FCC Test Report

Product Name	Tablet PC
Model No	TM105, TM105A, TM105AS, TM105S, TM105-W, TM105S-W, TM105A-W, TM105AS-W, MG101A1T, CTA-E10-11E
FCC ID.	WL6-TMBCM4330

Applicant	ELITEGROUP COMPUTER SYSTEMS CO., LTD.
Address	No.239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan

Date of Receipt	Apr. 30, 2013
Issue Date	May 22, 2013
Report No.	135049R-RFUSP42V01
Report Version	V1.0

Testing Laboratory
0914

Test Report Certification

Product Name	Tablet PC
Applicant	ELITEGROUP COMPUTER SYSTEMS CO., LTD.
Address	No.239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan
Manufacturer	ELITEGROUP COMPUTER SYSTEMS CO., LTD.
Model No.	TM105, TM105A, TM105AS, TM105S, TM105-W, TM105S-W, TM105A-W, TM105AS-W, MG101A1T, CTA-E10-11E
FCC ID.	WL6-TMBCM4330
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	ECS
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2012 ANSI C63.4: 2003, ANSI C63.10: 2009
Test Result	Complied

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

Documented By　　:

(Senior Adm. Specialist / Rita Huang)

Tested By　　　　　:

(Engineer / Jack Hsu)

Approved By　　　　:

(Manager / Vincent Lin)

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Attachment 1:   EUT Test Photographs

Attachment 2:   EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Tablet PC
Trade Name	ECS
Model No.	TM105, TM105A, TM105AS, TM105S, TM105-W, TM105S-W, TM105A-W, TM105AS-W, MG101A1T, CTA-E10-11E
FCC ID.	WL6-TMBCM4330
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW
Number of Channels	802.11b/g/n-20MHz: 11
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 72.2Mbps
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK) 802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	PCB Antenna
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
USB Cable	Non-Shielded, 1.5m
Power Adapter	MFR: SHENZHEN FRECOM, M/N: F12W-050200SPAU Input: 100-240V, 50/60Hz, 0.3A Output: 5V⎓2A Cable Out: Non-Shielded, 1.8m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	JEM	13H130-JU5071	PCB Antenna	1.94 dBi for 2.4 GHz

Note:

1. The antenna of EUT is conform to FCC 15.203.

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		

Note:

1. The EUT is a Tablet PC with a built-in WLAN、Bluetooth transceiver, this report for WLAN.
2. The EUT is including ten 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 is 6Mbps、802.11n(20M-BW) is 7.2Mbps and)
5. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
6. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

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	Notebook PC	DELL	PPT	N/A	Non-Shielded, 0.8m
2	LED Monitor	DELL	ST2402Lb	CN-0X0K27-74261-27E-0M6U T	Non-Shielded, 1.8m
3	Microphone & Earphone	Ergotech	ET-E201	N/A	N/A

Signal Cable Type		Signal cable Description
A	USB Cable	Non-Shielded, 1.0m
B	HDMI Cable	Non-Shielded, 1.5m
C	Microphone & Earphone Cable	Non-Shielded, 1.6m

1.4.   Configuration of Tested System

1.5. EUT Exercise Software

(1) Setup the EUT as shown in Section 1.4

(2) Execute software "adb.exe V1.0.29" on the Notebook PC.

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

(4) Press "OK" to start the continuous Transmit.

(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

The related certificate for our laboratories about the test site and management system can be downloaded from

QuieTek Corporation's Web Site: http://www.quietek.com/tw/ctg/cts/accreditations.htm

The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site:
http://www.quietek.com/

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

Accreditation on NVLAP
NVLAP Lab Code: 200533-0

Site Name: Quietek Corporation
Site Address: No.5-22, Ruishukeng,
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E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

2. Conducted Emission

2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2012	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2013	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2013	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2013	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2013	
	No.1 Shielded Room				

Note:

1. All equipments are calibrated every one year.

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

2.2. Test Setup

2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (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 C63.10: 2009 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 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.181	9.790	31.940	41.730	-23.384	65.114
0.396	9.790	37.900	47.690	-11.281	58.971
0.865	9.790	25.730	35.520	-20.480	56.000
1.584	9.800	24.480	34.280	-21.720	56.000
2.279	9.810	23.340	33.150	-22.850	56.000
14.595	10.075	26.340	36.415	-23.585	60.000
Average					
0.181	9.790	19.220	29.010	-26.104	55.114
0.396	9.790	31.230	41.020	-7.951	48.971
0.865	9.790	20.790	30.580	-15.420	46.000
1.584	9.800	17.070	26.870	-19.130	46.000
2.279	9.810	17.600	27.410	-18.590	46.000
14.595	10.075	21.860	31.935	-18.065	50.000

Note:

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

Product	:	Tablet PC
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.205	9.770	29.210	38.980	-25.449	64.429
0.396	9.770	35.430	45.200	-13.771	58.971
0.556	9.770	25.040	34.810	-21.190	56.000
1.318	9.780	22.900	32.680	-23.320	56.000
2.826	9.800	21.720	31.520	-24.480	56.000
14.189	10.118	25.700	35.818	-24.182	60.000
Average					
0.205	9.770	15.810	25.580	-28.849	54.429
0.396	9.770	27.880	37.650	-11.321	48.971
0.556	9.770	17.370	27.140	-18.860	46.000
1.318	9.780	14.780	24.560	-21.440	46.000
2.826	9.800	12.740	22.540	-23.460	46.000
14.189	10.118	19.740	29.858	-20.142	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.

2. "   " means the worst emission level.

3. Measurement Level = Reading Level + Correct Factor

3.   Peak Power Output

3.1.   Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2013
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2012

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.

3.2.   Test Setup

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 ANSI C63.10: 2009 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: Transmit (802.11b 1Mbps)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	14.24	--	--	--	17.60	<30dBm	Pass
06	2437	14.18	14.13	14.06	13.99	17.62	<30dBm	Pass
11	2462	14.15	--	--	--	17.65	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

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

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	14.11	--	--	--	--	--	--	--	23.98	<30dBm	Pass
06	2437	14.02	13.97	13.92	13.9	13.87	13.81	13.74	13.7	24.01	<30dBm	Pass
11	2462	14.17	--	--	--	--	--	--	--	24.23	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product   :   Tablet PC
Test Item   :   Peak Power Output Data
Test Site   :   No.3 OATS
Test Mode   :   Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	7.2		
		Measurement Level (dBm)										
01	2412	13.91	--	--	--	--	--	--	--	23.96	<30dBm	Pass
06	2437	13.93	13.91	13.84	13.76	13.71	13.68	13.63	13.51	24.12	<30dBm	Pass
11	2462	14.03	--	--	--	--	--	--	--	24.15	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

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	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2012
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2012
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2012
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	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

3m

FRP Dome

1m to 4m

The height of broad band antenna was scanned from 1m to 4m.

The distance between antenna and turn table was 3m..

EUT

Non-Conducted Table

80cm

Test Receiver

Fully soldered Metal Ground

To Controller

To Receiver

Radiated Emission Above 1GHz

3m

FRP Dome

The height of broad band or Dipole Antenna was scanned from 1M to 4M.

The distance between antenna and turn table was 3M regards to the standard adopted.

EUT

80cm

To Receiver

Pre-Amplifier

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	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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

4.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2009 and tested according to DTS test procedure of ANSI C63.10: 2009 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 C63.10: 2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~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 bandwidth of the antenna.

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

The frequency range from 9KHz 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: Transmit (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	3.261	49.900	53.161	-20.839	74.000
7236.000	10.650	42.580	53.230	-20.770	74.000
9648.000	13.337	36.880	50.216	-23.784	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	50.530	56.951	-17.049	74.000
7236.000	11.495	40.560	52.055	-21.945	74.000
9648.000	13.807	36.590	50.396	-23.604	74.000
Average Detector:					
4824.000	6.421	47.080	53.501	-0.499	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (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	3.038	46.910	49.947	-24.053	74.000
7311.000	12.630	39.590	52.219	-21.781	74.000
9748.000	13.126	36.880	50.006	-23.994	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	48.070	53.881	-20.119	74.000
7311.000	12.630	38.640	51.269	-22.731	74.000
9748.000	13.126	37.590	50.716	-23.284	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC			
Test Item	:	Harmonic Radiated Emission Data			
Test Site	:	No.3 OATS			
Test Mode	:	Mode 1: Transmit (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	2.858	45.460	48.317	-25.683	74.000
7386.000	13.254	37.290	50.544	-23.456	74.000
9848.000	13.367	37.550	50.917	-23.083	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	46.840	52.360	-21.640	74.000
7386.000	13.254	36.590	49.844	-24.156	74.000
9848.000	13.367	36.880	50.247	-23.753	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (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	3.261	53.810	57.071	-16.929	74.000
7236.000	10.650	47.850	58.500	-15.500	74.000
9648.000	13.337	37.560	50.896	-23.104	74.000
Average Detector:					
4824.000	3.261	36.710	39.971	-14.029	54.000
7236.000	10.650	30.880	41.530	-12.470	54.000
Vertical					
Peak Detector:					
4824.000	6.421	53.980	60.401	-13.599	74.000
7236.000	11.495	41.020	52.515	-21.485	74.000
9648.000	13.807	36.290	50.096	-23.904	74.000
Average Detector:					
4824.000	6.421	35.640	42.061	-11.939	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (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	3.038	50.570	53.607	-20.393	74.000
7311.000	11.795	44.350	56.144	-17.856	74.000
9748.000	12.635	37.550	50.185	-23.815	74.000
Average Detector:					
7311.000	11.795	27.820	39.614	-14.386	54.000
Peak Detector:					
4874.000	5.812	51.640	57.451	-16.549	74.000
7311.000	12.630	39.220	51.849	-22.151	74.000
9748.000	13.126	37.590	50.716	-23.284	74.000
Average Detector:					
4874.000	5.812	34.530	40.341	-13.659	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC			
Test Item	:	Harmonic Radiated Emission Data			
Test Site	:	No.3 OATS			
Test Mode	:	Mode 2: Transmit (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	2.858	49.920	52.777	-21.223	74.000
7386.000	13.254	42.530	55.784	1.784	54.000
9848.000	12.852	37.590	50.443	-23.557	74.000
Average Detector:					
7386.000	12.127	24.900	37.028	-16.972	54.000
Vertical					
Peak Detector:					
4924.000	5.521	51.200	56.720	-17.280	74.000
7386.000	13.254	38.260	51.514	-22.486	74.000
9848.000	13.367	36.290	49.657	-24.343	74.000
Average Detector:					
4924.000	5.521	33.580	39.100	-14.900	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	50.900	54.161	-19.839	74.000
7236.000	10.650	47.600	58.250	-15.750	74.000
9648.000	13.337	37.050	50.386	-23.614	74.000
Average Detector:					
4824.000	3.261	34.410	37.671	-16.329	54.000
7236.000	10.650	30.720	41.370	-12.630	54.000
Vertical					
Peak Detector:					
4824.000	6.421	53.430	59.851	-14.149	74.000
7236.000	11.495	41.720	53.215	-20.785	74.000
9648.000	13.807	37.060	50.866	-23.134	74.000
Average Detector:					
4824.000	6.421	36.540	42.961	-11.039	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product   :   Tablet PC
Test Item   :   Harmonic Radiated Emission Data
Test Site   :   No.3 OATS
Test Mode   :   Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	50.590	53.627	-20.373	74.000
7311.000	12.630	43.570	56.199	2.199	54.000
9748.000	12.635	36.930	49.565	-24.435	74.000
Average Detector:					
7311.000	11.795	26.720	38.514	-15.486	54.000
Vertical					
Peak Detector:					
4874.000	5.812	51.210	57.021	-16.979	74.000
7311.000	12.630	38.290	50.919	-23.081	74.000
9748.000	13.126	37.560	50.686	-23.314	74.000
Average Detector:					
4874.000	5.812	34.340	40.151	-13.849	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product   :   Tablet PC
Test Item   :   Harmonic Radiated Emission Data
Test Site   :   No.3 OATS
Test Mode :   Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	50.620	53.477	-20.523	74.000
7386.000	13.254	40.460	53.714	-0.286	54.000
9848.000	13.367	36.430	49.797	-4.203	54.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	50.480	56.000	-18.000	74.000
7386.000	13.254	36.290	49.544	-24.456	74.000
9848.000	13.367	37.060	50.427	-23.573	74.000
Average Detector:					
4924.000	5.521	32.700	38.220	-15.780	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	Tablet PC
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
132.820	-10.230	41.490	31.260	-12.240	43.500
191.020	-10.040	47.548	37.508	-5.992	43.500
365.620	-1.329	39.926	38.597	-7.403	46.000
608.120	4.384	34.971	39.355	-6.645	46.000
767.200	4.235	29.925	34.160	-11.840	46.000
881.660	6.307	29.845	36.152	-9.848	46.000
Vertical					
130.880	-4.239	42.512	38.273	-5.227	43.500
247.280	-8.042	45.683	37.640	-8.360	46.000
365.620	-2.179	39.926	37.747	-8.253	46.000
509.180	-0.158	40.826	40.668	-5.332	46.000
664.380	-1.918	36.213	34.295	-11.705	46.000
899.120	3.063	34.330	37.393	-8.607	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss −Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product	:	Tablet PC
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
198.780	-10.661	45.939	35.278	-8.222	43.500
330.700	-4.492	41.600	37.108	-8.892	46.000
462.620	1.172	32.004	33.176	-12.824	46.000
615.880	3.215	34.855	38.070	-7.930	46.000
749.740	3.320	31.507	34.827	-11.173	46.000
899.120	5.433	34.330	39.763	-6.237	46.000
Vertical					
55.220	-4.699	39.649	34.950	-5.050	40.000
169.680	-8.728	48.635	39.907	-3.593	43.500
365.620	-2.179	39.926	37.747	-8.253	46.000
509.180	-0.158	40.826	40.668	-5.332	46.000
664.380	-1.918	36.213	34.295	-11.705	46.000
825.400	3.430	30.617	34.047	-11.953	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product	:	Tablet PC
Test Item	:	General Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
142.520	-10.427	47.064	36.637	-6.863	43.500
330.700	-4.492	41.600	37.108	-8.892	46.000
462.620	1.172	32.004	33.176	-12.824	46.000
586.780	3.436	33.377	36.813	-9.187	46.000
747.800	3.296	31.404	34.700	-11.300	46.000
899.120	5.433	34.330	39.763	-6.237	46.000
Vertical					
130.880	-4.239	42.512	38.273	-5.227	43.500
330.700	-4.912	41.600	36.688	-9.312	46.000
509.180	-0.158	40.826	40.668	-5.332	46.000
664.380	-1.918	37.175	35.257	-10.743	46.000
825.400	3.430	30.617	34.047	-11.953	46.000
965.080	7.932	29.345	37.277	-16.723	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. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.
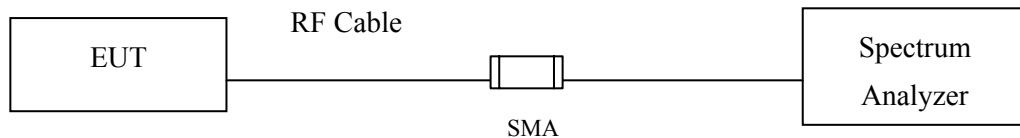
5. RF antenna conducted test

5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2013

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 ANSI C63.10: 2009 for compliance to FCC 47CFR 15.247 requirements.

