



Test Report

Product Name	Slate PC
Model No	S1080XX, R2005XX(X=0-9,A-Z,a-z or blank)
FCC ID.	JCK-S2005

Applicant	GIGA-BYTE TECHNOLOGY CO., LTD
Address	No.6, Bao Chiang Road, Hsin-Tien Dist., New Taipei City 231, Taiwan

Date of Receipt	Mar. 03, 2011
Issue Date	Apr. 15, 2011
Report No.	113054R-RFUSP42V01
Report Version	V1.0

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Test Report Certification

Issue Date: Apr. 15, 2011

Report No.: 113054R-RFUSP42V01



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

Product Name	Slate PC
Applicant	GIGA-BYTE TECHNOLOGY CO., LTD
Address	No.6, Bao Chiang Road, Hsin-Tien Dist., New Taipei City 231, Taiwan
Manufacturer	GIGA-BYTE TECHNOLOGY CO., LTD
Model No.	S1080XX, R2005XX(X=0-9,A-Z,a-z or blank)
FCC ID.	JCK-S2005
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	GIGABYTE
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2010 ANSI C63.4: 2009
Test Result	Complied



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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Slate PC
Trade Name	GIGABYTE
Model No.	S1080XX, R2005XX(X=0-9,A-Z,a-z or blank)
FCC ID.	JCK-S2005
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW, 2422-2452MHz for 802.11n-40BW
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK) 802.11g/n:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	Printed on PCB
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
Power Adapter	MFR: DELTA, M/N: ADP-40PH BB Input: AC 100-240V, 50-60Hz, 1.2A Output: DC 19V, 2.1A Cable Out: Non-shielded, 1.8m, with one ferrite core bonded.

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	GIGA-BYTE	WLAN-BT	Printed on PCB	1.9dBi

Note: 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		

802.11n-40MHz Center Frequency of Each Channel:

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

Note:

1. The EUT is a Slate PC build-in a 2.4GHz Transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report.
(802.11b is 1Mbps 、 802.11g is 6Mbps 、 802.11n(20M-BW) is 7.2Mbps and 、
802.11n(40M-BW) is 15Mbps)
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

1.2. Operational Description

The EUT is a Slate PC, This device provided four kinds of transmitting speed 1, 2, 5.5 and 11Mbps and the device of RF carrier is DBPSK, DQPSK and CCK (IEEE 802.11b). The device provided of eight kinds of transmitting speed 6, 9, 12, 18, 24, 36, 48 and 54Mbps the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11g).

The device provided of eight kinds of transmitting speed 7.2,14.4,21.7,28.9,43.3,57.8.65 and 72.2Mbps in 802.11n(20M-BW) mode and 15,30,45,60,90,120,135 and 150Mbps(40M-BW) the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11n), The IEEE 802.11n is Multiple In, Multiple Out” (MIMO) technology and two antennas to support 2(Transmit) * 2(Receive) MIMO technology.

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

This device use WLAN and Bluetooth combo module which not transmit simultaneous.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW)
	Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW)

NOTE: In n-20 and n-40 mode the power combiner is used, the factor of combiner is 10dB and offset it in test instrument.

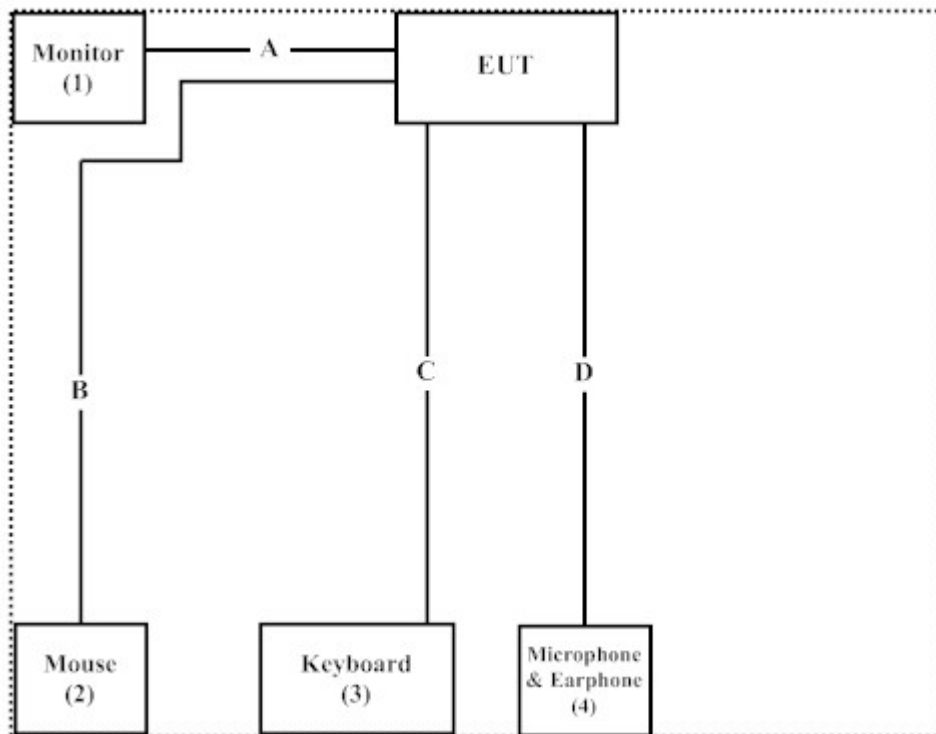
1.3. Tested System Details

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.	FCC ID	Power Cord
1 Monitor	Dell	2407WFPb	CN-0FC255-46633-67T-04GS	DoC	Non-Shielded, 1.8m
2 USB Mouse	DELL	M056U0A	F0Y01YEQ	DoC	N/A
3 Keyboard	DELL	SK-8115	MY-0DJ325-71619-7A2-0330	DoC	N/A
4 Microphone & Earphone	Ergotech	ET-E201	N/A	N/A	N/A

Signal Cable Type	Signal cable Description
A VGA Cable	Shielded, 1.8m, with two ferrite cores bonded.
B USB Mouse Cable	Shielded, 1.8m
C USB Keyboard Cable	Shielded, 1.8m
D Microphone & Earphone Cable	Non-Shielded, 1.8m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4.
- (2) Execute “.Realtek.exe” on the EUT.
- (3) Configure the test mode, the test channel, and the data rate to start the continuous transmit
- (4) 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:

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Accreditation on NVLAP
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FCC Accreditation Number: TW1014



2. Conducted Emission

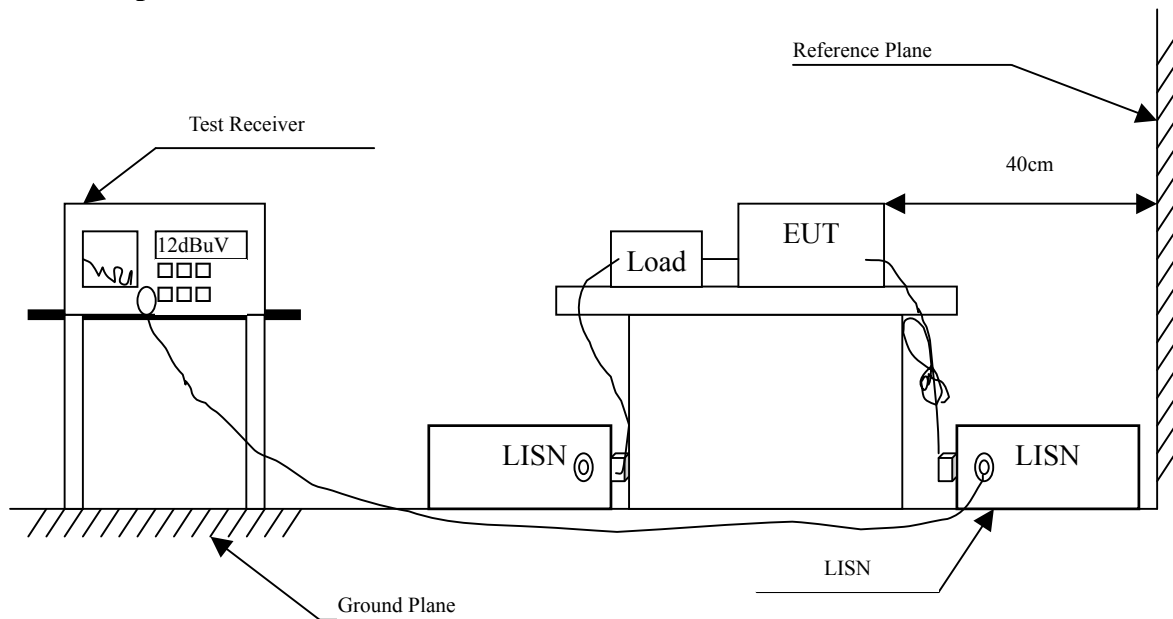
2.1. Test Equipment

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

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2010	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2010	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2010	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2010	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart 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: 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 : Slate PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
Line 1					
Quasi-Peak					
0.189	9.790	43.250	53.040	-11.846	64.886
0.209	9.790	36.090	45.880	-18.434	64.314
0.255	9.790	34.550	44.340	-18.660	63.000
0.767	9.770	26.650	36.420	-19.580	56.000
4.470	9.820	29.860	39.680	-16.320	56.000
15.884	10.110	30.210	40.320	-19.680	60.000
Average					
0.189	9.790	31.320	41.110	-13.776	54.886
0.209	9.790	17.110	26.900	-27.414	54.314
0.255	9.790	22.770	32.560	-20.440	53.000
0.767	9.770	22.820	32.590	-13.410	46.000
4.470	9.820	18.710	28.530	-17.470	46.000
15.884	10.110	23.010	33.120	-16.880	50.000

Note:

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

Product : Slate PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
Line 2					
Quasi-Peak					
0.181	9.790	42.680	52.470	-12.644	65.114
0.197	9.790	41.510	51.300	-13.357	64.657
0.263	9.790	32.170	41.960	-20.811	62.771
0.767	9.790	26.440	36.230	-19.770	56.000
4.474	9.830	30.440	40.270	-15.730	56.000
15.048	10.190	26.780	36.970	-23.030	60.000
Average					
0.181	9.790	25.300	35.090	-20.024	55.114
0.197	9.790	31.010	40.800	-13.857	54.657
0.263	9.790	18.410	28.200	-24.571	52.771
0.767	9.790	22.360	32.150	-13.850	46.000
4.474	9.830	18.030	27.860	-18.140	46.000
15.048	10.190	20.950	31.140	-18.860	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

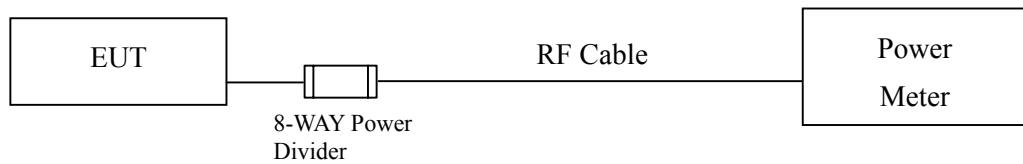
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2010
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2011

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. The power combiner is used for measure 11n mode.

