



RF TEST REPORT

Report No.: SET2018-15581

Product Name: OverHeadProjector

FCC ID: X3X-MAO2

IC: 8804A-MAO2

Model No. : MA-1,MO-2

Applicant: ELMO COMPANY, LIMITED

Address: 1-3-4, Shioya-cho, Minami-ku, Nagoya-city Aichi, 457-0078,
Japan

Dates of Testing: 11/26/2018 — 03/27/2019

Issued by: CCIC Southern Electronic Product Testing (Shenzhen) Co.,
Ltd.

Lab Location: Building 28/29, East of Shigu, Xili Industrial Zone, Xili Road,
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Test Report

Product Name : OverHeadProjector

Brand Name : ELMO

Trade Name : ELMO

Applicant : ELMO COMPANY, LIMITED

Applicant Address : 1-3-4, Shioya-cho, Minami-ku, Nagoya-city Aichi,
457-0078, Japan

Manufacturer : ELMO COMPANY, LIMITED

Manufacturer Address : 1-3-4, Shioya-cho, Minami-ku, Nagoya-Shi, Aichi Pref.,
Japan

Test Standards : 47 CFR Part 15 Subpart E

Test Result : PASS

Tested by :

2019.03.27

Shallwe Yang, Test Engineer

Reviewed by :

2019.03.27

Chris You, Senior EGINEER

Approved by :

2019.03.27

Shuangwen Zhang, Manager

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Change History		
Issue	Date	Reason for change
1.0	2019.03.27	First edition

1. General Information

1.1. EUT Description

EUT Type	OverHeadProjector
Hardware Version	MA-1
Software Version	0.5.1
EUT supports Radios application	WLAN5.0GHz 802.11a/n (HT20/40)
Product Type	Indoor
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM,16QAM, QPSK, BPSK for OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n : up to 135 Mbps
Frequency Range	Band UNII-1: 5150 ~ 5250MHz Band UNII-2A: 5250 ~ 5350MHz Band UNII-2C: 5470 ~ 5725MHz
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz/40MHz
Channel Number	5150 MHz ~ 5250MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5250 MHz ~ 5350MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5470 MHz ~ 5725MHz: 11 for 802.11a, 802.11n (HT20) 5 for 802.11n (HT40)
Antenna Type	Internal
Antenna Gain	Band 1: 4.09dBi Band 2A: 4.81dBi Band 2C: 5.41dBi
Output Power (Max.)	Band UNII-1: 12.92 dBm Band UNII-2A: 16.08 dBm Band UNII-2C: 12.77dBm

Note 1: The EUT is a OverHeadProjector, it contains 2 models, they are MA-1, MO-2. They have the same size, appearance and internal structure, the MA-1 have a Display. We select MA-1 as main model to test.

1.2. Test Standards and Results

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

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

No.	FCC Rule	Description	Result
1	15.203	Antenna Requirement	PASS
2	15.407(a)	Maximum Conducted Output Power	PASS
3	15.407(a)	Emission Bandwidth(26 dB Bandwidth)	PASS
	15.407(e)	Emission Bandwidth(6 dB Bandwidth)	PASS
	-	Emission Bandwidth(99%)	PASS
4	15.407(a)	Power spectral density (PSD)	PASS
5	15.207	AC Power Line Conducted Emission	PASS
6	15.209 15.407(b)	Radiated Band Edges and Spurious Emission	PASS
7	15.407(g)	Frequency Stability	PASS

1.3. Channel List

Operated band in 5150 MHz ~ 5250MHz

4 channels are provided for 802.11a, 802.11n-HT20

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

2 channels are provided for 802.11n-HT40

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

Operated band in 5250 MHz ~ 5350MHz

4 channels are provided for 802.11a, 802.11n-HT20

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

2 channels are provided for 802.11n-HT40

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

Operated band in 5470 MHz ~ 5725MHz

11 channels are provided for 802.11a, 802.11n-HT20

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

5 channels are provided for 802.11n-HT40

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

1.4. Test environment and mode

Operating Environment	
Temperature	24°C
Humidity	57 % RH
Atmospheric Pressure	1010 mbar
Test mode:	
Continuously transmitting mode	Keeps the EUT in 100% duty cycle transmitting with modulation in SISO, duty cycle factor is not required.

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

For Frequency band 5150 ~ 5250 MHz			
Mode	Modulation scheme / bandwidth		
	5180 MHz	5220 MHz	5240 MHz
802.11a	6 Mbps	6 Mbps	6 Mbps
802.11n – HT20	MCS 0	MCS 0	MCS 0
Frequency	5190 MHz		5230 MHz
802.11n – HT40	MCS 0		MCS 0
For Frequency band 5250 ~ 5350 MHz			
Mode	Modulation scheme / bandwidth		
	5260 MHz	5300 MHz	5320 MHz
802.11a	6 Mbps	6 Mbps	6 Mbps
802.11n – HT20	MCS 0	MCS 0	MCS 0
Frequency	5270 MHz		5310 MHz
802.11n – HT40	MCS 0		MCS 0
For Frequency band 5470 ~ 5725 MHz			
Mode	Modulation scheme / bandwidth		
	5500 MHz	5580 MHz	5700 MHz
802.11a	6 Mbps	6 Mbps	6 Mbps
802.11n – HT20	MCS 0	MCS 0	MCS 0
Frequency	5510 MHz		5670 MHz
802.11n – HT40	MCS 0		MCS 0

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

Pretest Test Mode	Description
Mode 1	TX A Mode / CH36, CH44, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX N20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 6	TX N40 Mode / CH54, CH62 (UNII-2A)
Mode 7	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 8	TX N20 Mode / CH100, CH116, CH140 (UNII-2C)
Mode 9	TX N40 Mode / CH102, CH134 (UNII-2C)
Mode 10	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 11	TX Mode
For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH44, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH44, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 5	TX N20 Mode / CH52, CH60, CH64 (UNII-2A)
Mode 6	TX N40 Mode / CH54, CH62 (UNII-2A)
Mode 7	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 8	TX N20 Mode / CH100, CH116, CH140 (UNII-2C)
Mode 9	TX N40 Mode / CH102, CH134 (UNII-2C)

1.5. Power level setup in software

Power level setup in software for 5G wifi			
UNII-1			
Frequency (MHz)	5180	5220	5240
A mode	18	18	18
Frequency (MHz)	5180	5220	5240
N20 mode	18	18	18
Frequency (MHz)	5190	5230	\
N40 mode	18	18	\

Power level setup in software for 5G wifi			
UNII-2A			
Frequency (MHz)	5260	5300	5320
A mode	20	20	20
Frequency (MHz)	5260	5300	5320
N20 mode	20	20	20
Frequency (MHz)	5270	5310	\
N40 mode	18	18	\

Power level setup in software for 5G wifi			
UNII-2C			
Frequency (MHz)	5500	5580	5700
A mode	20	20	20
Frequency (MHz)	5500	5580	5700
N20 mode	20	20	20
Frequency (MHz)	5510	5670	\
N40 mode	18	18	\

1.6. Laboratory Facilities

FCC-Registration No.: CN5031

CCIC Southern Electronic Product Testing (Shenzhen) 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: CN5031, valid time is until December 31, 2019.

ISED Registration: 11185A-1

CAB identifier: CN0064

CCIC Southern Electronic Product Testing (Shenzhen) 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 Dec. 03, 2019.

NVLAP Lab Code: 201008-0

CCIC-SET is a third party testing organization accredited by NVLAP according to ISO/IEC 17025. The accreditation certificate number is 201008-0.

2. 47 CFR Part 15E Requirements

2.1. Antenna requirement

2.1.1. Applicable Standard

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

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

2.1.2. Antenna Information

Antenna Type	Internal antenna
Max. Antenna Gain	5.41dBi

2.1.3. Result: comply

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

2.2. Output Power

2.2.1. Limit of Output Power

FCC 15.407(a)

The maximum conducted output power should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p. \leq 125mW(21dBm) at any elevation angle above 30 degrees as measured from the horizon)
	<input type="checkbox"/> Fixed point-to-point Access device	1 Watt (30 dBm)
	<input type="checkbox"/> Indoor Access Point	1 Watt (30 dBm)
	<input checked="" type="checkbox"/> Mobile and portable client device	250mW (24 dBm)
U-NII-2A	<input checked="" type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-2C	<input checked="" type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-3	<input type="checkbox"/>	1 Watt (30 dBm)

Note: B* is the 26 dB emission bandwidth in MHz.

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The maximum conducted output power shall not exceed:

Band	EUT Category	Limit
U-NII-1	<input checked="" type="checkbox"/>	N/A
U-NII-2A	<input checked="" type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-2C	<input checked="" type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-3	<input type="checkbox"/>	1 Watt (30 dBm)

Note: B* is the 99% emission bandwidth in MHz.

The maximum e.i.r.p. shall not exceed:

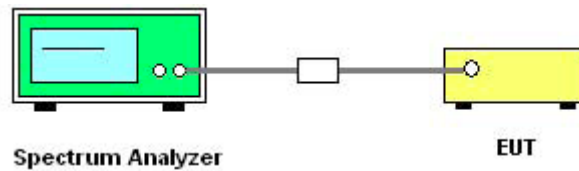
Band	EUT Category	Limit
U-NII-1	<input checked="" type="checkbox"/>	200mW(23dBm) or 10dBm+10log B* Whichever is less.
U-NII-2A	<input checked="" type="checkbox"/>	1W (30 dBm) or 17dBm+10logB* Whichever is less.
U-NII-2C	<input checked="" type="checkbox"/>	1W (30 dBm) or 17dBm+10logB* Whichever is less.
U-NII-3	<input type="checkbox"/>	N/A

Note: B* is the 99% emission bandwidth in MHz.

2.2.2. Measuring Instruments

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

2.2.3. Test Setup



2.2.4. Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02 Method SA-1
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector=average(RMS), Compute power by integrating the spectrum across the 99%OBW.
5. Measure the conducted output power and record the results in the test report.



2.2.5. Test Result

Please refer to APPENDIX A for detail

2.3. Emission Bandwidth

2.3.1. Limit of Bandwidth

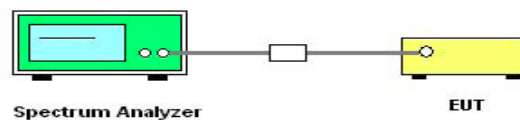
There is no limit bandwidth for band U-NII-1, U-NII-2A and U-NII-2C.

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

2.3.2. Measuring Instruments

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

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02.

2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. For 26dB bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = approximately 1%EBW, VBW \geq 3RBW , Detector = Peak, Trace mode = max hold

Span > 26 dB bandwidth and Sweep time = auto

5. Use the spectrum analyzer N dB down function to find the 26dB bandwidth.

6. For 6 Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 100kHz
VBW = 300 kHz, Detector = Peak, Trace mode = max hold

7. Use the spectrum analyzer N dB down function to find the 6dB bandwidth

8. For 99% Occupied Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 1% to 5% of the OBW, VBW \geq 3RBW, Detector = Peak, Trace mode = max hold, Span = 1.5 times to 5 times the OBW.

8. Measure and record the worst results in the test report.



2.3.5. Test Results Bandwidth

Please refer to APPENDIX A for detail

2.4. Power spectral density (PSD)

2.4.1. Limit of Power Spectral Density

FCC 15.407(a)

The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> Access Point (Master device)	17 dBm/MHz
	<input type="checkbox"/> Fixed point-to-point Access device	
	<input checked="" type="checkbox"/> Mobile and portable client device	11 dBm/MHz
U-NII-2A	<input checked="" type="checkbox"/>	11 dBm/MHz
U-NII-2C	<input checked="" type="checkbox"/>	11 dBm/MHz
U-NII-3	<input checked="" type="checkbox"/>	30dBm/500kHz

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The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input checked="" type="checkbox"/>	N/A
U-NII-2A	<input type="checkbox"/>	11 dBm/MHz
U-NII-2C	<input type="checkbox"/>	11 dBm/MHz
U-NII-3	<input checked="" type="checkbox"/>	30 dBm/500kHz

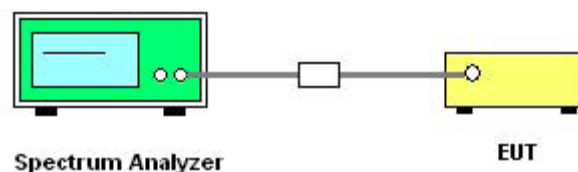
The e.i.r.p. spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input checked="" type="checkbox"/>	10 dBm/MHz
U-NII-2A	<input type="checkbox"/>	N/A
U-NII-2C	<input type="checkbox"/>	N/A
U-NII-3	<input checked="" type="checkbox"/>	N/A

2.4.2. Measuring Instruments

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

2.4.3. Test Setup



2.4.4. Test Procedures

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

4. For U-NII-1, U-NII-2A, U-NII-2C Band:

Using method SA-1

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

2.4.5. Test Results of Power spectral density

Please refer to APPENDIX A for detail

2.5. Frequency Stability

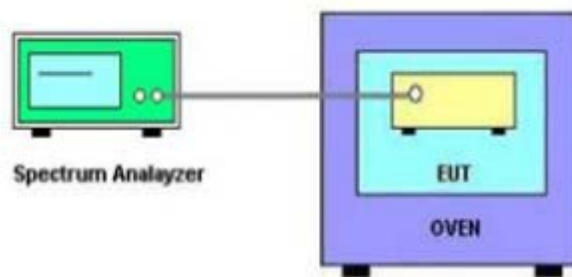
2.5.1. Limit

FCC 15.407(b) Frequency Stability	
Frequency Band(MHz)	Limit
5150~5250	Specified in the user's manual
5250~5350	
5470~5725	
5725~5850	

2.5.2. Measuring Instruments

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

2.5.3. Test Setup



2.5.4. Test Procedures

1. The EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. The EUT is installed in an environment test chamber with external power source.
4. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
5. A sufficient stabilization period at each temperatures in used prior to each frequency measurement.
6. The test shall be performed under -10 to 55 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.
7. Measure and record the worst results in the test report.

2.5.5. Test Results of Frequency Stability

Please refer to APPENDIX A for detail

2.6. Radiated Band Edge and Spurious Emission

2.6.1. Limit of Radiated Band Edges and Spurious Emission

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

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

NOTE:

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

Limits of unwanted emission out of the restricted bands

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

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

FCC 15.407			
Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dBμV/m)
5725 - 5850	<5650	-27	68.2
	5650~5700	-27~10	68.2~105.2
	5700~5720	10~15.6	105.2~110.8
	5720~5725	15.6~27	110.8~122.2
	5850~5855	27~15.6	122.2~110.8
	5855~5875	15.6~10	110.8~105.2
	5875~5925	10~-27	105.2~68.2
	>5925	-27	68.2

Note: 1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

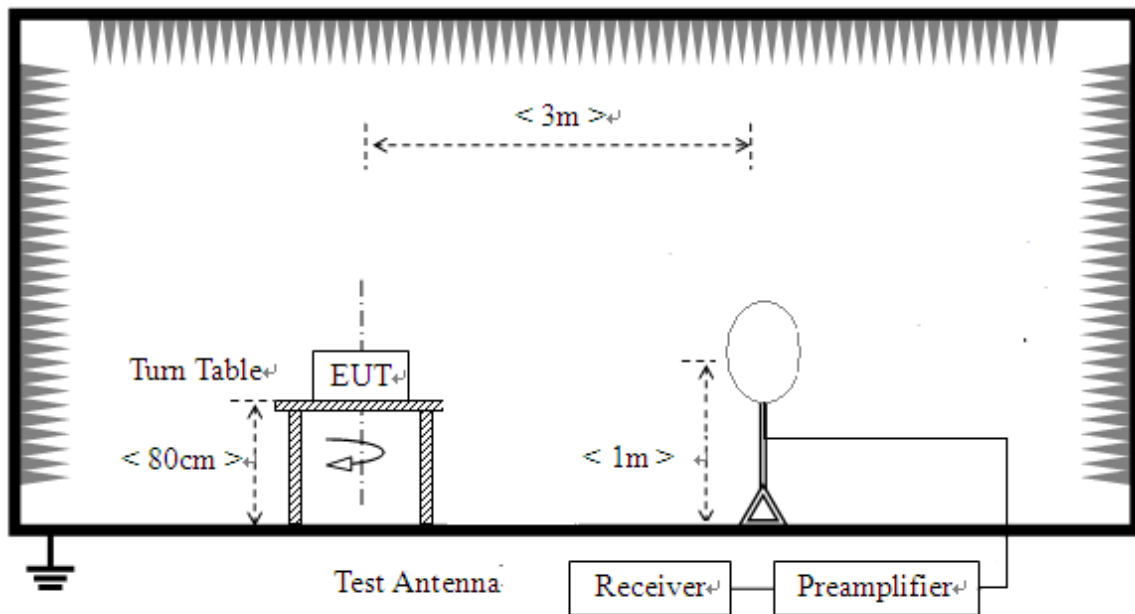
$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

