

FCC PART 15.247

TEST REPORT

For

Baby's Journey, Inc.

22 Shore Road Narragansett RI 02882 United States

FCC ID: PJF-05020RX

Report Type: Original Report	Product Type: SMART LINK 4.3" Touch Screen Video Monitor
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Report Number: RDG141203005-00A	
Report Date: 2015-01-24	
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Baby's Journey, Inc.*'s product, model number: *05020RX(FCC ID: PJF-05020RX)* or ("EUT") in this report is a *SMART LINK 4.3" Touch Screen Video Monitor*, which was measured approximately: 14 cm (L) x 7.9 cm (W) x 1.6 cm (H), rated input voltage: DC 3.7V from lithium battery or DC 5V charging from adapter.

Adapter Information: KUANTEN
Model: KT10W050200USD
Input: 100-240V, 50/60Hz, 0.4A
Output: 5V, 2A

All measurement and test data in this report was gathered from production sample serial number: 141203005. (Assigned by BACL, Dongguan). The EUT was received on 2014-12-04.

Objective

This report is prepared on behalf of *Baby's Journey, Inc.* in accordance with Part 2, Subpart J, Part 15, Subparts A, B and C of the Federal Communications Commission's rules

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

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, 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 and Bay Area Compliance Laboratories Corp. (Dongguan).

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) 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 February 02, 2012. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

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

The system was configured for testing in testing mode, which was provided by manufacturer. For 2.4GHz band, 11 channels are provided to testing:

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

For 802.11b, 802.11g, and 802.11n ht20 modes were tested with Channel 1, 6 and 11. For 802.11n ht40 mode were tested with Channel 3, 6 and 9.

The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates bandwidths, and modulations.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

The software “RF test tool built-in EUT” was used for testing, which was provided by manufacturer. The worst condition (maximum power with 100% duty cycle) was setting by the software as following table:

Test Mode	Test Software Version	Engineering mode (RF test tool built-in EUT)		
802.11b	Test Frequency	2412MHz	2437MHz	2462MHz
	Data Rate	(CCK)1Mbps	(CCK)1Mbps	(CCK)1Mbps
	Power Level Setting	44	44	44
802.11g	Test Frequency	2412MHz	2437MHz	2462MHz
	Data Rate	(OFDM)6Mbps	(OFDM)6Mbps	(OFDM)6Mbps
	Power Level Setting	44	44	44
802.11n ht20	Test Frequency	2412MHz	2437MHz	2462MHz
	Data Rate	(HT Mixmode) MCS0	(HT Mixmode) MCS0	(HT Mixmode) MCS0
	Power Level Setting	39	39	39
802.11n ht40	Test Frequency	2422MHz	2437MHz	2452MHz
	Data Rate	(HT Mixmode) MCS0	(HT Mixmode) MCS0	(HT Mixmode) MCS0
	Power Level Setting	40	40	40

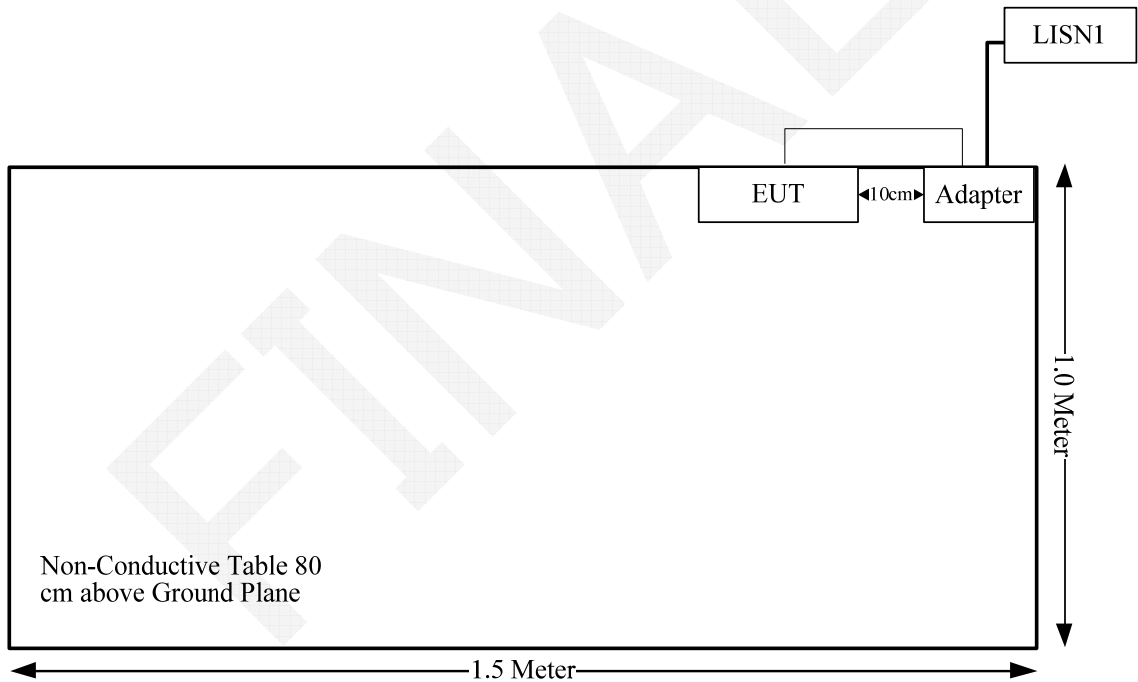
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
/	/	/	/

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Adapter Cable	no	no	1.9	Adapter	EUT

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.247 (i) & §1.1310 & §2.1093	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 & §2.1093- 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: RDG141203005-20.

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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.

Antenna Connector Construction

The EUT has one integral antenna arrangement and the antenna gain is 2.43 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

Compliance or non-compliance with a disturbance limit shall be determined in the following manner:

If U_{lab} is less than or equal to U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} of Table 1, then:

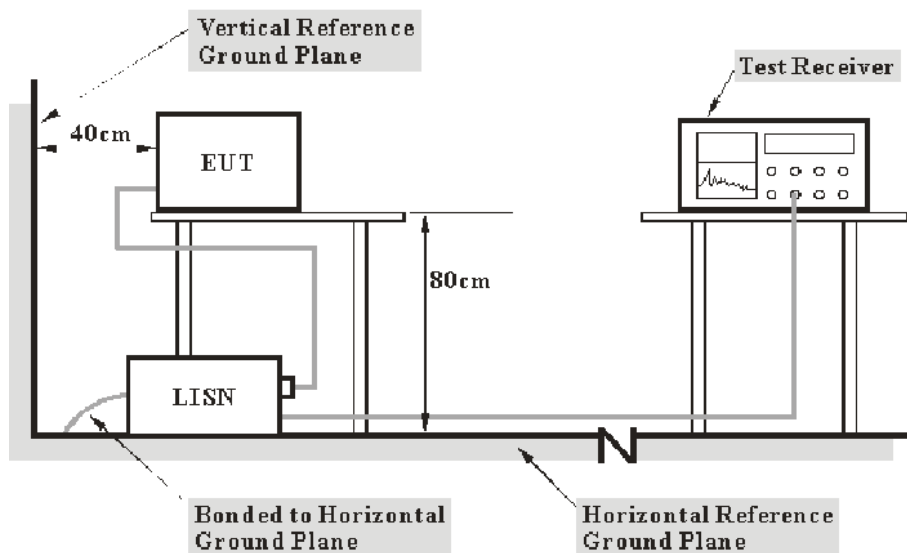
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit.

Based on CISPR 16-4-2-2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Dongguan) is 3.46 dB (150 kHz to 30 MHz).

Table 1 – Values of U_{cispr}

Measurement	U_{cispr}
Conducted disturbance at mains port using AMN (150 kHz to 30 MHz)	3.4 dB

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 C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

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 first LISN and the other support equipments were connected to the outlet of the second 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.

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

V_C (cord. Reading): corrected voltage amplitude

V_R : reading voltage amplitude

A_C : attenuation caused by cable loss

VDF: voltage division factor of AMN

C_f : Correction Factor

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

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

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2014-10-16	2015-10-16
R&S	L.I.S.N	ESH3-Z5	843331/015	N/A	N/A
R&S	Two-line V-network	ENV 216	3560.6550.12	2014-01-22	2015-01-22
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

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

Test Results Summary

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

11.5 dB at 0.549741MHz in the Line conducted mode

Test Data

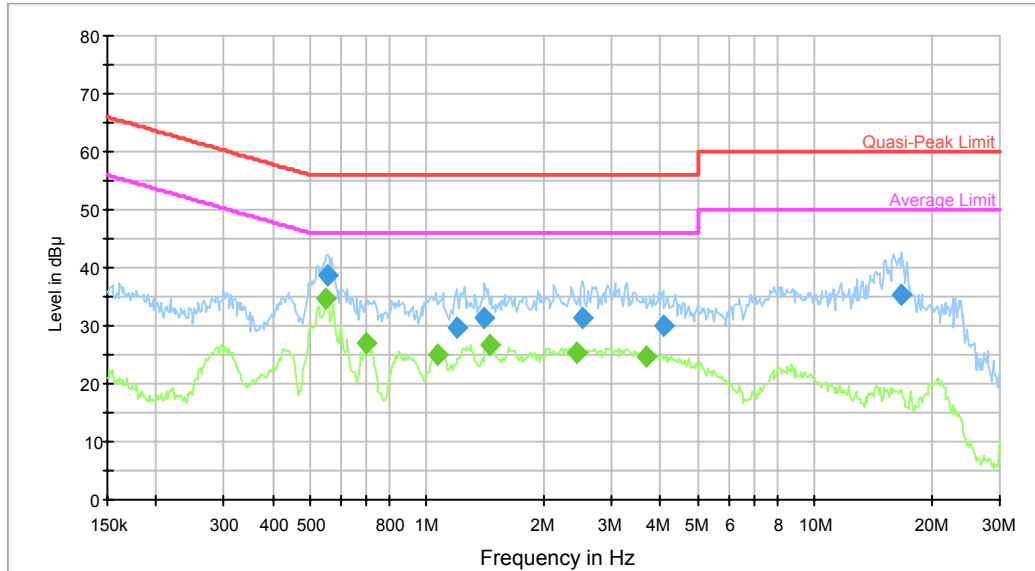
Environmental Conditions

Temperature:	20.83 °C
Relative Humidity:	41 %
ATM Pressure:	101.2 kPa

The testing was performed by Sevin Li on 2014-12-11.

Test Mode: Transmitting

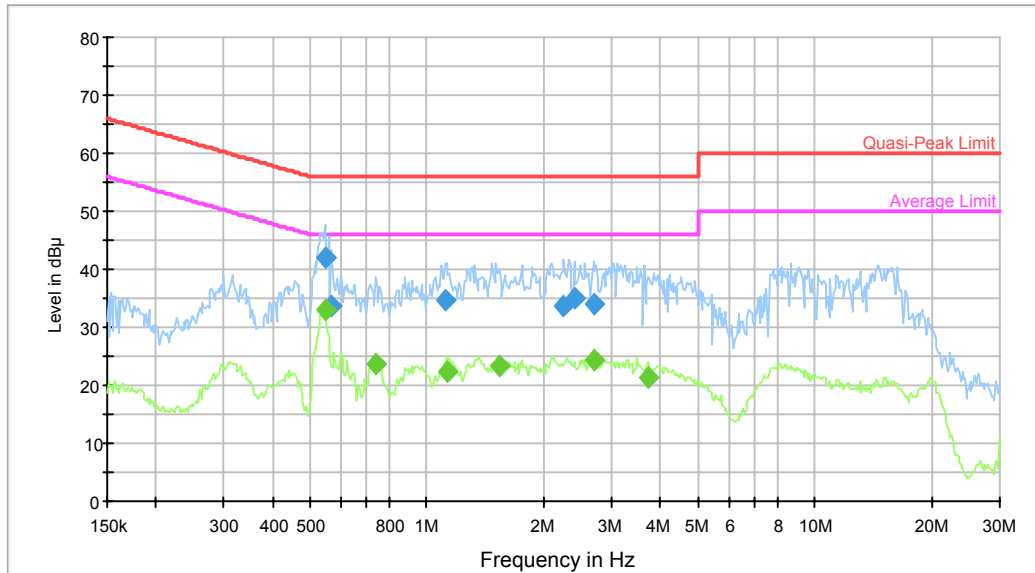
AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.554139	38.8	9.000	L1	0.5	17.2	56.0	Compliance
1.190776	29.7	9.000	L1	0.8	26.3	56.0	Compliance
1.407671	31.4	9.000	L1	0.8	24.6	56.0	Compliance
2.518372	31.2	9.000	L1	0.8	24.8	56.0	Compliance
4.062112	30.1	9.000	L1	1.1	25.9	56.0	Compliance
16.777473	35.3	9.000	L1	1.7	24.7	60.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.549741	34.5	9.000	L1	0.5	11.5	46.0	Compliance
0.698191	26.9	9.000	L1	0.8	19.1	46.0	Compliance
1.065081	25.0	9.000	L1	0.8	21.0	46.0	Compliance
1.453260	26.6	9.000	L1	0.8	19.4	46.0	Compliance
2.439371	25.4	9.000	L1	0.8	20.6	46.0	Compliance
3.691692	24.7	9.000	L1	1.1	21.3	46.0	Compliance

AC120 V, 60 Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.545378	42.0	9.000	N	0.5	14.0	56.0	Compliance
0.567545	33.7	9.000	N	0.6	22.3	56.0	Compliance
1.117238	34.8	9.000	N	0.8	21.2	56.0	Compliance
2.252540	33.7	9.000	N	0.9	22.3	56.0	Compliance
2.400804	35.0	9.000	N	0.9	21.0	56.0	Compliance
2.684134	33.8	9.000	N	0.9	22.2	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.545378	32.9	9.000	N	0.5	13.1	46.0	Compliance
0.738241	23.5	9.000	N	0.9	22.5	46.0	Compliance
1.126176	22.4	9.000	N	0.8	23.6	46.0	Compliance
1.536622	23.4	9.000	N	0.8	22.6	46.0	Compliance
2.684134	24.3	9.000	N	0.9	21.7	46.0	Compliance
3.721226	21.2	9.000	N	1.1	24.8	46.0	Compliance

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

Applicable Standard

FCC §15.247 (d); §15.209; §15.205;

Measurement Uncertainty

Compliance or non-compliance with a disturbance limit shall be determined in the following manner:

If U_{lab} is less than or equal to U_{cispr} of Table 2, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} of Table 2, then:

- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit.

Based on CISPR 16-4-2-2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Dongguan) is:

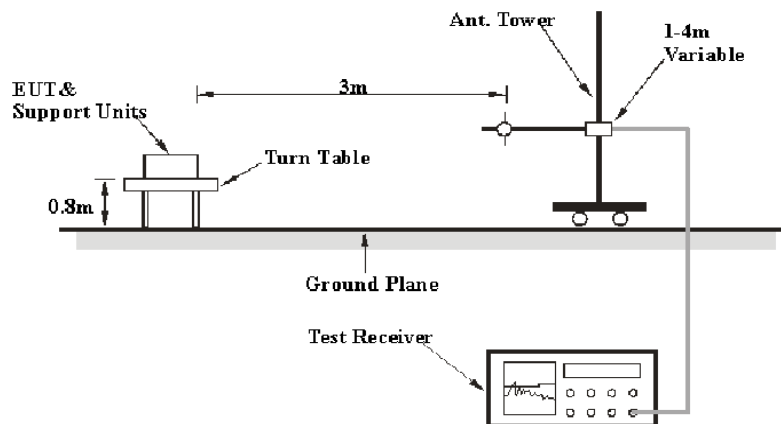
- 30M~200MHz: 5.0 dB
- 200M~1GHz: 6.2 dB
- 1G~6GHz: 4.45 dB
- 6G~18GHz: 5.23 dB

Table 2 – Values of U_{cispr}

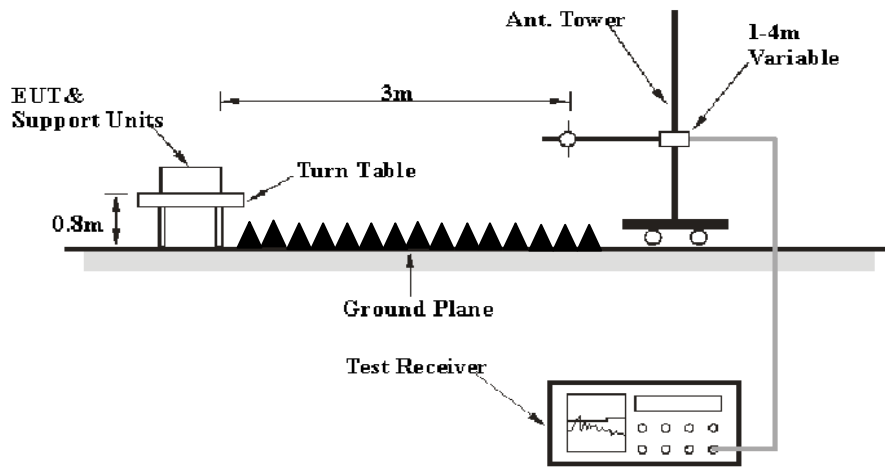
Measurement	U_{cispr}
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB

EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209, and FCC 15.247 limits. The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

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	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	Ave.

Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

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.

Corrected Amplitude & Margin Calculation

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

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

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 Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2014-05-09	2015-05-09
Sunol Sciences	Antenna	JB3	A060611-3	2014-07-28	2017-07-27
HP	Amplifier	8447E	2434A02181	2014-09-01	2015-09-01
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09
ETS-Lindgren	Horn Antenna	3115	000 527 35	2012-09-06	2015-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2014-02-19	2015-02-19
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2014-06-16	2017-06-15
Quinstar	Amplifier	QLW- 18405536-JO	15964001001	2014-09-06	2015-09-06

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

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Section 15.205, 15.209 and 15.247, with the worst margin reading of:

6.91 dB at 2483.5MHz in the Horizontal polarization for 802.11b Mode

Test Data

Environmental Conditions

Temperature:	21.3°C
Relative Humidity:	5 %
ATM Pressure:	100.9kPa

The testing was performed by Sevin Li on 2015-01-05.

Test Mode: Transmitting

802.11b Mode

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412	78.48	PK	H	25.67	4.42	0.00	108.57	N/A	N/A
2412	66.26	AV	H	25.67	4.42	0.00	96.35	N/A	N/A
2412	70.05	PK	V	25.67	4.42	0.00	100.14	N/A	N/A
2412	58.52	AV	V	25.67	4.42	0.00	88.61	N/A	N/A
2390	25.74	PK	H	25.61	4.39	0.00	55.74	74.00	18.26
2390	13.25	AV	H	25.61	4.39	0.00	43.25	54.00	10.75
4824	44.62	PK	H	30.64	6.03	27.41	53.88	74.00	20.12
4824	32.23	AV	H	30.64	6.03	27.41	41.49	54.00	12.51
7236	33.24	PK	H	34.17	7.47	25.90	48.98	74.00	25.02
7236	21.46	AV	H	34.17	7.47	25.90	37.20	54.00	16.80
9648	32.14	PK	H	36.06	8.81	27.46	49.55	74.00	24.45
9648	20.18	AV	H	36.06	8.81	27.46	37.59	54.00	16.41
1528	34.22	PK	H	23.66	3.14	27.52	33.50	74.00	40.50
1528	20.34	AV	H	23.66	3.14	27.52	19.62	54.00	34.38
165.1	33.47	QP	H	12.40	1.55	21.44	25.98	43.50	17.52
Middle Channel: 2437 MHz									
2437	78.02	PK	H	25.74	4.41	0.00	108.17	N/A	N/A
2437	66.77	AV	H	25.74	4.41	0.00	96.92	N/A	N/A
2437	70.64	PK	V	25.74	4.41	0.00	100.79	N/A	N/A
2437	58.31	AV	V	25.74	4.41	0.00	88.46	N/A	N/A
4874	43.87	PK	H	30.77	6.09	27.42	53.31	74.00	20.69
4874	21.36	AV	H	30.77	6.09	27.42	30.80	54.00	23.20
7311	33.64	PK	H	34.35	7.51	25.88	49.62	74.00	24.38
7311	21.67	AV	H	34.35	7.51	25.88	37.65	54.00	16.35
9748	32.47	PK	H	36.30	8.83	27.24	50.36	74.00	23.64
9748	20.26	AV	H	36.30	8.83	27.24	38.15	54.00	15.85
1890	34.33	PK	H	24.38	3.63	27.51	34.83	74.00	39.17
1890	22.36	AV	H	24.38	3.63	27.51	22.86	54.00	31.14
1647	34.24	PK	H	23.89	3.40	27.74	33.79	74.00	40.21
1647	22.13	AV	H	23.89	3.40	27.74	21.68	54.00	32.32
165.1	33.14	QP	H	12.40	1.55	21.44	25.65	43.50	17.85
High Channel: 2462 MHz									
2462	78.59	PK	H	25.80	4.43	0.00	108.82	N/A	N/A
2462	66.41	AV	H	25.80	4.43	0.00	96.64	N/A	N/A
2462	70.36	PK	V	25.80	4.43	0.00	100.59	N/A	N/A
2462	58.98	AV	V	25.80	4.43	0.00	89.21	N/A	N/A
2483.5	36.74	PK	H	25.86	4.49	0.00	67.09	74.00	6.91
2483.5	16.12	AV	H	25.86	4.49	0.00	46.47	54.00	7.53
4924	44.24	PK	H	30.90	5.97	27.43	53.68	74.00	20.32
4924	32.12	AV	H	30.90	5.97	27.43	41.56	54.00	12.44
7386	34.46	PK	H	34.53	7.55	25.86	50.68	74.00	23.32
7386	22.31	AV	H	34.53	7.55	25.86	38.53	54.00	15.47
9848	32.68	PK	H	36.54	8.85	26.94	51.13	74.00	22.87
9848	20.37	AV	H	36.54	8.85	26.94	38.82	54.00	15.18
3647	35.26	PK	H	29.12	4.96	27.30	42.04	74.00	31.96
3647	23.12	AV	H	29.12	4.96	27.30	29.90	54.00	24.10
165.1	33.28	QP	H	12.40	1.55	21.44	25.79	43.50	17.71

802.11g Mode

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412	76.10	PK	H	25.67	4.42	0.00	106.19	N/A	N/A
2412	64.14	AV	H	25.67	4.42	0.00	94.23	N/A	N/A
2412	65.65	PK	V	25.67	4.42	0.00	95.74	N/A	N/A
2412	53.87	AV	V	25.67	4.42	0.00	83.96	N/A	N/A
2390	30.42	PK	H	25.61	4.39	0.00	60.42	74.00	13.58
2390	16.35	AV	H	25.61	4.39	0.00	46.35	54.00	7.65
4824	34.48	PK	H	30.64	6.03	27.41	43.74	74.00	30.26
4824	22.1	AV	H	30.64	6.03	27.41	31.36	54.00	22.64
7236	33.13	PK	H	34.17	7.47	25.90	48.87	74.00	25.13
7236	21.46	AV	H	34.17	7.47	25.90	37.20	54.00	16.80
9648	31.94	PK	H	36.06	8.81	27.46	49.35	74.00	24.65
9648	20.15	AV	H	36.06	8.81	27.46	37.56	54.00	16.44
3993	34.07	PK	H	29.88	5.07	27.21	41.81	74.00	32.19
3993	20.21	AV	H	29.88	5.07	27.21	27.95	54.00	26.05
165.1	33.39	QP	H	12.40	1.55	21.44	25.90	43.50	17.60
Middle Channel: 2437 MHz									
2437	76.22	PK	H	25.74	4.41	0.00	106.37	N/A	N/A
2437	64.26	AV	H	25.74	4.41	0.00	94.41	N/A	N/A
2437	65.39	PK	V	25.74	4.41	0.00	95.54	N/A	N/A
2437	53.8	AV	V	25.74	4.41	0.00	83.95	N/A	N/A
4874	33.49	PK	H	30.77	6.09	27.42	42.93	74.00	31.07
4874	21.63	AV	H	30.77	6.09	27.42	31.07	54.00	22.93
7311	32.42	PK	H	34.35	7.51	25.88	48.40	74.00	25.60
7311	20.08	AV	H	34.35	7.51	25.88	36.06	54.00	17.94
9748	34.21	PK	H	36.30	8.83	27.24	52.10	74.00	21.90
9748	22.2	AV	H	36.30	8.83	27.24	40.09	54.00	13.91
3993	34.21	PK	H	29.88	5.07	27.21	41.95	74.00	32.05
3993	22.12	AV	H	29.88	5.07	27.21	29.86	54.00	24.14
3893	33.78	PK	H	29.66	5.12	27.30	41.26	74.00	32.74
3893	21.34	AV	H	29.66	5.12	27.30	28.82	54.00	25.18
165.1	33.52	QP	H	12.40	1.55	21.44	26.03	43.50	17.47
High Channel: 2462 MHz									
2462	76.32	PK	H	25.80	4.43	0.00	106.55	N/A	N/A
2462	64.33	AV	H	25.80	4.43	0.00	94.56	N/A	N/A
2462	64.58	PK	V	25.80	4.43	0.00	94.81	N/A	N/A
2462	53.77	AV	V	25.80	4.43	0.00	84.00	N/A	N/A
2483.5	34.91	PK	H	25.86	4.49	0.00	65.26	74.00	8.74
2483.5	16.24	AV	H	25.86	4.49	0.00	46.59	54.00	7.41
4924	35.24	PK	H	30.90	5.97	27.43	44.68	74.00	29.32
4924	23.36	AV	H	30.90	5.97	27.43	32.80	54.00	21.20
7386	34.33	PK	H	34.53	7.55	25.86	50.55	74.00	23.45
7386	22.13	AV	H	34.53	7.55	25.86	38.35	54.00	15.65
9848	32.61	PK	H	36.54	8.85	26.94	51.06	74.00	22.94
9848	20.25	AV	H	36.54	8.85	26.94	38.70	54.00	15.30
3993	35.12	PK	H	29.88	5.07	27.21	42.86	74.00	31.14
3993	23.04	AV	H	29.88	5.07	27.21	30.78	54.00	23.22
165.1	33.07	QP	H	12.40	1.55	21.44	25.58	43.50	17.92

802.11 n ht20 Mode

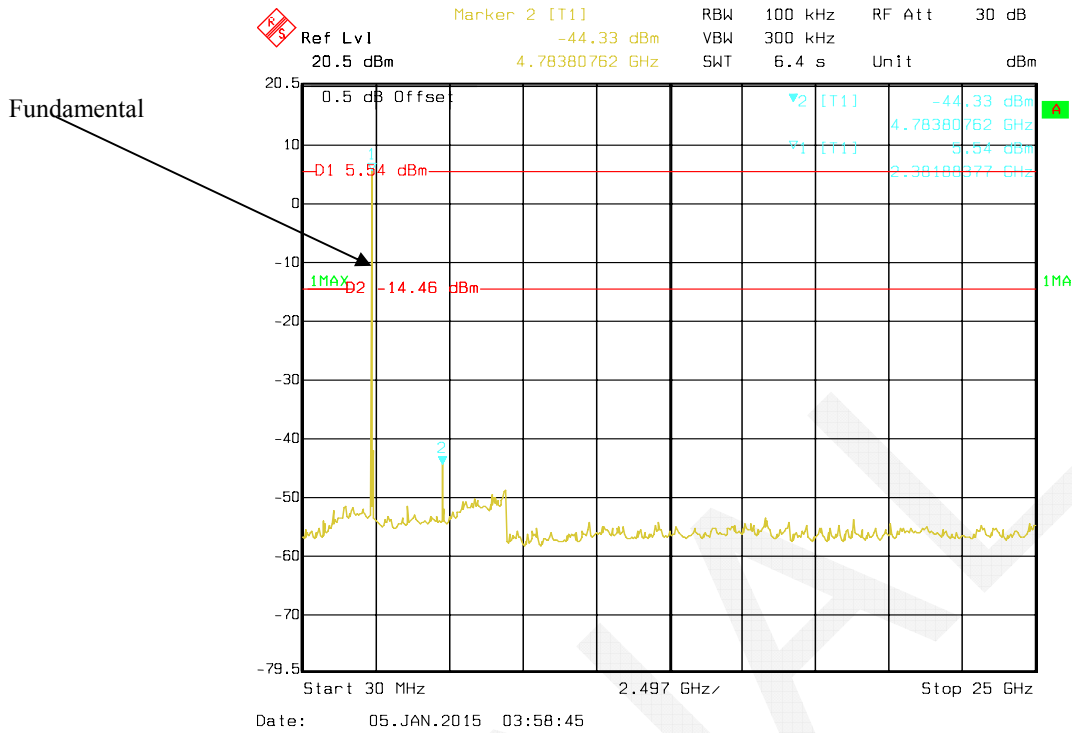
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)					
Low Channel: 2412 MHz									
2412	75.59	PK	H	25.67	4.42	0.00	105.68	N/A	N/A
2412	59.91	AV	H	25.67	4.42	0.00	90.00	N/A	N/A
2412	64.34	PK	V	25.67	4.42	0.00	94.43	N/A	N/A
2412	49.56	AV	V	25.67	4.42	0.00	79.65	N/A	N/A
2390	31.11	PK	H	25.61	4.39	0.00	61.11	74.00	12.89
2390	16.25	AV	H	25.61	4.39	0.00	46.25	54.00	7.75
4824	34.42	PK	H	30.64	6.03	27.41	43.68	74.00	30.32
4824	22.08	AV	H	30.64	6.03	27.41	31.34	54.00	22.66
7236	32.99	PK	H	34.17	7.47	25.90	48.73	74.00	25.27
7236	21.27	AV	H	34.17	7.47	25.90	37.01	54.00	16.99
9648	31.79	PK	H	36.06	8.81	27.46	49.20	74.00	24.80
9648	20.06	AV	H	36.06	8.81	27.46	37.47	54.00	16.53
3987	34.05	PK	H	29.87	5.08	27.21	41.79	74.00	32.21
3987	20.15	AV	H	29.87	5.08	27.21	27.89	54.00	26.11
165.1	33.92	QP	H	12.40	1.55	21.44	26.43	43.50	17.07
Middle Channel: 2437 MHz									
2437	75.67	PK	H	25.74	4.41	0.00	105.82	N/A	N/A
2437	59.56	AV	H	25.74	4.41	0.00	89.71	N/A	N/A
2437	66.37	PK	V	25.74	4.41	0.00	96.52	N/A	N/A
2437	50.22	AV	V	25.74	4.41	0.00	80.37	N/A	N/A
4874	33.44	PK	H	30.77	6.09	27.42	42.88	74.00	31.12
4874	21.5	AV	H	30.77	6.09	27.42	30.94	54.00	23.06
7311	32.31	PK	H	34.35	7.51	25.88	48.29	74.00	25.71
7311	19.97	AV	H	34.35	7.51	25.88	35.95	54.00	18.05
9748	34.05	PK	H	36.30	8.83	27.24	51.94	74.00	22.06
9748	22.08	AV	H	36.30	8.83	27.24	39.97	54.00	14.03
3987	34.07	PK	H	29.87	5.08	27.21	41.81	74.00	32.19
3987	22.12	AV	H	29.87	5.08	27.21	29.86	54.00	24.14
3573	35.24	PK	H	28.96	5.12	27.26	42.06	74.00	31.94
3573	23.14	AV	H	28.96	5.12	27.26	29.96	54.00	24.04
165.1	33.84	QP	H	12.40	1.55	21.44	26.35	43.50	17.15
High Channel: 2462 MHz									
2462	75.78	PK	H	25.80	4.43	0.00	106.01	N/A	N/A
2462	59.84	AV	H	25.80	4.43	0.00	90.07	N/A	N/A
2462	66.80	PK	V	25.80	4.43	0.00	97.03	N/A	N/A
2462	50.97	AV	V	25.80	4.43	0.00	81.20	N/A	N/A
2483.5	28.76	PK	H	25.86	4.49	0.00	59.11	74.00	14.89
2483.5	15.25	AV	H	25.86	4.49	0.00	45.60	54.00	8.40
4924	36.21	PK	H	30.90	5.97	27.43	45.65	74.00	28.35
4924	23.93	AV	H	30.90	5.97	27.43	33.37	54.00	20.63
7386	34.19	PK	H	34.53	7.55	25.86	50.41	74.00	23.59
7386	22.06	AV	H	34.53	7.55	25.86	38.28	54.00	15.72
9848	32.48	PK	H	36.54	8.85	26.94	50.93	74.00	23.07
9848	20.14	AV	H	36.54	8.85	26.94	38.59	54.00	15.41
3987	35	PK	H	29.87	5.08	27.21	42.74	74.00	31.26
3987	22.9	AV	H	29.87	5.08	27.21	30.64	54.00	23.36
165.1	33.15	QP	H	12.40	1.55	21.44	25.66	43.50	17.84

