Silex Technology America, Inc.

ADDENDUM TEST REPORT TO 92711-12

802.11bgn Access Point, Wi3-530

Tested To The Following Standards:

FCC Part 15 Subpart C Sections 15.207, 15.209, 15.247
and
RSS 210 Issue 8

Report No.: 92711-12A

Date of issue: March 14, 2012

ACCREDITED
Testing Certificates:
803.01, 803.02, 803.05, 803.06

This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

Testing the Future
CKC LABORATORIES, INC.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Silex Technology America, Inc.
201 E. Sandpointe Ave.
Sana Ana, CA 92707

Representative: Ron Tozaki
Customer Reference Number: 4896-00

REPORT PREPARED BY:

Joyce Walker
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 92711

DATE OF EQUIPMENT RECEIPT: February 15, 2012
DATE(S) OF TESTING: February 15-22, 2012

Revision History

Original: Testing of the 802.11bgn Access Point, Wi3-530 to FCC Part 15 Subpart C Sections 15.207, 15.209, 15.247 and RSS 210 Issue 8.
Addendum A: Corrects all occurrences of the frequency range from 2400-2482.5 to 2400-2483.5. Replaced the 99% bandwidth for 802.11b 2442MHz with a corrected plot.

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information

Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
110 N. Olinda Place
Brea, CA 92823

Site Registration & Accreditation Information

Location	CB #	Taiwan	Canada	FCC	Japan
Brea A	US0060	SL2-IN-E-1146R	3082D-1	90473	R-2945 C-3248 T-1572

SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C 15.207, 15.209, 15.247 and RSS 210 Issue 8

Description	Test Procedure/Method	Results
Voltage Variation	FCC Part 15 Subpart C Section 15.31(e) / ANSI C63.4 (2003)	Pass
Conducted Emissions	FCC Part 15 Subpart C Section 15.207 / ANSI C63.4 (2003)	Pass
RF Power Output	FCC Part 15 Subpart C Section 15.247 (b)(3) / 558074 D01 DTS MEAS GUIDANCE V01	Pass
-6dBc Occupied Bandwidth	FCC Part 15 Subpart C Section 15.247(a)(2) / 558074 D01 DTS MEAS GUIDANCE V01	Pass
Bandedge	FCC Part 15 Subpart C / ITU-R 55/1 / 558074 D01 DTS MEAS GUIDANCE V01	Pass
Field Strength of Spurious Emissions	FCC Part 15 Subpart C Section 15.247(d) / 15.209 / 558074 D01 DTS MEAS GUIDANCE V01	Pass
Power Spectral Density	FCC Part 15 Subpart C 15.247(e) / 558074 D01 DTS MEAS GUIDANCE V01	Pass
99% Bandwidth	RSS 210 Issue 8	Pass

Conditions During Testing

This list is a summary of the conditions noted for or modifications made to the equipment during testing.

Summary of Conditions
None

EQUIPMENT UNDER TEST (EUT)

EQUIPMENT UNDER TEST

802.11bgn Access Point
Manuf: Silex Technology America, Inc.
Model: Wi3-530
Serial: NA

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Ethernet Hub
Manuf: Netgear
Model: DS108
Serial: DS18006180179

Laptop
Manuf: Lenovo
Model: X61
Serial: 7675CTO

Laptop
Manuf: Sony
Model: PCG-982L
Serial: 2832330

Power Supply
Manuf: Condor
Model: HK-CH13-A05
Serial: NA

Development Board
Manuf: Silex Technology America, Inc.
Model: PN 128-00205-200
Serial: NA

FCC PART 15 SUBPART C

This report contains EMC emissions test results under United States Federal Communications Commission (FCC) 47 CFR 15C requirements for Unlicensed Radio Frequency Devices, Subpart C - Intentional Radiators.

15.31(e) Voltage Variations

Test Conditions / Setup

The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on a extender card installed on a support development PCB. One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops. The EUT is transmitting at rated power and exercising all the intended functionalities.
Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11b: 11.0 mbps short CCK.
Freq: 2412MHz, 2442MHz, 2472MHz, Firmware power setting= 14.5dBm, 14.5dBm, 12.5dBm
802.11g: 54.0 mbps. OFDM
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 13.5dBm, 13.5dBm, 13.5dBm
802.11n: 28.9 mbps.MCS3
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 13.5dBm , 13.5dBm, 9.5dBm
802.11n: 72.2 mbps.MCS7
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 9.5dBm, 9.5dBm, 9.5dBm
Frequency range of measurement = Fundamental
9 kH -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz-30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz-1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz-25000MHz; RBW=1 MHz, VBW=1 MHz.

Test environment conditions: 21.1°C, 36% relative humidity, 100kPa

15.31(e) compliance: the supply voltage was varied between 85% and 115% of the nominal rated supply voltage of 3.3V, no change in the Fundamental signal level was observed.

Engineer Name: E. Wong

Test Equipment

Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02672	Spectrum Analyzer	E4446A	Agilent	8/9/2010	8/9/2012
ANP06153	Cable	16301	AstroLab	10/27/2011	10/27/2013

Test Setup Photos

15.207 AC Conducted Emissions

Test Data Sheets

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Silex Technology America, Inc.**
Specification: **15.207 AC Mains - Average**
Work Order #: **92711** Date: 2/20/2012
Test Type: **Conducted Emissions** Time: 13:48:40
Equipment: **802.11bgn Access Point** Sequence#: 4
Manufacturer: Silex Technology America, Inc. Tested By: E. Wong
Model: Wi3-530 110V 60Hz
S/N: NA

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	ANP06084	Attenuator	SA18N10W-06	12/8/2010	12/8/2012
T2	ANP04358	Cable	RG142	5/7/2010	5/7/2012
T3	AN02610	High Pass Filter	HE9615-150K-50-720B	11/21/2011	11/21/2013
T4	AN00847.1	50uH LISN-Line 1 (dB)	3816/2NM	12/21/2010	12/21/2012
	AN00847.1	50uH LISN-Line 2 (dB)	3816/2NM	12/21/2010	12/21/2012

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
802.11bgn Access Point*	Silex Technology America, Inc.	Wi3-530	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Ethernet Hub	Netgear	DS108	DS18006180179
Laptop	Lenovo	X61	7675CTO
Laptop	Sony	PCG-982L	2832330
Power Supply	Condor	HK-CH13-A05	NA

Test Conditions / Notes:

The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on an extender card installed on a support development PCB.
One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops.
The EUT is transmitting at rated power and exercising all the intended functionalities.

Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11b: 11.0 mbps short CCK. Freq:2442MHz,Firmware power setting= 14.5dBm,
Frequency range of measurement = 150kHz- 30MHz.
150 kHz-30 MHz; RBW=9 kHz, VBW=9kHz
Test environment conditions: 21.1°C, 36% relative humidity, 100kPa
Applicable data rate was investigated. Recorded data represent worse case emission.

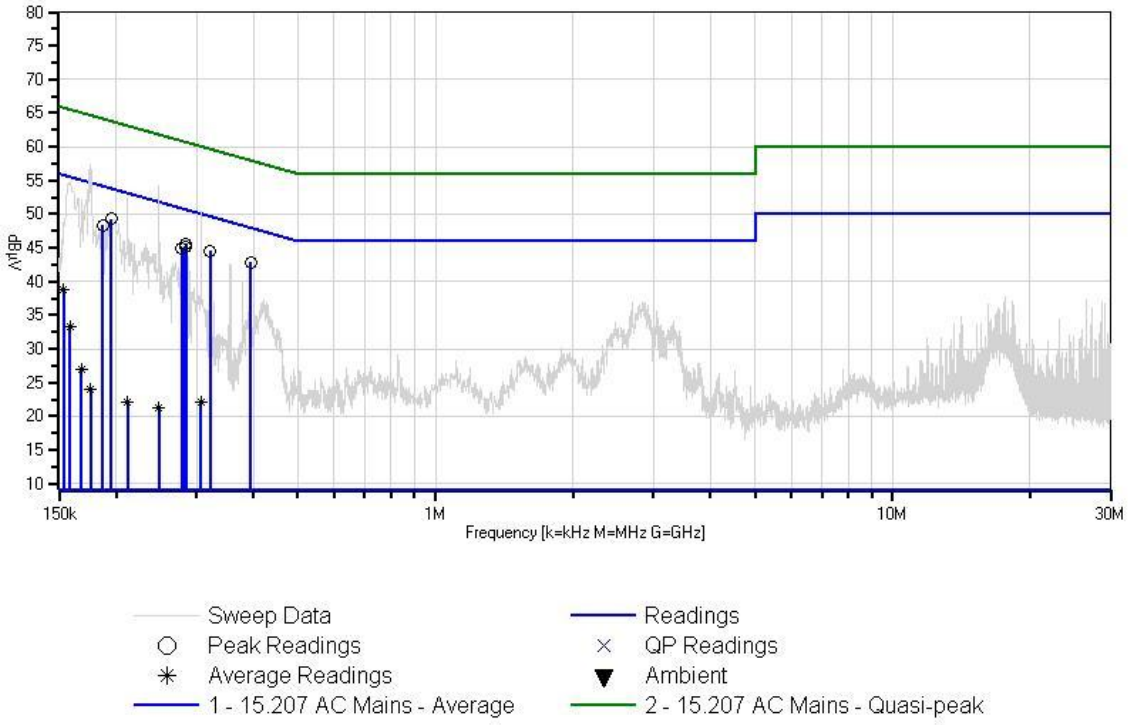
Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	195.087k	43.2	+5.8	+0.1	+0.2	+0.0	+0.0	49.3	53.8	-4.5	Black
2	320.893k	38.6	+5.7	+0.1	+0.2	+0.0	+0.0	44.6	49.7	-5.1	Black
3	394.341k	36.9	+5.7	+0.1	+0.2	+0.0	+0.0	42.9	48.0	-5.1	Black
4	284.533k	39.6	+5.7	+0.1	+0.2	+0.0	+0.0	45.6	50.7	-5.1	Black
5	283.079k	39.2	+5.7	+0.1	+0.2	+0.0	+0.0	45.2	50.7	-5.5	Black
6	187.088k	42.3	+5.8	+0.1	+0.2	+0.0	+0.0	48.4	54.2	-5.8	Black
7	277.988k	38.8	+5.8	+0.1	+0.2	+0.0	+0.0	44.9	50.9	-6.0	Black
8	153.336k Ave	31.2	+5.8	+0.1	+1.6	+0.0	+0.0	38.7	55.8	-17.1	Black
9	158.726k Ave	26.6	+5.8	+0.1	+0.7	+0.0	+0.0	33.2	55.5	-22.3	Black
^	158.726k	48.3	+5.8	+0.1	+0.7	+0.0	+0.0	54.9	55.5	-0.6	Black
11	307.076k Ave	16.2	+5.7	+0.1	+0.2	+0.0	+0.0	22.2	50.0	-27.8	Black
^	307.076k	44.5	+5.7	+0.1	+0.2	+0.0	+0.0	50.5	50.0	+0.5	Black
^	307.076k	16.3	+5.7	+0.1	+0.2	+0.0	+0.0	22.3	50.0	-27.7	Black
14	168.180k Ave	20.7	+5.8	+0.1	+0.4	+0.0	+0.0	27.0	55.0	-28.0	Black
^	168.180k	45.9	+5.8	+0.1	+0.4	+0.0	+0.0	52.2	55.0	-2.8	Black
16	248.173k Ave	15.2	+5.8	+0.1	+0.2	+0.0	+0.0	21.3	51.8	-30.5	Black

