FCC TEST REPORT

Test report
On Behalf of
Changsha Qisi Technology Co., Ltd.
For
Aurga Camera Assistant
Model No.: Aurga C1

FCC ID: 2AMUA-AC1

Prepared for :	**Changsha Qisi Technology Co., Ltd.** **8#2107, Yongjiang Yuan, Xiangjiang Shiji Cheng Kaifu District, Changsha, Hunan Province, PRC**
Prepared By :	**Shenzhen HUAK Testing Technology Co., Ltd.** **1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai Street, Bao'an District, Shenzhen City, China**

TEST REPORT

Applicant's name	:	Changsha Qisi Technology Co., Ltd.
Address	:	8#2107, Yongjiang Yuan, Xiangjiang Shiji Cheng Kaifu District, Changsha, Hunan Province, PRC
Manufacture's Name	:	Changsha Qisi Technology Co., Ltd.
Address	:	8#2107, Yongjiang Yuan, Xiangjiang Shiji Cheng Kaifu District, Changsha, Hunan Province, PRC

Product description

Trade Mark:		/
Product name	:	Aurga Camera Assistant
Model and/or type reference	:	Aurga C1
Standards	:	FCC Rules and Regulations Part 15 Subpart C Section 15.247 ANSI C63.10: 2013

Date of Test	:	
Date (s) of performance of tests	:	March. 25, 2018 ~ April.17, 2018
Date of Issue	:	April.17, 2018
Test Result	:	**Pass**

Testing Engineer	:	
		(Gary Qian)
Technical Manager	:	
		(Eden Hu)
Authorized Signatory	:	
		(Jason Zhou)

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1.1 TEST PROCEDURES AND RESULTS

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BAND EDGE	COMPLIANT
OCCUPIED BANDWIDTH MEASUREMENT	COMPLIANT
POWER SPECTRAL DENSITY	COMPLIANT
PEAK OUTPUT POWEReak	COMPLIANT
OUT OF BAND EMISSIONS	COMPLIANT
ANTENNA REQUIREMENT	COMPLIANT

1.2 TEST FACILITY

Test Firm : Shenzhen HUAK Testing Technology Co., Ltd.

Address 1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai Street, Bao'an District, Shenzhen City, China

1.3 MEASUREMENT UNCERTAINTY

Measurement Uncertainty		
Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty(9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty(30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty(Above 1GHz)	=	4.06dB, k=2

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Aurga Camera Assistant
Model Name	Aurga C1
Serial Model	/
Model Difference	/
FCC ID	2AMUA-AC1
Antenna Type	Internal antenna
Antenna Gain	2 dBi
Operation frequency	802.11b/g/n 20:2412~2462 MHz 802.11n 40: 2422~2452 MHz
Number of Channels	802.11b/g/n20: 11CH 802.11 n40: 9CH
Modulation Type	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Power Source (Auxiliary test)	Model: XJX-1000 Input: AC 100-240V～50/60Hz 0.3A Output:DC 5.0V 1A
Power Rating	DC5V, 1.2A form Battery base(DC 3.6V or DC 5V From Adpter)
HW Version	SX_Lite V1.5
SW Version	V1.0

2.1.1 Carrier Frequency of Channels

Channel List for 802.11b/g/n(20MHz)/n(40MHz)							
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

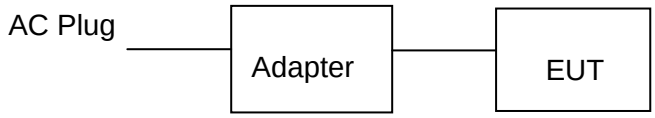
Operation of EUT during testing

Operating Mode
The mode is used: **Transmitting mode for 802.11b/g/n(20MHz)**
Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

Operating Mode
The mode is used: **Transmitting mode for 802.n(40MHz)**
Low Channel: 2422MHz
Middle Channel: 2437MHz
High Channel: 2452MHz

2.2 DESCRIPTION OF TEST SETUP

Operation of EUT during conducted testing and Radiation and Above1GHz Radiation testing:



2.3 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	R&S	ENV216	HKE-002	Dec. 28, 2017	1 Year
2.	Receiver	R&S	ESCI 7	HKE-010	Dec. 28, 2017	1 Year
3.	RF automatic control unit	Tonscend	JS0806-2	HKE-060	Dec. 28, 2017	1 Year
4.	Spectrum analyzer	R&S	FSP40	HKE-025	Dec. 28, 2017	1 Year
5.	Spectrum analyzer	Agilent	N9020A	HKE-048	Dec. 28, 2017	1 Year
6.	Preamplifier	Schwarzbeck	BBV 9743	HKE-006	Dec. 28, 2017	1 Year
7.	EMI Test Receiver	Rohde & Schwarz	ESCI 7	HKE-010	Dec. 28, 2017	1 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	HKE-012	Dec. 28, 2017	1 Year
9.	Loop Antenna	Schwarzbeck	FMZB 1519 B	HKE-014	Dec. 28, 2017	1 Year
10.	Horn Antenna	Schewarzbeck	9120D	HKE-013	Dec. 28, 2017	1 Year
11.	Pre-amplifier	EMCI	EMC051845 SE	HKE-015	Dec. 28, 2017	1 Year
12.	Pre-amplifier	Agilent	83051A	HKE-016	Dec. 28, 2017	1 Year
13.	EMI Test Software EZ-EMC	Tonscend	JS1120-B Version	HKE-083	Dec. 28, 2017	N/A
14.	Power Sensor	Agilent	E9300A	HKE-086	Dec. 28, 2017	1 Year
15.	Spectrum analyzer	Agilent	N9020A	HKE-048	Dec. 28, 2017	1 Year
16.	Signal generator	Agilent	N5182A	HKE-029	Dec. 28, 2017	1 Year
17.	Signal Generator	Agilent	83630A	HKE-028	Dec. 28, 2017	1 Year
18.	Shielded room	Shiel Hong	4*3*3	HKE-039	Dec. 28, 2017	3 Year

3. CONDUCTED EMISSIONS TEST

3.1 Conducted Power Line Emission Limit

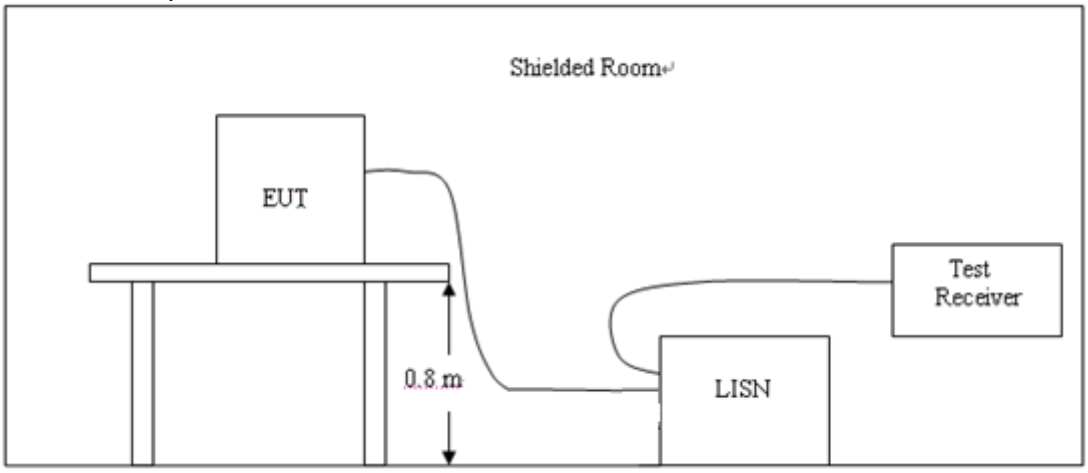
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Frequency (MHz)	Maximum RF Line Voltage (dBμV)			
	CLASS A		CLASS B	
	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

* Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

3.2 Test Setup



3.3 Test Procedure

1, The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.

2, Support equipment, if needed, was placed as per ANSI C63.10.

3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

4, If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.

5, All support equipments received AC power from a second LISN, if any.

6, The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.

7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

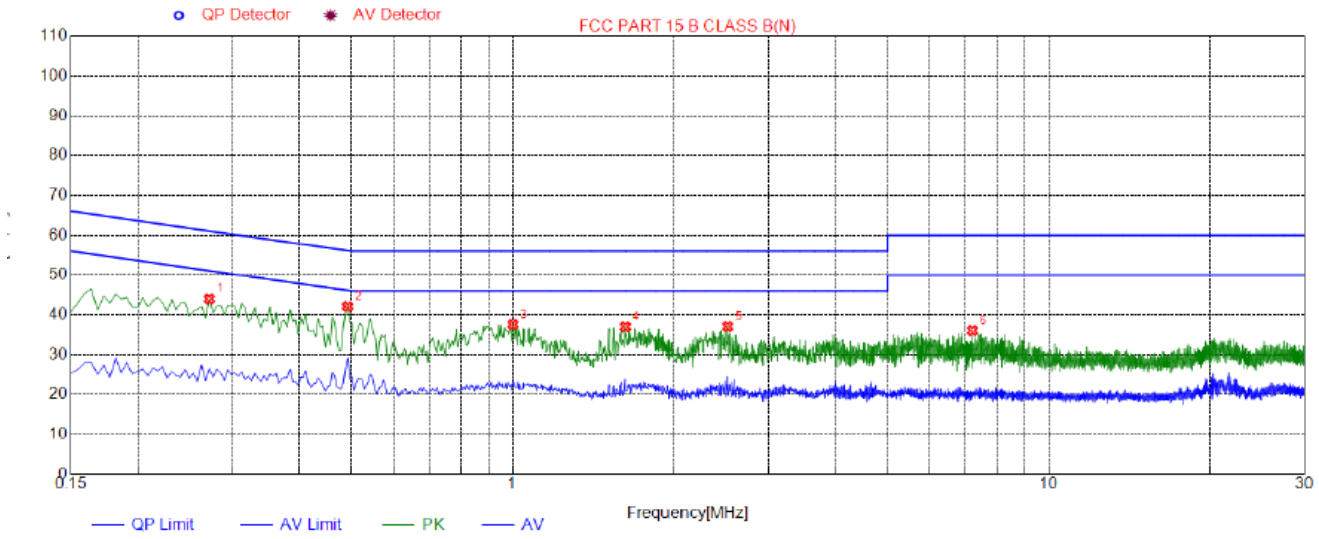
3.4 Test Result

PASS

All the test modes completed for test.

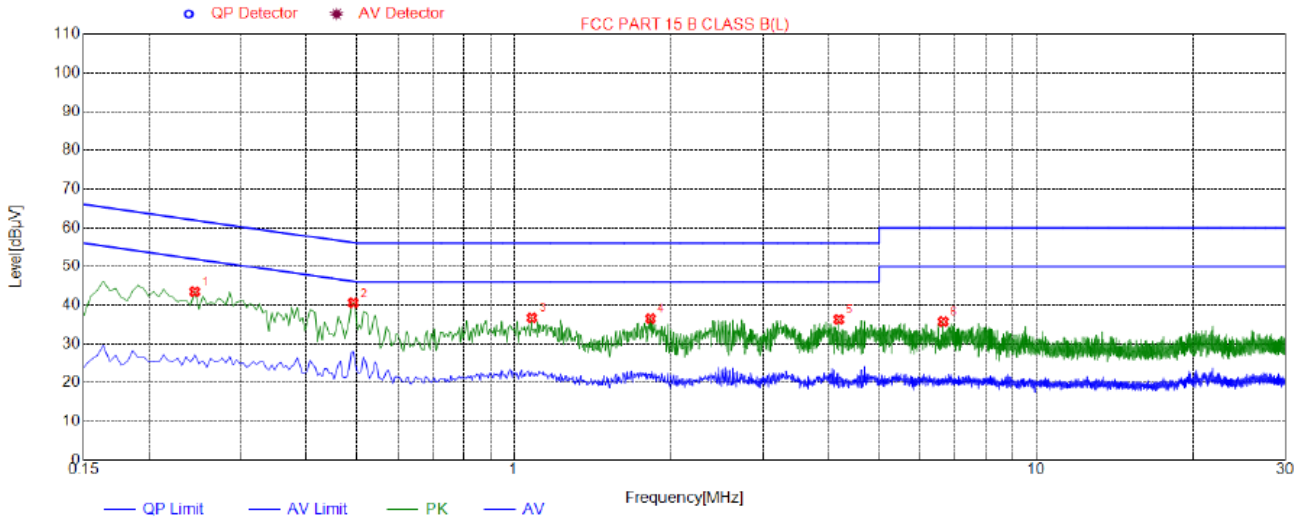
Remark: We measured Conducted Emission at 802.11b/802.11g/802.11n HT20/HT40 mode in AC 120V/60Hz,the worst case was recorded .

