

FCC PART 15.247

TEST REPORT

For

Jiangsu SEUIC Technology Co.,Ltd

No23, Wenzhu Road, Yuhuatai District Nanjing, Jiangsu, China

FCC ID: 2AC68-CRUISE1

Report Type: Original Report	Product Type: Portable Data Collection Terminal
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Report Number: RKS160913001-00F	
Report Date: 2016-12-02	
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Note: This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Manufacturer	Jiangsu SEUIC Technology Co.,Ltd.
Model	CRUISE 1
Series Model	CRUISE 1-HC
Product	Portable Data Collection Terminal
Dimension	152mm(H)×75.9mm(W)×12.8mm(T)
Power input	DC 3.8V From rechargeable battery or DC 5V Adapter

Adapter 1 Information:

Model: SW-3530

INPUT: 100-240V~50/60Hz 0.7A

OUTPUT: 5V, 2.5A

Adapter 2 Information:

Model: FJ-SW1260502000UB

INPUT: 100-240V~50/60Hz 0.4A Max

OUTPUT: 5V, 2000mA

Note: * The difference between tested model and series model was explained in the declaration letter.

*All measurement and test data in this report was gathered from production sample serial number: 20160909001 (Assigned by BACL, Kunshan). The EUT was received on 2016-09-09.

Objective

This report is prepared on behalf of Jiangsu SEUIC Technology Co.,Ltd. in accordance with Part 2-Subpart J, Part 15-Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

FCC Part 15B JBP, Part 15.247 DSS, Part 15.225 DXX and Part 22H24E27 PCE, Part 15.407 NII submissions with FCC ID: 2AC68-CRUISE1.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and FCC KDB558074 D01 DTS Meas Guidance v03r05.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		± 3.26 dB
RF conducted test with spectrum		± 0.9 dB
RF Output Power with Power meter		± 0.5 dB
Radiated emission	30MHz~1GHz	± 5.91 dB
	Above 1G	± 4.92 dB
Occupied Bandwidth		± 0.5 kHz
Temperature		± 1.0 °C
Humidity		$\pm 6\%$

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China

Test site at Bay Area Compliance Laboratories Corp. (Kunshan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 02, 2012. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

For 802.11b, 802.11g and 802.11n-HT20 mode, 11 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	/	/
6	2437	/	/
7	2442	/	/

EUT was tested with Channel 1, 6 and 11.

For Bluetooth LE mode, 40 channels are provided for testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	...	...
...	...	...	...
...	...	...	...
...	...	38	2478
19	2440	39	2480

EUT was tested with channel 0, 19 and 39.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

DutApiWiFi8801BrdigeUart Test Tool

The worst condition was performed under:

802.11b: Data rate:1 Mbps, Power level: 7

802.11g: Data rate: 6 Mbps, Power level: 10

802.11n-HT20: Data rate: MCS0, Power level: 10

BLE Power lever 2

Support Equipment List and Details

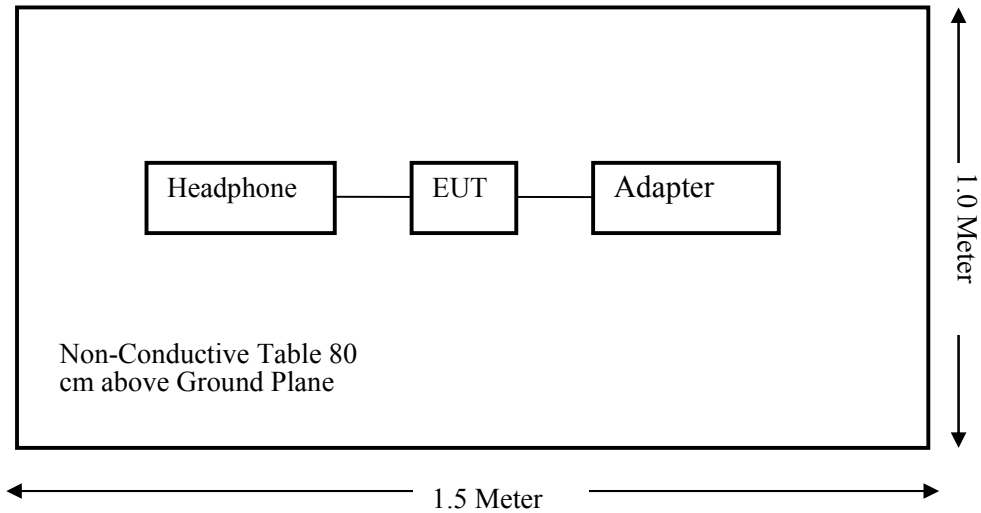
Manufacturer	Description	Model	Serial Number
SEUIC	Headphone	/	/

External I/O Cable

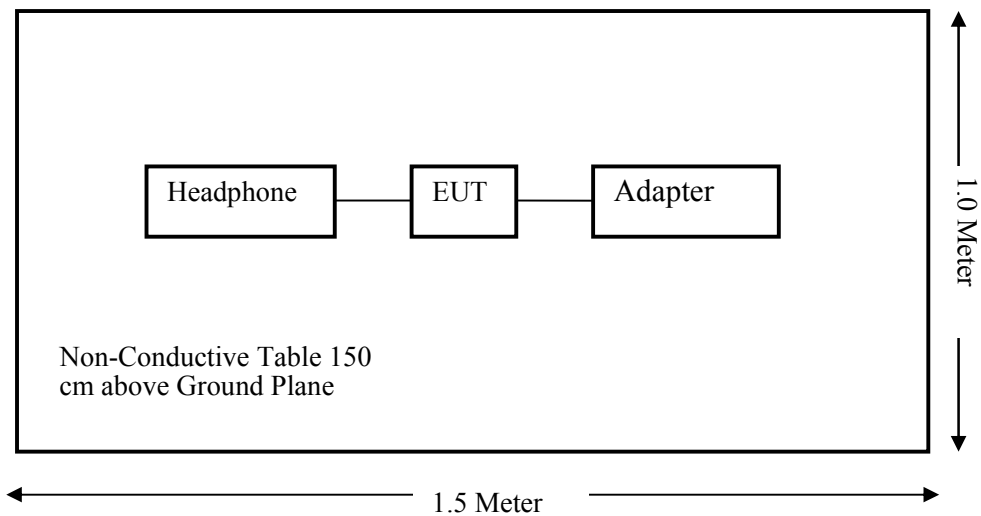
Cable Description	Shielding Type	Length (m)	From Port	To
USB Cable	Unshielding	0.8	Adapter	EUT

Block Diagram of Test Setup

For Radiated Emissions (Below 1 GHz):



For Radiated Emissions (Above 1 GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (i) §1.1310& §2.1093	RF Exposure Information	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.247(d)	Spurious Emissions at Antenna Port	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance
§15.247(b)(3)	Maximum Conducted Output Power	Compliance
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	Power Spectral Density	Compliance

FCC§15.247 (i), §1.1310& §2.1093 –RF EXPOSURE

Applicable Standard

According to§15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Test Result

Compliance, please refer to the SAR report: RKS160905050-20.

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the 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 6 dBi.

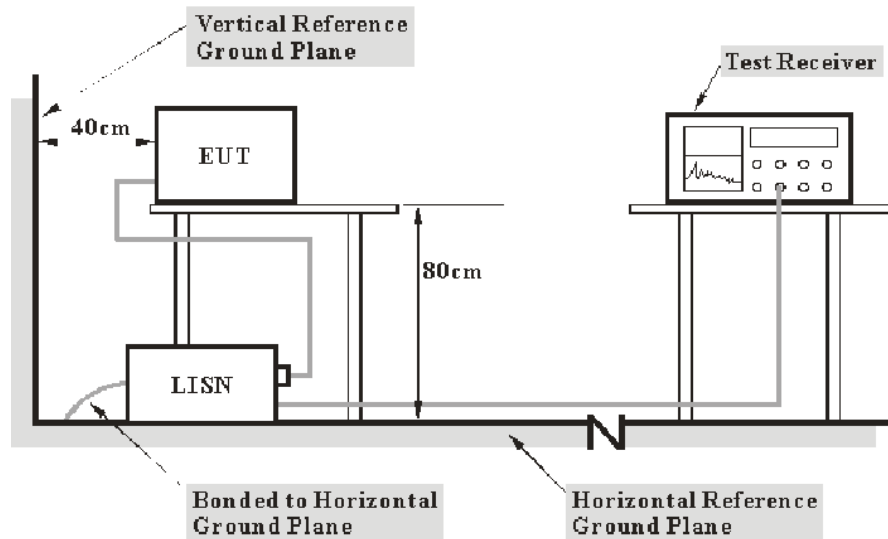
Antenna Connector Construction

The EUT has a internal integration antenna arrangement for Wifi&BLE, which the antenna gain is 0 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS**Applicable Standard**

FCC§15.207

EUT Setup

- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	834115/007	2015-11-12	2016-11-11
Rohde & Schwarz	LISN	ESH3-Z5	862770/011	2016-10-10	2017-10-10
HP	Current probe	11967A	636	2016-07-04	2017-07-03
FCC	ISN	FCC-TLISN-T8-02	20376	2016-07-04	2017-07-03
Haojintech	Coaxial Cable	HMR400UF	NN11600	2016-09-08	2017-09-08
Rohde & Schwarz	CE Test software	EMC32	V 09.10.0	/	/

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Corrected Factor & Margin Calculation

The Corrected factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

$$\text{Correction Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$

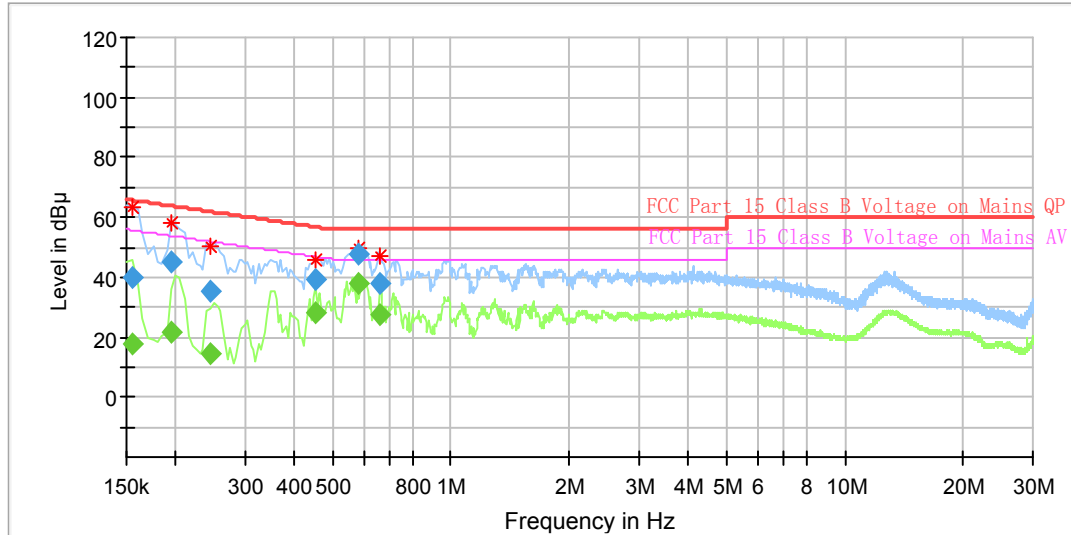
In BACL, $U_{(Lm)}$ is less than U_{cispr} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

Test Data**Environmental Conditions**

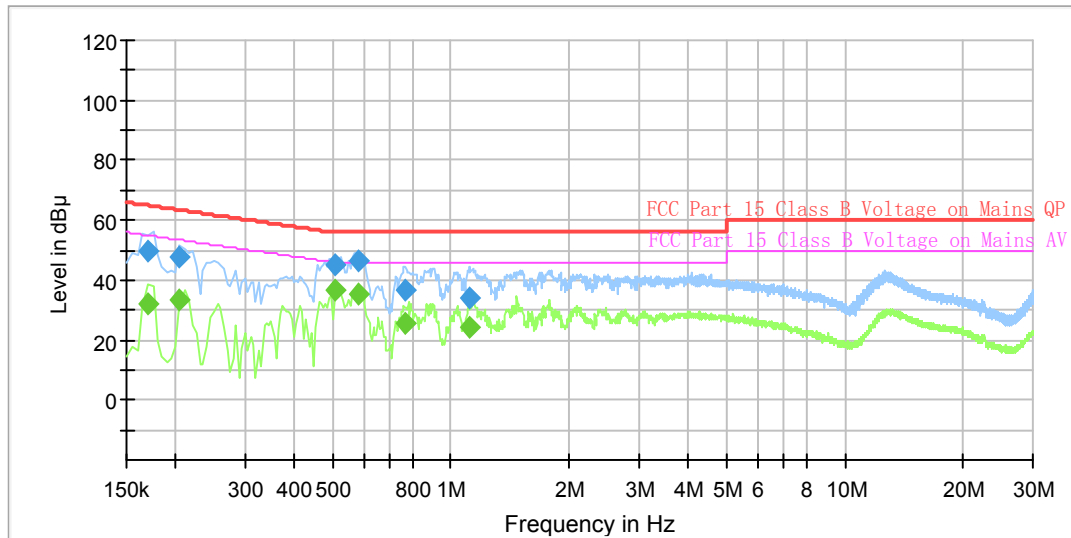
Temperature:	23 °C
Relative Humidity:	56 %
ATM Pressure:	101.0 kPa

The testing was performed by Chris Wang on 2016-10-18.