3.2. Test Setup

Conducted Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product : Slate 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			
		Measurement Level (dBm)						
01	2412	14.92	--	--	--	17.44	<30dBm	Pass
06	2437	17.2	17.02	16.88	16.54	19.42	<30dBm	Pass
11	2462	15.03	--	--	--	17.44	<30dBm	Pass

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

Product : Slate 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			
		Measurement Level (dBm)										
01	2412	4.58	--	--	--	--	--	--	--	15.5	<30dBm	Pass
06	2437	8.52	8.41	8.34	8.2	8.02	7.94	7.78	7.62	19.45	<30dBm	Pass
11	2462	6.04	--	--	--	--	--	--	--	16.19	<30dBm	Pass

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

Product : Slate PC
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		HT0	HT1	HT2	HT3	HT4	HT5	HT6	HT7	HT7		
		Measurement Level (dBm)										
01	2412	6.14	--	--	--	--	--	--	--	15.71	<30dBm	Pass
06	2437	9.04	8.88	8.72	8.66	8.37	8.22	8.13	8.07	18.8	<30dBm	Pass
11	2462	5.07	--	--	--	--	--	--	--	14.81	<30dBm	Pass

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

Product : Slate PC
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		HT0	HT1	HT2	HT3	HT4	HT5	HT6	HT7	HT7		
		Measurement Level (dBm)										
01	2422	4.91	--	--	--	--	--	--	--	14.76	<30dBm	Pass
04	2437	7.7	7.54	7.31	7.22	7.04	6.95	6.88	6.62	16.82	<30dBm	Pass
07	2452	4.82	--	--	--	--	--	--	--	14.71	<30dBm	Pass

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

4. Radiated Emission

4.1. Test Equipment

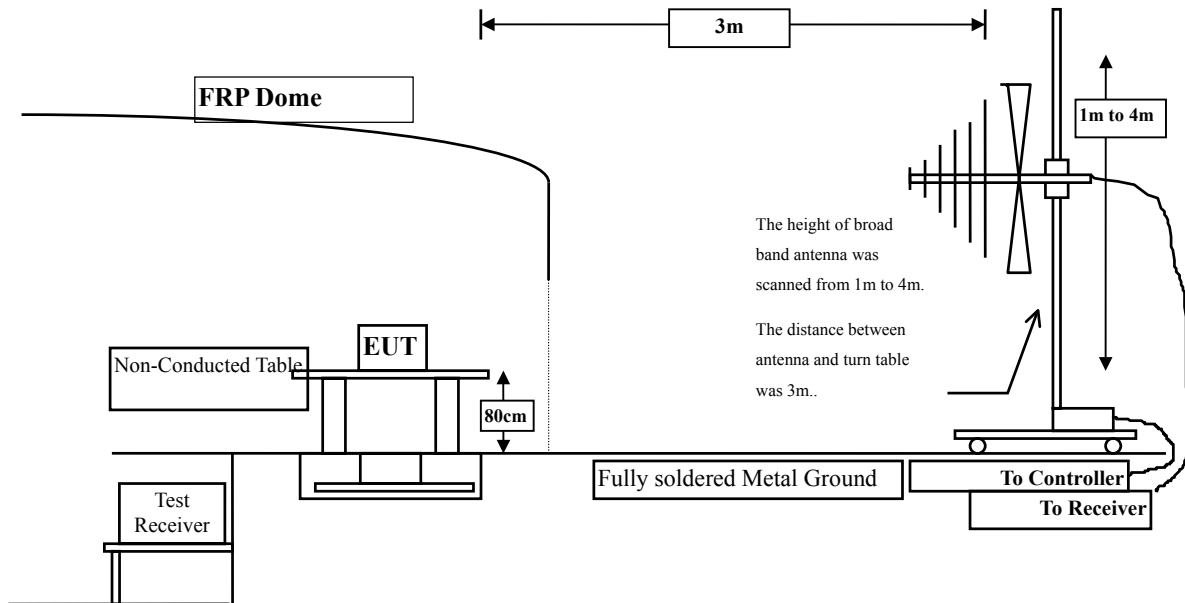
The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2010
	X	Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2010
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2010
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2010
	X	Coaxial Cable	Quietek	QTK-CABLE/ CAB5	Feb., 2011
	X	Controller	Quietek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

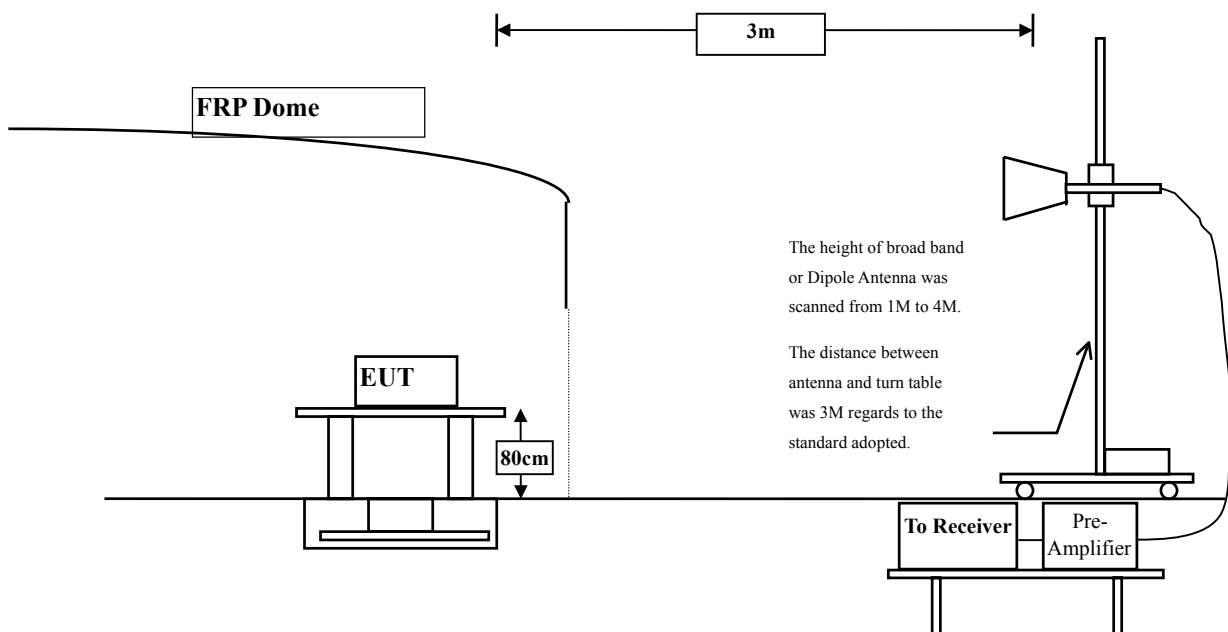
- Note:
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
 2. The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

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

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

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

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to DTS test procedure of Mar. 2005 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 C63.4:2009 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 harmonics is checked.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

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

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	38.420	41.681	-32.319	74.000
7236.000	10.650	39.050	49.700	-24.300	74.000
9648.000	13.337	37.420	50.756	-23.244	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	41.400	47.821	-26.179	74.000
7236.000	11.495	41.500	52.995	-21.005	74.000
9648.000	13.807	37.250	51.056	-22.944	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	39.250	42.287	-31.713	74.000
7311.000	11.795	39.350	51.144	-22.856	74.000
9748.000	12.635	37.350	49.985	-24.015	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	39.450	45.261	-28.739	74.000
7311.000	12.630	42.300	54.929	-19.071	74.000
9748.000	13.126	37.250	50.376	-23.624	74.000
Average Detector:					
7311.000	12.630	34.910	47.539	-6.461	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	39.050	41.907	-32.093	74.000
7386.000	12.127	38.020	50.148	-23.852	74.000
9848.000	12.852	37.040	49.893	-24.107	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	37.620	43.140	-30.860	74.000
7386.000	13.254	37.210	50.464	-23.536	74.000
9848.000	13.367	37.030	50.397	-23.603	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

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

Peak Detector:

4824.000	3.261	38.180	41.441	-32.559	74.000
7236.000	10.650	37.350	48.000	-26.000	74.000
9648.000	13.337	36.420	49.756	-24.244	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	38.050	44.471	-29.529	74.000
7236.000	11.495	37.610	49.105	-24.895	74.000
9648.000	13.807	36.120	49.926	-24.074	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

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

Horizontal

Peak Detector:

4874.000	3.038	38.000	41.037	-32.963	74.000
7311.000	11.795	35.600	47.394	-26.606	74.000
9748.000	12.635	36.750	49.385	-24.615	74.000

Average Detector:

--

Peak Detector:

4874.000	5.812	37.120	42.931	-31.069	74.000
7311.000	12.630	36.230	48.859	-25.141	74.000
9748.000	13.126	36.850	49.976	-24.024	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	38.010	41.271	-32.729	74.000
7386.000	12.127	37.110	49.238	-24.762	74.000
9848.000	12.852	37.320	50.173	-23.827	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	38.230	43.750	-30.250	74.000
7386.000	13.254	36.110	49.364	-24.636	74.000
9848.000	13.367	36.760	50.127	-23.873	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW)(2412MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	38.250	41.511	-32.489	74.000
7236.000	10.650	36.580	47.230	-26.770	74.000
9648.000	13.337	36.470	49.806	-24.194	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	37.440	43.861	-30.139	74.000
7236.000	11.495	36.380	47.875	-26.125	74.000
9648.000	13.807	36.650	50.456	-23.544	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW) (2437 MHz)

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

Peak Detector:

4874.000	3.038	37.660	40.697	-33.303	74.000
7311.000	11.795	35.580	47.374	-26.626	74.000
9748.000	12.635	36.420	49.055	-24.945	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	38.390	44.201	-29.799	74.000
7311.000	12.630	35.550	48.179	-25.821	74.000
9748.000	13.126	36.820	49.946	-24.054	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW) (2462 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	37.670	40.527	-33.473	74.000
7386.000	12.127	35.210	47.338	-26.662	74.000
9848.000	12.852	36.880	49.733	-24.267	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	37.820	43.340	-30.660	74.000
7386.000	13.254	35.230	48.484	-25.516	74.000
9848.000	13.367	36.780	50.147	-23.853	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW)(2422MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4844.000	3.171	37.450	40.621	-33.379	74.000
7266.000	11.162	36.330	47.492	-26.508	74.000
9688.000	12.964	36.800	49.765	-24.235	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	6.178	37.810	43.988	-30.012	74.000
7266.000	11.982	35.930	47.912	-26.088	74.000
9688.000	13.507	36.420	49.928	-24.072	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW) (2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.680	40.717	-33.283	74.000
7311.000	11.795	35.630	47.424	-26.576	74.000
9748.000	12.635	36.560	49.195	-24.805	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	37.680	43.491	-30.509	74.000
7311.000	12.630	35.530	48.159	-25.841	74.000
9748.000	13.126	36.650	49.776	-24.224	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 : Slate PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW)(2452 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4904.000	2.914	38.310	41.225	-32.775	74.000
7356.000	11.995	35.450	47.444	-26.556	74.000
9808.000	12.475	36.940	49.415	-24.585	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4904.000	5.530	38.120	43.651	-30.349	74.000
7356.000	13.005	35.520	48.524	-25.476	74.000
9808.000	12.901	36.780	49.681	-24.319	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 : Slate PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps)(2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
99.840	-7.471	48.173	40.702	-2.798	43.500
348.160	-2.268	36.684	34.416	-11.584	46.000
400.540	-2.276	37.947	35.671	-10.329	46.000
497.540	-0.273	34.611	34.338	-11.662	46.000
623.640	1.959	32.624	34.583	-11.417	46.000
697.360	3.171	36.437	39.608	-6.392	46.000
Vertical					
35.820	-2.159	39.222	37.063	-2.937	40.000
99.840	-0.021	42.434	42.413	-1.087	43.500
348.160	-3.458	37.115	33.657	-12.343	46.000
398.600	-4.678	35.671	30.993	-15.007	46.000
497.540	-1.393	36.259	34.866	-11.134	46.000
697.360	1.311	33.791	35.102	-10.898	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.

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

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
99.840	-7.471	48.215	40.744	-2.756	43.500
348.160	-2.268	43.512	41.244	-4.756	46.000
398.600	-2.268	33.840	31.572	-14.428	46.000
497.540	-0.273	30.899	30.626	-15.374	46.000
648.860	2.038	35.988	38.026	-7.974	46.000
697.360	3.171	39.960	43.131	-2.869	46.000
Vertical					
99.840	-0.021	40.465	40.444	-3.056	43.500
317.120	-6.895	37.271	30.376	-15.624	46.000
348.160	-3.458	36.828	33.370	-12.630	46.000
398.600	-4.678	36.629	31.951	-14.049	46.000
497.540	-1.393	36.756	35.363	-10.637	46.000
697.360	1.311	34.592	35.903	-10.097	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.

Product : Slate PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW)(2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
99.840	-7.471	48.231	40.760	-2.740	43.500
138.640	-10.435	44.509	34.074	-9.426	43.500
165.800	-11.079	40.555	29.476	-14.024	43.500
348.160	-2.268	35.364	33.096	-12.904	46.000
648.860	2.038	32.752	34.790	-11.210	46.000
697.360	3.171	36.441	39.612	-6.388	46.000
Vertical					
47.460	-5.701	42.729	37.029	-2.971	40.000
99.840	-0.021	40.740	40.719	-2.781	43.500
136.700	-5.143	44.521	39.378	-4.122	43.500
348.160	-3.458	31.348	27.890	-18.110	46.000
497.540	-1.393	32.503	31.110	-14.890	46.000
697.360	1.311	36.592	37.903	-8.097	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.

