

Test Report

Industry Canada RSS-Gen Issue 2/RSS-210 Issue 7
FCC Part15 Subpart C

Product Name : Eee PC
Model No. : Eee PC T101MT
FCC ID : MSQT101NE785
IC ID : 3568A-T101NE785

Applicant : ASUSTEK COMPUTER INC.

Address : NO.150, Li-Te Rd., Peitou, Taipei, Taiwan, R. O. C

Date of Receipt : 2009/10/23
Issued Date : 2009/10/30
Report No. : 09AS068R-RF-US-P05V01
Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date : 2009/10/30

Report No. : 09AS068R-RF-US-P05V01



Product Name : Eee PC
Applicant : ASUSTEK COMPUTER INC.
Address : NO.150, Li-Te Rd., Peitou, Taipei, Taiwan, R. O. C
Manufacturer : PROTEK (Shanghai) Limited
Address : NO.3668 Xiu Yan Rd.Kang Qiao Town.Nan Hui Dist,
Shang Hai
Model No. : Eee PC T101MT
FCC ID : MSQT101NE785
IC ID : 3568A-T101NE785
EUT Voltage : 12Vdc
Trade Name : ASUS
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2008
ANSI C63.4: 2003
Industry Canada RSS-Gen Issue 2/RSS-210 Issue 7
Test Result : Complied
Performed Location : SuZhou EMC laboratory
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FCC Registration Number: 800392, IC Lab Code: 4075B

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Laboratory Information

We , **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

Taiwan R.O.C.	: BSMI, DGT, CNLA
Germany	: TUV Rheinland
Norway	: Nemko, DNV
USA	: FCC, NVLAP
Japan	: VCCI

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://tw.quietek.com/modules/myalbum/>
 The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>
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1. General Information

1.1. EUT Description

Product Name	Eee PC
Trade Name	ASUS
Model No.	Eee PC T101MT
EUT Voltage	12Vdc
Frequency Range	For 2.4GHz Band 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz): 2422~2452MHz
Channel Number	For 2.4GHz Band 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7
Tech. of Modulation	802.11b: DSSS 802.11g/n: OFDM
Data Rate	802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11b: 1/2/5.5/11 Mbps 802.11n: up to 130 Mbps
Channel Control	Auto
Antenna Type	PIFA
Antenna Gain	2.45dBi for 2.4GHz band
AC Adapter	Manufacturer: PI ELECTRONICS (China Plant) M/N: AD6090 Input: 100-240V~50/60Hz 1.0A Output: 12Vdc, 3.0A

For 2.4GHz Band

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

For 802.11b/g/n Antenna List

Antenna	Manufacturer	Model No.	Antenna Gain(dBi)
PIFA Antenna	ASUS	APP6P-700261	1.96dBi for 2.4GHz band
PIFA Antenna	ASUS	CAN4313856012501B	2.45dBi for 2.4GHz band

1.2. Mode of Operation

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g
Mode 3: Transmit by 802.11 n (20MHz)
Mode 4: Transmit by 802.11n (40MHz)
Mode 5: Receive by 802.11n(20MHz)
Mode 6: Receive by 802.11n(40MHz)

Note:

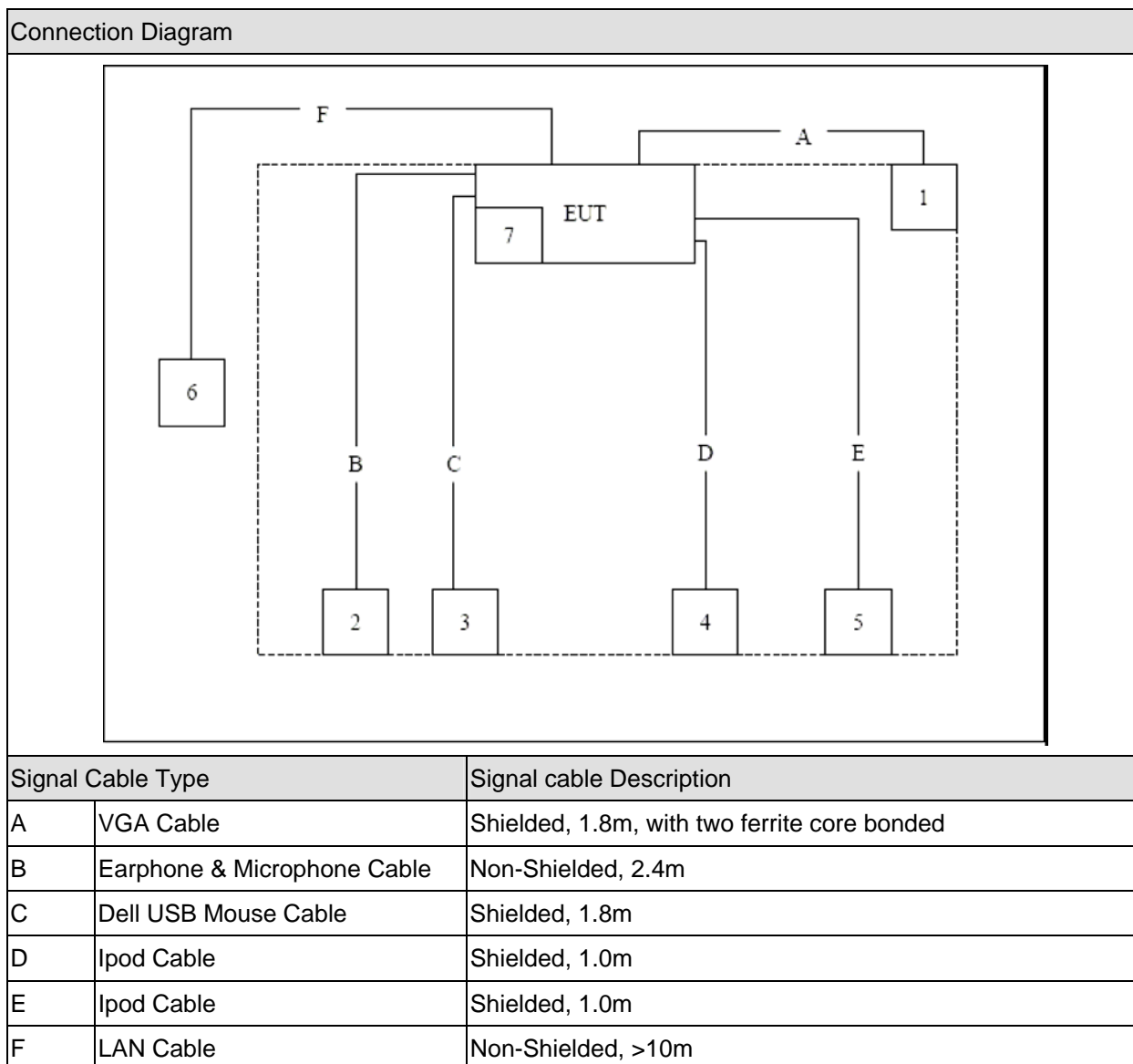
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations. The function for the receiver was measured and made a test report that the report number is 099S094.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 LCD Monitor	Lenovo	L2240pwD	9M0337992301042	Non-Shielded, 1.8m
2 Microphone & Earphone	SALAR	V81	N/A	N/A
3 USB Mouse	DELL	MO56UOA	GOQ02414	Power by PC
4 iPod	Apple	A1199	6U715YSVVQ5	Power by PC
5 iPod	Apple	A1199	6U715UPHVQ5	Power by PC
6 Notebook	DELL	PP19L	JH097 A01	Power by adapter
7 SD Card	Kingston	1GB	N/A	N/A

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above
2	Turn on the power of equipment.
3	Run control software "ART" provided by applicant.
4	Select test channel and test mode for test.

2. Technical Test

2.1. Summary of Test Result

- No deviations from the test standards
 Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.209	Yes	No
RF Antenna Conducted Spurious	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(d)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2008 15.247(d)	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2008 15.215(c)	Yes	No
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(a)(2)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(b)(3)	Yes	No
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(e)	Yes	No

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	RSS-Gen Issue 2 June 2007 Section 7.2.2	Yes	No
Radiated Emission	RSS-210 Issue 2 June 2007 Section 2.7 Table 2 and Table 3	Yes	No
RF Antenna Conducted Spurious	RSS-210 Issue 7 June 2007 Section A8.5	Yes	No
Radiated Emission Band Edge	RSS-210 Issue 7 June 2007 Section A8.5	Yes	No
Occupied Bandwidth	RSS-Gen Issue 2 June 2007 Section 4.6.1 and 4.6.2 RSS-210 Issue 7 June 2007 Section A8.2(1)	Yes	No
Power Output	RSS-210 Issue 7 June 2007 Section A8.4(4)	Yes	No
Power Spectral Density	RSS-210 Issue 7 June 2007 Section A8.2(2)	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

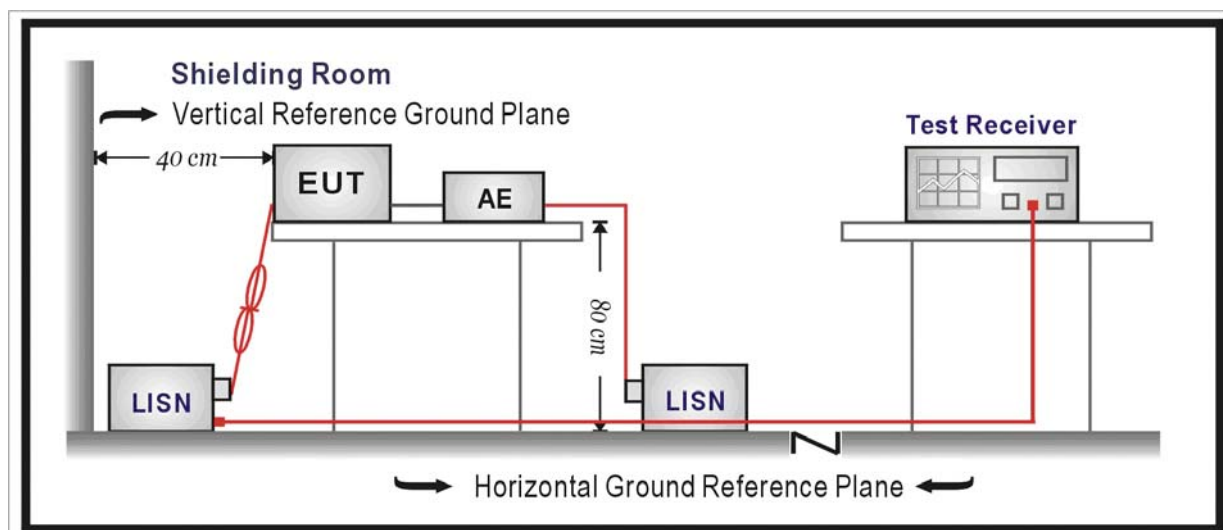
3.1. Test Equipment

Conducted Emission / SR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2009/02/07
Two-Line V-Network	R&S	ENV216	100013	2008/11/15
Two-Line V-Network	R&S	ENV216	100014	2008/11/15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2008/11/25
50ohm Termination	SHX	TF2	07081401	2008/10/19
Coaxial Cable	Luthi	RG214	519358	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH004	2009/03/31

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

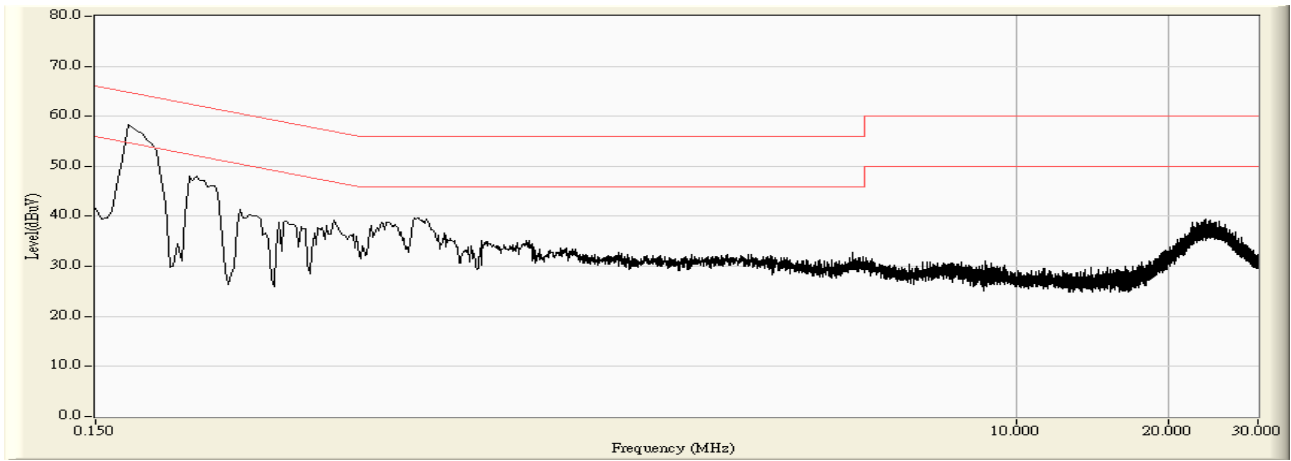
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.5. Uncertainty

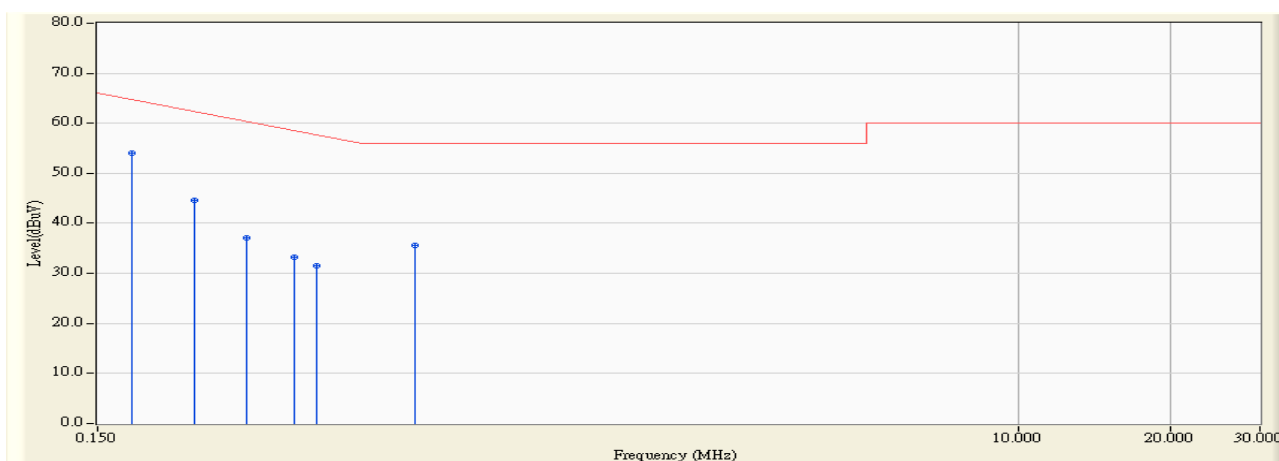
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/10/27 - 16:41
Limit : FCC_SPartC_15.207_00M_QP	Margin : 10
Probe : ENV216_100014(0.009-30MHz) - Line1	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1



Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/10/27 - 16:46
Limit : FCC_SPartC_15.207_00M_QP	Margin : 0
Probe : ENV216_100014(0.009-30MHz) - Line1	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1

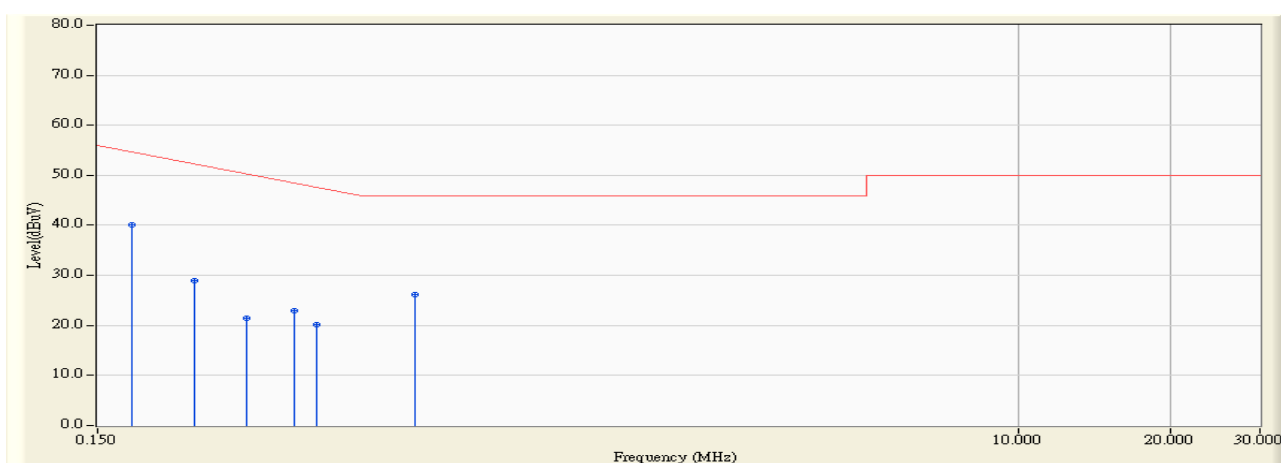


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.175	9.910	44.100	54.010	-10.710	64.720	QUASIPeAK
2		0.233	9.449	35.100	44.549	-17.793	62.342	QUASIPeAK
3		0.295	9.500	27.500	36.999	-23.383	60.382	QUASIPeAK
4		0.367	9.549	23.700	33.249	-25.320	58.569	QUASIPeAK
5		0.407	9.573	21.900	31.473	-26.236	57.709	QUASIPeAK
6		0.637	9.669	25.900	35.569	-20.431	56.000	QUASIPeAK

Note:

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

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/10/27 - 16:46
Limit : FCC_SPartC_15.207_00M_AV	Margin : 0
Probe : ENV216_100014(0.009-30MHz) - Line1	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1

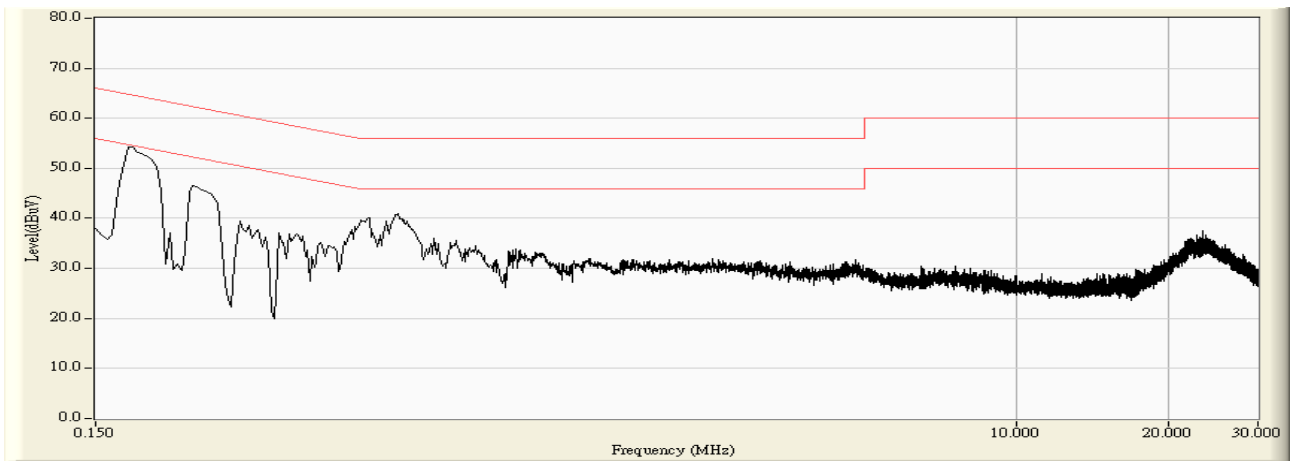


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.175	9.910	30.200	40.110	-14.610	54.720	AVERAGE
2		0.233	9.449	19.400	28.849	-23.493	52.342	AVERAGE
3		0.295	9.500	11.900	21.399	-28.983	50.382	AVERAGE
4		0.367	9.549	13.500	23.049	-25.520	48.569	AVERAGE
5		0.407	9.573	10.500	20.073	-27.636	47.709	AVERAGE
6		0.637	9.669	16.500	26.169	-19.831	46.000	AVERAGE

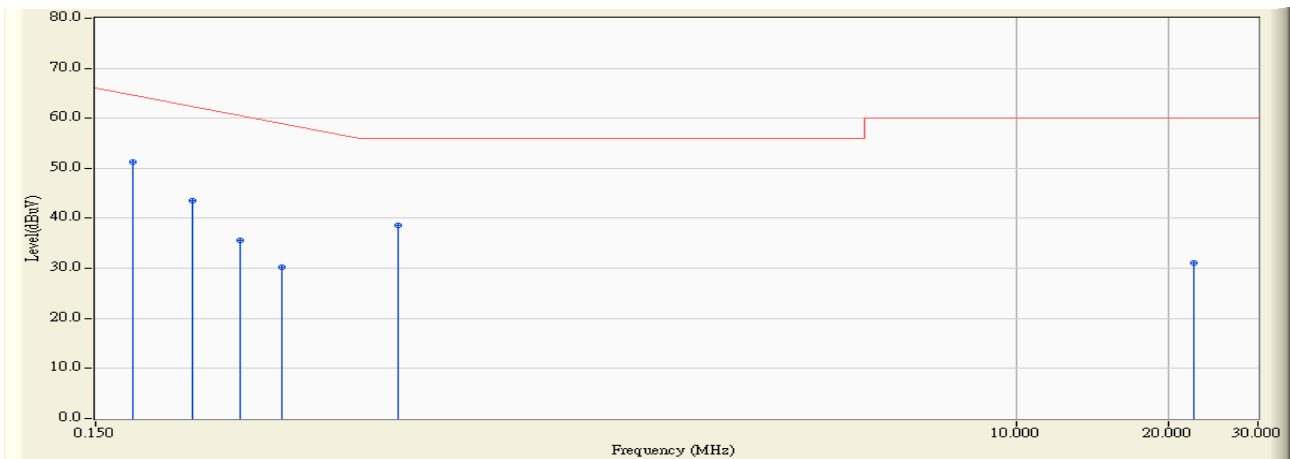
Note:

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

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/10/27 - 16:49
Limit : FCC_SPartC_15.207_00M_QP	Margin : 10
Probe : ENV216_100014(0.009-30MHz) - Line2	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1



Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/10/27 - 16:52
Limit : FCC_SPartC_15.207_00M_QP	Margin : 0
Probe : ENV216_100014(0.009-30MHz) - Line2	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1

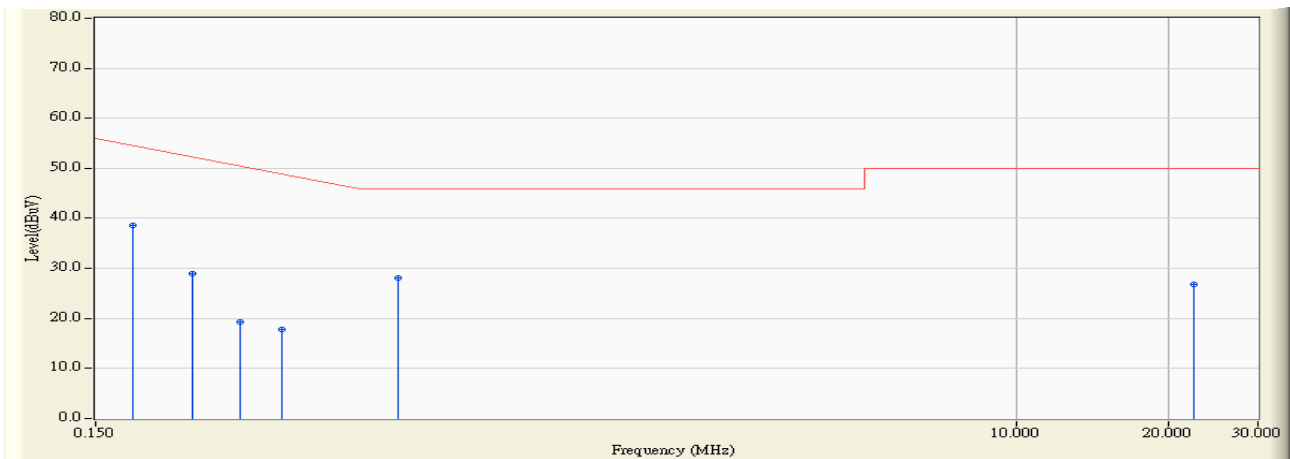


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.178	9.820	41.400	51.220	-13.358	64.578	QUASIPeAK
2		0.234	9.580	33.900	43.480	-18.827	62.307	QUASIPeAK
3		0.290	9.597	26.100	35.697	-24.827	60.524	QUASIPeAK
4		0.350	9.604	20.600	30.204	-28.758	58.962	QUASIPeAK
5		0.594	9.699	29.000	38.699	-17.301	56.000	QUASIPeAK
6		22.350	10.270	20.800	31.070	-28.930	60.000	QUASIPeAK

Note:

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

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/10/27 - 16:52
Limit : FCC_SPartC_15.207_00M_AV	Margin : 0
Probe : ENV216_100014(0.009-30MHz) - Line2	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.178	9.820	28.800	38.620	-15.958	54.578	AVERAGE
2		0.234	9.580	19.300	28.880	-23.427	52.307	AVERAGE
3		0.290	9.597	9.700	19.297	-31.227	50.524	AVERAGE
4		0.350	9.604	8.100	17.704	-31.258	48.962	AVERAGE
5		0.594	9.699	18.500	28.199	-17.801	46.000	AVERAGE
6		22.350	10.270	16.500	26.770	-23.230	50.000	AVERAGE

Note:

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

4. Radiated Emission

4.1. Test Equipment

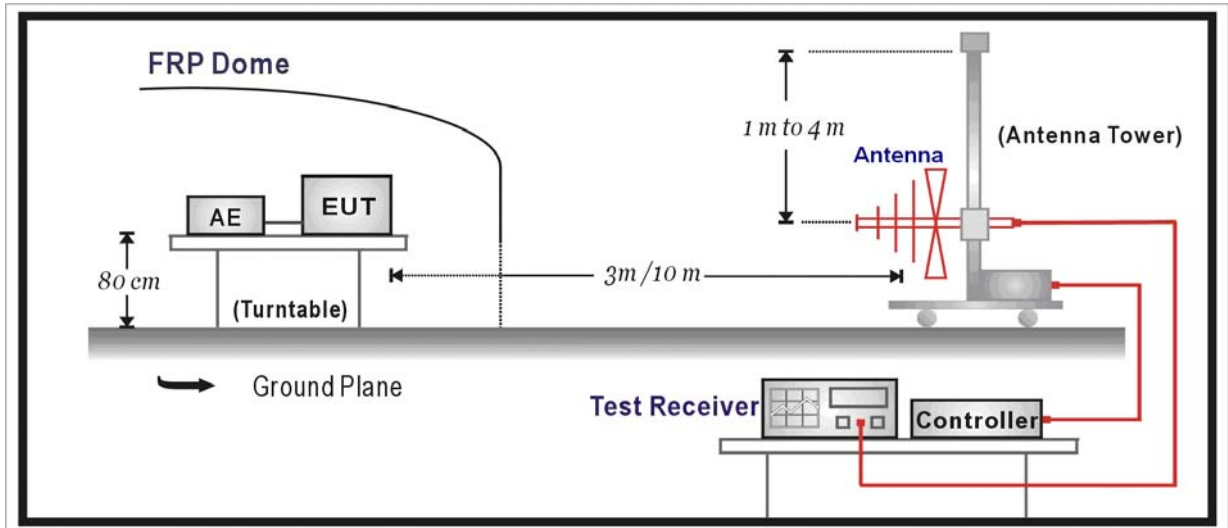
Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2009.04.23
EMI Test Receiver	R&S	ESCI	100906	2009.02.16
Preamplifier	Quietek	AP-180C	CHM-0602013	2009.05.25
Preamplifier	Quietek	AP-040G	CHM-0906001	2009.06.18
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2009.02.25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2009.06.11
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2009.03.03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2009.03.03
Lowpass Filter	Wainwright	WLKS4500-9SS	SN2	2009.03.03
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2009.05.25
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C2	2009.05.25
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2009.03.31

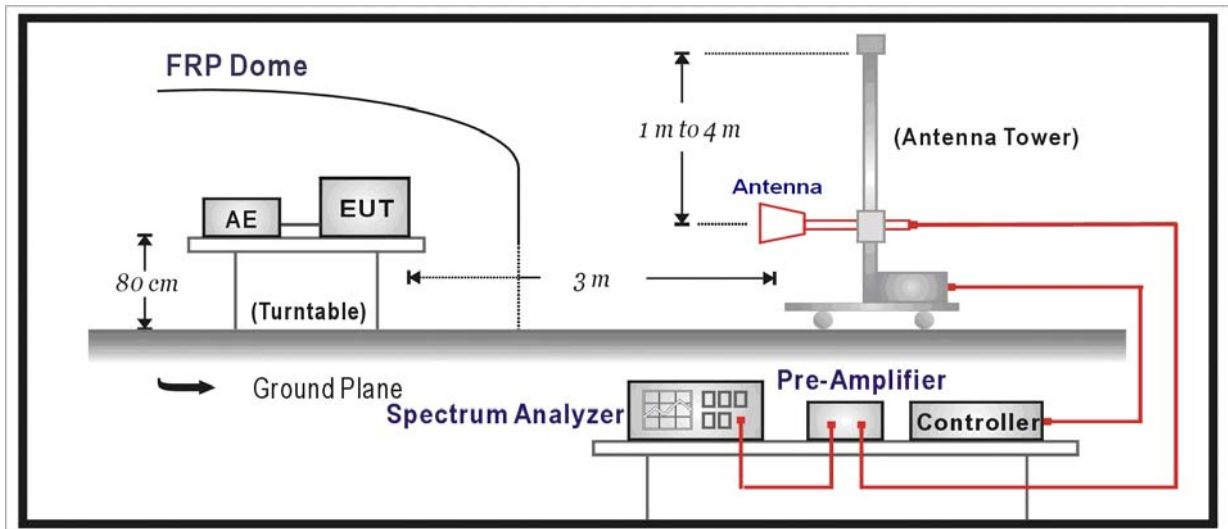
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

4.2. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

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

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

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

Note: When doing emission measurement above 1GHz, the horn antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
 below 1G is defined as ± 3.8 dB

4.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

802.11b

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	2410.760	106.68	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
6	H	2439.460	107.52	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
11	H	2463.600	108.61	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK

802.11g

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	2414.500	107.88	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
6	H	2434.230	107.25	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
11	H	2465.000	107.75	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK

802.11n(20MHz)

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	2415.490	108.10	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
6	H	2439.950	108.22	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
11	H	2465.700	105.97	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK

802.11n(40MHz)

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
3	H	2418.920	98.96	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
6	H	2428.730	99.78	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK
9	H	2465.910	100.06	Fundamental	/	PK
	H	335.908	38.91	Spurious	/	QP
	H	527.585	39.37	Spurious	/	QP
	V	6542.000	50.95	Spurious	/	PK
	V	5354.177	43.77	54	-10.23	PK
	V	14470.752	46.35	54	-7.65	PK
	V	24000.000	50.23	54	-3.77	PK

5. RF Antenna Conducted Spurious

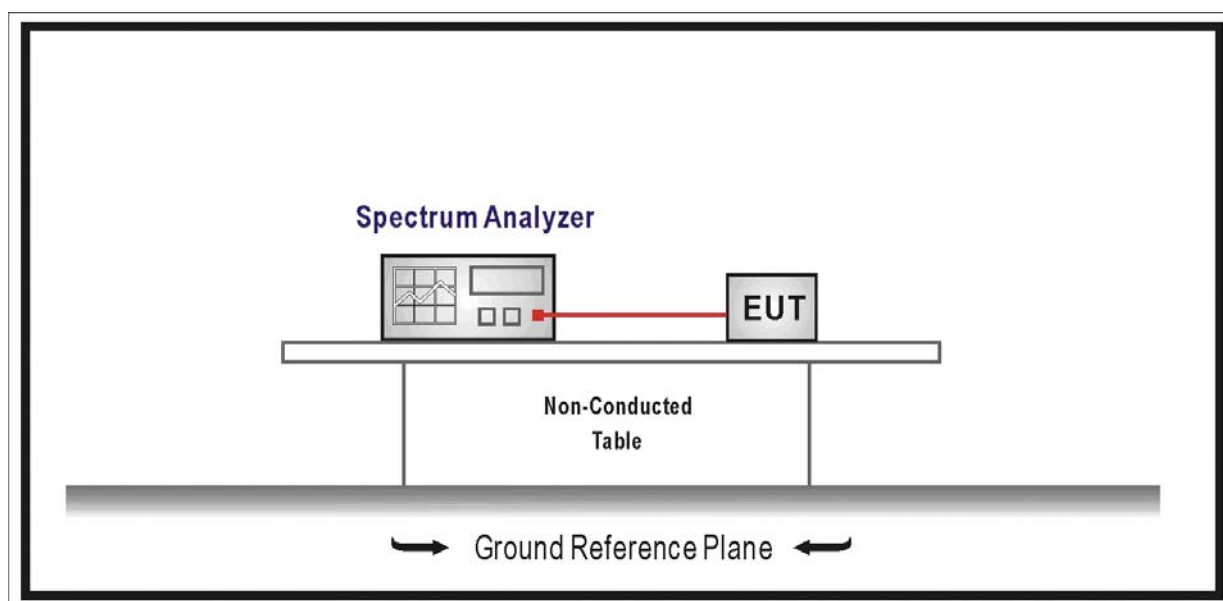
5.1. Test Equipment

RF Antenna Conducted Spurious / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup



5.3. Limit

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.