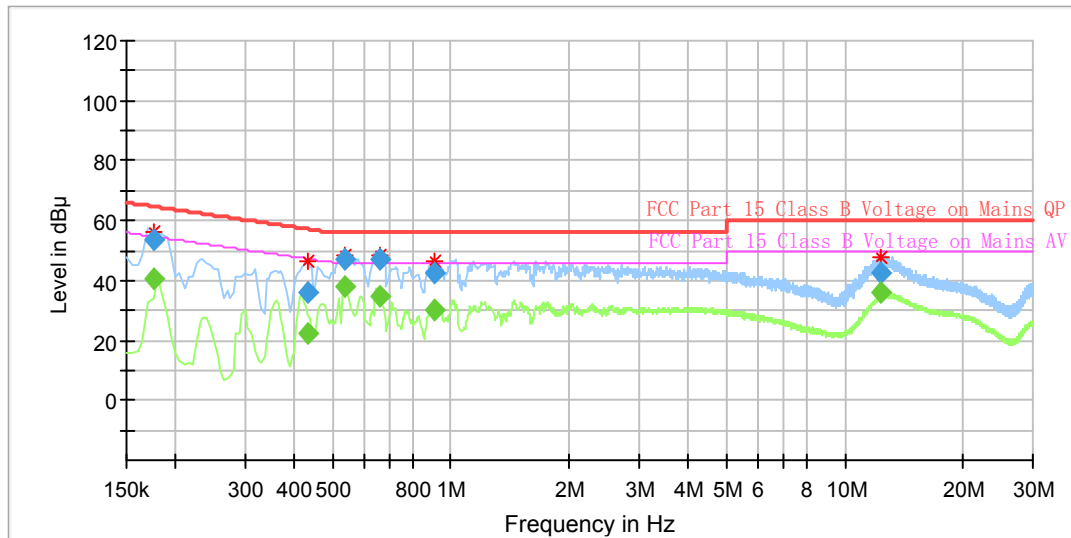
Test Mode: Transmitting(Worst case)

WIFI Mode:**AC 120V/60 Hz, Line**

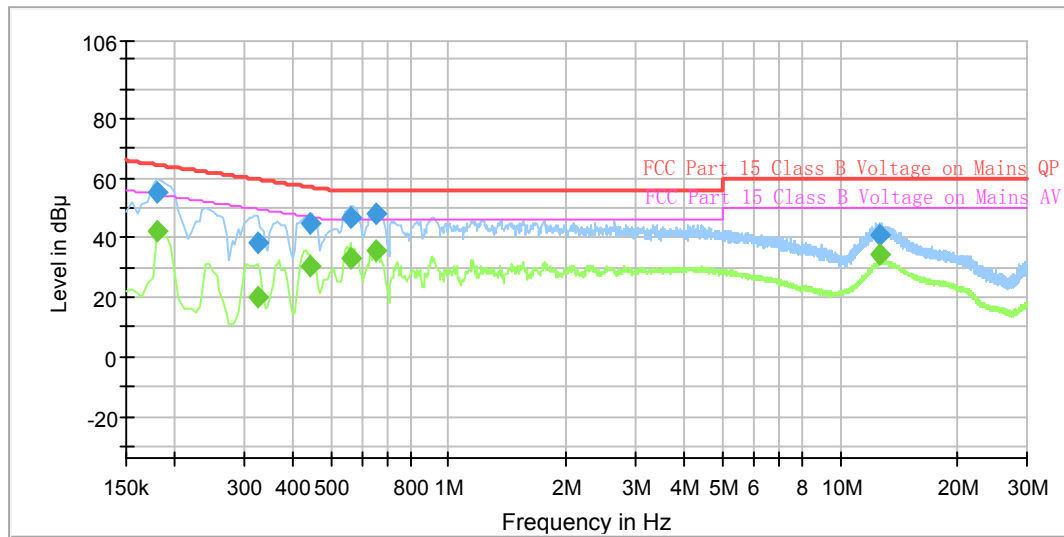
Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.155000	---	17.49	9.000	L1	11.0	38.24	55.73	Compliance
0.155000	40.08	---	9.000	L1	11.0	25.65	65.73	Compliance
0.195000	---	21.42	9.000	L1	11.0	32.40	53.82	Compliance
0.195000	45.15	---	9.000	L1	11.0	18.67	63.82	Compliance
0.245000	---	14.24	9.000	L1	11.0	37.68	51.92	Compliance
0.245000	35.50	---	9.000	L1	11.0	26.42	61.92	Compliance
0.455000	---	28.05	9.000	L1	11.0	18.73	46.78	Compliance
0.455000	39.00	---	9.000	L1	11.0	17.78	56.78	Compliance
0.580000	---	38.00	9.000	L1	11.1	8.00	46.00	Compliance
0.580000	47.47	---	9.000	L1	11.1	8.53	56.00	Compliance
0.660000	---	27.51	9.000	L1	11.1	18.49	46.00	Compliance
0.660000	37.79	---	9.000	L1	11.1	18.21	56.00	Compliance

AC 120V/60 Hz, Neutral

Frequency (MHz)	QuasiPeak (dBμV)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.170000	---	31.88	9.000	N	11.0	23.08	54.96	Compliance
0.170000	49.72	---	9.000	N	11.0	15.24	64.96	Compliance
0.205000	---	33.31	9.000	N	11.0	20.10	53.41	Compliance
0.205000	47.80	---	9.000	N	11.0	15.61	63.41	Compliance
0.510000	---	36.89	9.000	N	11.0	9.11	46.00	Compliance
0.510000	45.29	---	9.000	N	11.0	10.71	56.00	Compliance
0.585000	---	35.51	9.000	N	11.0	10.49	46.00	Compliance
0.585000	46.20	---	9.000	N	11.0	9.80	56.00	Compliance
0.765000	---	25.49	9.000	N	11.1	20.51	46.00	Compliance
0.765000	36.36	---	9.000	N	11.1	19.64	56.00	Compliance
1.115000	---	24.39	9.000	N	11.1	21.61	46.00	Compliance
1.115000	33.98	---	9.000	N	11.1	22.02	56.00	Compliance

BLE Mode:**AC 120V/60 Hz, Line**

Frequency (MHz)	QuasiPeak (dBμV)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.175000	---	40.84	9.000	L1	11.0	13.88	54.72	Compliance
0.175000	53.90	---	9.000	L1	11.0	10.82	64.72	Compliance
0.435000	---	22.31	9.000	L1	11.0	24.85	47.16	Compliance
0.435000	35.94	---	9.000	L1	11.0	21.22	57.16	Compliance
0.535000	---	37.68	9.000	L1	11.0	8.32	46.00	Compliance
0.535000	46.99	---	9.000	L1	11.0	9.01	56.00	Compliance
0.660000	---	34.40	9.000	L1	11.1	11.60	46.00	Compliance
0.660000	46.80	---	9.000	L1	11.1	9.20	56.00	Compliance
0.905000	---	30.42	9.000	L1	11.1	15.58	46.00	Compliance
0.905000	42.58	---	9.000	L1	11.1	13.42	56.00	Compliance
12.360000	---	35.80	9.000	L1	11.3	14.20	50.00	Compliance
12.360000	42.24	---	9.000	L1	11.3	17.76	60.00	Compliance

AC 120V/60 Hz, Neutral

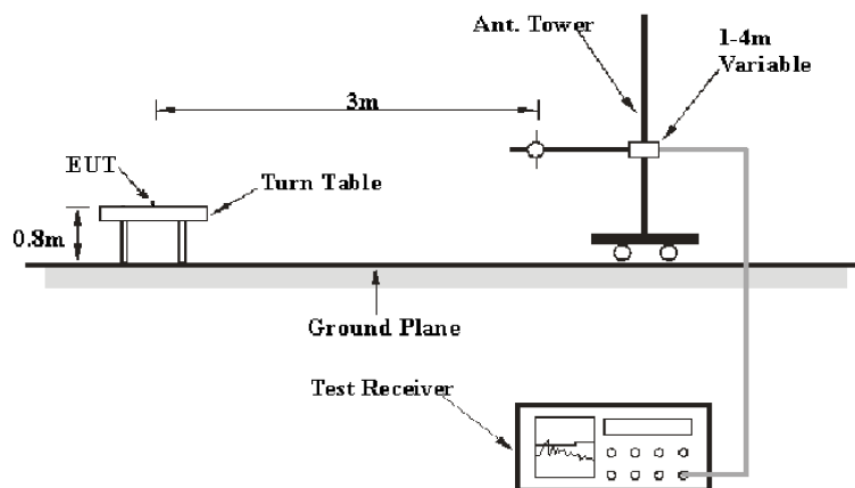
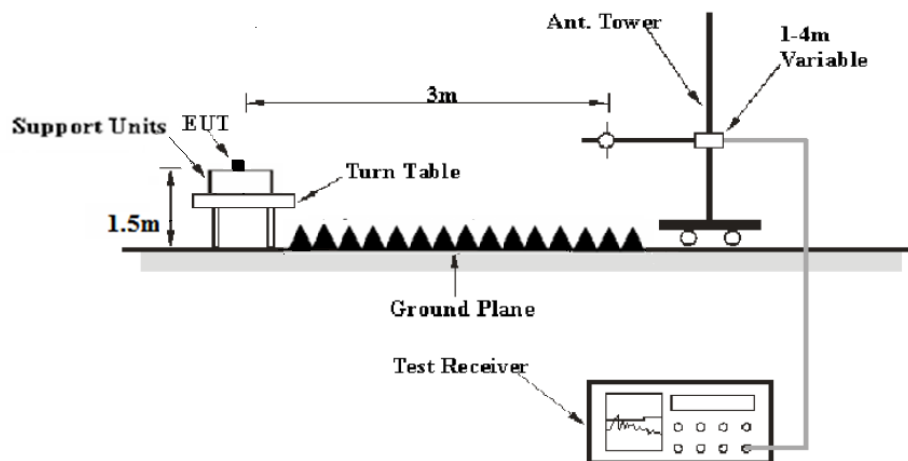
Frequency (MHz)	QuasiPeak (dBμV)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.180000	---	42.28	9.000	N	11.0	12.21	54.49	Compliance
0.180000	55.03	---	9.000	N	11.0	9.46	64.49	Compliance
0.325000	---	19.77	9.000	N	11.0	29.81	49.58	Compliance
0.325000	37.97	---	9.000	N	11.0	21.61	59.58	Compliance
0.445000	---	30.56	9.000	N	11.0	16.41	46.97	Compliance
0.445000	45.10	---	9.000	N	11.0	11.87	56.97	Compliance
0.560000	---	32.85	9.000	N	11.0	13.15	46.00	Compliance
0.560000	46.99	---	9.000	N	11.0	9.01	56.00	Compliance
0.655000	---	35.95	9.000	N	11.1	10.05	46.00	Compliance
0.655000	47.76	---	9.000	N	11.1	8.24	56.00	Compliance
12.580000	---	34.53	9.000	N	11.4	15.47	50.00	Compliance
12.580000	40.60	---	9.000	N	11.4	19.40	60.00	Compliance

