



Test Report

Product Name	802.11 n/b/g WLAN PCI-e Card
Model No.	WN7600R-MV, WN7600R-A, WN7600R-N
FCC ID	PPQ-WN7600R

Applicant	Lite-On TECHNOLOGY CORP.
Address	4F,90,Chien 1 Road, Chung-Ho, Taipei Hsien 235, Taiwan, R.O.C.

Date of Receipt	Mar. 20, 2008
Issued Date	Apr. 18, 2008
Report No.	083298R-RFUSP05V01
Version	V1.0

The test results relate only to the samples tested.

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This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Test Report Certification

Issued Date: Apr. 18, 2008

Report No.: 083298R-RFUSP05V01



Accredited by NIST (NVLAP)

NVLAP Lab Code: 200533-0

Product Name	802.11 n/b/g WLAN PCI-e Card
Applicant	Lite-On TECHNOLOGY CORP.
Address	4F,90,Chien 1 Road, Chung-Ho, Taipei Hsien 235, Taiwan, R.O.C.
Manufacturer	DONG GUAN G-COM COMPUTER CO., LTD
Model No.	WN7600R-MV, WN7600R-A, WN7600R-N
Rated Voltage	AC 120V/60Hz
Working Voltage	AC 120V/60Hz
Trade Name	LITE-ON
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2007 ANSI C63.4: 2003
Test Result	Complied



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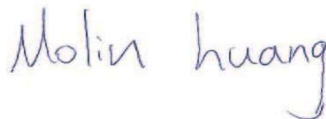


(Engineering Adm. Specialist /

Rita Huang)



Tested By :



(Engineer / Molin Huang)



Testing Laboratory

0914

Approved By :



(Deputy Manager / Vincent Lin)

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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	802.11 n/b/g WLAN PCI-e Card
Trade Name	LITE-ON
Model No.	WN7600R-MV, WN7600R-A, WN7600R-N
FCC ID.	PPQ-WN7600R
Frequency Range	2412-2462MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 11Mbps, 802.11g: 54Mbps, 802.11n: 130Mbps
Type of Modulation	802.11b:DSSS DBPSK, DQPSK, CCK 802.11g/n:OFDM BPSK, QPSK, 16QAM, 64QAM
Antenna Interface	External Antenna: Dipole, Internal Antenna: PIFA
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto

EXTERNAL Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	JOYMAX	3010000319Z7	2.32dBi for 2.4 GHz

INTERNAL Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	JOYMAX	3010000318Z7	2.33dBi for 2.4 GHz

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2422 MHz	Channel 02:	2427 MHz	Channel 03:	2432 MHz	Channel 04:	2437 MHz
Channel 05:	2442 MHz	Channel 06:	2447 MHz	Channel 07:	2452 MHz		

Note:

1. The EUT is an 802.11 n/b/g WLAN PCI-e Card with a built-in 2.4GHz WLAN transceiver.
2. The difference of the three models is shown as below:

Model Number	Antenna	Antenna connector Type	Bracket for WLAN Card
WN7600R-MV	EXTERNAL	Reverse-SMA	Long
WN7600R-A	EXTERNAL	Reverse -SMA	Short
WN7600R-N	INTERNAL	I-PEX	Long

3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps 、 802.11g is 6Mbps、 802.11n(20BW) is 6.5Mbps and 、 802.11n(40BW) is 13Mbps)
5. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices

1.2. Operational Description

The EUT is an 802.11 n/b/g WLAN PCI-e Card with 11 channels. This device provided four kinds of transmitting speed 1, 2, 5.5 and 11Mbps and the device of RF carrier is DBPSK, DQPSK and CCK (IEEE 802.11b). The device provided of eight kinds of transmitting speed 6, 9, 12, 18, 24, 36, 48 and 54Mbps the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11g).

The device provided of eight kinds of transmitting speed 6.5,13,19.5,26,39,52,58.5 and 65Mbps in 802.11n(20BW) mode and 13,26,39,52,78,104,117 and 130 Mbps(40BW) the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11n).

The device adapts direct sequence spread spectrum modulation. The antenna provides diversity function to improve the receiving function.

This 802.11 n/b/g WLAN PCI-e Card, compliant with IEEE 802.11b and IEEE 802.11g, is a high-efficiency Wireless LAN adapter. It allows your computer to connect to a wireless network and to share resources, such as files or printers without being bound to the network wires. Operation in 2.4GHz Direct Sequence Spread Spectrum (DSSS) radio transmission, the 802.11 n/b/g WLAN PCI-e Card Wired Equivalent Protection (WEP) algorithm is used. In addition, its standard compliance ensures that it can communicate with any IEEE 802.11b and IEEE 802.11g network.

Test Mode	Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna
	Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna
	Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna
	Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna
	Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna
	Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna
	Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna
	Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

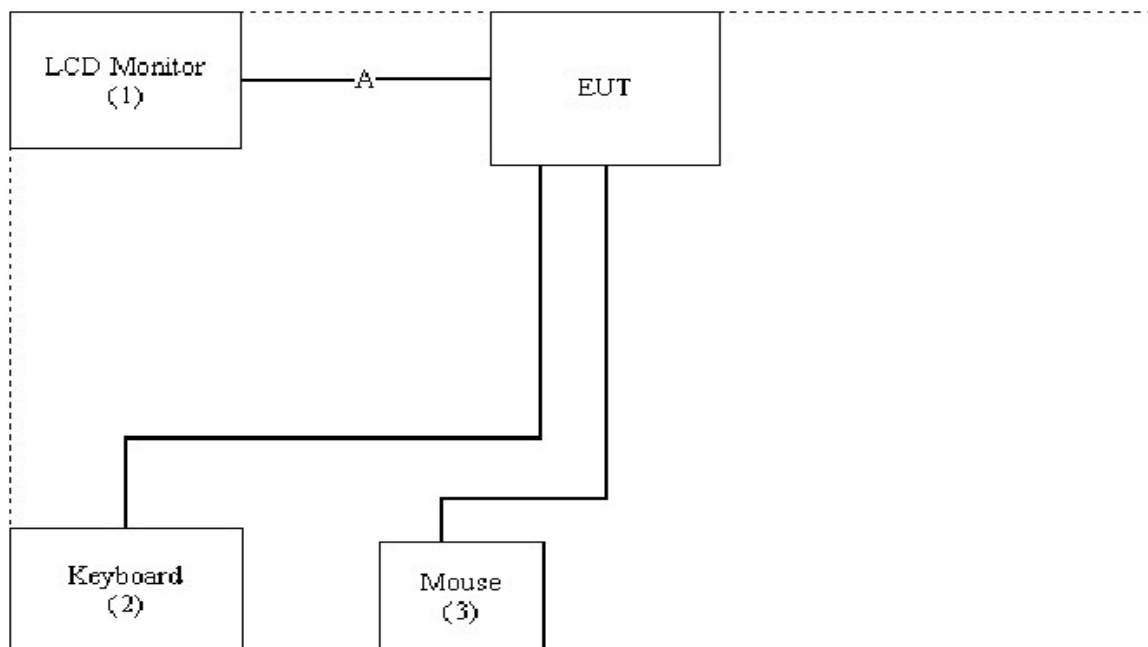
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
(1)	LCD Monitor	CMV	CT-730D	FNC122F57CA1025	Non-Shielded, 1.8m
(2)	Keyboard	Logitech	Y-SM46	867404-0121	N/A
(3)	Mouse	Logitech	M-SBM96B	810-000439	N/A

Signal Cable Type	Signal cable Description
A	VGA Cable

1.4. Configuration of Test System



1.5. EUT Exercise Software

- 1 Setup the EUT and simulators as shown on 1.3.
- 2 Turn on the power of all equipment.
- 3 Messages will be transmitted and received through EUT.
- 4 Test is based on the mandatory continuous transmitter.
- 5 Repeat the above procedure (3) to (4).

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 92195



Accreditation on NVLAP
NVLAP Lab Code: 200533-0



Site Name: Quietek Corporation

Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
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E-Mail : service@quietek.com

FCC Accreditation Number: TW1014



2. Conducted Emission

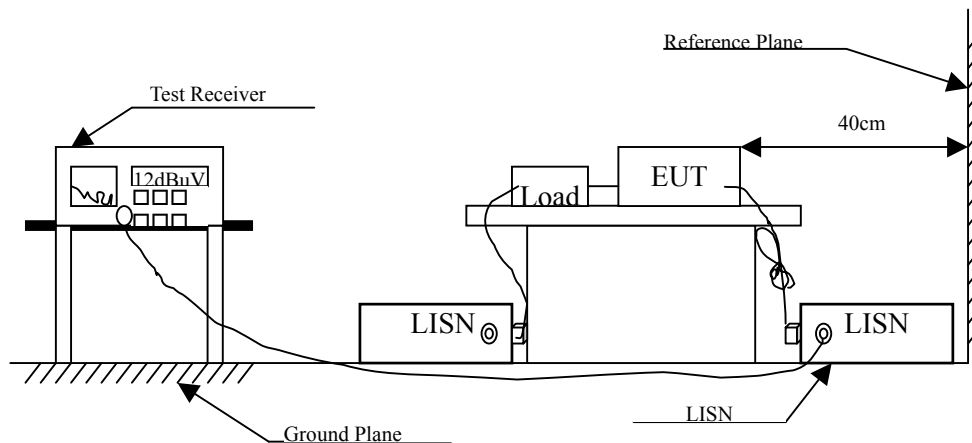
2.1. Test Equipment

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/014	Feb., 2008	
2	L.I.S.N.	R & S	ESH3-Z5/825562/002	Feb., 2008	EUT
3	L.I.S.N.	R & S	ENV4200/848411/010	Feb., 2008	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2/100410	July, 2007	
5	No.1 Shielded Room			N/A	

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	uV	dBuV
0.15 - 0.50	66-56 _(註)	56-46 _(註)
0.50-5.0	56	46
5.0 - 30	60	50

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
Line 1					
Quasi-Peak					
0.216	9.850	41.340	51.190	-12.924	64.114
0.431	9.830	26.790	36.620	-21.351	57.971
0.752	9.820	25.600	35.420	-20.580	56.000
1.720	9.840	21.720	31.560	-24.440	56.000
6.279	9.890	21.230	31.120	-28.880	60.000
20.810	10.090	18.250	28.340	-31.660	60.000
Average					
0.216	9.850	40.780	50.630	-3.484	54.114
0.431	9.830	26.270	36.100	-11.871	47.971
0.752	9.820	24.920	34.740	-11.260	46.000
1.720	9.840	16.480	26.320	-19.680	46.000
6.279	9.890	15.460	25.350	-24.650	50.000
20.810	10.090	14.880	24.970	-25.030	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.216	9.860	41.340	51.200	-12.914	64.114
0.404	9.840	24.420	34.260	-24.483	58.743
0.646	9.840	27.520	37.360	-18.640	56.000
0.966	9.830	25.350	35.180	-20.820	56.000
1.752	9.840	20.940	30.780	-25.220	56.000
6.197	9.880	21.350	31.230	-28.770	60.000
Average					
0.216	9.860	40.830	50.690	-3.424	54.114
0.404	9.840	22.790	32.630	-16.113	48.743
0.646	9.840	26.890	36.730	-9.270	46.000
0.966	9.830	22.180	32.010	-13.990	46.000
1.752	9.840	15.130	24.970	-21.030	46.000
6.197	9.880	15.380	25.260	-24.740	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.216	9.850	41.240	51.090	-13.024	64.114
0.431	9.830	27.030	36.860	-21.111	57.971
0.884	9.830	24.120	33.950	-22.050	56.000
3.056	9.850	19.570	29.420	-26.580	56.000
11.912	10.019	21.050	31.069	-28.931	60.000
25.673	10.300	9.930	20.230	-39.770	60.000
Average					
0.216	9.850	40.880	50.730	-3.384	54.114
0.431	9.830	26.450	36.280	-11.691	47.971
0.884	9.830	21.790	31.620	-14.380	46.000
3.056	9.850	17.480	27.330	-18.670	46.000
11.912	10.019	16.300	26.319	-23.681	50.000
25.673	10.300	6.820	17.120	-32.880	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.216	9.860	41.300	51.160	-12.954	64.114
0.431	9.839	26.970	36.809	-21.162	57.971
0.884	9.830	24.140	33.970	-22.030	56.000
2.091	9.840	20.930	30.770	-25.230	56.000
6.115	9.880	22.440	32.320	-27.680	60.000
11.619	9.993	21.640	31.633	-28.367	60.000
Average					
0.216	9.860	40.830	50.690	-3.424	54.114
0.431	9.839	26.390	36.229	-11.742	47.971
0.884	9.830	21.790	31.620	-14.380	46.000
2.091	9.840	16.400	26.240	-19.760	46.000
6.115	9.880	16.020	25.900	-24.100	50.000
11.619	9.993	15.720	25.713	-24.287	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.216	9.850	41.280	51.130	-12.984	64.114
0.431	9.830	26.790	36.620	-21.351	57.971
0.845	9.820	23.350	33.170	-22.830	56.000
1.490	9.834	22.210	32.044	-23.956	56.000
6.240	9.890	21.050	30.940	-29.060	60.000
17.693	10.204	21.530	31.734	-28.266	60.000
Average					
0.216	9.850	40.880	50.730	-3.384	54.114
0.431	9.830	26.520	36.350	-11.621	47.971
0.845	9.820	22.290	32.110	-13.890	46.000
1.490	9.834	20.620	30.454	-15.546	46.000
6.240	9.890	15.230	25.120	-24.880	50.000
17.693	10.204	16.520	26.724	-23.276	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.216	9.860	41.280	51.140	-12.974	64.114
0.431	9.839	26.850	36.689	-21.282	57.971
0.685	9.840	27.210	37.050	-18.950	56.000
1.291	9.830	18.120	27.950	-28.050	56.000
3.216	9.850	18.900	28.750	-27.250	56.000
18.916	10.240	20.650	30.890	-29.110	60.000
Average					
0.216	9.860	40.940	50.800	-3.314	54.114
0.431	9.839	26.520	36.359	-11.612	47.971
0.685	9.840	23.490	33.330	-12.670	46.000
1.291	9.830	13.550	23.380	-22.620	46.000
3.216	9.850	16.660	26.510	-19.490	46.000
18.916	10.240	15.760	26.000	-24.000	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level	dB	dBuV
	dB	dBuV	dBuV		
Line 1					
Quasi-Peak					
0.216	9.850	41.200	51.050	-13.064	64.114
0.603	9.822	24.810	34.632	-21.368	56.000
1.127	9.830	19.350	29.180	-26.820	56.000
1.736	9.840	23.010	32.850	-23.150	56.000
6.197	9.890	21.880	31.770	-28.230	60.000
25.591	10.300	9.720	20.020	-39.980	60.000
Average					
0.216	9.850	40.780	50.630	-3.484	54.114
0.603	9.822	23.640	33.462	-12.538	46.000
1.127	9.830	12.140	21.970	-24.030	46.000
1.736	9.840	17.410	27.250	-18.750	46.000
6.197	9.890	15.800	25.690	-24.310	50.000
25.591	10.300	6.660	16.960	-33.040	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.216	9.860	41.180	51.040	-13.074	64.114
0.482	9.830	17.030	26.860	-29.654	56.514
1.322	9.830	14.860	24.690	-31.310	56.000
1.732	9.840	23.620	33.460	-22.540	56.000
6.119	9.880	21.530	31.410	-28.590	60.000
20.259	10.228	21.090	31.318	-28.682	60.000
Average					
0.216	9.860	40.780	50.640	-3.474	54.114
0.482	9.830	11.270	21.100	-25.414	46.514
1.322	9.830	12.020	21.850	-24.150	46.000
1.732	9.840	18.710	28.550	-17.450	46.000
6.119	9.880	15.420	25.300	-24.700	50.000
20.259	10.228	17.690	27.918	-22.082	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.212	9.850	42.200	52.050	-12.179	64.229
0.318	9.840	33.920	43.760	-17.440	61.200
0.685	9.820	33.680	43.500	-12.500	56.000
1.681	9.840	24.520	34.360	-21.640	56.000
6.201	9.890	22.680	32.570	-27.430	60.000
12.970	10.146	24.590	34.736	-25.264	60.000
Average					
0.212	9.850	40.540	50.390	-3.839	54.229
0.318	9.840	33.410	43.250	-7.950	51.200
0.685	9.820	26.570	36.390	-9.610	46.000
1.681	9.840	15.980	25.820	-20.180	46.000
6.201	9.890	16.950	26.840	-23.160	50.000
12.970	10.146	16.590	26.736	-23.264	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.212	9.860	39.330	49.190	-15.039	64.229
0.400	9.840	25.420	35.260	-23.597	58.857
0.677	9.840	26.000	35.840	-20.160	56.000
1.005	9.830	27.640	37.470	-18.530	56.000
1.771	9.840	24.660	34.500	-21.500	56.000
6.361	9.880	21.690	31.570	-28.430	60.000
Average					
0.212	9.860	37.350	47.210	-7.019	54.229
0.400	9.840	22.790	32.630	-16.227	48.857
0.677	9.840	16.740	26.580	-19.420	46.000
1.005	9.830	26.040	35.870	-10.130	46.000
1.771	9.840	20.040	29.880	-16.120	46.000
6.361	9.880	15.660	25.540	-24.460	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.212	9.850	39.290	49.140	-15.089	64.229
0.361	9.840	28.490	38.330	-21.641	59.971
0.685	9.820	30.040	39.860	-16.140	56.000
2.091	9.840	23.240	33.080	-22.920	56.000
6.275	9.890	20.180	30.070	-29.930	60.000
13.084	10.156	26.510	36.666	-23.334	60.000
Average					
0.212	9.850	37.350	47.200	-7.029	54.229
0.361	9.840	24.870	34.710	-15.261	49.971
0.685	9.820	25.230	35.050	-10.950	46.000
2.091	9.840	21.520	31.360	-14.640	46.000
6.275	9.890	14.130	24.020	-25.980	50.000
13.084	10.156	18.070	28.226	-21.774	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.212	9.860	39.110	48.970	-15.259	64.229
0.404	9.840	26.540	36.380	-22.363	58.743
0.884	9.830	24.460	34.290	-21.710	56.000
1.689	9.840	25.520	35.360	-20.640	56.000
6.201	9.880	23.370	33.250	-26.750	60.000
10.806	9.940	19.880	29.820	-30.180	60.000
Average					
0.212	9.860	37.200	47.060	-7.169	54.229
0.404	9.840	23.850	33.690	-15.053	48.743
0.884	9.830	22.800	32.630	-13.370	46.000
1.689	9.840	22.700	32.540	-13.460	46.000
6.201	9.880	17.410	27.290	-22.710	50.000
10.806	9.940	13.000	22.940	-27.060	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.212	9.850	41.000	50.850	-13.379	64.229
0.361	9.840	26.760	36.600	-23.371	59.971
0.685	9.820	27.780	37.600	-18.400	56.000
1.822	9.840	22.750	32.590	-23.410	56.000
6.119	9.890	21.900	31.790	-28.210	60.000
19.712	10.130	21.940	32.070	-27.930	60.000
Average					
0.212	9.850	40.510	50.360	-3.869	54.229
0.361	9.840	24.620	34.460	-15.511	49.971
0.685	9.820	23.590	33.410	-12.590	46.000
1.822	9.840	16.160	26.000	-20.000	46.000
6.119	9.890	15.480	25.370	-24.630	50.000
19.712	10.130	18.960	29.090	-20.910	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.240	9.860	29.680	39.540	-23.889	63.429
0.361	9.843	27.140	36.983	-22.988	59.971
0.685	9.840	28.320	38.160	-17.840	56.000
1.330	9.830	24.740	34.570	-21.430	56.000
6.197	9.880	23.640	33.520	-26.480	60.000
18.244	10.240	19.270	29.510	-30.490	60.000
Average					
0.240	9.860	25.500	35.360	-18.069	53.429
0.361	9.843	24.950	34.793	-15.178	49.971
0.685	9.840	24.090	33.930	-12.070	46.000
1.330	9.830	22.310	32.140	-13.860	46.000
6.197	9.880	16.790	26.670	-23.330	50.000
18.244	10.240	15.100	25.340	-24.660	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.162	9.868	33.660	43.528	-22.129	65.657
0.443	9.830	25.610	35.440	-22.189	57.629
1.767	9.840	25.400	35.240	-20.760	56.000
6.283	9.890	21.490	31.380	-28.620	60.000
11.748	10.004	21.650	31.654	-28.346	60.000
17.627	10.210	17.490	27.700	-32.300	60.000
Average					
0.162	9.868	26.830	36.698	-18.959	55.657
0.443	9.830	23.310	33.140	-14.489	47.629
1.767	9.840	19.890	29.730	-16.270	46.000
6.283	9.890	15.080	24.970	-25.030	50.000
11.748	10.004	19.920	29.924	-20.076	50.000
17.627	10.210	14.150	24.360	-25.640	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.212	9.860	38.540	48.400	-15.829	64.229
0.322	9.850	34.790	44.640	-16.446	61.086
0.845	9.840	25.910	35.750	-20.250	56.000
1.529	9.840	25.210	35.050	-20.950	56.000
3.220	9.850	20.440	30.290	-25.710	56.000
18.248	10.240	23.230	33.470	-26.530	60.000
Average					
0.212	9.860	36.960	46.820	-7.409	54.229
0.322	9.850	33.170	43.020	-8.066	51.086
0.845	9.840	24.740	34.580	-11.420	46.000
1.529	9.840	24.150	33.990	-12.010	46.000
3.220	9.850	18.000	27.850	-18.150	46.000
18.248	10.240	20.630	30.870	-19.130	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Equipment

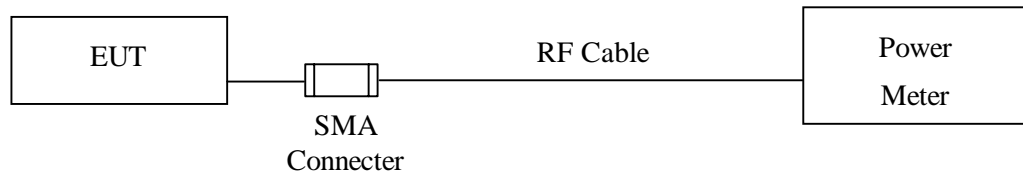
The following test equipments are used during the radiated emission tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Power Meter	Anritsu	ML2495A/6K00003357	May, 2007
X Power Sensor	Anritsu	MA2491A/034457	May, 2007

Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

3.2. Test Setup

Conducted Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna

Peak Power Output						
Channel No.	Frequency (MHz)	Data Rate				Required Limit
		1	2	5.5	11	
1	2412.00	20.78	--	--	--	1Watt= 30 dBm
6	2437.00	20.78	20.25	19.76	19.26	1Watt= 30 dBm
11	2462.00	20.75	--	--	--	1Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6	9	12	18	24	36	48	54	
1	2412.00	24.12	--	--	--	--	--	--	--	1 Watt= 30 dBm
6	2437.00	24.12	23.98	23.76	23.52	23.39	23.15	22.79	22.51	1 Watt= 30 dBm
11	2462.00	24.32	--	--	--	--	--	--	--	1 Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6.5	13	19.5	26	39	52	58.5	65	
1	2412.00	25.15	--	--	--	--	--	--	--	1 Watt= 30 dBm
6	2437.00	25.46	24.32	24.18	23.87	23.69	23.48	23.25	23.12	1 Watt= 30 dBm
11	2462.00	26.52	--	--	--	--	--	--	--	1 Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		13	26	39	52	78	104	117	130	
1	2422.00	22.35	--	--	--	--	--	--	--	1 Watt= 30 dBm
4	2437.00	23.84	23.62	23.48	23.25	23.13	23.02	22.98	22.81	1 Watt= 30 dBm
7	2452.00	24.31	--	--	--	--	--	--	--	1 Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna

Peak Power Output						
Channel No.	Frequency (MHz)	Data Rate				Required Limit
		1	2	5.5	11	
1	2412.00	19.61	--	--	--	1 Watt= 30 dBm
6	2437.00	19.49	18.88	18.57	18.42	1 Watt= 30 dBm
11	2462.00	18.7	--	--	--	1 Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11 g 6Mbps)-INTERNAL Antenna

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6	9	12	18	24	36	48	54	
1	2412.00	23.94	--	--	--	--	--	--	--	1 Watt= 30 dBm
6	2437.00	24.12	24.02	23.98	23.75	23.18	22.65	21.89	21.23	1 Watt= 30 dBm
11	2462.00	23.15	--	--	--	--	--	--	--	1 Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6.5	13	19.5	26	39	52	58.5	65	
1	2412.00	24.13	--	--	--	--	--	--	--	1Watt= 30 dBm
6	2437.00	24.14	23.63	23.45	23.11	22.67	21.98	21.65	21.45	1Watt= 30 dBm
11	2462.00	24.83	--	--	--	--	--	--	--	1Watt= 30 dBm

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		13	26	39	52	78	104	117	130	
1	2422.00	23.68	--	--	--	--	--	--	--	1 Watt= 30 dBm
4	2437.00	23.58	23.33	23.21	22.77	22.15	21.98	21.59	21.33	1 Watt= 30 dBm
7	2452.00	23.98	--	--	--	--	--	--	--	1 Watt= 30 dBm

4. Radiated Emission

4.1. Test Equipment

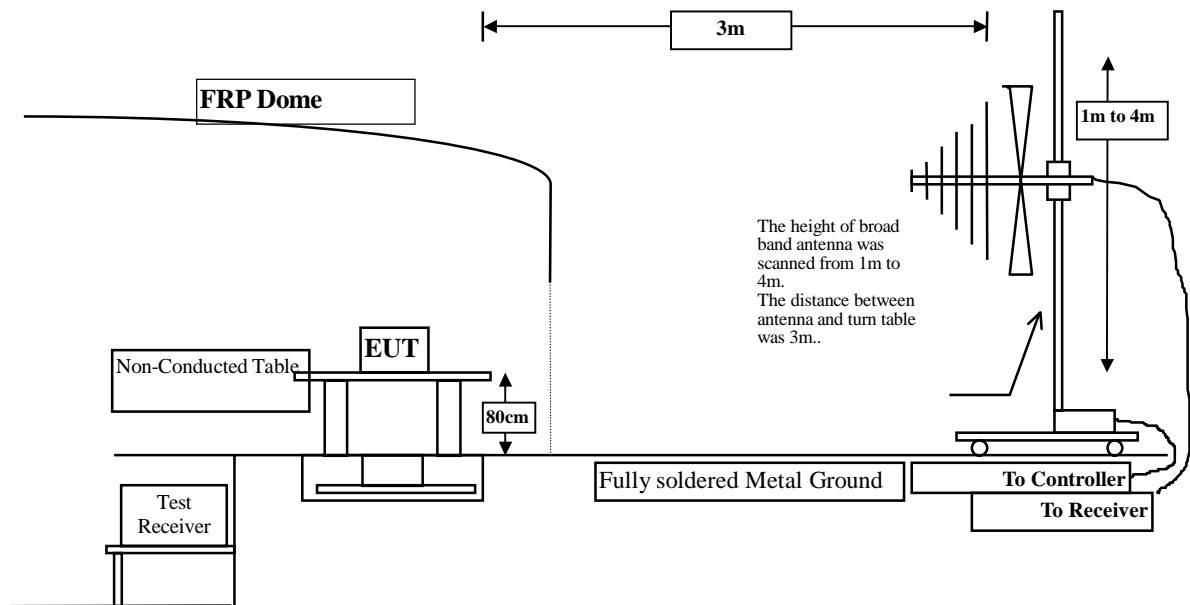
The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
<input checked="" type="checkbox"/> Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2007
	X	Pre-Amplifier	AGILENT	8447D/2944A09549	Sep., 2007
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2007
	X	Spectrum Analyzer	Advantest	R3162/91700283	Oct., 2007
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2008
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

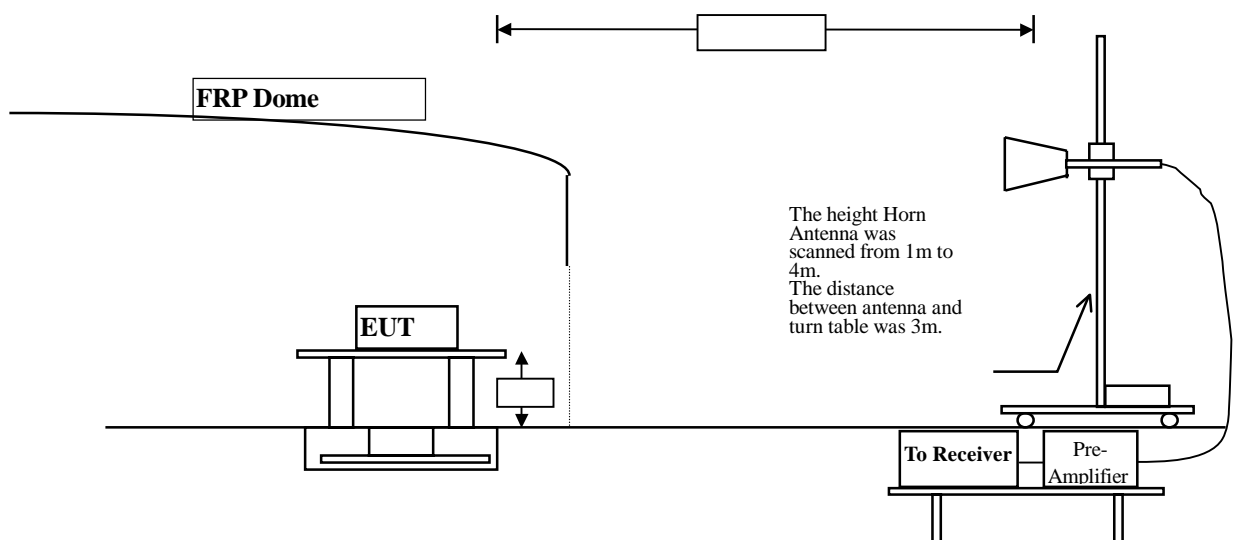
- Note:
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
 2. The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB beamwidth of the antenna.

The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The frequency range from 30MHz to 10th harmonics is checked.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : 802.11 n/b/g WLAN PCI-e Card
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2412MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	-0.229	47.380	47.151	-26.849	74.000
7236.000	3.182	40.030	43.212	-30.788	74.000
9648.000	5.798	40.400	46.199	-27.801	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	-0.229	50.400	50.171	-23.829	74.000
7236.000	3.182	40.060	43.242	-30.758	74.000
9648.000	5.798	40.230	46.029	-27.971	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	53.050	52.782	-21.218	74.000
7311.000	3.285	41.320	44.606	-29.394	74.000
9748.000	6.190	38.720	44.910	-29.090	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	54.720	54.452	-19.548	74.000
7311.000	3.285	39.110	42.396	-31.604	74.000
9748.000	6.190	38.360	44.550	-29.450	74.000
Average					
Detector:					
4874.000	-0.268	51.260	50.992	-3.008	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.105	50.470	50.575	-23.425	74.000
7386.000	3.644	39.170	42.815	-31.185	74.000
9848.000	6.582	38.720	45.302	-28.698	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	0.105	56.660	56.765	-17.235	74.000
7386.000	3.644	42.020	45.665	-28.335	74.000
9848.000	6.582	38.510	45.092	-28.908	74.000
Average					
Detector:					
4924.000	0.105	50.430	50.535	-3.465	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	-0.229	42.990	42.761	-31.239	74.000
7236.000	3.182	39.170	42.352	-31.648	74.000
9648.000	5.798	41.050	46.849	-27.151	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4824.000	-0.229	45.990	45.761	-28.239	74.000
7236.000	3.182	39.270	42.452	-31.548	74.000
9648.000	5.798	39.830	45.629	-28.371	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	47.850	47.582	-26.418	74.000
7311.000	3.285	40.170	43.456	-30.544	74.000
9748.000	6.190	39.370	45.560	-28.440	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	56.300	56.032	-17.968	74.000
7311.000	3.285	39.830	43.116	-30.884	74.000
9748.000	6.190	39.200	45.390	-28.610	74.000
Average					
Detector:					
4874.000	-0.268	42.420	42.152	-11.848	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.105	54.510	54.615	-19.385	74.000
7386.000	3.644	38.470	42.115	-31.885	74.000
9848.000	6.582	38.550	45.132	-28.868	74.000
Average Detector:					
4924.000	0.105	40.100	40.205	-13.795	54.000
Vertical					
Peak Detector:					
4924.000	0.105	61.260	61.365	-12.635	74.000
7386.000	3.644	38.490	42.135	-31.865	74.000
9848.000	6.582	38.060	44.642	-29.358	74.000
Average Detector:					
4924.000	0.105	49.990	50.095	-3.905	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	-0.229	45.830	45.601	-28.399	74.000
7236.000	3.182	40.250	43.432	-30.568	74.000
9648.000	5.798	42.550	48.349	-25.651	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4824.000	-0.229	50.150	49.921	-24.079	74.000
7236.000	3.182	40.230	43.412	-30.588	74.000
9648.000	5.798	40.580	46.379	-27.621	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	42.860	42.592	-31.408	74.000
7311.000	3.285	39.570	42.856	-31.144	74.000
9748.000	6.190	39.850	46.040	-27.960	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	58.250	57.982	-16.018	74.000
7311.000	3.285	40.620	43.906	-30.094	74.000
9748.000	6.190	40.520	46.710	-27.290	74.000
Average					
Detector:					
4874.000	-0.268	45.250	44.982	-9.018	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.105	58.880	58.985	-15.015	74.000
7386.000	3.644	38.730	42.375	-31.625	74.000
9848.000	6.582	37.980	44.562	-29.438	74.000
Average Detector:					
4924.000	0.105	46.450	46.555	-7.445	54.000
Vertical					
Peak Detector:					
4924.000	0.105	58.650	58.755	-15.245	74.000
7386.000	3.644	39.310	42.955	-31.045	74.000
9848.000	6.582	39.640	46.222	-27.778	74.000
Average Detector:					
4924.000	0.105	50.720	50.825	-3.175	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2422MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	-0.244	44.040	43.796	-30.204	74.000
7266.000	3.220	39.430	42.650	-31.350	74.000
9688.000	5.909	40.240	46.149	-27.851	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4844.000	-0.244	43.370	43.126	-30.874	74.000
7266.000	3.220	40.000	43.220	-30.780	74.000
9688.000	5.909	39.580	45.489	-28.511	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	40.910	40.642	-33.358	74.000
7311.000	3.285	40.840	44.126	-29.874	74.000
9748.000	6.190	38.440	44.630	-29.370	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	50.960	50.692	-23.308	74.000
7311.000	3.285	40.040	43.326	-30.674	74.000
9748.000	6.190	39.480	45.670	-28.330	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2452 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	-0.168	47.750	47.582	-26.418	74.000
7356.000	3.495	39.310	42.805	-31.195	74.000
9808.000	6.471	39.290	45.762	-28.238	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	-0.168	53.250	53.082	-20.918	74.000
7356.000	3.495	40.250	43.745	-30.255	74.000
9808.000	6.471	38.240	44.712	-29.288	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	-0.229	66.160	65.931	-8.069	74.000
7236.000	3.182	43.790	46.972	-27.028	74.000
9648.000	5.798	40.100	45.899	-28.101	74.000
Average					
Detector:					
4824.000	-0.229	50.320	50.091	-3.909	54.000
Vertical					
Peak Detector:					
4824.000	-0.229	65.850	65.621	-8.379	74.000
7236.000	3.182	40.210	43.392	-30.608	74.000
9648.000	5.798	43.050	48.849	-25.151	74.000
Average					
Detector:					
4824.000	-0.229	51.150	50.921	-3.079	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	65.580	65.312	-8.688	74.000
7311.000	3.285	44.430	47.716	-26.284	74.000
9748.000	6.190	39.850	46.040	-27.960	74.000
Average					
Detector:					
4874.000	-0.268	51.110	50.842	-3.158	54.000
Vertical					
Peak Detector:					
4874.000	-0.268	65.960	65.692	-8.308	74.000
7311.000	3.285	41.110	44.396	-29.604	74.000
9748.000	6.190	37.860	44.050	-29.950	74.000
Average					
Detector:					
4874.000	-0.268	51.210	50.942	-3.058	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.105	65.520	65.625	-8.375	74.000
7386.000	3.644	40.980	44.625	-29.375	74.000
9848.000	6.582	37.560	44.142	-29.858	74.000
Average Detector:					
4924.000	0.105	50.380	50.485	-3.515	54.000
Vertical					
Peak Detector:					
4924.000	0.105	65.520	65.625	-8.375	74.000
7386.000	3.644	42.180	45.825	-28.175	74.000
9848.000	6.582	37.620	44.202	-29.798	74.000
Average Detector:					
4924.000	0.105	50.860	50.965	-3.035	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	-0.229	64.130	63.901	-10.099	74.000
7236.000	3.182	44.270	47.452	-26.548	74.000
9648.000	5.798	41.760	47.559	-26.441	74.000
Average					
Detector:					
4824.000	-0.229	50.690	50.461	-3.539	54.000
Vertical					
Peak Detector:					
4824.000	-0.229	67.250	67.021	-6.979	74.000
7236.000	3.182	42.140	45.322	-28.678	74.000
9648.000	5.798	39.560	45.359	-28.641	74.000
Average					
Detector:					
4824.000	-0.229	51.120	50.891	-3.109	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	42.760	42.492	-31.508	74.000
7311.000	3.285	37.970	41.256	-32.744	74.000
9748.000	6.190	39.250	45.440	-28.560	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	56.150	55.882	-18.118	74.000
7311.000	3.285	38.020	41.306	-32.694	74.000
9748.000	6.190	37.420	43.610	-30.390	74.000
Average					
Detector:					
4874.000	-0.268	44.250	43.982	-10.018	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.105	56.180	56.285	-17.715	74.000
7386.000	3.644	40.930	44.575	-29.425	74.000
9848.000	6.582	36.480	43.062	-30.938	74.000
Average Detector:					
4924.000	0.105	45.350	45.455	-8.545	54.000
Vertical					
Peak Detector:					
4924.000	0.105	57.460	57.565	-16.435	74.000
7386.000	3.644	36.390	40.035	-33.965	74.000
9848.000	6.582	35.960	42.542	-31.458	74.000
Average Detector:					
4924.000	0.105	46.890	46.995	-7.005	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector:

4824.000	-0.229	47.930	47.701	-26.299	74.000
7236.000	3.182	38.750	41.932	-32.068	74.000
9648.000	5.798	39.350	45.149	-28.851	74.000

Average

Detector:

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Vertical

Peak Detector:

4824.000	-0.229	48.550	48.321	-25.679	74.000
7236.000	3.182	38.130	41.312	-32.688	74.000
9648.000	5.798	37.480	43.279	-30.721	74.000

Average

Detector:

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	42.760	42.492	-31.508	74.000
7311.000	3.285	37.970	41.256	-32.744	74.000
9748.000	6.190	39.250	45.440	-28.560	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	56.150	55.882	-18.118	74.000
7311.000	3.285	38.020	41.306	-32.694	74.000
9748.000	6.190	37.420	43.610	-30.390	74.000
Average					
Detector:					
4874.000	-0.268	44.250	43.982	-10.018	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	0.105	56.180	56.285	-17.715	74.000
7386.000	3.644	40.930	44.575	-29.425	74.000
9848.000	6.582	36.480	43.062	-30.938	74.000
Average Detector:					
4924.000	0.105	45.350	45.455	-8.545	54.000
Vertical					
Peak Detector:					
4924.000	0.105	57.050	57.155	-16.845	74.000
7386.000	3.644	37.210	40.855	-33.145	74.000
9848.000	6.582	38.040	44.622	-29.378	74.000
Average Detector:					
4924.000	0.105	48.620	48.725	-5.275	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2422MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector:

4844.000	-0.244	46.540	46.296	-27.704	74.000
7266.000	3.220	37.830	41.050	-32.950	74.000
9688.000	5.909	39.640	45.549	-28.451	74.000

Average

Detector:

--

Vertical

Peak Detector:

4844.000	-0.244	46.370	46.126	-27.874	74.000
7266.000	3.220	38.900	42.120	-31.880	74.000
9688.000	5.909	37.480	43.389	-30.611	74.000

Average

Detector:

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	-0.268	40.910	40.642	-33.358	74.000
7311.000	3.285	38.740	42.026	-31.974	74.000
9748.000	6.190	38.640	44.830	-29.170	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	-0.268	50.360	50.092	-23.908	74.000
7311.000	3.285	37.940	41.226	-32.774	74.000
9748.000	6.190	37.880	44.070	-29.930	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2452 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	-0.168	49.350	49.182	-24.818	74.000
7356.000	3.495	37.710	41.205	-32.795	74.000
9808.000	6.471	38.190	44.662	-29.338	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	-0.168	51.650	51.482	-22.518	74.000
7356.000	3.495	38.650	42.145	-31.855	74.000
9808.000	6.471	37.140	43.612	-30.388	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
121.180	12.759	11.031	23.790	-19.710	43.500
299.660	14.132	17.177	31.309	-14.691	46.000
400.540	16.687	12.967	29.654	-16.346	46.000
528.580	18.638	7.487	26.125	-19.875	46.000
681.840	20.859	5.536	26.395	-19.605	46.000
825.400	21.862	1.770	23.632	-22.368	46.000
Vertical					
212.360	10.231	13.795	24.026	-19.474	43.500
332.650	14.308	15.148	29.456	-16.544	46.000
433.210	19.234	7.314	26.548	-19.452	46.000
526.020	18.819	6.547	25.366	-20.634	46.000
681.640	20.258	5.198	25.456	-20.544	46.000
825.400	21.409	-0.153	21.256	-24.744	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
165.240	10.279	13.519	23.799	-19.701	43.500
265.540	13.963	17.293	31.256	-14.744	46.000
433.520	17.670	5.989	23.659	-22.341	46.000
528.580	18.638	8.110	26.748	-19.252	46.000
681.840	20.859	2.523	23.382	-22.618	46.000
825.400	21.862	1.526	23.388	-22.612	46.000
Vertical					
125.680	11.431	15.429	26.859	-16.641	43.500
256.630	14.100	10.759	24.859	-21.141	46.000
400.540	18.290	7.335	25.625	-20.375	46.000
528.590	18.993	7.642	26.635	-19.365	46.000
681.840	20.259	6.600	26.859	-19.141	46.000
825.650	21.412	5.234	26.646	-19.354	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
249.220	13.141	20.115	33.256	-12.744	46.000
312.360	13.749	13.105	26.854	-19.146	46.000
458.080	18.532	5.331	23.863	-22.137	46.000
625.300	20.848	7.811	28.659	-17.341	46.000
747.250	20.906	4.817	25.722	-20.278	46.000
825.400	21.862	1.526	23.388	-22.612	46.000
Vertical					
225.650	10.774	11.586	22.360	-23.640	46.000
365.250	16.452	10.026	26.478	-19.522	46.000
480.080	18.459	5.199	23.658	-22.342	46.000
635.840	20.664	6.210	26.874	-19.126	46.000
825.640	21.411	2.276	23.688	-22.312	46.000
945.680	23.823	1.592	25.415	-20.585	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
136.120	12.542	14.317	26.859	-16.641	43.500
299.660	14.132	9.727	23.859	-22.141	46.000
400.540	16.687	10.275	26.962	-19.038	46.000
528.580	18.638	4.527	23.165	-22.835	46.000
747.850	21.019	6.702	27.722	-18.278	46.000
800.180	21.764	3.025	24.789	-21.211	46.000
Vertical					
181.120	9.688	17.171	26.859	-16.641	43.500
222.490	10.427	15.256	25.683	-20.317	46.000
328.080	14.193	9.676	23.869	-22.131	46.000
528.580	18.993	12.117	31.110	-14.890	46.000
685.526	20.299	6.560	26.859	-19.141	46.000
800.180	21.815	3.081	24.896	-21.104	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
233.740	11.148	13.747	24.894	-21.106	46.000
336.520	14.414	9.236	23.650	-22.350	46.000
431.580	17.742	6.221	23.963	-22.037	46.000
515.250	18.954	4.461	23.415	-22.585	46.000
625.360	20.843	2.638	23.480	-22.520	46.000
745.890	20.804	8.853	29.658	-16.342	46.000
Vertical					
179.380	9.648	14.010	23.658	-19.842	43.500
352.040	15.309	11.550	26.859	-19.141	46.000
528.580	18.993	4.972	23.965	-22.035	46.000
666.325	19.977	3.168	23.145	-22.855	46.000
749.589	23.178	3.520	26.698	-19.302	46.000
965.850	22.936	3.918	26.854	-27.146	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
319.060	13.841	9.811	23.652	-22.348	46.000
431.580	17.742	8.378	26.120	-19.880	46.000
528.580	18.638	4.848	23.486	-22.514	46.000
602.360	20.181	7.449	27.630	-18.370	46.000
672.580	20.649	4.981	25.630	-20.370	46.000
918.500	22.853	2.727	25.580	-20.420	46.000
Vertical					
175.500	9.773	16.637	26.410	-17.090	43.500
352.050	15.311	17.639	32.950	-13.050	46.000
528.580	18.993	6.661	25.654	-20.346	46.000
666.320	19.977	4.677	24.654	-21.346	46.000
751.680	23.192	3.795	26.987	-19.013	46.000
968.960	22.949	1.681	24.630	-29.370	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
365.620	15.771	6.726	22.497	-23.503	46.000
472.320	18.759	6.326	25.085	-20.915	46.000
602.300	20.180	5.780	25.960	-20.040	46.000
633.340	20.865	4.545	25.410	-20.590	46.000
749.740	21.030	9.410	30.440	-15.560	46.000
833.160	21.825	2.805	24.630	-21.370	46.000
Vertical					
365.260	16.452	10.402	26.854	-19.146	46.000
528.578	18.993	7.667	26.660	-19.340	46.000
602.300	21.980	4.870	26.850	-19.150	46.000
687.660	20.424	5.991	26.415	-19.585	46.000
749.740	23.178	1.787	24.965	-21.035	46.000
967.020	22.939	1.920	24.859	-29.141	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna
 (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
334.580	14.290	12.339	26.629	-19.371	46.000
499.480	18.228	8.097	26.325	-19.675	46.000
602.300	20.180	6.714	26.894	-19.106	46.000
633.340	20.865	5.172	26.037	-19.963	46.000
749.790	21.036	4.649	25.684	-20.316	46.000
833.140	21.823	4.861	26.684	-19.316	46.000
Vertical					
268.620	14.000	12.829	26.829	-19.171	46.000
365.620	16.452	10.407	26.859	-19.141	46.000
528.580	18.993	7.610	26.603	-19.397	46.000
602.300	21.980	4.655	26.635	-19.365	46.000
747.800	23.164	5.695	28.859	-17.141	46.000
967.300	22.942	5.915	28.856	-25.144	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the radiated emission tests:

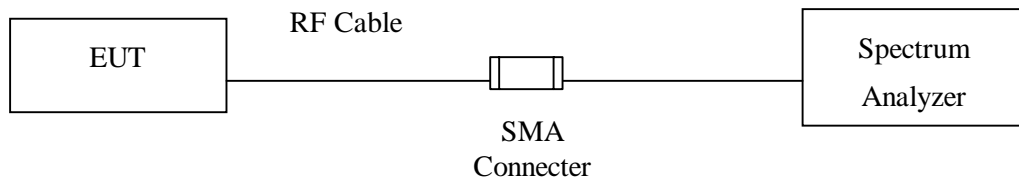
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. The test instruments marked with “X” are used to measure the final test results.