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

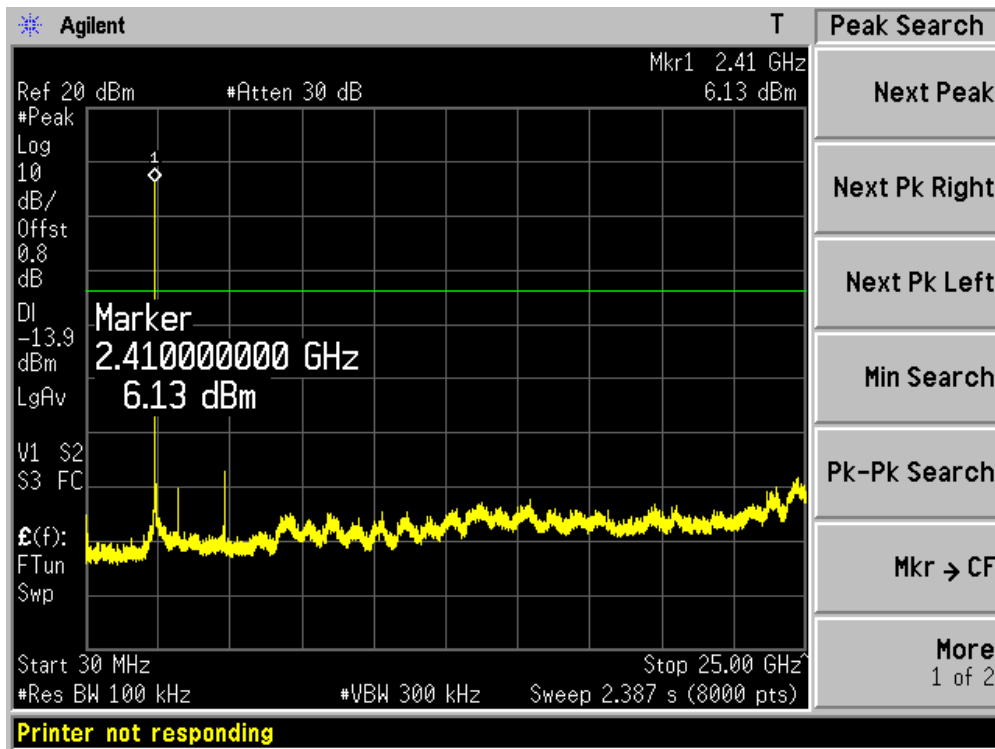
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

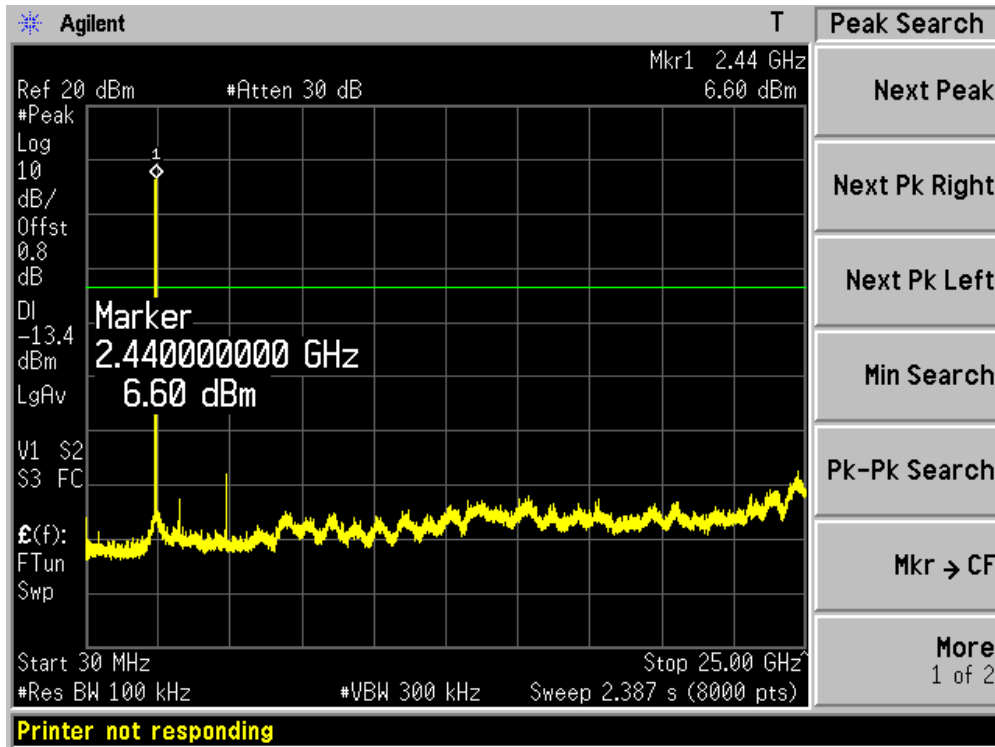
5.6. Test Result

Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b (Chain A)

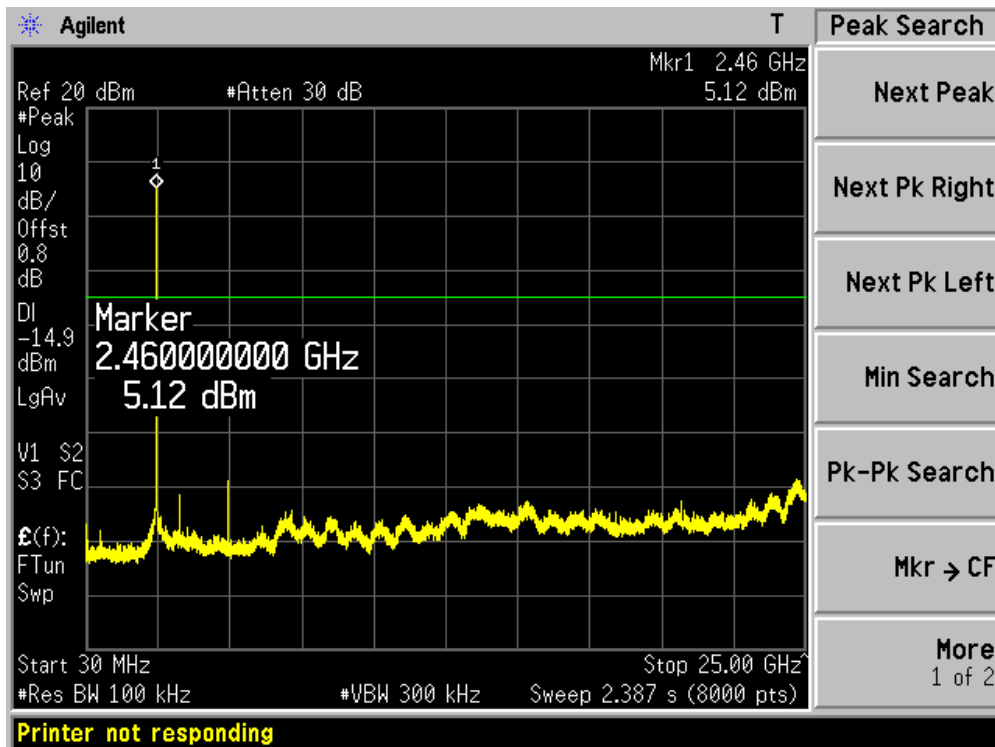
Channel 01 (2412MHz)



Channel 06 (2437MHz)

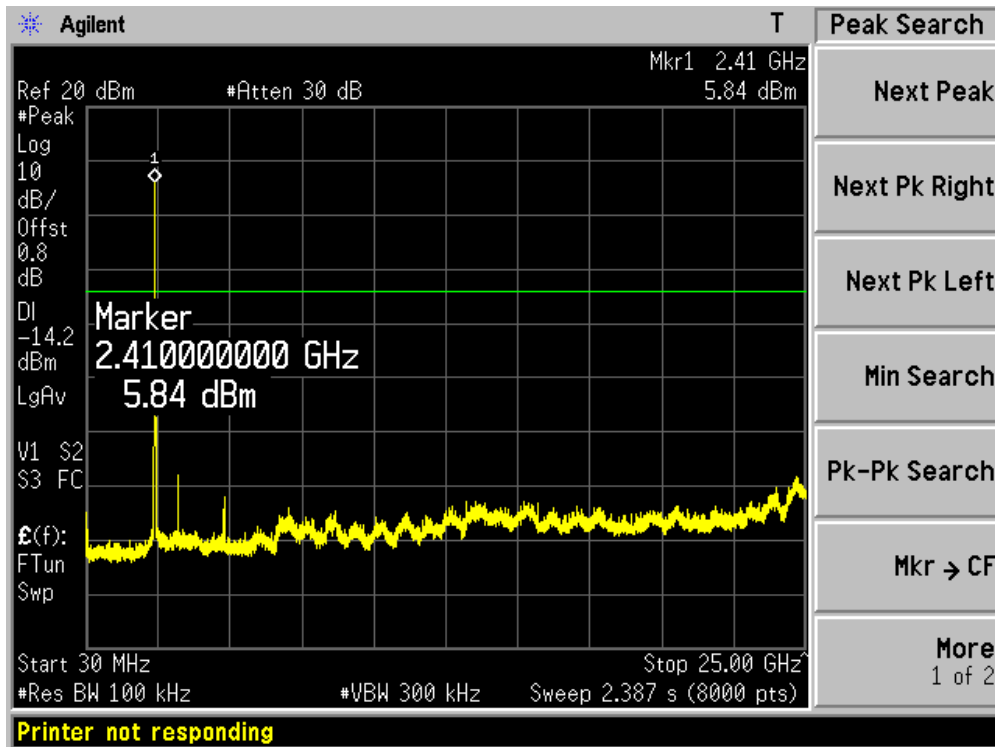


Channel 11 (2462MHz)

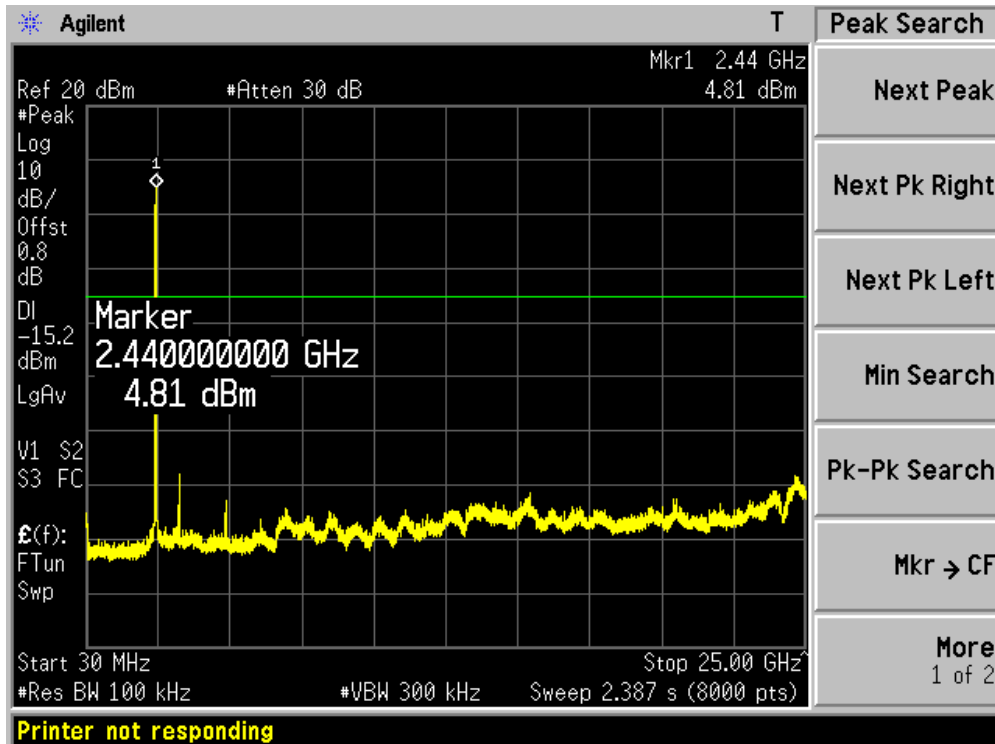


Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g (Chain A)

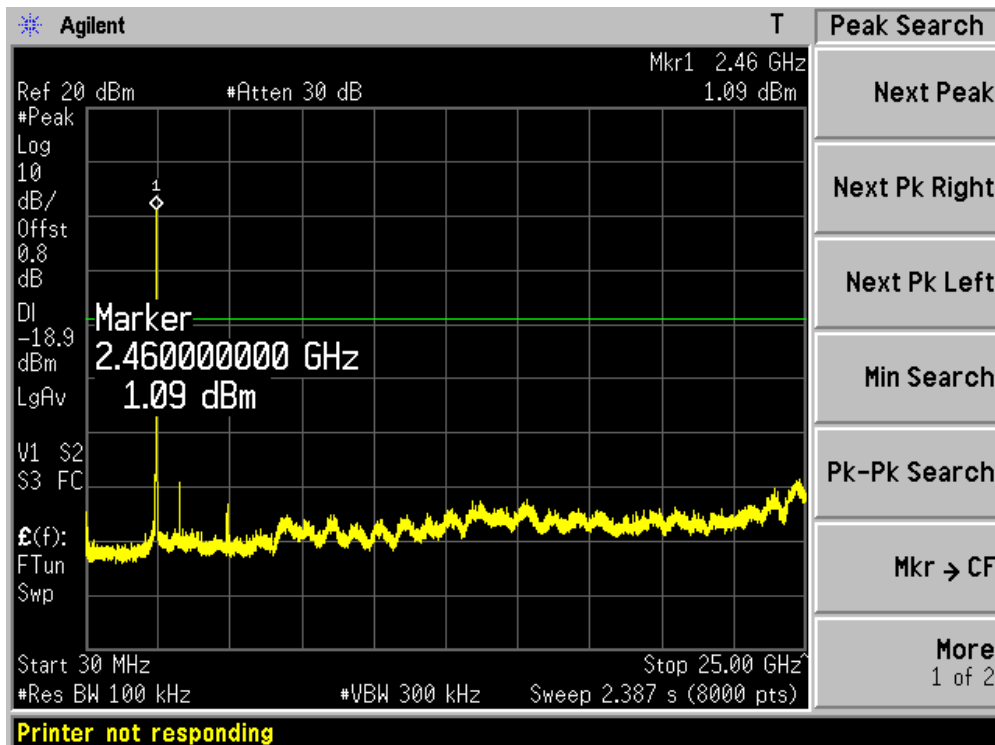
Channel 01 (2412MHz)



Channel 06 (2437MHz)

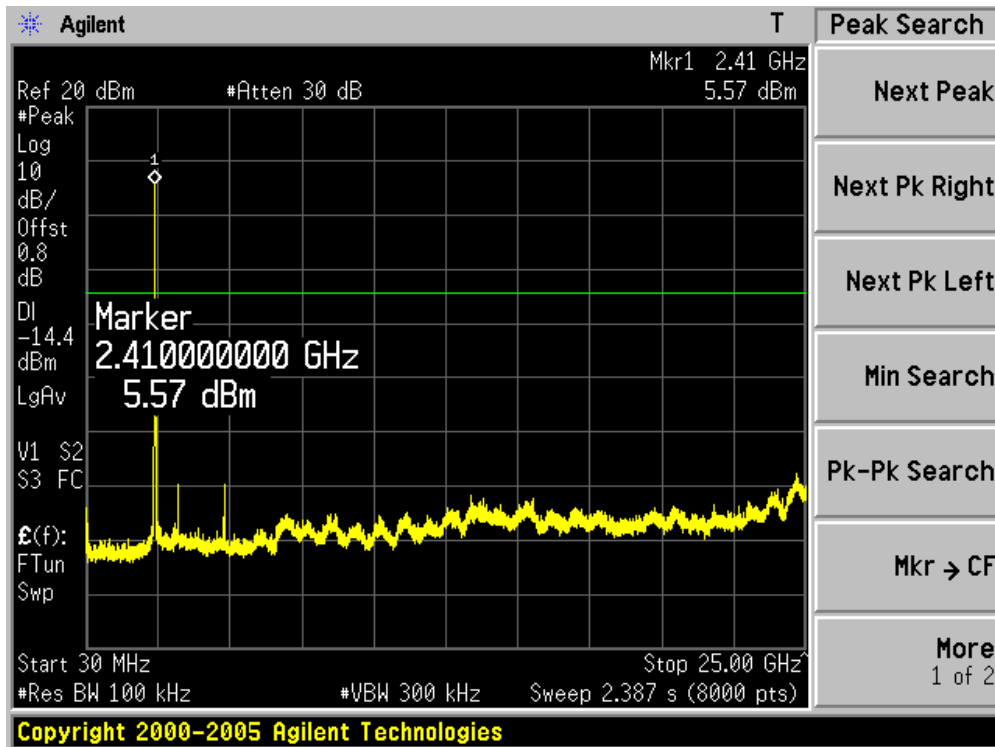


Channel 11 (2462MHz)

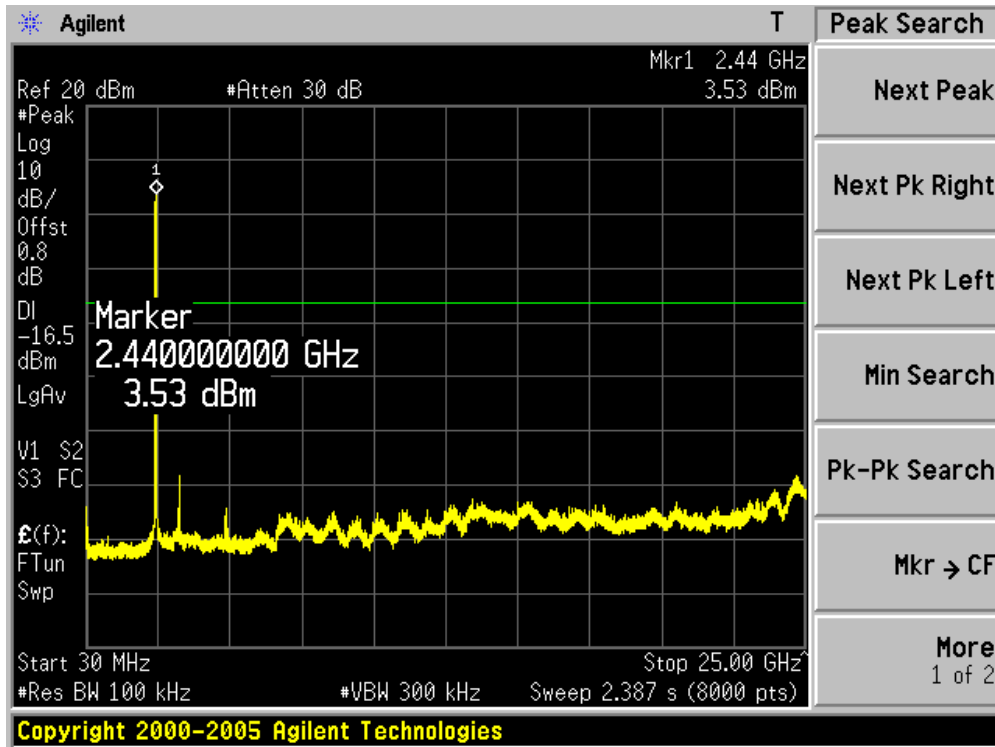


Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz)

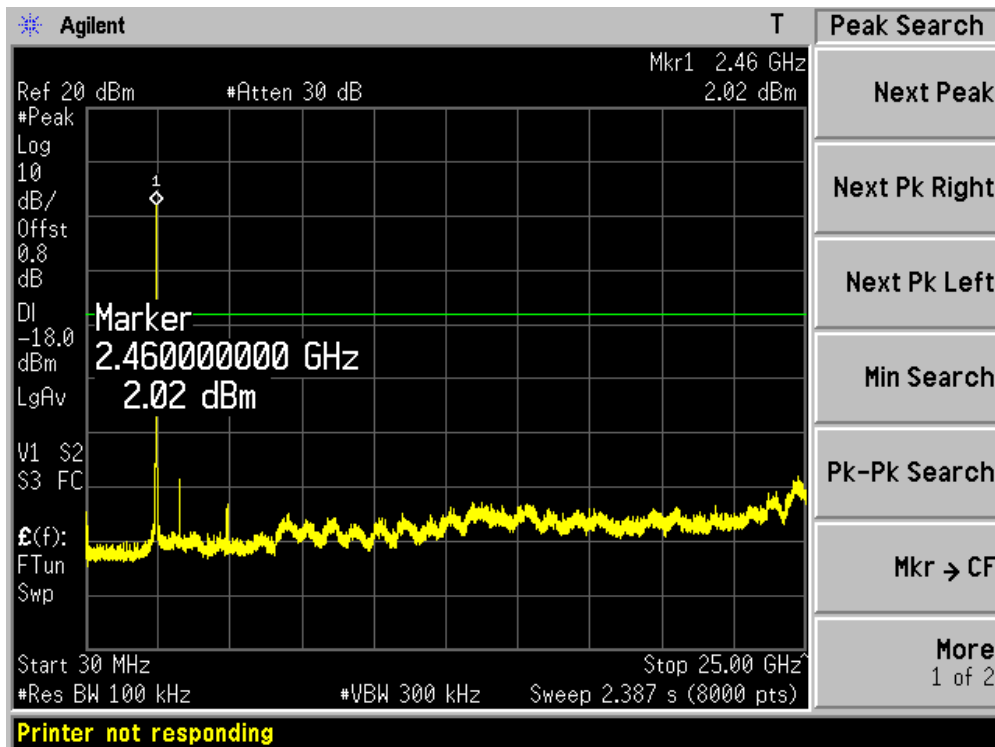
Channel 01 (2412MHz)



Channel 06 (2437MHz)

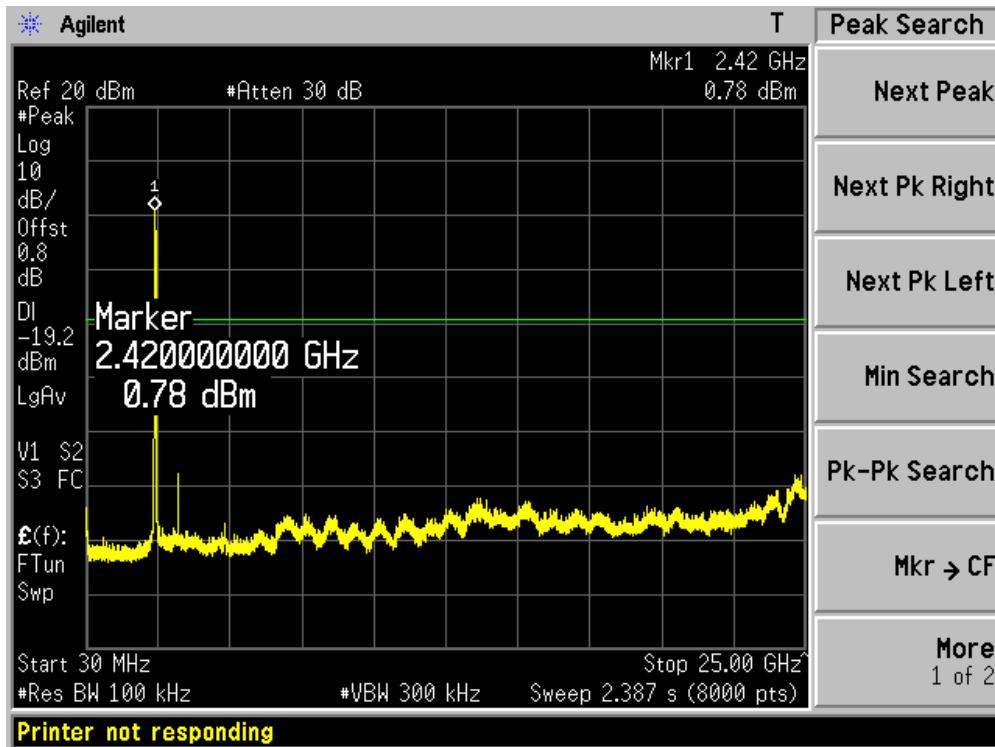


Channel 11 (2462MHz)

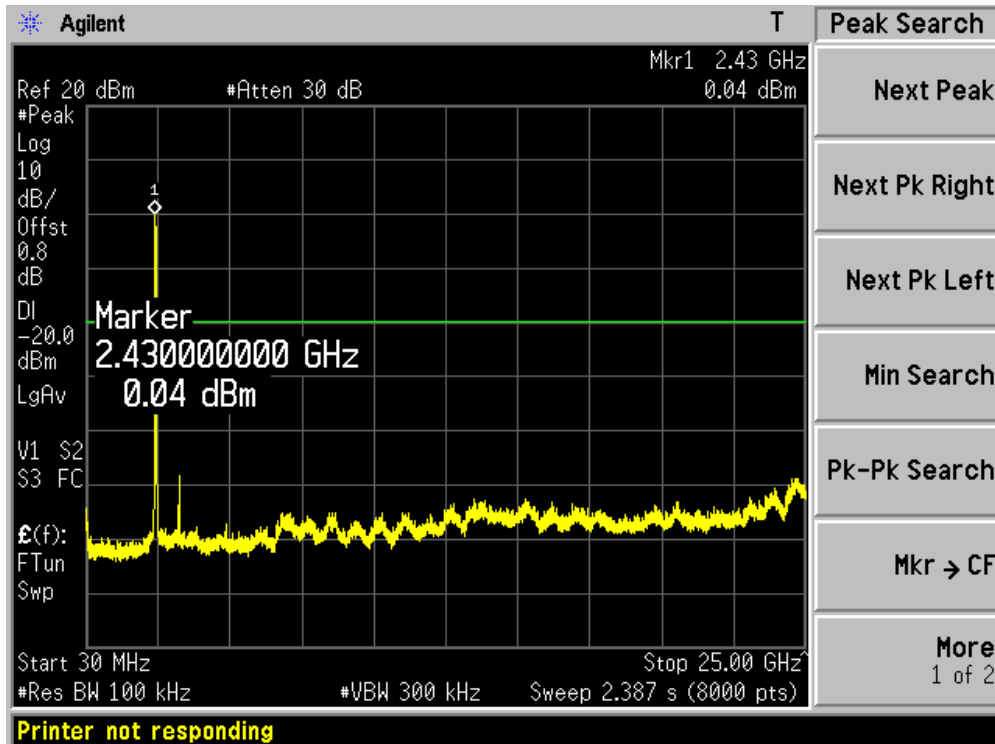


Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz)

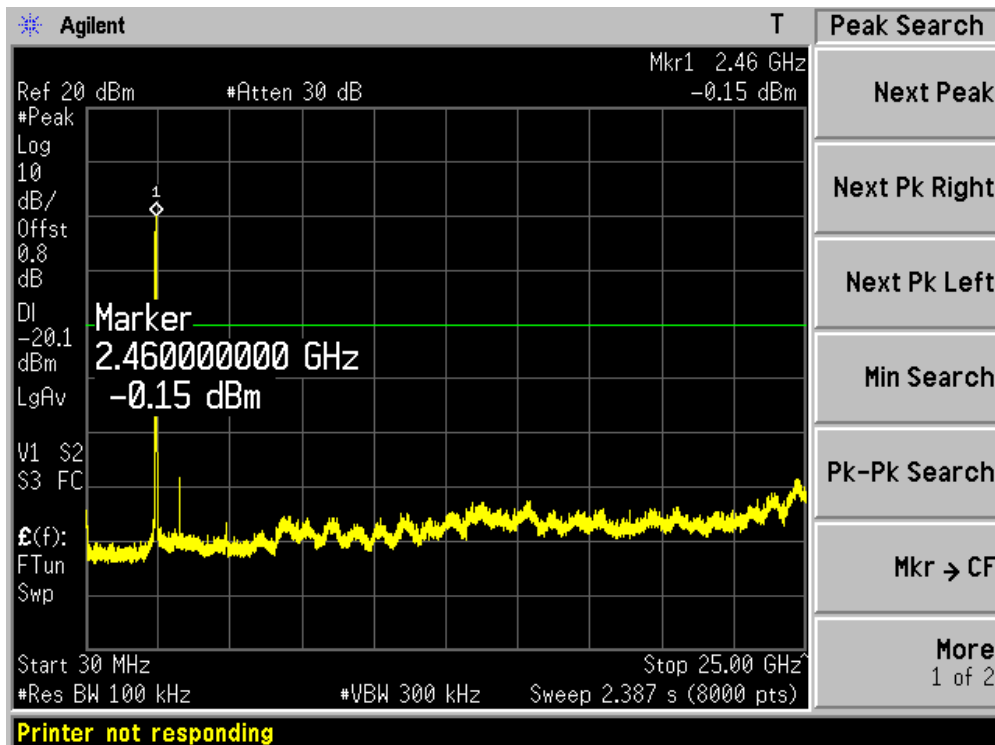
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



6. Radiated Emission Band Edge

6.1. Test Equipment

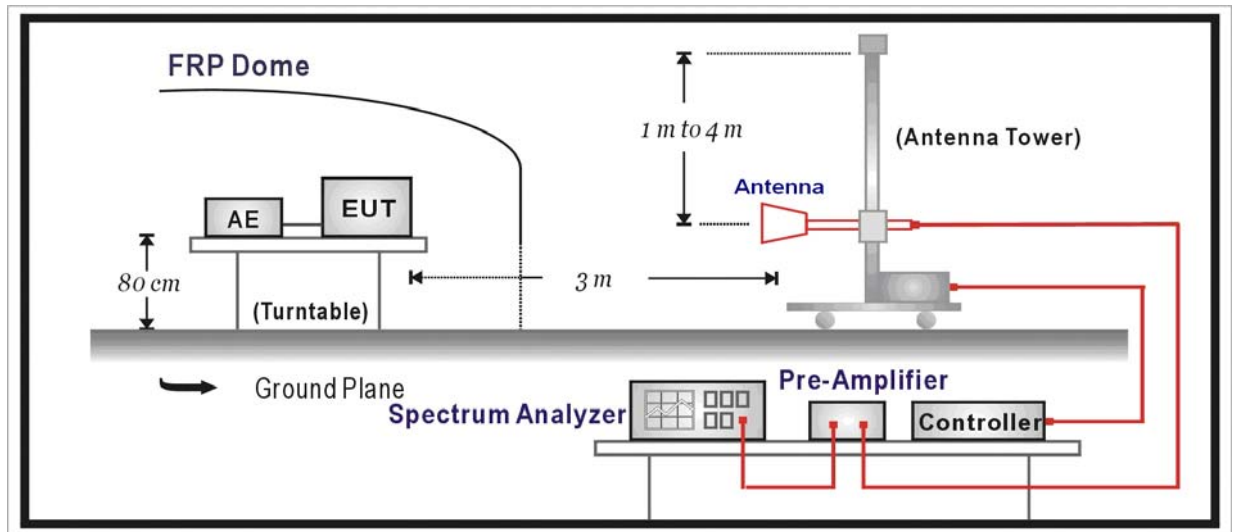
Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2009.04.23
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2009.06.11
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2009.05.25
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2009.03.31

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Note 2: The test instruments marked with "X" are used to measure the final test results.

