



ADDENDUM TO SILEX TECHNOLOGY AMERICA, INC. TEST REPORT FC08-099

FOR THE

SERIAL DEVICE SERVER, SX-510

FCC PART 15 SUBPART C SECTIONS 15.207, 15.209 AND 15.247

TESTING

DATE OF ISSUE: JANUARY 7, 2009

PREPARED FOR:

PREPARED BY:

Silex Technology America, Inc. 15661 Red Hill Ave., Suite 120 Tustin, CA 92780

Mary Ellen Clayton CKC Laboratories, Inc. 5046 Sierra Pines Drive Mariposa, CA 95338

P.O. No.: 1424 W.O. No.: 88495 Date of test: September 23 - October 23, 2008

Report No.: FC08-099A

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ADMINISTRATIVE INFORMATION

DATE OF TEST: September 23 - October **DATE OF RECEIPT:** September 23, 2008

23, 2008

REPRESENTATIVE: Ron Tozaki

MANUFACTURER:

Silex Technology America, Inc. 15661 Red Hill Ave., Suite 120 Tustin, CA 92780

TEST METHOD: ANSI C63.4 (2003)

TEST LOCATION:

CKC Laboratories, Inc. 110 Olinda Place Brea, CA 92823

PURPOSE OF TEST:

Original Report: To perform the testing of the Serial Device Server, SX-510 with the requirements for FCC Part 15 Subpart C Sections 15.207, 15.209 and 15.247 devices. Addendum A: To correct the voltage variations information on page 5 and the data sheet on page 23 with no new testing.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:

Joyce Walker, Quality Assurance Administrative Manager

TEST PERSONNEL:

Septimiu Apahidean, EMC Engineer

Eddie Wong, Senior EMC Engineer



SUMMARY OF RESULTS

Test	Specification	Results
		_
Conducted Emissions	FCC 15.205	Pass
Conducted Emissions	FCC 15.207	Pass
Radiated Emissions	FCC 15.209	Pass
6 dB Bandwidth	FCC 15.247(a)(2)	Pass
RF Power Output	FCC 15.247(b)(3)	Pass
Antenna Conducted Spurious Emissions	FCC 15.247(d)	Pass
OATS Radiated Spurious Emissions	FCC 15.247(d)	Pass
Peak Power Spectral Density	FCC 15.247(e)	Pass
Bandedge	ITU-R 55/1	Pass
Site File No.	FCC Site No. 90473 Industry of Canada File No. IC 3172-A	

CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.

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FCC 15.31(e) Voltage Variations

Nominal voltage is 120 VAC. When the voltage was set at 102 VAC, no change in the transmitter characteristics was detected. When the voltage wasset at 138VAC, no change in the transmitter characteristics was detected.

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.207 Conducted Emissions: 150 kHz – 30 MHz 15.209 Radiated Emissions: 9 kHz – 25 GHz 15.247 Radiated Emissions: 30 MHz – 25 GHz

FCC 15.203 Antenna Requirements

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

EUT Operating Frequency

The EUT was operating at 2412 MHz - 2462 MHz.

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EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

<u>Power Supply</u> <u>Serial Device Server</u>

Manuf: SL Power Manuf: Silex Technology America, Inc.

Model: MW170KB0503F01 Model: SX-510

Serial: NA Serial: 4

FCC ID: NA FCC ID: pending

PERIPHERAL DEVICES

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

Wireless Access Point Laptop

Manuf: 3Com Manuf: Sony Model: WL-526 Model: PCG-982L Serial: 0200/MUGADEB4723F Serial: 28323330

FCC ID: NA FCC ID: NA



REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within $+15^{\circ}$ C and $+35^{\circ}$ C. The relative humidity was between 20% and 75%.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $dB\mu V/m$, the spectrum analyzer reading in $dB\mu V$ was corrected by using the following formula. This reading was then compared to the applicable specification limit.

	SAMPLE CALCULATIONS							
	Meter reading	$(dB\mu V)$						
+	Antenna Factor	(dB)						
+	Cable Loss	(dB)						
-	Distance Correction	(dB)						
-	Preamplifier Gain	(dB)						
=	Corrected Reading	$(dB\mu V/m)$						

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TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. The following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer/receiver readings were recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

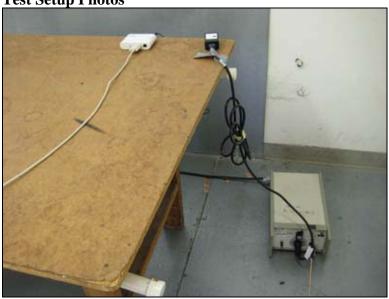
For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

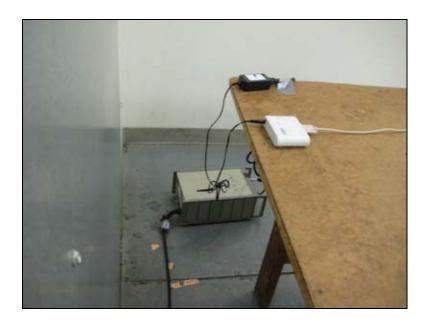
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FCC 15.207 AC CONDUCTED EMISSIONS

Test Setup Photos







Test Data Sheets

Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc. Specification: **FCC 15.207 COND [AVE]**

Work Order #: 88495 Date: 9/23/2008 Test Type: **Conducted Emissions** Time: 16:10:56 Equipment: **Wireless Device Server** Sequence#: 10 Manufacturer: Silex Technology America, Inc. Tested By: E. Wong Model:

SX-510 110V 60Hz

S/N: 4

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
LISN	1104	11/10/2006	11/10/2008	00847
6dB Attenuator	None	09/03/2008	09/03/2010	P05664
150kHz HPF	G7755	01/09/2008	01/09/2010	02610
Conducted Emission	Cable #21	05/12/2008	05/12/2010	P04358
Cable				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America,	SX-510	4
	Inc.		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3Com	WL-526	0200/MUGADEB4723F

Test Conditions / Notes:

FCC15.207. The EUT is placed on the wooden table. The device is configured in Wireless to Serial mode. The ethernet port is unpopulated to enable wireless transmission. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the ethernet port and the serial port in a loop back configuration via a wireless access point. Mode: Tx and Rx, 802.11b. 21°C, 65% relative humidity. Range of frequency measurement = 150 kHz - 30 MHz, RBW=9 kHz, VBW=9 kHz.

Transducer Legend:

T1=150kHz HPF AN02610_010910	T2=6dB Atten_P05564-090310
T3=Cable #21 -P04358- Site A 05/12/10	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

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

· CUBU.	cincin Dana.		- G		- 5			1000 2000	210011		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
1	267.807k	40.8	+0.2	+6.0	+0.0	+0.1	+0.0	47.1	51.2	-4.1	Black
2	331.802k	36.9	+0.2	+6.0	+0.0	+0.1	+0.0	43.2	49.4	-6.2	Black
3	397.250k	33.7	+0.2	+6.0	+0.0	+0.0	+0.0	39.9	47.9	-8.0	Black
	1	MHz 1 267.807k 2 331.802k			# Freq Rdng T1 T2 MHz dBμV dB dB 1 267.807k 40.8 +0.2 +6.0 2 331.802k 36.9 +0.2 +6.0	# Freq Rdng T1 T2 T3 MHz $dB\mu V$ dB dB dB 1 267.807k 40.8 +0.2 +6.0 +0.0 2 331.802k 36.9 +0.2 +6.0 +0.0	# Freq Rdng T1 T2 T3 T4 MHz $dB\mu V$ dB dB dB dB dB 1 267.807k 40.8 +0.2 +6.0 +0.0 +0.1 2 331.802k 36.9 +0.2 +6.0 +0.0 +0.1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

