Spectrum REPORT

Applicant:	SHENZHEN CYX TECHNOLOGY CO.,LTD
Address of Applicant:	5/F,one buildings, xiazao industrial zone, zaohe road, Longhua District, Shenzhen, China
Manufacturer:	SHENZHEN CYX TECHNOLOGY CO.,LTD
Address of Manufacturer:	5/F,one buildings, xiazao industrial zone, zaohe road, Longhua District, Shenzhen, China
Factory:	Shenzhen Chuang Ying Xin Technology Co., Ltd.
Address of Factory:	5/F,one buildings, xiazao industrial zone, zaohe road, Longhua District, Shenzhen, China

Equipment Under Test (EUT)

Product Name:	TV BOX
Model No.:	A95X MAX, A95X F1, A95X F2, A95X F1 Pro, A95X F2 Pro, A95X Plus, A95X F3, A95X F5, A95X F6, A95X F3 Pro, A95X F5 Pro, A95X F6 Pro, X95 Plus
Trade Mark	CYX
FCC ID:	2AHTK-A95XMAX
Applicable standards:	FCC CFR Title 47 Part 15 Subpart E Section 15.407
Date of sample receipt:	April 10, 2019
Date of Test:	April 11-23, 2019
Date of report issued:	April 24, 2019
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*April 24, 2019*	*Original*

Prepared By:  ***Date:*** *April 24, 2019*

Project Engineer

Check By:  ***Date:*** *April 24, 2019*

Reviewer

3 Contents

Page

4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.407(a)(3)	Pass
Channel Bandwidth	FCC part 15.407(e)	Pass
Power Spectral Density	FCC part 15.407(a)(3)	Pass
Band Edge	FCC part 15.407(b)(4)	Pass
Spurious Emission	FCC part 15.205/15.209/15.407(b)(4)	Pass
Frequency Stability	FCC part 15.407(g)	Pass

Remarks：

1. *Pass: The EUT complies with the essential requirements in the standard.*
2. *Test according to ANSI C63.10:2013.*

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz ~ 30MHz	± 4.34dB	(1)
Radiated Emission	30MHz ~ 1000MHz	± 4.24dB	(1)
Radiated Emission	1GHz ~ 40GHz	± 4.68dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	± 3.45dB	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

5 General Information

5.1 General Description of EUT

Product Name:	TV BOX
Model No.:	A95X MAX, A95X F1, A95X F2, A95X F1 Pro, A95X F2 Pro, A95X Plus, A95X F3, A95X F5, A95X F6, A95X F3 Pro, A95X F5 Pro, A95X F6 Pro, X95 Plus
Test Model No.:	A95X MAX
Remark: All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are color and model name for commercial purpose.	
Serial No.:	681DEF10EAC1
Hardware Version:	95XMAXV_V81
Software Version:	A95X_MAX-8.1.0
Test sample(s) ID:	GTS201904000075-1
Sample(s) Status:	Engineer sample
Operation Frequency:	802.11a/802.11n(HT20)/802.11ac(HT20): 5745MHz ~ 5825MHz 802.11n(HT40)/ 802.11ac(HT40): 5755MHz ~ 5795MHz 802.11ac(HT80): 5775MHz
Channel numbers:	802.11a/802.11n(HT20)/802.11ac(HT20): 5 802.11n(HT40)/ 802.11ac(HT40): 2 802.11ac(HT80): 1
Channel bandwidth:	802.11a/802.11n(HT20)/802.11ac(HT20) : 20MHz 802.11n(HT40)/802.11ac(HT40) : 40MHz 802.11ac(HT80): 80MHz
Modulation technology:	Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	Integral Antenna
Antenna gain:	1.0dBi
Power supply:	Power Supply Model: R122-0502500ED Input: AC 100-240V, 50/60Hz, 0.4A Output: DC 5V/2.5A

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	151	5755MHz	153	5765MHz	155	5775MHz
157	5785MHz	159	5795MHz	161	5805MHz	163	5815MHz
165	5825MHz						

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)		
	802.11 a/n/ac(HT20)	802.11 n/ac(HT40)	802.11ac(HT80)
Lowest channel	5745	5755	
Middle channel	5785		5775
Highest channel	5825	5795	

5.2 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

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:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11a	6Mbps
802.11n/ac(HT20)	6.5Mbps
802.11n/ac(HT40)	13Mbps
802.11ac(HT80)	29.3Mbps

5.3 Description of Support Units

None.

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen 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 files. Registration 381383.

● **Industry Canada (IC) —Registration No.: 9079A-2**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2.

● **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone,

Xixiang Road, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-27798480

Fax: 0755-27798960

5.6 Additional Instructions

Test Software	Special test command provided by manufacturer
Power level setup	Default

6 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 27 2018	June. 26 2019
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 27 2018	June. 26 2019
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 27 2018	June. 26 2019
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 27 2018	June. 26 2019
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 27 2018	June. 26 2019
9	Coaxial Cable	GTS	N/A	GTS211	June. 27 2018	June. 26 2019
10	Coaxial cable	GTS	N/A	GTS210	June. 27 2018	June. 26 2019
11	Coaxial Cable	GTS	N/A	GTS212	June. 27 2018	June. 26 2019
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 27 2018	June. 26 2019
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 27 2018	June. 26 2019
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 27 2018	June. 26 2019
15	Band filter	Amindeon	82346	GTS219	June. 27 2018	June. 26 2019
16	Power Meter	Anritsu	ML2495A	GTS540	June. 27 2018	June. 26 2019
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 27 2018	June. 26 2019
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 27 2018	June. 26 2019
19	Splitter	Agilent	11636B	GTS237	June. 27 2018	June. 26 2019
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 27 2018	June. 26 2019
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 20 2018	Oct. 19 2019
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 20 2018	Oct. 19 2019
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 20 2018	Oct. 19 2019
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 27 2018	June. 26 2019

Conducted Emission						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.16 2014	May.15 2019
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 27 2018	June. 26 2019
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 27 2018	June. 26 2019
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 27 2018	June. 26 2019
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	June. 27 2018	June. 26 2019

RF Conducted:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 27 2018	June. 26 2019
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 27 2018	June. 26 2019
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 27 2018	June. 26 2019
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 27 2018	June. 26 2019
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 27 2018	June. 26 2019
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 27 2018	June. 26 2019
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 27 2018	June. 26 2019
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 27 2018	June. 26 2019

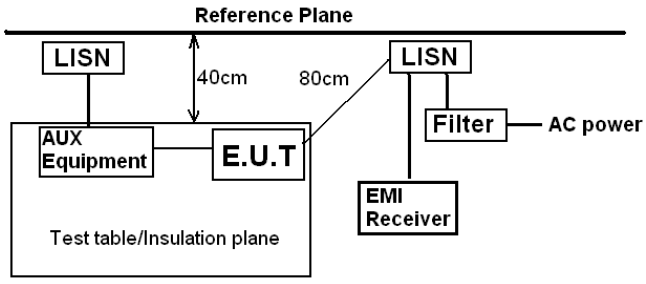
General used equipment:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 27 2018	June. 26 2019
2	Barometer	ChangChun	DYM3	GTS255	June. 27 2018	June. 26 2019

7 Test results and Measurement Data

7.1 Antenna requirement

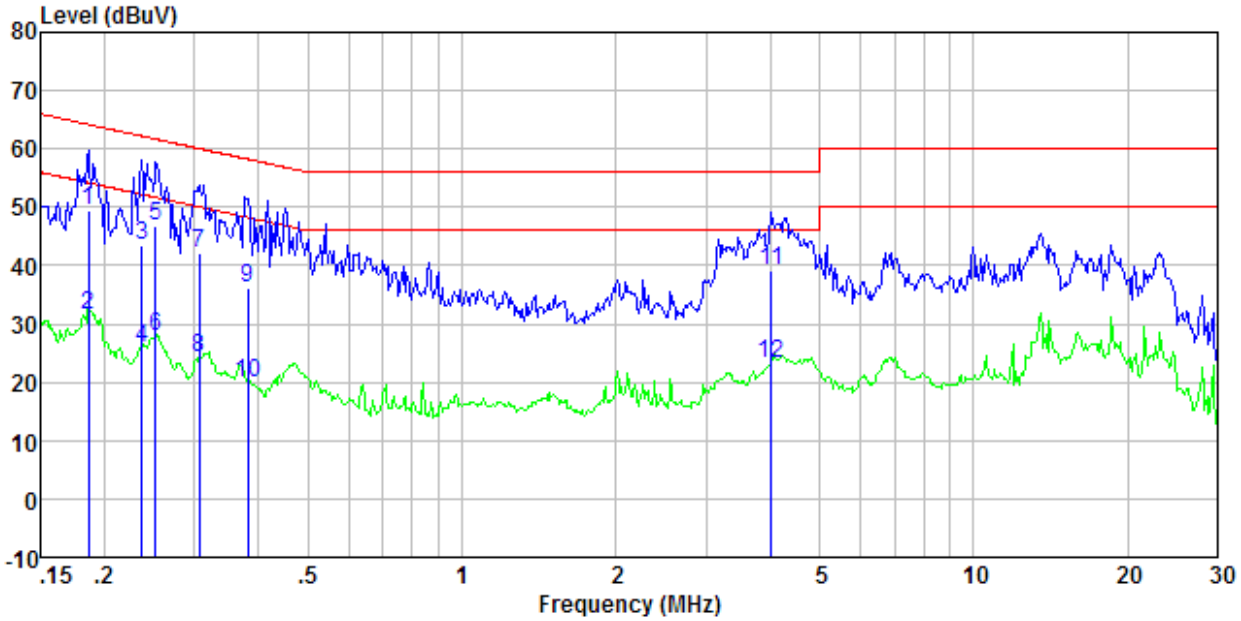
Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
The antenna is integral antenna, the best case gain of the antennas are 2.0dBi, reference to the appendix II for details	