^	248.173k	48.2	+5.8	+0.1	+0.2	+0.0	+0.0	54.3	51.8	+2.5	Black
18 Ave	176.179k	17.7	+5.8	+0.1	+0.3	+0.0	+0.0	23.9	54.7	-30.8	Black
^	176.179k	51.2	+5.8	+0.1	+0.3	+0.0	+0.0	57.4	54.7	+2.7	Black
^	173.998k	50.4	+5.8	+0.1	+0.4	+0.0	+0.0	56.7	54.8	+1.9	Black
^	171.816k	45.8	+5.8	+0.1	+0.4	+0.0	+0.0	52.1	54.9	-2.8	Black
22 Ave	211.850k	16.1	+5.8	+0.1	+0.2	+0.0	+0.0	22.2	53.1	-30.9	Black
^	211.813k	46.3	+5.8	+0.1	+0.2	+0.0	+0.0	52.4	53.1	-0.7	Black

CKC Laboratories, Inc. Date: 2/20/2012 Time: 13:48:40 Silex Technology America, Inc. WO#: 92711
15.207 AC Mains - Average Test Lead: Black 110V 60Hz Sequence#: 4 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Silex Technology America, Inc.**
Specification: **15.207 AC Mains - Average**
Work Order #: **92711** Date: 2/20/2012
Test Type: **Conducted Emissions** Time: 13:53:32
Equipment: **802.11bgn Access Point** Sequence#: 5
Manufacturer: Silex Technology America, Inc. Tested By: E. Wong
Model: Wi3-530 110V 60Hz
S/N: NA

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	ANP06084	Attenuator	SA18N10W-06	12/8/2010	12/8/2012
T2	ANP04358	Cable	RG142	5/7/2010	5/7/2012
T3	AN02610	High Pass Filter	HE9615-150K-50-720B	11/21/2011	11/21/2013
	AN00847.1	50uH LISN-Line 1 (dB)	3816/2NM	12/21/2010	12/21/2012
T4	AN00847.1	50uH LISN-Line 2 (dB)	3816/2NM	12/21/2010	12/21/2012

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
802.11bgn Access Point*	Silex Technology America, Inc.	Wi3-530	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Ethernet Hub	Netgear	DS108	DS18006180179
Laptop	Lenovo	X61	7675CTO
Laptop	Sony	PCG-982L	2832330
Power Supply	Condor	HK-CH13-A05	NA

Test Conditions / Notes:

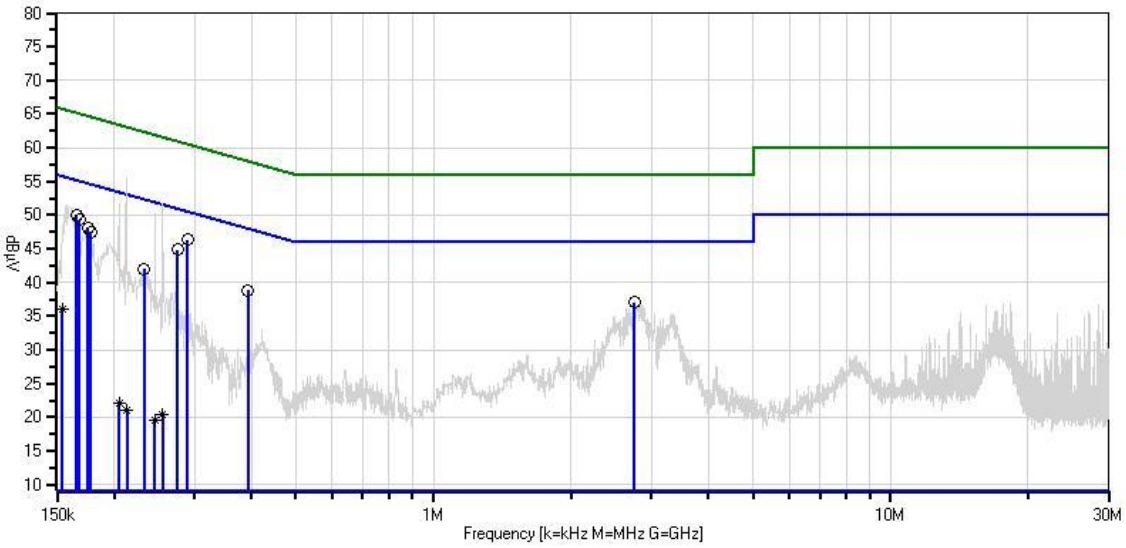
The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on an extender card installed on a support development PCB.
One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops.
The EUT is transmitting at rated power and exercising all the intended functionalities.
Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11b: 11.0 mbps short CCK. Freq:2442MHz,Firmware power setting= 14.5dBm,
Frequency range of measurement = 150kHz- 30MHz.
150 kHz-30 MHz; RBW=9 kHz, VBW=9kHz
Test environment conditions: 21.1°C, 36% relative humidity, 100kPa
Applicable data rate was investigated. Recorded data represent worse case emission.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	289.624k	40.4	+5.7	+0.1	+0.2	+0.0	+0.0	46.4	50.5	-4.1	White
2	165.271k	43.7	+5.8	+0.1	+0.4	+0.0	+0.0	50.0	55.2	-5.2	White
3	168.180k	43.0	+5.8	+0.1	+0.4	+0.0	+0.0	49.3	55.0	-5.7	White
4	275.079k	38.8	+5.8	+0.1	+0.2	+0.0	+0.0	44.9	51.0	-6.1	White
5	175.452k	41.8	+5.8	+0.1	+0.3	+0.0	+0.0	48.0	54.7	-6.7	White
6	177.634k	41.3	+5.8	+0.1	+0.3	+0.0	+0.0	47.5	54.6	-7.1	White
7	2.748M	30.8	+5.8	+0.2	+0.2	+0.1	+0.0	37.1	46.0	-8.9	White
8	392.160k	32.8	+5.7	+0.1	+0.2	+0.0	+0.0	38.8	48.0	-9.2	White
9	232.901k	35.9	+5.8	+0.1	+0.2	+0.0	+0.0	42.0	52.3	-10.3	White
10 Ave	154.024k	28.8	+5.8	+0.1	+1.4	+0.0	+0.0	36.1	55.8	-19.7	White
^	157.999k	44.9	+5.8	+0.1	+0.8	+0.0	+0.0	51.6	55.6	-4.0	White
12 Ave	255.445k	14.4	+5.8	+0.1	+0.2	+0.0	+0.0	20.5	51.6	-31.1	White
^	255.445k	45.6	+5.8	+0.1	+0.2	+0.0	+0.0	51.7	51.6	+0.1	White
14 Ave	205.268k	16.0	+5.8	+0.1	+0.2	+0.0	+0.0	22.1	53.4	-31.3	White
^	205.268k	45.6	+5.8	+0.1	+0.2	+0.0	+0.0	51.7	53.4	-1.7	White
16 Ave	213.267k	15.0	+5.8	+0.1	+0.2	+0.0	+0.0	21.1	53.1	-32.0	White
^	213.267k	49.5	+5.8	+0.1	+0.2	+0.0	+0.0	55.6	53.1	+2.5	White
^	211.085k	36.9	+5.8	+0.1	+0.2	+0.0	+0.0	43.0	53.2	-10.2	White
19 Ave	245.991k	13.5	+5.8	+0.1	+0.2	+0.0	+0.0	19.6	51.9	-32.3	White
^	245.991k	44.2	+5.8	+0.1	+0.2	+0.0	+0.0	50.3	51.9	-1.6	White

CKC Laboratories, Inc. Date: 2/20/2012 Time: 13:53:32 Silex Technology America, Inc. WO#: 92711
15.207 AC Mains - Average Test Lead: White 110V 60Hz Sequence#: 5 Ext ATTN: 0 dB



Sweep Data
Peak Readings
Average Readings
1 - 15.207 AC Mains - Average
Readings
QP Readings
Ambient
2 - 15.207 AC Mains - Quasi-peak

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Silex Technology America, Inc.**		
Specification:	**15.207 AC Mains - Average**		
Work Order #:	**92711**	Date:	2/20/2012
Test Type:	**Conducted Emissions**	Time:	14:10:57
Equipment:	**802.11bgn Access Point**	Sequence#:	7
Manufacturer:	Silex Technology America, Inc.	Tested By:	E. Wong
Model:	Wi3-530		110V 60Hz
S/N:	NA		

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	ANP06084	Attenuator	SA18N10W-06	12/8/2010	12/8/2012
T2	ANP04358	Cable	RG142	5/7/2010	5/7/2012
T3	AN02610	High Pass Filter	HE9615-150K-50-720B	11/21/2011	11/21/2013
T4	AN00847.1	50uH LISN-Line 1 (dB)	3816/2NM	12/21/2010	12/21/2012
	AN00847.1	50uH LISN-Line 2 (dB)	3816/2NM	12/21/2010	12/21/2012

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
802.11bgn Access Point*	Silex Technology America, Inc.	Wi3-530	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Ethernet Hub	Netgear	DS108	DS18006180179
Laptop	Lenovo	X61	7675CTO
Laptop	Sony	PCG-982L	2832330
Power Supply	Condor	HK-CH13-A05	NA

Test Conditions / Notes:

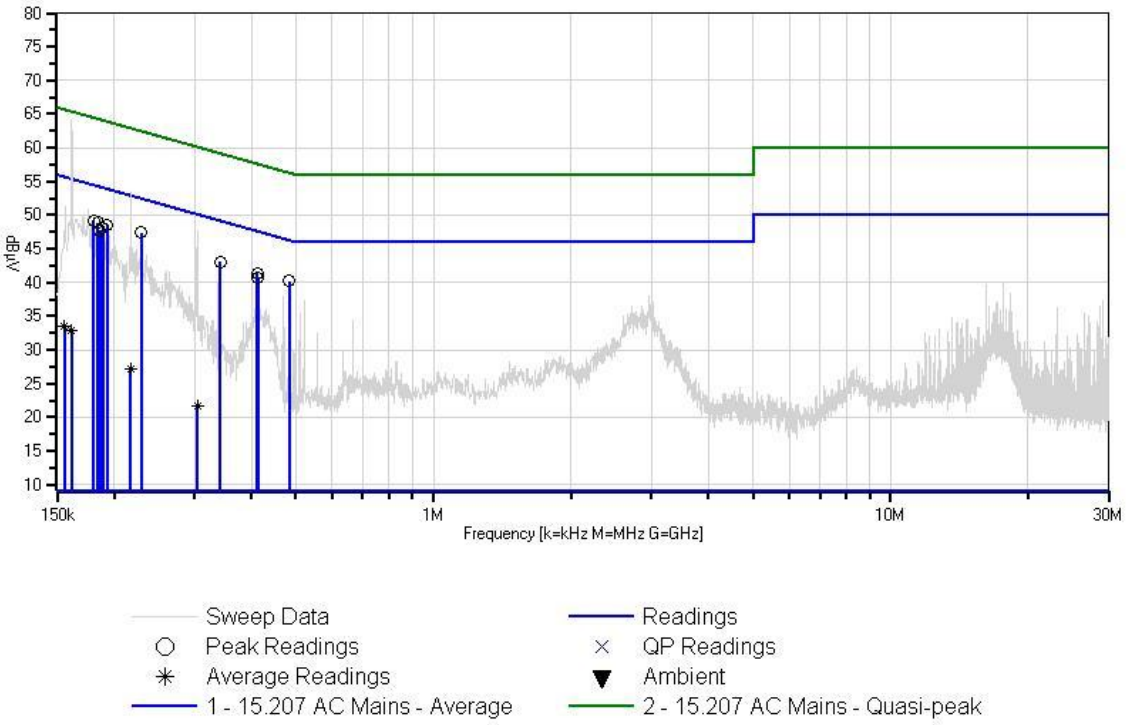
The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on a extender card installed on a support development PCB.
One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops.
The EUT is transmitting at rated power and exercising all the intended functionalities.
Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11n: 72.2 mbps. MCS3 . Freq:2442MHz,Firmware power setting=9.5dBm,
Frequency range of measurement = 150kHz- 30MHz.
150 kHz-30 MHz; RBW=9 kHz, VBW=9kHz
Test environment conditions: 21.1°C, 36% relative humidity, 100kPa
Applicable data rate was investigated. Recorded data represent worse case emission.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	229.265k	41.3	+5.8	+0.1	+0.2	+0.0	+0.0	47.4	52.5	-5.1	Black
2	180.543k	43.0	+5.8	+0.1	+0.3	+0.0	+0.0	49.2	54.5	-5.3	Black
3	192.905k	42.5	+5.8	+0.1	+0.2	+0.0	+0.0	48.6	53.9	-5.3	Black
4	184.179k	42.7	+5.8	+0.1	+0.3	+0.0	+0.0	48.9	54.3	-5.4	Black
5	483.788k	34.2	+5.7	+0.1	+0.2	+0.0	+0.0	40.2	46.3	-6.1	Black
6	189.269k	41.9	+5.8	+0.1	+0.2	+0.0	+0.0	48.0	54.1	-6.1	Black
7	341.255k	37.1	+5.7	+0.1	+0.2	+0.0	+0.0	43.1	49.2	-6.1	Black
8	411.794k	35.4	+5.7	+0.1	+0.2	+0.0	+0.0	41.4	47.6	-6.2	Black
9	186.360k	41.6	+5.8	+0.1	+0.2	+0.0	+0.0	47.7	54.2	-6.5	Black
10	413.249k	34.7	+5.7	+0.1	+0.2	+0.0	+0.0	40.7	47.6	-6.9	Black
11 Ave	155.619k	26.4	+5.8	+0.1	+1.2	+0.0	+0.0	33.5	55.7	-22.2	Black
^	156.545k	44.4	+5.8	+0.1	+1.0	+0.0	+0.0	51.3	55.6	-4.3	Black
13 Ave	161.635k	26.4	+5.8	+0.1	+0.5	+0.0	+0.0	32.8	55.4	-22.6	Black
^	161.635k	57.9	+5.8	+0.1	+0.5	+0.0	+0.0	64.3	55.4	+8.9	Black
15 Ave	217.630k	21.0	+5.8	+0.1	+0.2	+0.0	+0.0	27.1	52.9	-25.8	Black
^	217.630k	47.3	+5.8	+0.1	+0.2	+0.0	+0.0	53.4	52.9	+0.5	Black
17 Ave	304.895k	15.6	+5.7	+0.1	+0.2	+0.0	+0.0	21.6	50.1	-28.5	Black
^	304.895k	41.8	+5.7	+0.1	+0.2	+0.0	+0.0	47.8	50.1	-2.3	Black
^	301.986k	39.3	+5.7	+0.1	+0.2	+0.0	+0.0	45.3	50.2	-4.9	Black

CKC Laboratories, Inc. Date: 2/20/2012 Time: 14:10:57 Silex Technology America, Inc. WO#: 92711
15.207 AC Mains - Average Test Lead: Black 110V 60Hz Sequence#: 7 Ext ATTN: 0 dB



Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer:	**Silex Technology America, Inc.**		
Specification:	**15.207 AC Mains - Average**		
Work Order #:	**92711**	Date:	2/20/2012
Test Type:	**Conducted Emissions**	Time:	14:06:53
Equipment:	**802.11bgn Access Point**	Sequence#:	6
Manufacturer:	Silex Technology America, Inc.	Tested By:	E. Wong
Model:	Wi3-530		110V 60Hz
S/N:	NA		

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
	AN02672	Spectrum Analyzer	E4446A	8/9/2010	8/9/2012
T1	ANP06084	Attenuator	SA18N10W-06	12/8/2010	12/8/2012
T2	ANP04358	Cable	RG142	5/7/2010	5/7/2012
T3	AN02610	High Pass Filter	HE9615-150K-50-720B	11/21/2011	11/21/2013
	AN00847.1	50uH LISN-Line 1 (dB)	3816/2NM	12/21/2010	12/21/2012
T4	AN00847.1	50uH LISN-Line 2 (dB)	3816/2NM	12/21/2010	12/21/2012

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
802.11bgn Access Point*	Silex Technology America, Inc.	Wi3-530	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Ethernet Hub	Netgear	DS108	DS18006180179
Laptop	Lenovo	X61	7675CTO
Laptop	Sony	PCG-982L	2832330
Power Supply	Condor	HK-CH13-A05	NA

Test Conditions / Notes:

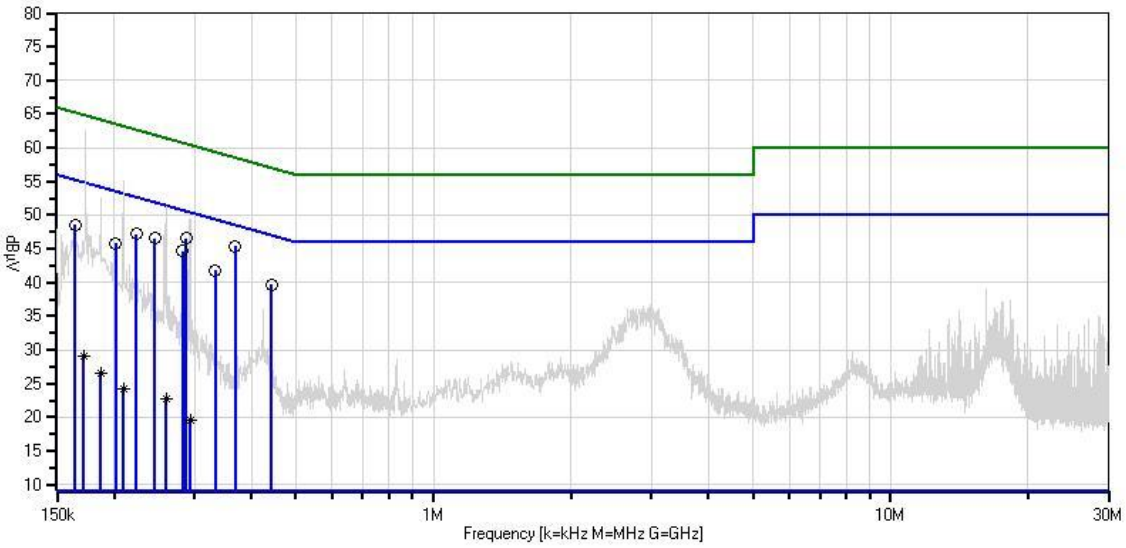
The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on an extender card installed on a support development PCB.
One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops.
The EUT is transmitting at rated power and exercising all the intended functionalities.
Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11n: 72.2 mbps .MCS3 . Freq:2442MHz,Firmware power setting=9.5dBm,
Frequency range of measurement = 150kHz- 30MHz.
150 kHz-30 MHz; RBW=9 kHz, VBW=9kHz
Test environment conditions: 21.1°C, 36% relative humidity, 100kPa
Applicable data rate was investigated. Recorded data represent worse case emission.

Ext Attn: 0 dB

Measurement Data: Reading listed by margin. Test Lead: White

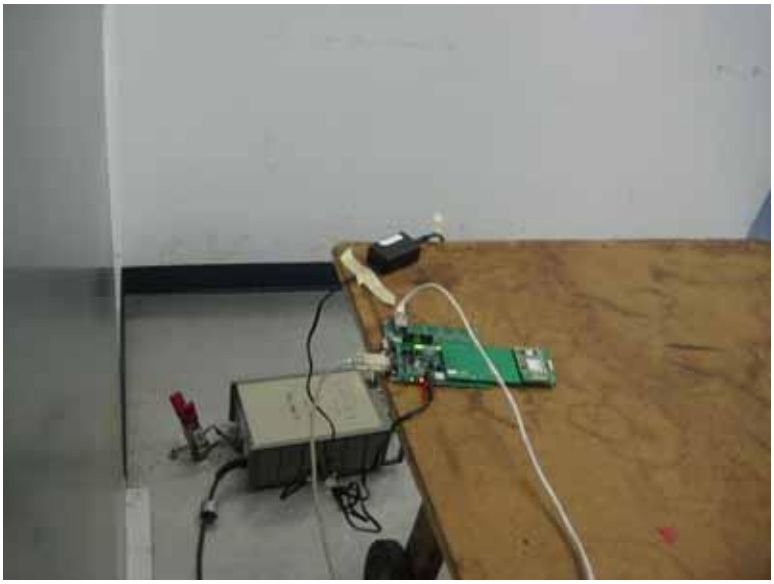
#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	368.162k	39.4	+5.7	+0.1	+0.2	+0.0	+0.0	45.4	48.5	-3.1	White
2	287.442k	40.6	+5.7	+0.1	+0.2	+0.0	+0.0	46.6	50.6	-4.0	White
3	245.991k	40.5	+5.8	+0.1	+0.2	+0.0	+0.0	46.6	51.9	-5.3	White
4	223.448k	41.1	+5.8	+0.1	+0.2	+0.0	+0.0	47.2	52.7	-5.5	White
5	282.351k	38.6	+5.8	+0.1	+0.2	+0.0	+0.0	44.7	50.7	-6.0	White
6	164.544k	42.2	+5.8	+0.1	+0.5	+0.0	+0.0	48.6	55.2	-6.6	White
7	441.610k	33.7	+5.7	+0.1	+0.2	+0.0	+0.0	39.7	47.0	-7.3	White
8	332.529k	35.8	+5.7	+0.1	+0.2	+0.0	+0.0	41.8	49.4	-7.6	White
9	201.632k	39.7	+5.8	+0.1	+0.2	+0.0	+0.0	45.8	53.5	-7.7	White
10	171.867k Ave	22.8	+5.8	+0.1	+0.4	+0.0	+0.0	29.1	54.9	-25.8	White
^	173.271k	56.1	+5.8	+0.1	+0.4	+0.0	+0.0	62.4	54.8	+7.6	White
12	187.088k Ave	20.5	+5.8	+0.1	+0.2	+0.0	+0.0	26.6	54.2	-27.6	White
^	187.088k	46.4	+5.8	+0.1	+0.2	+0.0	+0.0	52.5	54.2	-1.7	White
14	259.808k Ave	16.7	+5.8	+0.1	+0.2	+0.0	+0.0	22.8	51.4	-28.6	White
^	259.808k	45.3	+5.8	+0.1	+0.2	+0.0	+0.0	51.4	51.4	+0.0	White
^	257.626k	41.0	+5.8	+0.1	+0.2	+0.0	+0.0	47.1	51.5	-4.4	White
17	209.631k Ave	18.1	+5.8	+0.1	+0.2	+0.0	+0.0	24.2	53.2	-29.0	White
^	209.631k	49.1	+5.8	+0.1	+0.2	+0.0	+0.0	55.2	53.2	+2.0	White
19	293.260k Ave	13.6	+5.7	+0.1	+0.2	+0.0	+0.0	19.6	50.4	-30.8	White
^	293.260k	43.4	+5.7	+0.1	+0.2	+0.0	+0.0	49.4	50.4	-1.0	White

