Test Report

Product Name	Tablet PC
Model No	T23X (X=0~9, A~Z)
FCC ID.	R4RAIRT23XQXKN

Applicant	AMTEK SYSTEM CO., LTD.
Address	14F-11, No.79, Sec.1, Hsin Tai Wu Rd., His Chih City, Taipei Hsien, Taiwan

Date of Receipt	June 05, 2008
Issue Date	July 08, 2008
Report No.	086148R-RFUSP05V01
Version	V1.0

Test Report Certification

Issue Date: July 08, 2008
Report No.: 086148R-RFUSP05V01

Accredited by NIST (NVLAP)
NVLAP Lab Code: 200533-0

Product Name	Tablet PC
Applicant	AMTEK SYSTEM CO., LTD.
Address	14F-11, No.79, Sec.1, Hsin Tai Wu Rd., His Chih City, Taipei Hsien, Taiwan
Manufacturer	Shandong Dong Hsin Electronics Co., Ltd.
Model No.	T23X (X=0~9, A~Z)
Rated Voltage	AC 120V/60Hz
Working Voltage	DC 3.3V
Trade Name	AMTEK
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2007 ANSI C63.4: 2003
Test Result	Complied

NVLAP Lab Code: 200533-0

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

Documented By : Rita Huang
(Engineering Adm. Specialist / Rita Huang)

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(Engineer / Johnson Liao)

Approved By :
(Deputy Manager / Vincent Lin)

Testing Laboratory
0914

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Tablet PC
Trade Name	AMTEK
Model No.	T23X (X=0~9, A~Z)
FCC ID.	R4RAIRT23XQXKN
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW , 2422-2452MHz for 802.11n-40BW
Number of Channels	802.11b/g/n-10MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: 6.5-300Mbps
Type of Modulation	802.11b:DSSS DBPSK, DQPSK, CCK 802.11g/n:OFDM BPSK, QPSK, 16QAM, 64QAM
Antenna Interface	IFA
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Power Adapter	MFR: LITEON, M/N: PA-1750-09 Cable out: Shielded, 2.0m with one ferrite core bonded. Power Cord: Shielded, 1.8m

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	SLT Confidential	JPT2200702100 (Main) JPT2200701100 (Aux) JPT2300701100 (MIMO)	1.24dBi in 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 a Tablet PC with a built-in 2.4GHz WLAN transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. 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 54Mbps、802.11n(20BW) is MCS8 and 802.11n(40BW) is MCS8)
4. 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
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

1.2. Operational Description

The EUT is an Tablet PC 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 up to 300 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 Tablet PC, compliant with IEEE 802.11b, IEEE 802.11g and IEEE802.11n 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 Direst Sequence Spread Spectrum (DSSS) radio transmission, the Tablet PC Wired Equivalent Protection (WEP) algorithm is used. In addition, its standard compliance ensures that it can communicate with any IEEE 802.11b, IEEE 802.11g and IEEE802.11n network.

Test Mode:	Mode 1: Transmitter (802.11b 1Mbps)
	Mode 2: Transmitter (802.11g 6Mbps)
	Mode 3: Transmitter (802.11n MCS8 20MBW)
	Mode 4: Transmitter (802.11n MCS8 40MBW)

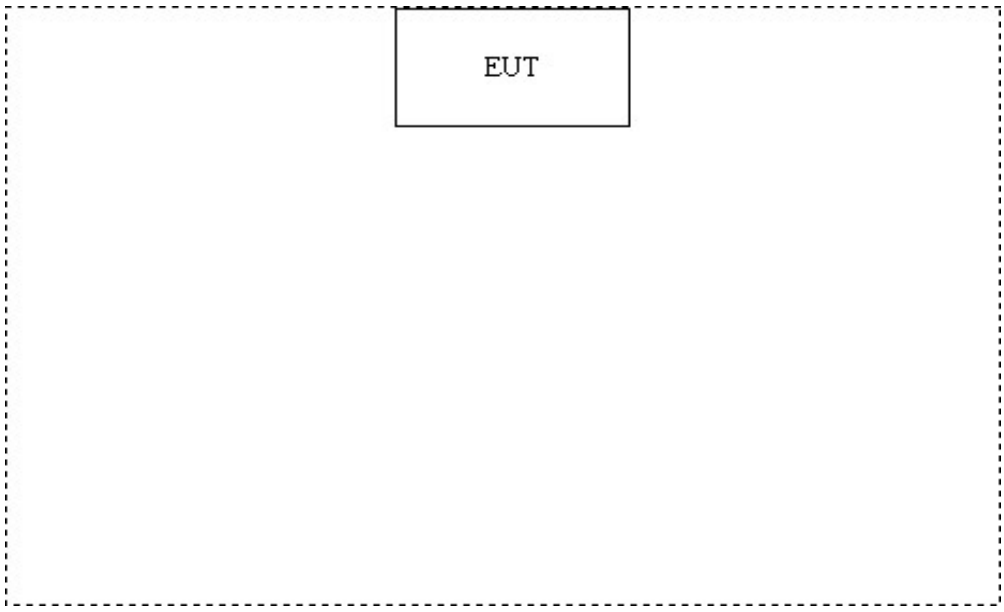
1.3. Tested System Details

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)	N/A	N/A	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	N/A	N/A

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Setup the EUT as shown in section 1.3

(2) Execute the “RT2860QA.EXE“ program (the continuous transmission program) on the EUT

(3) Setup the test mode, the test channel, and the data rate.

(4) Press OK to start the transmission.

(5) Verify that the EUT works correctly.

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

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://tw.quietek.com/modules/myalbum/
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

Site Description: File on
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Accreditation on NVLAP
NVLAP Lab Code: 200533-0

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FCC Accreditation Number: TW1014

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2. Conducted Emission

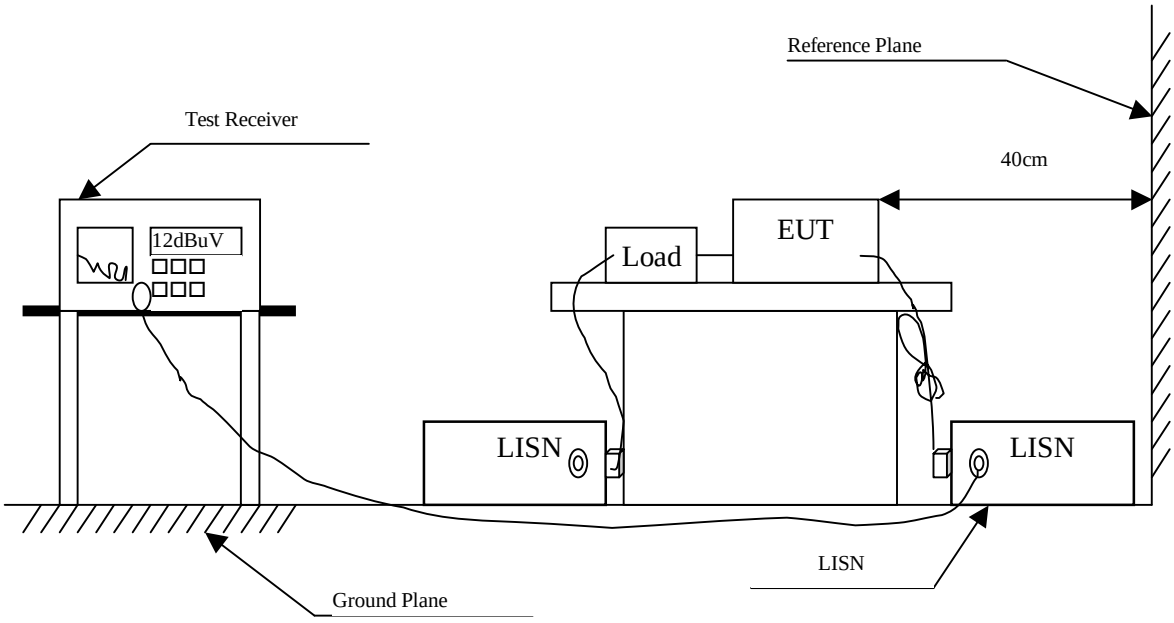
2.1. Test Equipment

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 30/825442/17	May, 2008	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2008	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2008	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2008	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart B Paragraph 15.107 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
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 refers 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 of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

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

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.216	9.850	36.480	46.330	-17.784	64.114
0.490	9.830	27.020	36.850	-19.436	56.286
0.732	9.820	29.850	39.670	-16.330	56.000
1.123	9.830	22.710	32.540	-23.460	56.000
1.396	9.830	29.680	39.510	-16.490	56.000
4.443	9.860	27.700	37.560	-18.440	56.000
Average					
0.216	9.850	30.610	40.460	-13.654	54.114
0.490	9.830	18.680	28.510	-17.776	46.286
0.732	9.820	21.430	31.250	-14.750	46.000
1.123	9.830	13.390	23.220	-22.780	46.000
1.396	9.830	16.670	26.500	-19.500	46.000
4.443	9.860	20.060	29.920	-16.080	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.224	9.860	29.860	39.720	-24.166	63.886
0.521	9.830	26.400	36.230	-19.770	56.000
0.709	9.840	28.650	38.490	-17.510	56.000
1.482	9.831	26.790	36.621	-19.379	56.000
3.080	9.850	26.020	35.870	-20.130	56.000
4.435	9.860	26.690	36.550	-19.450	56.000
Average					
0.224	9.860	21.440	31.300	-22.586	53.886
0.521	9.830	17.300	27.130	-18.870	46.000
0.709	9.840	21.040	30.880	-15.120	46.000
1.482	9.831	13.070	22.901	-23.099	46.000
3.080	9.850	17.430	27.280	-18.720	46.000
4.435	9.860	18.750	28.610	-17.390	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.236	9.850	32.130	41.980	-21.563	63.543
0.588	9.827	24.000	33.827	-22.173	56.000
1.306	9.830	29.010	38.840	-17.160	56.000
2.252	9.840	26.820	36.660	-19.340	56.000
3.212	9.850	28.290	38.140	-17.860	56.000
4.240	9.860	26.900	36.760	-19.240	56.000
Average					
0.236	9.850	27.450	37.300	-16.243	53.543
0.588	9.827	17.520	27.347	-18.653	46.000
1.306	9.830	22.400	32.230	-13.770	46.000
2.252	9.840	18.790	28.630	-17.370	46.000
3.212	9.850	21.180	31.030	-14.970	46.000
4.240	9.860	19.760	29.620	-16.380	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.236	9.860	31.100	40.960	-22.583	63.543
1.189	9.830	24.740	34.570	-21.430	56.000
1.685	9.840	24.790	34.630	-21.370	56.000
2.861	9.850	26.670	36.520	-19.480	56.000
3.255	9.850	26.460	36.310	-19.690	56.000
4.349	9.860	26.450	36.310	-19.690	56.000
Average					
0.236	9.860	22.540	32.400	-21.143	53.543
1.189	9.830	14.940	24.770	-21.230	46.000
1.685	9.840	16.000	25.840	-20.160	46.000
2.861	9.850	18.420	28.270	-17.730	46.000
3.255	9.850	18.520	28.370	-17.630	46.000
4.349	9.860	19.370	29.230	-16.770	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.177	9.858	32.770	42.628	-22.601	65.229
0.240	9.850	30.120	39.970	-23.459	63.429
1.365	9.830	28.910	38.740	-17.260	56.000
2.486	9.840	27.170	37.010	-18.990	56.000
3.951	9.860	26.780	36.640	-19.360	56.000
4.904	9.870	24.930	34.800	-21.200	56.000
Average					
0.177	9.858	19.990	29.848	-25.381	55.229
0.240	9.850	22.700	32.550	-20.879	53.429
1.365	9.830	22.130	31.960	-14.040	46.000
2.486	9.840	20.720	30.560	-15.440	46.000
3.951	9.860	19.510	29.370	-16.630	46.000
4.904	9.870	18.140	28.010	-17.990	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.255	9.858	31.210	41.068	-21.932	63.000
0.884	9.830	27.660	37.490	-18.510	56.000
1.248	9.830	27.000	36.830	-19.170	56.000
1.912	9.840	27.180	37.020	-18.980	56.000
3.013	9.850	27.900	37.750	-18.250	56.000
4.498	9.867	26.490	36.357	-19.643	56.000
Average					
0.255	9.858	26.770	36.628	-16.372	53.000
0.884	9.830	21.990	31.820	-14.180	46.000
1.248	9.830	19.650	29.480	-16.520	46.000
1.912	9.840	19.050	28.890	-17.110	46.000
3.013	9.850	20.920	30.770	-15.230	46.000
4.498	9.867	19.120	28.987	-17.013	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.177	9.858	32.630	42.488	-22.741	65.229
0.240	9.850	29.980	39.830	-23.599	63.429
0.900	9.830	28.340	38.170	-17.830	56.000
1.271	9.830	26.550	36.380	-19.620	56.000
2.439	9.840	27.660	37.500	-18.500	56.000
4.763	9.870	26.930	36.800	-19.200	56.000
Average					
0.177	9.858	19.820	29.678	-25.551	55.229
0.240	9.850	20.850	30.700	-22.729	53.429
0.900	9.830	22.160	31.990	-14.010	46.000
1.271	9.830	19.090	28.920	-17.080	46.000
2.439	9.840	20.280	30.120	-15.880	46.000
4.763	9.870	19.790	29.660	-16.340	46.000

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 : Tablet PC
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.236	9.860	29.840	39.700	-23.843	63.543
0.525	9.830	23.610	33.440	-22.560	56.000
0.912	9.830	28.020	37.850	-18.150	56.000
1.439	9.830	28.930	38.760	-17.240	56.000
2.064	9.840	24.390	34.230	-21.770	56.000
4.318	9.860	26.830	36.690	-19.310	56.000
Average					
0.236	9.860	16.720	26.580	-26.963	53.543
0.525	9.830	17.840	27.670	-18.330	46.000
0.912	9.830	21.710	31.540	-14.460	46.000
1.439	9.830	21.240	31.070	-14.930	46.000
2.064	9.840	17.230	27.070	-18.930	46.000
4.318	9.860	19.540	29.400	-16.600	46.000

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

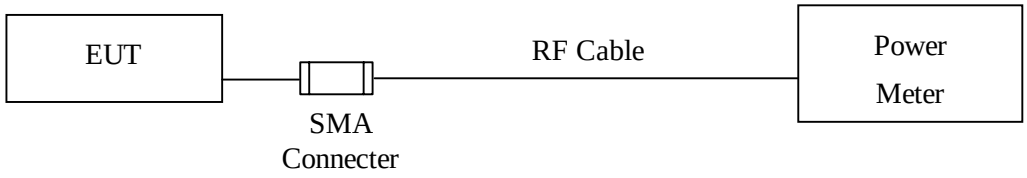
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2008
X	Power Sensor	Anritsu	MA2491A/034457	May, 2008

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 : Tablet PC
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)

Peak Power Output						
Channel No.	Frequency (MHz)	Data Rate				Required Limit
		1	2	5.5	11	
1	2412.00	19.77	--	--	--	1Watt= 30 dBm
6	2437.00	19.94	19.93	19.72	19.91	1Watt= 30 dBm
11	2462.00	19.67	--	--	--	1Watt= 30 dBm

Product : Tablet PC
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps)

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6	9	12	18	24	36	48	54	
1	2412.00	22.65	--	--	--	--	--	--	--	1Watt= 30 dBm
6	2437.00	22.94	22.28	22.25	21.17	20.3	19.28	18.5	19.17	1Watt= 30 dBm
11	2462.00	22.03	--	--	--	--	--	--	--	1Watt= 30 dBm

Product : Tablet PC
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) Antenna A + Antenna B

Peak Power Output(AntA+AntB)										
Channel No.	Frequency (MHz)	Data Rate(MCS)								Required Limit
		8	9	10	11	12	13	14	15	
1	2412.00	22.30	--	--	--	--	--	--	--	1Watt= 30 dBm
6	2437.00	22.29	22.00	21.69	22.15	22.11	22.19	22.19	21.69	1Watt= 30 dBm
11	2462.00	22.30	--	--	--	--	--	--	--	1Watt= 30 dBm

Note: Peak power Output= 10*Log (Ant A (mW) + Ant B (mW))

Peak Power Output(Ant A)										
Channel No.	Frequency (MHz)	Data Rate(MCS)								Required Limit
		8	9	10	11	12	13	14	15	
1	2412.00	19.3	--	--	--	--	--	--	--	1Watt= 30 dBm
6	2437.00	19.33	19	18.7	19.18	19.13	19.17	19.15	18.68	1Watt= 30 dBm
11	2462.00	19.32	--	--	--	--	--	--	--	1Watt= 30 dBm

Peak Power Output(Ant B)										
Channel No.	Frequency (MHz)	Data Rate(MCS)								Required Limit
		8	9	10	11	12	13	14	15	
1	2412.00	19.27	--	--	--	--	--	--	--	1Watt= 30 dBm
6	2437.00	19.22	18.98	18.65	19.09	19.06	19.18	19.2	18.68	1Watt= 30 dBm
11	2462.00	19.25	--	--	--	--	--	--	--	1Watt= 30 dBm

Product : Tablet PC
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) Antenna A + Antenna B

Peak Power Output(AntA+AntB)										
Channel No.	Frequency (MHz)	Data Rate(MCS)								Required Limit
		8	9	10	11	12	13	14	15	
1	2422.00	22.50	--	--	--	--	--	--	--	1Watt= 30 dBm
4	2437.00	22.54	22.16	22.29	22.37	22.00	21.52	21.07	21.51	1Watt= 30 dBm
7	2452.00	22.52	--	--	--	--	--	--	--	1Watt= 30 dBm

Note: Peak power Output= 10*Log (Ant A (mW) + Ant B (mW))

Peak Power Output(Ant A)										
Channel No.	Frequency (MHz)	Data Rate(MCS)								Required Limit
		8	9	10	11	12	13	14	15	
1	2422.00	19.52	--	--	--	--	--	--	--	1Watt= 30 dBm
4	2437.00	19.55	19.22	19.36	19.4	19.1	18.53	18.12	18.55	1Watt= 30 dBm
7	2452.00	19.55	--	--	--	--	--	--	--	1Watt= 30 dBm

Peak Power Output(Ant B)										
Channel No.	Frequency (MHz)	Data Rate(MCS)								Required Limit
		8	9	10	11	12	13	14	15	
1	2422.00	19.45	--	--	--	--	--	--	--	1Watt= 30 dBm
4	2437.00	19.5	19.07	19.2	19.31	18.88	18.49	18	18.44	1Watt= 30 dBm
7	2452.00	19.46	--	--	--	--	--	--	--	1Watt= 30 dBm

4. Radiated Emission

4.1. Test Equipment

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

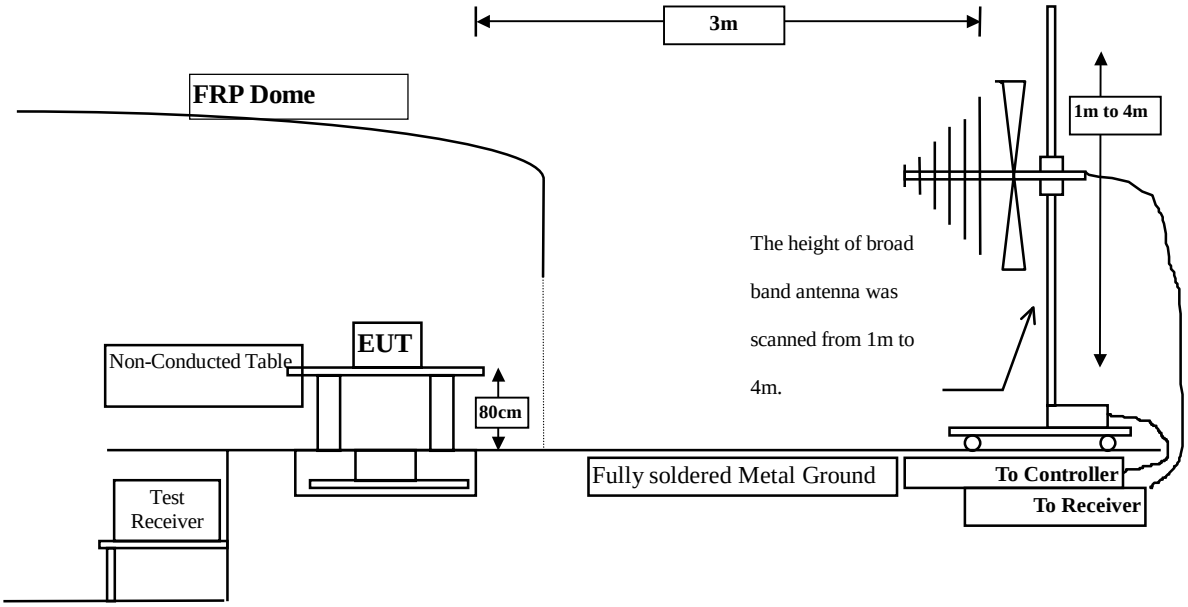
Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2007
	X	Pre-Amplifier	AGILENT	8447D/2944A09549	Sep., 2007
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2007
	X	Spectrum Analyzer	Advantest	R3162/91700283	Oct., 2007
	X	Coaxial 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.

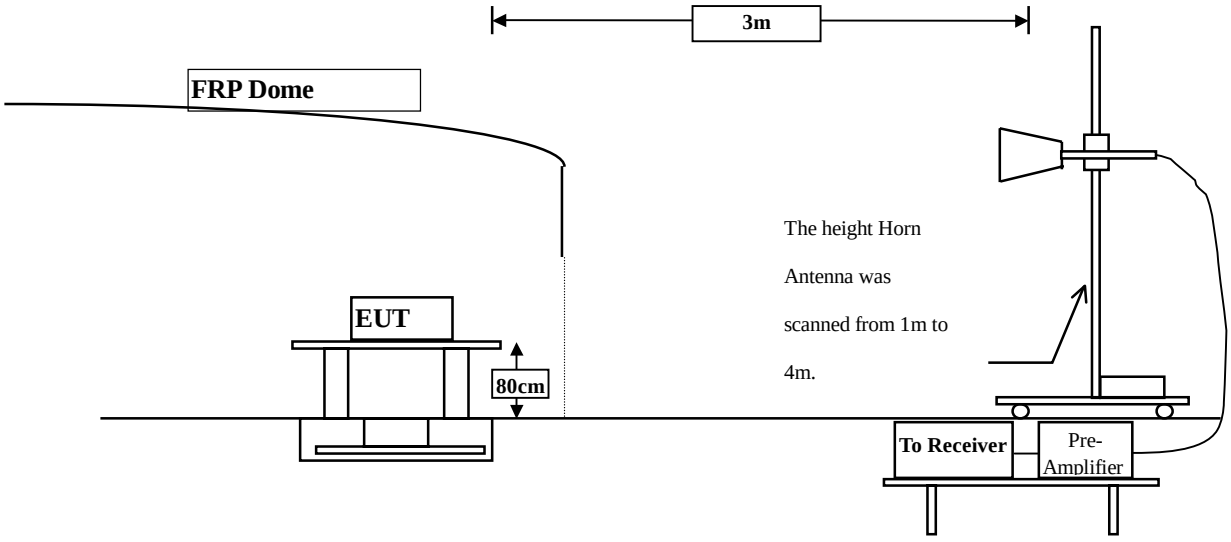
2. The test instruments marked with "X" are used to measure the final test results.

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 harminics is checked.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.623	36.890	40.513	-33.487	74.000
7236.000	9.189	33.960	43.149	-30.851	74.000
9648.000	11.689	34.620	46.309	-27.691	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	3.623	36.970	40.593	-33.407	74.000
7236.000	9.189	34.120	43.309	-30.691	74.000
9648.000	11.689	36.390	48.079	-25.921	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.803	36.960	40.762	-33.238	74.000
7311.000	9.384	34.430	43.814	-30.186	74.000
9748.000	11.672	35.900	47.573	-26.427	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	3.803	36.400	40.202	-33.798	74.000
7311.000	9.384	34.720	44.104	-29.896	74.000
9748.000	11.672	36.270	47.943	-26.057	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	3.985	36.880	40.865	-33.135	74.000
7386.000	9.572	34.640	44.212	-29.788	74.000
9848.000	11.696	35.740	47.436	-26.564	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	3.985	36.580	40.565	-33.435	74.000
7386.000	9.572	34.410	43.982	-30.018	74.000
9848.000	11.696	35.610	47.306	-26.694	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.623	39.730	43.353	-30.647	74.000
7236.000	9.189	36.120	45.309	-28.691	74.000
9648.000	11.689	35.980	47.669	-26.331	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	3.623	37.210	40.833	-33.167	74.000
7236.000	9.189	35.410	44.599	-29.401	74.000
9648.000	11.689	35.970	47.659	-26.341	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4874.000	3.803	36.980	40.782	-33.218	74.000
7311.000	9.384	34.390	43.774	-30.226	74.000
9748.000	11.672	35.780	47.453	-26.547	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4874.000	3.803	37.250	41.052	-32.948	74.000
7311.000	9.384	34.480	43.864	-30.136	74.000
9748.000	11.672	36.340	48.013	-25.987	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	3.985	36.940	40.925	-33.075	74.000
7386.000	9.572	35.110	44.682	-29.318	74.000
9848.000	11.696	36.090	47.786	-26.214	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	3.985	38.020	42.005	-31.995	74.000
7386.000	9.572	34.770	44.342	-29.658	74.000
9848.000	11.696	35.840	47.536	-26.464	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.623	39.550	43.173	-30.827	74.000
7236.000	9.189	36.720	45.909	-28.091	74.000
9648.000	11.689	36.240	47.929	-26.071	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	3.623	37.810	41.433	-32.567	74.000
7236.000	9.189	35.630	44.819	-29.181	74.000
9648.000	11.689	35.790	47.479	-26.521	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.803	37.330	41.132	-32.868	74.000
7311.000	9.384	34.680	44.064	-29.936	74.000
9748.000	11.672	35.860	47.533	-26.467	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	3.803	37.720	41.522	-32.478	74.000
7311.000	9.384	37.750	47.134	-26.866	74.000
9748.000	11.672	36.420	48.093	-25.907	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	3.985	36.460	40.445	-33.555	74.000
7386.000	9.572	34.380	43.952	-30.048	74.000
9848.000	11.696	35.750	47.446	-26.554	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	3.985	36.790	40.775	-33.225	74.000
7386.000	9.572	34.990	44.562	-29.438	74.000
9848.000	11.696	35.680	47.376	-26.624	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	3.693	37.920	41.613	-32.387	74.000
7266.000	9.267	35.070	44.337	-29.663	74.000
9688.000	11.685	36.190	47.875	-26.125	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	3.693	37.980	41.673	-32.327	74.000
7266.000	9.267	35.700	44.967	-29.033	74.000
9688.000	11.685	36.140	47.825	-26.175	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.803	36.960	40.762	-33.238	74.000
7311.000	9.384	34.590	43.974	-30.026	74.000
9748.000	11.672	36.310	47.983	-26.017	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	3.803	37.010	40.812	-33.188	74.000
7311.000	9.384	34.590	43.974	-30.026	74.000
9748.000	11.672	35.230	46.903	-27.097	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 : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	3.912	37.180	41.092	-32.908	74.000
7356.000	9.507	35.870	45.377	-28.623	74.000
9808.000	11.674	36.380	48.055	-25.945	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	3.912	36.680	40.592	-33.408	74.000
7356.000	9.507	34.650	44.157	-29.843	74.000
9808.000	11.674	36.350	48.025	-25.975	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 : Tablet PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
52.380	6.625	27.168	33.793	-6.207	40.000
90.140	9.927	26.389	36.316	-7.184	43.500
179.380	8.403	27.609	36.012	-7.488	43.500
237.580	10.185	21.035	31.220	-14.780	46.000
466.500	16.561	15.445	32.006	-13.994	46.000
501.420	16.359	15.842	32.201	-13.799	46.000
Vertical					
59.190	5.285	30.570	35.855	-4.145	40.000
90.140	8.318	23.910	32.228	-11.272	43.500
699.300	18.190	15.323	33.513	-12.487	46.000
751.680	20.655	12.122	32.777	-13.223	46.000
780.780	19.695	13.586	33.281	-12.719	46.000
963.140	20.151	21.240	41.391	-12.609	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 : Tablet PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
53.280	6.439	27.322	33.761	-6.239	40.000
90.140	9.927	25.265	35.192	-8.308	43.500
179.380	8.403	26.502	34.905	-8.595	43.500
299.660	12.528	20.573	33.101	-12.899	46.000
586.780	17.916	16.294	34.210	-11.790	46.000
639.160	18.681	12.968	31.649	-14.351	46.000
Vertical					
57.160	5.547	30.719	36.266	-3.734	40.000
90.140	8.318	26.240	34.558	-8.942	43.500
524.700	16.692	15.246	31.938	-14.062	46.000
679.900	17.738	17.633	35.371	-10.629	46.000
699.300	18.190	15.988	34.178	-11.822	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 : Tablet PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
53.280	6.439	28.875	35.314	-4.686	40.000
90.140	9.927	25.265	35.192	-8.308	43.500
179.380	8.403	26.502	34.905	-8.595	43.500
299.350	12.528	20.573	33.101	-12.899	46.000
586.780	17.916	16.294	34.210	-11.790	46.000
666.350	18.345	16.869	35.214	-10.786	46.000
Vertical					
58.160	5.299	30.967	36.266	-3.734	40.000
90.154	8.319	26.269	34.588	-8.912	43.500
524.700	16.692	16.243	32.935	-13.065	46.000
679.240	17.738	17.609	35.347	-10.653	46.000
699.300	18.190	15.989	34.179	-11.821	46.000
963.104	20.151	22.149	42.300	-11.700	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 : Tablet PC
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
53.280	6.439	27.558	33.997	-6.003	40.000
90.140	9.927	25.327	35.254	-8.246	43.500
179.600	8.372	25.744	34.116	-9.384	43.500
543.150	17.803	16.313	34.116	-11.884	46.000
639.160	18.681	14.376	33.057	-12.943	46.000
959.260	20.037	15.952	35.989	-10.011	46.000
Vertical					
57.160	5.547	26.707	32.254	-7.746	40.000
90.250	8.328	25.943	34.271	-9.229	43.500
679.900	17.738	15.124	32.862	-13.138	46.000
699.300	18.190	15.483	33.673	-12.327	46.000
781.250	19.703	11.939	31.642	-14.358	46.000
963.140	20.151	20.209	40.360	-13.640	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:

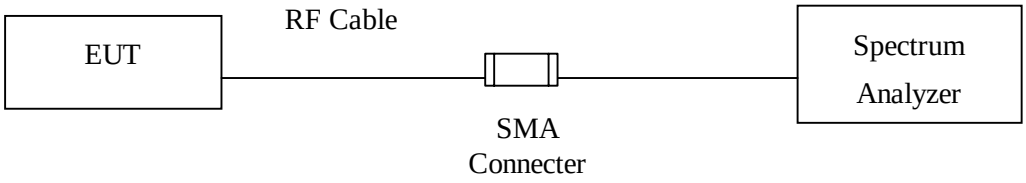
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2008
	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008

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

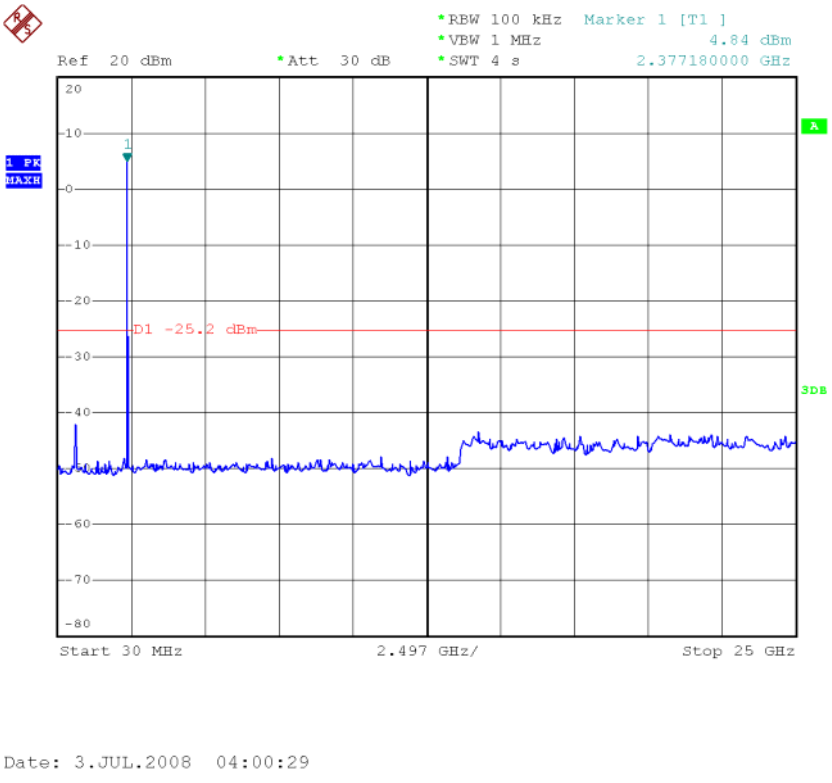
The measurement uncertainty

Conducted is defined as ± 1.27dB

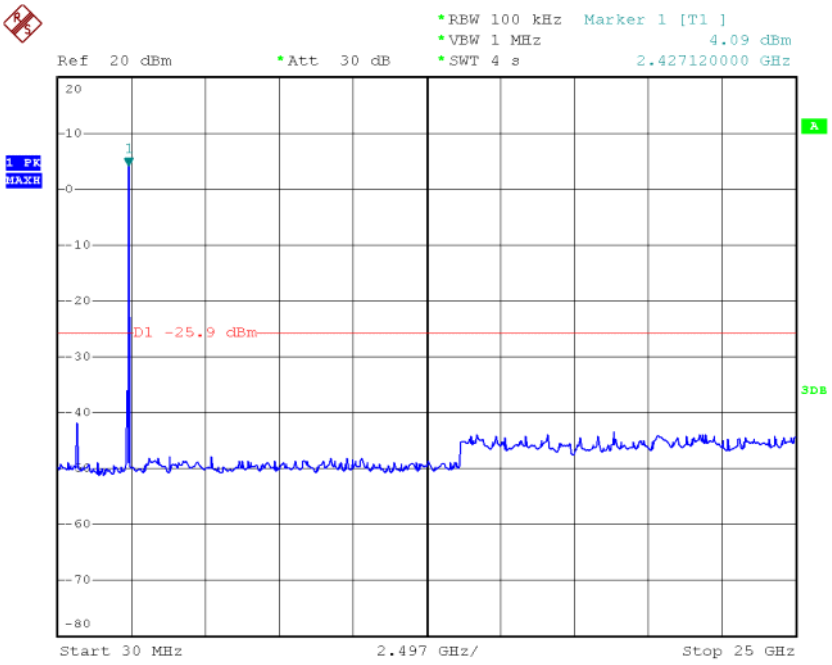
5.6. Test Result of RF antenna conducted test

Product : Tablet PC
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)

Channel 01 (2412MHz) 30-25GHz

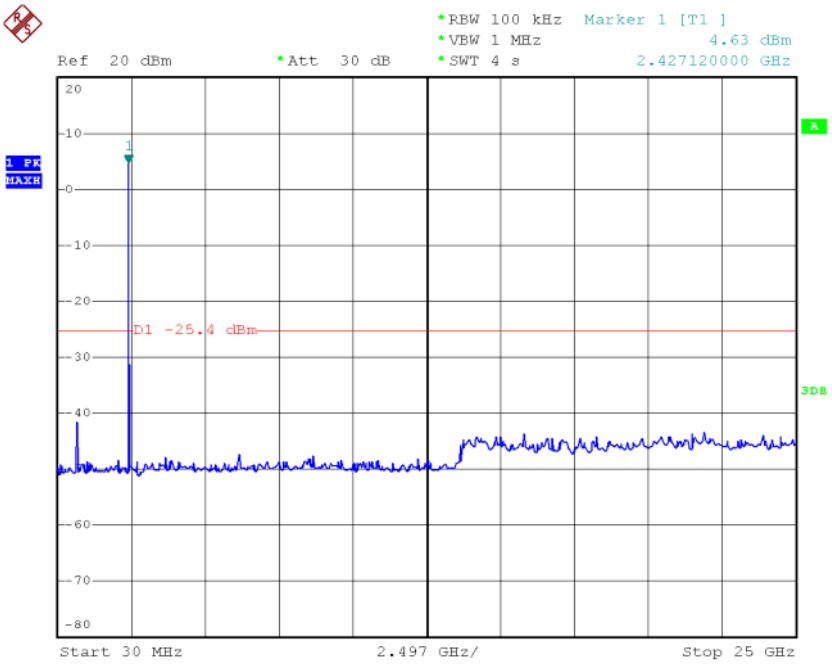


Channel 06 (2437MHz) 30-25GHz



Date: 3.JUL.2008 04:01:10

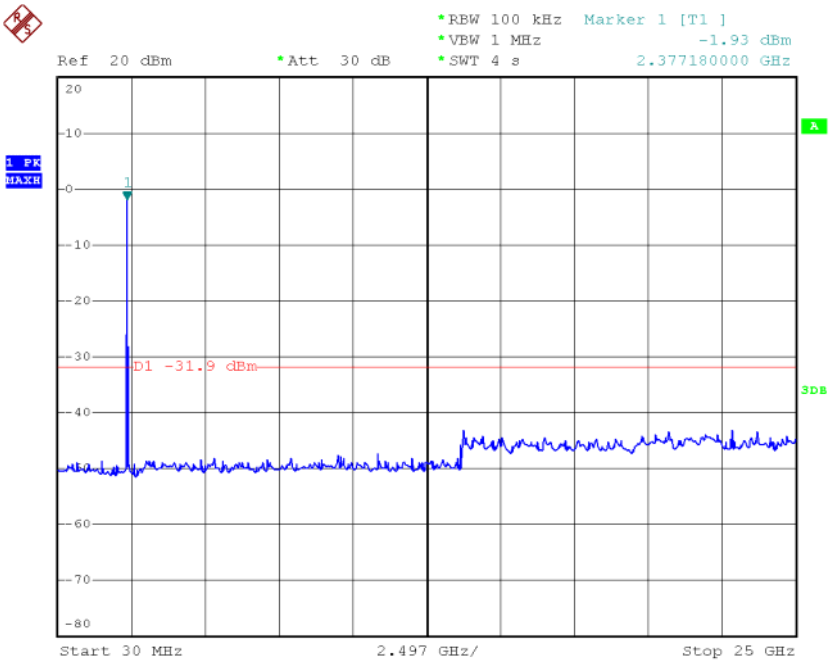
Channel 11 (2462MHz) 30-25GHz



Date: 3.JUL.2008 04:02:41

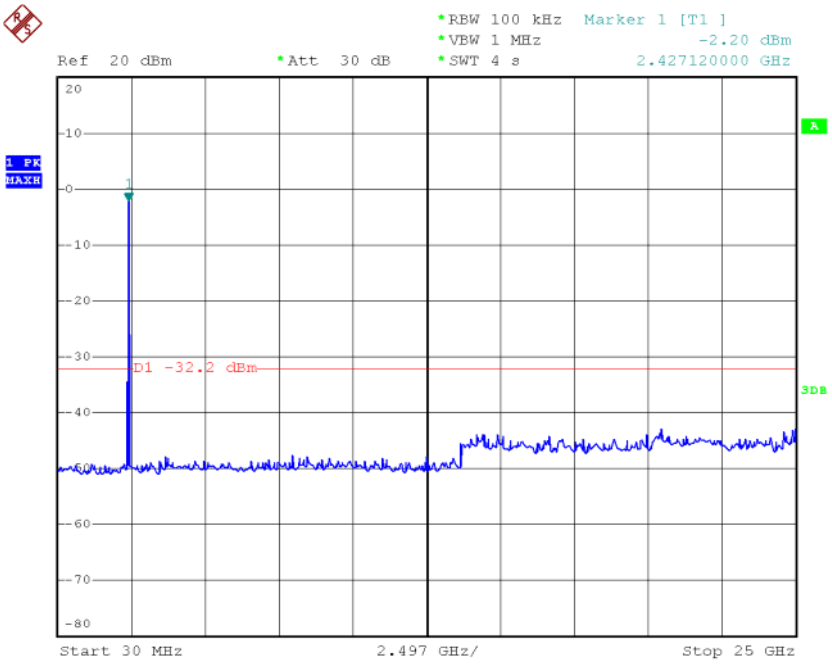
Product : Tablet PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps)

Channel 01 (2412MHz) 30-25GHz



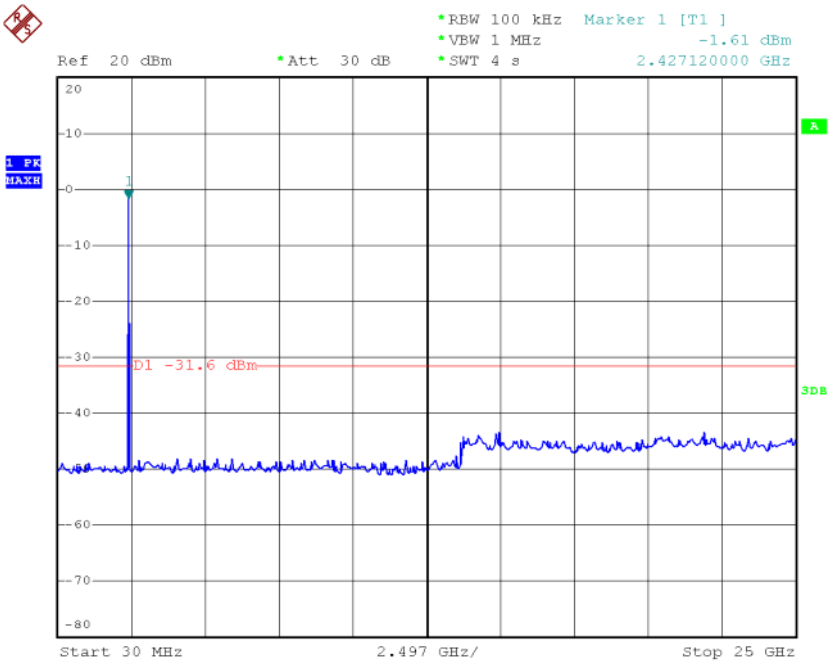
Date: 3.JUL.2008 04:03:34

Channel 06 (2437MHz) 30-25GHz



Date: 3.JUL.2008 04:04:14

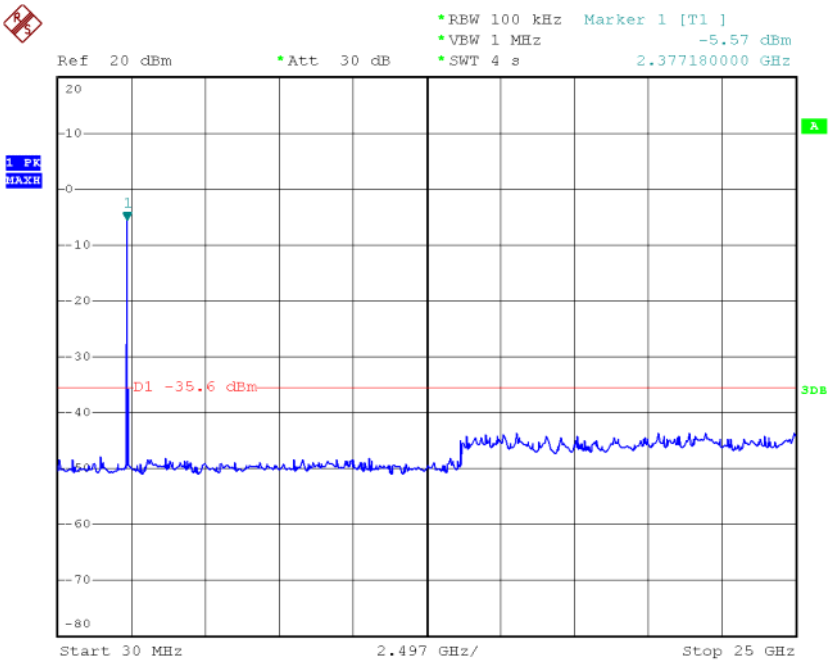
Channel 11 (2462MHz) 30-25GHz



Date: 3.JUL.2008 04:04:47

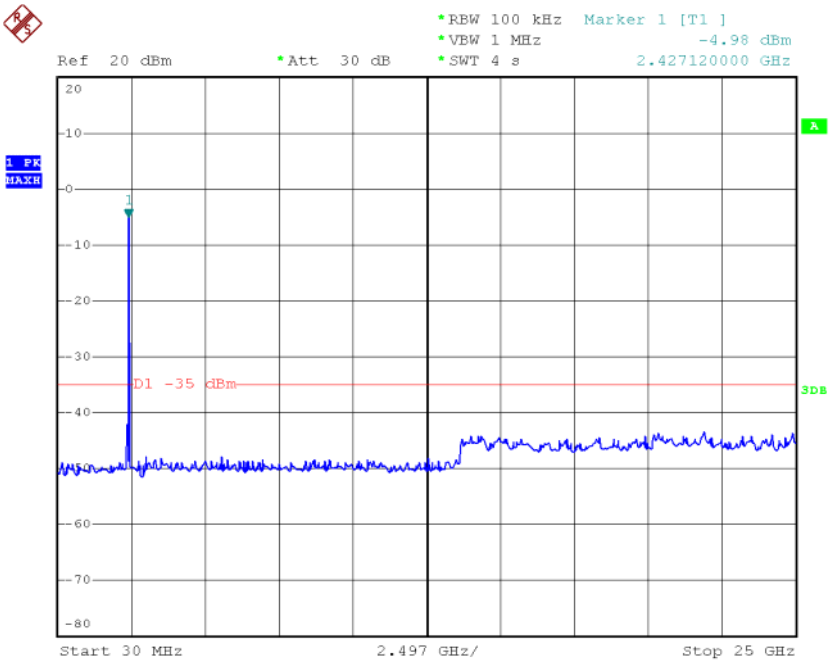
Product : Tablet PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) - Antenna A

Channel 01 (2412MHz) 30-25GHz



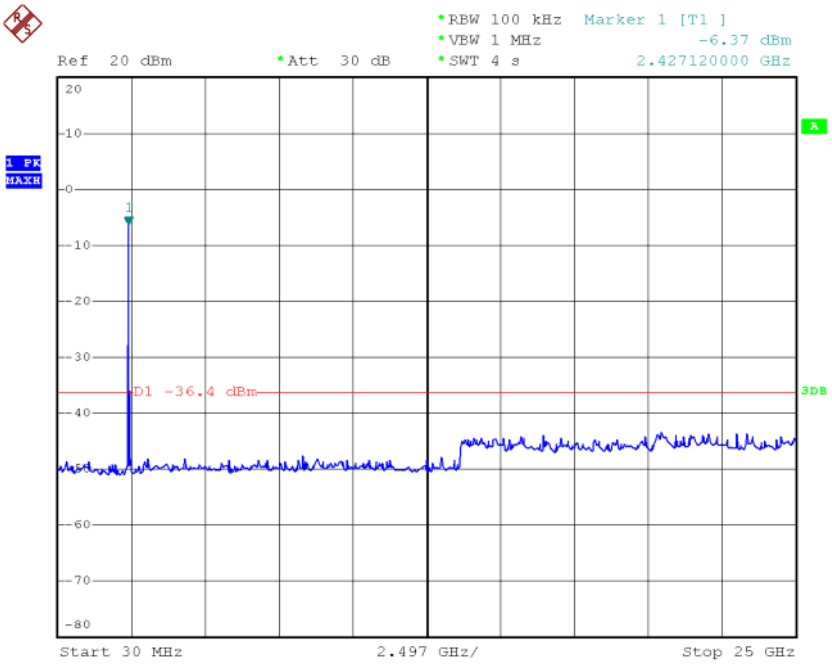
Date: 3.JUL.2008 04:05:32

Channel 06 (2437MHz) 30-25GHz



Date: 3.JUL.2008 04:06:10

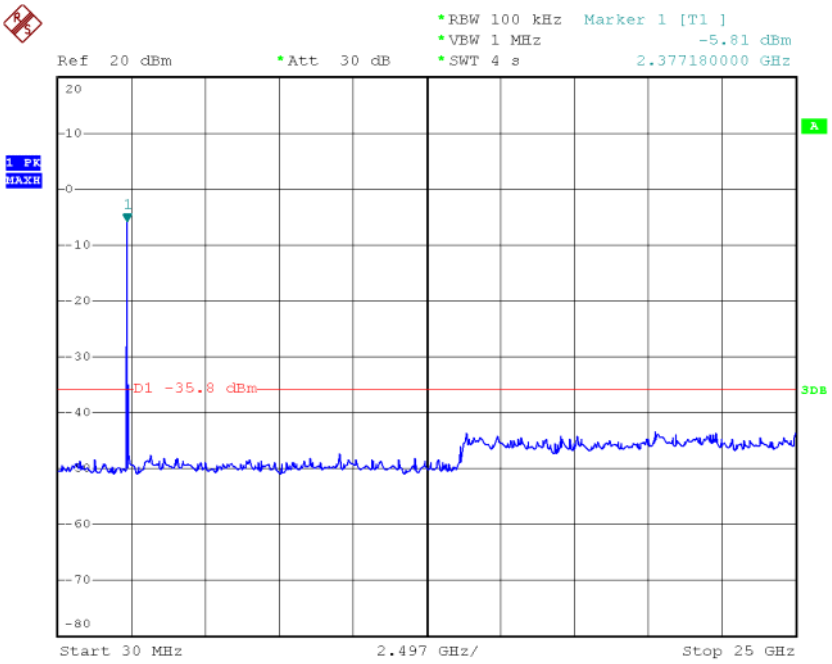
Channel 11 (2462MHz) 30-25GHz



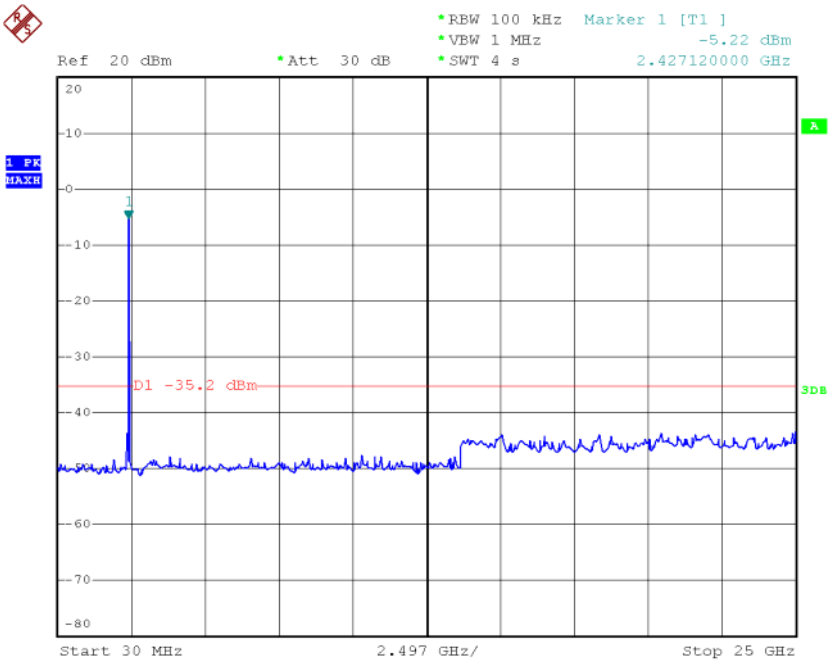
Date: 3.JUL.2008 04:06:51

Product : Tablet PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) - Antenna B

Channel 01 (2412MHz) 30-25GHz

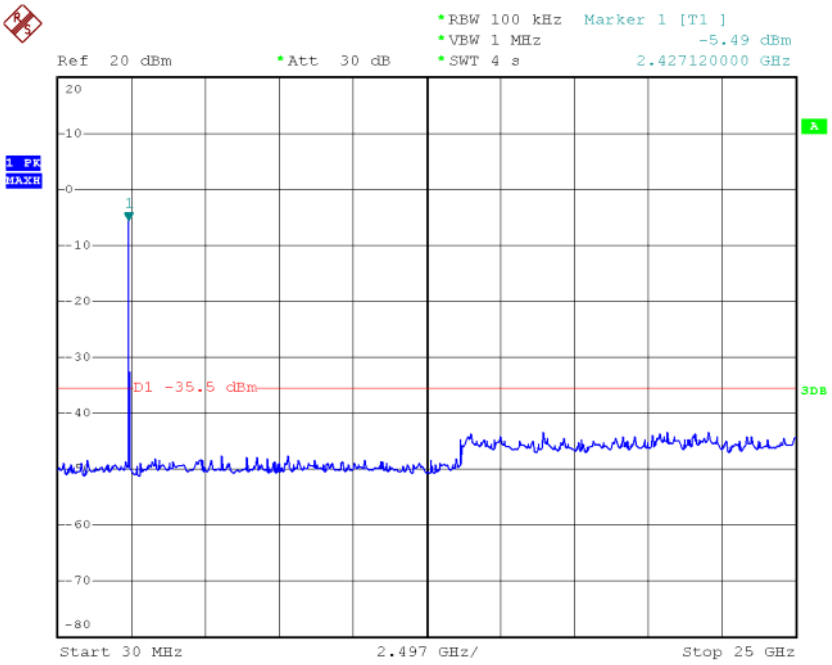


Channel 06 (2437MHz) 30-25GHz



Date: 3.JUL.2008 04:11:01

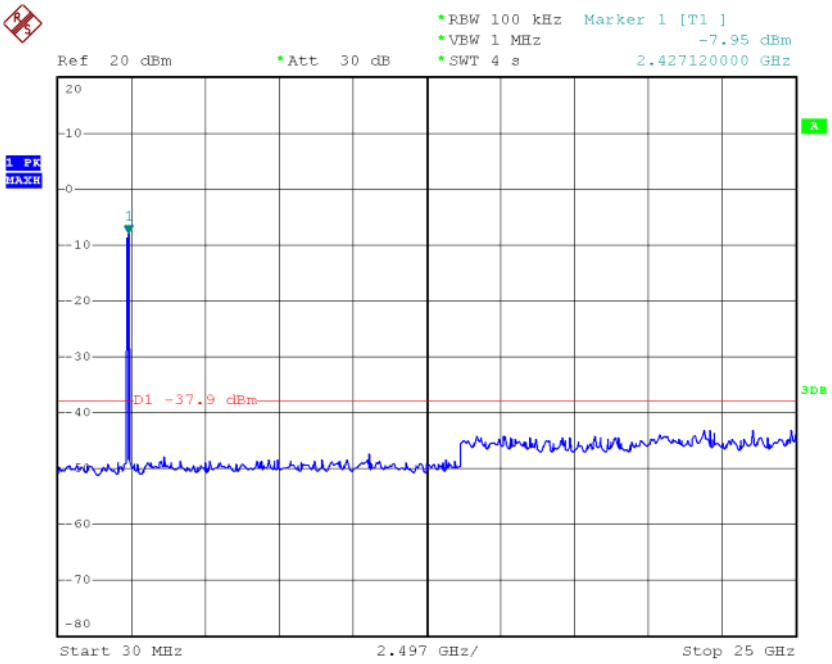
Channel 11 (2462MHz) 30-25GHz



Date: 3.JUL.2008 04:11:36

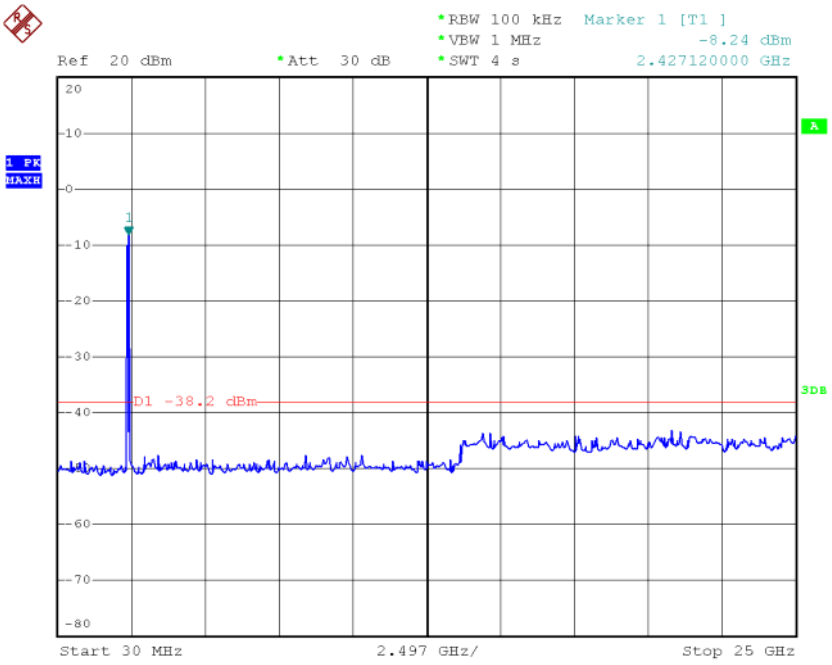
Product : Tablet PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) - Antenna A

