



Test Report

Product Name	Eee PC
Model No	Eee PC 1025C, Eee PC 1025CE, Eee PC R052C, Eee PC R052CE
FCC ID.	MSQ-1025CNB037H

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

Date of Receipt	June 01, 2011
Issue Date	July 12, 2011
Report No.	116097R-RFUSP42V01
Report Version	V1.0

The test results relate only to the samples tested.

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Test Report Certification

Issue Date: July 12, 2011

Report No.: 116097R-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-1025CNB037H
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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Approved By : Vincent Lin
(Manager / Vincent Lin)

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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Eee PC
Trade Name	ASUS
Model No.	Eee PC 1025C, Eee PC 1025CE, Eee PC R052C, Eee PC R052CE
FCC ID.	MSQ-1025CNB037H
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: PI, M/N: AD82030 Input: AC 100-240V, 50-60Hz, 0.8A Output: DC 19V, 1.58A Cable Out: Non-Shielded, 2.4m, with one ferrite core bonded.
Contain Module	Atheros / AR5B195 (AW-NB037H)

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	Whayu	C660-520265-A (Main)	1.59dBi in 2.4 GHz
		C660-520271-A (Aux)	1.12dBi in 2.4 GHz
2	ACON	APP6P-700398 (Main)	1.63dBi in 2.4 GHz
		APP6P-700432 (Aux)	2.27dBi in 2.4 GHz
3	Whayu	C660-520290-A (Main)	1.59dBi in 2.4 GHz
		C660-520289-A (Aux)	1.12dBi in 2.4 GHz
4	ACON	APP6P-700545 (Main)	1.39dBi in 2.4 GHz
		APP6P-700546 (Aux)	1.56dBi 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 a Eee PC.
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.

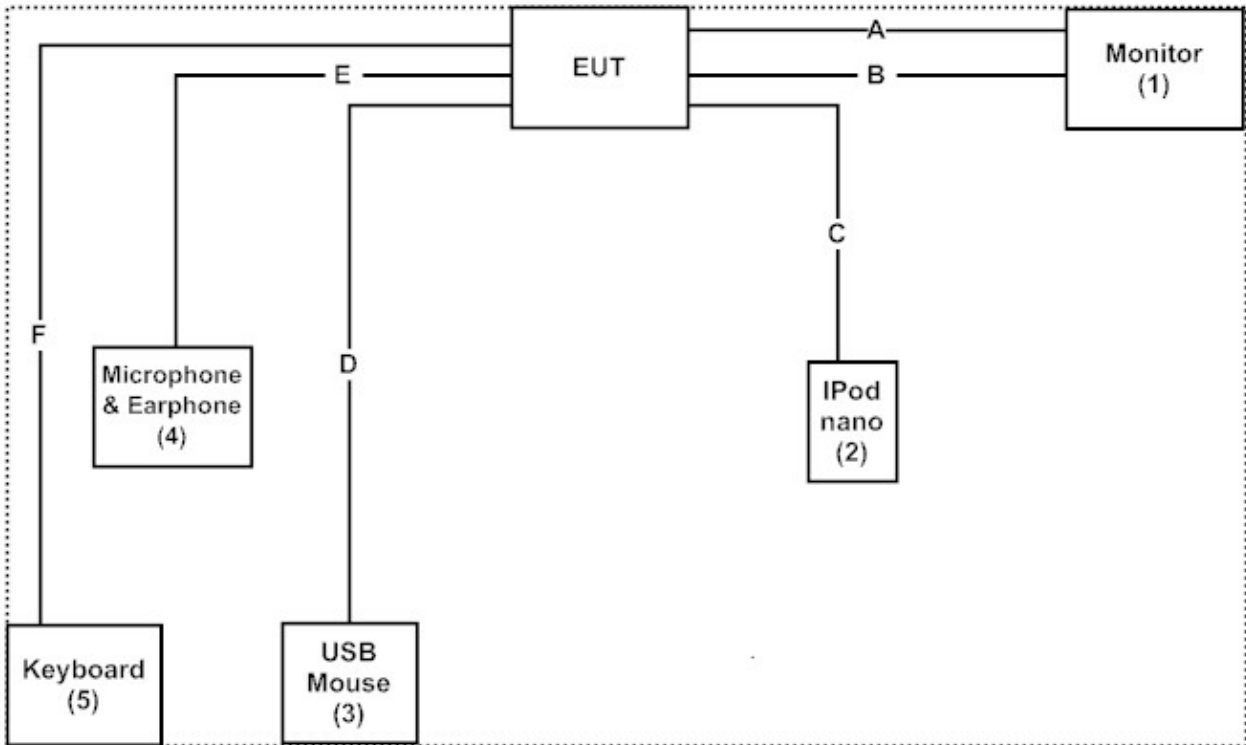
1.3. Tested System Details

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	907YHZK07303	DoC	Non-Shielded, 1.8m
2 iPod nano	Apple	A1236	7K818WQLY0P	N/A	N/A
3 USB Mouse	DELL	M056U0A	F0Y01YEC	DoC	N/A
4 Microphone & Earphone	Ergotech	ET-E201	N/A	N/A	N/A
5 Keyboard	IBM	KB-9930	0073445	DoC	N/A

	Signal Cable Type	Signal cable Description
A	HDMI Cable	Non-Shielded, 1.7m
B	VGA Cable	Shielded, 1.8m, with two ferrite cores bonded.
C	IPOD Cable	Shielded, 1.7m
D	Mouse Cable	Shielded, 1.8m
E	Microphone & Earphone Cable	Non-Shielded, 1.6m
F	Keyboard Cable	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 "ART.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:

<http://www.quietek.com/>

Site Description: File on
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 Registration Number: 92195



Accreditation on NVLAP
 NVLAP Lab Code: 200533-0



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FCC Accreditation Number: TW1014



2. Conducted Emission

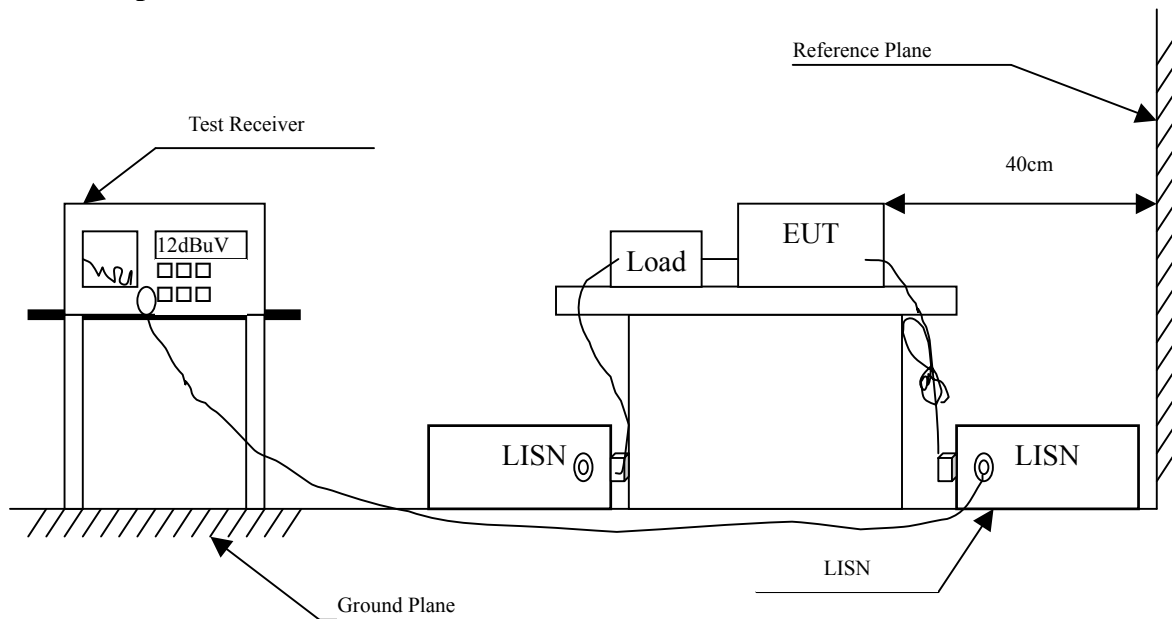
2.1. Test Equipment

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, 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					
0.181	9.724	41.410	51.134	-13.980	65.114
0.240	9.680	33.080	42.760	-20.669	63.429
0.302	9.650	32.410	42.060	-19.597	61.657
0.431	9.640	32.470	42.110	-15.861	57.971
0.771	9.648	29.000	38.648	-17.352	56.000
17.916	9.980	28.770	38.750	-21.250	60.000
Average					
0.181	9.724	24.540	34.264	-20.850	55.114
0.240	9.680	17.640	27.320	-26.109	53.429
0.302	9.650	18.210	27.860	-23.797	51.657
0.431	9.640	20.080	29.720	-18.251	47.971
0.771	9.648	12.010	21.658	-24.342	46.000
17.916	9.980	23.960	33.940	-16.060	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
Line 2					
Quasi-Peak					
0.185	9.727	41.210	50.938	-14.062	65.000
0.244	9.689	34.240	43.929	-19.385	63.314
0.306	9.660	33.200	42.860	-18.683	61.543
0.478	9.640	34.240	43.880	-12.749	56.629
0.994	9.670	29.840	39.510	-16.490	56.000
18.486	10.023	29.770	39.793	-20.207	60.000
Average					
0.185	9.727	26.400	36.128	-18.872	55.000
0.244	9.689	22.000	31.689	-21.625	53.314
0.306	9.660	20.360	30.020	-21.523	51.543
0.478	9.640	17.150	26.790	-19.839	46.629
0.994	9.670	16.160	25.830	-20.170	46.000
18.486	10.023	25.300	35.323	-14.677	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. 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 : 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			
		Measurement Level (dBm)						
01	2412	17.03	--	--	--	19.54	<30dBm	Pass
06	2437	18.59	18.54	18.52	18.50	19.76	<30dBm	Pass
11	2462	17.00	--	--	--	19.26	<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			
		Measurement Level (dBm)										
01	2412	13.25	--	--	--	--	--	--	--	22.49	<30dBm	Pass
06	2437	19.08	19.06	19.04	19.02	19.00	18.98	18.96	18.94	24.81	<30dBm	Pass
11	2462	12.80	--	--	--	--	--	--	--	22.12	<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			
		Measurement Level (dBm)										
01	2412	11.23	--	--	--	--	--	--	--	20.06	<30dBm	Pass
06	2437	18.89	18.87	18.85	18.84	18.83	18.81	18.8	18.79	24.56	<30dBm	Pass
11	2462	12.10	--	--	--	--	--	--	--	21.44	<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			
		Measurement Level (dBm)										
01	2422	10.03	--	--	--	--	--	--	--	19.39	<30dBm	Pass
04	2437	18.68	18.66	18.65	18.64	18.63	18.62	18.6	18.59	25.34	<30dBm	Pass
07	2452	11.58	--	--	--	--	--	--	--	21.14	<30dBm	Pass

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

4. Radiated Emission

4.1. Test Equipment

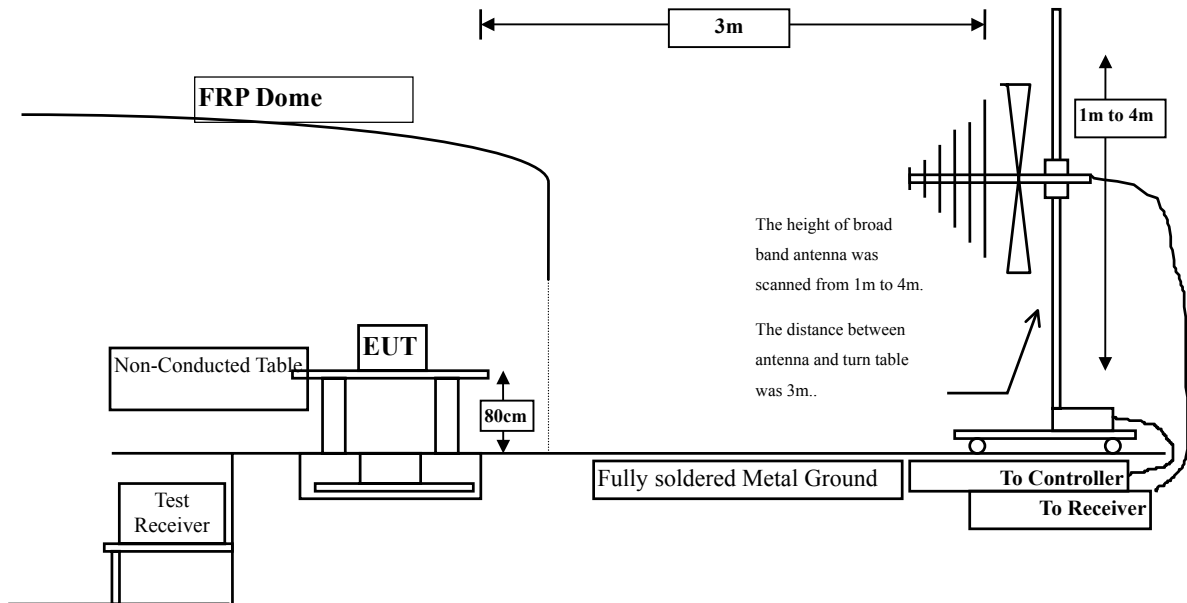
The following test equipment are used during the radiated emission test:

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., 2011
	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

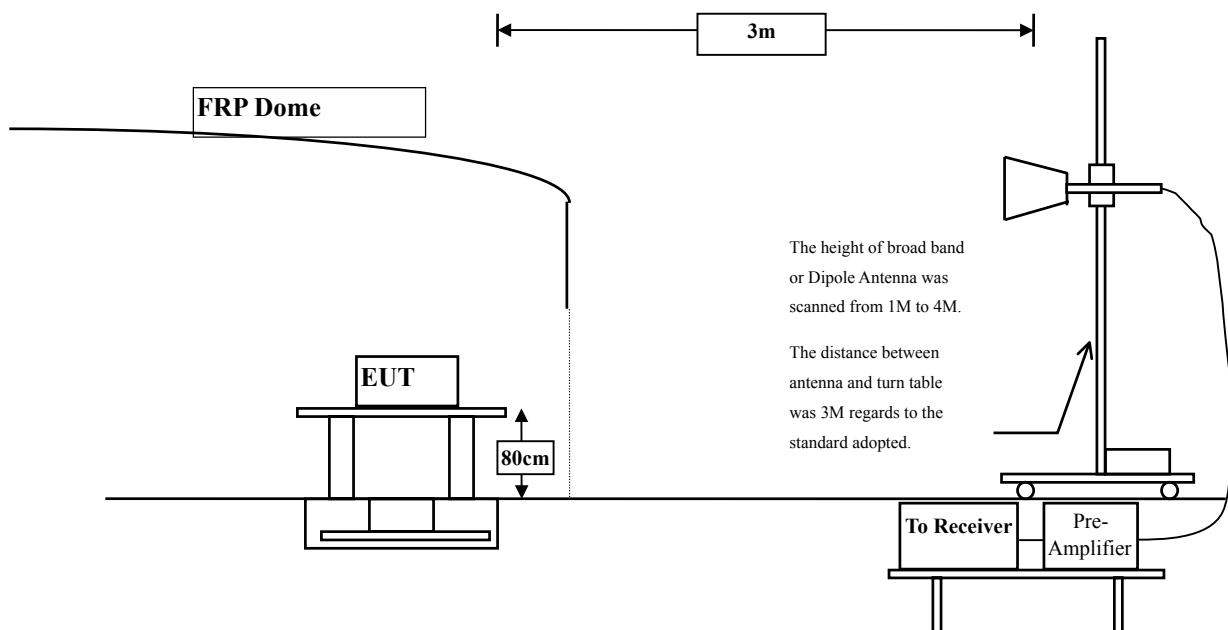
- Note:
1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
 2. The test instruments marked with "X" are used to measure the final test results.

