FCC PART 15, SUBPART C

TEST AND MEASUREMENT REPORT

For

Looxcie, Inc.

1196 Borregas Avenue, Suite 200,

Sunnyvale, CA 94089, USA

FCC ID: YJ8-LXQ1

Report Type:	Product Type:
Original Report	SD Camera with Wi-Fi

Prepared By:	Bo Li
Report Number:	R1308012-247
Report Date:	2013-09-26
Reviewed By:	Victor Zhang EMC/RF Lead

Bay Area Compliance Laboratories Corp.
1274 Anvilwood Avenue,
Sunnyvale, CA 94089, USA
Tel: (408) 732-9162
Fax: (408) 732-9164

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This report **must not** be used by the customer to claim product certification, approval, or endorsement by A2LA*, NIST, or any agency of the Federal Government.
* This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "*"

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1308012-247	Original Report	2013-09-26

1 General Description

1.1 Product Description for Equipment Under Test (EUT)

This test and measurement report was prepared on behalf of *Looxcie, Inc*., and their product model: *LXQ1*; *FCC ID: YJ8-LXQ1* or the "EUT" as referred to in this report. The EUT is an SD Camera with 802.11b/g Wi-Fi capability.

1.2 Mechanical Description of EUT

The EUT measures approximately 8.5 cm (L) x 1.7 cm (W) x 2.5 cm (H) and weighs 21.5 g.

The test data gathered are from a typical production sample, Serial Number: N5228M assigned by BACL.

1.3 Objective

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

The objective is to determine compliance with FCC Part 15.247 rules for Output Power, Antenna Requirements, 6 dB Bandwidth, and power spectral density, 100 kHz Bandwidth of Band Edges Measurement, Spurious Emissions, Conducted and Radiated Spurious Emissions.

1.4 Related Submittal(s)/Grant(s)

N/A

1.5 Test Methodology

All measurements contained in this report were conducted in accordance with ANSI C63.4-2009, 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 and FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247

1.6 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in the 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 CISPR16-4-2:2003, The Treatment of Uncertainty in EMC Measurements, the values ranging from $\pm$2.0 dB for Conducted Emissions tests and $\pm$4.0 dB for Radiated Emissions tests are the most accurate estimates pertaining to uncertainty of EMC measurements at BACL Corp.

1.7 Test Facility

Bay Area Compliance Laboratories Corp. (BACL) is:

1- An independent Commercial Test Laboratory accredited to **ISO 17025: 2005** by **A2LA**, in the fields of: Electromagnetic Compatibility & Telecommunications covering Emissions, Immunity, Radio, RF Exposure, Safety and Telecom. This includes NEBS (Network Equipment Building System), Wireless RF, Telecommunications Terminal Equipment (TTE); Network Equipment; Information Technology Equipment (ITE); Medical Electrical Equipment; Industrial, Commercial, and Medical Test Equipment; Professional Audio and Video Equipment; Electronic (Digital) Products; Industrial and Scientific Instruments; Cabled Distribution Systems and Energy Efficiency Lighting.

2- An ENERGY STAR Recognized Laboratory, for the LM80 Testing, a wide variety of Luminaires and Computers.

3- A NIST Designated Phase-I and Phase-II CAB including: ACMA (Australian Communication and Media Authority), BSMI (Bureau of Standards, Metrology and Inspection of Taiwan), IDA (Infocomm Development Authority of Singapore), IC (Industry Canada), Korea (Ministry of Communications Radio Research Laboratory), NCC (Formerly DGT; Directorate General of Telecommunication of Chinese Taipei) OFTA (Office of the Telecommunications Authority of Hong Kong), Vietnam, VCCI - Voluntary Control Council for Interference of Japan and a designated EU CAB (Conformity Assessment Body) (Notified Body) for the EMC and R&TTE Directives.

4 - A Product Certification Body accredited to **ISO Guide 65: 1996** by **A2LA** to certify:
1- Unlicensed, Licensed radio frequency devices and Telephone Terminal Equipment for the FCC. Scope A1, A2, A3, A4, B1, B2, B3, B4 & C.
2. Radio Standards Specifications (RSS) in the Category I Equipment Standards List and All Broadcasting Technical Standards (BETS) in Category I Equipment Standards List for Industry Canada.
3. Radio Communication Equipment for Singapore.
4. Radio Equipment Specifications, GMDSS Marine Radio Equipment Specifications, and Fixed Network Equipment Specifications for Hong Kong.
5. Japan MIC Telecommunication Business Law (A1, A2) and Radio Law (B1, B2 and B3).
6. Audio/Video, Battery Charging Systems, Computers, Displays, Enterprise Servers, Imaging Equipment, Set-Top Boxes, Telephony, Televisions, Ceiling Fans, CFLs (including GU24s), Decorative Light Strings, Integral LED Lamps, Luminaires, Residential Ventilating Fans.

The test site used by BACL Corp. to collect radiated and conducted emissions measurement data is located at its facility in Sunnyvale, California, USA.

The test site at BACL Corp. has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). 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 11 and December 10, 1997, and Article 8 of the VCCI regulations on December 25, 1997. The test site also complies with the test methods and procedures set forth in CISPR 22:2008 §10.4 for measurements below 1 GHz and §10.6 for measurements above 1 GHz, as well as ANSI C63.4-2009, ANSI C63.4-2009, TIA/EIA-603 & CISPR 24:2010.

The Federal Communications Commission and Voluntary Control Council for Interference have the reports on file and they are listed under FCC registration number: 90464 and VCCI Registration No.: A-0027. The test site has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, BACL Corp. is an American Association for Laboratory Accreditation (A2LA) accredited laboratory (Lab Code 3297-02). The current scope of accreditations can be found at

http://www.a2la.org/scopepdf/3297-02.pdf?CFID=1132286&CFTOKEN=e42a3240dac3f6ba-6DE17DCB-1851-9E57-477422F667031258&jsessionid=8430d44f1f47cf2996124343c704b367816b

2 System Test Configuration

2.1 Justification

The EUT was configured for testing according to ANSI C63.4-2009 and FCC KDB 558074 D01 DTS Meas Guidance v03r01.

The EUT was tested in a testing mode to represent worst-case results during the final qualification test.

2.2 EUT Exercise Software

The test utility used was *yugicon* and was provided by Looxcie, Inc., and was verified Bo Li to comply with the standard requirements being tested against.

2.3 Special Equipment

There were no special accessories were required, included, or intended for use with EUT during these tests.

2.4 Equipment Modifications

No modifications were made to the EUT.

2.5 Local Support Equipment

Manufacturer	Description	Model	Serial Number
Lenovo	Laptop	G550	CBU2109946

2.6 EUT Internal Configuration Details

Manufacturer	Description	Model	Serial Number
Looxcie	PCB board	31-2026-00 Rev 2	-
SYNergy	Battery	AHB541262PS-01	-

2.7 Interface Ports and Cables

Cable Description	Length (m)	To	From
RF Cable	<1.0	PSA	EUT

2.8 Power Supply List and Details

Manufacturer	Description	Model	Part Number
HuntKey	Power Adapter	HKA00605010-2B	1208C006960

3 Summary of Test Results

Results reported relate only to the product tested.

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

4 FCC §15.247 (i) & §2.1093– RF Exposure

4.1 Applicable Standard

FCC §2.1093, §15.247(i)

4.2 SAR Exemption Guidelines

According to FCC KDB 447498 D01, Appendix A:

SAR Test Exclusion Thresholds for 100 MHz-6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distance are illustrated in the following Table:

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

According to IC RSS-102 §2.5.1: Exemption from Routine Evaluation Limits-SAR evaluation

SAR evaluation is required if the separation distance between the user and the radiated element of the device is less than or equal to 20 cm, except when the device operates as follows.

- Above 2.2 GHz and up to 3GHz inclusively, and with output power (i.e. the higher of the conducted or radiated(e.i.r.p.) source-based, time-average output power) that is less than or equal to 20 mW for general public use and 100 mW for controlled used;

4.3 Evaluation Result

The maximum conducted output power of this device is 2.62 dBm, the antenna gain is 3 dBi, the maximum e.i.r.p. is 2.62 + 3 = 5.62 dBm, i.e. 3.65 mW which is less than the SAR threshold of 19 mw (FCC KDB 447498 D01 Appendix A). Standalone SAR evaluation is not required.

5 FCC §15.203 – Antenna Requirements

5.1 Applicable Standard

According to FCC §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 use of a standard antenna jack or electrical connector is prohibited.

And according to FCC §15.247 (b) (4), if transmitting antennas of directional gain greater than 6 dBi are used the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.2 Antenna List

Manufacturers	Antenna Type/Pattern	Antenna Gain (dBi) @ 2.4 GHz
Looxcie	Chip/Omni	3.0

The antenna consists of non-standard (UFL) connectors with less 6 dBi gain; therefore, it complies with the antenna requirement.

6 FCC §15.207 – AC Line Conducted Emissions

6.1 Applicable Standards

As per FCC §15.207 Conducted limits:

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

**Decreases with the logarithm of the frequency.*

6.2 Test Setup

The measurement was performed at shield room, using the setup per ANSI C63.4-2009 measurement procedure. The specification used was FCC §15.207 limits.

External I/O cables were draped along the edge of the test table and bundle when necessary.

The AC/DC power adapter of the EUT was connected with LISN-1 which provided 120 V / 60 Hz AC power.

6.3 Test Procedure

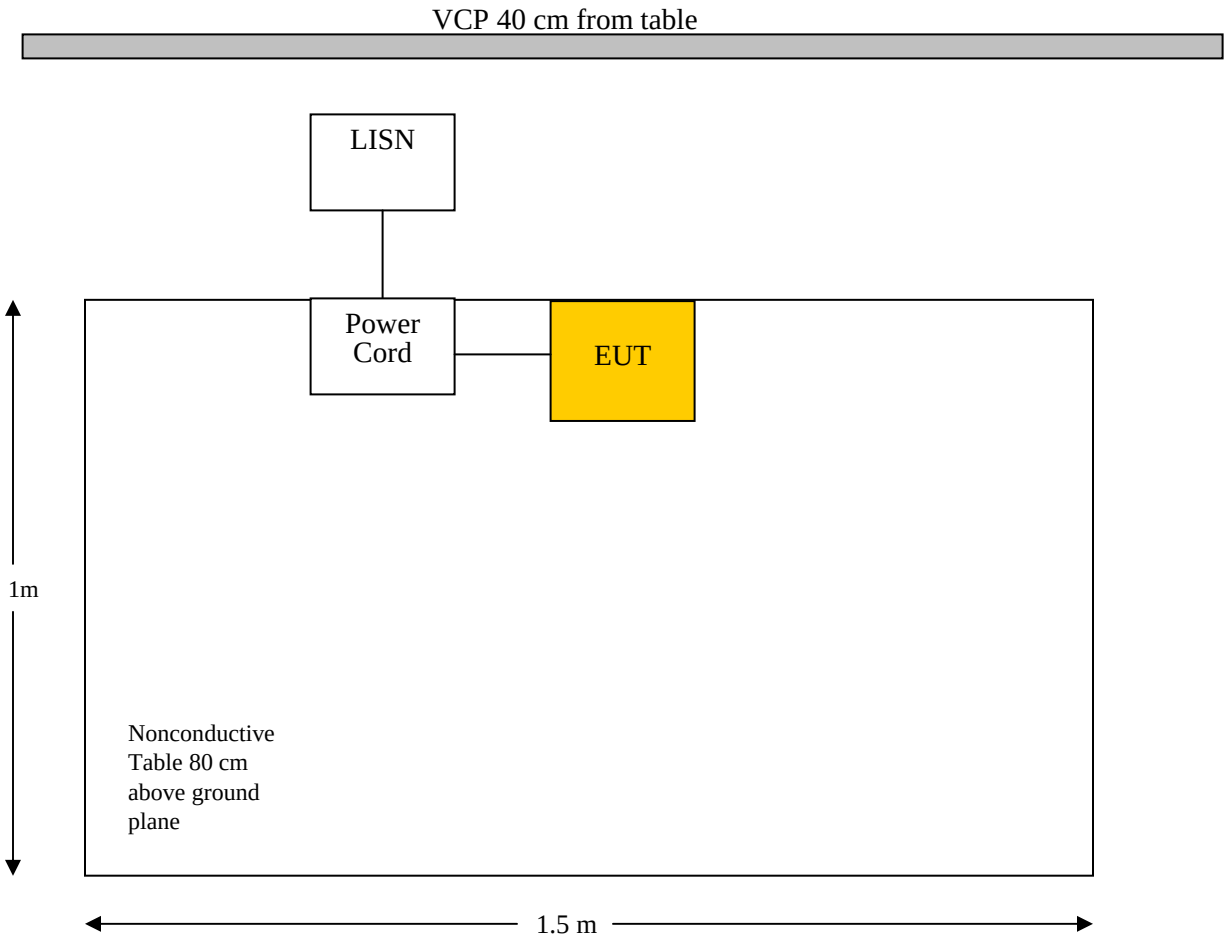
During the conducted emissions test, the power cord of the EUT host system was connected to the mains outlet of the LISN-1.