Channel 01 (2422MHz) 30-25GHz



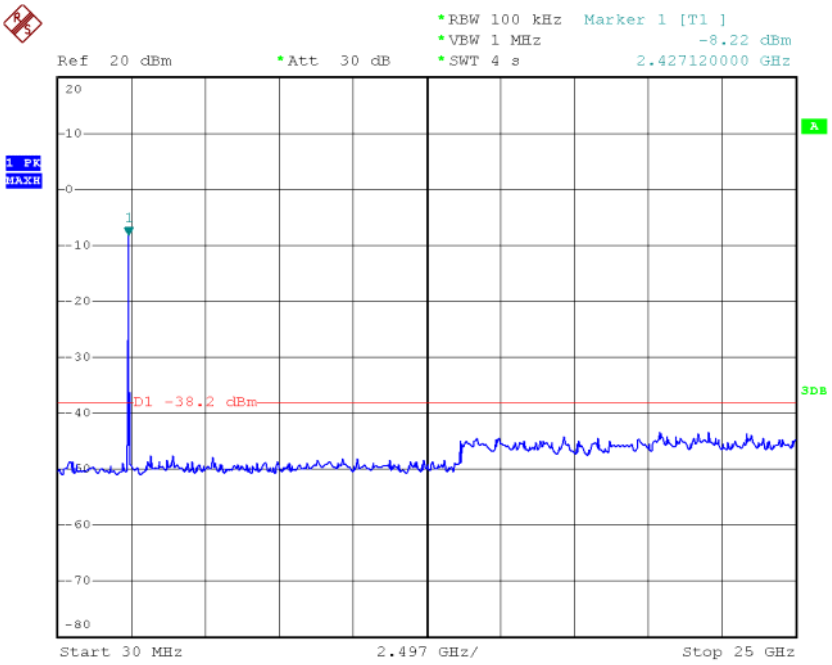
Date: 3.JUL.2008 04:07:34

Channel 04 (2437MHz) 30-25GHz



Date: 3.JUL.2008 04:08:12

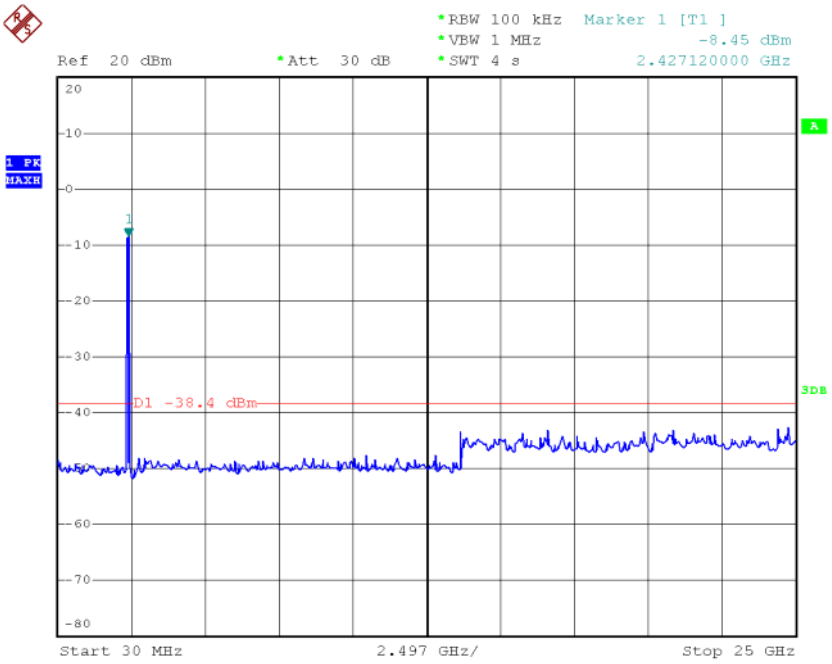
Channel 07 (2452MHz) 30-25GHz



Date: 3.JUL.2008 04:09:17

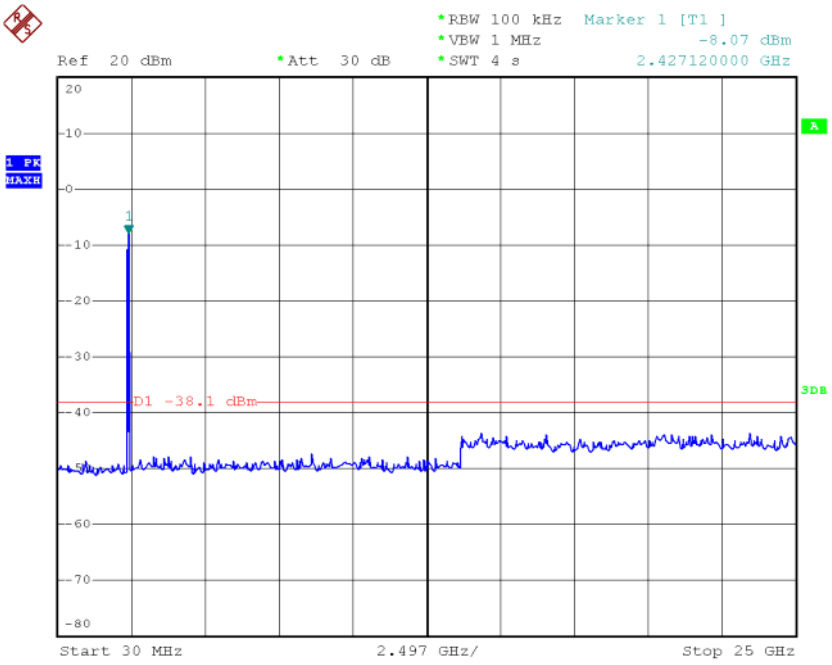
Product : Tablet PC
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) - Antenna B

Channel 01 (2422MHz) 30-25GHz



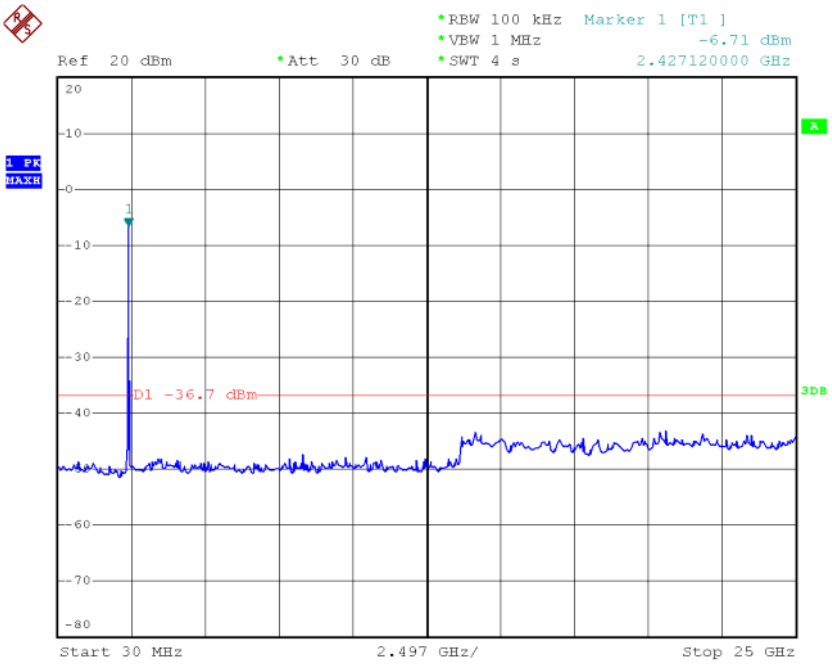
Date: 3.JUL.2008 04:12:21

Channel 04 (2437MHz) 30-25GHz



Date: 3.JUL.2008 04:13:00

Channel 07 (2452MHz) 30-25GHz



Date: 3.JUL.2008 04:13:33

6. Band Edge

6.1. Test Equipment

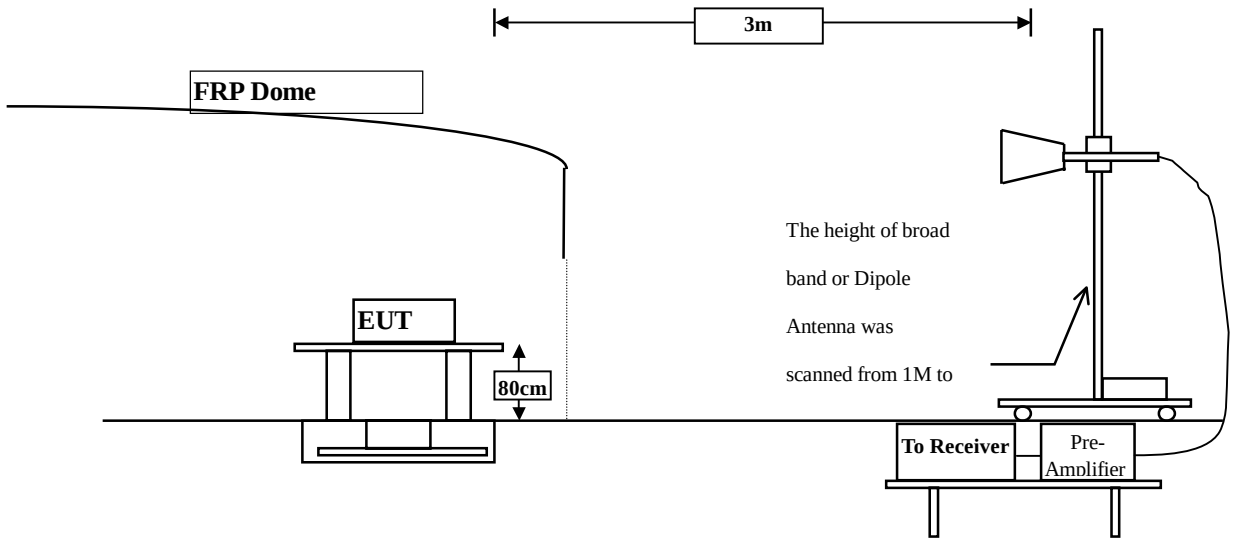
The following test equipments are used during the band edge tests:

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

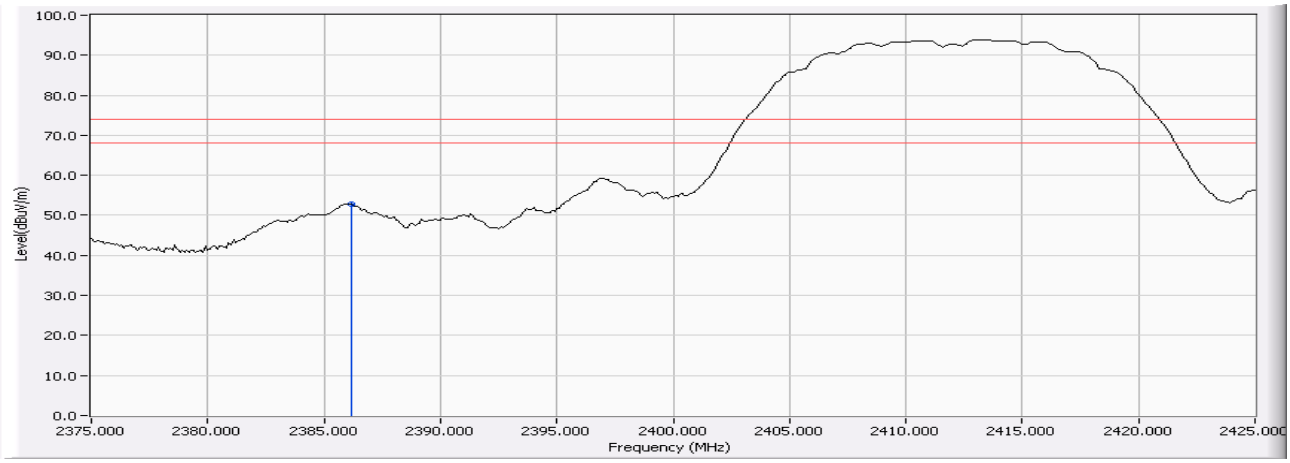
6.6. Test Result of Band Edge

Product : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2386.200	-6.779	59.621	52.842	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2386.000	-6.780	63.424	56.644	74.00	54.00	Pass
01 (Average)	2390.000	-6.769	48.224	41.456	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

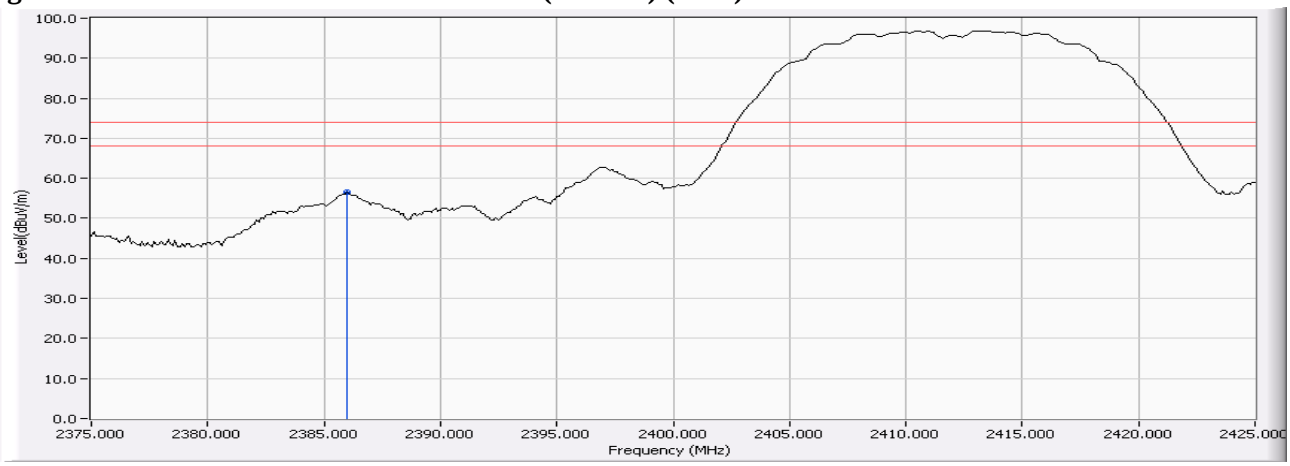
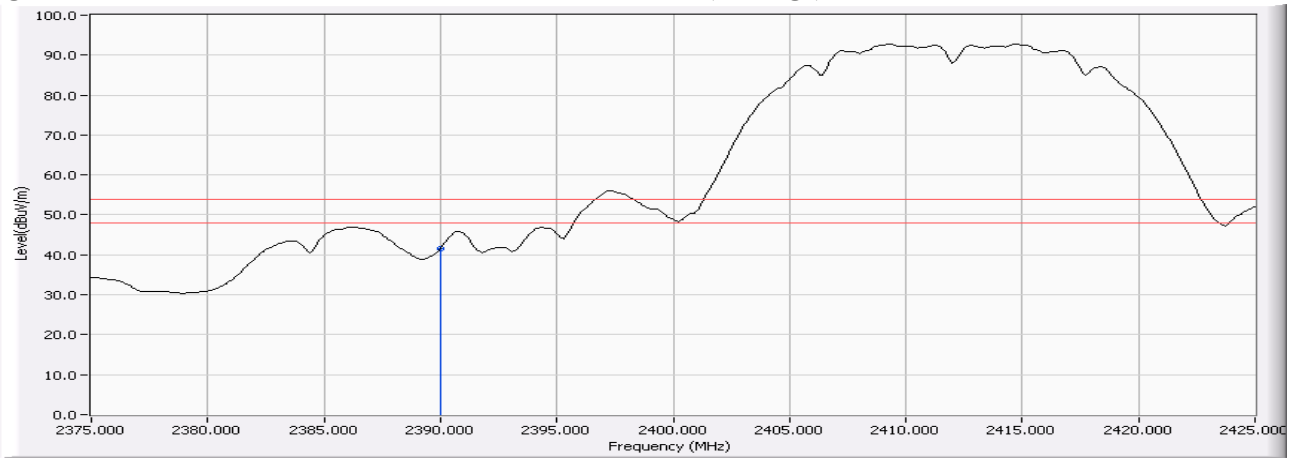


Figure Channel 01: Vertical (Average)



Note:

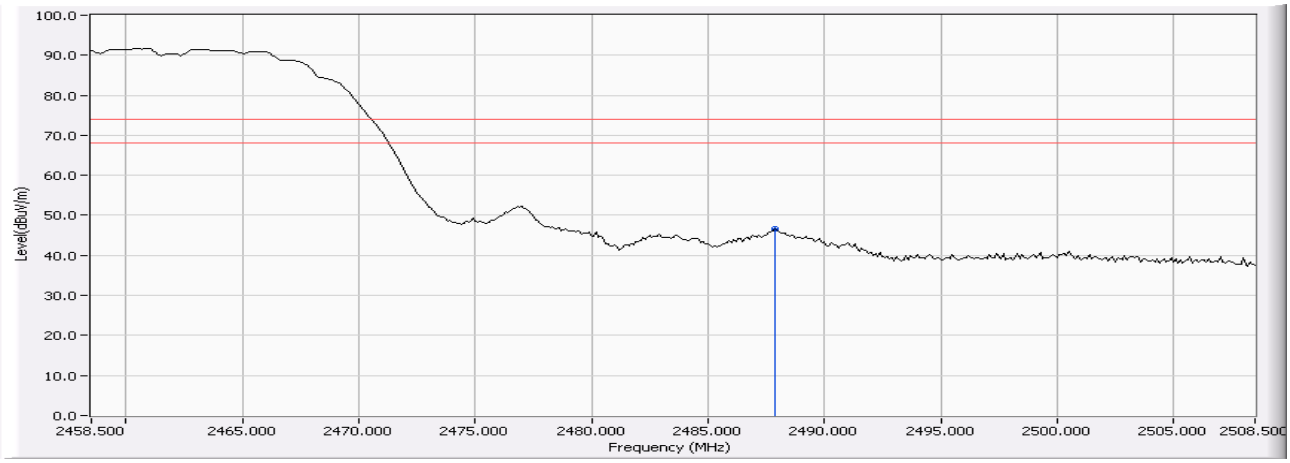
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading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

Product : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2487.900	-6.462	53.013	46.550	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)



Note:

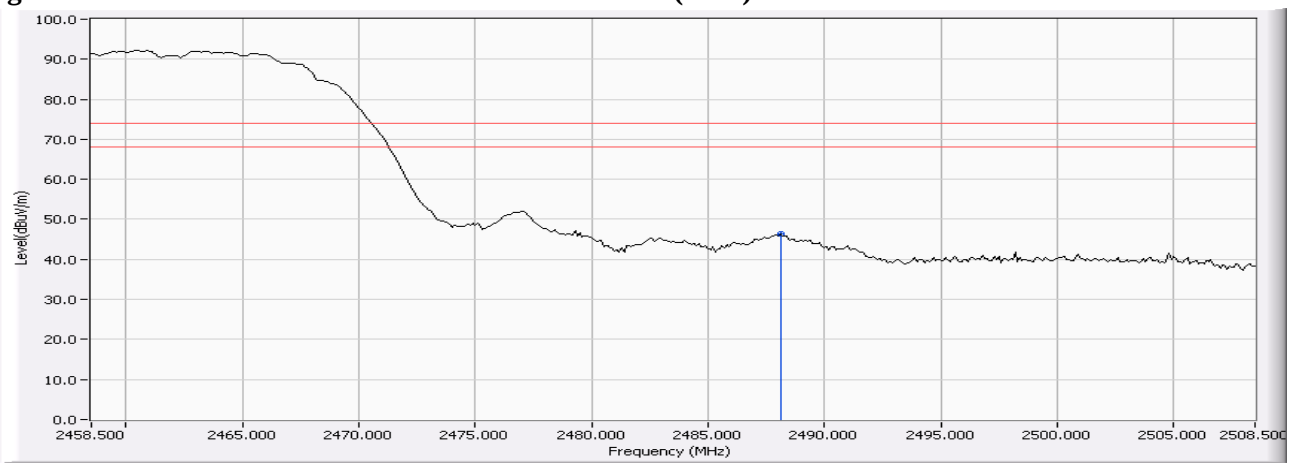
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading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

Product : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2488.100	-6.462	52.922	46.460	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.000	-6.771	66.439	59.668	74.00	54.00	Pass
01 (Average)	2389.000	-6.771	46.675	39.904	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

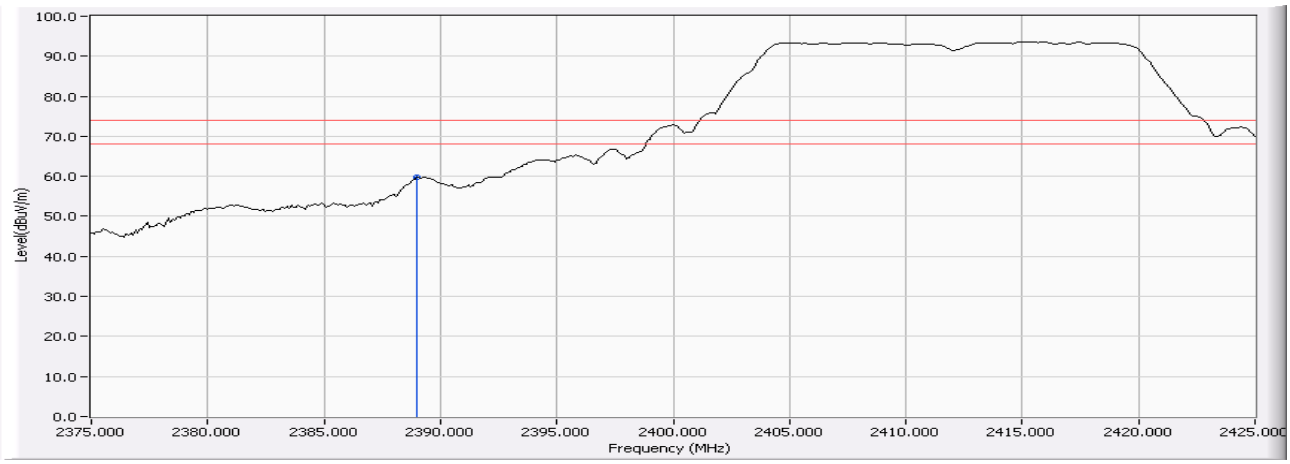
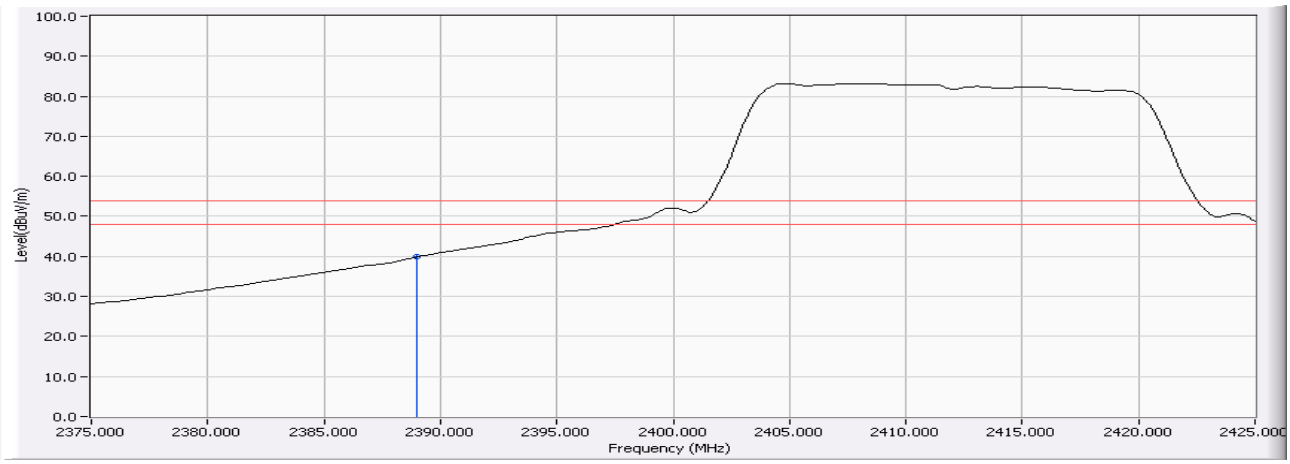


Figure Channel 01: Horizontal (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2388.900	-6.771	67.852	61.081	74.00	54.00	Pass
01 (Average)	2388.900	-6.771	46.480	39.709	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

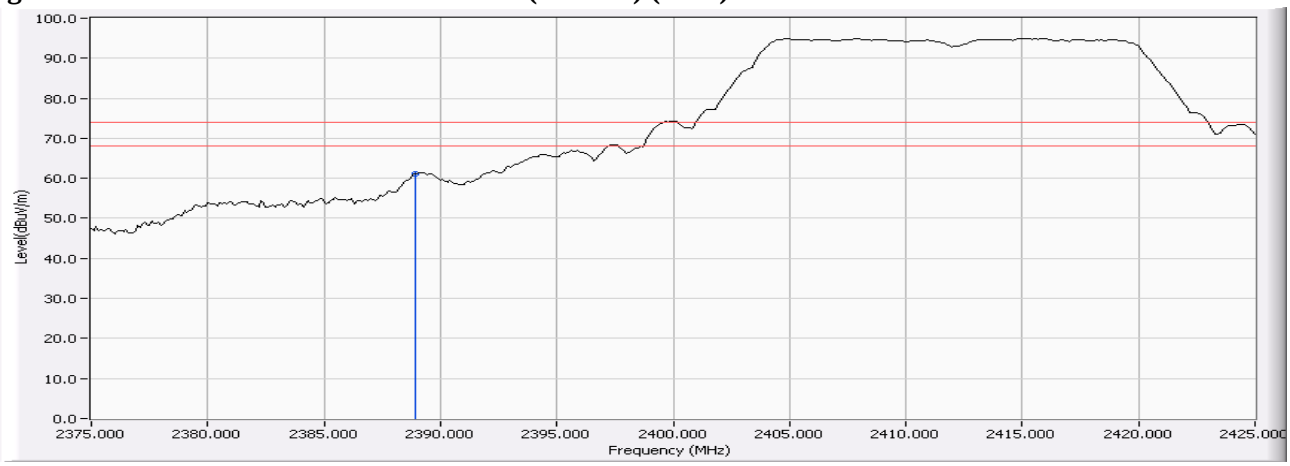
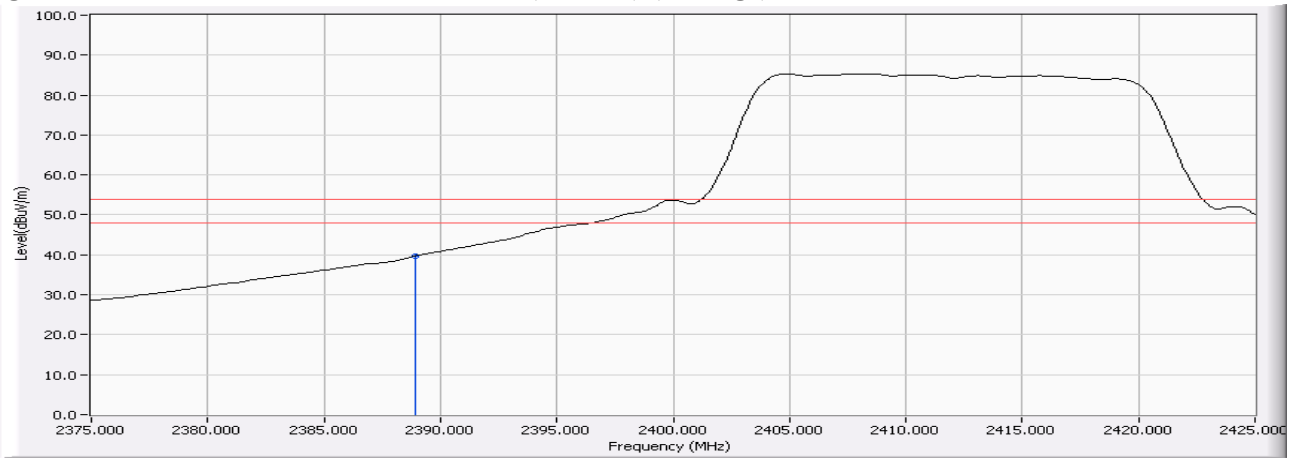