7.2 Conducted Emissions

<table>
<tr><td>Test Requirement:</td><td colspan="6">FCC Part15 C Section 15.207</td></tr>
<tr><td>Test Method:</td><td colspan="6">ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="6">150KHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td colspan="6">Class B</td></tr>
<tr><td>Receiver setup:</td><td colspan="6">RBW=9KHz, VBW=30KHz, Sweep time=auto</td></tr>
<tr><td>Limit:</td><td colspan="6">
<table>
<tr><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBuV)</td></tr>
<tr><td>Quasi-peak</td><td>Average</td></tr>
<tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* Decreases with the logarithm of the frequency.
</td></tr>
<tr><td>Test setup:</td><td colspan="6"> 

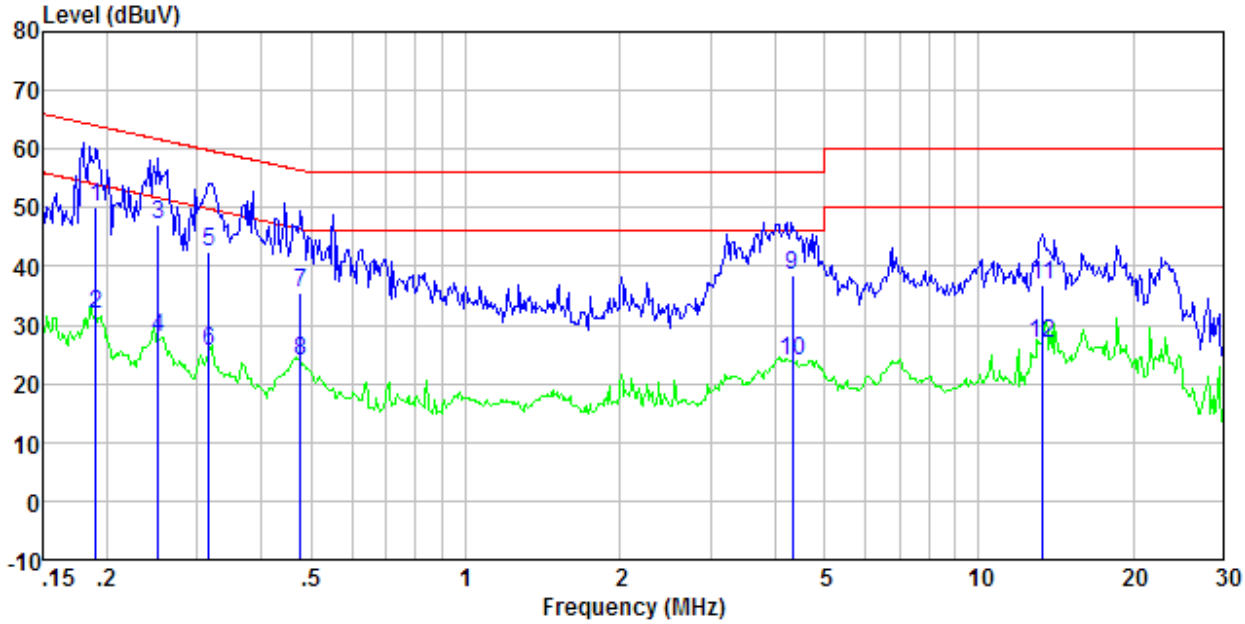
Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test procedure:</td><td colspan="6">1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.
2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).
3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</td></tr>
<tr><td>Test Instruments:</td><td colspan="6">Refer to section 6.0 for details</td></tr>
<tr><td>Test mode:</td><td colspan="6">Refer to section 5.2 for details</td></tr>
<tr><td>Test environment:</td><td>Temp.:</td><td>25 °C</td><td>Humid.:</td><td>52%</td><td>Press.:</td><td>1012mbar</td></tr>
<tr><td>Test voltage:</td><td colspan="6">AC 120V, 60Hz</td></tr>
<tr><td>Test results:</td><td colspan="6">Pass</td></tr>
</table>

Measurement data
Line:



Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.19	48.88	0.40	0.10	49.38	64.20	-14.82	QP
0.19	31.18	0.40	0.10	31.68	54.20	-22.52	Average
0.24	42.98	0.40	0.11	43.49	62.22	-18.73	QP
0.24	25.20	0.40	0.11	25.71	52.22	-26.51	Average
0.25	46.40	0.40	0.10	46.90	61.69	-14.79	QP
0.25	27.31	0.40	0.10	27.81	51.69	-23.88	Average
0.31	41.73	0.40	0.10	42.23	60.06	-17.83	QP
0.31	23.65	0.40	0.10	24.15	50.06	-25.91	Average
0.38	35.83	0.36	0.10	36.29	58.25	-21.96	QP
0.38	19.28	0.36	0.10	19.74	48.25	-28.51	Average
4.03	38.79	0.20	0.18	39.17	56.00	-16.83	QP
4.03	22.73	0.20	0.18	23.11	46.00	-22.89	Average

Neutral:



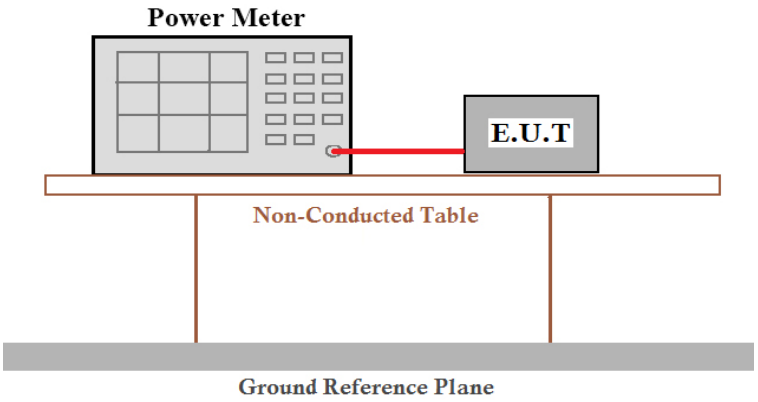
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.19	49.73	0.40	0.10	50.23	64.02	-13.79	QP
0.19	31.44	0.40	0.10	31.94	54.02	-22.08	Average
0.25	46.67	0.40	0.10	47.17	61.69	-14.52	QP
0.25	27.25	0.40	0.10	27.75	51.69	-23.94	Average
0.32	42.11	0.39	0.10	42.60	59.80	-17.20	QP
0.32	24.99	0.39	0.10	25.48	49.80	-24.32	Average
0.48	35.23	0.32	0.11	35.66	56.41	-20.75	QP
0.48	23.42	0.32	0.11	23.85	46.41	-22.56	Average
4.34	38.04	0.20	0.18	38.42	56.00	-17.58	QP
4.34	23.34	0.20	0.18	23.72	46.00	-22.28	Average
13.34	36.53	0.20	0.21	36.94	60.00	-23.06	QP
13.34	26.48	0.20	0.21	26.89	50.00	-23.11	Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss

4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both *limits and measurement with the average detector receiver is unnecessary.*

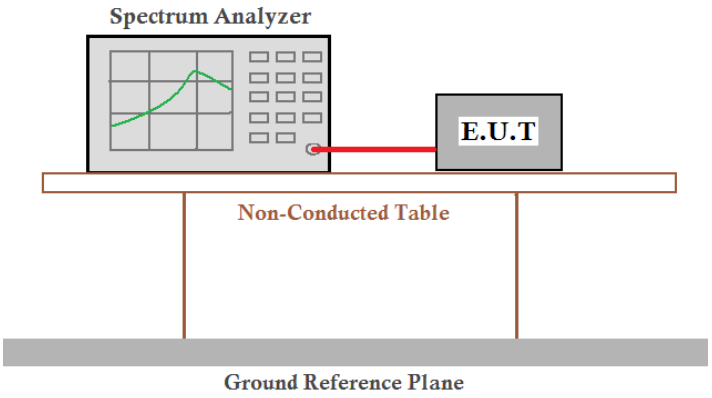
7.3 Conducted Peak Output Power

Test Requirement:	FCC Part15 E Section 15.407(a)(3)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 & RSS-Gen
Limit:	30dBm
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement Data

Test CH	Peak Output Power (dBm)						Limit(dBm)	Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)		
Lowest	11.23	10.57	12.20	10.25	10.09	---	30.00	Pass
Middle	11.28	10.86	11.56	---	---	11.76		
Highest	11.06	11.12	12.43	10.50	10.68	---		

7.4 Channel Bandwidth

Test Requirement:	FCC Part15 E Section 15.407(e)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 & RSS-Gen
Limit:	>500KHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