Power supply:	DC 5V from Adapter AC 120V/60Hz	Polarization	L



NO.	Freq. [MHz]	Level [dBμV]	Factor [dB]	Limit [dBμV]	Margin [dB]	Detector
1	0.2715	44.02	10.03	61.07	17.05	Qp
2	0.4920	42.10	10.04	56.14	14.04	Qp
3	1.0005	37.58	10.06	56.00	18.42	Qp
4	1.6215	37.02	10.11	56.00	18.98	Qp
5	2.5170	37.08	10.19	56.00	18.92	Qp
6	7.1970	36.07	10.19	60.00	23.93	Qp

Power supply:	DC 5V from Adapter AC 120V/60Hz	Polarization	N



NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Detector
1	0.2445	43.52	10.03	61.95	18.43	Qp
2	0.4920	40.57	10.04	56.14	15.57	Qp
3	1.0815	36.74	10.07	56.00	19.26	Qp
4	1.8240	36.55	10.14	56.00	19.45	Qp
5	4.1865	36.33	10.25	56.00	19.67	Qp
6	6.6345	35.78	10.21	60.00	24.22	Qp

4 RADIATED EMISSION TEST

4.1 Radiation Limit

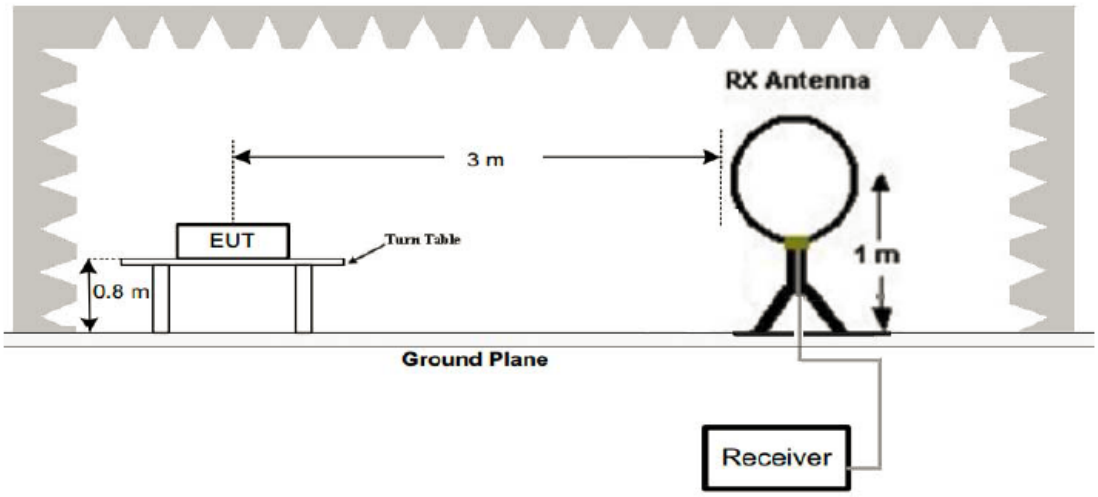
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
0.009-0.49	3	20log(2400/F(KHz))+40log(300/3)	2400/F(KHz)
0.49-1.705	3	20log(24000/F(KHz))+ 40log(30/3)	24000/F(KHz)
1.705-30	3	20log(30)+ 40log(30/3)	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

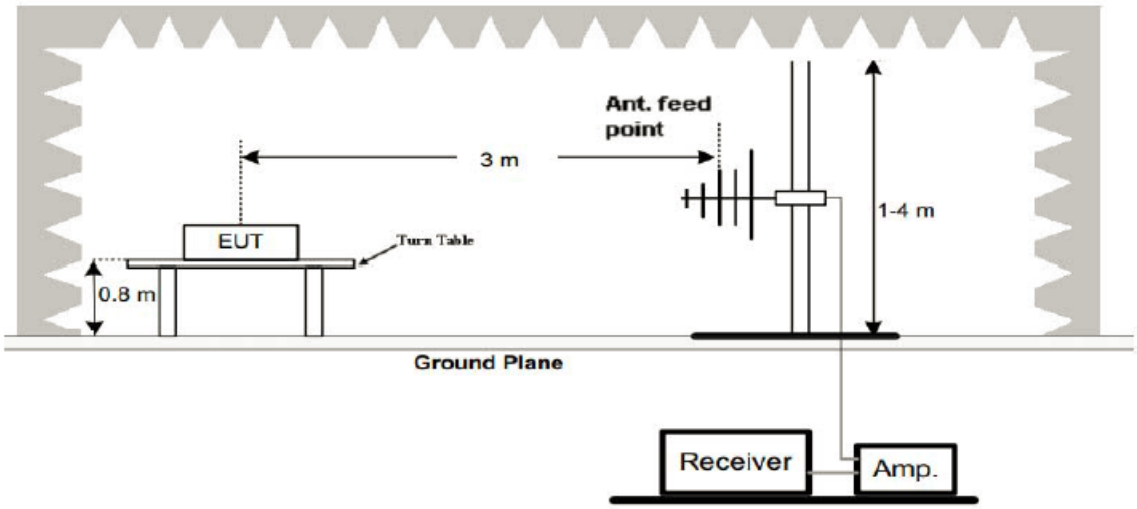
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

4.2 Test Setup

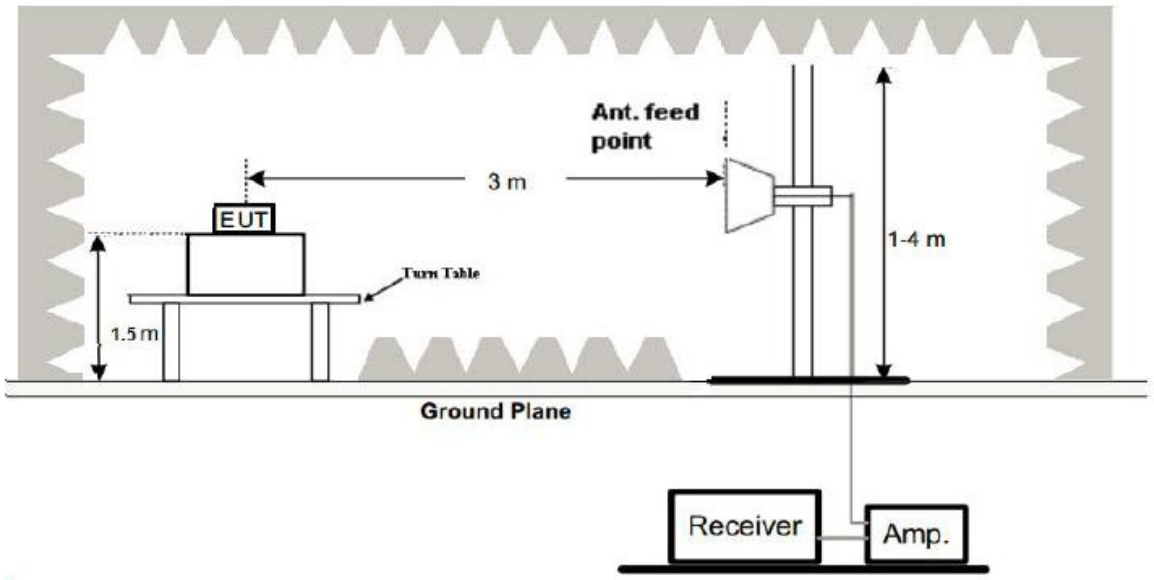
（1）Radiated Emission Test-Up Frequency Below 30MHz



（2）Radiated Emission Test-Up Frequency 30MHz~1GHz



（3）Radiated Emission Test-Up Frequency Above 1GHz



4.3 Test Procedure

1. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a).

Note:
For battery operated equipment, the equipment tests shall be performed using a new battery.

4.4 Test Result

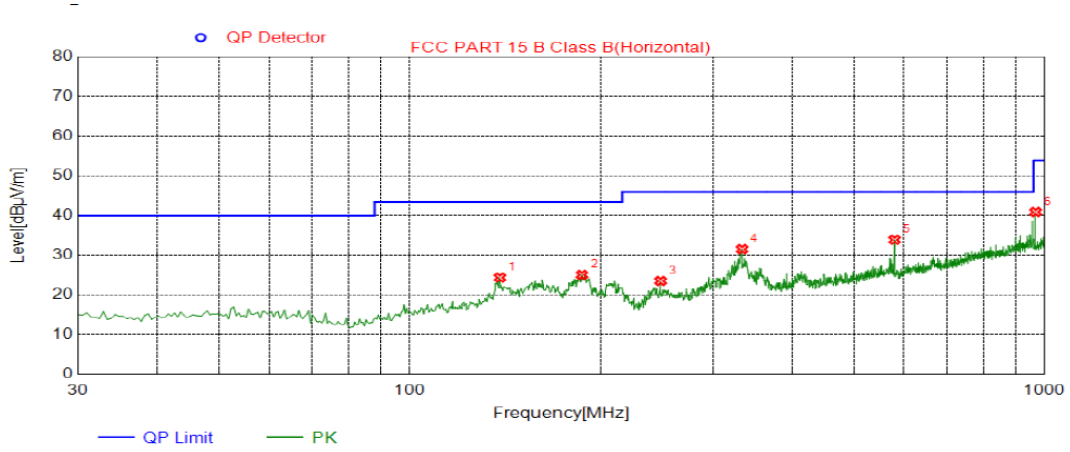
PASS
All the test modes completed for test. The worst case of Radiated Emission （802.11b Transmitting Low Channel-2412MHz (worst case) ）; the test data of this mode was reported.