CKC Laboratories, Inc. Date: 2/20/2012 Time: 14:06:53 Silex Technology America, Inc. WO#: 92711
15.207 AC Mains - Average Test Lead: White 110V 60Hz Sequence#: 6 Ext ATTN: 0 dB



Sweep Data
Peak Readings
Average Readings
1 - 15.207 AC Mains - Average
Readings
QP Readings
Ambient
2 - 15.207 AC Mains - Quasi-peak

Test Setup Photos



15.247(b)(3) RF Power Output

Test Conditions / Setup

The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on an extender card installed on a support development PCB. One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops. The EUT is transmitting at rated power and exercising all the intended functionalities.
RF characteristic measured at the antenna port
Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11b: 11.0 mbps short CCK
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 14.5dBm, 14.5dBm, 12.5dBm
802.11g: 54.0 mbps. OFDM
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 13.5dBm, 13.5dBm, 13.5dBm
802.11n: 28.9 mbps.MCS3
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 13.5dBm , 13.5dBm, 9.5dBm
802.11n: 72.2 mbps.MCS7
Freq:2412MHz, 2442MHz, 2472MHz, Firmware power setting= 9.5dBm, 9.5dBm, 9.5dBm
Test method in accordance with FCC document: 558074 D01 DTS Meas Guidance V01
Sec 5.2.1.2, measurement procedure PK2
Frequency range of measurement = Fundamental
Test environment conditions: 21.1°C, 36% relative humidity, 100kPa
15.31(e) compliance: the supply voltage was varied between 85% and 115% of the nominal rated supply voltage, no change in the Fundamental signal level was observed.

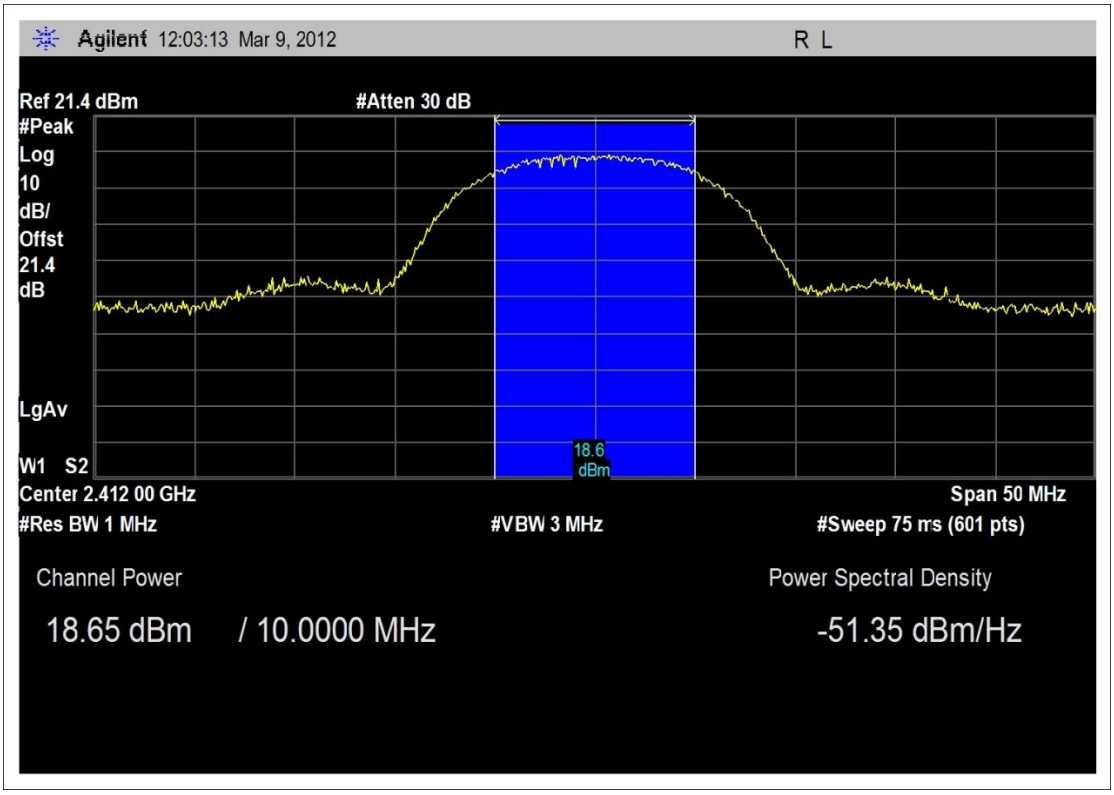
Engineer Name: E. Wong

Test Equipment

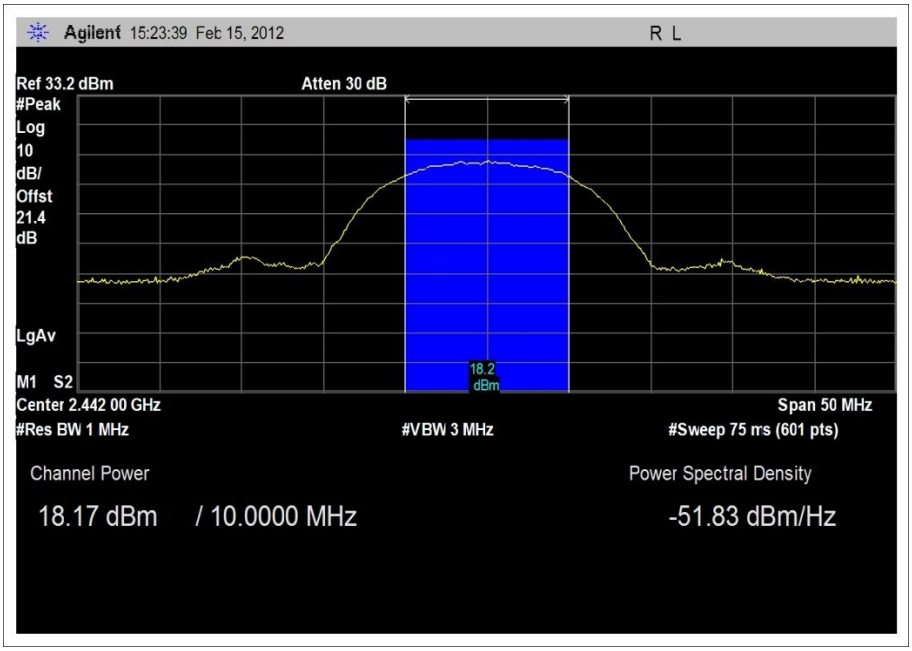
Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02672	Spectrum Analyzer	E4446A	Agilent	8/9/2010	8/9/2012
ANP06153	Cable	16301	AstroLab	10/27/2011	10/27/2013

Test Data

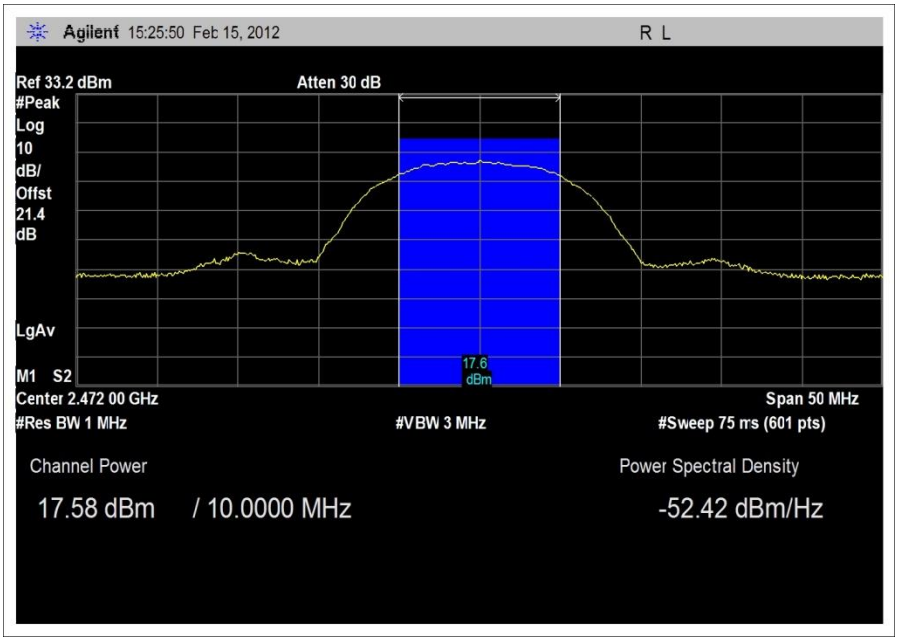
Modulation		Power (dBm)	Power (W)
802.11b: 11.0 mbps short CCK			
2412		18.65	0.073
2442		18.17	0.065
2472		17.58	0.057
802.11g: 54.0 mbps. OFDM			
2412		**19.52**	**0.089**
2442		18.91	0.077
2472		17.33	0.054
802.11n: 28.9 mbps.MCS3			
2412		19.26	0.084
2442		19.01	0.079
2472		17.26	0.053
802.11n:72.2 mbps.MCS7			
2412		16.00	0.040
2442		16.67	0.046
2472		16.14	0.041