2.6.2. Measuring Instruments

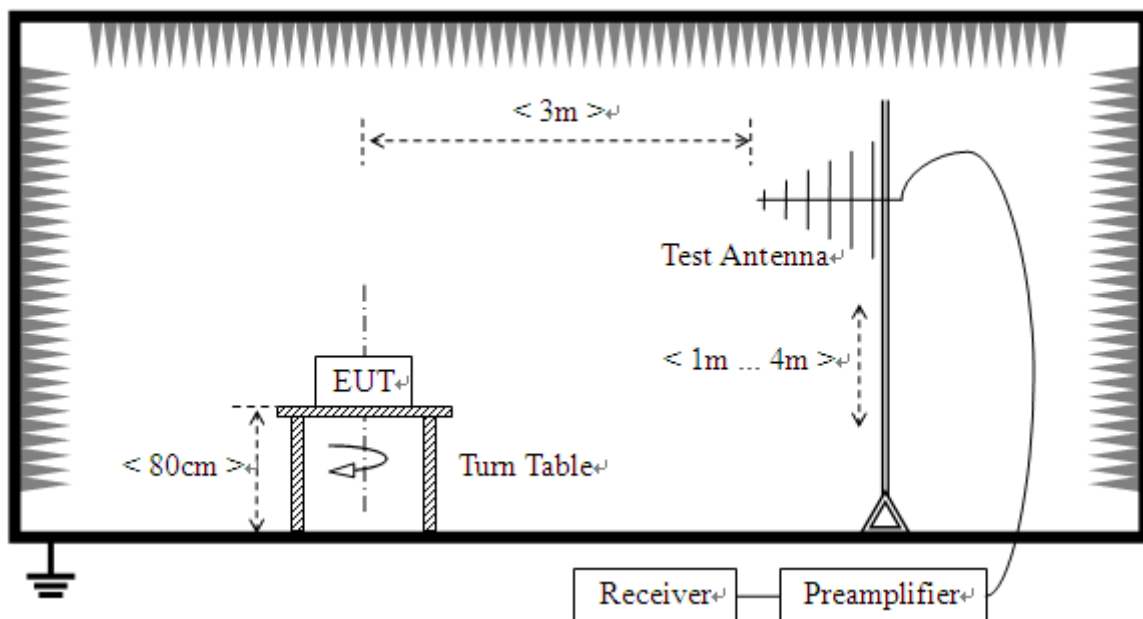
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

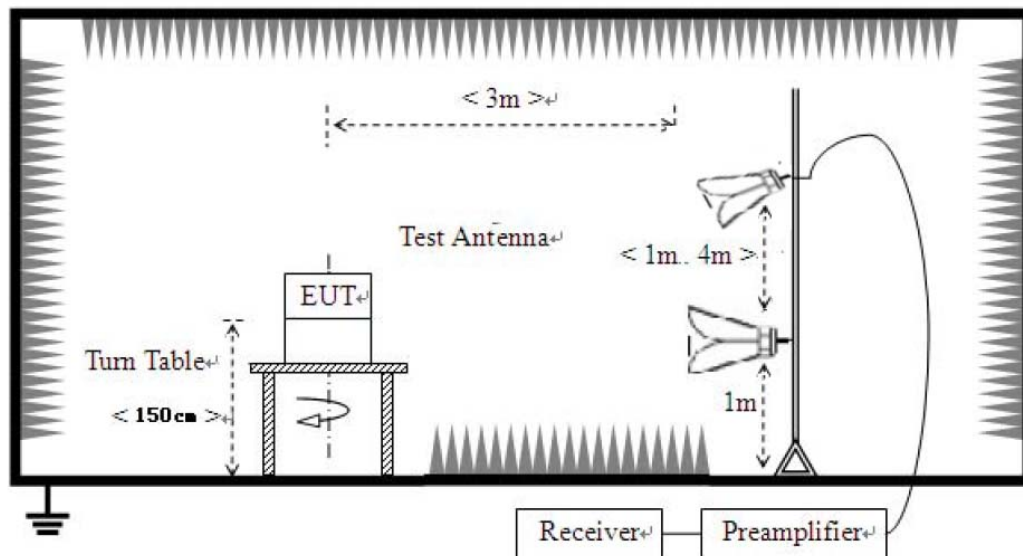
For radiated emissions from 9 KHz to 30 MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.4. Test Procedures

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

Note:

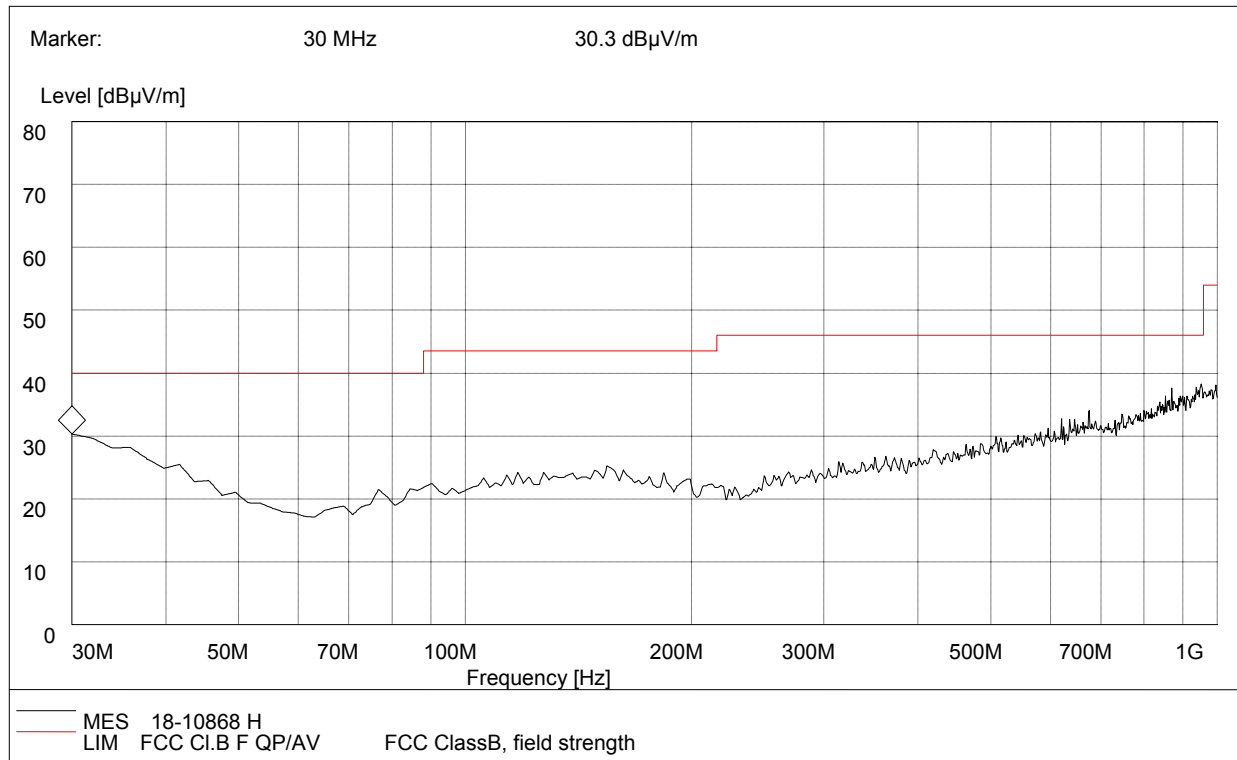
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

2.6.5. Test Results of Radiated Band Edge and Spurious Emission

For 9 KHz to 30MHz

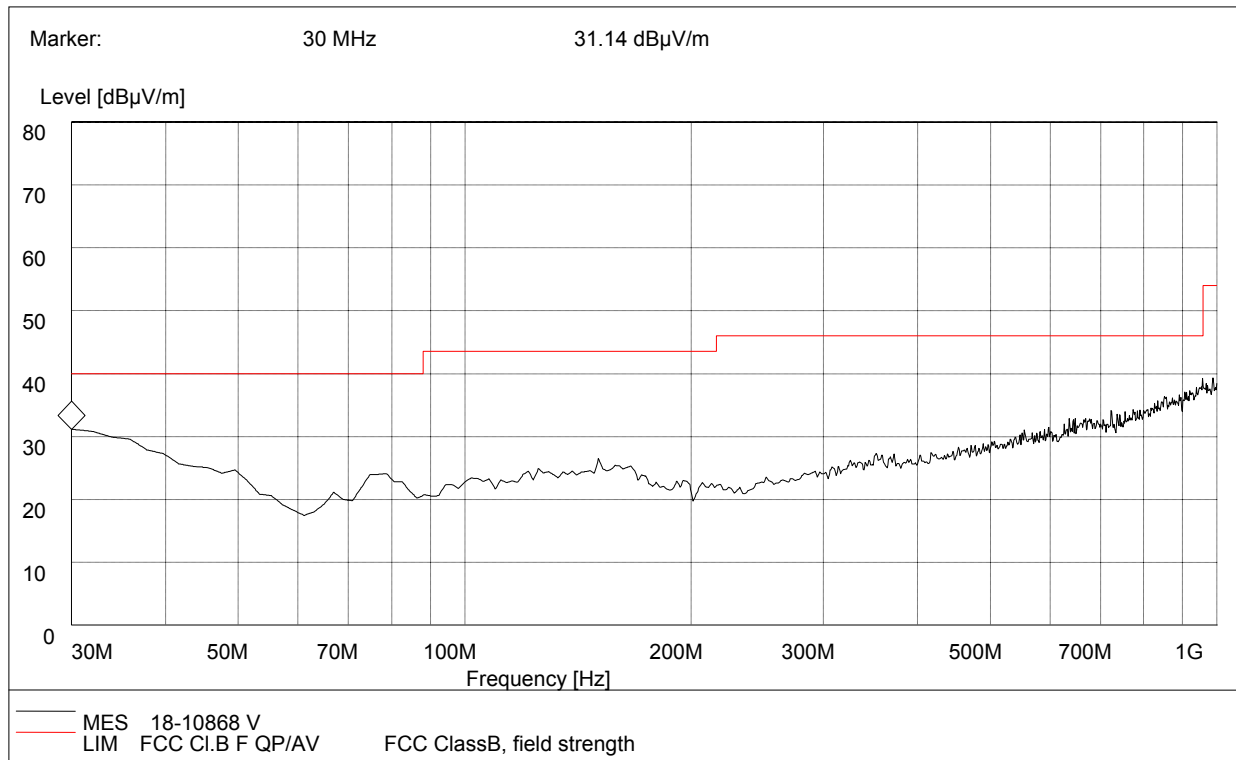
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For 30MHz to 1000 MHz



30MHz to 1GHz, Antenna Horizontal

Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB μ V/m)	Antenna	Verdict
30.00	30.30	120.000	200.0	40.00	Horizontal	Pass



30MHz to 1GHz, Antenna Vertical

Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Antenna height (cm)	Limit (dB μ V/m)	Antenna	Verdict
30	31.14	120.000	200.0	40.00	Vertical	Pass

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

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150	43.72	PK	74	-30.28	2.50 H	260	36.22	7.5
2	5150	33.42	AV	54	-20.58	2.50 H	260	25.92	7.5
3	10360	50.26	PK	68.2	-17.94	1.80 H	120	30.46	19.8
4	10360	40.2	AV	68.2	-28.00	1.80 H	120	20.4	19.8

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

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150	42.35	PK	74	-31.65	1.50 V	330	34.85	7.5
2	5150	32.37	AV	54	-21.63	1.50 V	330	24.87	7.5
3	10360	50.24	PK	68.2	-17.96	1.20 V	210	30.44	19.8
4	10360	40.39	AV	68.2	-27.81	1.20 V	210	20.59	19.8

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10400	51.18	PK	68.2	-17.02	1.80 H	120	31.28	19.9
2	10400	41.13	AV	68.2	-27.07	1.80 H	120	21.23	19.9

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10400	50.44	PK	68.2	-17.76	1.20 V	210	30.54	19.9
2	10400	40.08	AV	68.2	-28.12	1.20 V	210	20.18	19.9

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350	44.16	PK	74	-29.84	2.50 H	260	36.16	8
2	5350	33.81	AV	54	-20.19	2.50 H	260	25.81	8
3	10480	50.39	PK	68.2	-17.81	1.80 H	120	30.49	19.9
4	10480	40.27	AV	68.2	-27.93	1.80 H	120	20.37	19.9

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350	42.67	PK	74	-31.33	1.50 V	330	34.67	8
2	5350	32.53	AV	54	-21.47	1.50 V	330	24.53	8
3	10480	51.19	PK	68.2	-17.01	1.20 V	210	31.29	19.9
4	10480	40.84	AV	68.2	-27.36	1.20 V	210	20.94	19.9

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5260MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1.	5150.00	44.09	PK	74.00	-29.91	2.50 H	260	36.59	7.50
2.	5150.00	35.74	AV	54.00	-18.26	2.50 H	260	28.24	7.50
3.	10520.00	51.20	PK	68.2	-17.00	1.80 H	120	31.20	20.00
4.	10520.00	43.06	AV	68.2	-25.14	1.80 H	120	23.06	20.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5260MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1.	5150.00	42.29	PK	74.00	-31.71	1.50 V	330	34.79	7.50
2.	5150.00	34.14	AV	54.00	-19.86	1.50 V	330	26.64	7.50
3.	10520.00	51.34	PK	68.2	-16.86	1.20 V	210	31.34	20.00
4.	10520.00	42.98	AV	68.2	-25.22	1.20 V	210	22.98	20.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5300MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10600.00	47.00	PK	74.00	-27	1.50	220	27.00	20.00
2	10600.00	37.95	AV	54.00	-16.05	1.50	220	17.95	20.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5300MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10600.00	48.85	PK	74.00	-25.15	1.80	150	28.85	20.00
2	10600.00	40.20	AV	54.00	-13.8	1.80	150	20.20	20.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5320MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	38.95	PK	74.00	-35.05	2.00	260	30.95	8.00
2	5350.00	31.20	AV	54.00	-22.80	2.00	260	23.20	8.00
3	10640.00	50.09	PK	74.00	-23.91	2.00	120	29.99	20.10
4	10640.00	41.95	AV	54.00	-12.05	2.00	120	21.85	20.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5320MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	41.69	PK	74.00	-32.31	1.50	330	33.69	8.00
2	5350.00	32.34	AV	54.00	-21.66	1.50	330	24.34	8.00
3	10640.00	50.19	PK	74.00	-23.81	1.20	210	30.09	20.10
4	10640.00	41.05	AV	54.00	-12.95	1.20	210	20.95	20.10

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5500MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	39.25	PK	74.00	-34.75	2.00	120	30.75	8.50
2	5460.00	31.51	AV	54.00	-22.49	2.00	120	23.01	8.50
3	5470.00	38.95	PK	68.2	-29.25	2.00	260	30.45	8.50
4	5470.00	31.21	AV	68.2	-36.99	2.00	260	22.71	8.50
5	11000.00	49.36	PK	74.00	-24.64	1.80	200	28.36	21.00
6	11000.00	41.01	AV	54.00	-12.99	1.80	200	20.01	21.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5500MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	38.74	PK	74.00	-35.26	2.50	180	30.24	8.50
2	5460.00	30.09	AV	54.00	-23.91	2.50	180	21.59	8.50
3	5470.00	38.84	PK	68.2	-29.36	2.00	180	30.34	8.50
4	5470.00	30.19	AV	68.2	-38.01	2.00	180	21.69	8.50
5	11000.00	50.69	PK	74.00	-23.31	2.00	200	29.69	21.00
6	11000.00	42.84	AV	54.00	-11.16	2.00	200	21.84	21.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5580MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	11160.00	52.14	PK	74.00	-21.86	1.80	100	30.64	21.50
2	11160.00	43.89	AV	54.00	-10.11	1.80	100	22.39	21.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5580MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	11160.00	50.37	PK	74.00	-23.63	2.00	180	28.87	21.50
2	11160.00	41.52	AV	54.00	-12.48	2.00	180	20.02	21.50

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5700MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5700.00	46.69	PK	68.2	-21.51	1.00	0	37.04	9.65
2	5700.00	40.1	AV	68.2	-28.10	1.00	0	30.45	9.65
3	11400.00	52.17	PK	74.00	-21.83	1.80	360	30.67	21.50
4	11400.00	44.43	AV	54.00	-9.57	1.80	360	22.93	21.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5700MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5700.00	46.87	PK	68.2	-21.33	1.00	170	37.22	9.65
2	5700.00	40.27	AV	68.2	-27.93	1.00	170	30.62	9.65
3	11400.00	53.14	PK	74.00	-20.86	2.00	260	31.64	21.50
4	11400.00	45.56	AV	54.00	-8.44	2.00	260	24.06	21.50

