

FCC Part15 Subpart C Test Report

Product Name : Eee PC
Model No. : Eee PC T101MT
FCC ID : MSQT101NE762

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. : 09AS071R-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. : 09AS071R-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 : MSQT101NE762

EUT Voltage : 12Vdc

Trade Name : ASUS

Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2008
ANSI C63.4: 2003

Test Result : Complied

Performed Location : SuZhou EMC laboratory
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FCC Registration Number: 800392

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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/>
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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)

Note:

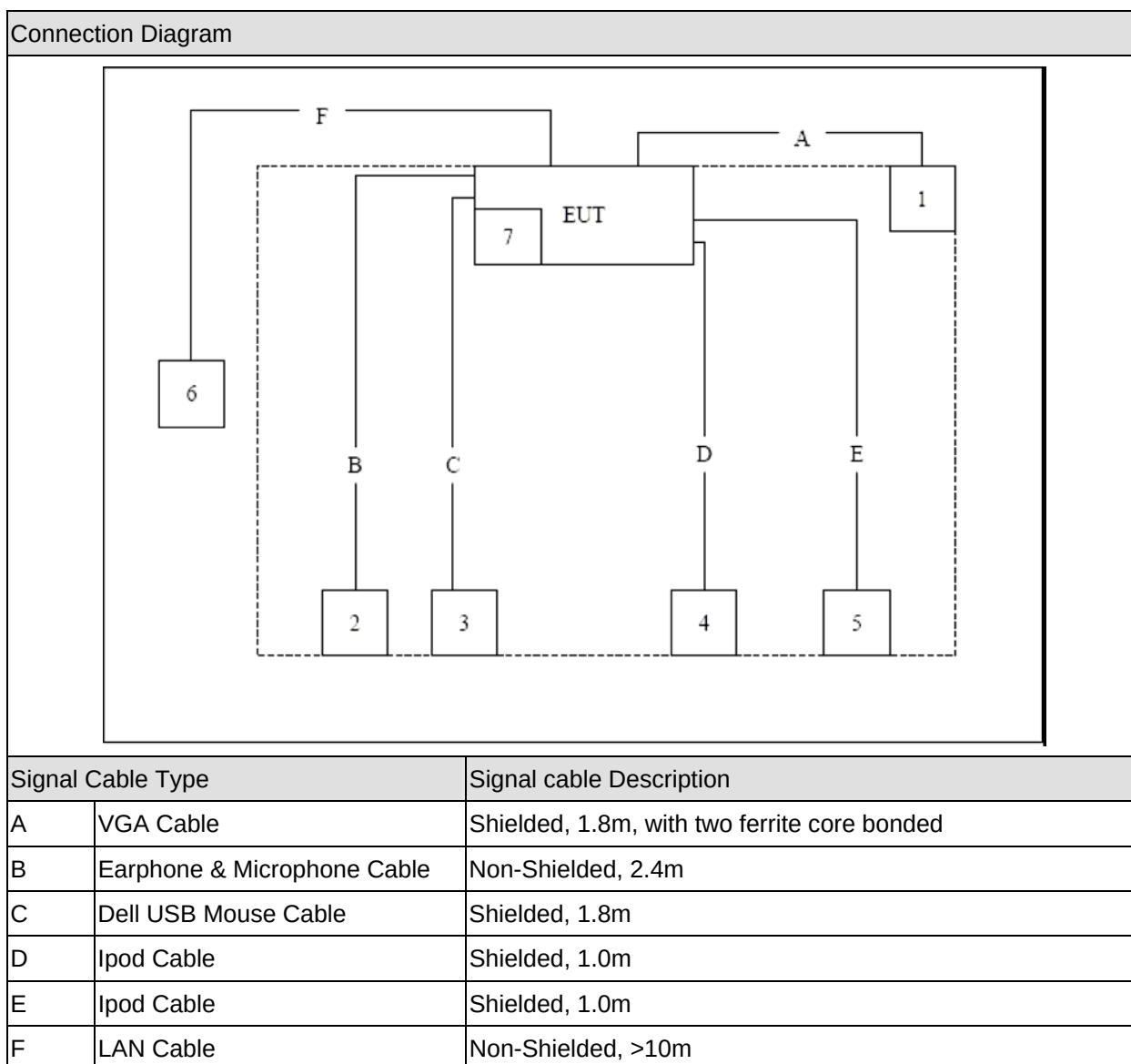
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations. The function for the receiver was measured and made a test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

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

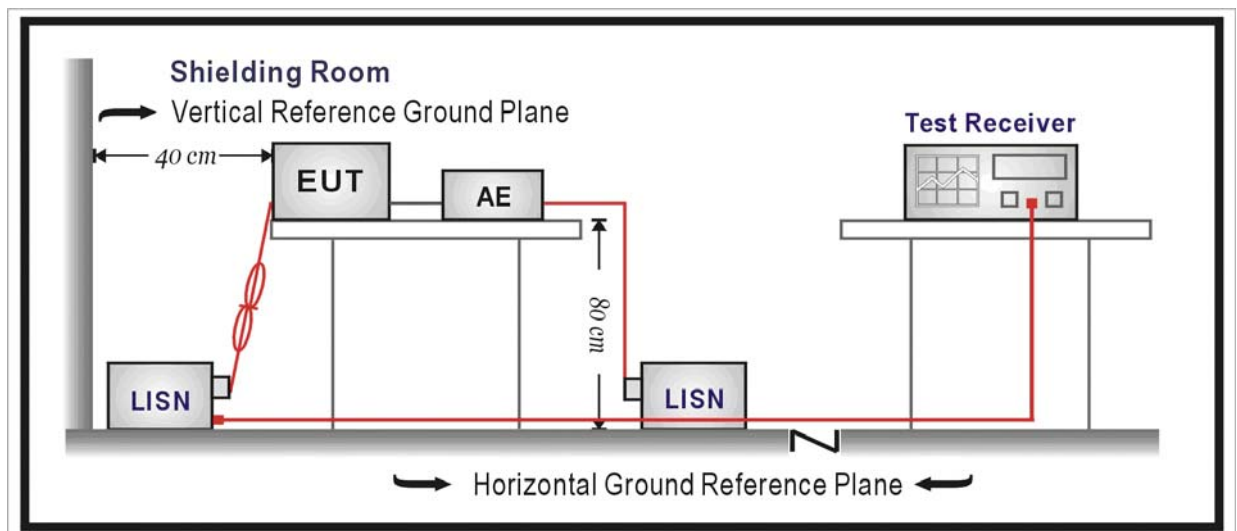
3.1. Test Equipment

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	2009/10/19
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.

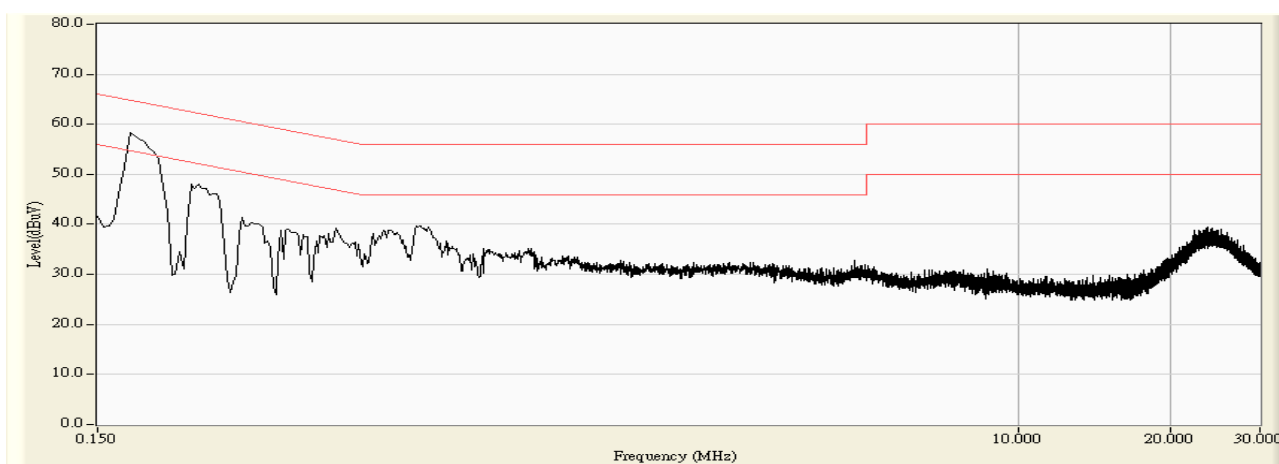
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.5. Uncertainty

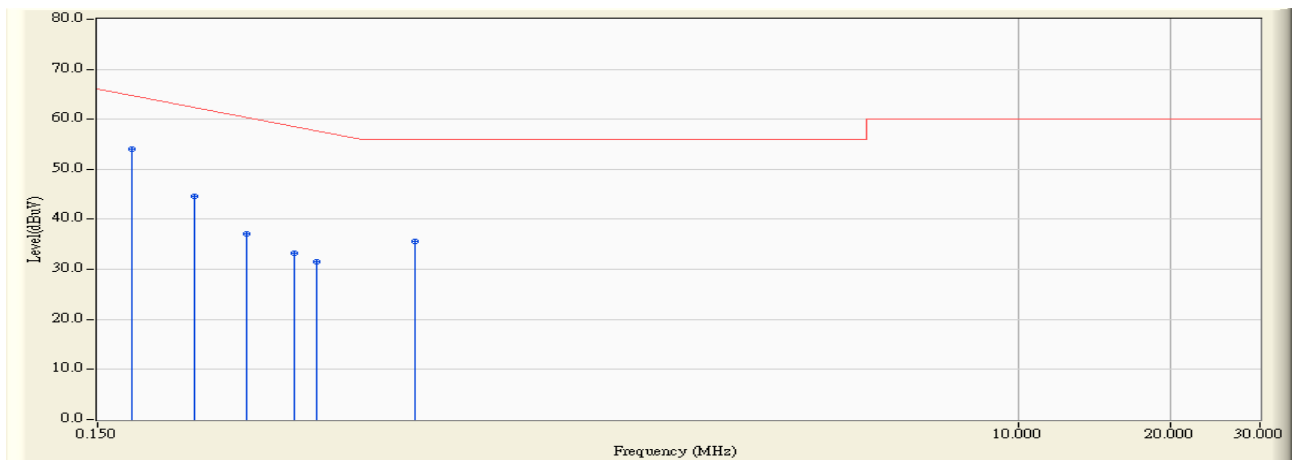
The measurement uncertainty is defined as ± 2.02 dB

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

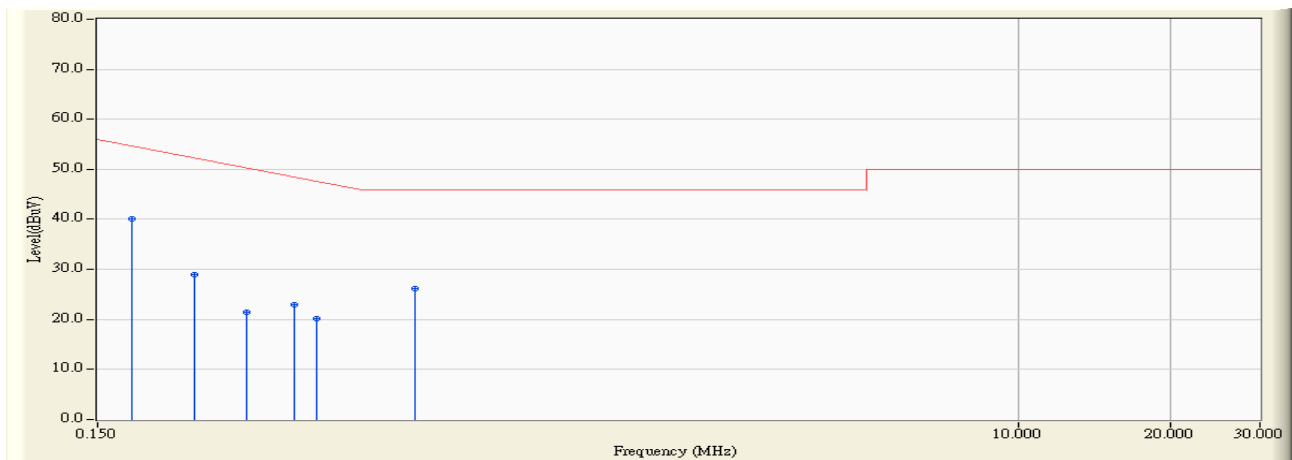


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.175	9.910	44.100	54.010	-10.710	64.720	QUASIPeAK
2		0.233	9.449	35.100	44.549	-17.793	62.342	QUASIPeAK
3		0.295	9.500	27.500	36.999	-23.383	60.382	QUASIPeAK
4		0.367	9.549	23.700	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

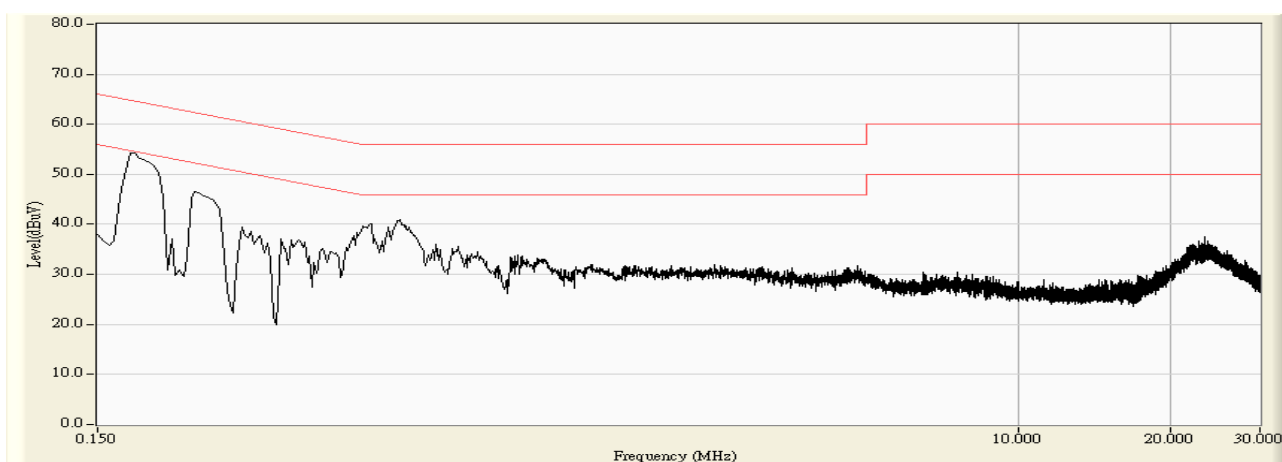


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.175	9.910	30.200	40.110	-14.610	54.720	AVERAGE
2		0.233	9.449	19.400	28.849	-23.493	52.342	AVERAGE
3		0.295	9.500	11.900	21.399	-28.983	50.382	AVERAGE
4		0.367	9.549	13.500	23.049	-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

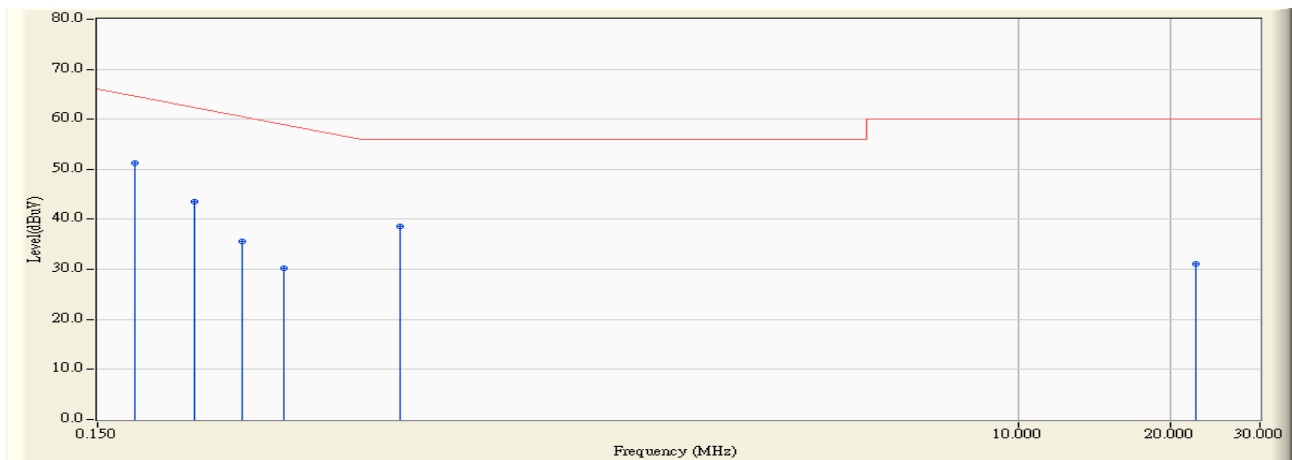
Note:

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

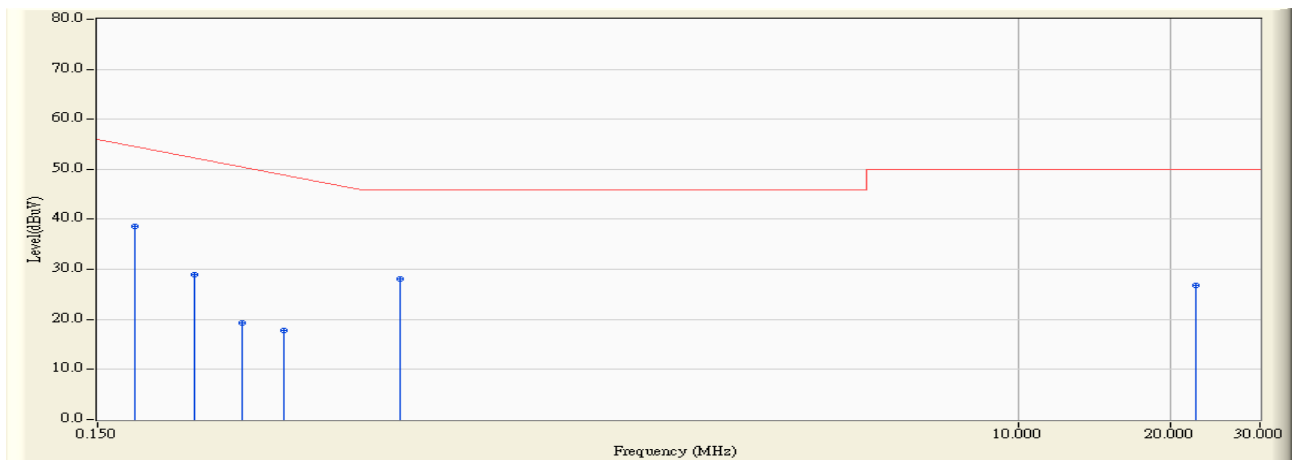


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.178	9.820	41.400	51.220	-13.358	64.578	QUASIPeAK
2		0.234	9.580	33.900	43.480	-18.827	62.307	QUASIPeAK
3		0.290	9.597	26.100	35.697	-24.827	60.524	QUASIPeAK
4		0.350	9.604	20.600	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

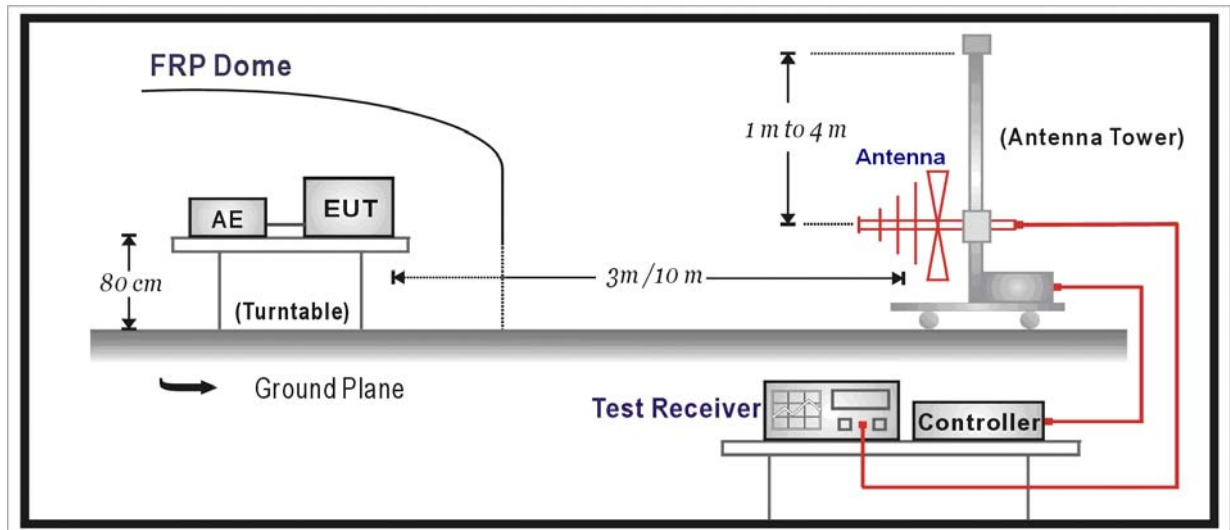
☒ Radiated Emission / AC-5

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

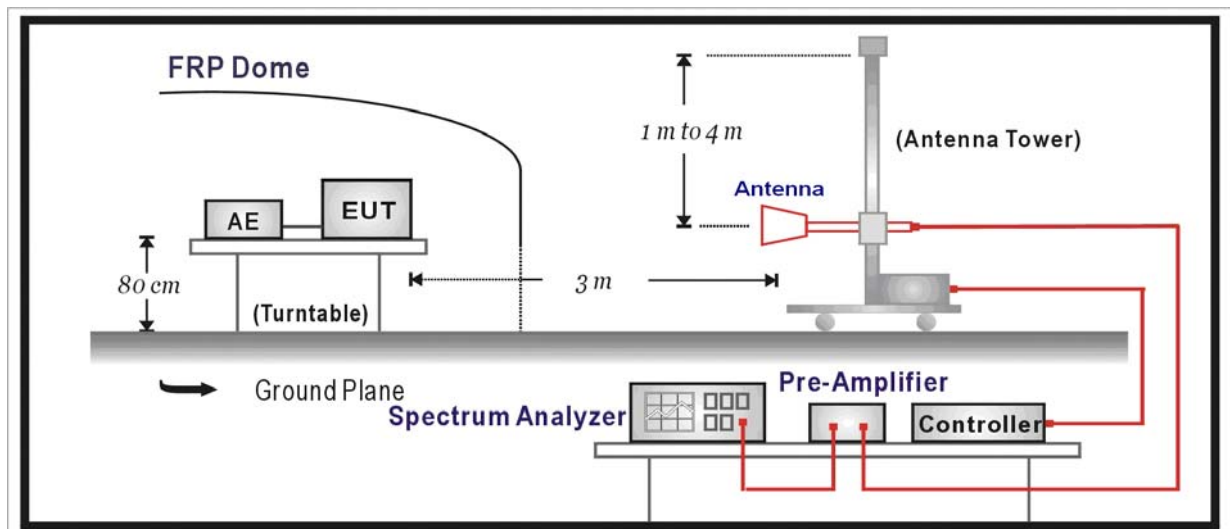
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

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	2413.620	106.82	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	2435.150	105.75	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
11	V	2463.650	105.49	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	2407.240	108.42	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	2433.470	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	2457.300	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

802.11n(20MHz)

CH	Antenna	Frequency (MHz)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	H	2407.350	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
6	H	2440.460	107.82	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	2457.550	107.00	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	2417.940	102.72	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	2440.280	103.64	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	2447.150	103.53	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

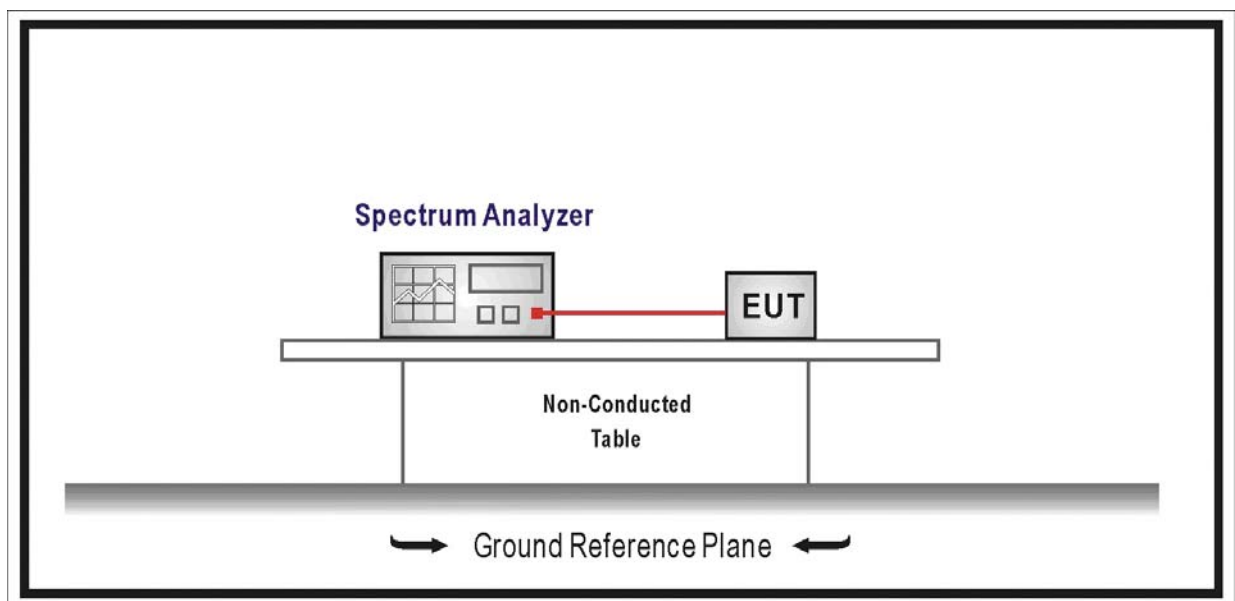
5.1. Test Equipment

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.