For 9 KHz-30MHz

Frequency (MHz)	Corrected Reading (dBuV/m)@3m	FCC Limit (dBuV/m)@3m	Margin(dB)	Detector	Result
0.27	50.45	98.98	48.53	QP	PASS
0.65	43.86	71.35	27.49	QP	PASS
18.26	45.02	69.54	24.52	QP	PASS
23.42	44.32	69.54	25.22	QP	PASS

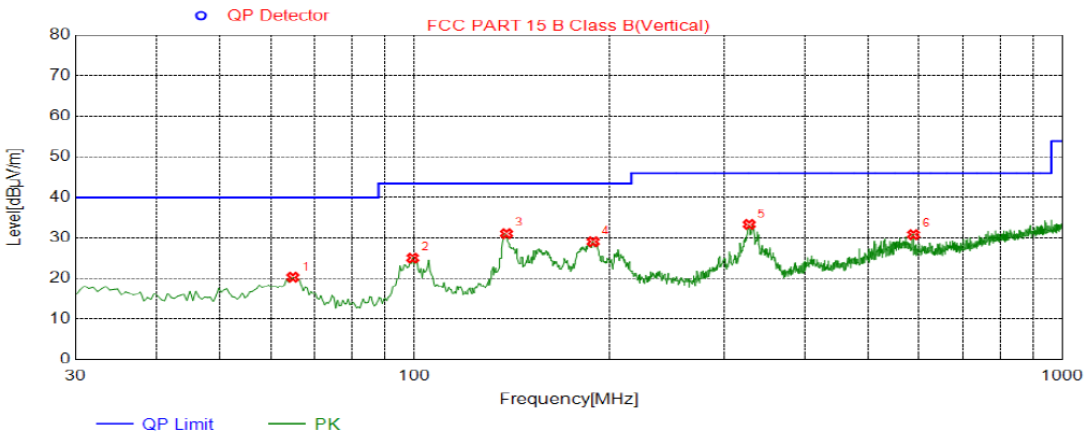
For 30MHz-1GHz

Horizontal



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	138.6400	24.45	-12.66	43.50	19.05	100	32	Horizontal
2	186.6550	25.14	-13.99	43.50	18.36	100	54	Horizontal
3	248.2500	23.60	-14.45	46.00	22.40	100	67	Horizontal
4	333.6100	31.60	-11.94	46.00	14.40	100	270	Horizontal
5	579.9900	33.96	-6.57	46.00	12.04	100	260	Horizontal
6	967.0200	40.94	-0.30	54.00	13.06	100	35	Horizontal

Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	64.9200	20.35	-17.00	40.00	19.65	100	41	Vertical
2	99.3550	25.14	-16.30	43.50	18.36	100	190	Vertical
3	138.6400	31.15	-12.66	43.50	12.35	100	174	Vertical
4	188.5950	29.16	-14.23	43.50	14.34	100	348	Vertical
5	328.2750	33.38	-12.02	46.00	12.62	100	171	Vertical
6	588.2350	30.92	-6.73	46.00	15.08	100	348	Vertical

Above 1 GHz Test Results:

LOW CH1 (802.11b Mode)/2412
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824	62.39	-3.64	58.75	74	-15.25	peak
4824	46.27	-3.64	42.63	54	-11.37	AVG
7236	56.37	-0.95	55.42	74	-18.58	peak
7236	41.21	-0.95	40.26	54	-13.74	AVG
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Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824	62.23	-3.64	58.59	74	-15.41	peak
4824	46.47	-3.64	42.83	54	-11.17	AVG
7236	56.65	-0.95	55.7	74	-18.3	peak
7236	41.27	-0.95	40.32	54	-13.68	AVG
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Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

MID CH6 (802.11b Mode)/2437
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	61.42	-3.51	57.91	74	-16.09	peak
4874	46.51	-3.51	43	54	-11	AVG
7311	56.47	-0.82	55.65	74	-18.35	peak
7311	42.26	-0.82	41.44	54	-12.56	AVG
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Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	61.82	-3.51	58.31	74	-15.69	peak
4874	46.51	-3.51	43	54	-11	AVG
7311	57.32	-0.82	56.5	74	-17.5	peak
7311	41.79	-0.82	40.97	54	-13.03	AVG
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---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

HIGH CH11 (802.11b Mode)/2462

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	61.42	-3.43	57.99	74	-16.01	peak
4924	45.75	-3.43	42.32	54	-11.68	AVG
7386	56.52	-0.75	55.77	74	-18.23	peak
7386	41.69	-0.75	40.94	54	-13.06	AVG
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---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	61.13	-3.43	57.7	74	-16.3	peak
4924	46.79	-3.43	43.36	54	-10.64	AVG
7386	56.37	-0.75	55.62	74	-18.38	peak
7386	41.26	-0.75	40.51	54	-13.49	AVG
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---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Remark：
(1) Measuring frequencies from 1 GHz to the 25 GHz。
(2) “F” denotes fundamental frequency; “H” denotes spurious frequency. “E” denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) Data of measurement within this frequency range shown “--- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

LOW CH1 (802.11g Mode)/2412
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824	61.47	-3.64	57.83	74	-16.17	peak
4824	46.36	-3.64	42.72	54	-11.28	AVG
7236	56.42	-0.95	55.47	74	-18.53	peak
7236	41.87	-0.95	40.92	54	-13.08	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824	61.21	-3.64	57.57	74	-16.43	peak
4824	46.35	-3.64	42.71	54	-11.29	AVG
7236	55.61	-0.95	54.66	74	-19.34	peak
7236	41.53	-0.95	40.58	54	-13.42	AVG
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---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

MID CH6 (802.11g Mode)/2437
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	59.75	-3.51	56.24	74	-17.76	peak
4874	45.29	-3.51	41.78	54	-12.22	AVG
7311	56.25	-0.82	55.43	74	-18.57	peak
7311	41.48	-0.82	40.66	54	-13.34	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	60.69	-3.51	57.18	74	-16.82	peak
4874	45.25	-3.51	41.74	54	-12.26	AVG
7311	56.29	-0.82	55.47	74	-18.53	peak
7311	40.87	-0.82	40.05	54	-13.95	AVG
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---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

HIGH CH11 (802.11g Mode)/2462

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	61.35	-3.43	57.92	74	-16.08	peak
4924	46.65	-3.43	43.22	54	-10.78	AVG
7386	55.89	-0.75	55.14	74	-18.86	peak
7386	42.75	-0.75	42	54	-12	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	60.85	-3.43	57.42	74	-16.58	peak
4924	46.42	-3.43	42.99	54	-11.01	AVG
7386	55.16	-0.75	54.41	74	-19.59	peak
7386	41.35	-0.75	40.6	54	-13.4	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Remark：
(1) Measuring frequencies from 1 GHz to the 25 GHz。
(2) “F” denotes fundamental frequency; “H” denotes spurious frequency. “E” denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) Data of measurement within this frequency range shown “--- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

LOW CH1 (802.11n/H20 Mode)/2412
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824	60.26	-3.64	56.62	74	-17.38	peak
4824	45.89	-3.64	42.25	54	-11.75	AVG
7236	56.13	-0.95	55.18	74	-18.82	peak
7236	41.36	-0.95	40.41	54	-13.59	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4824	59.79	-3.64	56.15	74	-17.85	peak
4824	45.59	-3.64	41.95	54	-12.05	AVG
7236	55.37	-0.95	54.42	74	-19.58	peak
7236	40.26	-0.95	39.31	54	-14.69	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

MID CH6 (802.11n/H20 Mode)/2437
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	60.23	-3.51	56.72	74	-17.28	peak
4874	45.42	-3.51	41.91	54	-12.09	AVG
7311	55.79	-0.82	54.97	74	-19.03	peak
7311	41.42	-0.82	40.6	54	-13.4	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	59.76	-3.51	56.25	74	-17.75	peak
4874	46.26	-3.51	42.75	54	-11.25	AVG
7311	56.37	-0.82	55.55	74	-18.45	peak
7311	41.65	-0.82	40.83	54	-13.17	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

HIGH CH11 (802.11n/H20 Mode)/2462
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	60.26	-3.43	56.83	74	-17.17	peak
4924	45.67	-3.43	42.24	54	-11.76	AVG
7386	56.25	-0.75	55.5	74	-18.5	peak
7386	41.62	-0.75	40.87	54	-13.13	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	59.85	-3.43	56.42	74	-17.58	peak
4924	45.72	-3.43	42.29	54	-11.71	AVG
7386	56.36	-0.75	55.61	74	-18.39	peak
7386	41.25	-0.75	40.5	54	-13.5	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Remark：
(1) Measuring frequencies from 1 GHz to the 25 GHz。
(2) “F” denotes fundamental frequency; “H” denotes spurious frequency. “E” denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) Data of measurement within this frequency range shown “--- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

LOW CH3 (802.11n/H40 Mode)/2422
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	62.65	-3.63	59.02	74	-14.98	peak
4924	46.43	-3.63	42.8	54	-11.2	AVG
7386	56.39	-0.94	55.45	74	-18.55	peak
7386	42.58	-0.94	41.64	54	-12.36	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4924	62.39	-3.63	58.76	74	-15.24	peak
4924	45.67	-3.63	42.04	54	-11.96	AVG
7386	56.26	-0.94	55.32	74	-18.68	peak
7386	41.59	-0.94	40.65	54	-13.35	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

MID CH6 (802.11n/H40 Mode)/2437
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	61.79	-3.51	58.28	74	-15.72	peak
4874	45.52	-3.51	42.01	54	-11.99	AVG
7311	55.68	-0.82	54.86	74	-19.14	peak
7311	41.21	-0.82	40.39	54	-13.61	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4874	61.49	-3.51	57.98	74	-16.02	peak
4874	45.26	-3.51	41.75	54	-12.25	AVG
7311	55.37	-0.82	54.55	74	-19.45	peak
7311	41.17	-0.82	40.35	54	-13.65	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

HIGH CH9 (802.11n/H40 Mode)/2452
Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4904	61.29	-3.43	57.86	74	-16.14	peak
4904	45.21	-3.43	41.78	54	-12.22	AVG
7356	55.35	-0.75	54.6	74	-19.4	peak
7356	41.49	-0.75	40.74	54	-13.26	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
4904	60.75	-3.43	57.32	74	-16.68	peak
4904	45.19	-3.43	41.76	54	-12.24	AVG
7356	54.46	-0.75	53.71	74	-20.29	peak
7356	40.65	-0.75	39.9	54	-14.1	AVG
---	---	---	---	---	---	---
---	---	---	---	---	---	---
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Remark：
(1) Measuring frequencies from 1 GHz to the 25 GHz。
(2) “F” denotes fundamental frequency; “H” denotes spurious frequency. “E” denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) Data of measurement within this frequency range shown “--- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

5 BAND EDGE

5.1 Limits

Please refer section15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

5.2 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 100KHz and VBM to 300KHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength.The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 100 KHz and VBW to 300 KHz, to measure the conducted peak band edge.

5.3 Test Result

PASS

For Radiated Bandedge Measurement

Operation Mode:

802.11b Mode TX CH Low (2412MHz)

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	60.12	-5.81	54.31	74	-19.69	peak
2390	41.65	-5.81	35.84	54	-18.16	AVG
2399	65.26	-5.84	59.42	74	-14.58	peak
2399	47.63	-5.84	41.79	54	-12.21	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	62.15	-5.81	56.34	74	-17.66	peak
2390	42.05	-5.81	36.24	54	-17.76	AVG
2399	67.12	-5.84	61.28	74	-12.72	peak
2399	47.69	-5.84	41.85	54	-12.15	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Operation Mode: TX CH High (2462MHz)
Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	57.75	-5.65	52.1	74	-21.9	peak
2483.5	42.63	-5.65	36.98	54	-17.02	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	59.12	-5.65	53.47	74	-20.53	peak
2483.5	42.13	-5.65	36.48	54	-17.52	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						
Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.						

Operation Mode: 802.11g Mode TX CH Low (2412MHz)
Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	60.27	-5.81	54.46	74	-19.54	peak
2390	43.52	-5.81	37.71	54	-16.29	AVG
2399	62.46	-5.84	56.62	74	-17.38	peak
2399	47.12	-5.84	41.28	54	-12.72	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	61.18	-5.81	55.37	74	-18.63	peak
2390	42.96	-5.81	37.17	54	-16.83	AVG
2399	62.57	-5.84	56.73	74	-17.27	peak
2399	46.52	-5.84	40.68	54	-13.32	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Operation Mode: TX CH High (2462MHz)
Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	54.16	-5.65	48.51	74	-25.49	peak
2483.5	41.26	-5.65	36.61	54	-18.39	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	55.85	-5.65	50.2	74	-23.8	peak
2483.5	42.17	-5.65	36.52	54	17.48	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						
Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.						

Operation Mode: 802.11n/H20 Mode TX CH Low (2412MHz)
Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	57.52	-5.81	51.71	74	-22.29	peak
2390	41.67	-5.81	35.86	54	-18.14	AVG
2399	59.63	-5.84	53.79	74	-20.21	peak
2399	46.78	-5.84	40.94	54	-13.06	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	57.96	-5.81	52.15	74	-21.85	peak
2390	40.87	-5.81	35.06	54	-18.94	AVG
2399	60.52	-5.84	54.68	74	-19.32	peak
2399	47.16	-5.84	41.32	54	-12.68	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Operation Mode: TX CH High (2462MHz)
Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	55.16	-5.65	49.51	74	-24.49	peak
2483.5	42.05	-5.65	36.04	54	-17.6	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	55.86	-5.65	50.21	74	-23.79	peak
2483.5	41.26	-5.65	35.61	54	-18.39	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						
Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.						