Figure Channel 01: (Vertical) (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2484.000	-6.467	63.358	56.891	74.00	54.00	Pass
11 (Average)	2484.000	-6.467	42.406	35.939	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

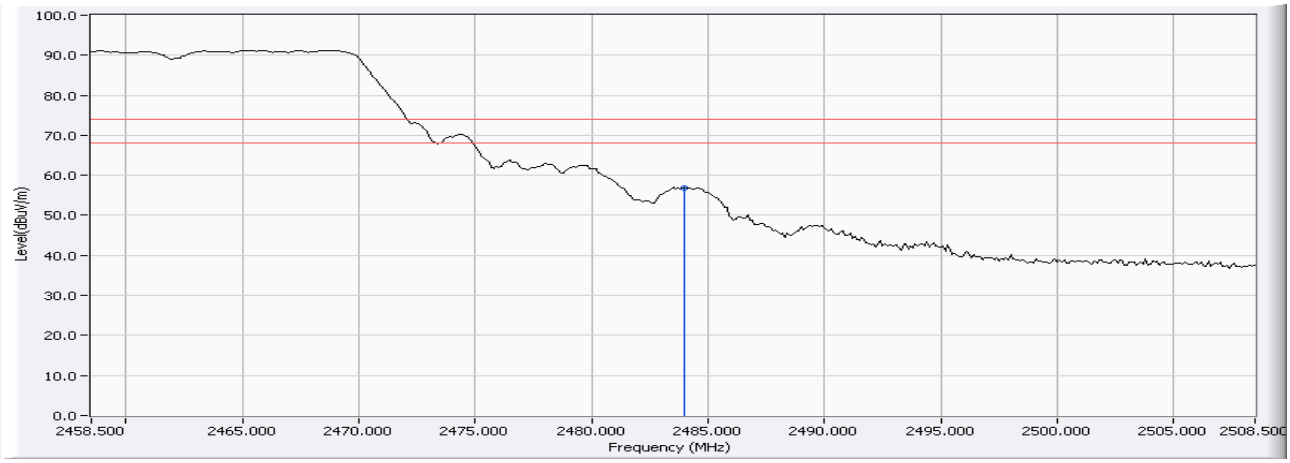
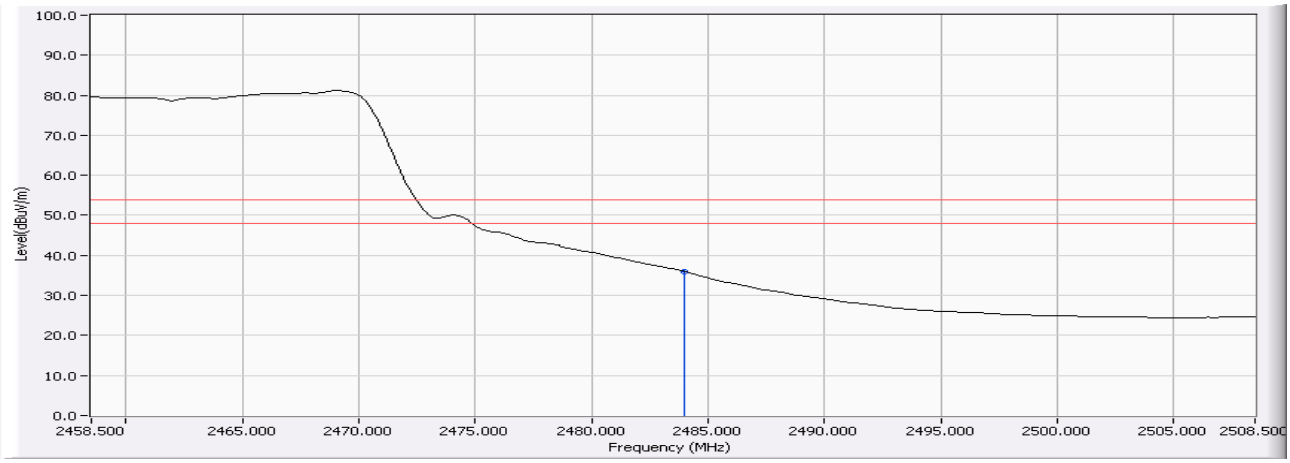


Figure Channel 11: Horizontal (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2484.100	-6.467	64.211	57.744	74.00	54.00	Pass
11(Average)	2484.100	-6.467	43.341	36.874	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

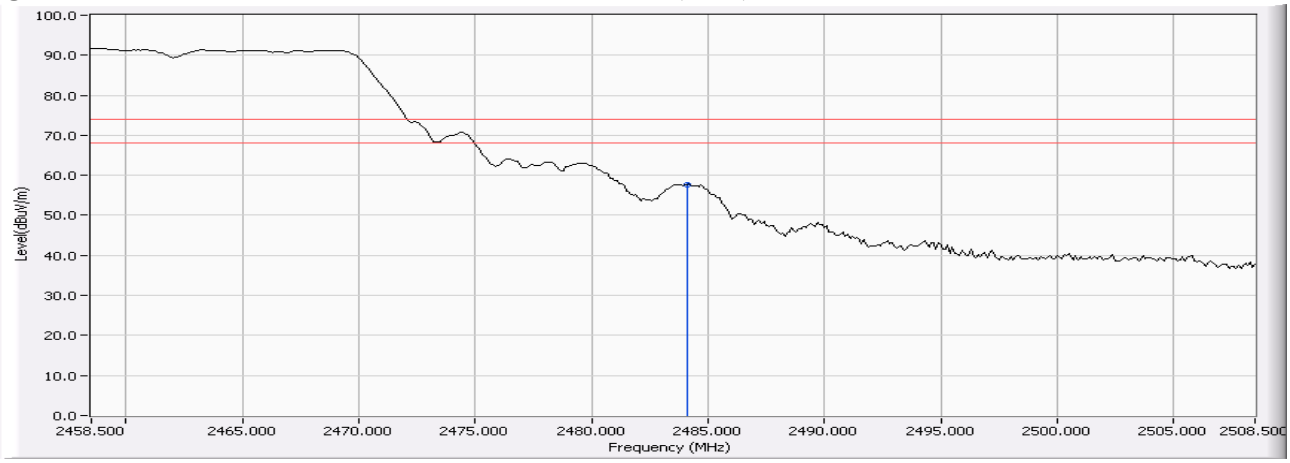
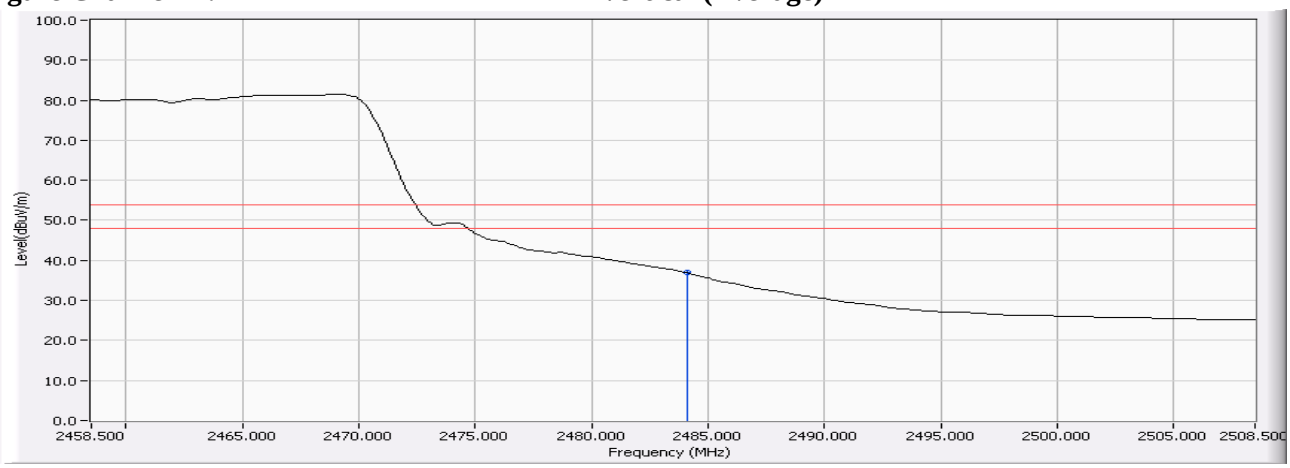


Figure Channel 11: Vertical (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.000	-6.771	61.464	54.693	74.00	54.00	Pass
01 (Average)	2389.000	-6.771	44.200	37.429	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

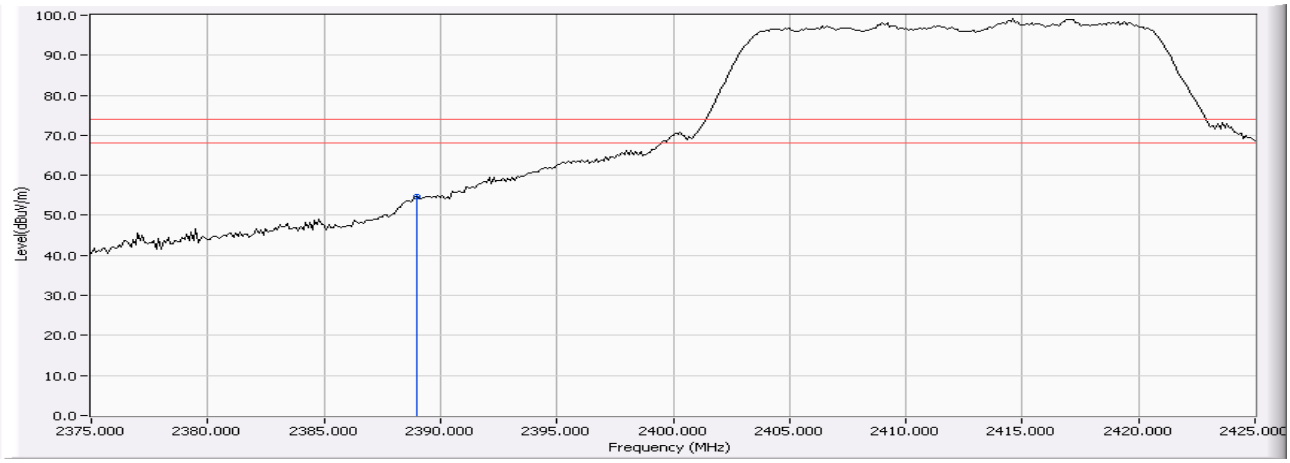
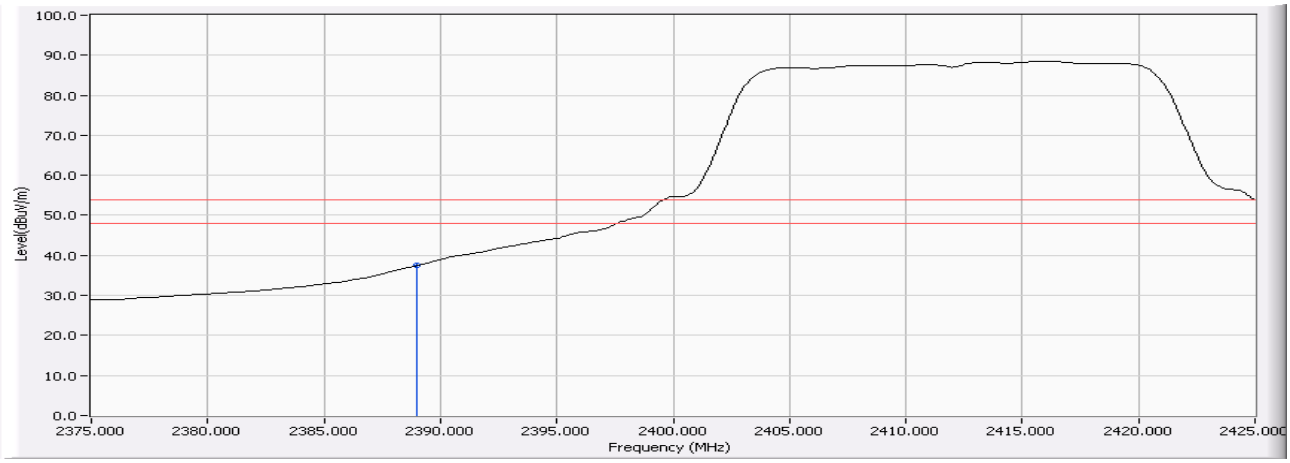


Figure Channel 01: Horizontal (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.300	-6.770	62.212	55.442	74.00	54.00	Pass
01 (Average)	2389.300	-6.770	44.151	37.381	74.00	54.00	Pass

Figure Channel 01: (Vertical) (Peak)

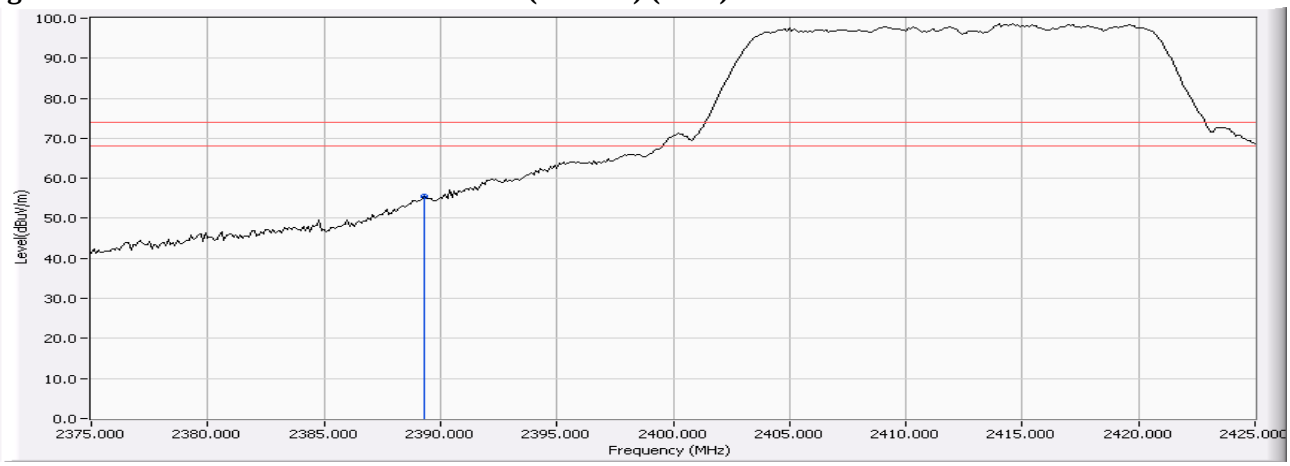
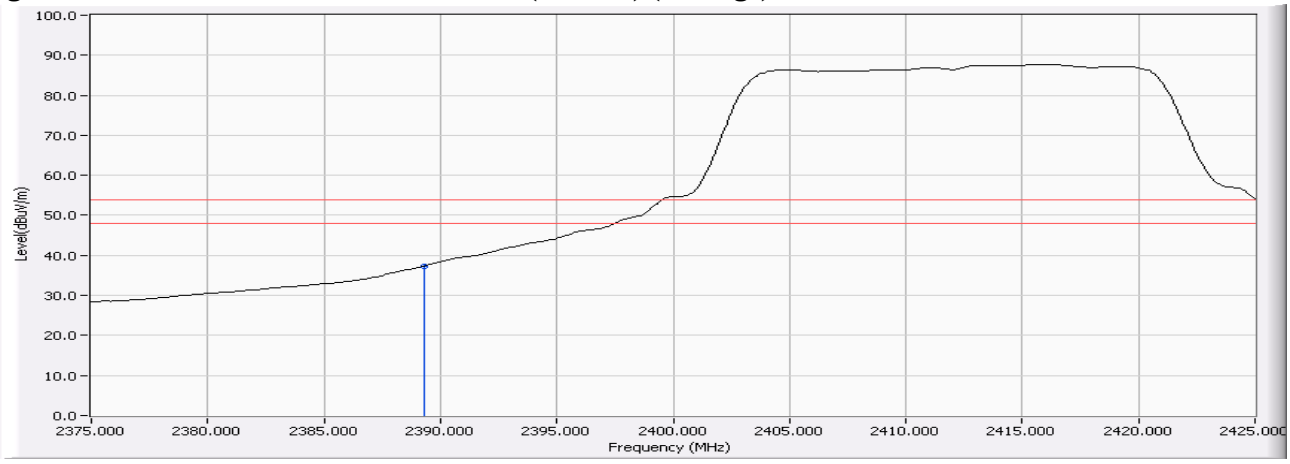


Figure Channel 01: (Vertical) (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2485.200	-6.466	65.557	59.091	74.00	54.00	Pass
11 (Average)	2485.200	-6.466	44.173	37.707	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)

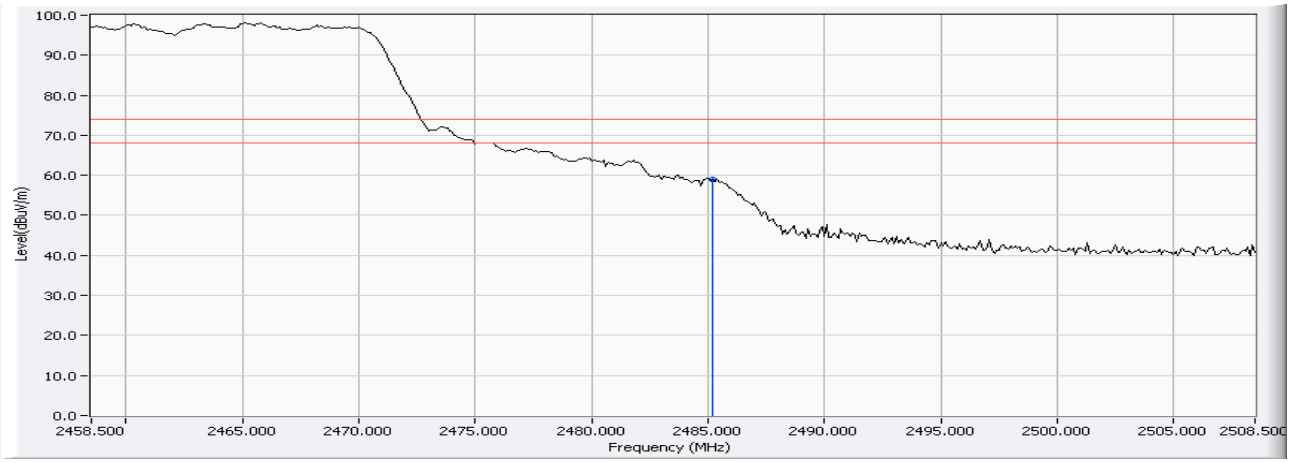
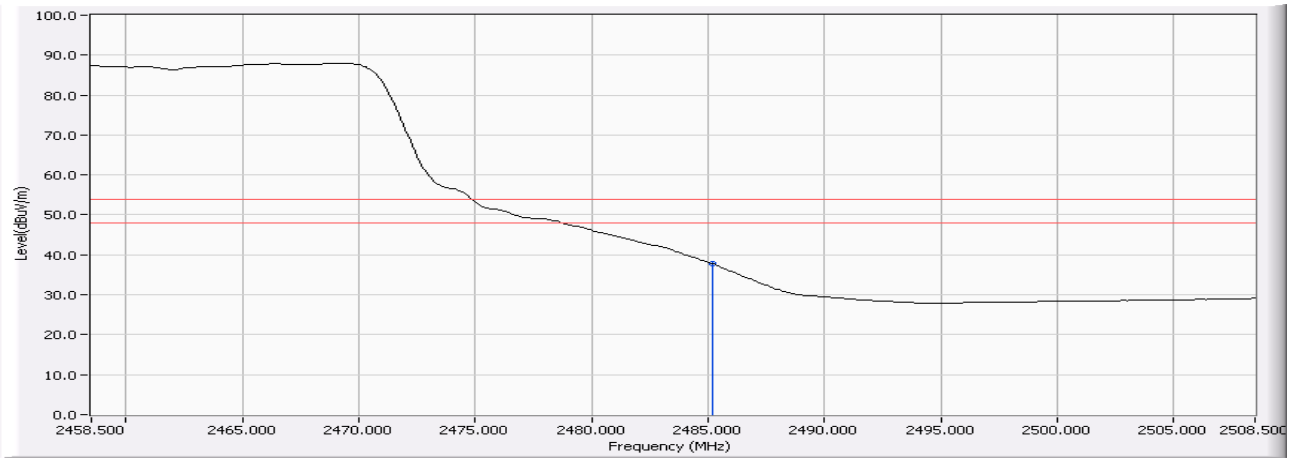


Figure Channel 11: Horizontal (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2485.200	-6.466	64.660	58.194	74.00	54.00	Pass
11 (Average)	2485.200	-6.466	44.590	38.124	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)

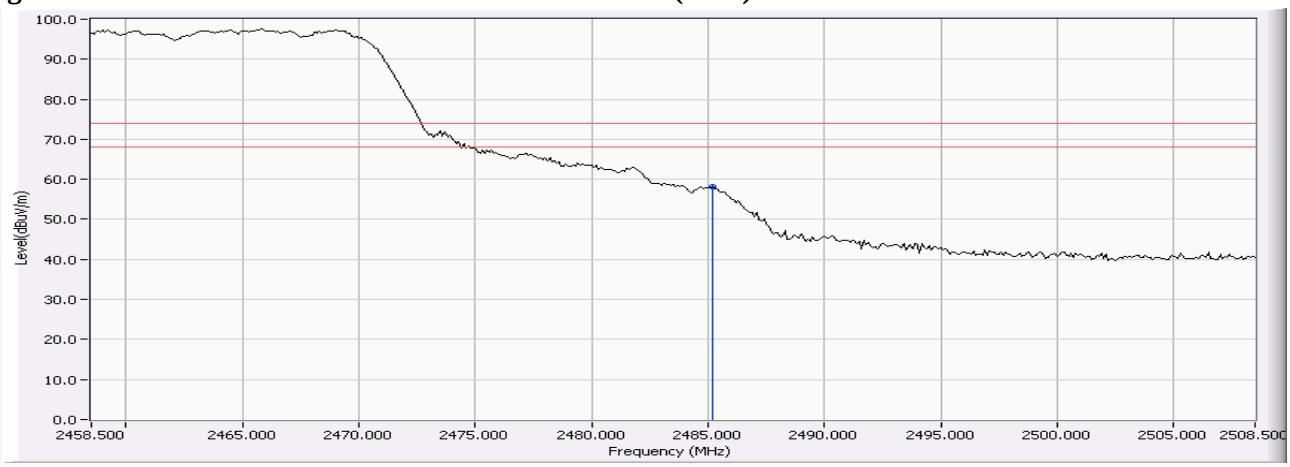
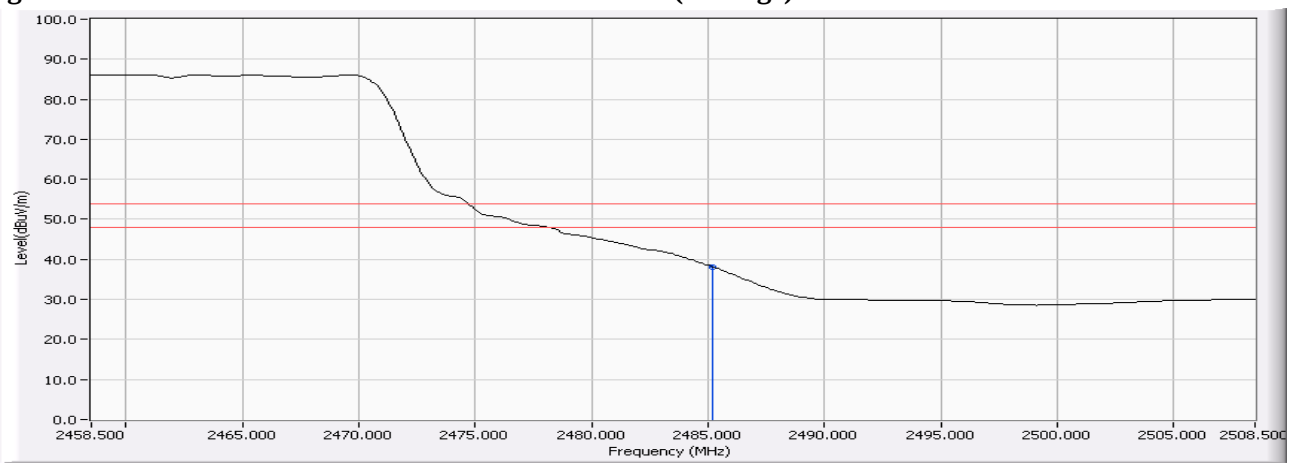


Figure Channel 11: Vertical (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.400	-6.770	65.505	58.735	74.00	54.00	Pass
01 (Average)	2389.400	-6.770	47.554	40.784	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)

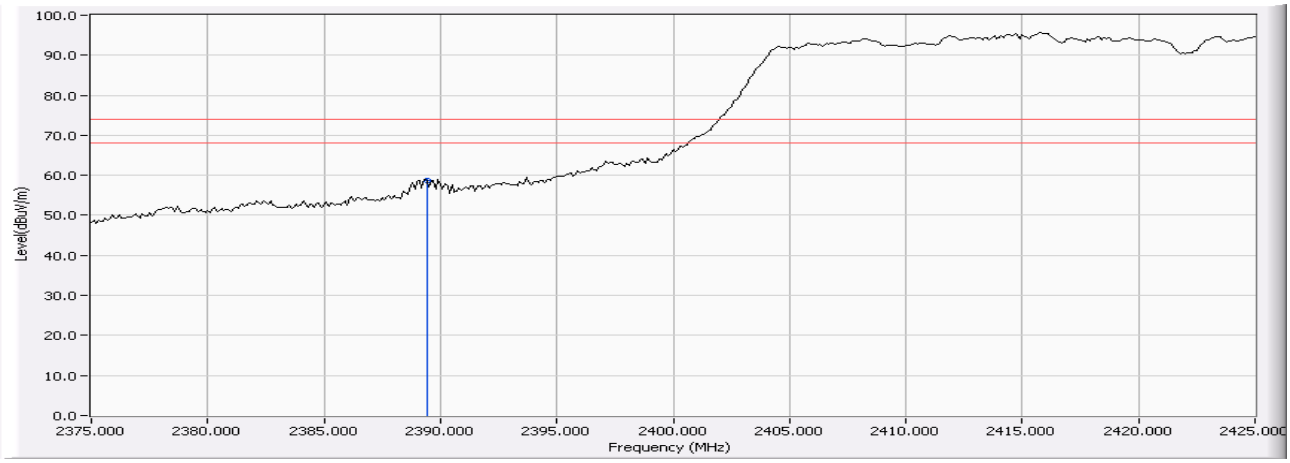
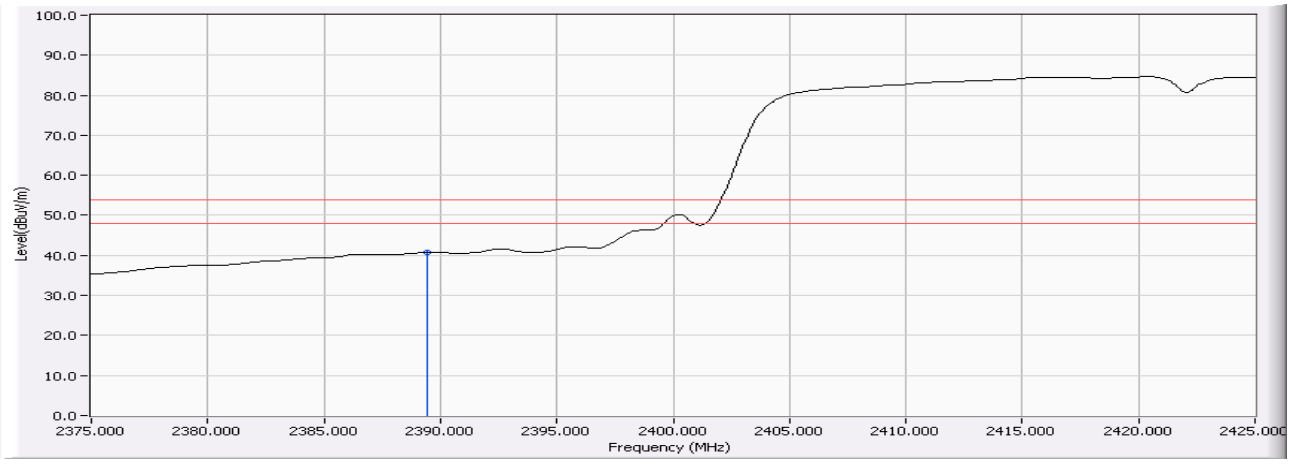