802.11 n ht40 Mode

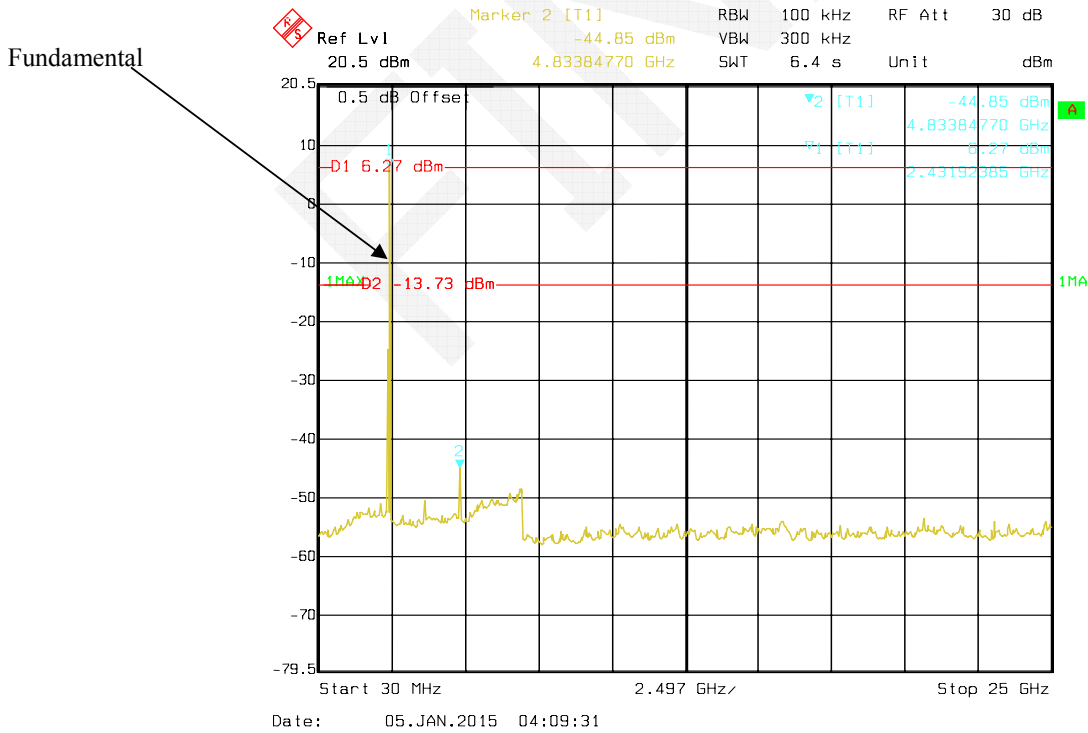
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)					
Low Channel: 2422 MHz									
2422	74.05	PK	H	25.70	4.41	0.00	104.16	N/A	N/A
2422	58.21	AV	H	25.70	4.41	0.00	88.32	N/A	N/A
2422	65.76	PK	V	25.70	4.41	0.00	95.87	N/A	N/A
2422	49.73	AV	V	25.70	4.41	0.00	79.84	N/A	N/A
2390	28.72	PK	H	25.61	4.39	0.00	58.72	74.00	15.28
2390	15.24	AV	H	25.61	4.39	0.00	45.24	54.00	8.76
4844	34.26	PK	H	30.69	6.08	27.42	43.61	74.00	30.39
4844	21.14	AV	H	30.69	6.08	27.42	30.49	54.00	23.51
7266	33.24	PK	H	34.24	7.48	25.89	49.07	74.00	24.93
7266	20.45	AV	H	34.24	7.48	25.89	36.28	54.00	17.72
9688	32.14	PK	H	36.15	8.82	27.37	49.74	74.00	24.26
9688	19.47	AV	H	36.15	8.82	27.37	37.07	54.00	16.93
3193	34.24	PK	H	27.82	6.75	27.38	41.43	74.00	32.57
3193	21.64	AV	H	27.82	6.75	27.38	28.83	54.00	25.17
165.1	33.76	QP	H	12.40	1.55	21.44	26.27	43.50	17.23
Middle Channel: 2437 MHz									
2437	74.29	PK	H	25.74	4.41	0.00	104.44	N/A	N/A
2437	58.52	AV	H	25.74	4.41	0.00	88.67	N/A	N/A
2437	65.78	PK	V	25.74	4.41	0.00	95.93	N/A	N/A
2437	49.06	AV	V	25.74	4.41	0.00	79.21	N/A	N/A
4874	34.34	PK	H	30.77	6.09	27.42	43.78	74.00	30.22
4874	21.33	AV	H	30.77	6.09	27.42	30.77	54.00	23.23
7311	33.54	PK	H	34.35	7.51	25.88	49.52	74.00	24.48
7311	20.34	AV	H	34.35	7.51	25.88	36.32	54.00	17.68
9748	32.27	PK	H	36.30	8.83	27.24	50.16	74.00	23.84
9748	19.64	AV	H	36.30	8.83	27.24	37.53	54.00	16.47
2927	33.54	PK	H	27.01	6.71	27.54	39.72	74.00	34.28
2927	21.18	AV	H	27.01	6.71	27.54	27.36	54.00	26.64
3193	34.36	PK	H	27.82	6.75	27.38	41.55	74.00	32.45
3193	21.65	AV	H	27.82	6.75	27.38	28.84	54.00	25.16
165.1	33.26	QP	H	12.40	1.55	21.44	25.77	43.50	17.73
High Channel: 2452 MHz									
2452	74.31	PK	H	25.78	4.41	0.00	104.50	N/A	N/A
2452	58.03	AV	H	25.78	4.41	0.00	88.22	N/A	N/A
2452	65.73	PK	V	25.78	4.41	0.00	95.92	N/A	N/A
2452	49.89	AV	V	25.78	4.41	0.00	80.08	N/A	N/A
2483.5	34.21	PK	H	25.86	4.49	0.00	64.56	74.00	9.44
2483.5	16.12	AV	H	25.86	4.49	0.00	46.47	54.00	7.53
4904	34.52	PK	H	30.85	6.06	27.43	44.00	74.00	30.00
4904	21.56	AV	H	30.85	6.06	27.43	31.04	54.00	22.96
7356	33.24	PK	H	34.45	7.53	25.87	49.35	74.00	24.65
7356	20.14	AV	H	34.45	7.53	25.87	36.25	54.00	17.75
9808	32.45	PK	H	36.44	8.84	27.09	50.64	74.00	23.36
9808	19.87	AV	H	36.44	8.84	27.09	38.06	54.00	15.94
3193	34.87	PK	H	27.82	6.75	27.38	42.06	74.00	31.94
3193	22.41	AV	H	27.82	6.75	27.38	29.60	54.00	24.40
165.1	33.11	QP	H	12.40	1.55	21.44	25.62	43.50	17.88