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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	45.780	46.209	-27.791	74.000
7236.000	7.177	39.710	46.887	-27.113	74.000
9648.000	8.019	41.190	49.210	-24.790	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	45.960	46.797	-27.203	74.000
7236.000	7.676	38.790	46.466	-27.534	74.000
9648.000	8.556	42.140	50.697	-23.303	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	46.090	46.167	-27.833	74.000
7311.000	7.512	39.960	47.472	-26.528	74.000
9748.000	7.630	41.120	48.750	-25.250	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	0.532	46.170	46.702	-27.298	74.000
7311.000	8.089	40.590	48.679	-25.321	74.000
9748.000	8.266	41.450	49.717	-24.283	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	0.191	46.610	46.801	-27.199	74.000
7386.000	8.373	39.350	47.724	-26.276	74.000
9848.000	7.964	43.740	51.704	-22.296	74.000

Average Detector:

--

Vertical

Peak Detector:

4924.000	0.805	47.900	48.705	-25.295	74.000
7386.000	9.180	40.420	49.600	-24.400	74.000
9848.000	8.801	44.880	53.681	-20.319	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 : Eee 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	0.428	45.480	45.909	-28.091	74.000
7236.000	7.177	39.050	46.227	-27.773	74.000
9648.000	8.019	39.900	47.920	-26.080	74.000

Average Detector:

--

Vertical
Peak Detector:

4824.000	0.836	48.450	49.287	-24.713	74.000
7236.000	7.676	38.920	46.596	-27.404	74.000
9648.000	8.556	40.250	48.807	-25.193	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	55.770	55.847	-18.153	74.000
7311.000	7.512	41.190	48.702	-25.298	74.000
9748.000	7.630	49.040	56.670	-17.330	74.000
Average Detector:					
4874.000	0.076	38.560	38.637	-15.363	54.000
9748.000	7.630	33.260	40.890	-13.110	54.000
Peak Detector:					
4874.000	0.532	57.700	58.232	-15.768	74.000
7311.000	8.089	42.250	50.339	-23.661	74.000
9748.000	8.266	48.190	56.457	-17.543	74.000
Average Detector:					
4874.000	0.532	39.640	40.172	-13.828	54.000
9748.000	8.266	32.950	41.217	-12.783	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 : Eee 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:					
4924.000	0.191	47.170	47.361	-26.639	74.000
7386.000	8.373	38.130	46.504	-27.496	74.000
9848.000	7.964	41.920	49.884	-24.116	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4924.000	0.805	49.890	50.695	-23.305	74.000
7386.000	9.180	38.460	47.640	-26.360	74.000
9848.000	8.801	40.510	49.311	-24.689	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	0.428	43.510	43.939	-30.061	74.000
7326.000	7.824	39.290	47.113	-26.887	74.000
9648.000	8.019	39.800	47.820	-26.180	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	0.836	46.980	47.817	-26.183	74.000
7236.000	7.676	38.670	46.346	-27.654	74.000
9648.000	8.556	39.490	48.047	-25.953	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	55.390	55.467	-18.533	74.000
7311.000	7.512	40.820	48.332	-25.668	74.000
9748.000	7.630	47.820	55.450	-18.550	74.000
Average Detector:					
4874.000	0.076	37.030	37.107	-16.893	54.000
9748.000	7.630	32.270	39.900	-14.100	54.000
Vertical					
Peak Detector:					
4874.000	0.532	56.710	57.242	-16.758	74.000
7311.000	8.089	42.080	50.169	-23.831	74.000
9748.000	8.266	47.820	56.087	-17.913	74.000
Average Detector:					
4874.000	0.532	37.640	38.172	-15.828	54.000
9748.000	8.266	32.140	40.407	-13.593	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 : 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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
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Horizontal
Peak Detector:

4924.000	0.191	44.870	45.061	-28.939	74.000
7386.000	8.373	37.620	45.994	-28.006	74.000
9848.000	7.964	39.450	47.414	-26.586	74.000

Average Detector:

--

Vertical
Peak Detector:

4924.000	0.805	47.730	48.535	-25.465	74.000
7386.000	9.180	37.930	47.110	-26.890	74.000
9848.000	8.801	39.690	48.491	-25.509	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
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Horizontal

Peak Detector:

4844.000	0.280	44.520	44.801	-29.199	74.000
7266.000	7.106	38.830	45.936	-28.064	74.000
9688.000	7.663	39.430	47.093	-26.907	74.000

Average Detector:

--

Vertical

Peak Detector:

4844.000	0.707	46.510	47.218	-26.782	74.000
7266.000	7.626	39.200	46.826	-27.174	74.000
9688.000	8.284	39.210	47.494	-26.506	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	0.076	48.750	48.827	-25.173	74.000
7311.000	7.512	38.600	46.112	-27.888	74.000
9748.000	7.630	43.450	51.080	-22.920	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	0.532	50.660	51.192	-22.808	74.000
7311.000	8.089	38.870	46.959	-27.041	74.000
9748.000	8.266	43.500	51.767	-22.233	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector:					
4904.000	0.000	45.660	45.661	-28.339	74.000
7356.000	8.308	37.950	46.258	-27.742	74.000
9808.000	7.850	39.110	46.960	-27.040	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4904.000	0.513	48.060	48.574	-25.426	74.000
7356.000	9.022	38.340	47.362	-26.638	74.000
9808.000	8.512	38.740	47.252	-26.748	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					
37.275	0.925	34.971	35.896	-4.104	40.000
240.975	-9.265	49.118	39.853	-6.147	46.000
299.175	-8.440	48.354	39.914	-6.086	46.000
347.675	-5.120	46.566	41.446	-4.554	46.000
531.975	0.680	40.070	40.750	-5.250	46.000
694.450	2.850	35.903	38.753	-7.247	46.000
Vertical					
37.275	-8.095	43.710	35.615	-4.385	40.000
100.325	-5.940	44.185	38.245	-5.255	43.500
240.975	-3.480	44.885	41.405	-4.595	46.000
335.550	-7.060	44.643	37.583	-8.417	46.000
694.450	1.080	38.708	39.788	-6.212	46.000
898.150	5.290	32.280	37.570	-8.430	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
37.275	0.925	34.772	35.697	-4.303	40.000
240.975	-9.265	49.170	39.905	-6.095	46.000
347.675	-5.120	44.426	39.306	-6.694	46.000
398.600	-1.670	39.900	38.230	-7.770	46.000
694.450	2.850	31.029	33.879	-12.121	46.000
898.150	4.180	32.447	36.627	-9.373	46.000
Vertical					
34.850	-7.050	42.770	35.720	-4.280	40.000
97.900	-6.570	45.182	38.612	-4.888	43.500
240.975	-3.480	45.448	41.968	-4.032	46.000
335.550	-7.060	44.656	37.596	-8.404	46.000
694.450	1.080	38.770	39.850	-6.150	46.000
898.150	5.290	30.217	35.507	-10.493	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
37.275	0.925	34.180	35.105	-4.895	40.000
240.975	-9.265	49.382	40.117	-5.883	46.000
335.550	-5.960	47.153	41.193	-4.807	46.000
507.725	-0.485	36.523	36.038	-9.962	46.000
694.450	2.850	35.615	38.465	-7.535	46.000
898.150	4.180	32.079	36.259	-9.741	46.000
Vertical					
34.850	-7.050	42.599	35.549	-4.451	40.000
97.900	-6.570	44.477	37.907	-5.593	43.500
240.975	-3.480	44.967	41.487	-4.513	46.000
415.575	-2.315	38.197	35.882	-10.118	46.000
694.450	1.080	37.092	38.172	-7.828	46.000
898.150	5.290	30.527	35.817	-10.183	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 MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
37.275	0.925	34.835	35.760	-4.240	40.000
231.275	-10.030	49.706	39.676	-6.324	46.000
299.175	-8.440	47.975	39.535	-6.465	46.000
335.550	-5.960	47.510	41.550	-4.450	46.000
694.450	2.850	36.074	38.924	-7.076	46.000
898.150	4.180	32.931	37.111	-8.889	46.000
Vertical					
34.850	-7.050	42.823	35.773	-4.227	40.000
97.900	-6.570	44.016	37.446	-6.054	43.500
240.975	-3.480	44.803	41.323	-4.677	46.000
335.550	-7.060	44.824	37.764	-8.236	46.000
694.450	1.080	37.726	38.806	-7.194	46.000
898.150	5.290	30.155	35.445	-10.555	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

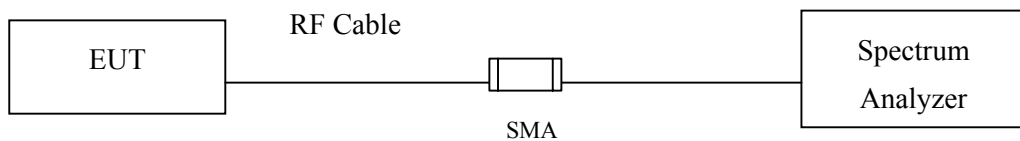
5.1. Test Equipment

	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
	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

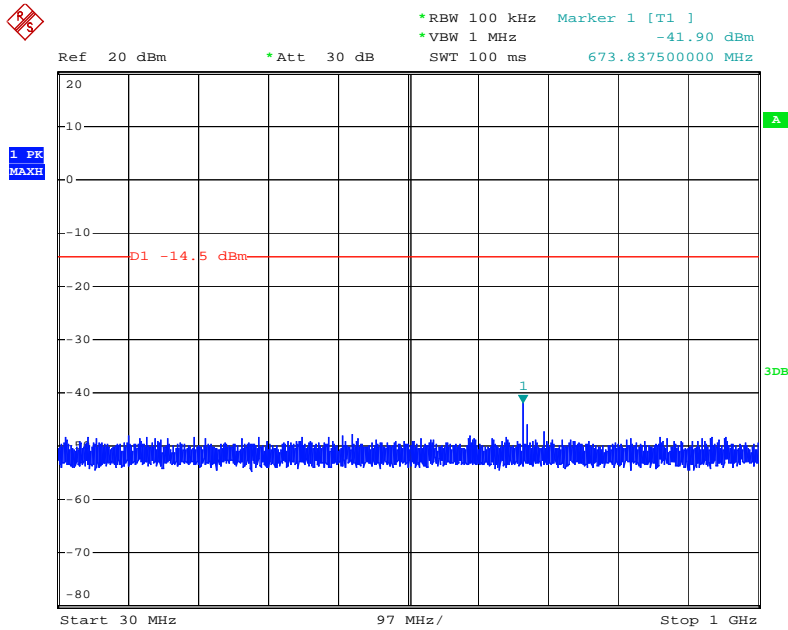
The measurement uncertainty

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

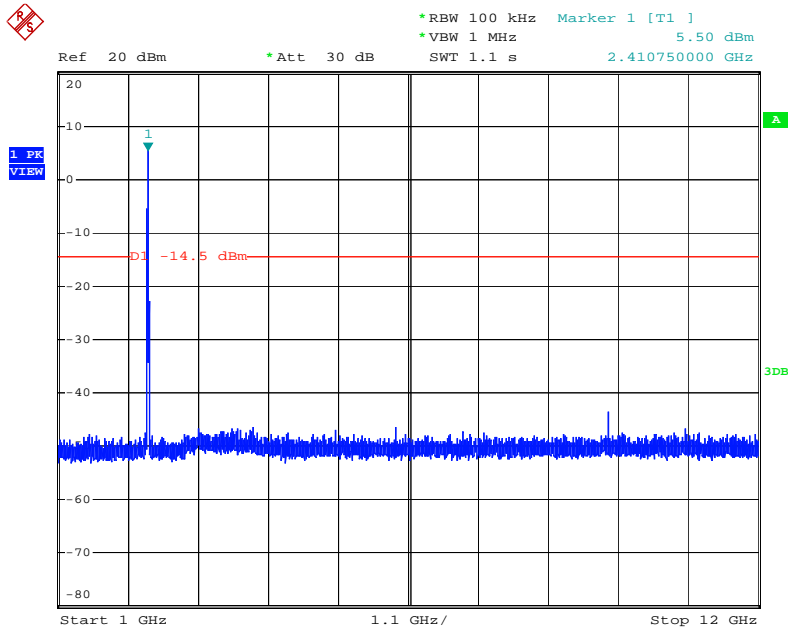
5.6. Test Result of RF antenna conducted test

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

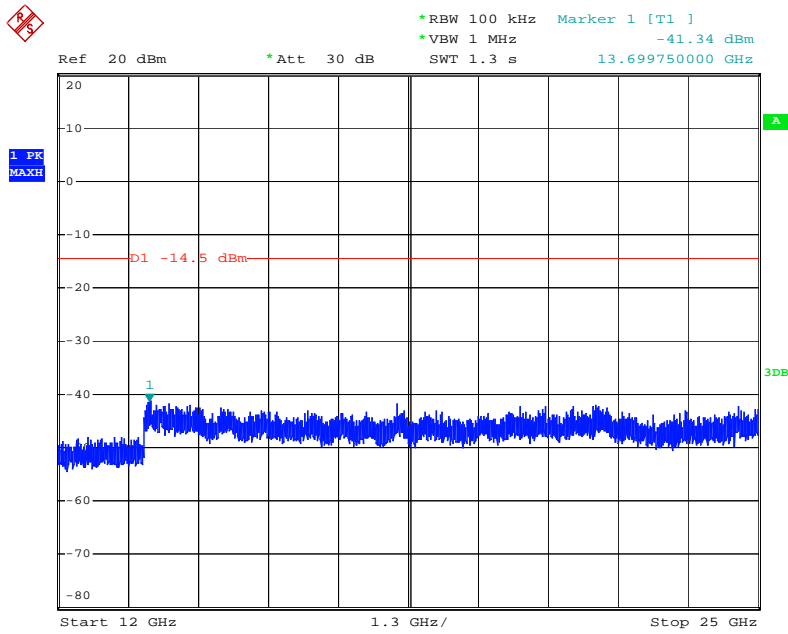
Channel 01 (2412MHz)