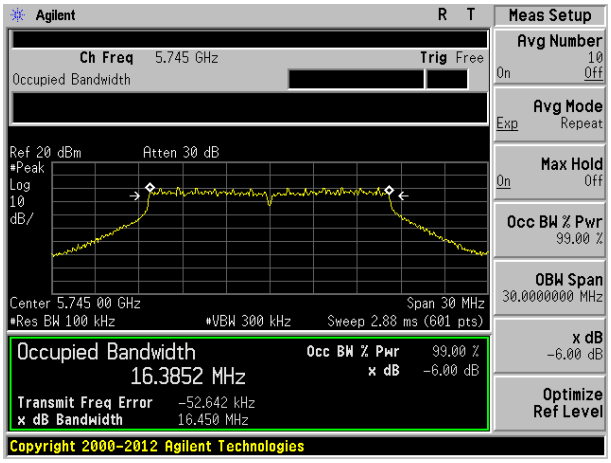
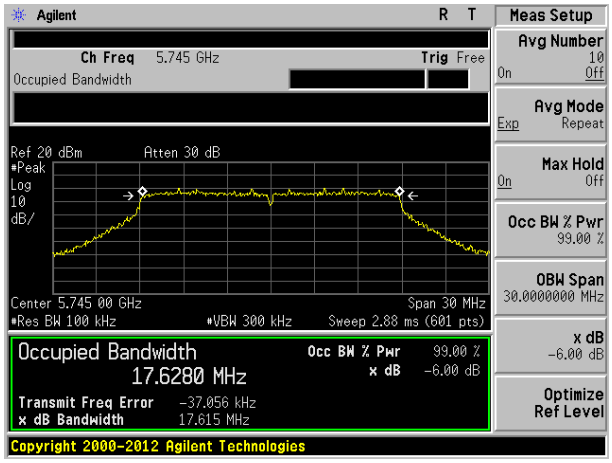
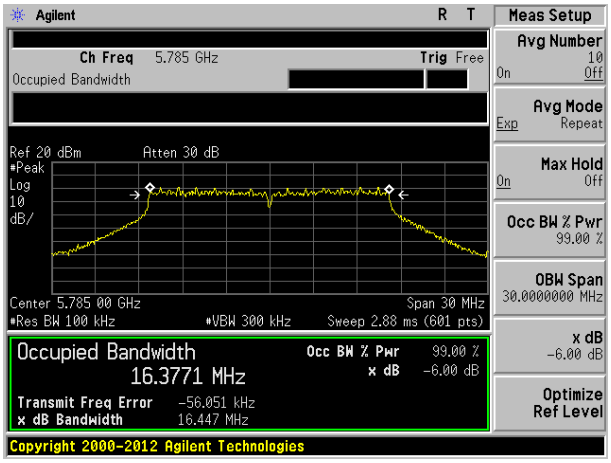
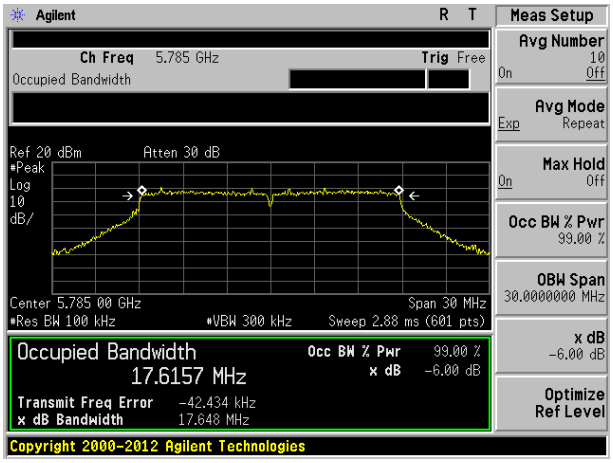
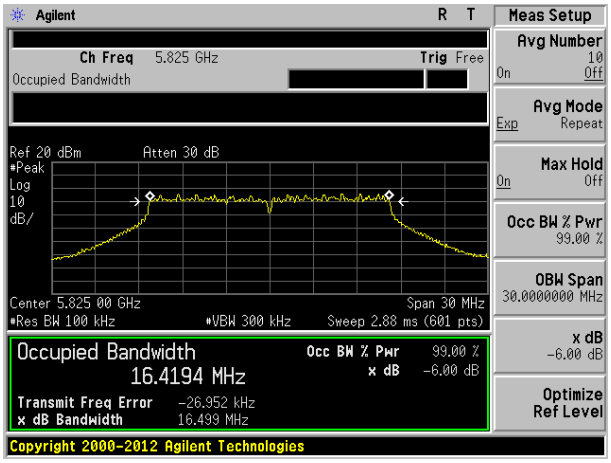
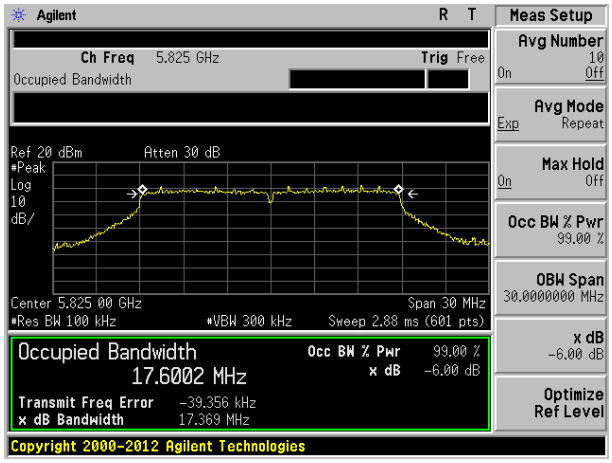
Measurement Data

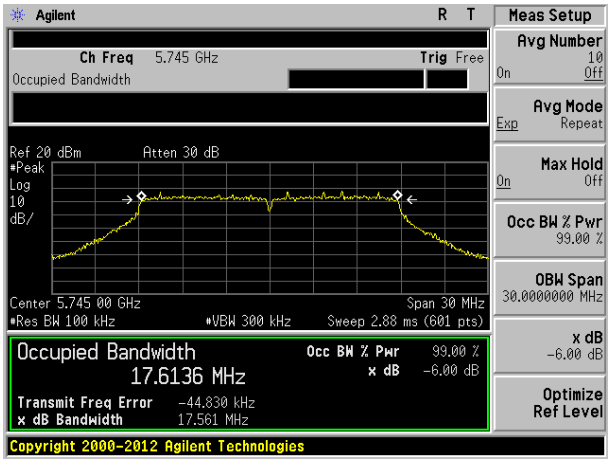
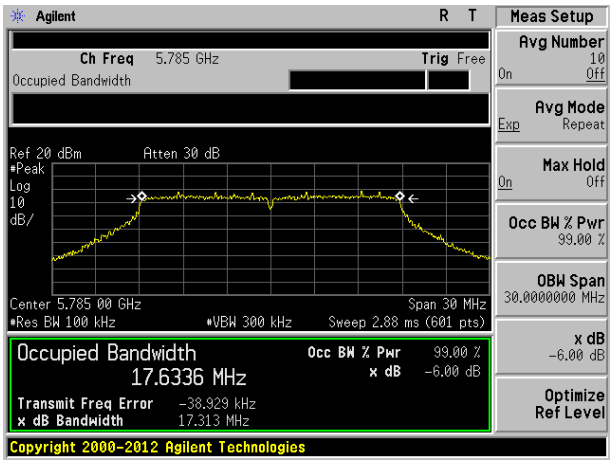
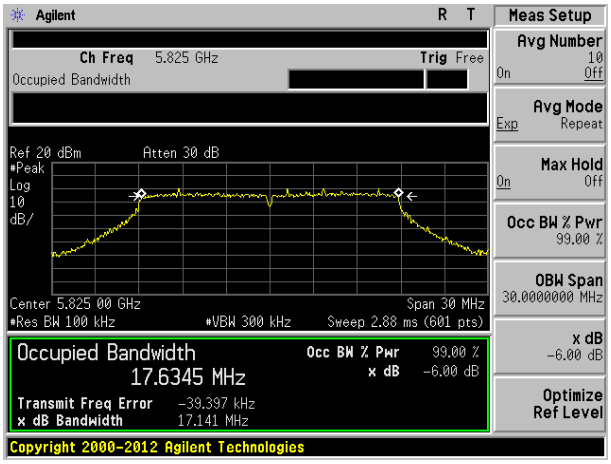
Test CH	-6dB Channel Bandwidth (MHz)						Limit (KHz)	Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)		
Lowest	16.450	17.615	17.561	36.187	36.003	---	>500	Pass
Middle	16.447	17.648	17.313	---	---	75.221		
Highest	16.499	17.369	17.141	36.145	35.847	---		

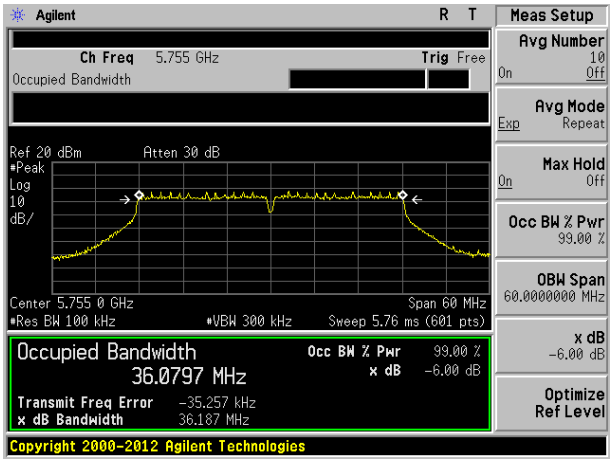
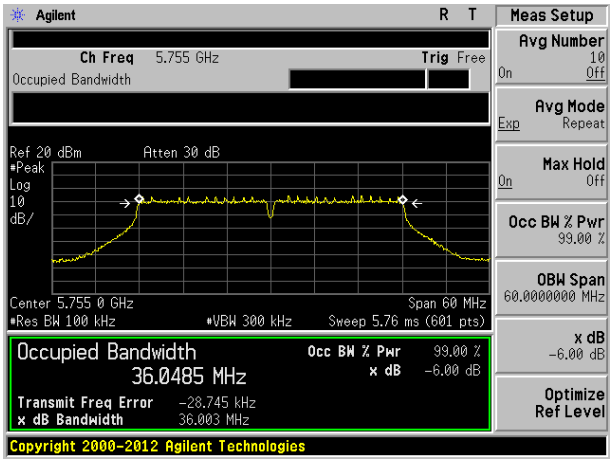
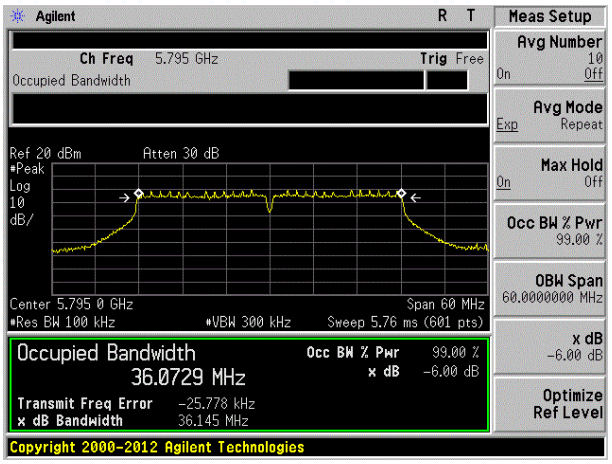
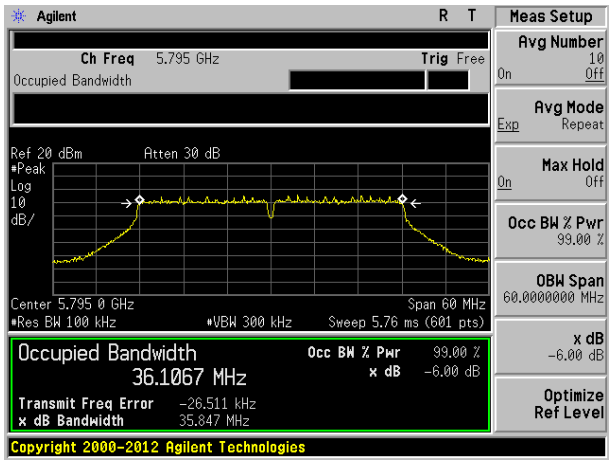
Test CH	99% Channel Bandwidth (MHz)						Limit (KHz)	Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)		
Lowest	16.3852	17.6280	17.6136	36.0797	36.0485	---	>500	Pass
Middle	16.3771	17.6157	17.6336	---	---	74.9677		
Highest	16.4194	17.6002	17.6345	36.0729	36.1067	---		