Product : Slate PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW)(2437 MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
99.840	-7.471	48.184	40.713	-2.787	43.500
348.160	-2.268	38.197	35.929	-10.071	46.000
472.320	0.637	35.140	35.777	-10.223	46.000
579.020	3.414	35.987	39.401	-6.599	46.000
604.240	4.770	34.296	39.066	-6.934	46.000
697.360	3.171	40.059	43.230	-2.770	46.000
Vertical					
99.840	-0.021	40.798	40.777	-2.723	43.500
319.060	-6.897	39.201	32.304	-13.696	46.000
348.160	-3.458	35.941	32.483	-13.517	46.000
398.600	-4.678	35.582	30.904	-15.096	46.000
497.540	-1.393	34.925	33.532	-12.468	46.000
697.360	1.311	34.658	35.969	-10.031	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.

5. RF antenna conducted test

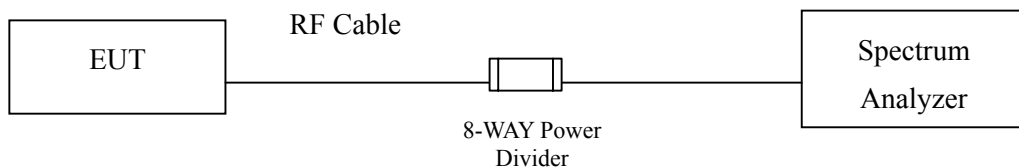
5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2010
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2010
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2011
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2011

- 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. The power combiner is used for measure 11n mode.

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 Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

5.5. Uncertainty

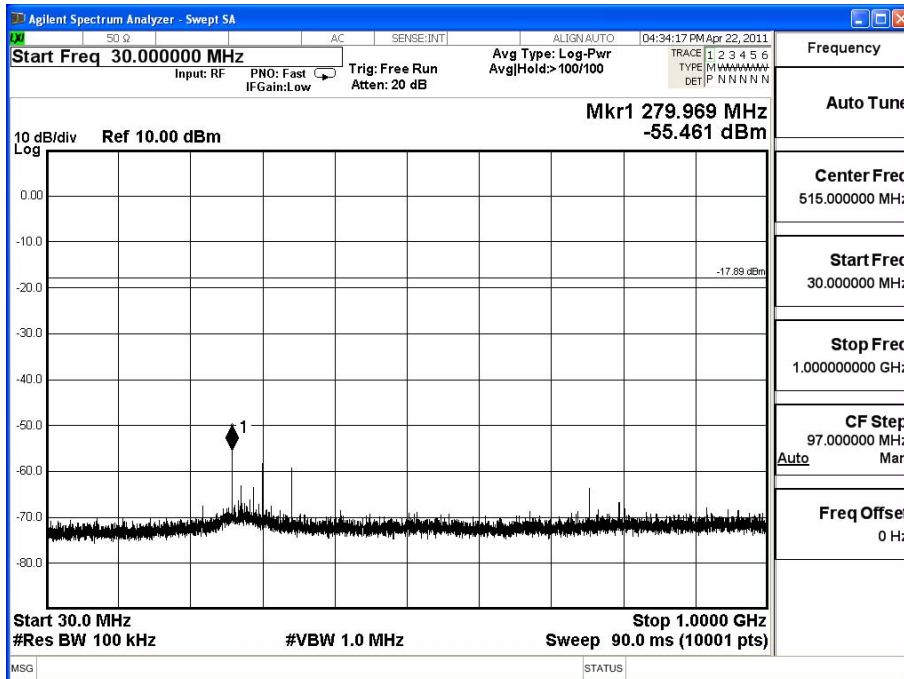
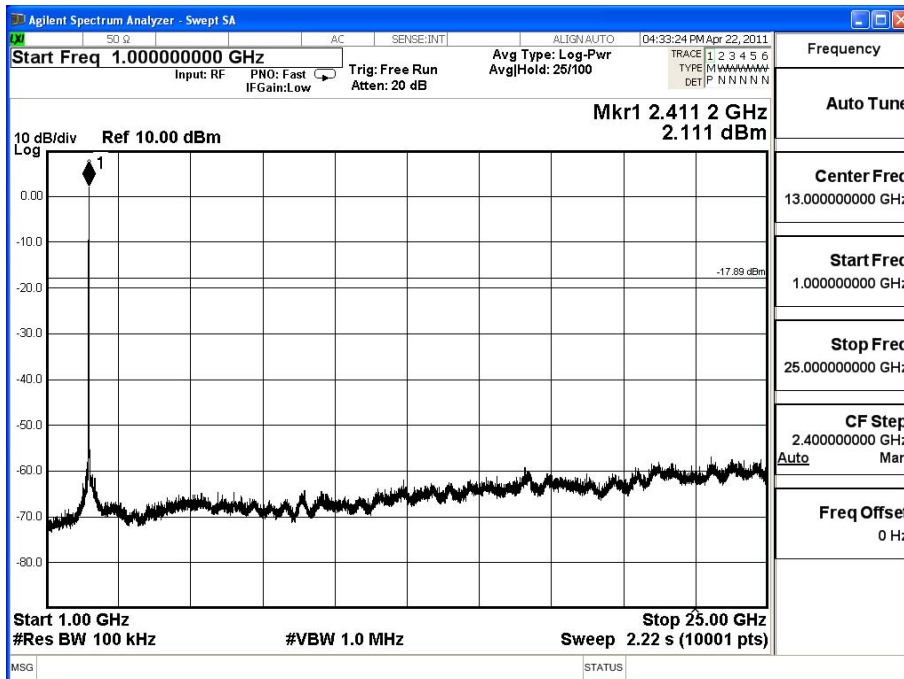
The measurement uncertainty

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

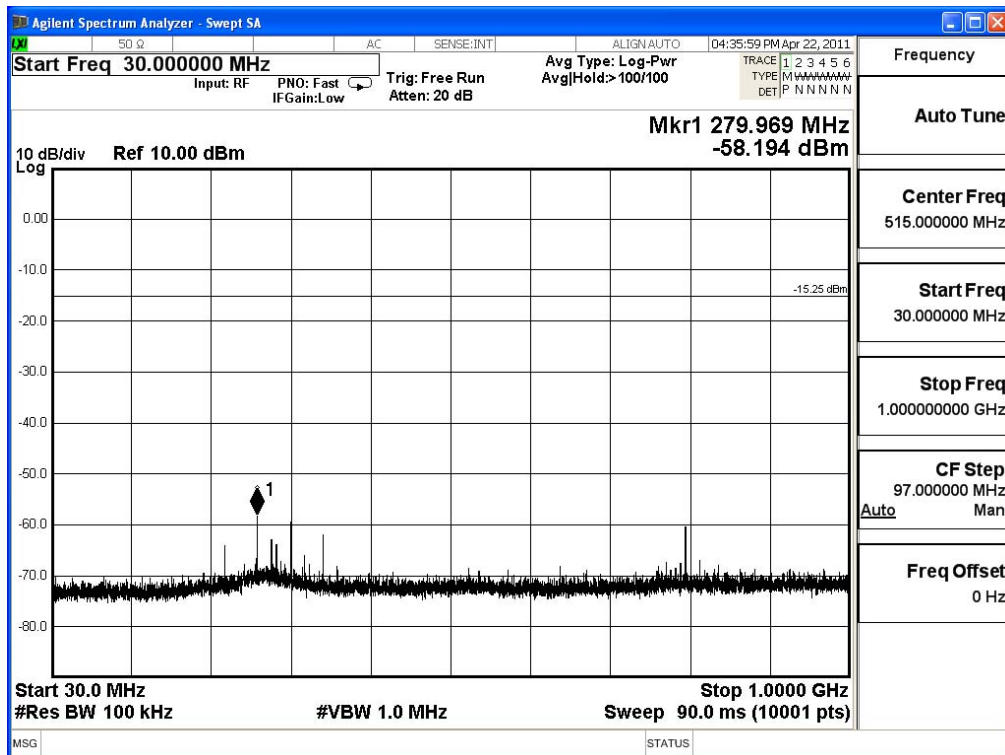
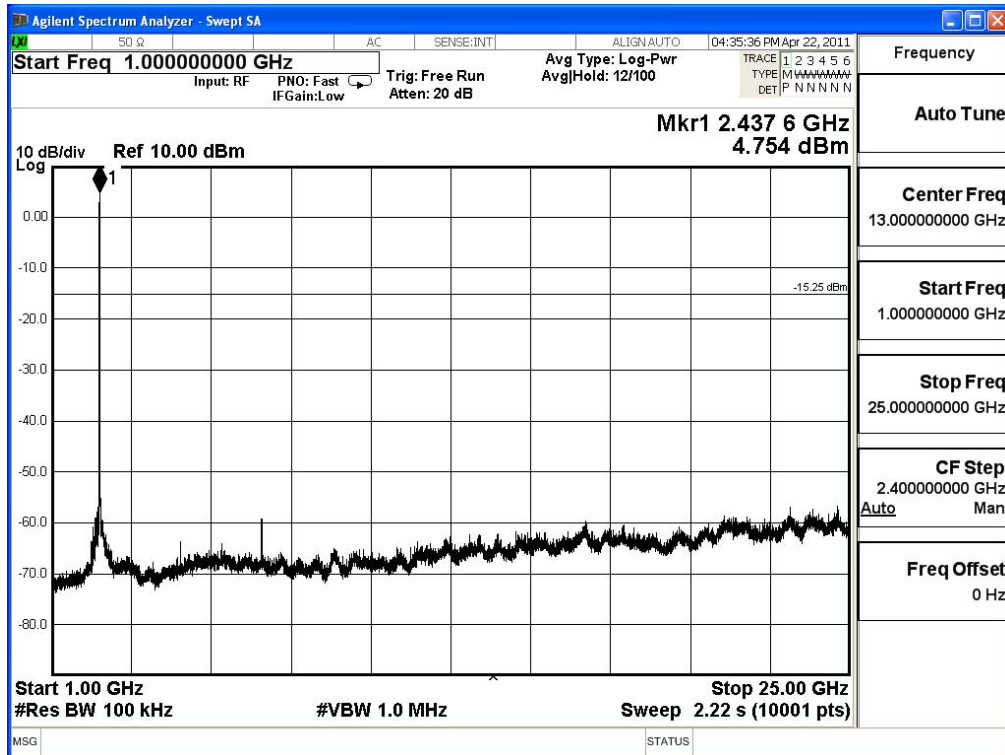
5.6. Test Result of RF antenna conducted test

