



Test Report

Product Name : Notebook
Model No. : SZ900/SZ901
FCC ID : WXC-900901WBG

Applicant : FOXCONN INTERNATIONAL INC
Address : 2 TZU YU ST TU-CHENG, TAIPEI HSIEN 236 TAIWAN

Date of Receipt : 2009/05/31
Issued Date : 2009/06/19
Report No. : 096S038R-RF-US-P05V01
Report Version : 1.1

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 : 2009/06/19

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Product Name : Notebook

Applicant : FOXCONN INTERNATIONAL INC

Address : 2 TZU YU ST TU-CHENG, TAIPEI HSIEN 236 TAIWAN

Manufacturer : FULIN ELECTRONICAL TECHNOLOGY (CHANGSHU)
CO LTD

Address : HUANGPU RD, DONGNAN ECONOMICAL
DEVELOPMENT ZONE, CHANGSHU JIANGSU, CHINA

Model No. : SZ900/SZ901

FCC ID : WXC-900901WBG

Rated Voltage : AC 120 V / 60 Hz

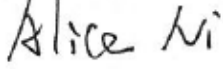
EUT Voltage : AC 100~240 V/ 50 Hz

Trade Name : FOXCONN


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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(Gene Chang)

Laboratory Information

We , **QuietTek 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 QuietTek Corporation's Web Site : <http://tw.quietek.com/modules/myalbum/>
The address and introduction of QuietTek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>
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TABLE OF CONTENTS

Description	Page
1. General Information.....	6
1.1. EUT Description.....	6
1.2. Mode of Operation.....	8
1.3. Tested System Details.....	9
1.4. Configuration of Tested System.....	10
1.5. EUT Exercise Software	11
2. Technical Test.....	12
2.1. Summary of Test Result.....	12
2.2. Test Environment	13
3. Conducted Emission.....	14
3.1. Test Equipment.....	14
3.2. Test Setup.....	14
3.3. Limit.....	15
3.4. Test Procedure.....	15
3.5. Uncertainty.....	15
3.6. Test Result	16
4. Radiated Emission.....	22
4.1. Test Equipment.....	22
4.2. Test Setup.....	23
4.3. Limit.....	24
4.4. Test Procedure.....	24
4.5. Uncertainty.....	24
4.6. Test Result	25
5. RF Antenna Conducted Spurious.....	29
5.1. Test Equipment.....	29
5.2. Test Setup.....	29
5.3. Limit.....	29
5.4. Test Procedure.....	30
5.5. Uncertainty.....	30
5.6. Test Result.....	31
6. Radiated Emission Band Edge.....	35
6.1. Test Equipment.....	35
6.2. Test Setup.....	36
6.3. Limit.....	36
6.4. Test Procedure.....	36
6.5. Uncertainty.....	36
6.6. Test Result.....	37

7. Operation Frequency Range of 20dB Bandwidth.....	53
7.1. Test Equipment.....	53
7.2. Test Setup.....	53
7.3. Limit.....	53
7.4. Test Procedure.....	53
7.5. Uncertainty.....	54
7.6. Test Result.....	55
8. Occupied Bandwidth.....	57
8.1. Test Equipment.....	57
8.2. Test Setup.....	57
8.3. Limit.....	57
8.4. Test Procedure.....	57
8.5. Uncertainty.....	58
8.6. Test Result.....	59
9. Power Output.....	63
9.1. Test Equipment.....	63
9.2. Test Setup.....	63
9.3. Limit.....	63
9.4. Test Procedure.....	64
9.5. Uncertainty.....	64
9.6. Test Result.....	65
10. Power Spectral Density.....	67
10.1. Test Equipment.....	67
10.2. Test Setup.....	67
10.3. Limit.....	67
10.4. Test Procedure.....	67
10.5. Uncertainty.....	68
10.6. Test Result.....	69

1. General Information

1.1. EUT Description

Product Name	Notebook
Trade Name	FOXCONN
Model No.	SZ900/SZ901
WLAN Work 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	802.11g: 6/9/12/18/24/36/48/54 Mbps
	802.11b: 1/2/5.5/11 Mbps
Channel Control	Auto
Antenna Type	PIFA Antenna
Antenna Gain	0.75dBi

Note: This product includes two models SZ900 and SZ901. SZ900 and SZ901 are only different from externally. The motherboard and the material are the same.

Component	
AC Adapter	Manufacturer: Darfon Electronics Corp. Model: BA01-J Input: 100-240V~, 50~60Hz, 1A Output: 19V, 2.1A

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

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
Mode1: 802.11b (TX)
Mode2: 802.11g (TX)

Note:

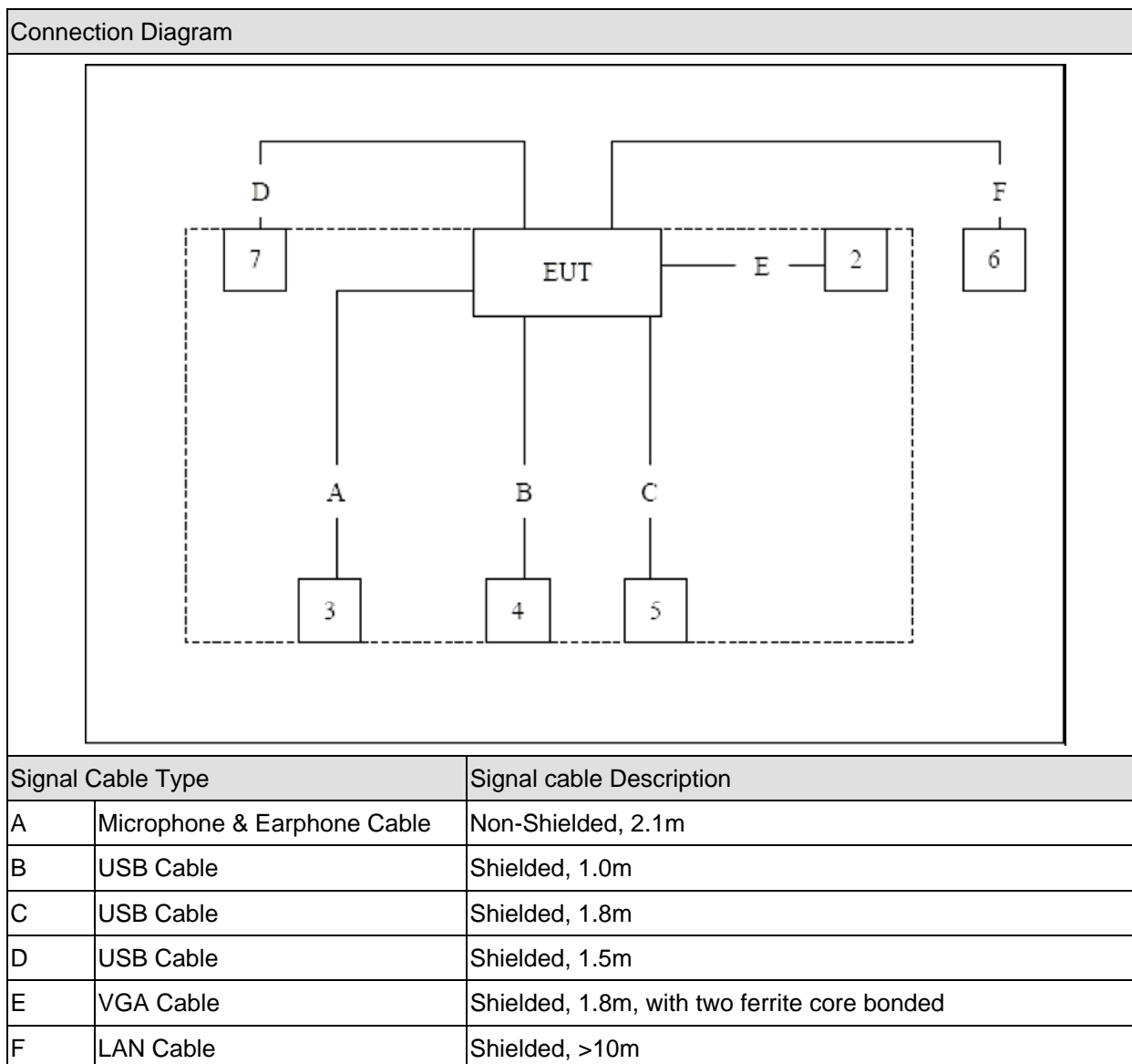
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations.

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
2 CRT "21	IBM	6652-U3N	1	Non-Shielded, 1.8m
3 Microphone & Earphone	SALAR	V81	N/A	N/A
4 iPod	Apple	A1199	6U715YSVVQ5	Power by PC
5 USB Mouse	DELL	MO56UOA	GOQ02414	Power by PC
6 Notebook	DELL	PP19L	JH097 A01	Power by adapter
7 Printer	HP	C9027D	CN53Q3Y22X	Non-Shielded, 1.8m

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	Open the software “ART”, then select the channel and start 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	51
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

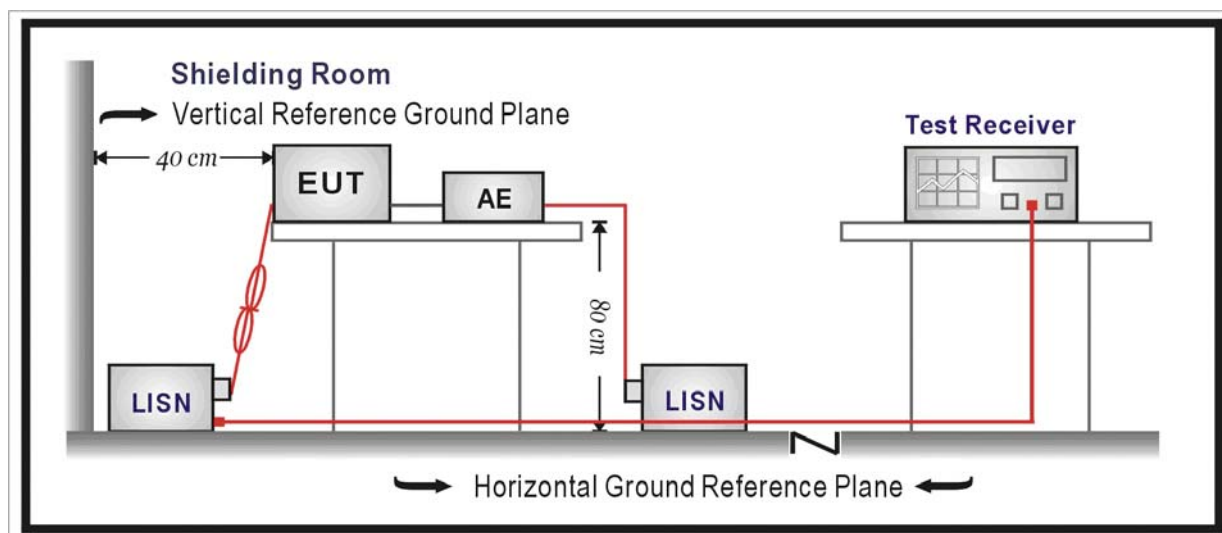
3.1. Test Equipment

Conducted Emission / SR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2009/04/23
Two-Line V-Network	R&S	ENV216	100013	2009/06/11
Two-Line V-Network	R&S	ENV216	100014	2009/04/23
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2008/11/24
50ohm Termination	SHX	TF2	07081401	2008/09/28
Coaxial Cable	Luthi	RG214	519358	2009/05/25
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.

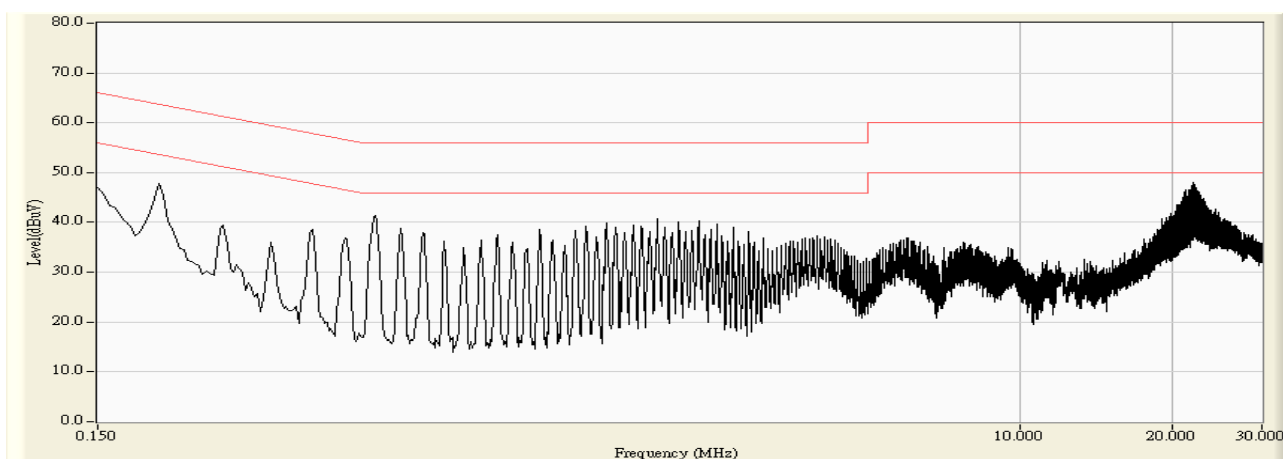
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Uncertainty

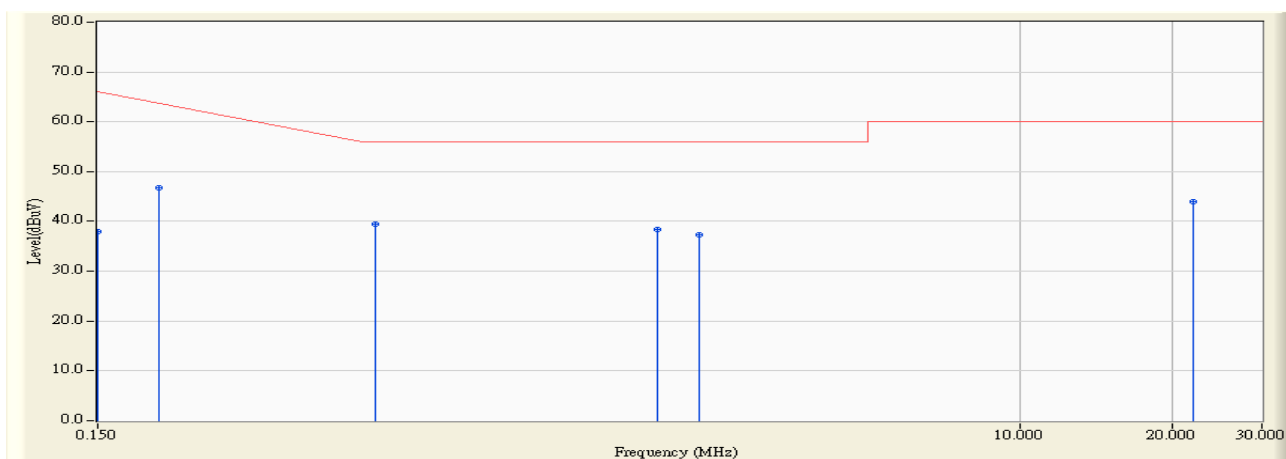
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/06/17 - 10:26
Limit : FCC_Part15_207_00M_QP	Margin : 10
EUT : NOTEBOOK	Probe : ENV216_100014(0.009-30MHz) - Line1
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b

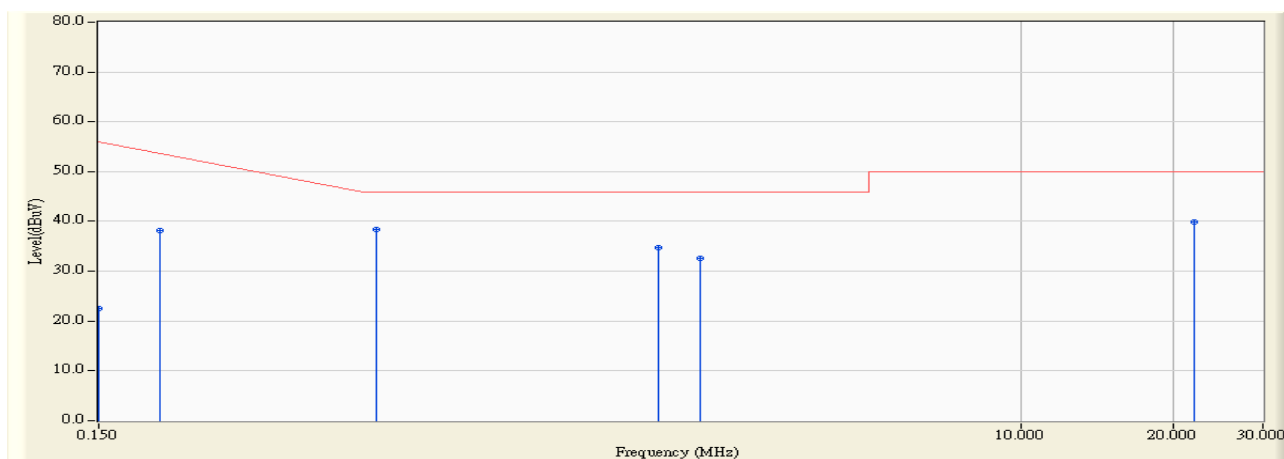


Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/06/17 - 10:27
Limit : FCC_Part15_207_00M_QP	Margin : 0
EUT : NOTEBOOK	Probe : ENV216_100014(0.009-30MHz) - Line1
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b