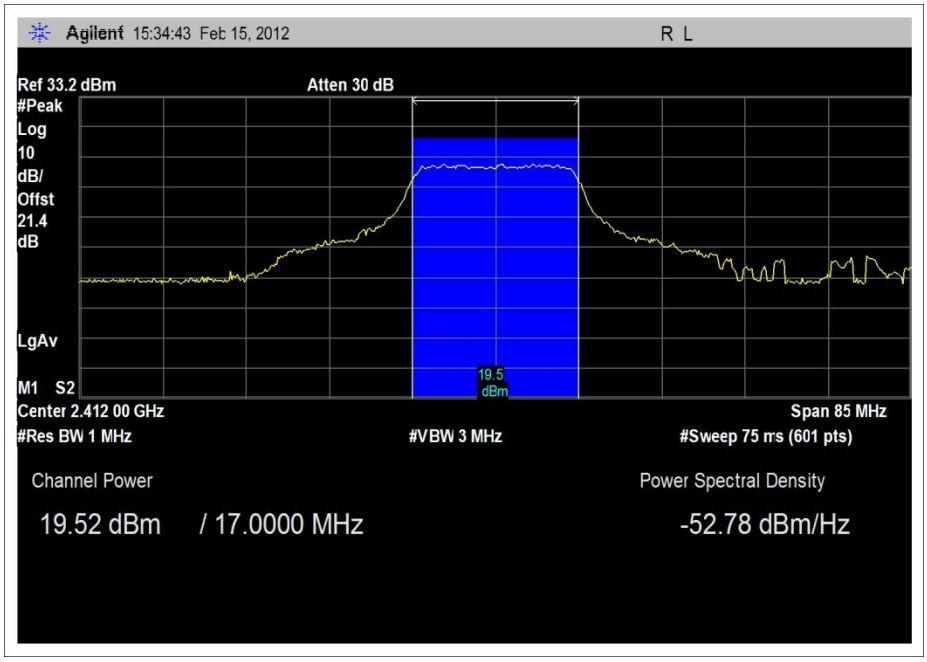
Peak Power 802.11b 2412MHz



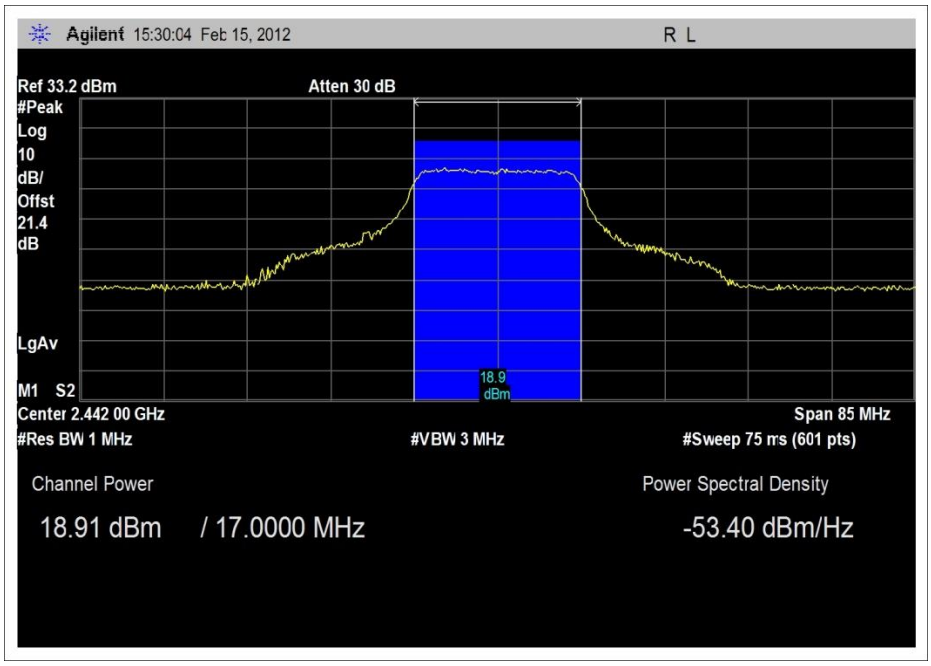
Peak Power 802.11b 2442MHz



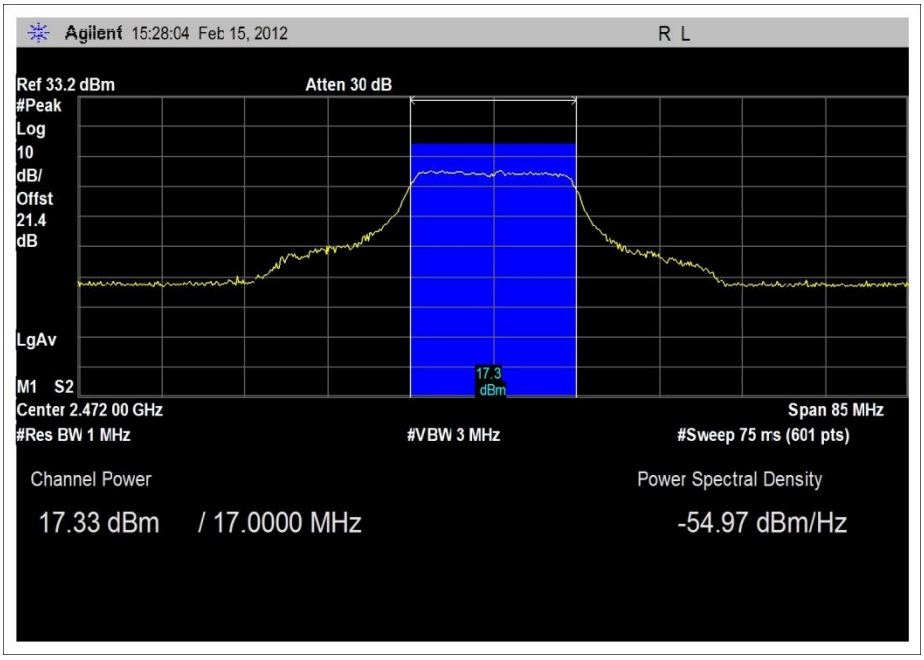
Peak Power 802.11b 2472MHz



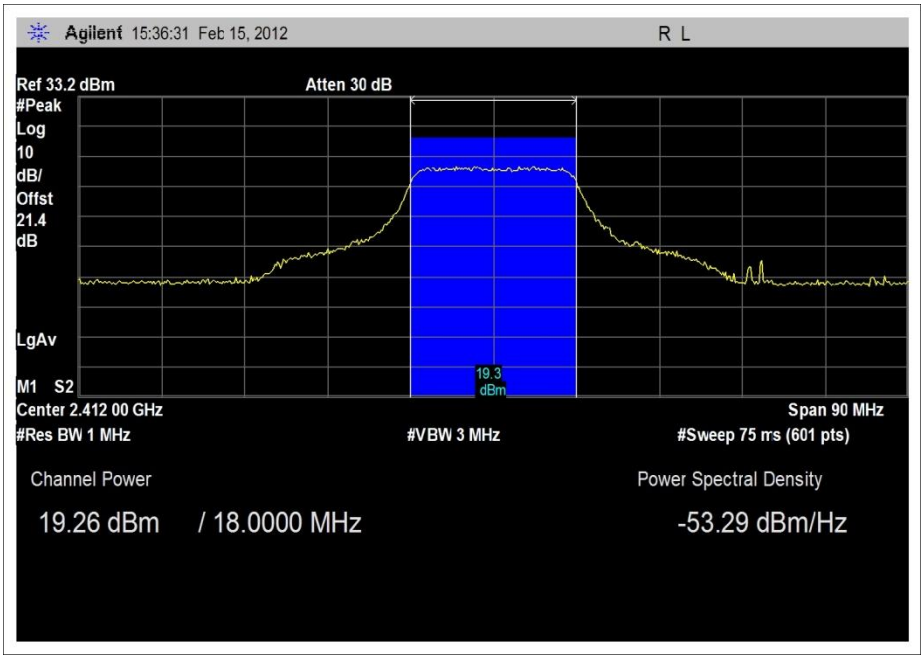
Peak Power 802.11g 2412MHz



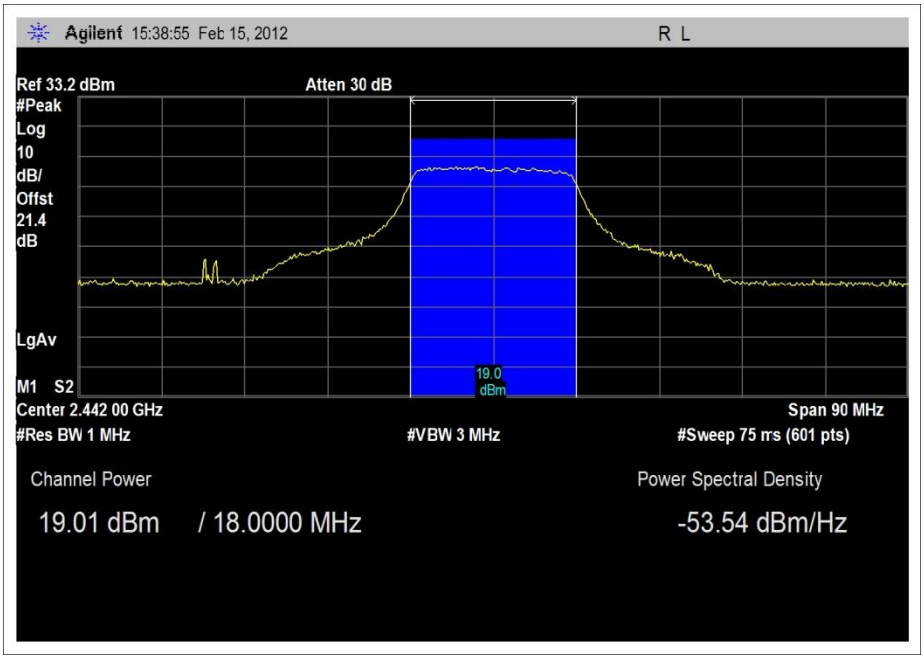
Peak Power 802.11g 2442MHz



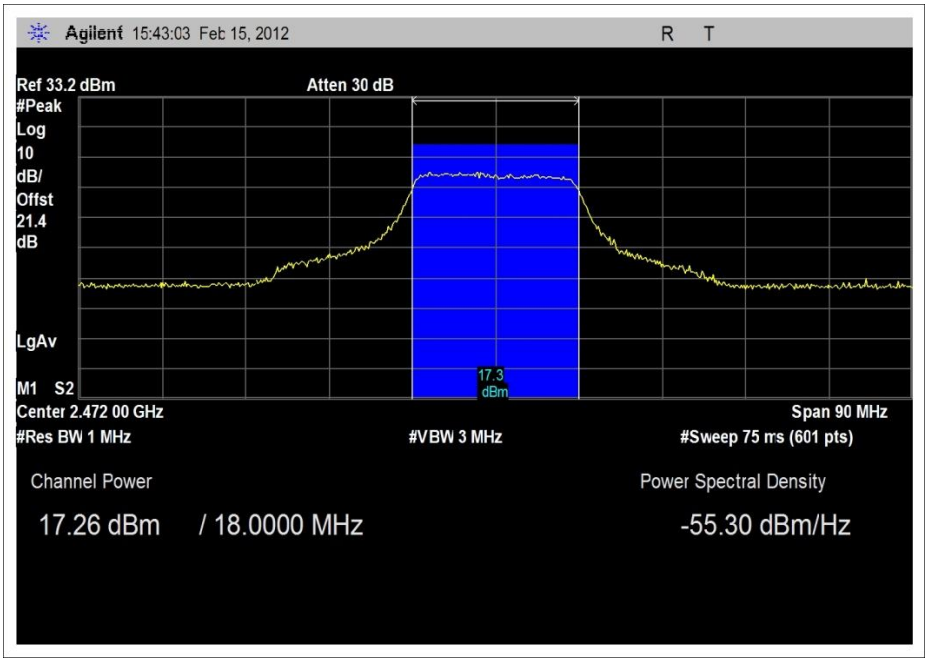
Peak Power 802.11g 2472MHz



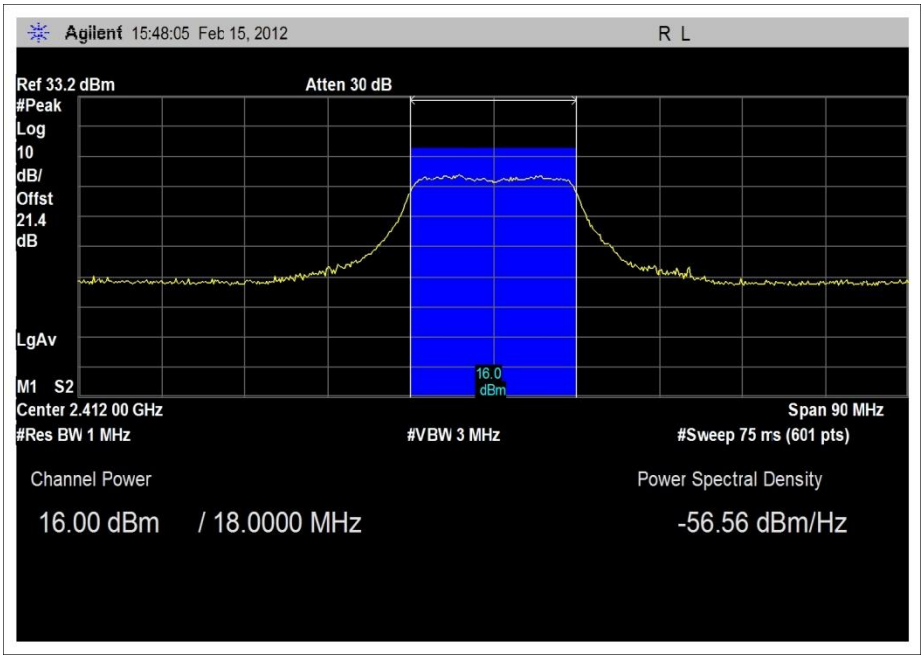
Peak Power 802.11n MCS03 2412MHz



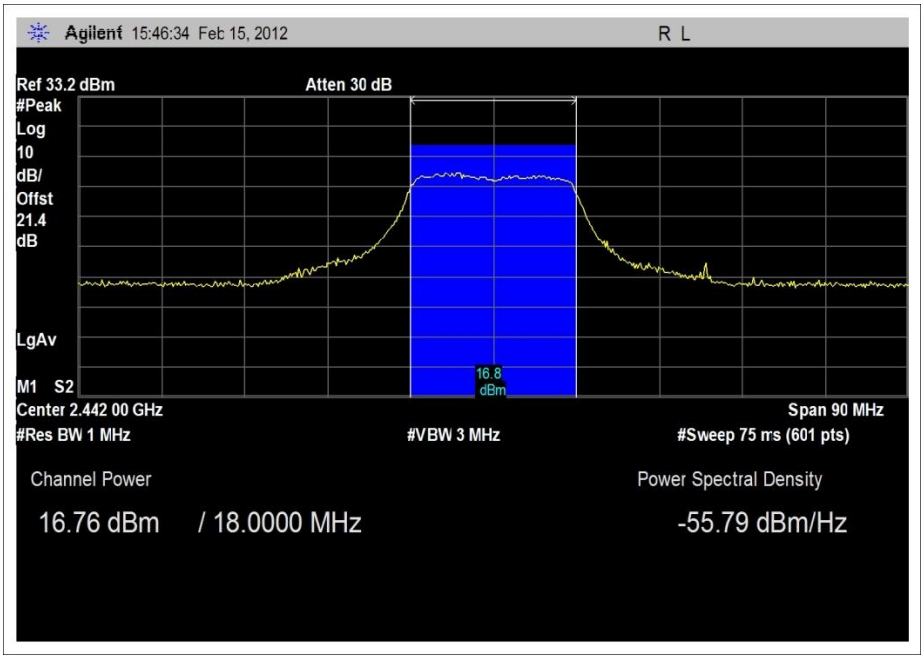
Peak Power 802.11n MCS03 2442MHz



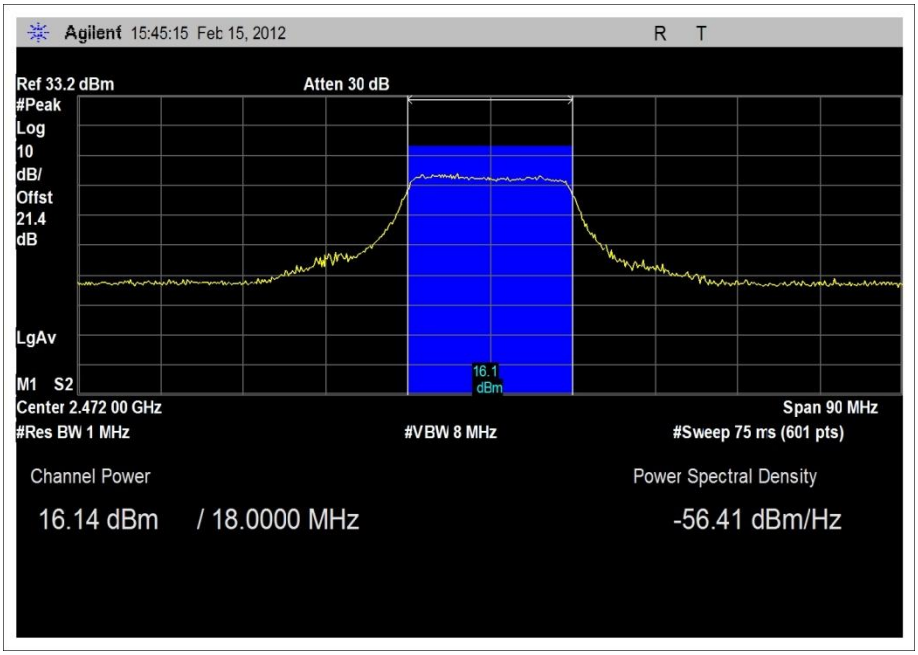
Peak Power 802.11n MCS03 2472MHz



Peak Power 802.11n MCS07 2412MHz



Peak Power 802.11n MCS07 2442MHz



Peak Power 802.11n MCS07 2472MHz

Test Setup Photos

15.247(a)(2)-6dBc Occupied Bandwidth

Test Conditions / Setup

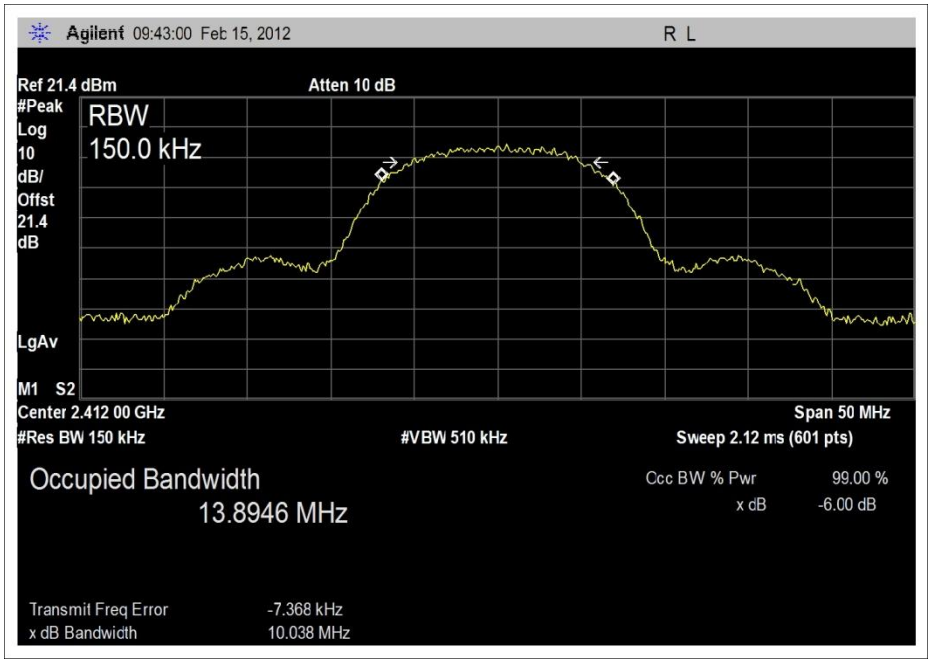
The EUT is placed on the wooden table lined with Styrofoam of 10 cm thickness. The EUT seeking modular approval is placed on an extender card installed on a support development PCB. One out of five Ethernet port and serial port of the development