Operation Mode: 802.11n/H40 Mode TX CH Low (2422MHz)
Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	55.16	-5.81	49.35	74	-24.65	peak
2390	41.76	-5.81	35.95	54	-18.05	AVG
2399	58.25	-5.84	52.41	74	-21.59	peak
2399	47.21	-5.84	41.37	54	-12.63	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2390	56.29	-5.81	50.48	74	-23.52	peak
2390	42.38	-5.81	36.57	54	17.43	AVG
2399	60.17	-5.84	54.33	74	-19.67	peak
2399	48.26	-5.84	42.42	54	-11.58	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

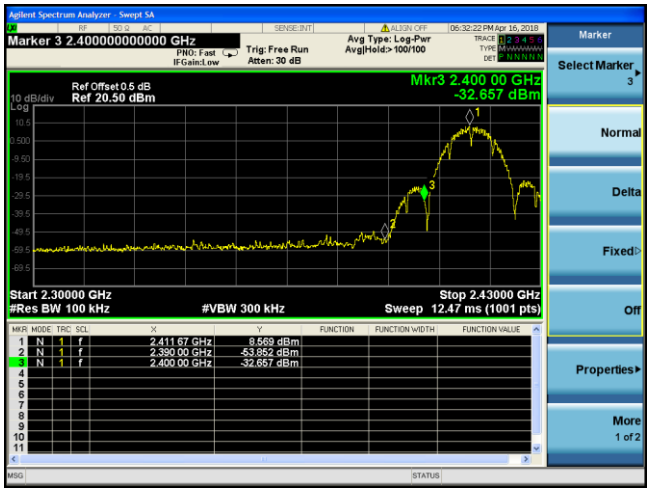
Operation Mode: TX CH High (2452MHz)
Horizontal

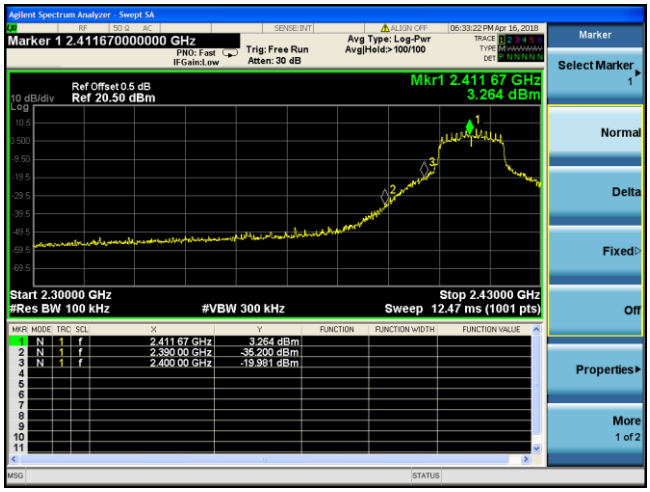
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	52.19	-5.65	46.54	74	-27.46	peak
2483.5	41.78	-5.65	36.13	54	-17.87	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Vertical:

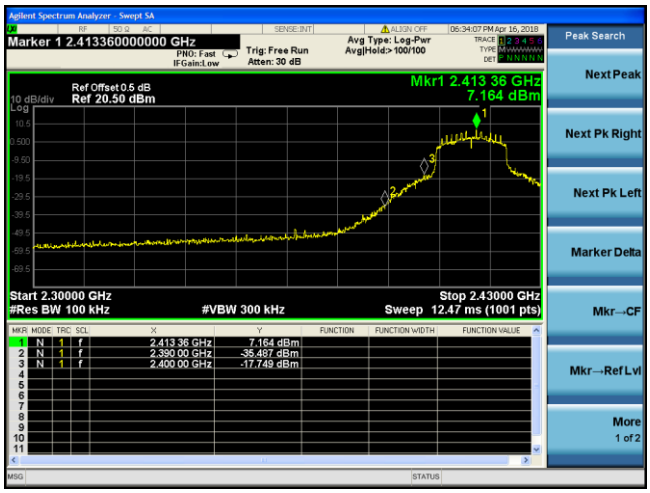
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2483.5	50.62	-5.65	44.97	74	-29.03	peak
2483.5	41.93	-5.65	36.28	54	-17.72	AVG
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.						
Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.						

For Conducted Bandedge Measurement

802.11b			
Frequency (MHz)	**Delta Peak to Band emission (dBc)**	**Limit (dBc)**	**Verdict**
2400.00	-41.23	-20	PASS
2483.50	-49.73	-20	PASS
			
2412		2462	

802.11g			
Frequency (MHz)	**Delta Peak to Band emission (dBc)**	**Limit (dBc)**	**Verdict**
2400.00	-23.25	-20	PASS
2483.05	-36.72	-20	PASS
			
2412		2462	

802.11n HT20			
Frequency (MHz)	**Delta Peak to Band emission (dBc)**	**Limit (dBc)**	**Verdict**
2400.00	-24.91	-20	PASS
2483.50	-35.41	-20	PASS



2412	2462

802.11n HT40			
Frequency (MHz)	**Delta Peak to Band emission (dBc)**	**Limit (dBc)**	**Verdict**
2400.00	-28.54	-20	PASS
2483.50	-28.31	-20	PASS

2422	2452

6 6dB Bandwidth

6.1 Test Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

6.2 Test Procedure

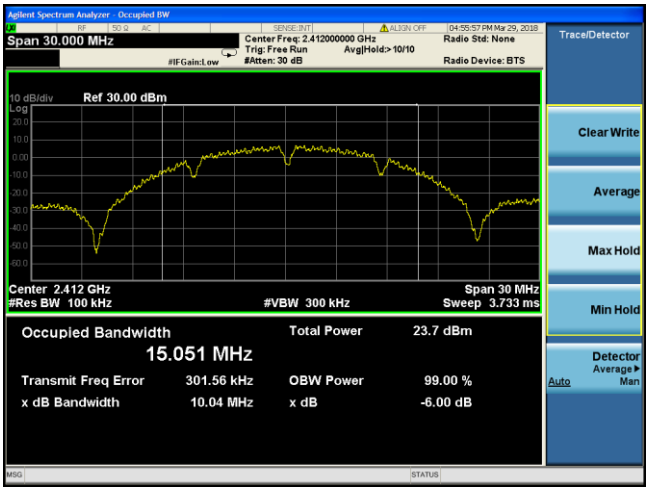
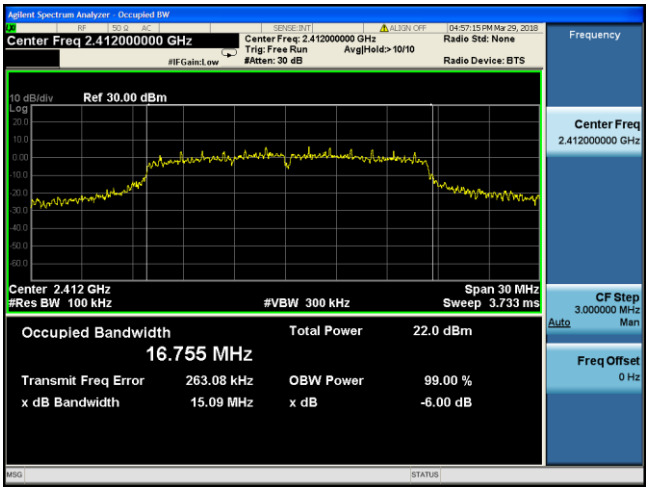
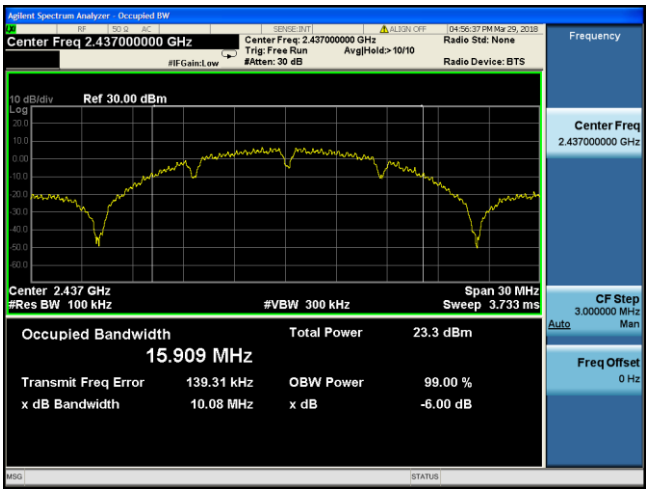
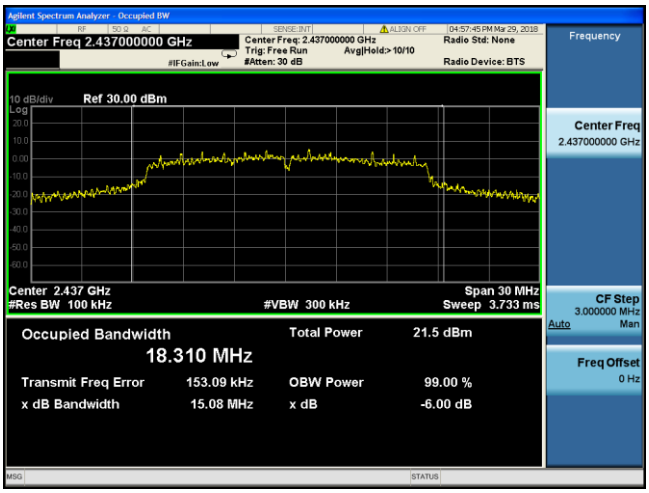
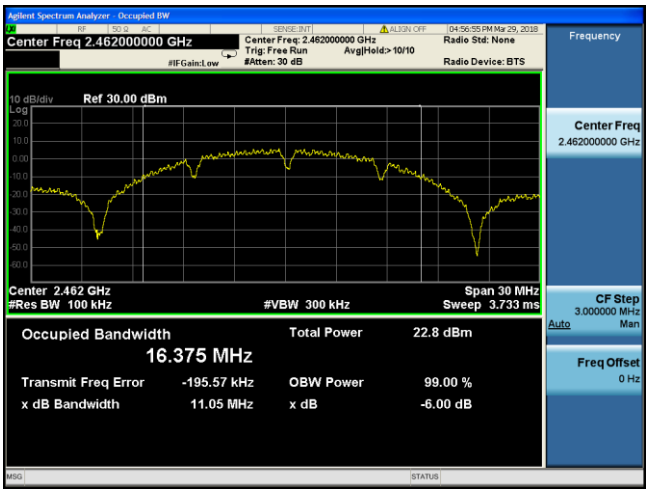
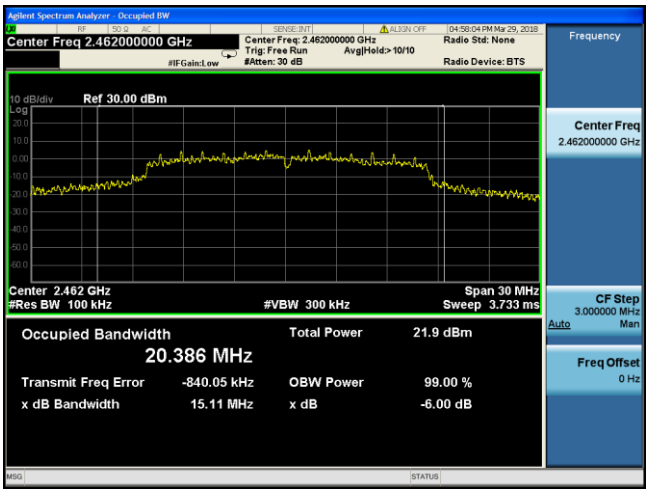
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW=100 KHz and VBW=300KHz.The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.According to KDB558074 for one of the following procedures may be used to determine the modulated DTS device signal bandwidth.