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

5.5. Uncertainty

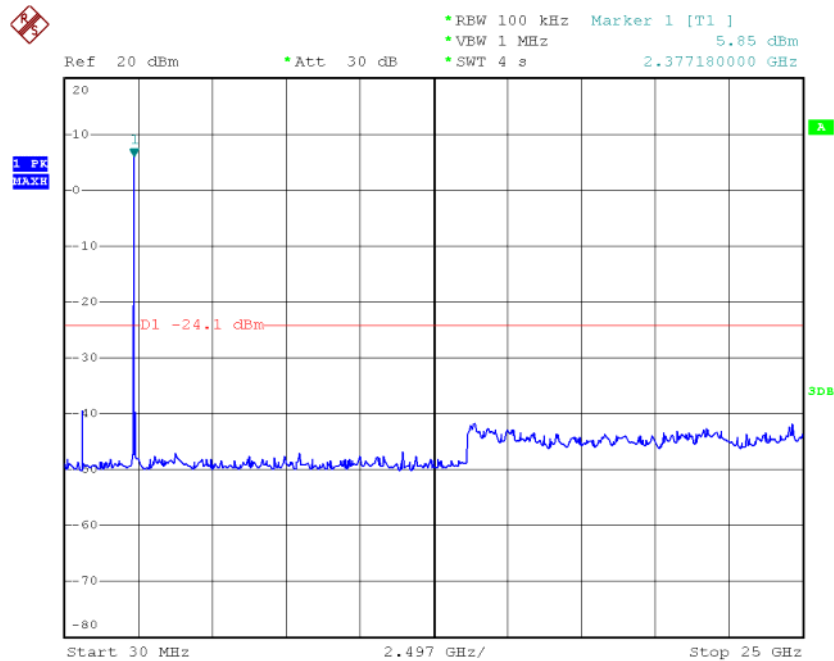
The measurement uncertainty

Conducted is defined as $\pm 1.27\text{dB}$

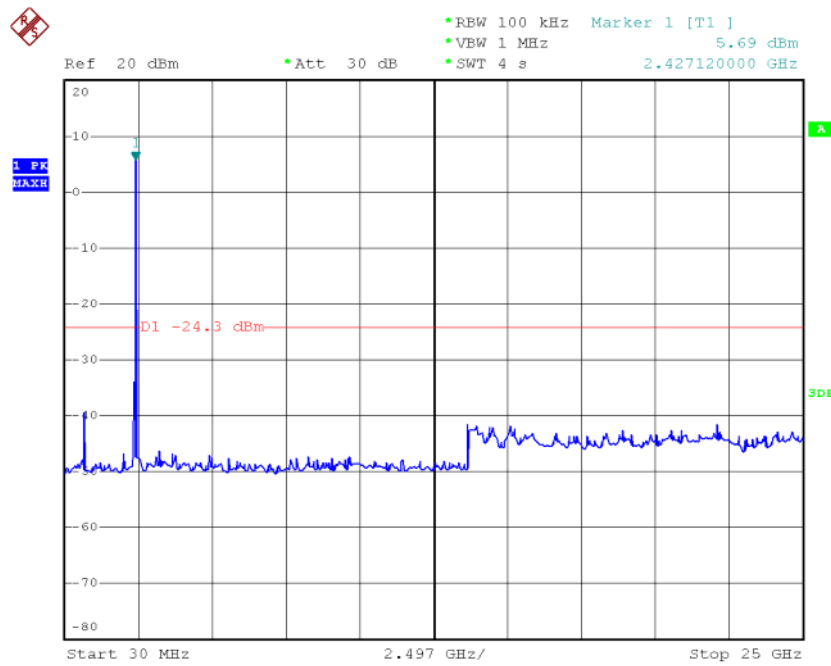
5.6. Test Result of RF antenna conducted test

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF antenna conducted test
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna

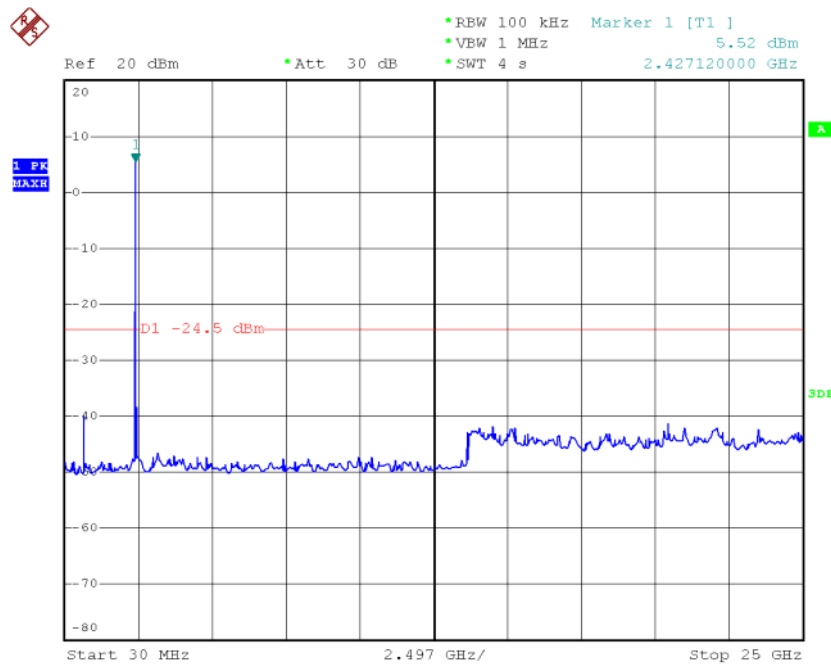
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

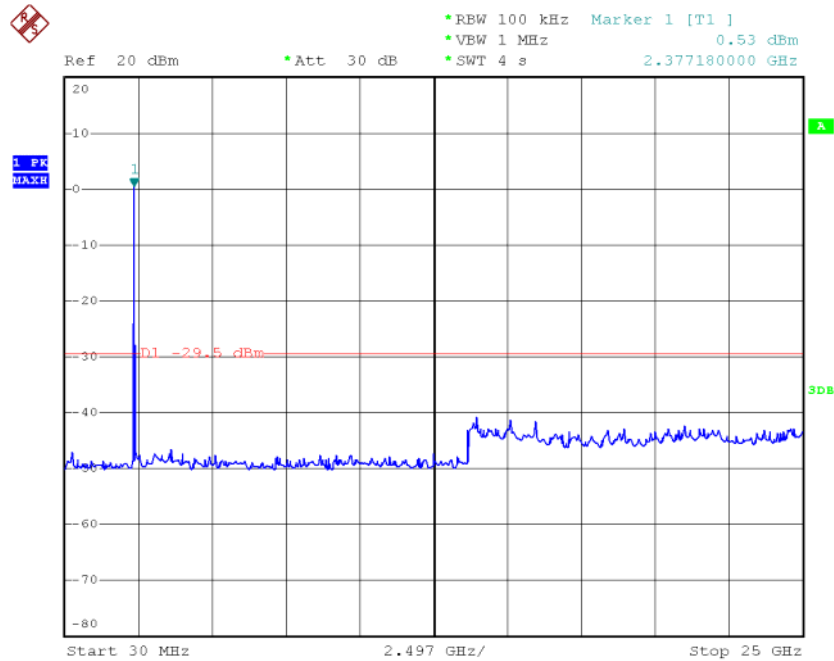


Channel 11 (2462MHz) 30-25GHz

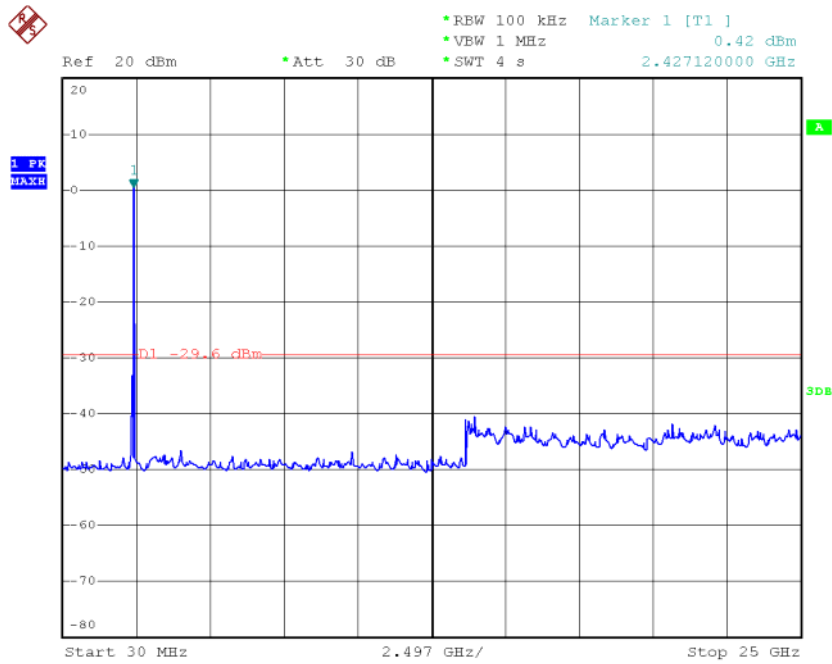


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna

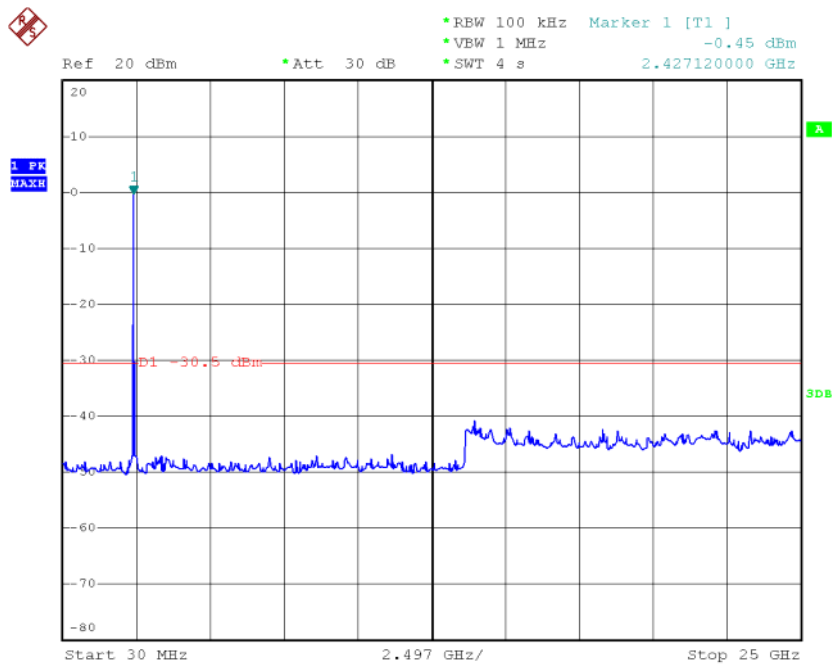
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

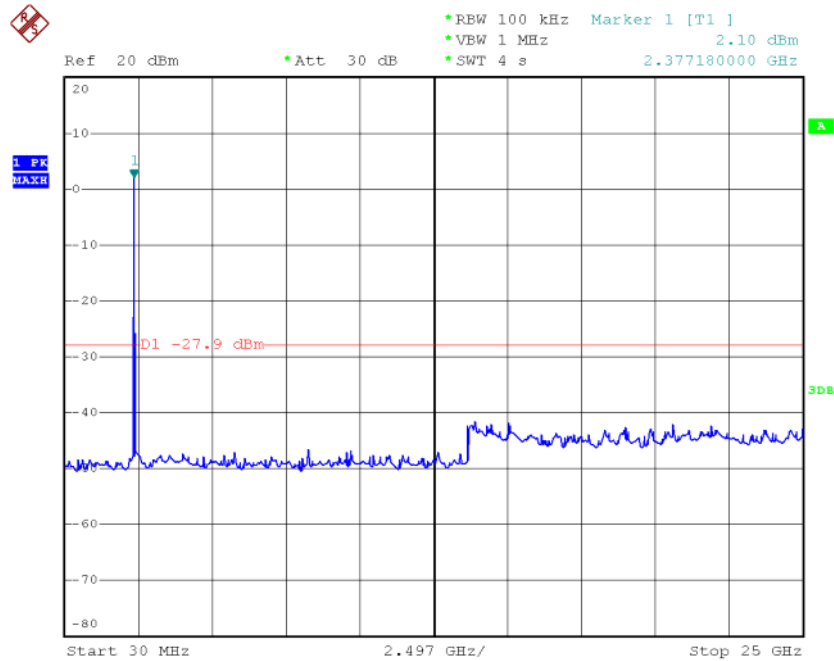


Channel 11 (2462MHz) 30-25GHz

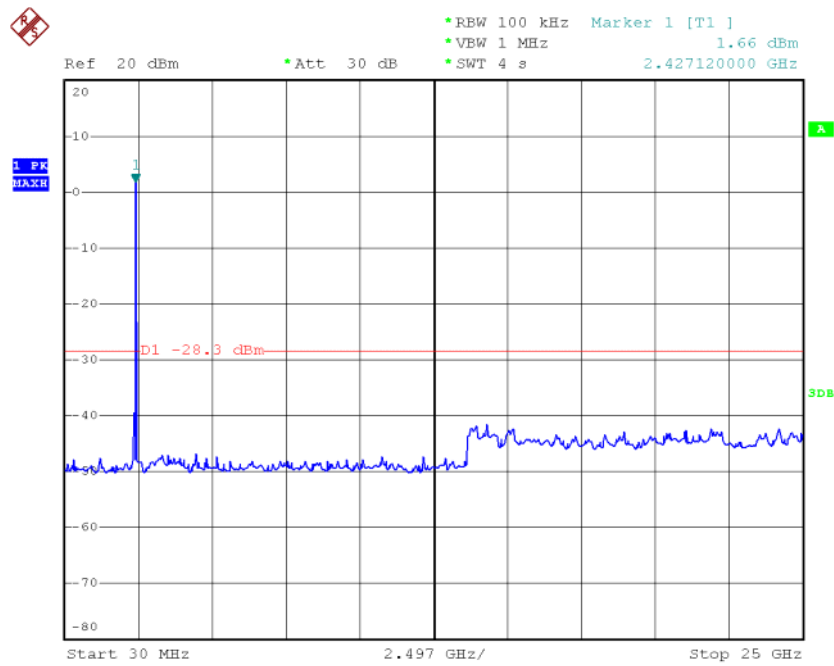


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna

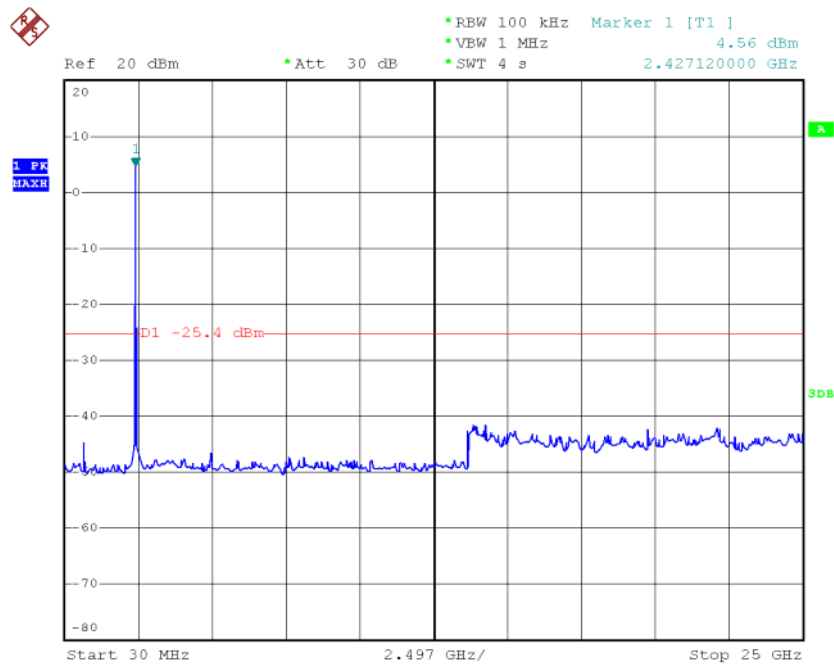
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

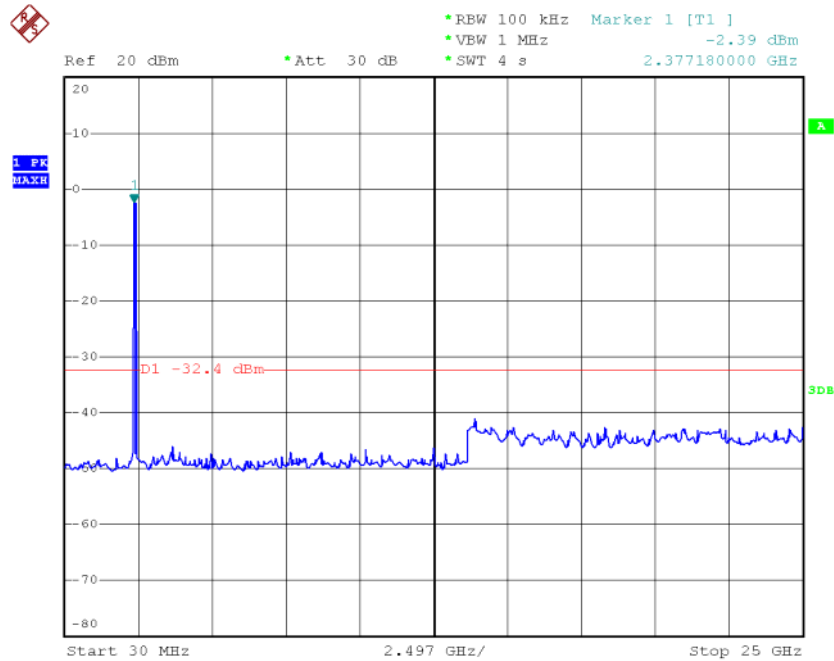


Channel 11 (2462MHz) 30-25GHz

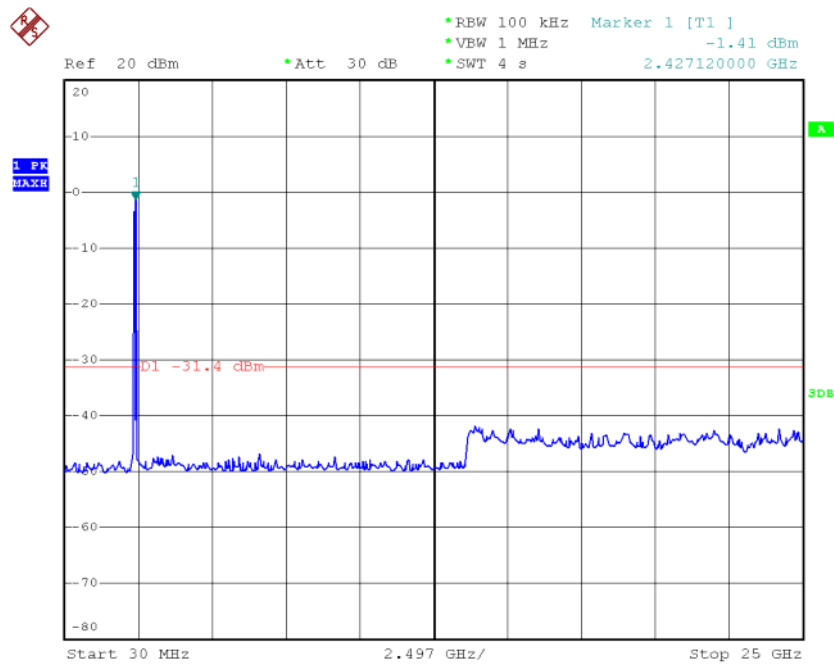


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna

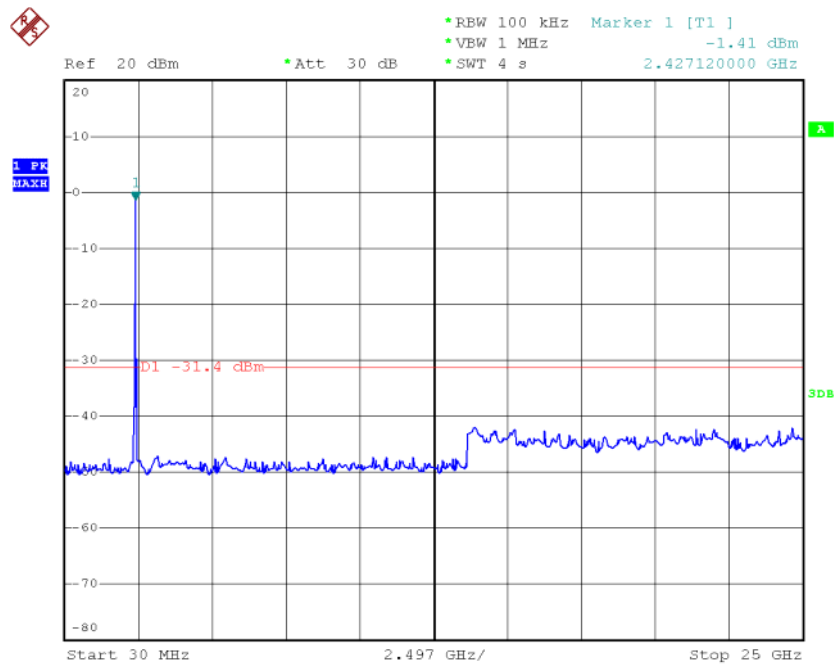
Channel 01 (2422MHz) 30-25GHz



Channel 04 (2437MHz) 30-25GHz

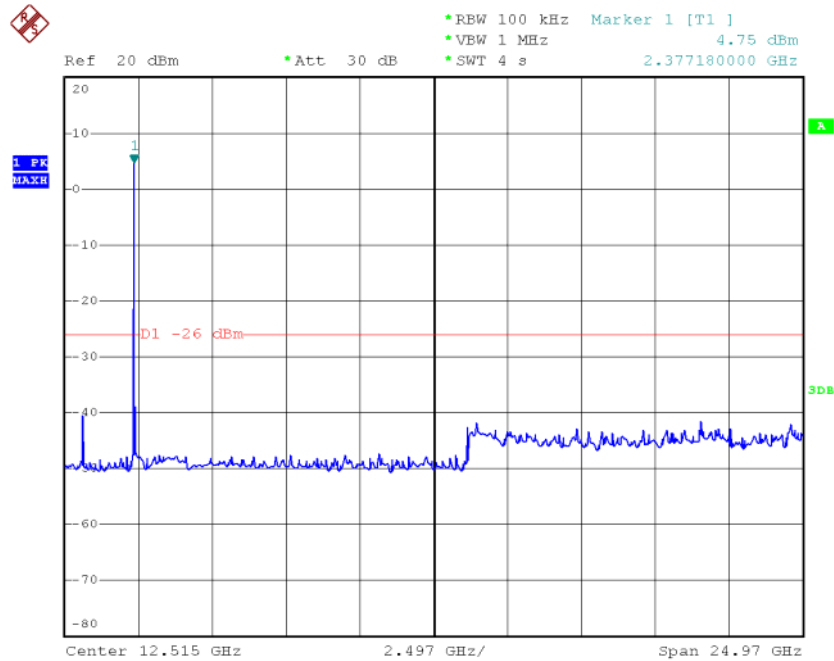


Channel 07 (2452MHz) 30-25GHz

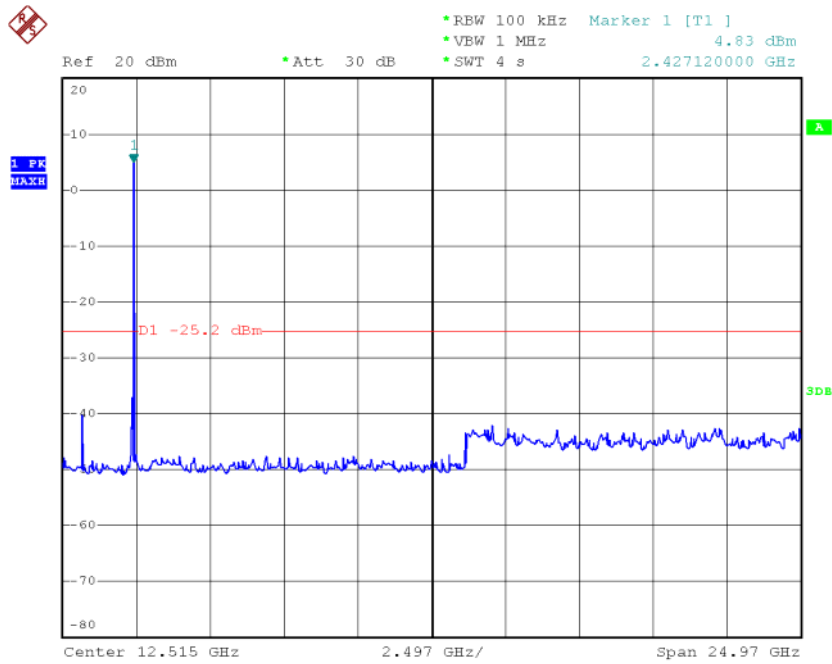


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF antenna conducted test
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna

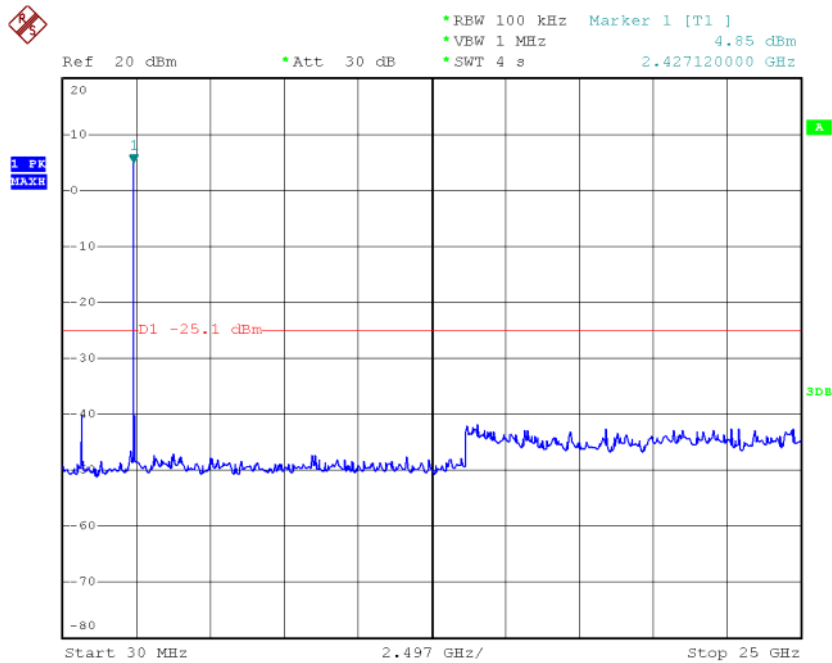
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

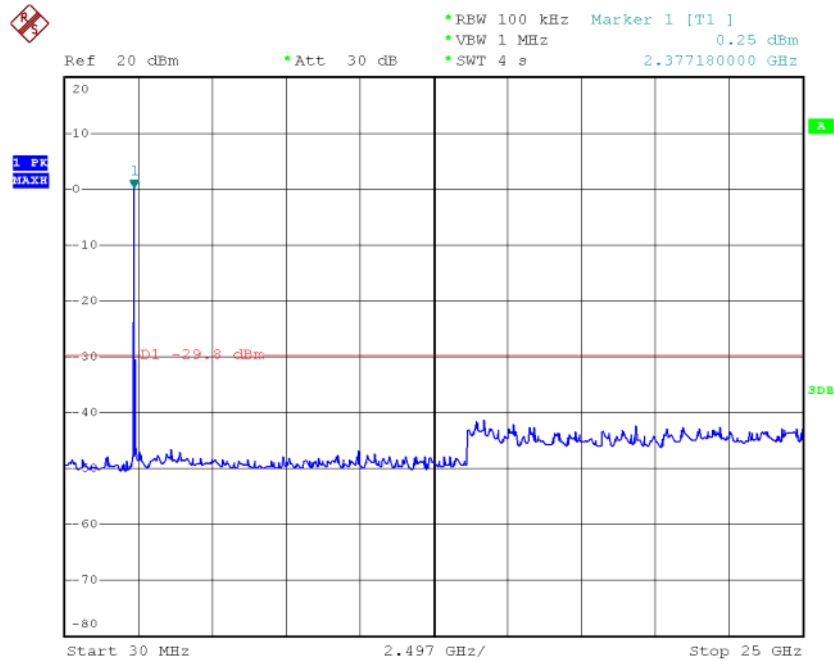


Channel 11 (2462MHz) 30-25GHz

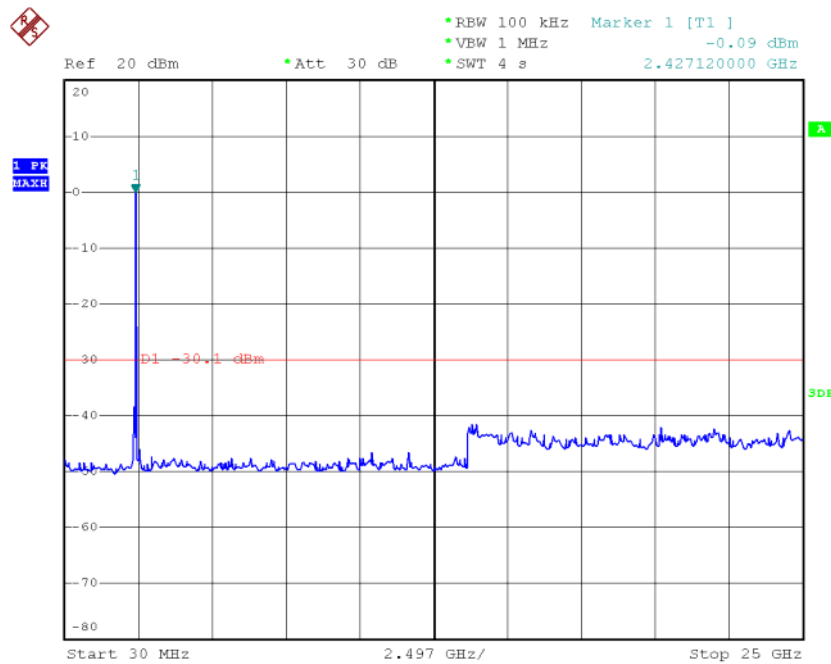


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna

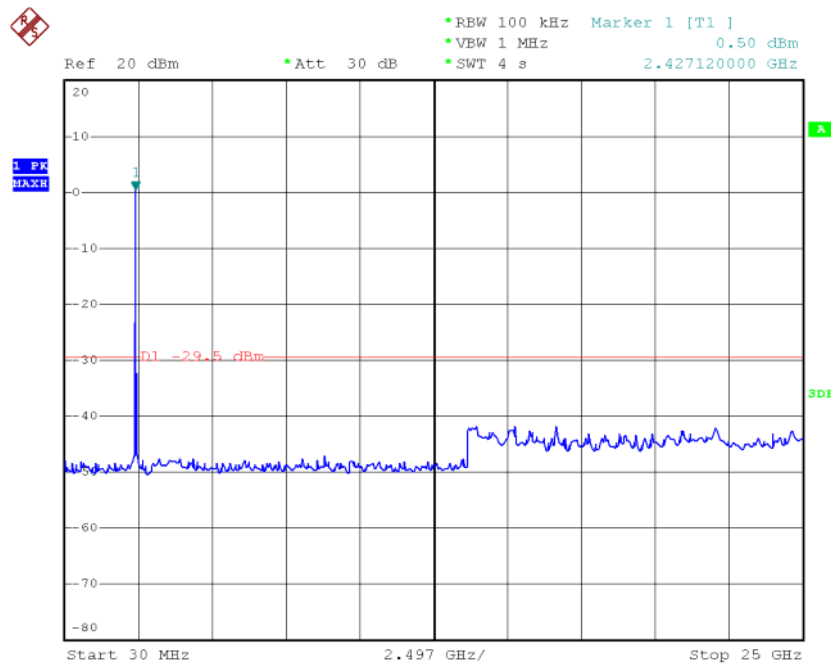
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

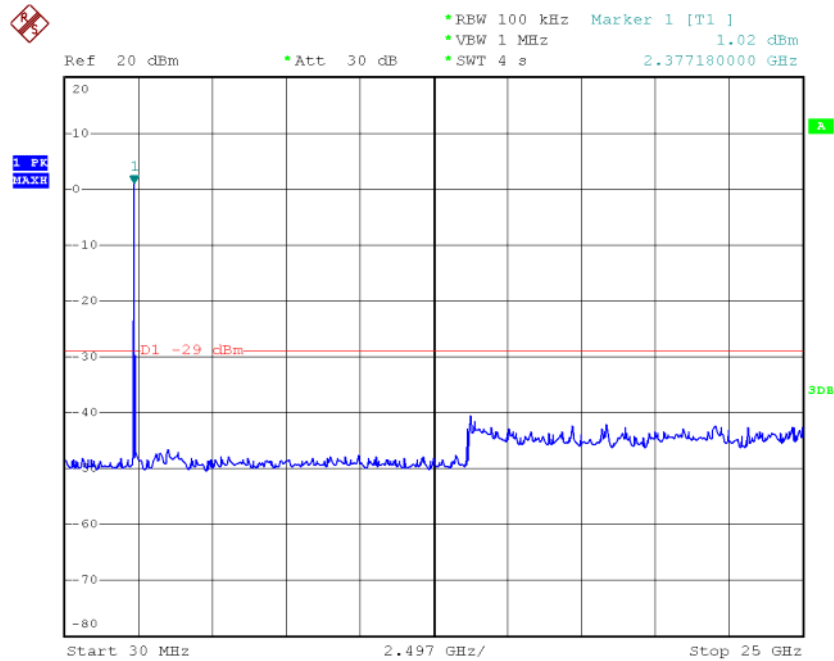


Channel 11 (2462MHz) 30-25GHz

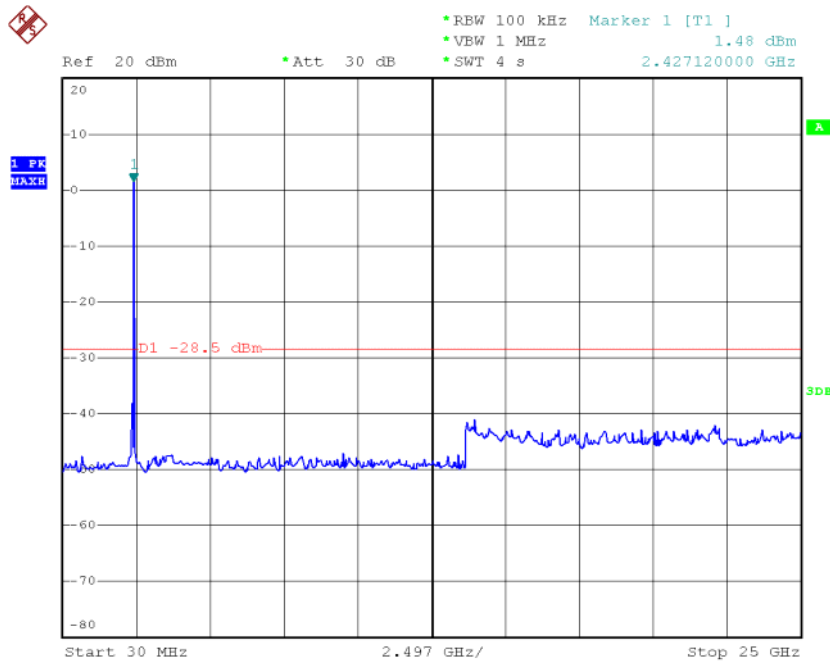


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna

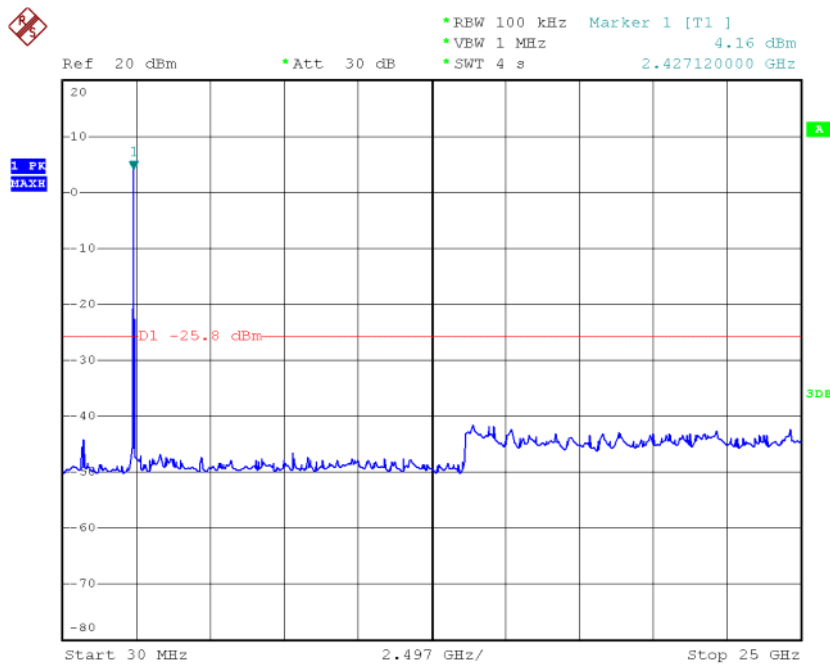
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

