Ant0	16.21	/	24	Pass
802.11a (20MHz)	5300	Ant1	16.24	/	24	Pass
802.11a (20MHz)	5320	Ant0	16.30	/	24	Pass
802.11a (20MHz)	5320	Ant1	16.17	/	24	Pass
802.11ax (20MHz)	5260	Ant0	12.43	15.37	24	Pass
802.11ax (20MHz)	5260	Ant1	12.28			
802.11ax (20MHz)	5300	Ant0	13.21	16.17	24	Pass



802.11ax (20MHz)	5300	Ant1	13.10			
802.11ax (20MHz)	5320	Ant0	13.25	16.28	24	Pass
802.11ax (20MHz)	5320	Ant1	13.29			
802.11ax (40MHz)	5270	Ant0	12.22	15.15	24	Pass
802.11ax (40MHz)	5270	Ant1	12.06			
802.11ax (40MHz)	5310	Ant0	12.75	15.73	24	Pass
802.11ax (40MHz)	5310	Ant1	12.68			
802.11ax (80MHz)	5290	Ant0	12.68	15.63	24	Pass
802.11ax (80MHz)	5290	Ant1	12.56			

Note:

- 1) Power has added duty cycle factor.
- 2) Ant0 and Ant1 is 2*2MIMO.
- 3) Total Power = $10 \cdot \log \{10^{(\text{Ant0 Power}/10)} + 10^{(\text{Ant1 Power}/10)}\}$.



U-NII-2c AVGSA Output Power						
Mode	Test Frequency (MHz)	Ant	Power (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5500	Ant0	12.82	15.76	24	Pass
802.11n (20MHz)	5500	Ant1	12.68			
802.11n (20MHz)	5600	Ant0	12.48	15.43	24	Pass
802.11n (20MHz)	5600	Ant1	12.36			
802.11n (20MHz)	5700	Ant0	12.43	15.42	24	Pass
802.11n (20MHz)	5700	Ant1	12.38			
802.11n (40MHz)	5510	Ant0	11.95	14.92	24	Pass
802.11n (40MHz)	5510	Ant1	11.86			
802.11n (40MHz)	5590	Ant0	12.73	15.81	24	Pass
802.11n (40MHz)	5590	Ant1	12.87			
802.11n (40MHz)	5670	Ant0	12.10	15.03	24	Pass
802.11n (40MHz)	5670	Ant1	11.93			
802.11ac (20MHz)	5500	Ant0	12.85	15.83	24	Pass
802.11ac (20MHz)	5500	Ant1	12.78			
802.11ac (20MHz)	5600	Ant0	12.43	15.37	24	Pass
802.11ac (20MHz)	5600	Ant1	12.29			
802.11ac (20MHz)	5700	Ant0	12.31	15.34	24	Pass
802.11ac (20MHz)	5700	Ant1	12.35			
802.11ac (40MHz)	5510	Ant0	12.08	15.07	24	Pass
802.11ac (40MHz)	5510	Ant1	12.03			
802.11ac (40MHz)	5590	Ant0	12.34	15.38	24	Pass
802.11ac (40MHz)	5590	Ant1	12.39			
802.11ac (40MHz)	5670	Ant0	11.72	14.57	24	Pass
802.11ac (40MHz)	5670	Ant1	11.39			
802.11ac (80MHz)	5530	Ant0	12.91	15.95	24	Pass
802.11ac (80MHz)	5530	Ant1	12.97			
802.11ac (80MHz)	5610	Ant0	13.06	16.04	24	Pass
802.11ac (80MHz)	5610	Ant1	13.00			
802.11a (20MHz)	5500	Ant0	16.89	/	24	Pass
802.11a (20MHz)	5500	Ant1	16.74	/	24	Pass
802.11a (20MHz)	5600	Ant0	16.77	/	24	Pass



802.11a (20MHz)	5600	Ant1	16.71	/	24	Pass
802.11a (20MHz)	5700	Ant0	16.86	/	24	Pass
802.11a (20MHz)	5700	Ant1	16.81	/	24	Pass
802.11ax (20MHz)	5500	Ant0	13.16	16.08	24	Pass
802.11ax (20MHz)	5500	Ant1	12.98			
802.11ax (20MHz)	5600	Ant0	13.05	16.08	24	Pass
802.11ax (20MHz)	5600	Ant1	13.09			
802.11ax (20MHz)	5700	Ant0	12.38	15.37	24	Pass
802.11ax (20MHz)	5700	Ant1	12.33			
802.11ax (40MHz)	5510	Ant0	13.33	16.31	24	Pass
802.11ax (40MHz)	5510	Ant1	13.27			
802.11ax (40MHz)	5590	Ant0	12.38	15.37	24	Pass
802.11ax (40MHz)	5590	Ant1	12.33			
802.11ax (40MHz)	5670	Ant0	11.70	14.63	24	Pass
802.11ax (40MHz)	5670	Ant1	11.53			
802.11ax (80MHz)	5530	Ant0	12.38	15.32	24	Pass
802.11ax (80MHz)	5530	Ant1	12.24			
802.11ax (80MHz)	5610	Ant0	11.90	14.86	24	Pass
802.11ax (80MHz)	5610	Ant1	11.79			

Note:

- 1) Power has added duty cycle factor.
- 2) Ant0 and Ant1 is 2*2MIMO.
- 3) Total Power = $10 \cdot \log \{10^{(\text{Ant0 Power}/10)} + 10^{(\text{Ant1 Power}/10)}\}$.



U-NII-3 AVGSA Output Power						
Mode	Test Frequency (MHz)	Ant	Power (dBm)	Total Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5745	Ant0	12.27	15.31	30	Pass
802.11n (20MHz)	5745	Ant1	12.32			
802.11n (20MHz)	5785	Ant0	12.74	15.70	30	Pass
802.11n (20MHz)	5785	Ant1	12.64			
802.11n (20MHz)	5825	Ant0	12.00	14.96	30	Pass
802.11n (20MHz)	5825	Ant1	11.89			
802.11n (40MHz)	5755	Ant0	11.80	14.80	30	Pass
802.11n (40MHz)	5755	Ant1	11.78			
802.11n (40MHz)	5795	Ant0	12.02	14.99	30	Pass
802.11n (40MHz)	5795	Ant1	11.93			
802.11ac (20MHz)	5745	Ant0	12.67	15.72	30	Pass
802.11ac (20MHz)	5745	Ant1	12.75			
802.11ac (20MHz)	5785	Ant0	12.66	15.66	30	Pass
802.11ac (20MHz)	5785	Ant1	12.63			
802.11ac (20MHz)	5825	Ant0	12.48	15.45	30	Pass
802.11ac (20MHz)	5825	Ant1	12.39			
802.11ac (40MHz)	5755	Ant0	12.11	15.08	30	Pass
802.11ac (40MHz)	5755	Ant1	12.02			
802.11ac (40MHz)	5795	Ant0	12.28	15.24	30	Pass
802.11ac (40MHz)	5795	Ant1	12.17			
802.11ac (80MHz)	5775	Ant0	12.83	15.87	30	Pass
802.11ac (80MHz)	5775	Ant1	12.88			
802.11a (20MHz)	5745	Ant0	16.60	/	30	Pass
802.11a (20MHz)	5745	Ant1	16.50	/	30	Pass
802.11a (20MHz)	5785	Ant0	16.64	/	30	Pass
802.11a (20MHz)	5785	Ant1	16.61	/	30	Pass
802.11a (20MHz)	5825	Ant0	16.43	/	30	Pass
802.11a (20MHz)	5825	Ant1	16.37	/	30	Pass
802.11ax (20MHz)	5745	Ant0	12.80	15.78	30	Pass
802.11ax (20MHz)	5745	Ant1	12.73			
802.11ax (20MHz)	5785	Ant0	12.86	15.85	30	Pass



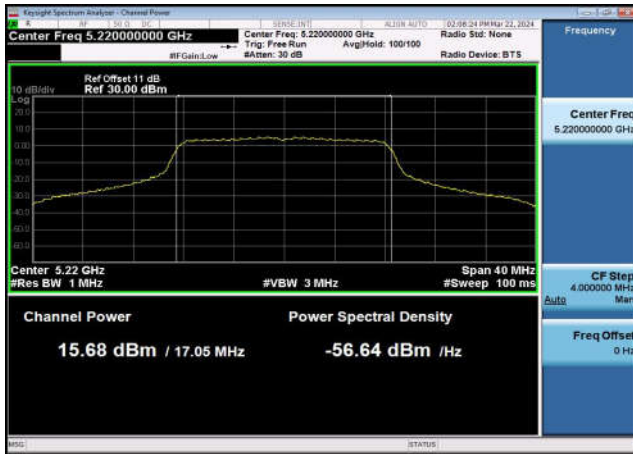
802.11ax (20MHz)	5785	Ant1	12.81			
802.11ax (20MHz)	5825	Ant0	12.51	15.42	30	Pass
802.11ax (20MHz)	5825	Ant1	12.30			
802.11ax (40MHz)	5755	Ant0	12.35	15.26	30	Pass
802.11ax (40MHz)	5755	Ant1	12.15			
802.11ax (40MHz)	5795	Ant0	12.55	15.55	30	Pass
802.11ax (40MHz)	5795	Ant1	12.53			
802.11ax (80MHz)	5775	Ant0	12.55	15.49	30	Pass
802.11ax (80MHz)	5775	Ant1	12.41			

Note:

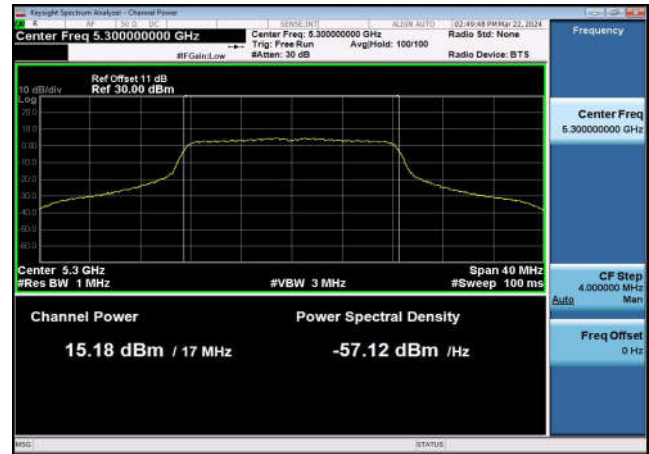
- 1) Power has added duty cycle factor.
- 2) Ant0 and Ant1 is 2*2MIMO.
- 3) Total Power = $10 \cdot \log \{10^{(\text{Ant0 Power}/10)} + 10^{(\text{Ant1 Power}/10)}\}$.

Test plots

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



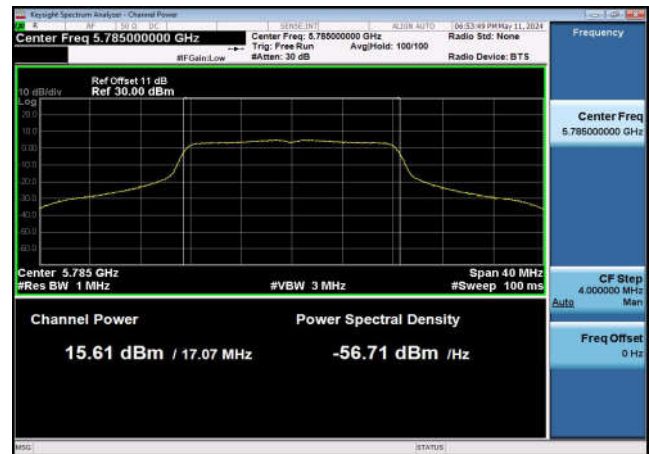
U-NII-2a Output Power-802.11a(20MHz)
,5300MHz,Ant0



U-NII-2c Output Power-802.11a(20MHz)
,5600MHz,Ant0



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



Note: Only 802.11a mode mid channel plot is reported to show setting parameter complies with testing method and procedure.

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

U-NII-1 AVGSA PSD						
Mode	Test Frequency (MHz)	Ant	PSD (dBm/MHz)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11n (20MHz)	5180	Ant0	2.50	5.32	11	Pass
802.11n (20MHz)	5180	Ant1	2.12			
802.11n (20MHz)	5220	Ant0	1.73	4.40	11	Pass
802.11n (20MHz)	5220	Ant1	1.01			
802.11n (20MHz)	5240	Ant0	1.82	4.62	11	Pass
802.11n (20MHz)	5240	Ant1	1.38			
802.11n (40MHz)	5190	Ant0	0.21	3.08	11	Pass
802.11n (40MHz)	5190	Ant1	-0.07			
802.11n (40MHz)	5230	Ant0	-0.88	2.04	11	Pass
802.11n (40MHz)	5230	Ant1	-1.06			
802.11ac (20MHz)	5180	Ant0	2.21	5.47	11	Pass
802.11ac (20MHz)	5180	Ant1	2.69			
802.11ac (20MHz)	5220	Ant0	1.90	4.78	11	Pass
802.11ac (20MHz)	5220	Ant1	1.64			
802.11ac (20MHz)	5240	Ant0	1.63	4.86	11	Pass
802.11ac (20MHz)	5240	Ant1	2.05			
802.11ac (40MHz)	5190	Ant0	-0.11	2.93	11	Pass
802.11ac (40MHz)	5190	Ant1	-0.05			
802.11ac (40MHz)	5230	Ant0	-0.89	1.94	11	Pass
802.11ac (40MHz)	5230	Ant1	-1.26			
802.11ac (80MHz)	5210	Ant0	-3.06	0.05	11	Pass
802.11ac (80MHz)	5210	Ant1	-2.86			
802.11a (20MHz)	5180	Ant0	6.04	/	11	Pass
802.11a (20MHz)	5180	Ant1	7.00	/	11	Pass
802.11a (20MHz)	5220	Ant0	6.16	/	11	Pass
802.11a (20MHz)	5220	Ant1	6.46	/	11	Pass
802.11a (20MHz)	5240	Ant0	6.36	/	11	Pass
802.11a (20MHz)	5240	Ant1	6.52	/	11	Pass
802.11ax (20MHz)	5180	Ant0	1.51	4.94	11	Pass



802.11ax (20MHz)	5180	Ant1	2.32			
802.11ax (20MHz)	5220	Ant0	1.24	4.72	11	Pass
802.11ax (20MHz)	5220	Ant1	2.13			
802.11ax (20MHz)	5240	Ant0	1.13	4.40	11	Pass
802.11ax (20MHz)	5240	Ant1	1.64			
802.11ax (40MHz)	5190	Ant0	-0.39	2.58	11	Pass
802.11ax (40MHz)	5190	Ant1	-0.48			
802.11ax (40MHz)	5230	Ant0	0.33	2.70	11	Pass
802.11ax (40MHz)	5230	Ant1	-1.05			
802.11ax (80MHz)	5210	Ant0	-3.97	-0.78	11	Pass
802.11ax (80MHz)	5210	Ant1	-3.61			

Note:

1) PSD has added duty cycle factor.

2) Ant0 and Ant1 is 2*2MIMO.

3) Total PSD = $10 \cdot \log \{10^{(\text{Ant0 PSD}/10)} + 10^{(\text{Ant1 PSD}/10)}\}$.



U-NII-2a AVGSA PSD						
Mode	Test Frequency (MHz)	Ant	PSD (dBm/MHz)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11n (20MHz)	5260	Ant0	2.28	5.29	11	Pass
802.11n (20MHz)	5260	Ant1	2.27			
802.11n (20MHz)	5300	Ant0	1.88	4.84	11	Pass
802.11n (20MHz)	5300	Ant1	1.78			
802.11n (20MHz)	5320	Ant0	2.22	5.23	11	Pass
802.11n (20MHz)	5320	Ant1	2.22			
802.11n (40MHz)	5270	Ant0	-0.22	2.74	11	Pass
802.11n (40MHz)	5270	Ant1	-0.32			
802.11n (40MHz)	5310	Ant0	-1.04	1.91	11	Pass
802.11n (40MHz)	5310	Ant1	-1.16			
802.11ac (20MHz)	5260	Ant0	2.17	5.17	11	Pass
802.11ac (20MHz)	5260	Ant1	2.14			
802.11ac (20MHz)	5300	Ant0	1.98	4.95	11	Pass
802.11ac (20MHz)	5300	Ant1	1.90			
802.11ac (20MHz)	5320	Ant0	1.73	4.70	11	Pass
802.11ac (20MHz)	5320	Ant1	1.65			
802.11ac (40MHz)	5270	Ant0	-0.42	2.55	11	Pass
802.11ac (40MHz)	5270	Ant1	-0.51			
802.11ac (40MHz)	5310	Ant0	-0.25	2.68	11	Pass
802.11ac (40MHz)	5310	Ant1	-0.41			
802.11ac (80MHz)	5290	Ant0	-3.24	-0.22	11	Pass
802.11ac (80MHz)	5290	Ant1	-3.23			
802.11a (20MHz)	5260	Ant0	6.10	/	11	Pass
802.11a (20MHz)	5260	Ant1	6.06	/	11	Pass
802.11a (20MHz)	5300	Ant0	5.74	/	11	Pass
802.11a (20MHz)	5300	Ant1	5.70	/	11	Pass
802.11a (20MHz)	5320	Ant0	5.79	/	11	Pass
802.11a (20MHz)	5320	Ant1	5.57	/	11	Pass
802.11ax (20MHz)	5260	Ant0	1.29	4.27	11	Pass
802.11ax (20MHz)	5260	Ant1	1.22			
802.11ax (20MHz)	5300	Ant0	1.72	4.23	11	Pass



802.11ax (20MHz)	5300	Ant1	0.65			
802.11ax (20MHz)	5320	Ant0	1.81	4.86	11	Pass
802.11ax (20MHz)	5320	Ant1	1.88			
802.11ax (40MHz)	5270	Ant0	-1.12	1.83	11	Pass
802.11ax (40MHz)	5270	Ant1	-1.24			
802.11ax (40MHz)	5310	Ant0	-0.10	2.89	11	Pass
802.11ax (40MHz)	5310	Ant1	-0.14			
802.11ax (80MHz)	5290	Ant0	-3.29	-0.39	11	Pass
802.11ax (80MHz)	5290	Ant1	-3.51			

Note:

1) PSD has added duty cycle factor.

2) Ant0 and Ant1 is 2*2MIMO.

3) Total PSD = $10 \cdot \log \{10^{(\text{Ant0 PSD}/10)} + 10^{(\text{Ant1 PSD}/10)}\}$.