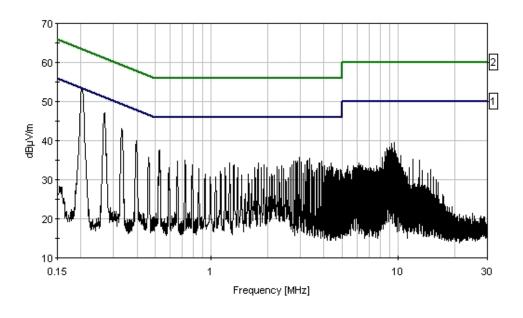
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4	526.693k	31.4	+0.2	+6.0	+0.0	+0.1	+0.0	37.7	46.0	-8.3	Black
5	2.970M	29.2	+0.2	+6.0	+0.1	+0.2	+0.0	35.7	46.0	-10.3	Black
6	9.499M	32.8	+0.2	+6.0	+0.2	+0.4	+0.0	39.6	50.0	-10.4	Black
7	3.365M	29.0	+0.2	+6.0	+0.1	+0.2	+0.0	35.5	46.0	-10.5	Black
8	9.157M	32.4	+0.2	+6.0	+0.2	+0.4	+0.0	39.2	50.0	-10.8	Black
9	462.699k	29.4	+0.2	+6.0	+0.0	+0.1	+0.0	35.7	46.6	-10.9	Black
10	725.947k	28.6	+0.3	+6.0	+0.0	+0.1	+0.0	35.0	46.0	-11.0	Black
11	3.293M	28.4	+0.2	+6.0	+0.1	+0.2	+0.0	34.9	46.0	-11.1	Black
12	659.771k	28.5	+0.2	+6.0	+0.0	+0.1	+0.0	34.8	46.0	-11.2	Black
13	2.770M	28.3	+0.2	+6.0	+0.1	+0.2	+0.0	34.8	46.0	-11.2	Black
14	3.229M	28.3	+0.2	+6.0	+0.1	+0.2	+0.0	34.8	46.0	-11.2	Black
15	198.902k Ave	30.7	+0.2	+6.0	+0.0	+0.1	+0.0	37.0	53.7	-16.7	Black
٨	203.813k	47.3	+0.2	+6.0	+0.0	+0.1	+0.0	53.6	53.5	+0.1	Black



CKC Laboratories, Inc. Date: 9/23/2008 Time: 16:10:56 Silex Technology, America, Inc. WO#: 88495 FCC 15:207 COND [AVE] Test Lead: Black 110V 60Hz Sequence#: 10





Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc. Specification: **FCC 15.207 COND [AVE]**

Work Order #: 88495 Date: 9/23/2008 Test Type: **Conducted Emissions** Time: 16:06:10 Equipment: **Wireless Device Server** Sequence#: 9

Manufacturer: Silex Technology America, Inc. Tested By: E. Wong 110V 60Hz

Model: SX-510

S/N:

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
LISN	1104	11/10/2006	11/10/2008	00847
6dB Attenuator	None	09/03/2008	09/03/2010	P05664
150kHz HPF	G7755	01/09/2008	01/09/2010	02610
Conducted Emission	Cable #21	05/12/2008	05/12/2010	P04358
Cable				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America,	SX-510	4
	Inc.		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3Com	WL-526	0200/MUGADEB4723F

Test Conditions / Notes:

FCC 15.207. The EUT is placed on the wooden table. The device is configured in Wireless to Serial mode. The ethernet port is unpopulated to enable wireless transmission. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the ethernet port and the serial port in a loop back configuration via a wireless access point. Mode: Tx and Rx, 802.11b. 21°C, 65% relative humidity. Range of frequency measurement = 150 kHz - 30 MHz, RBW=9 kHz, VBW=9 kHz.

Transducer Legend:

8	
T1=150kHz HPF AN02610_010910	T2=6dB Atten_P05564-090310
T3=Cable #21 -P04358- Site A 05/12/10	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measur	rement Data:	Re	Reading listed by margin.			Test Lead: White					
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
1	267.080k	40.7	+0.2	+6.0	+0.0	+0.1	+0.0	47.0	51.2	-4.2	White
2	332.529k	36.5	+0.2	+6.0	+0.0	+0.1	+0.0	42.8	49.4	-6.6	White
3	396.523k	33.2	+0.2	+6.0	+0.0	+0.1	+0.0	39.5	47.9	-8.4	White
4	526.693k	31.2	+0.2	+6.0	+0.0	+0.1	+0.0	37.5	46.0	-8.5	White

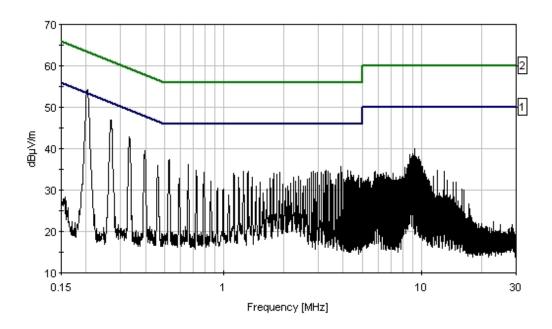
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5	658.317k	30.0	+0.2	+6.0	+0.0	+0.1	+0.0	36.3	46.0	-9.7	White
6	9.175M	33.3	+0.2	+6.0	+0.2	+0.4	+0.0	40.1	50.0	-9.9	White
7	3.888M	29.2	+0.2	+6.0	+0.1	+0.2	+0.0	35.7	46.0	-10.3	White
8	461.971k	29.6	+0.2	+6.0	+0.0	+0.1	+0.0	35.9	46.7	-10.8	White
9	4.224M	28.3	+0.2	+6.0	+0.1	+0.2	+0.0	34.8	46.0	-11.2	White
10	723.766k	28.3	+0.3	+6.0	+0.0	+0.1	+0.0	34.7	46.0	-11.3	White
11	3.293M	28.2	+0.2	+6.0	+0.1	+0.2	+0.0	34.7	46.0	-11.3	White
12	9.031M	31.9	+0.2	+6.0	+0.2	+0.4	+0.0	38.7	50.0	-11.3	White
13	4.356M	28.1	+0.2	+6.0	+0.1	+0.2	+0.0	34.6	46.0	-11.4	White
14	8.959M	31.8	+0.2	+6.0	+0.2	+0.4	+0.0	38.6	50.0	-11.4	White
15	198.852k Ave	33.6	+0.2	+6.0	+0.0	+0.2	+0.0	40.0	53.7	-13.7	White
^	203.813k	47.8	+0.2	+6.0	+0.0	+0.2	+0.0	54.2	53.5	+0.7	White



CKC Laboratories, Inc. Date: 9/23/2008 Time: 16:06:10 Silex Technology, America, Inc. WO#: 88495 FCC 15.207 COND [AVE] Test Lead: White 110V 60Hz Sequence#: 9



Sweep Data 1 - FCC 15.207 COND [AVE] 2 - FCC 15.207 COND [QP]



Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc. Specification: FCC 15.207 COND [AVE]

Work Order #: 88495 Date: 9/23/2008
Test Type: Conducted Emissions Time: 15:55:05
Equipment: Wireless Davies Server Server 7

Equipment: Wireless Device Server Sequence#: 7

Manufacturer: Silex Technology America, Inc. Tested By: E. Wong Model: SX-510 110V 60Hz

S/N: 4

Test Equipment:

z est zquipen				
Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
LISN	1104	11/10/2006	11/10/2008	00847
6dB Attenuator	None	09/03/2008	09/03/2010	P05664
150kHz HPF	G7755	01/09/2008	01/09/2010	02610
Conducted Emission	Cable #21	05/12/2008	05/12/2010	P04358
Cable				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America,	SX-510	4
	Inc.		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3Com	WL-526	0200/MUGADEB4723F

Test Conditions / Notes:

FCC 15.207. The EUT is placed on the wooden table. The device is configured in Wireless to Serial mode. The ethernet port is unpopulated to enable wireless transmission. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the ethernet port and the serial port in a loop back configuration via a wireless access point. Mode: Tx and Rx, 802.11g. 21°C, 65% relative humidity. Range of frequency measurement = 150 kHz - 30 MHz, RBW=9 kHz, VBW=9 kHz.

Transducer Legend:

T1=150kHz HPF AN02610_010910	T2=6dB Atten_P05564-090310
T3=Cable #21 -P04358- Site A 05/12/10	T4=(L1) Insertion Loss 00847 EMCO 3816/2NM

Measur	rement Data:	Re	Reading listed by margin.			Test Lead: Black					
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
1	268.535k	41.3	+0.2	+6.0	+0.0	+0.1	+0.0	47.6	51.2	-3.6	Black
2	331.802k	37.0	+0.2	+6.0	+0.0	+0.1	+0.0	43.3	49.4	-6.1	Black
3	527.420k	31.6	+0.2	+6.0	+0.0	+0.1	+0.0	37.9	46.0	-8.1	Black
4	397.250k	33.1	+0.2	+6.0	+0.0	+0.0	+0.0	39.3	47.9	-8.6	Black