Conducted Spurious Emissions at Antenna Port

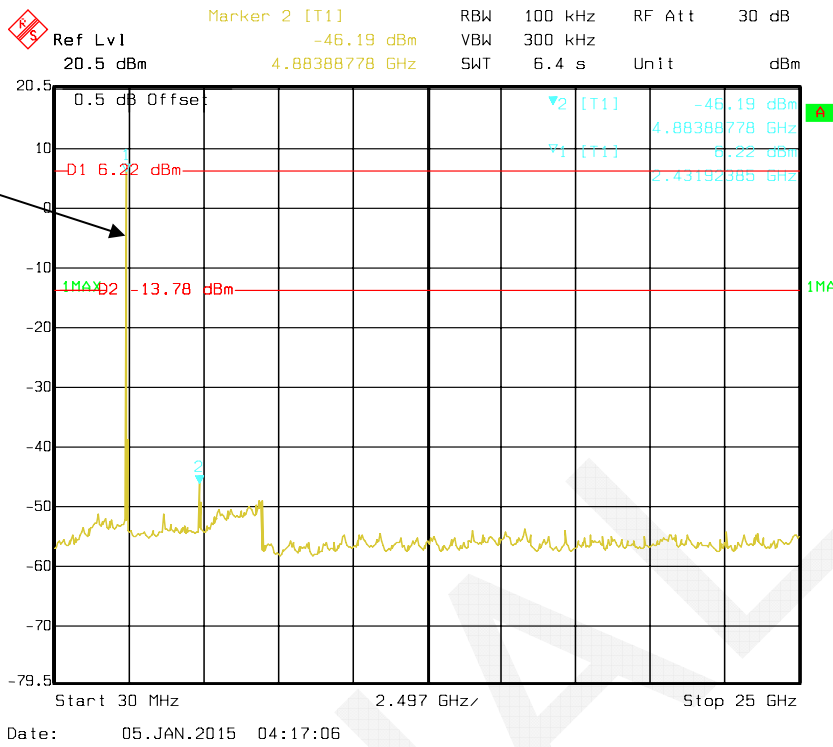
802.11b Low Channel



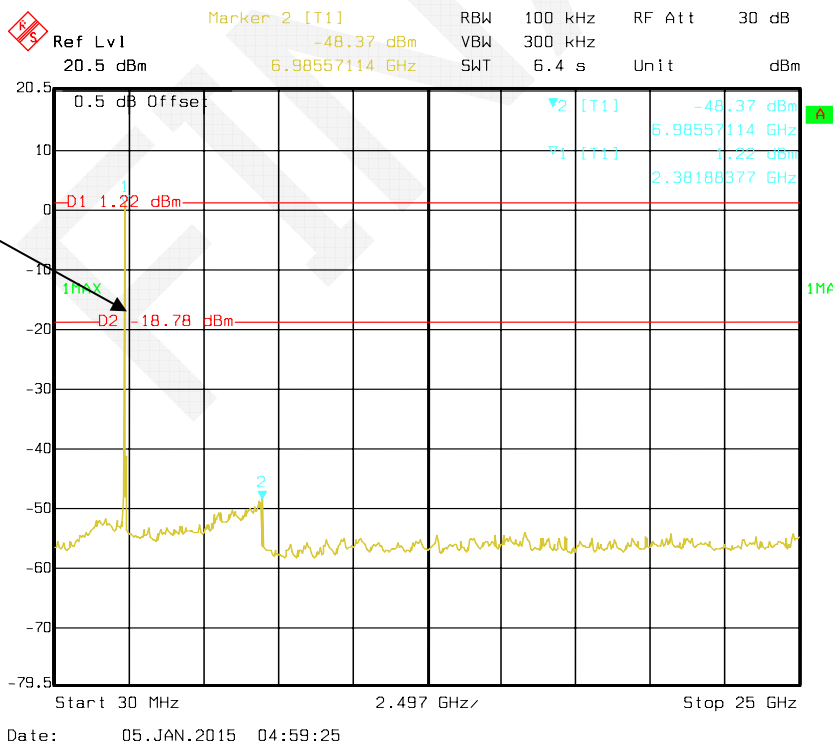
802.11b Middle Channel



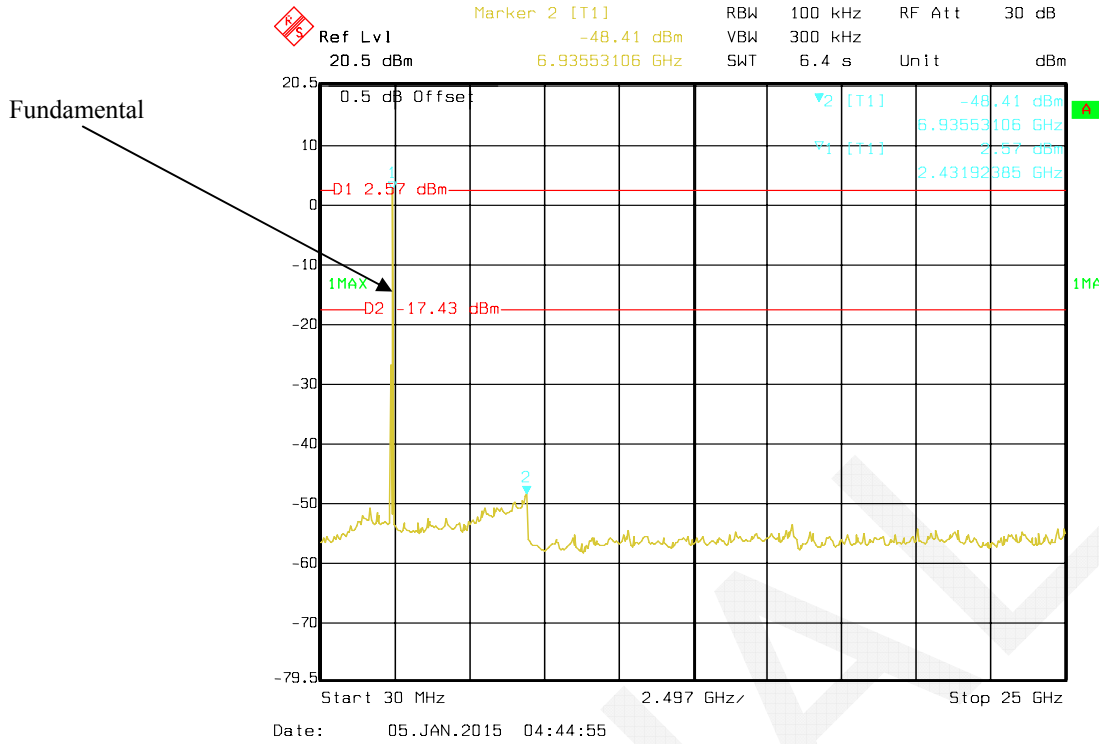
802.11b High Channel



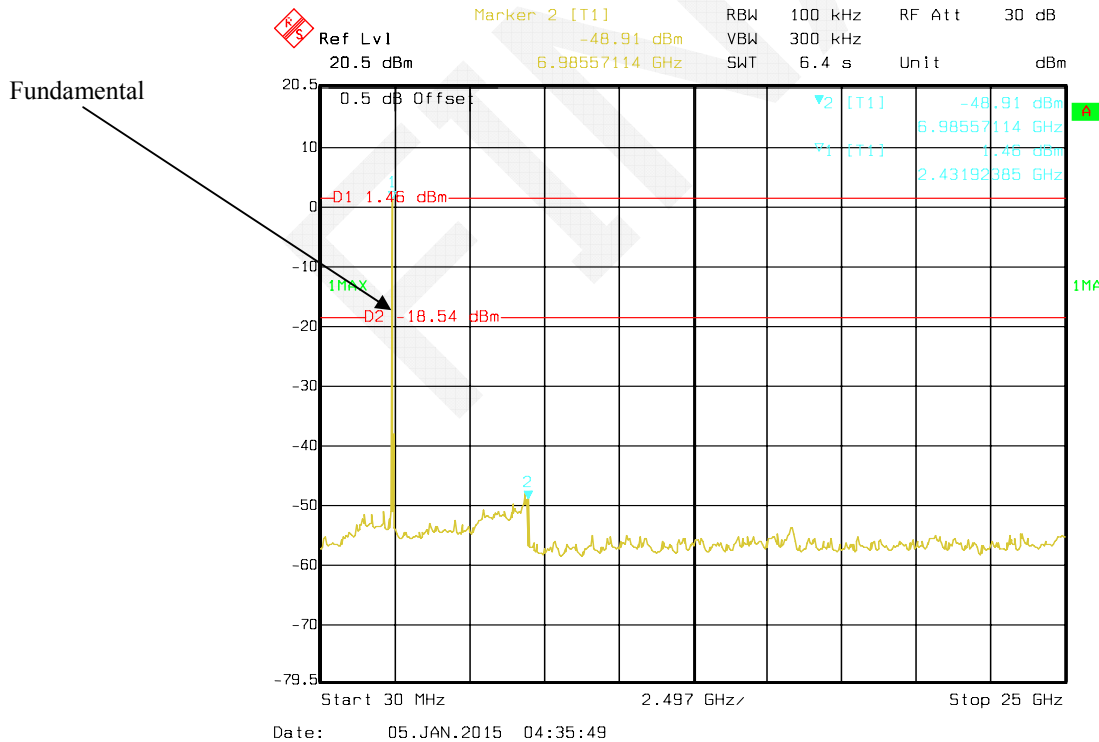
802.11g Low Channel



802.11g Middle Channel

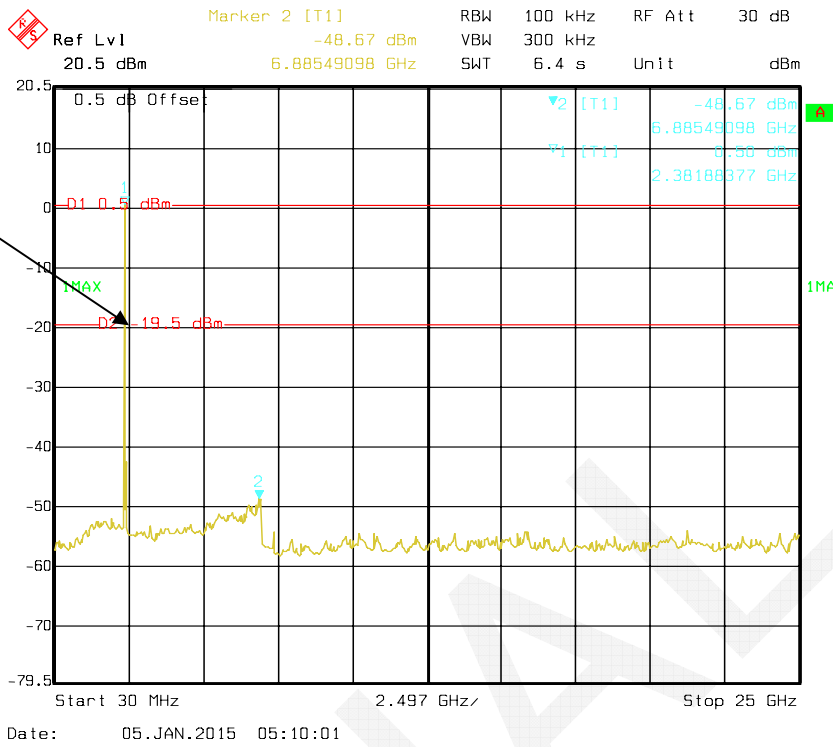


802.11g High Channel



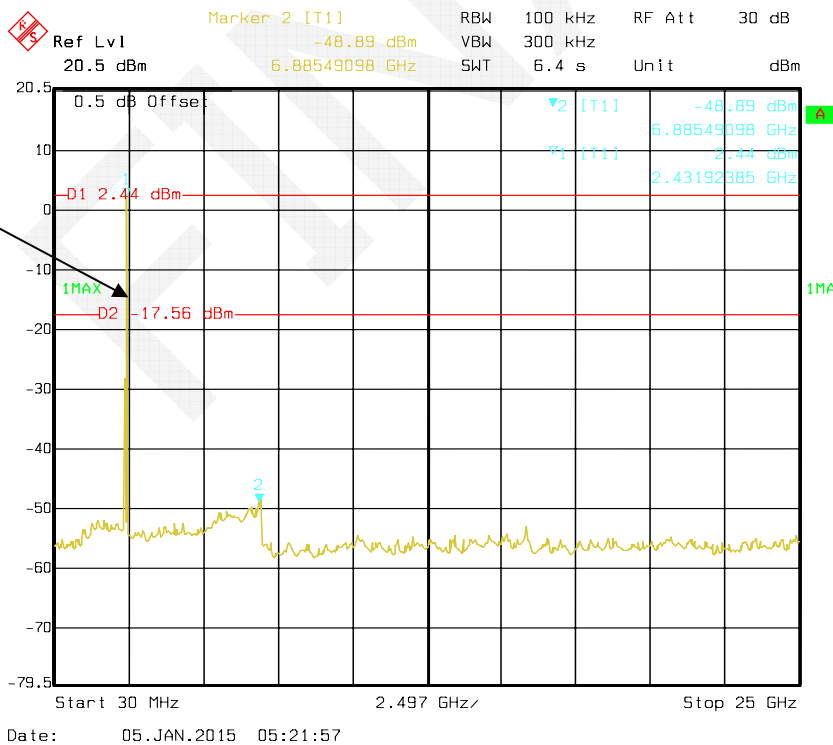
802.11n ht20 Low Channel

Fundamental

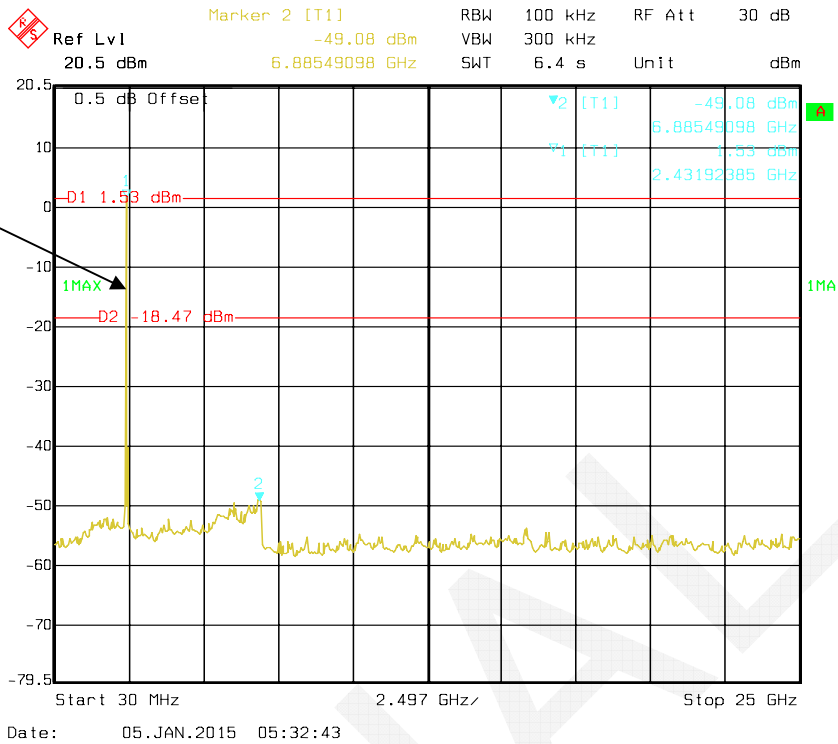


802.11n ht20 Middle Channel

Fundamental

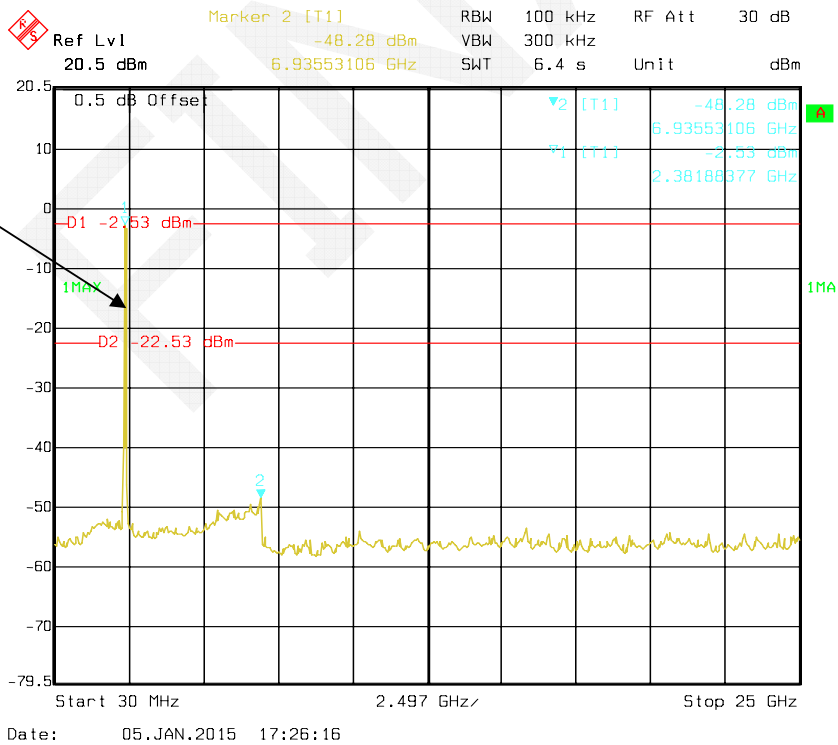


802.11n ht20 High Channel



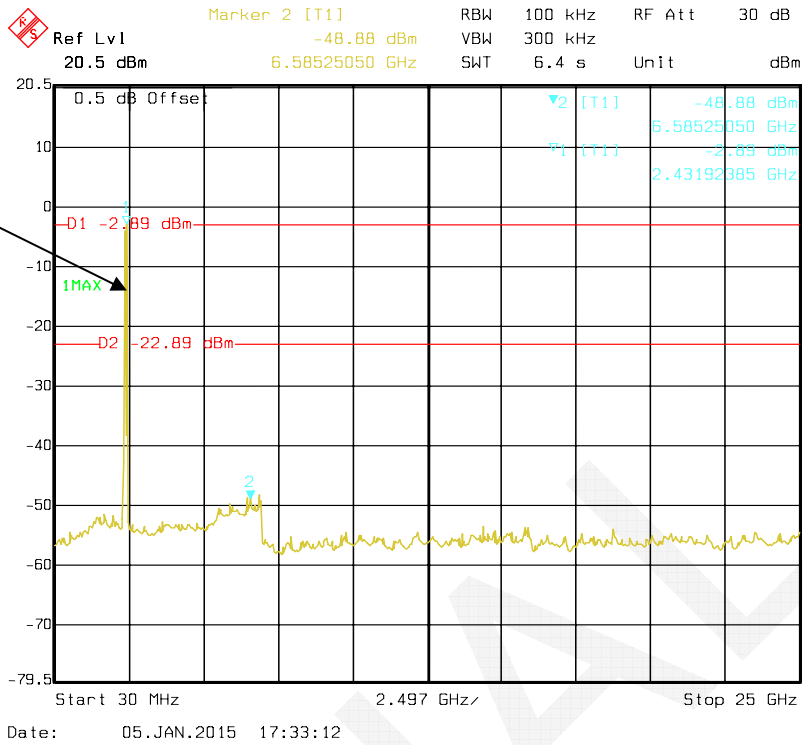
Fundamental

802.11n ht40 Low Channel

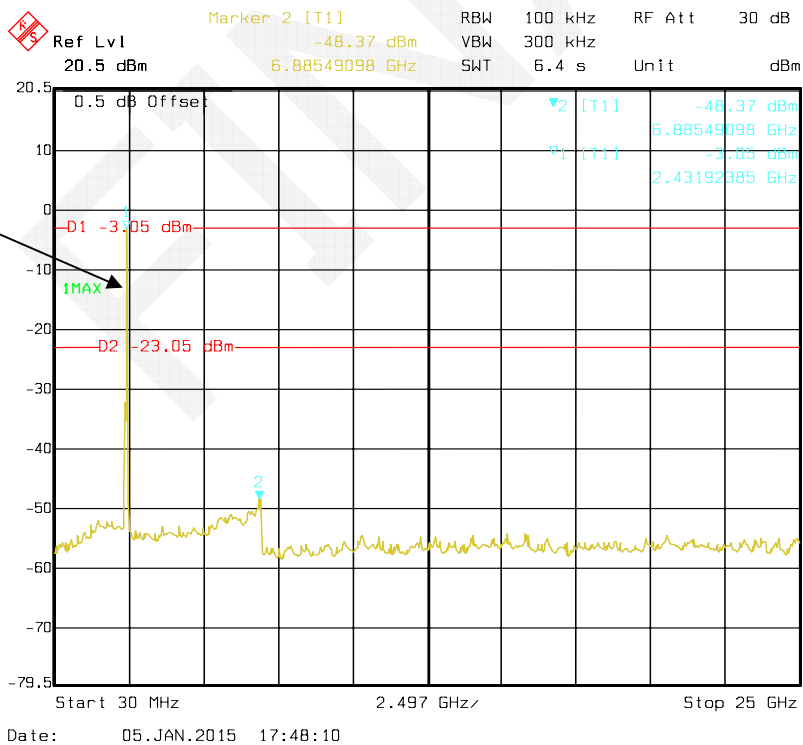


Fundamental

802.11n ht40 Middle Channel



802.11n ht40 High Channel



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

According to KDB 558074 D01 DTS Meas Guidance v03r02 clause8.1 Option 1:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09

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

Test Data

Environmental Conditions

Temperature:	23.1°C
Relative Humidity:	50%
ATM Pressure:	100.9kPa

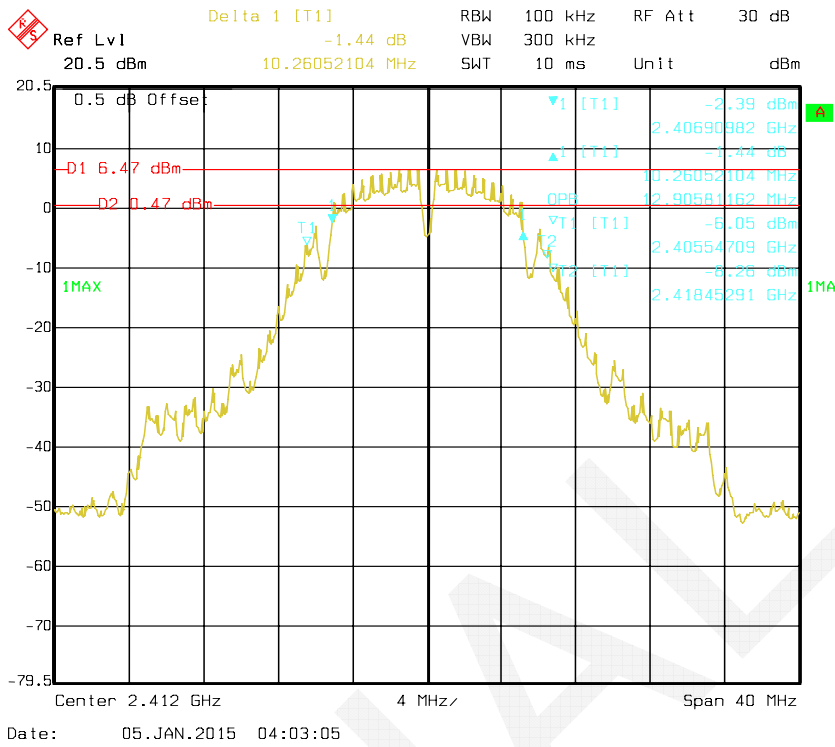
The testing was performed by Sevin Li on 2015-01-05.

Test Mode: Transmitting

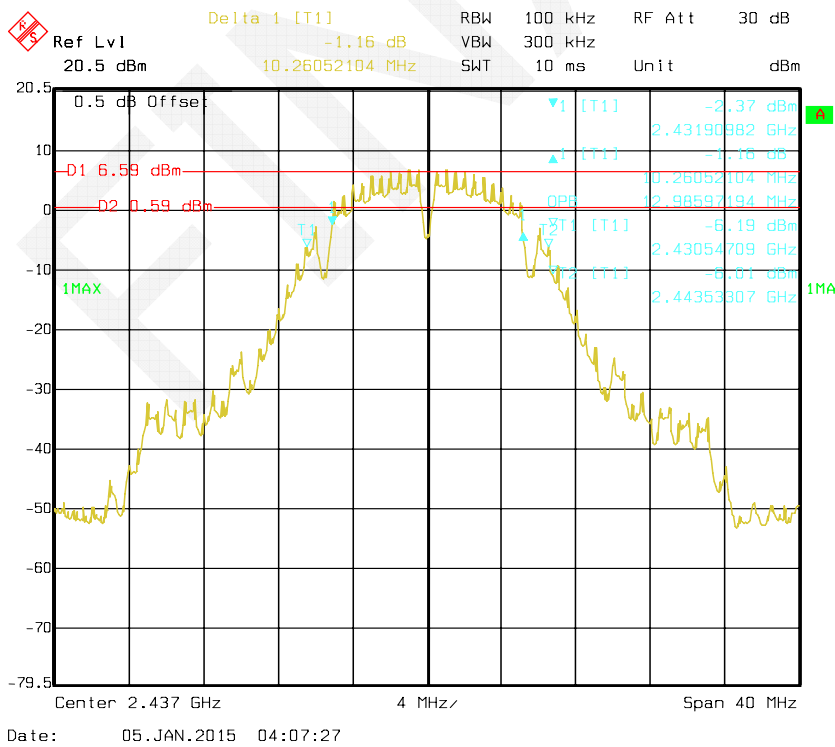
Test Result: Compliant. Please refer to the following table and plots.