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

All data was recorded in the peak detection mode, quasi-peak and average. Quasi-Peak readings are distinguished with a “QP.” Average readings are distinguished with an “Ave”.

6.4 Test Setup Block Diagram

AC/DC Adaptor:



6.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude (CA) is calculated by adding the Cable Loss (CL), the Attenuator Factor (Atten) to indicated Amplitude (Ai) reading. The basic equation is as follows:

CA = Ai + CL + Atten

For example, a corrected amplitude of 46.2 dBuV = Indicated Reading (32.5 dBuV) + Cable Loss (3.7 dB) + Attenuator (10 dB)

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

Margin = Corrected Amplitude - Limit

6.6 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Rohde & Schwarz	EMI Test Receiver	ESCI 1166.5950K03	100337	2013-03-28	1 year
Solar Electronics	LISN	9252-50-R-24-N	511205	2013-06-25	1 year
TTE	Filter, High Pass	H962-150k-50-21378	K7133	2013-05-30	1 year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

6.7 Test Environmental Conditions

Temperature:	25 ºC
Relative Humidity:	43%
ATM Pressure:	101.8 kPa

The testing was performed by Bo Li on 2013-09-09 in 5 m chamber 3.

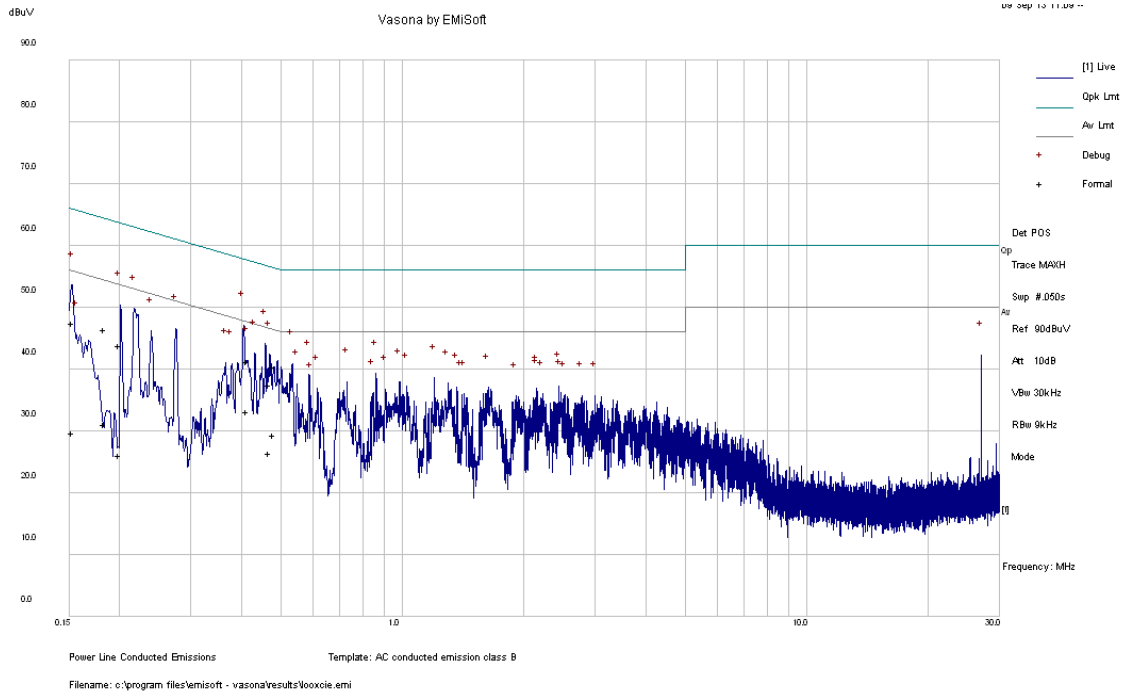
6.8 Summary of Test Results

According to the recorded data in following table, the EUT complied with the FCC standard's conducted emissions limits, with the margin reading of:

Connection: AC/DC adapter connected to 120 V/60 Hz, AC (TX on Worst mode)			
Margin (dB)	**Frequency (MHz)**	**Conductor Mode (Line/Neutral)**	**Range (MHz)**
-14.39	0.413745	Line	0.15-30

6.9 Conducted Emissions Test Plots and Data

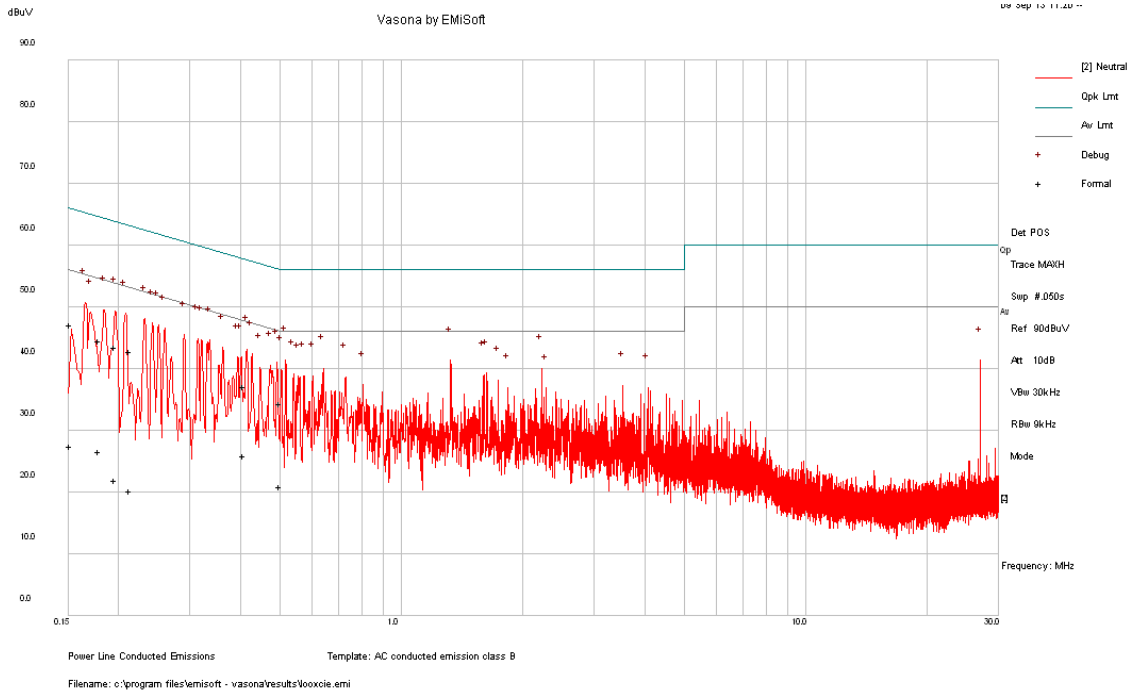
120 V, 60 Hz – Line, AC/DC Adaptor



Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Line/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.48084	40.43	Line	56.32	-15.90	QP
0.413745	41.23	Line	57.57	-16.34	QP
0.18357	46.41	Line	64.32	-17.92	QP
0.153195	47.47	Line	65.82	-18.36	QP
0.46914	37.44	Line	56.53	-19.09	QP
0.200292	43.95	Line	63.6	-19.65	QP

Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Line/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.413745	33.19	Line	47.57	-14.39	Ave.
0.48084	29.35	Line	46.32	-16.97	Ave.
0.46914	26.55	Line	46.53	-19.98	Ave.
0.18357	31.10	Line	54.32	-23.22	Ave.
0.153195	29.75	Line	55.82	-26.07	Ave.
0.200292	26.15	Line	53.6	-27.45	Ave.

120 V, 60 Hz – Neutral, AC/DC Adaptor



Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Line/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.15213	47.23	Neutral	65.88	-18.66	QP
0.179157	44.58	Neutral	64.52	-19.94	QP
0.214158	42.89	Neutral	63.04	-20.16	QP
0.196524	43.60	Neutral	63.76	-20.16	QP
0.408744	37.09	Neutral	57.67	-20.58	QP
0.501942	34.45	Neutral	56	-21.55	QP

Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Line/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.408744	25.93	Neutral	47.67	-21.74	Ave.
0.501942	21	Neutral	46	-25.00	Ave.
0.179157	26.71	Neutral	54.52	-27.81	Ave.
0.15213	27.43	Neutral	55.88	-28.46	Ave.
0.196524	21.93	Neutral	53.76	-31.83	Ave.
0.214158	20.24	Neutral	53.04	-32.81	Ave.

7 FCC §2.1051 & §15.247(d) – Spurious Emissions at Antenna Terminals

7.1 Applicable Standard

For FCC §15.247(d) 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.

7.2 Measurement Procedure

The measurements are based on FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 11: Emissions in non-restricted frequency bands and section 12: Emissions in restricted frequency bands.

7.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Spectrum Analyzer	E4446A	US44300386	2012-09-29	1 year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

7.4 Test Environmental Conditions

Temperature:	26 °C
Relative Humidity:	42 %
ATM Pressure:	101.7 kPa

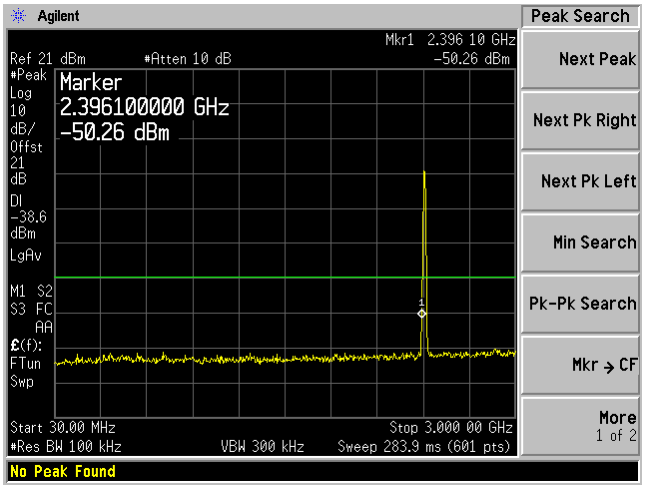
The testing was performed by Bo Li on 2013-09-05 in RF site.