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

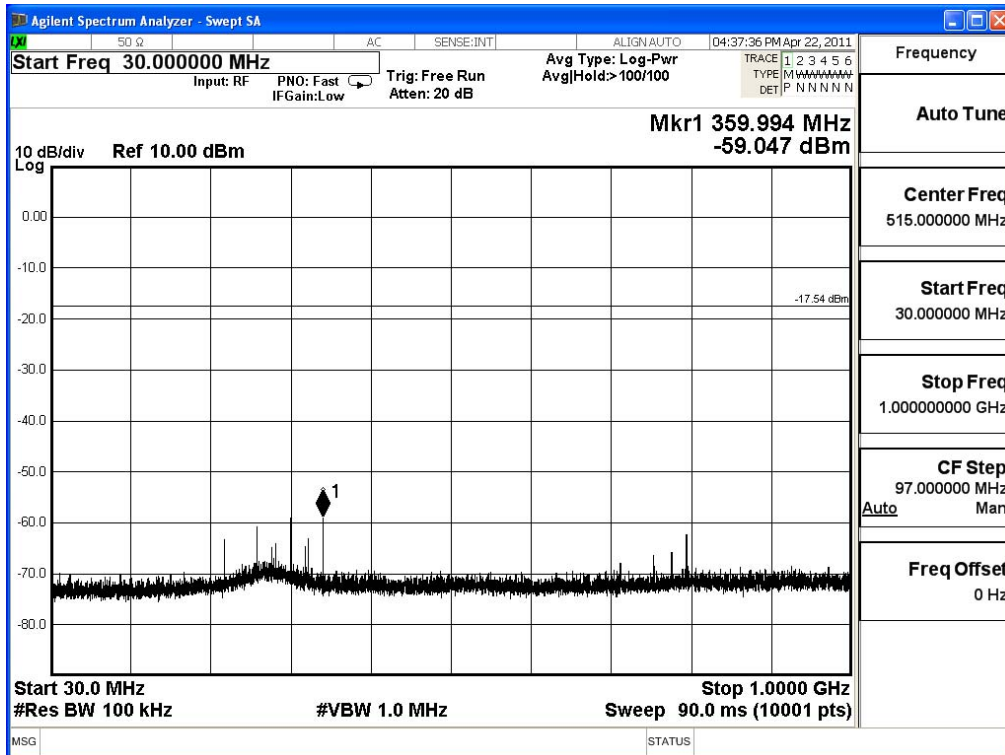
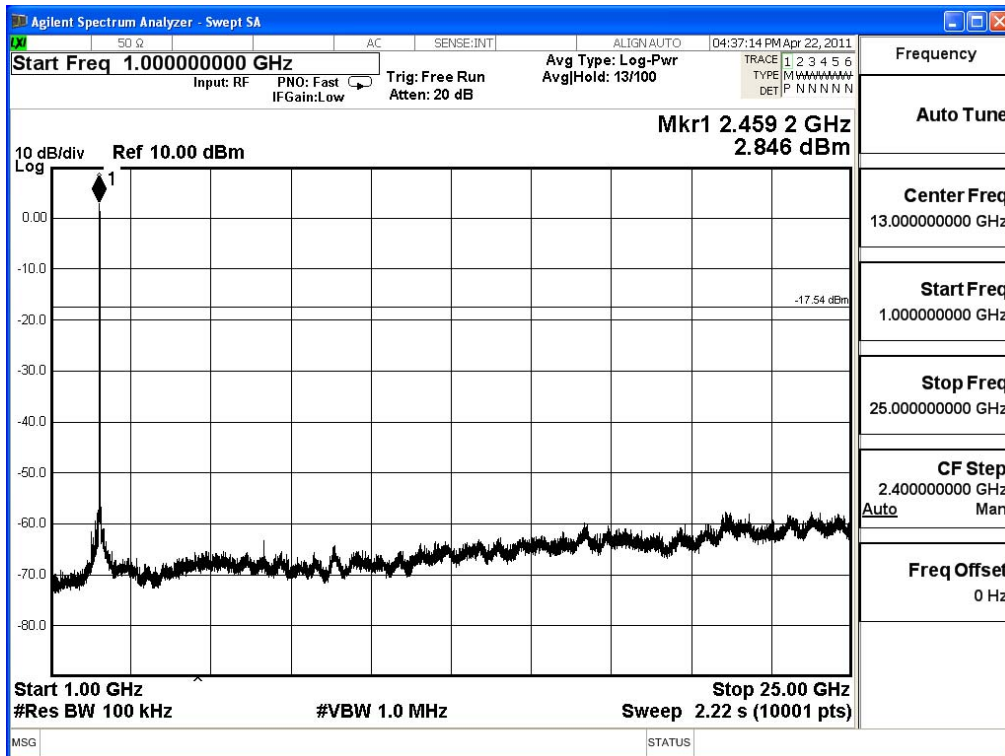
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

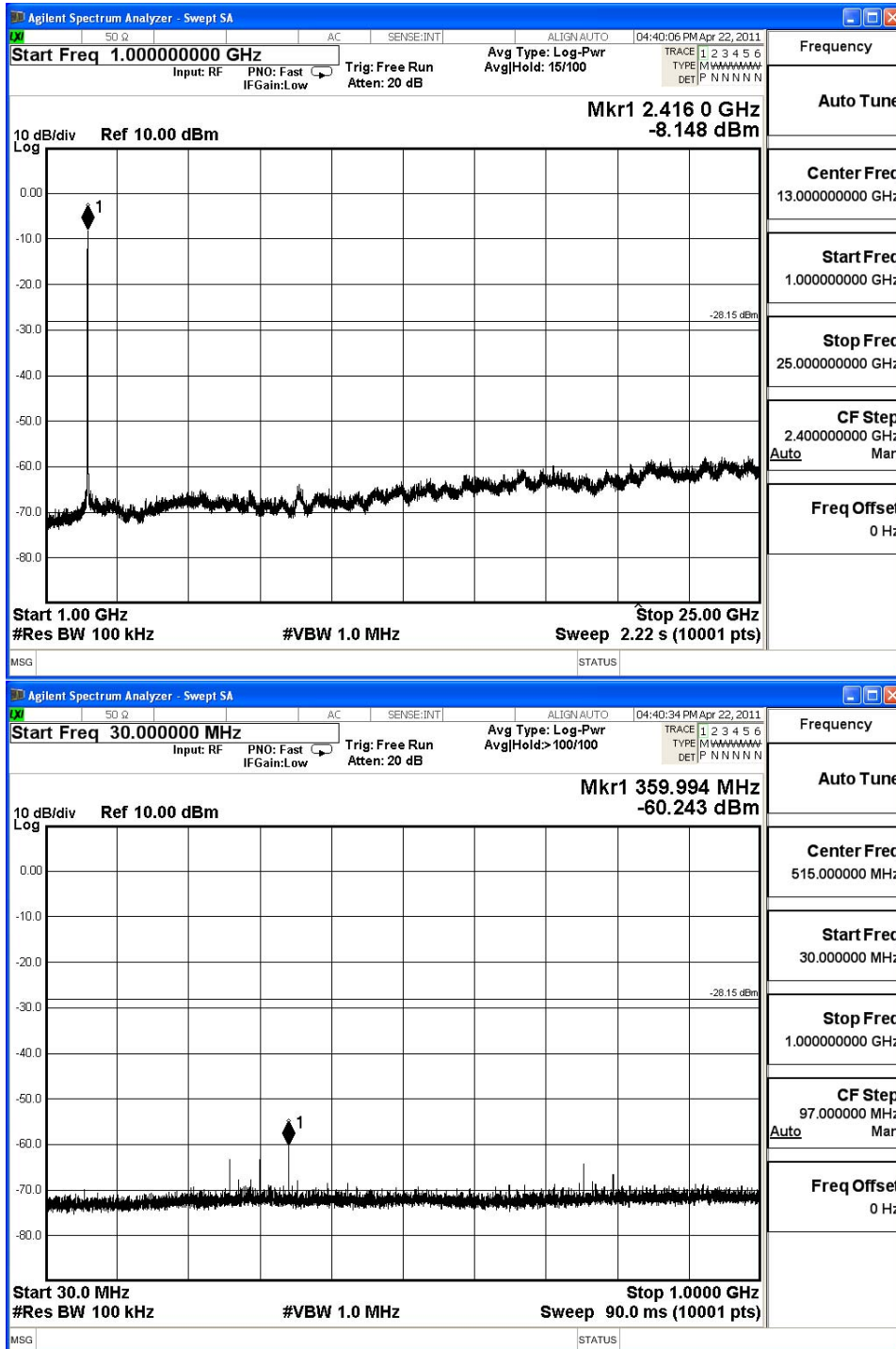


Channel 11 (2462MHz) 30-25GHz

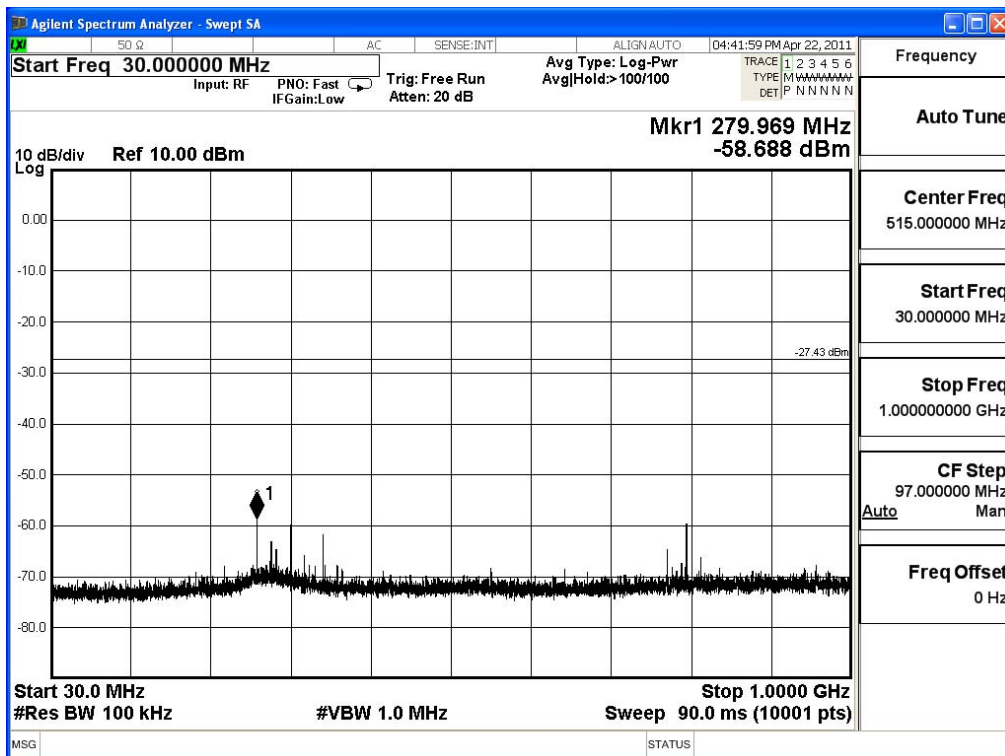
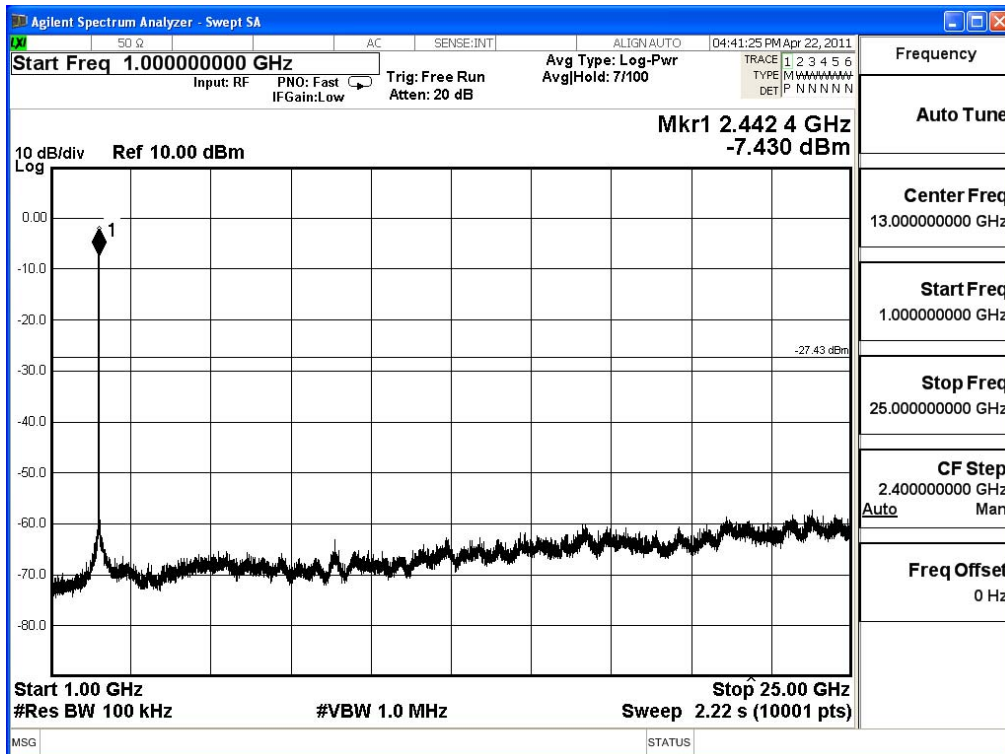


Product : Slate PC [u1]
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps)