Date: 6.JUL.2011 19:23:11

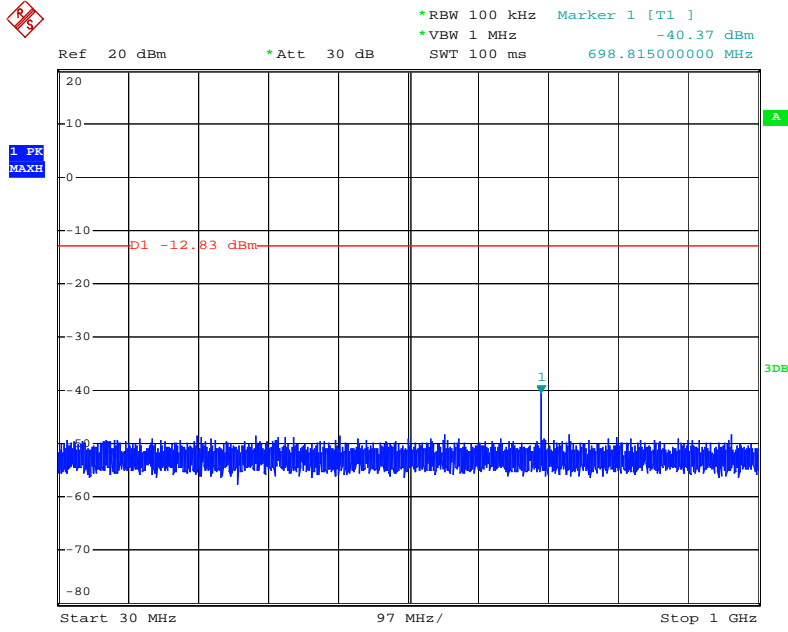


Date: 6.JUL.2011 19:22:30

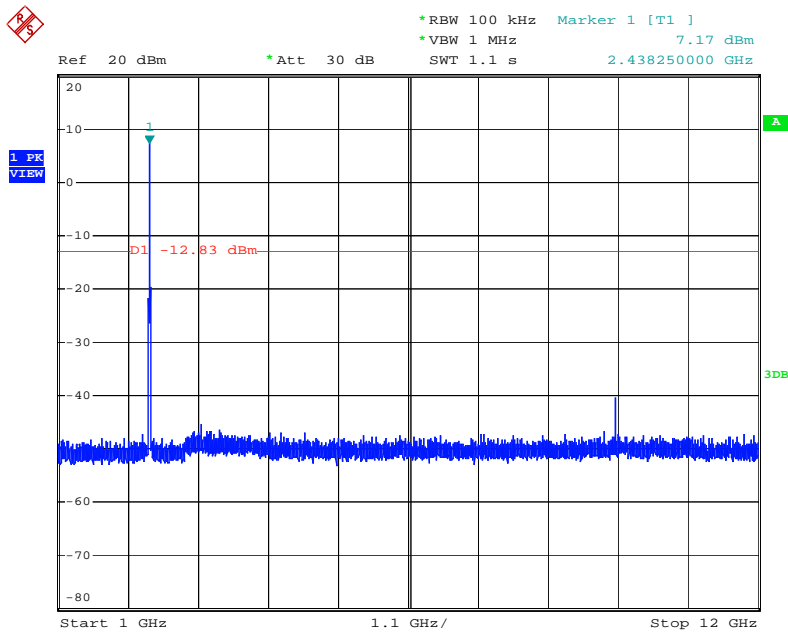


Date: 6.JUL.2011 19:23:33

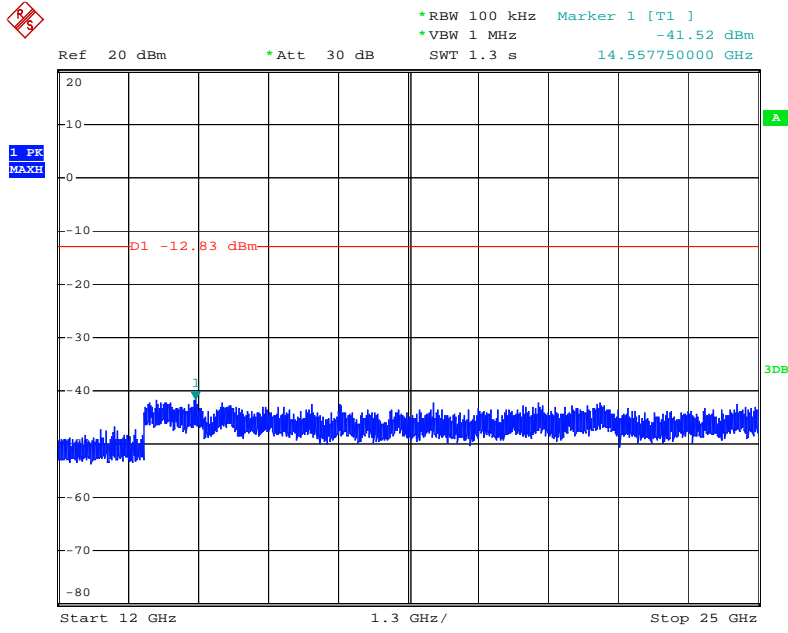
Channel 06 (2437MHz)



Date: 6.JUL.2011 19:25:20

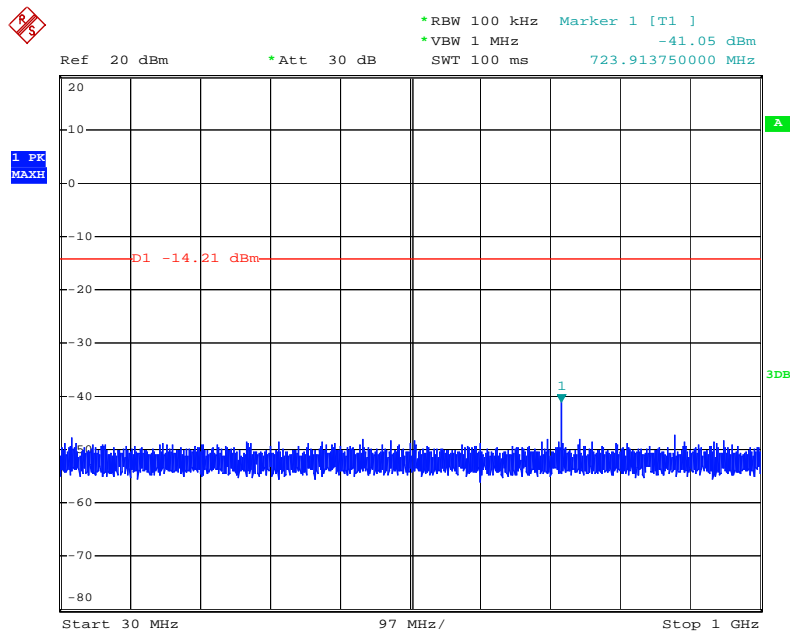


Date: 6.JUL.2011 19:24:51

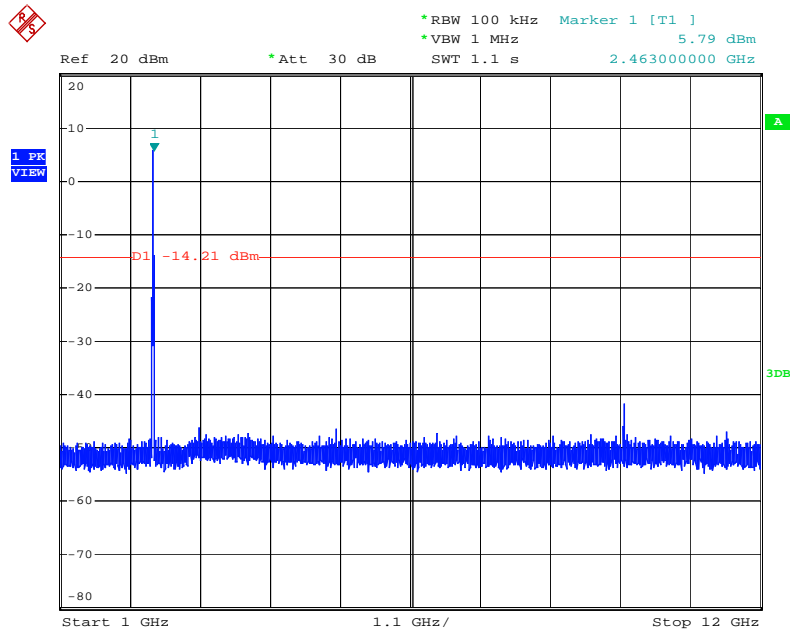


Date: 6.JUL.2011 19:25:39

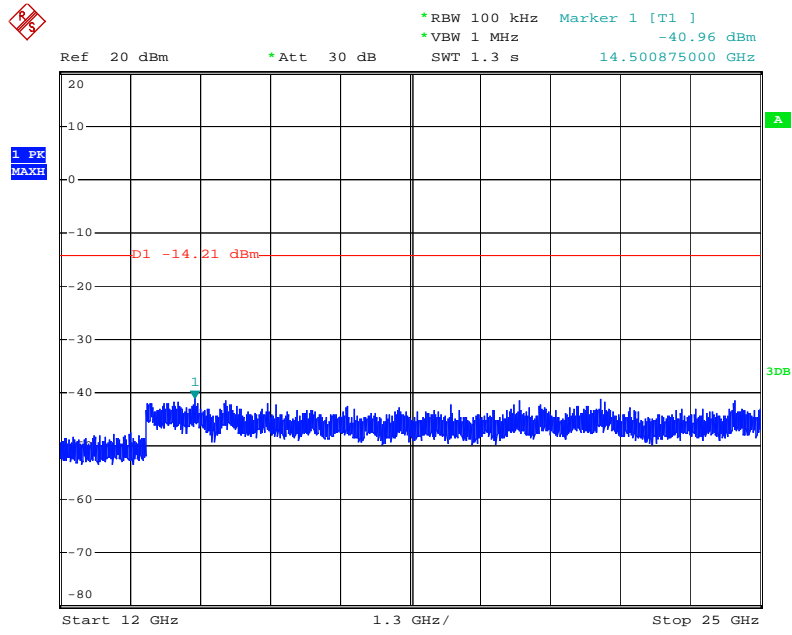
Channel 11 (2462MHz)



Date: 6.JUL.2011 19:26:48



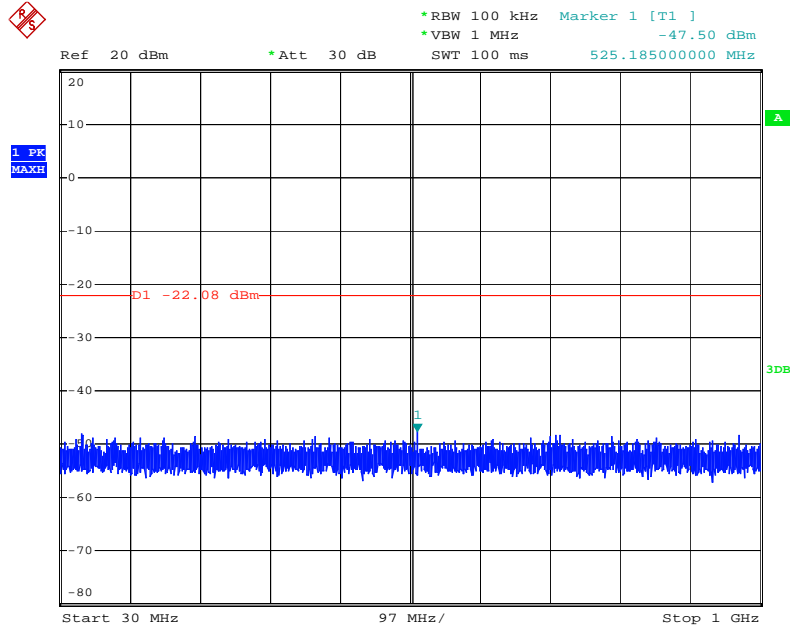
Date: 6.JUL.2011 19:26:25



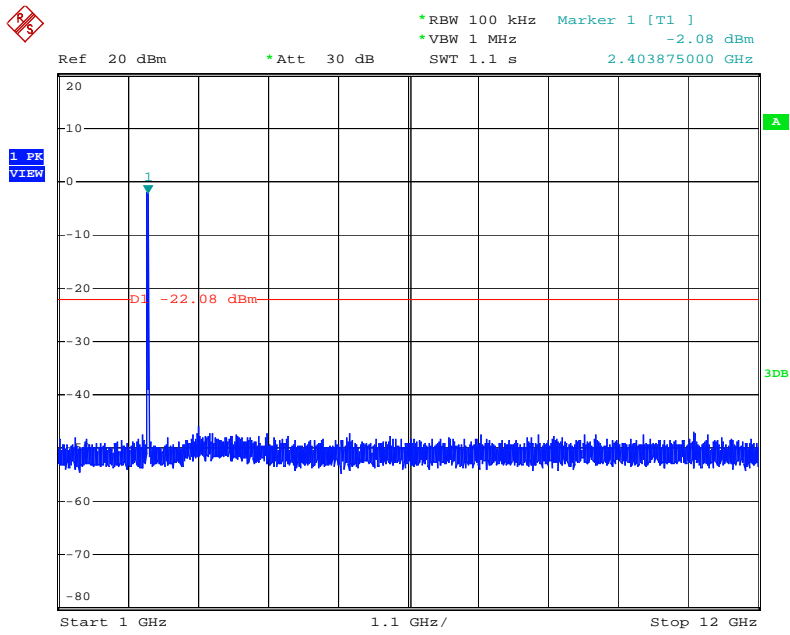
Date: 6.JUL.2011 19:27:14

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

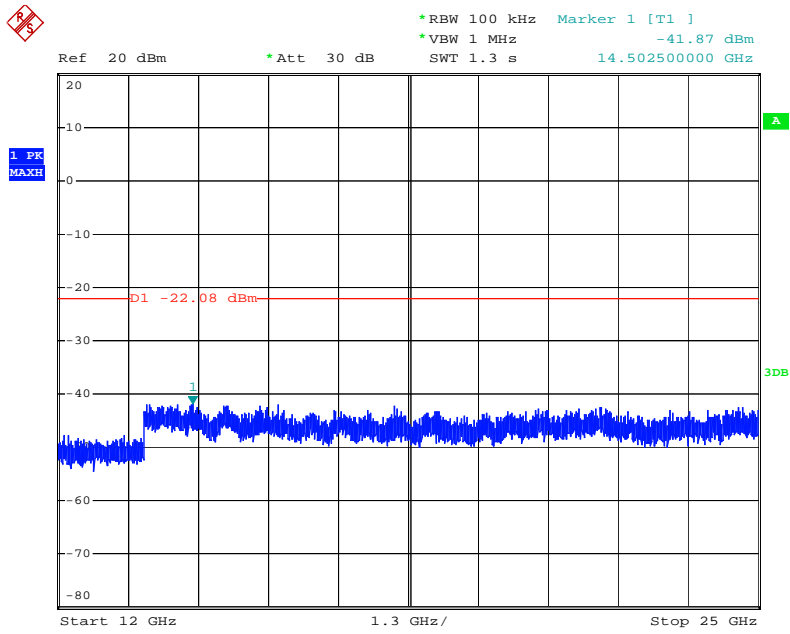
Channel 01 (2412MHz)



Date: 6.JUL.2011 19:29:18

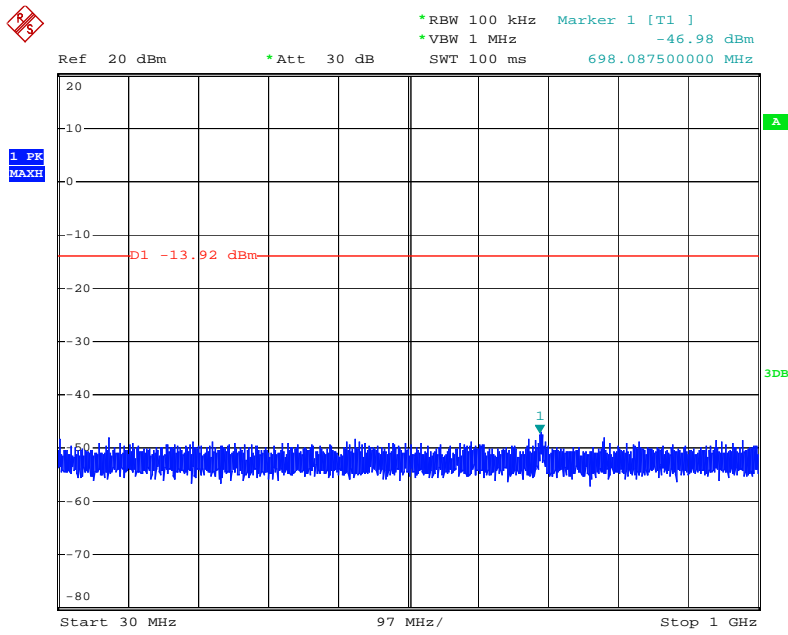


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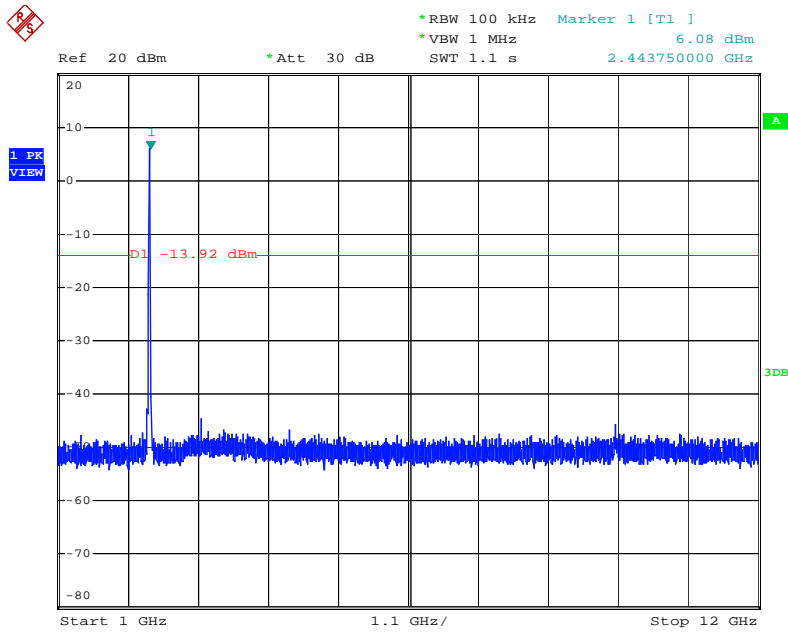