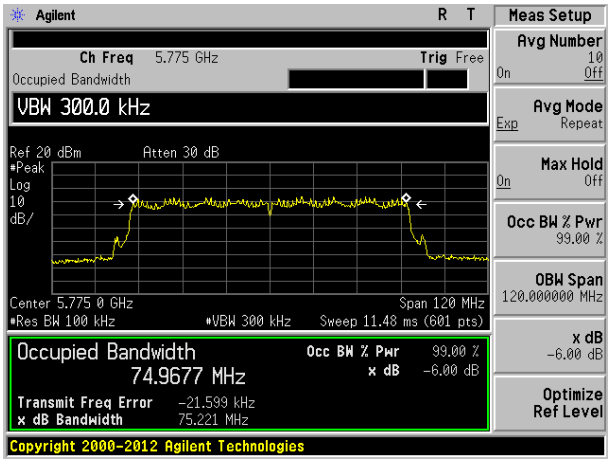
Remark: "---" is not applicable

Test plot as follows:

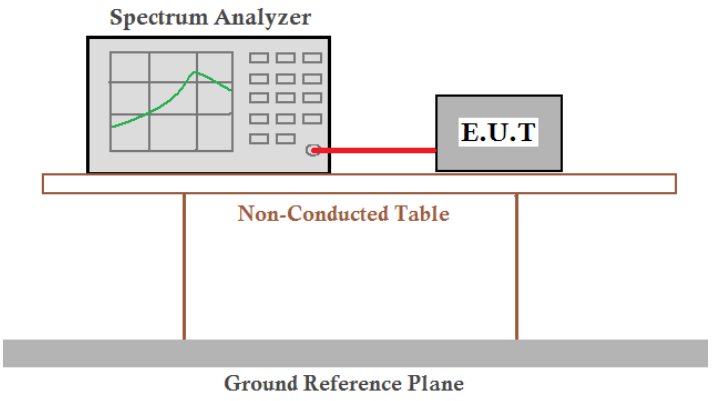
802.11a	802.11n(HT20)
	
Lowest channel	
	
Middle channel	
	
Highest channel	

802.11ac(HT20)	
	
Lowest channel	
	
Middle channel	
	
Highest channel	

802.11n(HT40)	802.11ac(HT40)
	
Lowest channel	
	
Highest channel	

802.11ac(HT80)	
	
Middle channel	

7.5 Power Spectral Density

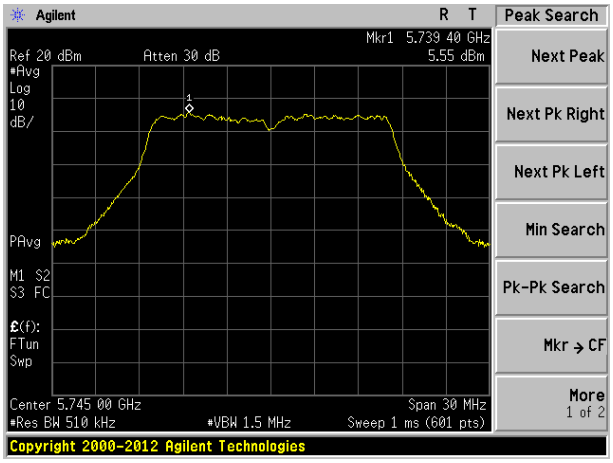
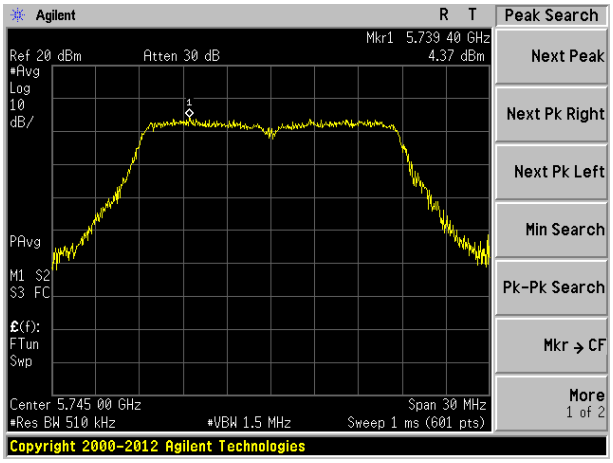
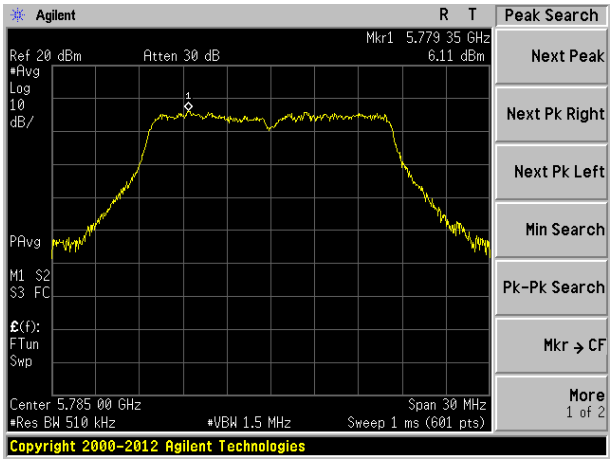
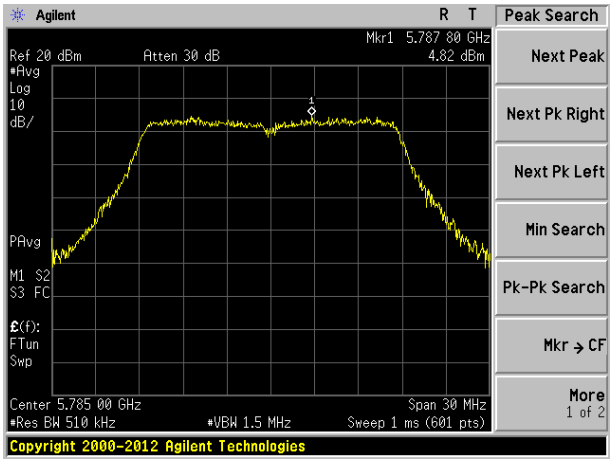
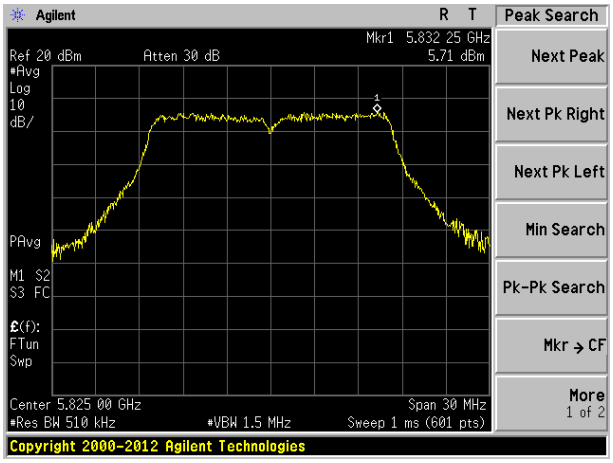
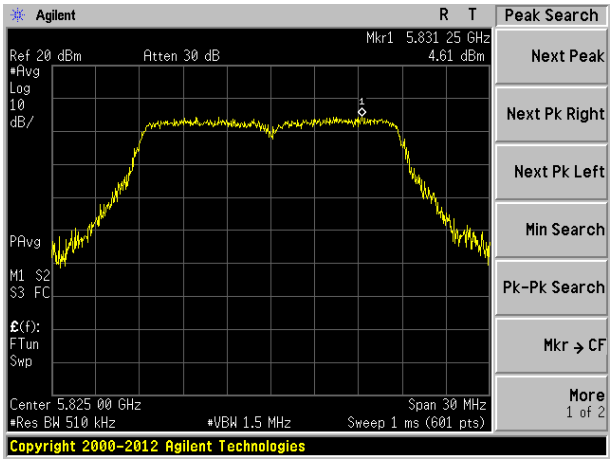
Test Requirement:	FCC Part15 E Section 15.407(a)(3)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Limit:	30dBm/500kHz
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

