FC

Test Report

Product Name	ASUS VivoTab
Model No	K0X
FCC ID.	MSQK0X

Applicant	ASUSTeK COMPUTER INC.
Address	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

Date of Receipt	Oct. 05, 2012
Issue Date	Nov. 01, 2012
Report No.	12A129R-RFUSP42V01
Report Version	V1.0

ilac-MRA

TAF

Testing Laboratory

0914

Test Report Certification

Issue Date: Nov. 01, 2012

Report No.: 12A129R-RFUSP42V01

Product Name	ASUS VivoTab
Applicant	ASUSTeK COMPUTER INC.
Address	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.
Manufacturer	Tech-Com(Shanghai) Computer Co.Ltd.
Model No.	K0X
FCC ID.	MSQK0X
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	ASUS
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010 ANSI C63.4: 2003
Test Result	Complied

The test results relate only to the samples tested.

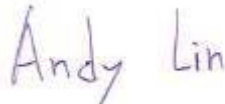The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

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

Documented By :

(Adm. Specialist / Joanne Lin)

Tested By   :

(Assistant Engineer / Andy Lin)

Approved By   :

(Manager / Vincent Lin)

TABLE OF CONTENTS

Description   Page

Attachment 1:   EUT Test Photographs

Attachment 2:   EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	ASUS VivoTab
Trade Name	ASUS
Model No.	K0X
FCC ID.	MSQK0X
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	PIFA Antenna
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
Power Adapter	MFR: PIE, M/N: AD876320
	Input: AC 100-240V~0.3A, 50/60Hz
	Output: DC 5V, 2A
USB Cable	Shielded, 1m
Contain Module	Azurewave / AW-NH665

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	SINBON	A9701279-D	PIFA	2.81dBi for 2.4 GHz
2	ACON	APE00-000013	PIFA	1.82dBi for 2.4 GHz

Note: 1.The antenna of EUT is conforming to FCC 15.203.

2.Only the higher gain antenna was tested and recorded in this report.

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 an ASUS VivoTab with a built-in WLAN、Bluetooth and NFC transceiver, this report for WLAN.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps、802.11g is 6Mbps、802.11n(20M-BW) is 7.2Mbps and)
4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

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	Monitor	DELL	ST2320LF	CN-OM2NN6-72872-22I-C9WS	N/A
2	Earphone	PCHOME	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
A	HDMI to Micro Cable	Non-Shielded, 1.5m
B	Earphone Cable	Non-Shielded, 1.3m

1.4. Configuration of Tested System
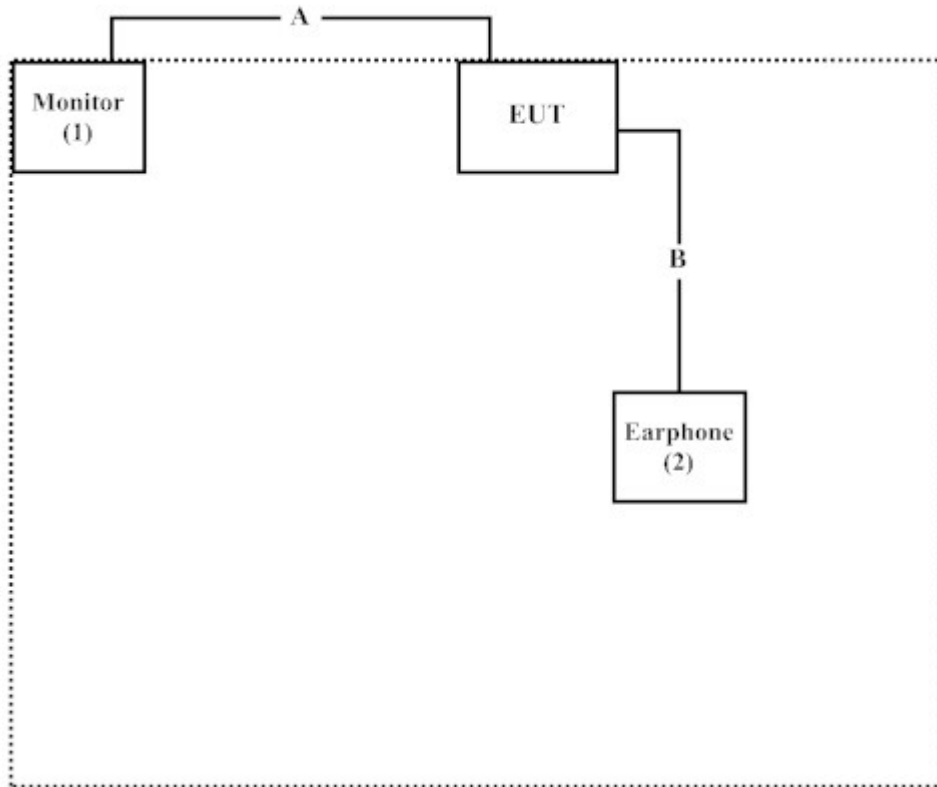
1.5. EUT Exercise Software

(1) Setup the EUT as shown in Section 1.4

(2) Execute software on the EUT.

(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,
                 Linkou Dist. New Taipei City 24451,
                 Taiwan, R.O.C.
                 TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
                 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., 2012	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2012	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2012	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2012	
	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
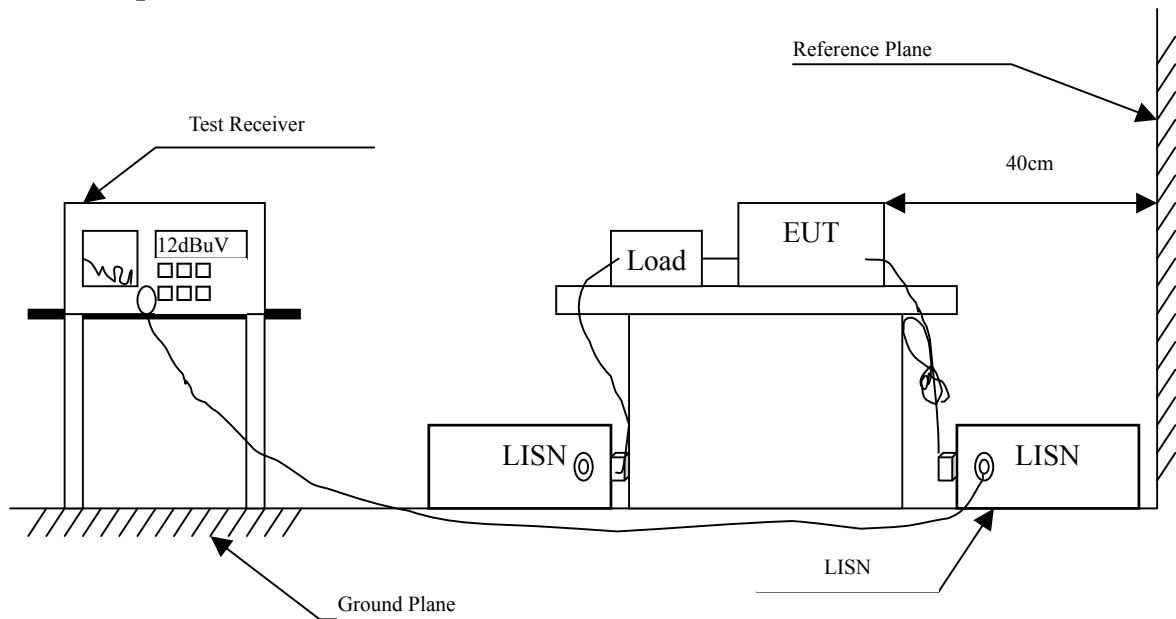
2.3. Limits

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 C63.4: 2003 on conducted measurement.

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

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : ASUS VivoTab
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	dBμV	dBμV	dB	dBμV
Line 1					
Quasi-Peak					
0.189	9.830	33.310	43.140	-21.746	64.886
0.377	9.830	31.280	41.110	-18.404	59.514
0.603	9.830	30.890	40.720	-15.280	56.000
2.111	9.840	27.280	37.120	-18.880	56.000
3.627	9.860	31.670	41.530	-14.470	56.000
8.455	9.952	29.420	39.372	-20.628	60.000
Average					
0.189	9.830	25.040	34.870	-20.016	54.886
0.377	9.830	13.180	23.010	-26.504	49.514
0.603	9.830	18.680	28.510	-17.490	46.000
2.111	9.840	20.450	30.290	-15.710	46.000
3.627	9.860	9.070	18.930	-27.070	46.000
8.455	9.952	19.170	29.122	-20.878	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   :   ASUS VivoTab
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	dBμV	dBμV	dB	dBμV
Line 2					
Quasi-Peak					
0.173	9.836	30.880	40.716	-24.627	65.343
0.310	9.840	32.690	42.530	-18.899	61.429
0.439	9.840	31.370	41.210	-16.533	57.743
2.103	9.860	27.440	37.300	-18.700	56.000
4.060	9.870	31.160	41.030	-14.970	56.000
9.697	10.046	31.920	41.966	-18.034	60.000
Average					
0.173	9.836	15.360	25.196	-30.147	55.343
0.310	9.840	16.260	26.100	-25.329	51.429
0.439	9.840	14.900	24.740	-23.003	47.743
2.103	9.860	7.340	17.200	-28.800	46.000
4.060	9.870	13.810	23.680	-22.320	46.000
9.697	10.046	21.560	31.606	-18.394	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, 2012
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
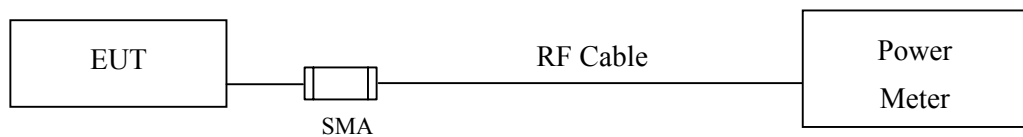
3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product   :   ASUS VivoTab
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	11.85	--	--	--	15.03	<30dBm	Pass
06	2437	11.76	11.73	11.68	11.6	14.91	<30dBm	Pass
11	2462	11.58	--	--	--	14.84	<30dBm	Pass

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

Product   :   ASUS VivoTab

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	11.47	--	--	--	--	--	--	--	19.66	<30dBm	Pass
06	2437	11.36	11.33	11.3	11.27	11.25	11.22	11.19	11.15	19.61	<30dBm	Pass
11	2462	11.14	--	--	--	--	--	--	--	19.41	<30dBm	Pass

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

Product   :   ASUS VivoTab
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	11.21	--	--	--	--	--	--	--	19.63	<30dBm	Pass
06	2437	10.91	10.88	10.85	10.8	10.77	10.75	10.71	10.69	19.44	<30dBm	Pass
11	2462	10.71	--	--	--	--	--	--	--	19.23	<30dBm	Pass

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

4. Radiated Emission
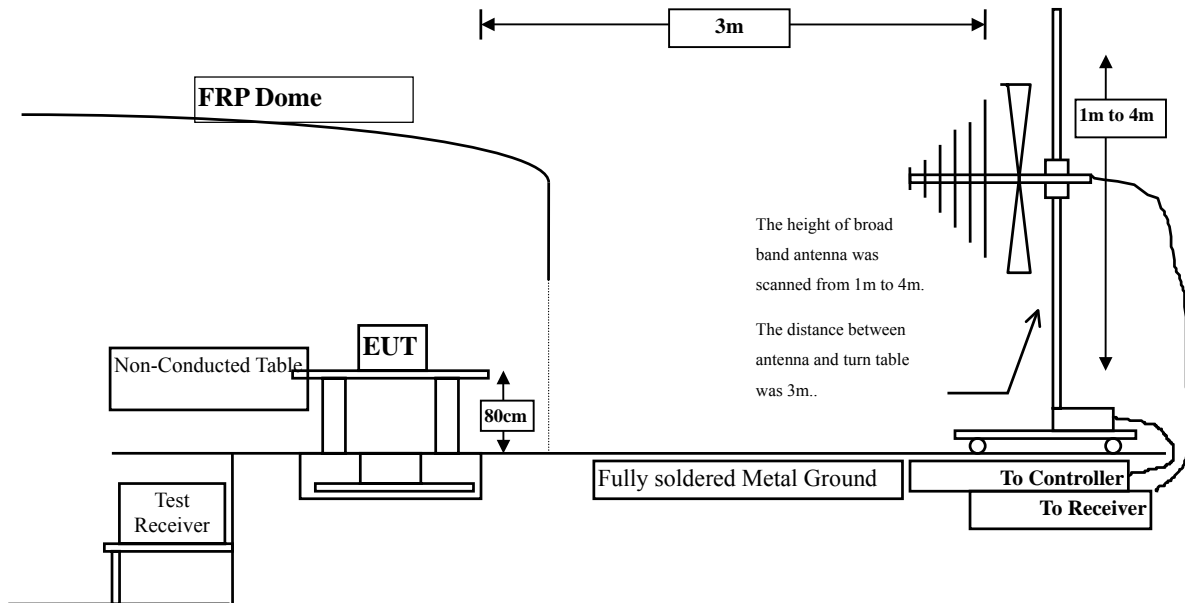
4.1. Test Equipment

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

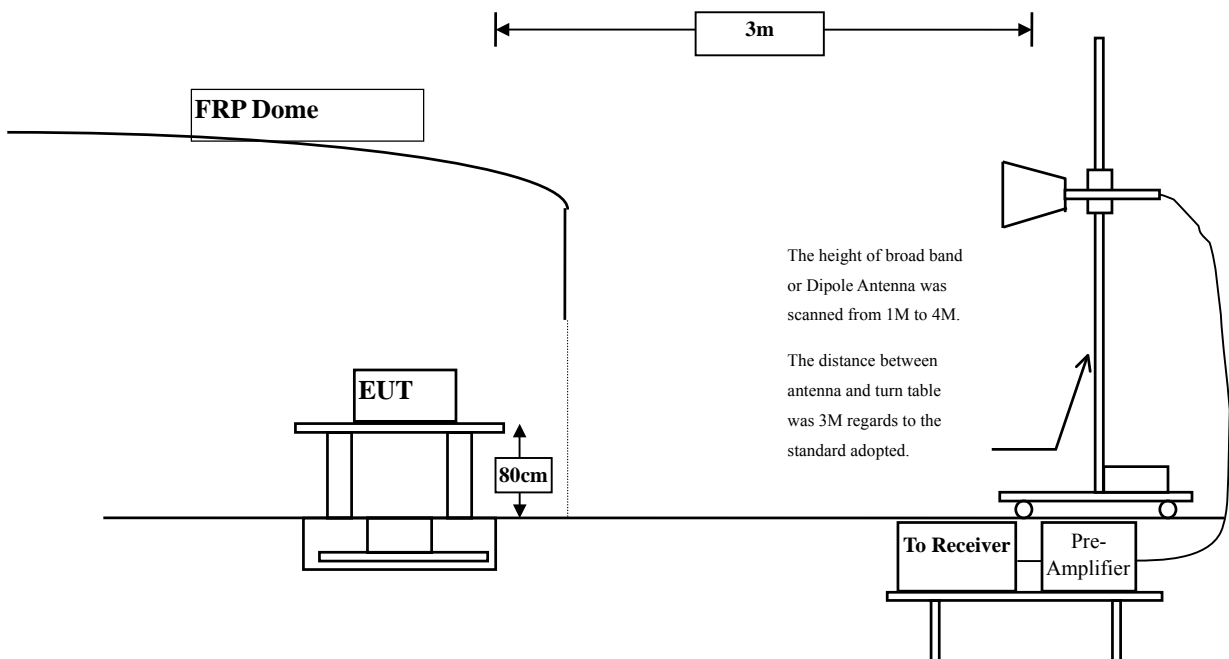| Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2012
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2012
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2012
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2012
	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	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

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

4.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2003 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