6.2. Test Setup



6.3. Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

6.5. Uncertainty

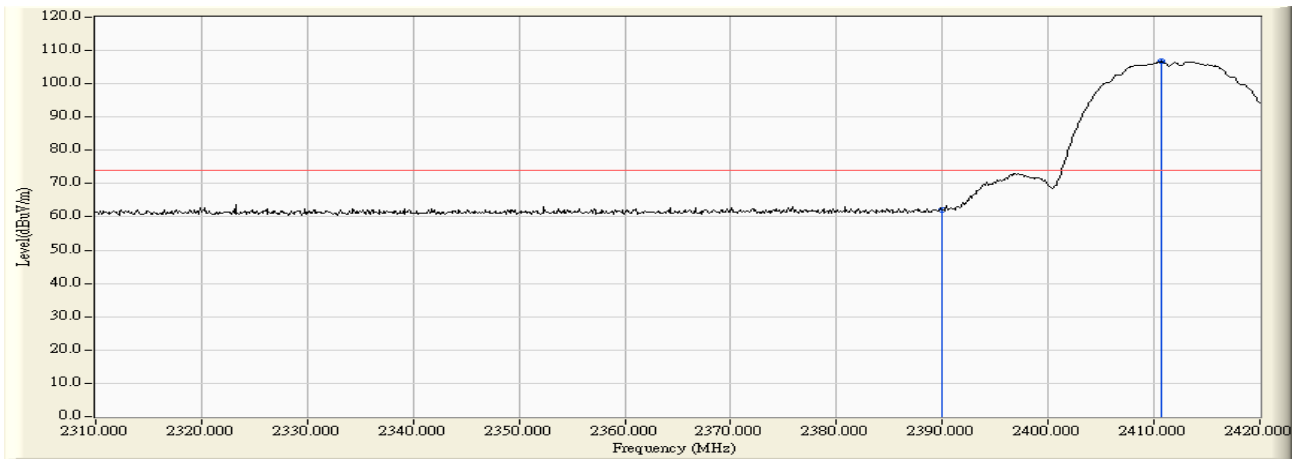
The measurement uncertainty above 1G is defined as ± 3.9 dB

6.6. Test Result

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

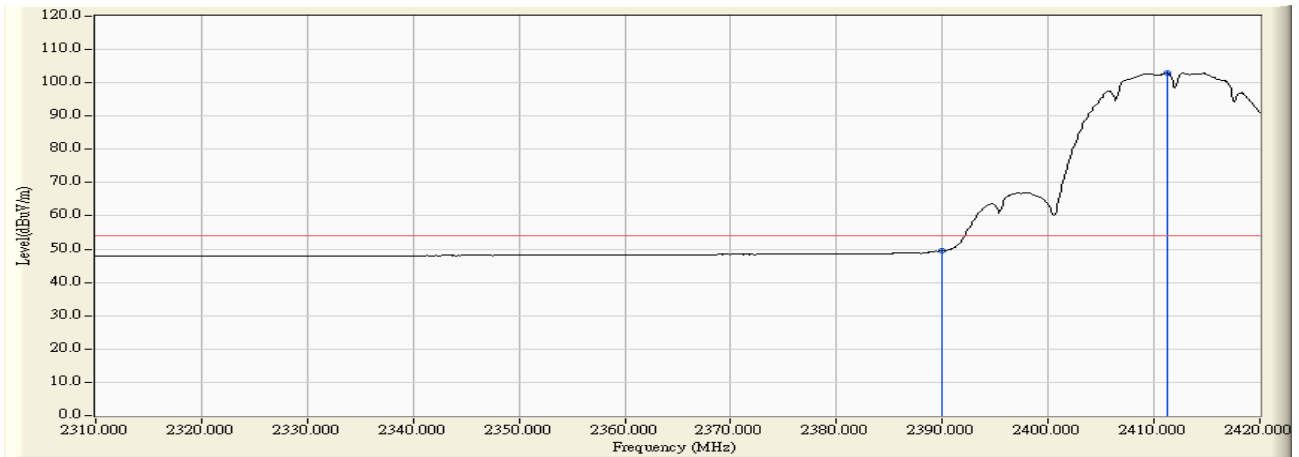
Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:11
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2412MHz



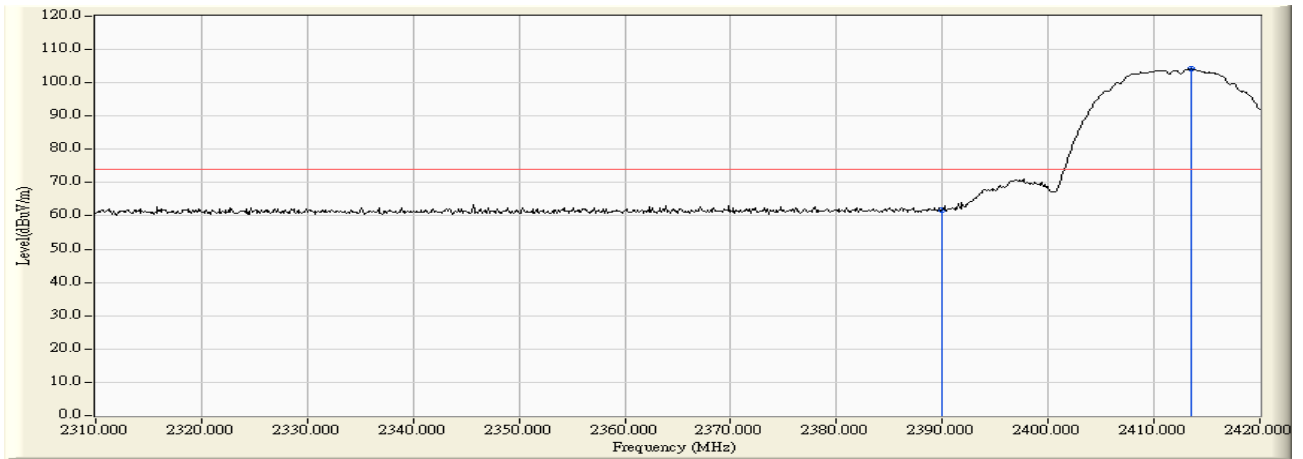
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	30.892	62.076	-11.894	73.970	PEAK
2	*	2410.760	31.189	75.492	106.681	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:11
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2412MHz



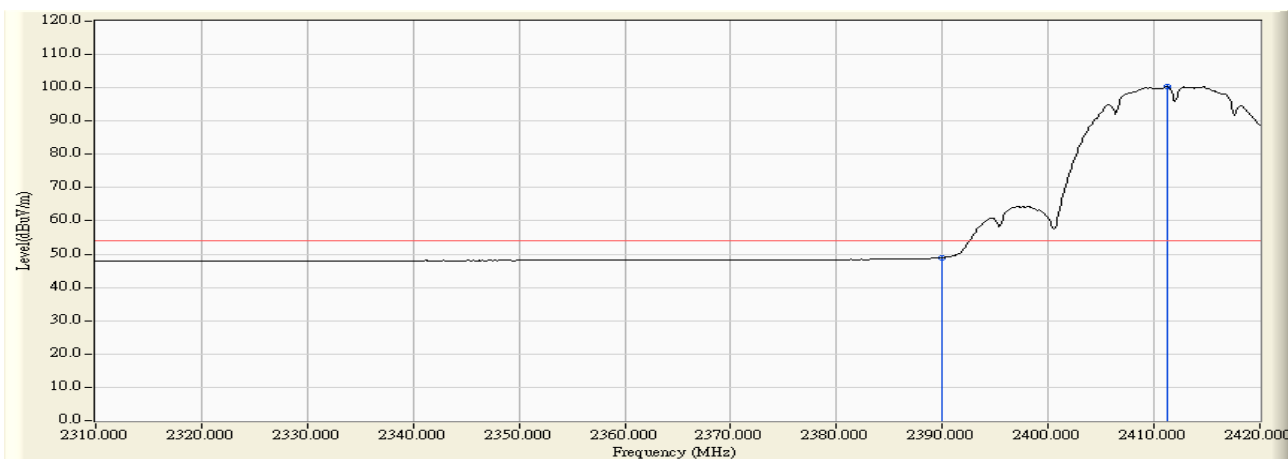
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.303	49.487	-4.483	53.970	AVERAGE
2	*	2411.200	31.190	71.754	102.944	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:07
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2412MHz



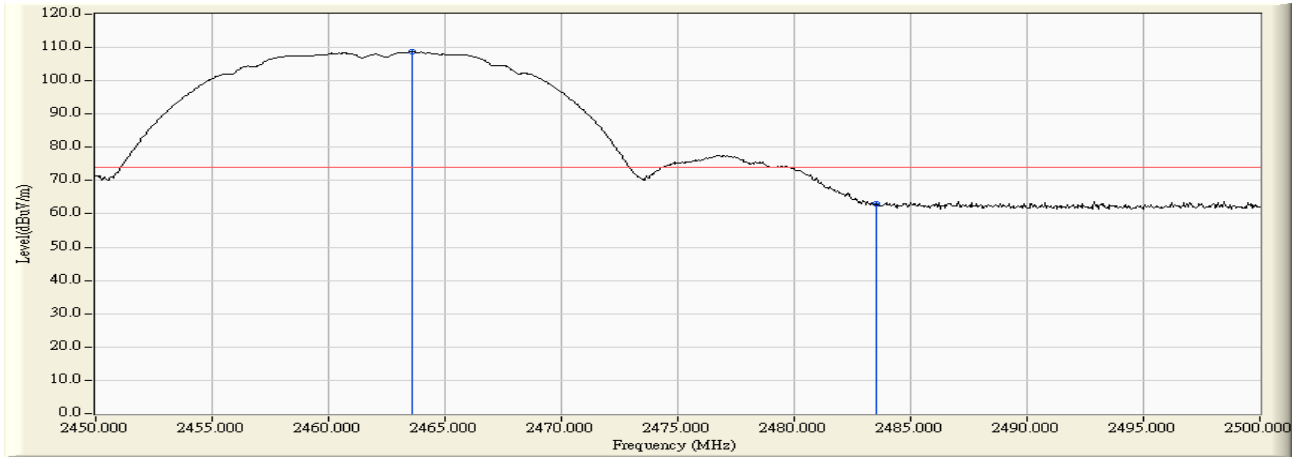
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	30.622	61.806	-12.164	73.970	PEAK
2	*	2413.510	31.192	73.012	104.204	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:07
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2412MHz



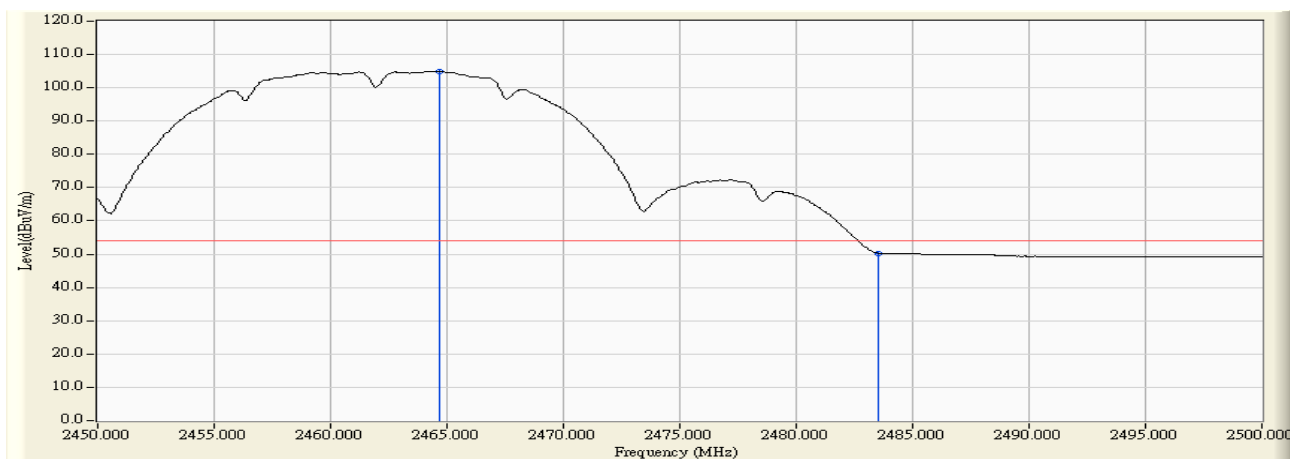
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	17.816	49.000	-4.970	53.970	AVERAGE
2	*	2411.200	31.190	69.086	100.276	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:59
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2462MHz



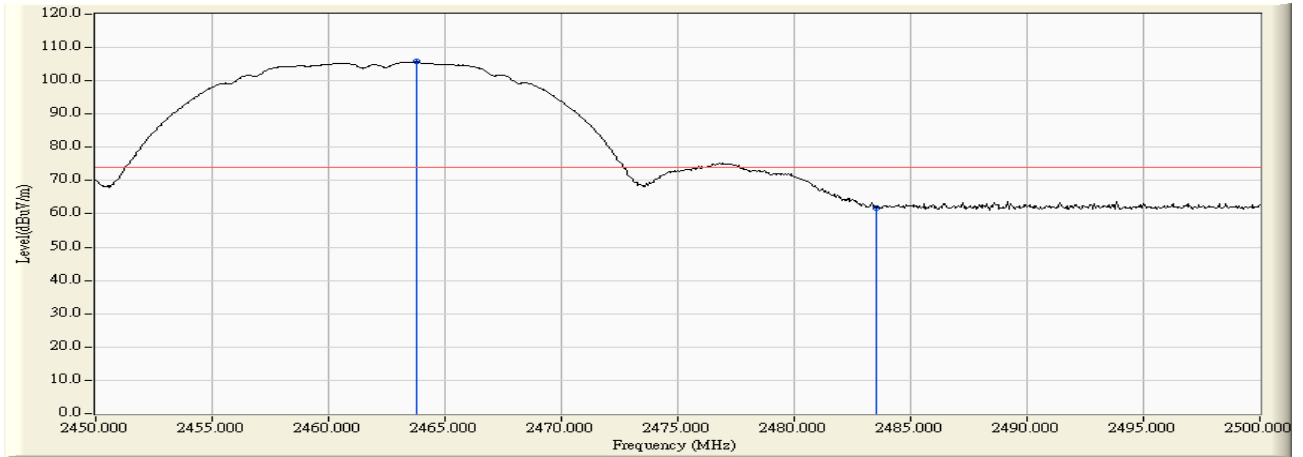
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.600	31.224	77.385	108.609	N/A	N/A	PEAK
2		2483.500	31.212	31.858	63.070	-10.900	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:00
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2462MHz



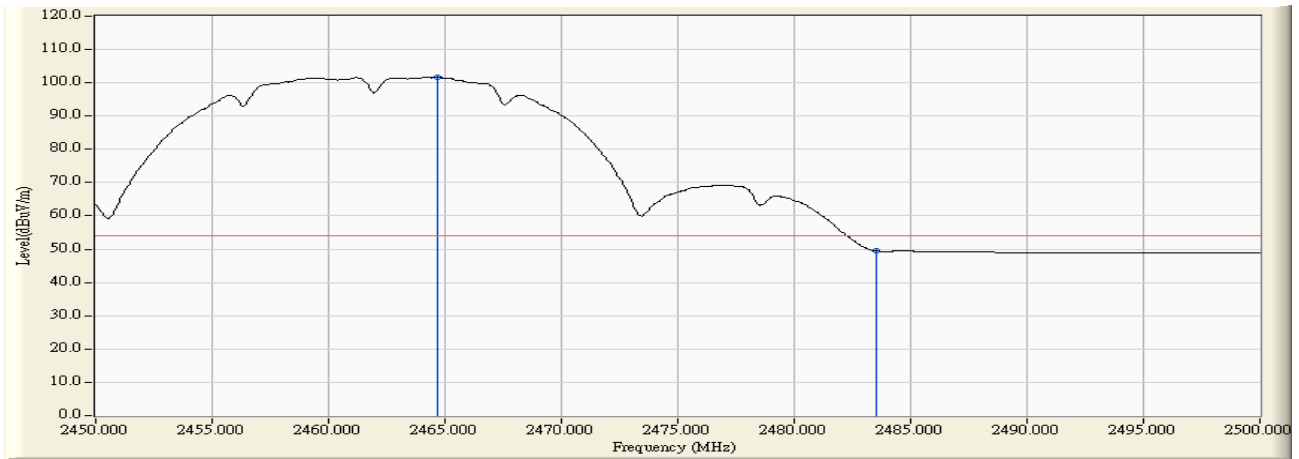
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.700	31.223	73.793	105.017	N/A	N/A	AVERAGE
2		2483.500	31.212	19.085	50.297	-3.673	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:03
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2462MHz



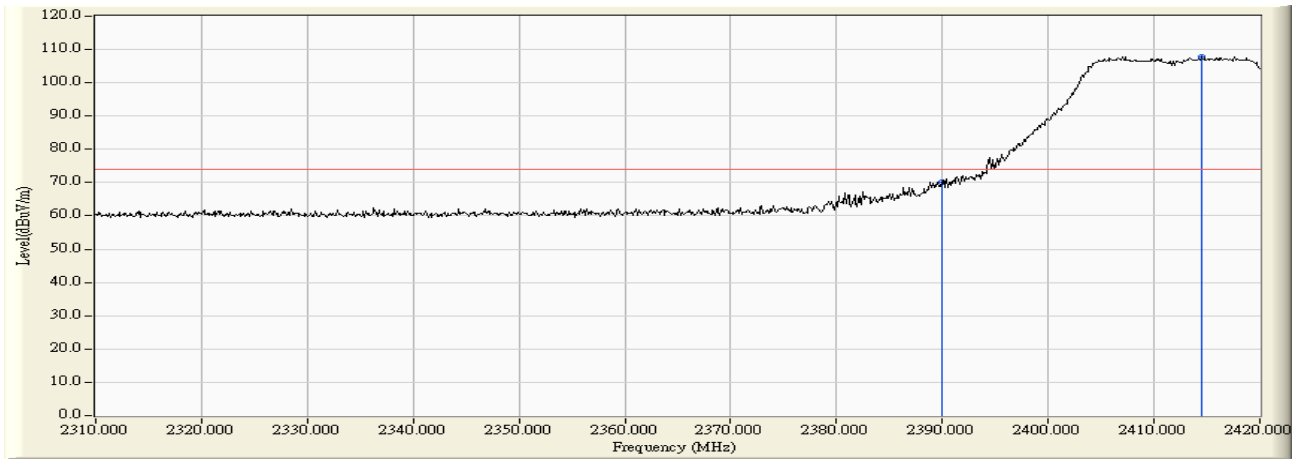
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.800	31.224	74.476	105.700	N/A	N/A	PEAK
2		2483.500	31.212	30.530	61.742	-12.228	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:03
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2462MHz



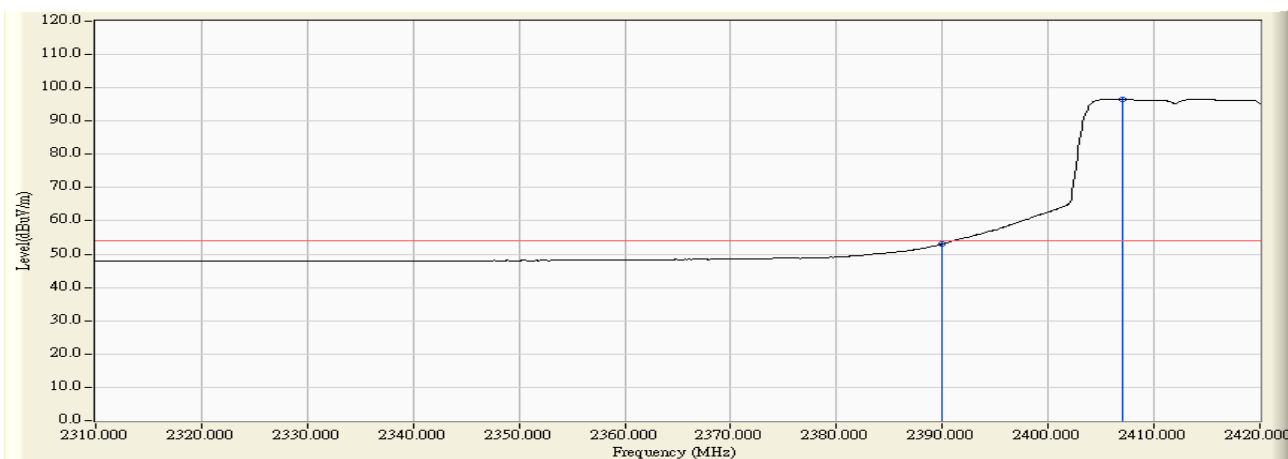
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.700	31.223	70.538	101.762	N/A	N/A	AVERAGE
2		2483.500	31.212	18.288	49.500	-4.470	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:38
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2412MHz



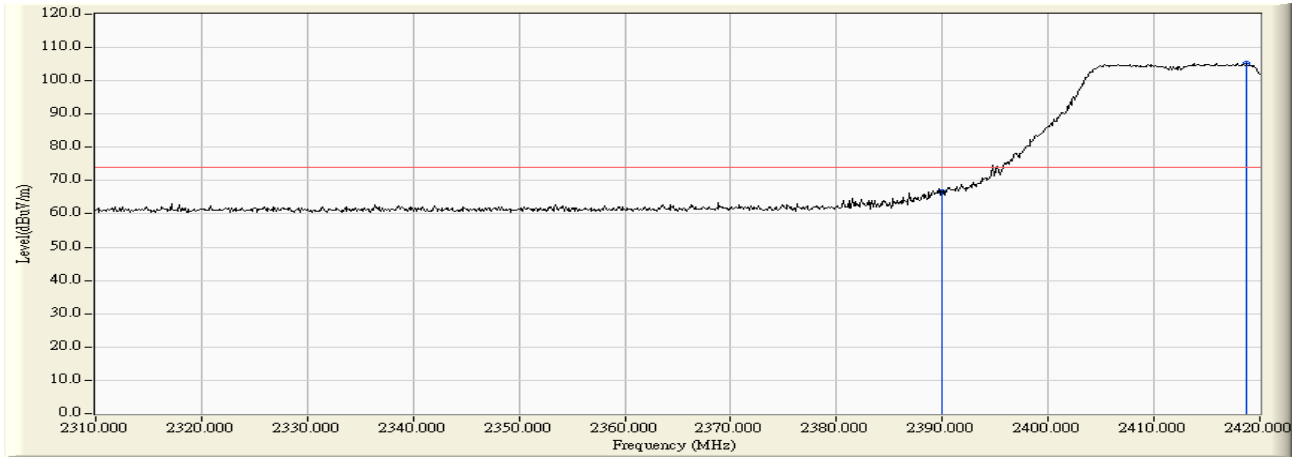
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	38.821	70.005	-3.965	73.970	PEAK
2	*	2414.500	31.193	76.686	107.878	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:39
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2412MHz



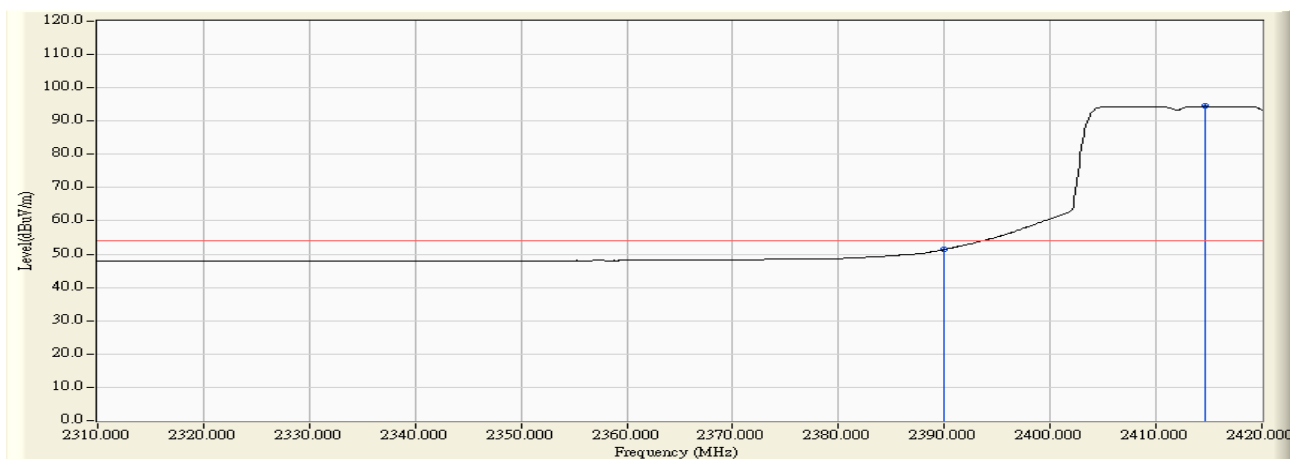
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	21.983	53.167	-0.803	53.970	AVERAGE
2	*	2407.020	31.187	65.323	96.510	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:41
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2412MHz



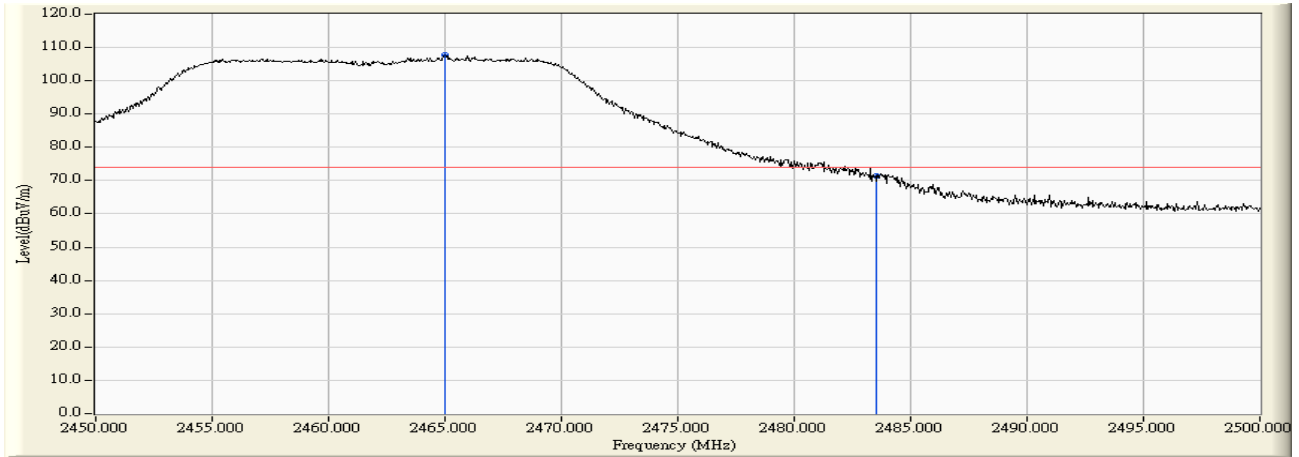
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	35.538	66.722	-7.248	73.970	PEAK
2	*	2418.790	31.196	74.069	105.265	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:42
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2412MHz



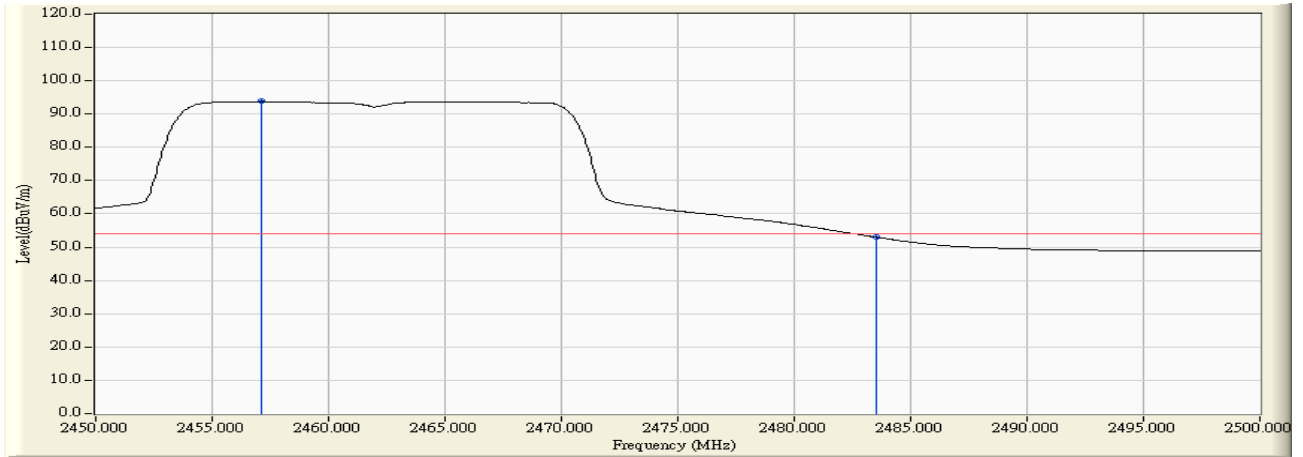
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	20.237	51.421	-2.549	53.970	AVERAGE
2	*	2414.610	31.193	63.244	94.437	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:52
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2462MHz



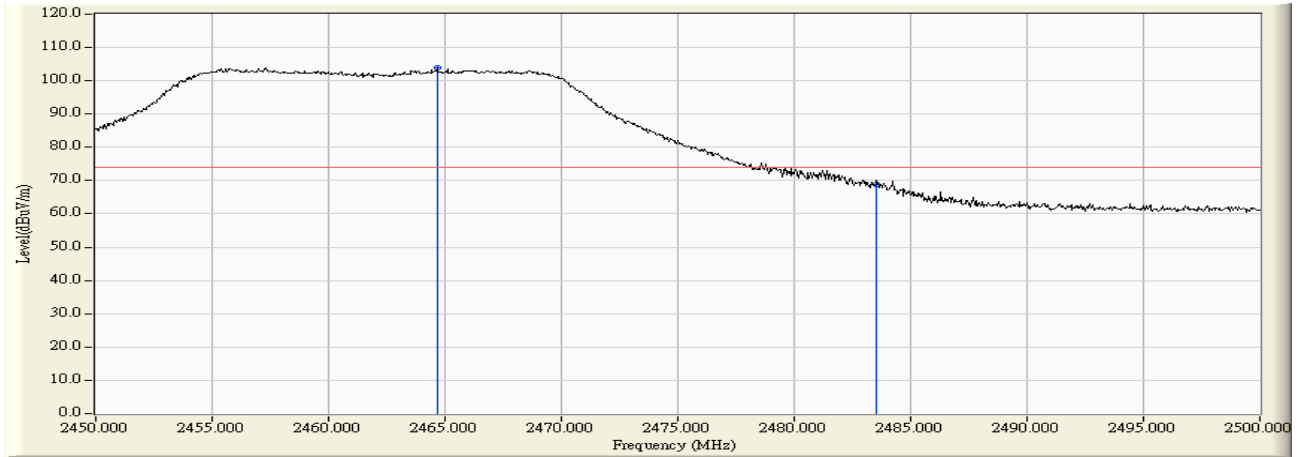
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.000	31.223	76.524	107.747	N/A	N/A	PEAK
2		2483.500	31.212	40.318	71.530	-2.440	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:54
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2462MHz