Mode	Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
802.11b	Low	2412	10.26	≥ 0.50
	Middle	2437	10.26	≥ 0.50
	High	2462	10.26	≥ 0.50
802.11g	Low	2412	15.87	≥ 0.50
	Middle	2437	15.87	≥ 0.50
	High	2462	15.95	≥ 0.50
802.11n20	Low	2412	16.99	≥ 0.50
	Middle	2437	17.07	≥ 0.50
	High	2462	17.07	≥ 0.50
802.11n40	Low	2422	36.71	≥ 0.50
	Middle	2437	36.71	≥ 0.50
	High	2452	36.71	≥ 0.50

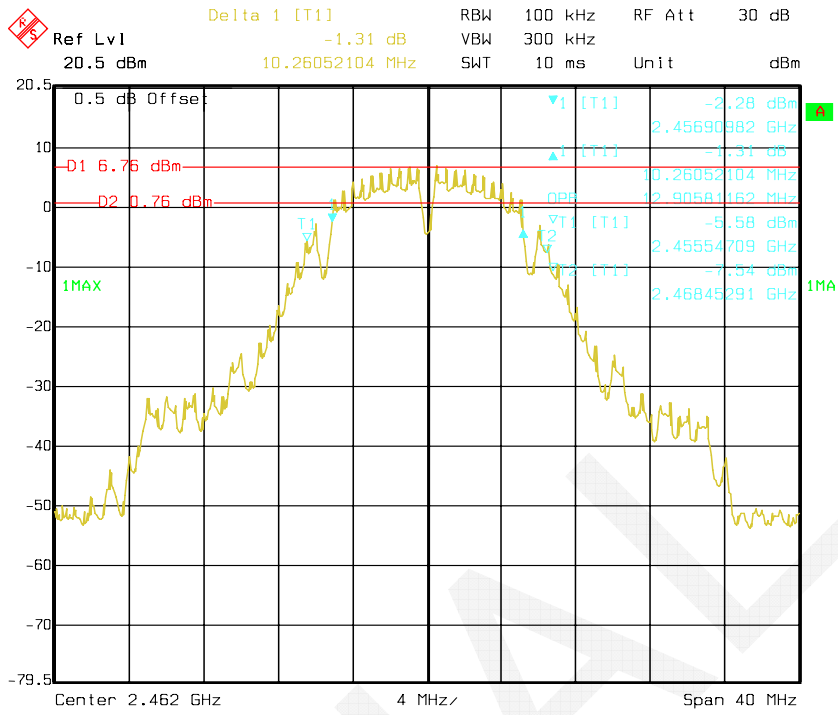
802.11b Low Channel



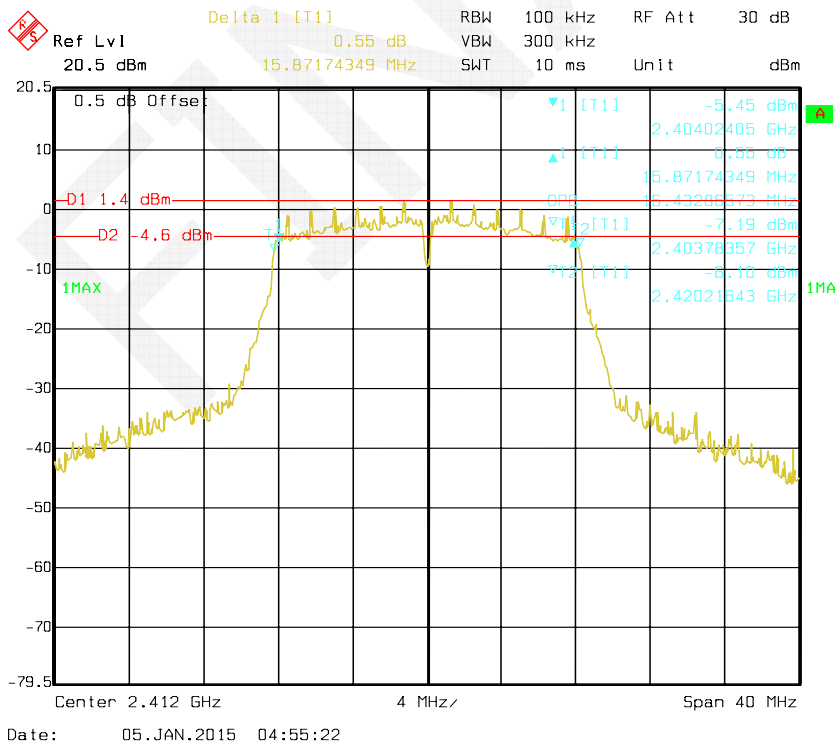
802.11b Middle Channel



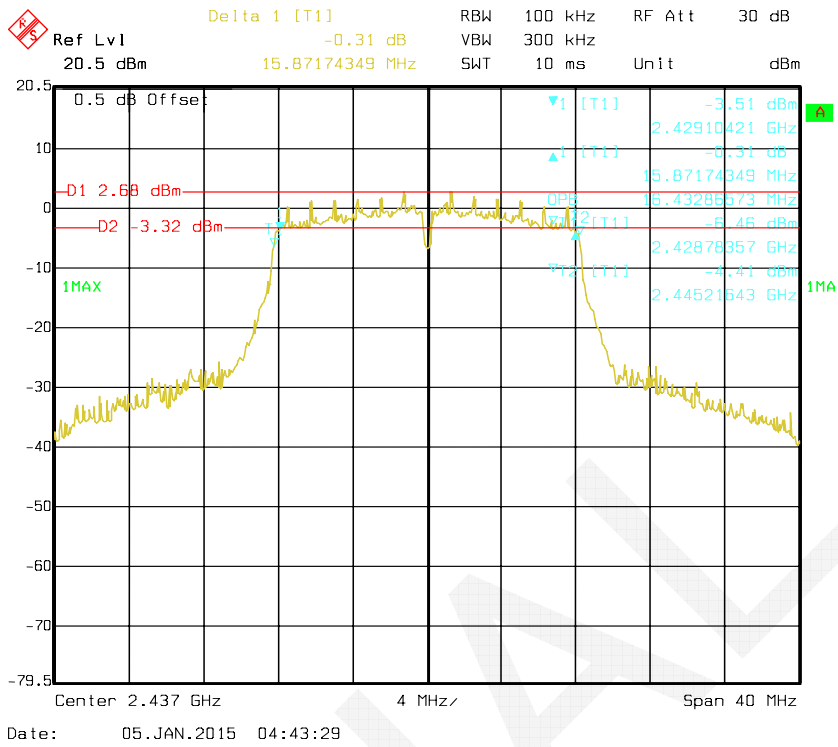
802.11b High Channel



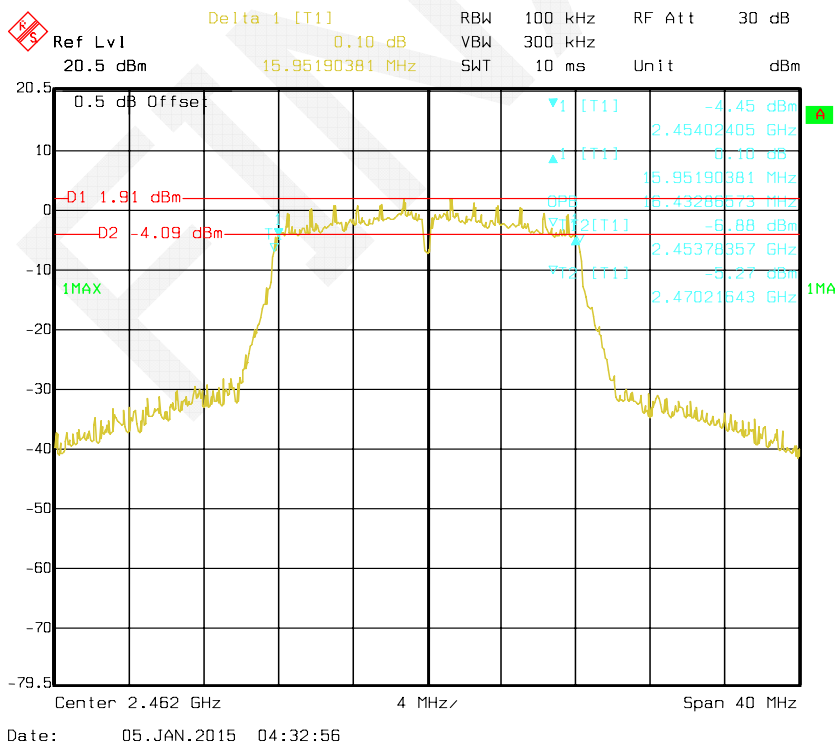
802.11g Low Channel



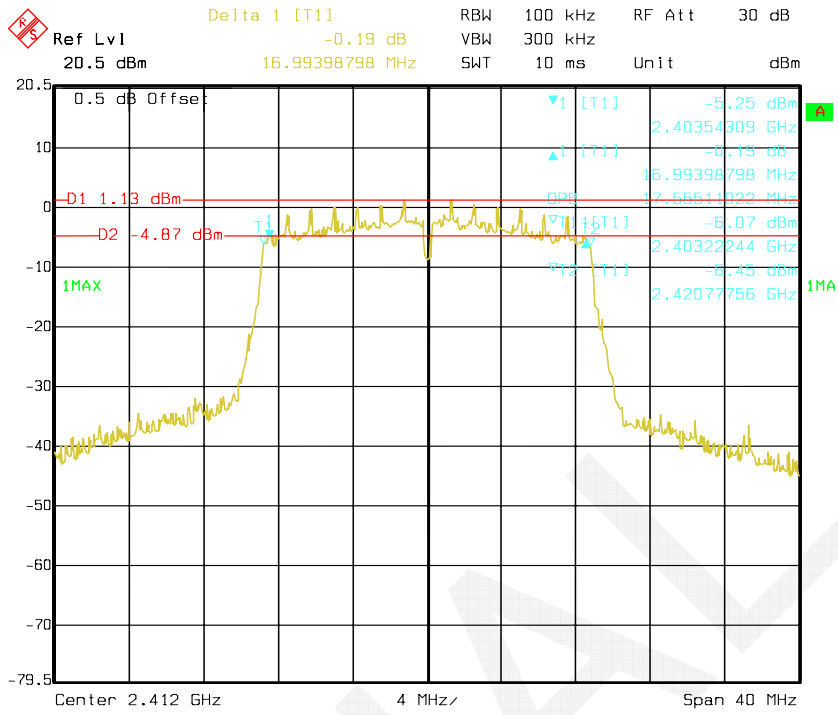
802.11g Middle Channel



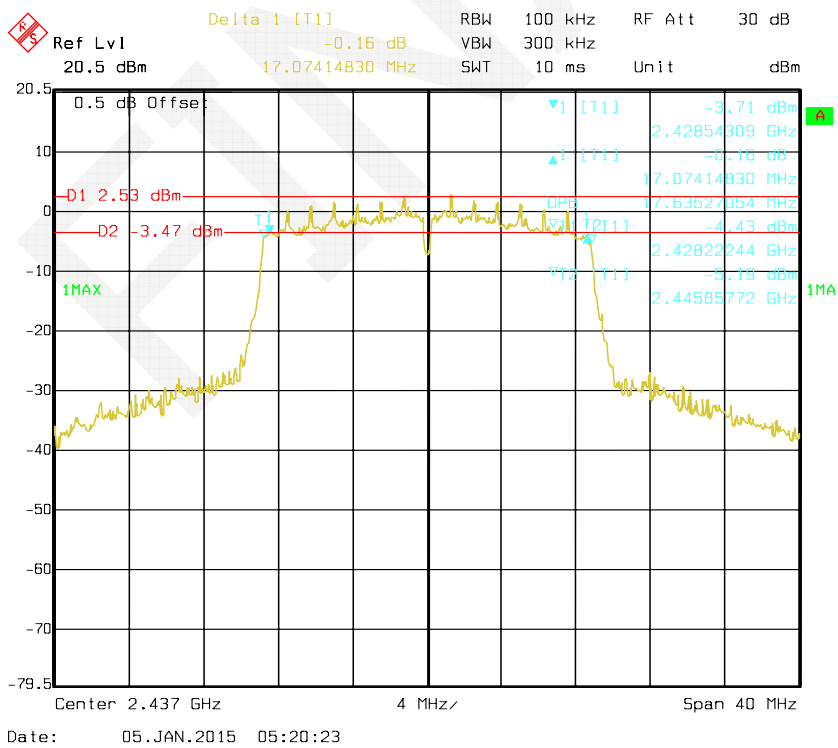
802.11g High Channel



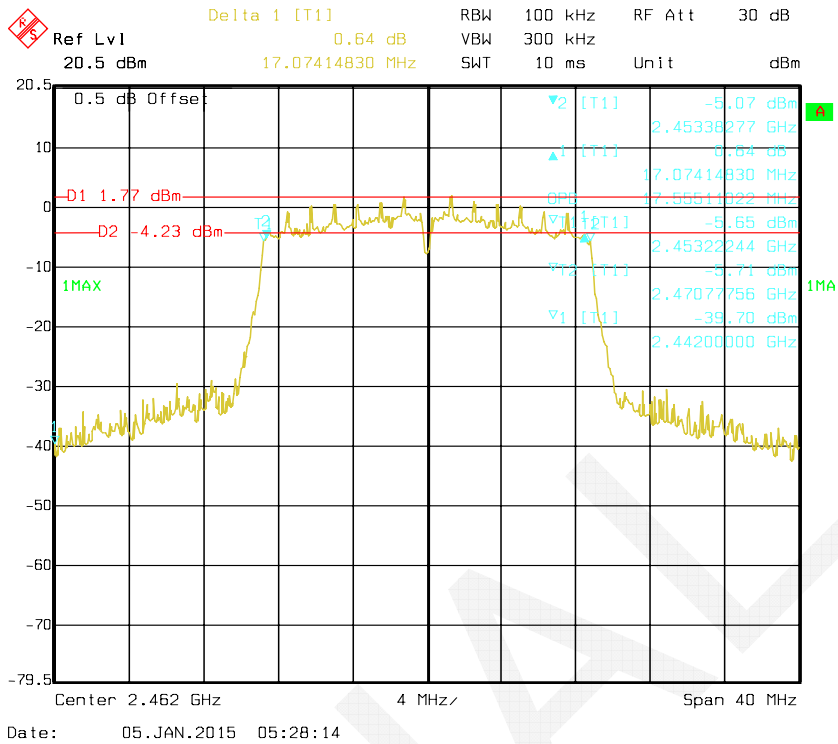
802.11n ht20 Low Channel



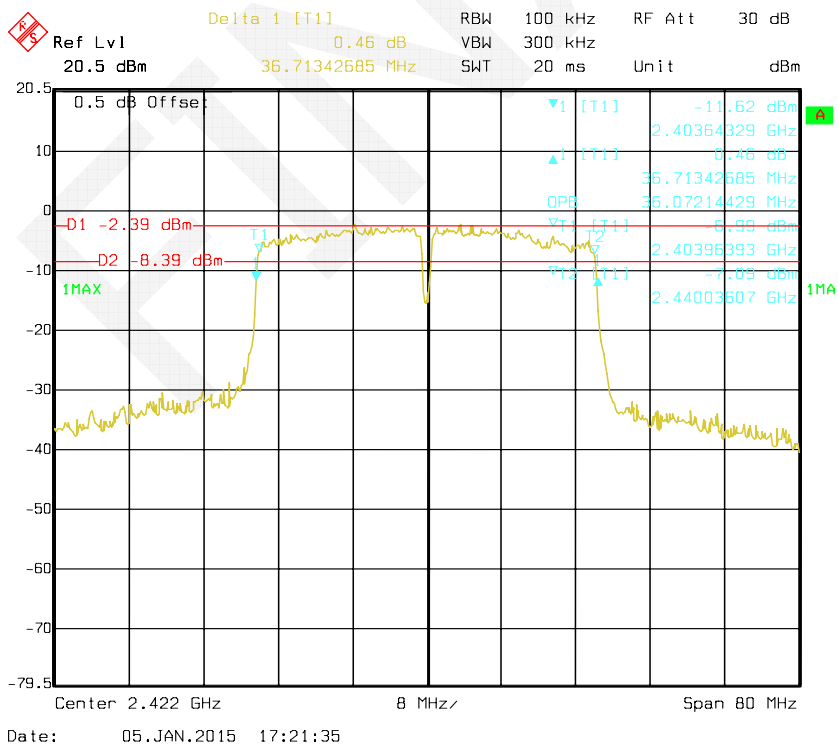
802.11n ht20 Middle Channel



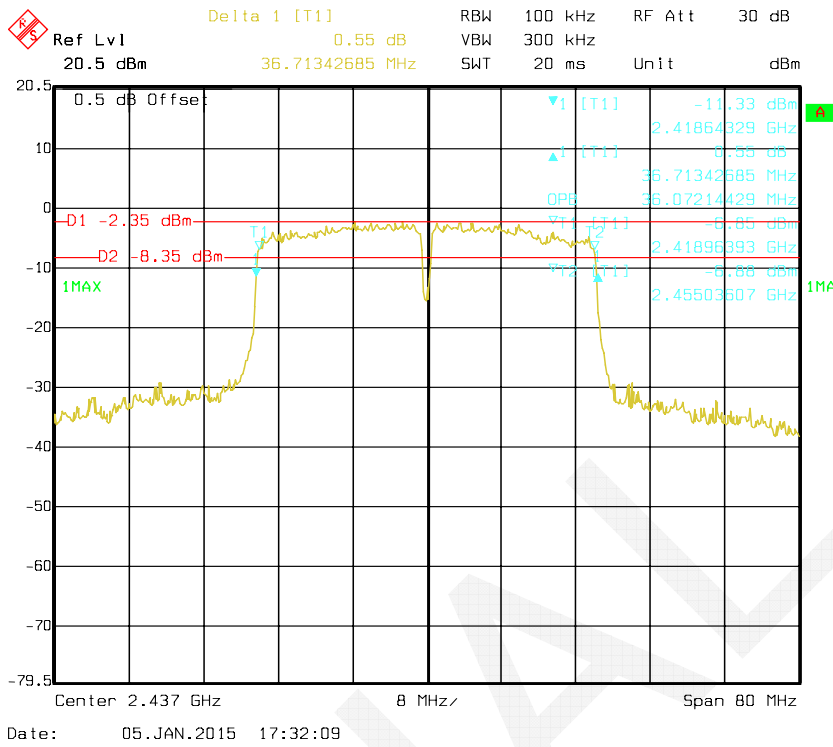
802.11n ht20 High Channel



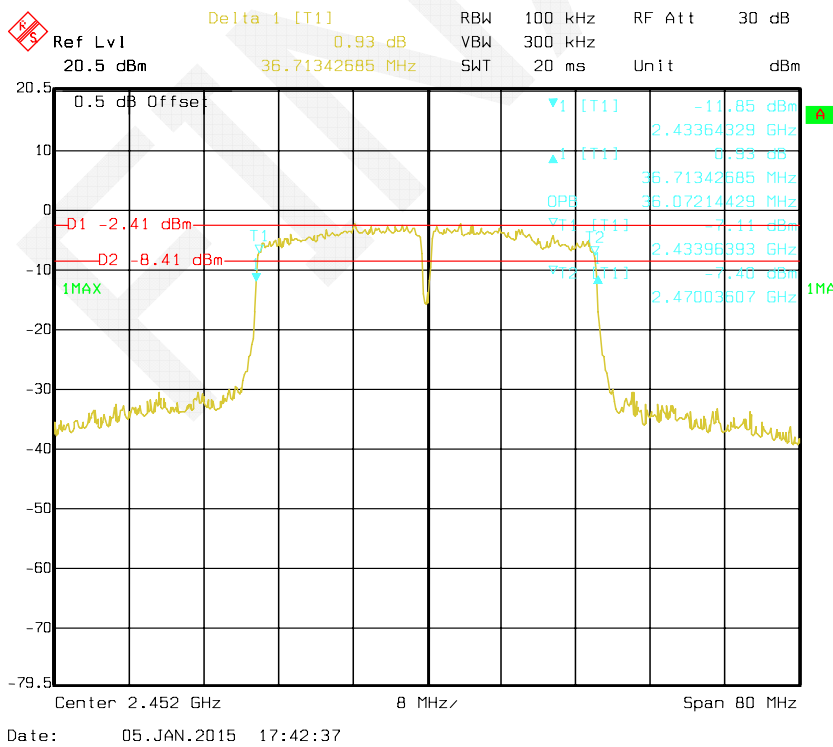
802.11n ht40 Low Channel



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

According to KDB 558074 D01 DTS Meas Guidance v03r02

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 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	MY54210016	2014-11-03	2015-11-03
Agilent	Wideband Power Sensor	N1921A	MY54170013	2014-11-03	2015-11-03
Agilent	P-Series Power Meter	N1912A	MY5000448	2014-11-03	2015-11-03

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

Test Data

Environmental Conditions

