

FC

Test Report

Product Name	Eee PC
Model No	Eee PC 1025C, Eee PC 1025CE, Eee PC R052C, Eee PC R052CE
FCC ID.	MSQ-1025CNE785H

Applicant	ASUSTeK COMPUTER INC.
Address	No. 15, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

Date of Receipt	June 01, 2011
Issue Date	June 24, 2011
Report No.	116096R-RFUSP42V01
Report Version	V1.0

The test results relate only to the samples tested.

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Test Report Certification

Issue Date: June 24, 2011

Report No.: 116096R-RFUSP42V01



Accredited by NIST (NVLAP)

NVLAP Lab Code: 200533-0

Product Name	Eee PC
Applicant	ASUSTeK COMPUTER INC.
Address	No. 15, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.
Manufacturer	1. PEGATRON CORPORATION Taoyuan Mfg 2. Protek (Shanghai) Limited. 3. Tech-Com(Shanghai) Computer Co. Ltd.
Model No.	Eee PC 1025C, Eee PC 1025CE, Eee PC R052C, Eee PC R052CE
FCC ID.	MSQ-1025CNE785H
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: 2009
Test Result	Complied



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Documented By :



(Senior Adm. Specialist / Rita Huang)



Tested By :



(Engineer / Henk Huang)



Approved By :



(Manager / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Eee PC
Trade Name	ASUS
Model No.	Eee PC 1025C, Eee PC 1025CE, Eee PC R052C, Eee PC R052CE
FCC ID.	MSQ-1025CNE785H
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	PIFA
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
Power Adapter	MFR: Enertronix, M/N: EXA1004UH Input: AC 100-240V, 50-60Hz, 1.0A Output: DC 19V, 1.58A Cable Out: Non-Shielded, 2.4m, with one ferrite core bonded.
Contain Module	Atheros / AR5B95

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	Whayu	C660-520265-A (Main)	1.59dBi in 2.4 GHz
2	ACON	APP6P-700398 (Main)	1.63dBi in 2.4 GHz
3	Whayu	C660-520290-A (Main)	1.59dBi in 2.4 GHz
4	ACON	APP6P-700545 (Main)	1.39dBi in 2.4 GHz

Note:

1. The antenna of EUT is conform 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		

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 an Eee PC with a built-in 2.4GHz WLAN transceiver.
2. The EUT is including four models for different marketing requirement.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report.
(802.11b is 1Mbps 、802.11g is 6Mbps 、802.11n(20M-BW) is 7.2Mbps and 、
802.11n(40M-BW) is 15Mbps)
5. These tests are conducted on a sample for the purpose of demonstrating compliance of
802.11b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

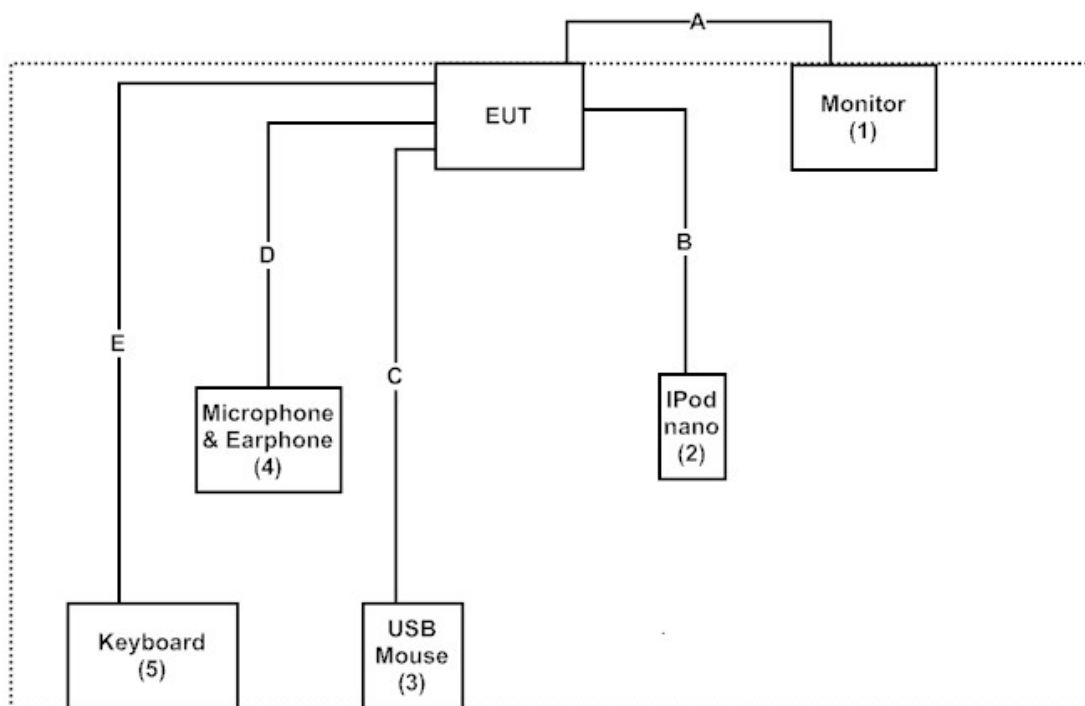
1.3. Tested System Details

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	LG	W2261VT	907YHED07356	DoC	Non-Shielded, 1.8m
2 iPod nano	Apple	A1236	7K823DWSY0P	N/A	N/A
3 USB Mouse	DELL	M056U0A	F0Y01YE7	DoC	N/A
4 Microphone & Earphone	Ergotech	ET-E201	N/A	N/A	N/A
5 Keyboard	DELL	SK-8115	MY-0DJ325-7161 9-7A2-0330	DoC	N/A

Signal Cable Type	Signal cable Description
A VGA Cable	Shielded, 1.8m,with two ferrite cores bonded.
B IPOD Cable	Shielded, 1.2m
C Mouse Cable	Shielded, 1.8m
D Microphone & Earphone Cable	Non-Shielded, 1.6m
E Keyboard Cable	Shielded, 1.8m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT and peripherals as shown in Section 1.4
- (2) Execute “Atheros Radio Test.exe v0.9” 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:

<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



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E-Mail : service@quietek.com

FCC Accreditation Number: TW1014



2. Conducted Emission

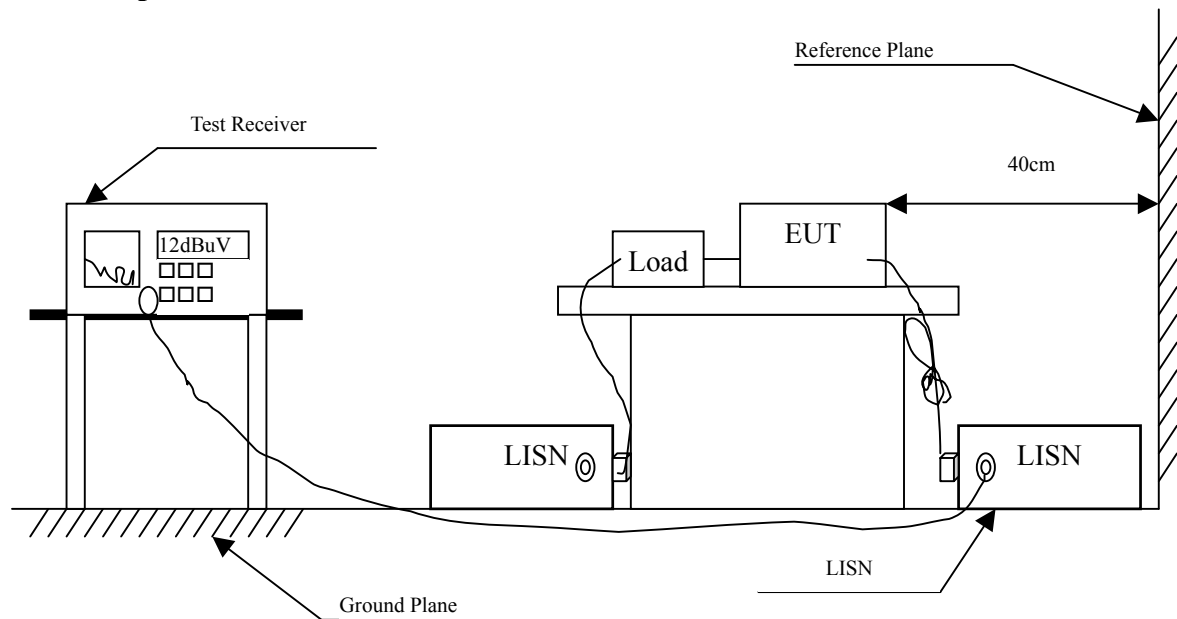
2.1. Test Equipment

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

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2011	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2011	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2011	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2011	
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 : Eee PC
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
Line 1					
Quasi-Peak					
0.173	9.734	36.030	45.765	-19.578	65.343
0.236	9.682	27.270	36.952	-26.591	63.543
0.463	9.640	30.450	40.090	-16.967	57.057
1.013	9.670	15.210	24.880	-31.120	56.000
3.490	9.691	17.970	27.661	-28.339	56.000
10.232	9.830	20.530	30.360	-29.640	60.000
Average					
0.173	9.734	20.980	30.715	-24.628	55.343
0.236	9.682	16.740	26.422	-27.121	53.543
0.463	9.640	23.960	33.600	-13.457	47.057
1.013	9.670	9.200	18.870	-27.130	46.000
3.490	9.691	9.200	18.891	-27.109	46.000
10.232	9.830	14.910	24.740	-25.260	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 : Eee PC
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.150	9.766	39.560	49.326	-16.674	66.000
0.189	9.724	31.840	41.564	-23.322	64.886
0.236	9.692	27.230	36.922	-26.621	63.543
0.431	9.649	23.880	33.529	-24.442	57.971
1.068	9.670	16.660	26.330	-29.670	56.000
15.677	10.000	22.380	32.380	-27.620	60.000
Average					
0.150	9.766	21.260	31.026	-24.974	56.000
0.189	9.724	11.880	21.604	-33.282	54.886
0.236	9.692	9.570	19.262	-34.281	53.543
0.431	9.649	13.300	22.949	-25.022	47.971
1.068	9.670	8.590	18.260	-27.740	46.000
15.677	10.000	17.030	27.030	-22.970	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

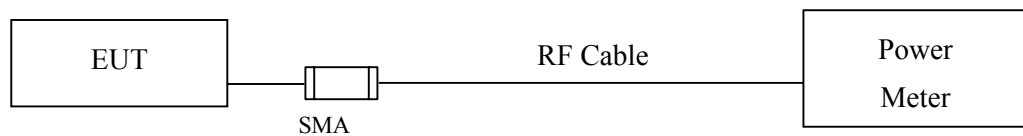
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2011
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2011

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.

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

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	17.12	--	--	--	19.58	<30dBm	Pass
06	2437	17.73	17.62	17.54	17.41	20.71	<30dBm	Pass
11	2462	18.40	--	--	--	21.10	<30dBm	Pass

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

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

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	13.94	--	--	--	--	--	--	--	24	<30dBm	Pass
06	2437	16.91	16.86	16.74	16.65	16.61	16.55	16.51	16.49	25.46	<30dBm	Pass
11	2462	14.62	--	--	--	--	--	--	--	24.21	<30dBm	Pass

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

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

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	7.2		
		Measurement Level (dBm)										
01	2412	12.89	--	--	--	--	--	--	--	22.81	<30dBm	Pass
06	2437	16.96	16.91	16.85	16.77	16.72	16.68	16.62	16.56	25.61	<30dBm	Pass
11	2462	13.41	--	--	--	--	--	--	--	23.03	<30dBm	Pass

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

Product : Eee PC
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		15	30	45	60	90	120	135	150	15		
		Measurement Level (dBm)										
01	2422	9.31	--	--	--	--	--	--	--	18.87	<30dBm	Pass
04	2437	13.39	13.26	13.15	13.06	12.99	12.97	12.91	12.84	23.62	<30dBm	Pass
07	2452	9.44	--	--	--	--	--	--	--	19.12	<30dBm	Pass

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

4. Radiated Emission

4.1. Test Equipment

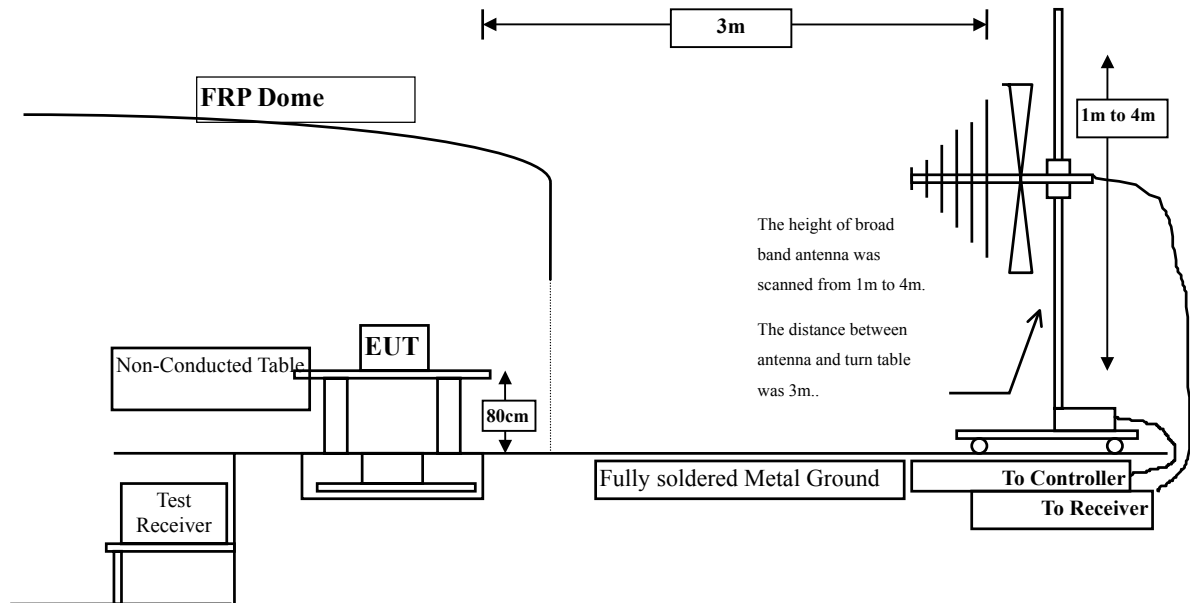
The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
<input checked="" type="checkbox"/> 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, 2011
	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

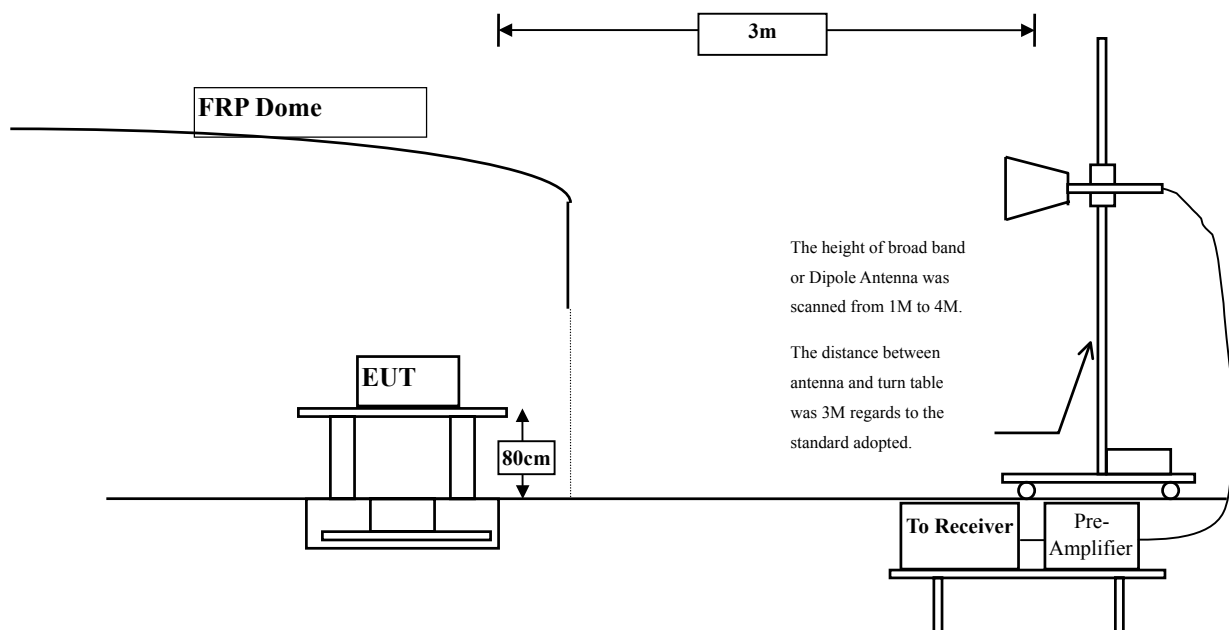
- Note:
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
 2. The test instruments marked with "X" are used to measure the final test results.