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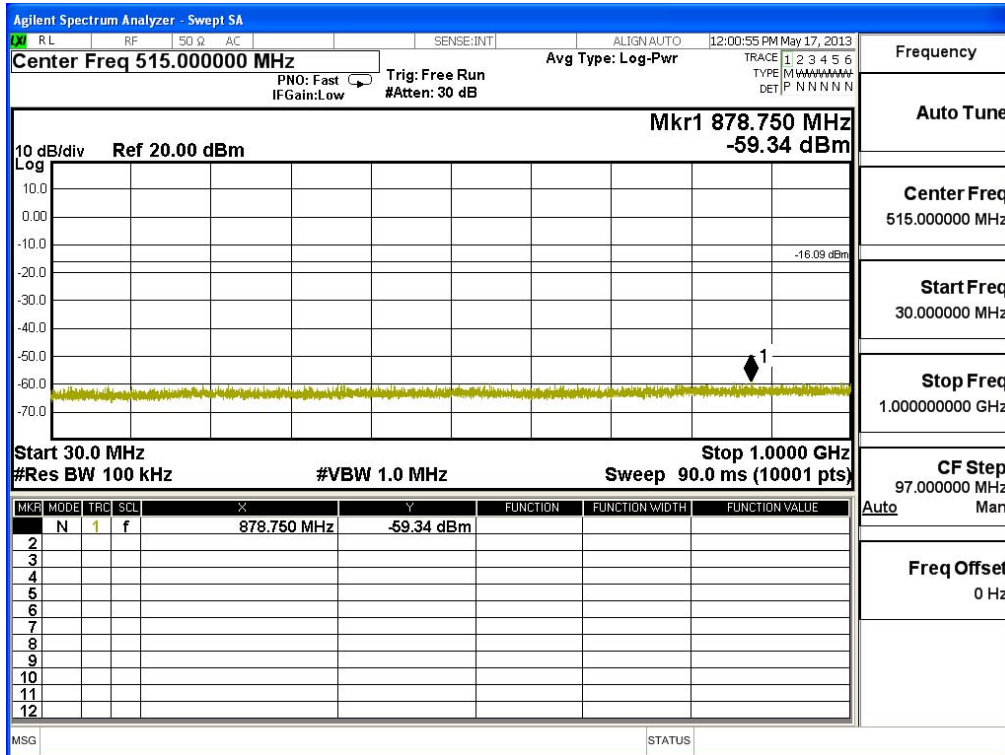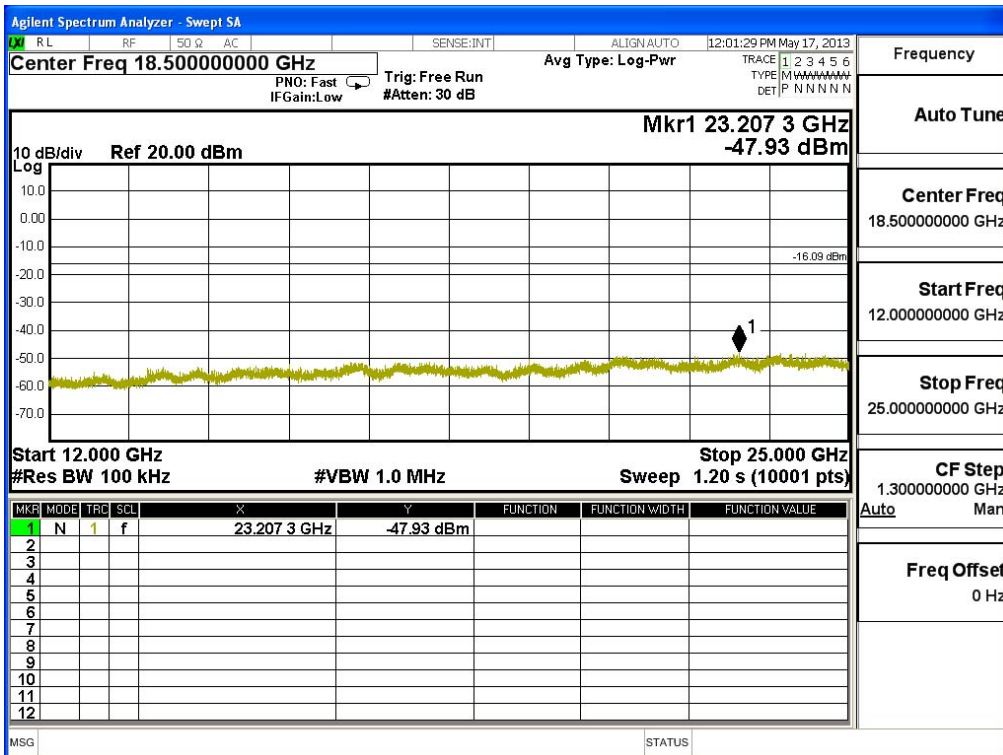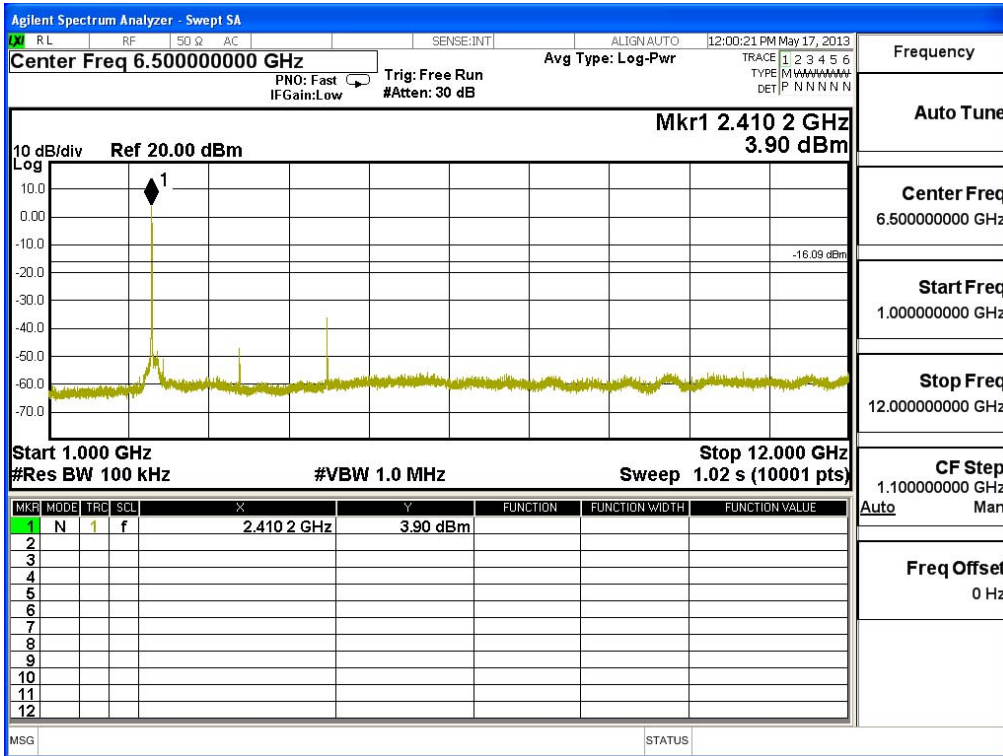
5.5. Uncertainty

The measurement uncertainty

Conducted is defined as $\pm$ 1.27dB

5.6. Test Result of RF antenna conducted test
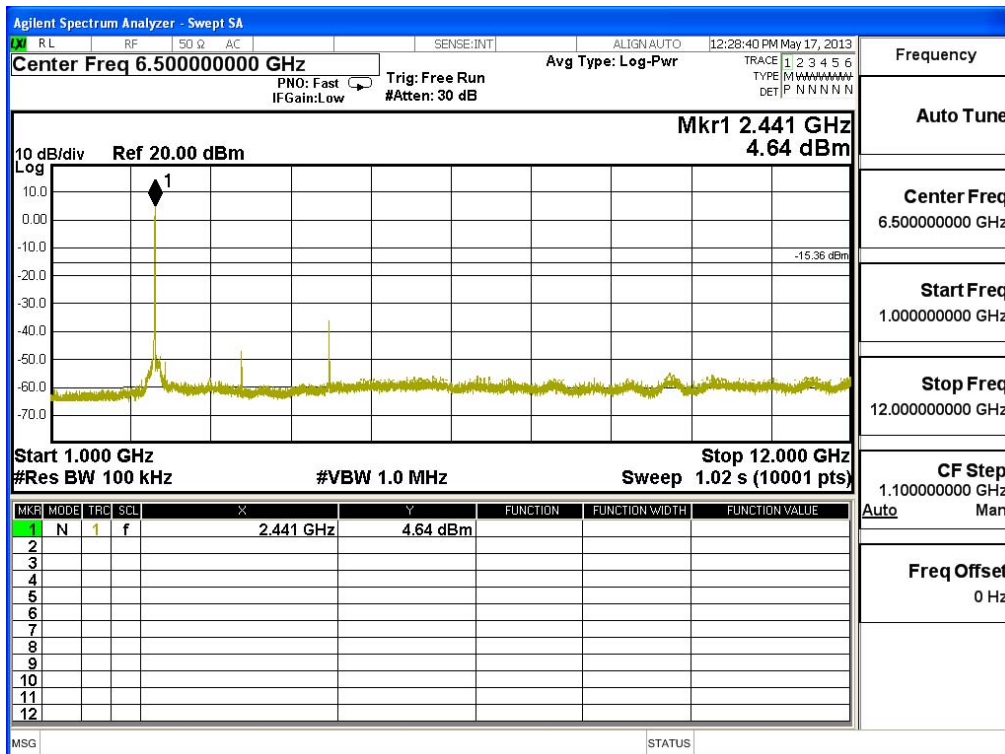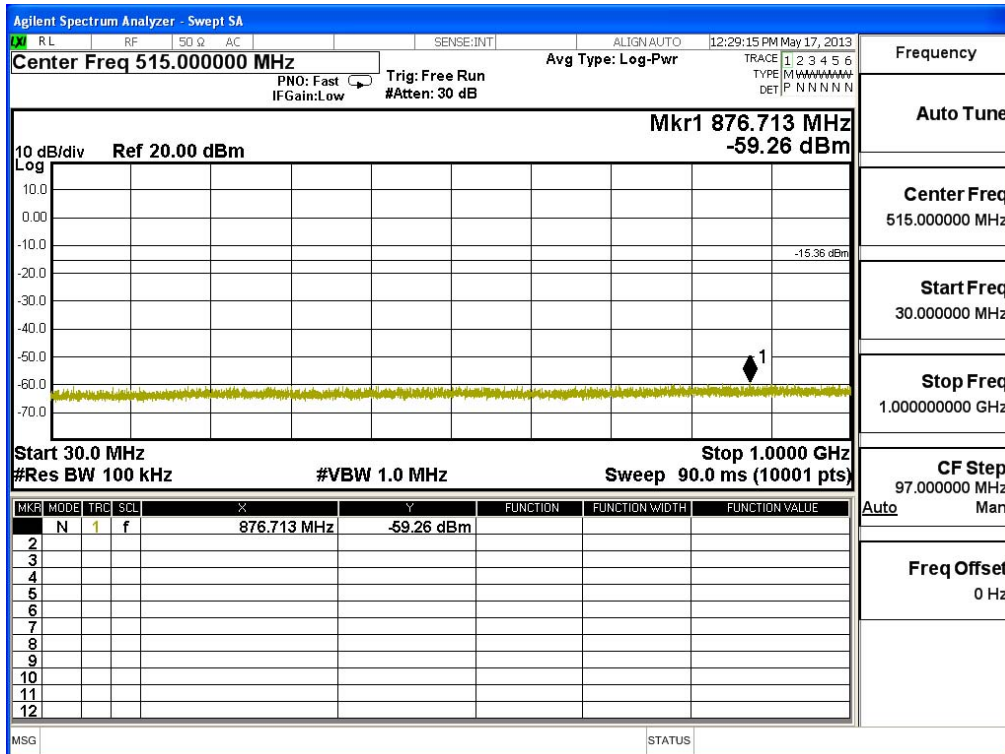
Product   :   Tablet PC

Test Item   :   RF antenna conducted test

Test Site   :   No.3 OATS
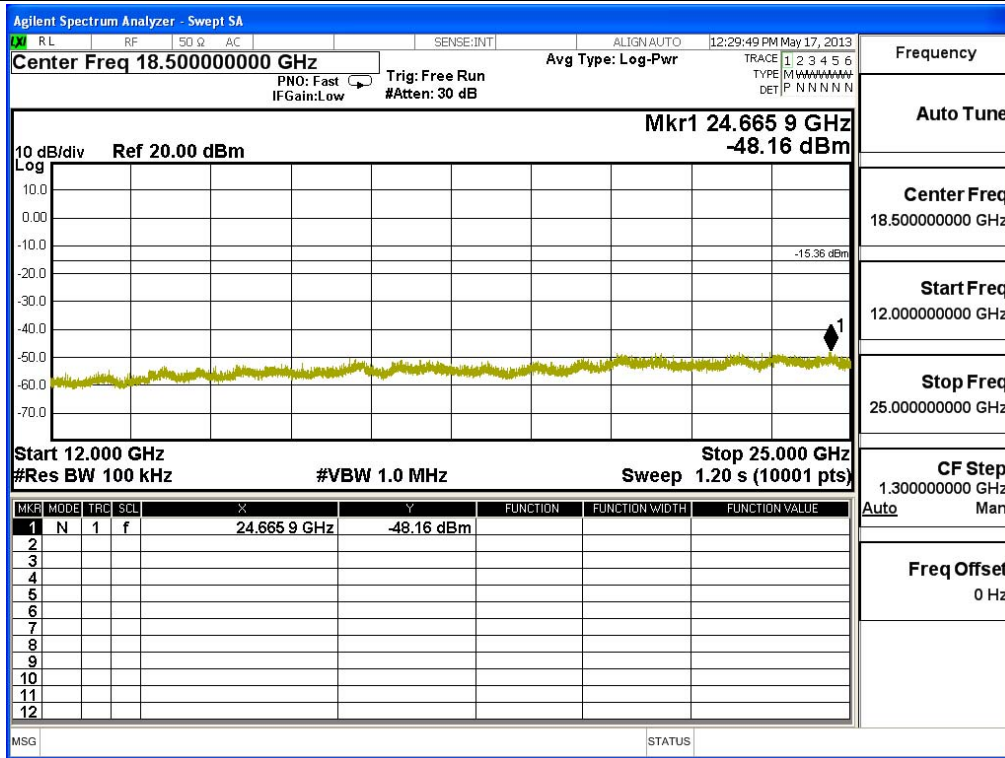
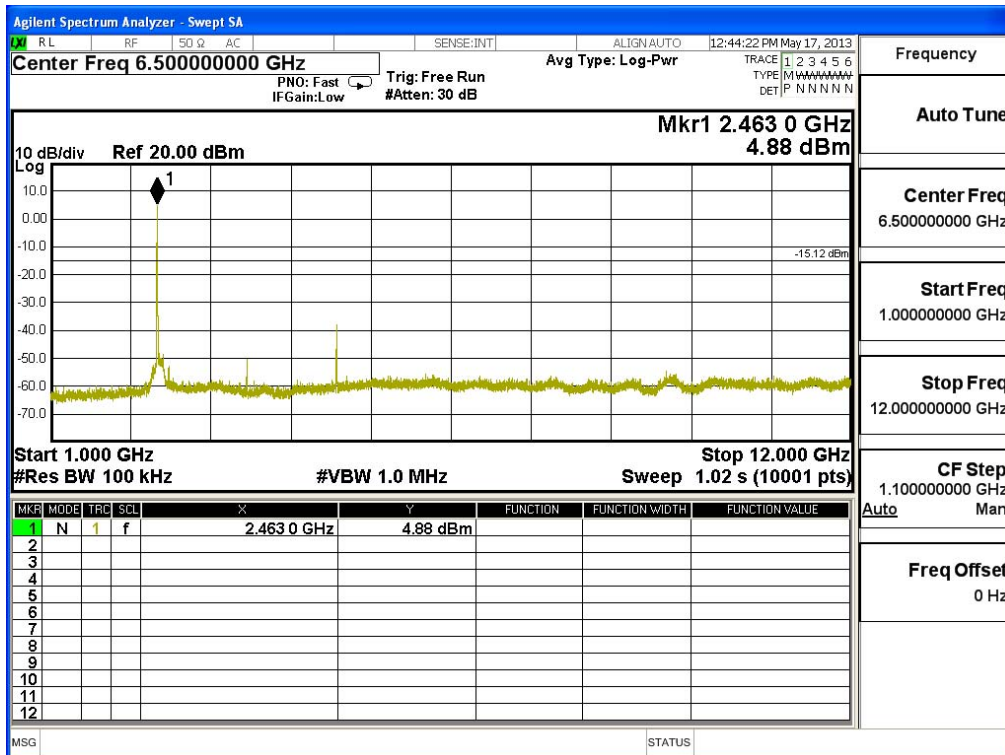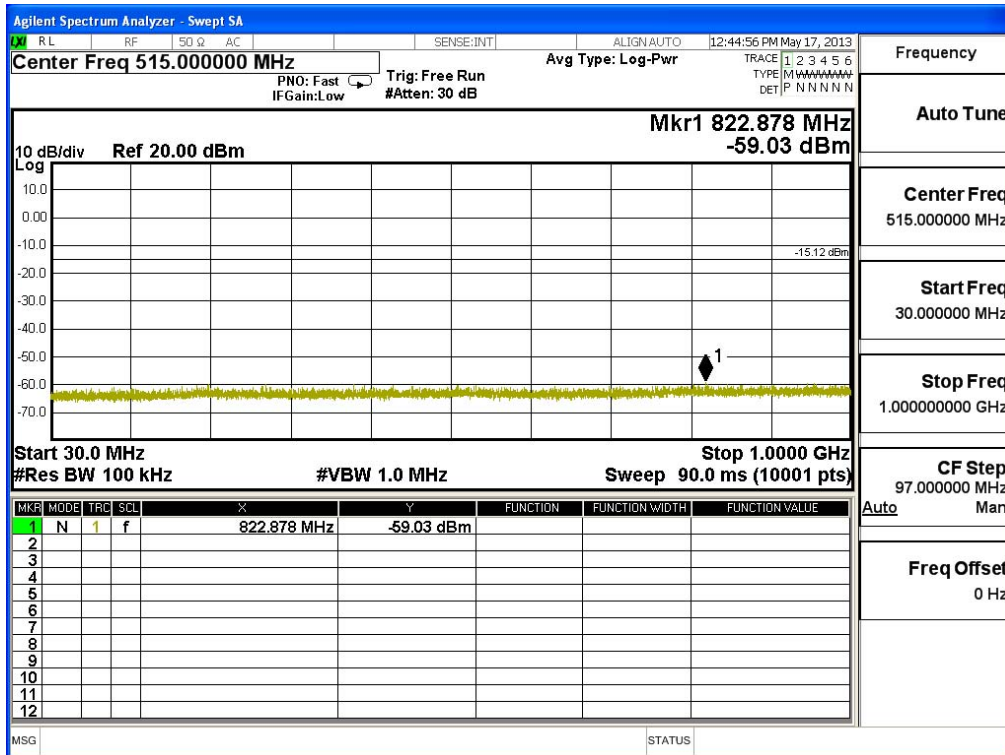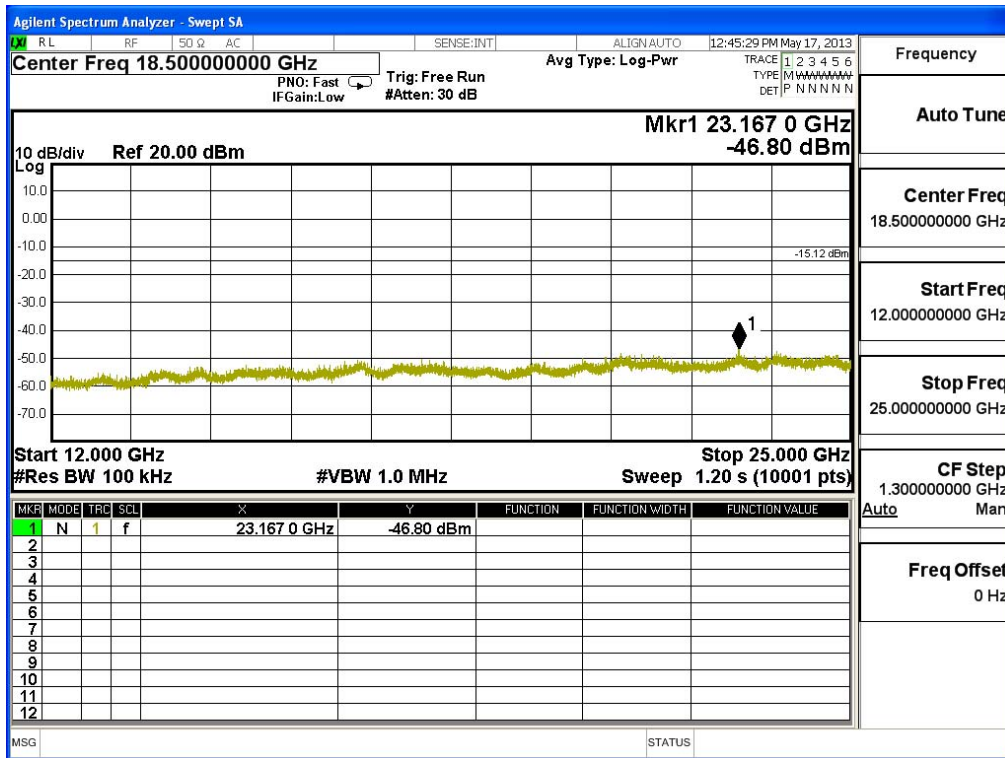Test Mode   :   Mode 1: Transmit (802.11b 1Mbps)

Channel 01 (2412MHz)

QTK QuieTek Corporation

Agilent Spectrum Analyzer - Swept SA
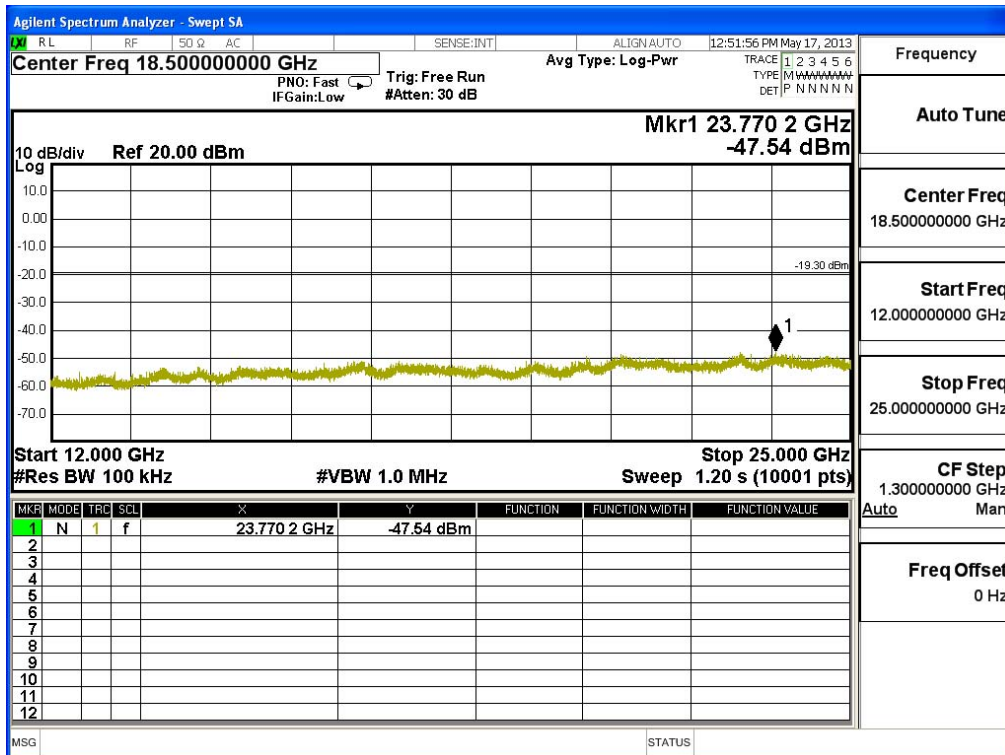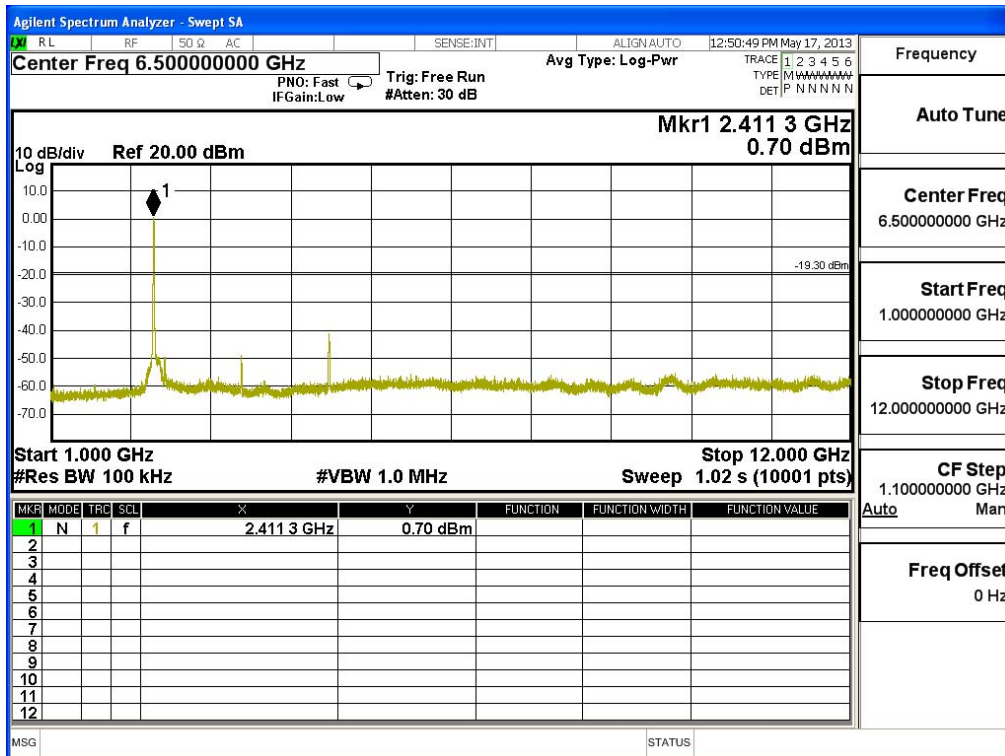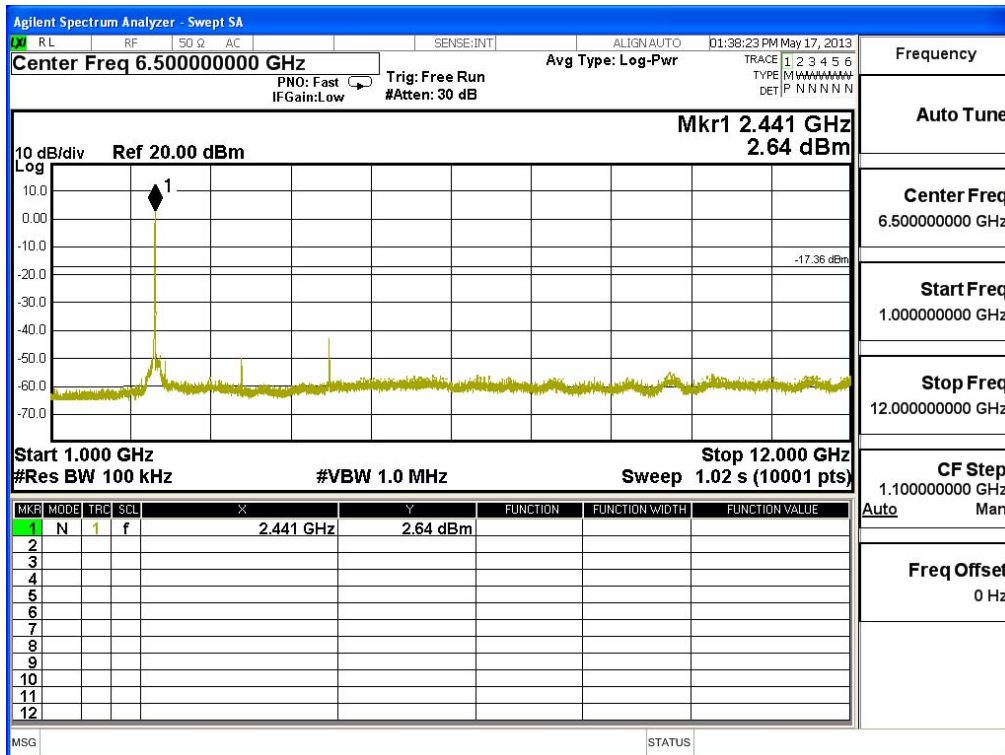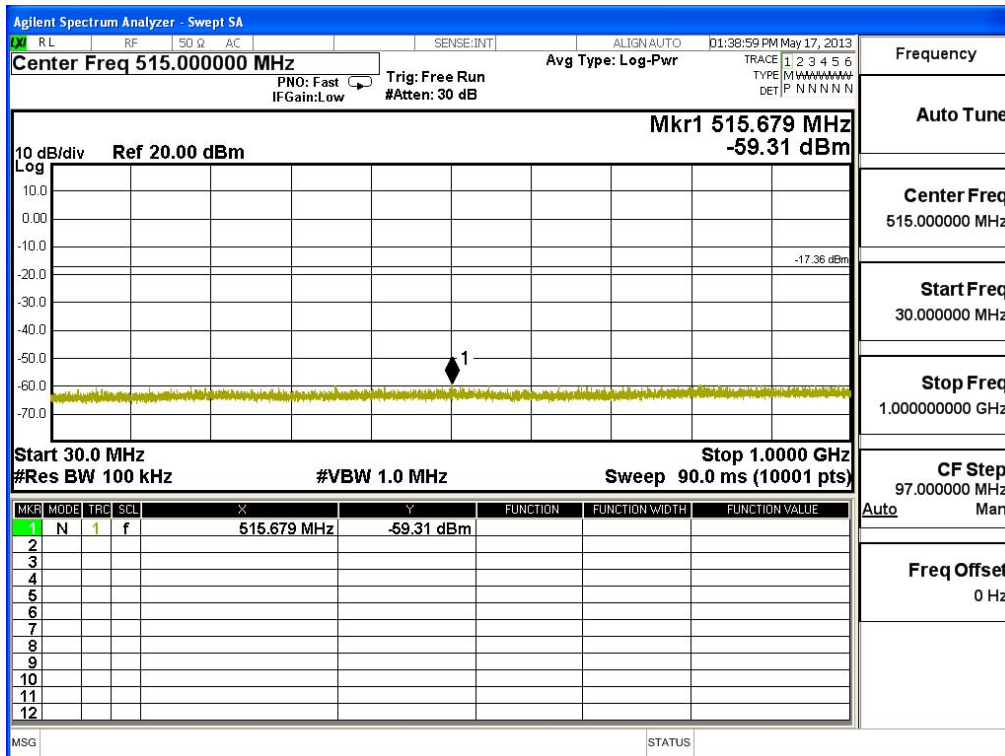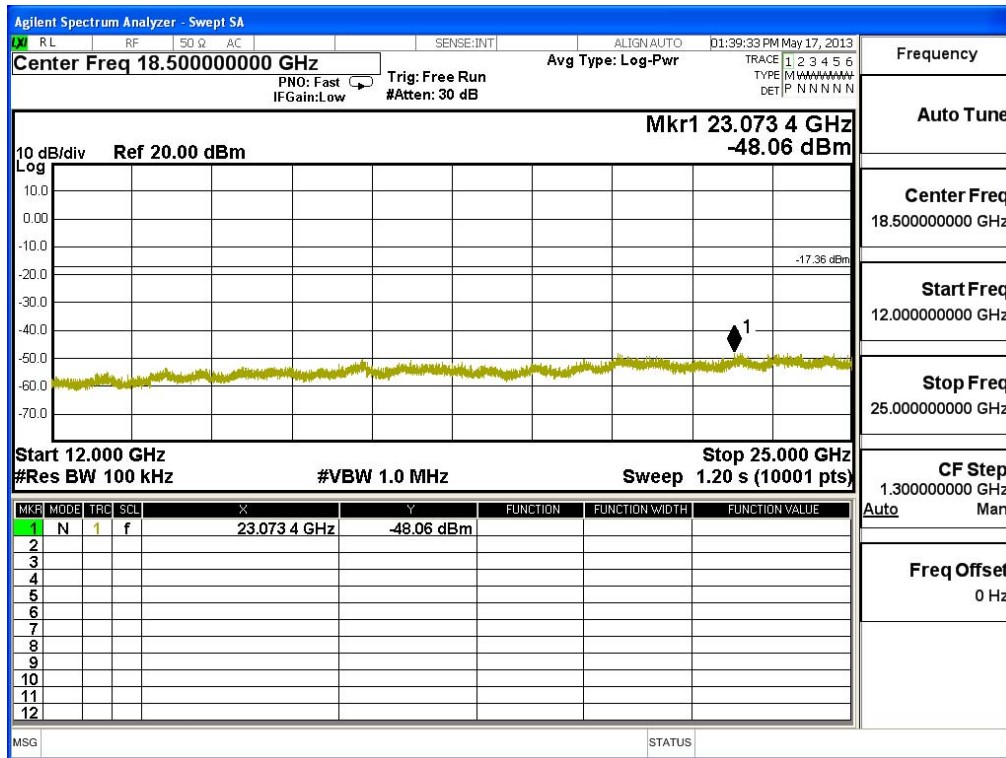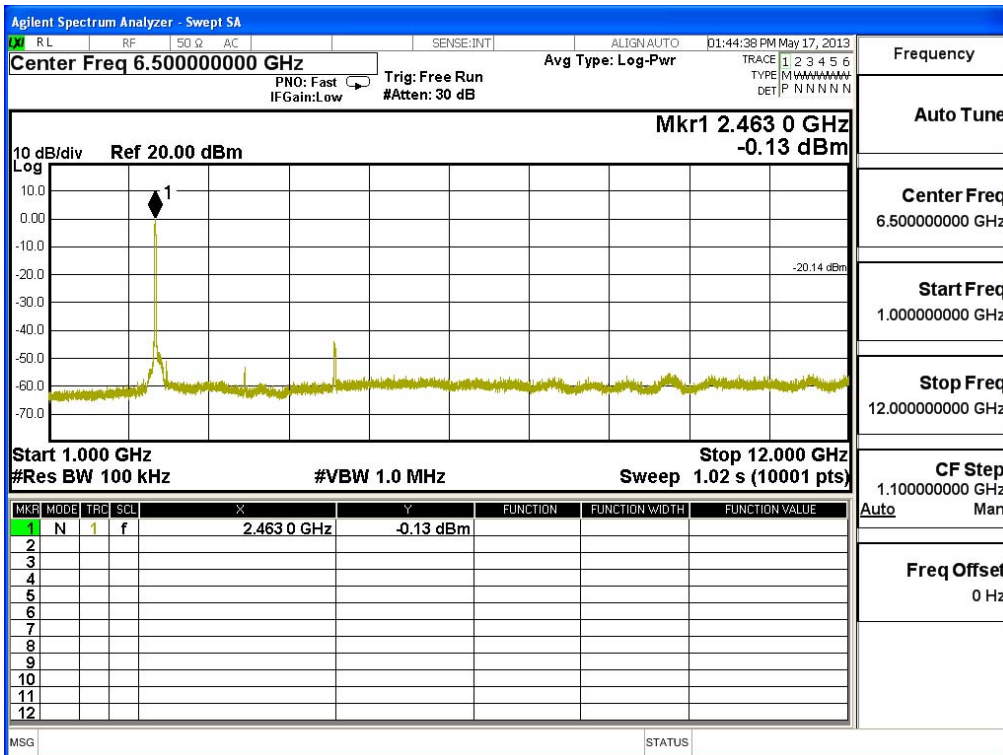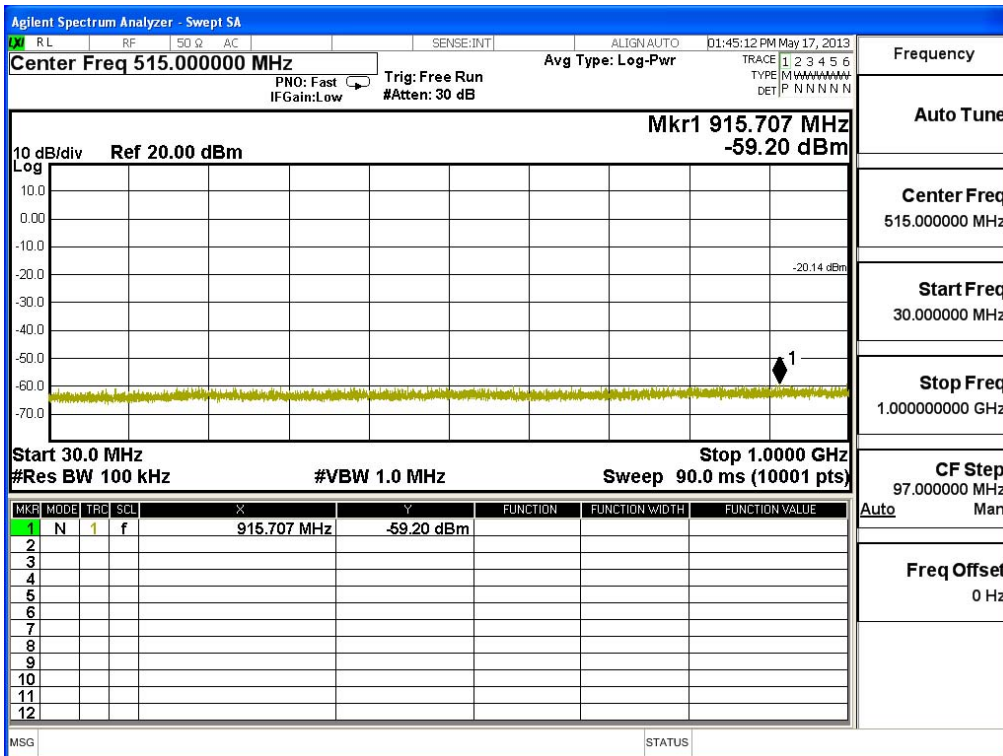
LXI R L   RF   50 Ω   AC   SENSE:INT   ALIGN AUTO   12:00:21 PM May 17, 2013

Center Freq 6.500000000 GHz   Avg Type: Log-Pwr

PNO: Fast   Trig: Free Run
IFGain:Low   #Atten: 30 dB

Mkr1 2.410 2 GHz
3.90 dBm

10 dB/div   Ref 20.00 dBm
Log

10.0
0.00
-10.0   -16.09 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0

Start 1.000 GHz   Stop 12.000 GHz
#Res BW 100 kHz   #VBW 1.0 MHz   Sweep 1.02 s (10001 pts)

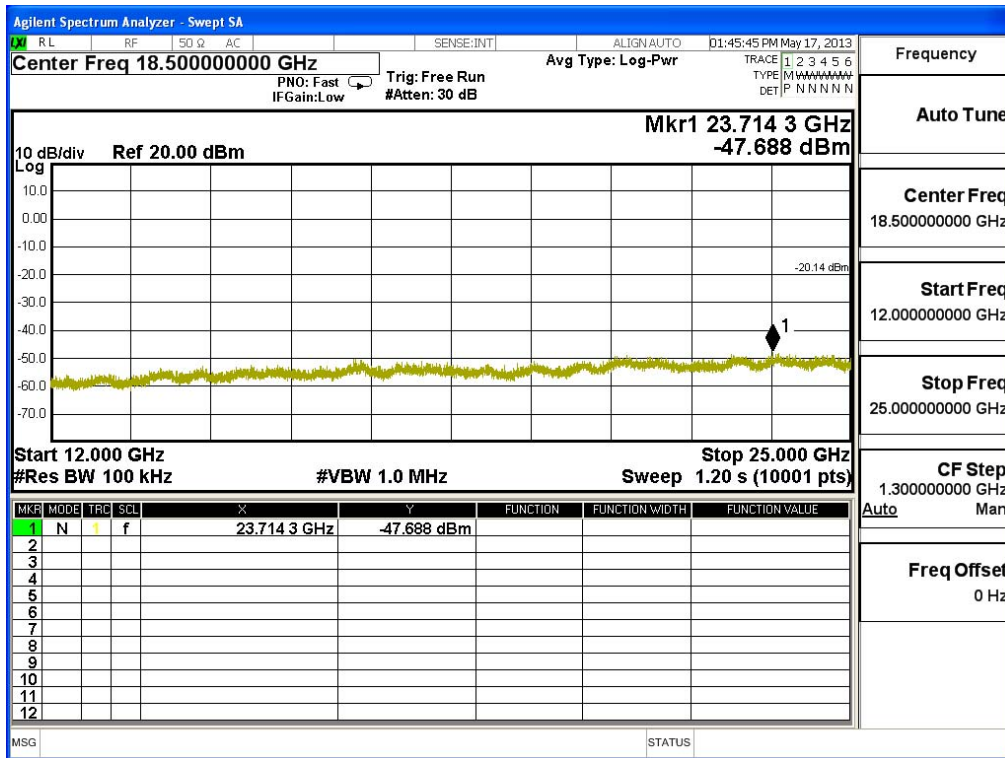| MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.410 2 GHz	3.90 dBm			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG   STATUS

Frequency
Auto Tune
Center Freq 6.500000000 GHz
Start Freq 1.000000000 GHz
Stop Freq 12.000000000 GHz
CF Step 1.100000000 GHz Auto Man
Freq Offset 0 Hz

Agilent Spectrum Analyzer - Swept SA

LXI R L   RF   50 Ω   AC   SENSE:INT   ALIGN AUTO   12:01:29 PM May 17, 2013

Center Freq 18.500000000 GHz   Avg Type: Log-Pwr

PNO: Fast   Trig: Free Run
IFGain:Low   #Atten: 30 dB

Mkr1 23.207 3 GHz
-47.93 dBm

10 dB/div   Ref 20.00 dBm
Log

10.0
0.00
-10.0   -16.09 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0

Start 12.000 GHz   Stop 25.000 GHz
#Res BW 100 kHz   #VBW 1.0 MHz   Sweep 1.20 s (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	23.207 3 GHz	-47.93 dBm			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG   STATUS

Frequency
Auto Tune
Center Freq 18.500000000 GHz
Start Freq 12.000000000 GHz
Stop Freq 25.000000000 GHz
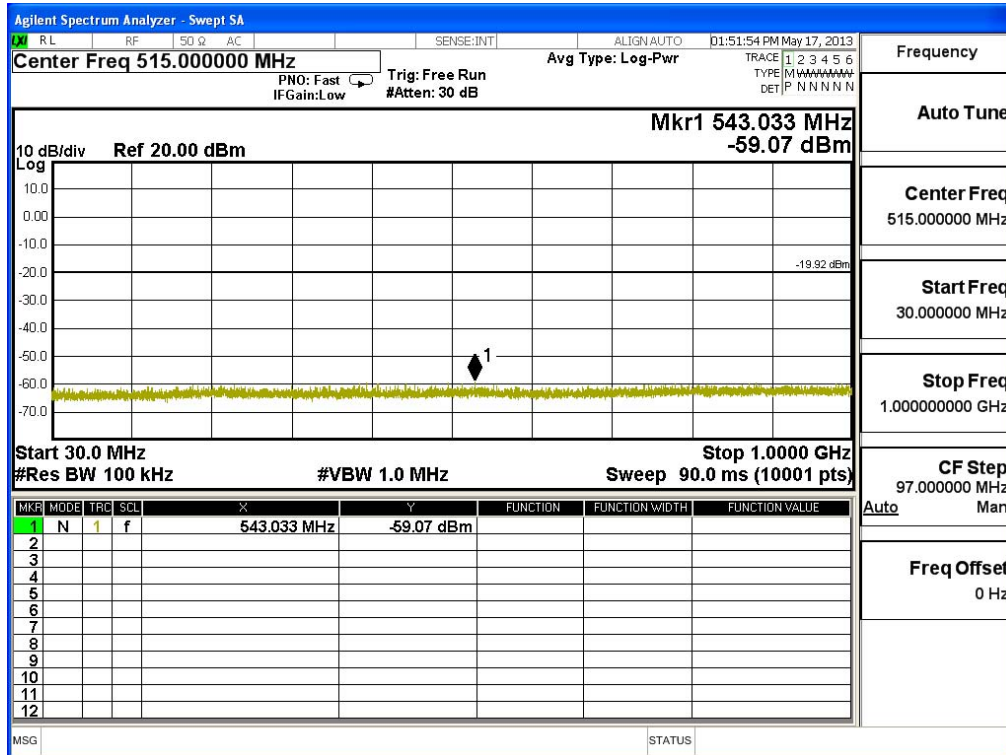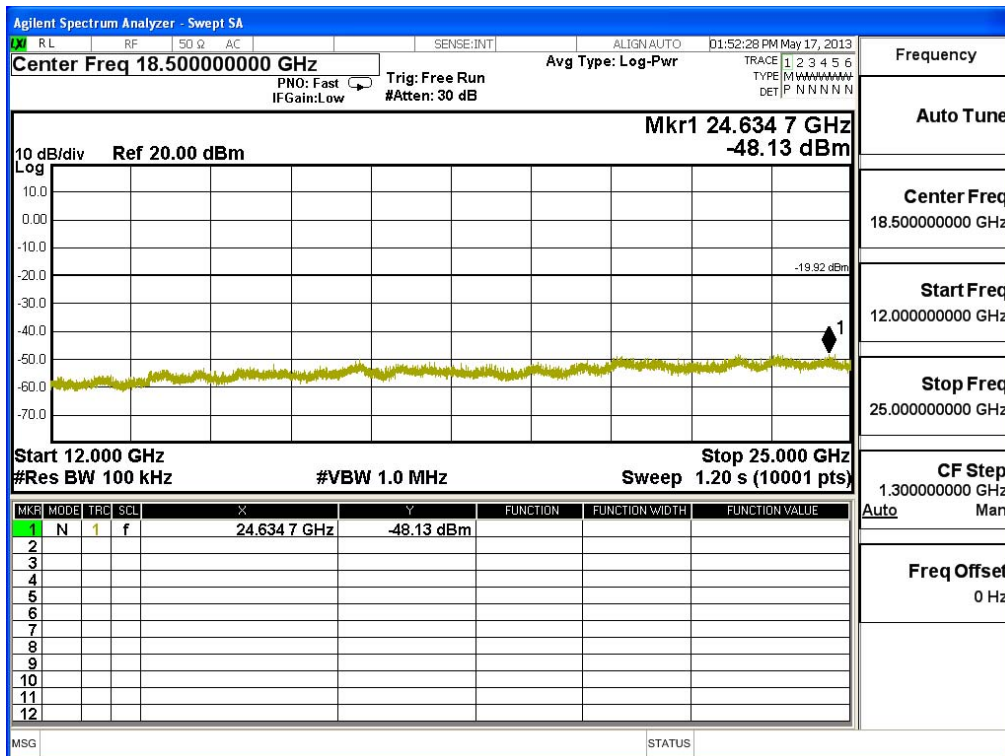CF Step 1.300000000 GHz Auto Man
Freq Offset 0 Hz

Channel 06 (2437MHz)

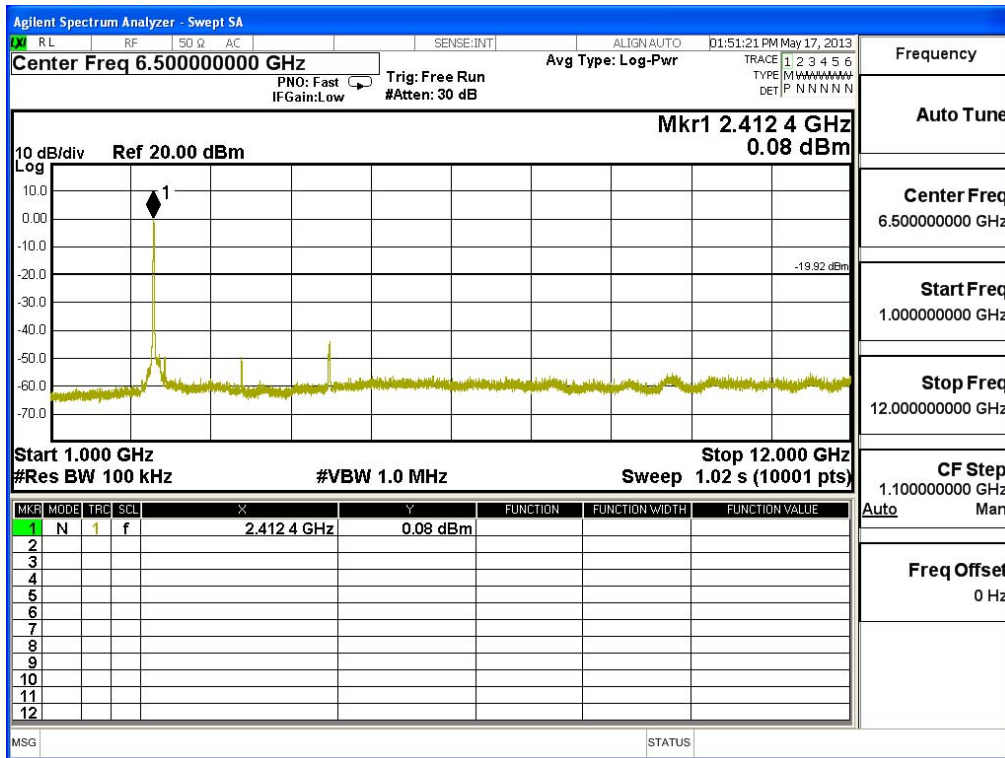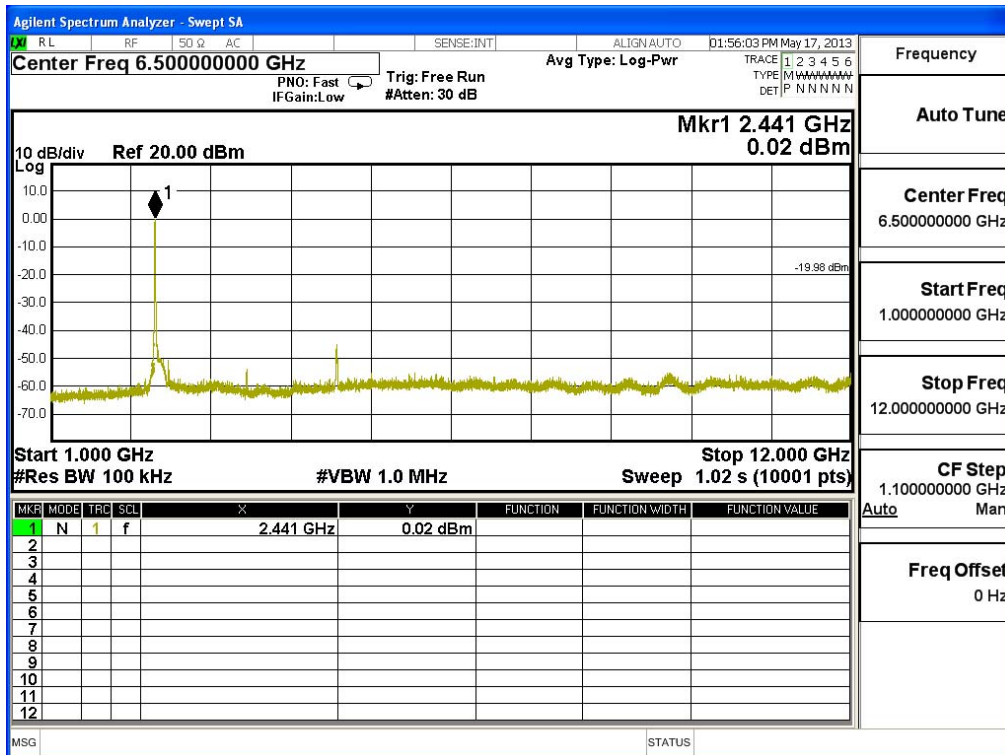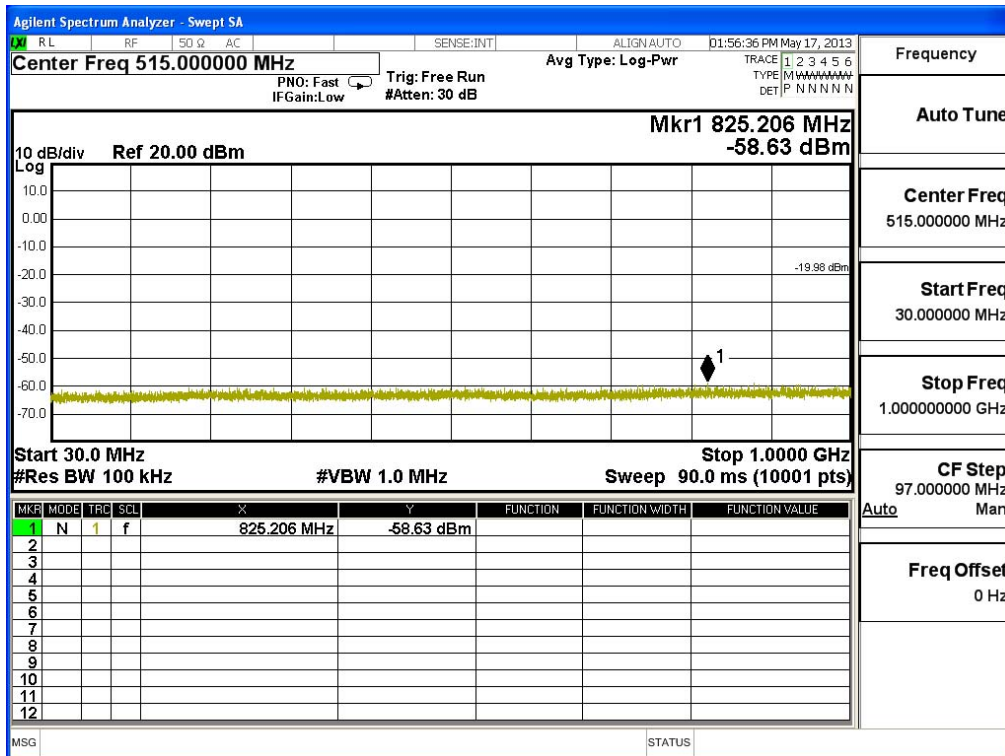**QTK QuieTek** Corporation

Agilent Spectrum Analyzer - Swept SA

R L	RF	50 Ω	AC		SENSE:INT		ALIGN AUTO	12:29:49 PM May 17, 2013

Center Freq 18.500000000 GHz

Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N

PNO: Fast
IFGain:Low

Trig: Free Run
#Atten: 30 dB

Mkr1 24.665 9 GHz
-48.16 dBm

10 dB/div   Ref 20.00 dBm
Log

10.0
0.00
-10.0   -15.36 dBm
-20.0
-30.0
-40.0   1
-50.0
-60.0
-70.0

Start 12.000 GHz   Stop 25.000 GHz
#Res BW 100 kHz   #VBW 1.0 MHz   Sweep 1.20 s (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	24.665 9 GHz	-48.16 dBm			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG   STATUS

Frequency

Auto Tune

Center Freq
18.500000000 GHz

Start Freq
12.000000000 GHz

Stop Freq
25.000000000 GHz

CF Step
1.300000000 GHz
Auto   Man

Freq Offset
0 Hz

Channel 11 (2462MHz)

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

Channel 01 (2412MHz)

Channel 06 (2437MHz)

Channel 11 (2462MHz)

Product : Tablet PC

Test Item : RF Antenna Conducted Spurious

Test Site : No.3 OATS
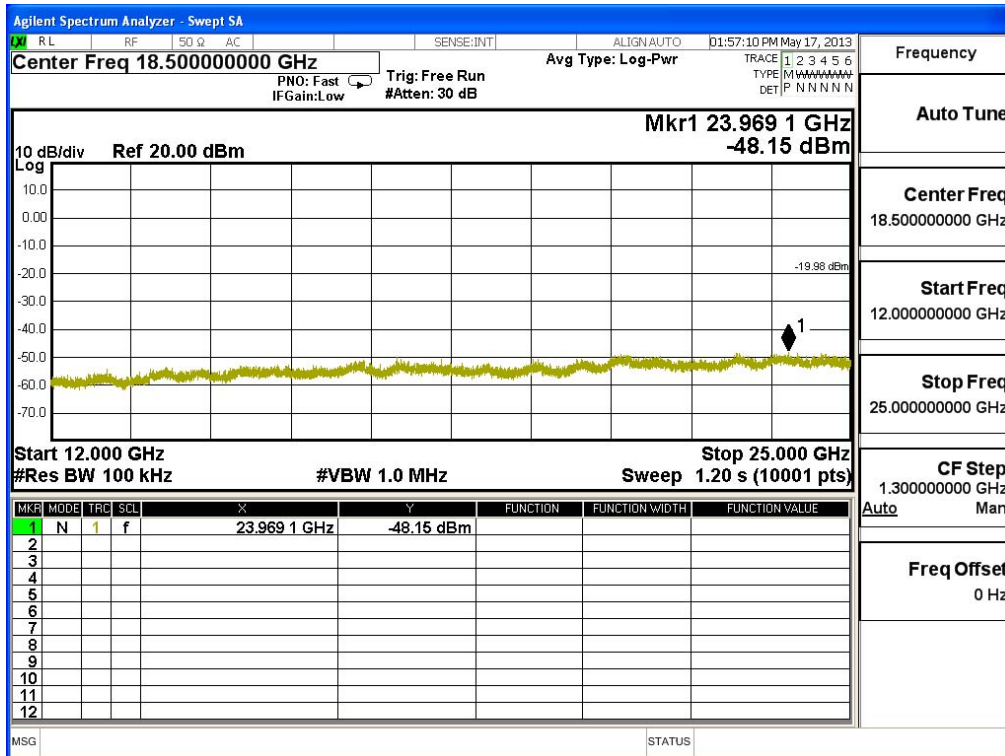
Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)
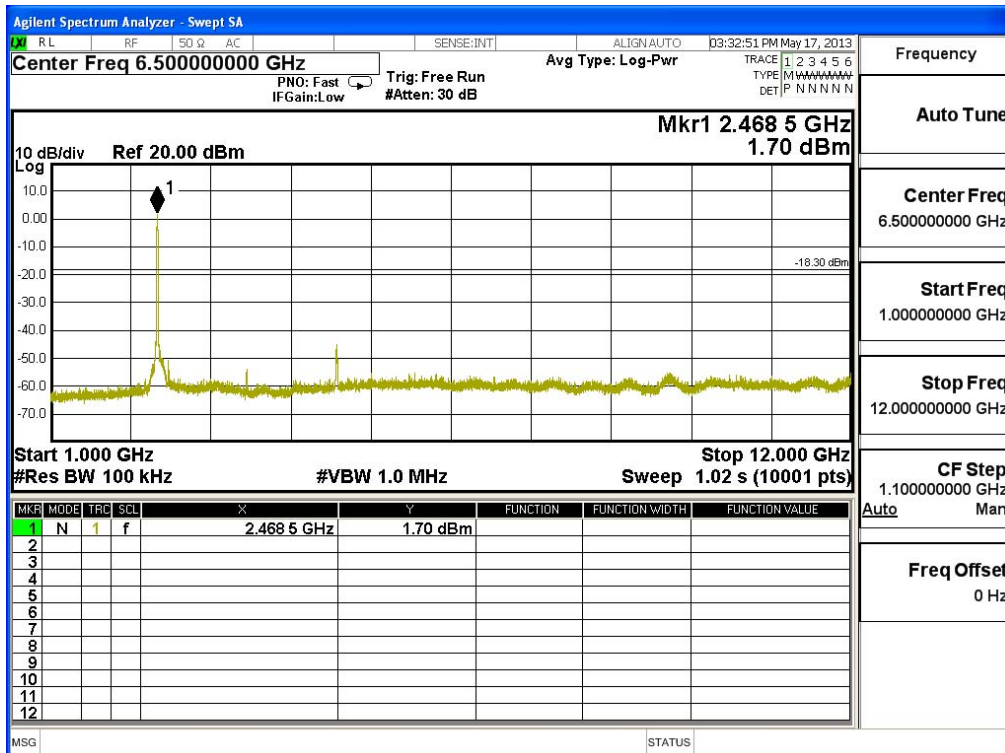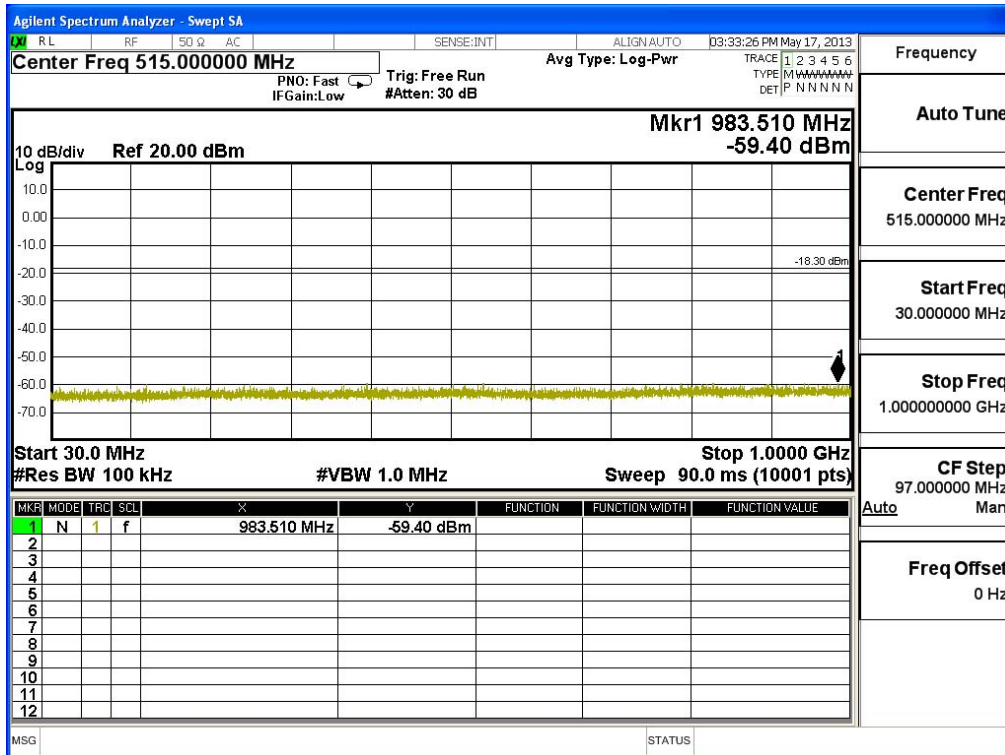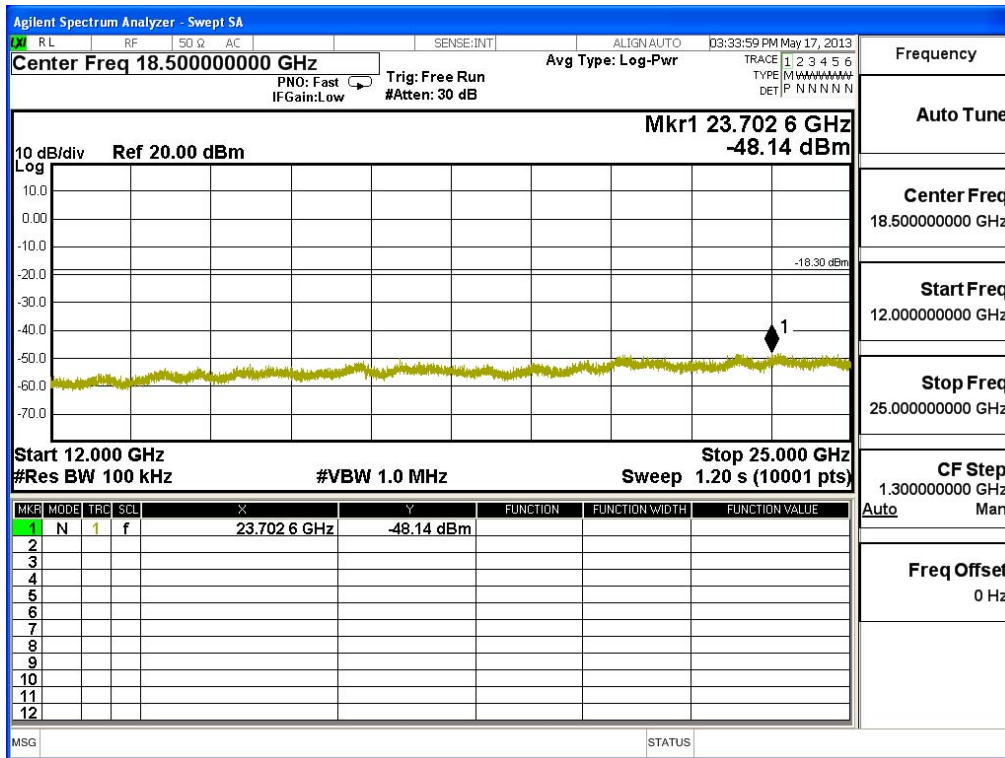
Channel 01 (2412MHz)

Channel 06 (2437MHz)

Channel 11 (2462MHz)

QTK QuieTek Corporation

Agilent Spectrum Analyzer - Swept SA

| R L | RF | 50 Ω | AC | | SENSE:INT | | ALIGN AUTO | 03:33:59 PM May 17, 2013 |

Center Freq 18.500000000 GHz

Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE MWWWWWW
DET P N N N N N

PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB

Mkr1 23.702 6 GHz
-48.14 dBm

10 dB/div   Ref 20.00 dBm
Log

10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0

-18.30 dBm

1

Start 12.000 GHz
#Res BW 100 kHz
#VBW 1.0 MHz
Stop 25.000 GHz
Sweep 1.20 s (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	23.702 6 GHz	-48.14 dBm			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

MSG
STATUS

Frequency

Auto Tune

Center Freq
18.500000000 GHz

Start Freq
12.000000000 GHz

Stop Freq
25.000000000 GHz

CF Step
1.300000000 GHz
Auto   Man

Freq Offset
0 Hz

6. Band Edge

6.1. Test Equipment

RF Radiated Measurement:

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

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2012
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2012
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2012
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	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 C63.10: 2009 and tested according to DTS test procedure of ANSI C63.10: 2009 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 C63.10: 2009 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: Transmit (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)	Average Limit (dBuV/m)	Result
01 (Peak)	2375.000	31.451	26.655	58.106	74.000	54.000	Pass
01 (Peak)	2390.000	31.509	24.863	56.372	74.000	54.000	Pass
01 (Peak)	2413.000	31.646	66.934	98.580	--	--	--
01 (Average)	2390.000	31.509	12.912	44.421	74.000	54.000	Pass
01 (Average)	2412.800	31.645	62.596	94.240	--	--	--

Figure Channel 01:   **Horizontal (Peak)**
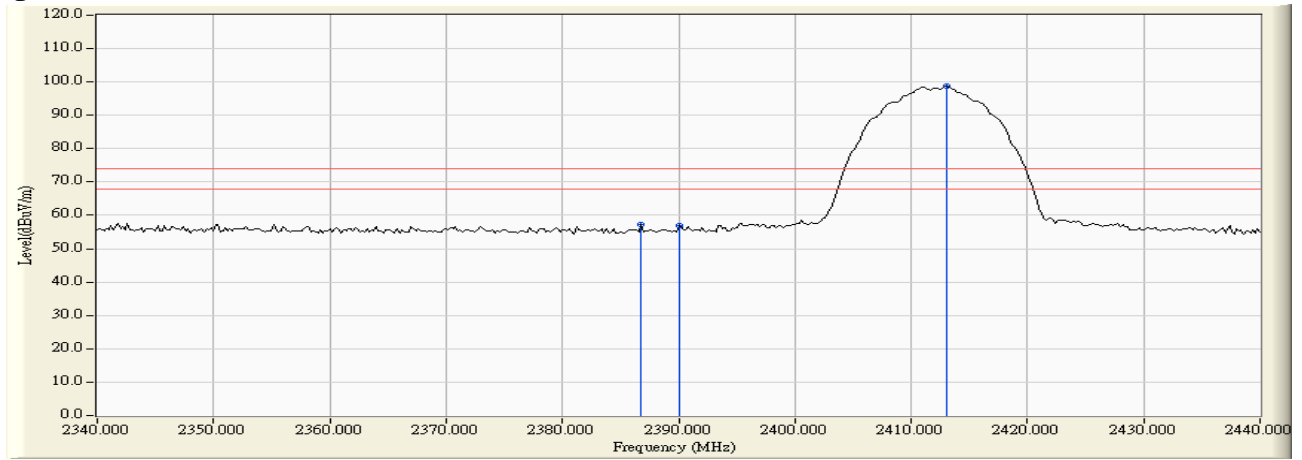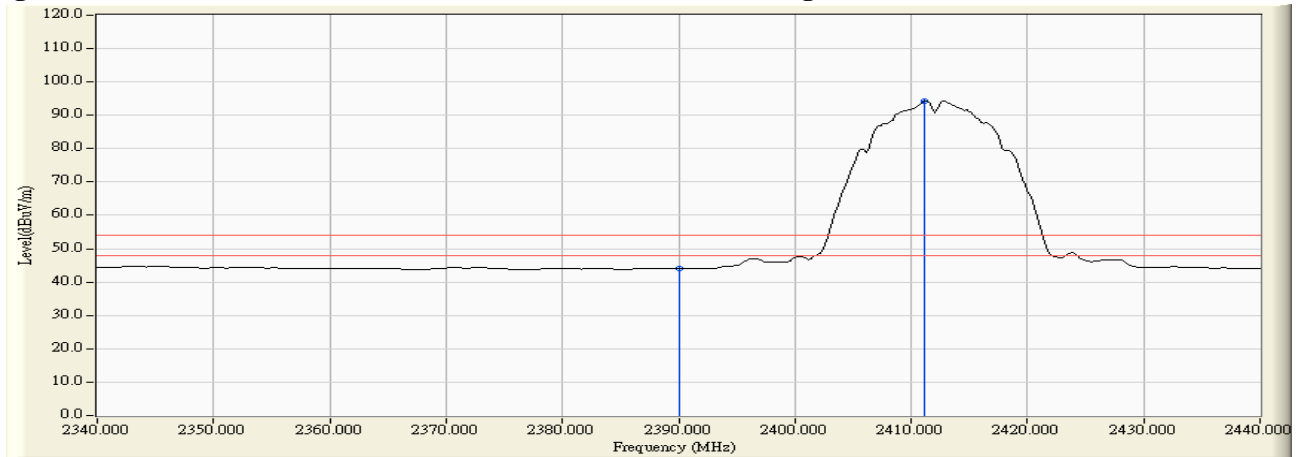

Figure Channel 01:   **Horizontal (Average)**

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 1: Transmit (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)	Average Limit (dBuV/m)	Result
01 (Peak)	2386.800	30.930	26.255	57.185	74.000	54.000	Pass
01 (Peak)	2390.000	30.915	26.156	57.071	74.000	54.000	Pass
01 (Peak)	2413.000	30.956	67.680	98.636	--	--	--
01 (Average)	2390.000	30.915	13.199	44.114	74.000	54.000	Pass
01 (Average)	2411.200	30.944	63.460	94.404	--	--	--

Figure Channel 01:   **Vertical (Peak)**
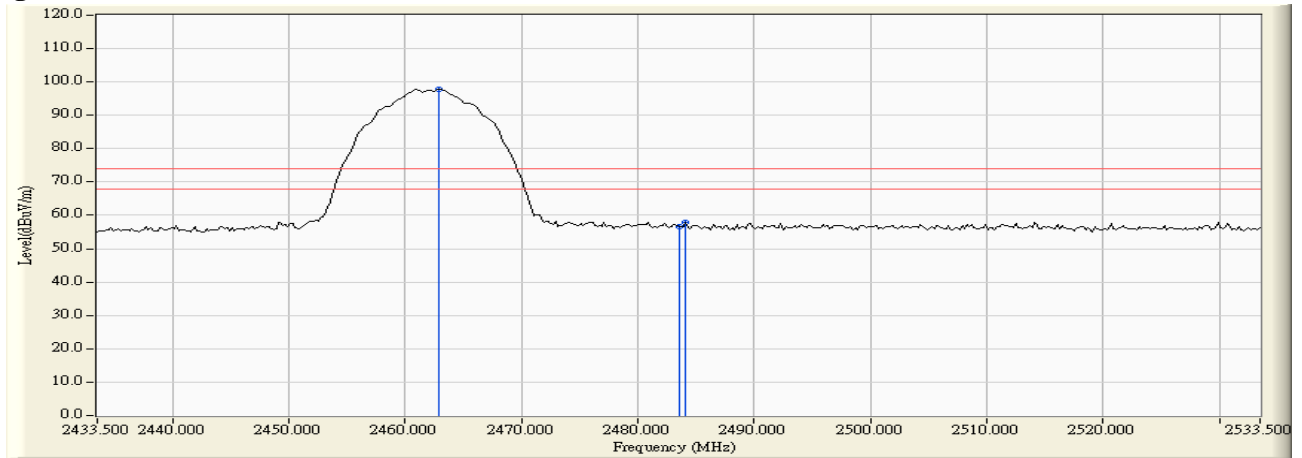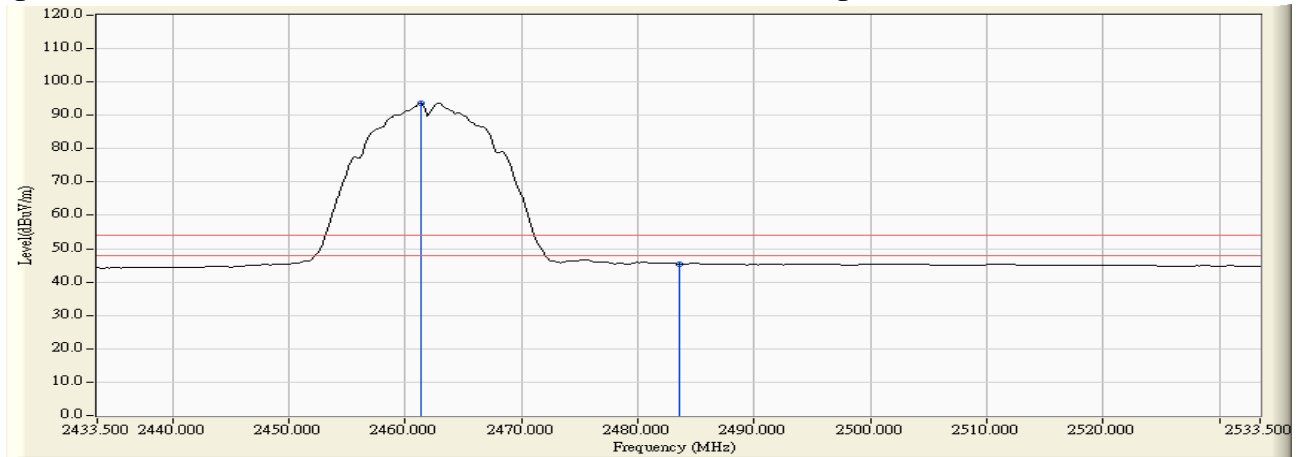

Figure Channel 01:   **Vertical (Average)**

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: Transmit (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)	Average Limit (dBuV/m)	Result
11 (Peak)	2462.900	32.026	65.847	97.873	--	--	--
11 (Peak)	2483.500	32.182	24.568	56.750	74.000	54.000	Pass
11 (Peak)	2484.100	32.186	25.678	57.865	74.000	54.000	Pass
11 (Average)	2461.300	32.014	61.545	93.559	--	--	--
11 (Average)	2483.500	32.182	13.205	45.387	74.000	54.000	Pass

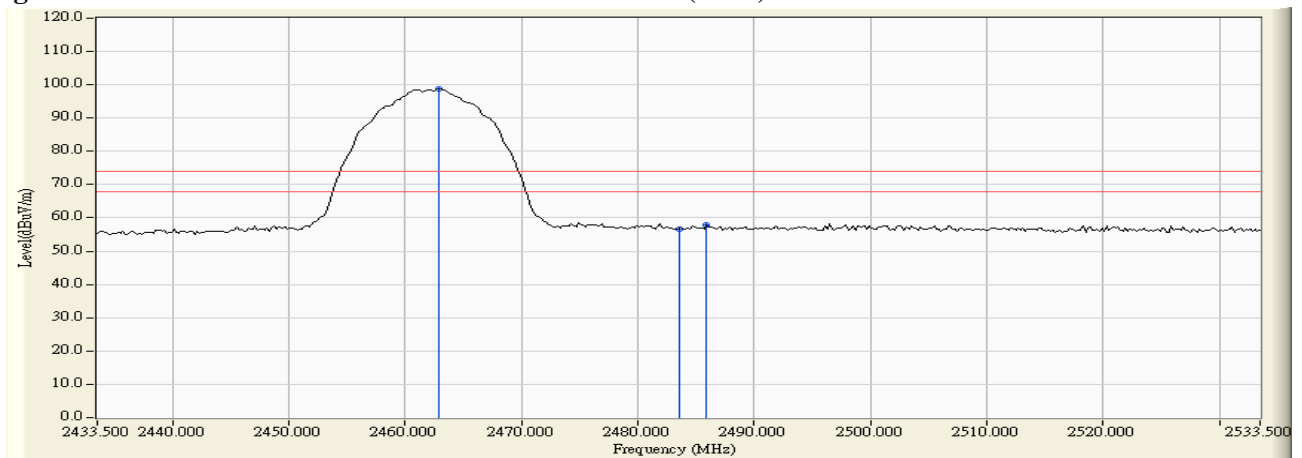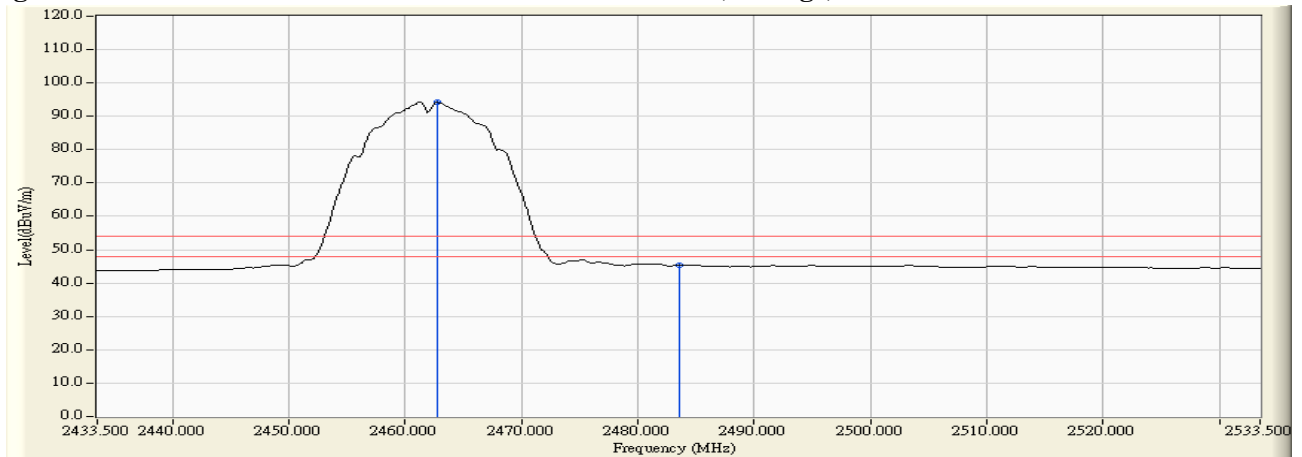**Figure Channel 11:**   **Horizontal (Peak)**

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 1: Transmit (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)	Average Limit (dBuV/m)	Result
11 (Peak)	2462.900	31.296	67.536	98.832	--	--	--
11 (Peak)	2483.500	31.435	25.041	56.476	74.000	54.000	Pass
11 (Peak)	2485.900	31.451	26.569	58.021	74.000	54.000	Pass
11 (Average)	2462.700	31.295	63.086	94.381	--	--	--
11 (Average)	2483.500	31.435	13.855	45.290	74.000	54.000	Pass

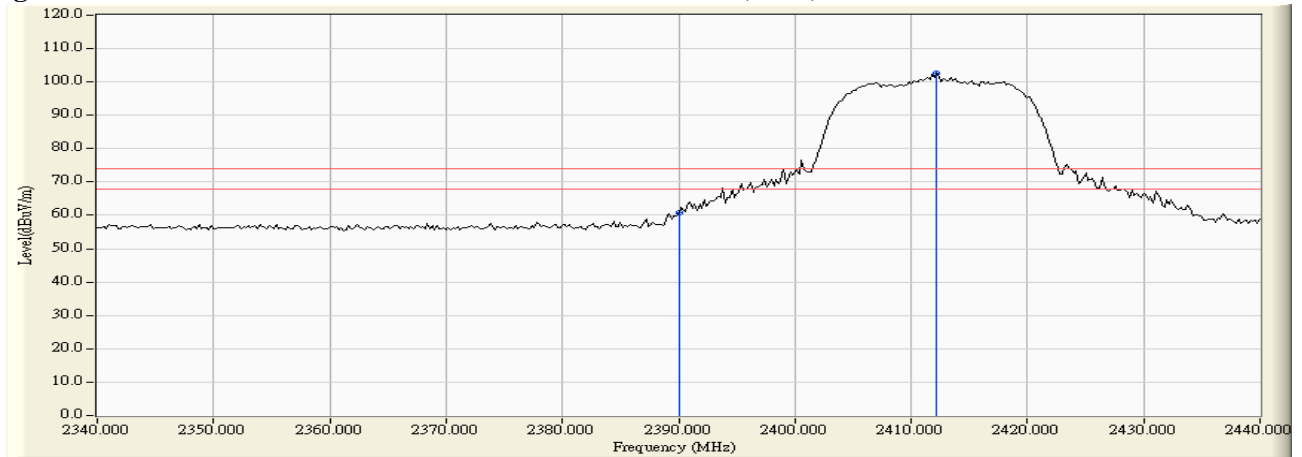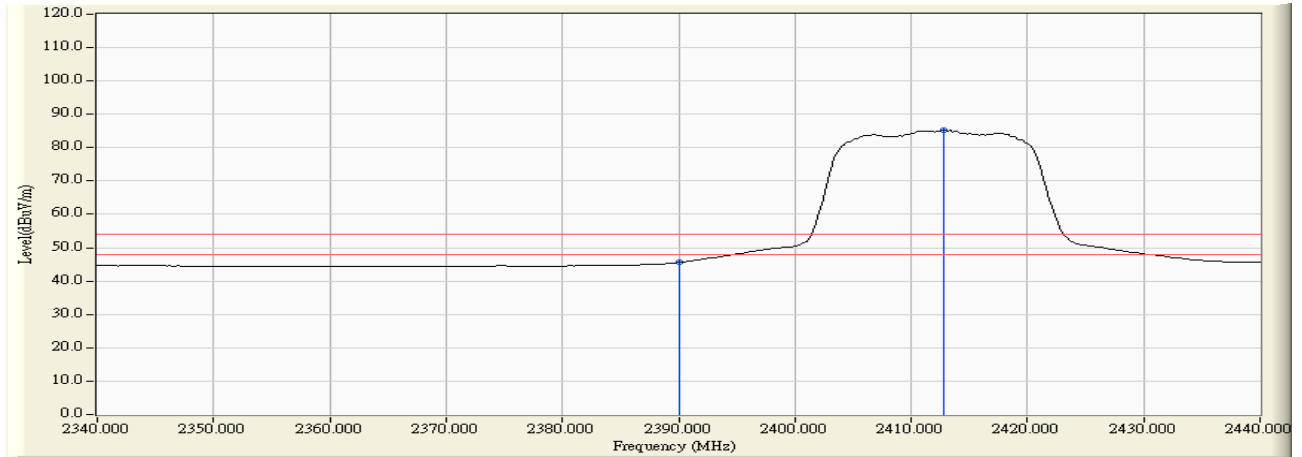**Figure Channel 11:** **Vertical (Peak)**

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 2: Transmit (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)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	29.307	60.816	74.000	54.000	Pass
01 (Peak)	2412.200	31.640	70.957	102.597	--	--	--
01 (Average)	2390.000	31.509	14.082	45.591	74.000	54.000	Pass
01 (Average)	2412.800	31.645	53.622	85.266	--	--	--

Figure Channel 01:   **Horizontal (Peak)**
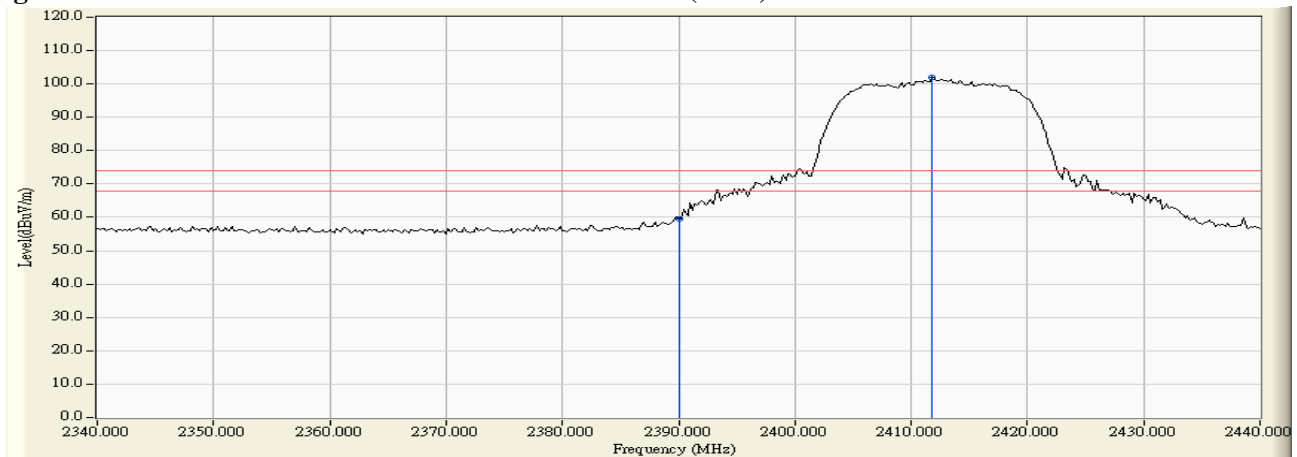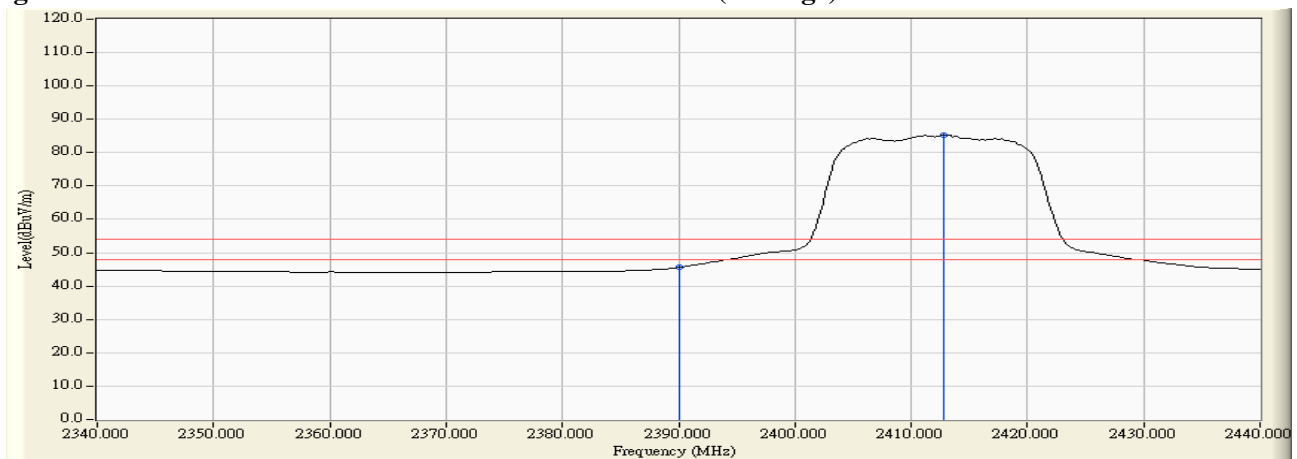

Figure Channel 01:   **Horizontal (Average)**

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 etection.

Product	:	Tablet PC					
Test Item	:	Band Edge Data					
Test Site	:	No.3 OATS					
Test Mode	:	Mode 2: Transmit (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)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	28.594	59.509	74.000	54.000	Pass
01 (Peak)	2411.800	30.948	71.157	102.105	--	--	--
01 (Average)	2390.000	30.915	14.643	45.558	74.000	54.000	Pass
01 (Average)	2412.800	30.955	54.388	85.343	--	--	--

Figure Channel 01:   **Vertical (Peak)**
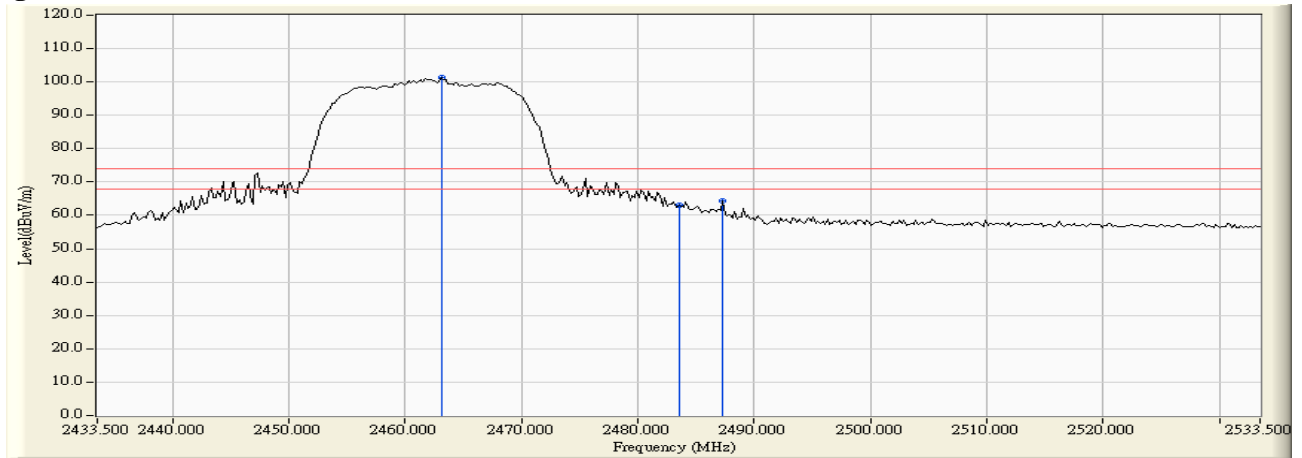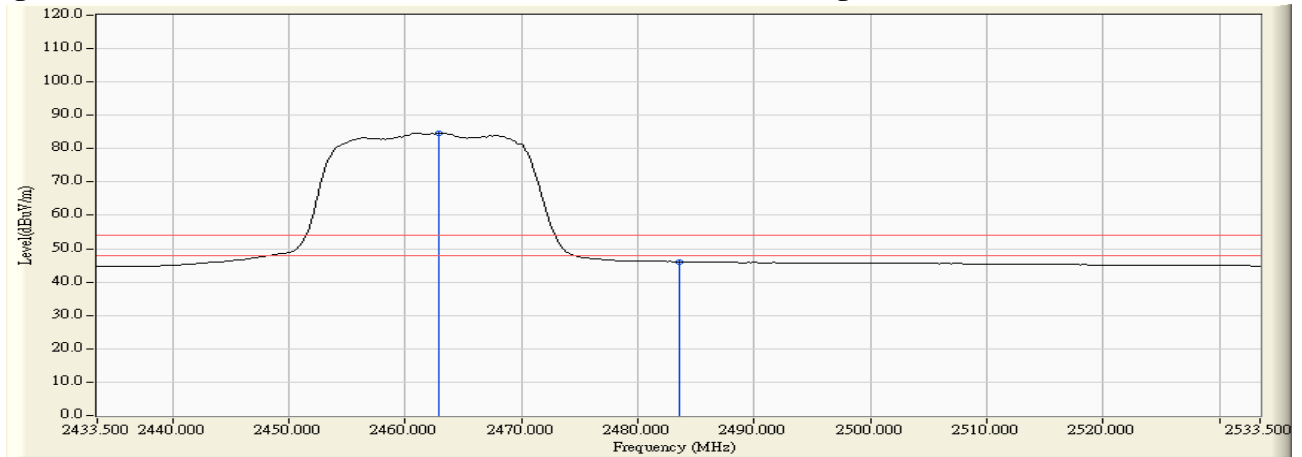

Figure Channel 01:   **Vertical (Average)**

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: Transmit (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)	Average Limit (dBuV/m)	Result
11 (Peak)	2463.100	32.028	69.177	101.205	--	--	--
11 (Peak)	2483.500	32.182	30.958	63.140	74.000	54.000	Pass
11 (Peak)	2487.300	32.211	32.277	64.488	74.000	54.000	Pass
11 (Average)	2462.900	32.026	52.728	84.754	--	--	--
11 (Average)	2483.500	32.182	13.894	46.076	74.000	54.000	Pass

Figure Channel 11:   **Horizontal (Peak)**
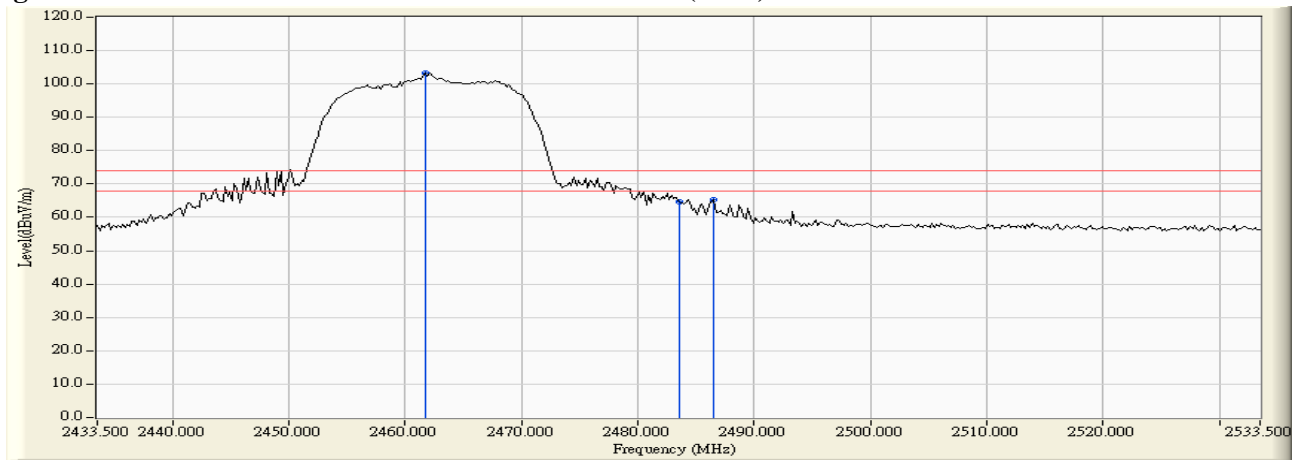

Figure Channel 11:   **Horizontal (Average)**

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 etection.

Product	:	Tablet PC
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (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)	Average Limit (dBuV/m)	Result
11 (Peak)	2461.700	31.288	71.975	103.263	--	--	--
11 (Peak)	2483.500	31.435	33.204	64.639	74.000	54.000	Pass
11 (Peak)	2486.500	31.456	33.826	65.282	74.000	54.000	Pass
11 (Average)	2462.700	31.295	54.186	85.481	--	--	--
11 (Average)	2483.500	31.435	14.526	45.961	74.000	54.000	Pass

Figure Channel 11:   **Vertical (Peak)**
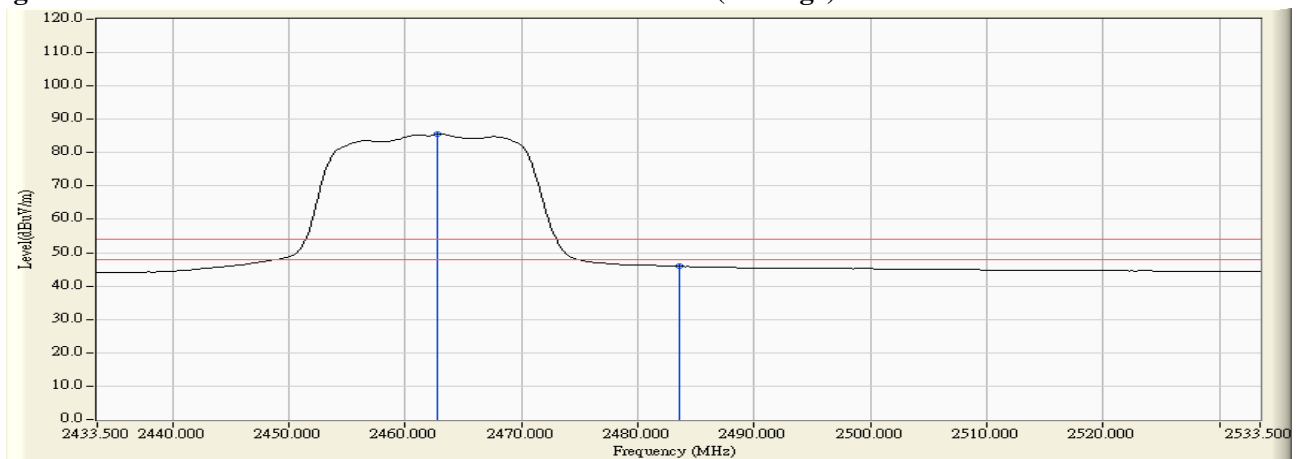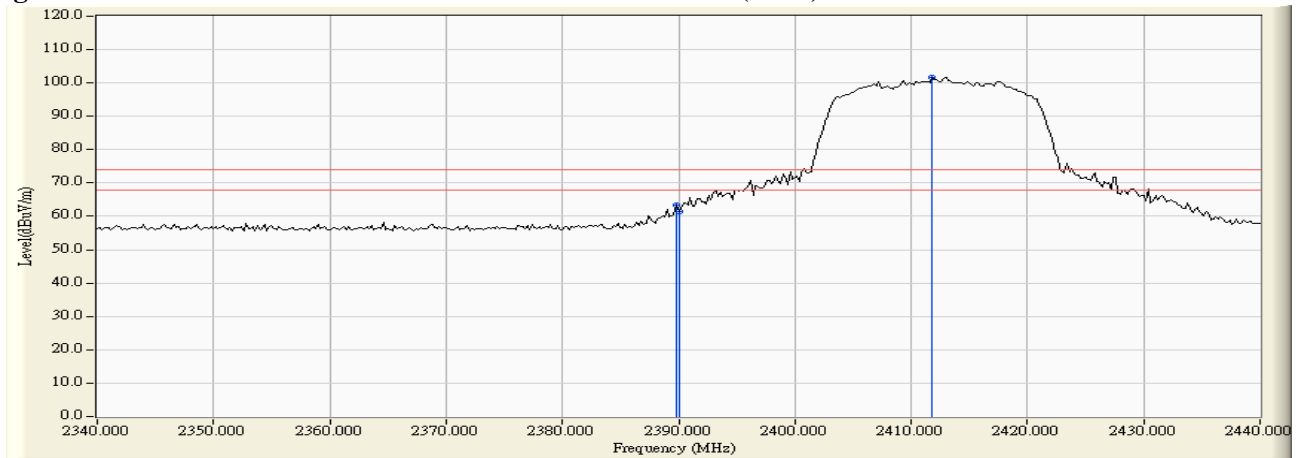

Figure Channel 11:   **Vertical (Average)**

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: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2389.800	31.508	31.817	63.325	74.000	54.000	Pass
01 (Peak)	2390.000	31.509	29.931	61.440	74.000	54.000	Pass
01 (Peak)	2411.800	31.636	70.078	101.715	--	--	--
01 (Average)	2390.000	31.509	14.708	46.217	74.000	54.000	Pass
01 (Average)	2413.000	31.646	53.145	84.791	--	--	--

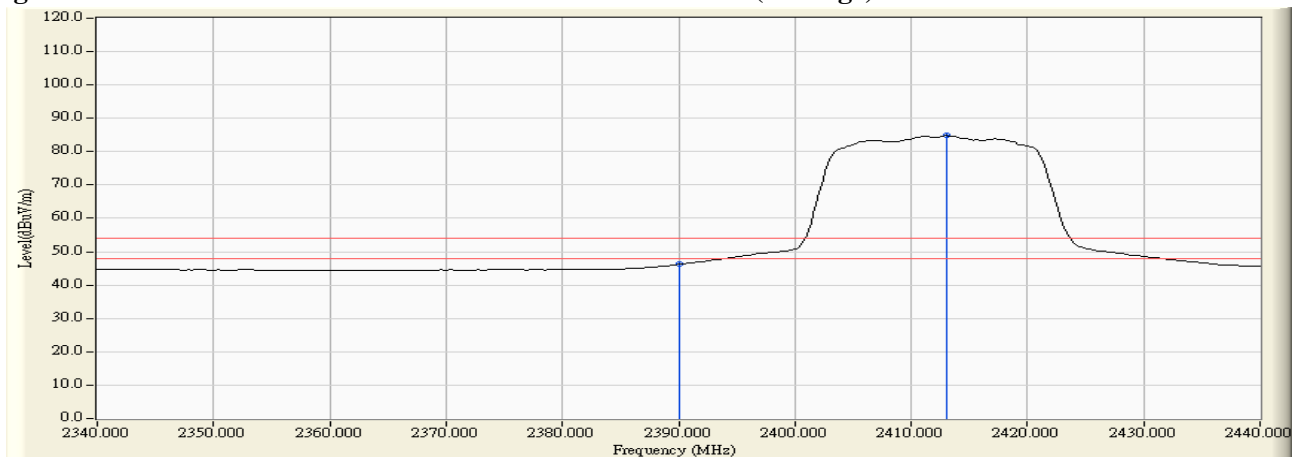**Figure Channel 01:** **Horizontal (Peak)**

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 etection.

Product	:	Tablet PC
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	2390.000	30.915	33.074	63.989	74.000	54.000	Pass
01 (Peak)	2412.600	30.953	70.716	101.669	--	--	--
01 (Average)	2390.000	30.915	15.244	46.159	74.000	54.000	Pass
01 (Average)	2413.000	30.956	53.672	84.628	--	--	--

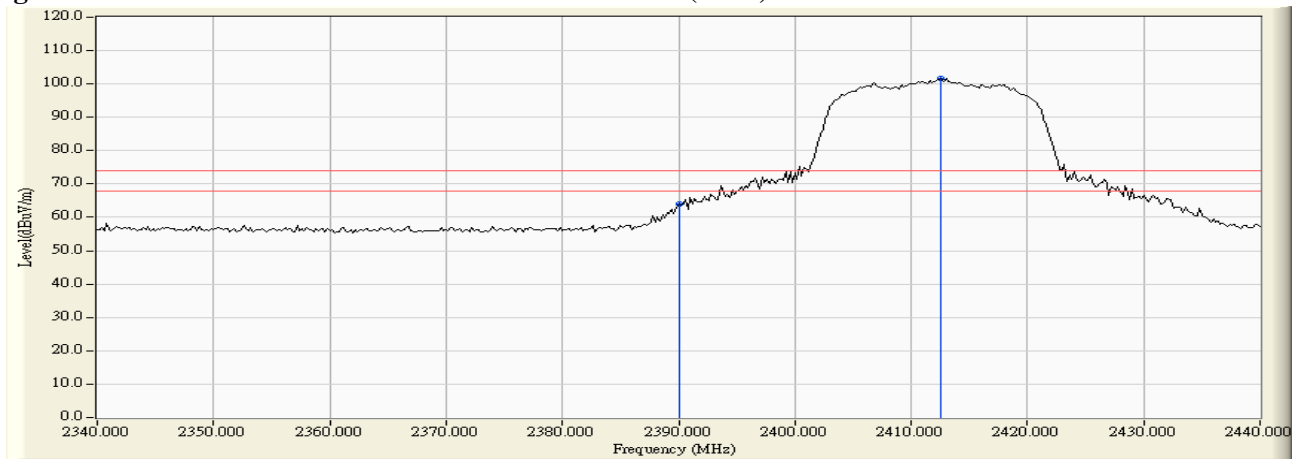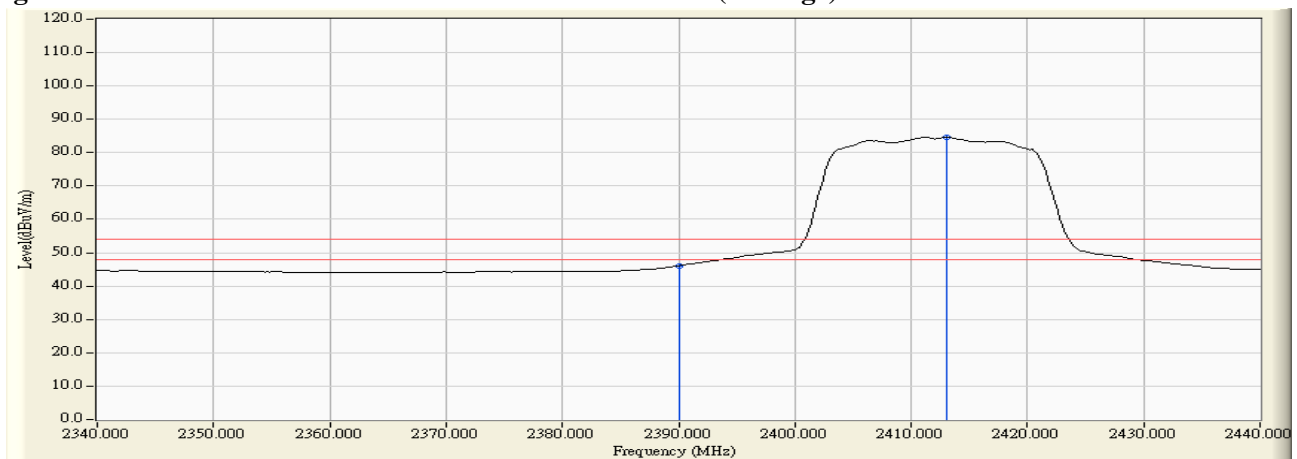**Figure Channel 01:**   **Vertical (Peak)**

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: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

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)	2461.900	32.018	69.258	101.277	--	--	--
11 (Peak)	2483.500	32.182	33.521	65.703	74.000	54.000	Pass
11 (Average)	2462.900	32.026	51.932	83.958	--	--	--
11 (Average)	2483.500	32.182	13.709	45.891	74.000	54.000	Pass

Figure Channel 11:   **Horizontal (Peak)**
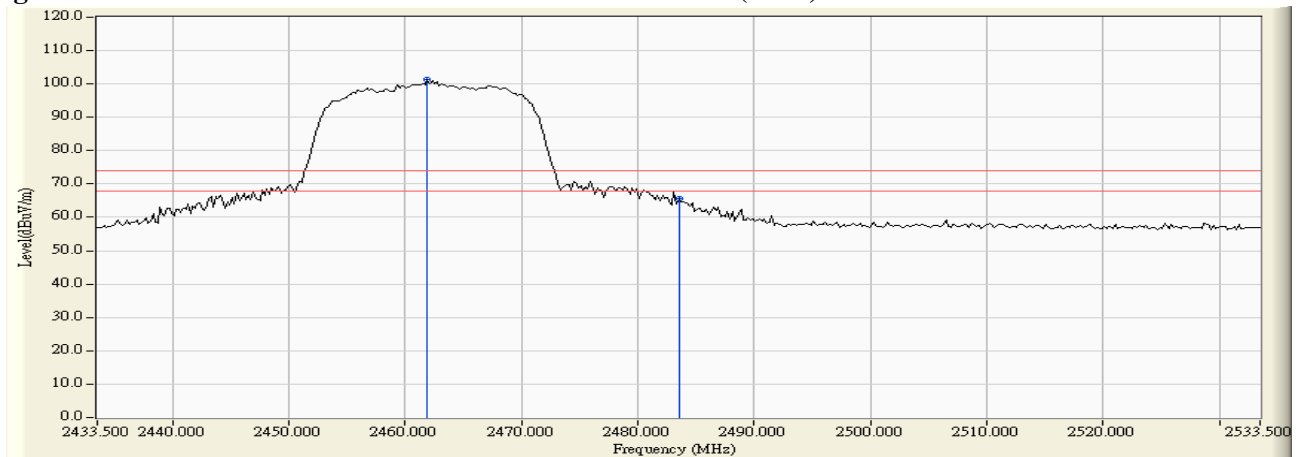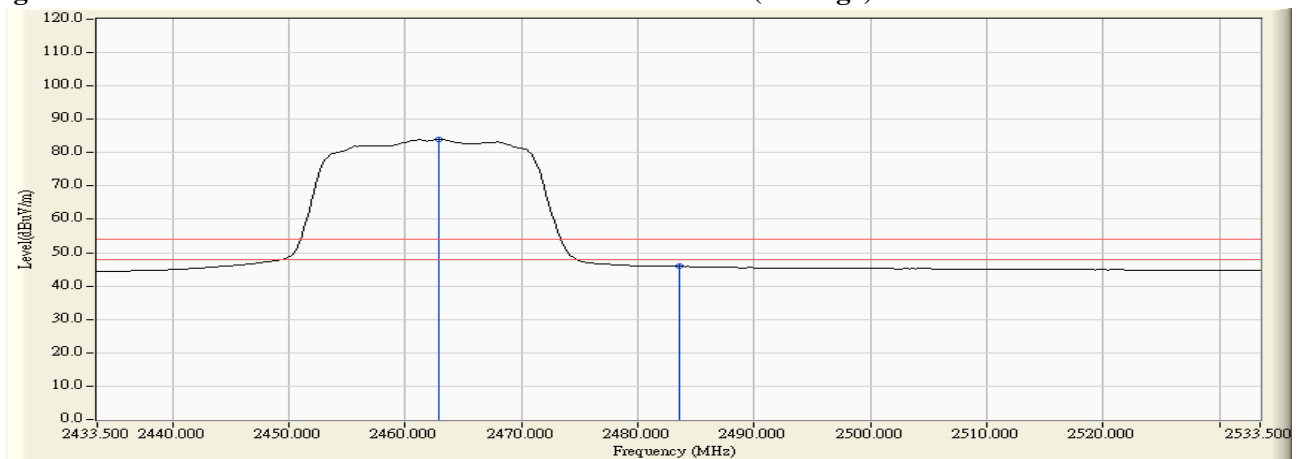

Figure Channel 11:   **Horizontal (Average)**

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 etection.

Product	:	Tablet PC
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

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)	2462.100	31.291	70.913	102.204	--	--	--
11 (Peak)	2483.500	31.435	35.104	66.539	74.000	54.000	Pass
11 (Peak)	2483.900	31.438	36.013	67.451	74.000	54.000	Pass
11 (Average)	2462.900	31.296	53.325	84.621	--	--	--
11 (Average)	2483.500	31.435	14.662	46.097	74.000	54.000	Pass

Figure Channel 11:   **Vertical (Peak)**
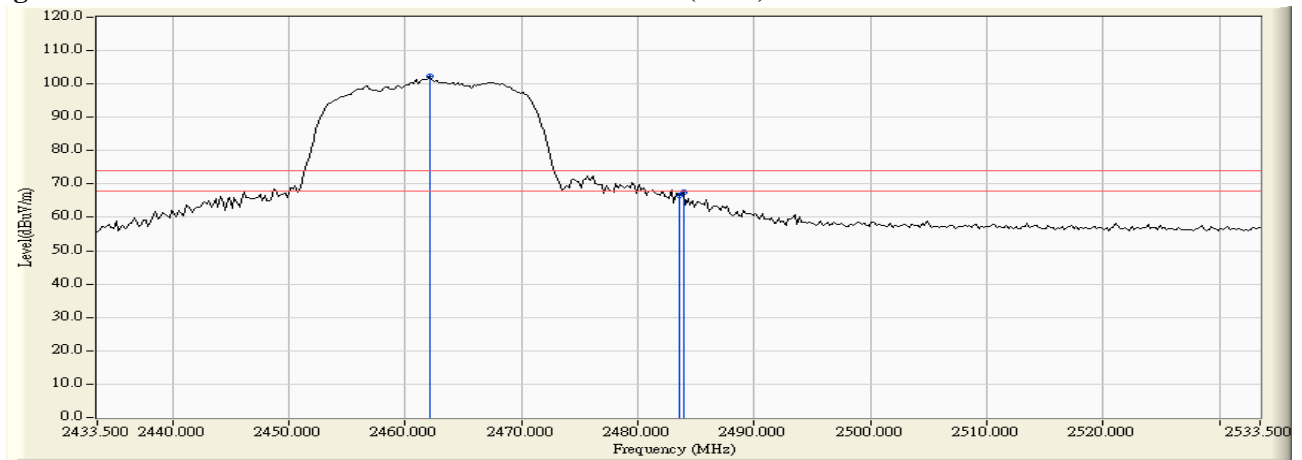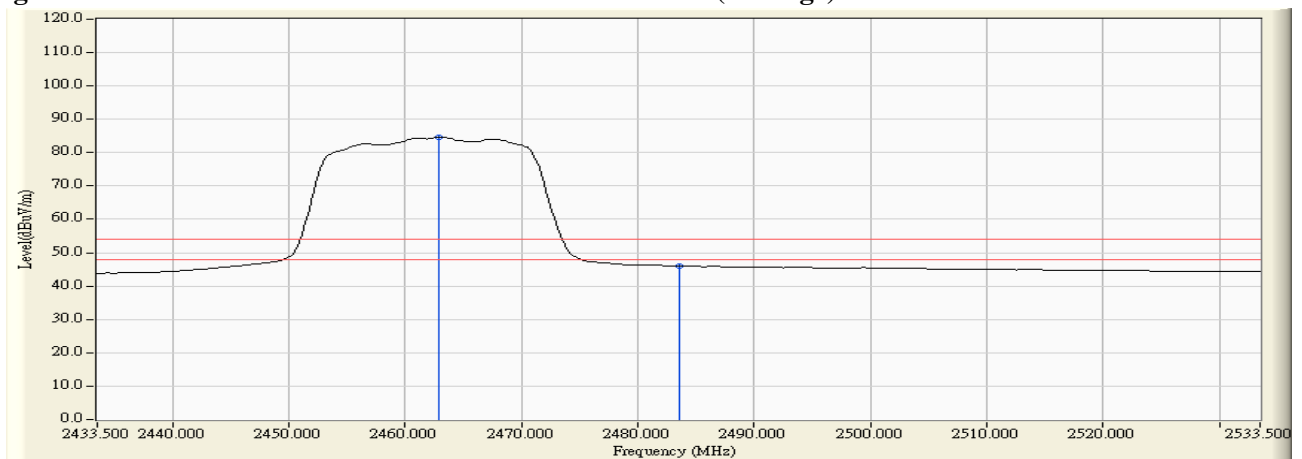

Figure Channel 11:   **Vertical (Average)**

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.