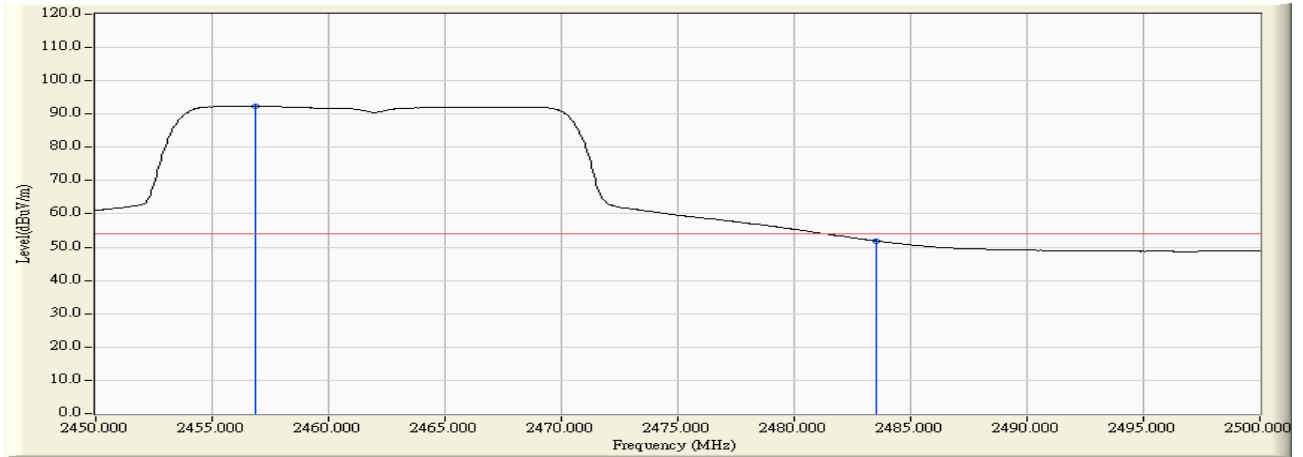
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2457.100	31.223	62.565	93.788	N/A	N/A	AVERAGE
2		2483.500	31.212	21.838	53.050	-0.920	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:32
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2462MHz



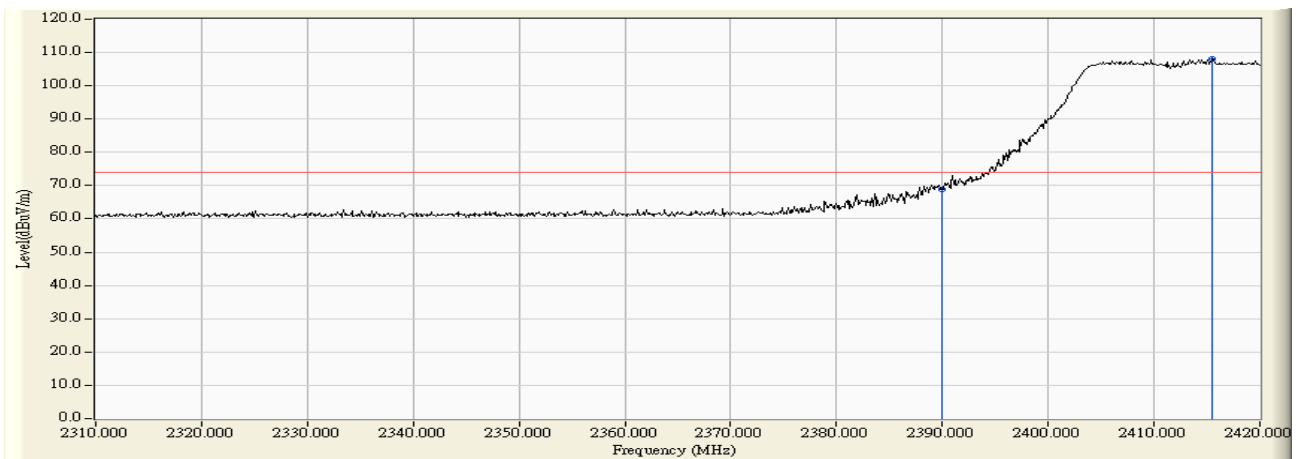
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.650	31.223	72.599	103.823	N/A	N/A	PEAK
2		2483.500	31.212	37.778	68.990	-4.980	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:32
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2462MHz



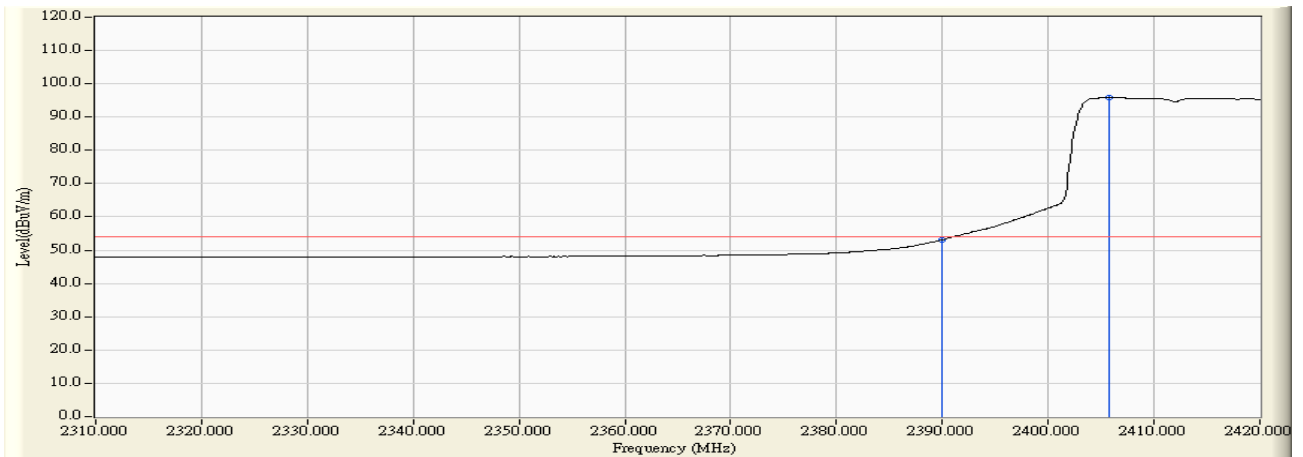
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.850	31.223	61.136	92.359	N/A	N/A	AVERAGE
2		2483.500	31.212	20.707	51.919	-2.051	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:15
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz



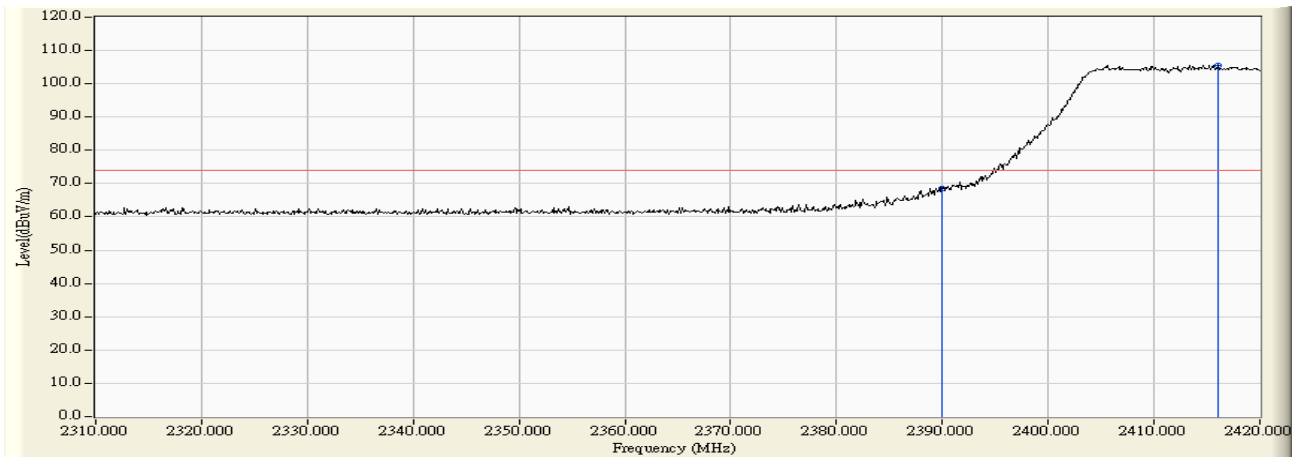
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	37.709	68.893	-5.077	73.970	PEAK
2	*	2415.490	31.193	76.905	108.098	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:16
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz



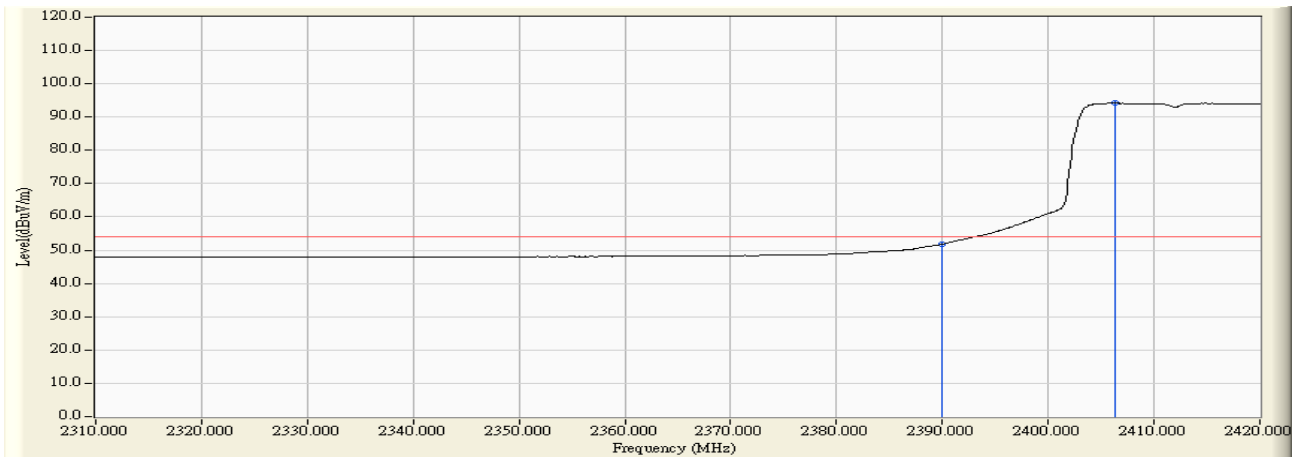
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	21.982	53.166	-0.804	53.970	AVERAGE
2	*	2405.700	31.186	64.661	95.847	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:19
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz



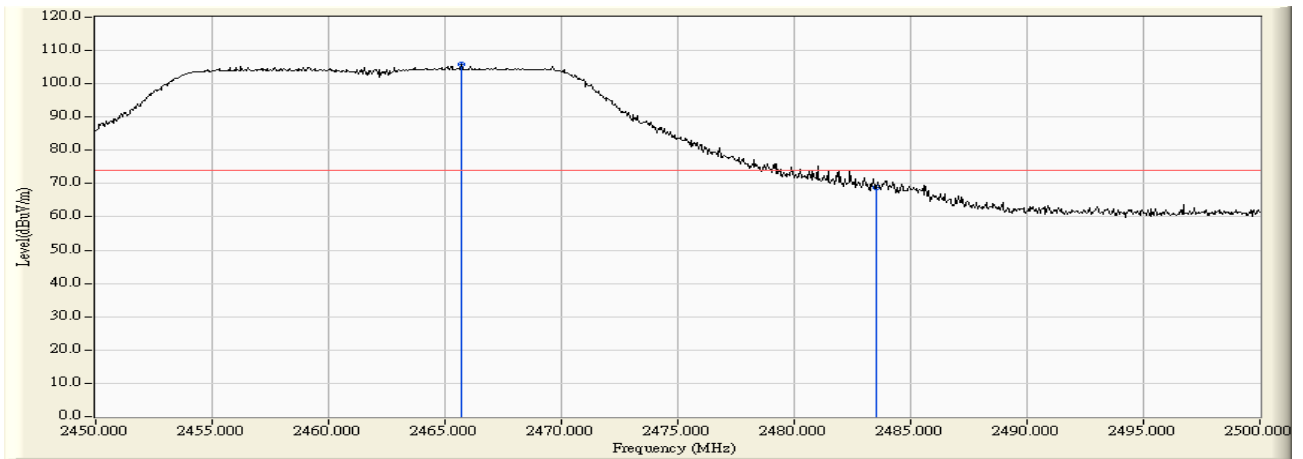
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	37.402	68.586	-5.384	73.970	PEAK
2	*	2416.040	31.194	74.394	105.588	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:20
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2412MHz



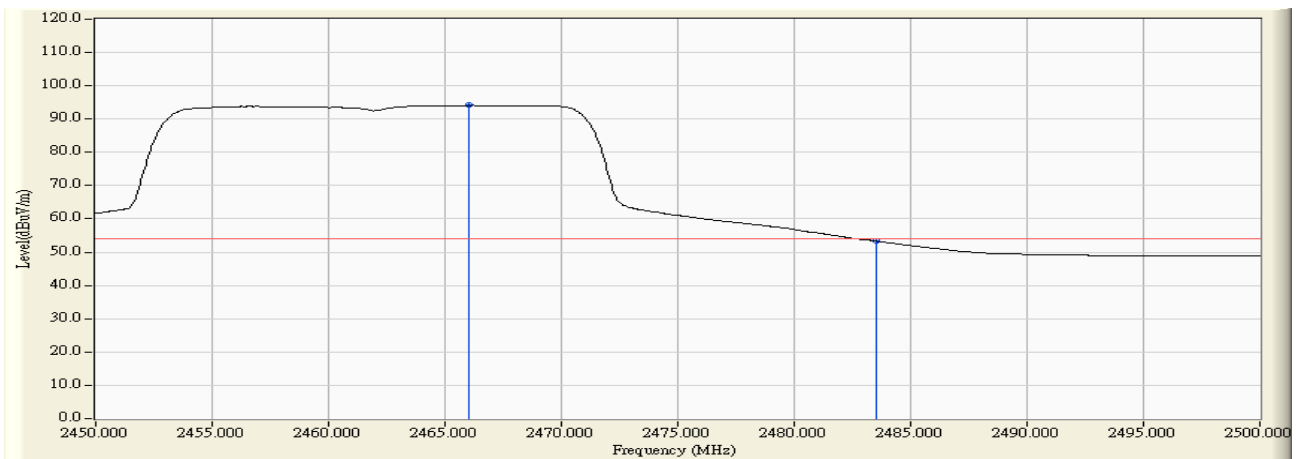
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	20.692	51.876	-2.094	53.970	AVERAGE
2	*	2406.250	31.187	62.958	94.145	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:25
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz



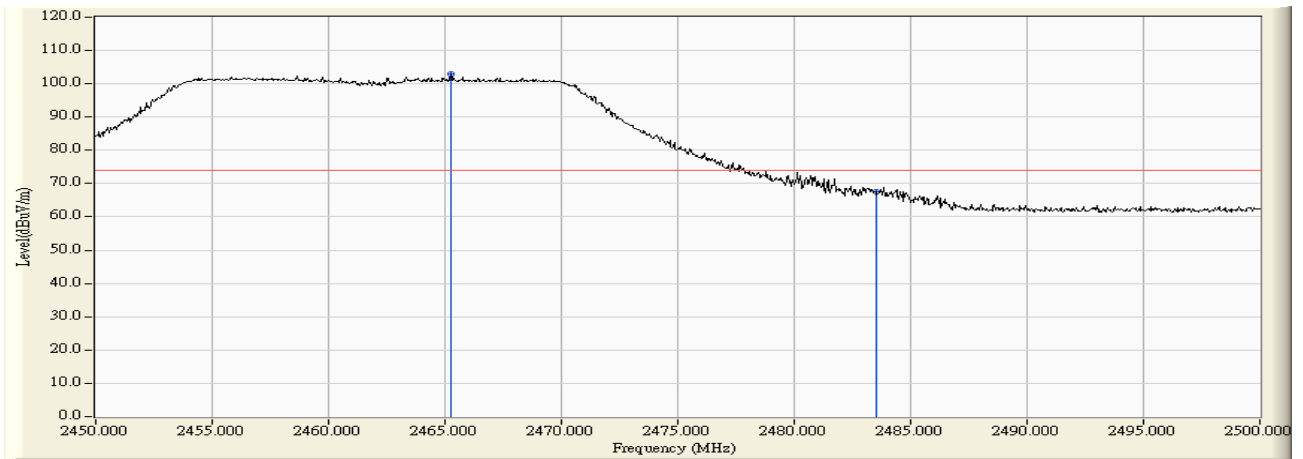
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.700	31.223	74.746	105.969	N/A	N/A	PEAK
2		2483.500	31.212	37.762	68.974	-4.996	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:26
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz



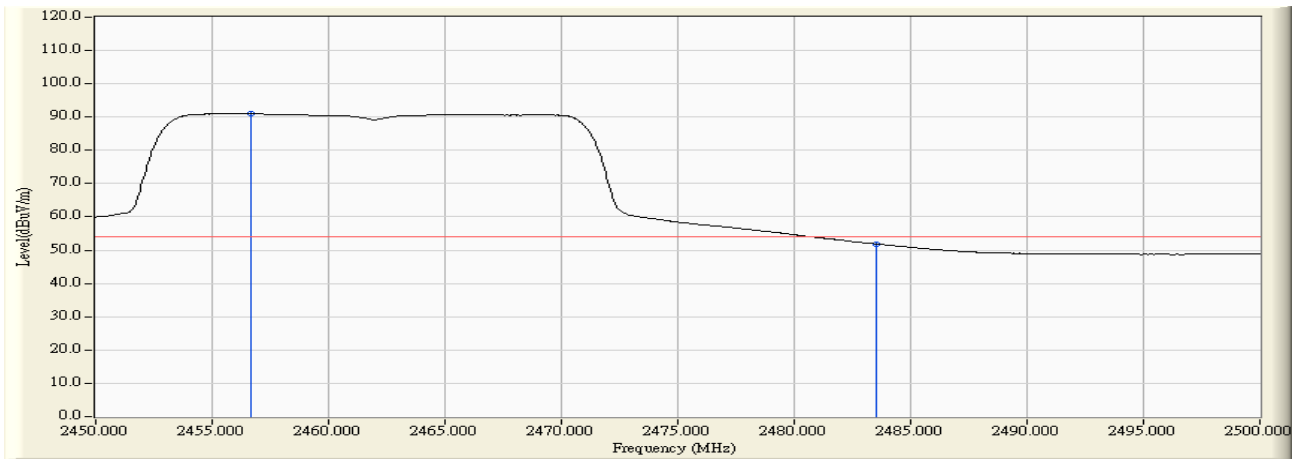
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2466.050	31.223	62.897	94.120	N/A	N/A	AVERAGE
2		2483.500	31.212	22.084	53.296	-0.674	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:29
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz



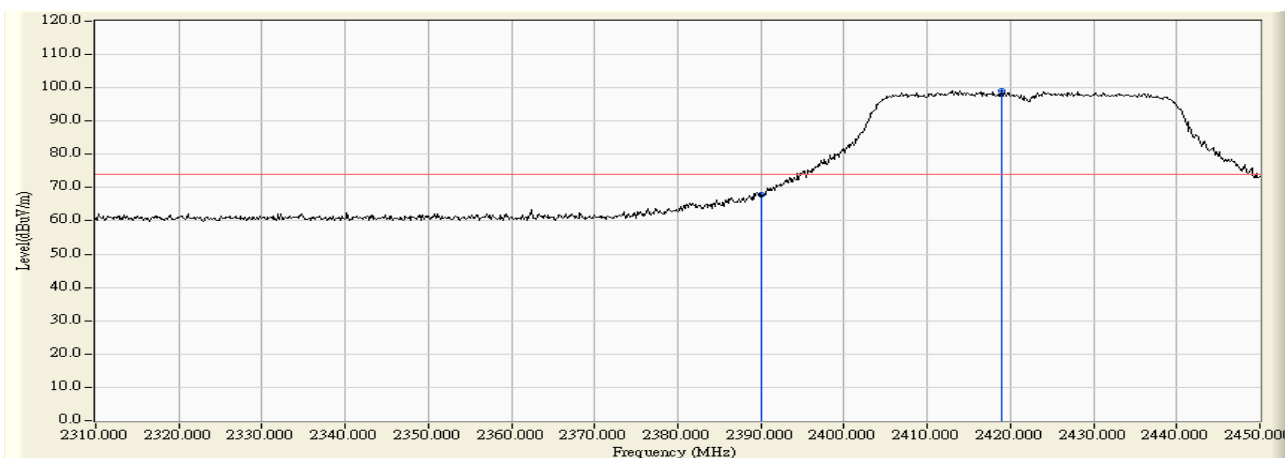
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.250	31.223	71.588	102.811	N/A	N/A	PEAK
2		2483.500	31.212	36.405	67.617	-6.353	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:30
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 3: Transmit by 802.11n(20MHz) at channel 2462MHz



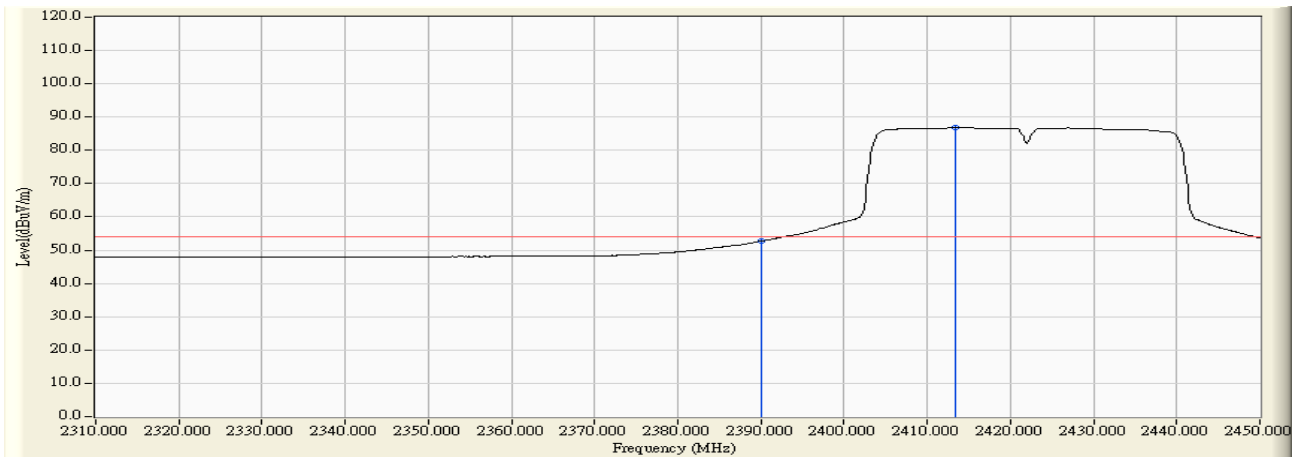
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.650	31.223	59.793	91.016	N/A	N/A	AVERAGE
2		2483.500	31.212	20.711	51.923	-2.047	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:50
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz



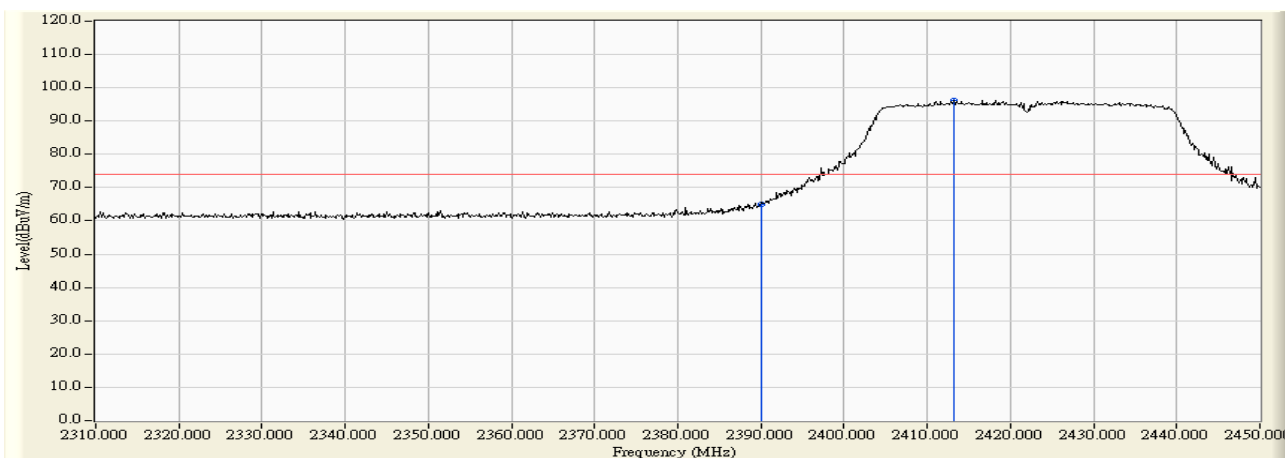
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	36.601	67.785	-6.185	73.970	PEAK
2	*	2418.920	31.196	67.768	98.964	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:50
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz



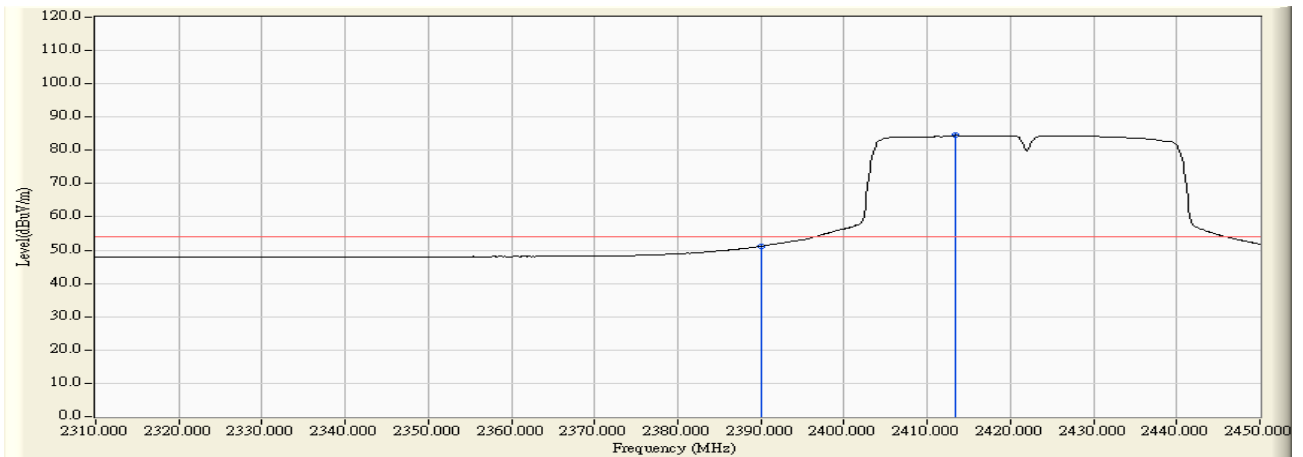
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	21.568	52.752	-1.218	53.970	AVERAGE
2	*	2413.460	31.192	55.711	86.903	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:54
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz



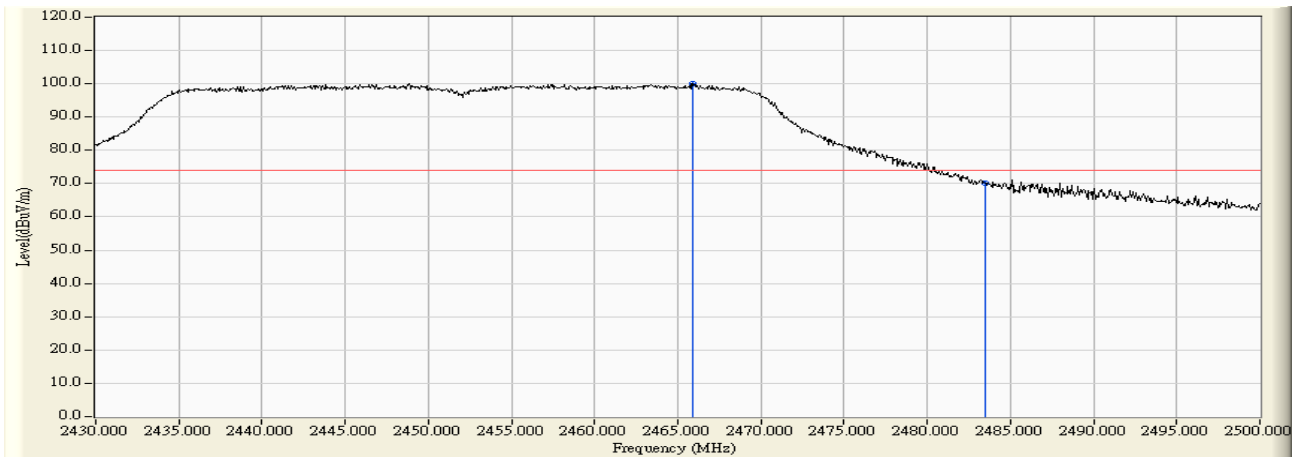
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	33.874	65.058	-8.912	73.970	PEAK
2	*	2413.180	31.192	65.085	96.276	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:54
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2422MHz



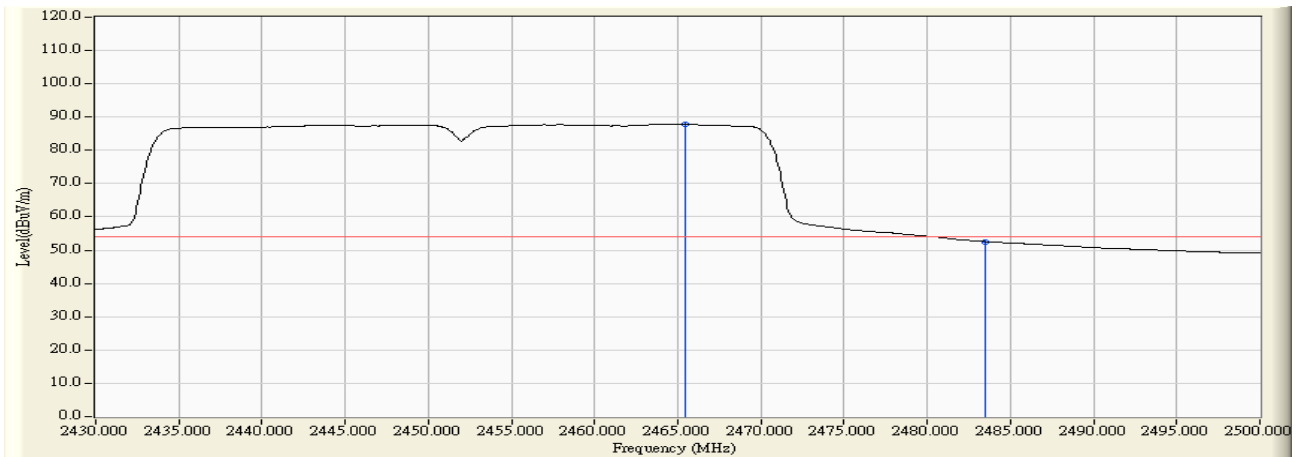
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	20.016	51.200	-2.770	53.970	AVERAGE
2	*	2413.460	31.192	53.283	84.475	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:40
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz



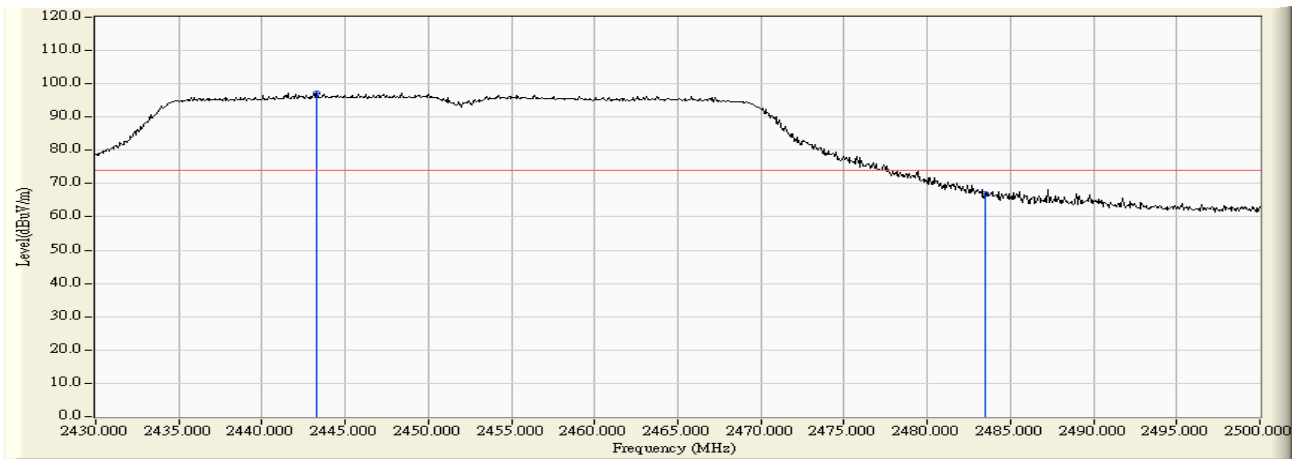
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.910	31.223	68.840	100.063	N/A	N/A	PEAK
2		2483.500	31.212	38.966	70.178	-3.792	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:40
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz



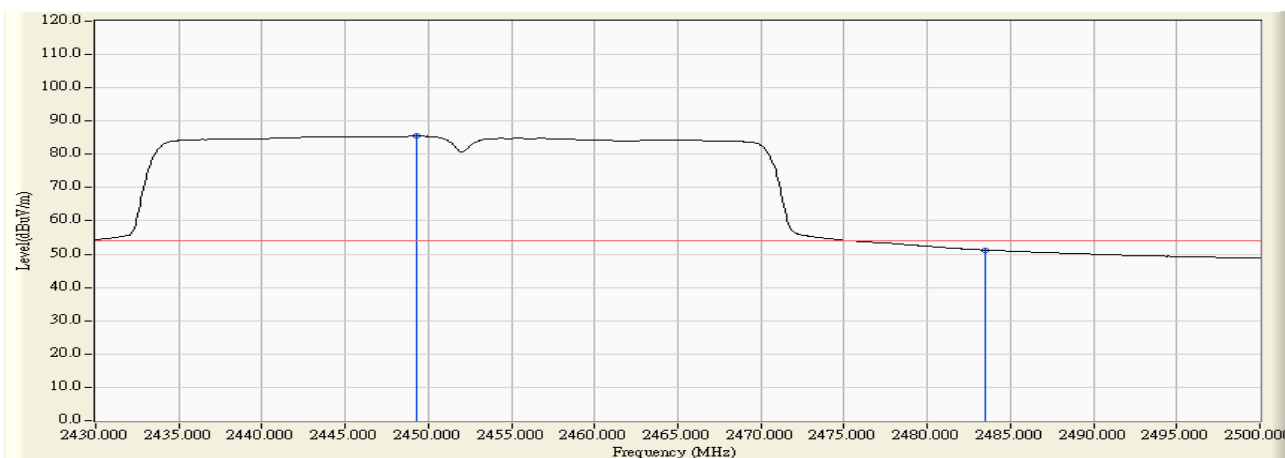
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.420	31.223	56.648	87.871	N/A	N/A	AVERAGE
2		2483.500	31.212	21.358	52.570	-1.400	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:43
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2443.300	31.217	65.982	97.199	N/A	N/A	PEAK
2		2483.500	31.212	35.684	66.896	-7.074	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 15:44
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(40MHz) at channel 2452MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2449.320	31.220	54.253	85.473	N/A	N/A	AVERAGE
2		2483.500	31.212	20.039	51.251	-2.719	53.970	AVERAGE

7. Operation Frequency Range of 20dB Bandwidth

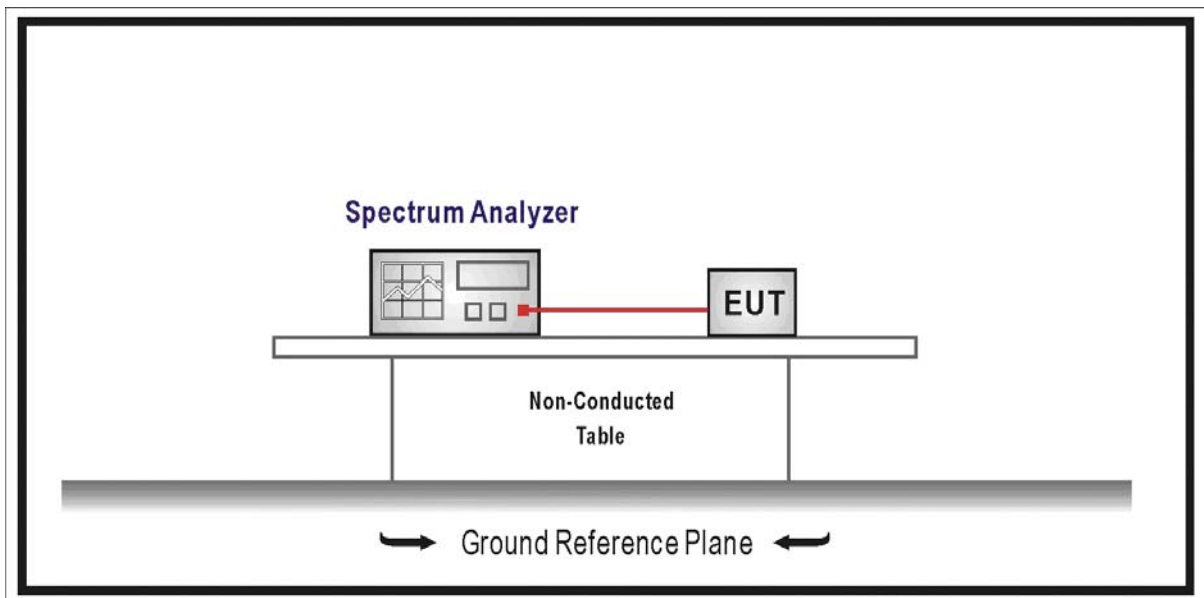
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Limit

20 dB bandwidth of the emission is contained within the operation frequency band.

7.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

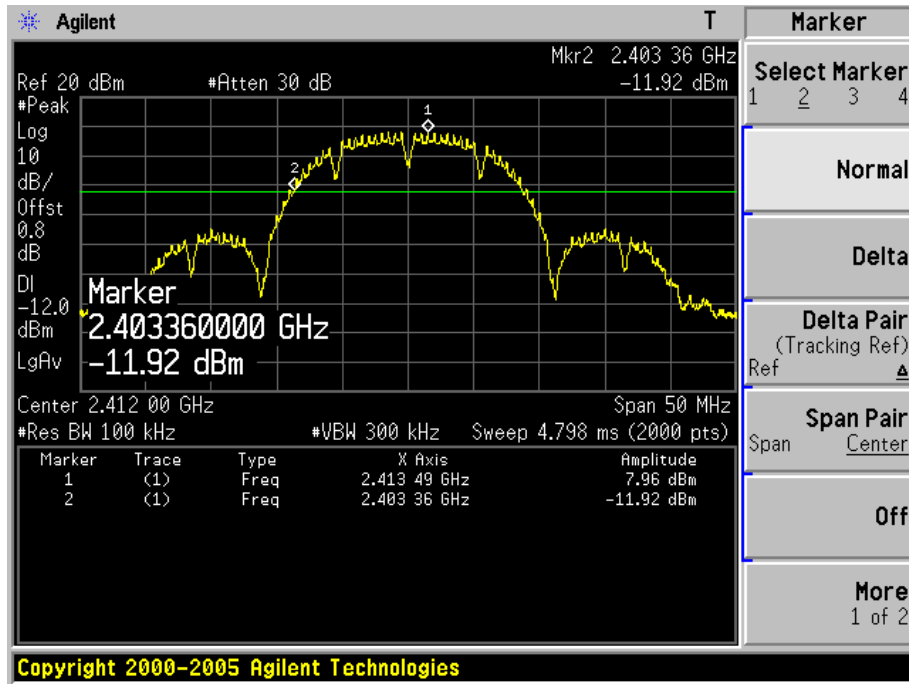
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

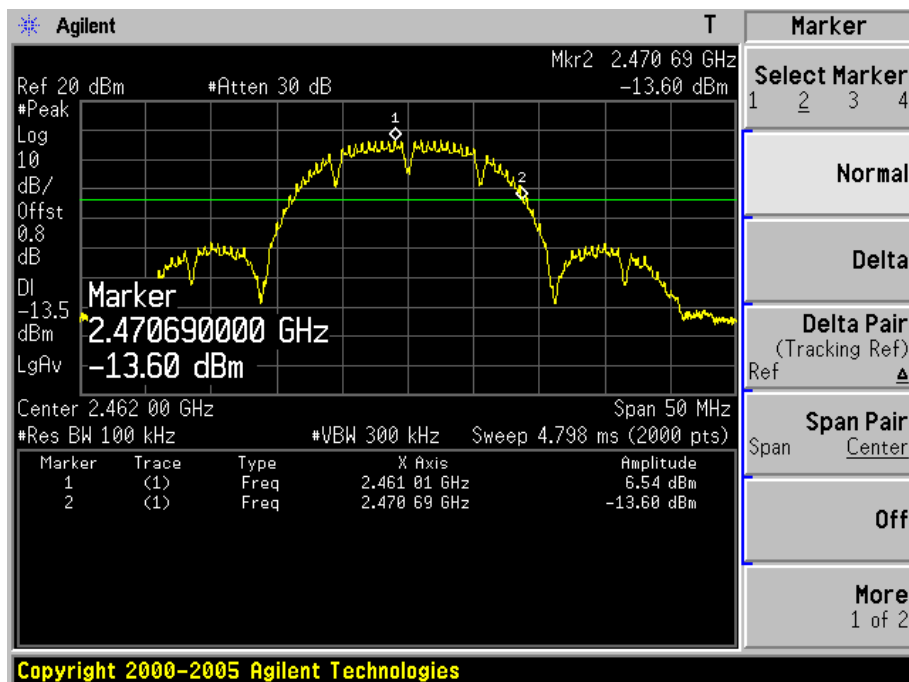
7.6. Test Result

Product	:	Eee PC
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel 01 (2412MHz)

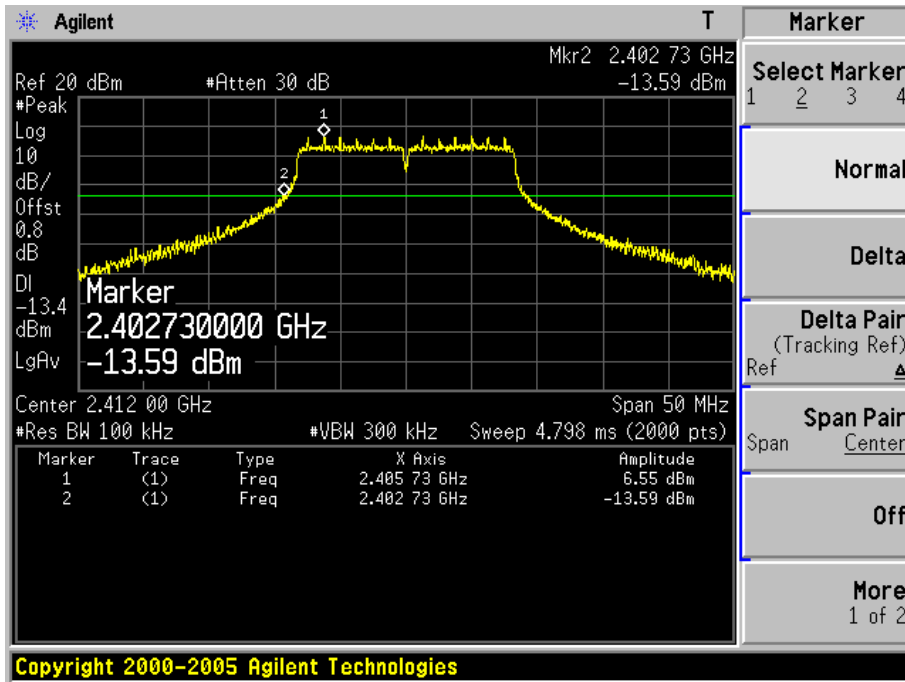


Channel 11 (2462MHz)

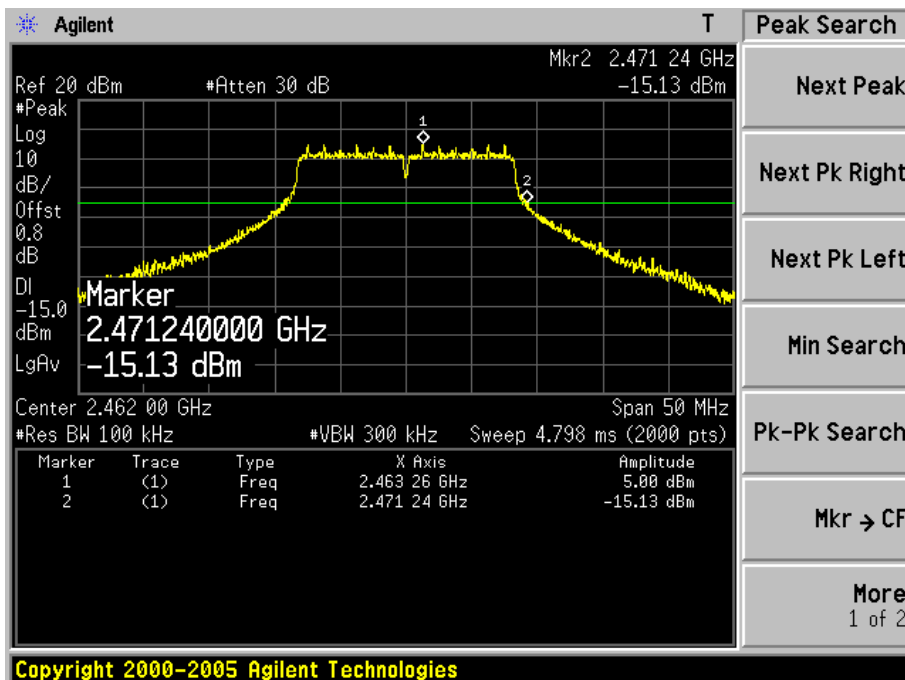


Product	: Eee PC
Test Item	: Operation Frequency Range of 20dB Bandwidth
Test Site	: AC-6
Test Mode	: Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)

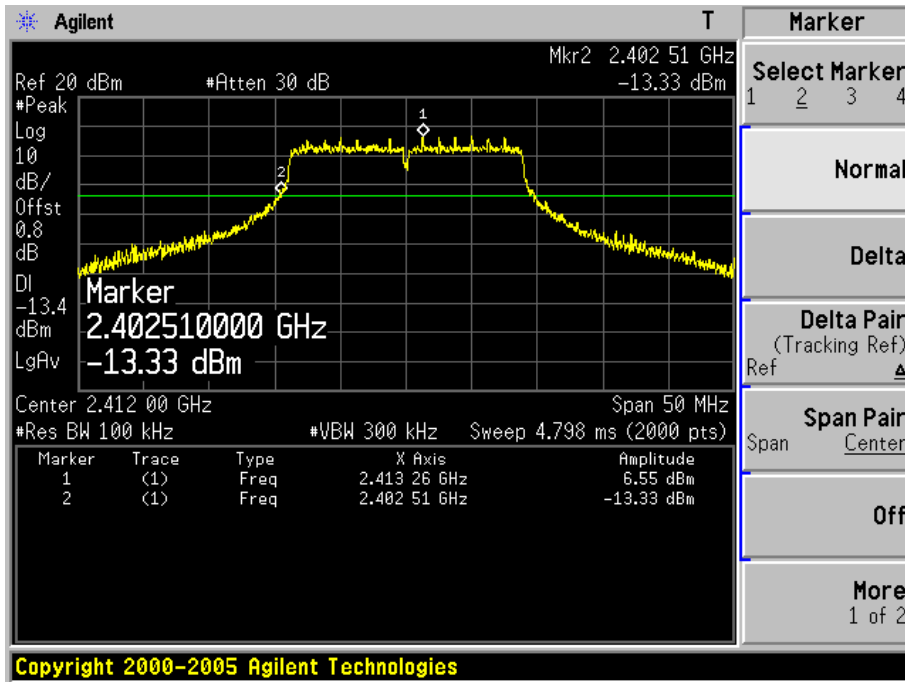


Channel 11 (2462MHz)

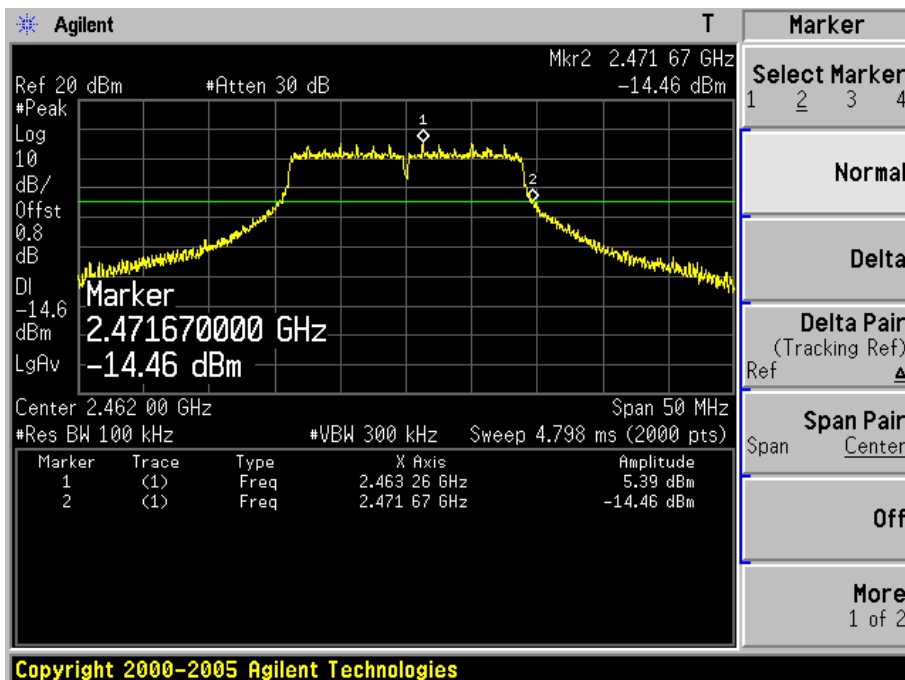


Product	: Eee PC
Test Item	: Operation Frequency Range of 20dB Bandwidth
Test Site	: AC-6
Test Mode	: Mode 3: Transmit by 802.11n (20MHz)

Channel 01 (2412MHz)

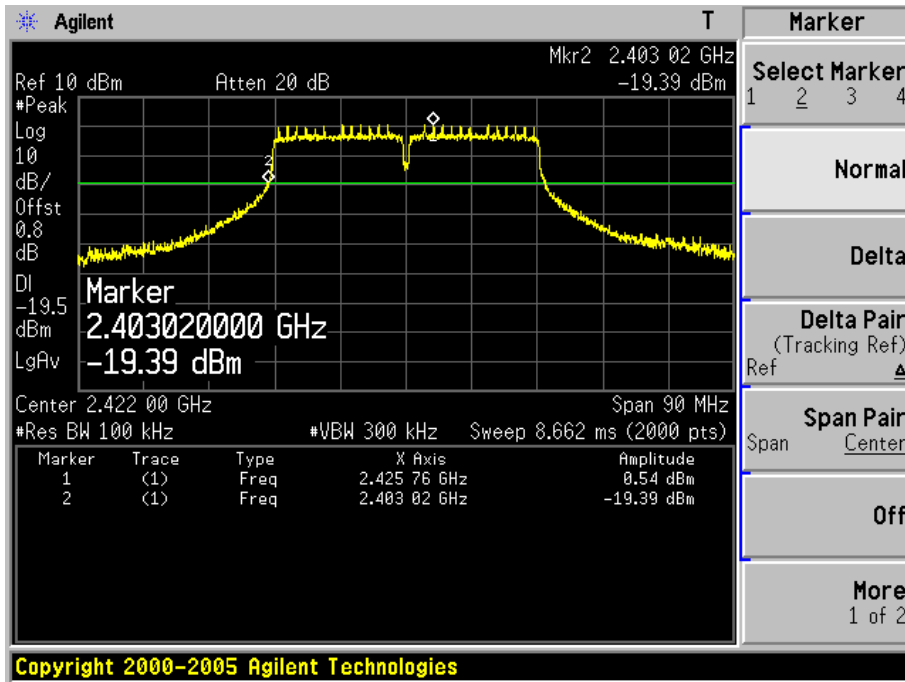


Channel 11 (2462MHz)

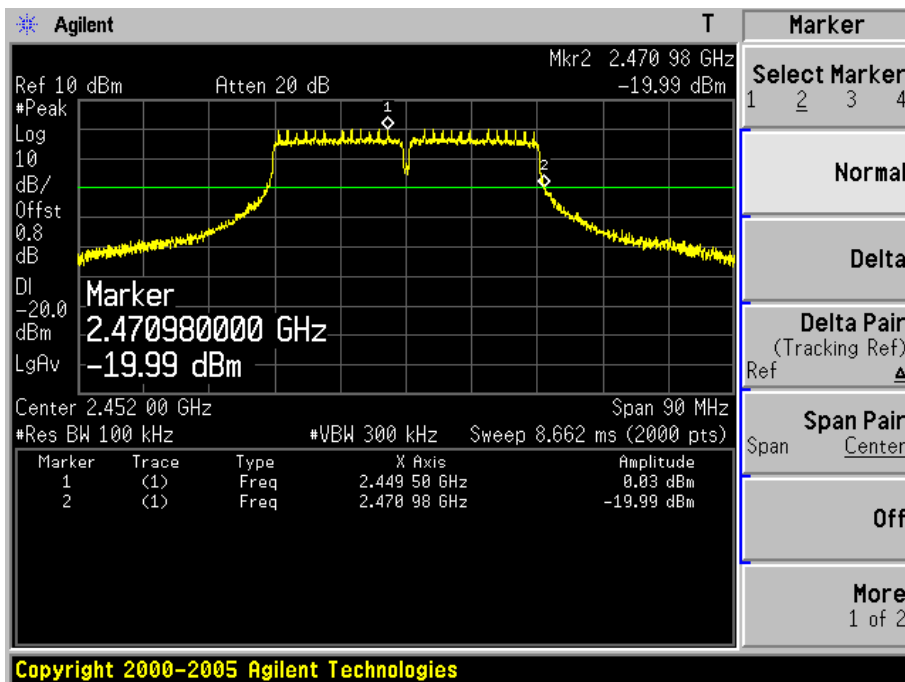


Product	: Eee PC
Test Item	: Operation Frequency Range of 20dB Bandwidth
Test Site	: AC-6
Test Mode	: Mode 4: Transmit by 802.11n (40MHz)

Channel 03 (2422MHz)



Channel 09 (2452MHz)



8. Occupied Bandwidth

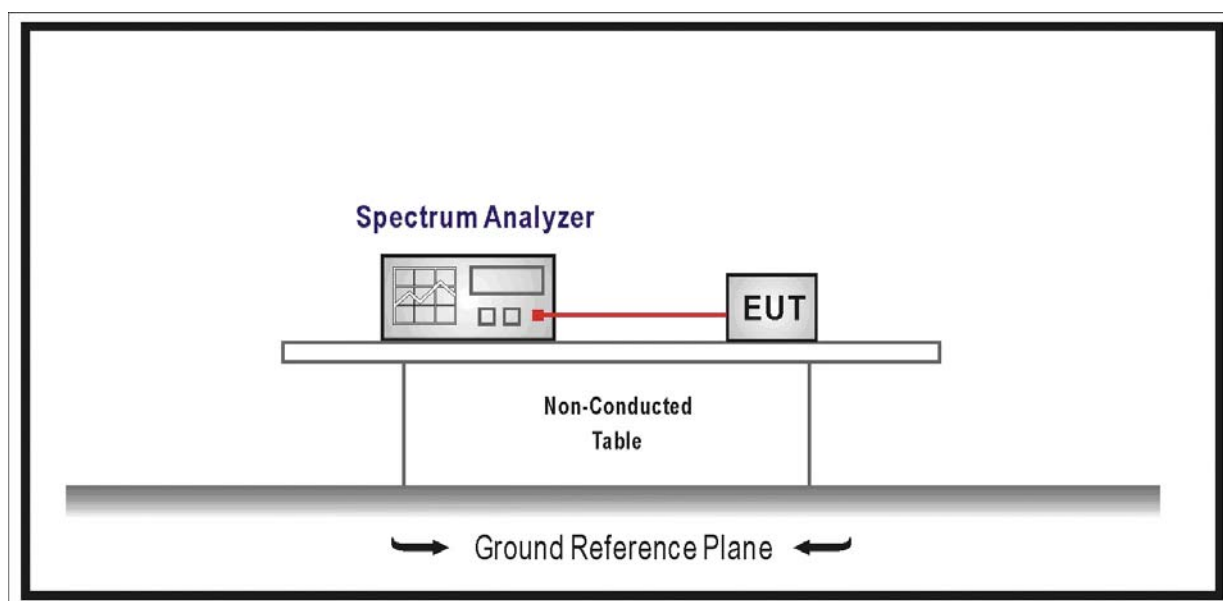
8.1. Test Equipment

Occupied Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

The minimum 6 dB bandwidth shall be at least 500 kHz.

8.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

8.5. Uncertainty

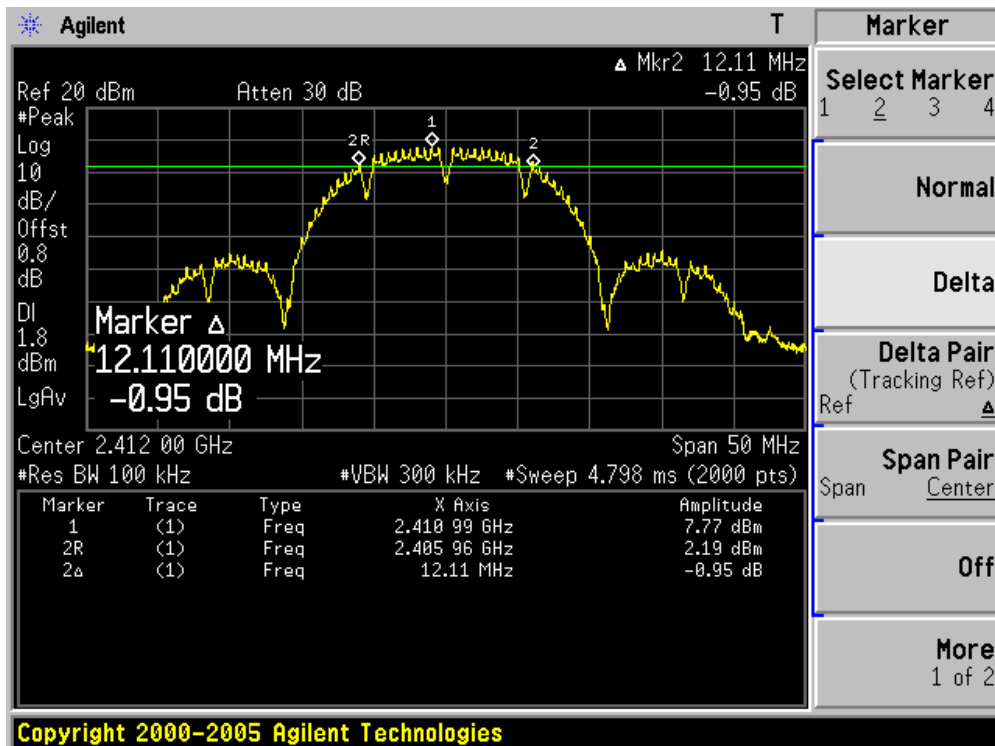
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

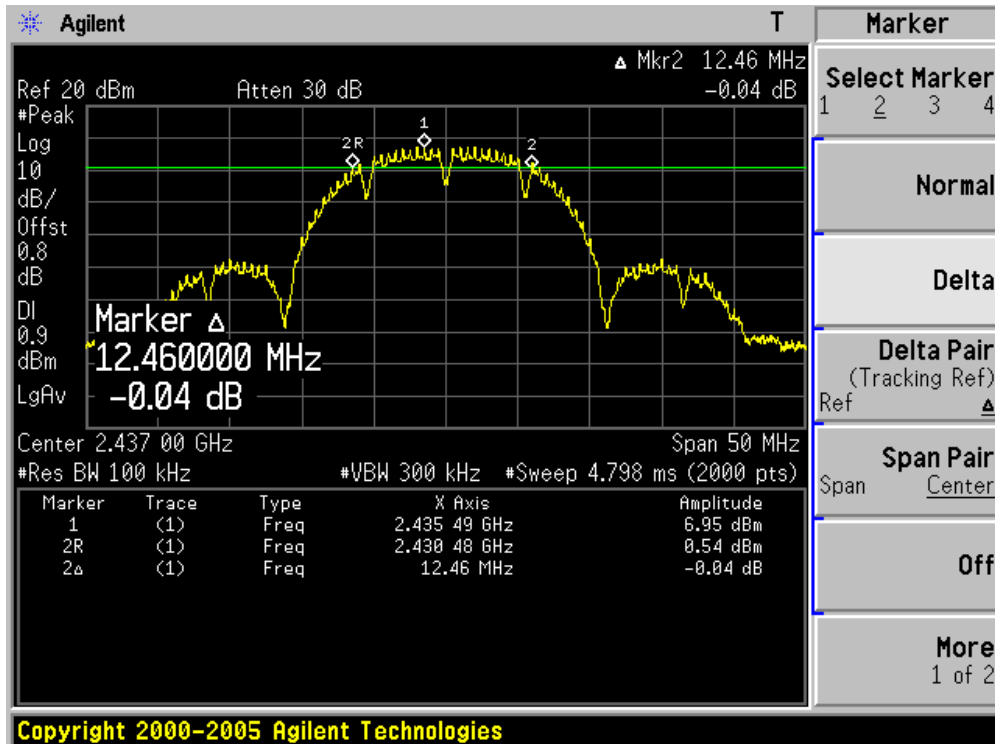
Product	:	Eee PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12110	500	Pass
06	2437	12460	500	Pass
11	2462	12530	500	Pass