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

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

Horizontal

Peak Detector:

4824.000	3.261	40.810	44.071	-29.929	74.000
7236.000	10.650	36.460	47.110	-26.890	74.000
9648.000	13.337	36.660	49.996	-24.004	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	40.330	46.751	-27.249	74.000
7236.000	11.495	36.060	47.555	-26.445	74.000
9648.000	13.807	36.330	50.136	-23.864	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	43.000	46.037	-27.963	74.000
7311.000	11.795	35.390	47.184	-26.816	74.000
9748.000	12.635	36.700	49.335	-24.665	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	43.970	49.781	-24.219	74.000
7311.000	12.630	35.130	47.759	-26.241	74.000
9748.000	13.126	36.670	49.796	-24.204	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 : Eee 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	46.610	49.467	-24.533	74.000
7386.000	12.127	34.600	46.728	-27.272	74.000
9848.000	12.852	36.320	49.173	-24.827	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	47.670	53.190	-20.810	74.000
7386.000	13.254	35.230	48.484	-25.516	74.000
9848.000	13.367	36.390	49.757	-24.243	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

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

Horizontal

Peak Detector:

4824.000	3.261	39.690	42.951	-31.049	74.000
7236.000	10.650	36.320	46.970	-27.030	74.000
9648.000	13.337	36.550	49.886	-24.114	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	40.420	46.841	-27.159	74.000
7236.000	11.495	36.080	47.575	-26.425	74.000
9648.000	13.807	36.280	50.086	-23.914	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 : Eee 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	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector:

4874.000	3.038	45.430	48.467	-25.533	74.000
7311.000	11.795	35.640	47.434	-26.566	74.000
9748.000	12.635	36.880	49.515	-24.485	74.000

Average Detector:

--

Peak Detector:

4874.000	5.812	45.320	51.131	-22.869	74.000
7311.000	12.630	35.310	47.939	-26.061	74.000
9748.000	13.126	36.580	49.706	-24.294	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	44.610	47.467	-26.533	74.000
7386.000	12.127	35.020	47.148	-26.852	74.000
9848.000	12.852	36.970	49.823	-24.177	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	47.300	52.820	-21.180	74.000
7386.000	13.254	34.520	47.774	-26.226	74.000
9848.000	13.367	36.540	49.907	-24.093	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2412MHz)

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

Horizontal

Peak Detector:

4824.000	3.261	39.440	42.701	-31.299	74.000
7236.000	10.650	36.200	46.850	-27.150	74.000
9648.000	13.337	35.950	49.286	-24.714	74.000

Average Detector:

--

Vertical

Peak Detector:

4824.000	6.421	39.200	45.621	-28.379	74.000
7236.000	11.495	36.320	47.815	-26.185	74.000
9648.000	13.807	35.930	49.736	-24.264	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2437 MHz)

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

Horizontal

Peak Detector:

4874.000	3.038	46.560	49.597	-24.403	74.000
7311.000	11.795	35.460	47.254	-26.746	74.000
9748.000	12.635	37.510	50.145	-23.855	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	46.700	52.511	-21.489	74.000
7311.000	12.630	36.010	48.639	-25.361	74.000
9748.000	13.126	38.820	51.946	-22.054	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW) (2462 MHz)

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

Horizontal

Peak Detector:

4924.000	2.858	44.460	47.317	-26.683	74.000
7386.000	12.127	35.070	47.198	-26.802	74.000
9848.000	12.852	36.620	49.473	-24.527	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	5.521	44.960	50.480	-23.520	74.000
7386.000	13.254	34.540	47.794	-26.206	74.000
9848.000	13.367	36.100	49.467	-24.533	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2422MHz)

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

Horizontal

Peak Detector:

4844.000	3.171	37.140	40.311	-33.689	74.000
7266.000	11.162	35.790	46.952	-27.048	74.000
9688.000	12.964	36.900	49.865	-24.135	74.000

Average Detector:

--

Vertical

Peak Detector:

4844.000	6.178	36.950	43.128	-30.872	74.000
7266.000	11.982	36.120	48.102	-25.898	74.000
9688.000	13.507	36.920	50.428	-23.572	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW) (2437 MHz)

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

Horizontal

Peak Detector:

4874.000	3.038	37.290	40.327	-33.673	74.000
7311.000	11.795	35.620	47.414	-26.586	74.000
9748.000	12.635	36.680	49.315	-24.685	74.000

Average Detector:

--

Vertical

Peak Detector:

4874.000	5.812	39.890	45.701	-28.299	74.000
7311.000	12.630	35.240	47.869	-26.131	74.000
9748.000	13.126	37.010	50.136	-23.864	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 : Eee PC
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2452 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	2.914	37.580	40.495	-33.505	74.000
7356.000	11.995	35.700	47.694	-26.306	74.000
9808.000	12.475	36.610	49.085	-24.915	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4904.000	5.530	38.690	44.221	-29.779	74.000
7356.000	13.005	34.890	47.894	-26.106	74.000
9808.000	12.901	36.850	49.751	-24.249	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 : Eee 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					
142.520	-27.641	65.771	38.130	-5.370	43.500
239.520	-6.851	48.503	41.653	-4.347	46.000
336.520	-22.127	63.865	41.738	-4.262	46.000
431.580	-2.099	40.471	38.372	-7.628	46.000
598.420	3.991	34.429	38.420	-7.580	46.000
912.700	6.132	30.693	36.825	-9.175	46.000
Vertical					
109.540	-24.477	61.238	36.761	-6.739	43.500
142.520	-23.060	60.695	37.635	-5.865	43.500
336.520	-22.523	60.761	38.238	-7.762	46.000
375.320	-2.029	42.188	40.159	-5.841	46.000
507.240	-0.471	37.318	36.847	-9.153	46.000
912.700	1.762	33.469	35.231	-10.769	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 : Eee PC
 Test Item : General 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	dBuV/m	dB	dBuV/m
Horizontal					
142.520	-27.641	64.881	37.240	-6.260	43.500
239.520	-30.944	70.781	39.837	-6.163	46.000
336.520	-22.127	62.324	40.197	-5.803	46.000
375.320	-1.209	41.876	40.667	-5.333	46.000
528.580	1.848	35.209	37.057	-8.943	46.000
817.640	5.532	27.271	32.803	-13.197	46.000
Vertical					
109.540	-24.477	62.559	38.082	-5.418	43.500
142.520	-23.060	61.424	38.364	-5.136	43.500
336.520	-22.523	61.082	38.559	-7.441	46.000
528.580	-0.462	37.003	36.541	-9.459	46.000
817.640	3.272	29.523	32.795	-13.205	46.000
912.700	1.762	31.604	33.366	-12.634	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 : Eee PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)(2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
173.560	-9.954	48.155	38.202	-5.298	43.500
239.520	-30.944	72.031	41.087	-4.913	46.000
336.520	-22.127	60.352	38.225	-7.775	46.000
431.580	-2.099	41.155	39.056	-6.944	46.000
594.540	3.927	32.761	36.688	-9.312	46.000
817.640	5.532	27.241	32.773	-13.227	46.000
Vertical					
142.520	-23.060	60.322	37.262	-6.238	43.500
336.520	-22.523	61.771	39.248	-6.752	46.000
497.540	-1.393	35.991	34.598	-11.402	46.000
701.240	0.198	39.595	39.793	-6.207	46.000
842.860	3.074	28.939	32.013	-13.987	46.000
941.800	6.585	26.891	33.476	-12.524	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 : Eee PC
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)(2437 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
173.560	-9.954	48.258	38.305	-5.195	43.500
239.520	-6.851	47.422	40.572	-5.428	46.000
336.520	-22.127	61.228	39.101	-6.899	46.000
501.420	0.105	40.277	40.382	-5.618	46.000
732.280	3.082	32.865	35.947	-10.053	46.000
912.700	6.132	31.019	37.151	-8.849	46.000
Vertical					
142.520	-23.060	61.460	38.400	-5.100	43.500
336.520	-22.523	63.169	40.646	-5.354	46.000
503.360	-0.852	33.902	33.050	-12.950	46.000
689.600	2.538	34.640	37.178	-8.822	46.000
815.700	3.221	29.053	32.274	-13.726	46.000
941.800	6.585	28.284	34.869	-11.131	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

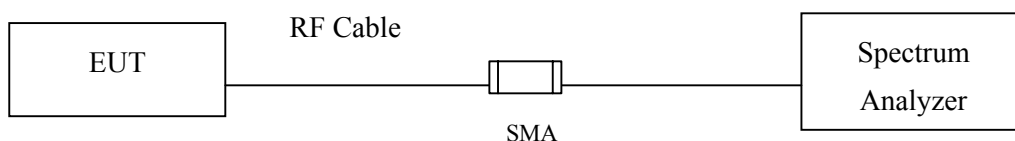
5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2011
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2011
	Spectrum Analyzer	Agilent	N9010A / MY48030495	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.

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

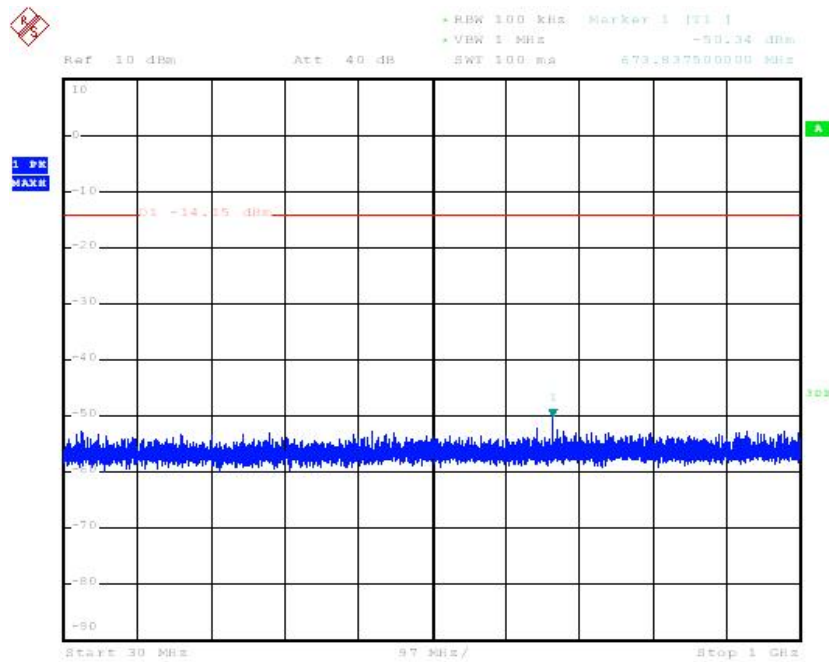
The measurement uncertainty

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

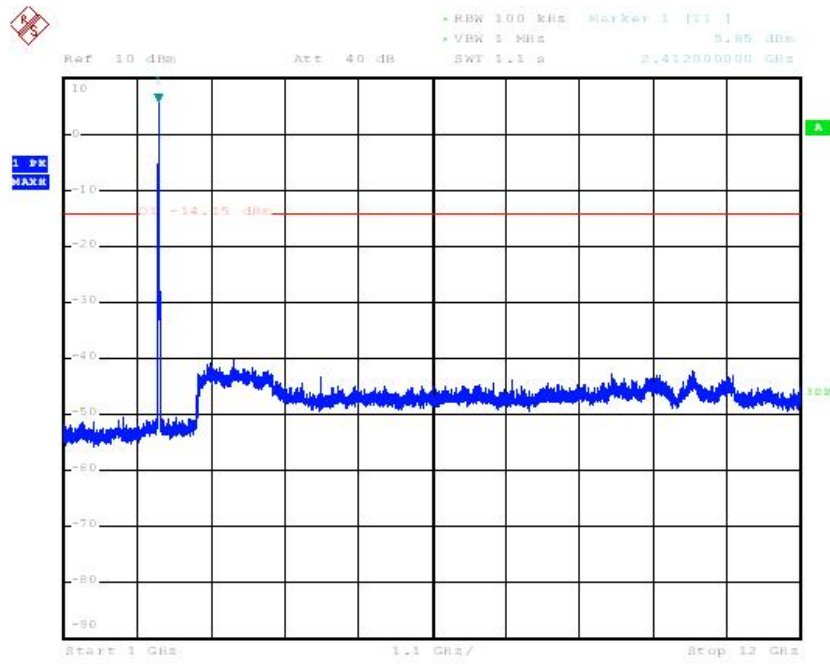
5.6. Test Result of RF antenna conducted test

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

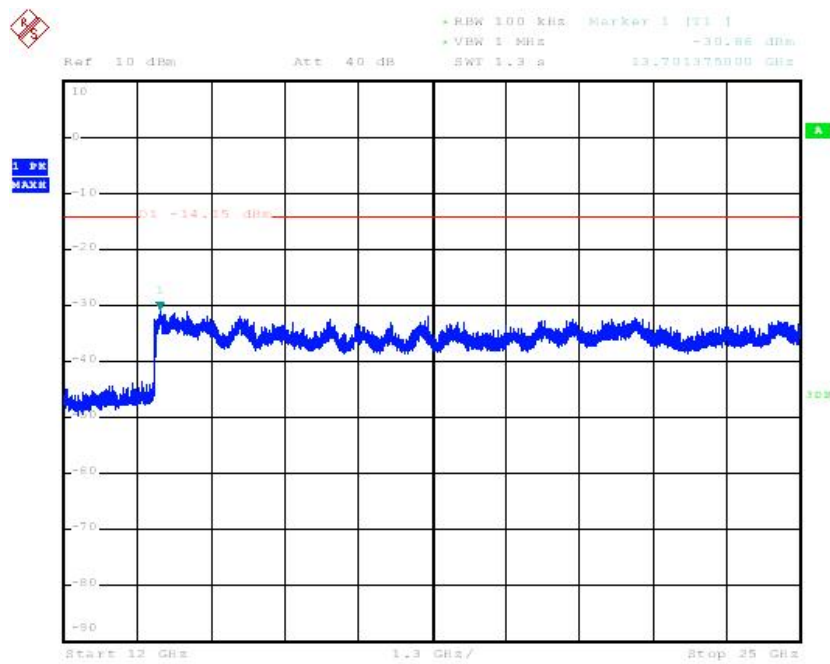
Channel 01 (2412MHz)