Note:

- 1) Corr.=LISN VDF (Voltage Division Factor) + Cable Loss
- 2) Corrected Amplitude = Reading + Corr.
- 3) Margin = Limit –Corrected Amplitude

FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS**Applicable Standard**

FCC §15.247 (d); §15.209; §15.205;

EUT Setup**Below 1 GHz:****Above 1GHz:**

The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sonoma Instrument	Amplifier	330	171377	2016-10-21	2017-10-21
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2015-11-12	2016-11-11
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2016-01-09	2019-01-08
ETS	Horn Antenna	3115	6229	2016-01-11	2019-01-10
ETS-LINDGREN	Horn Antenna	3116	00084159	2015-10-18	2018-10-18
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2015-11-12	2016-11-11
Narda	Pre-amplifier	AFS42-00101800	2001270	2016-09-08	2017-09-08
R&S	Auto test Software	EMC32	V 09.10.0	/	/
Haojintech	Coaxial Cable	HMR400UF	NN11600	2016-09-08	2017-09-08
Haojintech	Coaxial Cable	SR	SS11800	2016-09-08	2017-09-08

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$

In BACL, $U_{(Lm)}$ is less than U_{cispr} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

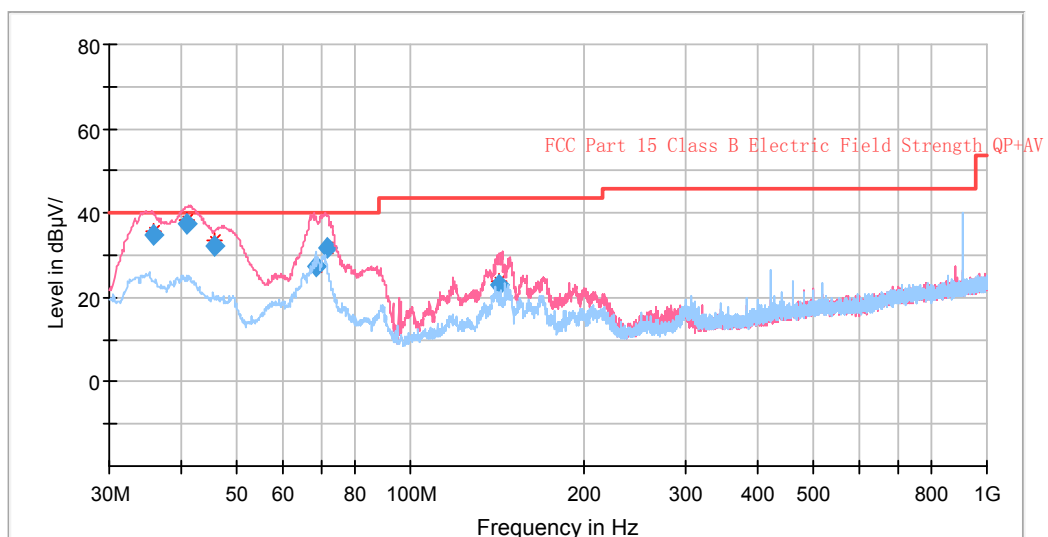
Test Data**Environmental Conditions**

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

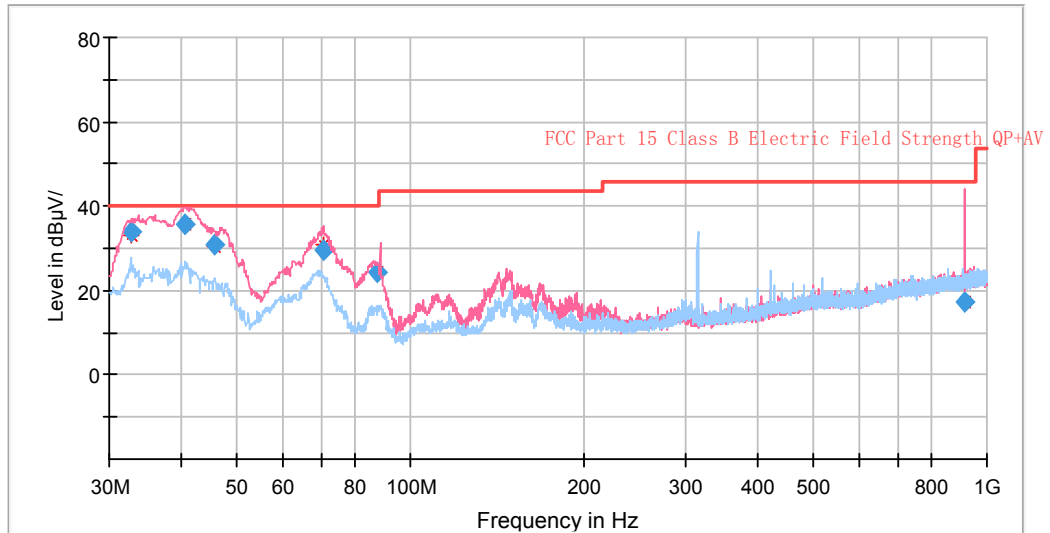
The testing was performed by Chris Wang on 2016-10-21.

WIFI:**30 MHz-1 GHz:**

EUT operation mode: Transmitting



Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
35.688750	43.04	QP	207.0	101.0	V	-8.1	34.94	40.00	5.06
40.953750	48.30	QP	192.0	101.0	V	-10.9	37.40	40.00	2.60
45.855000	46.28	QP	149.0	101.0	V	-14.0	32.28	40.00	7.72
68.750000	44.52	QP	226.0	101.0	V	-17.1	27.42	40.00	12.58
71.496250	48.76	QP	188.0	199.0	V	-17.1	31.66	40.00	8.34
142.645000	35.03	QP	183.0	101.0	V	-12.0	23.03	43.50	20.47

BLE:**30 MHz-1 GHz:***EUT operation mode: Charging and Transmitting (Worst case)*

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15.247/205/209	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB µV/m)	Margin (dB)
32.677500	40.50	QP	194.0	101.0	V	-6.6	33.90	40.00	6.10
40.667500	46.49	QP	141.0	101.0	V	-10.8	35.69	40.00	4.31
45.812500	45.03	QP	141.0	101.0	V	-14.0	31.03	40.00	8.97
70.700000	46.47	QP	170.0	101.0	V	-17.1	29.37	40.00	10.63
87.363750	41.19	QP	75.0	101.0	V	-17.0	24.19	40.00	15.81
913.397500	17.77	QP	109.0	101.0	V	-0.6	17.17	40.00	28.83

WIFI MODE:

1GHz-25GHz

EUT operation mode: Transmitting

802.11b Mode

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412.00	104.40	PK	252	136	V	-3.04	101.36	/	/
2412.00	99.50	Ave	252	136	V	-3.04	96.46	/	/
2412.00	98.59	PK	188	171	H	-3.04	95.55	/	/
2412.00	94.31	Ave	188	171	H	-3.04	91.27	/	/
2390.00	49.05	PK	84	242	V	-3.05	46.00	74	28.00
2390.00	38.79	Ave	84	242	V	-3.05	35.74	54	18.26
2400.00	51.46	PK	122	158	V	-3.04	48.42	74	25.58
2400.00	40.63	Ave	122	158	V	-3.04	37.59	54	16.41
4824.00	41.21	PK	22	133	H	7.19	48.40	74	25.60
4824.00	36.78	Ave	22	133	H	7.19	43.97	54	10.03
6620.00	35.05	PK	139	104	V	13.58	48.63	74	25.37
6620.00	27.53	Ave	139	104	V	13.58	41.11	54	12.89
7236.00	30.07	PK	306	203	H	16.00	46.07	74	27.93
7236.00	24.65	Ave	306	203	H	16.00	40.65	54	13.35
Middle Channel (2437 MHz)									
2437.00	105.87	PK	155	240	V	-3.02	102.85	/	/
2437.00	101.62	Ave	155	240	V	-3.02	98.60	/	/
2437.00	100.34	PK	324	208	H	-3.02	97.32	/	/
2437.00	95.89	Ave	324	208	H	-3.02	92.87	/	/
1477.00	52.04	PK	173	206	V	-6.98	45.06	74	28.94
1477.00	40.02	Ave	173	206	V	-6.98	33.04	54	20.96
1696.00	50.23	PK	292	152	H	-5.43	44.80	74	29.20
1696.00	40.94	Ave	292	152	H	-5.43	35.51	54	18.49
4874.00	40.85	PK	45	117	V	7.27	48.12	74	25.88
4874.00	35.91	Ave	45	117	V	7.27	43.18	54	10.82
6677.00	35.38	PK	305	209	H	13.79	49.17	74	24.83
6677.00	27.55	Ave	305	209	H	13.79	41.34	54	12.66
7311.00	30.17	PK	315	113	H	16.33	46.50	74	27.50
7311.00	25.02	Ave	315	113	H	16.33	41.35	54	12.65

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
High Channel (2462 MHz)									
2462.00	105.66	PK	40	114	V	-3.00	102.66	/	/
2462.00	100.70	Ave	40	114	V	-3.00	97.70	/	/
2462.00	101.50	PK	98	221	H	-3.00	98.50	/	/
2462.00	96.58	Ave	98	221	H	-3.00	93.58	/	/
2483.50	50.04	PK	327	234	V	-2.99	47.05	74	26.95
2483.50	39.18	Ave	327	234	V	-2.99	36.19	54	17.81
2563.00	51.54	PK	229	101	V	-2.58	48.96	74	25.04
2563.00	41.70	Ave	229	101	V	-2.58	39.12	54	14.88
4924.00	41.29	PK	180	176	H	7.34	48.63	74	25.37
4924.00	37.10	Ave	180	176	H	7.34	44.44	54	9.56
6681.00	36.57	PK	183	167	H	13.80	50.37	74	23.63
6681.00	27.97	Ave	183	167	H	13.80	41.77	54	12.23
7386.00	30.13	PK	157	137	H	16.65	46.78	74	27.22
7386.00	22.93	Ave	157	137	H	16.65	39.58	54	14.42

802.11g Mode

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412.00	106.93	PK	307	246	V	-3.04	103.89	/	/
2412.00	101.39	Ave	307	246	V	-3.04	98.35	/	/
2412.00	101.14	PK	157	177	H	-3.04	98.10	/	/
2412.00	95.52	Ave	157	177	H	-3.04	92.48	/	/
2390.00	49.07	PK	14	230	V	-3.05	46.02	74	27.98
2390.00	38.78	Ave	14	230	V	-3.05	35.73	54	18.27
2400.00	50.27	PK	305	240	V	-3.04	47.23	74	26.77
2400.00	42.63	Ave	305	240	V	-3.04	39.59	54	14.41
4824.00	40.43	PK	14	131	H	7.19	47.62	74	26.38
4824.00	34.49	Ave	14	131	H	7.19	41.68	54	12.32
6620.00	37.14	PK	200	169	V	13.58	50.72	74	23.28
6620.00	26.35	Ave	200	169	V	13.58	39.93	54	14.07
7236.00	29.58	PK	173	220	H	16.00	45.58	74	28.42
7236.00	23.70	Ave	173	220	H	16.00	39.70	54	14.30