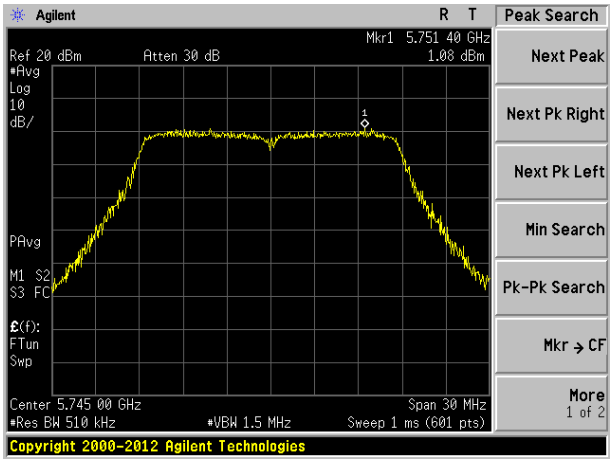
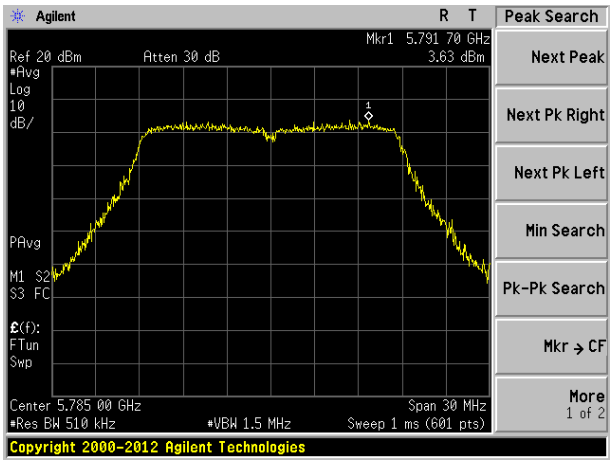
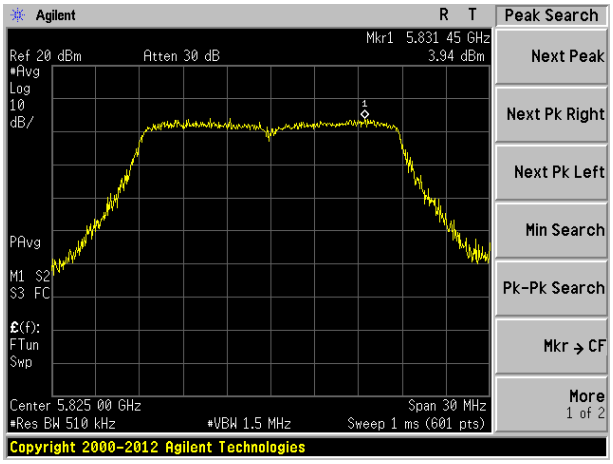
Measurement Data

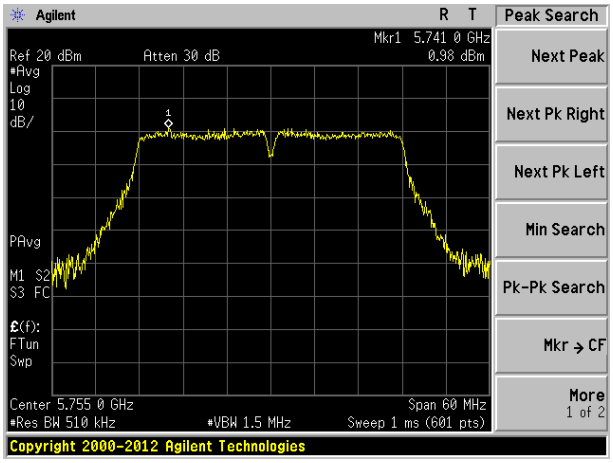
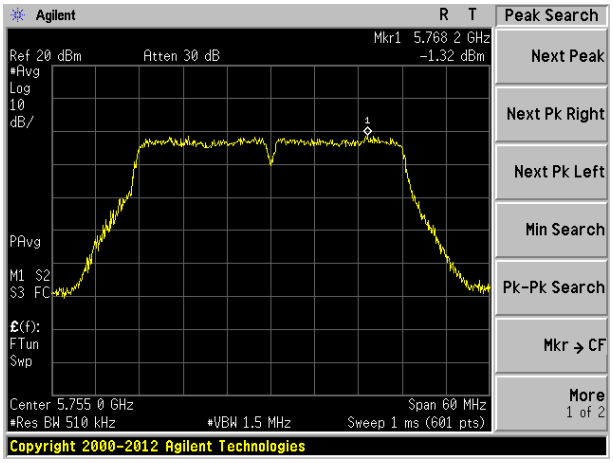
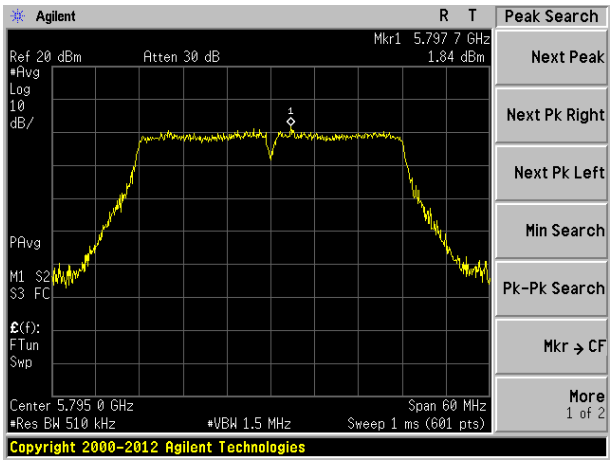
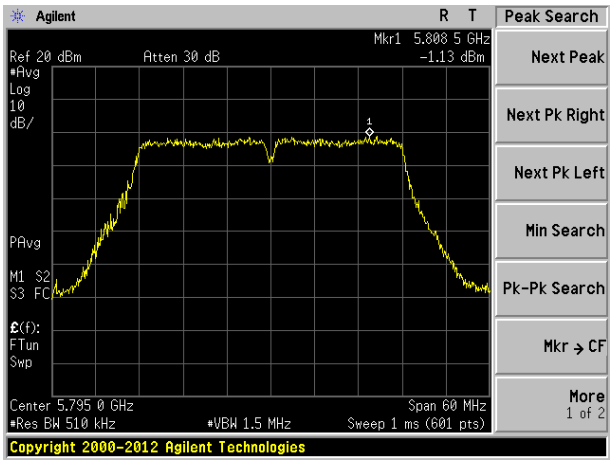
Test CH	Power Spectral Density (dBm/500kHz)						Limit (dBm/500kHz)	Result
	802.11a	802.11n (HT20)	802.11ac (HT20)	802.11n (HT40)	802.11ac (HT40)	802.11ac (HT80)		
Lowest	5.55	4.37	1.08	0.98	-1.32	---	30.00	Pass
Middle	6.11	4.82	3.63	---	---	-3.66		
Highest	5.71	4.61	3.94	1.84	-1.13	---		

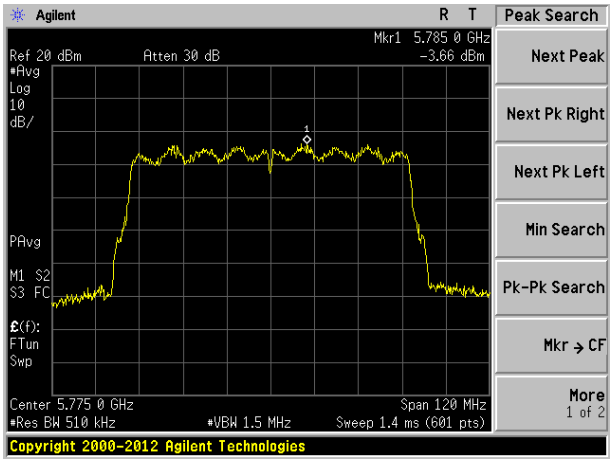
Remark: “---“is not applicable

Test plot as follows:

802.11a	802.11n(HT20)
	
Lowest channel	
	
Middle channel	
	
Highest channel	

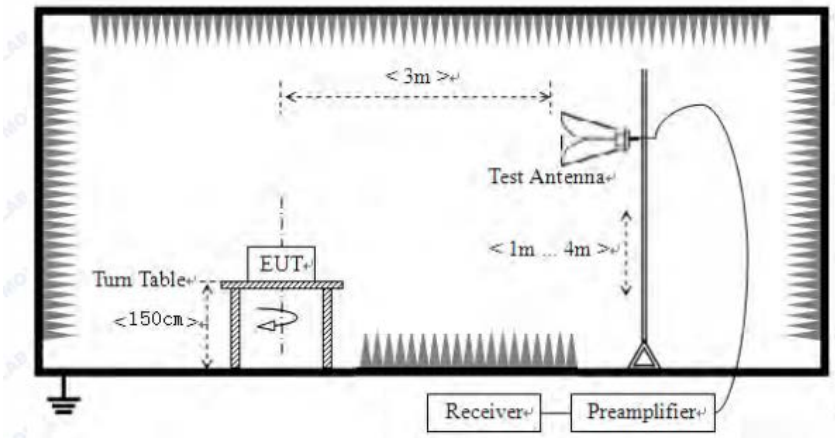
802.11ac(HT20)	
	
Lowest channel	
	
Middle channel	
	
Highest channel	

802.11n(HT40)	802.11ac(HT40)
	
Lowest channel	
	
Highest channel	

802.11ac(HT80)	
	
Middle channel	

7.6 Band edge

7.6.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	9kHz to 40GHz, only worse case is reported
Test site:	Measurement Distance: 3m
Receiver setup:	Frequency / Detector / RBW / VBW / Value Above 1GHz / Peak / 1MHz / 3MHz / Peak Above 1GHz / RMS / 1MHz / 3MHz / RMS
Limit:	All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
Test setup:	
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. 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 antenna height 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data

	sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Remarks:

1. *Only the worst case Main Antenna test data..*
2. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
4. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*
5. *According to KDB 789033 D02v02r01 section G) 1) d),for measurements above 1000 MHz @3m distance, the limit of field strength is computed as follows:*

   E[dBuV/m] = EIRP[dBm] + 95.2;

   E[dBuV/m] = -27 + 95.2 = 68.2dBuV/m.

   E[dBuV/m] = 10 + 95.2 = 105.2dBuV/m.

   E[dBuV/m] = 15.6 + 95.2 = 110.8dBuV/m.