Date: 20.JUN.2011 20:23:34

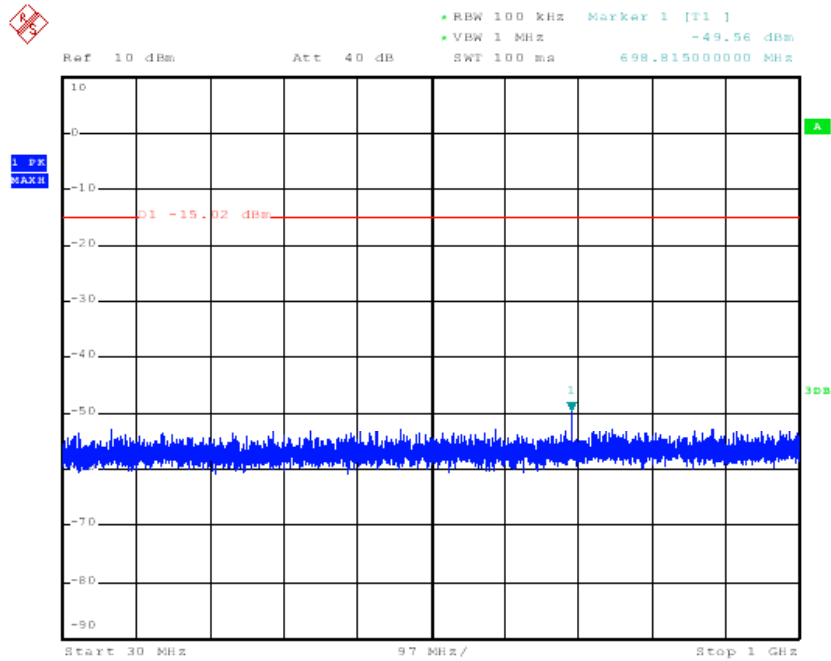


Date: 20.JUN.2011 20:21:23

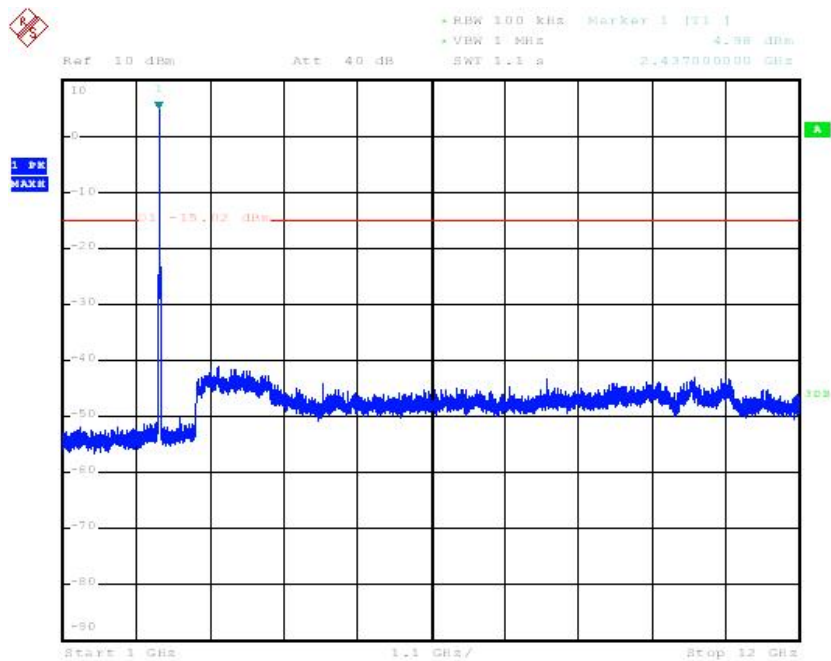


Date: 20.JUN.2011 20:23:11

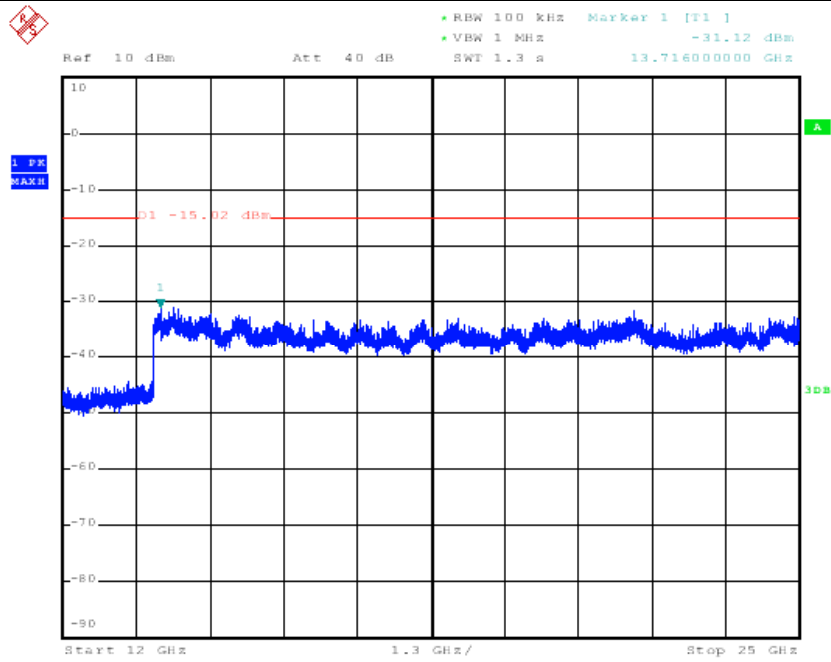
Channel 06 (2437MHz)



Date: 20.JUN.2011 20:25:56

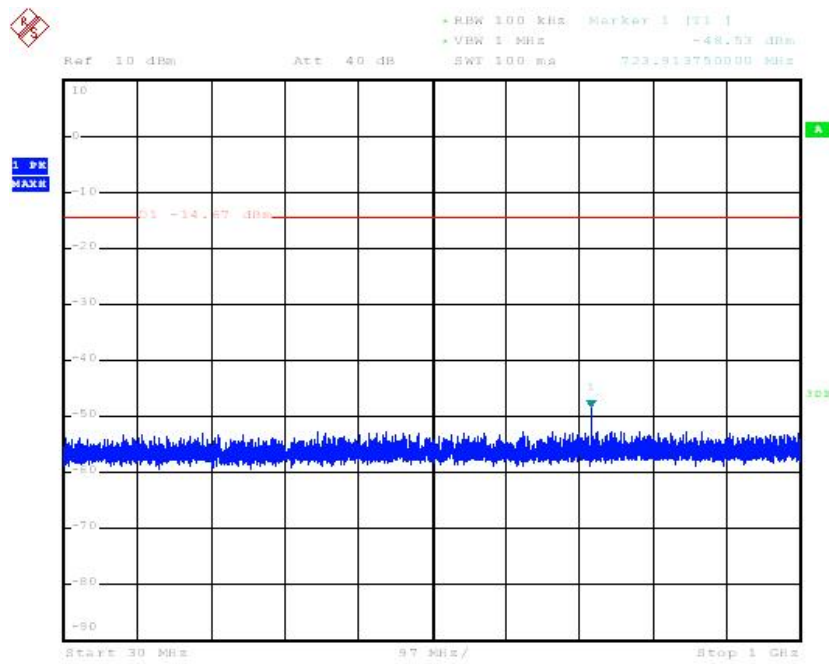


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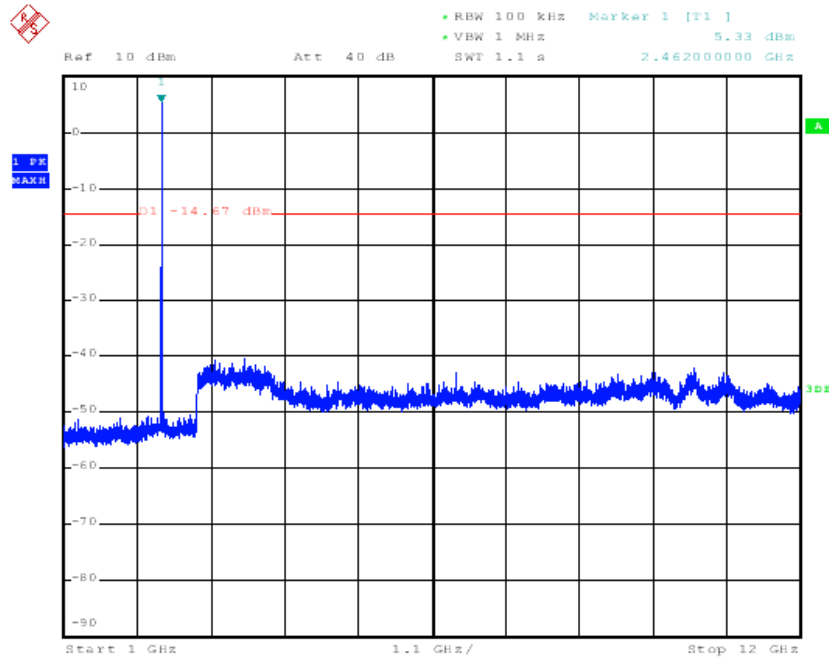


Date: 20.JUN.2011 20:25:36

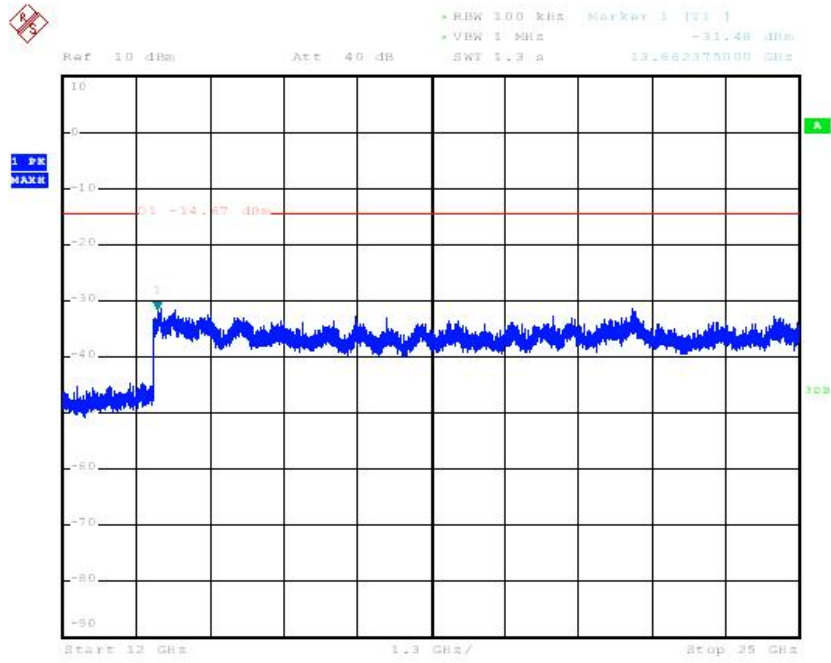
Channel 11 (2462MHz)



Date: 20.JUN.2011 20:29:03



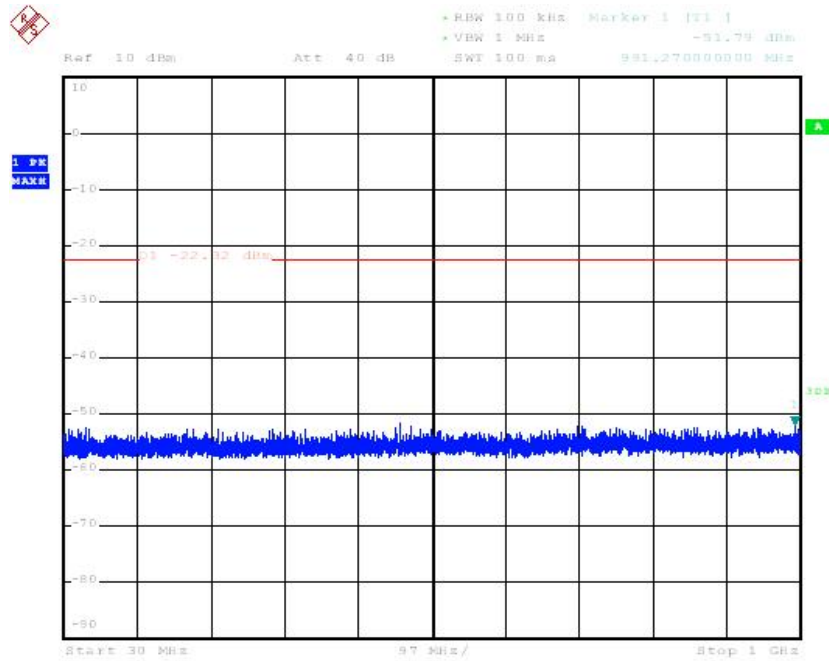
Date: 20.JUN.2011 20:27:45



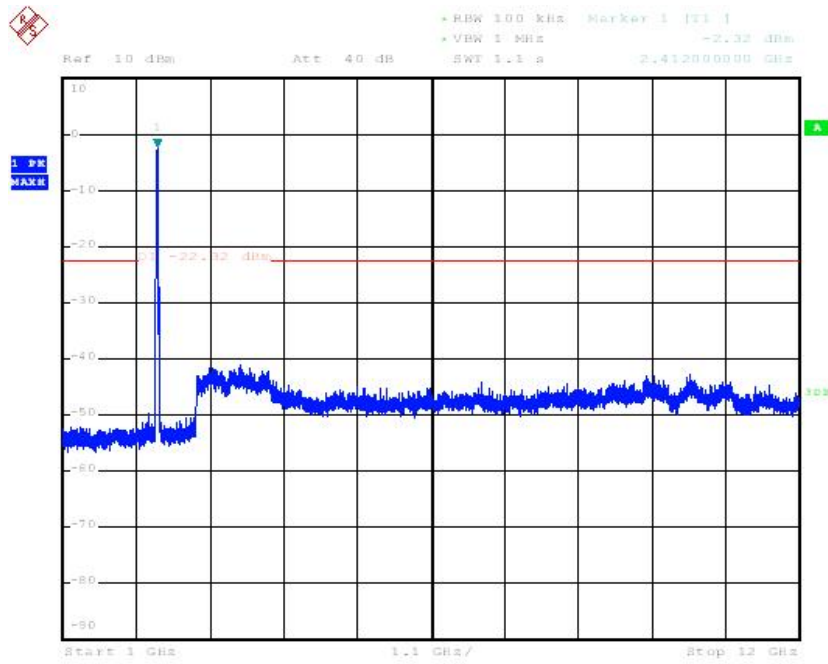
Date: 20.JUN.2011 20:30:49

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

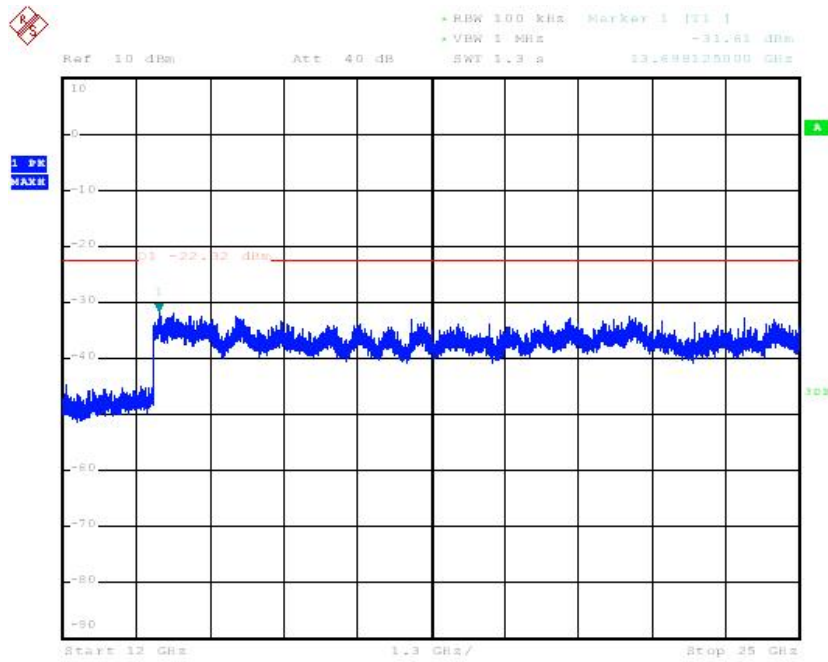
Channel 01 (2412MHz)



Date: 20.JUN.2011 20:39:13

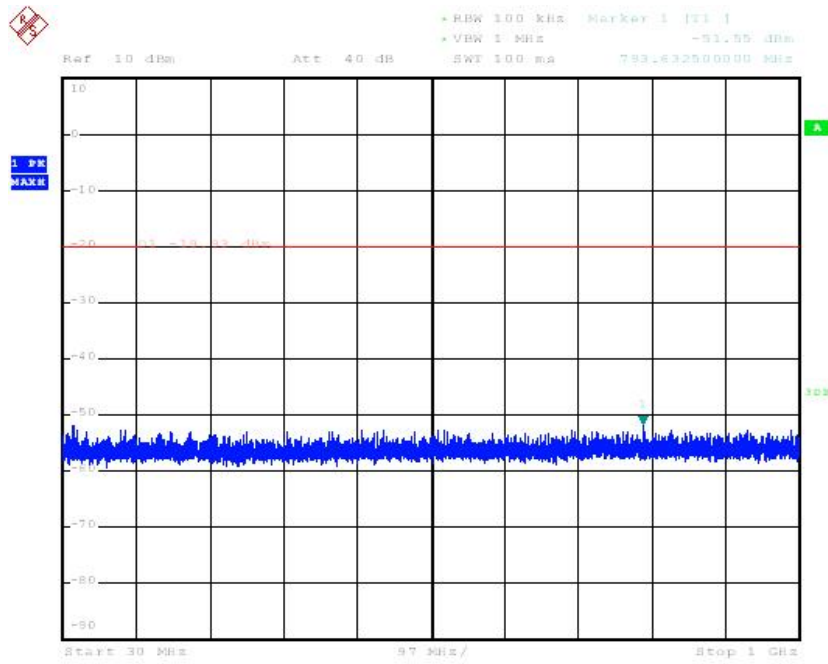


Date: 20.JUN.2011 20:38:00

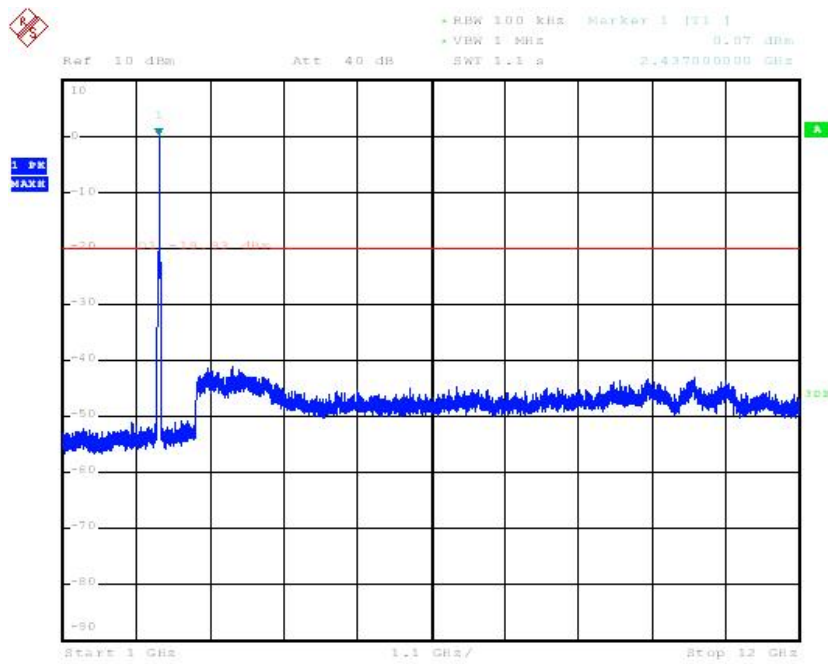


Date: 20.JUN.2011 20:38:32

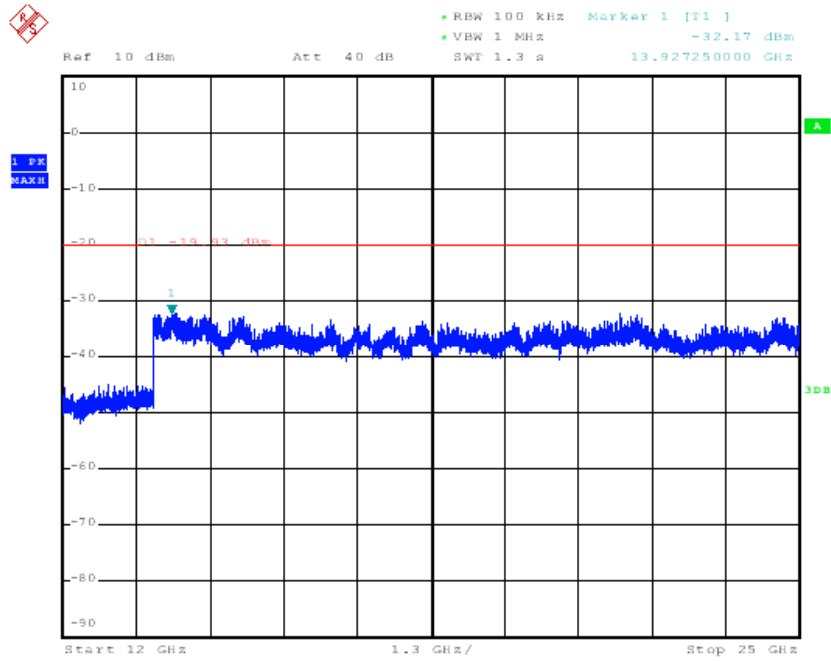
Channel 06 (2437MHz)