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

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	46.26	PK	74.00	-27.74	1.00	120	38.76	7.50
2	5150.00	35.96	AV	54.00	-18.04	1.00	120	28.46	7.50
3	10360.00	51.24	PK	68.2	-16.96	1.50	120	31.44	19.80
4	10360.00	41.18	AV	68.2	-27.02	1.50	120	21.38	19.80

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

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	44.25	PK	74.00	-29.75	1.50	260	36.75	7.50
2	5150.00	34.27	AV	54.00	-19.73	1.50	260	26.77	7.50
3	10360.00	50.09	PK	68.2	-18.11	1.50	270	30.29	19.80
4	10360.00	40.24	AV	68.2	-27.96	1.50	270	20.44	19.80

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10400.00	51.19	PK	68.2	-17.01	1.50	250	31.29	19.90
2	10400.00	41.03	AV	68.2	-27.17	1.50	250	21.13	19.90

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10400.00	51.84	PK	68.2	-16.36	1.00	360	31.94	19.90
2	10400.00	41.58	AV	68.2	-26.62	1.00	360	21.68	19.90

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	46.25	PK	74.00	-27.75	1.00	120	38.25	8.00
2	5350.00	35.90	AV	54.00	-18.1	1.00	120	27.90	8.00
3	10480.00	48.95	PK	68.2	-19.25	2.00	120	29.05	19.90
4	10480.00	38.83	AV	68.2	-29.37	2.00	120	18.93	19.90

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	43.52	PK	74.00	-30.48	1.00	230	35.52	8.00
2	5350.00	33.38	AV	54.00	-20.62	1.00	230	25.38	8.00
3	10480.00	51.19	PK	68.2	-17.01	2.00	360	31.29	19.90
4	10480.00	40.84	AV	68.2	-27.36	2.00	360	20.94	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5260MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	38.26	PK	74.00	-35.74	2.00	120	30.76	7.50
2	5150.00	29.91	AV	54.00	-24.09	2.00	120	22.41	7.50
3	10520.00	51.19	PK	68.2	-17.01	1.00	120	31.19	20.00
4	10520.00	43.05	AV	68.2	-25.15	1.00	120	23.05	20.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5260MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	39.62	PK	74.00	-34.38	1.20	100	32.12	7.50
2	5150.00	31.47	AV	54.00	-22.53	1.20	100	23.97	7.50
3	10520.00	50.26	PK	68.2	-17.94	1.00	210	30.26	20.00
4	10520.00	41.90	AV	68.2	-26.30	1.00	210	21.90	20.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5300MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10600.00	49.65	PK	74.00	-24.35	1.00	0	29.65	20.00
2	10600.00	40.60	AV	54.00	-13.4	1.00	0	20.60	20.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5300MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	10600.00	48.85	PK	74.00	-25.15	1.50	360	28.85	20.00
2	10600.00	40.20	AV	54.00	-13.8	1.50	360	20.20	20.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5320MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	40.15	PK	74.00	-33.85	1.00	120	32.15	8.00
2	5350.00	32.40	AV	54.00	-21.6	1.00	120	24.40	8.00
3	10640.00	51.16	PK	74.00	-22.84	1.50	260	31.06	20.10
4	10640.00	43.02	AV	54.00	-10.98	1.50	260	22.92	20.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5320MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	41.25	PK	74.00	-32.75	1.50	260	33.25	8.00
2	5350.00	31.90	AV	54.00	-22.1	1.50	260	23.90	8.00
3	10640.00	48.25	PK	74.00	-25.75	1.00	180	28.15	20.10
4	10640.00	39.11	AV	54.00	-14.89	1.00	180	19.01	20.10

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5500MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	38.66	PK	74.00	-35.34	1.00	120	30.16	8.50
2	5460.00	30.92	AV	54.00	-23.08	1.00	120	22.42	8.50
3	5470.00	38.96	PK	68.2	-29.24	1.50	250	30.46	8.50
4	5470.00	31.22	AV	68.2	-36.98	1.50	250	22.72	8.50
5	11000.00	51.36	PK	74.00	-22.64	1.80	360	30.36	21.00
6	11000.00	43.01	AV	54.00	-10.99	1.80	360	22.01	21.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5500MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	39.95	PK	74.00	-34.05	1.00	120	31.45	8.50
2	5460.00	31.30	AV	54.00	-22.70	1.00	120	22.80	8.50
3	5470.00	39.65	PK	68.2	-28.55	1.50	100	31.15	8.50
4	5470.00	31.00	AV	68.2	-37.20	1.50	100	22.50	8.50
5	11000.00	52.24	PK	74.00	-21.76	2.00	100	31.24	21.00
6	11000.00	44.39	AV	54.00	-9.61	2.00	100	23.39	21.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5580MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	11160.00	51.00	PK	74.00	-23	2.00	0	29.50	21.50
2	11160.00	42.75	AV	54.00	-11.25	2.00	0	21.25	21.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5580MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	11160.00	50.98	PK	74.00	-23.02	1.00	150	29.48	21.50
2	11160.00	42.13	AV	54.00	-11.87	1.00	150	20.63	21.50

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5700MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5700.00	45.63	PK	68.2	-22.57	1.00	0	35.98	9.65
2	5700.00	39.04	AV	68.2	-29.16	1.00	0	29.39	9.65
3	11400.00	52.25	PK	74.00	-21.75	1.80	360	30.75	21.50
4	11400.00	44.51	AV	54.00	-9.49	1.80	360	23.01	21.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5700MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5700.00	46.6	PK	68.2	-21.60	1.00	180	36.95	9.65
2	5700.00	40	AV	68.2	-28.20	1.00	180	30.35	9.65
3	11400.00	53.05	PK	74.00	-20.95	2.00	200	31.55	21.50
4	11400.00	45.47	AV	54.00	-8.53	2.00	200	23.97	21.50

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	44.26	PK	74.00	-29.74	1.2	210.00	36.76	7.50
2	5150.00	33.48	AV	54.00	-20.52	1.2	210.00	25.98	7.50
3	10380.00	50.36	PK	68.2	-17.84	1.5	100.00	30.56	19.80
4	10380.00	40.07	AV	68.2	-28.13	1.5	100.00	20.27	19.80

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	42.65	PK	74.00	-31.35	1.20	250.00	35.15	7.50
2	5150.00	32.67	AV	54.00	-21.33	1.20	250.00	25.17	7.50
3	10380.00	53.36	PK	68.2	-14.84	1.00	270.00	33.56	19.80
4	10380.00	43.51	AV	68.2	-24.69	1.00	270.00	23.71	19.80

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	44.16	PK	74.00	-29.84	2.00	100.00	36.16	8.00
2	5350.00	33.81	AV	54.00	-20.19	2.00	100.00	25.81	8.00
3	10460.00	52.36	PK	74.00	-21.64	1.00	200.00	32.46	19.90
4	10460.00	42.24	AV	54.00	-11.76	1.00	200.00	22.34	19.90

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

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	45.35	PK	74.00	-28.65	1.80	100.00	37.35	8.00
2	5350.00	35.21	AV	54.00	-18.79	1.80	100.00	27.21	8.00
3	10460.00	53.02	PK	74.00	-21.54	2.00	360.00	33.12	19.90
4	10460.00	42.67	AV	54.00	-11.6	2.00	360.00	22.77	19.90

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5270MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	42.65	PK	74.00	-31.35	1.20	88.00	35.15	7.50
2	5150.00	34.30	AV	54.00	-19.70	1.20	88.00	26.80	7.50
3	10540.00	52.19	PK	68.2	-16.01	1.80	36.00	32.19	20.00
4	10540.00	44.05	AV	68.2	-24.15	1.80	36.00	24.05	20.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5270MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5150.00	44.15	PK	74.00	-29.85	2.00	120.00	36.65	7.50
2	5150.00	34.00	AV	54.00	-20.00	2.00	120.00	26.50	7.50
3	10540.00	51.36	PK	68.2	-16.84	1.50	360.00	31.36	20.00
4	10540.00	41.00	AV	68.2	-27.20	1.50	360.00	21.00	20.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5310MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	42.25	PK	74.00	-31.747	1.50	260.00	34.25	8.00
2	5350.00	31.50	AV	54.00	-22.497	1.50	260.00	23.50	8.00
3	10640.00	51.36	PK	74.00	-22.64	2.60	180.00	31.26	20.10
4	10640.00	43.22	AV	54.00	-10.78	2.60	180.00	23.12	20.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5310MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5350.00	43.36	PK	74.00	-30.64	1.50	260.00	35.36	8.00
2	5350.00	34.01	AV	54.00	-19.99	1.50	260.00	26.01	8.00
3	10620.00	51.28	PK	74.00	-22.72	2.00	360.00	31.18	20.10
4	10620.00	42.14	AV	54.00	-11.86	2.00	360.00	22.04	20.10

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5510MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	42.15	PK	74.00	-31.85	1.60	180.00	33.65	8.50
2	5460.00	31.41	AV	54.00	-22.59	1.60	180.00	22.91	8.50
3	5470.00	43.26	PK	68.2	-24.94	1.60	180.00	34.76	8.50
4	5470.00	32.52	AV	68.2	-35.68	1.60	180.00	24.02	8.50
5	11020.00	51.36	PK	74.00	-22.64	1.60	320.00	30.36	21.00
6	11020.00	40.90	AV	54.00	-13.1	1.60	320.00	19.90	21.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5510MHz)

No.	Frequency (MHz)	Emssion Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	43.69	PK	74.00	-30.31	1.00	200.00	35.19	8.50
2	5460.00	33.04	AV	54.00	-20.96	1.00	200.00	24.54	8.50
3	5470.00	45.56	PK	68.2	-22.64	1.50	200.00	37.06	8.50
4	5470.00	34.91	AV	68.2	-33.29	1.50	200.00	26.41	8.50
5	11020.00	52.19	PK	74.00	-21.81	1.60	360.00	31.19	21.00
6	11020.00	41.34	AV	54.00	-12.66	1.60	360.00	20.34	21.00

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5670MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	11340.00	53.26	PK	74.00	-20.74	1.50	360.00	31.86	21.40
2	11340.00	42.52	AV	54.00	-11.48	1.50	360.00	21.12	21.40

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5670MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	11340.00	51.17	PK	74.00	-22.83	1.50	360.00	29.77	21.40
2	11340.00	40.59	AV	54.00	-13.41	1.50	360.00	19.19	21.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

2.7. Conducted Emission

2.7.1. Limit of Conducted Emission

FCC 15.207,

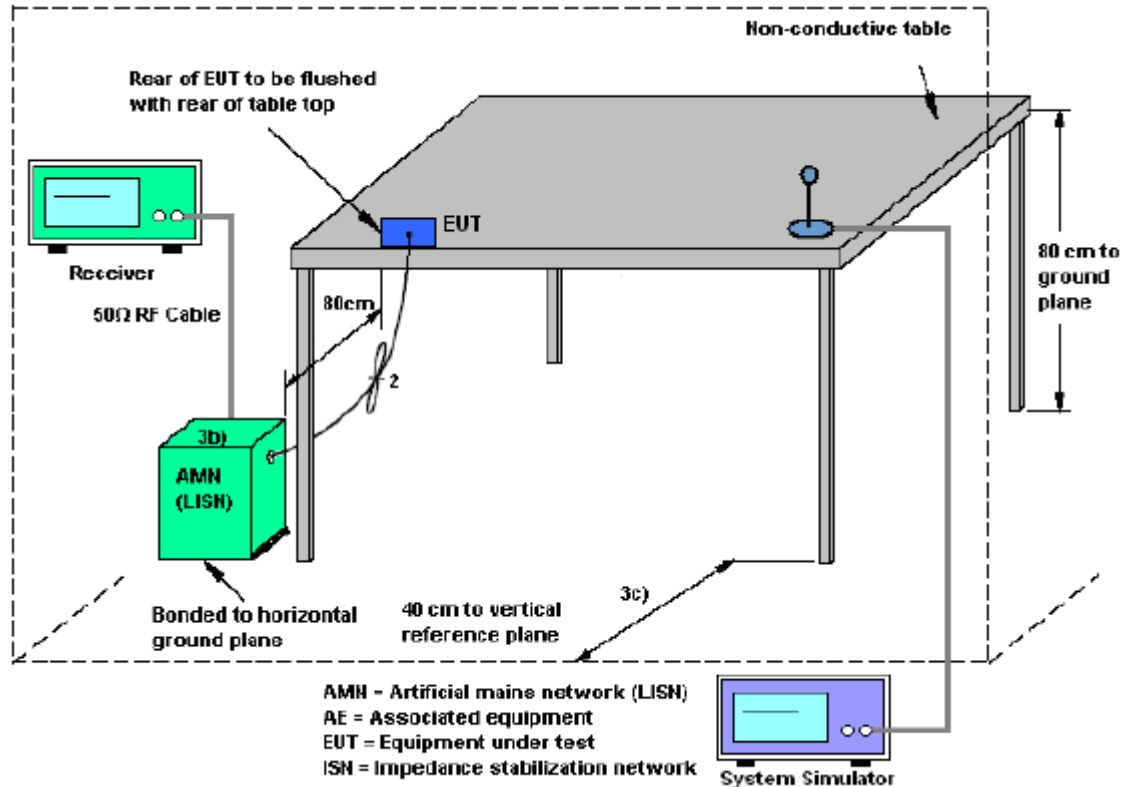
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