   E[dBuV/m] = 27 + 95.2 = 122.2dBuV/m

Measurement data:

IEEE 802.11a								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	32.05	32.36	9.72	23.83	50.3	68.2	-17.9	Horizontal
5700.00	32.56	32.5	9.79	23.84	51.01	105.2	-54.19	Horizontal
5720.00	29.57	32.53	9.81	23.85	48.06	110.8	-62.74	Horizontal
5725.00	31.61	32.53	9.83	23.86	50.11	122.2	-72.09	Horizontal
5850.00	30.75	32.7	9.99	23.87	49.57	122.2	-72.63	Horizontal
5855.00	31.09	32.72	9.99	23.88	49.92	110.8	-60.88	Horizontal
5875.00	33.01	32.74	10.04	23.89	51.9	105.2	-53.3	Horizontal
5925.00	28.99	32.8	10.11	23.9	48	68.2	-20.2	Horizontal
5650.00	29.28	32.36	9.72	23.83	47.53	68.2	-20.67	Vertical
5700.00	31.85	32.5	9.79	23.84	50.3	105.2	-54.9	Vertical
5720.00	29.94	32.53	9.81	23.85	48.43	110.8	-62.37	Vertical
5725.00	33.94	32.53	9.83	23.86	52.44	122.2	-69.76	Vertical
5850.00	29.13	32.7	9.99	23.87	47.95	122.2	-74.25	Vertical
5855.00	33.07	32.72	9.99	23.88	51.9	110.8	-58.9	Vertical
5875.00	30.08	32.74	10.04	23.89	48.97	105.2	-56.23	Vertical
5925.00	31.04	32.8	10.11	23.9	50.05	68.2	-18.15	Vertical

IEEE 802.11n HT20								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	29.34	32.36	9.72	23.83	47.59	68.2	-20.61	Horizontal
5700.00	29.10	32.5	9.79	23.84	47.55	105.2	-57.65	Horizontal
5720.00	30.70	32.53	9.81	23.85	49.19	110.8	-61.61	Horizontal
5725.00	31.83	32.53	9.83	23.86	50.33	122.2	-71.87	Horizontal
5850.00	31.37	32.7	9.99	23.87	50.19	122.2	-72.01	Horizontal
5855.00	30.02	32.72	9.99	23.88	48.85	110.8	-61.95	Horizontal
5875.00	32.26	32.74	10.04	23.89	51.15	105.2	-54.05	Horizontal
5925.00	30.65	32.8	10.11	23.9	49.66	68.2	-18.54	Horizontal
5650.00	29.11	32.36	9.72	23.83	47.36	68.2	-20.84	Vertical
5700.00	33.79	32.5	9.79	23.84	52.24	105.2	-52.96	Vertical
5720.00	29.10	32.53	9.81	23.85	47.59	110.8	-63.21	Vertical
5725.00	28.95	32.53	9.83	23.86	47.45	122.2	-74.75	Vertical
5850.00	32.61	32.7	9.99	23.87	51.43	122.2	-70.77	Vertical
5855.00	31.17	32.72	9.99	23.88	50	110.8	-60.8	Vertical
5875.00	33.18	32.74	10.04	23.89	52.07	105.2	-53.13	Vertical
5925.00	29.64	32.8	10.11	23.9	48.65	68.2	-19.55	Vertical

IEEE 802.11ac HT20								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	28.27	32.36	9.72	23.83	46.52	68.2	-21.68	Horizontal
5700.00	29.93	32.5	9.79	23.84	48.38	105.2	-56.82	Horizontal
5720.00	29.66	32.53	9.81	23.85	48.15	110.8	-62.65	Horizontal
5725.00	29.35	32.53	9.83	23.86	47.85	122.2	-74.35	Horizontal
5850.00	28.86	32.7	9.99	23.87	47.68	122.2	-74.52	Horizontal
5855.00	29.41	32.72	9.99	23.88	48.24	110.8	-62.56	Horizontal
5875.00	31.85	32.74	10.04	23.89	50.74	105.2	-54.46	Horizontal
5925.00	28.12	32.8	10.11	23.9	47.13	68.2	-21.07	Horizontal
5650.00	29.65	32.36	9.72	23.83	47.9	68.2	-20.3	Vertical
5700.00	30.12	32.5	9.79	23.84	48.57	105.2	-56.63	Vertical
5720.00	33.83	32.53	9.81	23.85	52.32	110.8	-58.48	Vertical
5725.00	32.65	32.53	9.83	23.86	51.15	122.2	-71.05	Vertical
5850.00	32.61	32.7	9.99	23.87	51.43	122.2	-70.77	Vertical
5855.00	31.71	32.72	9.99	23.88	50.54	110.8	-60.26	Vertical
5875.00	31.59	32.74	10.04	23.89	50.48	105.2	-54.72	Vertical
5925.00	28.59	32.8	10.11	23.9	47.6	68.2	-20.6	Vertical

IEEE 802.11n HT40								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	31.09	32.36	9.72	23.83	49.34	68.2	-18.86	Horizontal
5700.00	28.59	32.5	9.79	23.84	47.04	105.2	-58.16	Horizontal
5720.00	31.64	32.53	9.81	23.85	50.13	110.8	-60.67	Horizontal
5725.00	32.65	32.53	9.83	23.86	51.15	122.2	-71.05	Horizontal
5850.00	32.64	32.7	9.99	23.87	51.46	122.2	-70.74	Horizontal
5855.00	33.47	32.72	9.99	23.88	52.3	110.8	-58.5	Horizontal
5875.00	31.71	32.74	10.04	23.89	50.6	105.2	-54.6	Horizontal
5925.00	32.54	32.8	10.11	23.9	51.55	68.2	-16.65	Horizontal
5650.00	28.99	32.36	9.72	23.83	47.24	68.2	-20.96	Vertical
5700.00	32.14	32.5	9.79	23.84	50.59	105.2	-54.61	Vertical
5720.00	31.10	32.53	9.81	23.85	49.59	110.8	-61.21	Vertical
5725.00	29.49	32.53	9.83	23.86	47.99	122.2	-74.21	Vertical
5850.00	30.54	32.7	9.99	23.87	49.36	122.2	-72.84	Vertical
5855.00	28.22	32.72	9.99	23.88	47.05	110.8	-63.75	Vertical
5875.00	28.83	32.74	10.04	23.89	47.72	105.2	-57.48	Vertical
5925.00	29.32	32.8	10.11	23.9	48.33	68.2	-19.87	Vertical

IEEE 802.11ac HT40								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	33.81	32.36	9.72	23.83	52.06	68.2	-16.14	Horizontal
5700.00	33.08	32.5	9.79	23.84	51.53	105.2	-53.67	Horizontal
5720.00	32.67	32.53	9.81	23.85	51.16	110.8	-59.64	Horizontal
5725.00	28.63	32.53	9.83	23.86	47.13	122.2	-75.07	Horizontal
5850.00	31.64	32.7	9.99	23.87	50.46	122.2	-71.74	Horizontal
5855.00	30.98	32.72	9.99	23.88	49.81	110.8	-60.99	Horizontal
5875.00	30.15	32.74	10.04	23.89	49.04	105.2	-56.16	Horizontal
5925.00	31.29	32.8	10.11	23.9	50.3	68.2	-17.9	Horizontal
5650.00	31.75	32.36	9.72	23.83	50	68.2	-18.2	Vertical
5700.00	33.54	32.5	9.79	23.84	51.99	105.2	-53.21	Vertical
5720.00	30.34	32.53	9.81	23.85	48.83	110.8	-61.97	Vertical
5725.00	31.91	32.53	9.83	23.86	50.41	122.2	-71.79	Vertical
5850.00	31.75	32.7	9.99	23.87	50.57	122.2	-71.63	Vertical
5855.00	32.56	32.72	9.99	23.88	51.39	110.8	-59.41	Vertical
5875.00	29.77	32.74	10.04	23.89	48.66	105.2	-56.54	Vertical
5925.00	32.67	32.8	10.11	23.9	51.68	68.2	-16.52	Vertical

IEEE 802.11ac HT80								
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5650.00	31.11	32.36	9.72	23.83	49.36	68.2	-18.84	Horizontal
5700.00	29.22	32.5	9.79	23.84	47.67	105.2	-57.53	Horizontal
5720.00	28.30	32.53	9.81	23.85	46.79	110.8	-64.01	Horizontal
5725.00	29.71	32.53	9.83	23.86	48.21	122.2	-73.99	Horizontal
5850.00	29.72	32.7	9.99	23.87	48.54	122.2	-73.66	Horizontal
5855.00	32.65	32.72	9.99	23.88	51.48	110.8	-59.32	Horizontal
5875.00	31.56	32.74	10.04	23.89	50.45	105.2	-54.75	Horizontal
5925.00	28.54	32.8	10.11	23.9	47.55	68.2	-20.65	Horizontal
5650.00	32.37	32.36	9.72	23.83	50.62	68.2	-17.58	Vertical
5700.00	28.78	32.5	9.79	23.84	47.23	105.2	-57.97	Vertical
5720.00	33.51	32.53	9.81	23.85	52	110.8	-58.8	Vertical
5725.00	32.53	32.53	9.83	23.86	51.03	122.2	-71.17	Vertical
5850.00	30.70	32.7	9.99	23.87	49.52	122.2	-72.68	Vertical
5855.00	31.12	32.72	9.99	23.88	49.95	110.8	-60.85	Vertical
5875.00	28.27	32.74	10.04	23.89	47.16	105.2	-58.04	Vertical
5925.00	32.14	32.8	10.11	23.9	51.15	68.2	-17.05	Vertical

7.7 Spurious Emission

7.7.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209, Part 15E Section 15.407(b)(4)
Test Method:	ANSI C63.10:2013
Test Frequency Range:	9kHz to 40GHz
Test site:	Measurement Distance: 3m

Receiver setup:

Frequency	Detector	RBW	VBW	Value
9kHz-150KHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	AV	1MHz	3MHz	Average Value

