FCC PART 15.247

TEST REPORT

For

Hangzhou Gubei Electronics Technology Co., Ltd.

Room 106, No.1 Building, No.611, Jianghong road Binjiang, Hangzhou, Zhejiang, China

FCC ID: 2ACDZ -WT1FBS

Report Type:	**Product Type:**
Original Report	Embedded Wi-Fi Module

Test Engineer:	Matt Yao
Report Number:	RKS150824001-00A
Report Date:	2015-09-11
Reviewed By:	Jesse Huang EMC Manager
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TABLE OF CONTENTS

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The HangZhou Gubei Electronics Technology Co., Ltd.'s product, model number: WT1FBS (FCC ID：2ACDZ -WT1FBS) or the "EUT" in this report was a Embedded Wi-Fi Module, which was measured approximately: 37.5mm x 20.3mm x 4mm, rated with input voltage: DC 3.3 V from mainboard.

**All measurement and test data in this report was gathered from production sample serial number:150824001. (Assigned by the BACL Kunshan).The EUT supplied by the applicant was received on 2015-08-24.*

Objective

This report is prepared on behalf of HangZhou Gubei Electronics 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)

N/A

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

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 with RF radiated emission is 5.91 dB for 30MHz-1GHz.and 4.92 dB for above 1GHz, 1.95dB for conducted measurement.

Test Facility

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

Test site at Bay Area Compliance Laboratories Corp. (Kunshan) has been fully described in reports submitted to the Federal Communication 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 November 06, 2014. 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.: 815570. 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	/	/

For 802.11b, 802.11g, 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.

For 802.11n-HT40 mode, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	8	2447
4	2427	9	2452
5	2432	/	/
6	2437	/	/
7	2442	/	/

EUT was tested with Channel 3, 6 and 9.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

RF test tool built-in the EUT. RF test tool built-in the EUT.The test command was used for testing,which was provided by manufacturer. The worst condition(maximum power with 100% duty cycle) was performed under:

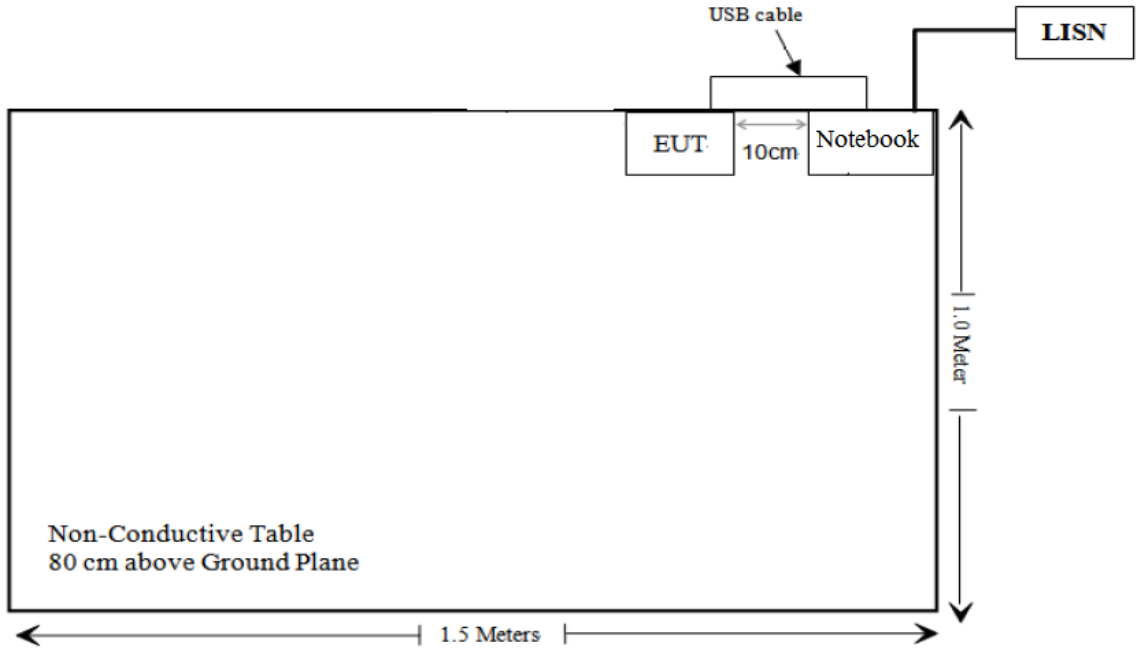
802.11b: Data rate:1 Mbps, Power level: 10
802.11g: Data rate: 6 Mbps, Power level: 12
802.11n-HT20: Data rate: MCS0, Power level: 12
802.11n-HT40: Data rate: MCS0, Power level: 12

External I/O Cable

Cable Description	Length (m)	From Port	To
N/A	/	/	/

Block Diagram of Test Setup

For conducted emission



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC§15.247 (i), §1.1310& §2.1091	RF Exposure	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& §2.1091 –MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

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

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/		f/1500	30
1500-100,000	/		1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:
Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2412	2.0	1.585	17.13	51.64	20	0.0163	1.0
802.11g	2412	2.0	1.585	19.50	89.13	20	0.0281	1.0
802.11n HT20	2412	2.0	1.585	19.33	85.70	20	0.0270	1.0
802.11n HT40	2422	2.0	1.585	18.72	74.47	20	0.0235	1.0

Result: The device meet FCC MPE at 20 cm distance

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 one integral antenna arrangement for wifi, which was permanently attached and the antenna gain is 2 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

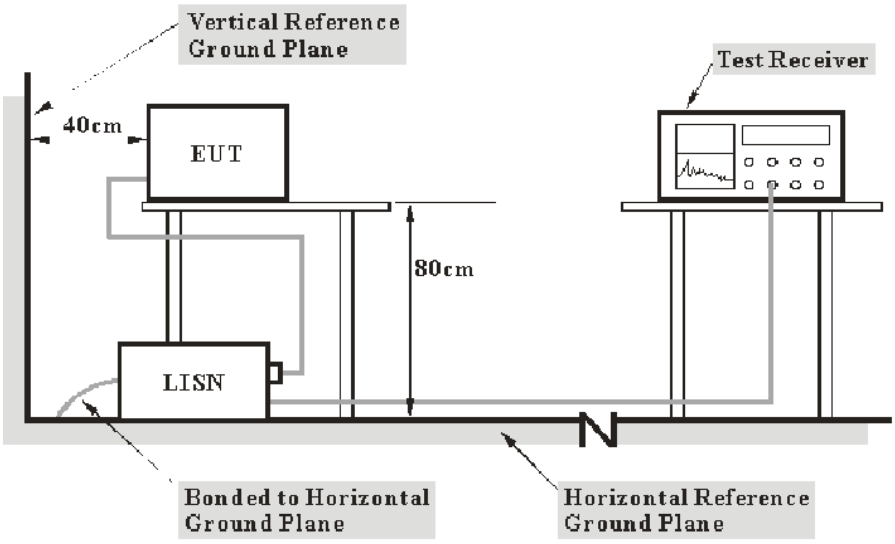
Measurement Uncertainty

Input quantities to be considered for conducted disturbance measurements maybe receiver reading, attenuation of the connection between LISN and receiver, LISN voltage division factor, LISN VDF frequency interpolation and receiver related input quantities, etc.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of conducted disturbance test at Bay Area Compliance Laboratories Corp. (Kunshan) is shown as below. And the uncertainty will not be taken into consideration for the test data recorded in the report.

Port	Expanded Measurement uncertainty
AC Mains	3.26 dB (k=2, 95% level of confidence)
CAT 3	3.70 dB (k=2, 95% level of confidence)
CAT 5	3.86 dB (k=2, 95% level of confidence)
CAT 6	4.64 dB (k=2, 95% level of confidence)

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 C63.4-2014 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The adapter was connected to a 120 VAC/60 Hz power source.

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	934115/007	2014-11-4	2015-11-3
Rohde & Schwarz	LISN	ESH3-Z5	862770/011	2014-11-4	2015-11-3
Rohde & Schwarz	LISN	ESH3-Z5	892239/018	2015-6-23	2016-6-22
Rohde & Schwarz	Pulse limiter	ESH3-Z2	879940/0058	2015-6-19	2016-6-18
HP	Current probe	8710-1744	636	2015-6-19	2016-6-18
FCC	ISN	FCC-TLISN-T8-02	20376	2015-6-23	2016-6-22
Rohde & Schwarz	CE Test software	EMC 32	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:

Correction Factor = LISN VDF + 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:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207, the worst margin reading as below:

13.09 dB at **0.170 MHz** in the **Line** conducted mode

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

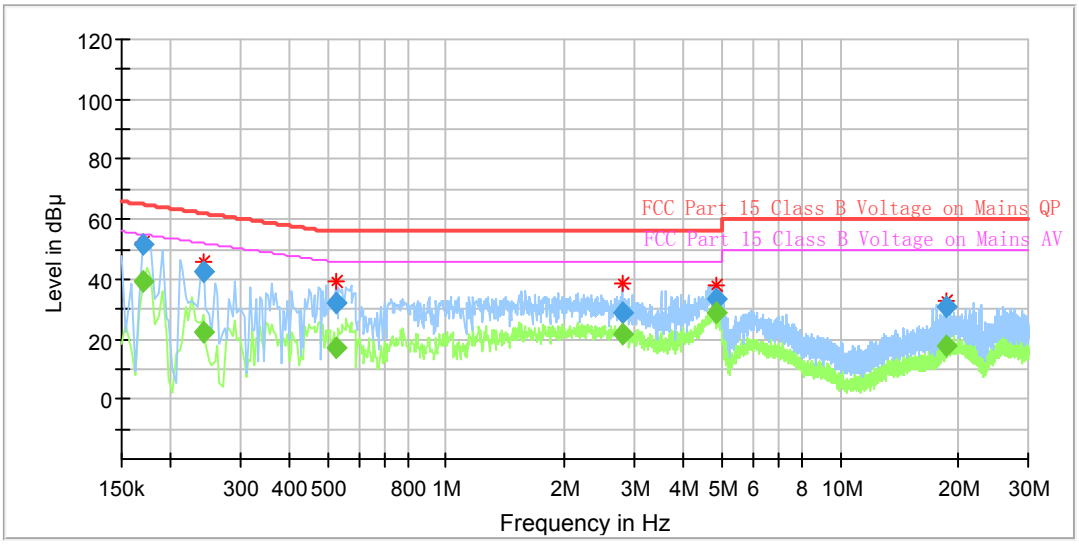
Environmental Conditions

Temperature:	23 ℃
Relative Humidity:	56 %
ATM Pressure:	101.0 kPa

The testing was performed by Matt Yao on 2015-09-10.

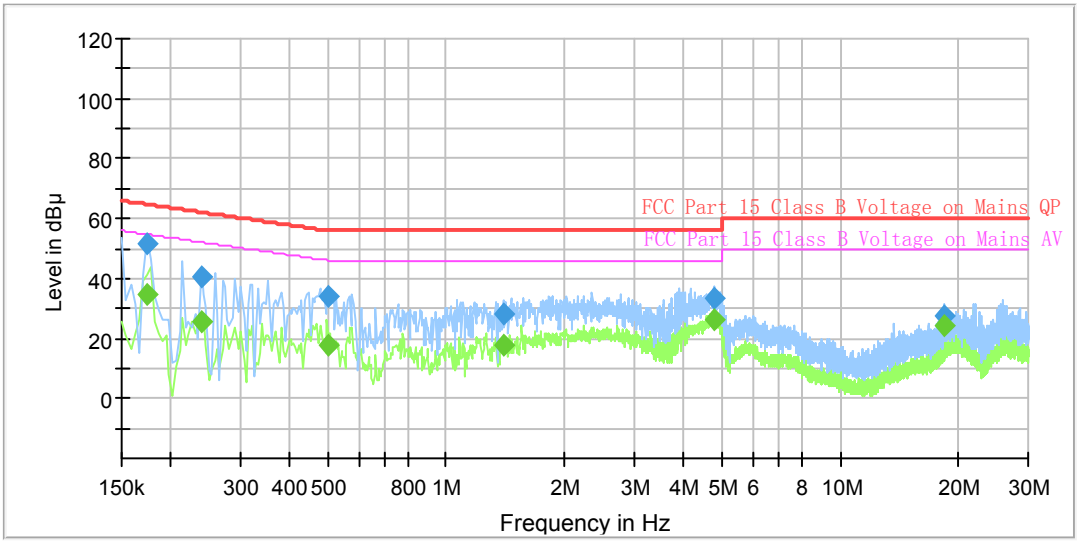
EUT operation mode: Transmitting

AC 120V/60 Hz, Line



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.170	---	39.38	9.000	L1	11.0	15.58	54.96	Compliance
0.170	51.87	---	9.000	L1	11.0	13.09	64.96	Compliance
0.242	---	22.54	9.000	L1	11.0	29.49	52.03	Compliance
0.242	42.27	---	9.000	L1	11.0	19.76	62.03	Compliance
0.526	---	17.17	9.000	L1	11.0	28.83	46.00	Compliance
0.526	32.35	---	9.000	L1	11.0	23.65	56.00	Compliance
2.790	---	21.71	9.000	L1	11.2	24.29	46.00	Compliance
2.790	29.16	---	9.000	L1	11.2	26.84	56.00	Compliance
4.850	---	28.64	9.000	L1	11.3	17.36	46.00	Compliance
4.850	33.42	---	9.000	L1	11.3	22.58	56.00	Compliance
18.658	---	17.50	9.000	L1	11.4	32.50	50.00	Compliance
18.658	30.59	---	9.000	L1	11.4	29.41	60.00	Compliance