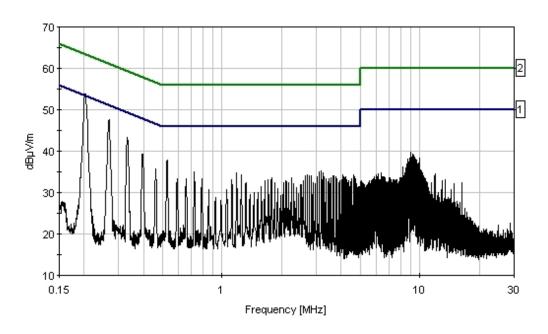
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5	8.959M	33.0	+0.2	+6.0	+0.2	+0.4	+0.0	39.8	50.0	-10.2	Black
6	3.161M	28.8	+0.2	+6.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	Black
7	9.031M	32.4	+0.2	+6.0	+0.2	+0.4	+0.0	39.2	50.0	-10.8	Black
8	9.157M	32.4	+0.2	+6.0	+0.2	+0.4	+0.0	39.2	50.0	-10.8	Black
9	3.097M	28.6	+0.2	+6.0	+0.1	+0.2	+0.0	35.1	46.0	-10.9	Black
10	9.283M	32.2	+0.2	+6.0	+0.2	+0.4	+0.0	39.0	50.0	-11.0	Black
11	460.517k	29.3	+0.2	+6.0	+0.0	+0.1	+0.0	35.6	46.7	-11.1	Black
12	724.493k	28.5	+0.3	+6.0	+0.0	+0.1	+0.0	34.9	46.0	-11.1	Black
13	3.225M	28.3	+0.2	+6.0	+0.1	+0.2	+0.0	34.8	46.0	-11.2	Black
14	9.220M	32.0	+0.2	+6.0	+0.2	+0.4	+0.0	38.8	50.0	-11.2	Black
15	198.245k Ave	31.1	+0.2	+6.0	+0.0	+0.1	+0.0	37.4	53.7	-16.3	Black
^	203.086k	47.6	+0.2	+6.0	+0.0	+0.1	+0.0	53.9	53.5	+0.4	Black



CKC Laboratories, Inc. Date: 9/23/2008 Time: 15:55:05 Silex Technology, America, Inc. WO#: 88495 FCC 15:207 COND [AVE] Test Lead: Black 110V 60Hz Sequence#: 7



Sweep Data 1 - FCC 15.207 COND [AVE] 2 - FCC 15.207 COND [QP]



Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc. Specification: FCC 15.207 COND [AVE]

Work Order #: 88495 Date: 9/23/2008
Test Type: Conducted Emissions Time: 15:58:33
Equipment: Wireless Device Server Sequence#: 8

Manufacturer: Silex Technology America, Inc. Tested By: E. Wong Model: SX-510 110V 60Hz

S/N: 4

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
LISN	1104	11/10/2006	11/10/2008	00847
6dB Attenuator	None	09/03/2008	09/03/2010	P05664
150kHz HPF	G7755	01/09/2008	01/09/2010	02610
Conducted Emission	Cable #21	05/12/2008	05/12/2010	P04358
Cable				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America,	SX-510	4
	Inc.		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3Com	WL-526	0200/MUGADEB4723F

Test Conditions / Notes:

FCC 15.207. The EUT is placed on the wooden table. The device is configured in Wireless to Serial mode. The ethernet port is unpopulated to enable wireless transmission. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the ethernet port and the serial port in a loop back configuration via a wireless access point. Mode: Tx and Rx, 802.11g. 21°C, 65% relative humidity. Range of frequency measurement = 150 kHz - 30 MHz, RBW=9 kHz, VBW=9 kHz.

Transducer Legend:

8	
T1=150kHz HPF AN02610_010910	T2=6dB Atten_P05564-090310
T3=Cable #21 -P04358- Site A 05/12/10	T4=(L2) Insertion Loss 00847 EMCO 3816/2NM

Measur	ement Data:	Re	eading list	ted by ma	ırgin.	Test Lead: White					
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
1	267.079k	40.8	+0.2	+6.0	+0.0	+0.1	+0.0	47.1	51.2	-4.1	White
2	331.801k	36.7	+0.2	+6.0	+0.0	+0.1	+0.0	43.0	49.4	-6.4	White
3	396.522k	33.1	+0.2	+6.0	+0.0	+0.1	+0.0	39.4	47.9	-8.5	White
4	526.692k	30.9	+0.2	+6.0	+0.0	+0.1	+0.0	37.2	46.0	-8.8	White

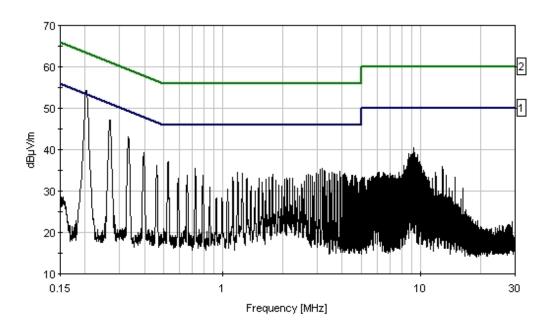
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5	9.157M	33.6	+0.2	+6.0	+0.2	+0.4	+0.0	40.4	50.0	-9.6	White
6	461.243k	29.9	+0.2	+6.0	+0.0	+0.1	+0.0	36.2	46.7	-10.5	White
7	3.161M	29.0	+0.2	+6.0	+0.1	+0.2	+0.0	35.5	46.0	-10.5	White
8	723.765k	29.0	+0.3	+6.0	+0.0	+0.1	+0.0	35.4	46.0	-10.6	White
9	3.097M	28.8	+0.2	+6.0	+0.1	+0.2	+0.0	35.3	46.0	-10.7	White
10	9.355M	32.4	+0.2	+6.0	+0.2	+0.4	+0.0	39.2	50.0	-10.8	White
11	3.229M	28.6	+0.2	+6.0	+0.1	+0.2	+0.0	35.1	46.0	-10.9	White
12	8.697M	32.2	+0.2	+6.0	+0.2	+0.4	+0.0	39.0	50.0	-11.0	White
13	9.085M	32.2	+0.2	+6.0	+0.2	+0.4	+0.0	39.0	50.0	-11.0	White
14	9.220M	32.0	+0.2	+6.0	+0.2	+0.4	+0.0	38.8	50.0	-11.2	White
15	198.574k Ave	33.8	+0.2	+6.0	+0.0	+0.2	+0.0	40.2	53.7	-13.5	White
٨	203.085k	48.0	+0.2	+6.0	+0.0	+0.2	+0.0	54.4	53.5	+0.9	White



CKC Laboratories, Inc. Date: 9/23/2008 Time: 15:58:33 Silex Technology, America, Inc. WO#: 88495 FCC 15:207 COND [AVE] Test Lead: White 110V 60Hz Sequence#: 8



Sweep Data 1 - FCC 15.207 COND [AVE] 2 - FCC 15.207 COND [QP]



FCC 15.209 RADIATED EMISSIONS

Test Setup Photos







Test Data Sheets

Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc.

FCC 15.209 Specification:

Work Order #: 88495 Date: 10/6/2008 **Radiated Scan** Test Type: Time: 14:54:29 Equipment: **Wireless Device Server** Sequence#: 1

Manufacturer: Silex Technology America, Inc. Tested By: Sep Apahidean

Model: SX-510 S/N:

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
Antenna cable	Cable#17	09/22/2008	09/22/2010	P04382
Heliax Antenna Cable	P5565	09/04/2008	09/04/2010	P05565
Loop Antenna	2014	06/16/2008	06/16/2010	00314
Pre-amp	2727A05392	04/29/2008	04/29/2010	00010
Preamp to SA Cable	Cable #22	08/19/2008	08/19/2010	P05555
(3 feet)				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America, Inc.	SX-510	4
MiniPCI Wireless Board	Silex Technology America, Inc.	SX-10WAG	0080923A9E74
Antenna	Silex Technology America, Inc.	128-00193-100 Rev A	. =

Support Devices:

Support Derices.			
Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3 Com	WL-526	0200/MUGA6DEB4723F

Test Conditions / Notes:

The EUT is placed on the wooden table with Styrofoam padding of 5 cm thickness. The device is configured in Wireless to Serial mode. The wireless modem is connected to a remote support laptop via a remote support wireless router. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the unit and the serial port in a loop back configuration. Test distance correction factor used in accordance with 15.31. 21°C, 65% relative humidity. Frequency range: 9kHz - 30 MHz Bandwidth: 9kHz-150kHz = 200Hz, 150kHz-30MHz = 9kHz 802.11 B and G mode of operation LMH.

Transducer Legend:

T1=84' Heliax Cable P04382_#17	T2=Heliax Cable 54' ANP05565 090410
T3=Active loop antenna_AN00314	T4=Preamplifier ANP00010 042910
T5=Cable_P05555_SA to pre-amp	

Measu	Measurement Data:			isted by n	nargin.		Test Distance: 3 Meters				
- 11	г	D 1	TD1	TTO	TD2	TD 4	D: (C		

171	Lusur	emem Dam.	111	rading ns	ted by file	11 g 1111.	rest Bistance. 5 Meters					
	#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
				T5								
		MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
	1	13.612M	37.0	+0.4	+0.2	+9.4	-27.3	-20.0	-0.2	29.5	-29.7	Paral
				+0.1								
	2	16.900k	35.1	+0.0	+0.0	+14.3	+0.0	-40.0	9.5	43.0	-33.5	Paral
				+0.1								

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3	15.110M	29.9	+0.4 +0.1	+0.2	+9.4	-27.3	-20.0	-7.3	29.5	-36.8	Paral
4	10.922M	29.2	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-8.1	29.5	-37.6	Paral
5	4.271M	29.3	+0.2 +0.0	+0.2	+9.4	-27.3	-20.0	-8.2	29.5	-37.7	Paral
6	4.886M	25.7	+0.2 +0.0	+0.2	+9.4	-27.3	-20.0	-11.8	29.5	-41.3	Paral
7	25.150k	25.7	+0.0 +0.1	+0.0	+12.4	+0.0	-40.0	-1.8	39.6	-41.4	Paral
8	10.925M	24.2	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-13.1	29.5	-42.6	Perpe
9	8.052M	23.3	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-14.0	29.5	-43.5	Paral
10	18.438M	22.7	+0.5 +0.1	+0.3	+9.3	-27.3	-20.0	-14.4	29.5	-43.9	Paral
11	25.530M	24.0	+0.6 +0.1	+0.3	+7.9	-27.4	-20.0	-14.5	29.5	-44.0	Paral
12	425.900k	27.1	+0.1 +0.1	+0.0	+9.4	-27.0	-40.0	-30.3	15.0	-45.3	Paral
13	7.347M	19.4	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-17.9	29.5	-47.4	Paral
14	412.900k	25.2	+0.1 +0.1	+0.0	+9.5	-27.0	-40.0	-32.1	15.3	-47.4	Paral
15	1.972M	18.9	+0.1 +0.0	+0.1	+9.5	-27.2	-20.0	-18.6	29.5	-48.1	Paral
16	9.516M	18.3	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-19.0	29.5	-48.5	Paral
17	418.000k	23.9	+0.1 +0.1	+0.0	+9.5	-27.0	-40.0	-33.4	15.2	-48.6	Perpe
18	411.700k	24.0	+0.1 +0.1	+0.0	+9.5	-27.0	-40.0	-33.3	15.3	-48.6	Perpe
19	1.932M	18.1	+0.1 +0.0	+0.1	+9.5	-27.2	-20.0	-19.4	29.5	-48.9	Perpe
20	8.074M	17.8	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-19.5	29.5	-49.0	Perpe
21	4.248M	17.5	+0.2 +0.0	+0.2	+9.4	-27.3	-20.0	-20.0	29.5	-49.5	Perpe
22	7.390M	17.2	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-20.1	29.5	-49.6	Perpe
23	9.473M	17.1	+0.3 +0.1	+0.2	+9.4	-27.3	-20.0	-20.2	29.5	-49.7	Perpe
24	21.078M	16.7	+0.5 +0.1	+0.3	+9.0	-27.3	-20.0	-20.7	29.5	-50.2	Paral
25	29.376M	19.9	+0.6 +0.1	+0.4	+5.5	-27.5		-21.0	29.5	-50.5	Paral
26	183.000k	28.4	+0.0 +0.0	+0.0	+9.3	-26.0	-40.0	-28.3	22.4	-50.7	Paral
27	185.000k	26.2	+0.0 +0.0	+0.0	+9.3	-26.0	-40.0	-30.5	22.3	-52.8	Perpe



Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc.

Specification: FCC 15.209

 Work Order #:
 88495
 Date:
 10/6/2008

 Test Type:
 Radiated Scan
 Time:
 10:53:29

Equipment: Wireless Device Server Sequence#: 1

Manufacturer: Silex Technology America, Inc. Tested By: Sep Apahidean

Model: SX-510 S/N: 4

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #	
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672	
Pre-amp	2727A05392	04/29/2008	04/29/2010	00010	
Bilog Antenna	2629	01/21/2008	01/21/2010	00851	
Antenna cable	Cable#17	09/22/2008	09/22/2010	P04382	
Preamp to SA Cable (3	Cable #22	08/19/2008	08/19/2010	P05555	
feet)					
Heliax Antenna Cable	P5565	09/04/2008	09/04/2010	P05565	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America, Inc.	SX-510	4
MiniPCI Wireless Board	Silex Technology America, Inc.	SX-10WAG	0080923A9E74
Antenna	Silex Technology America, Inc.	128-00193-100 Rev A	-

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3 Com	WL-526	0200/MUGA6DEB4723F

Test Conditions / Notes:

The EUT is placed on the wooden table with Styrofoam padding of 5 cm thickness. The device is configured in Wireless to Serial mode. The wireless modem is connected to a remote support laptop via a remote support wireless router. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the unit and the serial port in a loop back configuration. 21°C, 65% relative humidity. Frequency range: 30-1000MHz. Bandwidth: 120kHz. 802.11 B and G mode of operation. L M H.

Transducer Legend:

T1=Preamplifier ANP00010 042910	T2=ANT-AN00851 BILOG
T3=84' Heliax Cable P04382_#17	T4=Cable_P05555_SA to pre-amp
T5=Heliax Cable 54' ANP05565 090410	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

measurement Data.		IX.	Reading fisted by margin.			Test Distance. 3 Weters					
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
1	666.700M	41.8	-28.1	+20.2	+2.8	+0.5	+0.0	39.1	46.0	-6.9	Horiz
			+1.9								
2	933.328M	36.8	-27.7	+23.4	+3.4	+0.7	+0.0	38.9	46.0	-7.1	Horiz
			+2.3								

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866.668M	35.0	-27.8 +2.2	+22.6	+3.2	+0.8	+0.0	36.0	46.0	-10.0	Horiz
133.356M	46.2	-27.1	+11.5	+1.2	+0.3	+0.0	32.9	43.5	-10.6	Horiz
399.991M	42.9	-27.4	+15.7	+2.1	+0.3	+0.0	35.0	46.0	-11.0	Vert
266.676M	45.6	-26.7	+12.6	+1.7	+0.4	+0.0	34.9	46.0	-11.1	Horiz
266.656M	45.6	-26.7	+12.6	+1.7	+0.4	+0.0	34.9	46.0	-11.1	Vert
133.326M	45.6	-27.1	+11.5	+1.2	+0.3	+0.0	32.3	43.5	-11.2	Vert
933.348M	32.5	-27.7	+23.4	+3.4	+0.7	+0.0	34.6	46.0	-11.4	Vert
833.338M	33.9	-27.8	+22.3	+3.2	+0.8	+0.0	34.5	46.0	-11.5	Horiz
799.994M	34.1	-27.9	+21.9	+3.1	+0.9	+0.0	34.2	46.0	-11.8	Horiz
399.998M	40.9	-27.4	+15.7	+2.1	+0.3	+0.0	33.0	46.0	-13.0	Horiz
533.380M	37.3	-28.1	+18.6	+2.5	+0.3	+0.0	32.3	46.0	-13.7	Horiz
833.353M	31.6	-27.8	+22.3	+3.2	+0.8	+0.0	32.2	46.0	-13.8	Vert
499.948M	36.6	-28.0	+18.0	+2.4	+0.4	+0.0	31.0	46.0	-15.0	Vert
533.320M	35.4	-28.1	+18.6	+2.5	+0.3	+0.0	30.4	46.0	-15.6	Vert
333.341M	39.4	-26.9 +1.3	+14.1	+1.9	+0.4	+0.0	30.2	46.0	-15.8	Vert
900.019M	28.2	-27.8 +2.3	+23.0	+3.3	+0.9	+0.0	29.9	46.0	-16.1	Vert
999.994M	34.5	-27.5 +2.4	+24.3	+3.5	+0.7	+0.0	37.9	54.0	-16.1	Horiz
900.054M	28.2	-27.8 +2.3	+23.0	+3.3	+0.9	+0.0	29.9	46.0	-16.1	Horiz
333.340M	38.8	-26.9 +1.3	+14.1	+1.9	+0.4	+0.0	29.6	46.0	-16.4	Vert
166.681M	41.4	-26.9 +0.9	+9.8	+1.4	+0.3	+0.0	26.9	43.5	-16.6	Vert
299.998M	38.4	-26.6 +1.3	+13.1	+1.8	+0.3	+0.0	28.3	46.0	-17.7	Horiz
499.998M	33.9	-28.0 +1.6	+18.0	+2.4	+0.4	+0.0	28.3	46.0	-17.7	Horiz
333.336M	37.4	-26.9 +1.3	+14.1	+1.9	+0.4	+0.0	28.2	46.0	-17.8	Horiz
299.983M	37.6	-26.6 +1.3	+13.1	+1.8	+0.3	+0.0	27.5	46.0	-18.5	Vert
	133.356M 399.991M 266.676M 266.656M 133.326M 933.348M 833.338M 799.994M 339.998M 533.380M 833.353M 499.948M 533.320M 333.341M 900.019M 909.994M 333.340M 166.681M 299.998M 499.998M	133.356M 46.2 399.991M 42.9 266.676M 45.6 266.656M 45.6 133.326M 45.6 933.348M 32.5 833.338M 33.9 799.994M 34.1 399.998M 40.9 533.380M 37.3 833.353M 31.6 499.948M 36.6 533.320M 35.4 333.341M 39.4 900.019M 28.2 999.994M 34.5 900.054M 28.2 333.340M 38.8 166.681M 41.4 299.998M 38.4 499.998M 33.9 333.336M 37.4	+2.2	+2.2	+2.2	+2.2	133.356M	+2.2	133,356M	133,356M



27	166.686M	38.9	-26.9	+9.8	+1.4	+0.3	+0.0	24.4	43.5	-19.1	Horiz
			+0.9								
28	366.670M	32.1	-27.1	+14.9	+2.0	+0.4	+0.0	23.6	46.0	-22.4	Vert
			+1.3								
29	320.024M	33.1	-26.8	+13.7	+1.9	+0.3	+0.0	23.5	46.0	-22.5	Horiz
			+1.3								
30	340.024M	32.0	-26.9	+14.2	+2.0	+0.4	+0.0	23.0	46.0	-23.0	Horiz
			+1.3								
31	966.658M	27.8	-27.6	+23.9	+3.4	+0.6	+0.0	30.4	54.0	-23.6	Horiz
			+2.3								
32	966.728M	27.5	-27.6	+23.9	+3.4	+0.6	+0.0	30.1	54.0	-23.9	Vert
			+2.3								
33	74.965M	33.5	-27.2	+6.9	+0.9	+0.2	+0.0	14.9	40.0	-25.1	Horiz
			+0.6								



Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc.

Specification: FCC 15.209

Work Order #: 88495 Date: 10/6/2008
Test Type: Radiated Scan Time: 13:47:53
Equipment: Wireless Device Server Sequence#: 1

Manufacturer: Silex Technology America, Inc. Tested By: Sep Apahidean

Model: SX-510 S/N: 4

Test Equipment:

I cot Equipment					
Function	S/N	Calibration Date	Cal Due Date	Asset #	
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672	
Antenna cable	Cable#17	09/22/2008	09/22/2010	P04382	
Heliax Antenna Cable	P5565	09/04/2008	09/04/2010	P05565	
Microwave Pre-amp	3123A00282	06/05/2007	06/05/2009	00787	
Horn Antenna 1-18GHz	9603-4683	06/06/2008	06/06/2010	01646	
2'-40GHz cable	NA	09/18/2007	09/18/2009	P02947	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America, Inc.	SX-510	4
MiniPCI Wireless Board	Silex Technology America, Inc.	SX-10WAG	0080923A9E74
Antenna	Silex Technology America, Inc.	128-00193-100 Rev A	-

Support Devices:

Support Devices.			_
Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3 Com	WL-526	0200/MUGA6DEB4723F

Test Conditions / Notes:

The EUT is placed on the wooden table with Styrofoam padding of 5 cm thickness. The device is configured in Wireless to Serial mode. The wireless modem is connected to a remote support laptop via a remote support wireless router. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the unit and the serial port in a loop back configuration. 21°C, 65% relative humidity. Frequency range: 1-25GHz. Bandwidth: 1MHz 802.11 B and G mode of operation. L M H.

Transducer Legend:

T1=84' Heliax Cable P04382_#17	T2=Heliax Cable 54' ANP05565 090410
T3=Preamplifier 83017A 00787	T4=Horn Ant AN01646 060610
T5=CAB-ANP02947 091807	

Measu	rement Data:	Re	Reading listed by margin.			Test Distance: 3 Meters					
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	dBμV/m	dBμV/m	dB	Ant
1	17583.350M	7.0	+24.4	+12.6	-37.7	+43.6	+0.0	50.9	54.0	-3.1	Vert
			+1.0								
2	4436.110M	39.3	+8.2	+5.3	-39.4	+32.5	+0.0	46.3	54.0	-7.7	Horiz
			+0.4								
3	15035.400M	12.5	+18.9	+11.7	-37.8	+39.9	+0.0	46.1	54.0	-7.9	Vert
			+0.9								

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4	12928.400M	16.9	+17.2 +0.9	+10.1	-39.0	+39.2	+0.0	45.3	54.0	-8.7	Vert
5	11507.400M	16.5	+15.8 +0.7	+9.6	-39.5	+38.8	+0.0	41.9	54.0	-12.1	Vert
6	10821.400M	17.7	+15.5 +0.7	+9.0	-39.4	+38.1	+0.0	41.6	54.0	-12.4	Vert
7	2190.785M	43.2	+5.4 +0.3	+3.6	-38.9	+27.7	+0.0	41.3	54.0	-12.7	Horiz
8	9195.350M	21.4	+0.3 +12.7 +0.7	+8.2	-39.5	+37.5	+0.0	41.0	54.0	-13.0	Vert
9	1744.985M	45.0	+4.8 +0.3	+3.1	-38.9	+26.2	+0.0	40.5	54.0	-13.5	Horiz
10	1499.250M	46.7	+0.3 +4.4 +0.2	+2.9	-38.8	+25.0	+0.0	40.4	54.0	-13.6	Horiz
11	1852.285M	44.0	+0.2 +5.0 +0.3	+3.2	-38.9	+26.7	+0.0	40.3	54.0	-13.7	Horiz
12	1000.164M	50.3	+3.5 +0.2	+2.4	-40.6	+24.2	+0.0	40.0	54.0	-14.0	Horiz
13	9645.400M	19.4	+13.0 +0.7	+8.4	-39.4	+37.9	+0.0	40.0	54.0	-14.0	Vert
14	1166.540M	47.0	+3.8 +0.2	+2.5	-39.9	+24.5	+0.0	38.1	54.0	-15.9	Horiz
15	1000.029M	48.4	+3.5 +0.2	+2.4	-40.6	+24.2	+0.0	38.1	54.0	-15.9	Vert
16	1750.010M	37.8	+4.8 +0.3	+3.1	-38.9	+26.2	+0.0	33.3	54.0	-20.7	Vert
17	1011.960M	43.4	+3.5 +0.2	+2.4	-40.5	+24.2	+0.0	33.2	54.0	-20.8	Vert
18	1253.230M	39.9	+4.0 +0.2	+2.6	-39.6	+24.6	+0.0	31.7	54.0	-22.3	Vert
19	1244.490M	39.8	+3.9 +0.2	+2.5	-39.6	+24.6	+0.0	31.4	54.0	-22.6	Vert
20	1277.630M	38.4	+4.0 +0.2	+2.6	-39.5	+24.7	+0.0	30.4	54.0	-23.6	Vert
21	1500.030M	36.2	+4.4 +0.2	+2.9	-38.8	+25.0	+0.0	29.9	54.0	-24.1	Vert
22	1422.290M	35.9	+4.2 +0.2	+2.7	-39.0	+24.9	+0.0	28.9	54.0	-25.1	Vert
23	1166.690M	36.9	+3.8 +0.2	+2.5	-39.9	+24.5	+0.0	28.0	54.0	-26.0	Vert
24	18997.350M	11.6	+0.0 +1.0	+0.0	-36.0	+0.0	+0.0	-23.4	54.0	-77.4	Vert



FCC 15.247(a)(2) 6 dB BANDWIDTH

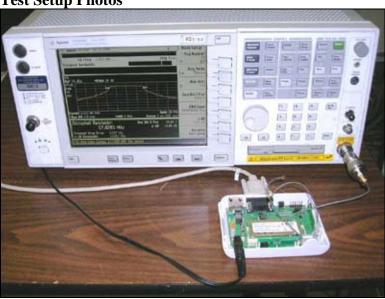
Test Equipment

Function	S/N	Calibration Date	Cal Due Date	Asset #	
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672	

Test Conditions

Unit is located next to the spectrum analyzer . The laptop is connected to the unit via RS232 cable. The laptop is used only to change the Channel settings. The spectrum analyzer is directly connected to the antenna port of the transmitter.