Date: 6.JUL.2011 19:29:35

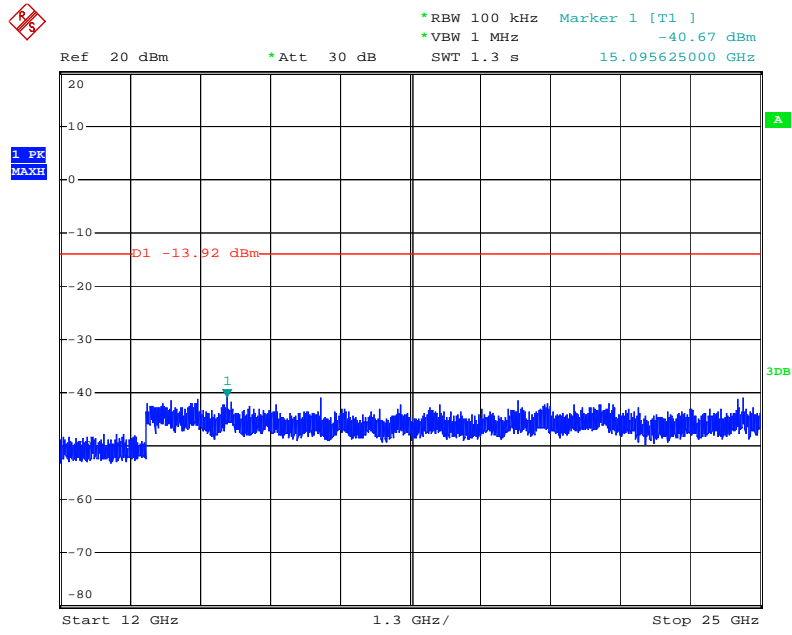
Channel 06 (2437MHz)



Date: 6.JUL.2011 19:31:38

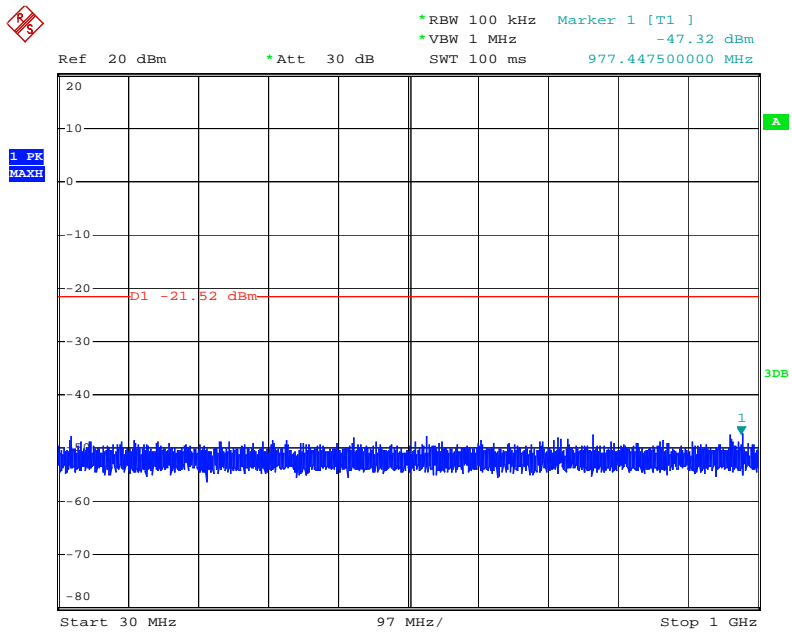


Date: 6.JUL.2011 19:31:11

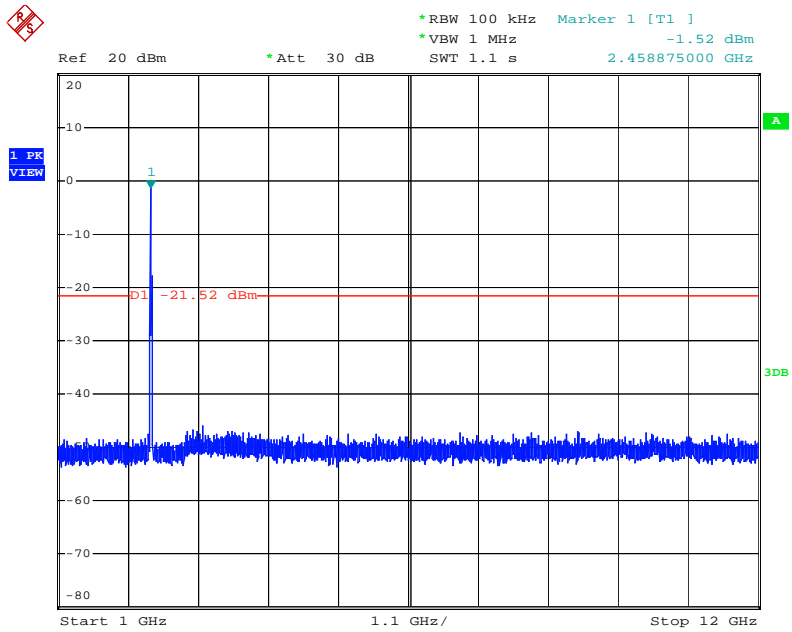


Date: 6.JUL.2011 19:32:00

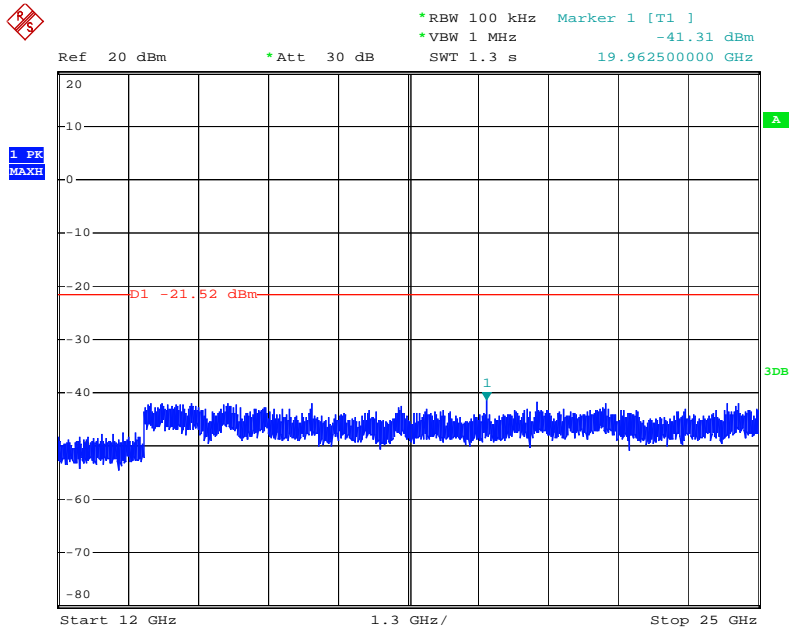
Channel 11 (2462MHz)



Date: 6.JUL.2011 19:33:17



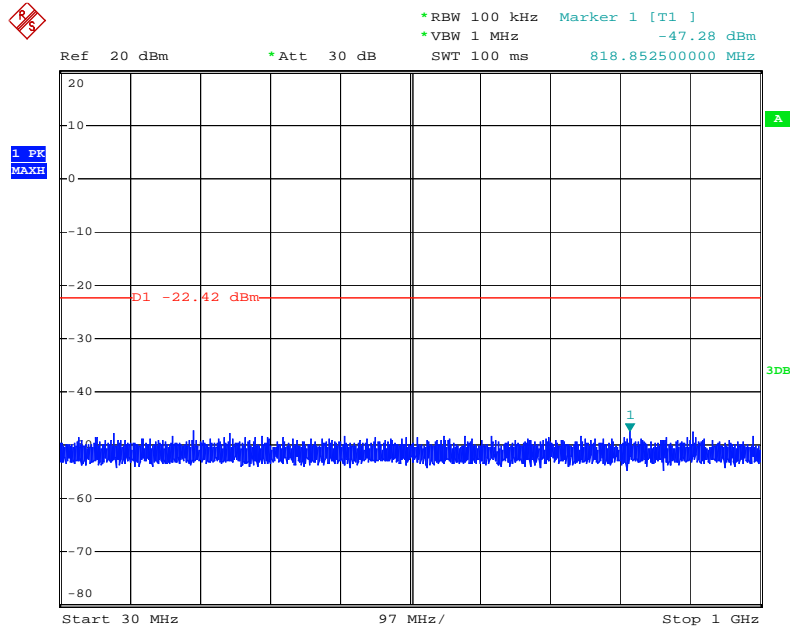
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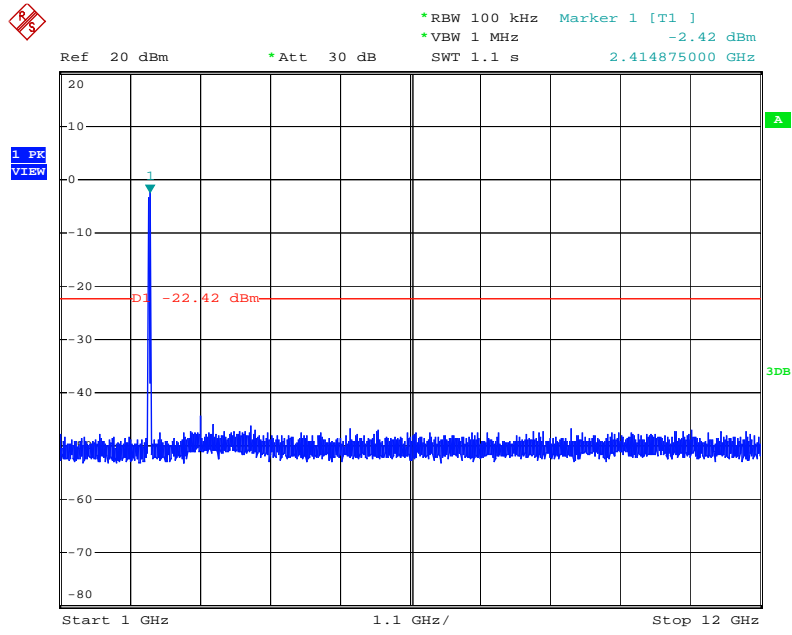
Date: 6.JUL.2011 19:33:31

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)

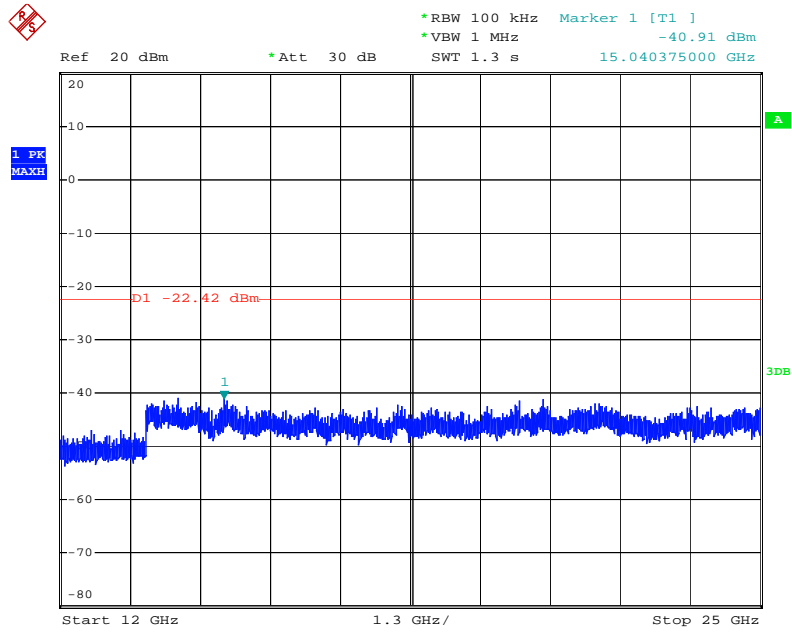
Channel 01 (2412MHz)



Date: 6.JUL.2011 19:35:43

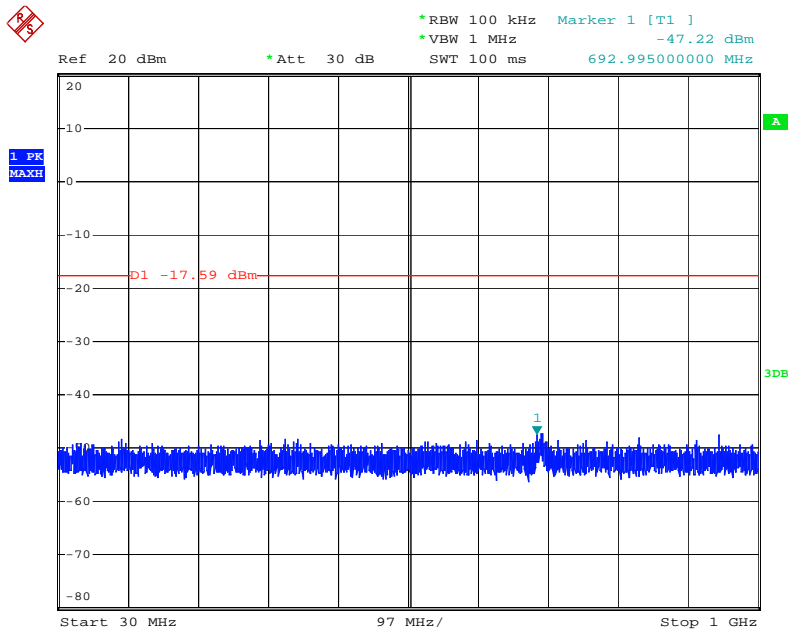


Date: 6.JUL.2011 19:35:10

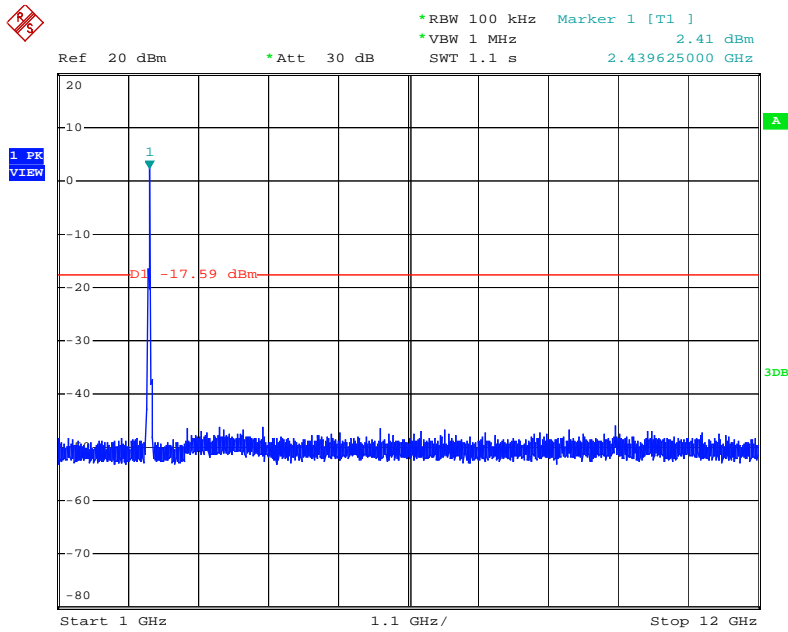


Date: 6.JUL.2011 19:36:05

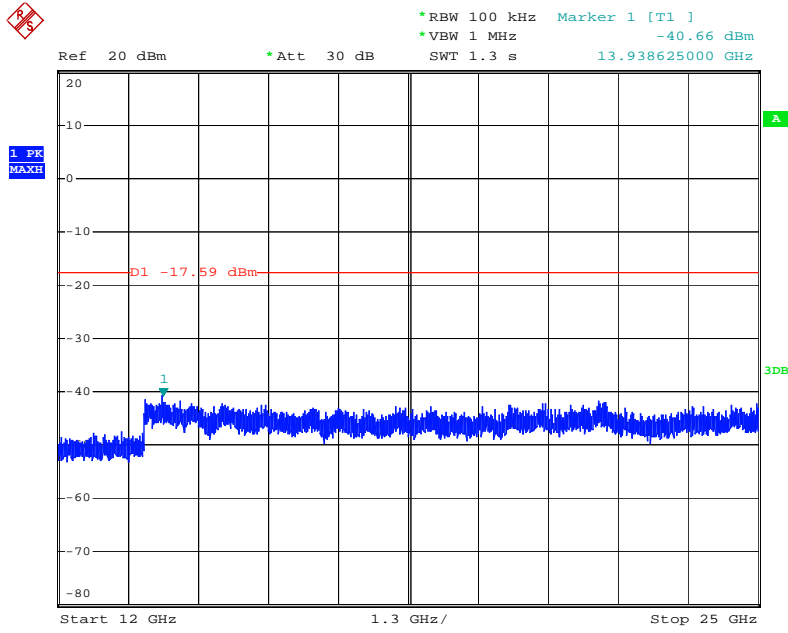
Channel 06 (2437MHz)