AC 120V/60 Hz, Neutral



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.174	---	34.84	9.000	N	11.00	19.93	54.77	Compliance
0.174	51.51	---	9.000	N	11.00	13.26	64.77	Compliance
0.238	---	25.67	9.000	N	11.00	26.50	52.17	Compliance
0.238	40.40	---	9.000	N	11.00	21.77	62.17	Compliance
0.502	---	17.81	9.000	N	11.00	28.19	46.00	Compliance
0.502	33.87	---	9.000	N	11.00	22.13	56.00	Compliance
1.394	---	17.97	9.000	N	11.10	28.03	46.00	Compliance
1.394	28.34	---	9.000	N	11.10	27.66	56.00	Compliance
4.794	---	26.38	9.000	N	11.40	19.62	46.00	Compliance
4.794	33.58	---	9.000	N	11.40	22.42	56.00	Compliance
18.330	---	24.34	9.000	N	11.40	25.66	50.00	Compliance
18.330	27.26	---	9.000	N	11.40	32.74	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;

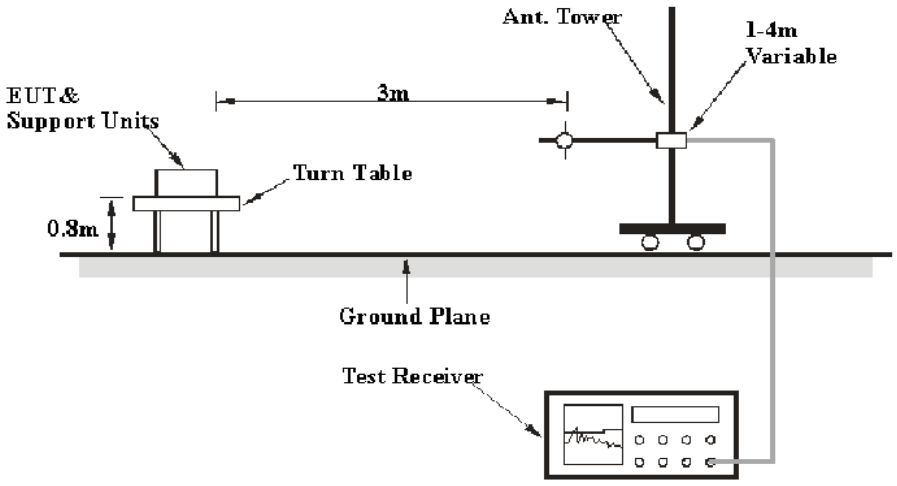
Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

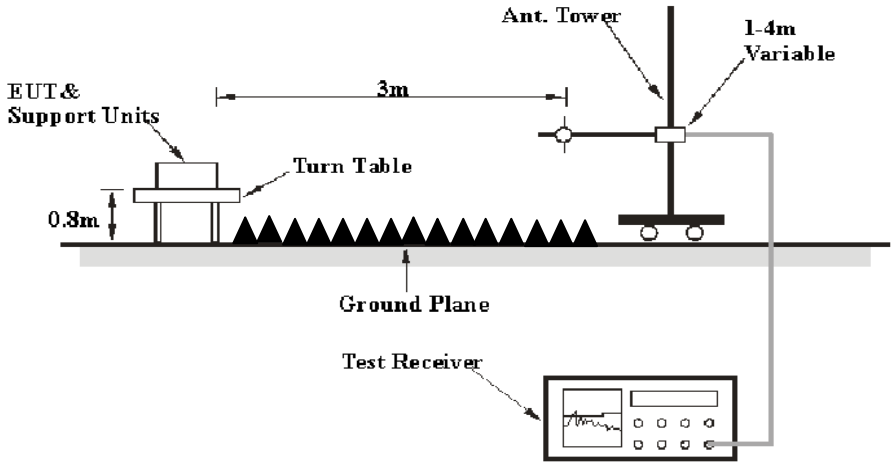
Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Kunshan) is 5.91 dB for 30MHz-1GHz and 4.92 dB for above 1GHz, 1.95dB for conducted measurement at antenna port. And the uncertainty will not be taken into consideration for the test data recorded in the report.

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 C63.4-2014. The specification used was the FCC 15.209, and FCC 15.247 limits.

The adapter was connected to a 120 VAC/60 Hz power source.

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 Instrunent	Amplifier	330	171377	2014-9-16	2015-9-16
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2015-5-20	2016-5-19
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2014-11-7	2015-11-6
ETS	Horn Antenna	3115	6229	2014-11-7	2015-11-6
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2014-11-4	2015-11-3
Mini	Pre-amplifier	ZVA-183-S+	857001418	2014-9-16	2015-9-16
R&S	Auto test Software	EMC32	V 09.10.0	-	-
BACL	RF cable	KS-LAB-012	KS-LAB-012	2015-06-16	2015-12-15

*** 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:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - 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:

Margin = Limit – 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.

5.09 dB at **7386 MHz** in the **vertical** polarization **for 802.11b Mode**

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

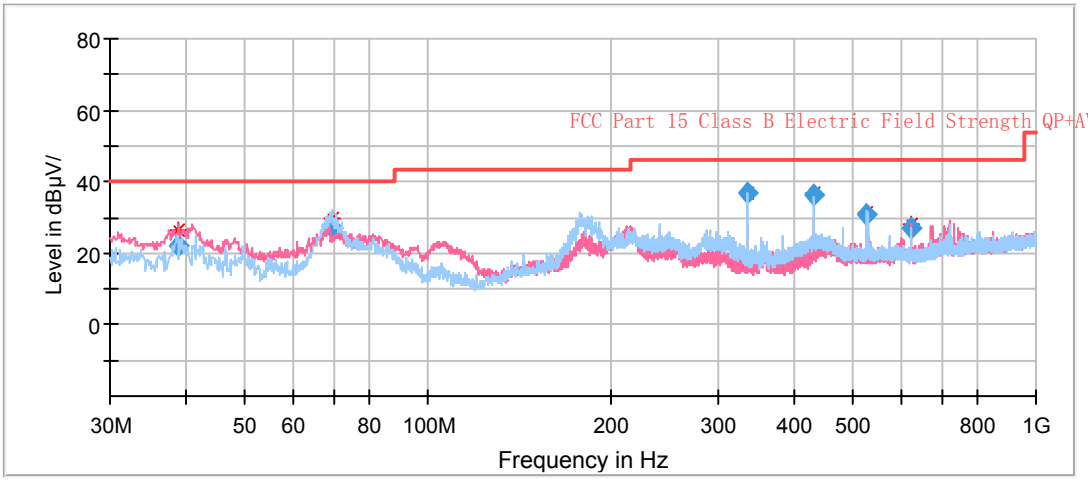
Temperature:	25 ℃
Relative Humidity:	40 %
ATM Pressure:	101.0 kPa

The testing was performed by Matt Yao on 2015-09-10.

EUT operation mode: Transmitting

30 MHz-1 GHz:

The worst case was performed under 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 (dBµV/m)	Margin (dB)
38.9274	32.33	QP	80	100	V	-10.3	22.03	40.00	17.97
69.4678	43.98	QP	37	200	H	-17	26.98	40.00	13.02
335.98965	46.16	QP	40	100	H	-9.5	36.66	46.00	9.34
432.00885	43.66	QP	50	100	H	-7.4	36.26	46.00	9.74
527.99775	36.27	QP	351	200	H	-5.3	30.97	46.00	15.03
624.00735	31.06	QP	100	100	V	-4.3	26.76	46.00	19.24

1GHz-25GHz

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 μ V/m)	Margin (dB)
Low Channel (2412 MHz)									
2412	94.69	PK	22	150	H	2.8	97.49	/	/
2412	91.91	Ave.	22	150	H	2.8	94.71	/	/
2412	95.18	PK	22	150	V	2.8	97.98	/	/
2412	92.14	Ave.	22	150	V	2.8	94.94	/	/
2328	40.84	PK	332	139	V	2.9	43.74	74	30.26
2328	22.4	Ave	332	139	V	2.9	25.30	54	28.70
2390	39.46	PK	34	134	V	3.4	42.86	74	31.14
2390	25.36	Ave	34	134	V	3.4	28.76	54	25.24
4824	52.53	PK	110	150	H	11.5	64.03	74	9.97
4824	35.25	Ave.	110	150	H	11.5	46.75	54	7.25
6154	40.82	PK	80	100	V	16.1	56.92	74	17.08
6154	27.81	Ave	80	100	V	16.1	43.91	54	10.09
7236	43.85	PK	170	100	H	17.2	61.05	74	12.95
7236	29.28	Ave	170	100	H	17.2	46.48	54	7.52

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	93.39	PK	122	100	H	2.9	96.29	/	/
2437	91.13	Ave.	122	100	H	2.9	94.03	/	/
2437	93.91	PK	122	100	V	2.9	96.81	/	/
2437	91.23	Ave.	122	100	V	2.9	94.13	/	/
1592	38.99	PK	48	150	V	2.2	41.19	74	32.81
1592	36.91	Ave.	48	150	V	2.2	39.11	54	14.89
3233	39.45	PK	340	100	V	4.3	43.75	74	30.25
3233	37.51	Ave.	340	100	V	4.3	41.81	54	12.19
4874	51.19	PK	186	200	V	11.6	62.79	74	11.21
4874	32.91	Ave.	186	200	V	11.6	44.51	54	9.49
6228	38.88	PK	57	200	H	16.2	55.08	74	18.92
6228	25.87	Ave	57	200	H	16.2	42.07	54	11.93
7311	43.91	PK	212	150	V	17.3	61.21	74	12.79
7311	27.34	Ave	212	150	V	17.3	44.64	54	9.36

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	96.29	PK	340	100	H	3.1	99.39	/	/
2462	93.51	Ave.	340	100	H	3.1	96.61	/	/
2462	96.78	PK	340	100	V	3.1	99.88	/	/
2462	93.74	Ave.	340	100	V	3.1	96.84	/	/
2484	37.49	PK	290	110	V	3.2	40.69	74	33.31
2484	24.04	Ave	290	110	V	3.2	27.24	54	26.76
2532	35.85	PK	283	150	V	3.4	39.25	74	34.75
2532	22.44	Ave	283	150	V	3.4	25.84	54	28.16
4924	54.16	PK	68	100	V	11.7	65.86	74	8.14
4924	35.68	Ave.	68	100	V	11.7	47.38	54	6.62
6310	38.82	PK	92	150	V	16.3	55.12	74	18.88
6310	26.32	Ave	92	150	V	16.3	42.62	54	11.38
7386	47.04	PK	160	200	V	17.4	64.44	74	9.56
7386	31.51	Ave	160	200	V	17.4	48.91	54	5.09

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	93.32	PK	90	100	H	2.8	96.12	/	/
2412	89.96	Ave.	90	100	H	2.8	92.76	/	/
2412	93.84	PK	90	100	V	2.8	96.64	/	/
2412	90.86	Ave.	90	100	V	2.8	93.66	/	/
2330	41.46	PK	158	139	V	2.9	44.36	74	29.64
2330	23.97	Ave	158	139	V	2.9	26.87	54	27.13
2389	37.07	PK	60	141	V	3.4	40.47	74	33.53
2389	21.29	Ave	60	141	V	3.4	24.69	54	29.31
4824	52.71	PK	390	180	V	11.5	64.21	74	9.79
4824	35.46	Ave.	390	180	V	11.5	46.96	54	7.04
6154	46.23	PK	90	100	H	16.1	62.33	74	11.67
6154	25.79	Ave	90	100	H	16.1	41.89	54	12.11
7236	49.02	PK	66	200	V	17.2	66.22	74	7.78
7236	29.58	Ave	66	200	V	17.2	46.78	54	7.22

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	93.31	PK	170	100	H	2.9	96.21	/	/
2437	92.05	Ave.	170	100	H	2.9	94.95	/	/
2437	93.83	PK	270	150	V	2.9	96.73	/	/
2437	91.15	Ave.	270	150	V	2.9	94.05	/	/
1592	41.28	PK	340	200	V	2.2	43.48	74	30.52
1592	27.40	Ave.	340	200	V	2.2	29.60	54	24.40
3233	39.66	PK	180	150	V	4.3	43.96	74	30.04
3233	26.38	Ave.	180	150	V	4.3	30.68	54	23.32
4874	49.45	PK	310	200	V	11.6	61.05	74	12.95
4874	35.17	Ave.	310	200	V	11.6	46.77	54	7.23
6228	49.98	PK	85	100	H	16.2	66.18	74	7.82
6228	25.14	Ave	85	100	H	16.2	41.34	54	12.66
7311	47.90	PK	330	100	V	17.3	65.20	74	8.80
7311	28.41	Ave	330	100	V	17.3	45.71	54	8.29

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	93.11	PK	120	160	H	3.1	96.21	/	/
2462	91.85	Ave.	120	160	H	3.1	94.95	/	/
2462	93.63	PK	210	210	V	3.1	96.73	/	/
2462	90.95	Ave.	210	210	V	3.1	94.05	/	/
2486	38.81	PK	241	100	V	3.2	42.01	74	31.99
2486	22.49	Ave	241	100	V	3.2	25.69	54	28.31
2512	36.82	PK	280	150	V	3.4	40.22	74	33.78
2512	20.74	Ave	280	150	V	3.4	24.14	54	29.86
4924	49.35	PK	350	140	V	11.7	61.05	74	14.05
4924	35.07	Ave.	350	140	V	11.7	46.77	54	8.33
6310	49.88	PK	200	100	V	16.3	66.18	74	6.72
6310	25.04	Ave	200	100	V	16.3	41.34	54	11.56
7386	47.80	PK	280	200	H	17.4	65.2	74	9.90
7386	28.31	Ave	280	200	H	17.4	45.71	54	9.39