Figure Channel 01: Horizontal (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.100	-6.771	65.265	58.494	74.00	54.00	Pass
01 (Average)	2389.100	-6.771	47.443	40.672	74.00	54.00	Pass

Figure Channel 01: (Vertical)

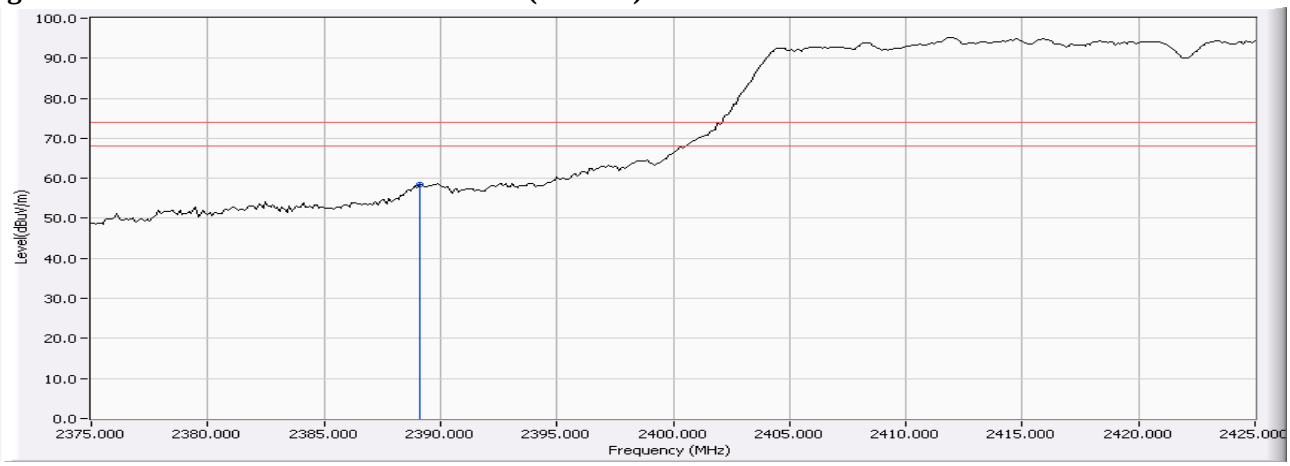
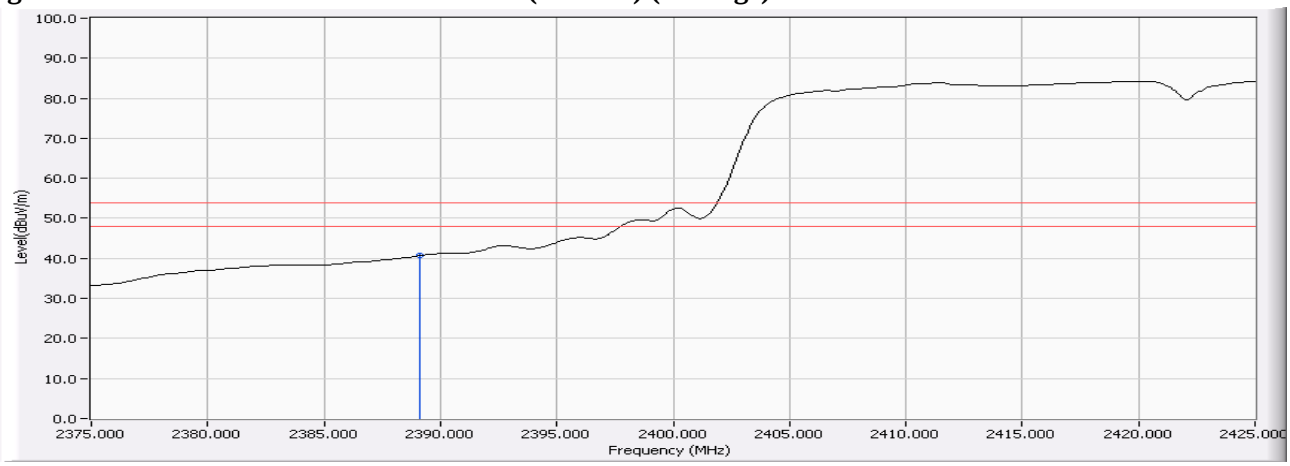


Figure Channel 01: (Vertical) (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
07 (Peak)	2484.400	-6.467	63.520	57.053	74.00	54.00	Pass
07 (Average)	2484.400	-6.467	51.604	45.137	74.00	54.00	Pass

Figure Channel 07: Horizontal (Peak)

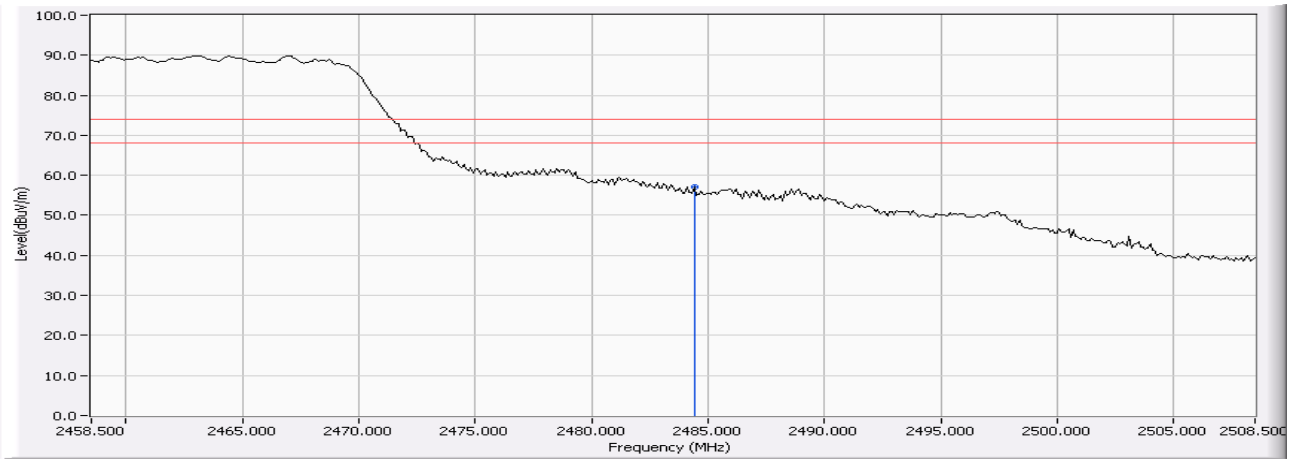
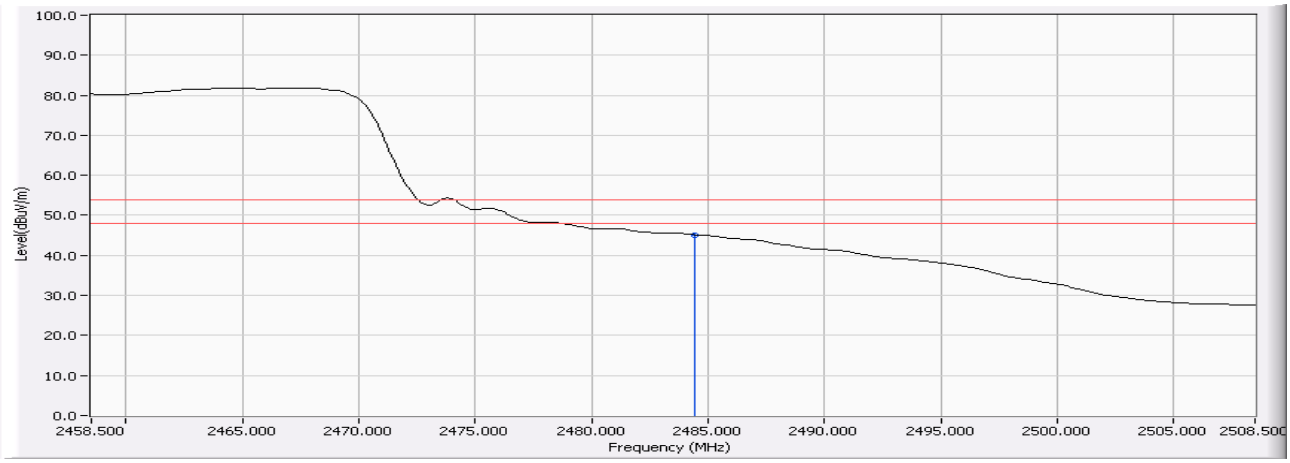


Figure Channel 07: Horizontal (Average)



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 : Tablet PC
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
07 (Peak)	2488.800	-6.461	65.940	59.479	74.00	54.00	Pass
07 (Average)	2488.800	-6.461	49.051	42.590	74.00	54.00	Pass

Figure Channel 07: Vertical (Peak)

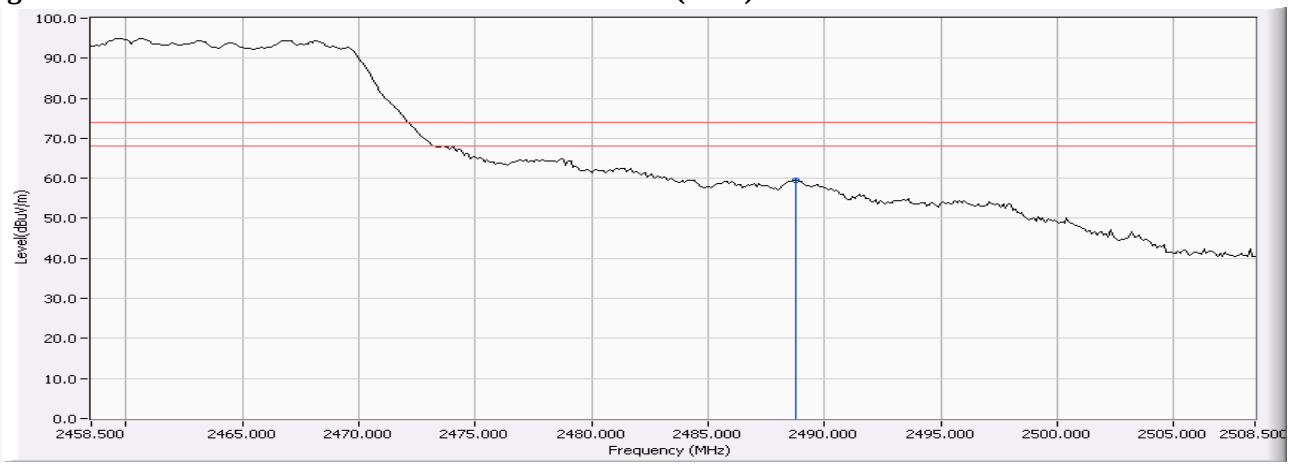
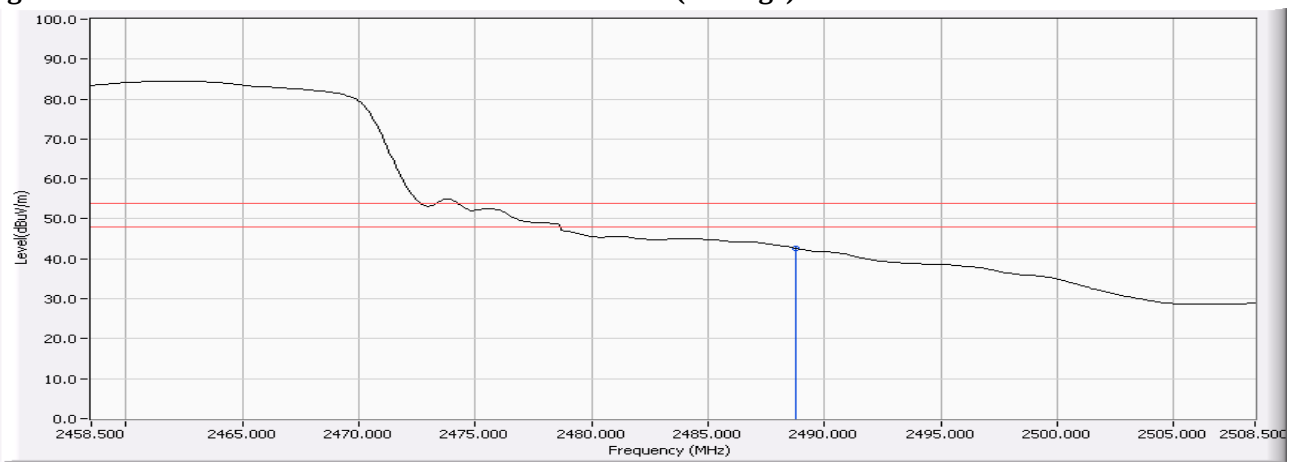


Figure Channel 07: Vertical (Average)



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

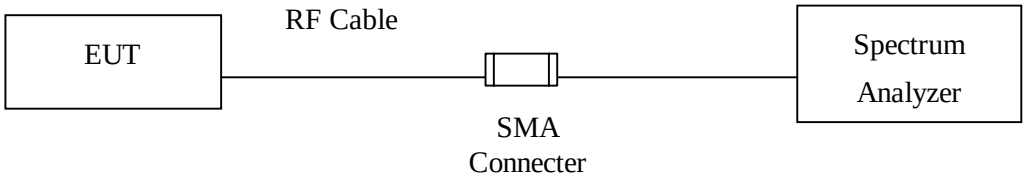
7.1. Test Equipment

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

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr, 2008

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

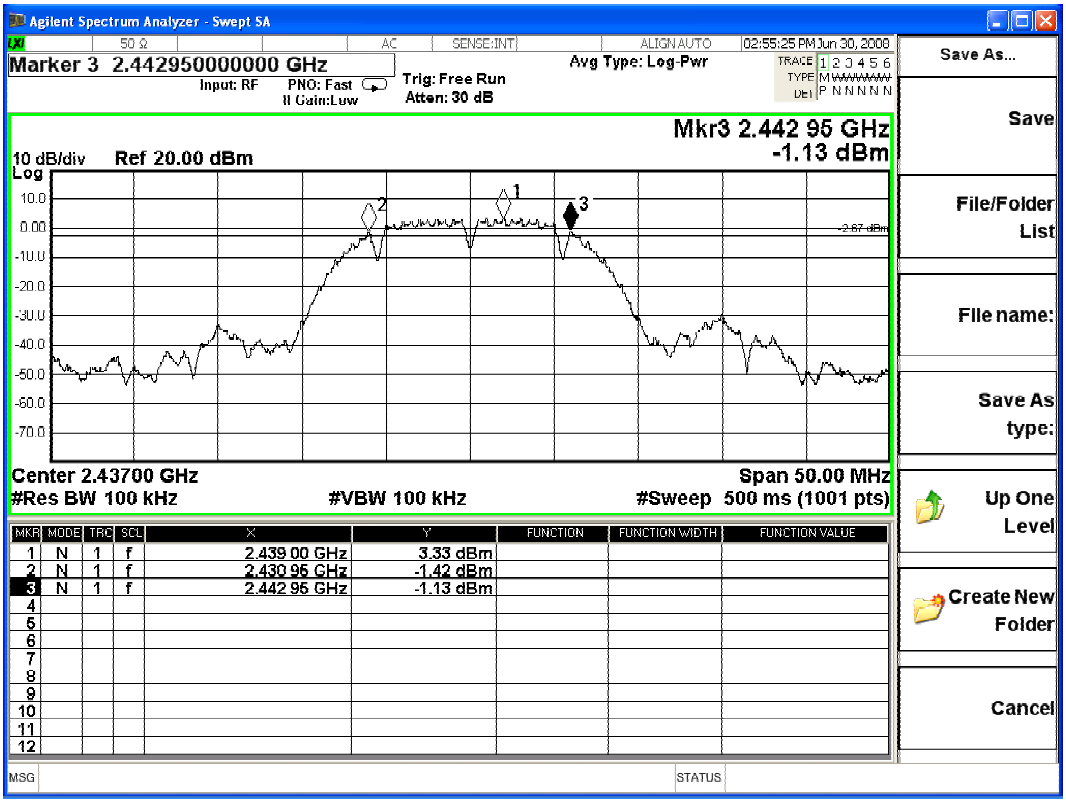
± 150Hz

7.6. Test Result of Occupied Bandwidth

Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (1Mbps)	2412.00	12000	>500	Pass

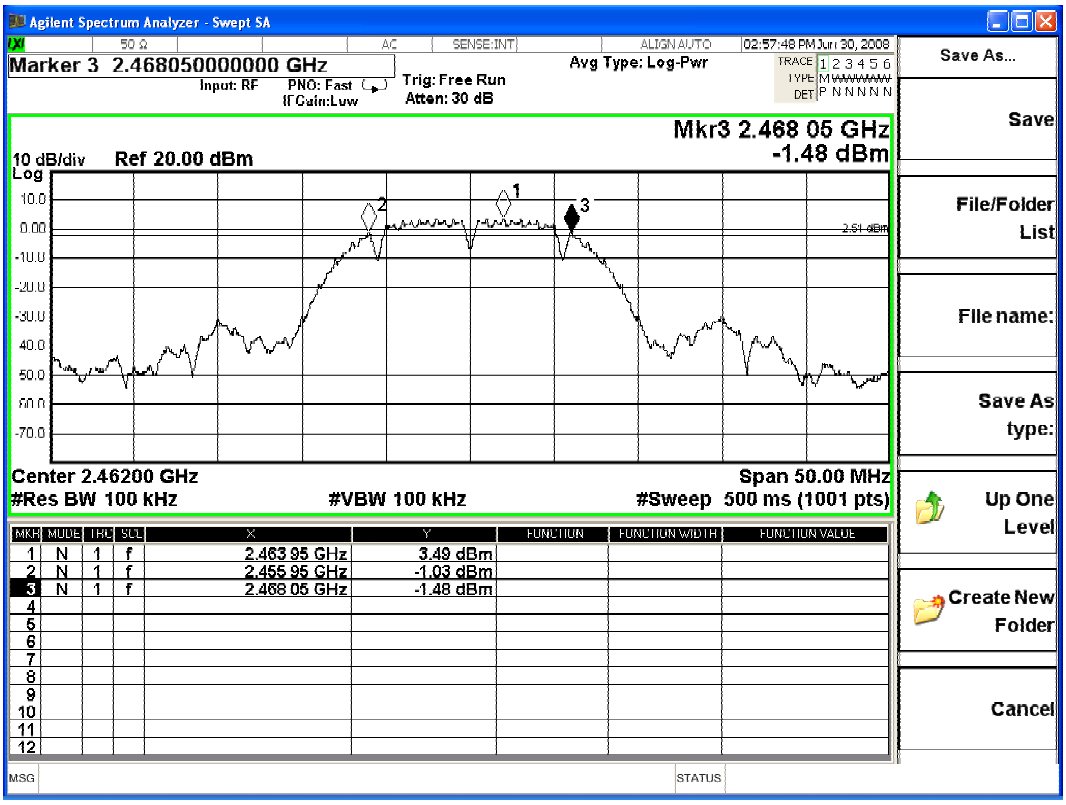
Figure Channel 1:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (1Mbps)	2437.00	12100	>500	Pass

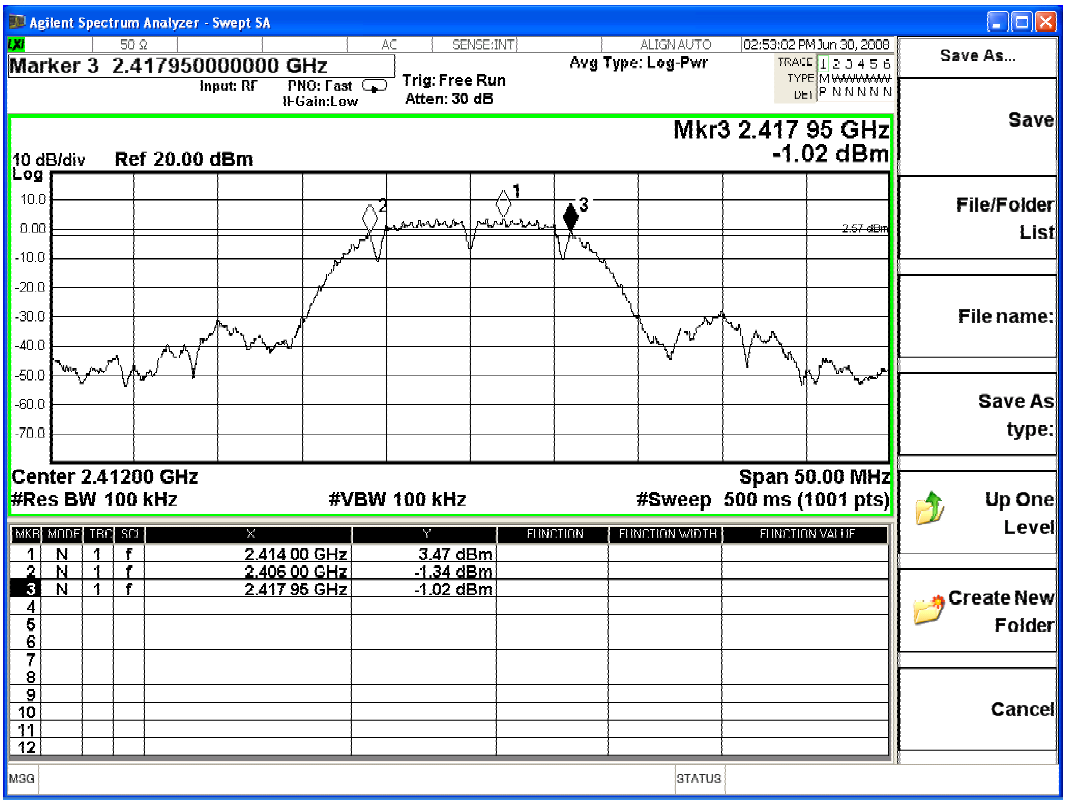
Figure Channel 6:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (1Mbps)	2462.00	11950	>500	Pass

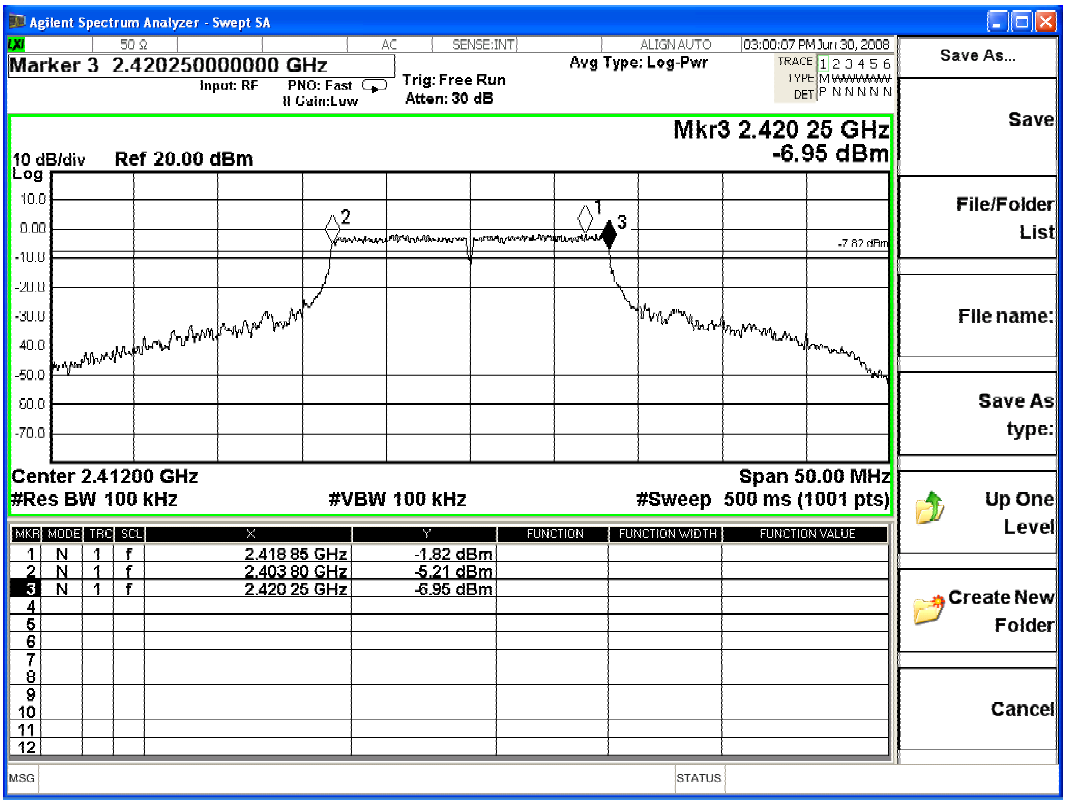
Figure Channel 11:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6Mbps)	2412.00	16450	>500	Pass

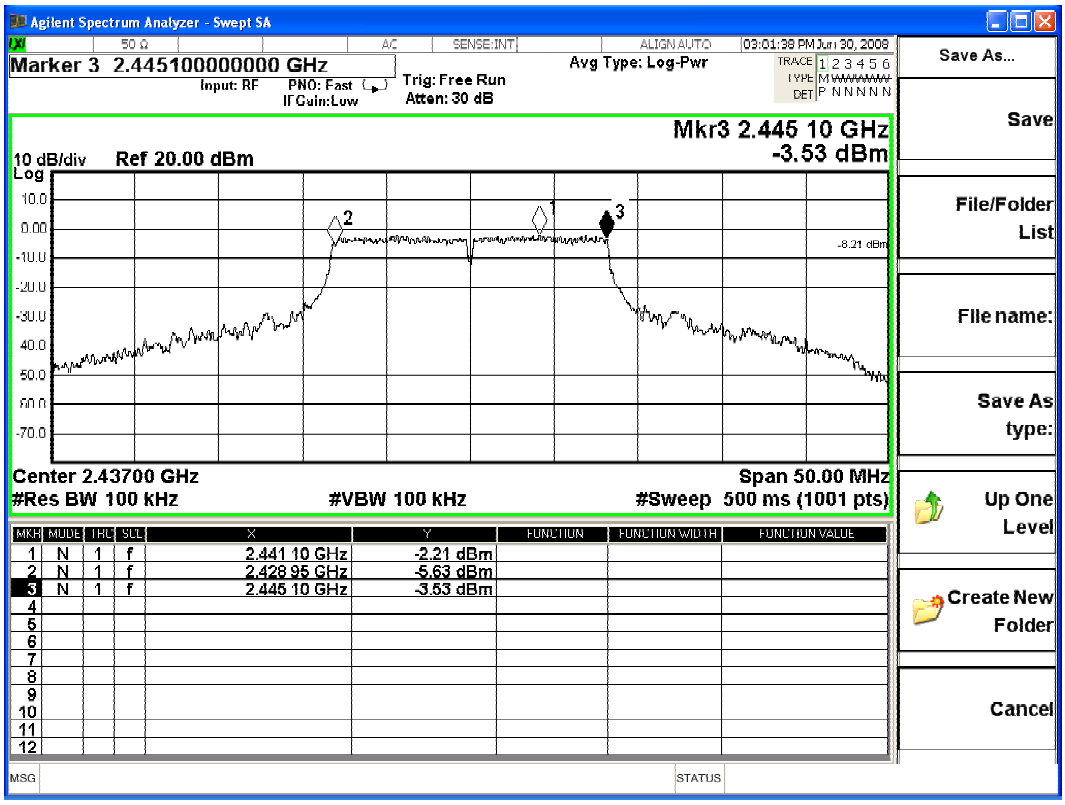
Figure Channel 1:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6Mbps)	2437.00	16150	>500	Pass

Figure Channel 6:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2462MHz)