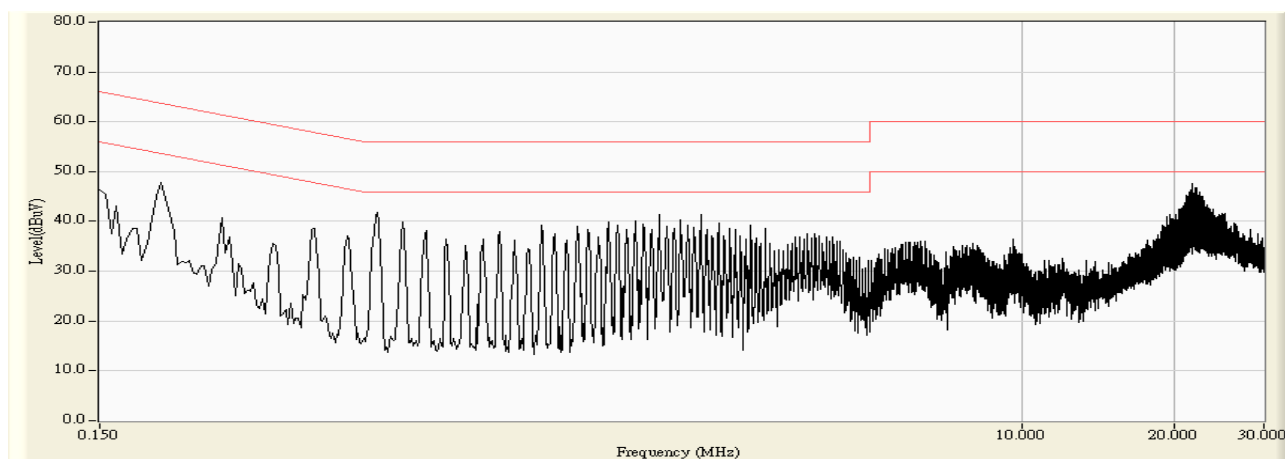
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.150	10.160	27.700	37.860	-28.140	66.000	QUASIPeAK
2		0.198	9.580	37.100	46.680	-17.014	63.694	QUASIPeAK
3		0.530	9.634	29.900	39.534	-16.466	56.000	QUASIPeAK
4		1.914	9.685	28.800	38.485	-17.515	56.000	QUASIPeAK
5		2.310	9.704	27.700	37.404	-18.596	56.000	QUASIPeAK
6	*	21.914	10.700	33.200	43.900	-16.100	60.000	QUASIPeAK

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/06/17 - 10:27
Limit : FCC_Part15_207_00M_AV	Margin : 0
EUT : NOTEBOOK	Probe : ENV216_100014(0.009-30MHz) - Line1
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b

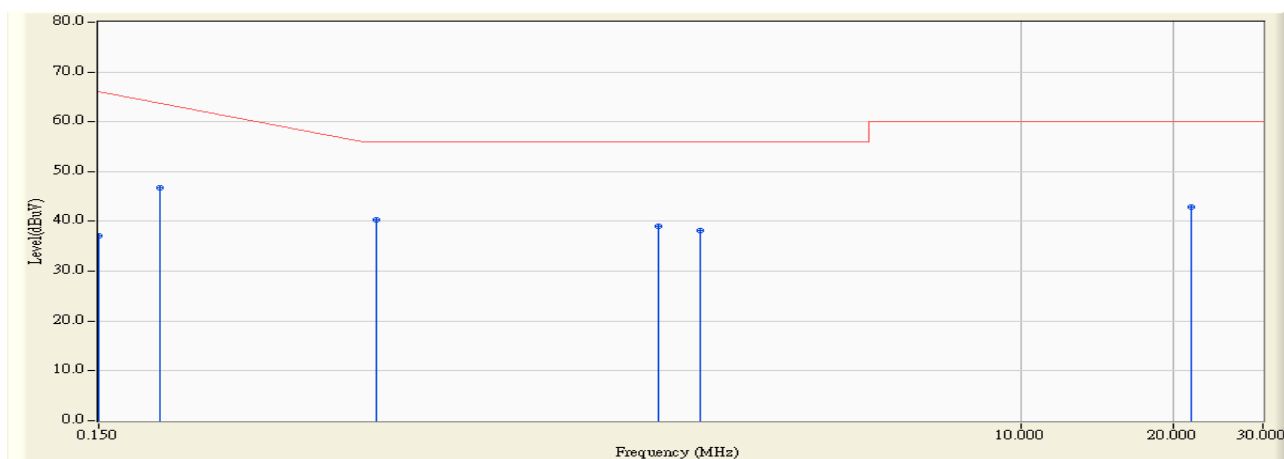


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.150	10.160	12.300	22.460	-33.540	56.000	AVERAGE
2		0.198	9.580	28.700	38.280	-15.414	53.694	AVERAGE
3	*	0.530	9.634	28.700	38.334	-7.666	46.000	AVERAGE
4		1.914	9.685	25.100	34.785	-11.215	46.000	AVERAGE
5		2.310	9.704	22.900	32.604	-13.396	46.000	AVERAGE
6		21.914	10.700	29.200	39.900	-10.100	50.000	AVERAGE

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/06/17 - 10:29
Limit : FCC_Part15_207_00M_QP	Margin : 10
EUT : NOTEBOOK	Probe : ENV216_100014(0.009-30MHz) - Line2
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b

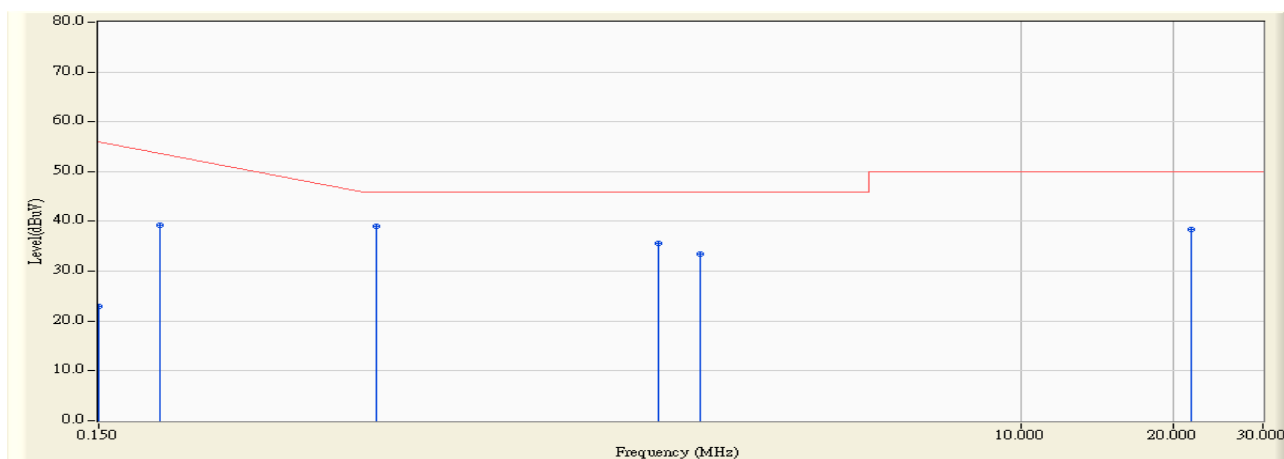


Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/06/17 - 10:31
Limit : FCC_Part15_207_00M_QP	Margin : 0
EUT : NOTEBOOK	Probe : ENV216_100014(0.009-30MHz) - Line2
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.150	10.006	27.100	37.106	-28.894	66.000	QUASIPeAK
2		0.198	9.664	37.100	46.764	-16.930	63.694	QUASIPeAK
3	*	0.530	9.637	30.600	40.237	-15.763	56.000	QUASIPeAK
4		1.914	9.670	29.400	39.070	-16.930	56.000	QUASIPeAK
5		2.310	9.664	28.600	38.264	-17.736	56.000	QUASIPeAK
6		21.718	10.470	32.500	42.970	-17.030	60.000	QUASIPeAK

Engineer : Jame	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	Time : 2009/06/17 - 10:31
Limit : FCC_Part15_207_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		0.150	10.006	13.000	23.006	-32.994	56.000	AVERAGE
2		0.198	9.664	29.500	39.164	-14.530	53.694	AVERAGE
3	*	0.530	9.637	29.500	39.137	-6.863	46.000	AVERAGE
4		1.914	9.670	25.900	35.570	-10.430	46.000	AVERAGE
5		2.310	9.664	23.900	33.564	-12.436	46.000	AVERAGE
6		21.718	10.470	27.900	38.370	-11.630	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	2008/11/12
EMI Test Receiver	R&S	ESCI	100573	2009/04/23
Preamplifier	Quietek	AP-025C	QT-AP003	2008/11/24
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/11/24
Bilog Type Antenna	Schaffner	CBL6112B	2932	2009/02/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2009/06/11
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2009/03/03
Band Reject Filter	Wainwright	WRCG2400/2485-2375 /2510-60/11SS	SN9	2009/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2009/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2009/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	04	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2009/03/31

☐ Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2009/04/23
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	2009/05/05
Bilog Type Antenna	Schaffner	CBL6112D	22254	2009/02/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2009/06/11
High-Pass Filter	Wainwright	WHKX2.8/18G-12SS	SN1	2009/03/03
Band Reject Filter	Wainwright	WRCG2400/2485-2375 /2510-60/11SS	SN9	2009/03/03
High-Pass Filter	Wainwright	WHKX7.0/18G-8SS	SN16	2009/03/03
Low-Pass Filter	Wainwright	WLKS4500-9SS	SN2	2009/03/03
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	05	2009/05/25

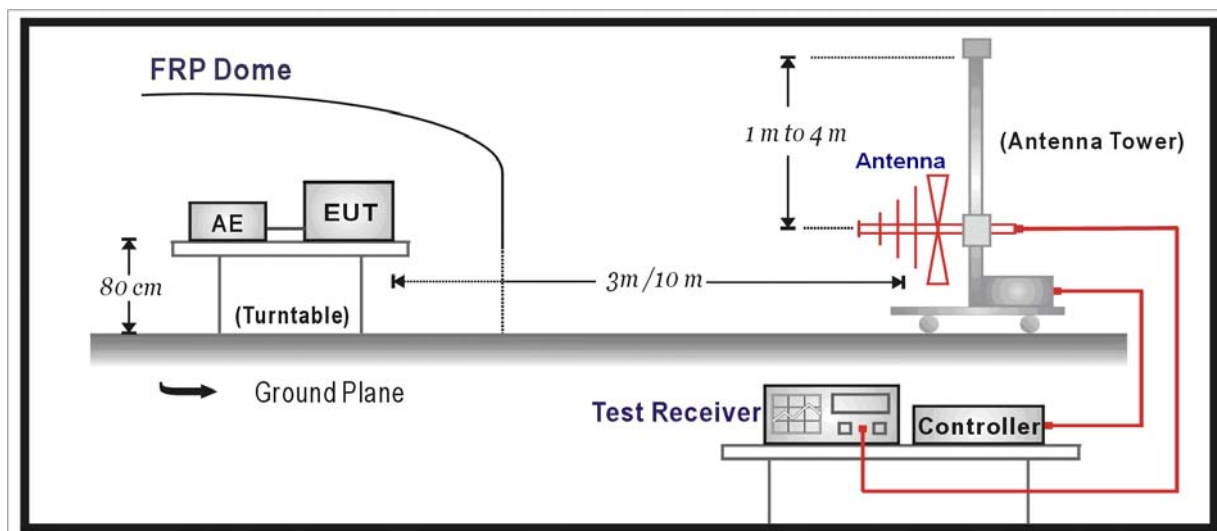
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2009/03/31
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Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

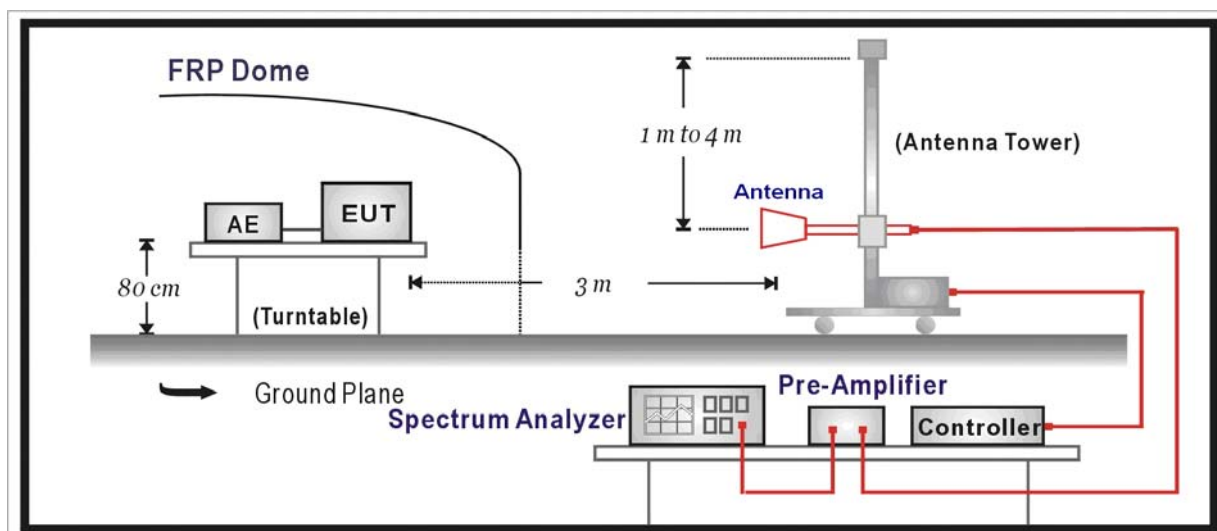
Note 2: The test instruments marked with "X" are used to measure the final test results.

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

Below 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)							
99.8	H	18.8	43.5	-24.7	QP	120.5	65.8
198.7	H	17.9	43.5	-25.6	QP	120.5	65.8
532.7	H	26.0	46.0	-20.0	QP	114.2	144.8
99.8	V	24.7	43.5	-18.8	QP	114.2	144.8
198.7	V	26.3	43.5	-17.2	QP	120.5	65.8
532.7	V	32.0	46.0	-14.0	QP	120.5	65.8
Channel 6 (2437MHz)							
120.1	H	17.3	43.5	-26.2	QP	120.5	65.8
342.6	H	19.6	46.0	-26.4	QP	120.5	65.8
635.5	H	26.1	46.0	-19.9	QP	114.2	144.8
120.1	V	20.2	43.5	-23.3	QP	114.2	144.8
342.6	V	25.4	46.0	-20.6	QP	120.5	65.8
635.5	V	33.4	46.0	-12.6	QP	120.5	65.8
Channel 11 (2462MHz)							
134.7	H	16.8	43.5	-26.7	QP	120.5	65.8
295.1	H	18.0	46.0	-28.0	QP	120.5	65.8
648.0	H	25.2	46.0	-20.8	QP	114.2	144.8
134.7	V	20.5	43.5	-23.0	QP	114.2	144.8
295.1	V	21.4	46.0	-24.6	QP	120.5	65.8
648.0	V	33.4	46.0	-12.6	QP	120.5	65.8

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)							
99.8	H	19.1	43.5	-24.7	QP	120.5	65.8
198.7	H	17.9	43.5	-25.6	QP	120.5	65.8
532.7	H	26.4	46.0	-20.0	QP	114.2	144.8
99.8	V	24.7	43.5	-18.8	QP	114.2	144.8
198.7	V	26.3	43.5	-17.2	QP	120.5	65.8
532.7	V	32.0	46.0	-14.0	QP	120.5	65.8
Channel 6 (2437MHz)							
120.1	H	17.3	43.5	-26.2	QP	120.5	65.8
342.6	H	19.6	46.0	-23.9	QP	120.5	65.8
635.5	H	26.1	46.0	-19.9	QP	114.2	144.8
120.1	V	20.2	43.5	-23.3	QP	114.2	144.8
342.6	V	25.4	46.0	-18.1	QP	120.5	65.8
635.5	V	33.4	46.0	-12.6	QP	120.5	65.8
Channel 11 (2462MHz)							
134.7	H	16.8	43.5	-26.7	QP	120.5	65.8
295.1	H	18.0	46.0	-25.5	QP	120.5	65.8
648.0	H	25.2	46.0	-20.8	QP	114.2	144.8
134.7	V	20.5	43.5	-23.0	QP	114.2	144.8
295.1	V	21.4	46.0	-22.1	QP	120.5	65.8
648.0	V	33.4	46.0	-12.6	QP	120.5	65.8

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)							
4978.0	H	46.5	74	-27.5	PK	150.5	75.2
4978.0	H	32.2	54	-21.8	AV	150.5	75.2
4978.0	V	46.9	74	-27.1	PK	144.2	124.8
4978.0	V	32.1	54	-21.9	AV	144.2	124.8
Channel 6 (2437MHz)							
4995.0	H	46.9	74	-27.1	PK	151.0	65.8
4995.0	H	32.5	54	-21.5	AV	151.0	65.8
4995.0	V	50.9	74	-23.1	PK	144.6	114.8
4995.0	V	36.4	54	-17.6	AV	144.6	114.8
Channel 11 (2462MHz)							
4995.0	H	48.3	74	-25.7	PK	151.2	65.8
4995.0	H	34.1	54	-19.9	AV	151.2	65.8
4995.0	V	52.5	74	-21.5	PK	144.3	144.8
4995.0	V	38.3	54	-15.7	AV	144.3	144.8

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)							
4995.0	H	47.2	74	-26.8	PK	150.5	75.2
4995.0	H	33.1	54	-20.9	AV	150.5	75.2
4995.0	V	51.0	74	-23.0	PK	144.2	124.8
4995.0	V	36.6	54	-17.4	AV	144.2	124.8
Channel 6 (2437MHz)							
4876.0	H	46.5	74	-27.5	PK	151.0	65.8
4876.0	H	32.2	54	-21.8	AV	151.0	65.8
4876.0	V	50.5	74	-23.5	PK	144.6	114.8
4876.0	V	36.1	54	-17.9	AV	144.6	114.8
Channel 11 (2462MHz)							
4978.0	H	46.3	74	-27.7	PK	151.2	65.8
4978.0	H	32.0	54	-22.0	AV	151.2	65.8
4978.0	V	51.1	74	-22.9	PK	144.3	144.8
4978.0	V	37.0	54	-17.0	AV	144.3	144.8

5. RF Antenna Conducted Spurious

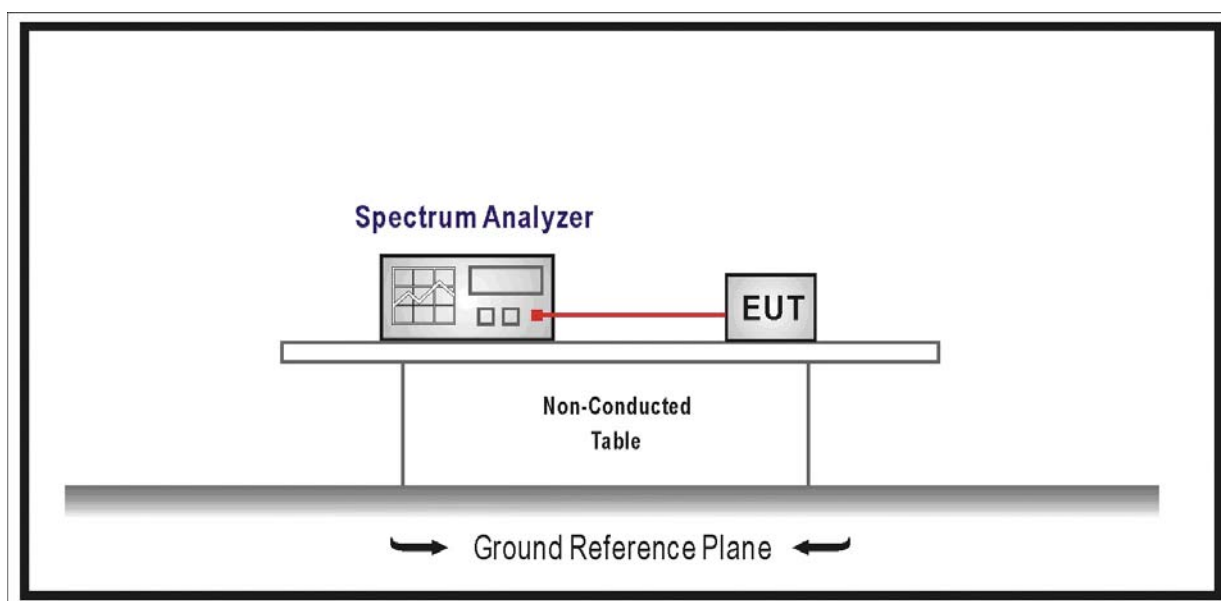
5.1. Test Equipment

RF Antenna Conducted Spurious / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/10
Coaxial Cable	Huber+Suhner	AC4-RF	09	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/31

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.

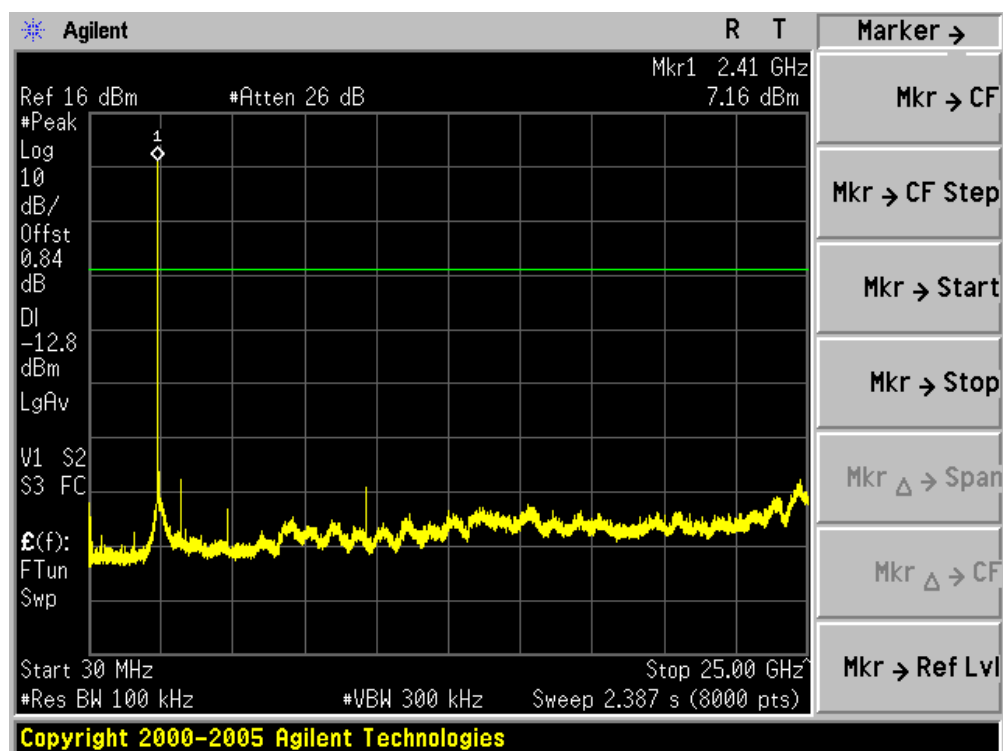
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

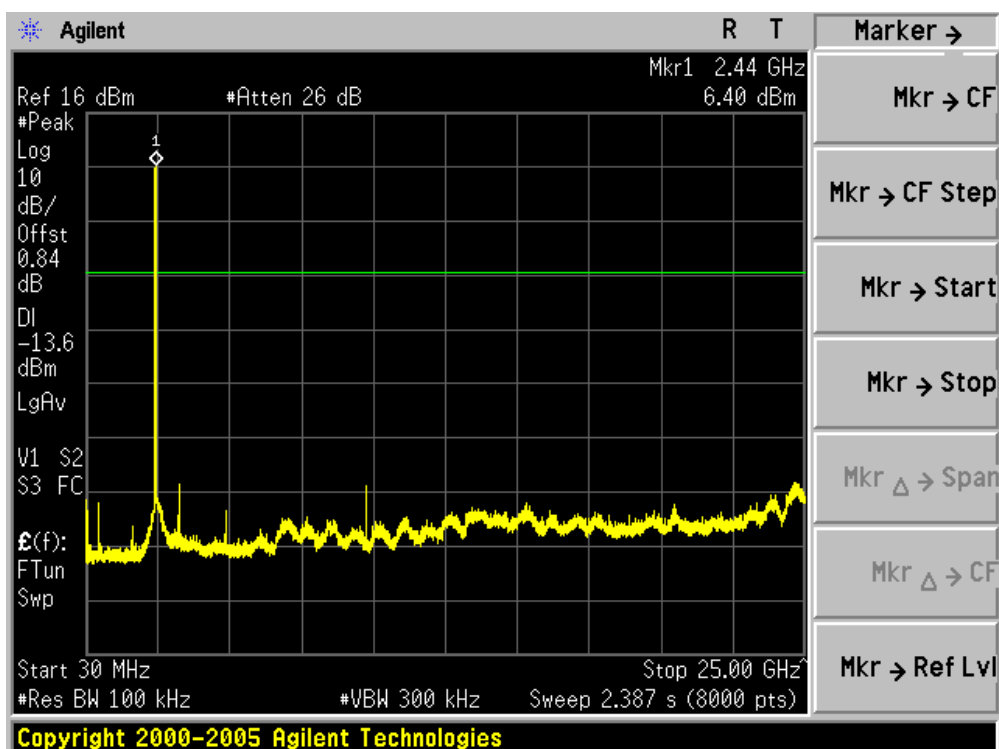
5.6. Test Result

Product	:	Notebook
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

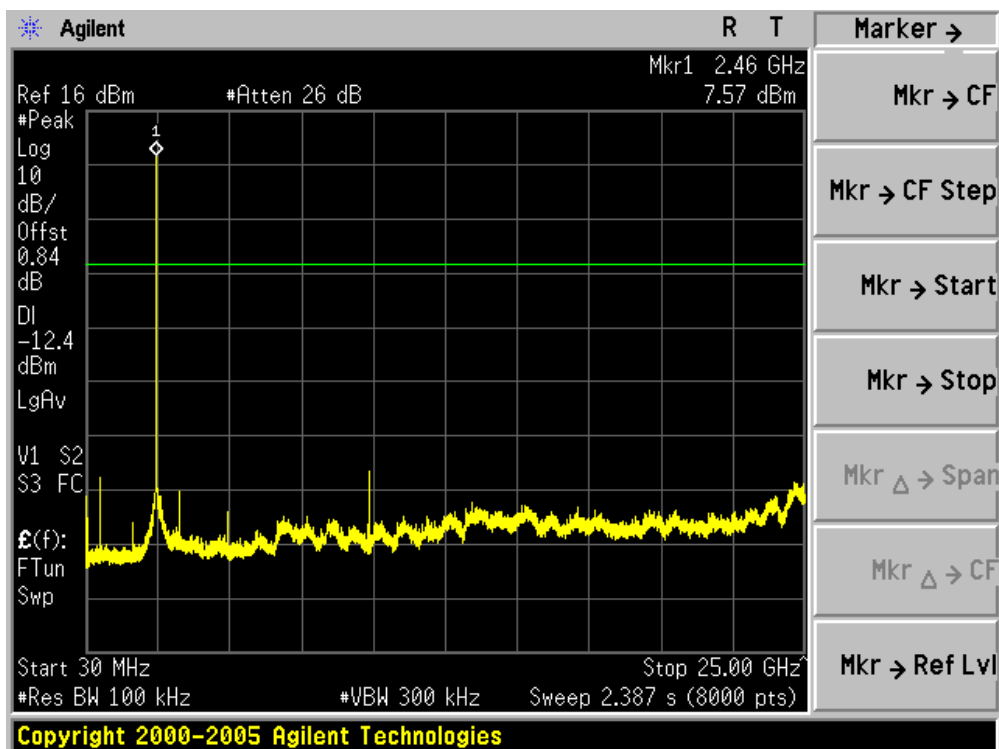
Channel 01 (2412MHz)



Channel 06 (2437MHz)

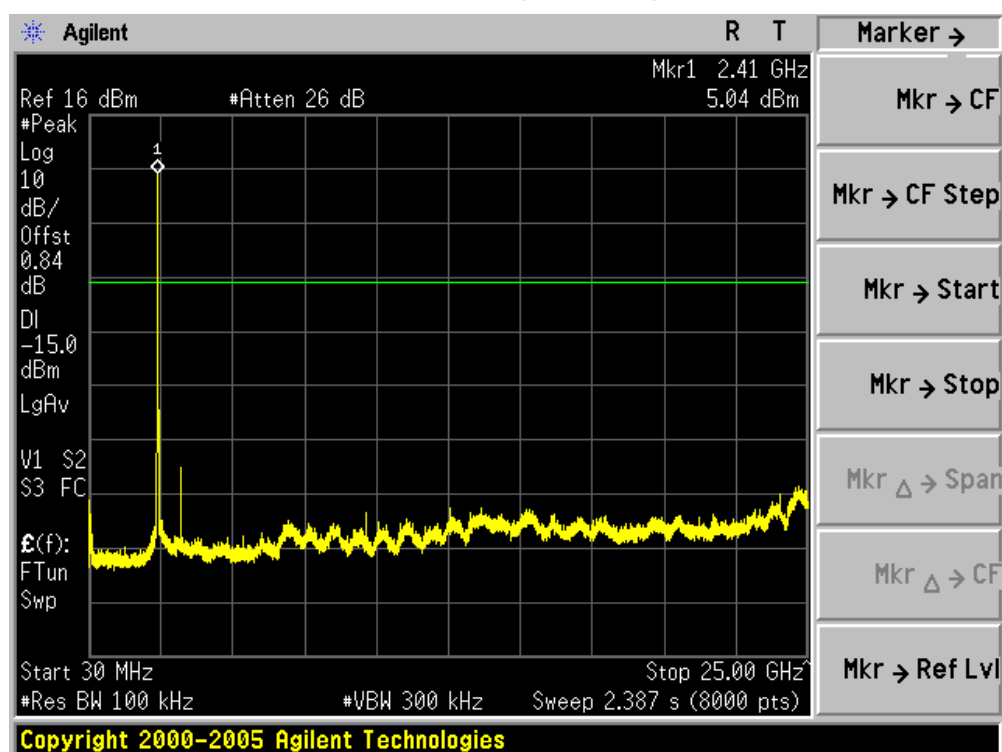


Channel 11 (2462MHz)

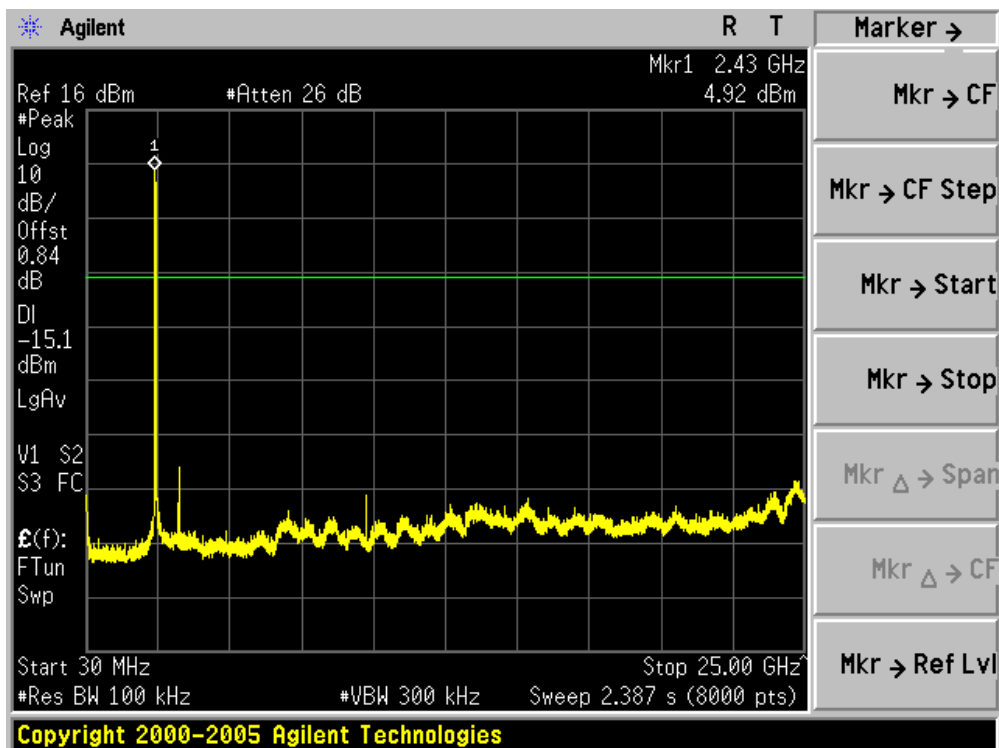


Product	:	Notebook
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

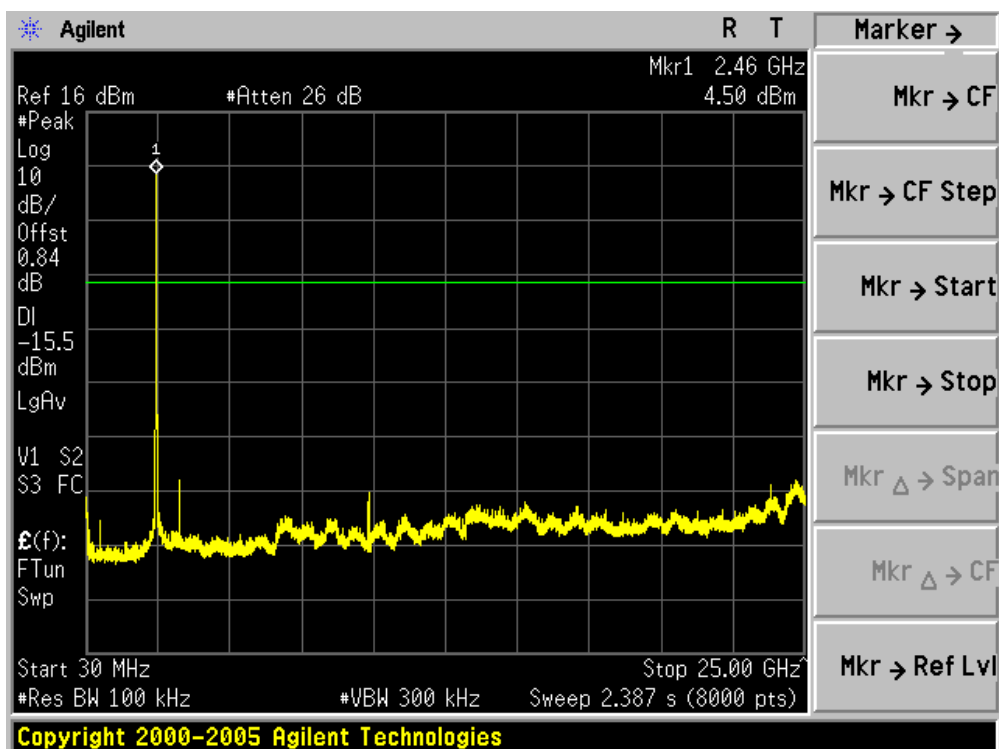
Channel 01 (2412MHz)



