

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: 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:

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
Heliacx 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
Microwave Pre-amp 1-40GHz	00323	02/05/2008	02/05/2010	02810
18-26GHz Horn	942126-003	09/21/2007	09/21/2009	01413
3'-40GHz cable	NA	09/18/2007	09/18/2009	P02945

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. 1-25GHz test range, bandwidth 1MHz. 802.11b mode of operation L M H, 802.11g mode of operation L M H.

Transducer Legend:

T1=84' Heliacx Cable P04382_#17	T2=Heliacx Cable 54' ANP05565 090410
T3=Preamplifier 83017A 00787	T4=Horn Ant AN01646 060610
T5=CAB-ANP02947 091807	T6=AMP-AN02810-020508
T7=ANT 18-26GHz Horn AN01413	T8=CAB-ANP02945 091807

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1	T2	T3	T4	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
			T5 dB	T6 dB	T7 dB	T8 dB					
1	17583.350M	7.0	+24.4 +1.0	+12.6 +0.0	-37.7 +0.0	+43.6 +0.0	+0.0	50.9	54.0	-3.1	Vert

2	4436.110M	39.3	+8.2 +0.4	+5.3 +0.0	-39.4 +0.0	+32.5 +0.0	+0.0	46.3	54.0	-7.7	Horiz
3	15035.400M	12.5	+18.9 +0.9	+11.7 +0.0	-37.8 +0.0	+39.9 +0.0	+0.0	46.1	54.0	-7.9	Vert
4	12928.400M	16.9	+17.2 +0.9	+10.1 +0.0	-39.0 +0.0	+39.2 +0.0	+0.0	45.3	54.0	-8.7	Vert
5	11507.400M	16.5	+15.8 +0.7	+9.6 +0.0	-39.5 +0.0	+38.8 +0.0	+0.0	41.9	54.0	-12.1	Vert
6	10821.400M	17.7	+15.5 +0.7	+9.0 +0.0	-39.4 +0.0	+38.1 +0.0	+0.0	41.6	54.0	-12.4	Vert
7	2190.785M	43.2	+5.4 +0.3	+3.6 +0.0	-38.9 +0.0	+27.7 +0.0	+0.0	41.3	54.0	-12.7	Horiz
8	9195.350M	21.4	+12.7 +0.7	+8.2 +0.0	-39.5 +0.0	+37.5 +0.0	+0.0	41.0	54.0	-13.0	Vert
9	1744.985M	45.0	+4.8 +0.3	+3.1 +0.0	-38.9 +0.0	+26.2 +0.0	+0.0	40.5	54.0	-13.5	Horiz
10	1499.250M	46.7	+4.4 +0.2	+2.9 +0.0	-38.8 +0.0	+25.0 +0.0	+0.0	40.4	54.0	-13.6	Horiz
11	1852.285M	44.0	+5.0 +0.3	+3.2 +0.0	-38.9 +0.0	+26.7 +0.0	+0.0	40.3	54.0	-13.7	Horiz
12	1000.164M	50.3	+3.5 +0.2	+2.4 +0.0	-40.6 +0.0	+24.2 +0.0	+0.0	40.0	54.0	-14.0	Horiz
13	9645.400M	19.4	+13.0 +0.7	+8.4 +0.0	-39.4 +0.0	+37.9 +0.0	+0.0	40.0	54.0	-14.0	Vert
14	1166.540M	47.0	+3.8 +0.2	+2.5 +0.0	-39.9 +0.0	+24.5 +0.0	+0.0	38.1	54.0	-15.9	Horiz
15	1000.029M	48.4	+3.5 +0.2	+2.4 +0.0	-40.6 +0.0	+24.2 +0.0	+0.0	38.1	54.0	-15.9	Vert
16	1750.010M	37.8	+4.8 +0.3	+3.1 +0.0	-38.9 +0.0	+26.2 +0.0	+0.0	33.3	54.0	-20.7	Vert
17	1011.960M	43.4	+3.5 +0.2	+2.4 +0.0	-40.5 +0.0	+24.2 +0.0	+0.0	33.2	54.0	-20.8	Vert
18	1253.230M	39.9	+4.0 +0.2	+2.6 +0.0	-39.6 +0.0	+24.6 +0.0	+0.0	31.7	54.0	-22.3	Vert
19	1244.490M	39.8	+3.9 +0.2	+2.5 +0.0	-39.6 +0.0	+24.6 +0.0	+0.0	31.4	54.0	-22.6	Vert
20	1277.630M	38.4	+4.0 +0.2	+2.6 +0.0	-39.5 +0.0	+24.7 +0.0	+0.0	30.4	54.0	-23.6	Vert
21	1500.030M	36.2	+4.4 +0.2	+2.9 +0.0	-38.8 +0.0	+25.0 +0.0	+0.0	29.9	54.0	-24.1	Vert
22	1422.290M	35.9	+4.2 +0.2	+2.7 +0.0	-39.0 +0.0	+24.9 +0.0	+0.0	28.9	54.0	-25.1	Vert
23	18997.350M	11.6	+0.0 +1.0	+0.0 -26.4	+0.0 +40.4	+0.0 +1.6	+0.0	28.2	54.0	-25.8	Vert
24	1166.690M	36.9	+3.8 +0.2	+2.5 +0.0	-39.9 +0.0	+24.5 +0.0	+0.0	28.0	54.0	-26.0	Vert