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

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

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

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

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

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

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

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : ASUS VivoTab
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	0.428	48.220	48.649	-25.351	74.000
7236.000	7.177	37.880	45.057	-28.943	74.000
9648.000	8.019	37.530	48.550	-28.450	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	49.070	49.907	-24.093	74.000
7236.000	7.676	38.420	46.096	-27.904	74.000
9648.000	8.556	37.330	45.887	-28.113	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	:	ASUS VivoTab
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	0.076	50.150	50.227	-23.773	74.000
7311.000	7.512	36.860	44.372	-29.628	74.000
9748.000	7.630	36.780	44.410	-29.590	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	0.532	49.960	50.492	-23.508	74.000
7311.000	8.089	37.710	45.799	-28.201	74.000
9748.000	8.266	36.860	45.127	-28.873	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	:	ASUS VivoTab			
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	0.191	47.310	47.501	-26.499	74.000
7386.000	8.373	36.400	44.774	-29.226	74.000
9848.000	7.964	37.590	45.554	-28.446	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	0.805	46.550	47.355	-26.645	74.000
7386.000	9.180	38.340	45.520	-28.480	74.000
9848.000	8.801	39.070	45.871	-28.129	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	:	ASUS VivoTab
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	52.660	55.921	-18.079	74.000
7236.000	10.650	34.990	45.640	-28.360	74.000
9648.000	13.337	34.250	47.586	-26.414	74.000
Average Detector:					
4824.000	3.261	34.450	37.711	-16.289	54.000
Vertical					
Peak Detector:					
4824.000	6.421	48.830	55.251	-18.749	74.000
7236.000	11.495	34.800	46.295	-27.705	74.000
9648.000	13.807	34.540	48.346	-25.654	74.000
Average Detector:					
4824.000	6.421	31.370	37.791	-16.209	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	:	ASUS VivoTab	
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	51.460	54.497	-19.503	74.000
7311.000	11.795	36.590	48.384	-25.616	74.000
9748.000	12.635	36.690	49.325	-24.675	74.000
Average Detector:					
4874.000	3.038	33.240	36.277	-17.723	54.000
Peak Detector:					
4874.000	5.812	46.790	52.601	-21.399	74.000
7311.000	12.630	36.790	49.419	-24.581	74.000
9748.000	13.126	36.720	49.846	-24.154	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 : ASUS VivoTab
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	48.290	51.147	-22.853	74.000
7386.000	12.127	35.410	47.538	-26.462	74.000
9848.000	12.852	37.370	50.223	-23.777	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	44.920	50.440	-23.560	74.000
7386.000	13.254	35.740	48.994	-25.006	74.000
9848.000	13.367	36.650	50.017	-23.983	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	:	ASUS VivoTab
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	52.090	55.351	-18.649	74.000
7236.000	10.650	36.550	47.200	-26.800	74.000
9648.000	13.337	36.170	49.506	-24.494	74.000
Average Detector:					
4824.000	3.261	33.630	36.891	-17.109	54.000
Vertical					
Peak Detector:					
4824.000	6.421	48.660	55.081	-18.919	74.000
7236.000	11.495	37.590	49.085	-24.915	74.000
9648.000	13.807	36.520	50.326	-23.674	74.000
Average Detector:					
4824.000	6.421	31.060	37.481	-16.519	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	:	ASUS VivoTab			
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	51.100	54.137	-19.863	74.000
7311.000	11.795	36.440	48.234	-25.766	74.000
9748.000	12.635	36.720	49.355	-24.645	74.000
Average Detector:					
4874.000	3.038	32.280	35.317	-18.683	54.000
Vertical					
Peak Detector:					
4874.000	5.812	46.750	52.561	-21.439	74.000
7311.000	12.630	35.950	48.579	-25.421	74.000
9748.000	13.126	36.290	49.416	-24.584	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 : ASUS VivoTab
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	48.070	50.927	-23.073	74.000
7386.000	13.254	35.860	49.114	-24.886	74.000
9848.000	13.367	36.330	49.697	-24.303	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	45.200	50.720	-23.280	74.000
7386.000	13.254	35.460	48.714	-25.286	74.000
9848.000	13.367	36.480	49.847	-24.153	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 : ASUS VivoTab
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					
239.520	-6.878	36.004	29.126	-16.874	46.000
400.540	0.942	28.468	29.410	-16.590	46.000
480.080	1.870	30.087	31.957	-14.043	46.000
549.920	3.662	25.884	29.545	-16.455	46.000
720.640	3.826	28.150	31.976	-14.024	46.000
961.200	6.810	30.268	37.078	-16.922	54.000
Vertical					
92.080	-5.373	37.259	31.886	-11.614	43.500
239.520	-6.138	34.943	28.805	-17.195	46.000
480.080	-3.390	33.069	29.679	-16.321	46.000
617.820	0.958	29.188	30.146	-15.854	46.000
720.640	-0.754	31.326	30.572	-15.428	46.000
961.200	3.310	29.588	32.898	-21.102	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 | : | ASUS VivoTab |
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					
94.020	-10.730	33.012	22.282	-21.218	43.500
239.520	-6.878	35.490	28.612	-17.388	46.000
400.540	0.942	30.158	31.100	-14.900	46.000
480.080	1.870	31.309	33.179	-12.821	46.000
720.640	3.826	28.963	32.789	-13.211	46.000
961.200	6.810	29.993	36.803	-17.197	54.000
Vertical					
92.080	-5.373	36.784	31.411	-12.089	43.500
239.520	-6.138	35.024	28.886	-17.114	46.000
480.080	-3.390	31.105	27.715	-18.285	46.000
617.820	0.958	28.968	29.926	-16.074	46.000
720.640	-0.754	31.704	30.950	-15.050	46.000
961.200	3.310	29.747	33.057	-20.943	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	:	ASUS VivoTab
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					
239.520	-6.878	36.940	30.062	-15.938	46.000
400.540	0.942	29.448	30.390	-15.610	46.000
480.080	1.870	31.231	33.101	-12.899	46.000
549.920	3.662	26.704	30.365	-15.635	46.000
833.160	6.616	24.902	31.518	-14.482	46.000
961.200	6.810	29.098	35.908	-18.092	54.000
Vertical					
92.080	-5.373	38.142	32.769	-10.731	43.500
179.380	-0.824	30.697	29.873	-13.627	43.500
480.080	-3.390	31.250	27.860	-18.140	46.000
617.820	0.958	27.670	28.628	-17.372	46.000
720.640	-0.754	30.875	30.121	-15.879	46.000
961.200	3.310	29.314	32.624	-21.376	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.

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., 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.

5.2. Test Setup

RF antenna Conducted Measurement:
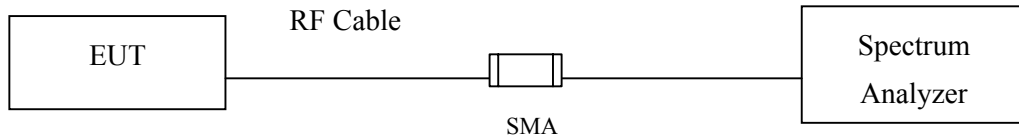
5.3. Limits

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 Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

5.5. Uncertainty

The measurement uncertainty

Conducted is defined as $\pm$ 1.27dB

5.6. Test Result of RF antenna conducted test

Product   :   ASUS VivoTab
Test Item   :   RF antenna conducted test
Test Site   :   No.3 OATS
Test Mode   :   Mode 1: Transmit (802.11b 1Mbps)
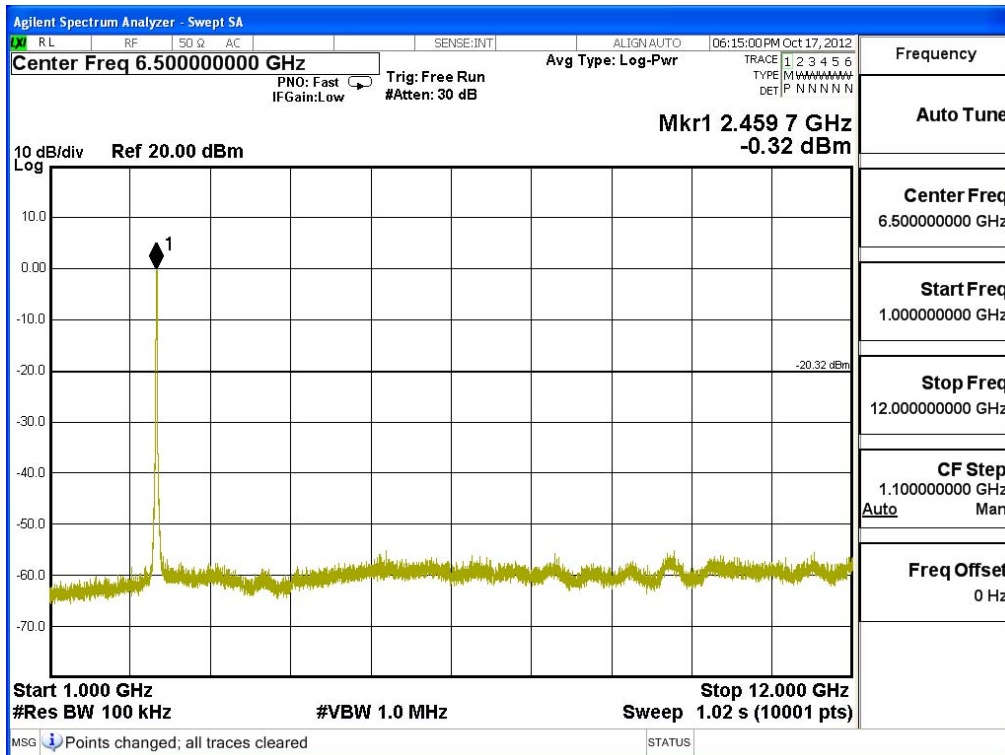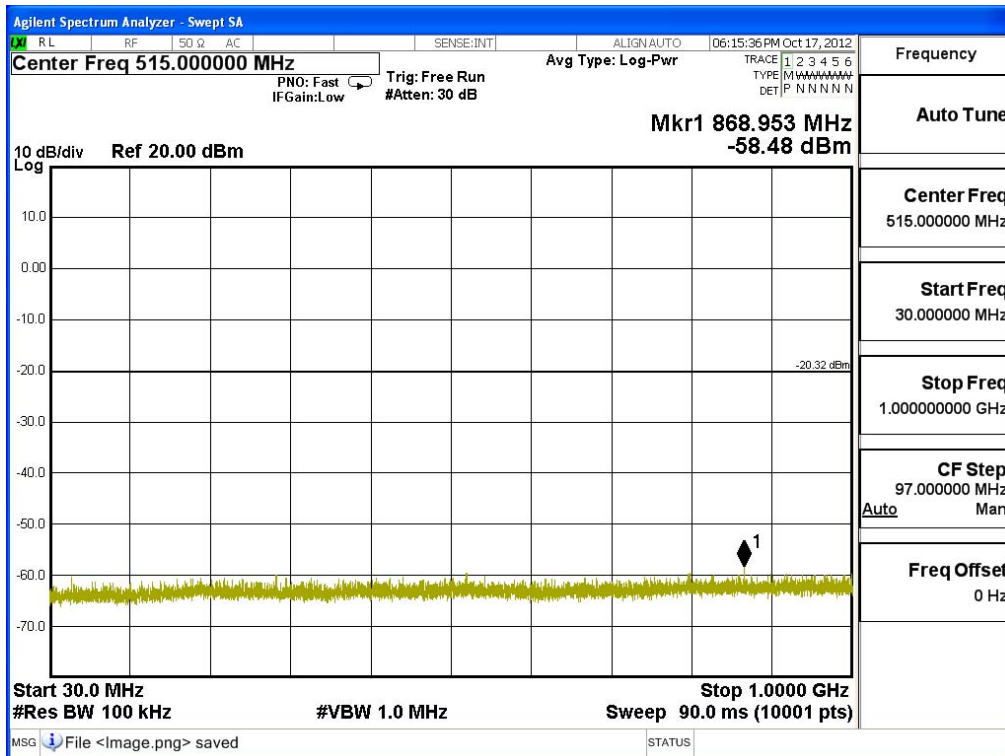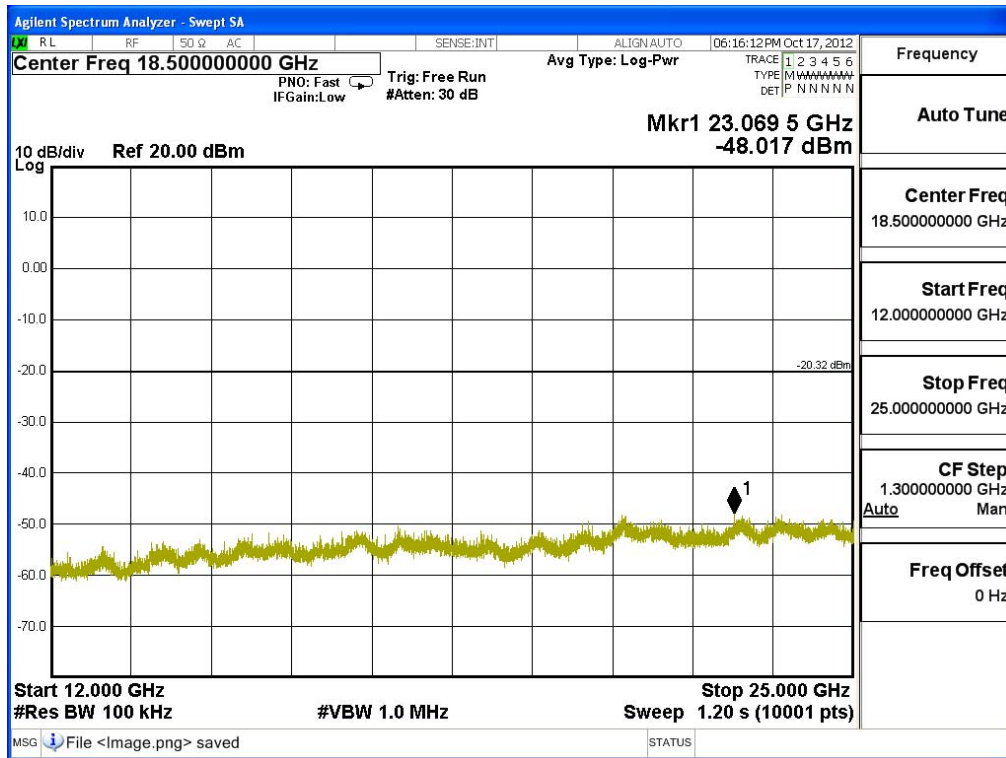
Channel 01 (2412MHz)
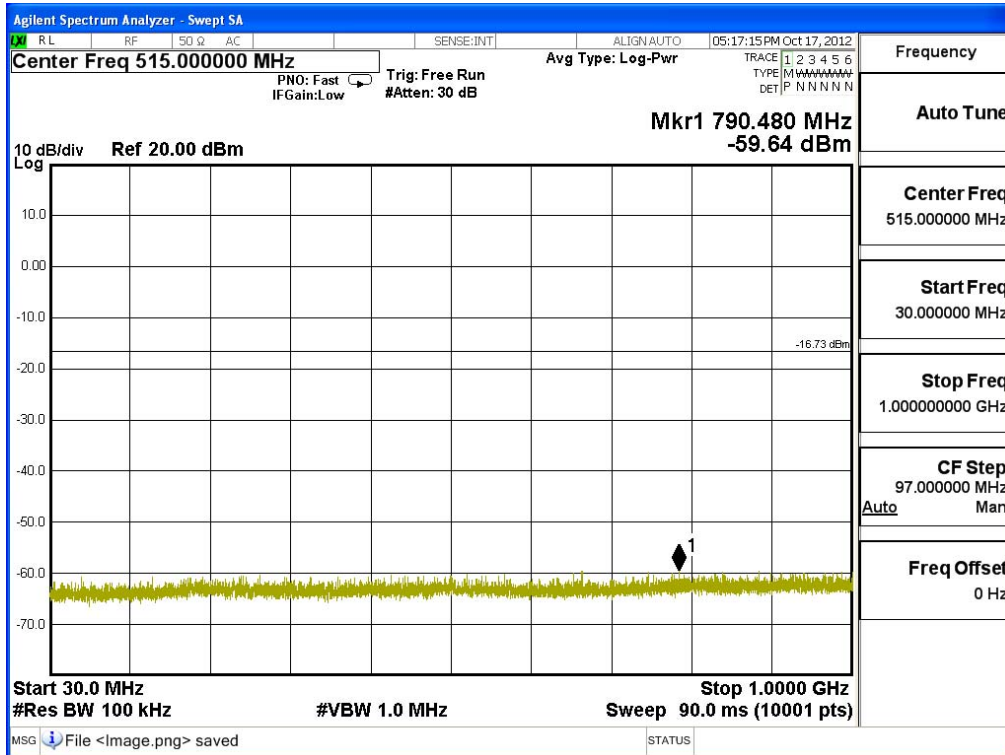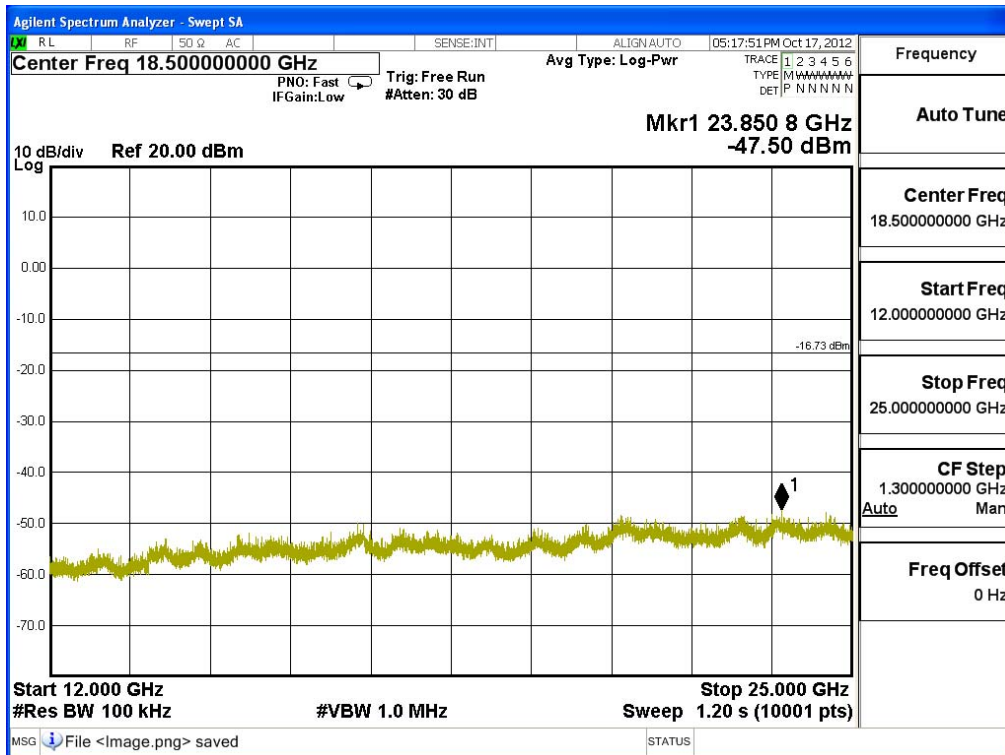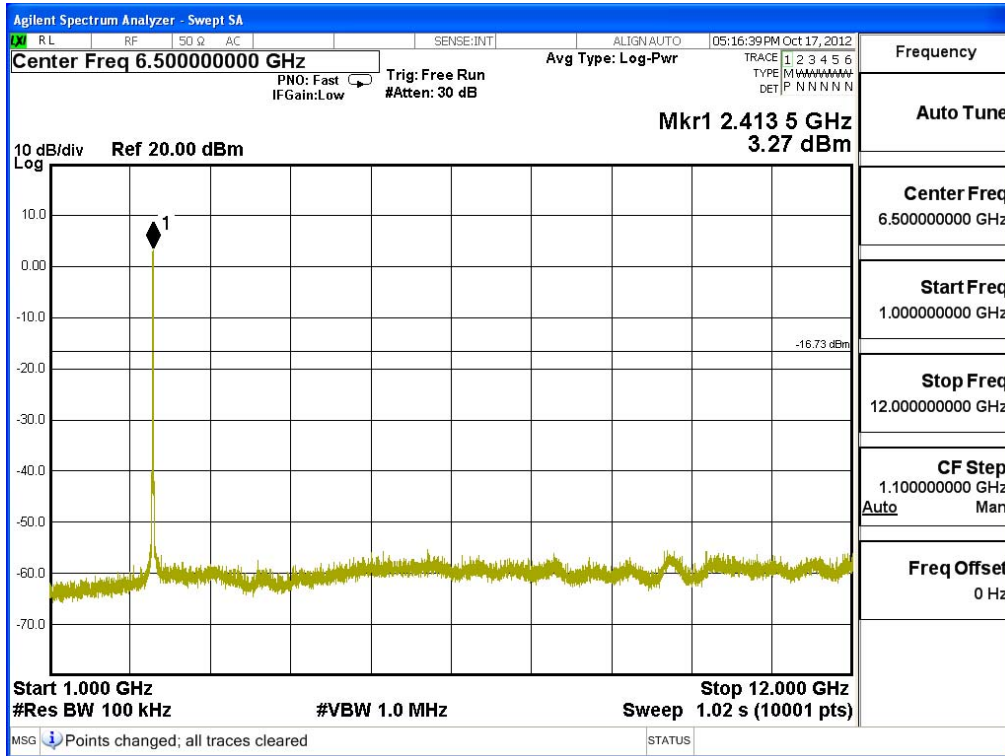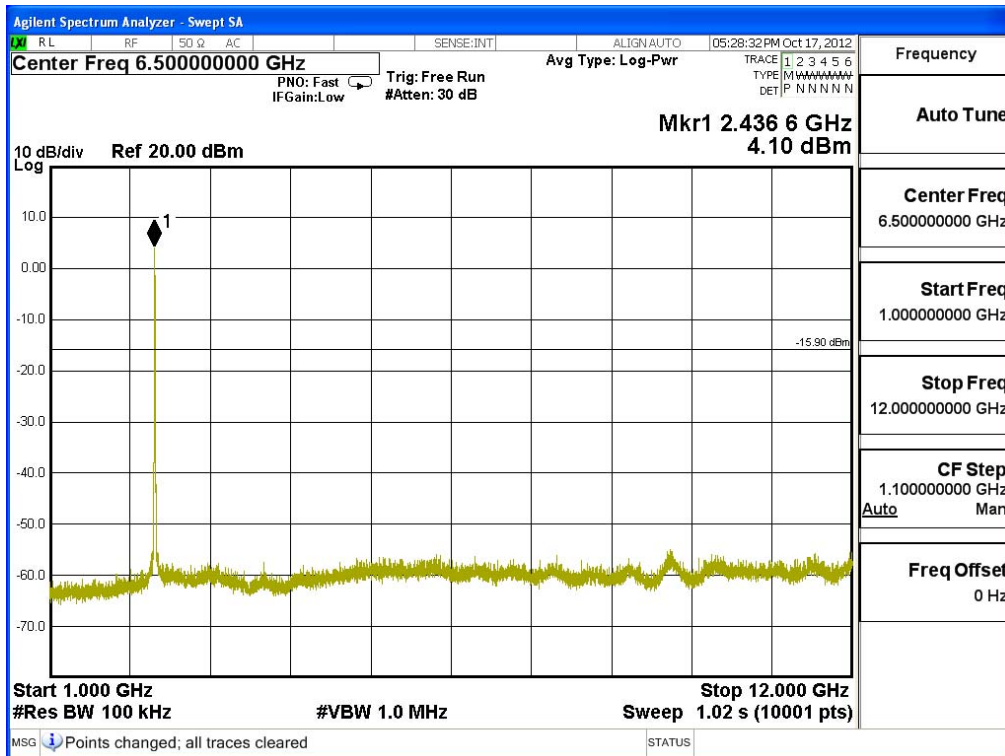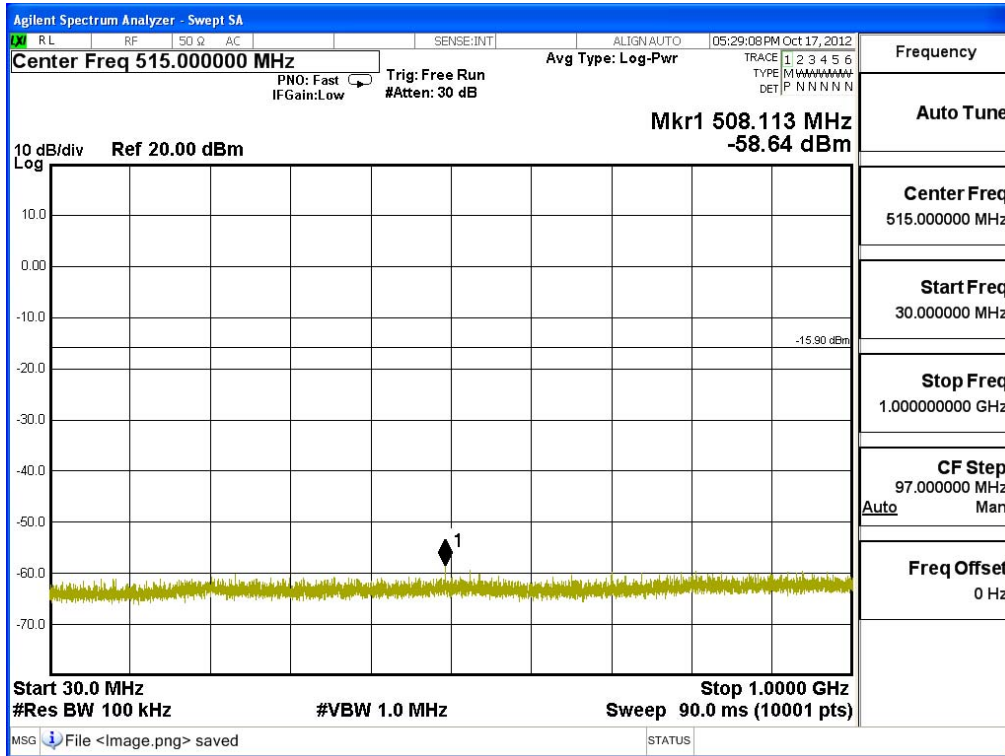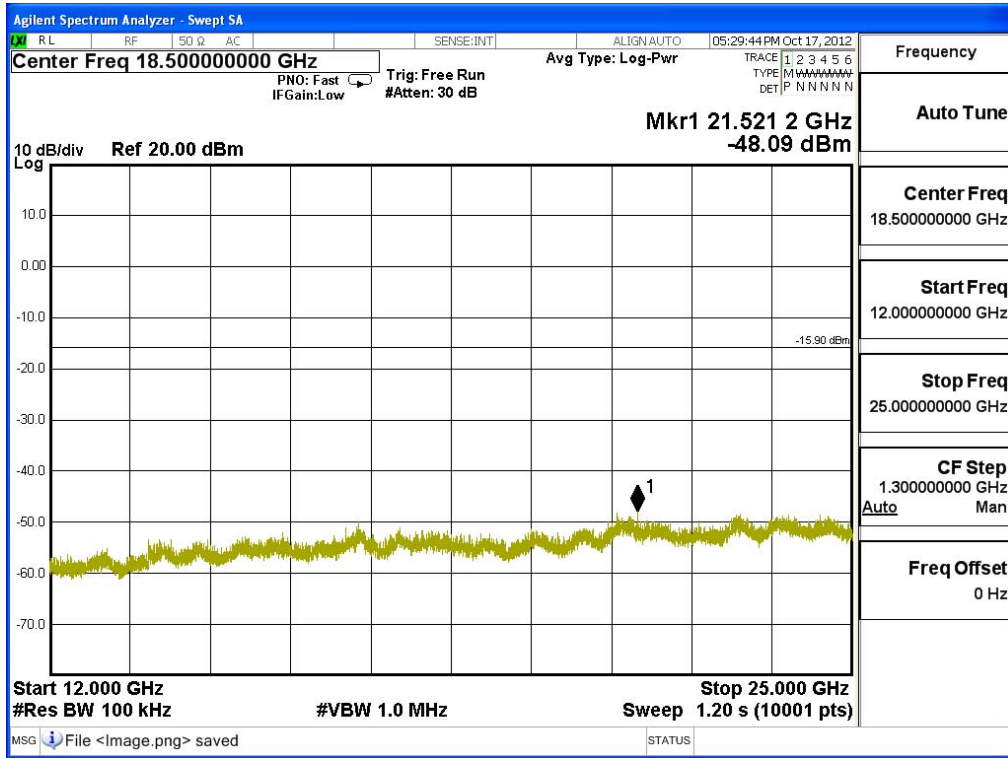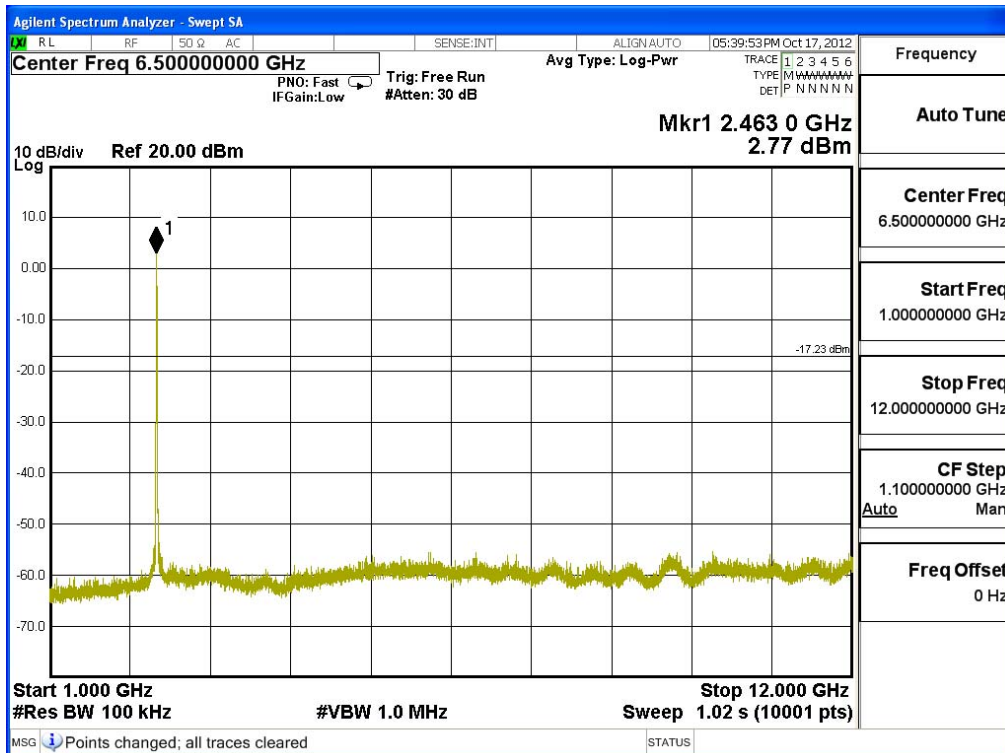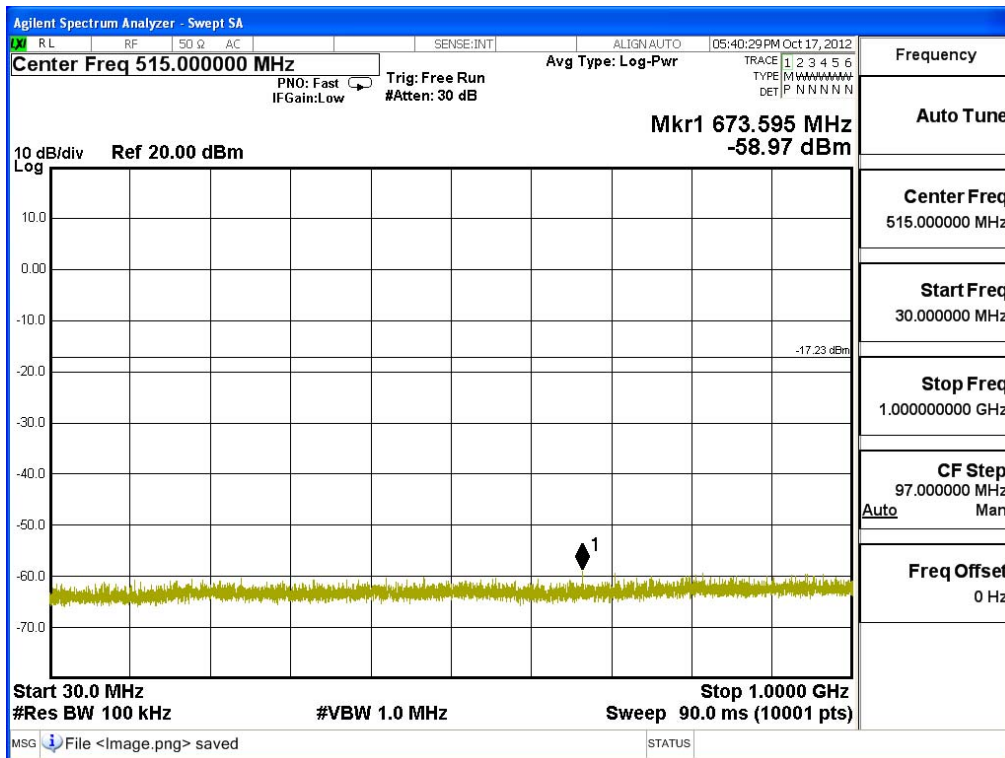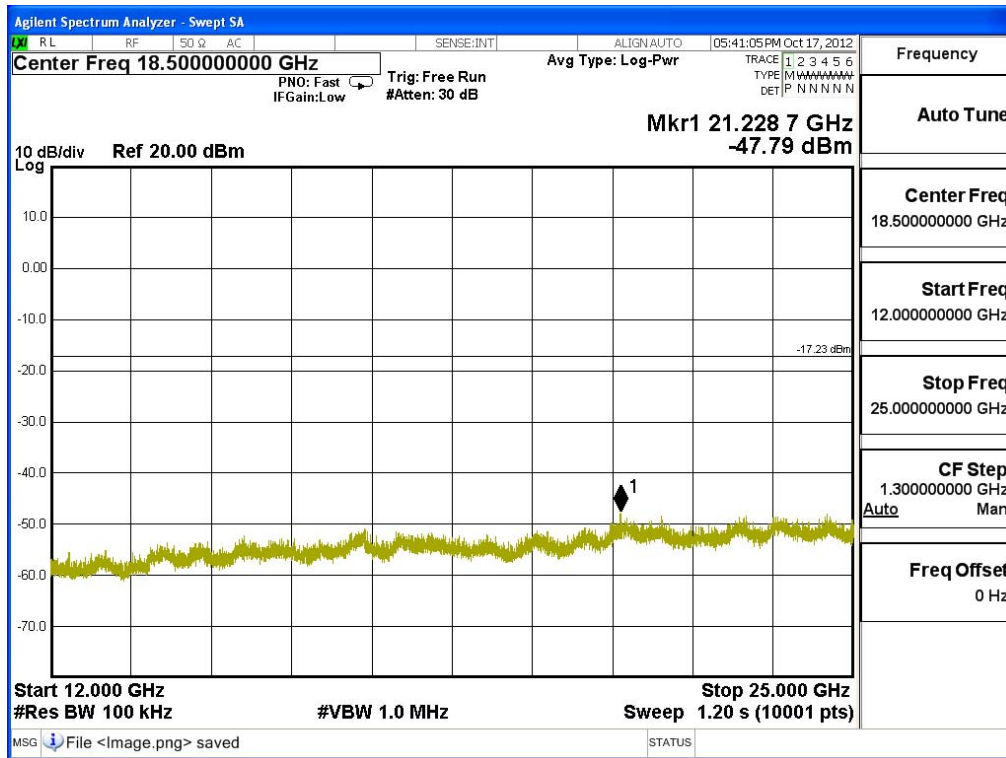
Channel 06 (2437MHz)

