



Test Report

Product Name	Tablet PC
Model No.	T8NY, InfoTablet 5500, xTablet® T8700
FCC ID	FKGT8NY
Transmitter Module.	Intel / 4965AG

Applicant	TWINHEAD INTERNATIONAL CORP.
Address	10F, 550 RUEIGUAN RD NEIHU, TAIPEI, Taiwan 114, ROC.

Date of Receipt	Sep. 20, 2007
Issued Date	Nov. 05, 2007
Report No.	079257R-RFUSP05V01

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

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

Test Report Certification

Issued Date: Nov. 05, 2007

Report No.: 079257R-RFUSP05V01



Product Name	Tablet PC
Applicant	TWINHEAD INTERNATIONAL CORP.
Address	10F, 550 RUEIGUAN RD NEIHU, TAIPEI, Taiwan 114, ROC.
Manufacturer	TWINHEAD INTERNATIONAL CORP.
Model No.	T8NY, InfoTablet 5500, xTablet® T8700
FCC ID.	FKGT8NY
Rated Voltage	AC 120V/60Hz
Working Voltage	DC 3.3V
Trade Name	Twinhead
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2006 ANSI C63.4: 2003
Test Result	Complied



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Documented By :



(Engineering Adm. Specialist /
Rita Huang)



Tested By :



(Engineer / Tim Sung)

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	Twinhead
Model No.	T8NY, InfoTablet 5500, xTablet® T8700
FCC ID	FKGT8NY
Frequency Range	2412MHz - 2462MHz, 5180-5320MHz, 5745-5825MHz
Number of Channels	11 in 2.4GHz band, 13 in 5GHz band
Channel Separation	5MHz in 2.4GHz band, 20MHz in 5GHz band
Channel Control	Auto
Data Rate	802.11b – 1, 2, 5.5, 11Mbps
	802.11a/g – 6, 9, 12, 18, 24, 36, 48, 54Mbps
Type of Modulation	DSSS/ OFDM
Antenna Type	PIFA
Antenna Gain	Refer to the table “Antenna List”
Power Adapter	LI SHIN, 0335A2065 Cable out: Non-Shielded, 1.8m with one ferrite core bonded. Power cord: Shielded, 1.8m

Antenna List (WLAN)

No.	Manufacturer	Part No.	Peak Gain
1	wgt	TWT8NWIP101D (Aux) TWT8NWIP102C (Main)	0.79 dBi for 2.4 GHz 1.0 dBi for 5.15-5.35 GHz -0.66 dBi for 5.725-5.850 GHz

Frequency of Each Channel (2.4GHz):

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2412 MHz	Channel 5:	2432 MHz	Channel 9:	2452 MHz
Channel 2:	2417 MHz	Channel 6:	2437 MHz	Channel 10:	2457 MHz
Channel 3:	2422 MHz	Channel 7:	2442 MHz	Channel 11:	2462 MHz
Channel 4:	2427 MHz	Channel 8:	2447 MHz		

Frequency of Each Channel (5GHz):

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 56:	5280 MHz	Channel 157:	5785 MHz
Channel 40:	5200 MHz	Channel 60:	5300 MHz	Channel 161:	5805 MHz
Channel 44:	5220 MHz	Channel 64:	5320 MHz	Channel 165:	5825 MHz
Channel 48:	5240 MHz	Channel 149:	5745 MHz		
Channel 52:	5260 MHz	Channel 153:	5765 MHz		

Note:

1. This device is a Tablet PC with a built-in 2.4GHz and 5GHz transceiver.
2. The EUT is including three models for different marketing requirement.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps, 802.11g and 802.11a are 6Mbps)
5. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
6. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

1.2. Operational Description

EUT is a Tablet PC with a built-in WLAN and Bluetooth transceiver. There are 11 channels in 2412 – 2462MHz and 13 channels in 5745 – 5825MHz. The channels are separated by 5MHz in 2.4GHz band and 20MHz in 5GHz band. This device supports the data rates of 1, 2, 5.5, 11Mbps in 802.11b mode and 6, 9, 12, 18, 24, 36, 48, 54Mbps in 802.11a/g mode. The signals are modulated by DSSS in 802.11b mode and OFDM in 802.11a/g mode. The antennas are Connector and use diversity to improve the receiving sensitivity.

This Tablet PC, complied with IEEE 802.11b, IEEE 802.11g and IEEE 802.11a, 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 network wires. 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 IEEE 802.11a network.

Test Mode	Mode 1: Transmitter 802.11a
	Mode 2: Transmitter 802.11b
	Mode 3: Transmitter 802.11g

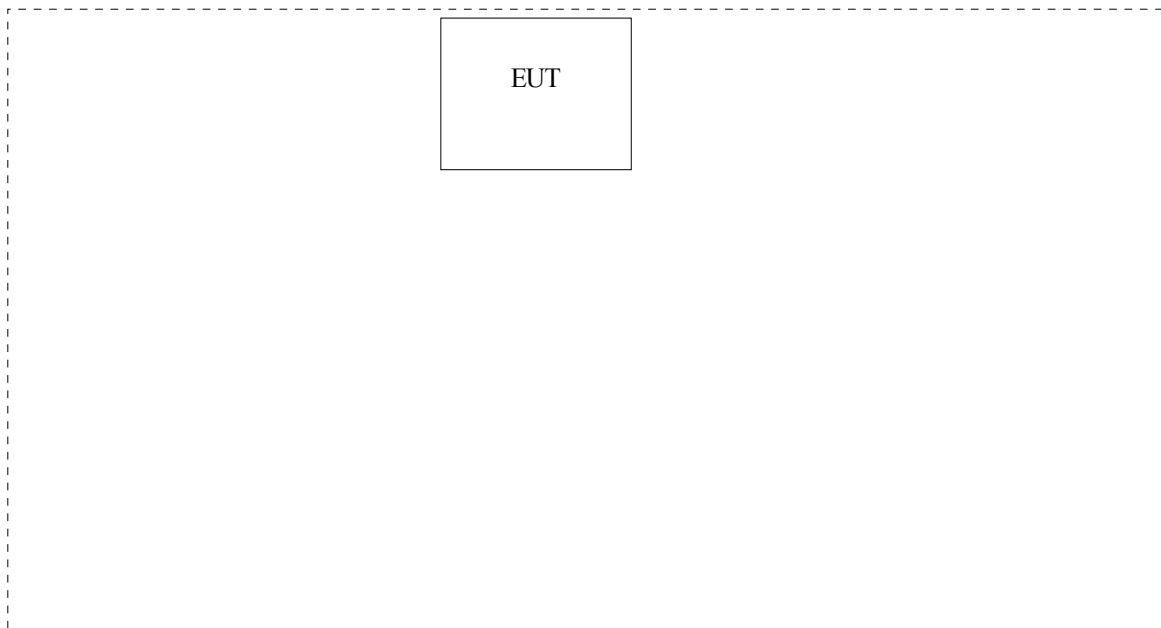
1.3. Tested System Details

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 1.4
- (2) Execute CRTU Version 4.0.18.0000 on the EUT.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press “OK” to start the continuous transmission.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

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

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Reference 31040/SIT1300F2



Accreditation on NVLAP
NVLAP Lab Code: 200533-0



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E-Mail : service@quietek.com

FCC Accreditation Number: TW1014



2. Conducted Emission

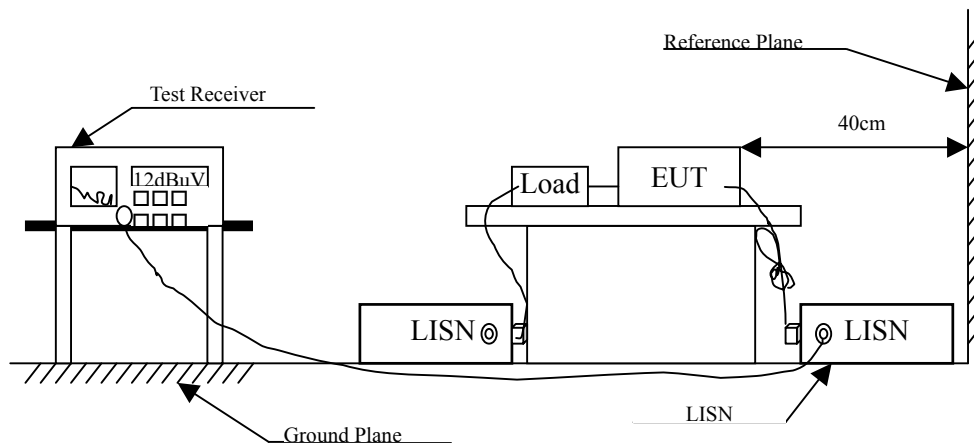
2.1. Test Equipment

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

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2007	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2007	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2007	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2007	
5	No.1 Shielded Room			N/A	

Note: All equipments are calibrated every one year.

2.2. Test Setup



2.3. Limits

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

2.4. Test Procedure

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

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

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Tablet PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter 802.11a (5785MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.189	0.725	45.610	46.335	-18.551	64.886
0.249	0.348	36.460	36.808	-26.363	63.171
0.379	0.300	30.810	31.110	-28.347	59.457
0.439	0.300	33.130	33.430	-24.313	57.743
0.509	0.300	32.470	32.770	-23.230	56.000
0.569	0.300	32.830	33.130	-22.870	56.000
Average					
0.189	0.725	37.440	38.165	-16.721	54.886
0.249	0.348	29.460	29.808	-23.363	53.171
0.379	0.300	26.510	26.810	-22.647	49.457
0.439	0.300	30.470	30.770	-16.973	47.743
0.509	0.300	29.350	29.650	-16.350	46.000
0.569	0.300	29.580	29.880	-16.120	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 802.11a (5785MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.193	0.300	43.870	44.170	-20.601	64.771
0.253	0.300	37.230	37.530	-25.527	63.057
0.313	0.300	33.560	33.860	-27.483	61.343
0.443	0.310	33.470	33.780	-23.849	57.629
0.503	0.310	36.150	36.460	-19.540	56.000
0.563	0.310	32.570	32.880	-23.120	56.000
Average					
0.193	0.300	36.220	36.520	-18.251	54.771
0.253	0.300	31.090	31.390	-21.667	53.057
0.313	0.300	27.410	27.710	-23.633	51.343
0.443	0.310	30.680	30.990	-16.639	47.629
0.503	0.310	34.190	34.500	-11.500	46.000
0.563	0.310	28.700	29.010	-16.990	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 1
 Test Mode : Mode 2: Transmitter 802.11b (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.193	0.698	49.660	50.358	-14.413	64.771
0.244	0.360	43.400	43.760	-19.554	63.314
0.568	0.300	46.230	46.530	-9.470	56.000
0.744	0.310	41.300	41.610	-14.390	56.000
0.963	0.310	33.850	34.160	-21.840	56.000
1.494	0.330	31.660	31.990	-24.010	56.000
Average					
0.193	0.698	43.380	44.078	-10.693	54.771
0.244	0.360	38.300	38.660	-14.654	53.314
0.568	0.300	38.800	39.100	-6.900	46.000
0.744	0.310	34.050	34.360	-11.640	46.000
0.963	0.310	27.770	28.080	-17.920	46.000
1.494	0.330	20.340	20.670	-25.330	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 802.11b (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.189	0.300	46.920	47.220	-17.666	64.886
0.255	0.300	42.080	42.380	-20.620	63.000
0.443	0.310	38.660	38.970	-18.659	57.629
0.564	0.310	43.740	44.050	-11.950	56.000
0.759	0.320	41.070	41.390	-14.610	56.000
1.334	0.330	27.760	28.090	-27.910	56.000
Average					
0.189	0.300	39.590	39.890	-14.996	54.886
0.255	0.300	36.160	36.460	-16.540	53.000
0.443	0.310	33.030	33.340	-14.289	47.629
0.564	0.310	36.270	36.580	-9.420	46.000
0.759	0.320	32.970	33.290	-12.710	46.000
1.334	0.330	13.890	14.220	-31.780	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 802.11g (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.189	0.725	49.150	49.875	-15.011	64.886
0.244	0.360	44.960	45.320	-17.994	63.314
0.334	0.300	41.800	42.100	-18.643	60.743
0.556	0.300	38.120	38.420	-17.580	56.000
0.720	0.310	39.720	40.030	-15.970	56.000
1.251	0.320	24.070	24.390	-31.610	56.000
Average					
0.189	0.725	39.960	40.685	-14.201	54.886
0.244	0.360	34.730	35.090	-18.224	53.314
0.334	0.300	27.530	27.830	-22.913	50.743
0.556	0.300	27.030	27.330	-18.670	46.000
0.720	0.310	33.310	33.620	-12.380	46.000
1.251	0.320	16.190	16.510	-29.490	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 802.11g (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.193	0.300	43.990	44.290	-20.481	64.771
0.250	0.300	37.350	37.650	-25.493	63.143
0.380	0.310	30.320	30.630	-28.799	59.429
0.500	0.310	35.840	36.150	-19.850	56.000
0.690	0.310	32.300	32.610	-23.390	56.000
1.005	0.320	28.190	28.510	-27.490	56.000
Average					
0.193	0.300	35.650	35.950	-18.821	54.771
0.250	0.300	30.620	30.920	-22.223	53.143
0.380	0.310	25.900	26.210	-23.219	49.429
0.500	0.310	32.180	32.490	-13.510	46.000
0.690	0.310	27.390	27.700	-18.300	46.000
1.005	0.320	23.570	23.890	-22.110	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

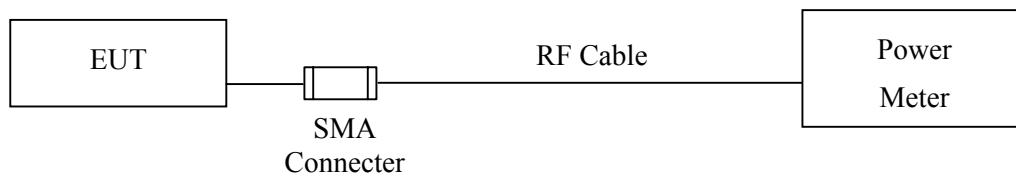
The following test equipments are used during the radiated emission tests:

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

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

3.2. Test Setup

Conduction Power Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

- (1) The transmitter output was connected the Power Meter.
- (2) Select the middle channel of the operation band, and measure the peak output power value of each data rate.
- (3) Find out the worst-case data rate of previous procedure, and dependence on which data rate to measure the high and the low channel.
- (4) The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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 802.11a

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6	9	12	18	24	36	48	54	
149	5745.00	18.82	--	--	--	--	--	--	--	1 Watt= 30 dBm
157	5785.00	18.74	18.65	18.68	18.69	18.62	18.63	18.67	18.63	1 Watt= 30 dBm
165	5825.00	18.82	--	--	--	--	--	--	--	1 Watt= 30 dBm

Product : Tablet PC
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b

Peak Power Output						
Channel No.	Frequency (MHz)	Data Rate				Required Limit
		1	2	5.5	11	
1	2412.00	18.85	--	--	--	1 Watt= 30 dBm
6	2437.00	18.87	18.75	18.78	18.69	1 Watt= 30 dBm
11	2462.00	18.71	--	--	--	1 Watt= 30 dBm

Product : Tablet PC
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter 802.11g

Peak Power Output										
Channel No.	Frequency (MHz)	Data Rate								Required Limit
		6	9	12	18	24	36	48	54	
1	2412.00	21.38	--	--	--	--	--	--	--	1 Watt= 30 dBm
6	2437.00	21.54	21.41	21.38	21.37	21.43	21.36	21.38	21.37	1 Watt= 30 dBm
11	2462.00	21.83	--	--	--	--	--	--	--	1 Watt= 30 dBm

4. Radiated Emission

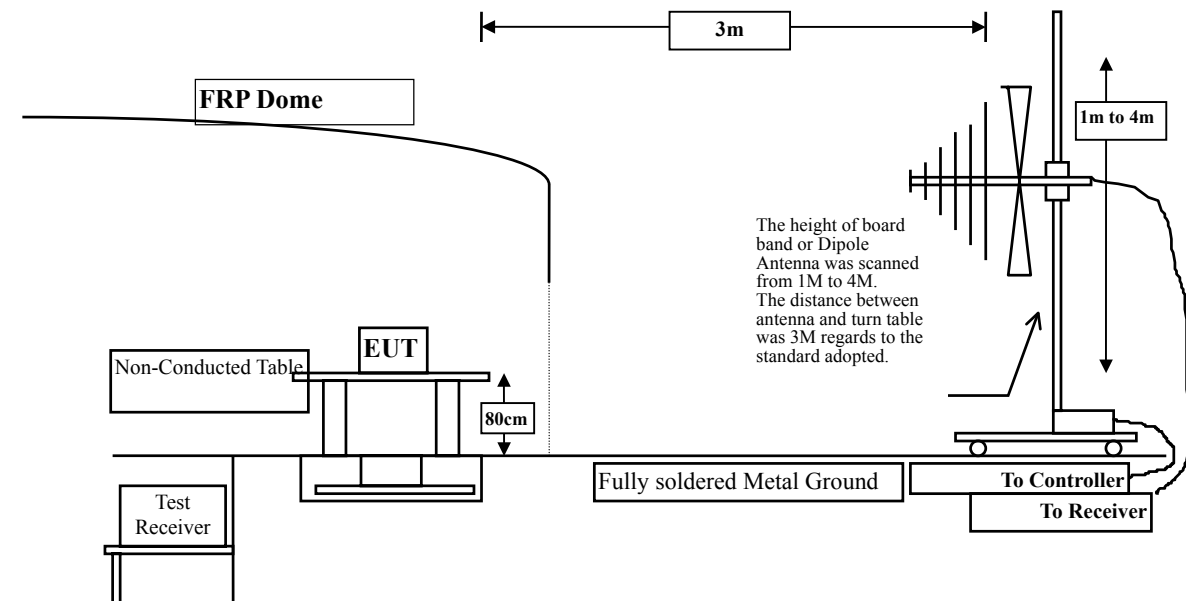
4.1. Test Equipment

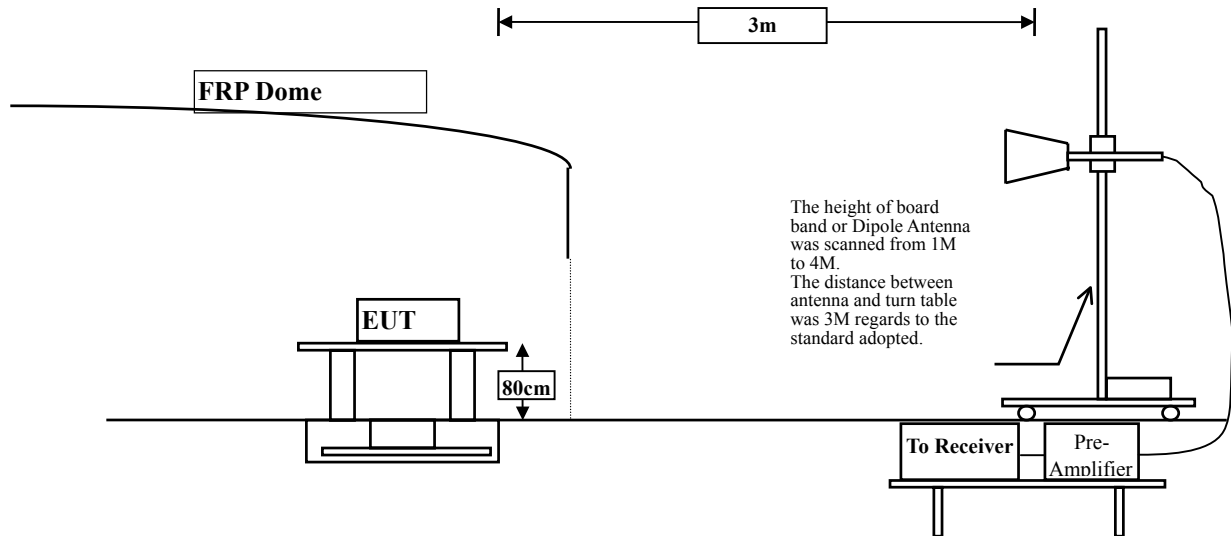
The following test equipment are used during the radiated emission test:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 1	Test Receiver	R & S	ESCS 30 / 825442/14	May, 2007
	Spectrum Analyzer	Advantest	R3261C / 71720140	May, 2007
	Pre-Amplifier	HP	8447D/3307A01812	May, 2007
	Bilog Antenna	Chase	CBL6112B / 12452	Sep., 2007
	Horn Antenna	EM	EM6917 / 103325	May, 2007
Site # 2	Test Receiver	R & S	ESCS 30 / 825442/17	May, 2007
	Spectrum Analyzer	Advantest	R3261C / 71720609	May, 2007
	Pre-Amplifier	HP	8447D/3307A01814	May, 2007
	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2007
	Horn Antenna	EM	EM6917 / 103325	May, 2007
Site # 3	X Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
	X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
	X Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
	X Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
	X Horn Antenna	ETS	3115 / 0005-6160	July, 2007
	X Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2007

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

4.2. Test Setup





4.3. Limits

➤ General Radiated Emission 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 :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field strength of harmonics measurement.

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

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

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

4.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 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 802.11a (5745 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector					
11490.000	15.526	36.155	51.680	-22.320	74.000
17235.000	14.291	36.163	50.454	-23.546	74.000
Average Detector					
--					
Vertical					
Peak Detector					
11490.000	15.526	35.976	51.501	-22.499	74.000
17235.000	14.291	36.462	50.753	-23.247	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5785MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
11570.000	14.910	36.318	51.227	-22.773	74.000
17355.000	14.144	37.019	51.164	-22.836	74.000
Average Detector					
--					
Vertical					
Peak Detector					
11570.000	14.910	35.972	50.881	-23.119	74.000
17355.000	14.144	36.622	50.767	-23.233	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5825 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
11650.000	14.691	36.194	50.884	-23.116	74.000
17475.000	13.864	37.227	51.091	-22.909	74.000
Average Detector					
--					
Vertical					
Peak Detector					
11650.000	14.691	35.531	50.221	-23.779	74.000
17475.000	13.864	35.937	49.801	-24.199	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2412MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
4824.000	3.723	40.684	44.407	-29.593	74.000
7236.000	9.439	37.349	46.787	-27.213	74.000
9648.000	11.829	36.820	48.649	-25.351	74.000
Average Detector					
--					
Vertical					
Peak Detector					
4824.000	3.723	38.032	41.755	-32.245	74.000
7236.000	9.439	37.718	47.156	-26.844	74.000
9648.000	11.829	37.669	49.498	-24.502	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
4874.000	3.893	37.422	41.314	-32.686	74.000
7311.000	9.624	36.835	46.459	-27.541	74.000
9748.000	11.805	36.954	48.760	-25.240	74.000
Average Detector					
--					
Vertical					
Peak Detector					
4874.000	3.893	38.196	42.088	-31.912	74.000
7311.000	9.624	36.752	46.376	-27.624	74.000
9748.000	11.805	36.244	48.050	-25.950	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter 802.11b (2462MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
4924.000	4.075	37.012	41.086	-32.914	74.000
7386.000	9.812	36.982	46.794	-27.206	74.000
9848.000	11.819	36.084	47.903	-26.097	74.000
Average Detector					
--					
Vertical					
Peak Detector					
4924.000	4.075	36.221	40.295	-33.705	74.000
7386.000	9.812	36.739	46.551	-27.449	74.000
9848.000	11.819	36.107	47.926	-26.074	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

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

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
4824.000	3.723	38.346	42.069	-31.931	74.000
7236.000	9.439	37.819	47.257	-26.743	74.000
9648.000	11.829	37.238	49.067	-24.933	74.000
Average Detector					
--					
Vertical					
Peak Detector					
4824.000	3.723	37.010	40.733	-33.267	74.000
7236.000	9.439	36.026	45.464	-28.536	74.000
9648.000	11.829	36.189	48.018	-25.982	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmitter 802.11g (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
4874.000	3.893	37.185	41.077	-32.923	74.000
7311.000	9.624	36.159	45.783	-28.217	74.000
9748.000	11.805	35.630	47.436	-26.564	74.000
Average Detector					
--					
Vertical					
Peak Detector					
4874.000	3.893	36.792	40.684	-33.316	74.000
7311.000	9.624	35.759	45.383	-28.617	74.000
9748.000	11.805	35.715	47.521	-26.479	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11g (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
4924.000	4.075	36.517	40.591	-33.409	74.000
7386.000	9.812	36.504	46.316	-27.684	74.000
9848.000	11.819	35.757	47.576	-26.424	74.000
Average Detector					
--					
Vertical					
Peak Detector					
4924.000	4.075	36.544	40.618	-33.382	74.000
7386.000	9.812	36.955	46.767	-27.233	74.000
9848.000	11.819	36.646	48.465	-25.535	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Tablet PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5785 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
49.400	9.191	24.060	33.251	-6.749	40.000
119.725	12.953	18.543	31.496	-12.004	43.500
459.225	18.563	16.732	35.295	-10.705	46.000
500.450	18.352	16.156	34.508	-11.492	46.000
580.475	20.040	11.441	31.481	-14.519	46.000
721.125	20.929	12.229	33.158	-12.842	46.000
Vertical					
Peak Detector					
49.400	8.137	26.431	34.568	-5.432	40.000
97.900	10.460	28.255	38.715	-4.785	43.500
459.225	18.400	13.060	31.460	-14.540	46.000
500.450	18.354	13.714	32.068	-13.932	46.000
721.125	22.229	8.277	30.506	-15.494	46.000
961.200	23.009	13.162	36.171	-17.829	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : Tablet PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
49.400	9.191	24.718	33.909	-6.091	40.000
119.725	12.953	18.472	31.425	-12.075	43.500
459.225	18.563	14.677	33.240	-12.760	46.000
500.450	18.352	16.632	34.984	-11.016	46.000
534.400	18.780	13.490	32.270	-13.730	46.000
721.125	20.929	12.523	33.452	-12.548	46.000
Vertical					
Peak Detector					
61.525	6.586	29.628	36.214	-3.786	40.000
97.900	10.460	29.621	40.081	-3.419	43.500
459.225	18.400	11.099	29.499	-16.501	46.000
500.450	18.354	15.454	33.808	-12.192	46.000
679.900	20.135	9.863	29.998	-16.002	46.000
721.125	22.229	9.989	32.218	-13.782	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : Tablet PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11g (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
42.125	13.519	18.880	32.399	-7.601	40.000
119.725	12.953	18.725	31.678	-11.822	43.500
199.750	9.716	20.193	29.909	-13.591	43.500
459.225	18.563	15.385	33.948	-12.052	46.000
500.450	18.352	17.137	35.489	-10.511	46.000
721.125	20.929	12.666	33.595	-12.405	46.000
Vertical					
Peak Detector					
49.400	8.137	28.406	36.543	-3.457	40.000
97.900	10.460	29.180	39.640	-3.860	43.500
459.225	18.400	11.670	30.070	-15.930	46.000
500.450	18.354	14.773	33.127	-12.873	46.000
679.900	20.135	10.426	30.561	-15.439	46.000
721.125	22.229	10.882	33.111	-12.889	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

5. Band Edge

5.1. Test Equipment

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

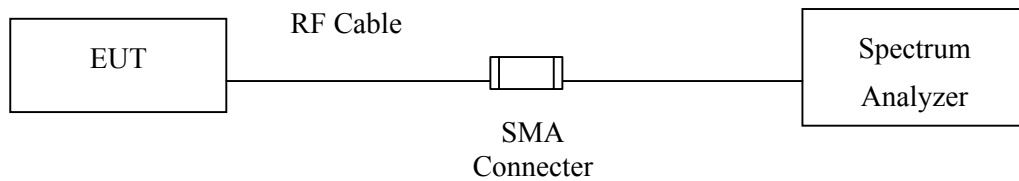
Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
X Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
X Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
X Horn Antenna	ETS	3115 / 0005-6160	July, 2007
X Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2007

Test Site: Site 3

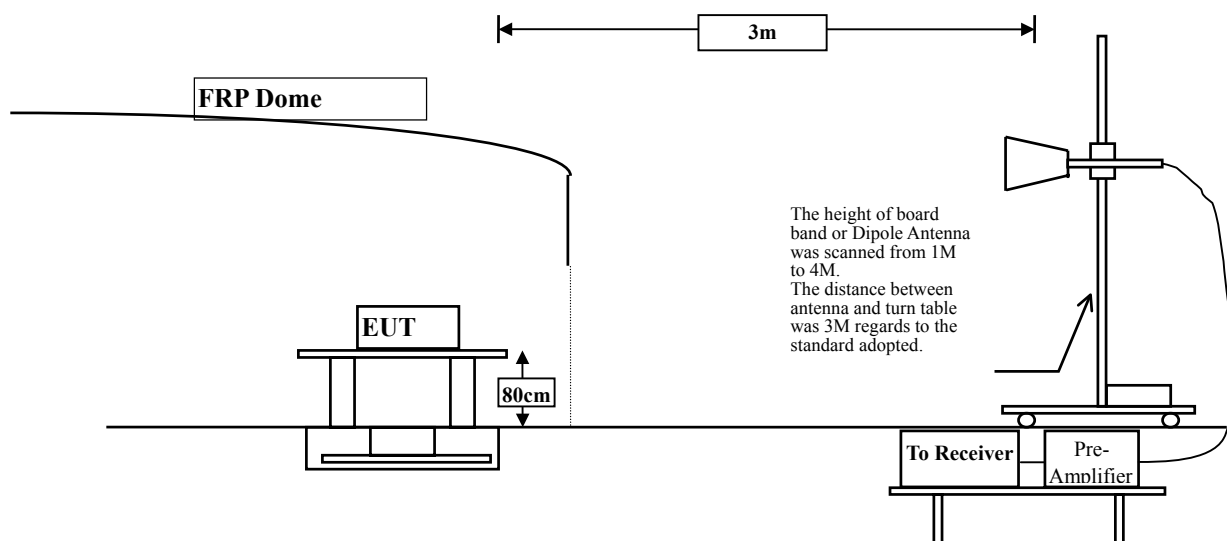
- Note:
1. All equipments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

5.2. Test Setup

RF Conducted Measurement:



RF Radiated 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 and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The frequency range from 30MHz to 10th harmonics is checked.

The average value of the radiated emission is calculated according to the following table from FCC15.35(c).

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

5.5. Uncertainty

Conducted is ± 1.27 dB

Radiated is ± 3.9 dB

5.6. Test Result of Band Edge

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5745MHz)

RF Conducted Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
149	< 5725	>20	Pass

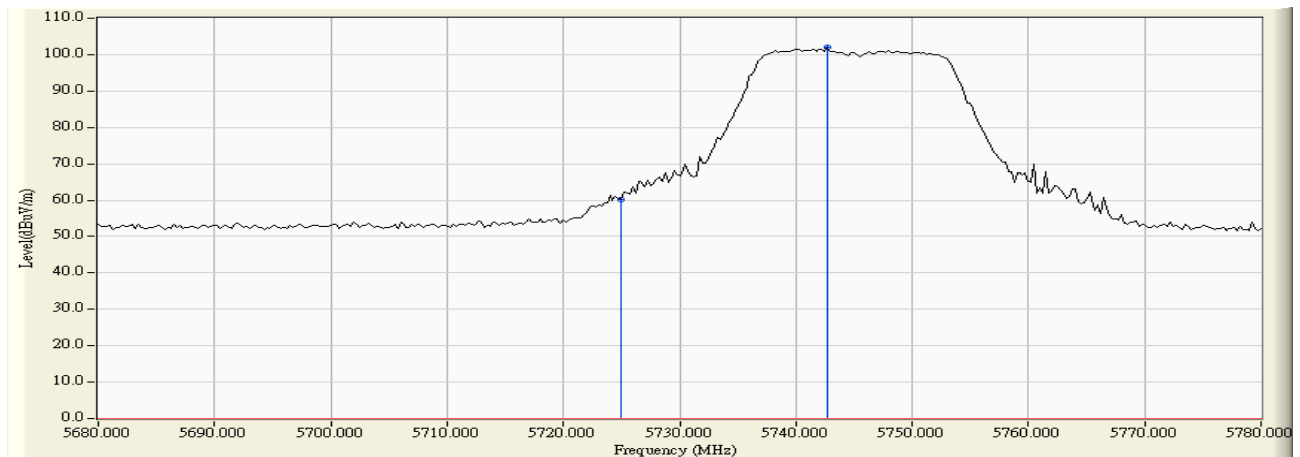
Figure Channel 149:

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
149 (Peak)	5725.000	4.802	55.285	60.087	74.00	54.00	Pass
149 (Peak)	5742.750	4.827	97.172	101.999	74.00	54.00	Pass

Figure Channel 149:

Horizontal (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5745MHz)

RF Conducted Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
149	< 5725	>20	Pass

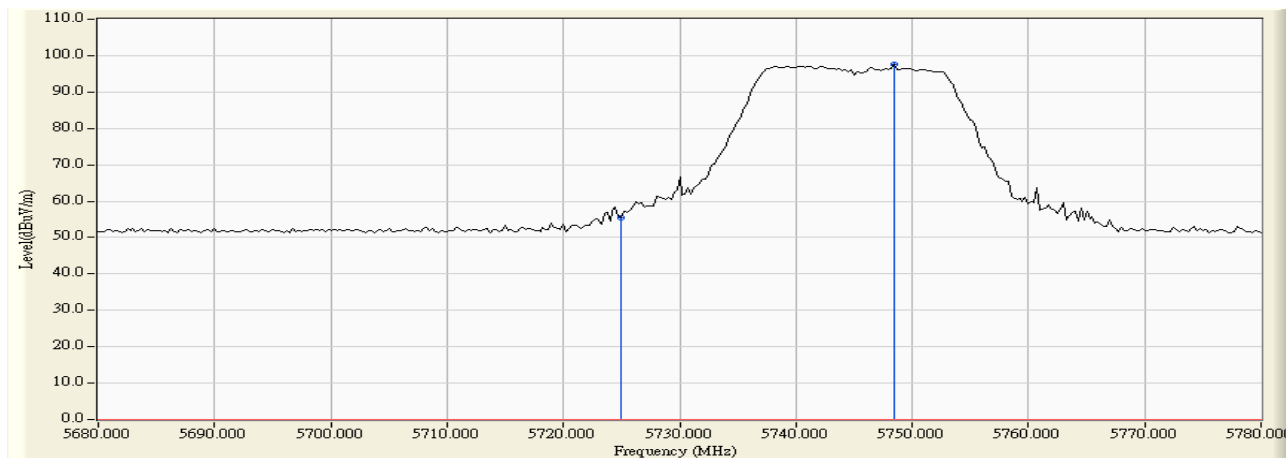
Figure Channel 149:

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
149 (Peak)	5725.000	4.802	50.538	55.340	74.00	54.00	Pass
149 (Peak)	5748.500	4.835	92.703	97.538	74.00	54.00	Pass

Figure Channel 149:

Vertical (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5825MHz)

RF Conducted Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
165	> 5850	>20	Pass

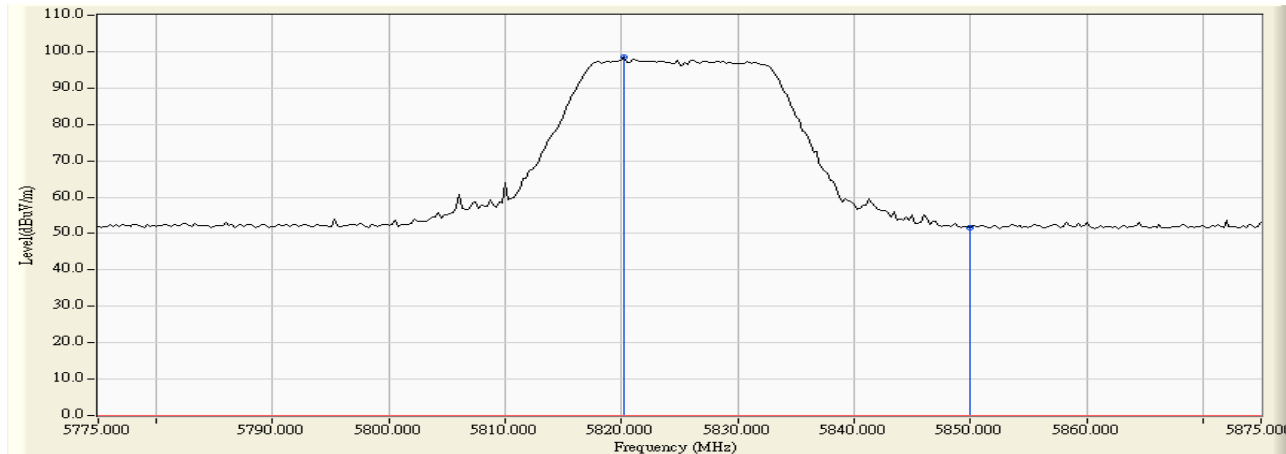
Figure Channel 165:

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
165 (Peak)	5820.250	4.941	93.469	98.410	74.00	54.00	Pass
165 (Peak)	5850.000	4.982	46.685	51.667	74.00	54.00	Pass

Figure Channel 165:

Horizontal (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5825MHz)

RF Conducted Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
165	> 5850	>20	Pass

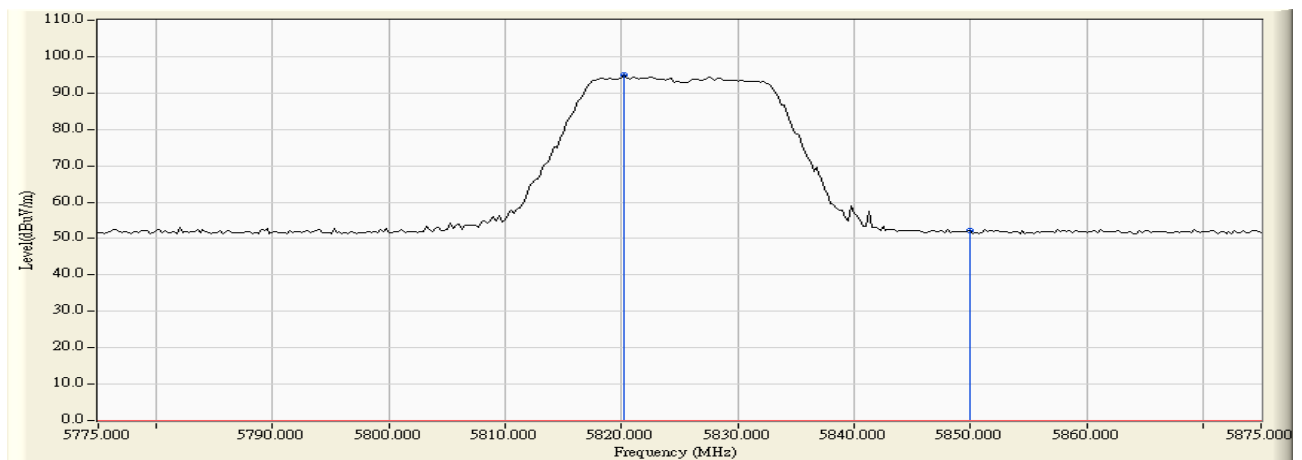
Figure Channel 165:

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
165 (Peak)	5820.250	4.941	89.950	94.891	74.00	54.00	Pass
165 (Peak)	5850.000	4.982	47.240	52.222	74.00	54.00	Pass

Figure Channel 165:

Vertical (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2412MHz)

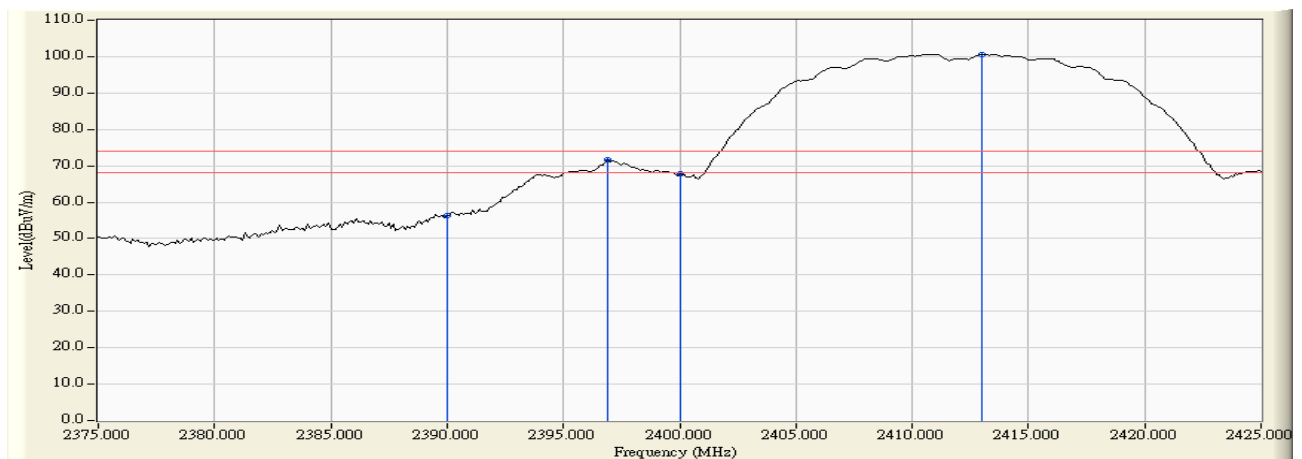
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Horizontal)	<2400	>20	Pass

RF Radiated Measurement (Horizontal):

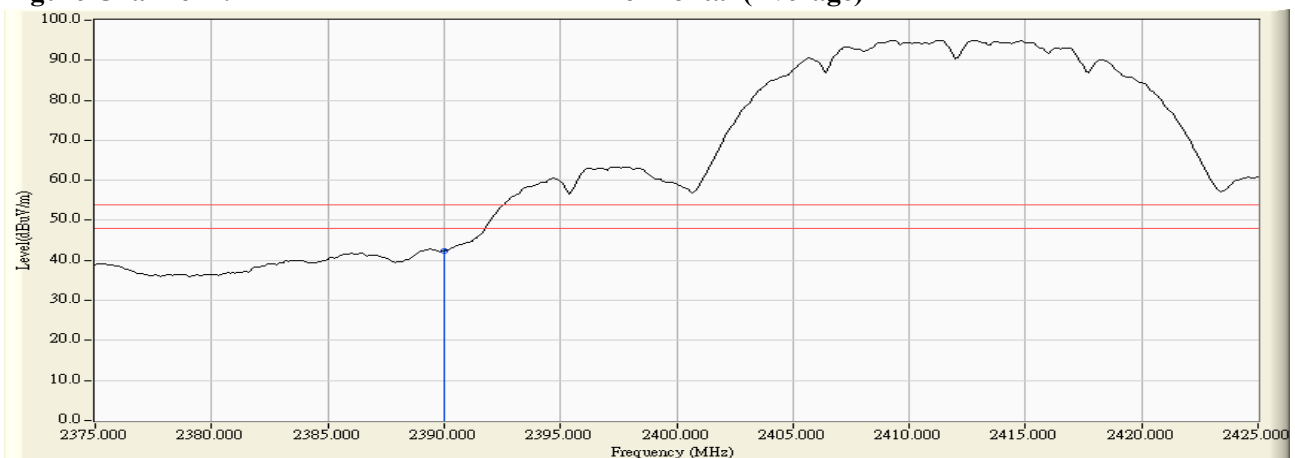
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2390.000	-2.378	58.698	56.321	74.00	54.00	Pass
1 (Average)	2390.000	-2.378	44.770	42.393	74.00	54.00	Pass
1 (Peak)	2396.900	-2.344	74.077	71.734	74.00	54.00	Pass
1 (Peak)	2400.000	-2.328	70.147	67.819	74.00	54.00	Pass
1 (Peak)	2413.000	-2.263	102.954	100.691	74.00	54.00	Pass

Figure Channel 1: Horizontal (Peak)



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

Figure Channel 1: Horizontal (Average)



Note: RBW=1MHz, VBW=300Hz, Sweep=500ms

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2412MHz)

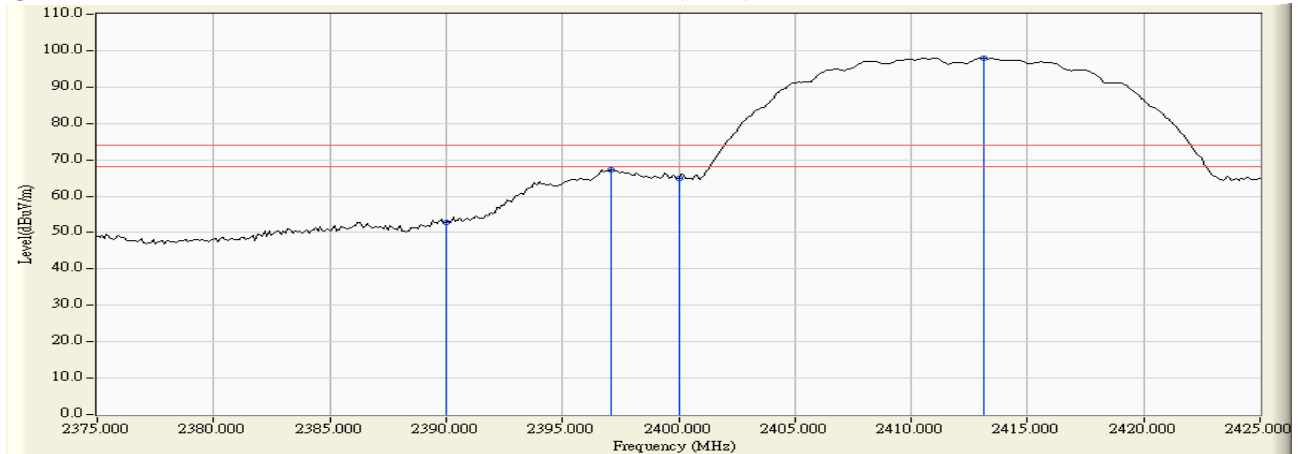
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Vertical)	<2400	>20	Pass

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2390.000	-2.378	55.185	52.807	74.00	54.00	Pass
1 (Peak)	2397.100	-2.342	69.587	67.245	74.00	54.00	Pass
1 (Peak)	2400.000	-2.328	67.181	64.853	74.00	54.00	Pass
1 (Peak)	2413.100	-2.262	100.182	97.920	74.00	54.00	Pass

Figure Channel 1: Vertical (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2462MHz)

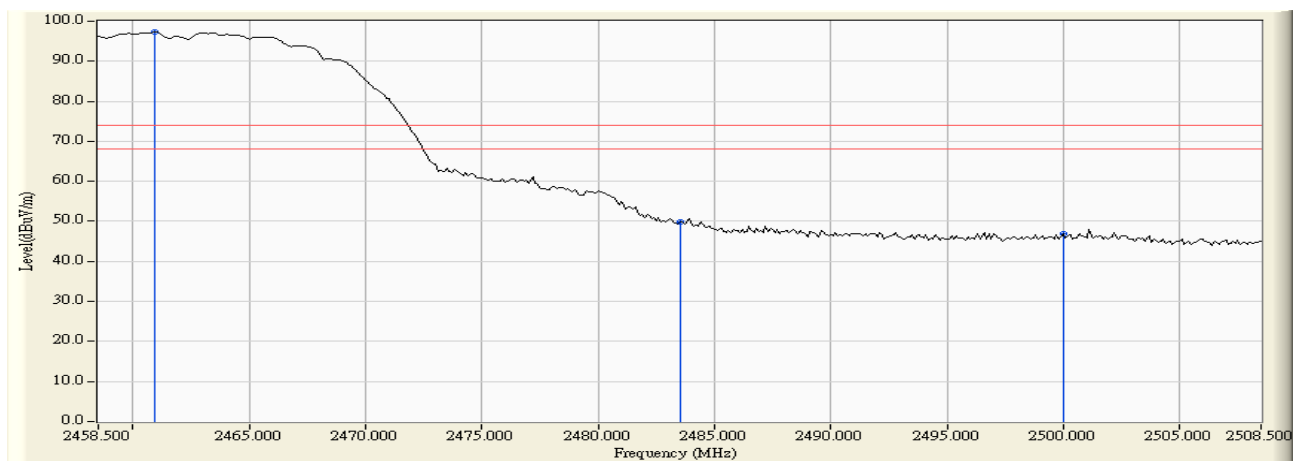
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Horizontal)	>2483.5	>20	Pass

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11(Peak)	2460.900	-2.037	99.258	97.220	74.00	54.00	Pass
11(Peak)	2483.500	-1.937	51.898	49.961	74.00	54.00	Pass
11(Peak)	2500.000	-1.886	48.918	47.032	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11b (2462MHz)

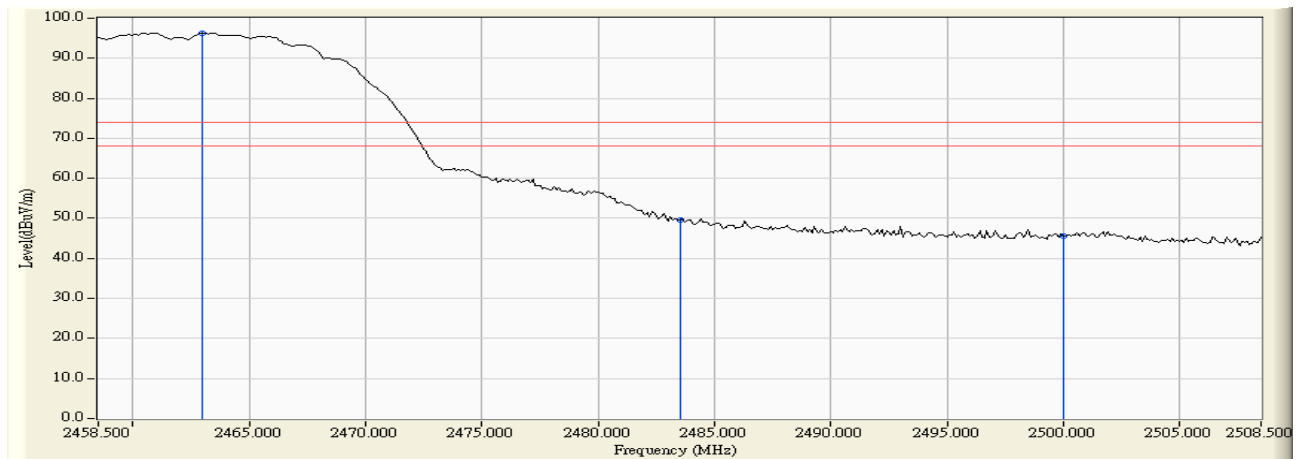
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Vertical)	>2483.5	>20	Pass

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11(Peak)	2463.000	-2.028	98.317	96.288	74.00	54.00	Pass
11(Peak)	2483.500	-1.937	51.666	49.729	74.00	54.00	Pass
11(Peak)	2500.000	-1.886	47.485	45.599	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)



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

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11g (2412MHz)

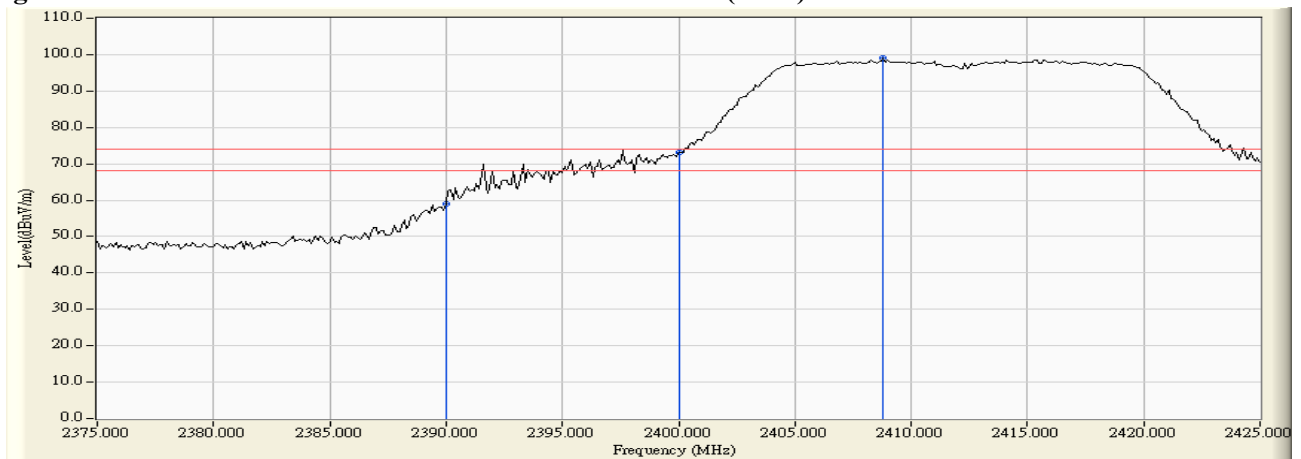
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Horizontal)	<2400	>20	Pass

RF Radiated Measurement (Horizontal):

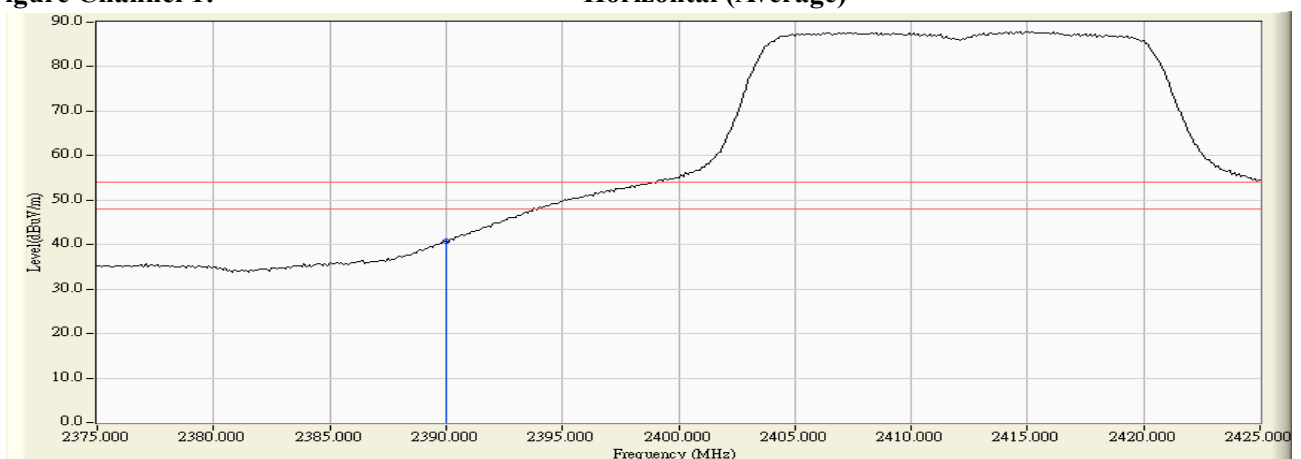
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2390.000	-2.378	61.366	58.989	74.00	54.00	Pass
1 (Average)	2390.000	-2.378	43.147	40.770	74.00	54.00	Pass
1 (Peak)	2400.000	-2.328	75.362	73.034	74.00	54.00	Pass
1 (Peak)	2408.800	-2.283	101.299	99.016	74.00	54.00	Pass

Figure Channel 1: Horizontal (Peak)



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

Figure Channel 1: Horizontal (Average)



Note: RBW=1MHz, VBW=300Hz, Sweep=500ms

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11g (2412MHz)

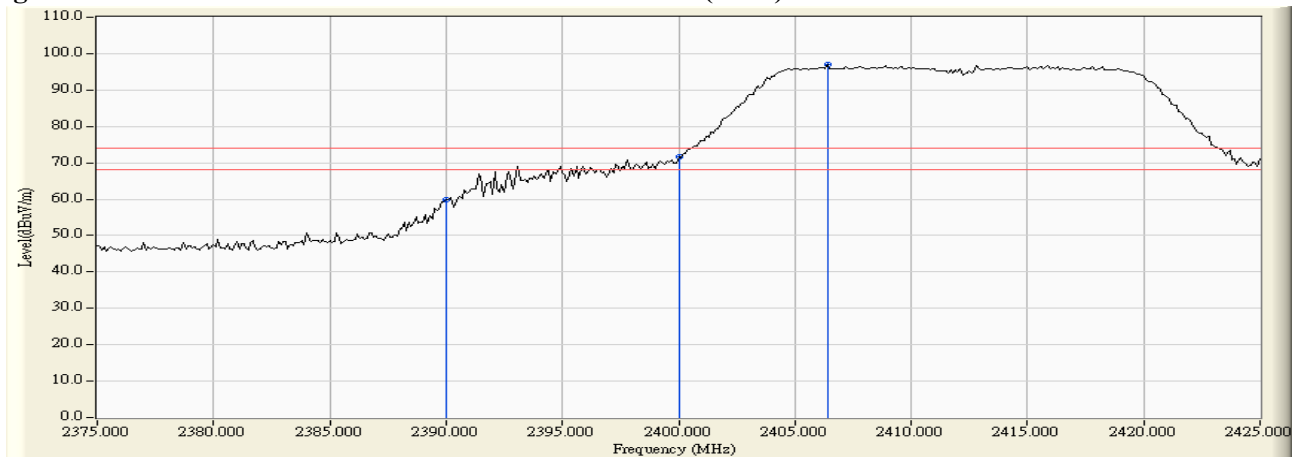
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
1 (Vertical)	<2400	>20	Pass

RF Radiated Measurement (Vertical):

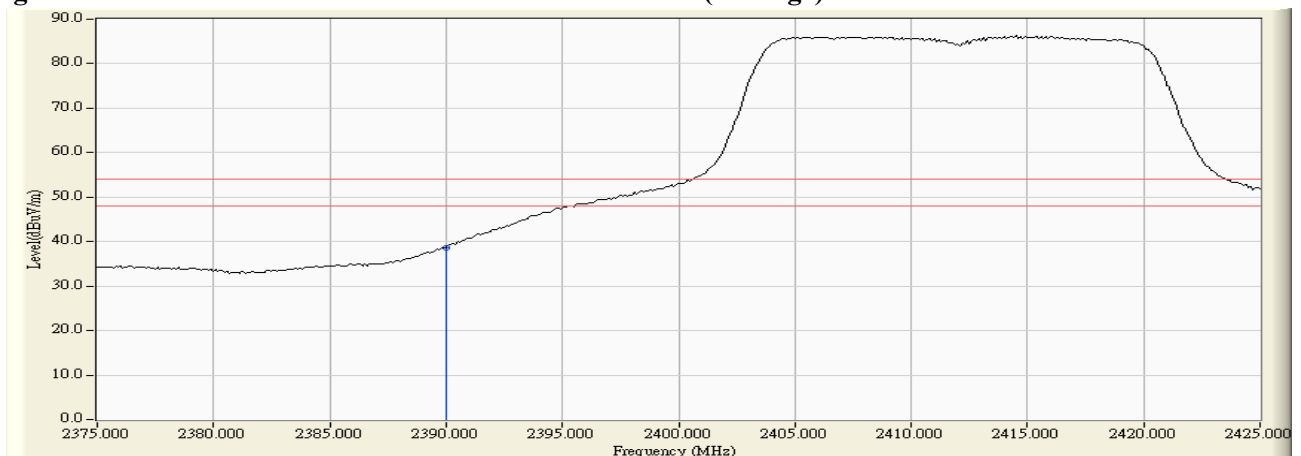
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
1 (Peak)	2390.000	-2.378	62.182	59.805	74.00	54.00	Pass
1 (Average)	2390.000	-2.378	41.094	38.717	74.00	54.00	Pass
1 (Peak)	2400.000	-2.328	73.978	71.650	74.00	54.00	Pass
1 (Peak)	2406.400	-2.295	99.288	96.992	74.00	54.00	Pass

Figure Channel 1: Vertical (Peak)



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

Figure Channel 1: Vertical (Average)



Note: RBW=1MHz, VBW=300Hz, Sweep=500ms

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11g (2462MHz)

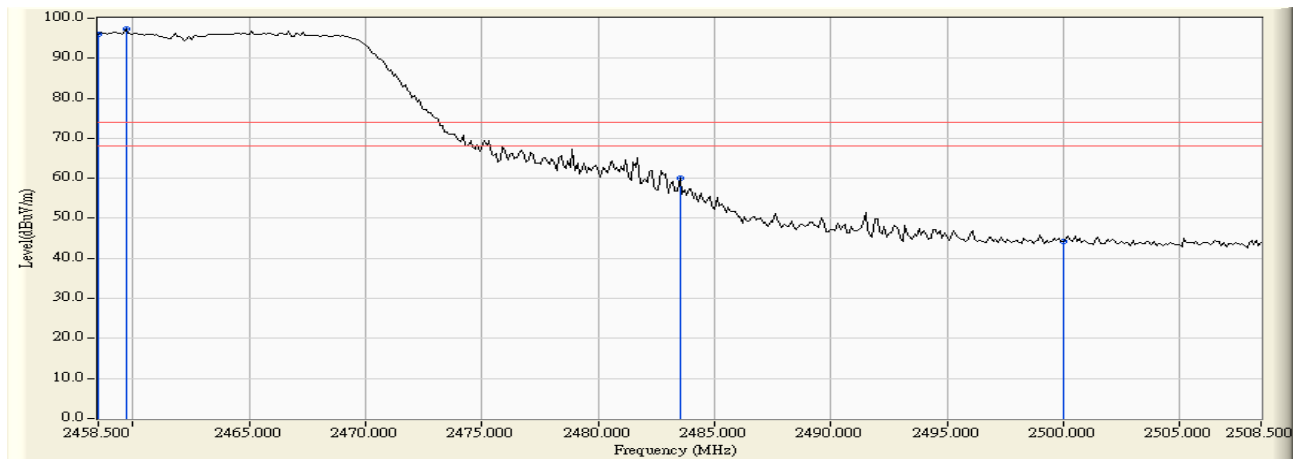
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Horizontal)	>2483.5	>20	Pass

RF Radiated Measurement (Horizontal):

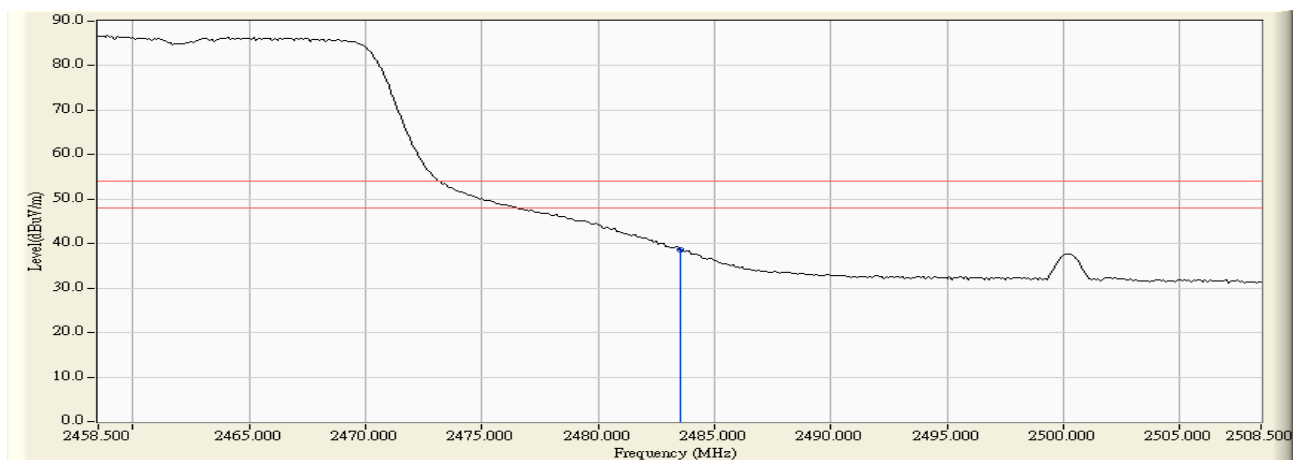
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2459.700	-2.043	99.375	97.331	74.00	54.00	Pass
11 (Peak)	2483.500	-1.937	61.908	59.971	74.00	54.00	Pass
11 (Average)	2483.500	-1.937	40.424	38.487	74.00	54.00	Pass
11 (Peak)	2500.000	-1.886	46.178	44.292	74.00	54.00	Pass

Figure Channel 11: Horizontal (Peak)



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

Figure Channel 11: Horizontal (Average)



Note: RBW=1MHz, VBW=300Hz, Sweep=500ms

Product : Tablet PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11g (2462MHz)

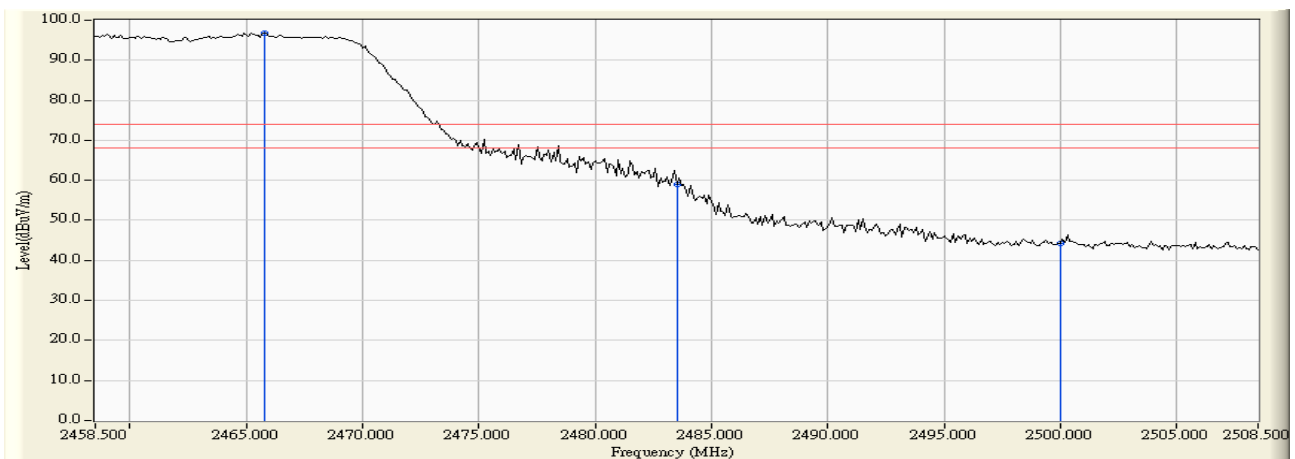
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
11 (Vertical)	>2483.5	>20	Pass

RF Radiated Measurement (Vertical):

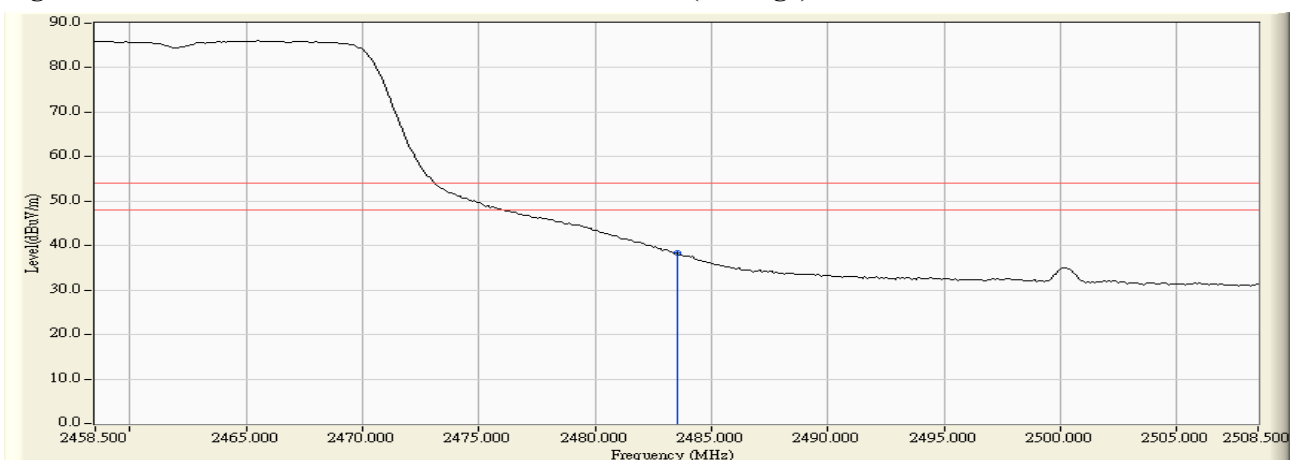
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
11 (Peak)	2465.800	-2.016	98.864	96.848	74.00	54.00	Pass
11 (Peak)	2483.500	-1.937	61.046	59.109	74.00	54.00	Pass
11 (Average)	2483.500	-1.937	40.307	38.370	74.00	54.00	Pass
11 (Peak)	2500.000	-1.886	46.255	44.369	74.00	54.00	Pass

Figure Channel 11: Vertical (Peak)



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

Figure Channel 11: Vertical (Average)



Note: RBW=1MHz, VBW=300Hz, Sweep=500ms

Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

6. Occupied Bandwidth

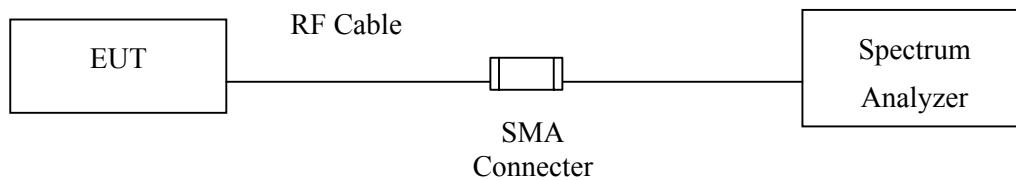
6.1. Test Equipment

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

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

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

6.2. Test Setup



6.3. Limits

The minimum bandwidth shall be at least 500kHz.

6.4. Test Procedure

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

6.5. Uncertainty

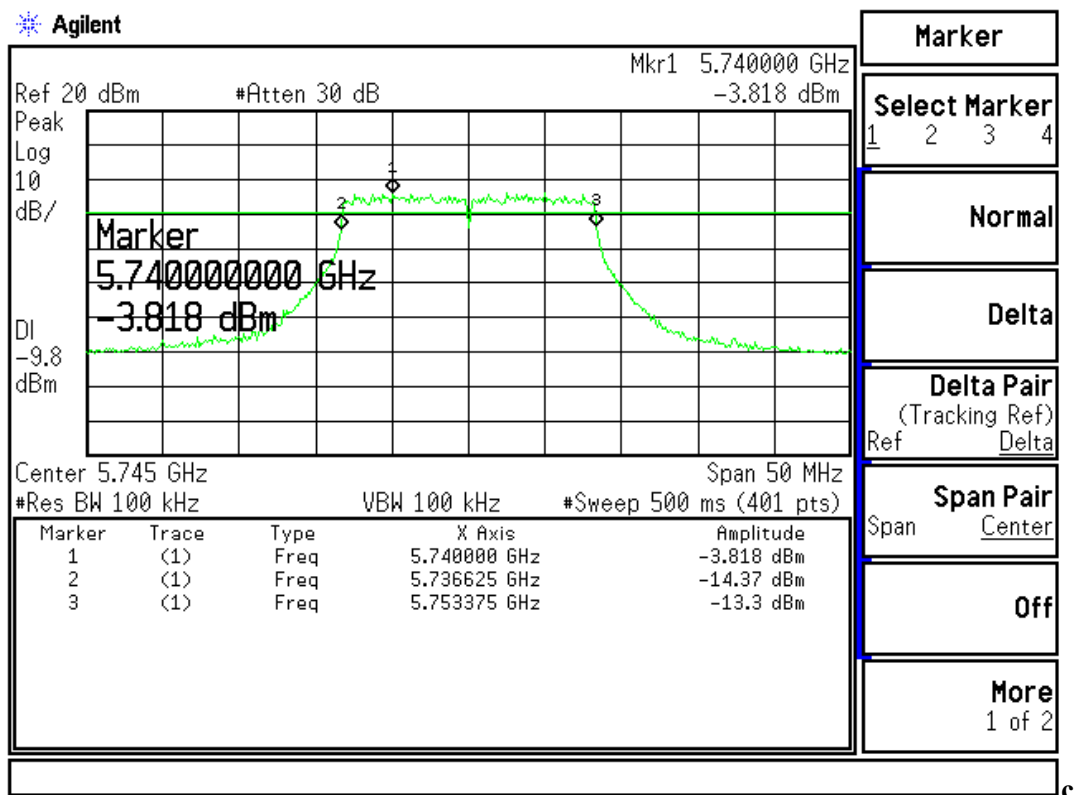
$\pm 150\text{Hz}$

6.6. Test Result of Occupied Bandwidth

Product : Tablet PC
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149 (6Mbps)	5745.00	16750	>500	Pass

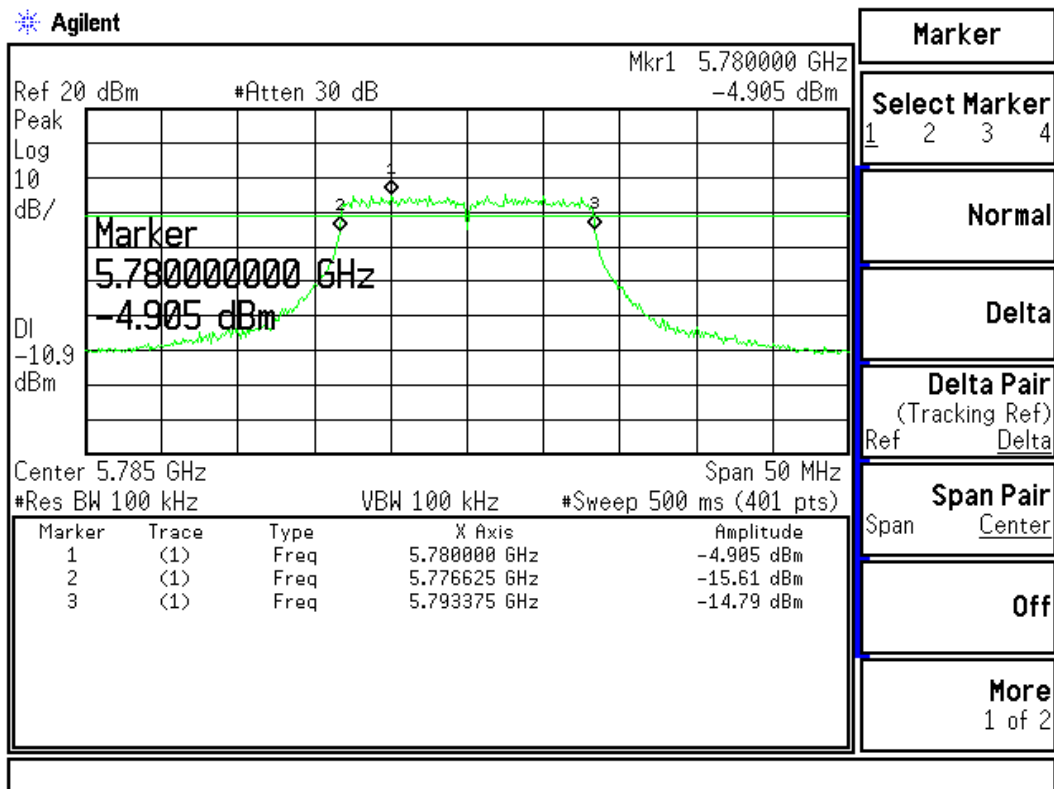
Figure Channel 1:



Product : Tablet PC
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157 (6Mbps)	5785.00	16750	>500	Pass

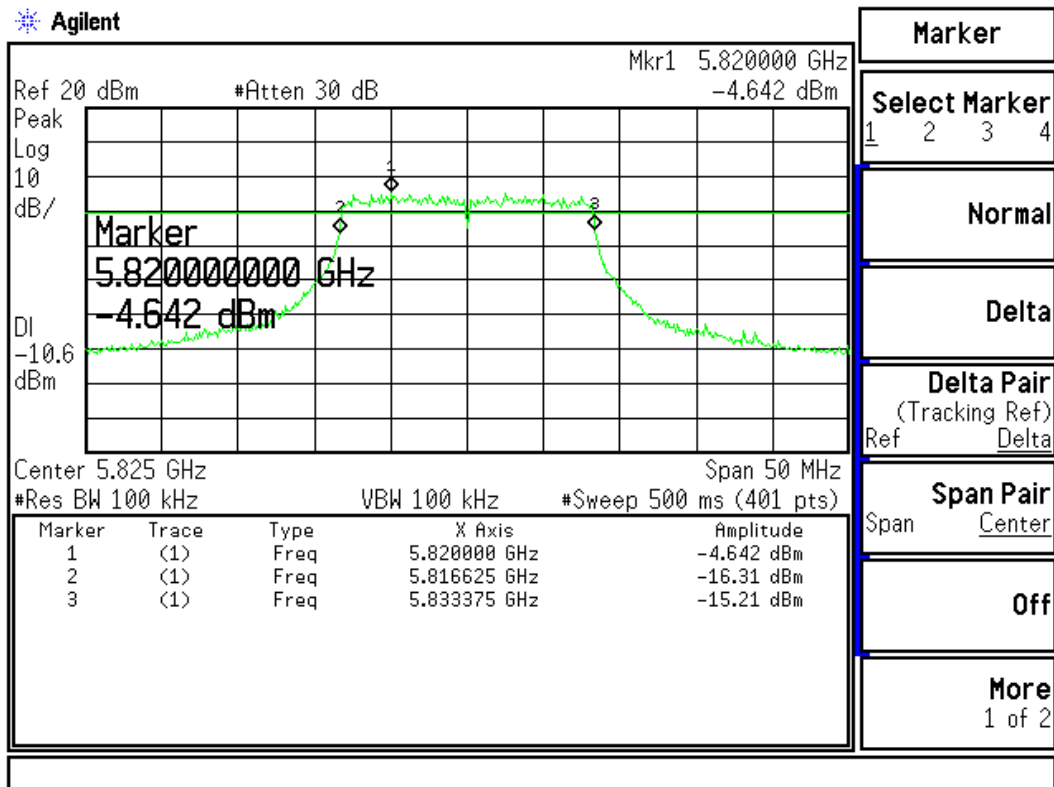
Figure Channel 3:



Product : Tablet PC
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165(6Mbps)	5825.00	16750	>500	Pass

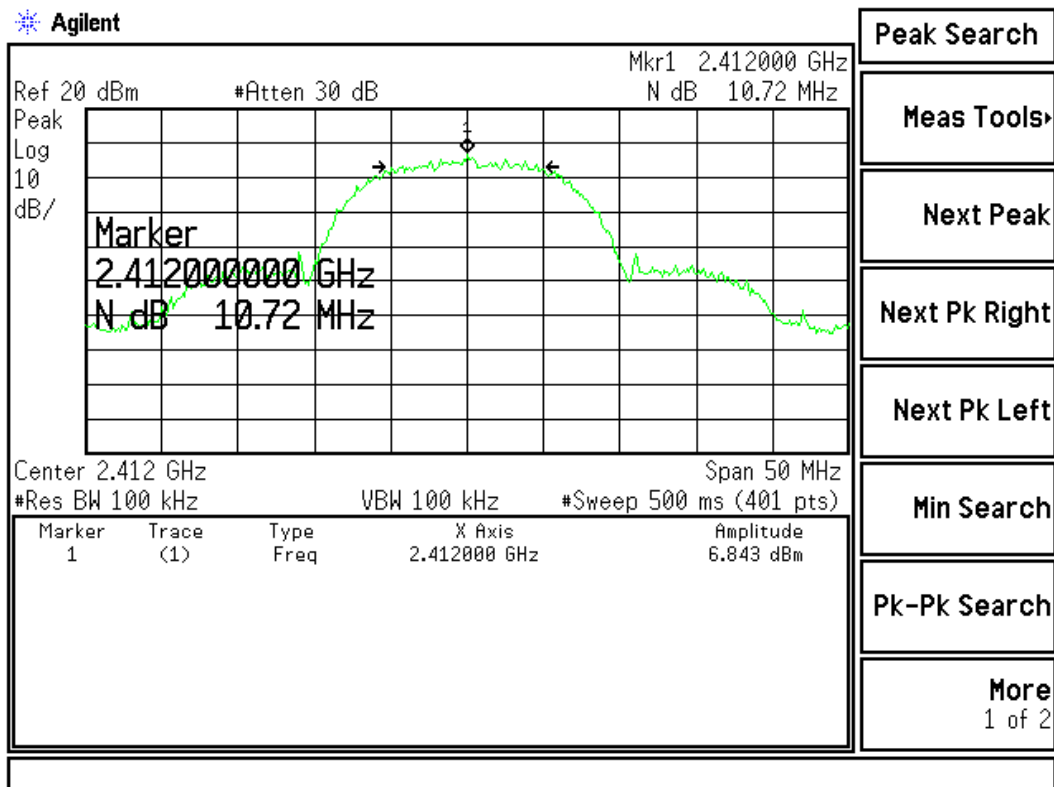
Figure Channel 5:



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

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (1Mbps)	2412.00	10720	>500	Pass

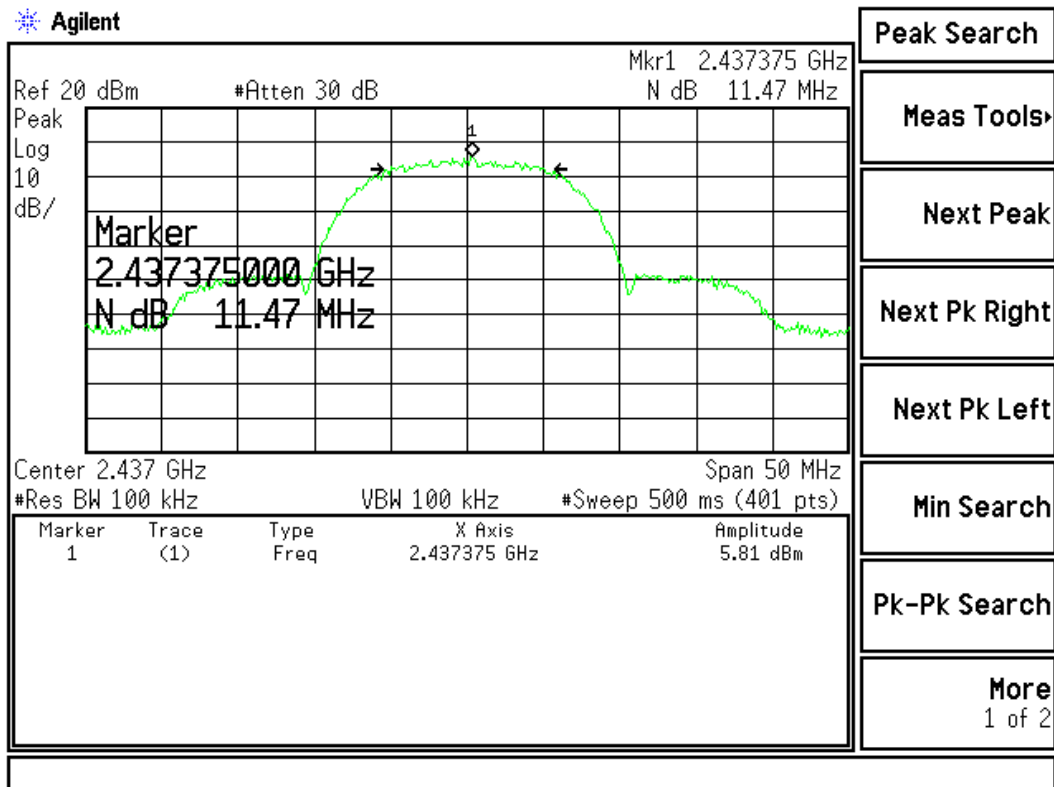
Figure Channel 1:



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

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (1Mbps)	2437.00	11470	>500	Pass

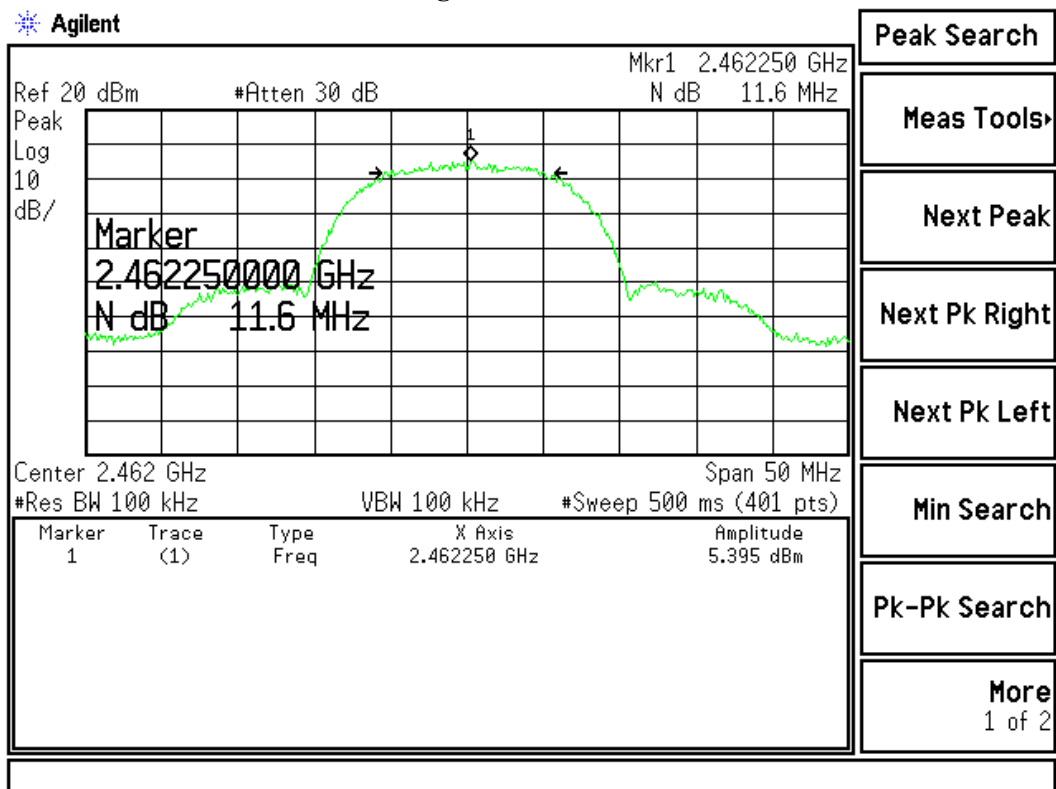
Figure Channel 6:



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

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (1Mbps)	2462.00	11600	>500	Pass

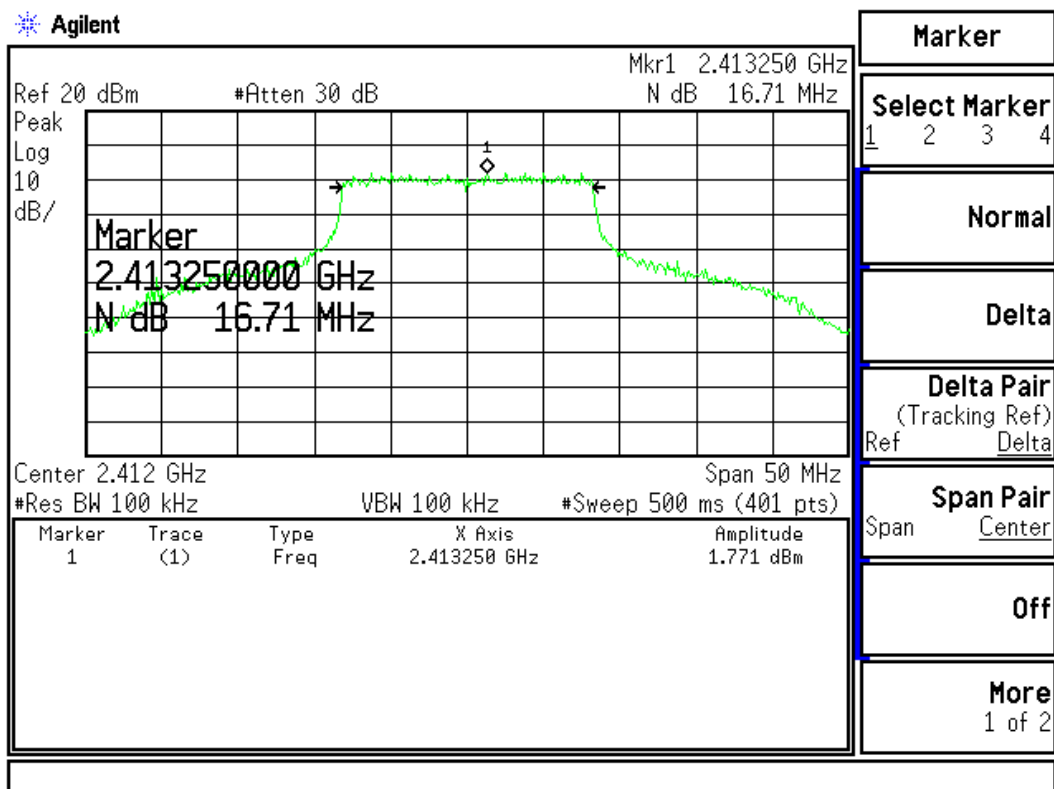
Figure Channel 11:



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

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1 (6Mbps)	2412.00	16710	>500	Pass

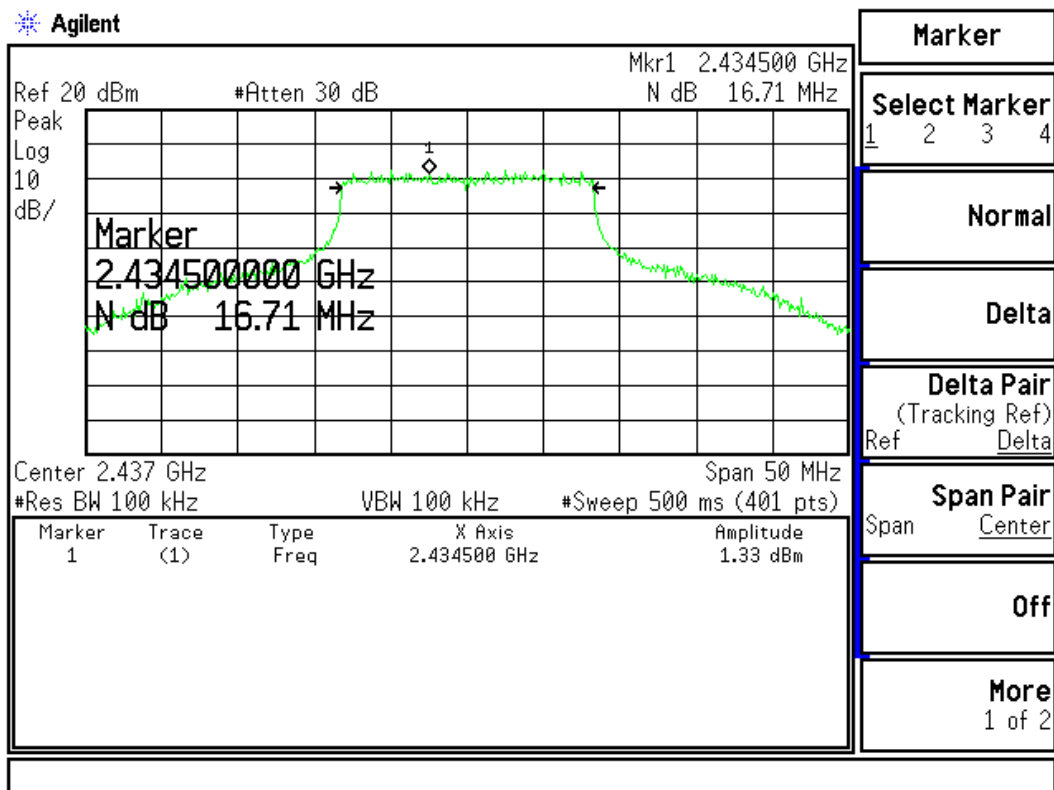
Figure Channel 1:



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

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6 (6Mbps)	2437.00	16710	>500	Pass

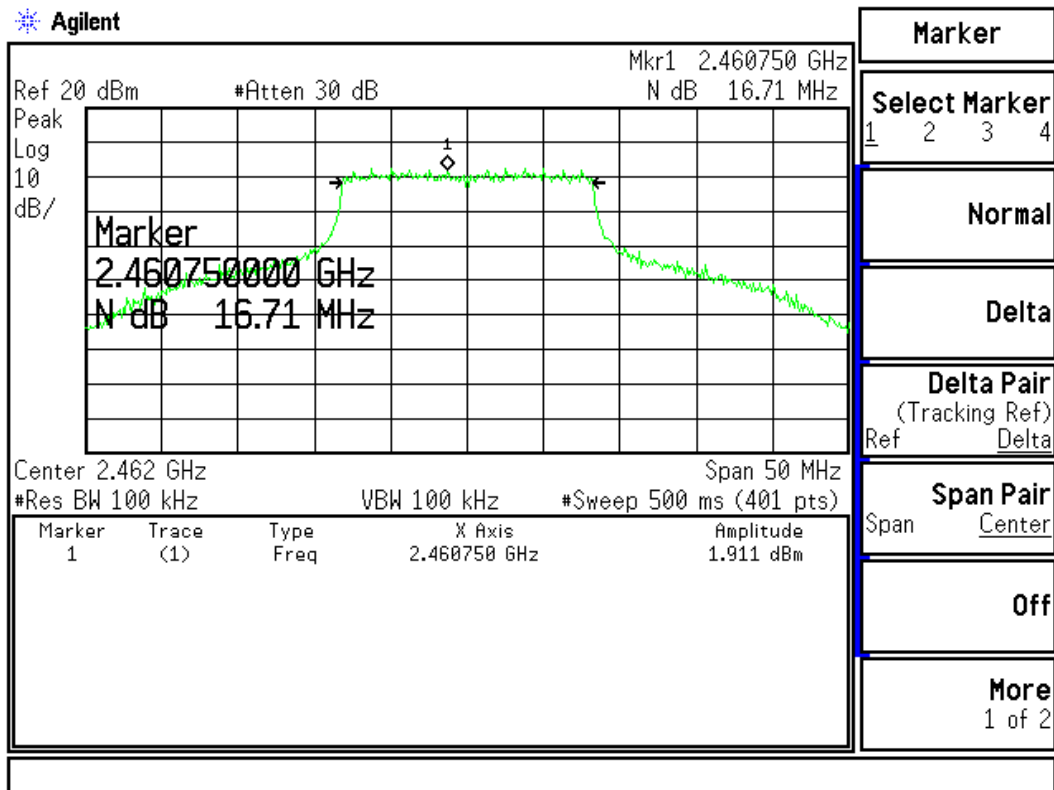
Figure Channel 6:



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

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11 (6Mbps)	2462.00	16710	>500	Pass

Figure Channel 11:



7. Power Density

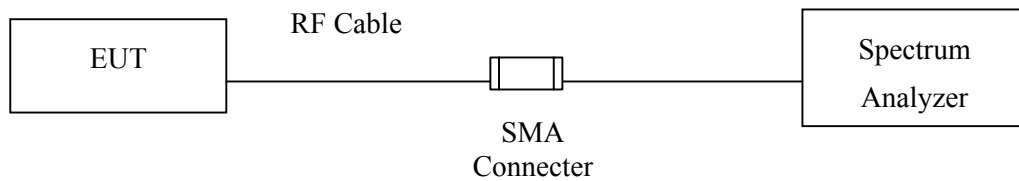
7.1. Test Equipment

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

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

Note: 1. All equipments 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 peak power spectral density conducted from the intentional radiator to the antenna shall not be greater 8dBm in any 3kHz band during any time interval of continuous transmission.

7.4. Test Procedure

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

7.5. Uncertainty

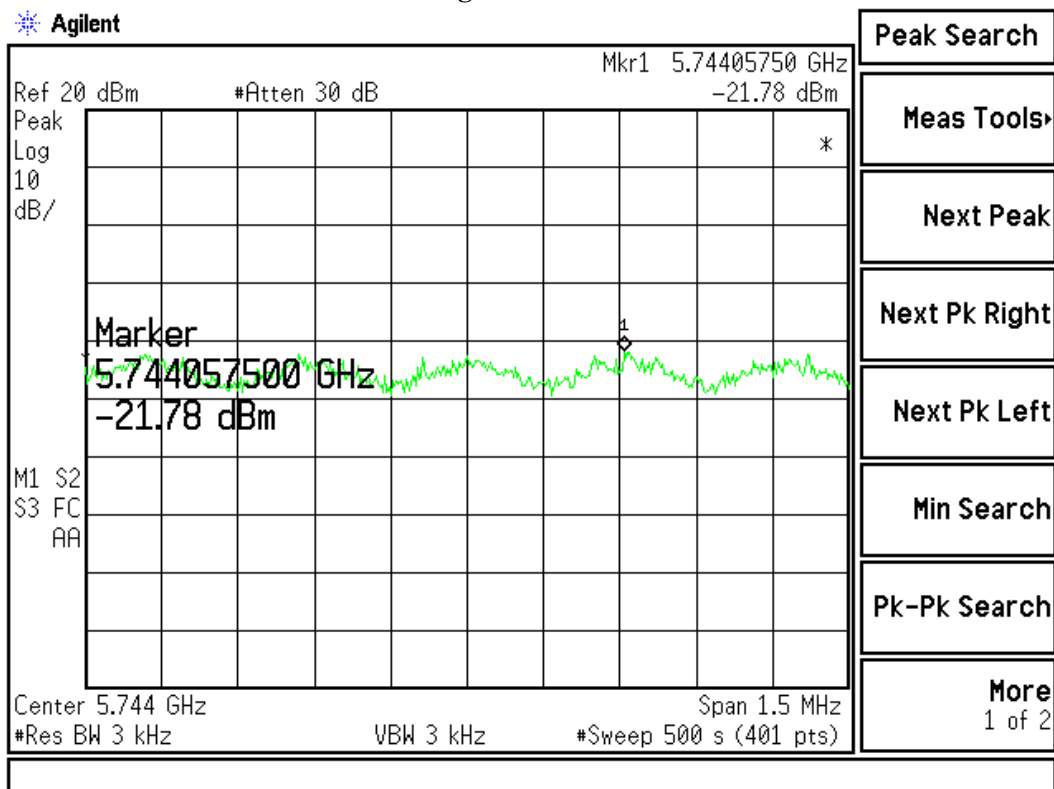
± 1.27 dB

7.6. Test Result of Power Density

Product : Tablet PC
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a (5745MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149 (6Mbps)	5745	-21.78	< 8dBm	Pass

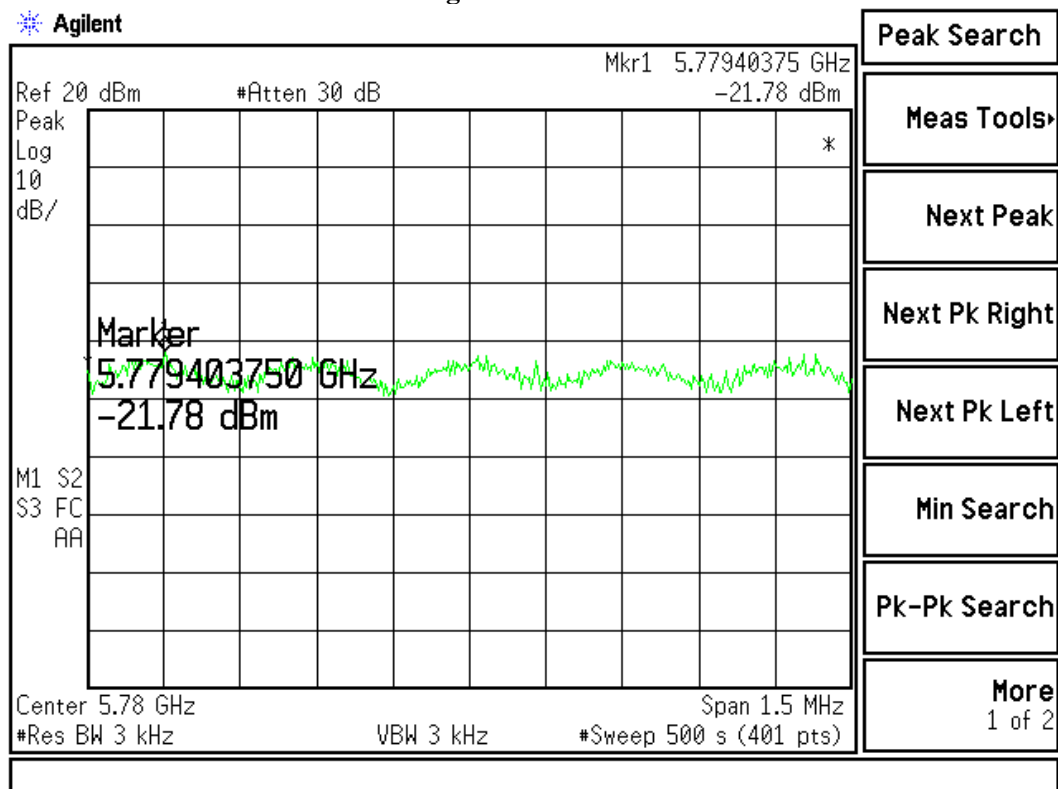
Figure Channel 1:



Product : Tablet PC
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 1: Transmitter 802.11a (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
157 (6Mbps)	5785	-21.78	< 8dBm	Pass

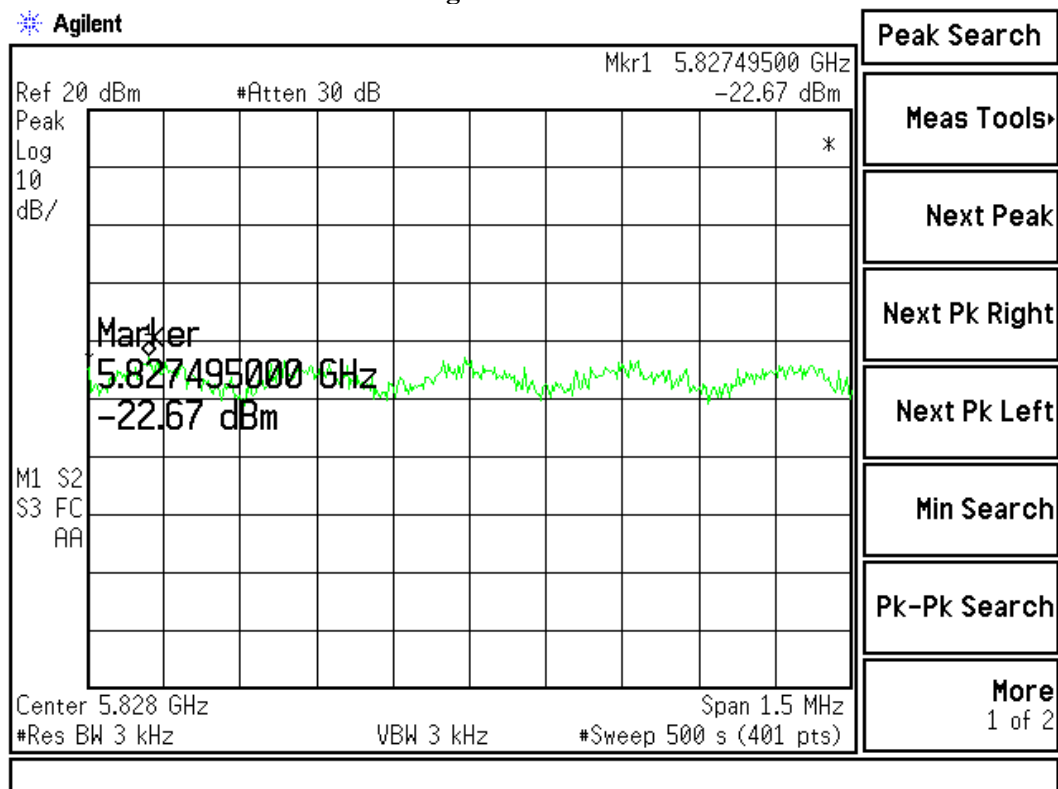
Figure Channel 3:



Product : Tablet PC
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 1: Transmitter 802.11a (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
165 (6Mbps)	5825	-22.67	< 8dBm	Pass

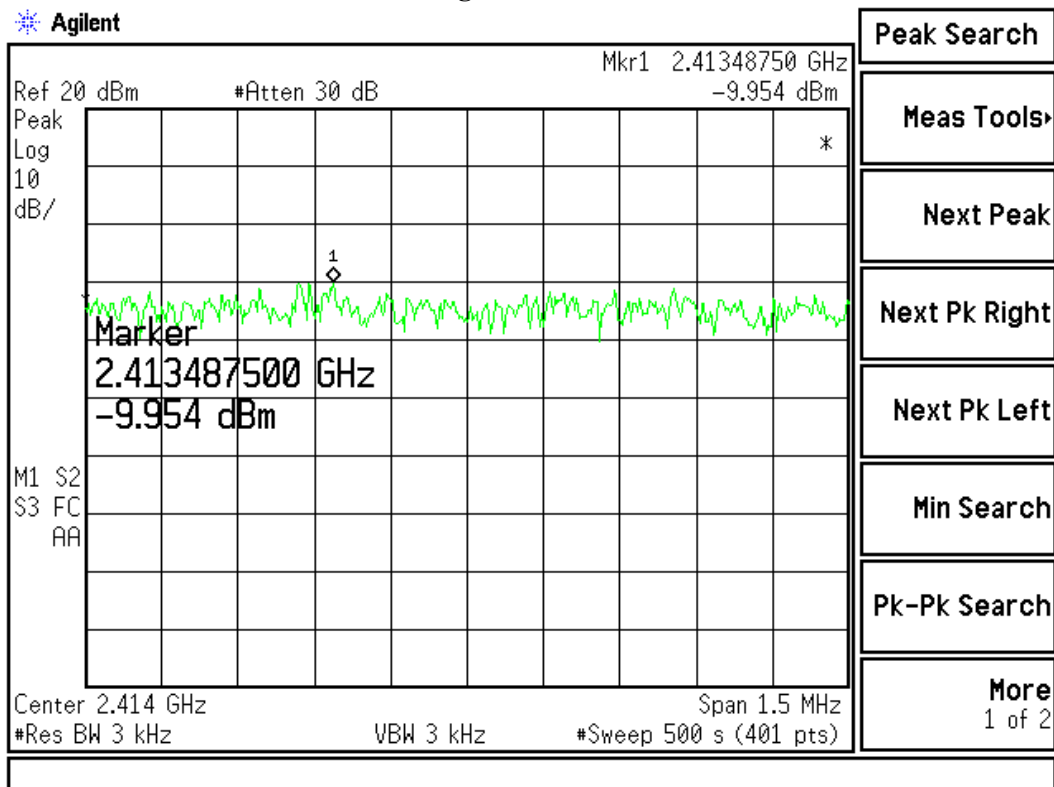
Figure Channel 5:



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

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (1Mbps)	2412	-9.954	< 8dBm	Pass

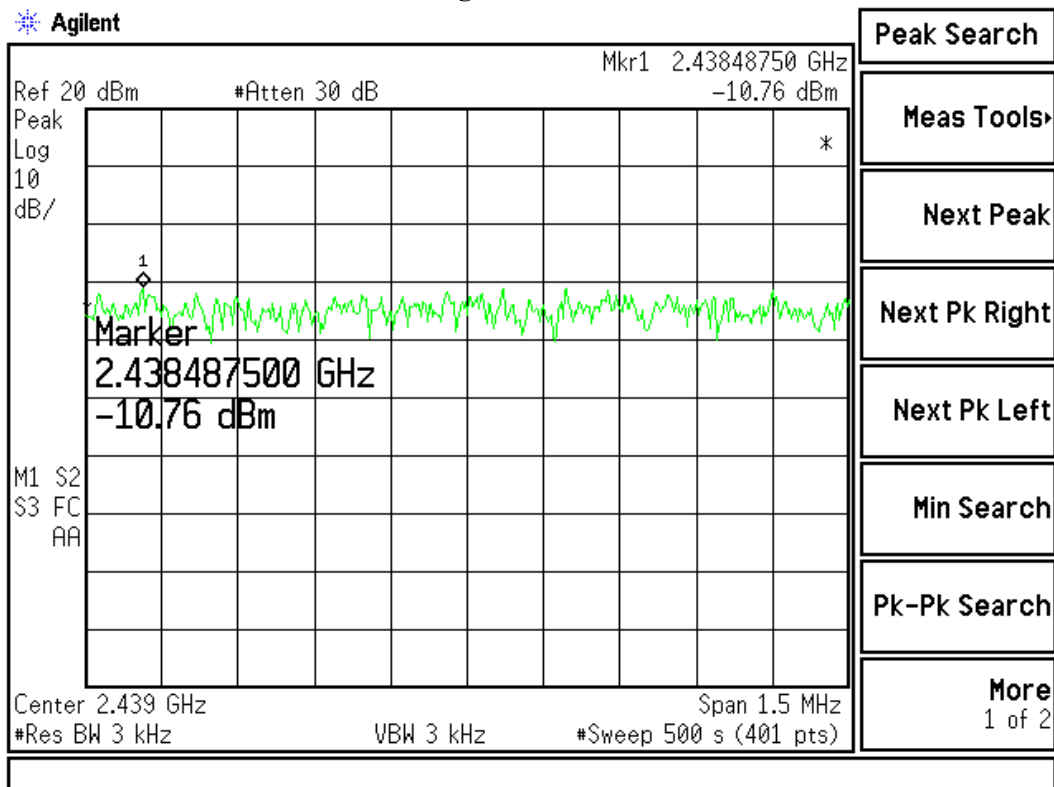
Figure Channel 1:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (1Mbps)	2437	-10.76	< 8dBm	Pass

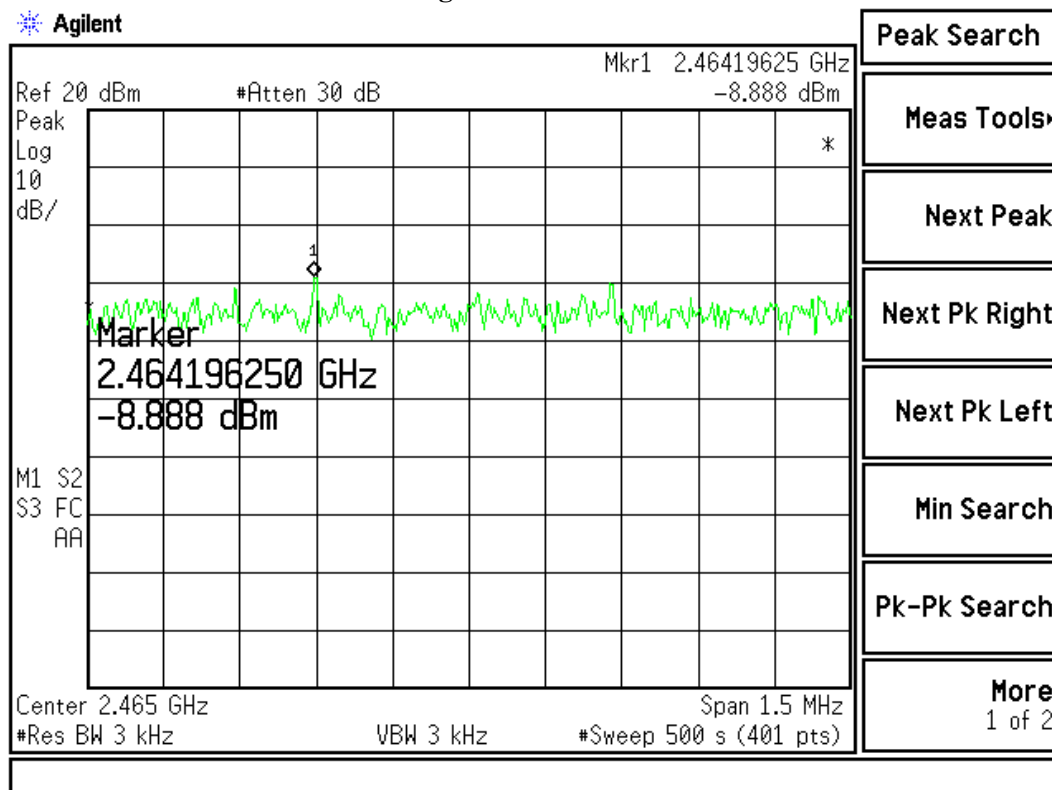
Figure Channel 6:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (1Mbps)	2462	-8.888	< 8dBm	Pass

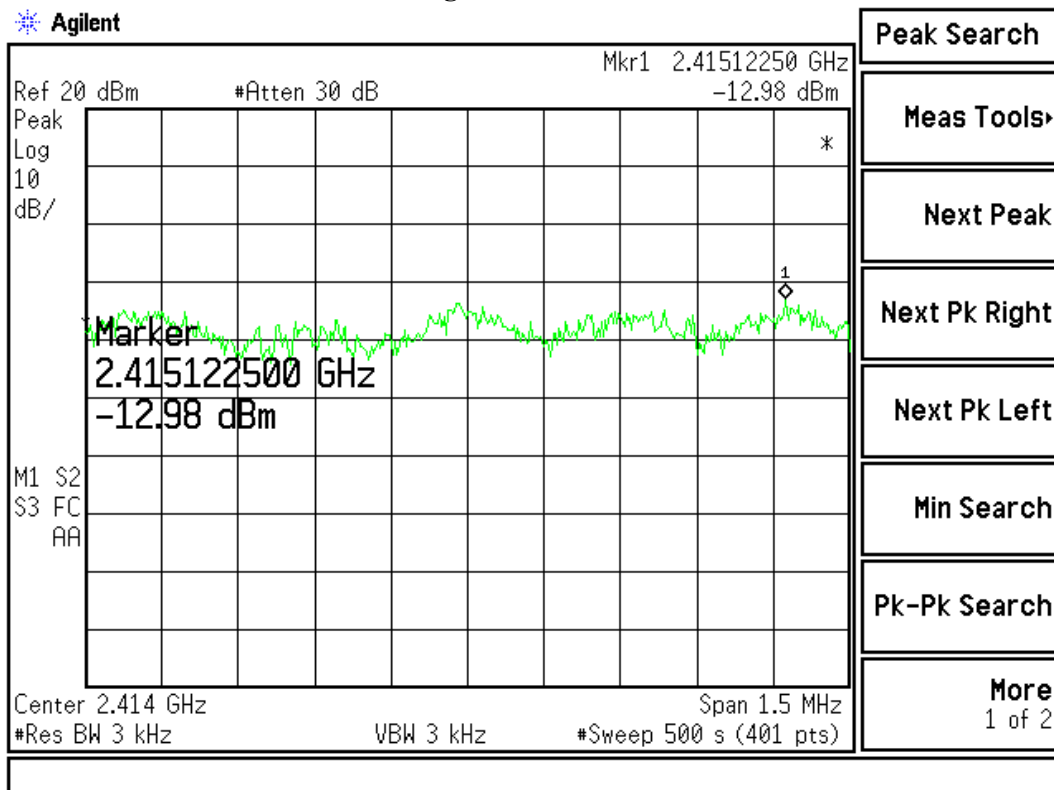
Figure Channel 11:



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

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1 (6Mbps)	2412	-12.98	< 8dBm	Pass

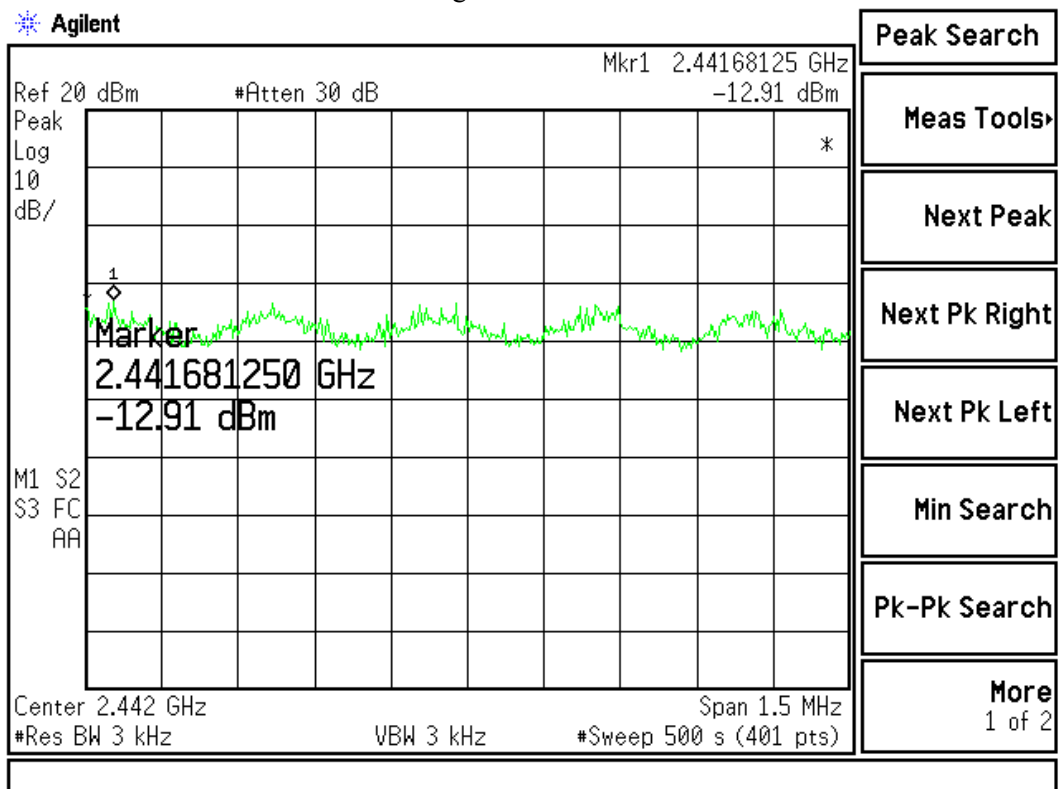
Figure Channel 1:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6 (6Mbps)	2437	-12.91	< 8dBm	Pass

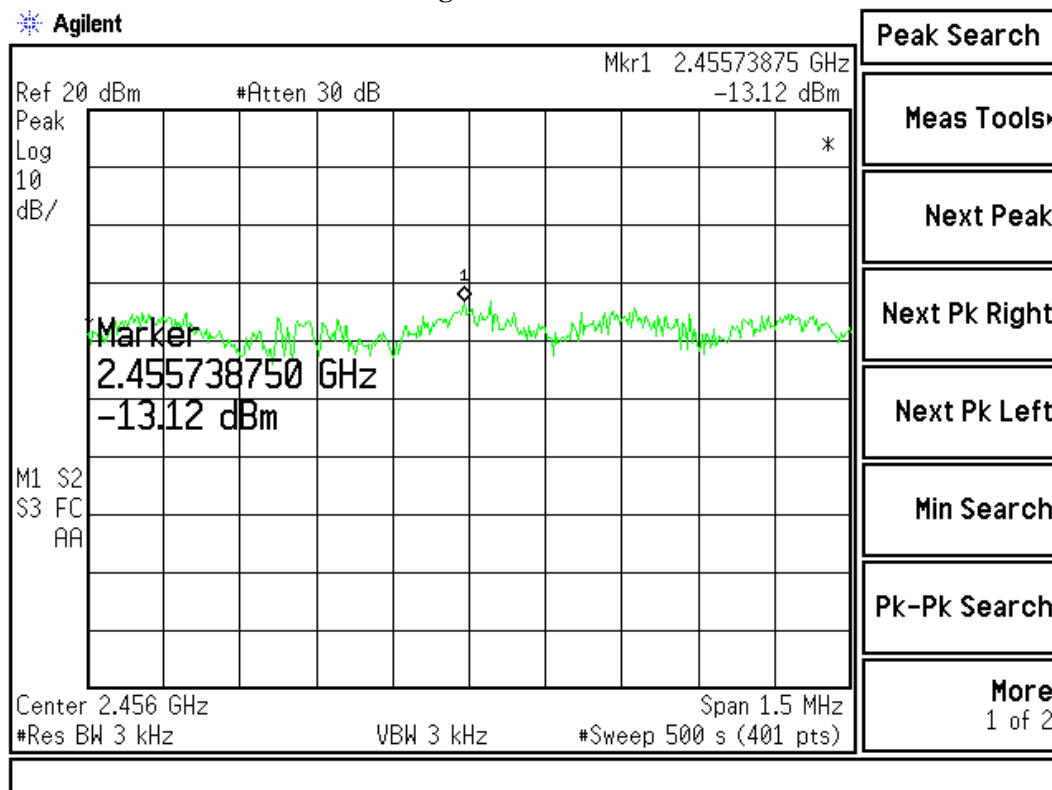
Figure Channel 6:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11 (6Mbps)	2462	-13.12	< 8dBm	Pass

Figure Channel 11:



8. EMI Reduction Method During Compliance Testing

No modification was made during testing.