7.5 Test Results

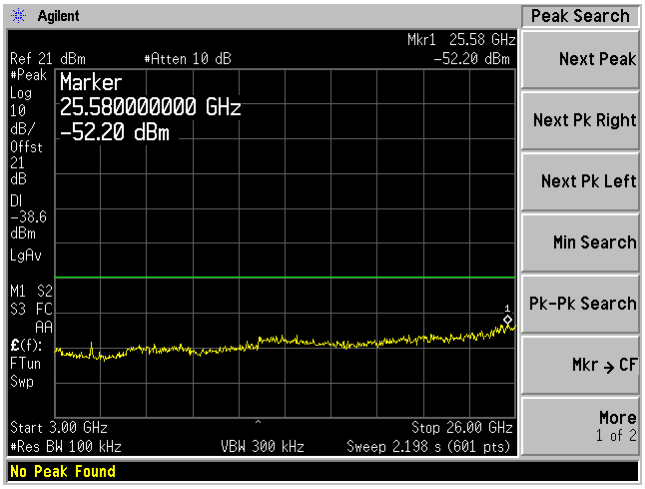
Please refer to the following plots of spurious emissions.

802.11b, Low Channel, 2412 MHz

Plot: 30 MHz – 3 GHz

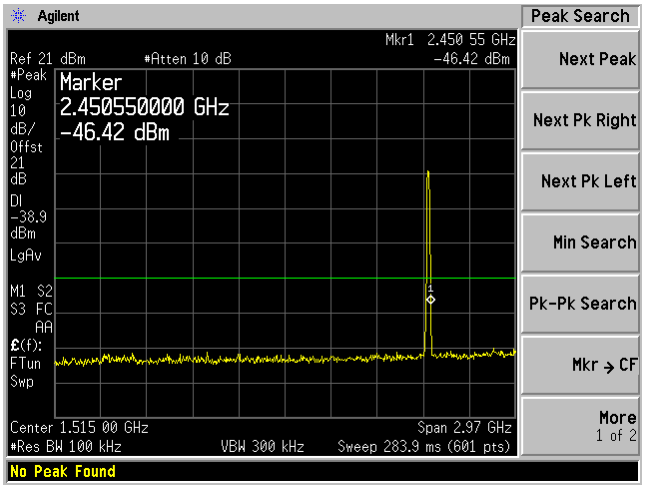


Plot: 3 GHz – 26 GHz

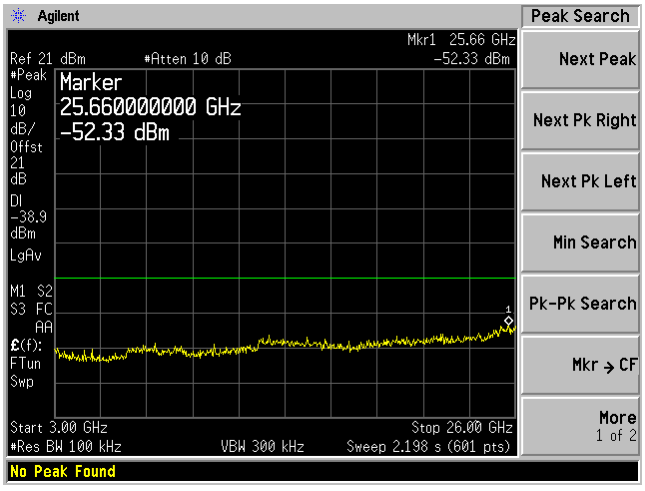


802.11b, Middle Channel, 2437 MHz

Plot: 30 MHz – 3 GHz

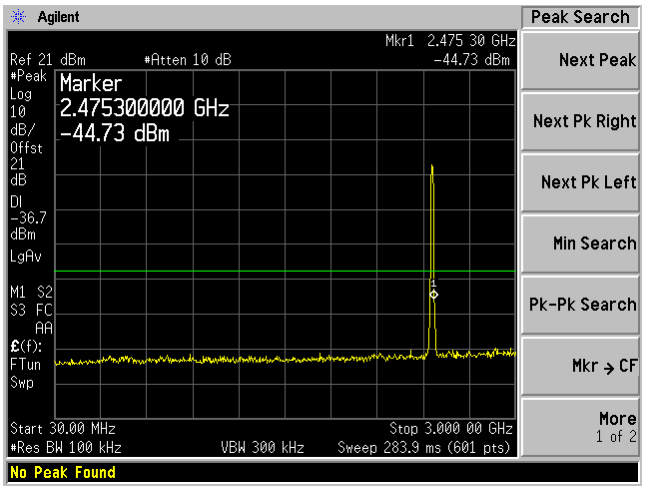


Plot: 3 GHz – 26 GHz

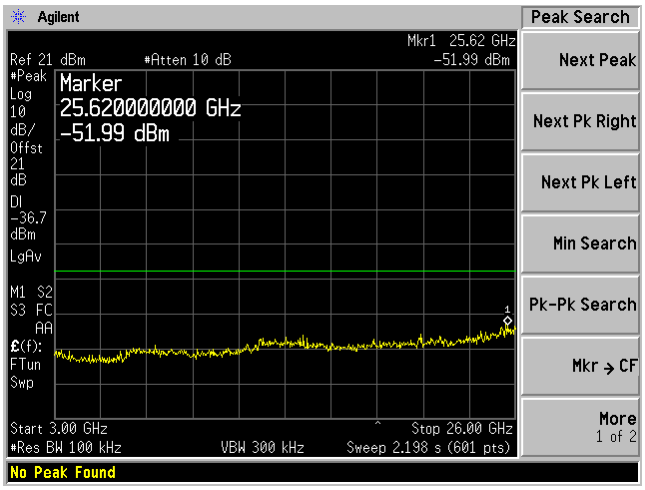


802.11b, High Channel, 2462 MHz

Plot: 30 MHz – 3 GHz

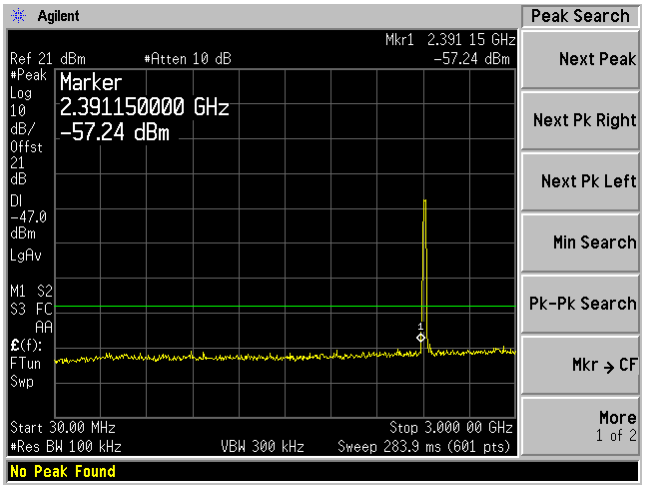


Plot: 3 GHz – 26 GHz

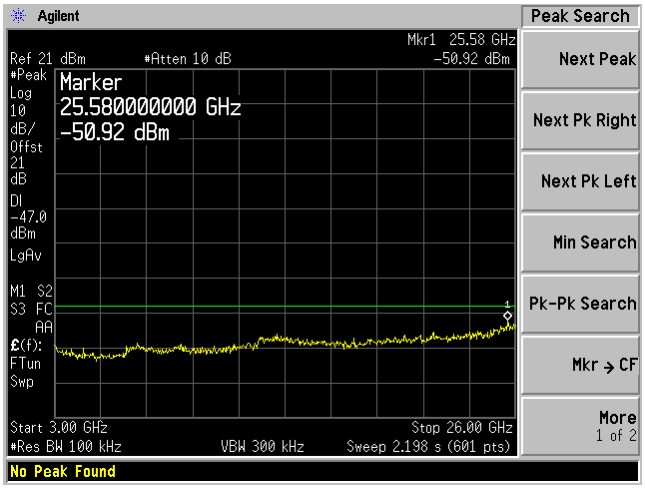


802.11g, Low Channel 2412 MHz

Plot: 30 MHz – 3 GHz

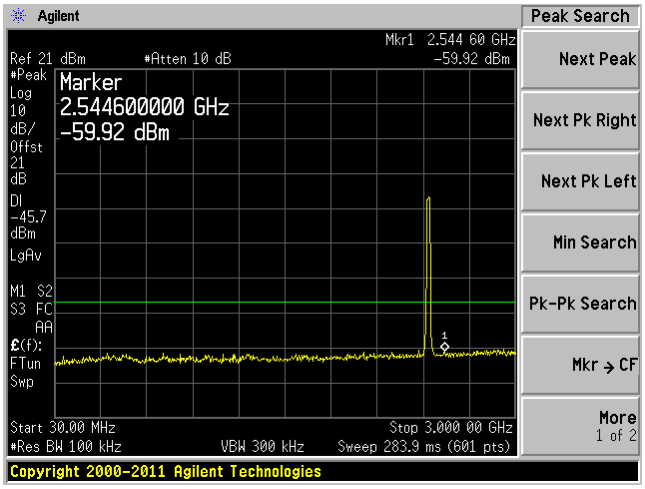


Plot: 3 GHz – 26 GHz

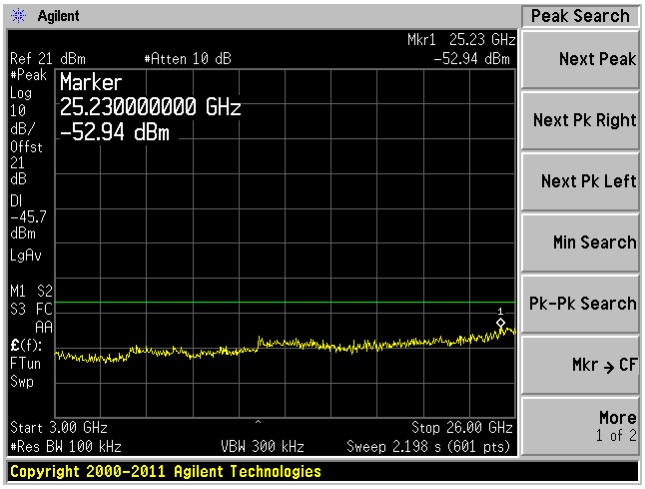


802.11g, Middle Channel 2437 MHz

Plot: 30 MHz – 3 GHz

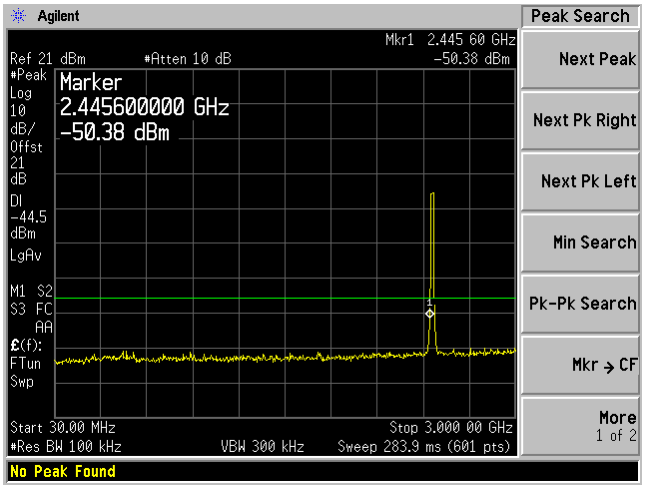


Plot: 3 GHz – 26 GHz

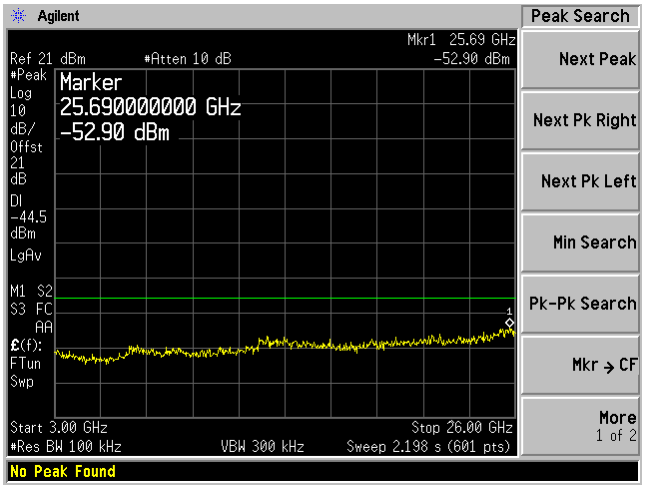


802.11g, High Channel 2462 MHz

Plot: 30 MHz – 3 GHz



Plot: 3 GHz – 26 GHz



8 FCC §15.205, §15.209 & §15.247(d) – Spurious Radiated Emissions

8.1 Applicable Standard

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz.

As per FCC §15.209(a) and RSS-210: Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

As Per FCC §15.205(a), except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	960 – 1240	4. 5 – 5. 15
0.495 – 0.505	16.69475 – 16.69525	1300 – 1427	5. 35 – 5. 46
2.1735 – 2.1905	25.5 – 25.67	1435 – 1626.5	7.25 – 7.75
4.125 – 4.128	37.5 – 38.25	1645.5 – 1646.5	8.025 – 8.5
4.17725 – 4.17775	73 – 74.6	1660 – 1710	9.0 – 9.2
4.20725 – 4.20775	74.8 – 75.2	1718.8 – 1722.2	9.3 – 9.5
6.215 – 6.218	108 – 121.94	2200 – 2300	10.6 – 12.7
6.26775 – 6.26825	123 – 138	2310 – 2390	13.25 – 13.4
6.31175 – 6.31225	149.9 – 150.05	2483.5 – 2500	14.47 – 14.5
8.291 – 8.294	156.52475 – 156.52525	2690 – 2900	15.35 – 16.2
8.362 – 8.366	156.7 – 156.9	3260 – 3267	17.7 – 21.4
8.37625 – 8.38675	162.0125 –167.17	3.332 – 3.339	22.01 – 23.12
8.41425 – 8.41475	167.72 – 173.2	3 3458 – 3 358	23.6 – 24.0
12.29 – 12.293	240 – 285	3.600 – 4.400	31.2 – 31.8
12.51975 – 12.52025	322 – 335.4		36.43 – 36.5
12.57675 – 12.57725	399.9 – 410		Above 38.6
13.36 – 13.41	608 – 614		

As per FCC §15.247 (d) 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).

8.2 Test Setup

The radiated emissions tests were performed in the 5-meter Chamber, using the setup in accordance with ANSI C63.4-2009. The specification used was the FCC 15 Subpart C limits.

The spacing between the peripherals was 3 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

8.3 Test Procedure

The measurements are based on FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 11: Emissions in non-restricted frequency bands and section 12: Emissions in restricted frequency bands. As well as ANSI C63.4: 2009 as described below:

For the radiated emissions test, the EUT host, and all support equipment power cords was connected to the AC floor outlet.

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

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 0.8 meter above ground plane, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

The spectrum analyzer or receiver is set as:

Below 1000 MHz:

RBW = 100 kHz / VBW = 300 kHz / Sweep = Auto

Above 1000 MHz:

(1) Peak: RBW = 1MHz / VBW = 1MHz / Sweep = Auto
(2) Average: RBW = 1MHz / VBW = 10Hz / Sweep = Auto

8.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude (CA) is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) to indicated Amplitude (Ai) reading. The basic equation is as follows:

CA = Ai + AF + CL + Atten – Ga

For example, a corrected amplitude of 40.3 dBuV/m = Indicated Reading (32.5 dBuV) + Antenna Factor (+23.5dB) + Cable Loss (3.7 dB) + Attenuator (10 dB) - Amplifier Gain (29.4 dB)

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

Margin = Corrected Amplitude - Limit

8.5 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Sunol Science Corp	System Controller	SC99V	122303-1	N/R	N/R
Sunol Science Corp	Combination Antenna	JB3	A020106-3	2013-07-11	1 year
Hewlett Packard	Pre-amplifier	8447D	2944A06639	2013-06-09	1 year
Mini-Circuits	Pre-amplifier	ZVA-183-S	570400946	2013-05-09	1 year
Agilent	Spectrum Analyzer	E4446A	US44300386	2012-09-29	1 year
EMCO	Horn Antenna	3315	9511-4627	2012-10-17	1 year
Rohde & Schwarz	EMI Test Receiver	ESCI 1166.5950K03	100337	2013-03-28	1 year

Statement of Traceability: BACL *attests that all calibrations have been performed per the A2LA requirements, traceable to NIST.*

8.6 Test Environmental Conditions

Temperature:	25 ºC
Relative Humidity:	43 %
ATM Pressure:	101.8 kPa

The testing was performed by Bo Li on 2013-09-09 in 5 m chamber 3.

8.7 Summary of Test Results

According to the data hereinafter, the EUT complied with the FCC Title 47, Part 15C standard's radiated emissions limits, and had the worst margin of:

30-1000 MHz:

Mode: Transmitting			
Margin (dB)	**Frequency (MHz)**	**Polarization (Horizontal/Vertical)**	**Mode, Channel**
-9.69	31.455	Horizontal	802.11 g mode

1 – 25 GHz:

Mode: Transmitting			
Margin (dB)	**Frequency (MHz)**	**Polarization (Horizontal/Vertical)**	**Mode, Channel**
-0.113	4924	Vertical	802.11 b mode High Channel

Please refer to the following table and plots for specific test result details.

8.8 Radiated Emissions Test Data and Plots

1) 30 MHz–1 GHz, Measured at 3 meters, Quasi-Peak Measurements

802.11b mode

All 3 0MHz– 1 GHz spurious are digital, other emissions are on the noise floor level. The worst case result was reported.

Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)
713.466	18.79	348	V	236	46	-27.21
38.0135	12.06	344	H	79	40	-27.94
983.39075	22.52	155	H	175	54	-31.48
135.29925	12.87	367	H	319	43.5	-30.63

802.11g mode

All 30 MHz–1 GHz spurious are digital, other emissions are on the noise floor level. The worst case result was reported.

Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)
31.455	30.31	200	H	0	40	-9.69
62.01	26.18	200	V	0	40	-13.82
38.245	24.45	400	V	0	40	-15.55
992.24	36.04	200	H	0	54	-17.96
130.395	24.66	200	H	0	43.5	-18.84

2) 1–25 GHz, Measured at 3 meters

802.11b mode

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 2412 MHz, measured at 3 meters											
2412	50.27	352	100	V	28.956	3.12	0	82.346	-	-	Peak
2412	51.06	45	118	H	28.956	3.12	0	83.136	-	-	Peak
2412	45.68	352	100	V	28.956	3.12	0	77.756	-	-	Ave
2412	46.88	45	118	H	28.956	3.12	0	78.956	-	-	Ave
2390	27.71	0	100	V	28.956	3.12	0	59.786	74	-14.214	Peak
2390	27.45	0	100	H	28.956	3.12	0	59.526	74	-14.474	Peak
2390	12.58	0	100	V	28.956	3.12	0	44.656	54	-9.344	Ave
2390	12.57	0	100	H	28.956	3.12	0	44.646	54	-9.354	Ave
4824	45.76	31	100	V	33.097	4.56	27.7	55.717	74	-18.283	Peak
4824	44.64	48	100	H	33.097	4.56	27.7	54.597	74	-19.403	Peak
4824	40.07	31	100	V	33.097	4.56	27.7	50.027	54	-3.973	Ave
4824	39.16	48	100	H	33.097	4.56	27.7	49.117	54	-4.883	Ave
7236	32.62	0	100	V	35.928	5.49	27.58	46.458	74	-27.542	Peak
7236	33.7	0	100	H	35.928	5.49	27.58	47.538	74	-26.462	Peak
7236	18.31	0	100	V	35.928	5.49	27.58	32.148	54	-21.852	Ave
7236	18.25	0	100	H	35.928	5.49	27.58	32.088	54	-21.912	Ave
9648	32.6	100	105	V	37.954	6.54	27.06	50.034	74	-23.966	Peak
9648	31.64	335	151	H	37.954	6.54	27.06	49.074	74	-24.926	Peak
9648	22.4	100	105	V	37.954	6.54	27.06	39.834	54	-14.166	Ave
9648	21.12	335	151	H	37.954	6.54	27.06	38.554	54	-15.446	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Middle Channel 2437 MHz, measured at 3 meters											
2437	51.86	360	100	V	28.956	3.12	0	83.936	-	-	Peak
2437	58.26	317	121	H	28.956	3.12	0	90.336	-	-	Peak
2437	47.55	360	100	V	28.956	3.12	0	79.626	-	-	Ave
2437	54.11	317	121	H	28.956	3.12	0	86.186	-	-	Ave
4874	46.25	23	100	V	33.327	4.54	27.76	56.357	74	-17.643	Peak
4874	46.61	317	120	H	33.327	4.54	27.76	56.717	74	-17.283	Peak
4874	41.46	23	100	V	33.327	4.54	27.76	51.567	54	-2.433	Ave
4874	41.57	317	120	H	33.327	4.54	27.76	51.677	54	-2.323	Ave
7311	32.5	0	100	V	36.369	5.57	27.51	46.929	74	-27.071	Peak
7311	33.2	0	100	H	36.369	5.57	27.51	47.629	74	-26.371	Peak
7311	17.52	0	100	V	36.369	5.57	27.51	31.949	54	-22.051	Ave
7311	17.29	0	100	H	36.369	5.57	27.51	31.719	54	-22.281	Ave
9748	33.15	80	140	V	38.087	6.62	26.98	50.877	74	-23.123	Peak
9748	32.45	332	150	H	38.087	6.62	26.98	50.177	74	-23.823	Peak
9748	25.54	80	140	V	38.087	6.62	26.98	43.267	54	-10.733	Ave
9748	23.64	332	150	H	38.087	6.62	26.98	41.367	54	-12.633	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 2462 MHz, measured at 3 meters											
2462	52.07	183	122	V	29.155	3.25	0	84.475	-	-	Peak
2462	55.08	102	123	H	29.155	3.25	0	87.485	-	-	Peak
2462	47.66	183	122	V	29.155	3.25	0	80.065	-	-	Ave
2462	50.62	102	123	H	29.155	3.25	0	83.025	-	-	Ave
2483.5	27.88	0	100	V	29.155	3.25	0	60.285	74	-13.715	Peak
2483.5	27.93	0	100	H	29.155	3.25	0	60.335	74	-13.665	Peak
2483.5	12.87	0	100	V	29.155	3.25	0	45.275	54	-8.725	Ave
2483.5	12.83	0	100	H	29.155	3.25	0	45.235	54	-8.765	Ave
4924	48.18	317	107	V	33.327	4.52	27.75	58.277	74	-15.723	Peak
4924	47.62	318	100	H	33.327	4.52	27.75	57.717	74	-16.283	Peak
4924	43.79	317	107	V	33.327	4.52	27.75	53.887	54	-0.113	Ave
4924	43.02	318	100	H	33.327	4.52	27.75	53.117	54	-0.883	Ave
7386	32.67	0	100	V	36.565	5.62	27.51	47.345	74	-26.655	Peak
7386	31.88	0	100	H	36.565	5.62	27.51	46.555	74	-27.445	Peak
7386	17.54	0	100	V	36.565	5.62	27.51	32.215	54	-21.785	Ave
7386	17.26	0	100	H	36.565	5.62	27.51	31.935	54	-22.065	Ave
9848	34.29	69	117	V	38.287	6.55	26.98	52.147	74	-21.853	Peak
9848	33.74	327	100	H	38.287	6.55	26.98	51.597	74	-22.403	Peak
9848	27.85	69	117	V	38.287	6.55	26.98	45.707	54	-8.293	Ave
9848	23.88	327	100	H	38.287	6.55	26.98	41.737	54	-12.263	Ave