Channel 11 (2462MHz)
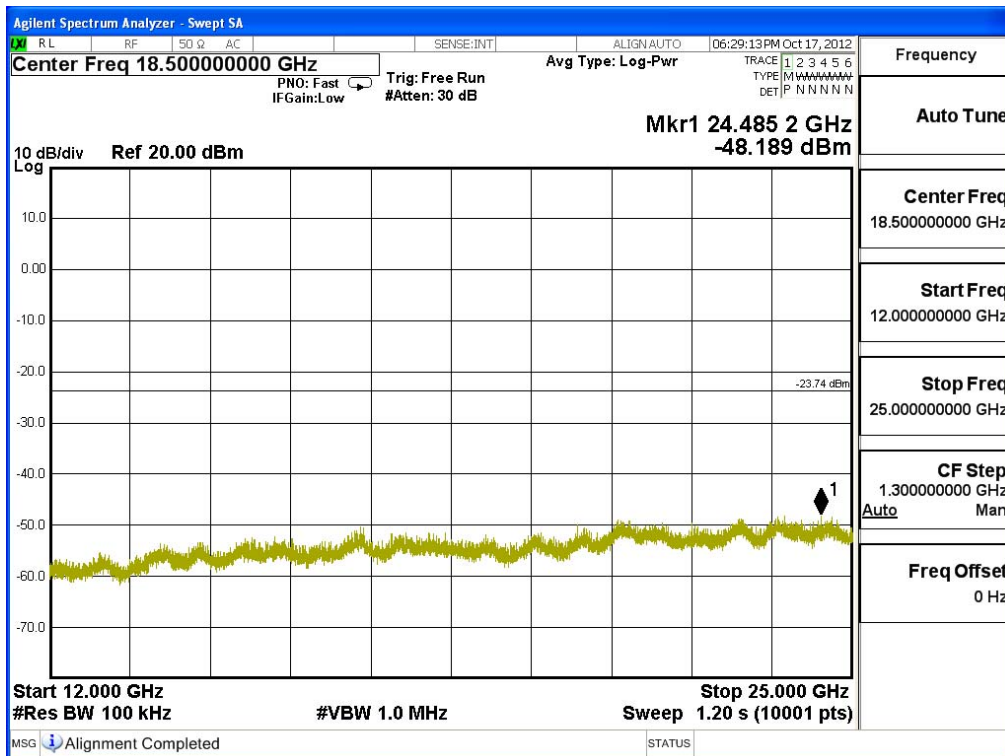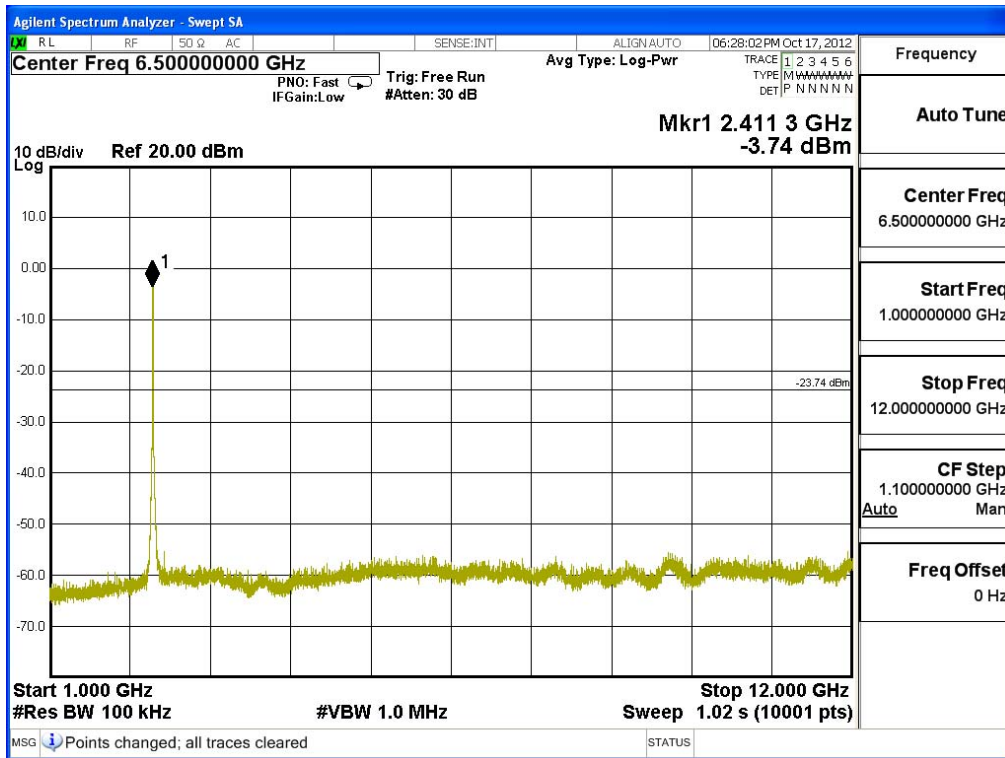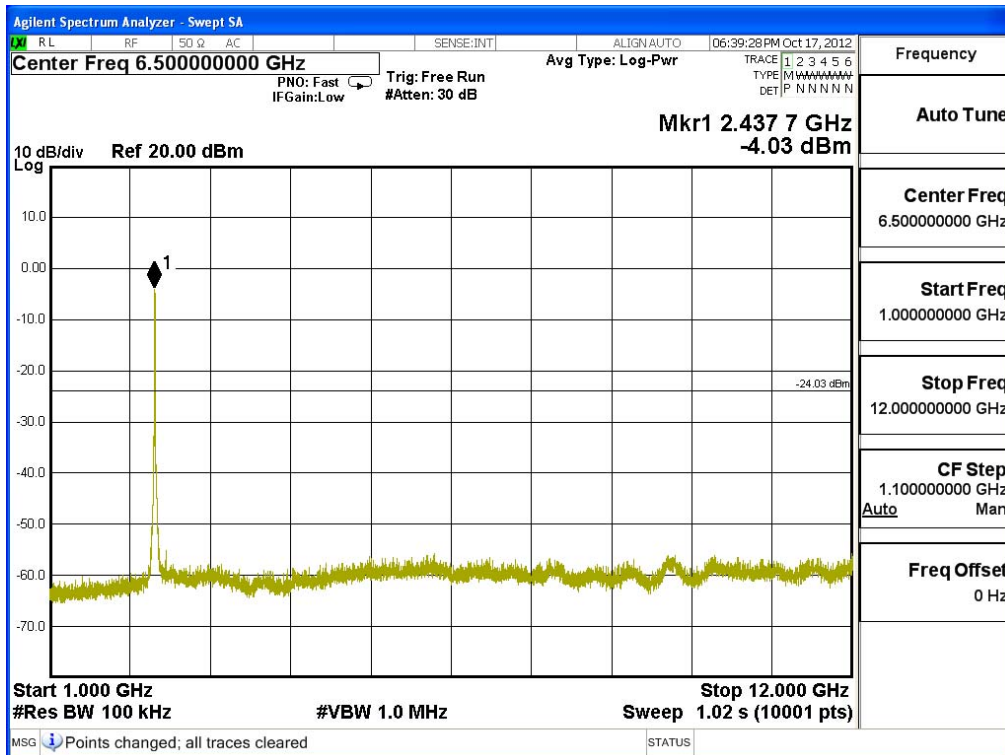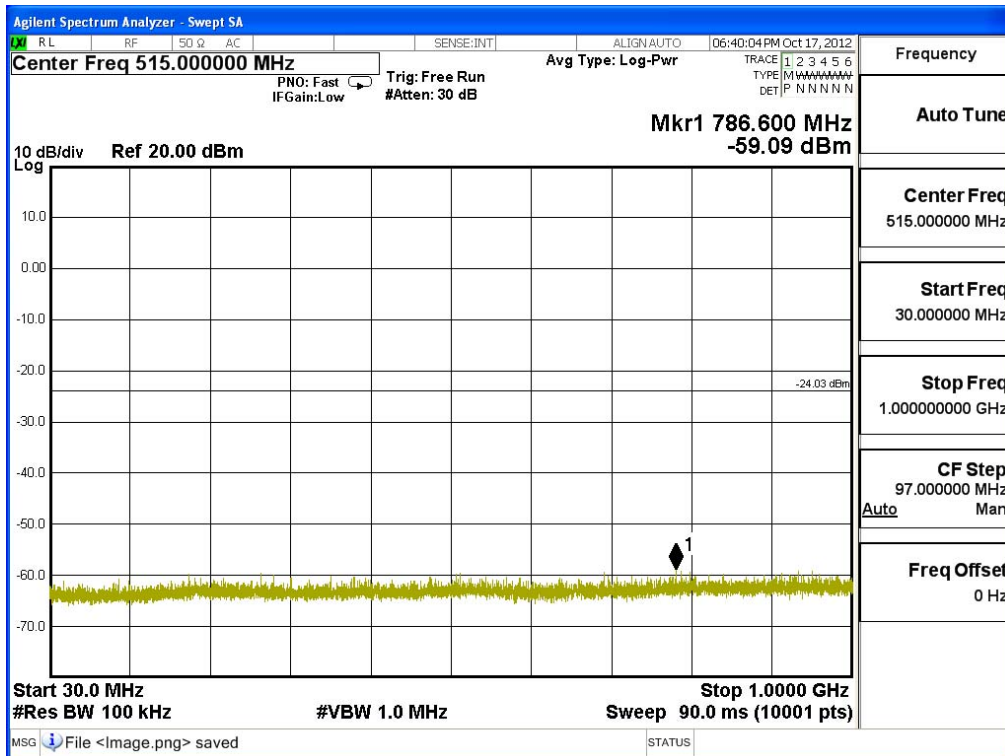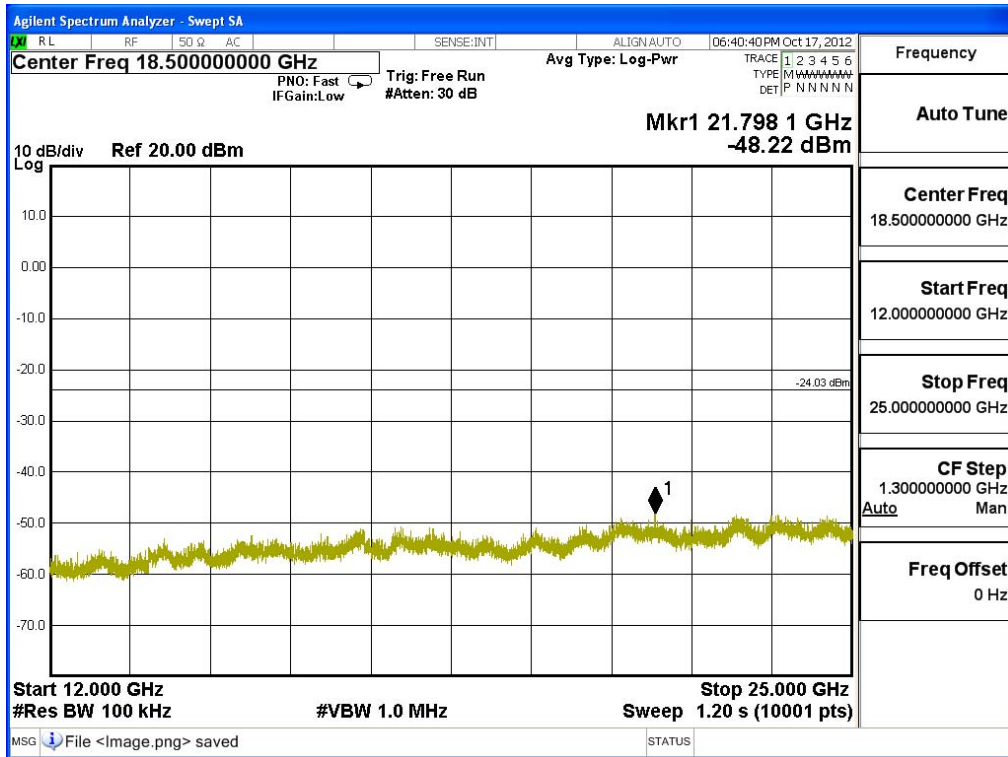
Product : ASUS VivoTab