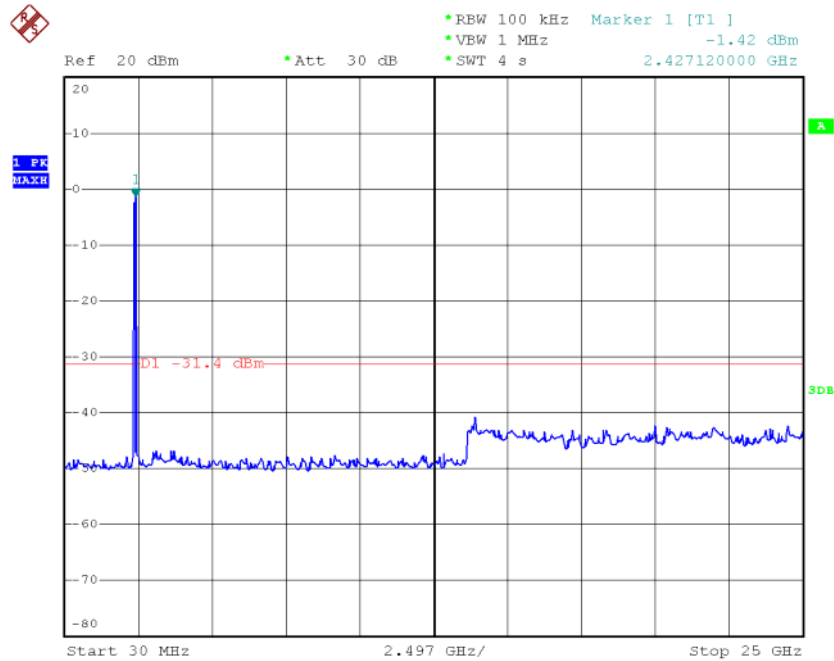


Channel 11 (2462MHz) 30-25GHz

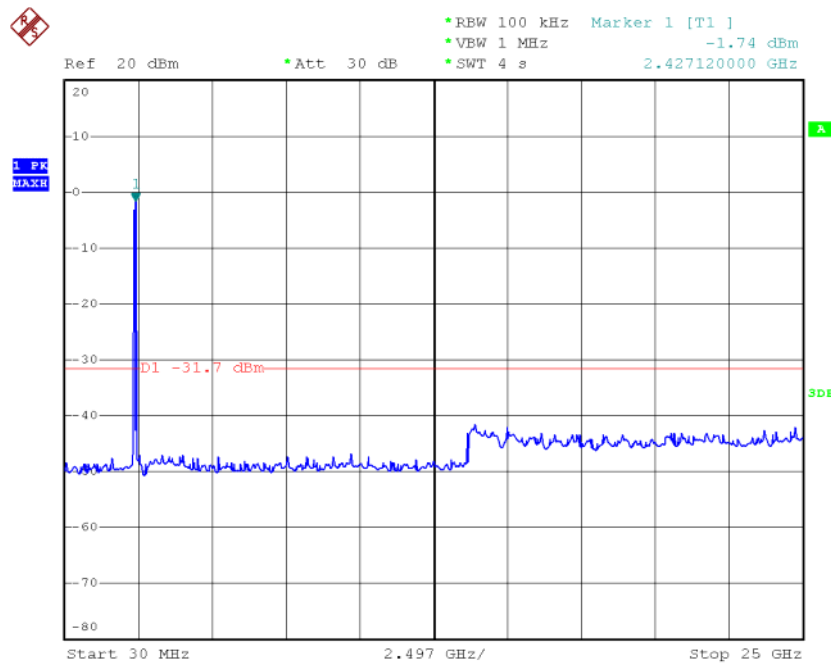


Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

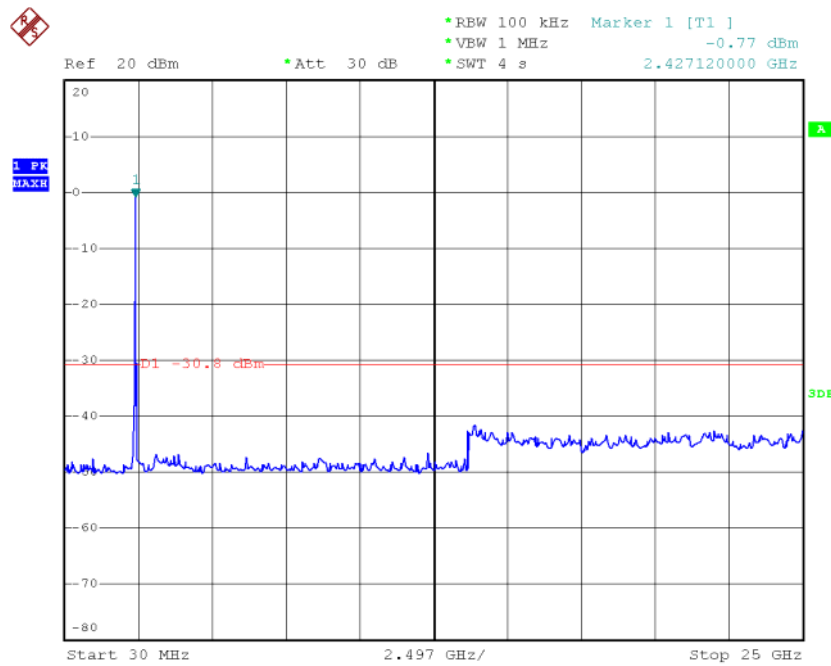
Channel 01 (2422MHz) 30-25GHz



Channel 04 (2437MHz) 30-25GHz



Channel 07 (2452MHz) 30-25GHz



6. Band Edge

6.1. Test Equipment

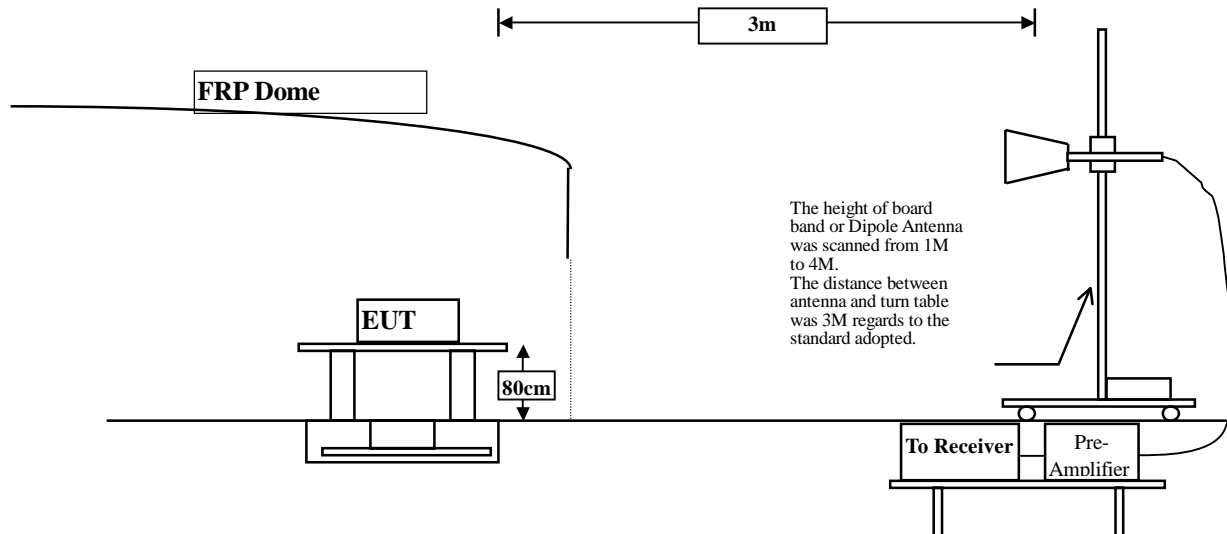
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2007
	X	Pre-Amplifier	AGILENT	8447D/2944A09549	Sep., 2007
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2007
	X	Spectrum Analyzer	Advantest	R3162/91700283	Oct., 2007
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2008
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

6.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2386.500	-6.776	65.322	58.546	74.00	54.00	Pass
01 (Average)	2386.500	-6.778	53.201	46.423	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

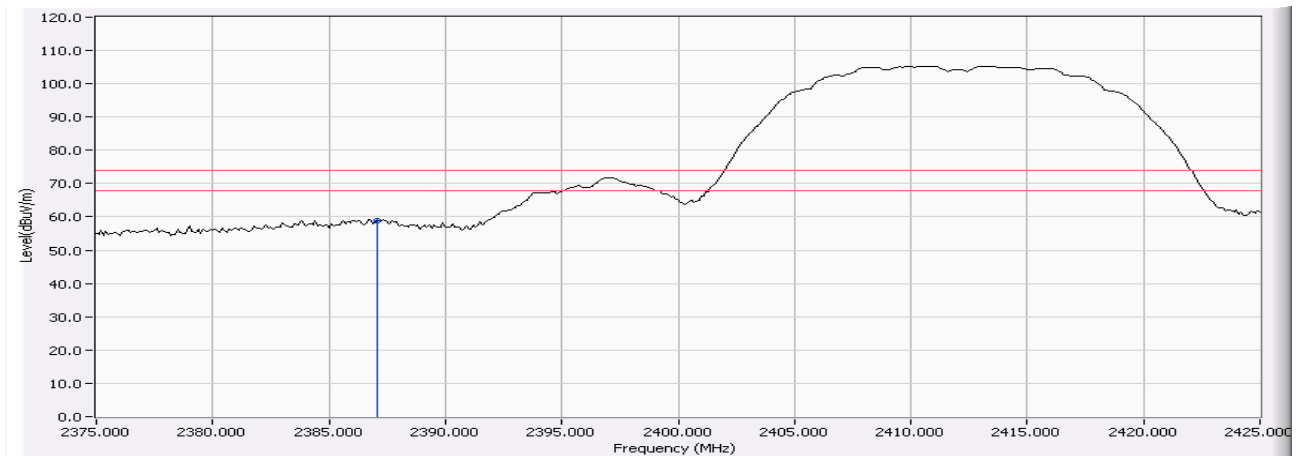


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2386.500	-6.779	62.342	55.563	74.00	54.00	Pass
01 (Average)	2386.500	-6.778	59.151	52.373	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

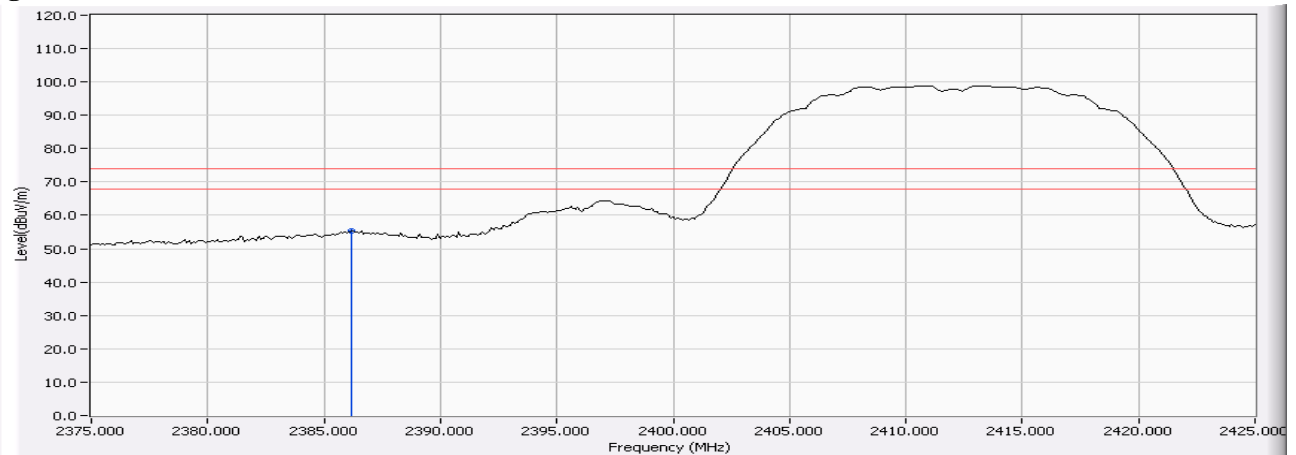


Figure Channel 01: Vertical (Average)



Note:

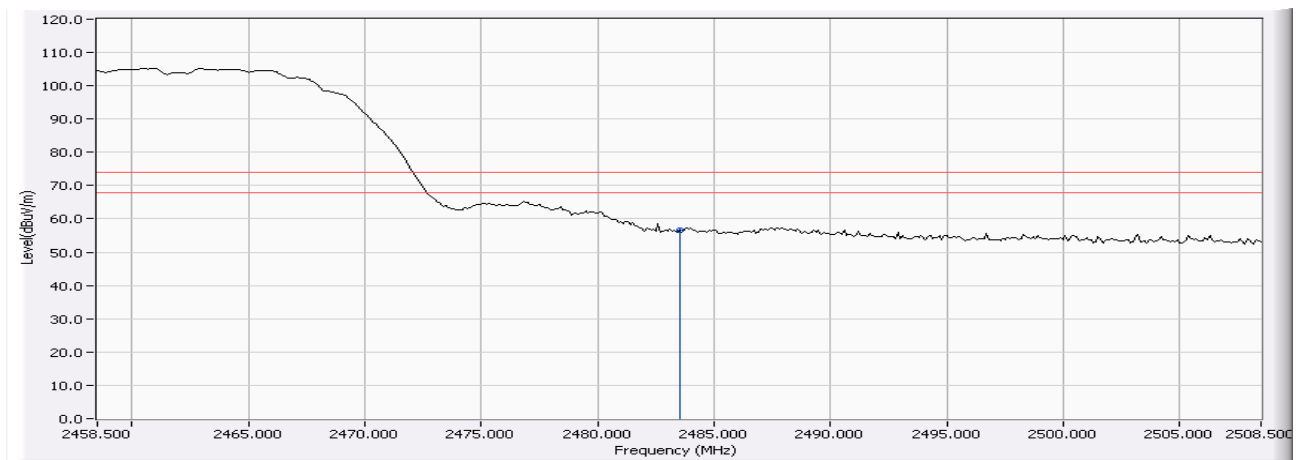
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

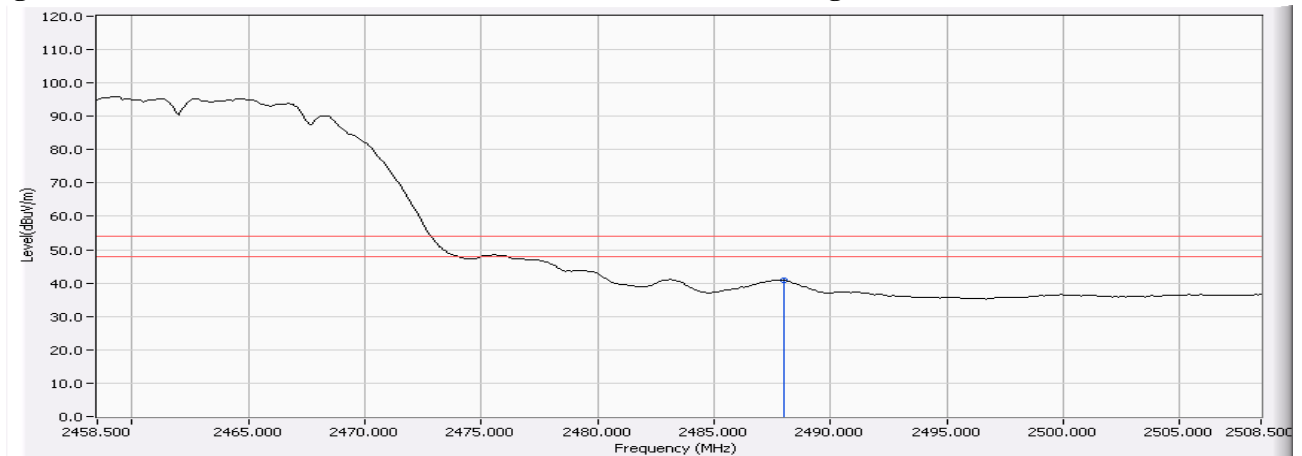
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	63.239	56.77	74.00	54.00	Pass
11(Average)	2488.000	29.984	47.355	40.893	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Figure Channel 11: Horizontal (Average)



Note:

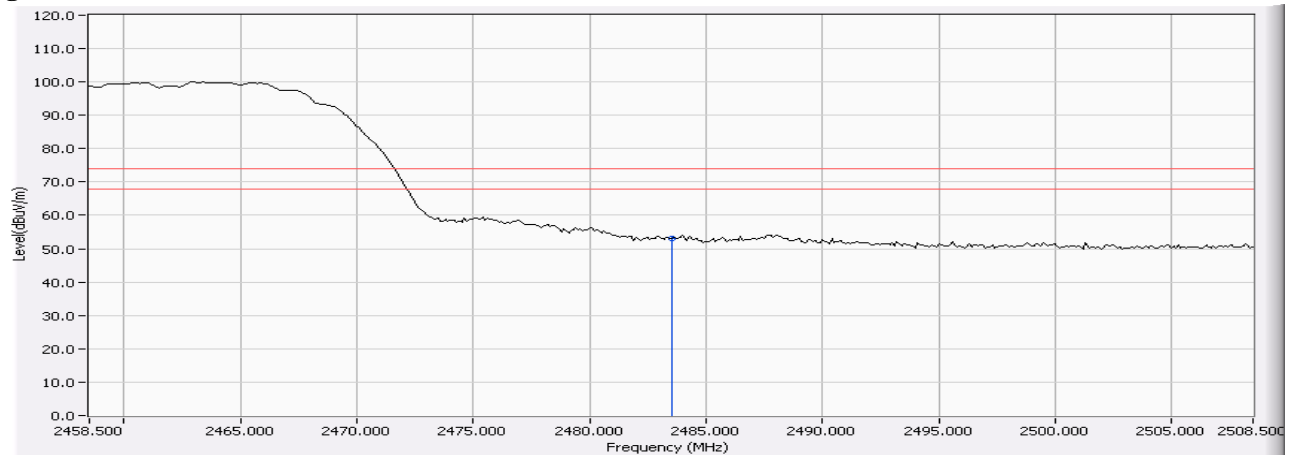
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

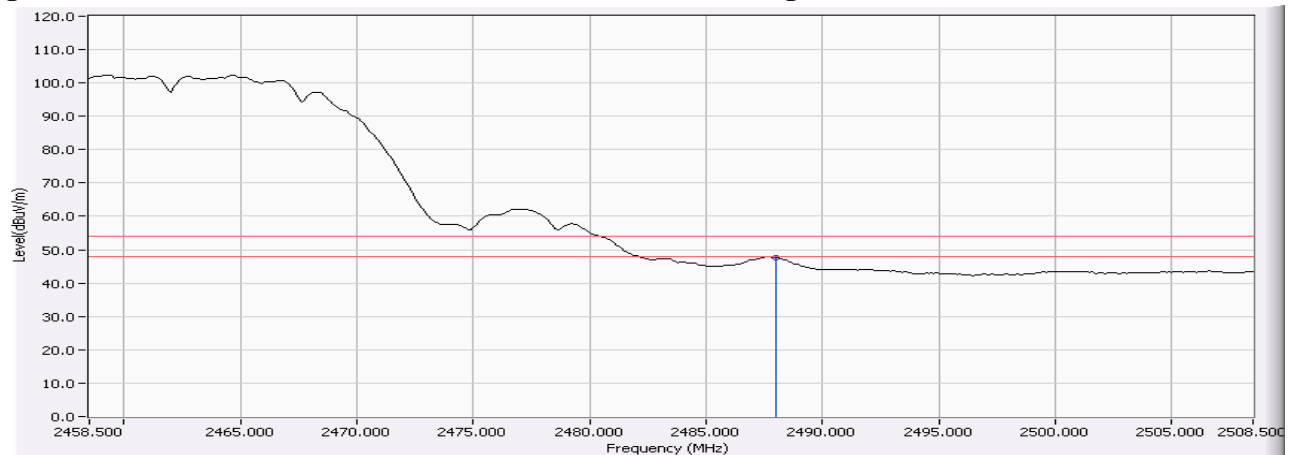
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	59.735	53.266	74.00	54.00	Pass
11(Average)	2488.000	-6.462	54.197	47.735	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	68.623	61.854	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	49.341	42.573	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

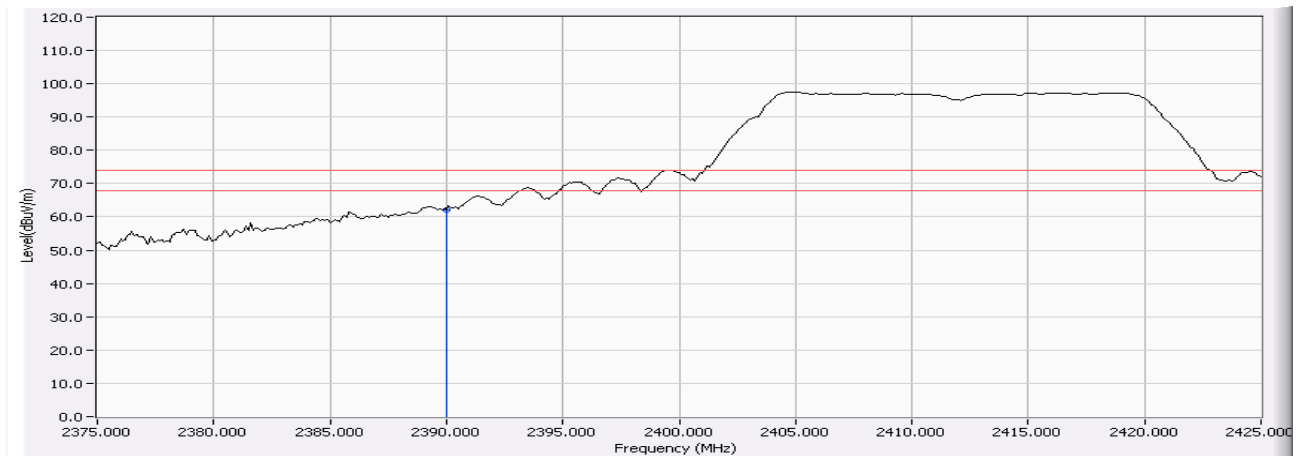
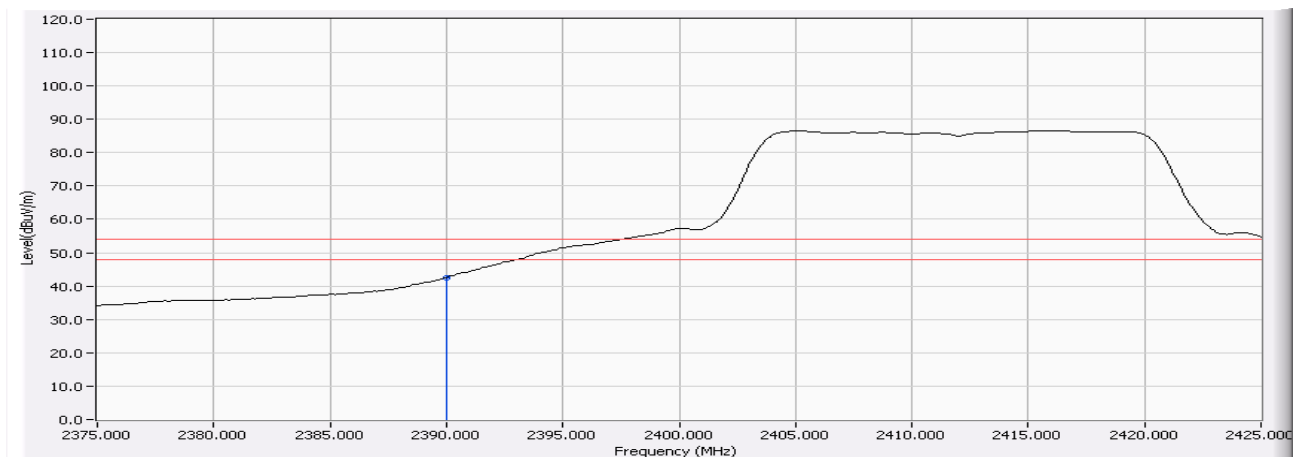


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	71.255	64.466	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	57.773	51.005	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

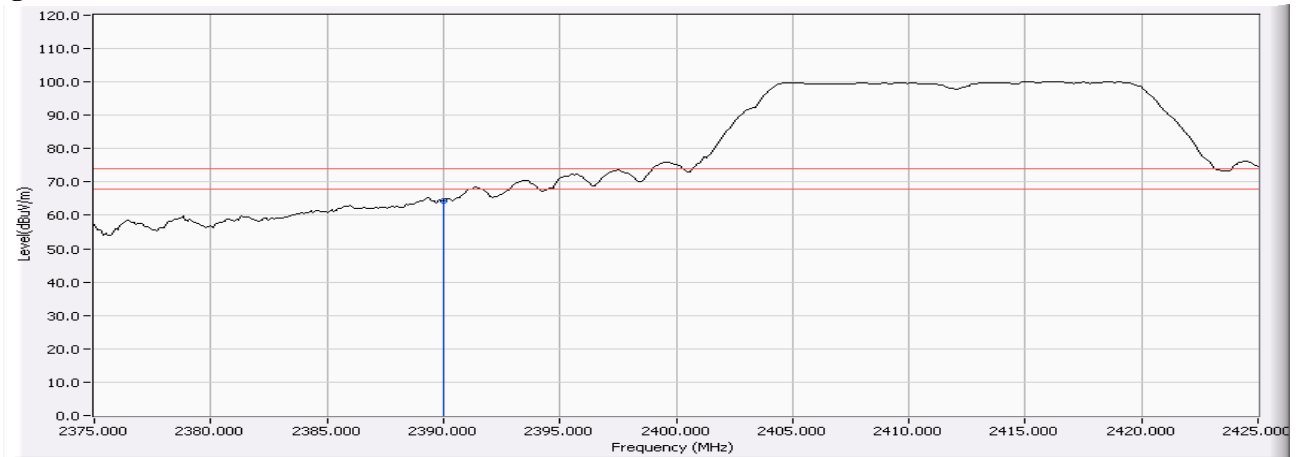
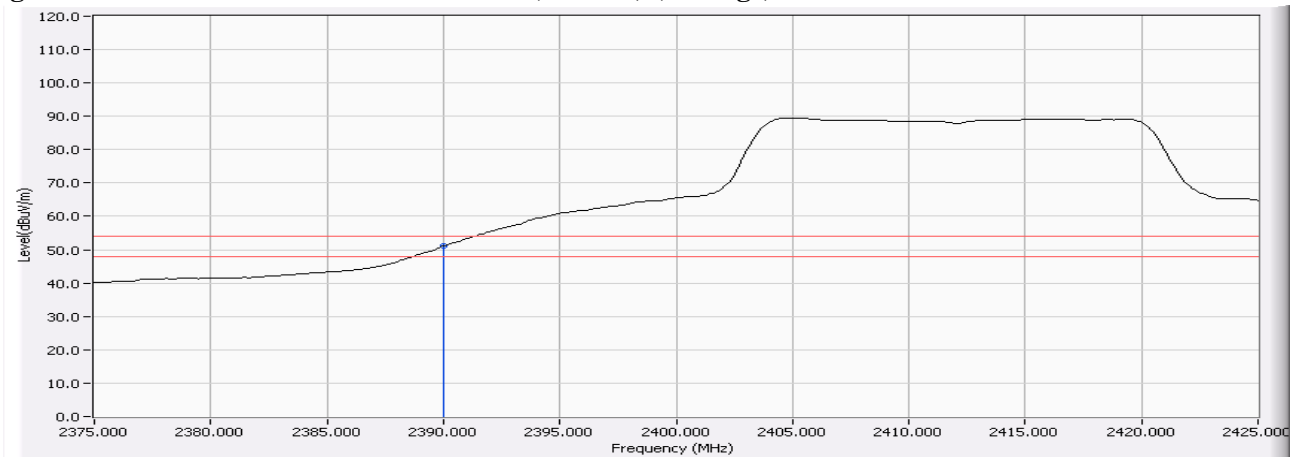


Figure Channel 01: (Vertical) (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	66.125	59.656	74.00	54.00	Pass
11 (Average)	2483.500	-6.469	47.879	41.411	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

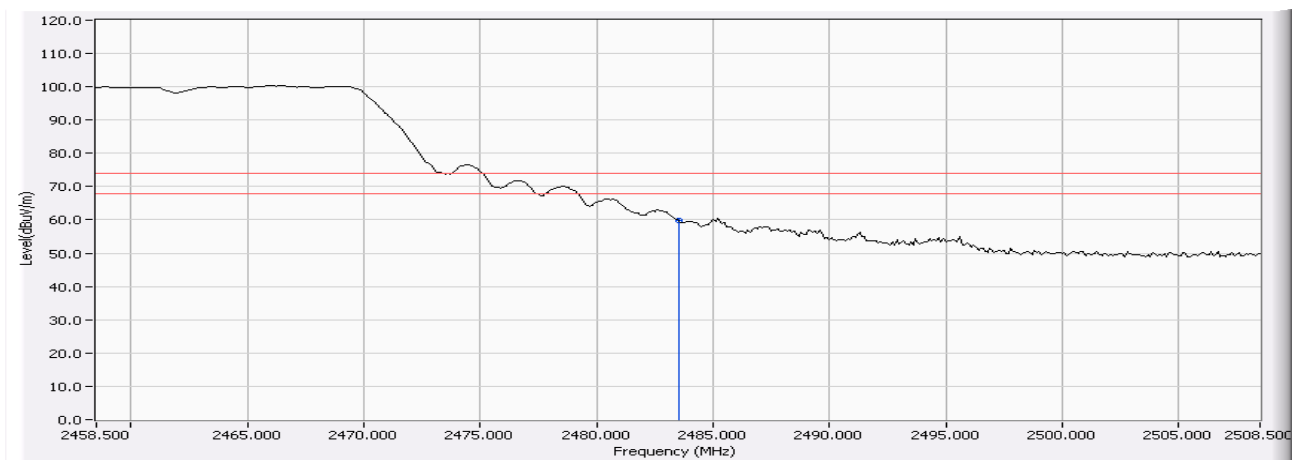
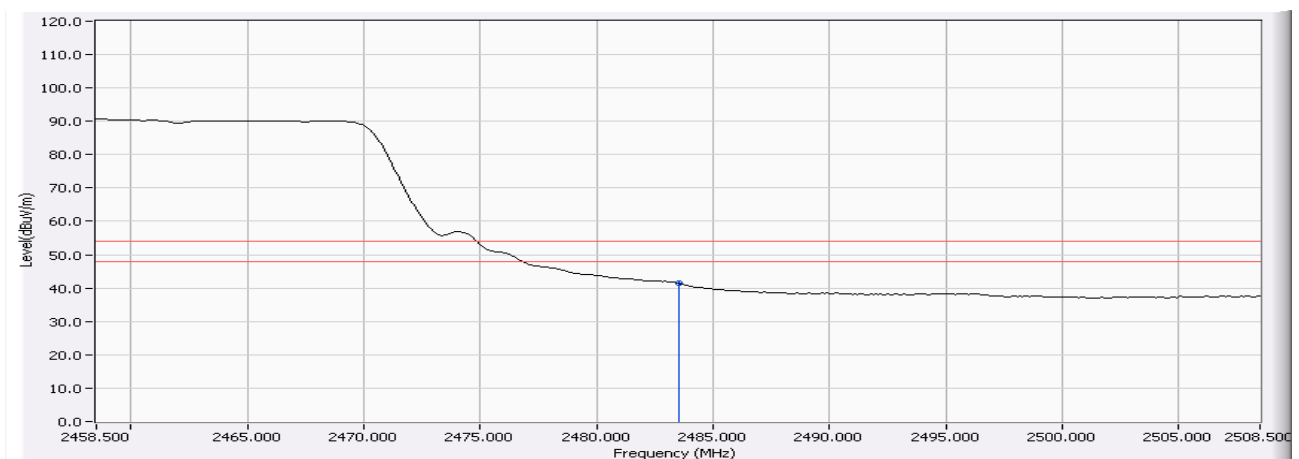


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	63.535	57.046	74.00	54.00	Pass
11(Average)	2483.500	-6.469	58.988	52.520	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

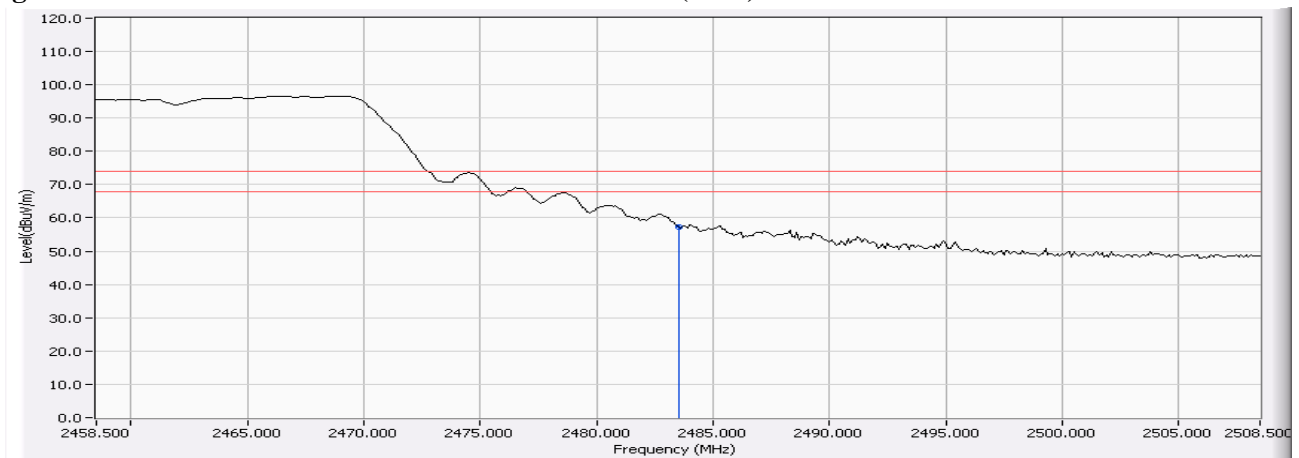
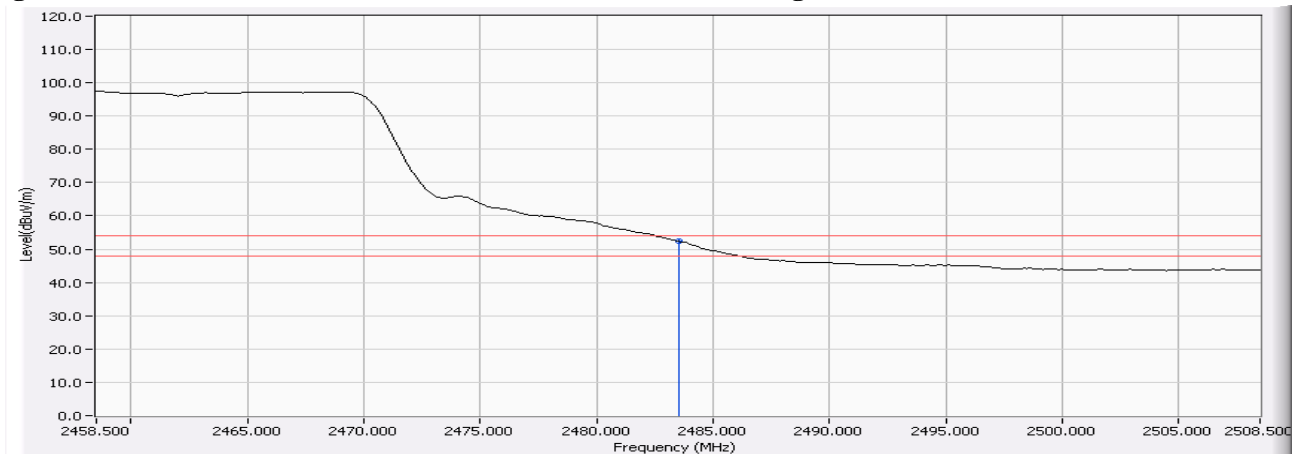


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	67.218	60.450	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	54.741	47.973	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

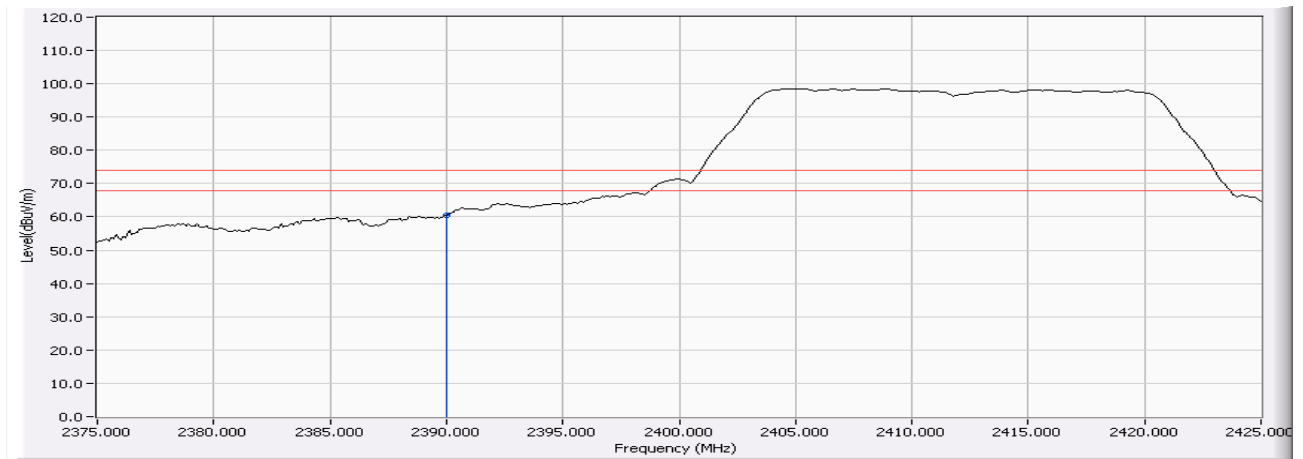
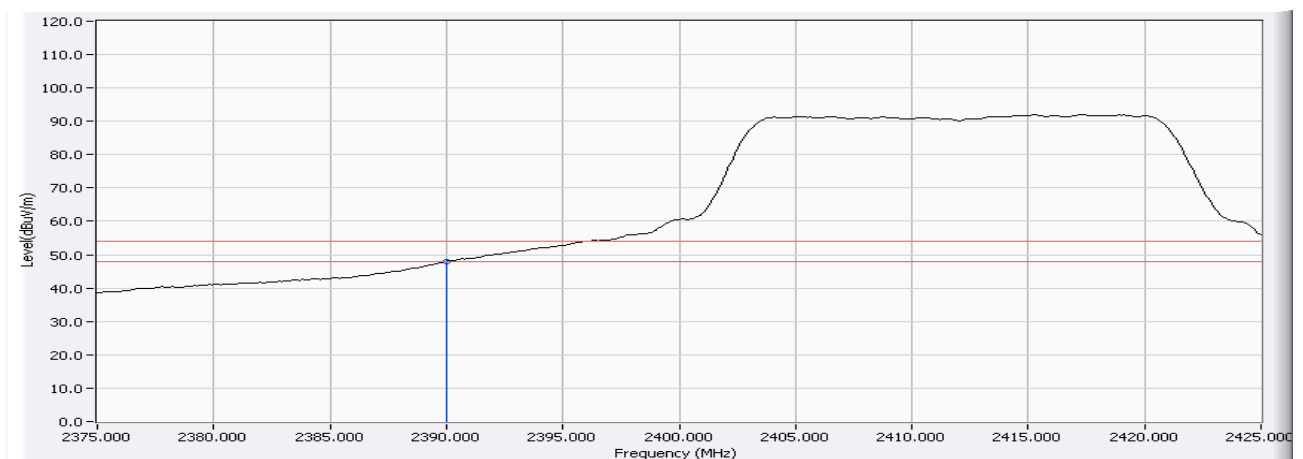


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	69.648	62.880	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	57.302	50.534	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

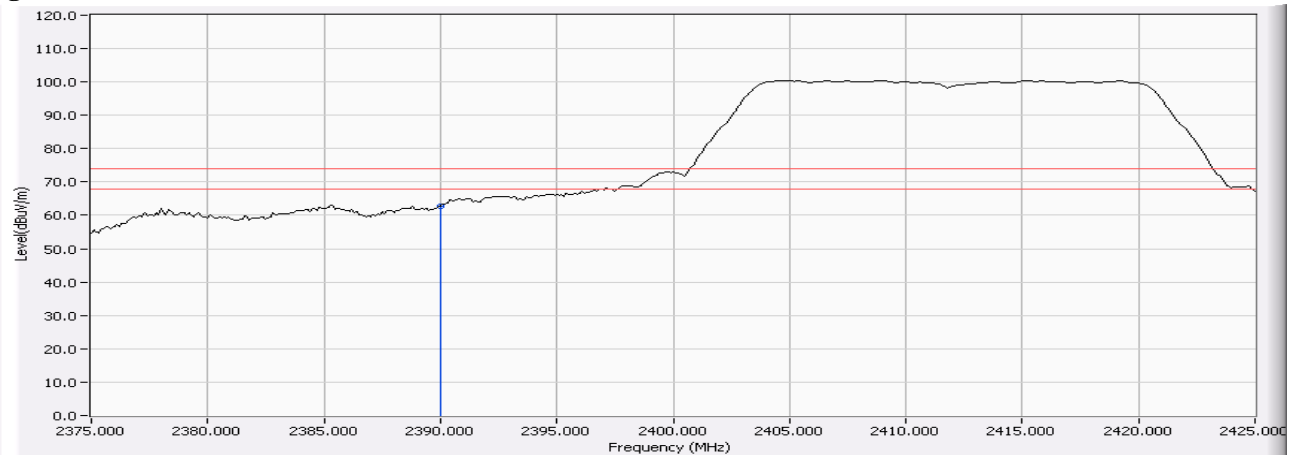
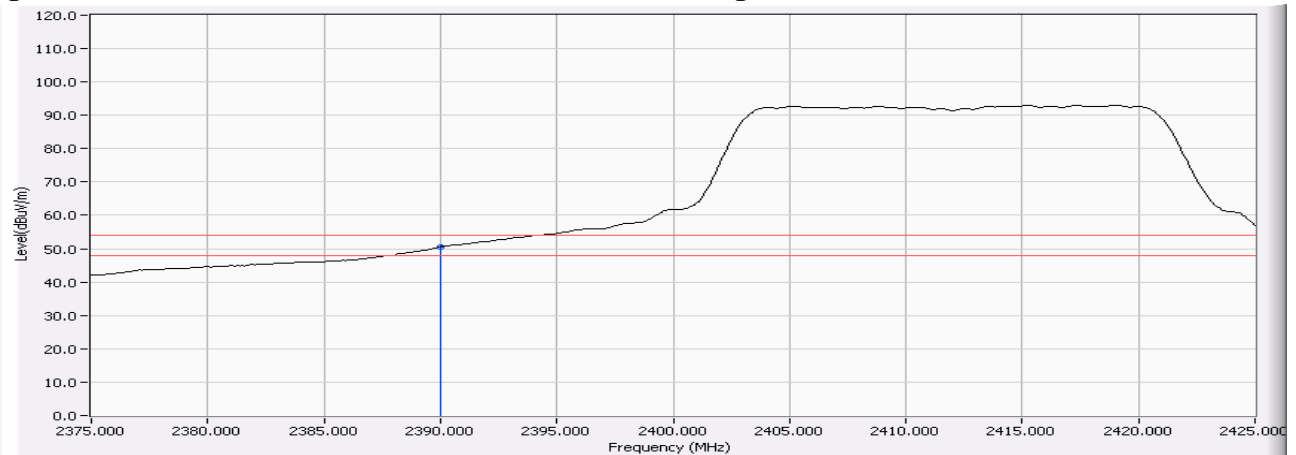


Figure Channel 01: (Vertical) (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2485.500	-6.466	71.010	64.544	74.00	54.00	Pass
11 (Average)	2483.500	-6.469	49.494	43.026	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

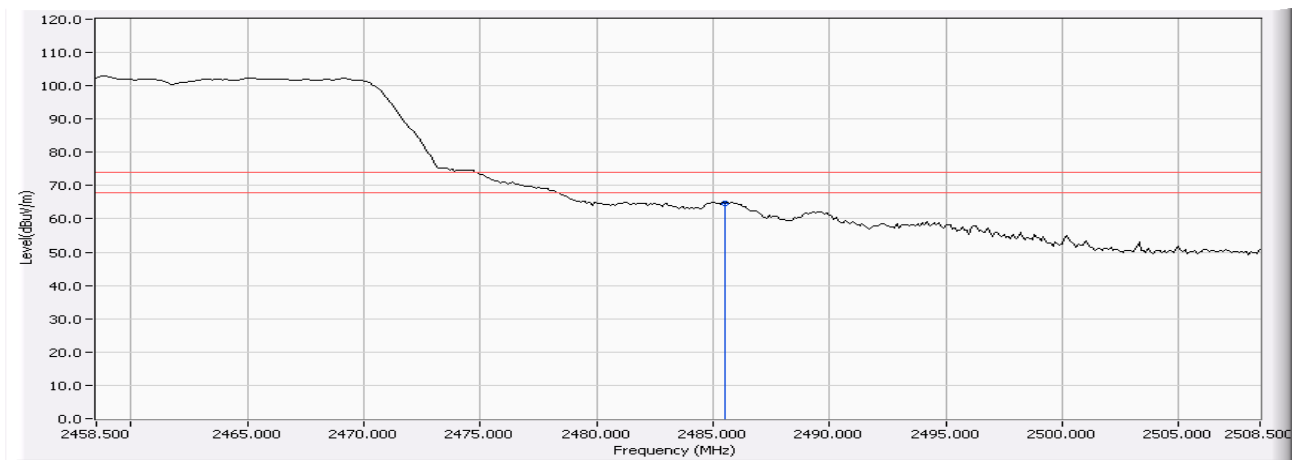
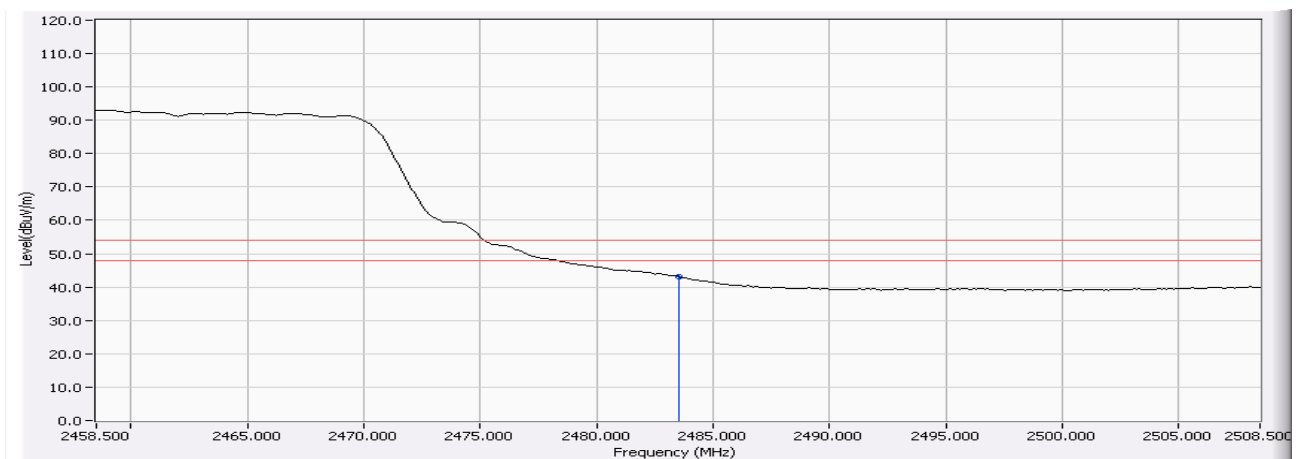