802.11g mode

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 2412 MHz, measured at 3 meters											
2412	50.78	2	100	V	28.956	3.12	0	82.856	-	-	Peak
2412	57.22	318	127	H	28.956	3.12	0	89.296	-	-	Peak
2412	38.73	2	100	V	28.956	3.12	0	70.806	-	-	Ave
2412	44.92	318	127	H	28.956	3.12	0	76.996	-	-	Ave
2390	27.53	0	100	V	28.956	3.12	0	59.606	74	-14.394	Peak
2390	27.22	0	100	H	28.956	3.12	0	59.296	74	-14.704	Peak
2390	12.54	0	100	V	28.956	3.12	0	44.616	54	-9.384	Ave
2390	12.52	0	100	H	28.956	3.12	0	44.596	54	-9.404	Ave
4824	35.99	337	100	V	33.097	4.56	27.7	45.947	74	-28.053	Peak
4824	35.59	49	110	H	33.097	4.56	27.7	45.547	74	-28.453	Peak
4824	22.02	337	100	V	33.097	4.56	27.7	31.977	54	-22.023	Ave
4824	21.47	49	110	H	33.097	4.56	27.7	31.427	54	-22.573	Ave
7236	32.86	0	100	V	35.928	5.49	27.58	46.698	74	-27.302	Peak
7236	32.63	0	100	H	35.928	5.49	27.58	46.468	74	-27.532	Peak
7236	17.85	0	100	V	35.928	5.49	27.58	31.688	54	-22.312	Ave
7236	17.68	0	100	H	35.928	5.49	27.58	31.518	54	-22.482	Ave
9648	32.94	92	100	V	37.954	6.54	27.06	50.374	74	-23.626	Peak
9648	33.73	58	108	H	37.954	6.54	27.06	51.164	74	-22.836	Peak
9648	22.41	92	100	V	37.954	6.54	27.06	39.844	54	-14.156	Ave
9648	25.62	58	108	H	37.954	6.54	27.06	43.054	54	-10.946	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Middle Channel 2437 MHz, measured at 3 meters											
2437	51.48	1	100	V	28.956	3.12	0	83.556	-	-	Peak
2437	56.93	314	125	H	28.956	3.12	0	89.006	-	-	Peak
2437	39.52	1	100	V	28.956	3.12	0	71.596	-	-	Ave
2437	45.43	314	125	H	28.956	3.12	0	77.506	-	-	Ave
4874	33.02	0	100	V	33.327	4.54	27.76	43.127	74	-30.873	Peak
4874	33.14	0	100	H	33.327	4.54	27.76	43.247	74	-30.753	Peak
4874	18.17	0	100	V	33.327	4.54	27.76	28.277	54	-25.723	Ave
4874	18.22	0	100	H	33.327	4.54	27.76	28.327	54	-25.673	Ave
7311	32.45	0	100	V	36.369	5.57	27.51	46.879	74	-27.121	Peak
7311	32.57	0	100	H	36.369	5.57	27.51	46.999	74	-27.001	Peak
7311	17.51	0	100	V	36.369	5.57	27.51	31.939	54	-22.061	Ave
7311	17.39	0	100	H	36.369	5.57	27.51	31.819	54	-22.181	Ave
9748	31.19	0	100	V	38.087	6.62	26.98	48.917	74	-25.083	Peak
9748	30.92	0	100	H	38.087	6.62	26.98	48.647	74	-25.353	Peak
9748	16.06	0	100	V	38.087	6.62	26.98	33.787	54	-20.213	Ave
9748	16.03	0	100	H	38.087	6.62	26.98	33.757	54	-20.243	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 2462 MHz, measured at 3 meters											
2462	52.7	3	100	V	29.155	3.25	0	85.105	-	-	Peak
2462	58.36	317	121	H	29.155	3.25	0	90.765	-	-	Peak
2462	40.89	3	100	V	29.155	3.25	0	73.295	-	-	Ave
2462	47.16	317	121	H	29.155	3.25	0	79.565	-	-	Ave
2483.5	27.23	0	100	V	29.155	3.25	0	59.635	74	-14.365	Peak
2483.5	27.32	0	100	H	29.155	3.25	0	59.725	74	-14.275	Peak
2483.5	12.84	0	100	V	29.155	3.25	0	45.245	54	-8.755	Ave
2483.5	12.83	0	100	H	29.155	3.25	0	45.235	54	-8.765	Ave
4924	36.92	302	100	V	33.327	4.52	27.75	47.017	74	-26.983	Peak
4924	36.46	50	100	H	33.327	4.52	27.75	46.557	74	-27.443	Peak
4924	22.98	302	100	V	33.327	4.52	27.75	33.077	54	-20.923	Ave
4924	22.25	50	100	H	33.327	4.52	27.75	32.347	54	-21.653	Ave
7386	32.18	0	100	V	36.565	5.62	27.51	46.855	74	-27.145	Peak
7386	32.3	0	100	H	36.565	5.62	27.51	46.975	74	-27.025	Peak
7386	17.51	0	100	V	36.565	5.62	27.51	32.185	54	-21.815	Ave
7386	17.36	0	100	H	36.565	5.62	27.51	32.035	54	-21.965	Ave
9848	34.47	75	164	V	38.287	6.55	26.98	52.327	74	-21.673	Peak
9848	33.4	333	100	H	38.287	6.55	26.98	51.257	74	-22.743	Peak
9848	28.31	75	164	V	38.287	6.55	26.98	46.167	54	-7.833	Ave
9848	25.5	333	100	H	38.287	6.55	26.98	43.357	54	-10.643	Ave

9 FCC§15.247(a) (2) – 6 dB & 99% Emission Bandwidth

9.1 Applicable Standard

According to FCC §15.247(a)(2), 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

9.2 Measurement Procedure

The measurements are based on FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 8: DTS bandwidth

9.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Spectrum Analyzer	E4446A	US44300386	2012-09-29	1 year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

9.4 Test Environmental Conditions

Temperature:	26 °C
Relative Humidity:	42 %
ATM Pressure:	101.7 kPa

The testing was performed by Bo Li on 2013-09-05 in RF site.

9.5 Test Results

802.11 b mode:

Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	99% Emission Bandwidth (MHz)	Limit (MHz)	Results
Low	2412	9.708	14.6439	> 0.5	Compliant
Middle	2437	9.724	14.7463	> 0.5	Compliant
High	2462	9.786	14.6580	> 0.5	Compliant

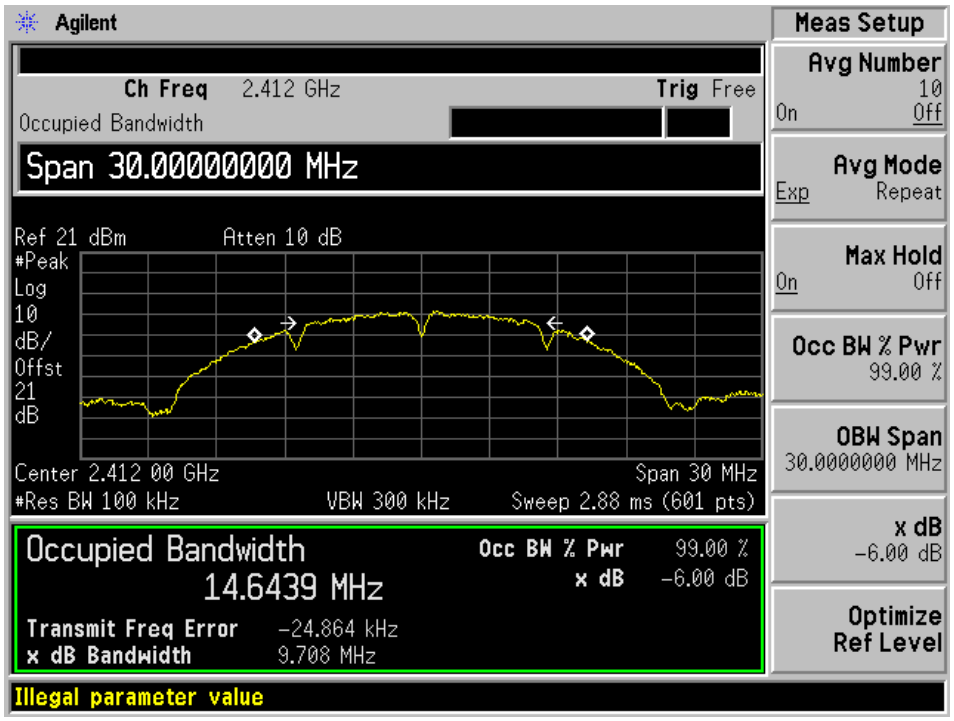
802.11 g mode:

Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	99% Emission Bandwidth (MHz)	Limit (MHz)	Results
Low	2412	16.574	16.4768	> 0.5	Compliant
Middle	2437	16.593	16.4746	> 0.5	Compliant
High	2462	16.546	16.4620	> 0.5	Compliant