U-NII-2c AVGSA PSD						
Mode	Test Frequency (MHz)	Ant	PSD (dBm/MHz)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
802.11n (20MHz)	5500	Ant0	2.01	5.02	11	Pass
802.11n (20MHz)	5500	Ant1	2.01			
802.11n (20MHz)	5600	Ant0	1.65	4.65	11	Pass
802.11n (20MHz)	5600	Ant1	1.62			
802.11n (20MHz)	5700	Ant0	1.47	4.48	11	Pass
802.11n (20MHz)	5700	Ant1	1.47			
802.11n (40MHz)	5510	Ant0	-1.35	1.65	11	Pass
802.11n (40MHz)	5510	Ant1	-1.38			
802.11n (40MHz)	5590	Ant0	-0.36	2.55	11	Pass
802.11n (40MHz)	5590	Ant1	-0.56			
802.11n (40MHz)	5670	Ant0	-0.89	2.10	11	Pass
802.11n (40MHz)	5670	Ant1	-0.94			
802.11ac (20MHz)	5500	Ant0	2.00	5.00	11	Pass
802.11ac (20MHz)	5500	Ant1	1.98			
802.11ac (20MHz)	5600	Ant0	1.76	4.72	11	Pass
802.11ac (20MHz)	5600	Ant1	1.66			
802.11ac (20MHz)	5700	Ant0	1.32	4.33	11	Pass
802.11ac (20MHz)	5700	Ant1	1.32			
802.11ac (40MHz)	5510	Ant0	-0.79	2.19	11	Pass
802.11ac (40MHz)	5510	Ant1	-0.86			
802.11ac (40MHz)	5590	Ant0	-0.69	2.26	11	Pass
802.11ac (40MHz)	5590	Ant1	-0.82			
802.11ac (40MHz)	5670	Ant0	-1.00	1.98	11	Pass
802.11ac (40MHz)	5670	Ant1	-1.06			
802.11ac (80MHz)	5530	Ant0	-3.13	-0.16	11	Pass
802.11ac (80MHz)	5530	Ant1	-3.21			
802.11ac (80MHz)	5610	Ant0	-2.68	0.28	11	Pass
802.11ac (80MHz)	5610	Ant1	-2.79			
802.11a (20MHz)	5500	Ant0	6.14	/	11	Pass
802.11a (20MHz)	5500	Ant1	6.12	/	11	Pass
802.11a (20MHz)	5600	Ant0	6.26	/	11	Pass



802.11a (20MHz)	5600	Ant1	6.16	/	11	Pass
802.11a (20MHz)	5700	Ant0	6.32	/	11	Pass
802.11a (20MHz)	5700	Ant1	6.18	/	11	Pass
802.11ax (20MHz)	5500	Ant0	1.61	4.59	11	Pass
802.11ax (20MHz)	5500	Ant1	1.54			
802.11ax (20MHz)	5600	Ant0	1.74	4.74	11	Pass
802.11ax (20MHz)	5600	Ant1	1.72			
802.11ax (20MHz)	5700	Ant0	1.04	1.81	11	Pass
802.11ax (20MHz)	5700	Ant1	-6.08			
802.11ax (40MHz)	5510	Ant0	0.23	3.19	11	Pass
802.11ax (40MHz)	5510	Ant1	0.13			
802.11ax (40MHz)	5590	Ant0	-0.81	2.19	11	Pass
802.11ax (40MHz)	5590	Ant1	-0.83			
802.11ax (40MHz)	5670	Ant0	-1.59	1.36	11	Pass
802.11ax (40MHz)	5670	Ant1	-1.71			
802.11ax (80MHz)	5530	Ant0	-3.97	-0.97	11	Pass
802.11ax (80MHz)	5530	Ant1	-4.00			
802.11ax (80MHz)	5610	Ant0	-4.50	-1.55	11	Pass
802.11ax (80MHz)	5610	Ant1	-4.63			

Note:

1) PSD has added duty cycle factor.

2) Ant0 and Ant1 is 2*2MIMO.

3) Total PSD = $10 \cdot \log \{10^{(\text{Ant0 PSD}/10)} + 10^{(\text{Ant1 PSD}/10)}\}$.



U-NII-3 AVGSA PSD

Mode	Test Frequency (MHz)	Ant	PSD (dBm/500kHz)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
802.11n (20MHz)	5745	Ant0	-1.52	1.45	30	Pass
802.11n (20MHz)	5745	Ant1	-1.60			
802.11n (20MHz)	5785	Ant0	-0.88	2.08	30	Pass
802.11n (20MHz)	5785	Ant1	-0.99			
802.11n (20MHz)	5825	Ant0	-1.25	1.73	30	Pass
802.11n (20MHz)	5825	Ant1	-1.32			
802.11n (40MHz)	5755	Ant0	-4.04	-1.08	30	Pass
802.11n (40MHz)	5755	Ant1	-4.14			
802.11n (40MHz)	5795	Ant0	-3.54	-0.59	30	Pass
802.11n (40MHz)	5795	Ant1	-3.67			
802.11ac (20MHz)	5745	Ant0	-0.83	2.17	30	Pass
802.11ac (20MHz)	5745	Ant1	-0.86			
802.11ac (20MHz)	5785	Ant0	-1.15	1.84	30	Pass
802.11ac (20MHz)	5785	Ant1	-1.20			
802.11ac (20MHz)	5825	Ant0	-1.27	1.67	30	Pass
802.11ac (20MHz)	5825	Ant1	-1.41			
802.11ac (40MHz)	5755	Ant0	-4.05	-0.99	30	Pass
802.11ac (40MHz)	5755	Ant1	-3.96			
802.11ac (40MHz)	5795	Ant0	-2.99	-0.07	30	Pass
802.11ac (40MHz)	5795	Ant1	-3.18			
802.11ac (80MHz)	5775	Ant0	-6.09	-3.15	30	Pass
802.11ac (80MHz)	5775	Ant1	-6.23			
802.11a (20MHz)	5745	Ant0	3.09	/	30	Pass
802.11a (20MHz)	5745	Ant1	3.15	/	30	Pass
802.11a (20MHz)	5785	Ant0	3.06	/	30	Pass
802.11a (20MHz)	5785	Ant1	3.05	/	30	Pass
802.11a (20MHz)	5825	Ant0	2.87	/	30	Pass
802.11a (20MHz)	5825	Ant1	2.78	/	30	Pass
802.11ax (20MHz)	5745	Ant0	-1.72	1.26	30	Pass
802.11ax (20MHz)	5745	Ant1	-1.78			
802.11ax (20MHz)	5785	Ant0	-1.10	1.90	30	Pass



802.11ax (20MHz)	5785	Ant1	-1.12			
802.11ax (20MHz)	5825	Ant0	-1.25	1.66	30	Pass
802.11ax (20MHz)	5825	Ant1	-1.45			
802.11ax (40MHz)	5755	Ant0	-3.72	-0.76	30	Pass
802.11ax (40MHz)	5755	Ant1	-3.82			
802.11ax (40MHz)	5795	Ant0	-3.44	-0.46	30	Pass
802.11ax (40MHz)	5795	Ant1	-3.50			
802.11ax (80MHz)	5775	Ant0	-6.40	-3.45	30	Pass
802.11ax (80MHz)	5775	Ant1	-6.52			

Note:

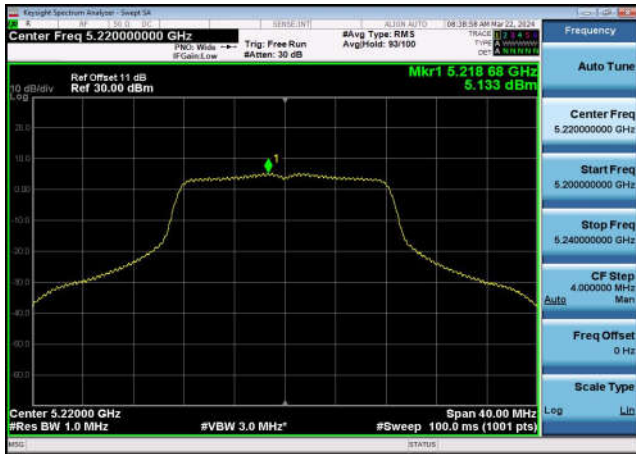
1) PSD has added duty cycle factor.

2) Ant0 and Ant1 is 2*2MIMO.

3) Total PSD = $10 \cdot \log \{10^{(\text{Ant0 PSD}/10)} + 10^{(\text{Ant1 PSD}/10)}\}$.

Test Plots

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



U-NII-2a Power spectral density-802.1
1a(20MHz),5300MHz,Ant0



U-NII-2c Power spectral density-802.1
1a(20MHz),5600MHz,Ant0



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



Note: Only 802.11a mode mid channel plot is reported to show setting parameter complies with testing method and procedure.



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

U-NII-1 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5180	18.196	28.19	Pass
802.11n (20MHz)	5220	18.149	27.30	Pass
802.11n (20MHz)	5240	17.651	20.44	Pass
802.11n (40MHz)	5190	35.784	39.92	Pass
802.11n (40MHz)	5230	35.748	40.02	Pass
802.11ac (20MHz)	5180	18.283	26.60	Pass
802.11ac (20MHz)	5220	18.125	27.71	Pass
802.11ac (20MHz)	5240	17.662	20.26	Pass
802.11ac (40MHz)	5190	35.812	39.98	Pass
802.11ac (40MHz)	5230	35.739	39.72	Pass
802.11ac (80MHz)	5290	75.038	79.63	Pass
802.11a (20MHz)	5180	17.147	25.64	Pass
802.11a (20MHz)	5220	17.050	26.18	Pass
802.11a (20MHz)	5240	16.620	19.70	Pass
802.11ax (20MHz)	5180	18.916	21.57	Pass
802.11ax (20MHz)	5220	19.011	25.35	Pass
802.11ax (20MHz)	5190	18.827	19.86	Pass
802.11ax (40MHz)	5230	37.427	39.35	Pass
802.11ax (40MHz)	5310	37.452	39.34	Pass
802.11ax (80MHz)	5210	76.502	80.17	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.



U-NII-2a 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5260	18.170	26.37	Pass
802.11n (20MHz)	5300	18.204	25.74	Pass
802.11n (20MHz)	5320	18.194	26.61	Pass
802.11n (40MHz)	5270	35.895	40.00	Pass
802.11n (40MHz)	5310	35.838	39.92	Pass
802.11ac (20MHz)	5260	18.202	26.60	Pass
802.11ac (20MHz)	5300	18.181	27.32	Pass
802.11ac (20MHz)	5320	18.130	24.86	Pass
802.11ac (40MHz)	5270	35.786	39.89	Pass
802.11ac (40MHz)	5310	35.815	39.79	Pass
802.11ac (80MHz)	5290	75.252	79.79	Pass
802.11a (20MHz)	5260	17.077	24.74	Pass
802.11a (20MHz)	5300	17.003	24.98	Pass
802.11a (20MHz)	5320	17.017	26.72	Pass
802.11ax (20MHz)	5260	18.950	21.63	Pass
802.11ax (20MHz)	5300	18.989	22.95	Pass
802.11ax (20MHz)	5320	19.048	21.69	Pass
802.11ax (40MHz)	5270	37.489	39.36	Pass
802.11ax (40MHz)	5310	37.339	39.31	Pass
802.11ax (80MHz)	5290	76.638	80.29	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.



U-NII-2c 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5500	18.248	27.67	Pass
802.11n (20MHz)	5600	18.243	25.52	Pass
802.11n (20MHz)	5700	18.253	25.47	Pass
802.11n (40MHz)	5510	37.573	39.18	Pass
802.11n (40MHz)	5590	37.528	39.25	Pass
802.11n (40MHz)	5670	37.466	39.53	Pass
802.11ac (20MHz)	5500	18.235	25.54	Pass
802.11ac (20MHz)	5600	18.107	25.92	Pass
802.11ac (20MHz)	5700	18.208	28.63	Pass
802.11ac (40MHz)	5510	35.776	39.60	Pass
802.11ac (40MHz)	5590	35.839	39.65	Pass
802.11ac (40MHz)	5670	35.867	39.91	Pass
802.11ac (80MHz)	5530	75.112	79.38	Pass
802.11ac (80MHz)	5610	75.183	79.74	Pass
802.11a (20MHz)	5500	17.196	25.64	Pass
802.11a (20MHz)	5600	17.276	25.42	Pass
802.11a (20MHz)	5700	17.133	26.01	Pass
802.11ax (20MHz)	5500	19.040	23.30	Pass
802.11ax (20MHz)	5600	19.071	24.38	Pass
802.11ax (20MHz)	5700	19.019	23.28	Pass
802.11ax (40MHz)	5510	37.523	39.43	Pass
802.11ax (40MHz)	5590	37.477	39.43	Pass
802.11ax (40MHz)	5670	37.356	39.35	Pass
802.11ax (80MHz)	5530	76.569	80.18	Pass
802.11ax (80MHz)	5610	76.576	80.22	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.



U-NII-3 99% OBW & 26dB EBW				
Mode	Test Frequency (MHz)	99% OBW (MHz)	26dB EBW (MHz)	Result
802.11n (20MHz)	5745	17.58	25.89	Pass
802.11n (20MHz)	5785	17.61	26.53	Pass
802.11n (20MHz)	5825	16.38	26.18	Pass
802.11n (40MHz)	5755	32.64	40.15	Pass
802.11n (40MHz)	5795	32.55	39.91	Pass
802.11ac (20MHz)	5745	15.80	26.17	Pass
802.11ac (20MHz)	5785	16.69	26.54	Pass
802.11ac (20MHz)	5825	16.93	26.61	Pass
802.11ac (40MHz)	5755	33.79	39.39	Pass
802.11ac (40MHz)	5795	32.61	39.73	Pass
802.11ac (80MHz)	5775	74.00	79.67	Pass
802.11a (20MHz)	5745	15.65	26.02	Pass
802.11a (20MHz)	5785	16.09	25.96	Pass
802.11a (20MHz)	5825	16.36	24.75	Pass
802.11ax (20MHz)	5745	17.32	21.82	Pass
802.11ax (20MHz)	5785	18.32	24.16	Pass
802.11ax (20MHz)	5825	17.53	21.93	Pass
802.11ax (40MHz)	5755	35.14	39.22	Pass
802.11ax (40MHz)	5795	35.13	39.38	Pass
802.11ax (80MHz)	5775	72.80	80.16	Pass

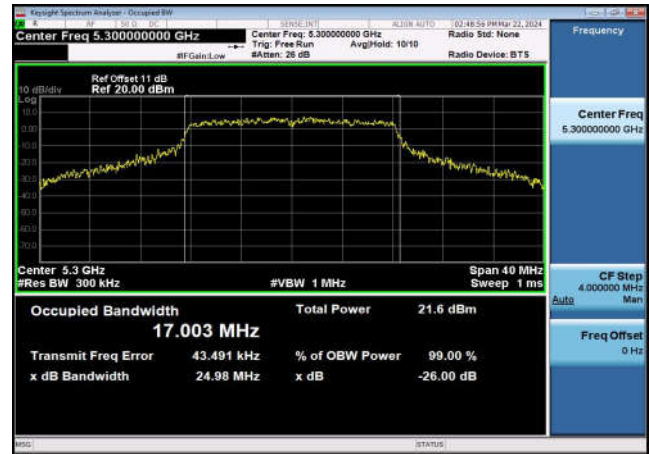
Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.

Test Plots

U-NII-1 99%&26dB Bandwidth-802.11a(20MHz)
,5220MHz,Ant0



U-NII-2a 99%&26dB Bandwidth-802.11a(20MHz)
,5300MHz,Ant0



U-NII-2c 99%&26dB Bandwidth-802.11a(20MHz)
,5600MHz,Ant0



U-NII-3 99%&26dB Bandwidth-802.11a(20MHz)
,5785MHz,Ant0



Note: Only 802.11a mode mid channel plot is reported to show setting parameter complies with testing method and procedure.

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

U-NII-3 Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	6dB Bandwidth (MHz)	Limit (kHz)	Result
802.11n (20MHz)	5745	17.58	500	Pass
802.11n (20MHz)	5785	17.61	500	Pass
802.11n (20MHz)	5825	16.38	500	Pass
802.11n (40MHz)	5755	32.64	500	Pass
802.11n (40MHz)	5795	32.55	500	Pass
802.11ac (20MHz)	5745	15.80	500	Pass
802.11ac (20MHz)	5785	16.69	500	Pass
802.11ac (20MHz)	5825	16.93	500	Pass
802.11ac (40MHz)	5755	33.79	500	Pass
802.11ac (40MHz)	5795	32.61	500	Pass
802.11ac (80MHz)	5775	74.00	500	Pass
802.11a (20MHz)	5745	15.65	500	Pass
802.11a (20MHz)	5785	16.09	500	Pass
802.11a (20MHz)	5825	16.36	500	Pass
802.11ax (20MHz)	5745	17.32	500	Pass
802.11ax (20MHz)	5785	18.32	500	Pass
802.11ax (20MHz)	5825	17.53	500	Pass
802.11ax (40MHz)	5755	35.14	500	Pass
802.11ax (40MHz)	5795	35.13	500	Pass
802.11ax (80MHz)	5775	72.80	500	Pass

Test Plots

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



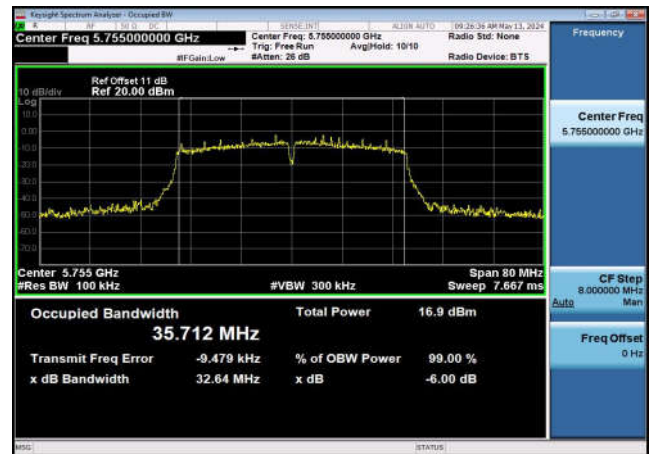
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5785MHz,Ant0



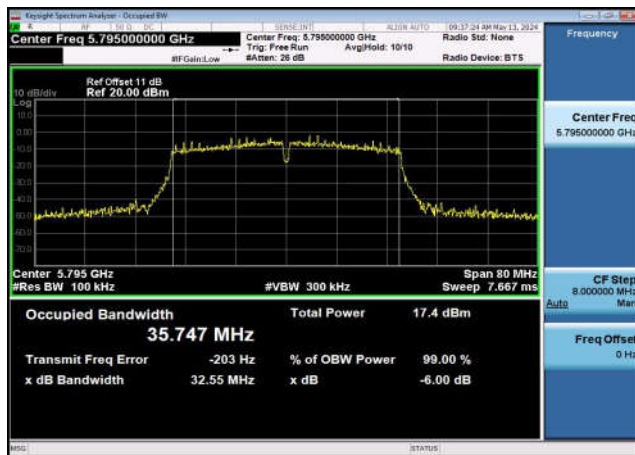
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5825MHz,Ant0



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



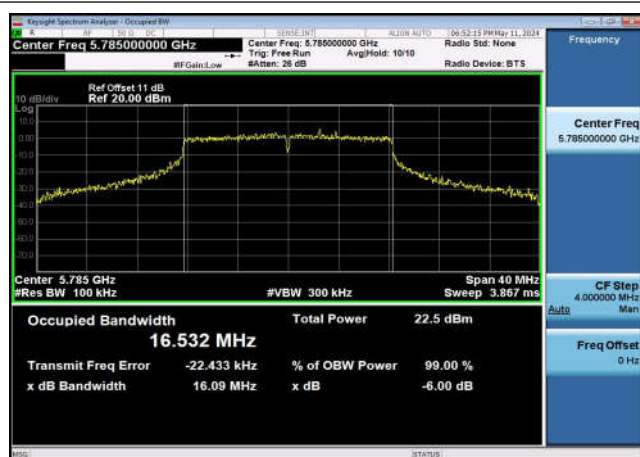
U-NII-3 6dB Bandwidth-802.11n(40MHz)
,5795MHz,Ant0



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)
,5745MHz,Ant0



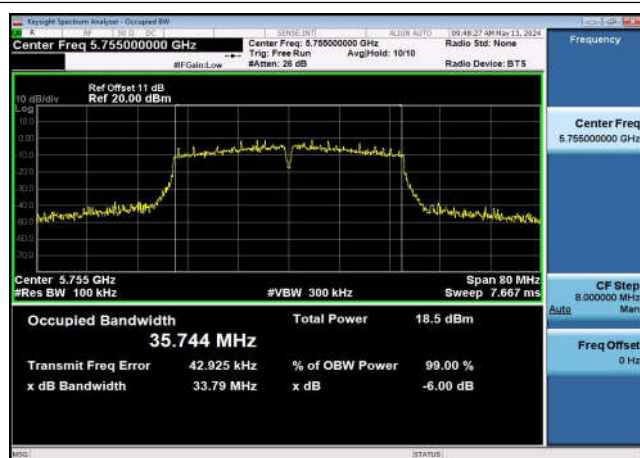
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5785MHz,Ant0