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	2009/04/23
EMI Test Receiver	R&S	ESCI	100573	2009/04/23
Preamplifier	Quietek	AP-025C	QT-AP003	2008/11/24
Preamplifier	Quietek	AP-180C	CHM-0602012	2009/05/05
Bilog Type Antenna	Schaffner	CBL6112B	2932	2009/02/25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2009/06/11
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	04	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2009/03/31

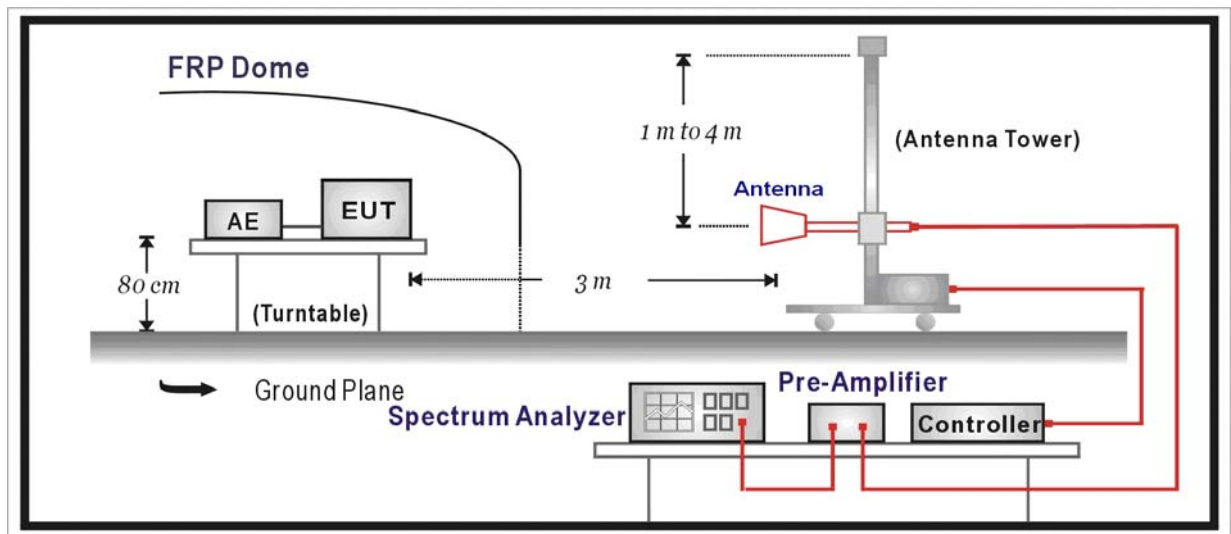
☐ Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2009/04/23
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	2009/05/05
Bilog Type Antenna	Schaffner	CBL6112D	22254	2008/11/24
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2009/06/11
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2008/11/24
Coaxial Cable	Huber+Suhner	AC2-C	05	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	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.

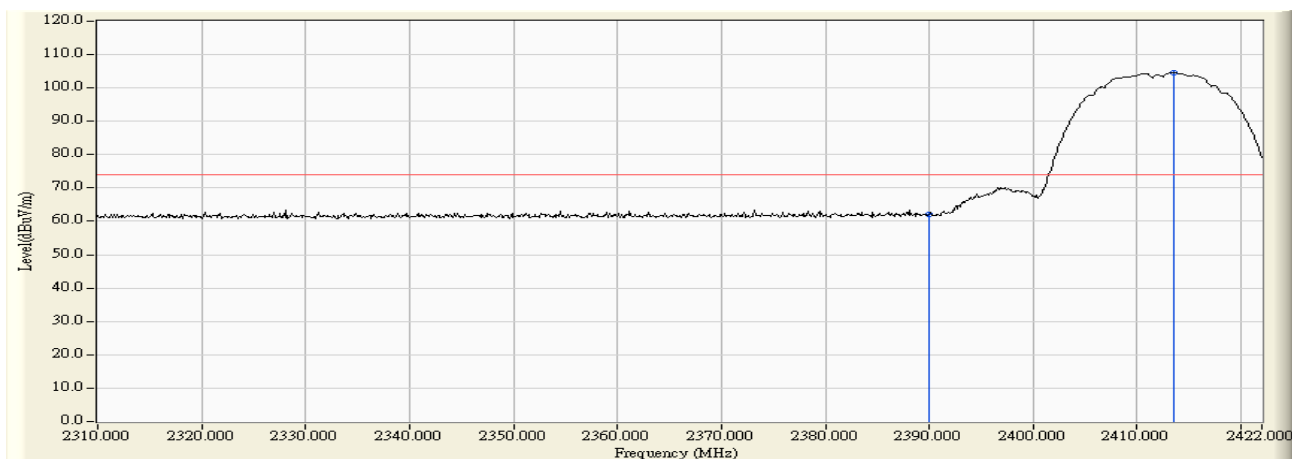
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

6.5. Uncertainty

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

6.6. Test Result

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:24
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2412MHz by 802.11b

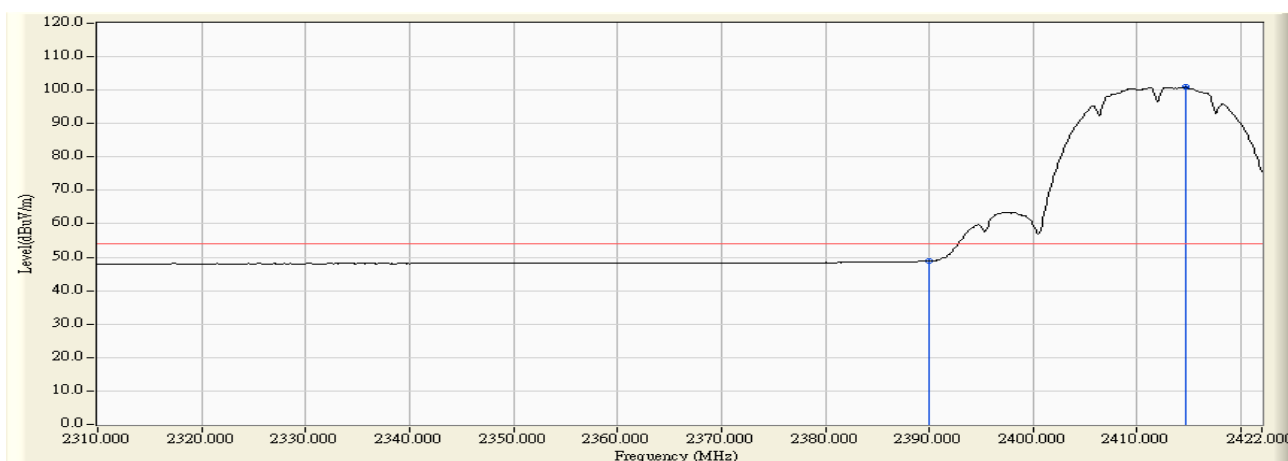


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	30.912	62.096	-11.874	73.970	PEAK
2	*	2413.488	31.192	73.401	104.593	N/A	N/A	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:24
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2412MHz by 802.11b

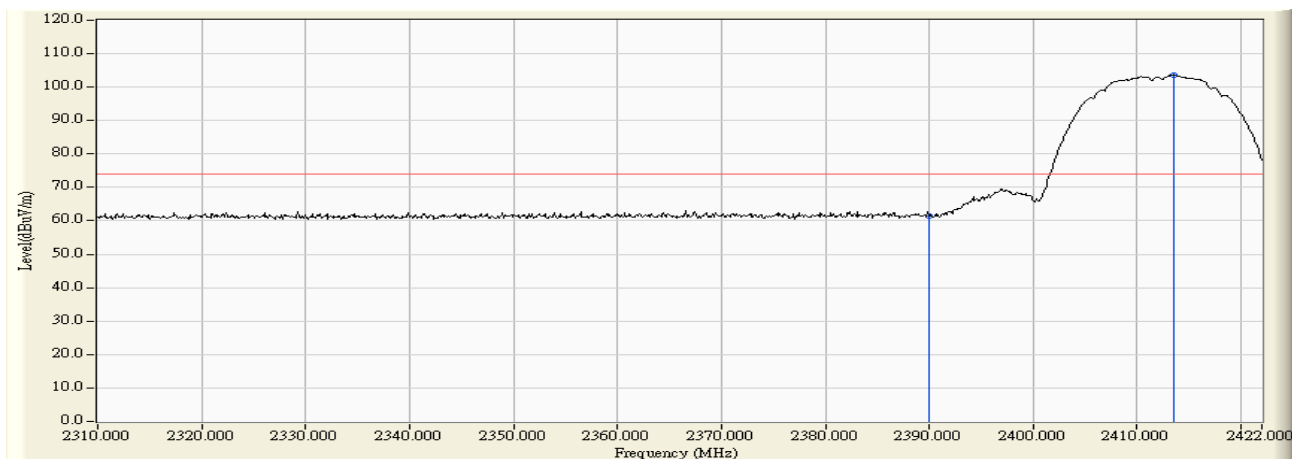


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	17.725	48.909	-5.061	53.970	AVERAGE
2	*	2414.608	31.193	69.704	100.897	N/A	N/A	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:20
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2412MHz by 802.11b

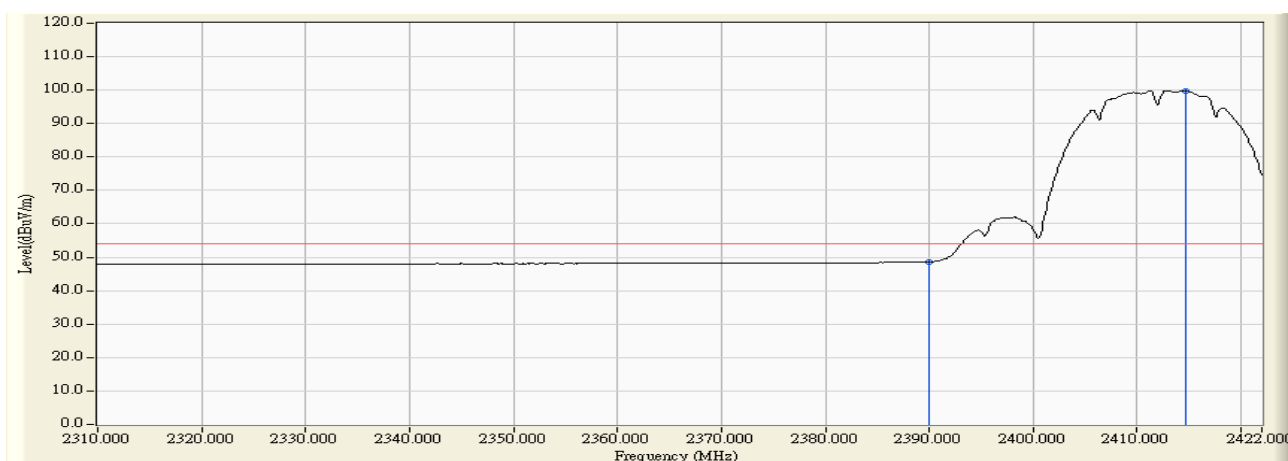


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	30.407	61.591	-12.379	73.970	PEAK
2	*	2413.488	31.192	72.539	103.731	N/A	N/A	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:20
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2412MHz by 802.11b

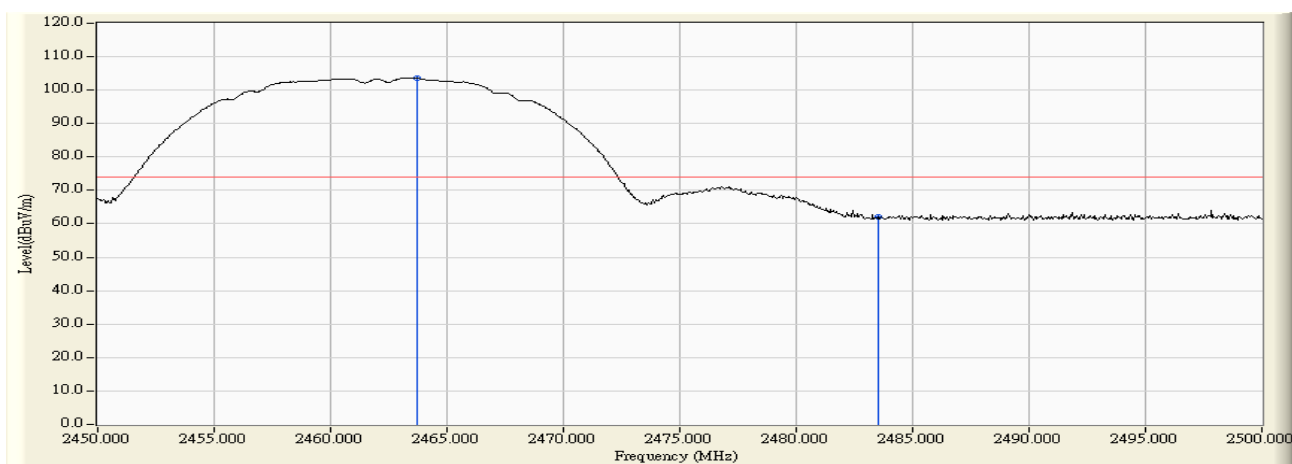


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	17.520	48.704	-5.266	53.970	AVERAGE
2	*	2414.720	31.193	68.671	99.864	N/A	N/A	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2462MHz by 802.11b

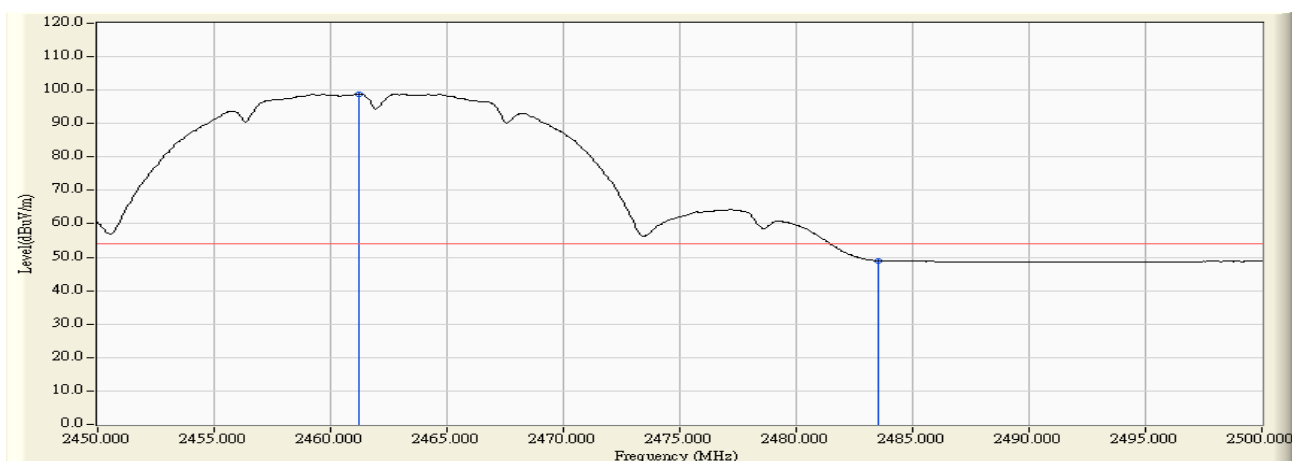


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.750	31.224	72.512	103.736	N/A	N/A	PEAK
2		2483.500	31.212	30.837	62.049	-11.921	73.970	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:31
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2462MHz by 802.11b