Date: 20.JUN.2011 20:36:27

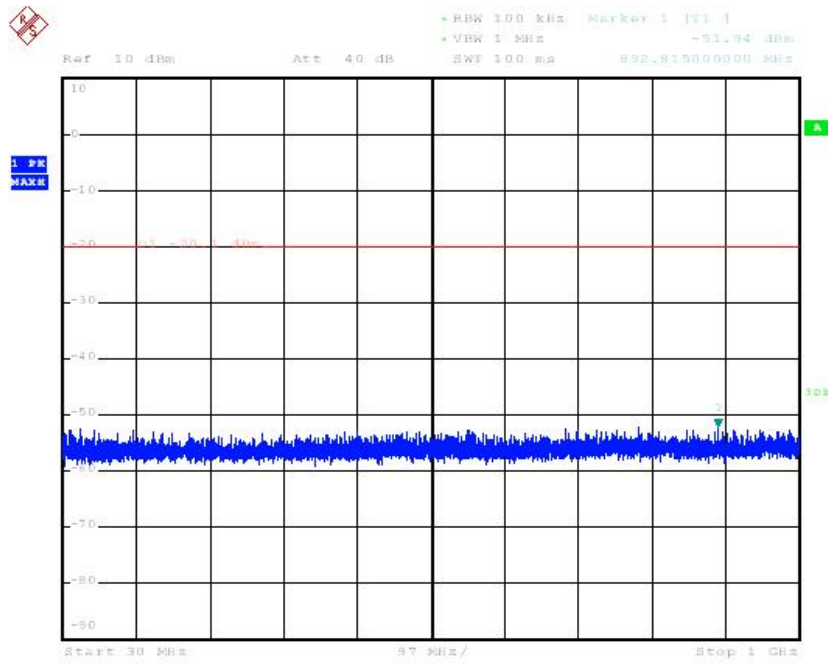


Date: 20.JUN.2011 20:35:27

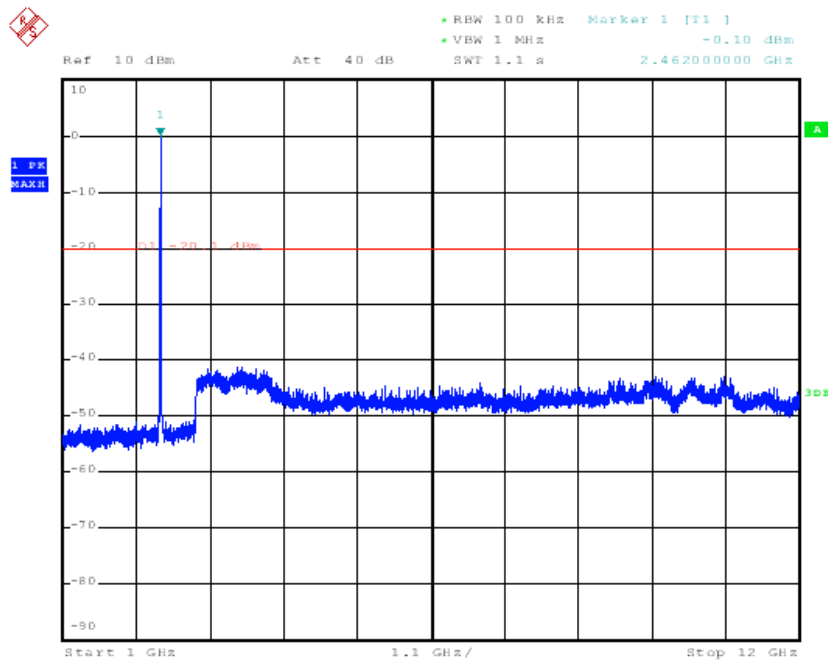


Date: 20.JUN.2011 20:36:01

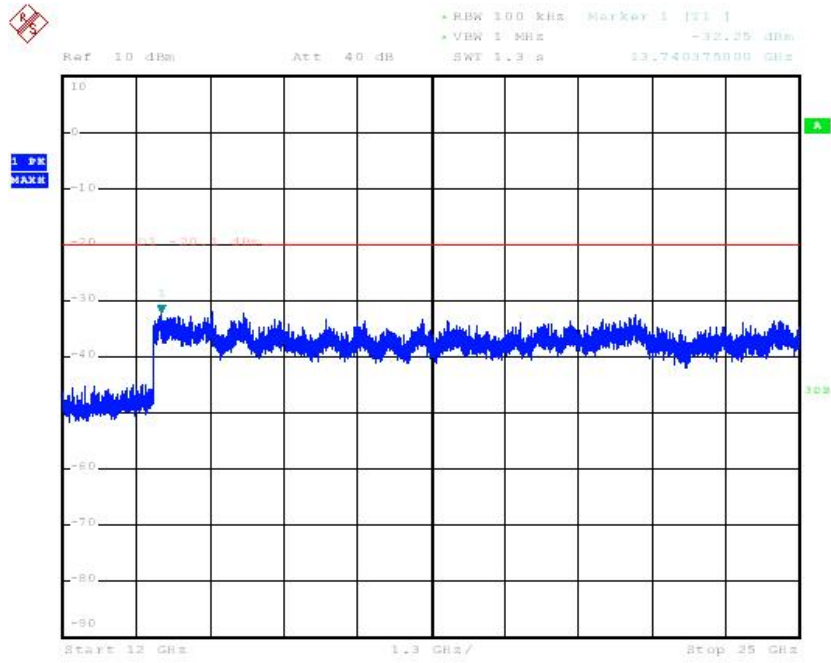
Channel 11 (2462MHz)



Date: 20.JUN.2011 20:34:10



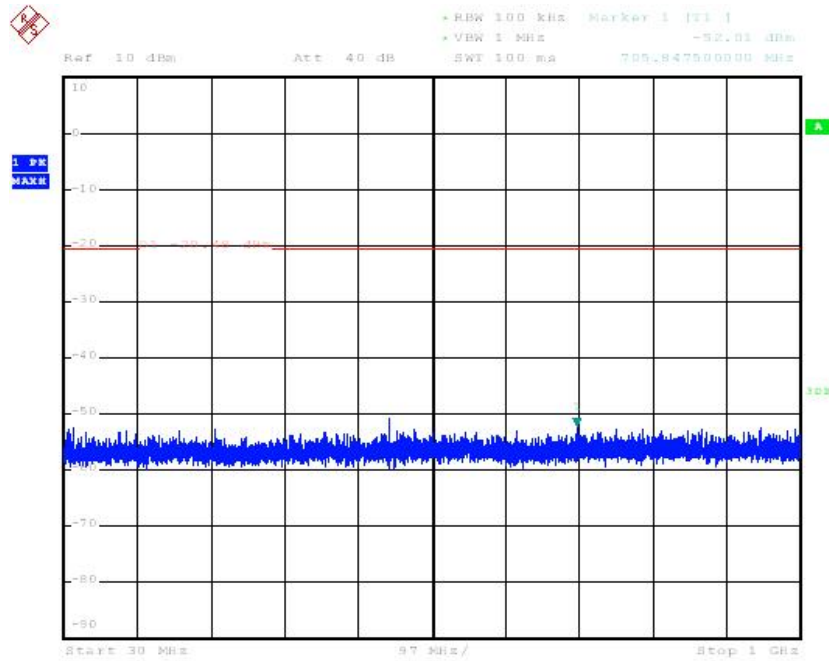
Date: 20.JUN.2011 20:33:18



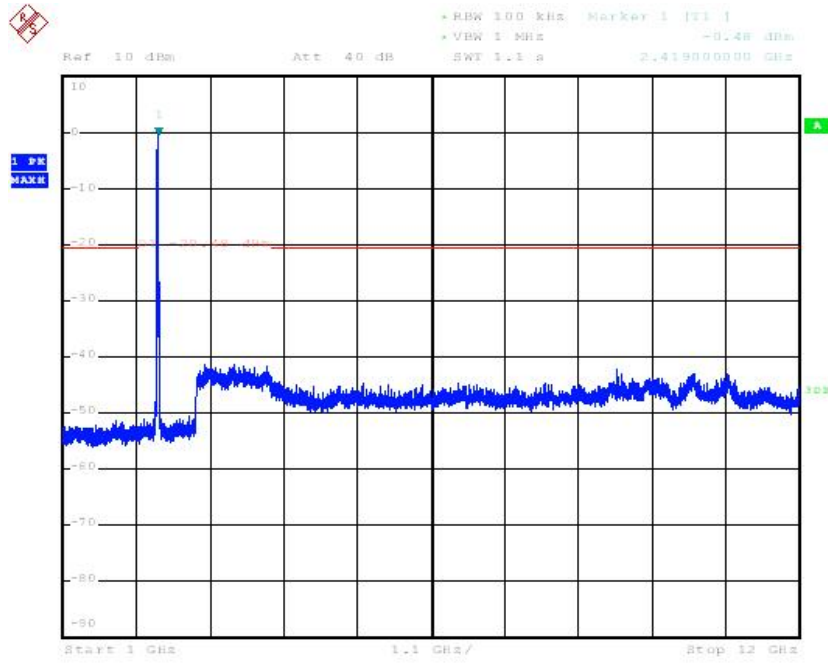
Date: 20.JUN.2011 20:33:46

Product : Eee PC
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmit (802.11n MCS0 7.2Mbps 20M-BW)

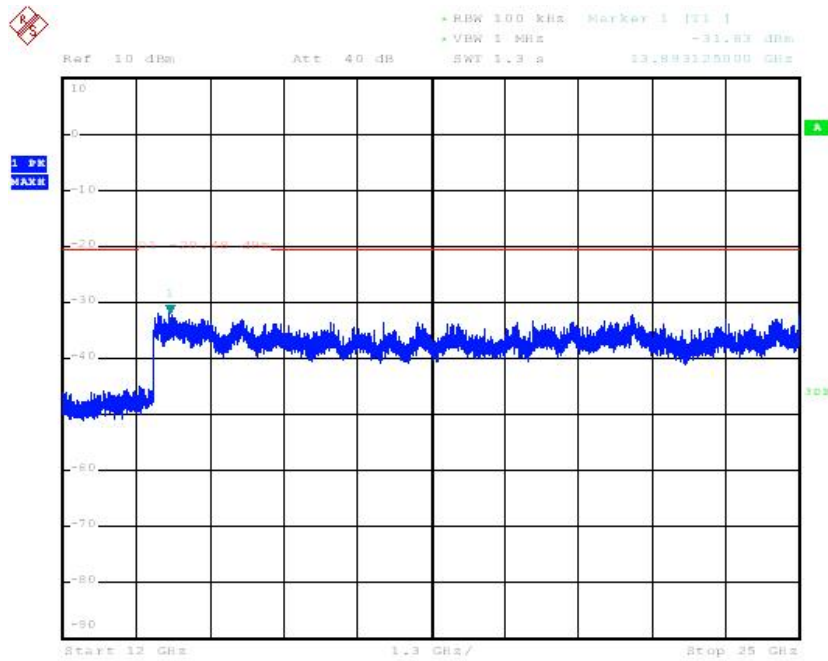
Channel 01 (2412MHz)



Date: 21.JUN.2011 11:07:48

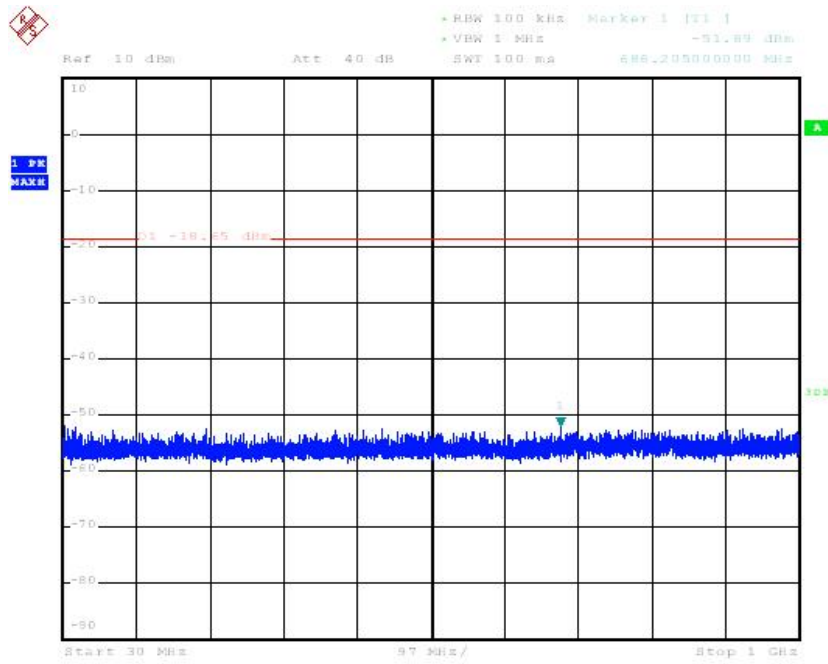


Date: 21.JUN.2011 11:06:32

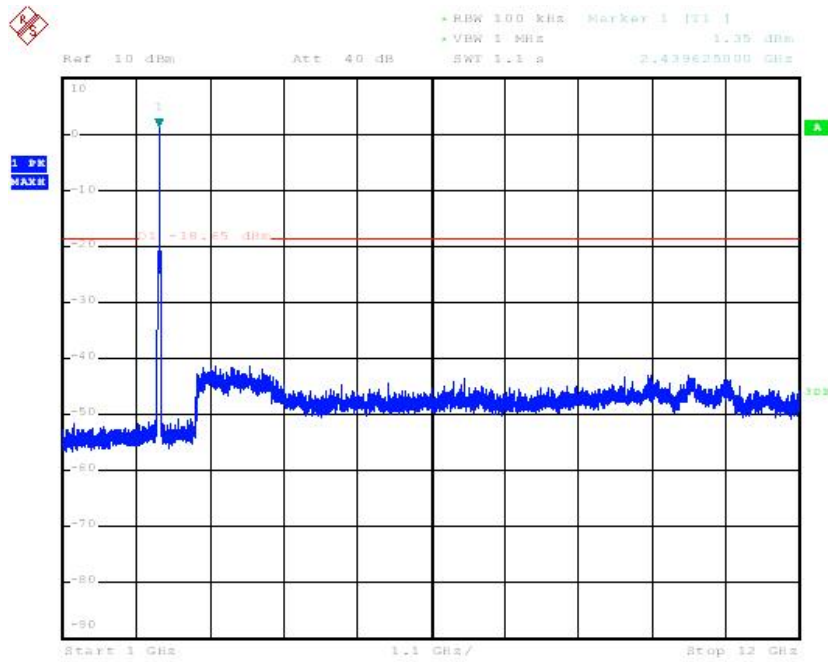


Date: 21.JUN.2011 11:07:23

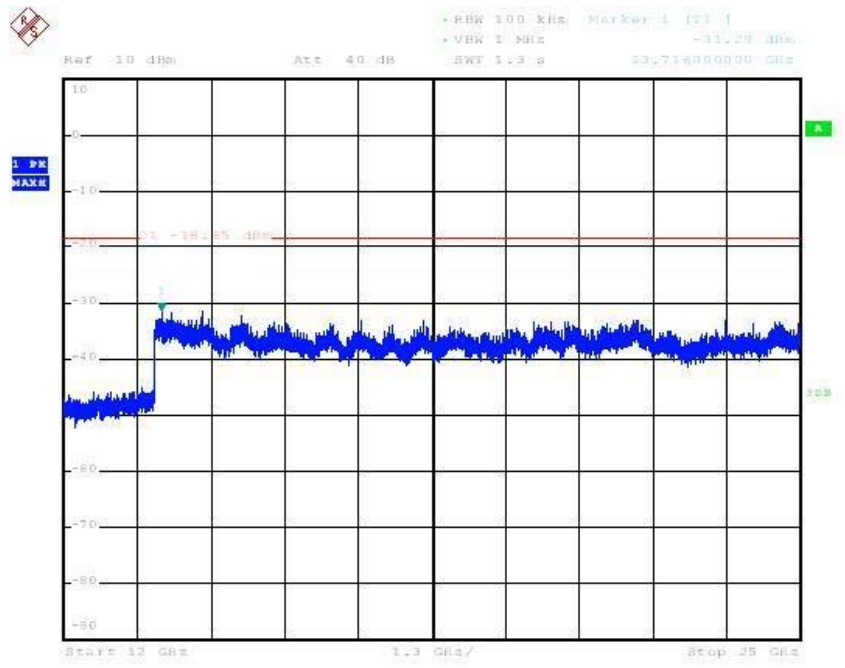
Channel 06 (2437MHz)