Date: 6.JUL.2011 19:38:02

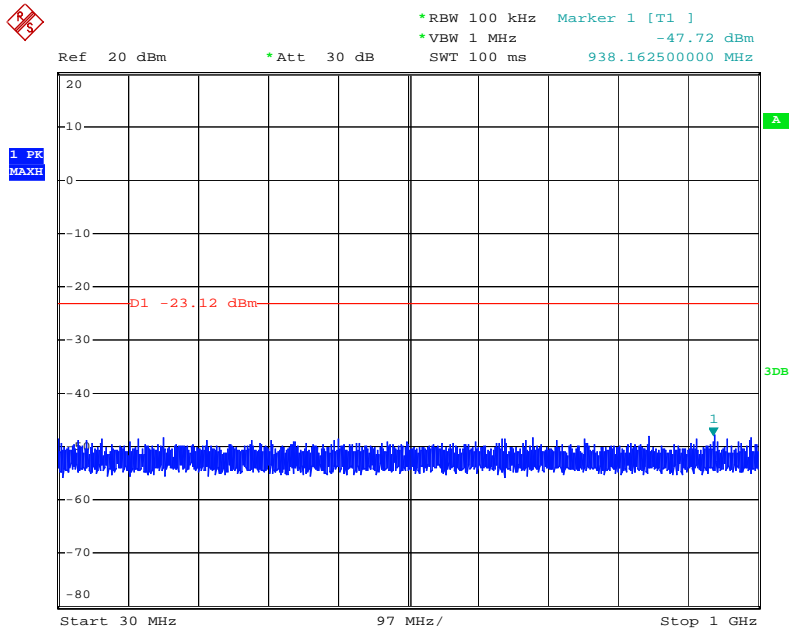


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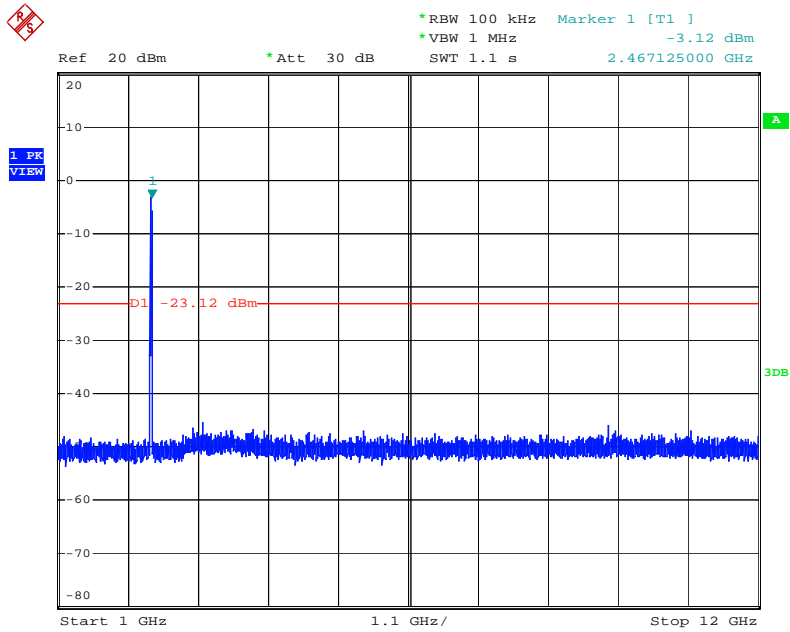


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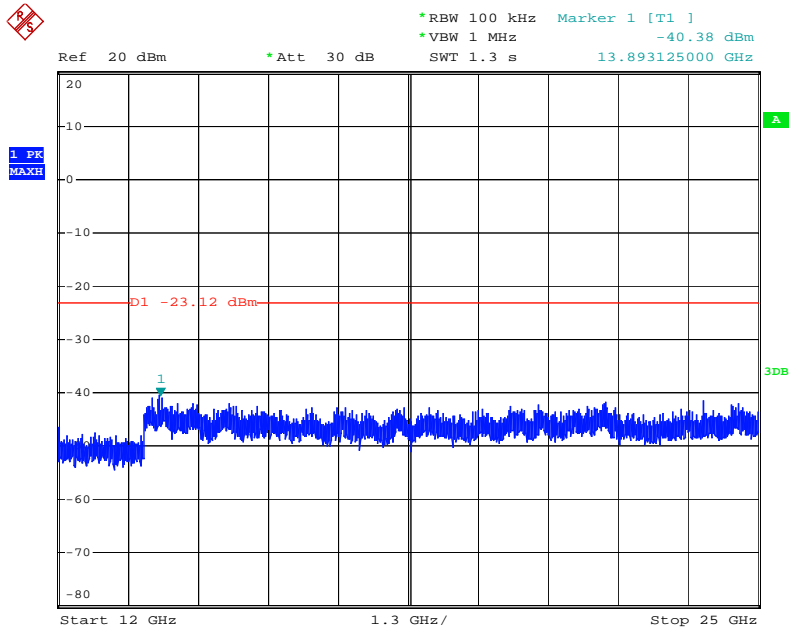
Channel 11 (2462MHz)



Date: 6.JUL.2011 19:40:01



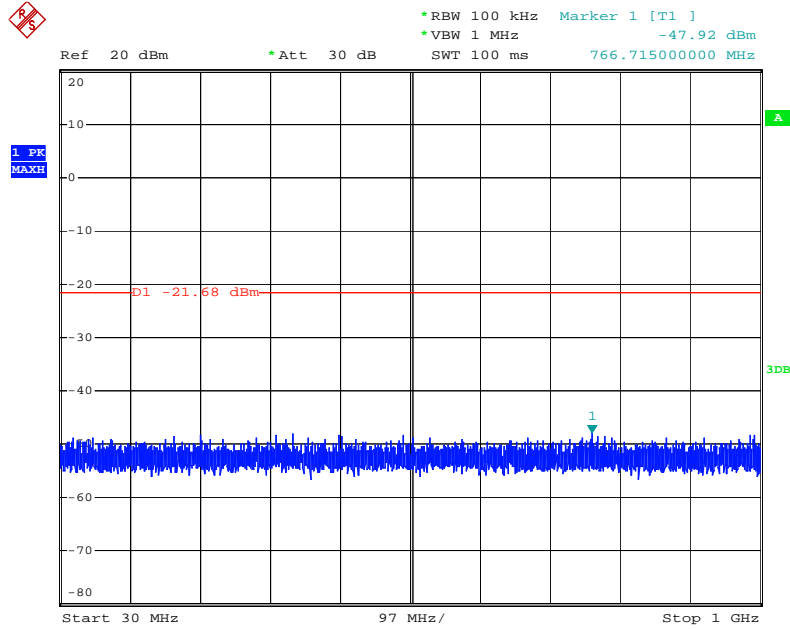
Date: 6.JUL.2011 19:39:36



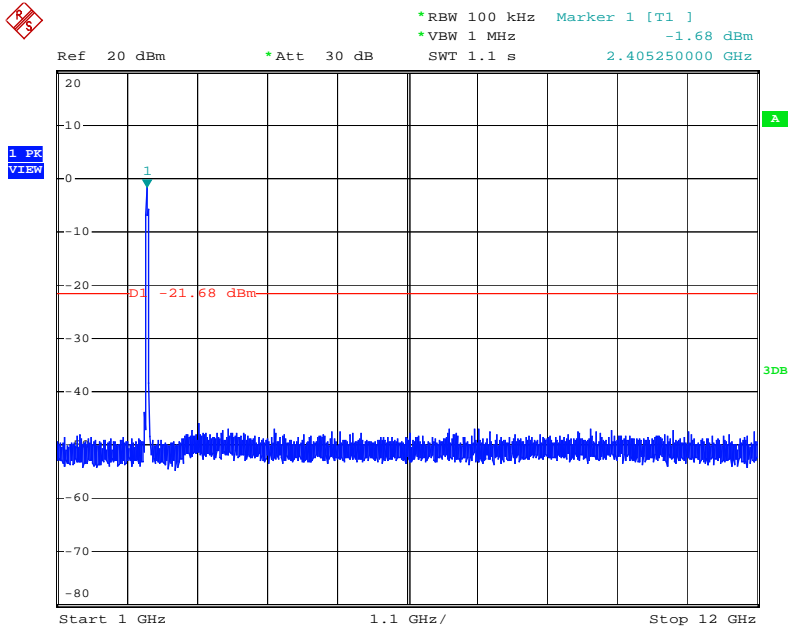
Date: 6.JUL.2011 19:40:17

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)

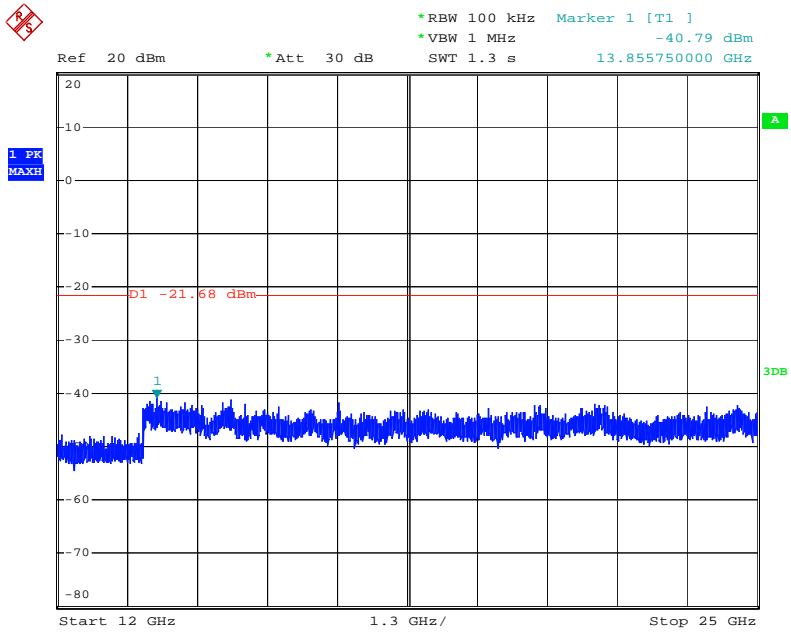
Channel 01 (2422MHz)



Date: 6.JUL.2011 19:42:02

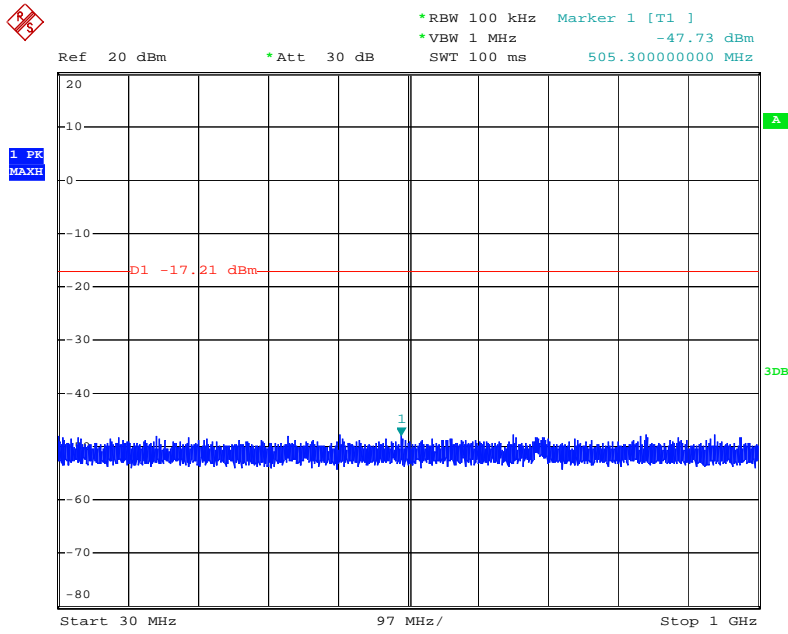


Date: 6.JUL.2011 19:41:35

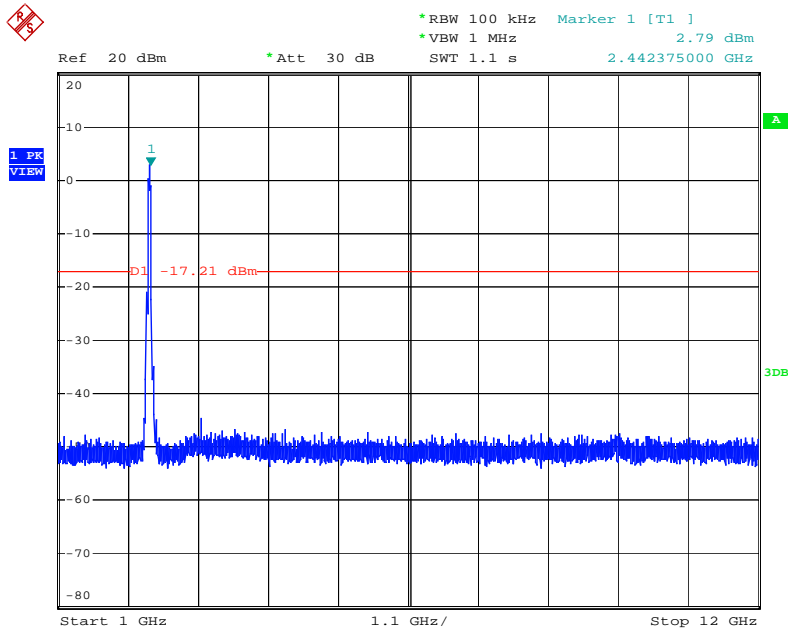


Date: 6.JUL.2011 19:42:18

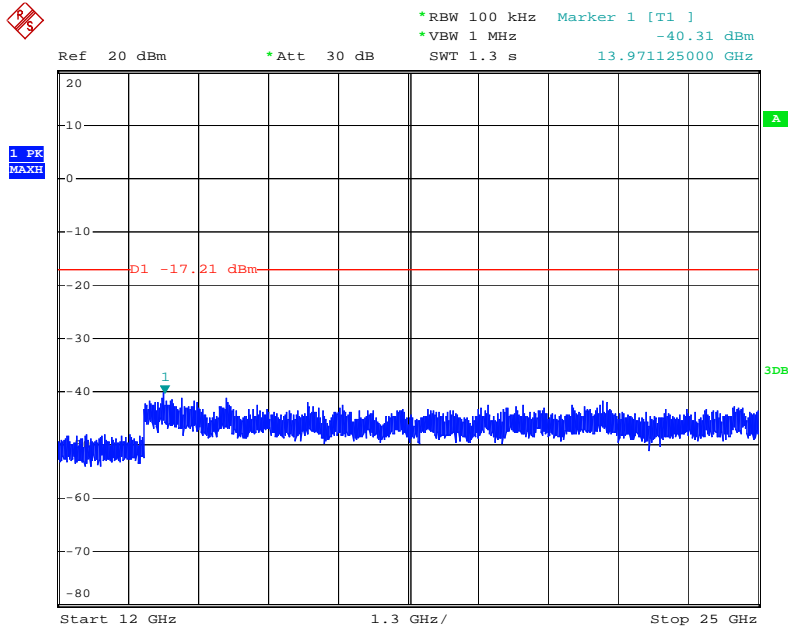
Channel 04 (2437MHz)