Test Setup Photos





Test Data

FCC 15.247(a)(2)

6 db Bandwidth (Antenna A)

IEEE 802.11b: 11Mbps

Channel	Frequency MHz	6 db Bandwidth MHz	Limit kHz
Low	2412	12.489	500
Mid	2437	12.370	500
High	2462	12.214	500

FCC 15.247(a)(2)

6 db Bandwidth (Antenna B)

IEEE 802.11b: 11Mbps

Channel	Frequency MHz	6 db Bandwidth MHz	Limit kHz
Low	2412	12.671	500
Mid	2437	12.702	500
High	2462	12.376	500



FCC 15.247(a)(2) 6 db Bandwidth (Antenna A) IEEE 802.11g: 54Mbps

Channel	Frequency MHz	6 db Bandwidth MHz	Limit kHz
Low	2412	16.646	500
Mid	2437	16.771	500
High	2462	16.613	500

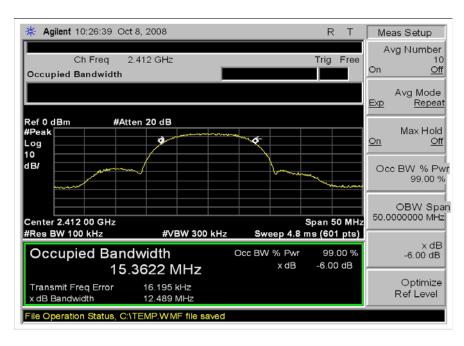
FCC 15.247(a)(2) 6 db Bandwidth (Antenna B) IEEE 802.11g: 54Mbps

Channel	Frequency MHz	6 db Bandwidth MHz	Limit kHz
Low	2412	16.617	500
Mid	2437	16.668	500
High	2462	16.584	500

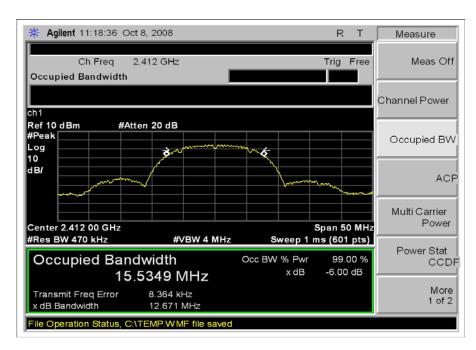


Test Plots

FCC 15.247(a)(2) 802.11b CHANNEL 1 ANTENNA A



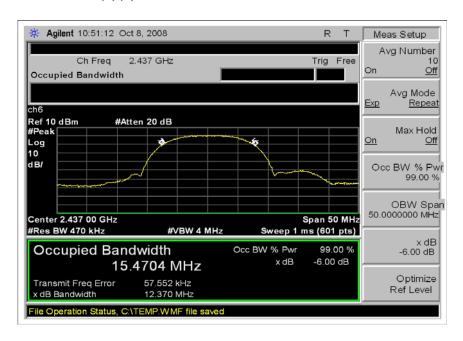
FCC 15.247(a)(2) 802.11b CHANNEL 1 ANTENNA B



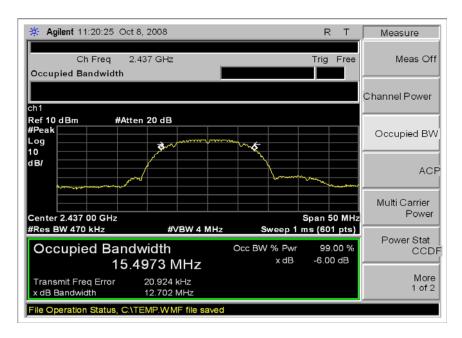
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FCC 15.247(a)(2) 802.11b CHANNEL 6 ANTENNA A



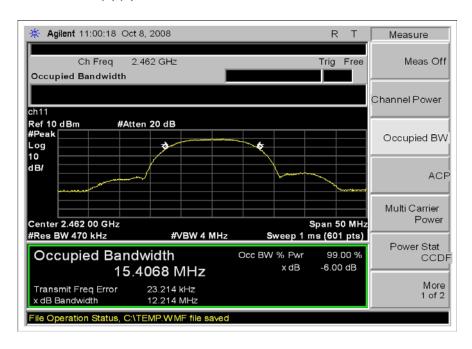
FCC 15.247(a)(2) 802.11b CHANNEL 6 ANTENNA B



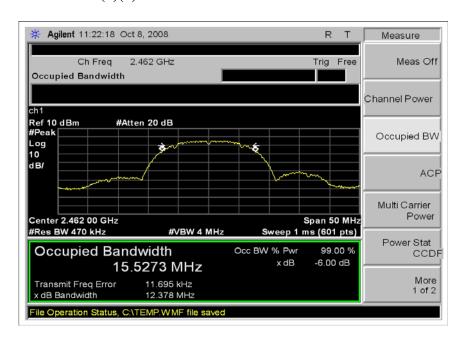
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FCC 15.247(a)(2) 802.11b CHANNEL 11 ANTENNA A



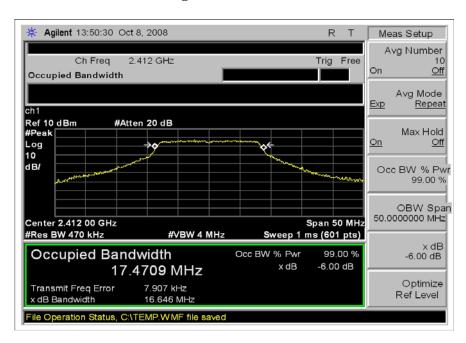
FCC 15.247(a)(2) 802.11b CHANNEL 11 ANTENNA B



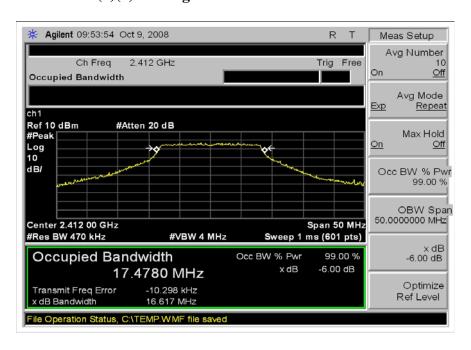
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FCC 15.247(a)(2) 802.11g CHANNEL 1 ANTENNA A



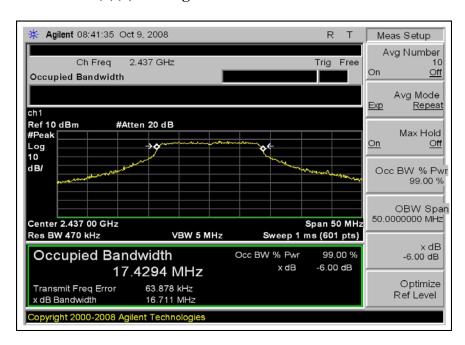
FCC 15.247(a)(2) 802.11g CHANNEL 1 ANTENNA B



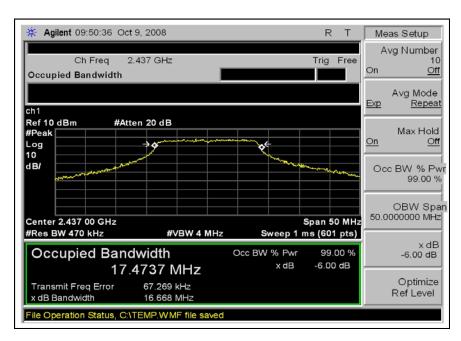
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FCC 15.247(a)(2) 802.11g CHANNEL 6 ANTENNA A



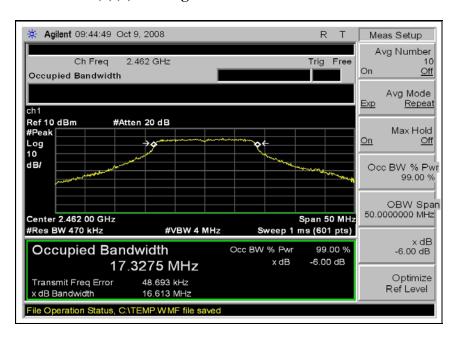
FCC 15.247(a)(2) 802.11g CHANNEL 6 ANTENNA B



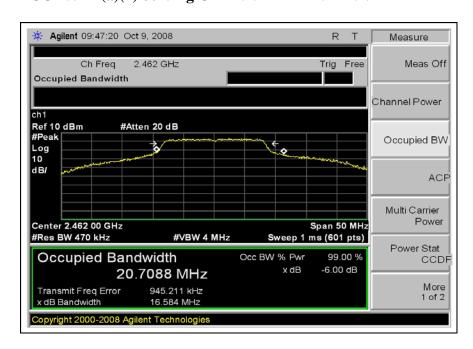
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FCC 15.247(a)(2) 802.11g CHANNEL 11 ANTENNA A



FCC 15.247(a)(2) 802.11g CHANNEL 11 ANTENNA B



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FCC 15.247(b)(3) RF POWER OUTPUT

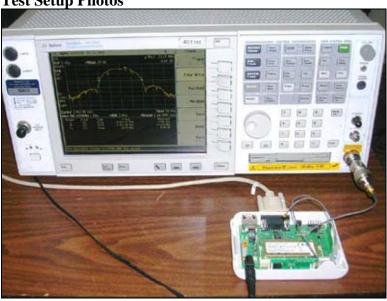
Test Equipment

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672

Test Conditions

Unit is located next to the spectrum analyzer. The laptop is connected to the unit via RS232 cable. The laptop is used only to change the Channel settings. The spectrum analyzer is directly connected to the antenna port of the transmitter.

Test Setup Photos





Test Data

FCC 15.247(b)(3)

Maximum Peak Output Power (Antenna A)

IEEE 802.11b: 11Mbps

Channel	Frequency MHz	S/A Reading dBm	Entire Emission Bandwidth (26db) MHz	26 dB EBW factor (dB)	Result dBm	Limit 1 Watt
Low	2412	-5.62	20.08	13.03 7.41		0.0055
Mid	2437	-5.66	19.92	12.99	7.33	0.0054
High	2462	-4.22	20.00	13.01	8.79	0.0076

FCC 15.247(b)(3)

Maximum Peak Output Power (Antenna B)

IEEE 802.11b: 11Mbps

Channel	Frequency MHz	S/A Reading dBm	Entire Emission Bandwidth (26db) MHz	26 dB EBW factor (dB)	Result dBm	Limit 1 Watt
Low	2412	-4.72	19.83	12.97 8.25		0.0067
Mid	2437	-5.29	19.83	12.97	7.68	0.0059
High	2462	-4.28	19.75	12.95	8.67	0.0074

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FCC 15.247(b)(3) Maximum Peak Output Power (Antenna A) IEEE 802.11g: 54Mbps

Channel	Freq. MHz	S/A Reading dBm	Entire Emission Bandwidth (26db) MHz	26 dB EBW factor (dB)	Result dBm	Limit 1 Watt
Low	2412	-0.57	27.00	14.31	13.74	0.0237
Mid	2437	0.07	26.83	14.29	14.36	0.0273
High	2462	0.57	27.08	14.33	14.89	0.0308

FCC 15.247(b)(3)
Maximum Peak Output Power (Antenna B)
IEEE 802.11g: 54Mbps

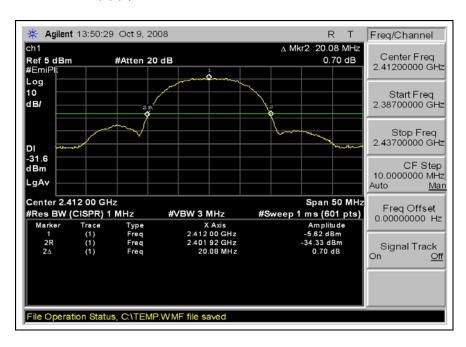
Channel	Freq. MHz	S/A Reading dBm	Entire Emission Bandwidth (26db) MHz	26 dB EBW factor (dB)	Result dBm	Limit 1 Watt
Low	2412	-0.31	25.83	14.12	13.81	0.0240
Mid	2437	-0.94	25.58	14.08	13.14	0.0206
High	2462	0.50	25.75	14.11	14.61	0.0289

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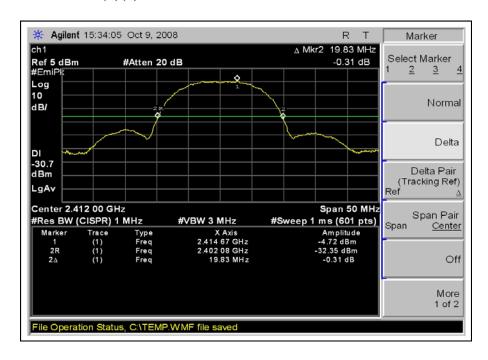


Test Plots

FCC 15.247(b)(3) 802.11b CHANNEL 1 ANTENNA A



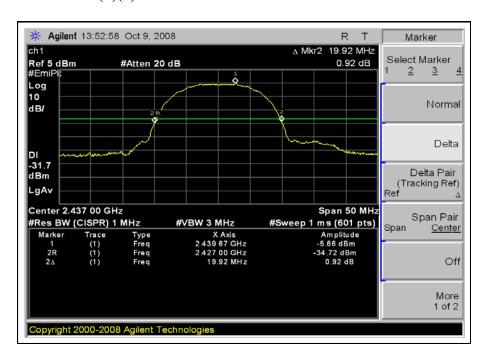
FCC 15.247(b)(3) 802.11b CHANNEL 1 ANTENNA B



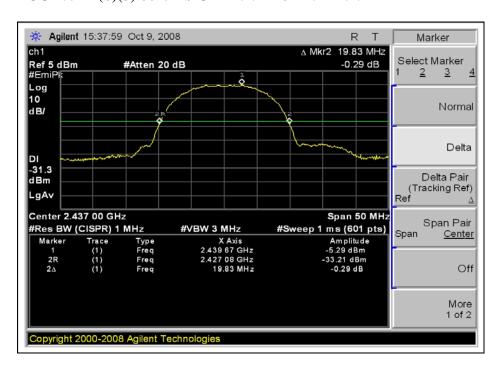
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FCC 15.247(b)(3) 802.11b CHANNEL 6 ANTENNA A



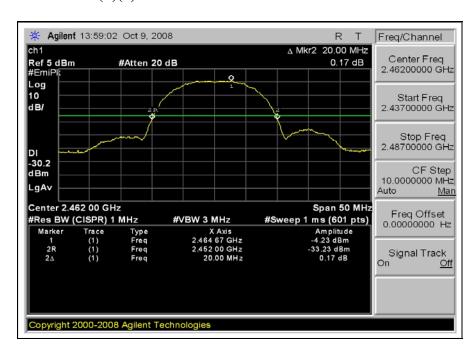
FCC 15.247(b)(3) 802.11b CHANNEL 6 ANTENNA B



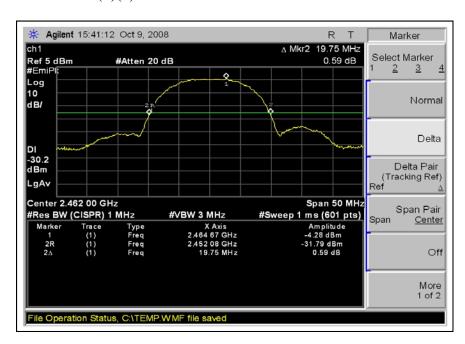
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FCC 15.247(b)(3) 802.11b CHANNEL 11 ANTENNA A



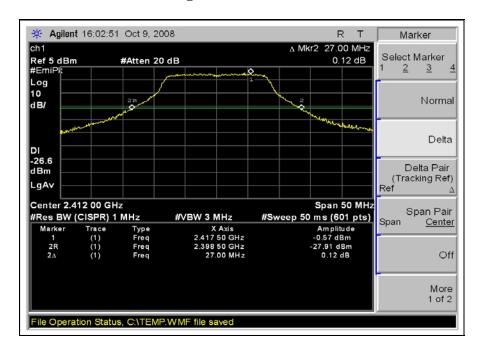
FCC 15.247(b)(3) 802.11b CHANNEL 11 ANTENNA B



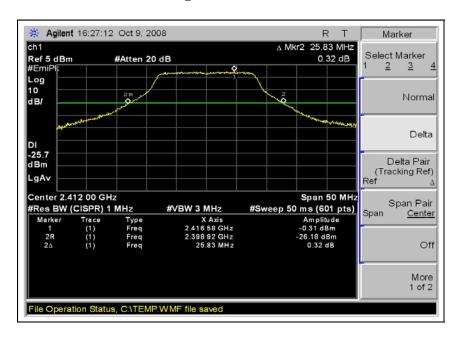
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FCC 15.247(b)(3) 802.11g CHANNEL 1 ANTENNA A

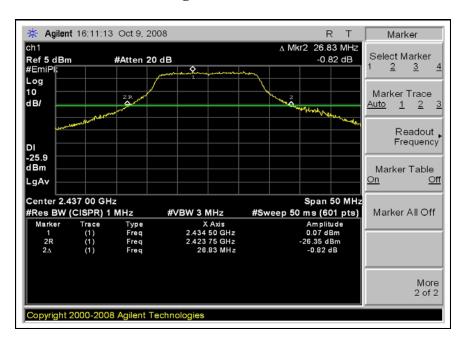


FCC 15.247(b)(3) 802.11g CHANNEL 1 ANTENNA B

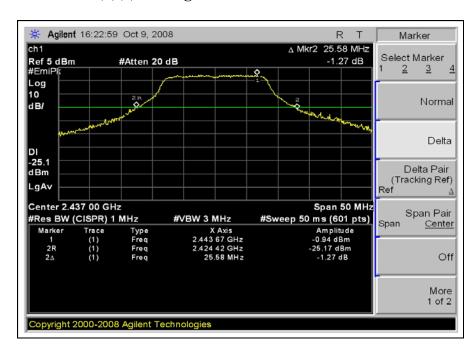




FCC 15.247(b)(3) 802.11g CHANNEL 6 ANTENNA A

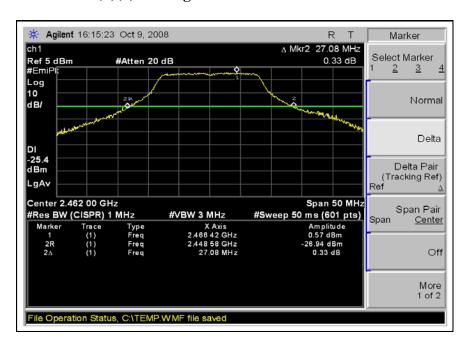


FCC 15.247(b)(3) 802.11g CHANNEL 6 ANTENNA B

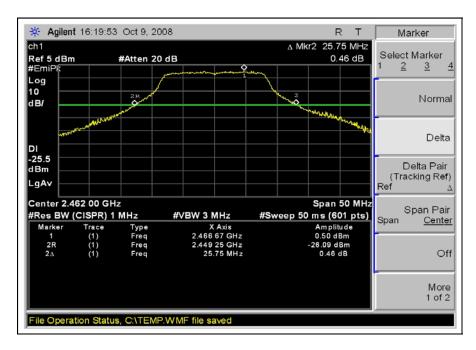




FCC 15.247(b)(3) 802.11g CHANNEL 11 ANTENNA A



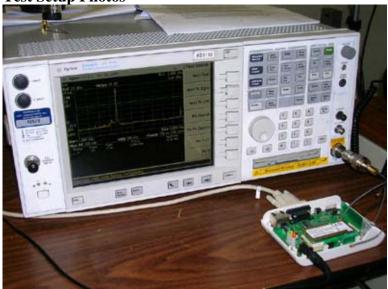
FCC 15.247(b)(3) 802.11g CHANNEL 11 ANTENNA B





FCC 15.247(d) ANTENNA CONDUCTED SPURIOUS EMISSIONS

Test Setup Photos



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Test Data Sheets

Test Location: CKC Laboratories, Inc. •110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: Silex Technology, America, Inc. Specification: FCC 15.247 (d) (FCC 15.209)

 Work Order #:
 88495
 Date: 10/6/2008

 Test Type:
 Radiated Scan
 Time: 10:53:29

Equipment: Wireless Device Server Sequence#: 1

Manufacturer: Silex Technology America, Inc. Tested By: Sep Apahidean

Model: SX-510 S/N: 4

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Spectrum Analyzer	US44300438	07/23/2008	07/23/2010	02672
Pre-amp	2727A05392	04/29/2008	04/29/2010	00010
Bilog Antenna	2629	01/21/2008	01/21/2010	00851
Antenna cable	Cable#17	09/22/2008	09/22/2010	P04382
Preamp to SA Cable (3 feet)	Cable #22	08/19/2008	08/19/2010	P05555
Heliax Antenna Cable	P5565	09/04/2008	09/04/2010	P05565

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Power Supply	SL Power	MW170KB0503F01	NA
Wireless Device Server*	Silex Technology America, Inc.	SX-510	4
MiniPCI Wireless Board	Silex Technology America, Inc.	SX-10WAG	0080923A9E74
Antenna	Silex Technology America, Inc.	128-00193-100 Rev A	-

Support Devices:

Support Bertees.			
Function	Manufacturer	Model #	S/N
Laptop	Sony	PCG-982L	28323330
Wireless Access Point	3 Com	WL-526	0200/MUGA6DEB4723F

Test Conditions / Notes:

The EUT is placed on the wooden table with Styrofoam padding of 5 cm thickness. The device is configured in Wireless to Serial mode. The wireless modem is connected to a remote support laptop via a remote support wireless router. The serial port is connected to a section of terminated null modem cable with the terminator placed remotely. The laptop is running test software to exercise the unit and the serial port in a loop back configuration. 21°C, 65% relative humidity. 30-1000MHz test range, bandwidth -120kHz. 802.11b mode of operation L M H, 802.11g mode of operation L M H.

Transducer Legend:

T1=Preamplifier ANP00010 042910	T2=ANT-AN00851 BILOG
T3=84' Heliax Cable P04382_#17	T4=Cable_P05555_SA to pre-amp
T5=Heliax Cable 54' ANP05565 090410	

Measu	rement Data:	Reading listed by margin.				Test Distance: 3 Meters					
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	•		T5						•		
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\muV/m$	dB	Ant
1	933.328M	36.8	-27.7	+23.4	+3.4	+0.7	+0.0	38.9	46.0	-7.1	Horiz
			+2.3								

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2	133.356M	49.2	-27.1 +0.8	+11.5	+1.2	+0.3	+0.0	35.9	43.5	-7.6	Horiz
3	666.700M	40.8	-28.1 +1.9	+20.2	+2.8	+0.5	+0.0	38.1	46.0	-7.9	Horiz
4	866.668M	35.0	-27.8 +2.2	+22.6	+3.2	+0.8	+0.0	36.0	46.0	-10.0	Horiz
5	399.991M	42.9	-27.4 +1.4	+15.7	+2.1	+0.3	+0.0	35.0	46.0	-11.0	Vert
6	266.676M	45.6	-26.7 +1.3	+12.6	+1.7	+0.4	+0.0	34.9	46.0	-11.1	Horiz
7	266.656M	45.6	-26.7 +1.3	+12.6	+1.7	+0.4	+0.0	34.9	46.0	-11.1	Vert
8	133.326M	45.6	-27.1 +0.8	+11.5	+1.2	+0.3	+0.0	32.3	43.5	-11.2	Vert
9	933.348M	32.5	-27.7 +2.3	+23.4	+3.4	+0.7	+0.0	34.6	46.0	-11.4	Vert
10	833.338M	33.9	-27.8 +2.1	+22.3	+3.2	+0.8	+0.0	34.5	46.0	-11.5	Horiz
11	799.994M	34.1	-27.9 +2.1	+21.9	+3.1	+0.9	+0.0	34.2	46.0	-11.8	Horiz
12	399.998M	40.9	-27.4 +1.4	+15.7	+2.1	+0.3	+0.0	33.0	46.0	-13.0	Horiz
13	533.380M	37.3	-28.1 +1.7	+18.6	+2.5	+0.3	+0.0	32.3	46.0	-13.7	Horiz
14	833.353M	31.6	-27.8 +2.1	+22.3	+3.2	+0.8	+0.0	32.2	46.0	-13.8	Vert
15	499.948M	36.6	-28.0 +1.6	+18.0	+2.4	+0.4	+0.0	31.0	46.0	-15.0	Vert
16	533.320M	35.4	-28.1 +1.7	+18.6	+2.5	+0.3	+0.0	30.4	46.0	-15.6	Vert
17	333.341M	39.4	-26.9 +1.3	+14.1	+1.9	+0.4	+0.0	30.2	46.0	-15.8	Vert
18	900.019M	28.2	-27.8 +2.3	+23.0	+3.3	+0.9	+0.0	29.9	46.0	-16.1	Vert
19	999.994M	34.5	-27.5 +2.4	+24.3	+3.5	+0.7	+0.0	37.9	54.0	-16.1	Horiz
20	900.054M	28.2	-27.8 +2.3	+23.0	+3.3	+0.9	+0.0	29.9	46.0	-16.1	Horiz
21	333.340M	38.8	-26.9 +1.3	+14.1	+1.9	+0.4	+0.0	29.6	46.0	-16.4	Vert
22	166.681M	41.4	-26.9 +0.9	+9.8	+1.4	+0.3	+0.0	26.9	43.5	-16.6	Vert
23	299.998M	38.4	-26.6 +1.3	+13.1	+1.8	+0.3	+0.0	28.3	46.0	-17.7	Horiz
24	499.998M	33.9	-28.0 +1.6	+18.0	+2.4	+0.4	+0.0	28.3	46.0	-17.7	Horiz
25	333.336M	37.4	-26.9 +1.3	+14.1	+1.9	+0.4	+0.0	28.2	46.0	-17.8	Horiz