FCC 15.247(e) POWER SPECTRAL DENSITY

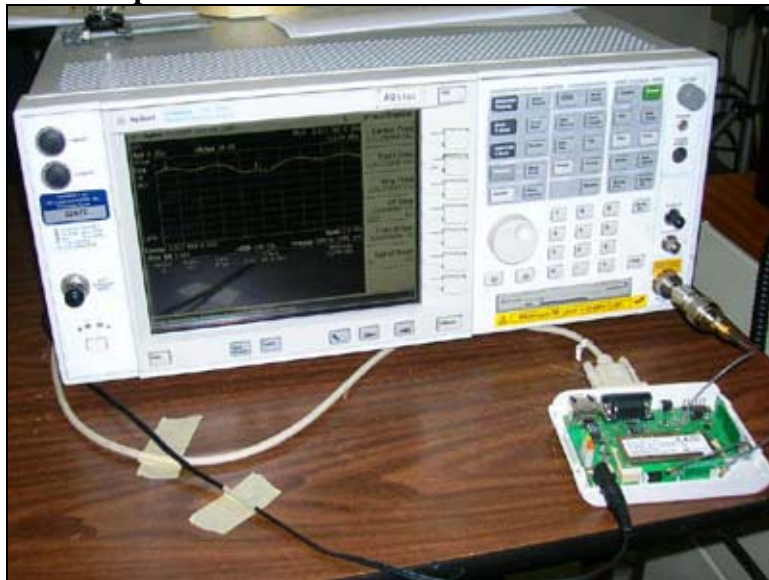
Test Equipment

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

Test Conditions

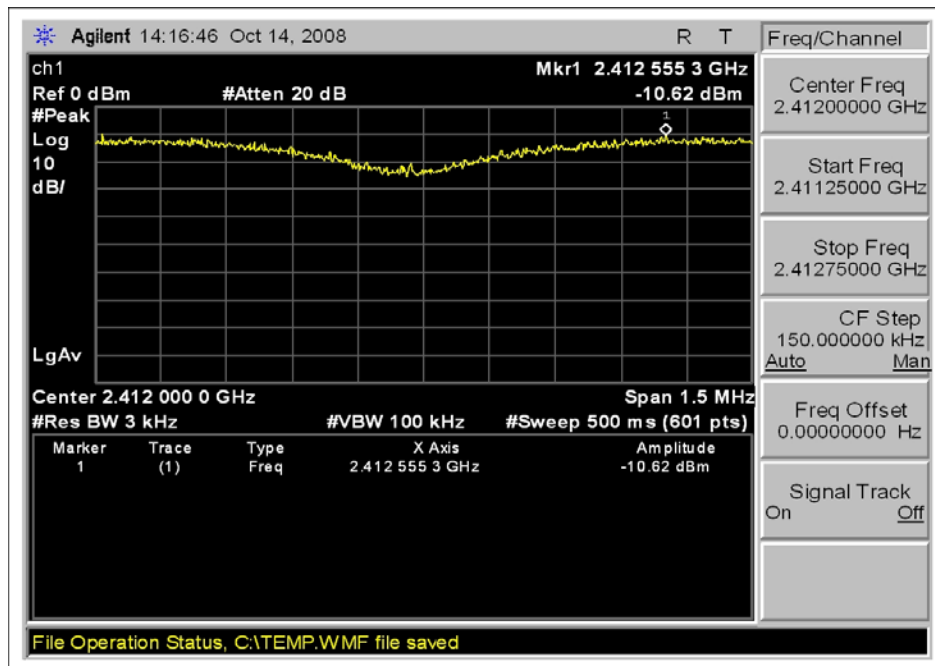
Unit is located next to the spectrum analyzer . The laptop is connected to the unit via RS232 cable. The laptop is used only to change the Channel settings. The spectrum analyzer is directly connected to the antenna port of the transmitter.