Date: 21.JUN.2011 11:11:12

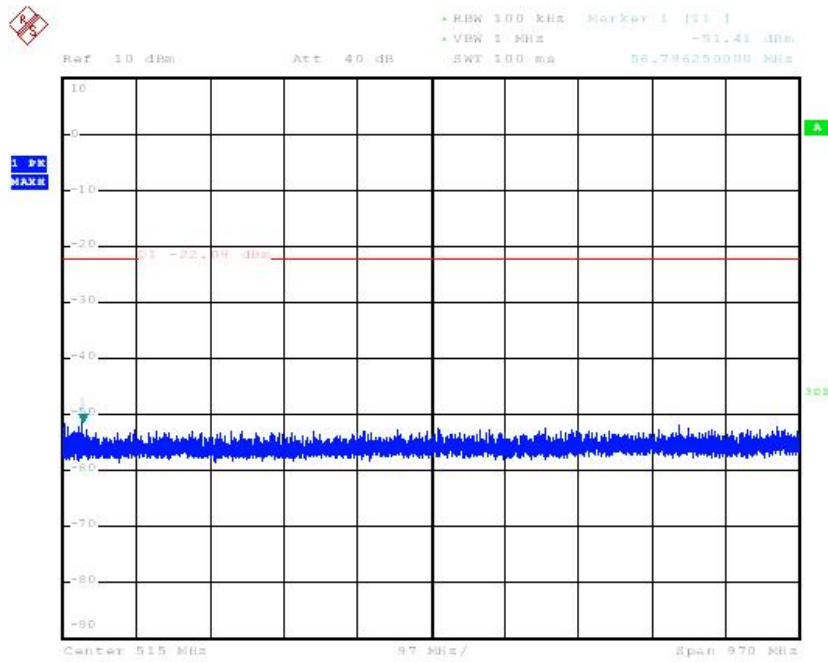


Date: 21.JUN.2011 11:09:56

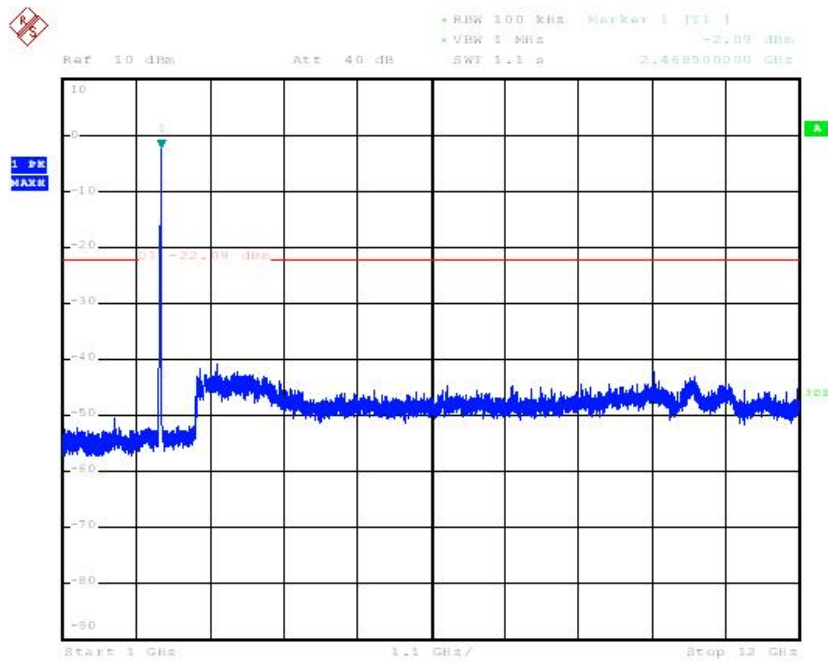


Date: 21.JUN.2011 11:19:29

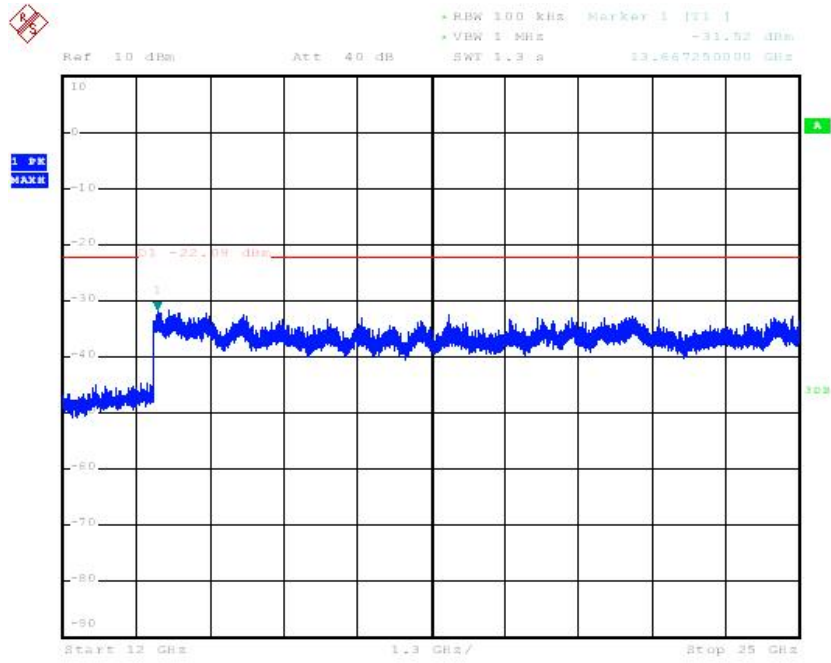
Channel 11 (2462MHz)



Date: 21.JUN.2011 11:13:46



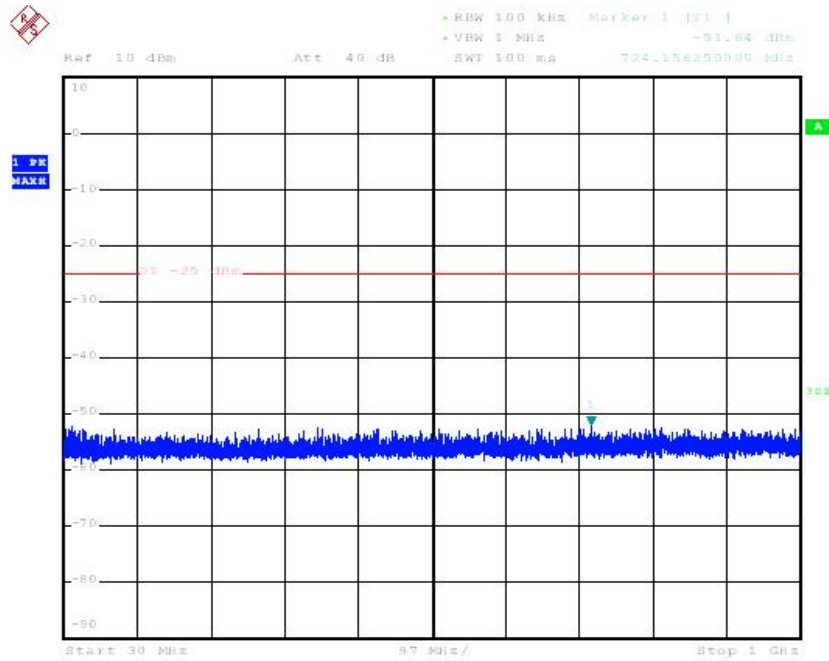
Date: 21.JUN.2011 11:12:32



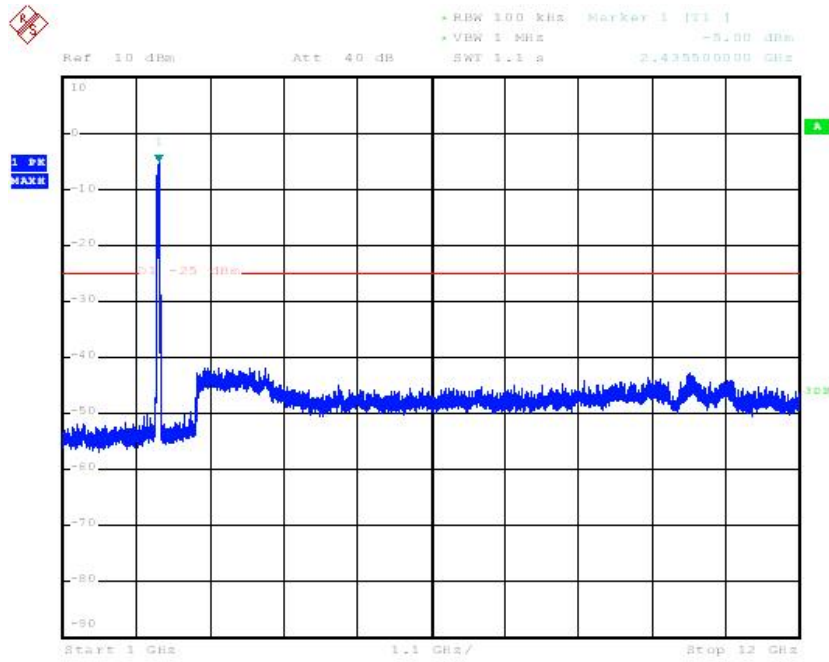
Date: 21.JUN.2011 11:13:11

Product : Eee PC
 Test Item : RF Antenna Conducted Spurious
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

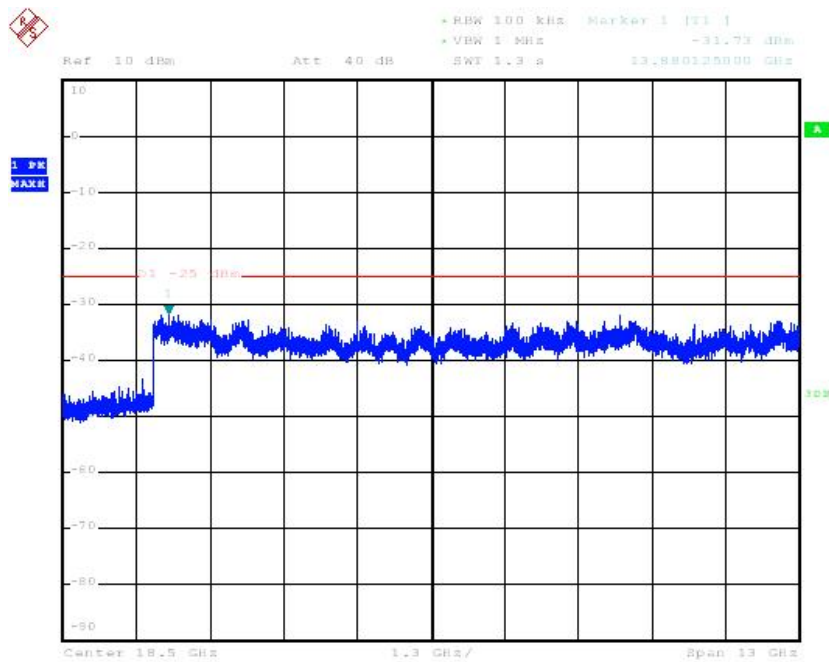
Channel 01 (2422MHz)



Date: 21.JUN.2011 11:22:23

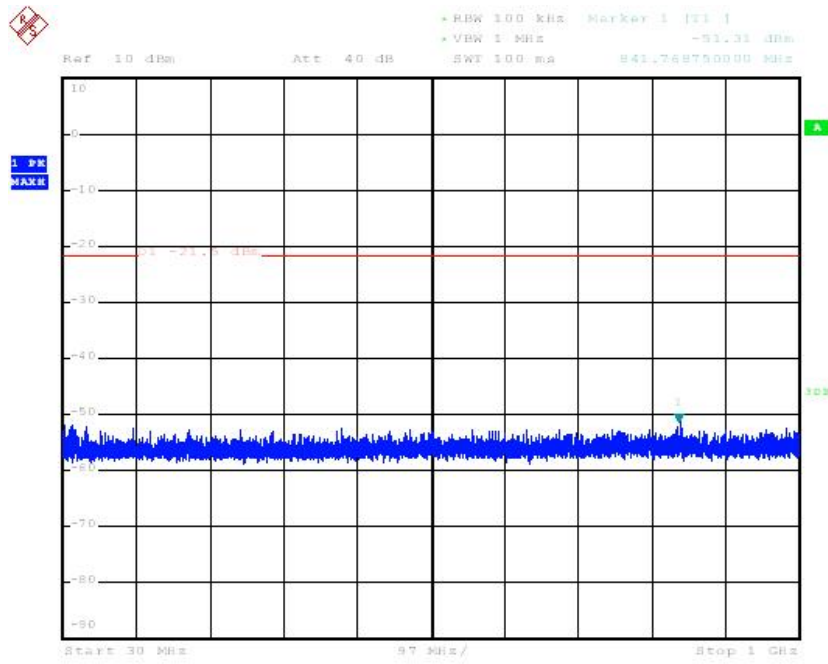


Date: 21.JUN.2011 11:21:21

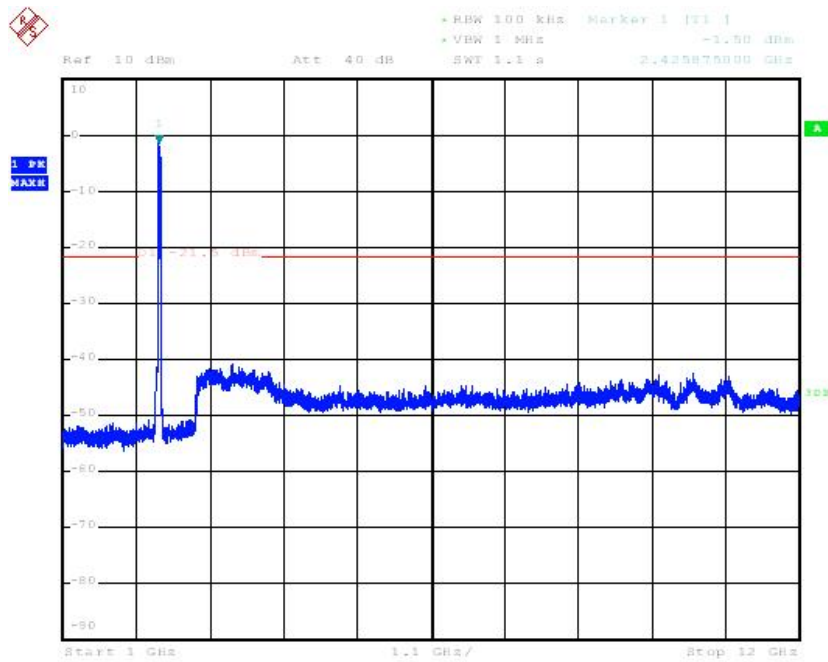


Date: 21.JUN.2011 11:21:52

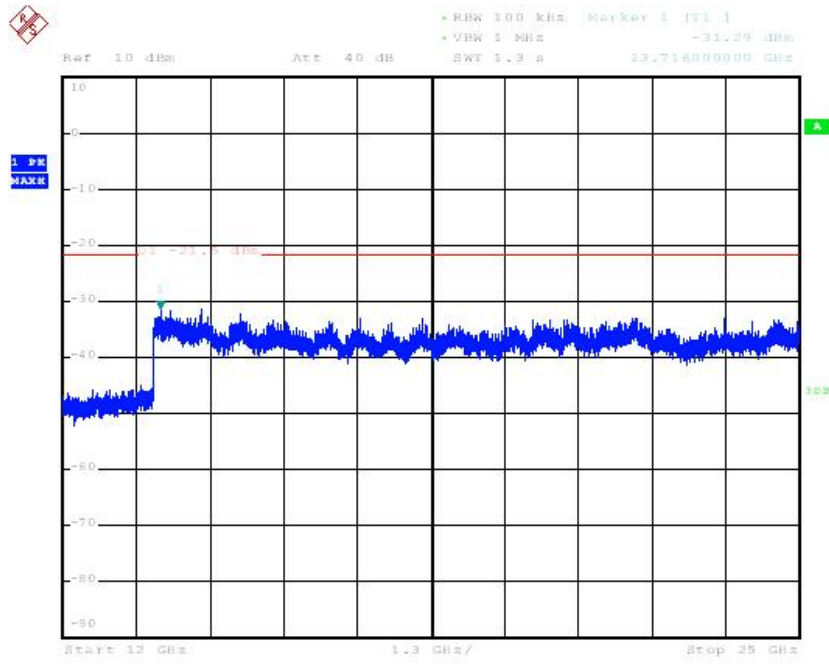
Channel 04 (2437MHz)