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Middle Channel (2437 MHz)									
2437.00	107.55	PK	151	154	V	-3.02	104.53	/	/
2437.00	101.81	Ave	151	154	V	-3.02	98.79	/	/
2437.00	104.38	PK	309	232	H	-3.02	101.36	/	/
2437.00	98.49	Ave	309	232	H	-3.02	95.47	/	/
1477.00	49.77	PK	252	111	V	-6.98	42.79	74	31.21
1477.00	37.83	Ave	252	111	V	-6.98	30.85	54	23.15
1696.00	50.06	PK	117	158	H	-5.43	44.63	74	29.37
1696.00	40.93	Ave	117	158	H	-5.43	35.50	54	18.50
4874.00	38.96	PK	13	187	V	7.27	46.23	74	27.77
4874.00	33.26	Ave	13	187	V	7.27	40.53	54	13.47
6677.00	34.72	PK	200	250	H	13.79	48.51	74	25.49
6677.00	27.98	Ave	200	250	H	13.79	41.77	54	12.23
7311.00	29.42	PK	29	213	H	16.33	45.75	74	28.25
7311.00	24.14	Ave	29	213	H	16.33	40.47	54	13.53
High Channel (2462 MHz)									
2462.00	107.63	PK	146	187	V	-3.00	104.63	/	/
2462.00	102.50	Ave	146	187	V	-3.00	99.50	/	/
2462.00	103.01	PK	174	220	H	-3.00	100.01	/	/
2462.00	97.22	Ave	174	220	H	-3.00	94.22	/	/
2483.50	49.27	PK	282	195	V	-2.99	46.28	74	27.72
2483.50	39.16	Ave	282	195	V	-2.99	36.17	54	17.83
2563.00	53.18	PK	116	190	V	-2.58	50.60	74	23.40
2563.00	43.84	Ave	116	190	V	-2.58	41.26	54	12.74
4924.00	40.51	PK	205	124	H	7.34	47.85	74	26.15
4924.00	34.38	Ave	205	124	H	7.34	41.72	54	12.28
6681.00	36.22	PK	94	202	H	13.80	50.02	74	23.98
6681.00	27.89	Ave	94	202	H	13.80	41.69	54	12.31
7386.00	30.57	PK	282	110	H	16.65	47.22	74	26.78
7386.00	23.83	Ave	282	110	H	16.65	40.48	54	13.52

802.11n-HT20 Mode

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Low Channel (2412 MHz)									
2412.00	107.33	PK	201	152	V	-3.04	104.29	/	/
2412.00	102.11	Ave	201	152	V	-3.04	99.07	/	/
2412.00	103.33	PK	151	122	H	-3.04	100.29	/	/
2412.00	98.04	Ave	151	122	H	-3.04	95.00	/	/
2390.00	49.57	PK	232	219	V	-3.05	46.52	74	27.48
2390.00	39.28	Ave	232	219	V	-3.05	36.23	54	17.77
2400.00	50.79	PK	332	109	V	-3.04	47.75	74	26.25
2400.00	40.16	Ave	332	109	V	-3.04	37.12	54	16.88
4824.00	40.66	PK	79	154	H	7.19	47.85	74	26.15
4824.00	35.46	Ave	79	154	H	7.19	42.65	54	11.35
6620.00	36.99	PK	37	215	V	13.58	50.57	74	23.43
6620.00	28.60	Ave	37	215	V	13.58	42.18	54	11.82
7236.00	30.44	PK	246	234	H	16.00	46.44	74	27.56
7236.00	24.05	Ave	246	234	H	16.00	40.05	54	13.95
Middle Channel (2437 MHz)									
2437.00	106.97	PK	5	235	V	-3.02	103.95	/	/
2437.00	101.58	Ave	5	235	V	-3.02	98.56	/	/
2437.00	101.00	PK	122	189	H	-3.02	97.98	/	/
2437.00	95.27	Ave	122	189	H	-3.02	92.25	/	/
1477.00	50.03	PK	308	108	V	-6.98	43.05	74	30.95
1477.00	37.79	Ave	308	108	V	-6.98	30.81	54	23.19
1696.00	50.81	PK	106	129	H	-5.43	45.38	74	28.62
1696.00	41.11	Ave	106	129	H	-5.43	35.68	54	18.32
4874.00	38.75	PK	253	237	V	7.27	46.02	74	27.98
4874.00	32.93	Ave	253	237	V	7.27	40.20	54	13.80
6677.00	34.54	PK	181	113	H	13.79	48.33	74	25.67
6677.00	29.00	Ave	181	113	H	13.79	42.79	54	11.21
7311.00	29.64	PK	172	241	H	16.33	45.97	74	28.03
7311.00	22.84	Ave	172	241	H	16.33	39.17	54	14.83

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
High Channel (2462 MHz)									
2462.00	107.46	PK	44	249	V	-3.00	104.46	/	/
2462.00	101.98	Ave	44	249	V	-3.00	98.98	/	/
2462.00	102.99	PK	155	120	H	-3.00	99.99	/	/
2462.00	97.25	Ave	155	120	H	-3.00	94.25	/	/
2483.50	48.84	PK	293	156	V	-2.99	45.85	74	28.15
2483.50	37.61	Ave	293	156	V	-2.99	34.62	54	19.38
2563.00	52.67	PK	225	196	V	-2.58	50.09	74	23.91
2563.00	43.03	Ave	225	196	V	-2.58	40.45	54	13.55
4924.00	40.02	PK	214	164	H	7.34	47.36	74	26.64
4924.00	33.36	Ave	214	164	H	7.34	40.70	54	13.30
6681.00	35.78	PK	215	241	H	13.80	49.58	74	24.42
6681.00	27.93	Ave	215	241	H	13.80	41.73	54	12.27
7386.00	30.95	PK	301	235	H	16.65	47.60	74	26.40
7386.00	24.48	Ave	301	235	H	16.65	41.13	54	12.87

BLE Mode:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Low Channel (2402 MHz)									
2402.00	96.35	PK	353	185	V	-3.04	93.31	/	/
2402.00	92.15	Ave	353	185	V	-3.04	89.11	/	/
2402.00	90.44	PK	68	200	H	-3.04	87.40	/	/
2402.00	86.43	Ave	68	200	H	-3.04	83.39	/	/
2390.00	44.80	PK	168	137	V	-3.05	41.75	74	32.25
2390.00	30.02	Ave	168	137	V	-3.05	26.97	54	27.03
2400.00	45.91	PK	29	109	V	-3.04	42.87	74	31.13
2400.00	35.97	Ave	29	109	V	-3.04	32.93	54	21.07
1613.70	34.08	PK	324	136	H	-6.00	28.08	74	45.92
1613.70	29.71	Ave	324	136	H	-6.00	23.71	54	30.29
4804.00	48.53	PK	270	157	V	7.16	55.69	74	18.31
4804.00	36.45	Ave	270	157	V	7.16	43.61	54	10.39
7236.00	40.12	PK	52	212	H	16.00	56.12	74	17.88
7236.00	30.23	Ave	52	212	H	16.00	46.23	54	7.77

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Middle Channel (2440MHz)									
2440.00	98.25	PK	62	165	V	-3.02	95.23	/	/
2440.00	93.74	Ave	62	165	V	-3.02	90.72	/	/
2440.00	92.69	PK	138	177	H	-3.02	89.67	/	/
2440.00	88.51	Ave	138	177	H	-3.02	85.49	/	/
1477.00	44.17	PK	241	236	V	-6.98	37.19	74	36.81
1477.00	32.64	Ave	241	236	V	-6.98	25.66	54	28.34
1696.00	46.03	PK	80	237	H	-5.43	40.60	74	33.40
1696.00	34.38	Ave	80	237	H	-5.43	28.95	54	25.05
4880.00	51.21	PK	309	132	V	7.28	58.49	74	15.51
4880.00	41.56	Ave	309	132	V	7.28	48.84	54	5.16
6677.00	38.32	PK	187	217	H	13.79	52.11	74	21.89
6677.00	33.14	Ave	187	217	H	13.79	46.93	54	7.07
7320.00	40.63	PK	16	159	H	16.37	57.00	74	17.00
7320.00	33.21	Ave	16	159	H	16.37	49.58	54	4.42

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
High Channel (2480 MHz)									
2480.00	93.85	PK	206	242	V	-2.99	90.86	/	/
2480.00	89.33	Ave	206	242	V	-2.99	86.34	/	/
2480.00	88.83	PK	257	138	H	-2.99	85.84	/	/
2480.00	84.21	Ave	257	138	H	-2.99	81.22	/	/
2483.50	45.56	PK	120	228	V	-2.99	42.57	74	31.43
2483.50	33.42	Ave	120	228	V	-2.99	30.43	54	23.57
2563.00	43.81	PK	231	205	V	-2.60	41.21	74	32.79
2563.00	37.81	Ave	231	205	V	-2.60	35.21	54	18.79
4960.00	48.18	PK	276	107	H	7.40	55.58	74	18.42
4960.00	42.12	Ave	276	107	H	7.40	49.52	54	4.48
6681.00	23.04	PK	10	154	H	13.80	36.84	74	37.16
6681.00	16.72	Ave	10	154	H	13.80	30.52	54	23.48
7386.00	41.57	PK	322	188	H	16.65	58.22	74	15.78
7386.00	33.51	Ave	322	188	H	16.65	50.16	54	3.84

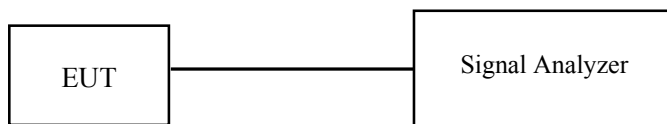
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2015-11-12	2016-11-11
Haojintech	Coaxial Cable	SR	SS11800	2016-09-08	2017-09-08

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Chris Wang on 2016-09-17&2016-09-18.

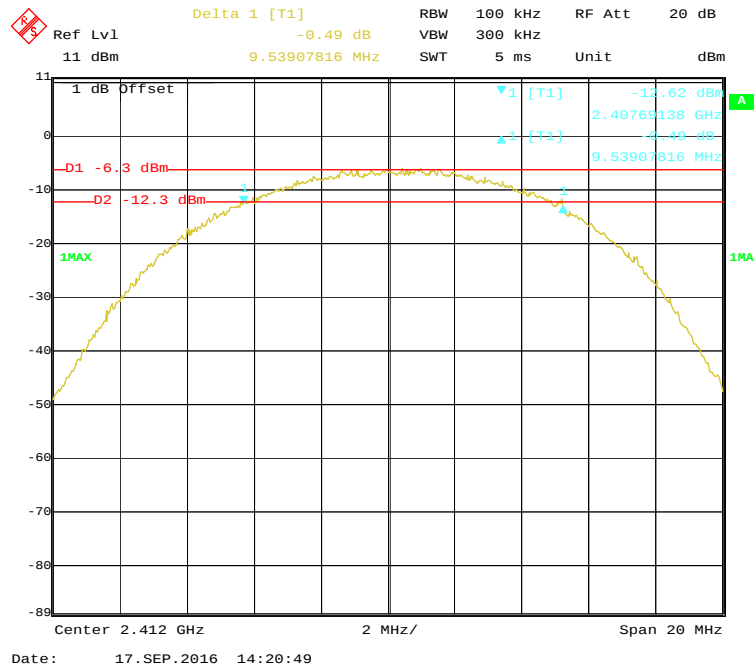
Test Result: Pass.

Please refer to the following tables and plots.