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	74.366	67.898	74.00	54.00	Pass
11 (Average)	2483.500	-6.469	58.189	51.721	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

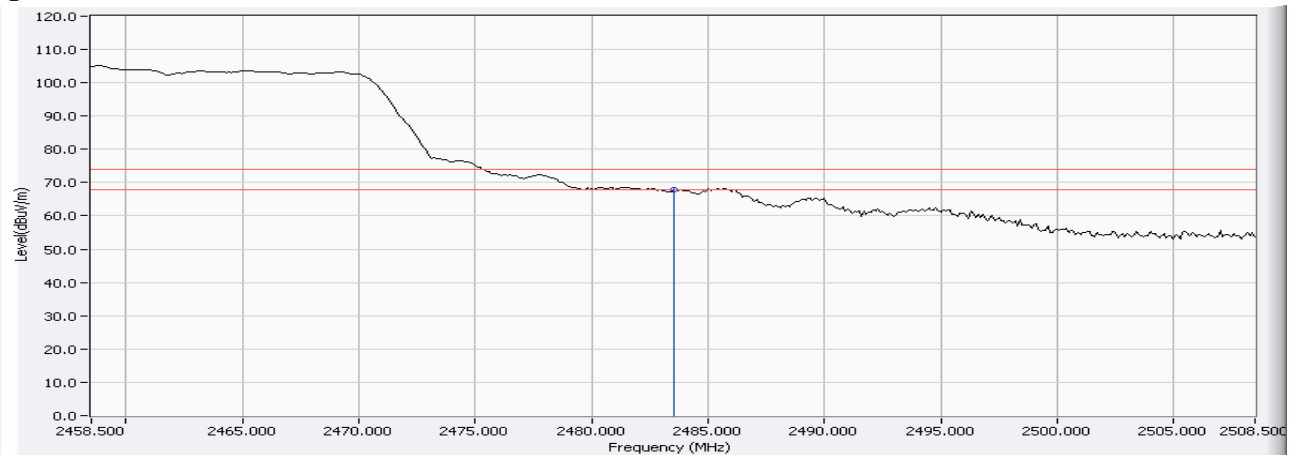
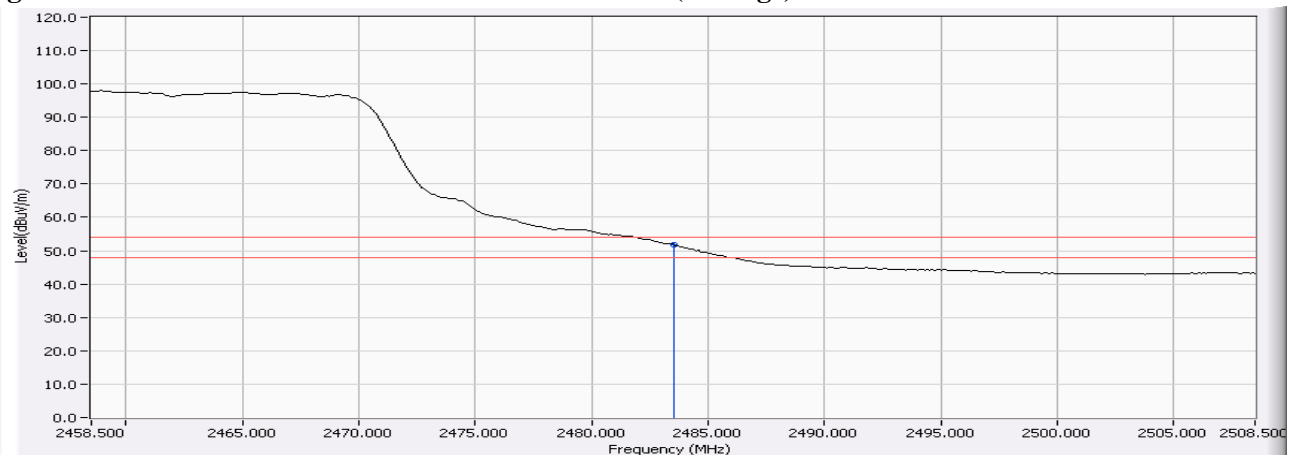


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	65.288	58.520	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	53.661	46.893	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

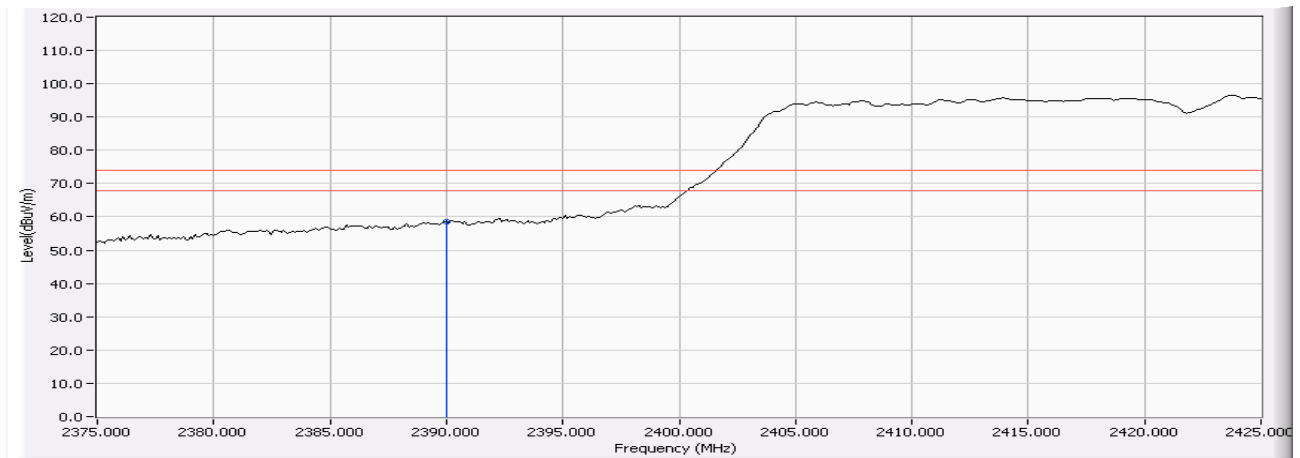
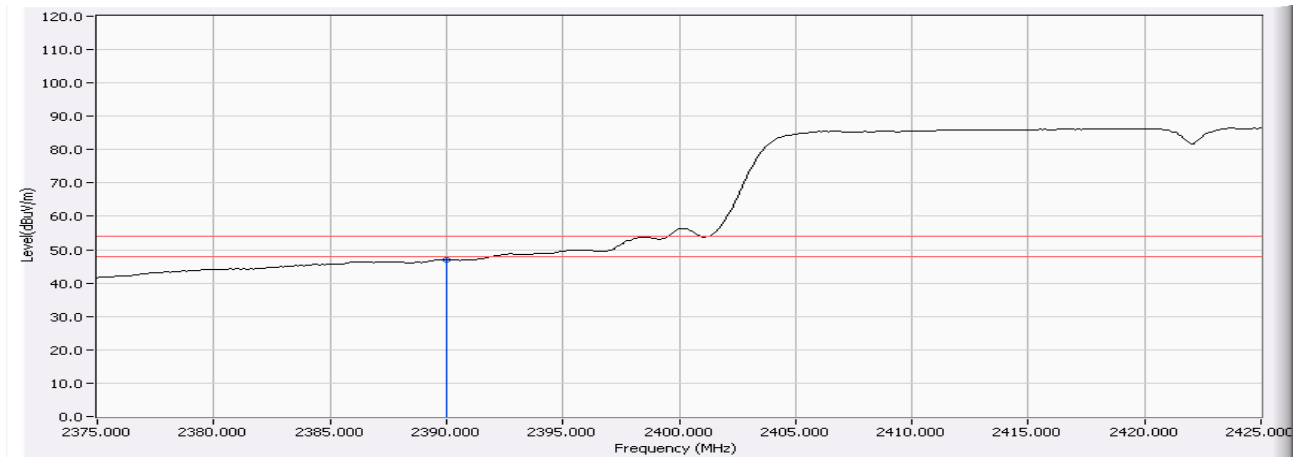


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	65.888	59.120	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	57.470	50.702	74.00	54.00	Pass

Figure Channel 01: (Vertical)

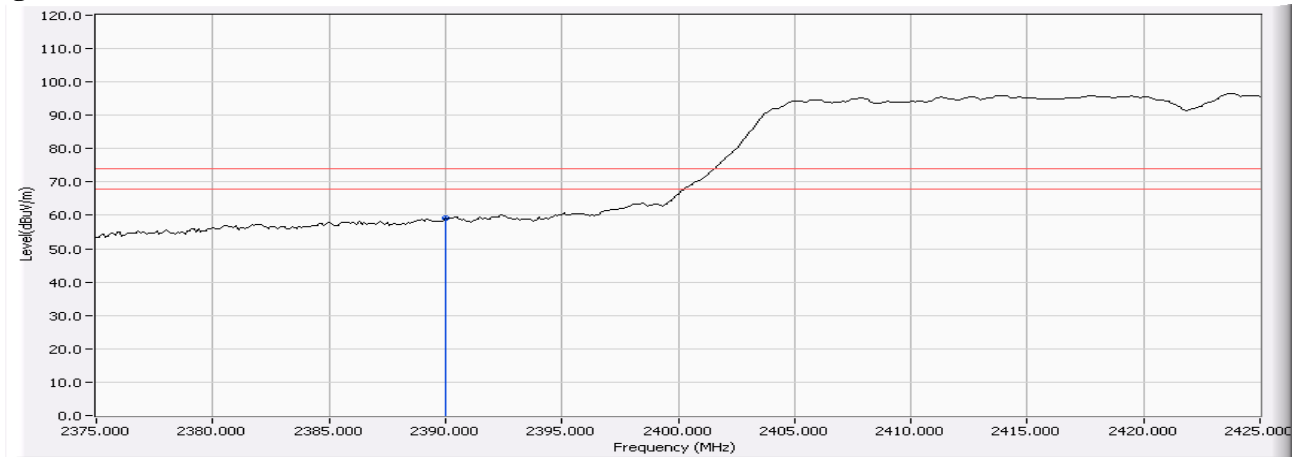
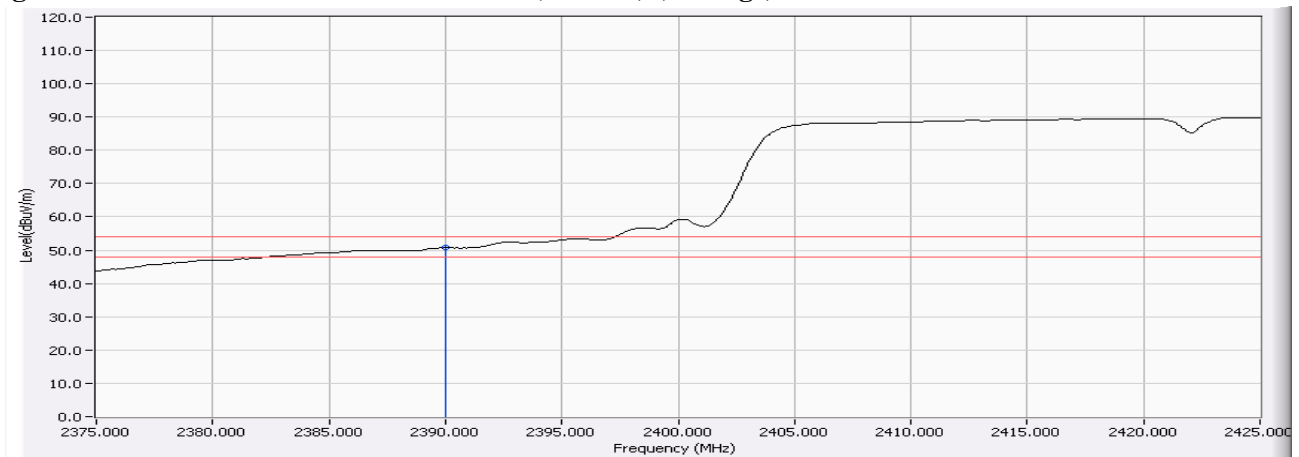


Figure Channel 01: (Vertical) (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2483.500	-6.469	57.605	51.137	74.00	54.00	Pass
07 (Average)	2483.500	-6.469	57.497	51.029	74.00	54.00	Pass

Figure Channel 07: Horizontal (Peak)

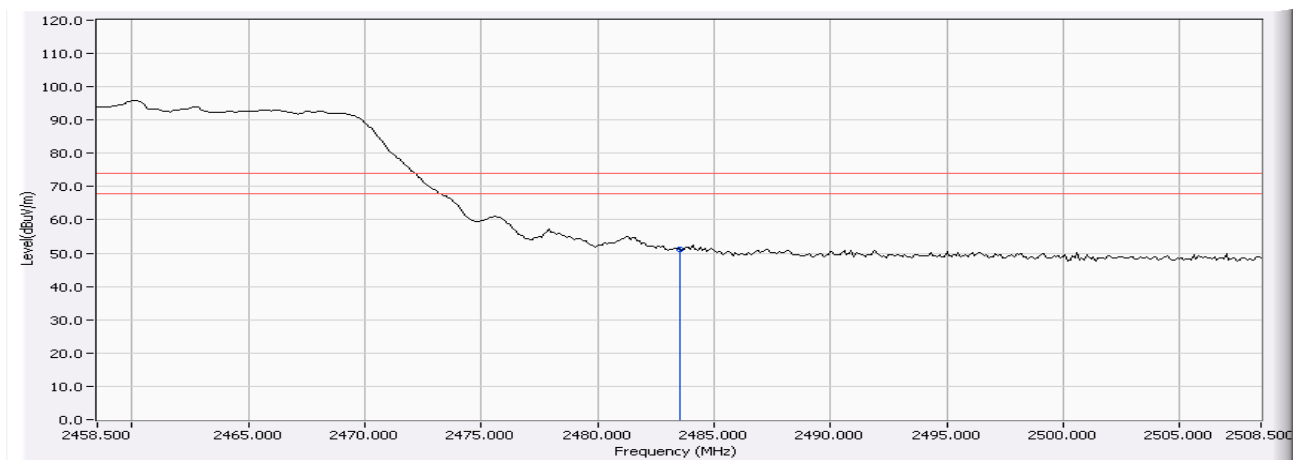
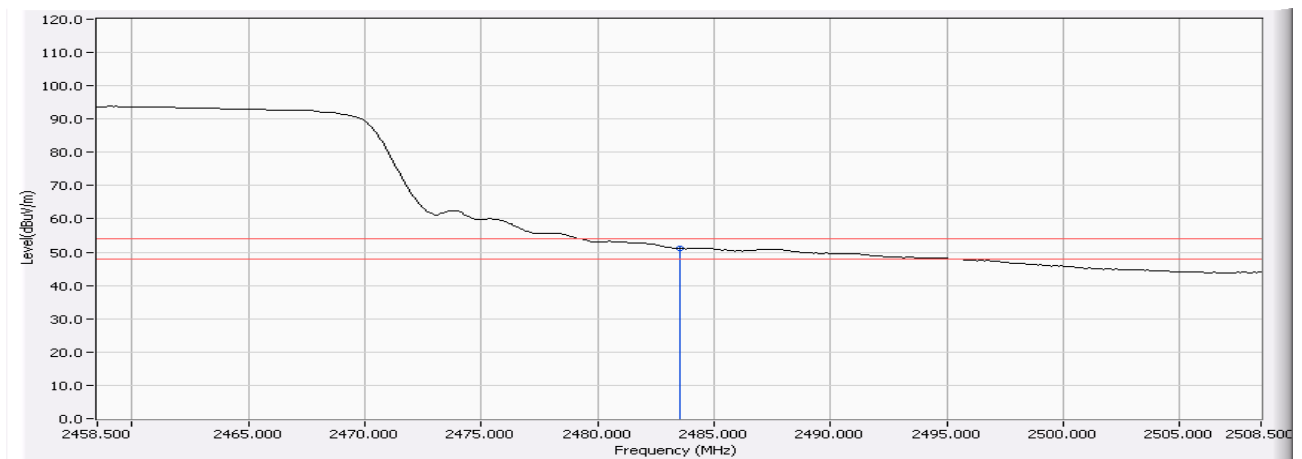


Figure Channel 07: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2483.500	-6.469	65.050	58.582	74.00	54.00	Pass
07 (Average)	2483.500	-6.469	58.094	51.626	74.00	54.00	Pass

Figure Channel 07: Vertical (Peak)

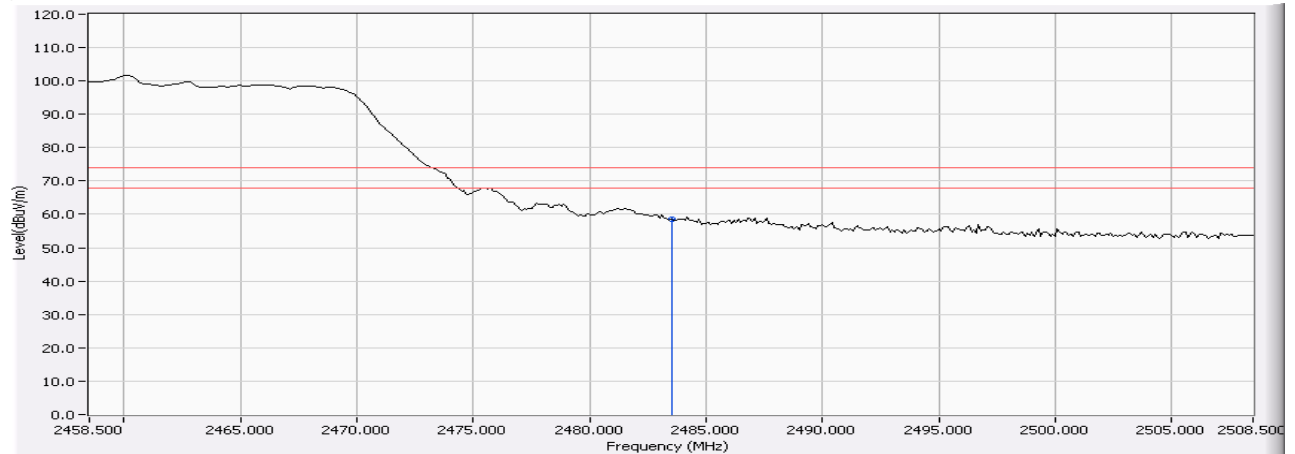
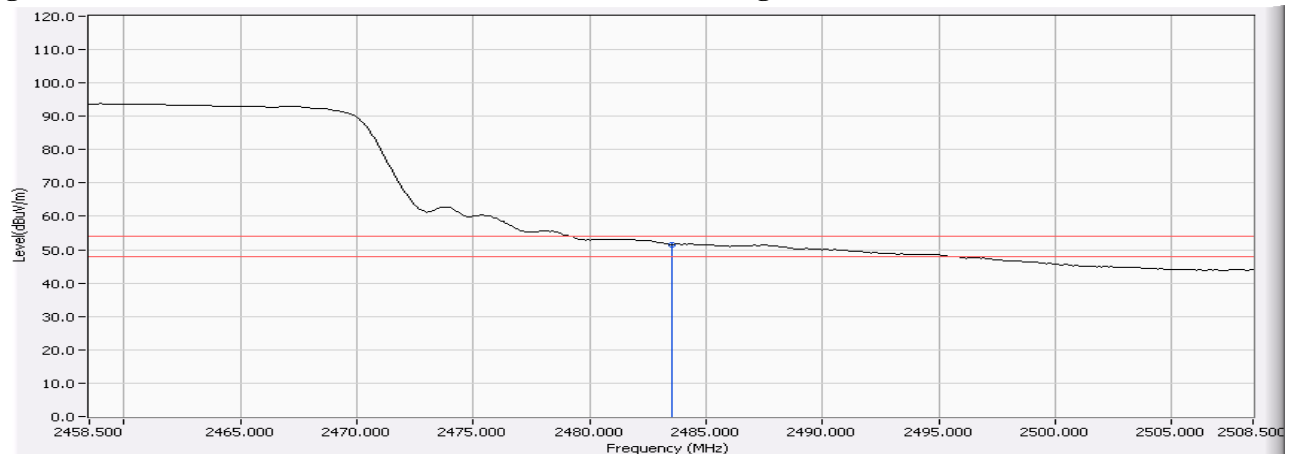


Figure Channel 07: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2387.100	-6.776	65.557	58.781	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	58.438	51.670	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

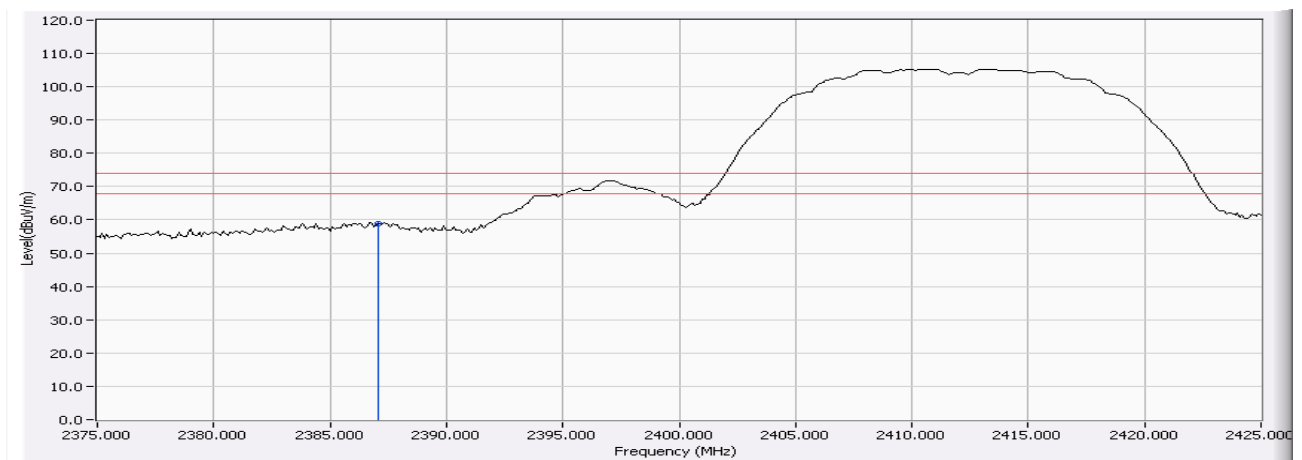
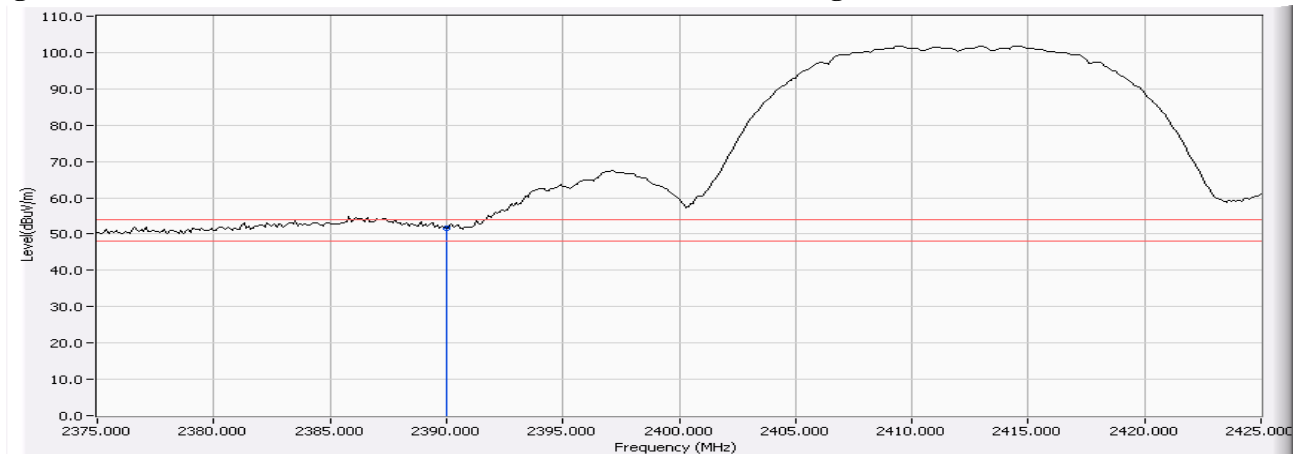


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2386.200	-6.779	62.242	55.463	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	55.809	49.041	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

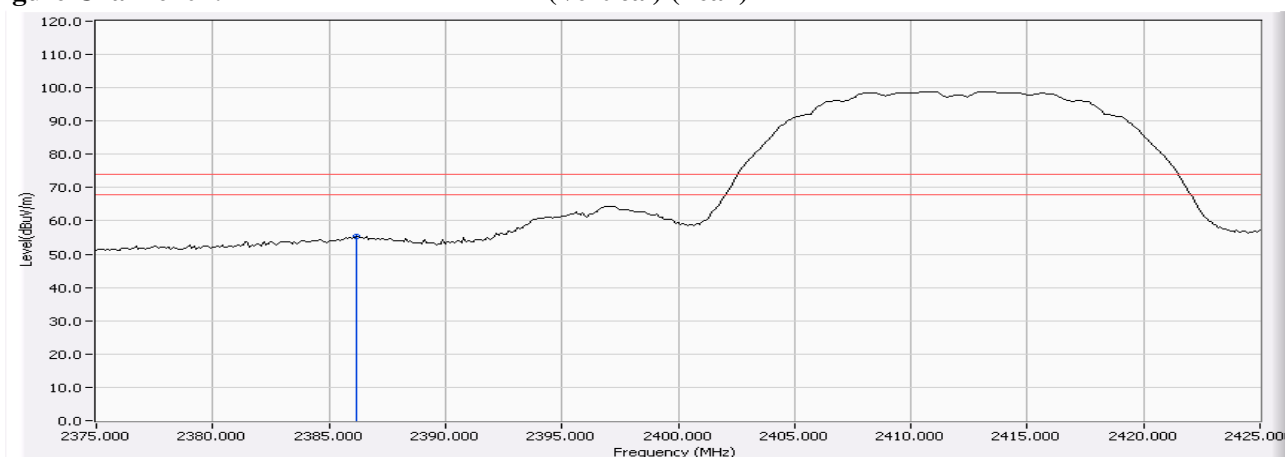
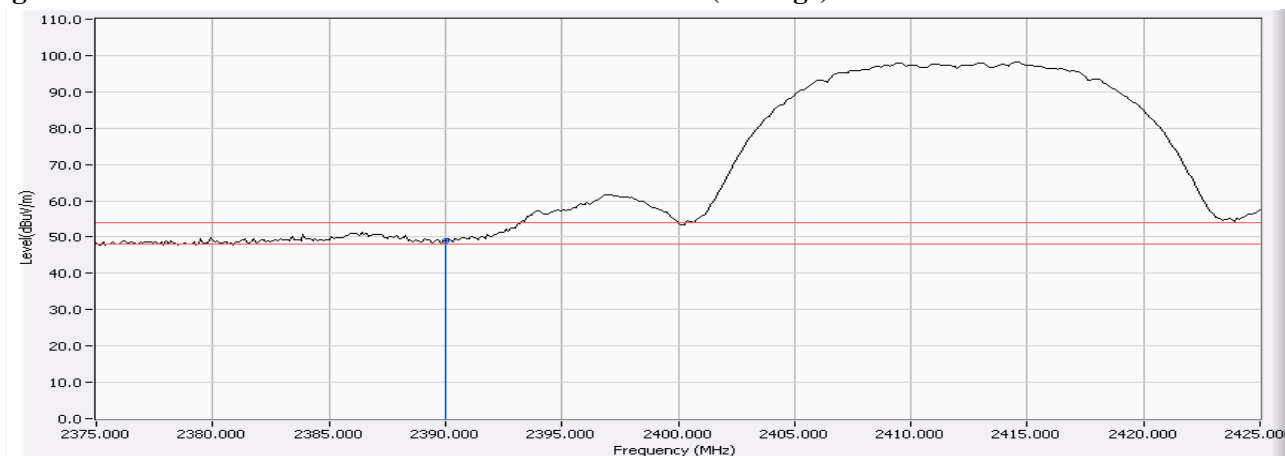


Figure Channel 01: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	63.119	56.651	74.00	54.00	Pass
11(Average)	2483.500	-6.469	57.147	50.679	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

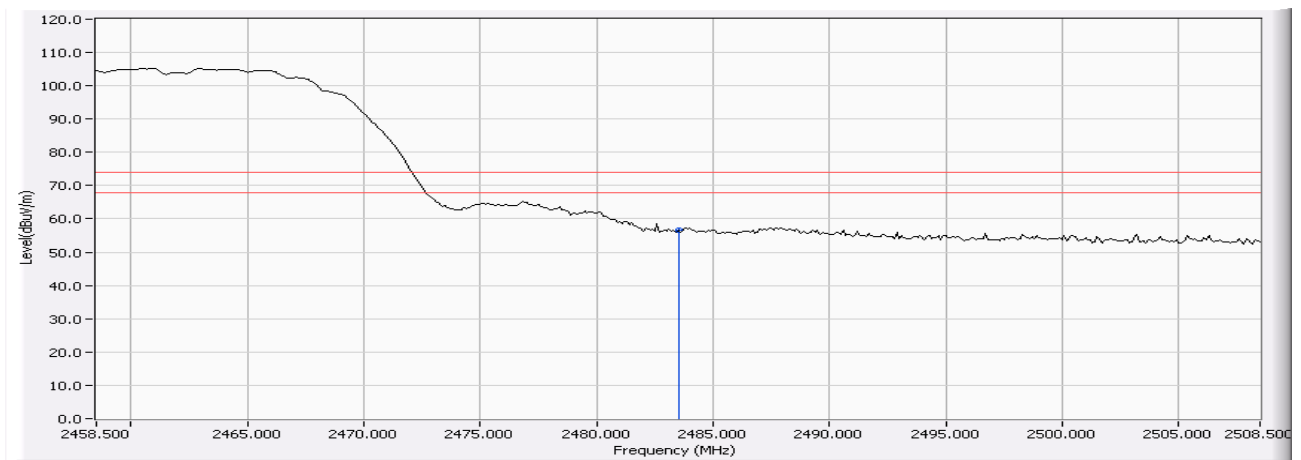
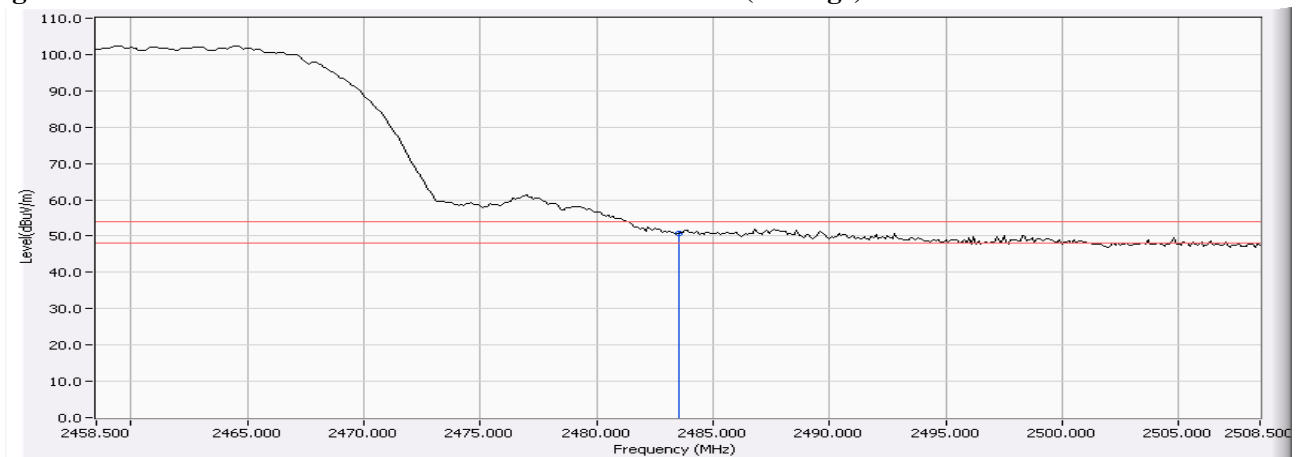


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	59.706	53.238	74.00	54.00	Pass
11(Average)	2483.500	-6.469	54.033	47.565	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

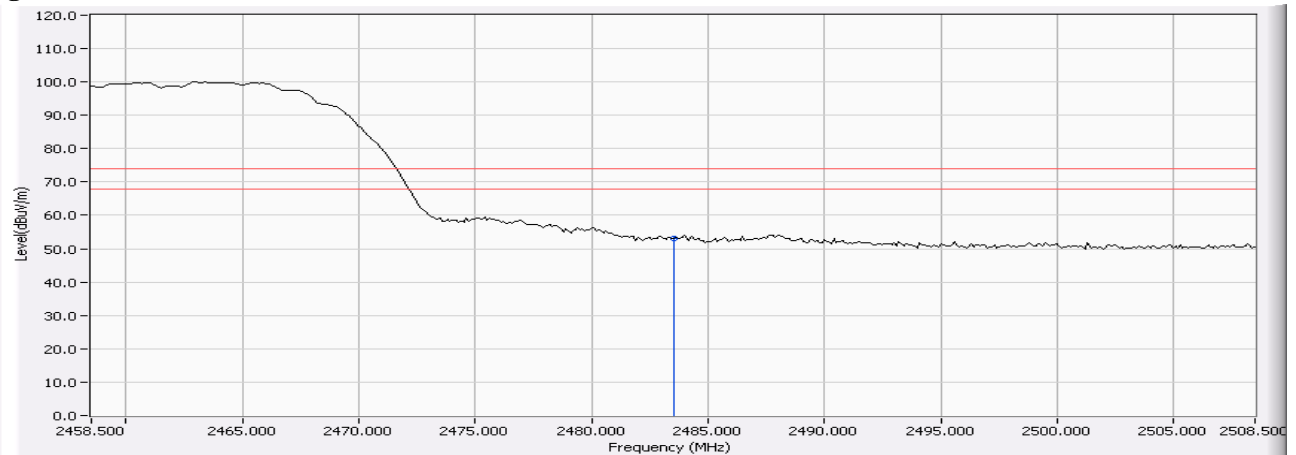
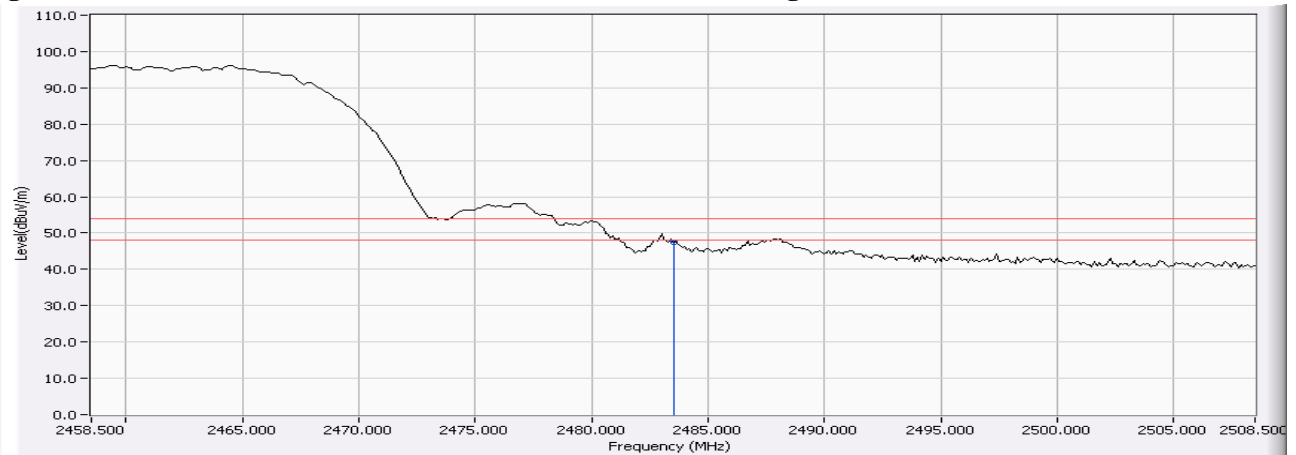


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	68.819	62.051	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	58.684	51.916	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

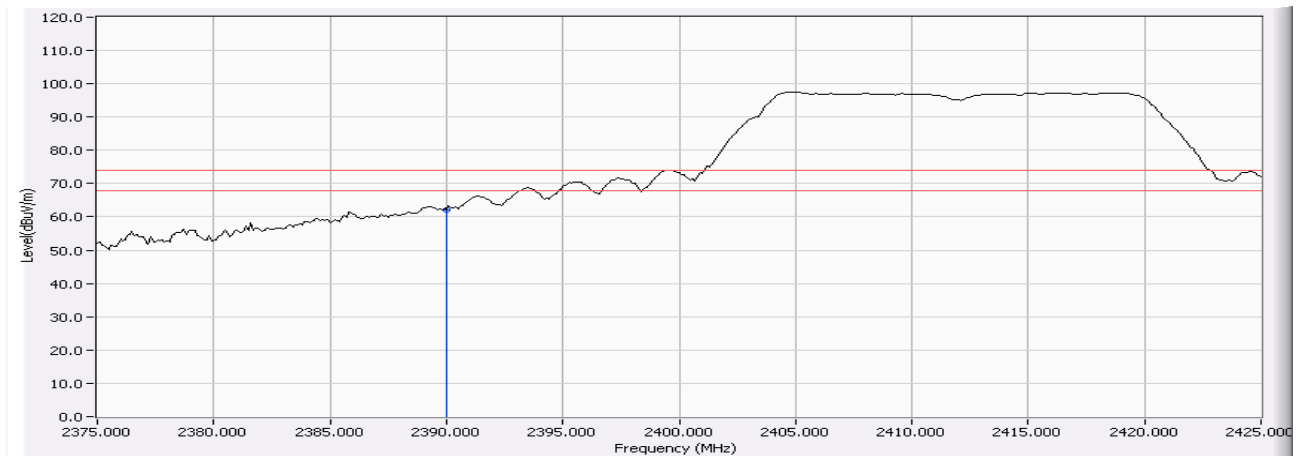
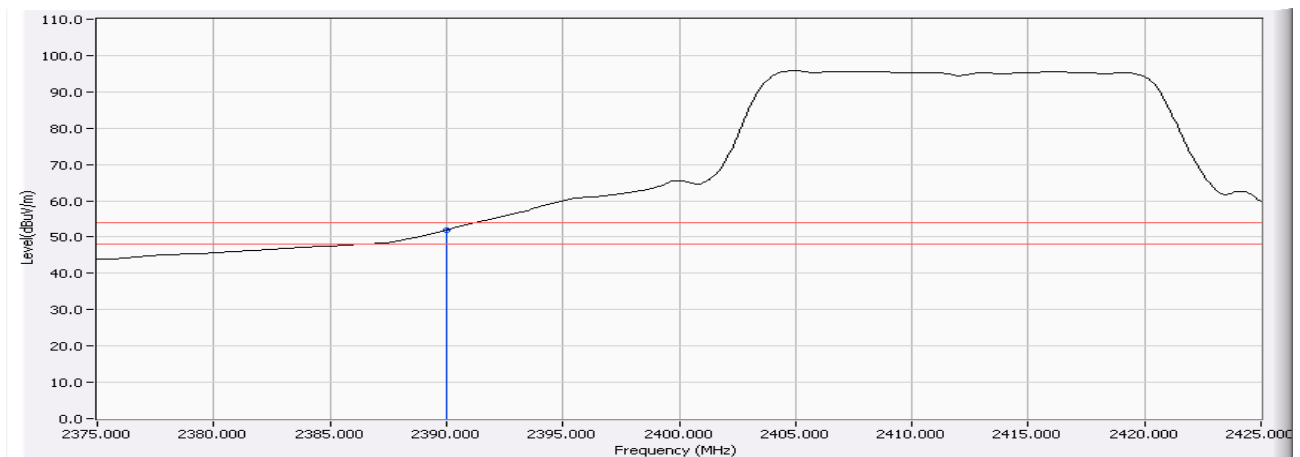


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	71.241	64.473	74.00	54.00	Pass
01(Average)	2390.000	-6.769	51.300	44.532	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

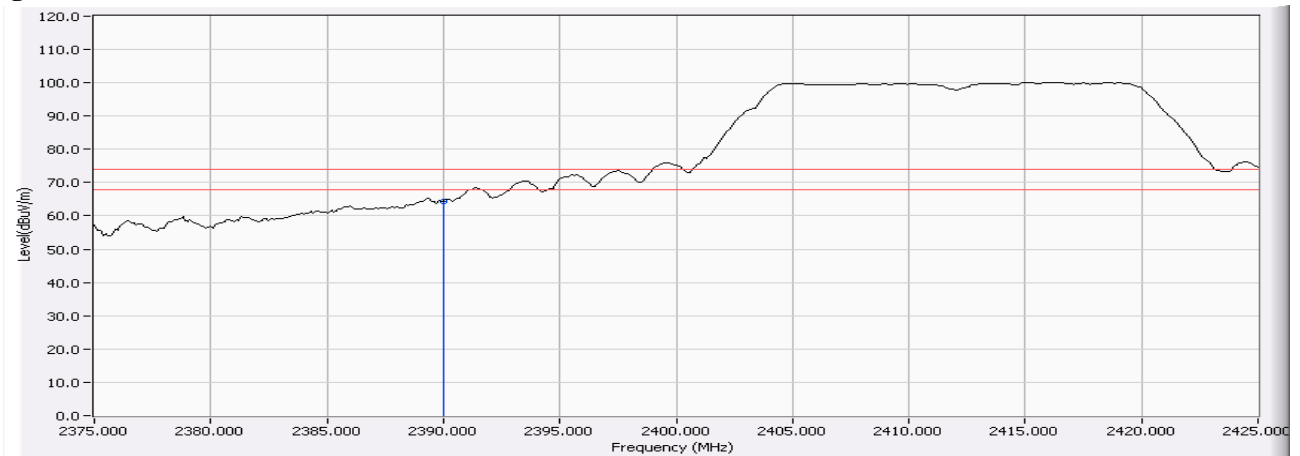
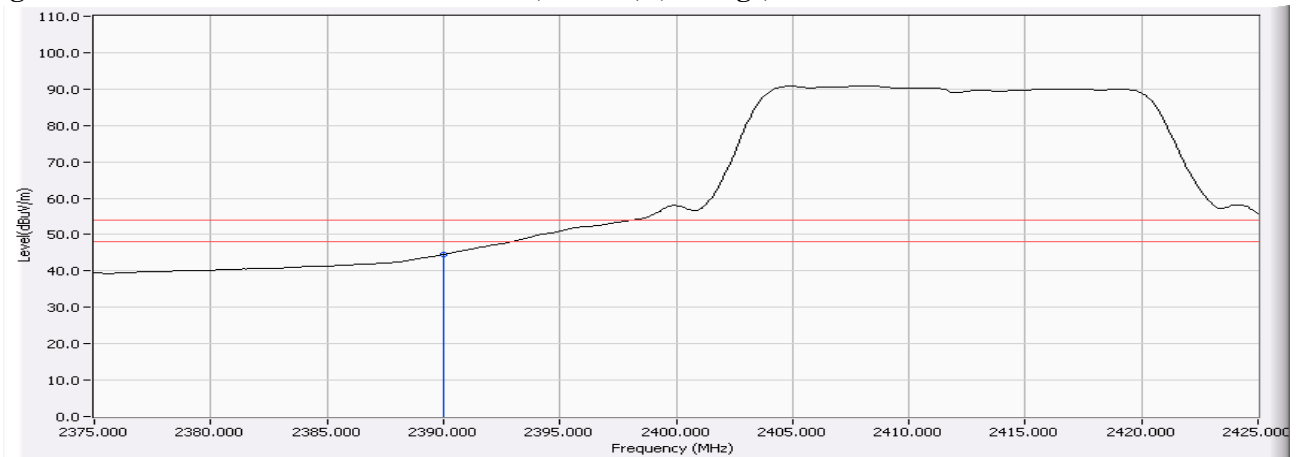