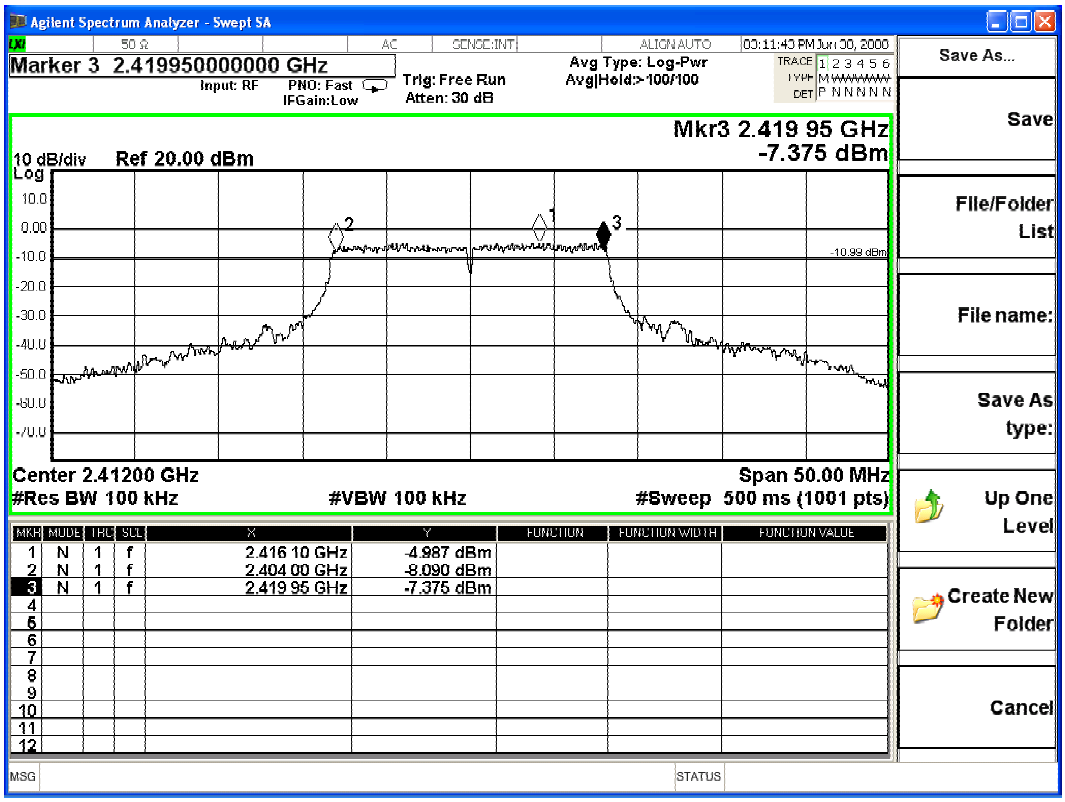
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6Mbps)	2462.00	16150	>500	Pass

Figure Channel 11:

Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2412MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6.5Mbps)	2412.00	15950	>500	Pass

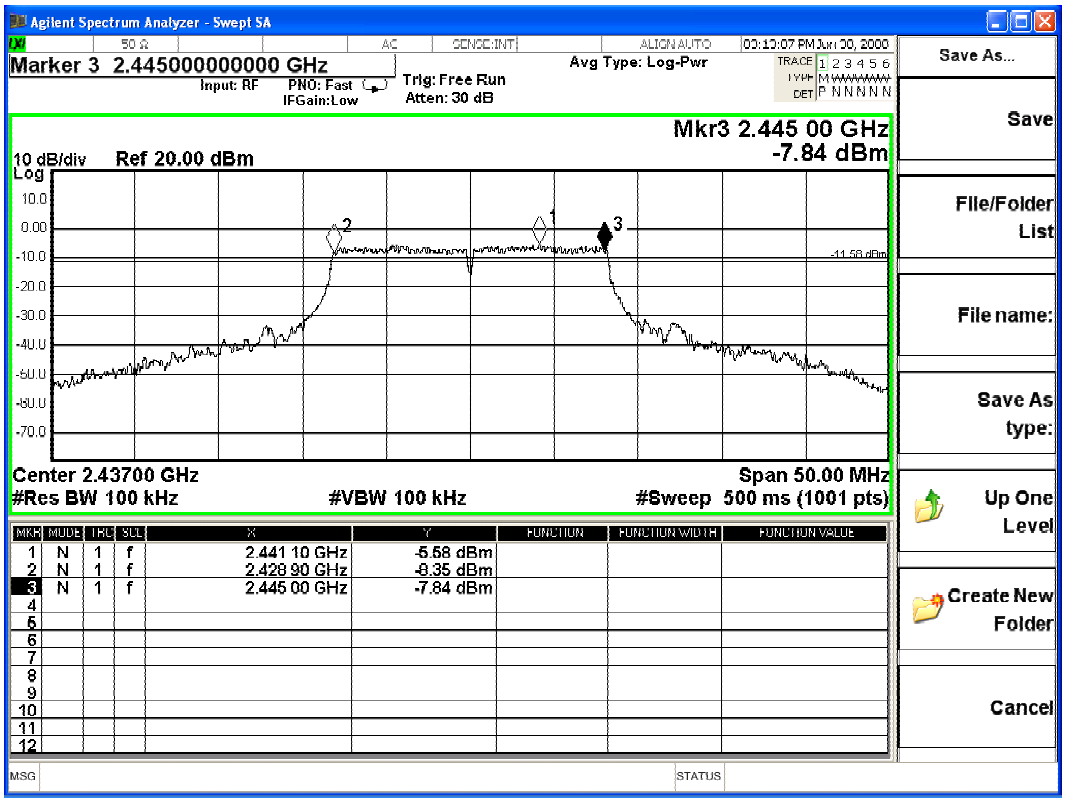
Figure Channel 1:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6.5Mbps)	2437.00	16100	>500	Pass

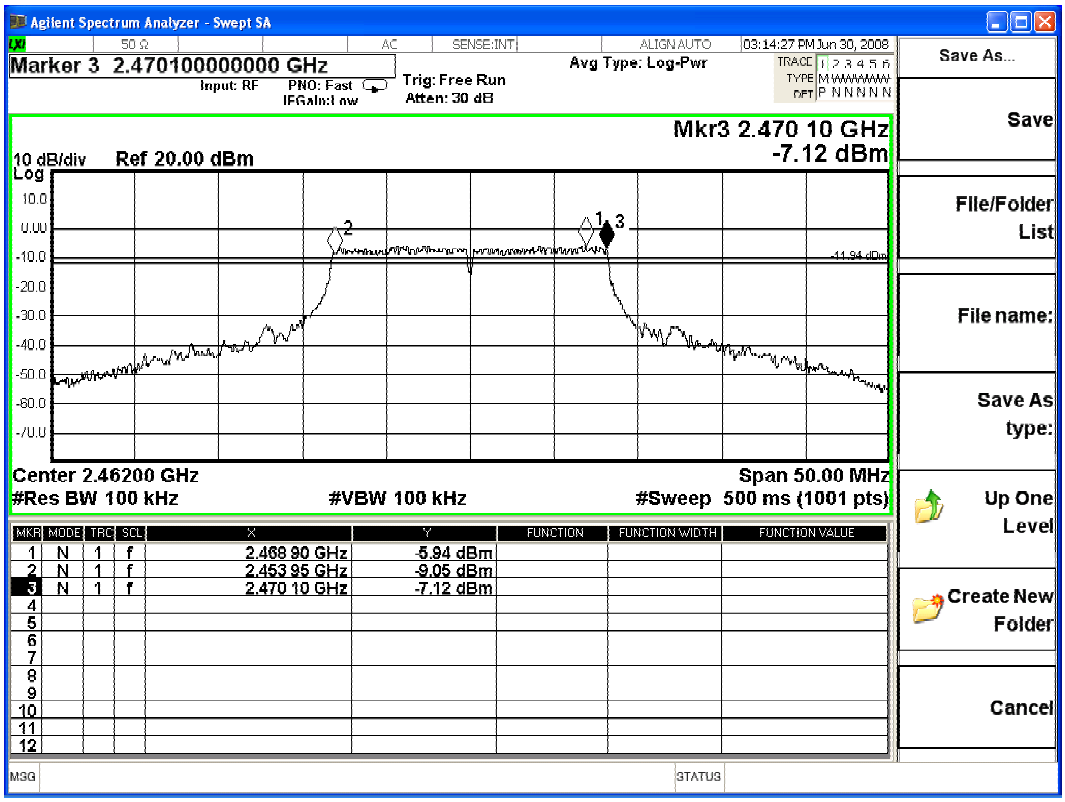
Figure Channel 6:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2462MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6.5Mbps)	2462.00	16150	>500	Pass

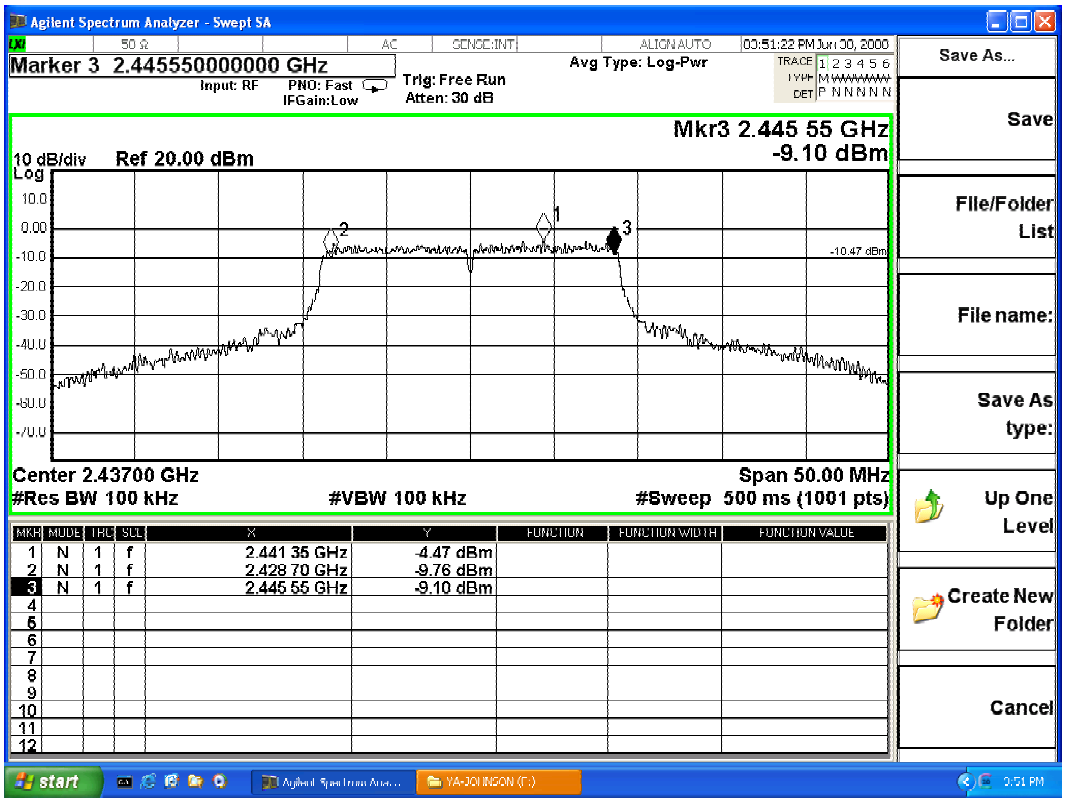
Figure Channel 11:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2412MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6.5Mbps)	2412.00	16850	>500	Pass

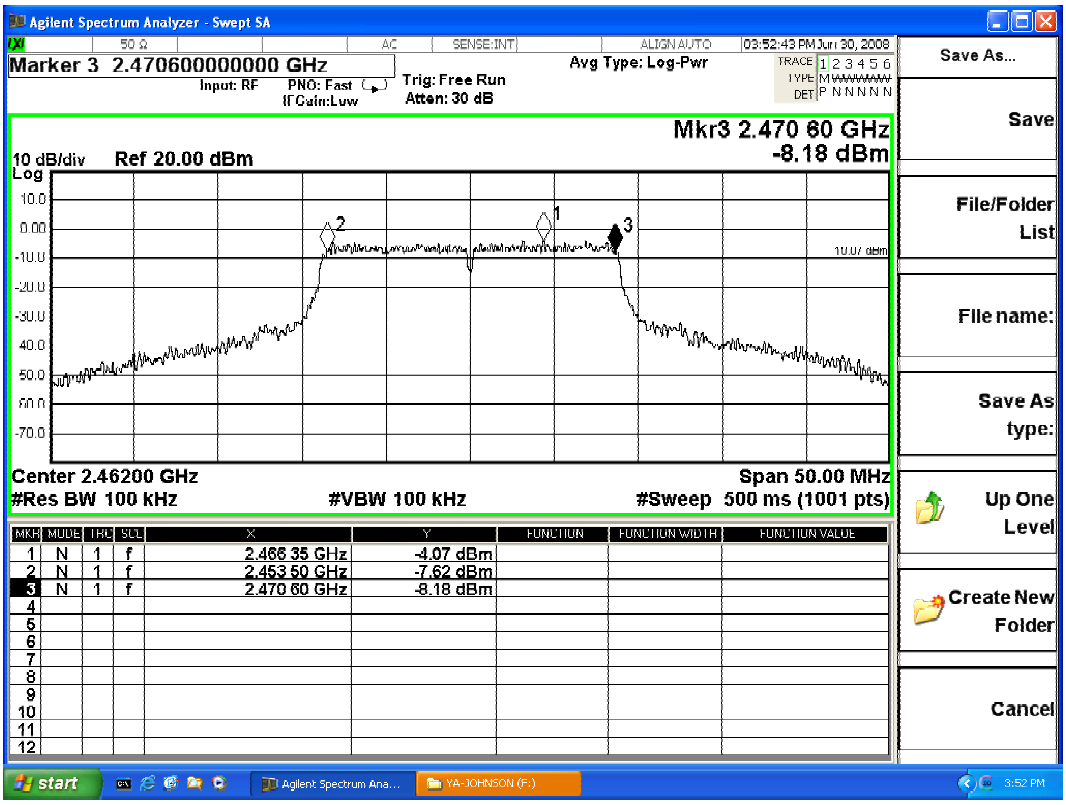
Figure Channel 1:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6.5Mbps)	2437.00	17100	>500	Pass

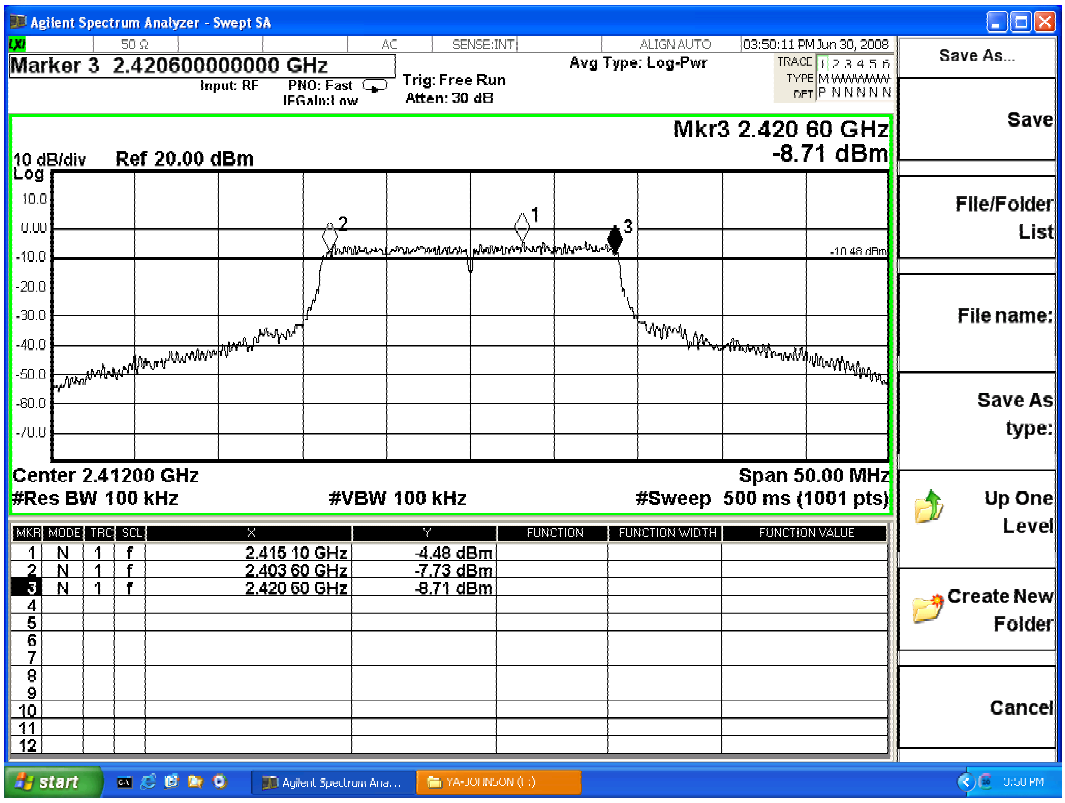
Figure Channel 6:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2462MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6.5Mbps)	2462.00	17000	>500	Pass

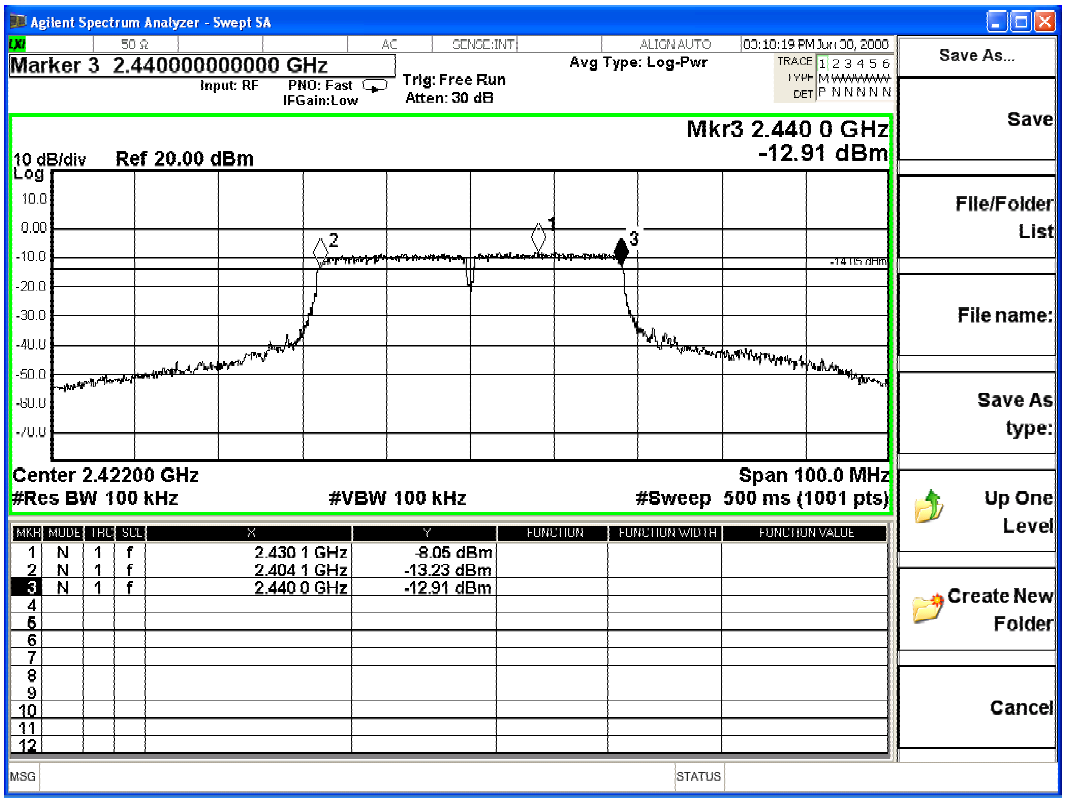
Figure Channel 11:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2422MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (13Mbps)	2422.00	35900	>500	Pass

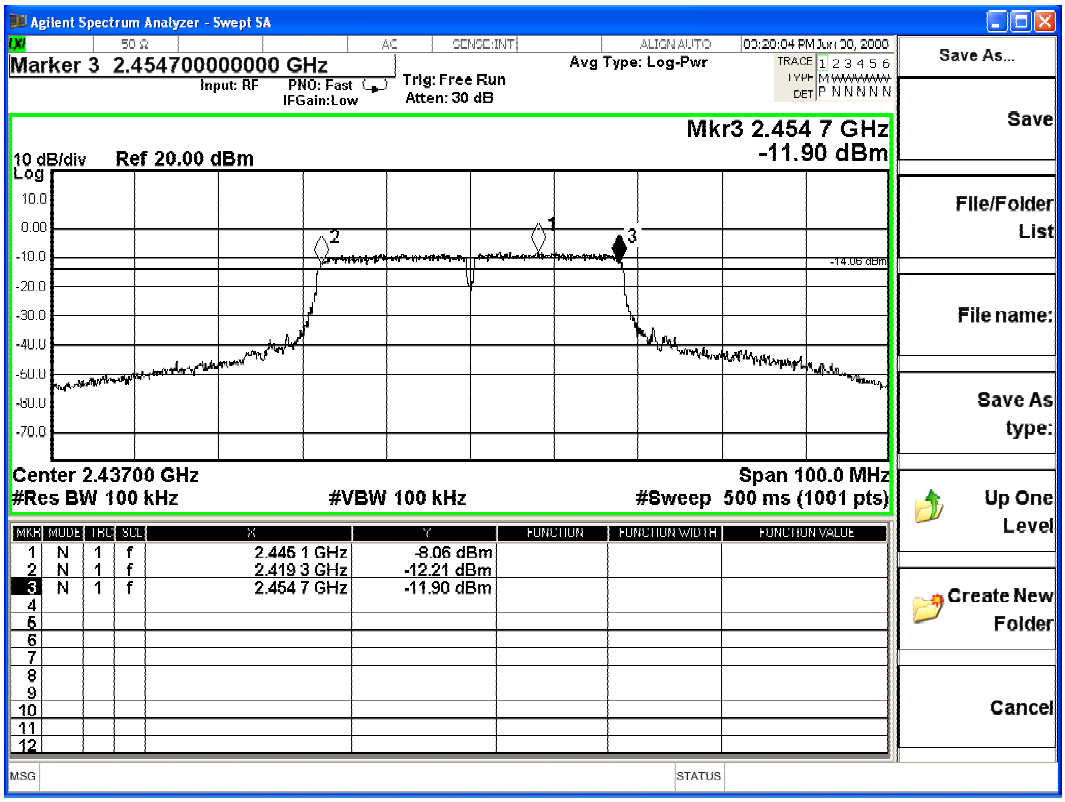
Figure Channel 1:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4 (13Mbps)	2437.00	35400	>500	Pass

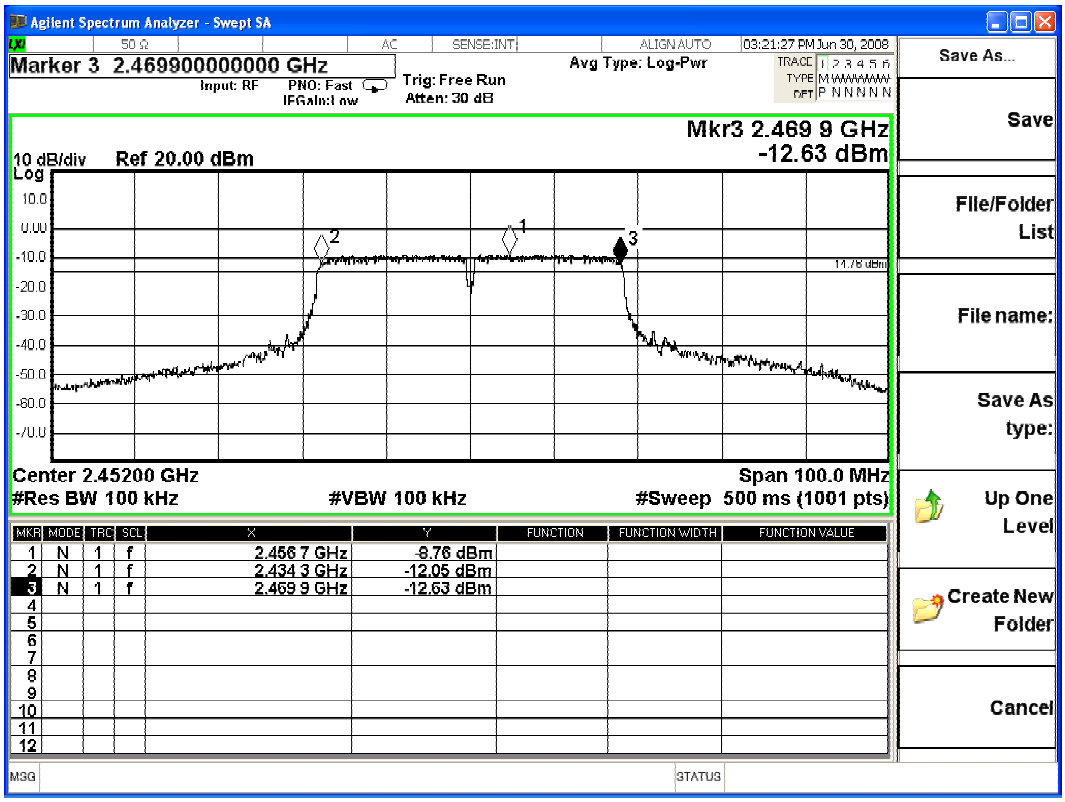
Figure Channel 4:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2452MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7 (13Mbps)	2452.00	35600	>500	Pass

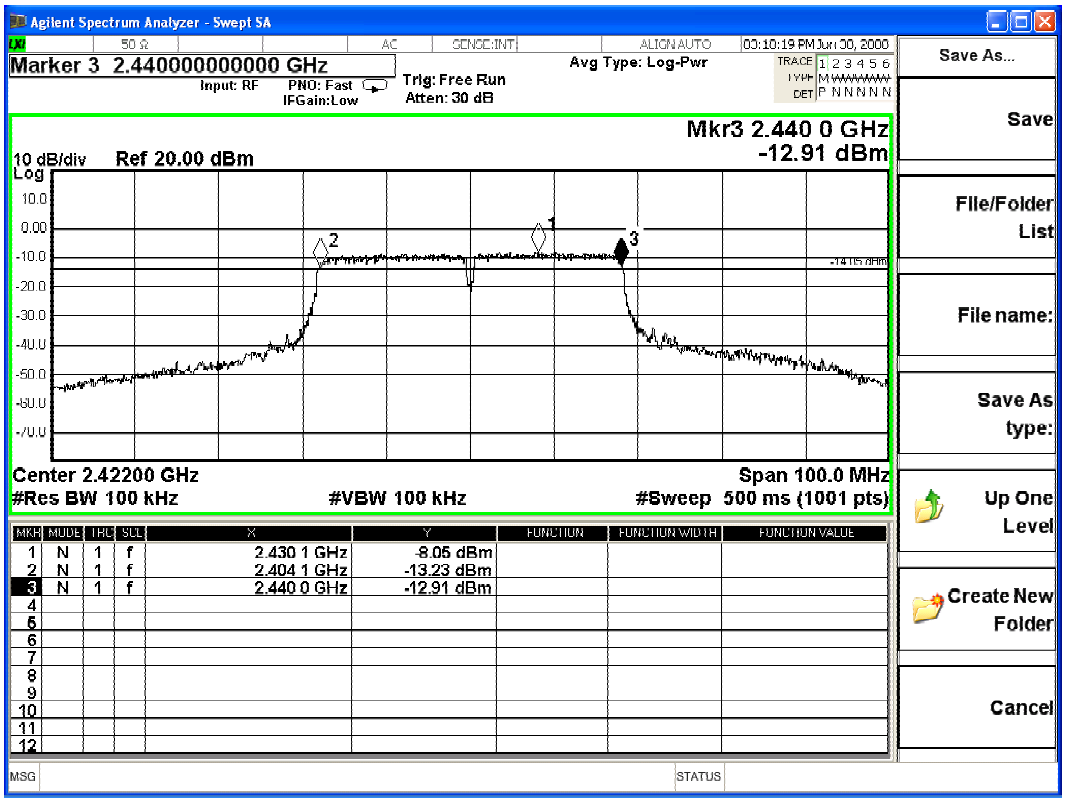
Figure Channel 7:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2422MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (13Mbps)	2422.00	35900	>500	Pass