2.7.2. Measuring Instruments

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

2.7.3. Test Setup

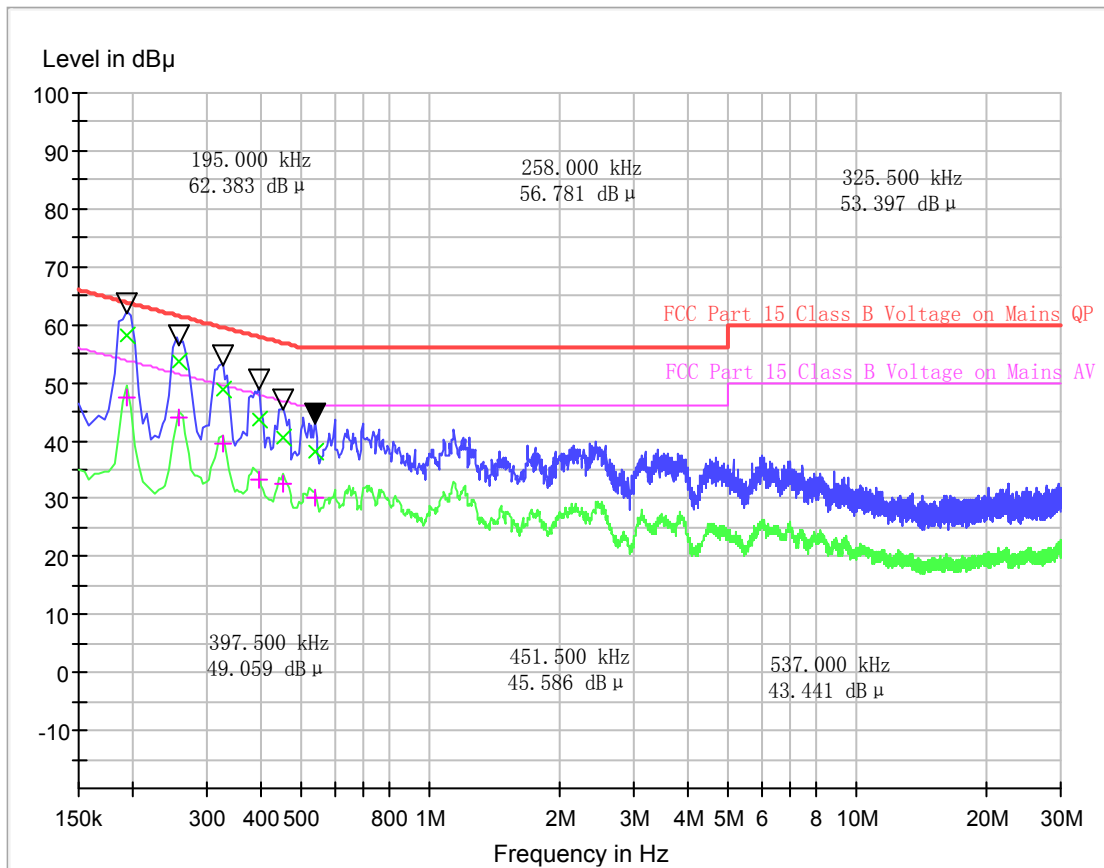


2.7.4. Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

2.7.5. Test Results of Conducted Emission

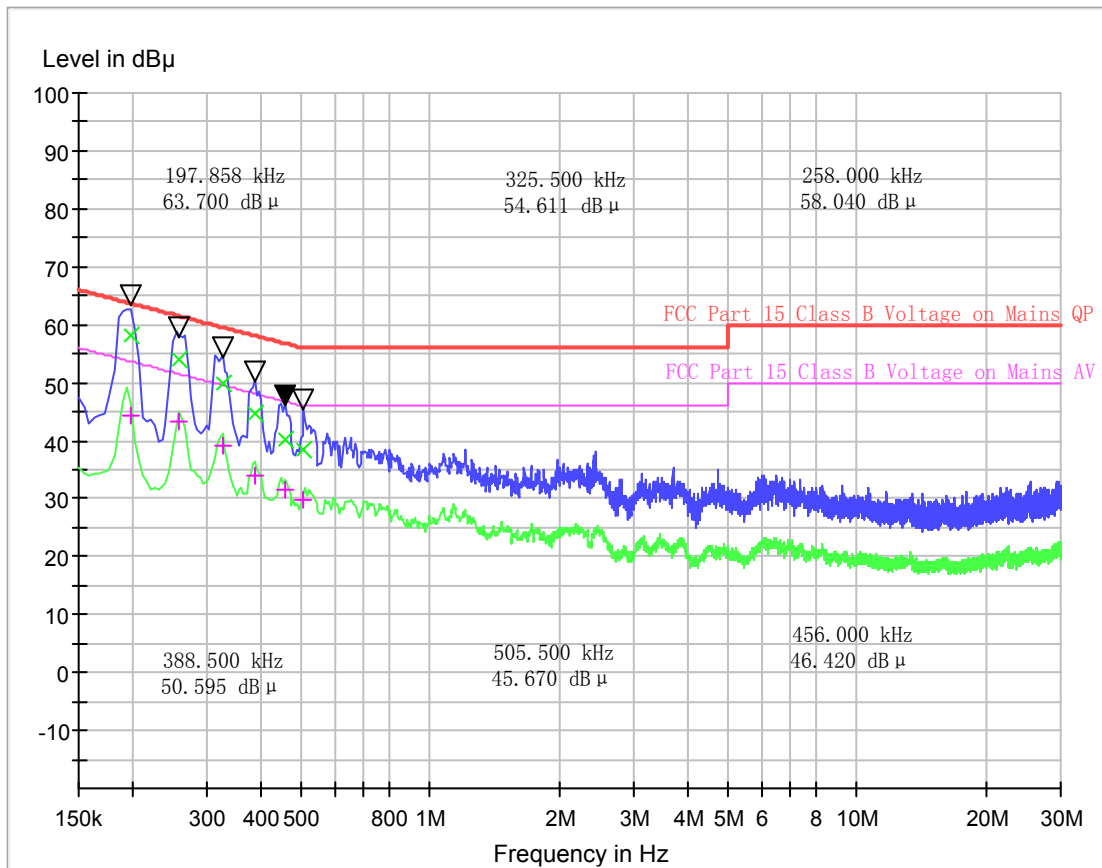
The EUT configuration of the emission tests is 5G WLAN Link + USB Cable (Charging from Adapter)



Conducted Disturbance at Mains Terminals

L Test Data

QP			AV		
Frequency (MHz)	Limits (dB μ V)	Measurement Value (dB μ V)	Frequency (MHz)	Limits (dB μ V)	Measurement Value (dB μ V)
0.195000	63.8	58.26	0.195000	53.8	47.39
0.258000	61.5	53.59	0.258000	51.5	43.83
0.325500	59.6	48.94	0.325500	49.6	39.56
0.397500	57.9	43.73	0.397500	47.9	33.13
0.451500	56.8	40.40	0.451500	46.8	32.64
0.537000	56.0	37.99	0.537000	46.0	30.19



Conducted Disturbance at Mains Terminals

N Test Data

QP			AV		
Frequency (MHz)	Limits (dB μ V)	Measurement Value (dB μ V)	Frequency (MHz)	Limits (dB μ V)	Measurement Value (dB μ V)
0.199500	63.6	58.25	0.199500	53.6	44.45
0.258000	61.5	53.92	0.258000	51.5	43.12
0.325500	59.6	49.78	0.325500	49.6	38.98
0.388500	58.1	44.53	0.388500	48.1	34.01
0.456000	56.8	40.19	0.456000	46.8	31.67
0.505500	56.0	38.54	0.505500	46.0	29.80

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
1	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2018/11/11
2	EMI TEST RECEIVER	Rohde&Schwarz	ESI 26	100009	2018/11/11
3	EMI TEST Software	Audix	E3	N/A	N/A
4	TURNTABLE	ETS	2088	2149	N/A
5	ANTENNA MAST	ETS	2075	2346	N/A
6	EMI TEST Software	Rohde&Schwarz	ESK1	N/A	N/A
7	HORNANTENNA	ShwarzBeck	9120D	1011	2018/11/11
8	Amplifer	Sonoma	310N	E009-13	2018/11/11
9	JS amplifer	Rohde&Schwarz	JS4-00101800-28-5A	F201504	2018/11/11
10	High pass filter	Compliance Direction systems	BSU-6	34202	2018/11/11
11	HORNANTENNA	ShwarzBeck	9120D	1012	2018/11/11
12	Amplifer	Compliance Direction systems	PAP1-4060	120	2018/11/11
13	Loop Antenna	Rohde&Schwarz	HFH2-Z2	100020	2018/11/11
14	TURNTABLE	MATURO	TT2.0	----	N/A
15	ANTENNA MAST	MATURO	TAM-4.0-P	----	N/A
16	Horn Antenna	SCHWARZBECK	BBHA9170	25841	2018/11/11
17	ULTRA-BROADBAND ANTENNA	Rohde&Schwarz	HL562	100015	2018/07/12
18	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
20	Spectrum Analyzer	Keysight	N9030A	A160702554	2018/10/15

Note: the calibration interval of test equipment is one year.

Appendix A

Conducted output power

Test results

U-NII-1 AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Conducted Output Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5180	11.82	24	Pass
802.11n (20MHz)	5220	11.43	24	Pass
802.11n (20MHz)	5240	11.77	24	Pass
802.11n (40MHz)	5190	11.50	24	Pass
802.11n (40MHz)	5230	12.31	24	Pass
802.11a (20MHz)	5180	12.92	24	Pass
802.11a (20MHz)	5220	12.24	24	Pass
802.11a (20MHz)	5240	12.13	24	Pass

U-NII-2a AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Conducted Output Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5260	12.80	24	Pass
802.11n (20MHz)	5300	12.93	24	Pass
802.11n (20MHz)	5320	12.81	24	Pass
802.11n (40MHz)	5270	16.08	24	Pass
802.11n (40MHz)	5310	15.80	24	Pass
802.11a (20MHz)	5260	12.85	24	Pass
802.11a (20MHz)	5300	13.18	24	Pass
802.11a (20MHz)	5320	13.14	24	Pass

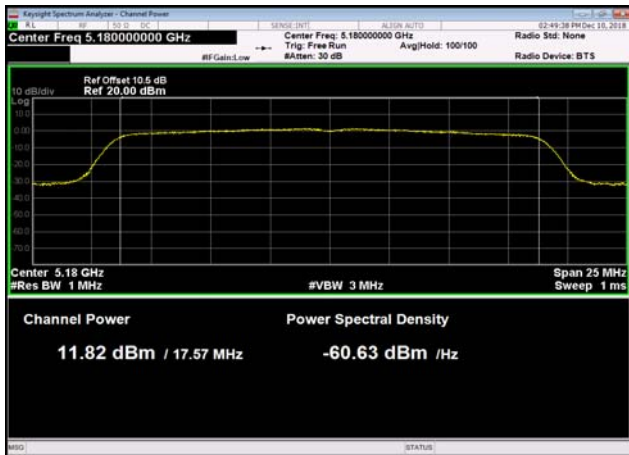
Remark: $250\text{mw (24dBm)} < 11\text{dBm} + 10 \log B$ (where B is the 26 dB emission bandwidth in megahertz) ,so the limit is 24dBm

U-NII-2c AVGSA Output Power				
Mode	Test Frequency (MHz)	Max Conducted Output Power (dBm)	Limit (dBm)	Result
802.11n (20MHz)	5500	11.21	24	Pass
802.11n (20MHz)	5600	12.55	24	Pass
802.11n (20MHz)	5700	12.71	24	Pass
802.11n (40MHz)	5510	10.78	24	Pass
802.11n (40MHz)	5590	12.58	24	Pass
802.11n (40MHz)	5670	12.58	24	Pass
802.11a (20MHz)	5500	11.15	24	Pass
802.11a (20MHz)	5600	12.43	24	Pass
802.11a (20MHz)	5700	12.69	24	Pass

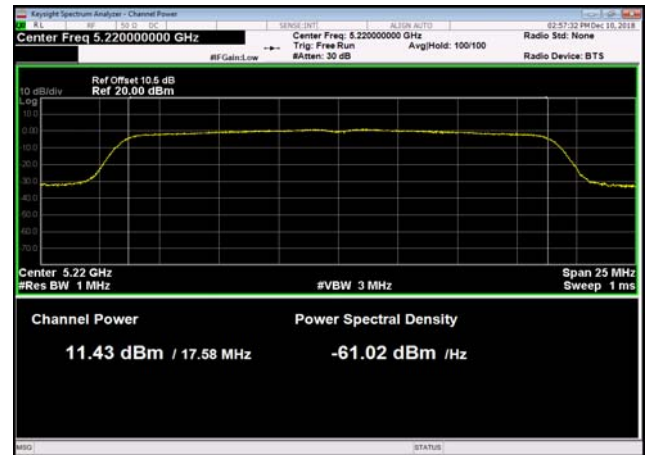
Remark: 250mw (24dBm) $< 11\text{dBm} + 10 \log B$ (where B is the 26 dB emission bandwidth in megahertz) ,so the limit is 24dBm

Test Plots

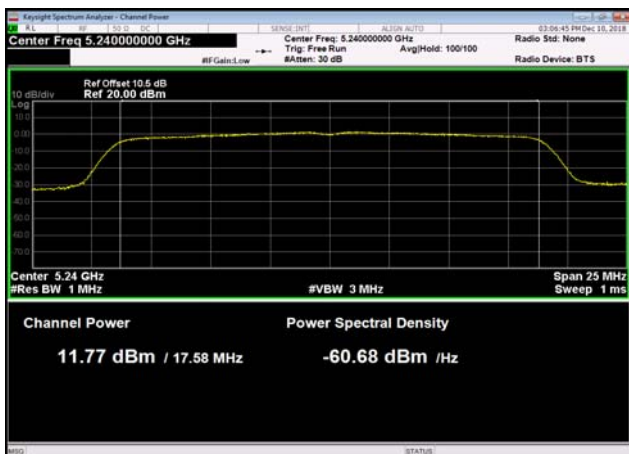
U-NII-1 Output Power-802.11n(20MHz)
,5180MHz



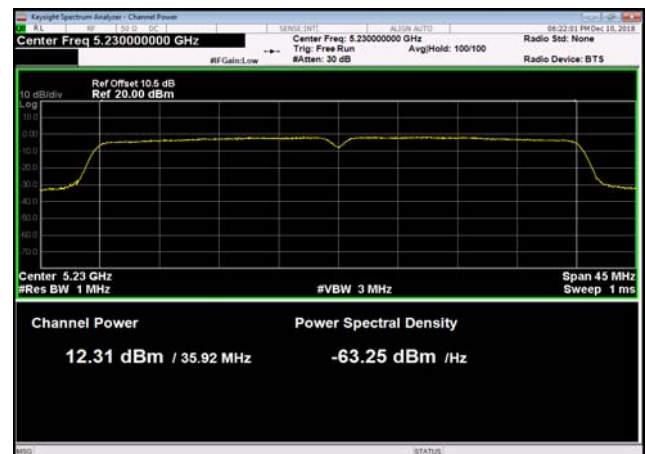
U-NII-1 Output Power-802.11n(20MHz)
,5220MHz



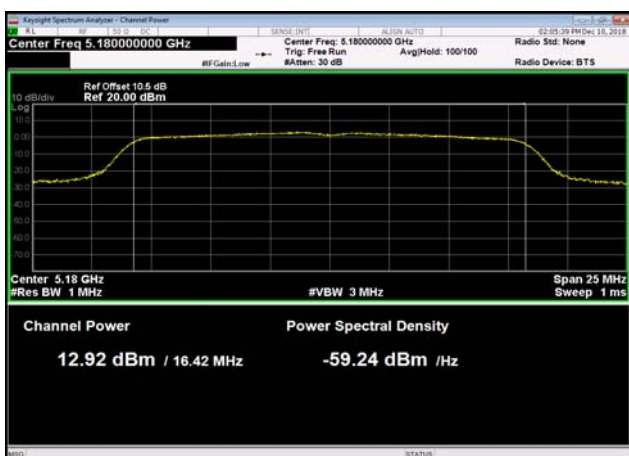
U-NII-1 Output Power-802.11n(20MHz)
,5240MHz



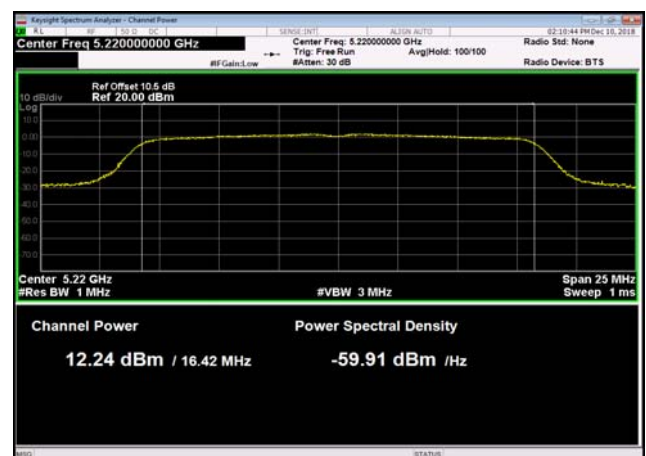
U-NII-1 Output Power-802.11n(40MHz)
,5230MHz



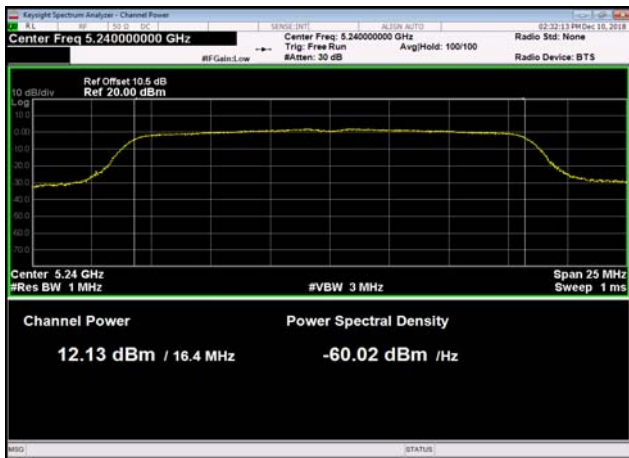
U-NII-1 Output Power-802.11a(20MHz)
,5180MHz



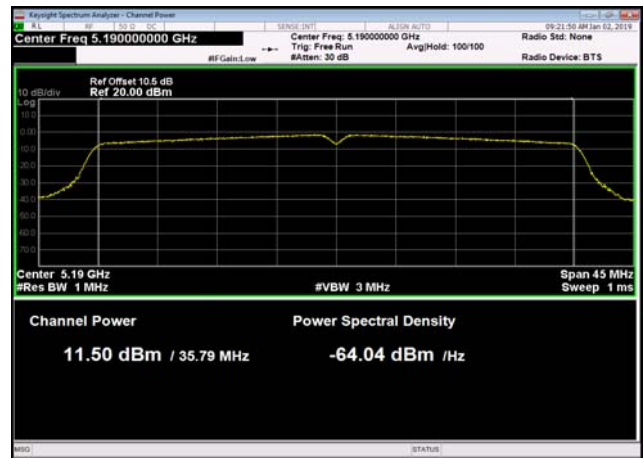
U-NII-1 Output Power-802.11a(20MHz)
,5220MHz



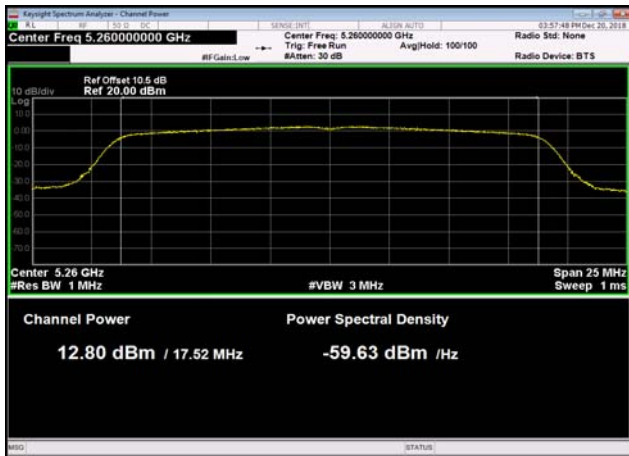
U-NII-1 Output Power-802.11a(20MHz)
,5240MHz



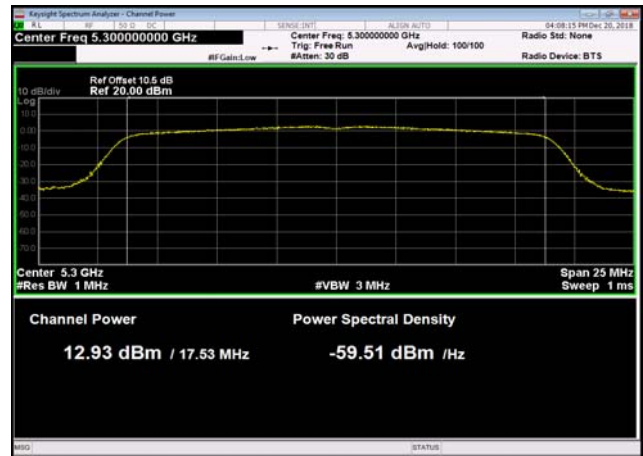
U-NII-1 Output Power-802.11n(40MHz)
,5190MHz



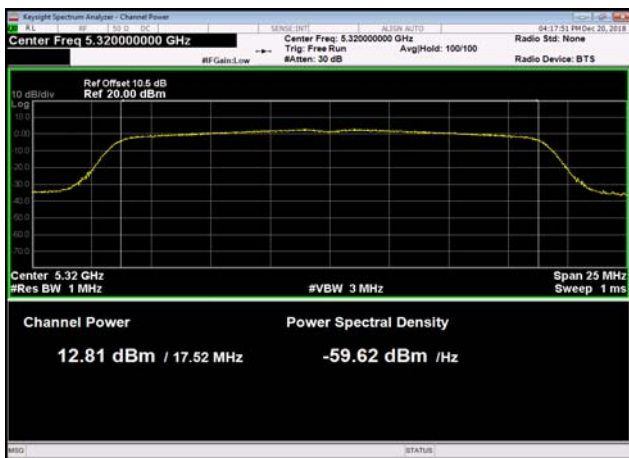
U-NII-2a Output Power-802.11n(20MHz)
,5260MHz



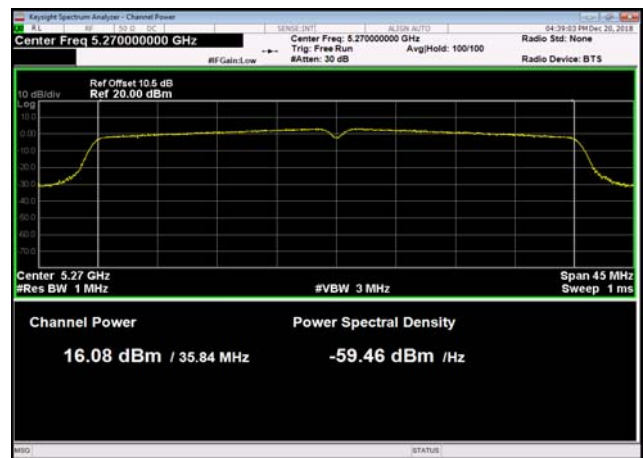
U-NII-2a Output Power-802.11n(20MHz)
,5300MHz



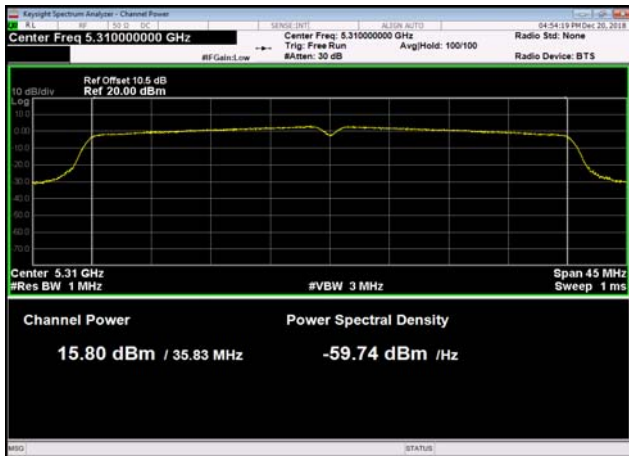
U-NII-2a Output Power-802.11n(20MHz)
,5320MHz



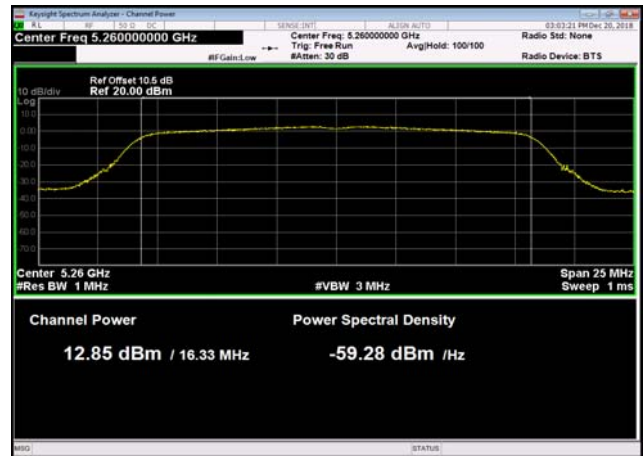
U-NII-2a Output Power-802.11n(40MHz)
,5270MHz



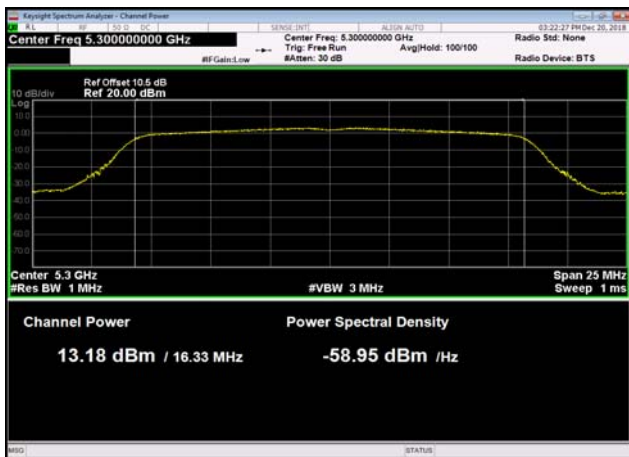
U-NII-2a Output Power-802.11n(40MHz)
,5310MHz



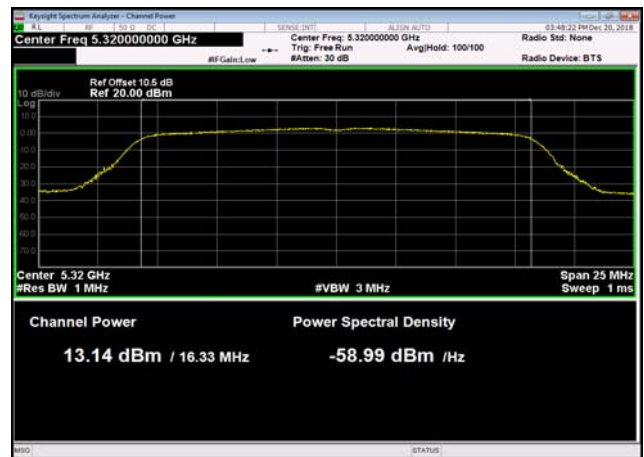
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,5260MHz



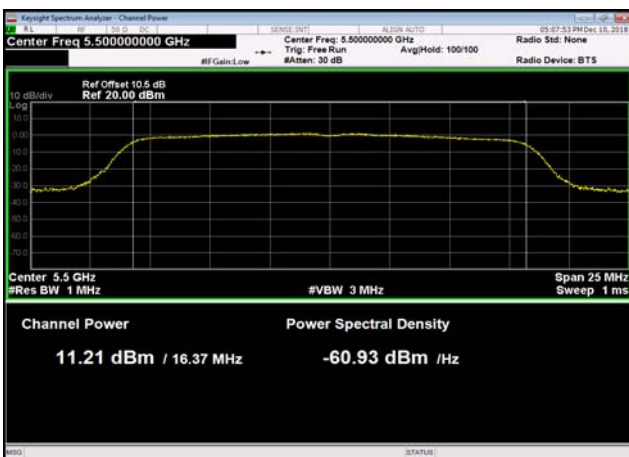
U-NII-2a Output Power-802.11a(20MHz)
,5300MHz



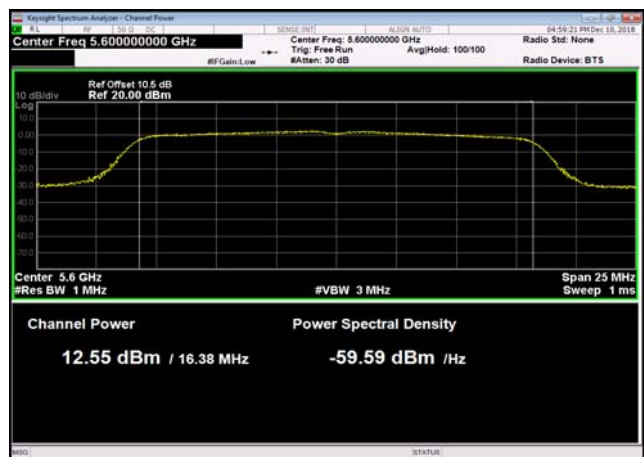
U-NII-2a Output Power-802.11a(20MHz)
,5320MHz

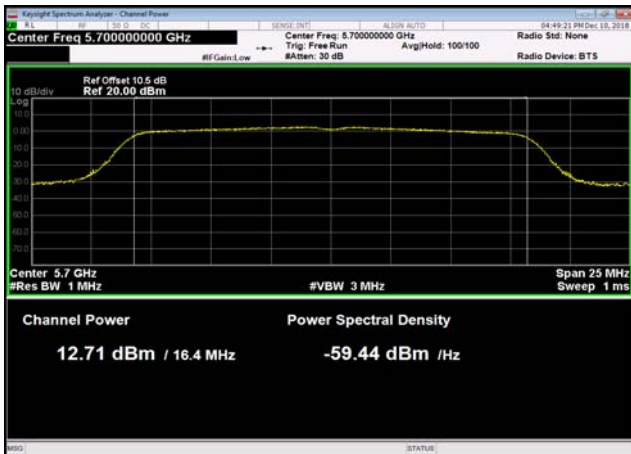
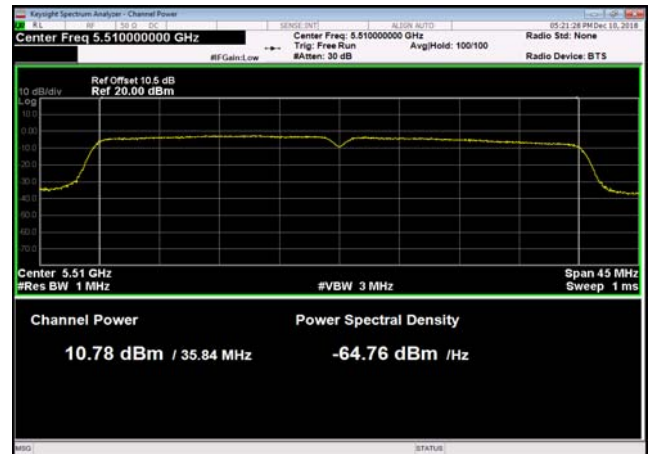
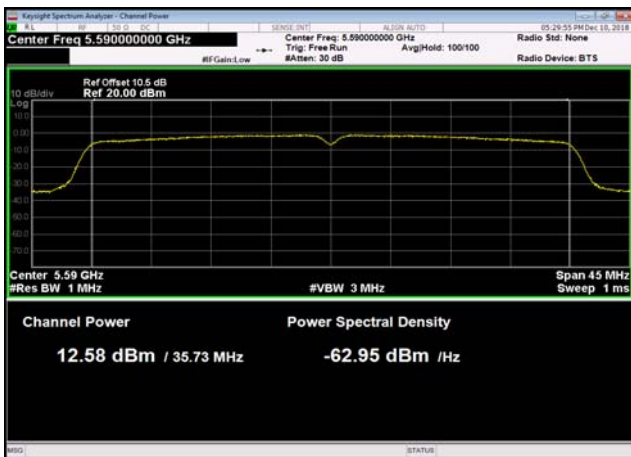
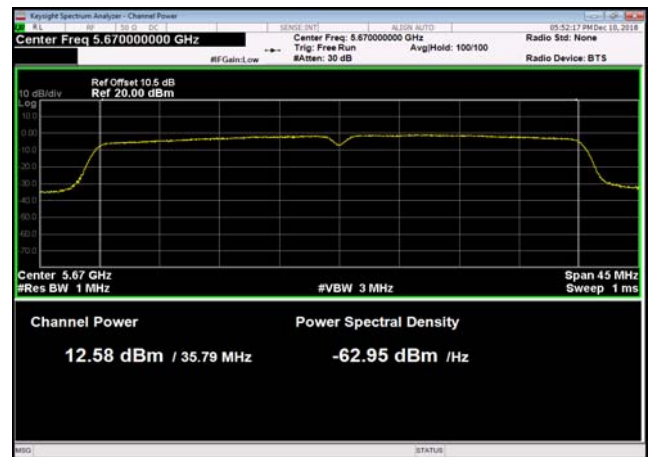
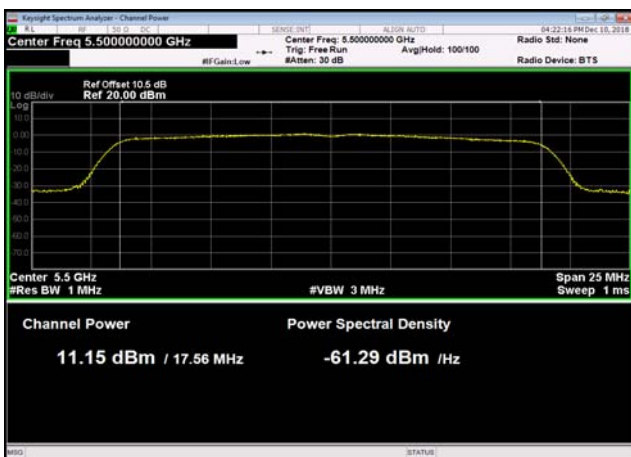
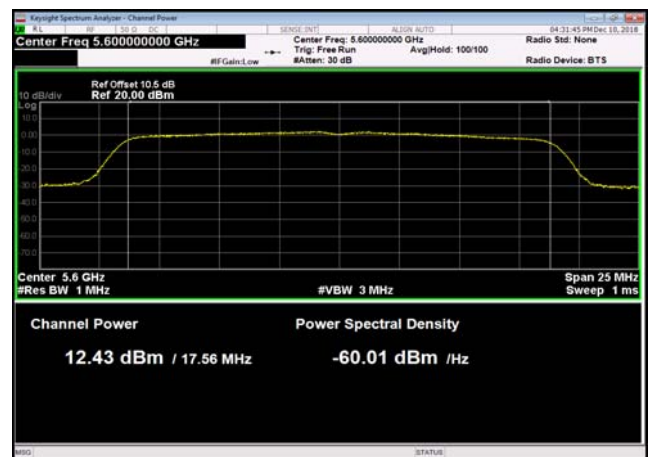


U-NII-2c Output Power-802.11n(20MHz)
,5500MHz



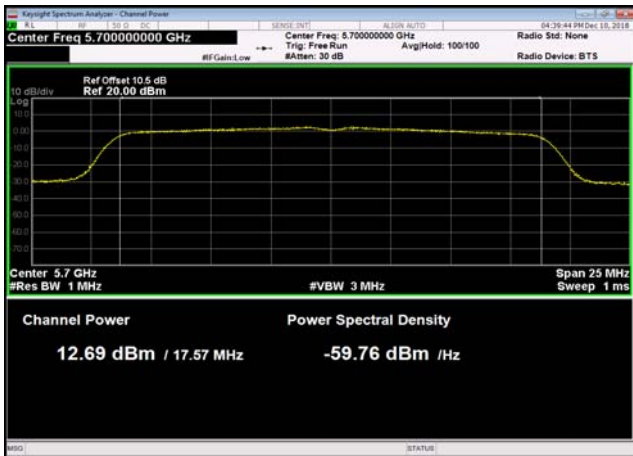
U-NII-2c Output Power-802.11n(20MHz)
,5600MHz



U-NII-2c Output Power-802.11n(20MHz)
,5700MHzU-NII-2c Output Power-802.11n(40MHz)
,5510MHzU-NII-2c Output Power-802.11n(40MHz)
,5590MHzU-NII-2c Output Power-802.11n(40MHz)
,5670MHzU-NII-2c Output Power-802.11a(20MHz)
,5500MHzU-NII-2c Output Power-802.11a(20MHz)
,5600MHz