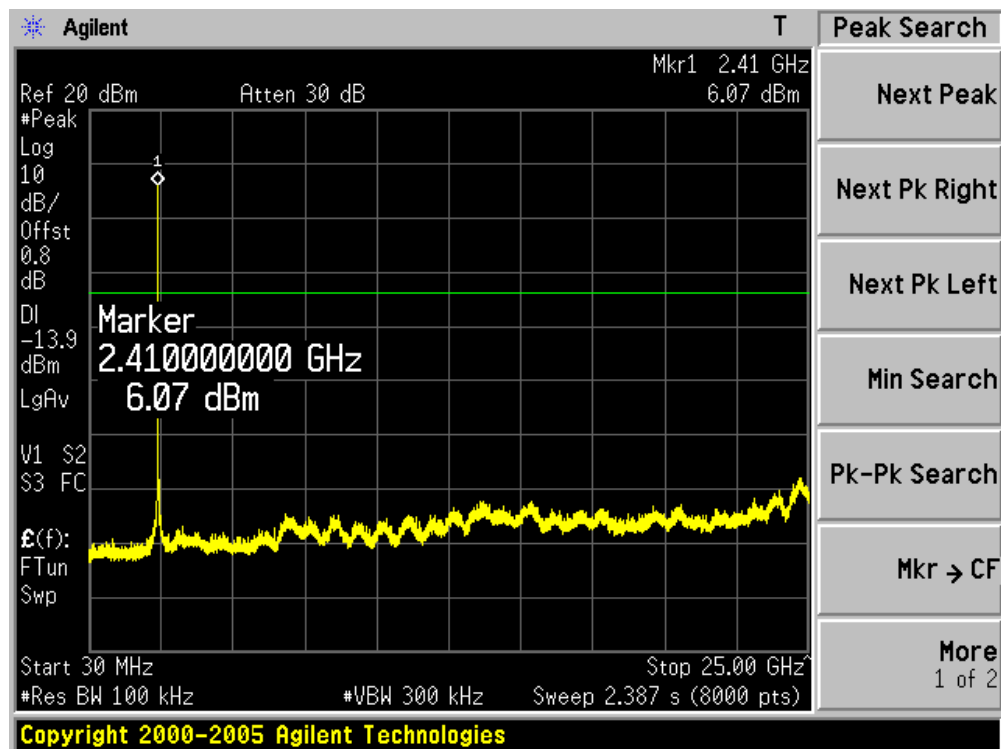
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

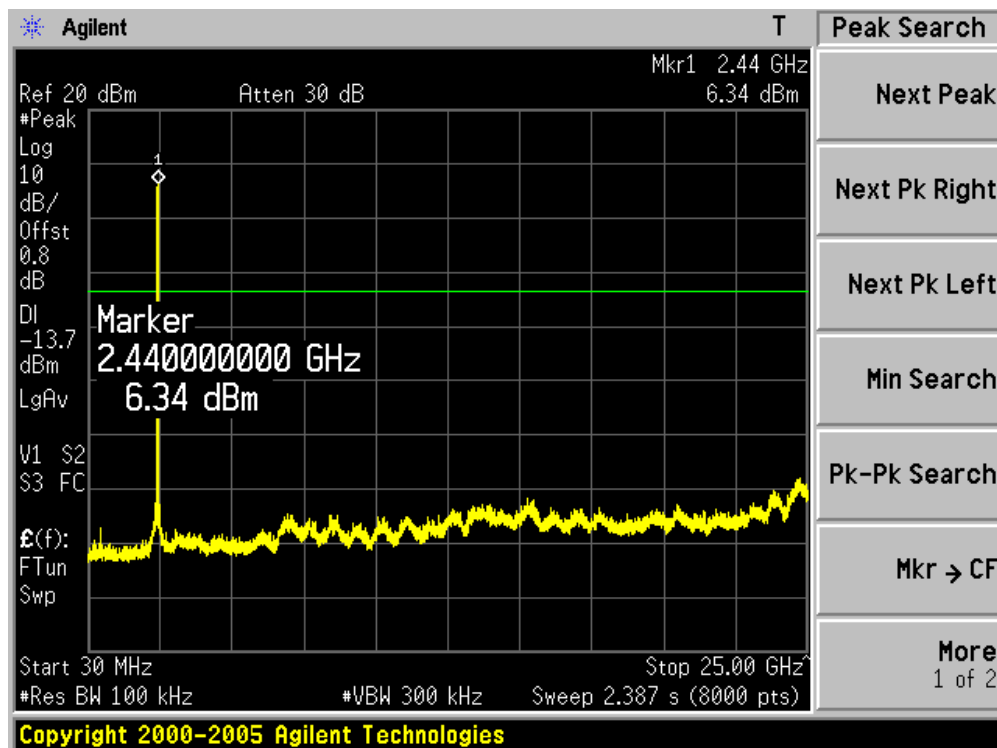
5.6. Test Result

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

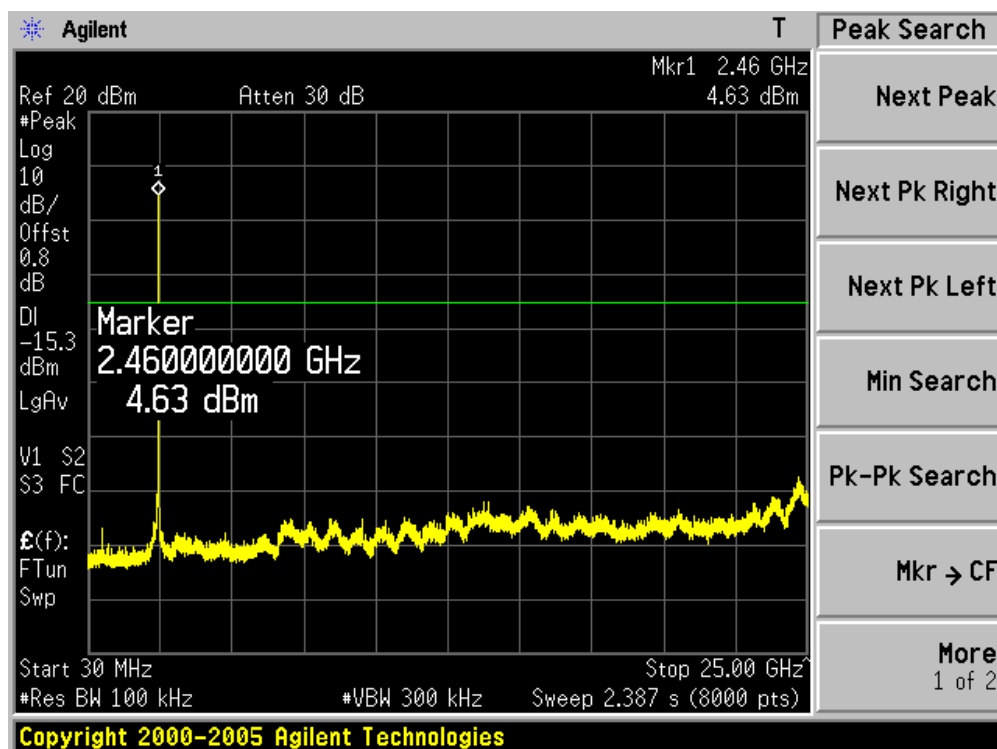
Channel 01 (2412MHz)



Channel 06 (2437MHz)

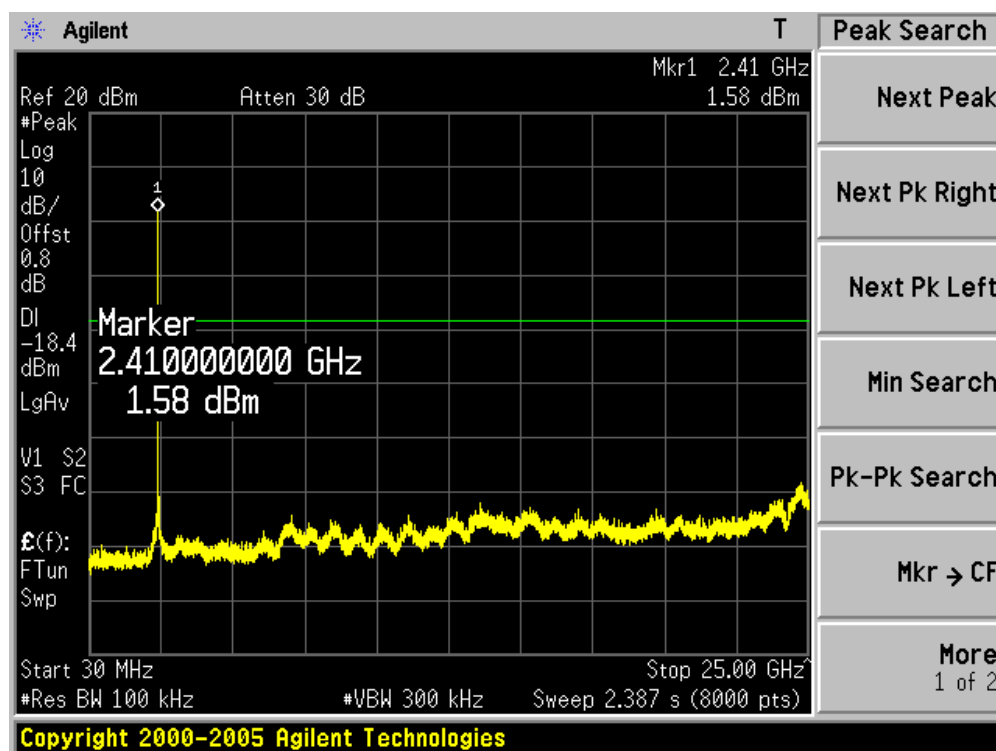


Channel 11 (2462MHz)

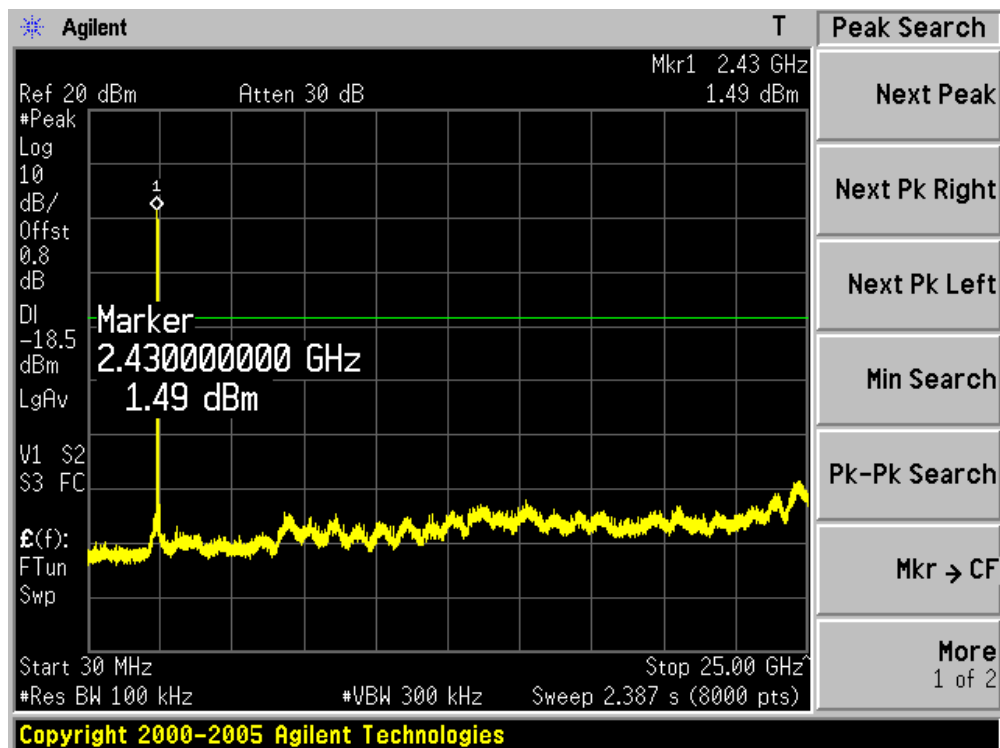


Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g (Chain A)

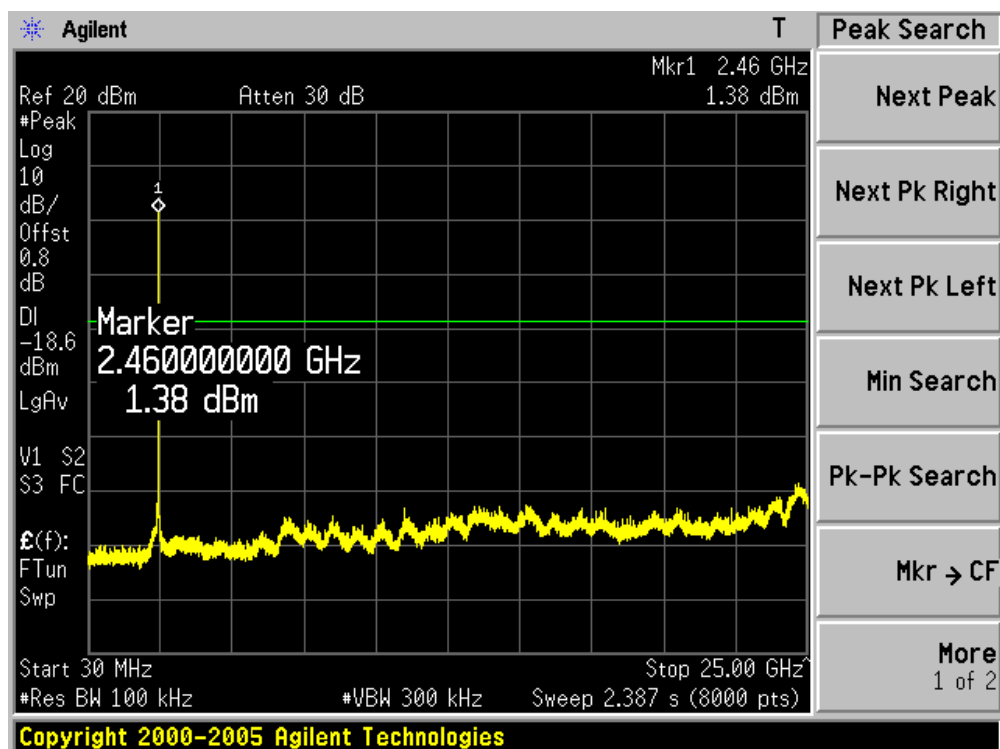
Channel 01 (2412MHz)



Channel 06 (2437MHz)

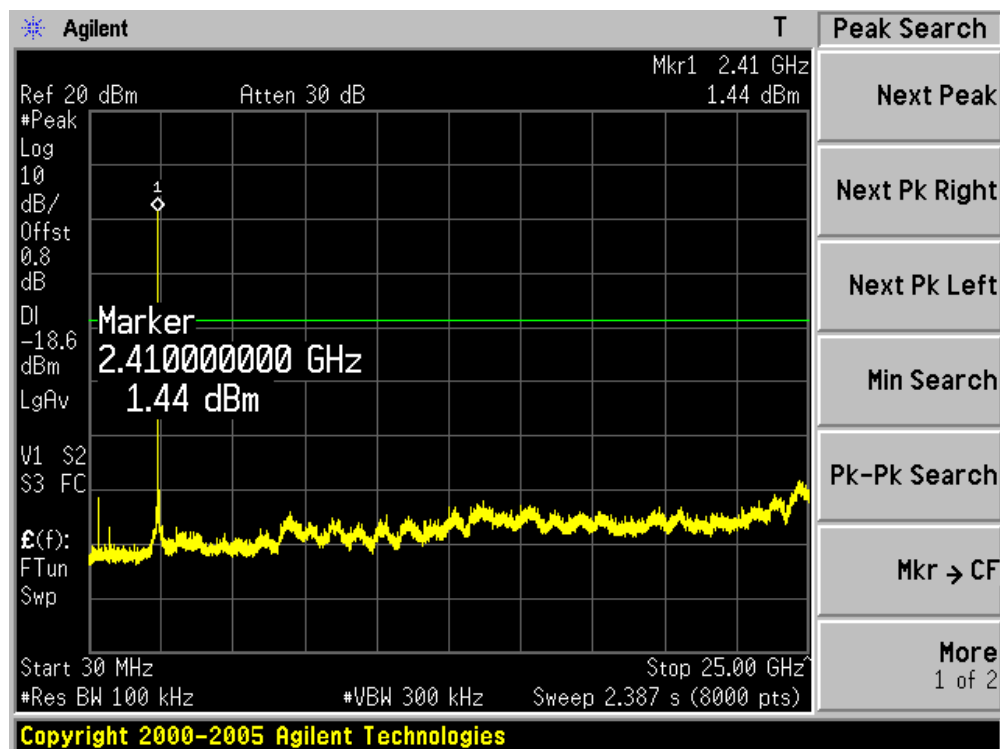


Channel 11 (2462MHz)

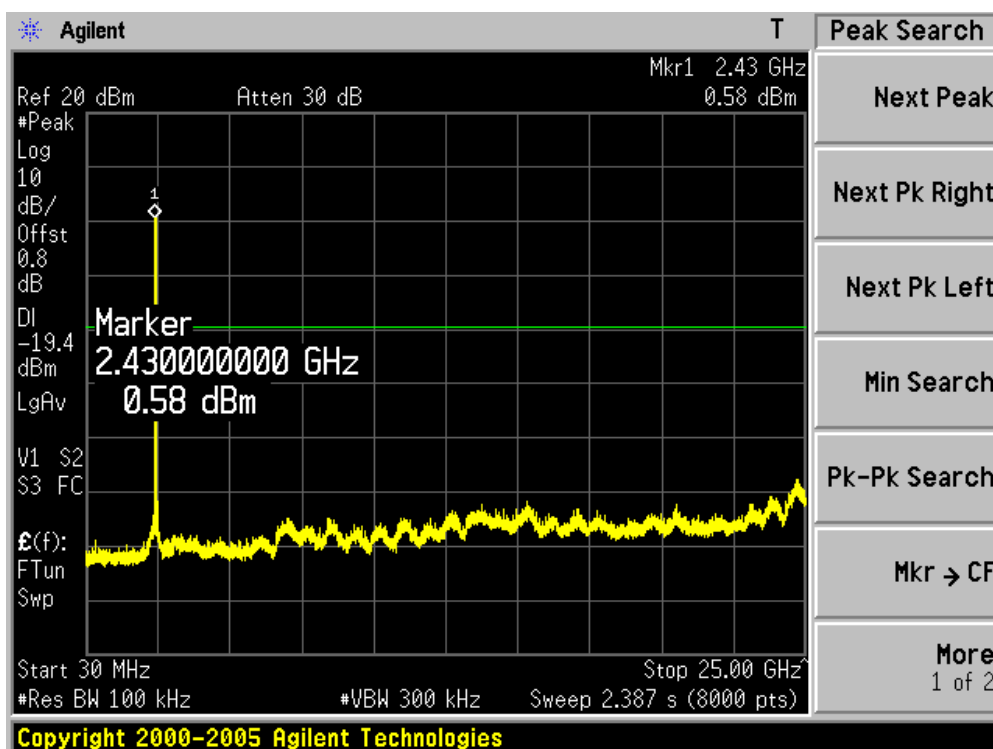


Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz)

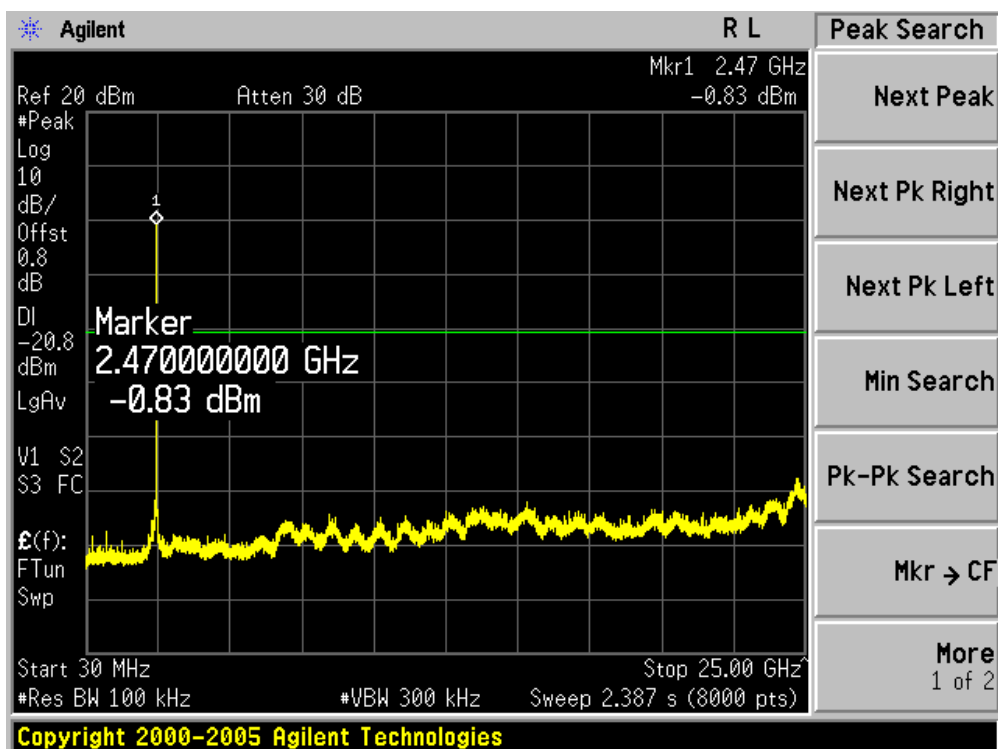
Channel 01 (2412MHz)



Channel 06 (2437MHz)

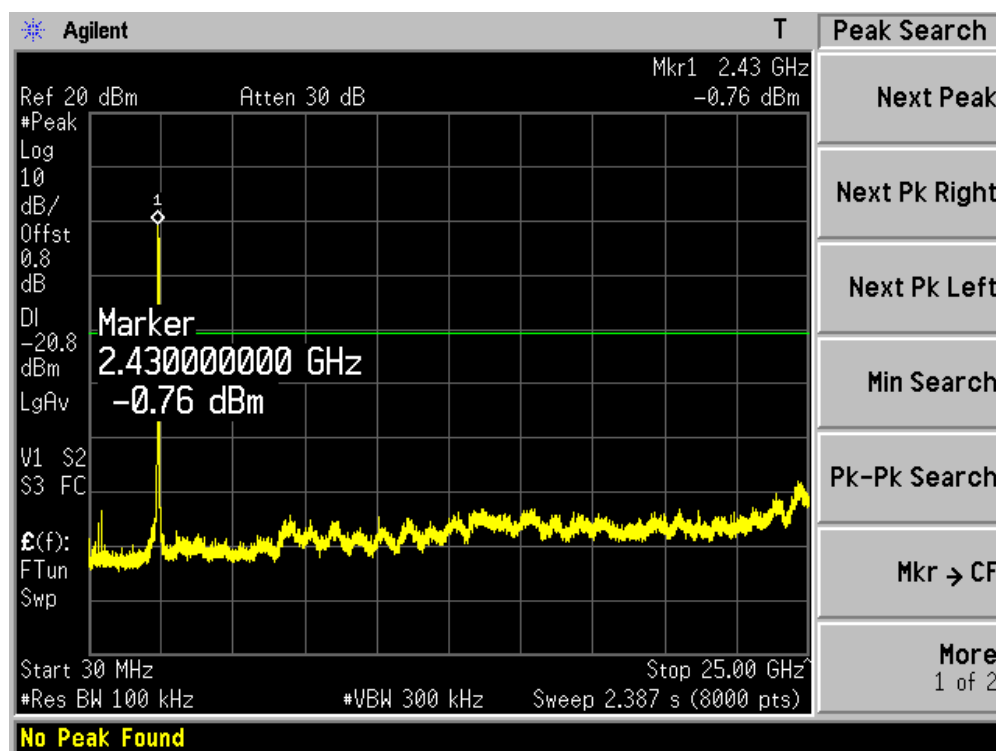


Channel 11 (2462MHz)

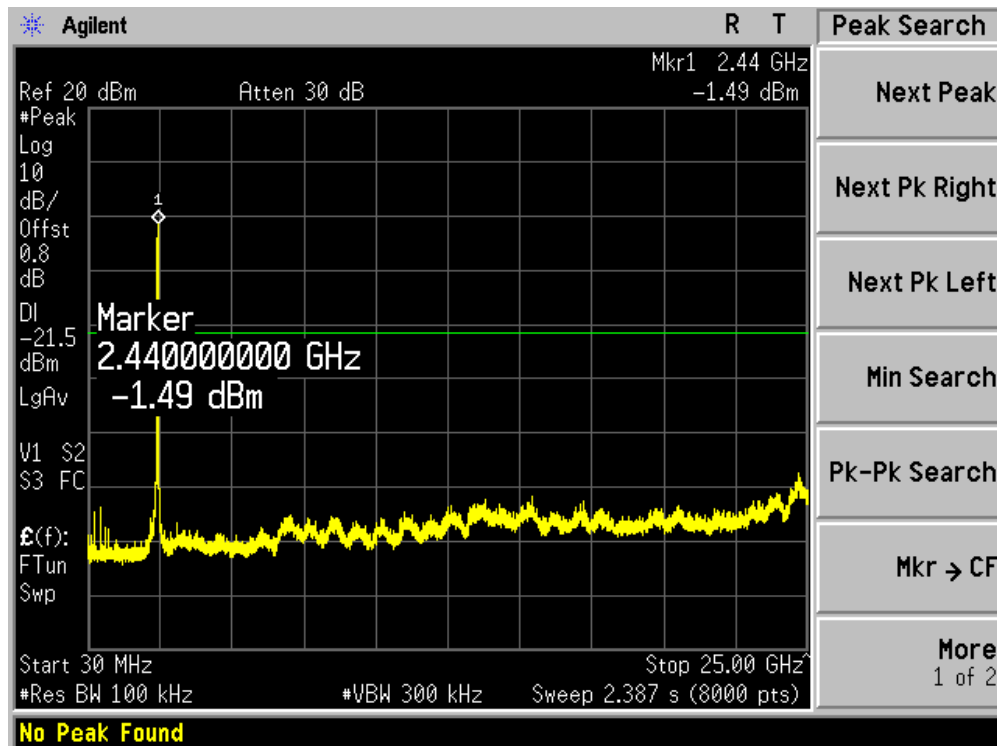


Product	:	Eee PC
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz)

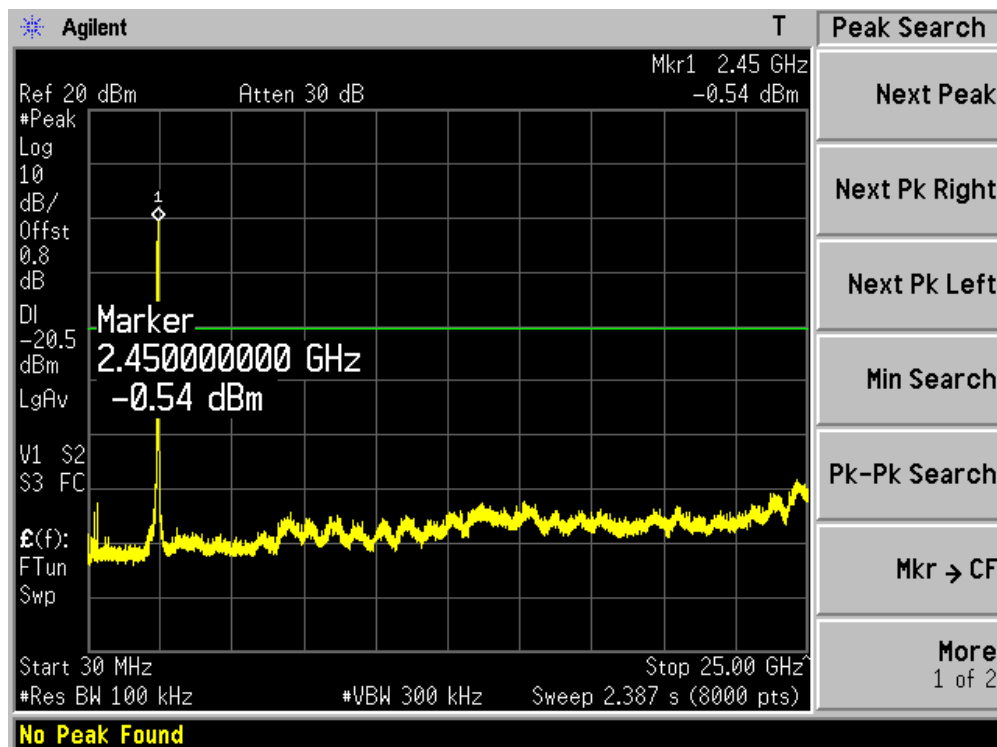
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



6. Radiated Emission Band Edge

6.1. Test Equipment

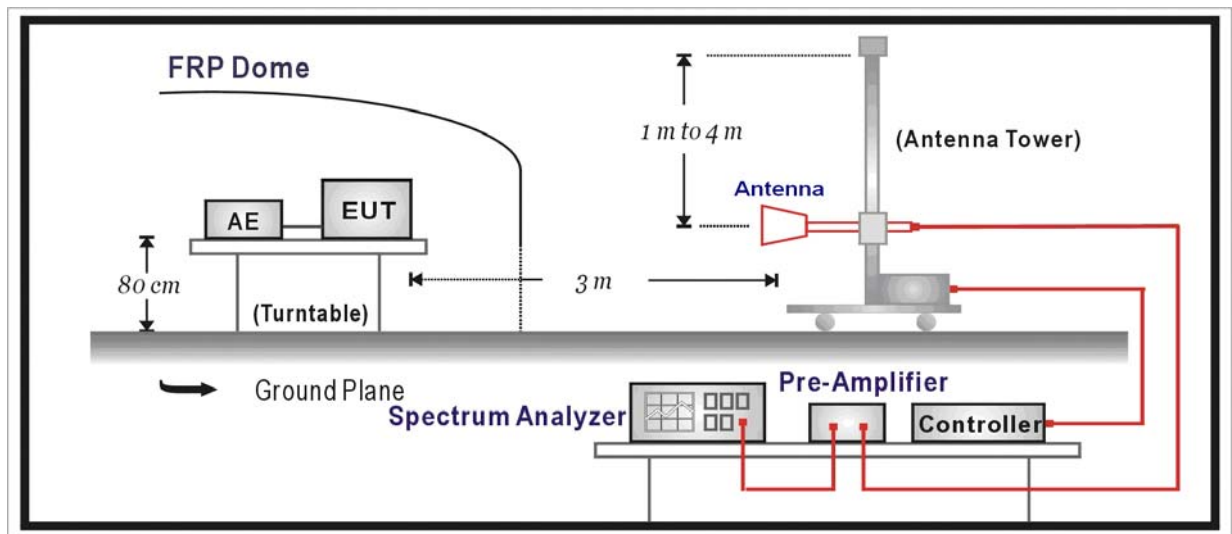
☒ Radiated Emission / AC-5

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

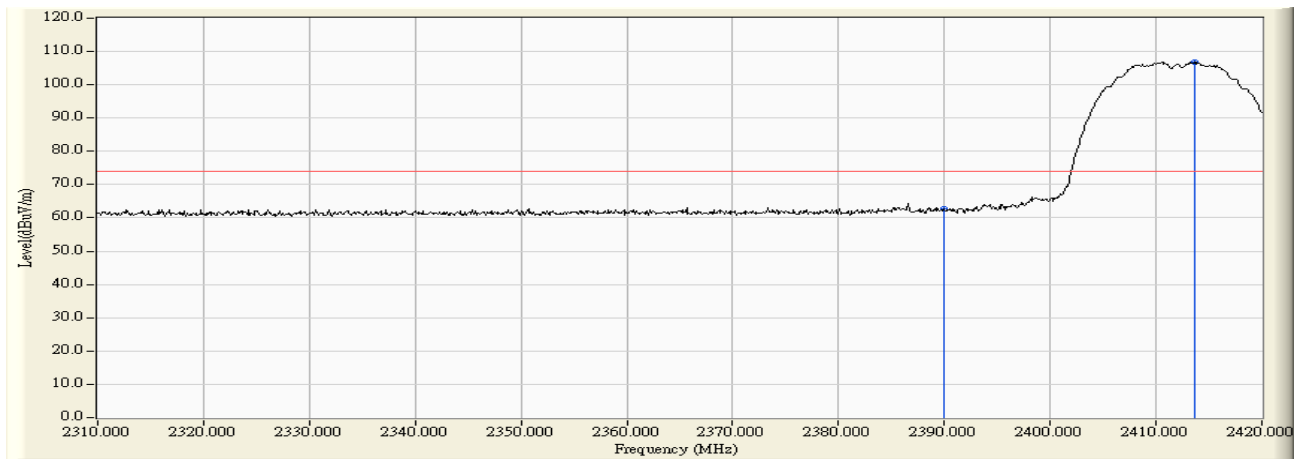
The measurement uncertainty above 1G is defined as ± 3.9 dB

6.6. Test Result

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

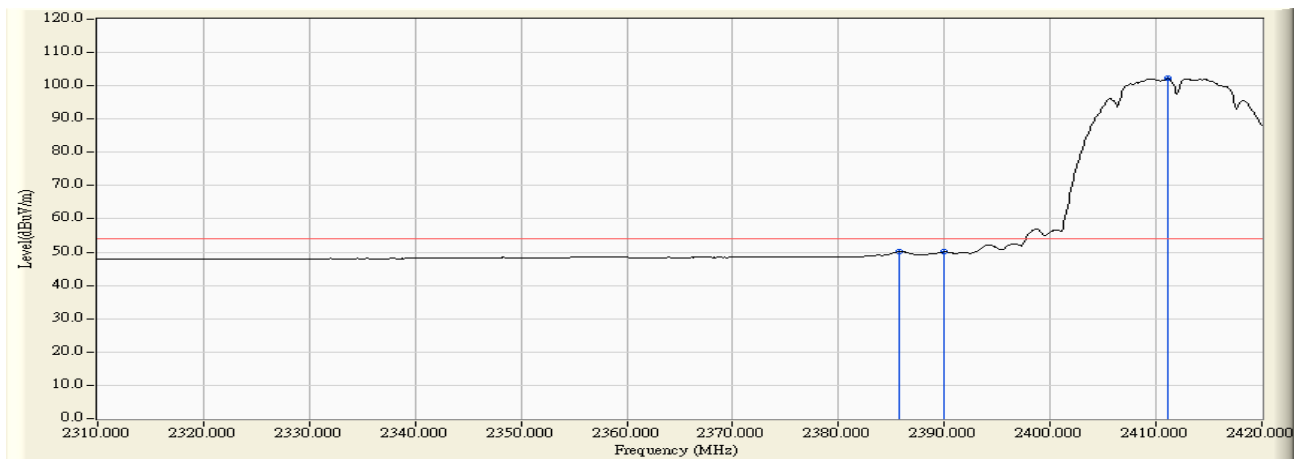
Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:48
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



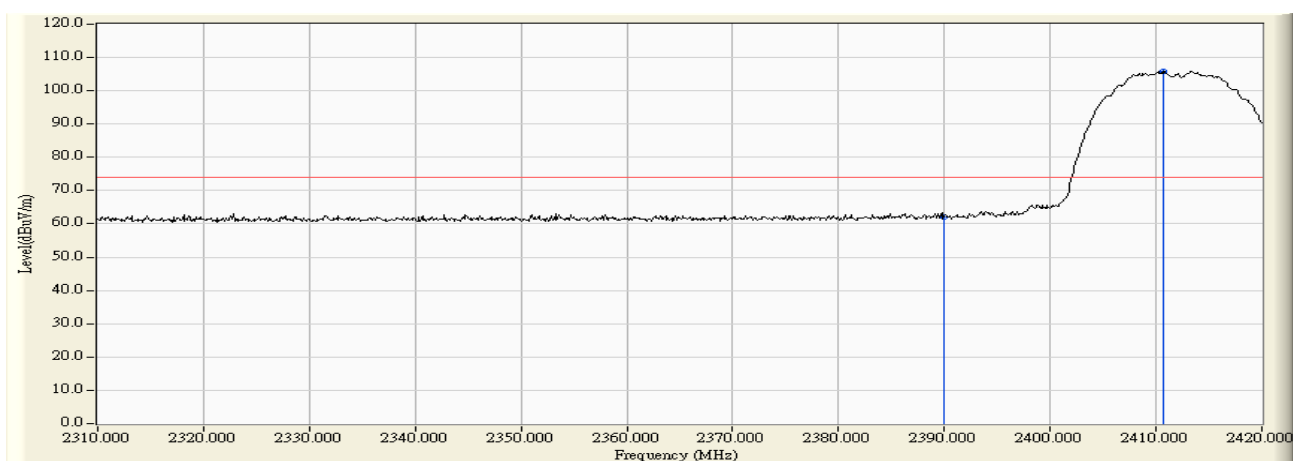
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	31.422	62.606	-11.364	73.970	PEAK
2	*	2413.620	31.191	75.626	106.818	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:49
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



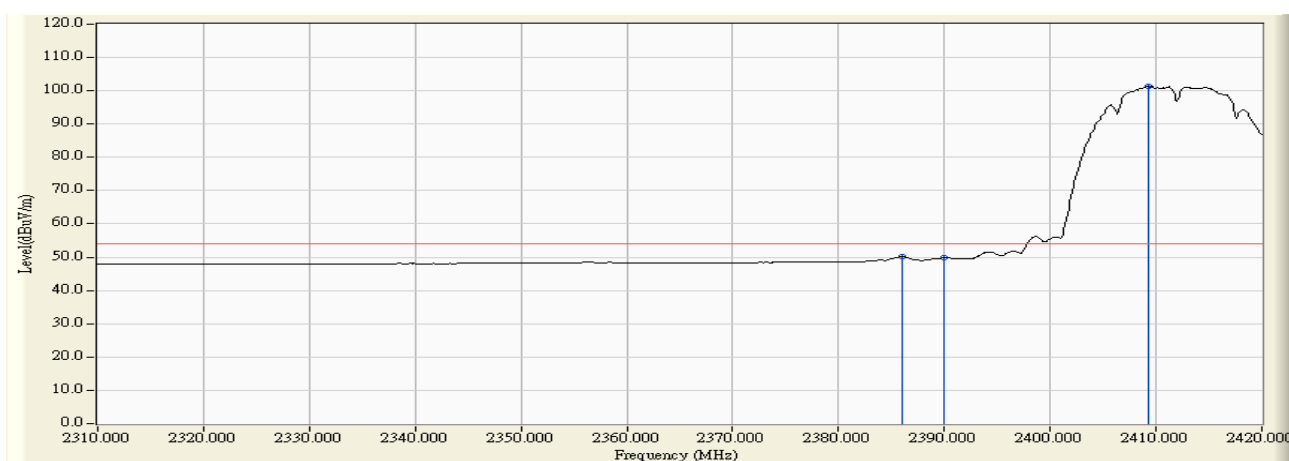
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2385.790	31.188	18.965	50.154	-3.816	53.970	AVERAGE
2		2390.000	31.184	18.887	50.071	-3.899	53.970	AVERAGE
3	*	2411.090	31.190	70.955	102.145	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:44
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



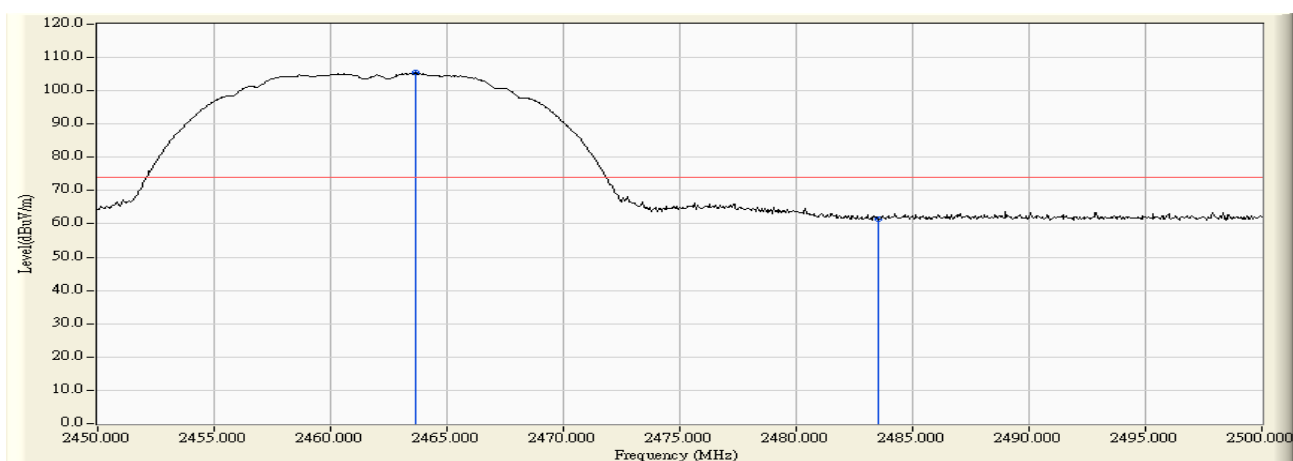
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	30.982	62.166	-11.804	73.970	PEAK
2	*	2410.650	31.189	74.562	105.751	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:44
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 1: Transmit by 802.11b at channel 2412MHz



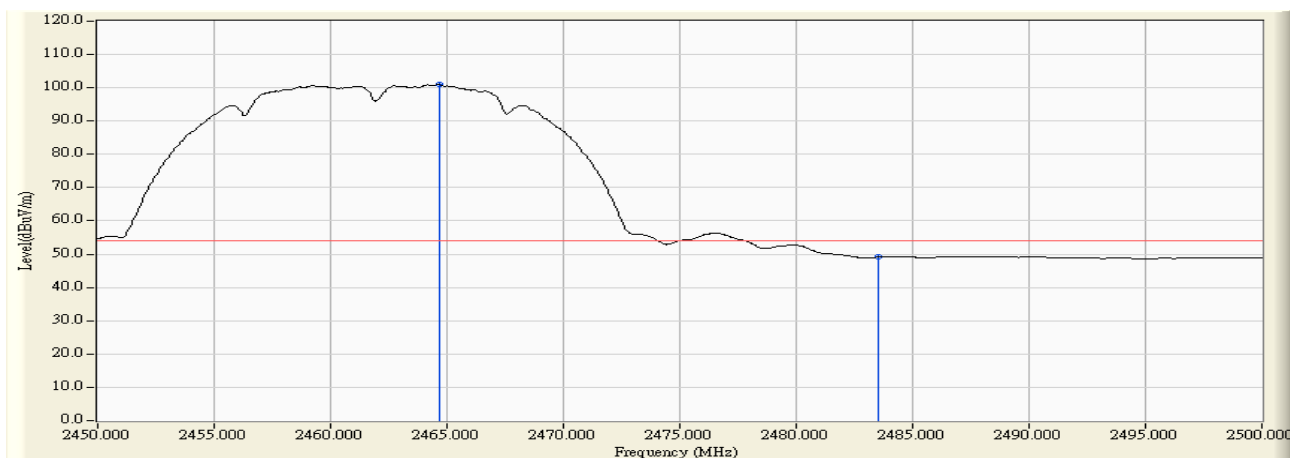
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.010	31.189	18.881	50.070	-3.900	53.970	AVERAGE
2		2390.000	31.184	18.657	49.841	-4.129	53.970	AVERAGE
3	*	2409.220	31.188	70.172	101.360	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:53
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



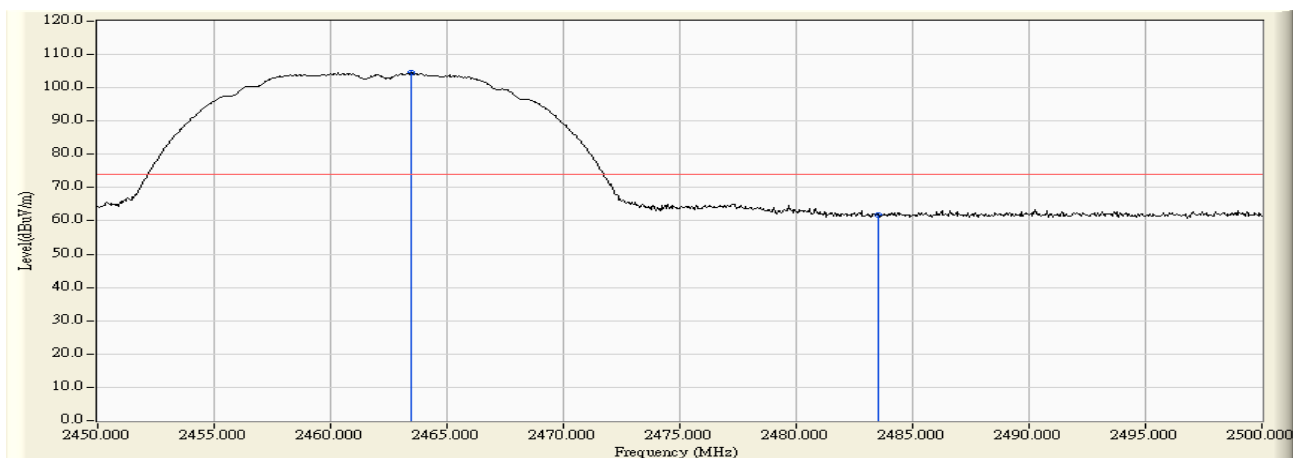
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.650	31.224	74.263	105.487	N/A	N/A	PEAK
2		2483.500	31.212	30.344	61.556	-12.414	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:53
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



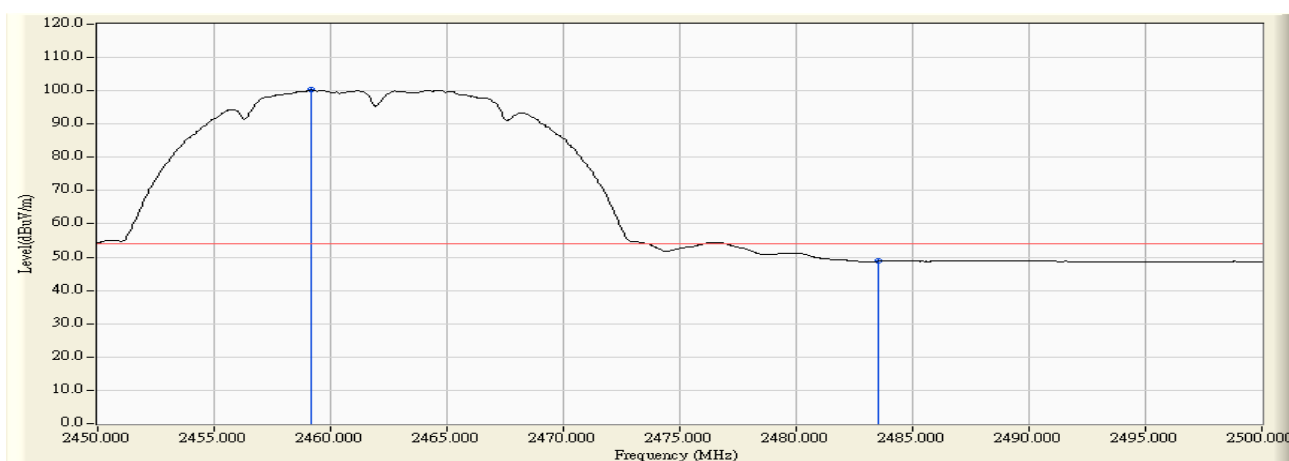
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.700	31.223	69.766	100.990	N/A	N/A	AVERAGE
2		2483.500	31.212	17.918	49.130	-4.840	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:55
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



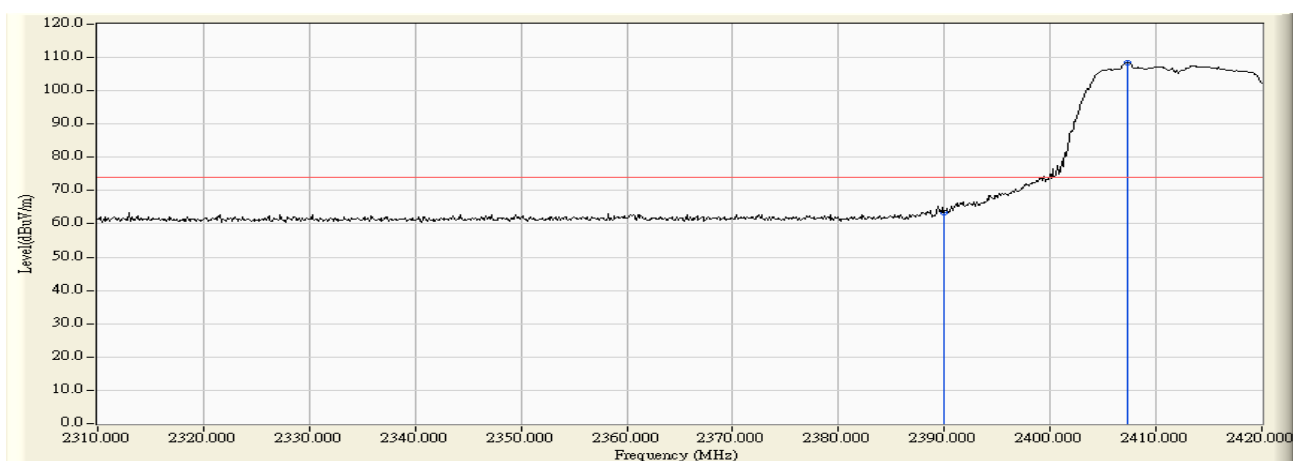
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.450	31.224	73.305	104.529	N/A	N/A	PEAK
2		2483.500	31.212	30.517	61.729	-12.241	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 11:56
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



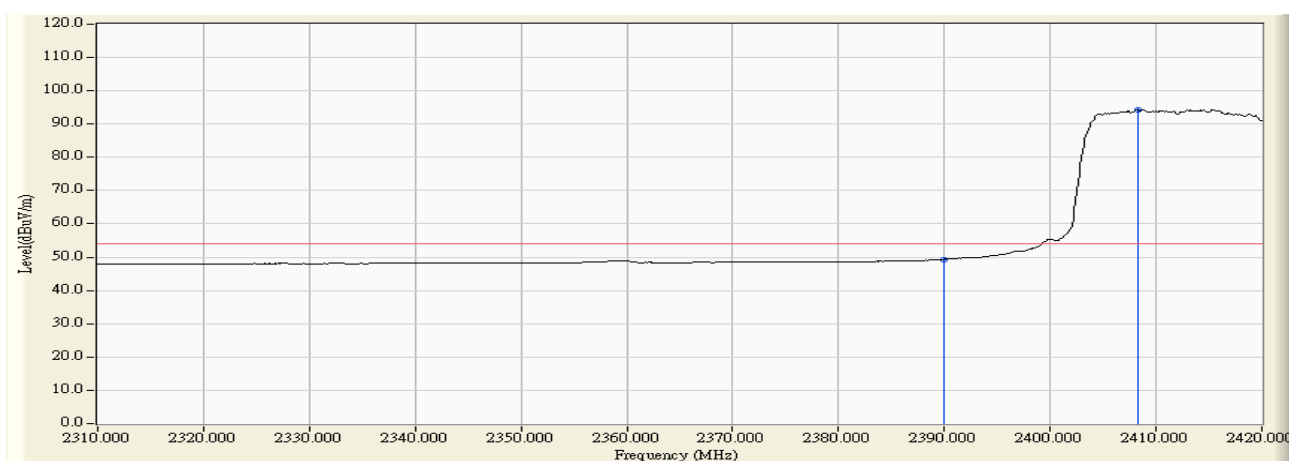
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2459.150	31.224	69.005	100.229	N/A	N/A	AVERAGE
2		2483.500	31.212	17.542	48.754	-5.216	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:16
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



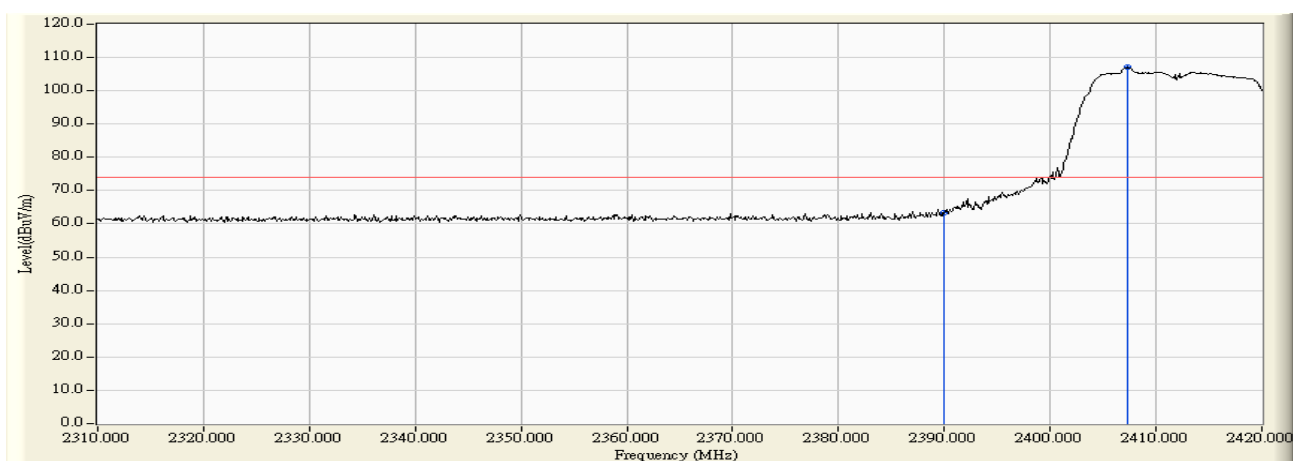
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	32.315	63.499	-10.471	73.970	PEAK
2	*	2407.240	31.187	77.235	108.422	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:17
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



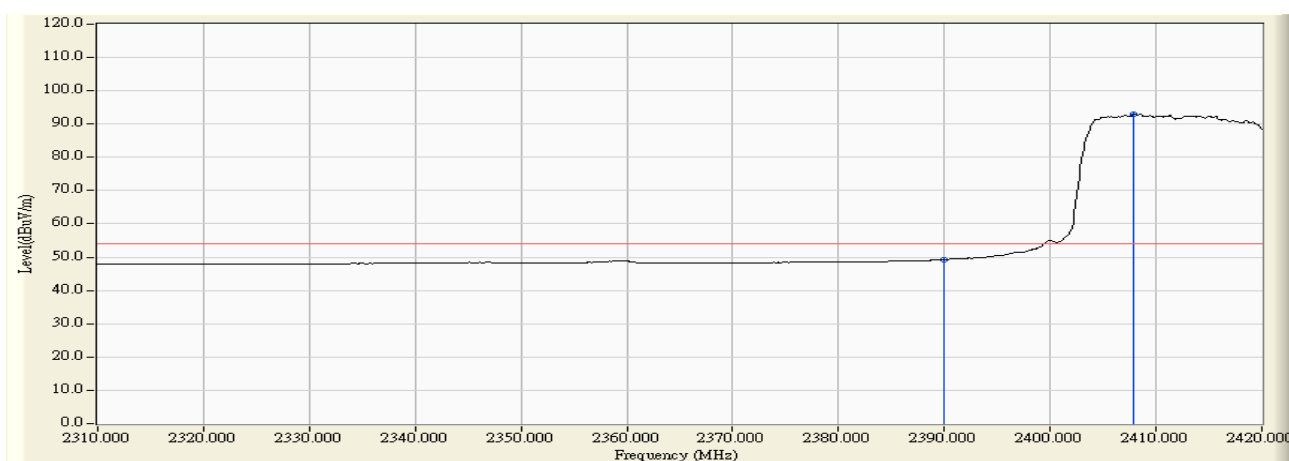
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.186	49.370	-4.600	53.970	AVERAGE
2	*	2408.230	31.188	63.207	94.395	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:20
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



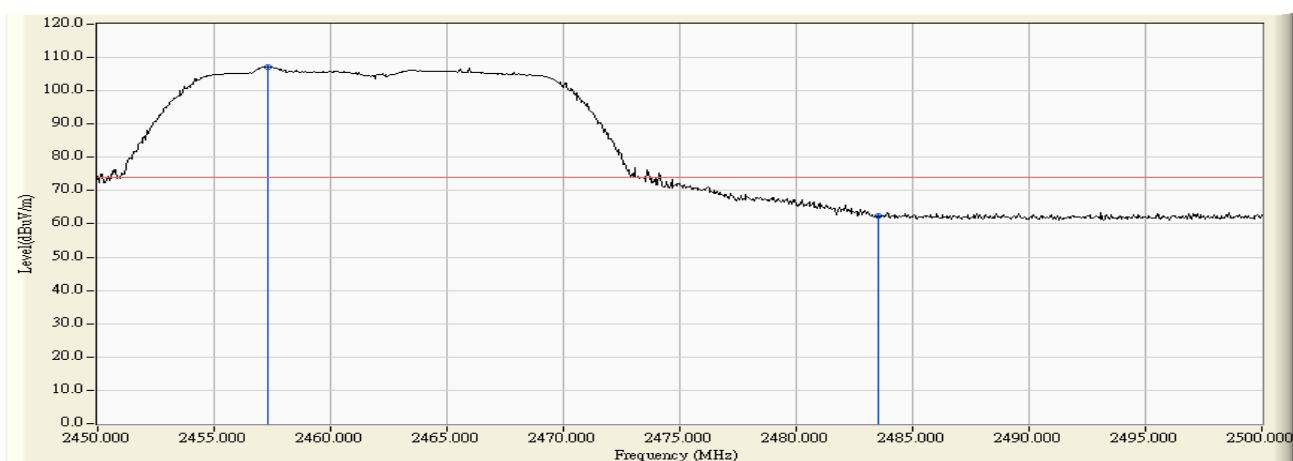
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	32.242	63.426	-10.544	73.970	PEAK
2	*	2407.240	31.187	75.818	107.005	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:20
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
Probe : 9120D_499(1-18GHz) - VERTICAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 2: Transmit by 802.11g at channel 2412MHz



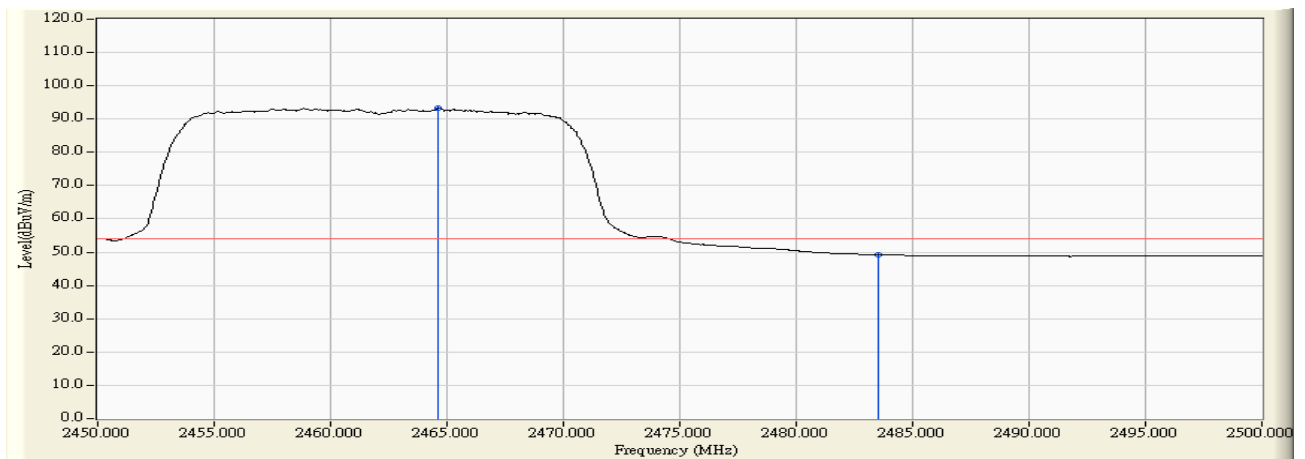
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.128	49.312	-4.658	53.970	AVERAGE
2	*	2407.900	31.188	61.808	92.996	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:12
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



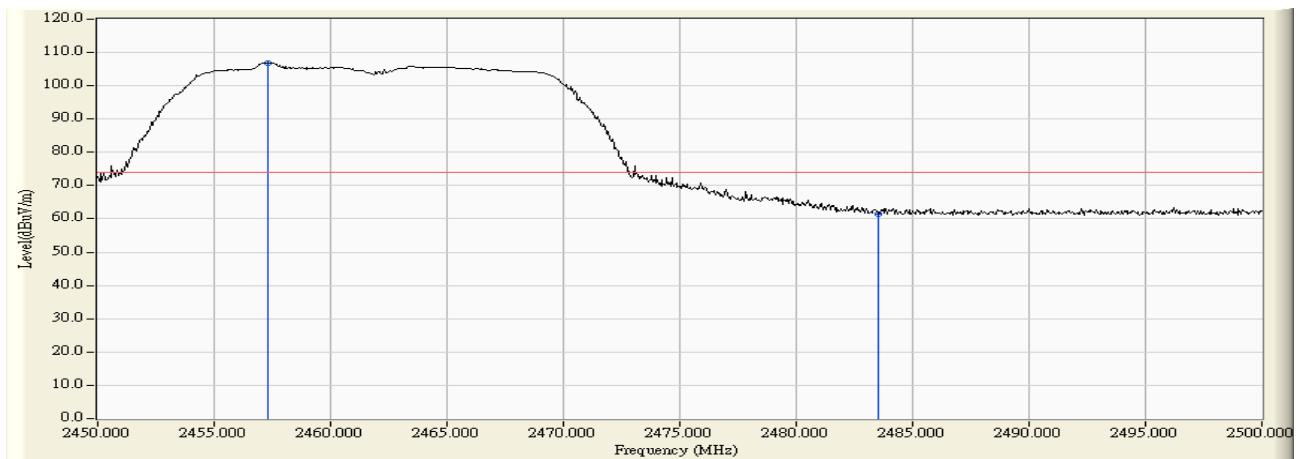
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2457.300	31.223	76.029	107.252	N/A	N/A	PEAK
2		2483.500	31.212	31.138	62.350	-11.620	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:12
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



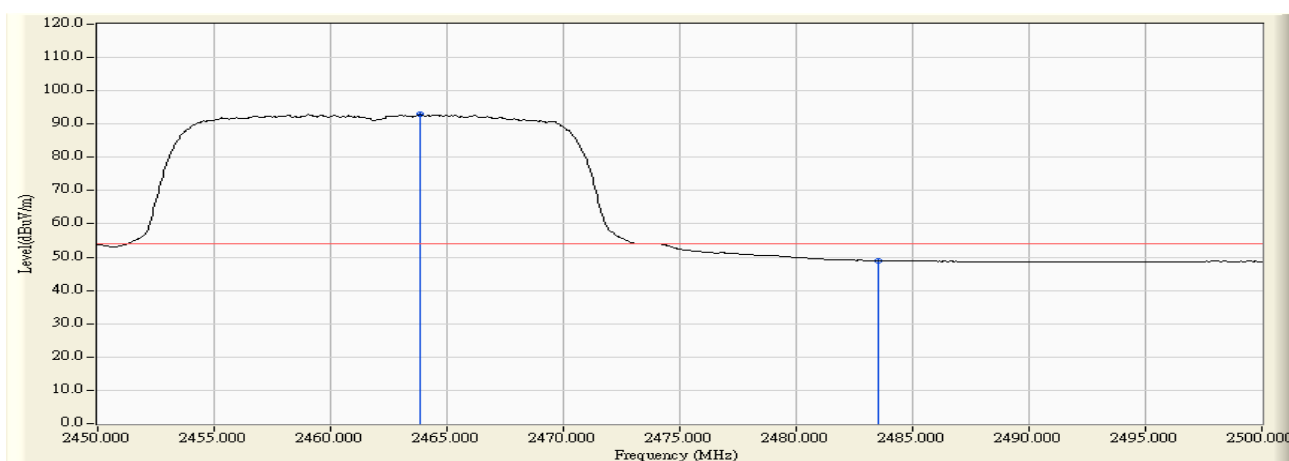
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.600	31.223	61.958	93.182	N/A	N/A	AVERAGE
2		2483.500	31.212	18.043	49.255	-4.715	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:09
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



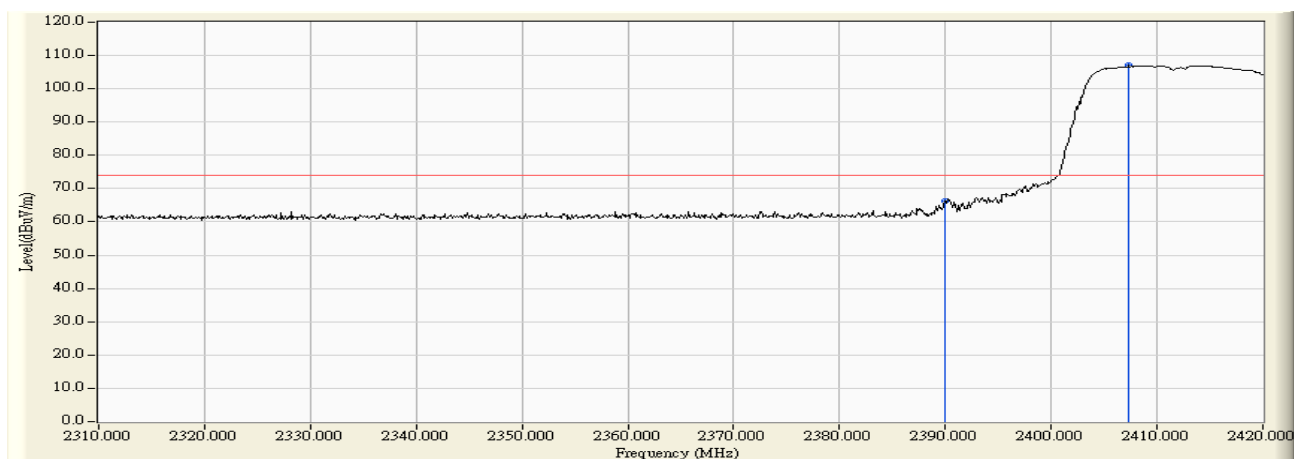
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2457.300	31.223	75.713	106.936	N/A	N/A	PEAK
2		2483.500	31.212	30.326	61.538	-12.432	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:09
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



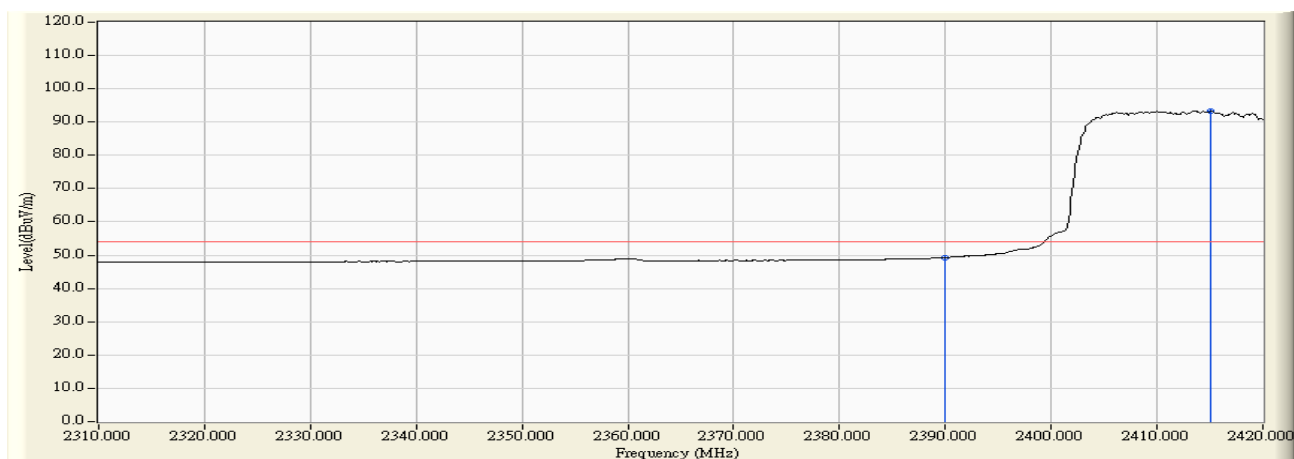
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.850	31.224	61.680	92.904	N/A	N/A	AVERAGE
2		2483.500	31.212	17.760	48.972	-4.998	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:30
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



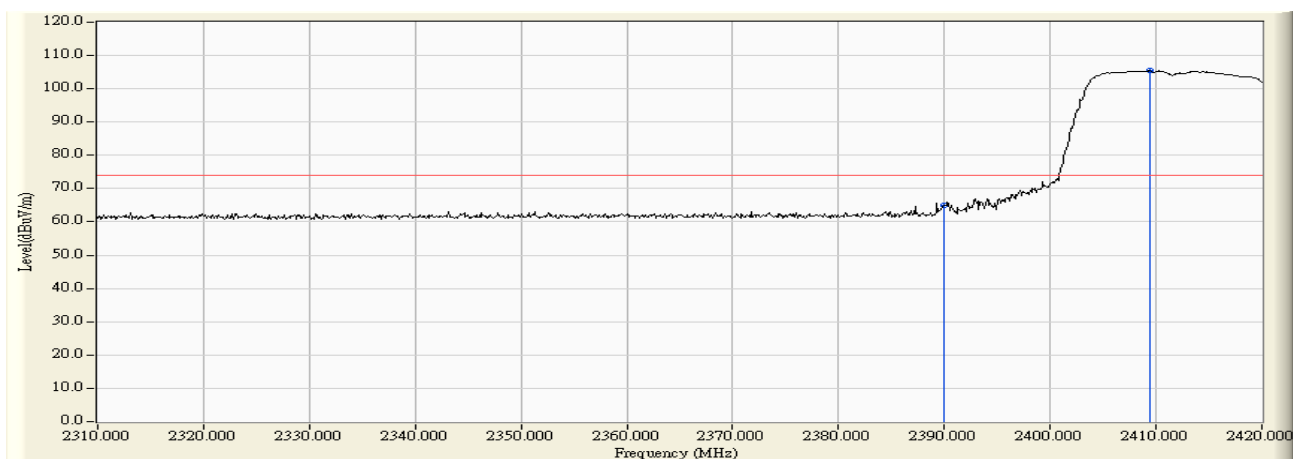
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	35.008	66.192	-7.778	73.970	PEAK
2	*	2407.350	31.187	76.066	107.253	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:30
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



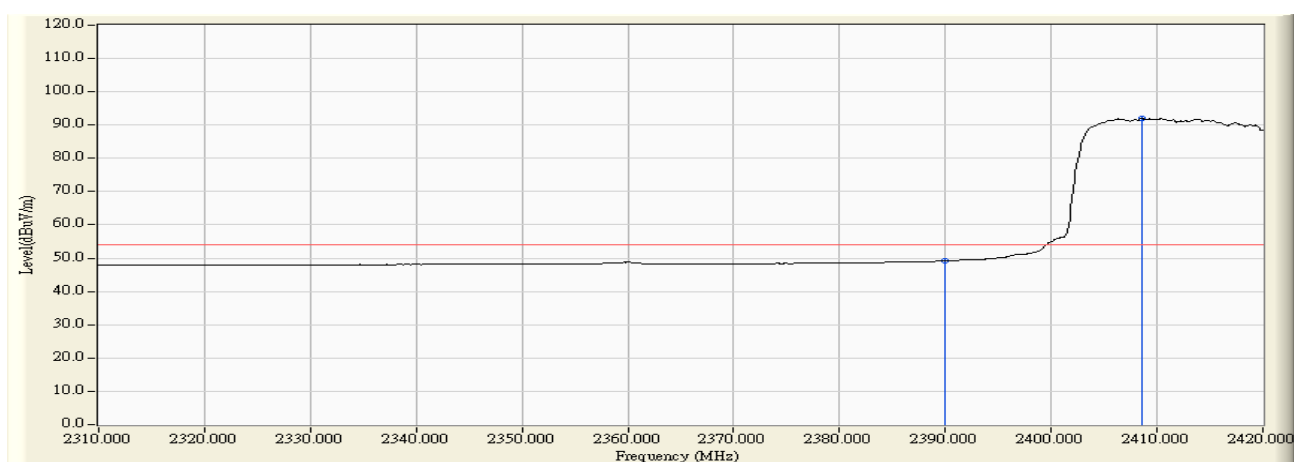
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.133	49.317	-4.653	53.970	AVERAGE
2	*	2415.050	31.193	62.244	93.437	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:26
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



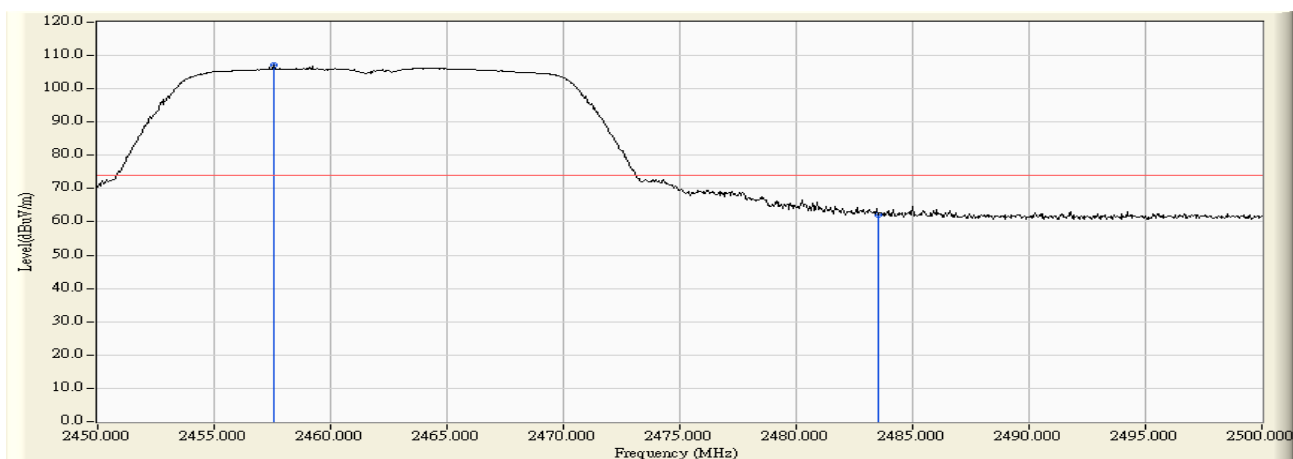
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	33.877	65.061	-8.909	73.970	PEAK
2	*	2409.440	31.189	74.309	105.498	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:26
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



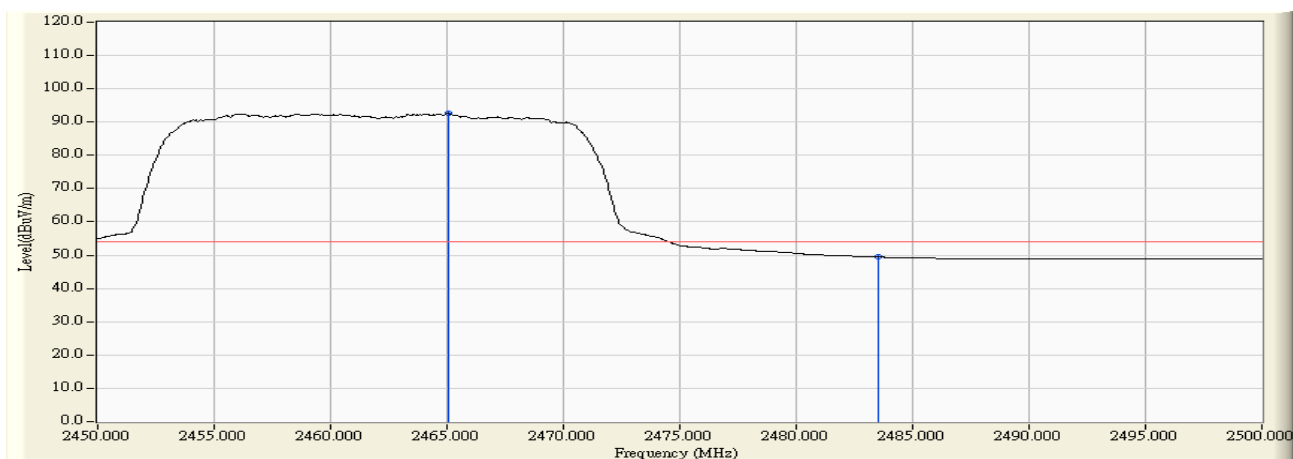
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.030	49.214	-4.756	53.970	AVERAGE
2	*	2408.560	31.188	60.938	92.126	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:32
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



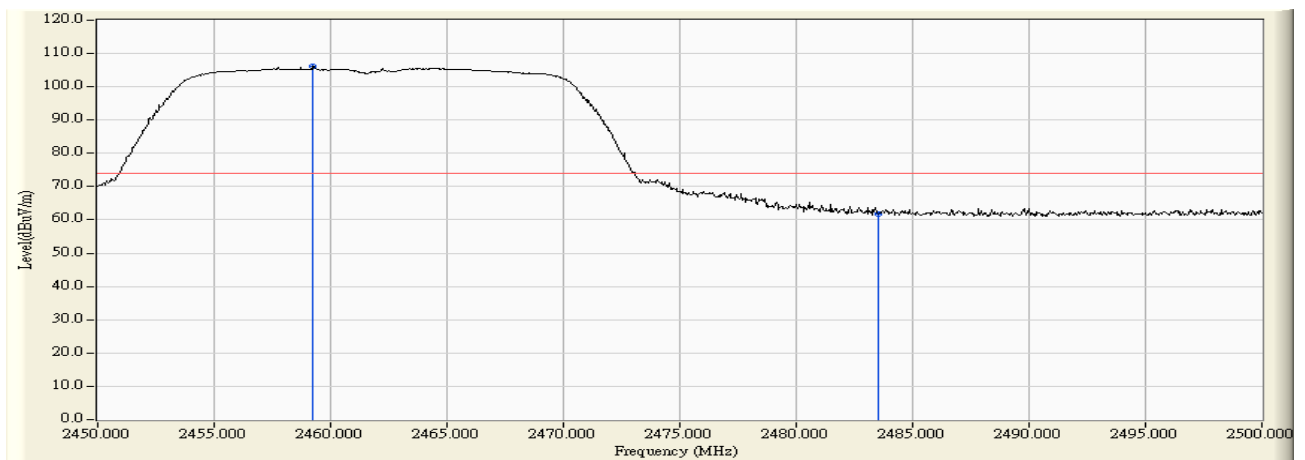
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2457.550	31.224	75.777	107.001	N/A	N/A	PEAK
2		2483.500	31.212	30.943	62.155	-11.815	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:33
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



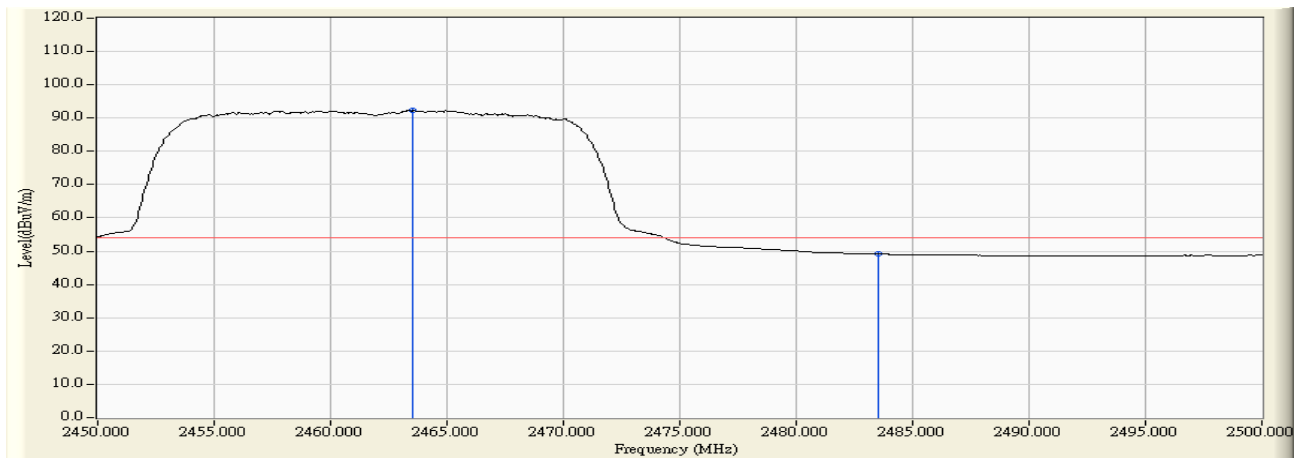
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.050	31.223	61.362	92.585	N/A	N/A	AVERAGE
2		2483.500	31.212	18.214	49.426	-4.544	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:35
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



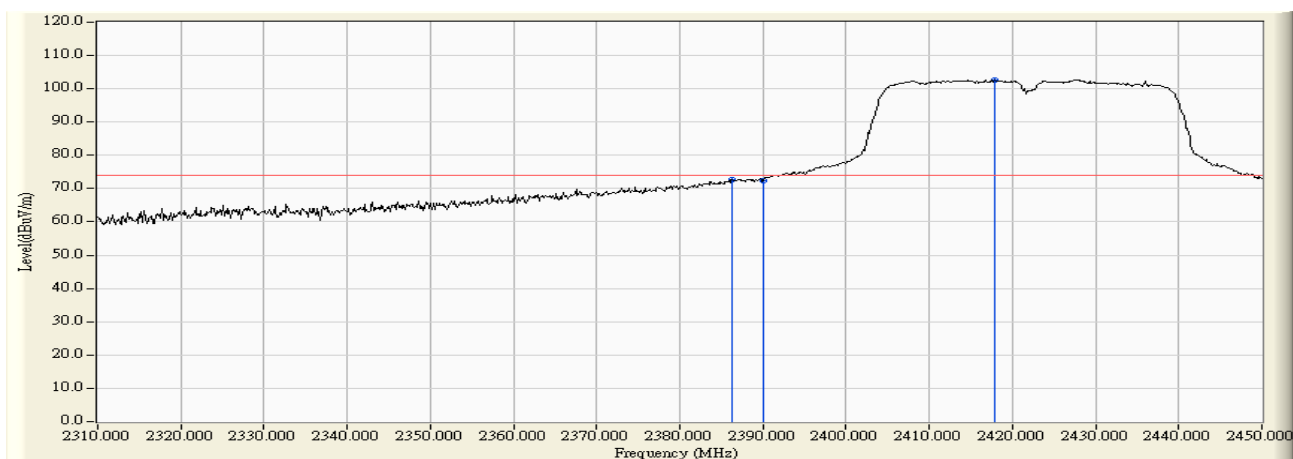
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2459.200	31.224	74.859	106.083	N/A	N/A	PEAK
2		2483.500	31.212	30.609	61.821	-12.149	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:36
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



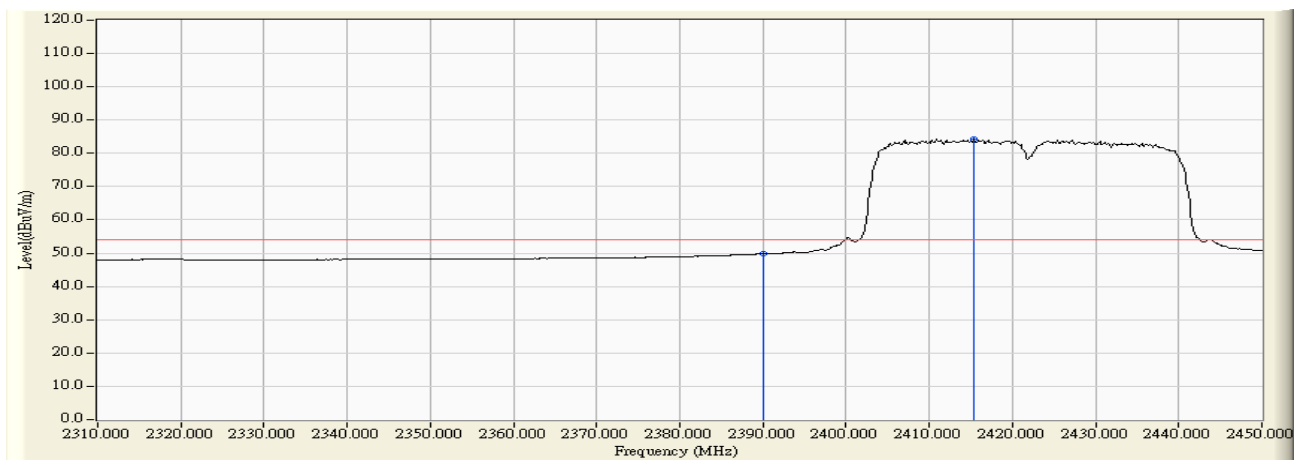
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.500	31.224	61.068	92.292	N/A	N/A	AVERAGE
2		2483.500	31.212	17.902	49.114	-4.856	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:52
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
Probe : 9120D_499(1-18GHz) - HORIZONTAL	Power : AC 120V/60Hz
EUT : Eee PC	Note : Mode 4: Transmit by 802.11n(20MHz) at channel 2422MHz



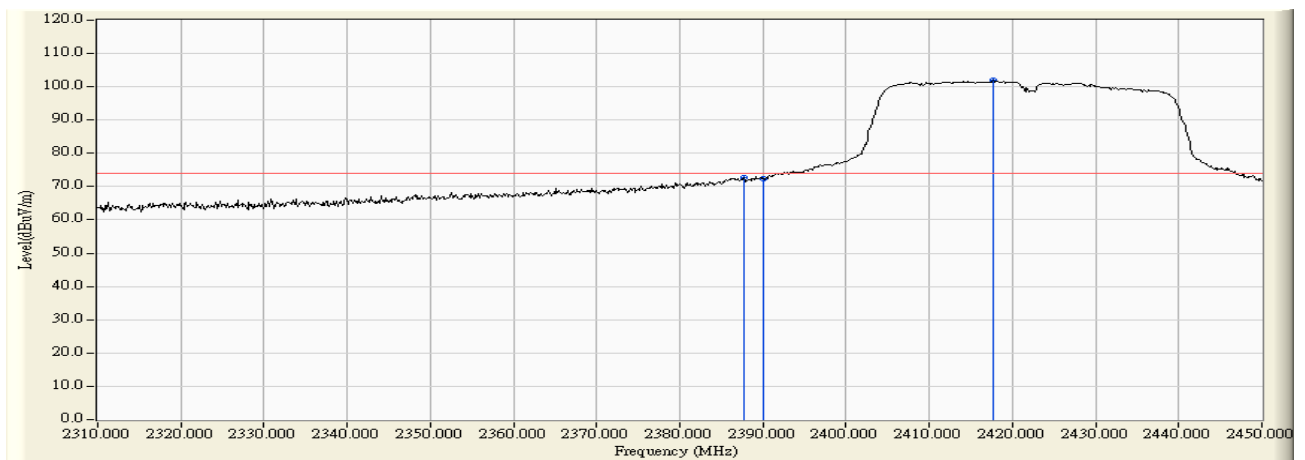
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.300	31.189	41.450	72.638	-1.332	73.970	PEAK
2		2390.000	31.184	41.058	72.242	-1.728	73.970	PEAK
3	*	2417.940	31.196	71.521	102.716	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:57
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(20MHz) at channel 2422MHz



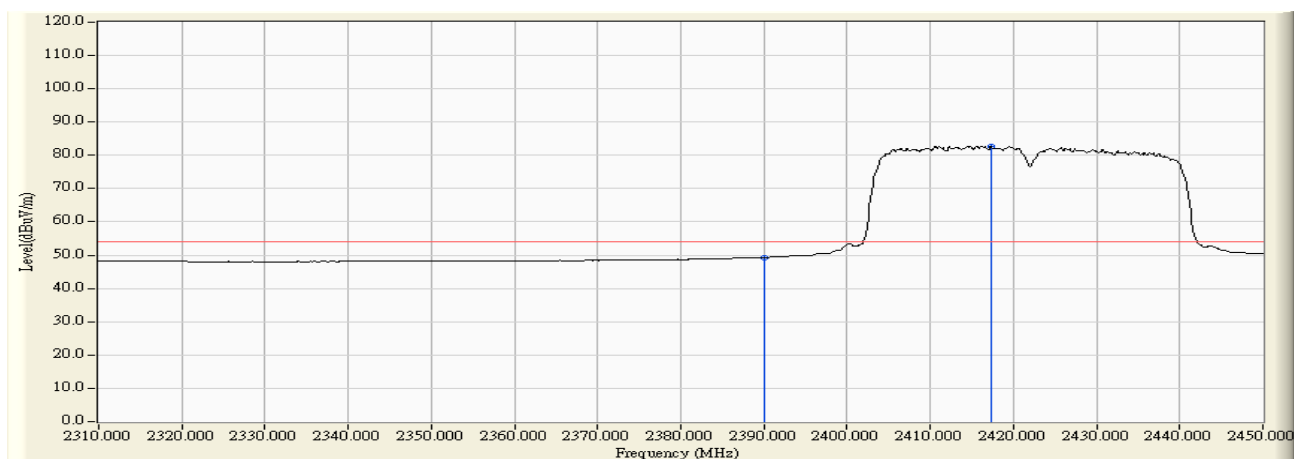
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.606	49.790	-4.180	53.970	AVERAGE
2	*	2415.420	31.193	52.964	84.157	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:01
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(20MHz) at channel 2422MHz



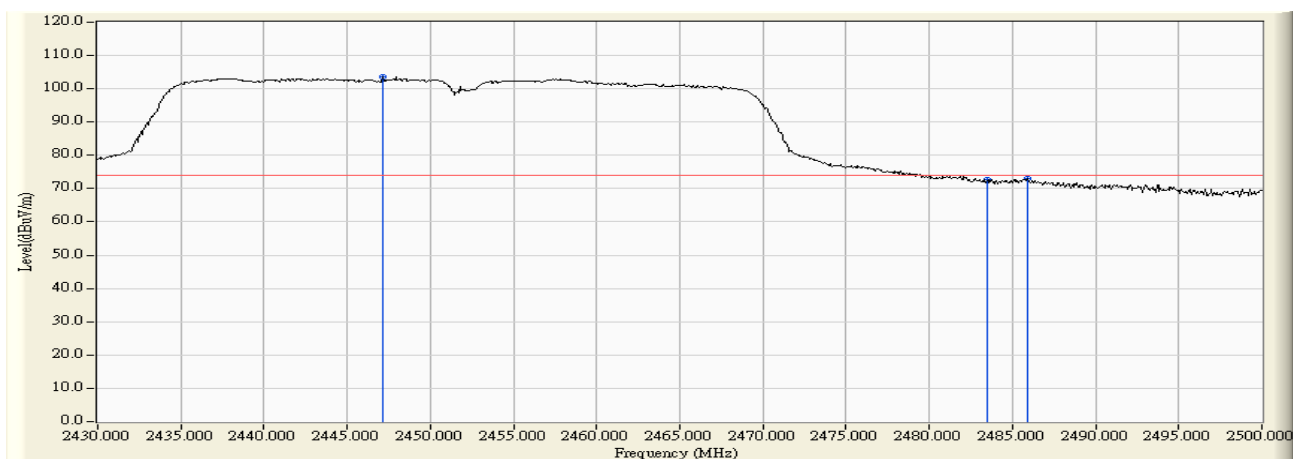
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2387.700	31.187	41.573	72.760	-1.210	73.970	PEAK
2		2390.000	31.184	41.245	72.429	-1.541	73.970	PEAK
3	*	2417.660	31.195	70.901	102.096	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 14:02
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(20MHz) at channel 2422MHz



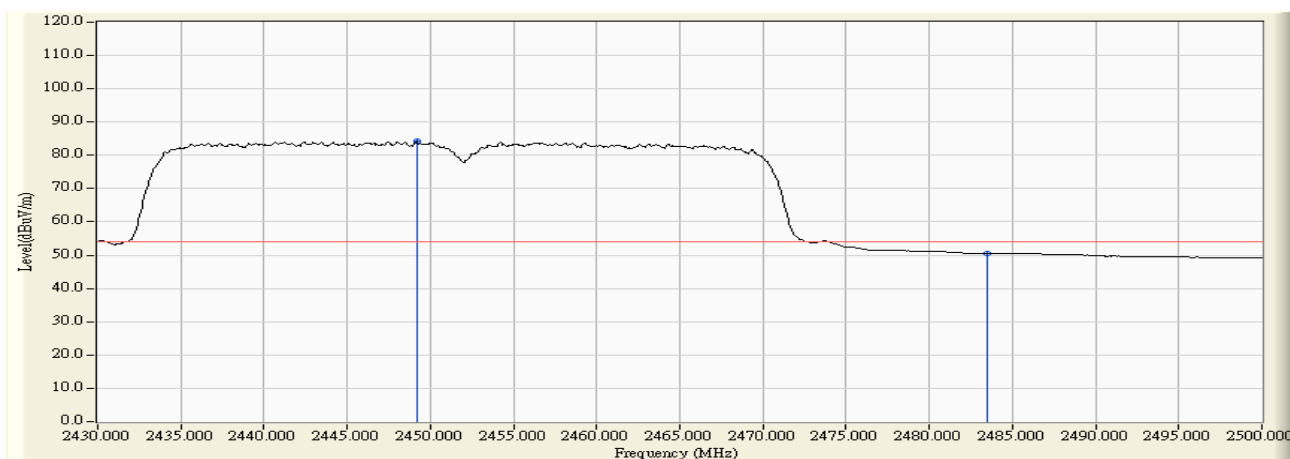
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	18.157	49.341	-4.629	53.970	AVERAGE
2	*	2417.380	31.195	51.630	82.825	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:45
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(20MHz) at channel 2452MHz



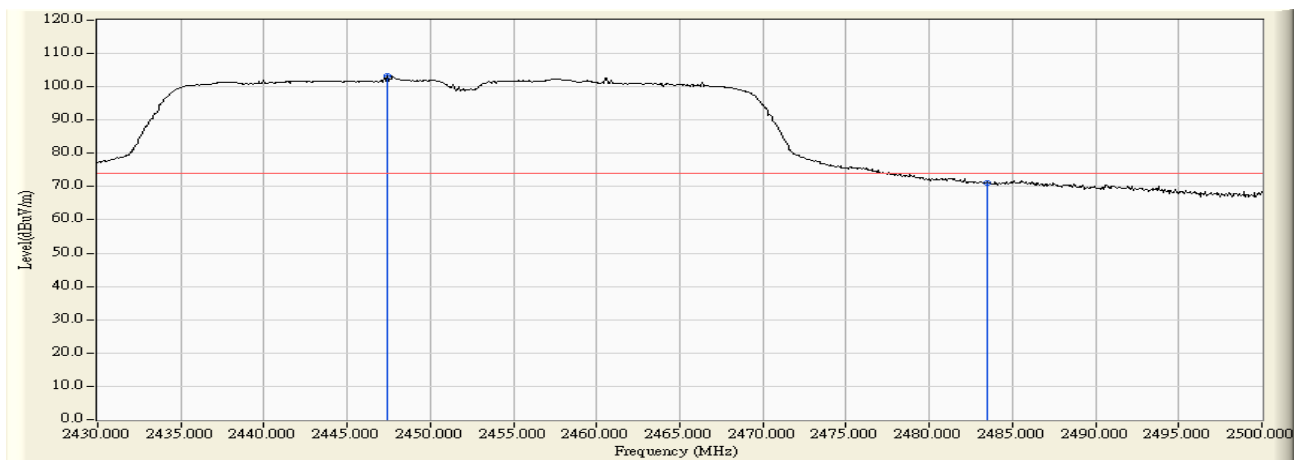
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2447.150	31.219	72.310	103.529	N/A	N/A	PEAK
2		2483.500	31.212	41.344	72.556	-1.414	73.970	PEAK
3		2485.930	31.211	41.659	72.870	-1.100	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:47
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(20MHz) at channel 2452MHz



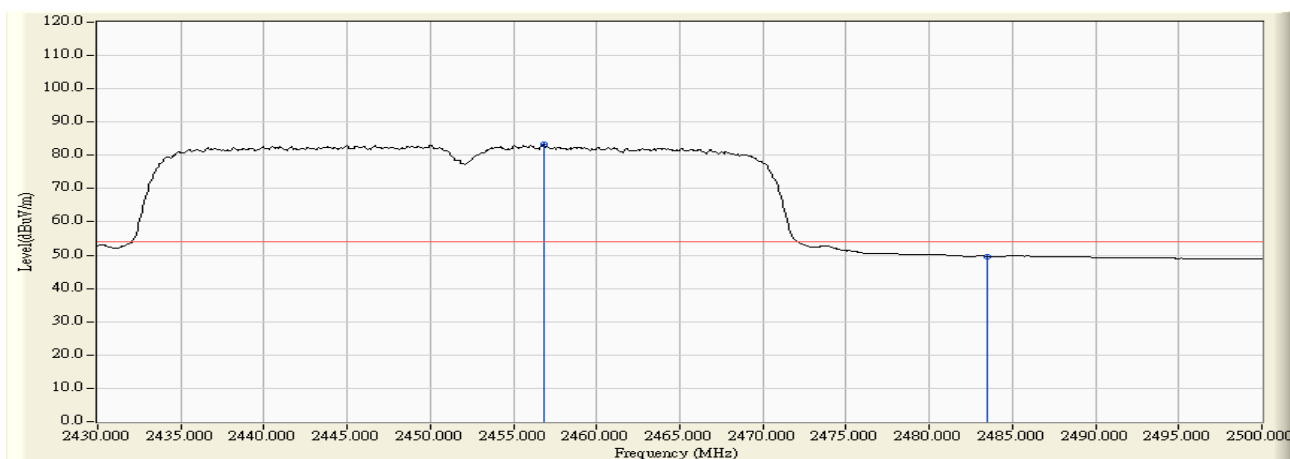
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2449.180	31.220	52.953	84.173	N/A	N/A	AVERAGE
2		2483.500	31.212	19.370	50.582	-3.388	53.970	AVERAGE

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:40
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(20MHz) at channel 2452MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2447.430	31.219	71.989	103.208	N/A	N/A	PEAK
2		2483.500	31.212	40.045	71.257	-2.713	73.970	PEAK

Engineer : Robin	
Site : AC-5 (3m Semi-Anechoic Chamber)	Time : 2009/10/29 - 13:40
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(20MHz) at channel 2452MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.810	31.223	51.991	83.214	N/A	N/A	AVERAGE
2		2483.500	31.212	18.450	49.662	-4.308	53.970	AVERAGE

7. Operation Frequency Range of 20dB Bandwidth

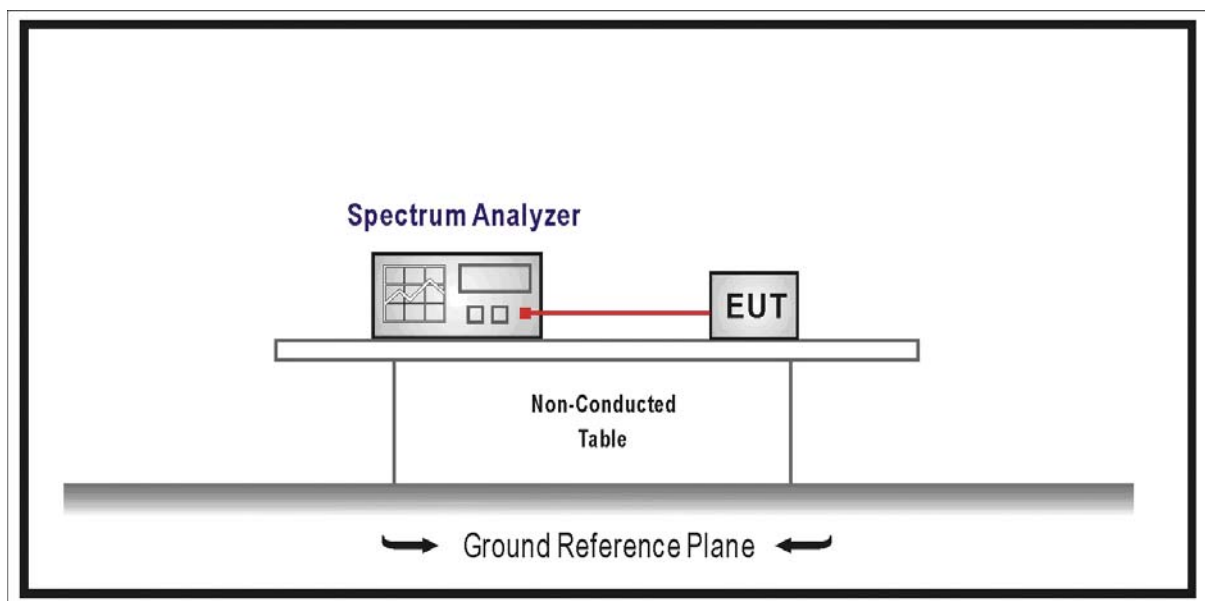
7.1. Test Equipment

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.

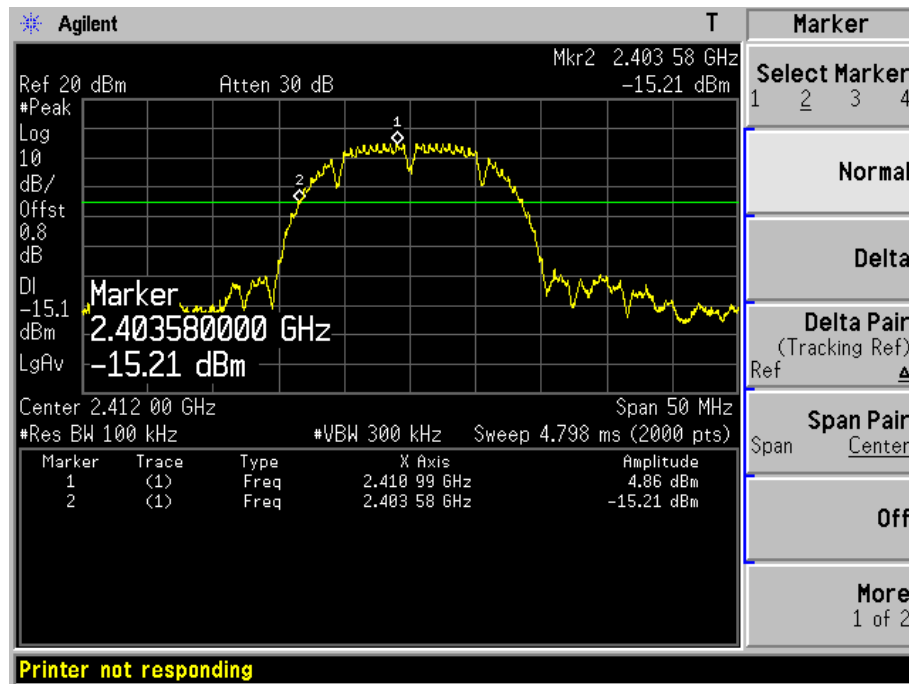
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

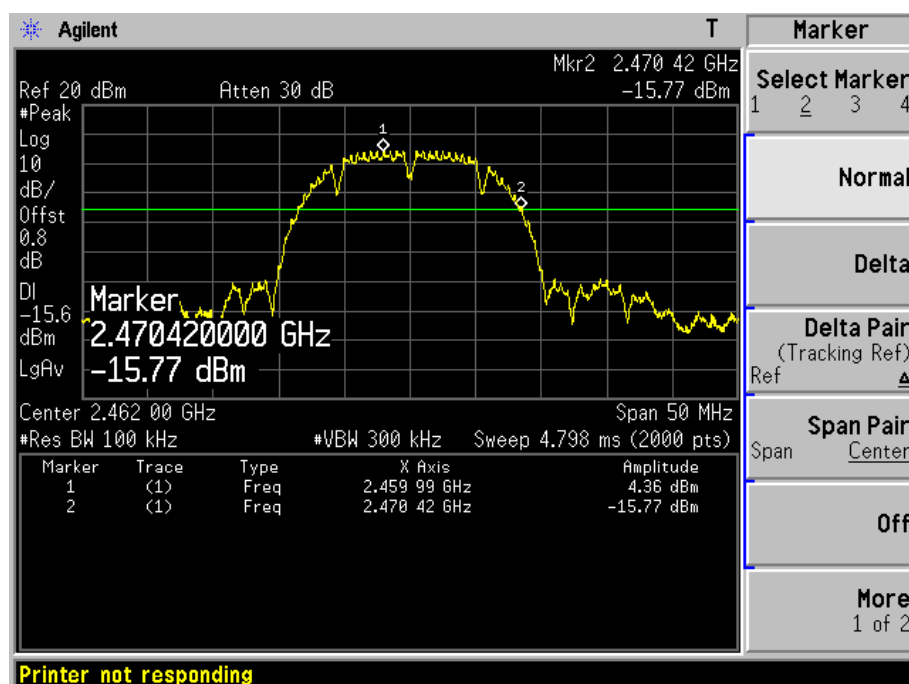
7.6. Test Result

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)

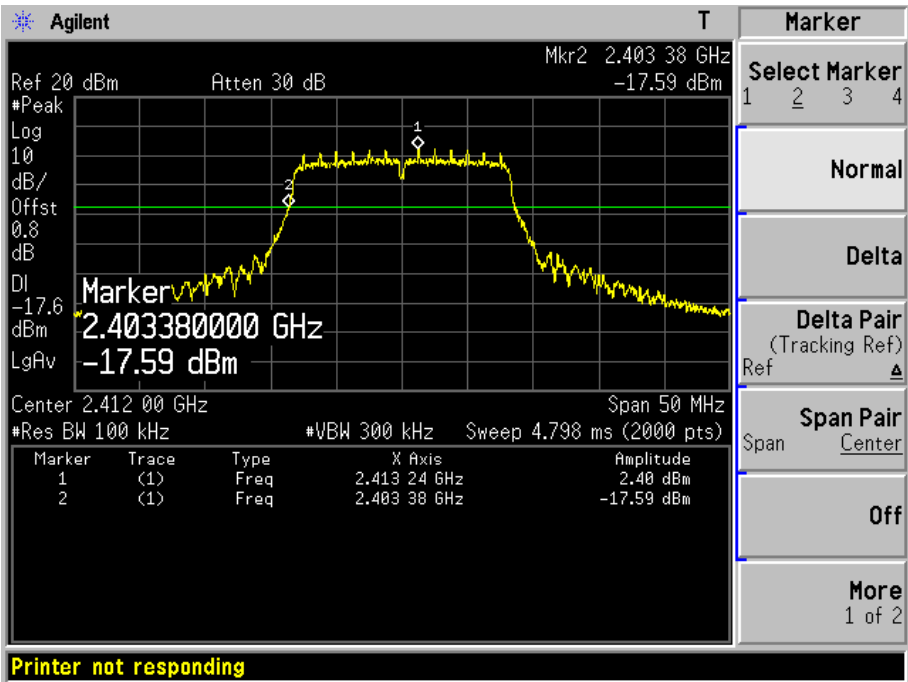


Channel 11 (2462MHz)

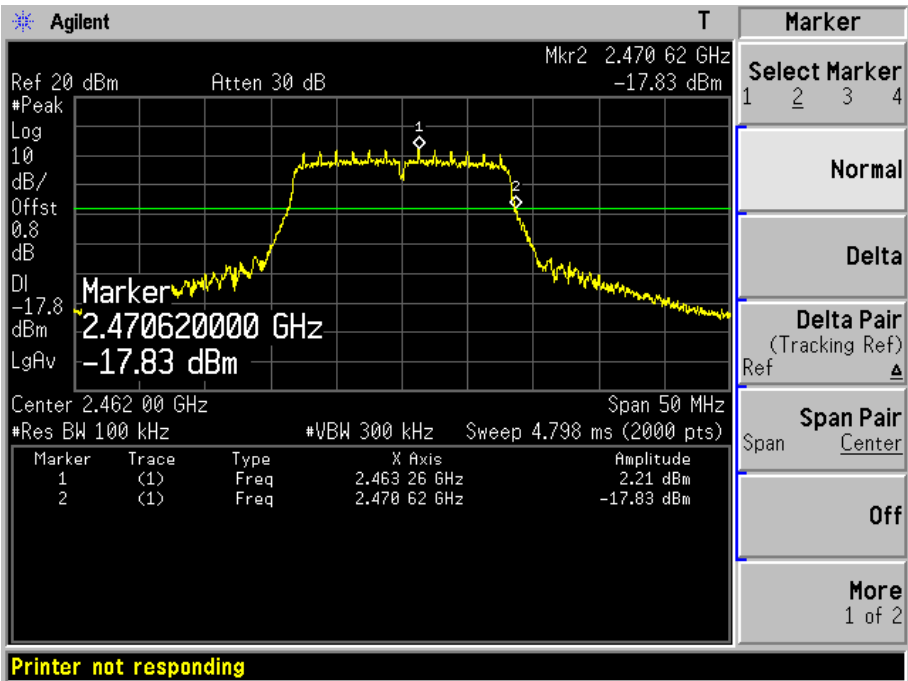


Product	:	Eee PC
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)

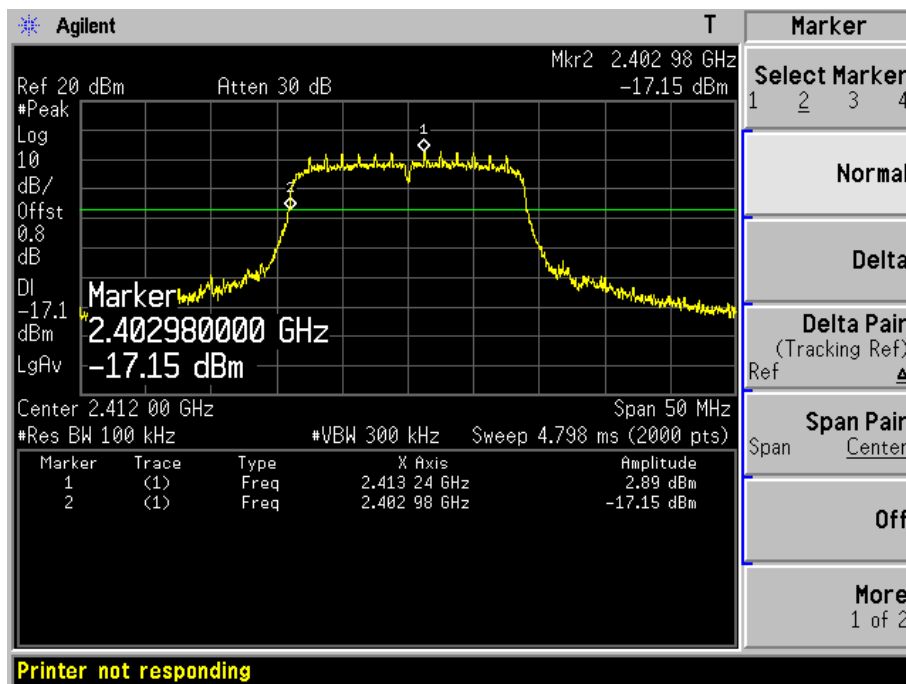


Channel 11 (2462MHz)

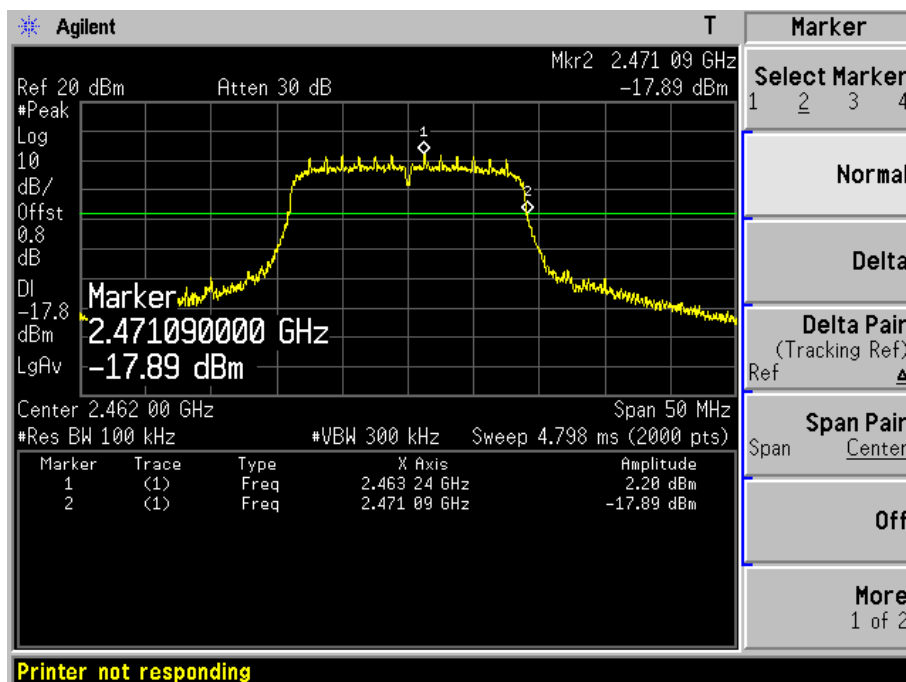


Product	:	Eee PC
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz)

Channel 01 (2412MHz)

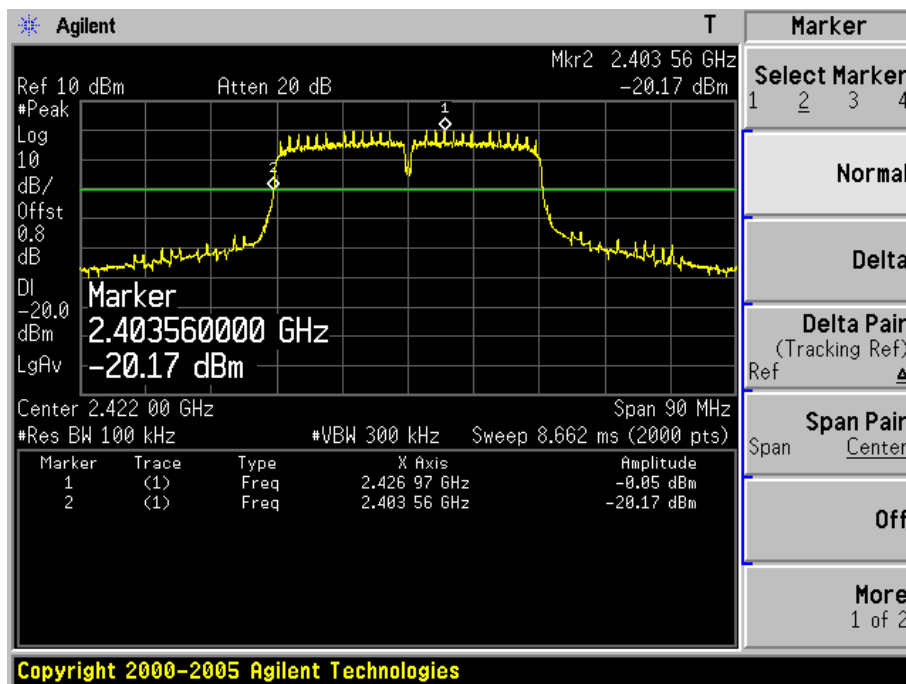


Channel 11 (2462MHz)

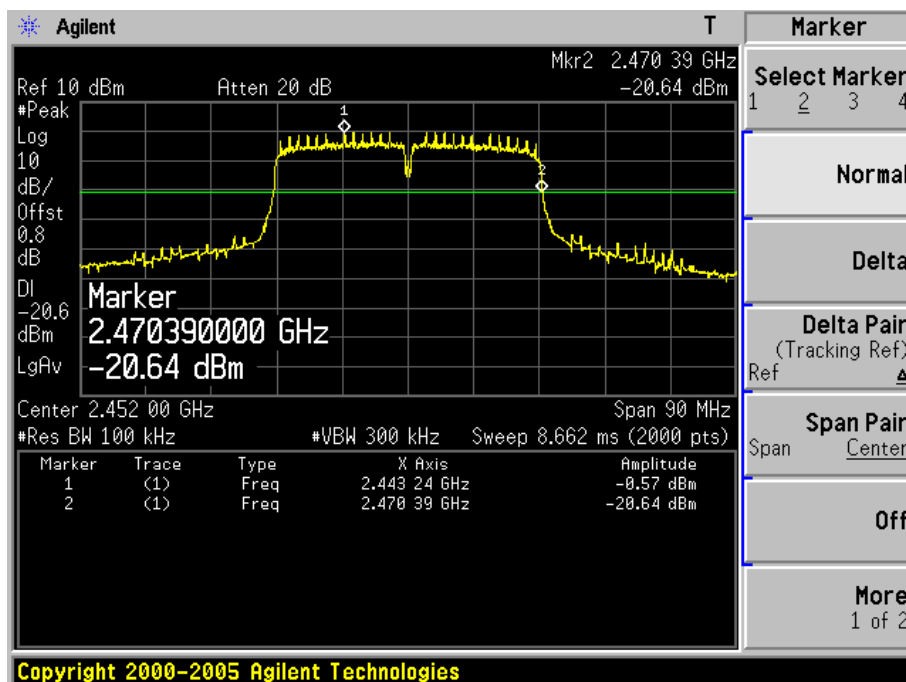


Product	:	Eee PC
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz)

Channel 03 (2422MHz)



Channel 09 (2452MHz)



8. Occupied Bandwidth

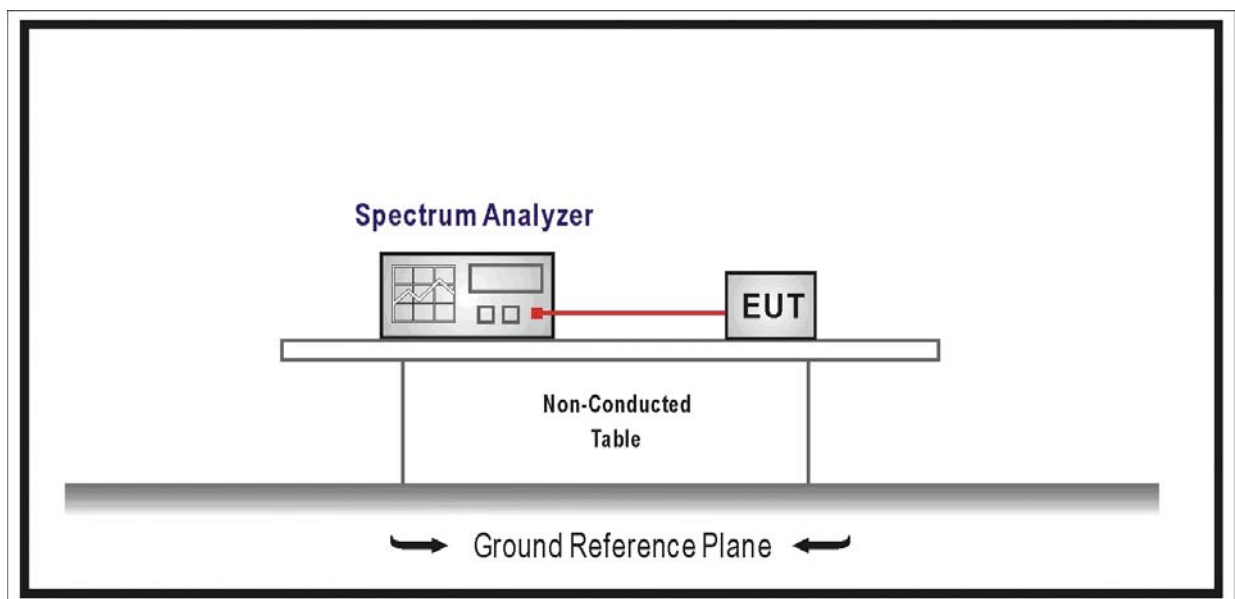
8.1. Test Equipment

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

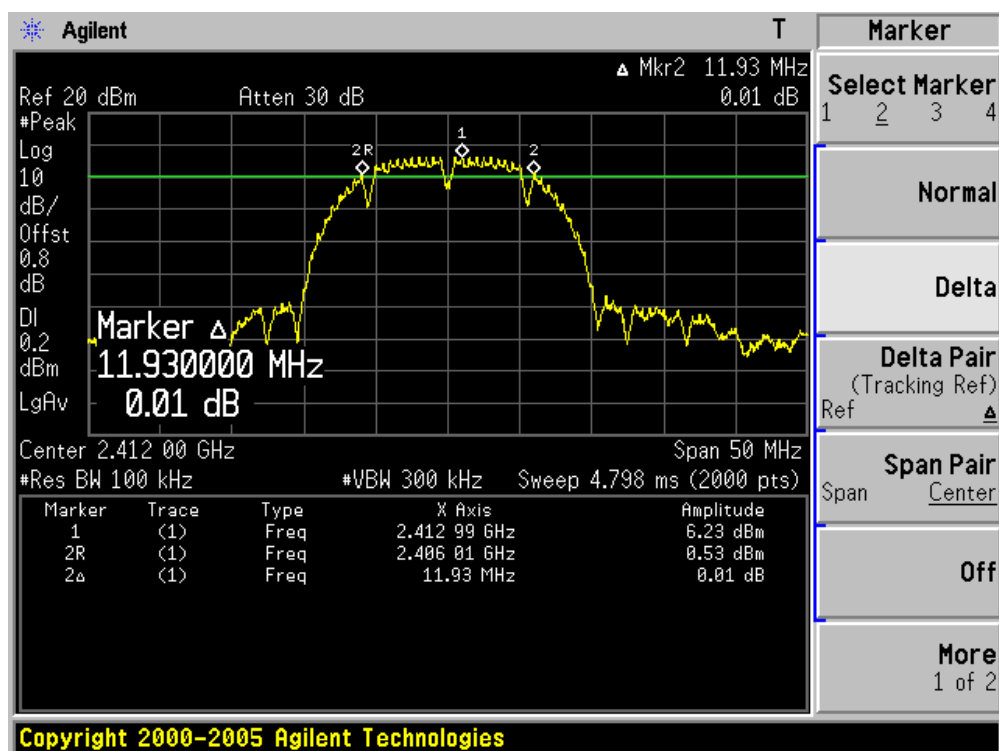
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

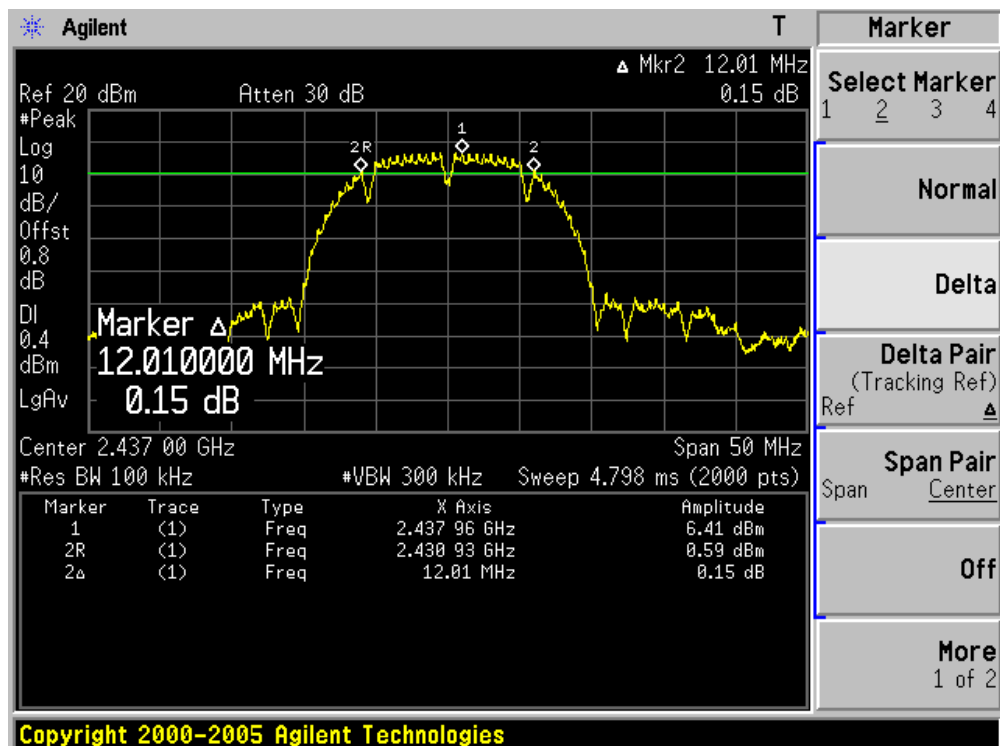
Product	:	Eee PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	11930	500	Pass
06	2437	12010	500	Pass
11	2462	11910	500	Pass

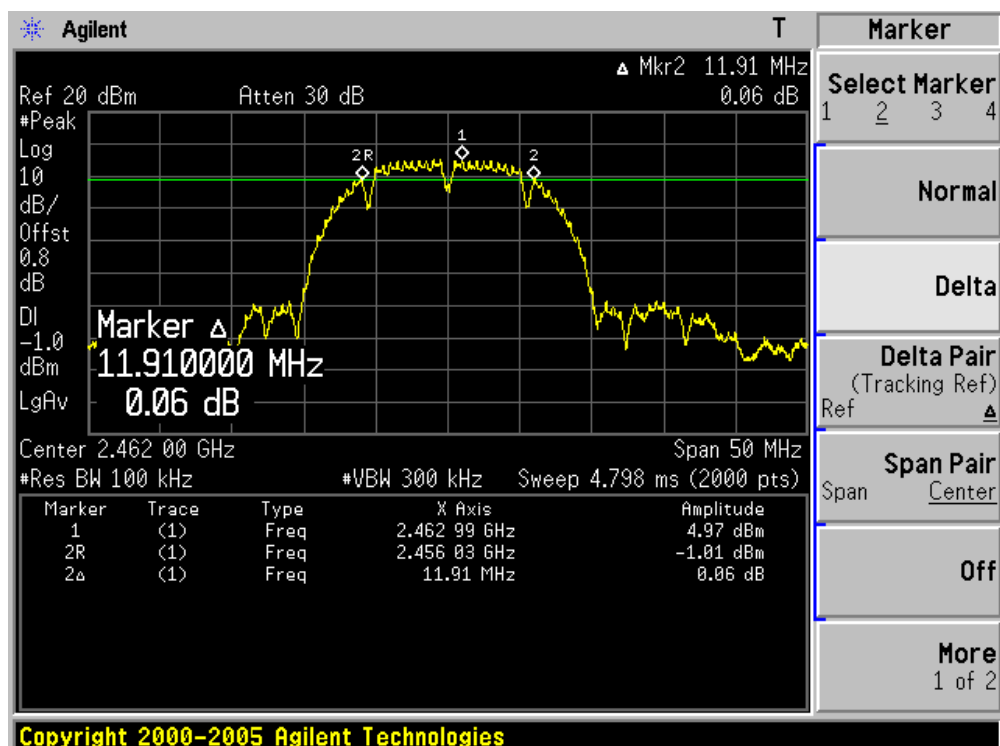
Channel 01 (2412MHz)



Channel 06 (2437MHz)



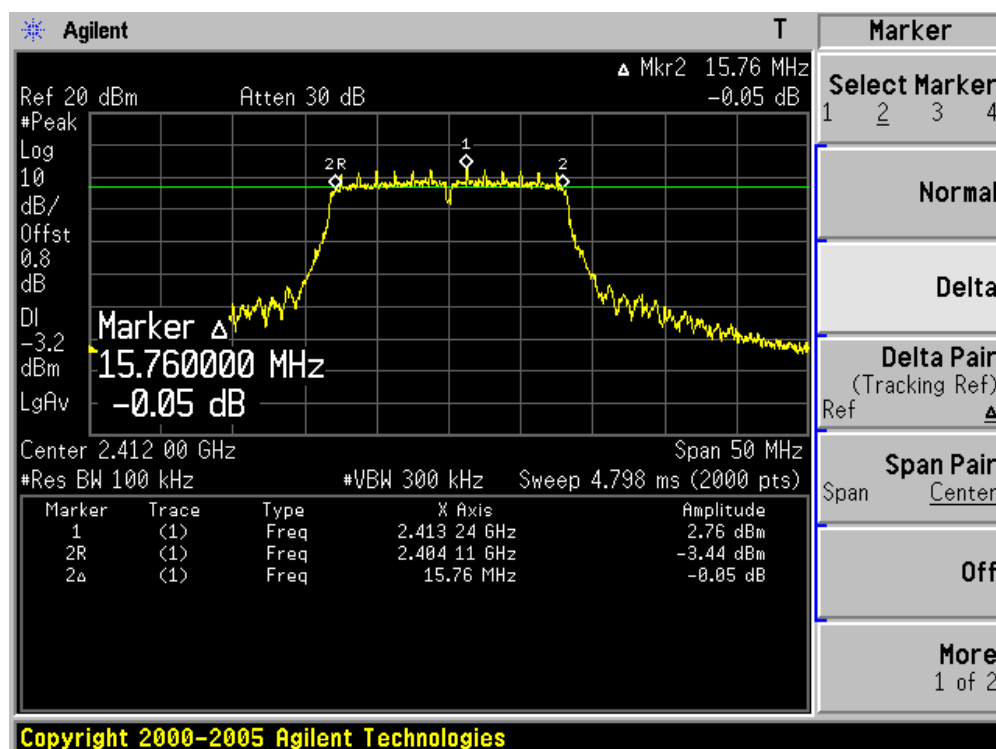
Channel 11 (2462MHz)



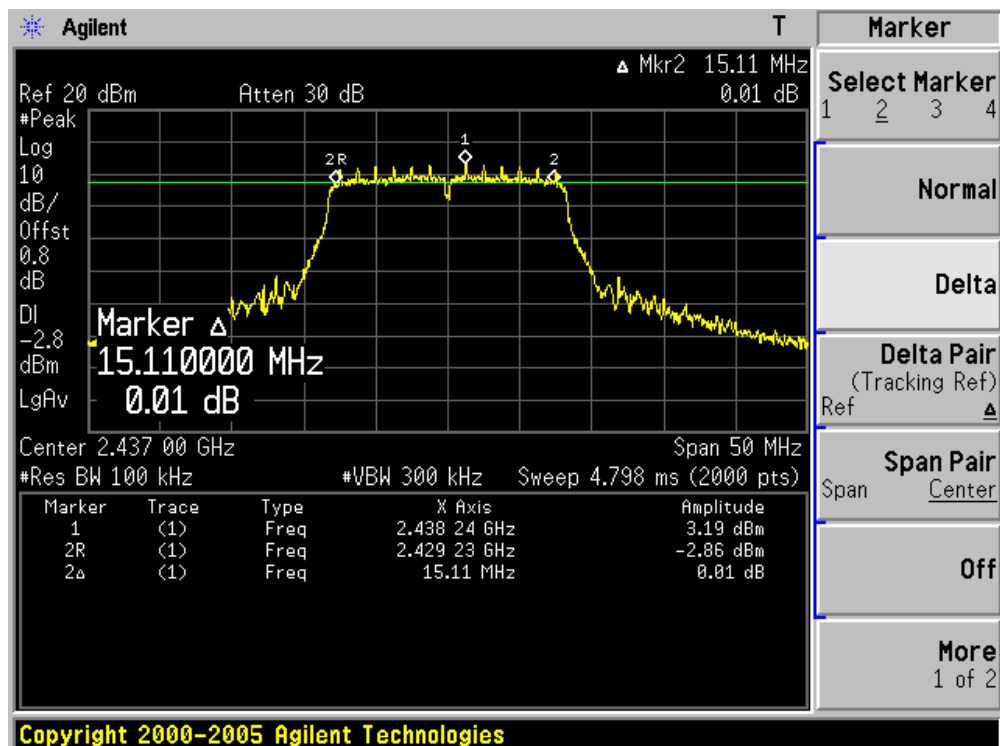
Product	:	Eee PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	15760	500	Pass
06	2437	15110	500	Pass
11	2462	15510	500	Pass

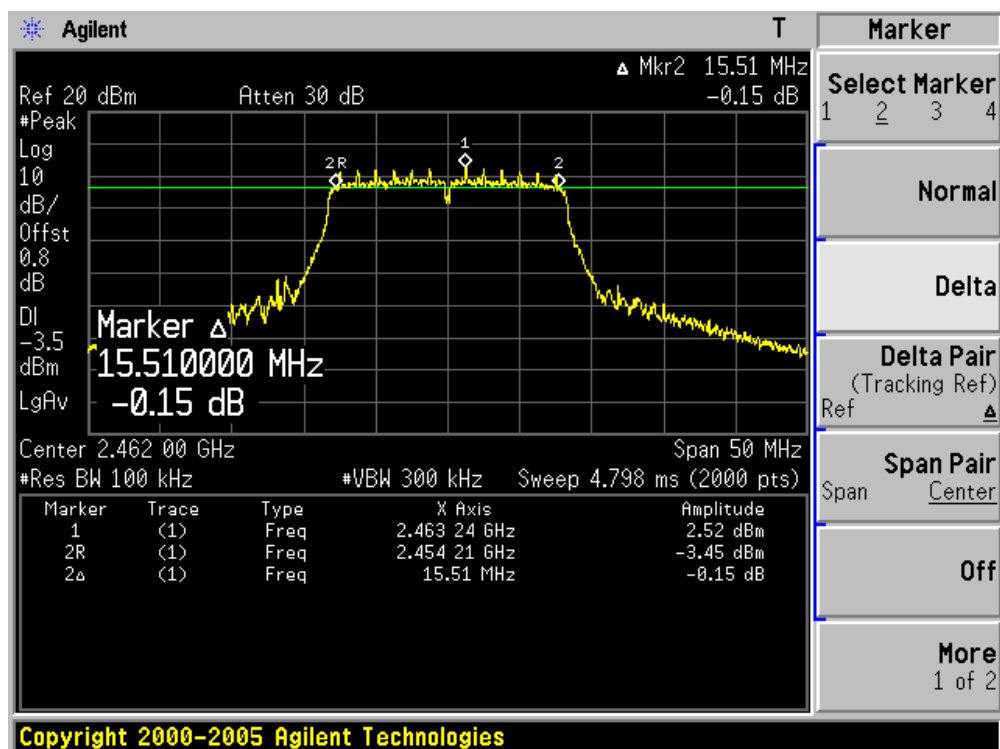
Channel 01 (2412MHz)



Channel 06 (2437MHz)



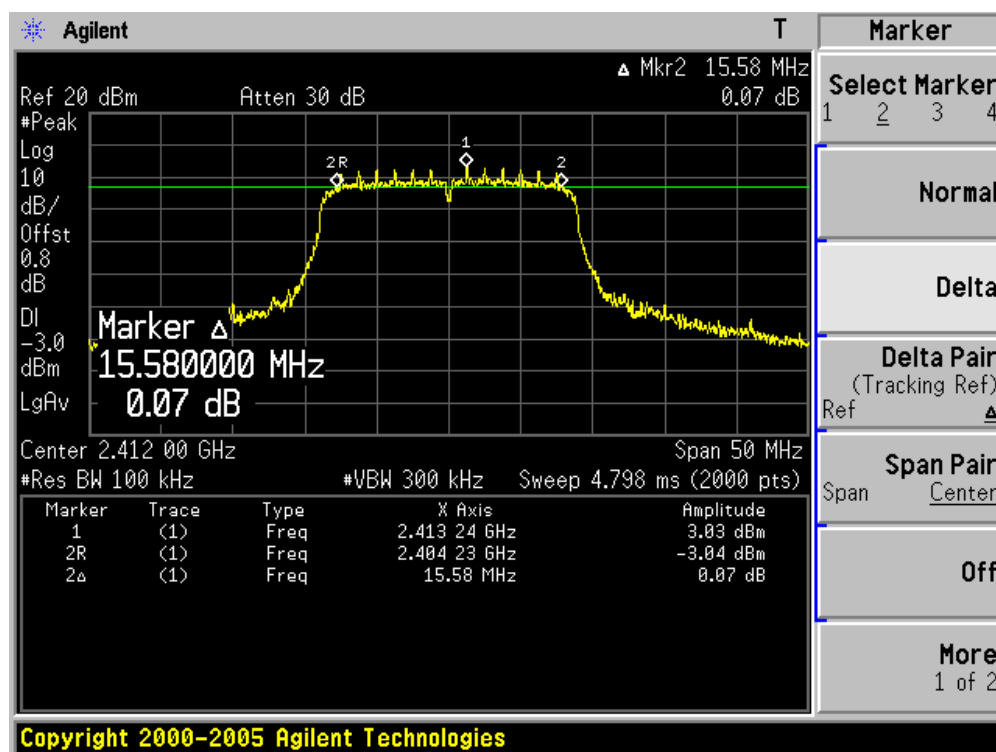
Channel 11 (2462MHz)



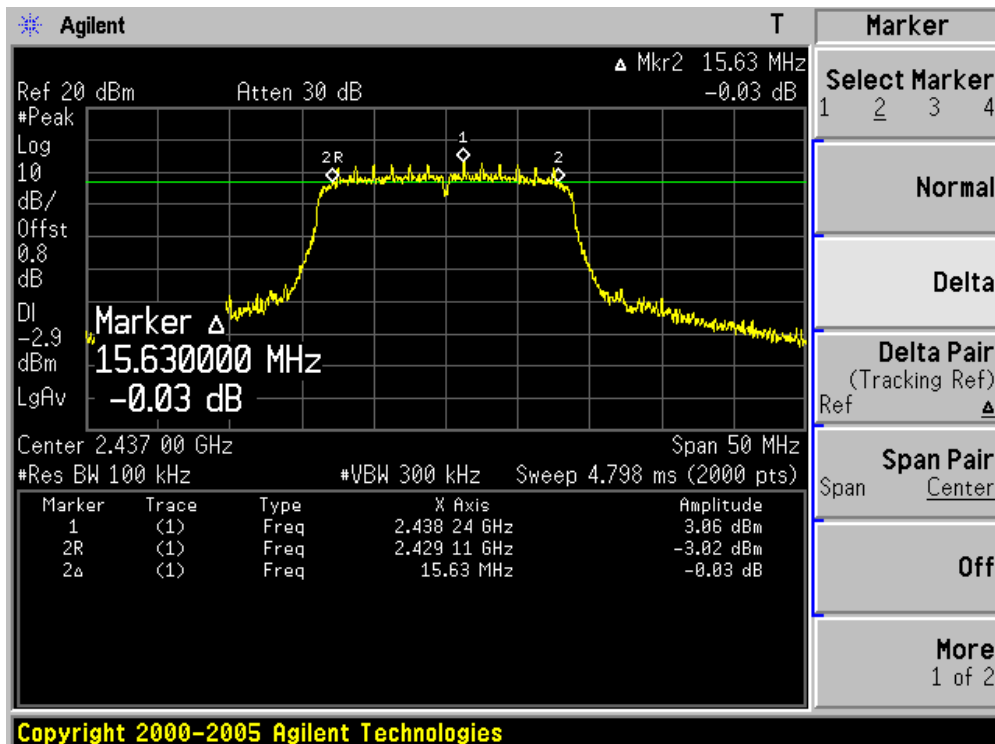
Product	:	Eee PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 3: Transmit by 802.11n (20MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	15580	500	Pass
06	2437	15630	500	Pass
11	2462	15360	500	Pass

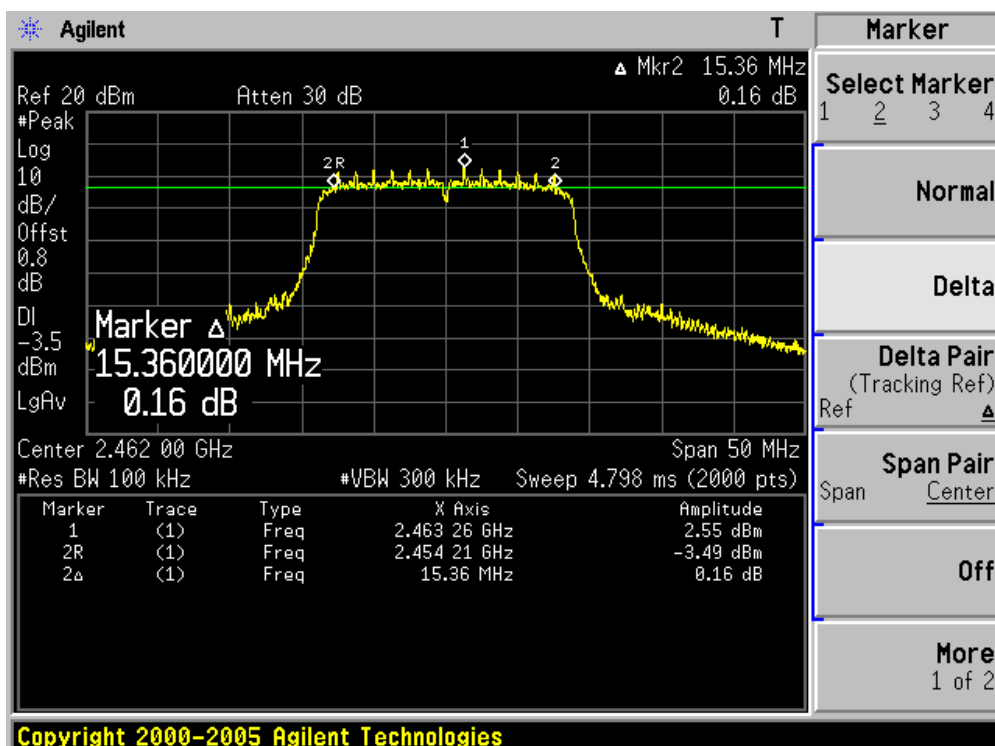
Channel 01 (2412MHz)



Channel 06 (2437MHz)



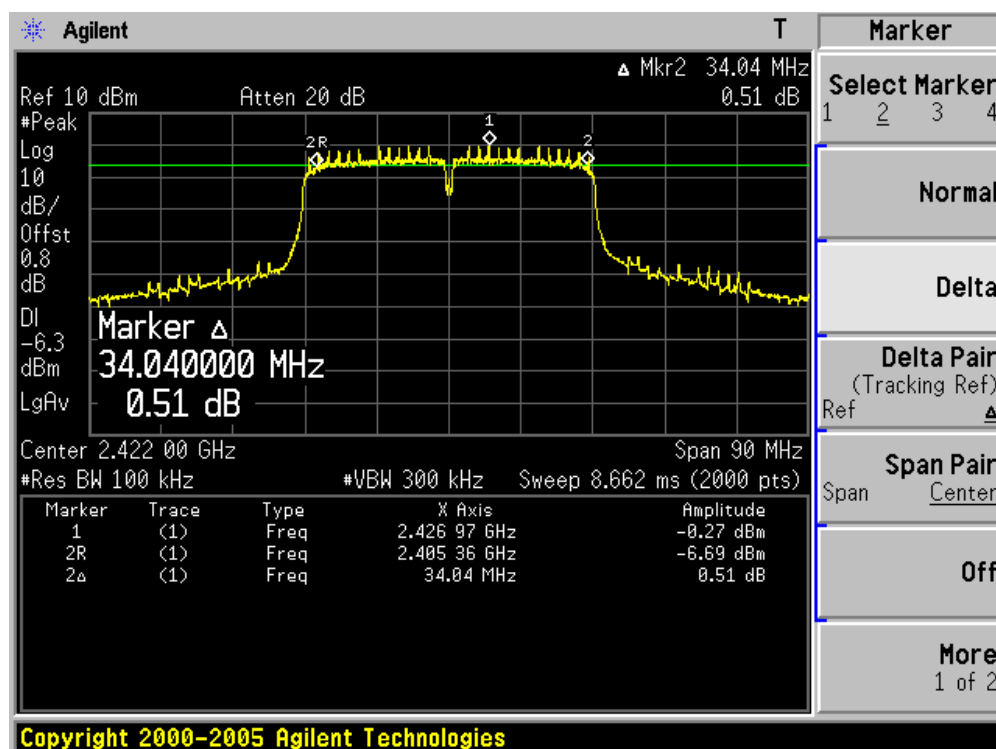
Channel 11 (2462MHz)



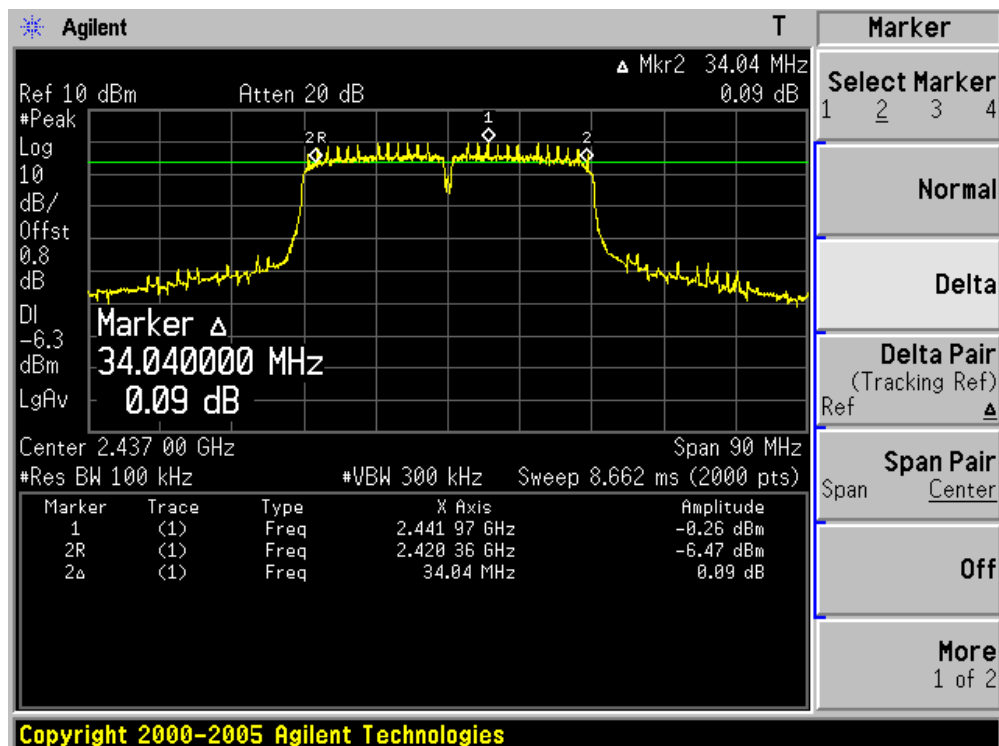
Product	:	Eee PC
Test Item	:	6dB Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (40MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	34040	500	Pass
06	2437	34040	500	Pass
09	2452	34800	500	Pass

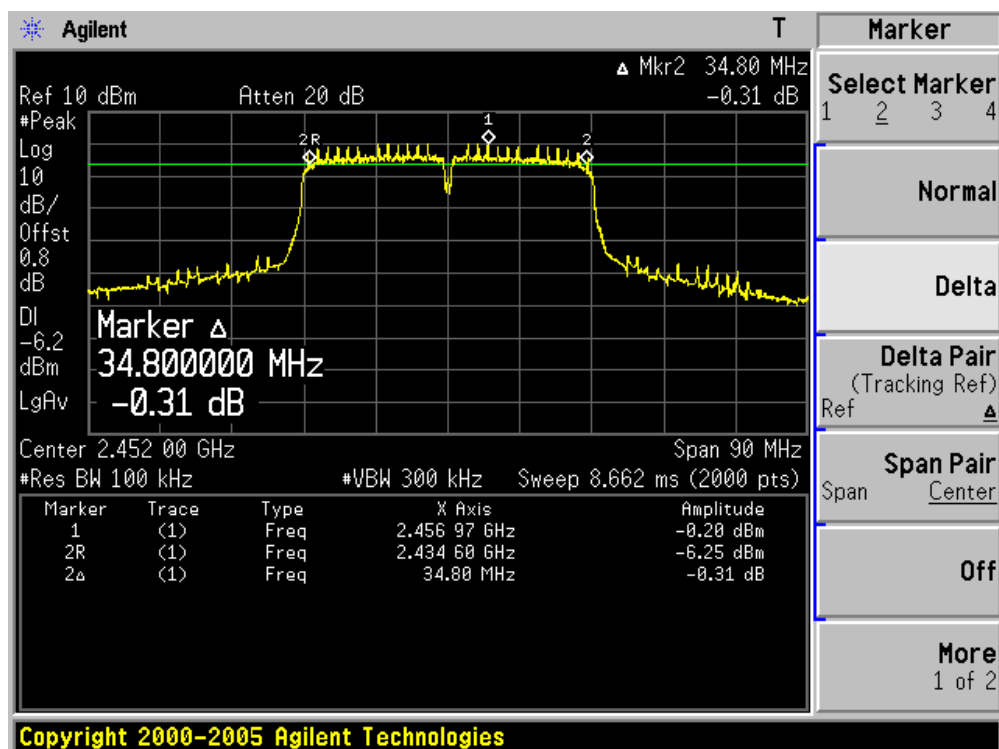
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



9. Power Output

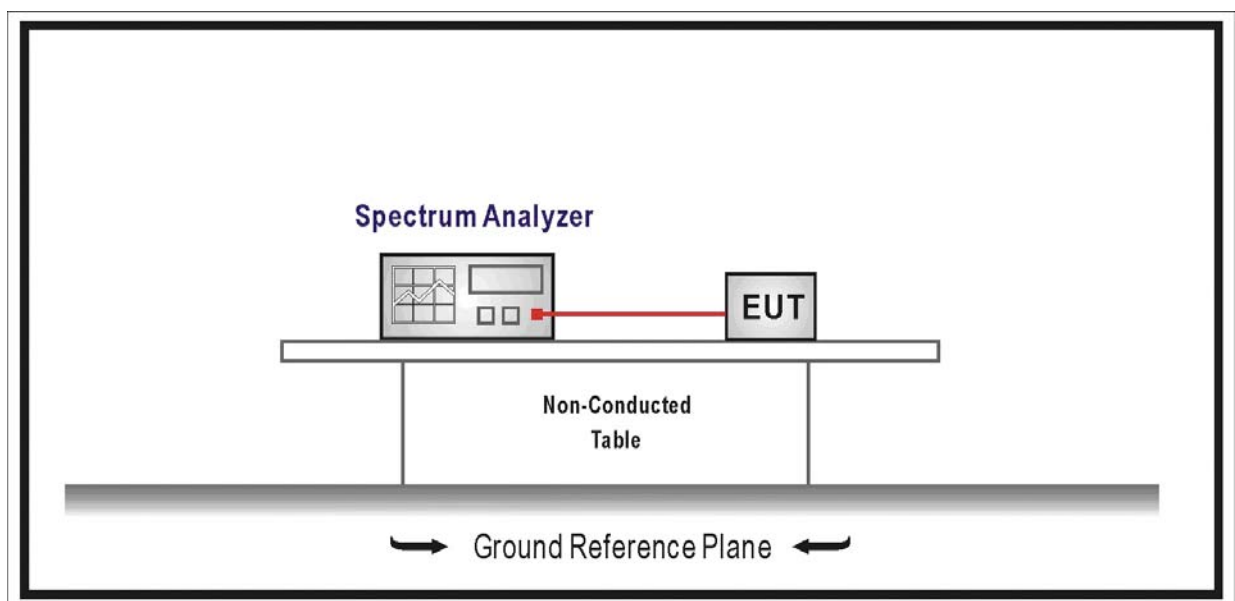
9.1. Test Equipment

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	18.37	30	Pass
	06	2437	18.86	30	Pass
	11	2462	18.55	30	Pass
802.11g	01	2412	18.77	30	Pass
	06	2437	19.23	30	Pass
	11	2462	18.95	30	Pass
802.11n(20M)	01	2412	18.96	30	Pass
	06	2437	19.52	30	Pass
	11	2462	19.14	30	Pass
802.11n(40M)	03	2422	17.56	30	Pass
	06	2437	18.23	30	Pass
	09	2452	18.22	30	Pass

10. Power Spectral Density

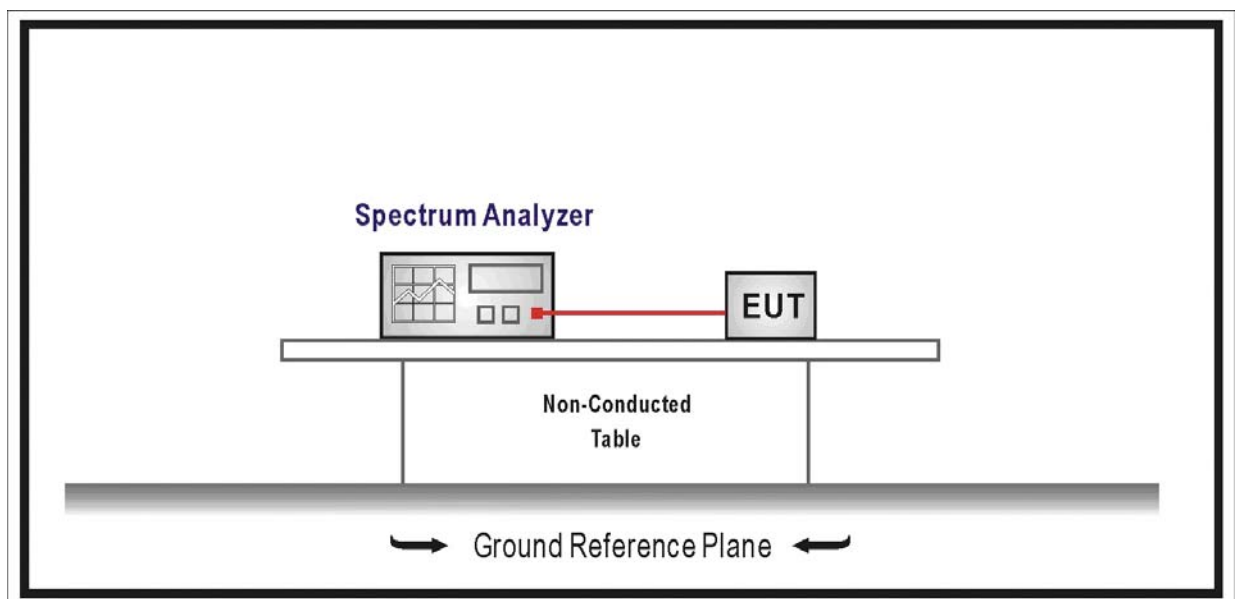
10.1. Test Equipment

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

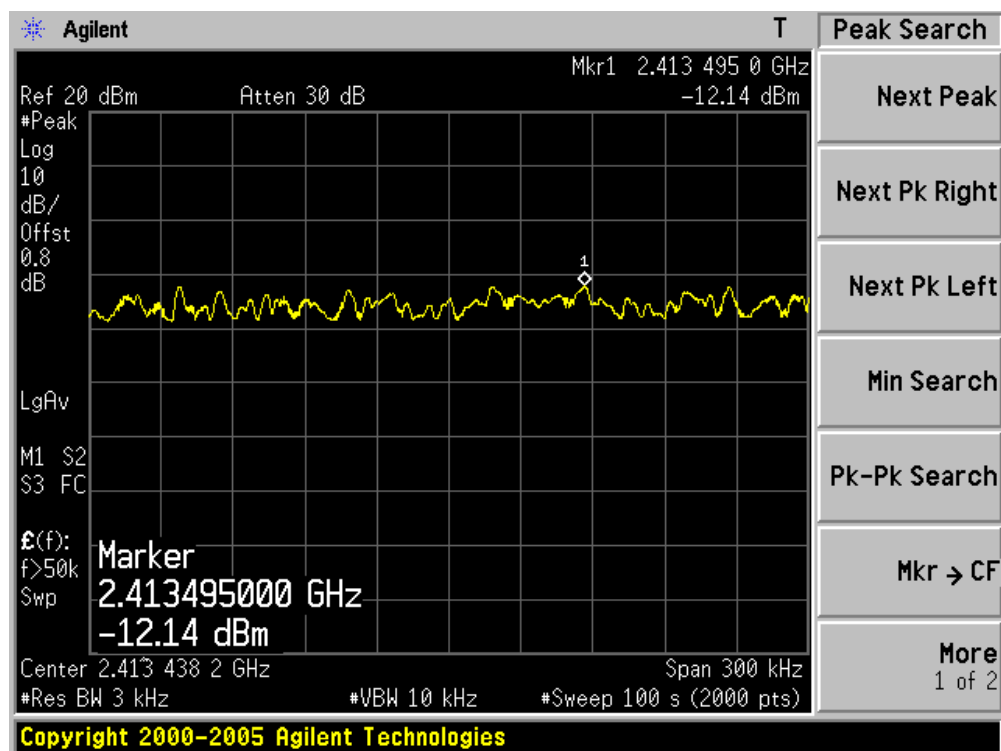
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

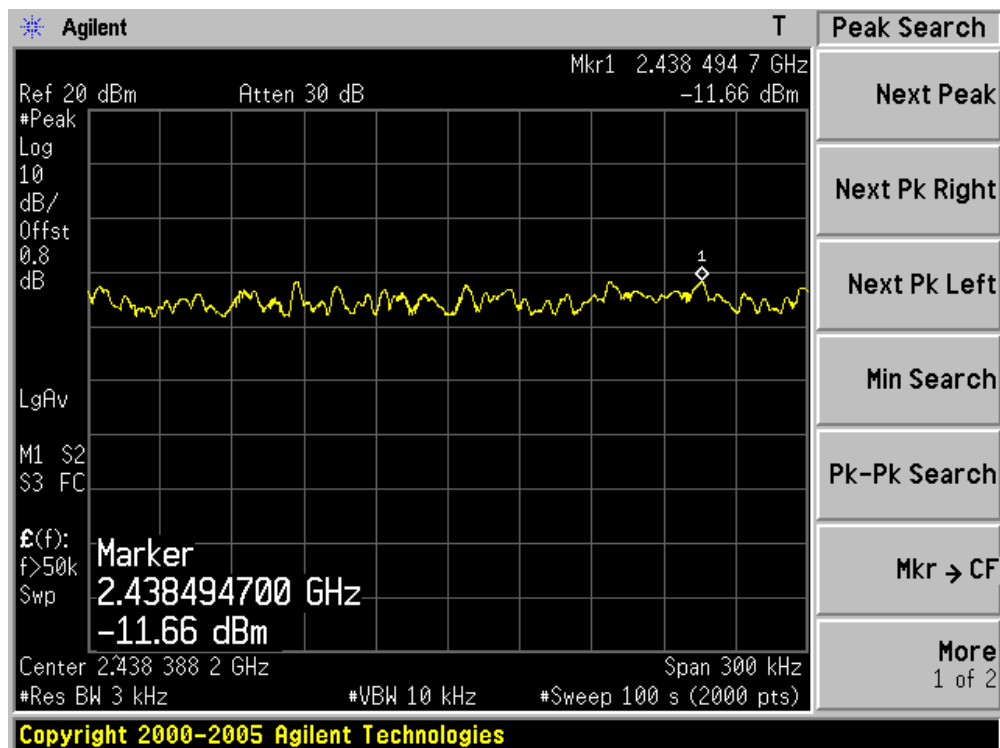
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
01	2412	-12.14	8	Pass
06	2437	-11.66	8	Pass
11	2462	-10.39	8	Pass

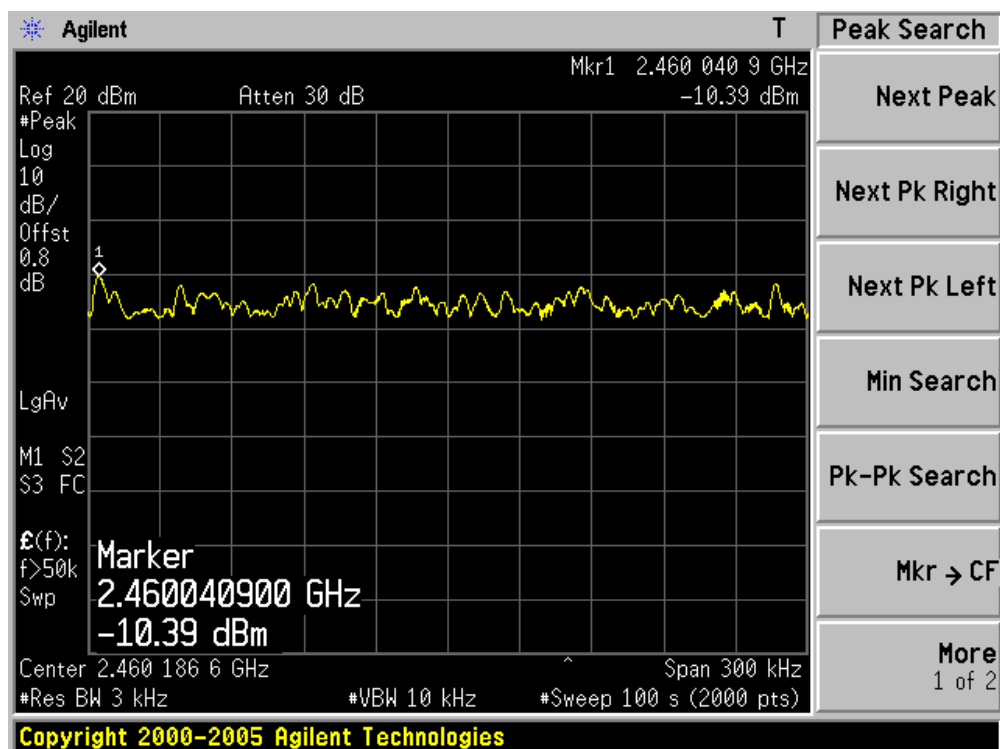
Channel 01 (2412MHz)



Channel 06 (2437MHz)



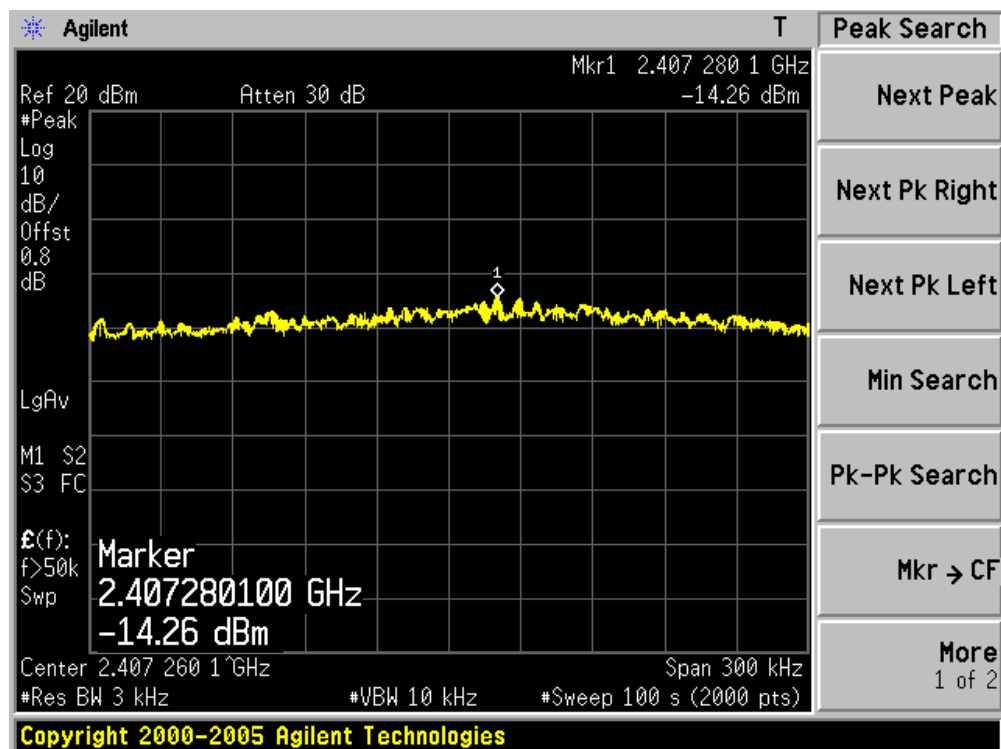
Channel 11 (2462MHz)



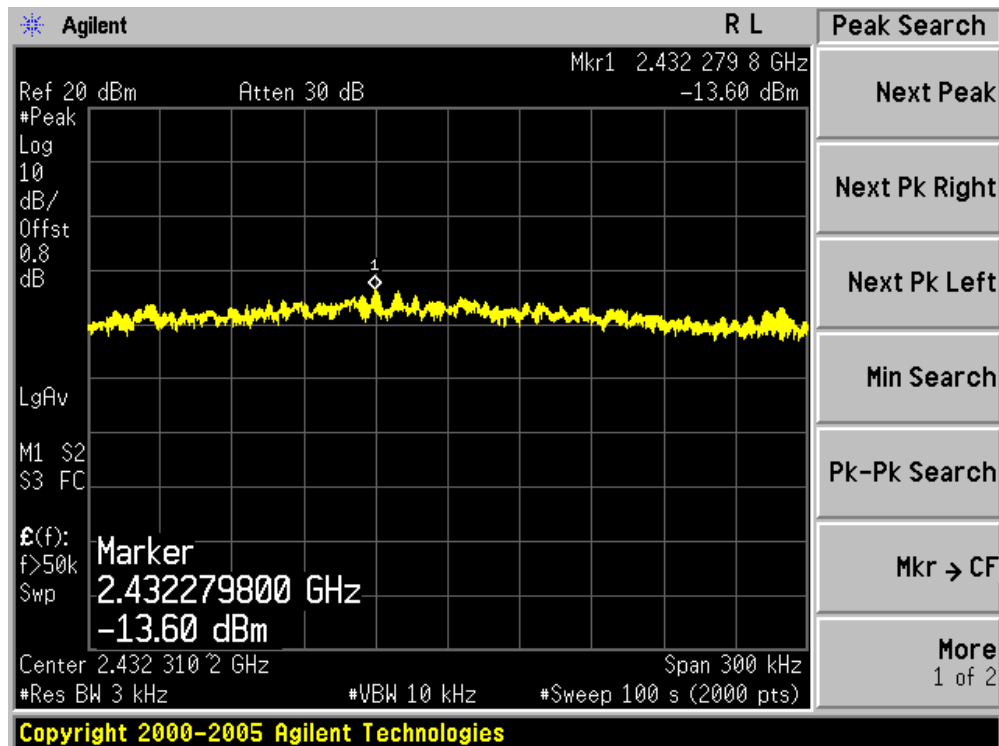
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
01	2412	-14.26	8	Pass
06	2437	-13.60	8	Pass
11	2462	-14.28	8	Pass

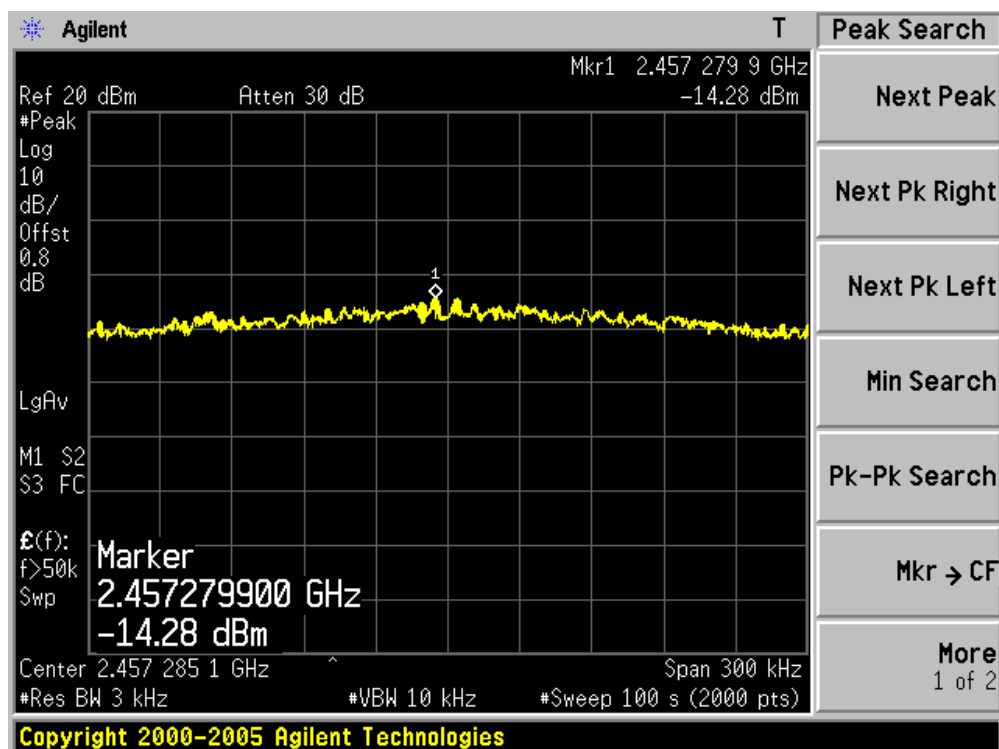
Channel 01 (2412MHz)



Channel 06 (2437MHz)



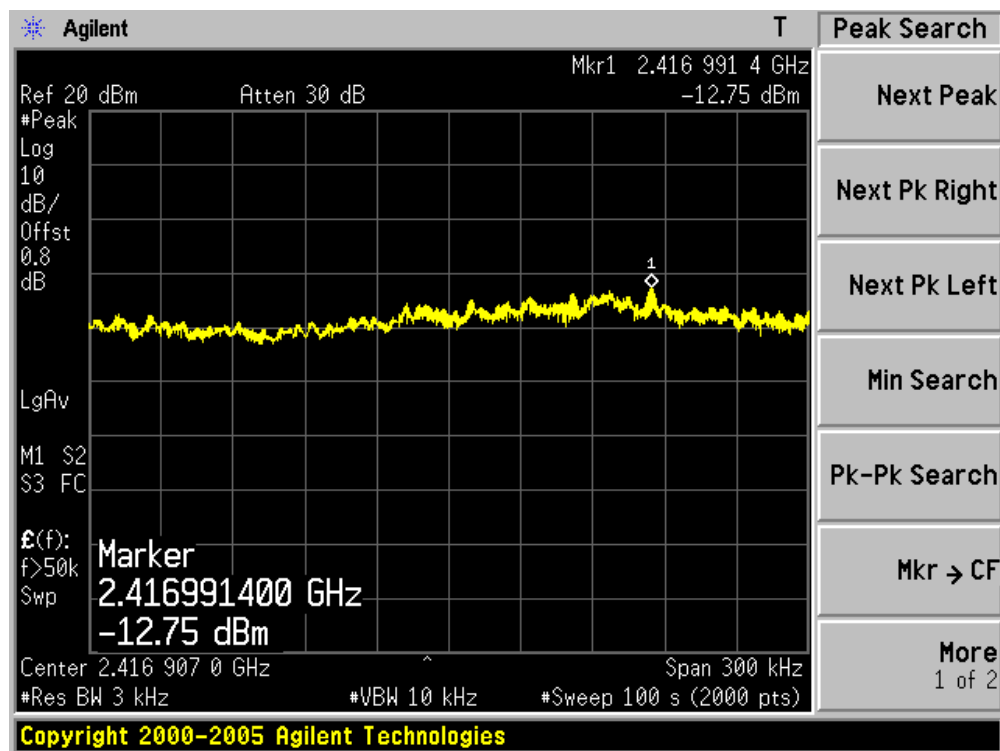
Channel 11 (2462MHz)



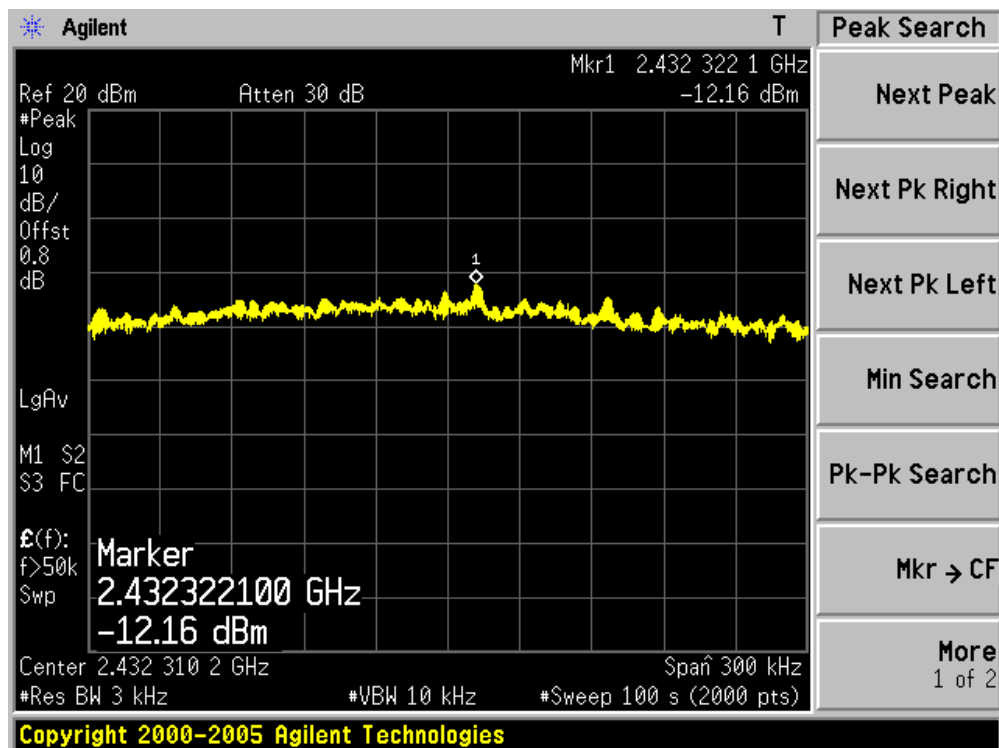
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 4: Transmit by 802.11n (20MHz)

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
01	2412	-12.75	8	Pass
06	2437	-12.16	8	Pass
11	2462	-12.91	8	Pass

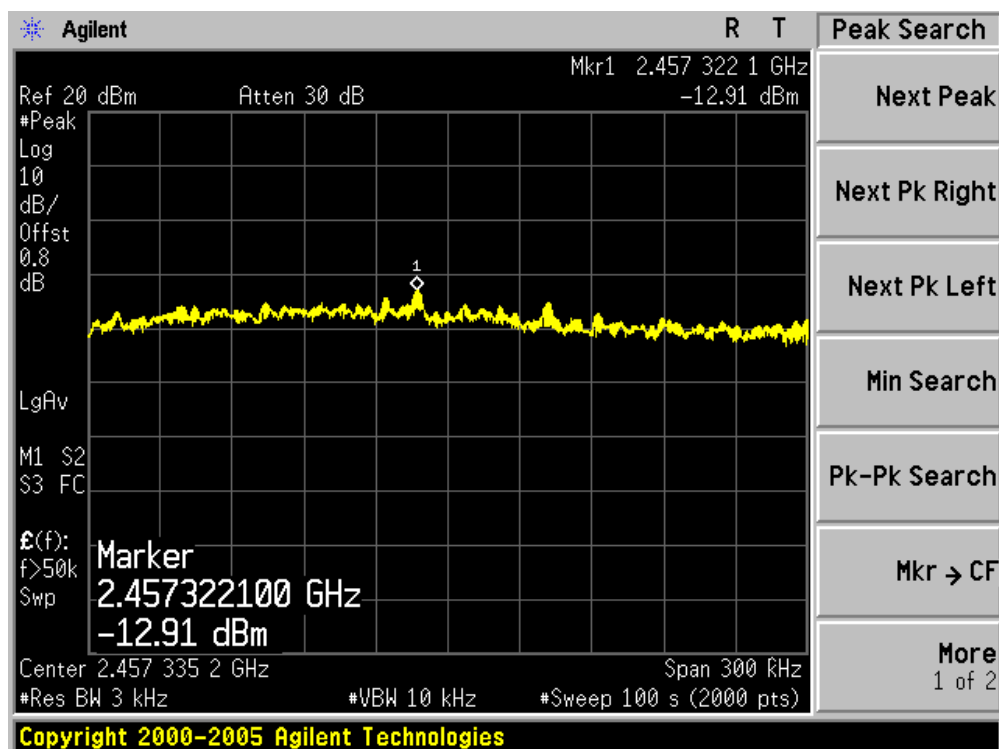
Channel 01 (2412MHz)



Channel 06 (2437MHz)



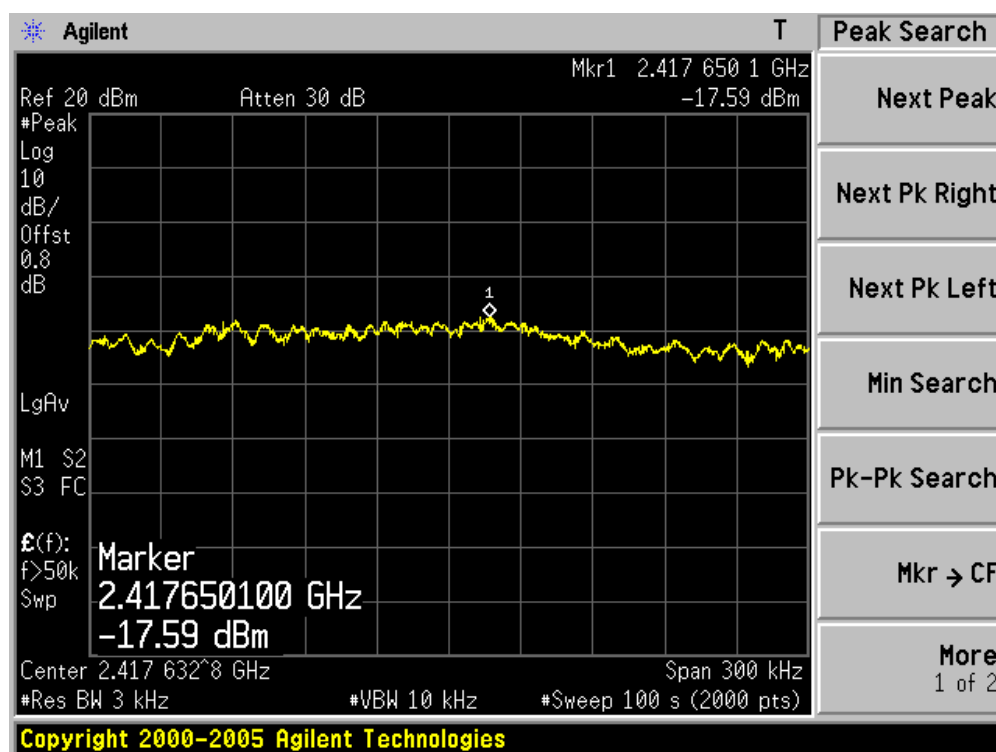
Channel 11 (2462MHz)



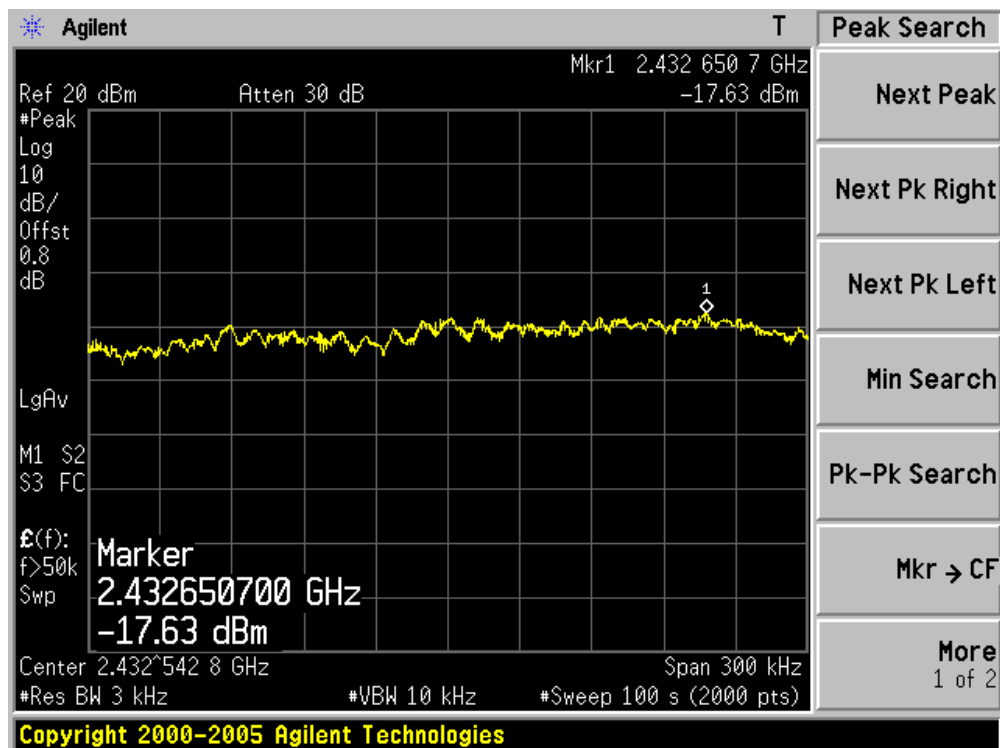
Product	:	Eee PC
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 5: Transmit by 802.11n (40MHz)

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm)	Result
03	2422	-17.59	8	Pass
06	2437	-17.63	8	Pass
09	2452	-17.77	8	Pass

Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)