Test Item : RF Antenna Conducted Spurious

Test Site : No.3 OATS

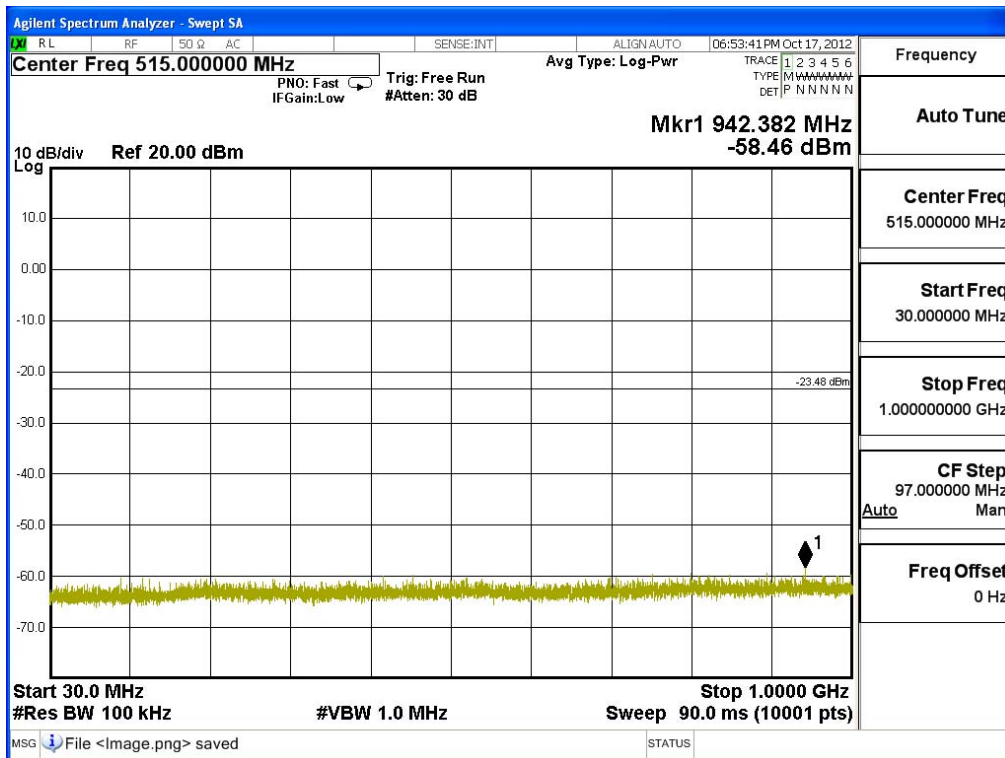Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel 01 (2412MHz)
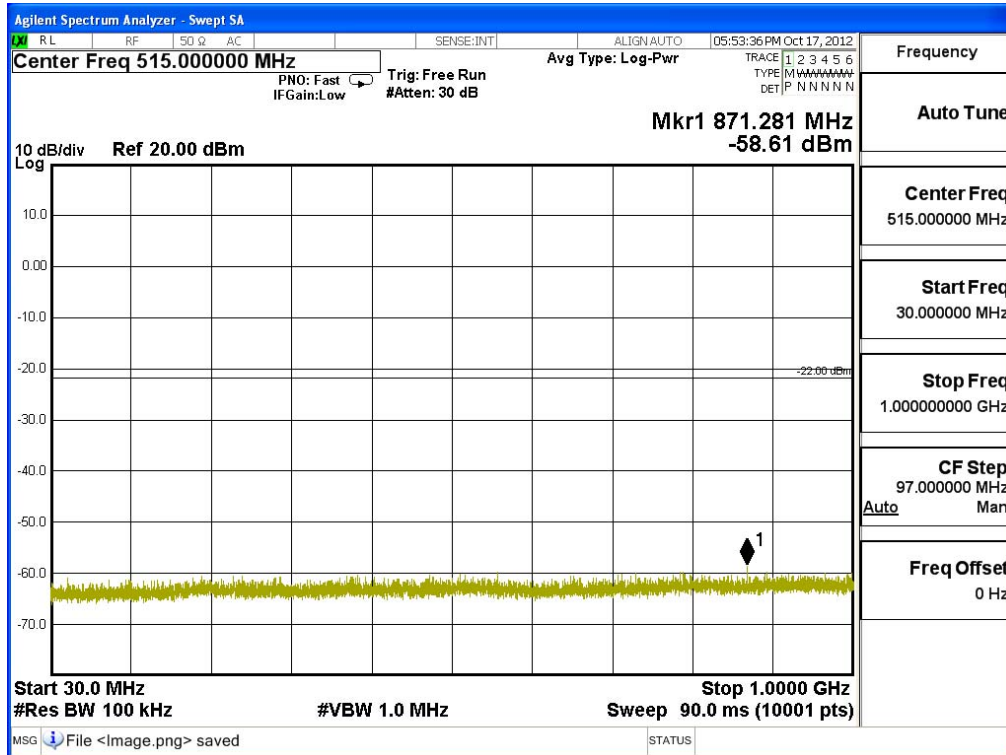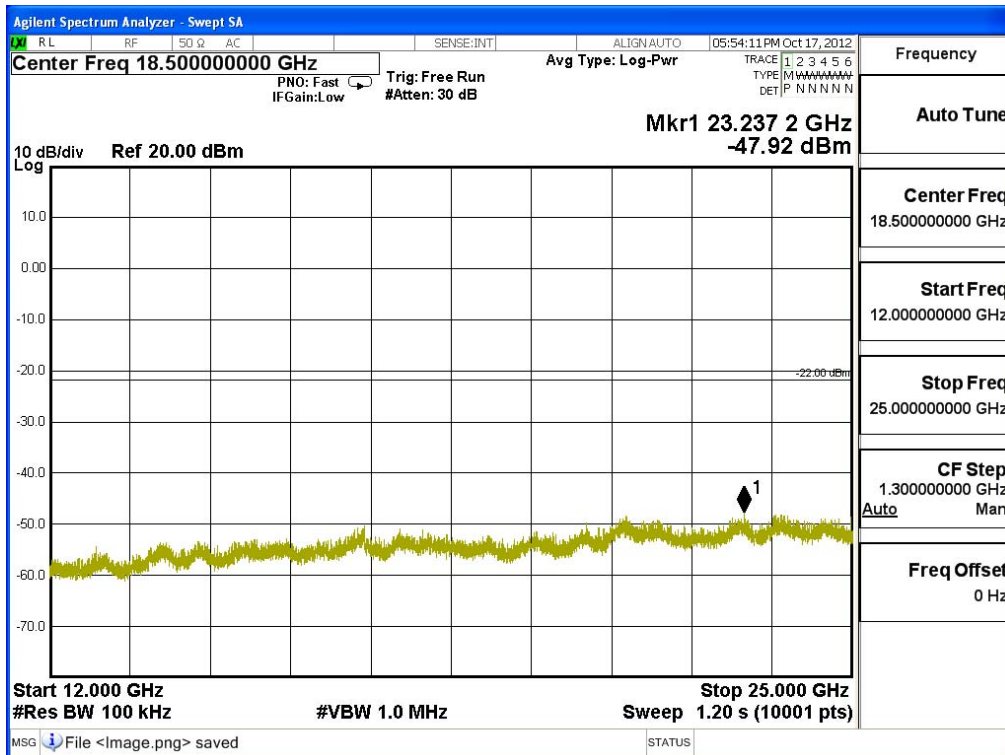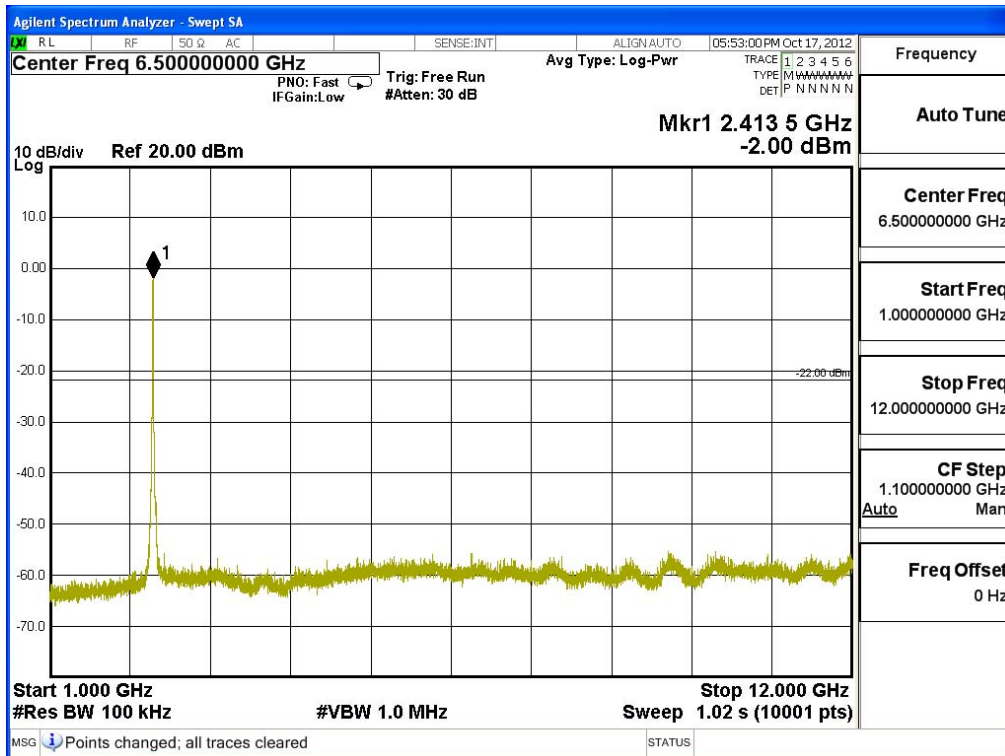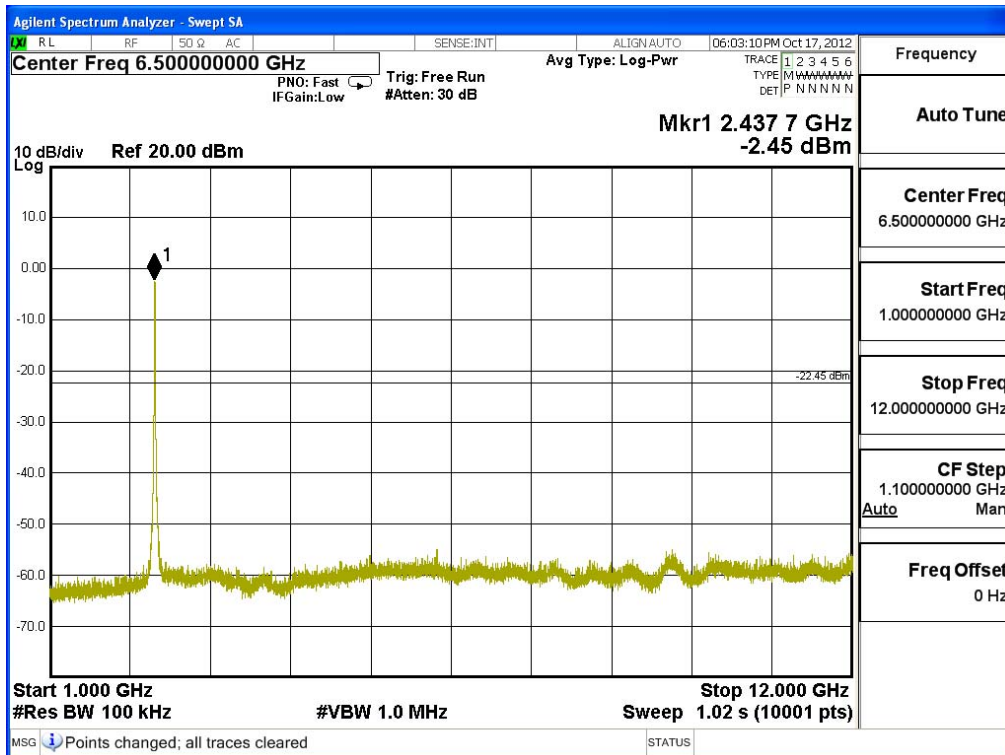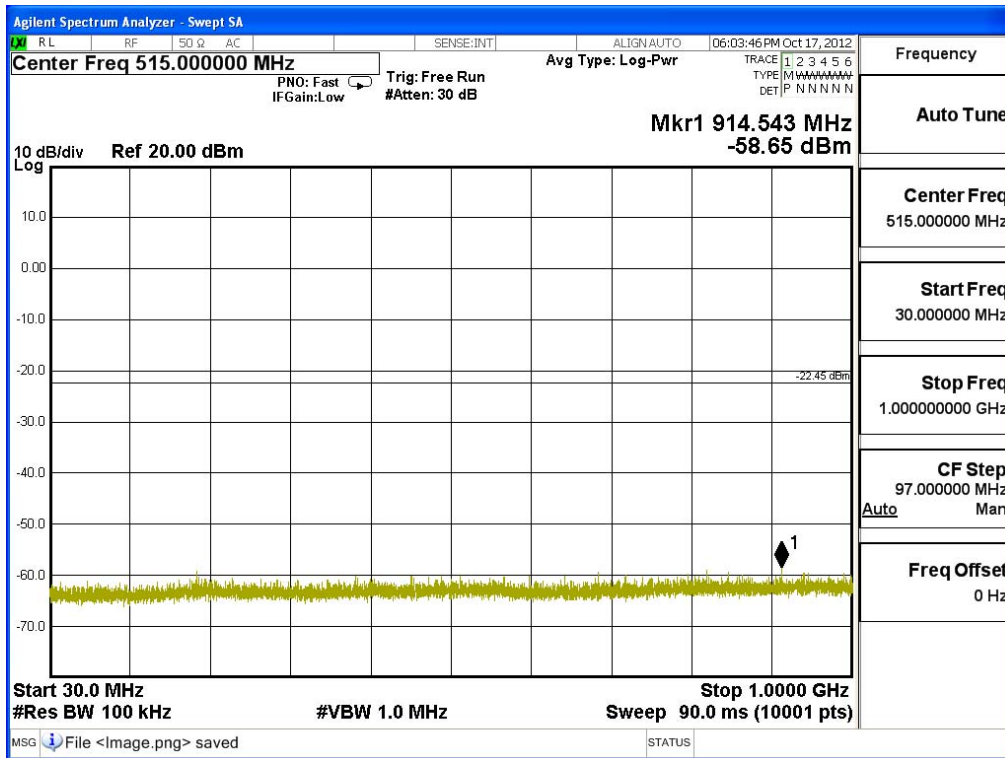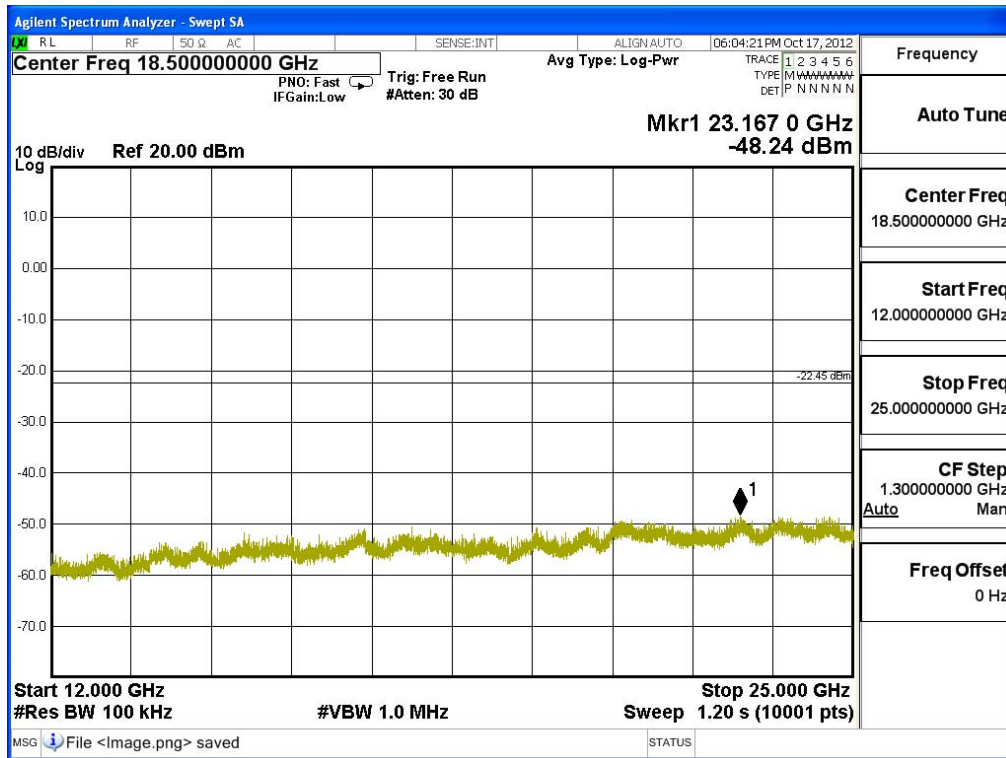
Channel 06 (2437MHz)