Figure Channel 01: (Vertical) (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	66.334	59.866	74.00	54.00	Pass
11 (Average)	2483.500	-6.469	55.306	48.838	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

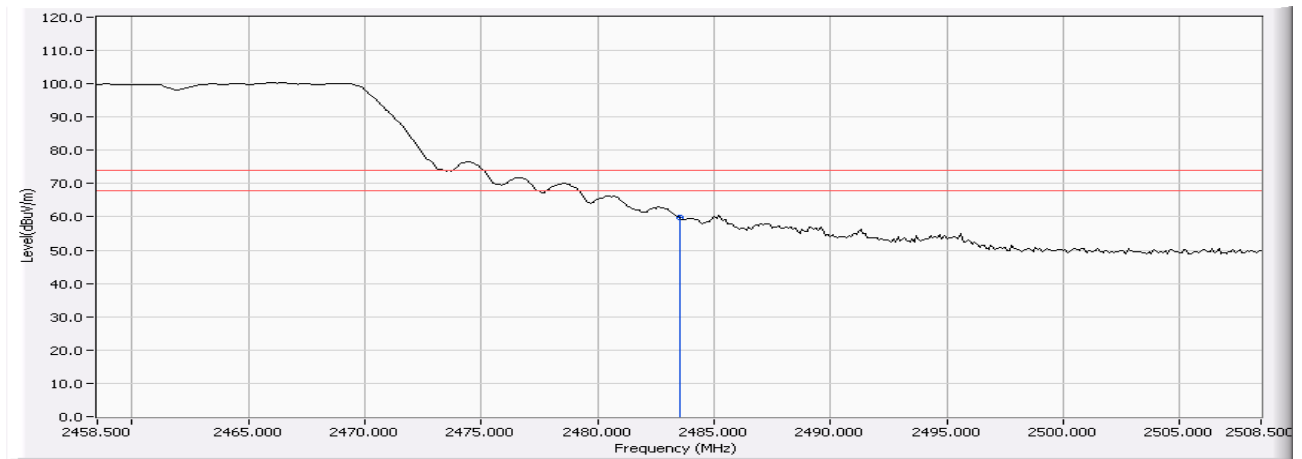
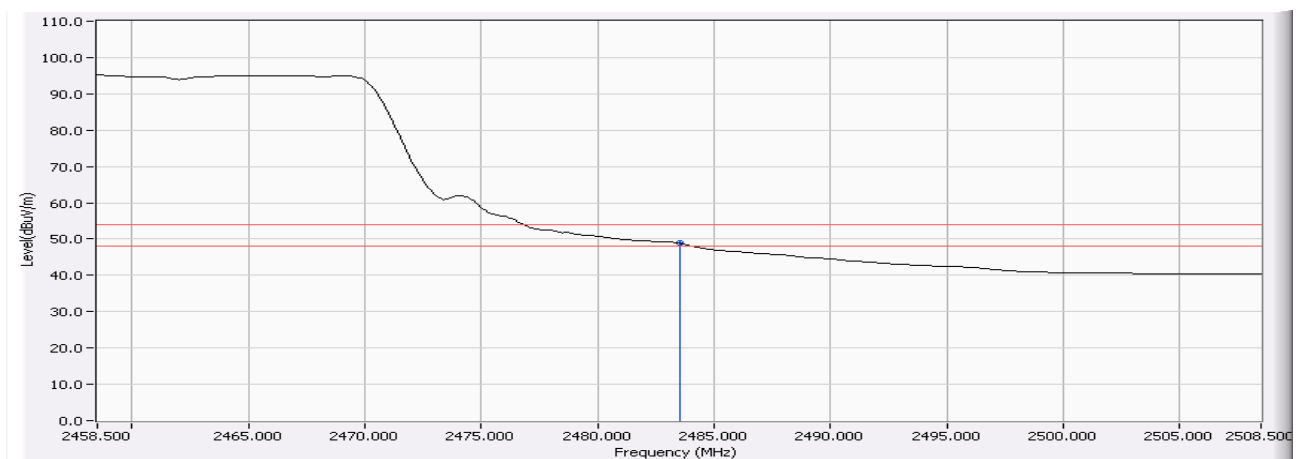


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	63.885	57.417	74.00	54.00	Pass
11(Average)	2483.500	-6.469	50.764	44.296	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

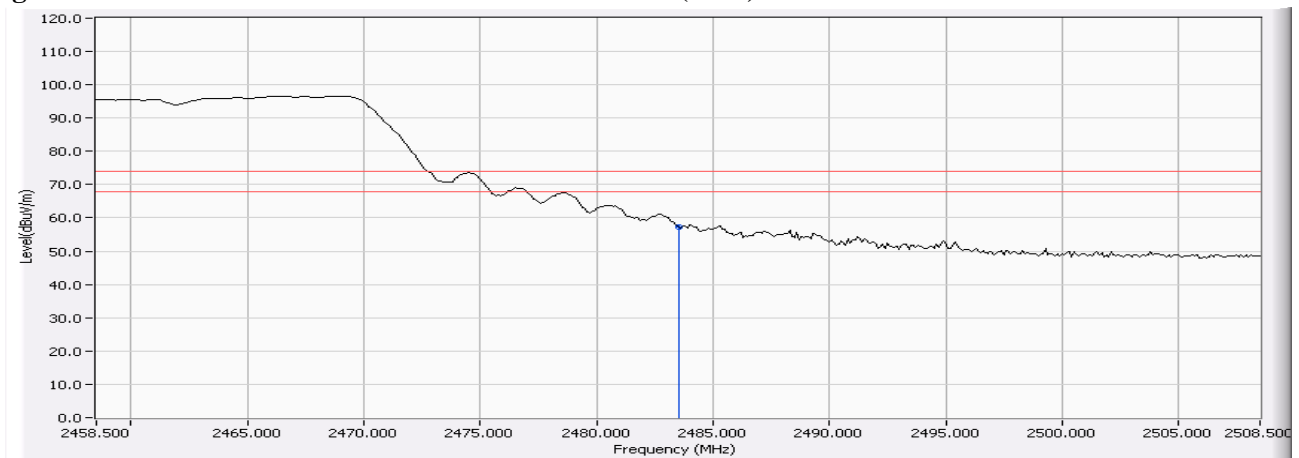
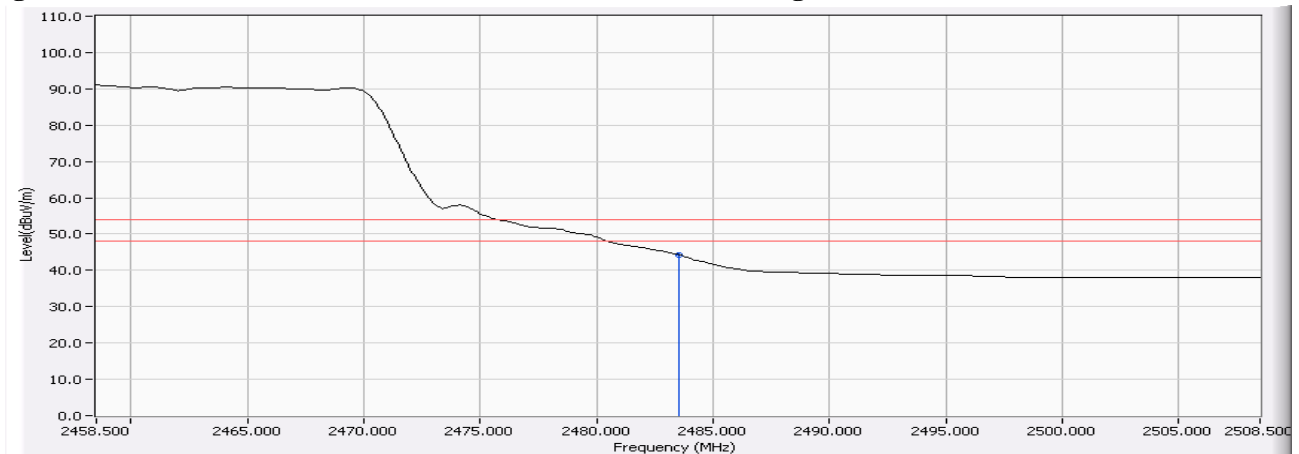


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	74.319	67.551	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	57.035	50.267	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

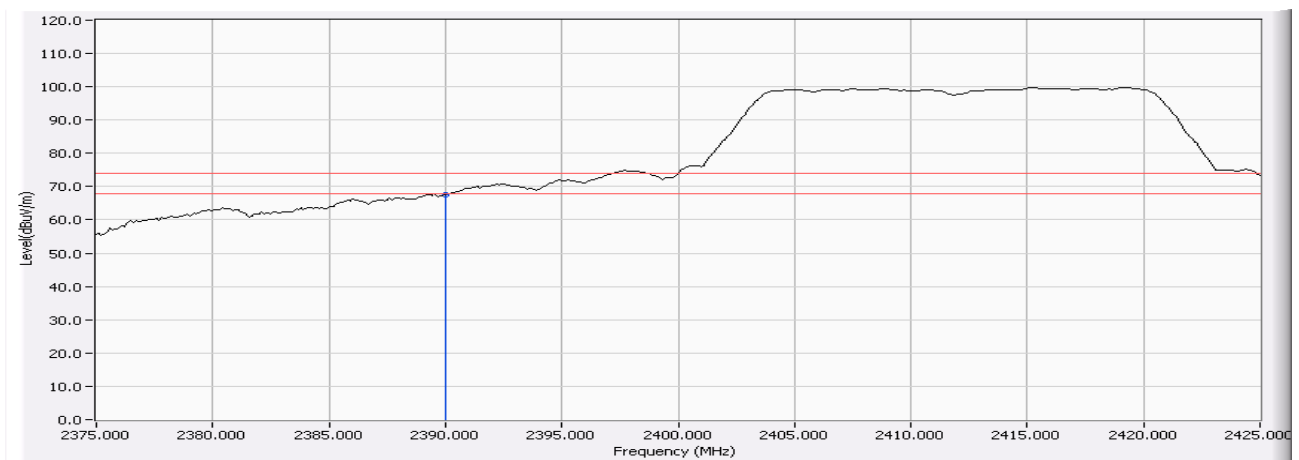
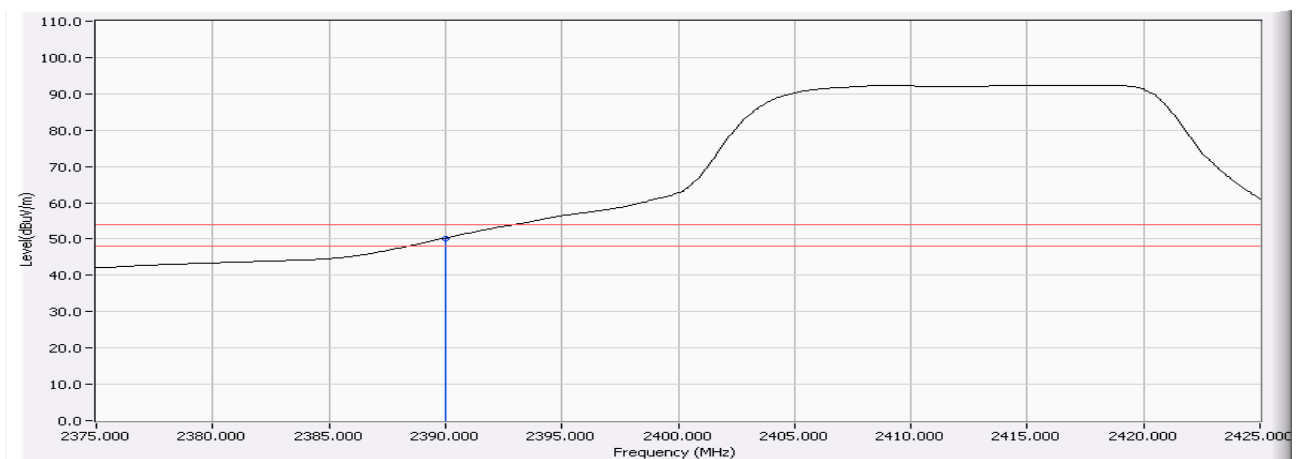


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	73.596	66.828	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	53.874	47.106	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

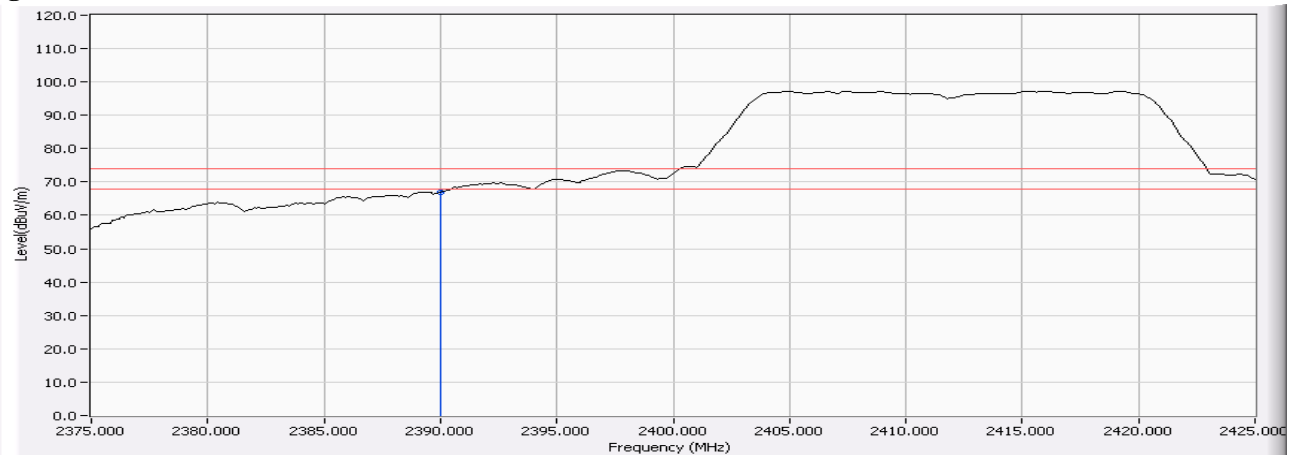
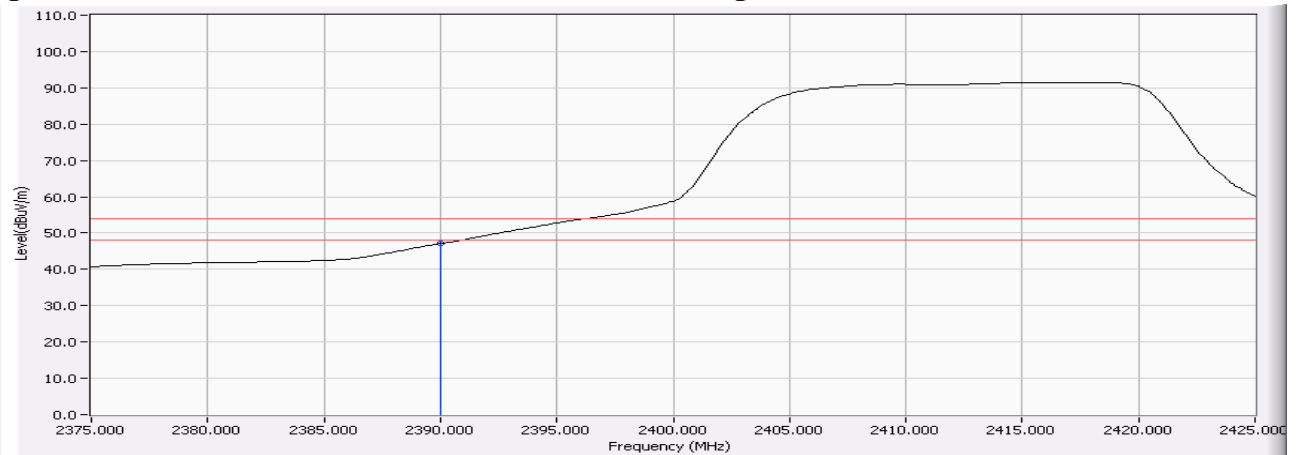


Figure Channel 01: (Vertical) (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	78.194	71.726	74.00	54.00	Pass
11 (Average)	2483.500	-6.469	59.156	52.688	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

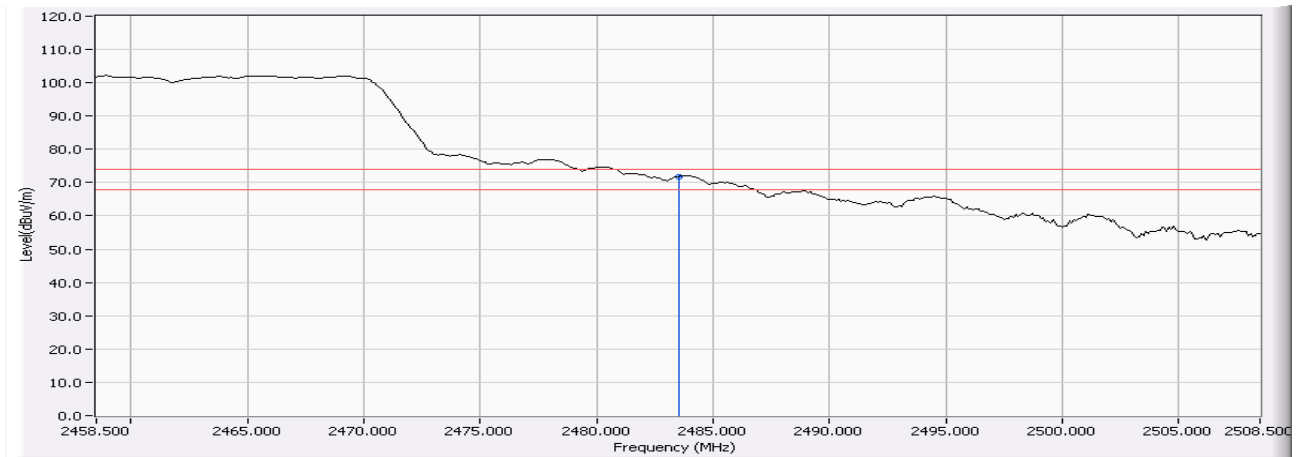
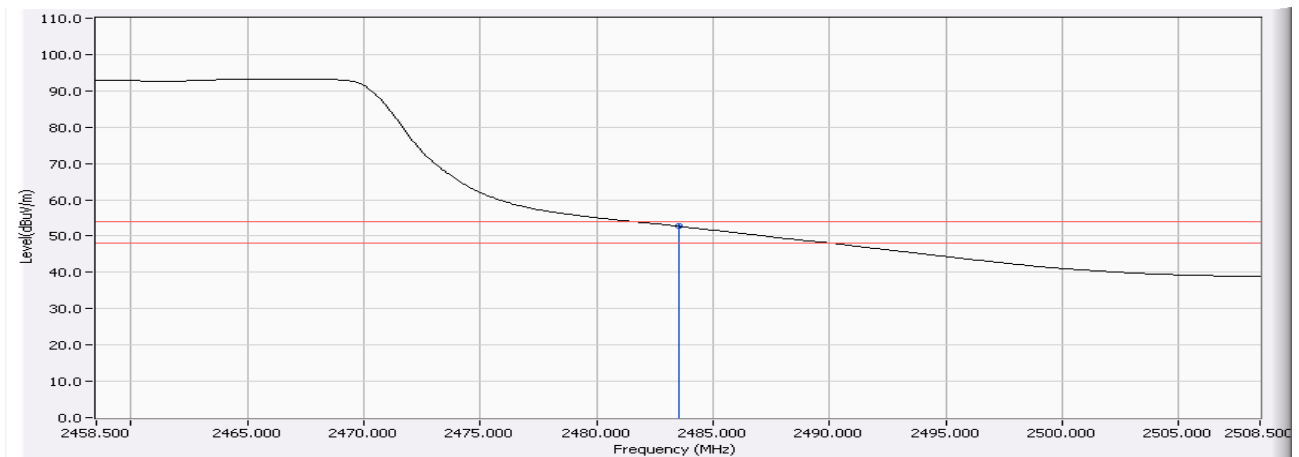


Figure Channel 11: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2483.500	-6.469	69.881	63.413	74.00	54.00	Pass
11(Average)	2483.500	-6.469	56.990	50.522	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

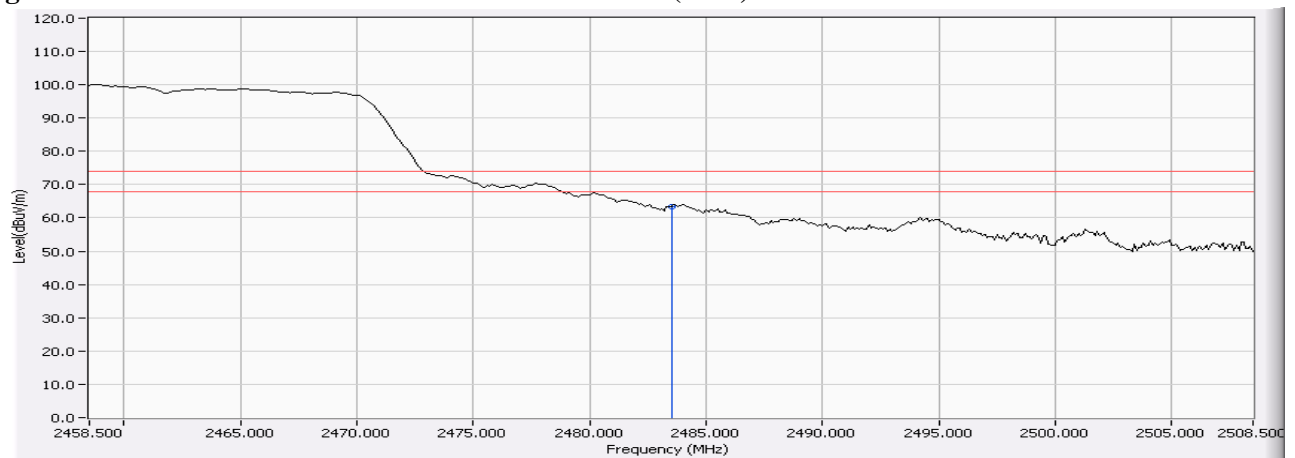
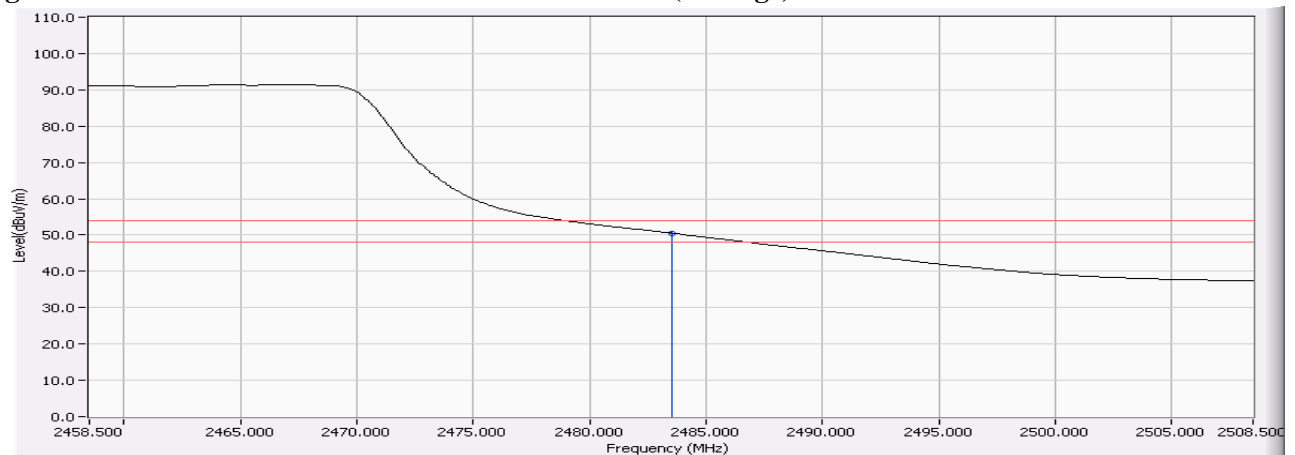


Figure Channel 11: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	76.268	69.500	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	57.446	50.678	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

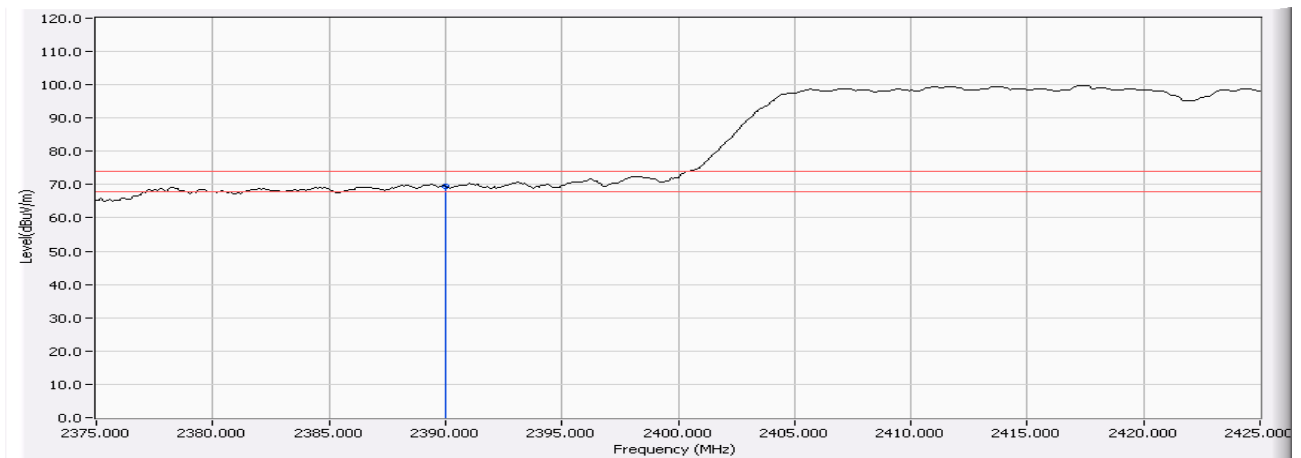
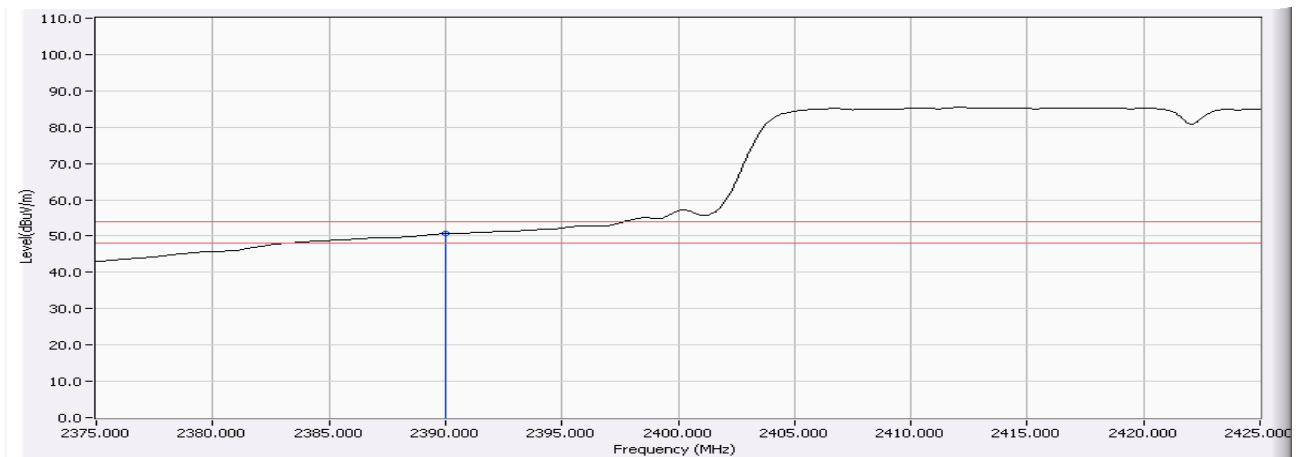


Figure Channel 01: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	-6.769	72.448	65.680	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	56.967	50.199	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

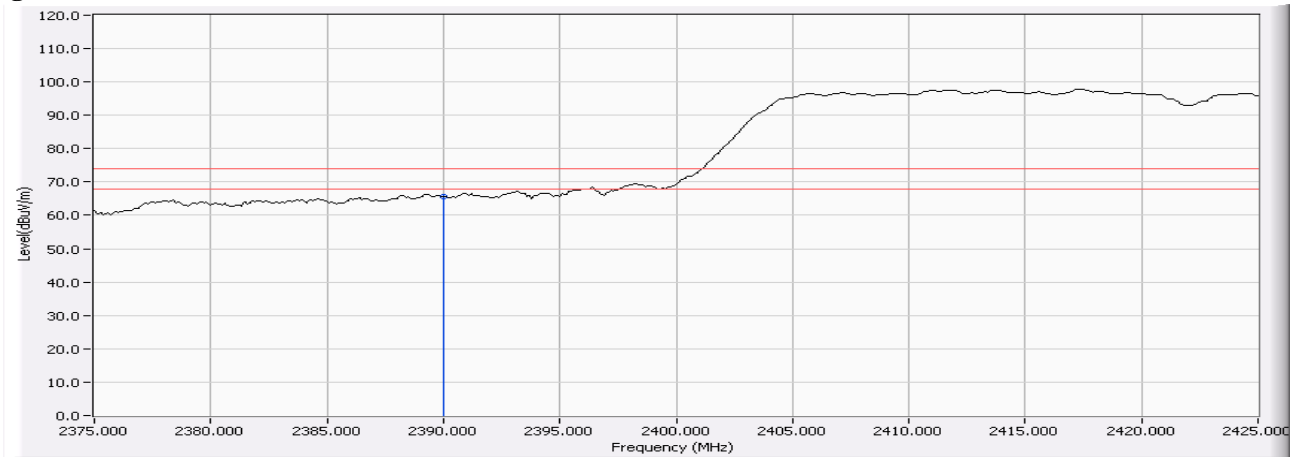
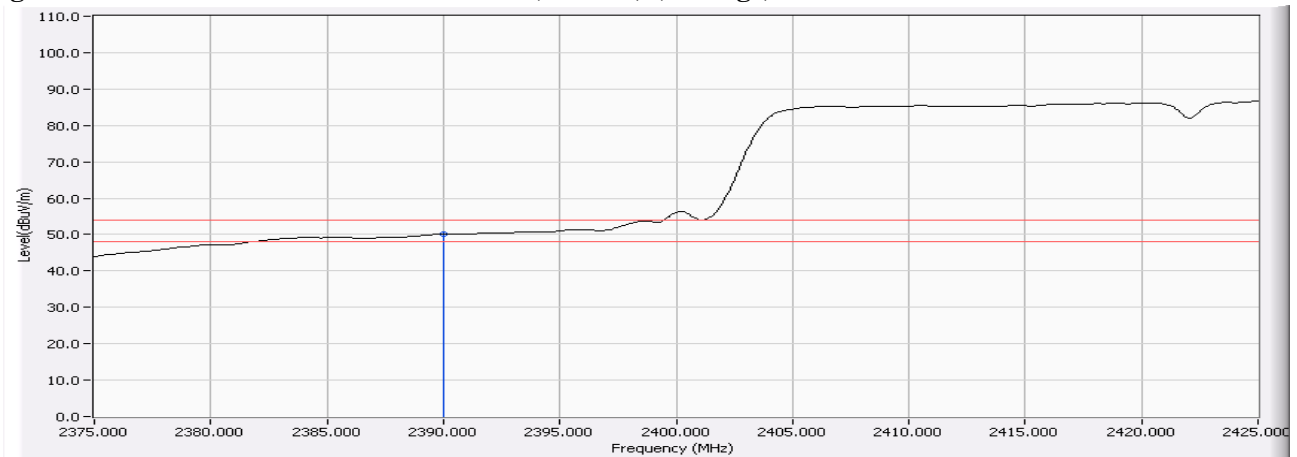


Figure Channel 01: (Vertical) (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2483.500	-6.469	65.399	58.931	74.00	54.00	Pass
07 (Average)	2483.500	-6.469	57.682	51.214	74.00	54.00	Pass

Figure Channel 07: Horizontal (Peak)

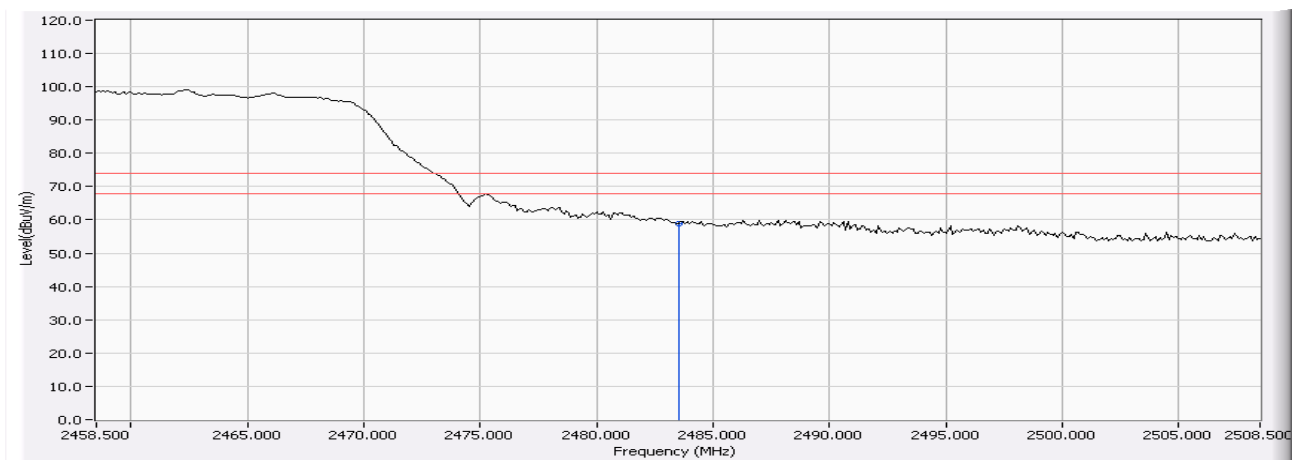
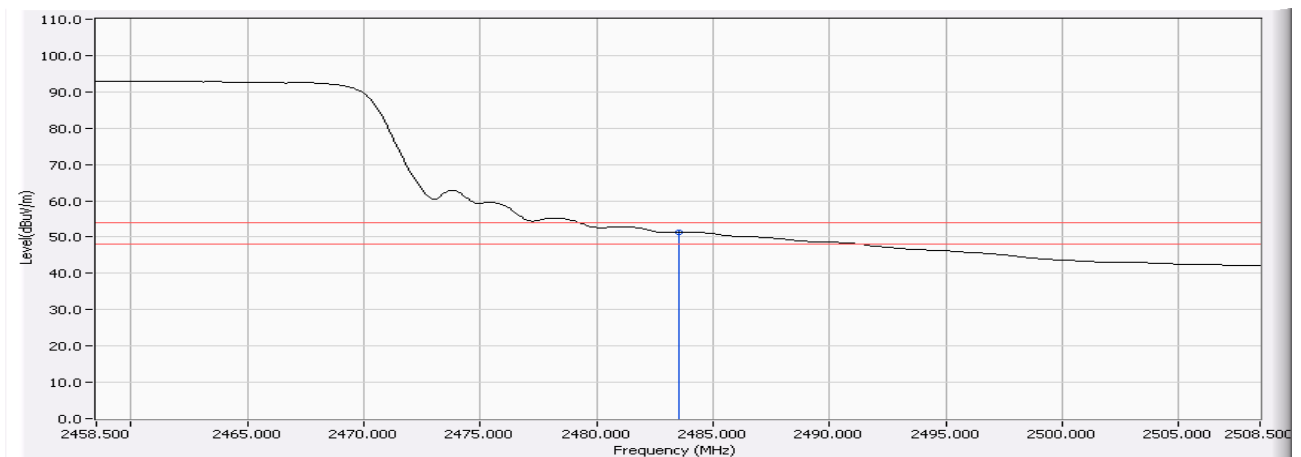


Figure Channel 07: Horizontal (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
07 (Peak)	2483.500	-6.469	78.463	71.995	74.00	54.00	Pass
07 (Average)	2483.500	-6.469	57.787	51.319	74.00	54.00	Pass

Figure Channel 07: Vertical (Peak)

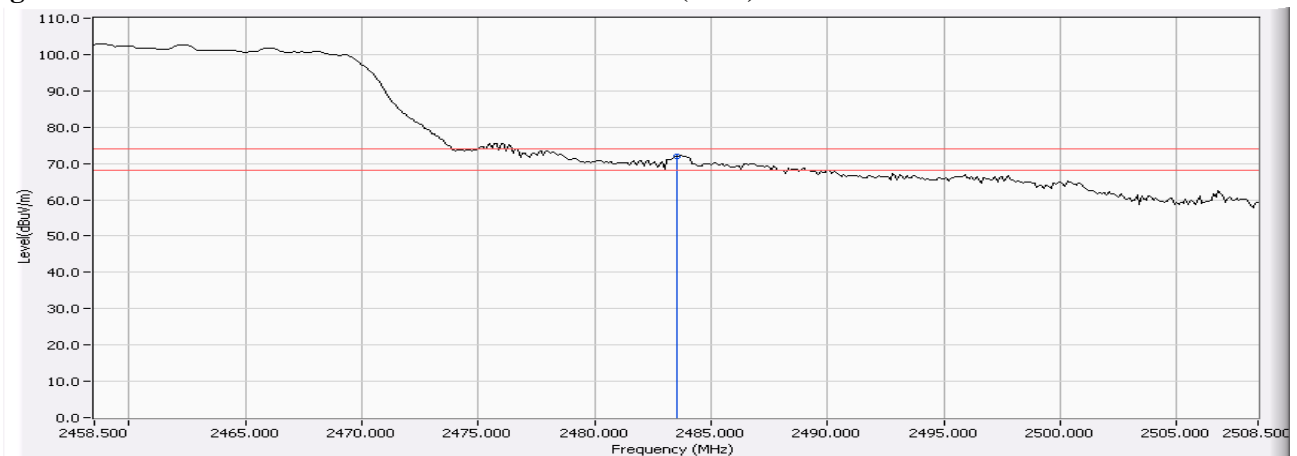
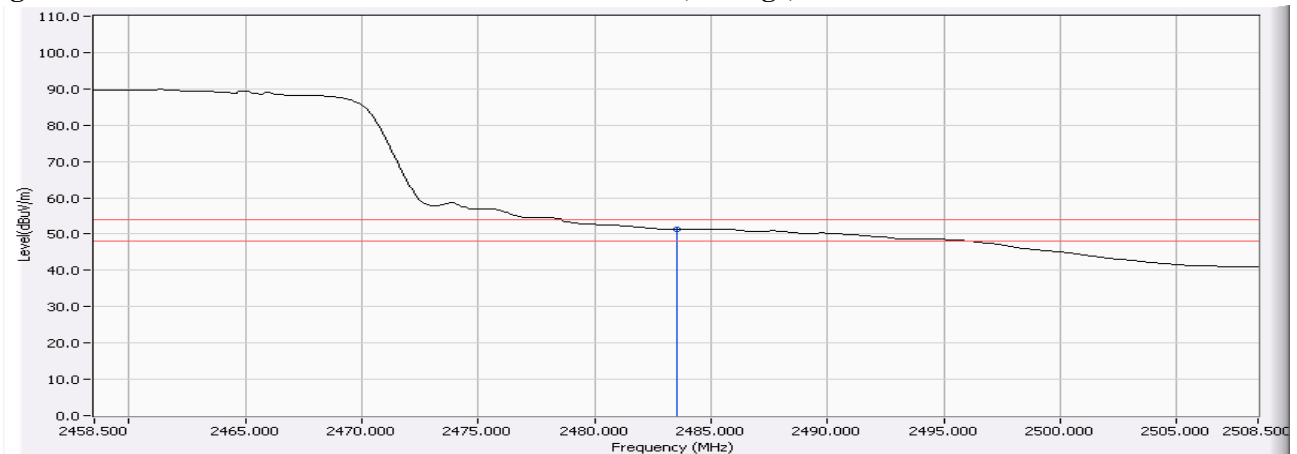


Figure Channel 07: Vertical (Average)



Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

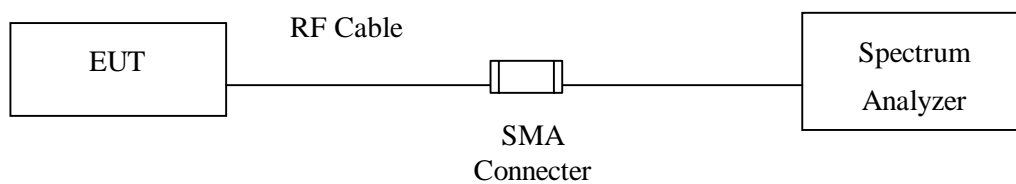
7.1. Test Equipment

The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

7.2. Test Setup



7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

7.5. Uncertainty

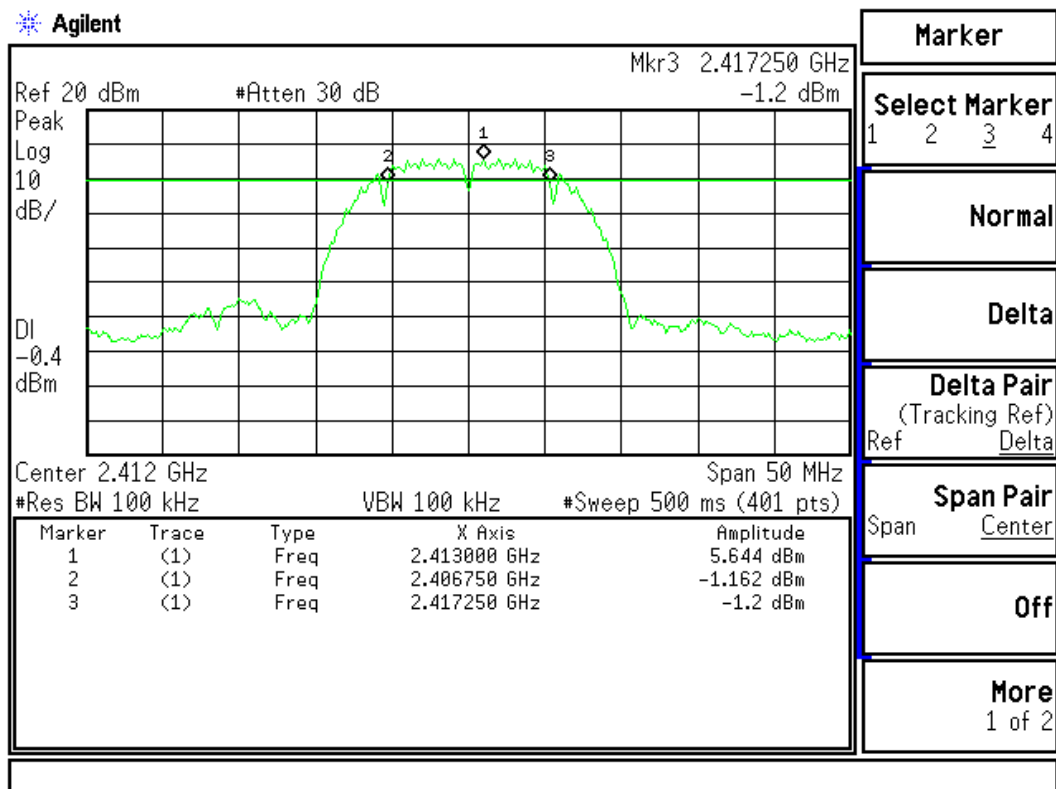
± 150Hz

7.6. Test Result of Occupied Bandwidth

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (1Mbps)	2412.00	10500	>500	Pass