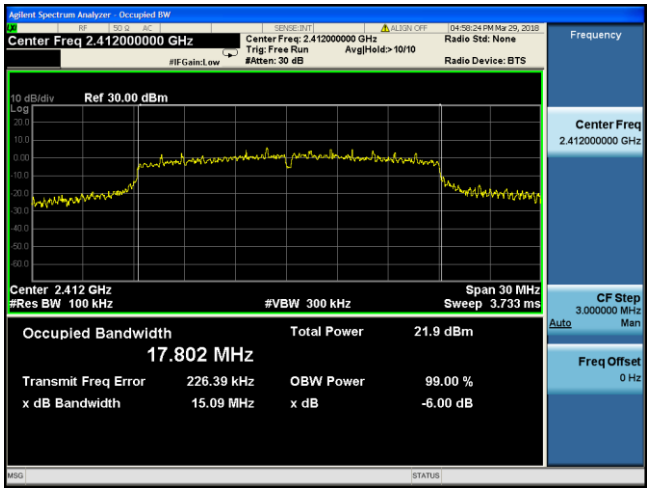
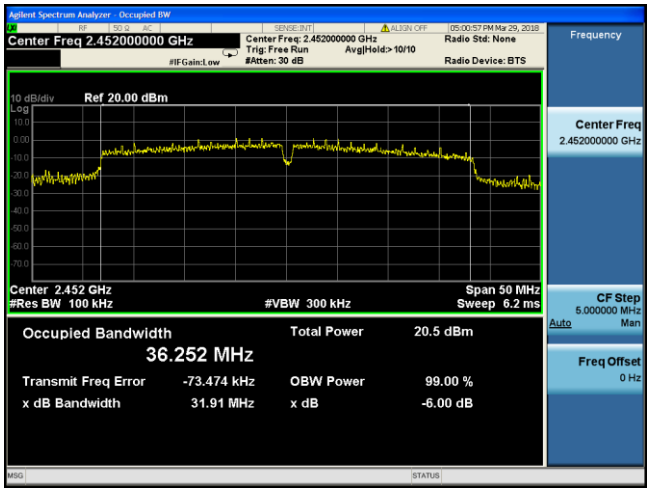
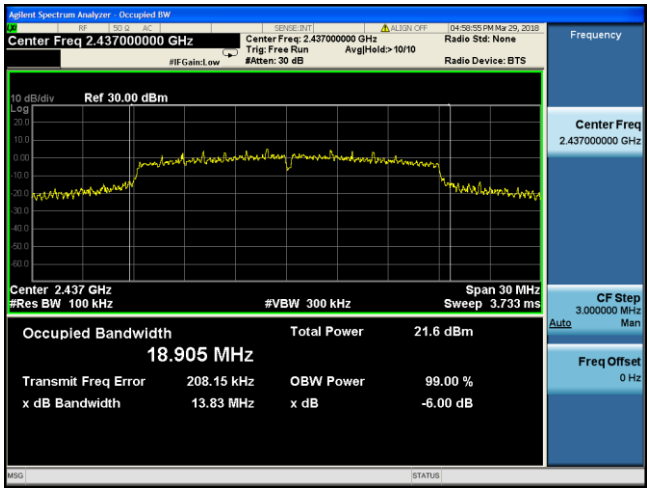
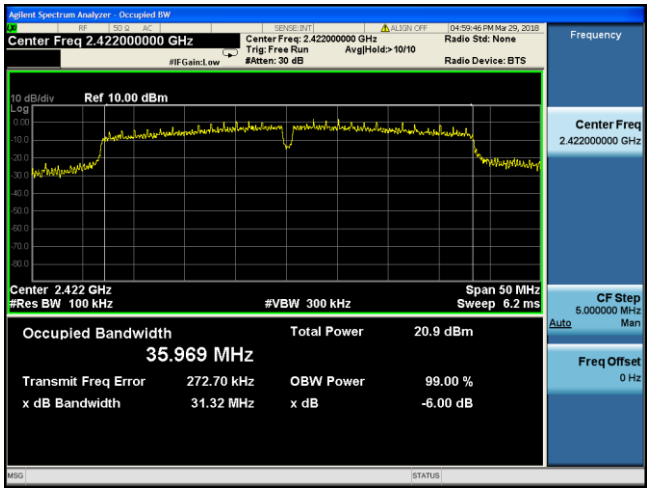
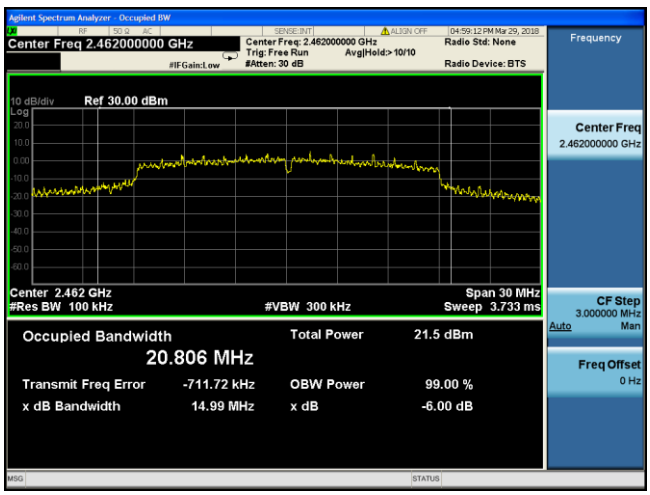
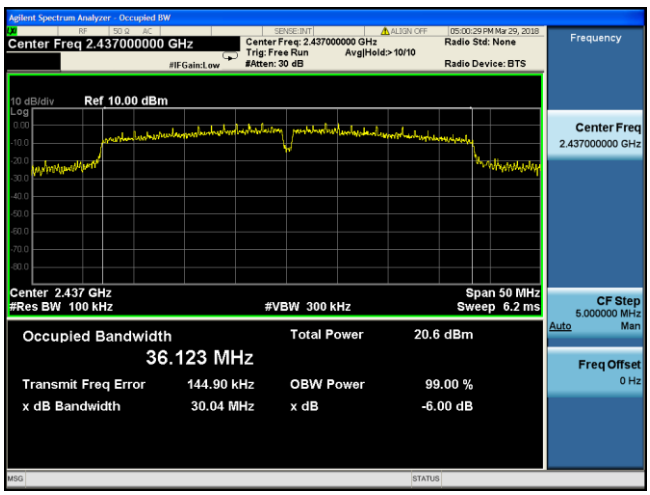
1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.3 Test Result

PASS

Type	Channel	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11b	01	10.04	≥500	Pass
	06	10.08		
	11	11.05		
802.11g	01	15.09	≥500	Pass
	06	15.08		
	11	15.11		
802.11nHT20	01	15.09	≥500	Pass
	06	13.83		
	11	14.99		
802.11nHT40	03	31.91	≥500	Pass
	06	31.32		
	09	30.04		

802.11b	802.11g
	
CH01	CH01
	
CH06	CH06
	
CH11	CH11

802.11n HT20	802.11n HT40
	
CH01	CH03
	
CH06	CH06
	
CH11	CH09

7 POWER SPECTRAL DENSITY TEST

7.1 Test Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

7.2 Test Procedure

According to KDB 558074 D01 Method PKPSD (peak PSD) This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance, and is optional if the maximum conducted (average) output power was used to demonstrate compliance.

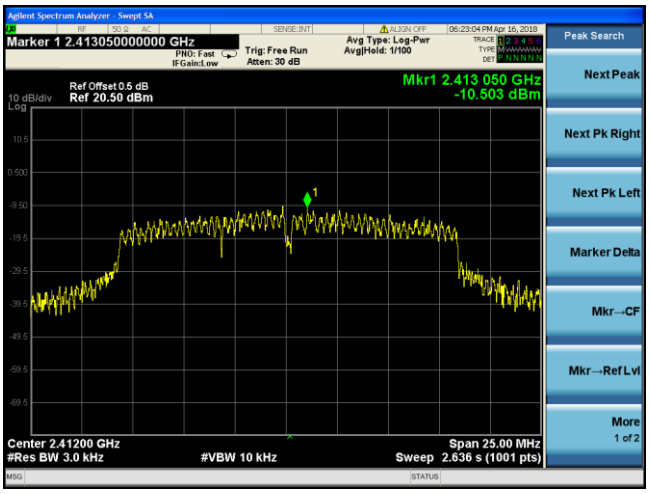
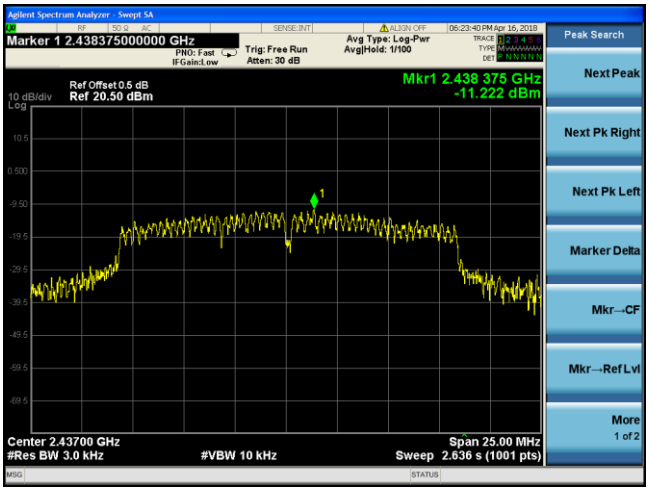
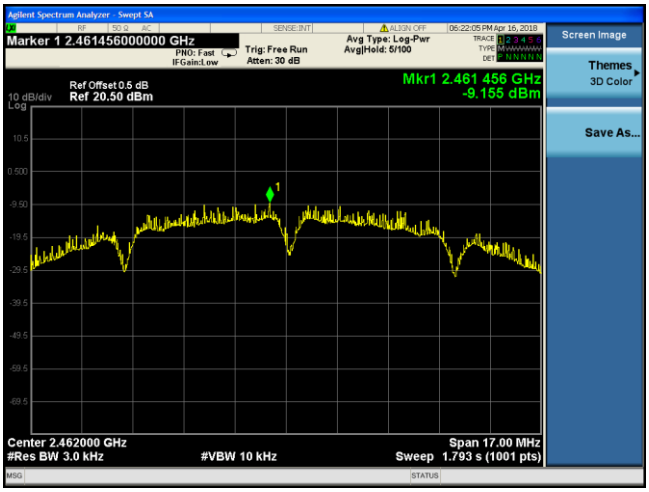
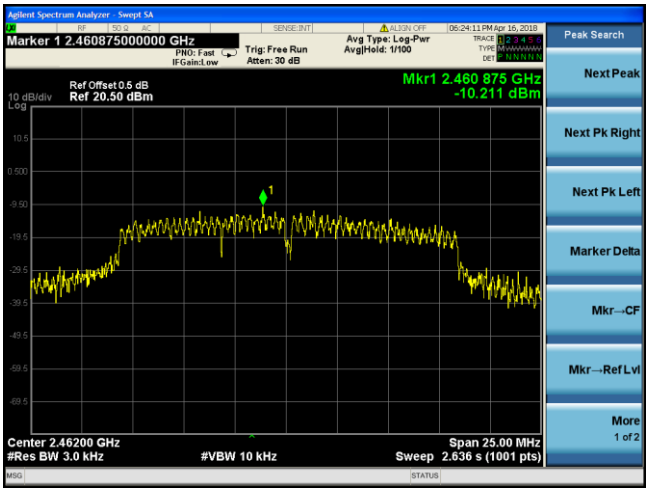
1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat

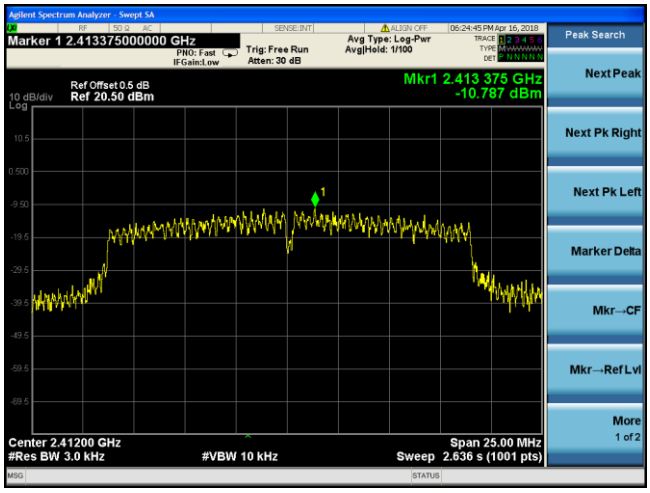
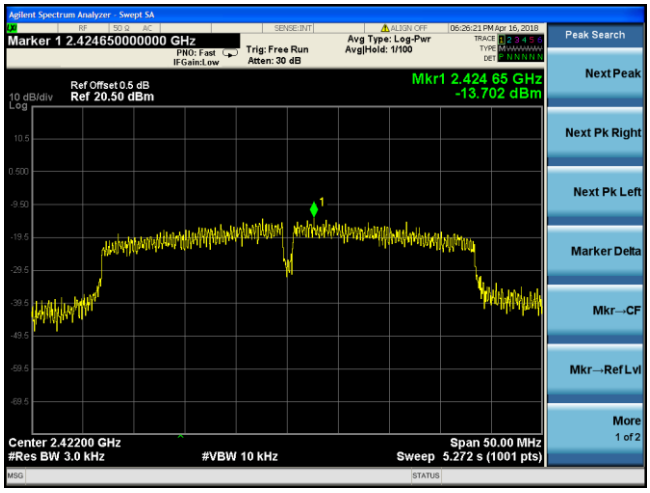
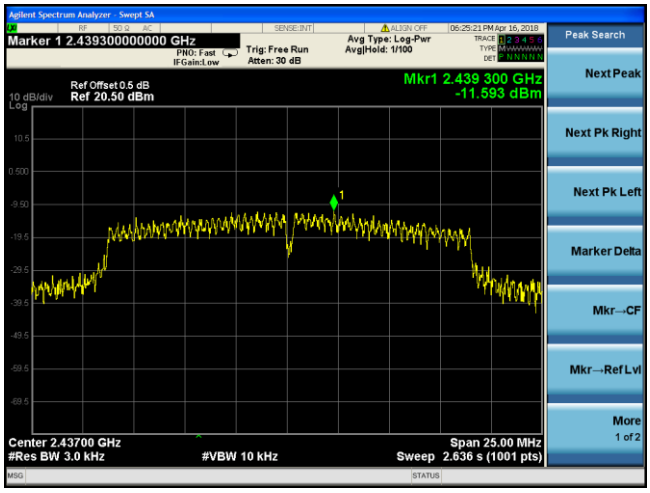
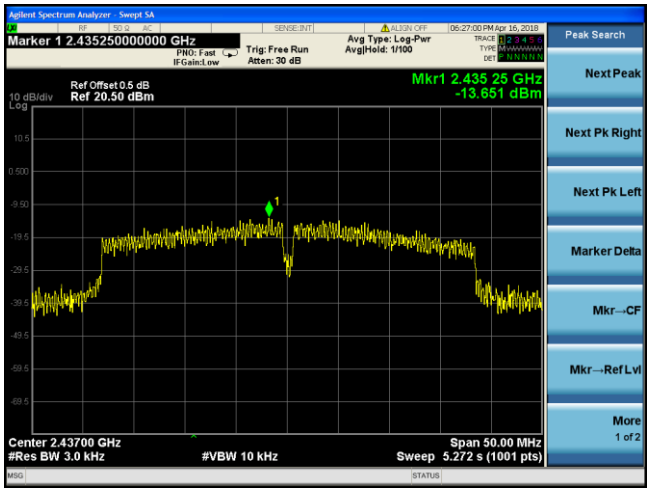
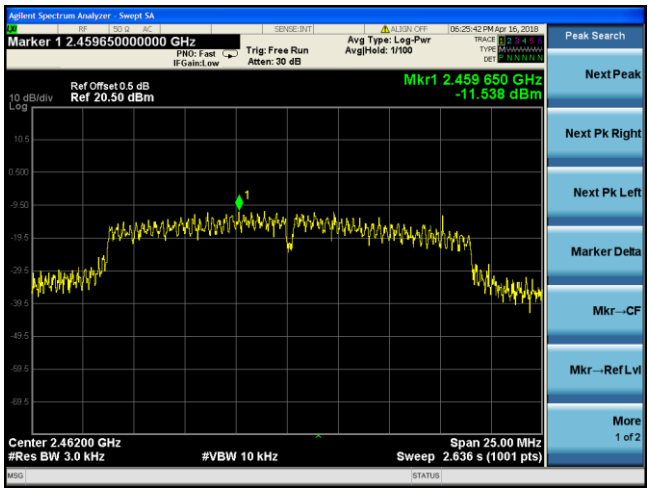
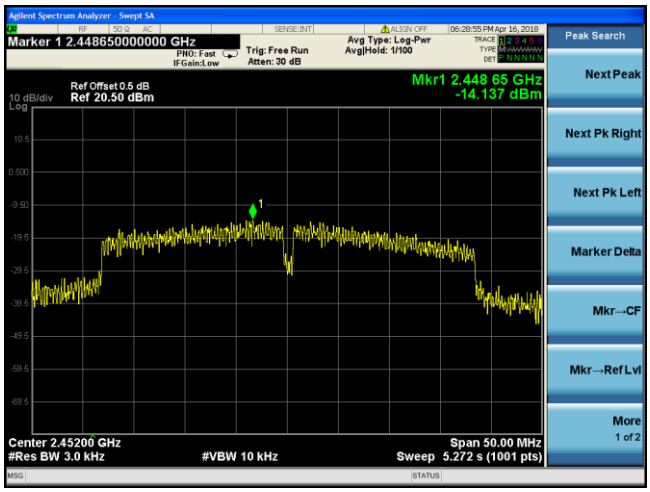
7.3 Test Result

PASS

All the test modes completed for test.

Type	Channel	Power Spectral Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
802.11b	01	-8.299	8.00	Pass
	06	-7.512		
	11	-9.155		
802.11g	01	-10.503	8.00	Pass
	06	-11.222		
	11	-10.211		
802.11n(HT20)	01	-10.787	8.00	Pass
	06	-11.593		
	11	-11.538		
802.11n(HT40)	03	-13.702	8.00	Pass
	06	-13.651		
	09	-14.137		

802.11b	802.11g
	
CH01	CH01
	
CH06	CH06
	
CH11	CH11

802.11nHT20	802.11nHT40
	
CH01	CH03
	
CH06	CH06
	
CH11	CH09

8 PEAK OUTPUT POWER TEST

8.1 Test Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

8.2 Test Procedure

According to KDB558074 D01 DTS Measurement Guidance Section 9.1 Maximum peak conducted output power,9.1.2. and Average conducted output power, 9.2.3.1.

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

The maximum Average conducted output power may be measured using a wideband RF power meter with a thermocouple derector or equivalent. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

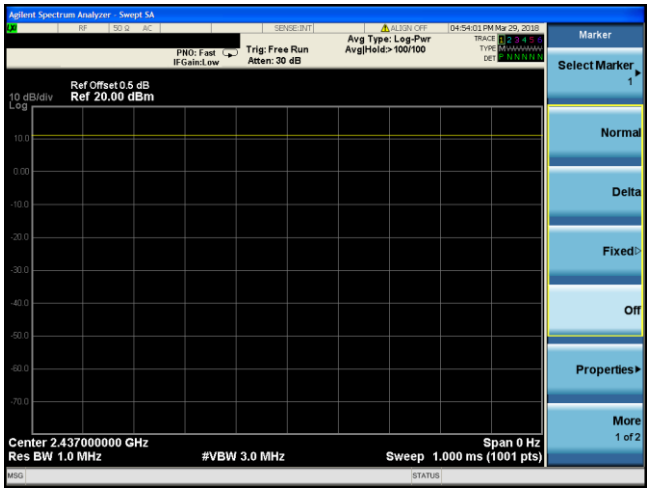
8.3 Test Result

PASS

Type	Channel	Output power PK (dBm)	Output power AV (dBm)	Limit (dBm)	Result
802.11b	01	18.21	15.68	30.00	Pass
	06	17.84	15.31		
	11	17.41	14.93		
802.11g	01	20.93	17.47	30.00	Pass
	06	20.39	16.91		
	11	20.75	17.32		
802.11n(HT20)	01	20.89	16.31	30.00	Pass
	06	20.03	15.43		
	11	19.85	15.32		
802.11n(HT40)	03	20.43	15.43	30.00	Pass
	06	20.07	15.09		
	09	19.98	14.91		

Note: 1.The test results including the cable lose.

Duty cycle used in all test items: 100%



9 OUT OF BAND EMISSIONS TEST

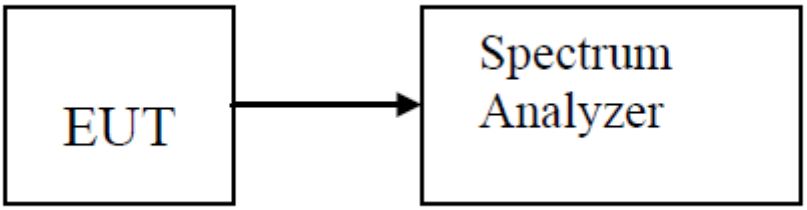
9.1 Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB

9.2 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013, For 30MHz-25GHz ,Set RBW=100kHz and VBW= 300KHz in order to measure the peak field strength, and mwasure frequeny range from 30MHz to 25GHz.

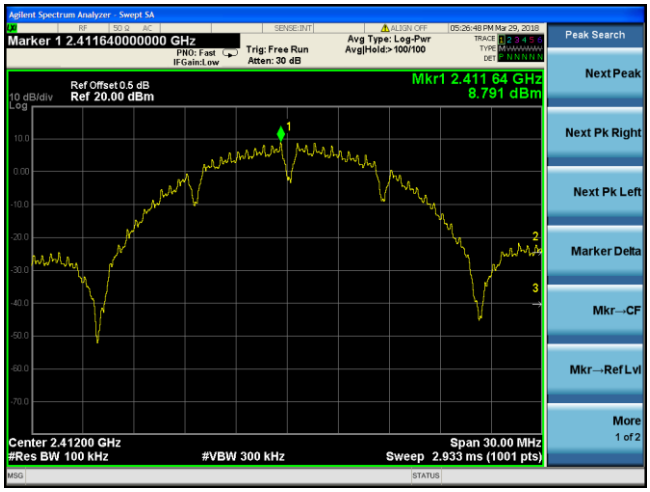
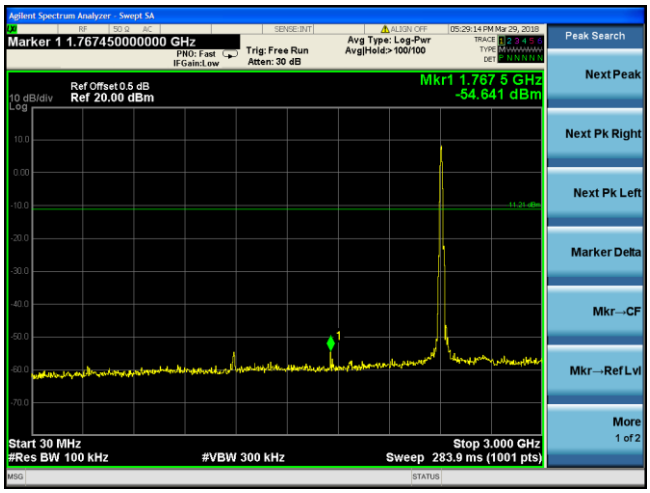
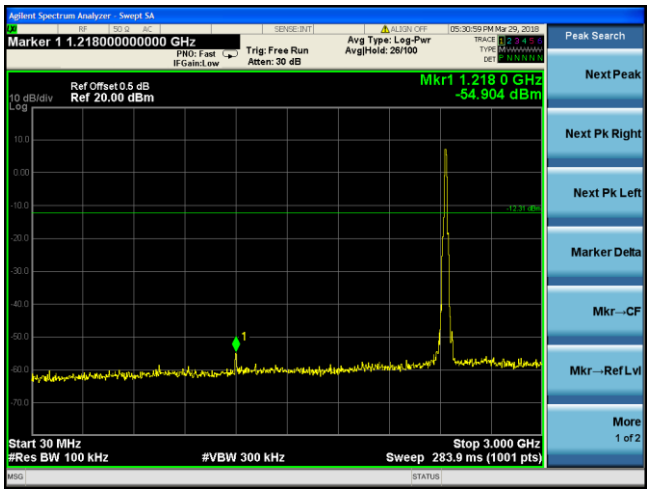
9.3 Test Setup

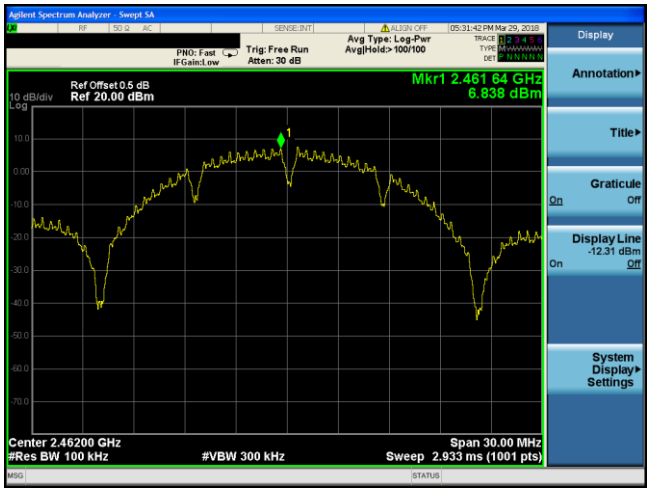
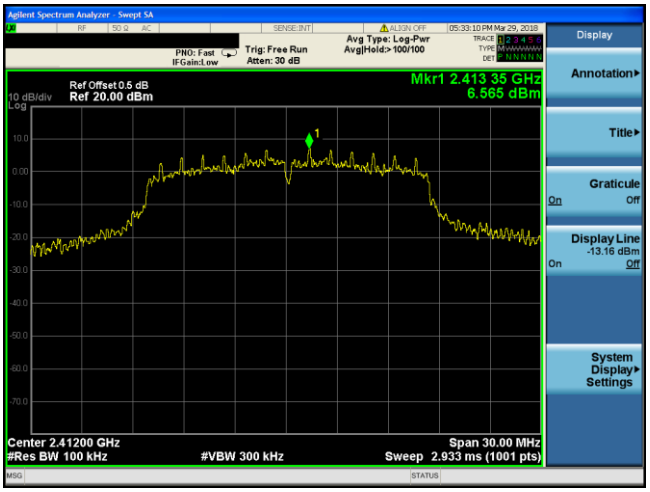
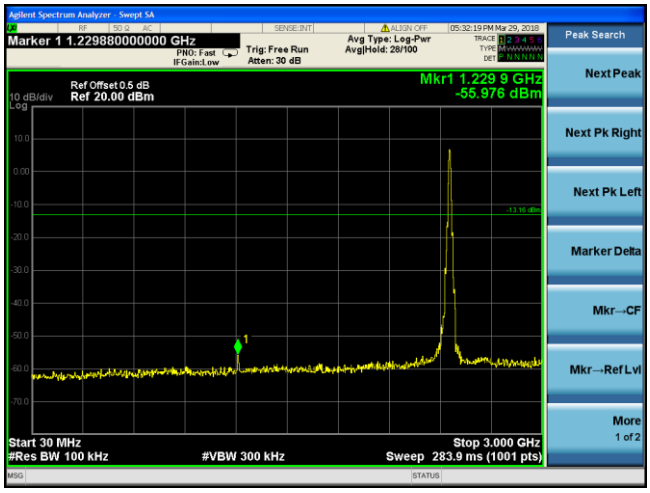
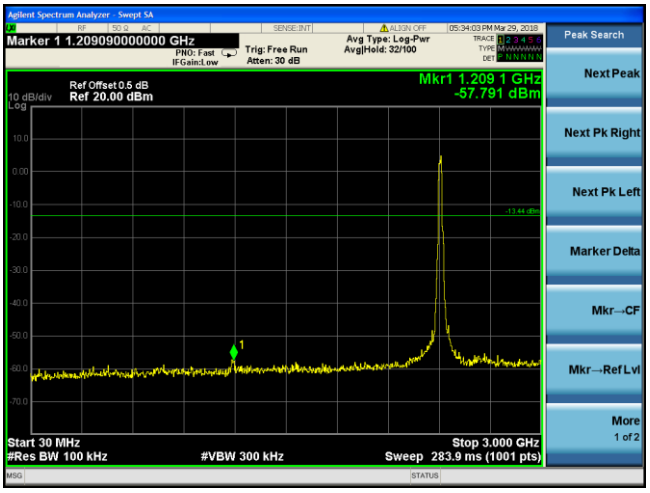


7.4 Test Result

PASS

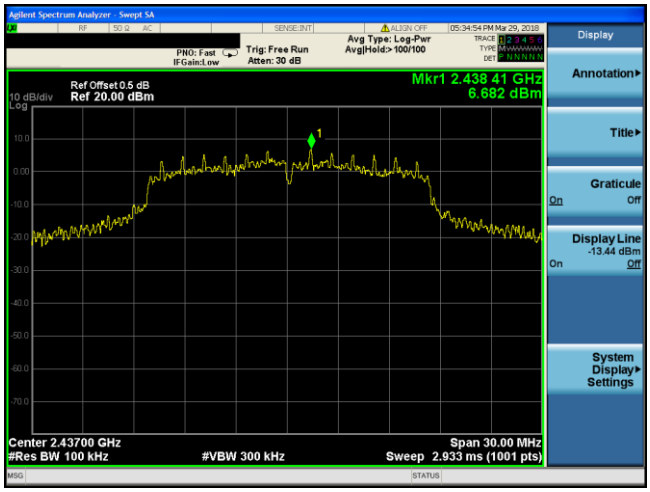
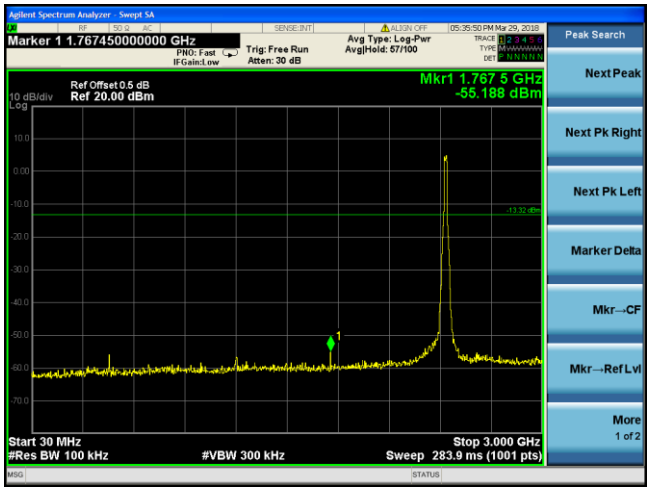
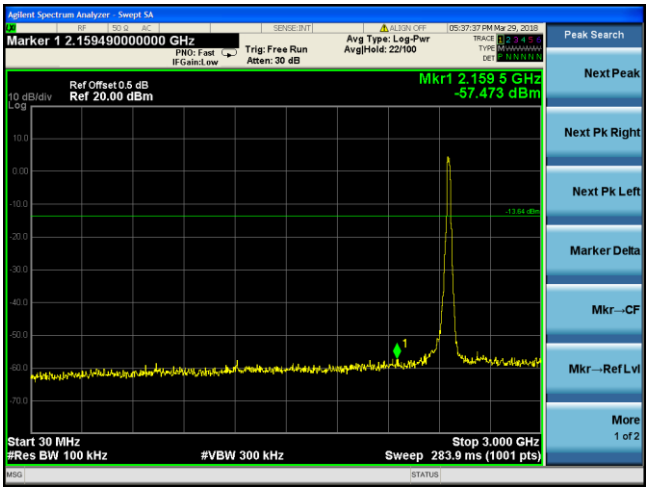
All the test modes completed for test.

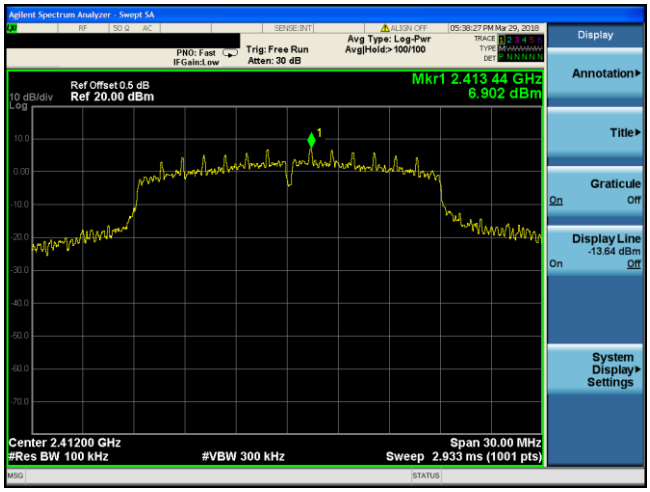
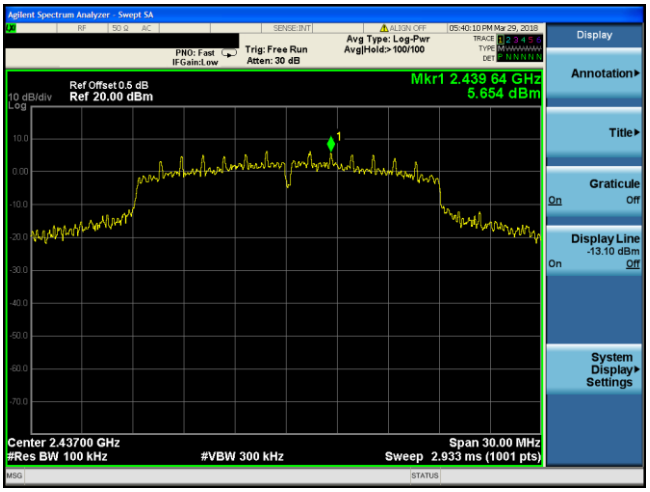
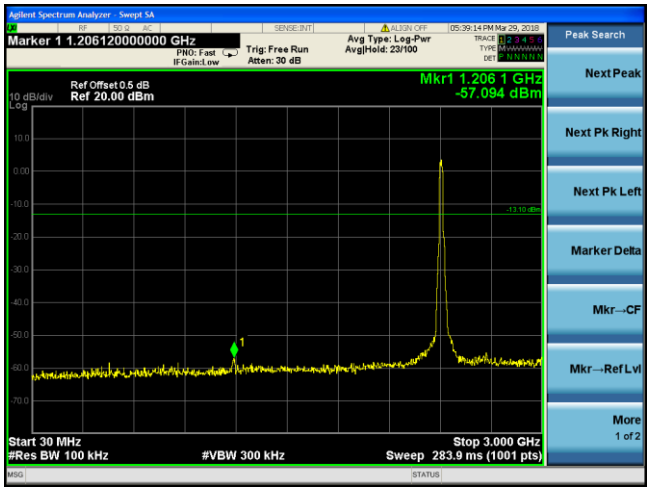
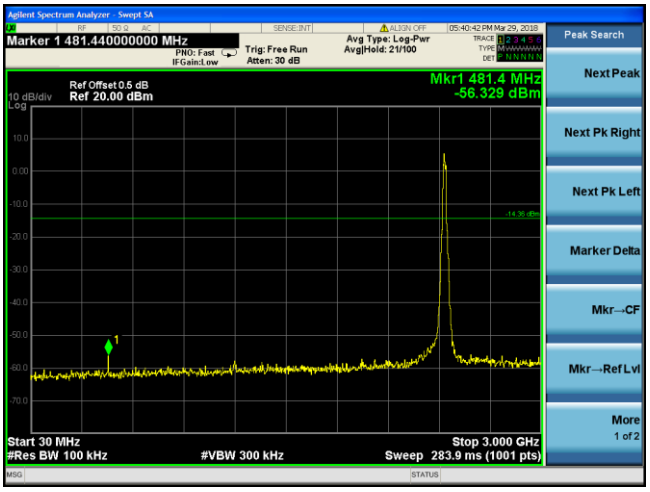
Test Mode:	802.11b CH 01	Test Mode:	802.11b CH 06
			
2412		2437	
			
30MHz~3GHz		30MHz~3GHz	
			
3GHz~25GHz		3GHz~25GHz	

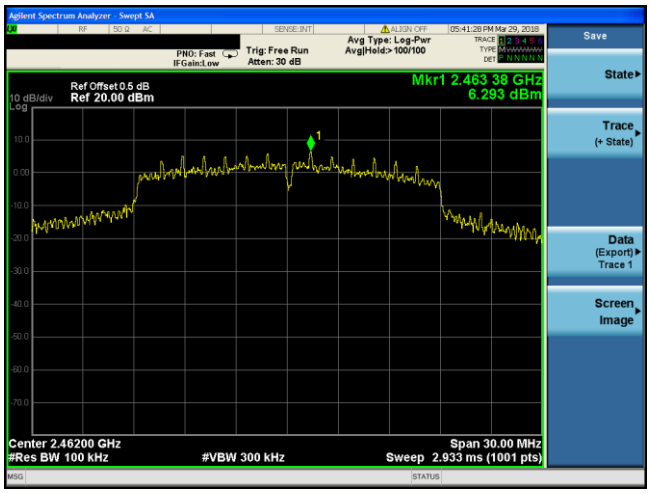
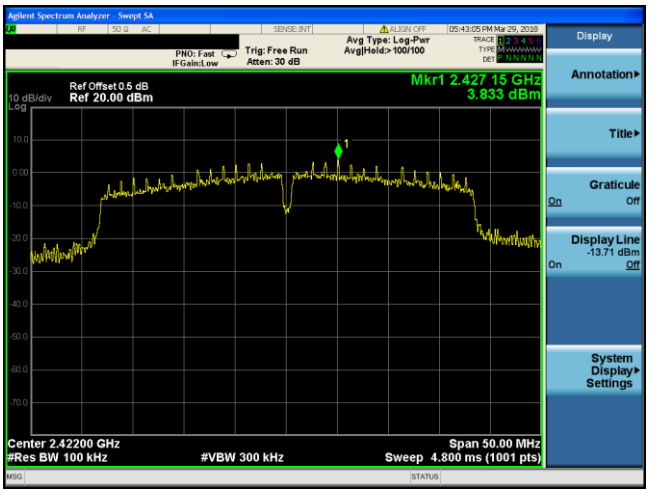
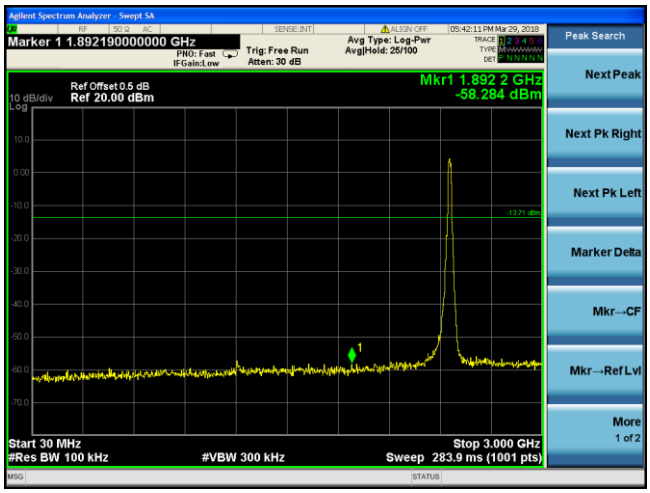
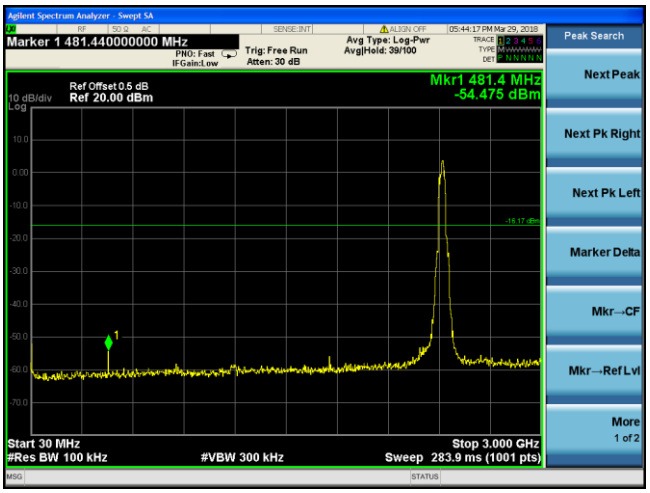
Test Mode:	802.11b CH 11	Test Mode:	802.11g CH 01
			
2462		2412	
			
30MHz~3GHz		30MHz~3GHz	

3GHz~25GHz

3GHz~25GHz

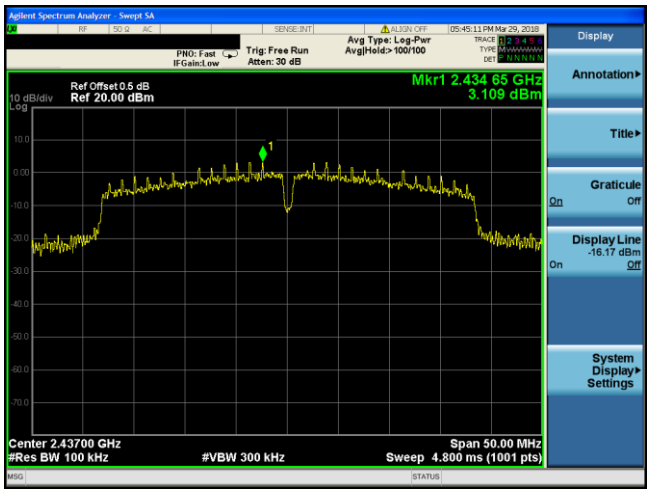
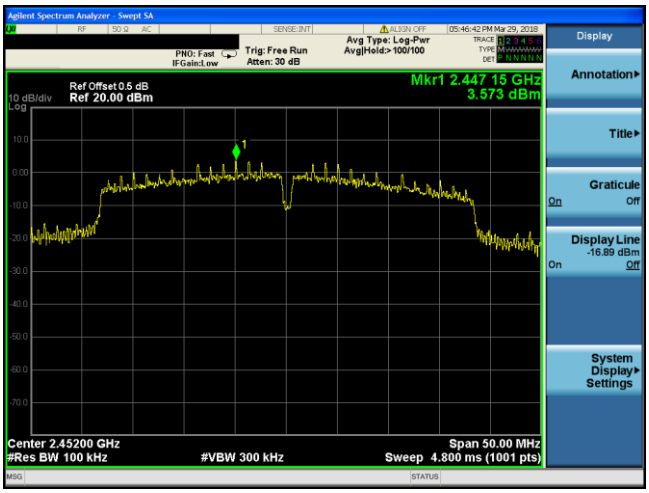
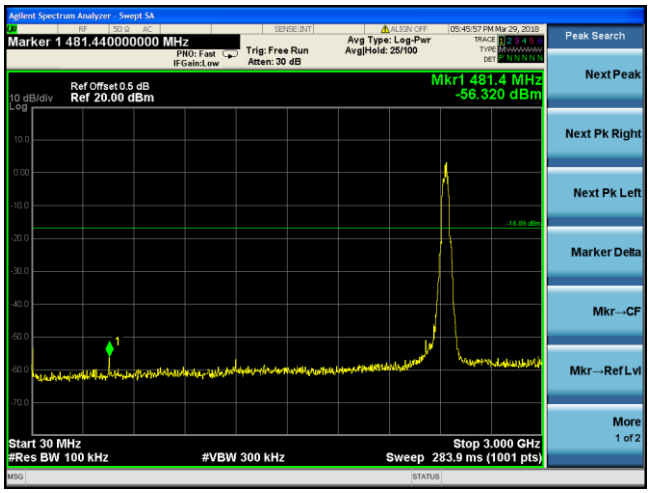
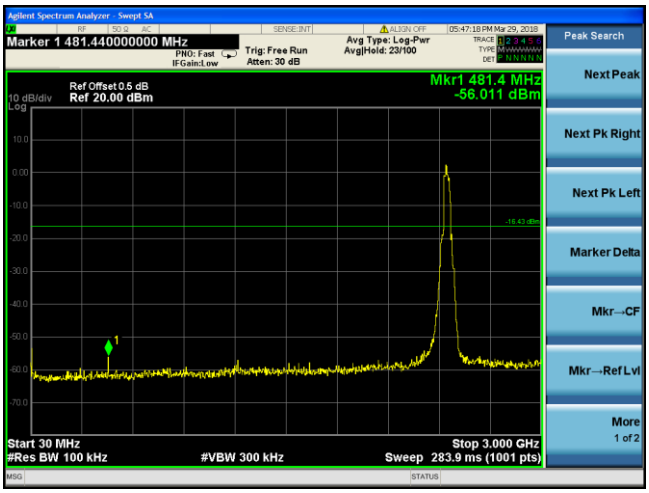
Test Mode:	802.11g CH 06	Test Mode:	802.11g CH 11
			
2437		2462	
			
30MHz~3GHz		30MHz~3GHz	
			
3GHz~25GHz		3GHz~25GHz	

Test Mode:	802.11n 20 CH 01	Test Mode:	802.11n 20 CH 06
			
2412		2437	
			
30MHz~3GHz		30MHz~3GHz	
			
3GHz~25GHz		3GHz~25GHz	

Test Mode:	802.11n 20 CH 11	Test Mode:	802.11n 40 CH 03
			
2462		2422	
			
30MHz~3GHz		30MHz~3GHz	

3GHz~25GHz

3GHz~25GHz

Test Mode:	802.11n 40 CH 06	Test Mode:	802.11n 40 CH 09
			
2437		2452	
			
30MHz~3GHz		30MHz~3GHz	
			
3GHz~25GHz		3GHz~25GHz	

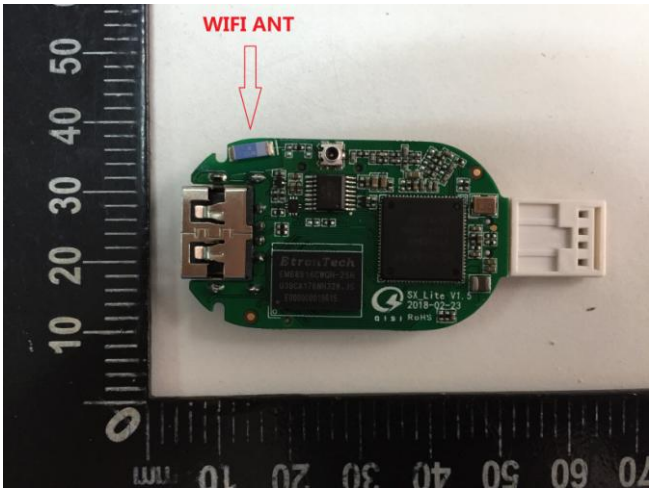
10 ANTENNA REQUIREMENT

Standard Applicable

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.249, 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.

Antenna Information

The antenna is a Ceramic antenna, the directional gains of antenna used for transmitting is 2.00dBi.



11 PHOTOGRAPH OF TEST

11.1 Radiated Emission

11.2 Conducted Emission