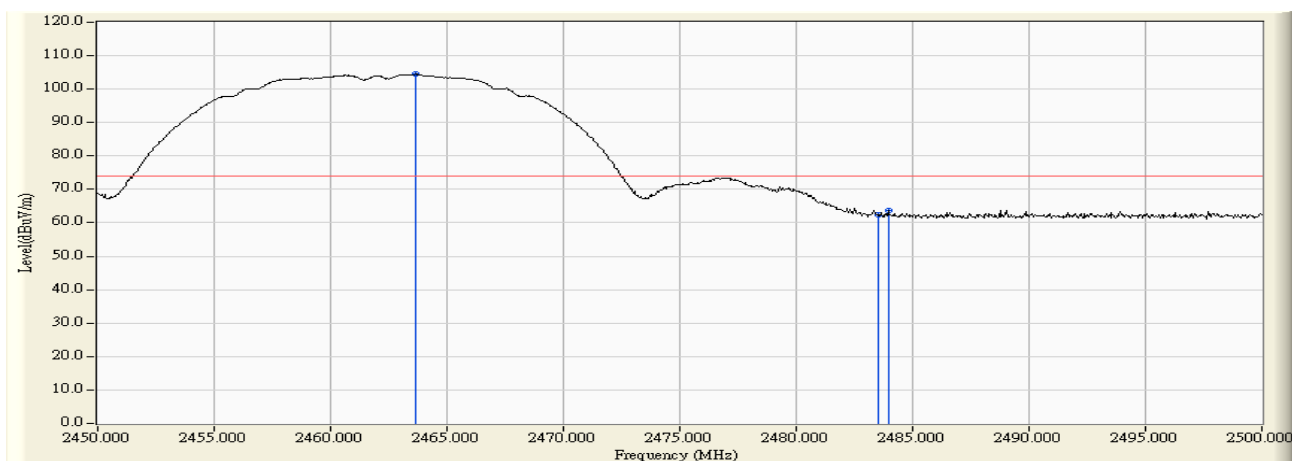


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.200	31.225	67.701	98.926	N/A	N/A	AVERAGE
2		2483.500	31.212	17.736	48.948	-5.022	53.970	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2462MHz by 802.11b

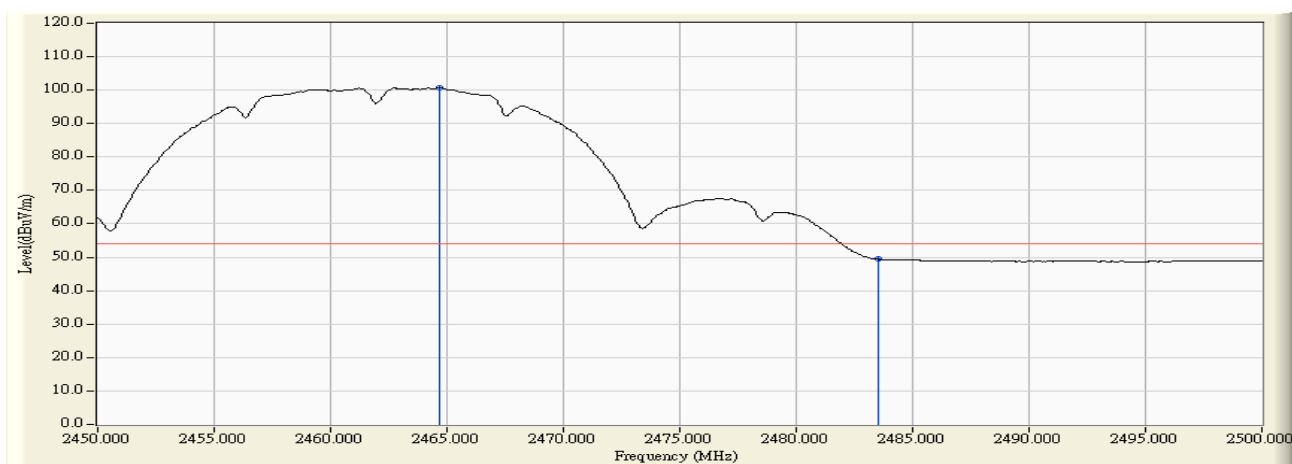


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.650	31.224	73.246	104.470	N/A	N/A	PEAK
2		2483.500	31.212	31.258	62.470	-11.500	73.970	PEAK
3		2483.950	31.212	32.365	63.577	-10.393	73.970	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 1:Transmit at channel 2462MHz by 802.11b

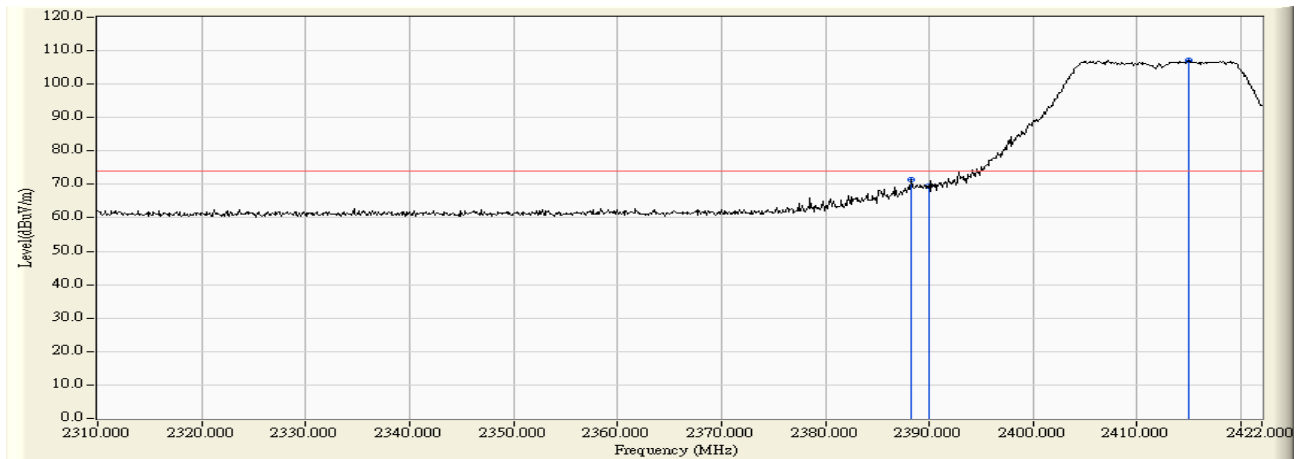


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.700	31.223	69.401	100.625	N/A	N/A	AVERAGE
2		2483.500	31.212	18.193	49.405	-4.565	53.970	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:12
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2412MHz by 802.11g

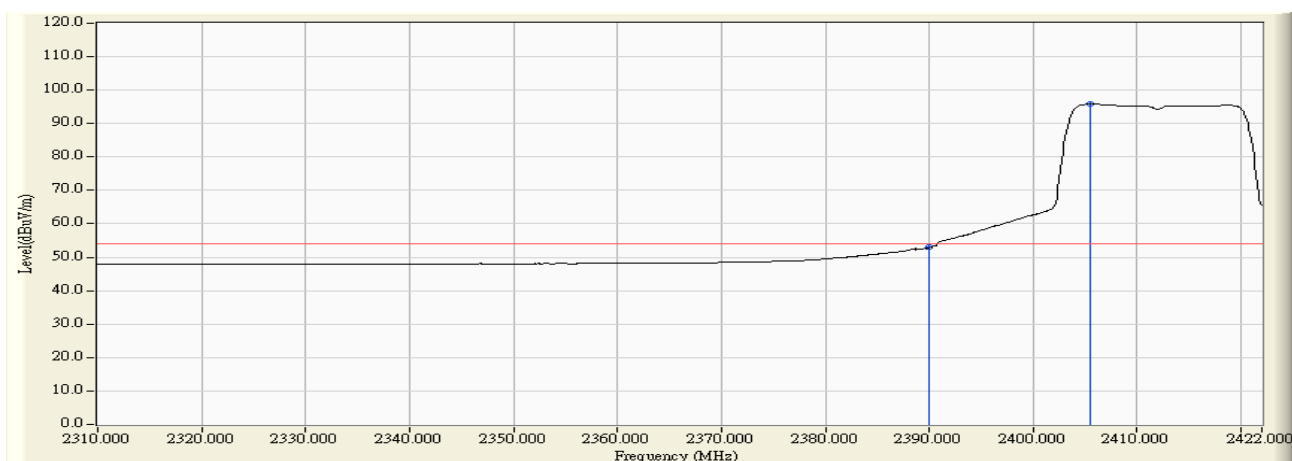


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2388.288	31.186	40.190	71.376	-2.594	73.970	PEAK
2		2390.000	31.184	38.300	69.484	-4.486	73.970	PEAK
3	*	2414.944	31.193	76.009	107.202	N/A	N/A	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:14
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2412MHz by 802.11g

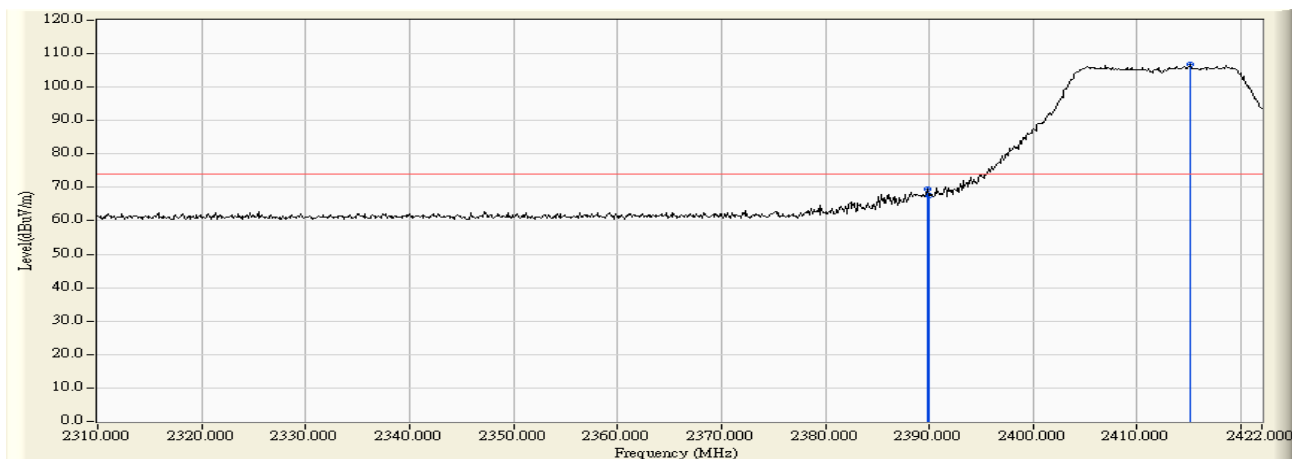


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	21.754	52.938	-1.032	53.970	AVERAGE
2	*	2405.536	31.186	64.691	95.877	N/A	N/A	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:09
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2412MHz by 802.11g

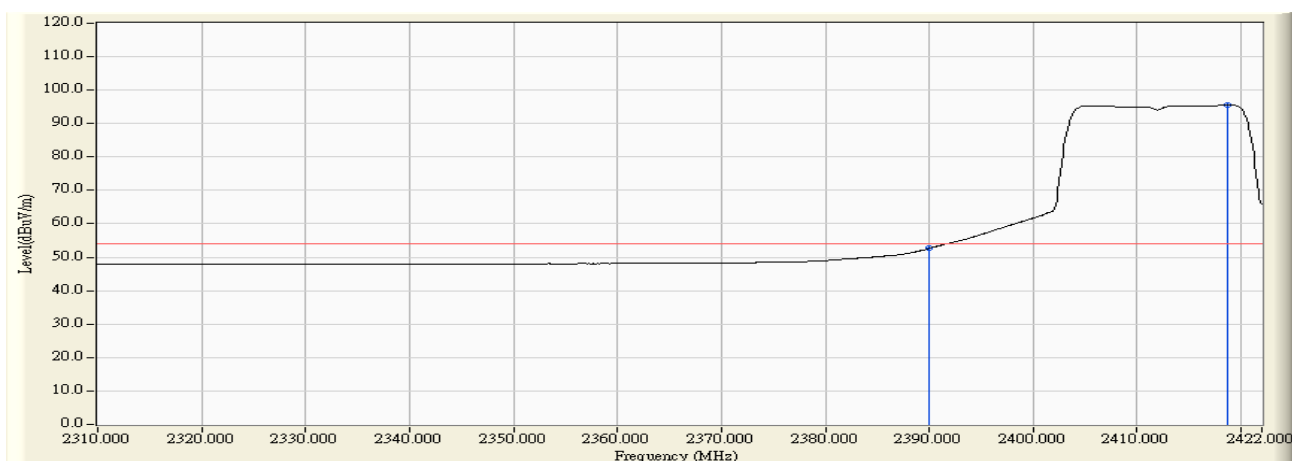


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2389.856	31.184	38.174	69.358	-4.612	73.970	PEAK
2		2390.000	31.184	36.421	67.605	-6.365	73.970	PEAK
3	*	2415.168	31.194	75.704	106.897	N/A	N/A	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 18:10
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2412MHz by 802.11g

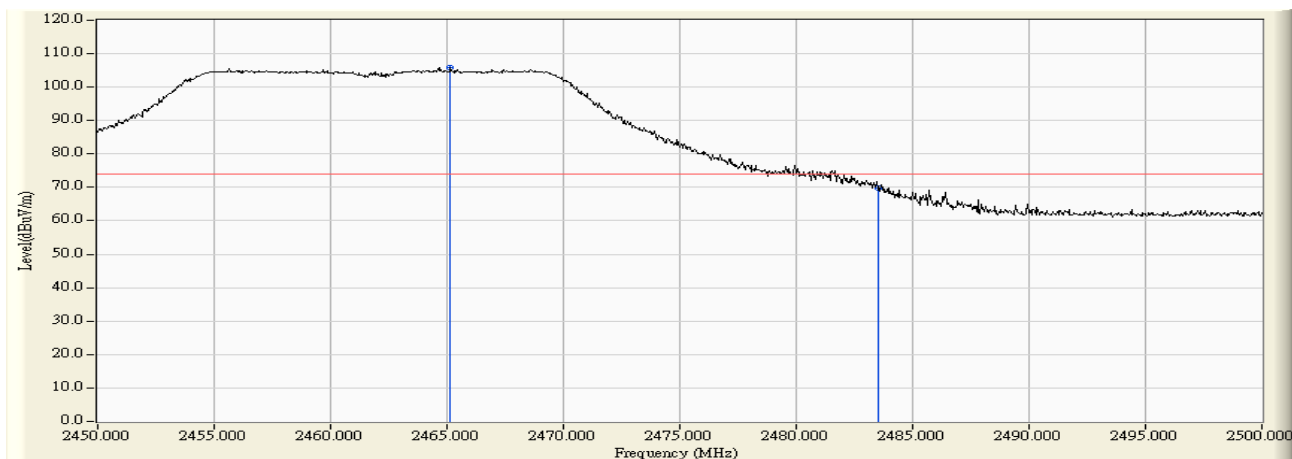


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	31.184	21.481	52.665	-1.305	53.970	AVERAGE
2	*	2418.640	31.197	64.316	95.512	N/A	N/A	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 17:44
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2462MHz by 802.11g

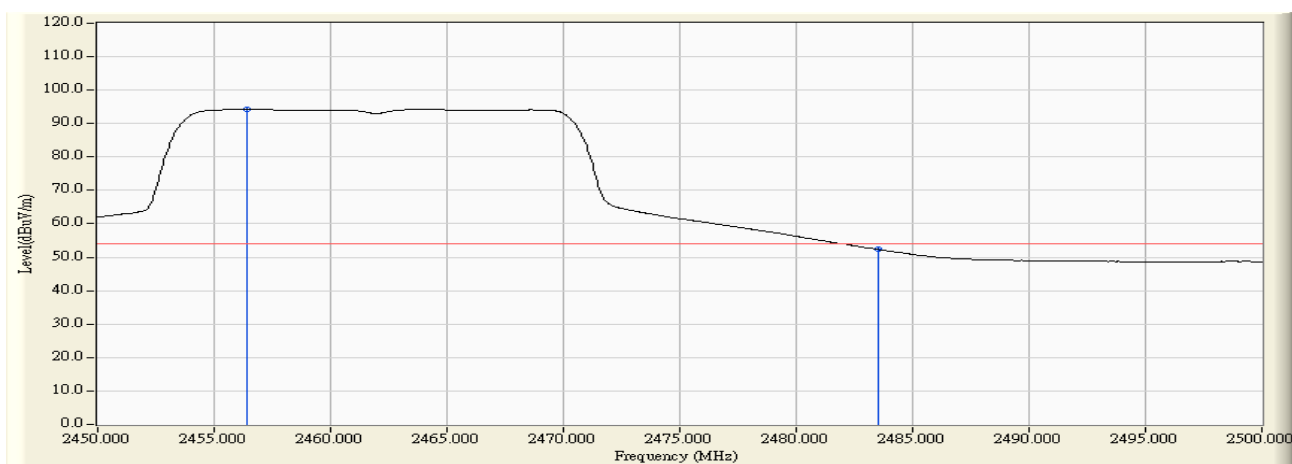


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.150	31.223	74.684	105.907	N/A	N/A	PEAK
2		2483.500	31.212	38.678	69.890	-4.080	73.970	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 17:45
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - HORIZONTAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2462MHz by 802.11g