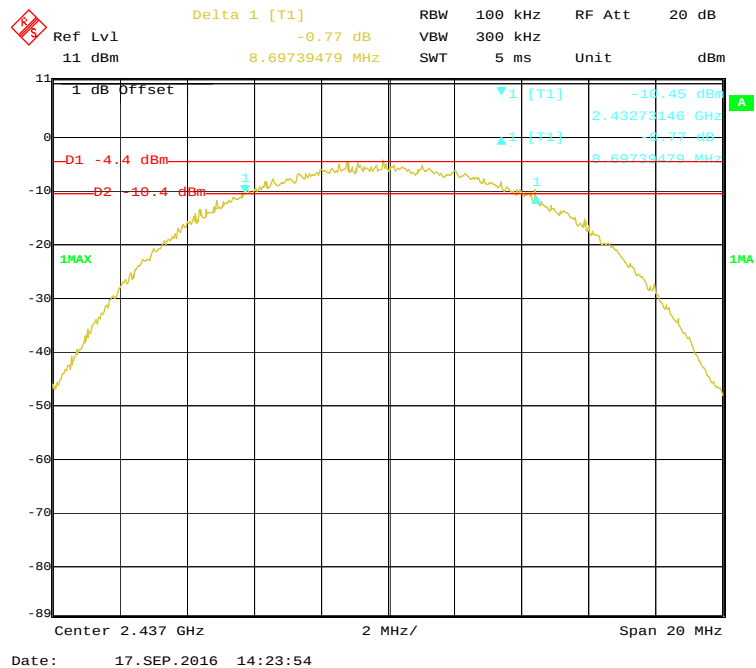
EUT operation mode: Transmitting

Channel	Frequency	6 dB Emission Bandwidth	Limit
	(MHz)	(MHz)	(kHz)
802.11b mode			
Low	2412	9.54	≥ 500
Middle	2437	8.7	≥ 500
High	2462	8.9	≥ 500
802.11g mode			
Low	2412	16.59	≥ 500
Middle	2437	16.51	≥ 500
High	2462	16.59	≥ 500
802.11n-HT20 mode			
Low	2412	17.82	≥ 500
Middle	2437	17.82	≥ 500
High	2462	17.82	≥ 500
BLE mode			
Low	2402	0.727	≥ 500
Middle	2440	0.727	≥ 500
High	2480	0.721	≥ 500

802.11b Low Channel



802.11b Middle Channel



Delta 1 [T1] 0.08 dB
 Ref Lvl 11 dBm
 RBW 100 kHz
 VBW 300 kHz
 SWT 5 ms
 RF Att 20 dB
 Unit dBm

1 dB Offset
 -D1 -5.33 dBm
 -D2 -11.33 dBm
 1 MAX
 1 MIN
 -11.17 dBm
 2.45777154 GHz
 8.89779559 MHz

Center 2.462 GHz
 2 MHz/
 Span 20 MHz

Date: 17.SEP.2016 14:26:33

Delta 1 [T1]

Ref Lvl -0.23 dB

RBW 100 kHz RF Att 30 dB

21 dBm 16.59318637 MHz SWT 5 ms Unit dBm

1 dB Offset

1 [T1] -13.94 dBm

2.40376353 GHz

1 [T1] -13.23 dBm

16.59318637 MHz

-D1 -7.3 dBm

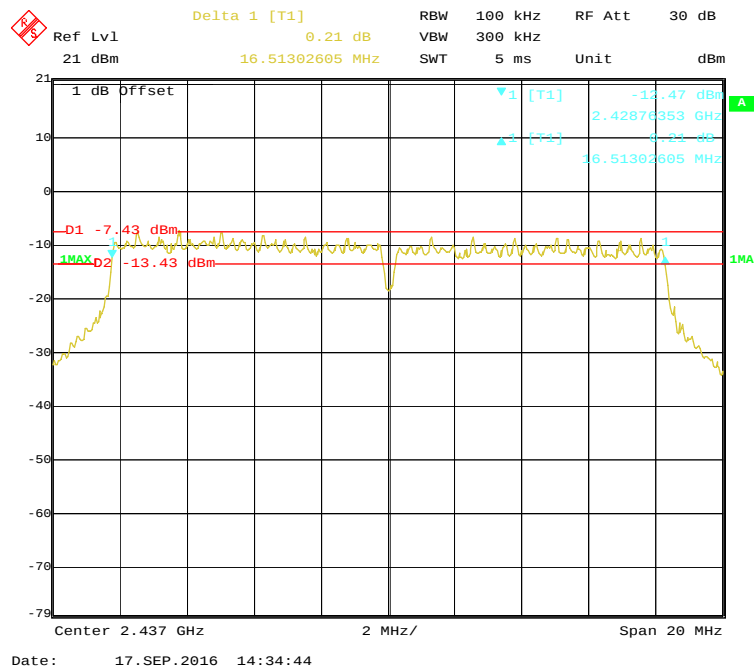
1MAX D2 -13.3 dBm

1MAX

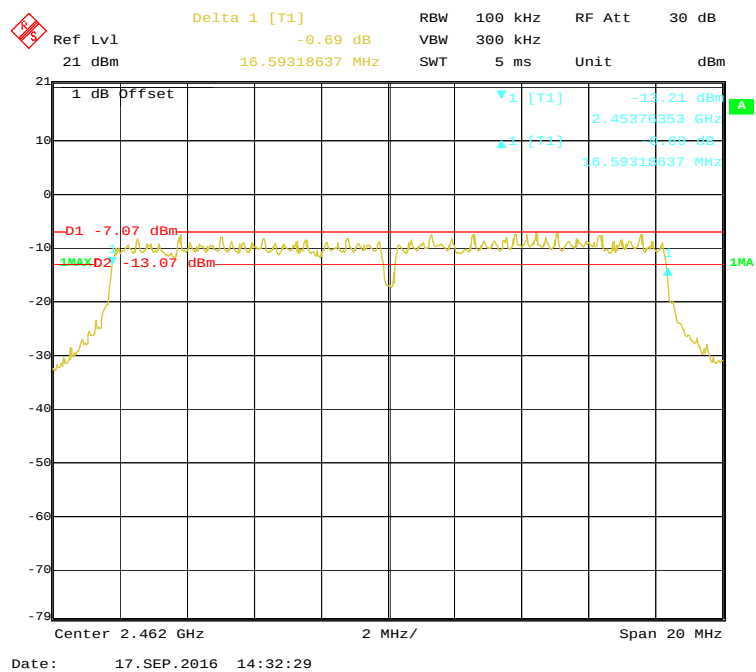
Center 2.412 GHz 2 MHz/ Span 20 MHz

Date: 17.SEP.2016 14:36:20

802.11g Middle Channel



802.11g High Channel



[illegible]

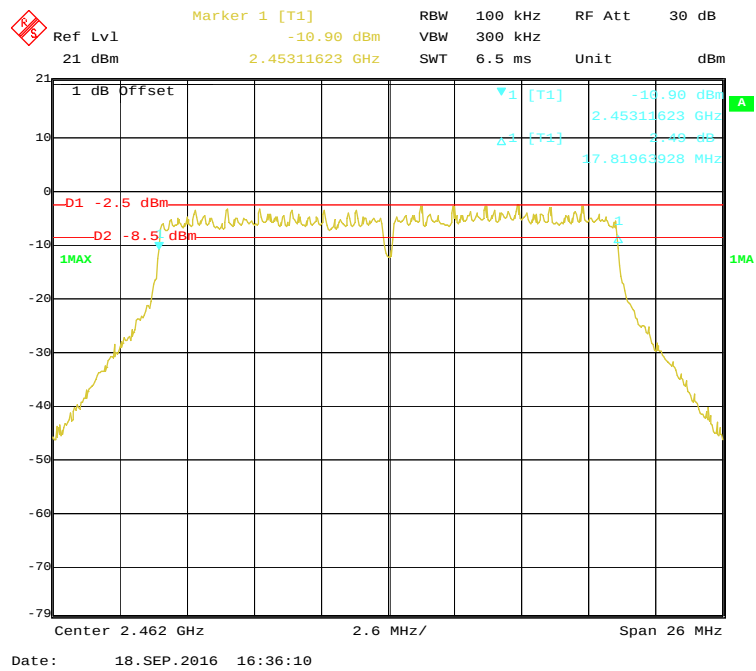
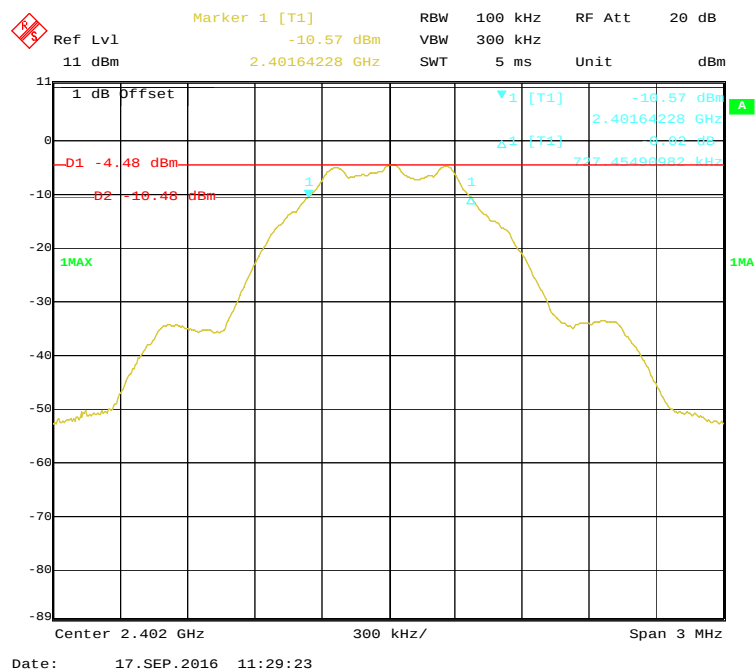
Delta 1 [T1] 0.37 dB
 RBW 100 kHz RF Att 30 dB
 Ref Lvl 21 dBm
 VBW 300 kHz
 SWT 6.5 ms Unit dBm

1 dB Offset
 -1 dBm
 -2.75 dBm
 -8.75 dBm
 1 MAX

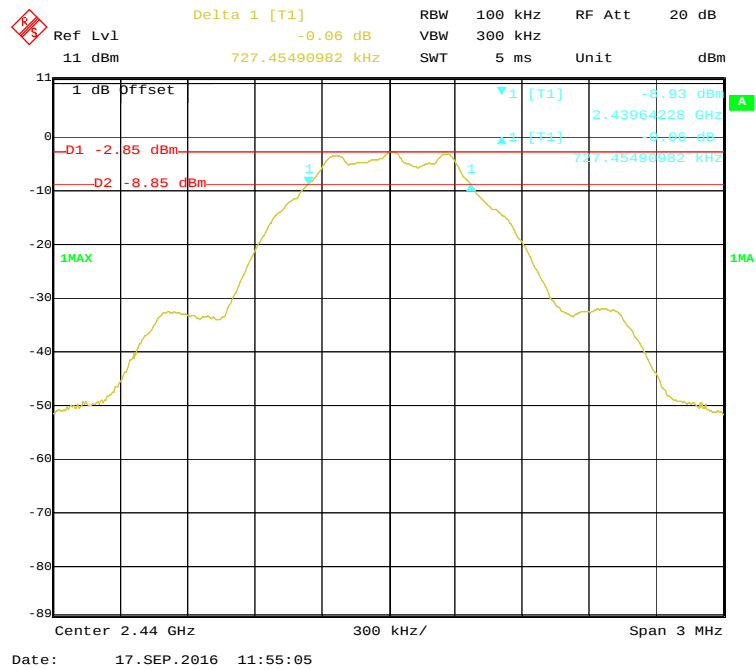
1 [T1] -3.84 dBm
 2.42813623 GHz
 1 [T1] 0.37 dB
 17.81963928 MHz

Center 2.437 GHz 2.6 MHz/ Span 26 MHz

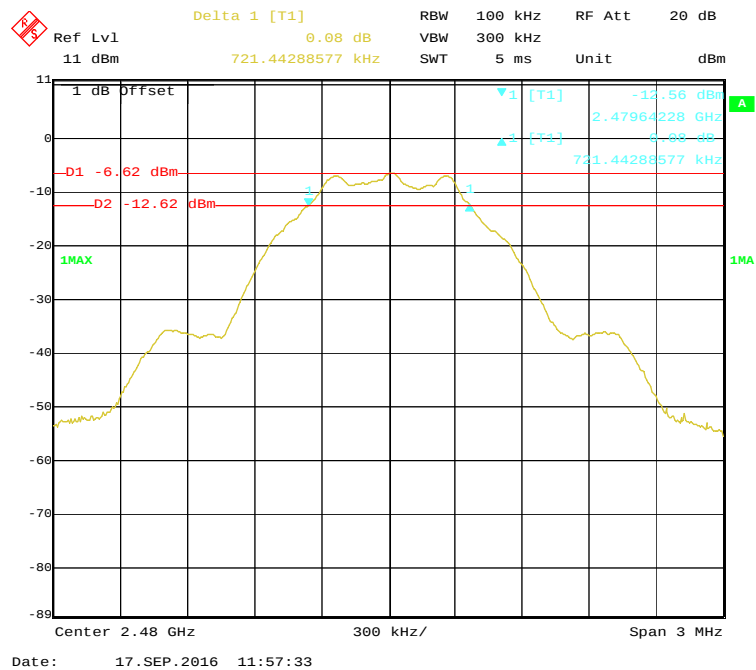
Date: 18.SEP.2016 16:37:36

802.11n-HT20 High Channel**BLE: Low Channel**

BLE: Middle Channel



High Channel



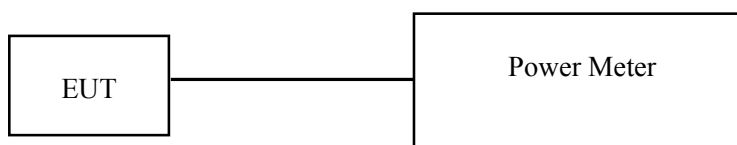
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

Applicable Standard

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2015-11-12	2016-11-11
Haojintech	Coaxial Cable	SR	SS11800	2016-09-08	2017-09-08
Agilent	Power Meter	N1912A	MY5000492	2015-11-18	2016-11-17
Agilent	Power Sensor	N1921A	MY54210024	2015-11-18	2016-11-17

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Chris Wang on 2016-09-17.

EUT operation mode: Transmitting

Channel	Frequency (MHz)	Max Conducted Average Output Power (dBm)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
802.11b					
Low	2412	3.21	6.71	30	Pass
Middle	2437	4.53	7.84	30	Pass
High	2462	4.37	7.70	30	Pass
802.11g					
Low	2412	5.62	9.61	30	Pass
Middle	2437	5.76	9.92	30	Pass
High	2462	5.28	9.47	30	Pass
802.11n-HT20					
Low	2412	4.86	9.75	30	Pass
Middle	2437	4.33	9.47	30	Pass
High	2462	4.52	9.71	30	Pass
BLE Mode					
Low	2402	-4.72	0.27	30	Pass
Middle	2440	-3.05	2.45	30	Pass
High	2480	-6.05	1.32	30	Pass

FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Applicable Standard

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. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2015-11-12	2016-11-11
Haojintech	Coaxial Cable	SR	SS11800	2016-09-08	2017-09-08

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

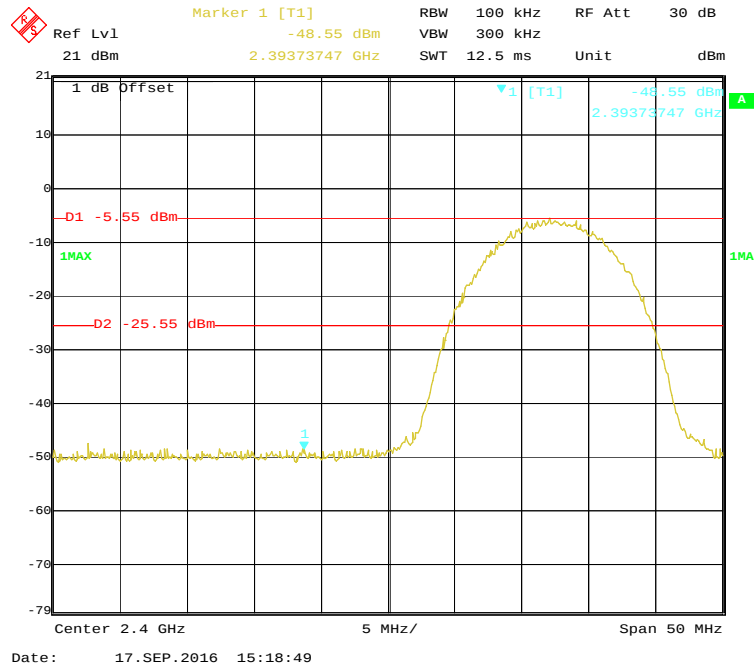
Temperature:	23°C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Chris Wang on 2016-09-17

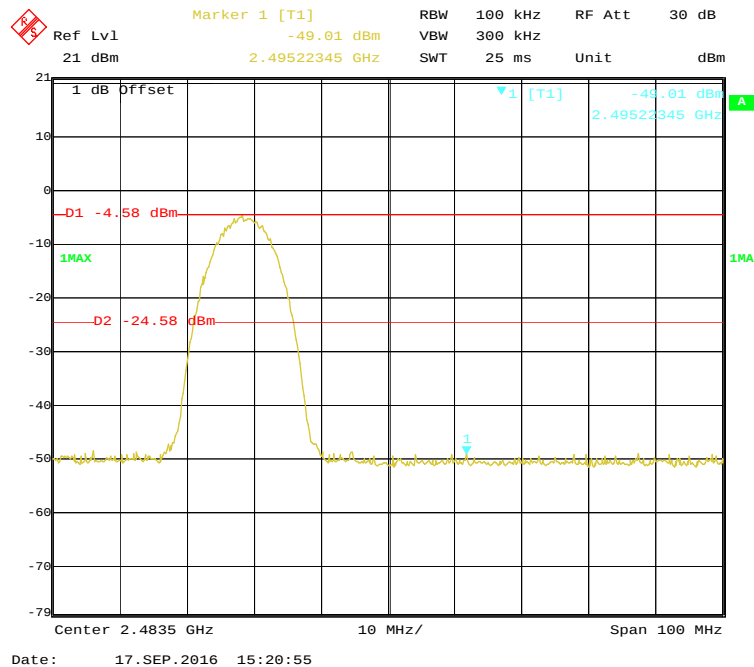
EUT operation mode: Transmitting

Please refer to the following table and plots.

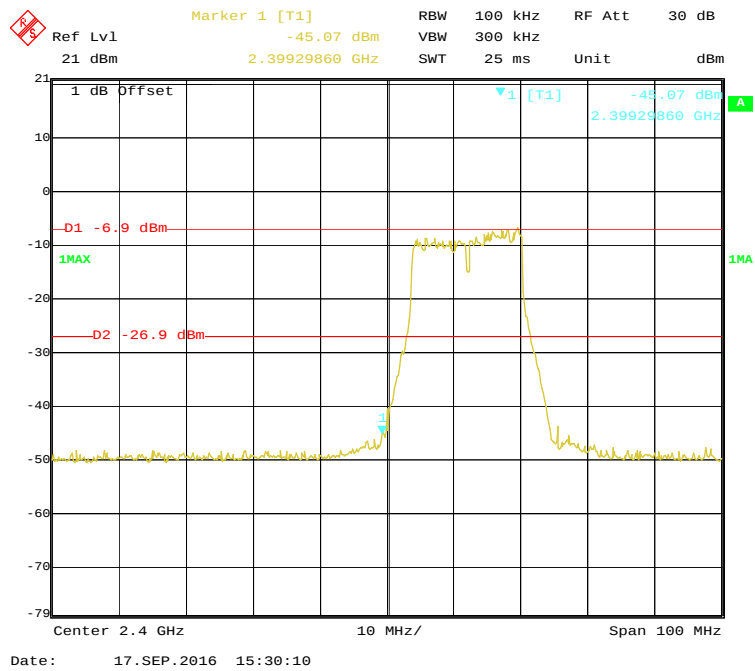
802.11b: Band Edge, Left Side



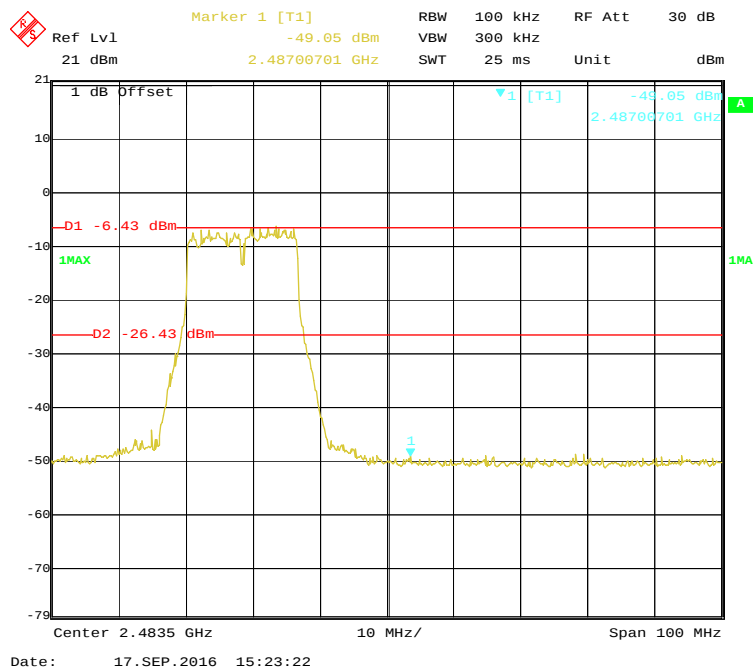
802.11b: Band Edge, Right Side



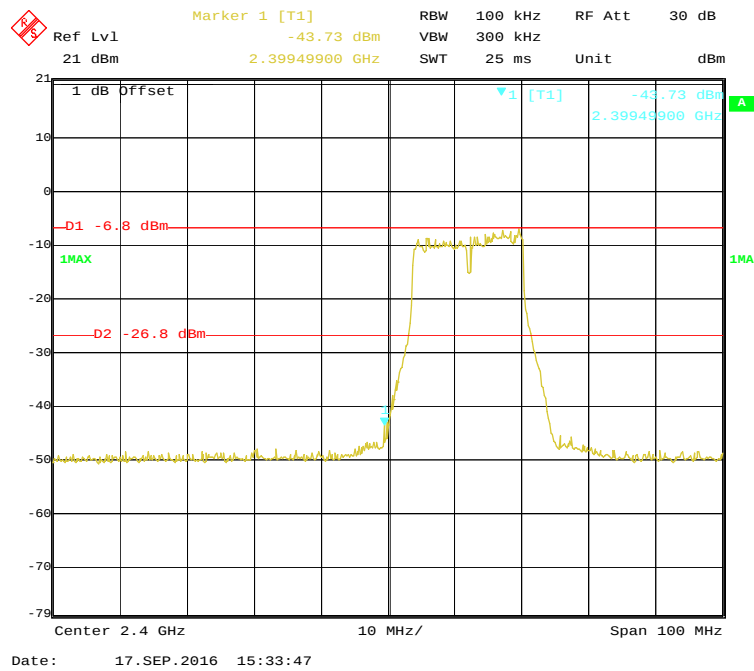
802.11g Band Edge, Left Side



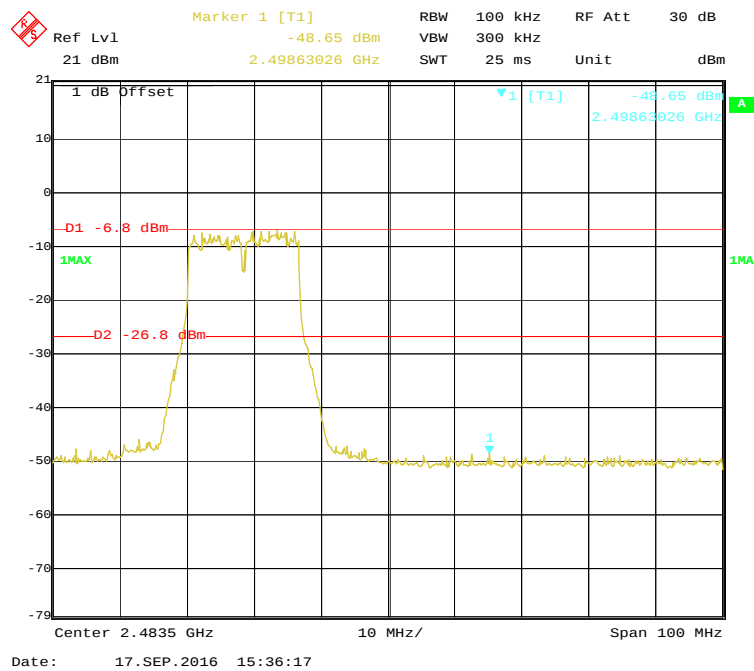
802.11g Band Edge, Right Side



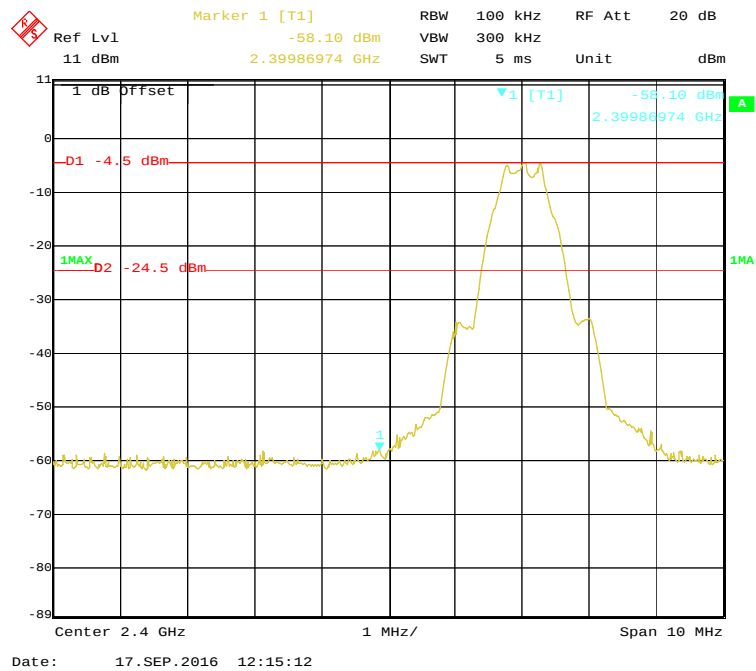
802.11n-HT20: Band Edge, Left Side



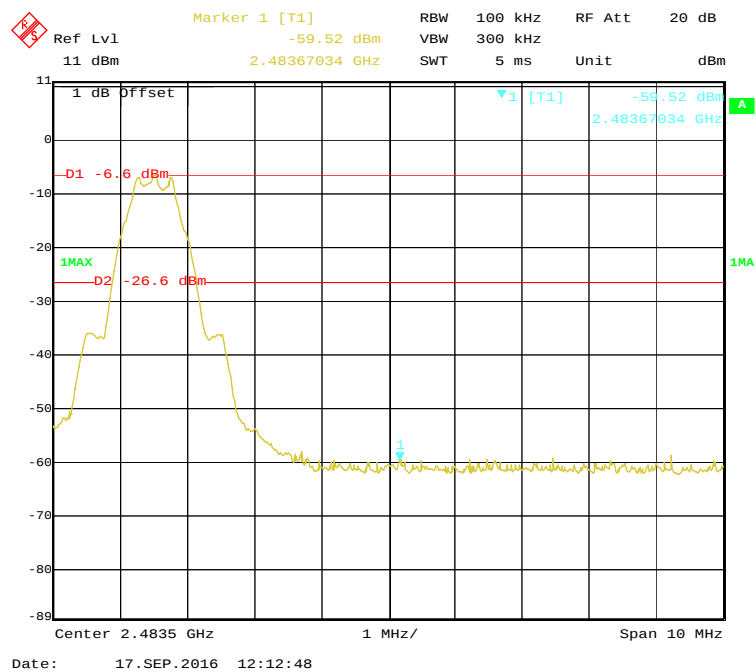
802.11n-HT20: Band Edge, Right Side



Band Edge, Left Side



Band Edge, Right Side



FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

According to KDB558074 D01 DTS Meas Guidance v03r05.

1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
2. Set the RBW to: $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$.
3. Set the VBW $\geq 3 \times \text{RBW}$.
4. Set the span to 1.5 times the DTS bandwidth.
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.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2015-11-12	2016-11-11
Haojintech	Coaxial Cable	SR	SS11800	2016-09-08	2017-09-08

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

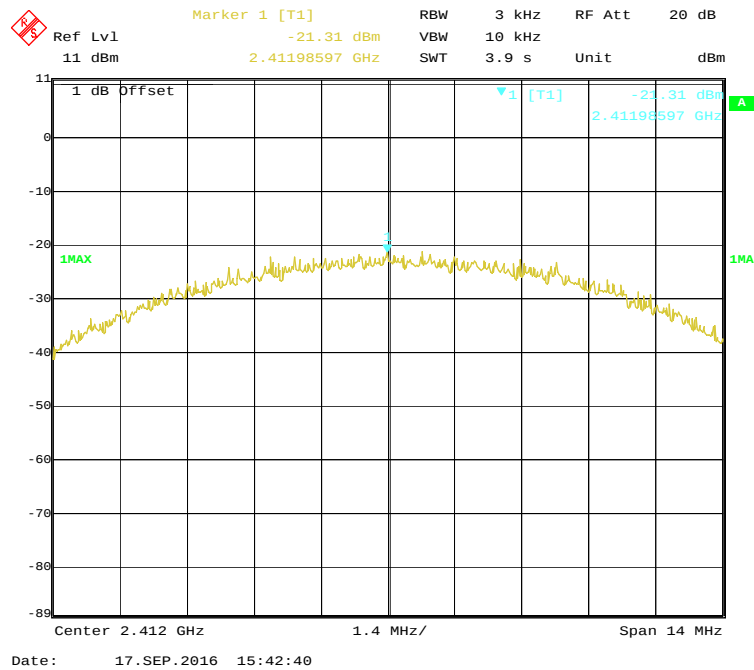
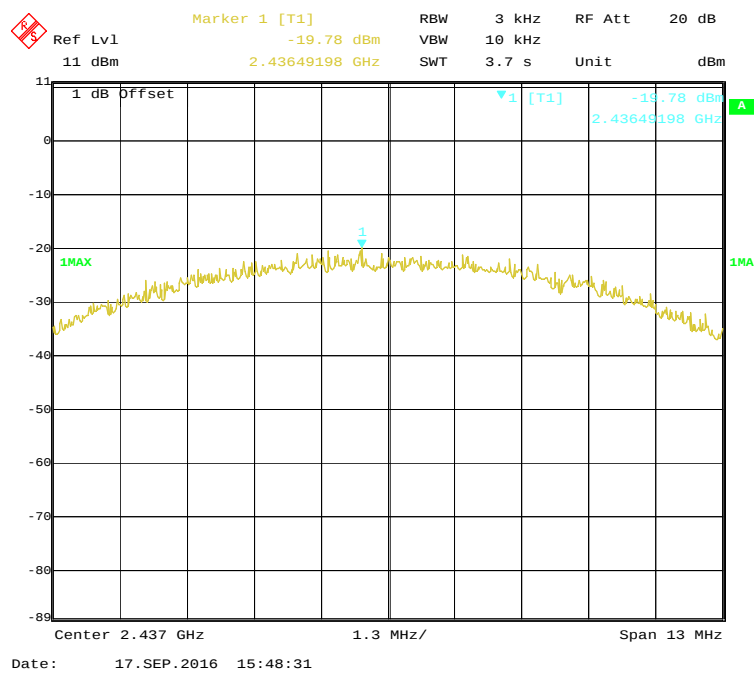
Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Chris Wang on 2016-09-17.

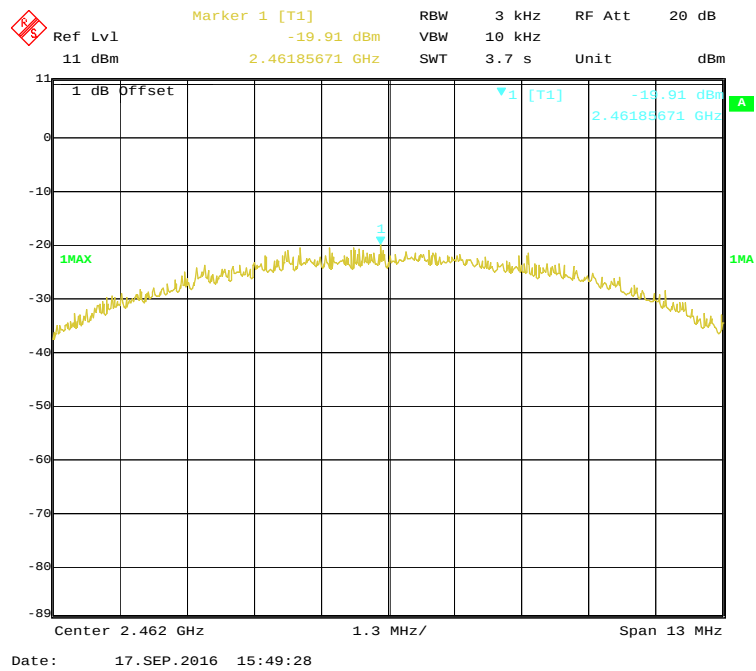
EUT operation mode: Transmitting

Test Result: Pass

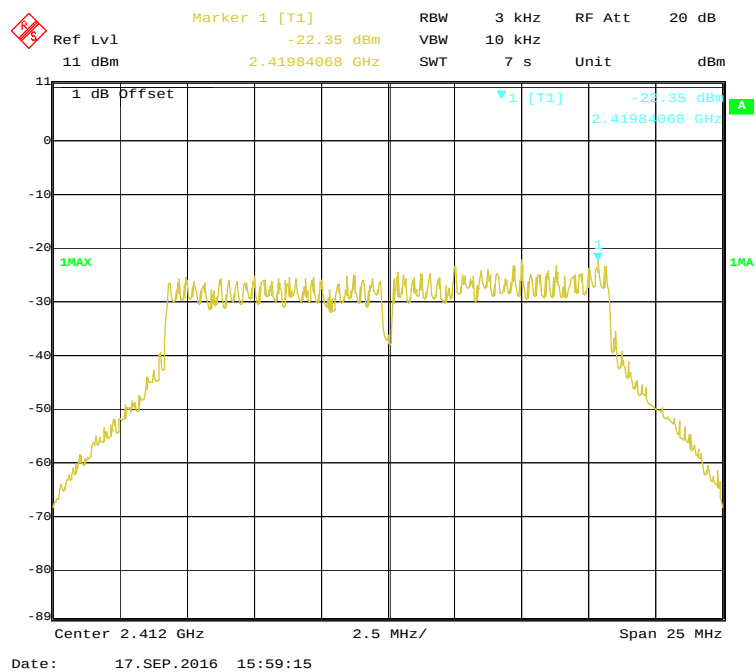
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
802.11b mode			
Low	2412	-21.31	≤ 8
Middle	2437	-19.78	≤ 8
High	2462	-19.91	≤ 8
802.11g mode			
Low	2412	-22.35	≤ 8
Middle	2437	-20.80	≤ 8
High	2462	-22.77	≤ 8
802.11n-HT20 mode			
Low	2412	-23.50	≤ 8
Middle	2437	-22.09	≤ 8
High	2462	-23.58	≤ 8
BLE Mode			
Low	2402	-19.36	≤ 8
Middle	2440	-17.72	≤ 8
High	2480	-21.32	≤ 8

Power Spectral Density, 802.11b Low Channel**Power Spectral Density, 802.11b Middle Channel**

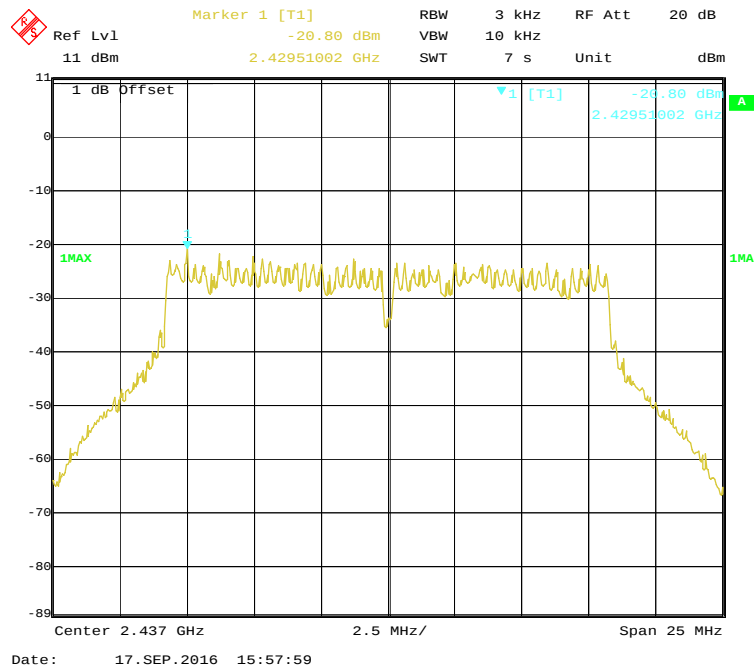
Power Spectral Density, 802.11b High Channel



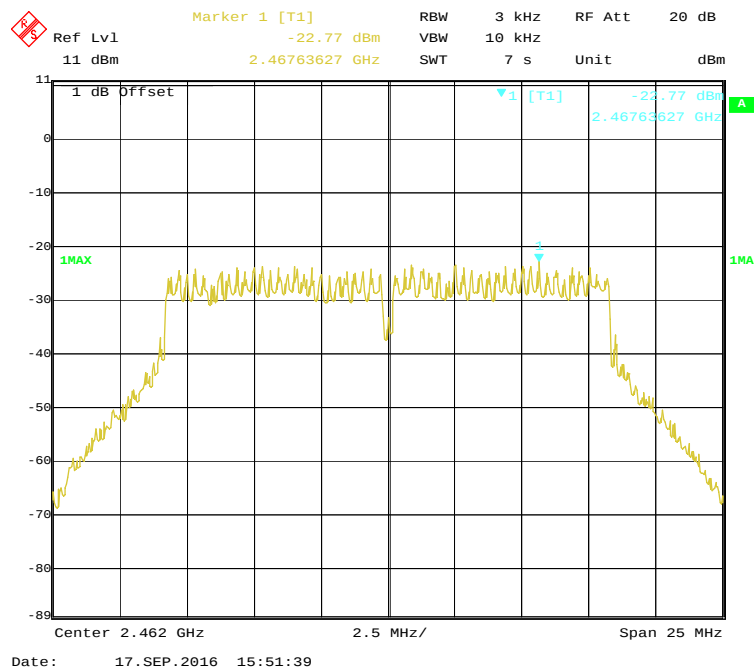
Power Spectral Density, 802.11g Low Channel



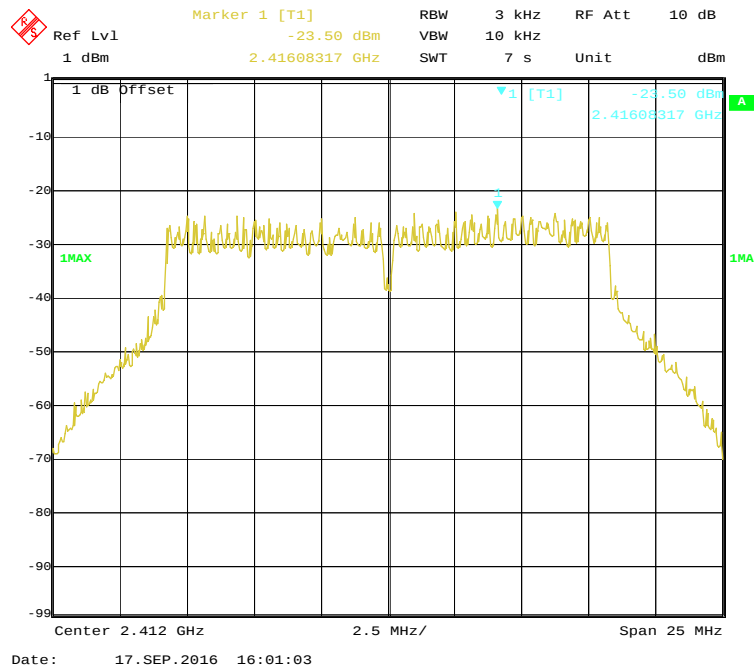
Power Spectral Density, 802.11g Middle Channel



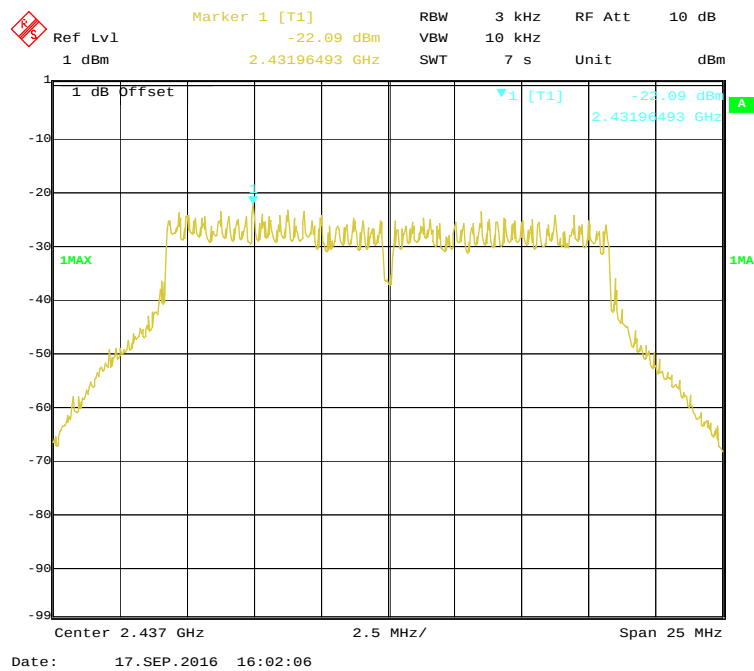
Power Spectral Density, 802.11g High Channel



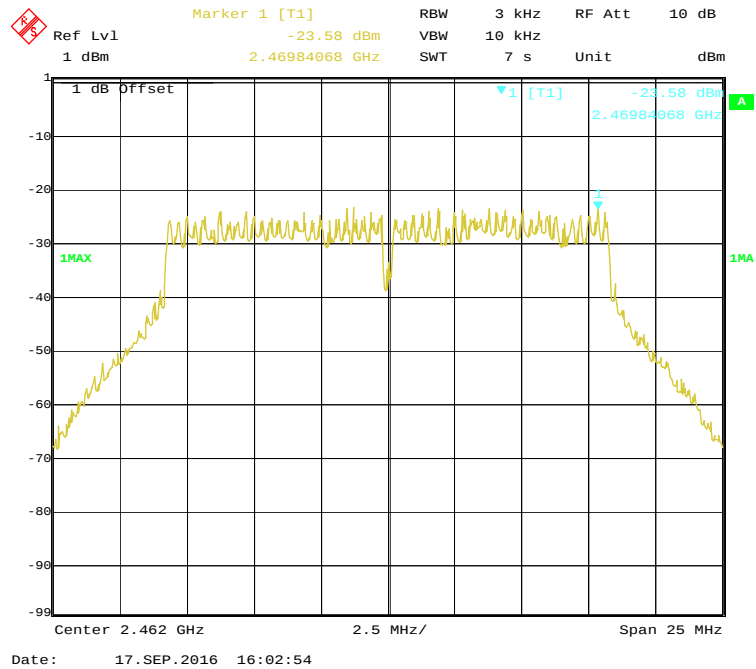
Power Spectral Density, 802.11n-HT20 Low Channel



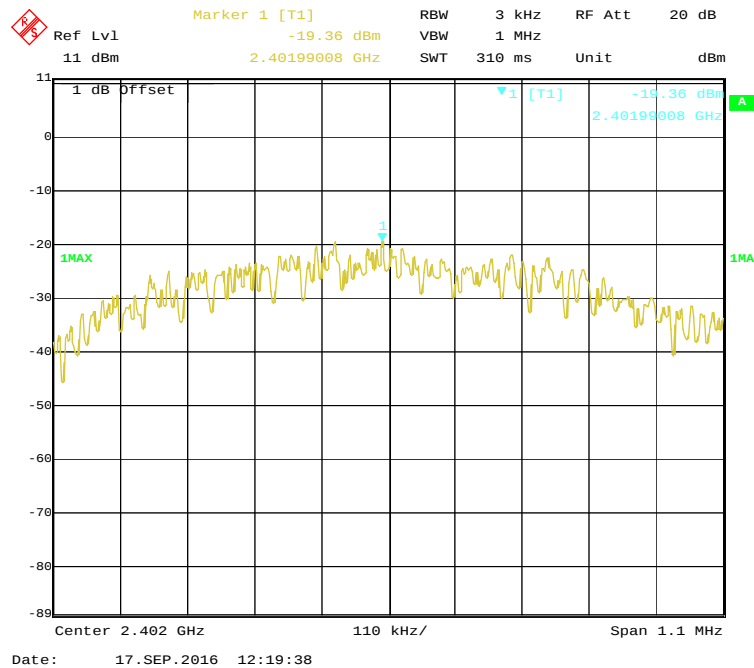
Power Spectral Density, 802.11n-HT20 Middle Channel



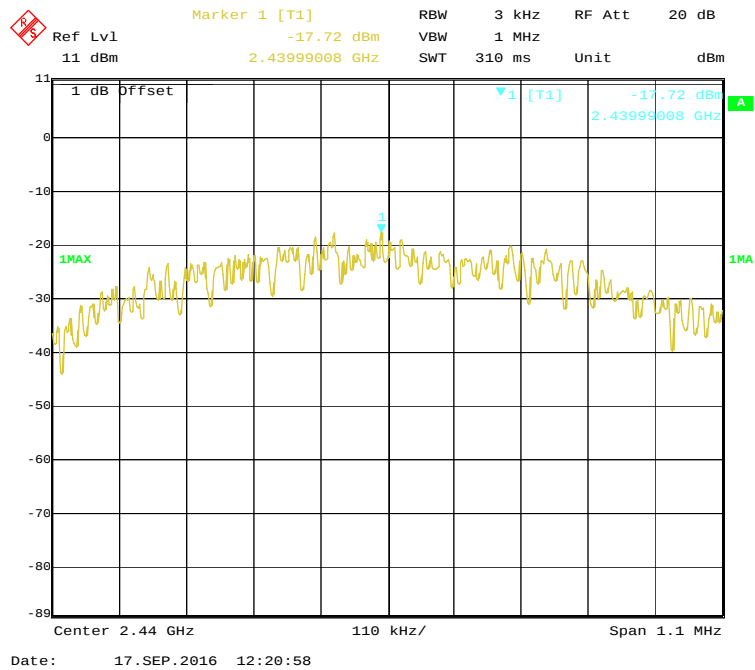
Power Spectral Density, 802.11n-HT20 High Channel



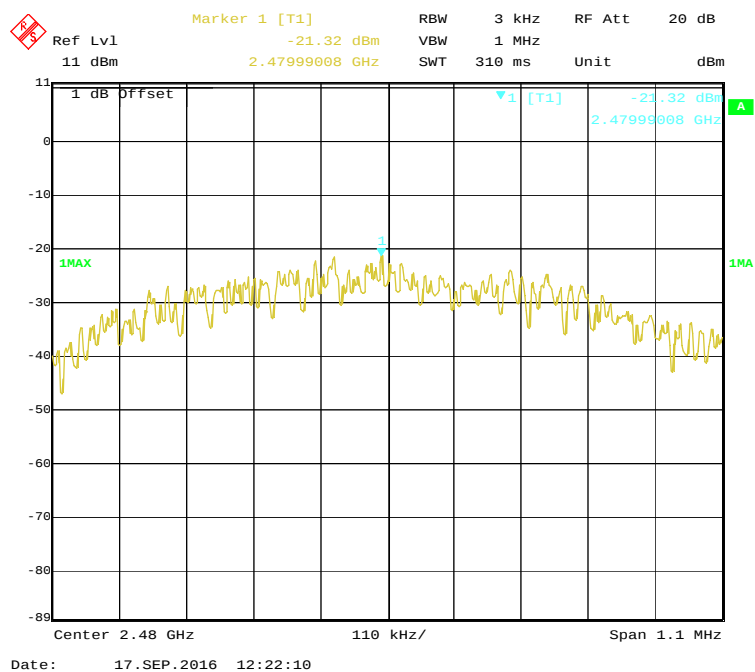
Power Spectral Density, BLE Low Channel



Power Spectral Density, BLE Middle Channel



Power Spectral Density, BLE High Channel



***** END OF REPORT *****