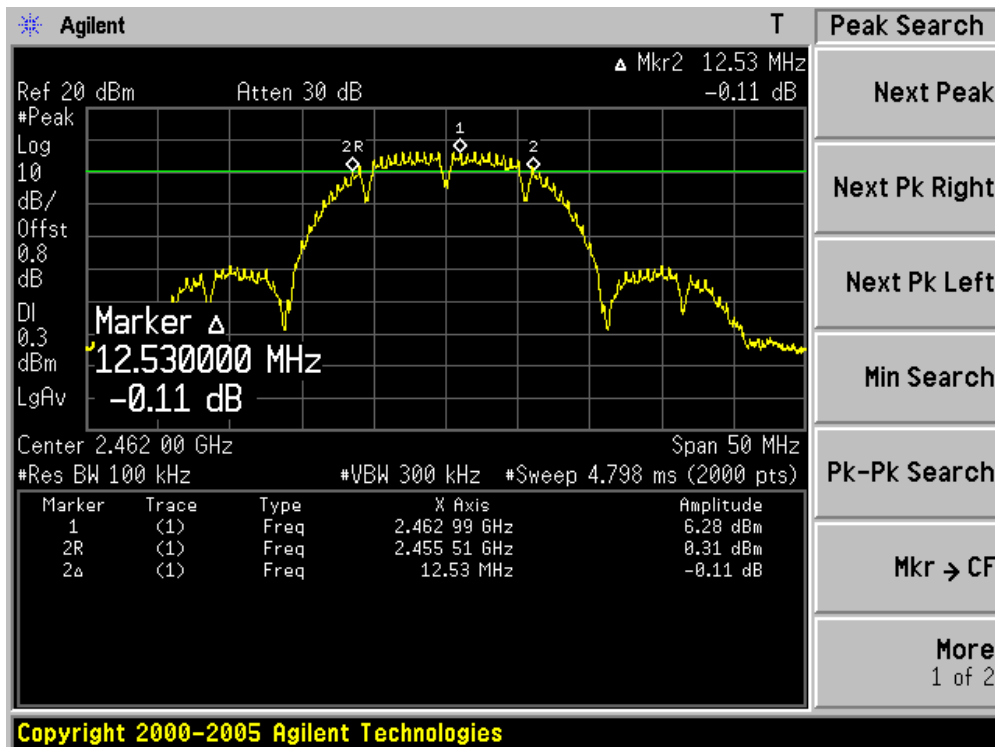
Channel 01 (2412MHz)



Channel 06 (2437MHz)



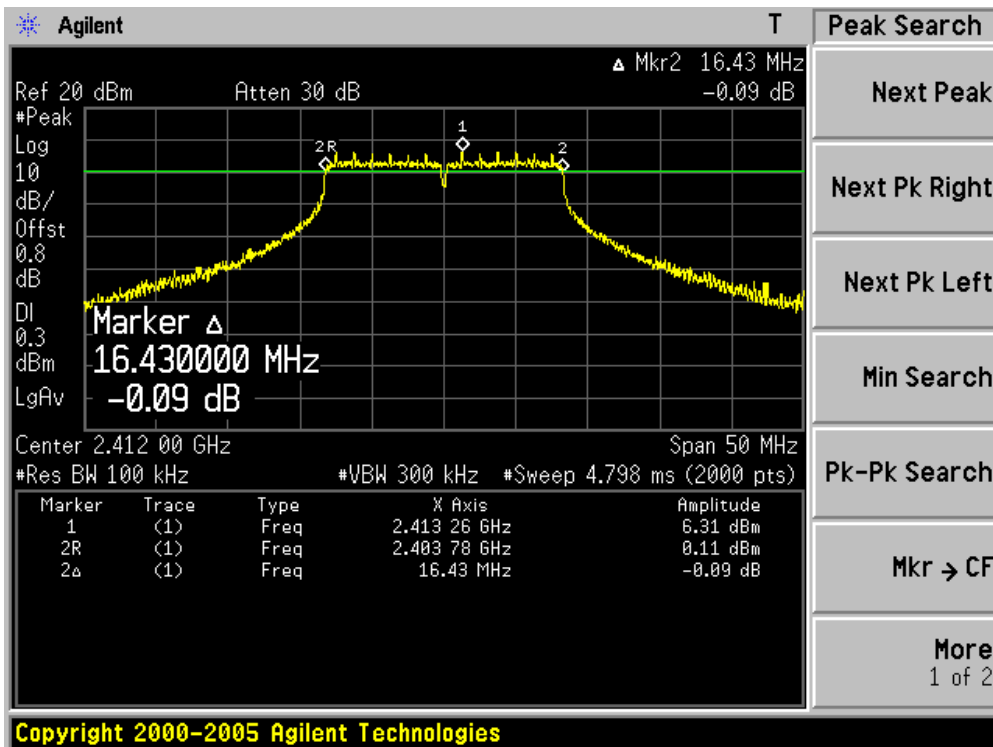
Channel 11 (2462MHz)



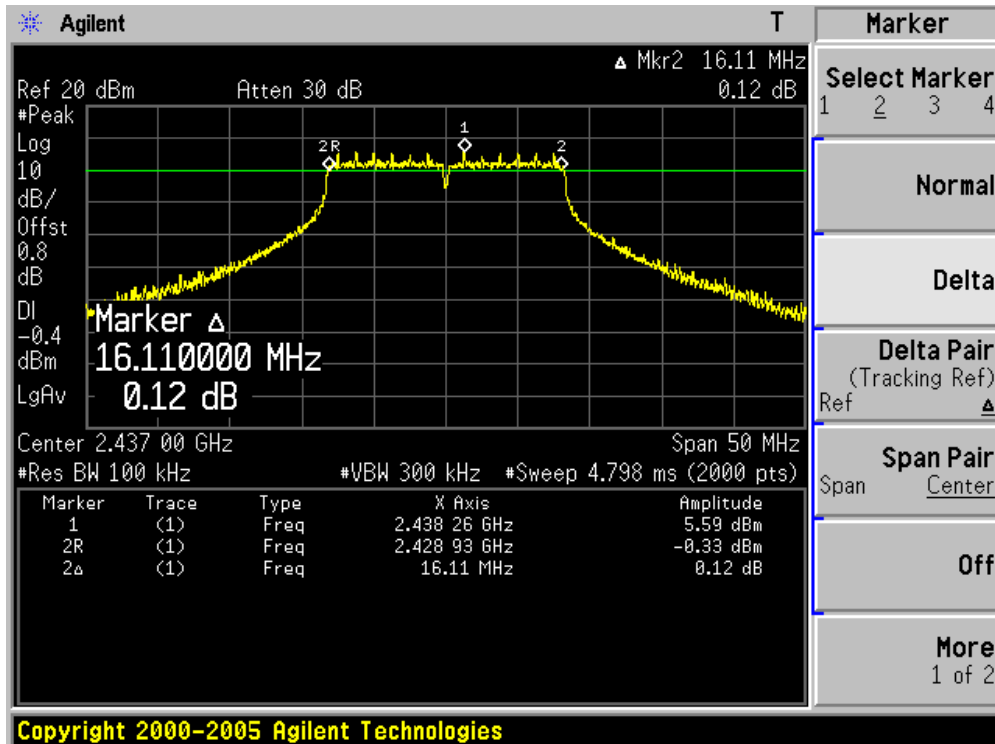
Product	:	Eee PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16430	500	Pass
06	2437	16110	500	Pass
11	2462	16410	500	Pass

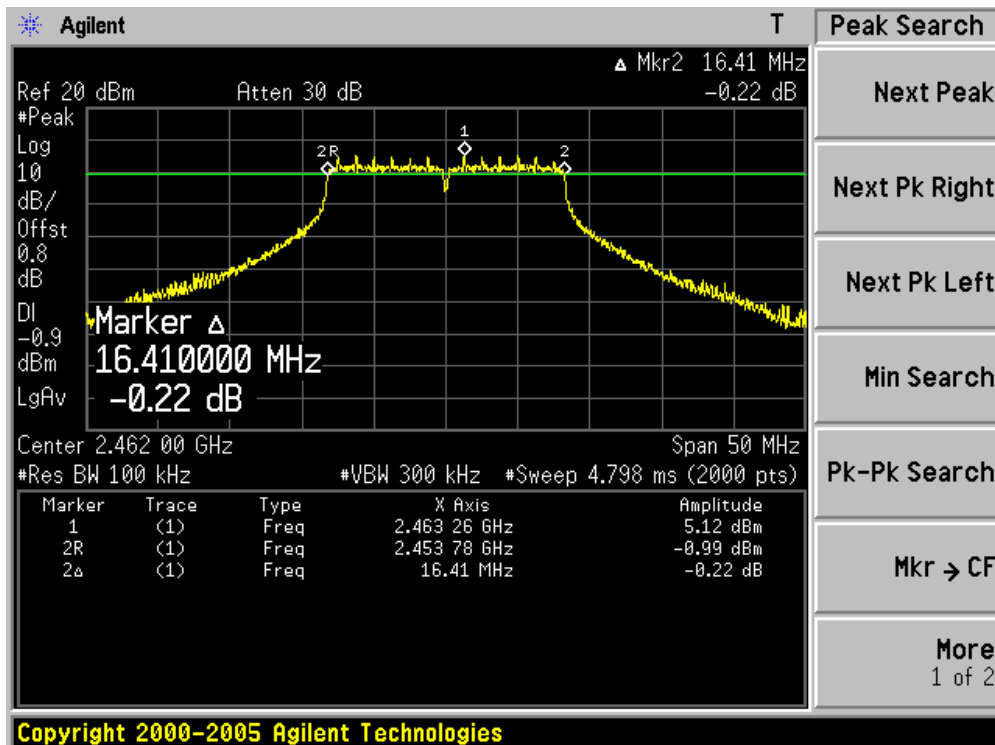
Channel 01 (2412MHz)



Channel 06 (2437MHz)



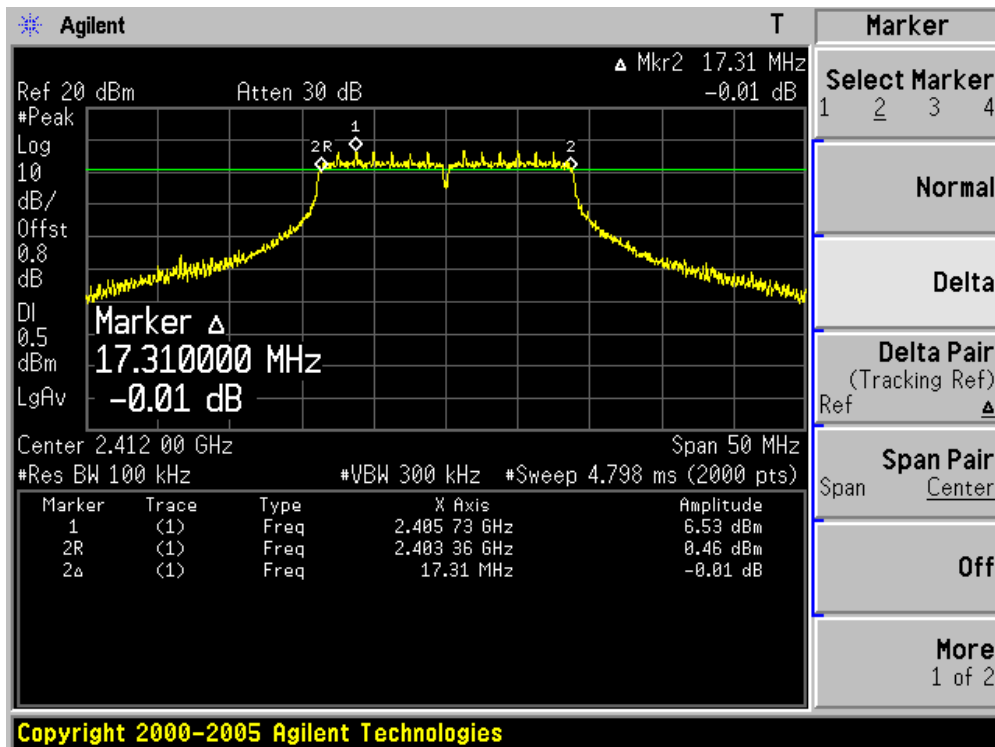
Channel 11 (2462MHz)



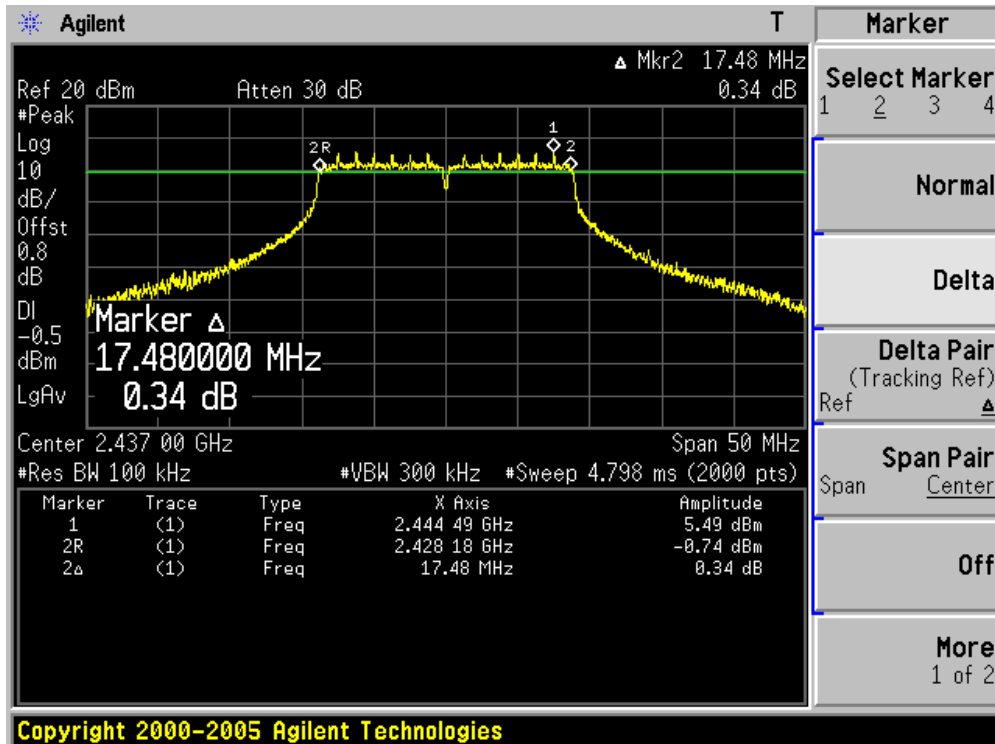
Product	: Eee PC
Test Item	: 6dB Occupied Bandwidth
Test Site	: AC-6
Test Mode	: Mode 3: Transmit by 802.11n (20MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	17310	500	Pass
06	2437	17480	500	Pass
11	2462	17480	500	Pass

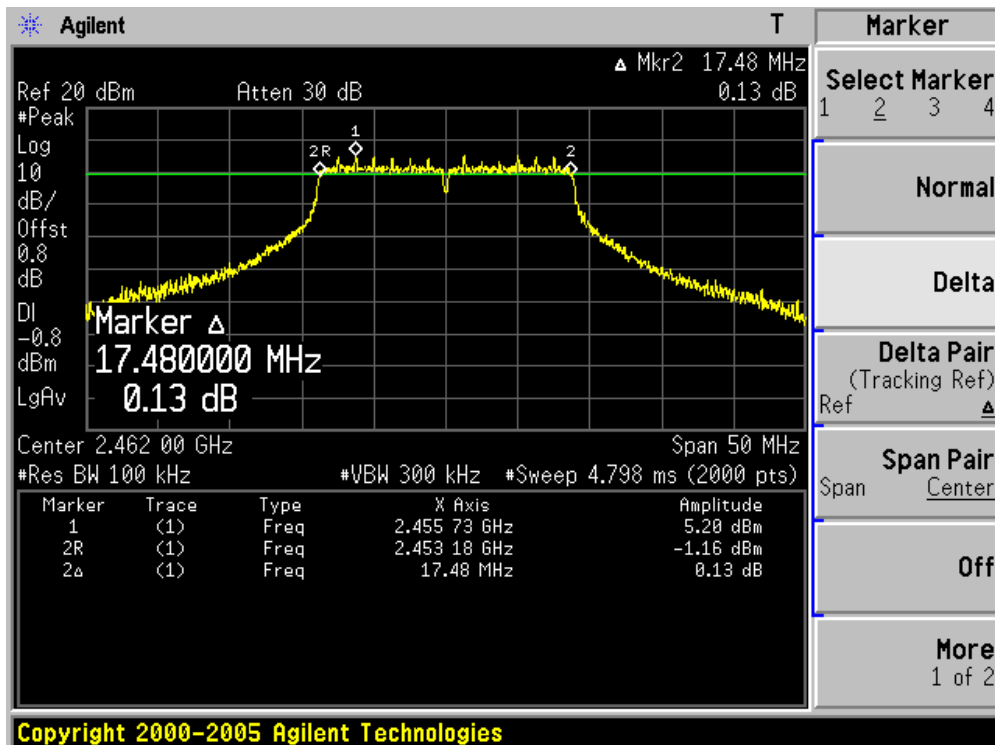
Channel 01 (2412MHz)



Channel 06 (2437MHz)



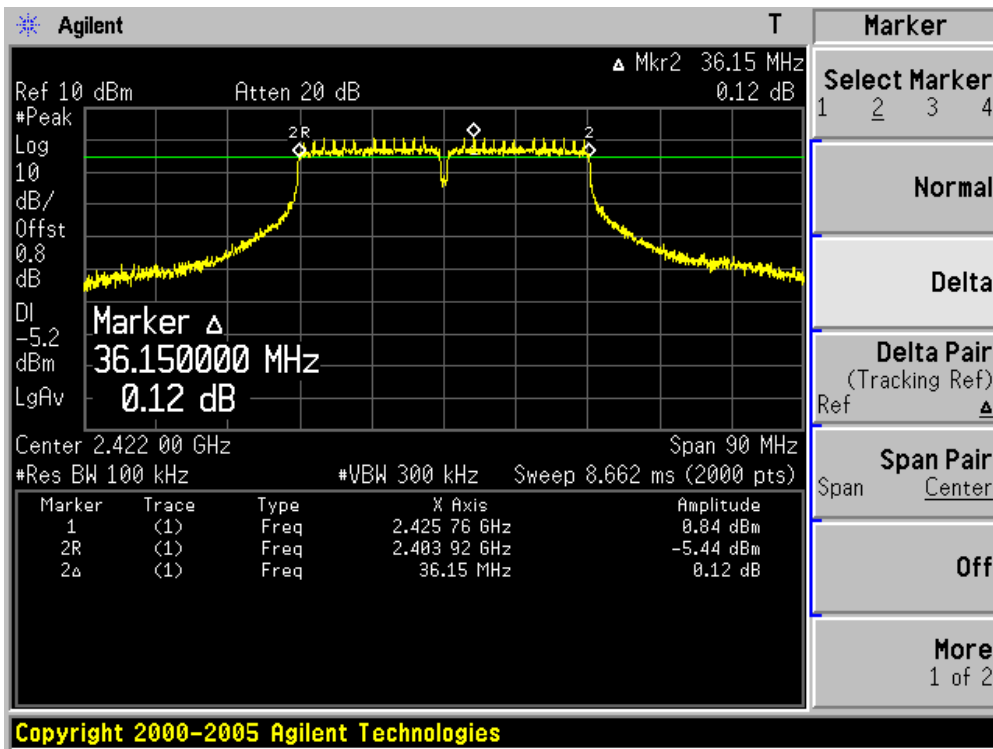
Channel 11 (2462MHz)



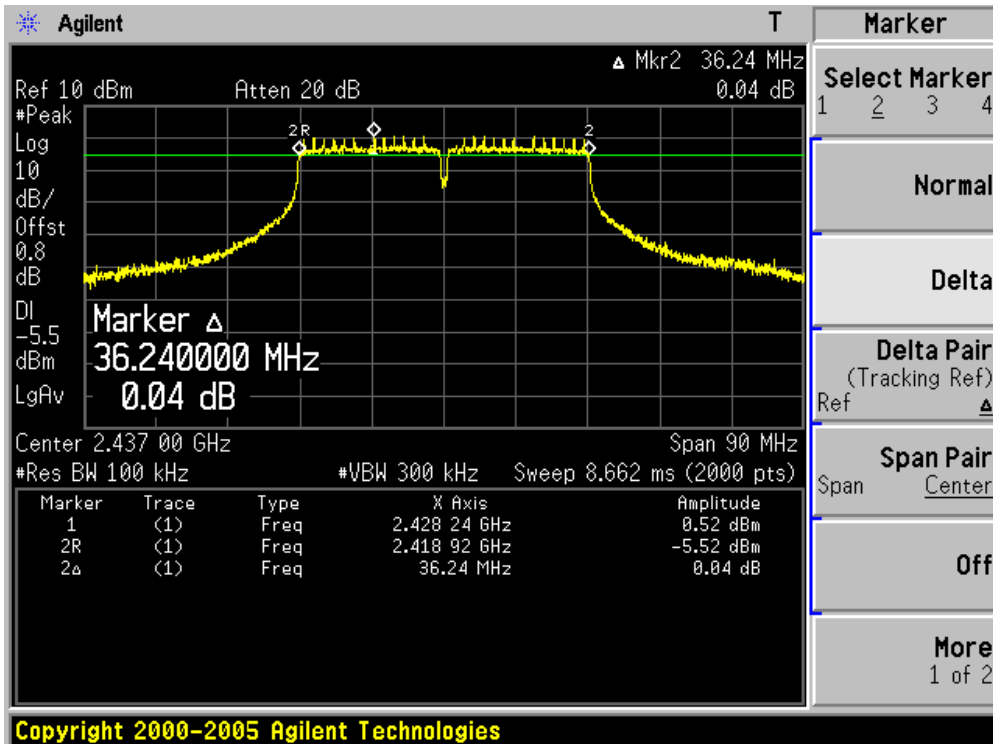
Product	: Eee PC
Test Item	: 6dB Occupied Bandwidth
Test Site	: AC-6
Test Mode	: Mode 4: Transmit by 802.11n (40MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	36150	500	Pass
06	2437	36240	500	Pass
09	2452	36150	500	Pass

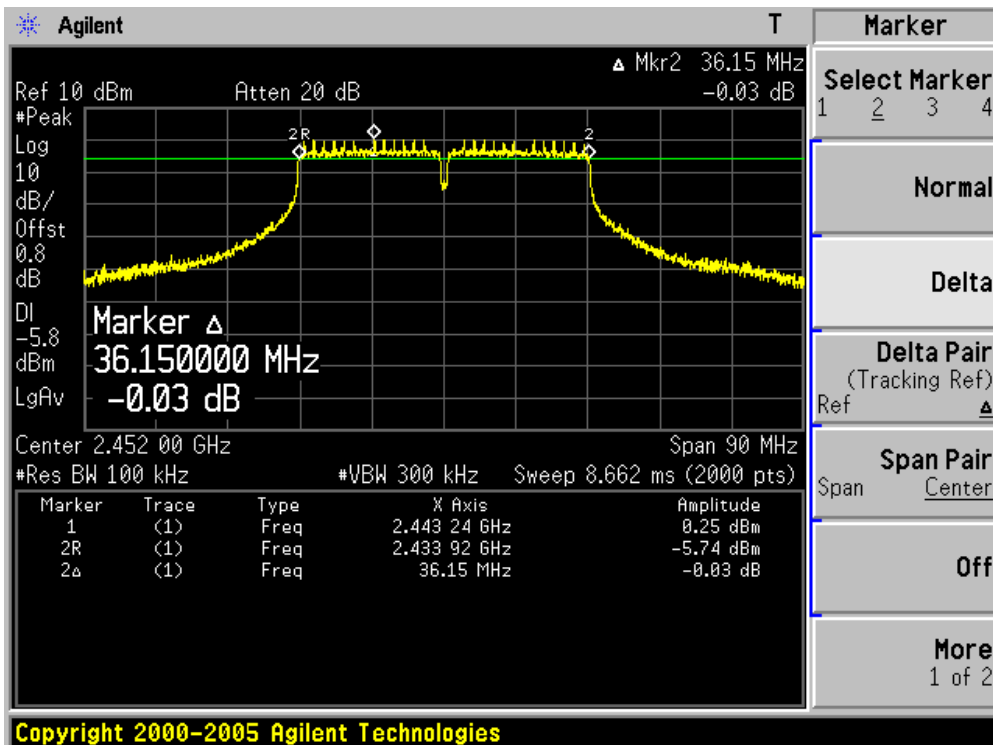
Channel 03 (2422MHz)



Channel 06 (2437MHz)



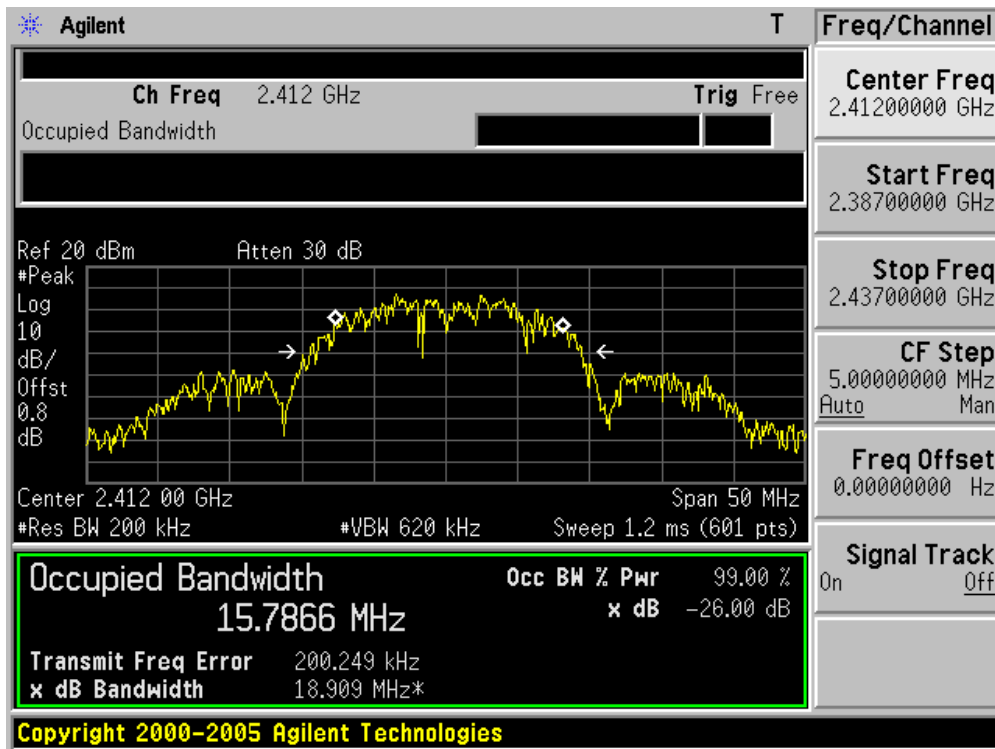
Channel 09 (2452MHz)



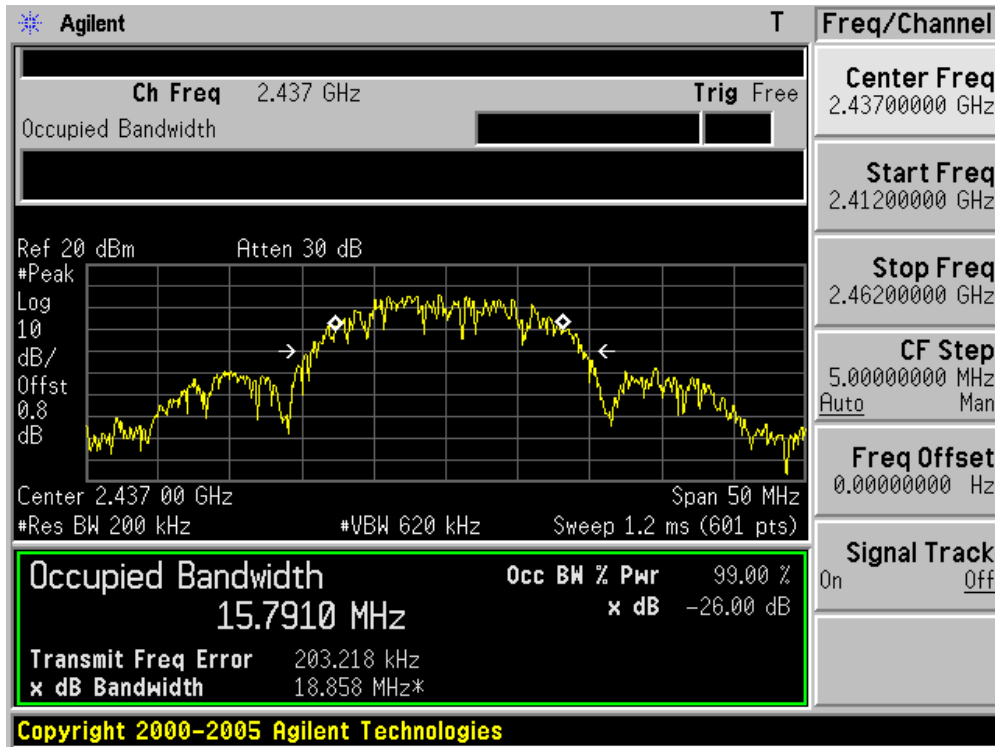
Product	:	Eee PC
Test Item	:	99% Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)
01	2412	15786.6
06	2437	15791.0
11	2462	15530.9

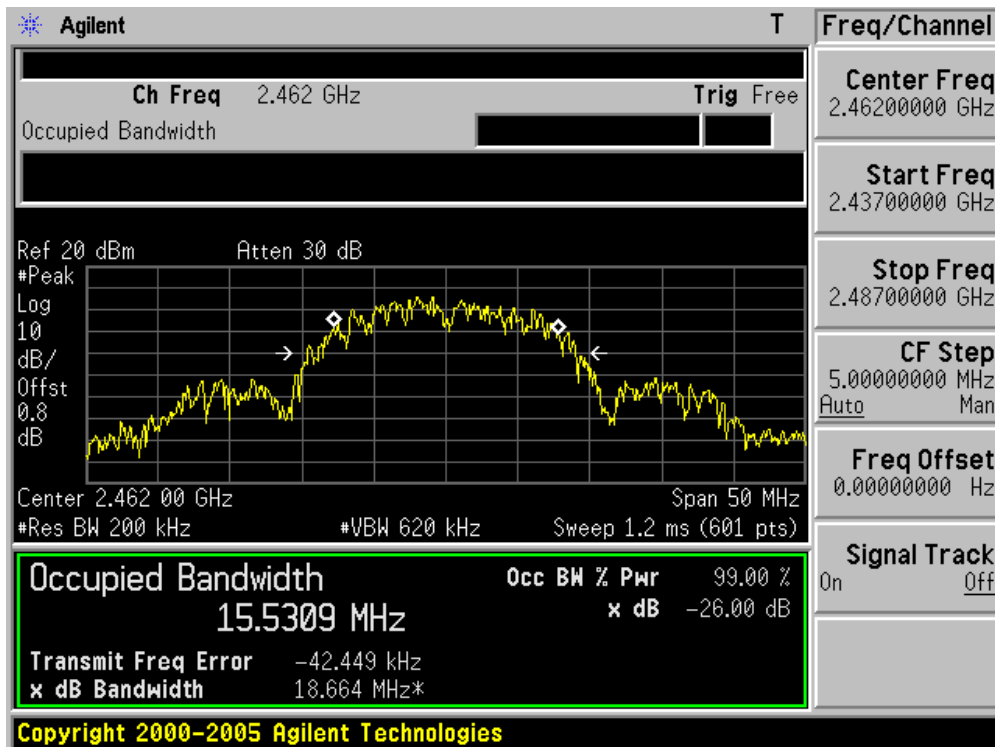
Channel 01 (2412MHz)



Channel 06 (2437MHz)



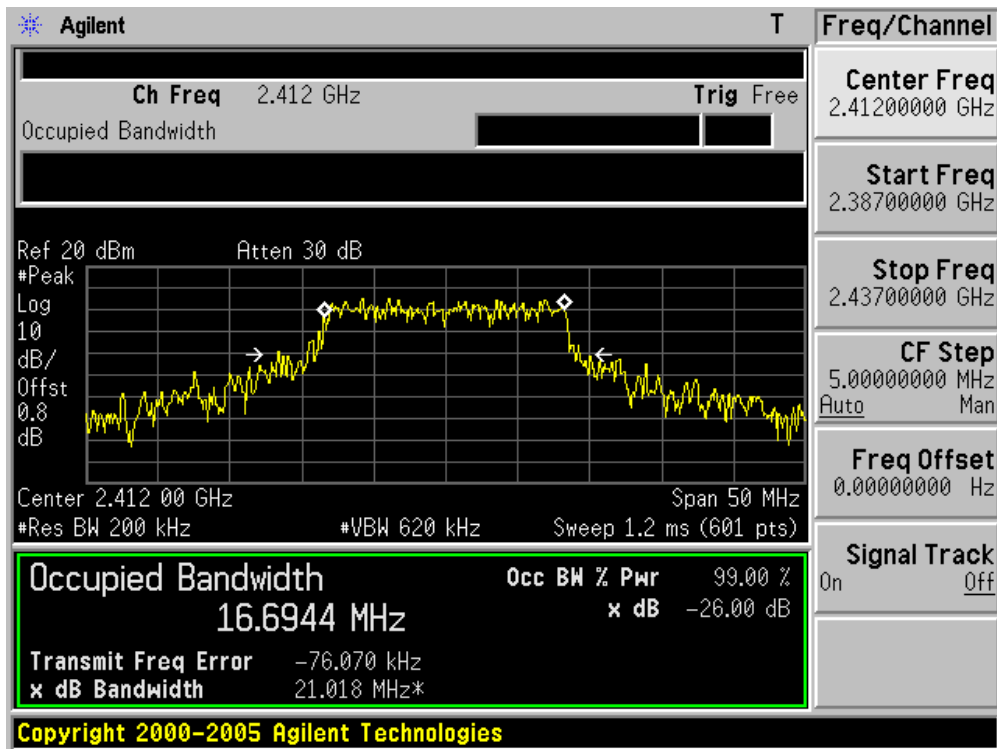
Channel 11 (2462MHz)



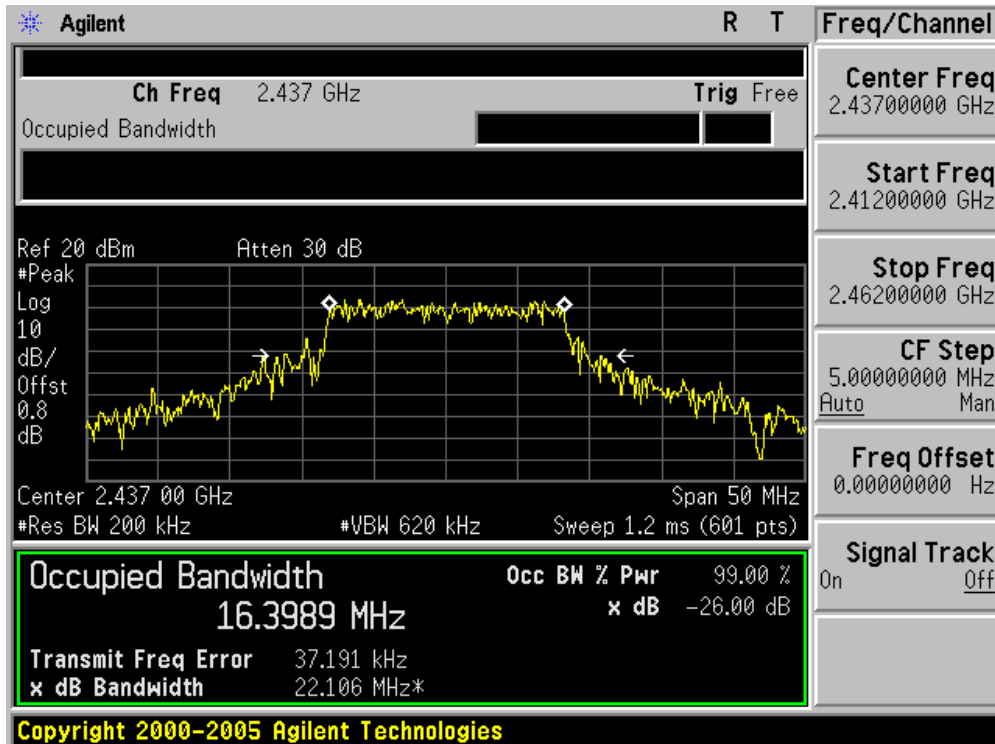
Product	:	Eee PC
Test Item	:	99% Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)
01	2412	16694.4
06	2437	16398.9
11	2462	16484.7

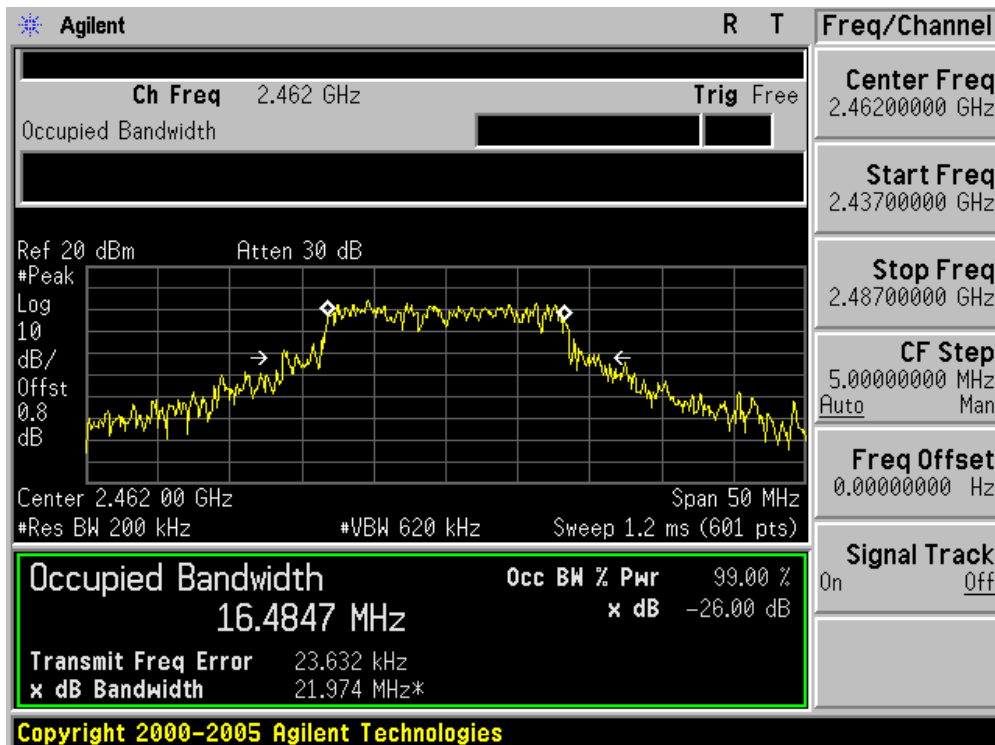
Channel 01 (2412MHz)



Channel 06 (2437MHz)



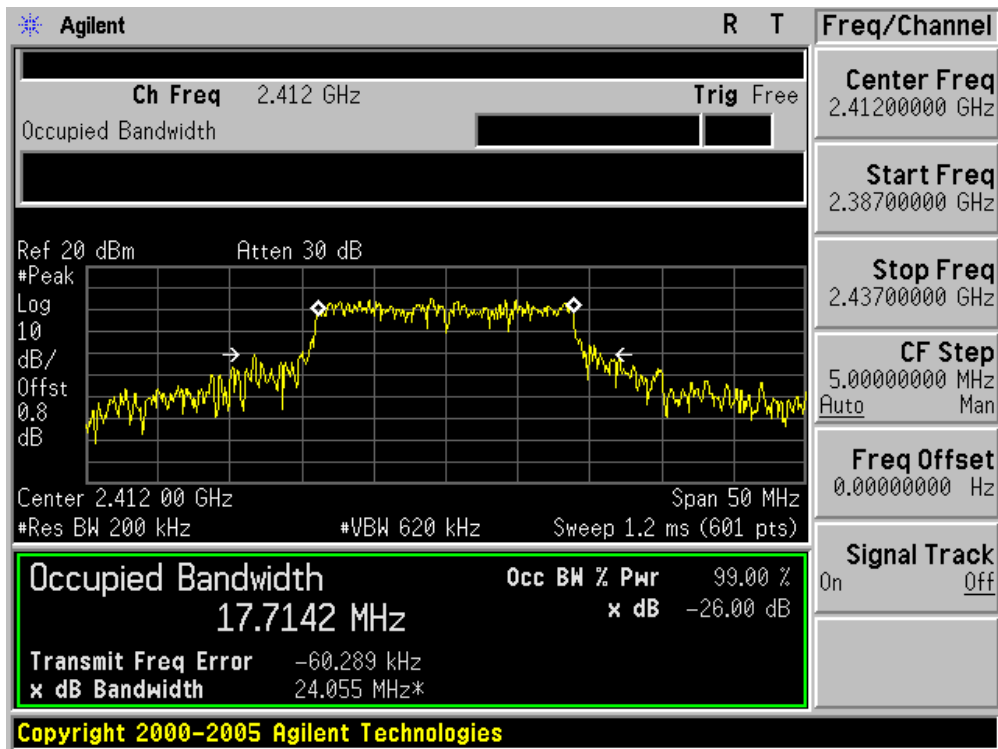
Channel 11 (2462MHz)



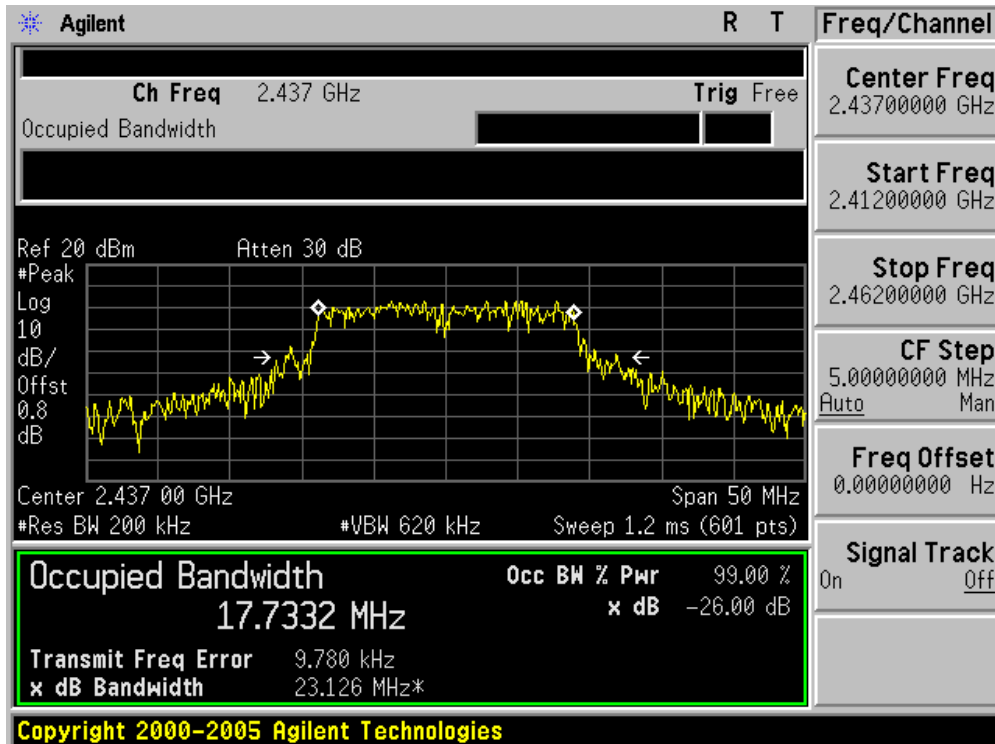
Product	:	Eee PC
Test Item	:	99% Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)
01	2412	17714.2
06	2437	17733.2
11	2462	17964.1

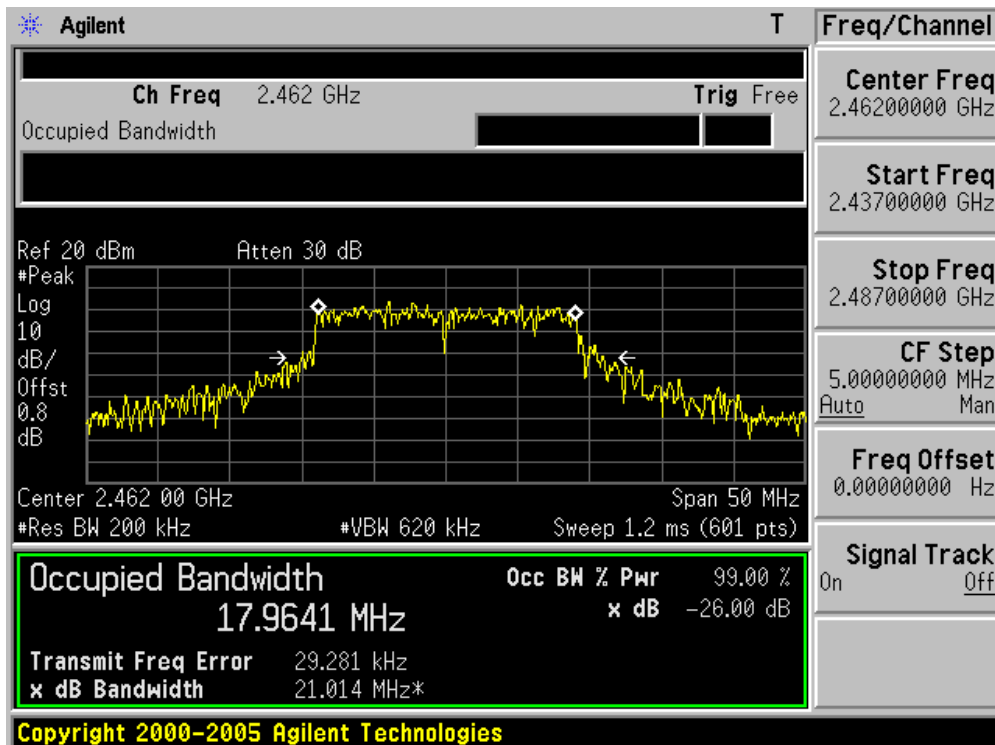
Channel 01 (2412MHz)



Channel 06 (2437MHz)



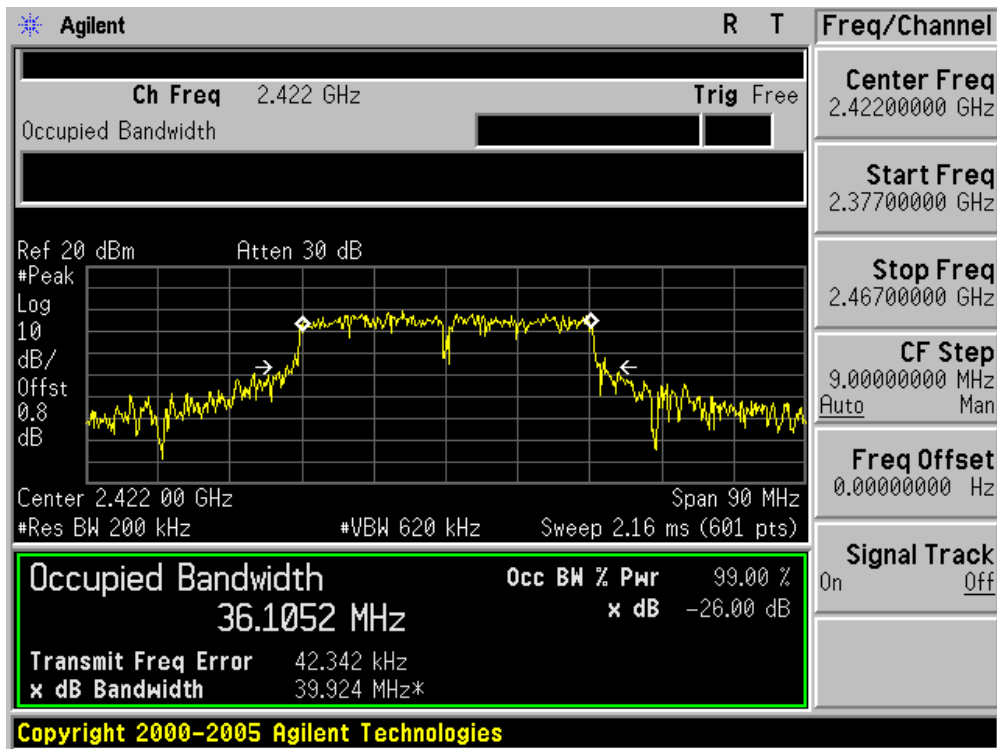
Channel 11 (2462MHz)



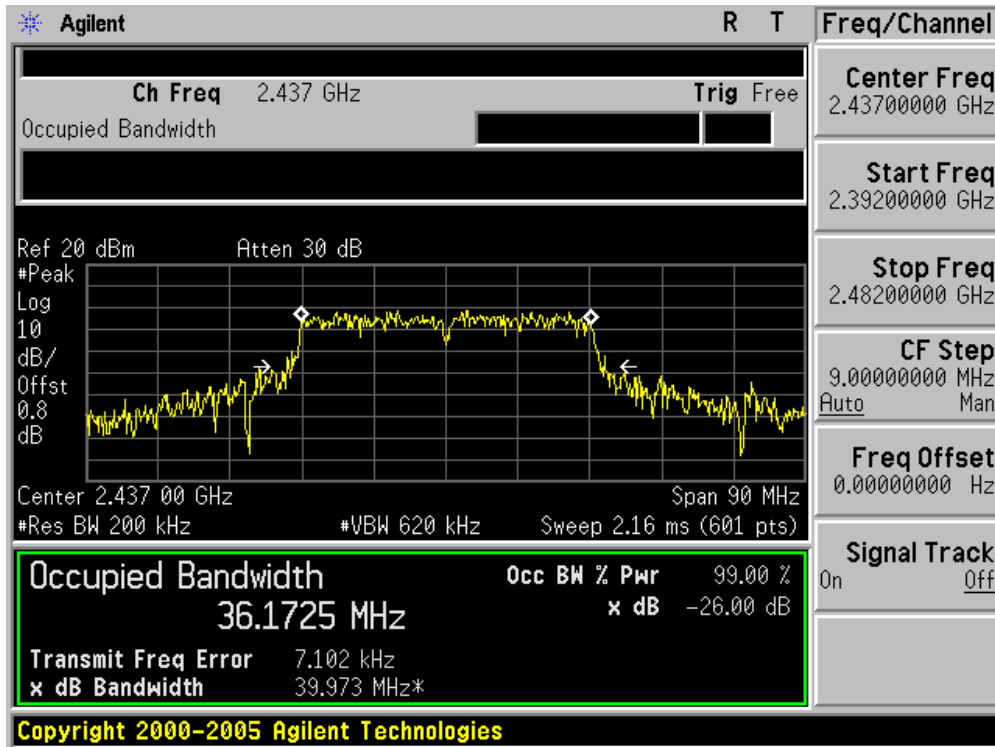
Product	:	Eee PC
Test Item	:	99% Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)
03	2422	36105.2
06	2437	36172.5
09	2452	36014.5

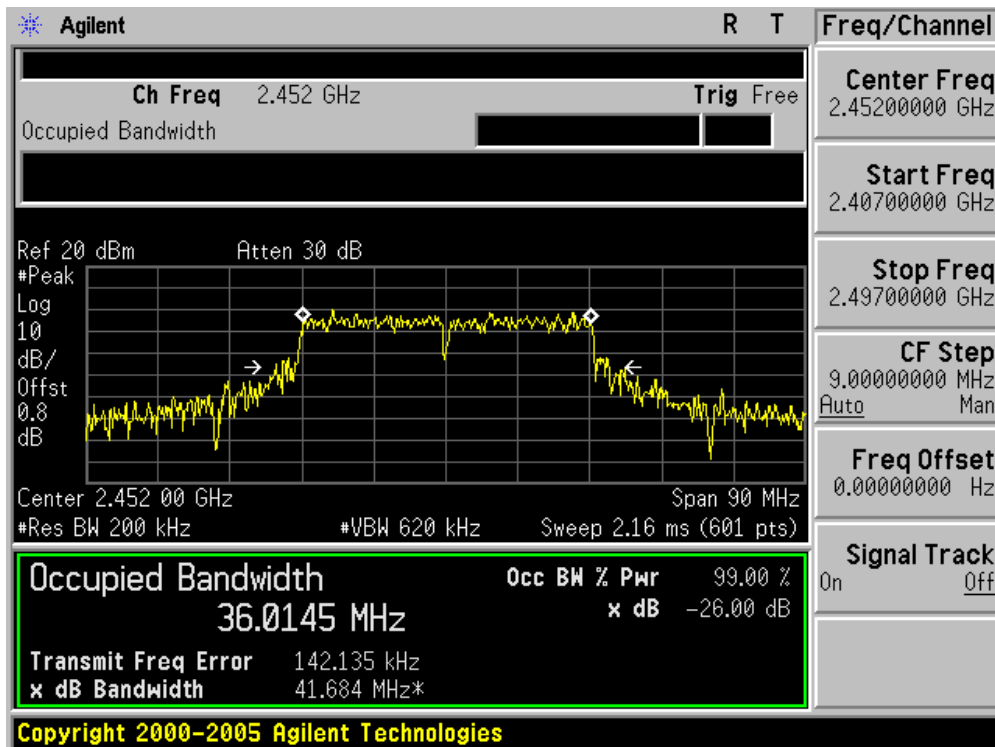
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



9. Power Output

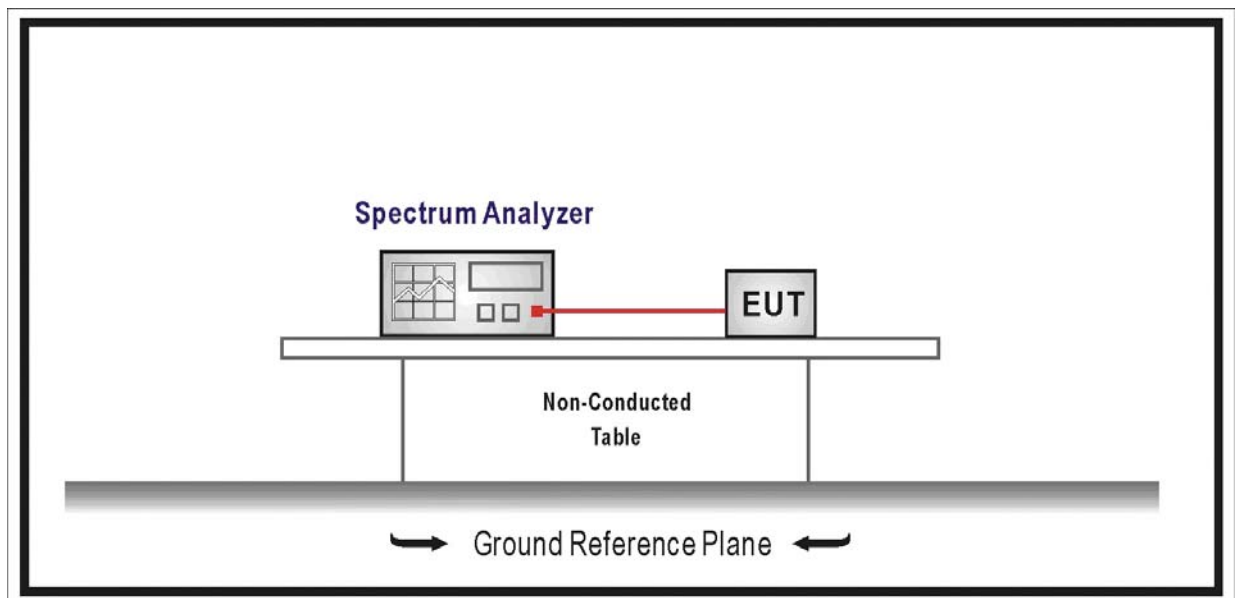
9.1. Test Equipment

Power Output / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2009/02/12
Power Sensor	Anritsu	MA2411B	0846014	2009/01/12
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

9.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Use the wideband power meter to test peak power and record the result.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)					
		802.11b	802.11g	20MHz Bandwidth		40MHz Bandwidth	
				800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	6.5	7.2	13.5	15.0
1	1	2	9	13.0	14.4	27.0	30.0
2	1	5.5	12	19.5	21.7	40.5	45.0
3	1	11	18	26.0	28.9	54.0	60.0
4	1	---	24	39.0	43.3	81.0	90.0
5	1	---	36	52.0	57.8	108.0	120.0
6	1	---	48	58.5	65.0	121.5	135.0
7	1	---	54	65.0	72.2	135.0	150.0

Product	:	Eee PC
Test Item	:	Power Output
Test Site	:	AC-6

Test Mode	Channel No.	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Result
802.11b	01	2412	19.21	30	Pass
	06	2437	18.56	30	Pass
	11	2462	18.50	30	Pass
802.11g	01	2412	21.36	30	Pass
	06	2437	21.67	30	Pass
	11	2462	18.64	30	Pass
802.11n(20M)	01	2412	21.20	30	Pass
	06	2437	21.50	30	Pass
	11	2462	16.46	30	Pass
802.11n(40M)	03	2422	14.02	30	Pass
	06	2437	16.91	30	Pass
	09	2452	13.34	30	Pass

10. Power Spectral Density

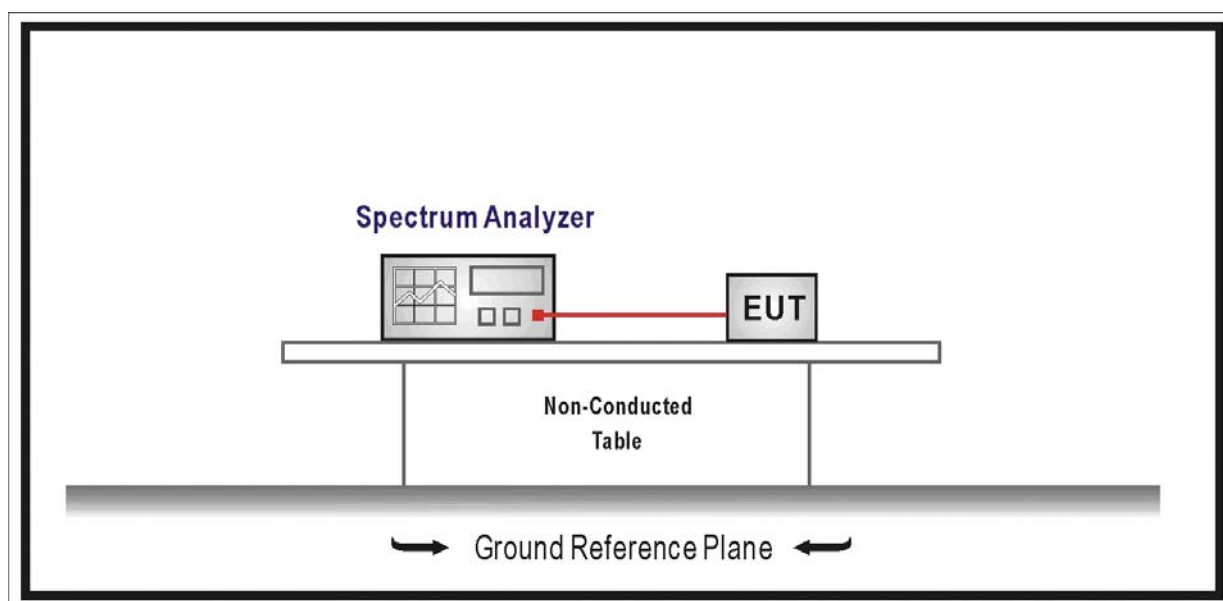
10.1. Test Equipment

Power Spectral Density / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/30

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



10.3. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiated to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

10.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 3 kHz, Set VBW \geq 10 kHz, Sweep time=100s, Set detector=Peak detector.