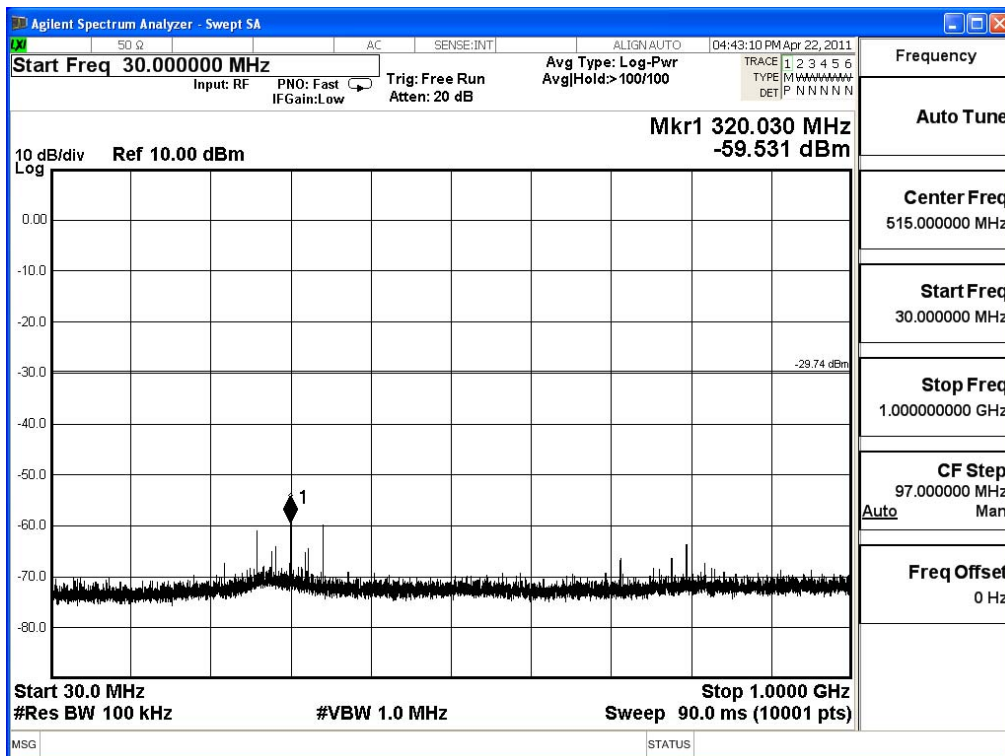
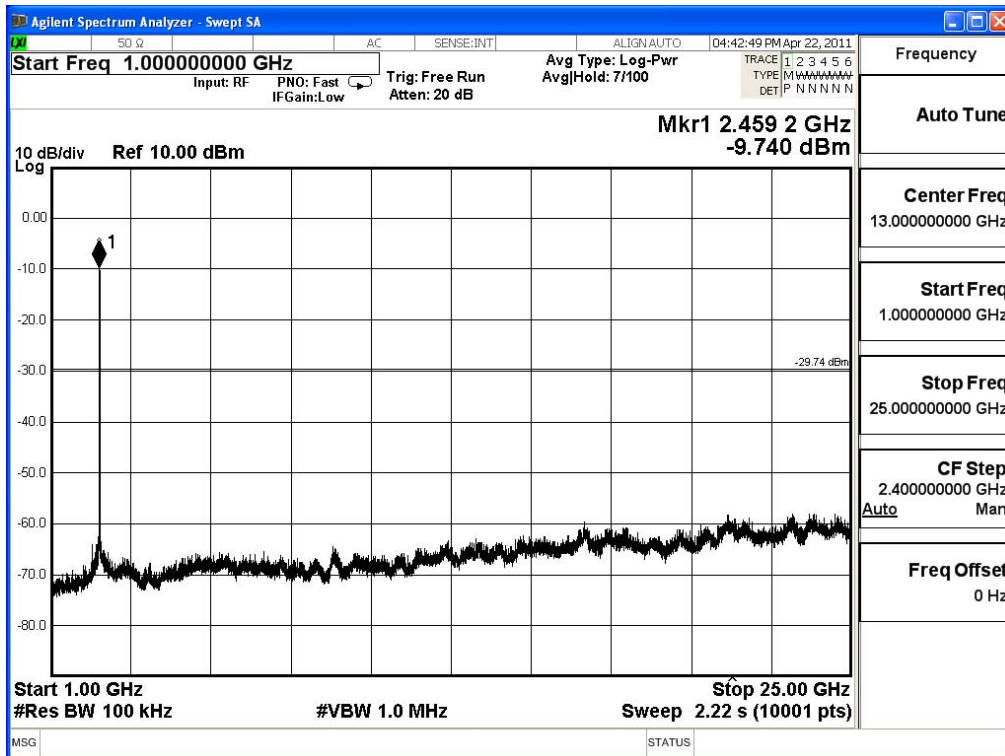
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

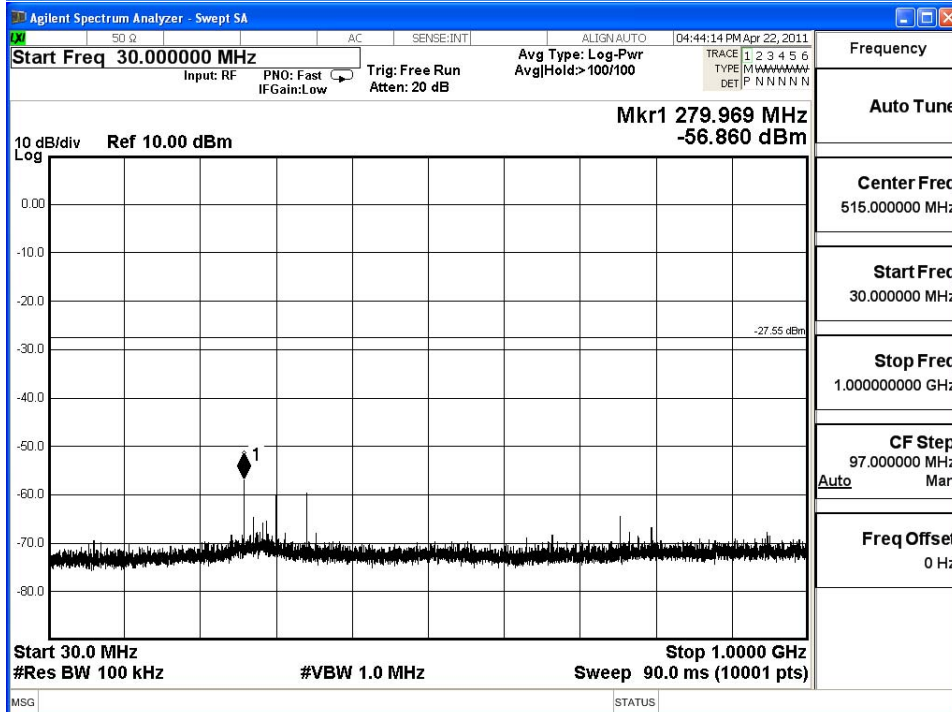
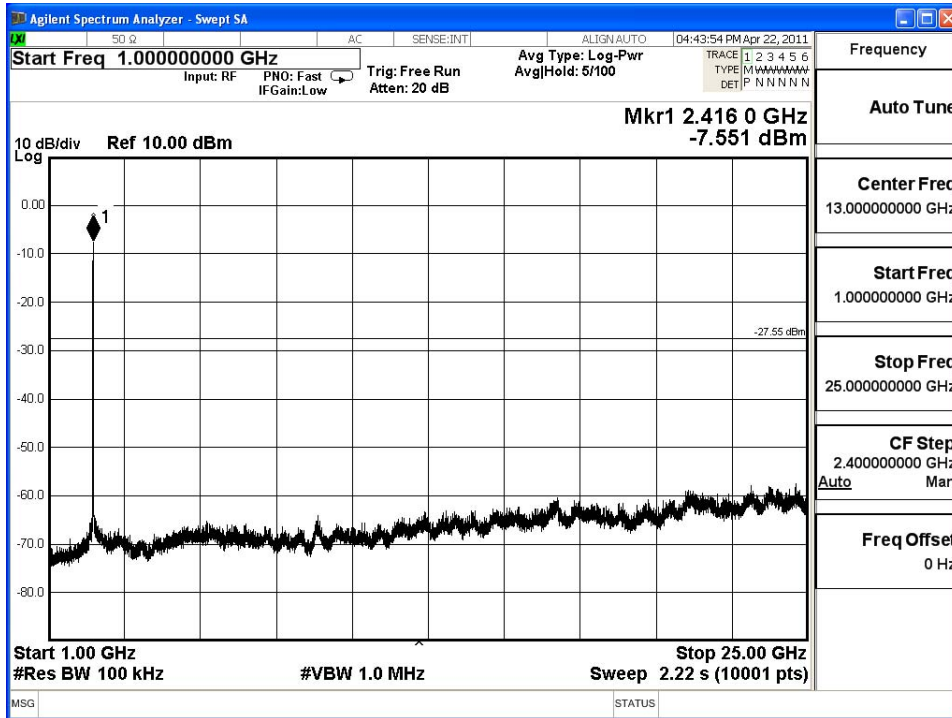


Channel 11 (2462MHz) 30-25GHz

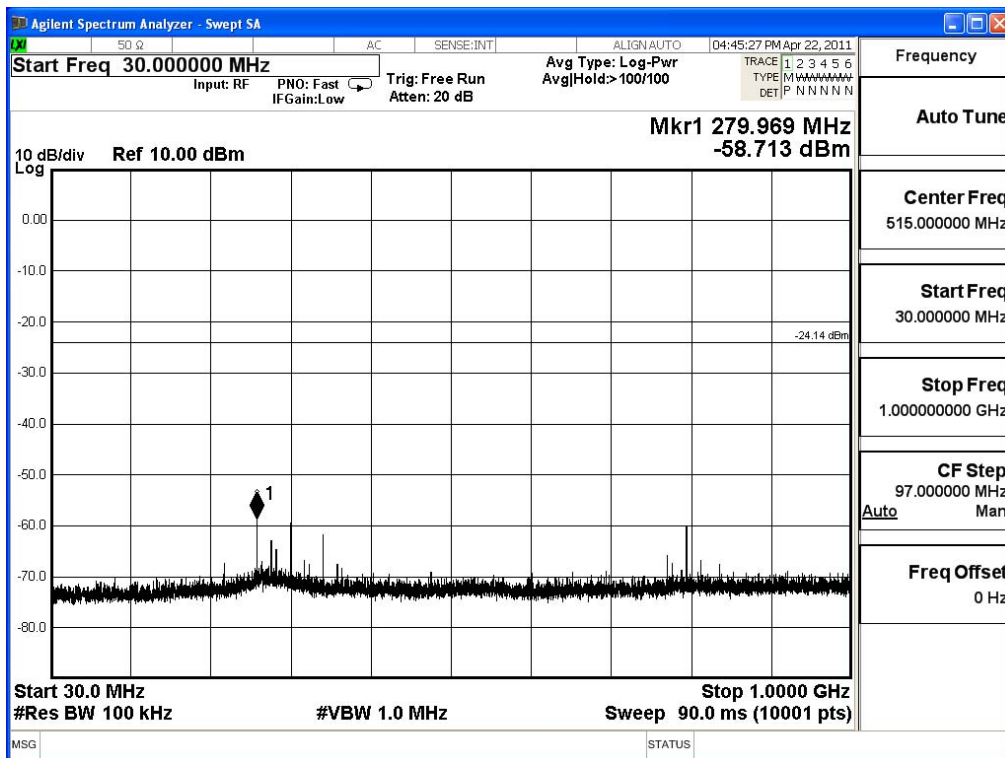
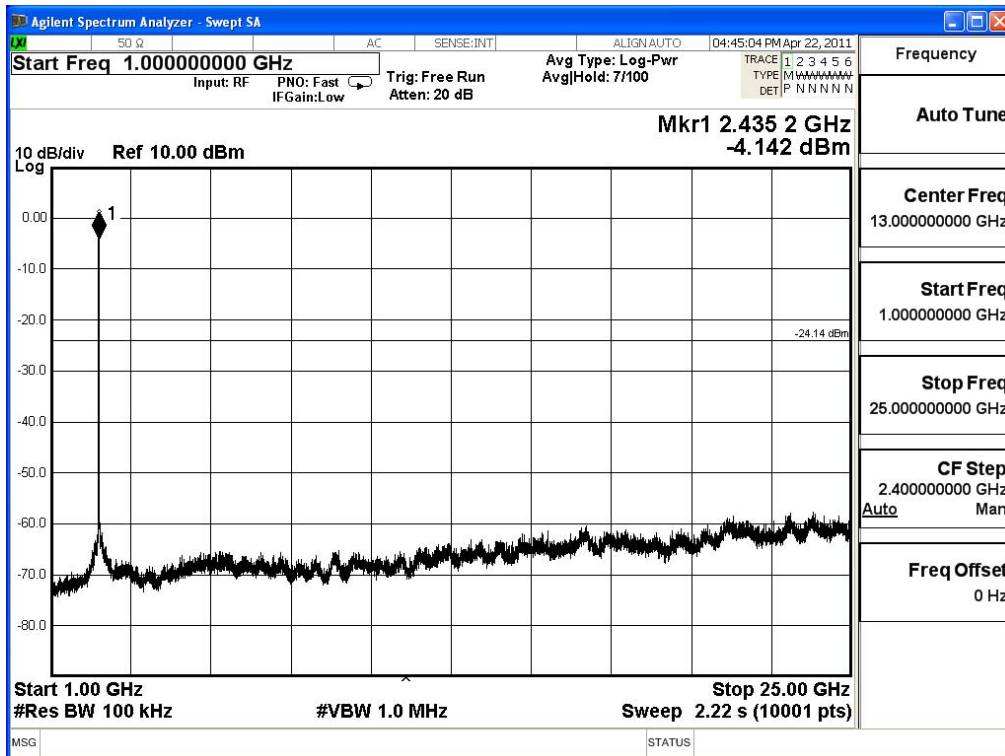