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	93.06	PK	140	100	H	2.8	95.86	/	/
2412	90.34	Ave.	140	100	H	2.8	93.14	/	/
2412	93.28	PK	60	100	V	2.8	96.08	/	/
2412	90.17	Ave.	60	100	V	2.8	92.97	/	/
2335	40.31	PK	140	100	V	2.9	43.21	74	30.79
2335	21.46	Ave	140	100	V	2.9	24.36	54	29.64
2390	37.85	PK	94	150	V	3.4	41.25	74	32.75
2390	21.74	Ave	94	150	V	3.4	25.14	54	28.86
4824	53.16	PK	290	200	V	11.5	64.66	74	9.34
4824	33.65	Ave.	290	200	V	11.5	45.15	54	8.85
6154	46.46	PK	320	100	V	16.1	62.56	74	11.44
6154	25.04	Ave	320	100	V	16.1	41.14	54	12.86
7236	45.32	PK	270	150	H	17.2	62.52	74	11.48
7236	28.53	Ave	270	150	H	17.2	45.73	54	8.27

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	93.48	PK	110	100	H	2.9	96.38	/	/
2437	90.76	Ave.	110	100	H	2.9	93.66	/	/
2437	93.7	PK	260	155	V	2.9	96.6	/	/
2437	90.59	Ave.	260	155	V	2.9	93.49	/	/
1592	41.78	PK	70	200	V	2.2	43.98	74	30.02
1592	28.25	Ave.	70	200	V	2.2	30.45	54	23.55
3233	40.82	PK	93	100	V	4.3	45.12	74	28.88
3233	25.69	Ave.	93	100	V	4.3	29.99	54	24.01
4874	53.58	PK	160	200	V	11.6	65.18	74	8.82
4874	34.07	Ave.	160	200	V	11.6	45.67	54	8.33
6228	46.88	PK	310	120	H	16.2	63.08	74	10.92
6228	25.46	Ave	310	120	H	16.2	41.66	54	12.34
7311	45.74	PK	220	100	V	17.3	63.04	74	10.96
7311	27.95	Ave	220	100	V	17.3	45.25	54	8.75

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	92.46	PK	170	100	H	3.1	95.56	/	/
2462	89.74	Ave.	170	100	H	3.1	92.84	/	/
2462	92.68	PK	170	100	V	3.1	95.78	/	/
2462	89.57	Ave.	170	100	V	3.1	92.67	/	/
2486	37.05	PK	239	100	V	3.2	40.25	74	33.75
2486	20.38	Ave	239	100	V	3.2	23.58	54	30.42
2510	37.81	PK	250	150	V	3.4	41.21	74	32.79
2510	20.59	Ave	250	150	V	3.4	23.99	54	30.01
4924	52.14	PK	130	100	V	11.7	63.84	74	10.16
4924	32.63	Ave.	130	100	V	11.7	44.33	54	9.67
6310	45.44	PK	280	200	V	16.3	61.74	74	12.26
6310	24.02	Ave	280	200	V	16.3	40.32	54	13.68
7386	44.3	PK	210	200	V	17.4	61.7	74	12.3
7386	27.51	Ave	210	200	V	17.4	44.91	54	9.09

802.11n-HT40 Mode:

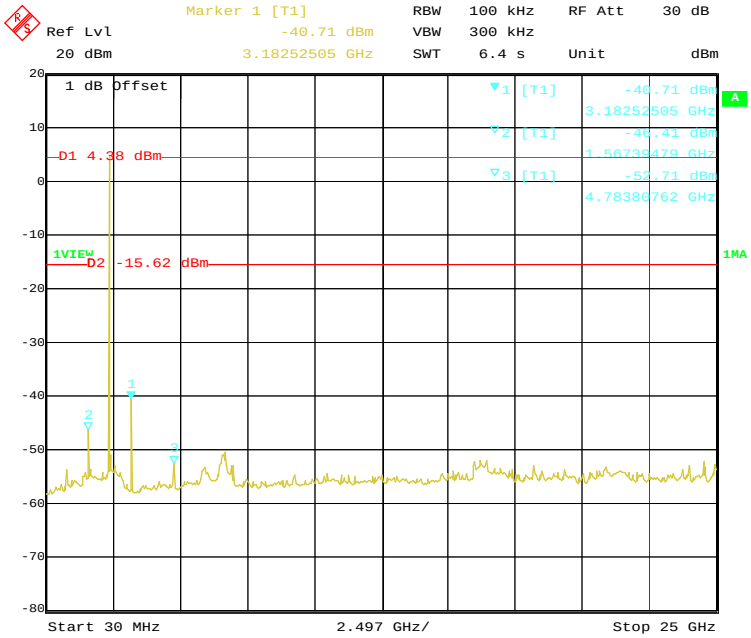
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBμV/m)	FCC Part 15.247/205/209	
	Reading (dBμV)	Detector (PK/QP/Ave.)		Height (cm)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
Low Channel (2422 MHz)									
2412	92.25	PK	22	150	H	2.8	95.05	/	/
2412	89.53	Ave.	22	150	H	2.8	92.33	/	/
2412	92.47	PK	22	150	V	2.8	95.27	/	/
2412	89.36	Ave.	22	150	V	2.8	92.16	/	/
2339	41.35	PK	140	100	V	2.9	44.25	74	29.75
2339	22.21	Ave	140	100	V	2.9	25.11	54	28.89
2390	36.84	PK	90	150	V	3.4	40.24	74	33.76
2390	21.25	Ave	90	150	V	3.4	24.65	54	29.35
4824	52.35	PK	110	150	V	11.5	63.85	74	10.15
4824	33.84	Ave.	110	150	V	11.5	45.34	54	8.66
6154	45.65	PK	80	100	H	16.1	61.75	74	12.25
6154	24.23	Ave	80	100	H	16.1	40.33	54	13.67
7236	44.51	PK	170	100	V	17.2	61.71	74	12.29
7236	28.72	Ave	170	100	V	17.2	45.92	54	8.08

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	92.01	PK	100	100	H	2.9	94.91	/	/
2437	88.98	Ave.	100	100	H	2.9	91.88	/	/
2437	91.82	PK	100	100	V	2.9	94.72	/	/
2437	89.06	Ave.	100	100	V	2.9	91.96	/	/
1592	40.01	PK	26	200	V	2.2	42.21	74	31.79
1592	26.74	Ave.	26	200	V	2.2	28.94	54	25.06
3233	38.80	PK	318	200	V	4.3	43.1	74	30.90
3233	23.94	Ave.	318	200	V	4.3	28.24	54	25.76
4874	52.57	PK	164	200	V	11.6	64.17	74	9.83
4874	34.06	Ave.	164	200	V	11.6	45.66	54	8.34
6228	45.02	PK	35	100	V	16.2	61.22	74	12.78
6228	25.60	Ave	35	100	V	16.2	41.80	54	12.20
7311	44.59	PK	190	150	H	17.3	61.89	74	12.11
7311	28.94	Ave	190	150	H	17.3	46.24	54	7.76

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 (2452 MHz)									
2462	91.08	PK	80	150	H	3.1	94.18	/	/
2462	89.37	Ave.	80	150	H	3.1	92.47	/	/
2462	92.15	PK	170	150	V	3.1	95.25	/	/
2462	89.51	Ave.	170	150	V	3.1	92.61	/	/
2486	36.35	PK	214	100	V	3.2	39.55	74	34.45
2486	31.92	Ave	214	100	V	3.2	35.12	54	18.88
2510	38.91	PK	238	150	V	3.4	42.31	74	31.69
2510	22.34	Ave	238	150	V	3.4	25.74	54	28.26
4924	52.03	PK	220	100	V	11.7	63.73	74	10.27
4924	27.58	Ave.	220	100	V	11.7	39.28	54	14.72
6310	45.69	PK	120	150	H	16.3	61.99	74	12.01
6310	25.01	Ave	120	150	H	16.3	41.31	54	12.69
7386	43.16	PK	240	150	V	17.4	60.56	74	13.44
7386	28.38	Ave	240	150	V	17.4	45.78	54	8.22

Conducted Spurious Emissions at Antenna Port

802.11b Low Channel



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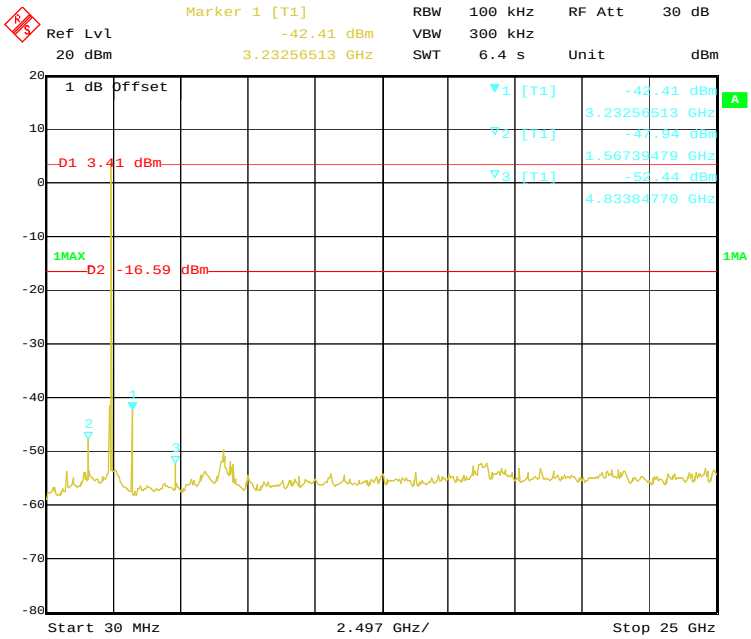
802.11b Middle Channel



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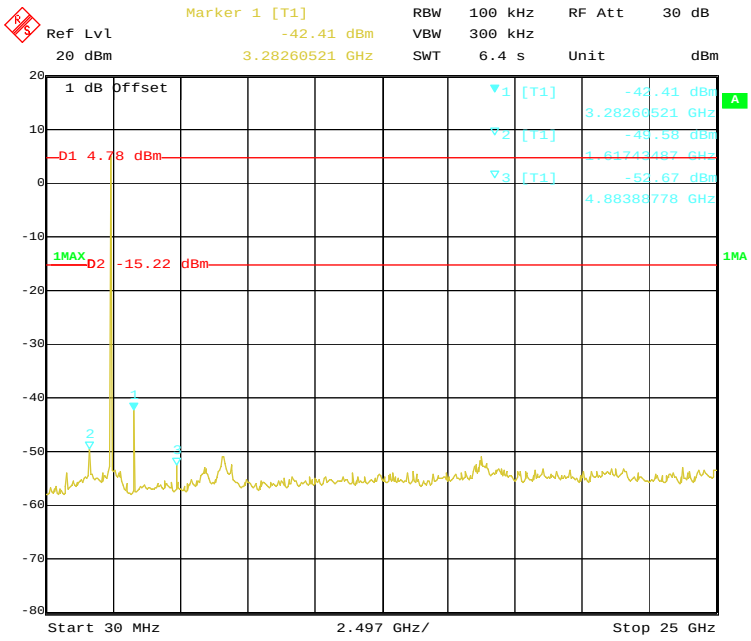
802.11b High Channel



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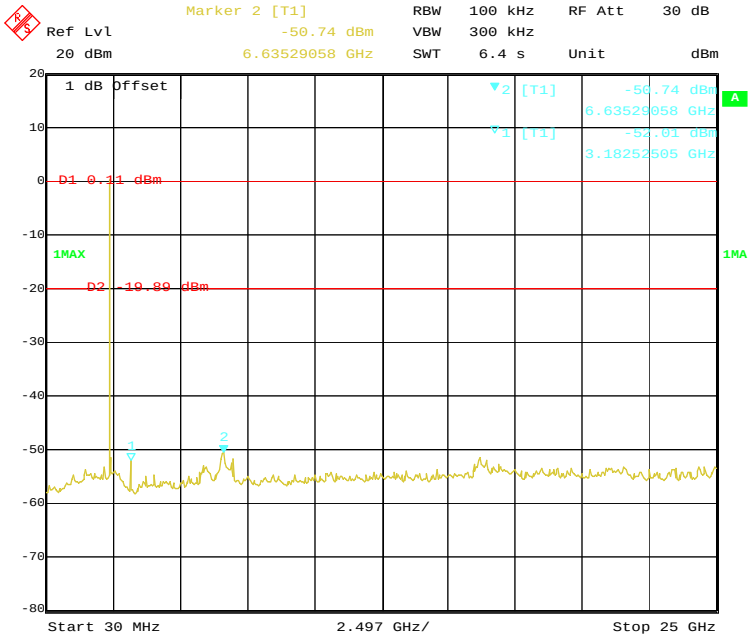
802.11g Low Channel



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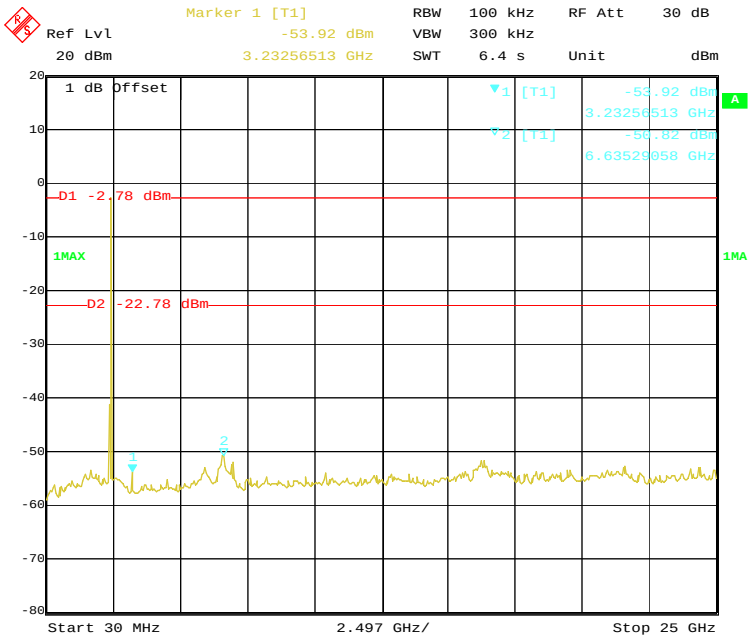
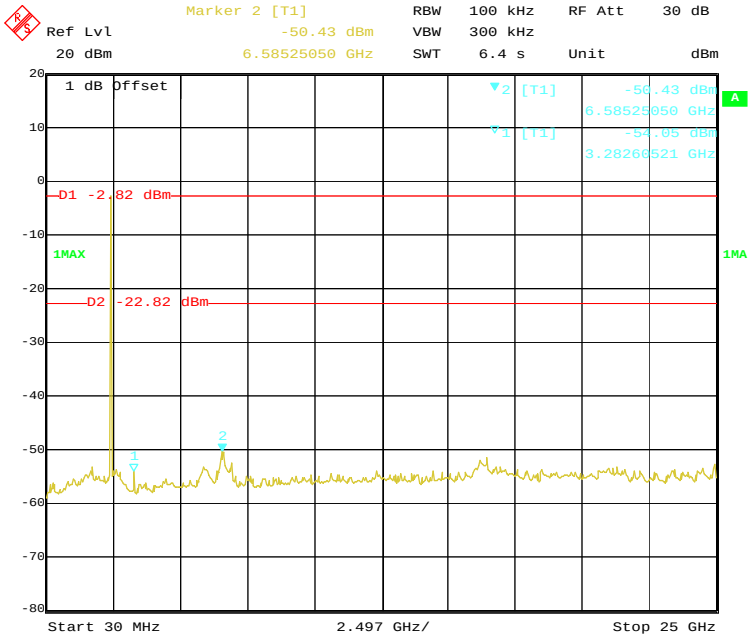
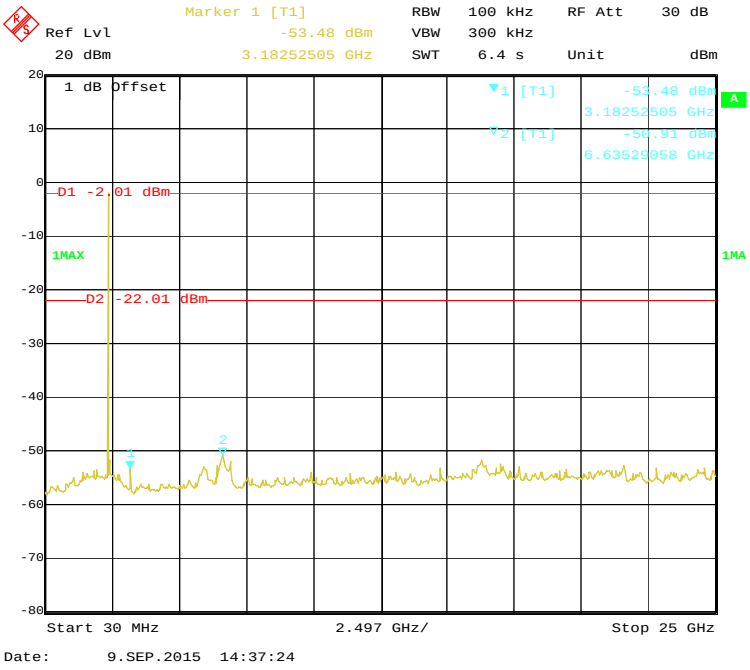
802.11g Middle Channel



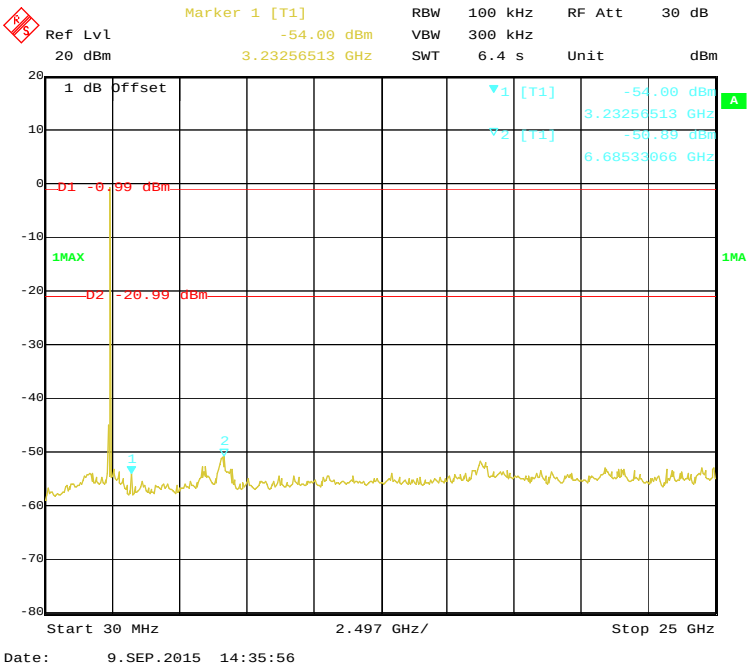
802.11g High Channel



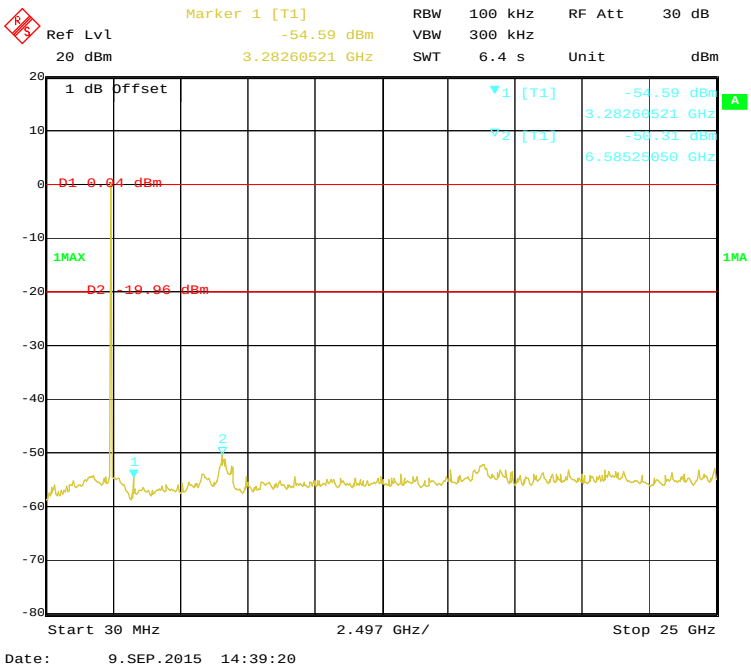
802.11n-HT20 Low Channel



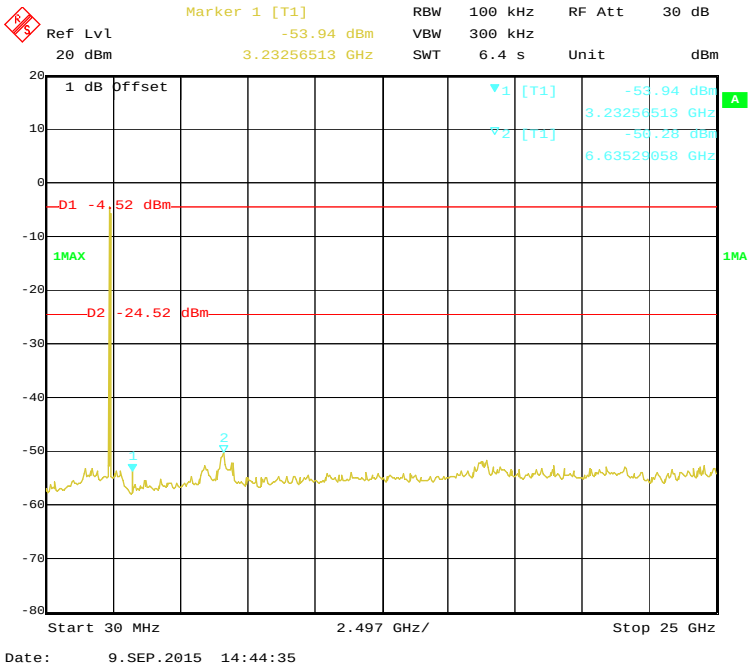
802.11n-HT20 Middle Channel



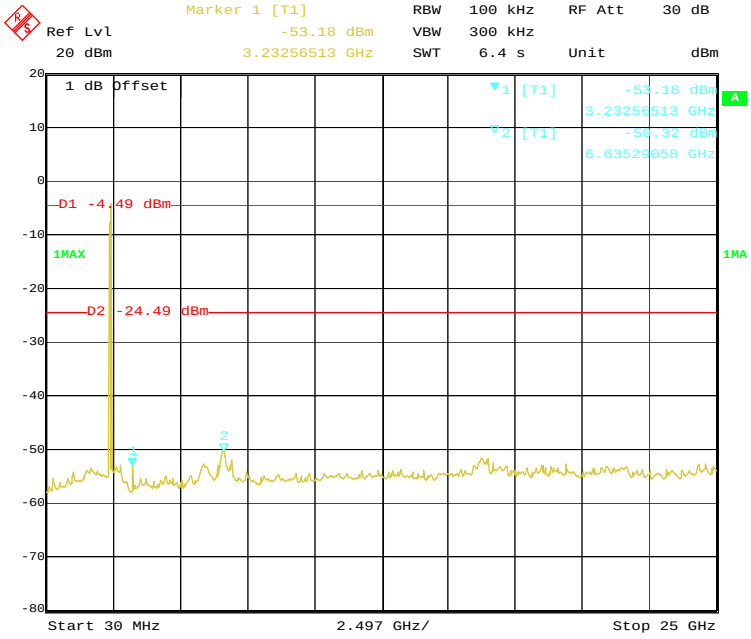
802.11n-HT20 High Channel



802.11n-HT40 Low Channel



802.11n-HT40 Middle Channel



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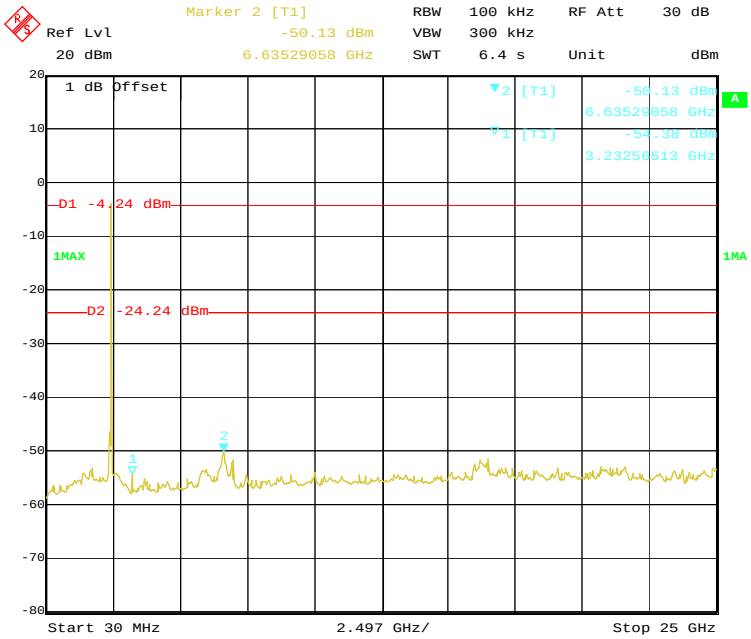
802.11n-HT40 High Channel



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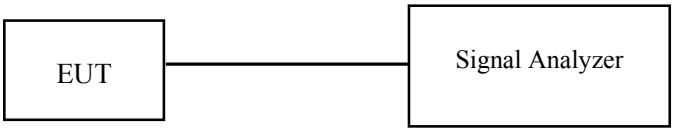
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

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	2014-11-4	2015-11-3
BACL	RF cable	KS-LAB-012	KS-LAB-012	2015-06-16	2015-12-15

*** 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:	27 ℃
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Matt Yao on 2015-09-09.

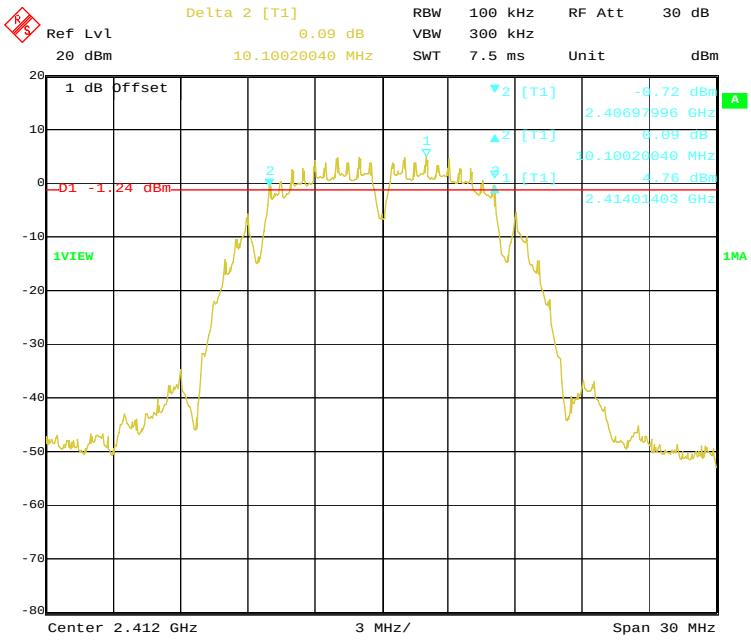
Test Result: Pass.

Please refer to the following tables and plots.

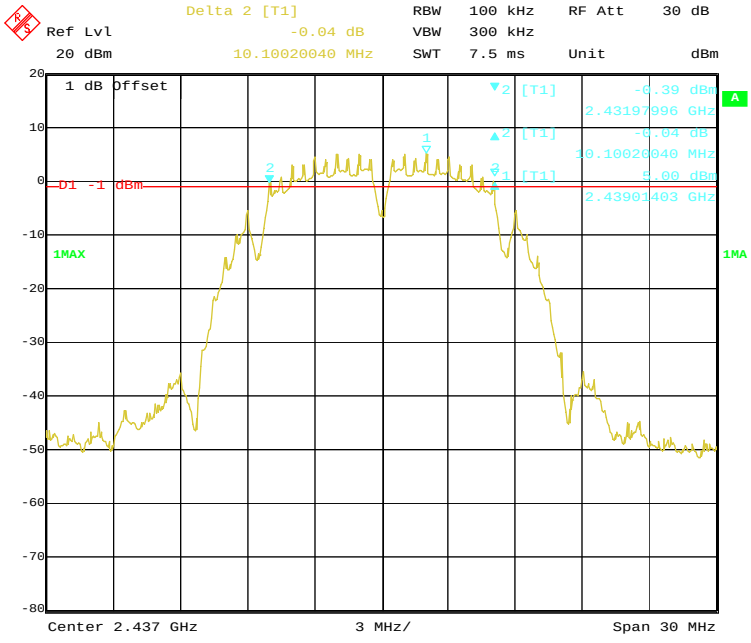
EUT operation mode: Transmitting

Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (kHz)
802.11b mode			
Low	2412.00	10.10	≥500
Middle	2437.00	10.10	≥500
High	2462.00	10.05	≥500
802.11g mode			
Low	2412.00	16.47	≥500
Middle	2437.00	16.47	≥500
High	2462.00	16.54	≥500
802.11n-HT20 mode			
Low	2412.00	17.56	≥500
Middle	2437.00	17.31	≥500
High	2462.00	17.68	≥500
802.11n-HT40 mode			
Low	2422.00	36.55	≥500
Middle	2437.00	36.43	≥500
High	2452.00	36.19	≥500