U-NII-2c Output Power-802.11a(20MHz)
,5700MHz



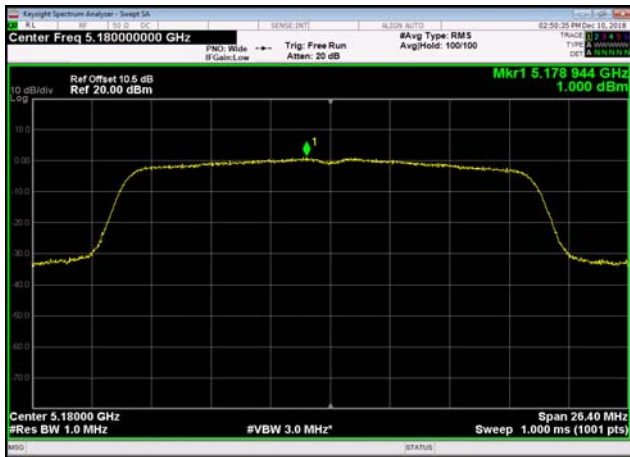
AVGSA Power Spectral Density

Test Result and Data

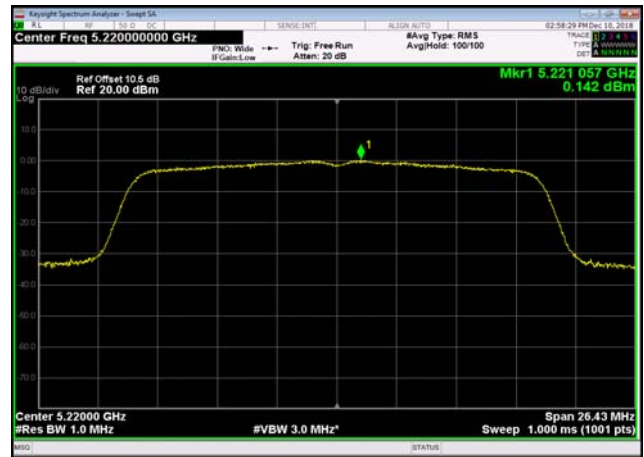
U-NII-1 AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5180	1.000	11	Pass
802.11n (20MHz)	5220	0.142	11	Pass
802.11n (20MHz)	5240	2.118	11	Pass
802.11n (40MHz)	5190	0.769	11	Pass
802.11n (40MHz)	5230	-2.583	11	Pass
802.11a (20MHz)	5180	2.051	11	Pass
802.11a (20MHz)	5220	1.386	11	Pass
802.11a (20MHz)	5240	1.405	11	Pass
U-NII-2a AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5260	1.859	11	Pass
802.11n (20MHz)	5300	1.966	11	Pass
802.11n (20MHz)	5320	2.205	11	Pass
802.11n (40MHz)	5270	1.776	11	Pass
802.11n (40MHz)	5310	1.996	11	Pass
802.11a (20MHz)	5260	2.048	11	Pass
802.11a (20MHz)	5300	2.342	11	Pass
802.11a (20MHz)	5320	2.224	11	Pass
U-NII-2c AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5500	1.887	11	Pass
802.11n (20MHz)	5600	2.765	11	Pass
802.11n (20MHz)	5700	2.973	11	Pass
802.11n (40MHz)	5510	-2.047	11	Pass
802.11n (40MHz)	5590	-0.310	11	Pass
802.11n (40MHz)	5670	-0.718	11	Pass
802.11a (20MHz)	5500	1.727	11	Pass
802.11a (20MHz)	5600	2.767	11	Pass
802.11a (20MHz)	5700	2.717	11	Pass

Test Plots

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



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



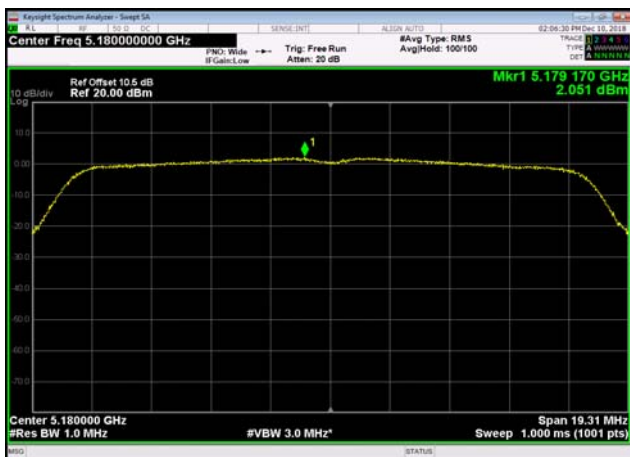
U-NII-1 Power spectral density-802.11
n(20MHz),5240MHz



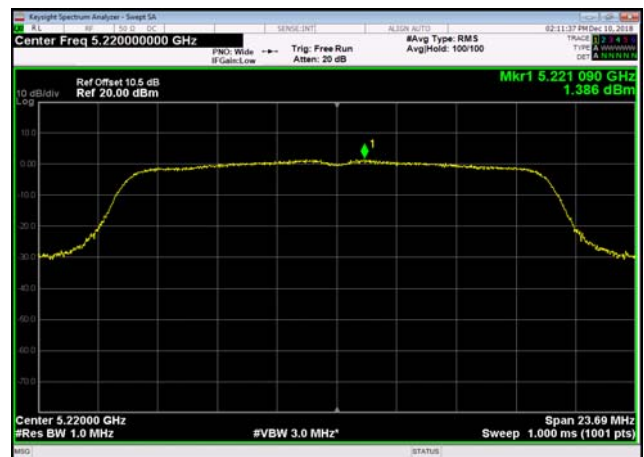
U-NII-1 Power spectral density-802.11
n(40MHz),5230MHz



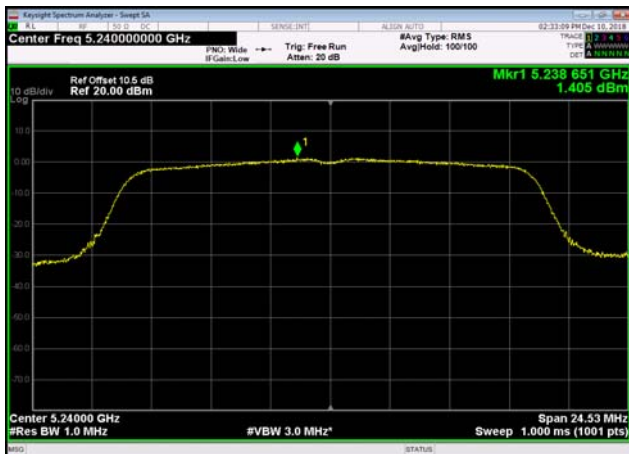
U-NII-1 Power spectral density-802.11
a(20MHz),5180MHz



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



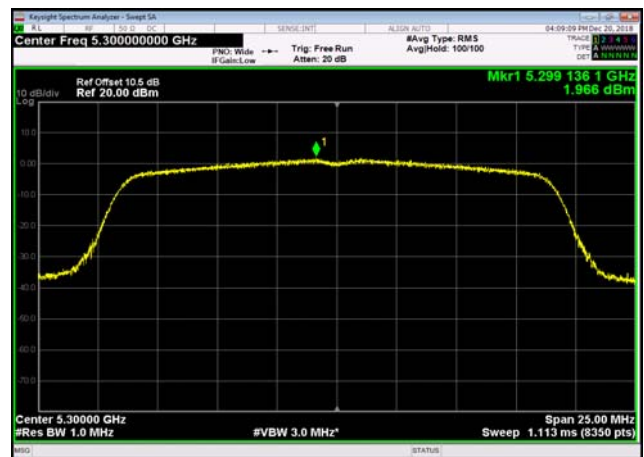
U-NII-1 Power spectral density-802.11
a(20MHz),5240MHz



U-NII-2a Power spectral density-802.1
1n(20MHz),5260MHz



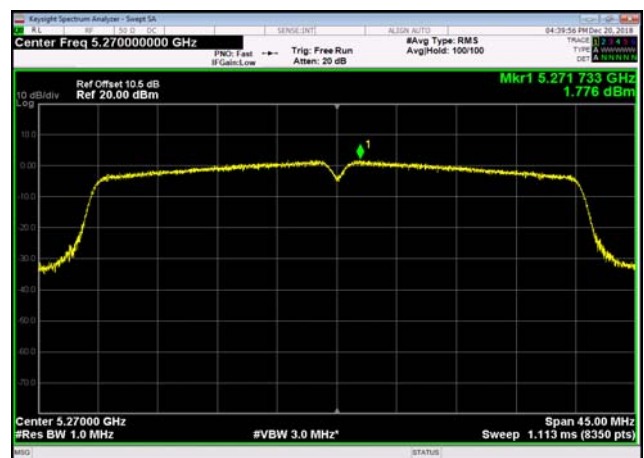
U-NII-2a Power spectral density-802.1
1n(20MHz),5300MHz

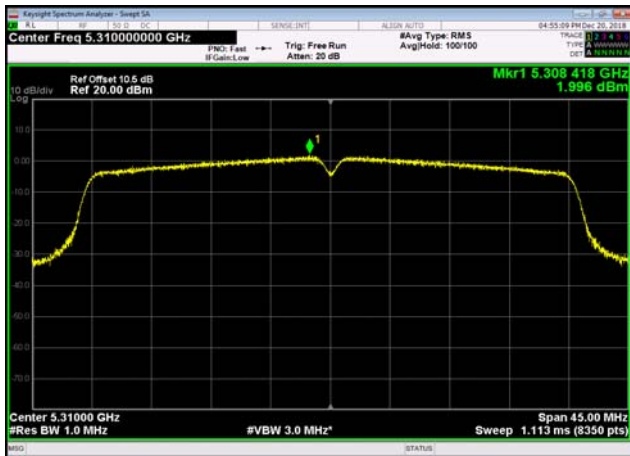
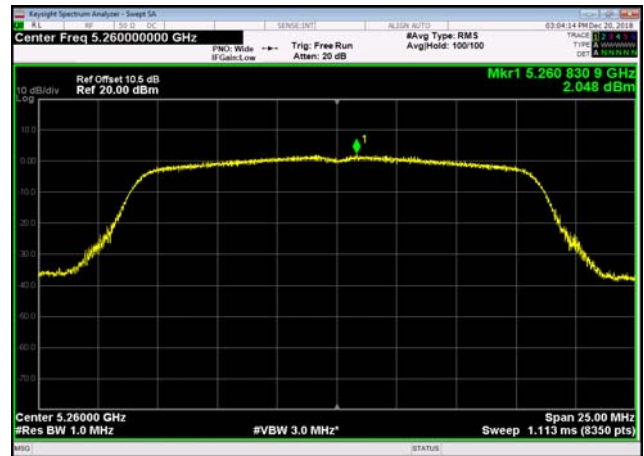
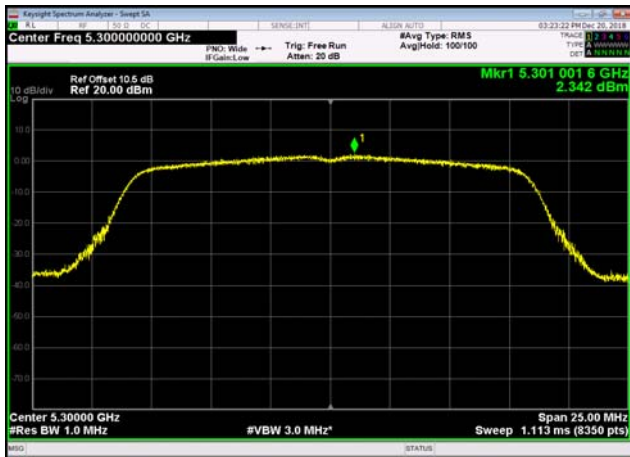
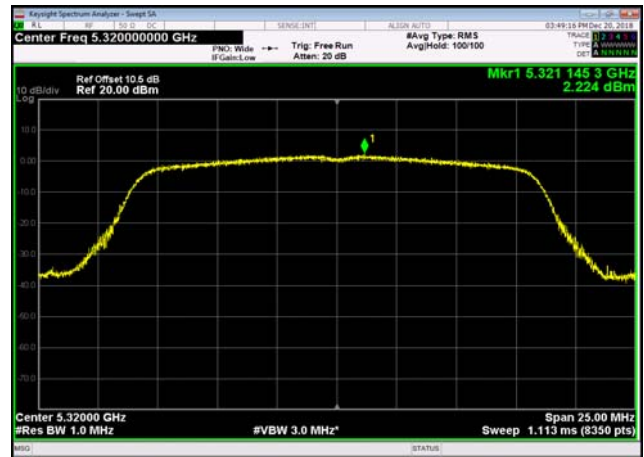
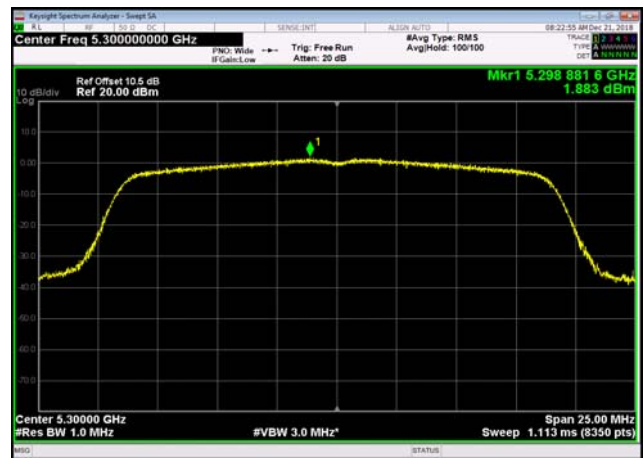


U-NII-2a Power spectral density-802.1
1n(20MHz),5320MHz

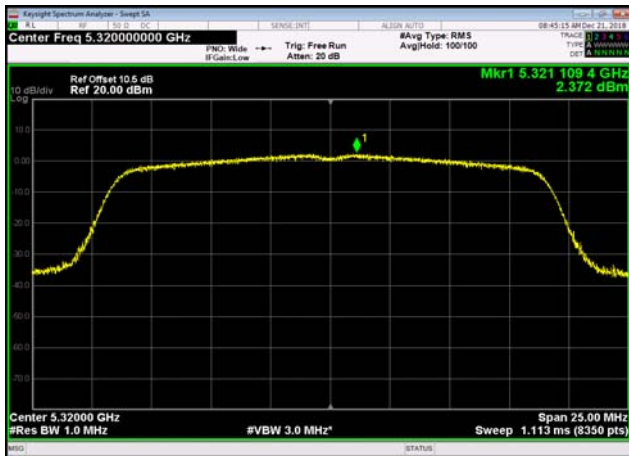


U-NII-2a Power spectral density-802.1
1n(40MHz),5270MHz



U-NII-2a Power spectral density-802.1
1n(40MHz),5310MHzU-NII-2a Power spectral density-802.1
1a(20MHz),5260MHzU-NII-2a Power spectral density-802.1
1a(20MHz),5300MHzU-NII-2a Power spectral density-802.1
1a(20MHz),5320MHzU-NII-2a Power spectral density-802.1
1ac(20MHz),5260MHzU-NII-2a Power spectral density-802.1
1ac(20MHz),5300MHz

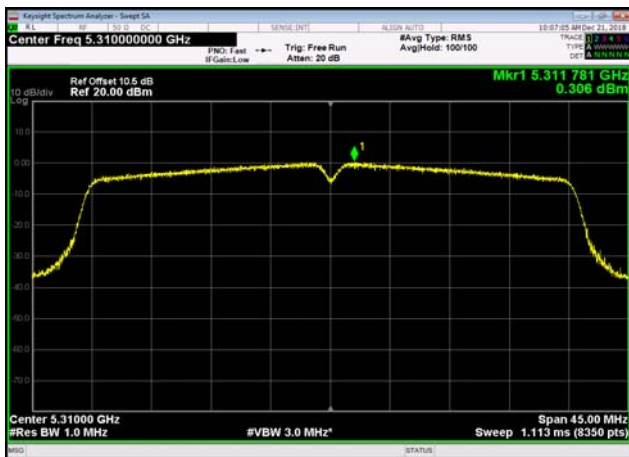
U-NII-2a Power spectral density-802.1
1ac(20MHz),5320MHz



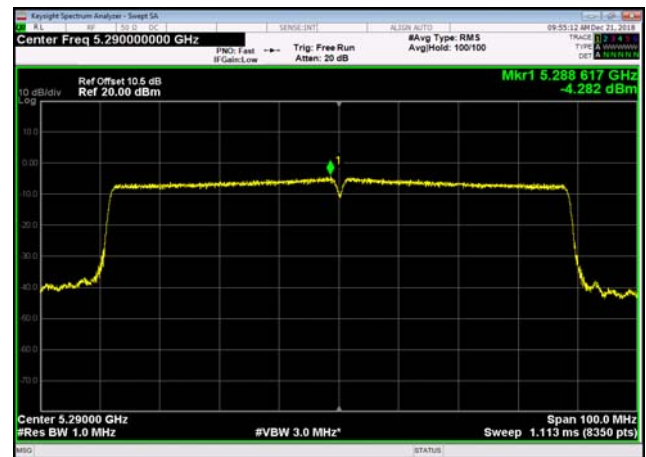
U-NII-2a Power spectral density-802.1
1ac(40MHz),5270MHz