Temperature:	25.8 °C-26.6 °C
Relative Humidity:	56 %-58 %
ATM Pressure:	101.1 kPa-101.3 kPa

The testing was performed by Sevin Li on 2014-11-11.

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table.

Maximum peak conducted output power:

Mode	Channel	Frequency MHz	Reading dBm	Limit dBm	Result
802.11b	Low	2412	19.01	30	PASS
	Middle	2437	18.92	30	PASS
	High	2462	19.12	30	PASS
802.11g	Low	2412	20.97	30	PASS
	Middle	2437	21.44	30	PASS
	High	2462	21.18	30	PASS
802.11n20	Low	2412	20.39	30	PASS
	Middle	2437	20.70	30	PASS
	High	2462	20.51	30	PASS
802.11n40	Low	2422	22.40	30	PASS
	Middle	2437	22.46	30	PASS
	High	2452	22.24	30	PASS

Maximum conducted Average output power:

Mode	Channel	Frequency MHz	Reading dBm	Limit dBm	Result
802.11b	Low	2412	17.08	30	PASS
	Middle	2437	16.95	30	PASS
	High	2462	17.02	30	PASS
802.11g	Low	2412	16.12	30	PASS
	Middle	2437	16.33	30	PASS
	High	2462	16.27	30	PASS
802.11n20	Low	2412	15.19	30	PASS
	Middle	2437	15.47	30	PASS
	High	2462	15.35	30	PASS
802.11n40	Low	2422	15.00	30	PASS
	Middle	2437	15.31	30	PASS
	High	2452	15.15	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
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09

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

Test Data

Environmental Conditions

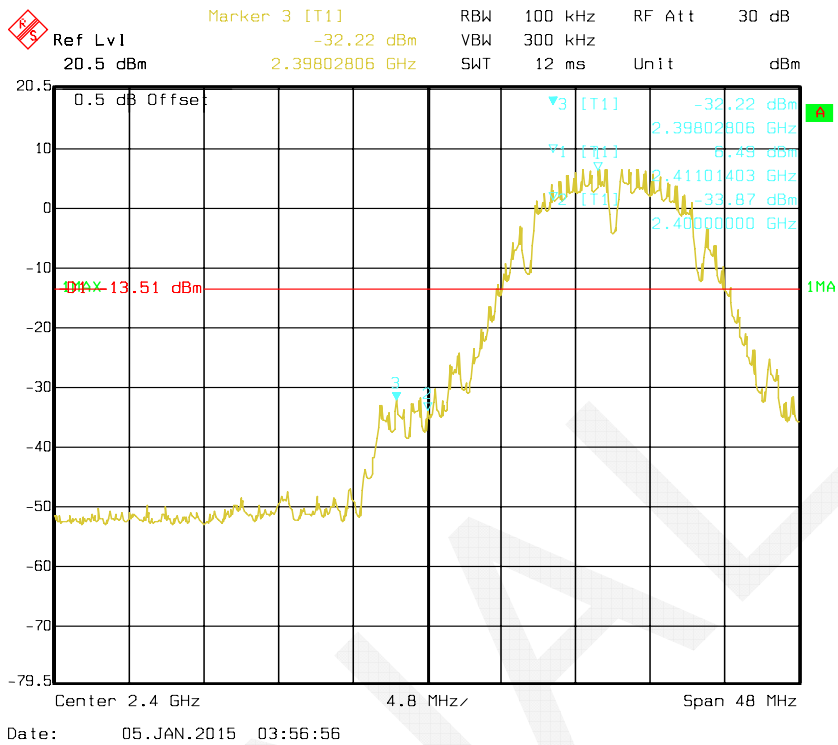
Temperature:	23.1 °C
Relative Humidity:	50 %
ATM Pressure:	100.9 kPa

The testing was performed by Sevin Li on 2015-01-05.

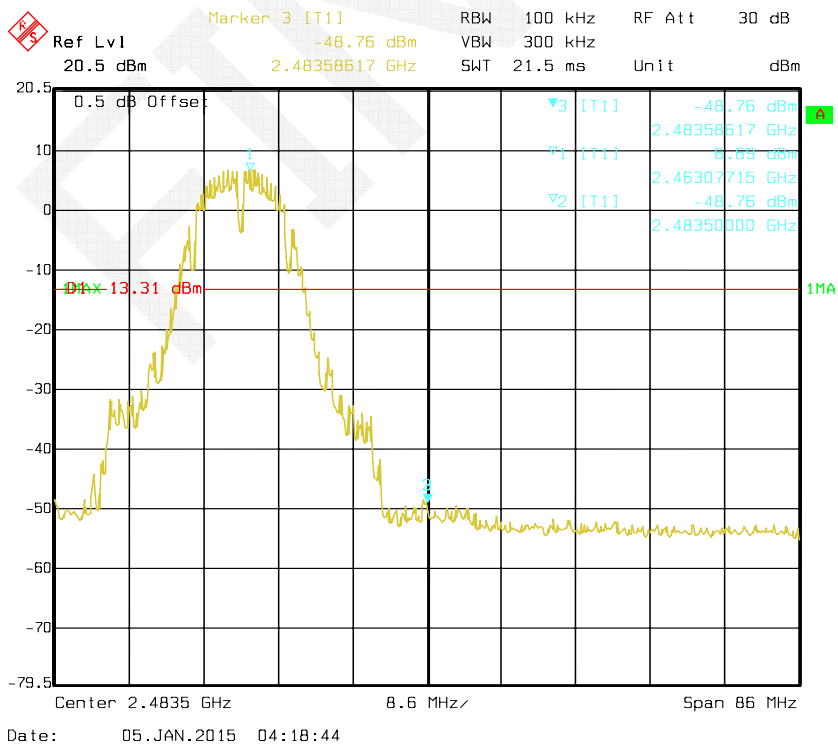
Test mode: Transmitting

Test Result: Compliant. Please refer to following plots.