Date: 21.JUN.2011 11:19:59

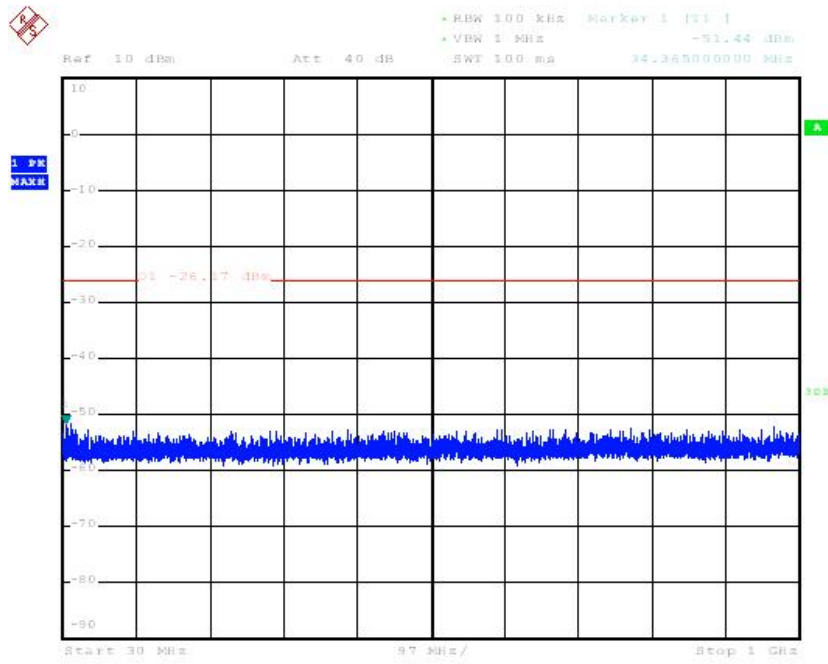


Date: 21.JUN.2011 11:18:55

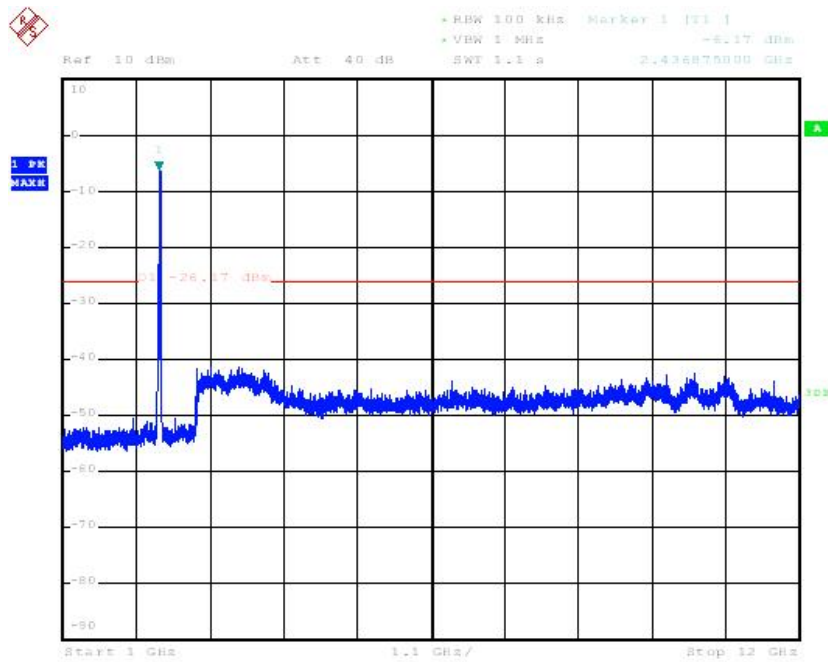


Date: 21.JUN.2011 11:19:29

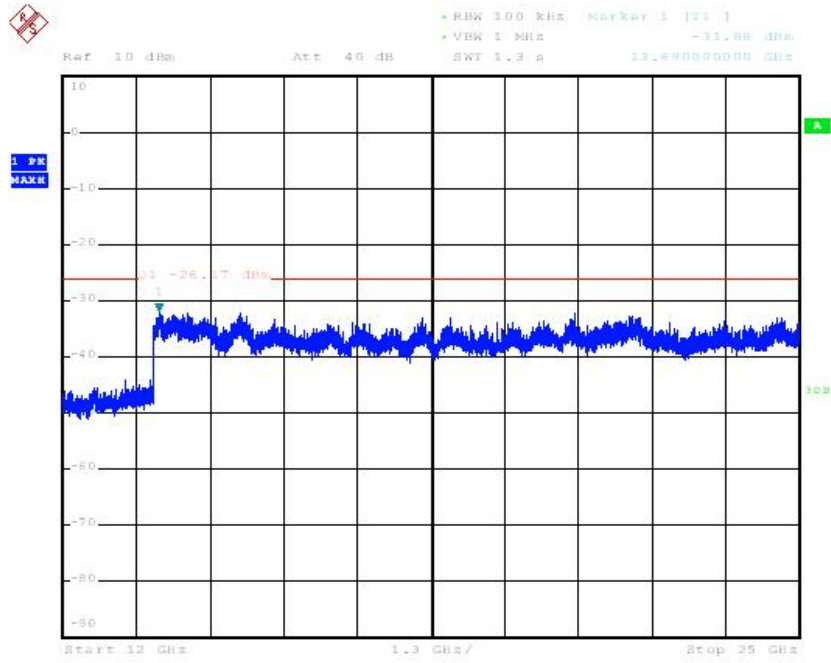
Channel 07 (2452MHz)



Date: 21.JUN.2011 11:16:44



Date: 21.JUN.2011 11:15:38



Date: 21.JUN.2011 11:16:16

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, 2011
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2011
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	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.

RF Radiated Measurement:

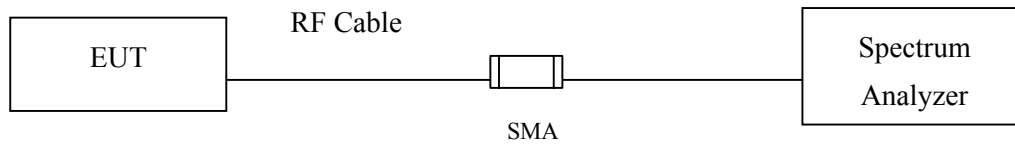
The following test equipments are used during the band edge tests:

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, 2011
		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

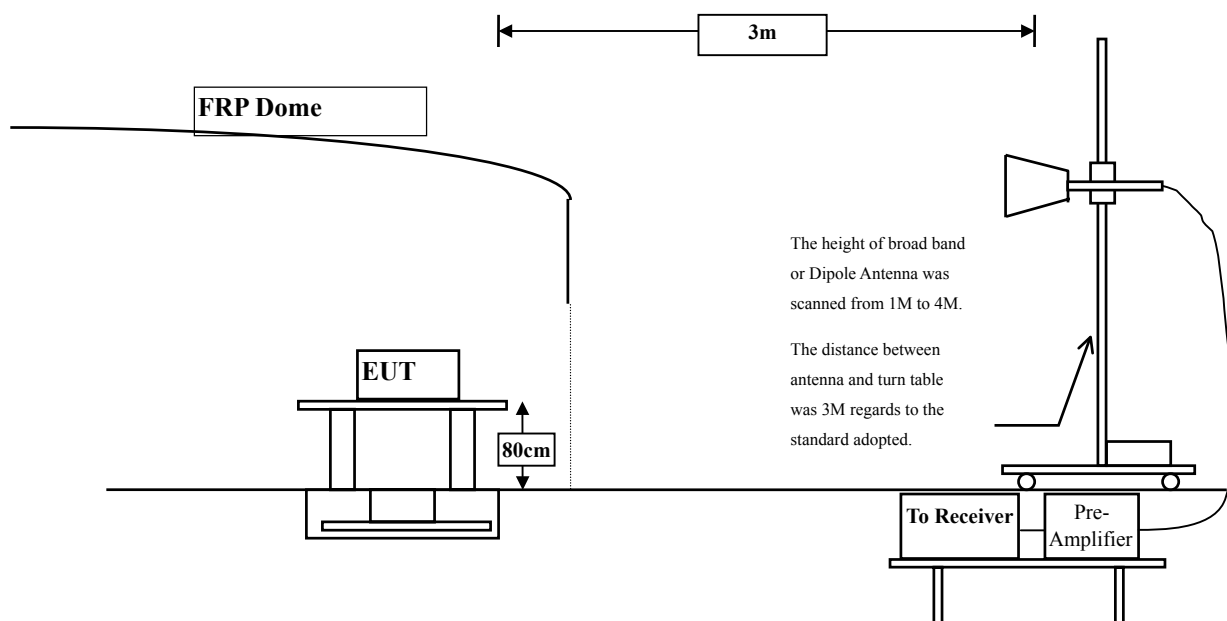
- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by “X” are used to measure the final test results.

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 : Eee 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	76.89	108.528	Peak
Horizontal	2412	31.639	72.91	104.548	Average
Vertical	2412	31.639	73.87	105.508	Peak
Vertical	2412	31.639	69.67	101.308	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)	Limit (dBuV/m)	Detector
Horizontal	2390	108.528	48.58	59.948	74.000	Peak
Horizontal	2390	104.548	57.26	47.288	54.000	Average
Vertical	2390	105.508	48.58	56.928	74.000	Peak
Vertical	2390	101.308	57.26	44.048	54.000	Average

Note:

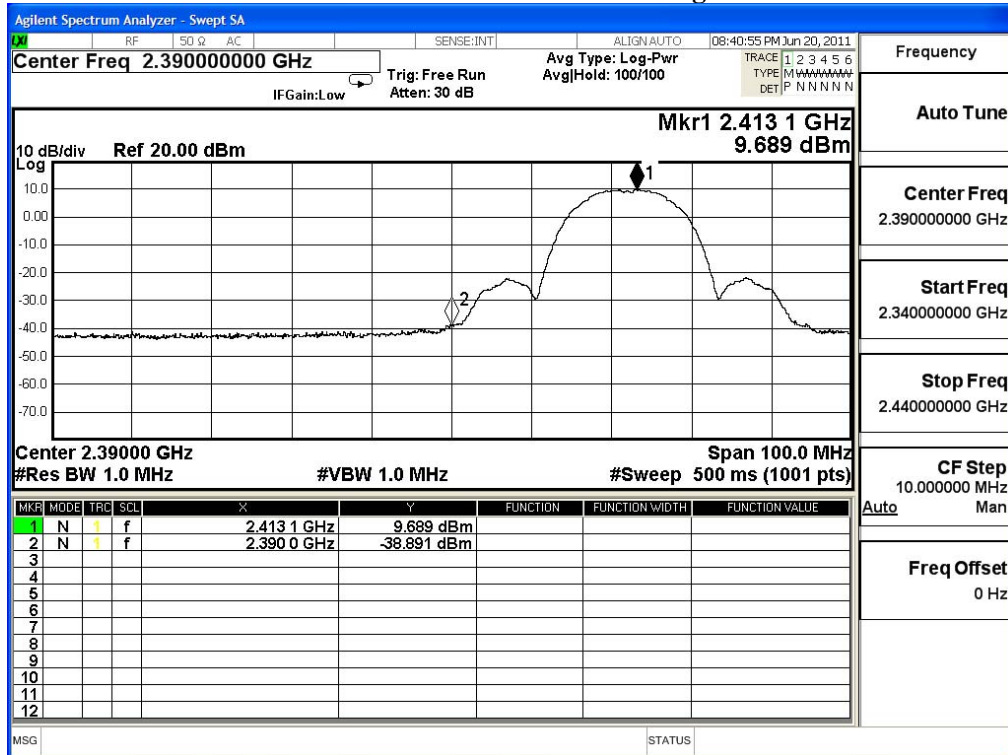
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

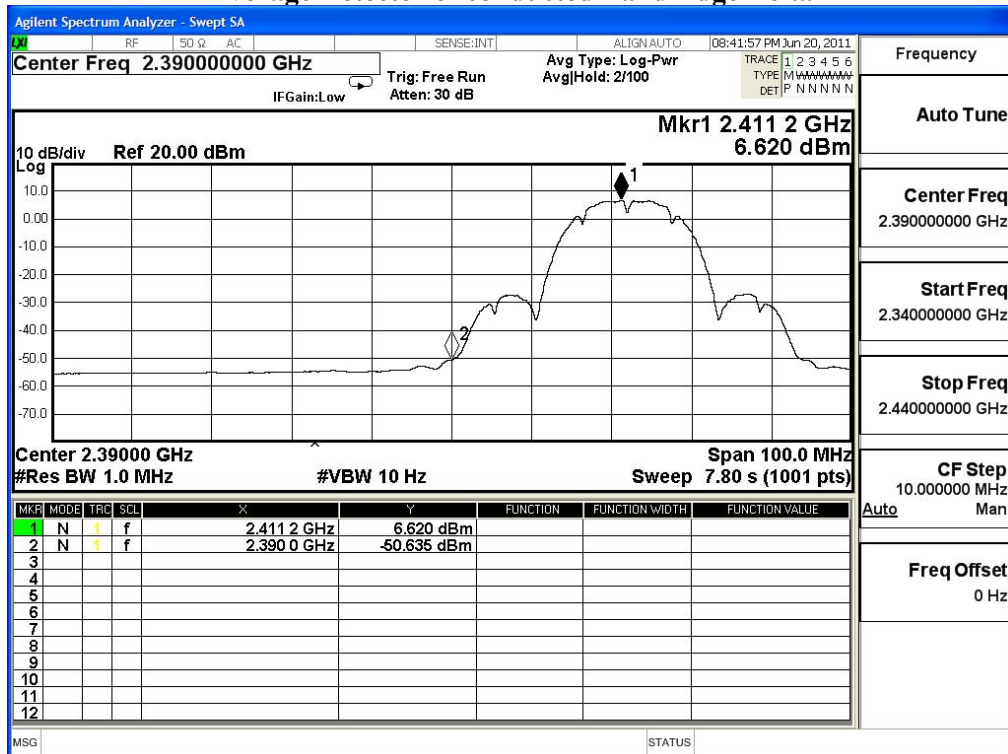
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Eee 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	80.43	112.449	Peak
Horizontal	2462	32.019	76.8	108.819	Average
Vertical	2462	31.29	76.44	107.73	Peak
Vertical	2462	31.29	72.31	103.6	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)	Limit (dBuV/m)	Detector
Horizontal	2483.5	112.449	48.45	63.999	74.000	Peak
Horizontal	2483.5	108.819	56.36	52.459	54.000	Average
Vertical	2483.5	107.73	48.45	59.28	74.000	Peak
Vertical	2483.5	103.6	56.36	47.24	54.000	Average

Note:

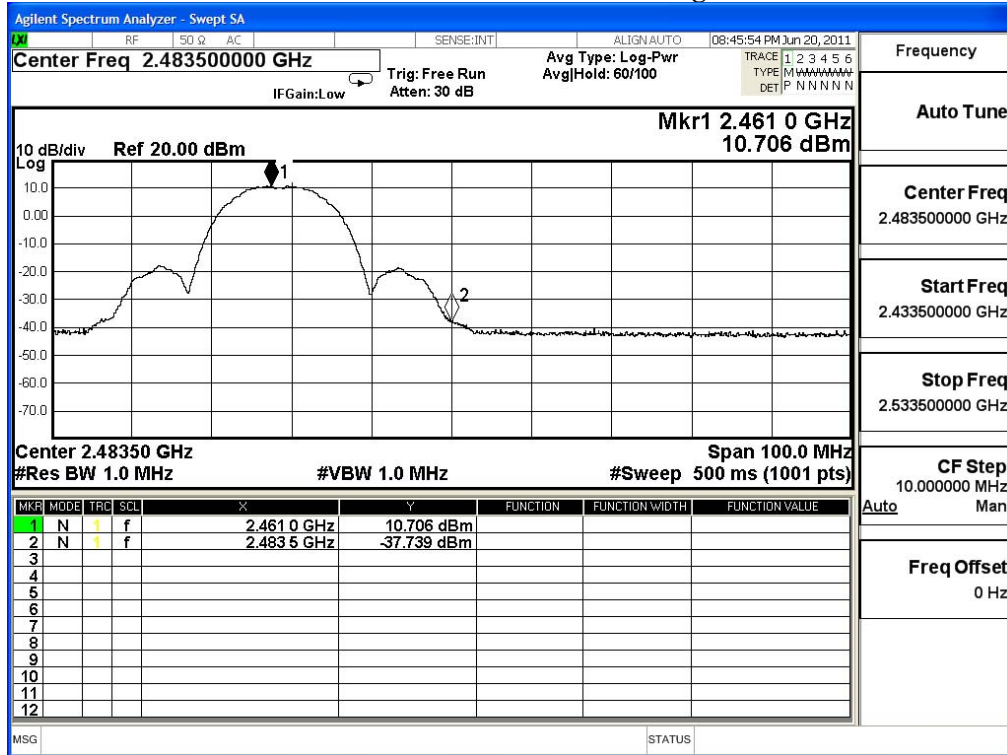
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

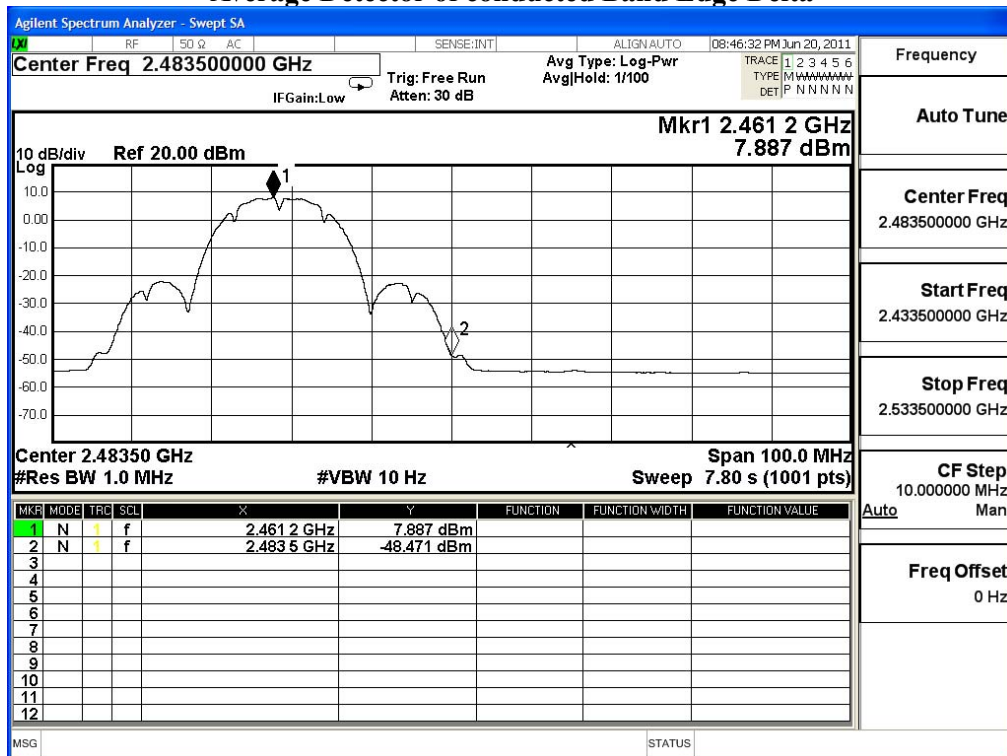
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Eee 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	76.31	107.948	Peak
Horizontal	2412	31.639	64.9	96.538	Average
Vertical	2412	30.95	74.66	105.609	Peak
Vertical	2412	30.95	63.25	94.199	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)	Limit (dBuV/m)	Detector
Horizontal	2389.3	107.948	38.91	69.038	74.000	Peak
Horizontal	2390.0	96.538	44.19	52.348	54.000	Average
Vertical	2389.3	105.609	38.91	66.699	74.000	Peak
Vertical	2390.0	94.199	44.19	50.009	54.000	Average

Note:

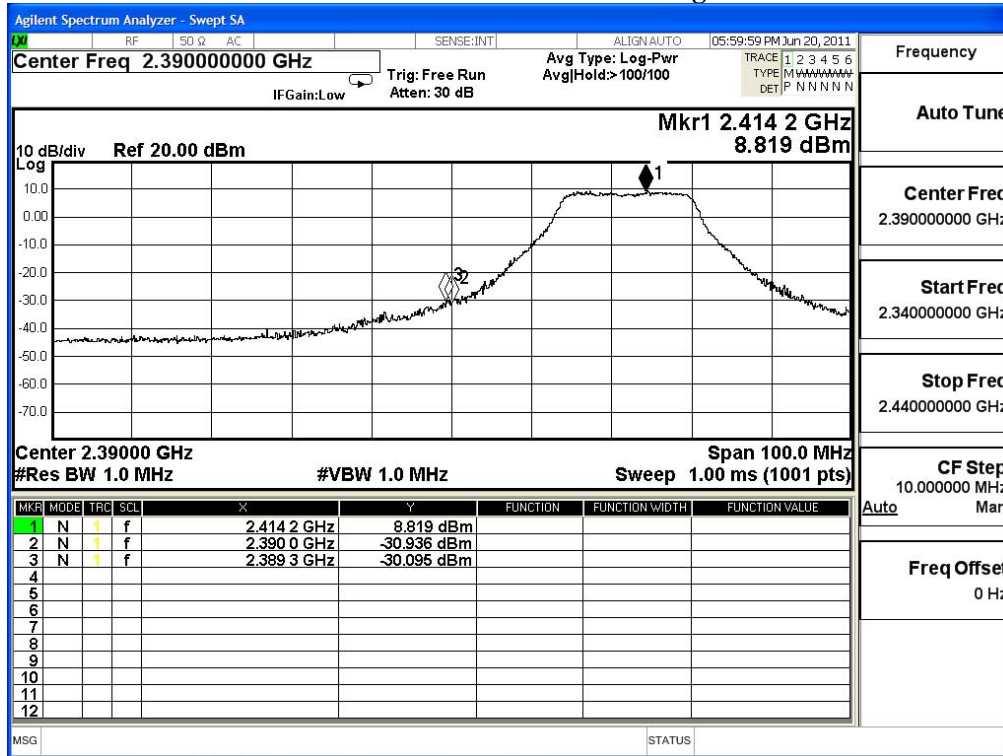
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

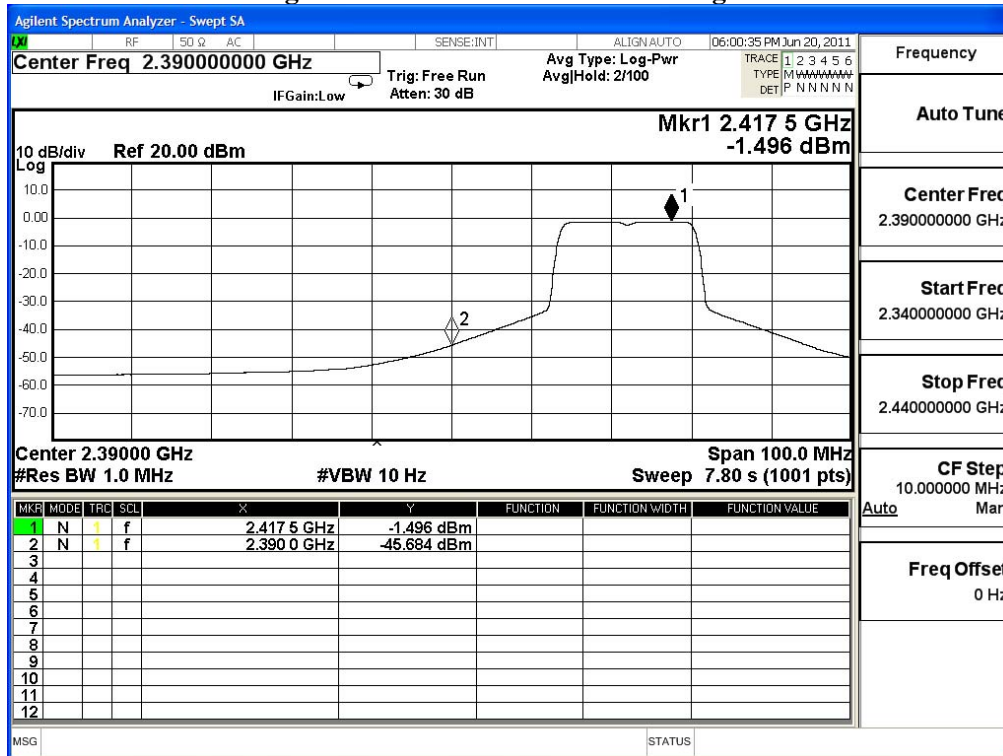
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Eee 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	2462	32.019	78.51	110.529	Peak
Horizontal	2462	32.019	67.11	99.129	Average
Vertical	2462	31.29	75.58	106.87	Peak
Vertical	2462	31.29	64.23	95.52	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)	Limit (dBuV/m)	Detector
Horizontal	2483.5	110.529	38.73	71.799	74.000	Peak
Horizontal	2483.5	99.129	46.42	52.709	54.000	Average
Vertical	2483.5	106.87	38.73	68.14	74.000	Peak
Vertical	2483.5	95.52	46.42	49.1	54.000	Average

Note:

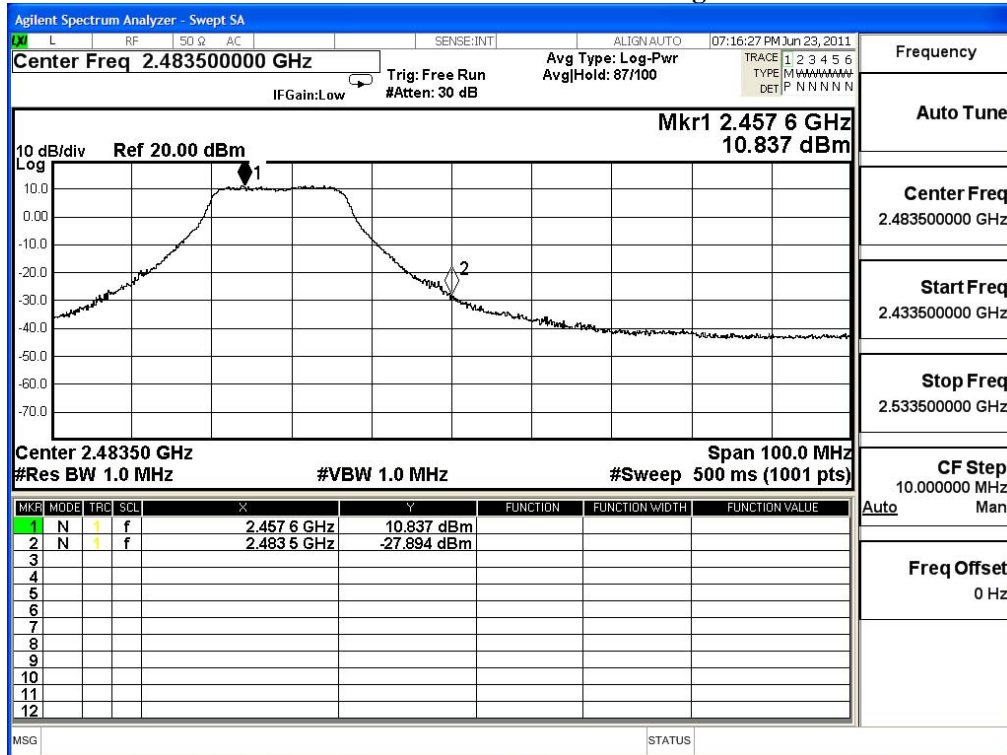
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

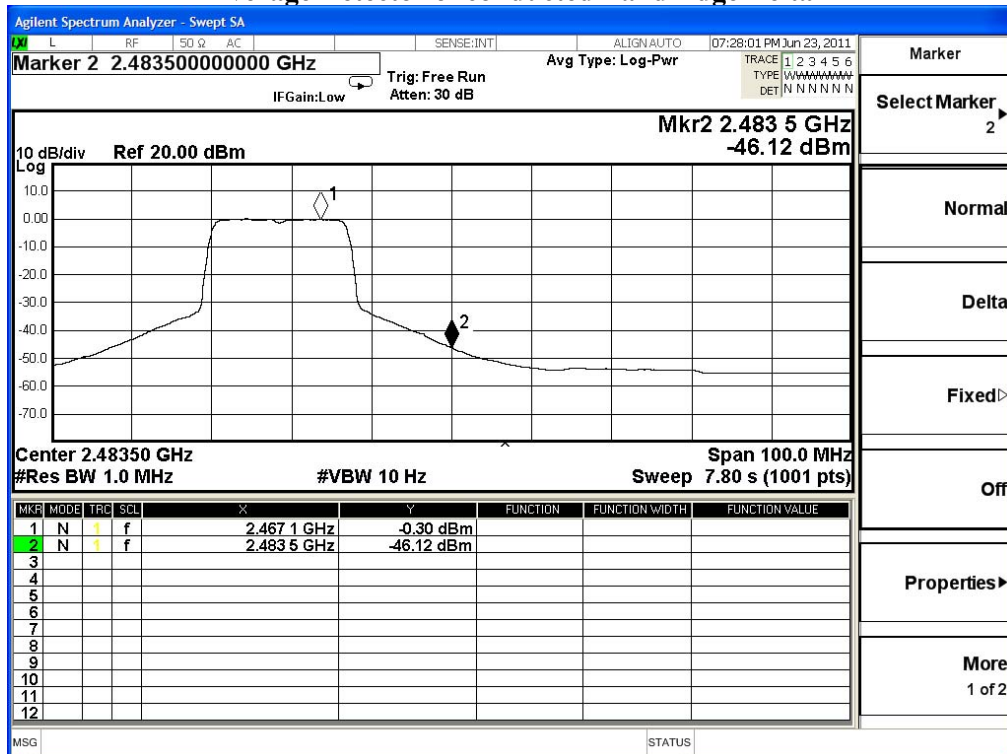
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



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

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2412	31.639	74.39	106.028	Peak
Horizontal	2412	31.639	63.02	94.658	Average
Vertical	2412	30.95	72.72	103.669	Peak
Vertical	2412	30.95	61.84	92.789	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)	Limit (dBuV/m)	Detector
Horizontal	2390	106.028	39.21	66.818	74.000	Peak
Horizontal	2390	94.658	43.2	51.458	54.000	Average
Vertical	2390	103.669	39.21	64.459	74.000	Peak
Vertical	2390	92.789	43.2	49.589	54.000	Average

Note:

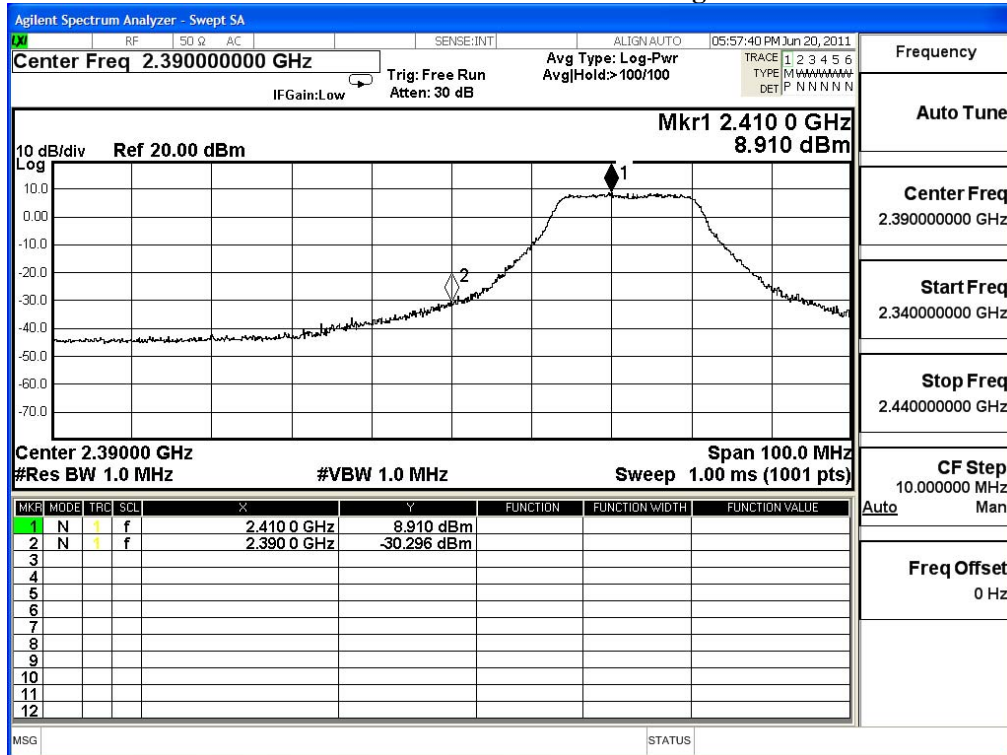
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