10.5. Uncertainty

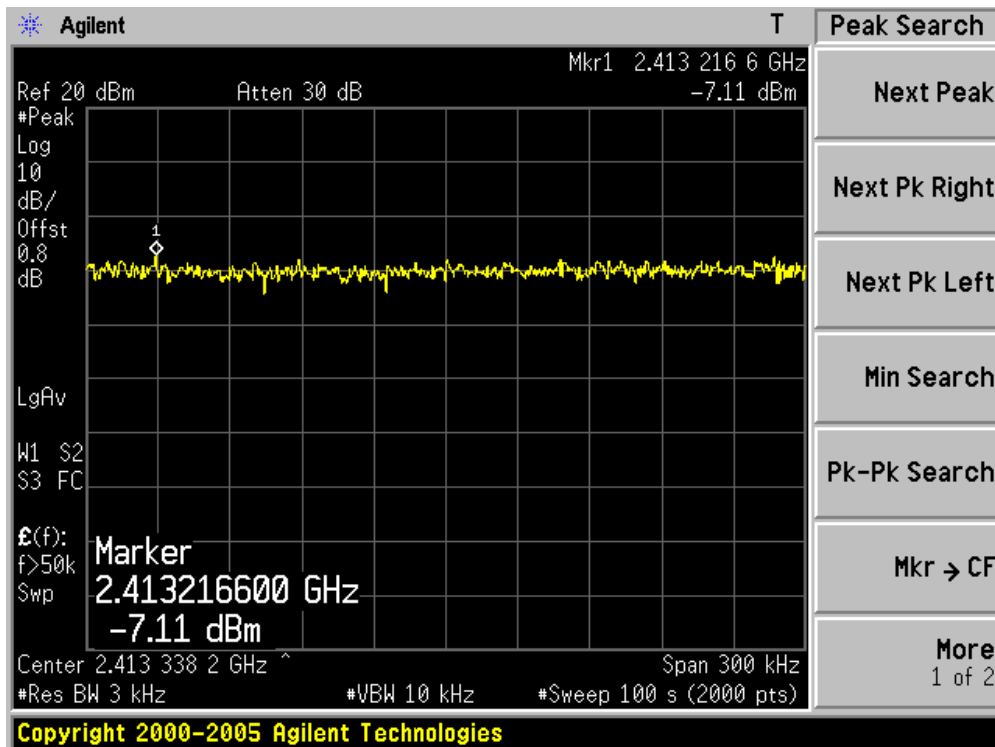
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

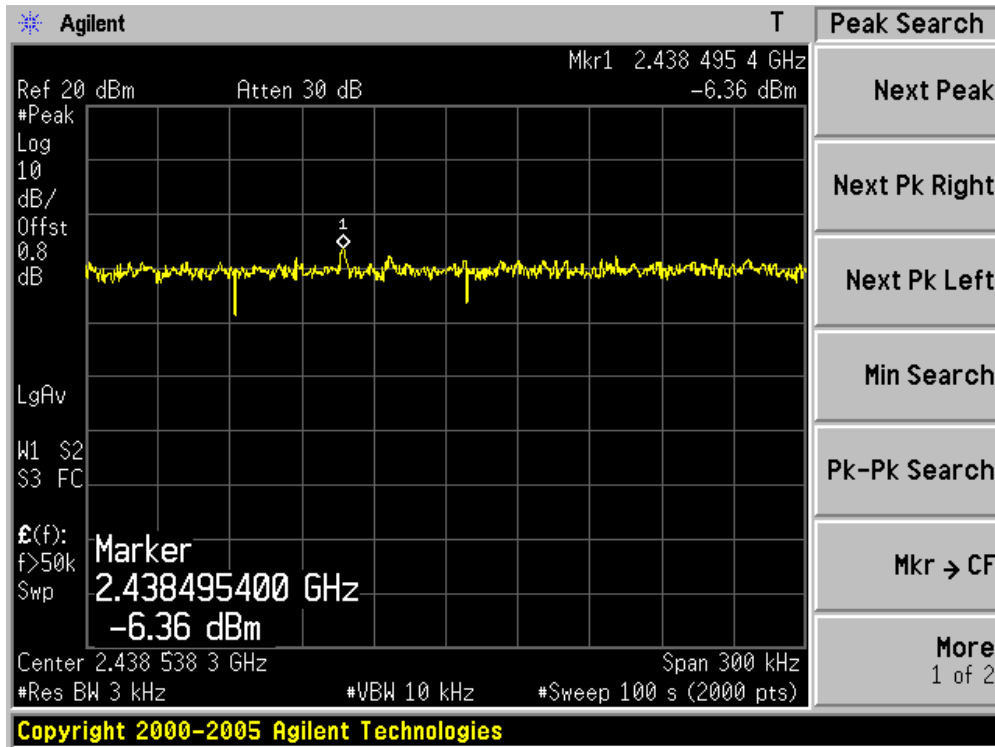
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
01	2412	-7.11	8	Pass
06	2437	-6.36	8	Pass
11	2462	-8.30	8	Pass

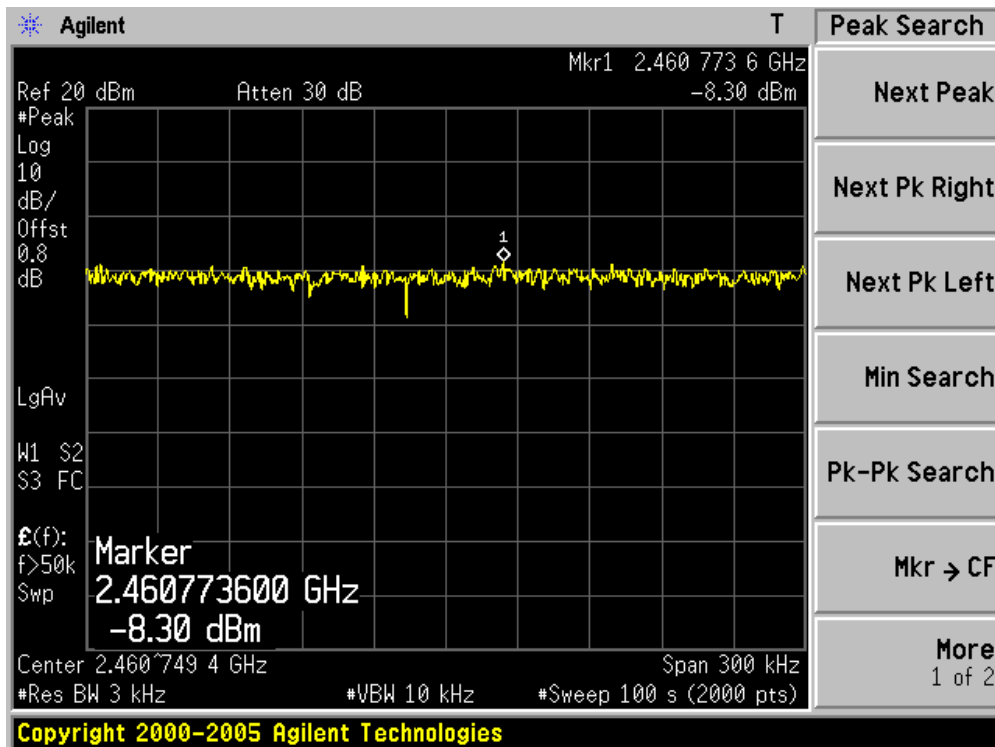
Channel 01 (2412MHz)



Channel 06 (2437MHz)



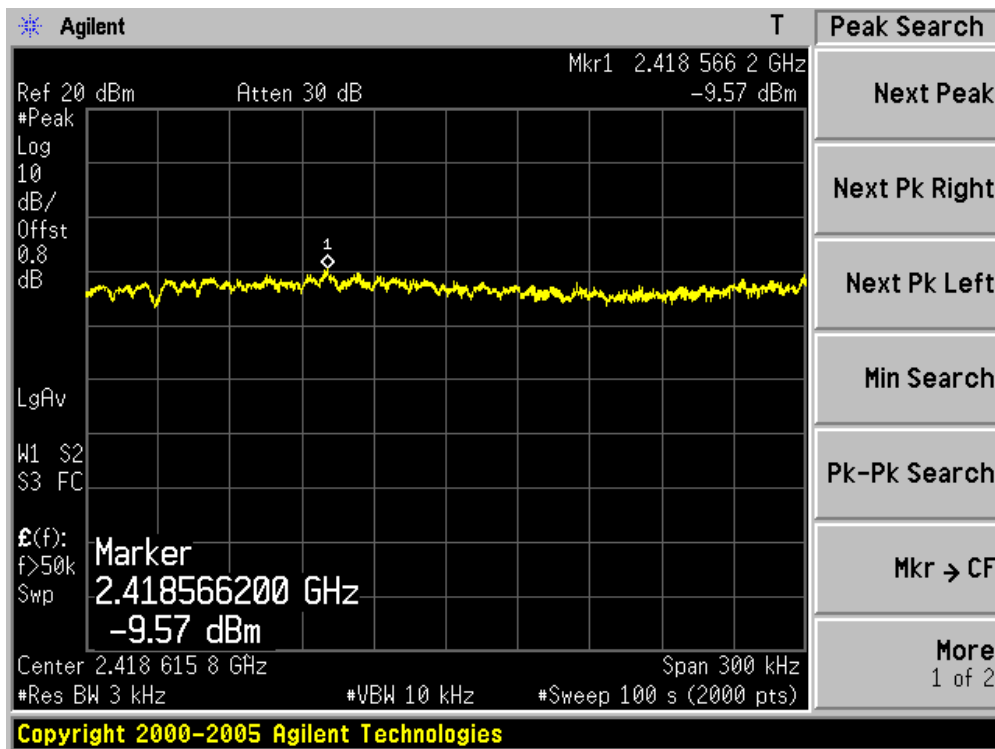
Channel 11 (2462MHz)



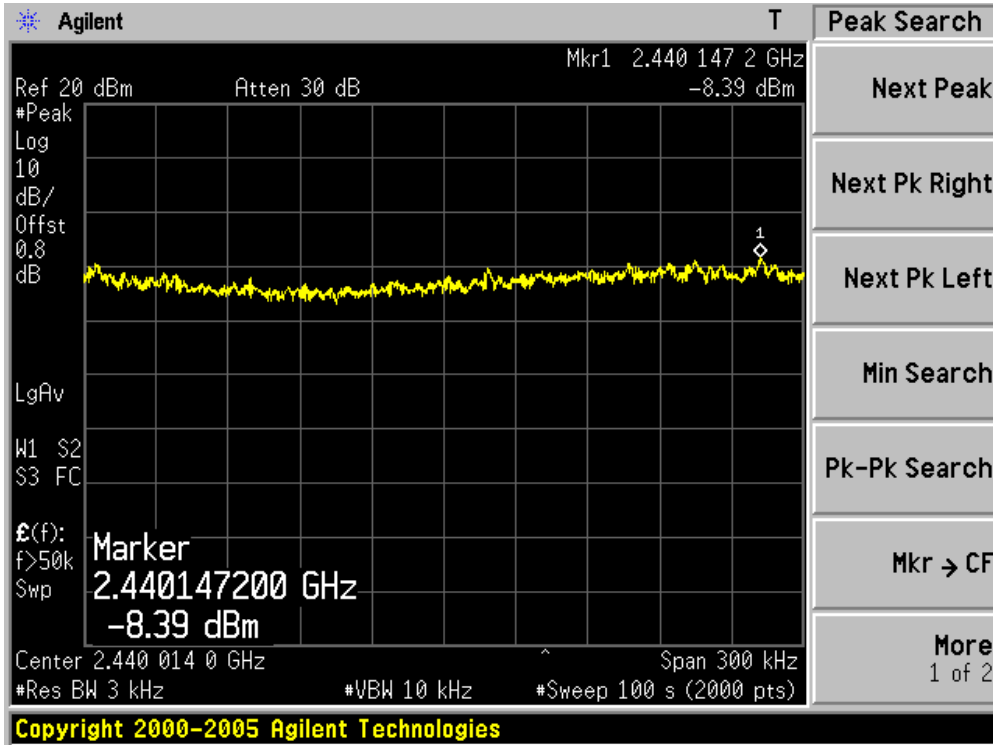
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
01	2412	-9.57	8	Pass
06	2437	-8.39	8	Pass
11	2462	-9.42	8	Pass

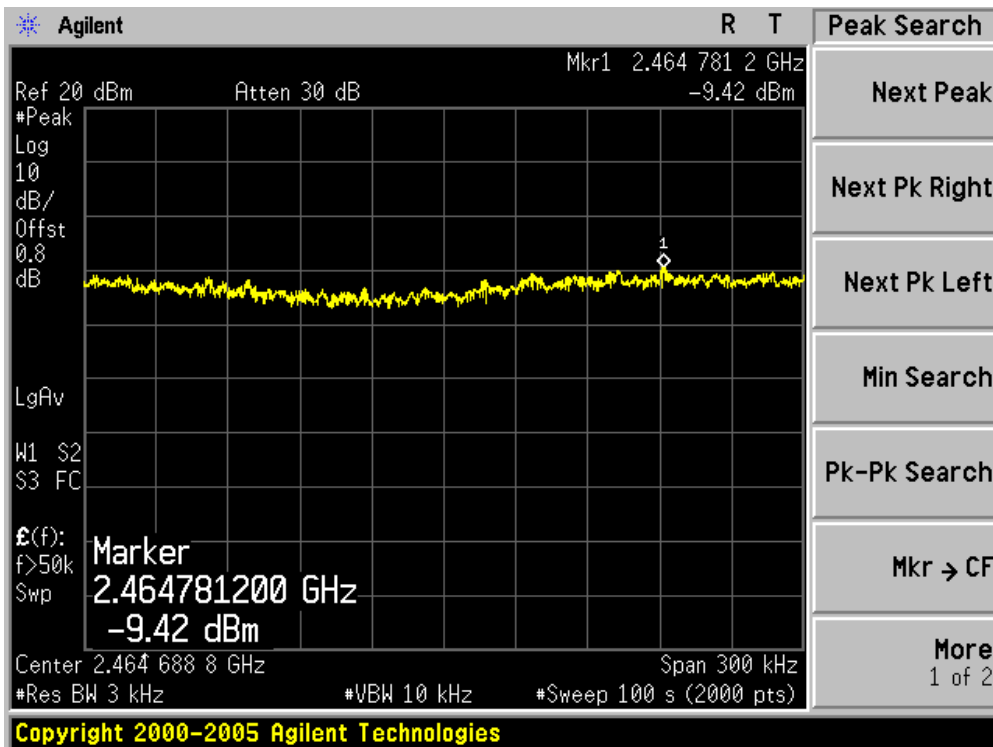
Channel 01 (2412MHz)



Channel 06 (2437MHz)



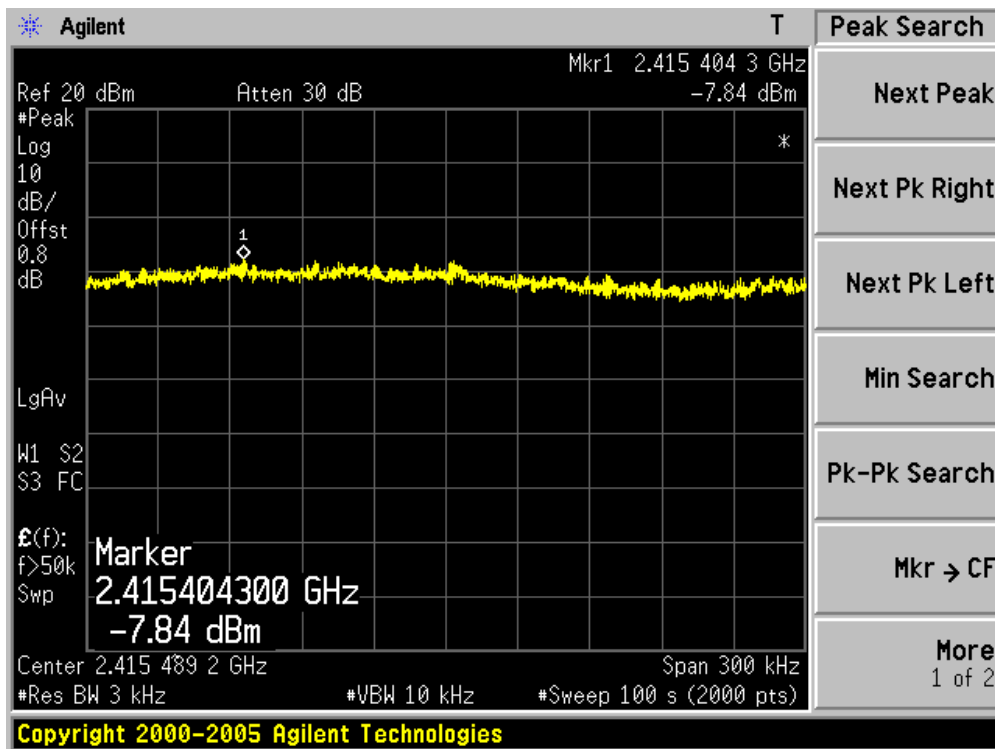
Channel 11 (2462MHz)



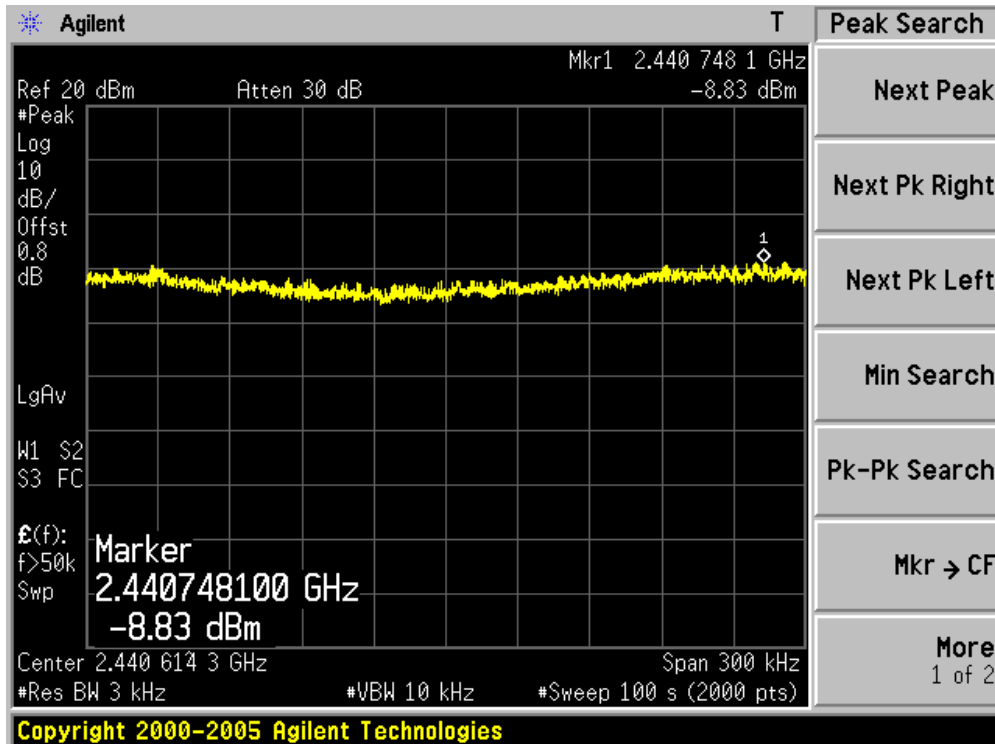
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (20MHz)

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
01	2412	-7.84	8	Pass
06	2437	-8.83	8	Pass
11	2462	-9.09	8	Pass

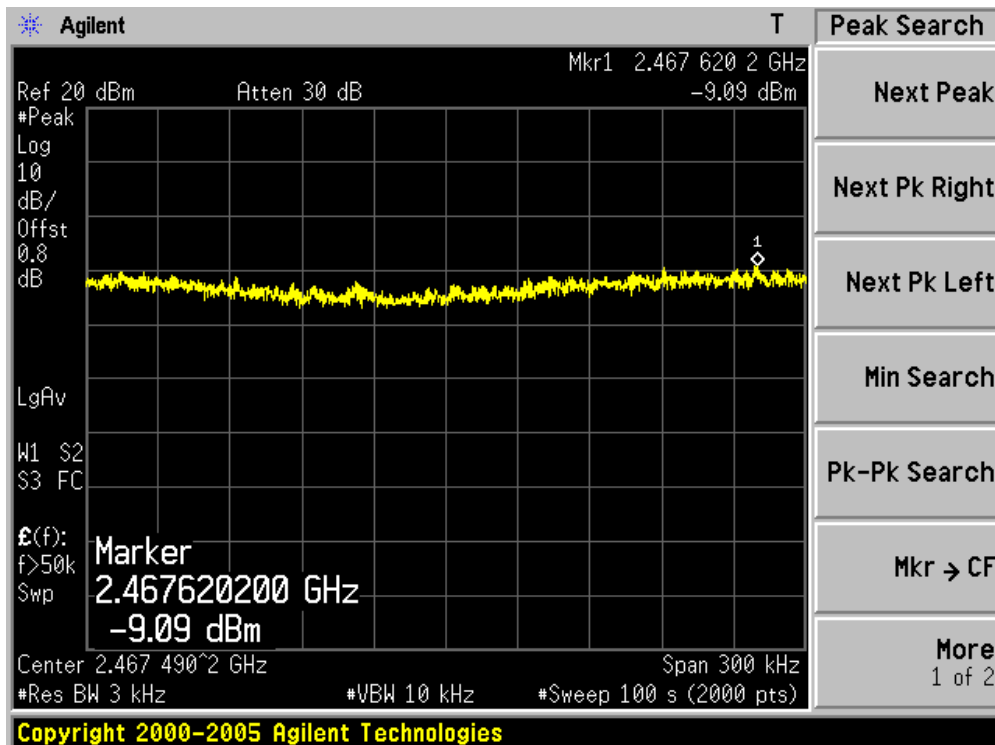
Channel 01 (2412MHz)



Channel 06 (2437MHz)



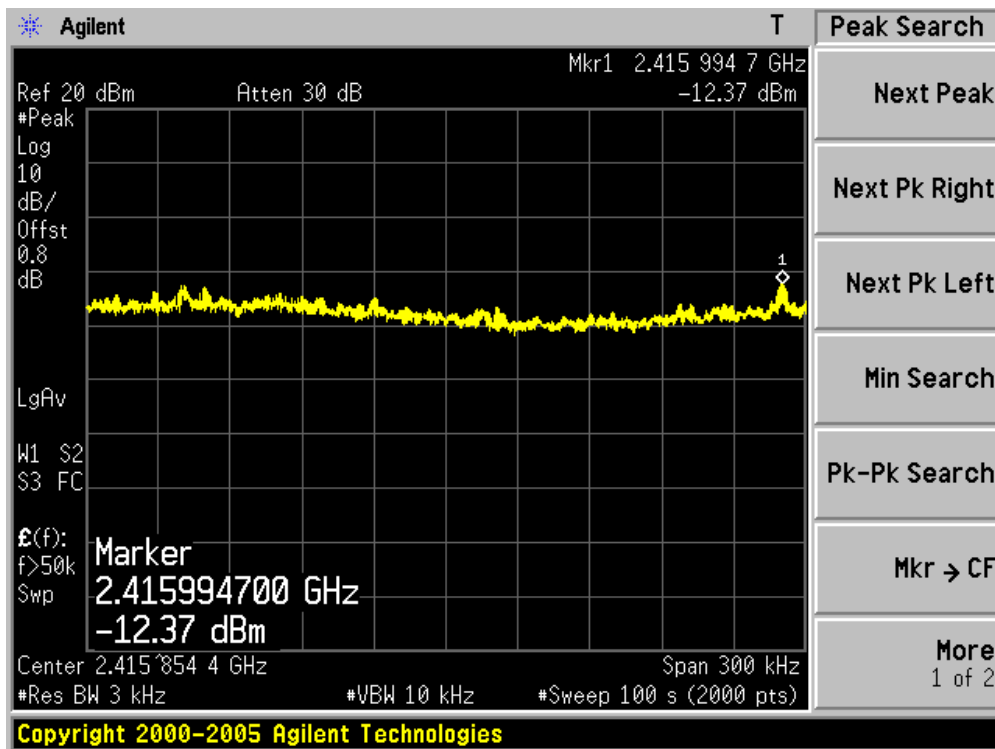
Channel 11 (2462MHz)



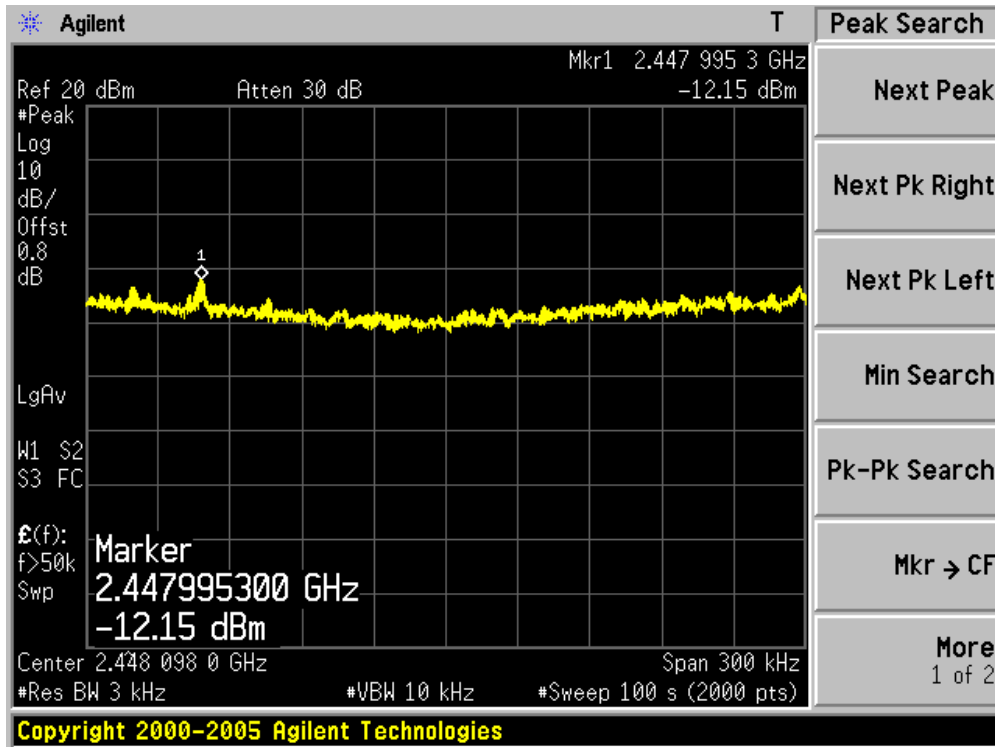
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 5: Transmit by 802.11n (40MHz)

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
03	2422	-12.37	8	Pass
06	2437	-12.15	8	Pass
09	2452	-13.57	8	Pass

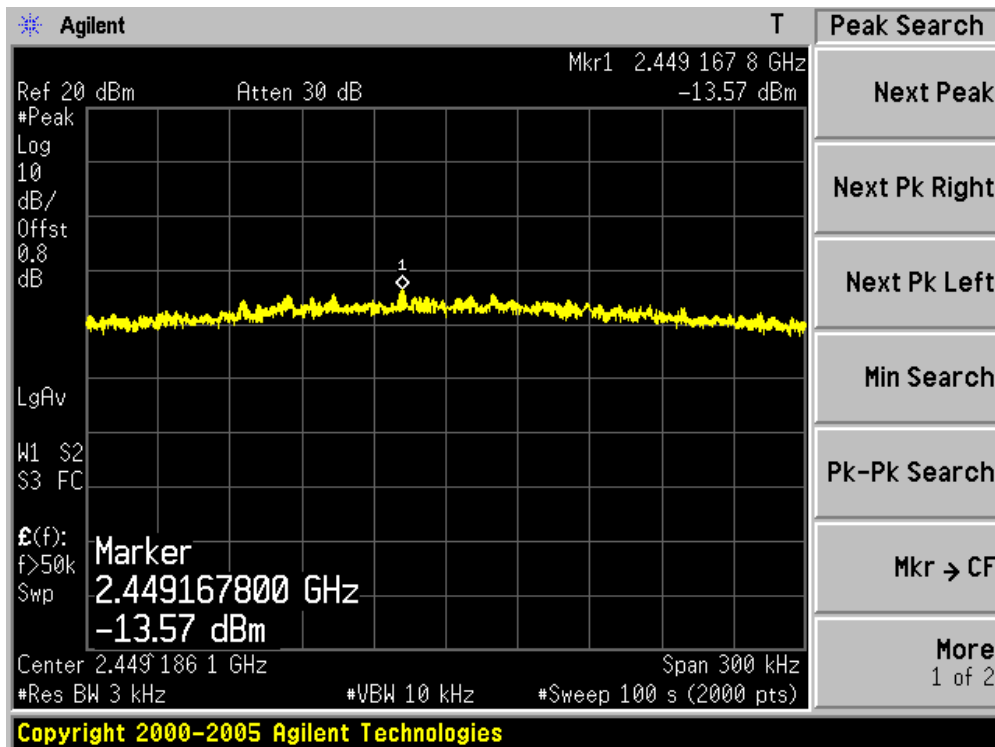
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



11. Receiver Spurious Emission for Industry Canada RSS-Gen Requirement

11.1. Test Equipment

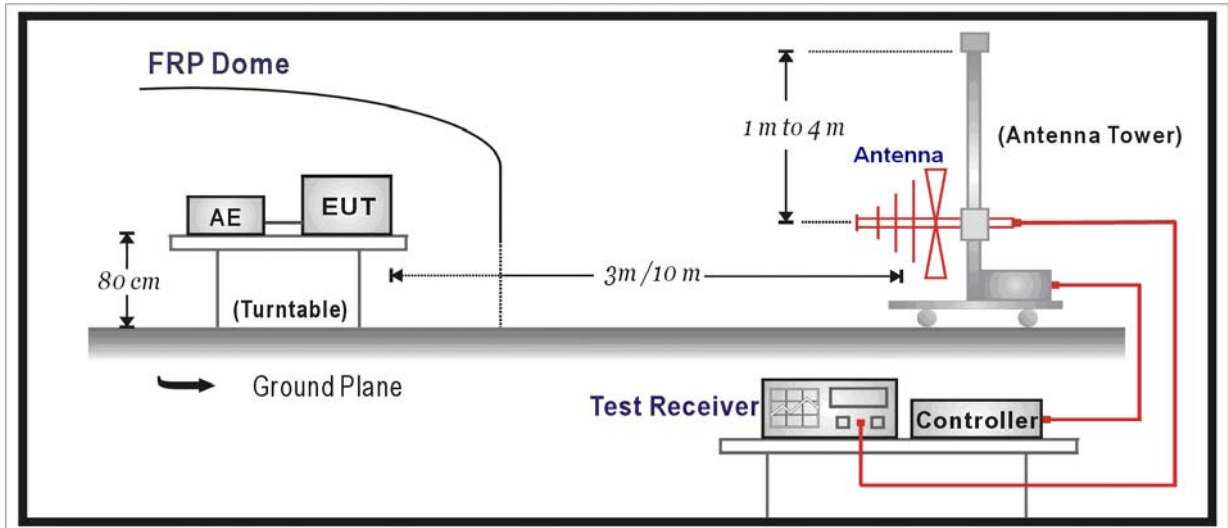
Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2009.04.23
EMI Test Receiver	R&S	ESCI	100906	2009.02.16
Preamplifier	Quietek	AP-180C	CHM-0602013	2009.05.25
Preamplifier	Quietek	AP-040G	CHM-0906001	2009.06.18
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2009.02.25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	499	2009.06.11
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2009.03.03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2009.03.03
Lowpass Filter	Wainwright	WLKS4500-9SS	SN2	2009.03.03
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2009.05.25
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C2	2009.05.25
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC5-TH	2009.03.31

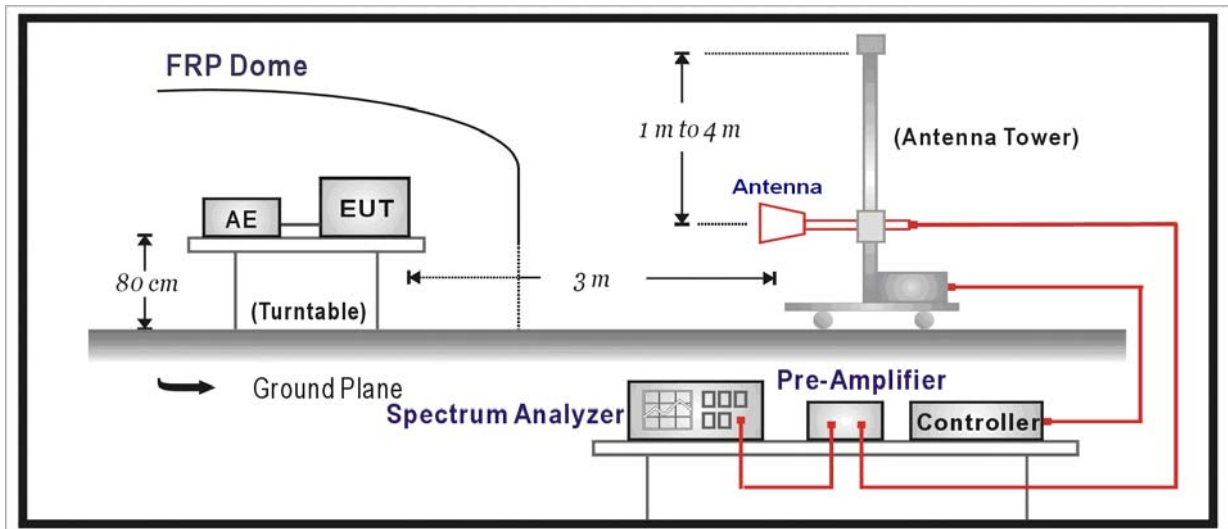
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

11.2. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



11.3. Limit

FCC Part 15 Subpart B Paragraph 15.109		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

11.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003.

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

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

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

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

Note: When doing emission measurement above 1GHz, the horn antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 60~10 degrees for H-plane and 90~10 degrees for E-plane.

11.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB
 below 1G is defined as ± 3.8 dB

11.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

No significant emissions measurable. Plots reported here represent the worse case emissions.

802.11n (20MHz)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
1	30~88	≤32	QP	40
	88~216	≤33	QP	43.5
	216~960	≤35	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤49	PK	54 (Note 1)
6	30~88	≤30	QP	40
	88~216	≤32	QP	43.5
	216~960	≤35	QP	46
	960~1000	≤38	QP	54
	1000~25000	≤47	PK	54 (Note 1)
11	30~88	≤33	QP	40
	88~216	≤32	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~25000	≤49	PK	54 (Note 1)

Note 1: This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

802.11n (40MHz)

Channel	Frequency Range (MHz)	Measure Level (dBuV/m)	Detector Type	Limit (dBuV/m)
3	30~88	≤32	QP	40
	88~216	≤33	QP	43.5
	216~960	≤35	QP	46
	960~1000	≤39	QP	54
	1000~25000	≤49	PK	54 (Note 1)
6	30~88	≤30	QP	40
	88~216	≤32	QP	43.5
	216~960	≤35	QP	46
	960~1000	≤38	QP	54
	1000~25000	≤47	PK	54 (Note 1)
9	30~88	≤33	QP	40
	88~216	≤32	QP	43.5
	216~960	≤36	QP	46
	960~1000	≤38	QP	54
	1000~25000	≤49	PK	54 (Note 1)

Note 1: This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.