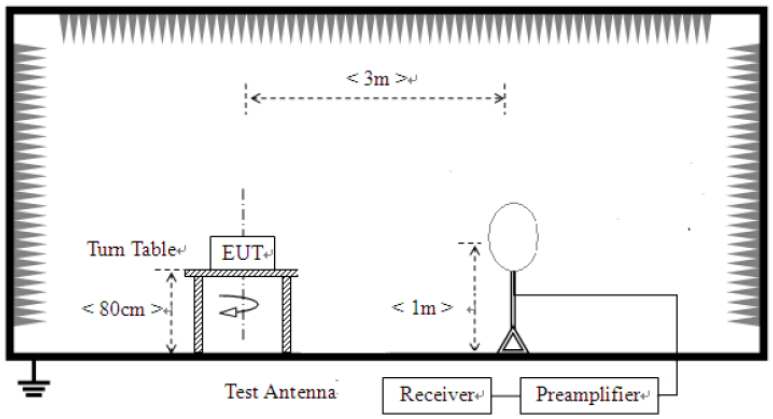
Limit:

Frequency	Limit (uV/m)	Value	Measurement Distance
0.009MHz-0.490MHz	2400/F(KHz)	QP	300m
0.490MHz-1.705MHz	24000/F(KHz)	QP	300m
1.705MHz-30MHz	30	QP	30m
30MHz-88MHz	100	QP	3m
88MHz-216MHz	150	QP	
216MHz-960MHz	200	QP	
960MHz-1GHz	500	QP	

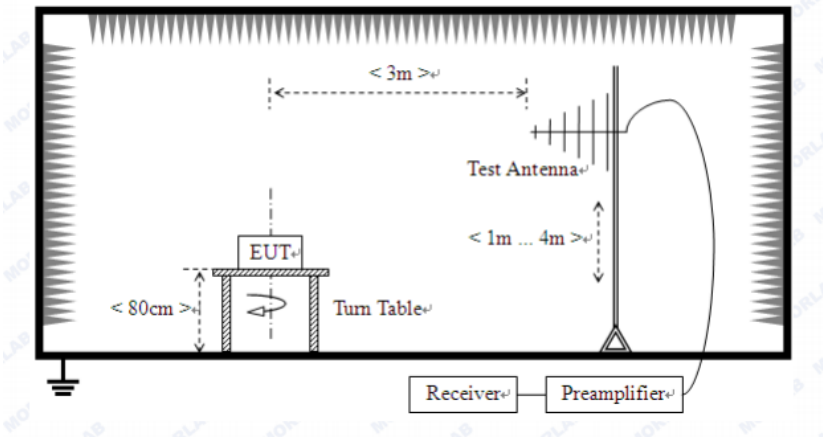
Frequency	Limit (dBm/MHz)	Remark
Above 1GHz	-27.0	Peak Value

Test setup:

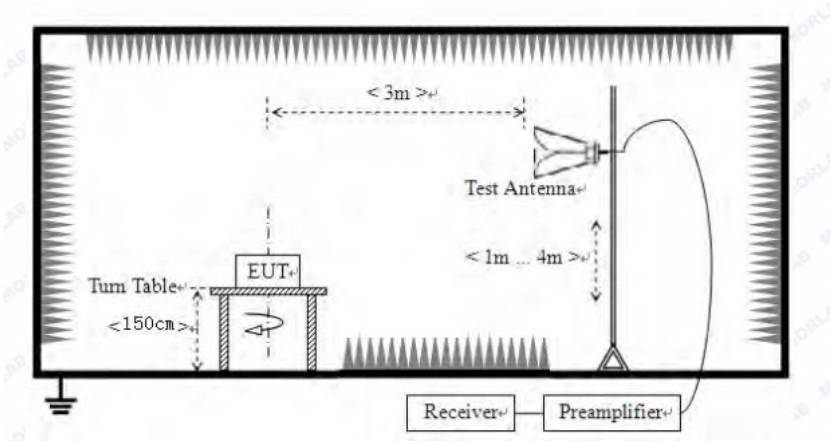
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. 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 antenna height 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-

	peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

Remarks:

1. *Only the worst case Main Antenna test data.*
2. *Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.*

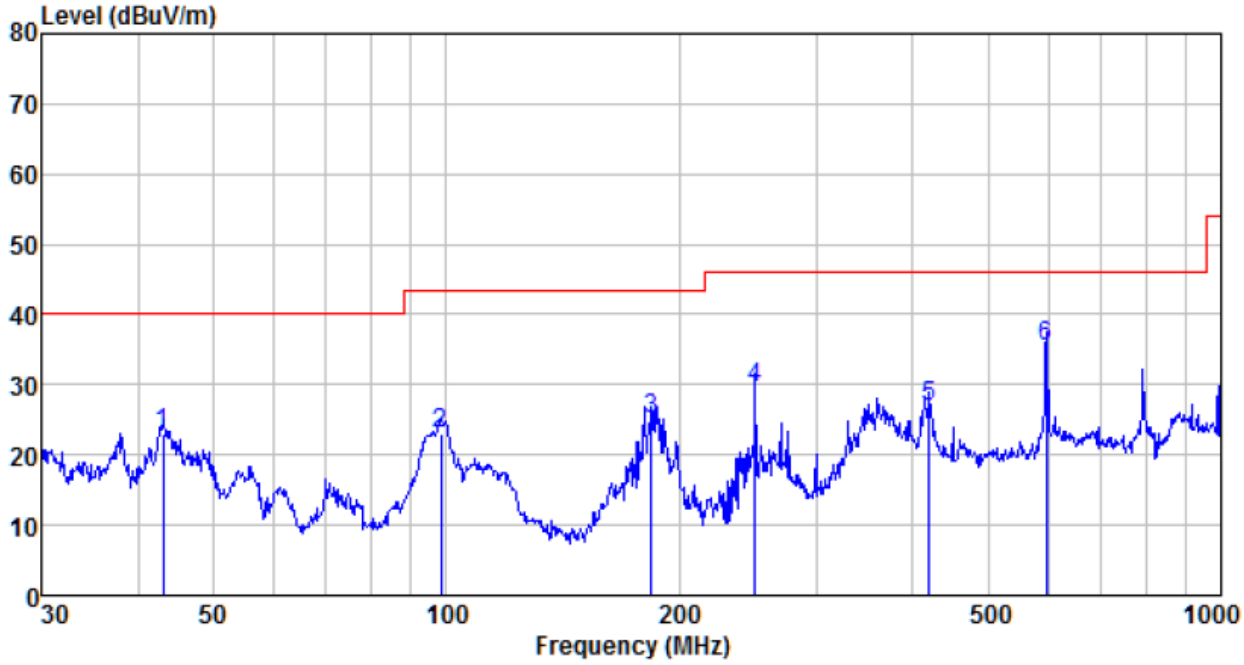
Measurement Data:

9 kHz ~ 30 MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

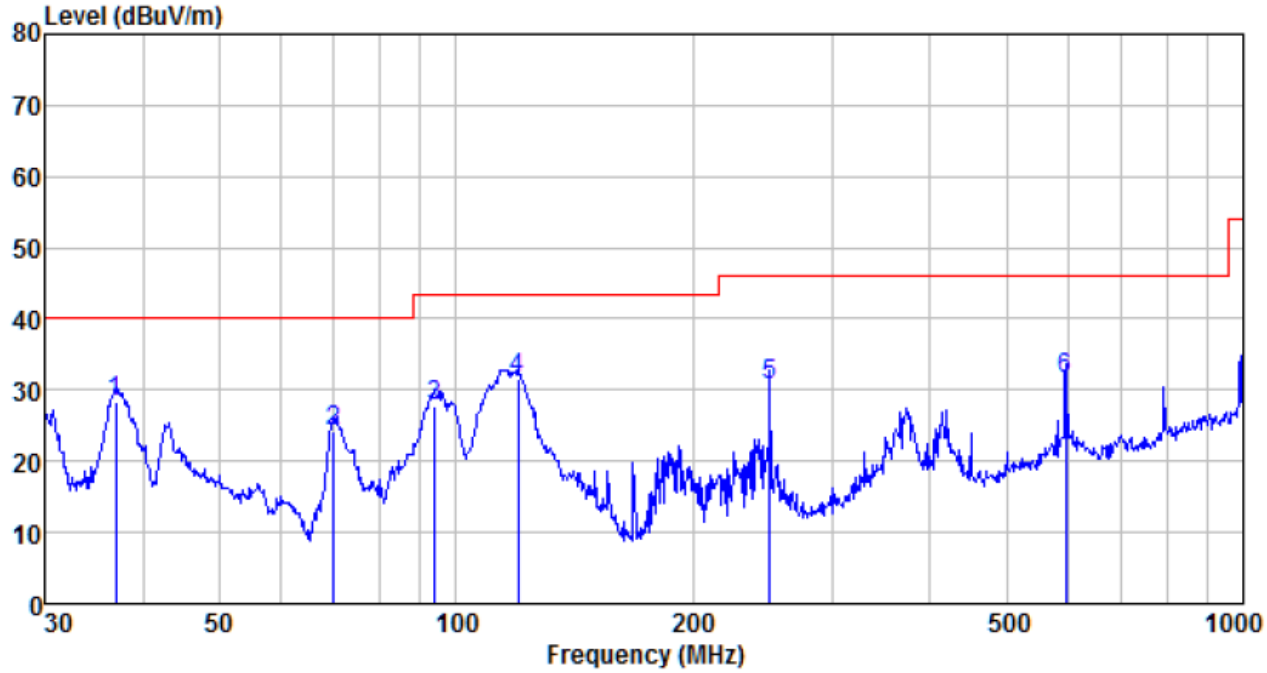
Below 1GHz

Horizontal:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
43.050	45.87	12.23	0.70	35.83	22.97	40.00	-17.03	QP
98.487	46.50	12.00	1.18	36.71	22.97	43.50	-20.53	QP
183.844	51.19	9.32	1.76	37.26	25.01	43.50	-18.49	QP
250.301	52.62	12.18	2.12	37.38	29.54	46.00	-16.46	QP
420.580	45.79	15.75	2.95	37.52	26.97	46.00	-19.03	QP
595.133	49.90	19.39	3.70	37.54	35.45	46.00	-10.55	QP