Product : Slate PC
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n HT0 7.2Mbps 20M-BW)

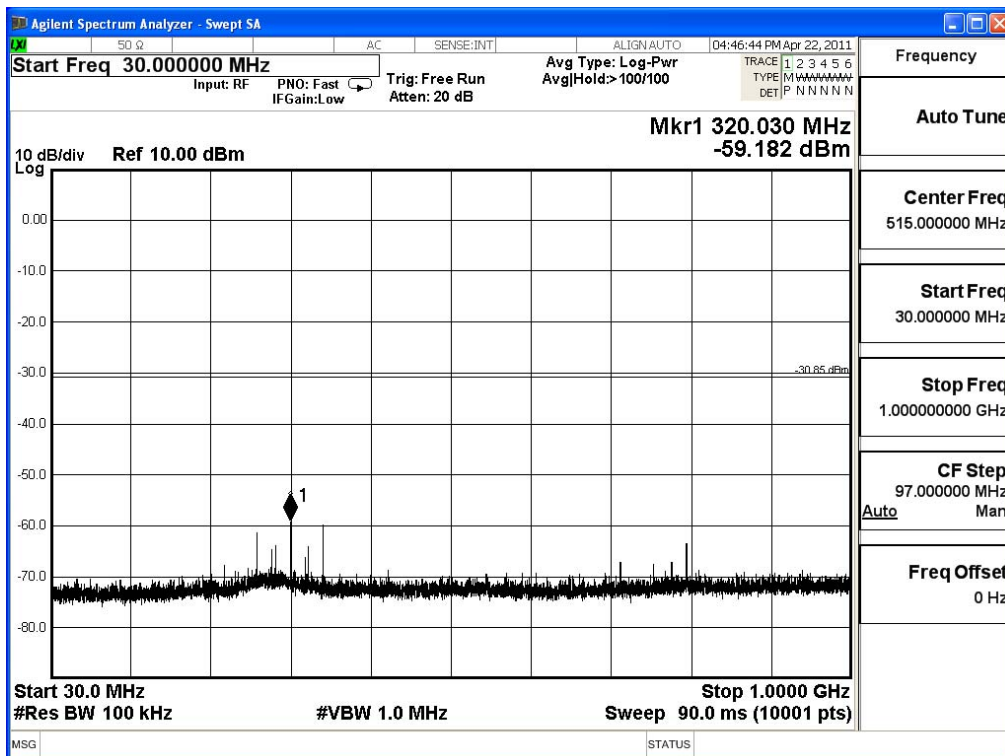
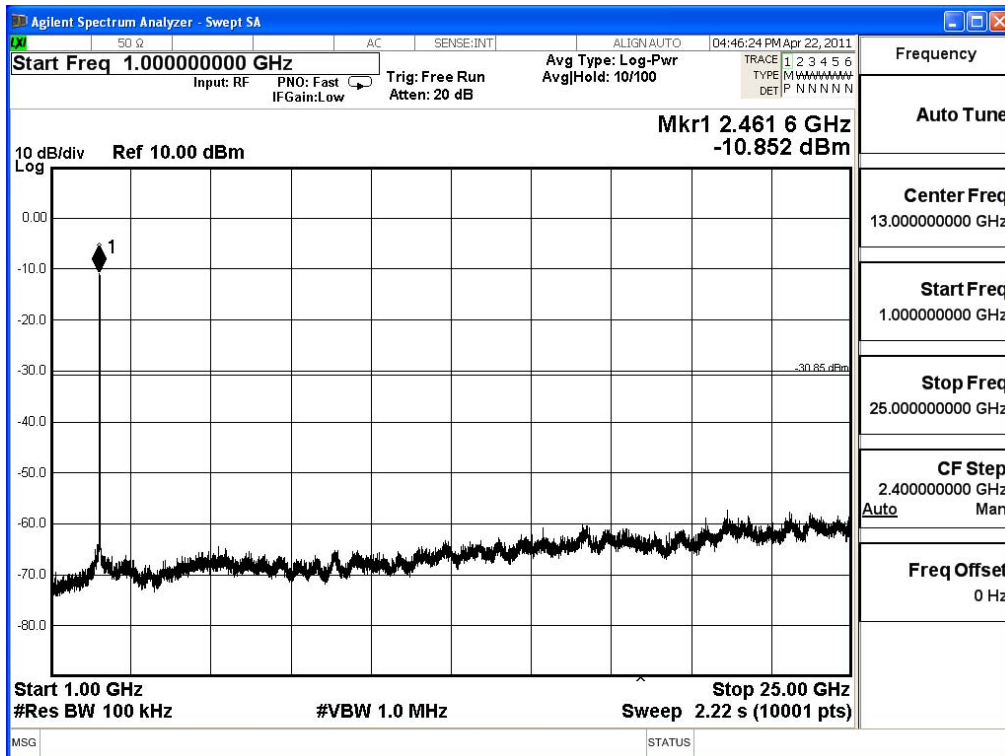
Channel 01 (2412MHz) 30-25GHz



Channel 06 (2437MHz) 30-25GHz

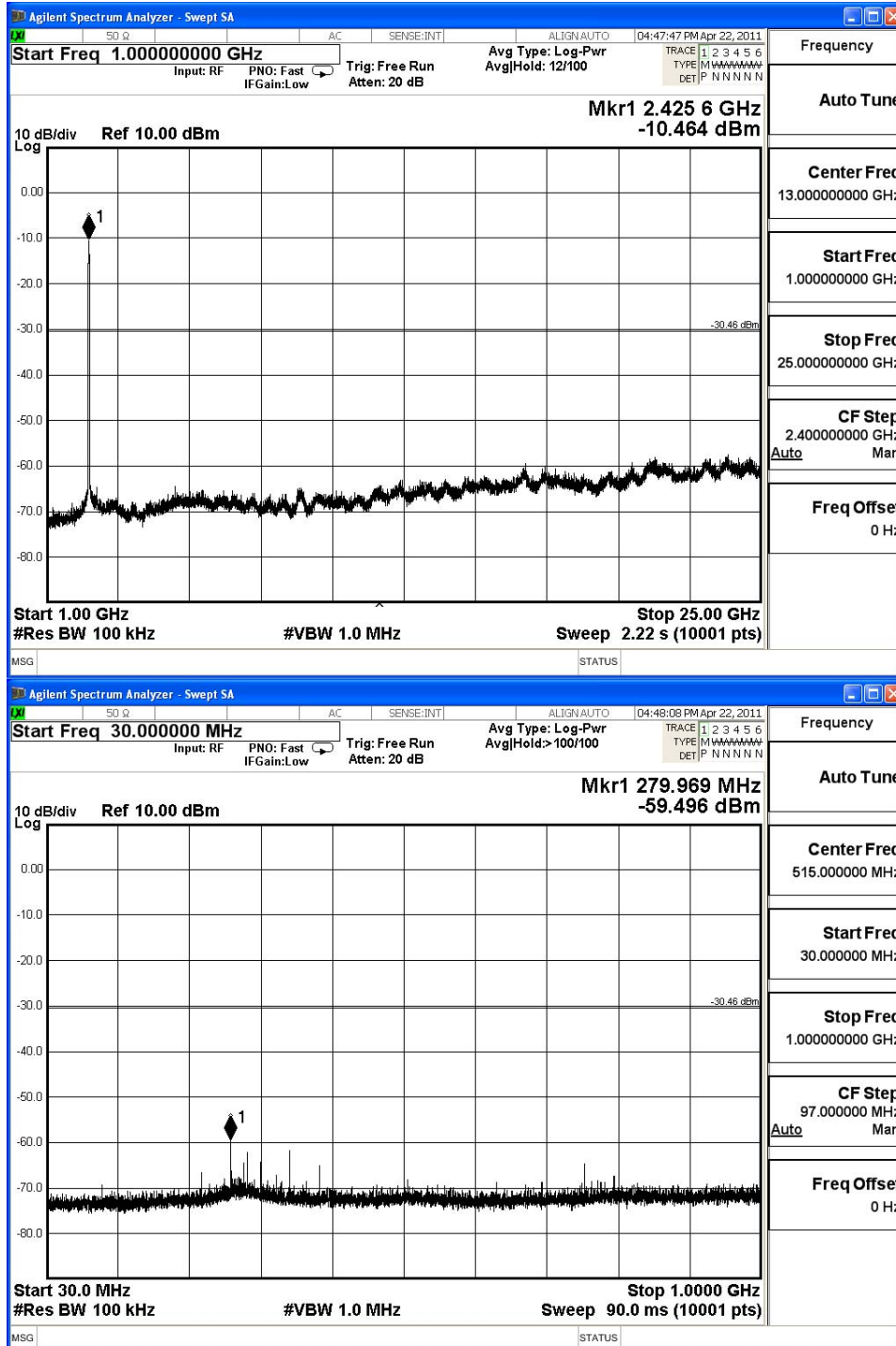


Channel 11 (2462MHz) 30-25GHz

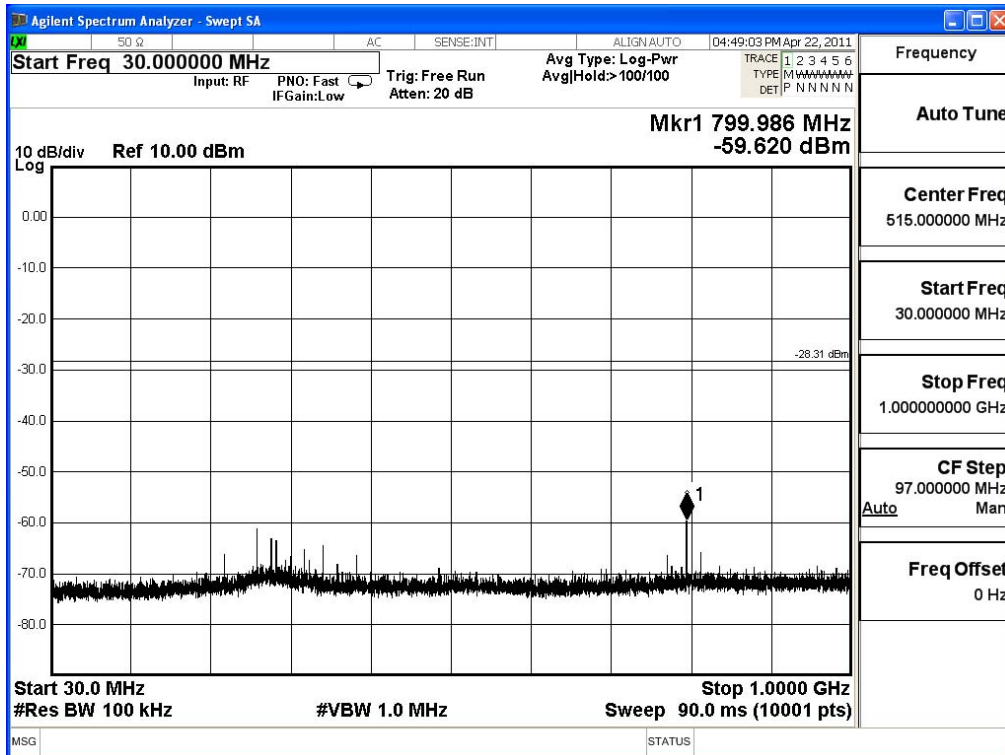
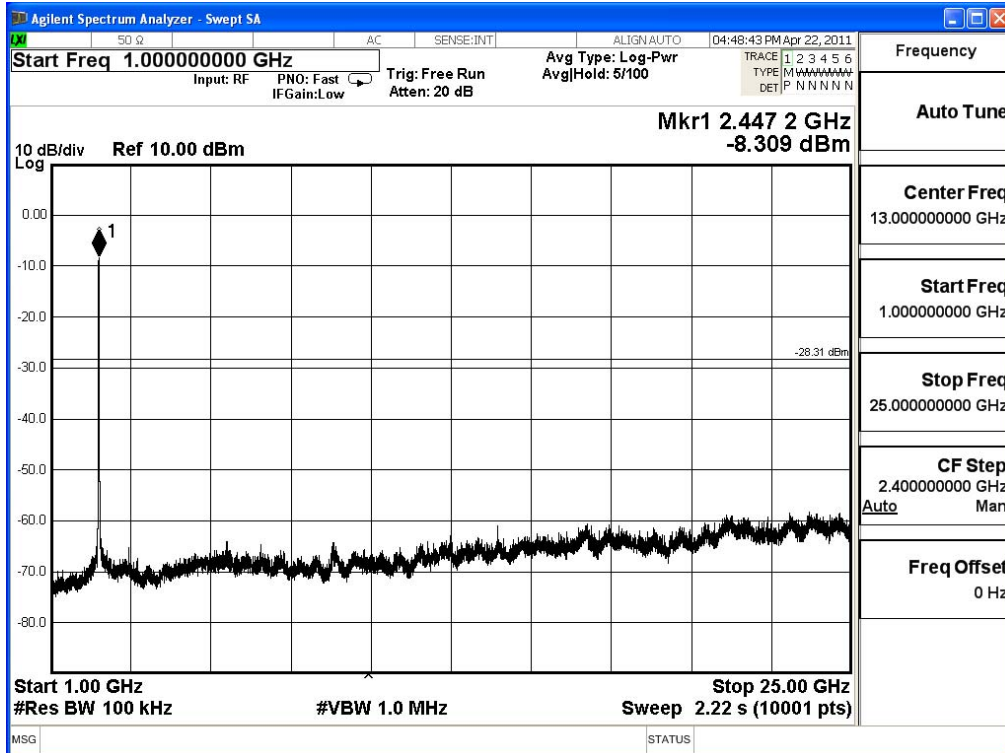