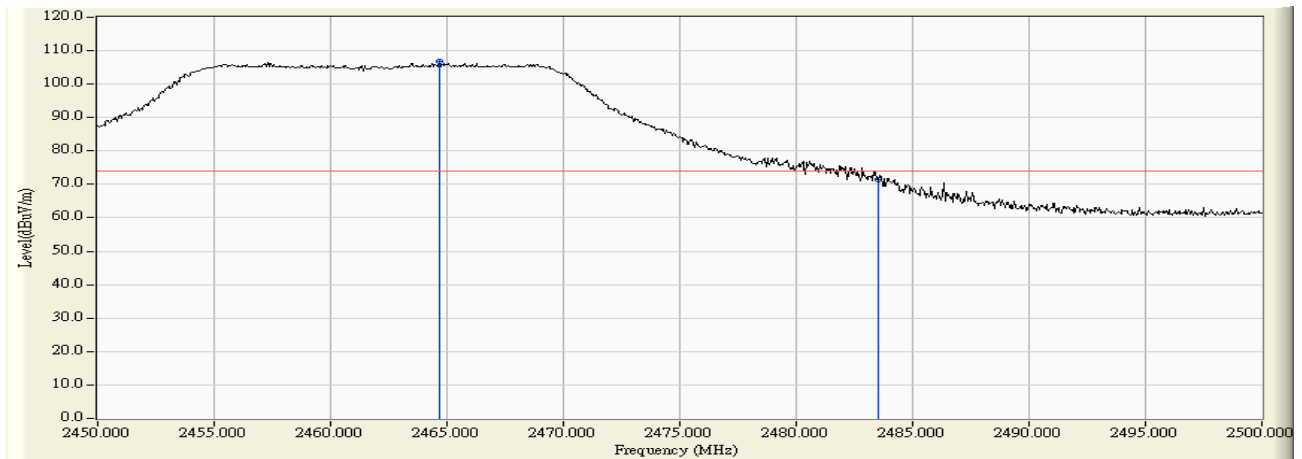


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.400	31.223	63.016	94.239	N/A	N/A	AVERAGE
2		2483.500	31.212	21.167	52.379	-1.591	53.970	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 17:35
Limit : FCC_SpartC_15.209_03M_PK	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2462MHz by 802.11g

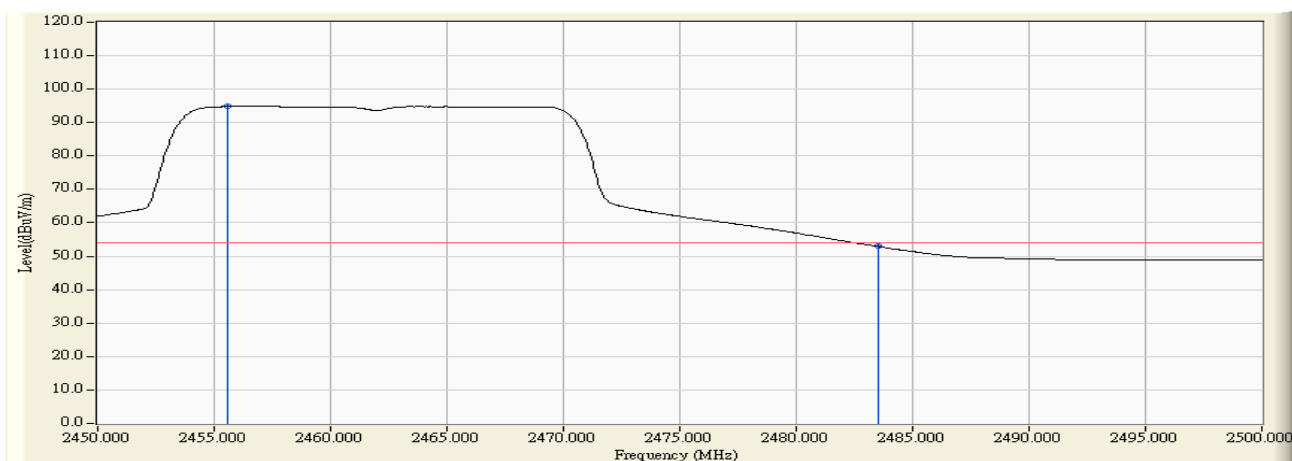


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.700	31.223	75.640	106.864	N/A	N/A	PEAK
2		2483.500	31.212	40.074	71.286	-2.684	73.970	PEAK

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

Engineer : Jame	
Site : AC-2 (3m Semi-Anechoic Chamber)	Time : 2009/06/13 - 17:34
Limit : FCC_SpartC_15.209_03M_AV	Margin : 0
EUT : WLAN for NOTEBOOK	Probe : 9120D_499(1-18GHz) - VERTICAL
Power : AC 120V/60HZ	Note : Mode 2:Transmit at channel 2462MHz by 802.11g



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2455.600	31.223	63.715	94.938	N/A	N/A	AVERAGE
2		2483.500	31.212	21.739	52.951	-1.019	53.970	AVERAGE

Note:

1. Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, Sweep time = 500ms
2. Average detector set as follows, RBW = 1MHz, VBW = 10Hz, Sweep time = Auto.

7. Operation Frequency Range of 20dB Bandwidth

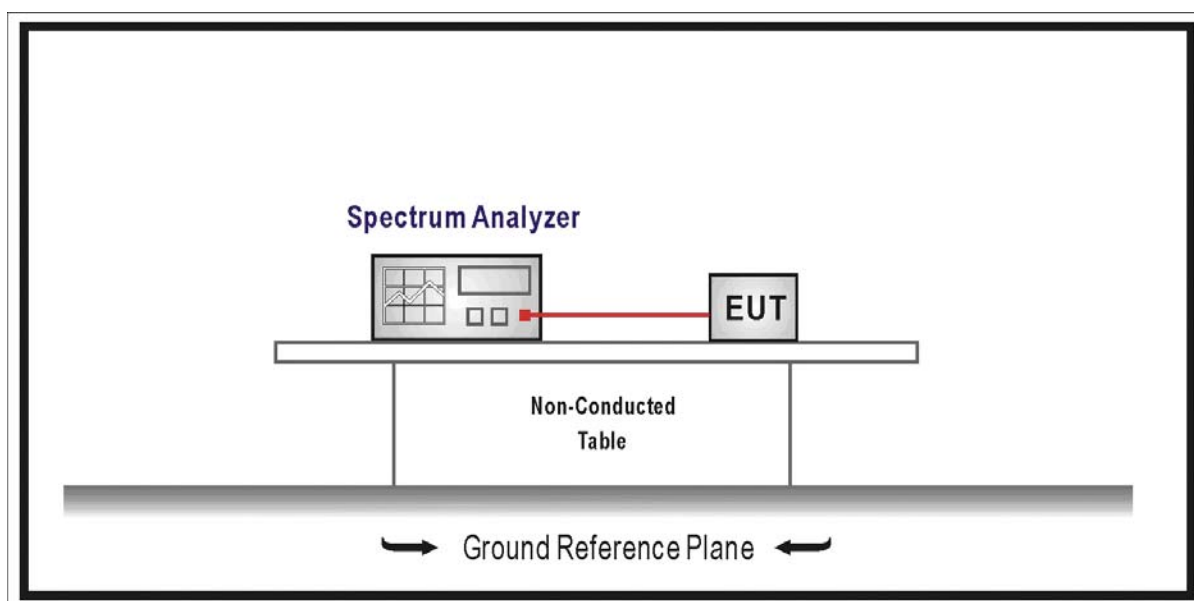
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/10
Coaxial Cable	Huber+Suhner	AC4-RF	09	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/31s

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.

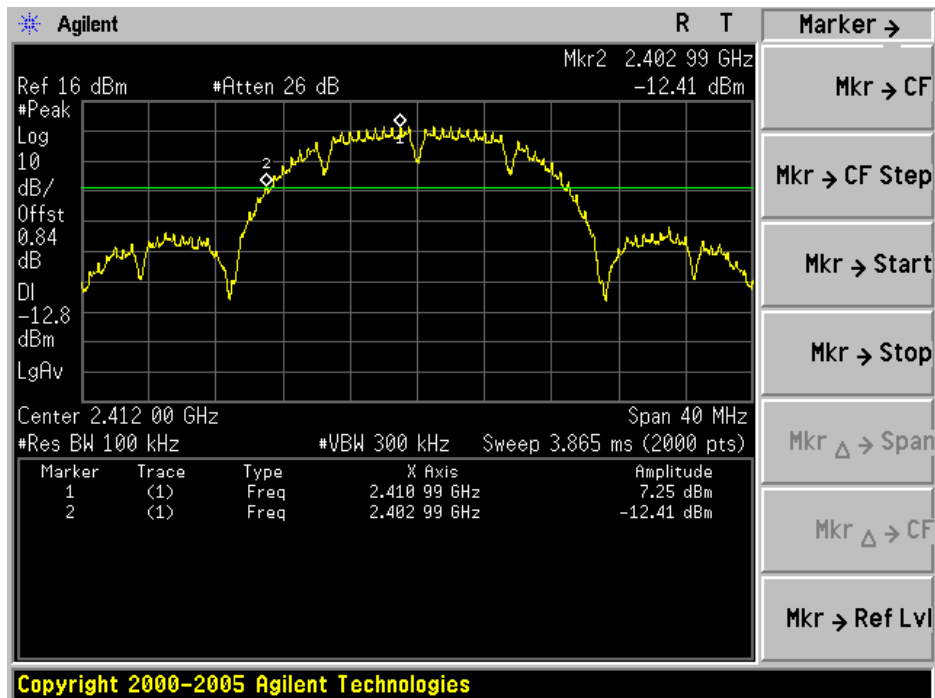
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

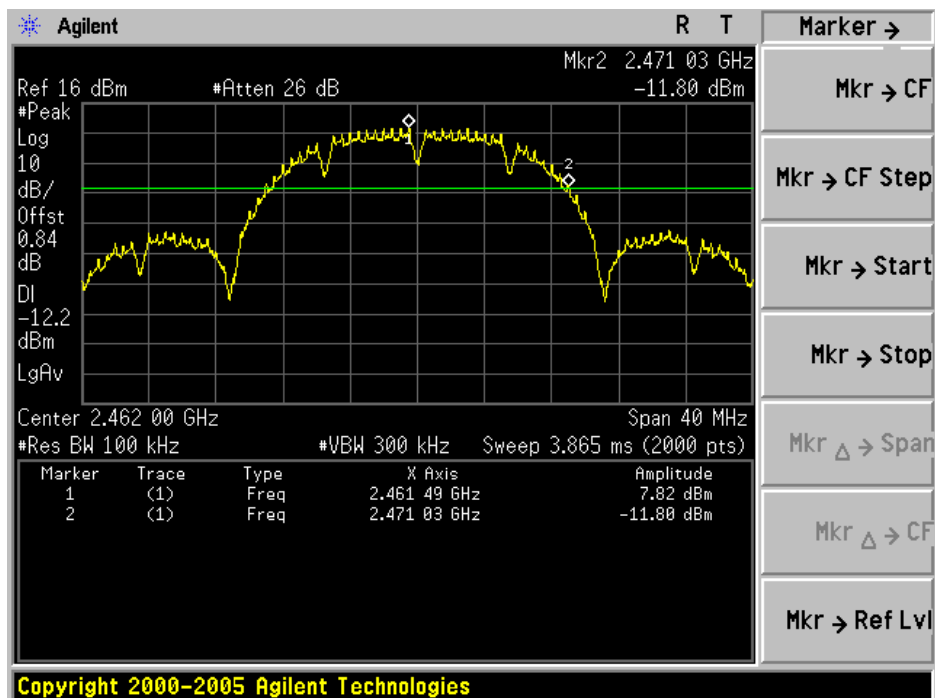
7.6. Test Result

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

Channel 01 (2412MHz)

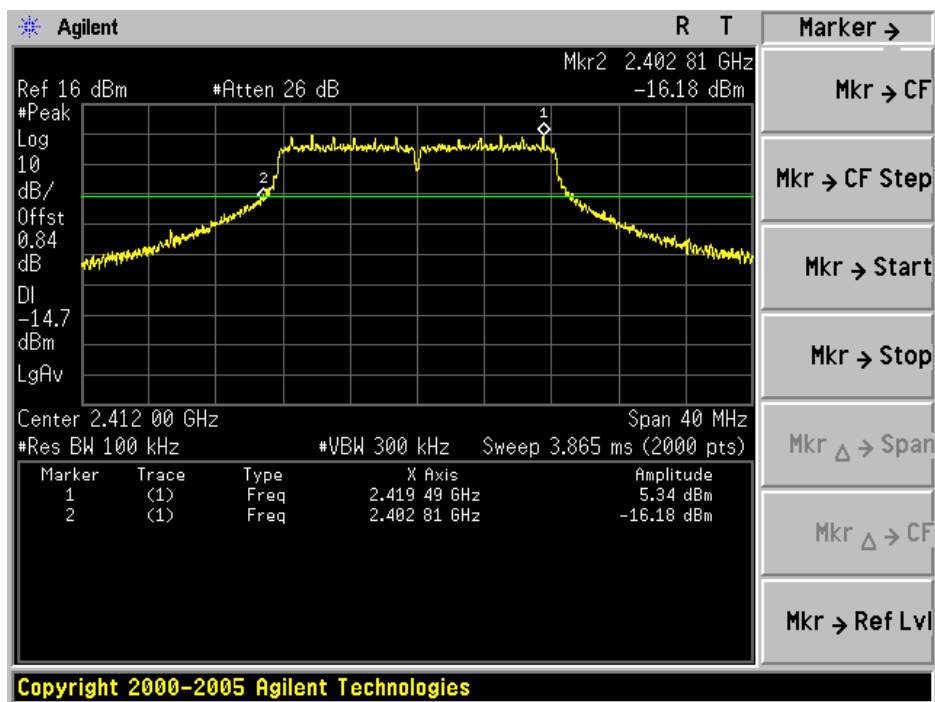


Channel 11 (2462MHz)

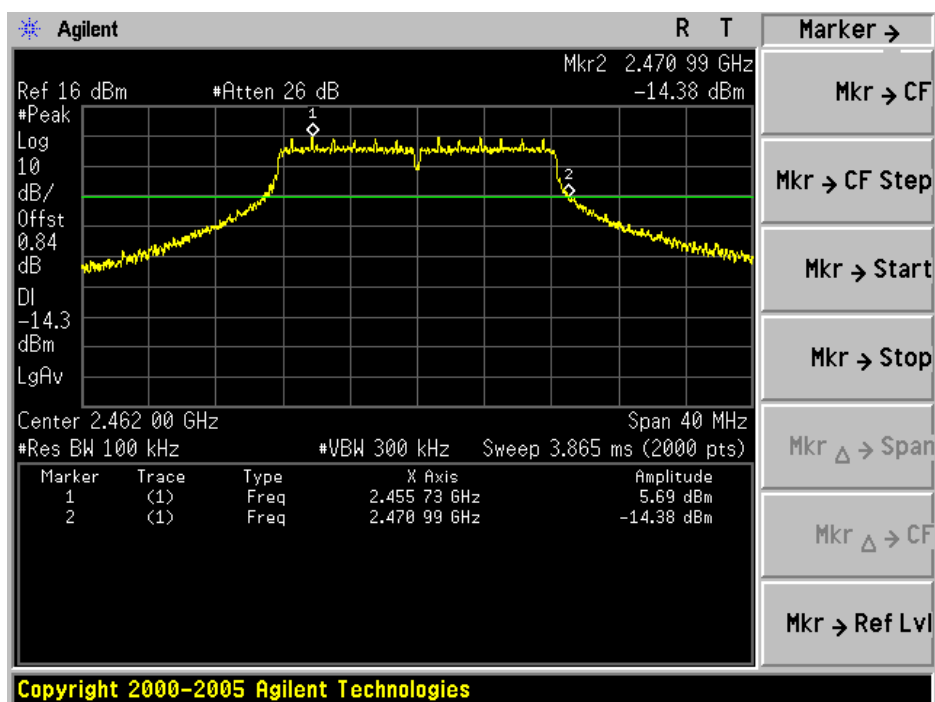


Product	:	Notebook
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)



Channel 11 (2462MHz)