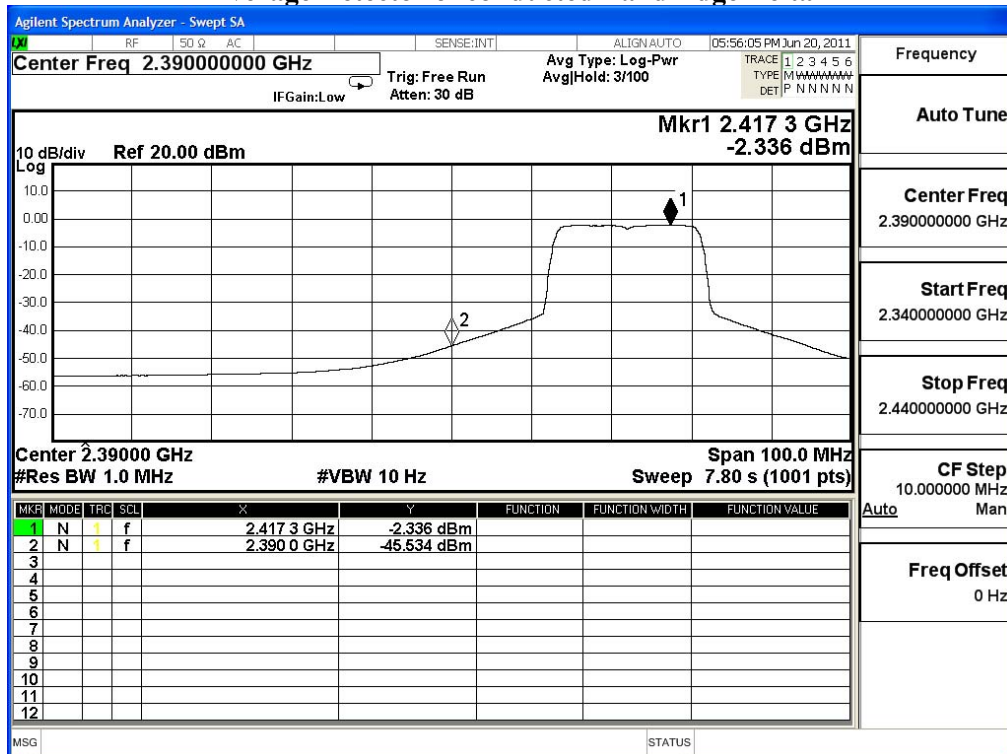
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



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

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2462	32.019	76.83	108.849	Peak
Horizontal	2462	32.019	65.4	97.419	Average
Vertical	2462	31.29	74.09	105.38	Peak
Vertical	2462	31.29	62.84	94.13	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)	Limit (dBuV/m)	Detector
Horizontal	2483.5	108.849	38.6	70.249	74.000	Peak
Horizontal	2483.5	97.419	44.13	53.289	54.000	Average
Vertical	2483.5	105.38	38.6	66.78	74.000	Peak
Vertical	2483.5	94.13	44.13	50	54.000	Average

Note:

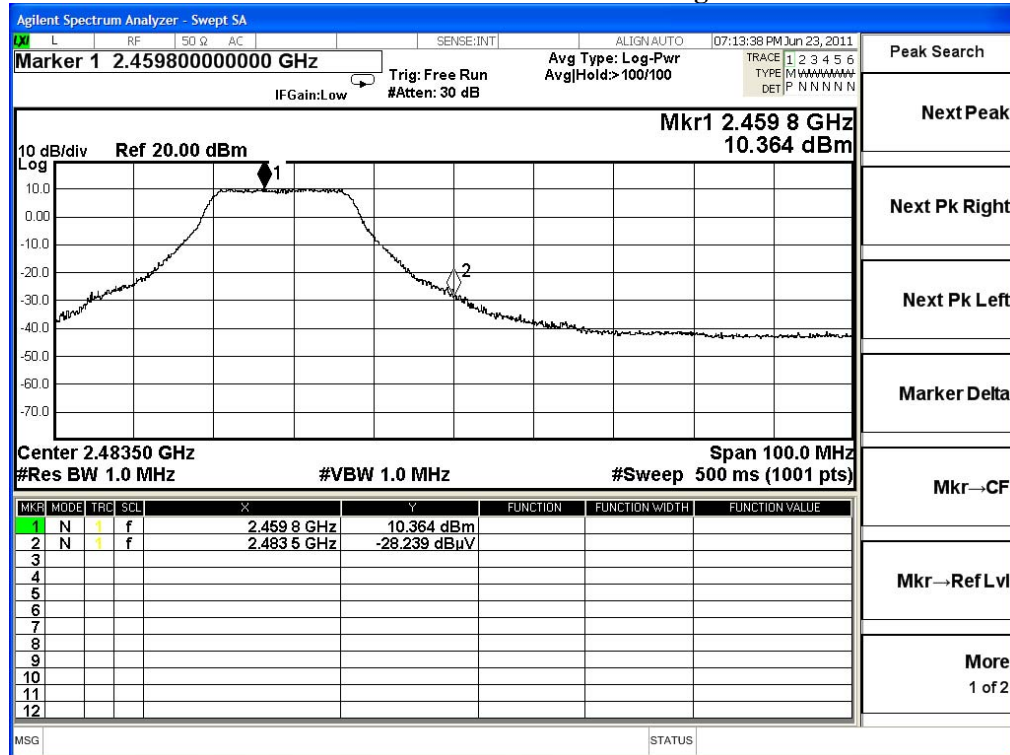
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

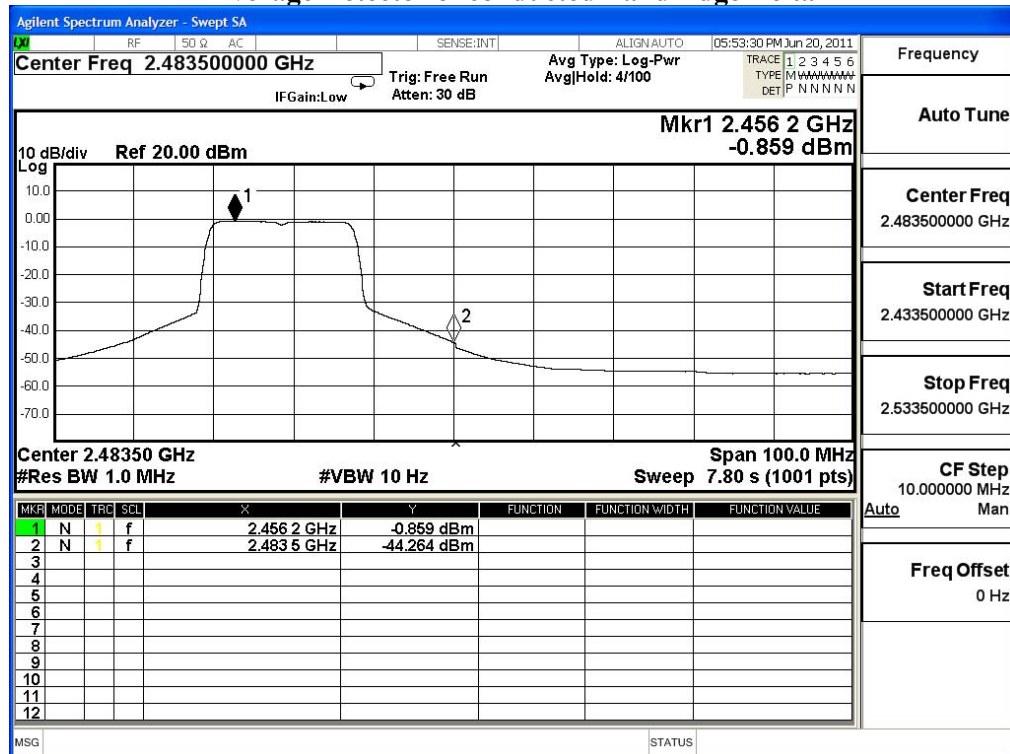
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Eee PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2422	31.715	68.6	100.315	Peak
Horizontal	2422	31.715	56.83	88.545	Average
Vertical	2422	31.017	67.62	98.637	Peak
Vertical	2422	31.017	55.68	86.697	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)	Limit (dBuV/m)	Detector
Horizontal	2389	100.315	31.58	68.735	74.000	Peak
Horizontal	2390	88.545	39.85	48.695	54.000	Average
Vertical	2389	98.637	31.58	67.057	74.000	Peak
Vertical	2390	86.697	39.85	46.847	54.000	Average

Note:

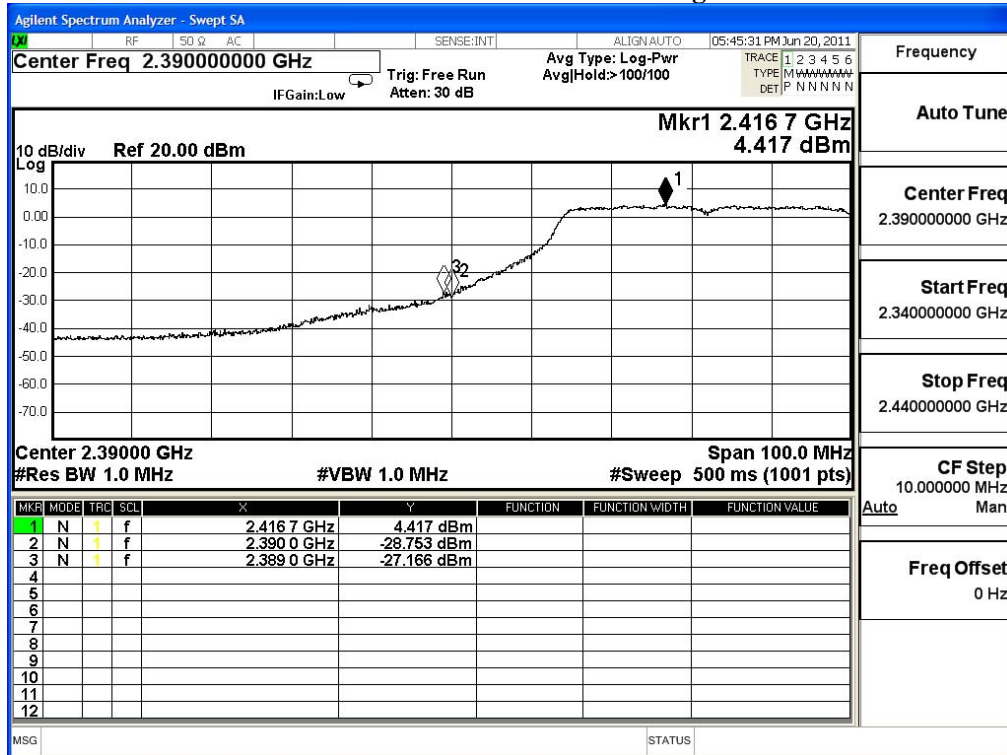
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

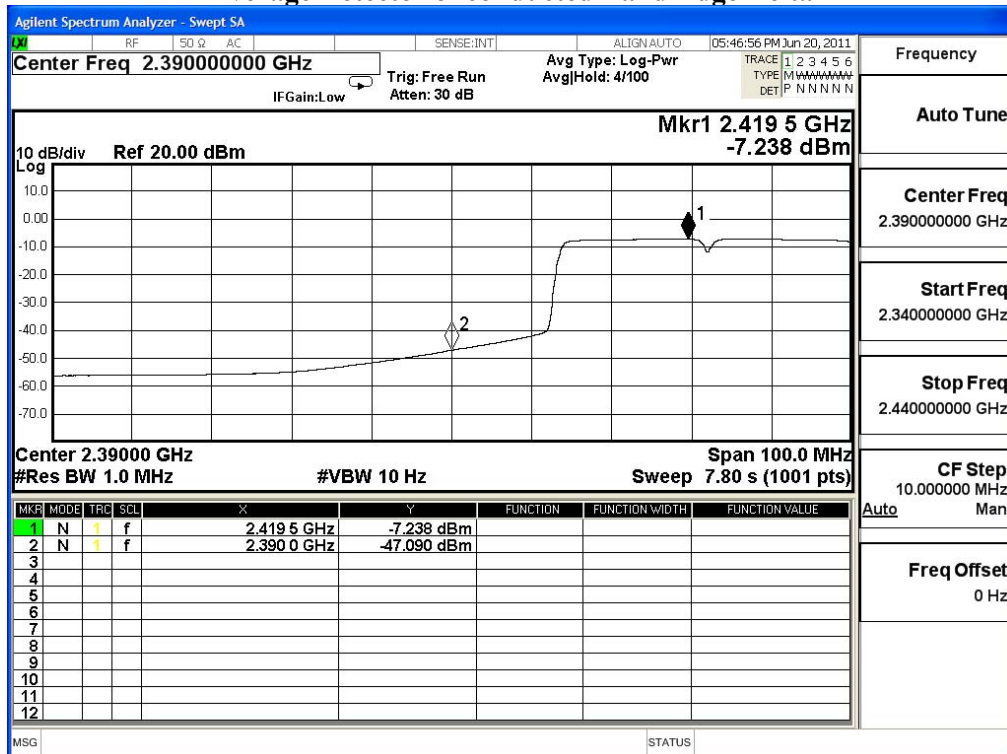
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Eee PC
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 4: Transmit (802.11n MCS0 15Mbps 40M-BW)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2452	31.944	70	101.944	Peak
Horizontal	2452	31.944	58.47	90.414	Average
Vertical	2452	31.222	67.29	98.512	Peak
Vertical	2452	31.222	55.93	87.152	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)	Limit (dBuV/m)	Detector
Horizontal	2483.9	101.944	33.58	68.364	74.000	Peak
Horizontal	2483.5	90.414	39.48	50.934	54.000	Average
Vertical	2483.9	98.512	33.58	64.932	74.000	Peak
Vertical	2483.5	87.152	39.48	47.672	54.000	Average

Note:

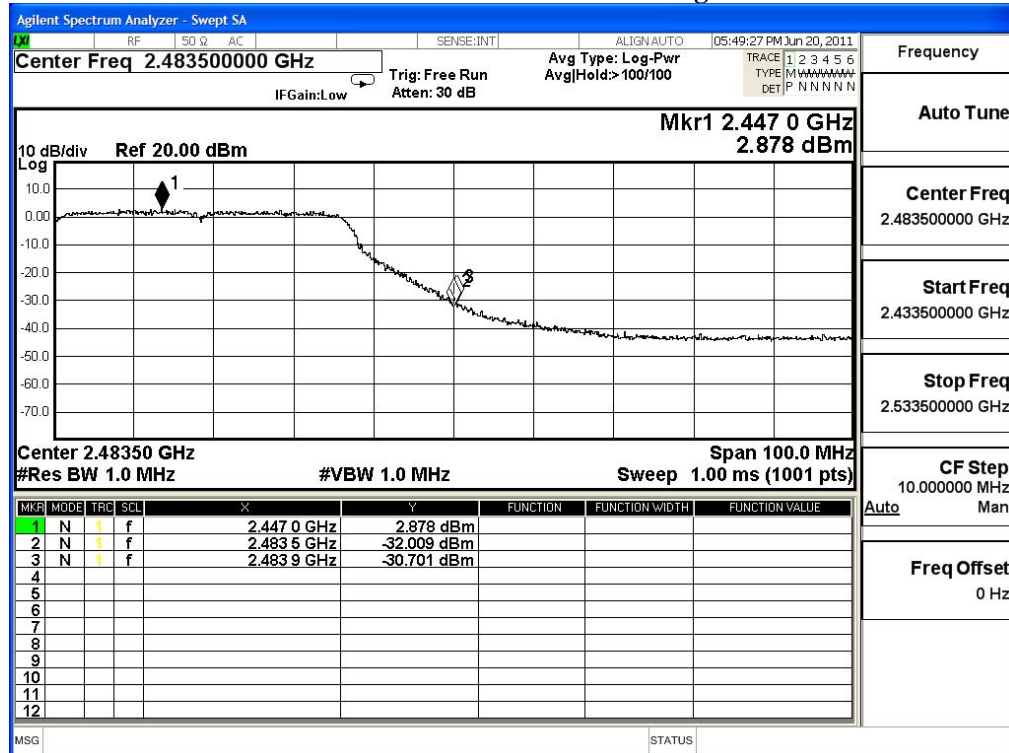
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

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