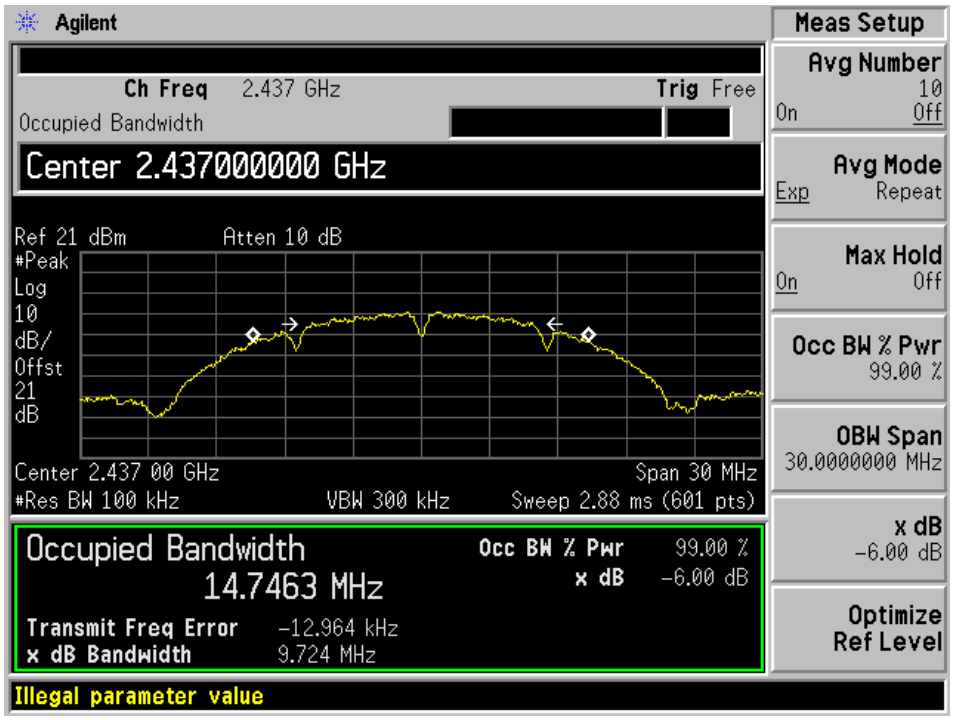
Please refer to the following plots for detailed test results

802.11 b mode

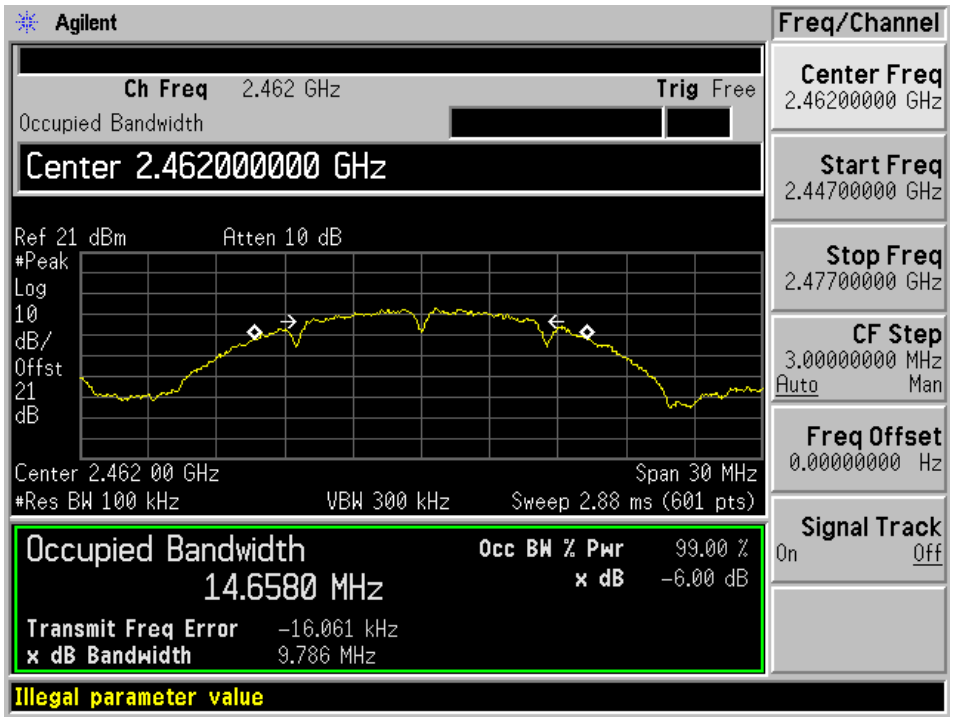
Low channel: 2412 MHz



Middle channel: 2437 MHz

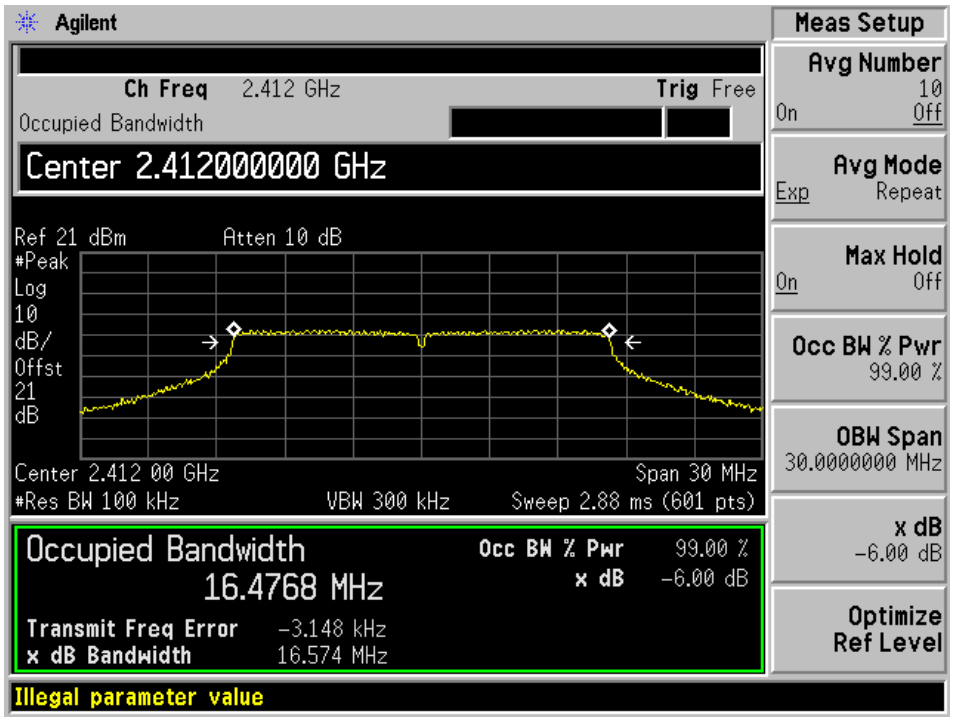


High channel: 2462 MHz

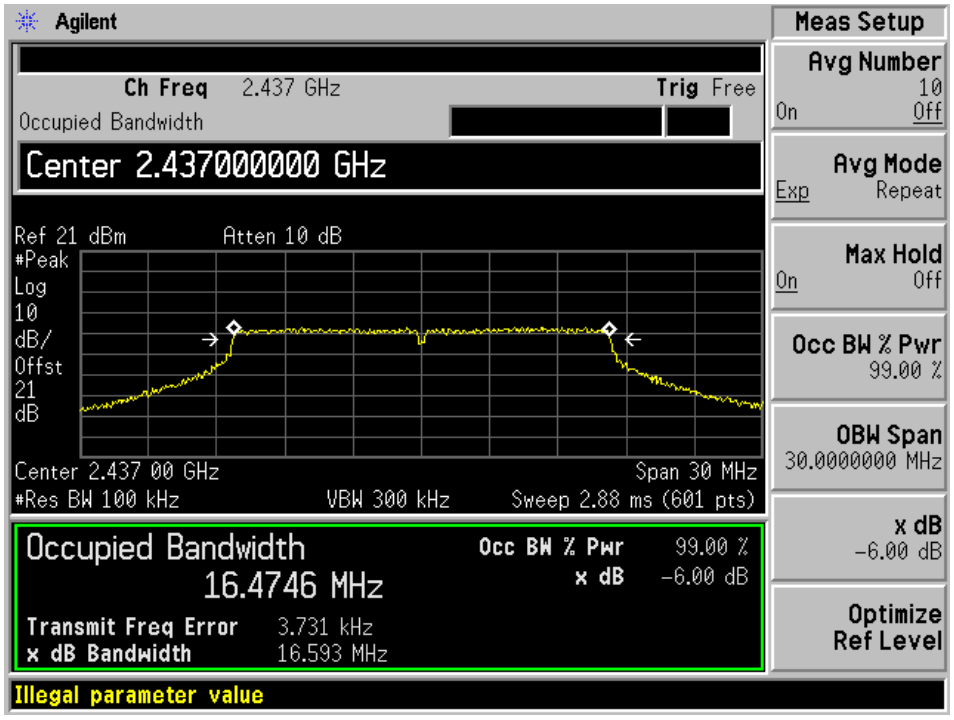


802.11 g mode

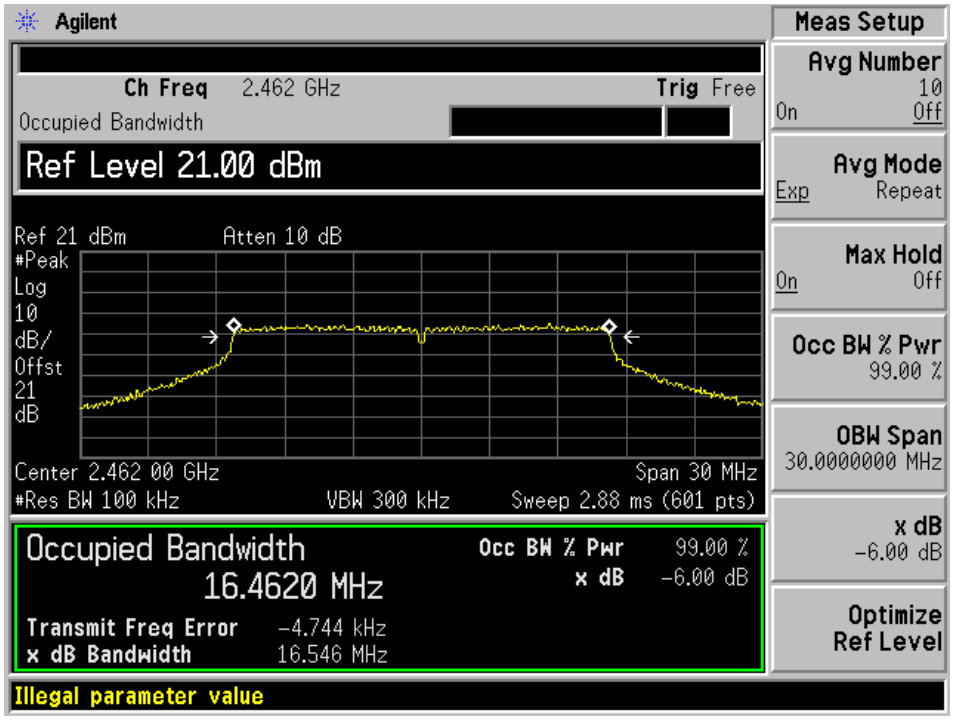
Low channel: 2412 MHz



Middle channel: 2437 MHz



High channel: 2462 MHz



10 FCC §15.247(b) – Peak Output Power Measurement

10.1 Applicable Standard

According to FCC §15.247(b) for systems using digital modulation in the 902~928 MHz, 2400~2483.5 MHz, and 5725~5850 MHz bands: 1 Watt.