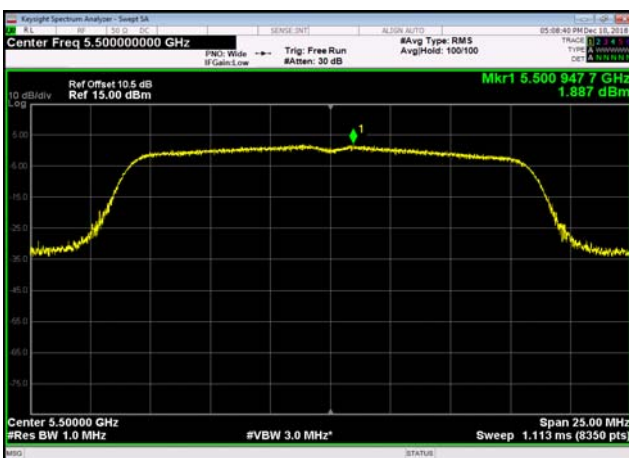
U-NII-2a Power spectral density-802.1
1ac(40MHz),5310MHz



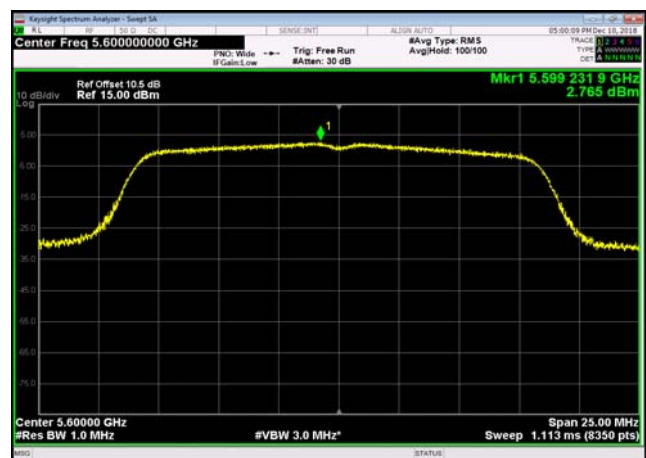
U-NII-2a Power spectral density-802.1
1ac(80MHz),5290MHz



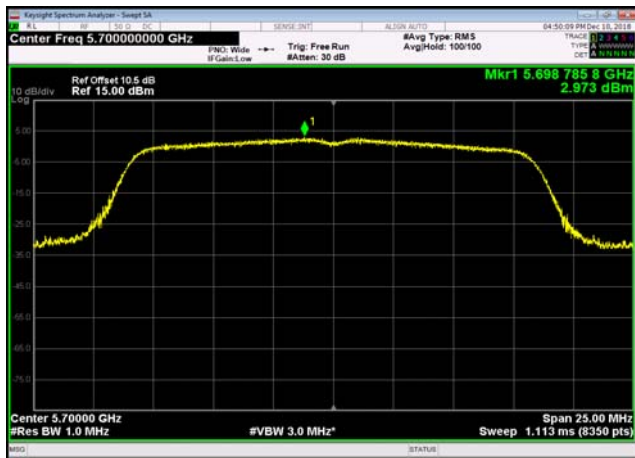
U-NII-2c Power spectral density-802.1
1n(20MHz),5500MHz



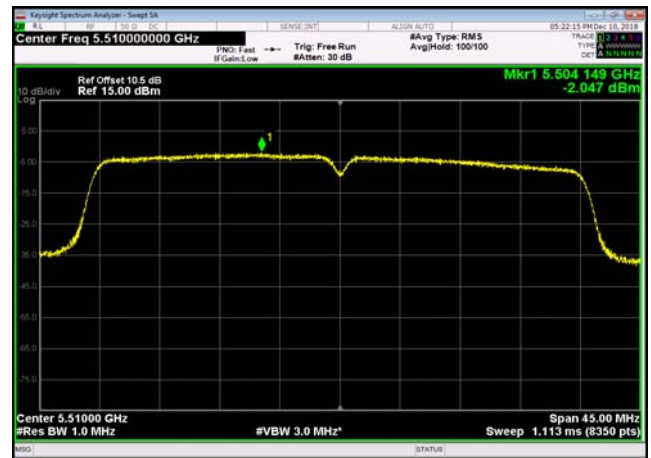
U-NII-2c Power spectral density-802.1
1n(20MHz),5600MHz



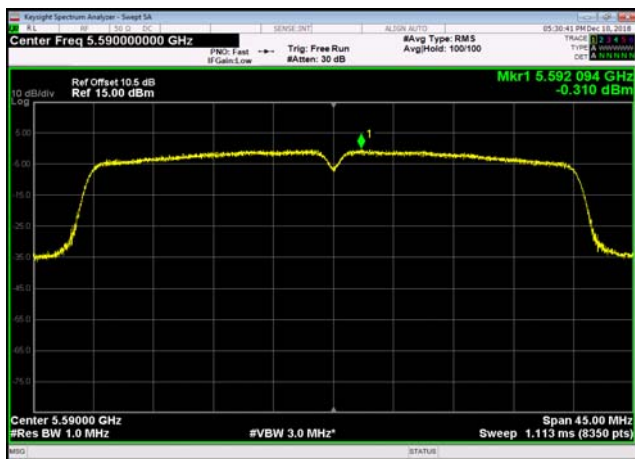
U-NII-2c Power spectral density-802.1
1n(20MHz),5700MHz



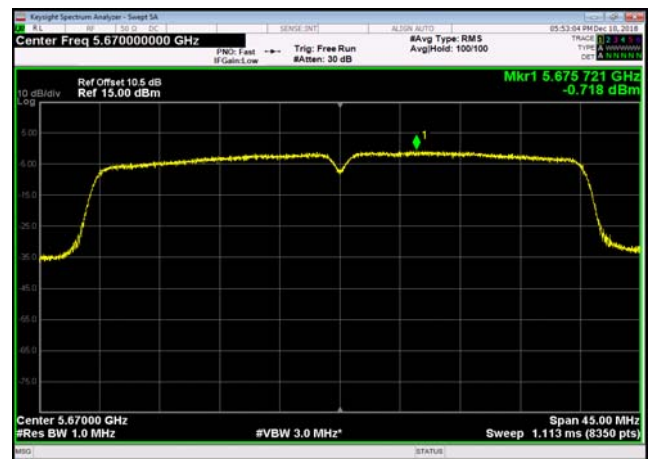
U-NII-2c Power spectral density-802.1
1n(40MHz),5510MHz



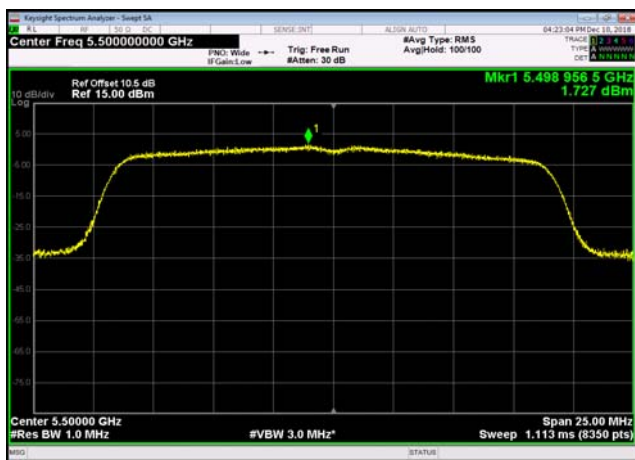
U-NII-2c Power spectral density-802.1
1n(40MHz),5590MHz



U-NII-2c Power spectral density-802.1
1n(40MHz),5670MHz



U-NII-2c Power spectral density-802.1
1a(20MHz),5500MHz

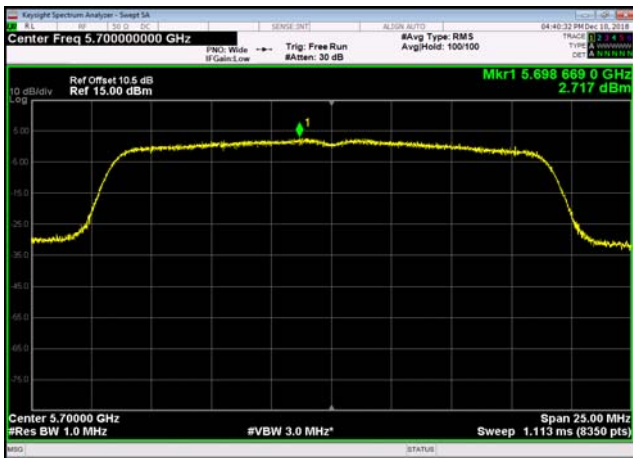


U-NII-2c Power spectral density-802.1
1a(20MHz),5600MHz





U-NII-2c Power spectral density-802.1
1a(20MHz),5700MHz



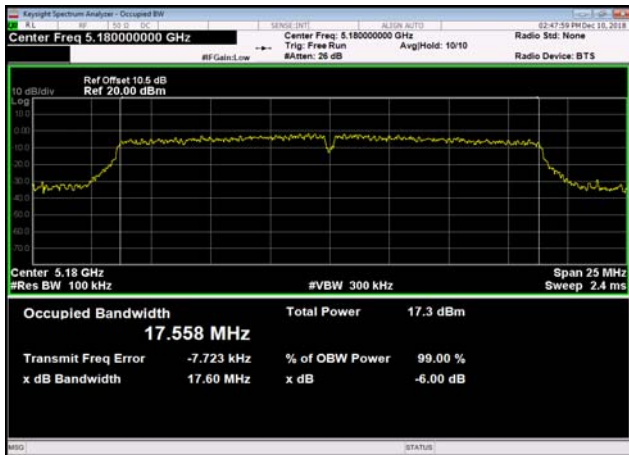
6dB Down Bandwidth

Test Result and Data

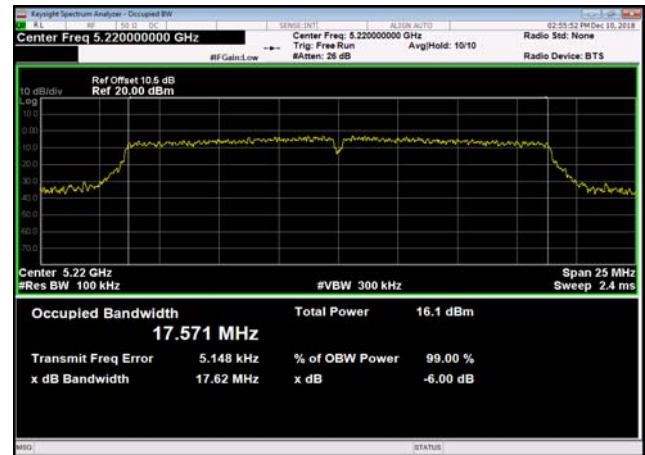
U-NII-1 Occupied 6dB Bandwidth			
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5180	17.60	Pass
802.11n (20MHz)	5220	17.62	Pass
802.11n (20MHz)	5240	17.59	Pass
802.11n (40MHz)	5190	35.07	Pass
802.11n (40MHz)	5230	36.36	Pass
802.11a (20MHz)	5180	12.87	Pass
802.11a (20MHz)	5220	15.79	Pass
802.11a (20MHz)	5240	16.35	Pass
U-NII-2a Occupied 6dB Bandwidth			
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5260	17.57	Pass
802.11n (20MHz)	5300	17.20	Pass
802.11n (20MHz)	5320	17.58	Pass
802.11n (40MHz)	5270	35.15	Pass
802.11n (40MHz)	5310	35.68	Pass
802.11a (20MHz)	5260	16.31	Pass
802.11a (20MHz)	5300	16.31	Pass
802.11a (20MHz)	5320	16.33	Pass
U-NII-2c Occupied 6dB Bandwidth			
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result
802.11n (20MHz)	5500	16.36	Pass
802.11n (20MHz)	5600	16.36	Pass
802.11n (20MHz)	5700	16.38	Pass
802.11n (40MHz)	5510	35.76	Pass
802.11n (40MHz)	5590	35.46	Pass
802.11a (20MHz)	5500	17.60	Pass
802.11a (20MHz)	5600	17.24	Pass
802.11a (20MHz)	5700	17.60	Pass

Test Plots

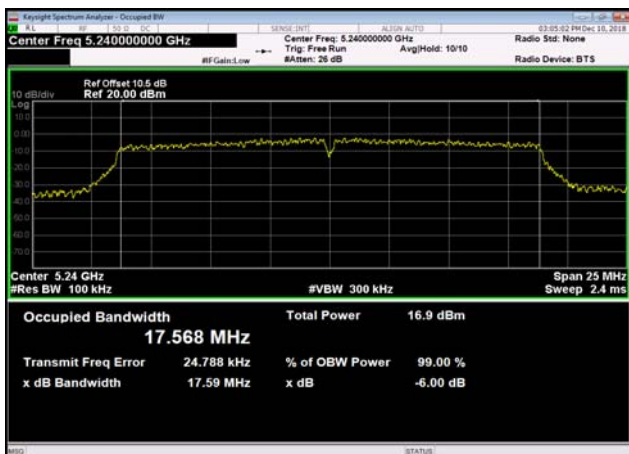
U-NII-1 6dB Bandwidth-802.11n(20MHz)
,5180MHz



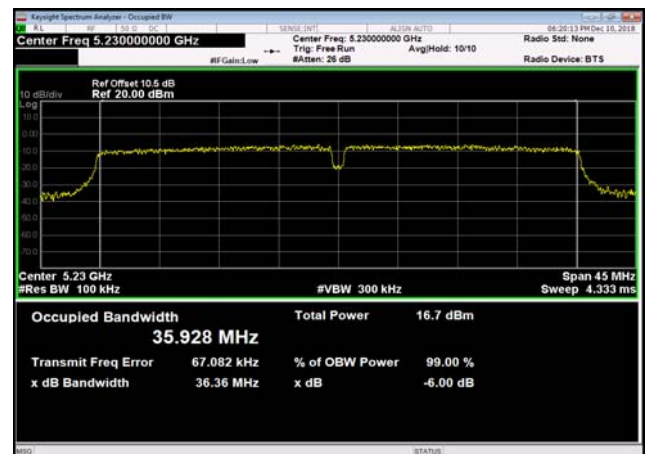
U-NII-1 6dB Bandwidth-802.11n(20MHz)
,5220MHz



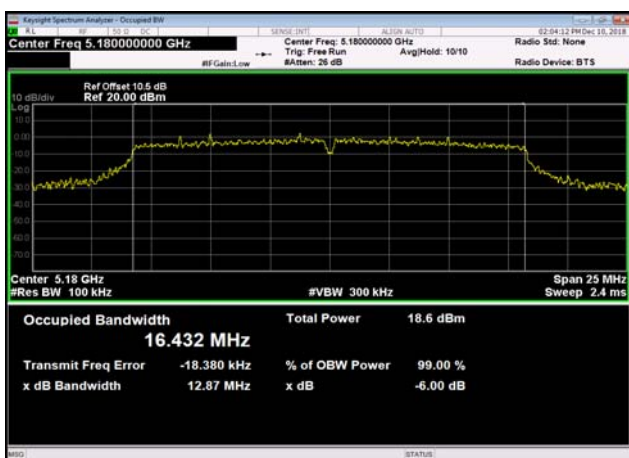
U-NII-1 6dB Bandwidth-802.11n(20MHz)
,5240MHz



U-NII-1 6dB Bandwidth-802.11n(40MHz)
,5230MHz



U-NII-1 6dB Bandwidth-802.11a(20MHz)
,5180MHz



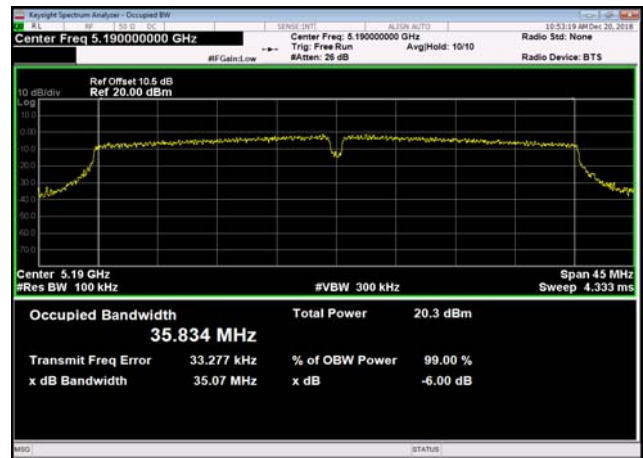
U-NII-1 6dB Bandwidth-802.11a(20MHz)
,5220MHz