Test Setup Photos

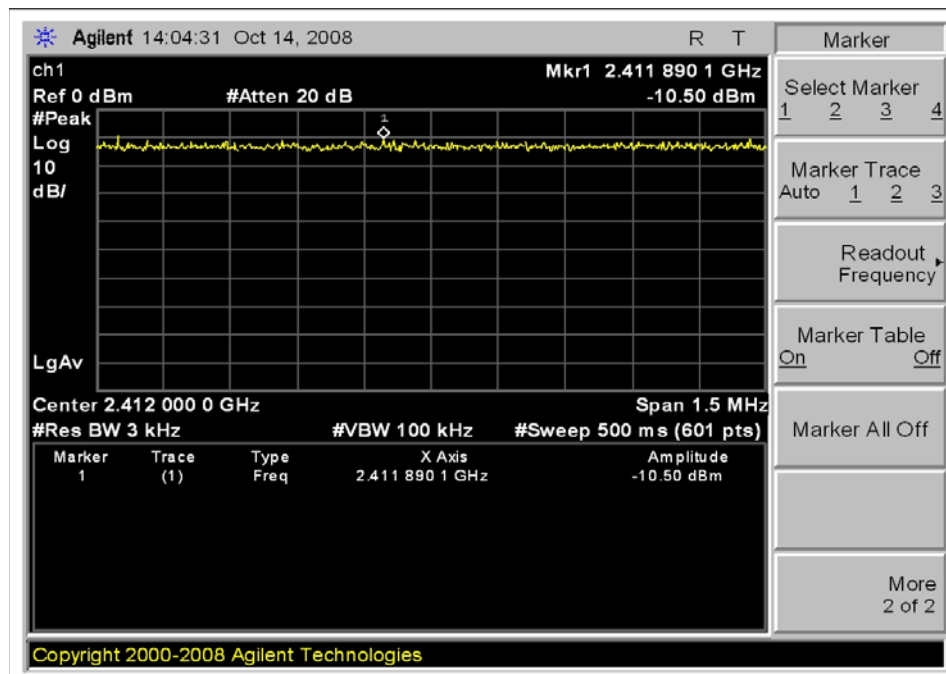


Test Plots

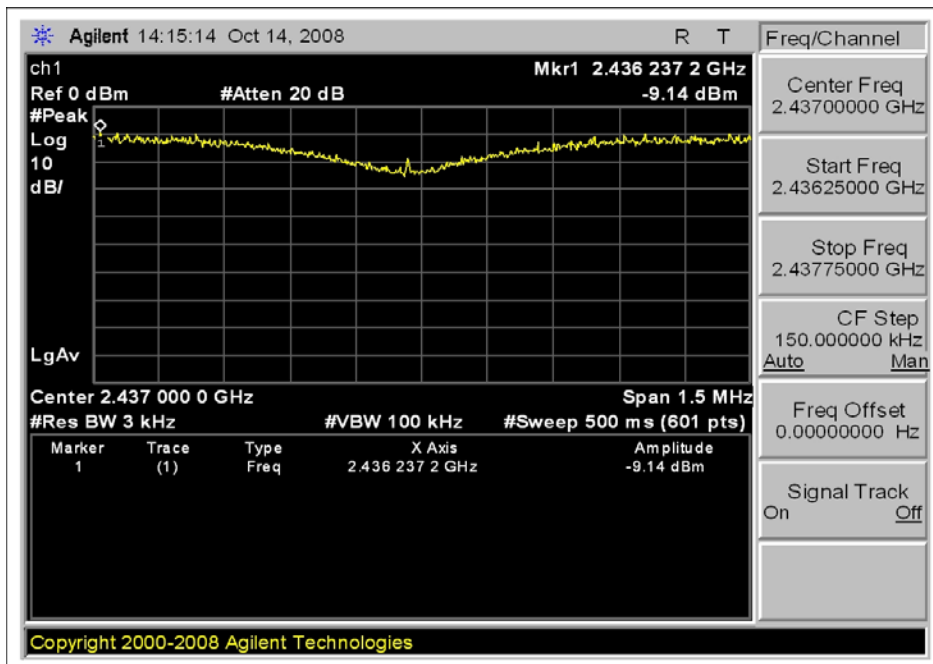
FCC 15.247(e) POWER SPECTRAL DENSITY 802.11b CHANNEL 1 ANTENNA A



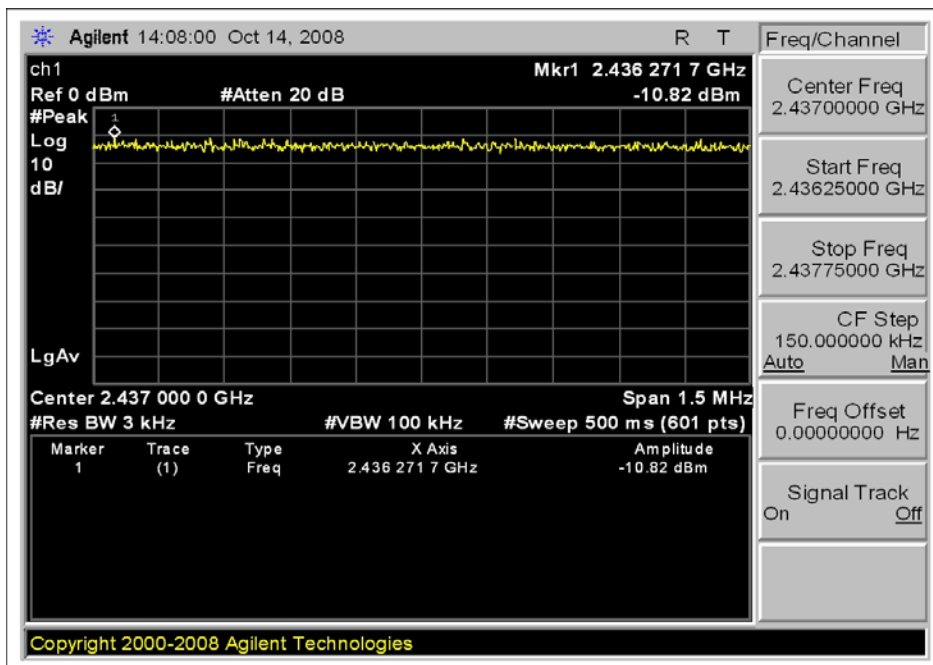
FCC 15.247(e) POWER SPECTRAL DENSITY 802.11b CHANNEL 1 ANTENNA B



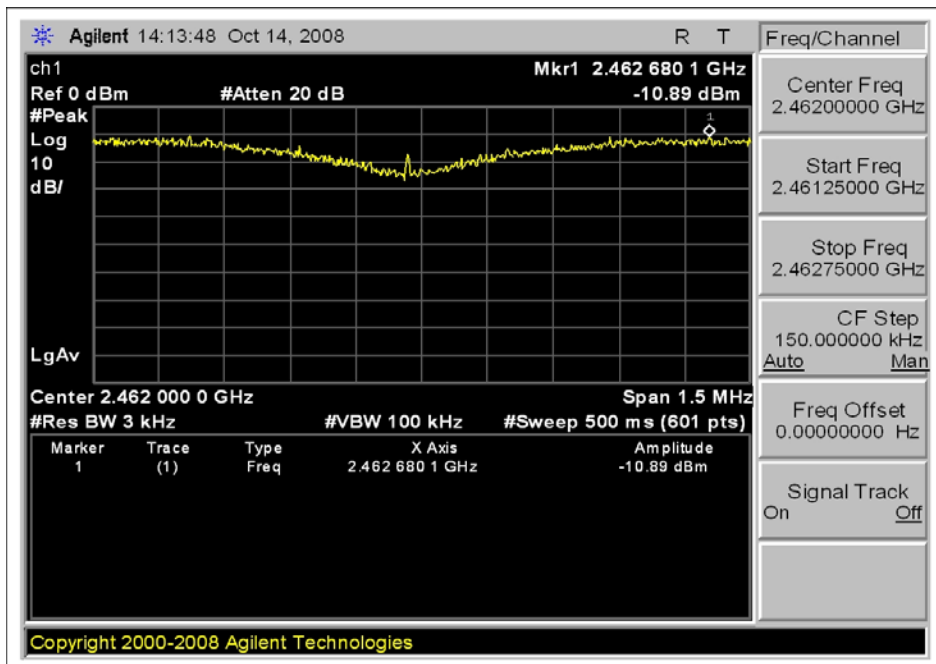
**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11b CHANNEL 6
ANTENNA A**