Date: 6.JUL.2011 19:44:31

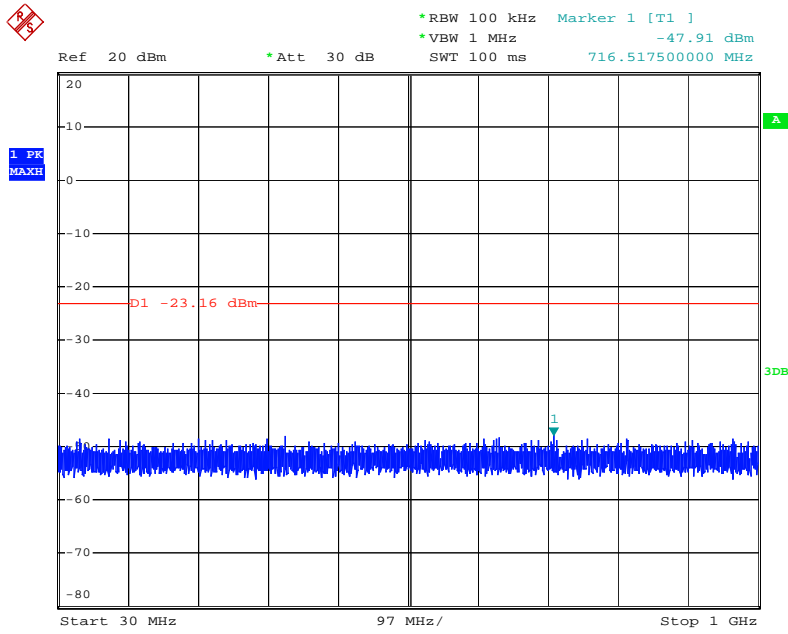


Date: 6.JUL.2011 19:43:17

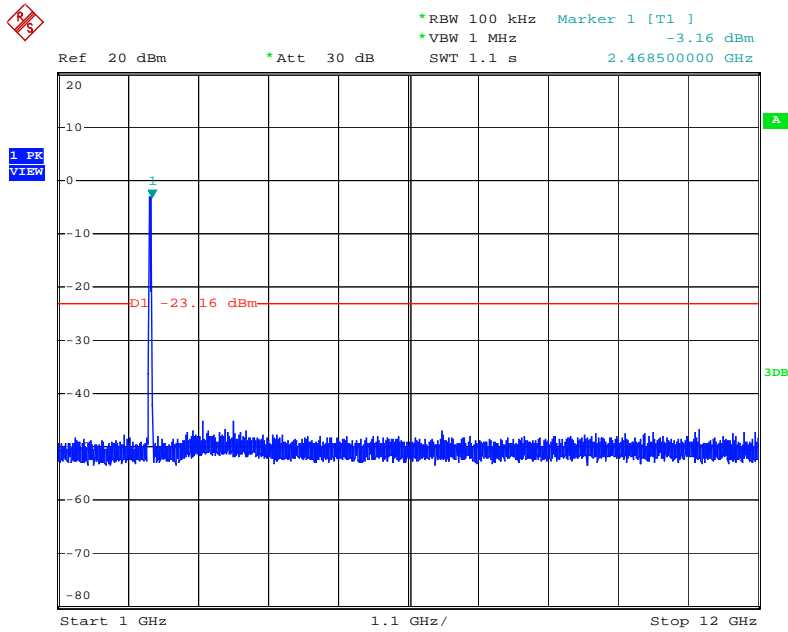


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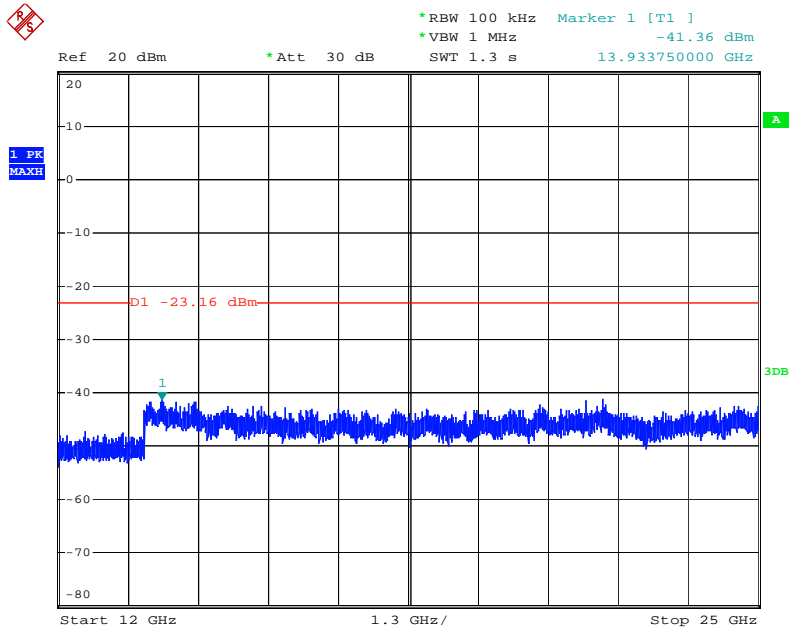
Channel 07 (2452MHz)



Date: 6.JUL.2011 19:46:03



Date: 6.JUL.2011 19:45:36



Date: 6.JUL.2011 19:46:26

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
	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:

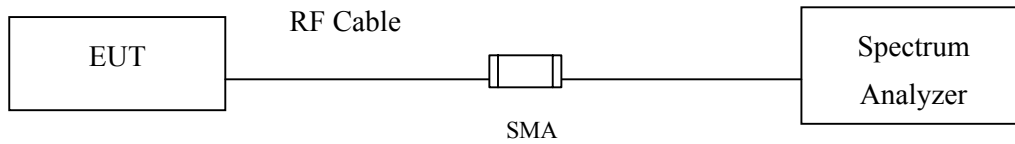
The following test equipments are used during the band edge tests:

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., 2011
	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

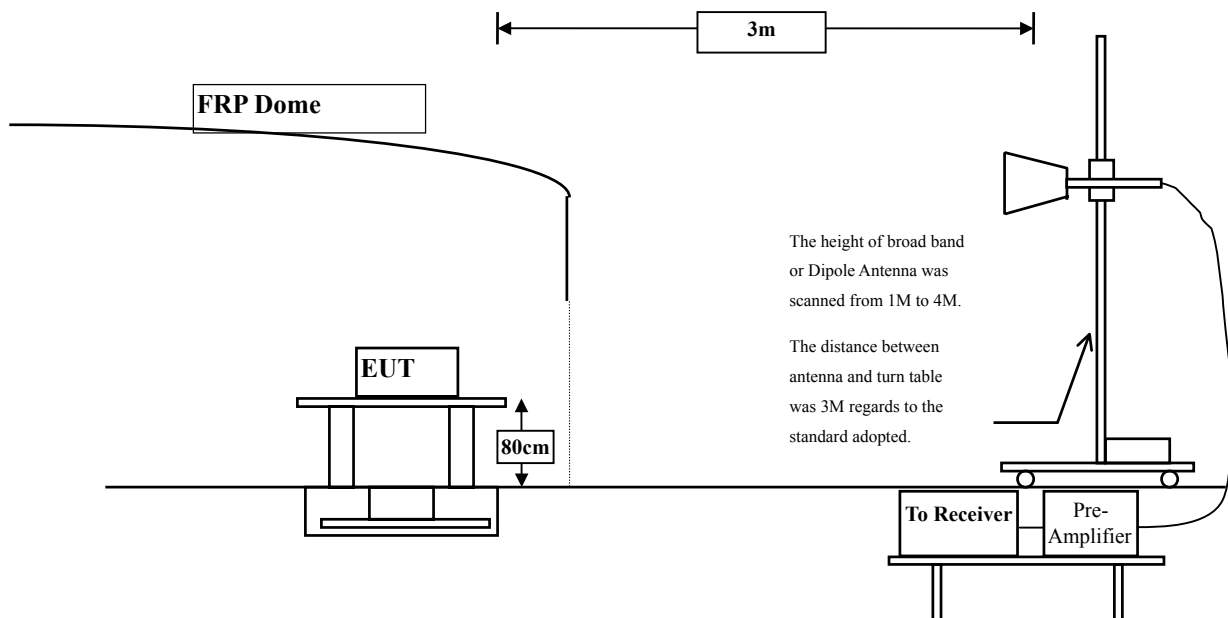
- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

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	31.771	77.33	109.102	Peak
Horizontal	2412	31.771	73.24	105.012	Average
Vertical	2412	30.248	75.17	105.419	Peak
Vertical	2412	30.248	71.14	101.389	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	109.102	47.791	61.311	74.000	Peak
Horizontal	2390	105.012	56.824	48.188	54.000	Average
Vertical	2390	105.419	47.791	57.628	74.000	Peak
Vertical	2390	101.389	56.824	44.565	54.000	Average

Note:

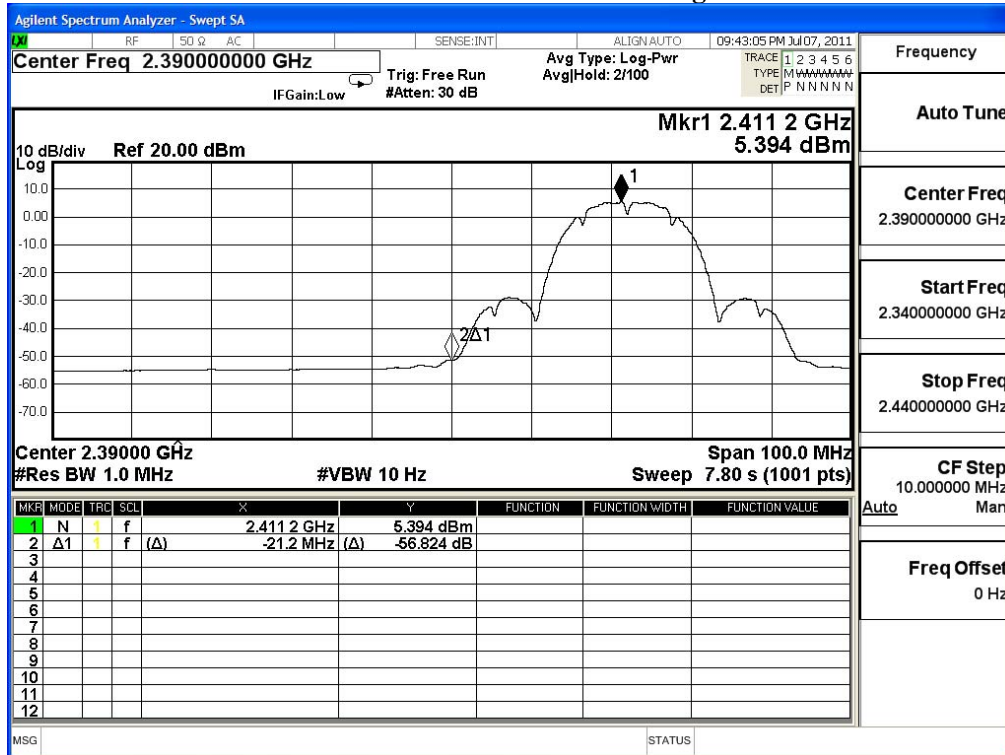
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

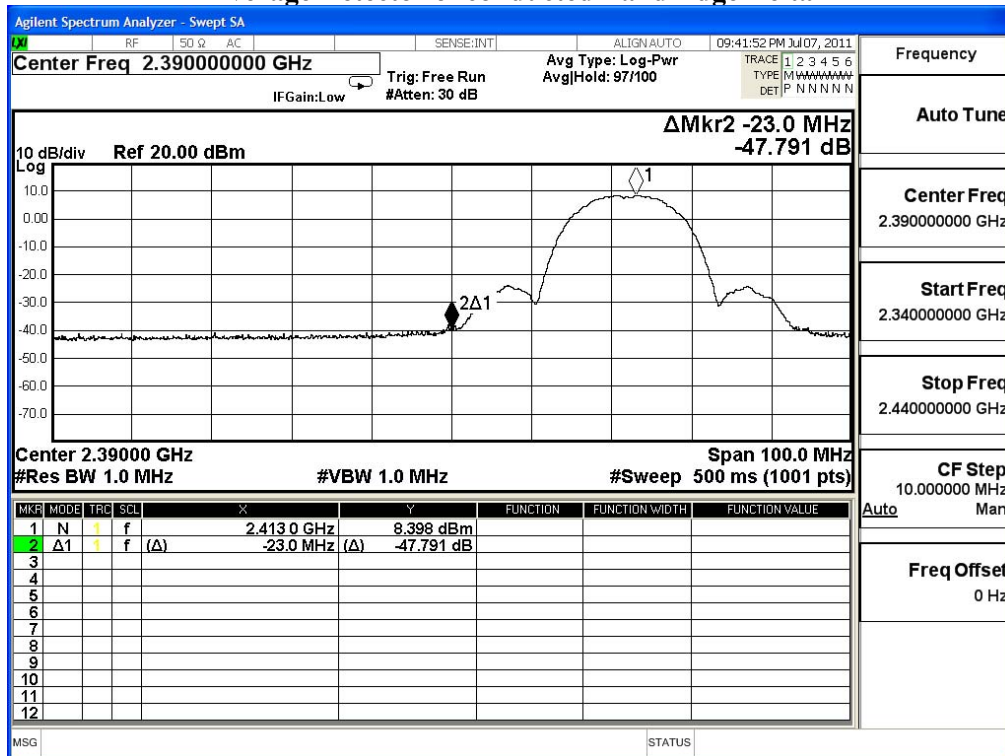
F = Fundamental field Strength (Peak or Average)

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	31.892	76.48	108.372	Peak
Horizontal	2462	31.892	72.55	104.442	Average
Vertical	2462	30.48	74.24	104.72	Peak
Vertical	2462	30.48	70.37	100.85	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	108.372	42.62	65.752	74.000	Peak
Horizontal	2483.5	104.442	51.179	53.263	54.000	Average
Vertical	2483.5	104.72	42.62	62.1	74.000	Peak
Vertical	2483.5	100.85	51.179	49.671	54.000	Average

Note:

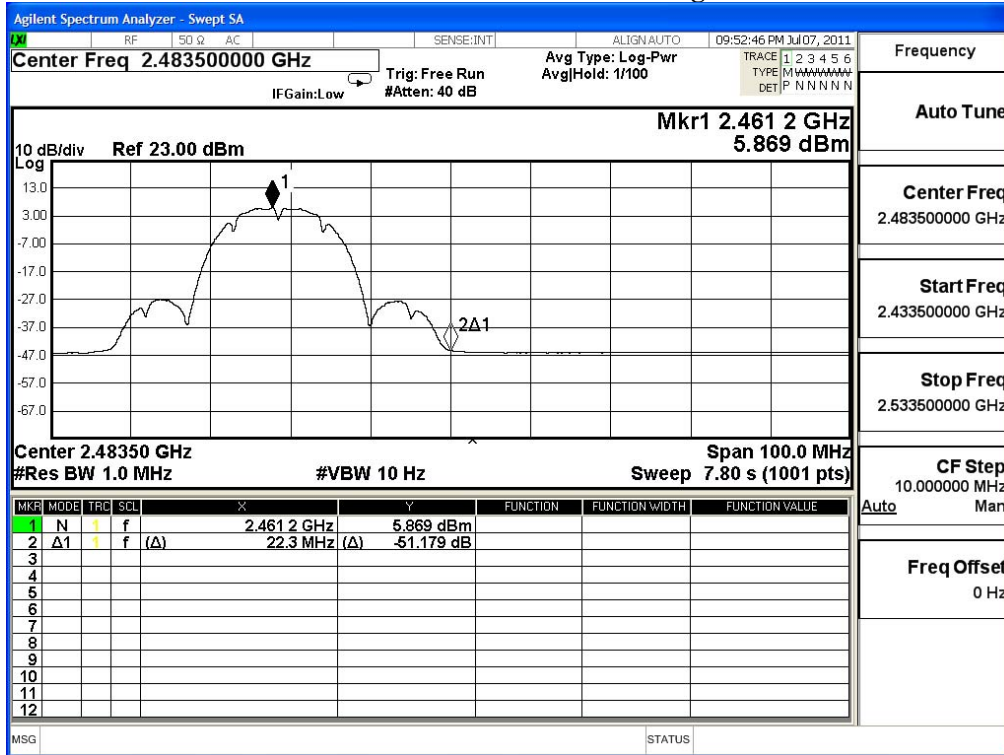
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