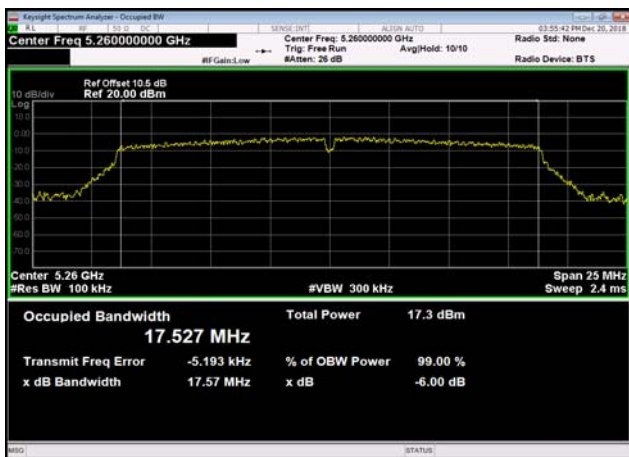
U-NII-1 6dB Bandwidth-802.11a(20MHz)
,5240MHz



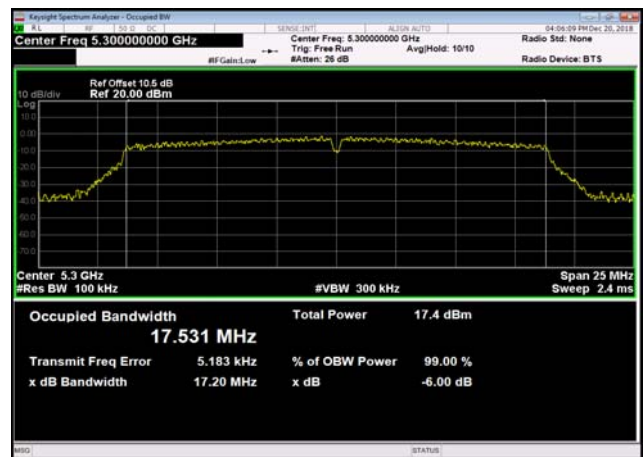
U-NII-1 6dB Bandwidth-802.11n(40MHz)
,5190MHz



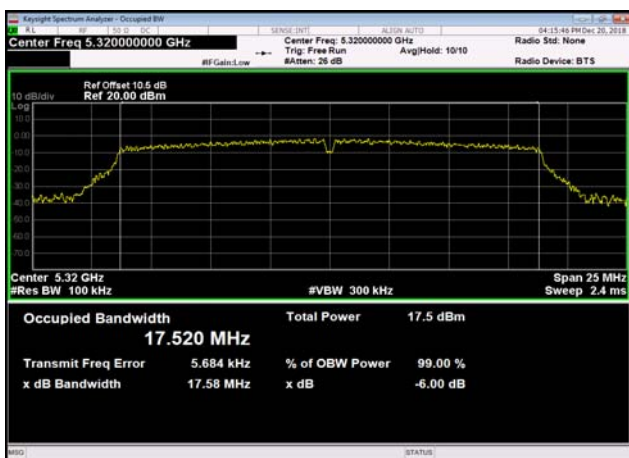
U-NII-2a 6dB Bandwidth-802.11n(20MHz)
,5260MHz



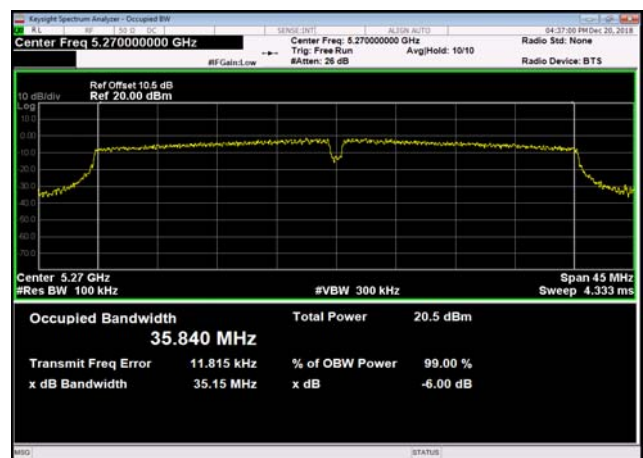
U-NII-2a 6dB Bandwidth-802.11n(20MHz)
,5300MHz



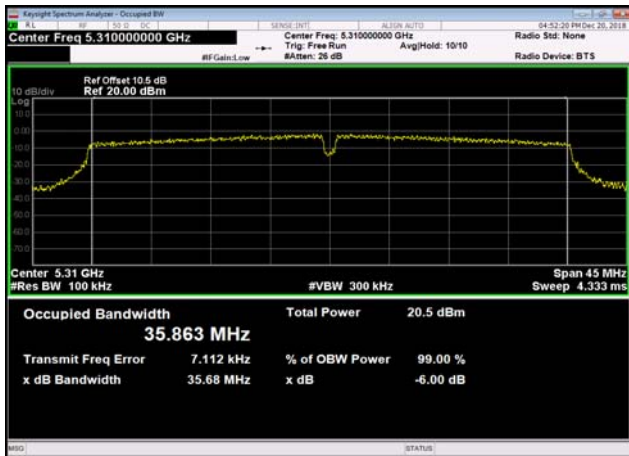
U-NII-2a 6dB Bandwidth-802.11n(20MHz)
,5320MHz



U-NII-2a 6dB Bandwidth-802.11n(40MHz)
,5270MHz



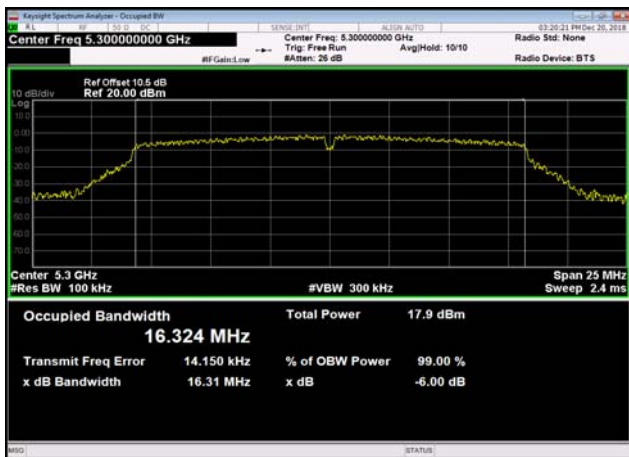
U-NII-2a 6dB Bandwidth-802.11n(40MHz)
,5310MHz



U-NII-2a 6dB Bandwidth-802.11a(20MHz)
,5260MHz



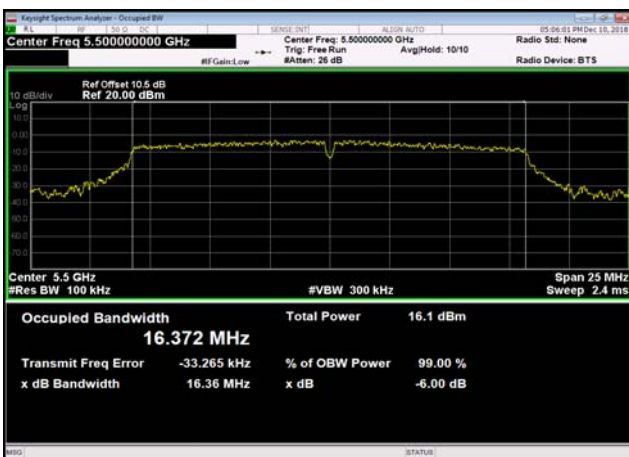
U-NII-2a 6dB Bandwidth-802.11a(20MHz)
,5300MHz



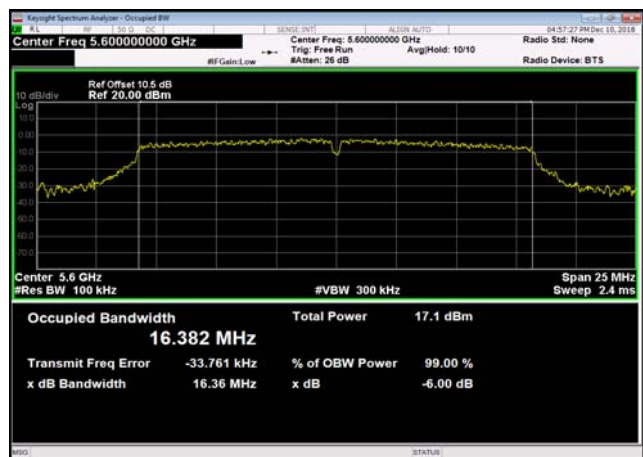
U-NII-2a 6dB Bandwidth-802.11a(20MHz)
,5320MHz

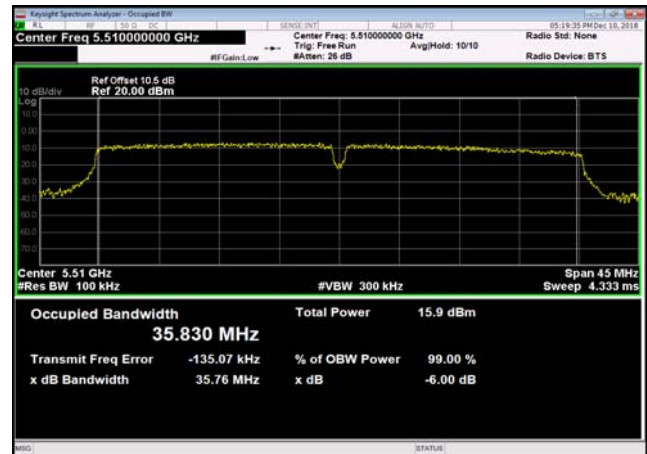
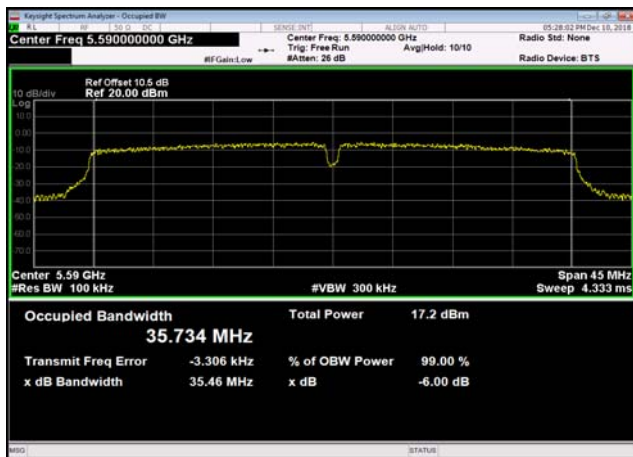
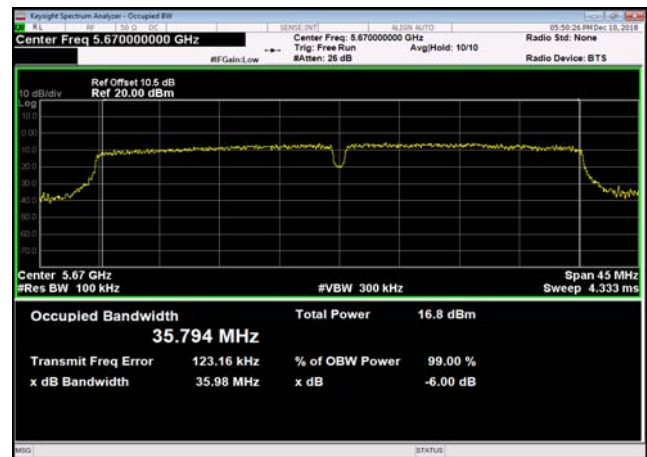
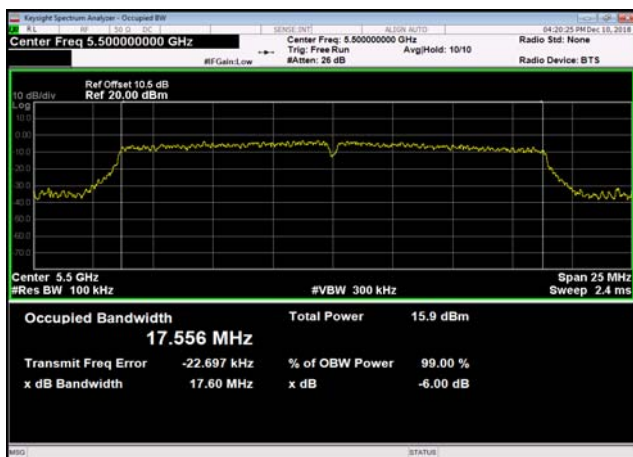
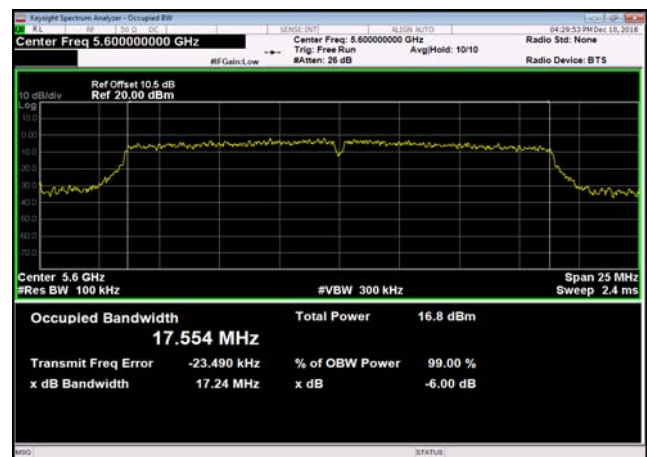


U-NII-2c 6dB Bandwidth-802.11n(20MHz)
,5500MHz



U-NII-2c 6dB Bandwidth-802.11n(20MHz)
,5600MHz



U-NII-2c 6dB Bandwidth-802.11n(20MHz)
,5700MHzU-NII-2c 6dB Bandwidth-802.11n(40MHz)
,5510MHzU-NII-2c 6dB Bandwidth-802.11n(40MHz)
,5590MHzU-NII-2c 6dB Bandwidth-802.11n(40MHz)
,5670MHzU-NII-2c 6dB Bandwidth-802.11a(20MHz)
,5500MHzU-NII-2c 6dB Bandwidth-802.11a(20MHz)
,5600MHz



U-NII-2c 6dB Bandwidth-802.11a(20MHz)
,5700MHz



**Frequency Stability**

Mode	Test Frequency (MHz)	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5180	5171.083	5188.908	5179.996	-0.800	Pass
802.11n (20MHz)	5220	5211.083	5228.933	5220.008	1.600	Pass
802.11n (20MHz)	5240	5231.083	5248.933	5240.008	1.590	Pass
802.11n (40MHz)	5190	5171.760	5208.165	5189.963	-7.230	Pass
802.11n (40MHz)	5230	5211.715	5248.315	5230.015	2.870	Pass
802.11a (20MHz)	5180	5171.708	5188.292	5180.000	0.000	Pass
802.11a (20MHz)	5220	5211.675	5228.317	5219.996	-0.800	Pass
802.11a (20MHz)	5240	5231.717	5248.308	5240.013	2.390	Pass
802.11n (20MHz)	5260	5251.099	5268.918	5260.009	1.660	Pass
802.11n (20MHz)	5300	5291.089	5308.913	5300.001	0.160	Pass
802.11n (20MHz)	5320	5311.109	5328.909	5320.009	1.720	Pass
802.11n (40MHz)	5270	5251.760	5288.267	5270.014	2.560	Pass
802.11n (40MHz)	5310	5291.766	5328.291	5310.029	5.370	Pass
802.11a (20MHz)	5260	5251.716	5268.294	5260.005	0.950	Pass
802.11a (20MHz)	5300	5291.733	5308.283	5300.008	1.490	Pass
802.11a (20MHz)	5320	5311.724	5328.291	5320.008	1.410	Pass
802.11n (20MHz)	5500	5491.042	5508.875	5499.958	-7.580	Pass
802.11n (20MHz)	5600	5591.058	5608.858	5599.958	-7.440	Pass
802.11n (20MHz)	5700	5691.050	5708.867	5699.958	-7.310	Pass



802.11n (40MHz)	5510	5491.775	5528.150	5509.963	-6.810	Pass
802.11n (40MHz)	5590	5571.775	5608.210	5589.993	-1.340	Pass
802.11n (40MHz)	5670	5651.775	5688.135	5669.955	-7.940	Pass
802.11a (20MHz)	5500	5491.667	5508.267	5499.967	-6.060	Pass
802.11a (20MHz)	5600	5591.658	5608.275	5599.967	-5.950	Pass
802.11a (20MHz)	5700	5691.650	5708.258	5699.954	-8.040	Pass

** END OF REPORT **