Channel 11 (2462MHz)

Product   :   ASUS VivoTab
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)
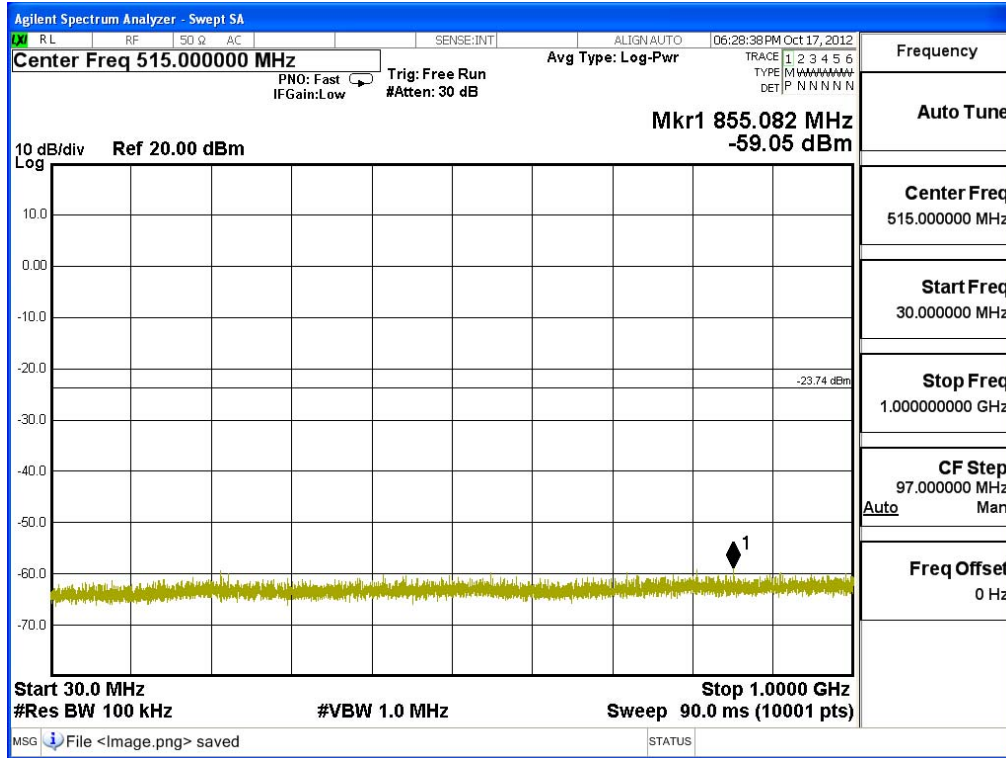
Channel 06 (2437MHz)

Channel 11 (2462MHz)
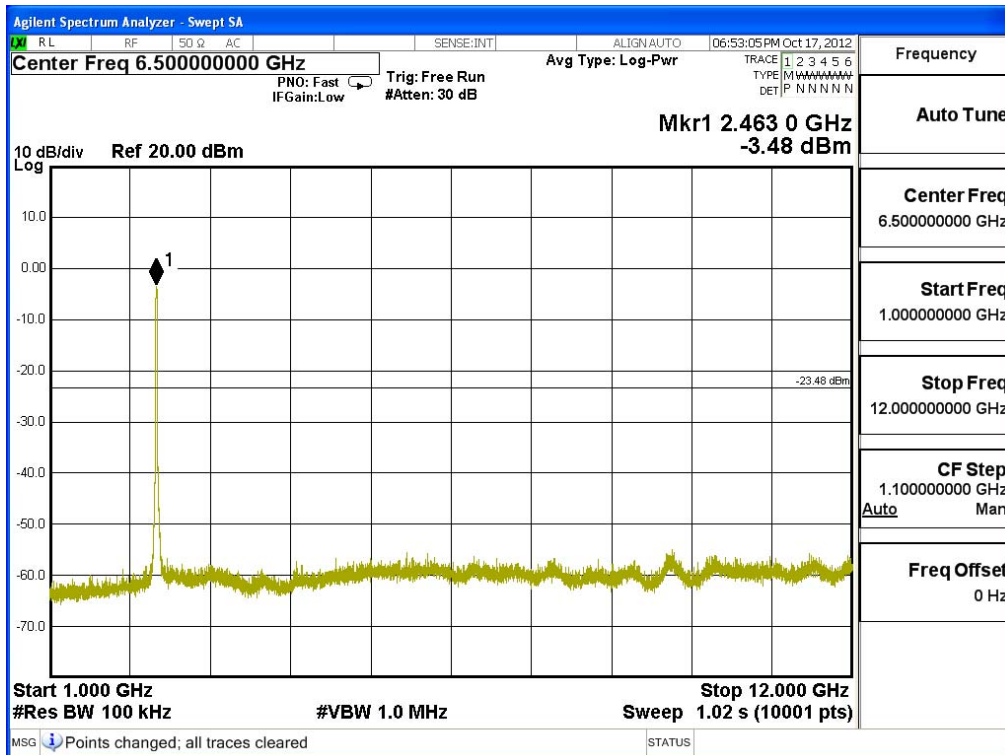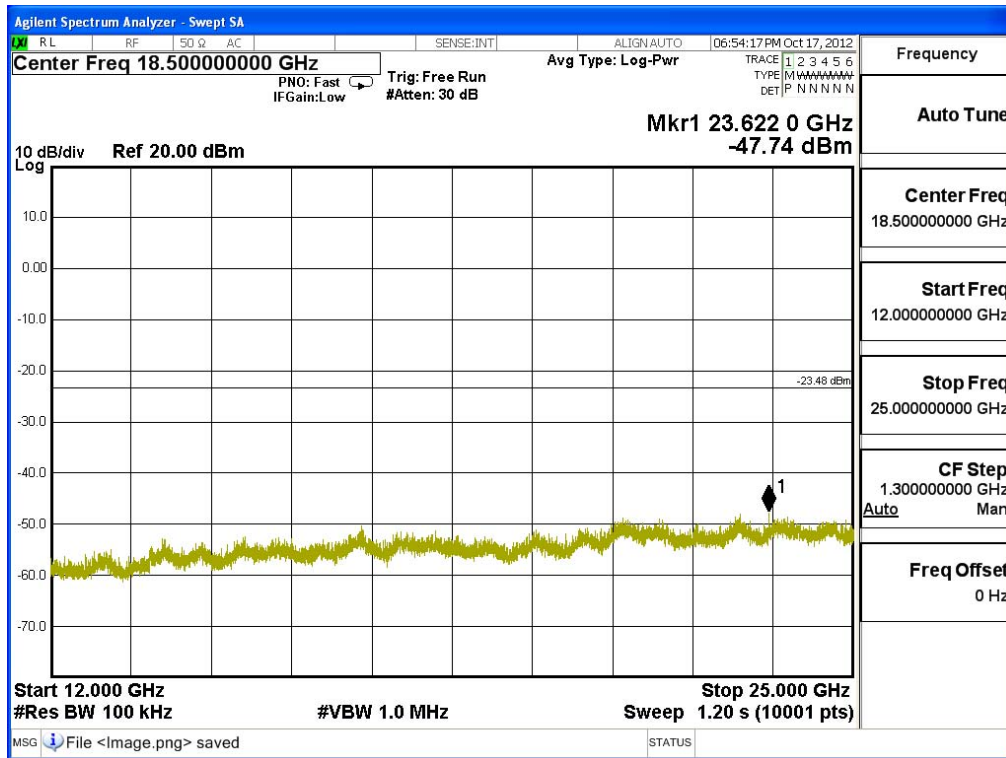
6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

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

	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., 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.
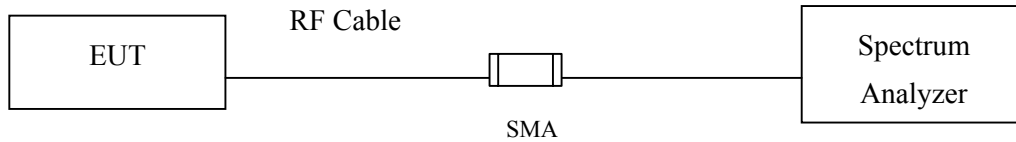
RF Radiated Measurement:

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

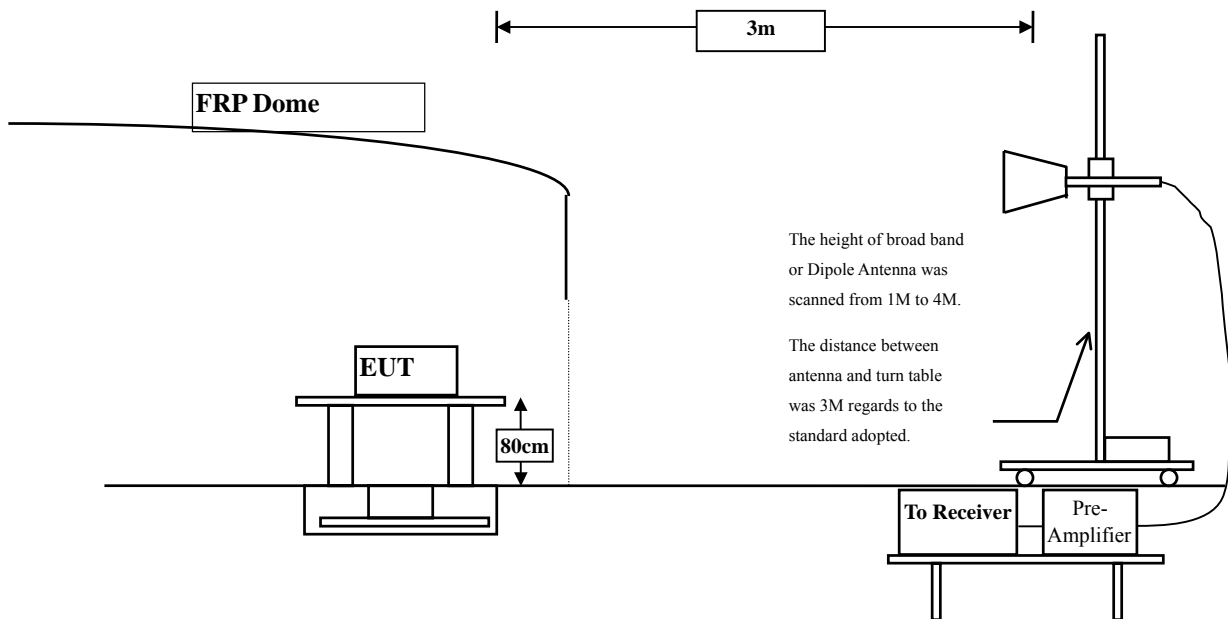| Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2011
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2011
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2012
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2011
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2012
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2011
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2012
	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 Conducted Measurement

RF Radiated Measurement:

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.

6.3. Limits

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

6.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2003 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

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

6.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

6.6.   Test Result of Band Edge

Product   :   ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.200	31.506	28.516	60.022	74.00	54.00	Pass
01 (Peak)	2390.000	31.509	26.755	58.264	74.00	54.00	Pass
01 (Peak)	2413.000	31.646	76.675	108.321	--	--	Pass
01 (Average)	2389.000	31.505	17.329	48.834	74.00	54.00	Pass
01 (Average)	2390.000	31.509	15.922	47.431	74.00	54.00	Pass
01 (Average)	2411.400	31.634	72.818	104.452	--	--	Pass

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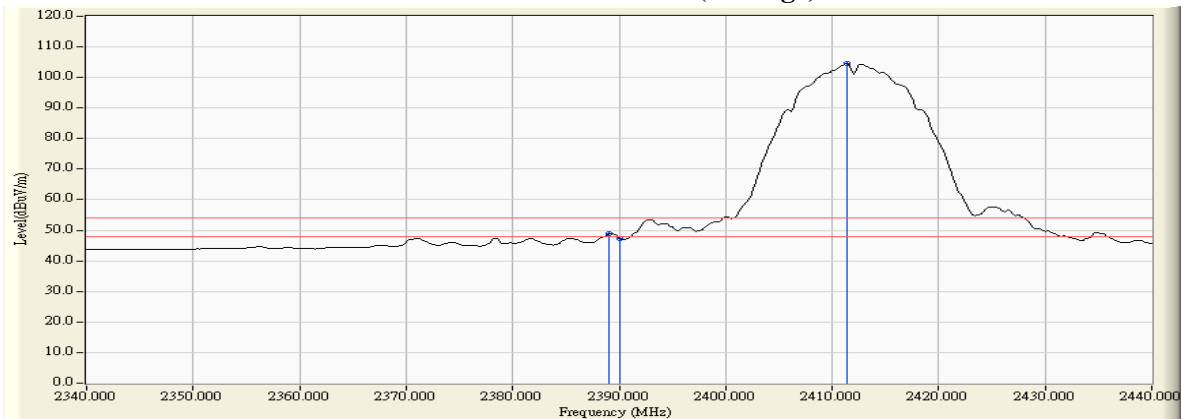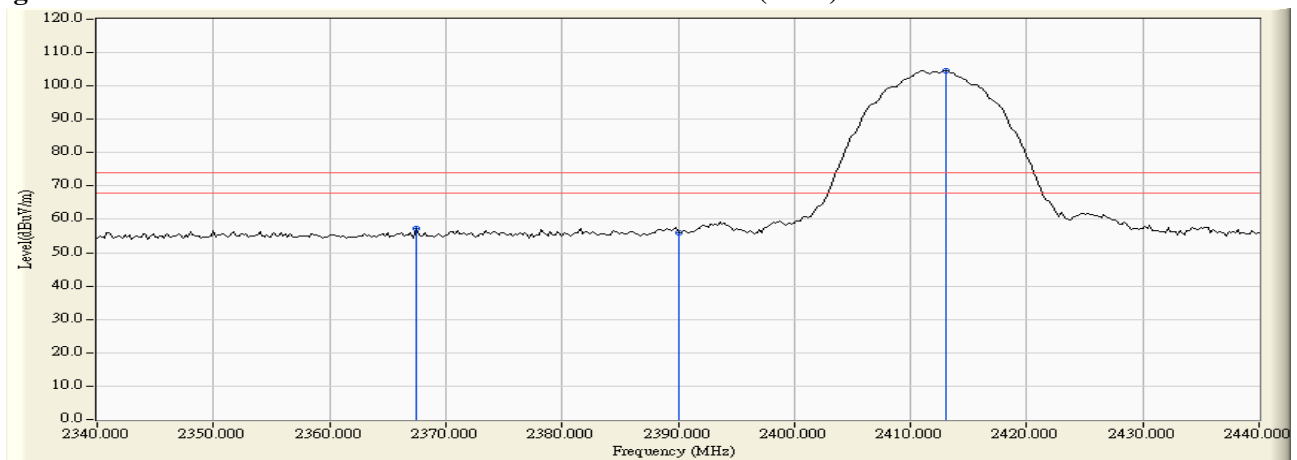

Figure Channel 01:   **Horizontal (Average)**

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

Product : ASUS VivoTab
Test Item : Band Edge Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

RF Radiated Measurement (VERTICAL):

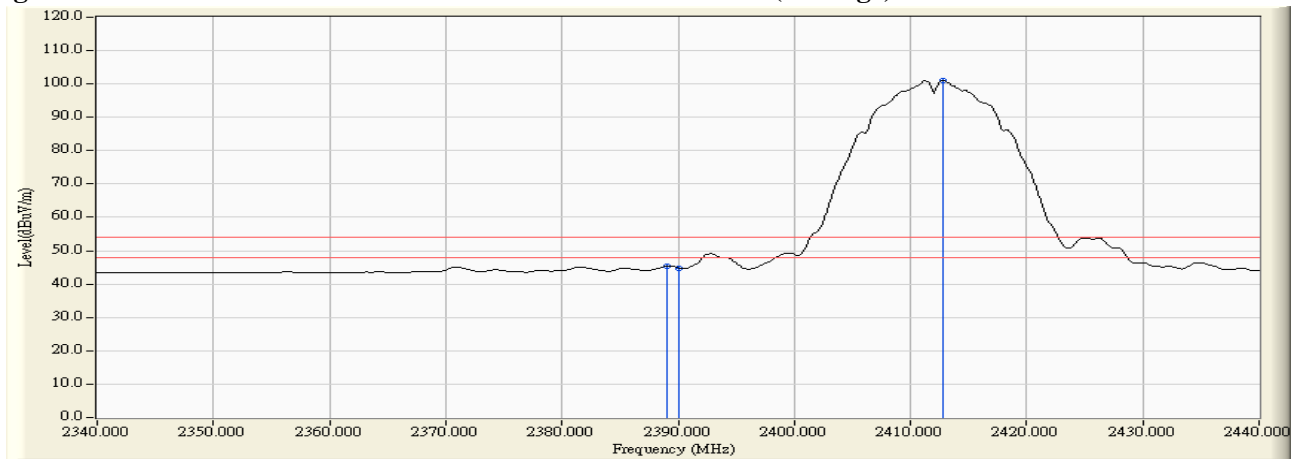| Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2367.400	31.019	26.089	57.109	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	25.127	56.042	74.00	54.00	Pass
01 (Peak)	2413.000	30.956	73.757	104.713	--	--	Pass
01 (Average)	2389.000	30.920	14.451	45.371	74.00	54.00	Pass
01 (Average)	2390.000	30.915	13.915	44.830	74.00	54.00	Pass
01 (Average)	2412.800	30.955	69.939	100.894	--	--	Pass

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

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

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

Product	:	ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2460.900	32.011	76.740	108.751	--	--	Pass
11 (Peak)	2483.500	32.182	25.847	58.029	74.00	54.00	Pass
11 (Peak)	2489.100	32.224	27.880	60.104	74.00	54.00	Pass
11 (Average)	2461.300	32.014	73.092	105.106	--	--	Pass
11 (Average)	2483.500	32.182	14.401	46.583	74.00	54.00	Pass
11 (Average)	2485.700	32.198	16.055	48.254	74.00	54.00	Pass

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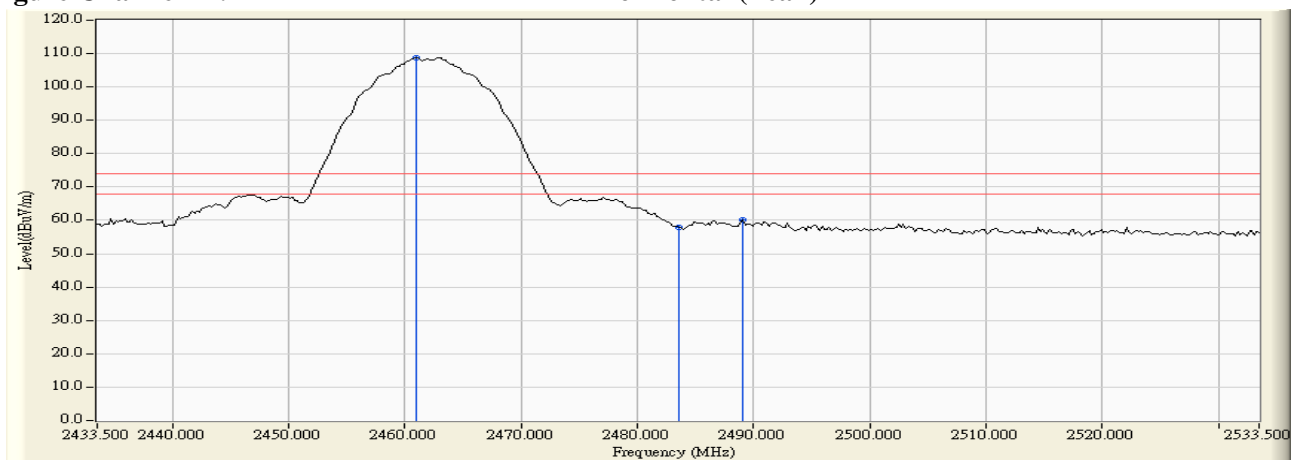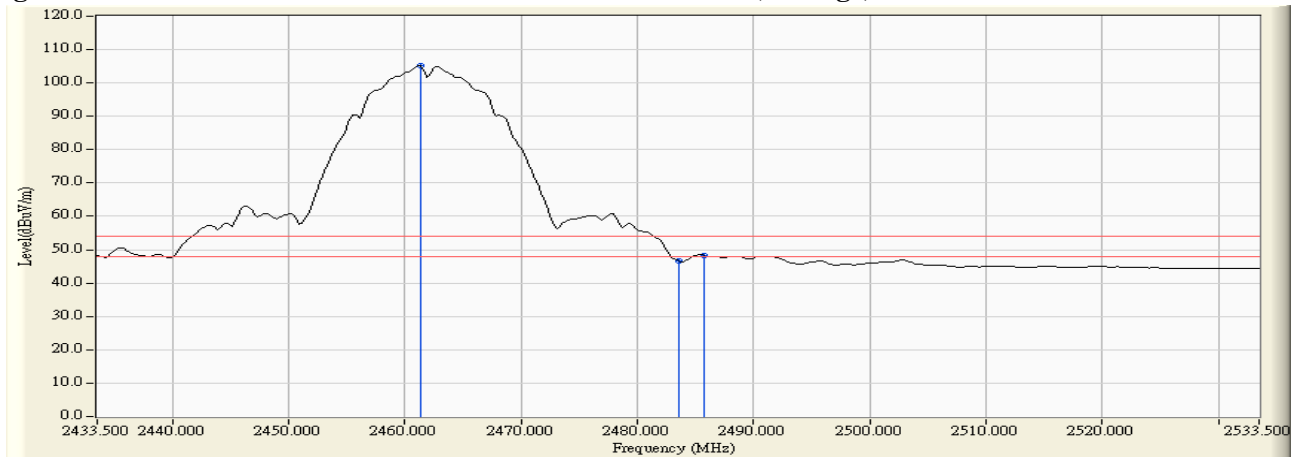

Figure Channel 11:   **Horizontal (Average)**

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

Product	:	ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2462.900	31.296	74.604	105.900	--	--	Pass
11 (Peak)	2483.500	31.435	24.575	56.010	74.00	54.00	Pass
11 (Peak)	2491.100	31.487	26.801	58.288	74.00	54.00	Pass
11 (Average)	2461.100	31.285	70.914	102.198	--	--	Pass
11 (Average)	2483.500	31.435	13.595	45.030	74.00	54.00	Pass
11 (Average)	2488.700	31.471	15.246	46.716	74.00	54.00	Pass

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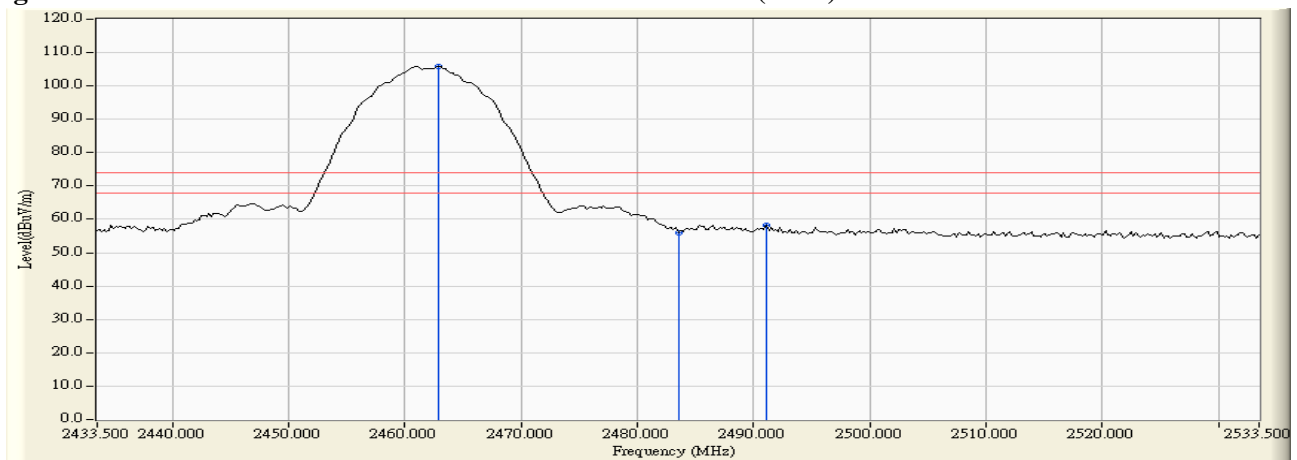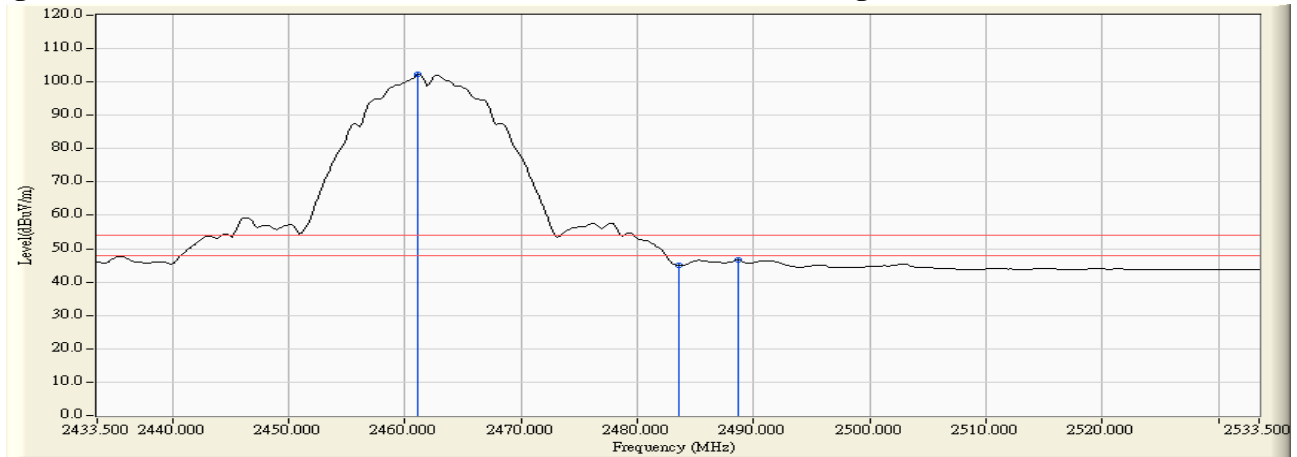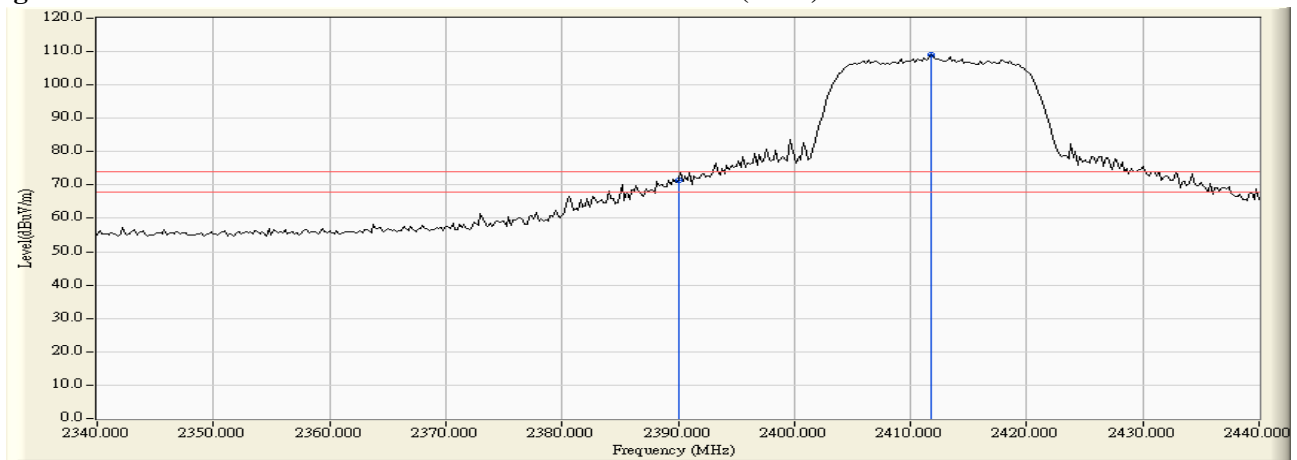

Figure Channel 11:   **VERTICAL (Average)**

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

Product	:	ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2390.000	31.509	39.772	71.281	74.00	54.00	Pass
01 (Peak)	2411.800	31.636	77.303	108.940	--	--	Pass
01 (Average)	2390.000	31.509	17.808	49.317	74.00	54.00	Pass
01 (Average)	2413.000	31.646	63.648	95.294	--	--	Pass

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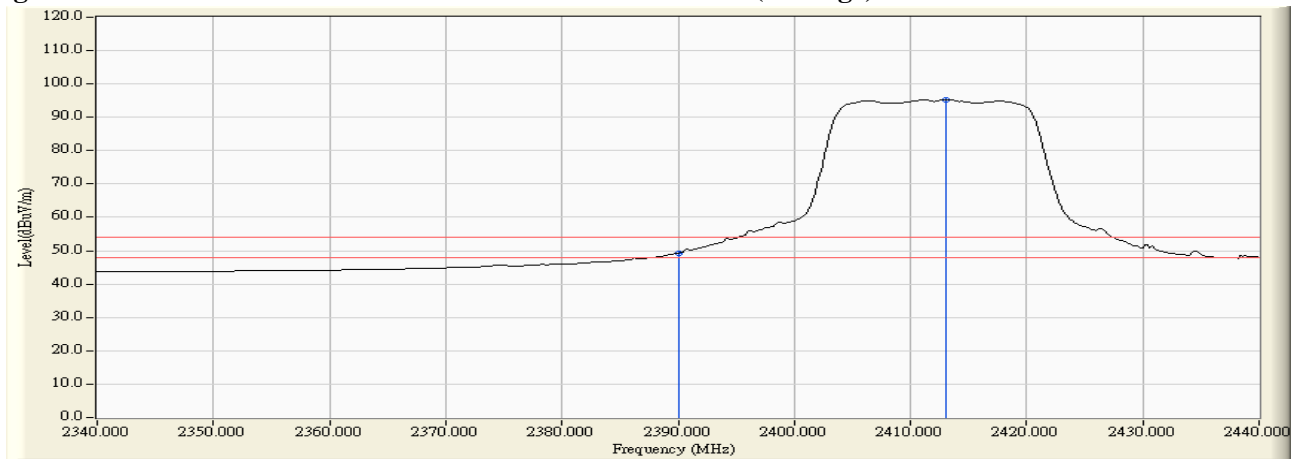

Figure Channel 01:   **Horizontal (Average)**

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

Product   :   ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.600	30.917	37.924	68.841	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	36.786	67.701	74.00	54.00	Pass
01 (Peak)	2412.200	30.951	74.427	105.378	--	--	Pass
01 (Average)	2390.000	30.915	16.259	47.174	74.00	54.00	Pass
01 (Average)	2413.200	30.957	60.703	91.660	--	--	Pass

