



RF TEST REPORT

Report No.: SET2022-16605

Product Name: Mobile360 M500

Model No.: Mobile360 M500

FCC ID: 2A9K7-M360-M500

Applicant: VIA Intelligent Automotive, INC.

Address: 8F., NO. 525, ZHONGZHENG RD., XINDIAN DIST., NEW TAIPEI
CITY 23148, TAIWAN

Dates of Testing: 11/24/2022 - 12/15/2022

Issued by: CCIC Southern Testing Co., Ltd.

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

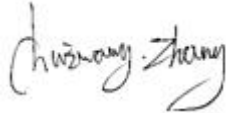
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Test Report

Product.....: Mobile360 M500
Brand Name.....: VIA
Trade Name: VIA
Applicant.....: VIA Intelligent Automotive, INC.
Applicant Address.....: 8F., NO. 525, ZHONGZHENG RD., XINDIAN DIST.,
NEW TAIPEI CITY 23148, TAIWAN
Manufacturer.....: VIA Intelligent Automotive, INC.
Manufacturer Address.....: 8F., NO. 525, ZHONGZHENG RD., XINDIAN DIST.,
NEW TAIPEI CITY 23148, TAIWAN
Test Standards.....: 47 CFR Part 15 Subpart E 15.407
ANSI C63.10-2013
Test Result.....: Pass

Tested by:  2022.12.16
Chuiwang Zhang, Test Engineer

Reviewed by.....:  2022.12.16
Chris You, Senior Engineer

Approved by.....:  2022.12.16
Tao Hou, Manager

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Change History		
Issue	Date	Reason for change
1.0	2022.12.16	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Mobile360 M500
Model No.	Mobile360 M500
Hardware Version	RA
Software Version	2.0.4
EUT supports Radios application	WLAN5.0GHz 802.11a/n/ac
Product Type	Fixed point-to-point access points
Modulation Type	802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM) 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 433.333Mbps
Frequency Range	UNII-1: 5150 ~ 5250MHz UNII-3: 5725 ~ 5850MHz
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz/40MHz 802.11ac: 20MHz/40MHz/80MHz
Channel Number	UNII-1: 4 for 802.11a, 802.11n(HT20), 802.11ac(VHT20) 2 for 802.11n(HT40), 802.11ac(VHT40) 1 for 802.11ac(VHT80) UNII-3: 5 for 802.11a, 802.11n(HT20), 802.11ac(VHT20) 2 for 802.11n(HT40), 802.11ac(VHT40)) 1 for 802.11ac(VHT80)
Antenna Type	External Antenna
Antenna Gain	1.05dBi
Output Power (Max.)	UNII-1: 15.69dBm UNII-3: 15.84dBm
Power supply	9~36V DC Power Supply

1.2. Test Standards and Results

The objective of the report is to perform testing according to below standards for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E §15.407	Radio Frequency Devices
2	KDB789033 D02 General UNII Test Procedures New Rules v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

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

No.	FCC Rule	Description	Result
1	15.203 15.407(a)	Antenna Requirement	PASS
2	15.407(a)(1)(iv) 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)(3)(i)	Power spectral density (PSD)	PASS
6	15.207	AC Power Line Conducted Emission	N/A ^{Note 1}
7	15.205 15.209 15.407(b)	Radiated Band Edges and Spurious Emission	PASS
8	15.407(g)	Frequency Stability	PASS

Note 1: N/A means not applicable. The product shall only be connected to a DC power supply source with output voltage higher than 9V and lower than 36V, not connected to the grid.

1.3. Channel List

Operated band in 5150 MHz ~ 5250MHz

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

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

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

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

1 channels are provided for 802.11ac-VHT80.

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

Operated band in 5725 MHz ~ 5850MHz

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

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

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

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

1 channel are provided for 802.11ac-VHT80.

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

1.4. Test environment and mode

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

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

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

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

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

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

Pretest Test Mode	Description
Mode 1	TX A 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 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 7	TX Mode
For Radiated Test	
Final Test Mode	Description
Mode 1	TX A 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

1.5. Table for Supporting Units

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

1.6. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2023.

A2LA Code: 5721.01

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

2. 47 CFR Part 15E Requirements

2.1. Antenna requirement

2.1.1. Applicable Standard

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

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)(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 General Information:

No.	EUT	Ant. Type	Operating frequency range	Ant. Gain
1	Mobile360 M500	External	UNII-1, UNII-3	1.05dBi

2.1.3. Result: comply

The EUT has a unique antenna connector. 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:

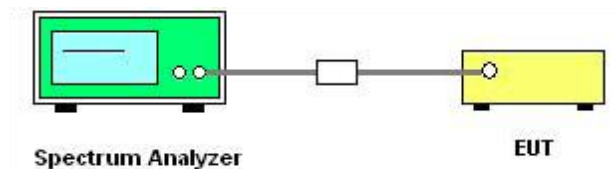
Band	EUT Category	Limit
U-NII-1	☐ Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21dBm) at any elevation angle above 30 degrees as measured from the horizon)
	☐ Fixed point-to-point Access device	1 Watt (30 dBm)
	☐ Indoor Access Point	1 Watt (30 dBm)
	☒ Mobile and portable client device	250mW (24 dBm)
U-NII-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)

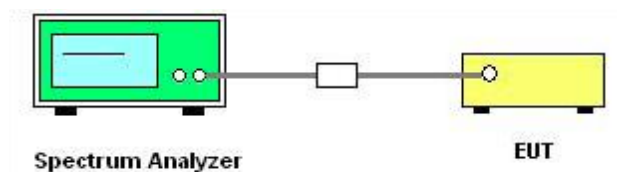
The maximum power spectral density should not exceed:

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-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 Band: Set RBW = 1MHz, VBW $\geq$ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).
5. For U-NII-3 Band: Set RBW = 500kHz, VBW $\geq$ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).
6. Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$.
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. Emission Bandwidth and Occupied Bandwidth

2.4.1. Limit of Emission Bandwidth and Occupied Bandwidth

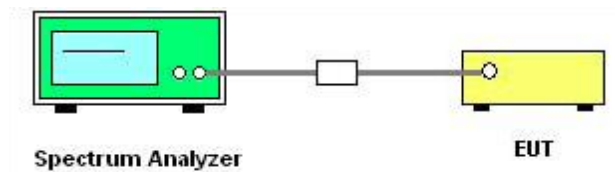
26dB Emission Bandwidth and 99% Occupied Bandwidth no Bandwidth limit.

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 Emission Bandwidth and Occupied Bandwidth

Please refer to APPENDIX A for detail

2.5. Frequency Stability

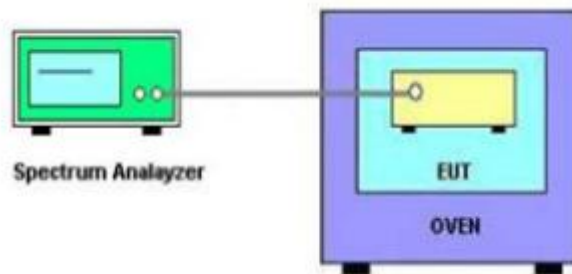
2.5.1. Limit of Frequency Stability

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(dBμV/m)	AV: 54 (dBμV/m)

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

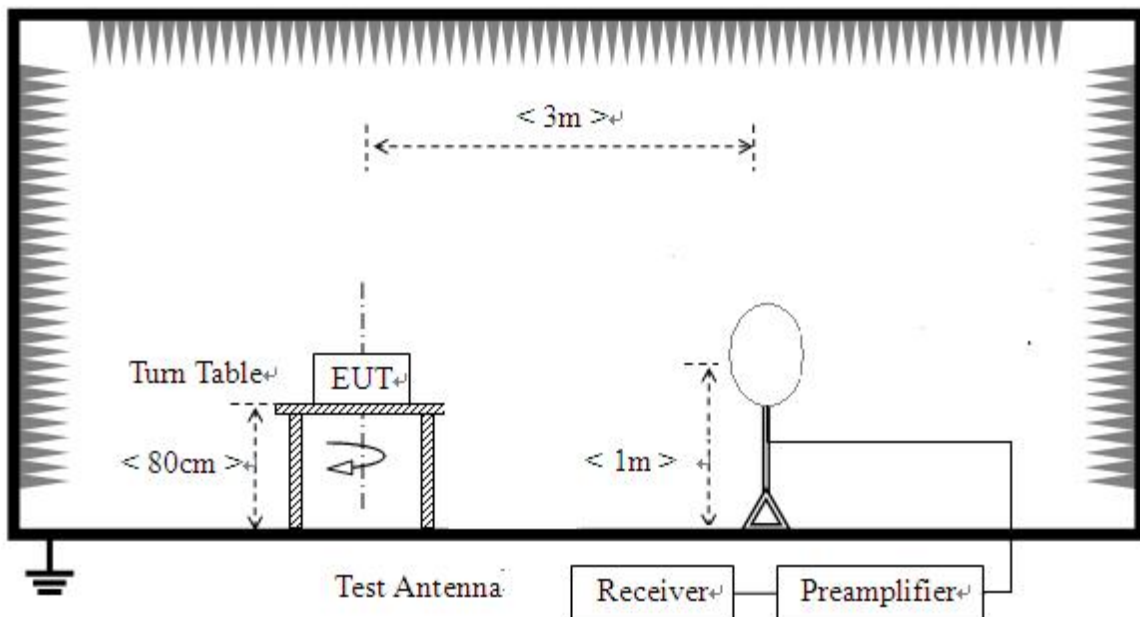
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41	/	/	/
Note: ¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. ² Above 38.6.			

2.6.2. Measuring Instruments

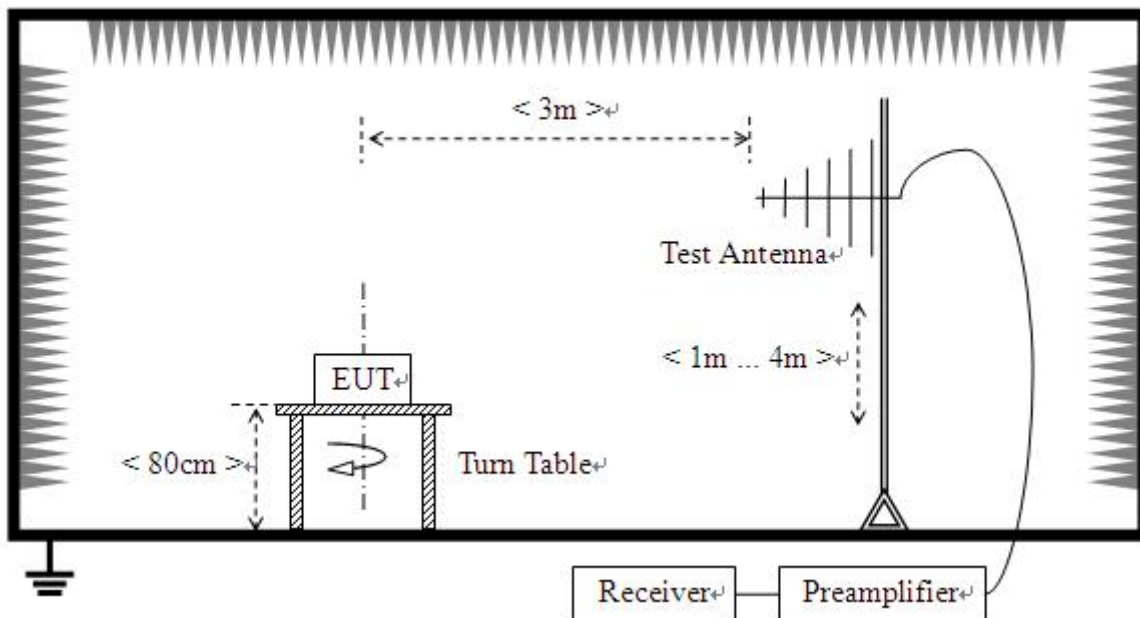
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

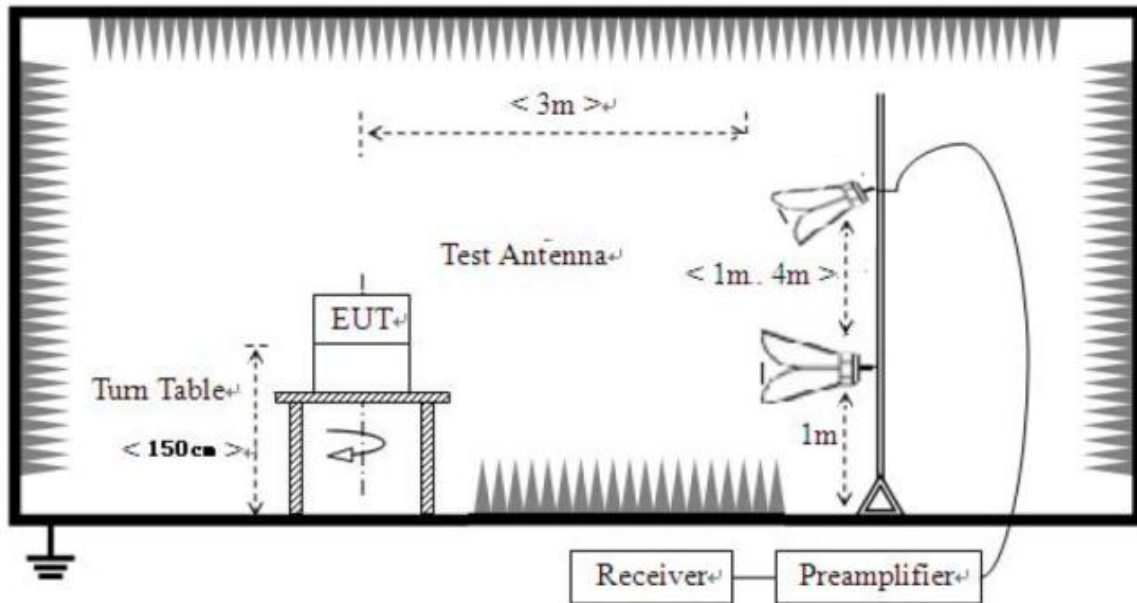
For radiated emissions from 9 kHz to 30 MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.4. Test Procedures

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

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.

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

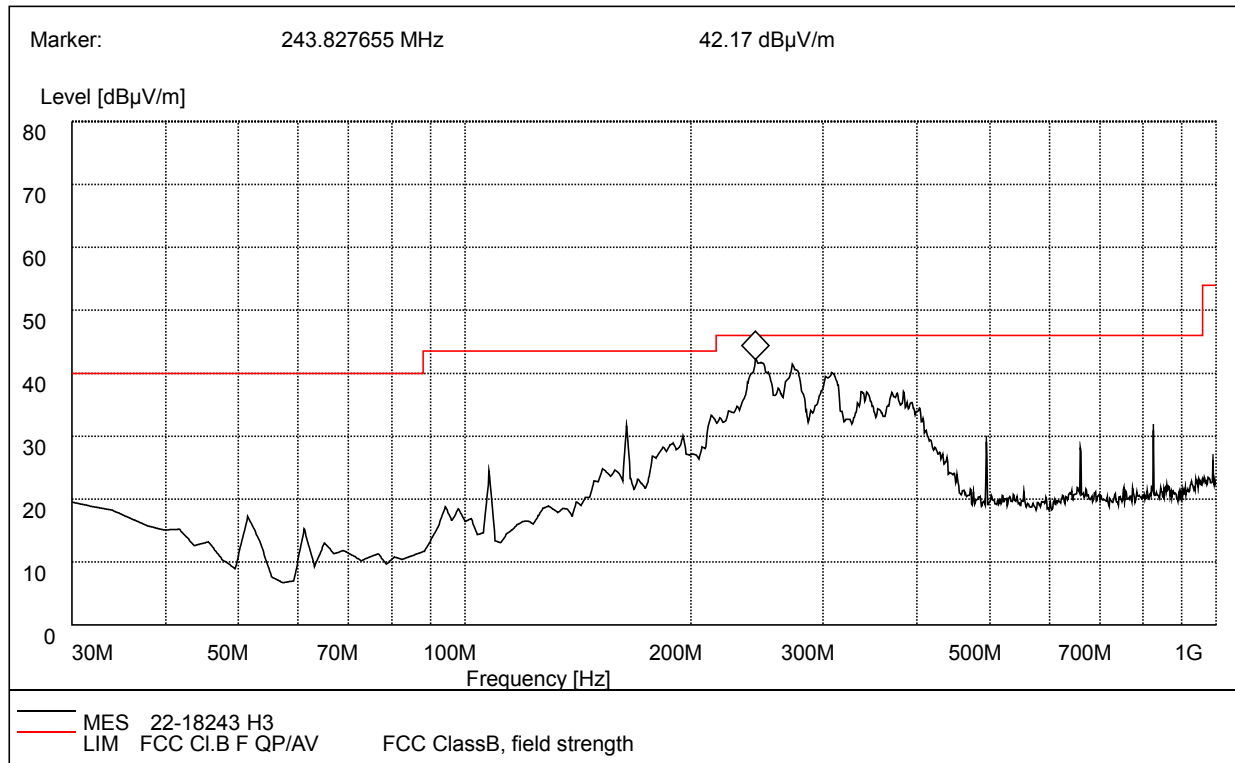
2.6.5. Test Result of Radiated Band Edge and Spurious Emission

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

NOTE 2: For 30MHz to 1GHz, All of the EUT Configure mode were tested and found 802.11a 5745MHz channel is the worst mode, the worst case is recorded in this report.

NOTE 3: Antenna height and turntable angle are the worst positions, the worst case is recorded in this report.

For 30MHz to 1000 MHz

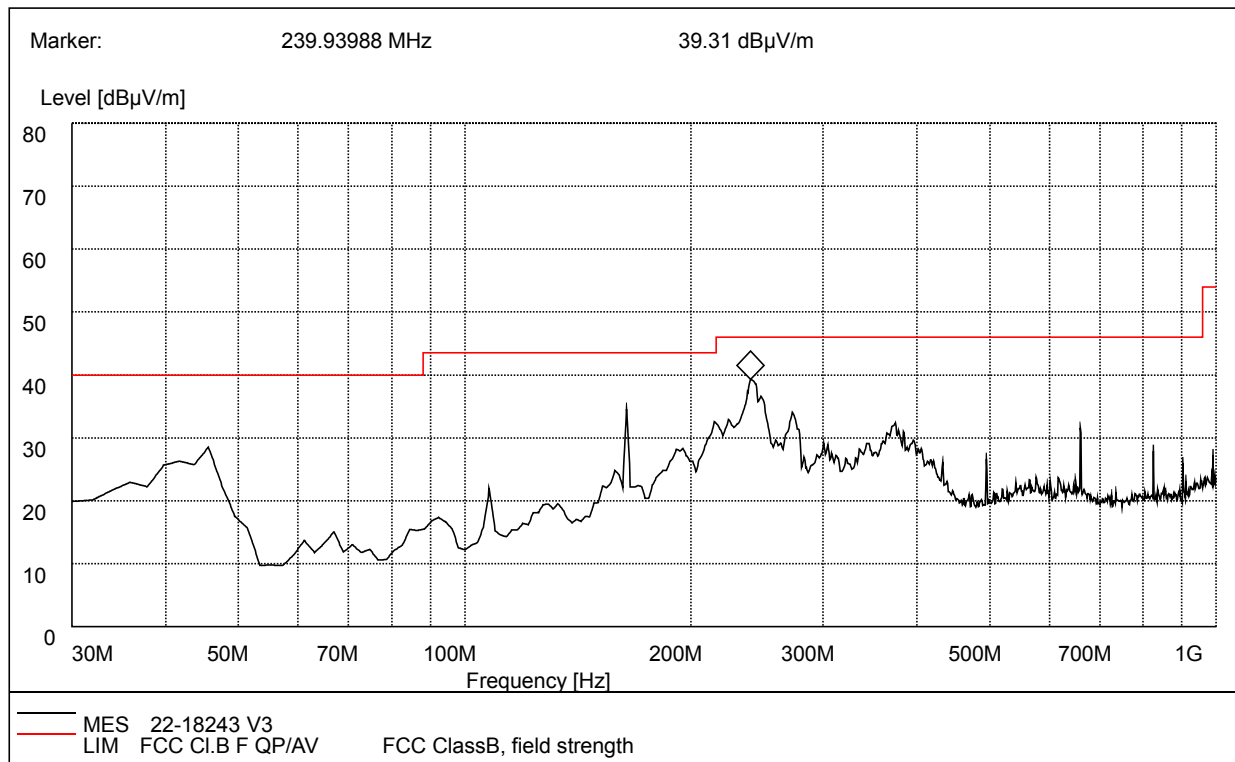


Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Corr.Factor (dB/m)	Antenna height (cm)	Limit (dB μ V/m)	Margin (dB)	Polarity
30.000000	19.05	120.000	19.3	100.0	40.0	20.95	Horizontal
51.050000	16.65	120.000	8.6	100.0	40.0	23.35	Horizontal
107.650000	23.64	120.000	10.9	100.0	43.5	19.86	Horizontal
164.120000	31.05	120.000	12.5	100.0	43.5	12.45	Horizontal
243.060000	41.05	120.000	11.9	100.0	46.0	4.95	Horizontal
272.650000	41.25	120.000	14.6	100.0	46.0	4.75	Horizontal

Test Result : Pass

Remark:

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



Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Corr.Factor (dB/m)	Antenna height (cm)	Limit (dB μ V/m)	Margin (dB)	Polarity
45.290000	27.65	120.000	14.0	100.0	40.0	12.35	Vertical
68.650000	11.02	120.000	6.1	100.0	40.0	28.98	Vertical
107.650000	22.0	120.000	10.9	100.0	43.5	21.50	Vertical
164.120000	33.85	120.000	12.5	100.0	43.5	9.65	Vertical
243.060000	37.65	120.000	11.9	100.0	46.0	8.35	Vertical
272.650000	33.60	120.000	14.6	100.0	46.0	12.40	Vertical

Test Result : Pass

Remark:

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

For 1GHz to 40 GHz

U-NII-1_802.11a_5180MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	60.57	68.20	-7.63	1.50	160	53.07	7.50	Horizontal	Peak
5150.00	48.60	54.00	-5.40	1.50	160	41.10	7.50	Horizontal	Average
10360.00	55.05	68.20	-13.15	1.50	160	35.25	19.80	Horizontal	Peak
10360.00	45.78	54.00	-8.22	1.50	160	25.98	19.80	Horizontal	Average
5150.00	61.17	68.20	-7.03	1.60	250	53.67	7.50	Vertical	Peak
5150.00	49.55	54.00	-4.45	1.60	250	42.05	7.50	Vertical	Average
10360.00	53.16	68.20	-15.04	1.60	250	33.36	19.80	Vertical	Peak
10360.00	45.58	54.00	-8.42	1.60	250	25.78	19.80	Vertical	Average
U-NII-1_802.11a_5220MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
10440.00	55.23	68.20	-12.97	1.60	200	35.33	19.90	Horizontal	Peak
10440.00	45.81	54.00	-8.19	1.60	200	25.91	19.90	Horizontal	Average
10440.00	53.28	68.20	-14.92	1.70	180	33.38	19.90	Vertical	Peak
10440.00	45.68	54.00	-8.32	1.70	180	25.78	19.90	Vertical	Average
U-NII-1_802.11a_5240MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	51.21	68.20	-16.99	1.50	160	43.21	8.00	Horizontal	Peak
5350.00	49.12	54.00	-4.88	1.50	160	41.12	8.00	Horizontal	Average
10480.00	55.63	68.20	-12.57	1.50	160	35.73	19.90	Horizontal	Peak
10480.00	46.02	54.00	-7.98	1.50	160	26.12	19.90	Horizontal	Average
5350.00	61.35	68.20	-6.85	1.60	250	53.35	8.00	Vertical	Peak
5350.00	50.21	54.00	-3.79	1.60	250	42.21	8.00	Vertical	Average
10480.00	53.65	68.20	-14.55	1.60	250	33.75	19.90	Vertical	Peak
10480.00	45.88	54.00	-8.12	1.60	250	25.98	19.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-1_802.11n-HT20_5180MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	60.33	68.20	-7.87	1.50	160	52.83	7.50	Horizontal	Peak
5150.00	48.89	54.00	-5.11	1.50	160	41.39	7.50	Horizontal	Average
10360.00	55.15	68.20	-13.05	1.50	160	35.35	19.80	Horizontal	Peak
10360.00	45.88	54.00	-8.12	1.50	160	26.08	19.80	Horizontal	Average
5150.00	61.51	68.20	-6.69	1.60	250	54.01	7.50	Vertical	Peak
5150.00	49.64	54.00	-4.36	1.60	250	42.14	7.50	Vertical	Average
10360.00	53.01	68.20	-15.19	1.60	250	33.21	19.80	Vertical	Peak
10360.00	45.58	54.00	-8.42	1.60	250	25.78	19.80	Vertical	Average
U-NII-1_802.11n-HT20_5220MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
10440.00	55.64	68.20	-12.56	1.50	160	35.74	19.90	Horizontal	Peak
10440.00	46.08	54.00	-7.92	1.50	160	26.18	19.90	Horizontal	Average
10440.00	53.01	68.20	-15.19	1.60	250	33.11	19.90	Vertical	Peak
10440.00	45.74	54.00	-8.26	1.60	250	25.84	19.90	Vertical	Average
U-NII-1_802.11n-HT20_5240MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	55.64	68.20	-12.56	1.50	160	35.74	8.00	Horizontal	Peak
5350.00	46.08	54.00	-7.92	1.50	160	26.18	8.00	Horizontal	Average
10480.00	53.01	68.20	-15.19	1.60	250	33.11	19.90	Horizontal	Peak
10480.00	45.74	54.00	-8.26	1.60	250	25.84	19.90	Horizontal	Average
5350.00	55.64	68.20	-12.56	1.50	160	35.74	8.00	Vertical	Peak
5350.00	46.08	54.00	-7.92	1.50	160	26.18	8.00	Vertical	Average
10480.00	53.01	68.20	-15.19	1.60	250	33.11	19.90	Vertical	Peak
10480.00	45.74	54.00	-8.26	1.60	250	25.84	19.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-1_802.11ac-VHT20_5180MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	60.39	68.20	-7.81	1.50	160	52.89	7.50	Horizontal	Peak
5150.00	49.36	54.00	-4.64	1.50	160	41.86	7.50	Horizontal	Average
10360.00	55.11	68.20	-13.09	1.50	160	35.31	19.80	Horizontal	Peak
10360.00	46.27	54.00	-7.73	1.50	160	26.47	19.80	Horizontal	Average
5150.00	61.35	68.20	-6.85	1.60	250	53.85	7.50	Vertical	Peak
5150.00	49.36	54.00	-4.64	1.60	250	41.86	7.50	Vertical	Average
10360.00	52.90	68.20	-15.30	1.60	250	33.10	19.80	Vertical	Peak
10360.00	45.35	54.00	-8.65	1.60	250	25.55	19.80	Vertical	Average
U-NII-1_802.11ac-VHT20_5220MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
10440.00	55.55	68.20	-12.65	1.50	160	35.65	19.90	Horizontal	Peak
10440.00	46.52	54.00	-7.48	1.50	160	26.62	19.90	Horizontal	Average
10440.00	53.38	68.20	-14.82	1.60	250	33.48	19.90	Vertical	Peak
10440.00	46.00	54.00	-8.00	1.60	250	26.10	19.90	Vertical	Average
U-NII-1_802.11ac-VHT20_5240MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	51.31	68.20	-16.89	1.50	160	43.31	8.00	Horizontal	Peak
5350.00	49.42	54.00	-4.58	1.50	160	41.42	8.00	Horizontal	Average
10480.00	54.66	68.20	-13.54	1.50	160	34.76	19.90	Horizontal	Peak
10480.00	46.44	54.00	-7.56	1.50	160	26.54	19.90	Horizontal	Average
5350.00	61.35	68.20	-6.85	1.60	250	53.35	8.00	Vertical	Peak
5350.00	50.11	54.00	-3.89	1.60	250	42.11	8.00	Vertical	Average
10480.00	54.11	68.20	-14.09	1.60	250	34.21	19.90	Vertical	Peak
10480.00	45.80	54.00	-8.20	1.60	250	25.90	19.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-1_802.11n-HT40_5190MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	59.91	68.20	-8.29	1.50	160	52.41	7.50	Horizontal	Peak
5150.00	49.72	54.00	-4.28	1.50	160	42.22	7.50	Horizontal	Average
10380.00	54.87	68.20	-13.33	1.50	160	35.07	19.80	Horizontal	Peak
10380.00	46.71	54.00	-7.29	1.50	160	26.91	19.80	Horizontal	Average
5150.00	60.98	68.20	-7.22	1.60	250	53.48	7.50	Vertical	Peak
5150.00	49.69	54.00	-4.31	1.60	250	42.19	7.50	Vertical	Average
10380.00	52.89	68.20	-15.31	1.60	250	33.09	19.80	Vertical	Peak
10380.00	44.90	54.00	-9.10	1.60	250	25.10	19.80	Vertical	Average
U-NII-1_802.11n-HT40_5230MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	51.80	68.20	-16.40	1.50	160	43.80	8.00	Horizontal	Peak
5350.00	49.52	54.00	-4.48	1.50	160	41.52	8.00	Horizontal	Average
10460.00	54.77	68.20	-13.43	1.50	160	34.87	19.90	Horizontal	Peak
10460.00	46.42	54.00	-7.58	1.50	160	26.52	19.90	Horizontal	Average
5350.00	62.22	68.20	-5.98	1.60	250	54.22	8.00	Vertical	Peak
5350.00	50.49	54.00	-3.51	1.60	250	42.49	8.00	Vertical	Average
10460.00	53.74	68.20	-14.46	1.60	250	33.84	19.90	Vertical	Peak
10460.00	46.09	54.00	-7.91	1.60	250	26.19	19.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-1_802.11ac-VHT40_5190MHz									
Frequency (MHz)	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	59.49	68.20	-8.71	1.50	160	51.99	7.50	Horizontal	Peak
5150.00	49.97	54.00	-4.03	1.50	160	42.47	7.50	Horizontal	Average
10380.00	55.27	68.20	-12.93	1.50	160	35.47	19.80	Horizontal	Peak
10380.00	46.47	54.00	-7.53	1.50	160	26.67	19.80	Horizontal	Average
5150.00	60.63	68.20	-7.57	1.60	250	53.13	7.50	Vertical	Peak
5150.00	50.06	54.00	-3.94	1.60	250	42.56	7.50	Vertical	Average
10380.00	53.12	68.20	-15.08	1.60	250	33.32	19.80	Vertical	Peak
10380.00	45.06	54.00	-8.94	1.60	250	25.26	19.80	Vertical	Average
U-NII-1_802.11ac-VHT40_5230MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	51.59	68.20	-16.61	1.50	160	43.59	8.00	Horizontal	Peak
5350.00	49.63	54.00	-4.37	1.50	160	41.63	8.00	Horizontal	Average
10460.00	55.19	68.20	-13.01	1.50	160	35.29	19.90	Horizontal	Peak
10460.00	46.40	54.00	-7.60	1.50	160	26.50	19.90	Horizontal	Average
5350.00	61.74	68.20	-6.46	1.60	250	53.74	8.00	Vertical	Peak
5350.00	50.16	54.00	-3.84	1.60	250	42.16	8.00	Vertical	Average
10460.00	53.96	68.20	-14.24	1.60	250	34.06	19.90	Vertical	Peak
10460.00	45.62	54.00	-8.38	1.60	250	25.72	19.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-1_802.11ac-VHT80_5210MHz									
Frequency (MHz)	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	59.65	68.20	-8.55	1.50	160	52.15	7.50	Horizontal	Peak
5150.00	49.73	54.00	-4.27	1.50	160	42.23	7.50	Horizontal	Average
5350.00	51.90	68.20	-16.30	1.50	160	43.90	8.00	Horizontal	Peak
5350.00	49.28	54.00	-4.72	1.50	160	41.28	8.00	Horizontal	Average
10420.00	52.73	68.20	-15.47	1.50	160	32.83	19.90	Horizontal	Peak
10420.00	45.44	54.00	-8.56	1.50	160	25.54	19.90	Horizontal	Average
5150.00	60.22	68.20	-7.98	1.60	250	52.72	7.50	Vertical	Peak
5150.00	50.01	54.00	-3.99	1.60	250	42.51	7.50	Vertical	Average
5350.00	61.51	68.20	-6.69	1.60	250	53.51	8.00	Vertical	Peak
5350.00	49.85	54.00	-4.15	1.60	250	41.85	8.00	Vertical	Average
10420.00	54.36	68.20	-13.84	1.60	250	34.46	19.90	Vertical	Peak
10420.00	45.90	54.00	-8.10	1.60	250	26.00	19.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-3_802.11a_5745MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	59.65	68.20	-8.55	1.50	160	52.15	9.46	Horizontal	Peak
5700.00	49.73	54.00	-4.27	1.50	160	42.23	9.59	Horizontal	Peak
5720.00	51.90	68.20	-16.30	1.50	160	43.90	9.64	Horizontal	Peak
5725.00	49.28	54.00	-4.72	1.50	160	41.28	9.65	Horizontal	Peak
11490.00	52.73	68.20	-15.47	1.50	160	32.83	21.70	Horizontal	Peak
11490.00	45.44	54.00	-8.56	1.50	160	25.54	21.70	Horizontal	Average
5650.00	60.22	68.20	-7.98	1.60	250	52.72	9.46	Vertical	Peak
5700.00	50.01	54.00	-3.99	1.60	250	42.51	9.59	Vertical	Peak
5720.00	61.51	68.20	-6.69	1.60	250	53.51	9.64	Vertical	Peak
5725.00	49.85	54.00	-4.15	1.60	250	41.85	9.65	Vertical	Peak
11490.00	54.36	68.20	-13.84	1.60	250	34.46	21.70	Vertical	Peak
11490.00	45.90	54.00	-8.10	1.60	250	26.00	21.70	Vertical	Average
U-NII-3_802.11a_5825MHz									
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	59.65	68.20	-8.55	1.50	160	52.15	59.65	Horizontal	Peak
5855.00	49.73	54.00	-4.27	1.50	160	42.23	49.73	Horizontal	Peak
5875.00	51.90	68.20	-16.30	1.50	160	43.90	51.90	Horizontal	Peak
5925.00	49.28	54.00	-4.72	1.50	160	41.28	49.28	Horizontal	Peak
11650.00	52.73	68.20	-15.47	1.50	160	32.83	52.73	Horizontal	Peak
11650.00	45.44	54.00	-8.56	1.50	160	25.54	45.44	Horizontal	Average
5850.00	60.22	68.20	-7.98	1.60	250	52.72	60.22	Vertical	Peak
5855.00	50.01	54.00	-3.99	1.60	250	42.51	50.01	Vertical	Peak
5875.00	61.51	68.20	-6.69	1.60	250	53.51	61.51	Vertical	Peak
5925.00	49.85	54.00	-4.15	1.60	250	41.85	49.85	Vertical	Peak
11650.00	54.36	68.20	-13.84	1.60	250	34.46	54.36	Vertical	Peak
11650.00	45.90	54.00	-8.10	1.60	250	26.00	45.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-3_802.11n-HT20_5745MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	59.65	68.20	-8.55	1.50	160	52.15	9.46	Horizontal	Peak
5700.00	49.73	54.00	-4.27	1.50	160	42.23	9.59	Horizontal	Peak
5720.00	51.90	68.20	-16.30	1.50	160	43.90	9.64	Horizontal	Peak
5725.00	49.28	54.00	-4.72	1.50	160	41.28	9.65	Horizontal	Peak
11490.00	52.73	68.20	-15.47	1.50	160	32.83	21.70	Horizontal	Peak
11490.00	45.44	54.00	-8.56	1.50	160	25.54	21.70	Horizontal	Average
5650.00	60.22	68.20	-7.98	1.60	250	52.72	9.46	Vertical	Peak
5700.00	50.01	54.00	-3.99	1.60	250	42.51	9.59	Vertical	Peak
5720.00	61.51	68.20	-6.69	1.60	250	53.51	9.64	Vertical	Peak
5725.00	49.85	54.00	-4.15	1.60	250	41.85	9.65	Vertical	Peak
11490.00	54.36	68.20	-13.84	1.60	250	34.46	21.70	Vertical	Peak
11490.00	45.90	54.00	-8.10	1.60	250	26.00	21.70	Vertical	Average
U-NII-3_802.11n-HT20_5825MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	60.11	122.20	-62.09	1.50	160	50.33	9.78	Horizontal	Peak
5855.00	60.77	110.80	-50.03	1.50	160	50.98	9.79	Horizontal	Peak
5875.00	60.77	105.20	-44.43	1.50	160	50.93	9.84	Horizontal	Peak
5925.00	60.70	68.20	-7.50	1.50	160	50.73	9.97	Horizontal	Peak
11650.00	49.99	68.20	-18.21	1.50	160	28.09	21.90	Horizontal	Peak
11650.00	44.63	54.00	-9.37	1.50	160	22.73	21.90	Horizontal	Average
5850.00	60.02	122.20	-62.18	1.60	250	50.24	9.78	Vertical	Peak
5855.00	60.43	110.80	-50.37	1.60	250	50.64	9.79	Vertical	Peak
5875.00	60.71	105.20	-44.49	1.60	250	50.87	9.84	Vertical	Peak
5925.00	61.80	68.20	-6.40	1.60	250	51.83	9.97	Vertical	Peak
11650.00	51.31	68.20	-16.89	1.60	250	29.41	21.90	Vertical	Peak
11650.00	44.01	54.00	-9.99	1.60	250	22.11	21.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report. 5. ANT 0, ANT 1, ANT 2 and ANT 3 is 4*4MIMO.									

U-NII-3_802.11ac-VHE20_5745MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	60.49	68.20	-7.71	1.50	160	51.03	9.46	Horizontal	Peak
5700.00	60.58	105.20	-44.62	1.50	160	50.99	9.59	Horizontal	Peak
5720.00	60.54	110.80	-50.26	1.50	160	50.90	9.64	Horizontal	Peak
5725.00	61.11	122.20	-61.09	1.50	160	51.46	9.65	Horizontal	Peak
11490.00	49.19	68.20	-19.01	1.50	160	27.49	21.70	Horizontal	Peak
11490.00	43.93	54.00	-10.07	1.50	160	22.23	21.70	Horizontal	Average
5650.00	60.02	68.20	-8.18	1.60	250	50.56	9.46	Vertical	Peak
5700.00	59.96	105.20	-45.24	1.60	250	50.37	9.59	Vertical	Peak
5720.00	60.17	110.80	-50.63	1.60	250	50.53	9.64	Vertical	Peak
5725.00	62.13	122.20	-60.07	1.60	250	52.48	9.65	Vertical	Peak
11490.00	50.31	68.20	-17.89	1.60	250	28.61	21.70	Vertical	Peak
11490.00	43.23	54.00	-10.77	1.60	250	21.53	21.70	Vertical	Average
U-NII-3_802.11ac-VHT20_5825MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	59.61	122.20	-62.59	1.50	160	49.83	9.78	Horizontal	Peak
5855.00	60.63	110.80	-50.17	1.50	160	50.84	9.79	Horizontal	Peak
5875.00	61.01	105.20	-44.19	1.50	160	51.17	9.84	Horizontal	Peak
5925.00	60.99	68.20	-7.21	1.50	160	51.02	9.97	Horizontal	Peak
11650.00	49.96	68.20	-18.24	1.50	160	28.06	21.90	Horizontal	Peak
11650.00	44.65	54.00	-9.35	1.50	160	22.75	21.90	Horizontal	Average
5850.00	59.86	122.20	-62.34	1.60	250	50.08	9.78	Vertical	Peak
5855.00	60.23	110.80	-50.57	1.60	250	50.44	9.79	Vertical	Peak
5875.00	60.28	105.20	-44.92	1.60	250	50.44	9.84	Vertical	Peak
5925.00	61.32	68.20	-6.88	1.60	250	51.35	9.97	Vertical	Peak
11650.00	50.92	68.20	-17.28	1.60	250	29.02	21.90	Vertical	Peak
11650.00	44.26	54.00	-9.74	1.60	250	22.36	21.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report. 5. ANT 0, ANT 1, ANT 2 and ANT 3 is 4*4MIMO.									

U-NII-3_802.11a_5785MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11570.00	59.61	122.20	-62.59	1.50	160	49.83	21.70	Horizontal	Peak
11570.00	60.63	110.80	-50.17	1.50	160	50.84	21.70	Horizontal	Average
11570.00	61.01	105.20	-44.19	1.50	160	51.17	21.70	Vertical	Peak
11570.00	60.99	68.20	-7.21	1.50	160	51.02	21.70	Vertical	Average
U-NII-3_802.11n-HT20_5785MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11570.00	49.28	68.20	-18.92	1.50	160	27.58	21.70	Horizontal	Peak
11570.00	43.61	54.00	-10.39	1.50	160	21.91	21.70	Horizontal	Average
11570.00	50.15	68.20	-18.05	1.60	250	28.45	21.70	Vertical	Peak
11570.00	43.48	54.00	-10.52	1.60	250	21.78	21.70	Vertical	Average
U-NII-3_802.11ac-VHT20_5785MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11570.00	49.30	68.20	-18.90	1.50	160	27.60	21.70	Horizontal	Peak
11570.00	43.83	54.00	-10.17	1.50	160	22.13	21.70	Horizontal	Average
11570.00	49.81	68.20	-18.39	1.60	250	28.11	21.70	Vertical	Peak
11570.00	43.81	54.00	-10.19	1.60	250	22.11	21.70	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-3_802.11n-HT40_5755MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	60.60	68.20	-7.60	1.50	160	51.14	9.46	Horizontal	Peak
5700.00	60.17	105.20	-45.03	1.50	160	50.58	9.59	Horizontal	Peak
5720.00	59.72	110.80	-51.08	1.50	160	50.08	9.64	Horizontal	Peak
5725.00	60.98	122.20	-61.22	1.50	160	51.33	9.65	Horizontal	Peak
11510.00	49.18	68.20	-19.02	1.50	160	27.48	21.70	Horizontal	Peak
11510.00	43.49	54.00	-10.51	1.50	160	21.79	21.70	Horizontal	Average
5650.00	59.68	68.20	-8.52	1.60	250	50.22	9.46	Vertical	Peak
5700.00	59.67	105.20	-45.53	1.60	250	50.08	9.59	Vertical	Peak
5720.00	60.14	110.80	-50.66	1.60	250	50.50	9.64	Vertical	Peak
5725.00	62.76	122.20	-59.44	1.60	250	53.11	9.65	Vertical	Peak
11510.00	49.81	68.20	-18.39	1.60	250	28.11	21.70	Vertical	Peak
11510.00	43.65	54.00	-10.35	1.60	250	21.95	21.70	Vertical	Average
U-NII-3_802.11n-HT40_5795MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	59.50	122.20	-62.70	1.50	160	49.72	9.78	Horizontal	Peak
5855.00	61.03	110.80	-49.77	1.50	160	51.24	9.79	Horizontal	Peak
5875.00	60.56	105.20	-44.64	1.50	160	50.72	9.84	Horizontal	Peak
5925.00	61.46	68.20	-6.74	1.50	160	51.49	9.97	Horizontal	Peak
11590.00	50.75	68.20	-17.45	1.50	160	28.85	21.90	Horizontal	Peak
11590.00	45.32	54.00	-8.68	1.50	160	23.42	21.90	Horizontal	Average
5850.00	59.79	122.20	-62.41	1.60	250	50.01	9.78	Vertical	Peak
5855.00	60.34	110.80	-50.46	1.60	250	50.55	9.79	Vertical	Peak
5875.00	60.89	105.20	-44.31	1.60	250	51.05	9.84	Vertical	Peak
5925.00	60.74	68.20	-7.46	1.60	250	50.77	9.97	Vertical	Peak
11590.00	51.58	68.20	-16.62	1.60	250	29.68	21.90	Vertical	Peak
11590.00	44.30	54.00	-9.70	1.60	250	22.40	21.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-3_802.11ac-VHT40_5755MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	60.15	68.20	-8.05	1.50	160	50.69	9.46	Horizontal	Peak
5700.00	60.14	105.20	-45.06	1.50	160	50.55	9.59	Horizontal	Peak
5720.00	60.22	110.80	-50.58	1.50	160	50.58	9.64	Horizontal	Peak
5725.00	61.15	122.20	-61.05	1.50	160	51.50	9.65	Horizontal	Peak
11510.00	49.05	68.20	-19.15	1.50	160	27.35	21.70	Horizontal	Peak
11510.00	43.85	54.00	-10.15	1.50	160	22.15	21.70	Horizontal	Average
5650.00	60.09	68.20	-8.11	1.60	250	50.63	9.46	Vertical	Peak
5700.00	59.94	105.20	-45.26	1.60	250	50.35	9.59	Vertical	Peak
5720.00	60.14	110.80	-50.66	1.60	250	50.50	9.64	Vertical	Peak
5725.00	62.34	122.20	-59.86	1.60	250	52.69	9.65	Vertical	Peak
11510.00	49.87	68.20	-18.33	1.60	250	28.17	21.70	Vertical	Peak
11510.00	43.49	54.00	-10.51	1.60	250	21.79	21.70	Vertical	Average
U-NII-3_802.11ac-VHT40_5795MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	59.16	122.20	-63.04	1.50	160	49.38	9.78	Horizontal	Peak
5855.00	61.04	110.80	-49.76	1.50	160	51.25	9.79	Horizontal	Peak
5875.00	60.81	105.20	-44.39	1.50	160	50.97	9.84	Horizontal	Peak
5925.00	61.31	68.20	-6.89	1.50	160	51.34	9.97	Horizontal	Peak
11590.00	50.27	68.20	-17.93	1.50	160	28.37	21.90	Horizontal	Peak
11590.00	44.99	54.00	-9.01	1.50	160	23.09	21.90	Horizontal	Average
5850.00	60.27	122.20	-61.93	1.60	250	50.49	9.78	Vertical	Peak
5855.00	60.64	110.80	-50.16	1.60	250	50.85	9.79	Vertical	Peak
5875.00	60.52	105.20	-44.68	1.60	250	50.68	9.84	Vertical	Peak
5925.00	61.04	68.20	-7.16	1.60	250	51.07	9.97	Vertical	Peak
11590.00	51.18	68.20	-17.02	1.60	250	29.28	21.90	Vertical	Peak
11590.00	43.91	54.00	-10.09	1.60	250	22.01	21.90	Vertical	Average
Remark: 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

U-NII-3_802.11ac-VHT80_5775MHz									
Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	59.98	68.20	-8.22	1.50	160	50.52	9.46	Horizontal	Peak
5700.00	59.80	105.20	-45.40	1.50	160	50.21	9.59	Horizontal	Peak
5720.00	59.86	110.80	-50.94	1.50	160	50.22	9.64	Horizontal	Peak
5725.00	61.32	122.20	-60.88	1.50	160	51.67	9.65	Horizontal	Peak
5850.00	59.10	122.20	-63.10	1.50	160	49.32	9.78	Horizontal	Peak
5855.00	60.76	110.80	-50.04	1.50	160	50.97	9.79	Horizontal	Peak
5875.00	60.49	105.20	-44.71	1.50	160	50.65	9.84	Horizontal	Peak
5925.00	61.12	68.20	-7.08	1.50	160	51.15	9.97	Horizontal	Peak
11550.00	50.63	68.20	-17.57	1.50	160	28.83	21.80	Horizontal	Peak
11550.00	44.55	54.00	-9.45	1.50	160	22.75	21.80	Horizontal	Average
5650.00	59.92	68.20	-8.28	1.60	250	50.46	9.46	Vertical	Peak
5700.00	59.65	105.20	-45.55	1.60	250	50.06	9.59	Vertical	Peak
5720.00	60.47	110.80	-50.33	1.60	250	50.83	9.64	Vertical	Peak
5725.00	62.79	122.20	-59.41	1.60	250	53.14	9.65	Vertical	Peak
5850.00	60.21	122.20	-61.99	1.60	250	50.43	9.78	Vertical	Peak
5855.00	61.11	110.80	-49.69	1.60	250	51.32	9.79	Vertical	Peak
5875.00	60.75	105.20	-44.45	1.60	250	50.91	9.84	Vertical	Peak
5925.00	61.23	68.20	-6.97	1.60	250	51.26	9.97	Vertical	Peak
11550.00	51.60	68.20	-16.60	1.60	250	29.80	21.80	Vertical	Peak
11550.00	44.21	54.00	-9.79	1.60	250	22.41	21.80	Vertical	Average
<i>Remark:</i> 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m) 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB) 3. Margin value = Emission Level – Limit value 4. The emission levels of other frequencies are very lower than the limit and not show in test report.									

2.7. AC Power Line Conducted Emission

2.7.1. Limit of AC Power Line Conducted Emission

FCC Part 15.207:

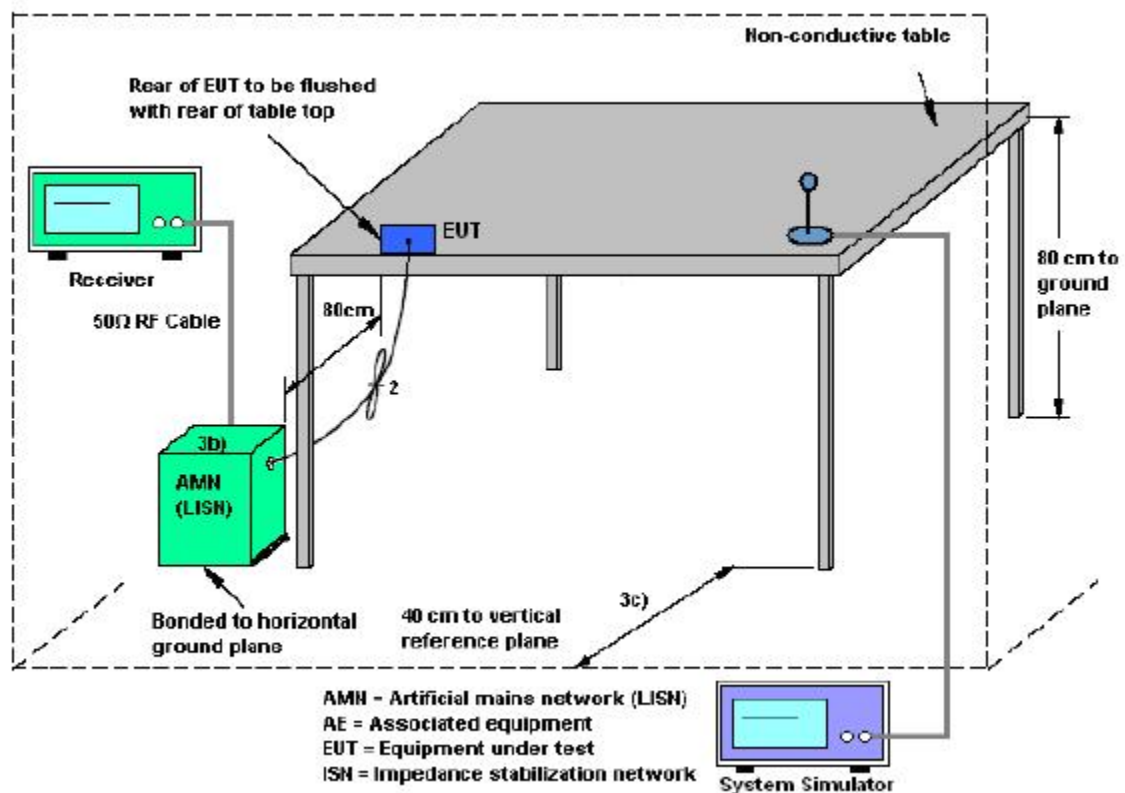
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

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

NOTE: The product shall only be connected to a DC power supply source with output voltage higher than 9V and lower than 36V, not connected to the grid.

3. List of measuring equipment

Item	Description	Manufacturer	Model	Serial No.	Cal. Date	Due Date
1	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2022.07.21	2023.07.20
2	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2019.03.25	2023.03.24
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2020.06.19	2023.06.18
5	EMI Horn Ant. (1-18G)	ETC	1209	A150402241	2021.01.02	2024.01.01
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2020.06.19	2023.06.18
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2020.09.22	2023.09.21
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2021.12.23	2022.12.22
9	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2021.04.26	2022.04.25
					2022.03.25	2023.03.24
10	Test Receiver	R&S	ESIB7	A0501375	2022.04.18	2023.04.17
11	Broadband Ant.	2786	ETC	A150402240	2021.09.16	2024.03.03
12	3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2019.03.26	2023.03.25
13	Temperature chamber	TABAI	PS-232	A8708054	2022.08.18	2023.08.17
14	Wideband Radio Communication tester	R&S	CMW500	A130101034	2021.01.26	2023.01.25
15	Test Receiver	KEYSIGHT	N9038A	A141202036	2022.07.21	2023.07.20
16	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2022.07.21	2023.07.20
17	Cable	MATCHING PAD	W7	/	2022.07.21	2023.07.20

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

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

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

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

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

Output power

Test results

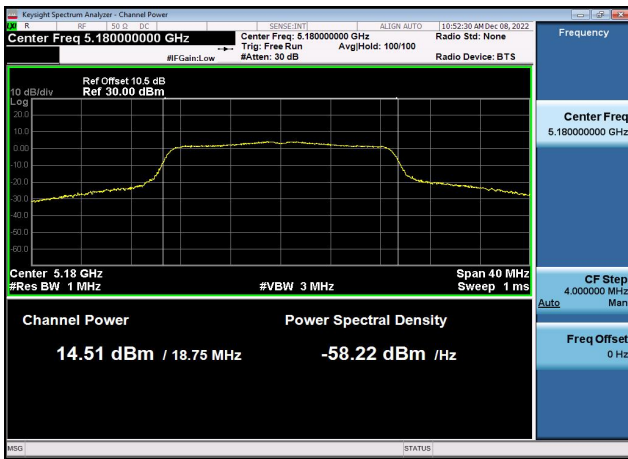
U-NII-1 AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5180	14.51	24	Pass
802.11n (20MHz)	5220	14.75	24	Pass
802.11n (20MHz)	5240	13.31	24	Pass
802.11n (40MHz)	5190	13.95	24	Pass
802.11n (40MHz)	5230	13.21	24	Pass
802.11ac (20MHz)	5180	13.96	24	Pass
802.11ac (20MHz)	5220	13.76	24	Pass
802.11ac (20MHz)	5240	13.22	24	Pass
802.11ac (40MHz)	5190	13.71	24	Pass
802.11ac (40MHz)	5230	13.28	24	Pass
802.11ac (80MHz)	5210	14.19	24	Pass
802.11a (20MHz)	5180	15.51	24	Pass
802.11a (20MHz)	5220	15.69	24	Pass
802.11a (20MHz)	5240	15.02	24	Pass



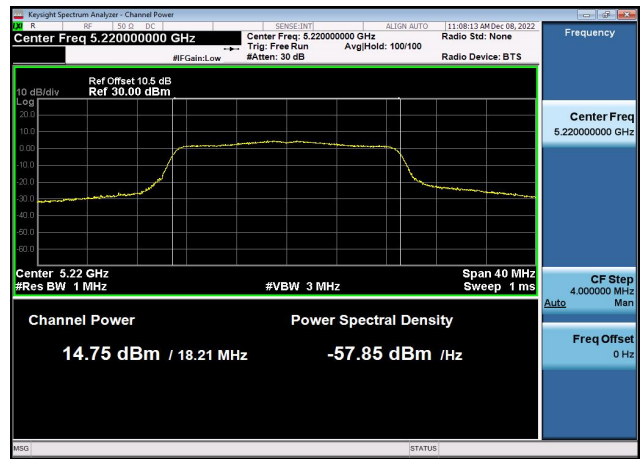
U-NII-3 AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5745	14.51	30	Pass
802.11n (20MHz)	5785	14.41	30	Pass
802.11n (20MHz)	5825	14.26	30	Pass
802.11n (40MHz)	5755	14.94	30	Pass
802.11n (40MHz)	5795	14.69	30	Pass
802.11ac (20MHz)	5745	14.50	30	Pass
802.11ac (20MHz)	5785	14.42	30	Pass
802.11ac (20MHz)	5825	13.92	30	Pass
802.11ac (40MHz)	5755	14.68	30	Pass
802.11ac (40MHz)	5795	14.69	30	Pass
802.11ac (80MHz)	5775	14.42	30	Pass
802.11a (20MHz)	5745	15.84	30	Pass
802.11a (20MHz)	5785	14.77	30	Pass
802.11a (20MHz)	5825	14.49	30	Pass

Test plots

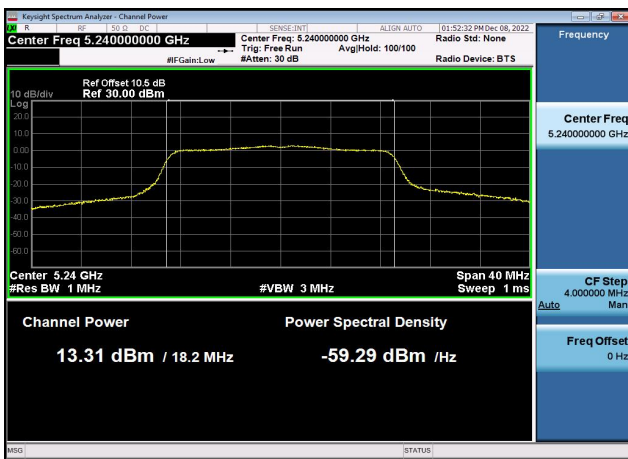
U-NII-1 Output Power-802.11n(20MHz)
,5180MHz,Ant1



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



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



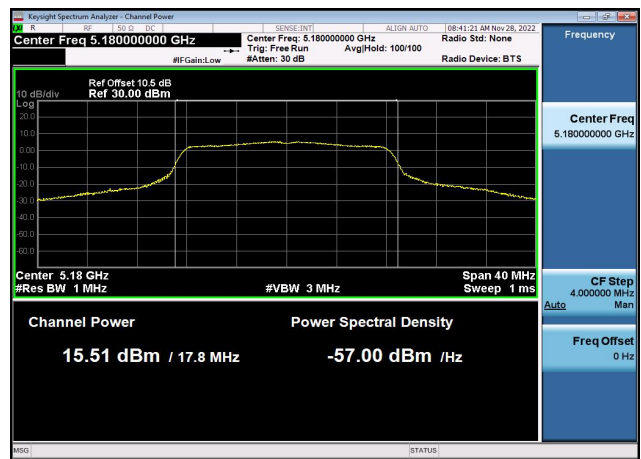
U-NII-1 Output Power-802.11n(40MHz)
,5190MHz,Ant1



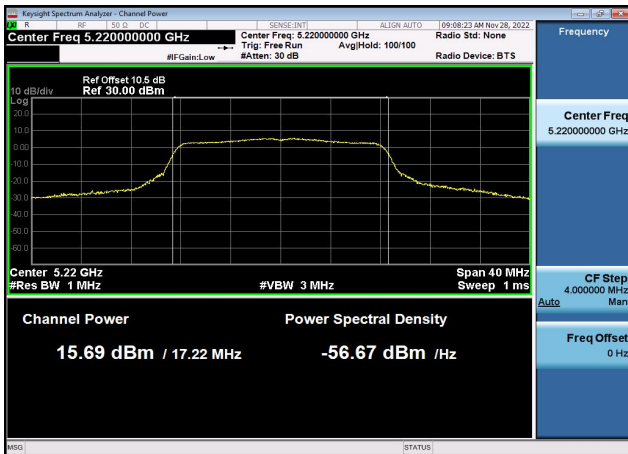
U-NII-1 Output Power-802.11n(40MHz)
,5230MHz,Ant1



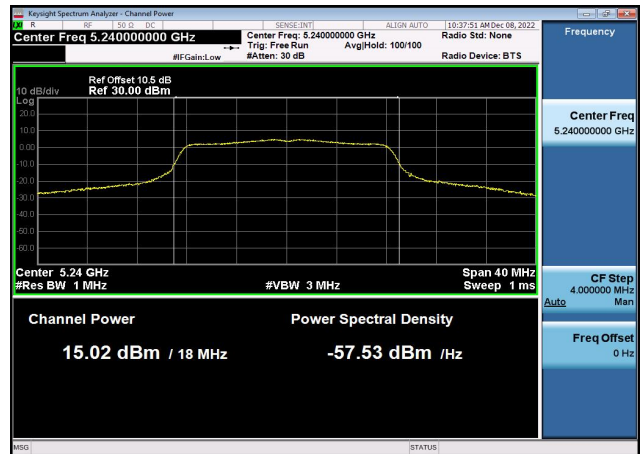
U-NII-1 Output Power-802.11a(20MHz)
,5180MHz,Ant1



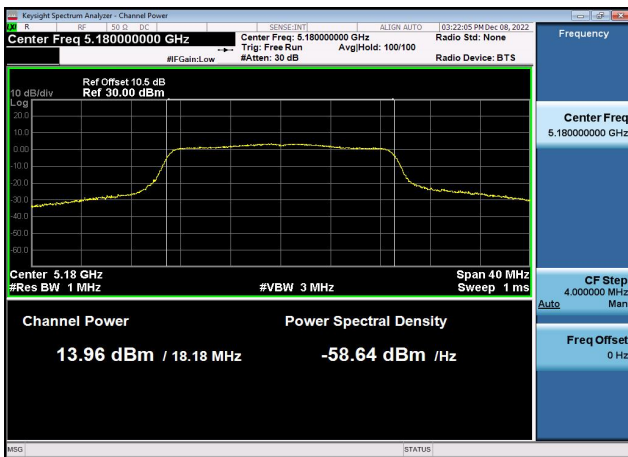
U-NII-1 Output Power-802.11a(20MHz)
,5220MHz,Ant1



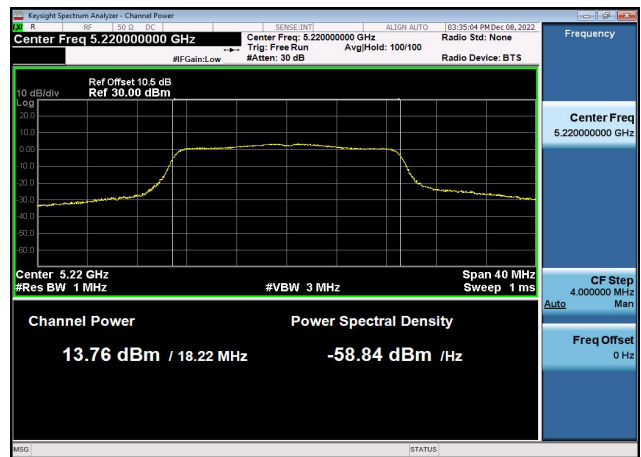
U-NII-1 Output Power-802.11a(20MHz)
,5240MHz,Ant1



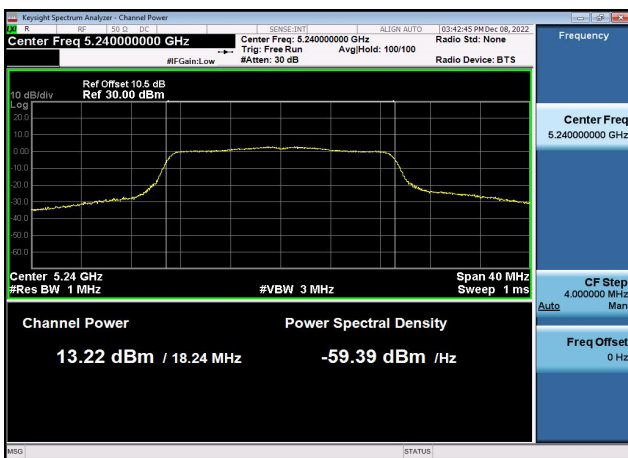
U-NII-1 Output Power-802.11ac(20MHz)
,5180MHz,Ant1