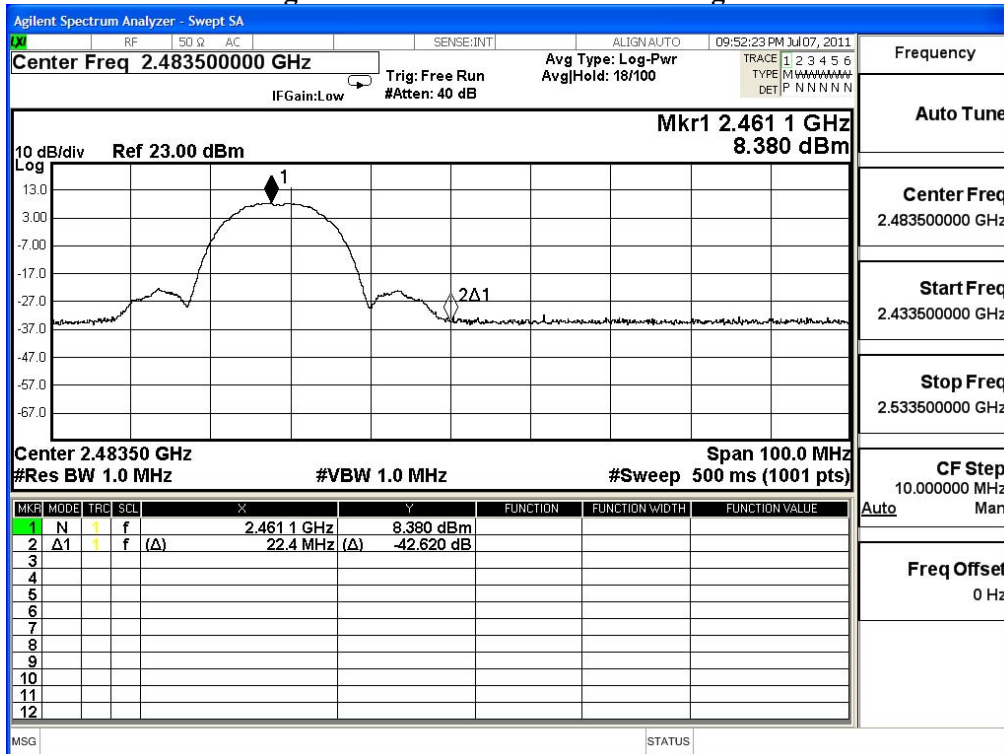
F = Fundamental field Strength (Peak or Average)

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	31.771	75.43	107.202	Peak
Horizontal	2412	31.771	64.43	96.202	Average
Vertical	2412	30.248	74.66	104.909	Peak
Vertical	2412	30.248	62.94	93.189	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	107.202	41.149	66.053	74.000	Peak
Horizontal	2390	96.202	42.701	53.501	54.000	Average
Vertical	2390	104.909	41.149	63.76	74.000	Peak
Vertical	2390	93.189	42.701	50.488	54.000	Average

Note:

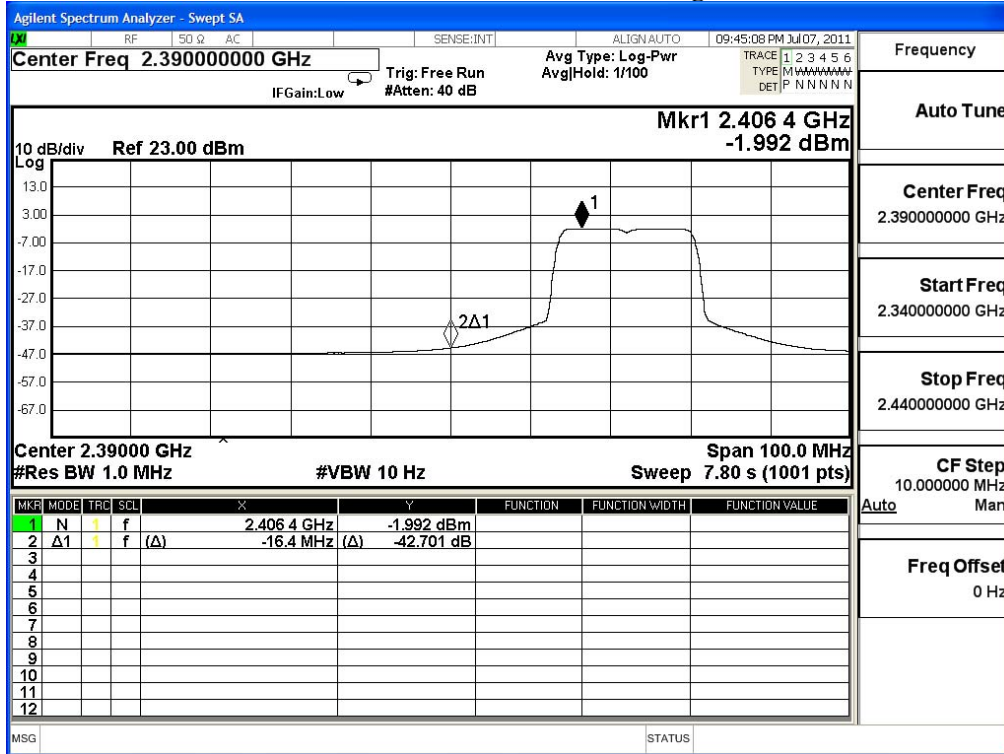
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

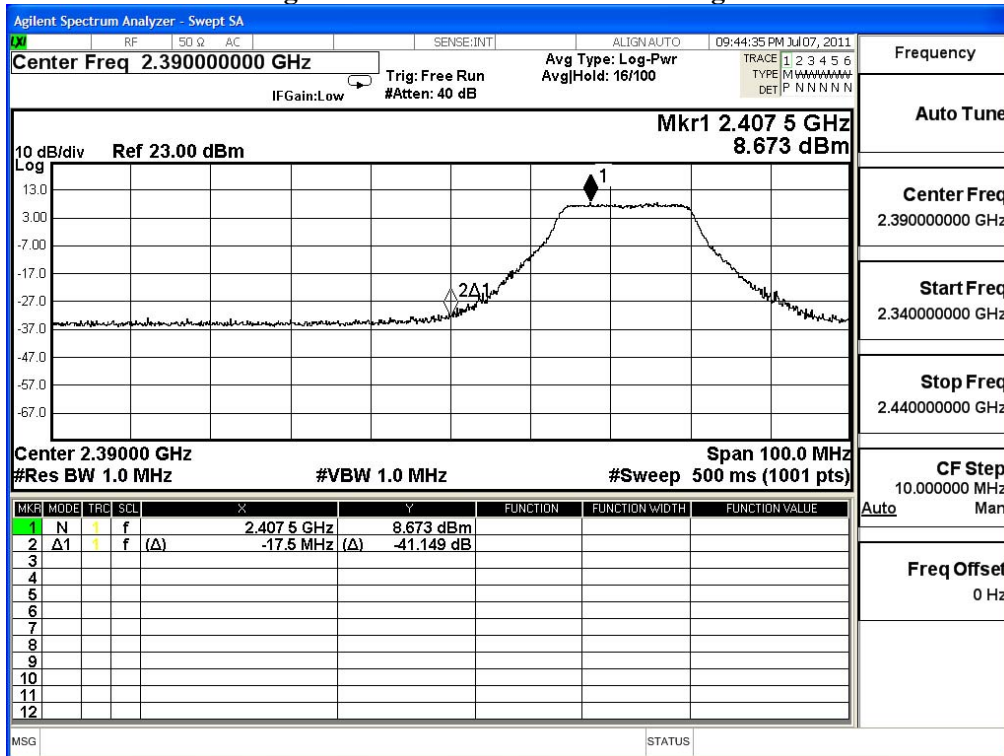
F = Fundamental field Strength (Peak or Average)

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	31.892	76.06	107.952	Peak
Horizontal	2462	31.892	64.67	96.562	Average
Vertical	2462	30.48	73.23	103.71	Peak
Vertical	2462	30.48	62.14	92.62	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	107.952	38.984	68.968	74.000	Peak
Horizontal	2483.5	96.562	42.929	53.633	54.000	Average
Vertical	2483.5	103.71	38.984	64.726	74.000	Peak
Vertical	2483.5	92.62	42.929	49.691	54.000	Average

Note:

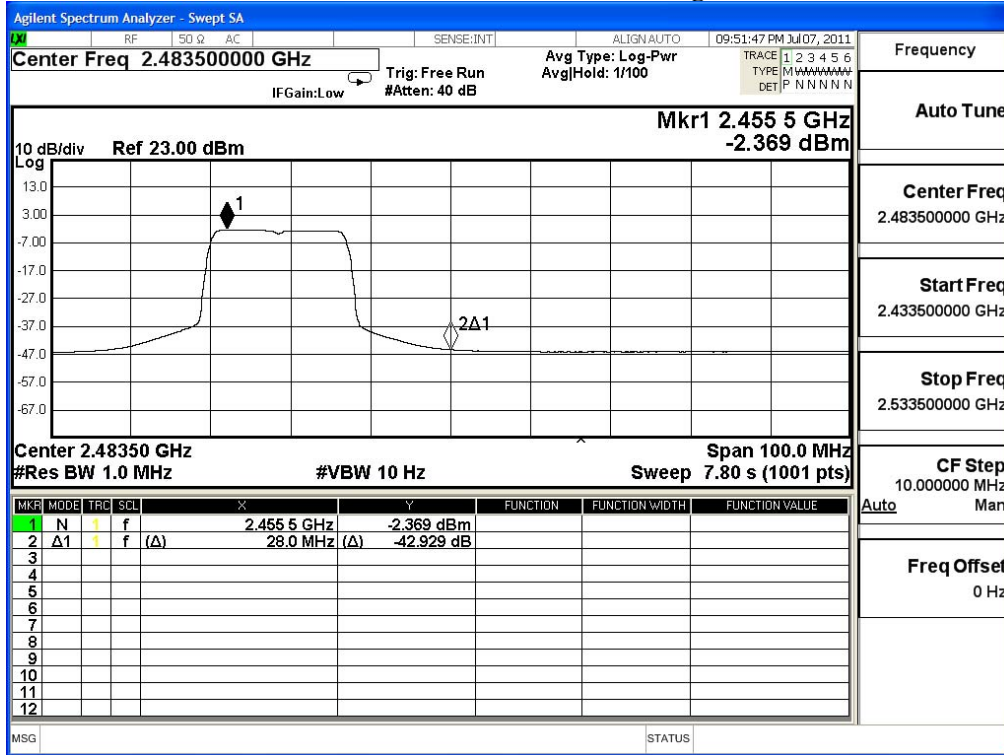
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

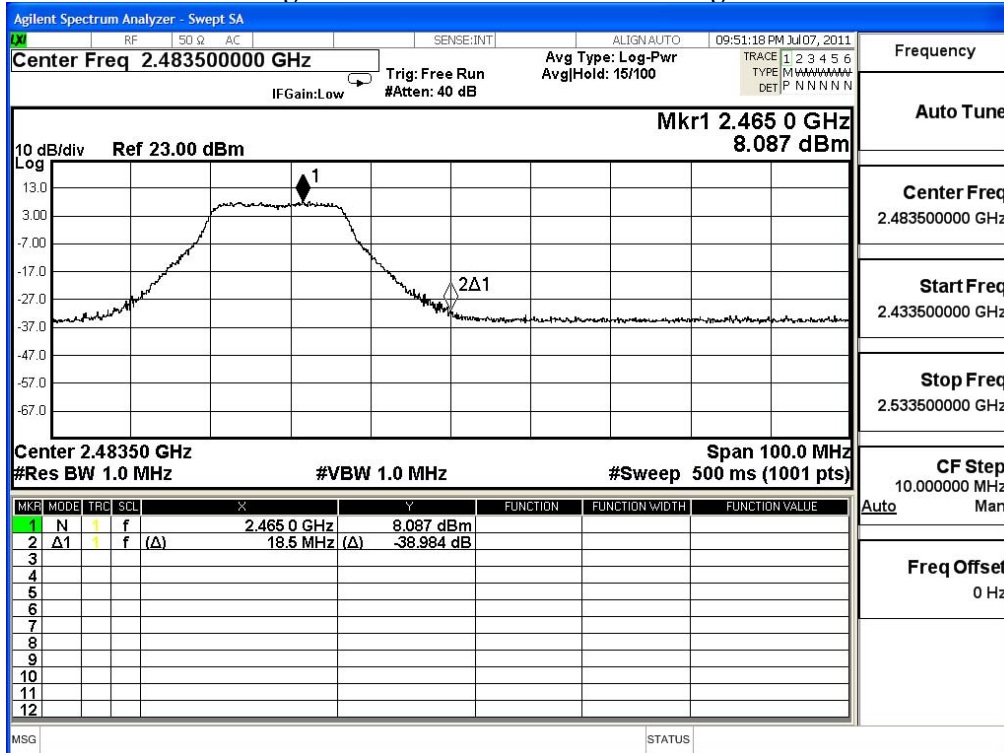
F = Fundamental field Strength (Peak or Average)

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	31.771	74.48	106.252	Peak
Horizontal	2412	31.771	62.84	94.612	Average
Vertical	2412	30.248	72.09	102.339	Peak
Vertical	2412	30.248	60.41	90.659	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	106.252	39.583	66.669	74.000	Peak
Horizontal	2390	94.612	41.397	53.215	54.000	Average
Vertical	2390	102.339	39.583	62.756	74.000	Peak
Vertical	2390	90.659	41.397	49.262	54.000	Average

Note:

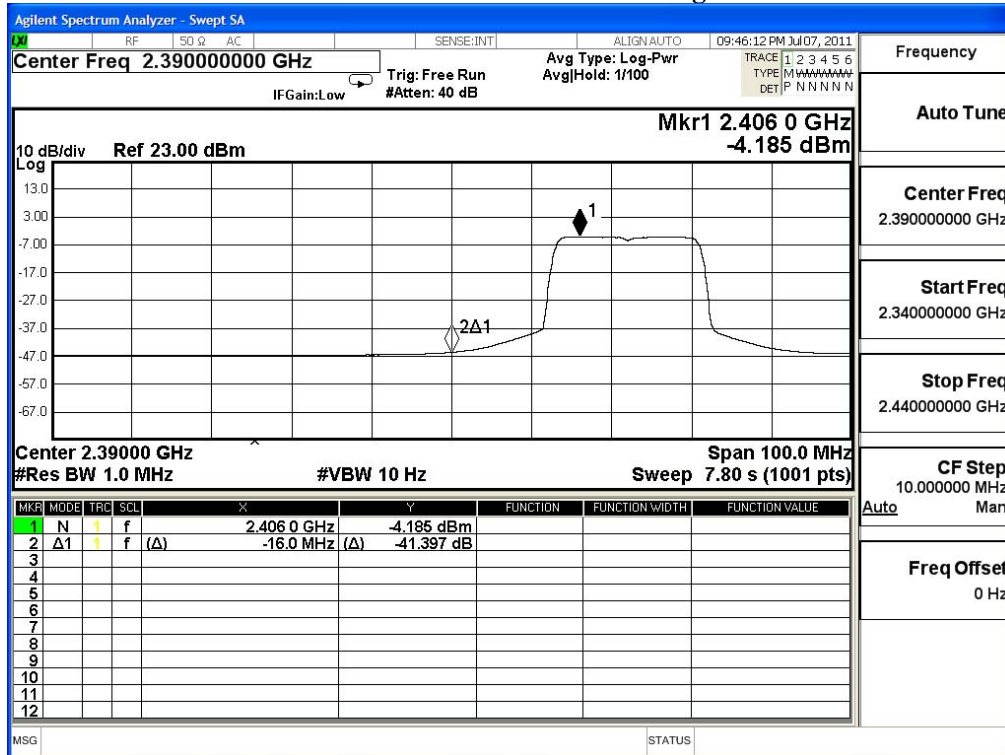
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