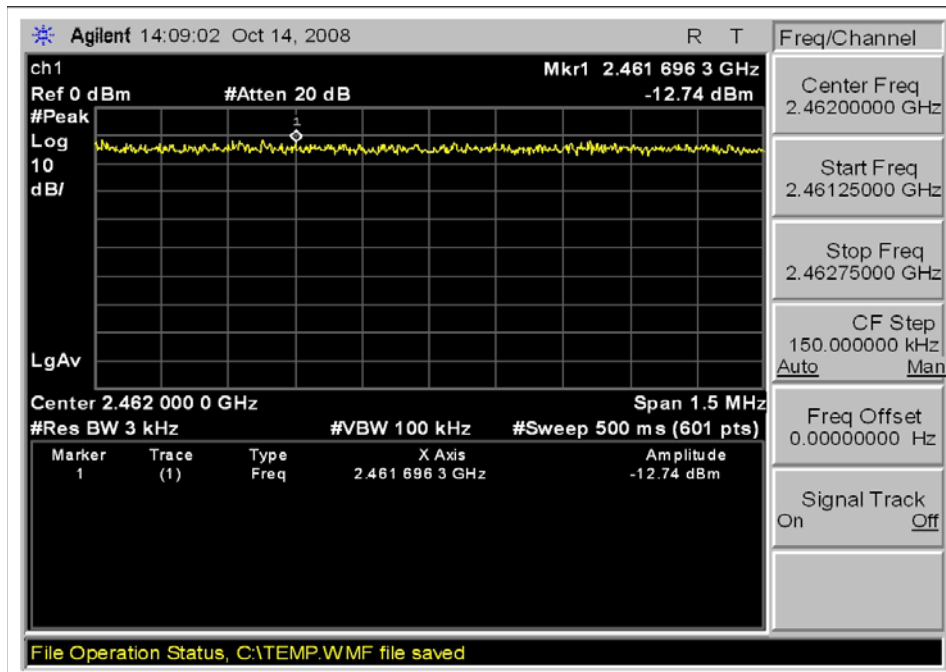
**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11b CHANNEL 6
ANTENNA B**



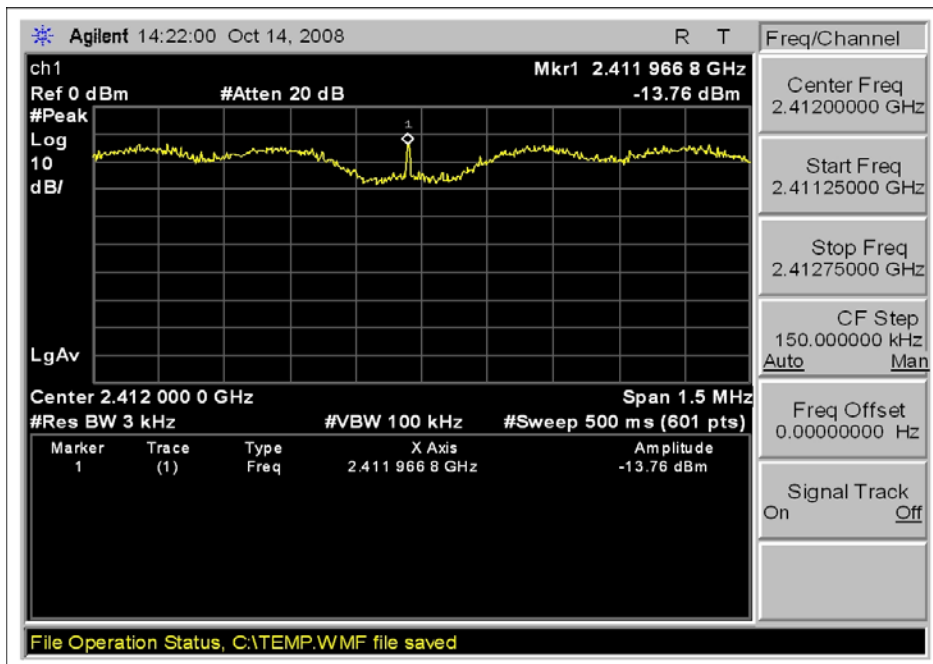
**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11b CHANNEL 11
ANTENNA A**



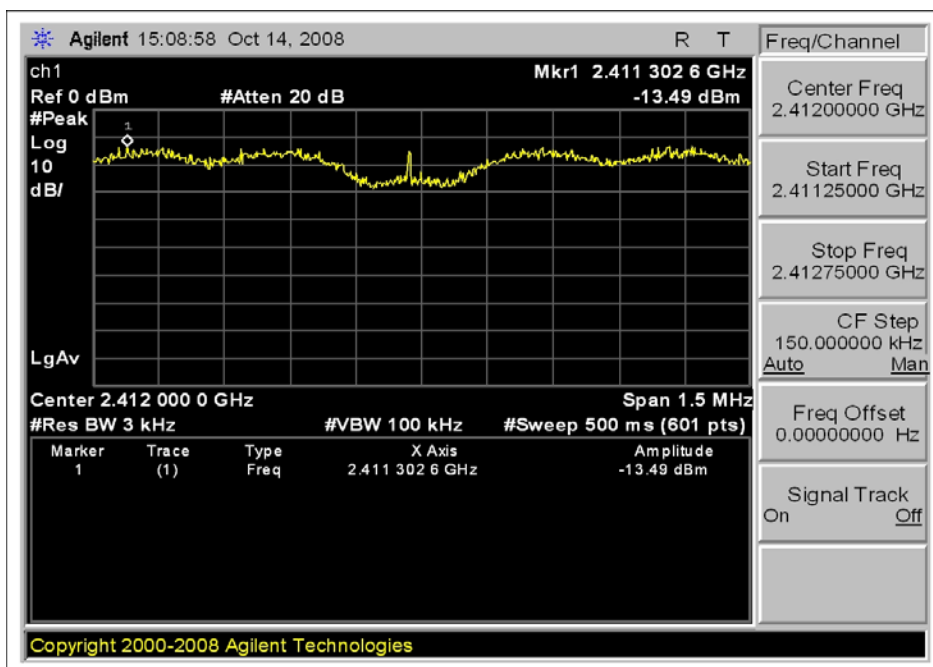
**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11b CHANNEL 11
ANTENNA B**