card is connected to remotely located support Ethernet hub and laptops. The EUT is transmitting at rated power and exercising all the intended functionalities. RF characteristic measured at the antenna port.
Antenna gain = 0 dBi
802.11n without antenna diversity.
802.11 b/g/n
Freq: 2400-2483.5MHz
802.11b: 11.0 mbps short CCK.
Freq: 2412MHz, 2442MHz, 2472MHz, Firmware power setting= 14.5dBm, 14.5dBm, 12.5dBm
802.11g: 54.0 mbps. OFDM
Freq: 2412MHz, 2442MHz, 2472MHz, Firmware power setting= 13.5dBm, 13.5dBm, 13.5dBm
802.11n: 28.9 mbps.MCS3
Freq: 2412MHz, 2442MHz, 2472MHz, Firmware power setting= 13.5dBm , 13.5dBm, 9.5dBm
802.11n: 72.2 mbps.MCS7
Freq: 2412MHz, 2442MHz, 2472MHz, Firmware power setting= 9.5dBm, 9.5dBm, 9.5dBm
Test method in accordance with FCC document: 558074 D01 DTS Meas Guidance V01
Sec 5.1.1, EBW measurement procedure
Frequency range of measurement = Fundamental
Test environment conditions: 21.1°C, 36% relative humidity, 100kPa
15.31(e) compliance: the supply voltage was varied between 85% and 115% of the nominal rated supply voltage, no change in the Fundamental signal level was observed.