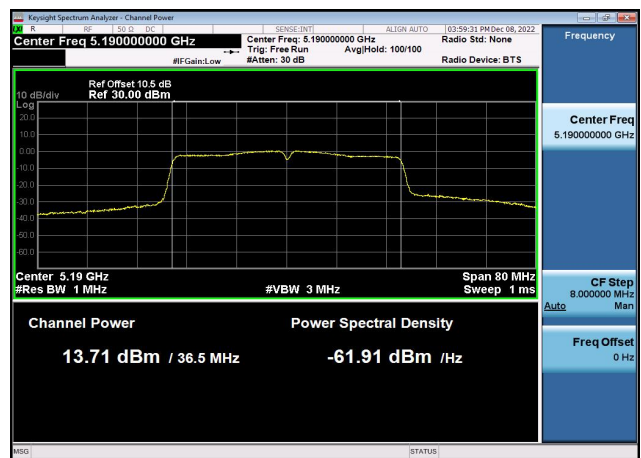
U-NII-1 Output Power-802.11ac(20MHz)
,5220MHz,Ant1



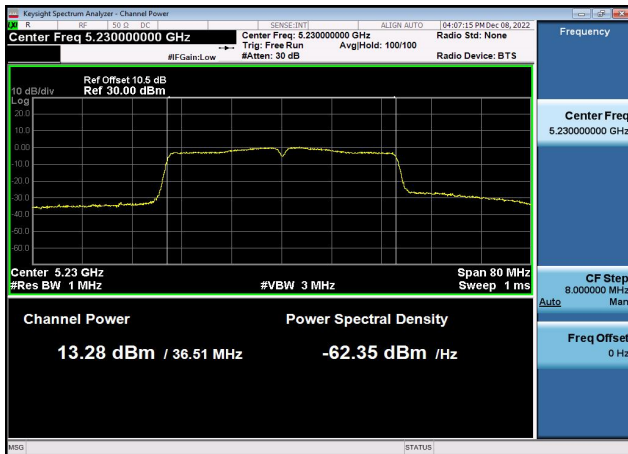
U-NII-1 Output Power-802.11ac(20MHz)
,5240MHz,Ant1



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



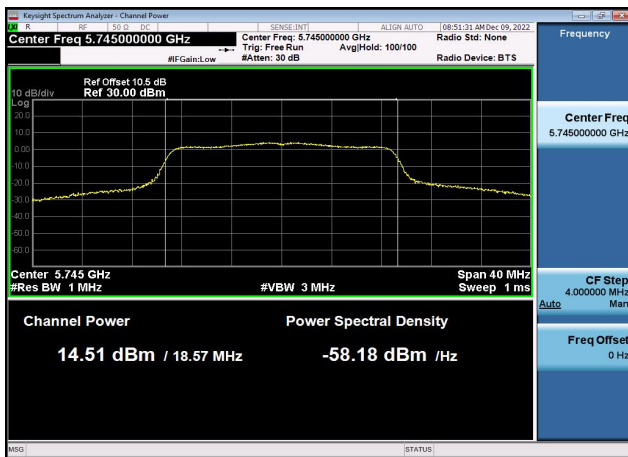
U-NII-1 Output Power-802.11ac(40MHz) ,5230MHz,Ant1



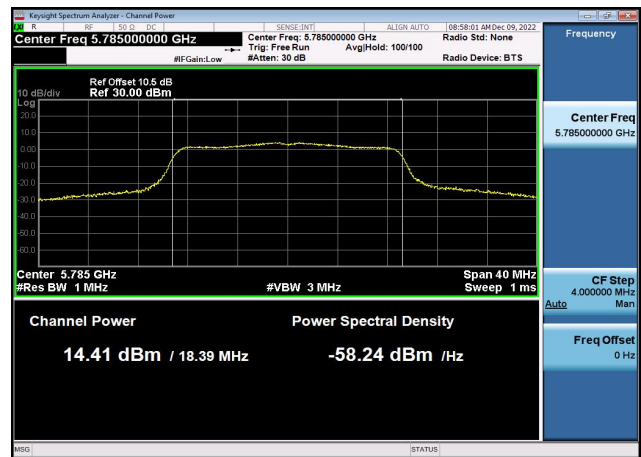
U-NII-1 Output Power-802.11ac(80MHz) ,5210MHz,Ant1



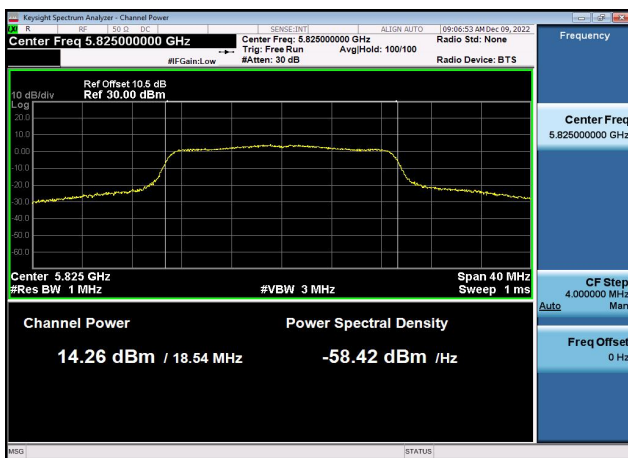
U-NII-3 Output Power-802.11n(20MHz) ,5745MHz,Ant1



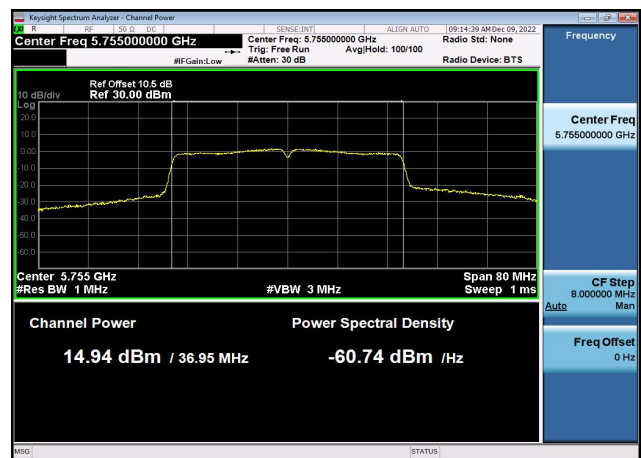
U-NII-3 Output Power-802.11n(20MHz) ,5785MHz,Ant1



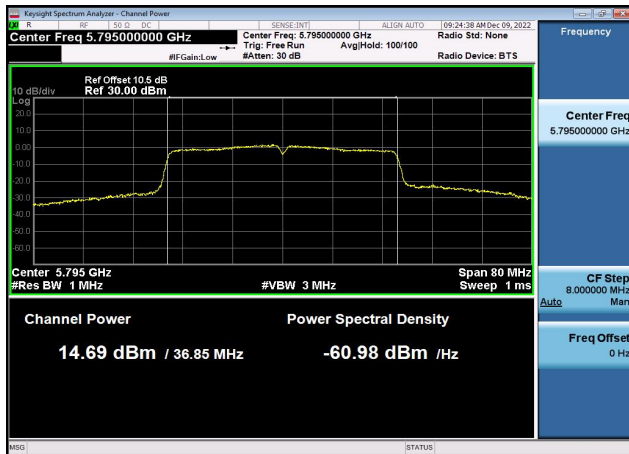
U-NII-3 Output Power-802.11n(20MHz) ,5825MHz,Ant1



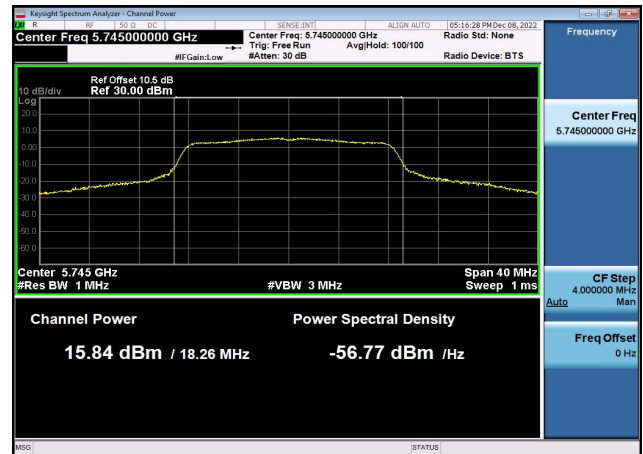
U-NII-3 Output Power-802.11n(40MHz) ,5755MHz,Ant1



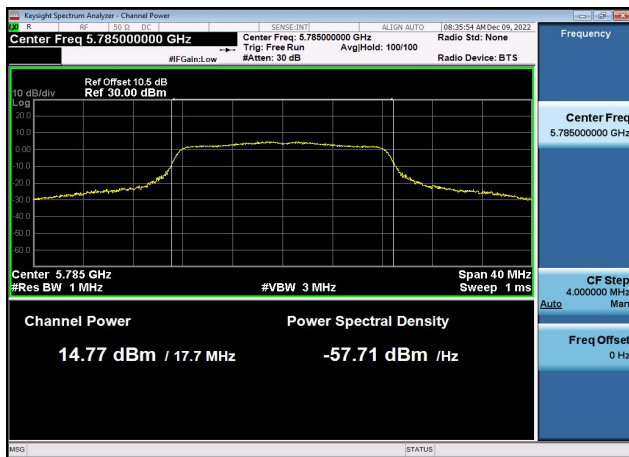
U-NII-3 Output Power-802.11n(40MHz)
,5795MHz,Ant1



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



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



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



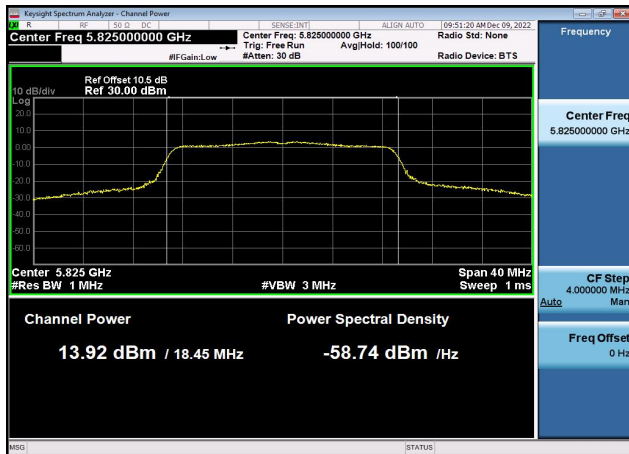
U-NII-3 Output Power-802.11ac(20MHz)
,5745MHz,Ant1



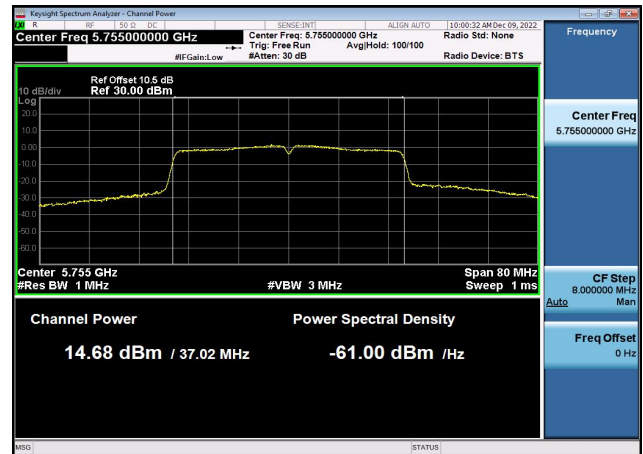
U-NII-3 Output Power-802.11ac(20MHz)
,5785MHz,Ant1



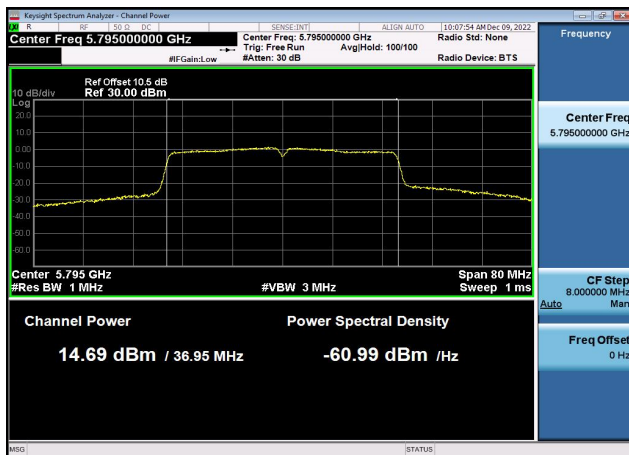
U-NII-3 Output Power-802.11ac(20MHz) ,5825MHz,Ant1



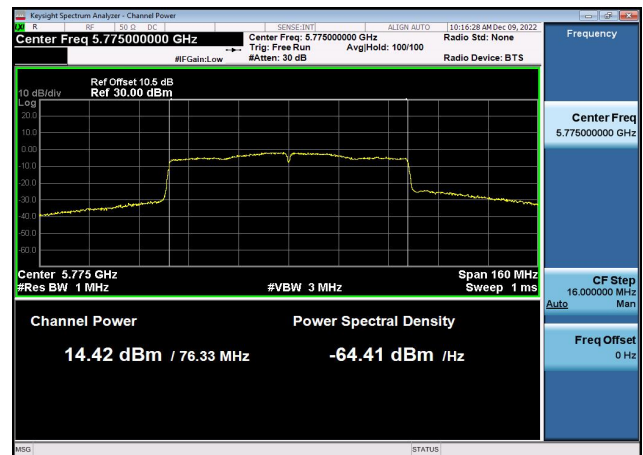
U-NII-3 Output Power-802.11ac(40MHz) ,5755MHz,Ant1



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



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



AVGSA Power Spectral Density

Test Result and Data

U-NII-1 AVGSA Output Power				
Mode	Test Frequency (MHz)	PSD (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5180	4.288	11	Pass
802.11n (20MHz)	5220	4.301	11	Pass
802.11n (20MHz)	5240	3.125	11	Pass
802.11n (40MHz)	5190	0.576	11	Pass
802.11n (40MHz)	5230	0.002	11	Pass
802.11ac (20MHz)	5180	3.533	11	Pass
802.11ac (20MHz)	5220	3.376	11	Pass
802.11ac (20MHz)	5240	2.836	11	Pass
802.11ac (40MHz)	5190	0.699	11	Pass
802.11ac (40MHz)	5230	0.120	11	Pass
802.11ac (80MHz)	5210	-1.809	11	Pass
802.11a (20MHz)	5180	5.161	11	Pass
802.11a (20MHz)	5220	5.436	11	Pass
802.11a (20MHz)	5240	4.853	11	Pass



U-NII-3 AVGSA Output Power				
Mode	Test Frequency (MHz)	PSD (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5745	1.147	30	Pass
802.11n (20MHz)	5785	1.473	30	Pass
802.11n (20MHz)	5825	1.287	30	Pass
802.11n (40MHz)	5755	-0.138	30	Pass
802.11n (40MHz)	5795	-1.156	30	Pass
802.11ac (20MHz)	5745	1.261	30	Pass
802.11ac (20MHz)	5785	1.301	30	Pass
802.11ac (20MHz)	5825	1.219	30	Pass
802.11ac (40MHz)	5755	-1.133	30	Pass
802.11ac (40MHz)	5795	-0.940	30	Pass
802.11ac (80MHz)	5775	-4.199	30	Pass
802.11a (20MHz)	5745	3.088	30	Pass
802.11a (20MHz)	5785	1.876	30	Pass
802.11a (20MHz)	5825	1.532	30	Pass

Test Plots

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



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



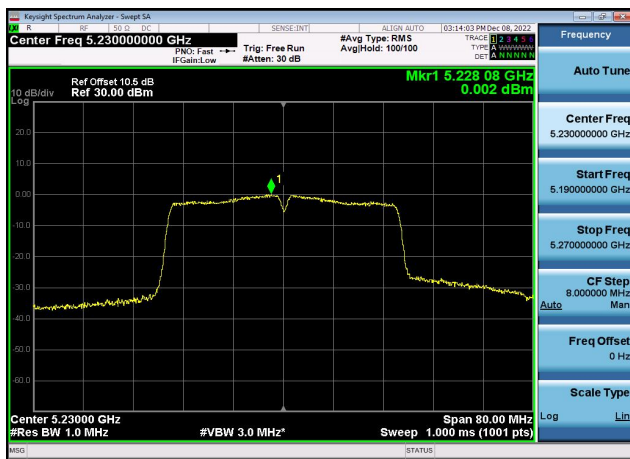
U-NII-1 Power spectral density-802.11
n(20MHz),5240MHz,Ant1



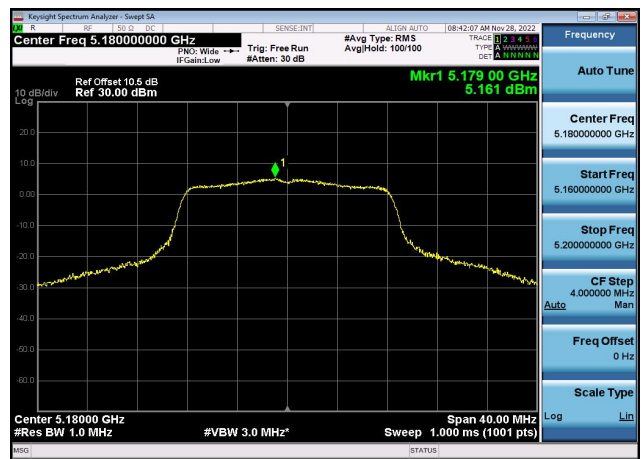
U-NII-1 Power spectral density-802.11
n(40MHz),5190MHz,Ant1



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



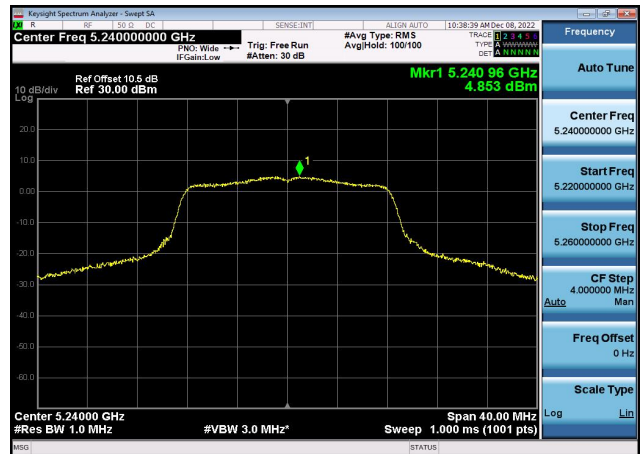
U-NII-1 Power spectral density-802.11
a(20MHz),5180MHz,Ant1



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



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



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



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



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



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



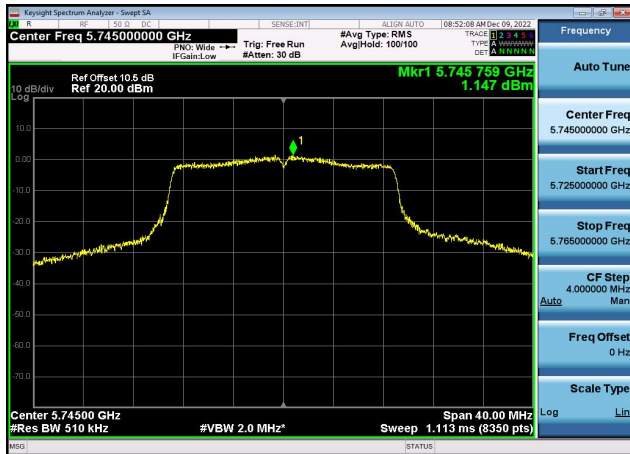
U-NII-1 Power spectral density-802.11
ac(40MHz),5230MHz,Ant1



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



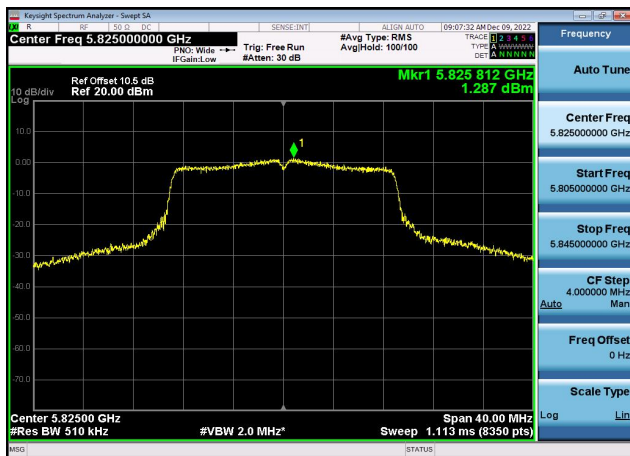
U-NII-3 Power spectral density-802.11
n(20MHz),5745MHz,Ant1



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



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



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