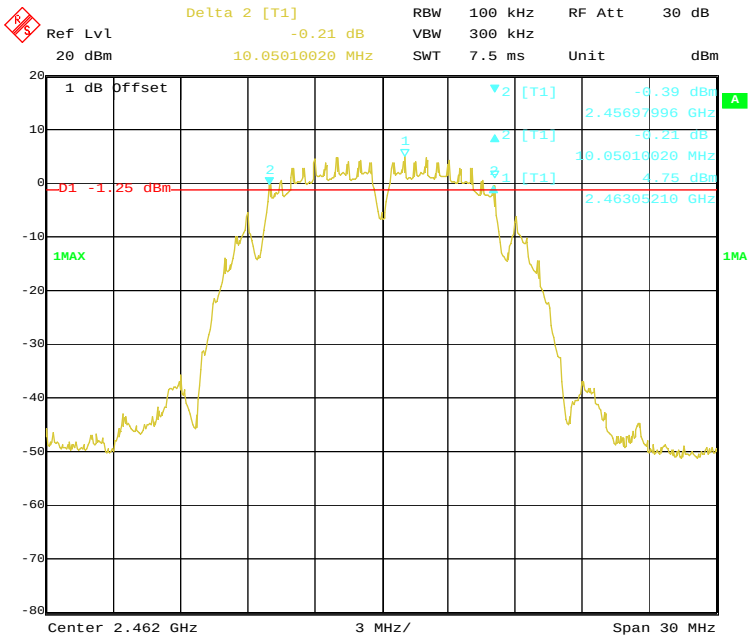
802.11b Low Channel



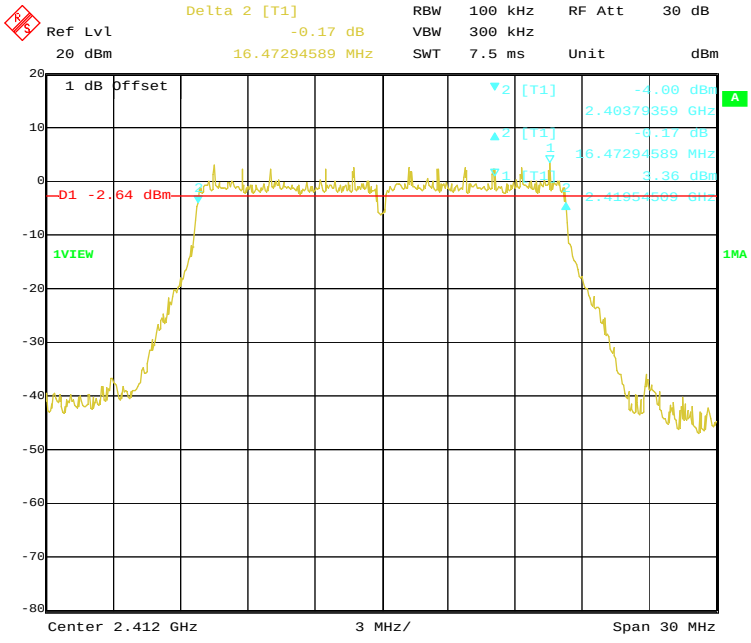
802.11b Middle Channel



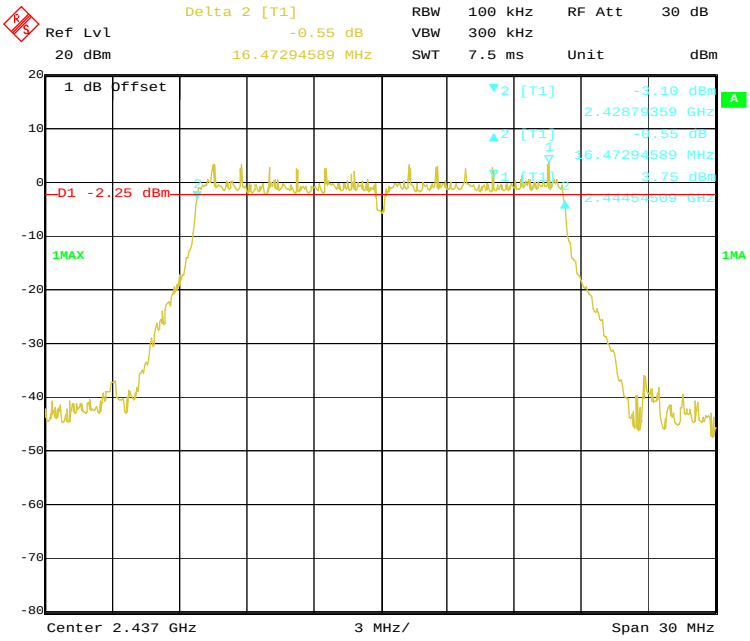
802.11b High Channel



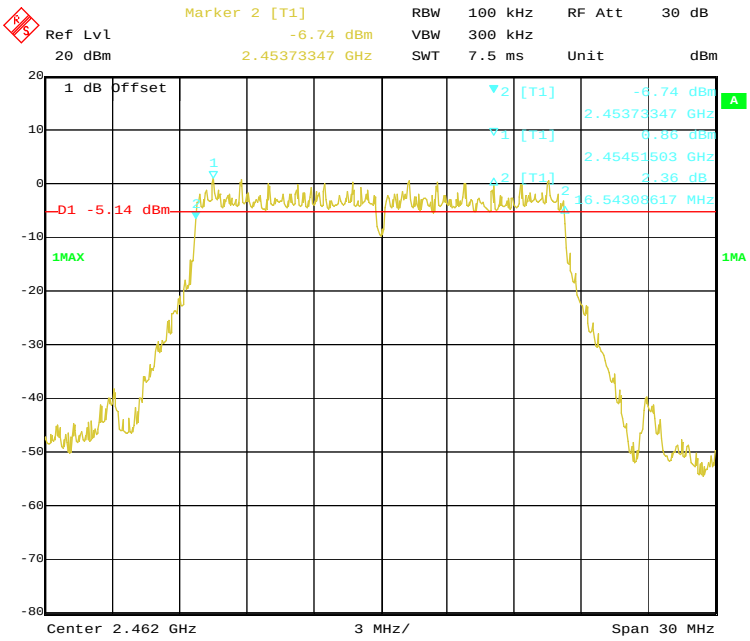
802.11g Low Channel



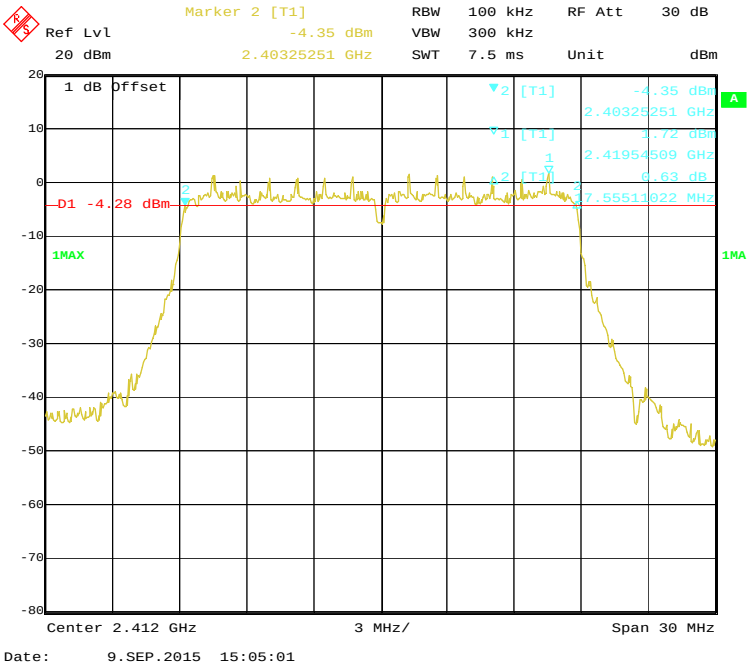
802.11g Middle Channel



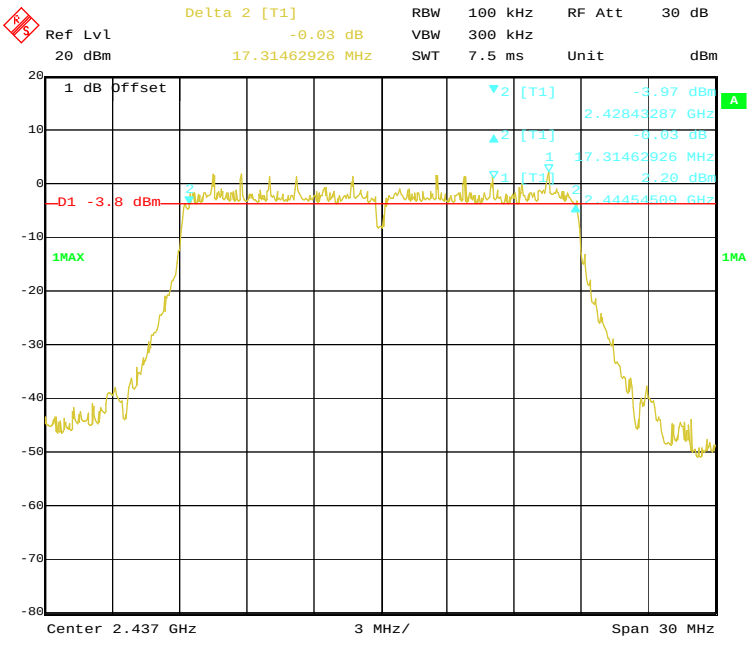
802.11g High Channel



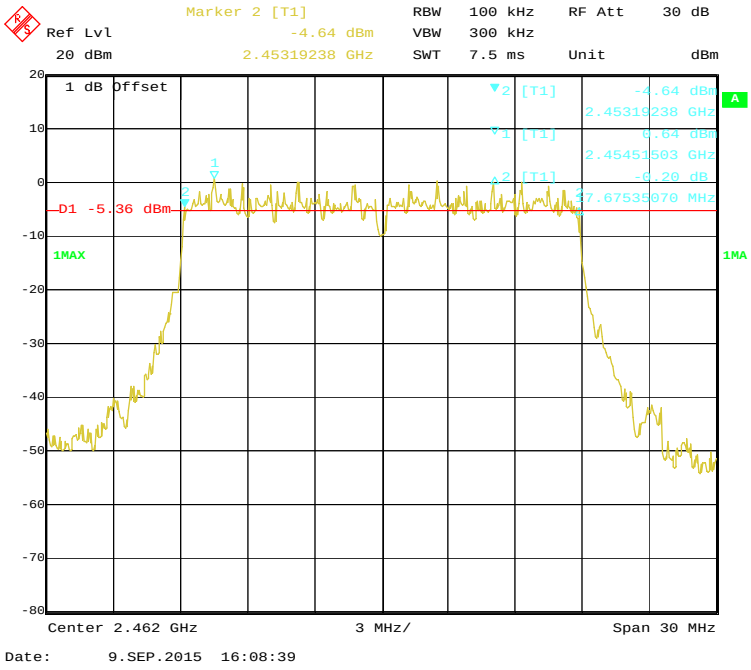
802.11n-HT20 Low Channel



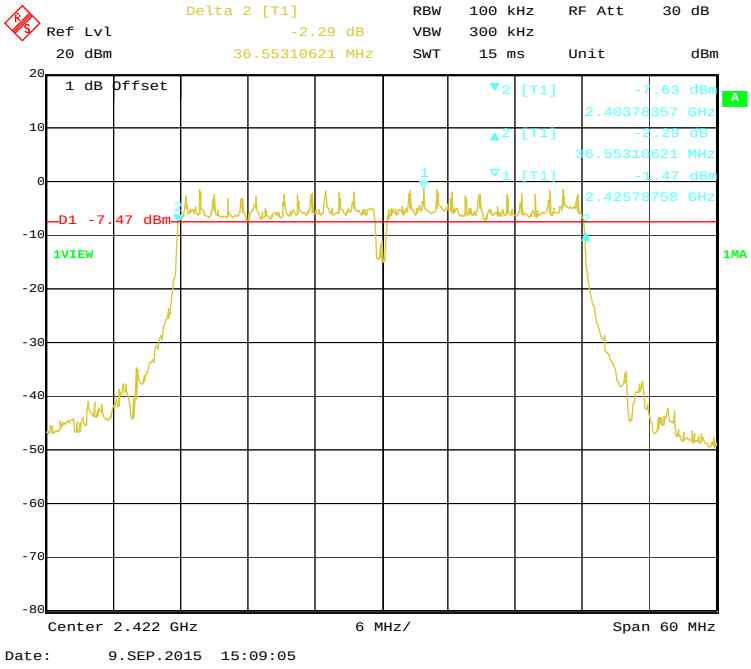
802.11n-HT20 Middle Channel



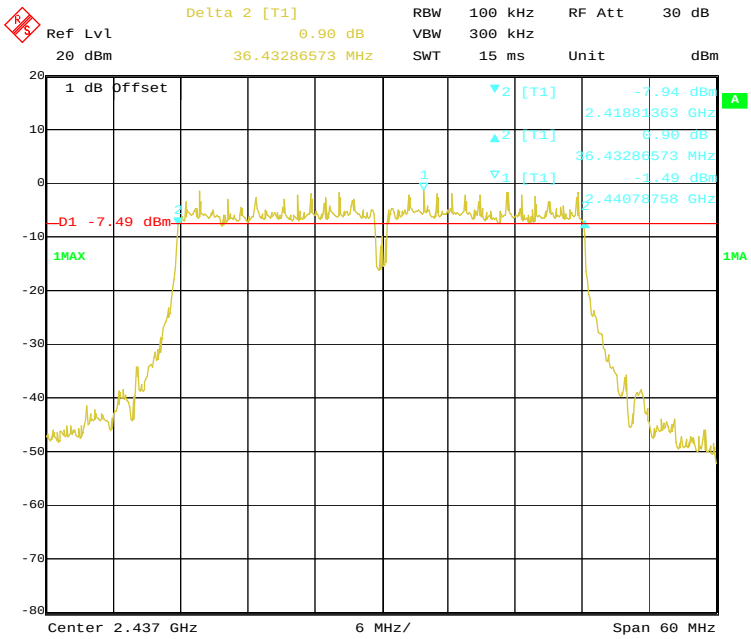
802.11n-HT20 High Channel



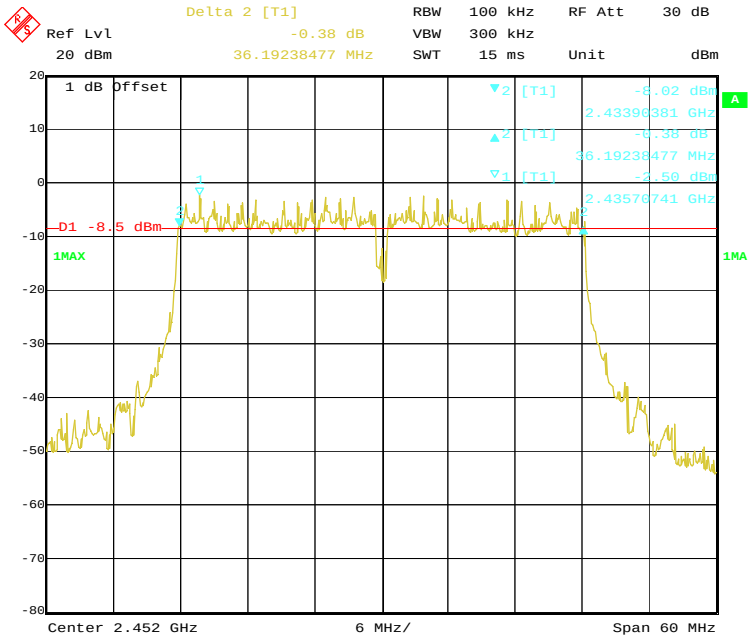
802.11n-HT40 Low Channel



802.11n-HT40 Middle Channel



802.11n-HT40 High Channel



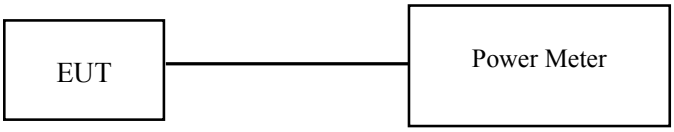
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

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
Agilent	Wideband Power Sensor	N1921A	MY54210120	2014-11-03	2015-11-03
Agilent	Wideband Power Sensor	N1921A	MY54210115	2014-11-03	2015-11-03
Agilent	P-Series Power Meter	N1921A	MY5000465	2014-11-03	2015-11-03
BACL	RF cable	KS-LAB-012	KS-LAB-012	2015-06-16	2015-12-15

*** 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:	27 ℃
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Matt Yao on 2015-09-09

EUT operation mode: Transmitting

Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)
802.11b			
Low	2412	17.13	30
Middle	2437	16.43	30
High	2462	15.34	30
802.11g			
Low	2412	19.50	30
Middle	2437	19.23	30
High	2462	18.30	30
802.11n-HT20			
Low	2412	19.33	30
Middle	2437	18.95	30
High	2462	17.80	30
802.11n-HT40			
Low	2422	18.72	30
Middle	2437	18.28	30
High	2452	17.17	30

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	2014-11-4	2015-11-3
BACL	RF cable	KS-LAB-012	KS-LAB-012	2015-06-16	2015-12-15

*** 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

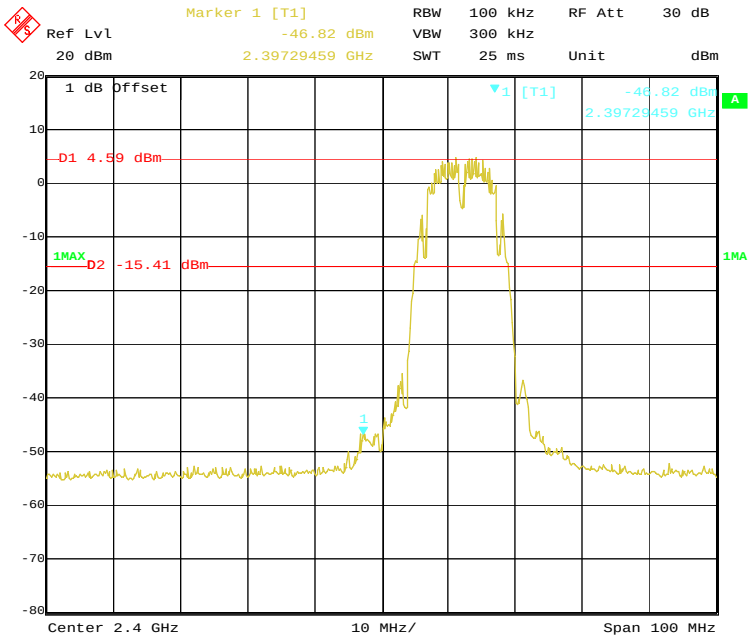
Temperature:	27 ℃
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

The testing was performed by Matt Yao on 2015-09-09.

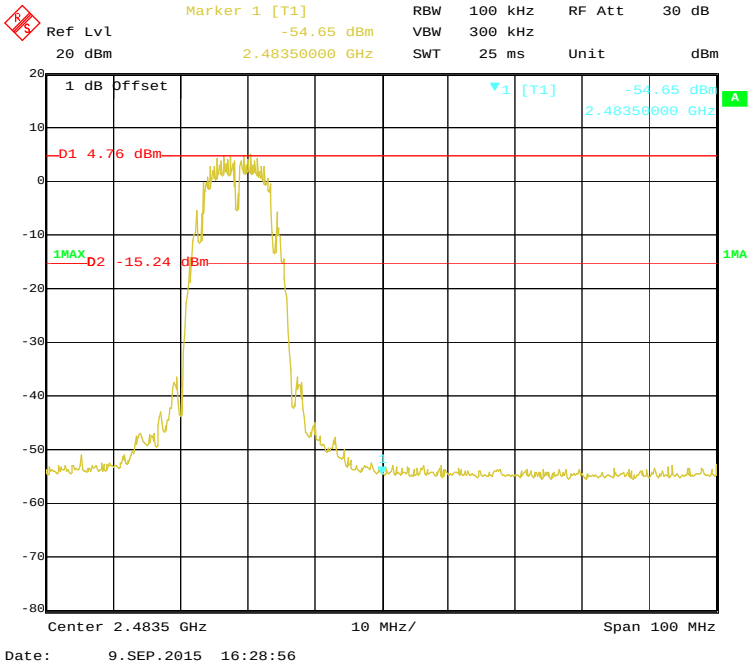
Test Result: *Compliance*

Please refer to the following table and plots.

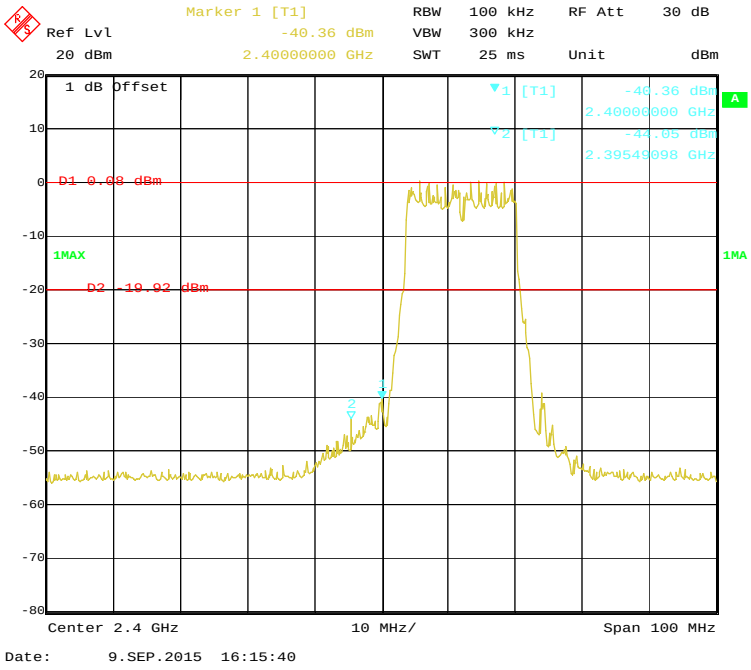
802.11b: Band Edge, Left Side



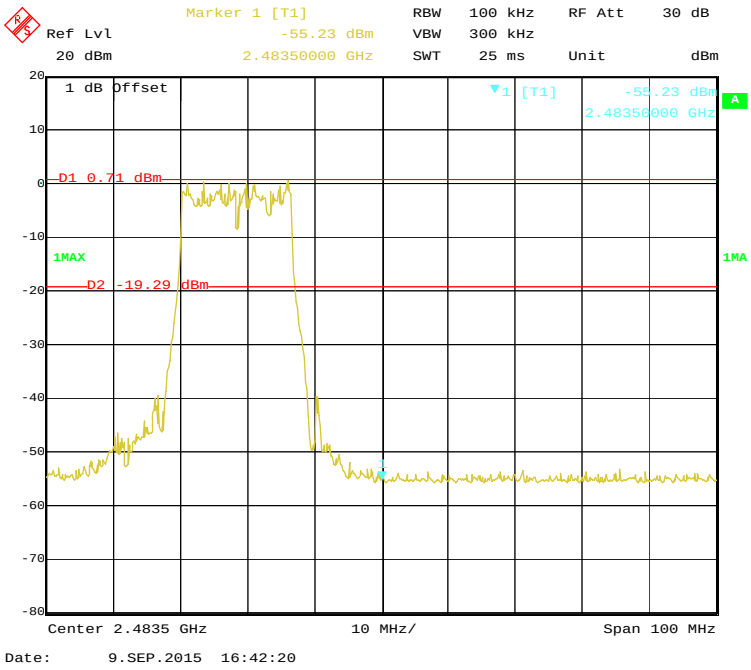
802.11b: Band Edge, Right Side



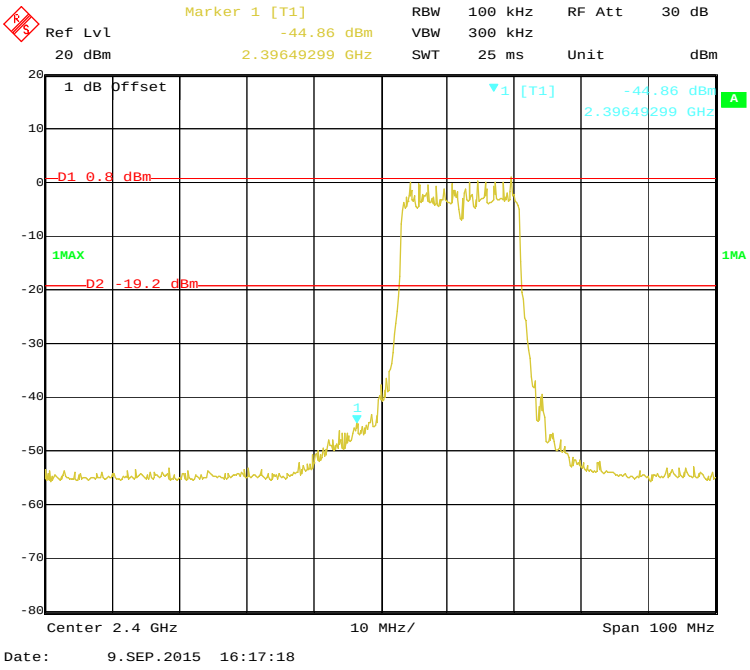
802.11g: Band Edge, Left Side



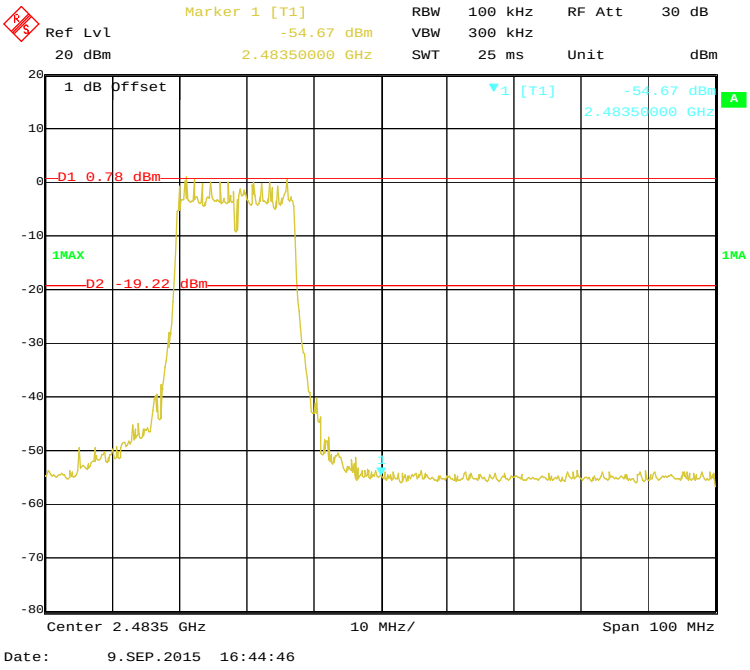
802.11g: Band Edge, Right Side



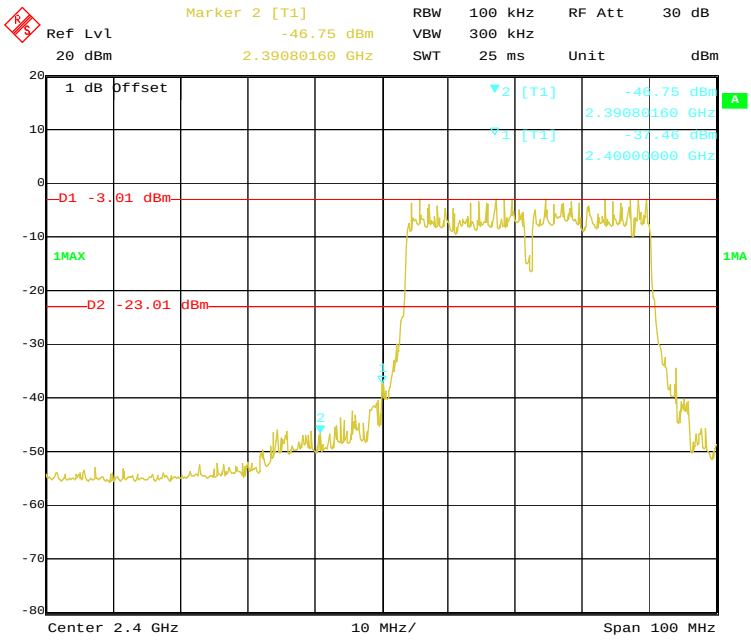
802.11n-HT20: Band Edge, Left Side



802.11n-HT20: Band Edge, Right Side



802.11n-HT40: Band Edge, Left Side



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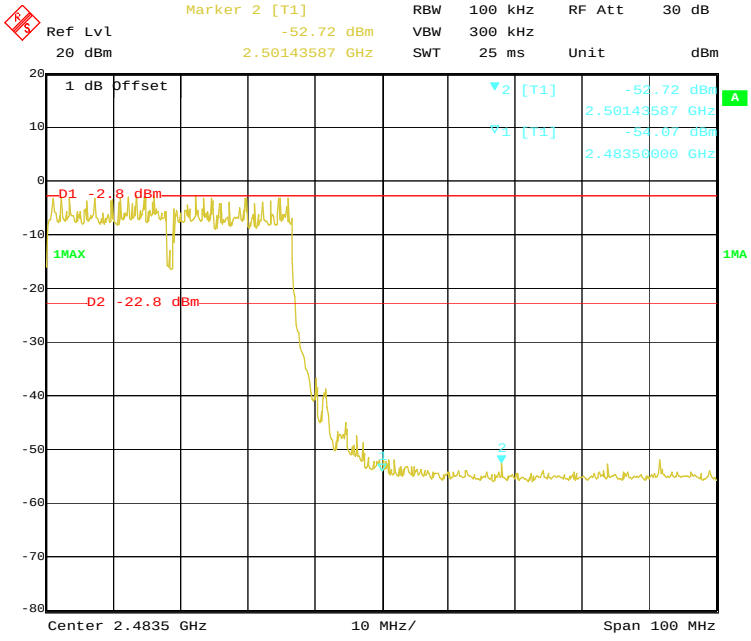
802.11n-HT40: Band Edge, Right Side



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FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standar

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 v03r02 sub-clause 10.2

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: 3kHz≤ RBW≤100 kHz.
3. Set the VBW ≥ 3×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	2014-11-4	2015-11-3
BACL	RF cable	KS-LAB-012	KS-LAB-012	2015-06-16	2015-12-15

*** 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:	27 ℃
Relative Humidity:	55 %
ATM Pressure:	101.0 kPa

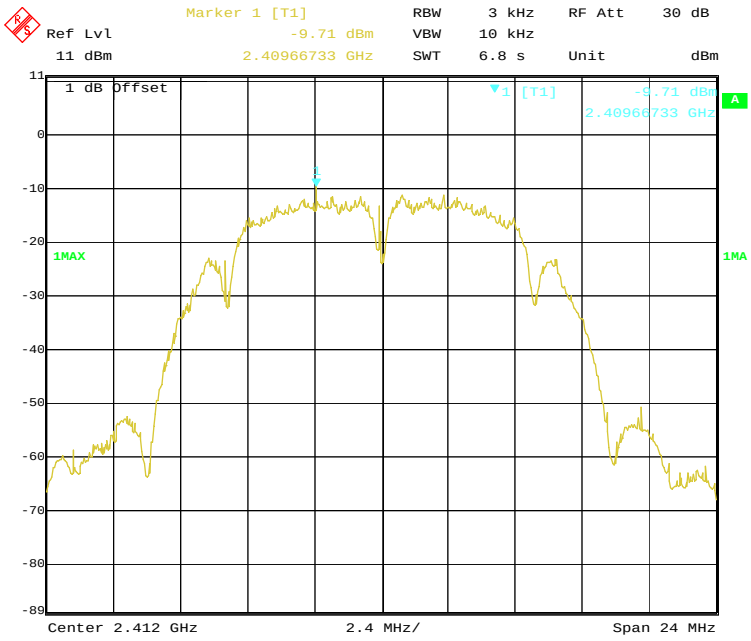
The testing was performed by Matt Yao on 2015-09-09.

EUT operation mode: Transmitting

Test Result: Pass

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
802.11b mode			
Low	2412	-9.71	≤8
Middle	2437	-9.27	≤8
High	2462	-8.62	≤8
802.11g mode			
Low	2412	-17.28	≤8
Middle	2437	-13.46	≤8
High	2462	-15.86	≤8
802.11n-HT20 mode			
Low	2412	-15.18	≤8
Middle	2437	-13.65	≤8
High	2462	-17.50	≤8
802.11n-HT40 mode			
Low	2422	-22.39	≤8
Middle	2437	-18.10	≤8
High	2452	-16.59	≤8

Power Spectral Density, 802.11b Low Channel



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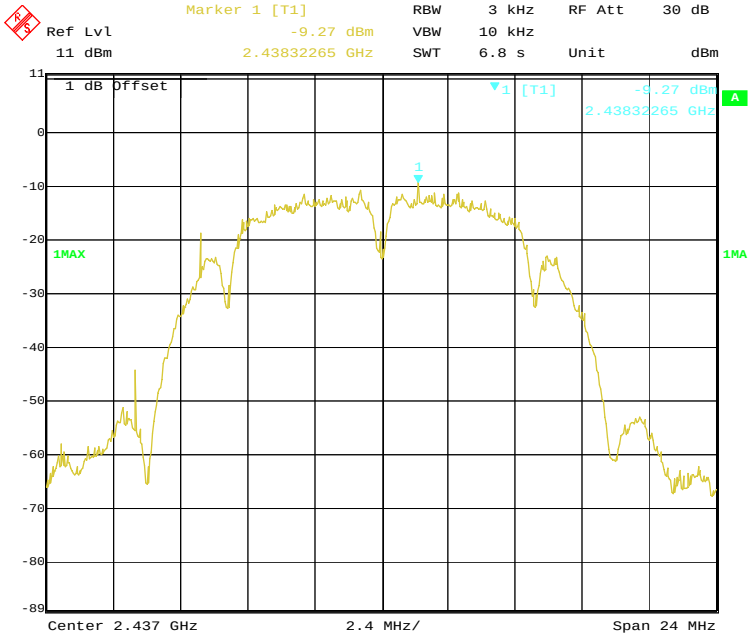
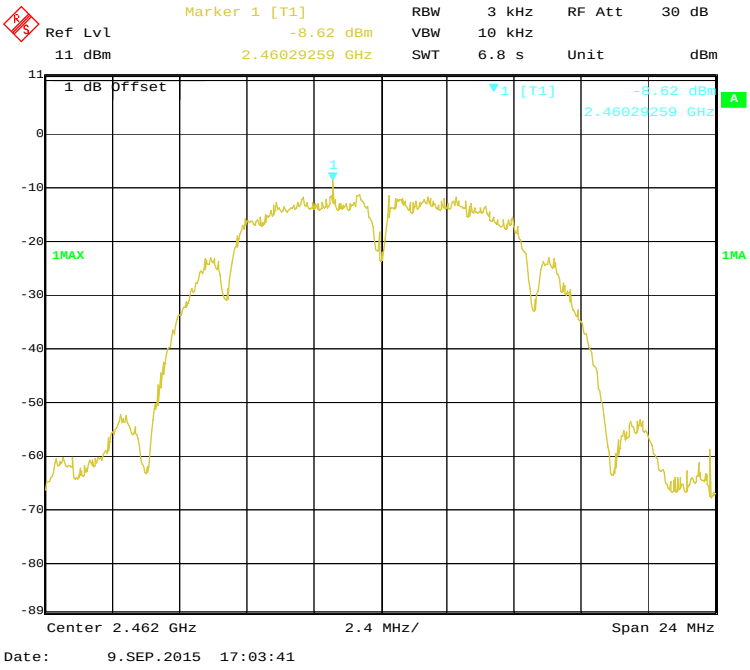
Power Spectral Density, 802.11b Middle Channel

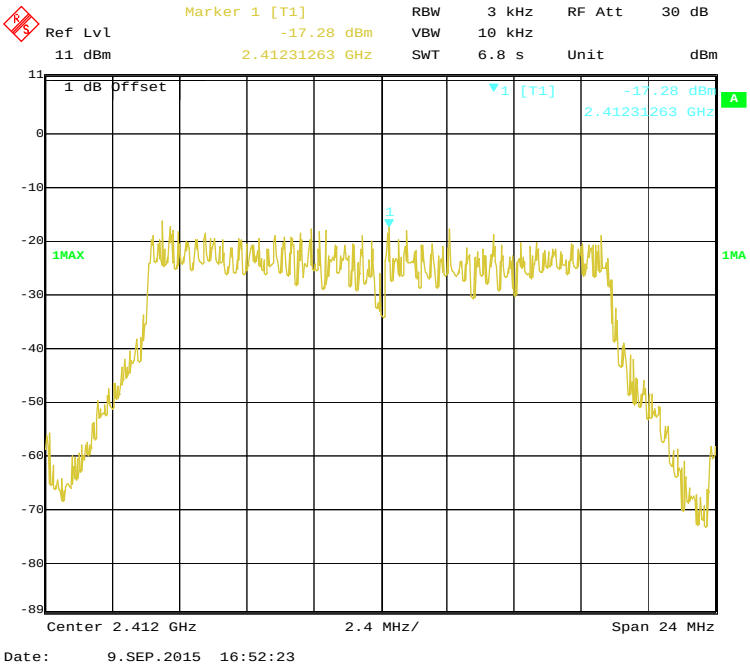


Date: 9.SEP.2015 16:58:59

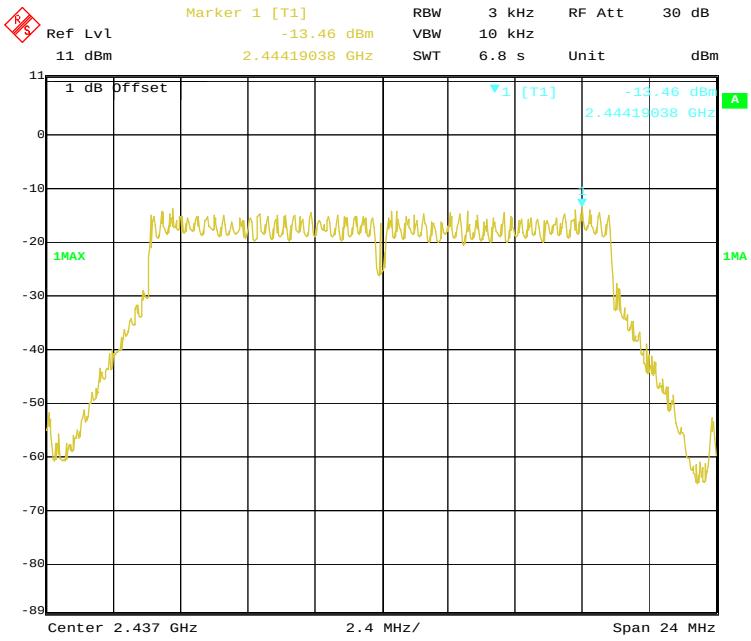
Power Spectral Density, 802.11b High Channel



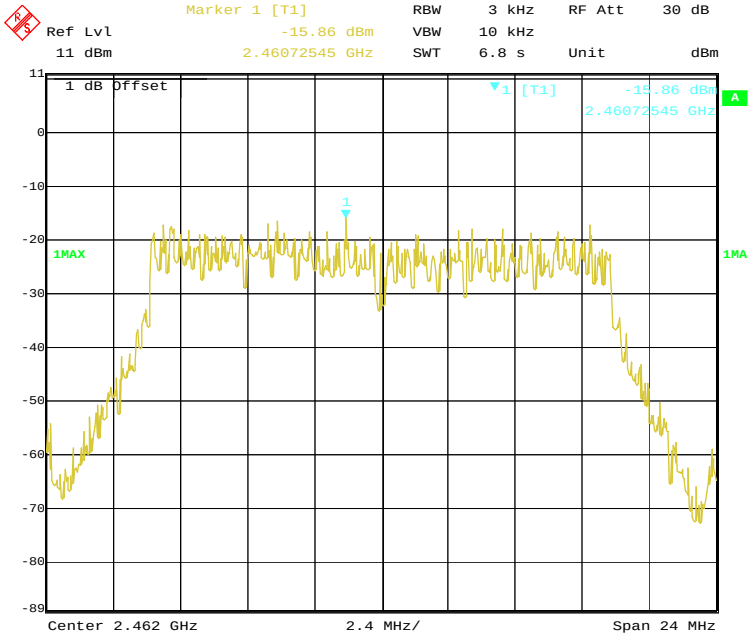
Power Spectral Density, 802.11g Low Channel



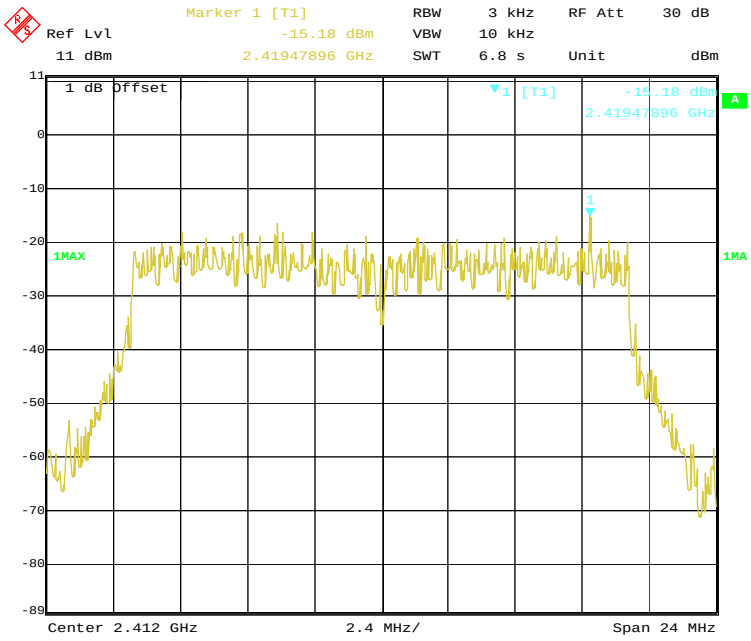
Power Spectral Density, 802.11g Middle Channel



Power Spectral Density, 802.11g High Channel



Power Spectral Density, 802.11n-HT20 Low Channel



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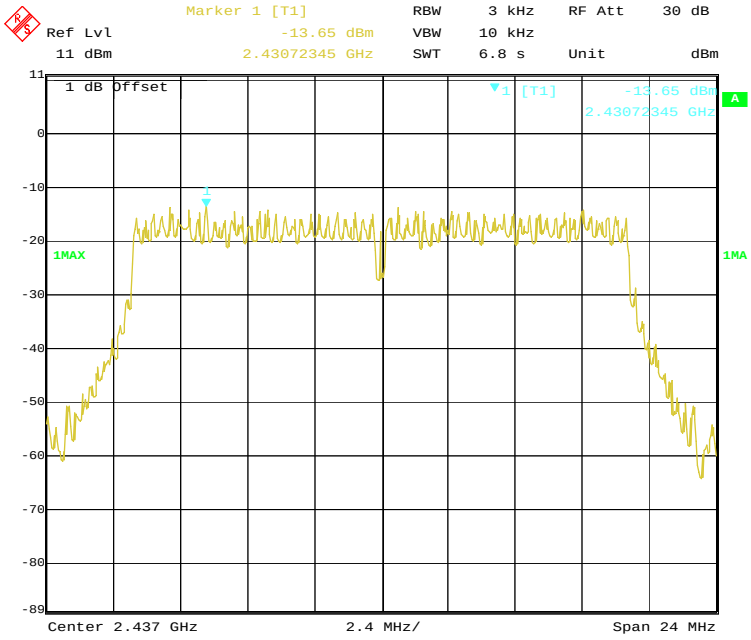
Power Spectral Density, 802.11n-HT20 Middle Channel



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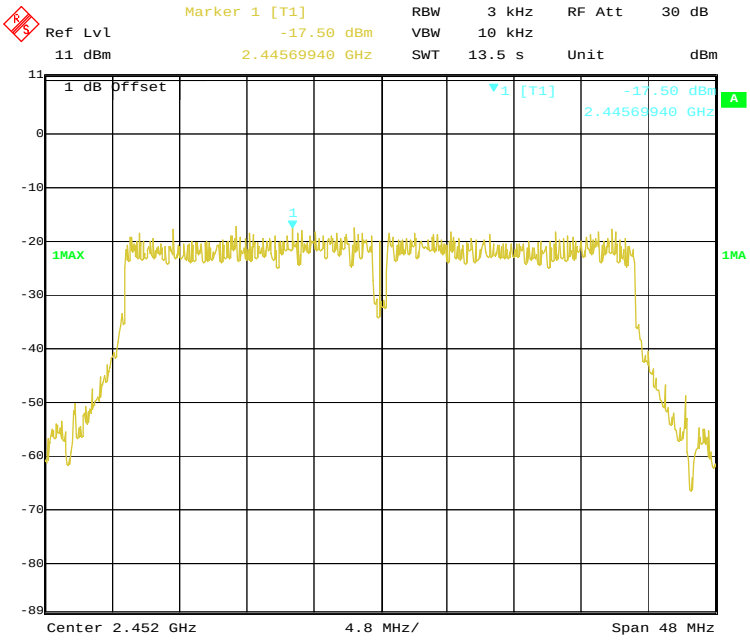
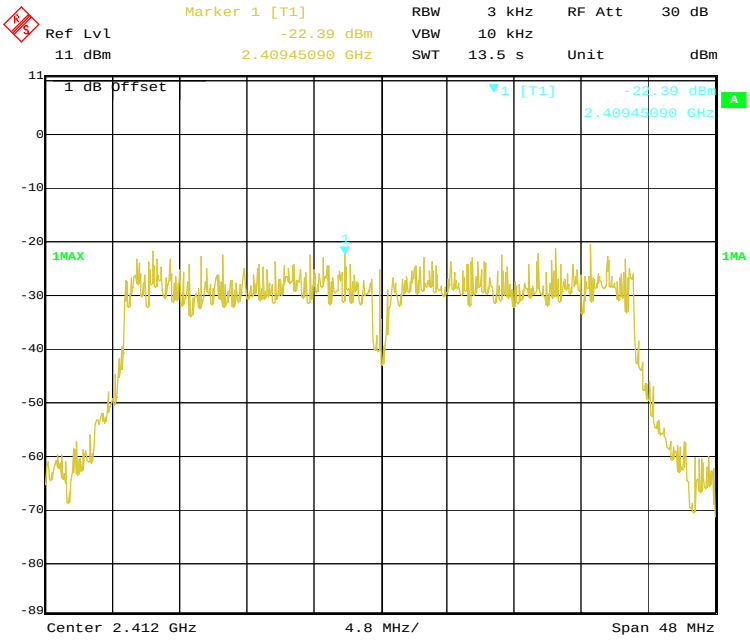
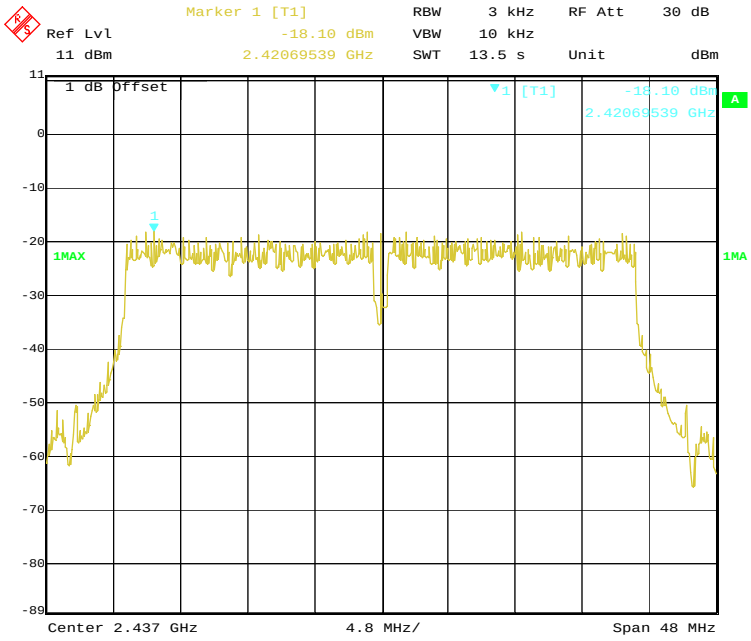
Power Spectral Density, 802.11n-HT20 High Channel



Power Spectral Density, 802.11n-HT40 Low Channel

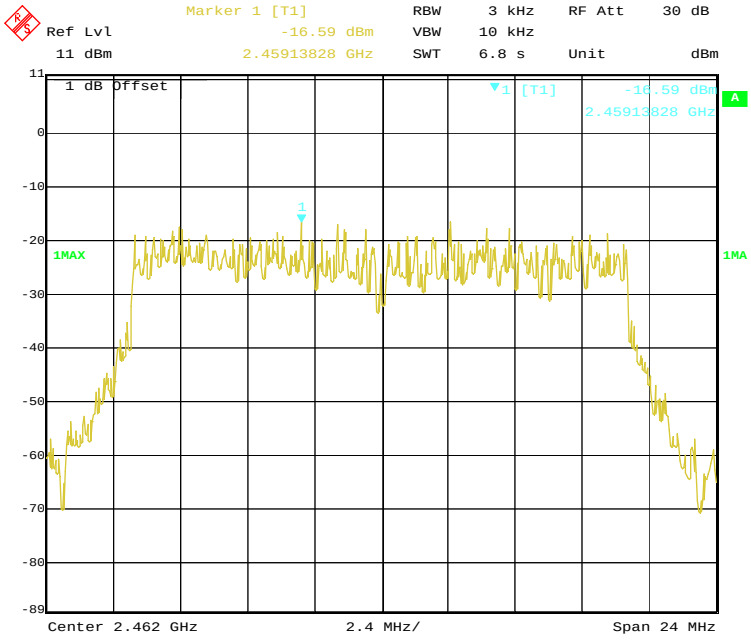


Power Spectral Density, 802.11n-HT40 Middle Channel



Date: 9.SEP.2015 17:01:03

Power Spectral Density, 802.11n-HT40 High Channel



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