RF TEST REPORT

Report No.:	20240717G12724X-W5
Product Name:	Ultra High Brightness Hanging Double-Sided Displays, Ultrathin Digital Poster, Double sided window poster, Intelligent multimedia display, LCD digital display
Main Model No. :	D55R1
Series Model No. :	UDS55HD10, ASLUDS55HD10, ASHUDS55HD10, D55******, UDS55******, ASLUDS55******, ASHUDS55******, D********, UDS********, TC55******, M55******, L55******, OH********,OM********("*" = 0~9 or A~Z or blank)
FCC ID:	2AVB8-0010010038877
Applicant:	Shanghai Goodview Electronics Technology Co., Ltd
Address:	Room 118, 1st Floor, No. 2, Lane 3999, Xiupu Road, Pudong District, Shanghai
Dates of Testing:	07/13/2024 - 08/19/2024
Issued by:	CCIC Southern Testing Co., Ltd.
Lab Location:	Electronic Testing Building, No.43, Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China. **Tel**：8-755-26627338 **E-Mail**：manager@ccic-set.com

Test Report

Product ..... :	Ultra High Brightness Hanging Double-Sided Displays, Ultrathin Digital Poster, Double sided window poster, Intelligent multimedia display, LCD digital display
Trade Name ..... :	Goodview
Applicant..... :	Shanghai Goodview Electronics Technology Co., Ltd
Applicant Address ..... :	Room 118, 1st Floor, No. 2, Lane 3999, Xiupu Road, Pudong District, Shanghai
Manufacturer ..... :	Shanghai Goodview Electronics Technology Co., Ltd
Manufacturer Address ..... :	Room 118, 1st Floor, No. 2, Lane 3999, Xiupu Road, Pudong District, Shanghai
Test Standards ..... :	47 CFR Part 15 Subpart E 15.407 ANSI C63.10-2020
Test Result..... :	Pass

Tested by ..... : Chuiwang Zhang 2024.08.19

Chuiwang Zhang, Test Engineer

Reviewed by ..... : Sun Jiaohui 2024.08.19

Sun Jiaohui, Senior Engineer

Approved by ..... : Chris You 2024.08.19

Chris You, Manager

Table of Contents

Change History		
Issue	Date	Reason for change
1.0	2024.08.19	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Ultra High Brightness Hanging Double-Sided Displays, Ultrathin Digital Poster, Double sided window poster, Intelligent multimedia display, LCD digital display	
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: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)	
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 200 Mbps 802.11ax: up to 786.765 Mbps	
Frequency Range	UNII-1: 5150 ~ 5250MHz	UNII-2c: 5470 ~ 5725MHz
	UNII-2a: 5250 ~ 5350MHz	UNII-3: 5725 ~ 5850MHz
Channel Bandwidth	802.11a: 20MHz 802.11n/ac/ax: 20MHz/40MHz	
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) 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) 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) 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)	
Antenna Type	External antenna	
Antenna Gain	4.12dBi	
Output Power (Max.)	UNII-1: 12.62dBm	UNII-2c: 14.45dBm
	UNII-2a: 12.89dBm	UNII-3: 14.94dBm
Power supply	100V-240V～50/60Hz 3A	

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.

Note 2: All models are different only in appearance color, software version, and customer code,

which has no impact on RF, safety and EMC performance. Among all models in this application, the screen size is 55 inches, and the external structure, internal structure, used circuit board and devices are all the same, which does not affect the RF, safety and EMC performance of the product.

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	ANSI C63.10-2020	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 and 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 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

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

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	/	/

Operated band in 5725 MHz ~ 5850MHz

5 channels are provided for 802.11a, 802.11n-HT20, 802.11ac-VHT20 and 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 and 802.11ax-HE40.

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

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/HE20				MCS 0
802.11n-HT40/ac-VHT40/HE40	5190	/	5230	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/HE20				MCS 0
802.11n-HT40/ac-VHT40/HE40	5270	/	5310	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/HE20				MCS 0
802.11n-HT40/ac-VHT40/HE40	5510	5550	5670	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/HE20				MCS 0
802.11n-HT40/ac-VHT40/HE40	5755	/	5795	MCS 0
Note: After scanning all modulation types and data rates for all test patterns, the above list was found to be the worst case.				

1.5. Table for Supporting Units

Support Equipment:

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.: CN1283

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

2.1. Antenna requirement

2.1.1. Applicable Standard

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

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

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

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

2.1.2. Antenna Information

Antenna General Information:

No.	Operating frequency range	Ant. Type	Ant. Gain
1	UNII-1, UNII-2a, UNII-2c, UNII-3	Externa	4.12dBi

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):

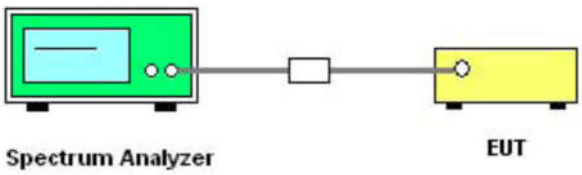
The maximum conducted output power should not exceed:

Band	EUT Category	Limit
U-NII-1	☐Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≤ 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 C63.10-2020 Section 12.4.2.2.
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 ≥ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).

6. Number of points in sweep ≥ 2 × span / RBW.

7. Trace average at least 100 traces in power averaging (rms) mode.

8. Replace the EUT center frequency and repeat steps 3~7.

2.2.5. Test Results of Maximum Conducted Output Power

Please refer to APPENDIX A for detail.

2.3. Power spectral density (PSD)

2.3.1. Limit of Power Spectral Density

FCC Part 15.407(a)

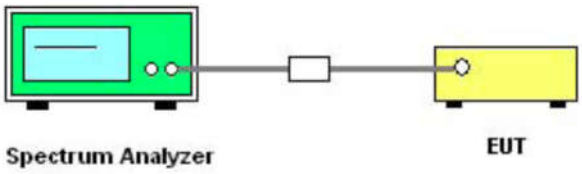
The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	☐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 C63.10-2020 Section 12.6.
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 ≥ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).
5. For U-NII-3 Band: Set RBW = 500kHz, VBW ≥ 3MHz, Sweep time = Auto, Detector = power averaging (RMS).
6. Number of points in sweep ≥ 2 × span / RBW.
7. Trace average at least 100 traces in power averaging (rms) mode.
8. Use the peak search function on the instrument to find the peak of the spectrum.

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

2.3.5. Test Result of Power Spectral Density

Please refer to APPENDIX A for detail.

2.4. 26dB Emission Bandwidth and 99% Occupied Bandwidth

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

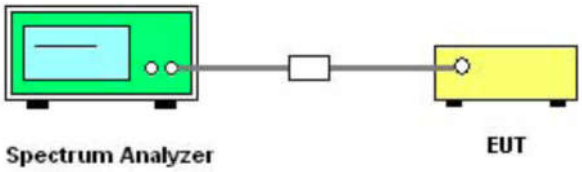
26dB Emission Bandwidth and 99% Occupied Bandwidth no Bandwidth limit.

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

2.4.2. Measuring Instruments

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

2.4.3. Test Description



2.4.4. Test Procedures

1. The testing follows the of KDB 789033 D02 v02r01 Section II.C.D and ANSI C63.10-2020 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. 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. For 99% OBW Measurement:
   Set Span = 1.5 times to 5.0 times the OBW/ RBW = Within 1% to 5% of OBW/VBW ≥ 3 × RBW.
6. For 26dB EBW Measurement:
   Set Span = 2.0 times to 5.0 times the EBW/ RBW = Within 1% to 5% of EBW/VBW ≥ 3 × RBW.
7. For 6dB EBW Measurement:
   Set RBW =100kHz, VBW ≥ 3 × 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

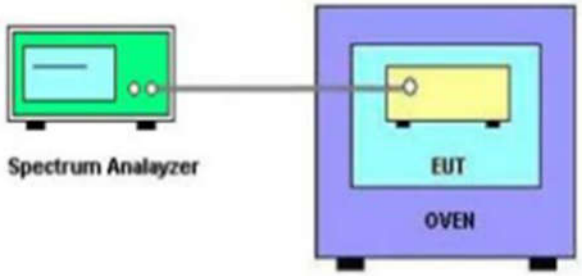
2.5.1. Limit of Frequency Stability

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 C63.10-2020 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 (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

NOTE:

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

Limits of unwanted emission out of the restricted bands

FCC Part 15.407(b)			
Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength @3m (dBμV/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) EIRP[dBm] = E[dBμV/m] + 20 log (d[m]) - 104.77, d is the measurement distance in m.
2) E[dBμV/m] = EIRP[dBm] + 95.2=68.2 dBuV/m, for EIPR[dBm] = -27dBm.
   E[dBμV/m] = EIRP[dBm] + 95.2=105.2 dBuV/m, for EIPR[dBm] = 10dBm.
   E[dBμV/m] = EIRP[dBm] + 95.2=110.8 dBuV/m, for EIPR[dBm] = 15.6dBm.
   E[dBμV/m] = EIRP[dBm] + 95.2=122.2 dBuV/m, for EIPR[dBm] = 27dBm.

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).

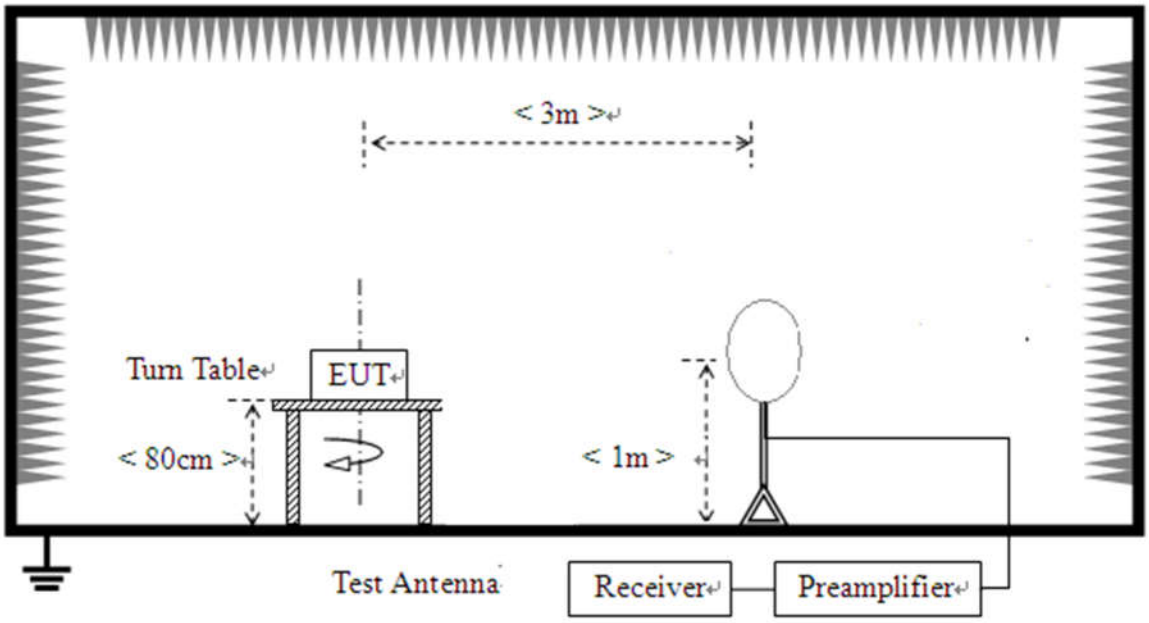
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	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

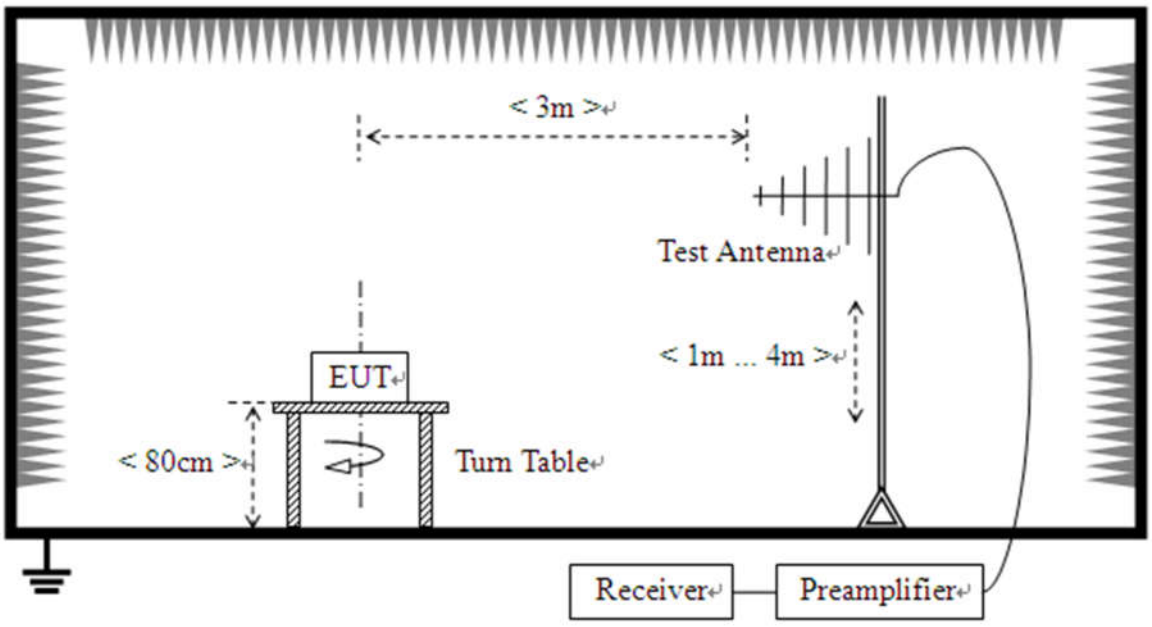
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

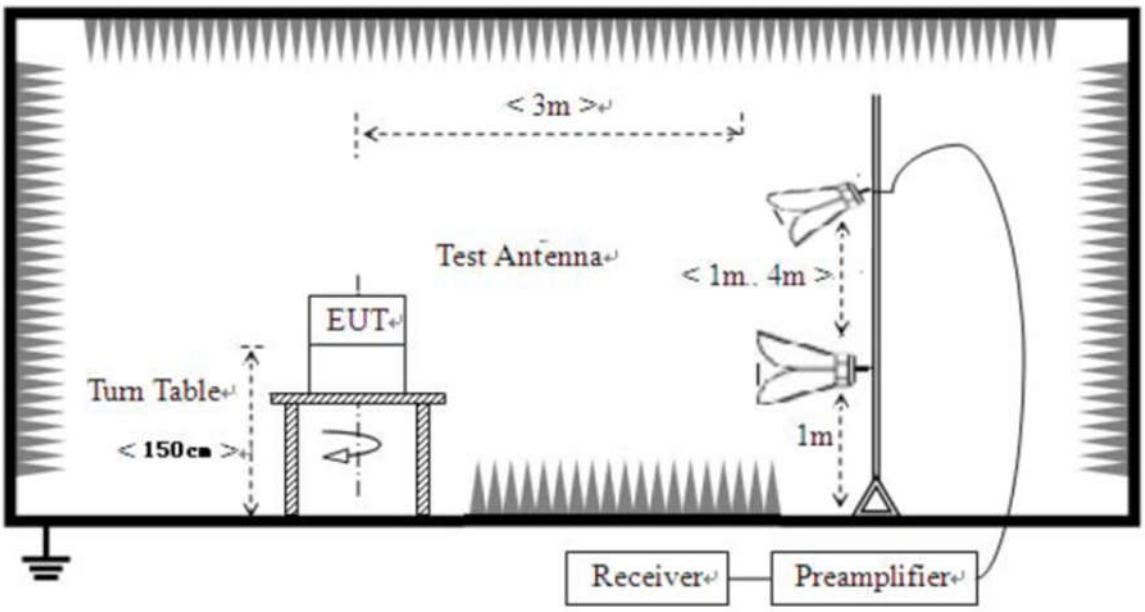
For radiated emissions from 9 kHz to 30 MHz



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/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 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 802.11ac_5825MHz channel is the worst mode, the worst case is recorded in this report.

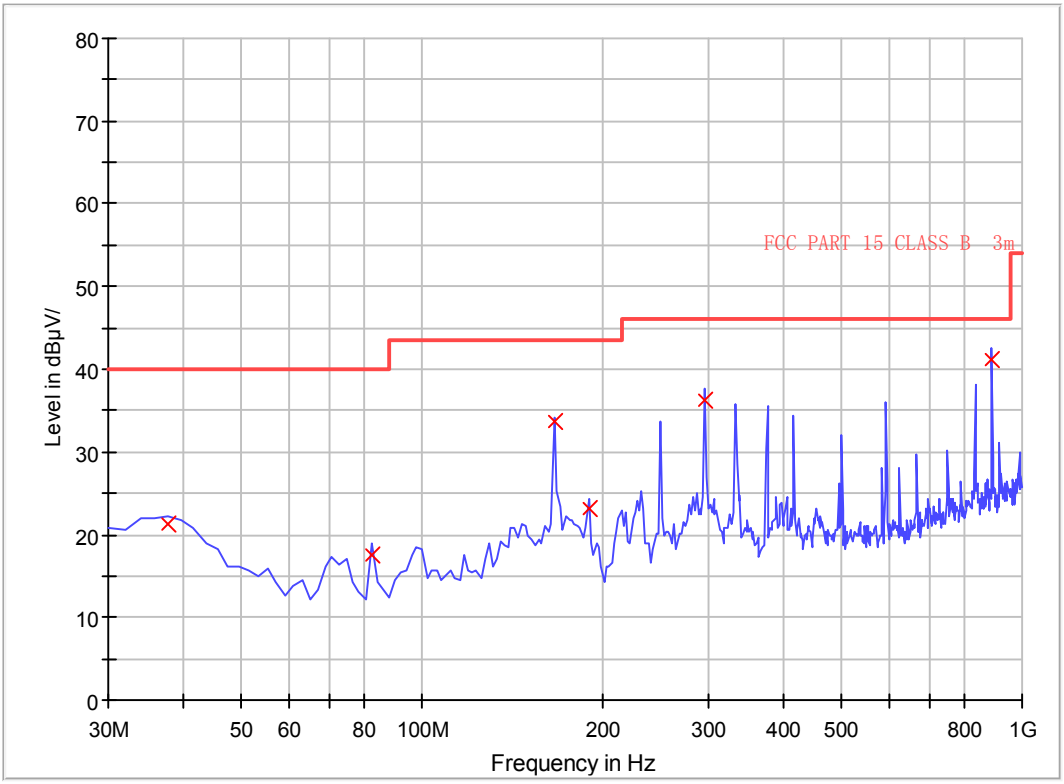
For 1GHz to 18GHz, Only worst-case data is reported.

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:	Huang Chaoming	Test Date:	2024.07.19
Test Mode:	5G WIFI - TX	Test Result:	Pass

EMI Sweep-3M(30-1G)



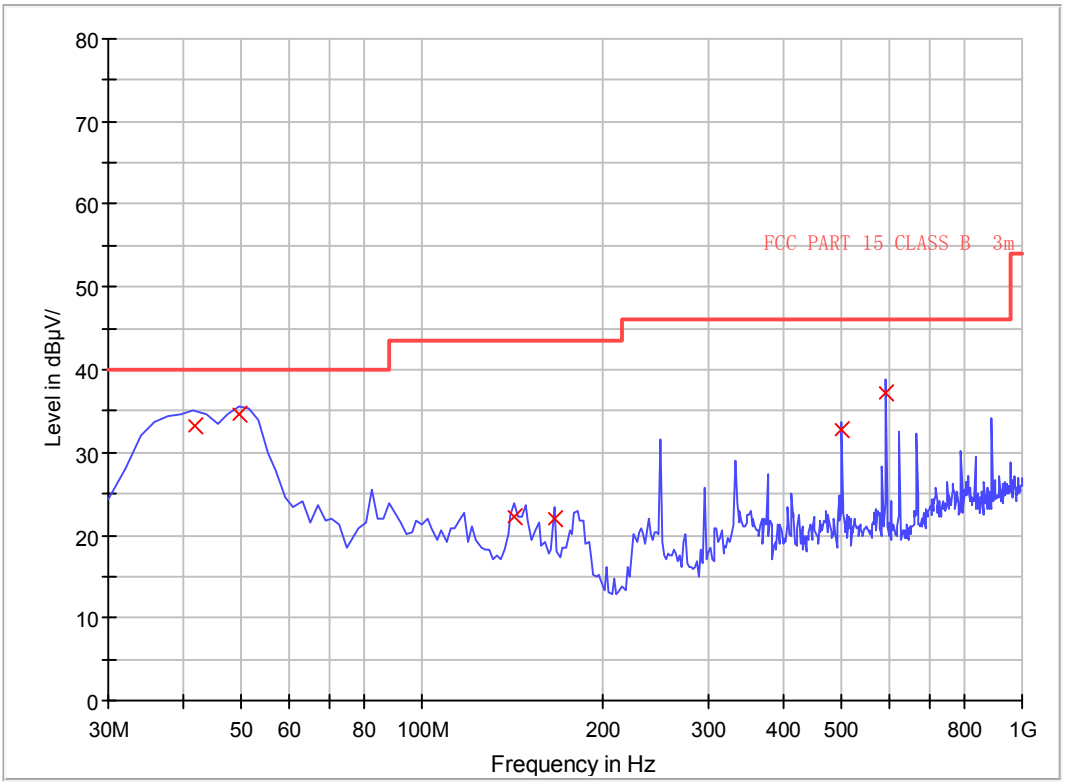
Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarity	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
37.760000	21.34	120.000	100.0	H	17.6	18.66	40.0
82.480000	17.56	120.000	100.0	H	10.0	22.44	40.0
166.080000	33.63	120.000	100.0	H	12.9	9.87	43.5
189.400000	23.25	120.000	100.0	H	11.2	20.25	43.5
296.320000	36.24	120.000	100.0	H	16.3	9.76	46.0
891.160000	41.25	120.000	100.0	H	24.3	4.75	46.0

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 emission levels of other frequencies are very lower than the limit and not show in test report.
5. 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:	Huang Chaoming	Test Date:	2024.07.19
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 (dB)	Limit - QPK (dBµV/m)
41.680000	33.33	120.000	100.0	V	15.6	6.67	40.0
49.440000	34.58	120.000	100.0	V	10.5	5.42	40.0
142.760000	22.27	120.000	100.0	V	13.8	21.23	43.5
166.080000	22.00	120.000	100.0	V	12.9	21.50	43.5
500.440000	32.74	120.000	100.0	V	20.2	13.26	46.0
593.720000	37.10	120.000	100.0	V	20.3	8.90	46.0

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 emission levels of other frequencies are very lower than the limit and not show in test report.
5. Only the antenna height (from 1m to 4m) at maximum reading are recorded.

For 1GHz to 40 GHz

U-NII-1_802.11a_5180MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.06	68.20	-20.14	1.50	120	48.06	0.44	Horizontal	Peak
5150.00	38.68	54.00	-15.32	1.50	120	38.68	0.44	Horizontal	Average
10360.00	52.80	68.20	-15.40	1.50	120	52.80	10.46	Horizontal	Peak
10360.00	42.77	54.00	-11.23	1.50	120	42.77	10.46	Horizontal	Average
5150.00	46.31	68.20	-21.89	1.50	270	46.31	0.44	Vertical	Peak
5150.00	38.42	54.00	-15.58	1.50	270	38.42	0.44	Vertical	Average
10360.00	53.37	68.20	-14.83	1.50	270	53.37	10.46	Vertical	Peak
10360.00	43.50	54.00	-10.50	1.50	270	43.50	10.46	Vertical	Average
U-NII-1_802.11a_5220MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
10440.00	52.54	68.20	-15.66	1.60	200	41.74	53.32	Horizontal	Peak
10440.00	42.62	54.00	-11.38	1.60	200	31.82	43.28	Horizontal	Average
10440.00	53.49	68.20	-14.71	1.70	180	42.69	53.56	Vertical	Peak
10440.00	43.67	54.00	-10.33	1.70	180	32.87	43.16	Vertical	Average
U-NII-1_802.11a_5240MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	45.91	68.20	-22.29	1.50	120	45.66	0.25	Horizontal	Peak
5350.00	36.24	54.00	-17.76	1.50	120	35.99	0.25	Horizontal	Average
10480.00	46.39	68.20	-21.81	1.50	120	35.39	11.00	Horizontal	Peak
10480.00	38.08	54.00	-15.92	1.50	120	27.08	11.00	Horizontal	Average
5350.00	46.78	68.20	-21.42	1.50	270	46.53	0.25	Vertical	Peak
5350.00	37.63	54.00	-16.37	1.50	270	37.38	0.25	Vertical	Average
10480.00	47.77	68.20	-20.43	1.50	270	36.77	11.00	Vertical	Peak
10480.00	38.70	54.00	-15.30	1.50	270	27.70	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

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	46.82	68.20	-21.38	1.50	120	46.38	0.44	Horizontal	Peak
5150.00	37.74	54.00	-16.26	1.50	120	37.30	0.44	Horizontal	Average
10380.00	52.95	68.20	-15.25	1.50	120	42.42	10.53	Horizontal	Peak
10380.00	43.37	54.00	-10.63	1.50	120	32.84	10.53	Horizontal	Average
5150.00	45.34	68.20	-22.86	1.50	270	44.90	0.44	Vertical	Peak
5150.00	37.96	54.00	-16.04	1.50	270	37.52	0.44	Vertical	Average
10380.00	53.15	68.20	-15.05	1.50	270	42.62	10.53	Vertical	Peak
10380.00	43.48	54.00	-10.52	1.50	270	32.95	10.53	Vertical	Average
U-NII-1_802.11n-HT40_5230MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	46.66	68.20	-21.54	1.50	120	46.41	0.25	Horizontal	Peak
5350.00	35.86	54.00	-18.14	1.50	120	35.61	0.25	Horizontal	Average
10460.00	45.36	68.20	-22.84	1.50	120	34.45	10.91	Horizontal	Peak
10460.00	38.41	54.00	-15.59	1.50	120	27.50	10.91	Horizontal	Average
5350.00	47.51	68.20	-20.69	1.50	270	47.26	0.25	Vertical	Peak
5350.00	37.00	54.00	-17.00	1.50	270	36.75	0.25	Vertical	Average
10460.00	46.94	68.20	-21.26	1.50	270	36.03	10.91	Vertical	Peak
10460.00	38.87	54.00	-15.13	1.50	270	27.96	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

U-NII-2A_802.11a_5260MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.47	68.20	-19.73	1.50	120	48.03	0.44	Horizontal	Peak
5150.00	38.73	54.00	-15.27	1.50	120	38.29	0.44	Horizontal	Average
10520.00	52.38	68.20	-15.82	1.50	120	41.20	11.18	Horizontal	Peak
10520.00	42.47	54.00	-11.53	1.50	120	31.29	11.18	Horizontal	Average
5150.00	45.83	68.20	-22.37	1.50	270	45.39	0.44	Vertical	Peak
5150.00	38.75	54.00	-15.25	1.50	270	38.31	0.44	Vertical	Average
10520.00	53.22	68.20	-14.98	1.50	270	42.04	11.18	Vertical	Peak
10520.00	43.11	54.00	-10.89	1.50	270	31.93	11.18	Vertical	Average
U-NII-2A_802.11a_5300MHz									
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
10600.00	52.42	68.20	-15.78	1.50	120	40.90	11.52	Horizontal	Peak
10600.00	42.63	54.00	-11.37	1.50	120	31.11	11.52	Horizontal	Average
10600.00	53.37	68.20	-14.83	1.50	270	41.85	11.52	Vertical	Peak
10600.00	43.28	54.00	-10.72	1.50	270	31.76	11.52	Vertical	Average
U-NII-2A_802.11a_5320MHz									
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	46.26	68.20	-21.94	1.50	120	46.01	0.25	Horizontal	Peak
5350.00	37.46	54.00	-16.54	1.50	120	37.21	0.25	Horizontal	Average
10640.00	46.80	68.20	-21.40	1.50	120	35.48	11.32	Horizontal	Peak
10640.00	37.94	54.00	-16.06	1.50	120	26.62	11.32	Horizontal	Average
5350.00	47.27	68.20	-20.93	1.50	270	47.02	0.25	Vertical	Peak
5350.00	37.78	54.00	-16.22	1.50	270	37.53	0.25	Vertical	Average
10640.00	47.40	68.20	-20.80	1.50	270	36.08	11.32	Vertical	Peak
10640.00	37.41	54.00	-16.59	1.50	270	26.09	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

U-NII-2A_802.11n-HT40_5270MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5150.00	48.75	68.20	-19.45	1.50	120	48.31	0.44	Horizontal	Peak
5150.00	38.52	54.00	-15.48	1.50	120	38.08	0.44	Horizontal	Average
10540.00	52.31	68.20	-15.89	1.50	120	41.05	11.26	Horizontal	Peak
10540.00	42.66	54.00	-11.34	1.50	120	31.40	11.26	Horizontal	Average
5150.00	44.99	68.20	-23.21	1.50	270	44.55	0.44	Vertical	Peak
5150.00	38.03	54.00	-15.97	1.50	270	37.59	0.44	Vertical	Average
10540.00	52.35	68.20	-15.85	1.50	270	41.09	11.26	Vertical	Peak
10540.00	43.35	54.00	-10.65	1.50	270	32.09	11.26	Vertical	Average
U-NII-2A_802.11n-HT40_5310MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5350.00	46.18	68.20	-22.02	1.50	120	45.93	0.25	Horizontal	Peak
5350.00	36.70	54.00	-17.30	1.50	120	36.45	0.25	Horizontal	Average
10620.00	46.43	68.20	-21.77	1.50	120	35.02	11.41	Horizontal	Peak
10620.00	37.70	54.00	-16.30	1.50	120	26.29	11.41	Horizontal	Average
5350.00	46.66	68.20	-21.54	1.50	270	46.41	0.25	Vertical	Peak
5350.00	37.65	54.00	-16.35	1.50	270	37.40	0.25	Vertical	Average
10620.00	47.99	68.20	-20.21	1.50	270	36.58	11.41	Vertical	Peak
10620.00	38.10	54.00	-15.90	1.50	270	26.69	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

U-NII-2C_802.11a_5500MHz									
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	48.58	68.20	-19.62	1.50	120	48.62	-0.04	Horizontal	Peak
5470.00	38.63	54.00	-15.37	1.50	120	38.67	-0.04	Horizontal	Average
11000.00	52.61	68.20	-15.59	1.50	120	41.19	11.42	Horizontal	Peak
11000.00	43.52	54.00	-10.48	1.50	120	32.10	11.42	Horizontal	Average
5470.00	45.34	68.20	-22.86	1.50	270	45.38	-0.04	Vertical	Peak
5470.00	38.61	54.00	-15.39	1.50	270	38.65	-0.04	Vertical	Average
11000.00	53.87	68.20	-14.33	1.50	270	42.45	11.42	Vertical	Peak
11000.00	44.23	54.00	-9.77	1.50	270	32.81	11.42	Vertical	Average
U-NII-2C_802.11a_5580MHz									
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
11160.00	52.51	68.20	-15.69	1.50	120	41.54	11.35	Horizontal	Peak
11160.00	43.73	54.00	-10.27	1.50	120	32.76	11.35	Horizontal	Average
11160.00	53.61	68.20	-14.59	1.50	270	42.64	11.35	Vertical	Peak
11160.00	44.34	54.00	-9.66	1.50	270	33.37	11.35	Vertical	Average
U-NII-2C_802.11a_5700MHz									
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	46.98	68.20	-21.22	1.50	120	45.68	1.30	Horizontal	Peak
5725.00	39.00	54.00	-15.00	1.50	120	37.70	1.30	Horizontal	Average
11400.00	46.51	68.20	-21.69	1.50	120	35.04	11.47	Horizontal	Peak
11400.00	37.66	54.00	-16.34	1.50	120	26.19	11.47	Horizontal	Average
5725.00	47.28	68.20	-20.92	1.50	270	45.98	1.30	Vertical	Peak
5725.00	39.26	54.00	-14.74	1.50	270	37.96	1.30	Vertical	Average
11400.00	47.67	68.20	-20.53	1.50	270	36.20	11.47	Vertical	Peak
11400.00	37.81	54.00	-16.19	1.50	270	26.34	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

U-NII-2C_802.11n-HT40_5510MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5470.00	49.28	68.20	-18.92	1.50	120	49.32	-0.04	Horizontal	Peak
5470.00	38.89	54.00	-15.11	1.50	120	38.93	-0.04	Horizontal	Average
11020.00	51.90	68.20	-16.30	1.50	120	40.44	11.46	Horizontal	Peak
11020.00	43.60	54.00	-10.40	1.50	120	32.14	11.46	Horizontal	Average
5470.00	45.54	68.20	-22.66	1.50	270	45.58	-0.04	Vertical	Peak
5470.00	39.17	54.00	-14.83	1.50	270	39.21	-0.04	Vertical	Average
11020.00	53.45	68.20	-14.75	1.50	270	41.99	11.46	Vertical	Peak
11020.00	43.98	54.00	-10.02	1.50	270	32.52	11.46	Vertical	Average
U-NII-2C_802.11n-HT40_5550MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
11100.00	51.76	68.20	-16.44	1.50	120	40.67	11.73	Horizontal	Peak
11100.00	43.34	54.00	-10.66	1.50	120	32.25	11.73	Horizontal	Average
11100.00	53.68	68.20	-14.52	1.50	270	42.59	11.73	Vertical	Peak
11100.00	43.77	54.00	-10.23	1.50	270	32.68	11.73	Vertical	Average
U-NII-2C_802.11n-HT40_5670MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5725.00	47.04	68.20	-21.16	1.50	120	45.74	1.30	Horizontal	Peak
5725.00	39.71	54.00	-14.29	1.50	120	38.41	1.30	Horizontal	Average
11340.00	46.69	68.20	-21.51	1.50	120	35.27	11.42	Horizontal	Peak
11340.00	38.01	54.00	-15.99	1.50	120	26.59	11.42	Horizontal	Average
5725.00	46.93	68.20	-21.27	1.50	270	45.63	1.30	Vertical	Peak
5725.00	38.62	54.00	-15.38	1.50	270	37.32	1.30	Vertical	Average
11340.00	48.06	68.20	-20.14	1.50	270	36.64	11.42	Vertical	Peak
11340.00	38.53	54.00	-15.47	1.50	270	27.11	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

U-NII-3_802.11a_5745MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5650.00	50.13	68.20	-18.07	1.50	120	49.33	0.80	Horizontal	Peak
5700.00	52.09	105.20	-53.11	1.50	120	50.85	1.24	Horizontal	Peak
5720.00	51.16	110.80	-59.64	1.50	120	49.88	1.28	Horizontal	Peak
5725.00	52.38	122.20	-69.82	1.50	120	51.08	1.30	Horizontal	Peak
11490.00	52.51	68.20	-15.69	1.50	120	40.96	11.55	Horizontal	Peak
11490.00	43.47	54.00	-10.53	1.50	120	31.92	11.55	Horizontal	Average
5650.00	49.97	68.20	-18.23	1.50	270	49.17	0.80	Vertical	Peak
5700.00	51.52	105.20	-53.68	1.50	270	50.28	1.24	Vertical	Peak
5720.00	51.04	110.80	-59.76	1.50	270	49.76	1.28	Vertical	Peak
5725.00	52.73	122.20	-69.47	1.50	270	51.43	1.30	Vertical	Peak
11490.00	52.57	68.20	-15.63	1.50	270	41.02	11.55	Vertical	Peak
11490.00	43.41	54.00	-10.59	1.50	270	31.86	11.55	Vertical	Average
U-NII-3_802.11a_5825MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	51.04	122.20	-71.16	1.50	120	49.22	1.82	Horizontal	Peak
5855.00	51.91	110.80	-58.89	1.50	120	50.06	1.85	Horizontal	Peak
5875.00	52.73	105.20	-52.47	1.50	120	50.75	1.98	Horizontal	Peak
5925.00	51.26	68.20	-16.94	1.50	120	49.14	2.12	Horizontal	Peak
11650.00	52.73	68.20	-15.47	1.50	120	41.09	11.64	Horizontal	Peak
11650.00	43.81	54.00	-10.19	1.50	120	32.17	11.64	Horizontal	Average
5850.00	51.92	122.20	-70.28	1.50	270	50.10	1.82	Vertical	Peak
5855.00	51.12	110.80	-59.68	1.50	270	49.27	1.85	Vertical	Peak
5875.00	51.52	105.20	-53.68	1.50	270	49.54	1.98	Vertical	Peak
5925.00	52.56	68.20	-15.64	1.50	270	50.44	2.12	Vertical	Peak
11650.00	52.67	68.20	-15.53	1.50	270	41.03	11.64	Vertical	Peak
11650.00	43.73	54.00	-10.27	1.50	270	32.09	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

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	50.52	68.20	-17.68	1.50	120	49.72	0.80	Horizontal	Peak
5700.00	52.70	105.20	-52.50	1.50	120	51.46	1.24	Horizontal	Peak
5720.00	50.90	110.80	-59.90	1.50	120	49.62	1.28	Horizontal	Peak
5725.00	52.48	122.20	-69.72	1.50	120	51.18	1.30	Horizontal	Peak
11510.00	52.42	68.20	-15.78	1.50	120	40.86	11.56	Horizontal	Peak
11510.00	43.73	54.00	-10.27	1.50	120	32.17	11.56	Horizontal	Average
5650.00	50.47	68.20	-17.73	1.50	270	49.67	0.80	Vertical	Peak
5700.00	51.57	105.20	-53.63	1.50	270	50.33	1.24	Vertical	Peak
5720.00	49.98	110.80	-60.82	1.50	270	48.70	1.28	Vertical	Peak
5725.00	51.66	122.20	-70.54	1.50	270	50.36	1.30	Vertical	Peak
11510.00	53.09	68.20	-15.11	1.50	270	41.53	11.56	Vertical	Peak
11510.00	42.75	54.00	-11.25	1.50	270	31.19	11.56	Vertical	Average
U-NII-3_802.11n-HT40_5795MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
5850.00	51.65	122.20	-70.55	1.50	120	49.83	1.82	Horizontal	Peak
5855.00	51.16	110.80	-59.64	1.50	120	49.31	1.85	Horizontal	Peak
5875.00	53.19	105.20	-52.01	1.50	120	51.21	1.98	Horizontal	Peak
5925.00	50.87	68.20	-17.33	1.50	120	48.75	2.12	Horizontal	Peak
11590.00	52.59	68.20	-15.61	1.50	120	41.08	11.51	Horizontal	Peak
11590.00	44.01	54.00	-9.99	1.50	120	32.50	11.51	Horizontal	Average
5850.00	52.59	122.20	-69.61	1.50	270	50.77	1.82	Vertical	Peak
5855.00	50.86	110.80	-59.94	1.50	270	49.01	1.85	Vertical	Peak
5875.00	51.14	105.20	-54.06	1.50	270	49.16	1.98	Vertical	Peak
5925.00	51.81	68.20	-16.39	1.50	270	49.69	2.12	Vertical	Peak
11590.00	52.64	68.20	-15.56	1.50	270	41.13	11.51	Vertical	Peak
11590.00	42.89	54.00	-11.11	1.50	270	31.38	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.

5.Tnly the antenna height (from 1m to 4m) and turntable angle (from 0 degrees to 360 degrees) at maximum reading are recorded.

2.7. AC Power Line Conducted Emission

2.7.1. Limit of AC Power Line Conducted Emission

FCC Part 15.207:

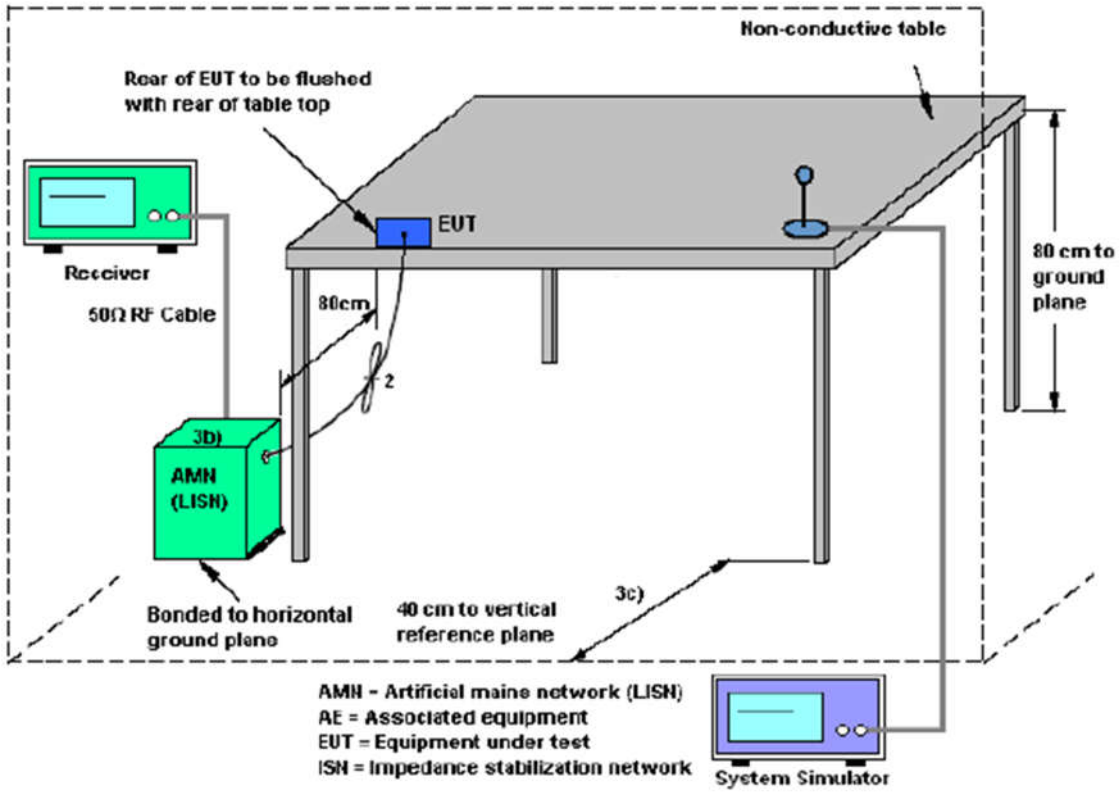
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency range (MHz)	Conducted Limit (dBμV)	
	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

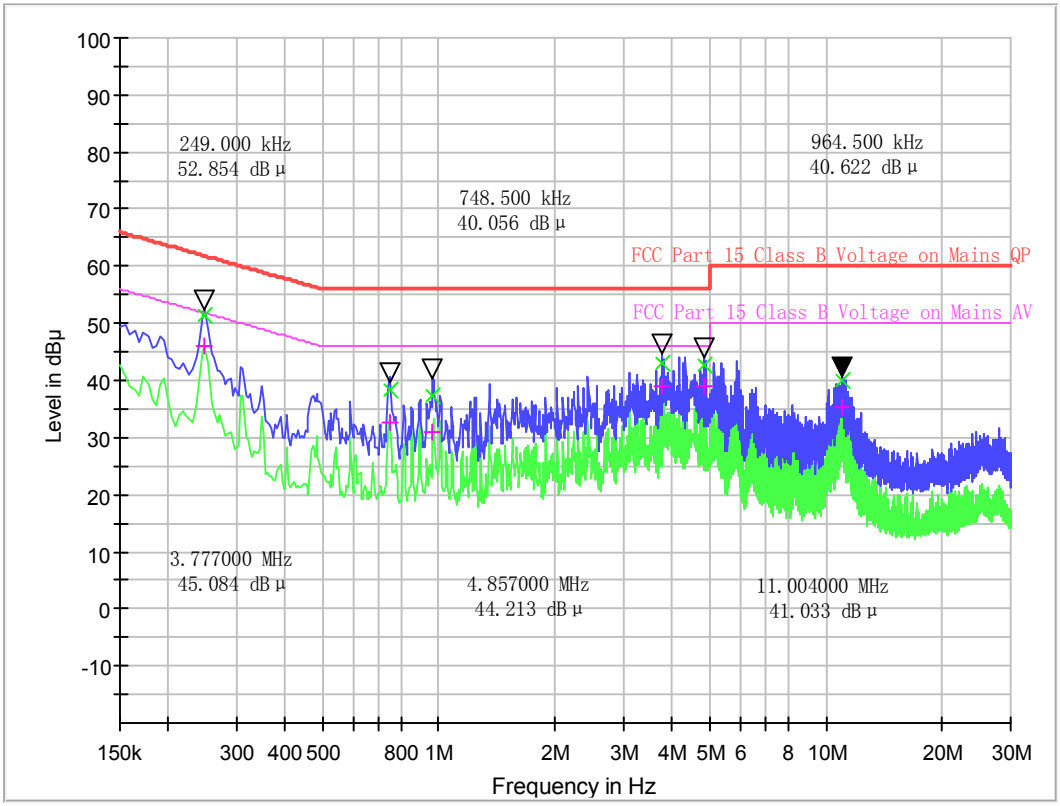
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 + AC 120V.

All of the EUT Configure mode were tested and found 802.11ac_5825MHz channel is the worst mode, the worst case is recorded in this report.

Test site:	Shield ROOM 1	Environment:	Temp: 23℃; Humi:53%;101kPa
Operator:	LIQINGLONG	Test Date:	2024.07.19
Test Mode:	5G WIFI- TX	Test Part:	L Line

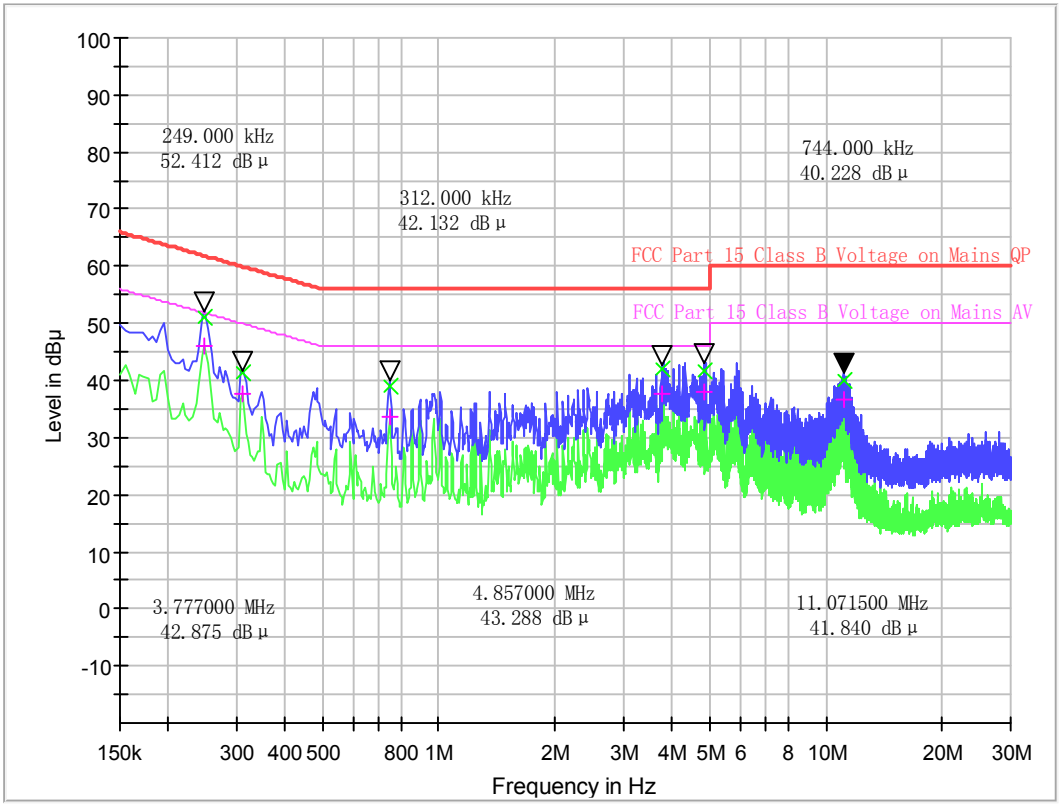


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Corr.Factor (dB)	Margin - QPK	Limit - QPK (dBµV)	Margin - AV (dB)	Limit - AV (dBµV)
0.249000	51.33	46.17	19.9	10.46	61.8	5.62	51.8
0.748500	38.20	32.75	19.9	17.80	56.0	13.25	46.0
0.964500	37.21	31.10	19.8	18.79	56.0	14.90	46.0
3.777000	42.90	38.97	19.9	13.10	56.0	7.04	46.0
4.857000	42.54	39.14	19.8	13.46	56.0	6.86	46.0
11.004000	39.87	35.41	20.0	20.13	60.0	14.59	50.0

Test Result : Pass

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

Test site:	Shield ROOM 1	Environment:	Temp: 23℃; Humi:53%;101kPa
Operator:	LIQINGLONG	Test Date:	2024.07.19
Test Mode:	5G WIFI- TX	Test Part:	N Line



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Corr.Factor (dB)	Margin - QPK	Limit - QPK (dBµV)	Margin - AV (dB)	Limit - AV (dBµV)
0.249000	51.13	45.99	19.8	10.66	61.8	5.80	51.8
0.312000	41.27	37.69	19.8	18.65	59.9	12.22	49.9
0.744000	39.09	33.50	19.8	16.91	56.0	12.50	46.0
3.777000	42.08	37.71	19.8	13.92	56.0	8.29	46.0
4.857000	41.62	38.05	19.8	14.38	56.0	7.95	46.0
11.071500	39.87	36.54	19.9	20.13	60.0	13.46	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	2024.05.23	2025.05.22
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	2026.06.07
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	2026.05.31
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	2024.06.05	2025.06.04
15	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2024.05.23	2025.05.22
16	Power Supply	R&S	WYJ-60100	A141102031	2023.07.12	2026.07.11

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2020. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.8dB

Uncertainty of Radiated Emission Measurement (9kHz~30MHz)

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

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

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

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

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

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

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

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

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

Uncertainty of Occupied Bandwidth Measurement

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

Appendix A

Duty Cycle
Test Result and Data
UNII-1:

TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	DC Factor
11A	Ant1	5180	2.03	2.10	96.67	0.15
11N20SISO	Ant1	5180	1.89	2.06	91.75	0.37
11N40SISO	Ant1	5190	0.94	1.10	85.45	0.68
11AC20SISO	Ant1	5180	1.90	1.95	97.44	0.11
11AC40SISO	Ant1	5190	0.94	0.99	94.95	0.23
11AX20SISO	Ant1	5180	1.46	1.63	89.57	0.48
11AX40SISO	Ant1	5190	0.75	0.86	87.21	0.59

UNII-2a:

TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	DC Factor
11A	Ant1	5260	2.03	2.18	93.12	0.31
11N20SISO	Ant1	5260	1.89	1.95	96.92	0.14
11N40SISO	Ant1	5270	0.93	1.01	92.08	0.36
11AC20SISO	Ant1	5260	1.91	2.14	89.25	0.49
11AC40SISO	Ant1	5270	0.93	1.06	87.74	0.57
11AX20SISO	Ant1	5260	1.46	1.68	86.90	0.61
11AX40SISO	Ant1	5270	0.75	0.86	87.21	0.59

UNII-2c:

TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	DC Factor
11A	Ant1	5500	2.03	2.19	92.69	0.33
11N20SISO	Ant1	5500	1.89	1.95	96.92	0.14
11N40SISO	Ant1	5510	0.93	1.04	89.42	0.49
11AC20SISO	Ant1	5500	1.91	2.08	91.83	0.37
11AC40SISO	Ant1	5510	0.93	1.12	83.04	0.81
11AX20SISO	Ant1	5500	1.46	1.63	89.57	0.48
11AX40SISO	Ant1	5510	0.75	0.94	79.79	0.98

UNII-3:

TestMode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	DC Factor
11A	Ant1	5745	2.04	2.18	93.58	0.29
11N20SISO	Ant1	5745	1.89	2.03	93.10	0.31
11N40SISO	Ant1	5755	0.94	1.05	89.52	0.48
11AC20SISO	Ant1	5745	1.90	2.04	93.14	0.31
11AC40SISO	Ant1	5755	0.93	1.05	88.57	0.53
11AX20SISO	Ant1	5745	1.45	1.57	92.36	0.35
11AX40SISO	Ant1	5755	0.74	0.90	82.22	0.85

Output power

Test Result and Data

UNII-1:

TestMode	Antenna	Frequency [MHz]	Power [dBm]	DC Factor [dBm]	Result [dBm]	Power Limit [dBm]	Verdict
11A	Ant1	5180	12.01	0.15	12.16	≤23.98	PASS
11A	Ant1	5200	11.71	0.15	11.86	≤23.98	PASS
11A	Ant1	5240	11.49	0.15	11.64	≤23.98	PASS
11N20SISO	Ant1	5180	11.40	0.37	11.77	≤23.98	PASS
11N20SISO	Ant1	5200	12.07	0.37	12.44	≤23.98	PASS
11N20SISO	Ant1	5240	12.21	0.37	12.58	≤23.98	PASS
11N40SISO	Ant1	5190	11.37	0.68	12.05	≤23.98	PASS
11N40SISO	Ant1	5230	11.48	0.68	12.16	≤23.98	PASS
11AC20SISO	Ant1	5180	12.04	0.11	12.15	≤23.98	PASS
11AC20SISO	Ant1	5200	12.05	0.11	12.16	≤23.98	PASS
11AC20SISO	Ant1	5240	12.02	0.11	12.13	≤23.98	PASS
11AC40SISO	Ant1	5190	11.45	0.23	11.68	≤23.98	PASS
11AC40SISO	Ant1	5230	11.52	0.23	11.75	≤23.98	PASS
11AX20SISO	Ant1	5180	12.07	0.48	12.55	≤23.98	PASS
11AX20SISO	Ant1	5200	12.05	0.48	12.53	≤23.98	PASS
11AX20SISO	Ant1	5240	12.14	0.48	12.62	≤23.98	PASS
11AX40SISO	Ant1	5190	11.10	0.59	11.69	≤23.98	PASS
11AX40SISO	Ant1	5230	11.47	0.59	12.06	≤23.98	PASS

UNII-2a:

TestMode	Antenna	Frequency [MHz]	Power [dBm]	DC Factor [dBm]	Result [dBm]	Power Limit [dBm]	Verdict
11A	Ant1	5260	12.16	0.31	12.47	≤23.98	PASS
11A	Ant1	5300	12.26	0.31	12.57	≤23.98	PASS
11A	Ant1	5320	12.09	0.31	12.40	≤23.98	PASS
11N20SISO	Ant1	5260	12.21	0.14	12.35	≤23.98	PASS
11N20SISO	Ant1	5300	12.22	0.14	12.36	≤23.98	PASS
11N20SISO	Ant1	5320	11.99	0.14	12.13	≤23.98	PASS
11N40SISO	Ant1	5270	11.66	0.36	12.02	≤23.98	PASS
11N40SISO	Ant1	5310	11.70	0.36	12.06	≤23.98	PASS
11AC20SISO	Ant1	5260	12.19	0.49	12.68	≤23.98	PASS
11AC20SISO	Ant1	5300	12.29	0.49	12.78	≤23.98	PASS
11AC20SISO	Ant1	5320	12.22	0.49	12.71	≤23.98	PASS
11AC40SISO	Ant1	5270	11.49	0.57	12.06	≤23.98	PASS
11AC40SISO	Ant1	5310	11.50	0.57	12.07	≤23.98	PASS
11AX20SISO	Ant1	5260	12.09	0.61	12.70	≤23.98	PASS
11AX20SISO	Ant1	5300	12.28	0.61	12.89	≤23.98	PASS
11AX20SISO	Ant1	5320	12.18	0.61	12.79	≤23.98	PASS
11AX40SISO	Ant1	5270	11.80	0.59	12.39	≤23.98	PASS
11AX40SISO	Ant1	5310	11.67	0.59	12.26	≤23.98	PASS

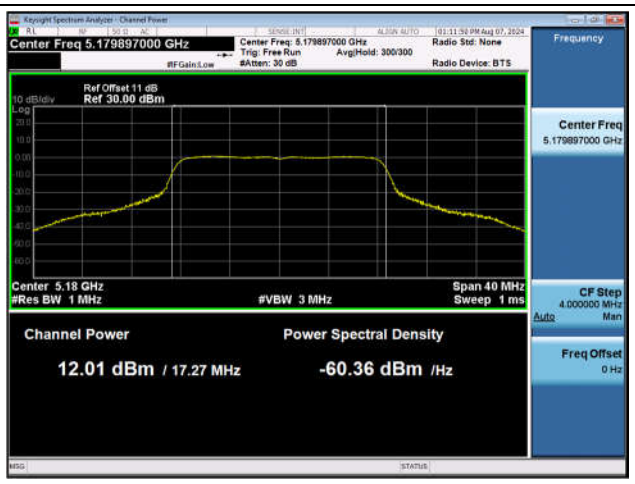
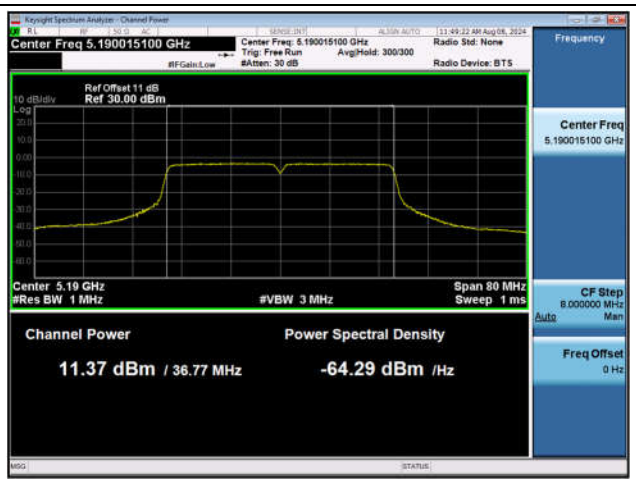
UNII-2c:

TestMode	Antenna	Frequency [MHz]	Power [dBm]	DC Factor [dBm]	Result [dBm]	Power Limit [dBm]	Verdict
11A	Ant1	5500	13.83	0.33	14.16	≤23.98	PASS
11A	Ant1	5580	13.85	0.33	14.18	≤23.98	PASS
11A	Ant1	5700	13.69	0.33	14.02	≤23.98	PASS
11N20SISO	Ant1	5500	13.88	0.14	14.02	≤23.98	PASS
11N20SISO	Ant1	5580	13.56	0.14	13.70	≤23.98	PASS
11N20SISO	Ant1	5700	14.31	0.14	14.45	≤23.98	PASS
11N40SISO	Ant1	5510	14.04	0.49	14.53	≤23.98	PASS
11N40SISO	Ant1	5550	13.96	0.49	14.45	≤23.98	PASS
11N40SISO	Ant1	5670	13.21	0.49	13.70	≤23.98	PASS
11AC20SISO	Ant1	5500	13.88	0.37	14.25	≤23.98	PASS
11AC20SISO	Ant1	5580	14.08	0.37	14.45	≤23.98	PASS
11AC20SISO	Ant1	5700	13.54	0.37	13.91	≤23.98	PASS
11AC40SISO	Ant1	5510	13.27	0.81	14.08	≤23.98	PASS
11AC40SISO	Ant1	5550	13.16	0.81	13.97	≤23.98	PASS
11AC40SISO	Ant1	5670	13.00	0.81	13.81	≤23.98	PASS
11AX20SISO	Ant1	5500	13.63	0.48	14.11	≤23.98	PASS
11AX20SISO	Ant1	5580	13.53	0.48	14.01	≤23.98	PASS
11AX20SISO	Ant1	5700	13.83	0.48	14.31	≤23.98	PASS
11AX40SISO	Ant1	5510	13.22	0.98	14.20	≤23.98	PASS
11AX40SISO	Ant1	5550	12.92	0.98	13.90	≤23.98	PASS
11AX40SISO	Ant1	5670	12.71	0.98	13.69	≤23.98	PASS

UNII-3:

TestMode	Antenna	Frequency [MHz]	Power [dBm]	DC Factor [dBm]	Result [dBm]	Power Limit [dBm]	Verdict
11A	Ant1	5745	13.21	0.29	13.50	≤30.00	PASS
11A	Ant1	5785	13.61	0.29	13.90	≤30.00	PASS
11A	Ant1	5825	14.47	0.29	14.76	≤30.00	PASS
11N20SISO	Ant1	5745	13.14	0.31	13.45	≤30.00	PASS
11N20SISO	Ant1	5785	13.66	0.31	13.97	≤30.00	PASS
11N20SISO	Ant1	5825	14.47	0.31	14.78	≤30.00	PASS
11N40SISO	Ant1	5755	13.00	0.48	13.48	≤30.00	PASS
11N40SISO	Ant1	5795	13.48	0.48	13.96	≤30.00	PASS
11AC20SISO	Ant1	5745	13.71	0.31	14.02	≤30.00	PASS
11AC20SISO	Ant1	5785	14.07	0.31	14.38	≤30.00	PASS
11AC20SISO	Ant1	5825	14.63	0.31	14.94	≤30.00	PASS
11AC40SISO	Ant1	5755	13.15	0.53	13.68	≤30.00	PASS
11AC40SISO	Ant1	5795	13.48	0.53	14.01	≤30.00	PASS
11AX20SISO	Ant1	5745	13.53	0.35	13.88	≤30.00	PASS
11AX20SISO	Ant1	5785	13.97	0.35	14.32	≤30.00	PASS
11AX20SISO	Ant1	5825	14.57	0.35	14.92	≤30.00	PASS
11AX40SISO	Ant1	5755	13.22	0.85	14.07	≤30.00	PASS
11AX40SISO	Ant1	5795	13.45	0.85	14.30	≤30.00	PASS

Test plots

	
11A-Ant1-5180-PASS	11N40SISO-Ant1-5190-PASS

Note: Only UNII-1 20MHz&40MHz Bandwidth test plot is reported to show setting parameter complies with testing method and procedure.

AVGSA Power Spectral Density

Test Result and Data

UNII-1:

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	1.44	≤11.00	PASS
11A	Ant1	5200	1.13	≤11.00	PASS
11A	Ant1	5240	0.72	≤11.00	PASS
11N20SISO	Ant1	5180	0.66	≤11.00	PASS
11N20SISO	Ant1	5200	1.37	≤11.00	PASS
11N20SISO	Ant1	5240	1.63	≤11.00	PASS
11N40SISO	Ant1	5190	-2.42	≤11.00	PASS
11N40SISO	Ant1	5230	-2.25	≤11.00	PASS
11AC20SISO	Ant1	5180	0.89	≤11.00	PASS
11AC20SISO	Ant1	5200	1.09	≤11.00	PASS
11AC20SISO	Ant1	5240	1.15	≤11.00	PASS
11AC40SISO	Ant1	5190	-2.96	≤11.00	PASS
11AC40SISO	Ant1	5230	-2.89	≤11.00	PASS
11AX20SISO	Ant1	5180	1.20	≤11.00	PASS
11AX20SISO	Ant1	5200	1.13	≤11.00	PASS
11AX20SISO	Ant1	5240	1.10	≤11.00	PASS
11AX40SISO	Ant1	5190	-2.67	≤11.00	PASS
11AX40SISO	Ant1	5230	-2.53	≤11.00	PASS

UNII-2a:

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5260	1.65	≤11.00	PASS
11A	Ant1	5300	1.63	≤11.00	PASS
11A	Ant1	5320	1.46	≤11.00	PASS
11N20SISO	Ant1	5260	1.08	≤11.00	PASS
11N20SISO	Ant1	5300	1.48	≤11.00	PASS
11N20SISO	Ant1	5320	0.93	≤11.00	PASS
11N40SISO	Ant1	5270	-2.37	≤11.00	PASS
11N40SISO	Ant1	5310	-2.80	≤11.00	PASS
11AC20SISO	Ant1	5260	1.69	≤11.00	PASS
11AC20SISO	Ant1	5300	1.61	≤11.00	PASS
11AC20SISO	Ant1	5320	1.31	≤11.00	PASS
11AC40SISO	Ant1	5270	-2.61	≤11.00	PASS
11AC40SISO	Ant1	5310	-2.36	≤11.00	PASS
11AX20SISO	Ant1	5260	1.36	≤11.00	PASS
11AX20SISO	Ant1	5300	1.55	≤11.00	PASS
11AX20SISO	Ant1	5320	1.23	≤11.00	PASS
11AX40SISO	Ant1	5270	-2.00	≤11.00	PASS
11AX40SISO	Ant1	5310	-2.08	≤11.00	PASS

UNII-2c:

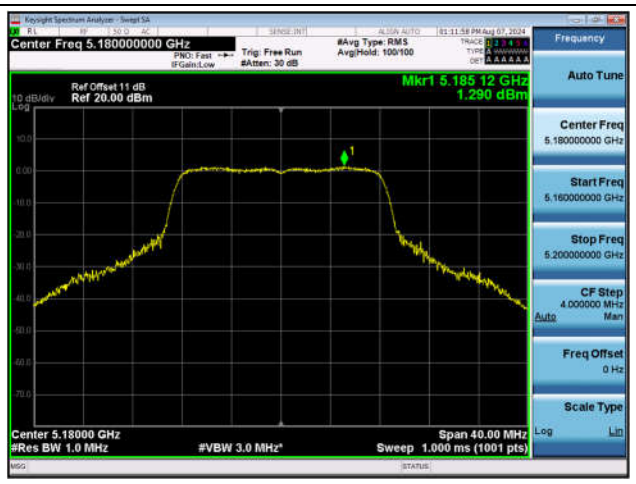
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5500	3.49	≤11.00	PASS
11A	Ant1	5580	3.49	≤11.00	PASS
11A	Ant1	5700	3.01	≤11.00	PASS
11N20SISO	Ant1	5500	2.73	≤11.00	PASS
11N20SISO	Ant1	5580	2.86	≤11.00	PASS
11N20SISO	Ant1	5700	3.23	≤11.00	PASS
11N40SISO	Ant1	5510	0.13	≤11.00	PASS
11N40SISO	Ant1	5550	0.02	≤11.00	PASS
11N40SISO	Ant1	5670	-0.34	≤11.00	PASS
11AC20SISO	Ant1	5500	3.21	≤11.00	PASS
11AC20SISO	Ant1	5580	3.65	≤11.00	PASS
11AC20SISO	Ant1	5700	2.65	≤11.00	PASS
11AC40SISO	Ant1	5510	-0.18	≤11.00	PASS
11AC40SISO	Ant1	5550	-0.44	≤11.00	PASS
11AC40SISO	Ant1	5670	-0.66	≤11.00	PASS
11AX20SISO	Ant1	5500	2.94	≤11.00	PASS
11AX20SISO	Ant1	5580	2.73	≤11.00	PASS
11AX20SISO	Ant1	5700	2.75	≤11.00	PASS
11AX40SISO	Ant1	5510	-0.11	≤11.00	PASS
11AX40SISO	Ant1	5550	0.04	≤11.00	PASS
11AX40SISO	Ant1	5670	-0.72	≤11.00	PASS

UNII-3:

TestMode	Antenna	Frequency[MHz]	Result[dBm/500kHz]	Limit[dBm/500kHz]	Verdict
11A	Ant1	5745	-0.28	≤30.00	PASS
11A	Ant1	5785	0.15	≤30.00	PASS
11A	Ant1	5825	1.06	≤30.00	PASS
11N20SISO	Ant1	5745	-0.48	≤30.00	PASS
11N20SISO	Ant1	5785	-0.24	≤30.00	PASS
11N20SISO	Ant1	5825	1.05	≤30.00	PASS
11N40SISO	Ant1	5755	-3.62	≤30.00	PASS
11N40SISO	Ant1	5795	-3.17	≤30.00	PASS
11AC20SISO	Ant1	5745	-0.11	≤30.00	PASS
11AC20SISO	Ant1	5785	0.37	≤30.00	PASS
11AC20SISO	Ant1	5825	0.87	≤30.00	PASS
11AC40SISO	Ant1	5755	-3.79	≤30.00	PASS
11AC40SISO	Ant1	5795	-3.33	≤30.00	PASS
11AX20SISO	Ant1	5745	-0.27	≤30.00	PASS
11AX20SISO	Ant1	5785	0.25	≤30.00	PASS
11AX20SISO	Ant1	5825	0.58	≤30.00	PASS
11AX40SISO	Ant1	5755	-3.60	≤30.00	PASS
11AX40SISO	Ant1	5795	-2.90	≤30.00	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor is compensated in the graph.

Test Plots

	
11A-Ant1-5180-PASS	11A-Ant1-5745-PASS

Note: Only UNII-1&3 20MHz Bandwidth test plot is reported to show setting parameter complies with testing method and procedure.

99% Occupied Bandwidth and 26dB Emission Bandwidth

Test Result and Data

UNII-1:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	99% OBW [MHz]	Verdict
11A	Ant1	5180	26.560	17.265	Pass
11A	Ant1	5200	26.920	17.407	Pass
11A	Ant1	5240	25.840	17.263	Pass
11N20SISO	Ant1	5180	26.680	18.372	Pass
11N20SISO	Ant1	5200	26.640	18.329	Pass
11N20SISO	Ant1	5240	26.880	18.373	Pass
11N40SISO	Ant1	5190	49.280	36.774	Pass
11N40SISO	Ant1	5230	48.160	36.891	Pass
11AC20SISO	Ant1	5180	27.800	18.489	Pass
11AC20SISO	Ant1	5200	28.480	18.566	Pass
11AC20SISO	Ant1	5240	27.120	18.403	Pass
11AC40SISO	Ant1	5190	48.800	36.809	Pass
11AC40SISO	Ant1	5230	47.920	36.656	Pass
11AX20SISO	Ant1	5180	26.080	19.315	Pass
11AX20SISO	Ant1	5200	25.080	19.284	Pass
11AX20SISO	Ant1	5240	24.040	19.311	Pass
11AX40SISO	Ant1	5190	45.120	38.052	Pass
11AX40SISO	Ant1	5230	44.880	37.910	Pass

UNII-2a:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	99% OBW [MHz]	Verdict
11A	Ant1	5260	25.240	17.130	Pass
11A	Ant1	5300	25.240	17.084	Pass
11A	Ant1	5320	24.840	17.189	Pass
11N20SISO	Ant1	5260	26.320	18.485	Pass
11N20SISO	Ant1	5300	26.000	18.367	Pass
11N20SISO	Ant1	5320	26.400	18.369	Pass
11N40SISO	Ant1	5270	48.480	36.962	Pass
11N40SISO	Ant1	5310	50.160	36.785	Pass
11AC20SISO	Ant1	5260	27.840	18.399	Pass
11AC20SISO	Ant1	5300	27.080	18.517	Pass
11AC20SISO	Ant1	5320	28.160	18.434	Pass
11AC40SISO	Ant1	5270	49.520	36.819	Pass
11AC40SISO	Ant1	5310	49.520	36.685	Pass
11AX20SISO	Ant1	5260	25.320	19.284	Pass
11AX20SISO	Ant1	5300	24.680	19.297	Pass
11AX20SISO	Ant1	5320	25.160	19.280	Pass
11AX40SISO	Ant1	5270	44.480	38.033	Pass
11AX40SISO	Ant1	5310	44.720	37.953	Pass

UNII-2c:

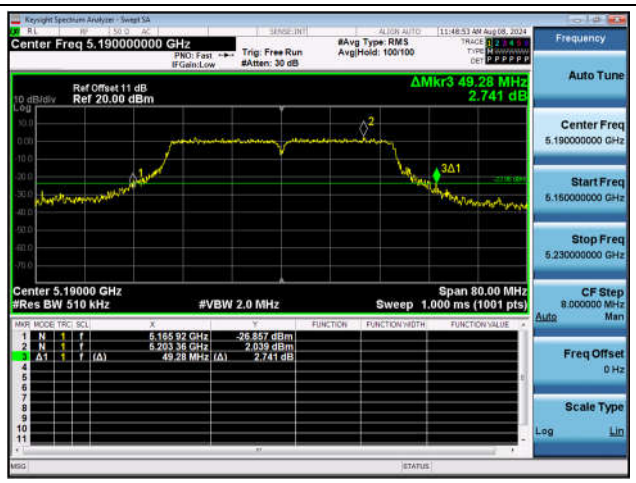
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	99% OBW [MHz]	Verdict
11A	Ant1	5500	26.000	17.182	Pass
11A	Ant1	5580	24.920	17.143	Pass
11A	Ant1	5700	24.800	17.178	Pass
11N20SISO	Ant1	5500	26.680	18.336	Pass
11N20SISO	Ant1	5580	26.280	18.321	Pass
11N20SISO	Ant1	5700	27.200	18.374	Pass
11N40SISO	Ant1	5510	48.800	36.814	Pass
11N40SISO	Ant1	5550	47.360	36.728	Pass
11N40SISO	Ant1	5670	48.560	36.859	Pass
11AC20SISO	Ant1	5500	26.840	18.487	Pass
11AC20SISO	Ant1	5580	26.400	18.364	Pass
11AC20SISO	Ant1	5700	26.600	18.323	Pass
11AC40SISO	Ant1	5510	46.800	36.720	Pass
11AC40SISO	Ant1	5550	48.960	36.747	Pass
11AC40SISO	Ant1	5670	48.880	36.743	Pass
11AX20SISO	Ant1	5500	24.720	19.276	Pass
11AX20SISO	Ant1	5580	25.480	19.322	Pass
11AX20SISO	Ant1	5700	25.040	19.318	Pass
11AX40SISO	Ant1	5510	45.120	38.024	Pass
11AX40SISO	Ant1	5550	44.560	38.025	Pass
11AX40SISO	Ant1	5670	45.680	38.045	Pass

UNII-3:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	99% OBW [MHz]	Verdict
11A	Ant1	5745	25.040	17.732	Pass
11A	Ant1	5785	25.180	17.573	Pass
11A	Ant1	5825	25.280	17.675	Pass
11N20SISO	Ant1	5745	26.280	18.805	Pass
11N20SISO	Ant1	5785	25.400	18.851	Pass
11N20SISO	Ant1	5825	26.480	18.843	Pass
11N40SISO	Ant1	5755	47.920	37.260	Pass
11N40SISO	Ant1	5795	48.480	37.263	Pass
11AC20SISO	Ant1	5745	26.720	18.884	Pass
11AC20SISO	Ant1	5785	25.800	19.002	Pass
11AC20SISO	Ant1	5825	26.040	19.112	Pass
11AC40SISO	Ant1	5755	47.920	37.270	Pass
11AC40SISO	Ant1	5795	48.480	37.186	Pass
11AX20SISO	Ant1	5745	24.120	19.403	Pass
11AX20SISO	Ant1	5785	23.720	19.534	Pass
11AX20SISO	Ant1	5825	25.240	19.563	Pass
11AX40SISO	Ant1	5755	44.880	38.299	Pass
11AX40SISO	Ant1	5795	45.200	38.396	Pass

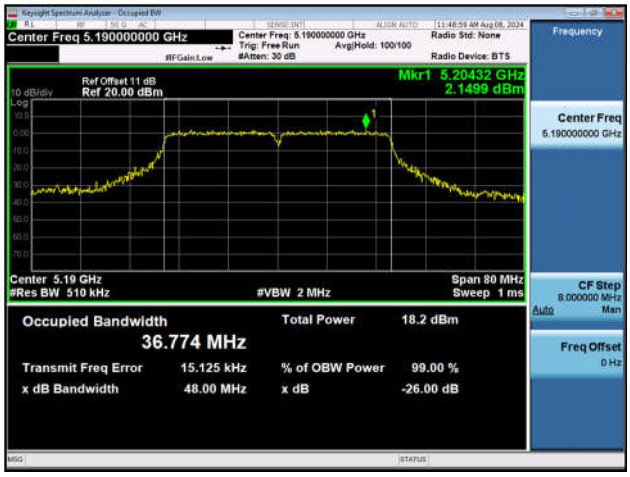
Test Plots

11A-Ant1-5180-26dB EBW



11N40SISO-Ant1-5190-26dB EBW

11A-Ant1-5180-99% OBW



11N40SISO-Ant1-5190-99% OBW

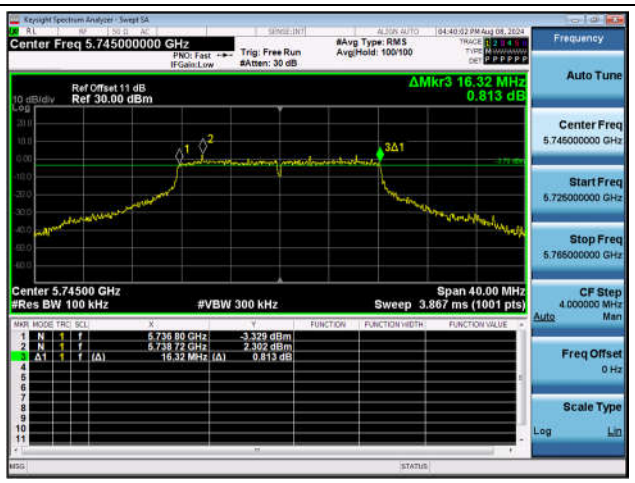
Note: Only UNII-1 20MHz&40MHz Bandwidth test plot is reported to show setting parameter complies with testing method and procedure.

6dB Bandwidth

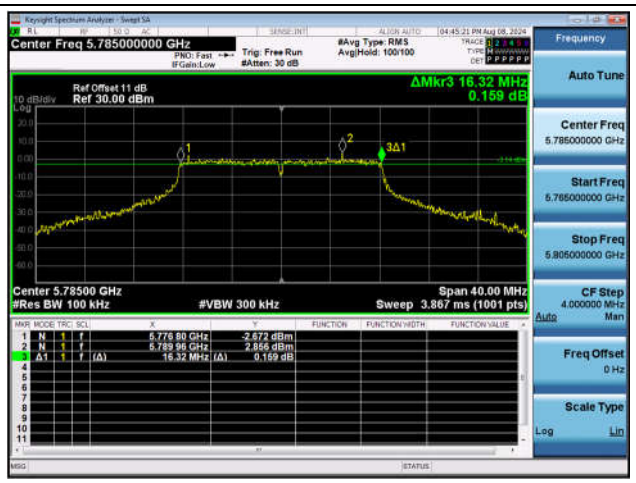
Test Result and Data

TestMode	Antenna	Frequency[MHz]	6dB EBW[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	0.5	PASS
11A	Ant1	5785	16.320	0.5	PASS
11A	Ant1	5825	16.320	0.5	PASS
11N20SISO	Ant1	5745	17.600	0.5	PASS
11N20SISO	Ant1	5785	17.600	0.5	PASS
11N20SISO	Ant1	5825	17.600	0.5	PASS
11N40SISO	Ant1	5755	36.320	0.5	PASS
11N40SISO	Ant1	5795	36.400	0.5	PASS
11AC20SISO	Ant1	5745	17.600	0.5	PASS
11AC20SISO	Ant1	5785	17.600	0.5	PASS
11AC20SISO	Ant1	5825	17.600	0.5	PASS
11AC40SISO	Ant1	5755	36.240	0.5	PASS
11AC40SISO	Ant1	5795	36.240	0.5	PASS
11AX20SISO	Ant1	5745	18.960	0.5	PASS
11AX20SISO	Ant1	5785	18.960	0.5	PASS
11AX20SISO	Ant1	5825	18.960	0.5	PASS
11AX40SISO	Ant1	5755	38.080	0.5	PASS
11AX40SISO	Ant1	5795	37.920	0.5	PASS

Test Plots

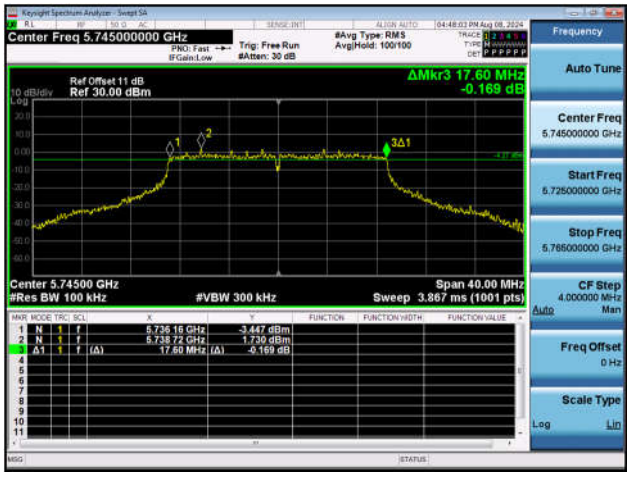


11A-Ant1-5745-PASS

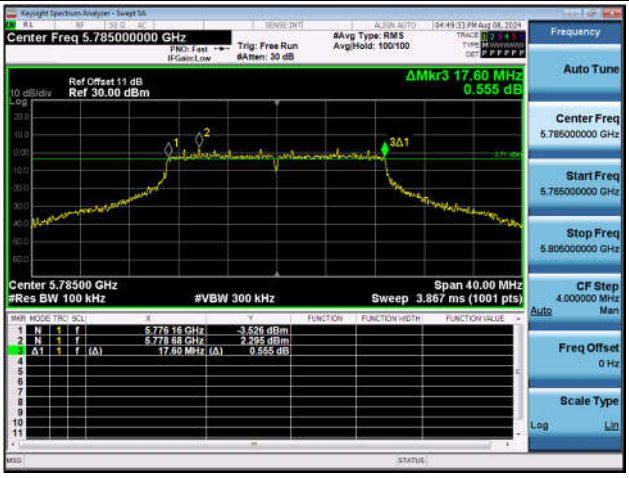


11A-Ant1-5785-PASS

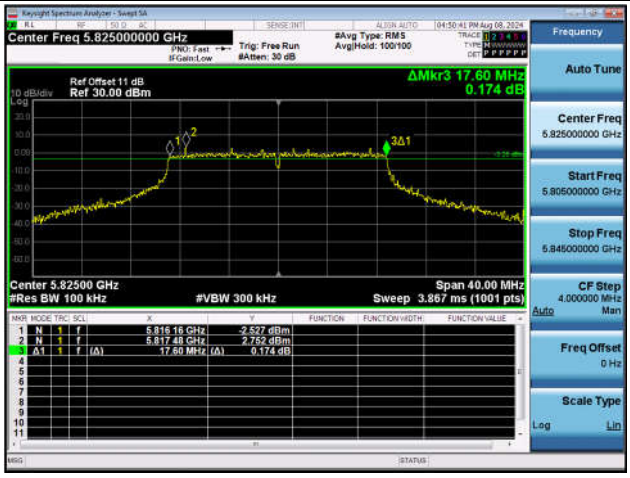
11A-Ant1-5825-PASS



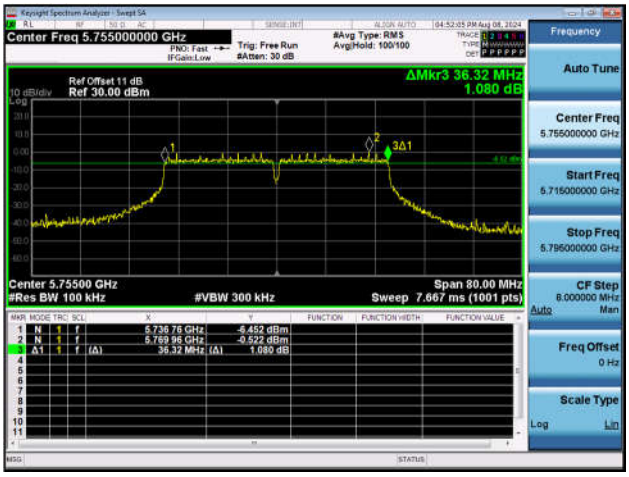
11N20SISO-Ant1-5745-PASS



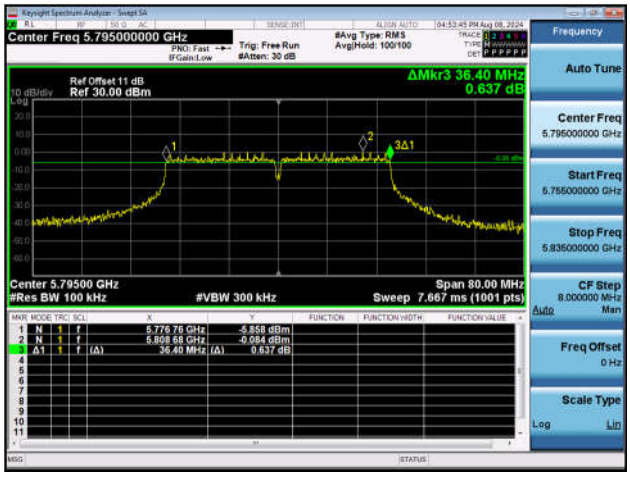
11N20SISO-Ant1-5785-PASS



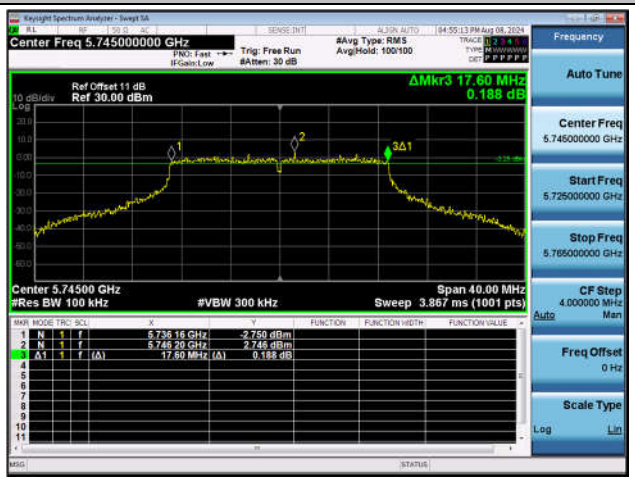
11N20SISO-Ant1-5825-PASS



11N40SISO-Ant1-5755-PASS

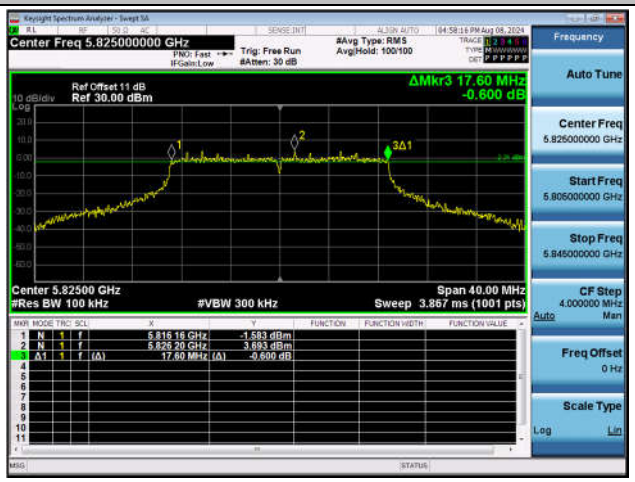


11N40SISO-Ant1-5795-PASS

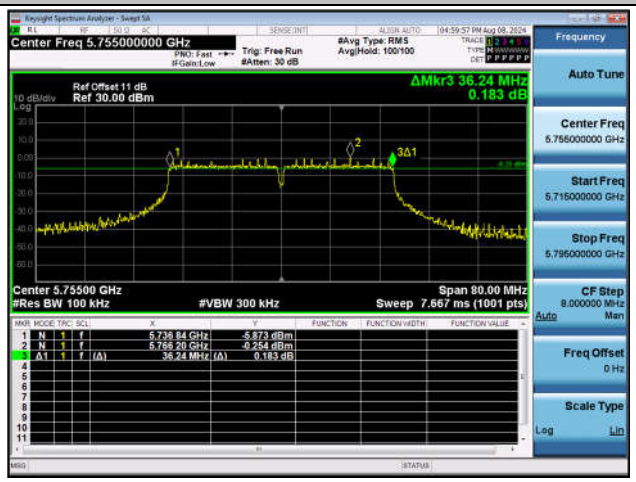


11AC20SISO-Ant1-5745-PASS

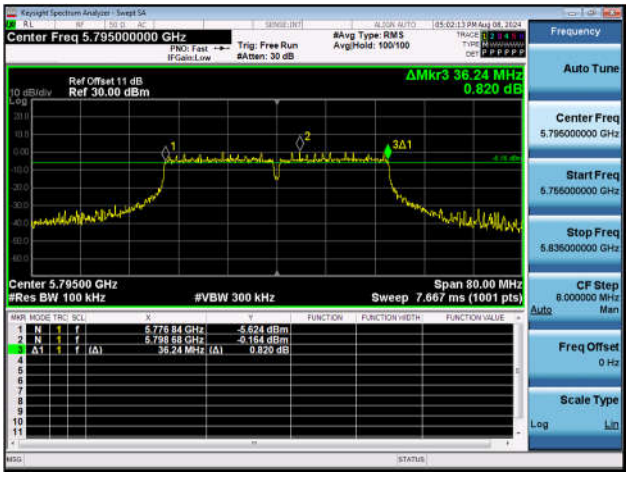
11AC20SISO-Ant1-5785-PASS



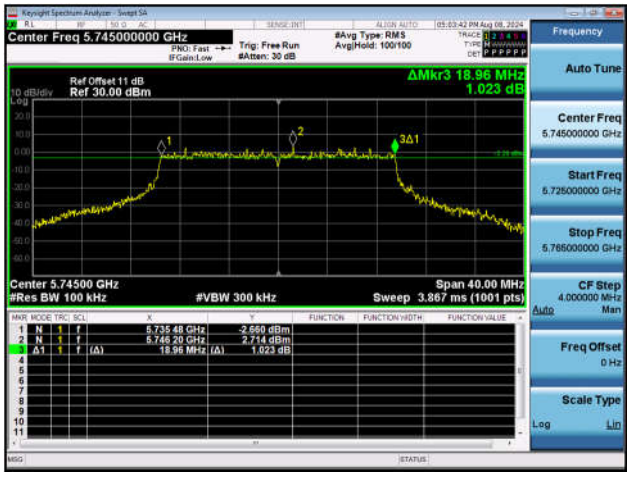
11AC20SISO-Ant1-5825-PASS



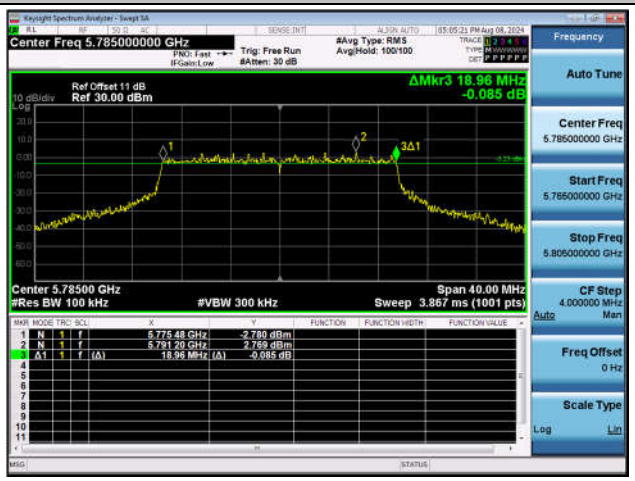
11AC40SISO-Ant1-5755-PASS



11AC40SISO-Ant1-5795-PASS

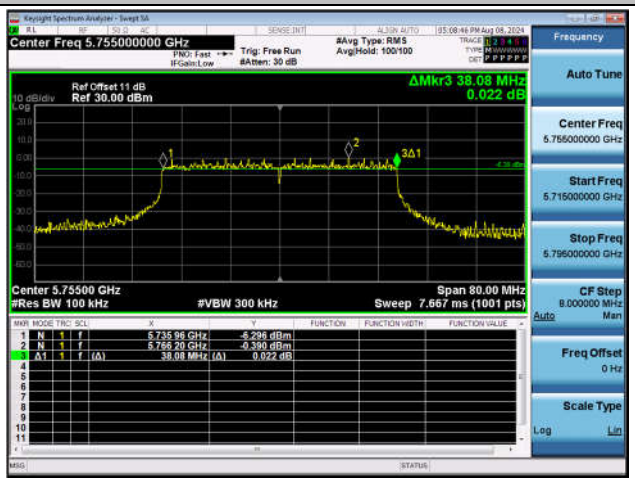


11AX20SISO-Ant1-5745-PASS

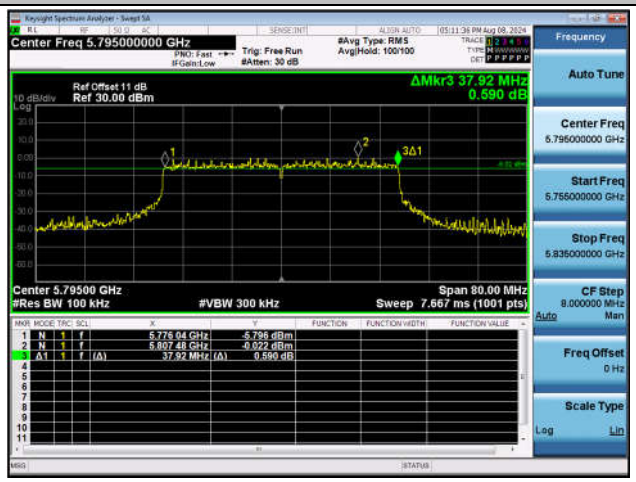


11AX20SISO-Ant1-5785-PASS

11AX20SISO-Ant1-5825-PASS



11AX40SISO-Ant1-5755-PASS



11AX40SISO-Ant1-5795-PASS

Frequency Stability

Test Result and Data

UNII-1:

TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	LV	NT	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	HV	NT	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	NV	-30	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	-20	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	-10	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	0	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	10	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	20	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	30	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	40	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	50	-40000.00	-7.722008	20	PASS

UNII-2a:

TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5260	NV	NT	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	LV	NT	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	HV	NT	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	-30	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	-20	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	-10	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	0	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	10	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	20	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	30	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	40	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	50	-60000.00	-11.406844	20	PASS

UNII-2c:

TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5500	NV	NT	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	LV	NT	-40000.00	-7.272727	20	PASS
11A	Ant1	5500	HV	NT	-40000.00	-7.272727	20	PASS
11A	Ant1	5500	NV	-30	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	-20	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	-10	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	0	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	10	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	20	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	30	-40000.00	-7.272727	20	PASS
11A	Ant1	5500	NV	40	-40000.00	-7.272727	20	PASS
11A	Ant1	5500	NV	50	-60000.00	-10.909091	20	PASS

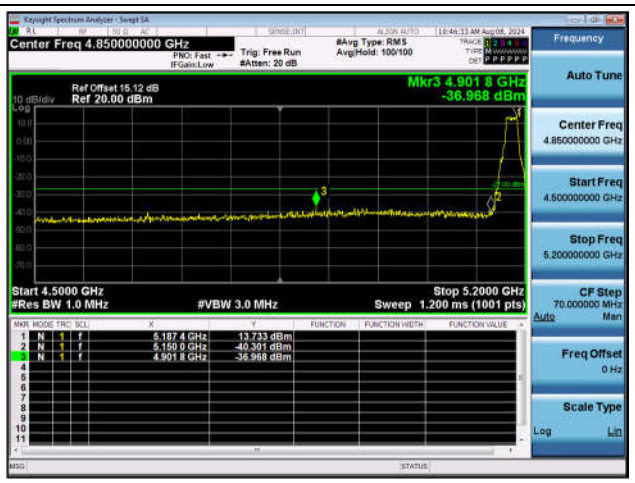
UNII-3:

TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5745	NV	NT	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	LV	NT	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	HV	NT	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	-30	-40000.00	-6.962576	20	PASS
11A	Ant1	5745	NV	-20	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	-10	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	0	-40000.00	-6.962576	20	PASS
11A	Ant1	5745	NV	10	-40000.00	-6.962576	20	PASS
11A	Ant1	5745	NV	20	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	30	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	40	-40000.00	-6.962576	20	PASS
11A	Ant1	5745	NV	50	-40000.00	-6.962576	20	PASS

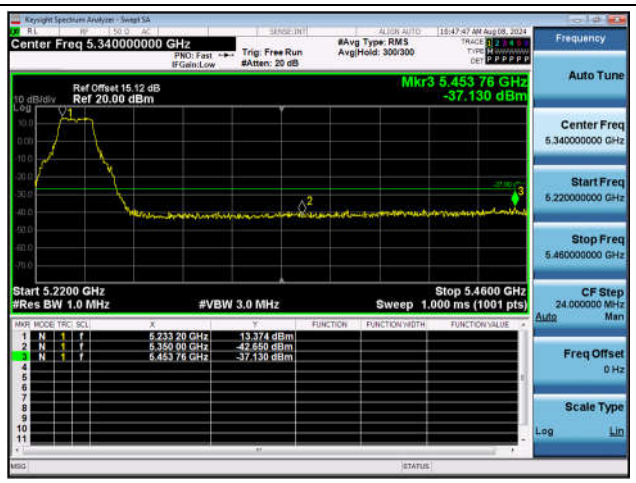
Note 1: All of the EUT Configure Mode were tested, the worst case is recorded in this report.

Conducted Band Edges

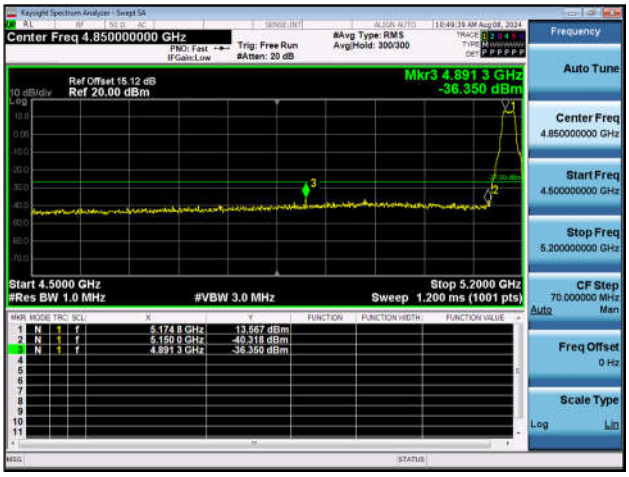
UNII-1:



11A-Ant1-5180-PASS



11A-Ant1-5240-PASS

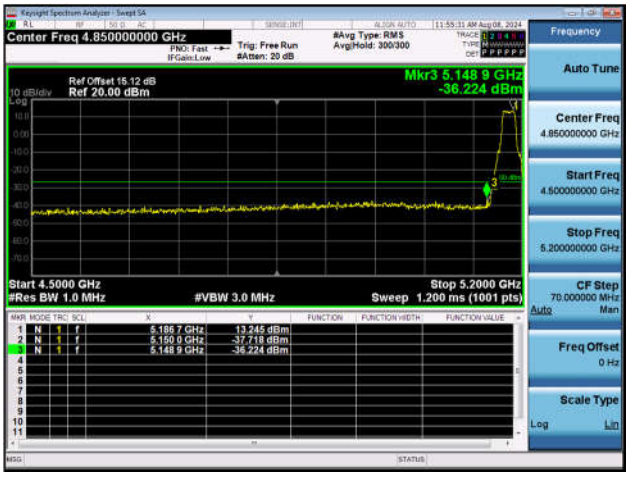


11N20SISO-Ant1-5180-PASS

11N20SISO-Ant1-5240-PASS

11N40SISO-Ant1-5190-PASS

11N40SISO-Ant1-5230-PASS

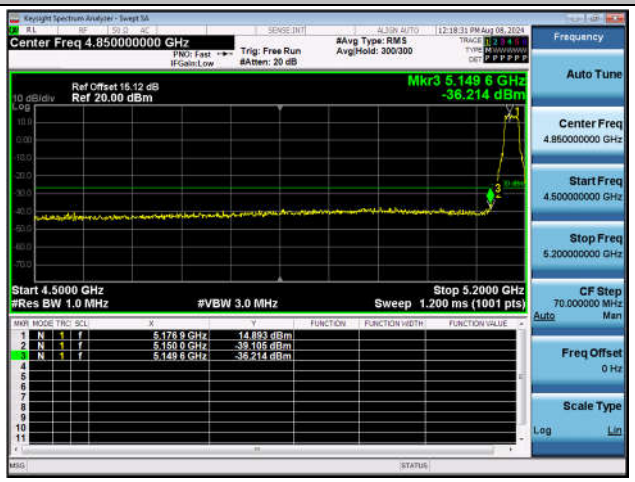


11AC20SISO-Ant1-5180-PASS

11AC20SISO-Ant1-5240-PASS

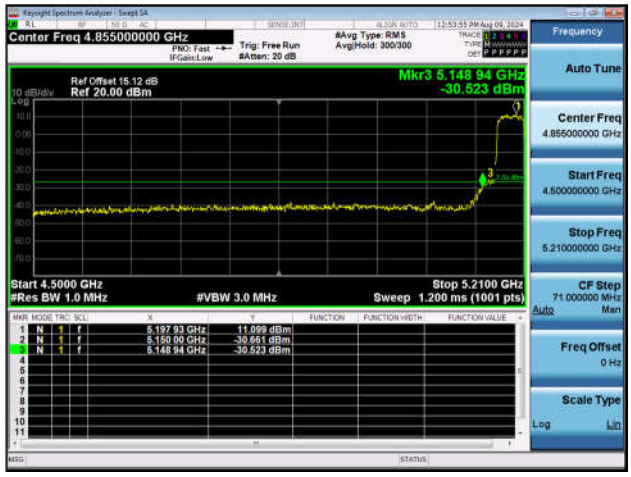
11AC40SISO-Ant1-5190-PASS

11AC40SISO-Ant1-5230-PASS



11AX20SISO-Ant1-5180-PASS

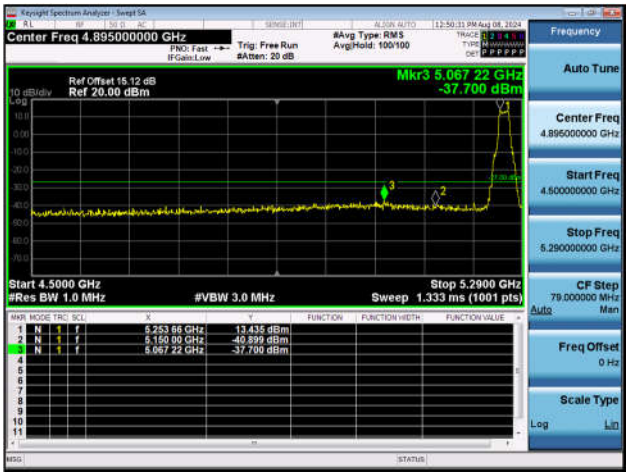
11AX20SISO-Ant1-5240-PASS



11AX40SISO-Ant1-5190-PASS

11AX40SISO-Ant1-5230-PASS

UNII-2a:

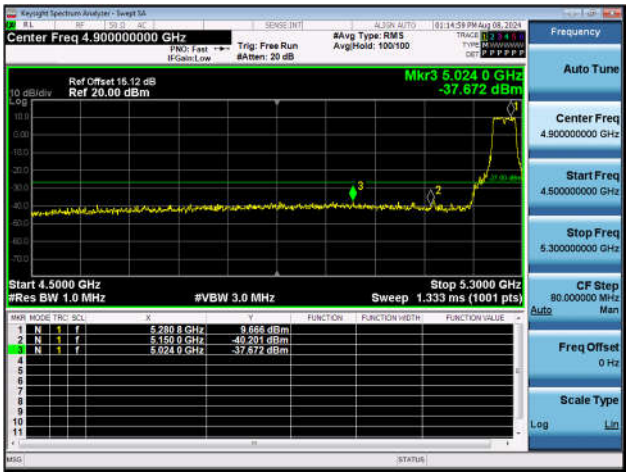


11A-Ant1-5260-PASS

11A-Ant1-5320-PASS

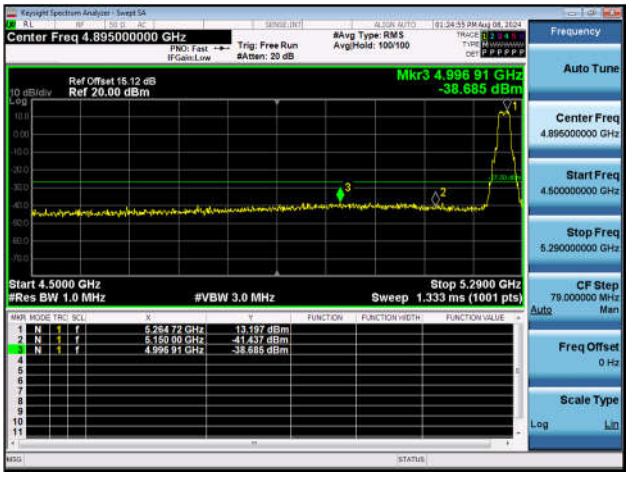
11N20SISO-Ant1-5260-PASS

11N20SISO-Ant1-5320-PASS



11N40SISO-Ant1-5270-PASS

11N40SISO-Ant1-5310-PASS

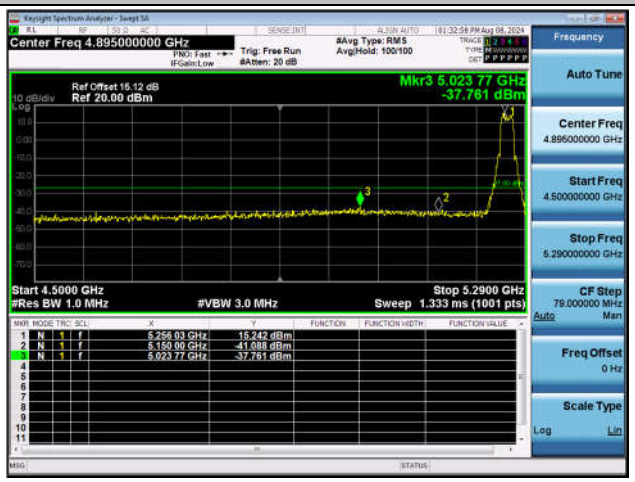


11AC20SISO-Ant1-5260-PASS

11AC20SISO-Ant1-5320-PASS

11AC40SISO-Ant1-5270-PASS

11AC40SISO-Ant1-5310-PASS



11AX20SISO-Ant1-5260-PASS

11AX20SISO-Ant1-5320-PASS

11AX40SISO-Ant1-5270-PASS

11AX40SISO-Ant1-5310-PASS

UNII-2c:

11A-Ant1-5500-PASS

11A-Ant1-5700-PASS

11N20SISO-Ant1-5500-PASS

11N20SISO-Ant1-5700-PASS

11N40SISO-Ant1-5510-PASS

11N40SISO-Ant1-5670-PASS

11AC20SISO-Ant1-5500-PASS

11AC20SISO-Ant1-5700-PASS

11AC40SISO-Ant1-5510-PASS

11AC40SISO-Ant1-5670-PASS

11AX20SISO-Ant1-5500-PASS

11AX20SISO-Ant1-5700-PASS

	
11AX40SISO-Ant1-5510-PASS	11AX40SISO-Ant1-5670-PASS

UNII-3:

11A-Ant1-5745-PASS

11A-Ant1-5825-PASS

11N20SISO-Ant1-5745-PASS

11N20SISO-Ant1-5825-PASS

11N40SISO-Ant1-5755-PASS

11N40SISO-Ant1-5795-PASS

11AC20SISO-Ant1-5745-PASS

11AC20SISO-Ant1-5825-PASS

11AC40SISO-Ant1-5755-PASS

11AC40SISO-Ant1-5795-PASS

11AX20SISO-Ant1-5745-PASS

11AX20SISO-Ant1-5825-PASS

	
11AX40SISO-Ant1-5755-PASS	11AX40SISO-Ant1-5795-PASS

** END OF REPORT **