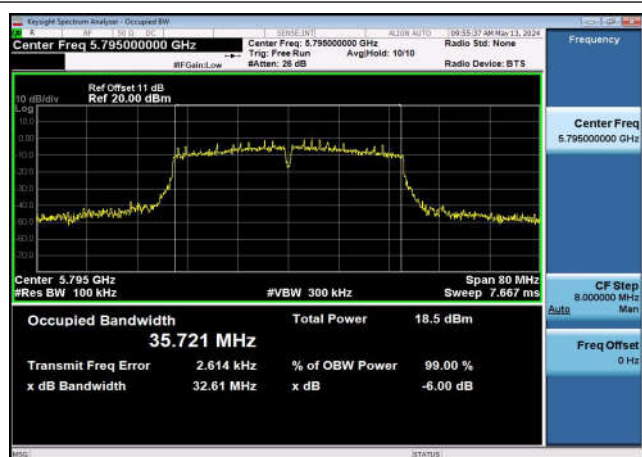
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,5825MHz,Ant0



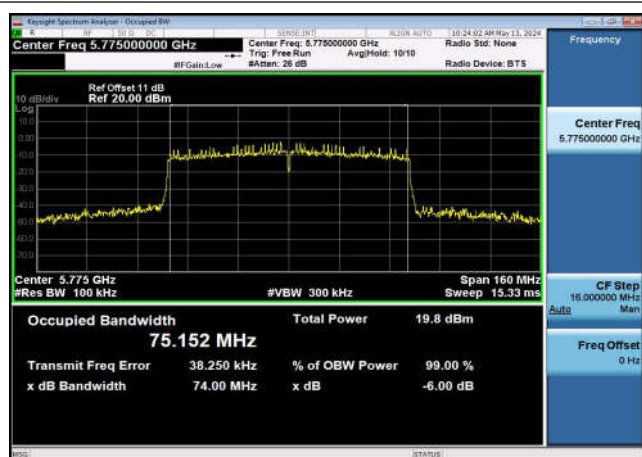
U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5755MHz,Ant0



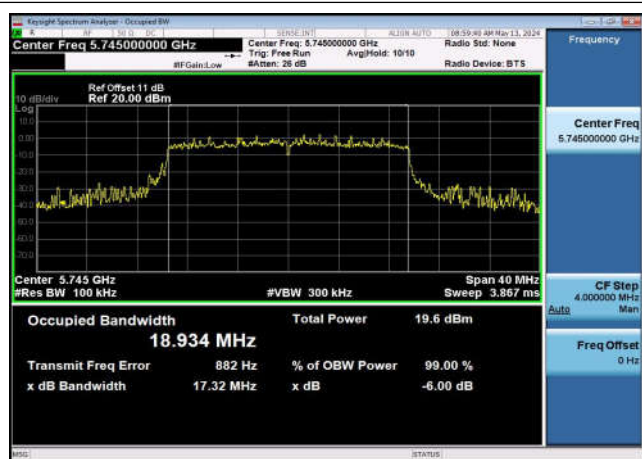
U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5795MHz,Ant0



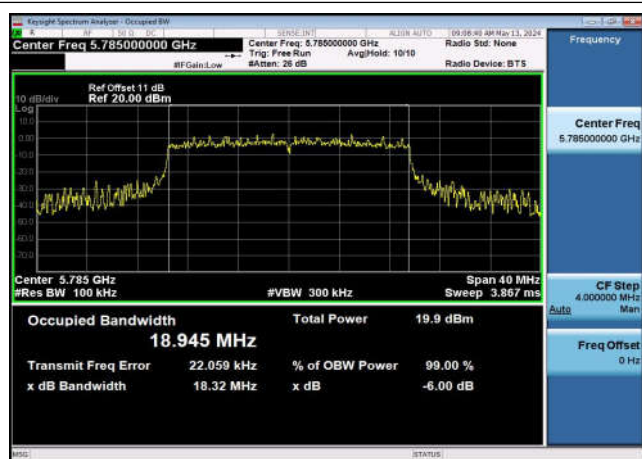
U-NII-3 6dB Bandwidth-802.11ac(80MHz)
,5775MHz,Ant0



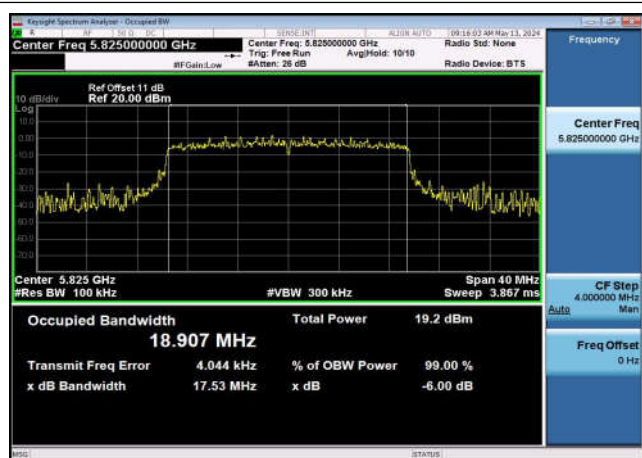
U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5745MHz,Ant0



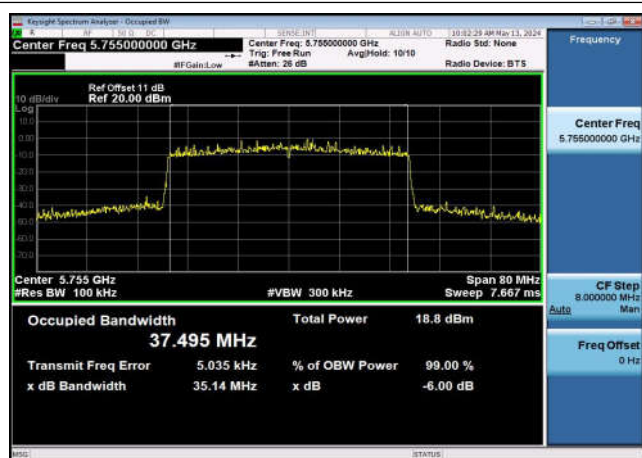
U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5785MHz,Ant0

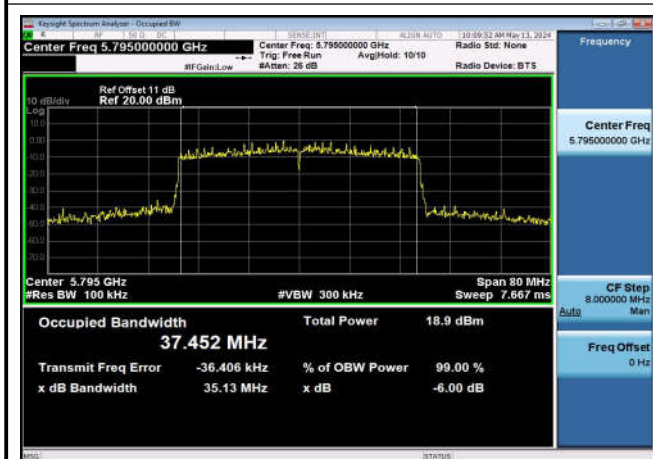
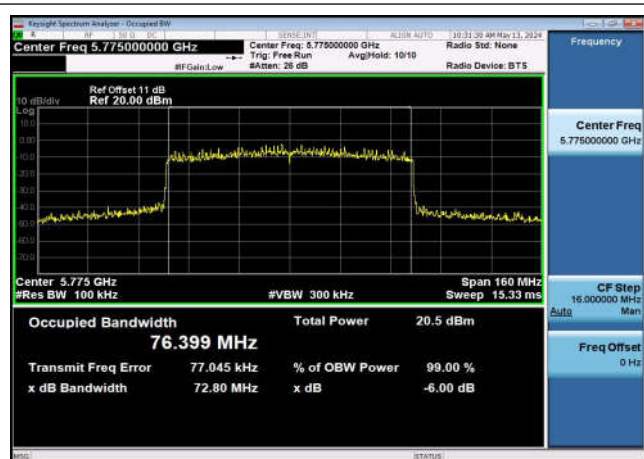


U-NII-3 6dB Bandwidth-802.11ax(20MHz)
,5825MHz,Ant0



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



U-NII-3 6dB Bandwidth-802.11ax(40MHz)
,5795MHz,Ant0U-NII-3 6dB Bandwidth-802.11ax(80MHz)
,5775MHz,Ant0

Frequency Stability Test Result and Data

U-NII-1 Centre Frequency						
Mode	Test Frequency (MHz)	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5180	5171.123	5188.882	5180.003	0.48	Pass
802.11n (20MHz)	5220	5211.118	5228.88	5219.999	-0.19	Pass
802.11n (20MHz)	5240	5231.179	5248.838	5240.009	1.62	Pass
802.11n (40MHz)	5190	5171.746	5208.212	5189.979	-4.05	Pass
802.11n (40MHz)	5230	5211.802	5248.208	5230.005	0.96	Pass
802.11ac (20MHz)	5180	5171.108	5188.898	5180.003	0.58	Pass
802.11ac (20MHz)	5220	5211.102	5228.885	5219.994	-1.25	Pass
802.11ac (20MHz)	5240	5231.156	5248.851	5240.004	0.67	Pass
802.11ac (40MHz)	5190	5171.872	5208.062	5189.967	-6.36	Pass
802.11ac (40MHz)	5230	5211.824	5248.216	5230.02	3.82	Pass
802.11ac (80MHz)	5210	5171.792	5248.196	5209.994	-1.15	Pass
802.11a (20MHz)	5180	5171.733	5188.249	5179.991	-1.74	Pass
802.11a (20MHz)	5220	5211.763	5228.253	5220.008	1.53	Pass
802.11a (20MHz)	5240	5231.732	5248.254	5239.993	-1.34	Pass
802.11ax (20MHz)	5180	5170.436	5189.561	5179.999	-0.29	Pass
802.11ax (20MHz)	5220	5210.439	5229.566	5220.003	0.48	Pass
802.11ax (20MHz)	5240	5230.437	5249.567	5240.002	0.38	Pass
802.11ax (40MHz)	5190	5170.918	5209.092	5190.005	0.96	Pass
802.11ax (40MHz)	5230	5210.908	5249.084	5229.996	-0.76	Pass
802.11ax (80MHz)	5210	5170.912	5249.084	5209.998	-0.38	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.



U-NII-2a Centre Frequency						
Mode	Test Frequency (MHz)	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5260	5251.105	5268.865	5259.985	-2.850	Pass
802.11n (20MHz)	5300	5291.099	5308.860	5299.980	-3.870	Pass
802.11n (20MHz)	5320	5311.096	5328.863	5319.980	-3.850	Pass
802.11n (40MHz)	5270	5251.826	5288.194	5270.010	1.900	Pass
802.11n (40MHz)	5310	5291.820	5328.178	5309.999	-0.190	Pass
802.11ac (20MHz)	5260	5251.107	5268.867	5259.987	-2.470	Pass
802.11ac (20MHz)	5300	5291.094	5308.864	5299.979	-3.960	Pass
802.11ac (20MHz)	5320	5311.079	5328.867	5319.973	-5.080	Pass
802.11ac (40MHz)	5270	5251.806	5288.150	5269.978	-4.170	Pass
802.11ac (40MHz)	5310	5291.818	5328.172	5309.995	-0.940	Pass
802.11ac (80MHz)	5290	5251.856	5328.172	5290.014	2.650	Pass
802.11a (20MHz)	5260	5251.704	5268.245	5259.975	-4.850	Pass
802.11a (20MHz)	5300	5291.718	5308.248	5299.983	-3.210	Pass
802.11a (20MHz)	5320	5311.725	5328.243	5319.984	-3.010	Pass
802.11ax (20MHz)	5260	5250.436	5269.568	5260.002	0.380	Pass
802.11ax (20MHz)	5300	5290.430	5309.566	5299.998	-0.380	Pass
802.11ax (20MHz)	5320	5310.425	5329.564	5319.995	-1.030	Pass
802.11ax (40MHz)	5270	5250.904	5289.080	5269.992	-1.520	Pass
802.11ax (40MHz)	5310	5290.906	5329.076	5309.991	-1.690	Pass
802.11ax (80MHz)	5290	5250.904	5329.076	5289.990	-1.890	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.

U-NII-2c Centre Frequency						
Mode	Test Frequency (MHz)	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5500	5491.143	5508.845	5499.994	-1.090	Pass
802.11n (20MHz)	5600	5591.083	5608.895	5599.989	-1.960	Pass
802.11n (20MHz)	5700	5691.102	5708.882	5699.992	-1.400	Pass
802.11n (40MHz)	5510	5490.904	5529.074	5509.989	-2.000	Pass
802.11n (40MHz)	5590	5570.902	5609.076	5589.989	-1.970	Pass
802.11n (40MHz)	5670	5650.966	5689.076	5670.021	3.700	Pass
802.11ac (20MHz)	5500	5491.093	5508.879	5499.986	-2.550	Pass
802.11ac (20MHz)	5600	5591.117	5608.866	5599.992	-1.520	Pass
802.11ac (20MHz)	5700	5691.098	5708.861	5699.980	-3.600	Pass
802.11ac (40MHz)	5510	5491.786	5528.198	5509.992	-1.450	Pass
802.11ac (40MHz)	5590	5571.784	5608.190	5589.987	-2.330	Pass
802.11ac (40MHz)	5670	5651.794	5688.178	5669.986	-2.470	Pass
802.11ac (80MHz)	5530	5491.796	5568.176	5529.986	-2.530	Pass
802.11ac (80MHz)	5610	5571.788	5648.208	5609.998	-0.360	Pass
802.11a (20MHz)	5500	5491.728	5508.235	5499.982	-3.360	Pass
802.11a (20MHz)	5600	5591.711	5608.265	5599.988	-2.140	Pass
802.11a (20MHz)	5700	5691.719	5708.243	5699.981	-3.330	Pass
802.11ax (20MHz)	5500	5490.424	5509.549	5499.987	-2.450	Pass
802.11ax (20MHz)	5600	5590.423	5609.552	5599.988	-2.230	Pass
802.11ax (20MHz)	5700	5690.421	5709.547	5699.984	-2.810	Pass
802.11ax (40MHz)	5510	5490.898	5529.074	5509.986	-2.540	Pass
802.11ax (40MHz)	5590	5570.898	5609.078	5589.988	-2.150	Pass
802.11ax (40MHz)	5670	5650.898	5689.074	5669.986	-2.470	Pass
802.11ax (80MHz)	5530	5490.900	5569.072	5529.986	-2.530	Pass
802.11ax (80MHz)	5610	5570.940	5649.076	5610.008	1.430	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.



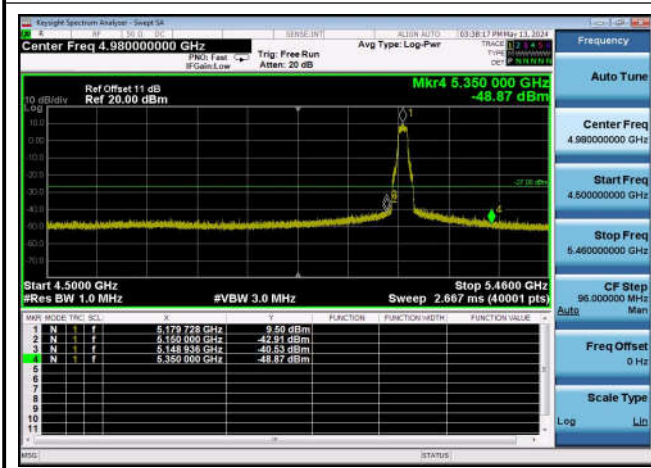
U-NII-3 Centre Frequency						
Mode	Test Frequency (MHz)	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5745	5736.118	5753.841	5744.980	-3.570	Pass
802.11n (20MHz)	5785	5776.101	5793.877	5784.989	-1.900	Pass
802.11n (20MHz)	5825	5816.705	5833.232	5824.969	-5.410	Pass
802.11n (40MHz)	5755	5736.794	5773.178	5754.986	-2.430	Pass
802.11n (40MHz)	5795	5776.820	5813.252	5795.036	6.210	Pass
802.11ac (20MHz)	5745	5736.104	5753.888	5744.996	-0.700	Pass
802.11ac (20MHz)	5785	5776.104	5793.880	5784.992	-1.380	Pass
802.11ac (20MHz)	5825	5816.097	5833.852	5824.975	-4.380	Pass
802.11ac (40MHz)	5755	5736.822	5773.202	5755.012	2.090	Pass
802.11ac (40MHz)	5795	5776.924	5813.146	5795.035	6.040	Pass
802.11ac (80MHz)	5775	5736.808	5813.204	5775.006	1.040	Pass
802.11a (20MHz)	5745	5736.725	5753.240	5744.983	-3.050	Pass
802.11a (20MHz)	5785	5776.698	5793.237	5784.968	-5.620	Pass
802.11a (20MHz)	5825	5816.714	5833.237	5824.976	-4.210	Pass
802.11ax (20MHz)	5745	5735.423	5754.568	5744.996	-0.780	Pass
802.11ax (20MHz)	5785	5775.421	5794.559	5784.990	-1.730	Pass
802.11ax (20MHz)	5825	5815.418	5834.551	5824.985	-2.660	Pass
802.11ax (40MHz)	5755	5735.916	5774.084	5755.000	0.000	Pass
802.11ax (40MHz)	5795	5776.012	5814.072	5795.042	7.250	Pass
802.11ax (80MHz)	5775	5735.996	5814.088	5775.042	7.270	Pass

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.

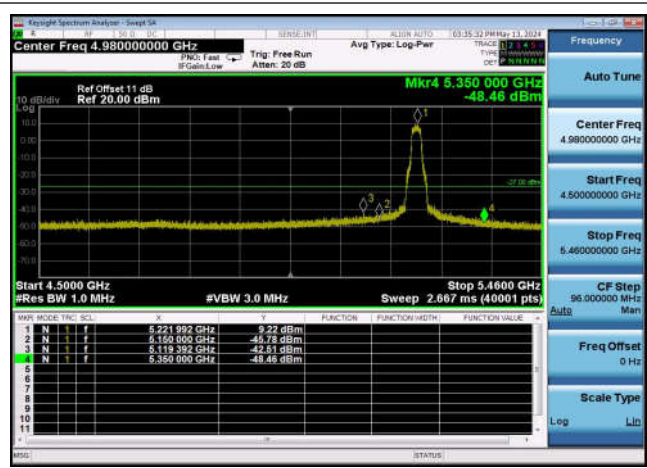
Band Edges Compliance

Note: All of the EUT Configure modes were tested and found Ant0 are the worst case, the worst data recorded in this report.