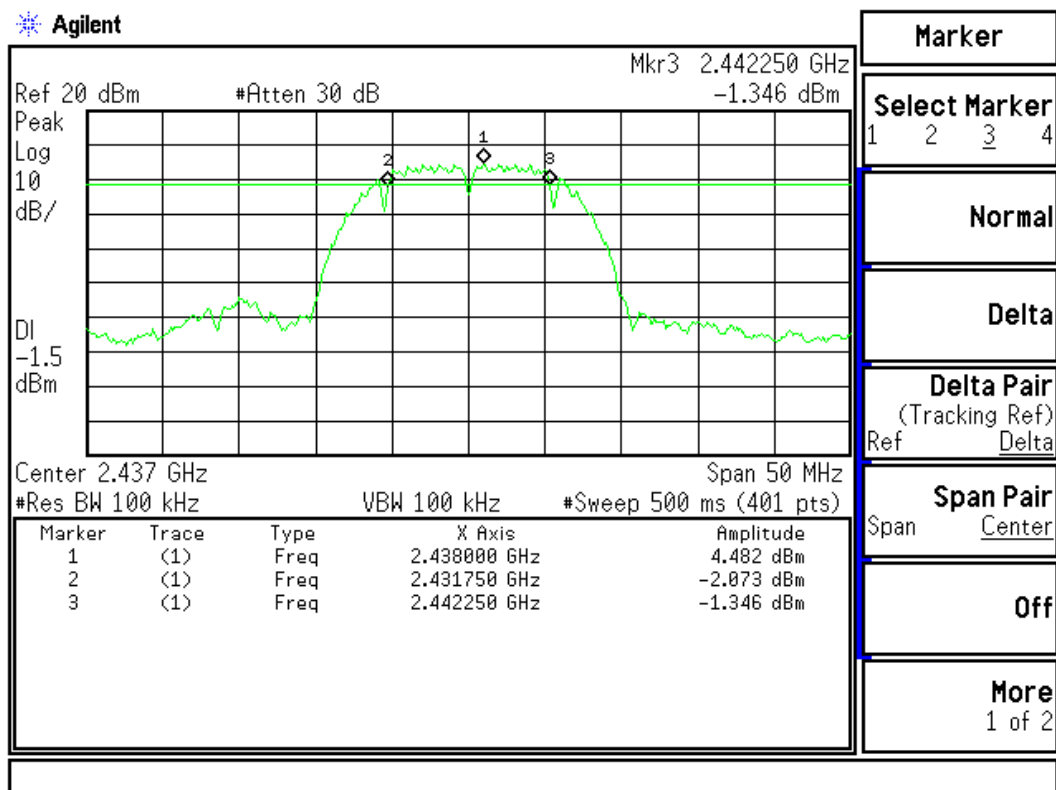
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (1Mbps)	2437.00	10500	>500	Pass

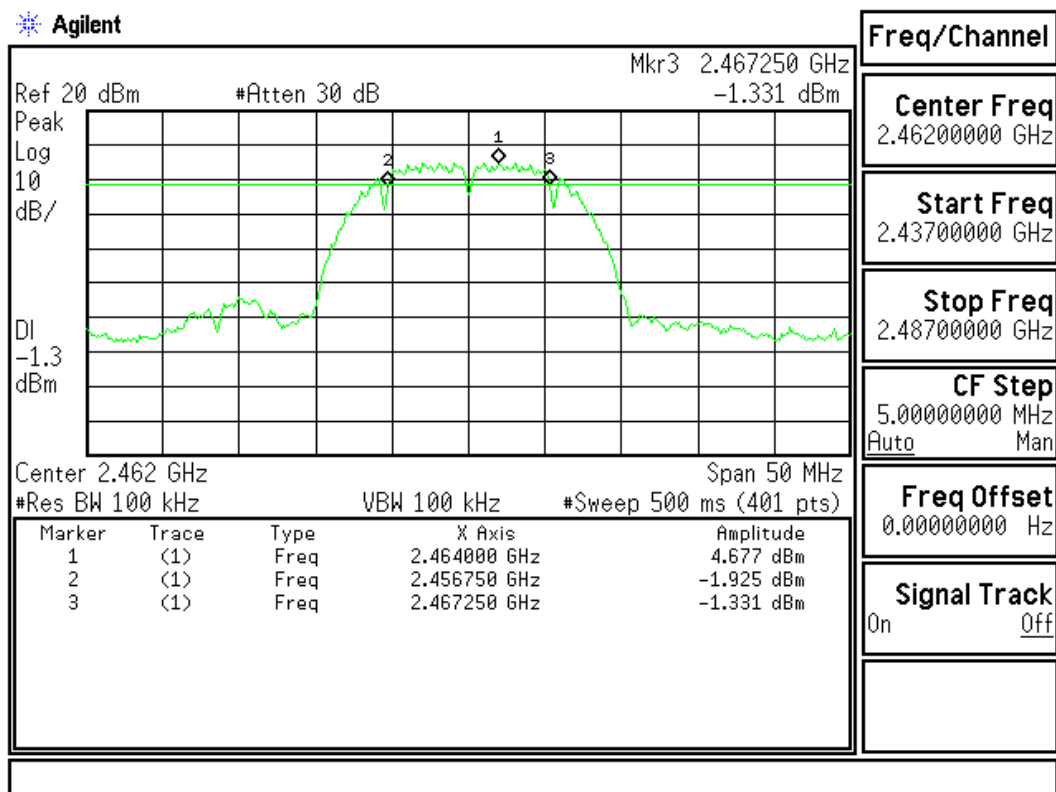
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (1Mbps)	2462.00	10500	>500	Pass

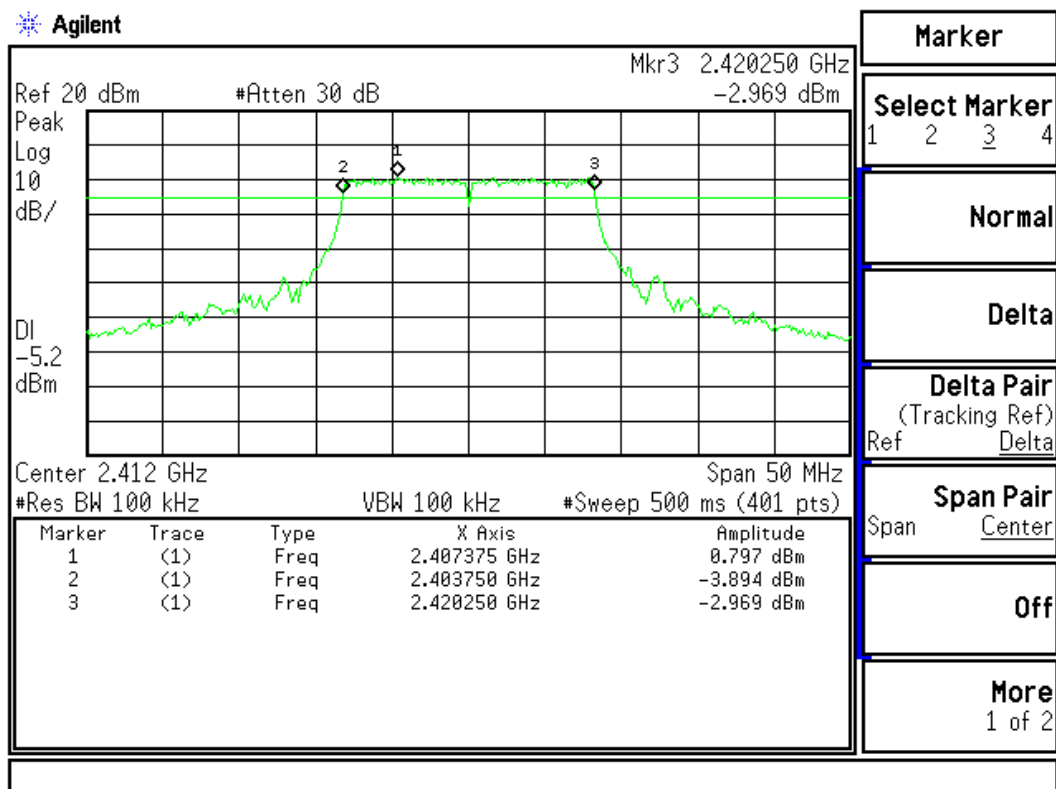
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6Mbps)	2412.00	16500	>500	Pass

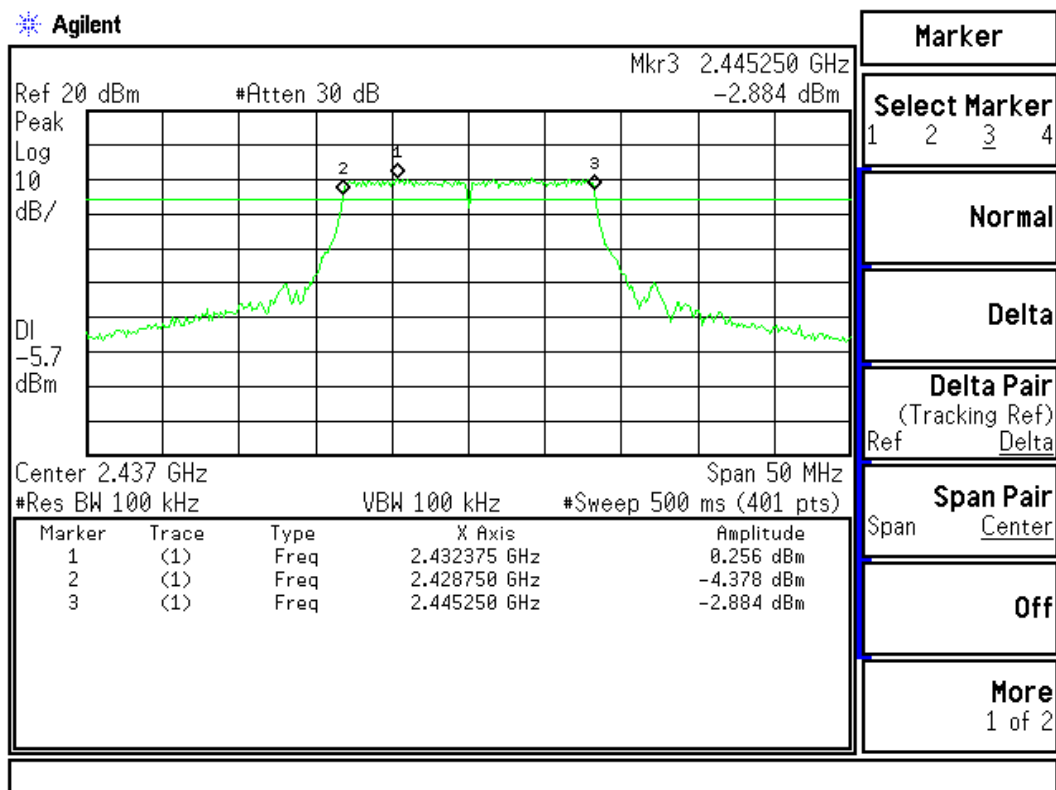
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6Mbps)	2437.00	16500	>500	Pass

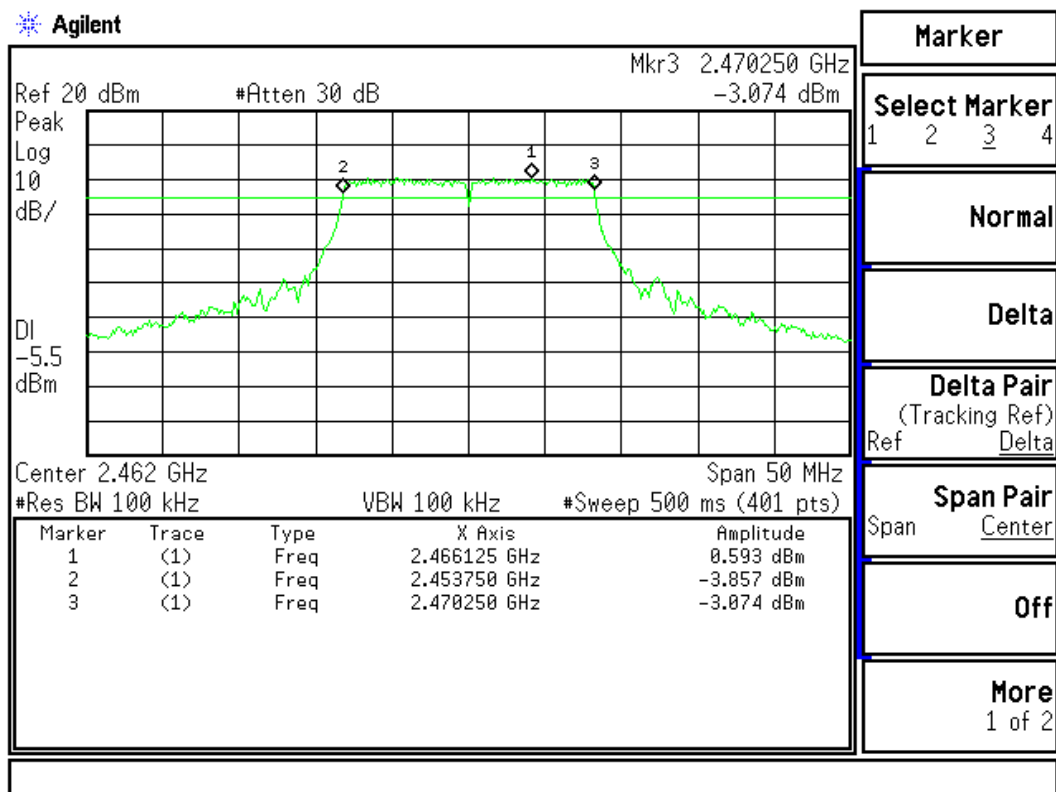
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6Mbps)	2462.00	16500	>500	Pass

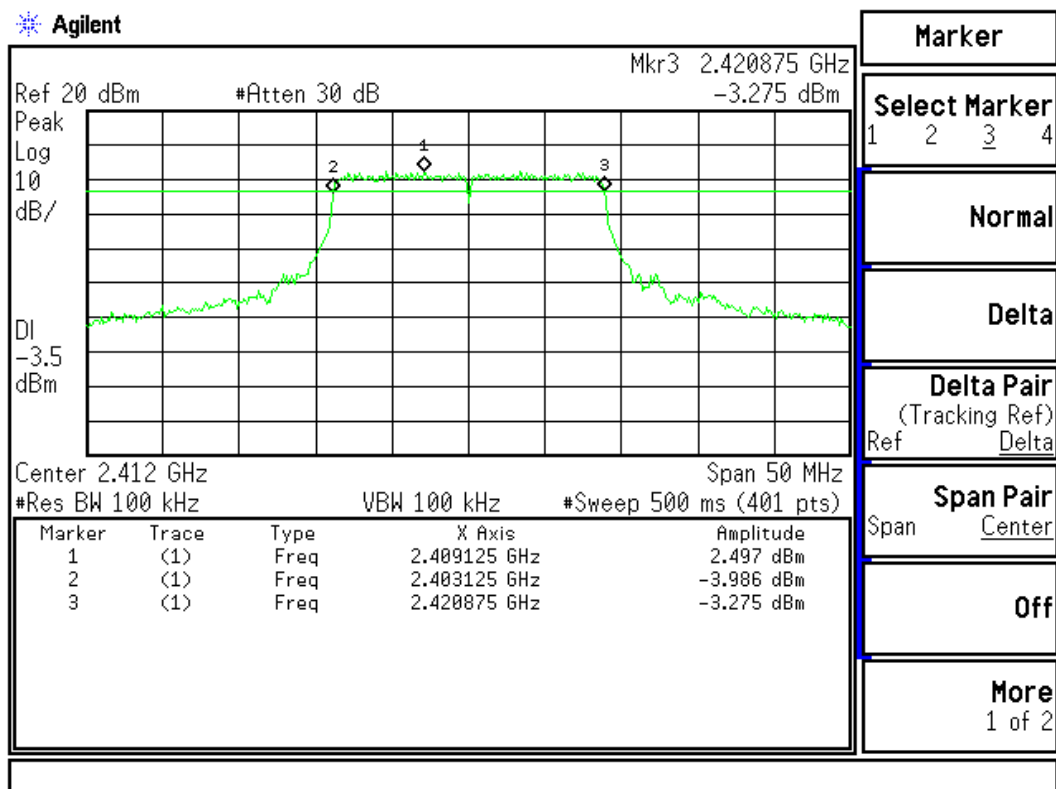
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6.5Mbps)	2412.00	17750	>500	Pass

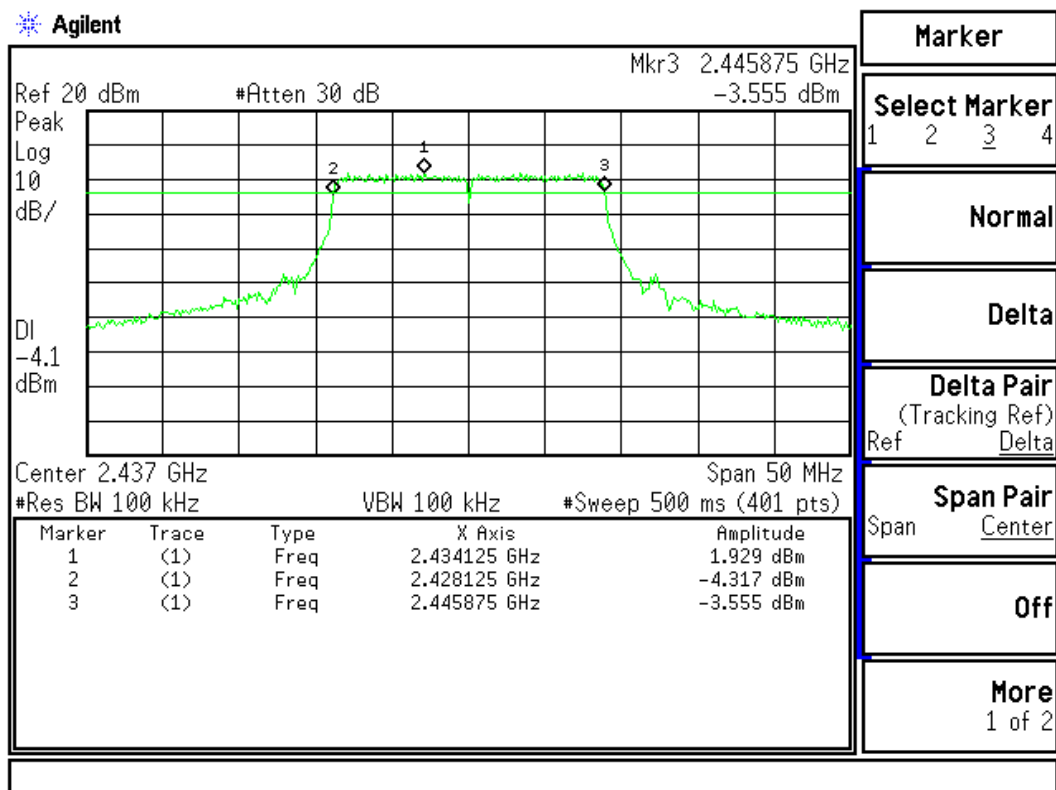
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6.5Mbps)	2437.00	17750	>500	Pass

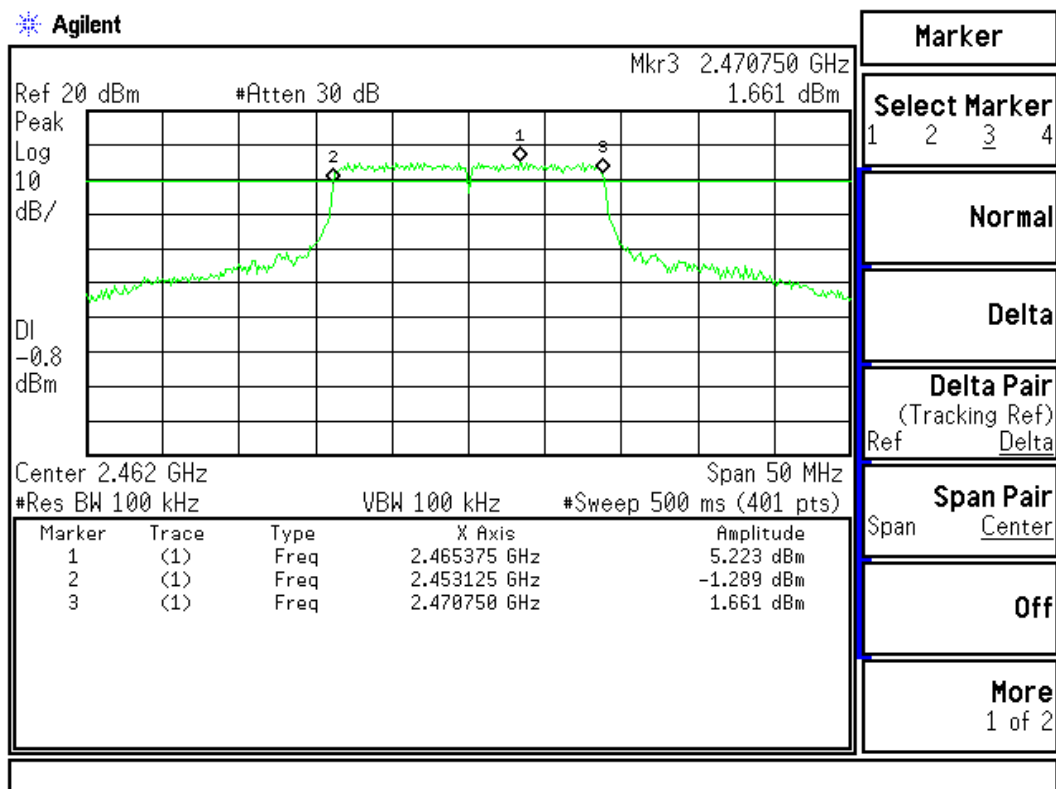
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6.5Mbps)	2462.00	17630	>500	Pass

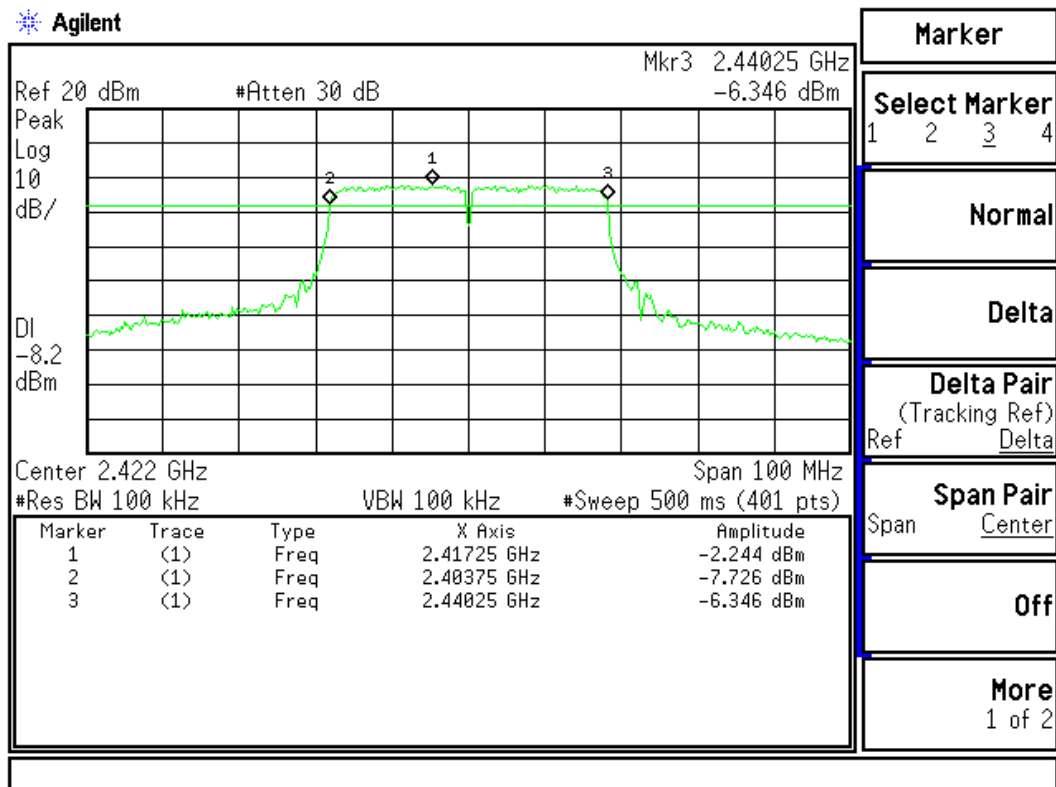
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2422MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (13Mbps)	2422.00	36500	>500	Pass

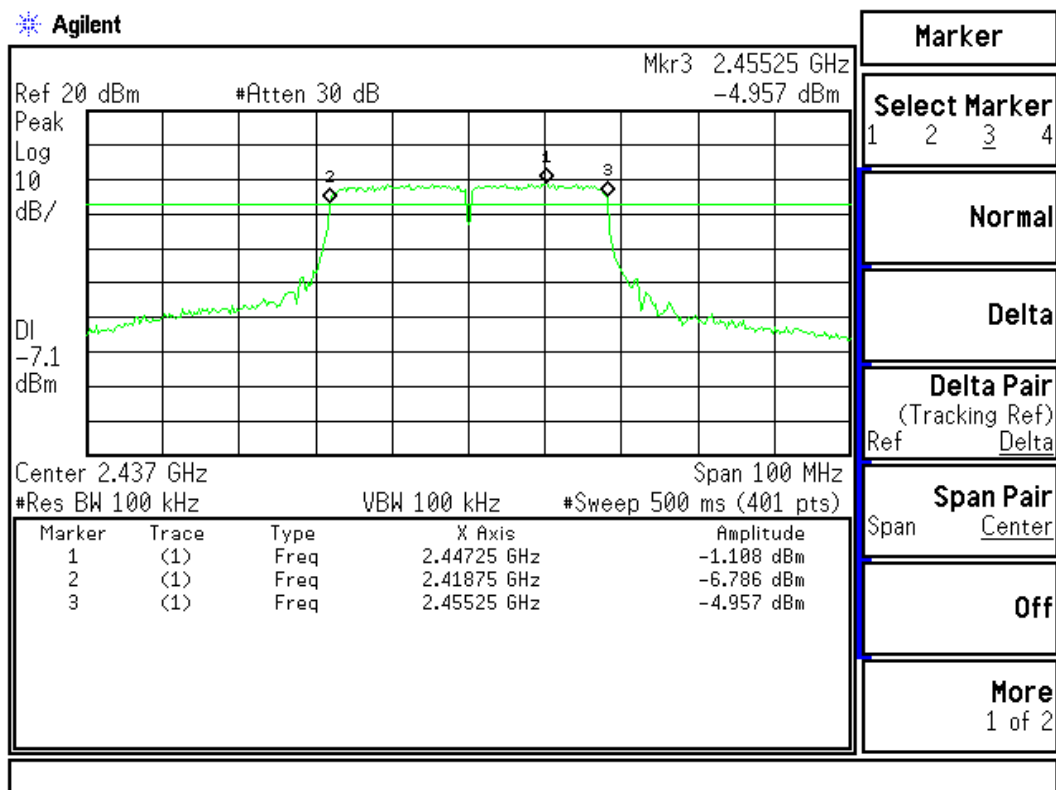
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4 (13Mbps)	2437.00	36500	>500	Pass

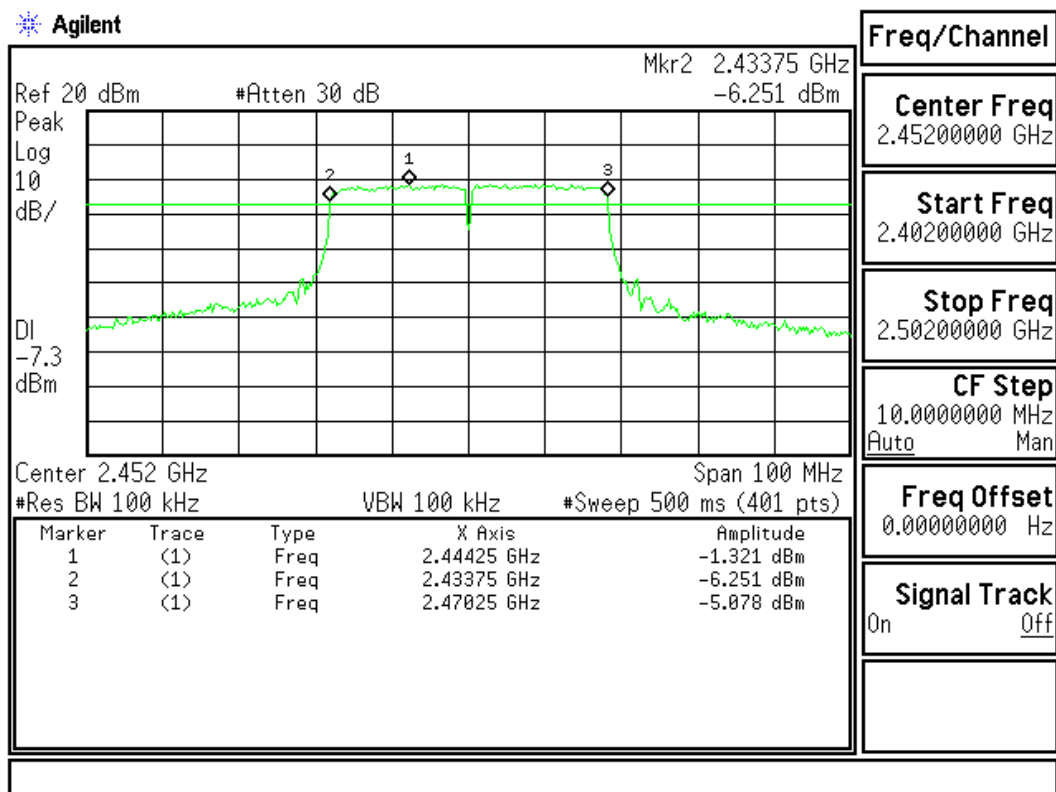
Figure Channel 4:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7 (13Mbps)	2452.00	36500	>500	Pass

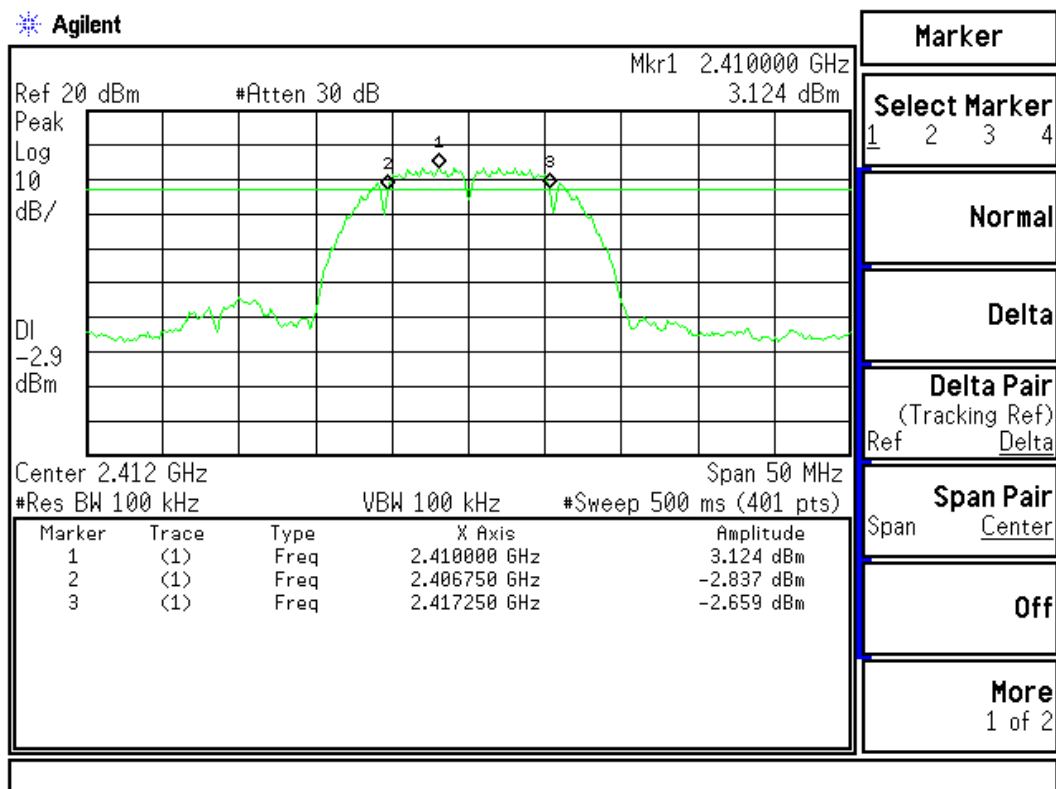
Figure Channel 7:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (1Mbps)	2412.00	10500	>500	Pass

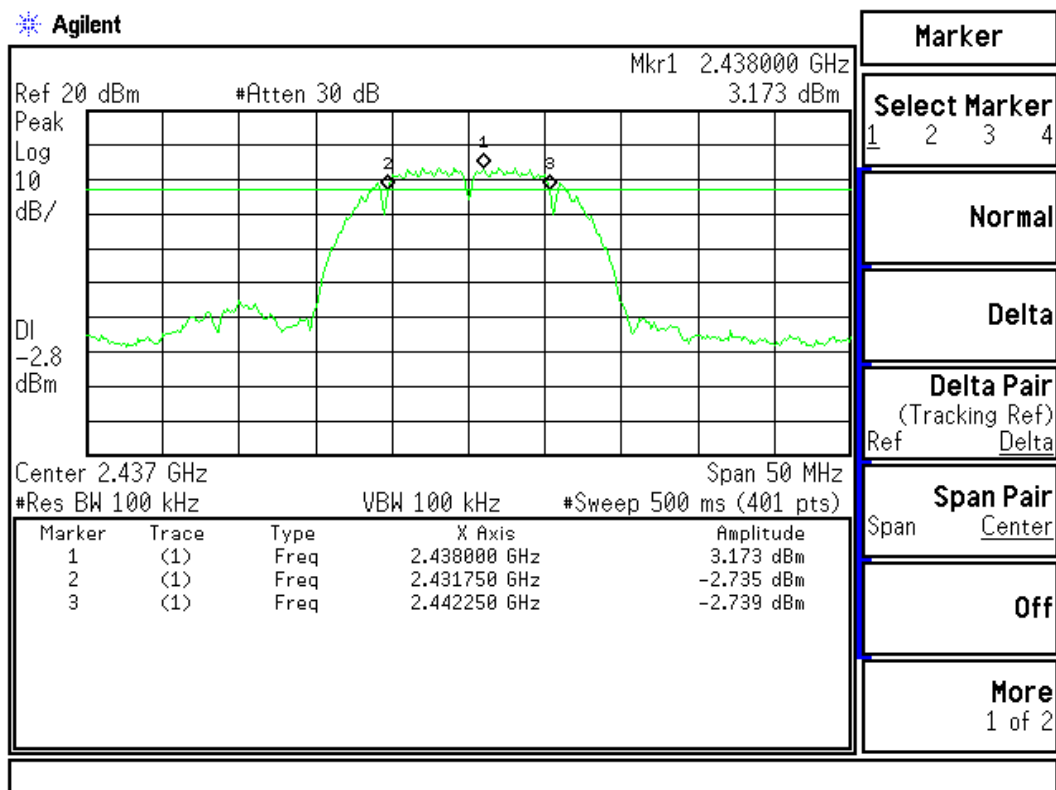
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (1Mbps)	2437.00	10500	>500	Pass

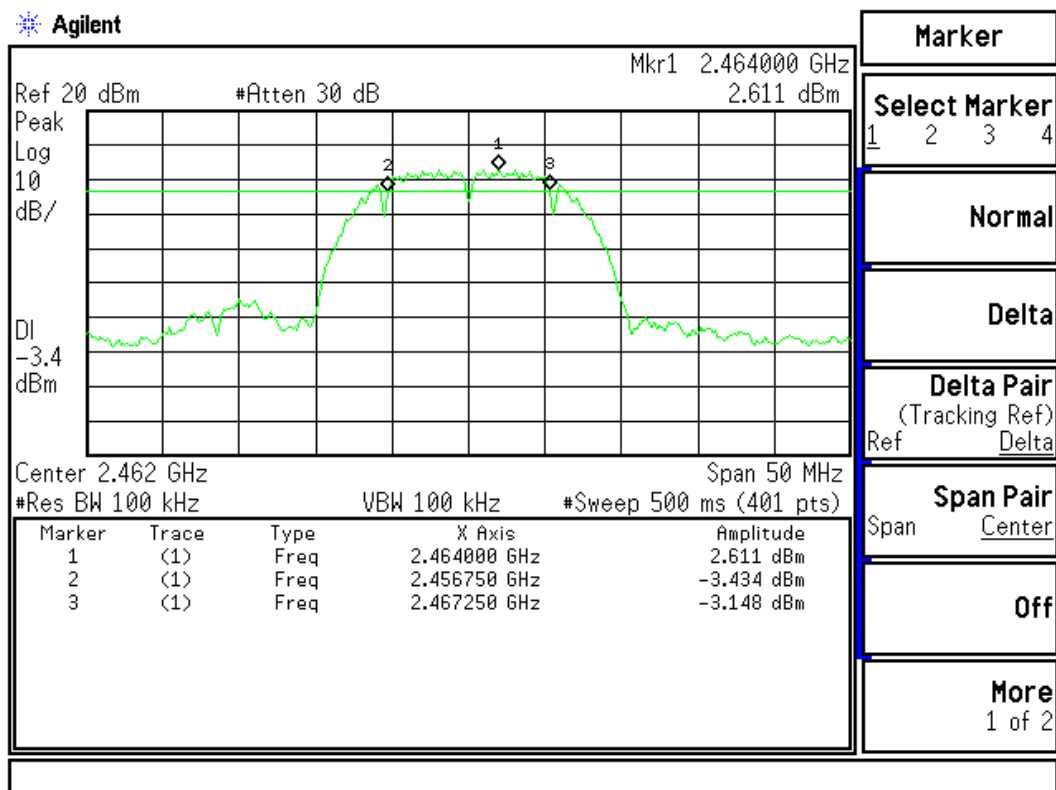
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (1Mbps)	2462.00	10500	>500	Pass

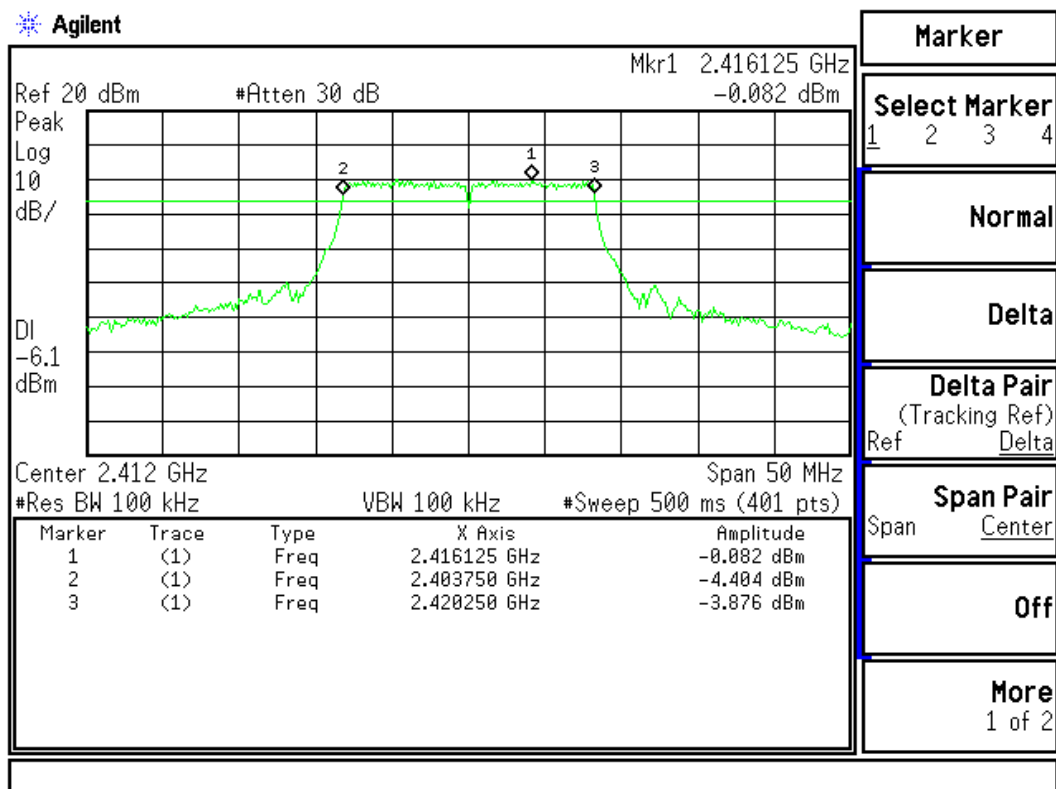
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6Mbps)	2412.00	16750	>500	Pass

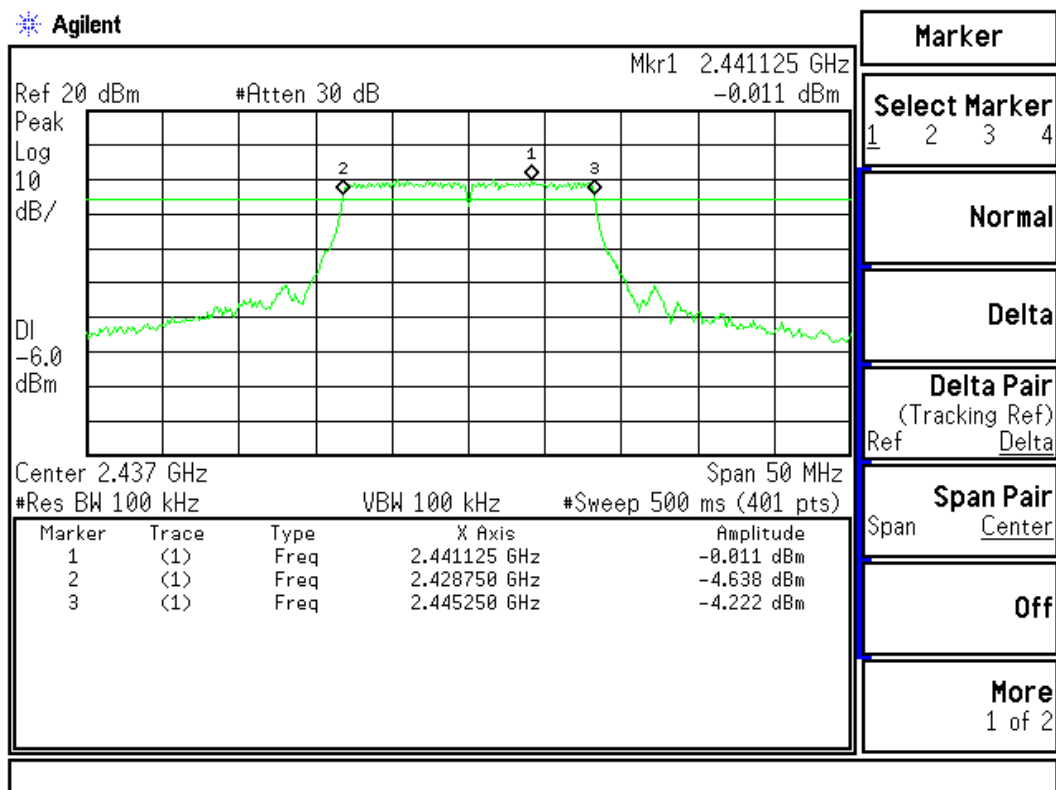
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6Mbps)	2437.00	16500	>500	Pass