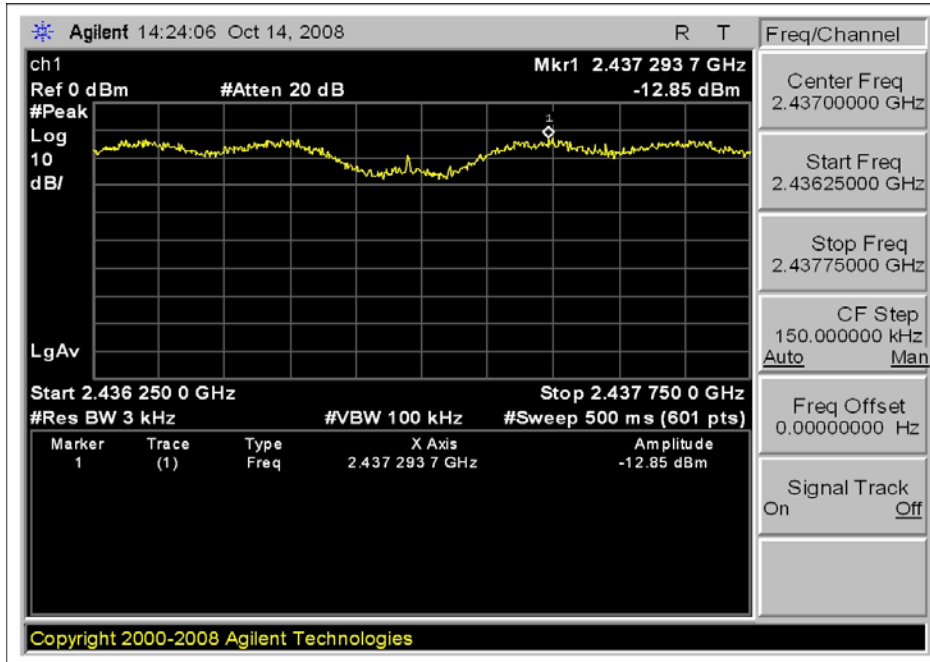
**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11g CHANNEL 1
ANTENNA A**



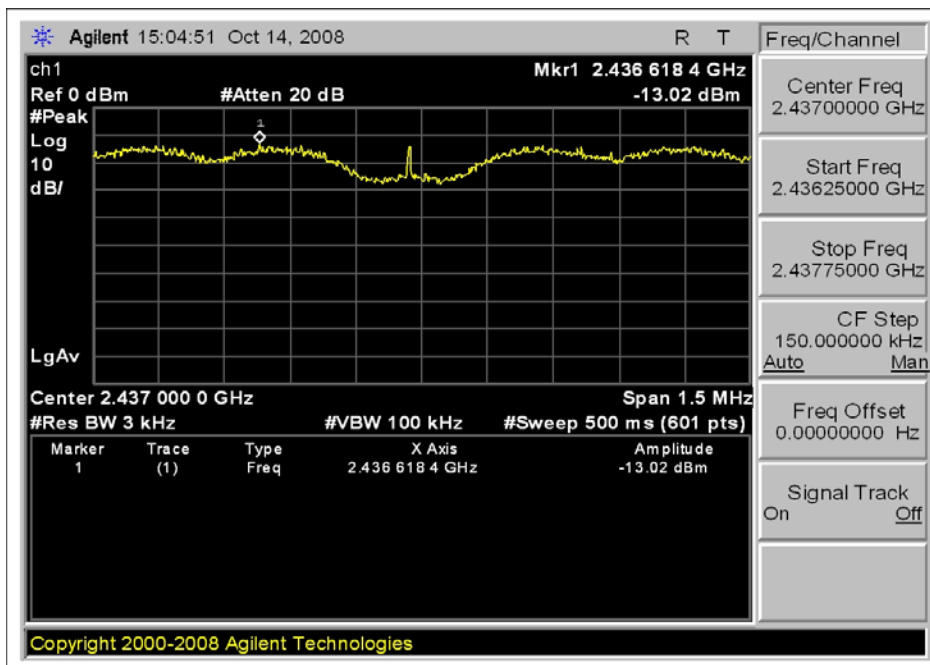
**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11g CHANNEL 1
ANTENNA B**



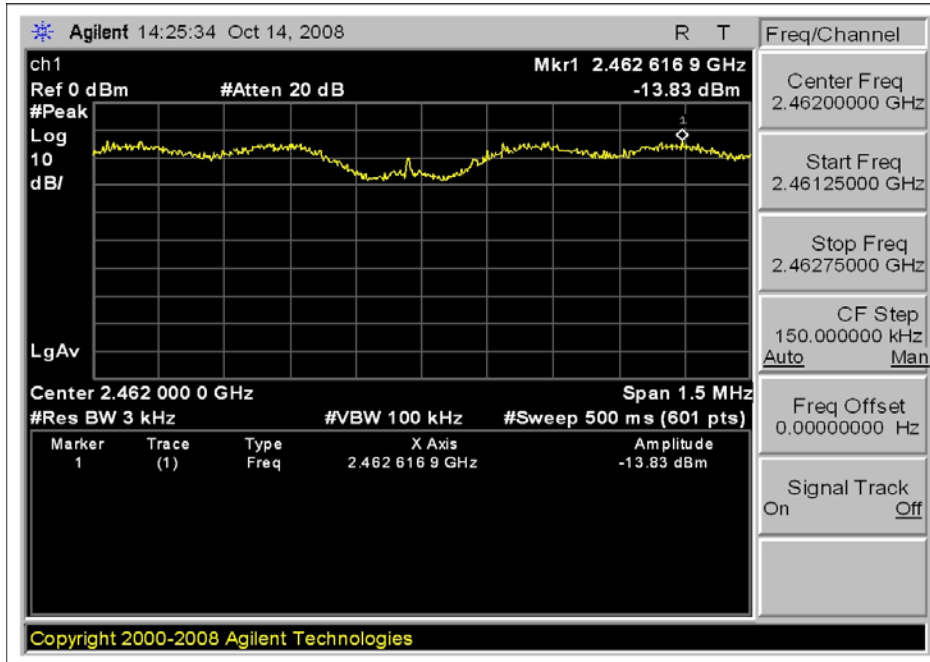
FCC 15.247(e) POWER SPECTRAL DENSITY 802.11g CHANNEL 6 ANTENNA A