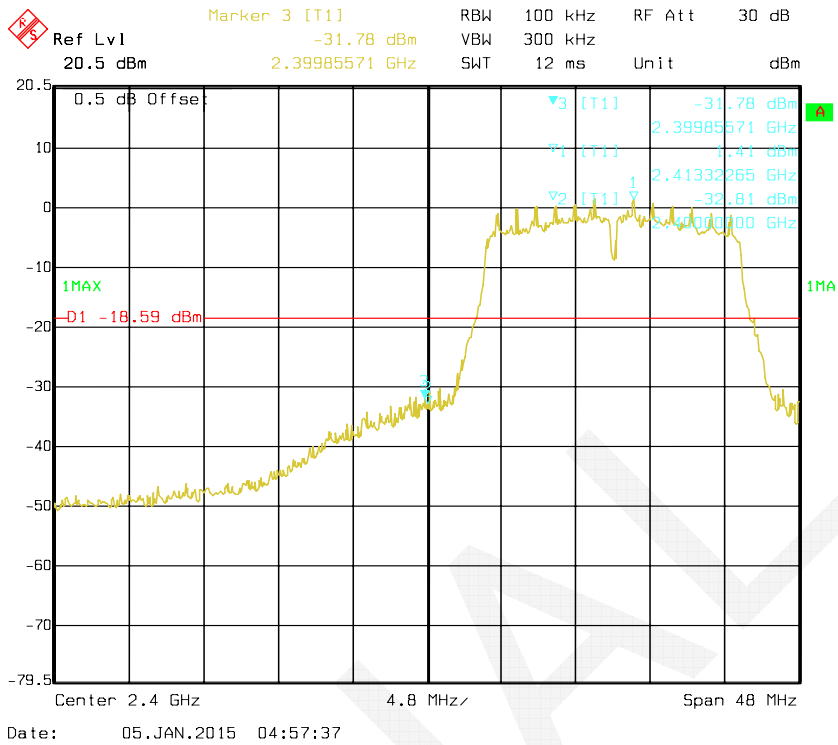
802.11b: Band Edge, Left Side



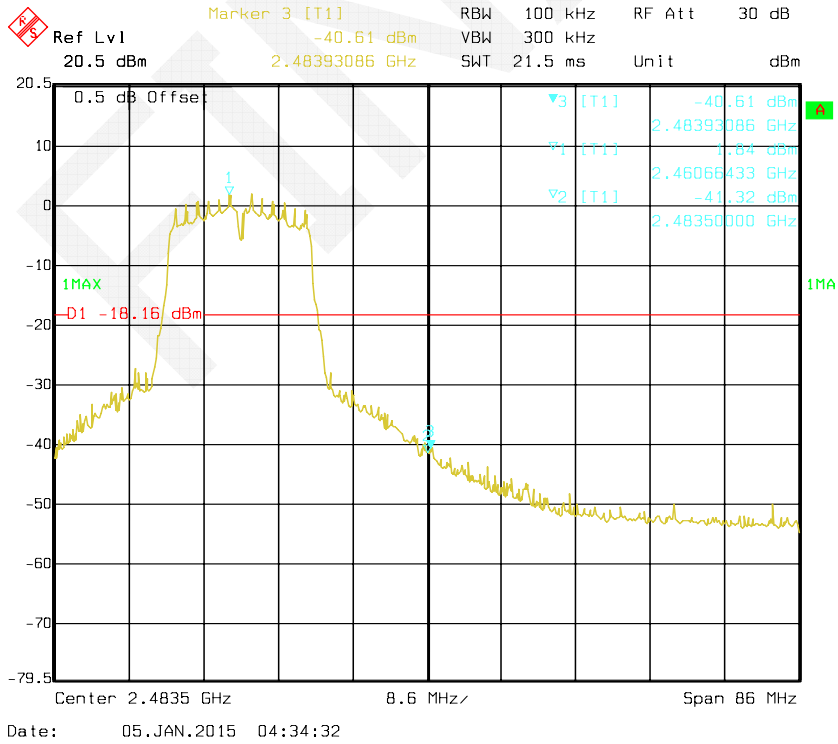
802.11b: Band Edge, Right Side



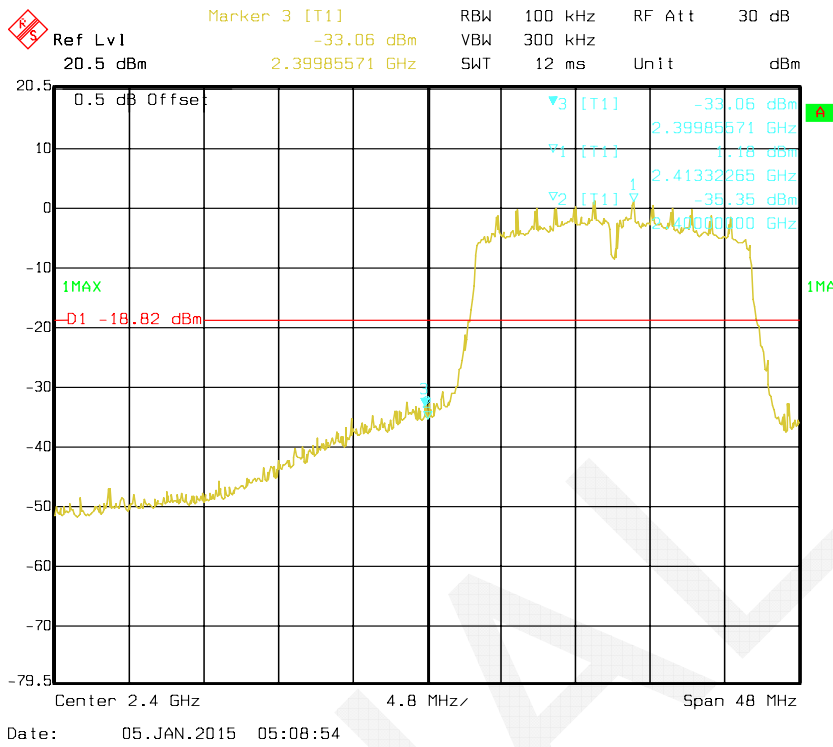
802.11g: Band Edge, Left Side



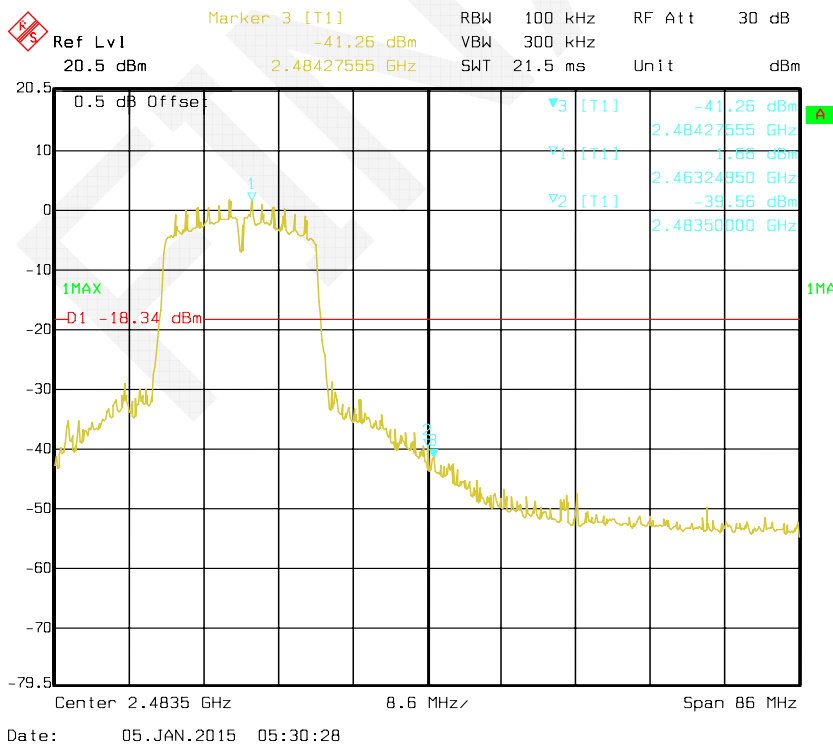
802.11g: Band Edge, Right Side



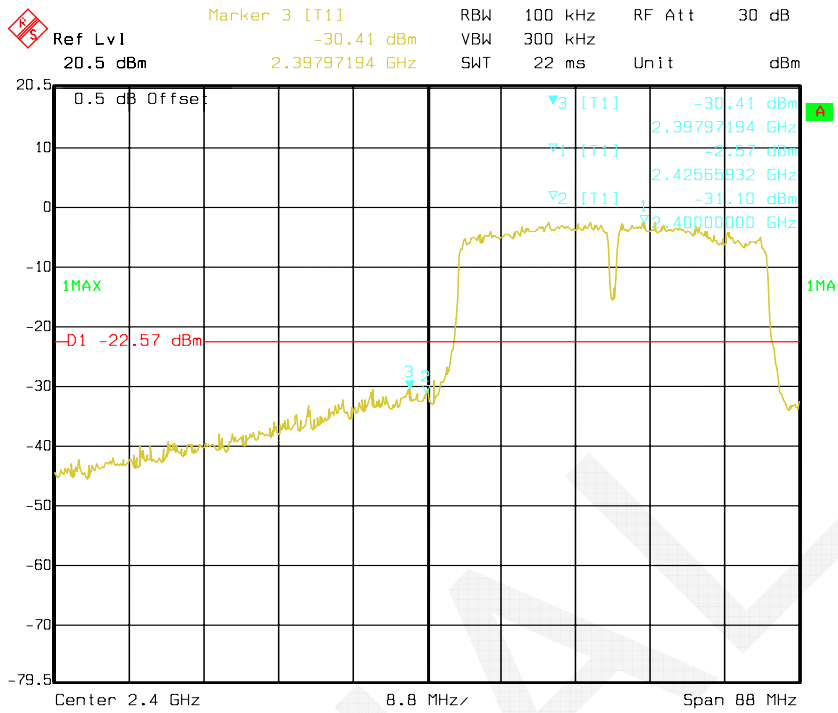
802.11n ht20 Band Edge, Left Side



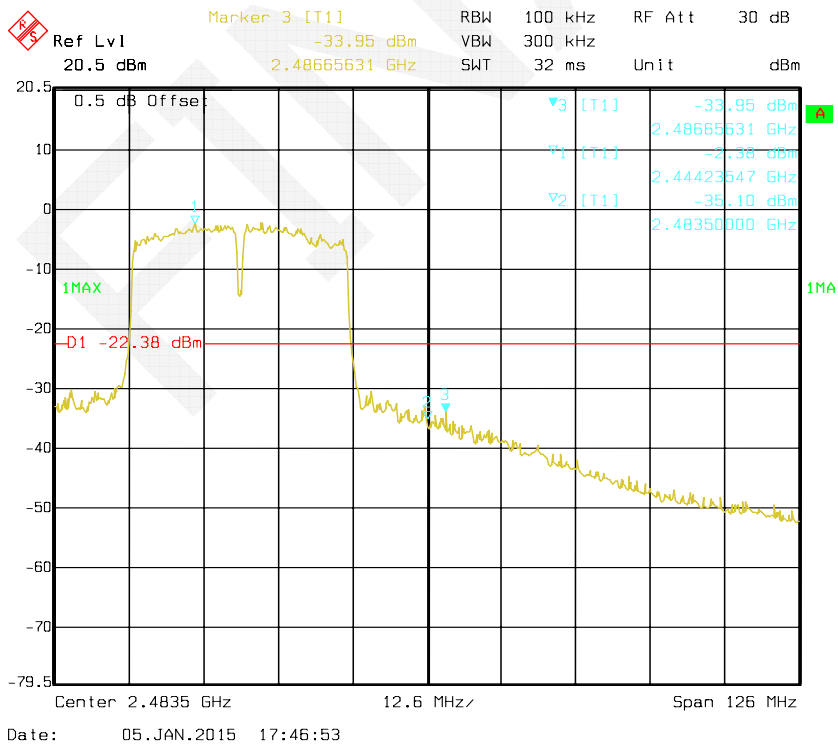
802.11n ht20 Band Edge, Right Side



802.11n ht40 Band Edge, Left Side



802.11n ht40 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 KDB 558074 D01 DTS Meas Guidance v03r02 clause10.2:

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW $\geq 3 \times \text{RBW}$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) 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
R&S	Spectrum Analyzer	FSEM	DE31388	2014-05-09	2015-05-09

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

Test Data

Environmental Conditions

Temperature:	21.3 °C
Relative Humidity:	50 %
ATM Pressure:	100.9 kPa

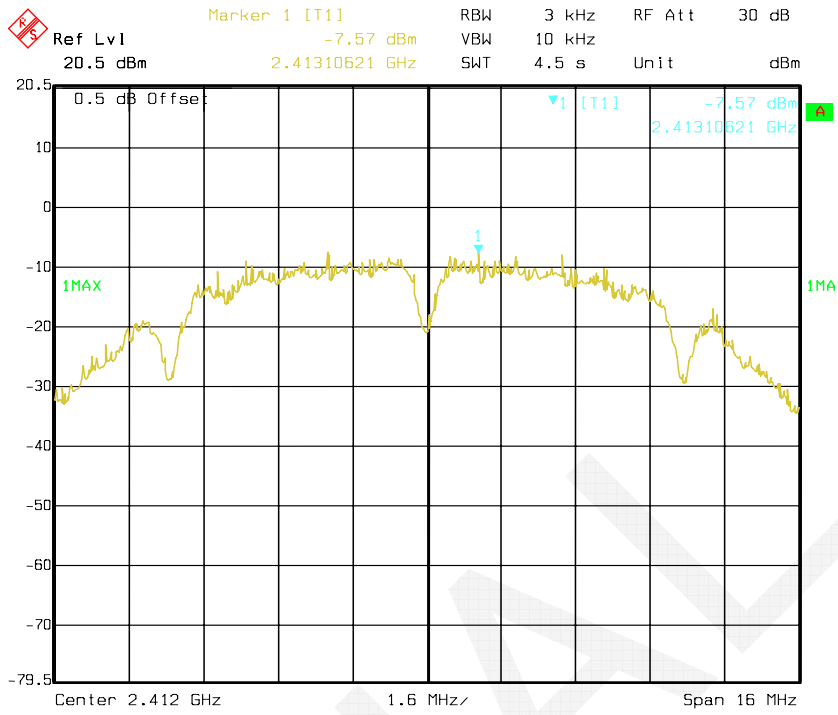
The testing was performed by Sevin Li on 2015-01-05.

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table and plots

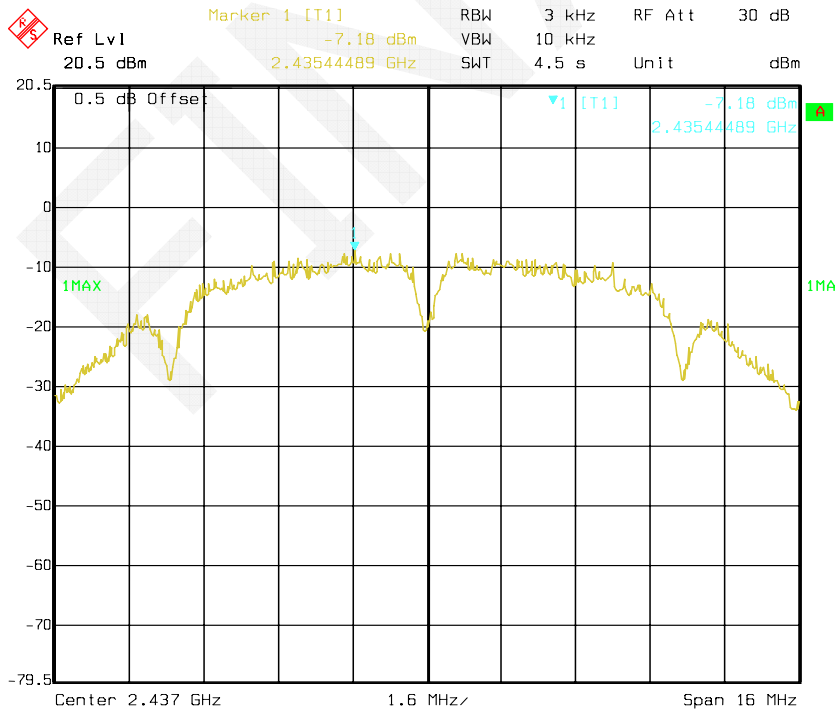
Mode	Channel Channel	Frequency MHz	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
802.11b	Low	2412	-7.57	≤8	PASS
	Middle	2437	-7.18	≤8	PASS
	High	2462	-7.37	≤8	PASS
802.11g	Low	2412	-12.56	≤8	PASS
	Middle	2437	-12.04	≤8	PASS
	High	2462	-12.91	≤8	PASS
802.11n20	Low	2412	-14.13	≤8	PASS
	Middle	2437	-13.98	≤8	PASS
	High	2462	-13.80	≤8	PASS
802.11n40	Low	2422	-15.71	≤8	PASS
	Middle	2437	-15.55	≤8	PASS
	High	2452	-15.37	≤8	PASS

Power Spectral Density, 802.11b Low Channel



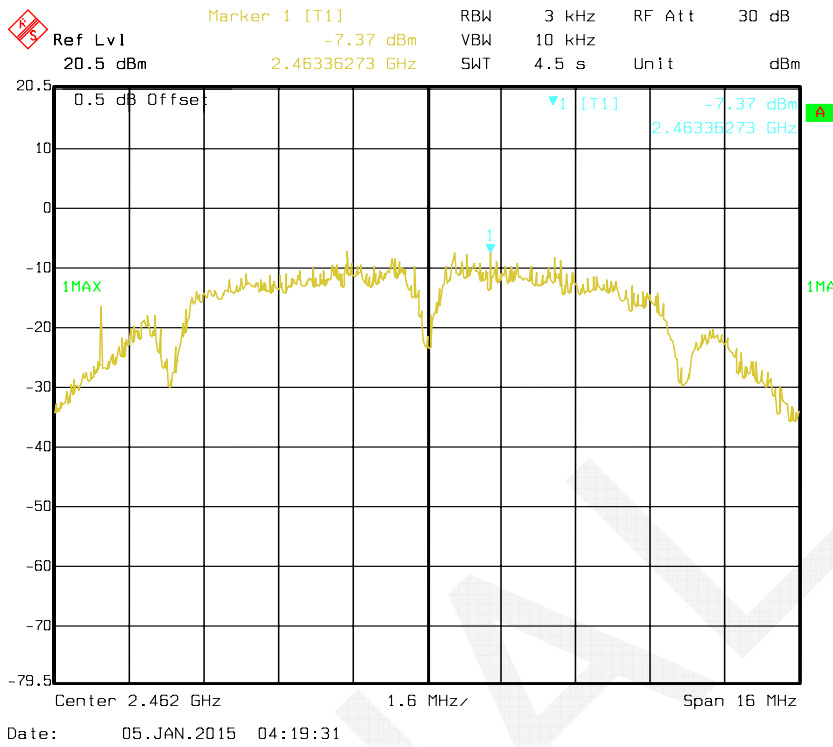
Date: 05.JAN.2015 03:59:37

Power Spectral Density, 802.11b Middle Channel

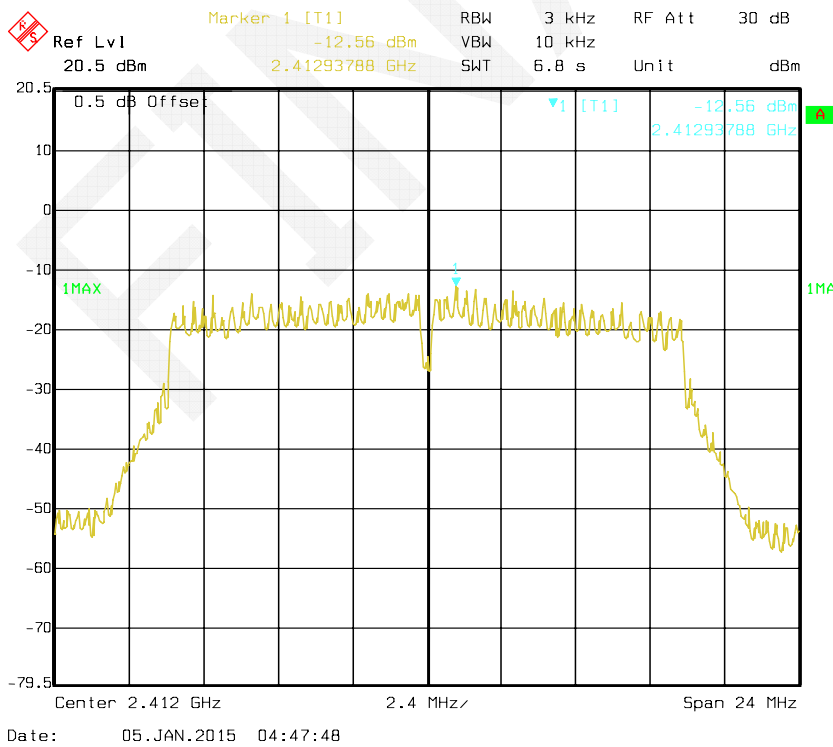


Date: 05.JAN.2015 04:12:09

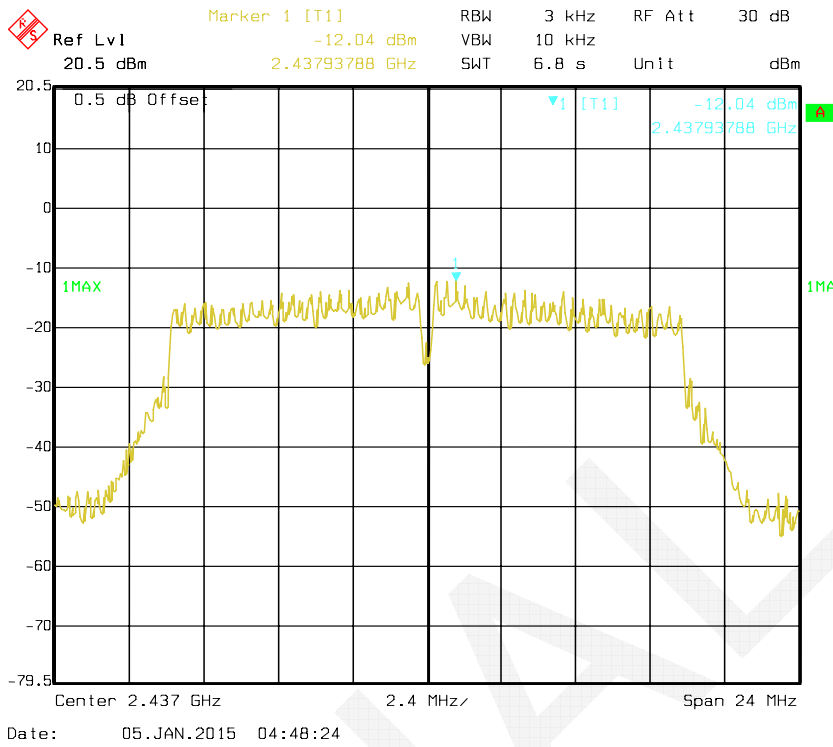
Power Spectral Density, 802.11b High Channel