8. Occupied Bandwidth

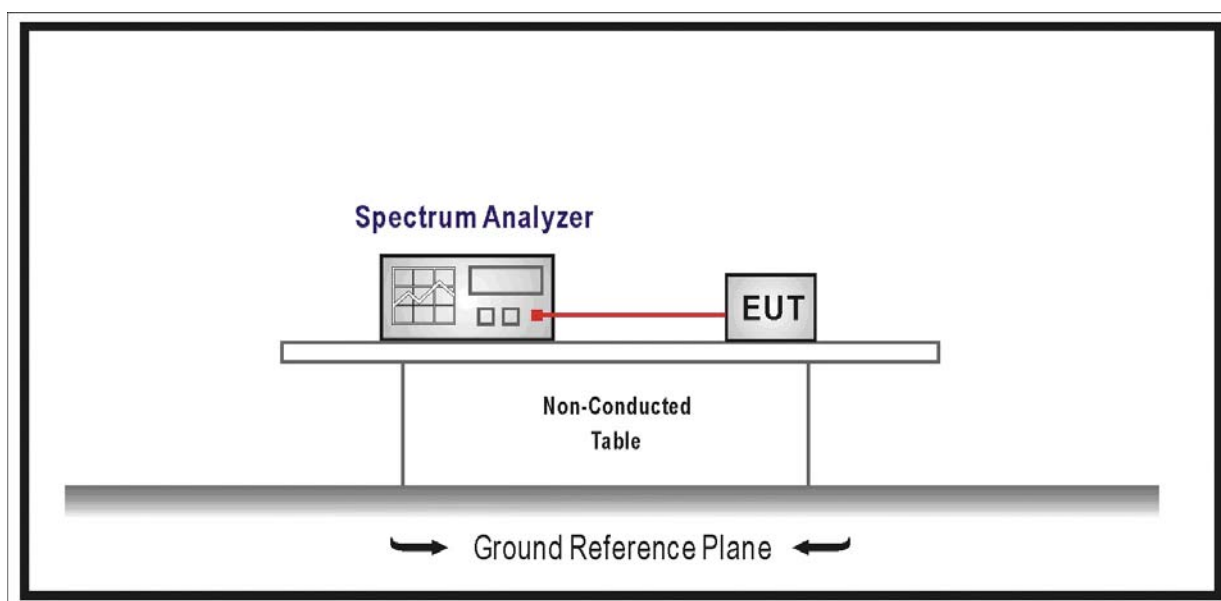
8.1. Test Equipment

Occupied Bandwidth / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/10
Coaxial Cable	Huber+Suhner	AC4-RF	09	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/31

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

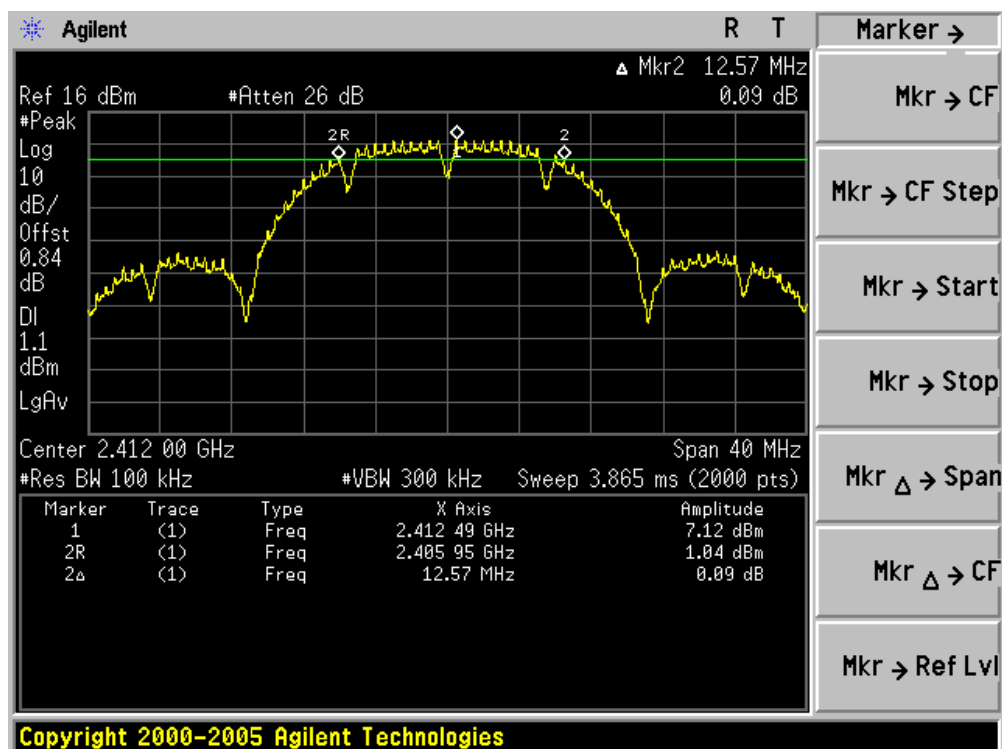
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

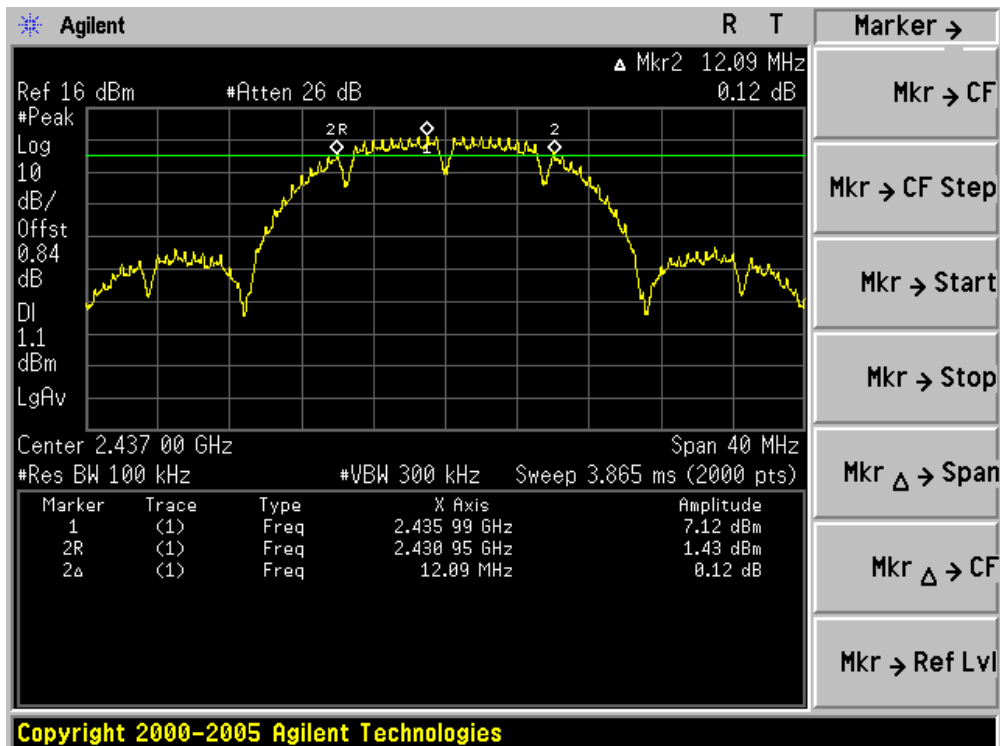
Product	:	Notebook
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12570	500	Pass
06	2437	12090	500	Pass
11	2462	12090	500	Pass

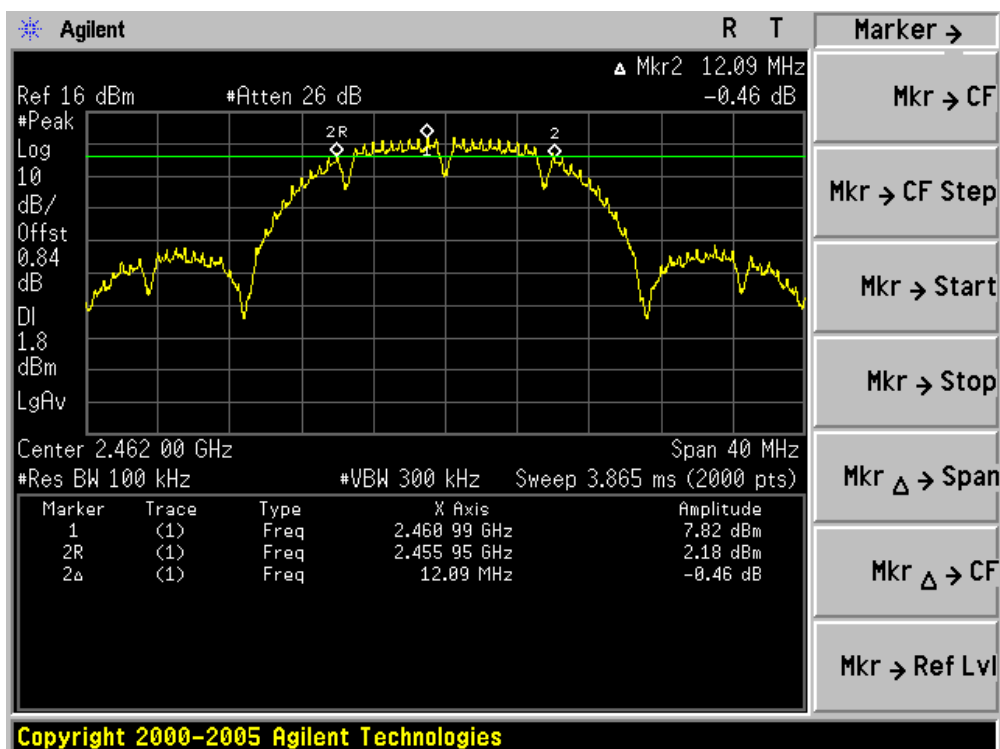
Channel 01 (2412MHz)



Channel 06 (2437MHz)



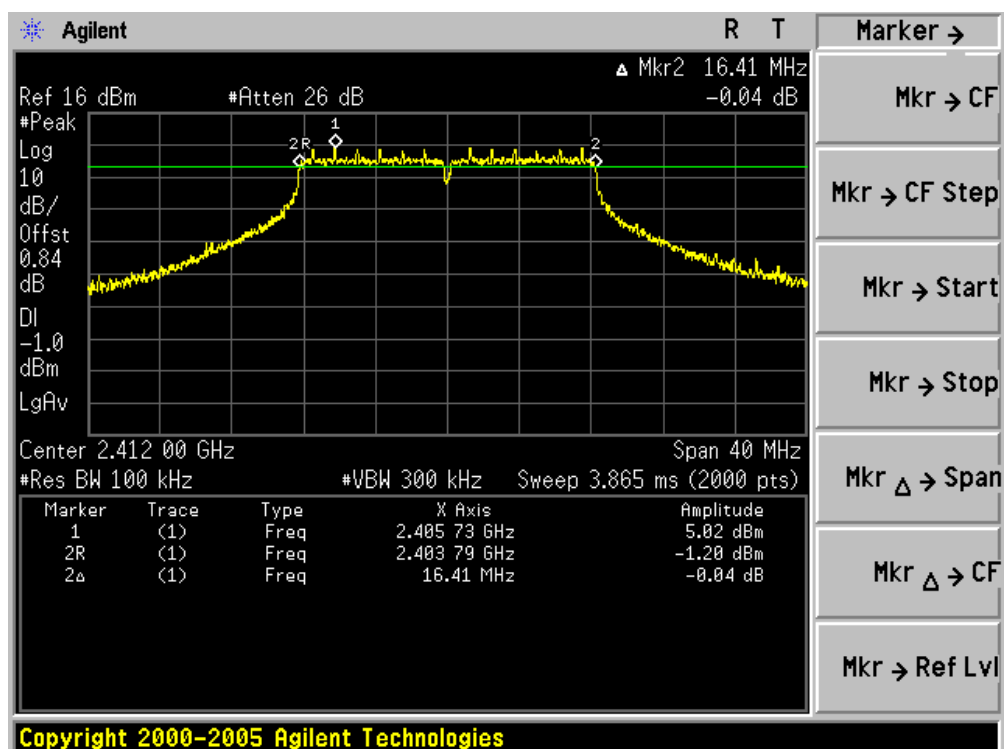
Channel 11 (2462MHz)



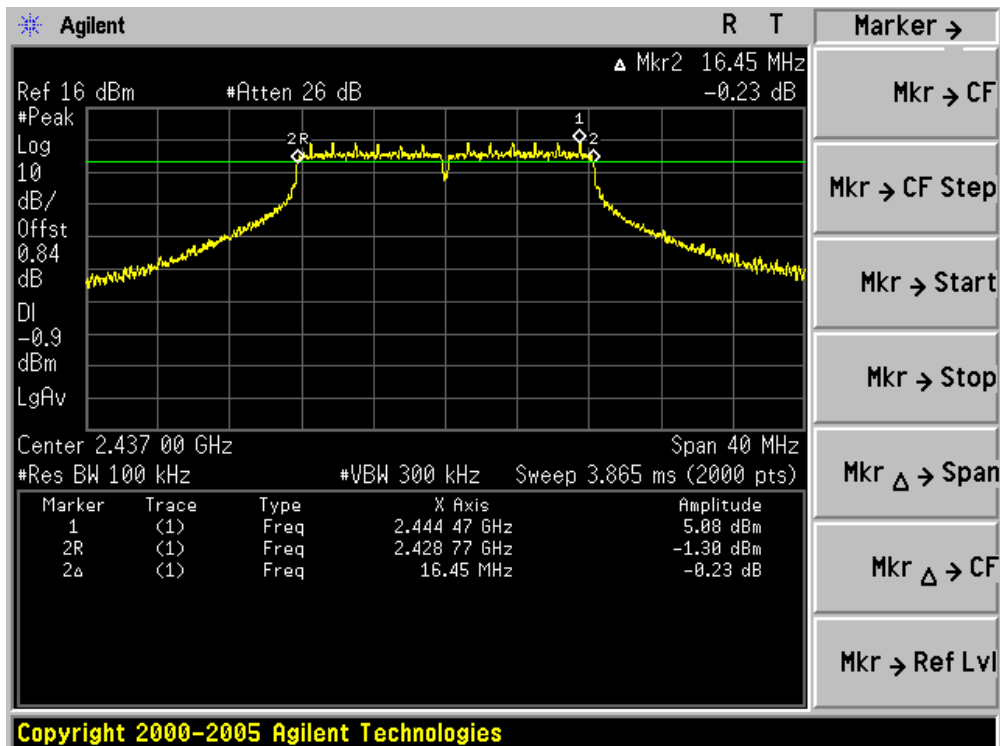
Product	:	Notebook
Test Item	:	Occupied Bandwidth
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16410	500	Pass
06	2437	16450	500	Pass
11	2462	16390	500	Pass

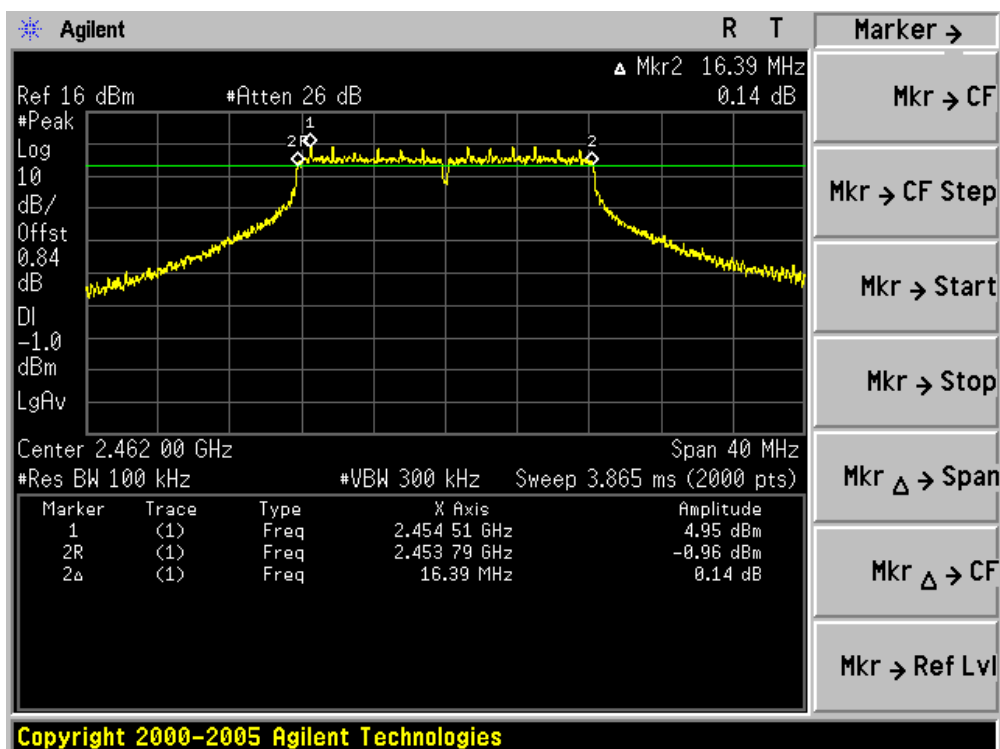
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



9. Power Output

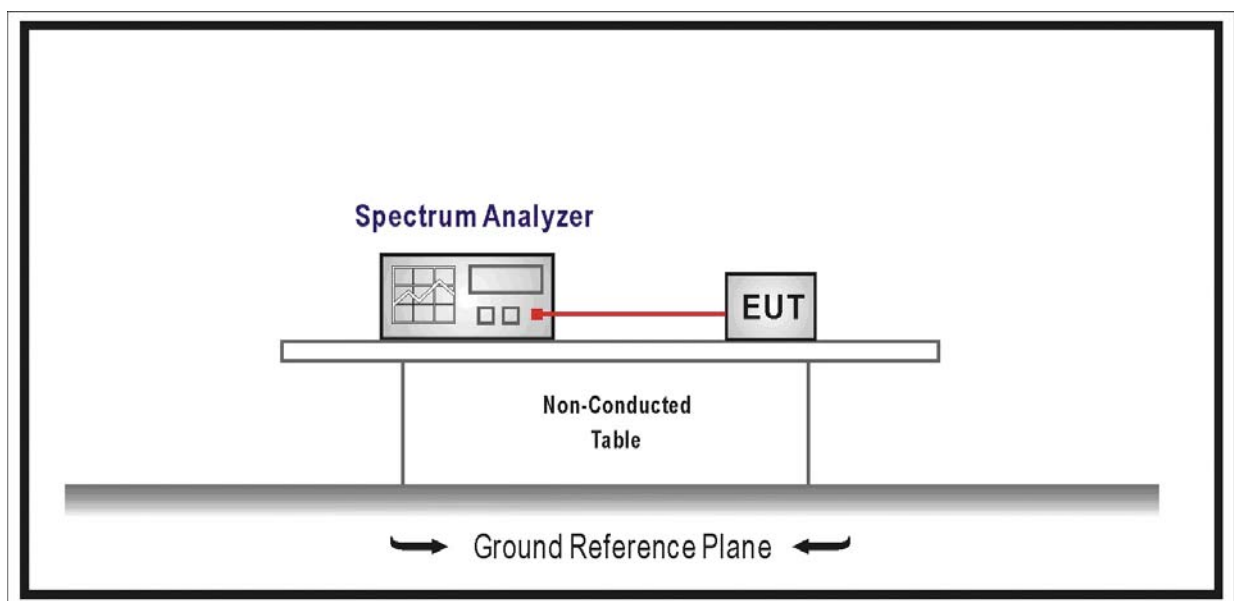
9.1. Test Equipment

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	2008/11/24
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/01

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).

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

Product	:	Notebook
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
1	2412	19.11	0.8	19.91	30.00	Pass
6	2437	19.10	0.8	19.90	30.00	Pass
11	2462	19.63	0.8	20.43	30.00	Pass

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

Product	:	Notebook
Test Item	:	Power Output
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)	Cable Loss (dBm)	Total Power (dBm)	Limit (dBm)	Result
1	2412	21.75	0.8	22.55	30.00	Pass
6	2437	21.43	0.8	22.23	30.00	Pass
11	2462	21.39	0.8	22.19	30.00	Pass

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

10. Power Spectral Density

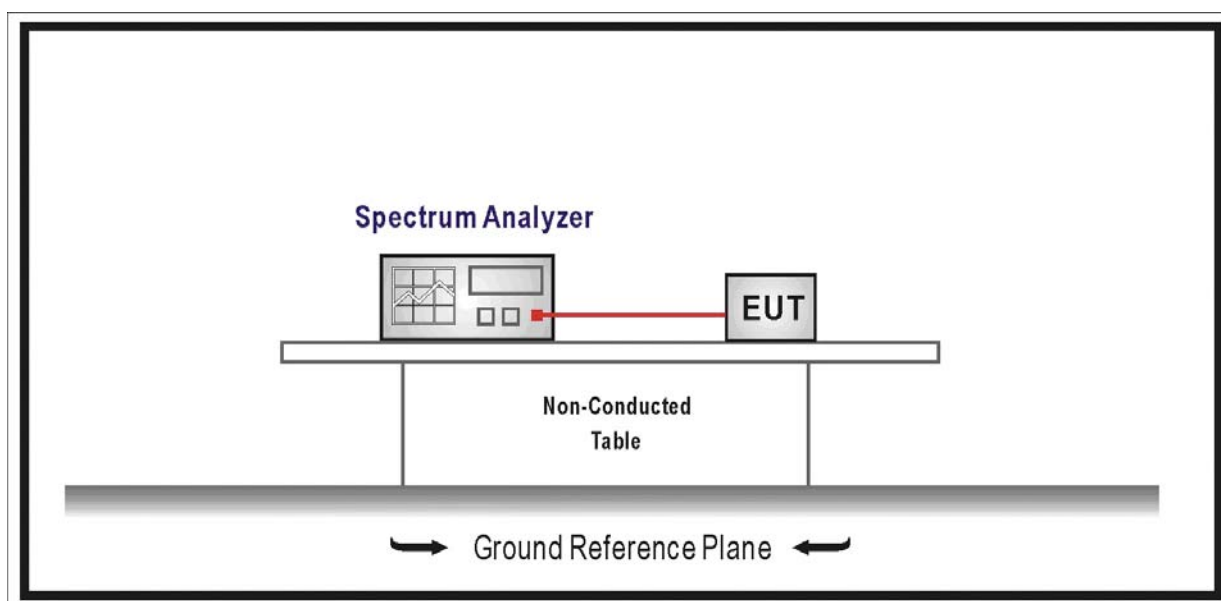
10.1. Test Equipment

Power Spectral Density / AC-6

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2009/06/10
Coaxial Cable	Huber+Suhner	AC4-RF	09	2009/05/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH007	2009/03/31

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 9 kHz, span = 300 kHz, Sweep time=100s, Set detector=Peak detector.

10.5. Uncertainty

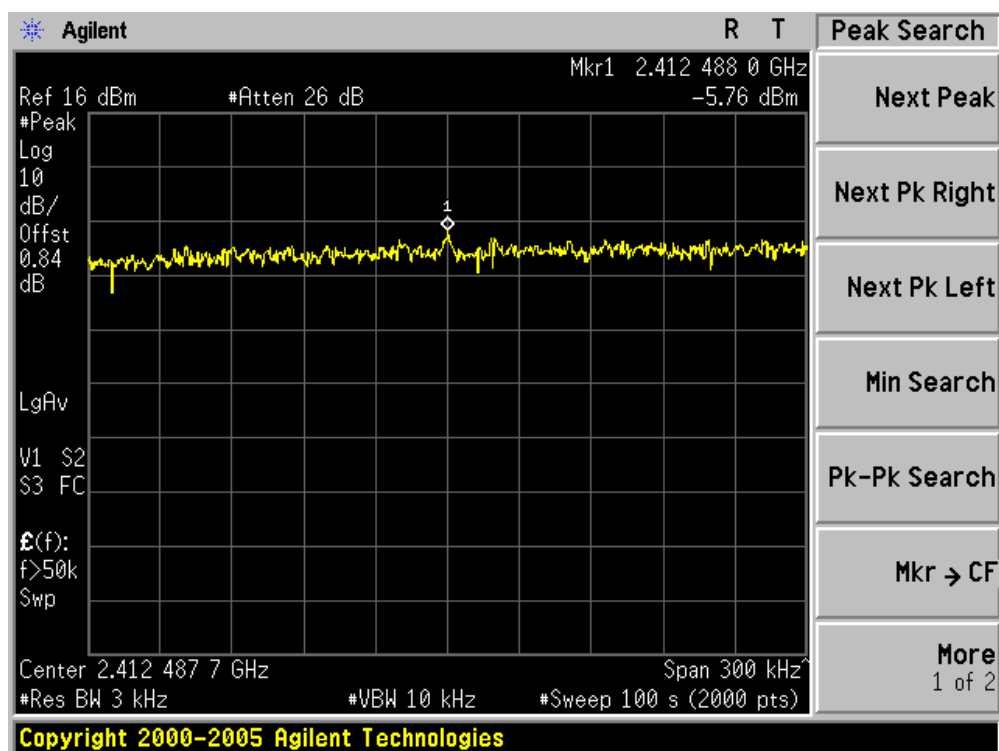
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

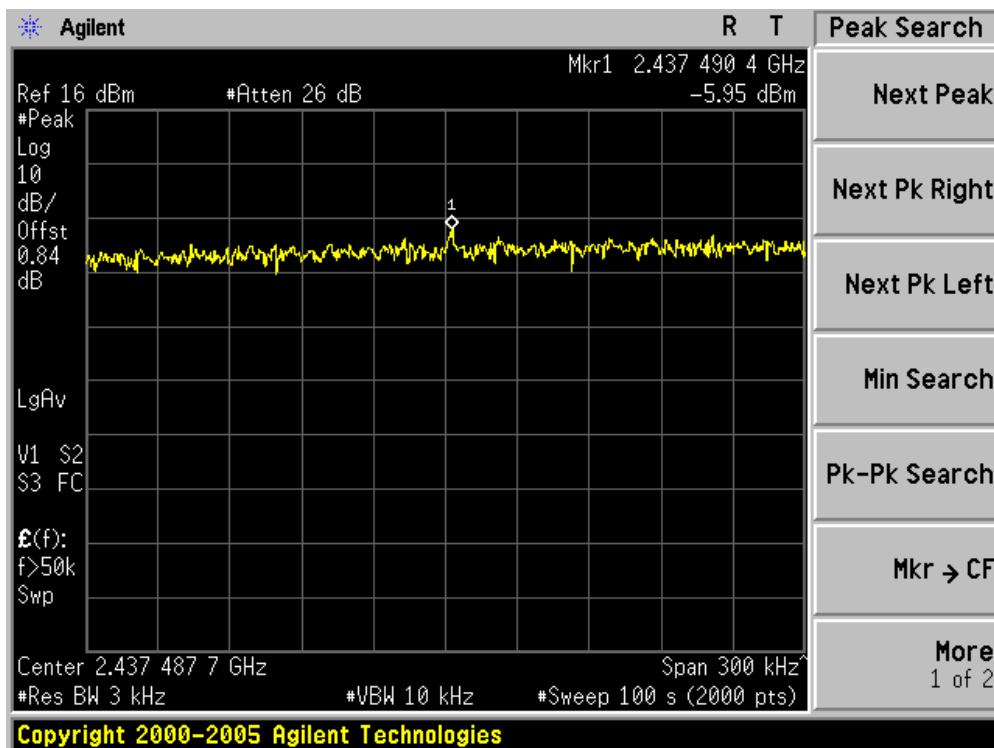
Product	:	Notebook
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-5.76	8	Pass
06	2437	-5.95	8	Pass
11	2462	-5.72	8	Pass

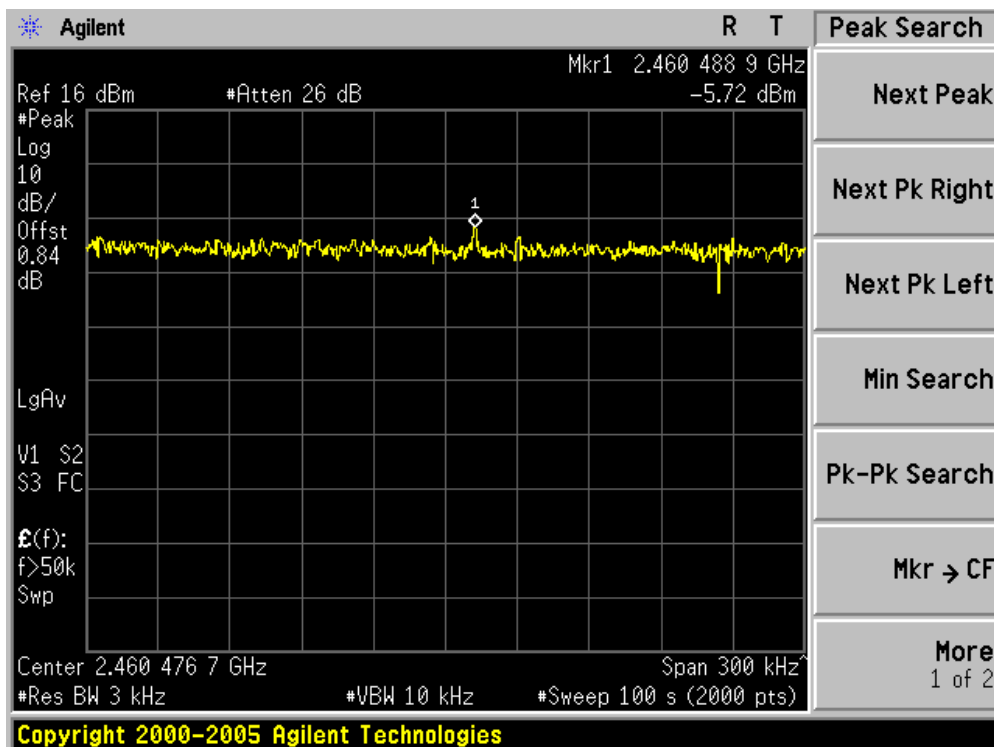
Channel 01 (2412MHz)



Channel 06 (2437MHz)



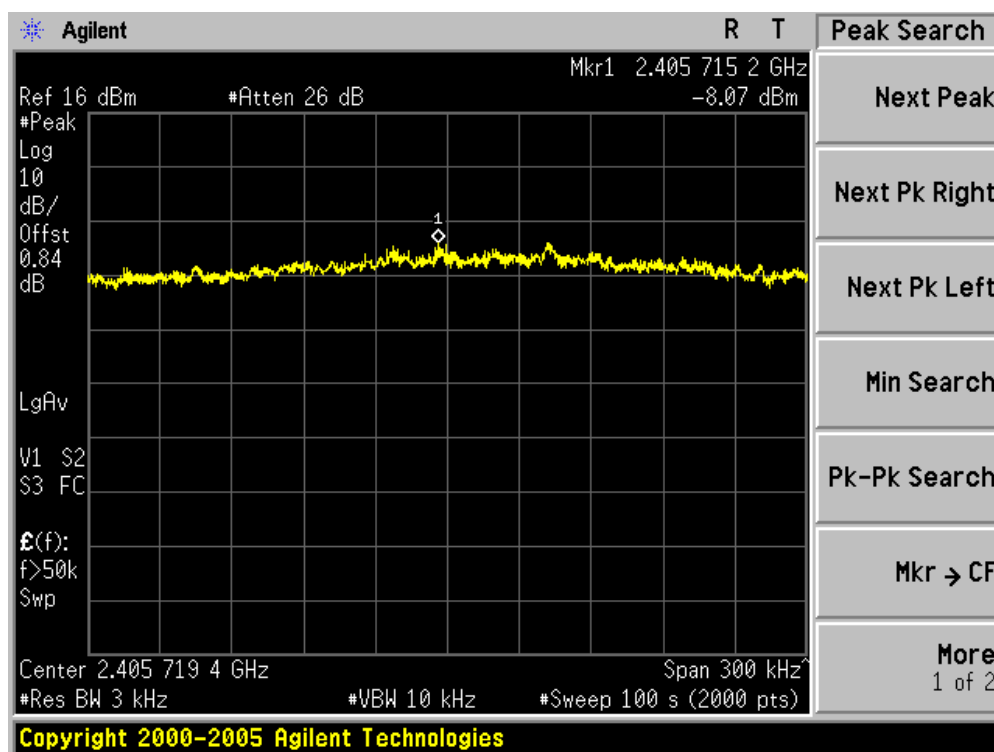
Channel 11 (2462MHz)



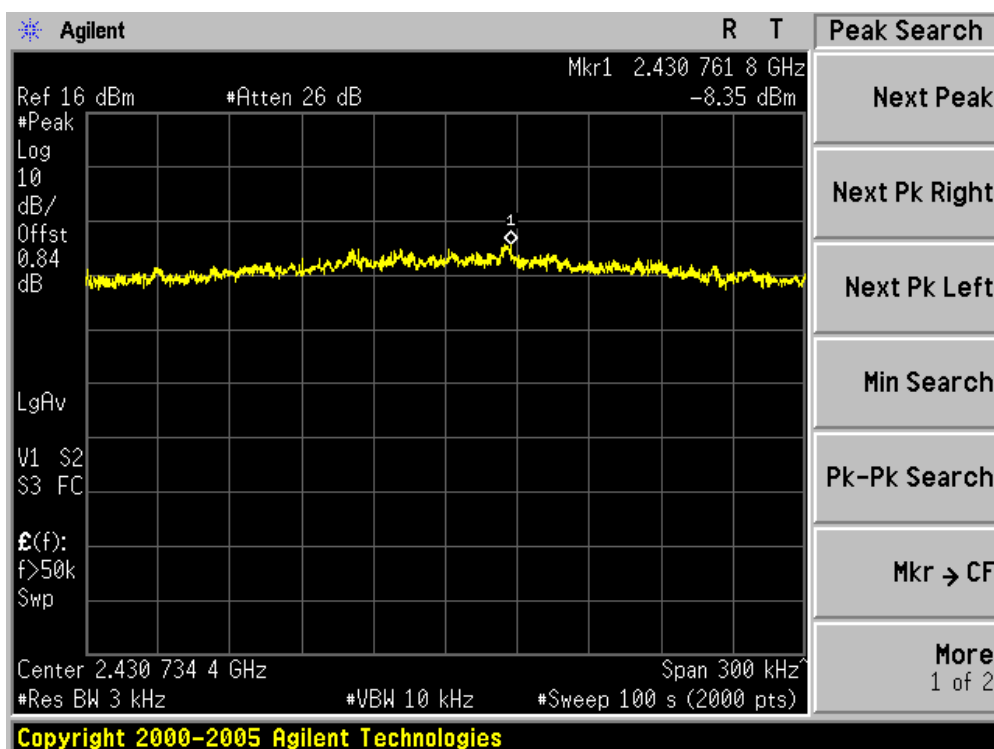
Product	:	Notebook
Test Item	:	Power Spectral Density
Test Site	:	AC-6
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-8.07	8	Pass
06	2437	-8.35	8	Pass
11	2462	-7.82	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