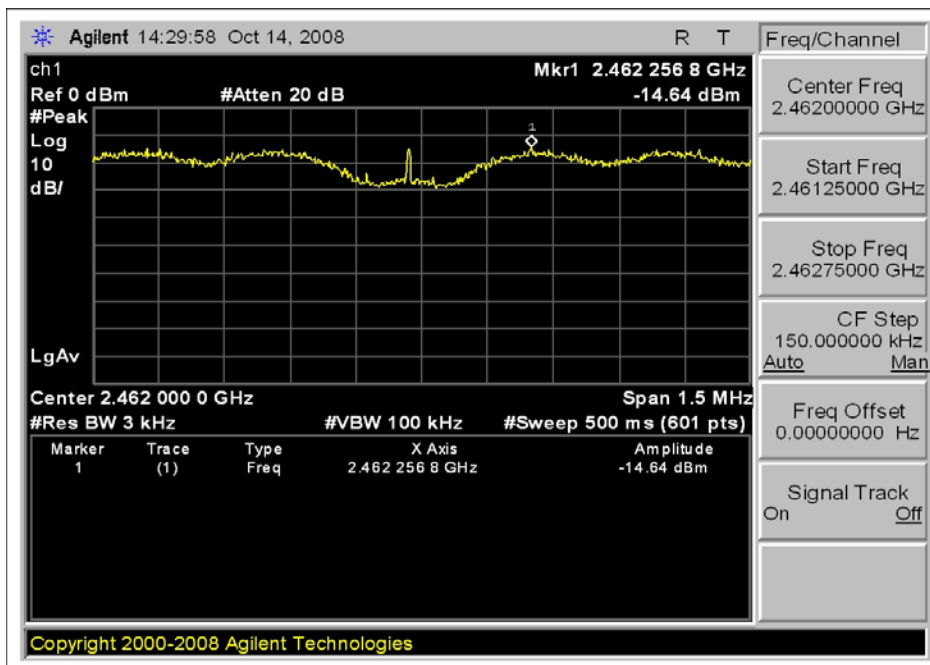
FCC 15.247(e) POWER SPECTRAL DENSITY 802.11g CHANNEL 6 ANTENNA B



**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11g CHANNEL 11
ANTENNA A**



**FCC 15.247(e) POWER SPECTRAL DENSITY 802.11g CHANNEL 11
ANTENNA B**



ITU-R 55/1 BANDEDGE

Test Equipment

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

Test Conditions

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.

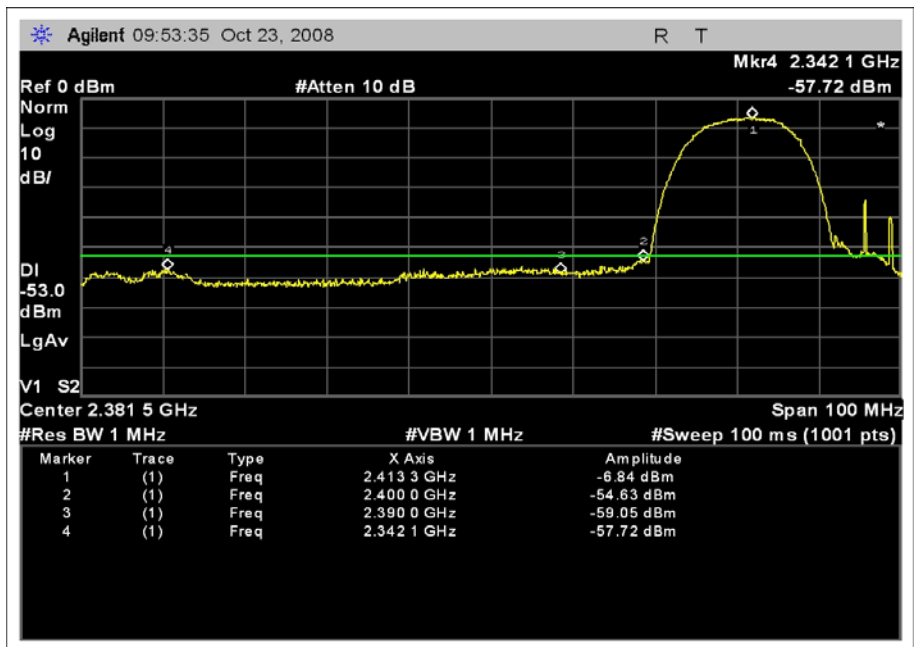
Test Setup Photos



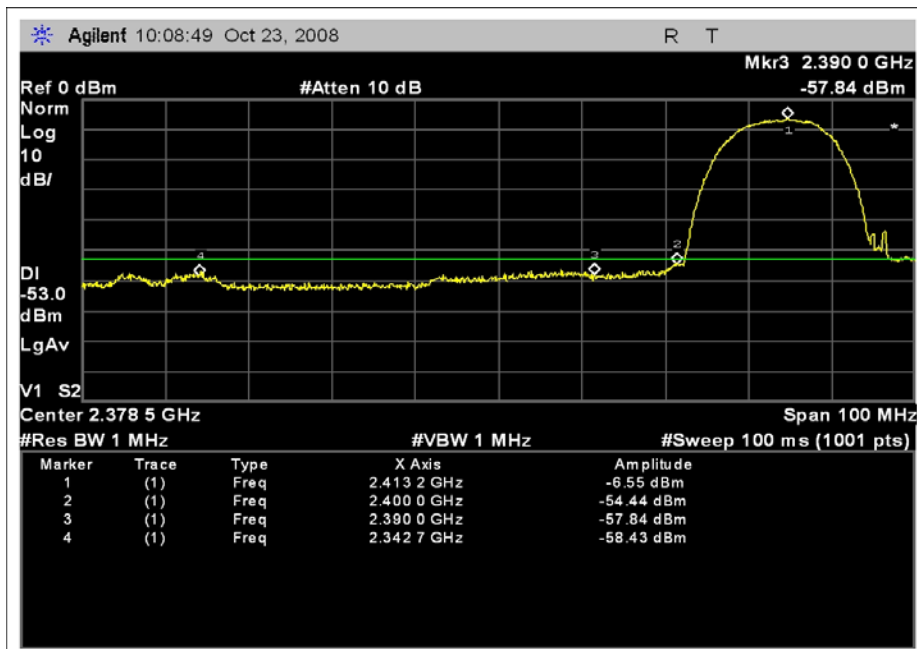


Test Plots

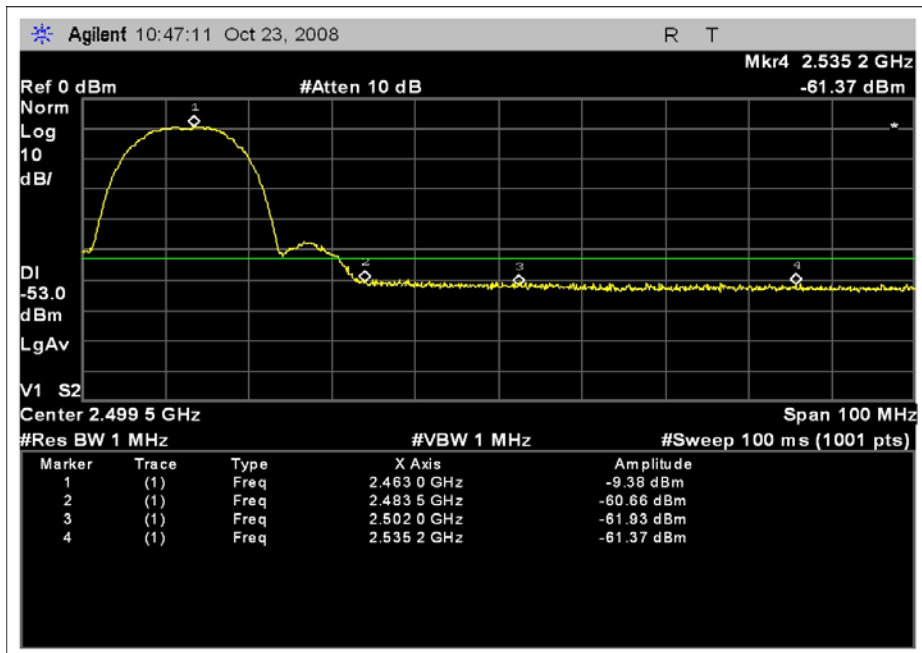
BANDEDGE 802.11b CHANNEL 1 ANTENNA A



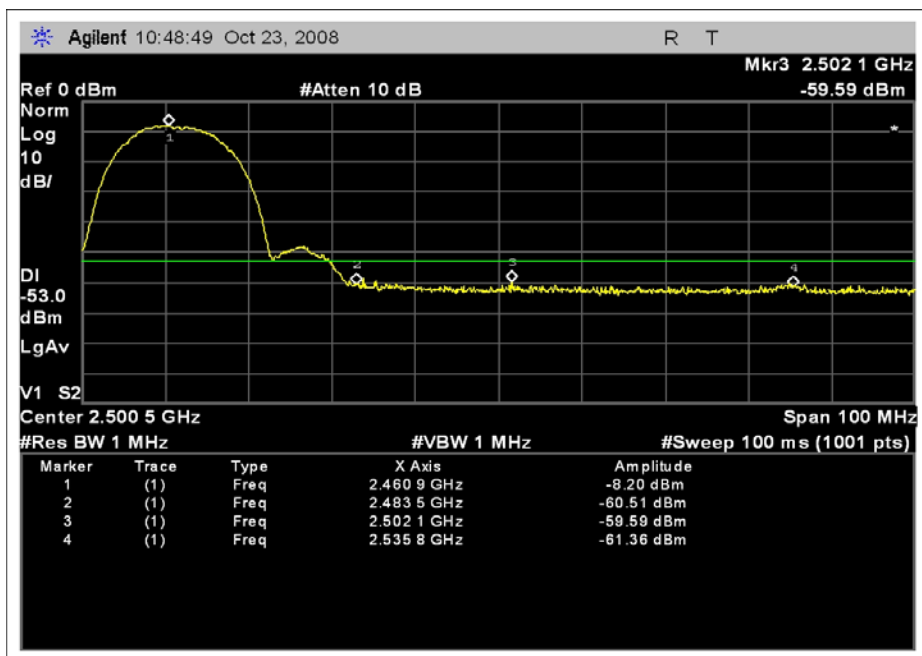
BANDEDGE 802.11b CHANNEL 1 ANTENNA B



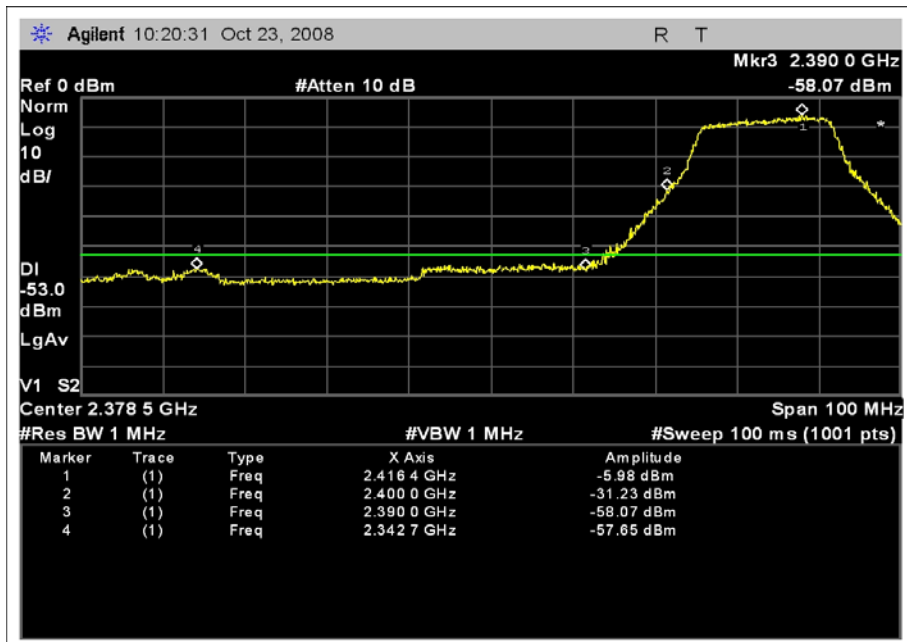
BANDEDGE 802.11b CHANNEL 11 ANTENNA A



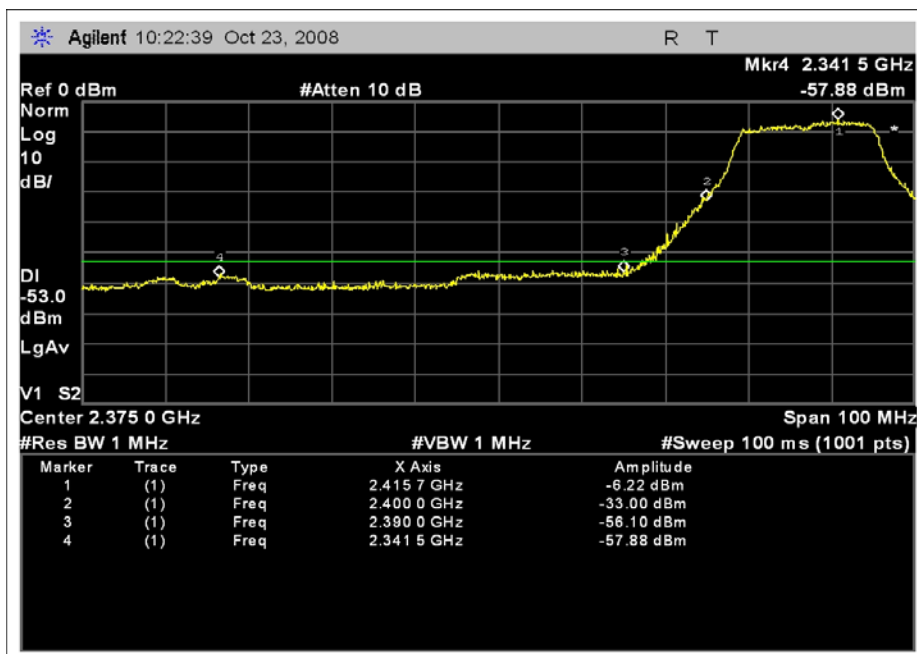
BANDEDGE 802.11b CHANNEL 11 ANTENNA B



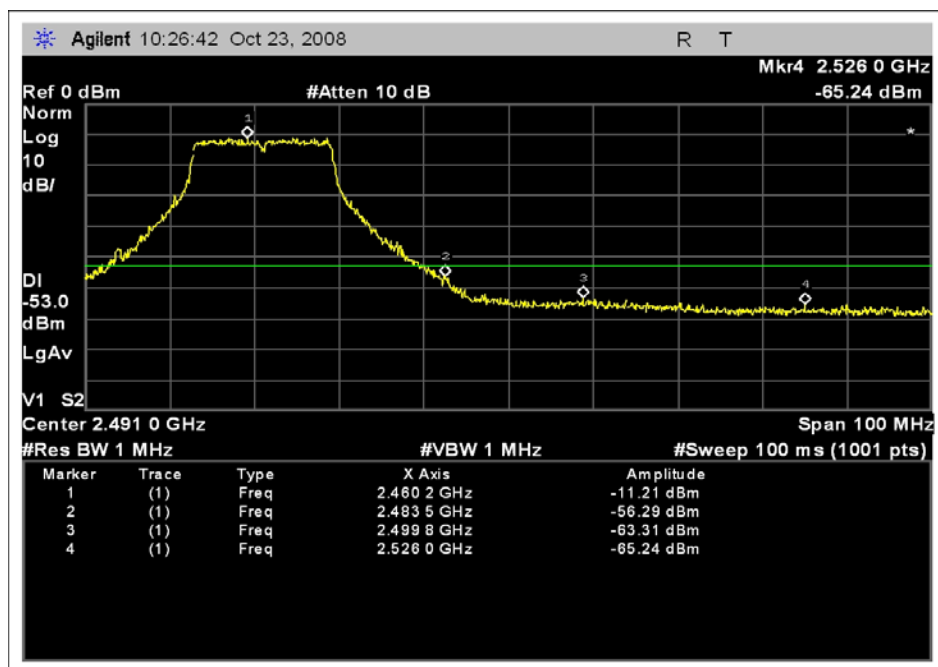
BANDEDGE 802.11g CHANNEL 1 ANTENNA A



BANDEDGE 802.11g CHANNEL 1 ANTENNA B



BANDEDGE 802.11g CHANNEL 11 ANTENNA A



BANDEDGE 802.11g CHANNEL 11 ANTENNA B