Engineer Name: E. Wong

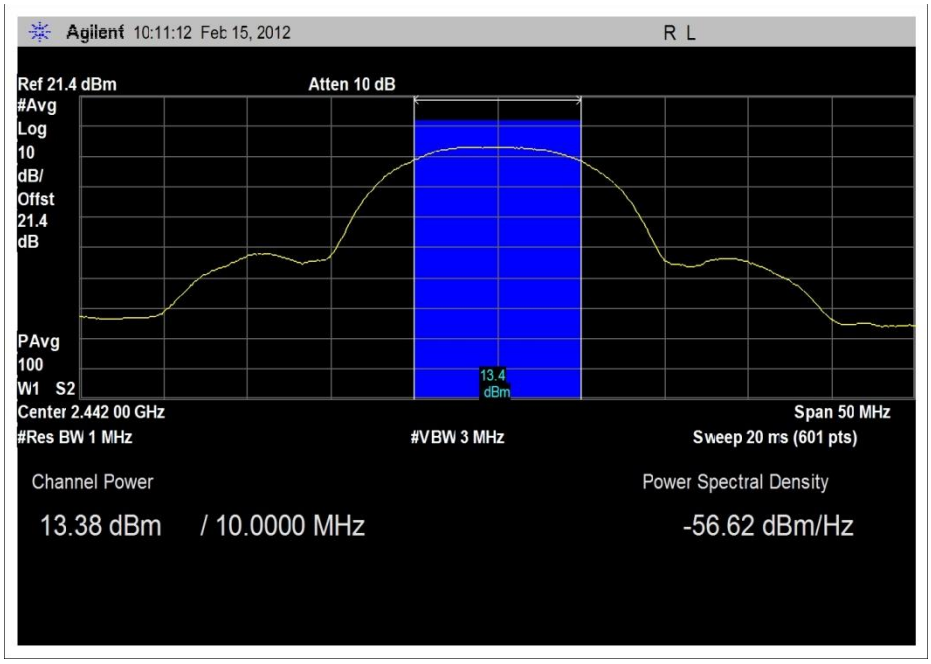
Test Equipment

Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
AN02672	Spectrum Analyzer	E4446A	Agilent	8/9/2010	8/9/2012
ANP06153	Cable	16301	AstroLab	10/27/2011	10/27/2013