Product : Slate PC [u2]
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n HT0 15Mbps 40M-BW)

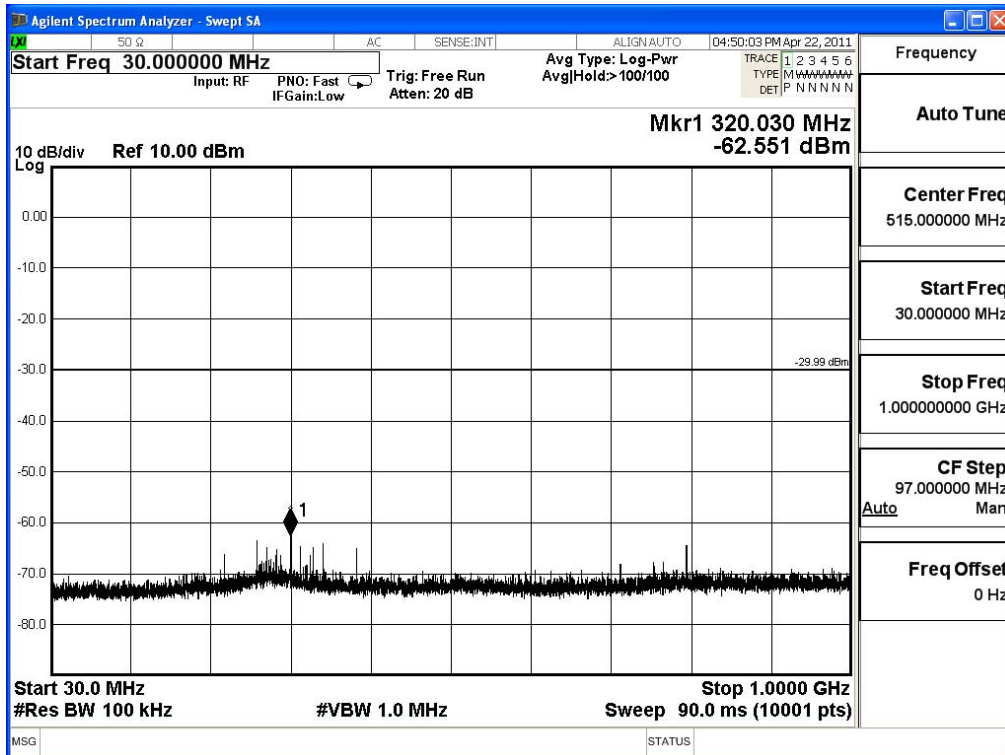
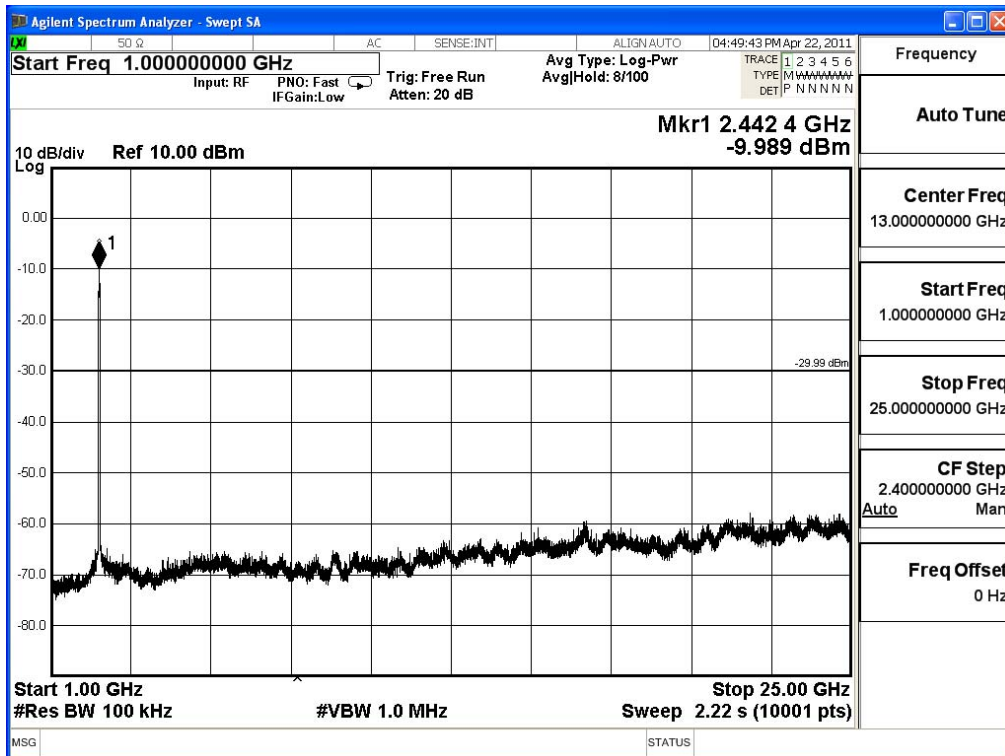
Channel 01 (2422MHz) 30-25GHz



Channel 04 (2437MHz) 30-25GHz



Channel 07 (2452MHz) 30-25GHz



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, 2010
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2010
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2011
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2011

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. The power combiner is used for measure 11n mode.

RF Radiated Measurement:

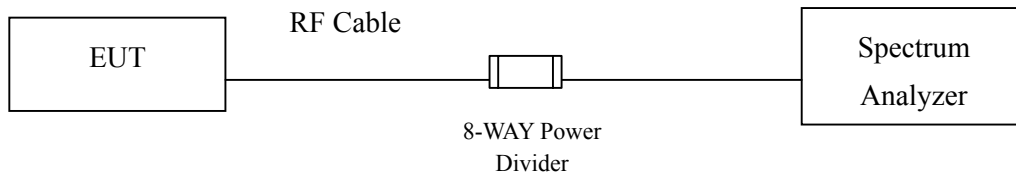
The following test equipments are used during the band edge tests:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒ Site # 3	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2010
	X Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2010
	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2010
	X Pre-Amplifier	Agilent	8447D/2944A09549	Sep., 2010
	X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2010
	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2010
	X Coaxial Cable	Quietek	QTK-CABLE/ CAB5	Feb., 2011
	X Controller	Quietek	QTK-CONTROLLER/ CTRL3	N/A
	X Coaxial Switch	Anritsu	MP59B/6200265729	N/A

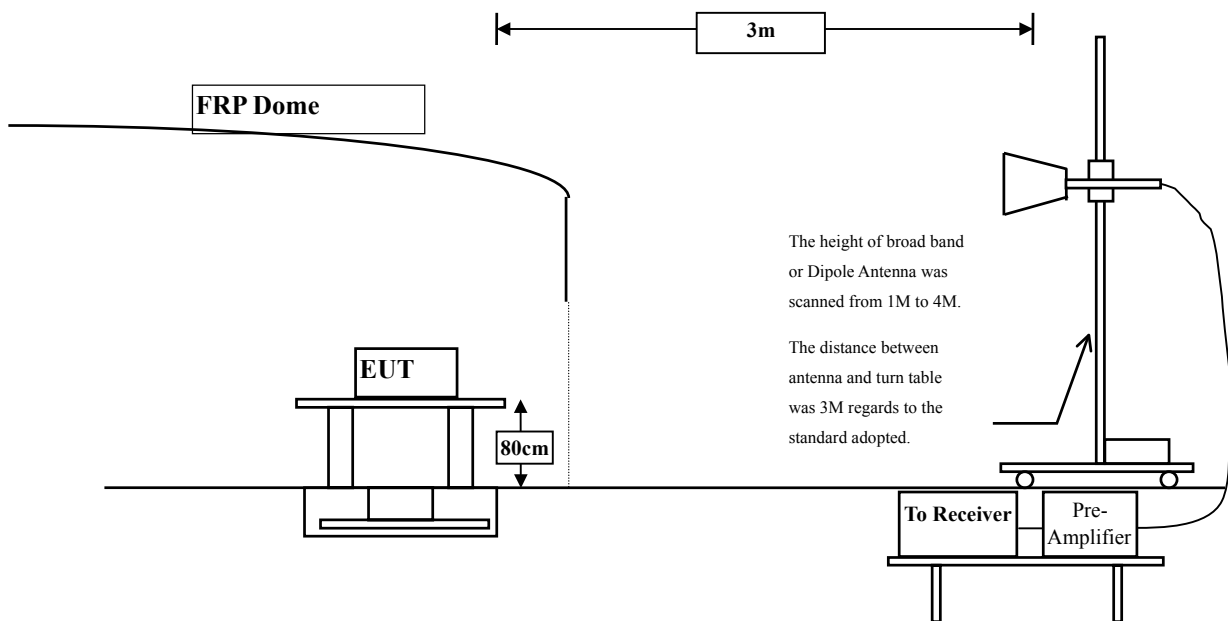
- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



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, 2009 and tested according to DTS test procedure of Mar. 2005 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 C63.4:2009 on radiated measurement.