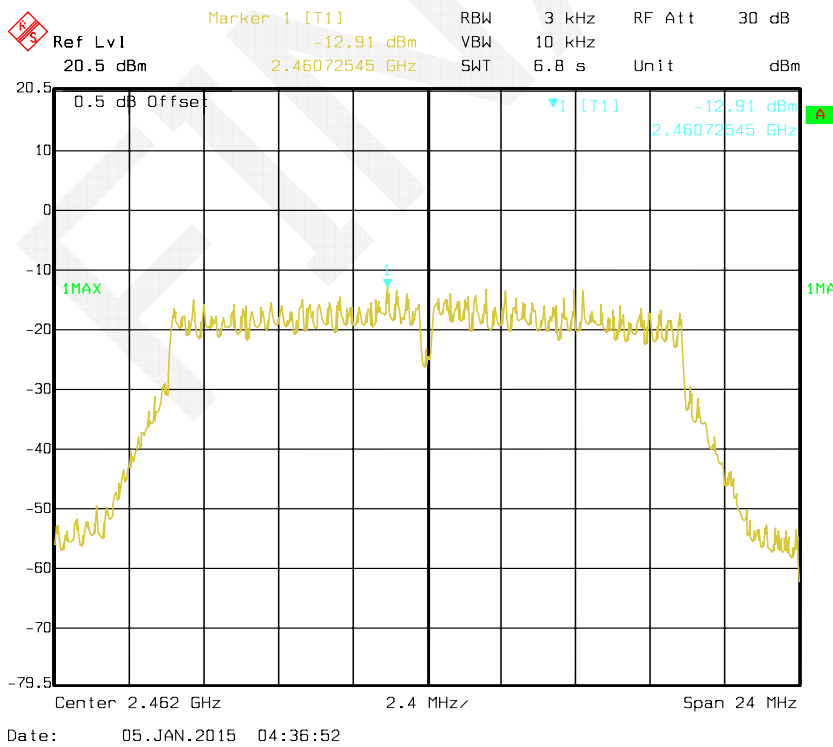
Power Spectral Density, 802.11g Low Channel



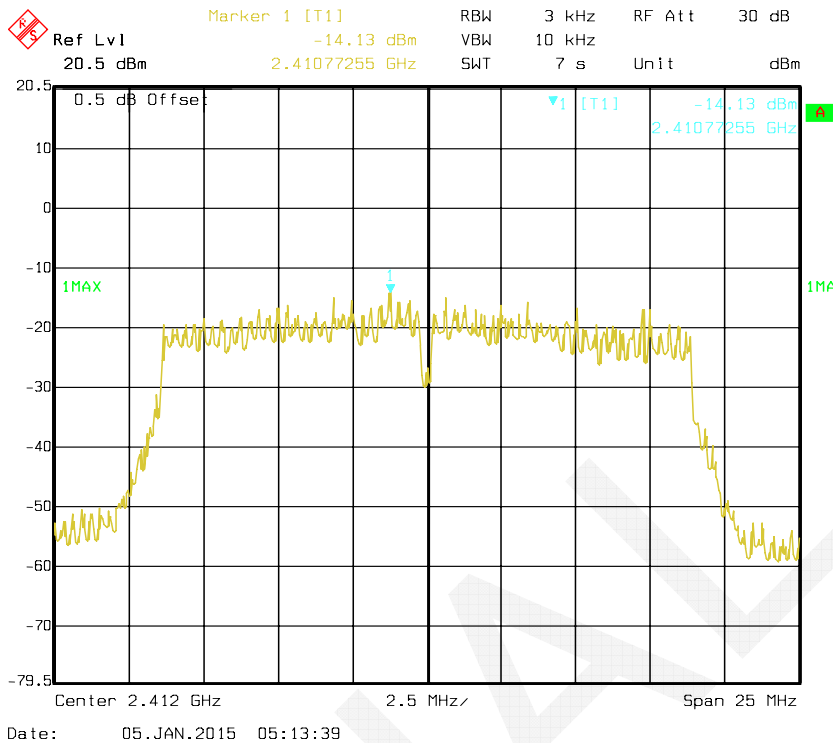
Power Spectral Density, 802.11g Middle Channel



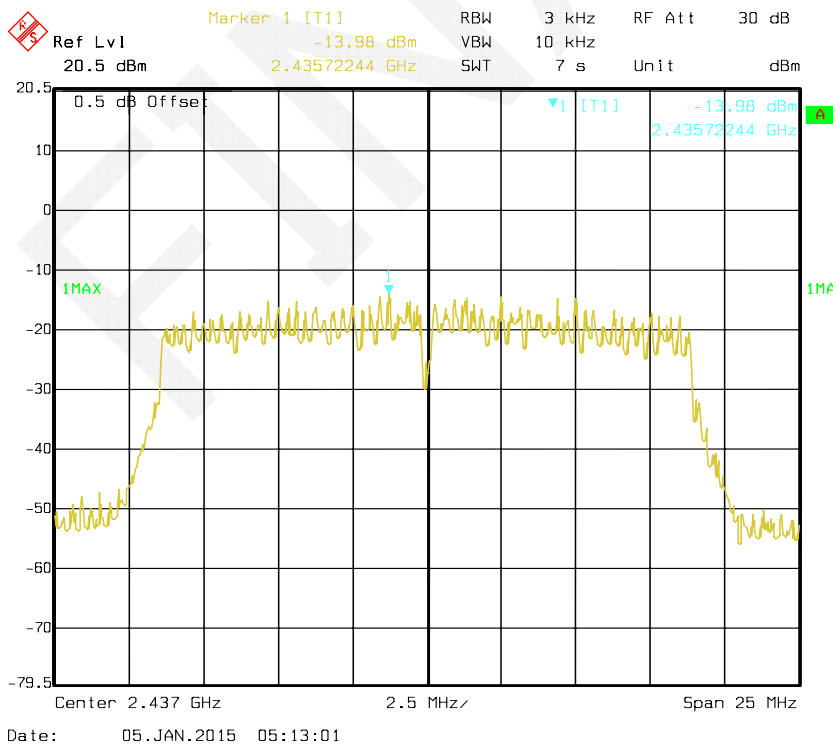
Power Spectral Density, 802.11g High Channel



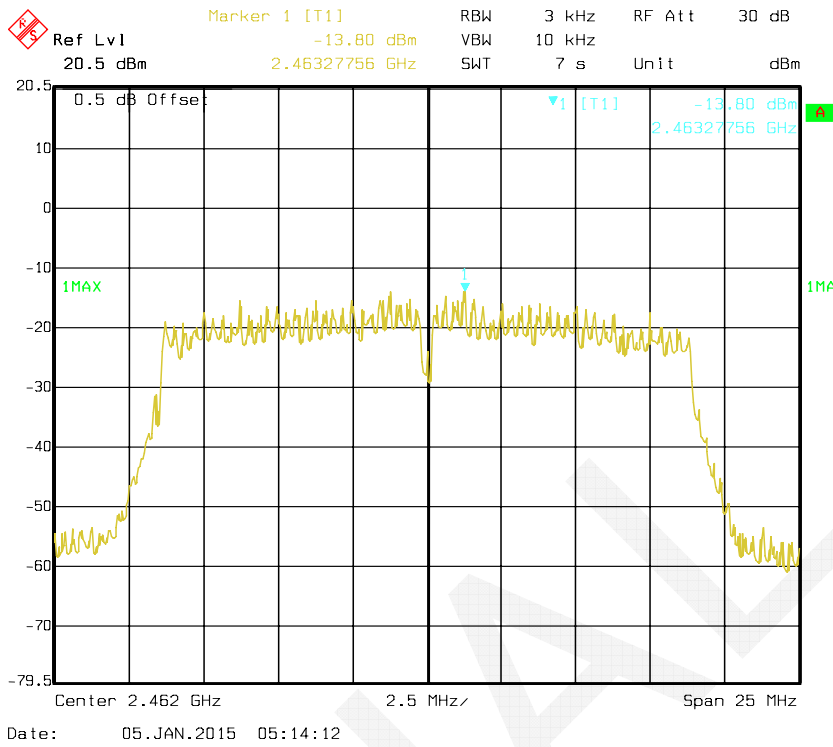
Power Spectral Density, 802.11n ht20 Low Channel



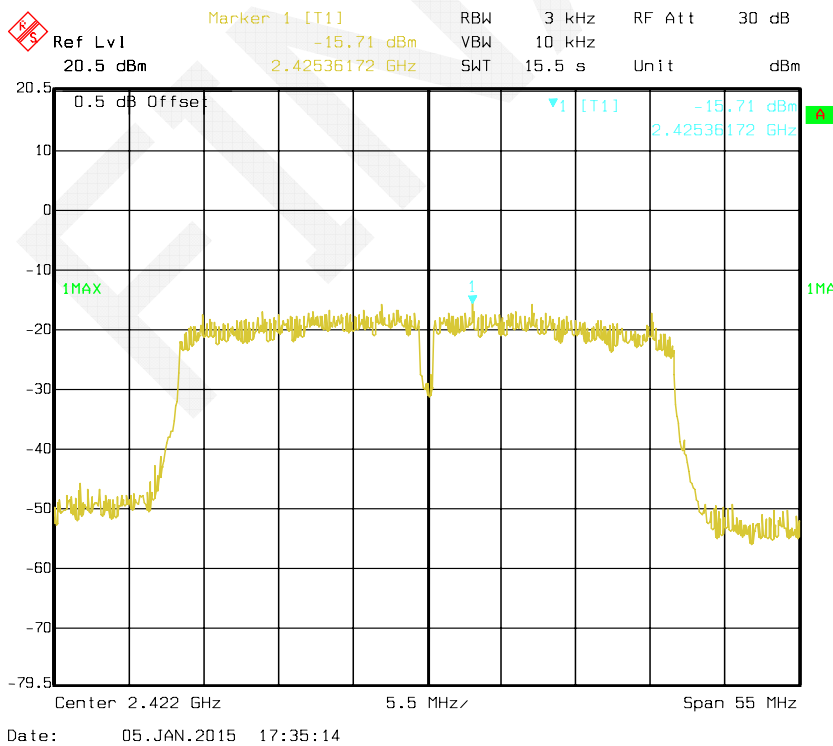
Power Spectral Density, 802.11n ht20 Middle Channel



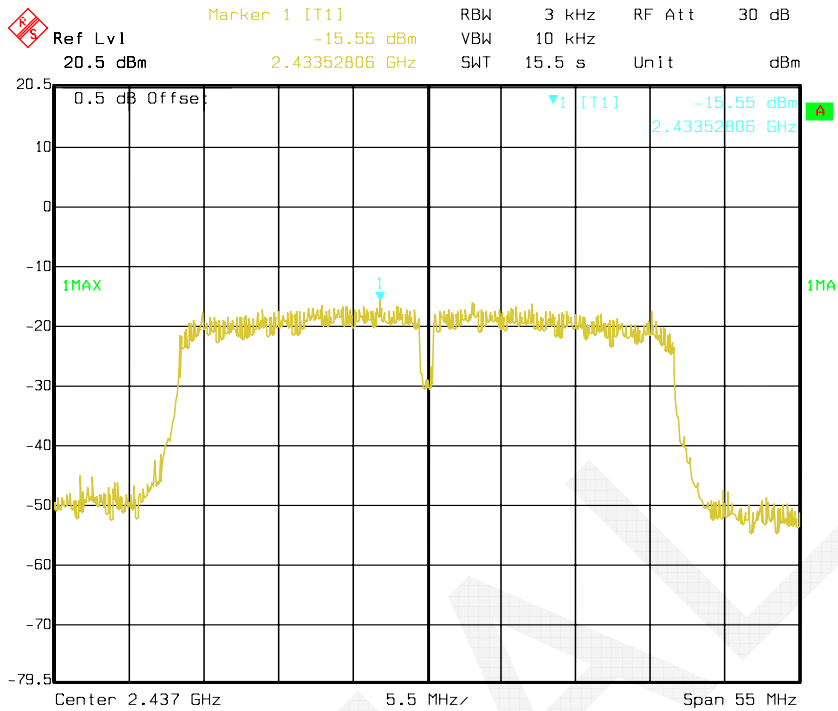
Power Spectral Density, 802.11n ht20 High Channel



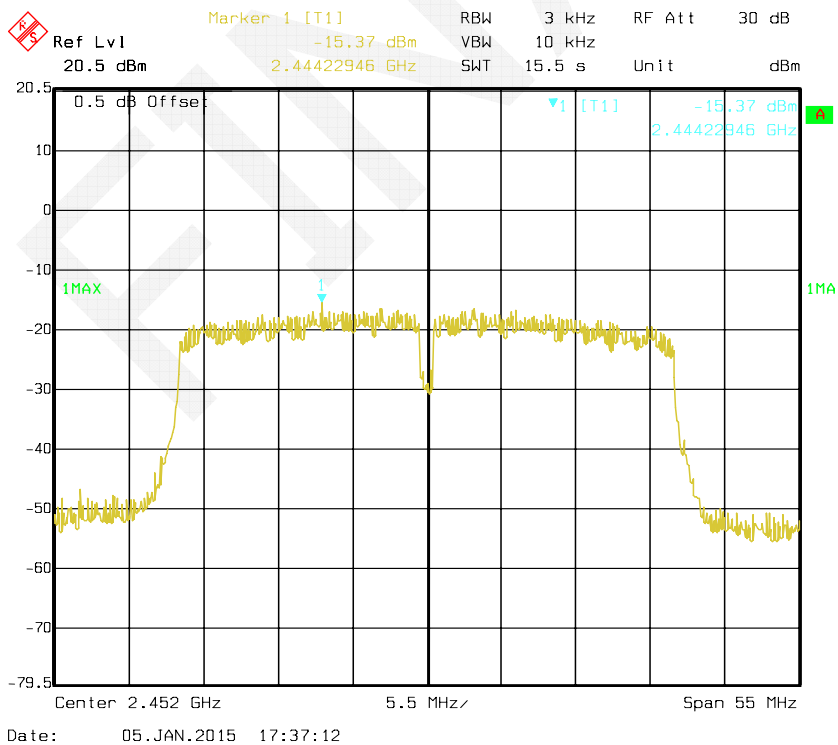
Power Spectral Density, 802.11n ht40 Low Channel



Power Spectral Density, 802.11n ht40 Middle Channel



Power Spectral Density, 802.11n ht40 High Channel



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