10.2 Measurement Procedure

The measurements are based on FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 9: Fundamental emission output power

10.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Spectrum Analyzer	E4446A	US44300386	2012-09-29	1 year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

10.4 Test Environmental Conditions

Temperature:	26 °C
Relative Humidity:	42 %
ATM Pressure:	101.7 kPa

The testing was performed by Bo Li on 2013-09-05 in RF site.

10.5 Test Results

802.11b mode

Channel	Frequency (MHz)	Conducted Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2412	1.37	30	-28.63
Middle	2437	1.13	30	-28.87
High	2462	2.62	30	-27.38

802.11g mode

Channel	Frequency (MHz)	Conducted Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-2.61	30	-32.61
Middle	2437	-2.15	30	-32.15
High	2462	-0.96	30	-30.96

11 FCC §15.247(d) – 100 kHz Bandwidth of Band Edges

11.1 Applicable Standard

According to FCC §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum 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. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emissions limits specified in §15.209(a) see §15.205(c).

11.2 Measurement Procedure

The measurements are based on FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 13: Band-edge measurements

11.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Spectrum Analyzer	E4446A	US44300386	2012-09-29	1 year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

11.4 Test Environmental Conditions

Temperature:	26 °C
Relative Humidity:	42 %
ATM Pressure:	101.7 kPa

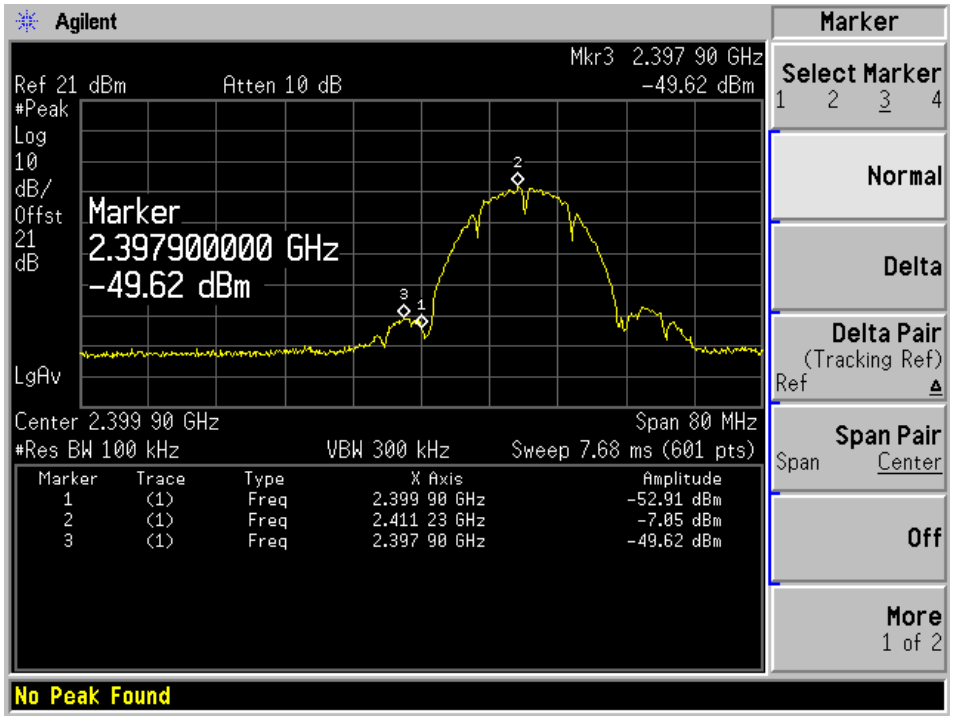
The testing was performed by Bo Li on 2013-09-05 in RF site.

11.5 Test Results

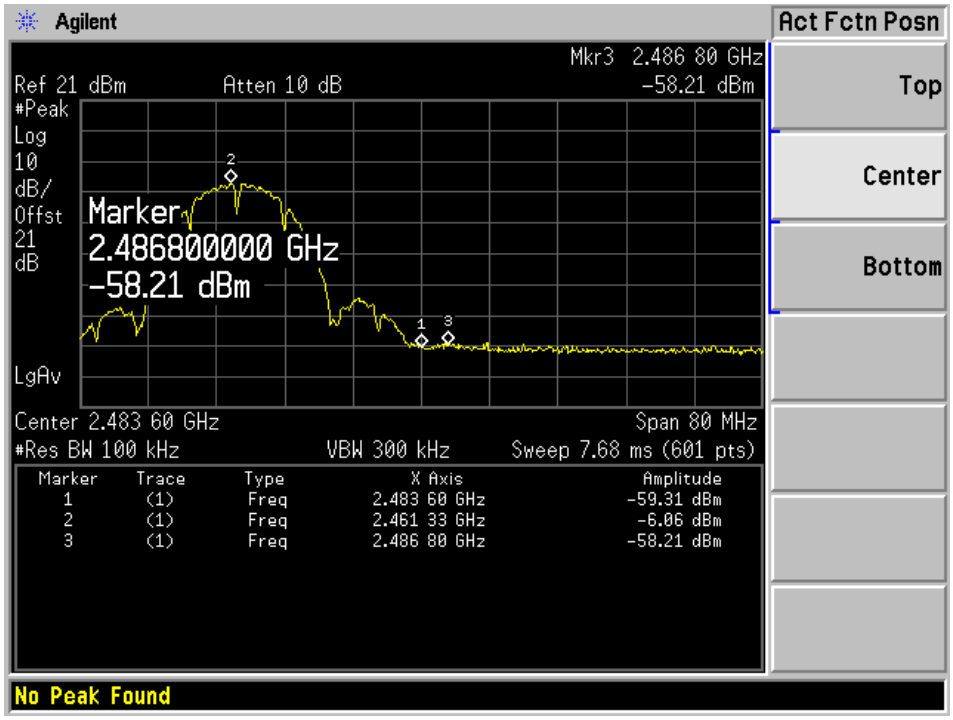
Please refer to following pages for plots of band edge.

802.11b mode

802.11b, Low Band Edge

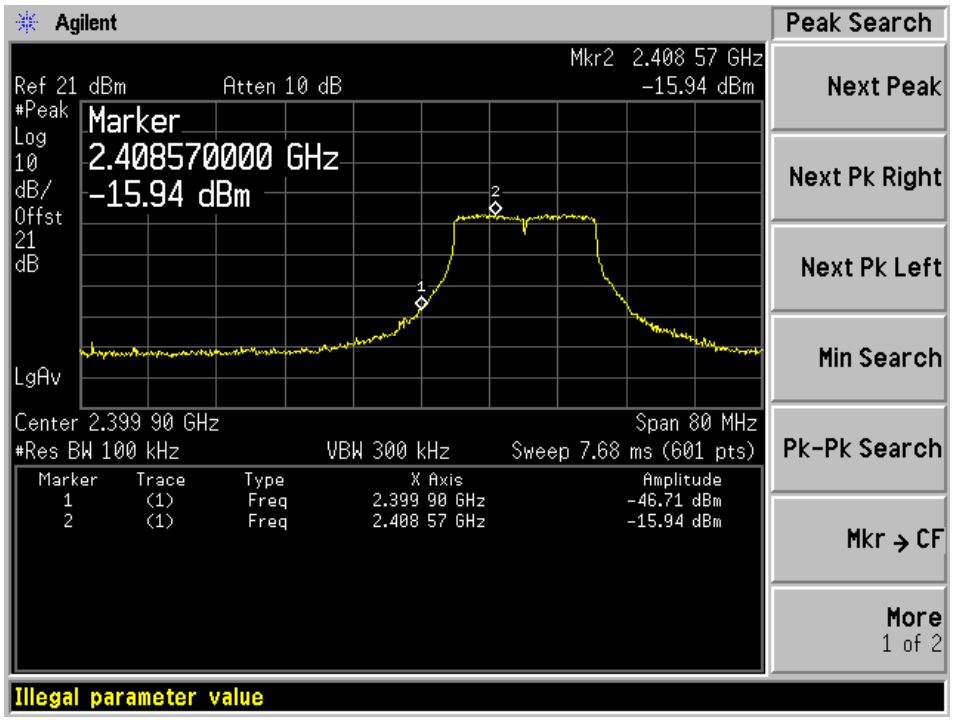


802.11b, High Band Edge

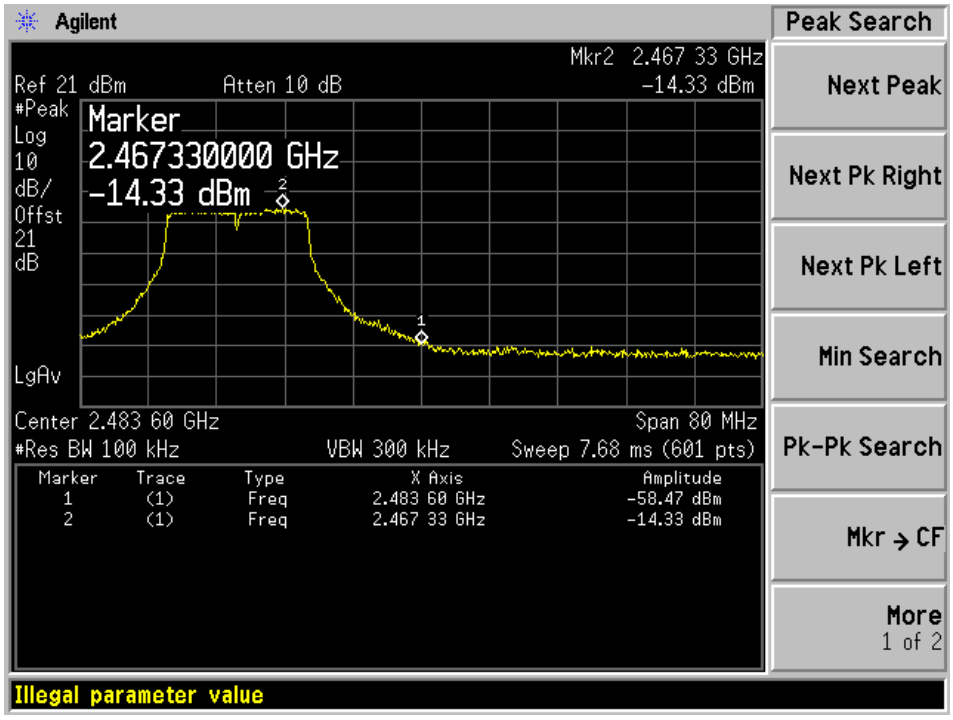


802.11g mode

802.11g, Low Band Edge



802.11g, High Band Edge



12 FCC §15.247(e) – Power Spectral Density

12.1 Applicable Standard

According to FCC §15.247(e), 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.

12.2 Measurement Procedure

The measurements are based on FCC KDB 558074 D01 DTS Meas Guidance v03r01: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 section 10: Maximum power spectral density level in the fundamental emission

12.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Spectrum Analyzer	E4446A	US44300386	2012-09-29	1 year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

12.4 Test Environmental Conditions

Temperature:	26 °C
Relative Humidity:	42 %
ATM Pressure:	101.7 kPa

The testing was performed by Bo Li on 2013-09-05 in RF site.