6.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

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

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2412	31.639	69.2	100.838	Peak
Horizontal	2412	31.639	65.12	96.758	Average
Vertical	2412	30.95	62.25	93.199	Peak
Vertical	2412	30.95	58.35	89.299	Average

Note: 1: Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2390	100.838	48.469	52.369	Peak
Horizontal	2371.2	96.758	57.687	39.071	Average
Vertical	2390	93.199	48.469	44.73	Peak
Vertical	2371.2	89.299	57.687	31.612	Average

Note:

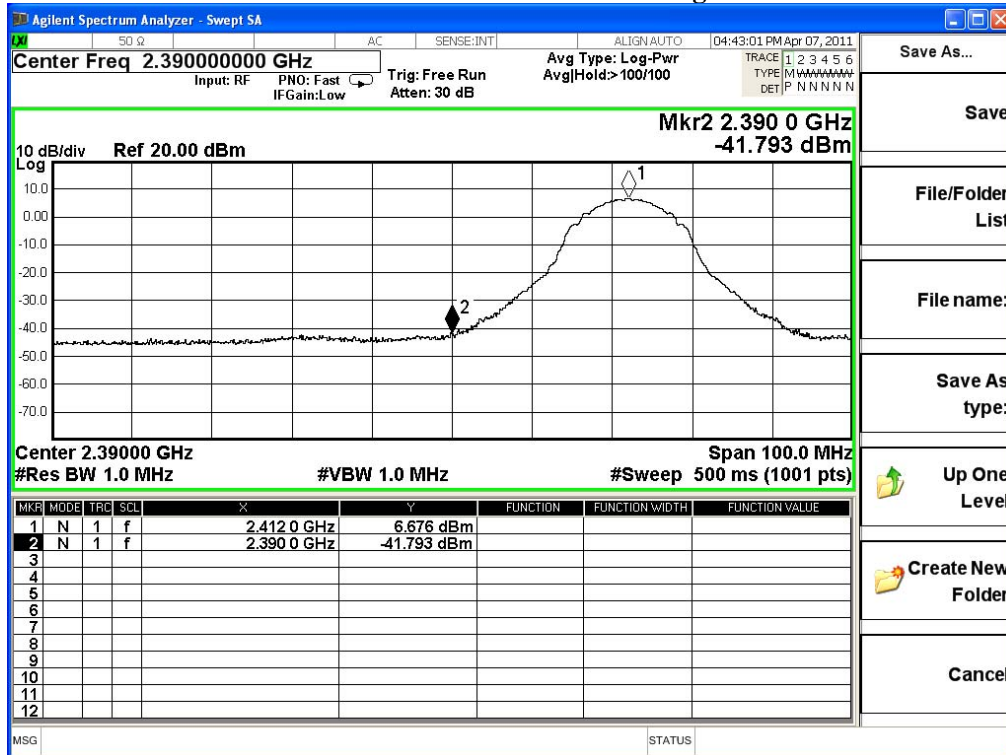
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

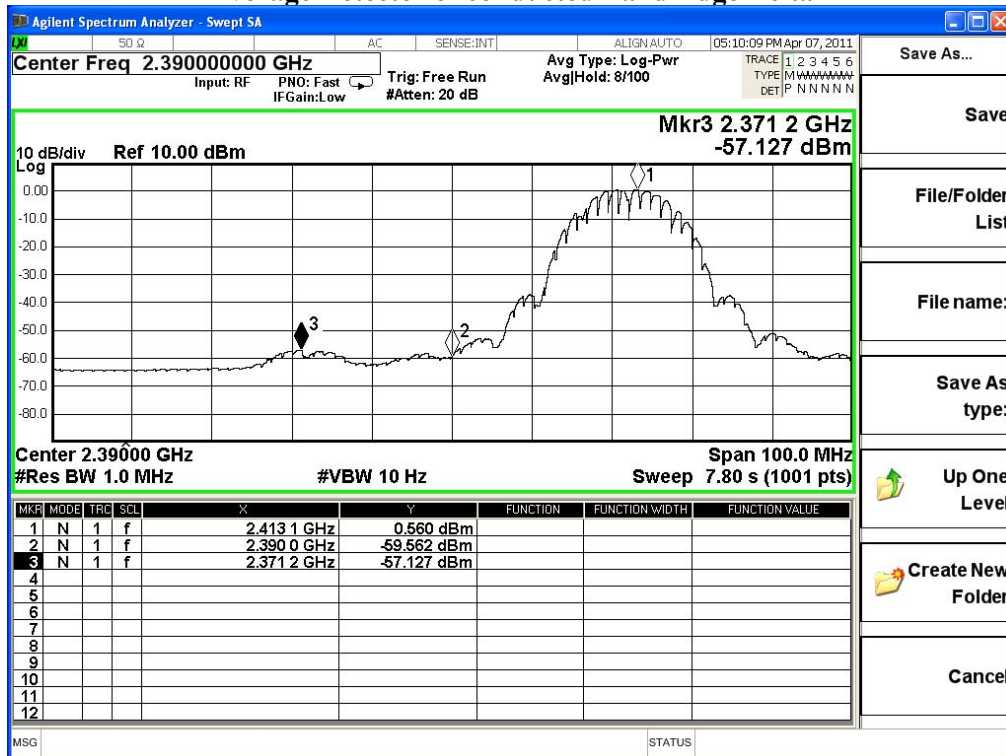
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



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

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2462	32.019	69.21	101.229	Peak
Horizontal	2462	32.019	65.23	97.249	Average
Vertical	2462	31.29	61.2	92.49	Peak
Vertical	2462	31.29	57.25	88.54	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2483.5	101.229	48.066	53.163	Peak
Horizontal	2483.5	97.249	56.832	40.417	Average
Vertical	2483.5	92.49	48.066	44.424	Peak
Vertical	2483.5	88.54	56.832	31.708	Average

Note:

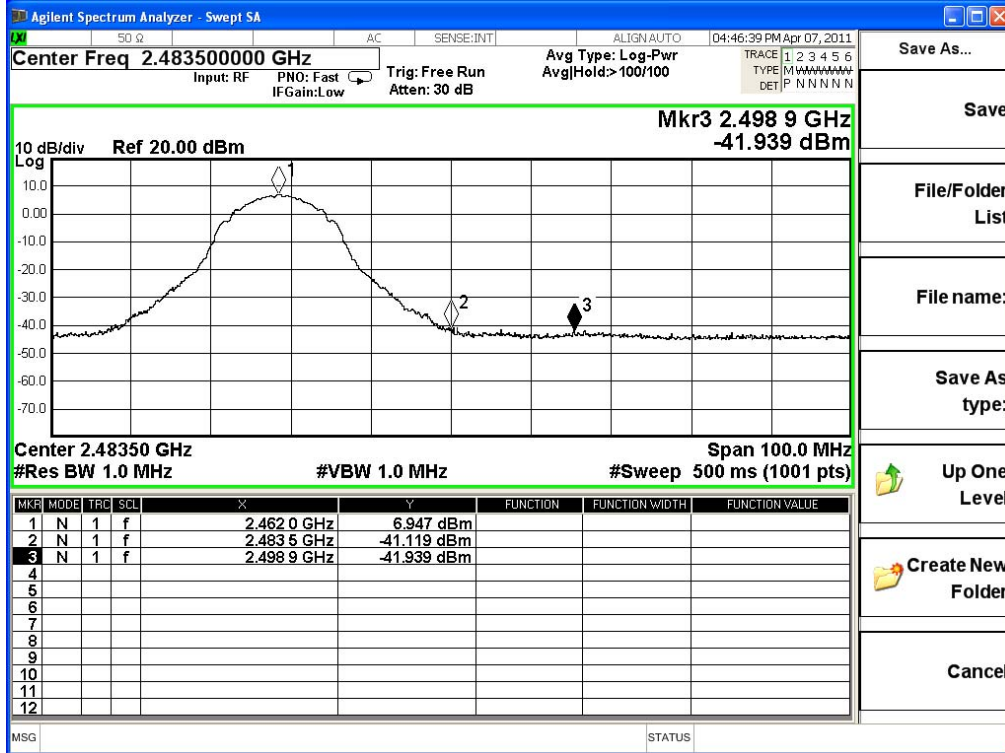
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

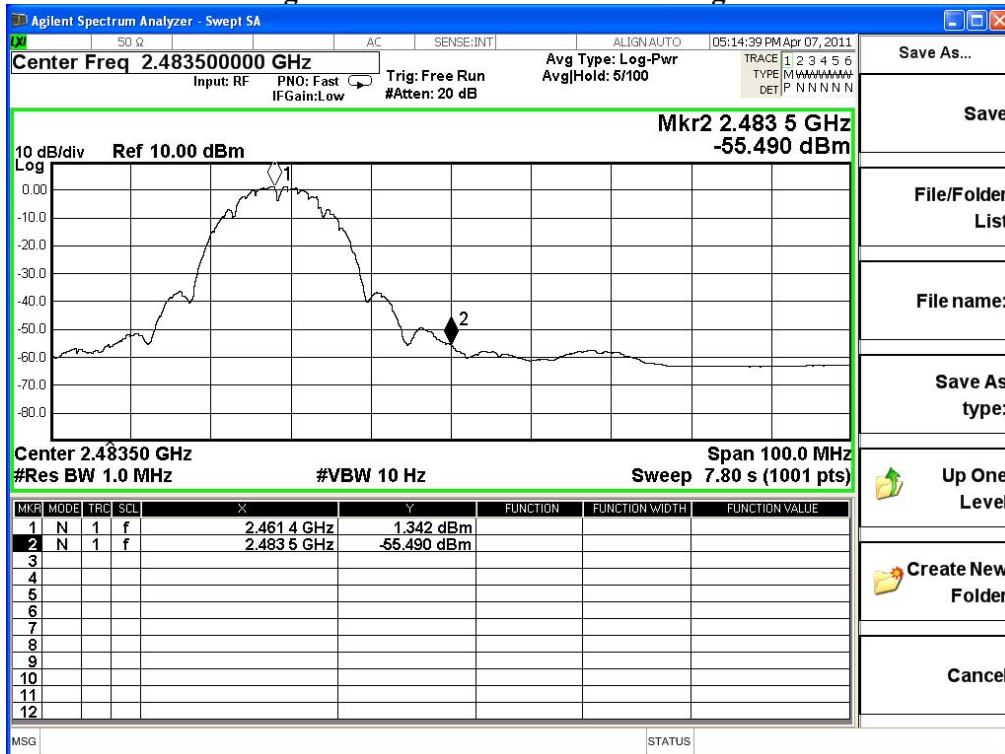
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



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

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2412	31.639	62.45	94.088	Peak
Horizontal	2412	31.639	53.15	84.788	Average
Vertical	2412	30.95	54.7	85.649	Peak
Vertical	2412	30.95	45.62	76.569	Average

Note: 1: Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2389	94.088	44.954	49.134	Peak
Horizontal	2390	84.788	47.531	37.257	Average
Vertical	2389	85.649	44.954	40.695	Peak
Vertical	2390	76.569	47.531	29.038	Average

Note:

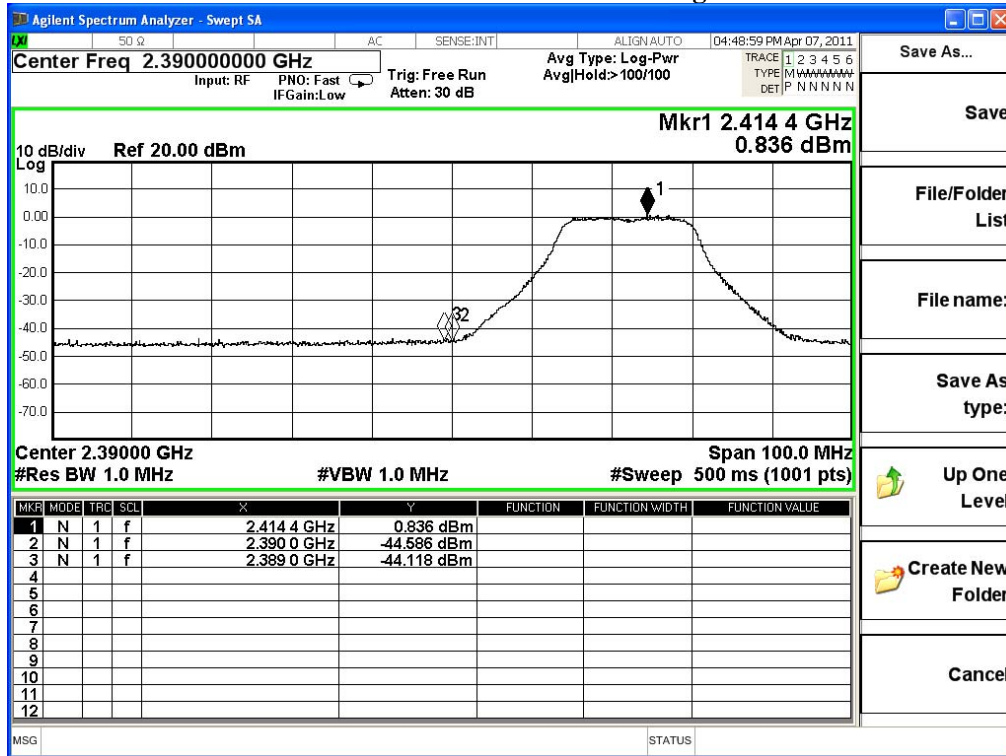
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta