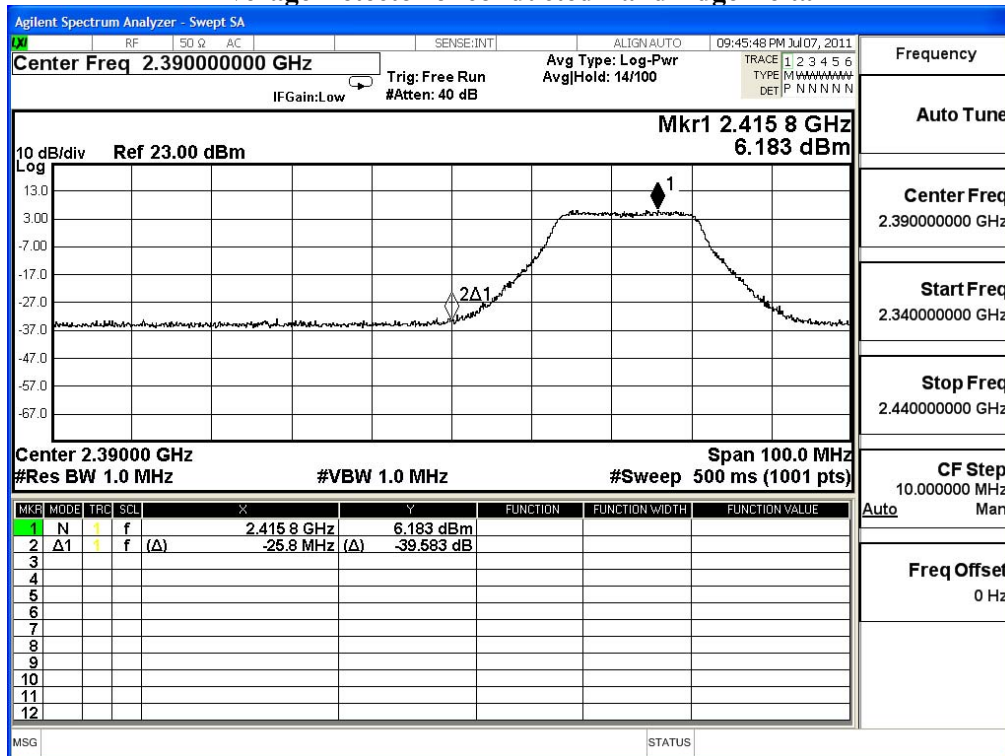
F = Fundamental field Strength (Peak or Average)

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	73.56	107.452	105.452	Peak
Horizontal	2462	62.01	95.902	93.902	Average
Vertical	2462	30.48	72.72	103.2	Peak
Vertical	2462	30.48	61.37	91.85	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	105.452	37.362	68.09	74.000	Peak
Horizontal	2483.5	93.902	39.984	53.918	54.000	Average
Vertical	2483.5	103.2	37.362	65.838	74.000	Peak
Vertical	2483.5	91.85	39.984	51.866	54.000	Average

Note:

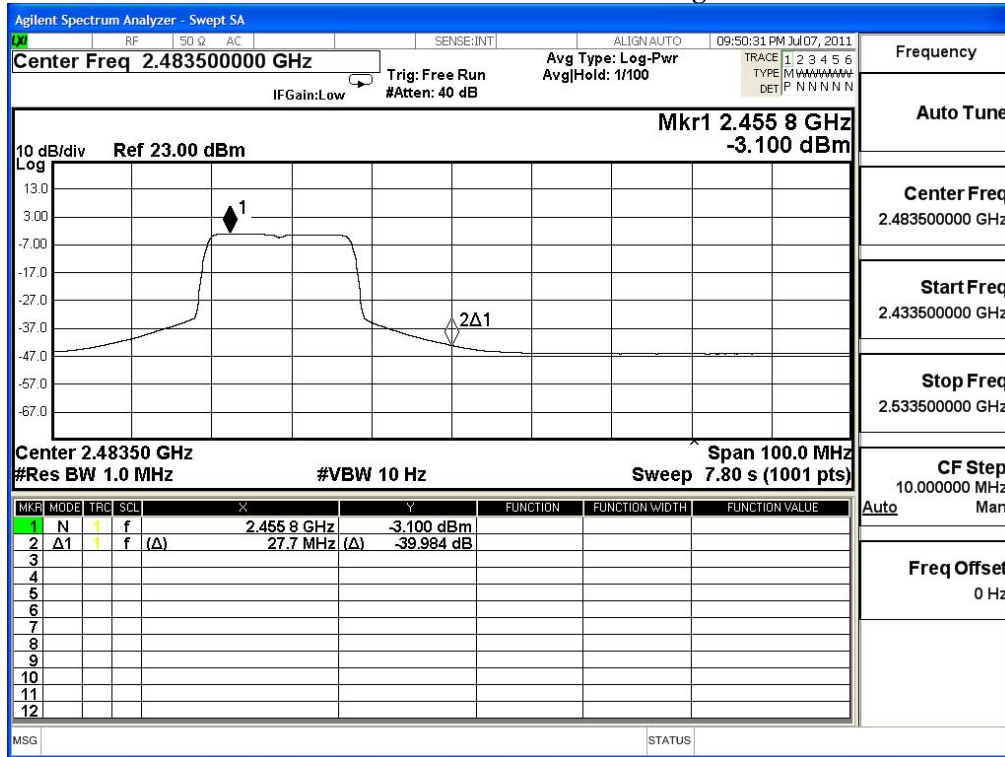
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

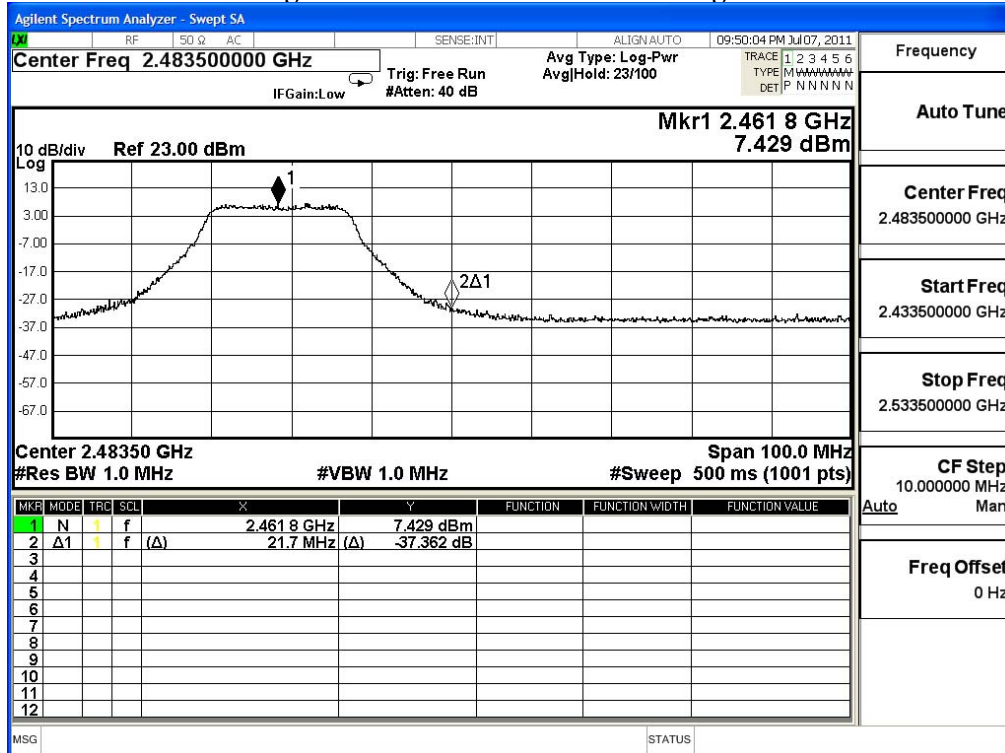
F = Fundamental field Strength (Peak or Average)

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	31.796	69.19	100.986	Peak
Horizontal	2422	31.796	57.95	89.746	Average
Vertical	2422	30.294	68	98.294	Peak
Vertical	2422	30.294	56.65	86.944	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	100.986	32.756	68.23	74.000	Peak
Horizontal	2390	89.746	36.579	53.167	54.000	Average
Vertical	2390	98.294	32.756	65.538	74.000	Peak
Vertical	2390	86.944	36.579	50.365	54.000	Average

Note:

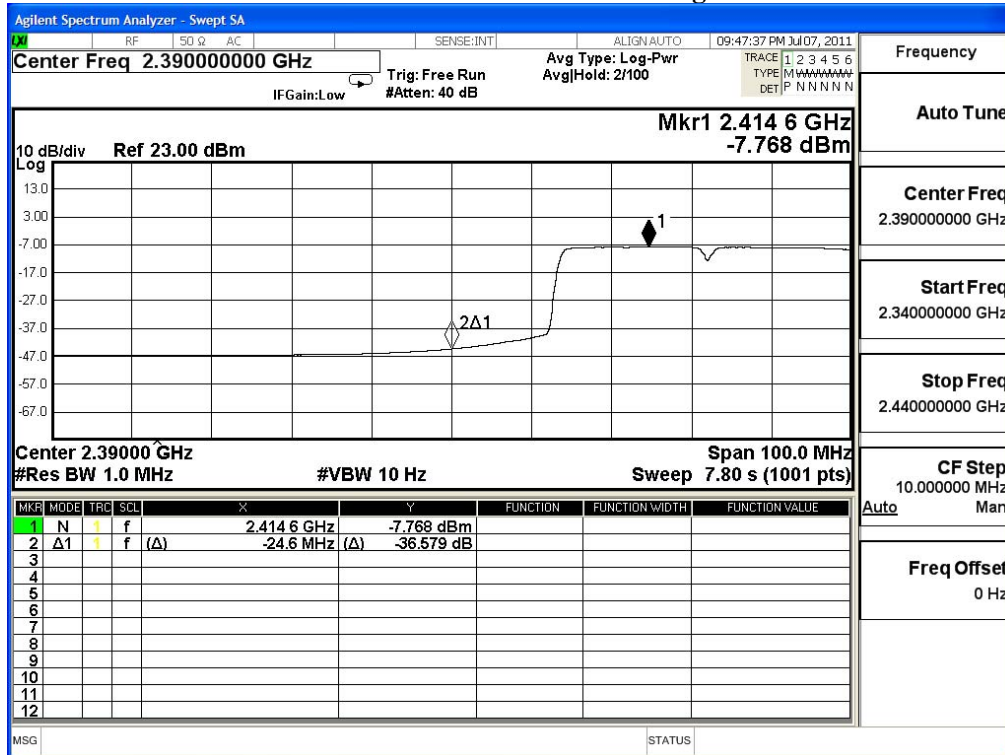
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

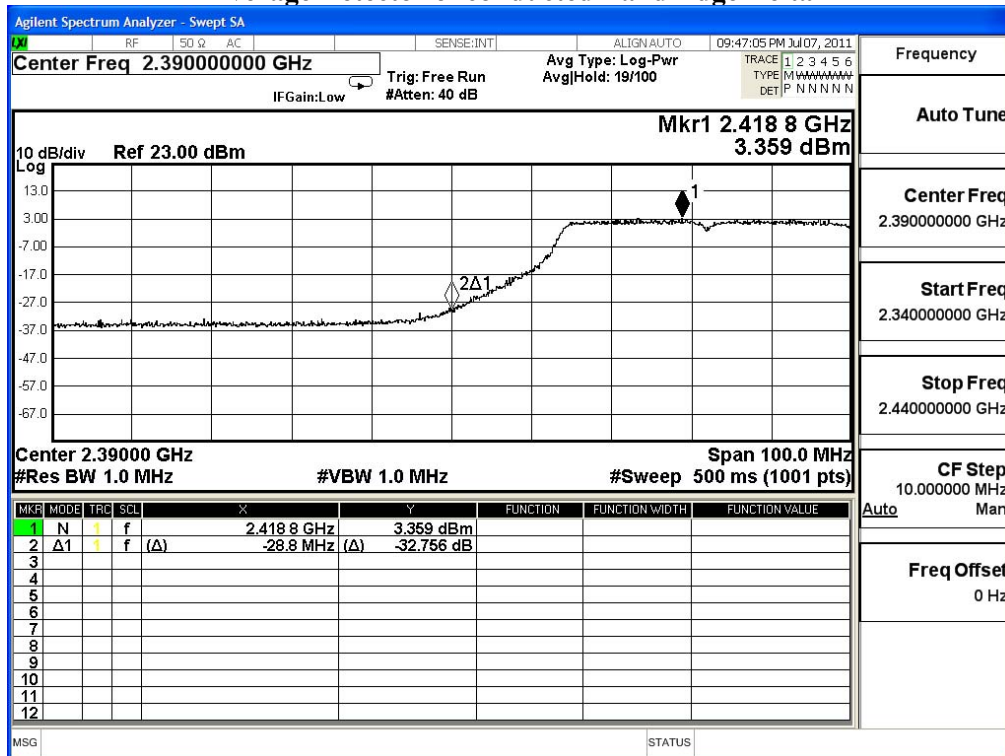
F = Fundamental field Strength (Peak or Average)

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	31.868	71.4	103.267	Peak
Horizontal	2452	31.868	59.56	91.427	Average
Vertical	2452	30.433	69.88	100.312	Peak
Vertical	2452	30.433	58.3	88.732	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	103.267	32.724	70.543	74.000	Peak
Horizontal	2483.5	91.427	37.558	53.869	54.000	Average
Vertical	2483.5	100.312	32.724	67.588	74.000	Peak
Vertical	2483.5	88.732	37.558	51.174	54.000	Average

Note:

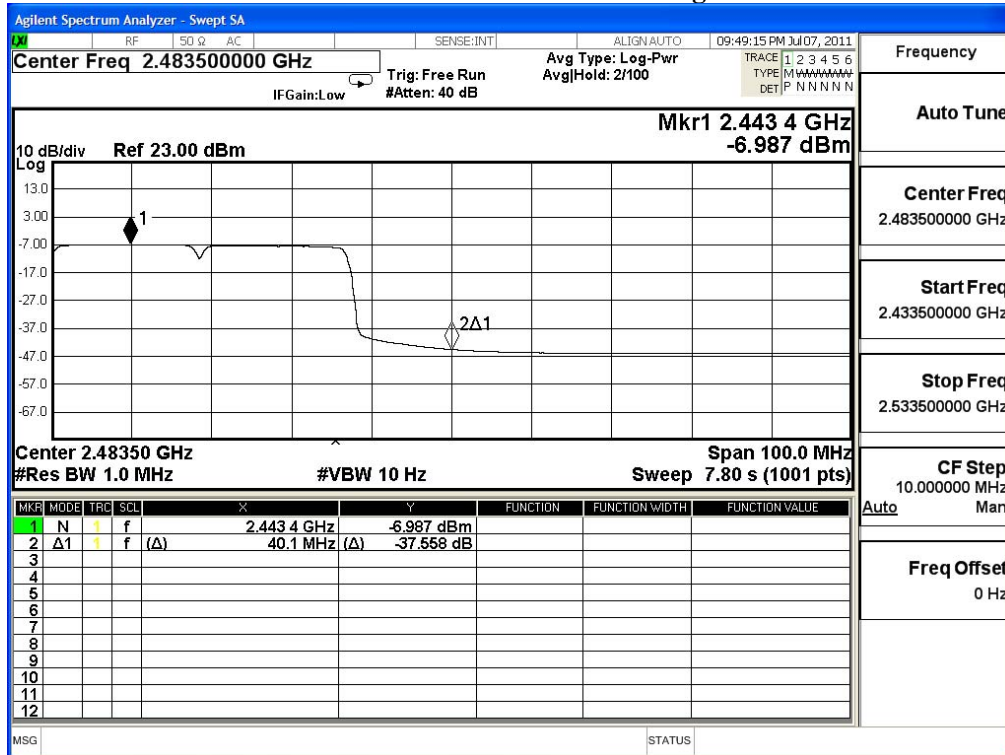
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

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