Vertical:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV	dBuV/m	dB	
36.895	51.64	11.67	0.63	35.48	28.46	40.00	-11.54	QP
69.845	52.31	7.50	0.94	36.44	24.31	40.00	-15.69	QP
94.098	51.99	11.31	1.14	36.67	27.77	43.50	-15.73	QP
119.856	57.49	9.50	1.36	36.88	31.47	43.50	-12.03	QP
250.301	53.83	12.18	2.12	37.38	30.75	46.00	-15.25	QP
595.133	46.14	19.39	3.70	37.54	31.69	46.00	-14.31	QP

Above 1GHz:

802.11a,11n(HT20),11ac(HT20),11n(HT40),11ac(HT40),11ac(HT80) all have been tested,

Test mode:		802.11a		Test channel:		lowest	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dBuV/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
V	11490	21.20	21.64	42.84	54(Note3)	-11.16	PK
V	17235	20.84	21.8	42.64	54(Note3)	-11.36	PK
H	11490	22.00	21.83	43.83	54(Note3)	-10.17	PK
H	17235	19.75	21.67	41.42	54(Note3)	-12.58	PK

Test mode:		802.11a		Test channel:		Middle	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dBuV/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
V	11570	22.37	21.64	44.01	54(Note3)	-9.99	PK
V	17355	23.84	21.8	45.64	54(Note3)	-8.36	PK
H	11570	25.01	21.83	46.84	54(Note3)	-7.16	PK
H	17355	25.18	21.67	46.85	54(Note3)	-7.15	PK

Test mode:		802.11a		Test channel:		Highest	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dBuV/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
V	11650	21.37	21.64	43.01	54(Note3)	-10.99	PK
V	17475	21.67	21.8	43.47	54(Note3)	-10.53	PK
H	11650	20.44	21.83	42.27	54(Note3)	-11.73	PK
H	17475	19.24	21.67	40.91	54(Note3)	-13.09	PK

Test mode:		802.11ac(HT40)		Test channel:		Lowest	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dBuV/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
V	11510	22.99	21.67	44.66	54(Note3)	-9.34	PK
V	17265	22.17	21.83	44.00	54(Note3)	-10	PK
H	11510	20.38	21.67	42.05	54(Note3)	-11.95	PK
H	17265	22.35	21.83	44.18	54(Note3)	-9.82	PK

Test mode:		802.11ac(HT40)		Test channel:		Highest	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dBuV/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
V	11590	21.43	21.67	43.10	54(Note3)	-10.9	PK
V	17385	25.20	21.83	47.03	54(Note3)	-6.97	PK
H	11590	24.50	21.67	46.17	54(Note3)	-7.83	PK
H	17385	23.09	21.83	44.92	54(Note3)	-9.08	PK

Test mode:		802.11ac(HT80)		Test channel:		Middle	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dBuV/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
V	11550	24.77	21.65	46.42	54(Note3)	-7.58	PK
V	17325	25.97	21.81	47.78	54(Note3)	-6.22	PK
H	11550	25.60	21.65	47.25	54(Note3)	-6.75	PK
H	17325	23.72	21.81	45.53	54(Note3)	-8.47	PK

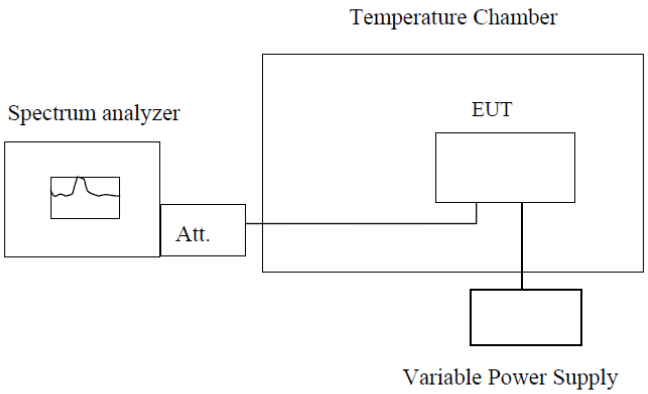
Notes:

1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

7.8 Frequency stability

Test Requirement:	FCC Part15 C Section 15.407(g)
Test Method:	ANSI C63.10:2013, FCC Part 2.1055
Limit:	Manufactures 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
Test Procedure:	The EUT was setup to ANSI C63.4, 2003; tested to 2.1055 for compliance to FCC Part 15.407(g) requirements.
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

HT 20MHz					
Frequency stability versus Temp.					
Power Supply: AC 120V					
Temp. (°C)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)
-30	5745	5743.3852	5741.2611	5743.5322	5743.4378
	5785	5783.6573	5782.8487	5784.4730	5784.3003
	5825	5824.9213	5822.0954	5824.6779	5824.8446
-20	5745	5743.4379	5742.9268	5744.9992	5744.6859
	5785	5784.3190	5784.6561	5784.3155	5784.5815
	5825	5821.7084	5824.3992	5824.2726	5824.9198
-10	5745	5744.9088	5743.1300	5744.8825	5744.6125
	5785	5781.7668	5784.7995	5784.9302	5784.9658
	5825	5823.6202	5824.0583	5824.3997	5824.7349
0	5745	5741.0891	5744.3137	5744.4271	5744.0537
	5785	5782.0547	5782.4240	5784.3104	5783.8336
	5825	5821.6304	5821.1070	5824.9578	5824.2033
10	5745	5744.8217	5742.0342	5744.6924	5744.9056
	5785	5782.9843	5781.3228	5783.5028	5784.6647
	5825	5821.3980	5822.8572	5824.1925	5824.1409
20	5745	5742.2445	5741.2648	5741.6708	5743.5473
	5785	5784.2656	5781.6060	5784.0445	5784.3788
	5825	5823.0504	5824.8262	5823.5108	5822.4228
30	5745	5742.8830	5742.1479	5744.9622	5744.5213
	5785	5784.3976	5784.9743	5782.2565	5784.2998
	5825	5823.6996	5823.2234	5824.9607	5823.6554
40	5745	5744.2620	5742.3074	5741.6034	5742.0050
	5785	5784.7985	5782.4544	5784.8191	5784.1799
	5825	5822.8520	5823.1139	5824.6313	5824.2642
50	5745	5742.6919	5743.6025	5744.2009	5744.8615
	5785	5782.2541	5783.8877	5784.3750	5783.2458
	5825	5823.0704	5823.1990	5824.4724	5824.0880

Frequency stability versus Voltage					
Temperature: 25°C					
Power Supply (VAC)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)
108	5745	5744.6372	5743.1735	5741.4324	5741.7883
	5785	5781.5908	5784.8735	5783.5727	5784.0471
	5825	5821.3134	5824.8543	5821.3411	5822.9681
120	5745	5741.4167	5743.9550	5744.1133	5741.4175
	5785	5781.9253	5781.1131	5783.4587	5783.1249
	5825	5824.2173	5822.2104	5823.8269	5824.5347
132	5745	5744.0990	5741.9041	5741.4032	5742.4802
	5785	5782.7827	5782.7143	5783.3510	5784.7678
	5825	5824.4332	5824.8648	5821.5775	5822.3664

HT40 MHz					
Frequency stability versus Temp.					
Power Supply: AC 120V					
Temp. (°C)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)
-30	5755	5756.0582	5754.5056	5755.9492	5753.9491
	5795	5795.6404	5794.9994	5795.1064	5794.7493
-20	5755	5755.9726	5754.8646	5755.1206	5754.0923
	5795	5795.0666	5794.6563	5795.6386	5794.5781
-10	5755	5755.5794	5754.2206	5755.5100	5754.4174
	5795	5795.2046	5794.1722	5795.5354	5794.8778
0	5755	5755.7759	5754.8707	5755.0063	5754.0938
	5795	5795.3277	5794.5853	5795.5991	5794.0038
10	5755	5755.6200	5754.6594	5755.3176	5754.8257
	5795	5795.1933	5794.1438	5795.8181	5794.8473
20	5755	5755.3469	5754.6141	5755.4586	5754.8601
	5795	5795.7583	5794.1178	5795.9324	5794.8917
30	5755	5755.2506	5754.9835	5755.3107	5754.5396
	5795	5795.0696	5794.4994	5795.0619	5794.2074
40	5755	5755.3951	5754.2351	5755.8191	5754.9469
	5795	5795.3855	5794.7290	5795.8483	5794.0094
50	5755	5755.7029	5754.5359	5755.9051	5754.3707
	5795	5795.8794	5794.6142	5795.9973	5794.0524

Frequency stability versus Voltage					
Temperature: 25°C					
Power Supply (VAC)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)
108	5755	5756.3387	5754.8997	5756.9177	5753.8536
	5795	5795.5369	5794.8665	5795.7260	5794.8880
120	5755	5755.8880	5754.1603	5755.4292	5754.5181
	5795	5795.0636	5794.2899	5795.4524	5794.0398
132	5755	5755.5107	5754.7234	5755.8170	5754.6148
	5795	5795.0552	5794.2837	5795.7933	5794.5358

HT80 MHz					
Frequency stability versus Temp.					
Power Supply: AC 120V					
Temp. (°C)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)
-30	5775	5775.1198	5775.4826	5772.6731	5773.7879
-20	5775	5775.4863	5775.1456	5773.5355	5773.4554
-10	5775	5775.2347	5775.8708	5774.9966	5773.8641
0	5775	5775.3750	5775.2431	5774.0575	5773.1448
10	5775	5775.0963	5775.7355	5774.7396	5774.5290
20	5775	5775.3691	5775.1921	5774.6649	5774.5399
30	5775	5775.4589	5775.4786	5774.9680	5774.8477
40	5775	5775.0006	5775.8440	5774.4227	5774.9871
50	5775	5775.5613	5775.7544	5774.9905	5774.2985

Frequency stability versus Voltage					
Temperature: 25°C					
Power Supply (VAC)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)
108	5775	5774.3263	5777.5956	5776.5545	5775.7914
120	5775	5773.7249	5776.2737	5777.5571	5776.9237
132	5775	5774.2156	5776.1657	5775.6288	5776.8948

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

------END------