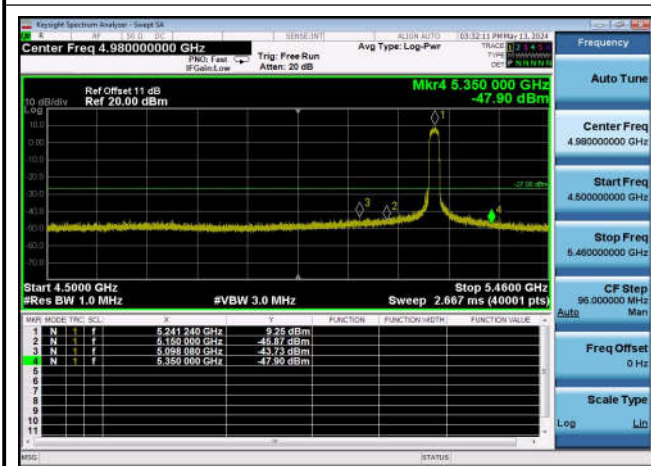
U-NII-1 ,Plot 1,Band Edge-802.11n(20M
Hz),5180MHz,Ant0



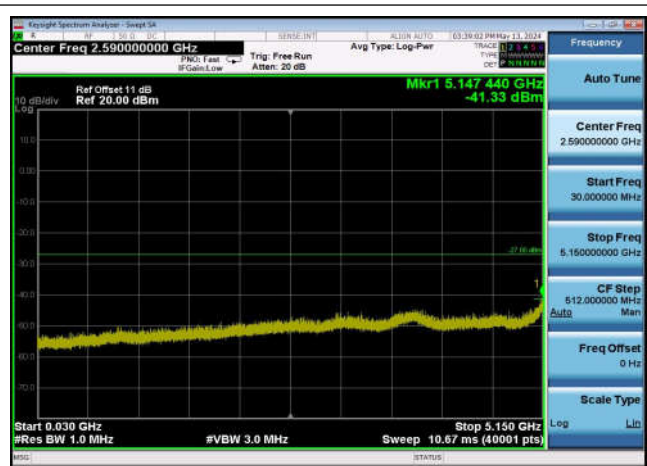
U-NII-1 ,Plot 1,Band Edge-802.11n(20M
Hz),5220MHz,Ant0



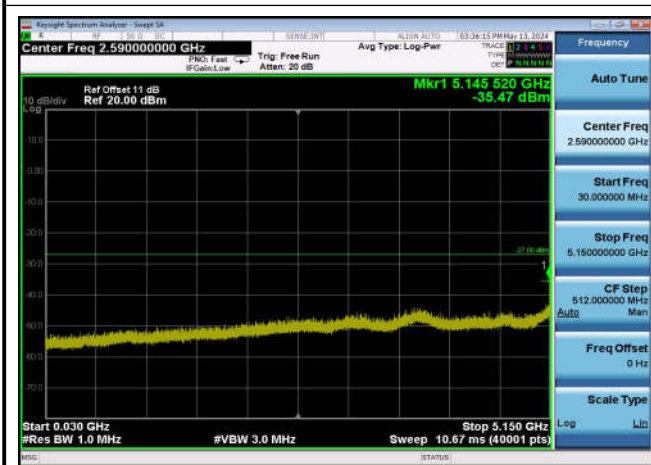
U-NII-1 ,Plot 1,Band Edge-802.11n(20M
Hz),5240MHz,Ant0



U-NII-1 ,Plot 2,30MHz~5150MHz-802.11n
(20MHz),5180MHz,Ant0



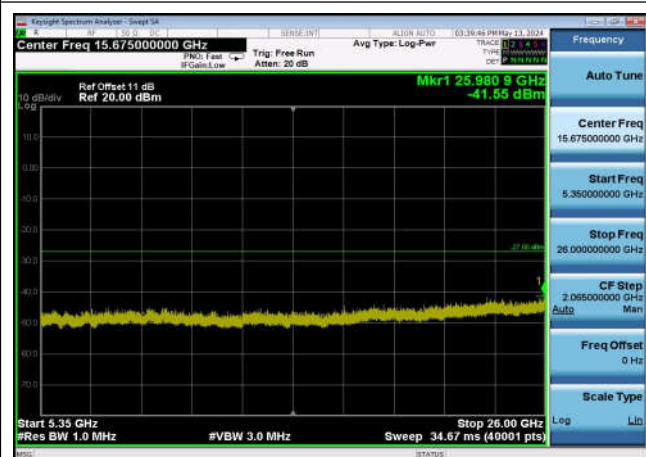
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11n
(20MHz),5220MHz,Ant0



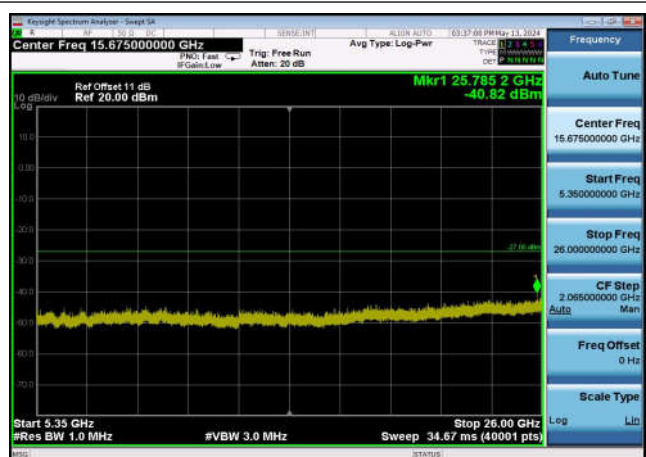
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11n
(20MHz),5240MHz,Ant0



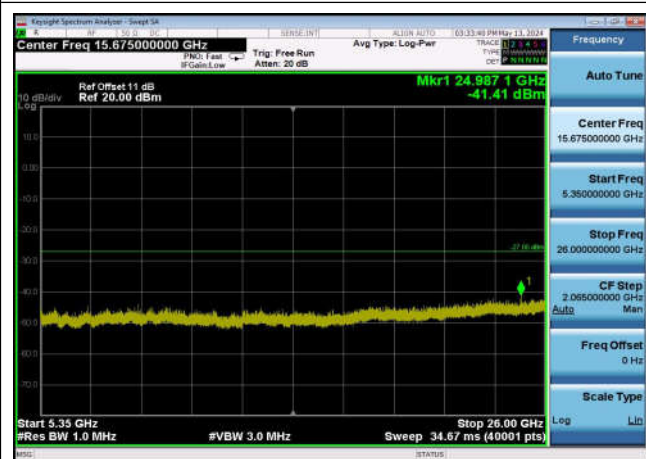
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11n(20MHz),5180MHz,Ant0



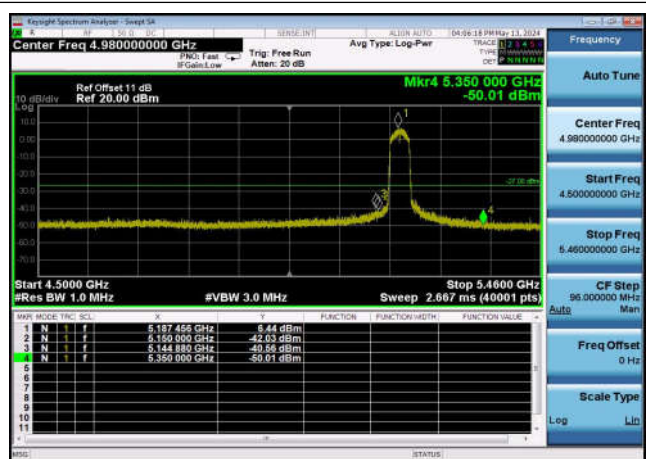
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11n(20MHz),5220MHz,Ant0



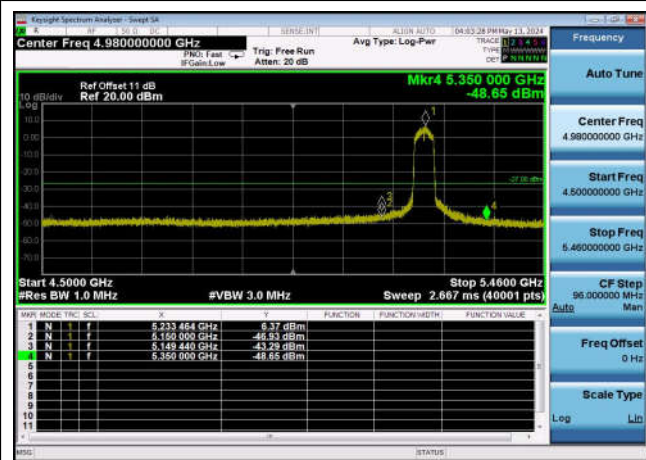
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11n(20MHz),5240MHz,Ant0



U-NII-1 ,Plot 1,Band Edge-802.11n(40M
Hz),5190MHz,Ant0



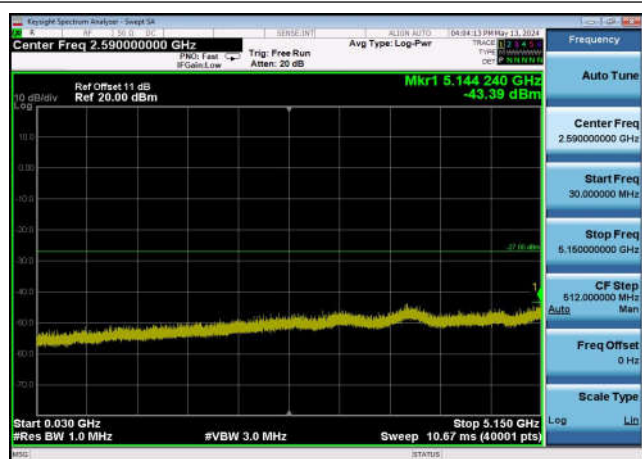
U-NII-1 ,Plot 1,Band Edge-802.11n(40M
Hz),5230MHz,Ant0



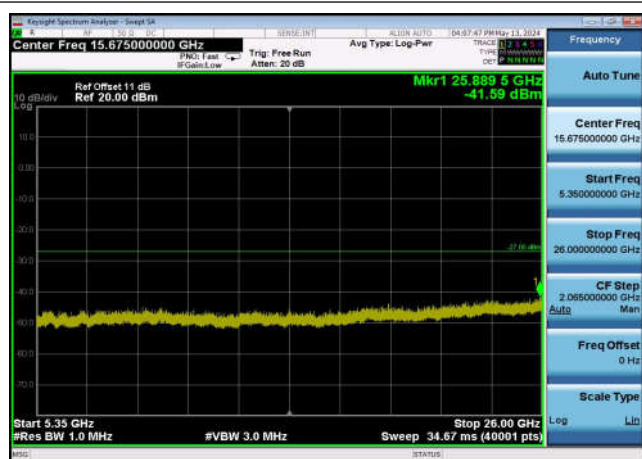
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11n
(40MHz),5190MHz,Ant0



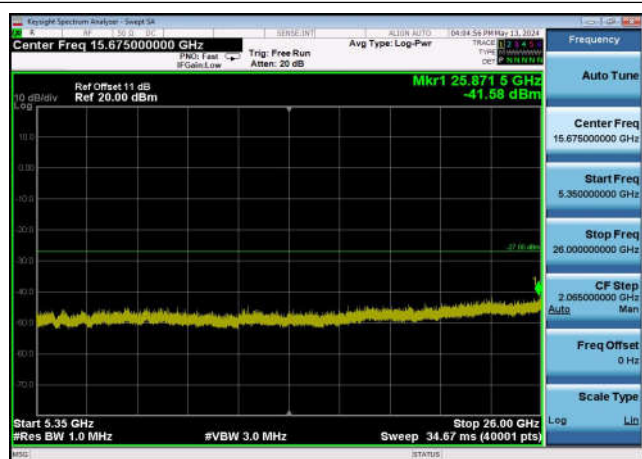
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11n
(40MHz),5230MHz,Ant0



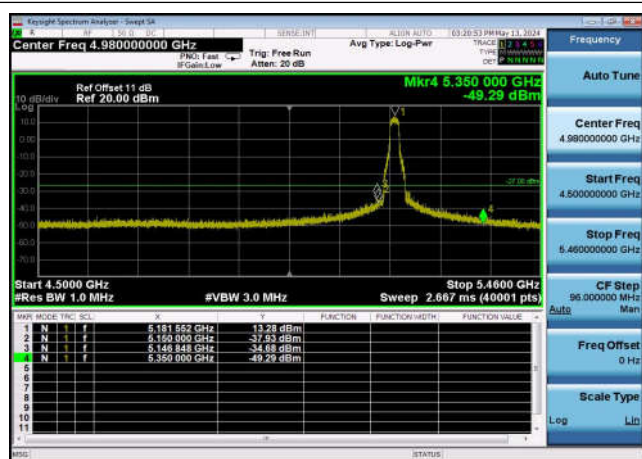
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11n(40MHz),5190MHz,Ant0



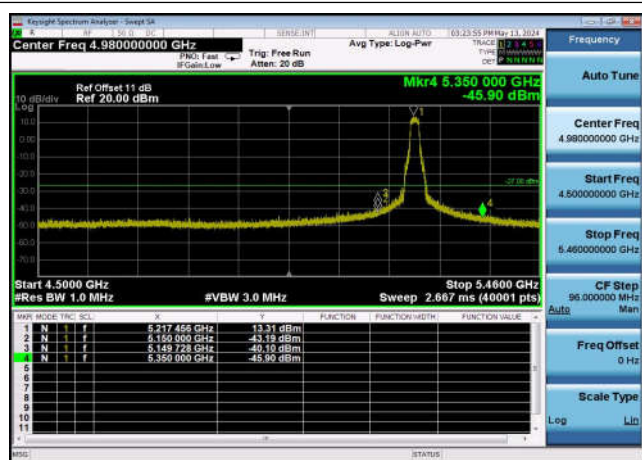
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11n(40MHz),5230MHz,Ant0



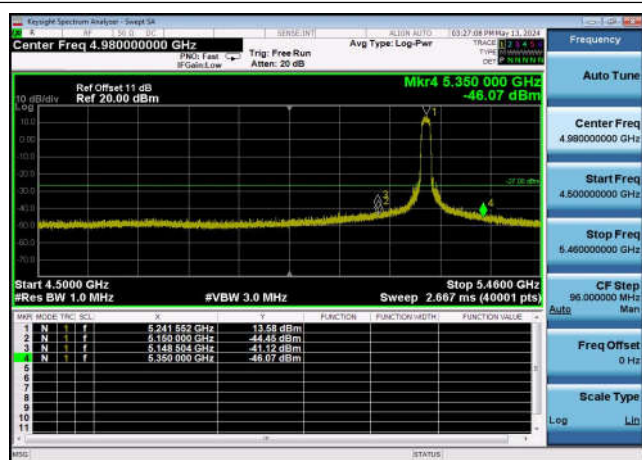
U-NII-1 ,Plot 1,Band Edge-802.11a(20M Hz),5180MHz,Ant0



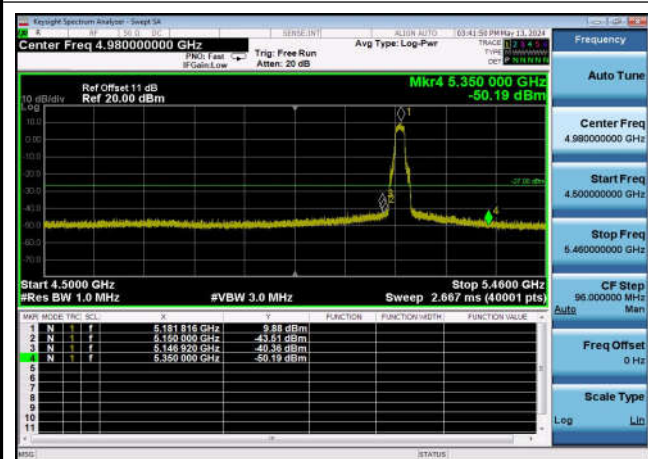
U-NII-1 ,Plot 1,Band Edge-802.11a(20M Hz),5220MHz,Ant0



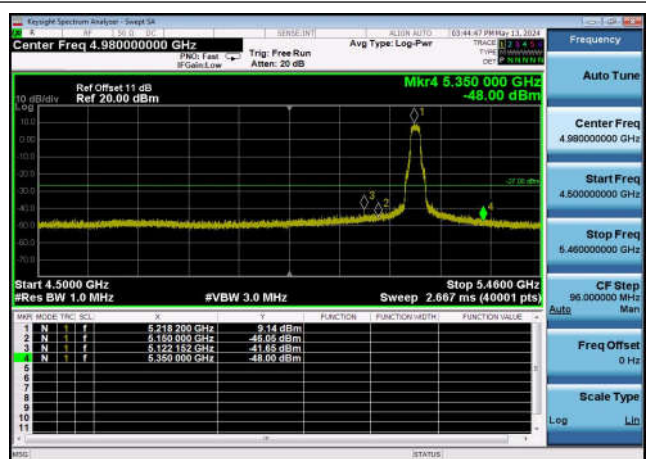
U-NII-1 ,Plot 1,Band Edge-802.11a(20M Hz),5240MHz,Ant0



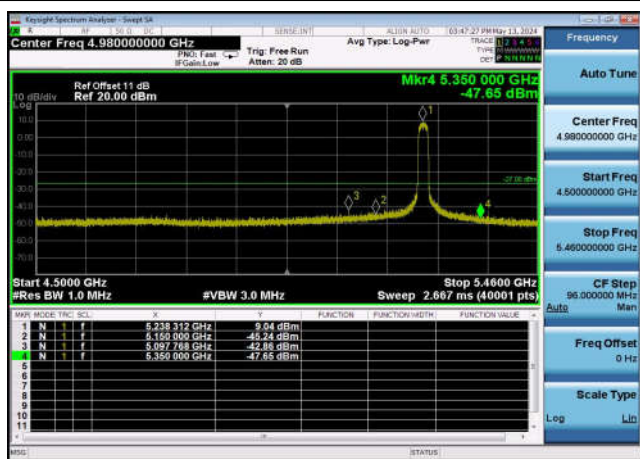
U-NII-1 ,Plot 1,Band Edge-802.11ac(20 MHz),5180MHz,Ant0



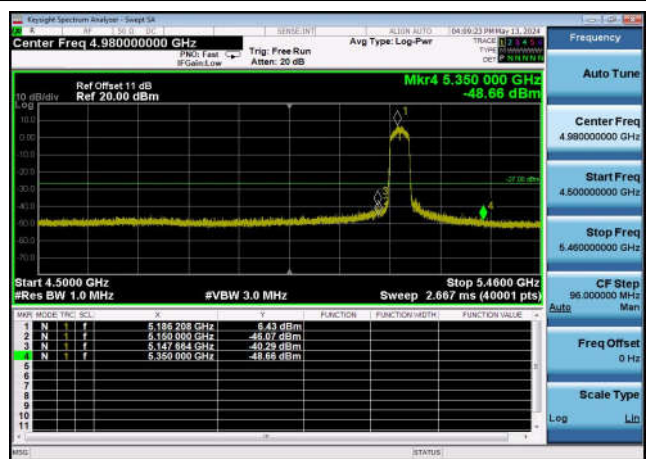
U-NII-1 ,Plot 1,Band Edge-802.11ac(20 MHz),5220MHz,Ant0



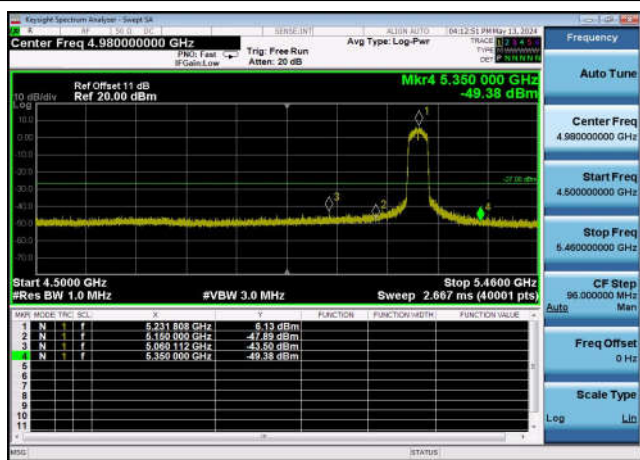
U-NII-1 ,Plot 1,Band Edge-802.11ac(20 MHz),5240MHz,Ant0



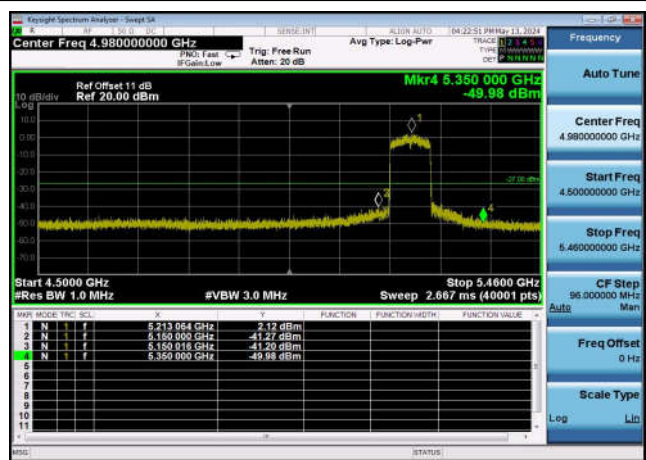
U-NII-1 ,Plot 1,Band Edge-802.11ac(40 MHz),5190MHz,Ant0



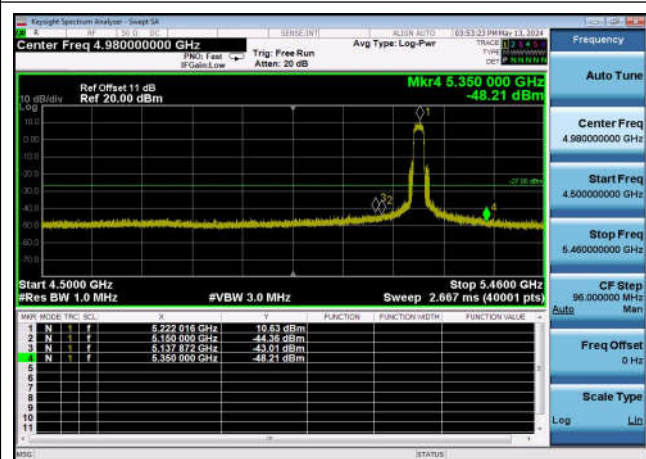
U-NII-1 ,Plot 1,Band Edge-802.11ac(40 MHz),5230MHz,Ant0



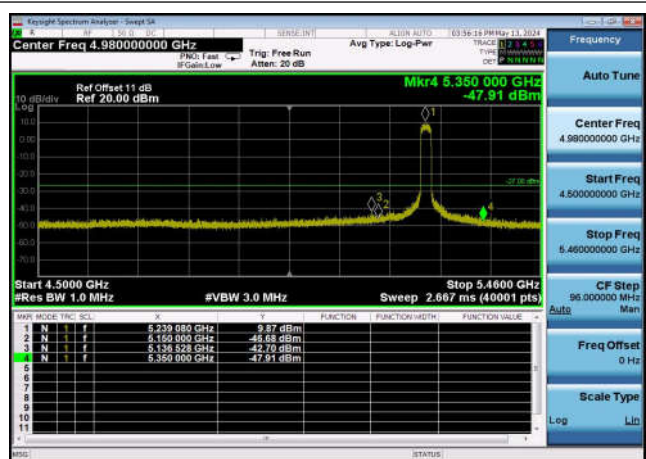
U-NII-1 ,Plot 1,Band Edge-802.11ac(80 MHz),5210MHz,Ant0



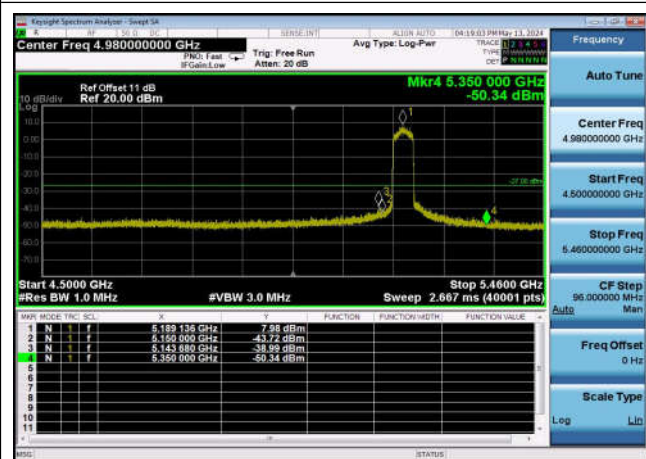
U-NII-1 ,Plot 1,Band Edge-802.11ax(20 MHz),5220MHz,Ant0



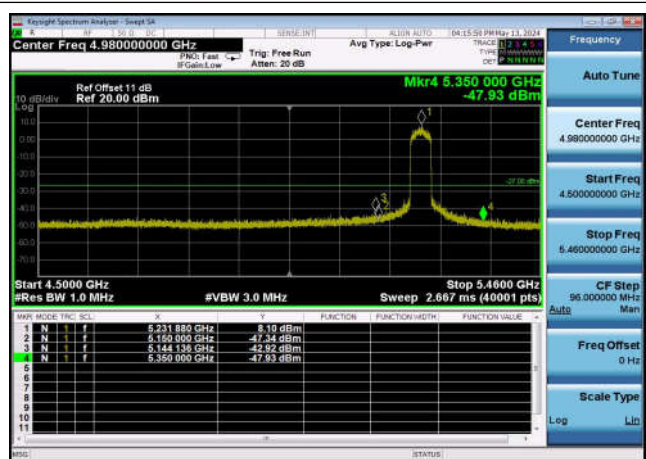
U-NII-1 ,Plot 1,Band Edge-802.11ax(20 MHz),5240MHz,Ant0



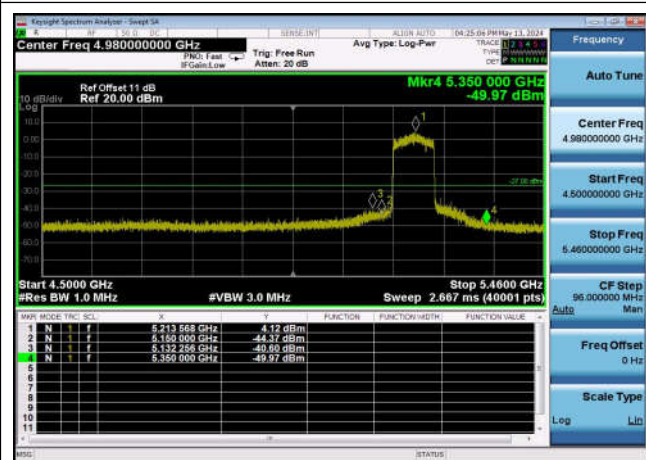
U-NII-1 ,Plot 1,Band Edge-802.11ax(40 MHz),5190MHz,Ant0



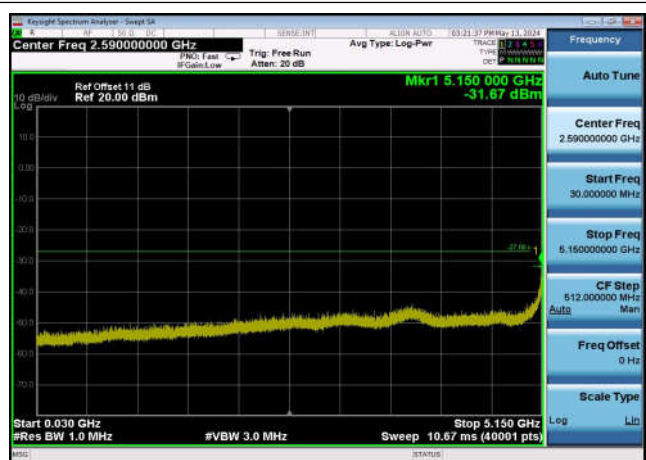
U-NII-1 ,Plot 1,Band Edge-802.11ax(40 MHz),5230MHz,Ant0



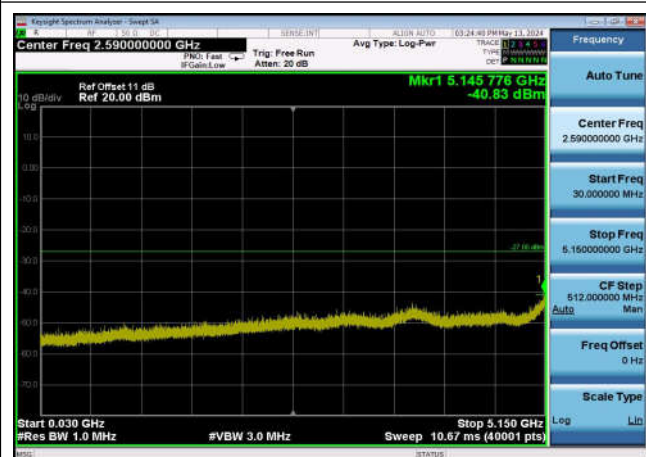
U-NII-1 ,Plot 1,Band Edge-802.11ax(80 MHz),5210MHz,Ant0



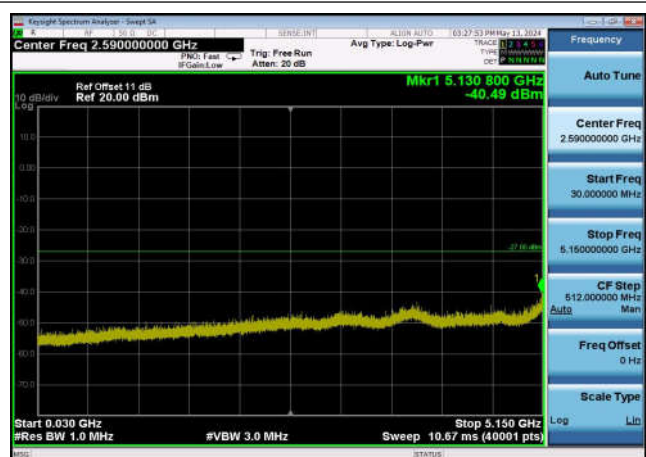
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a (20MHz),5180MHz,Ant0



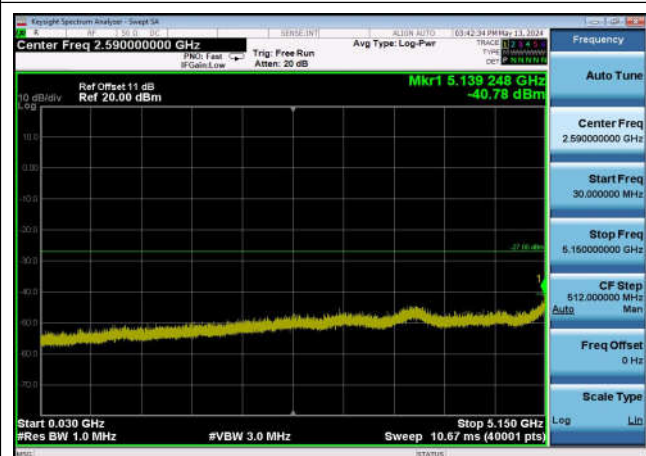
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
(20MHz),5220MHz,Ant0



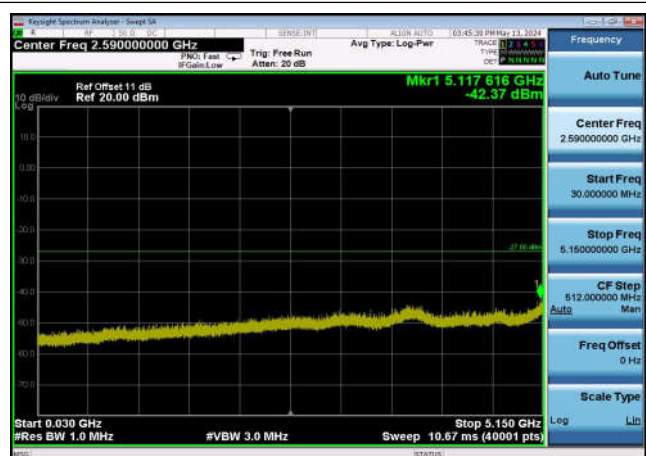
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
(20MHz),5240MHz,Ant0



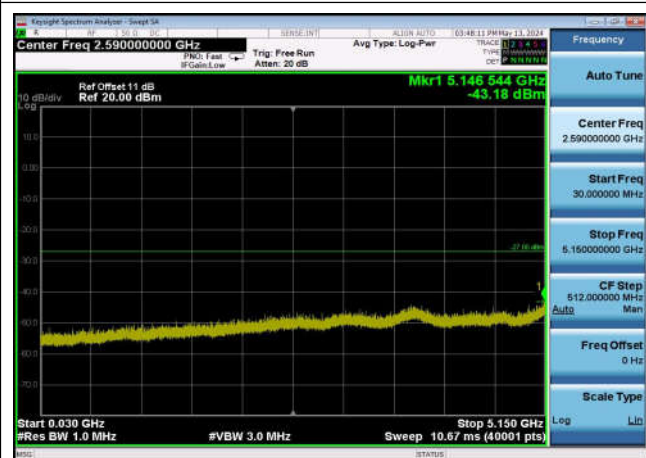
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
c(20MHz),5180MHz,Ant0



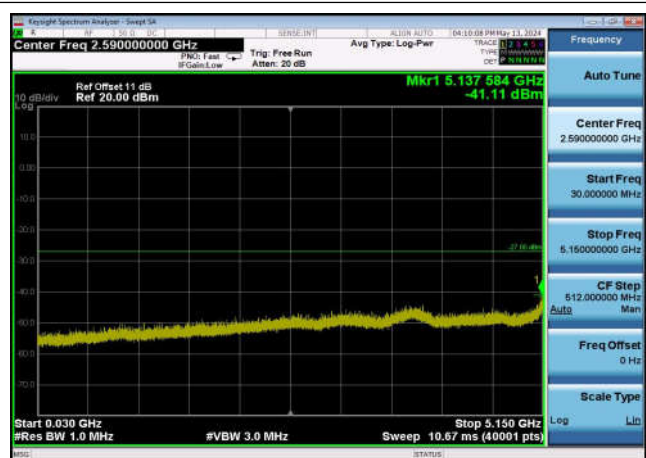
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
c(20MHz),5220MHz,Ant0



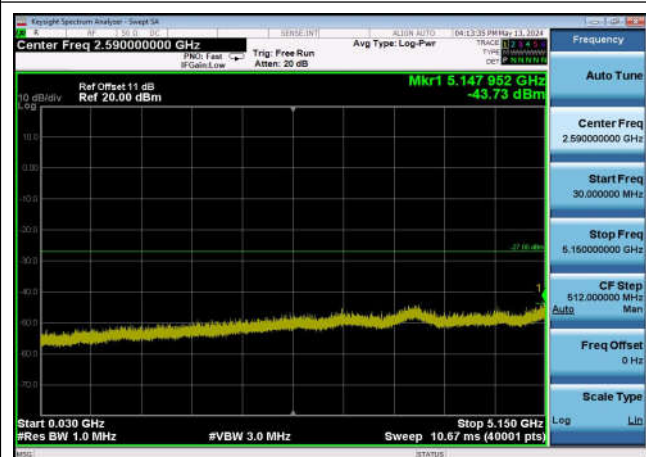
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
c(20MHz),5240MHz,Ant0



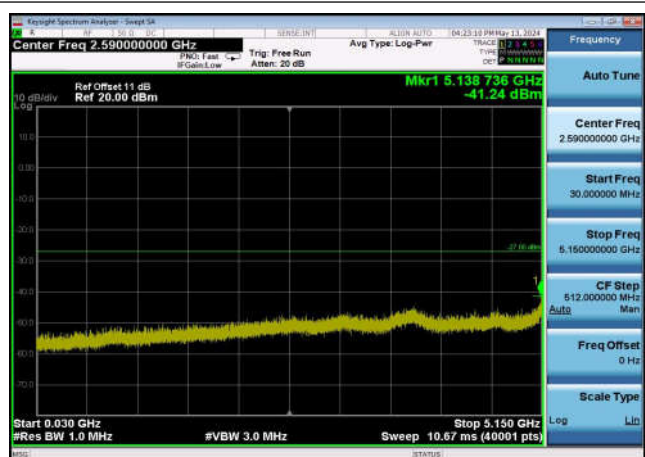
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
c(40MHz),5190MHz,Ant0



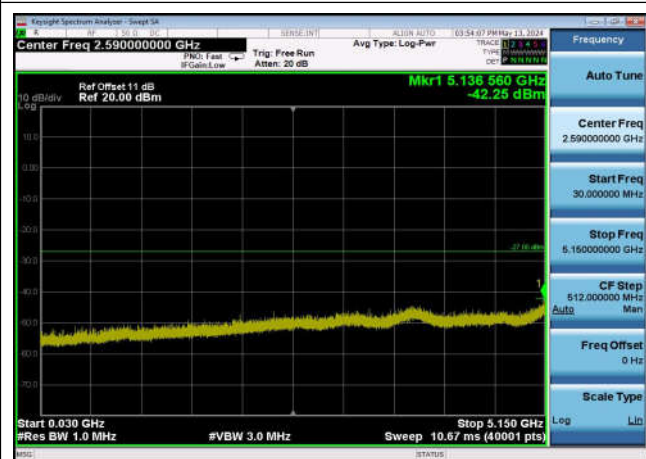
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
c(40MHz),5230MHz,Ant0



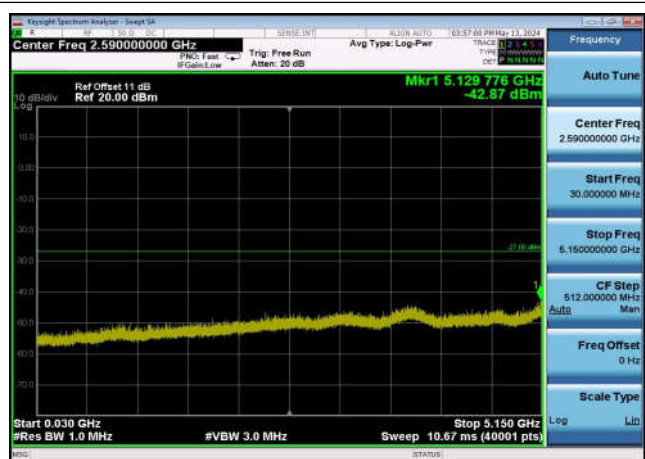
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
c(80MHz),5210MHz,Ant0



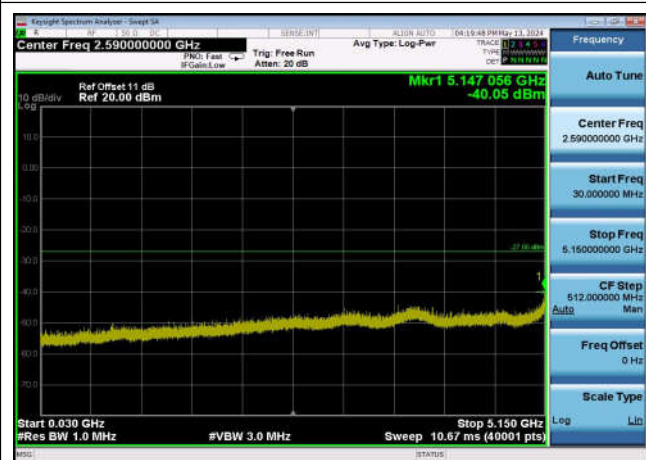
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
x(20MHz),5220MHz,Ant0



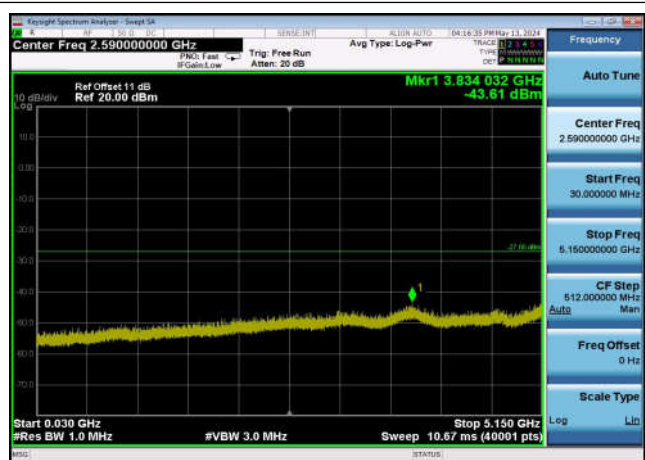
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
x(20MHz),5240MHz,Ant0



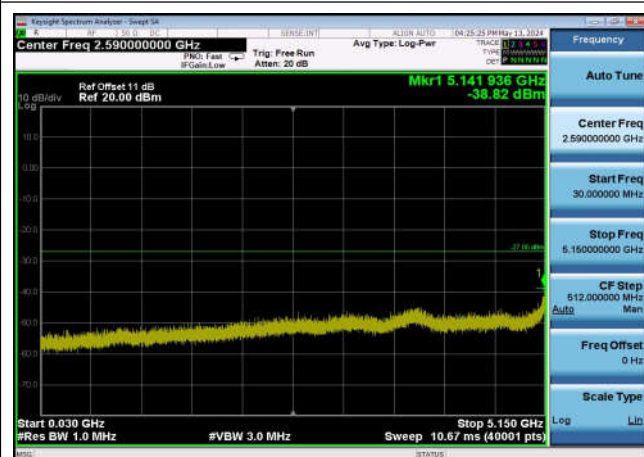
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
x(40MHz),5190MHz,Ant0



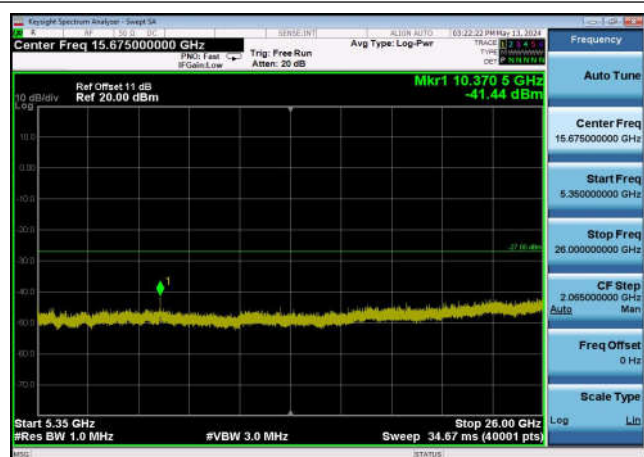
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
x(40MHz),5230MHz,Ant0



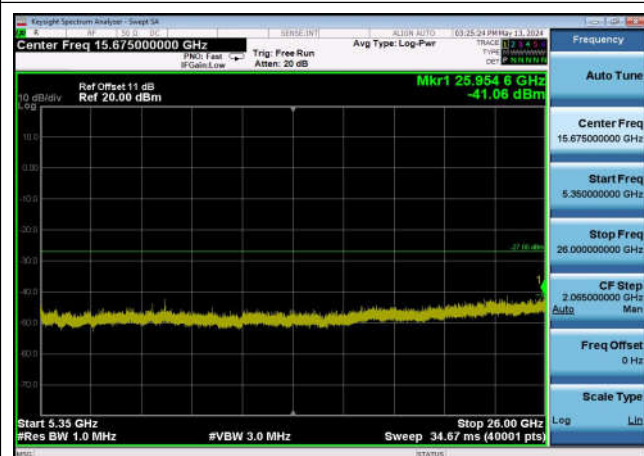
U-NII-1 ,Plot 2,30MHz~5150MHz-802.11a
x(80MHz),5210MHz,Ant0



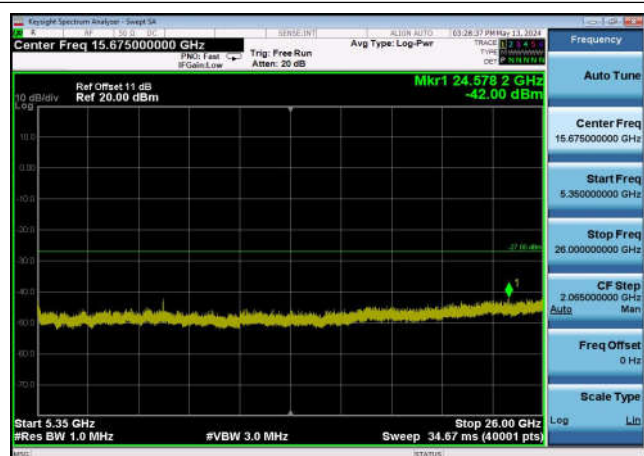
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11a(20MHz),5180MHz,Ant0



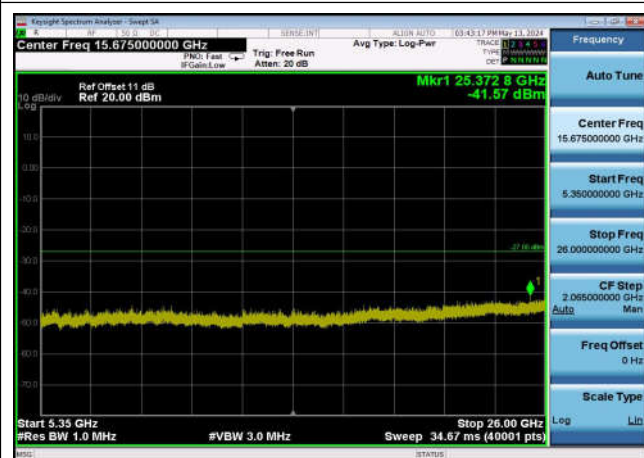
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11a(20MHz),5220MHz,Ant0



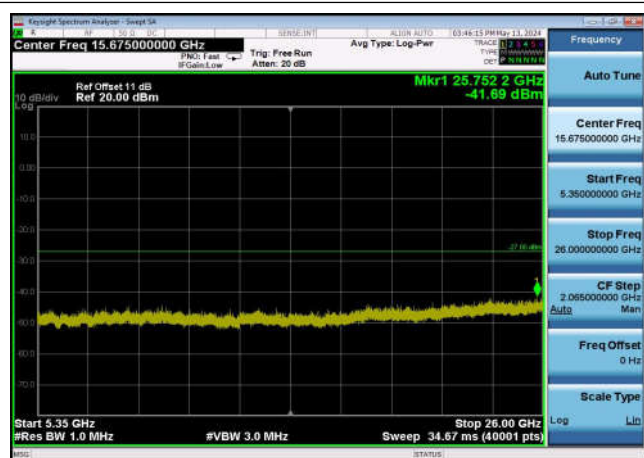
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11a(20MHz),5240MHz,Ant0



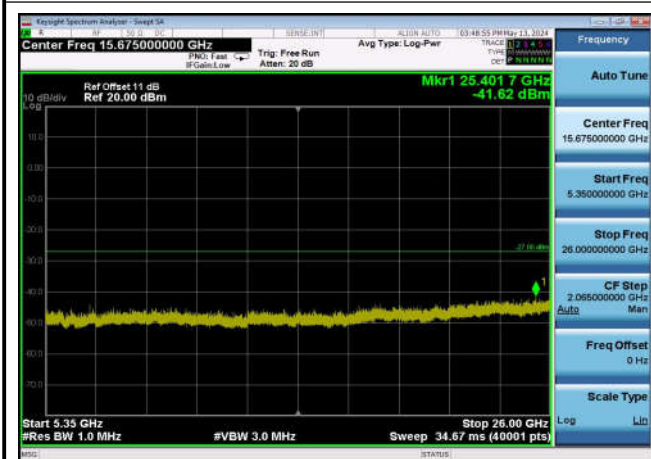
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11ac(20MHz),5180MHz,Ant0



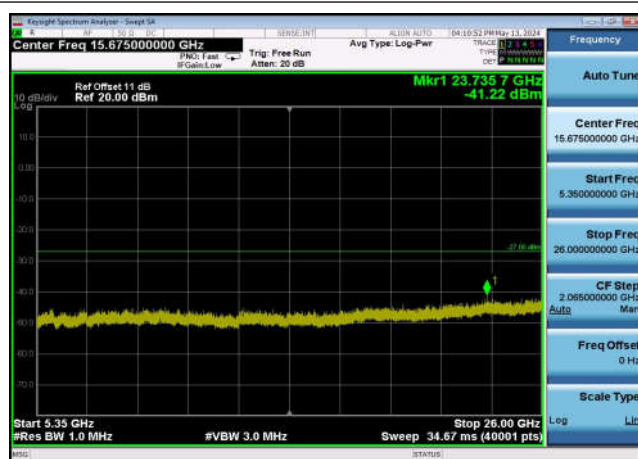
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.11ac(20MHz),5220MHz,Ant0



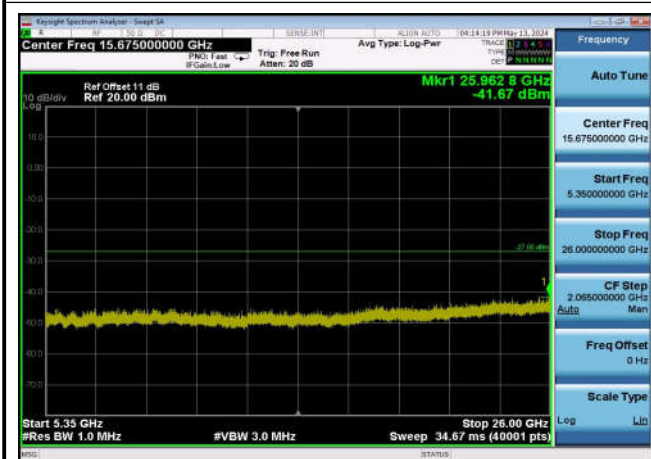
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ac(20MHz),5240MHz,Ant0



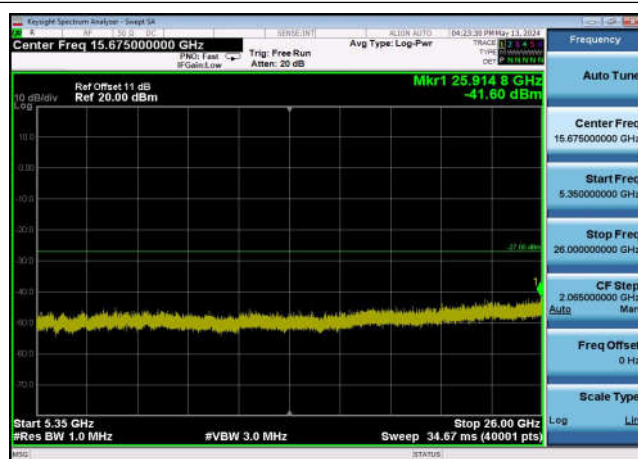
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ac(40MHz),5190MHz,Ant0



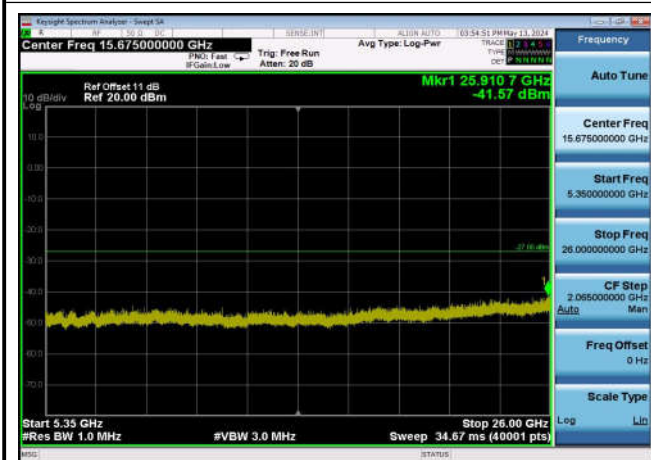
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ac(40MHz),5230MHz,Ant0



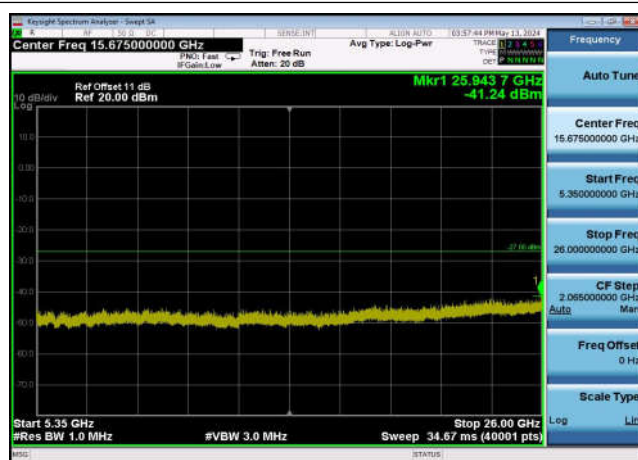
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ac(80MHz),5210MHz,Ant0



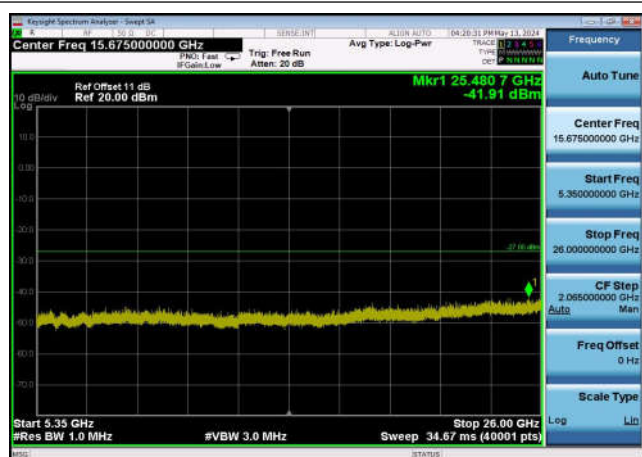
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ax(20MHz),5220MHz,Ant0



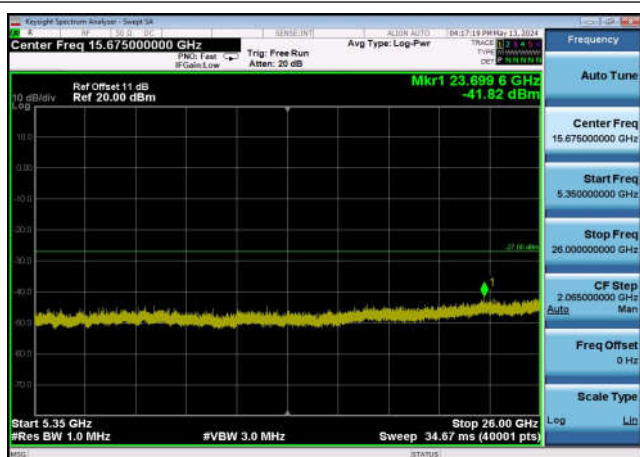
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ax(20MHz),5240MHz,Ant0



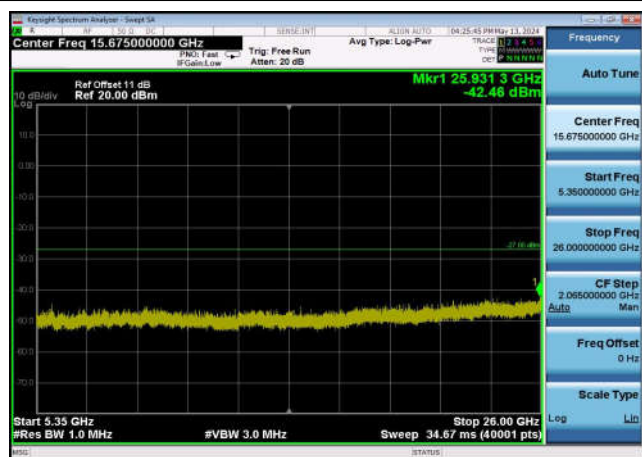
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ax(40MHz),5190MHz,Ant0



U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ax(40MHz),5230MHz,Ant0



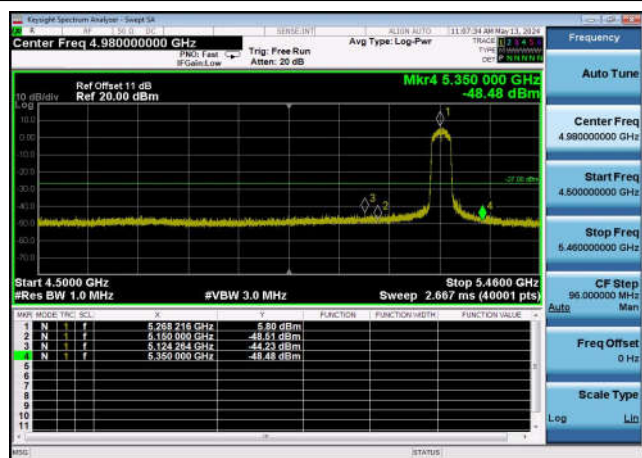
U-NII-1 ,Plot 3,5350MHz~26000MHz-802.
11ax(80MHz),5210MHz,Ant0



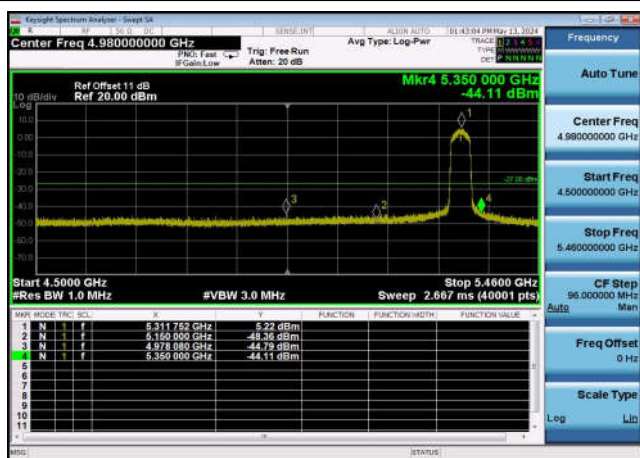
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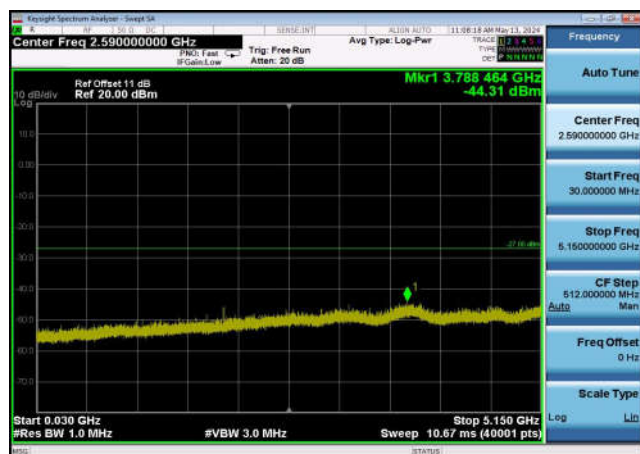
U-NII-2a ,Plot 1,Band Edge-802.11n(40
MHz),5270MHz,Ant0



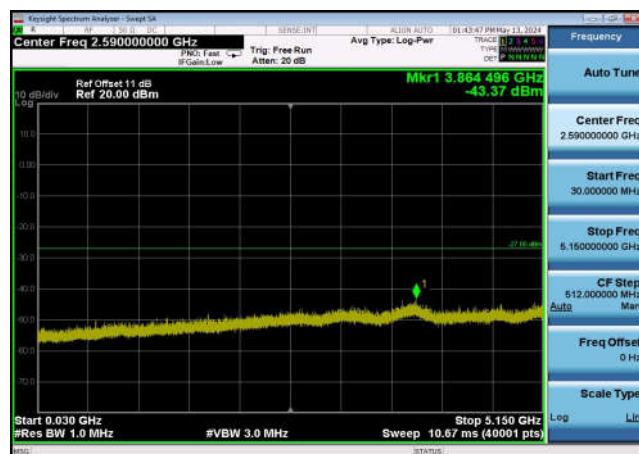
U-NII-2a ,Plot 1,Band Edge-802.11n(40
MHz),5310MHz,Ant0



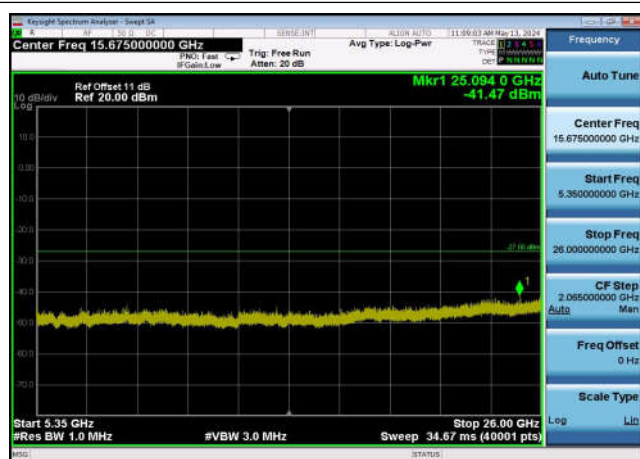
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
n(40MHz),5270MHz,Ant0



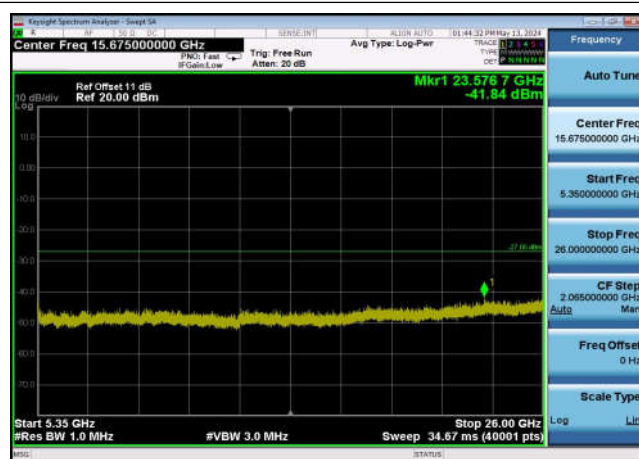
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
n(40MHz),5310MHz,Ant0



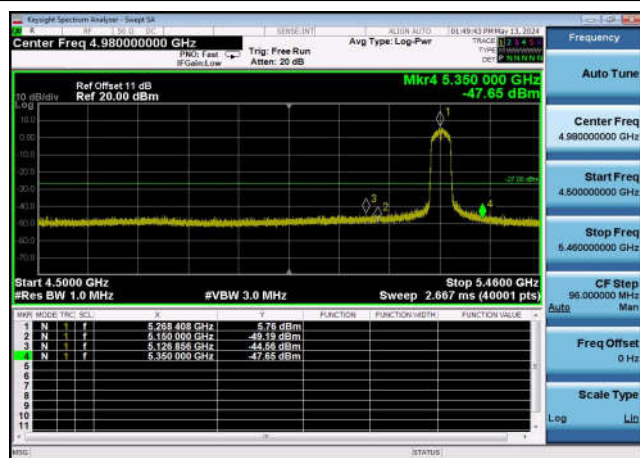
U-NII-2a ,Plot 3,5350MHz~26000MHz-802.11n(40MHz),5270MHz,Ant0



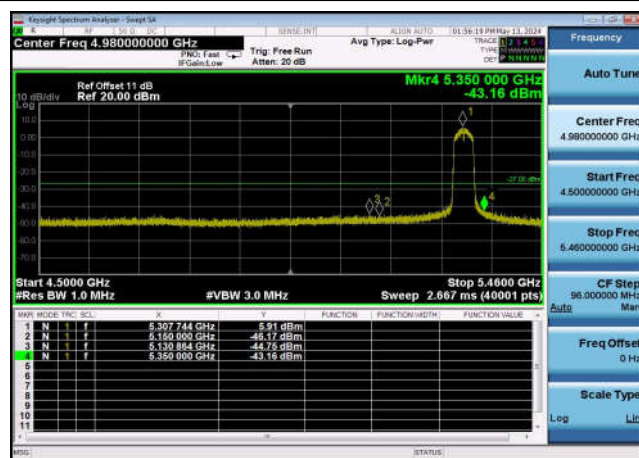
U-NII-2a ,Plot 3,5350MHz~26000MHz-802.11n(40MHz),5310MHz,Ant0

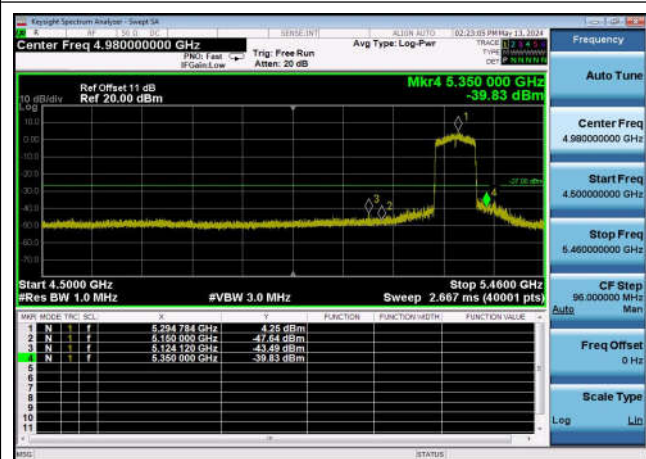
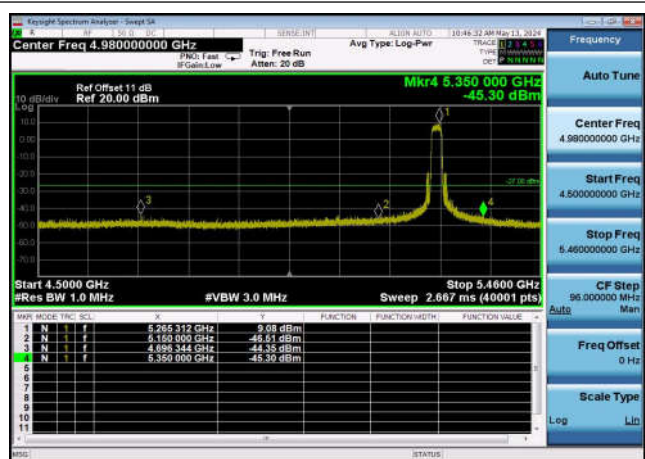
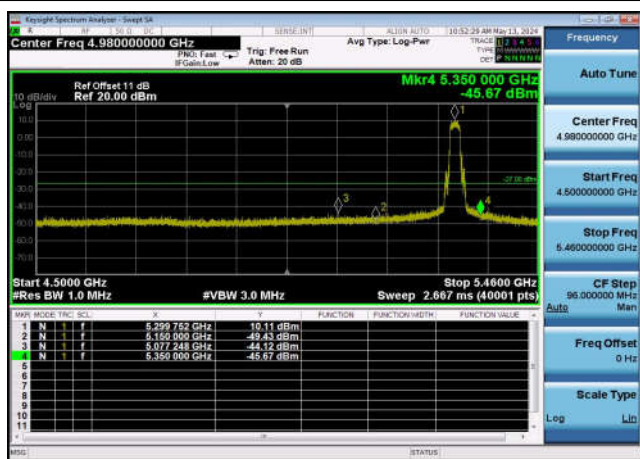
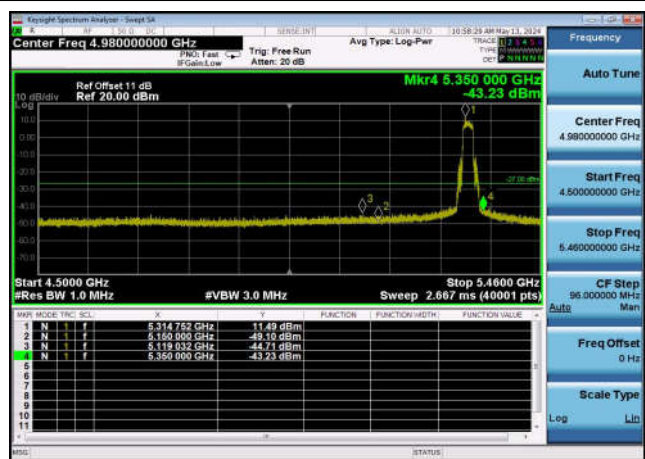
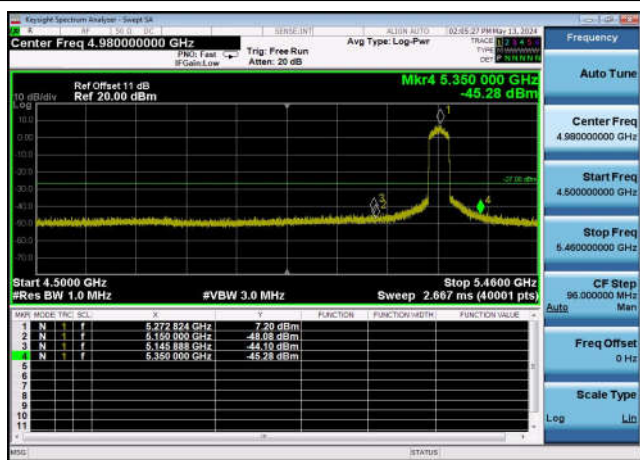
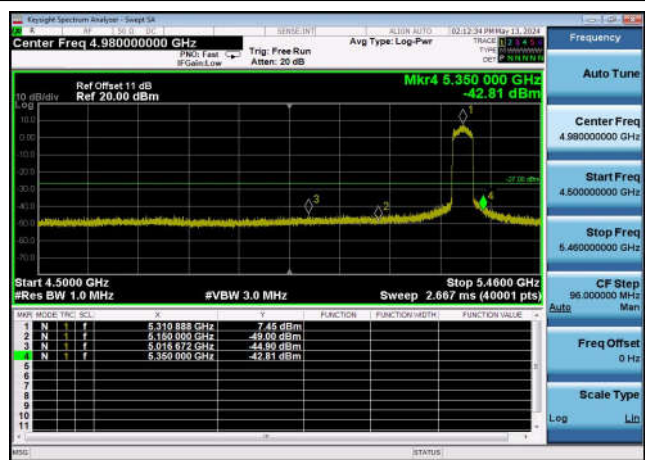


U-NII-2a ,Plot 1,Band Edge-802.11ac(40MHz),5270MHz,Ant0

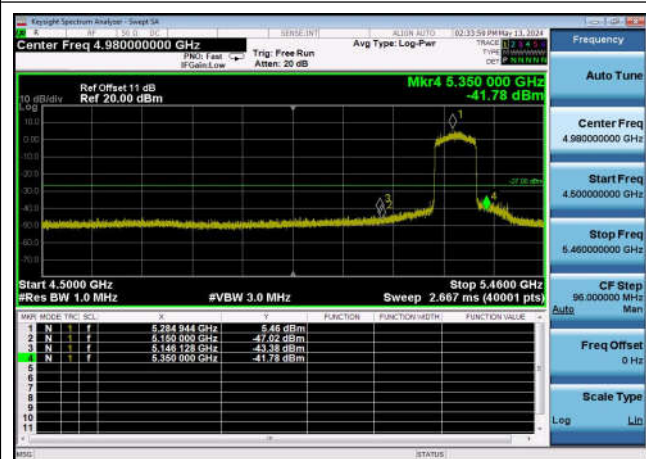


U-NII-2a ,Plot 1,Band Edge-802.11ac(40MHz),5310MHz,Ant0

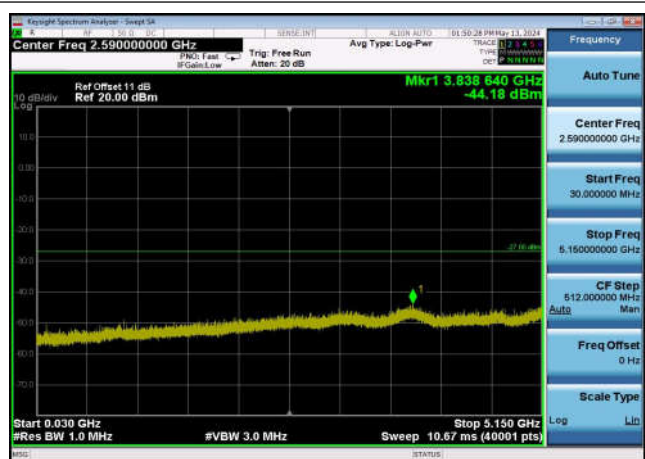


U-NII-2a ,Plot 1,Band Edge-802.11ac(8
0MHz),5290MHz,Ant0

U-NII-2a ,Plot 1,Band Edge-802.11ax(2
0MHz),5260MHz,Ant0

U-NII-2a ,Plot 1,Band Edge-802.11ax(2
0MHz),5300MHz,Ant0

U-NII-2a ,Plot 1,Band Edge-802.11ax(2
0MHz),5320MHz,Ant0

U-NII-2a ,Plot 1,Band Edge-802.11ax(4
0MHz),5270MHz,Ant0

U-NII-2a ,Plot 1,Band Edge-802.11ax(4
0MHz),5310MHz,Ant0


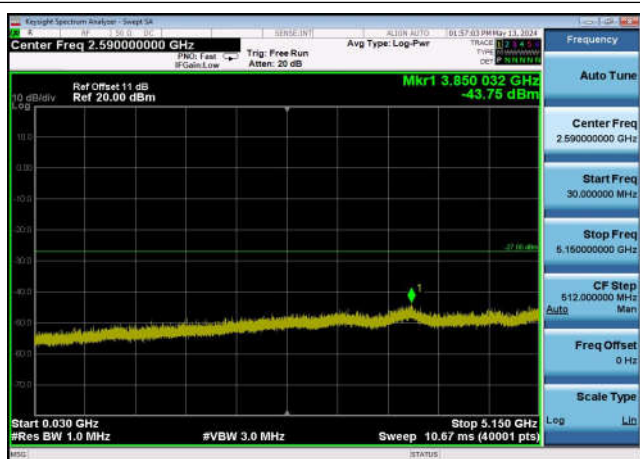
U-NII-2a ,Plot 1,Band Edge-802.11ax(8
0MHz),5290MHz,Ant0



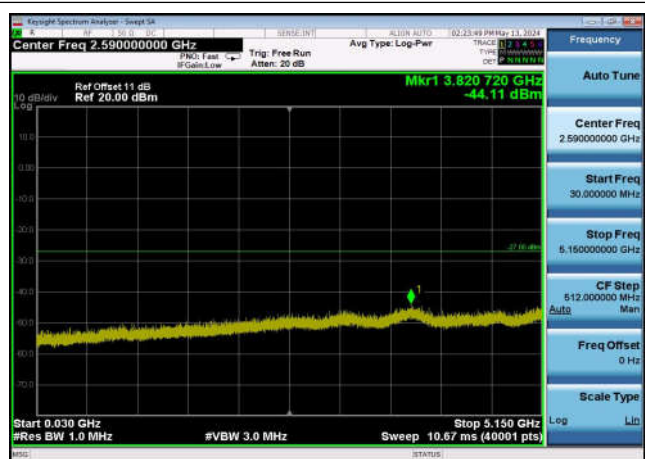
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ac(40MHz),5270MHz,Ant0



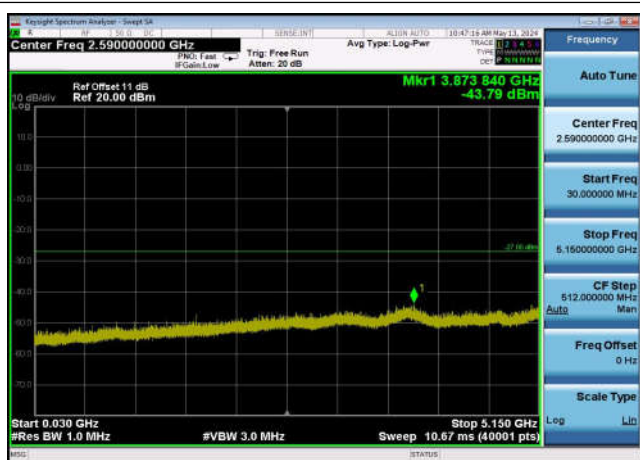
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ac(40MHz),5310MHz,Ant0



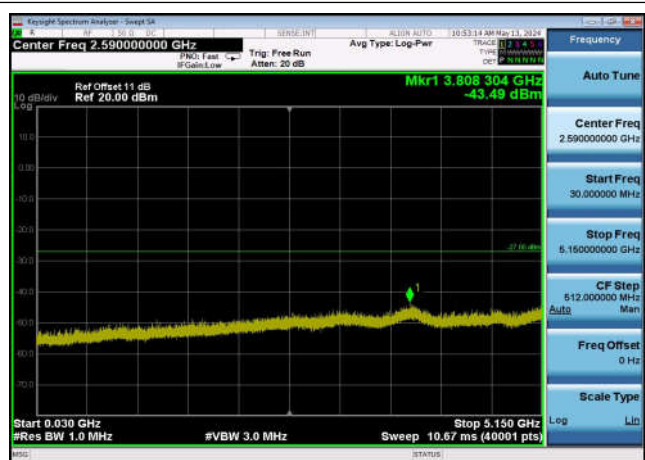
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ac(80MHz),5290MHz,Ant0



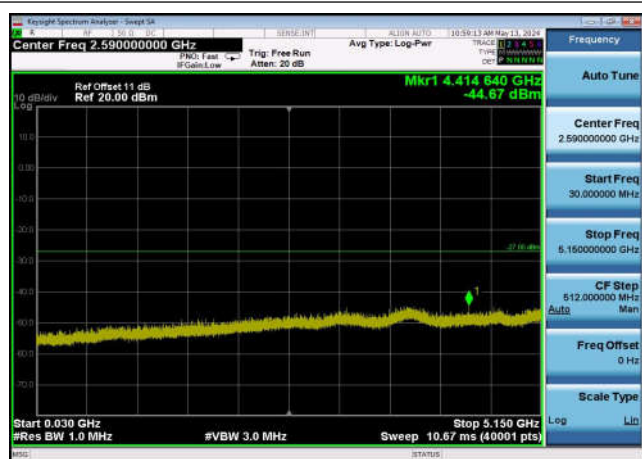
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ax(20MHz),5260MHz,Ant0



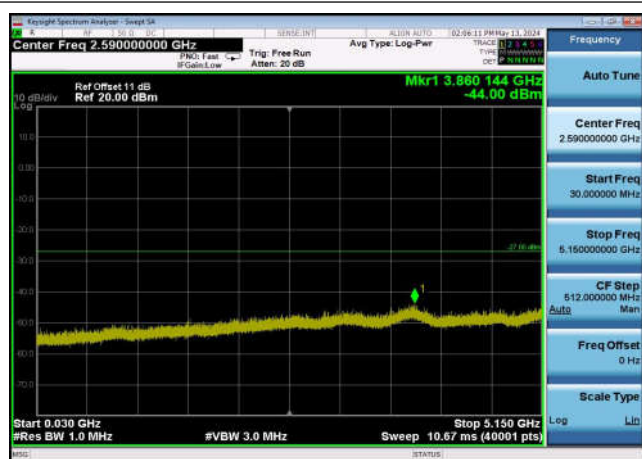
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ax(20MHz),5300MHz,Ant0



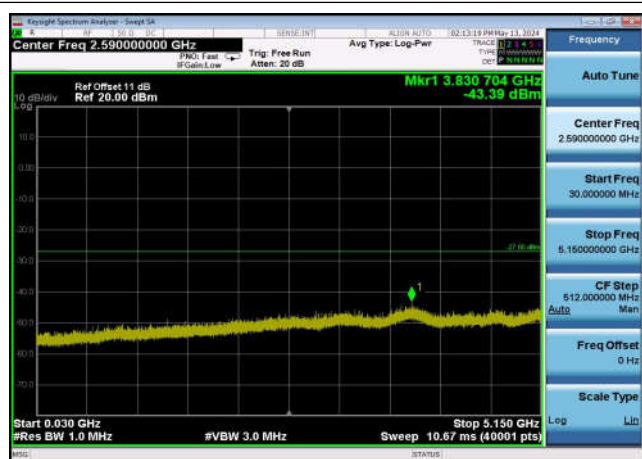
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ax(20MHz),5320MHz,Ant0



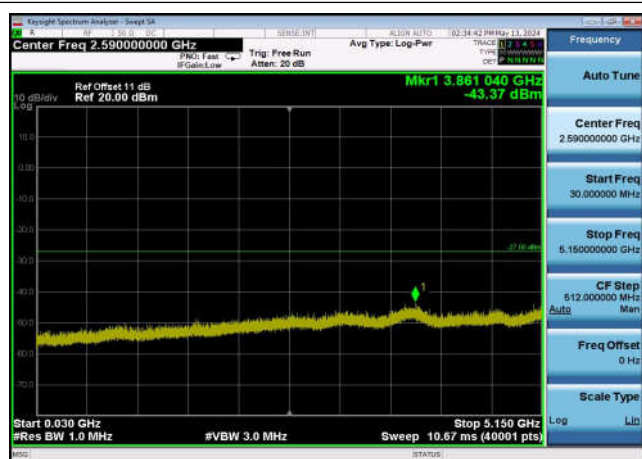
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ax(40MHz),5270MHz,Ant0



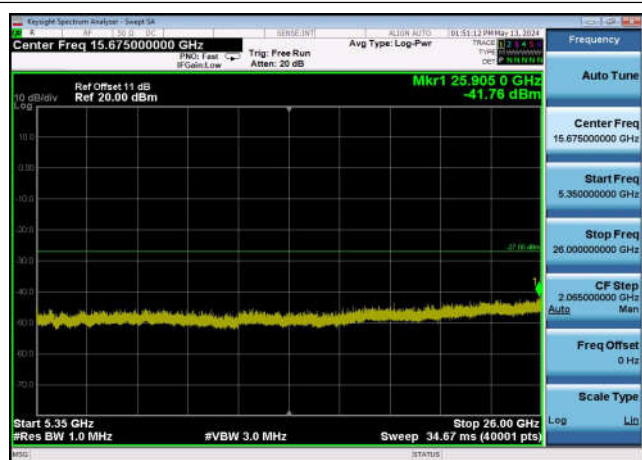
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ax(40MHz),5310MHz,Ant0



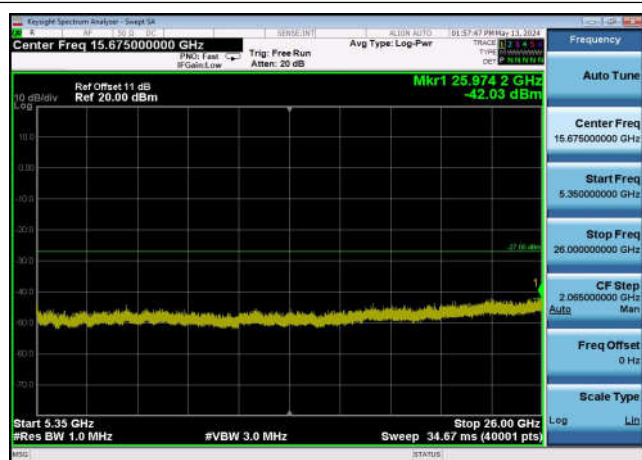
U-NII-2a ,Plot 2,30MHz~5150MHz-802.11
ax(80MHz),5290MHz,Ant0



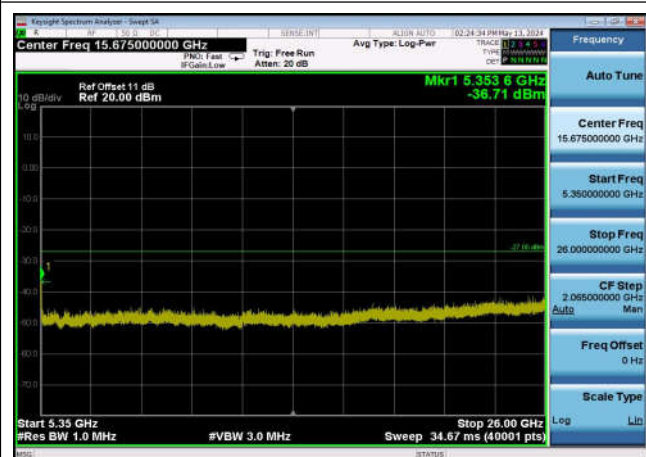
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ac(40MHz),5270MHz,Ant0



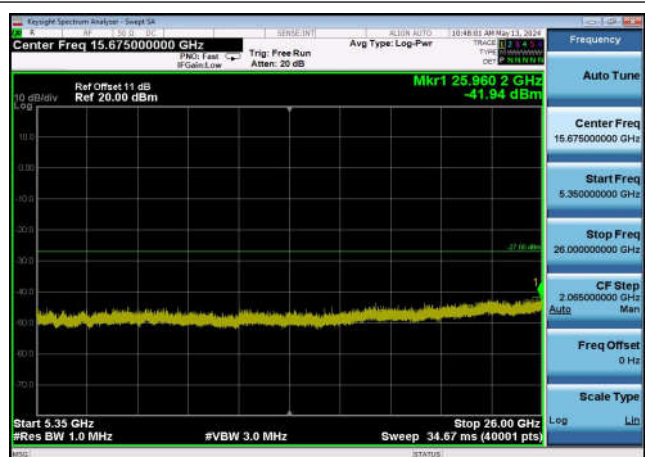
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ac(40MHz),5310MHz,Ant0



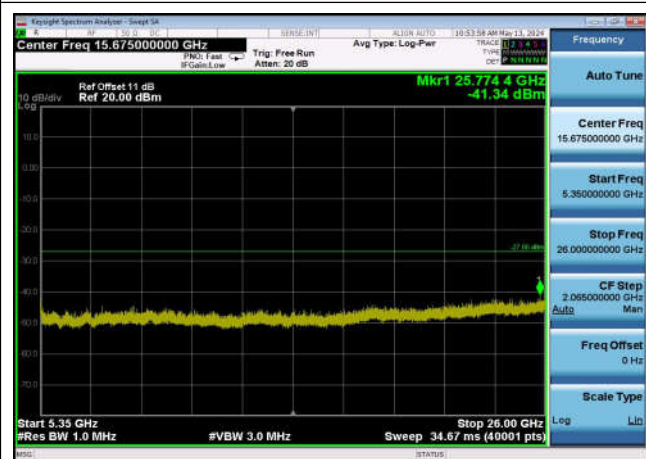
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ac(80MHz),5290MHz,Ant0



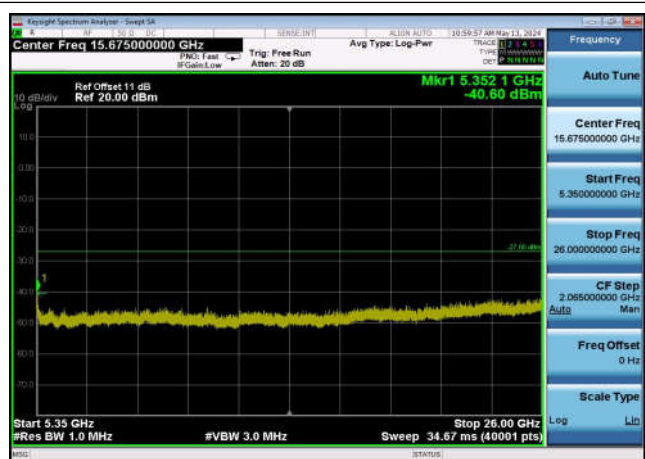
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ax(20MHz),5260MHz,Ant0



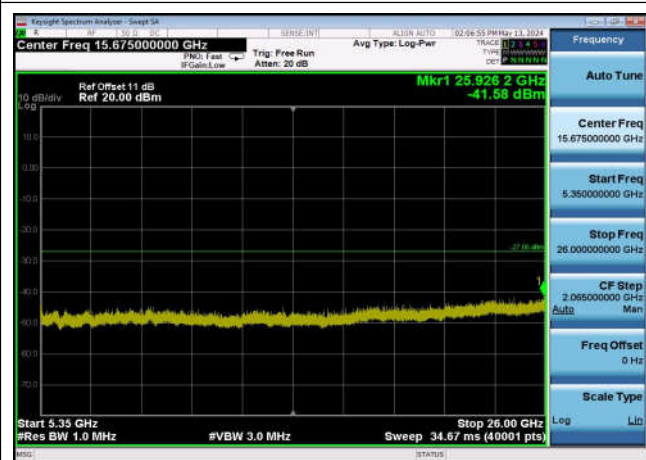
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ax(20MHz),5300MHz,Ant0



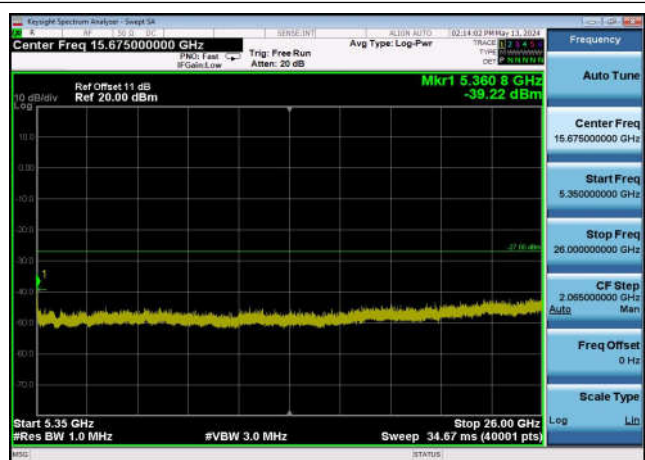
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ax(20MHz),5320MHz,Ant0



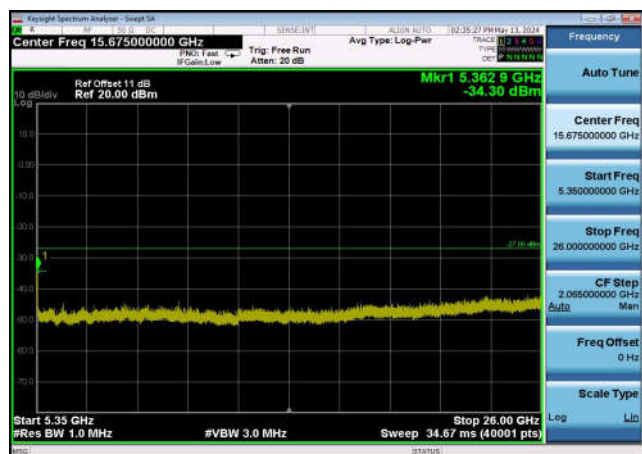
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ax(40MHz),5270MHz,Ant0



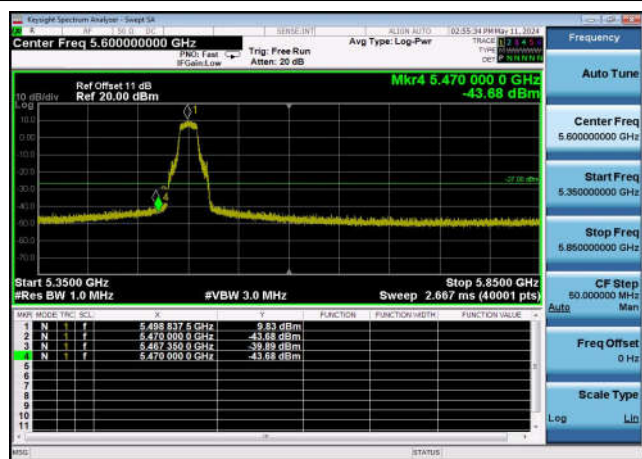
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ax(40MHz),5310MHz,Ant0



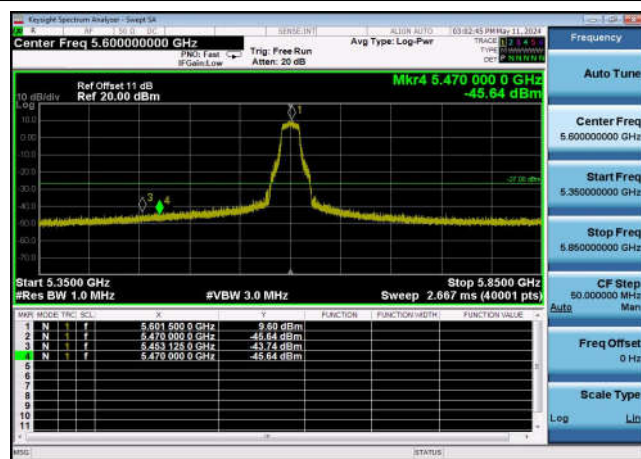
U-NII-2a ,Plot 3,5350MHz~26000MHz-802
.11ax(80MHz),5290MHz,Ant0



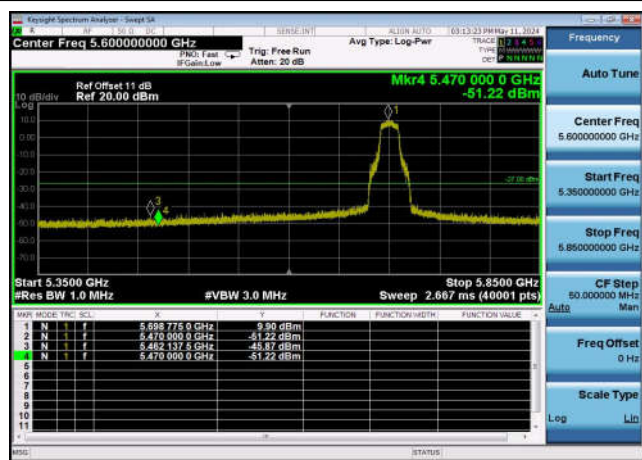
U-NII-2c ,Plot 1,Band Edge-802.11n(20
MHz),5500MHz,Ant0



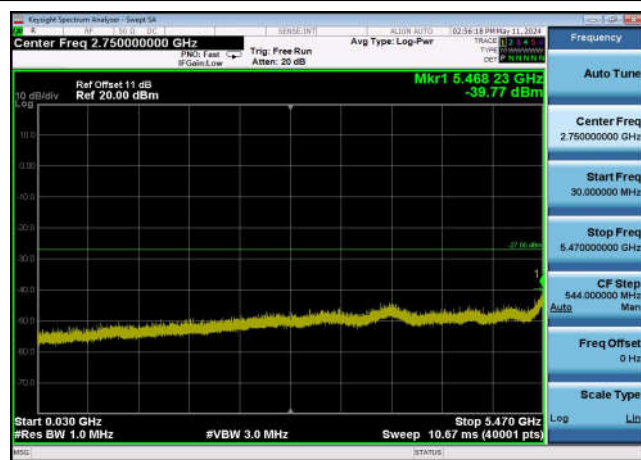
U-NII-2c ,Plot 1,Band Edge-802.11n(20
MHz),5600MHz,Ant0



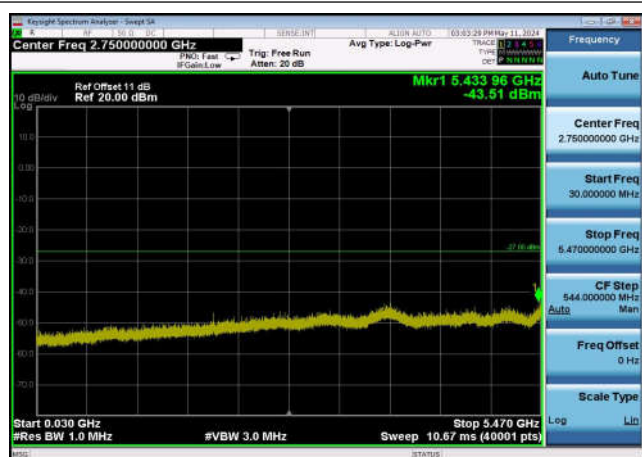
U-NII-2c ,Plot 1,Band Edge-802.11n(20
MHz),5700MHz,Ant0



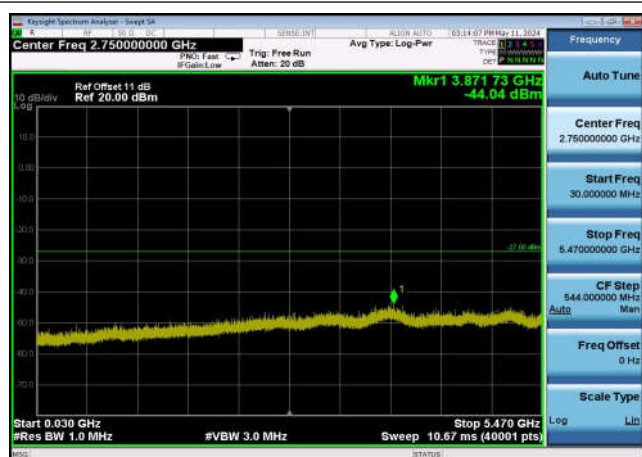
U-NII-2c ,Plot 2,30MHz~5470MHz-802.11
n(20MHz),5500MHz,Ant0



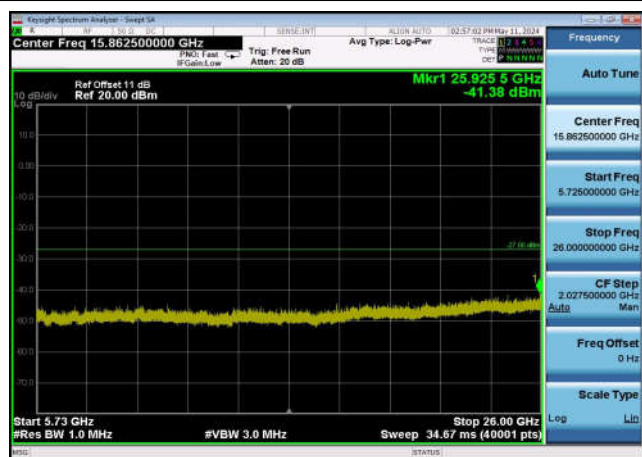
U-NII-2c ,Plot 2,30MHz~5470MHz-802.11
n(20MHz),5600MHz,Ant0



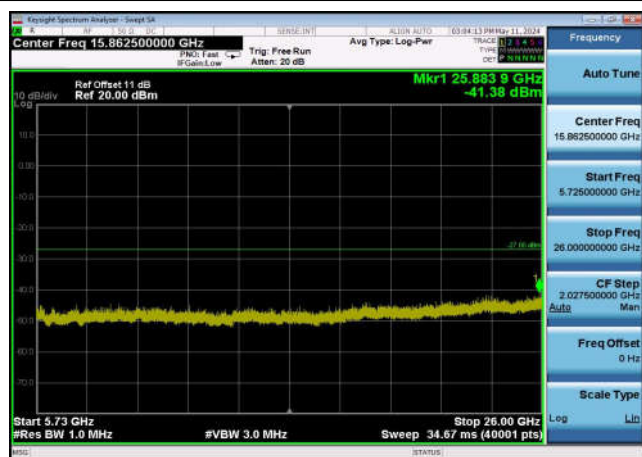
U-NII-2c ,Plot 2,30MHz~5470MHz-802.11
n(20MHz),5700MHz,Ant0



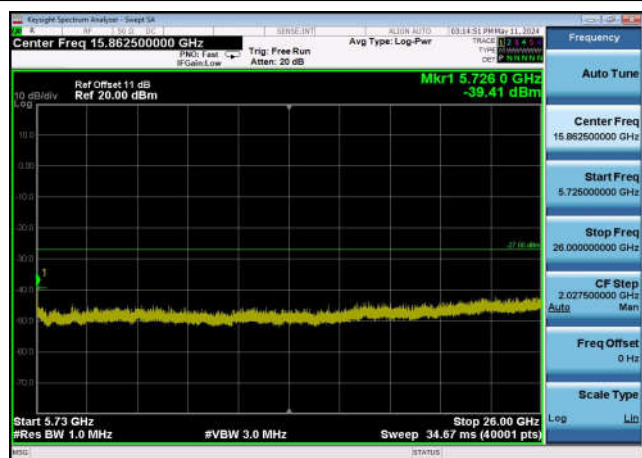
U-NII-2c ,Plot 3,5725MHz~26000MHz-802.11n(20MHz),5500MHz,Ant0



U-NII-2c ,Plot 3,5725MHz~26000MHz-802.11n(20MHz),5600MHz,Ant0



U-NII-2c ,Plot 3,5725MHz~26000MHz-802.11n(20MHz),5700MHz,Ant0



U-NII-2c ,Plot 1,Band Edge-802.11n(40 MHz),5510MHz,Ant0