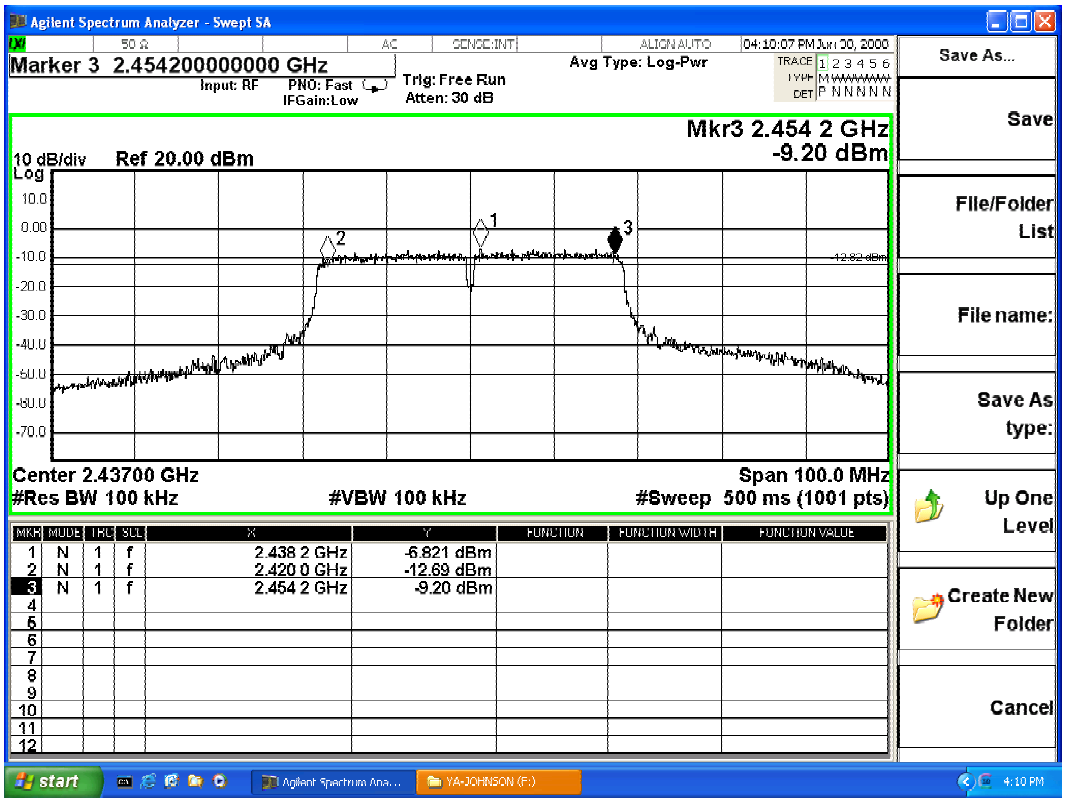
Figure Channel 1:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
4 (13Mbps)	2437.00	34200	>500	Pass

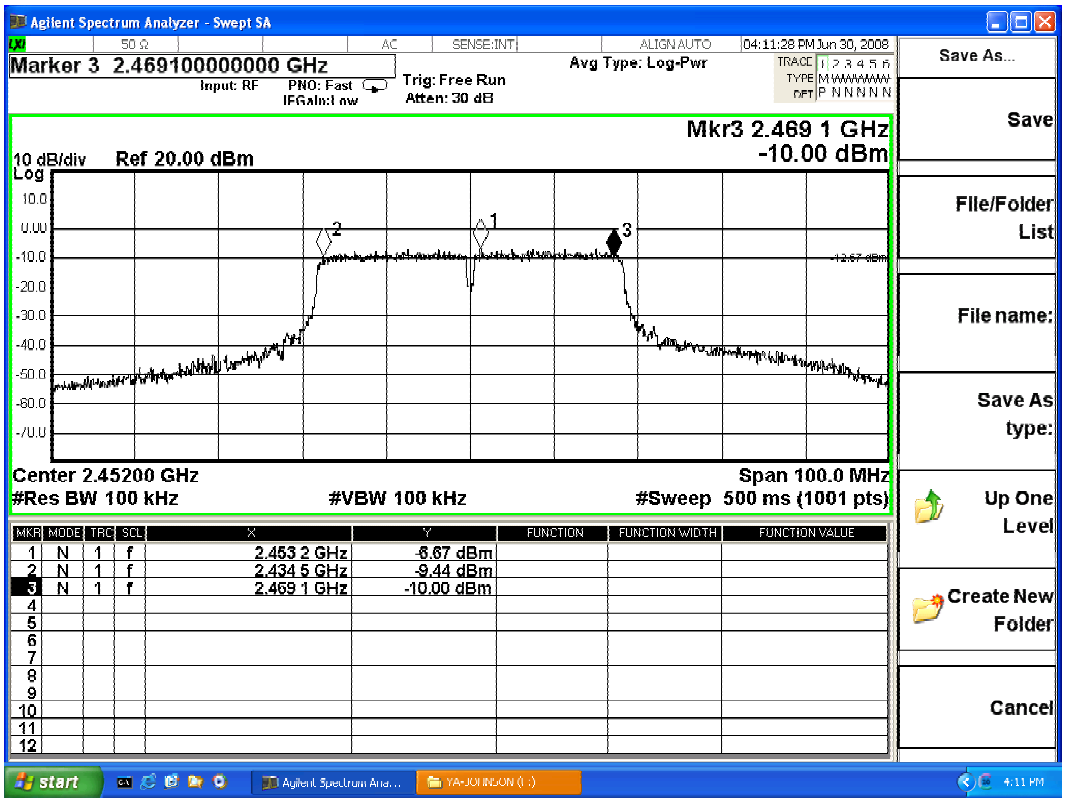
Figure Channel 4:



Product : Tablet PC
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2452MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
7 (13Mbps)	2452.00	34600	>500	Pass

Figure Channel 7:



8. Power Density

8.1. Test Equipment

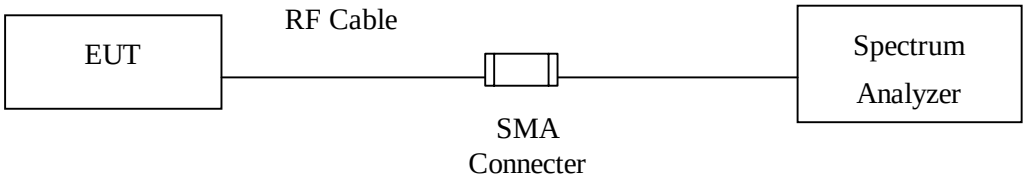
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2008
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr, 2008

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

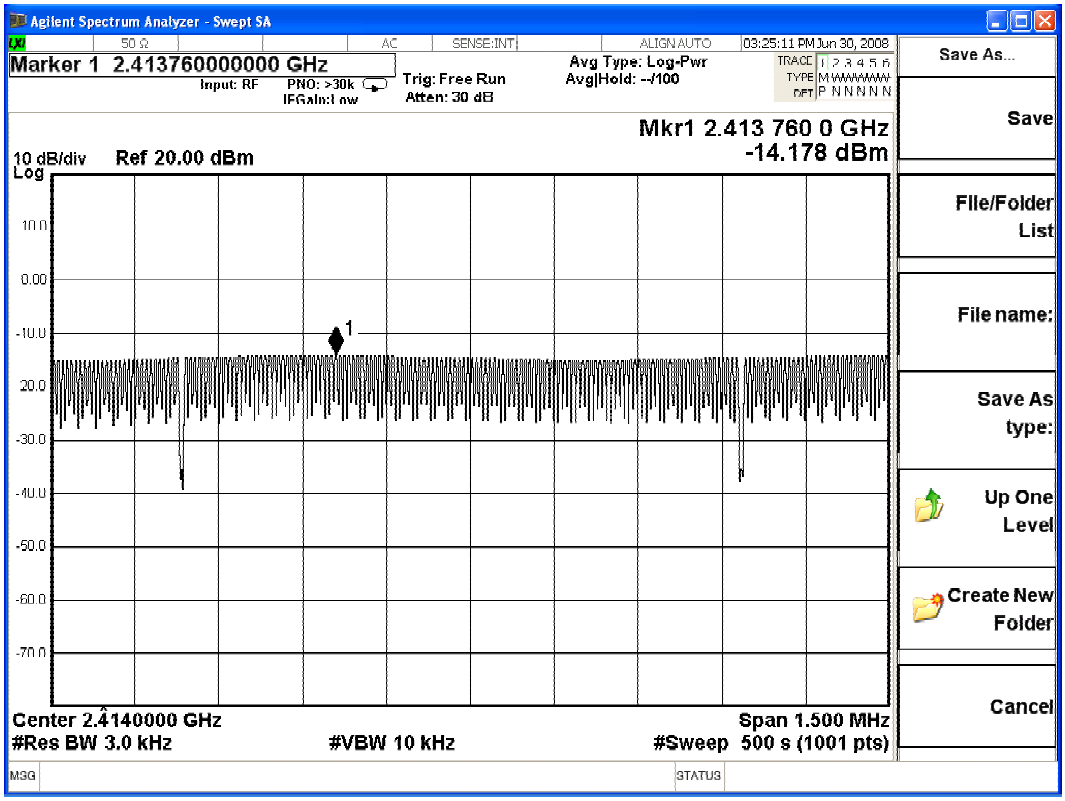
± 1.27 dB

8.6. Test Result of Power Density

Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (1Mbps)	2412.00	-14.178	< 8dBm	Pass

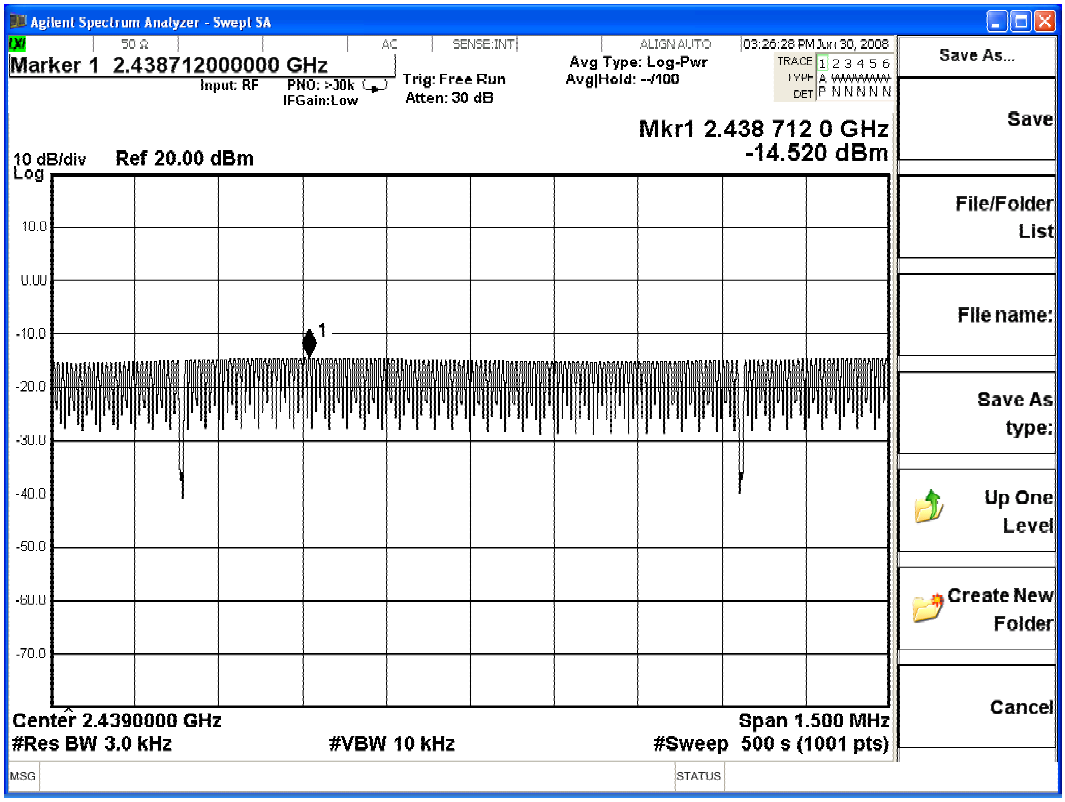
Figure Channel 1:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (1Mbps)	2437.000	-14.52	< 8dBm	Pass

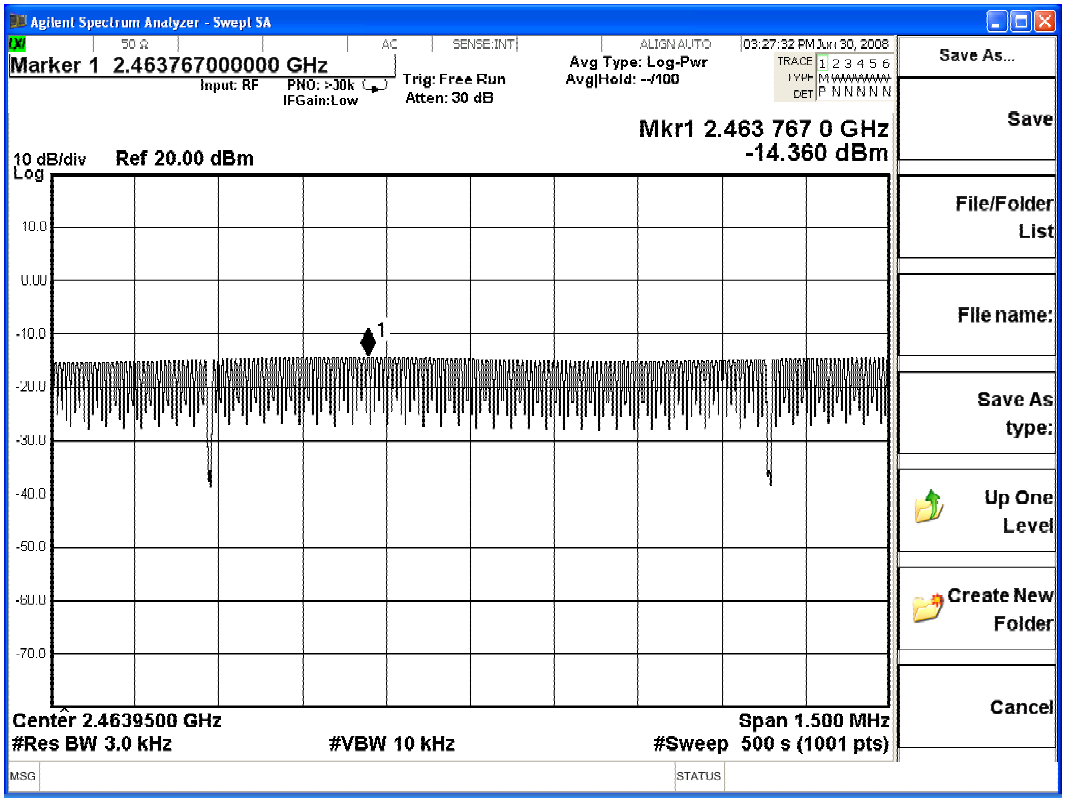
Figure Channel 6:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter (802.11b 1Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (1Mbps)	2462.00	-14.36	< 8dBm	Pass

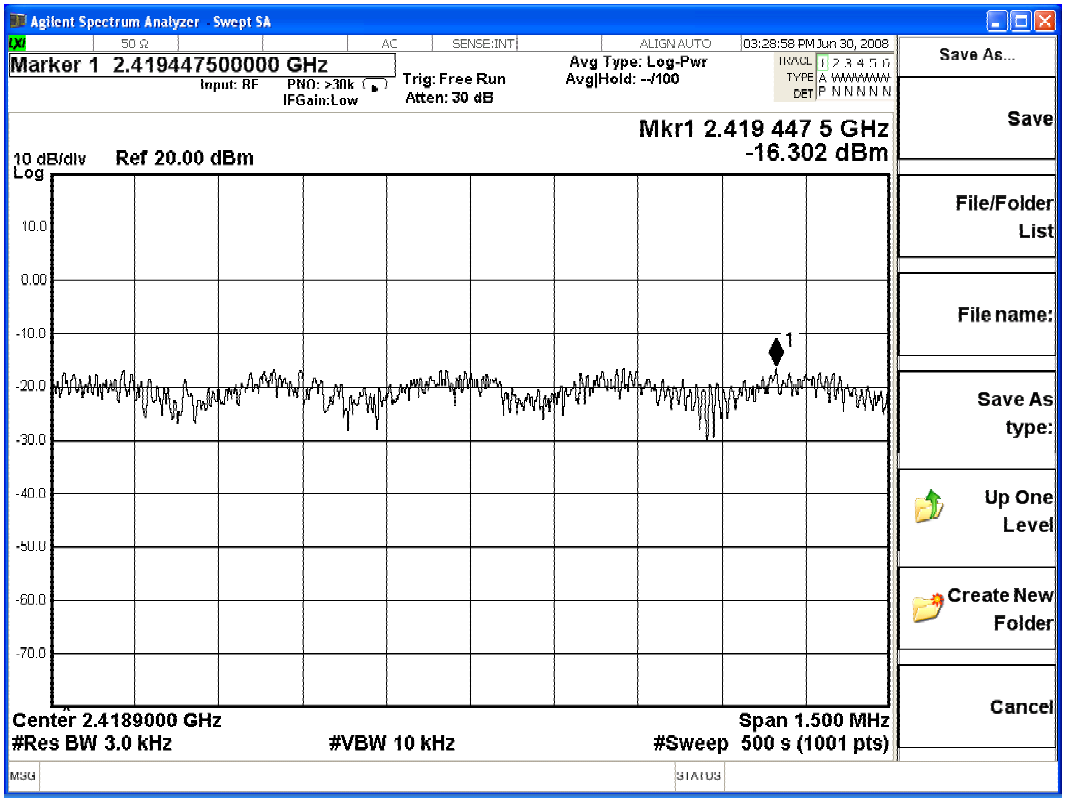
Figure Channel 11:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6Mbps)	2412.00	-16.302	< 8dBm	Pass

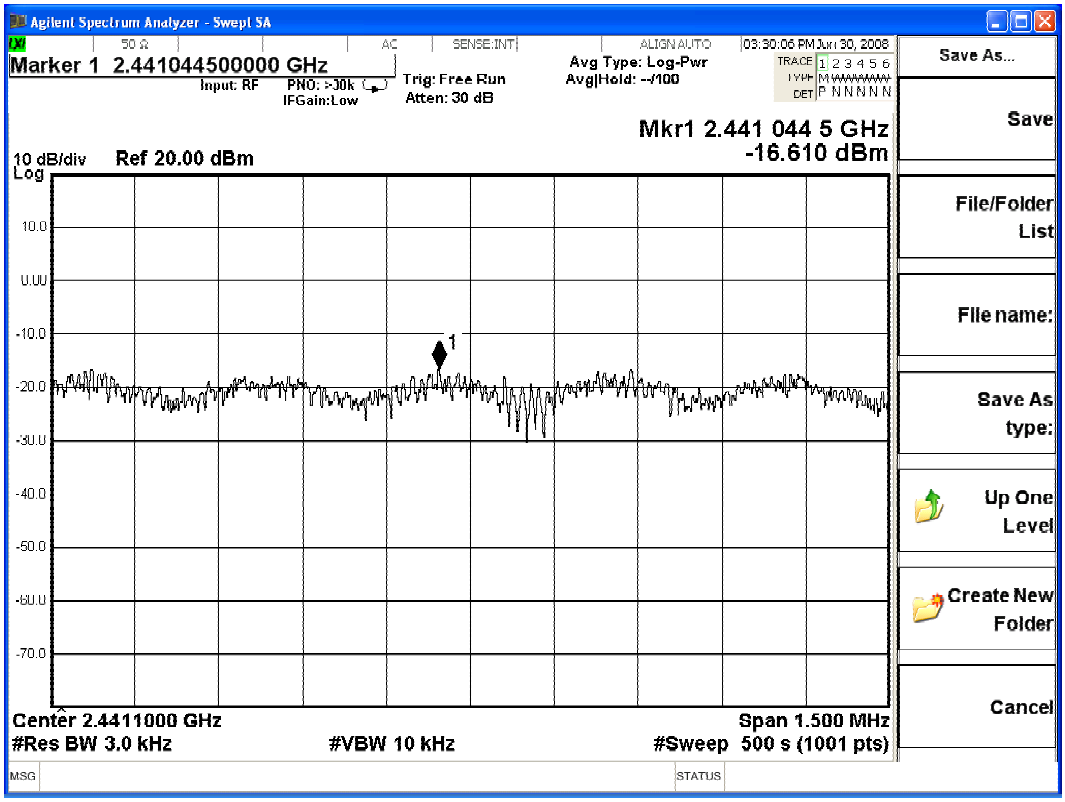
Figure Channel 1:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6Mbps)	2437.000	-16.61	< 8dBm	Pass

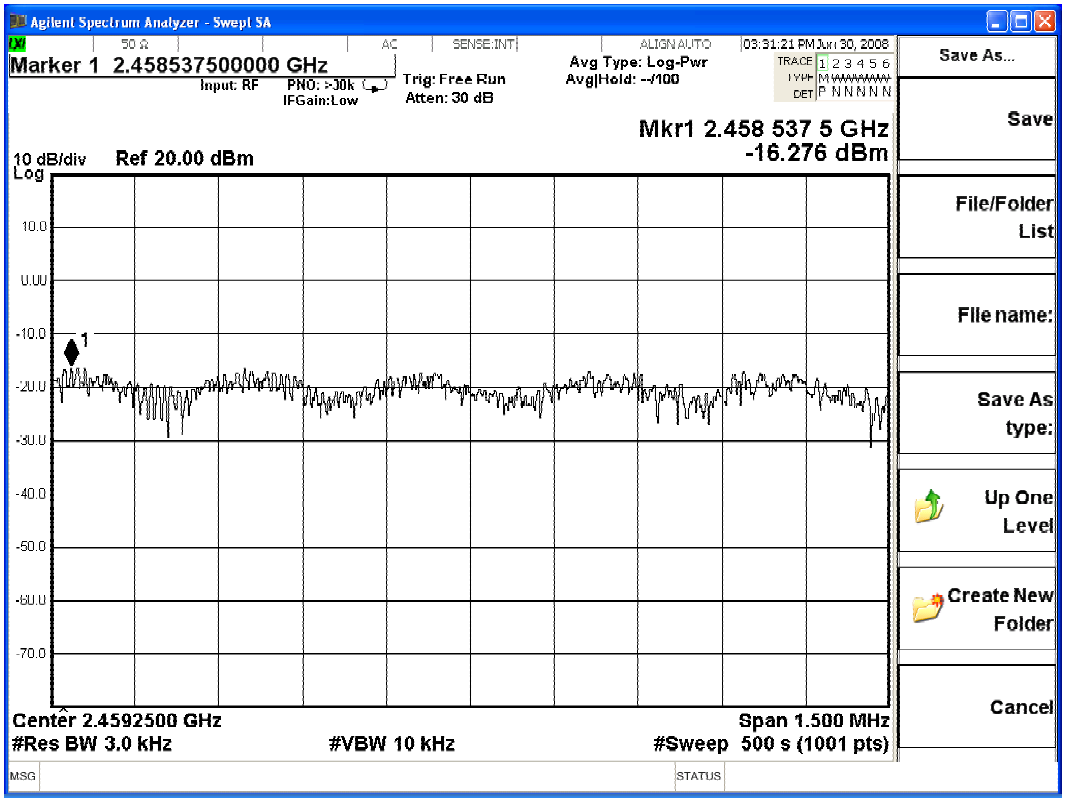
Figure Channel 6:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter (802.11g 6Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6Mbps)	2462.00	-16.276	< 8dBm	Pass

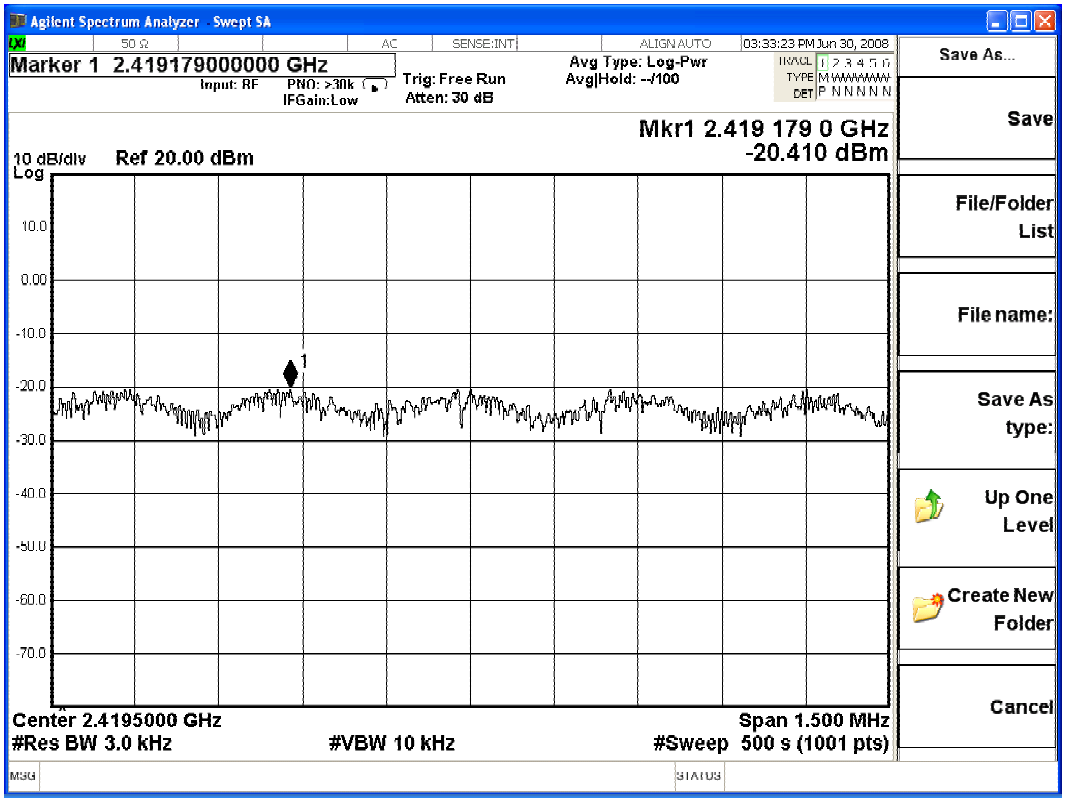
Figure Channel 11:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2412MHz) – Antenna A

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6.5Mbps)	2412.00	-20.41	< 8dBm	Pass

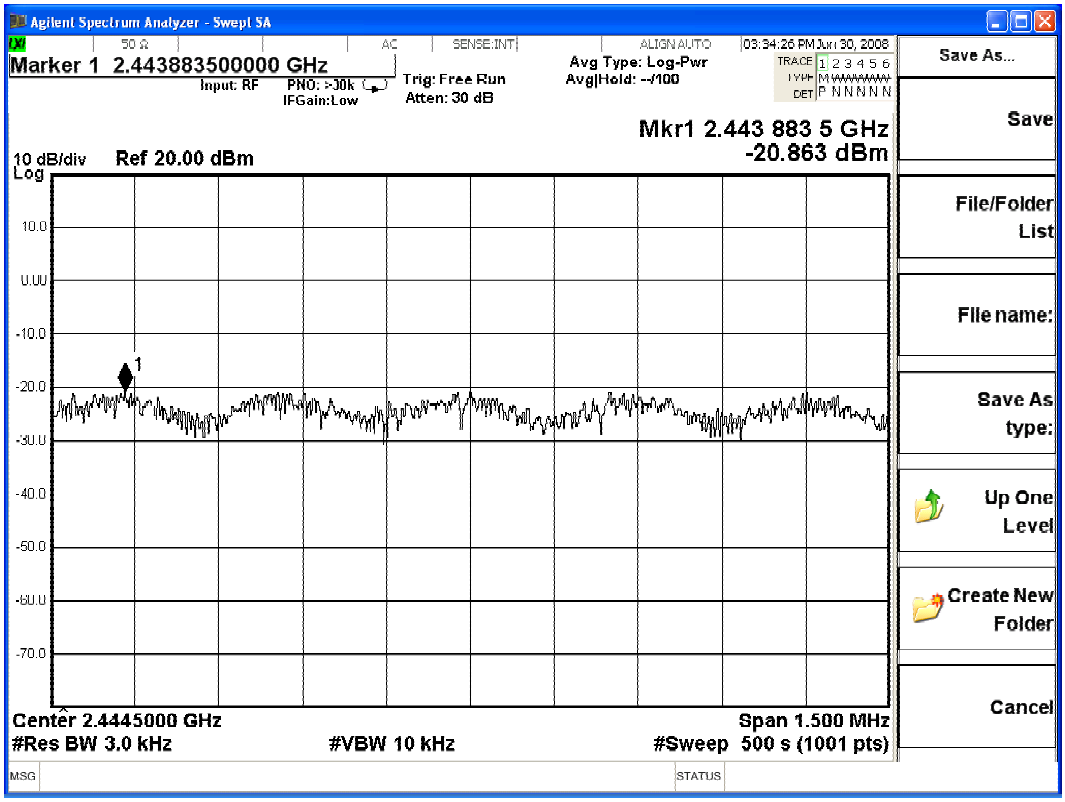
Figure Channel 1:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6.5Mbps)	2437.000	-20.863	< 8dBm	Pass