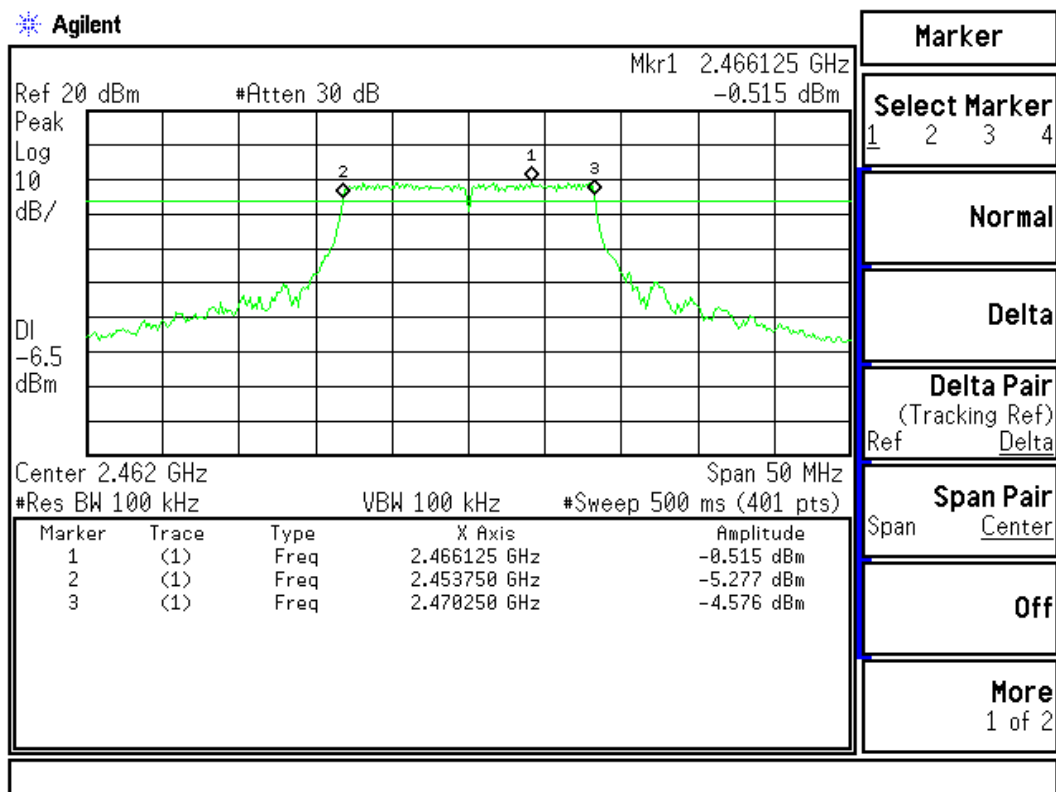
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6Mbps)	2462.00	16500	>500	Pass

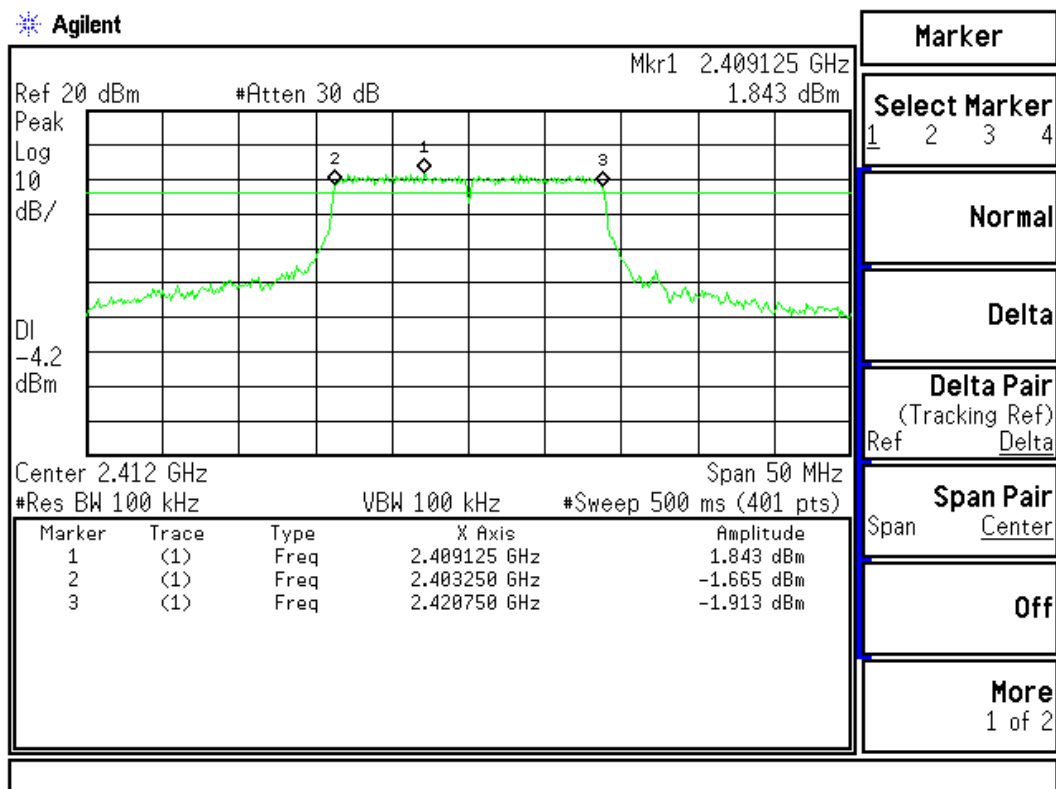
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6.5Mbps)	2412.00	17500	>500	Pass

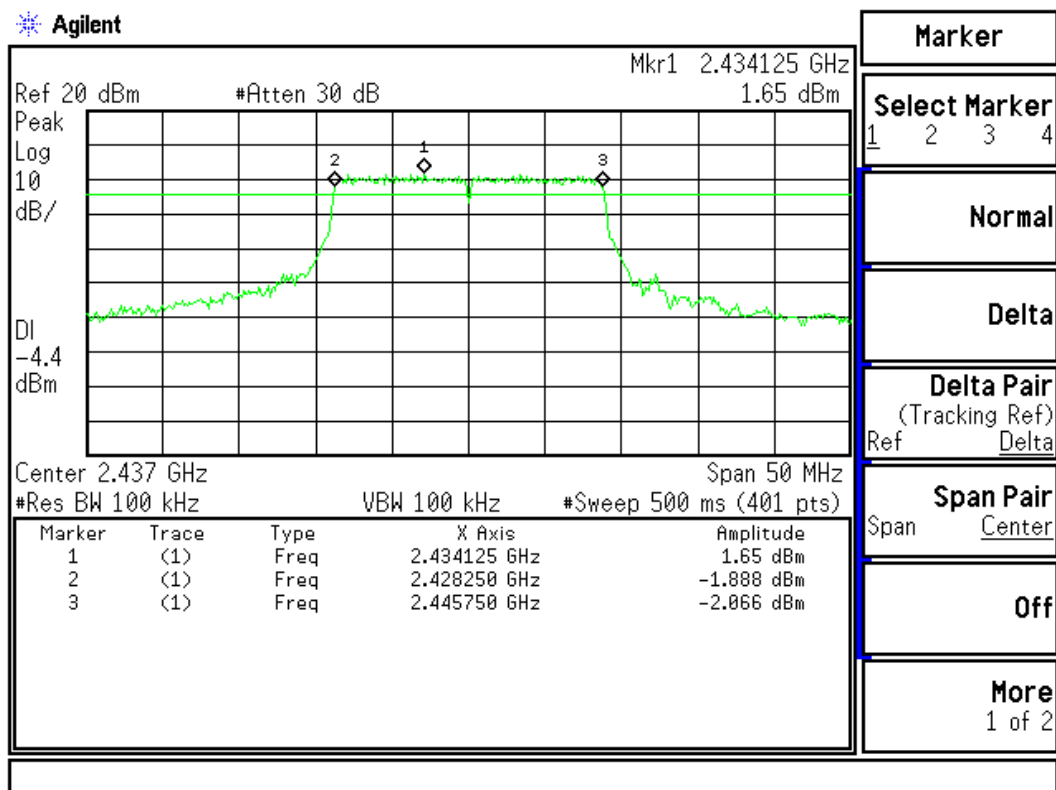
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6.5Mbps)	2437.00	17500	>500	Pass

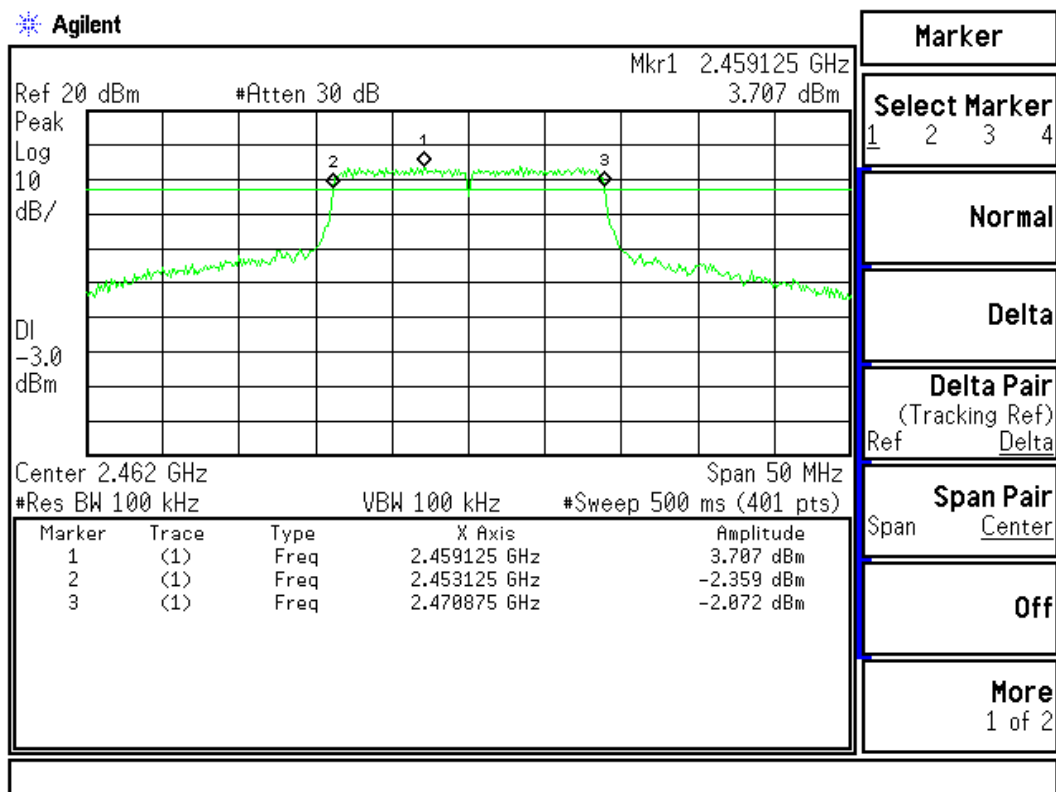
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6.5Mbps)	2462.00	17750	>500	Pass

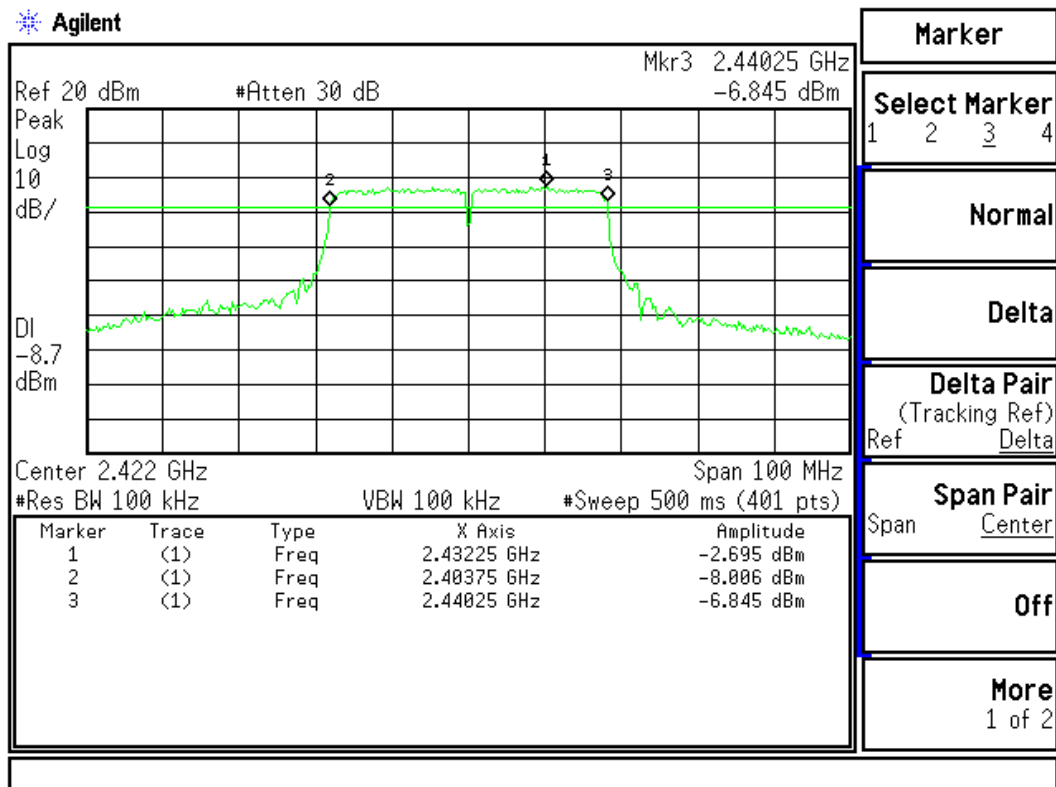
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2422MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (13Mbps)	2422.00	36500	>500	Pass

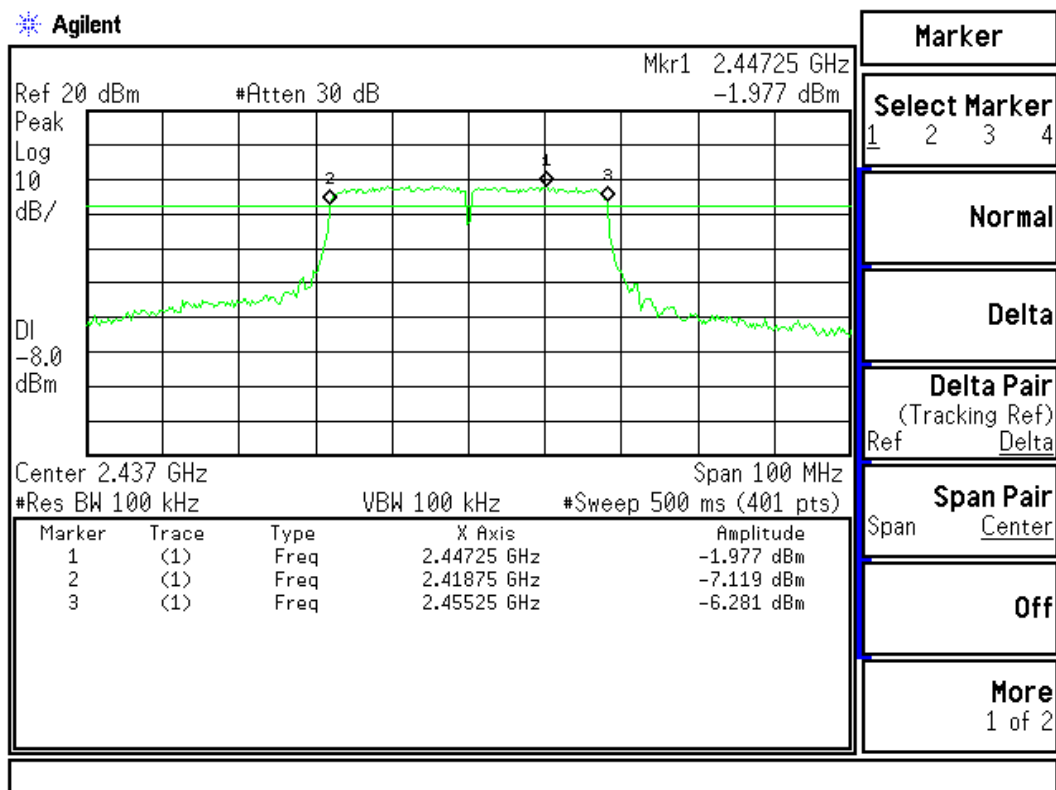
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4 (13Mbps)	2437.00	36500	>500	Pass

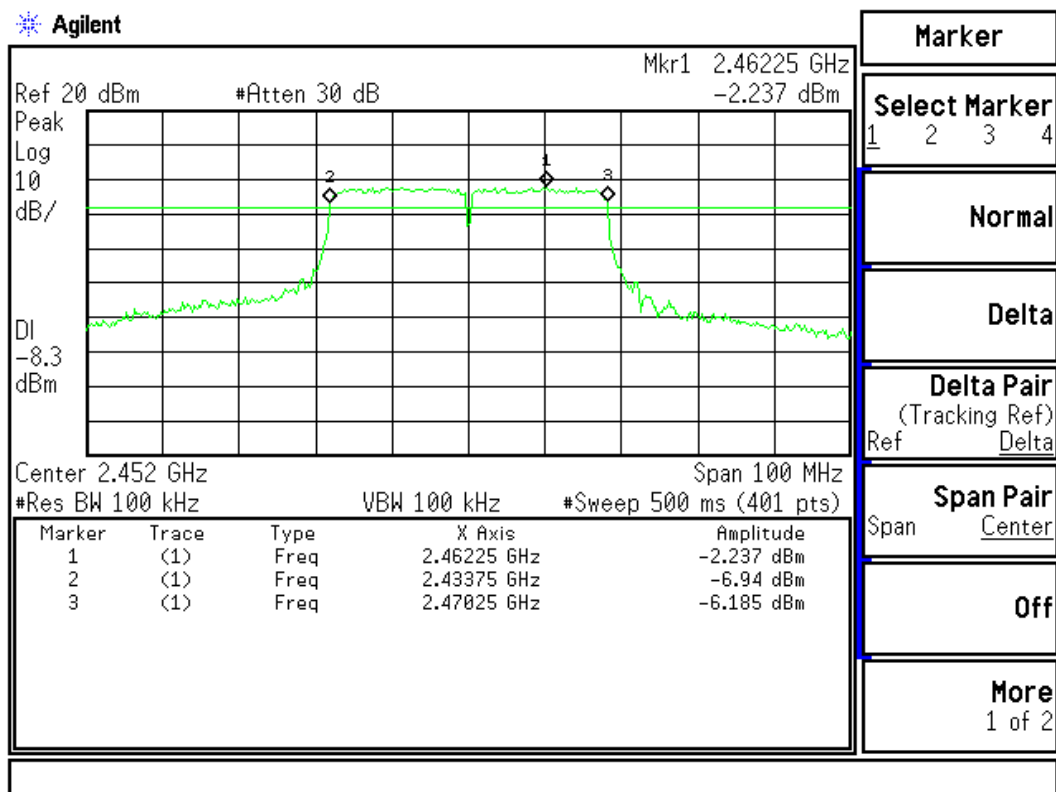
Figure Channel 4:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7 (13Mbps)	2452.00	36500	>500	Pass

Figure Channel 7:



8. Power Density

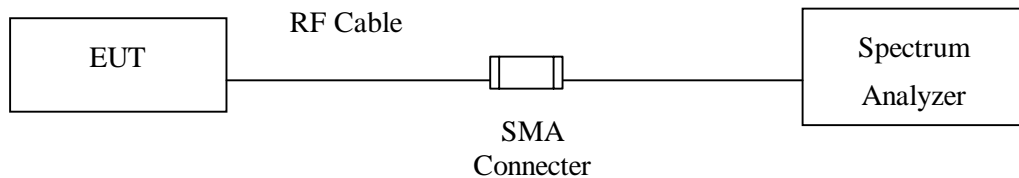
8.1. Test Equipment

The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

Note: 1. All equipments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

8.2. Test Setup



8.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW= 3 kHz, VBW=10KHz, Sweep time=(SPAN/3KHz), detector=Peak detector

8.5. Uncertainty

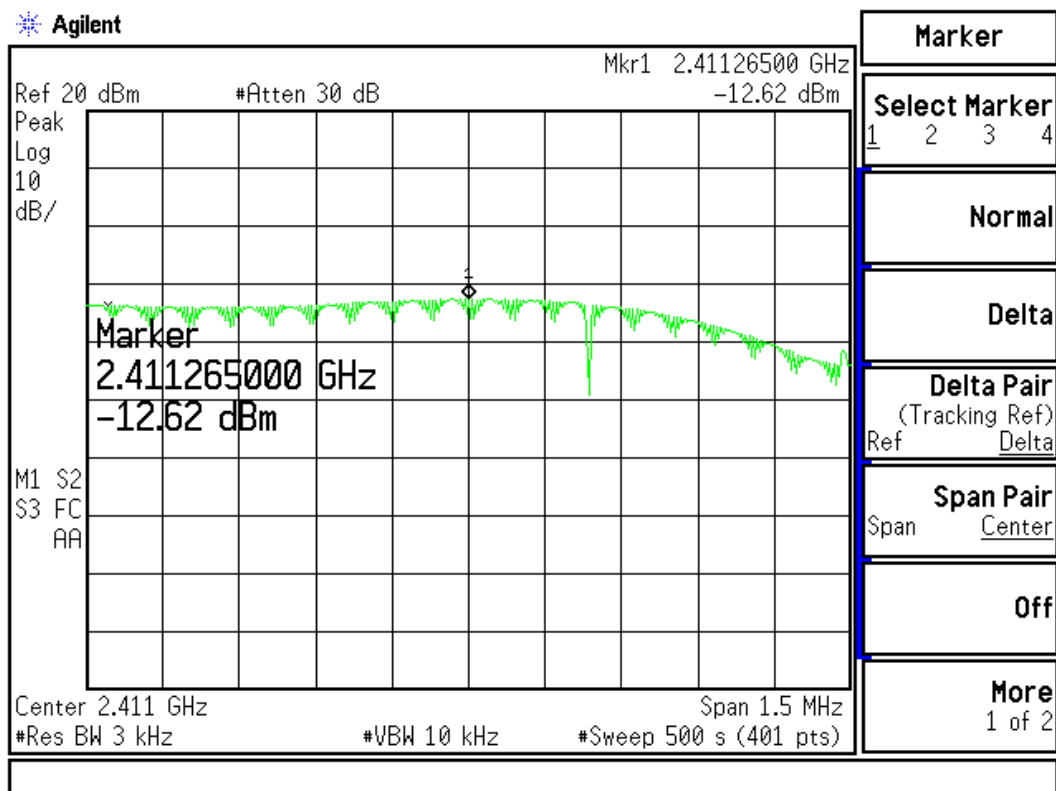
± 1.27 dB

8.6. Test Result of Power Density

Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (1Mbps)	2412.00	-12.62	< 8dBm	Pass

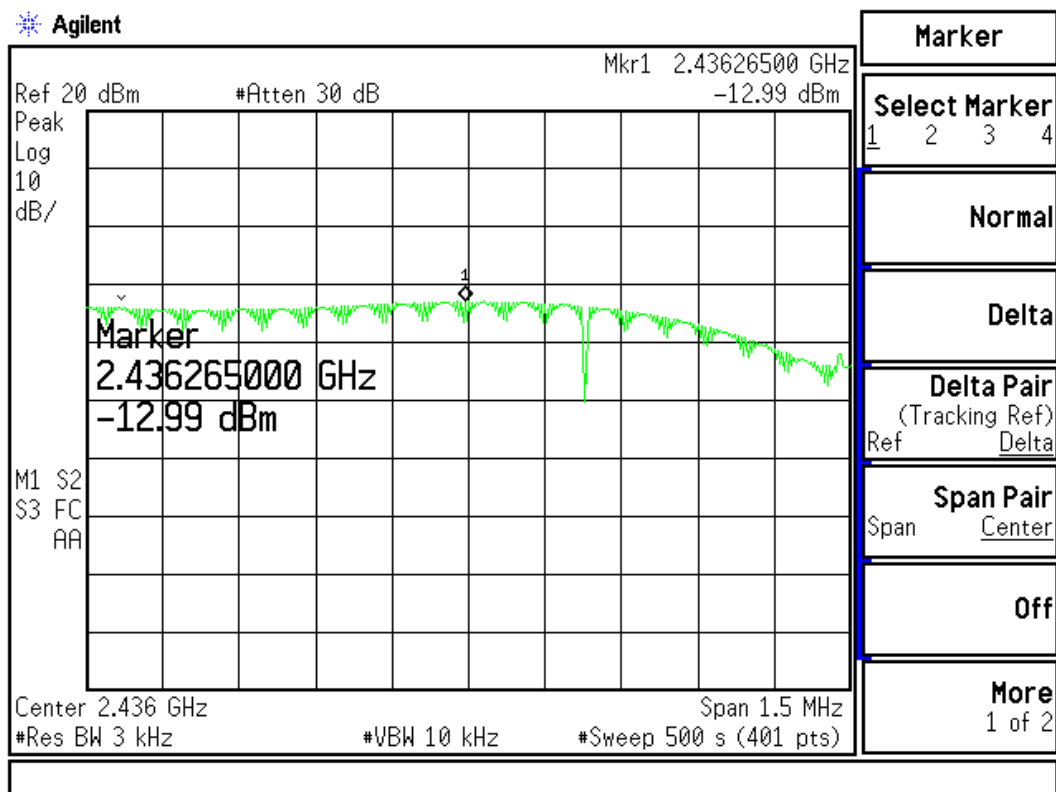
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (1Mbps)	2437.000	-12.99	< 8dBm	Pass

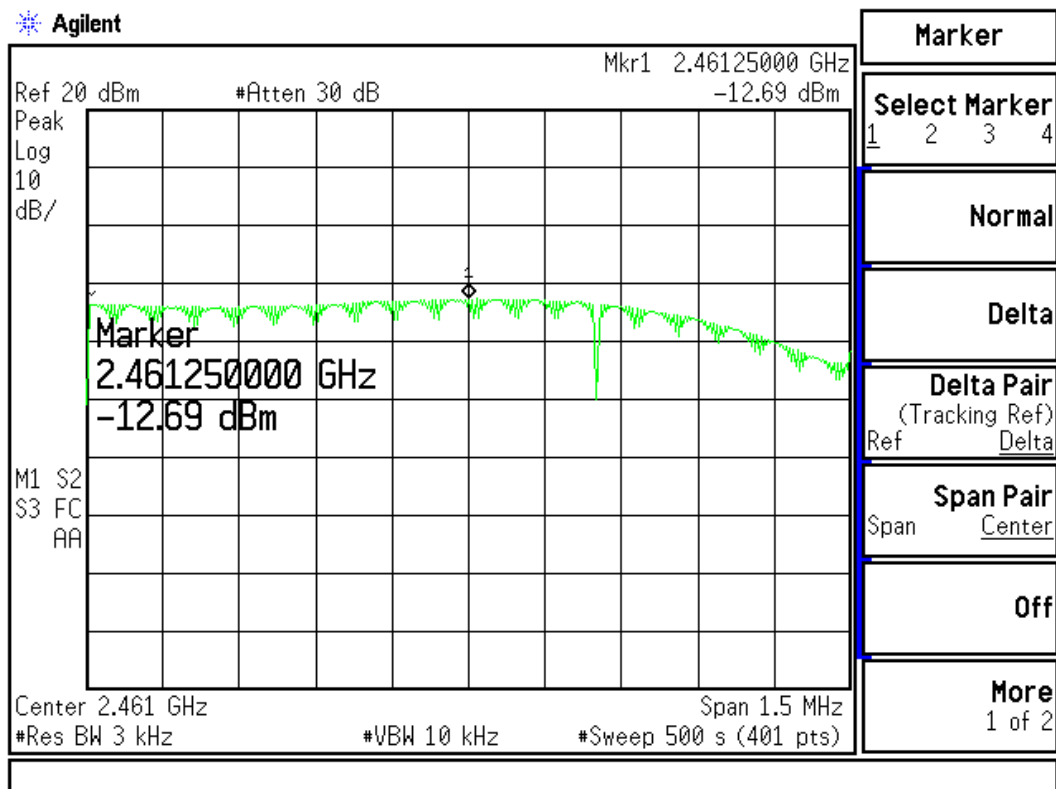
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11b 1Mbps)-EXTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (1Mbps)	2462.00	-12.69	< 8dBm	Pass

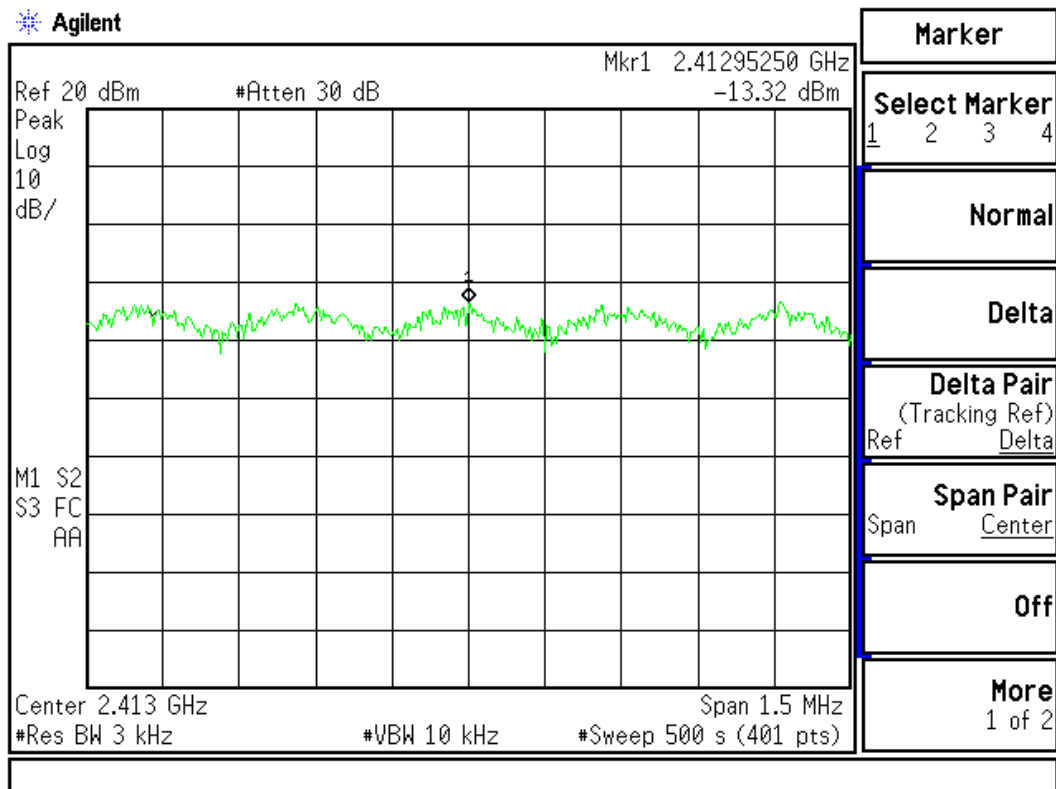
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6Mbps)	2412.00	-13.32	< 8dBm	Pass

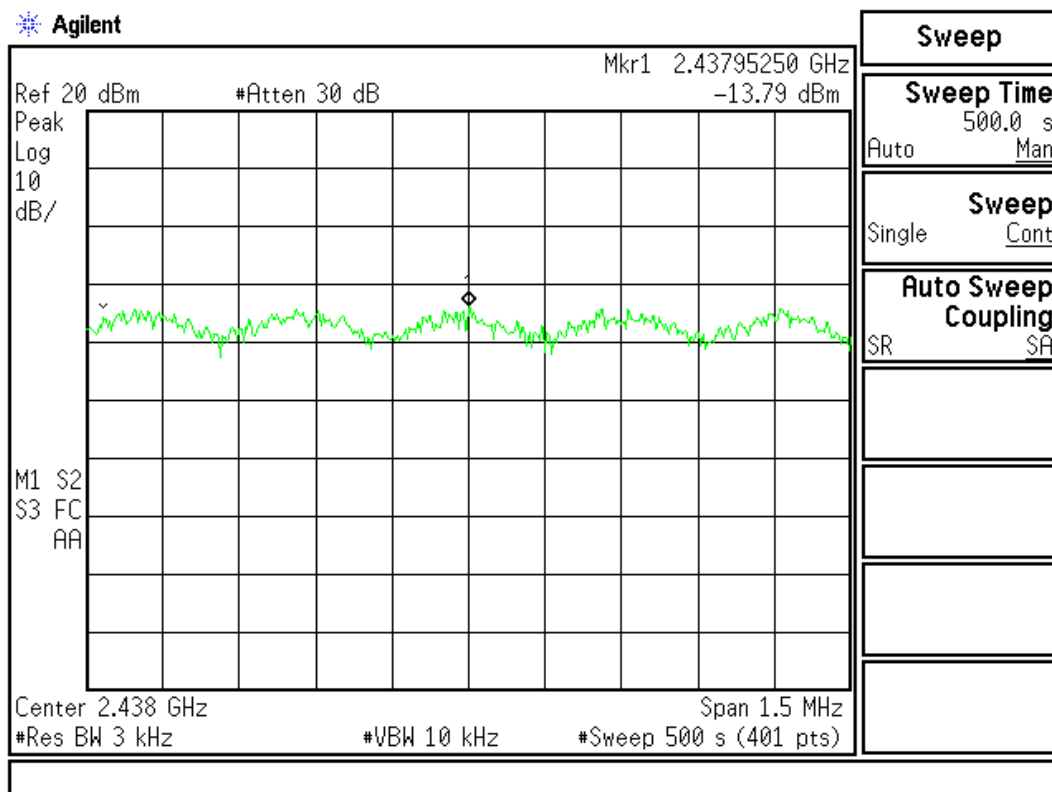
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6Mbps)	2437.000	-13.79	< 8dBm	Pass

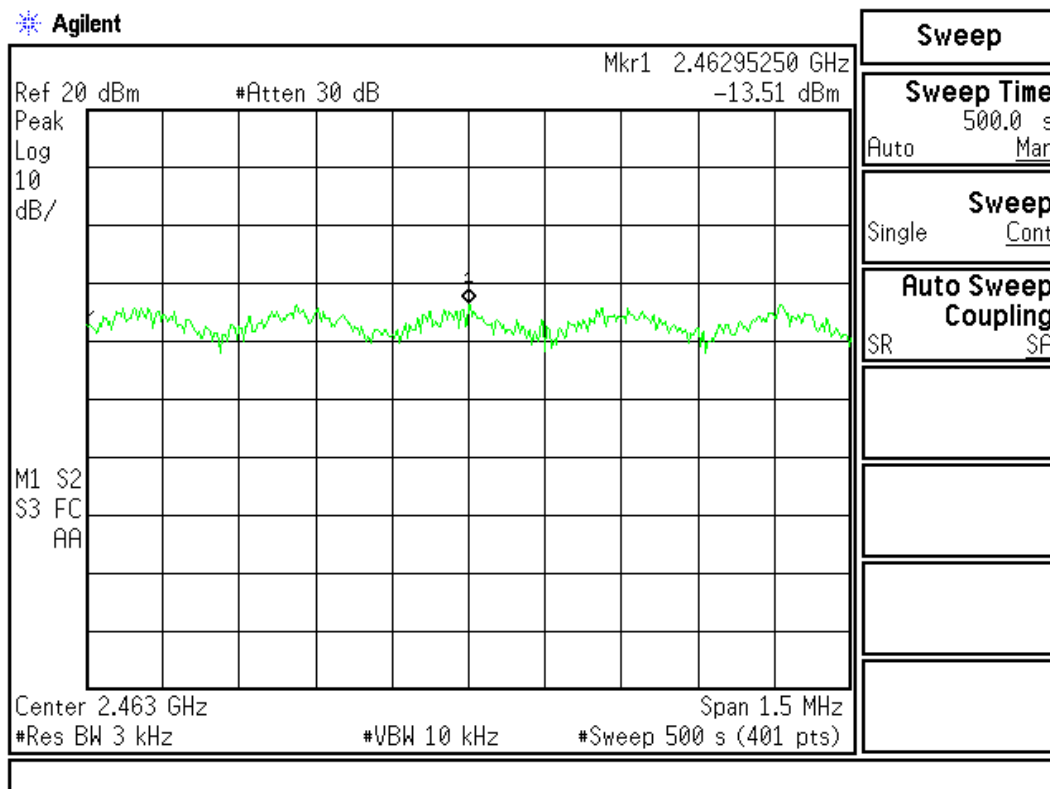
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11g 6Mbps)-EXTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6Mbps)	2462.00	-13.51	< 8dBm	Pass

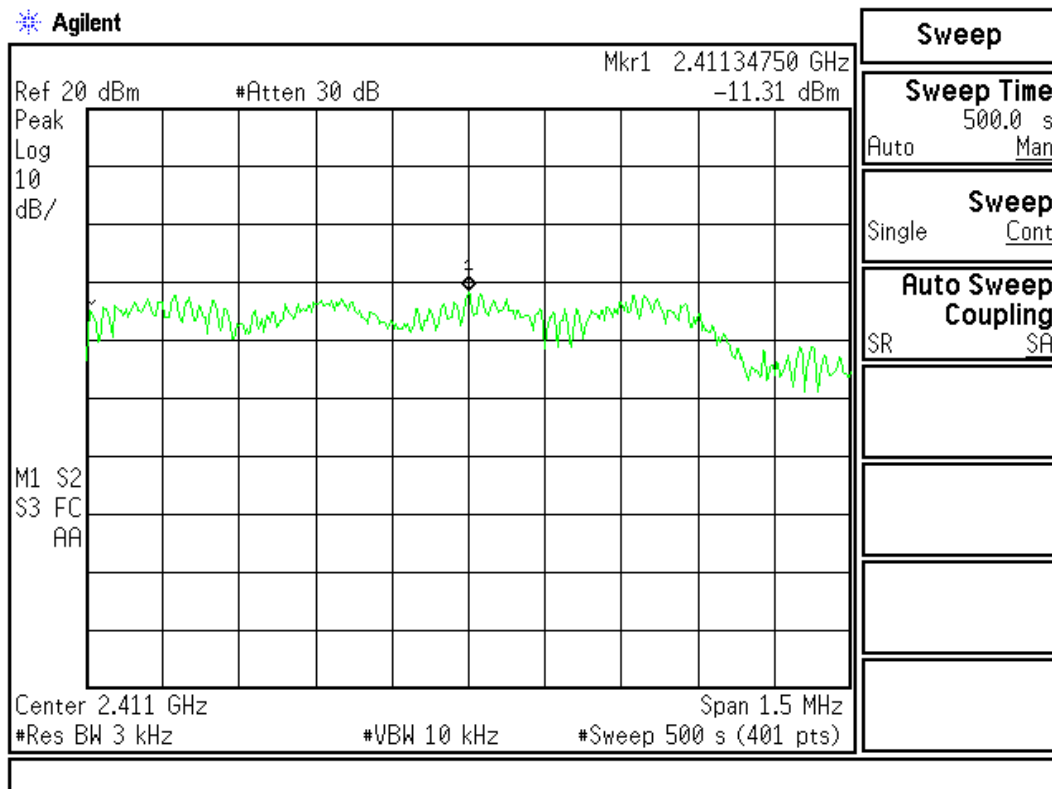
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6.5Mbps)	2412.00	-11.31	< 8dBm	Pass

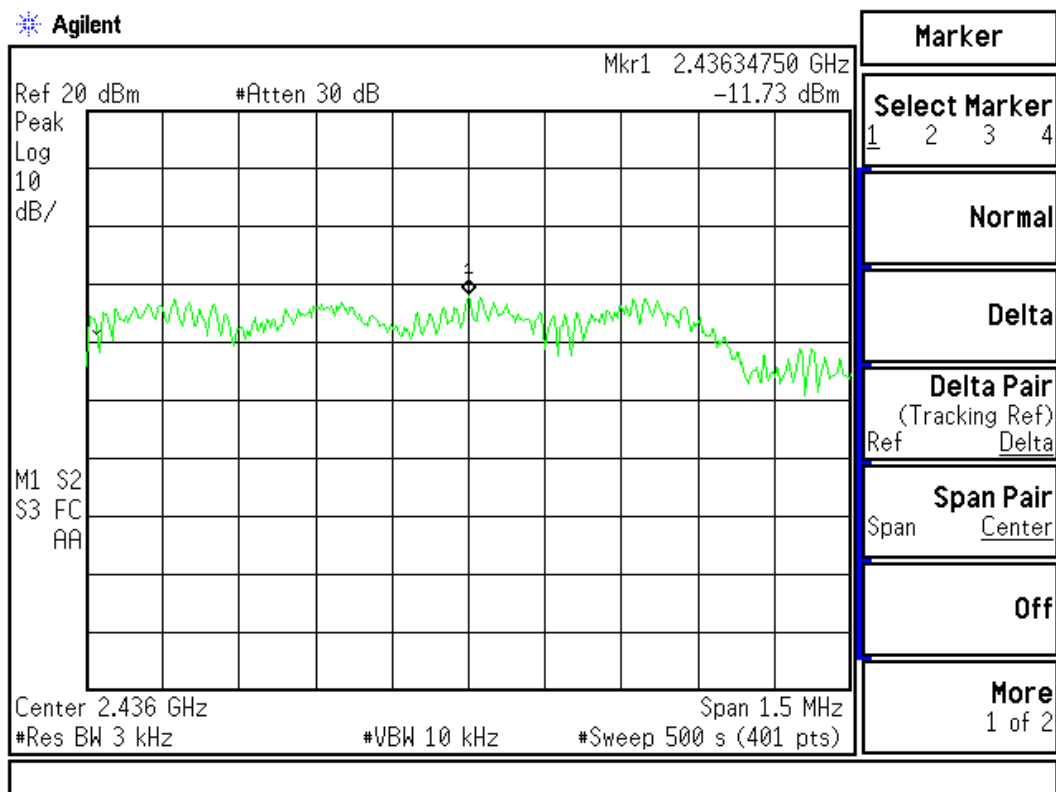
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6.5Mbps)	2437.000	-11.73	< 8dBm	Pass