12.5 Test Results

802.11b mode

Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.48	8	-16.48
Middle	2437	-7.77	8	-15.77
High	2462	-6.83	8	-14.83

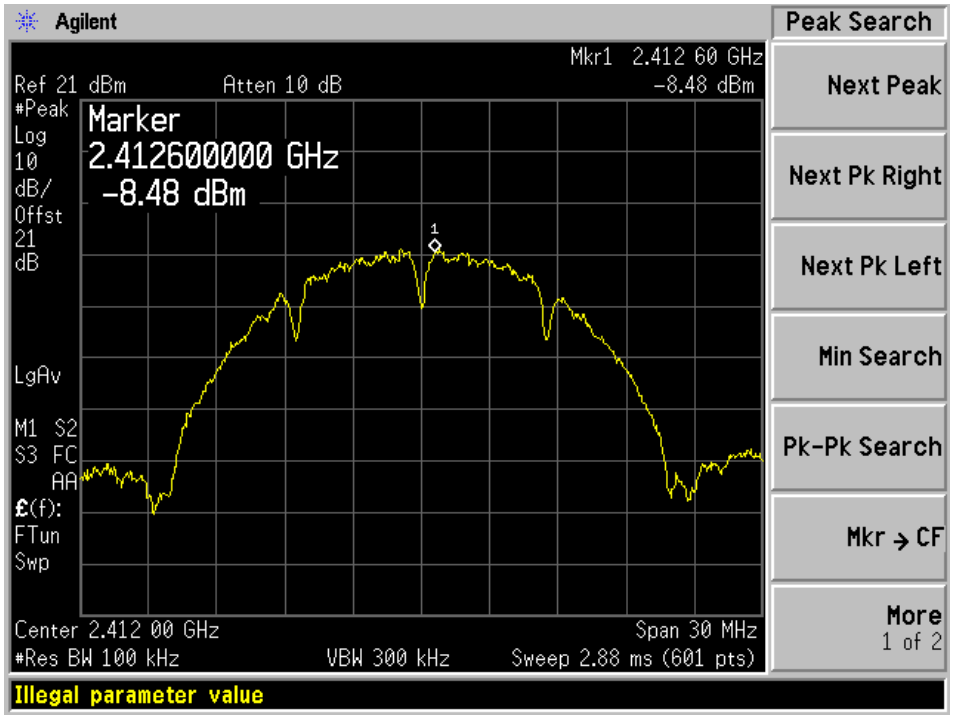
802.11 g mode

Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-16.07	8	-24.07
Middle	2437	-15.34	8	-23.34
High	2462	-14.67	8	-22.67

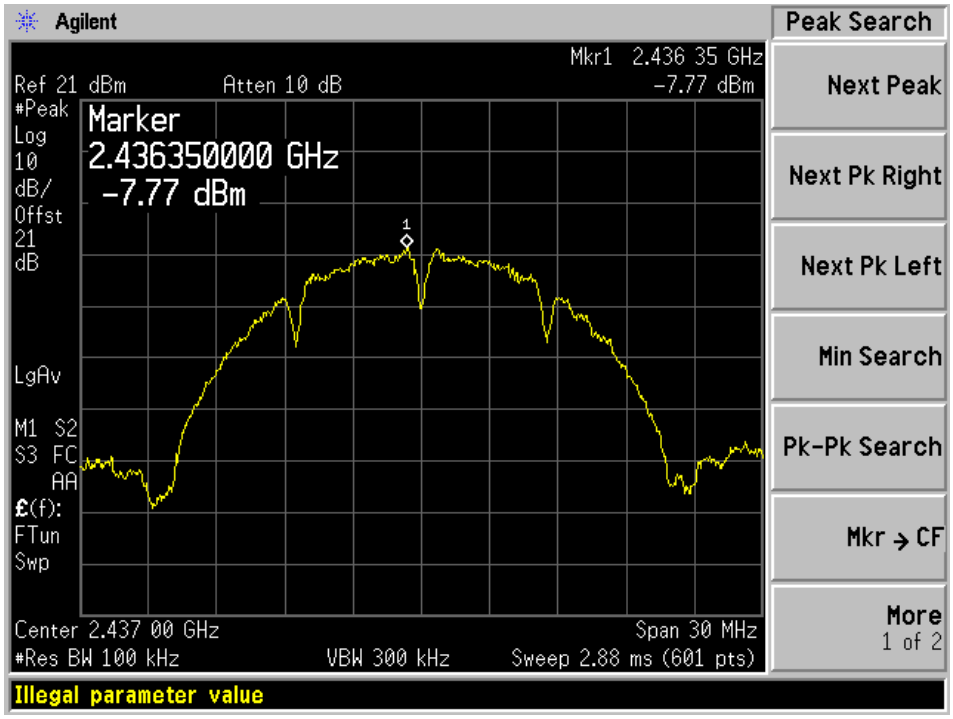
Please refer to the following plots for detailed test results:

802.11b mode

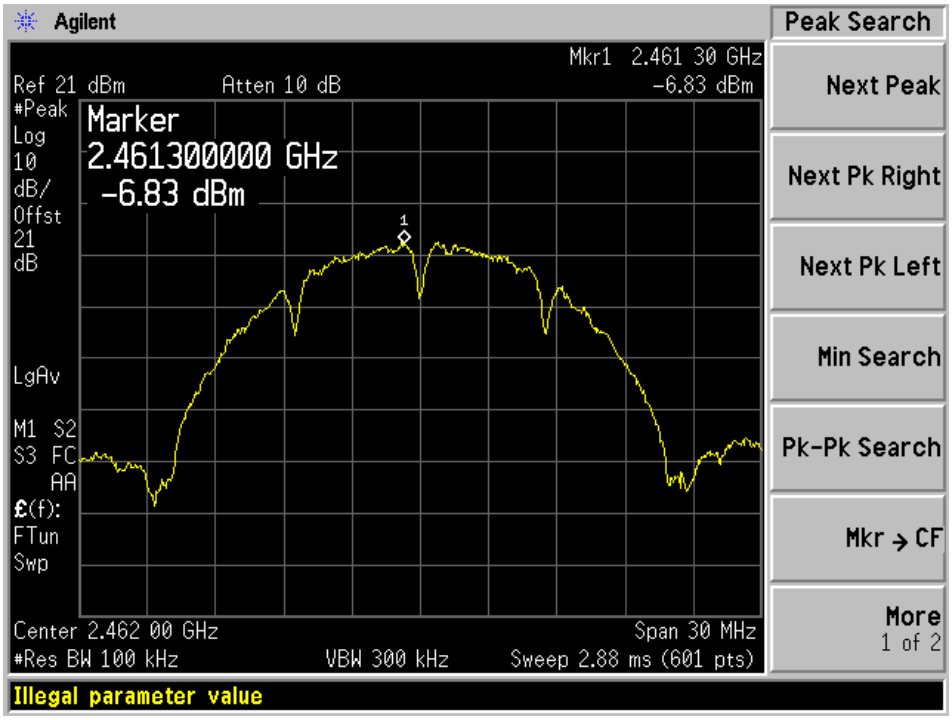
Low: 2412 MHz



Middle: 2437 MHz

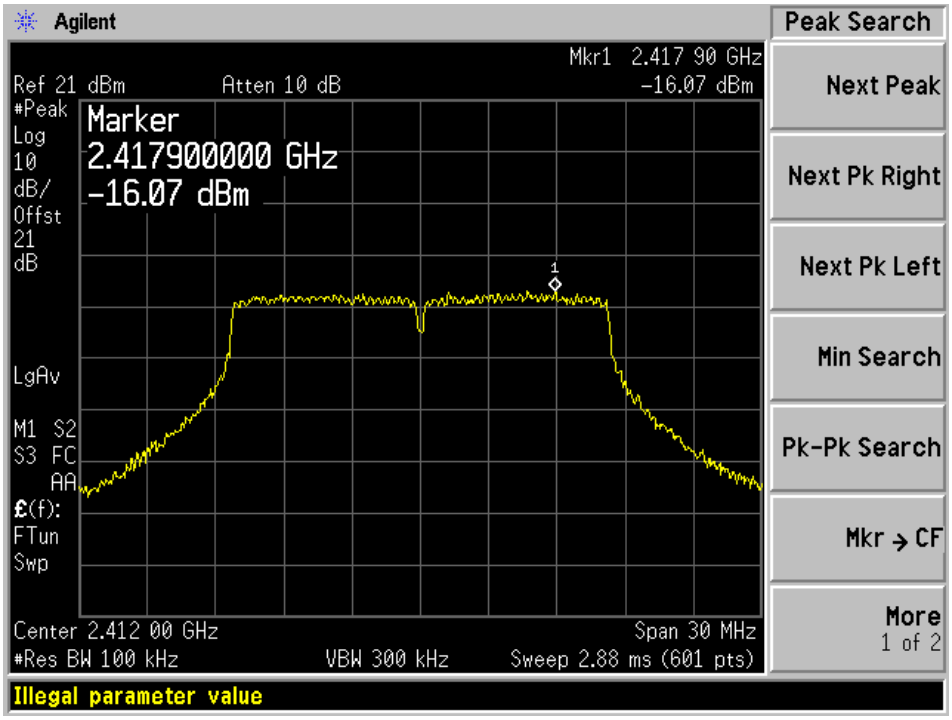


High: 2462 MHz

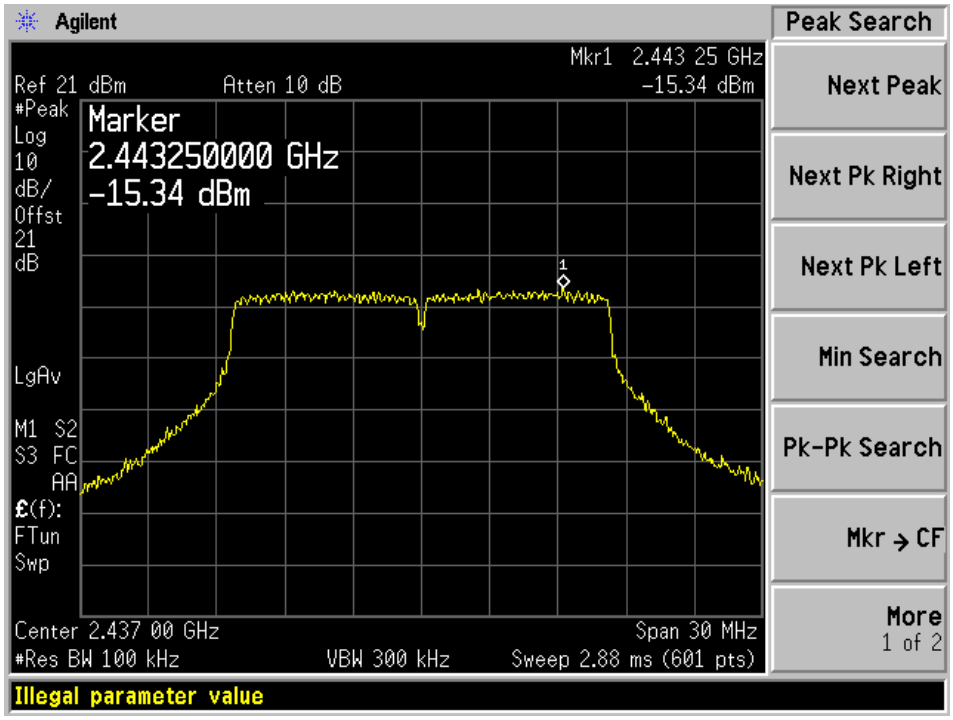


802.11g mode

Low: 2412 MHz



Middle: 2437 MHz



High: 2462 MHz