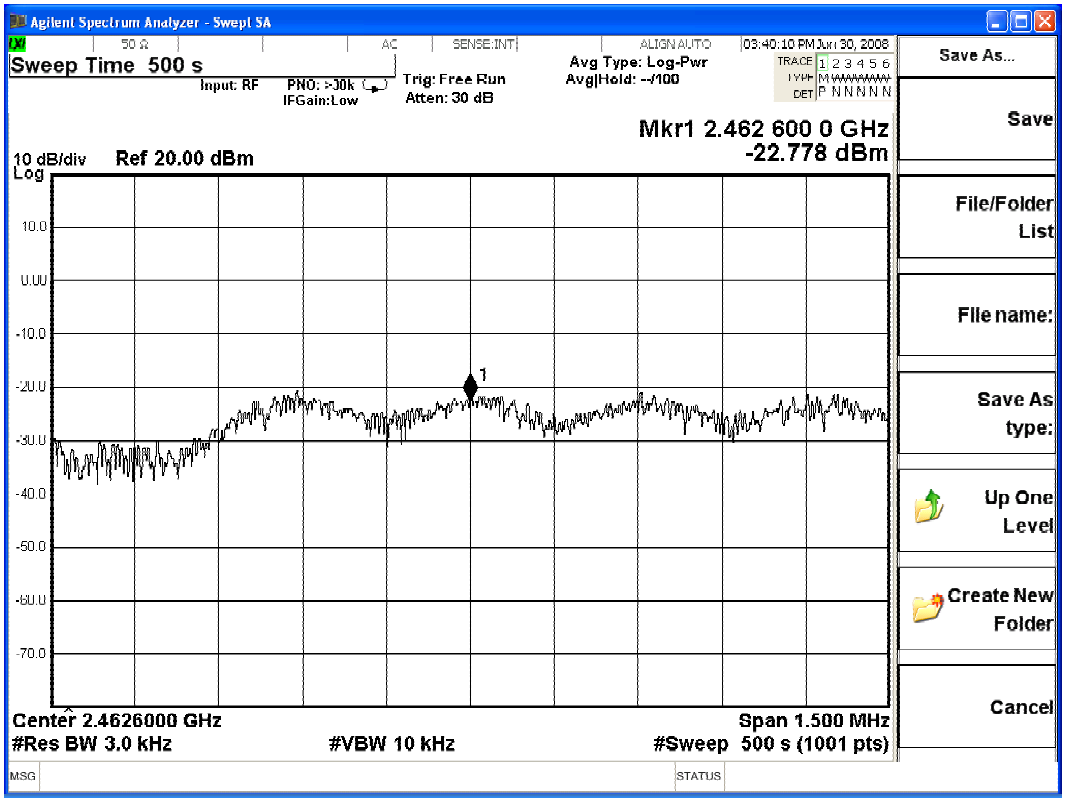
Figure Channel 6:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2462MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6.5Mbps)	2462.00	-22.778	< 8dBm	Pass

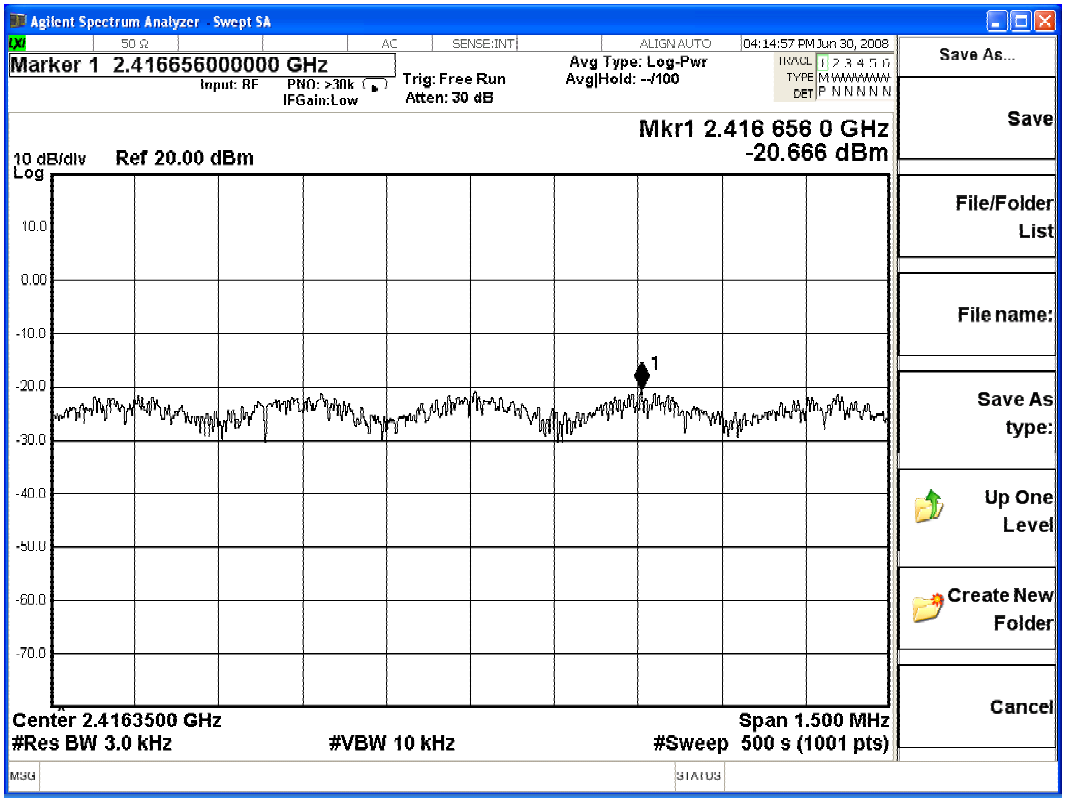
Figure Channel 11:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2412MHz) – Antenna B

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6.5Mbps)	2412.00	-20.666	< 8dBm	Pass

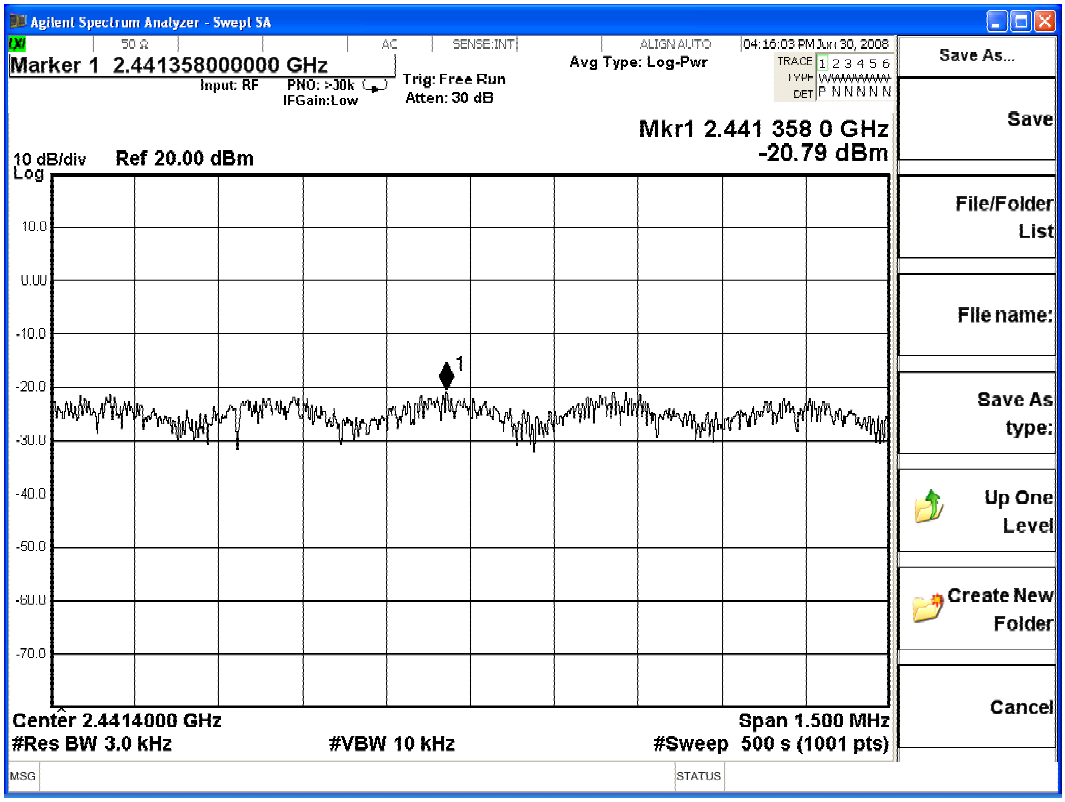
Figure Channel 1:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2437MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6.5Mbps)	2437.000	-20.79	< 8dBm	Pass

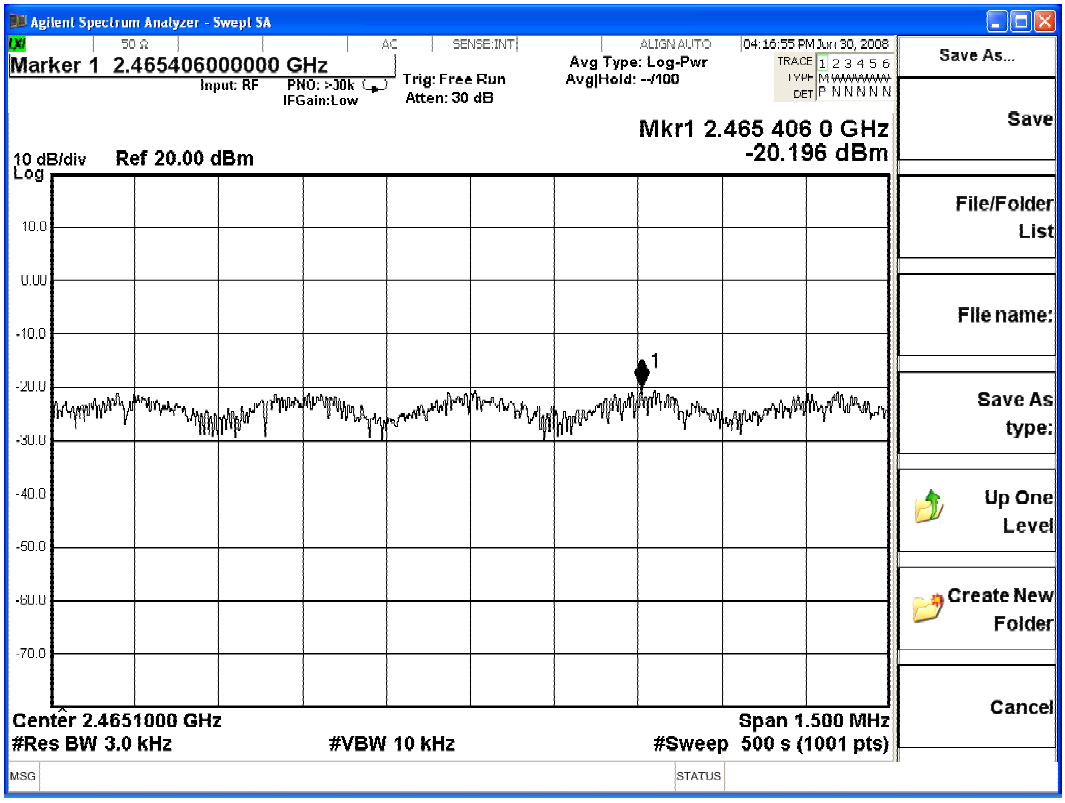
Figure Channel 6:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter (802.11n MCS8 20MBW) (2462MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6.5Mbps)	2462.00	-20.196	< 8dBm	Pass

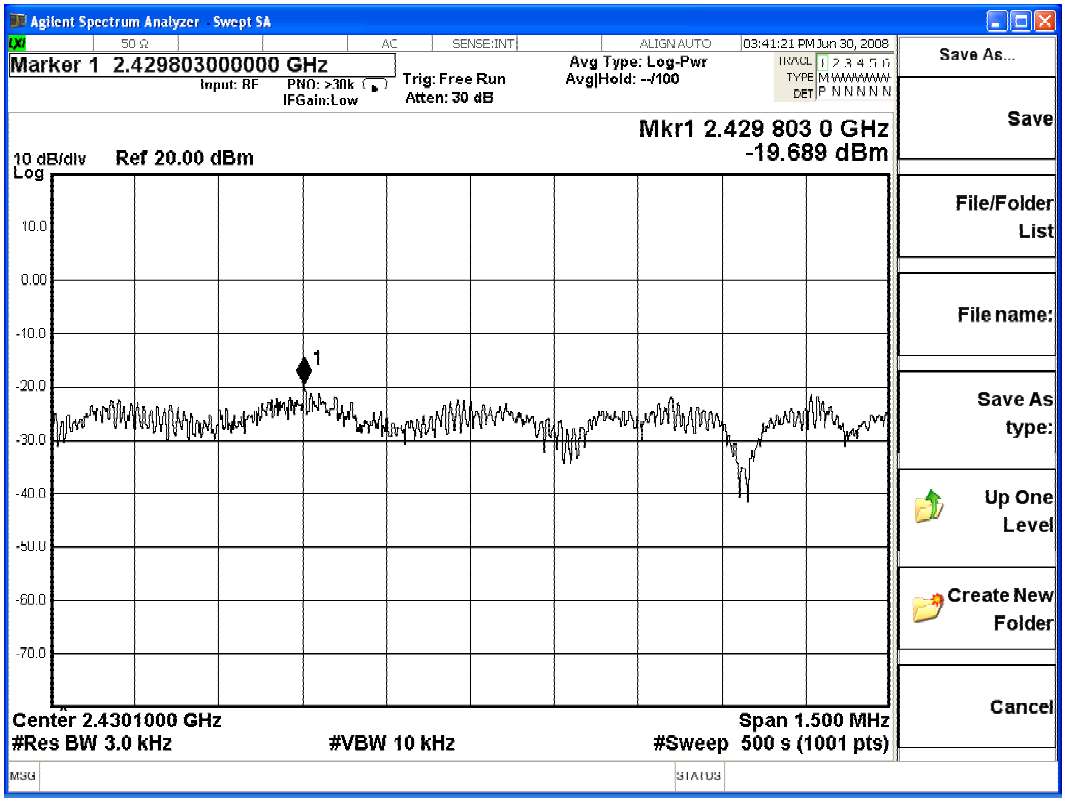
Figure Channel 11:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2422MHz) – Antenna A

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (13Mbps)	2422.00	-19.689	< 8dBm	Pass

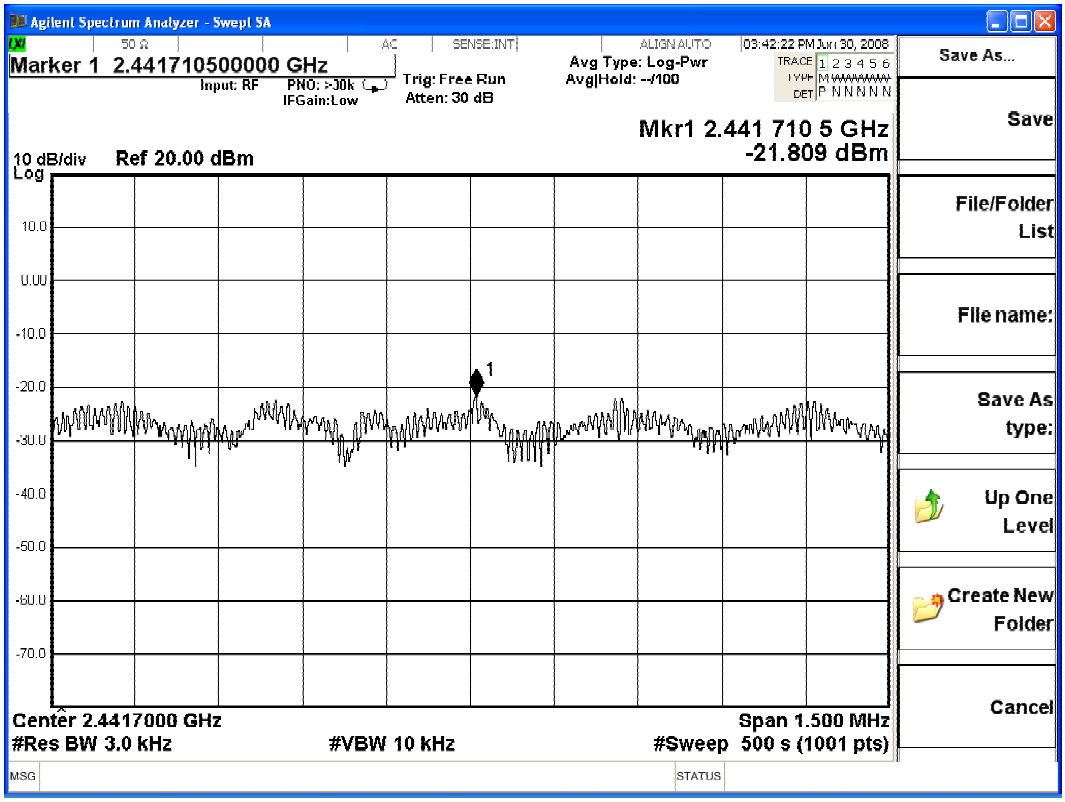
Figure Channel 1:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
4 (13Mbps)	2437.000	-21.809	< 8dBm	Pass

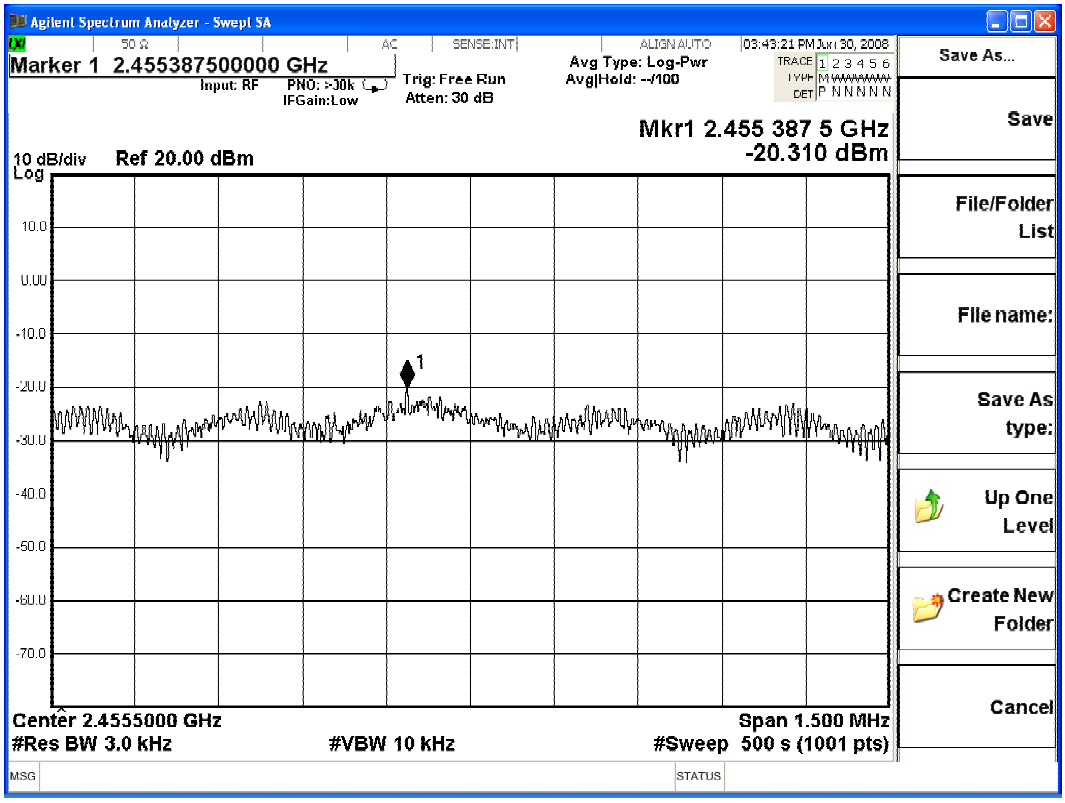
Figure Channel 4:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2452MHz) – Antenna A

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
07 (13Mbps)	2452.00	-20.31	< 8dBm	Pass

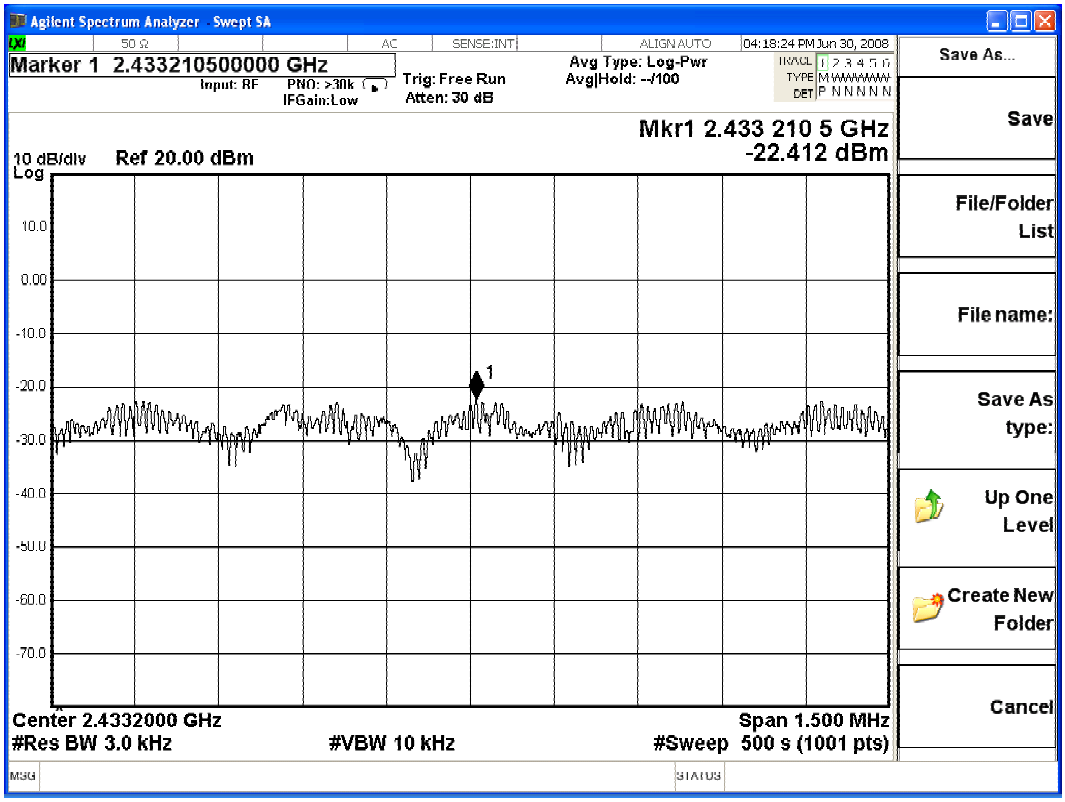
Figure Channel 7:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2422MHz) – Antenna B

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (13Mbps)	2422.00	-22.412	< 8dBm	Pass

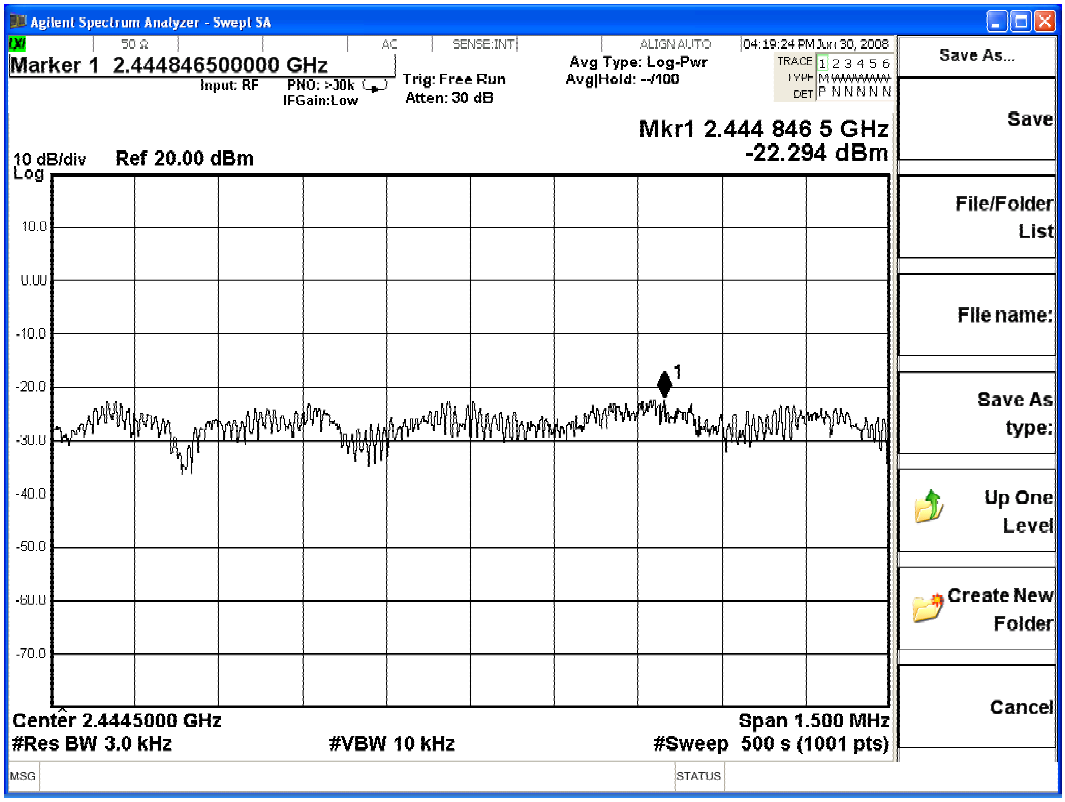
Figure Channel 1:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2437MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
4 (13Mbps)	2437.000	-22.294	< 8dBm	Pass

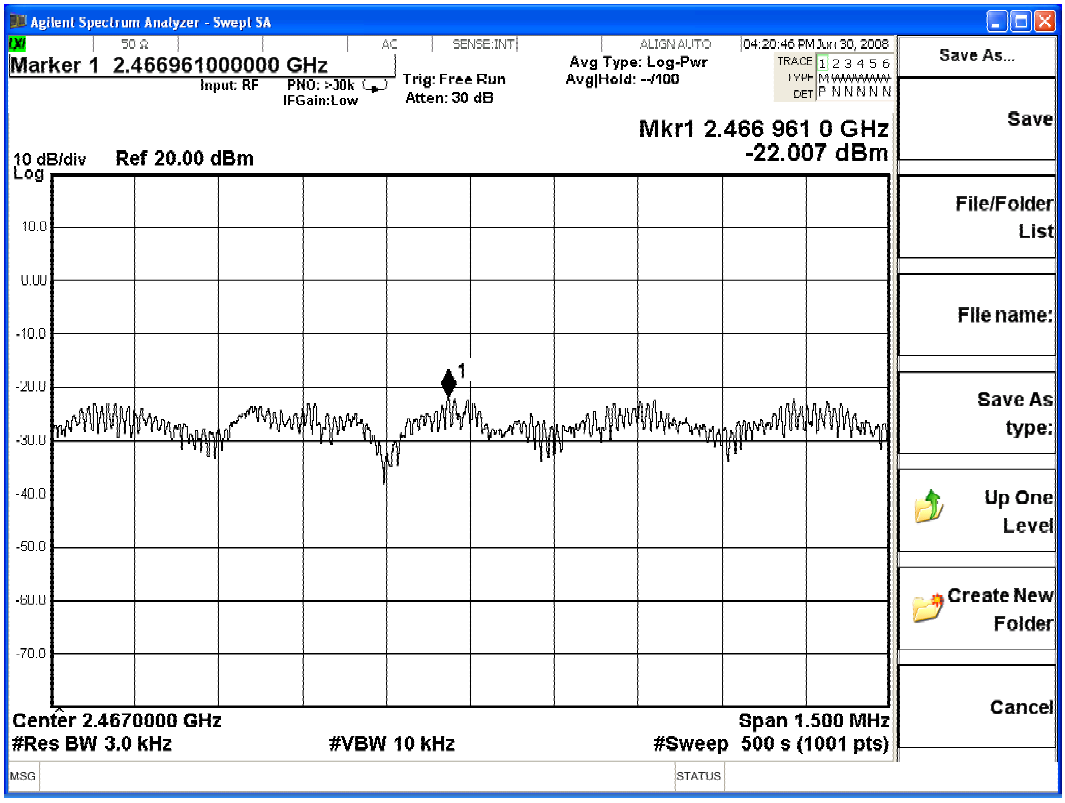
Figure Channel 4:



Product : Tablet PC
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmitter (802.11n MCS8 40MBW) (2452MHz) – Antenna B

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
07 (13Mbps)	2452.00	-22.007	< 8dBm	Pass

Figure Channel 7:



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.