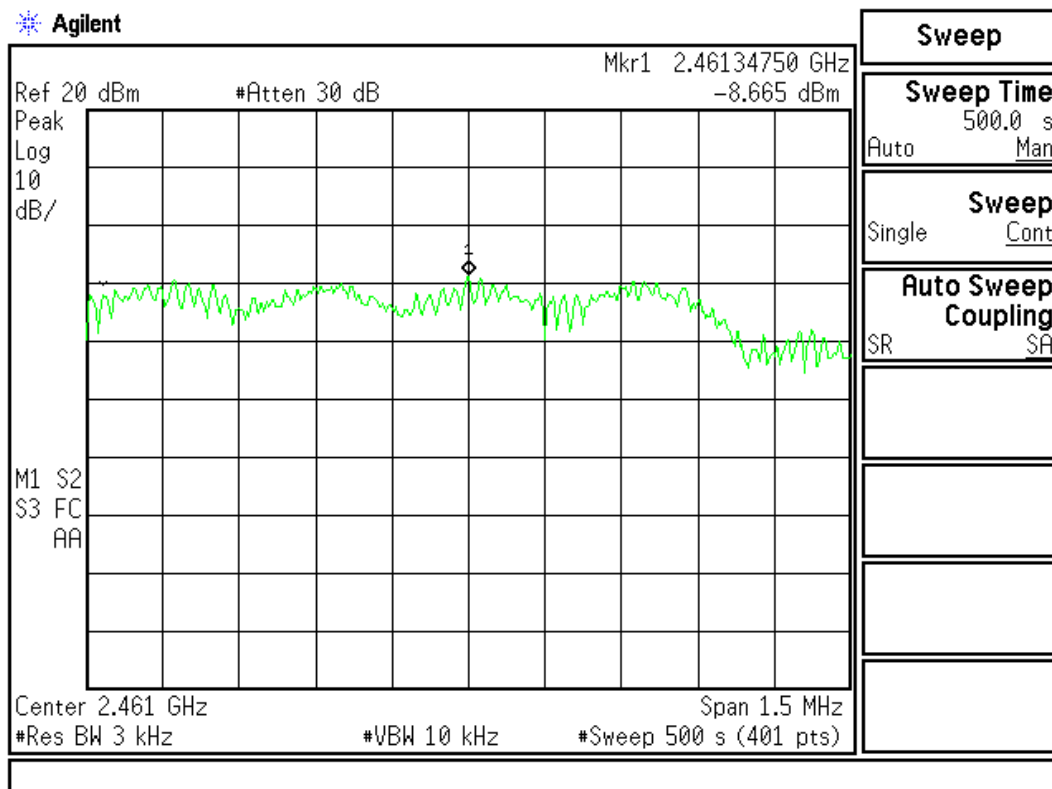
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-EXTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6.5Mbps)	2462.00	-8.665	< 8dBm	Pass

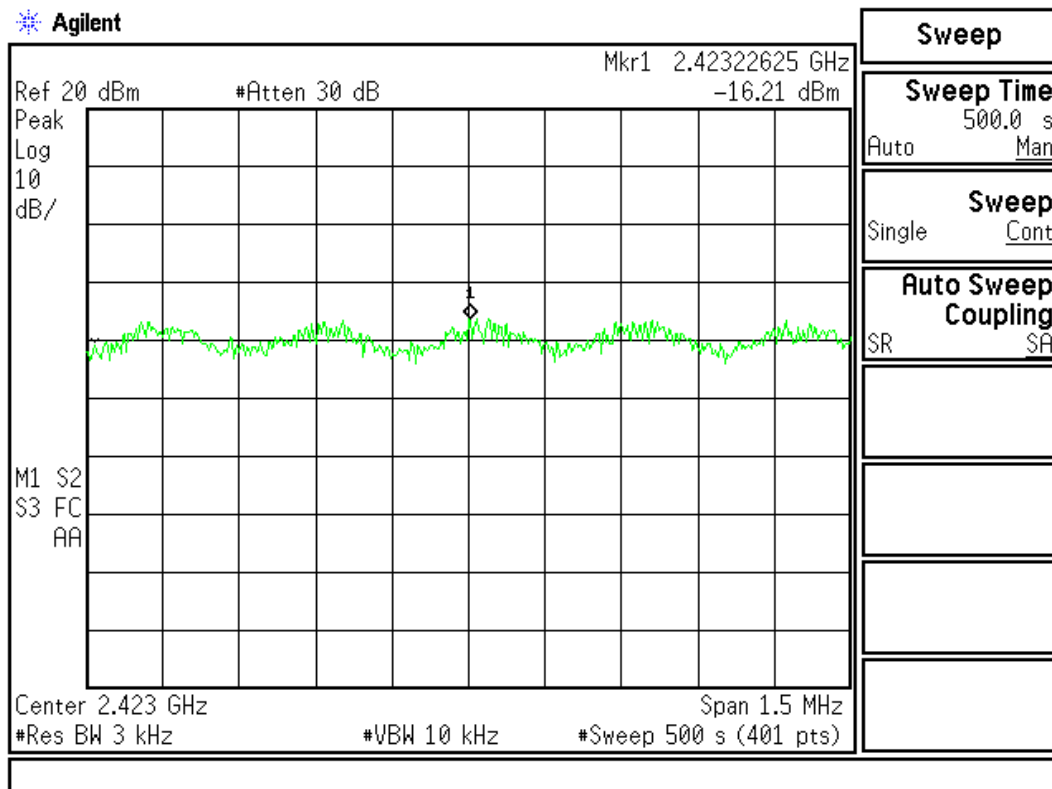
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2422MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (13Mbps)	2422.00	-16.21	< 8dBm	Pass

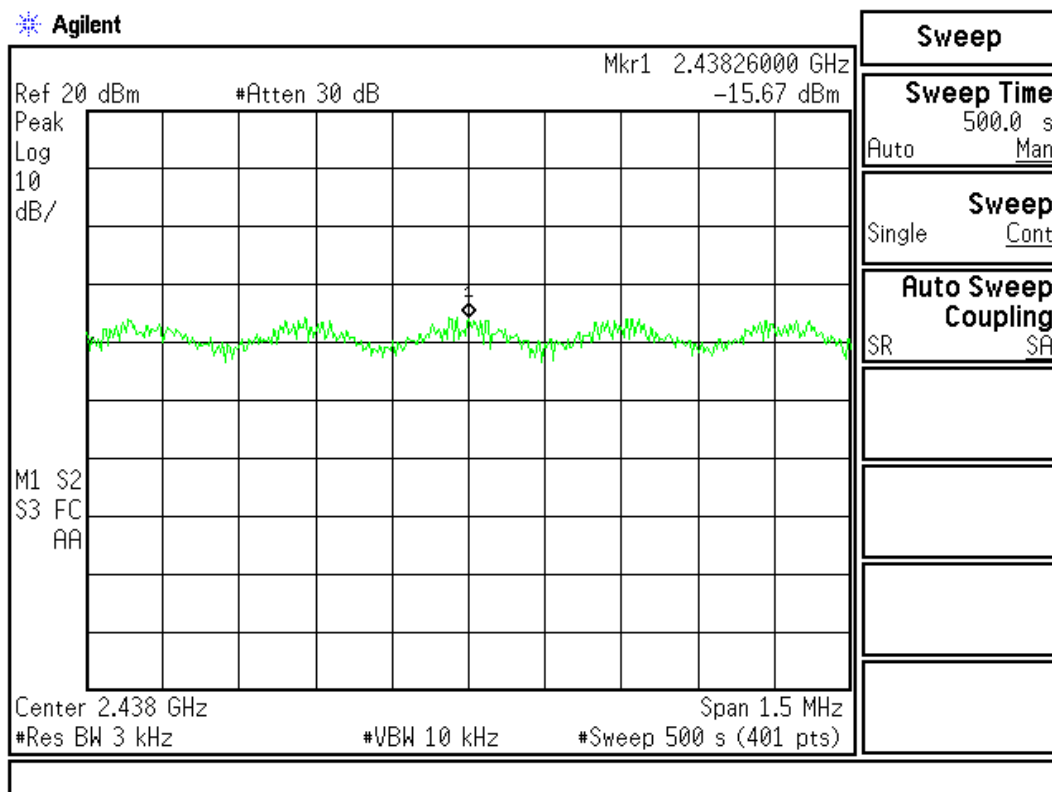
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
4 (13Mbps)	2437.000	-15.67	< 8dBm	Pass

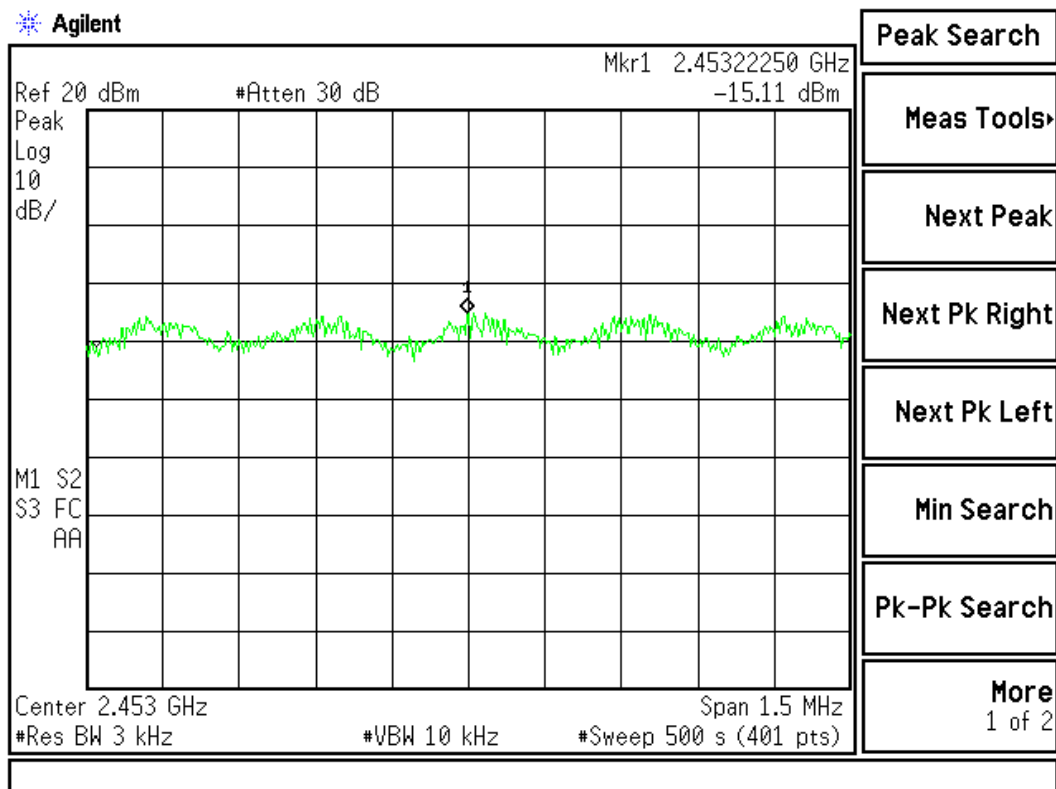
Figure Channel 4:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmitter (802.11n MCS8 13Mbps 40MBW)-EXTERNAL Antenna (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
07 (6Mbps)	2452.00	-15.11	< 8dBm	Pass

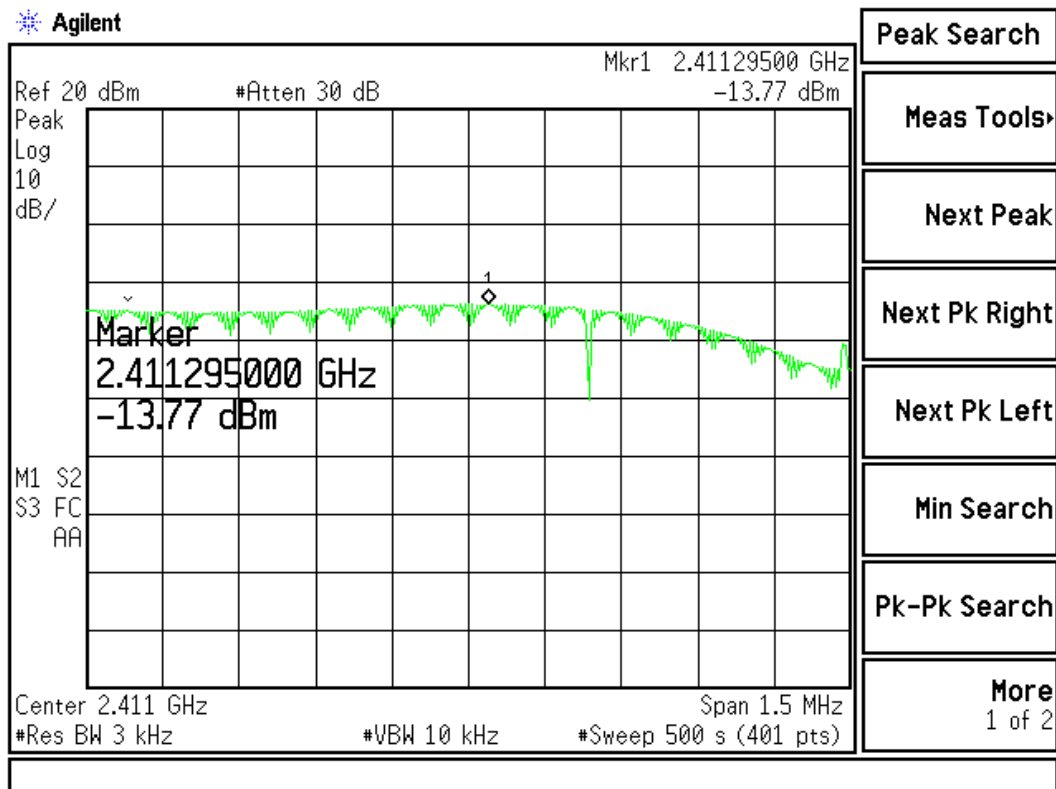
Figure Channel 7:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (1Mbps)	2412.00	-13.77	< 8dBm	Pass

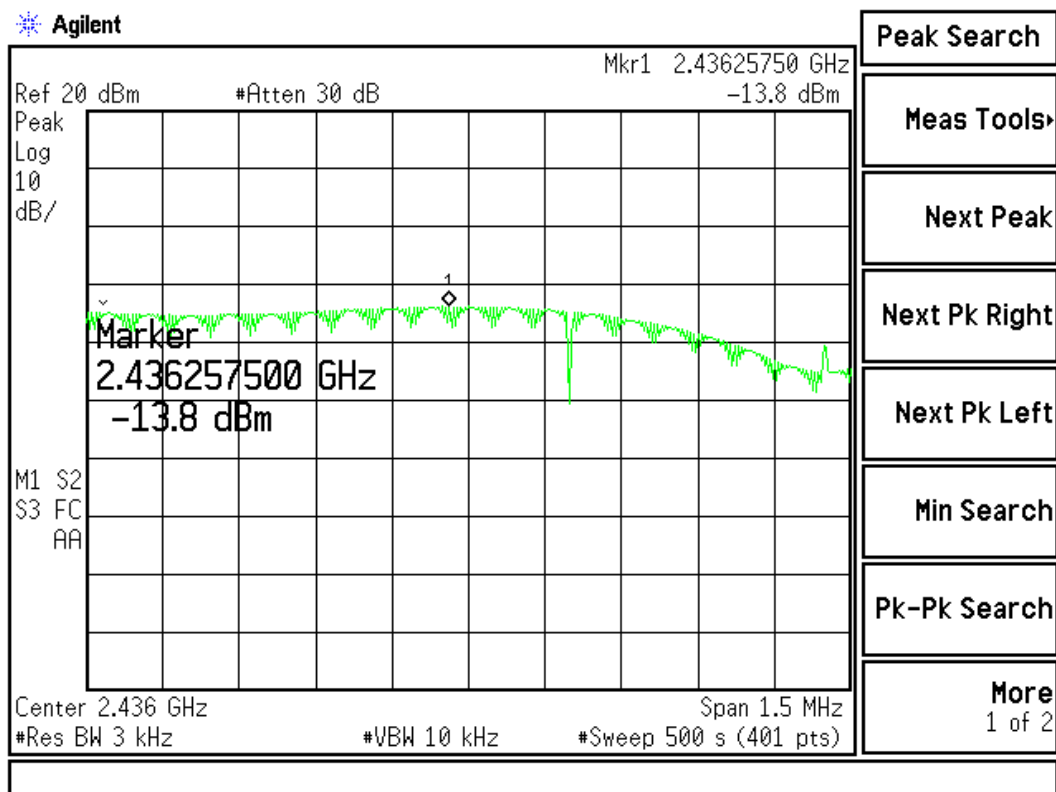
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (1Mbps)	2437.000	-13.80	< 8dBm	Pass

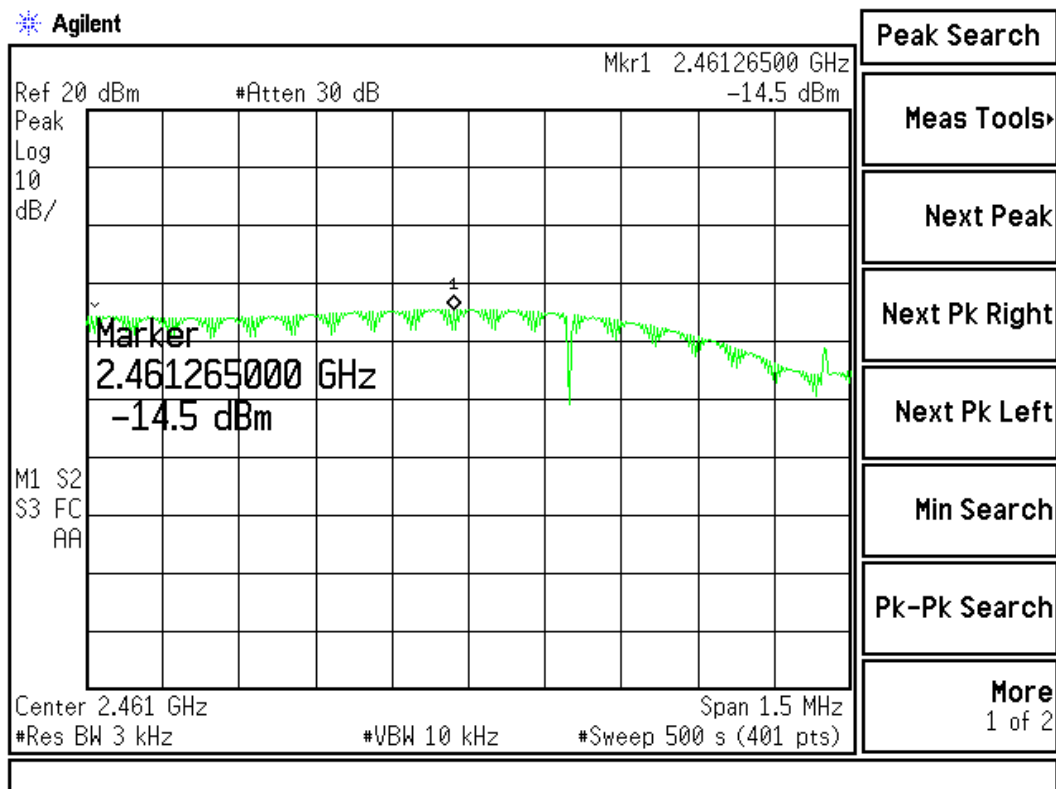
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 5: Transmitter (802.11b 1Mbps)-INTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (1Mbps)	2462.00	-14.50	< 8dBm	Pass

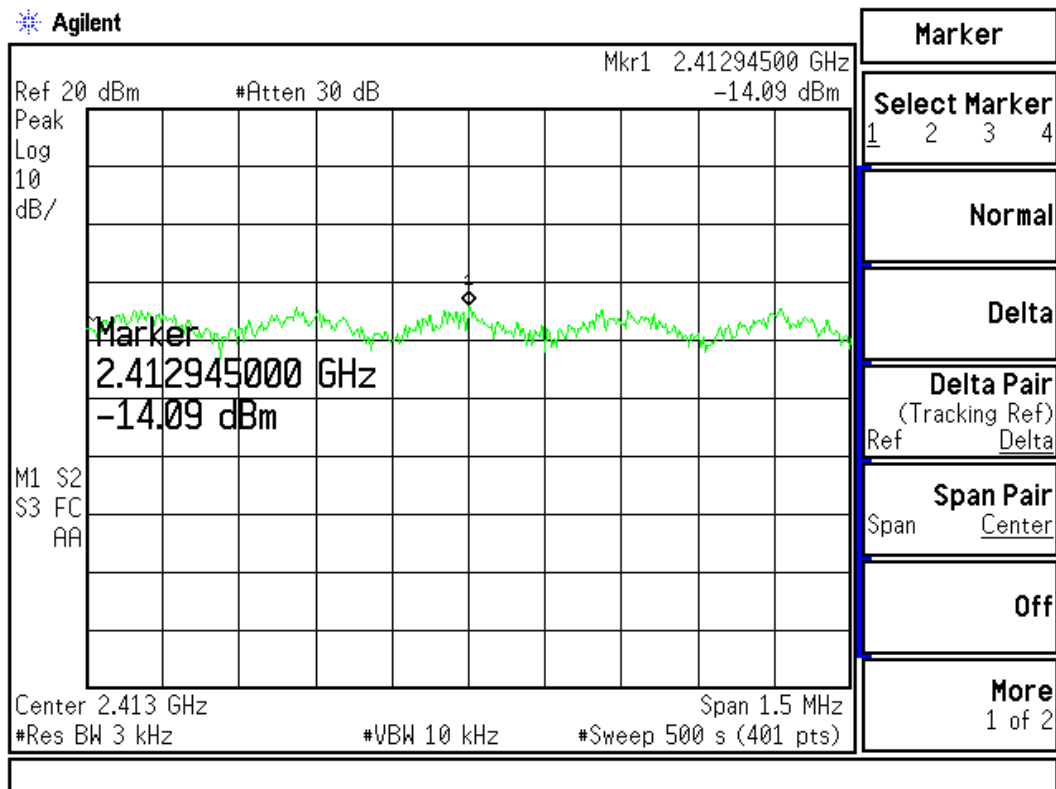
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6Mbps)	2412.00	-14.09	< 8dBm	Pass

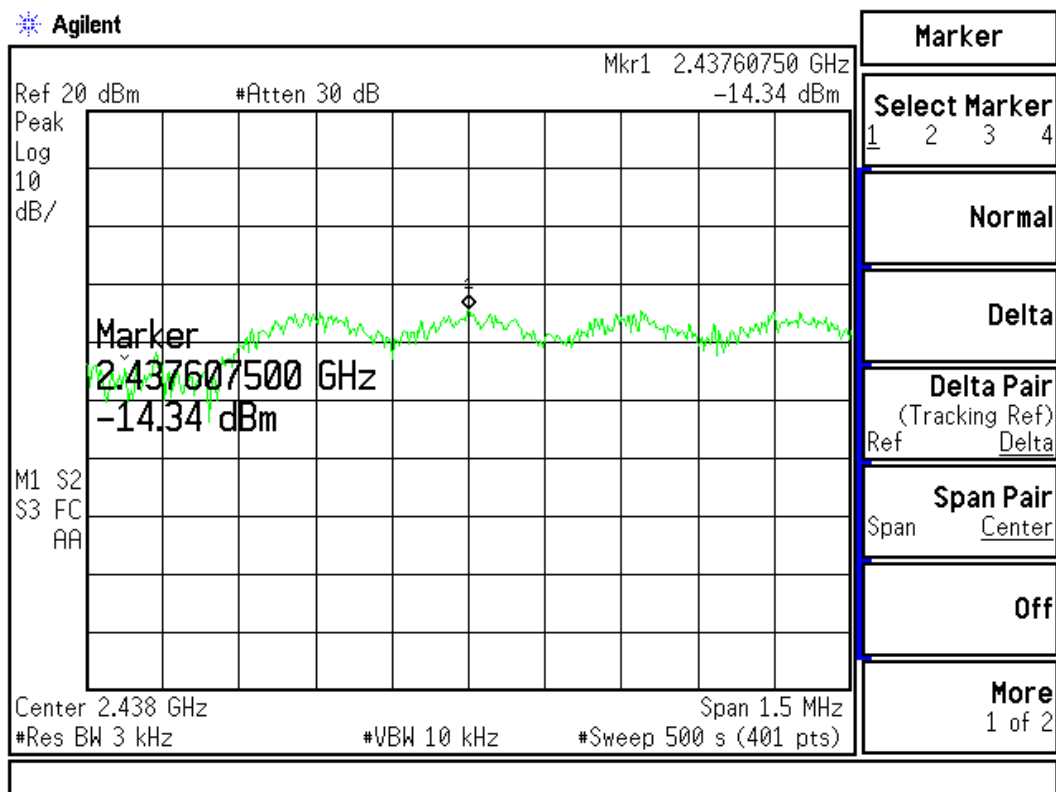
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6Mbps)	2437.000	-14.34	< 8dBm	Pass

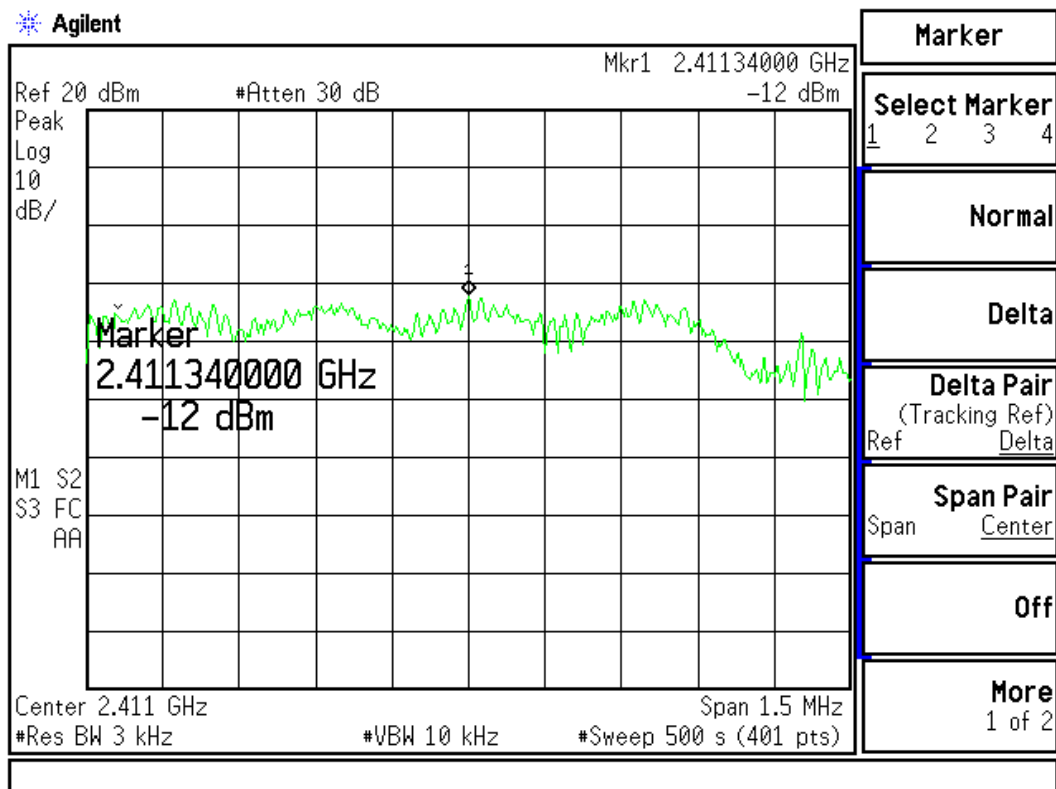
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmitter (802.11g 6Mbps)-INTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6Mbps)	2462.00	-12.00	< 8dBm	Pass

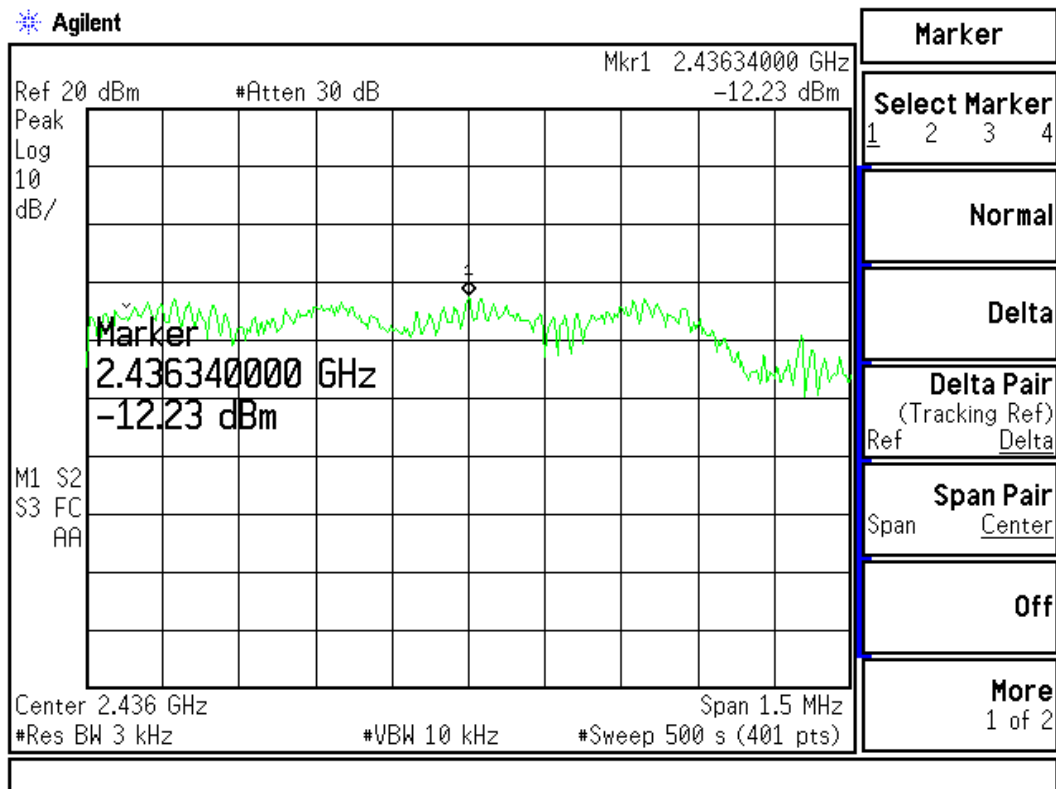
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6.5Mbps)	2412.00	-12.23	< 8dBm	Pass

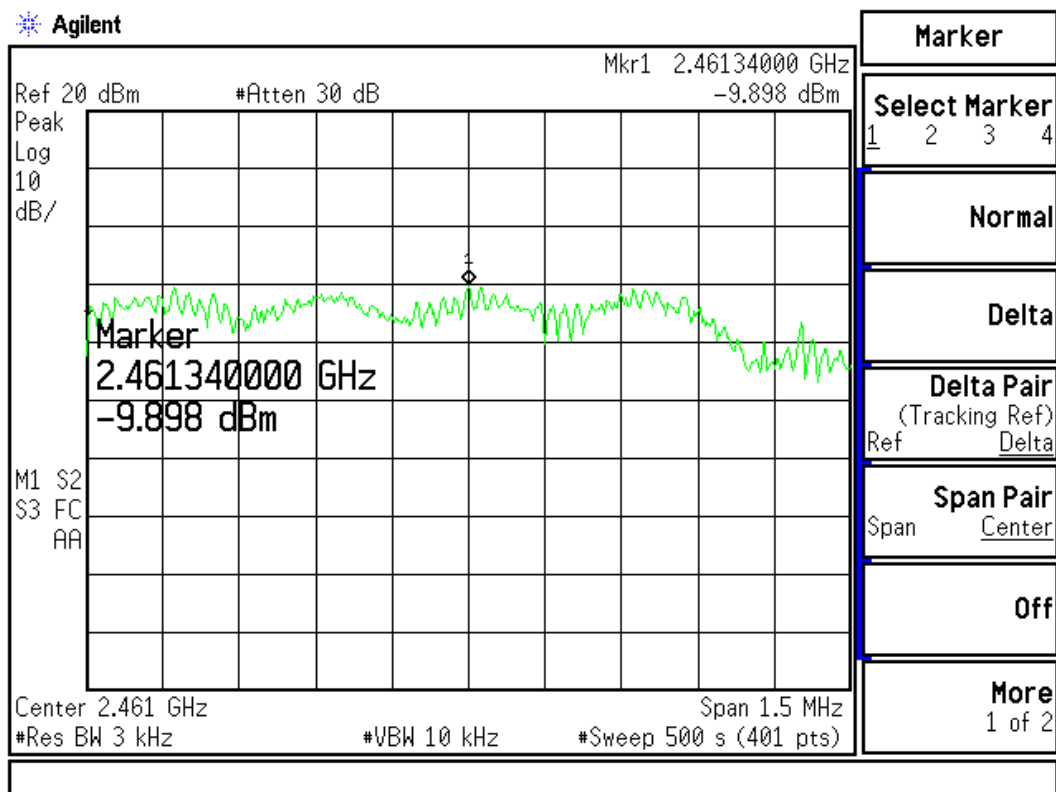
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6.5Mbps)	2437.000	-9.898	< 8dBm	Pass

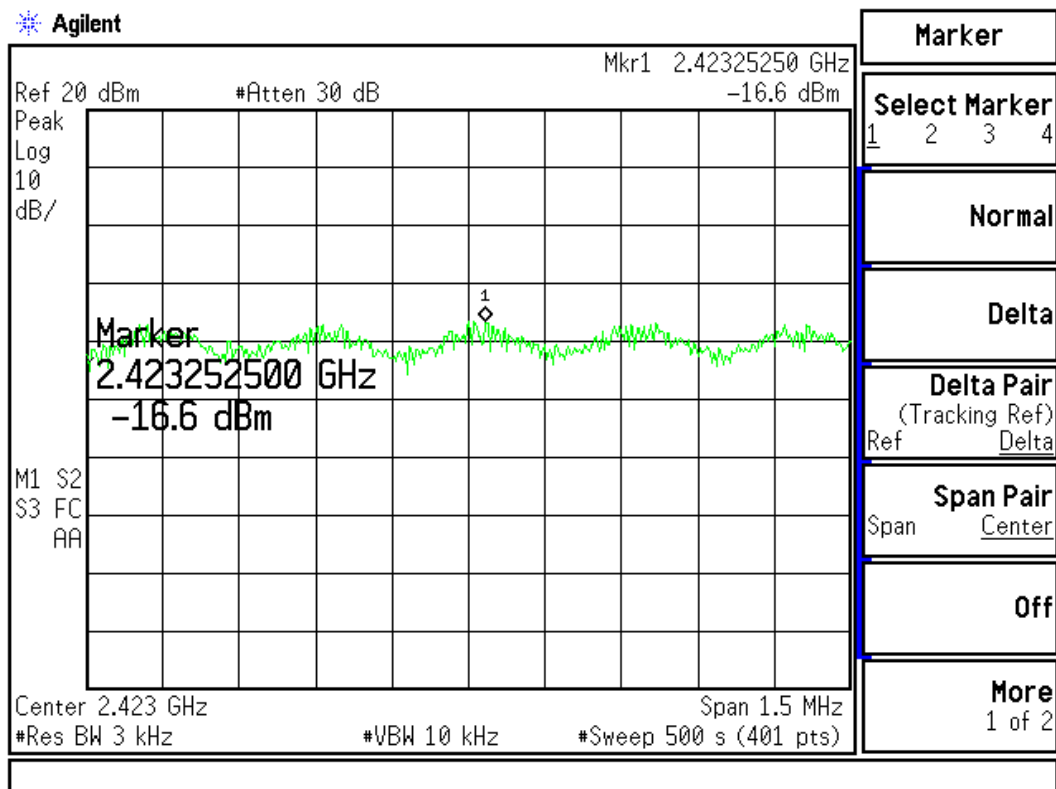
Figure Channel 6:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 7: Transmitter (802.11n MCS0 6.5Mbps 20MBW)-INTERNAL Antenna (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6.5Mbps)	2462.00	-16.60	< 8dBm	Pass

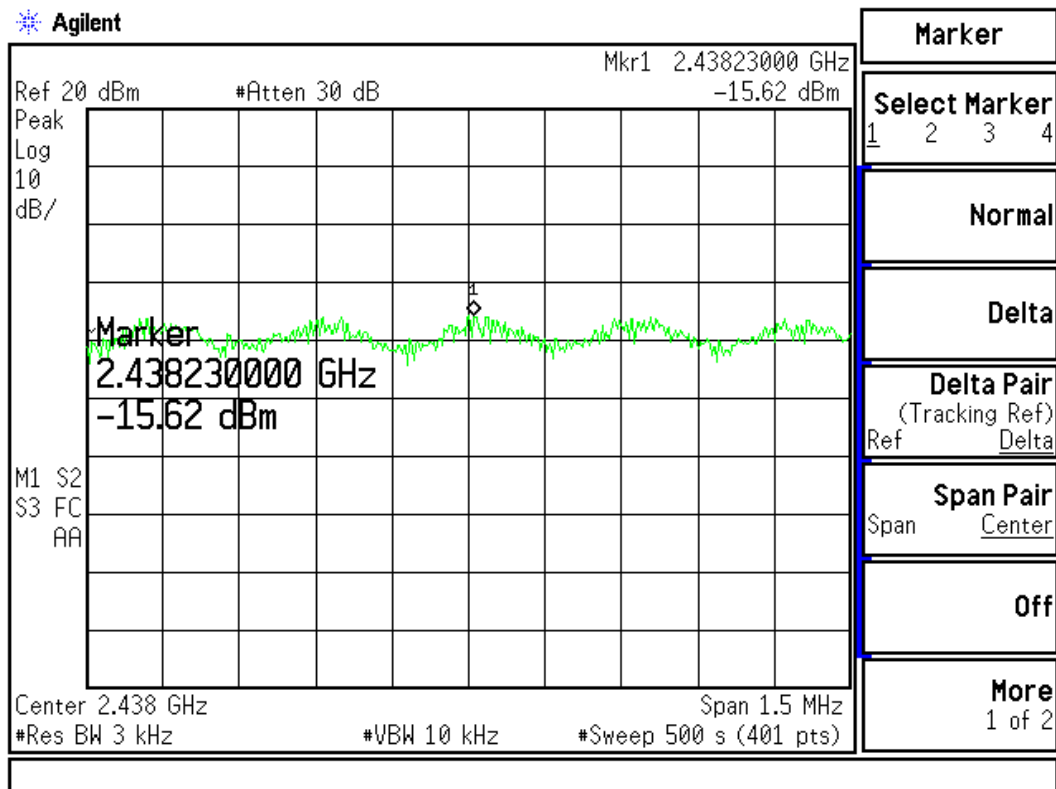
Figure Channel 11:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2422MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (13Mbps)	2422.00	-15.62	< 8dBm	Pass

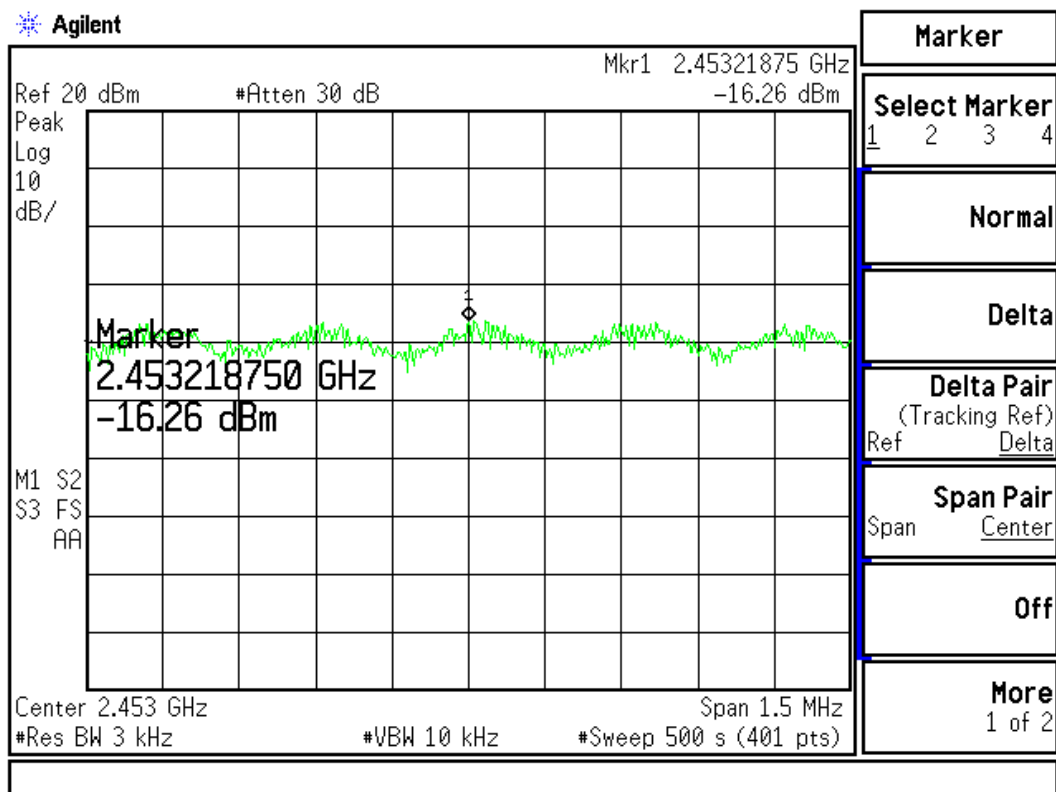
Figure Channel 1:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
4 (13Mbps)	2437.000	-16.25	< 8dBm	Pass

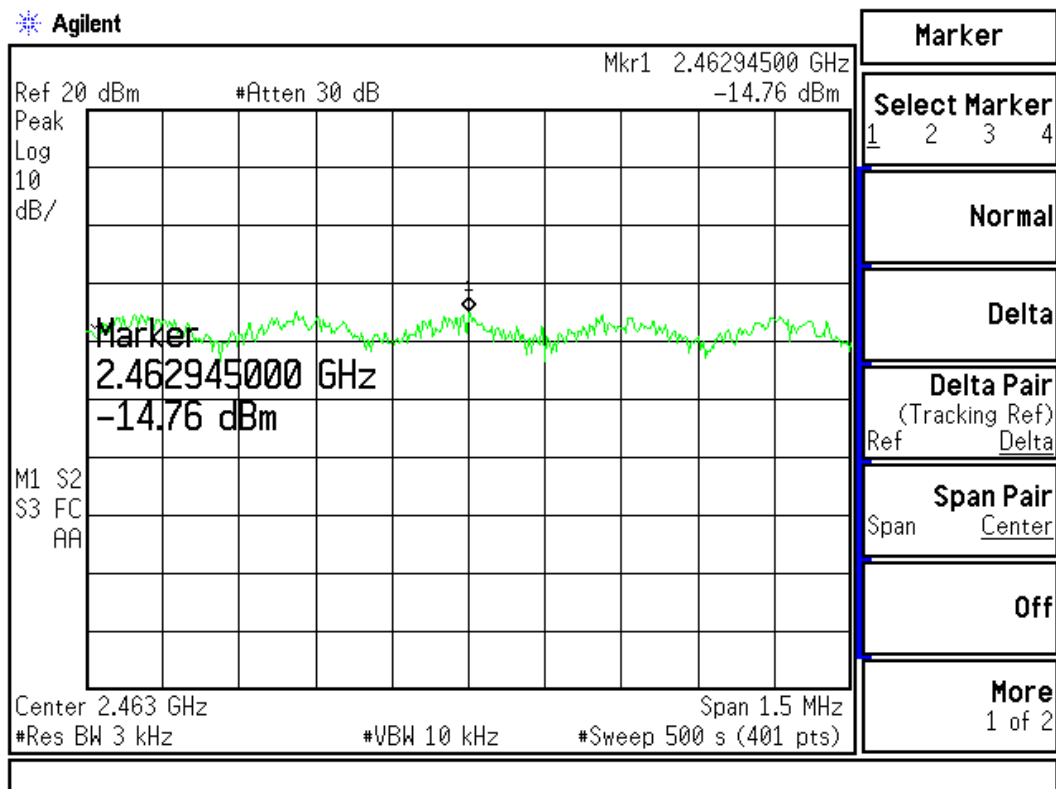
Figure Channel 4:



Product : 802.11 n/b/g WLAN PCI-e Card
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 8: Transmitter (802.11n MCS8 13Mbps 40MBW)-INTERNAL Antenna (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
07 (6Mbps)	2452.00	-14.76	< 8dBm	Pass

Figure Channel 7:



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.