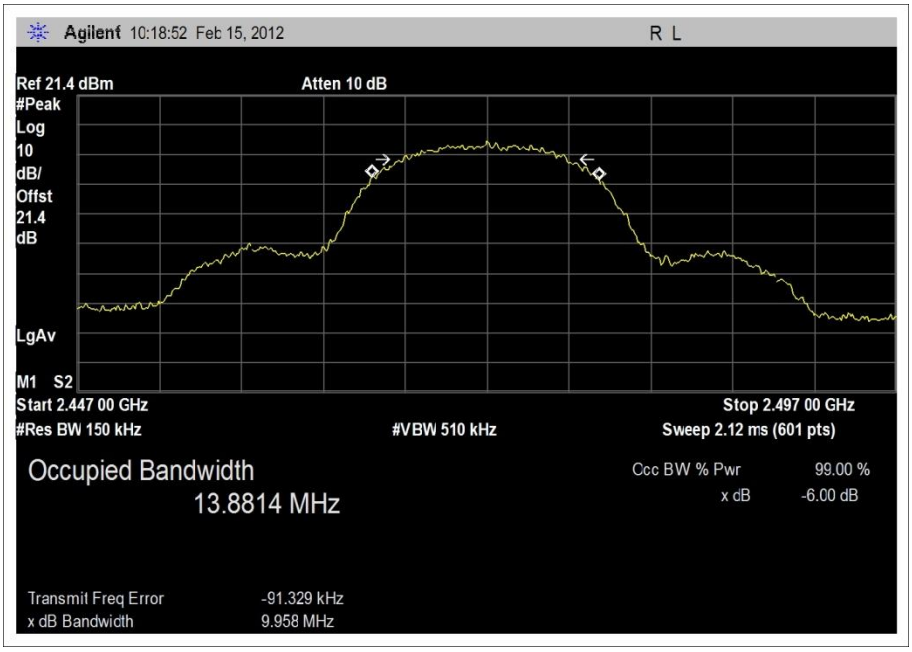
Test Plots



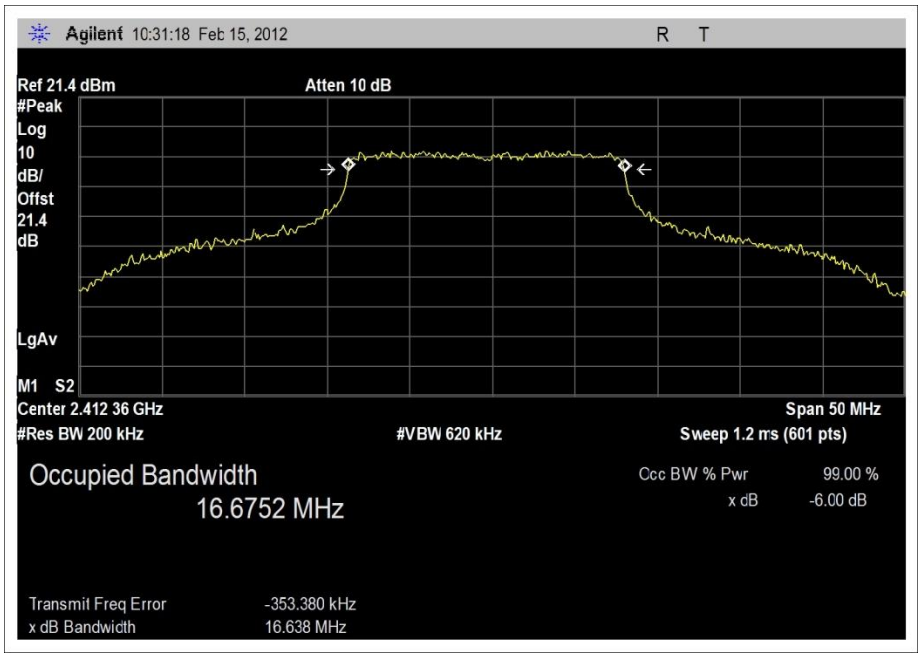
-6dB BW 802.11b 2412MHz



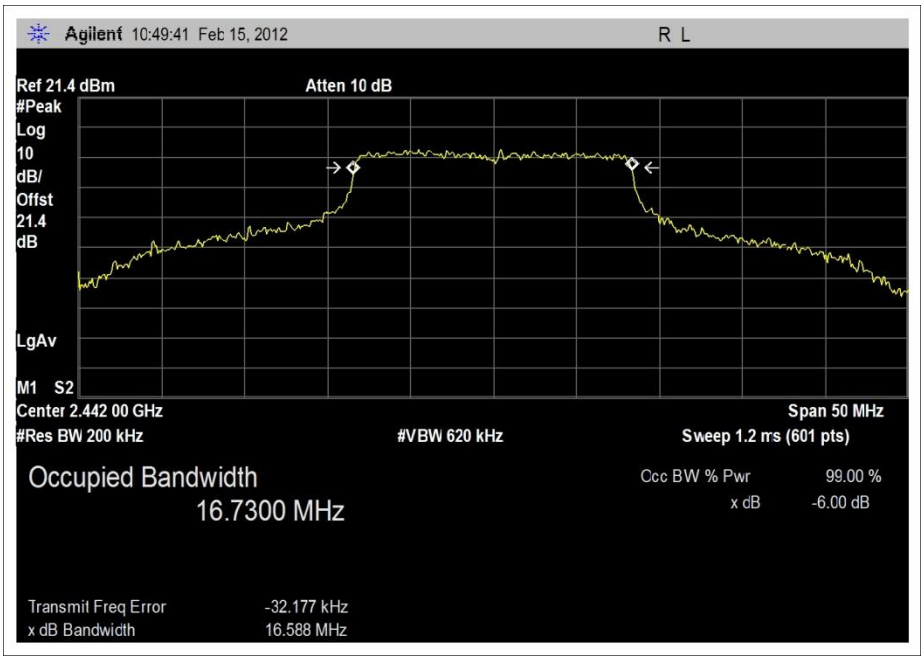
-6dB BW 802.11b 2442MHz



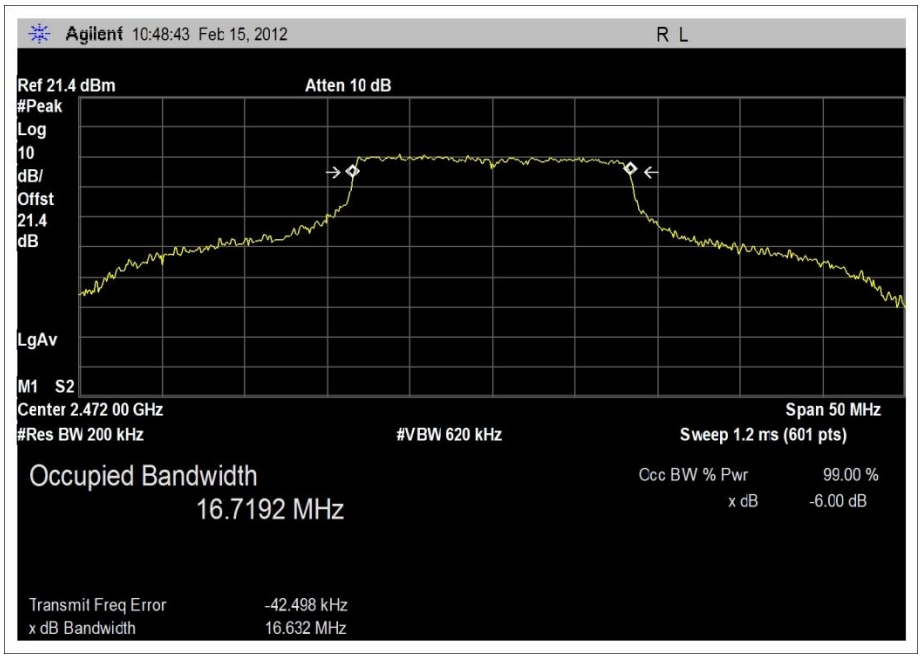
-6dB BW 802.11b 2472MHz



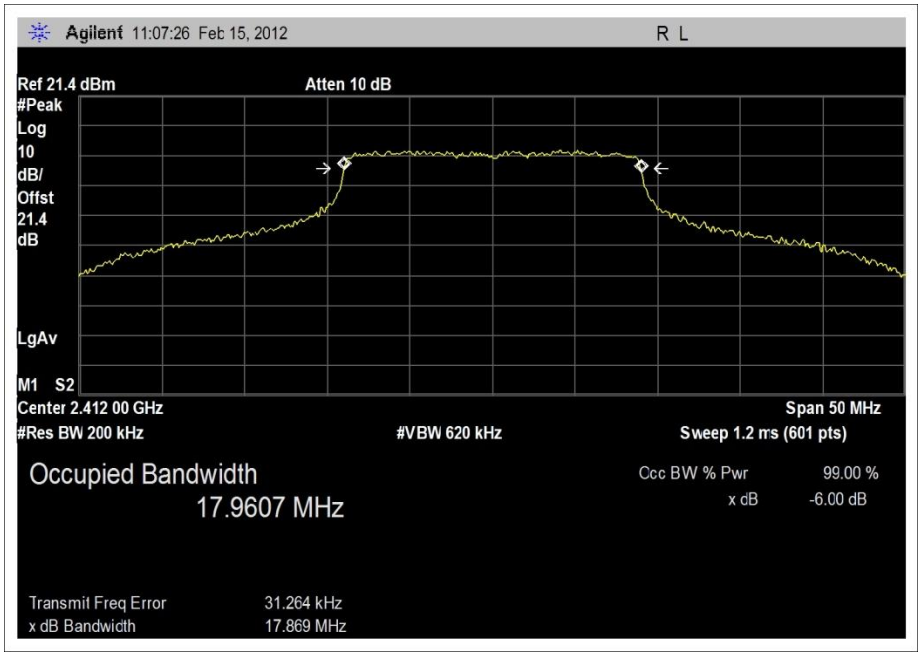
-6dB BW 802.11g 2412MHz



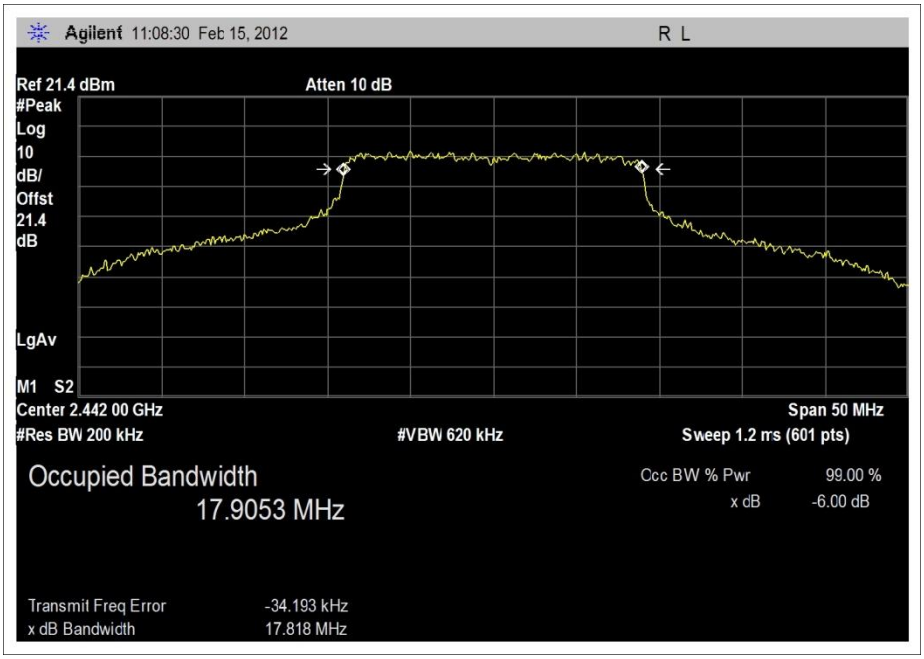
-6dB BW 802.11g 2442MHz



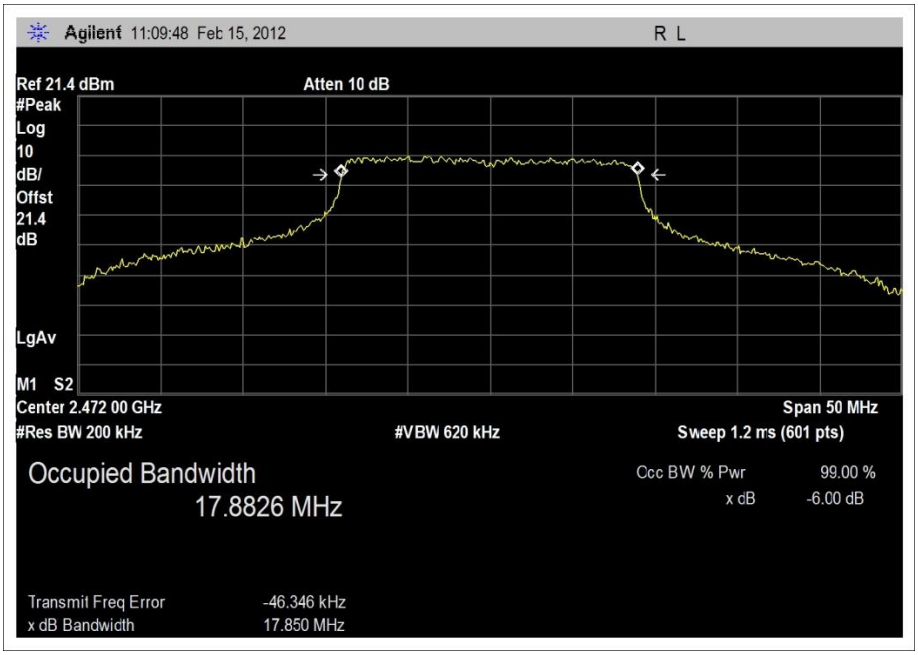
-6dB BW 802.11g 2472MHz



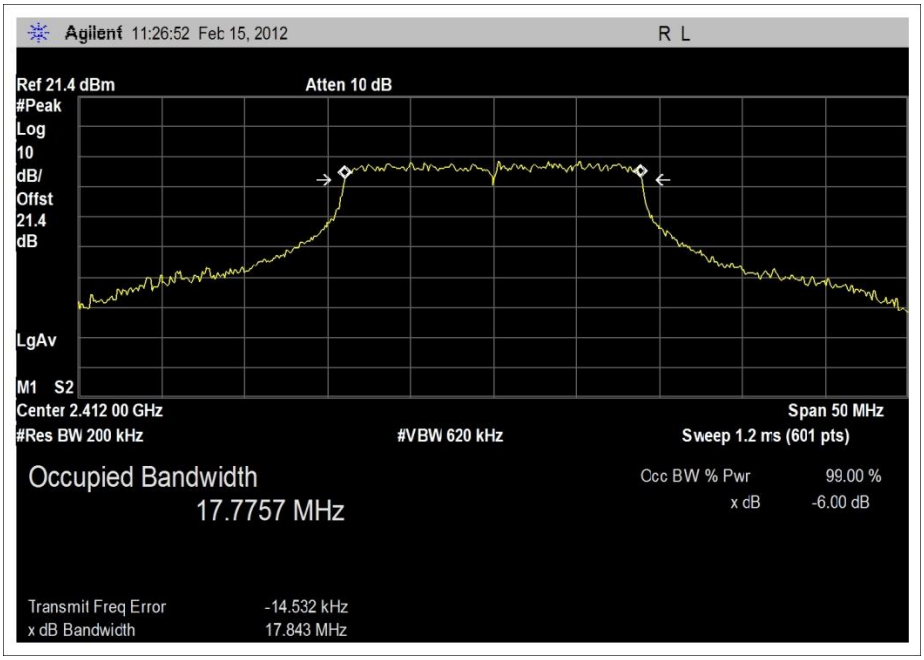
-6dB BW 802.11n MCS03 2412MHz



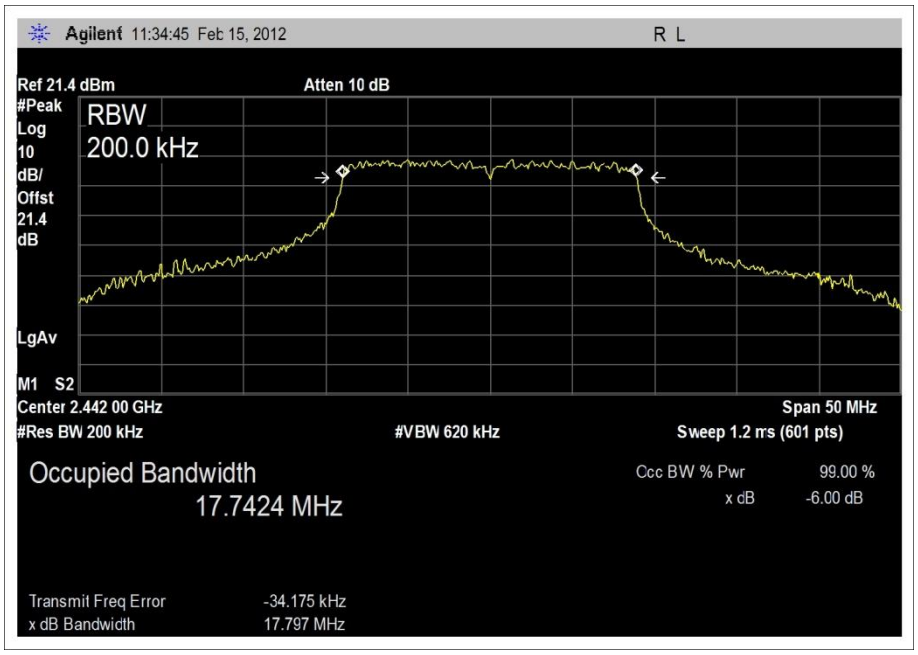
-6dB BW 802.11n MCS03 2442MHz



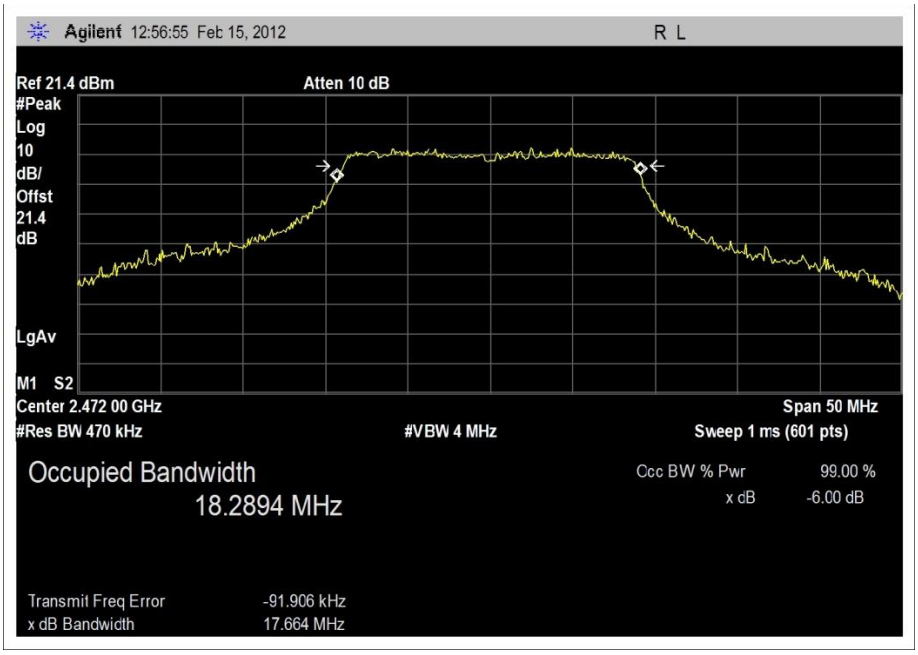
-6dB BW 802.11n MCS03 2472MHz



-6dB BW 802.11n MCS07 2412MHz



-6dB BW 802.11n MCS07 2442MHz



-6dB BW 802.11n MCS07 2472MHz

Test Setup Photos