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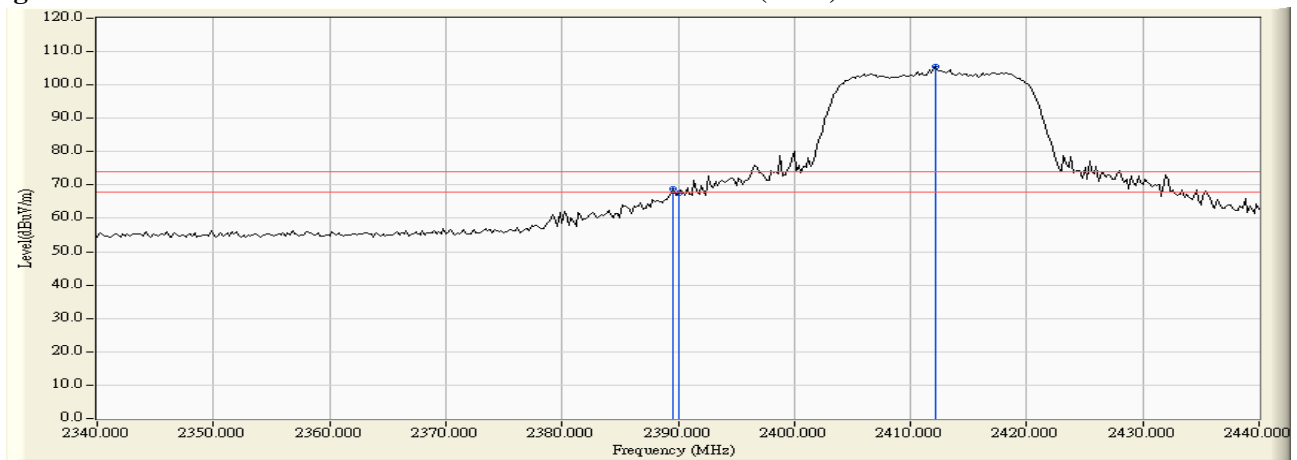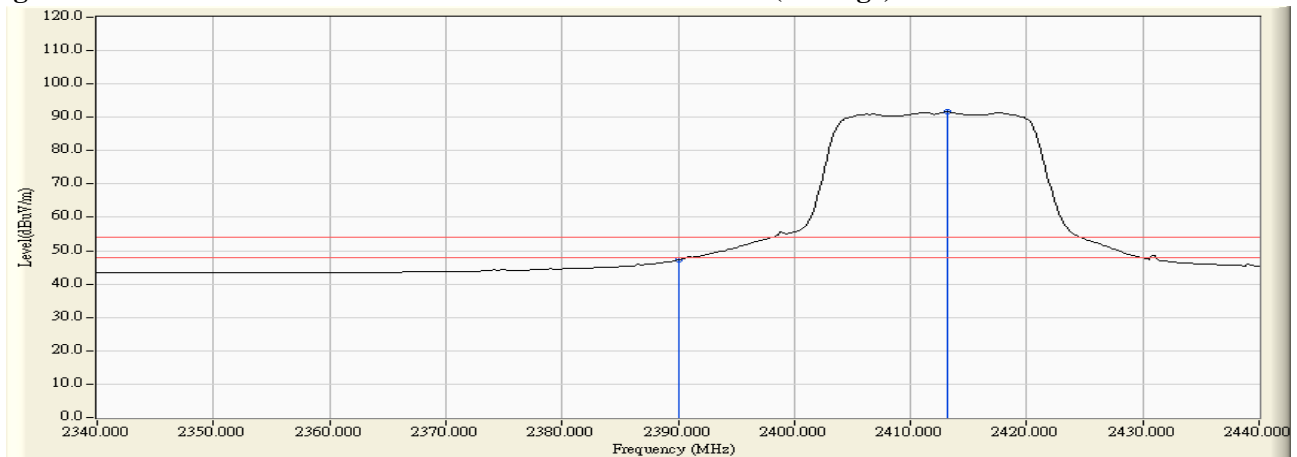

Figure Channel 01:   **VERTICAL (Average)**

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

Product	:	ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2461.900	32.018	77.605	109.624	--	--	Pass
11 (Peak)	2483.500	32.182	39.955	72.137	74.00	54.00	Pass
11 (Peak)	2484.700	32.192	40.115	72.306	74.00	54.00	Pass
11 (Average)	2461.100	32.013	63.678	95.691	--	--	Pass
11 (Average)	2483.500	32.182	20.712	52.894	74.00	54.00	Pass

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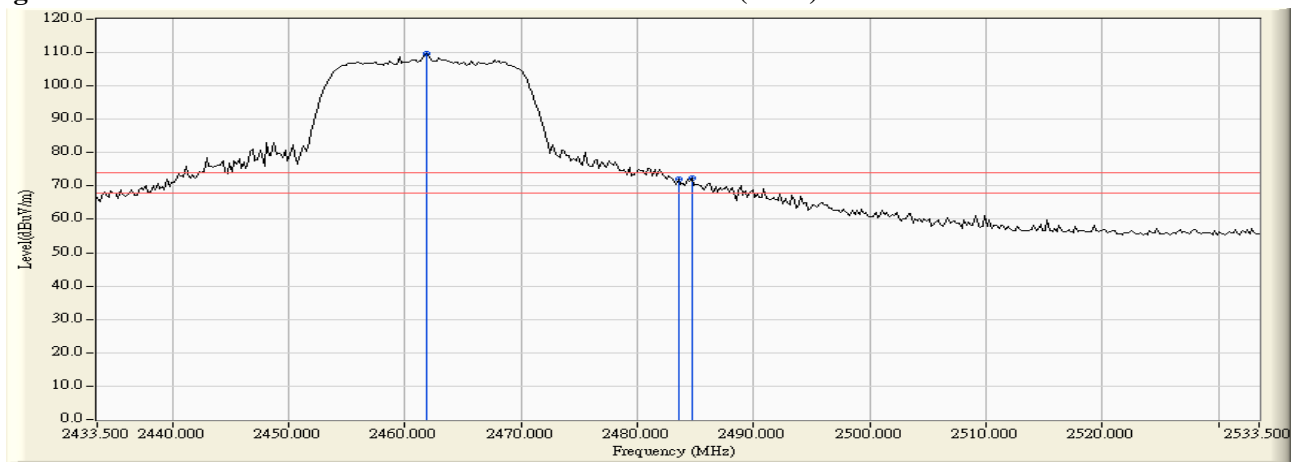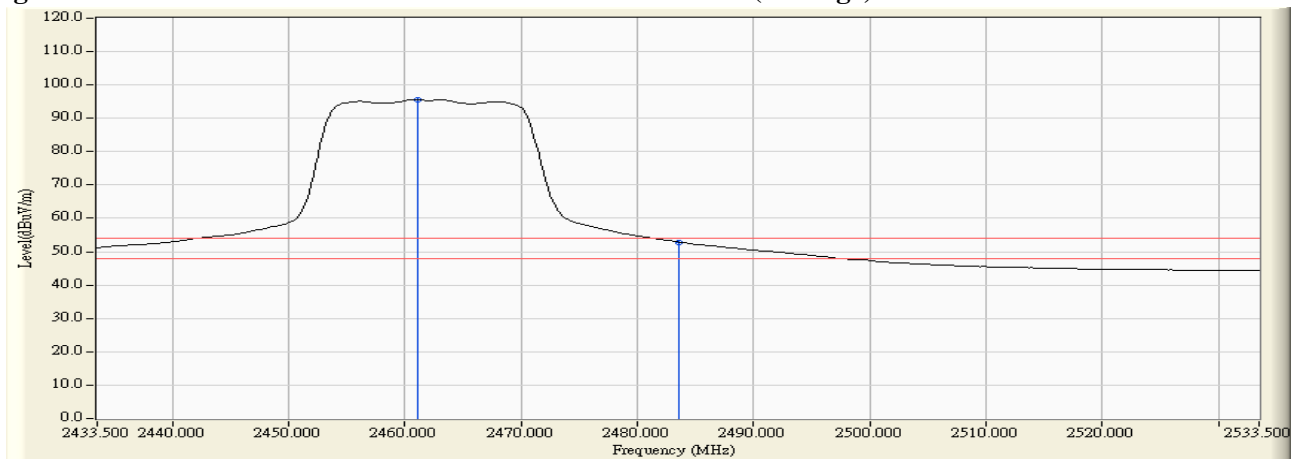

Figure Channel 11:   **Horizontal (Average)**

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

Product	:	ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2463.300	31.299	73.379	104.678	--	--	Pass
11 (Peak)	2483.500	31.435	36.878	68.313	74.00	54.00	Pass
11 (Peak)	2485.500	31.449	38.656	70.105	74.00	54.00	Pass
11 (Average)	2460.900	31.283	60.530	91.813	--	--	Pass
11 (Average)	2483.500	31.435	18.765	50.200	74.00	54.00	Pass

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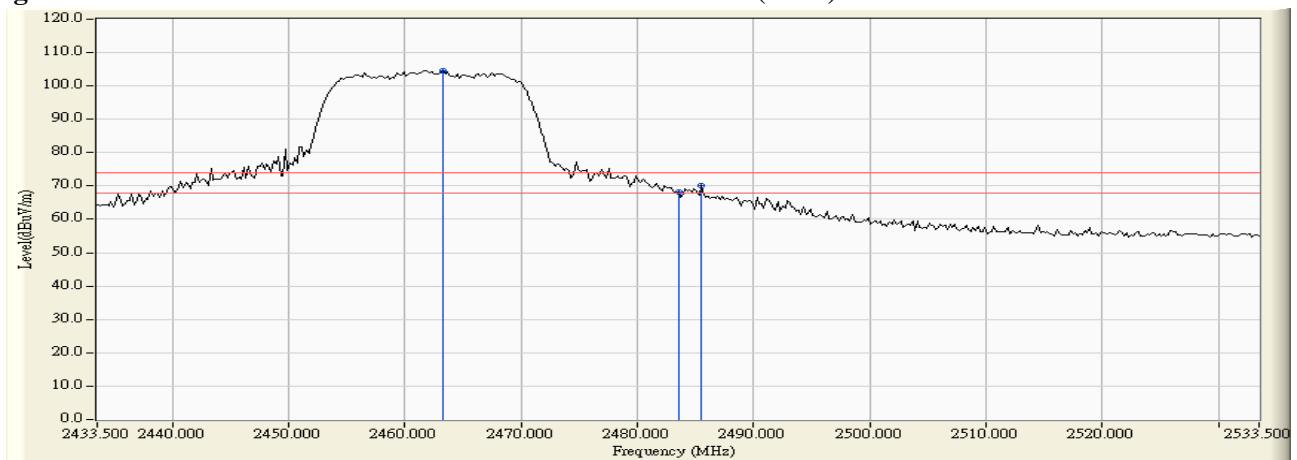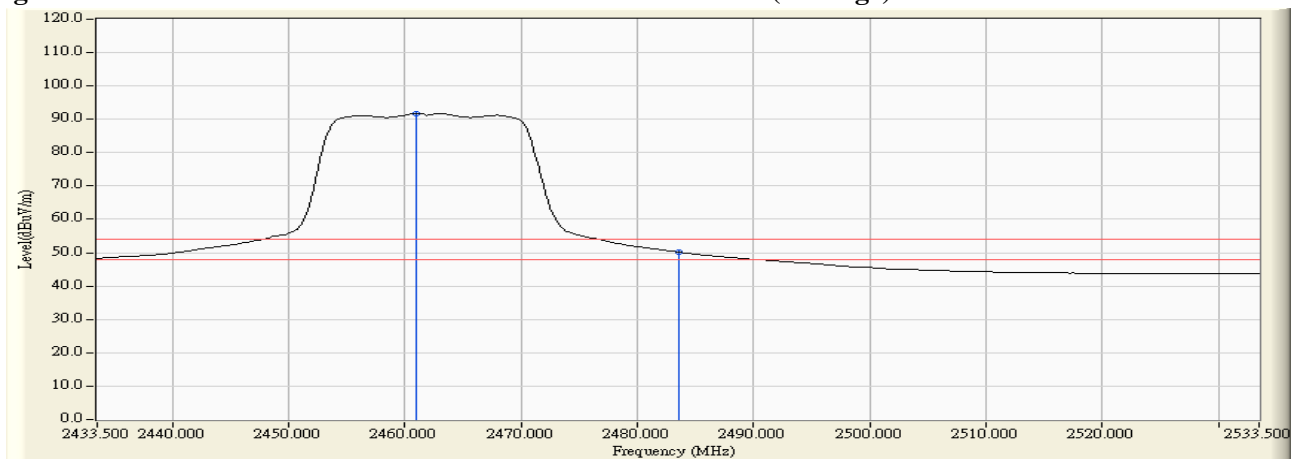

Figure Channel 11:   **VERTICAL (Average)**

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

Product : ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2386.800	31.497	40.381	71.878	74.00	54.00	Pass
01 (Peak)	2390.000	31.509	39.262	70.771	74.00	54.00	Pass
01 (Peak)	2413.000	31.646	76.651	108.297	--	--	Pass
01 (Average)	2390.000	31.509	17.849	49.358	74.00	54.00	Pass
01 (Average)	2413.000	31.646	58.622	90.268	--	--	Pass

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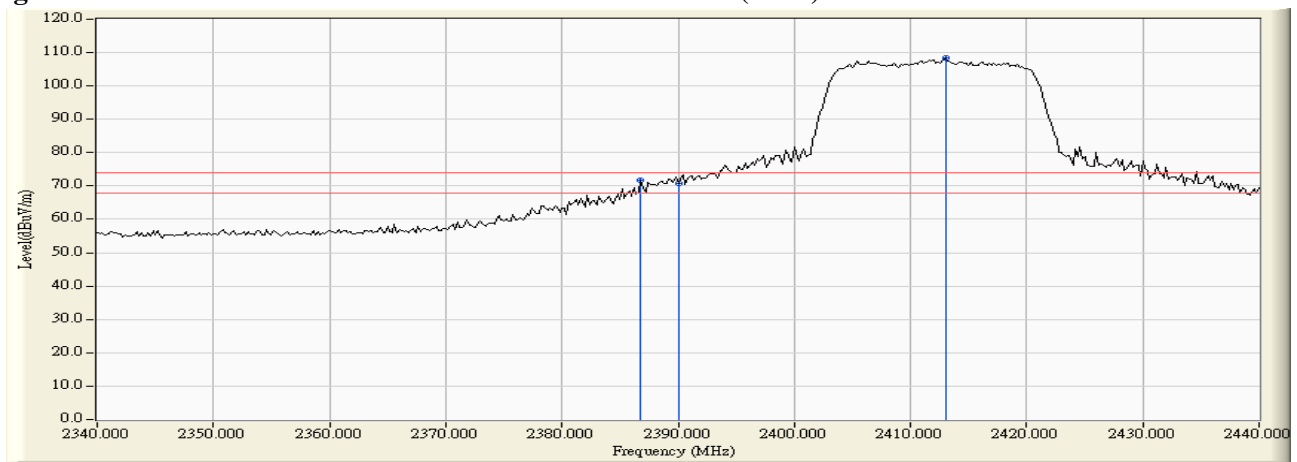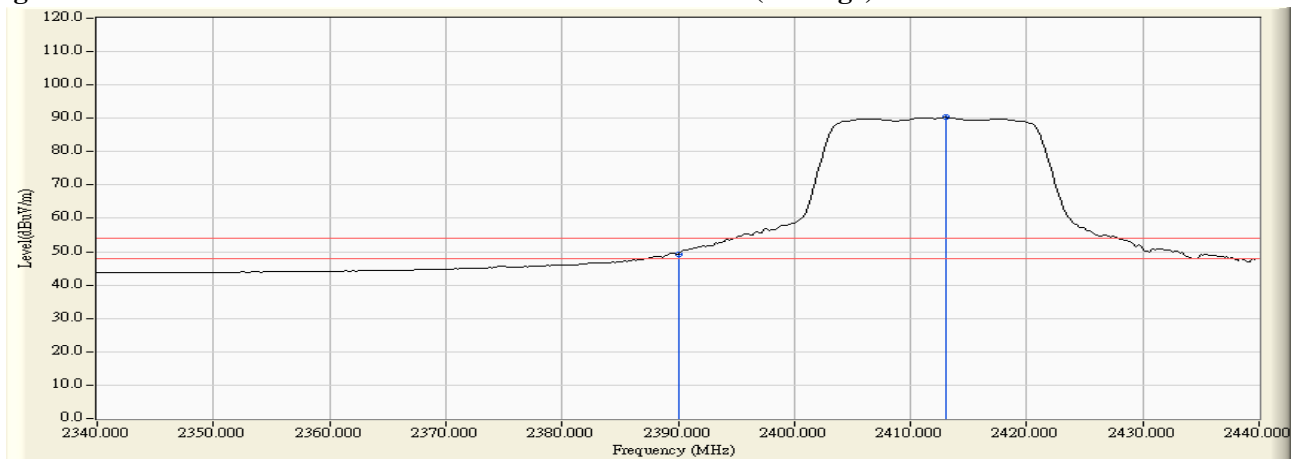

Figure Channel 01:   **Horizontal (Average)**

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

Product : ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
01 (Peak)	2389.600	30.917	39.495	70.412	74.00	54.00	Pass
01 (Peak)	2390.000	30.915	38.023	68.938	74.00	54.00	Pass
01 (Peak)	2412.200	30.951	73.403	104.354	--	--	Pass
01 (Average)	2390.000	30.915	17.131	48.046	74.00	54.00	Pass
01 (Average)	2413.000	30.956	55.948	86.904	--	--	Pass

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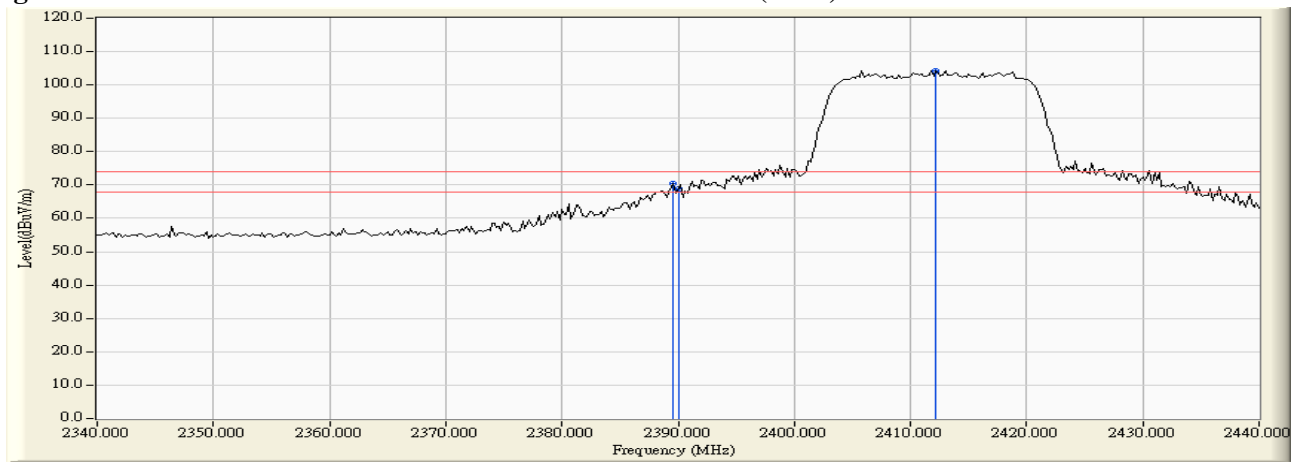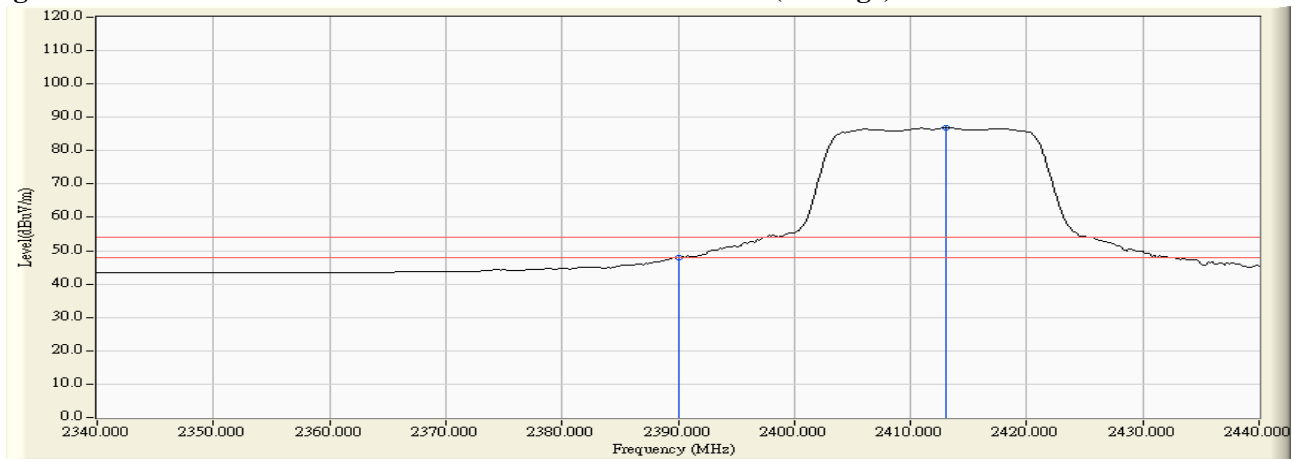

Figure Channel 01:   **VERTICAL (Average)**

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

Product : ASUS VivoTab

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)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2461.700	32.017	76.651	108.668	--	--	Pass
11 (Peak)	2483.500	32.182	39.811	71.993	74.00	54.00	Pass
11 (Peak)	2484.100	32.186	40.746	72.933	74.00	54.00	Pass
11 (Average)	2461.100	32.013	58.906	90.919	--	--	Pass
11 (Average)	2483.500	32.182	20.381	52.563	74.00	54.00	Pass

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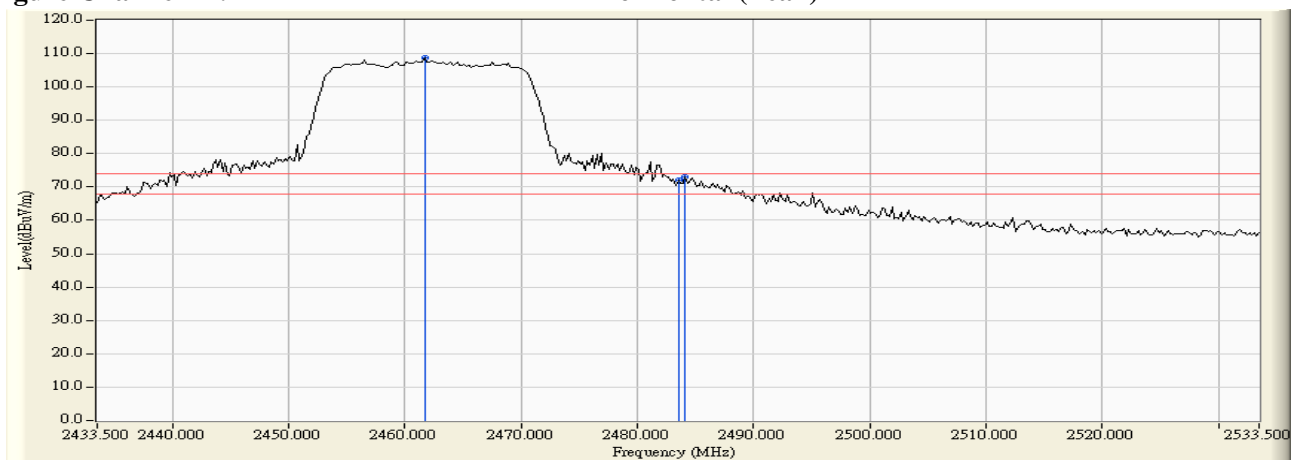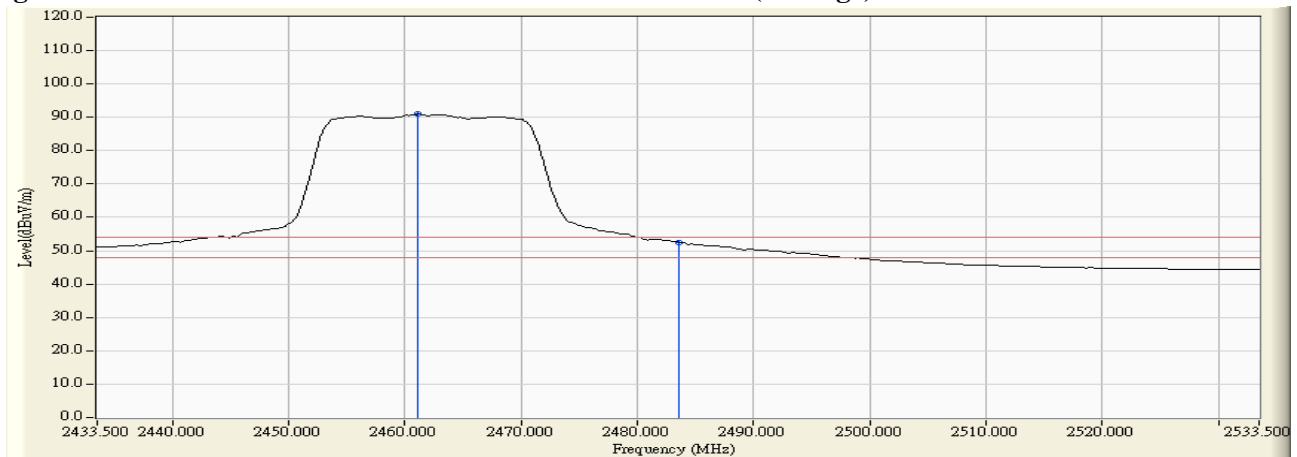

Figure Channel 11:   **Horizontal (Average)**

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

Product	:	ASUS VivoTab
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)	Arerage Limit (dBuV/m)	Result
11 (Peak)	2461.300	31.286	74.191	105.477	--	--	Pass
11 (Peak)	2483.500	31.435	39.614	71.049	74.00	54.00	Pass
11 (Average)	2461.100	31.285	57.296	88.580	--	--	Pass
11 (Average)	2483.500	31.435	19.258	50.693	74.00	54.00	Pass

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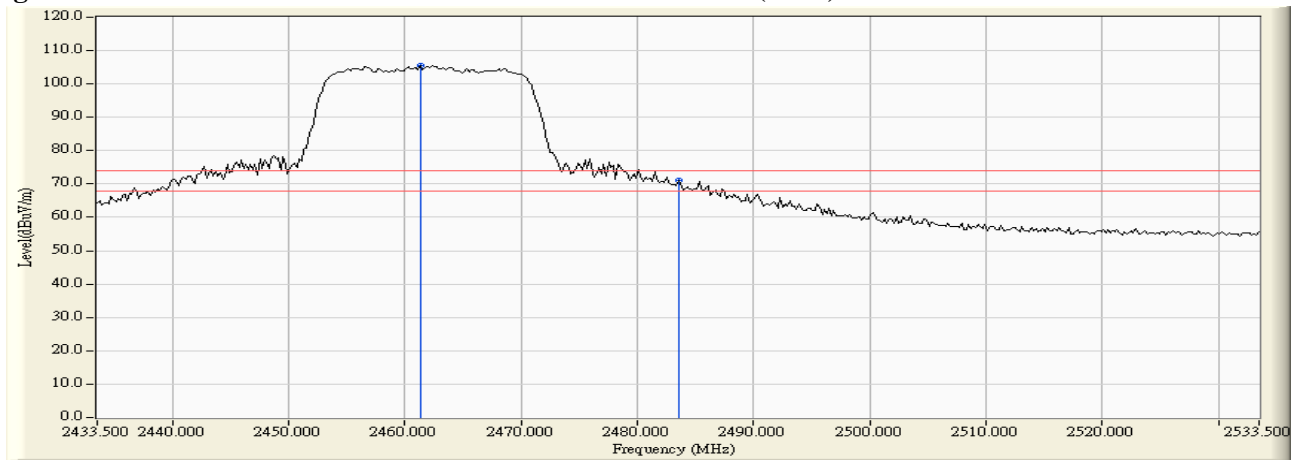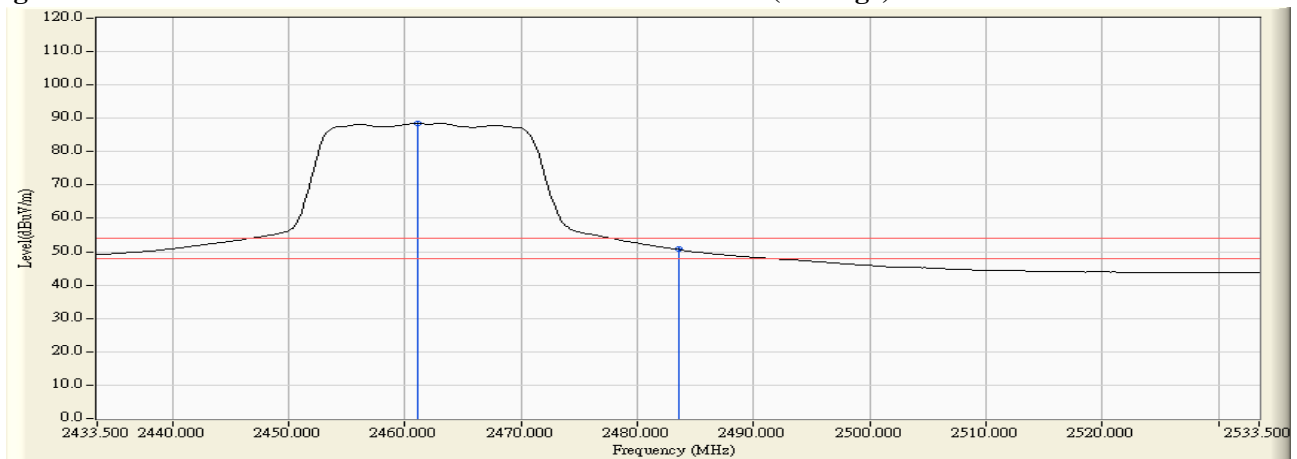

Figure Channel 11:   **VERTICAL (Average)**

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

7. Occupied Bandwidth

7.1. 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., 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.

7.2. Test Setup
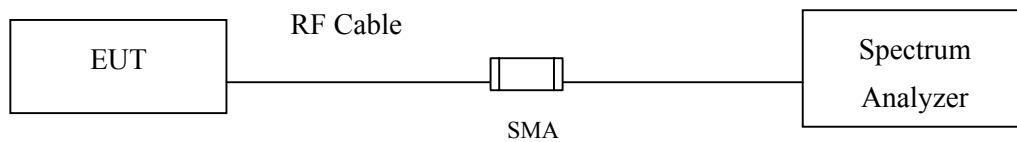
7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2003; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 1-5% of the emission bandwidth, VBW≥3*RBW
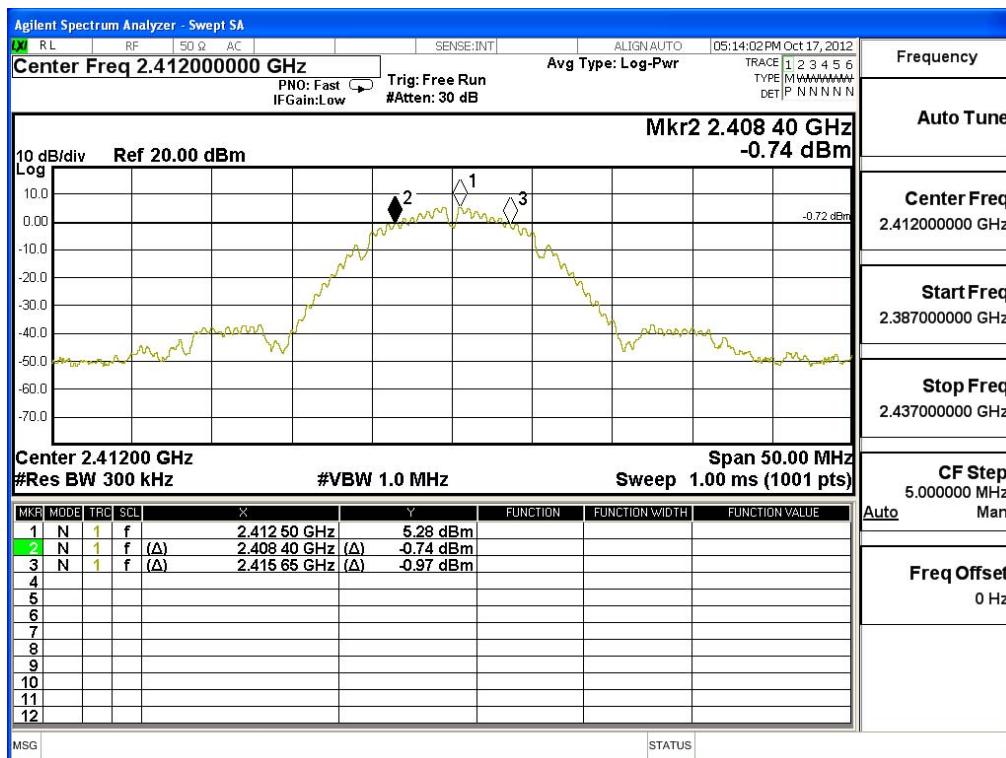
7.5. Uncertainty

± 150Hz

7.6. Test Result of Occupied Bandwidth

Product : ASUS VivoTab
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

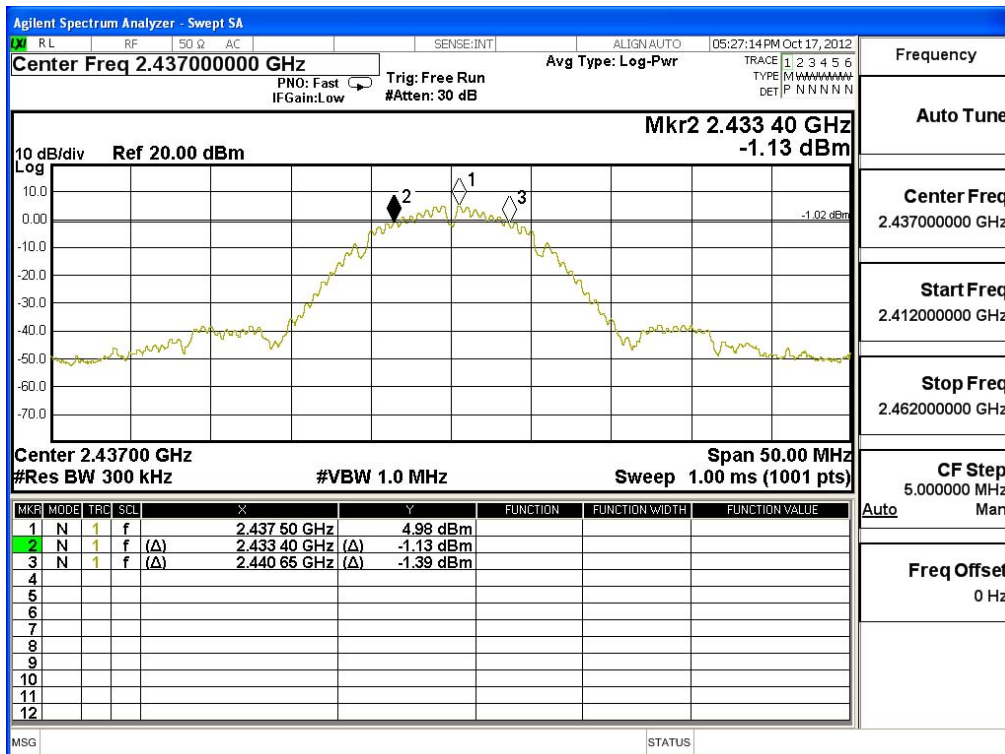| Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	7250	>500	Pass

Figure Channel 1:

Product   :   ASUS VivoTab
Test Item   :   Occupied Bandwidth Data
Test Site   :   No.3 OATS
Test Mode   :   Mode 1: Transmit (802.11b 1Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437	7250	>500	Pass

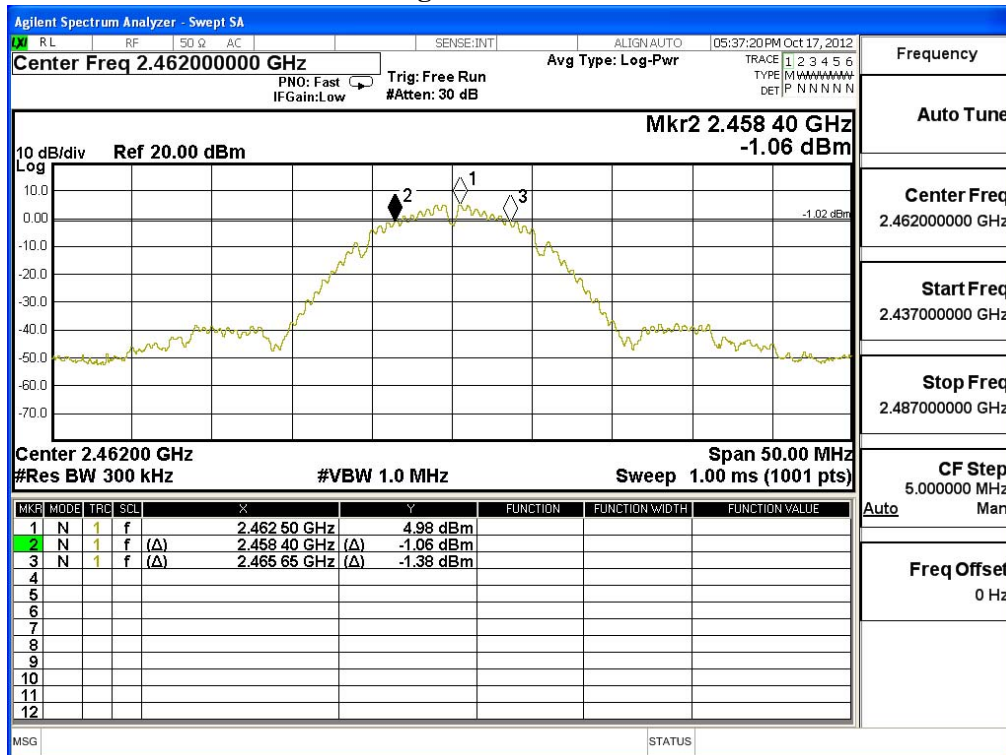**Figure Channel 6:**

Product   :   ASUS VivoTab

Test Item   :   Occupied Bandwidth Data

Test Site   :   No.3 OATS

Test Mode   :   Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462	7250	>500	Pass

Figure Channel 11:

Product   :   ASUS VivoTab

Test Item   :   Occupied Bandwidth Data

Test Site   :   No.3 OATS

Test Mode   :   Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412	16600	>500	Pass

Figure Channel 1: