Test Report

Product Name	：	Notebook Computer
Model No.	：	YEELOONG 8089_*(* can be A-Z, 0-9 or blank)
FCC ID	：	HFS-YEELOONG8089

Applicant	：	Quanta Computer Inc
Address	：	No.188, Wen Hwa 2nd Rd., Kuei Shan Hsiang, Tao Yuan Shien 333 Taiwan

Date of Receipt	：	2008/12/05
Issued Date	：	2009/01/23
Report No.	：	08CS039R-RF-US-P05V01

Test Report Certification

Issued Date : 2009/01/23
Report No. : 08CS039R-RF-US-P05V01

QuieTek

Product Name	:	Notebook Computer
Applicant	:	Quanta Computer Inc
Address	:	No.188, Wen Hwa 2nd Rd., Kuei Shan Hsiang, Tao Yuan Shien 333 Taiwan
Manufacturer	:	JiangSu ZhongKe MengLan Electronic Technology Co.,Ltd
Address	:	Menglan Village, Yushan Town, Changshu City, Jiangsu Provice
Model No.	:	YEELOONG 8089_*(* can be A-Z, 0-9 or blank)
FCC ID	:	HFS-YEELOONG8089
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	AC 100-240 V / 50-60 Hz
Trade Name	:	lemote
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C: 2007 ANSI C63.4: 2003
Test Result	:	Complied
Performed Location	:	SuZhou EMC laboratory No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098 FCC Registration Number: 800392

Documented By : Lanny Jin
(Lanny Jin)

Reviewed By : Marlin Chen
(Marlin Chen)

Approved By : Gene Zhang
(Gene Zhang)

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/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

NVLAP Lab Code : 200347-0
1313

LinKou Testing Laboratory :
No. 5, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C.
TEL : +886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

NVLAP Lab Code: 200533-0
0914

Suzhou Testing Laboratory :
No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

NVLAP Lab Code : 200743-0
1596

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1. General Information

1.1. EUT Description

Product Name	Notebook Computer
Trade Name	lemote
Model No.	YEELOONG 8089_*(* can be A-Z, 0-9 or blank)
FCC ID	HFS-YEELOONG8089

WLAN	US105
Working Voltage	DC 3.3V
Frequency Range	802.11b/g: 2412 - 2462 MHz
Channel Number	802.11b/g: 11
Type of Modulation	802.11b: DSSS
	802.11g: OFDM
Data Rate	802.11b: 1/2/5.5/11 Mbps
	802.11g: 6/9/12/18/24/36/48/54 Mbps
Channel Control	Auto
Antenna Type	PIFA
Antenna Gain	Refer to the “Antenna List”

802.11b/g 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

802.11b/g Antenna List

Antenna	Manufacturer	Model No.	Peak Gain
Combined Antenna	QUANTA COMPUTER INC.	9WUS105QC000Q	2.4GHz: 1.7dBi

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

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 regulation, report number is 20081104-1.

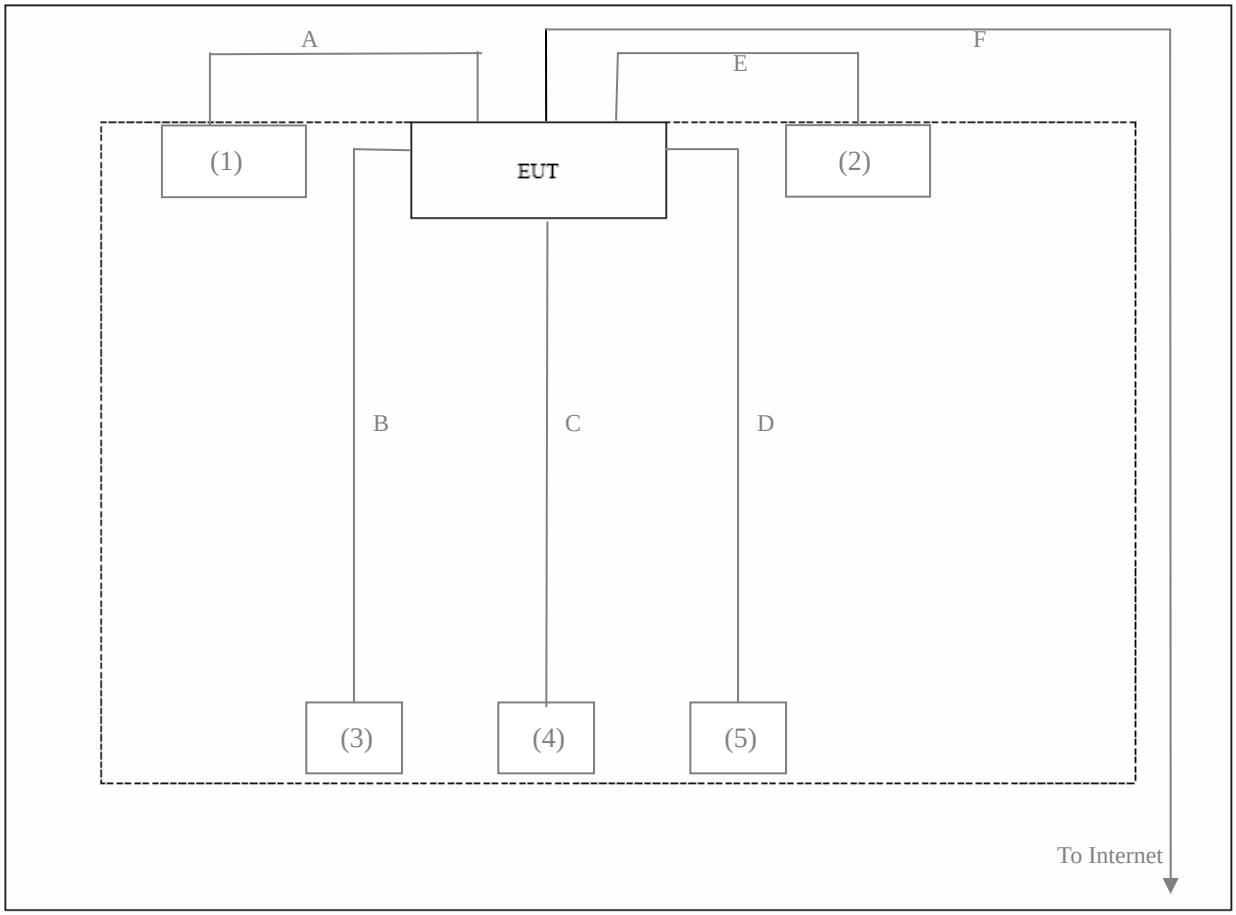
1.3. Tested System Details

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	Printer	EPSON	P950A	3KTE013597	Non-Shielded, 1.8m
2	LCD Monitor	CHI MEI	A170E1-0F	FNC122F57CA1299	Non-Shielded, 1.8m
3	iPod	Apple	A1199	7J7107WMVQ5	Power by PC
4	USB Mouse	DELL	MO56UOA	GOQ024HW	Power by PC
5	Microphone & Earphone	SOMIC	N/A	SM-302	N/A

1.4. Configuration of Tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	USB Cable	Shielded, 1.8m
B	USB Cable	Shielded, 1.8m
C	USB Cable	Shielded, 1.8m
D	Microphone &Earphone Cable	Non-shielded, 1.8m
E	VGA Cable	Shielded, 1.8m
F	LAN Cable	Non-shielded, >10m

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Execute the terminal on the PC.
4	Input commands to setup the test channel and the test mode, and then press ok to start transmitting or receiving.

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: 2007 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.209	Yes	No
RF Antenna Conducted Spurious	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(d)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2007 15.247(d)	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2007 15.215(c)	Yes	No
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(a)(2)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2007 Section 15.247(b)(3)	Yes	No
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2007 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

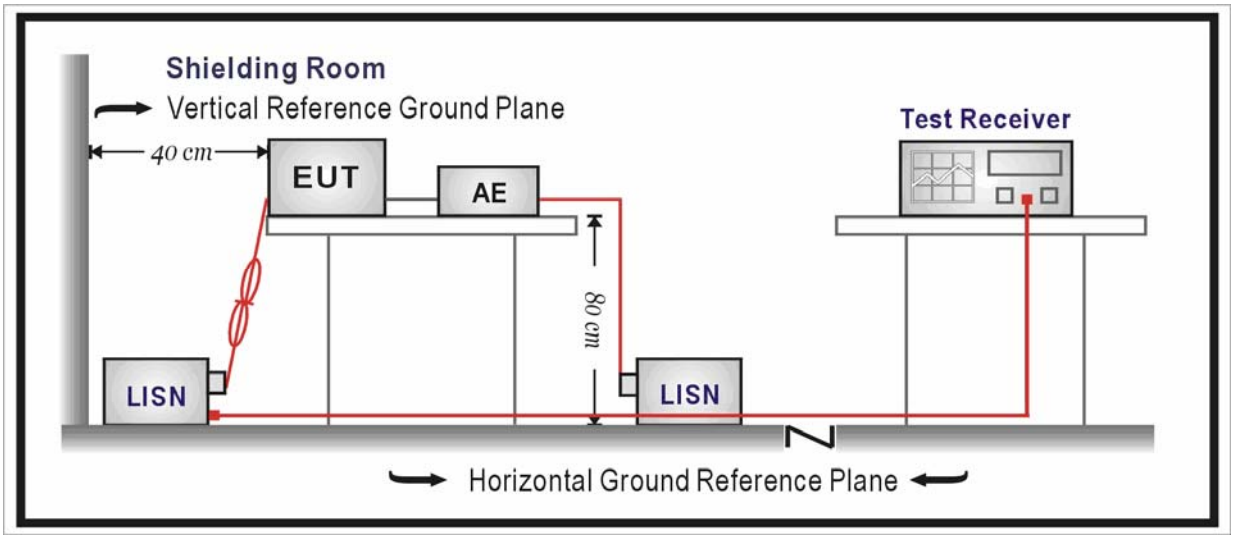
3.1. Test Equipment

Conducted Emission / SR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2008/02/07
Two-Line V-Network	R&S	ENV216	100013	2008/06/28
Two-Line V-Network	R&S	ENV216	100014	2008/06/28
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2008/11/24
50ohm Termination	SHX	TF2	07081401	2008/09/28
Coaxial Cable	Luthi	RG214	519358	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH004	2008/03/31

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

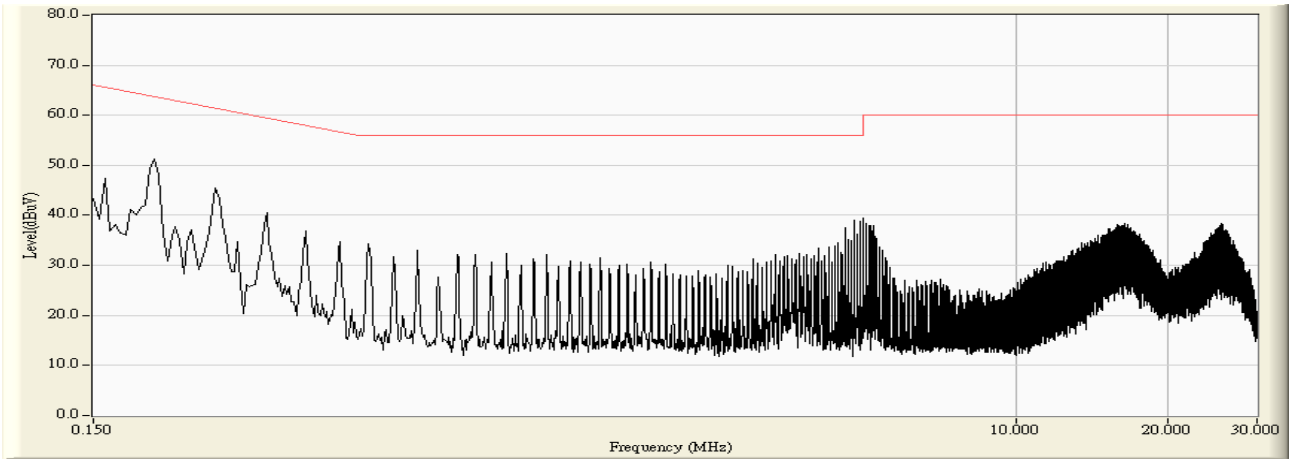
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane 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 9kHz.

3.5. Uncertainty

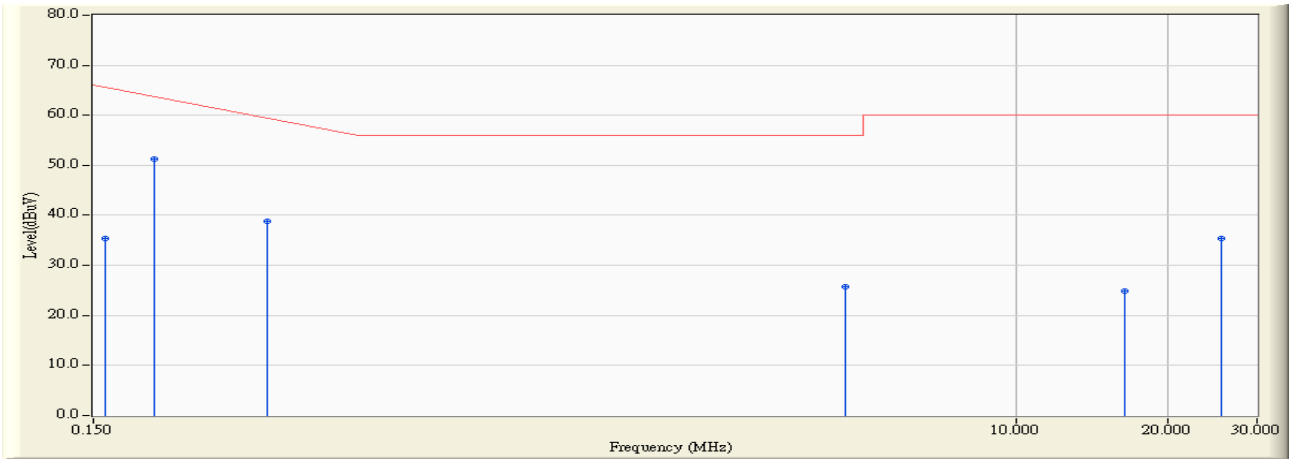
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/01/15 - 16:47**
Limit : FCC_PartC_15.209_00M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b**

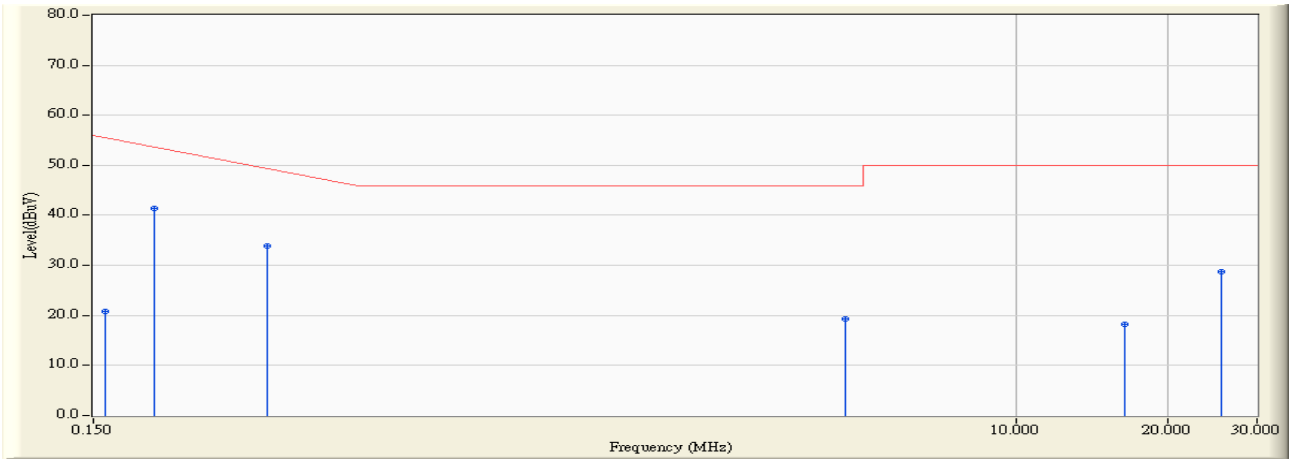


Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/01/15 - 16:49**
Limit : FCC_PartC_15.209_00M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b**



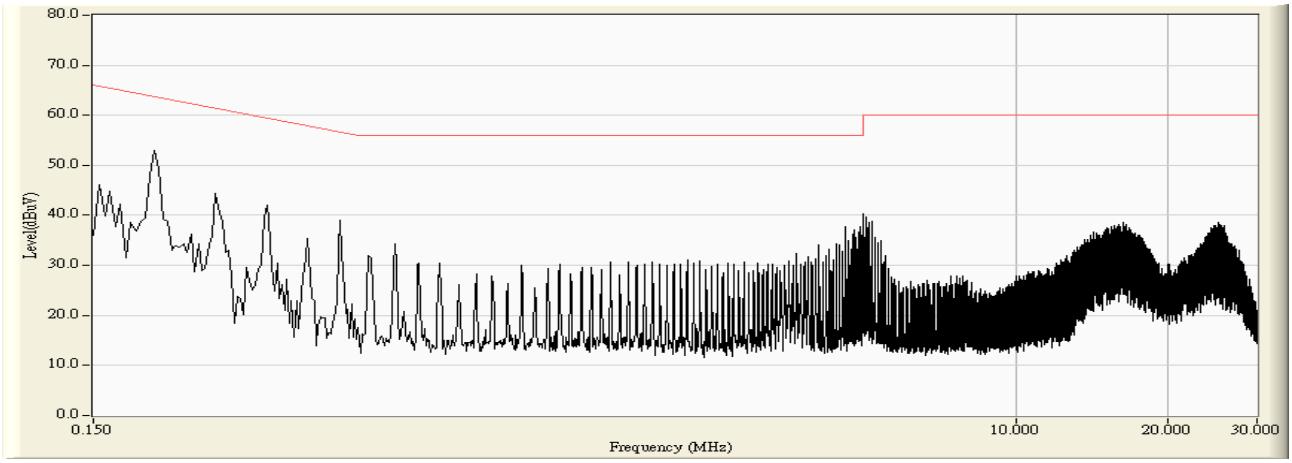
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.214	25.200	35.414	-30.357	65.771	QUASIPEAK
2	*	0.198	9.580	41.700	51.280	-13.349	64.629	QUASIPEAK
3		0.330	9.524	29.200	38.724	-22.133	60.857	QUASIPEAK
4		4.594	9.850	15.900	25.750	-30.250	56.000	QUASIPEAK
5		16.418	10.040	14.800	24.840	-35.160	60.000	QUASIPEAK
6		25.554	10.380	25.000	35.380	-24.620	60.000	QUASIPEAK

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/01/15 - 16:49**
Limit : FCC_PartC_15.209_00M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b**

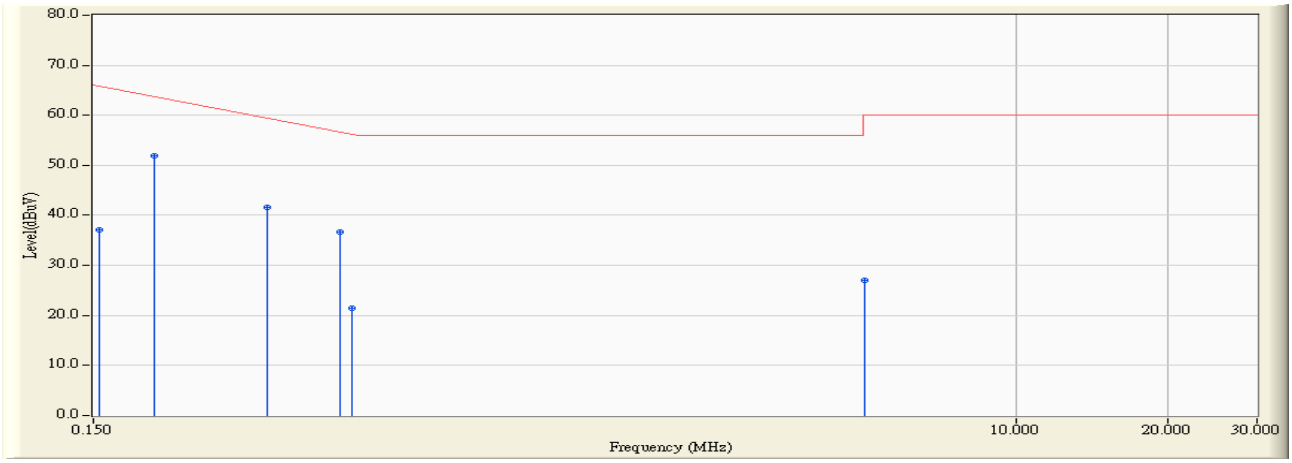


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.214	10.600	20.814	-34.957	55.771	AVERAGE
2	*	0.198	9.580	31.800	41.380	-13.249	54.629	AVERAGE
3		0.330	9.524	24.300	33.824	-17.033	50.857	AVERAGE
4		4.594	9.850	9.400	19.250	-26.750	46.000	AVERAGE
5		16.418	10.040	8.100	18.140	-31.860	50.000	AVERAGE
6		25.554	10.380	18.400	28.780	-21.220	50.000	AVERAGE

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/01/15 - 16:51**
Limit : FCC_PartC_15.209_00M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b**

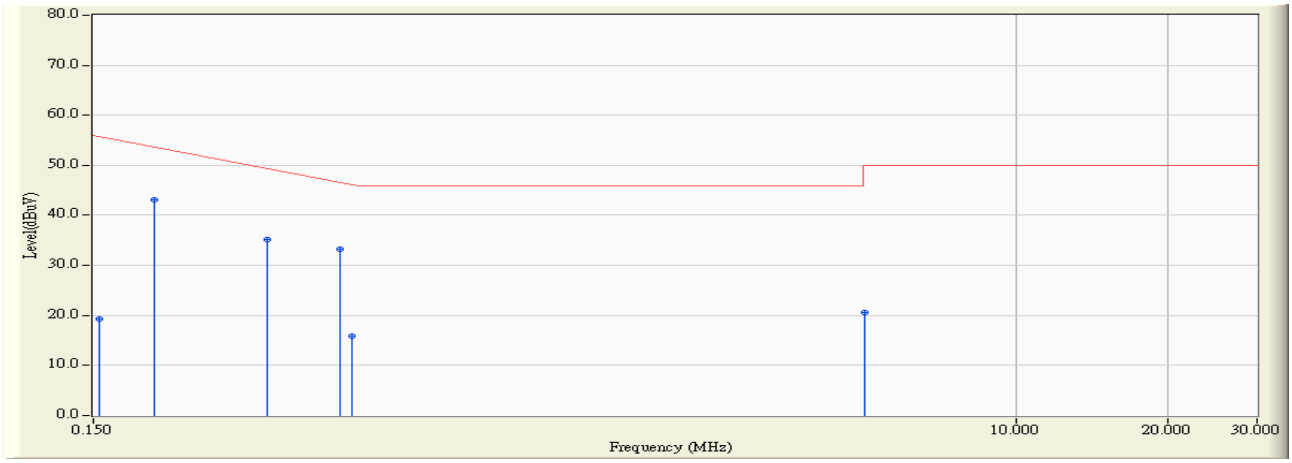


Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/01/15 - 16:52**
Limit : FCC_PartC_15.209_00M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	10.017	27.100	37.117	-28.769	65.886	QUASIPEAK
2	*	0.198	9.664	42.300	51.964	-12.665	64.629	QUASIPEAK
3		0.330	9.600	32.000	41.600	-19.257	60.857	QUASIPEAK
4		0.462	9.620	27.000	36.620	-20.466	57.086	QUASIPEAK
5		0.486	9.620	11.800	21.420	-34.980	56.400	QUASIPEAK
6		5.010	9.730	17.400	27.130	-32.870	60.000	QUASIPEAK

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2009/01/15 - 16:52**
Limit : FCC_PartC_15.209_00M_AV	**Margin : 0**
EUT : Notebook	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	10.017	9.300	19.317	-36.569	55.886	AVERAGE
2	*	0.198	9.664	33.500	43.164	-11.465	54.629	AVERAGE
3		0.330	9.600	25.600	35.200	-15.657	50.857	AVERAGE
4		0.462	9.620	23.700	33.320	-13.766	47.086	AVERAGE
5		0.486	9.620	6.300	15.920	-30.480	46.400	AVERAGE
6		5.010	9.730	10.800	20.530	-29.470	50.000	AVERAGE

4. Radiated Emission

4.1. Test Equipment

☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2008/06/28
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2008/11/24
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/24
Bilog Type Antenna	Schaffner	CBL6112B	2932	2008/11/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/24
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2008/03/03
Band Reject Filter	Wainwright	WRCG2400/2485-2375/2510-60/11SS	SN9	2008/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2008/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2008/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

☐Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2008/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2008/11/24
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/24
Bilog Type Antenna	Schaffner	CBL6112D	22254	2008/11/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/24
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2008/03/03
Band Reject Filter	Wainwright	WRCG2400/2485-2375/2510-60/11SS	SN9	2008/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2008/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2008/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	05	2008/11/24

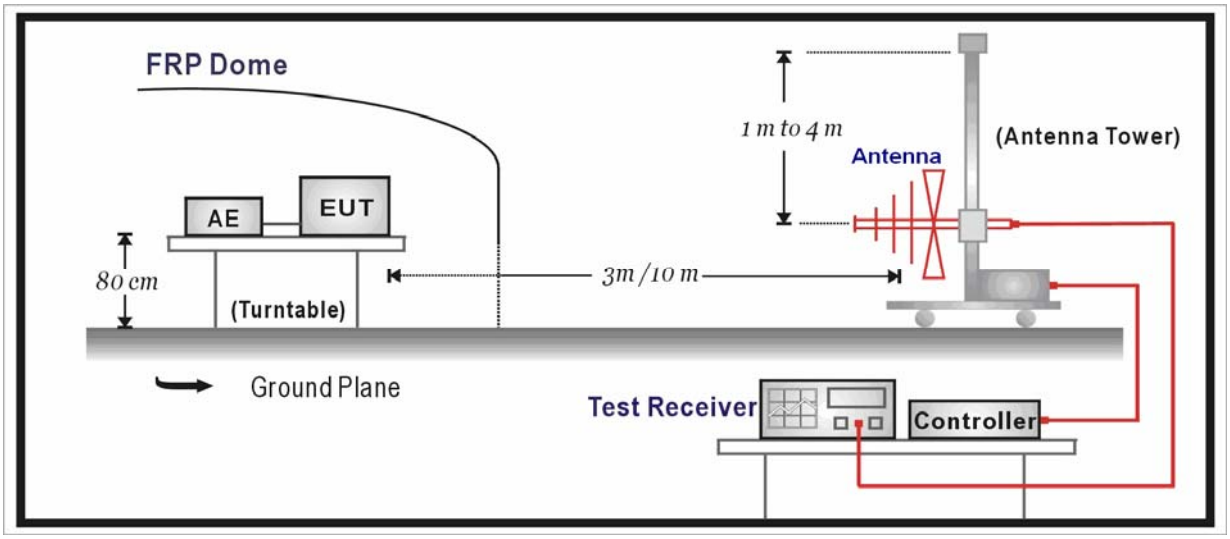
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

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

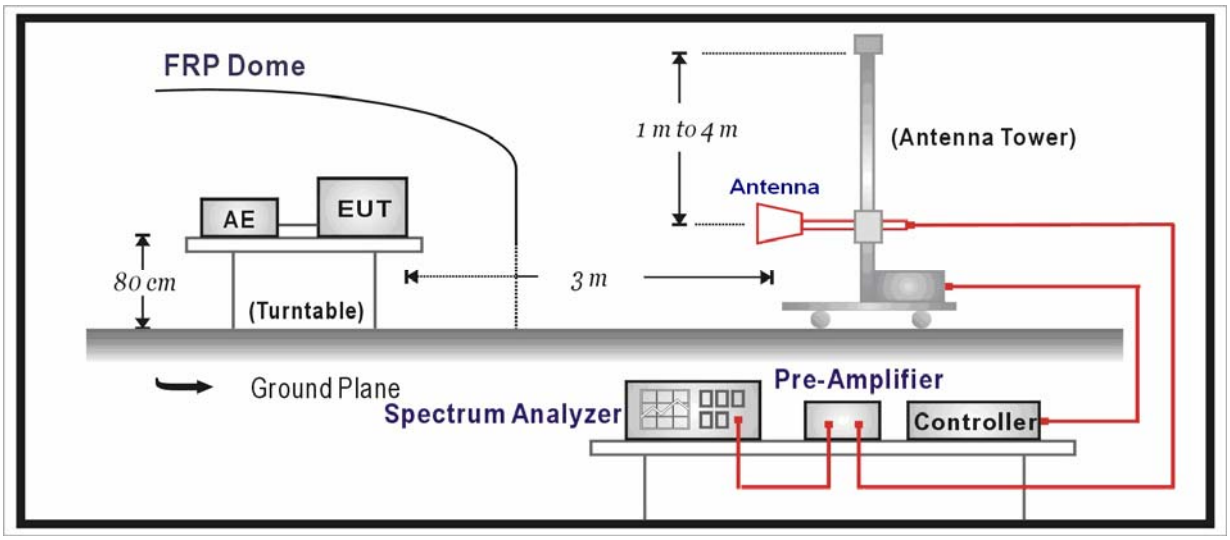
Note 2: The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Under 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 measurement above 1GHz, the horn antenna will bend down a little (as horn antenna have the narrow beamwidth) in order to find the maximum emission of EUT.

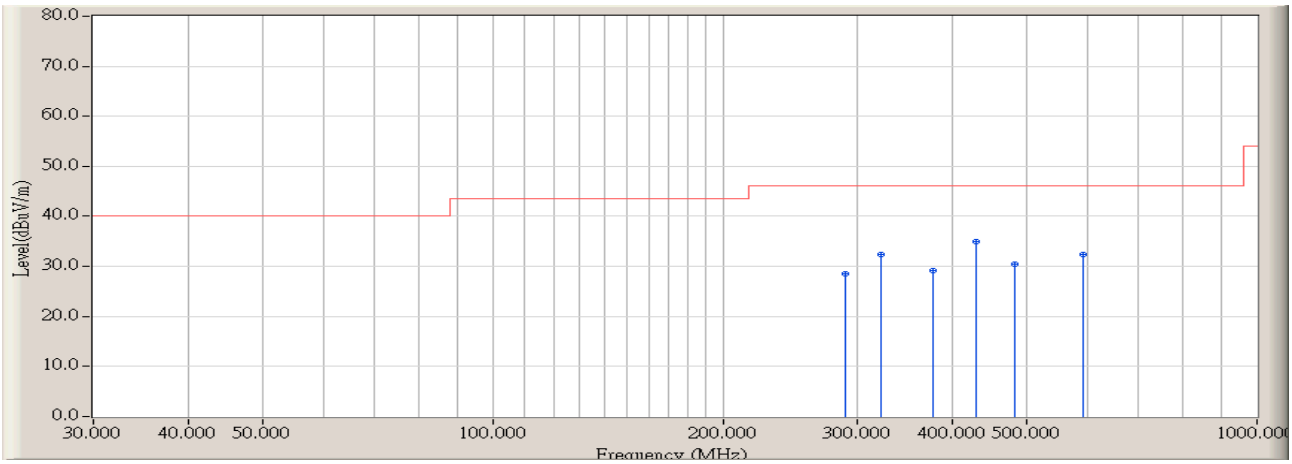
4.5. Uncertainty

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

below 1G is defined as ± 3.8 dB

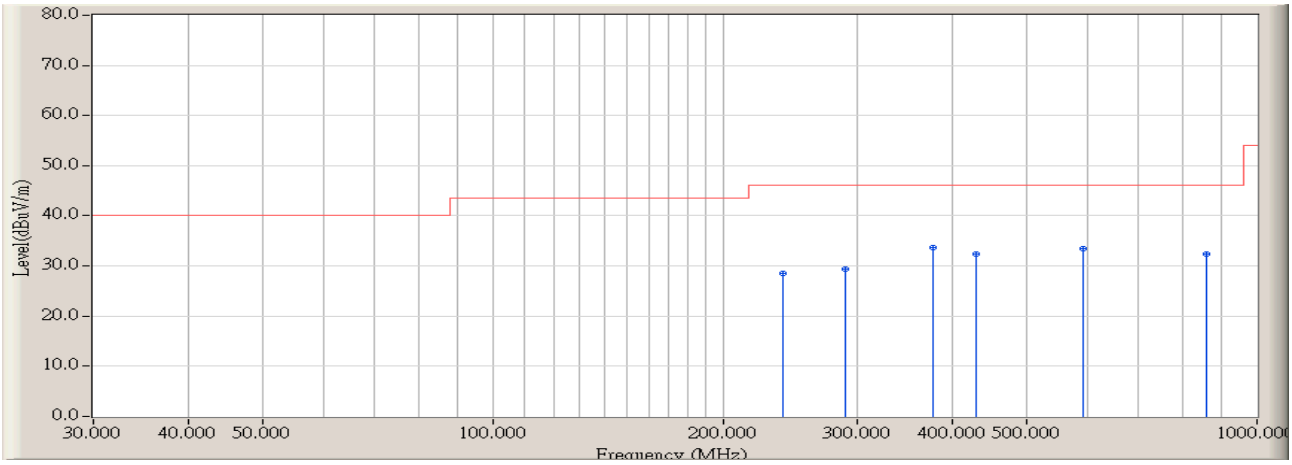
4.6. Test Result

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:08**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



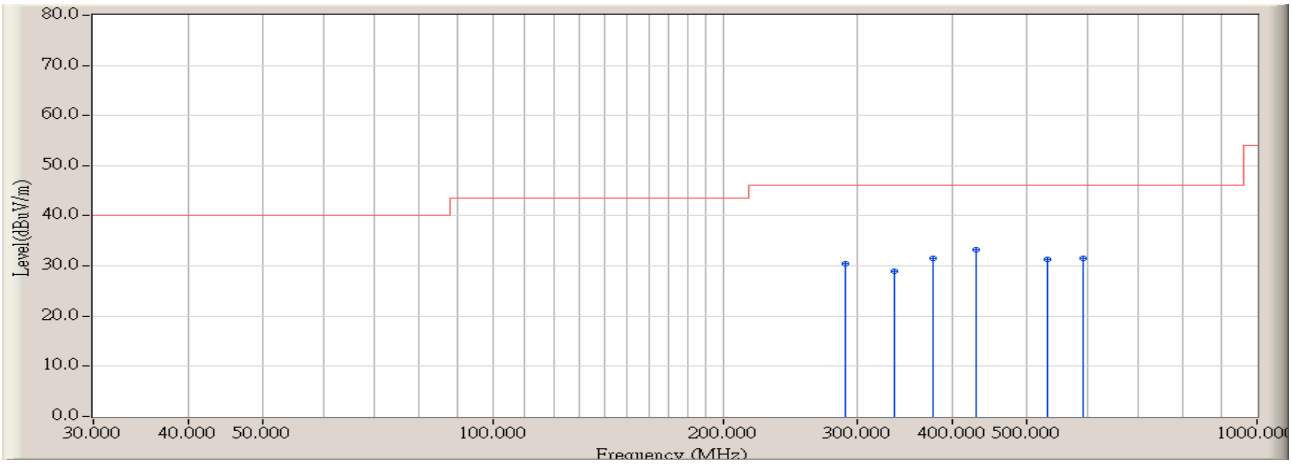
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	37.086	28.534	-17.486	46.020	QUASIPEAK	100.000	205.800
2		322.617	-7.030	39.401	32.371	-13.649	46.020	QUASIPEAK	144.500	154.800
3		375.967	-5.866	35.114	29.248	-16.772	46.020	QUASIPEAK	100.000	108.500
4	*	429.317	-4.641	39.567	34.927	-11.093	46.020	QUASIPEAK	172.500	208.500
5		482.667	-3.589	34.013	30.424	-15.596	46.020	QUASIPEAK	100.000	93.800
6		590.983	-1.483	33.971	32.488	-13.532	46.020	QUASIPEAK	112.600	183.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:08**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



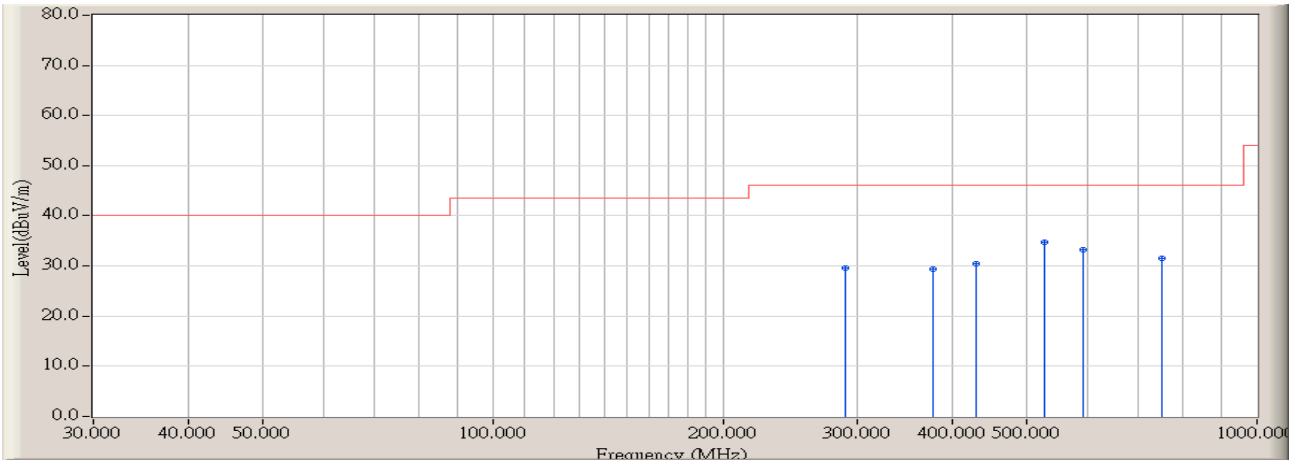
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		240.167	-9.325	37.930	28.605	-17.415	46.020	QUASIPEAK	100.000	206.000
2		288.667	-8.552	37.861	29.309	-16.711	46.020	QUASIPEAK	100.000	142.500
3	*	375.967	-5.866	39.503	33.637	-12.383	46.020	QUASIPEAK	100.000	75.300
4		429.317	-4.641	37.115	32.475	-13.545	46.020	QUASIPEAK	104.600	136.900
5		590.983	-1.483	34.922	33.439	-12.581	46.020	QUASIPEAK	114.600	204.800
6		859.350	2.390	29.969	32.359	-13.661	46.020	QUASIPEAK	100.000	193.800

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:08**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



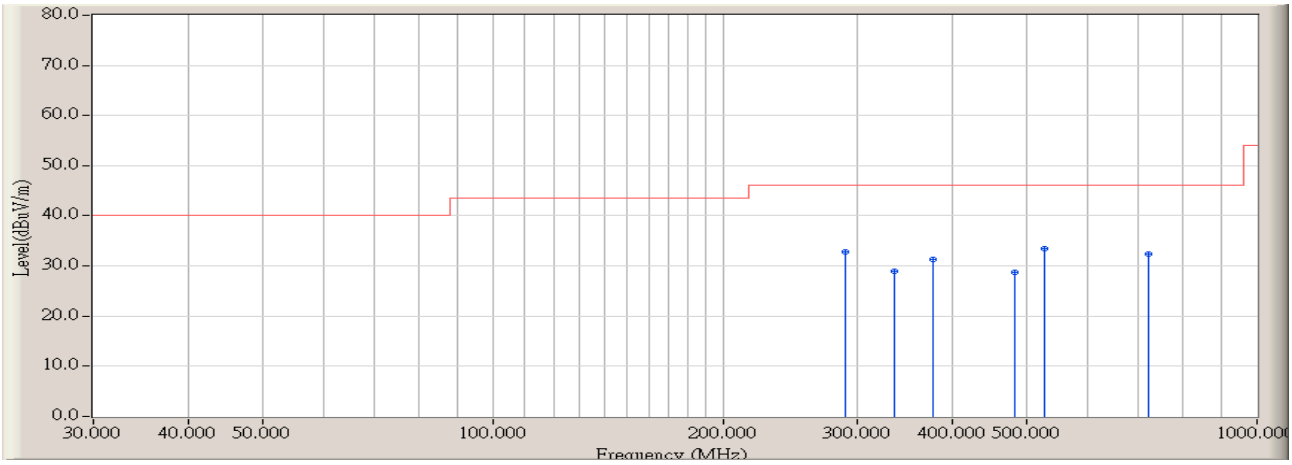
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	38.936	30.384	-15.636	46.020	QUASIPEAK	100.000	68.900
2		335.550	-6.515	35.542	29.027	-16.993	46.020	QUASIPEAK	142.000	84.500
3		375.967	-5.866	37.420	31.554	-14.466	46.020	QUASIPEAK	112.000	177.500
4	*	429.317	-4.641	37.912	33.272	-12.748	46.020	QUASIPEAK	100.000	154.600
5		531.167	-3.294	34.668	31.374	-14.646	46.020	QUASIPEAK	100.000	148.500
6		590.983	-1.483	33.114	31.631	-14.389	46.020	QUASIPEAK	100.000	136.600

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:08**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



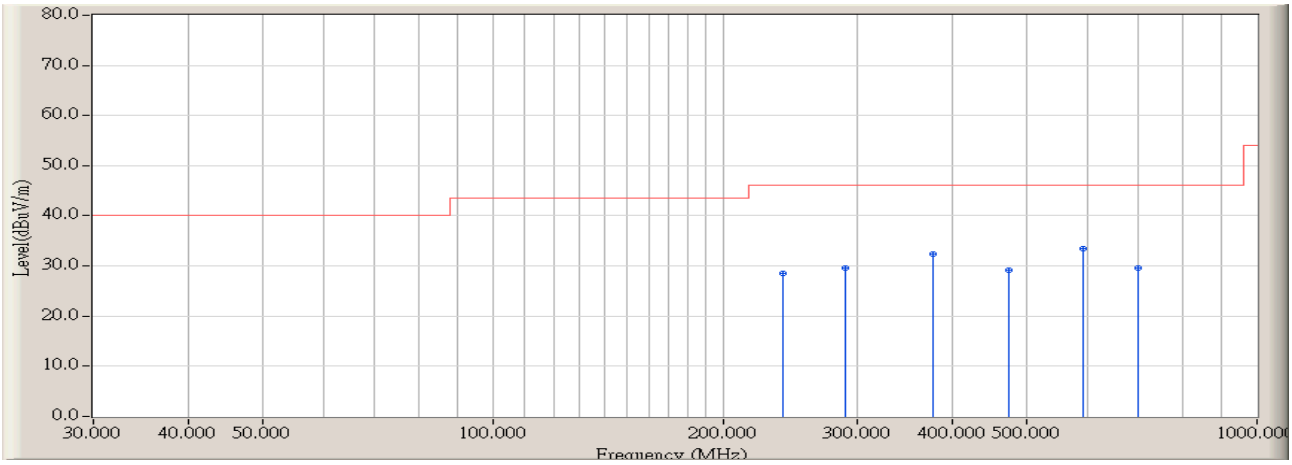
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	38.111	29.559	-16.461	46.020	QUASIPEAK	100.000	74.600
2		375.967	-5.866	35.288	29.422	-16.598	46.020	QUASIPEAK	100.000	116.500
3		429.317	-4.641	35.112	30.472	-15.548	46.020	QUASIPEAK	106.500	44.800
4	*	527.933	-3.263	37.974	34.711	-11.309	46.020	QUASIPEAK	113.600	210.400
5		590.983	-1.483	34.645	33.162	-12.858	46.020	QUASIPEAK	102.600	95.000
6		751.033	1.467	30.088	31.555	-14.465	46.020	QUASIPEAK	100.000	135.200

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:11**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



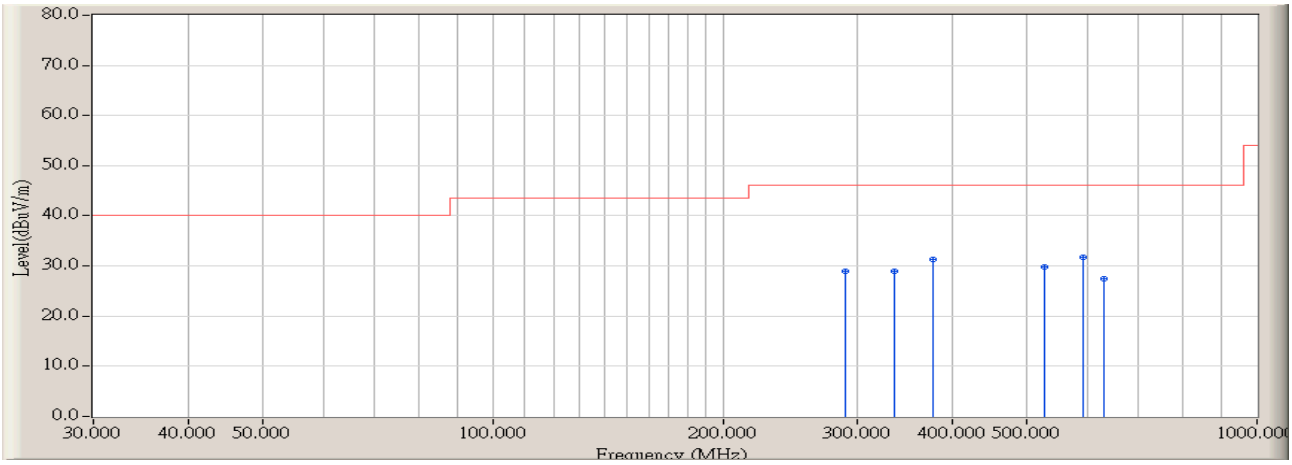
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	41.286	32.734	-13.286	46.020	QUASIPEAK	100.000	215.000
2		335.550	-6.515	35.365	28.850	-17.170	46.020	QUASIPEAK	128.000	88.500
3		375.967	-5.866	37.214	31.348	-14.672	46.020	QUASIPEAK	100.000	274.000
4		482.667	-3.589	32.413	28.824	-17.196	46.020	QUASIPEAK	145.500	209.000
5	*	527.933	-3.263	36.750	33.487	-12.533	46.020	QUASIPEAK	177.500	93.800
6		720.317	0.645	31.751	32.396	-13.624	46.020	QUASIPEAK	100.000	174.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:11**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



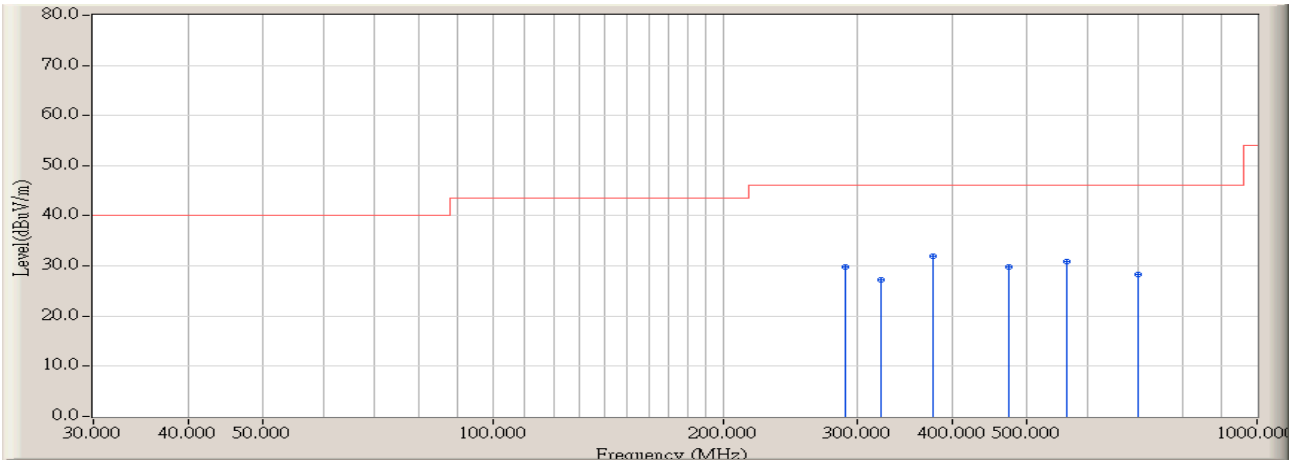
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		240.167	-9.325	37.930	28.605	-17.415	46.020	QUASIPEAK	100.000	248.000
2		288.667	-8.552	38.061	29.509	-16.511	46.020	QUASIPEAK	100.000	211.700
3		375.967	-5.866	38.303	32.437	-13.583	46.020	QUASIPEAK	105.600	225.000
4		472.967	-3.853	33.116	29.264	-16.756	46.020	QUASIPEAK	100.000	247.700
5	*	590.983	-1.483	34.922	33.439	-12.581	46.020	QUASIPEAK	125.500	48.600
6		697.683	0.425	29.227	29.653	-16.367	46.020	QUASIPEAK	100.000	287.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:13**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



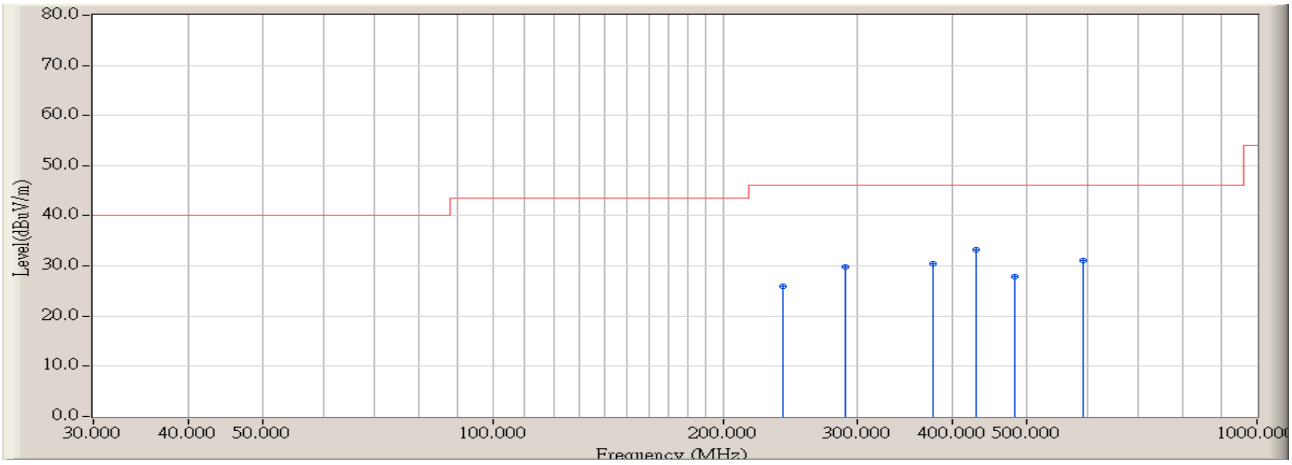
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	37.586	29.034	-16.986	46.020	QUASIPEAK	100.000	68.900
2		335.550	-6.515	35.365	28.850	-17.170	46.020	QUASIPEAK	142.000	84.500
3		375.967	-5.866	37.114	31.248	-14.772	46.020	QUASIPEAK	112.000	177.500
4		527.933	-3.263	33.150	29.887	-16.133	46.020	QUASIPEAK	100.000	154.600
5	*	590.983	-1.483	33.171	31.688	-14.332	46.020	QUASIPEAK	100.000	148.500
6		629.783	-0.952	28.380	27.429	-18.591	46.020	QUASIPEAK	100.000	136.600

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:13**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



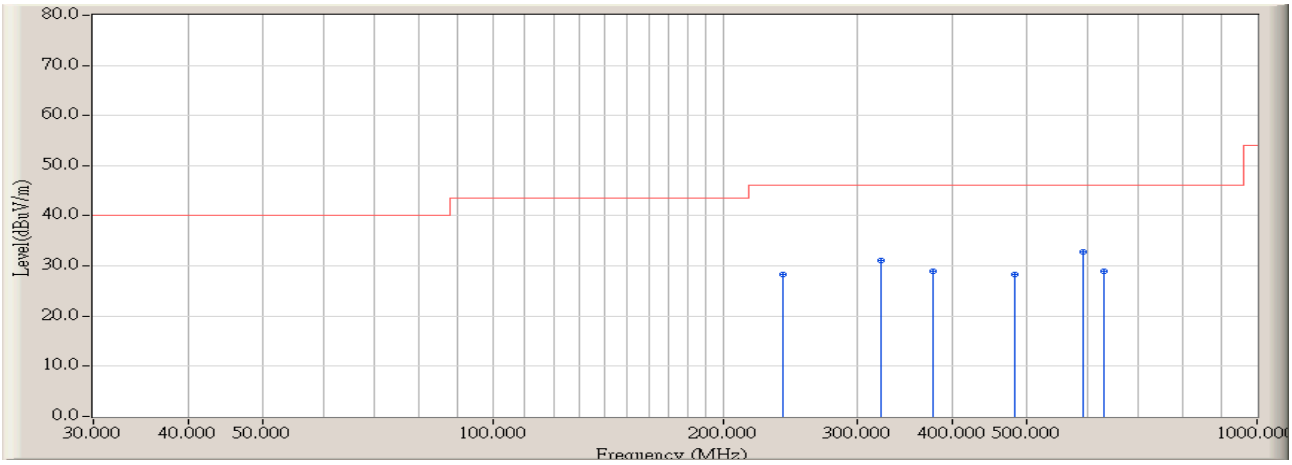
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	38.261	29.709	-16.311	46.020	QUASIPEAK	100.000	74.600
2		322.617	-7.030	34.291	27.261	-18.759	46.020	QUASIPEAK	100.000	116.500
3	*	375.967	-5.866	37.803	31.937	-14.083	46.020	QUASIPEAK	106.500	44.800
4		472.967	-3.853	33.616	29.764	-16.256	46.020	QUASIPEAK	113.600	210.400
5		563.500	-1.312	32.237	30.925	-15.095	46.020	QUASIPEAK	102.600	95.000
6		697.683	0.425	27.927	28.353	-17.667	46.020	QUASIPEAK	100.000	135.200

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:14**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



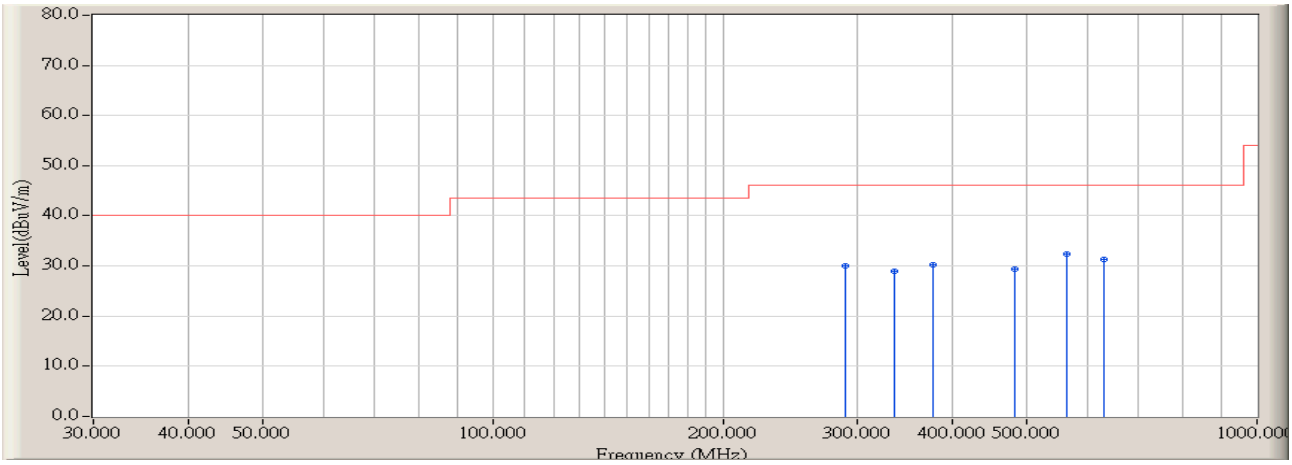
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		240.167	-9.325	35.323	25.998	-20.022	46.020	QUASIPEAK	100.000	95.800
2		288.667	-8.552	38.436	29.884	-16.136	46.020	QUASIPEAK	122.500	174.500
3		375.967	-5.866	36.420	30.554	-15.466	46.020	QUASIPEAK	105.200	96.500
4	*	429.317	-4.641	37.812	33.172	-12.848	46.020	QUASIPEAK	100.000	65.800
5		482.667	-3.589	31.492	27.903	-18.117	46.020	QUASIPEAK	100.000	214.000
6		590.983	-1.483	32.614	31.131	-14.889	46.020	QUASIPEAK	206.000	155.800

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:15**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



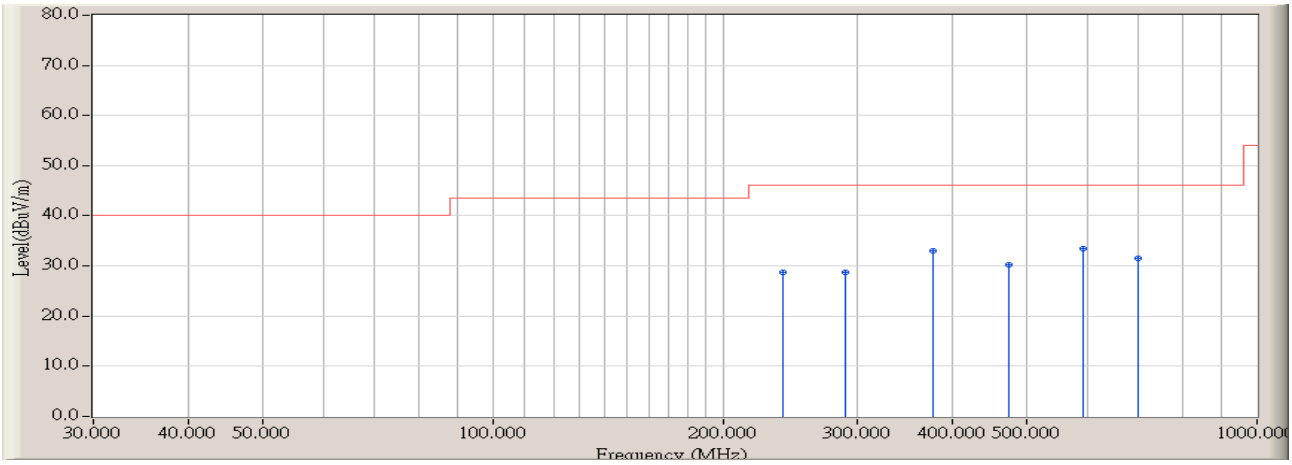
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		240.167	-9.325	37.701	28.376	-17.644	46.020	QUASIPEAK	100.000	88.900
2		322.617	-7.030	38.218	31.188	-14.832	46.020	QUASIPEAK	100.000	226.000
3		375.967	-5.866	34.788	28.922	-17.098	46.020	QUASIPEAK	112.600	65.900
4		482.667	-3.589	31.915	28.326	-17.694	46.020	QUASIPEAK	106.000	147.500
5	*	590.983	-1.483	34.245	32.762	-13.258	46.020	QUASIPEAK	100.000	145.300
6		629.783	-0.952	30.003	29.052	-16.968	46.020	QUASIPEAK	100.000	36.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:17**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**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	Ant Pos (cm)	Table Pos (deg)
1		288.667	-8.552	38.686	30.134	-15.886	46.020	QUASIPEAK	100.000	118.500
2		335.550	-6.515	35.365	28.850	-17.170	46.020	QUASIPEAK	114.600	45.800
3		375.967	-5.866	36.214	30.348	-15.672	46.020	QUASIPEAK	100.000	315.000
4		482.667	-3.589	32.913	29.324	-16.696	46.020	QUASIPEAK	100.000	188.000
5	*	563.500	-1.312	33.597	32.285	-13.735	46.020	QUASIPEAK	105.600	325.000
6		629.783	-0.952	32.280	31.329	-14.691	46.020	QUASIPEAK	100.000	156.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2009/01/16 - 16:18**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : Notebook Computer	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**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	Ant Pos (cm)	Table Pos (deg)
1		240.167	-9.325	38.030	28.705	-17.315	46.020	QUASIPEAK	100.000	185.000
2		288.667	-8.552	37.261	28.709	-17.311	46.020	QUASIPEAK	120.000	163.000
3		375.967	-5.866	38.803	32.937	-13.083	46.020	QUASIPEAK	113.600	154.000
4		472.967	-3.853	34.116	30.264	-15.756	46.020	QUASIPEAK	122.500	96.500
5	*	590.983	-1.483	34.922	33.439	-12.581	46.020	QUASIPEAK	100.000	85.900
6		697.683	0.425	31.127	31.553	-14.467	46.020	QUASIPEAK	105.200	93.500

Radiated Emission Test Data for above 1GHz

Mode 1: 802.11b							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
4825.000	H	42.835	73.97	-31.135	PK	120.50	65.80
4825.000	H	37.110	53.97	-16.860	AV	120.50	65.80
4825.000	V	42.532	73.97	-31.438	PK	114.20	144.80
4825.000	V	35.710	53.97	-18.260	AV	114.20	144.80
Channel 6 (2437MHz)							
4881.667	H	43.332	73.97	-30.638	PK	100.00	165.20
4881.667	H	36.233	53.97	-17.737	AV	100.00	165.20
4881.667	V	43.012	73.97	-30.958	PK	100.00	205.00
4881.667	V	35.233	53.97	-18.737	AV	100.00	205.00
Channel 11 (2462MHz)							
4938.333	H	43.106	73.97	-30.864	PK	100.00	187.00
4938.333	H	35.247	53.97	-18.723	AV	100.00	187.00
4938.333	V	45.410	73.97	-28.560	PK	106.00	328.00
4938.333	V	37.647	53.97	-16.323	AV	106.00	328.00

Mode 2: 802.11g							
Frequency (MHz)	Polarization (H/V)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (degree)
Channel 1 (2412MHz)							
4825.000	H	42.383	73.97	-31.587	PK	106.000	174.000
4825.000	H	34.810	53.97	-19.160	AV	106.000	174.000
4825.000	V	42.635	73.97	-31.335	PK	100.000	308.000
4825.000	V	-35.510	53.97	-18.460	AV	100.000	308.000
Channel 6 (2437MHz)							
4881.667	H	42.371	73.97	-31.599	PK	100.000	195.000
4881.667	H	35.433	53.97	-18.537	AV	100.000	195.000
4881.667	V	42.386	73.97	-31.584	PK	100.000	130.000
4881.667	V	34.433	53.97	-19.537	AV	100.000	130.000
Channel 11 (2462MHz)							
4938.333	H	43.581	73.97	-30.389	PK	106.500	184.000
4938.333	H	36.147	53.97	-17.823	AV	106.500	184.000
4938.333	V	43.529	73.97	-30.441	PK	108.000	247.000
4938.333	V	36.147	53.97	-17.823	AV	108.000	247.000

5. RF Antenna Conducted Spurious

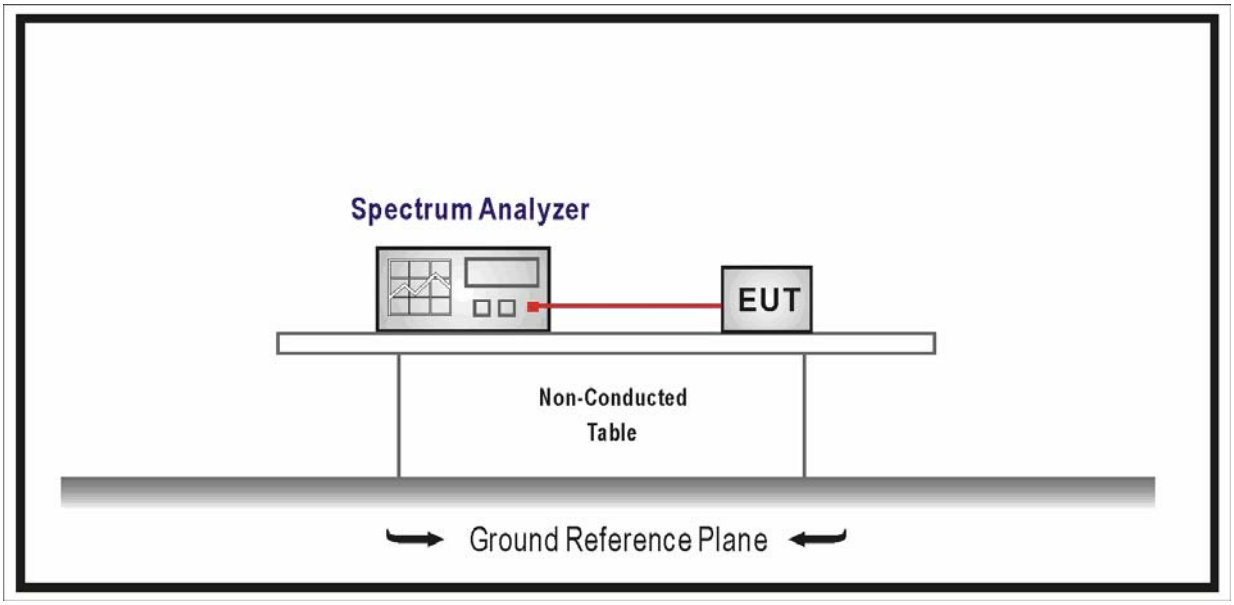
5.1. Test Equipment

RF Antenna Conducted Spurious / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

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.

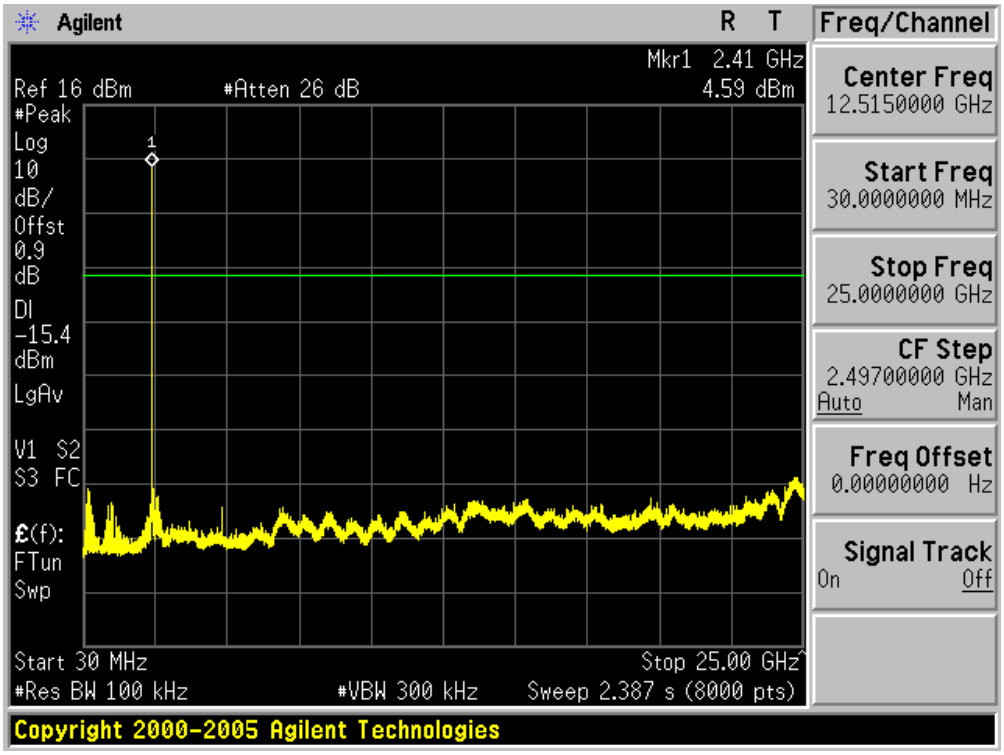
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

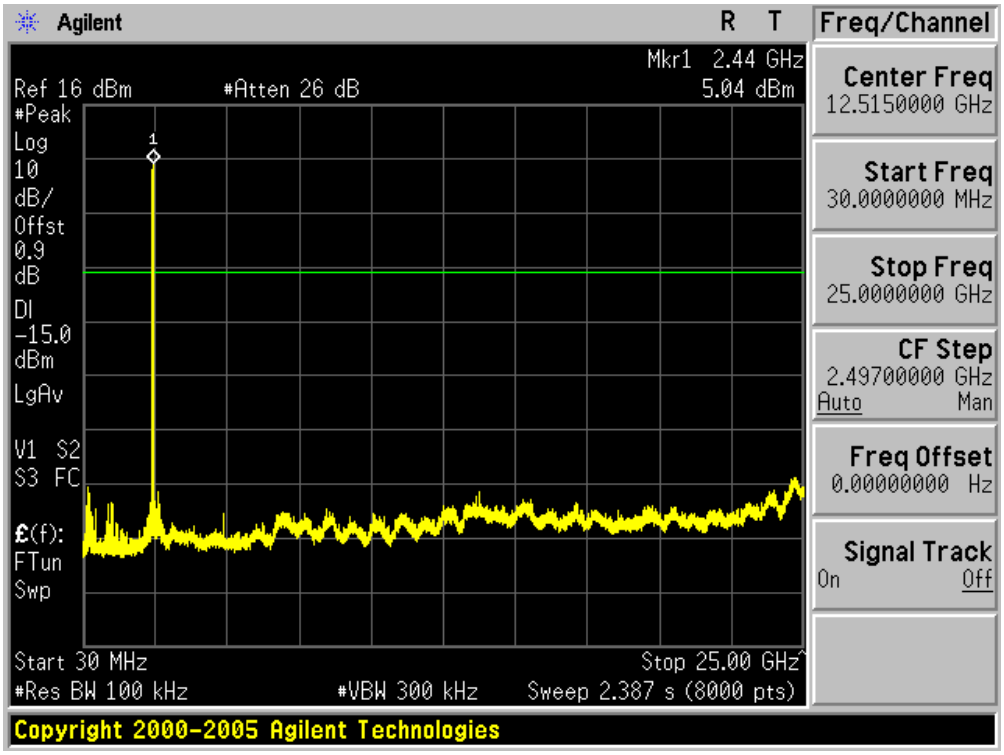
5.6. Test Result

Product	:	Notebook Computer
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

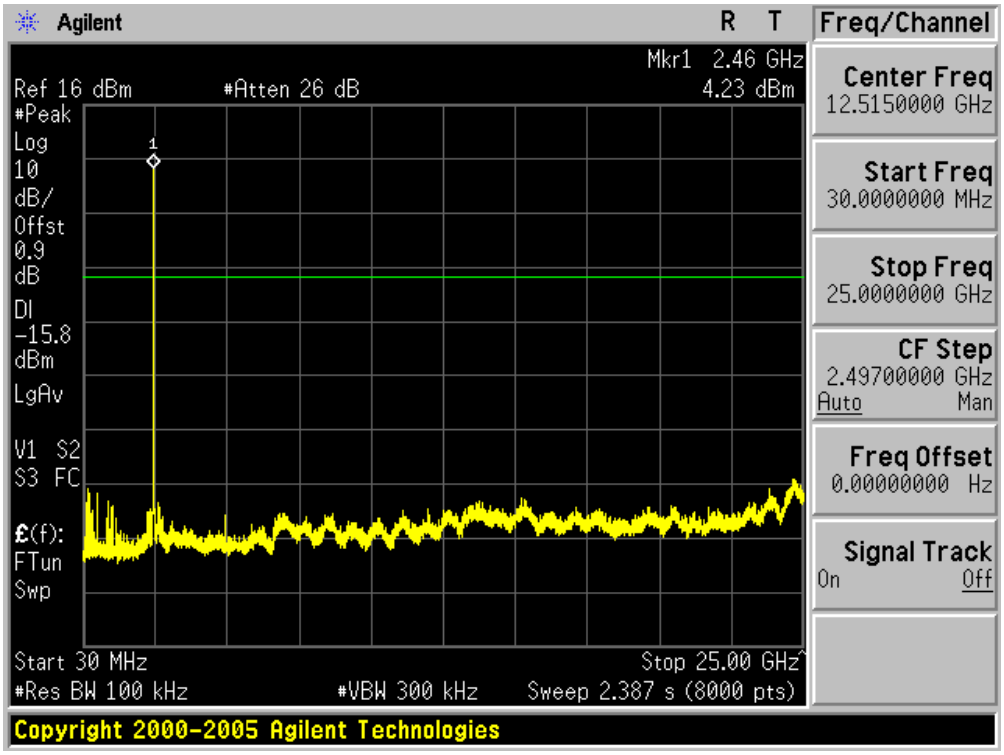
Channel 01 (2412MHz)



Channel 06 (2437MHz)

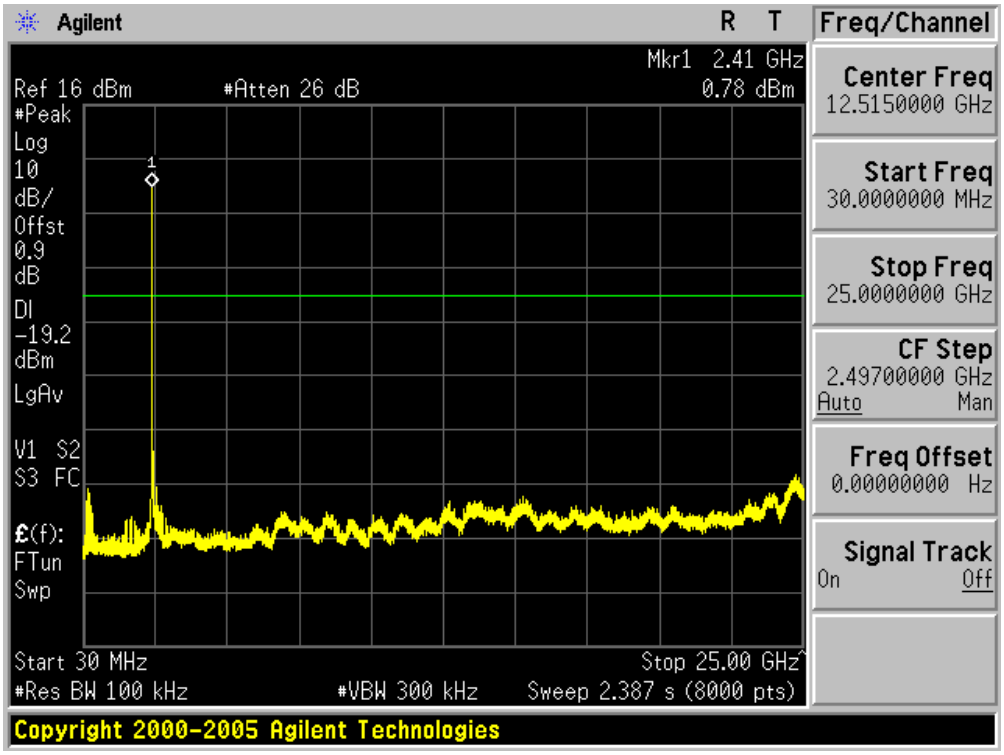


Channel 11 (2462MHz)

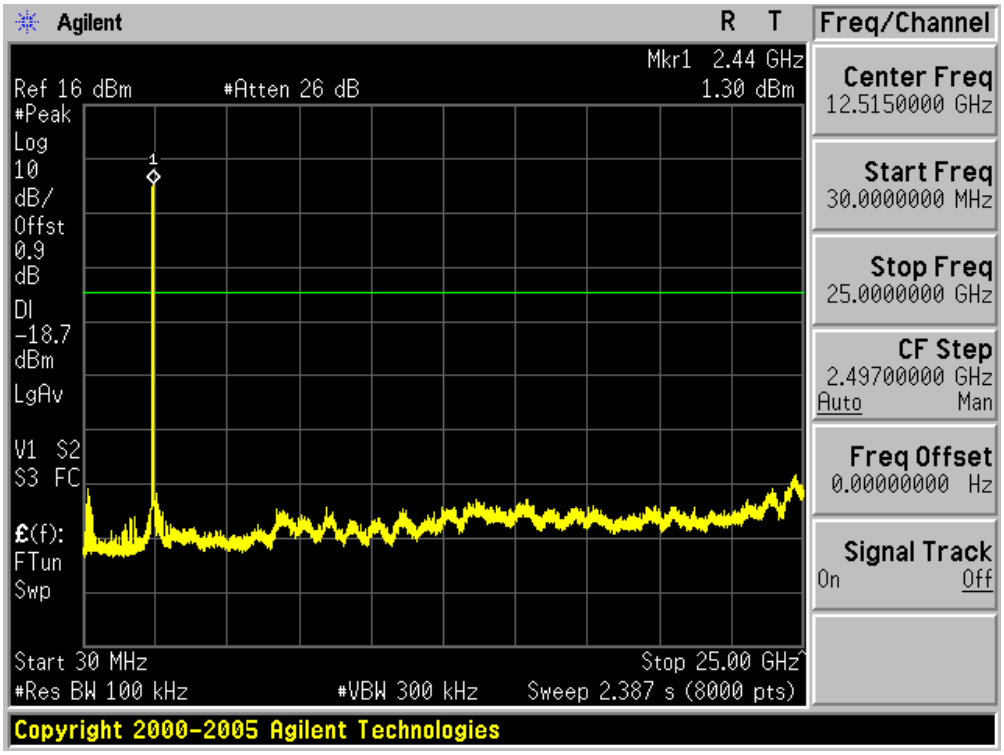


Product	:	Notebook Computer
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

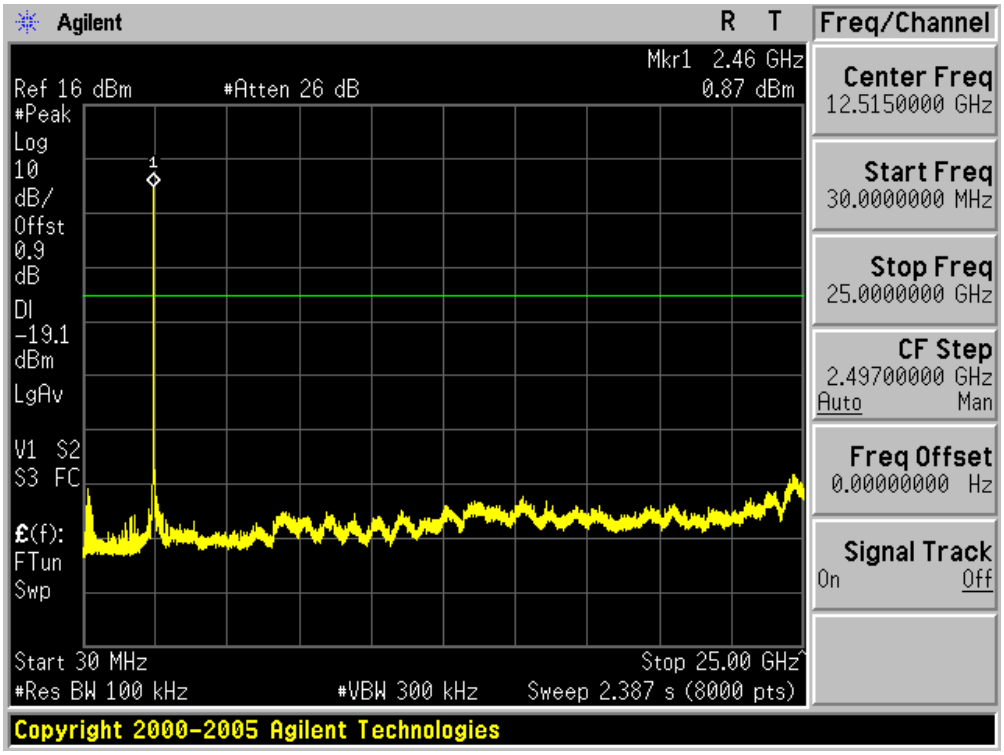
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



6. Radiated Emission Band Edge

6.1. Test Equipment

☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2008/06/28
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2008/11/24
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/24
Bilog Type Antenna	Schaffner	CBL6112B	2932	2008/11/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/24
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

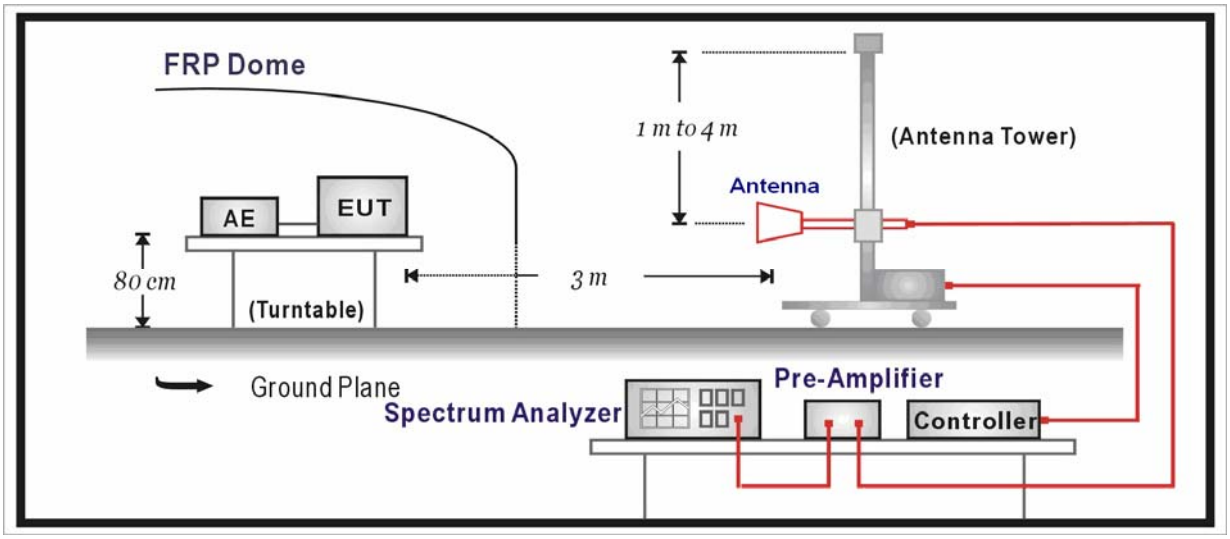
☐Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2008/11/14
Preamplifier	Quietek	AP-025C	QT-AP004	2008/11/24
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/24
Bilog Type Antenna	Schaffner	CBL6112D	22254	2008/11/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/11/24
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	05	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

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

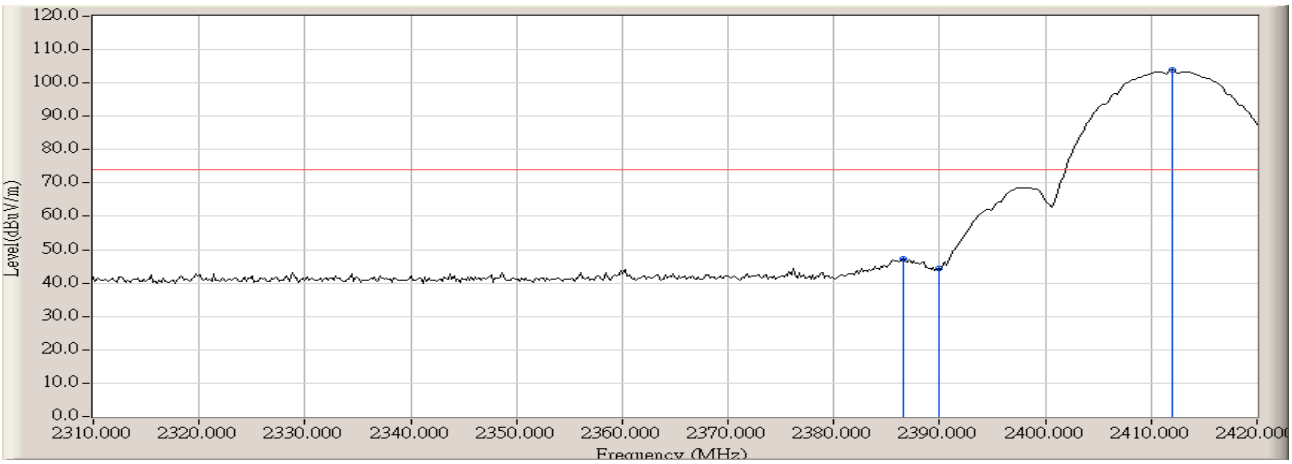
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum 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

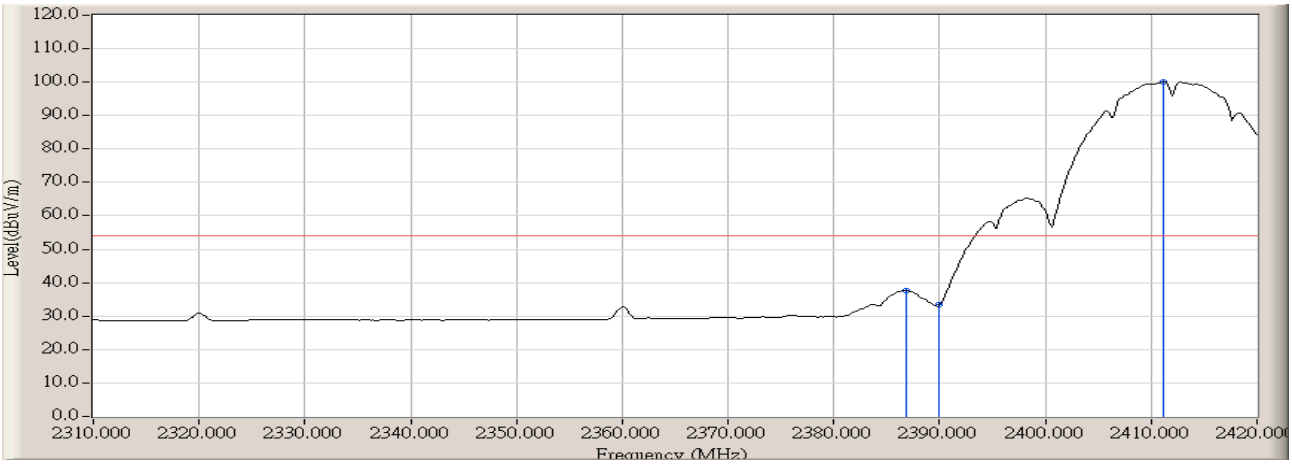
6.6. Test Result

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 09:48**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



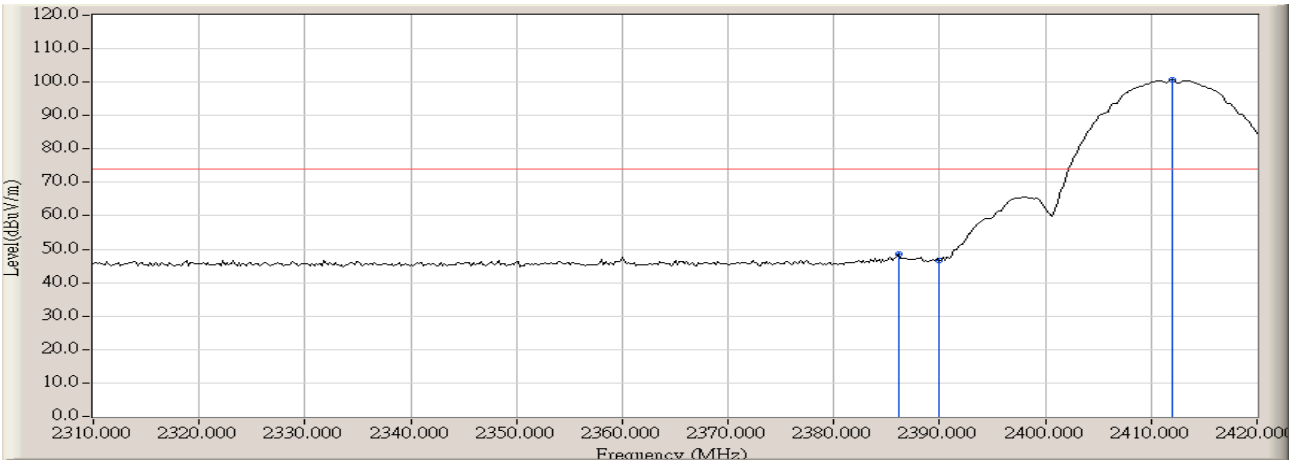
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.633	-3.212	50.480	47.268	-26.702	73.970	PEAK
2		2390.000	-3.202	47.566	44.364	-29.606	73.970	PEAK
3	*	2411.933	-3.213	107.017	103.805	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 09:49**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



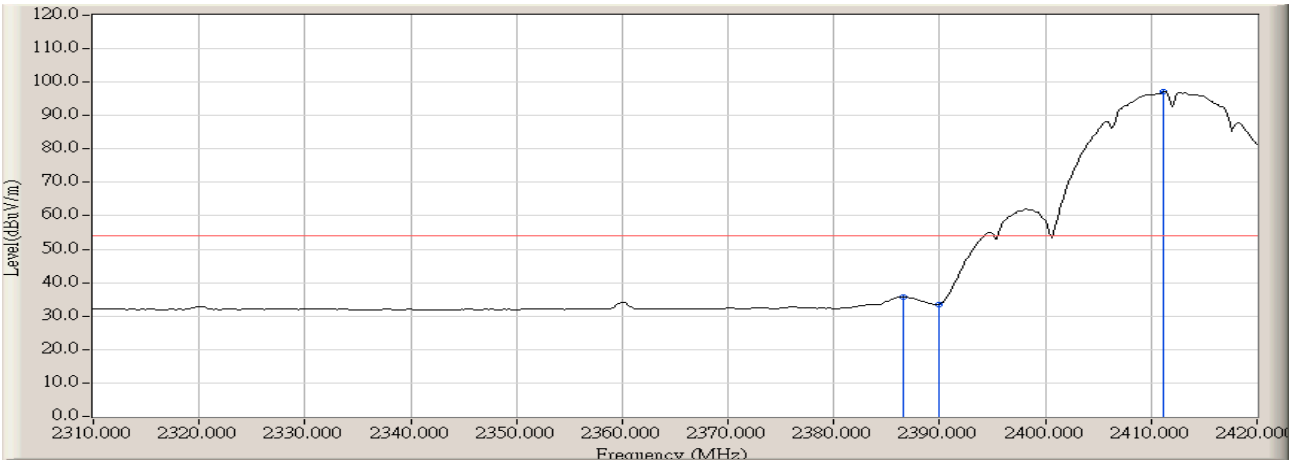
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.817	-3.210	40.813	37.602	-16.368	53.970	AVERAGE
2		2390.000	-3.202	36.586	33.384	-20.586	53.970	AVERAGE
3	*	2411.200	-3.211	103.385	100.175	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 09:42**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



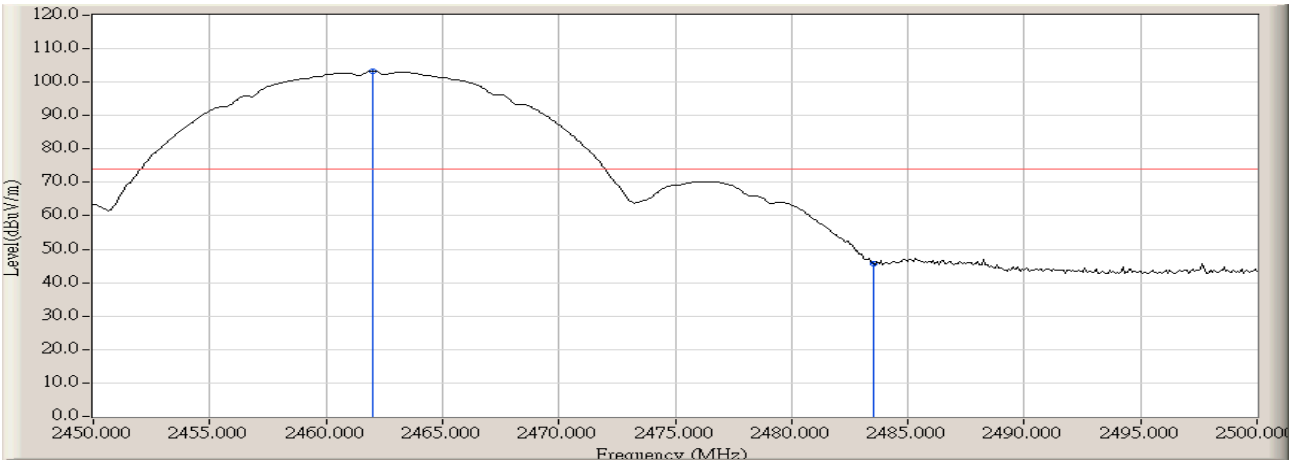
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.083	-3.213	51.715	48.502	-25.468	73.970	PEAK
2		2390.000	-3.202	49.744	46.542	-27.428	73.970	PEAK
3	*	2411.933	-3.213	104.022	100.810	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 09:43**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



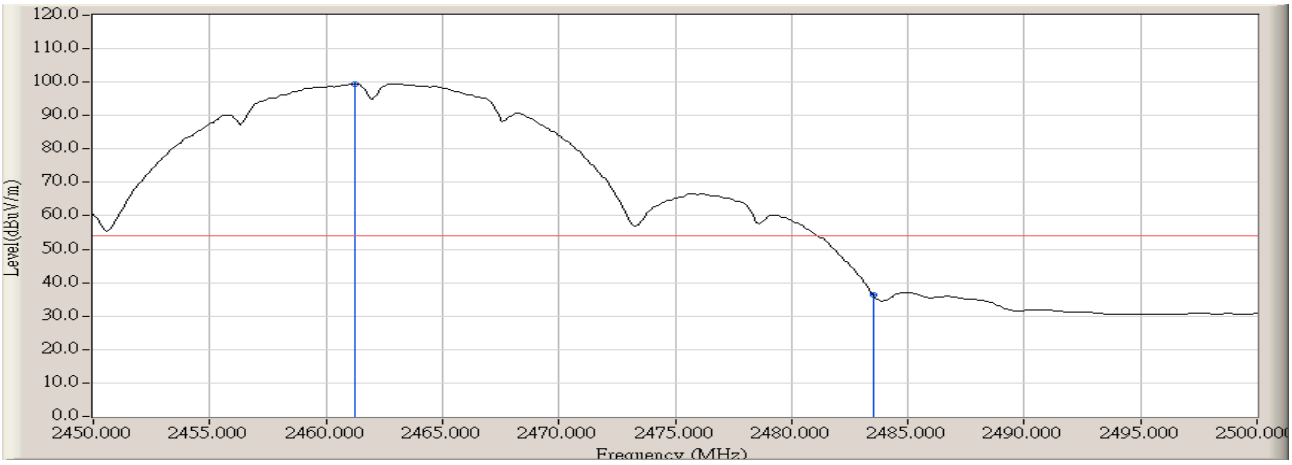
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.633	-3.212	38.903	35.691	-18.279	53.970	AVERAGE
2		2390.000	-3.202	36.767	33.565	-20.405	53.970	AVERAGE
3	*	2411.200	-3.211	100.270	97.060	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/19 - 16:27**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



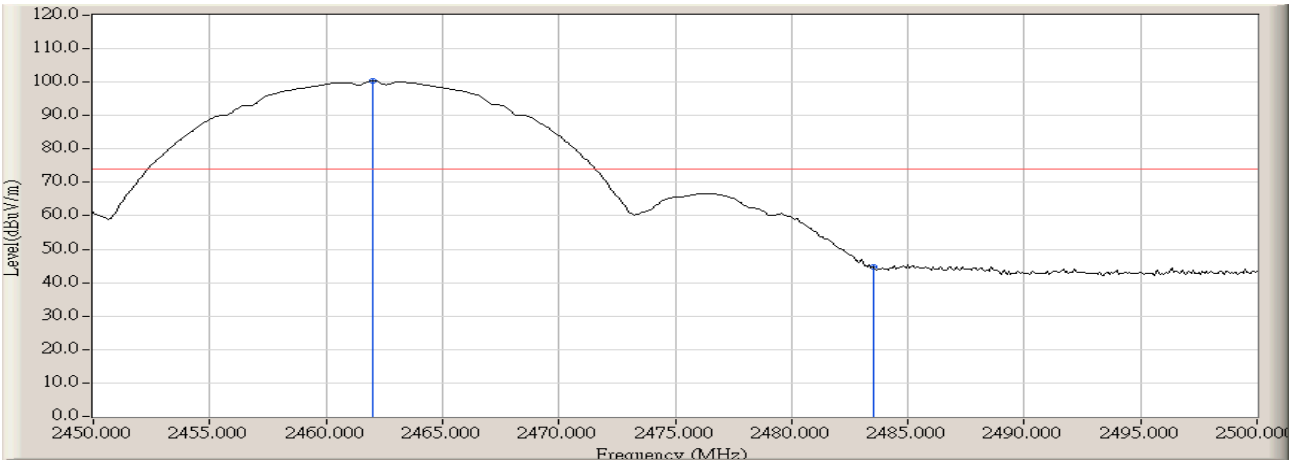
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2462.000	-3.260	106.525	103.265	N/A	N/A	PEAK
2		2483.500	-3.177	49.013	45.836	-28.134	73.970	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



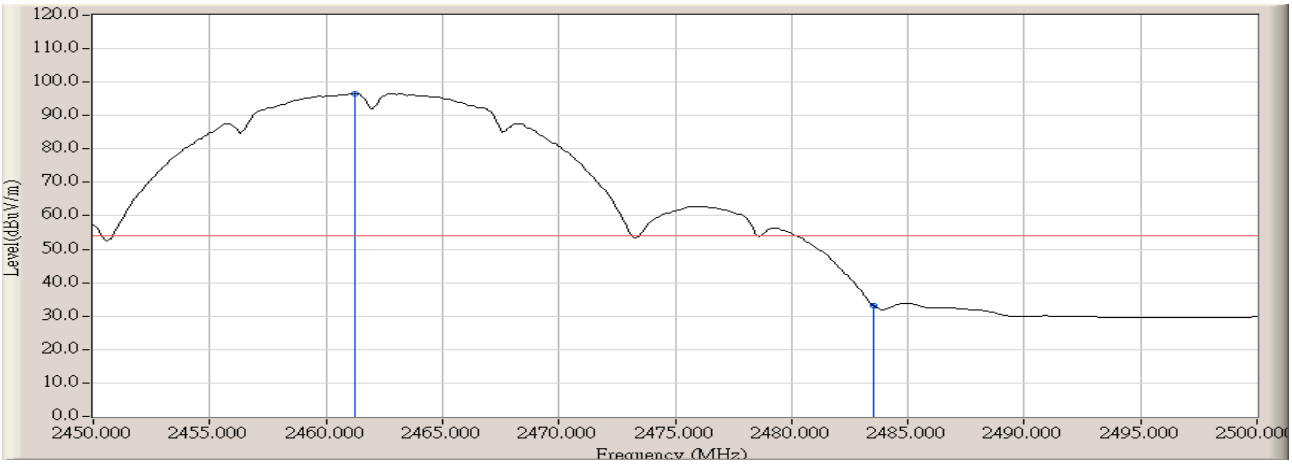
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.250	-3.261	102.764	99.502	N/A	N/A	AVERAGE
2		2483.500	-3.177	39.552	36.375	-17.595	53.970	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:09**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



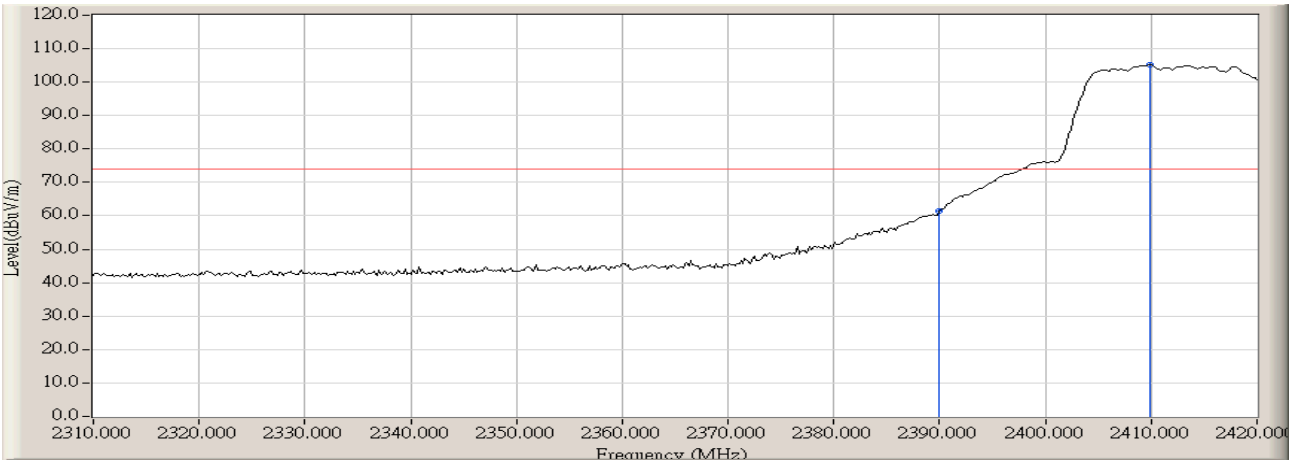
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2462.000	-3.260	103.652	100.392	N/A	N/A	PEAK
2		2483.500	-3.177	47.825	44.648	-29.322	73.970	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:09**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



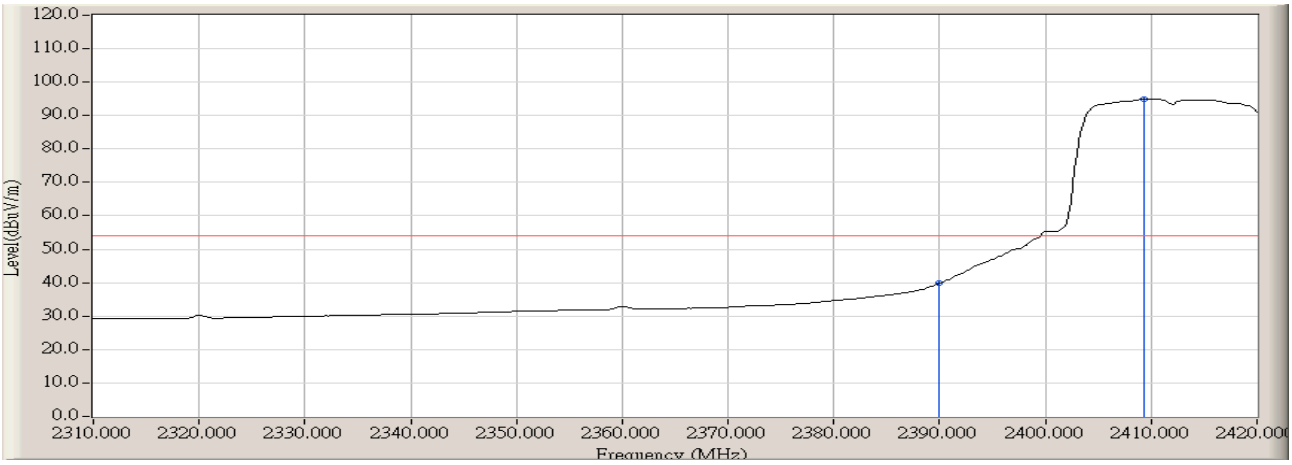
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.250	-3.261	99.907	96.645	N/A	N/A	AVERAGE
2		2483.500	-3.177	36.383	33.206	-20.764	53.970	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



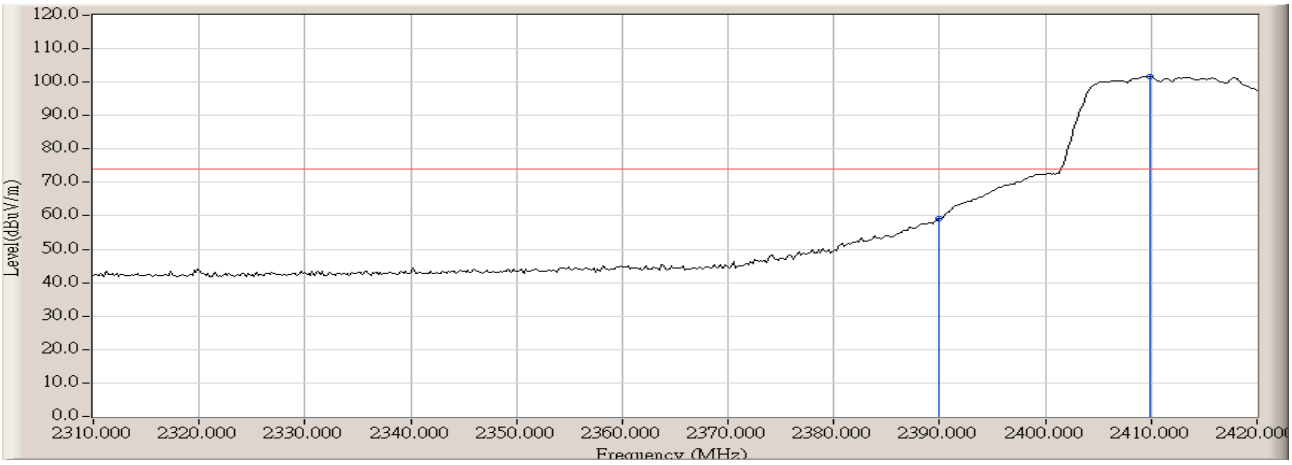
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	-3.202	64.692	61.490	-12.480	73.970	PEAK
2	*	2409.917	-3.208	108.329	105.120	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:18**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



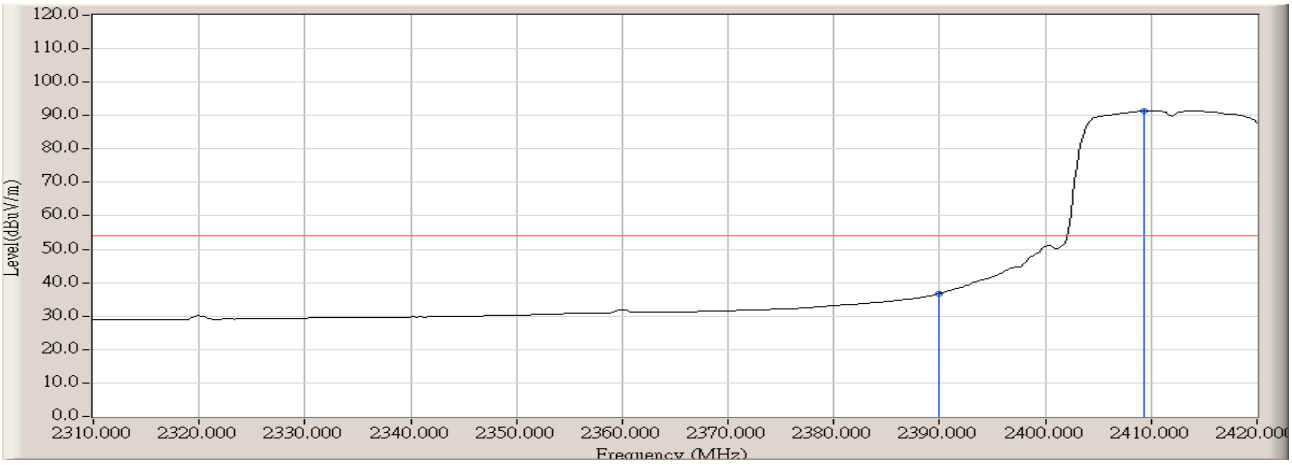
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	-3.202	43.026	39.824	-14.146	53.970	AVERAGE
2	*	2409.367	-3.208	98.205	94.997	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:23**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



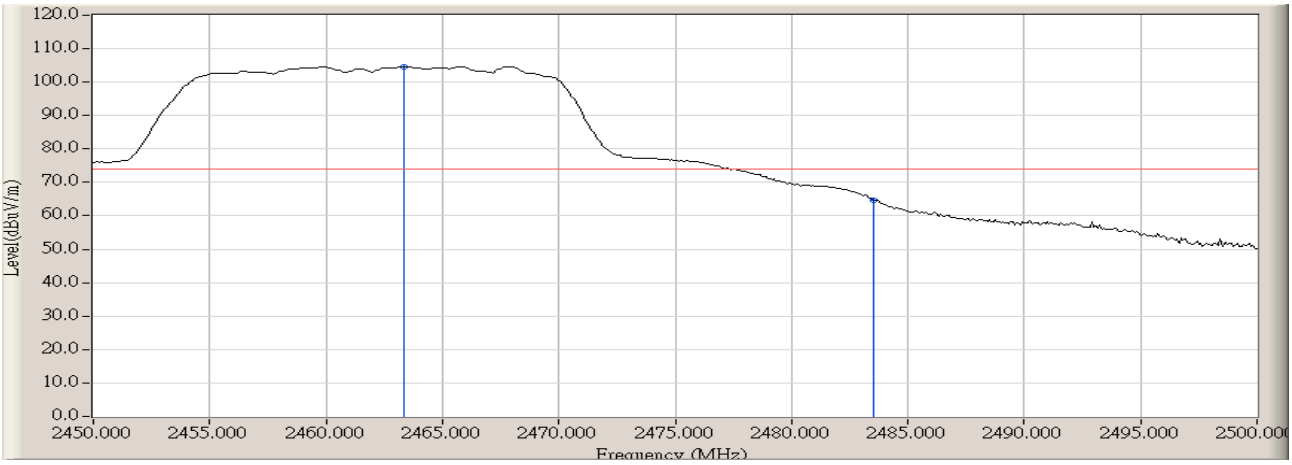
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	-3.202	62.373	59.171	-14.799	73.970	PEAK
2	*	2409.917	-3.208	104.843	101.634	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:23**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



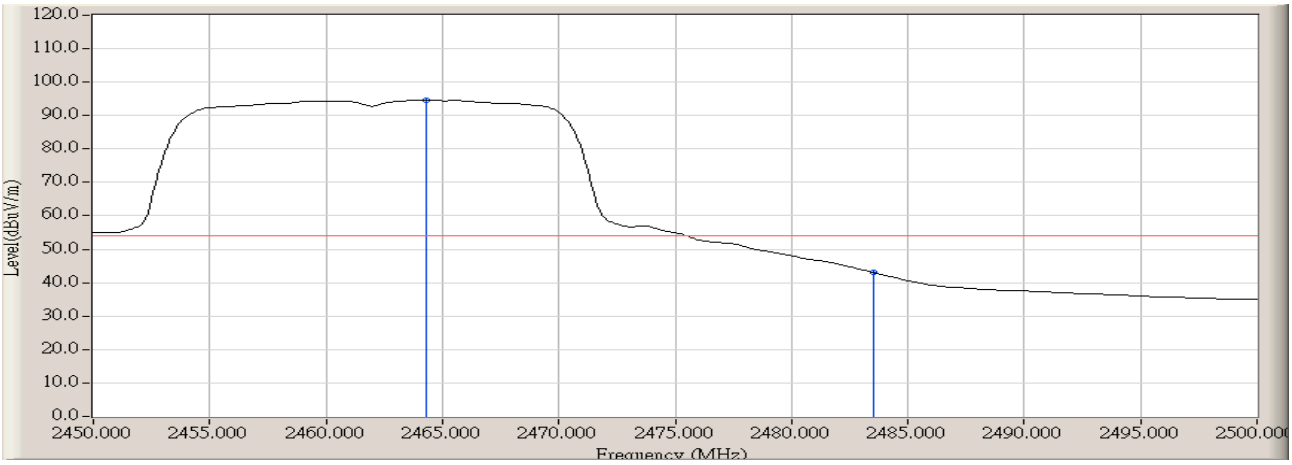
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	-3.202	39.967	36.765	-17.205	53.970	AVERAGE
2	*	2409.367	-3.208	94.723	91.515	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:30**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



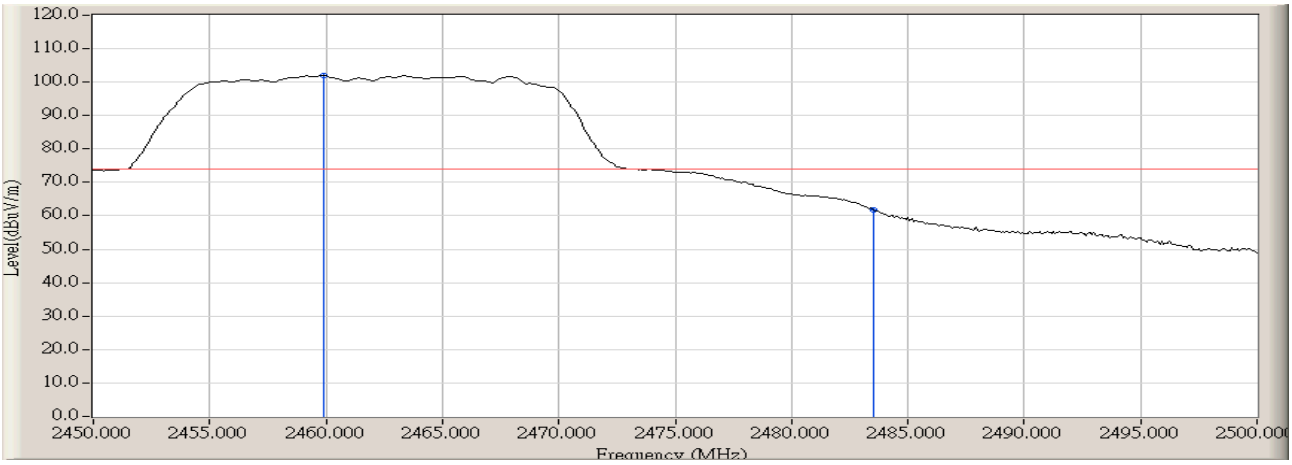
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.333	-3.255	107.891	104.636	N/A	N/A	PEAK
2		2483.500	-3.177	67.933	64.756	-9.214	73.970	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:31**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



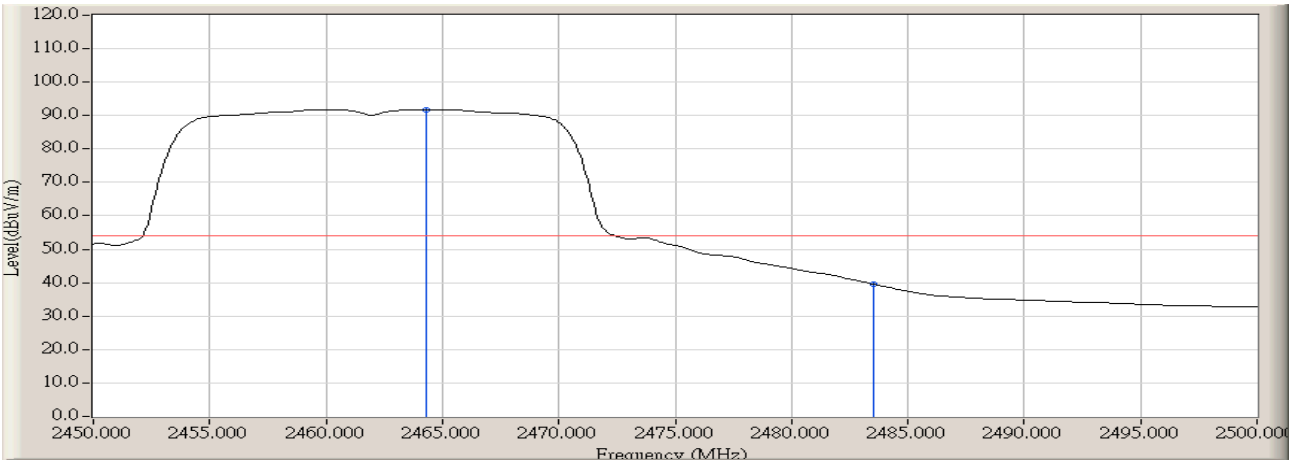
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.333	-3.250	97.767	94.517	N/A	N/A	AVERAGE
2		2483.500	-3.177	46.193	43.016	-10.954	53.970	AVERAGE

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:37**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**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	*	2459.917	-3.265	105.191	101.926	N/A	N/A	PEAK
2		2483.500	-3.177	64.843	61.666	-12.304	73.970	PEAK

Engineer : Robin	
Site : AC-4 (3m Fully-Anechoic Chamber)	**Time : 2009/01/14 - 10:37**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : Notebook Computer	**Probe : BBHA9120D_499(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**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	*	2464.333	-3.250	94.965	91.715	N/A	N/A	AVERAGE
2		2483.500	-3.177	42.751	39.574	-14.396	53.970	AVERAGE

7. Operation Frequency Range of 20dB Bandwidth

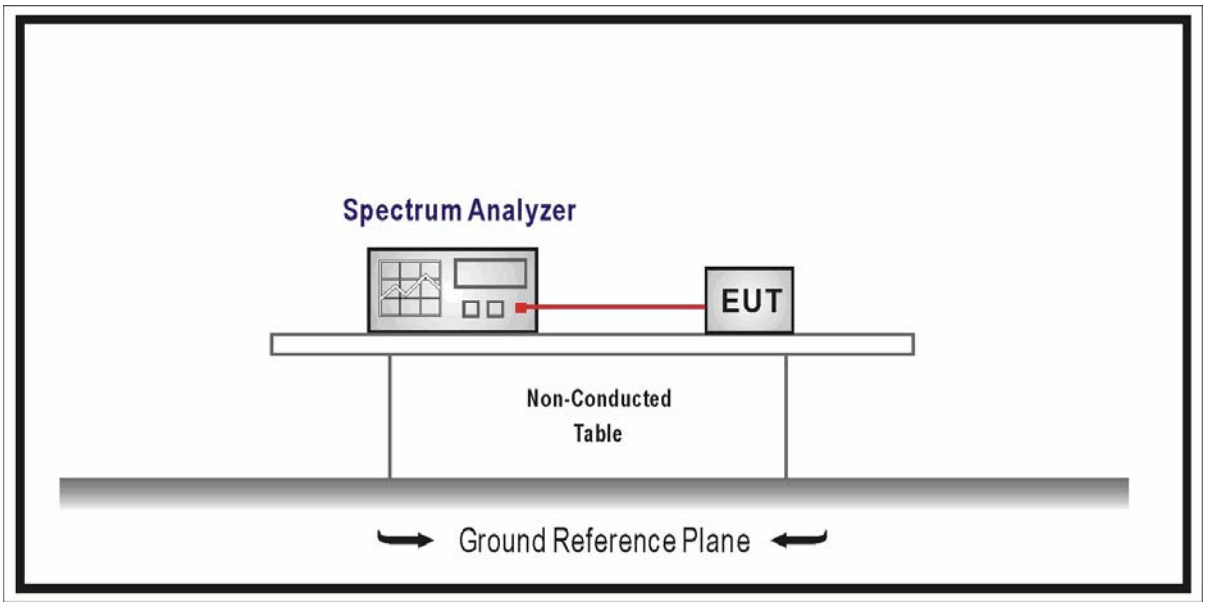
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

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.

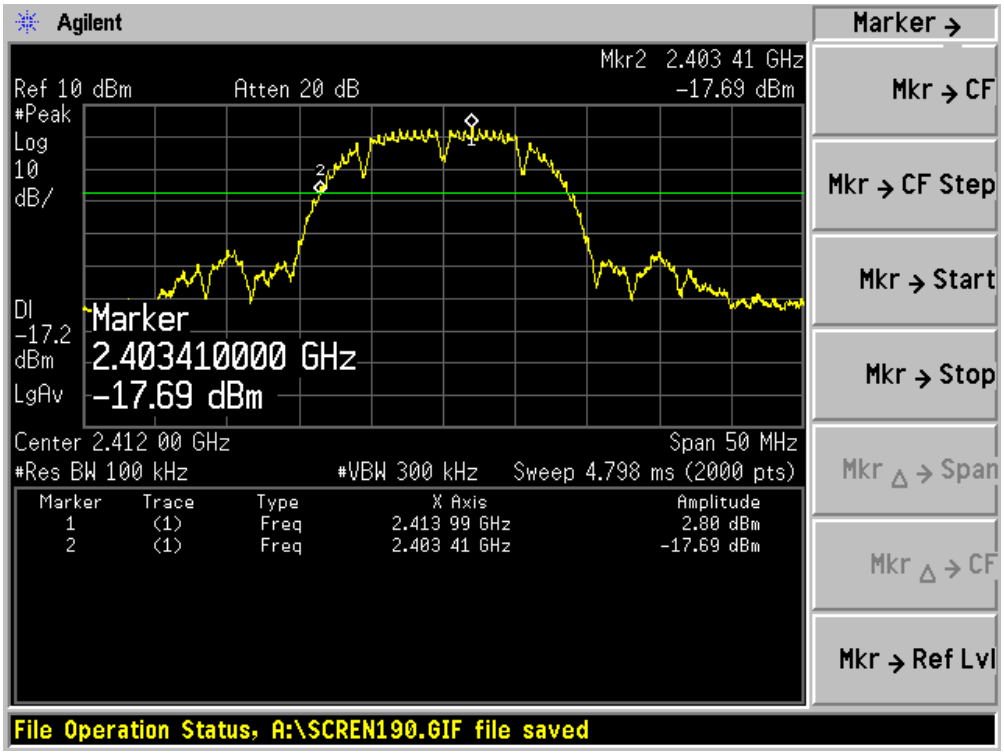
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

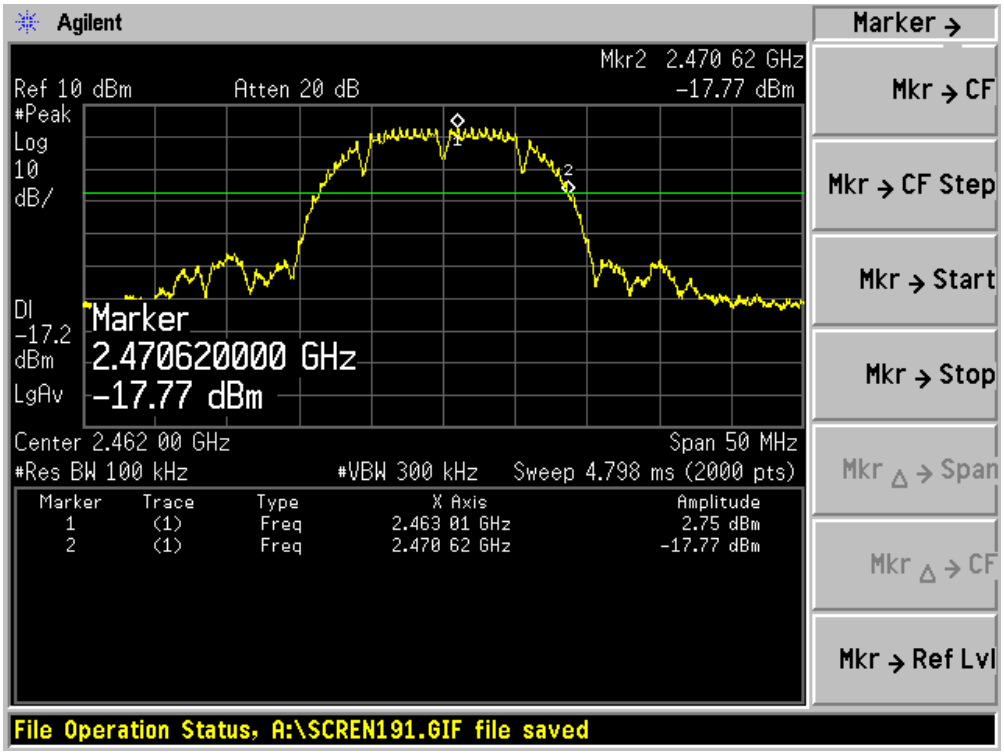
7.6. Test Result

Product	:	Notebook Computer
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel 01 (2412MHz)

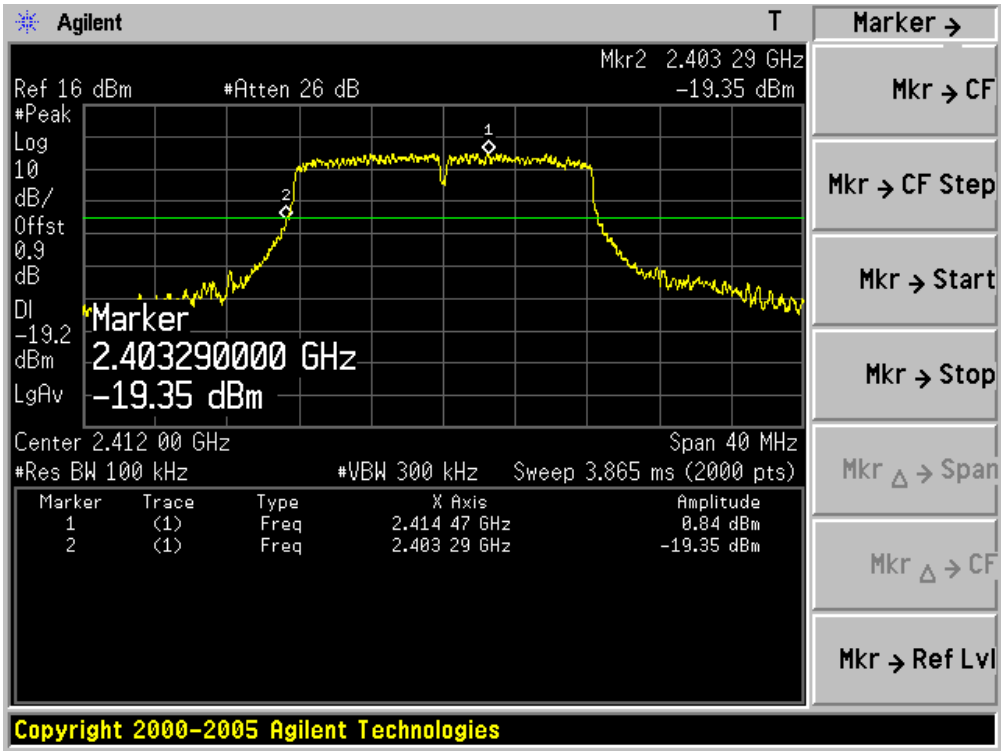


Channel 11 (2462MHz)

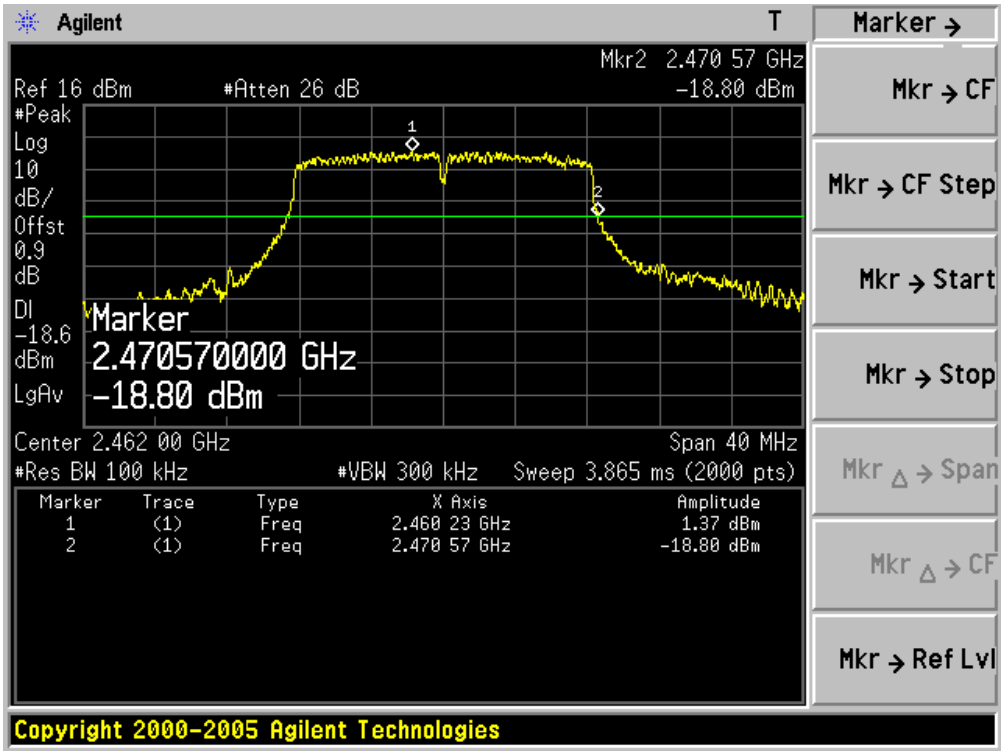


Product	:	Notebook Computer
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)



Channel 11 (2462MHz)



8. Occupied Bandwidth

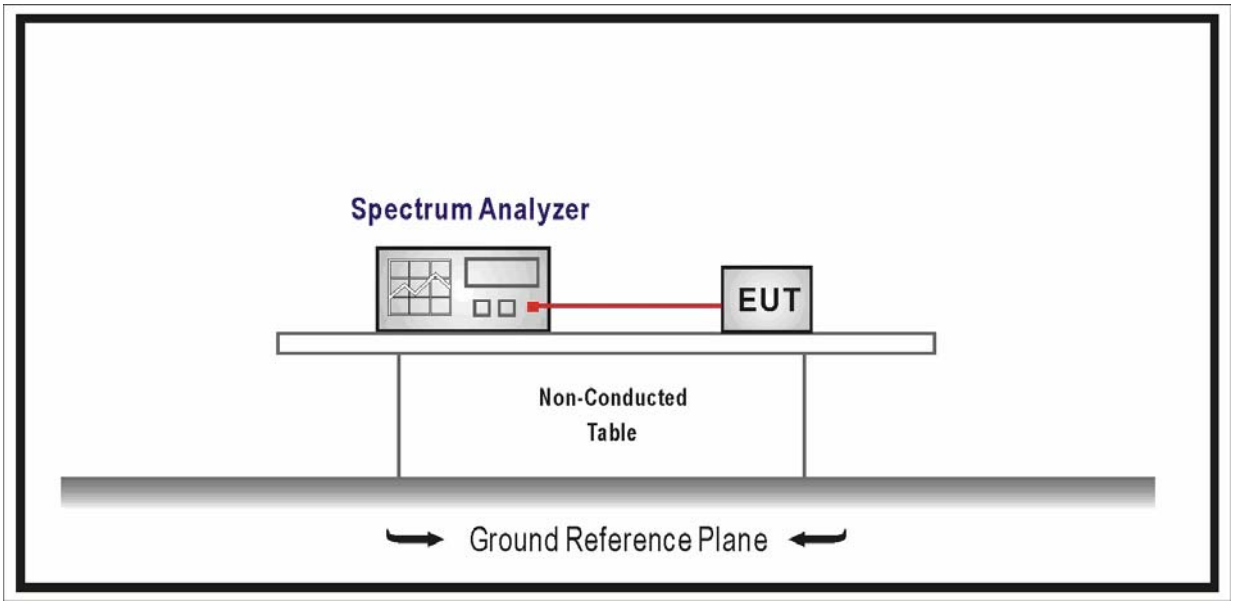
8.1. Test Equipment

Occupied Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

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

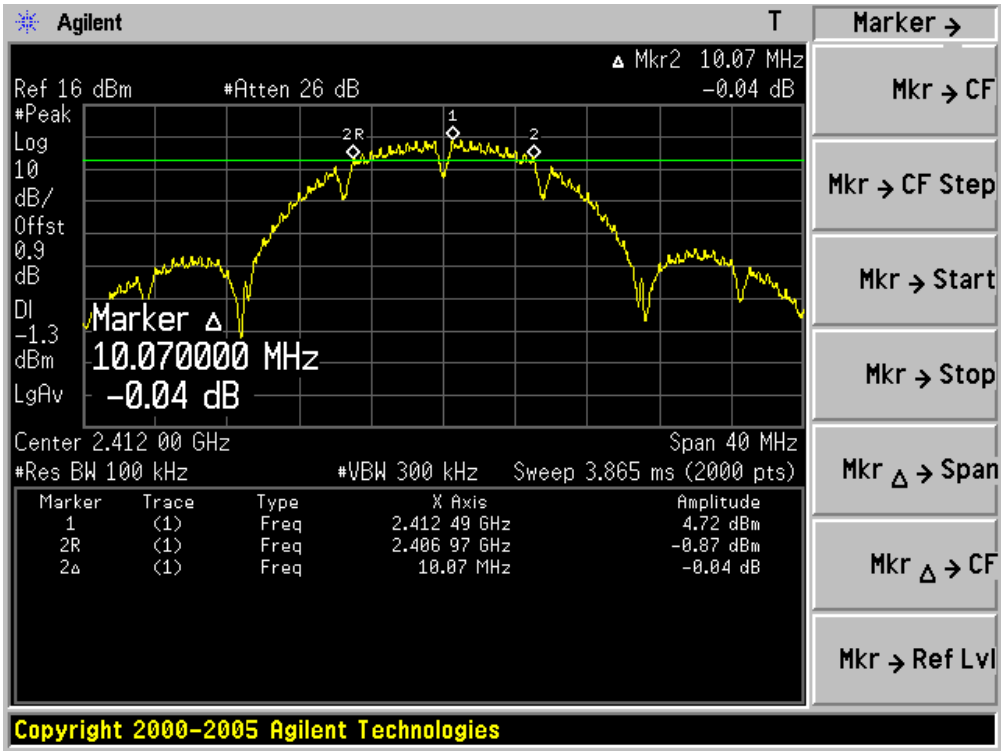
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

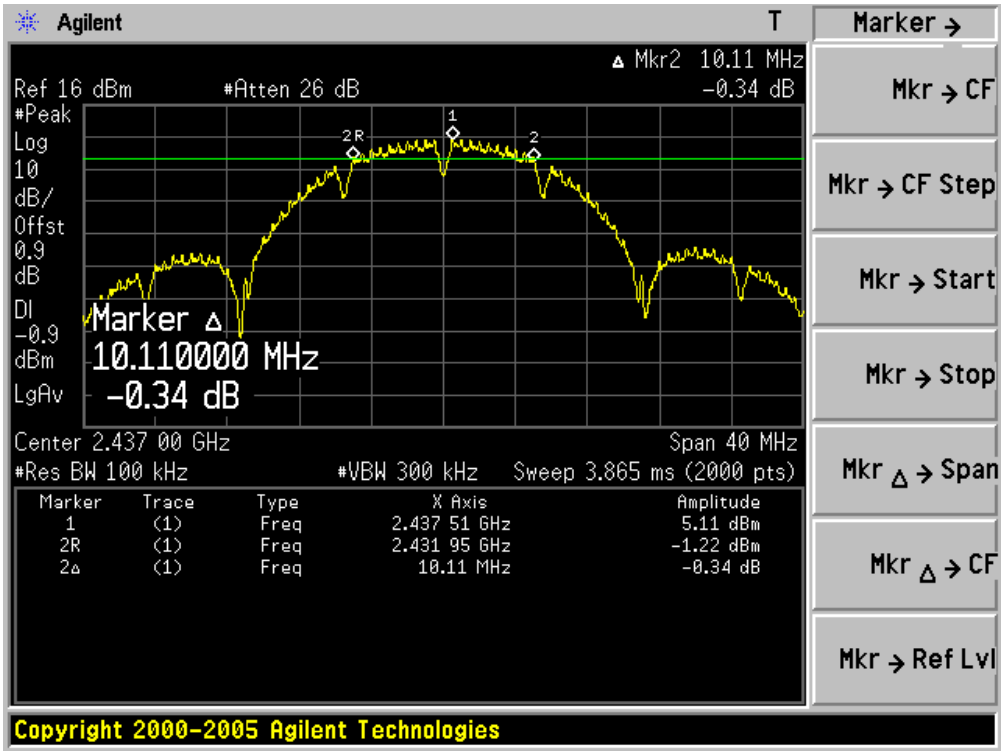
Product	:	Notebook Computer
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	10070	500	Pass
06	2437	10110	500	Pass
11	2462	10110	500	Pass

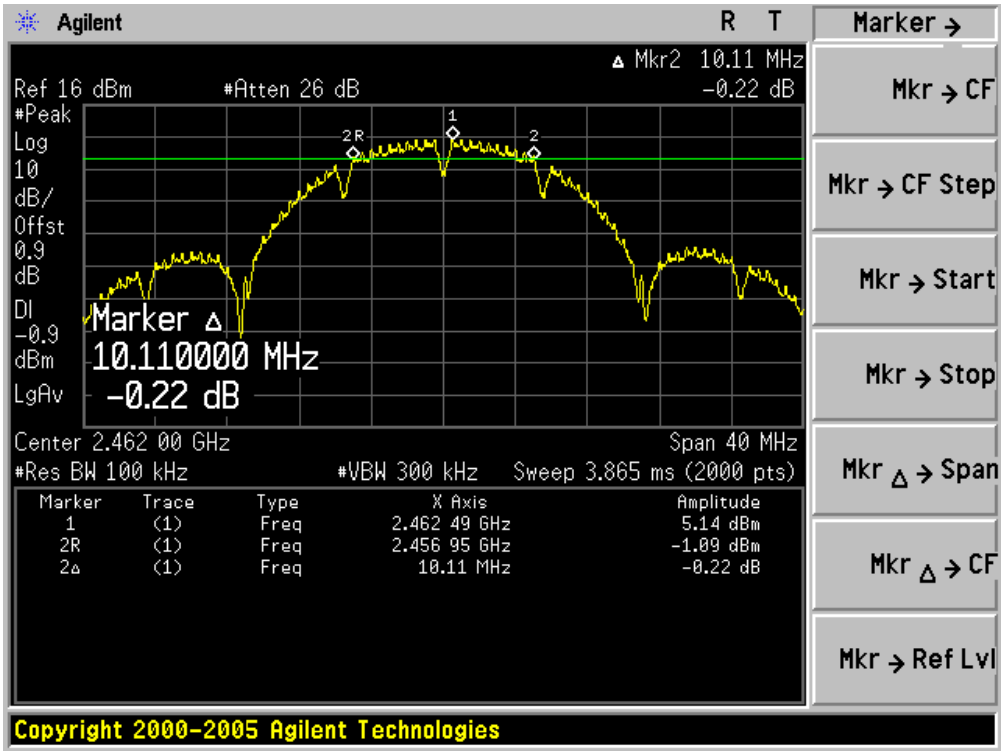
Channel 01 (2412MHz)



Channel 06 (2437MHz)



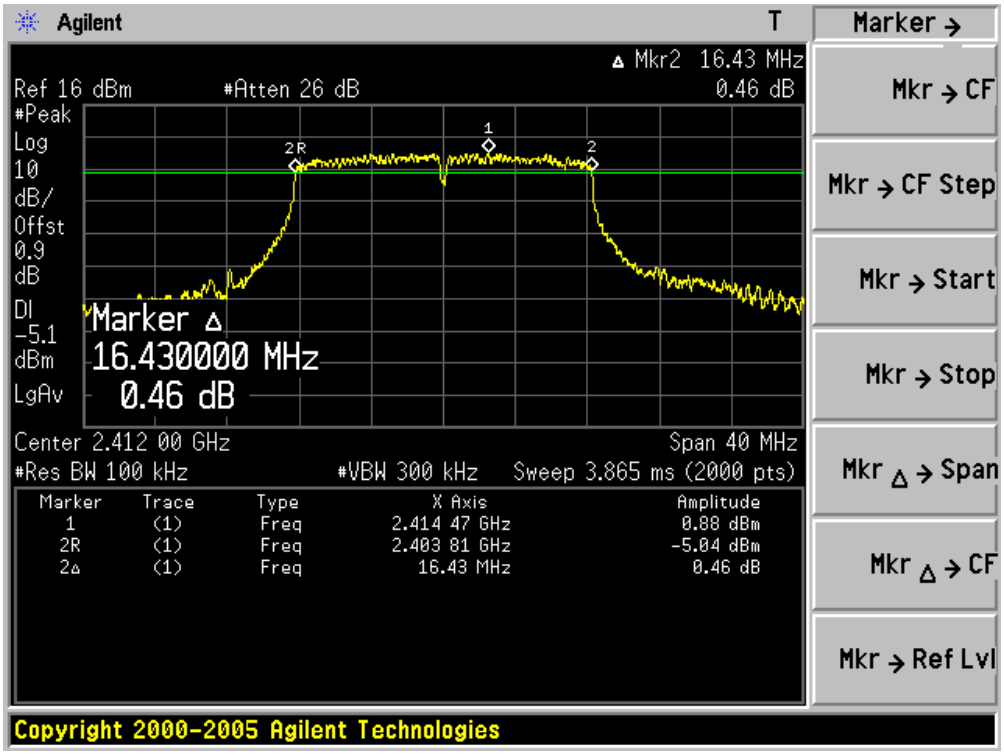
Channel 11 (2462MHz)



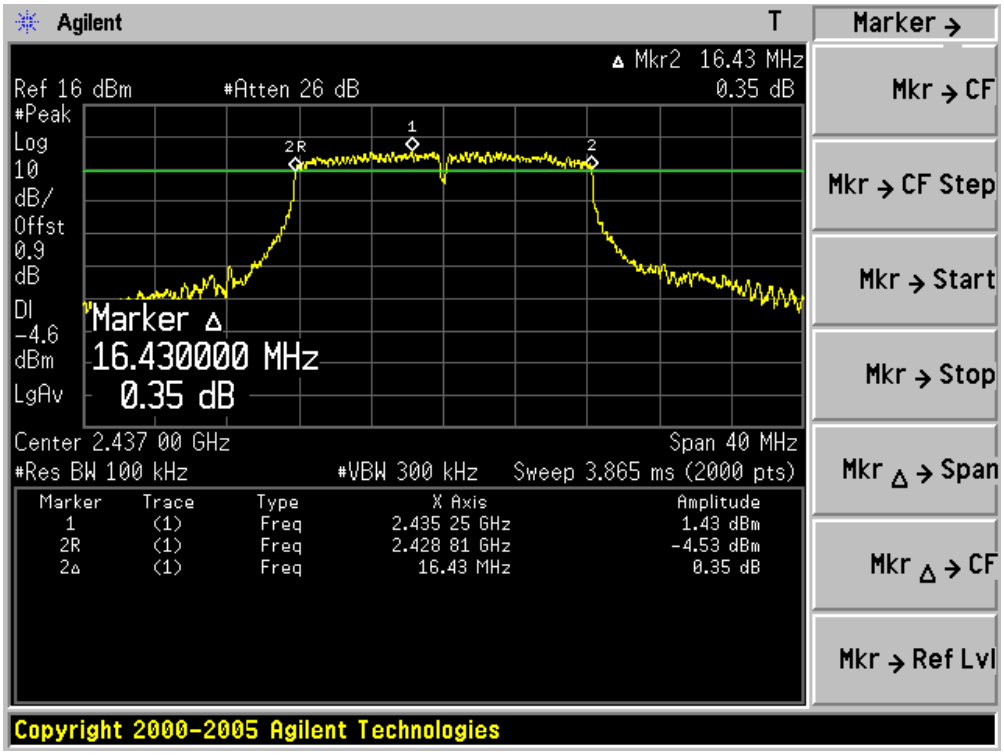
Product	:	Notebook Computer
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

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

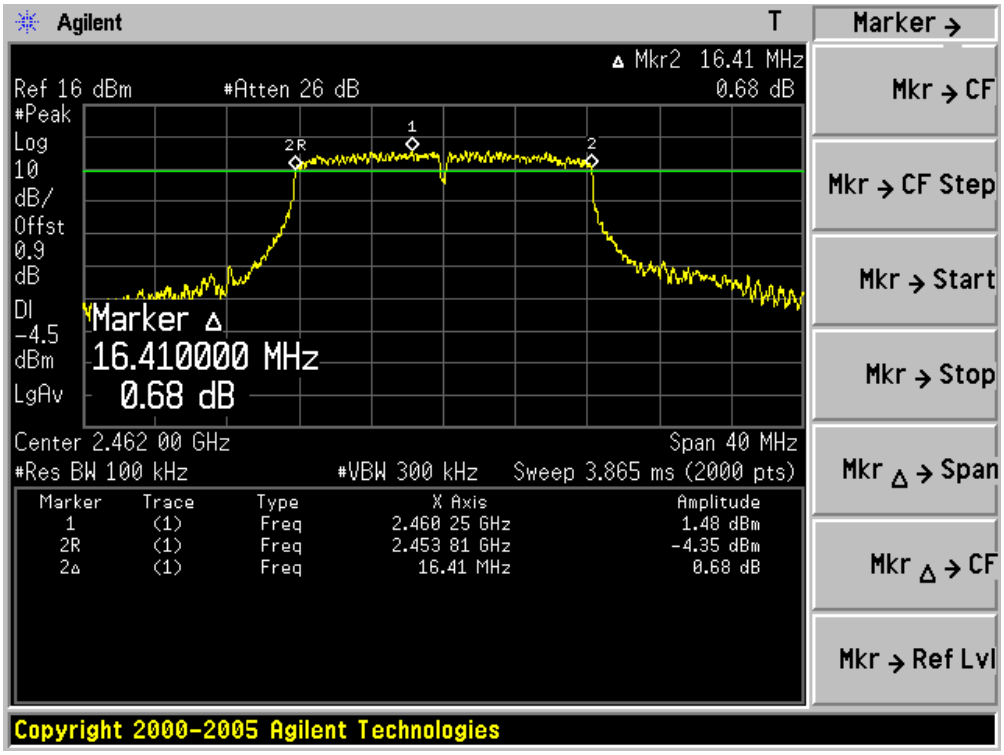
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



9. Power Output

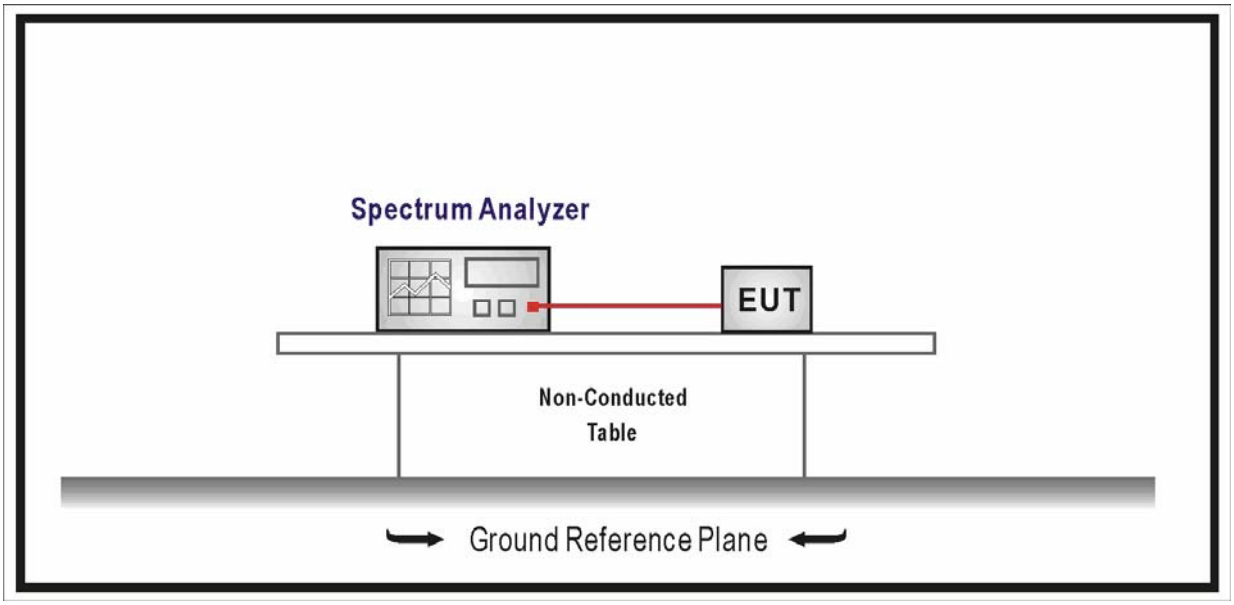
9.1. Test Equipment

Power Output / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

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.
Power output measurement allowed per Section 15.247(b)(3).
In the following, “T” is the transmission pulse duration over which the transmitter is on and transmitting at its maximum power control level. Measurements are performed with a spectrum analyzer. Three methods are provided to accommodate measurement limitations of the spectrum analyzer depending on signal parameters. Set resolution bandwidth (RBW) = 1 MHz. Set span to encompass the entire emission bandwidth (EBW) of the signal. Use automatic setting for analyzer sweep time.

As “T” ≧ sweep time, the test procedure will be used as following:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW ≧ 3 MHz.
4. Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise use peak detector mode.
5. Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to “free run”.
6. Trace average 100 traces in power averaging mode.
7. Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer’s band power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

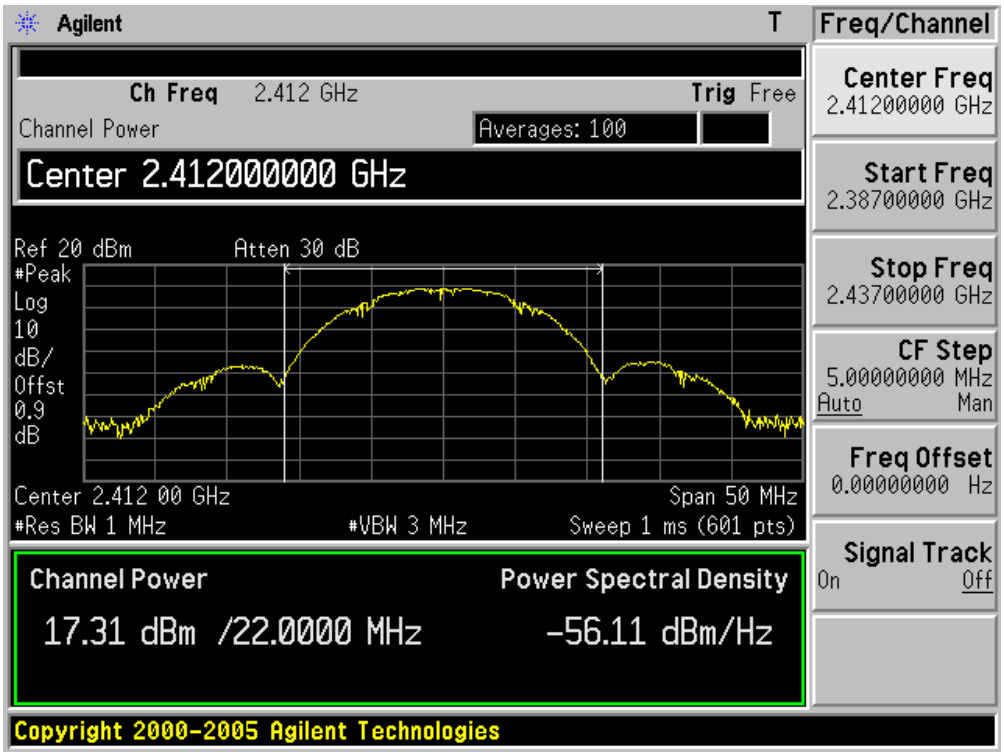
9.6. Test Result

Product	:	Notebook Computer
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

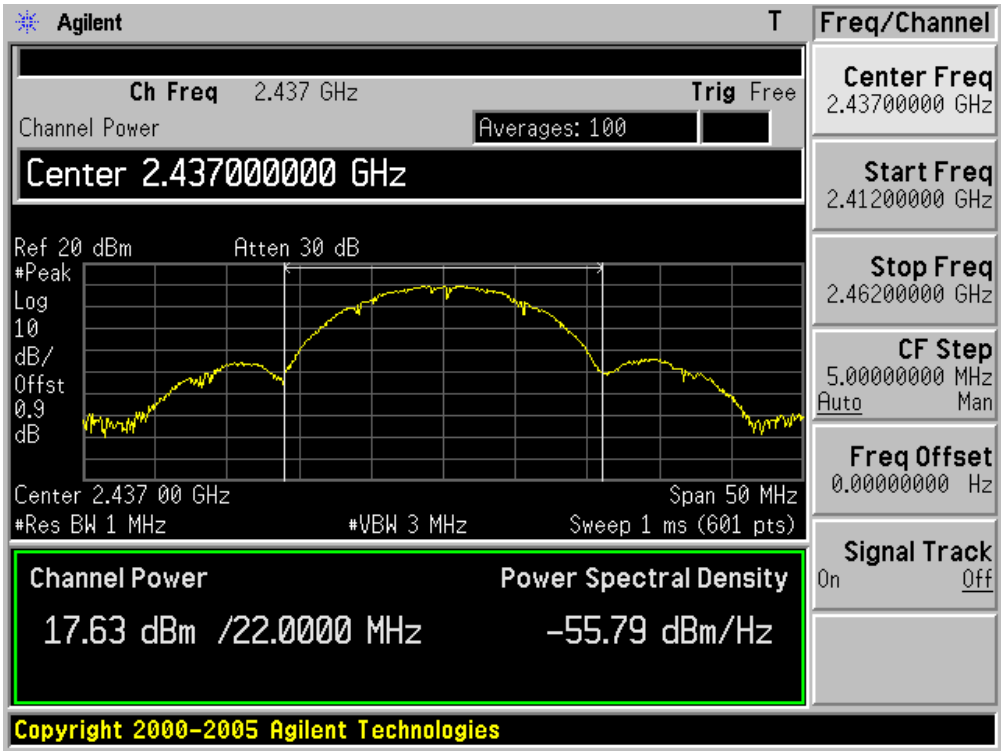
Channel No.	Frequency (MHz)	Data Rate (Mbps)				Limit (dBm)
		1	2	5.5	11	
01	2412	17.31	--	--	--	30
06	2437	17.63	17.58	17.51	17.36	30
11	2462	17.67	--	--	--	30

Note: The antenna gain of transmitter is less than 6 dBi and other than fixed, point-to-point operation, therefore the limit is 30 dBm.

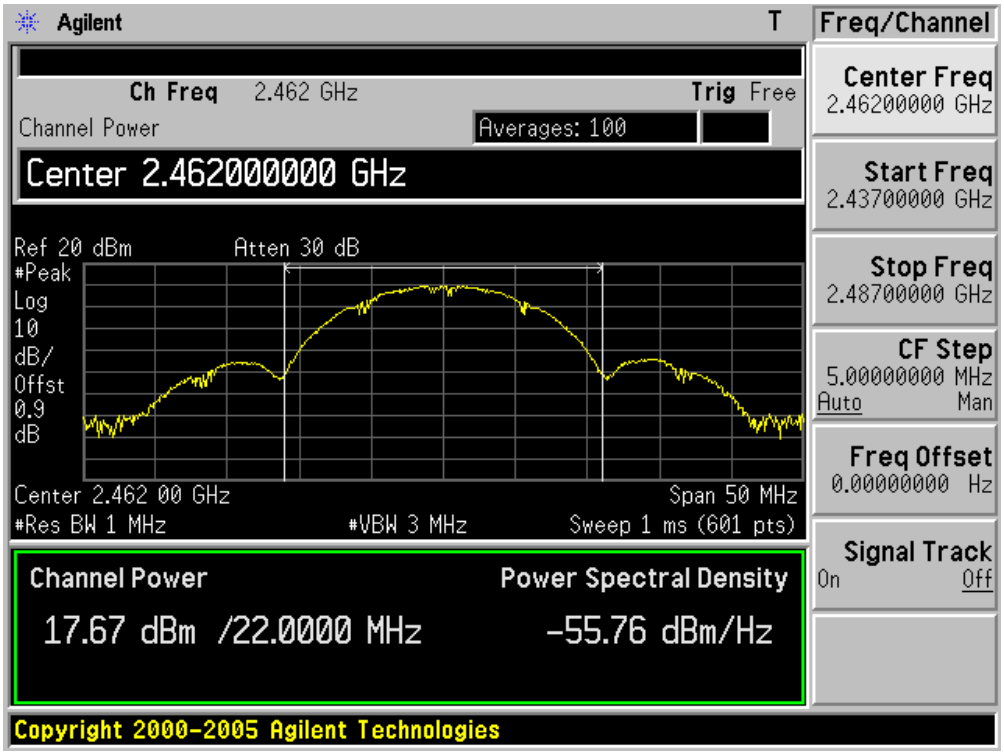
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

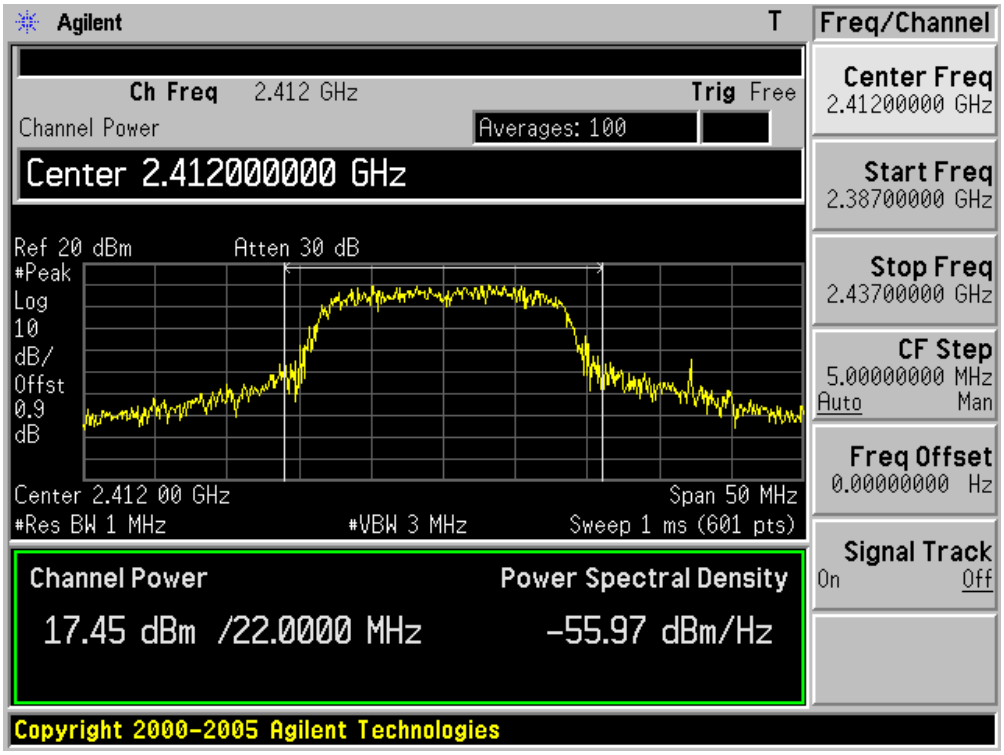


Product	:	Notebook Computer
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

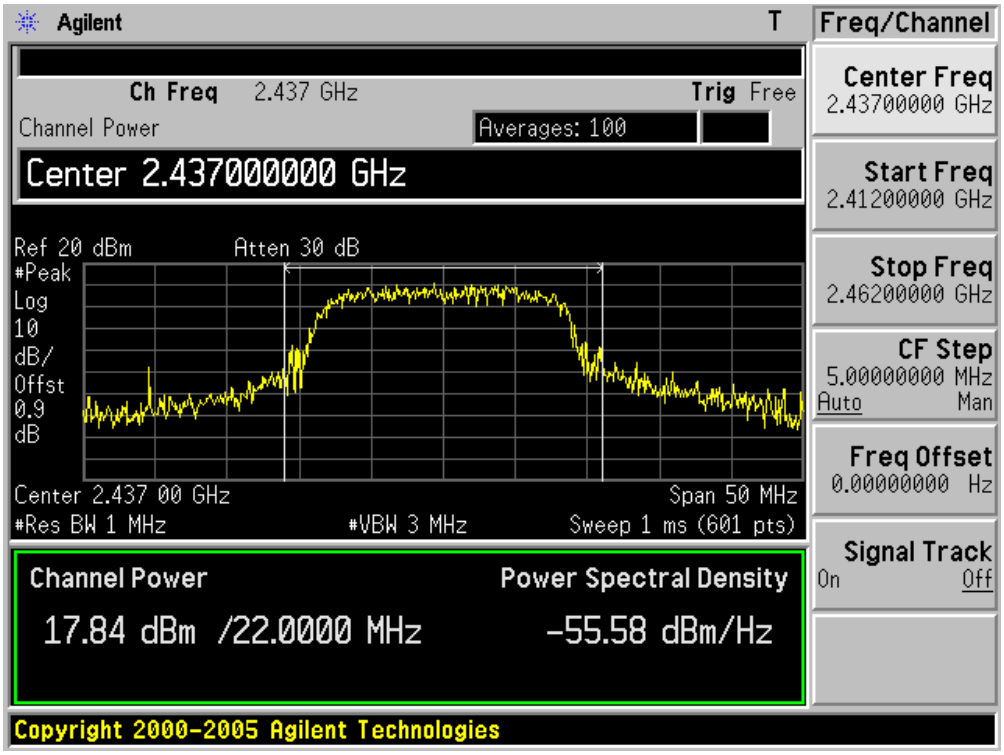
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Limit (dBm)
		6	9	12	18	24	36	48	54	
01	2412	17.45	--	--	--	--	--	--	--	30
06	2437	17.84	17.16	17.12	17.10	17.11	17.09	17.11	17.05	30
11	2462	17.98	--	--	--	--	--	--	--	30

Note: The antenna gain of transmitter is less than 6 dBi and other than fixed, point-to-point operation, therefore the limit is 30 dBm.

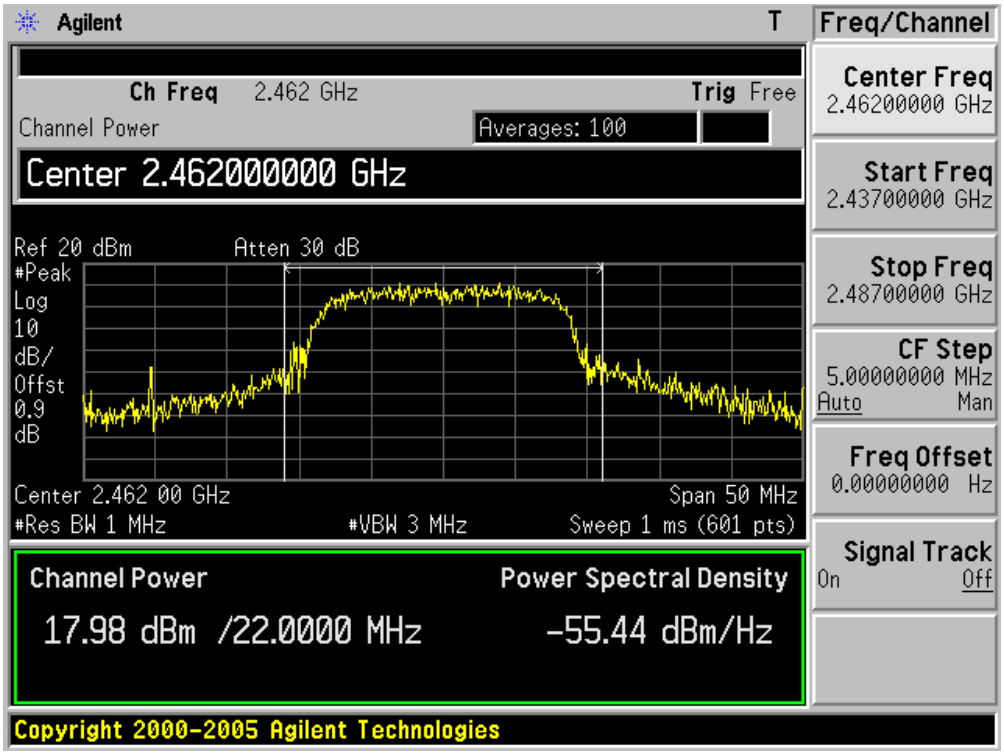
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



10. Power Spectral Density

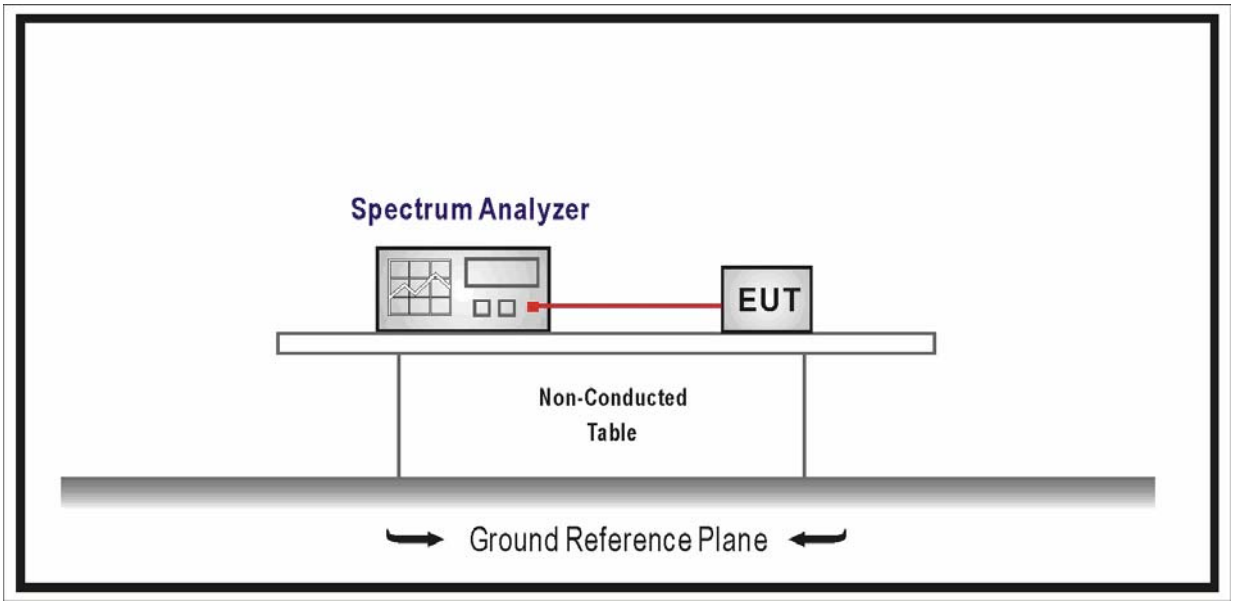
10.1. Test Equipment

Power Spectral Density / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2008/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2008/03/09

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, and choose option 2 test method for this item.

Set RBW= 3 kHz, Set VBW≧ 9 kHz, Sweep time=Auto, Set detector=Peak detector.

10.5. Uncertainty

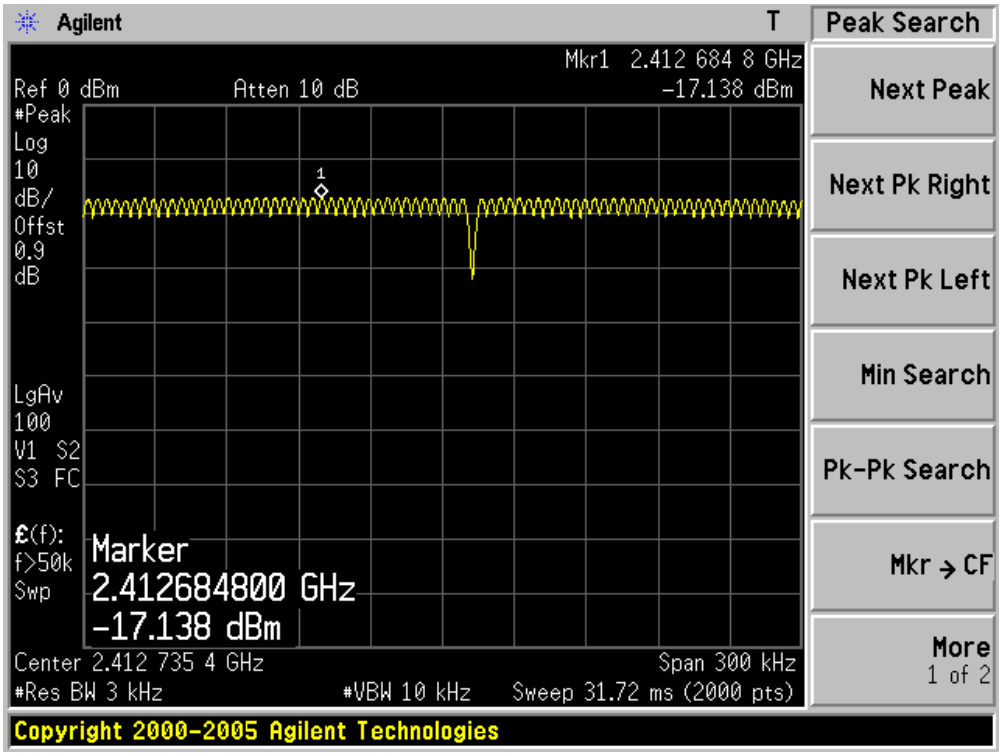
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

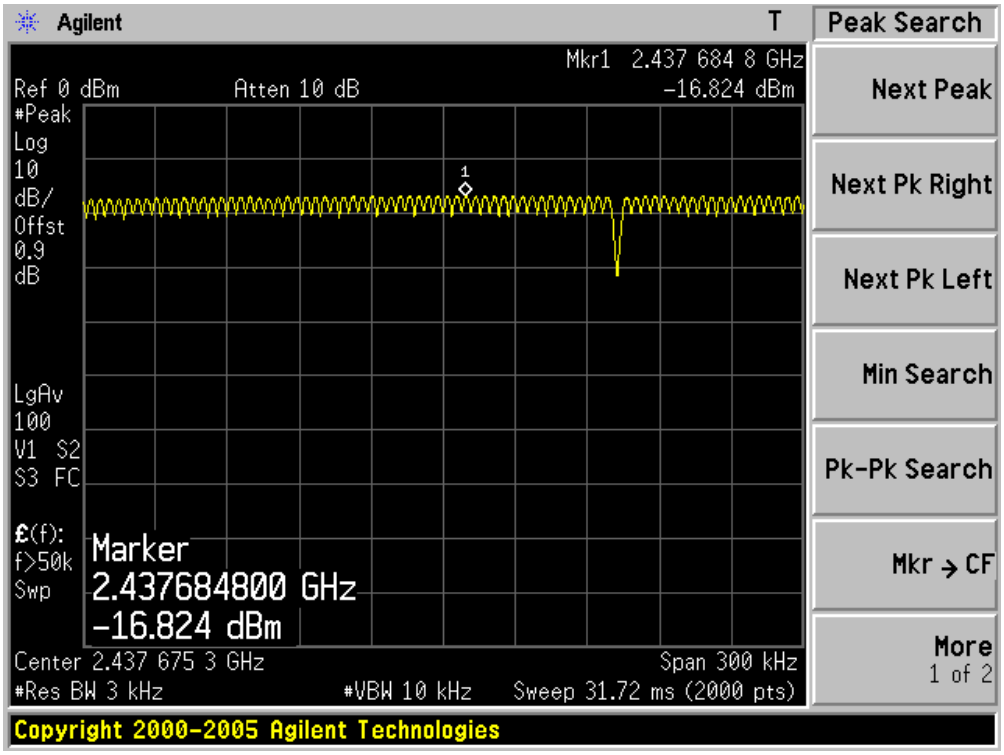
Product	:	Notebook Computer
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-17.138	8	Pass
06	2437	-16.824	8	Pass
11	2462	-16.646	8	Pass

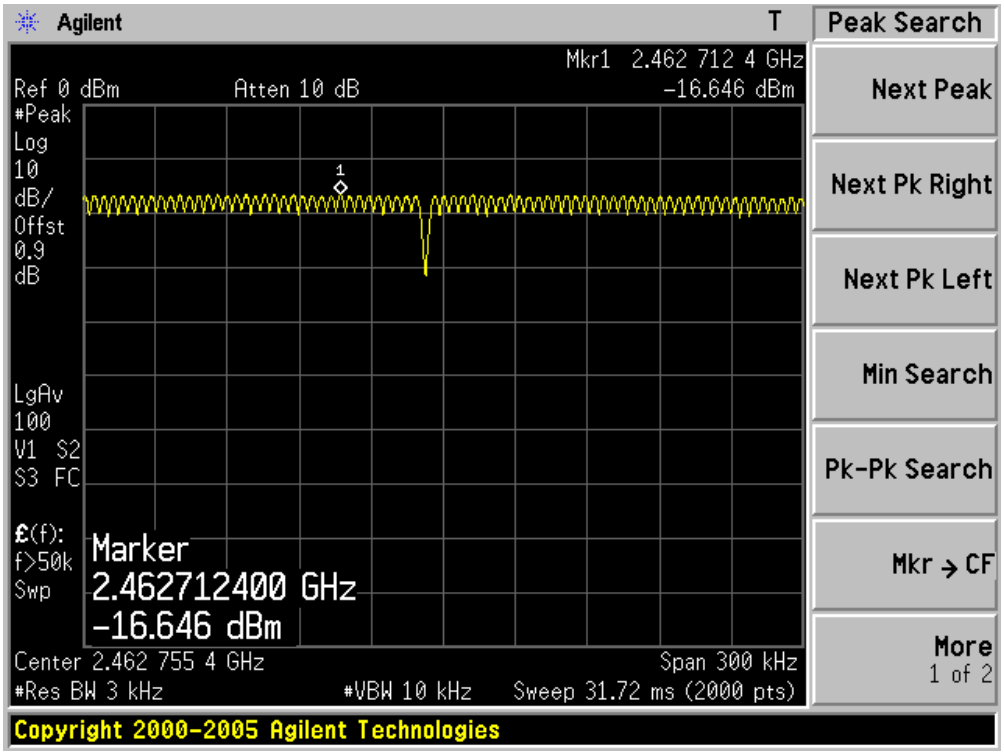
Channel 01 (2412MHz)



Channel 06 (2437MHz)



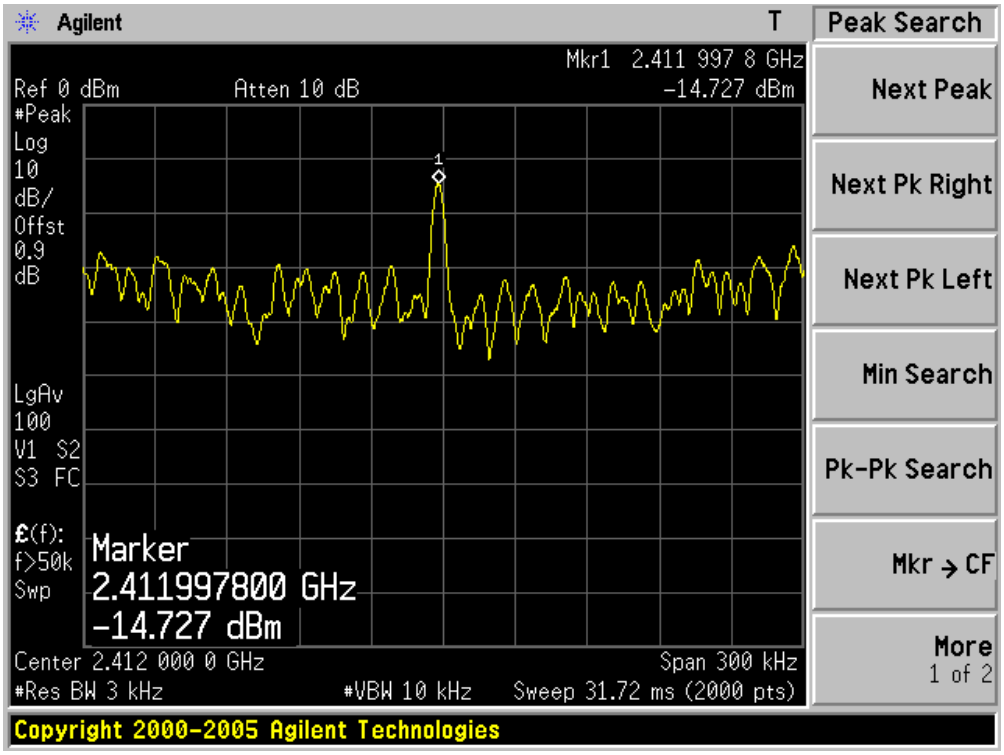
Channel 11 (2462MHz)



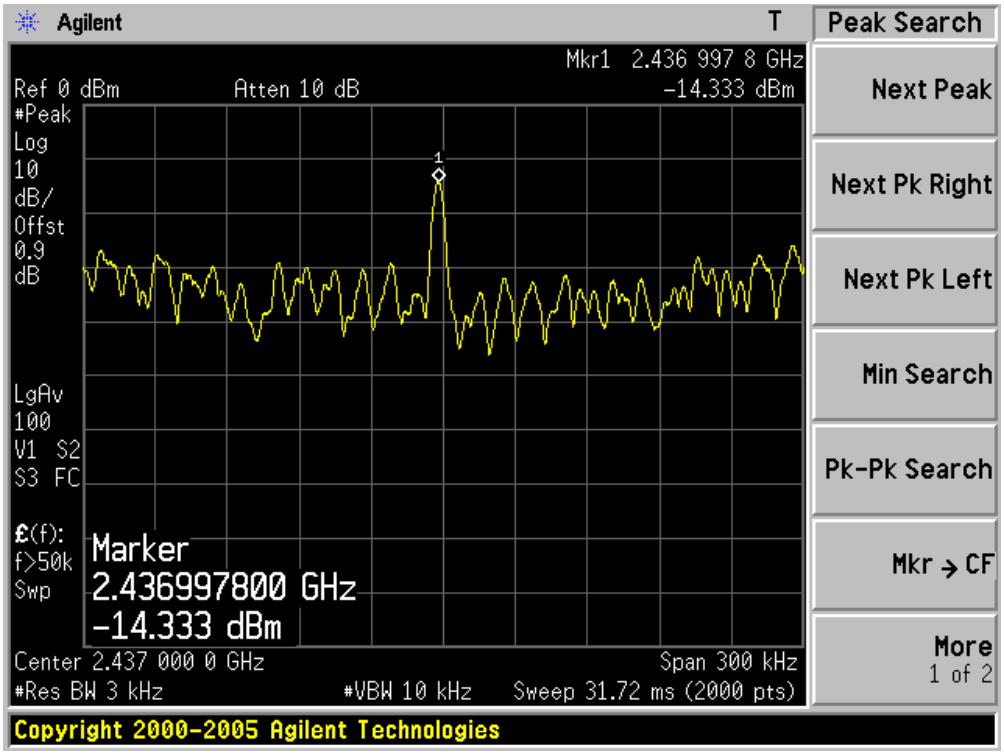
Product	:	Notebook Computer
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-14.727	8	Pass
06	2437	-14.333	8	Pass
11	2462	-14.117	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)