Test Report

Product Name	：	RF Module
Model No.	：	EWPA1PCID
FCC ID	：	U6IRTV1SAPPCID

Applicant	：	Hangzhou H3C Technologies Co., Ltd.
Address	：	310 Liuhe Road, Zhijiang Science Park, Hangzhou 310053, P.R.China

Date of Receipt	：	2008/10/28
Issued Date	：	2008/12/01
Report No.	：	08BS029R-RF-US-P05V01

Test Report Certification

Issued Date : 2008/12/01
Report No. : 08BS029R-RF-US-P05V01

QuieTek

Product Name	:	RF Module
Applicant	:	Hangzhou H3C Technologies Co., Ltd.
Address	:	310 Liuhe Road, Zhijiang Science Park, Hangzhou 310053, P.R.China
Manufacturer	:	Hangzhou H3C Technologies Co., Ltd.
Model No.	:	EWPA1PCID
FCC ID	:	U6IRTV1SAPPCID
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	DC 3.3V
Trade Name	:	H3C
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 Chang
(Gene Chang)

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	RF Module
Trade Name	H3C
Model No.	EWPA1PCID
FCC ID	U6IRTV1SAPPCID

WLAN	RF Module
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	Omni Antenna
Antenna Gain	Refer to the “Antenna List”

For 2.4GHz Band

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	Shengdu	SL15040A	2.0dBi

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:

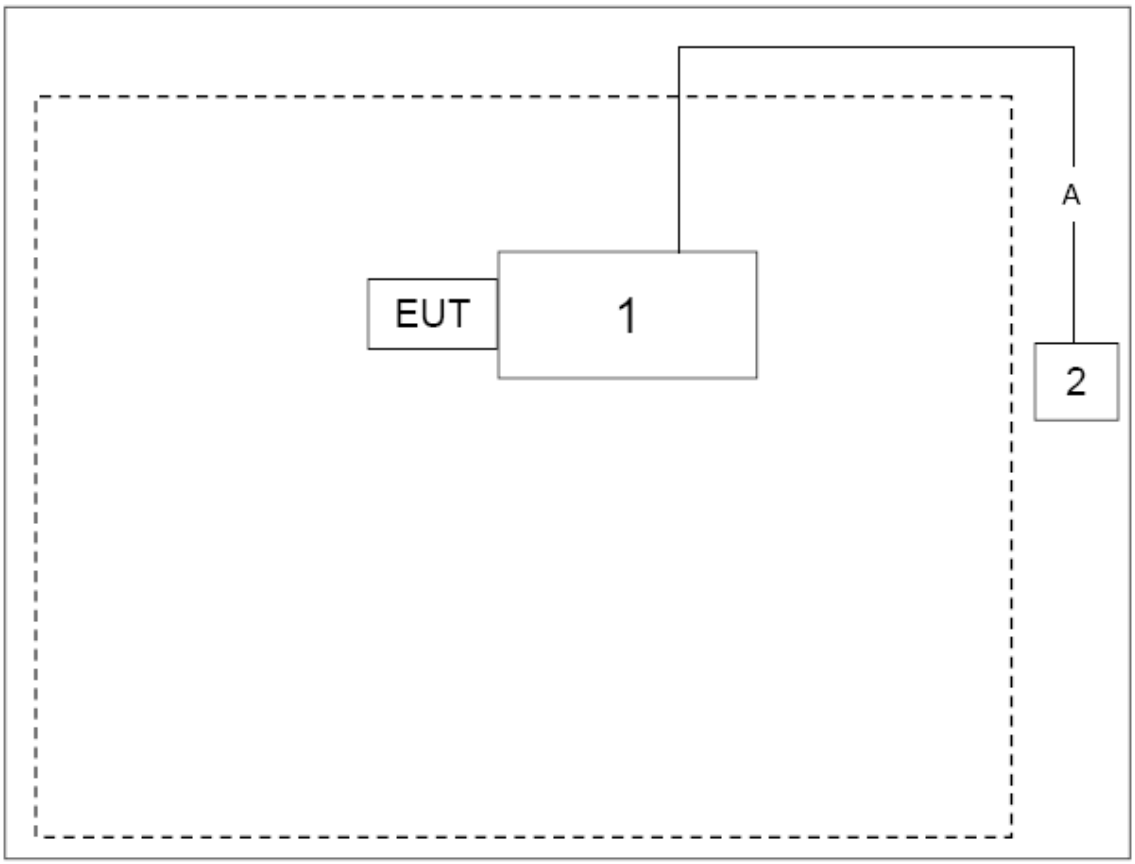
1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.

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	Router	H3C	MSR20-10	N/A	N/A
2	Notebook	DELL	PP19L	JH097 A01	Power by adapter

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	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 “ART.exe” software in PC, then select test mode and test channel to continuous transmit.

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

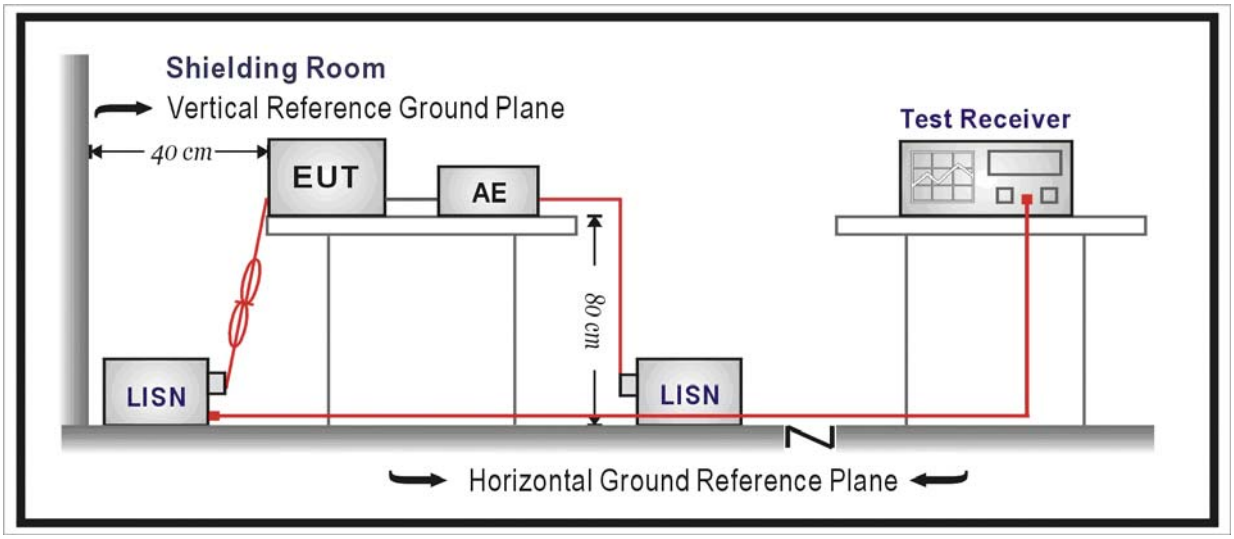
3.1. Test Equipment

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	2008/09/28
50ohm Termination	SHX	TF2	07081401	2008/09/28
Coaxial Cable	Luthi	RG214	519358	2008/10/21
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

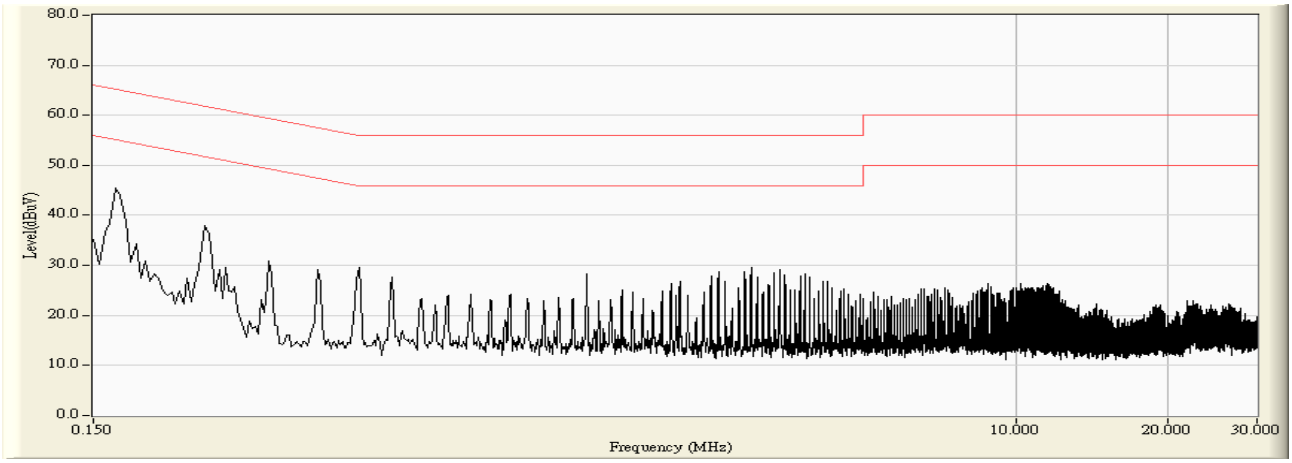
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane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

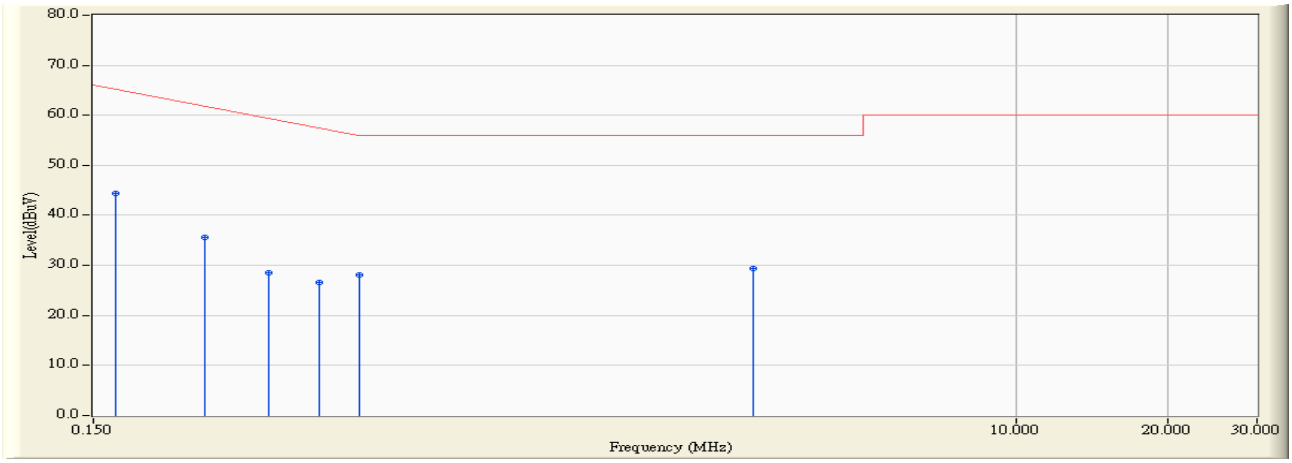
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/11/04 - 11:41**
Limit : FCC_PartC_15.207_00M_QP	**Margin : 10**
EUT : RF Module	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**

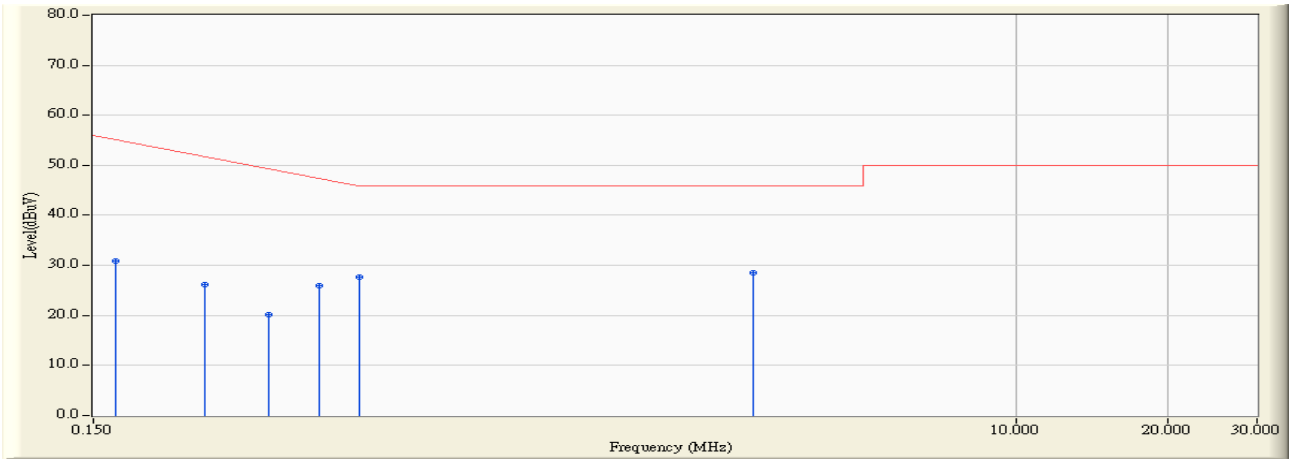


Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/11/04 - 11:46**
Limit : FCC_PartC_15.207_00M_QP	**Margin : 0**
EUT : RF Module	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



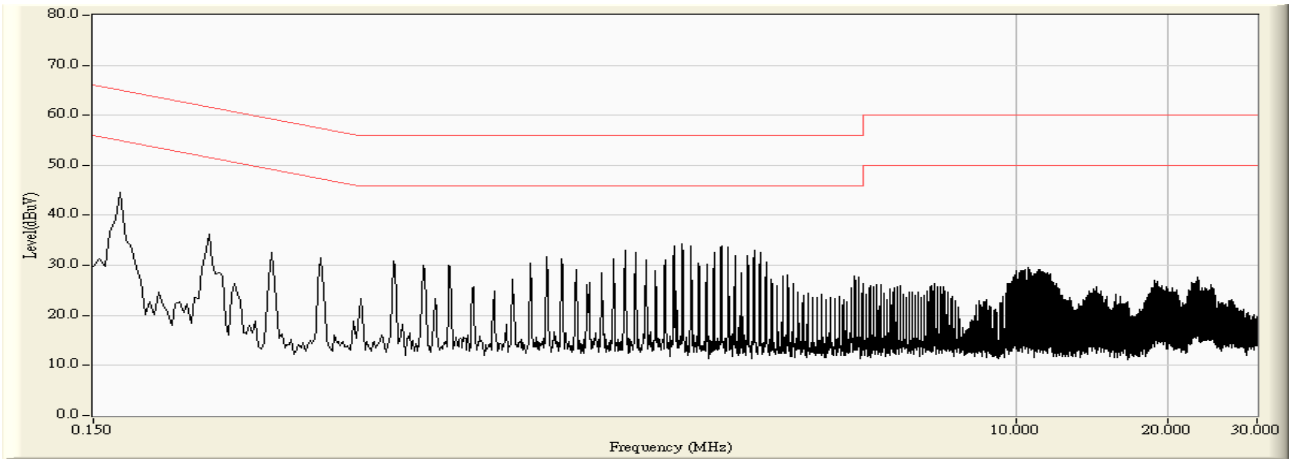
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.166	10.084	34.300	44.384	-21.159	65.543	QUASIPEAK
2		0.250	9.461	26.200	35.661	-27.482	63.143	QUASIPEAK
3		0.334	9.527	19.000	28.527	-32.216	60.743	QUASIPEAK
4		0.419	9.577	17.100	26.677	-31.637	58.314	QUASIPEAK
5		0.505	9.625	18.500	28.125	-27.875	56.000	QUASIPEAK
6		3.032	9.758	19.700	29.458	-26.542	56.000	QUASIPEAK

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/11/04 - 11:46**
Limit : FCC_PartC_15.207_00M_AV	**Margin : 0**
EUT : RF Module	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**

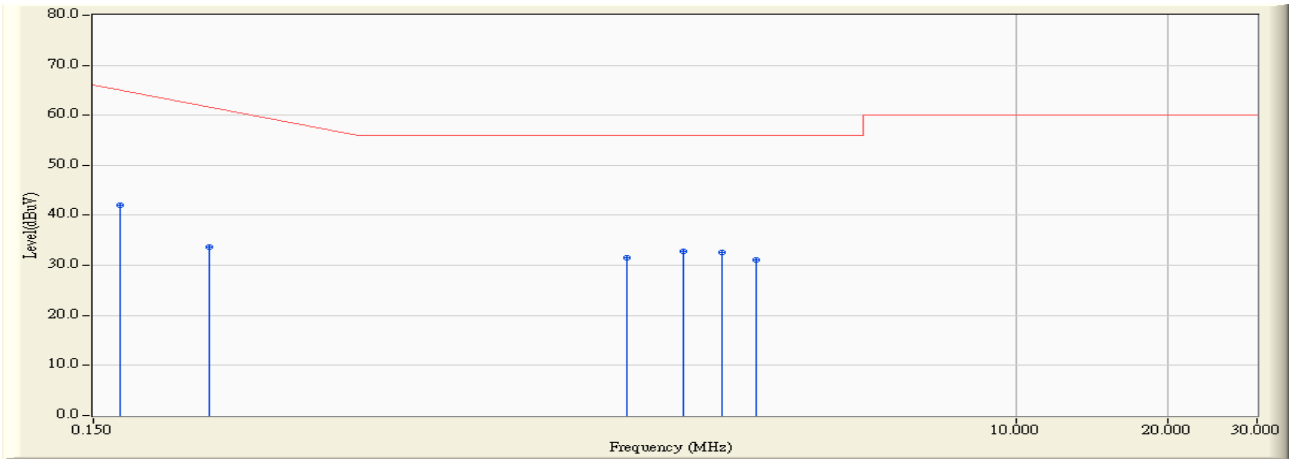


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	10.084	20.900	30.984	-24.559	55.543	AVERAGE
2		0.250	9.461	16.600	26.061	-27.082	53.143	AVERAGE
3		0.334	9.527	10.600	20.127	-30.616	50.743	AVERAGE
4		0.419	9.577	16.300	25.877	-22.437	48.314	AVERAGE
5		0.505	9.625	18.000	27.625	-18.375	46.000	AVERAGE
6	*	3.032	9.758	18.700	28.458	-17.542	46.000	AVERAGE

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/11/04 - 11:48**
Limit : FCC_PartC_15.207_00M_QP	**Margin : 10**
EUT : RF Module	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**

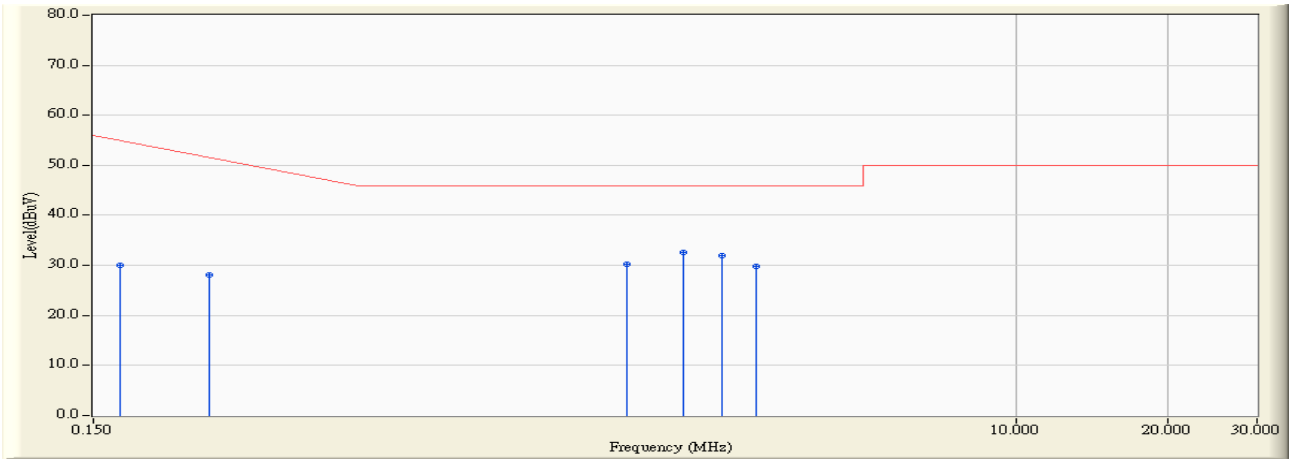


Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/11/04 - 11:53**
Limit : FCC_PartC_15.207_00M_QP	**Margin : 0**
EUT : RF Module	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.169	9.919	32.100	42.019	-23.438	65.457	QUASIPEAK
2		0.254	9.582	24.000	33.582	-29.447	63.029	QUASIPEAK
3		1.698	9.700	21.900	31.600	-24.400	56.000	QUASIPEAK
4	*	2.204	9.668	23.100	32.768	-23.232	56.000	QUASIPEAK
5		2.632	9.680	22.900	32.580	-23.420	56.000	QUASIPEAK
6		3.058	9.690	21.400	31.090	-24.910	56.000	QUASIPEAK

Engineer : Robin	
Site : SR-1 (Conducted Emission and Power Disturbance Test)	**Time : 2008/11/04 - 11:53**
Limit : FCC_PartC_15.207_00M_AV	**Margin : 0**
EUT : RF Module	**Probe : ENV216_100014(0.009-30MHz) - Line2**
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)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.169	9.919	20.200	30.119	-25.338	55.457	AVERAGE
2		0.254	9.582	18.500	28.082	-24.947	53.029	AVERAGE
3		1.698	9.700	20.600	30.300	-15.700	46.000	AVERAGE
4	*	2.204	9.668	22.900	32.568	-13.432	46.000	AVERAGE
5		2.632	9.680	22.300	31.980	-14.020	46.000	AVERAGE
6		3.058	9.690	20.200	29.890	-16.110	46.000	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	2008/10/21
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/10/21
Bilog Type Antenna	Schaffner	CBL6112B	2932	2008/10/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
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	2008/09/28
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/09/28
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	2008/06/28
Preamplifier	Quietek	AP-025C	QT-AP004	2008/10/21
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/10/21
Bilog Type Antenna	Schaffner	CBL6112D	22254	2008/10/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
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	2008/10/21
Coaxial Cable	Huber+Suhner	AC2-C	05	2008/10/21

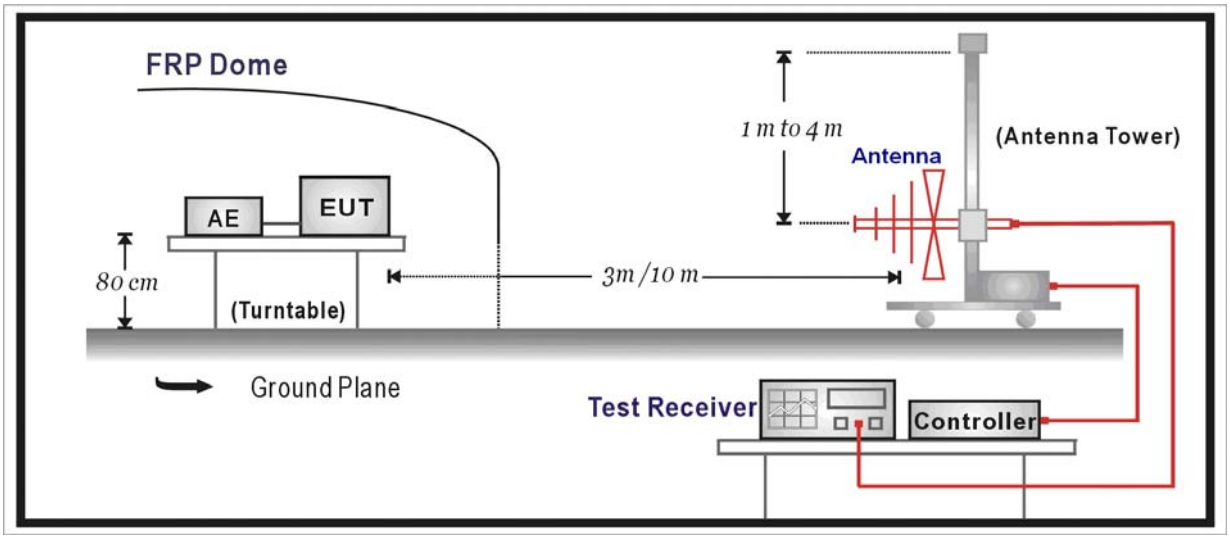
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

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

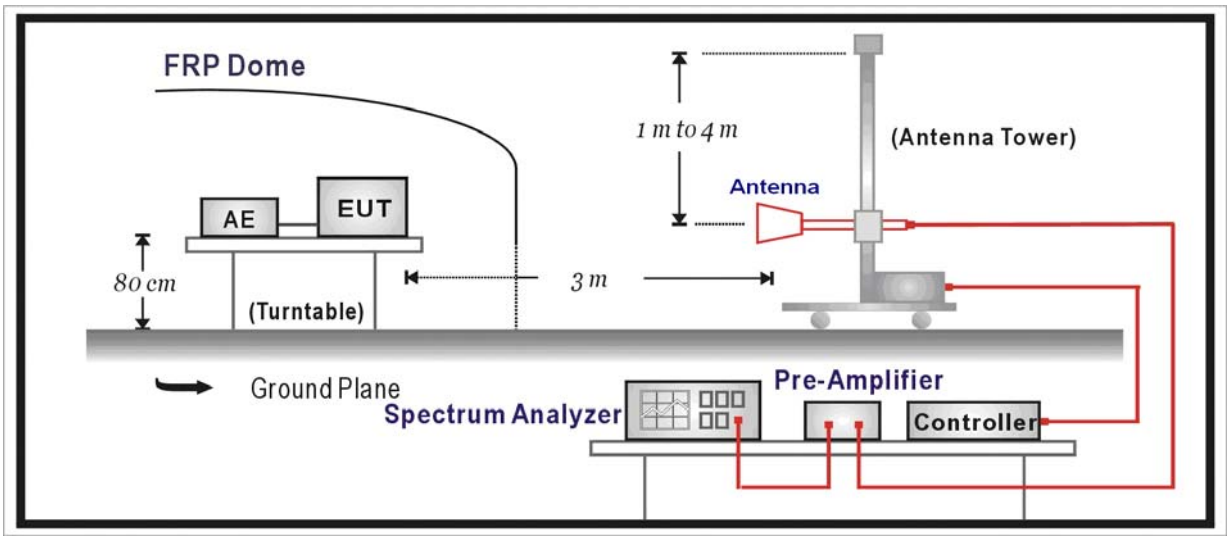
Note 2: The test instruments marked with “X” are used to measure the final test results.

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

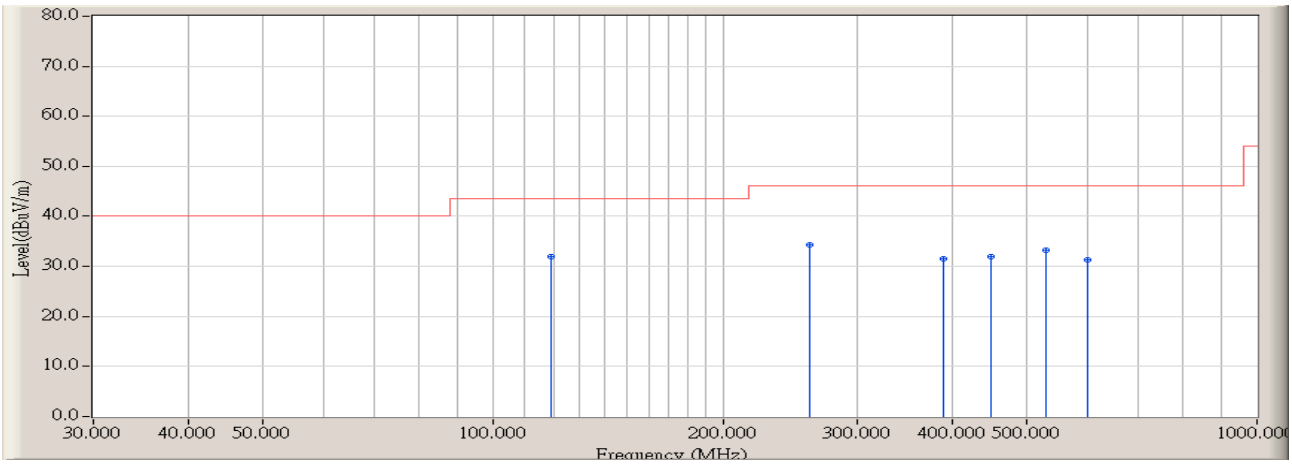
4.5. Uncertainty

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

below 1G is defined as ± 3.8 dB

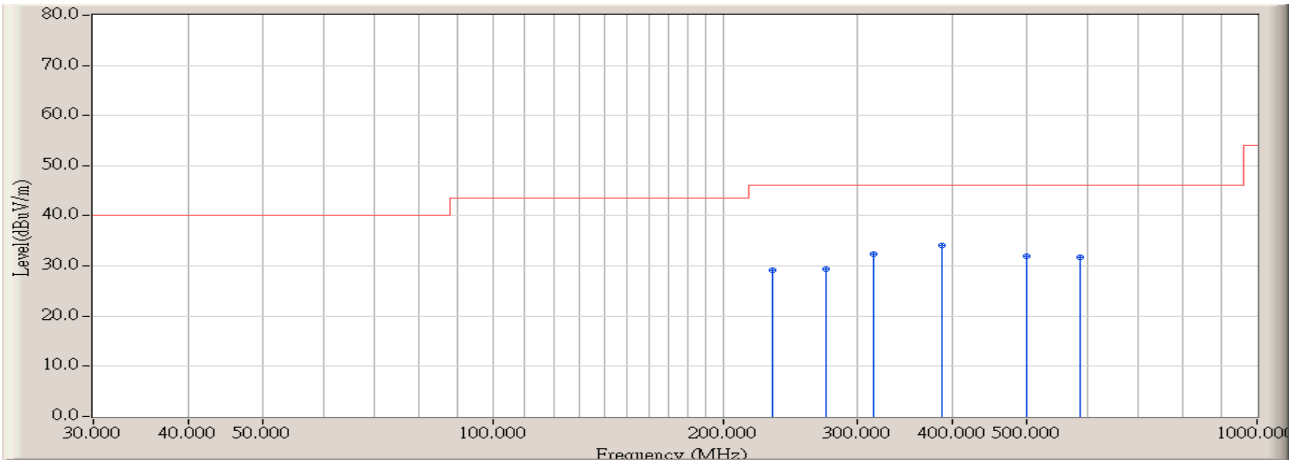
4.6. Test Result

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:21**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



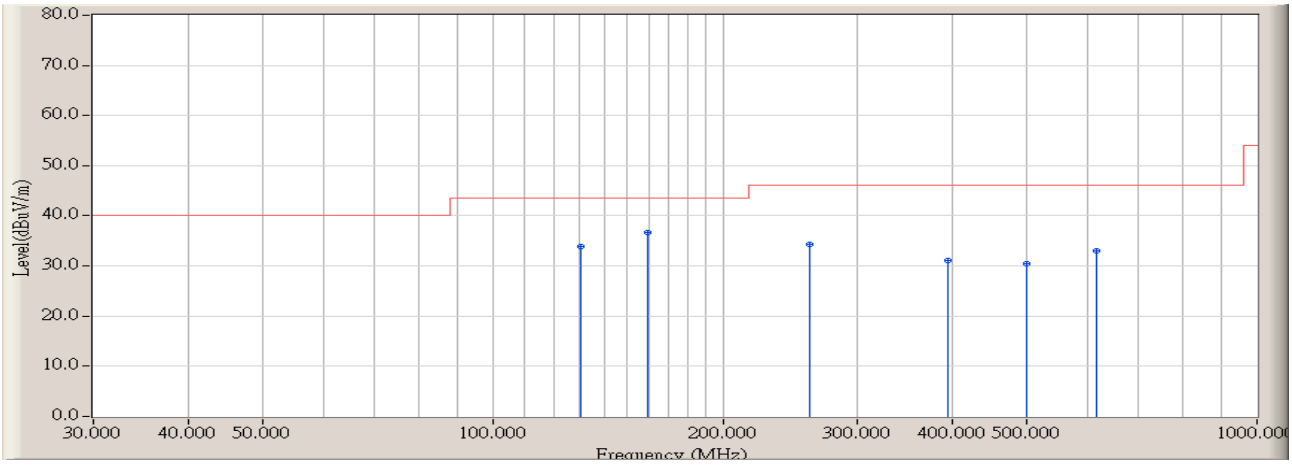
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	118.917	2.017	29.839	31.856	-11.664	43.520	QUASIPEAK	100.000	205.800
2		259.567	2.510	31.797	34.307	-11.713	46.020	QUASIPEAK	144.500	154.800
3		388.900	2.990	28.540	31.530	-14.490	46.020	QUASIPEAK	100.000	108.500
4		448.717	3.247	28.789	32.036	-13.984	46.020	QUASIPEAK	172.500	208.500
5		529.550	3.310	29.890	33.200	-12.820	46.020	QUASIPEAK	100.000	93.800
6		599.067	3.650	27.567	31.217	-14.803	46.020	QUASIPEAK	112.600	183.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:21**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



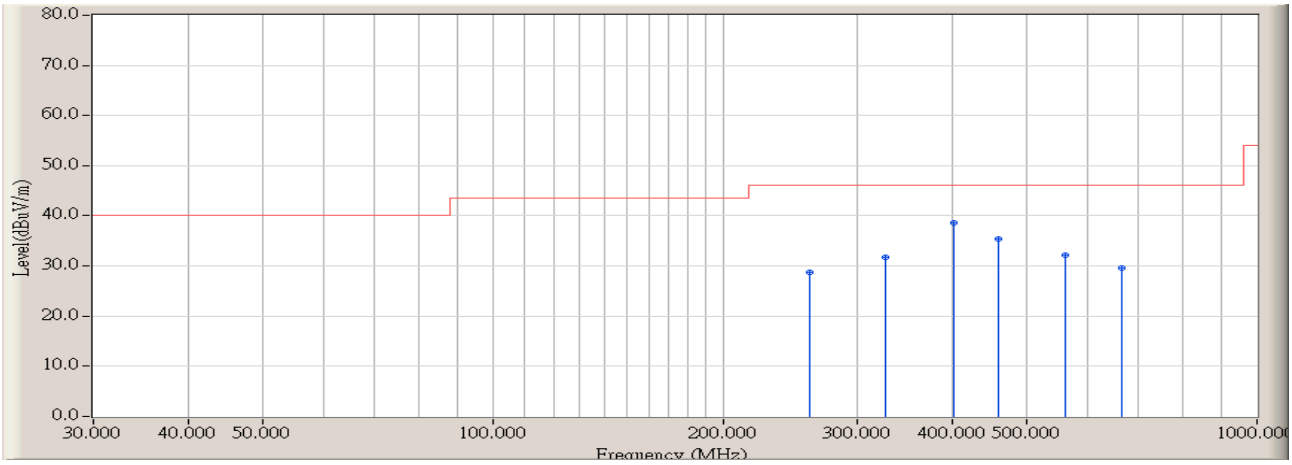
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		232.083	2.404	26.683	29.086	-16.934	46.020	QUASIPEAK	100.000	206.000
2		272.500	2.520	26.774	29.294	-16.726	46.020	QUASIPEAK	100.000	142.500
3		314.533	2.690	29.712	32.402	-13.618	46.020	QUASIPEAK	100.000	75.300
4	*	387.283	2.974	31.180	34.153	-11.867	46.020	QUASIPEAK	104.600	136.900
5		498.833	3.304	28.701	32.004	-14.016	46.020	QUASIPEAK	114.600	204.800
6		587.750	3.520	28.263	31.783	-14.237	46.020	QUASIPEAK	100.000	193.800

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:21**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



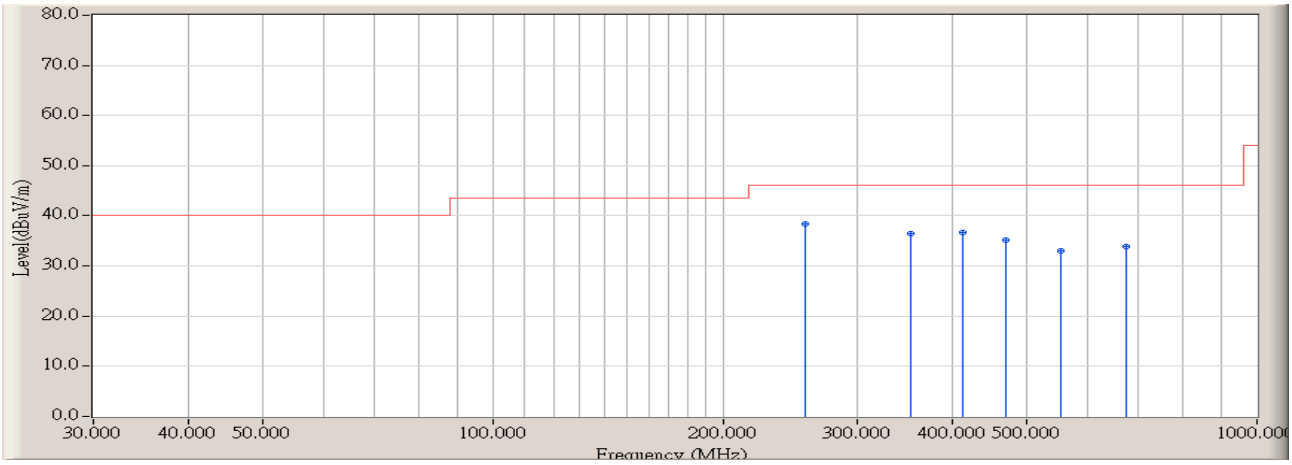
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		130.233	2.067	31.724	33.791	-9.729	43.520	QUASIPEAK	100.000	68.900
2	*	159.333	2.126	34.463	36.590	-6.930	43.520	QUASIPEAK	142.000	84.500
3		259.567	2.510	31.797	34.307	-11.713	46.020	QUASIPEAK	112.000	177.500
4		393.750	3.030	28.004	31.034	-14.986	46.020	QUASIPEAK	100.000	154.600
5		498.833	3.304	27.065	30.368	-15.652	46.020	QUASIPEAK	100.000	148.500
6		615.233	3.600	29.457	33.057	-12.963	46.020	QUASIPEAK	100.000	136.600

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:22**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



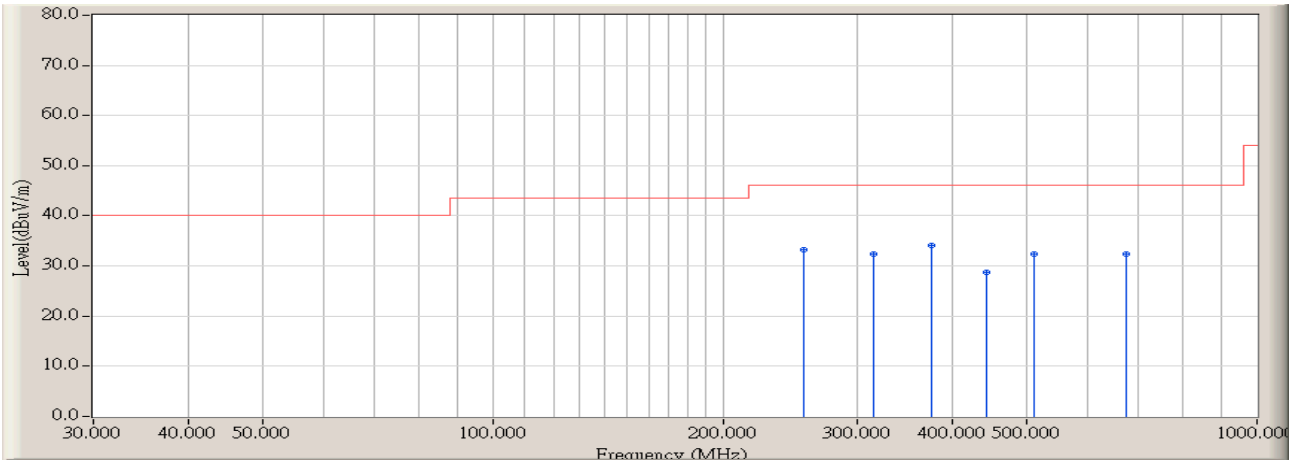
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		259.567	2.510	26.299	28.809	-17.211	46.020	QUASIPEAK	100.000	74.600
2		325.850	2.780	28.975	31.755	-14.265	46.020	QUASIPEAK	100.000	116.500
3	*	400.217	3.003	35.550	38.553	-7.467	46.020	QUASIPEAK	106.500	44.800
4		458.417	3.207	32.288	35.495	-10.525	46.020	QUASIPEAK	113.600	210.400
5		561.883	3.457	28.704	32.161	-13.859	46.020	QUASIPEAK	102.600	95.000
6		665.350	3.590	25.905	29.495	-16.525	46.020	QUASIPEAK	100.000	135.200

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:22**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



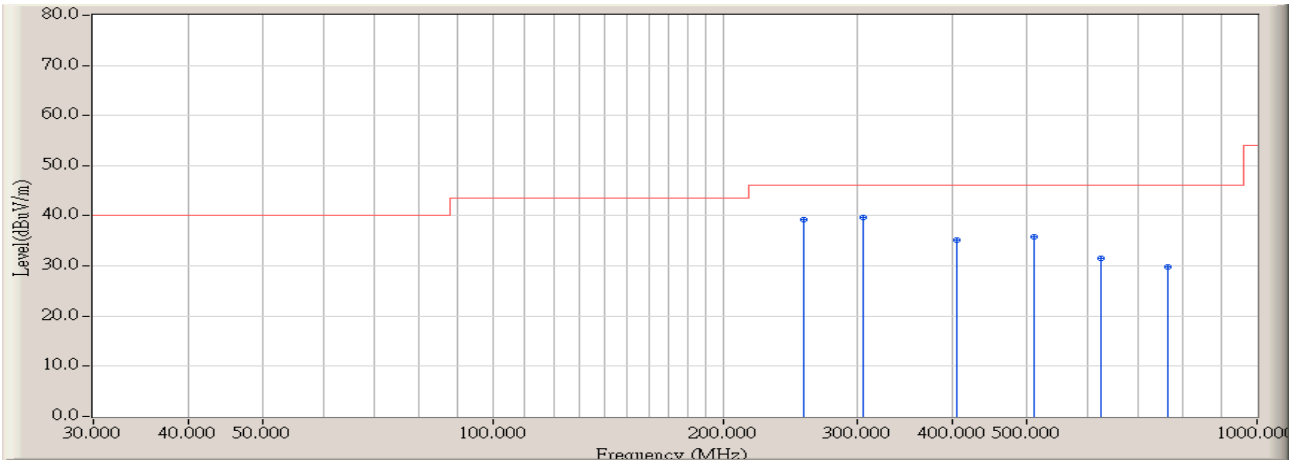
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	256.333	2.460	36.018	38.478	-7.542	46.020	QUASIPEAK	100.000	215.000
2		351.717	2.820	33.632	36.452	-9.568	46.020	QUASIPEAK	128.000	88.500
3		411.533	3.027	33.674	36.701	-9.319	46.020	QUASIPEAK	100.000	274.000
4		469.733	3.183	32.011	35.194	-10.826	46.020	QUASIPEAK	145.500	209.000
5		553.800	3.370	29.583	32.953	-13.067	46.020	QUASIPEAK	177.500	93.800
6		673.433	3.960	29.889	33.849	-12.171	46.020	QUASIPEAK	100.000	174.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:23**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



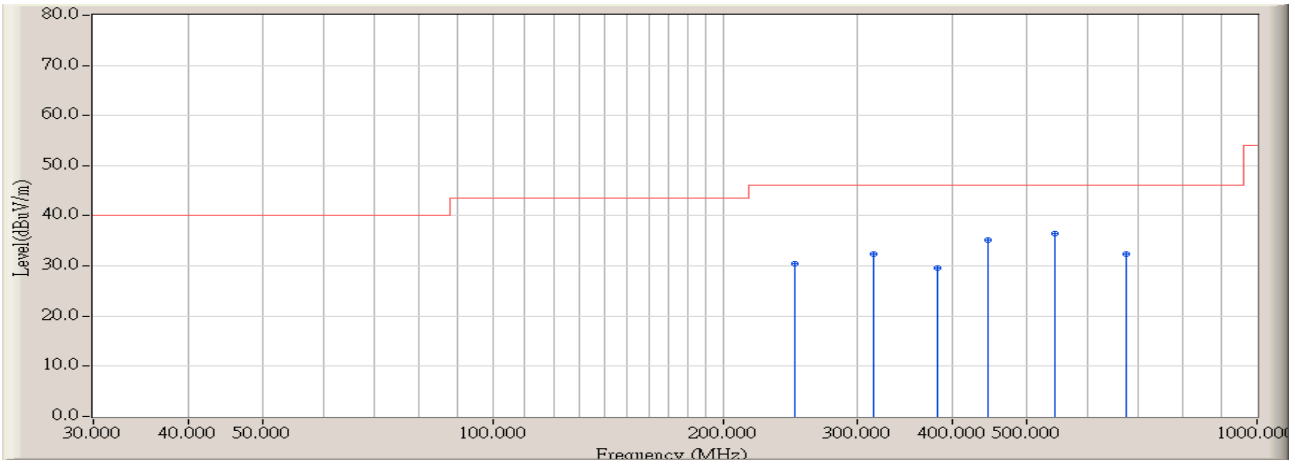
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		254.717	2.443	30.801	33.244	-12.776	46.020	QUASIPEAK	100.000	248.000
2		314.533	2.690	29.712	32.402	-13.618	46.020	QUASIPEAK	100.000	211.700
3	*	374.350	2.890	31.117	34.007	-12.013	46.020	QUASIPEAK	105.600	225.000
4		442.250	3.020	25.679	28.699	-17.321	46.020	QUASIPEAK	100.000	247.700
5		510.150	3.320	29.086	32.406	-13.614	46.020	QUASIPEAK	125.500	48.600
6		675.050	3.910	28.407	32.317	-13.703	46.020	QUASIPEAK	100.000	287.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:23**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



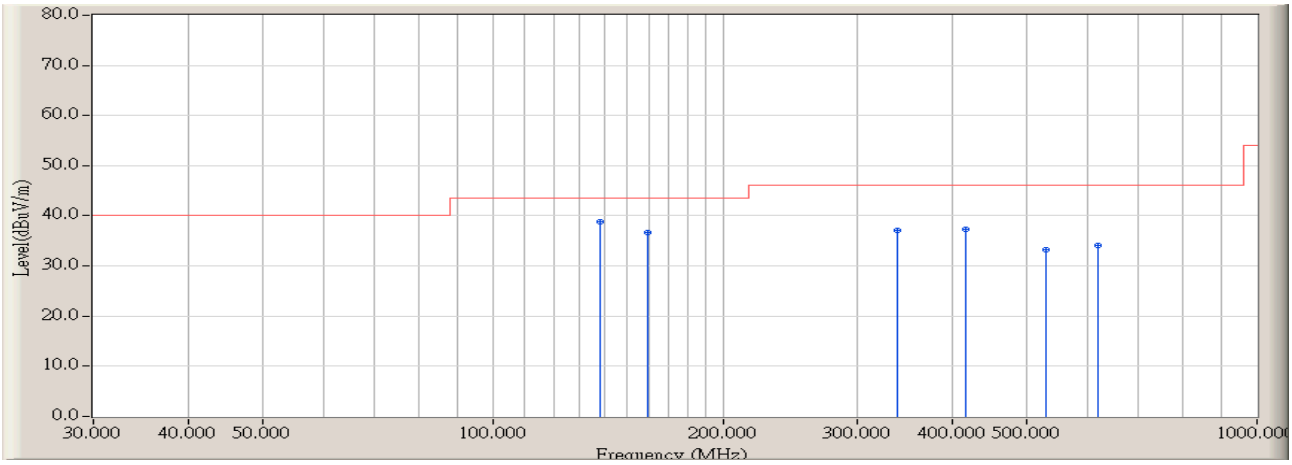
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		254.717	2.443	36.762	39.205	-6.815	46.020	QUASIPEAK	100.000	68.900
2	*	304.833	2.586	37.063	39.650	-6.370	46.020	QUASIPEAK	142.000	84.500
3		405.067	3.017	32.185	35.202	-10.818	46.020	QUASIPEAK	112.000	177.500
4		511.767	3.327	32.588	35.915	-10.105	46.020	QUASIPEAK	100.000	154.600
5		624.933	3.667	27.761	31.428	-14.592	46.020	QUASIPEAK	100.000	148.500
6		765.583	3.924	25.804	29.727	-16.293	46.020	QUASIPEAK	100.000	136.600

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:24**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



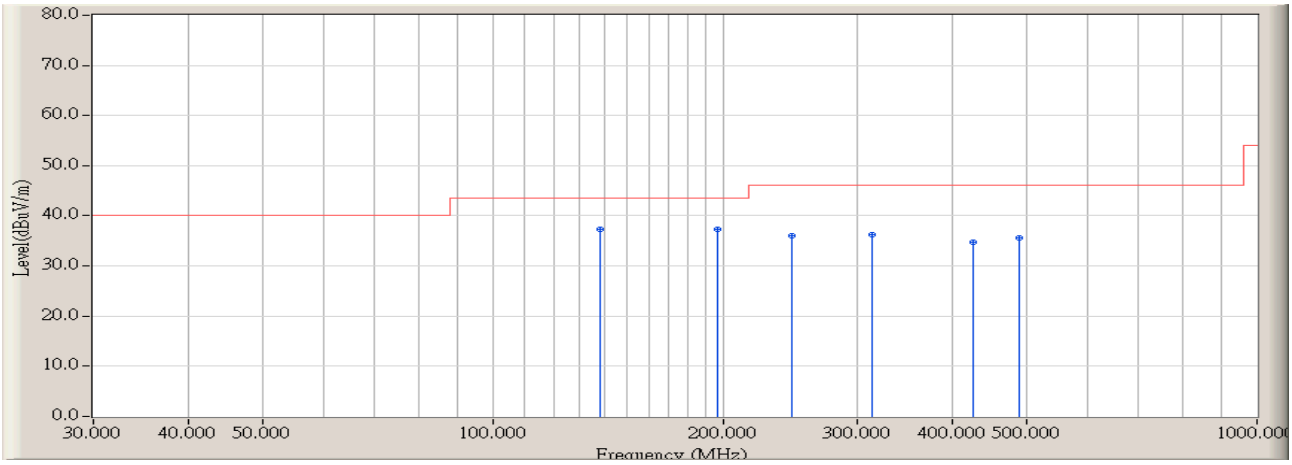
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		248.250	2.450	28.056	30.506	-15.514	46.020	QUASIPEAK	100.000	74.600
2		314.533	2.690	29.712	32.402	-13.618	46.020	QUASIPEAK	100.000	116.500
3		382.433	2.907	26.764	29.671	-16.349	46.020	QUASIPEAK	106.500	44.800
4		443.867	3.077	32.046	35.123	-10.897	46.020	QUASIPEAK	113.600	210.400
5	*	544.100	3.400	33.162	36.562	-9.458	46.020	QUASIPEAK	102.600	95.000
6		675.050	3.910	28.407	32.317	-13.703	46.020	QUASIPEAK	100.000	135.200

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:24**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



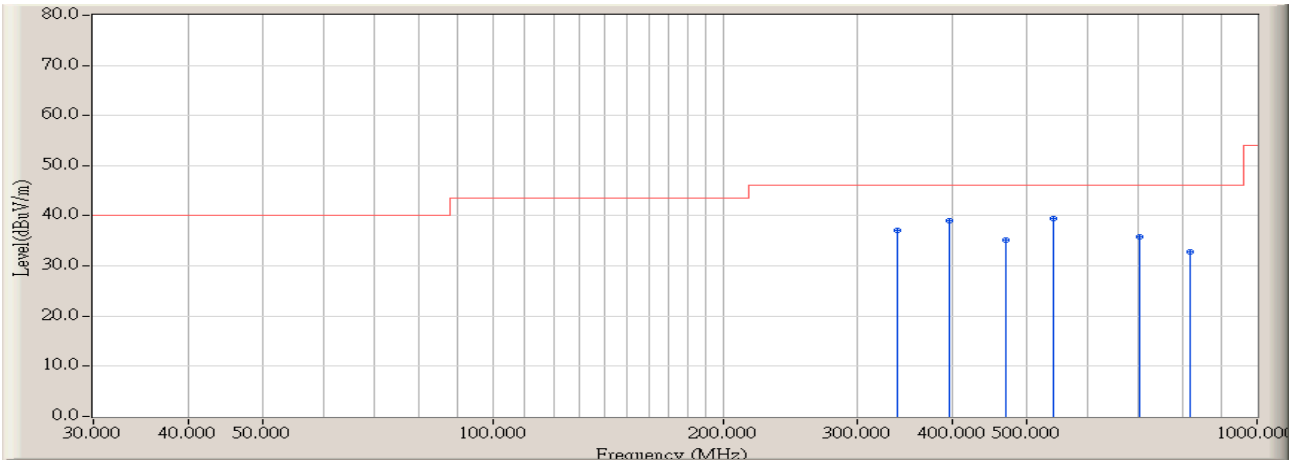
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	138.317	2.020	36.721	38.741	-4.779	43.520	QUASIPEAK	100.000	95.800
2		159.333	2.126	34.463	36.590	-6.930	43.520	QUASIPEAK	122.500	174.500
3		338.783	2.734	34.404	37.137	-8.883	46.020	QUASIPEAK	105.200	96.500
4		416.383	3.013	34.283	37.296	-8.724	46.020	QUASIPEAK	100.000	65.800
5		529.550	3.310	29.890	33.200	-12.820	46.020	QUASIPEAK	100.000	214.000
6		620.083	3.563	30.535	34.098	-11.922	46.020	QUASIPEAK	206.000	155.800

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:25**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



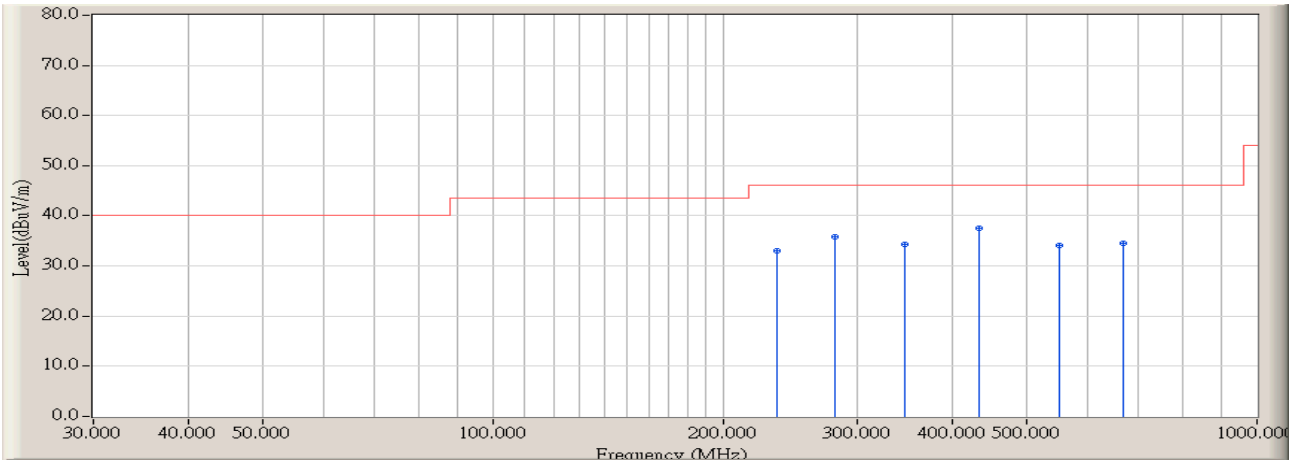
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	138.317	2.020	35.260	37.280	-6.240	43.520	QUASIPEAK	100.000	88.900
2		196.517	2.253	35.019	37.272	-6.248	43.520	QUASIPEAK	100.000	226.000
3		246.633	2.416	33.593	36.010	-10.010	46.020	QUASIPEAK	112.600	65.900
4		312.917	2.670	33.505	36.175	-9.845	46.020	QUASIPEAK	106.000	147.500
5		424.467	3.124	31.574	34.697	-11.323	46.020	QUASIPEAK	100.000	145.300
6		487.517	3.344	32.178	35.521	-10.499	46.020	QUASIPEAK	100.000	36.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:25**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



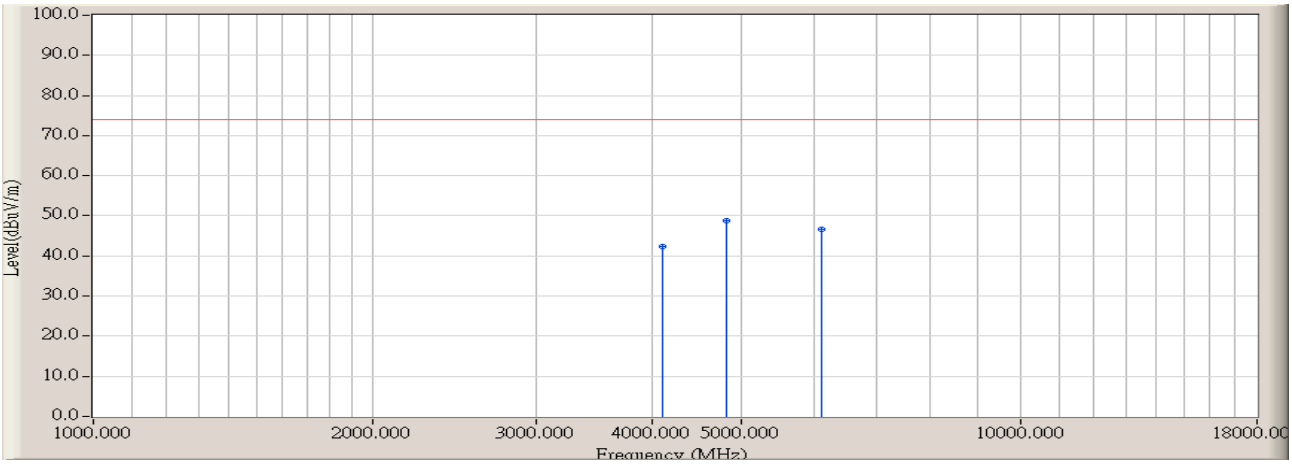
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		338.783	2.734	34.404	37.137	-8.883	46.020	QUASIPEAK	100.000	118.500
2		395.367	3.020	35.942	38.962	-7.058	46.020	QUASIPEAK	114.600	45.800
3		469.733	3.183	32.011	35.194	-10.826	46.020	QUASIPEAK	100.000	315.000
4	*	540.867	3.480	35.952	39.432	-6.588	46.020	QUASIPEAK	100.000	188.000
5		702.533	3.917	31.951	35.868	-10.152	46.020	QUASIPEAK	105.600	325.000
6		817.317	4.013	28.797	32.810	-13.210	46.020	QUASIPEAK	100.000	156.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 14:26**
Limit : FCC_SpartC_15.209_03M_QP	**Margin : 0**
EUT : RF Module	**Probe : CBL6112D_22254(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



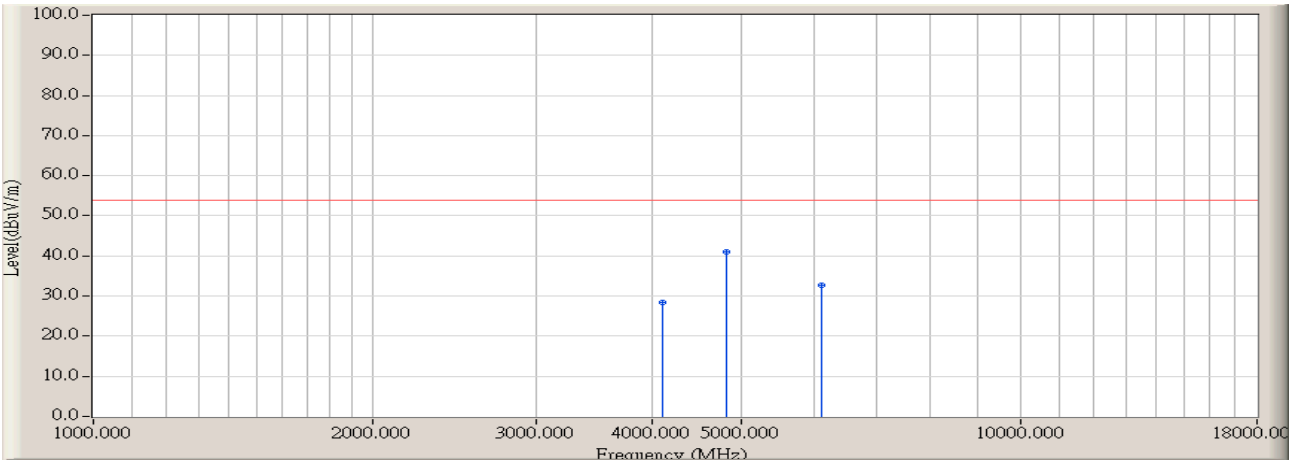
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		235.317	2.393	30.624	33.017	-13.003	46.020	QUASIPEAK	100.000	185.000
2		280.583	2.567	33.323	35.890	-10.130	46.020	QUASIPEAK	120.000	163.000
3		345.250	2.860	31.382	34.242	-11.778	46.020	QUASIPEAK	113.600	154.000
4	*	432.550	3.030	34.507	37.537	-8.483	46.020	QUASIPEAK	122.500	96.500
5		550.567	3.507	30.601	34.108	-11.912	46.020	QUASIPEAK	100.000	85.900
6		666.967	3.590	30.879	34.469	-11.551	46.020	QUASIPEAK	105.200	93.500

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:56**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



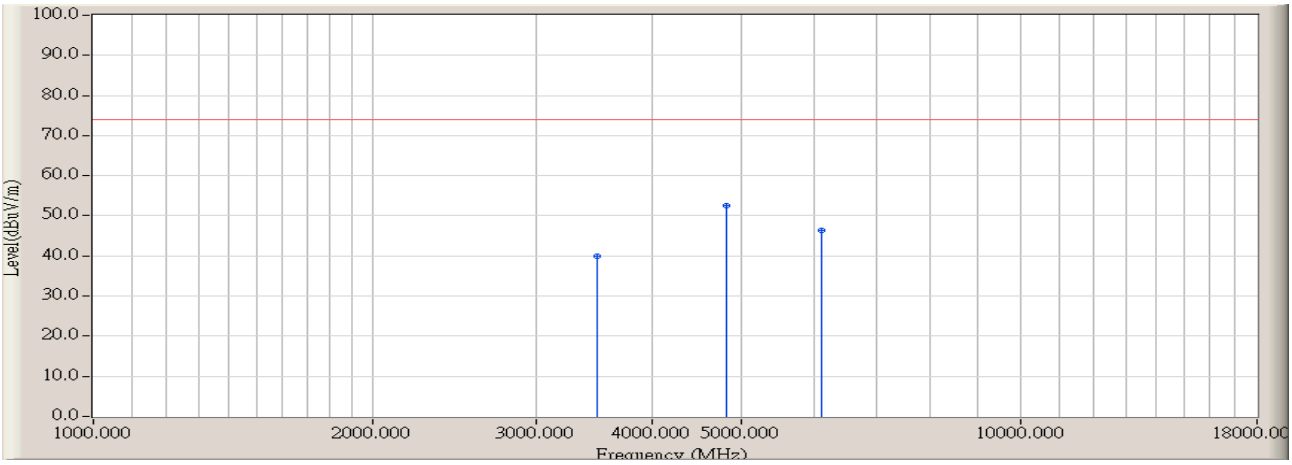
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		4116.667	1.187	41.203	42.390	-31.580	73.970	PEAK	105.000	165.000
2	*	4825.000	3.610	45.127	48.737	-25.233	73.970	PEAK	100.000	206.000
3		6100.000	6.630	40.087	46.717	-27.253	73.970	PEAK	120.000	256.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



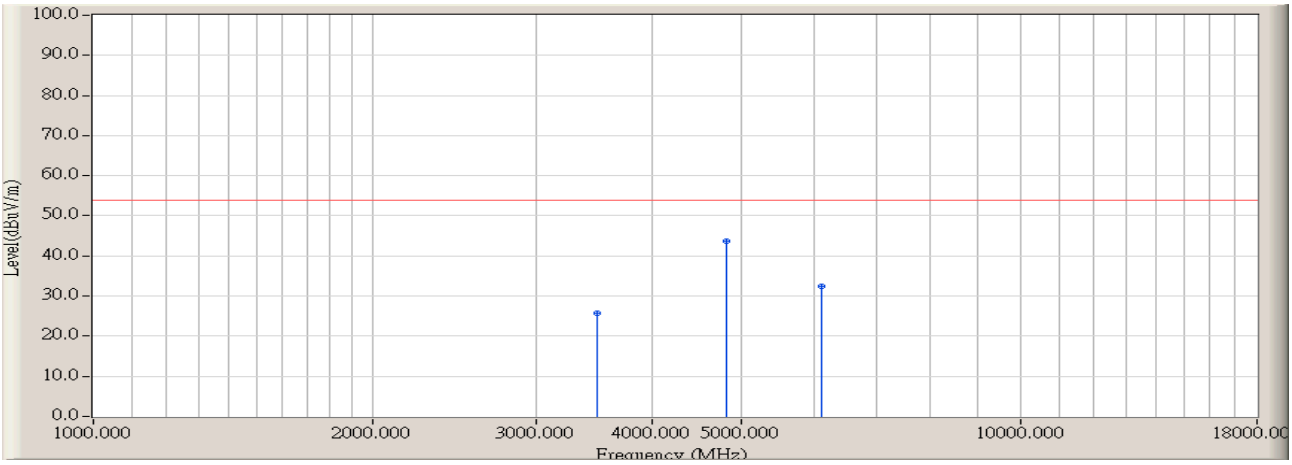
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		4116.667	1.187	27.200	28.387	-25.583	53.970	AVERAGE	105.000	165.000
2	*	4825.000	3.610	37.400	41.010	-12.960	53.970	AVERAGE	100.000	206.000
3		6100.000	6.630	26.100	32.730	-21.240	53.970	AVERAGE	120.000	256.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



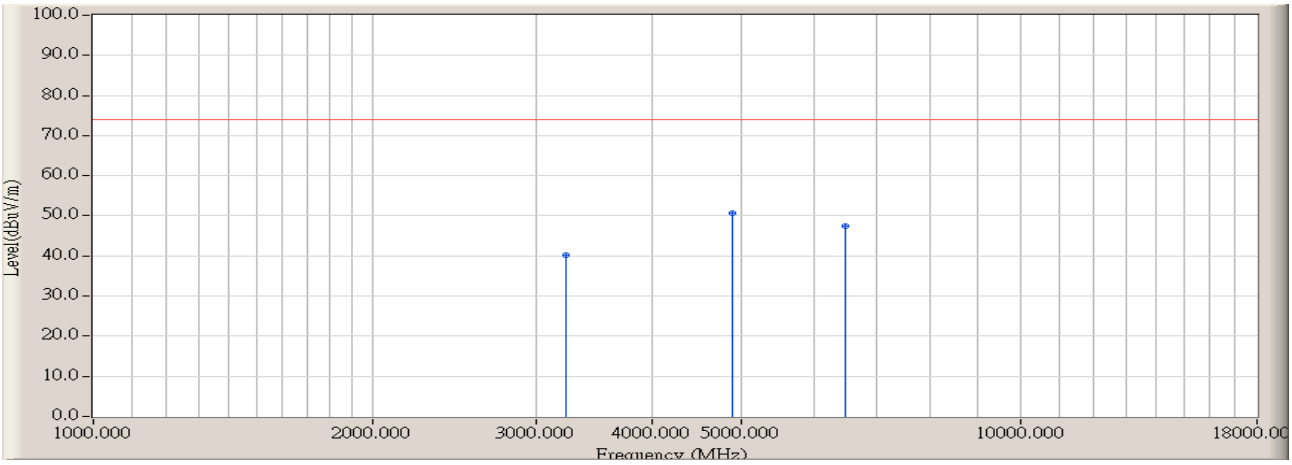
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3493.333	-1.093	41.019	39.926	-34.044	73.970	PEAK	100.000	167.000
2	*	4825.000	3.610	48.975	52.585	-21.385	73.970	PEAK	100.000	218.000
3		6100.000	6.630	39.820	46.450	-27.520	73.970	PEAK	100.000	205.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



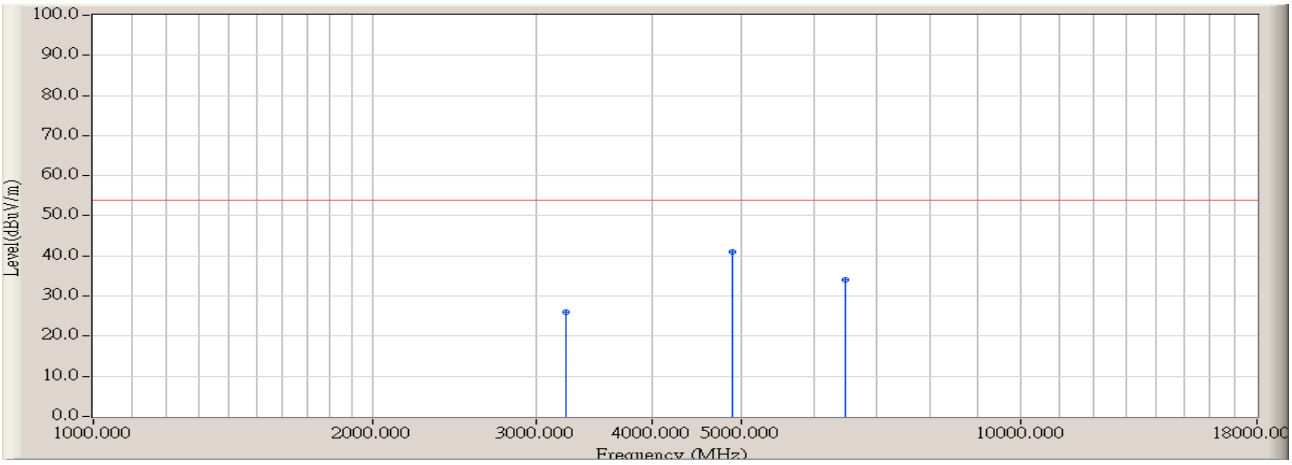
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3493.333	-1.093	26.800	25.707	-28.263	53.970	AVERAGE	100.000	167.000
2	*	4825.000	3.610	40.200	43.810	-10.160	53.970	AVERAGE	100.000	218.000
3		6100.000	6.630	25.700	32.330	-21.640	53.970	AVERAGE	100.000	205.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



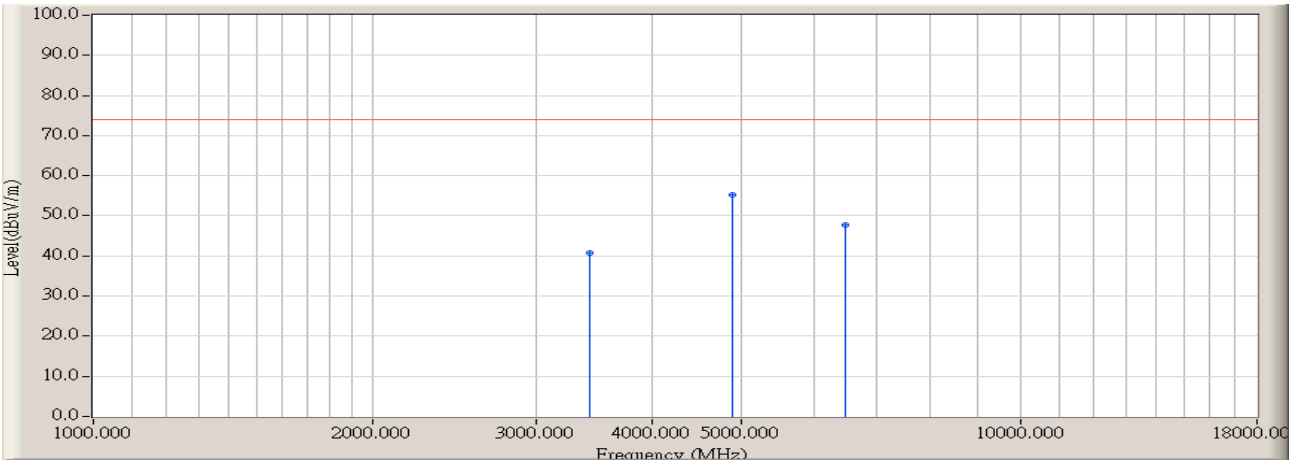
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3238.333	-1.743	42.090	40.347	-33.623	73.970	PEAK	116.000	195.000
2	*	4881.667	3.633	46.964	50.597	-23.373	73.970	PEAK	112.000	209.000
3		6468.333	8.343	39.057	47.400	-26.570	73.970	PEAK	108.000	125.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



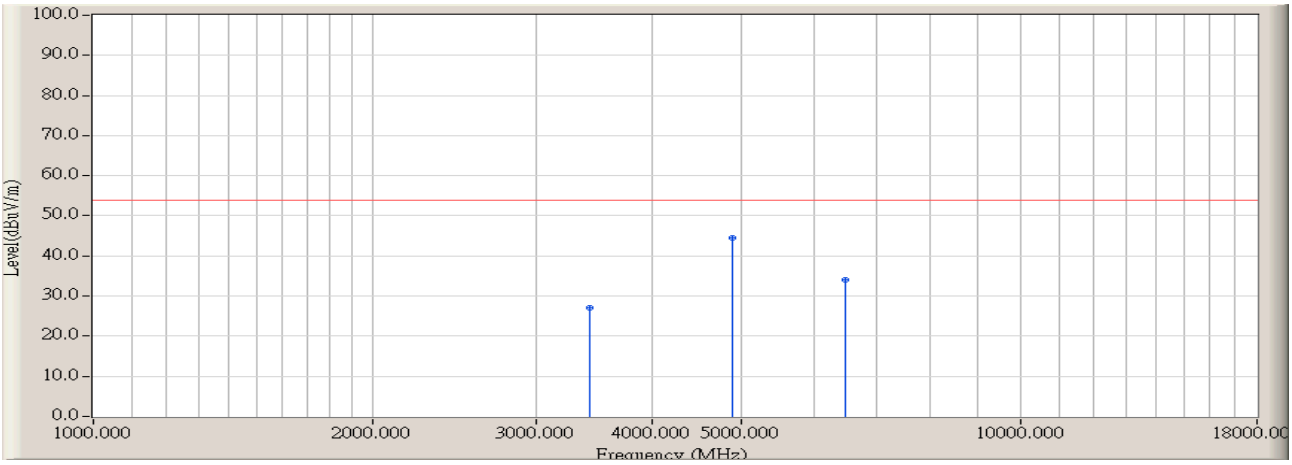
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3238.333	-1.743	27.800	26.057	-27.913	53.970	AVERAGE	116.000	195.000
2	*	4881.667	3.633	37.400	41.033	-12.937	53.970	AVERAGE	112.000	209.000
3		6468.333	8.343	25.600	33.943	-20.027	53.970	AVERAGE	108.000	125.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



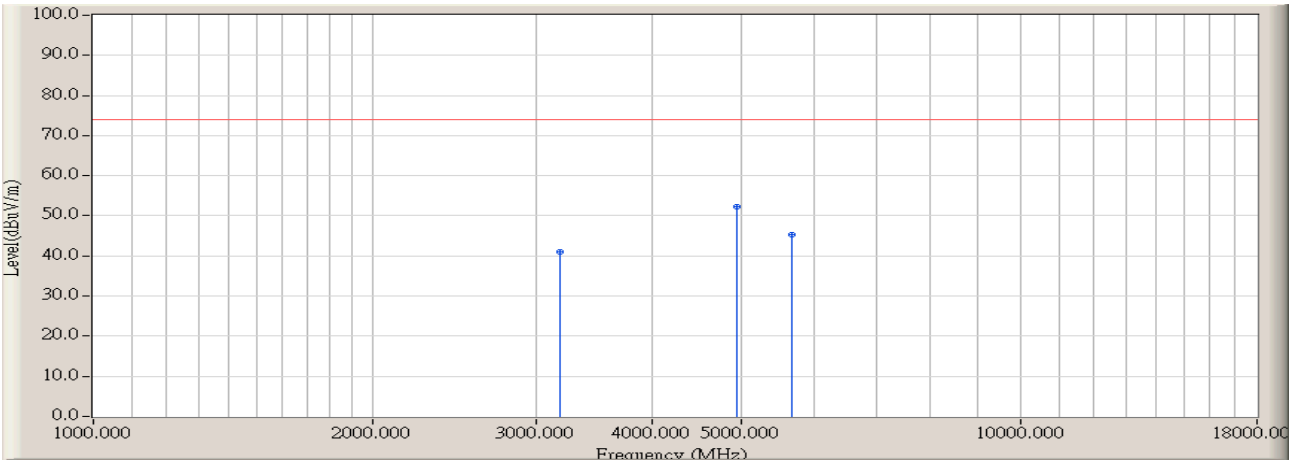
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3436.667	-1.397	42.207	40.810	-33.160	73.970	PEAK	100.000	159.000
2	*	4881.667	3.633	51.475	55.108	-18.862	73.970	PEAK	100.000	228.000
3		6468.333	8.343	39.332	47.675	-26.295	73.970	PEAK	106.000	284.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2437MHz**



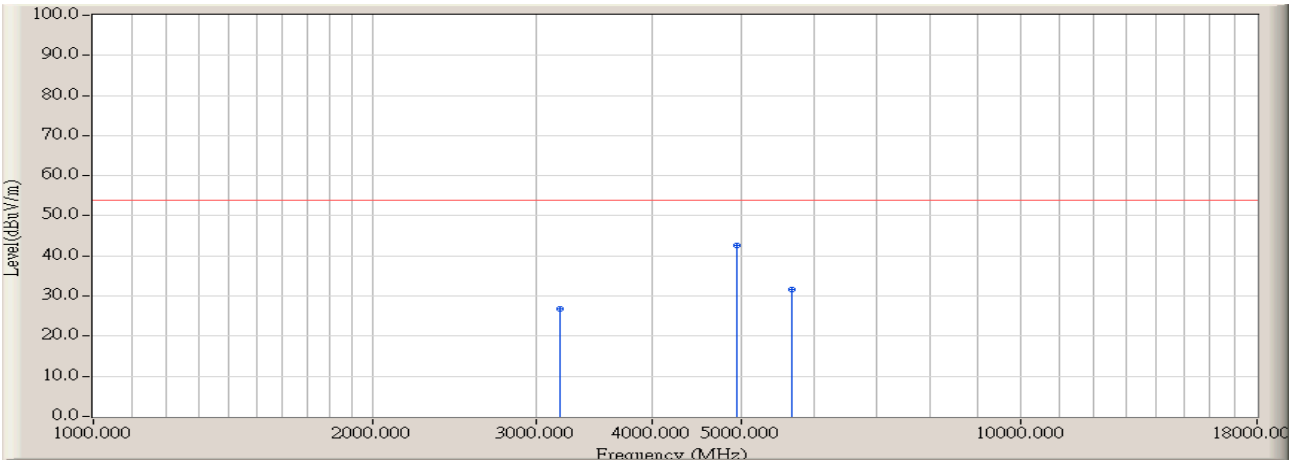
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3436.667	-1.397	28.400	27.003	-26.967	53.970	AVERAGE	100.000	159.000
2	*	4881.667	3.633	40.800	44.433	-9.537	53.970	AVERAGE	100.000	228.000
3		6468.333	8.343	25.600	33.943	-20.027	53.970	AVERAGE	106.000	284.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



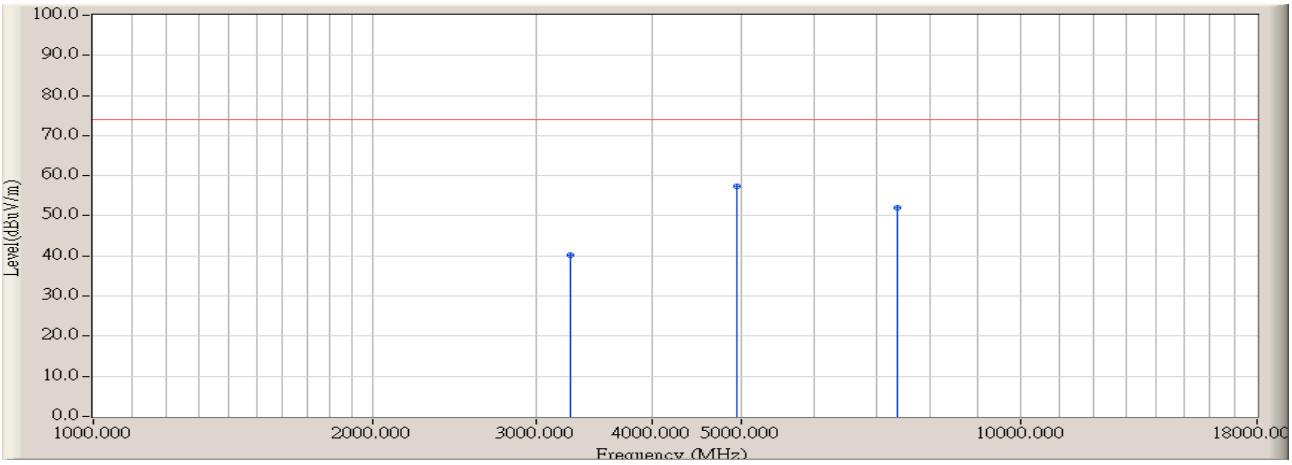
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3181.667	-1.476	42.562	41.085	-32.885	73.970	PEAK	113.000	147.000
2	*	4938.333	4.046	48.231	52.278	-21.692	73.970	PEAK	100.000	129.000
3		5675.000	5.210	40.183	45.393	-28.577	73.970	PEAK	100.000	187.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



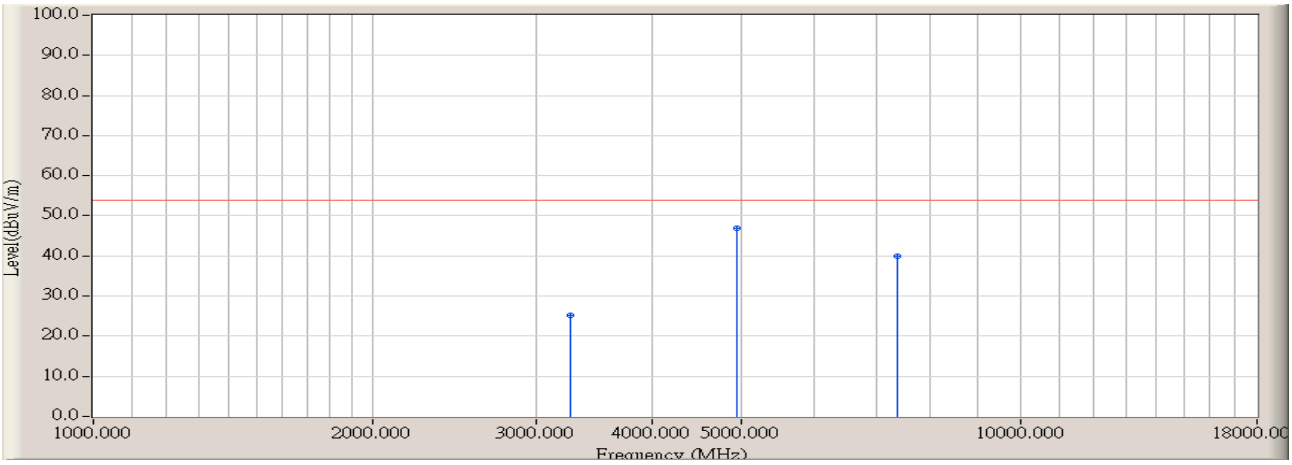
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3181.667	-1.476	28.200	26.723	-27.247	53.970	AVERAGE	113.000	147.000
2	*	4938.333	4.046	38.500	42.547	-11.423	53.970	AVERAGE	100.000	129.000
3		5675.000	5.210	26.300	31.510	-22.460	53.970	AVERAGE	100.000	187.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



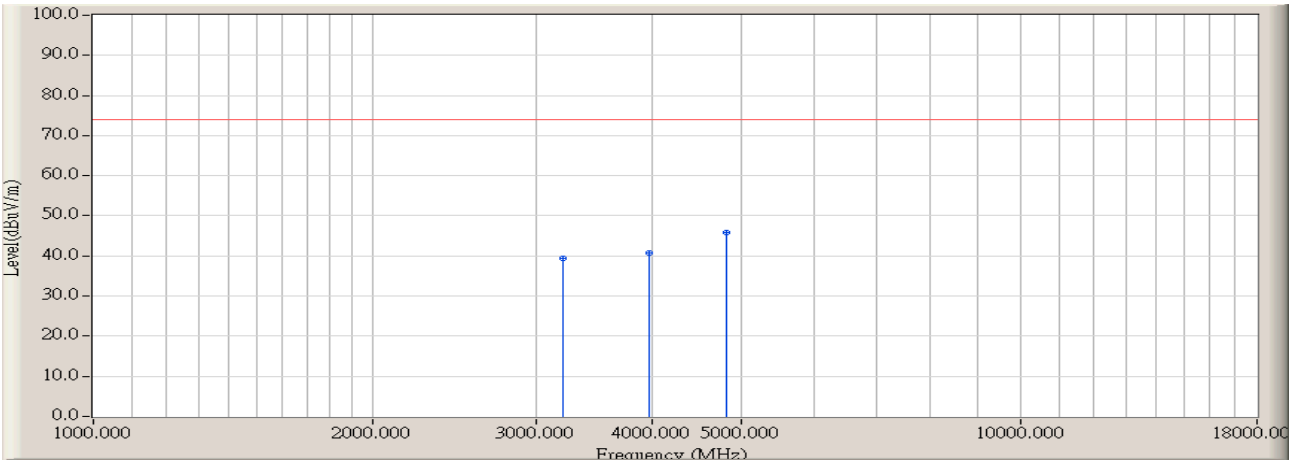
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3266.667	-1.793	41.968	40.175	-33.795	73.970	PEAK	100.000	269.000
2	*	4938.333	4.046	53.259	57.306	-16.664	73.970	PEAK	100.000	205.000
3		7375.000	11.650	40.377	52.027	-21.943	73.970	PEAK	100.000	233.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



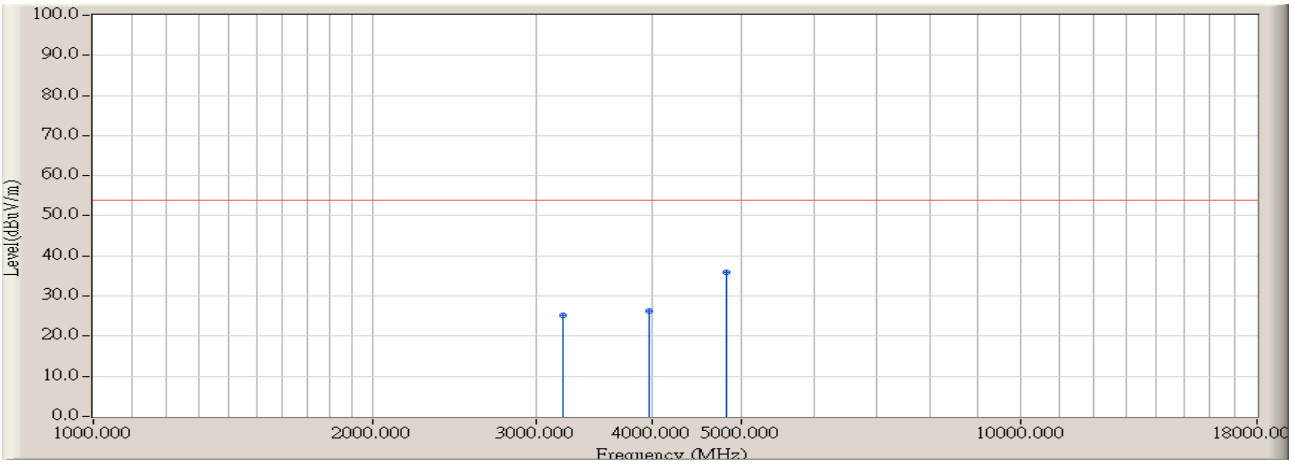
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3266.667	-1.793	27.100	25.307	-28.663	53.970	AVERAGE	100.000	269.000
2	*	4938.333	4.046	42.900	46.947	-7.023	53.970	AVERAGE	100.000	205.000
3		7375.000	11.650	28.400	40.050	-13.920	53.970	AVERAGE	100.000	233.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



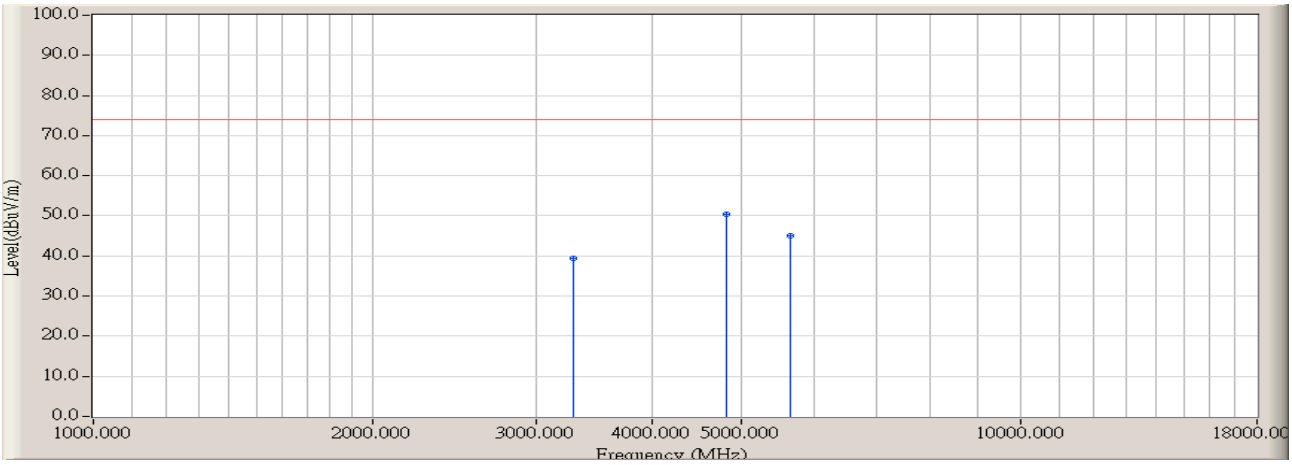
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3210.000	-1.490	40.962	39.472	-34.498	73.970	PEAK	118.000	185.000
2		3975.000	0.960	39.775	40.735	-33.235	73.970	PEAK	116.000	105.000
3	*	4825.000	3.610	42.181	45.791	-28.179	73.970	PEAK	100.000	229.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



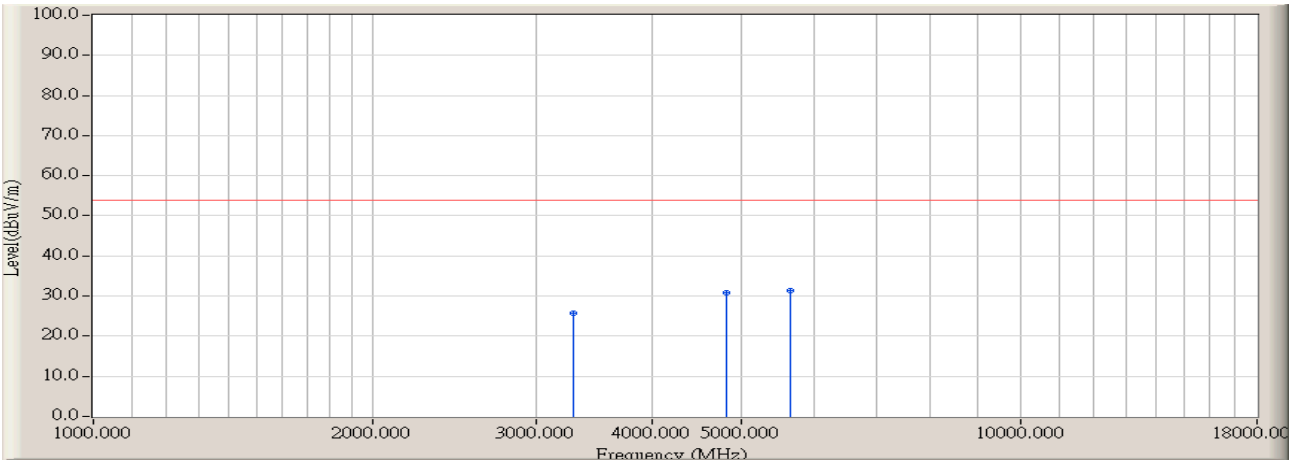
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3210.000	-1.490	26.800	25.310	-28.660	53.970	AVERAGE	118.000	185.000
2		3975.000	0.960	25.200	26.160	-27.810	53.970	AVERAGE	116.000	105.000
3	*	4825.000	3.610	32.200	35.810	-18.160	53.970	AVERAGE	100.000	229.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



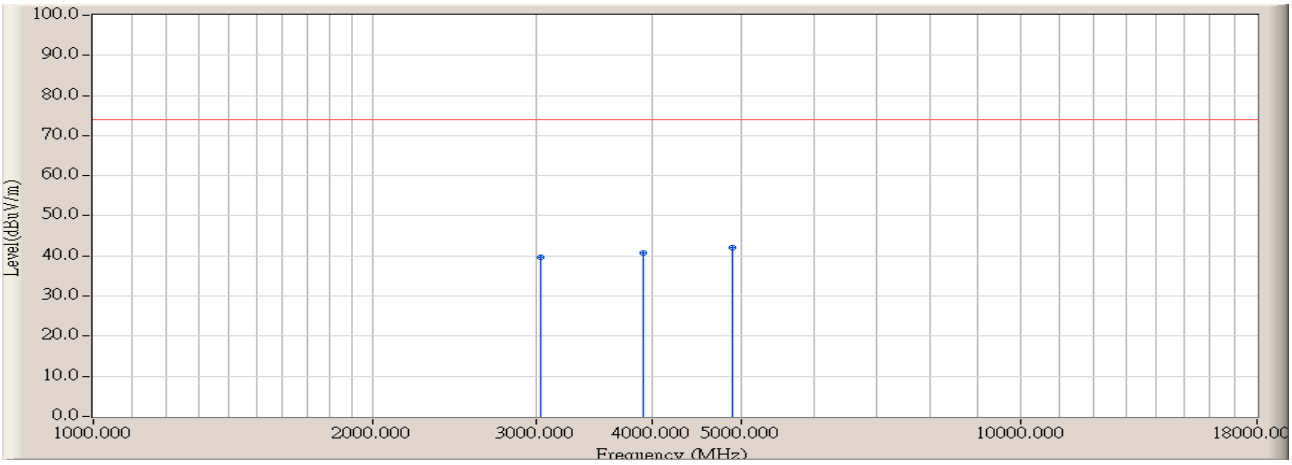
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3295.000	-1.720	41.158	39.438	-34.532	73.970	PEAK	100.000	158.000
2	*	4825.000	3.610	46.798	50.408	-23.562	73.970	PEAK	100.000	268.000
3		5646.667	5.127	39.868	44.995	-28.975	73.970	PEAK	100.000	208.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



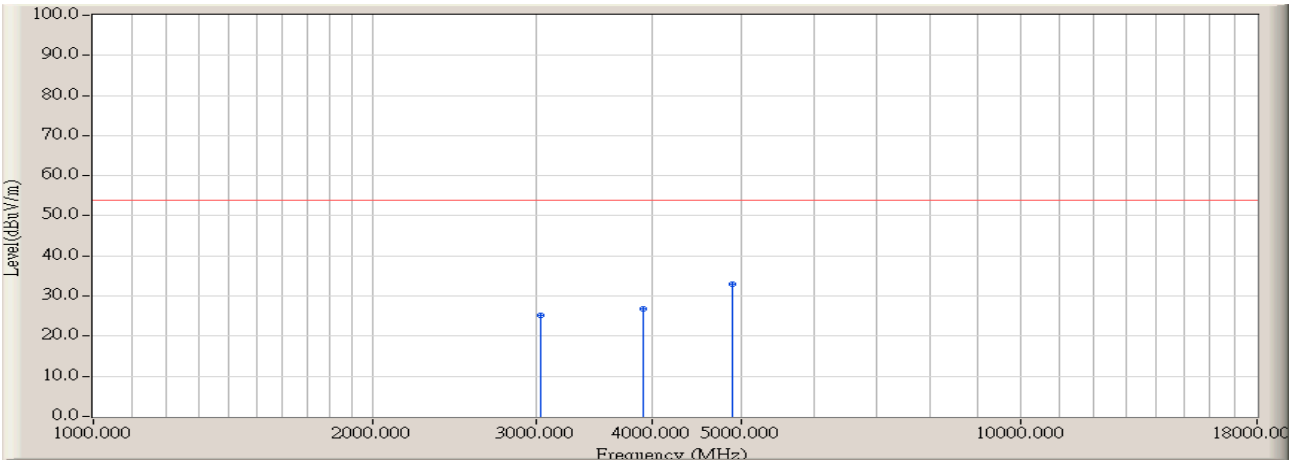
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3295.000	-1.720	27.500	25.780	-28.190	53.970	AVERAGE	100.000	158.000
2		4825.000	3.610	27.300	30.910	-23.060	53.970	AVERAGE	100.000	268.000
3	*	5646.667	5.127	26.200	31.327	-22.643	53.970	AVERAGE	100.000	208.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



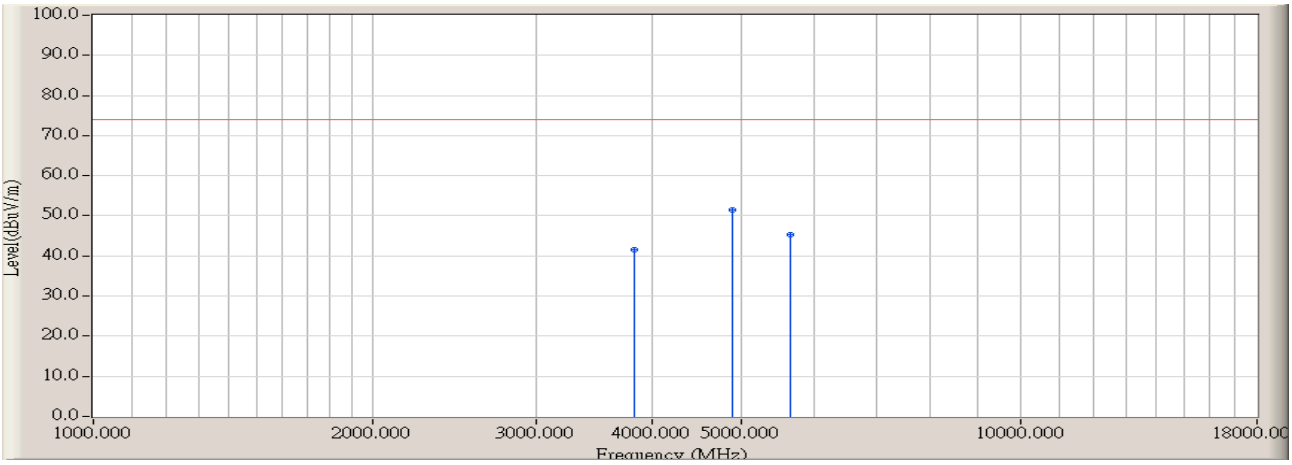
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3040.000	-1.550	41.121	39.571	-34.399	73.970	PEAK	114.000	254.000
2		3918.333	0.673	40.146	40.819	-33.151	73.970	PEAK	105.000	128.000
3	*	4881.667	3.633	38.584	42.217	-31.753	73.970	PEAK	100.000	185.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



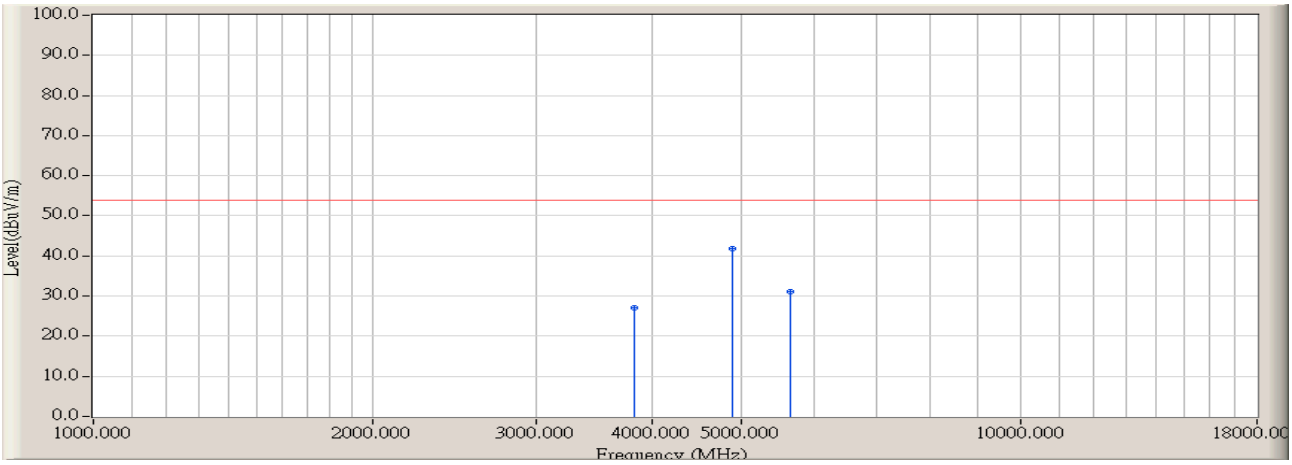
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3040.000	-1.550	26.800	25.250	-28.720	53.970	AVERAGE	114.000	254.000
2		3918.333	0.673	26.100	26.773	-27.197	53.970	AVERAGE	105.000	128.000
3	*	4881.667	3.633	29.400	33.033	-20.937	53.970	AVERAGE	100.000	185.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



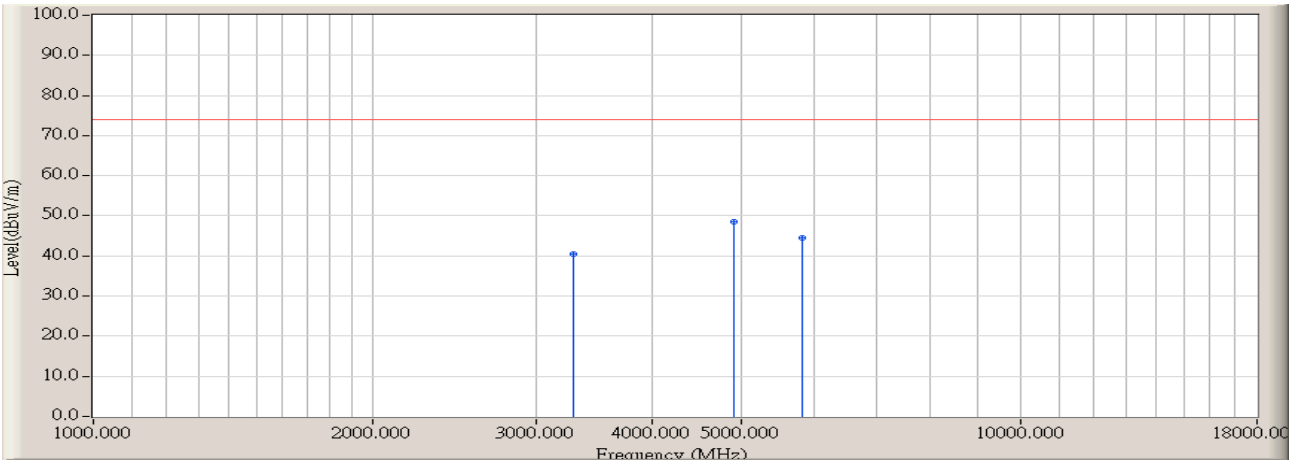
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3833.333	0.216	41.356	41.573	-32.397	73.970	PEAK	100.000	159.000
2	*	4881.667	3.633	47.800	51.433	-22.537	73.970	PEAK	100.000	259.000
3		5646.667	5.127	40.278	45.405	-28.565	73.970	PEAK	100.000	265.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2437MHz**



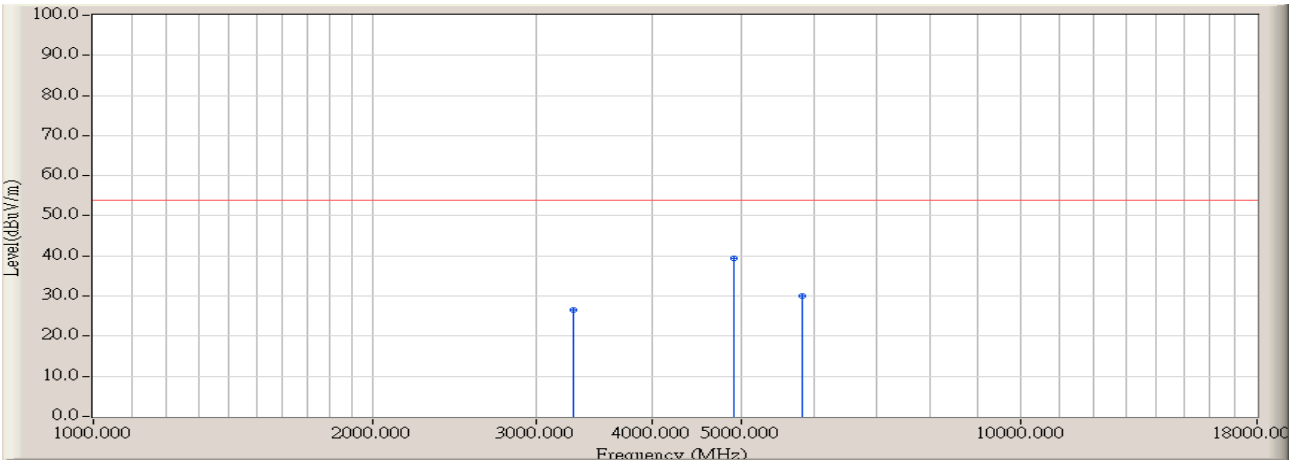
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3833.333	0.216	26.900	27.117	-26.853	53.970	AVERAGE	100.000	159.000
2	*	4881.667	3.633	38.200	41.833	-12.137	53.970	AVERAGE	100.000	259.000
3		5646.667	5.127	25.900	31.027	-22.943	53.970	AVERAGE	100.000	265.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



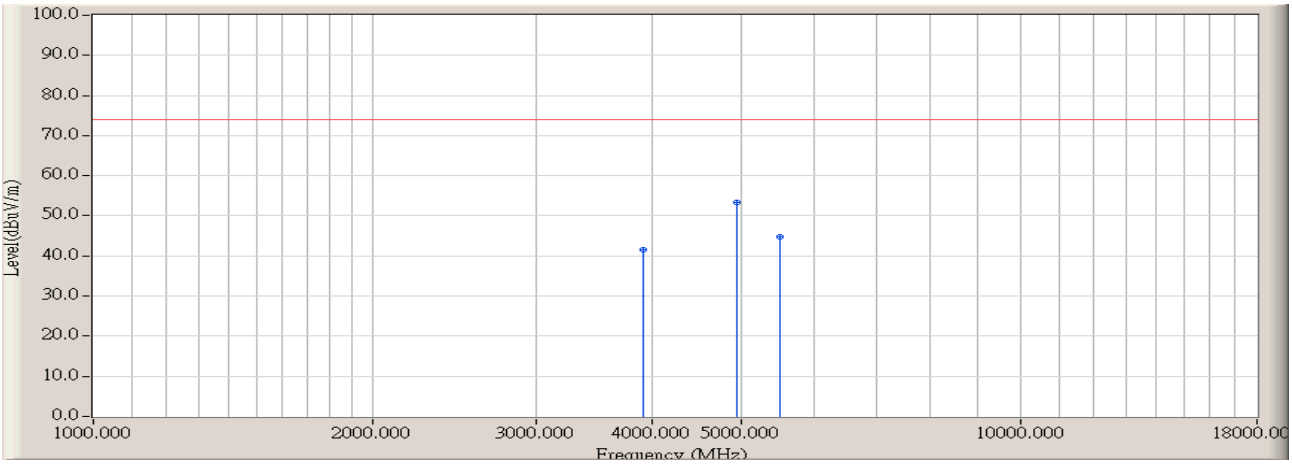
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3295.000	-1.720	42.161	40.441	-33.529	73.970	PEAK	112.000	238.000
2	*	4910.000	3.720	44.858	48.578	-25.392	73.970	PEAK	105.000	163.000
3		5816.667	5.560	38.960	44.520	-29.450	73.970	PEAK	116.000	284.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



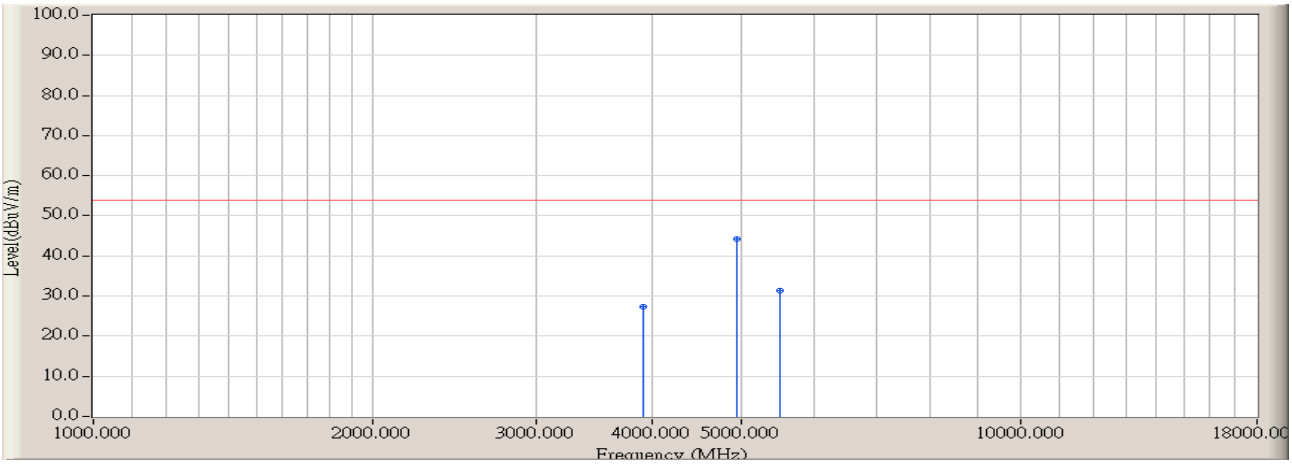
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3295.000	-1.720	28.200	26.480	-27.490	53.970	AVERAGE	112.000	238.000
2	*	4910.000	3.720	35.600	39.320	-14.650	53.970	AVERAGE	105.000	163.000
3		5816.667	5.560	24.500	30.060	-23.910	53.970	AVERAGE	116.000	284.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:57**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(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	Ant Pos (cm)	Table Pos (deg)
1		3918.333	0.673	40.896	41.569	-32.401	73.970	PEAK	100.000	228.000
2	*	4938.333	4.046	49.186	53.233	-20.737	73.970	PEAK	100.000	196.000
3		5505.000	5.080	39.818	44.898	-29.072	73.970	PEAK	100.000	205.000

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/11 - 13:58**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(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	Ant Pos (cm)	Table Pos (deg)
1		3918.333	0.673	26.800	27.473	-26.497	53.970	AVERAGE	100.000	228.000
2	*	4938.333	4.046	40.200	44.247	-9.723	53.970	AVERAGE	100.000	196.000
3		5505.000	5.080	26.200	31.280	-22.690	53.970	AVERAGE	100.000	205.000

5. RF Antenna Conducted Spurious

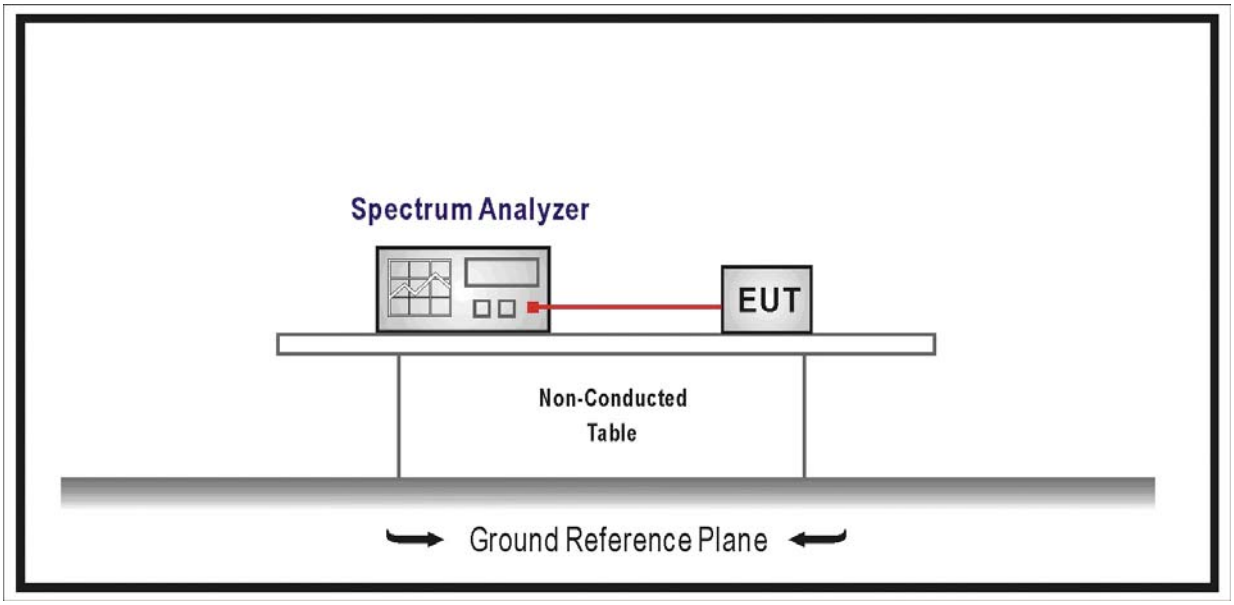
5.1. Test Equipment

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	2008/10/21
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.

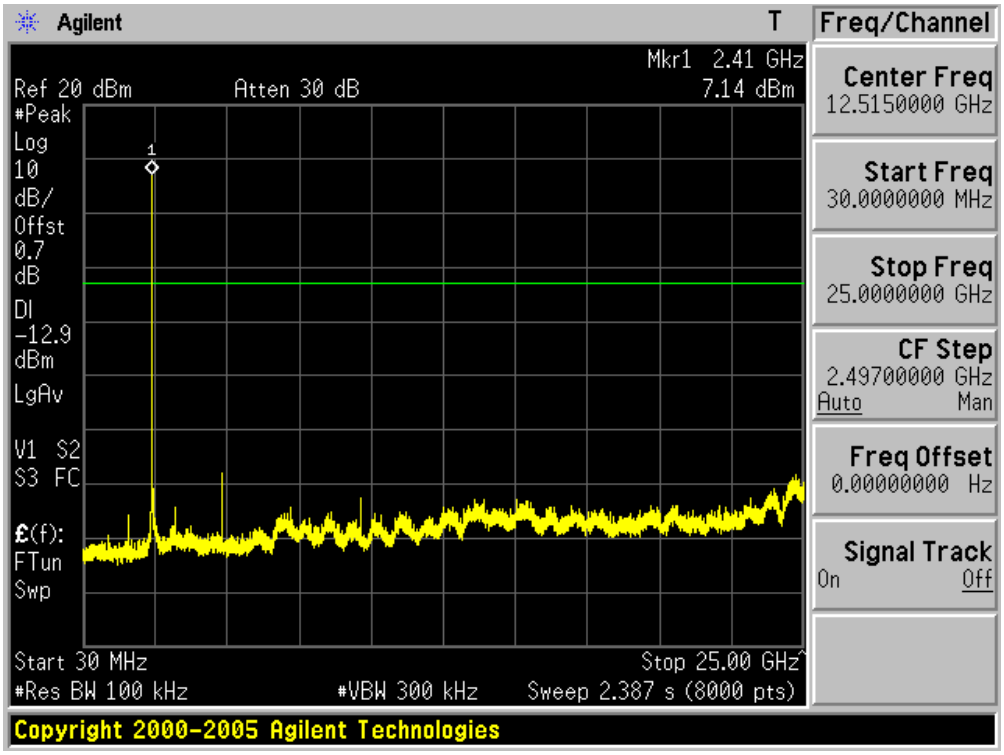
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

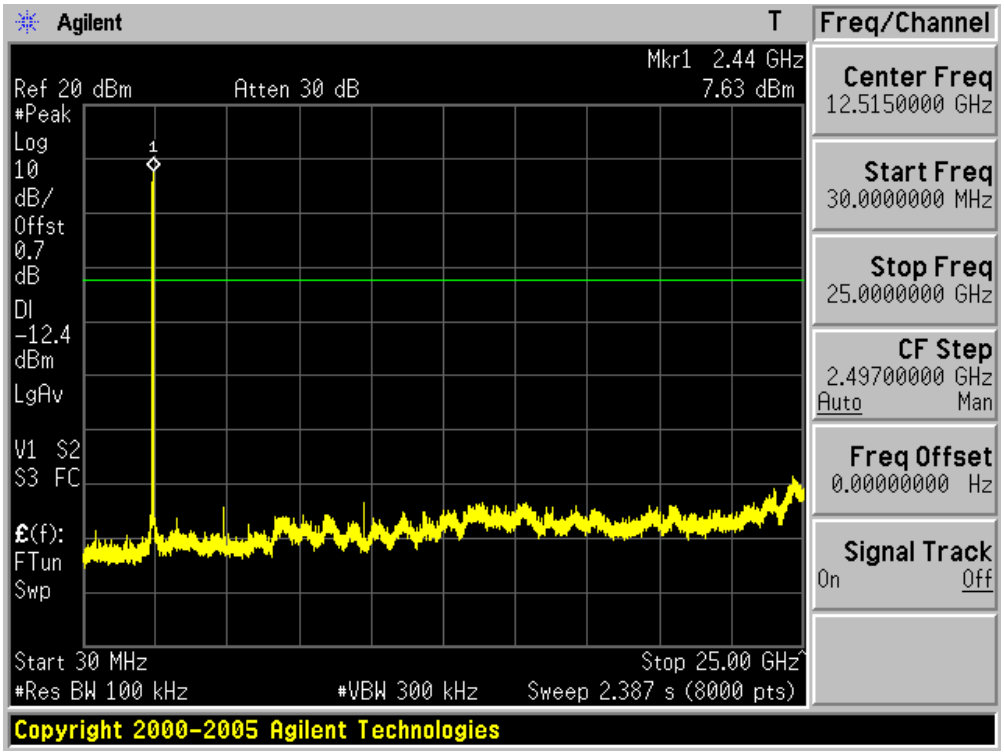
5.6. Test Result

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

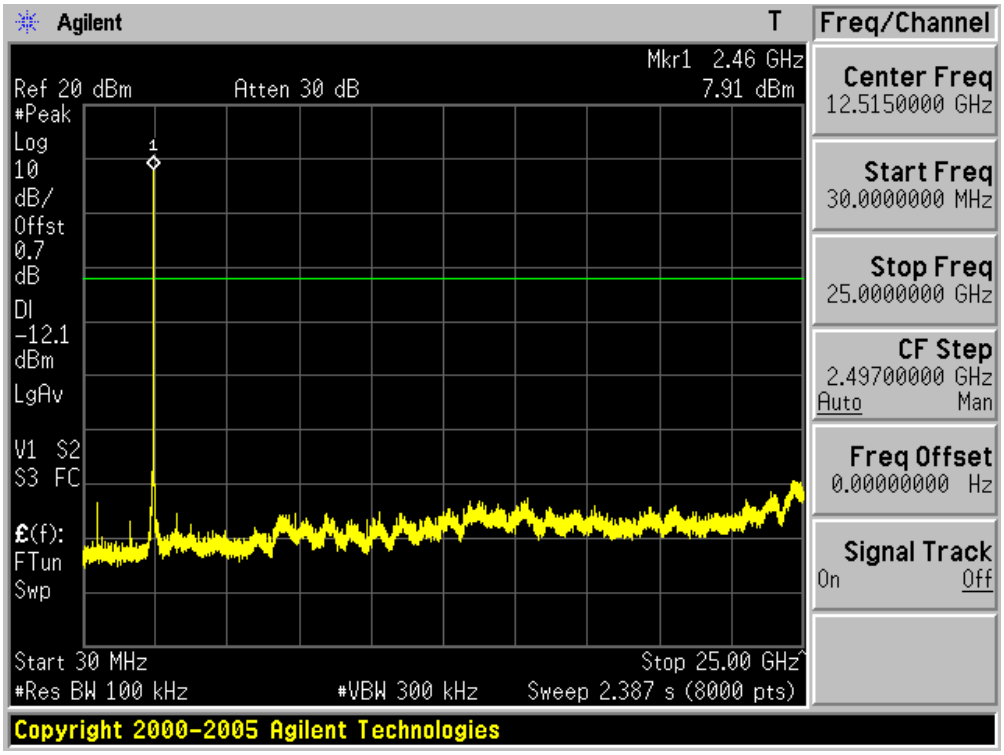
Channel 01 (2412MHz)



Channel 06 (2437MHz)

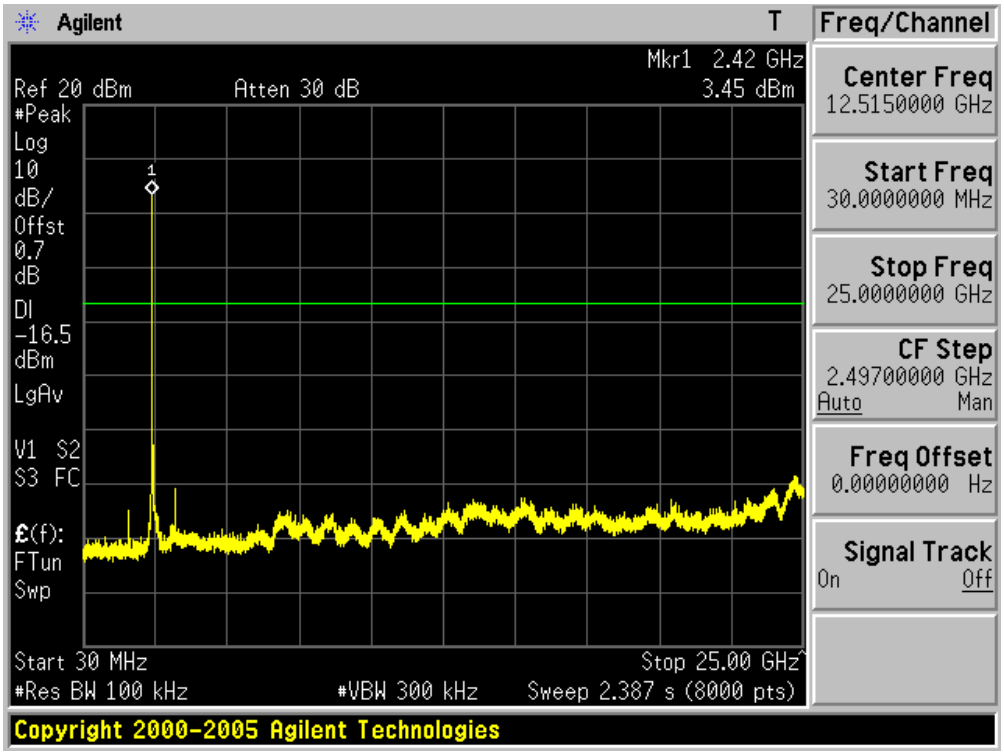


Channel 11 (2462MHz)

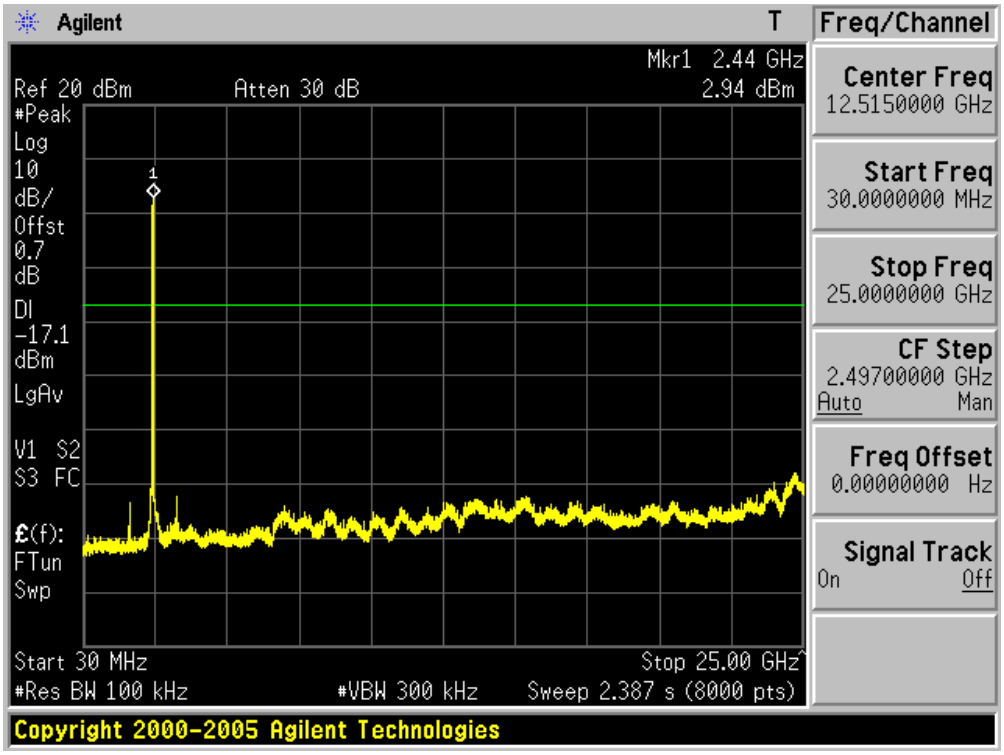


Product	:	RF Module
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

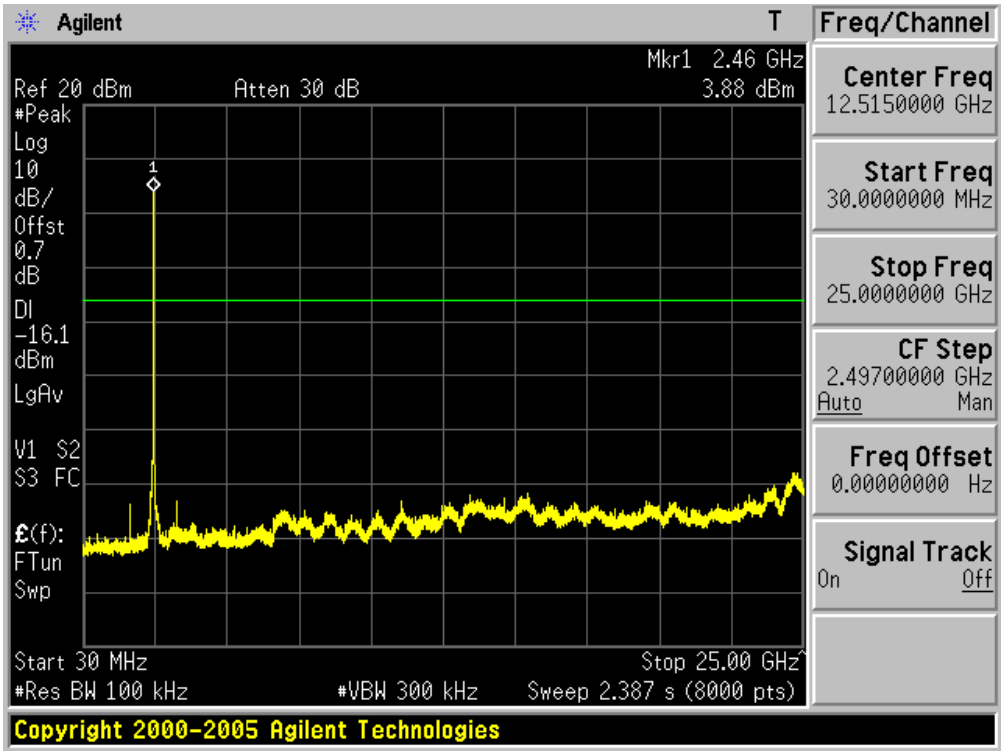
Channel 01 (2412MHz)



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	2008/10/21
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/10/21
Bilog Type Antenna	Schaffner	CBL6112B	2932	2008/10/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2008/10/21
Coaxial Cable	Huber+Suhner	AC2-C	04	2008/10/21
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

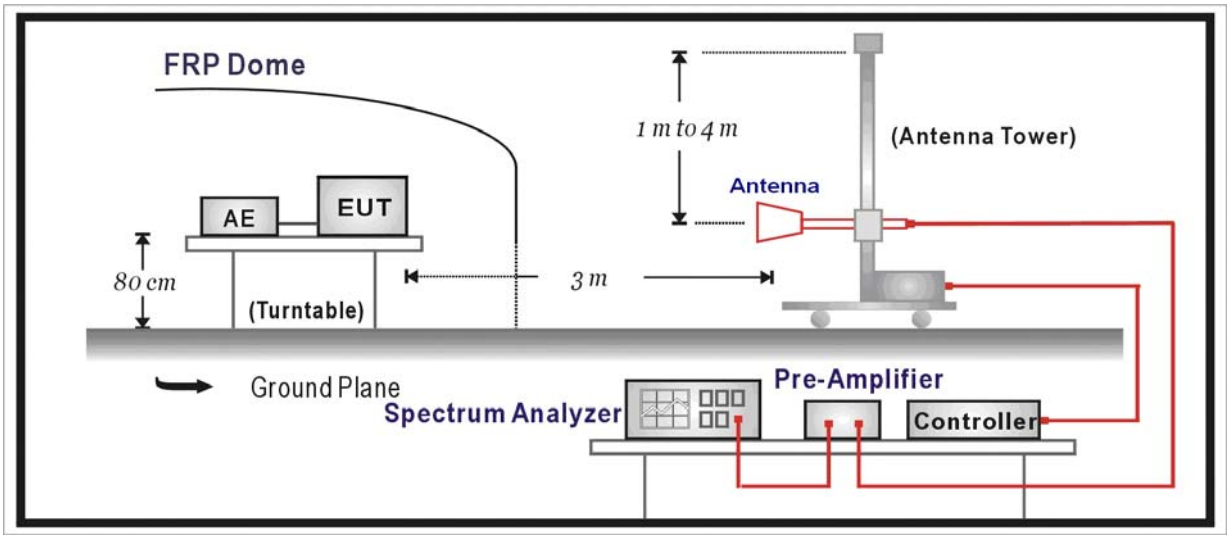
☐Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2008/06/28
Preamplifier	Quietek	AP-025C	QT-AP004	2008/10/21
Preamplifier	Quietek	AP-180C	CHM-0602012	2008/10/21
Bilog Type Antenna	Schaffner	CBL6112D	22254	2008/10/21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2008/06/28
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2008/10/21
Coaxial Cable	Huber+Suhner	AC2-C	05	2008/10/21
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

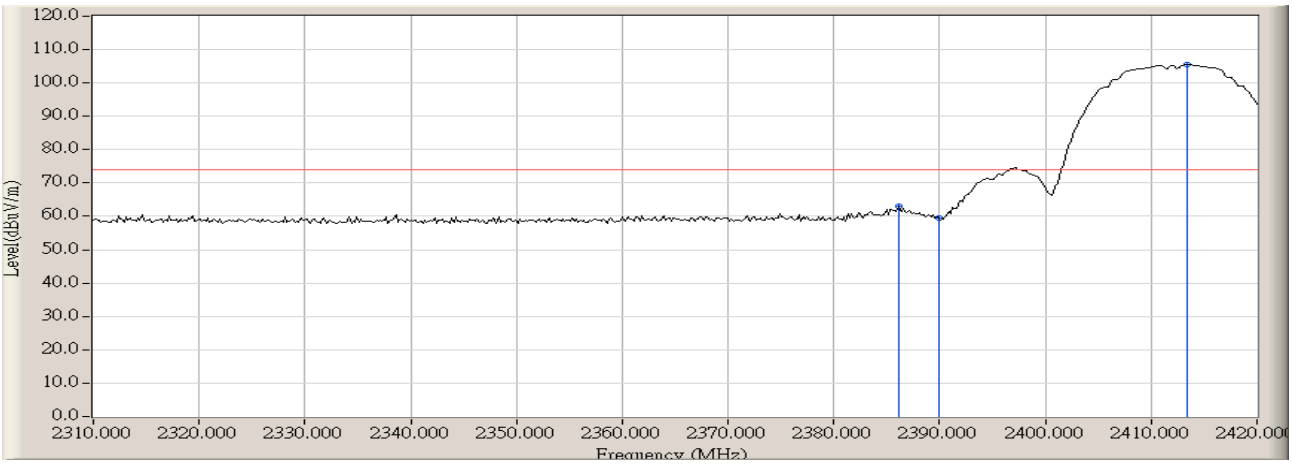
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum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

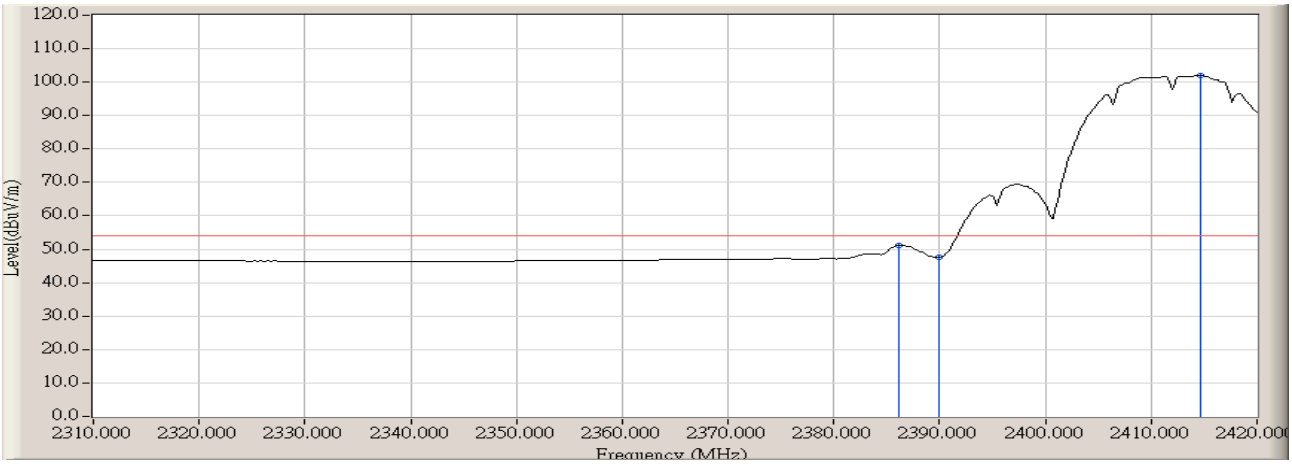
6.6. Test Result

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 16:52**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



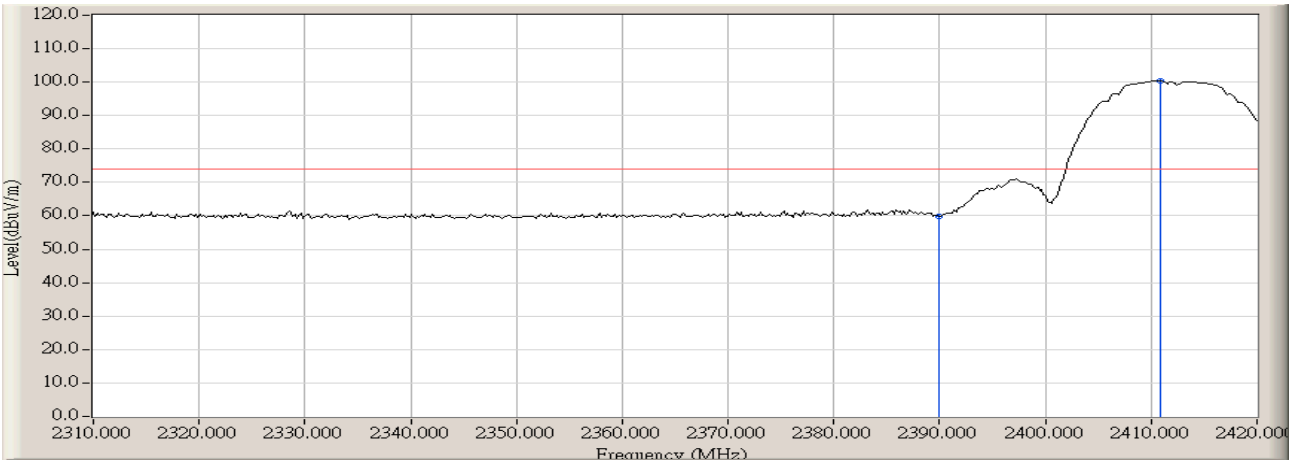
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.083	32.725	30.439	63.164	-10.806	73.970	PEAK
2		2390.000	32.722	26.649	59.371	-14.599	73.970	PEAK
3	*	2413.400	32.735	72.693	105.427	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 16:53**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



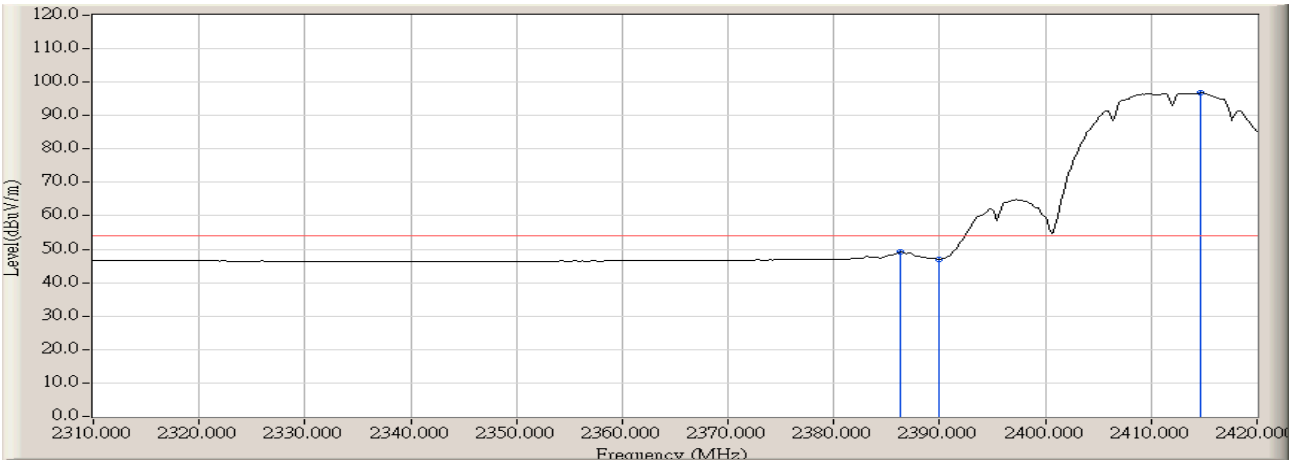
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.083	32.725	18.505	51.230	-2.740	53.970	AVERAGE
2		2390.000	32.722	14.788	47.510	-6.460	53.970	AVERAGE
3	*	2414.683	32.737	69.286	102.023	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 16:56**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



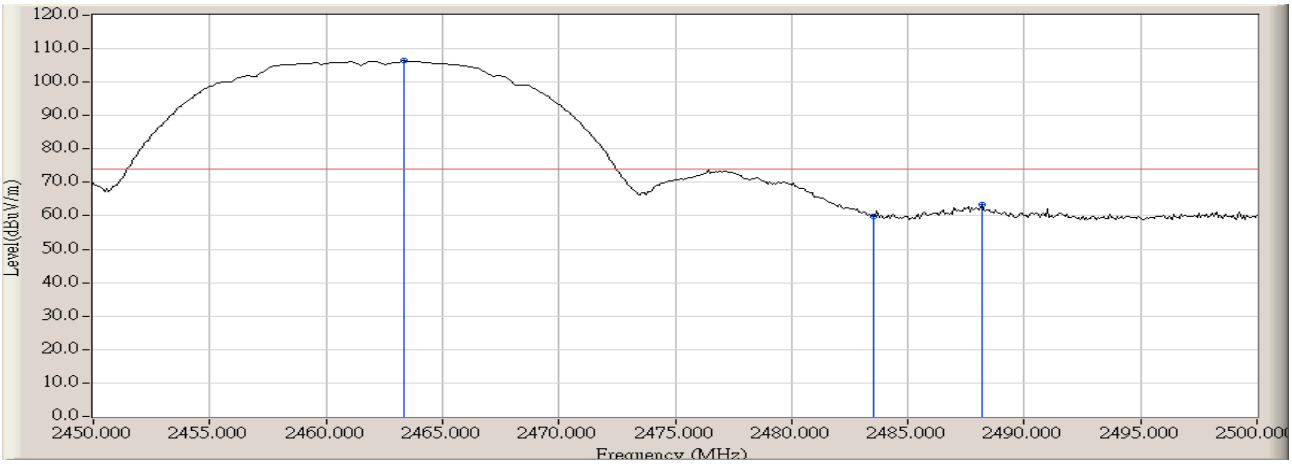
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	27.159	59.881	-14.089	73.970	PEAK
2	*	2410.833	32.730	67.703	100.433	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 16:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2412MHz**



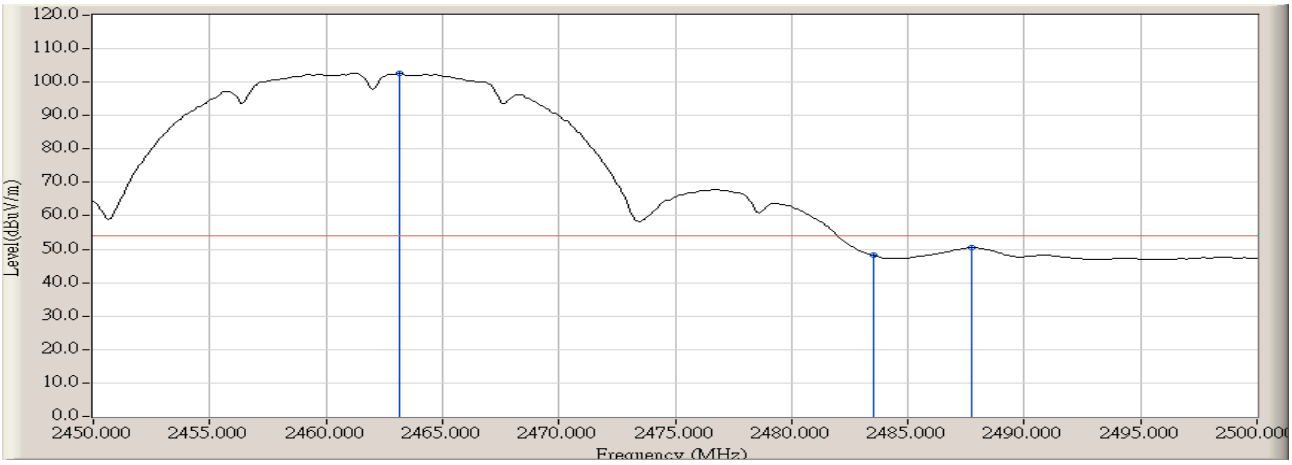
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2386.267	32.725	16.539	49.264	-4.706	53.970	AVERAGE
2		2390.000	32.722	14.375	47.097	-6.873	53.970	AVERAGE
3	*	2414.683	32.737	64.011	96.748	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:00**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



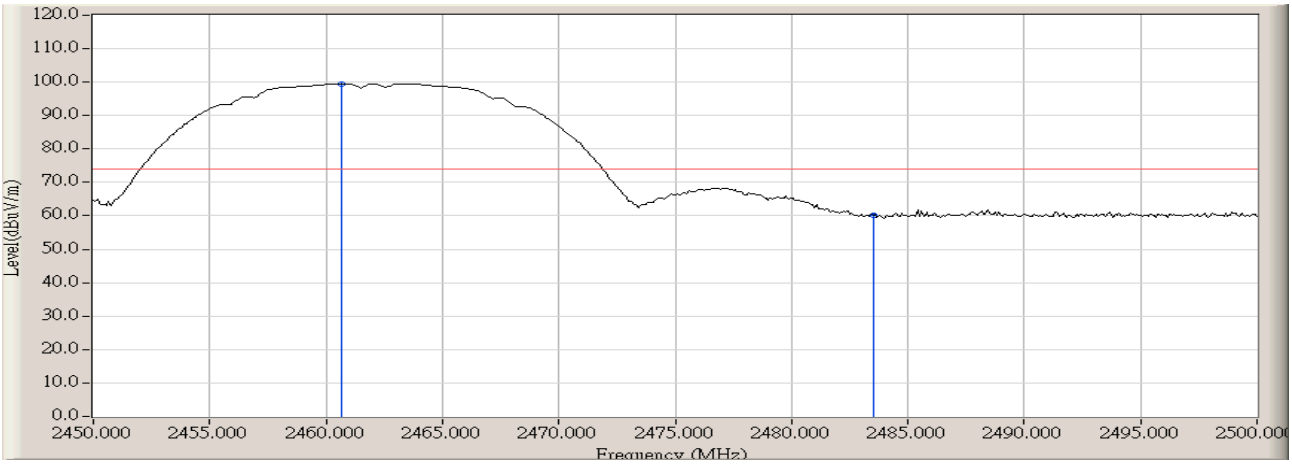
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.333	32.790	73.544	106.334	N/A	N/A	PEAK
2		2483.500	32.787	26.912	59.699	-14.271	73.970	PEAK
3		2488.167	32.785	30.605	63.390	-10.580	73.970	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:01**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



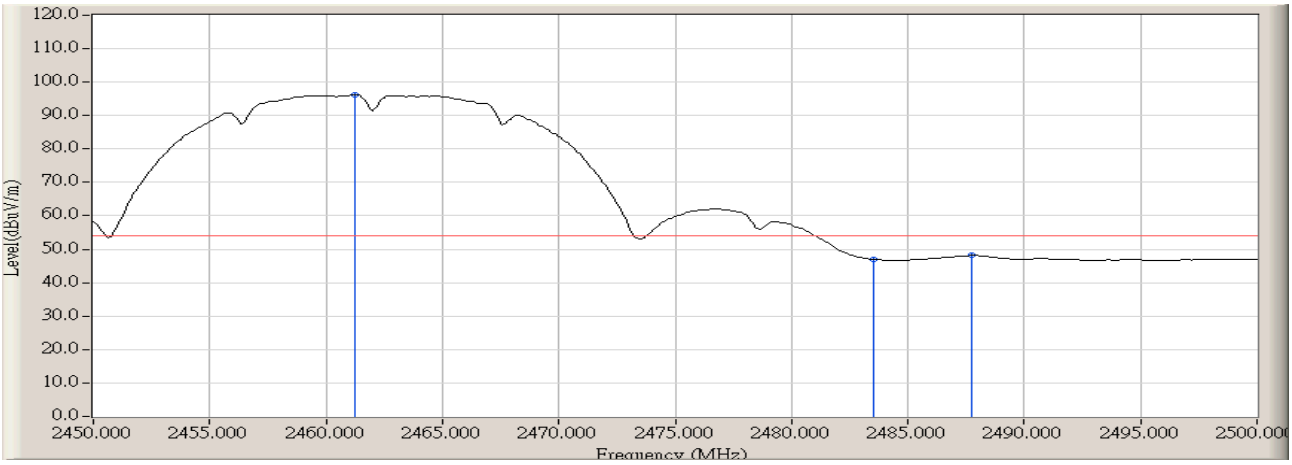
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2463.167	32.790	69.807	102.597	N/A	N/A	AVERAGE
2		2483.500	32.787	15.366	48.153	-5.817	53.970	AVERAGE
3		2487.750	32.785	17.715	50.500	-3.470	53.970	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



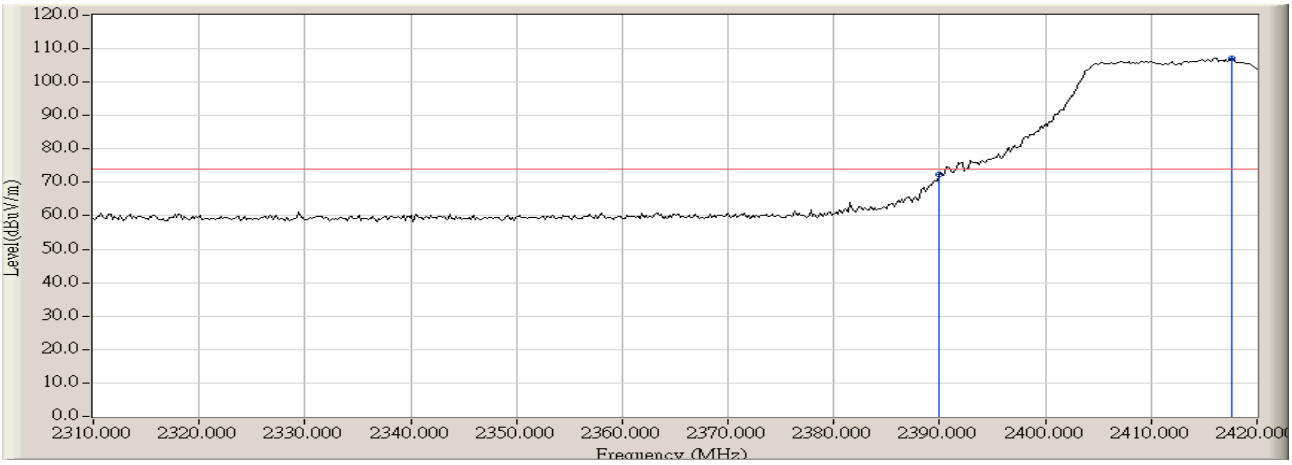
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.667	32.789	66.772	99.561	N/A	N/A	PEAK
2		2483.500	32.787	27.224	60.011	-13.959	73.970	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:05**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b at channel 2462MHz**



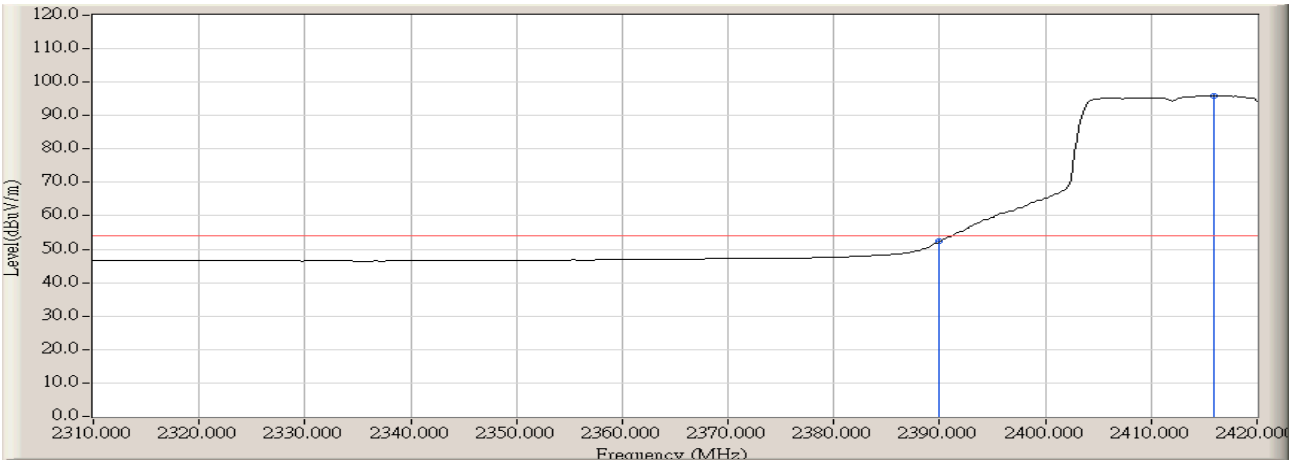
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.250	32.790	63.471	96.261	N/A	N/A	AVERAGE
2		2483.500	32.787	14.209	46.996	-6.974	53.970	AVERAGE
3		2487.750	32.785	15.366	48.151	-5.819	53.970	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



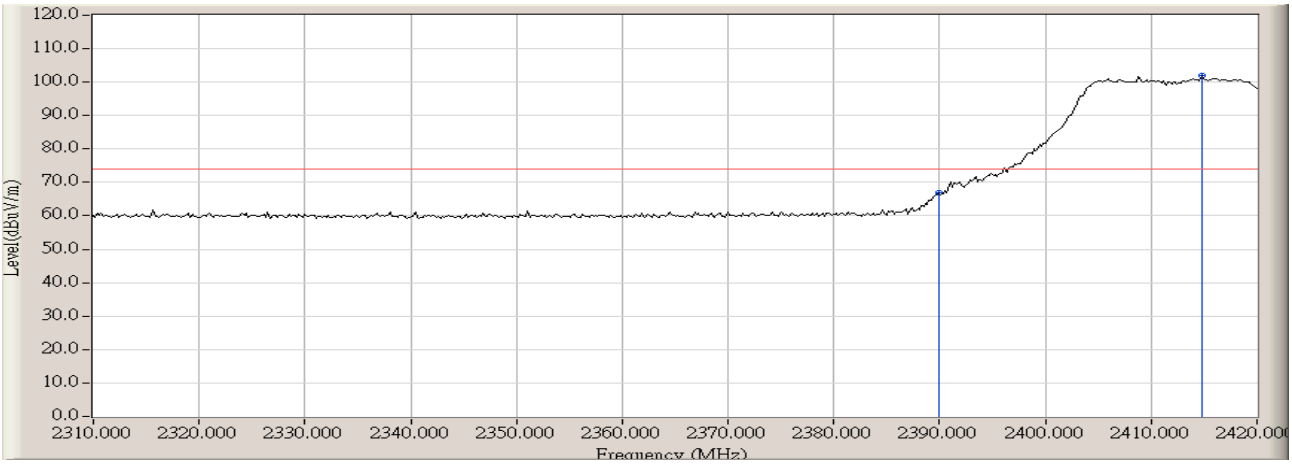
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	39.549	72.271	-1.699	73.970	PEAK
2	*	2417.617	32.742	74.298	107.040	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:14**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



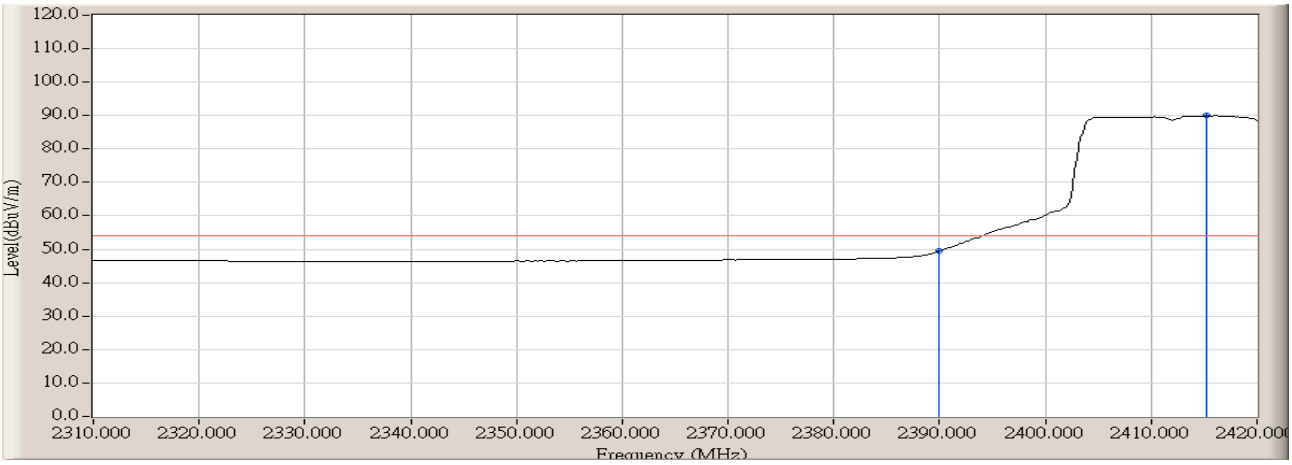
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	19.593	52.315	-1.655	53.970	AVERAGE
2	*	2415.967	32.739	63.149	95.888	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



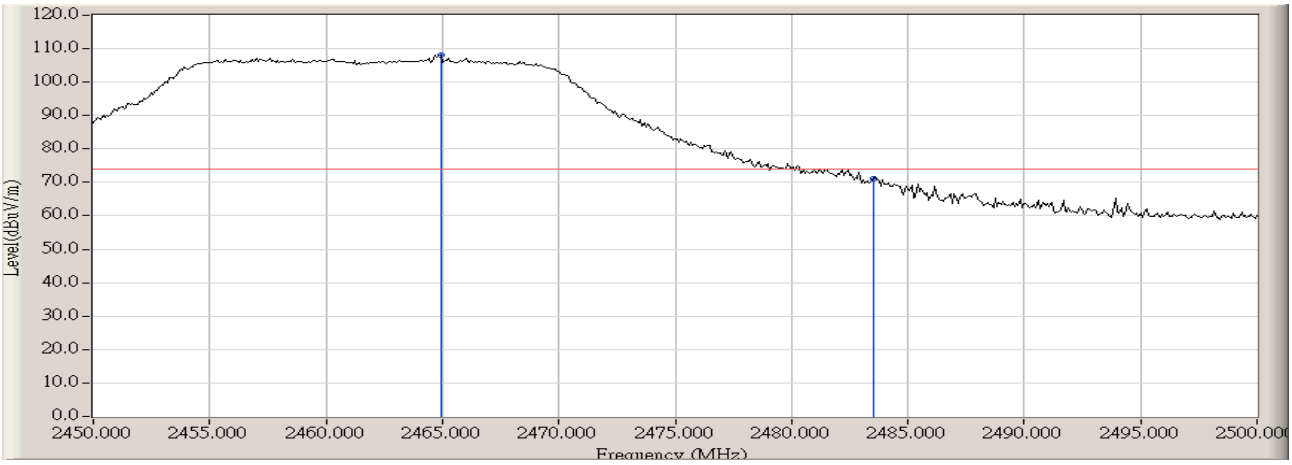
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	34.079	66.801	-7.169	73.970	PEAK
2	*	2414.867	32.737	69.300	102.037	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:18**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



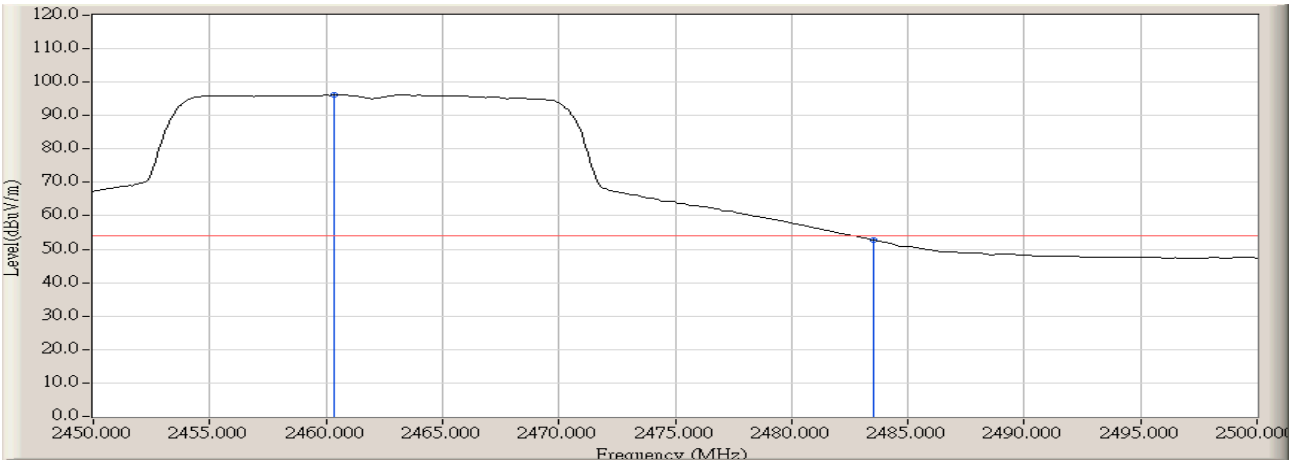
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	16.765	49.487	-4.483	53.970	AVERAGE
2	*	2415.233	32.738	57.266	90.003	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:24**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



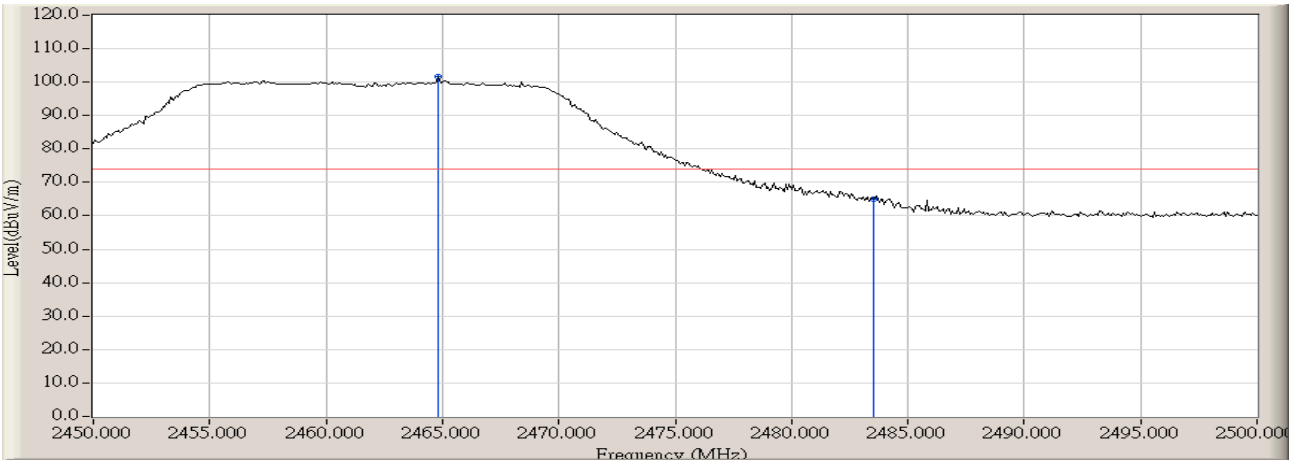
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.917	32.790	75.274	108.064	N/A	N/A	PEAK
2		2483.500	32.787	38.294	71.081	-2.889	73.970	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:24**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



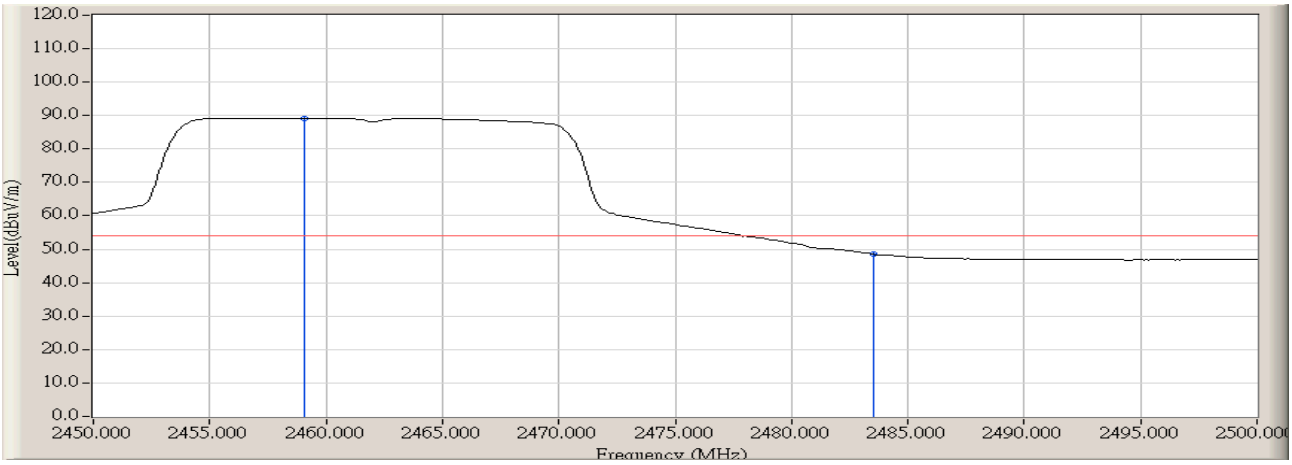
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.333	32.789	63.305	96.094	N/A	N/A	AVERAGE
2		2483.500	32.787	19.976	52.763	-1.207	53.970	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



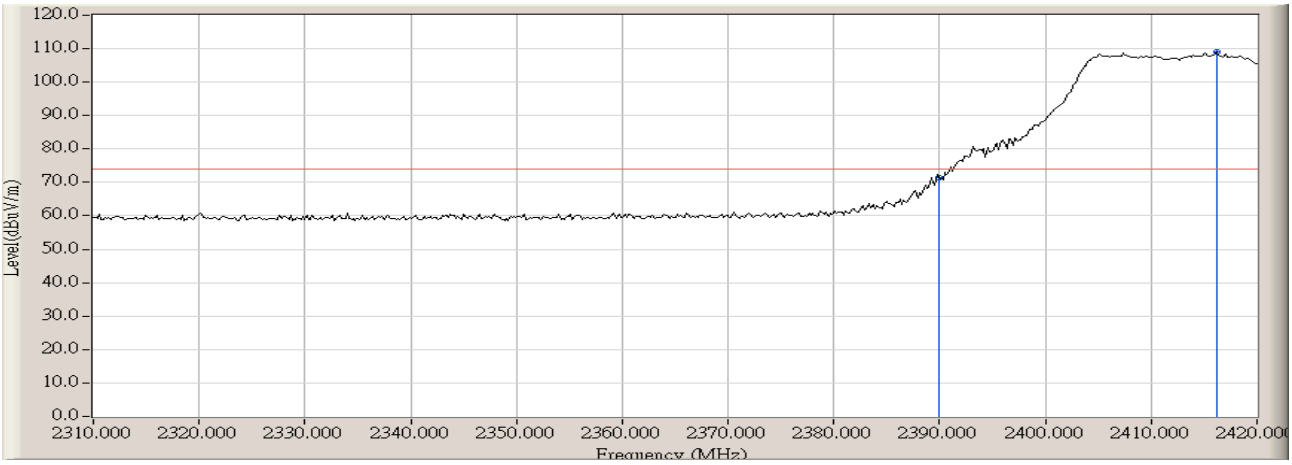
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2464.833	32.790	68.828	101.618	N/A	N/A	PEAK
2		2483.500	32.787	32.231	65.018	-8.952	73.970	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/10/31 - 17:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



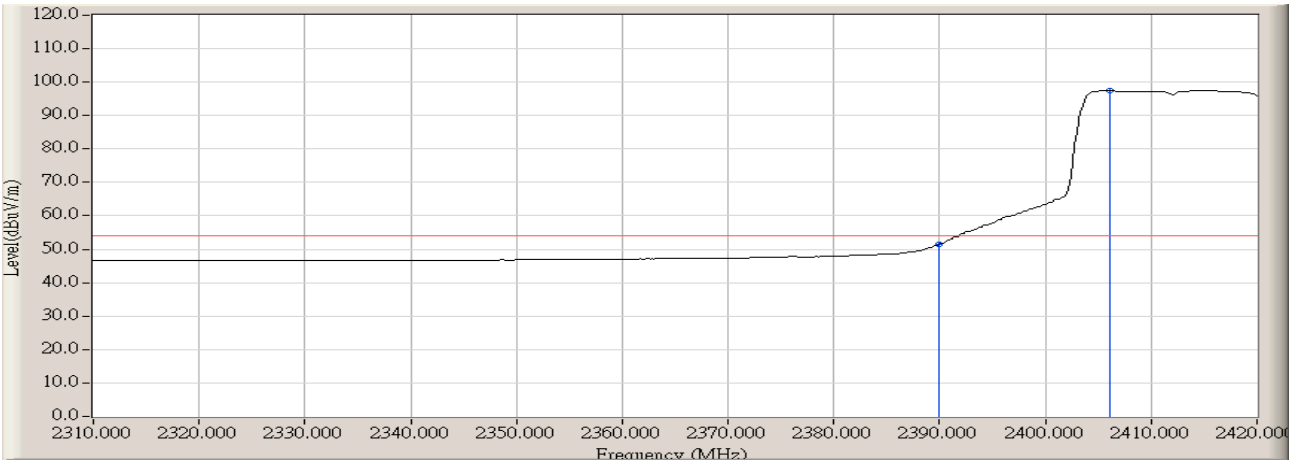
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2459.083	32.788	56.414	89.202	N/A	N/A	AVERAGE
2		2483.500	32.787	15.690	48.477	-5.493	53.970	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 11:43**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



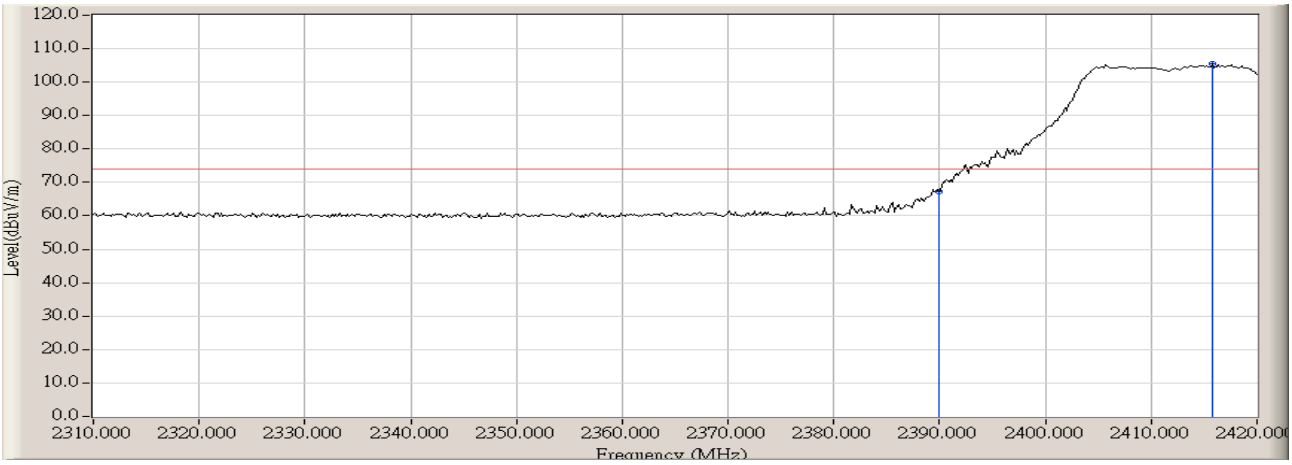
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	38.559	71.281	-2.689	73.970	PEAK
2	*	2416.150	32.739	76.165	108.904	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 11:44**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



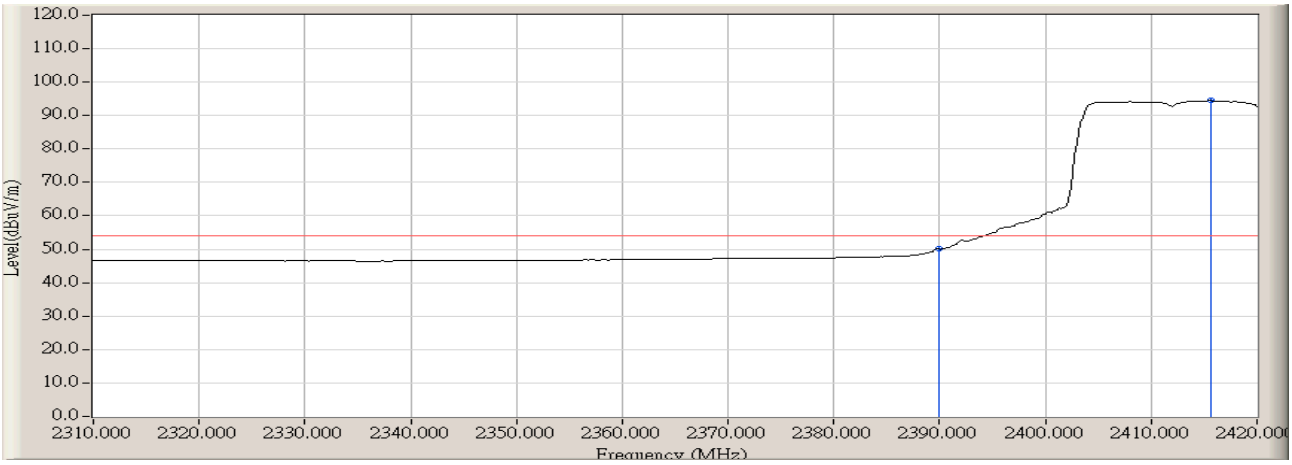
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	18.814	51.536	-2.434	53.970	AVERAGE
2	*	2406.067	32.727	64.737	97.464	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 11:49**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



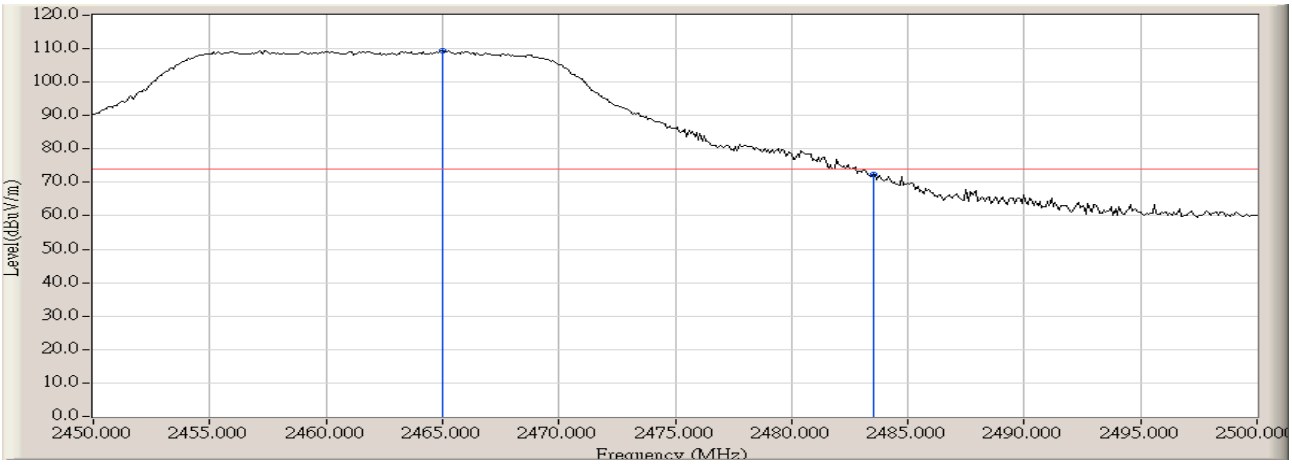
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	34.575	67.297	-6.673	73.970	PEAK
2	*	2415.783	32.738	72.810	105.548	N/A	N/A	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 11:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2412MHz**



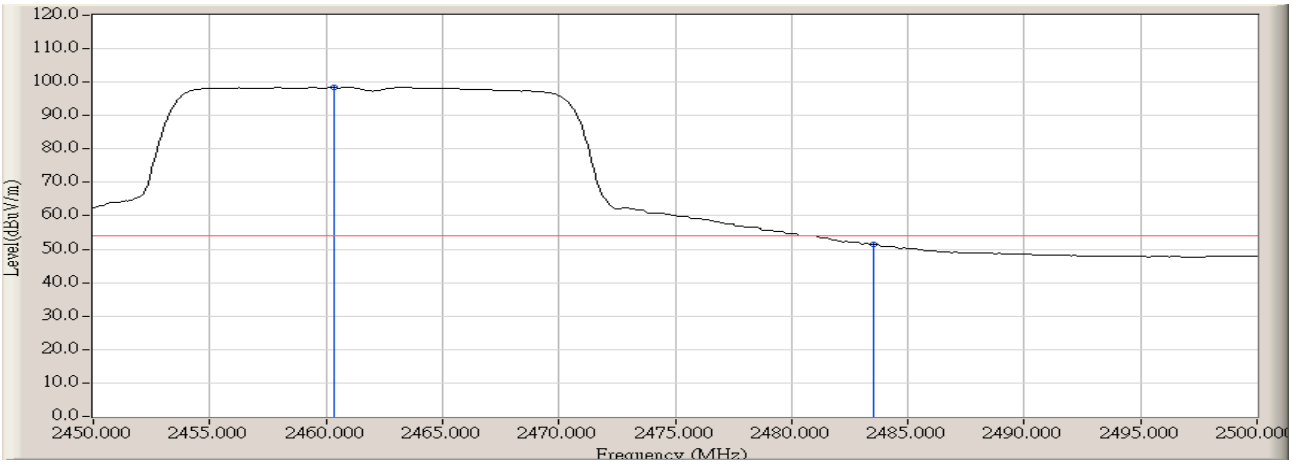
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2390.000	32.722	17.409	50.131	-3.839	53.970	AVERAGE
2	*	2415.600	32.738	61.790	94.528	N/A	N/A	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 11:56**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



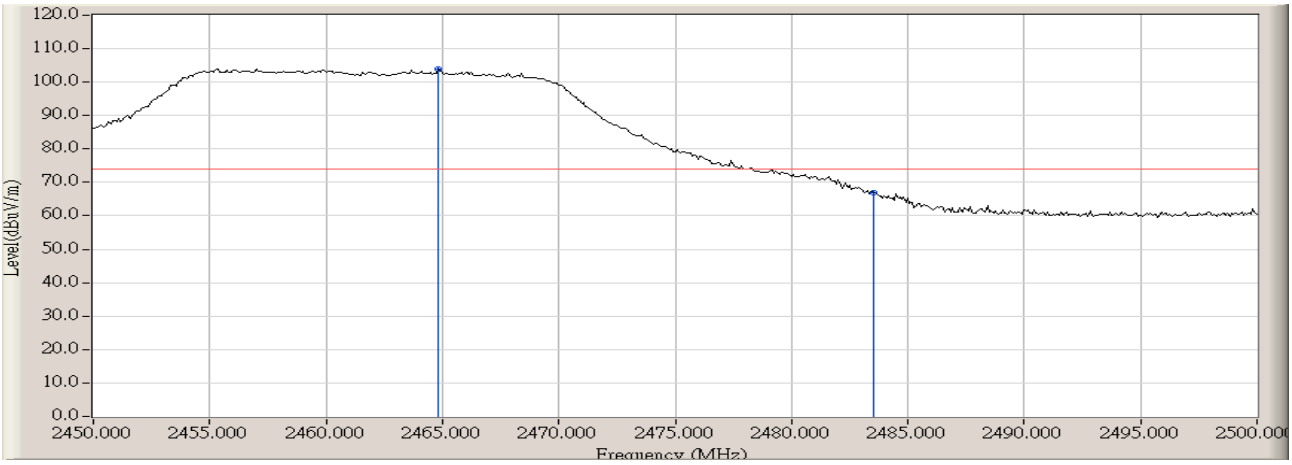
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.000	32.790	76.723	109.513	N/A	N/A	PEAK
2		2483.500	32.787	39.490	72.277	-1.693	73.970	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 11:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g at channel 2462MHz**



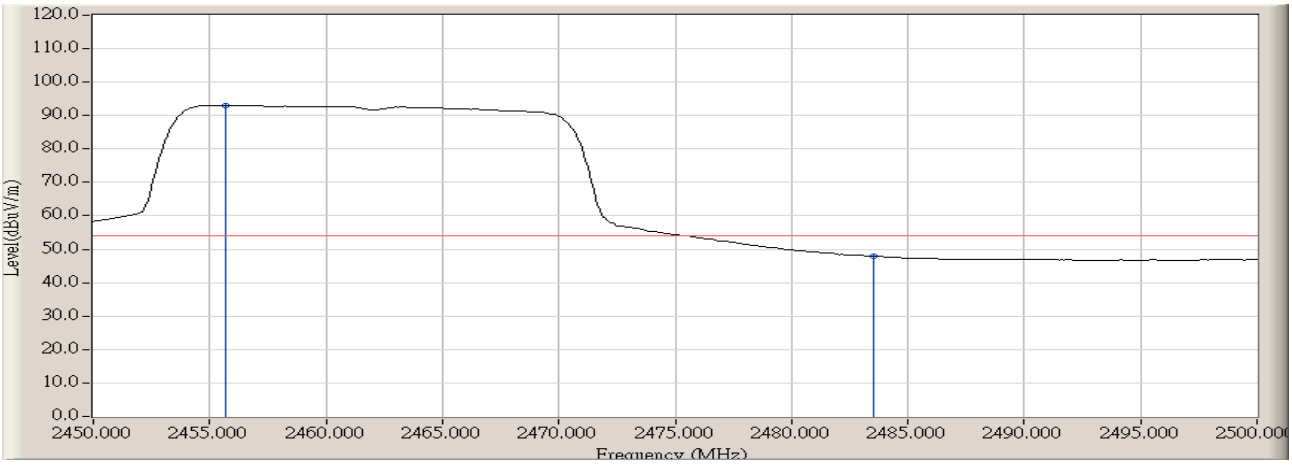
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.333	32.789	65.566	98.355	N/A	N/A	AVERAGE
2		2483.500	32.787	18.569	51.356	-2.614	53.970	AVERAGE

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 12:02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(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	*	2464.833	32.790	71.178	103.968	N/A	N/A	PEAK
2		2483.500	32.787	33.984	66.771	-7.199	73.970	PEAK

Engineer : Robin	
Site : AC-2 (3m Semi-Anechoic Chamber)	**Time : 2008/11/01 - 12:02**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : RF Module	**Probe : BBHA9120D_496(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	*	2455.667	32.786	60.158	92.944	N/A	N/A	AVERAGE
2		2483.500	32.787	15.115	47.902	-6.068	53.970	AVERAGE

7. Operation Frequency Range of 20dB Bandwidth

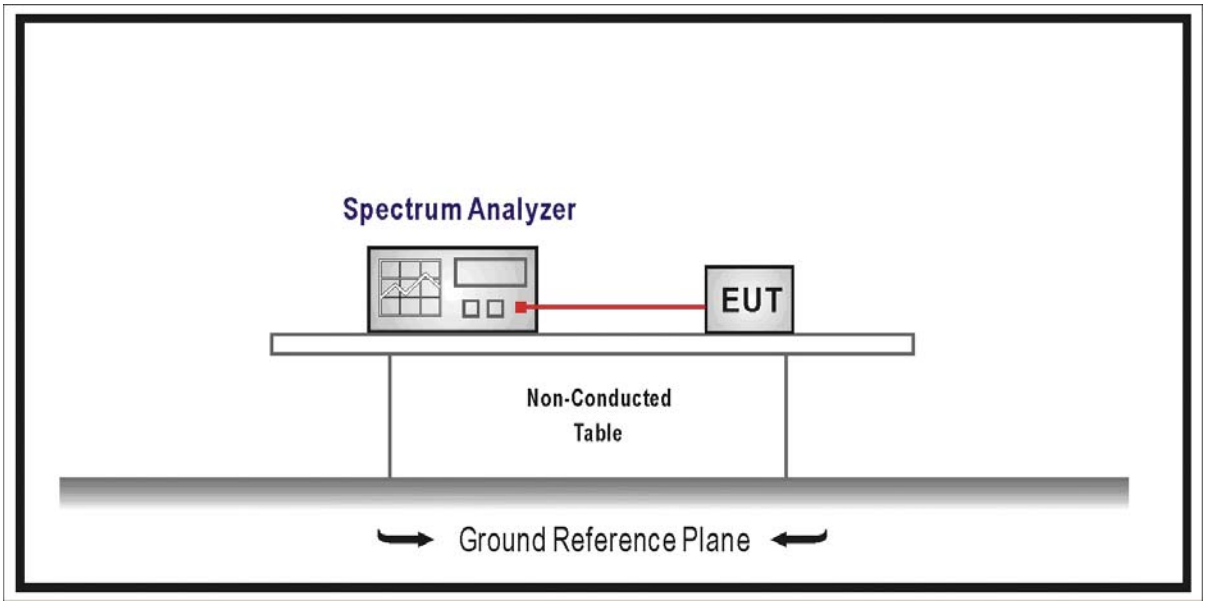
7.1. Test Equipment

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	2008/10/21
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.

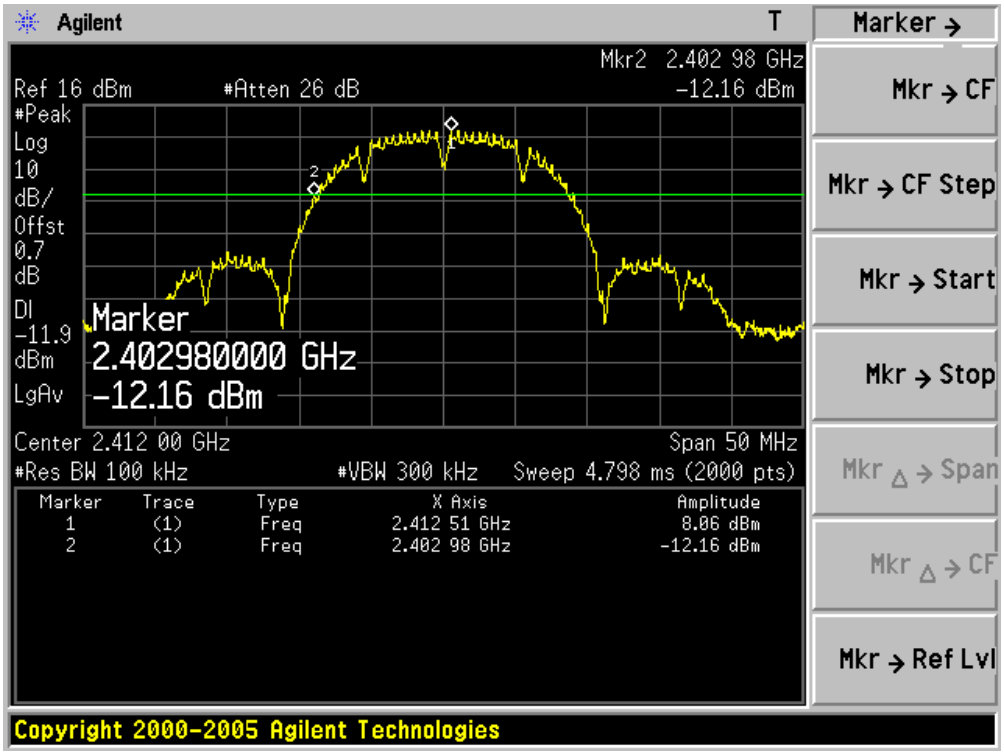
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

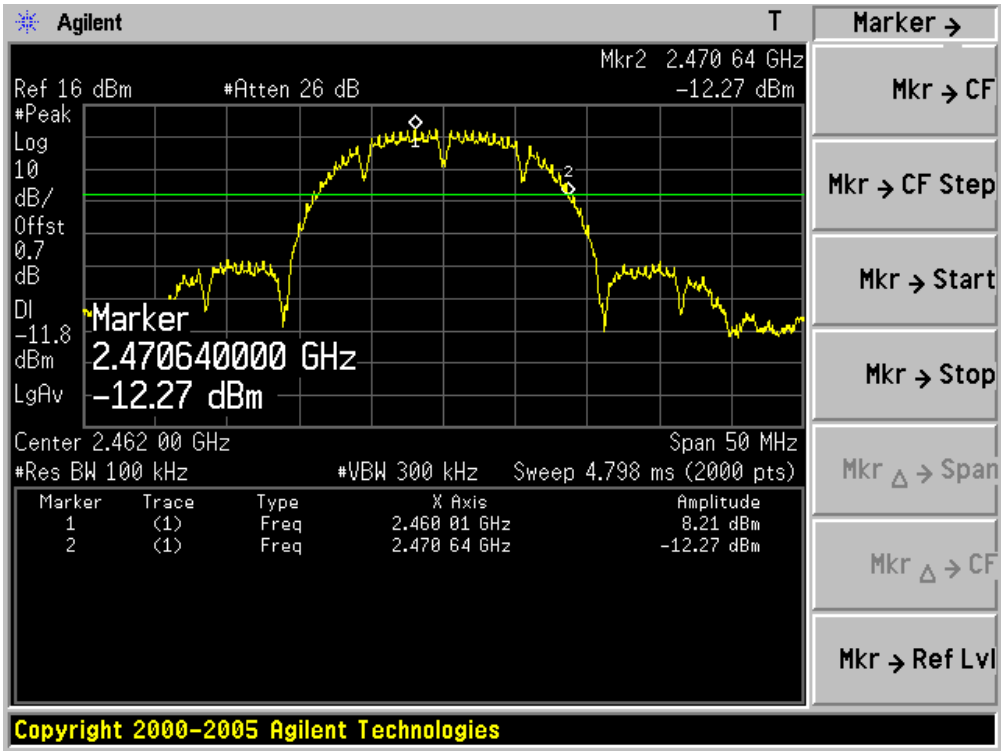
7.6. Test Result

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

Channel 01 (2412MHz)

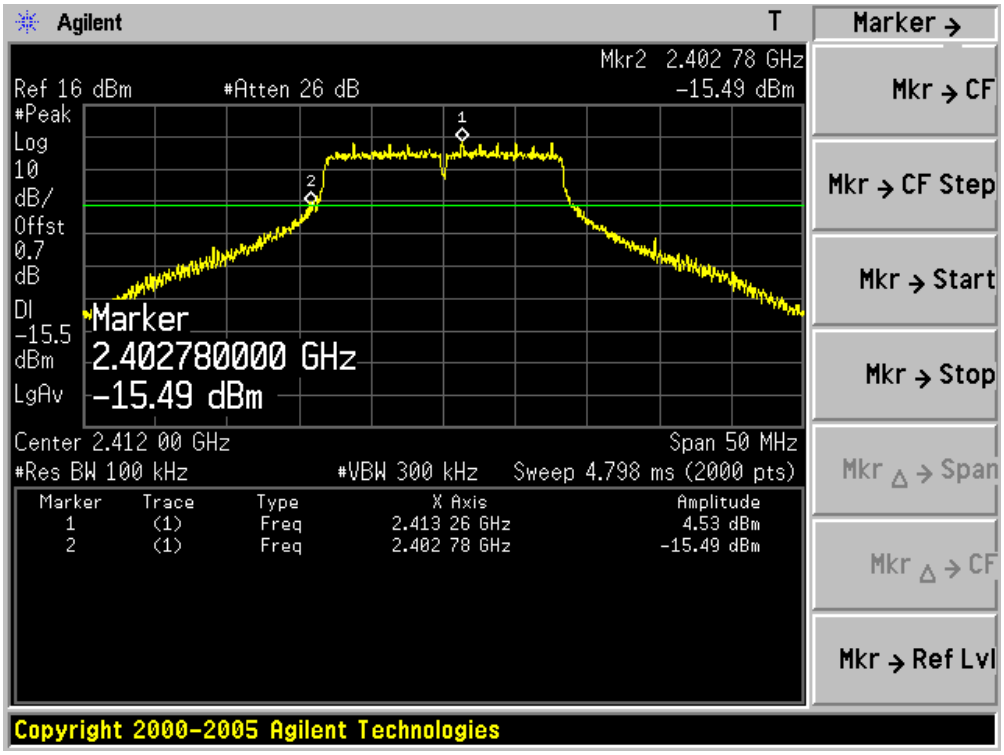


Channel 11 (2462MHz)

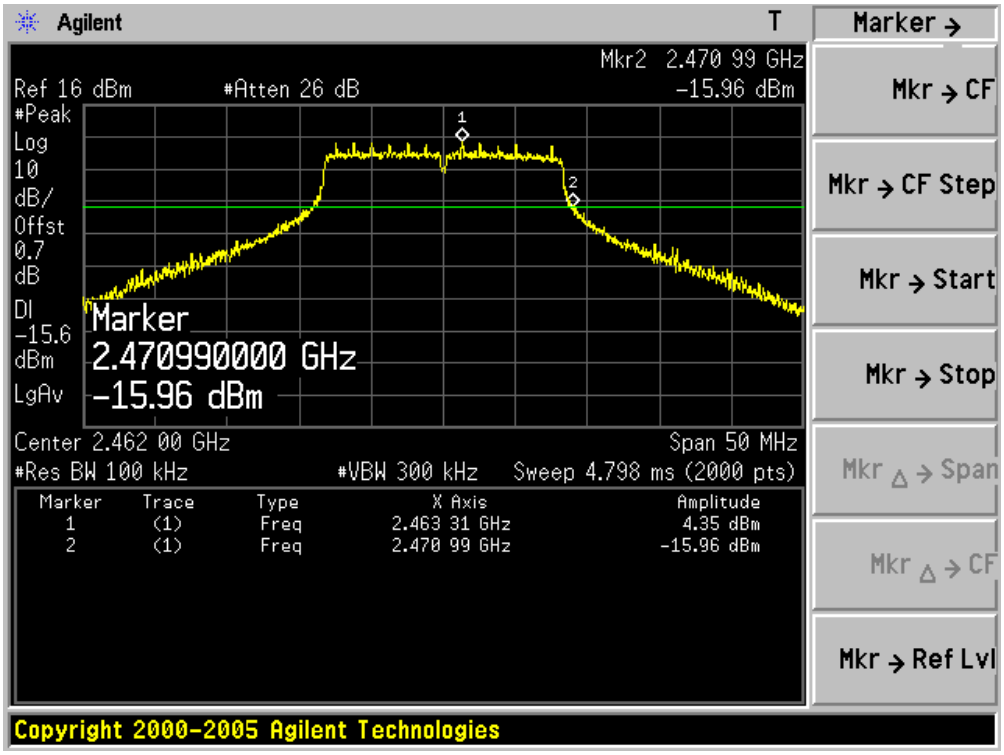


Product	:	RF Module
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)



Channel 11 (2462MHz)



8. Occupied Bandwidth

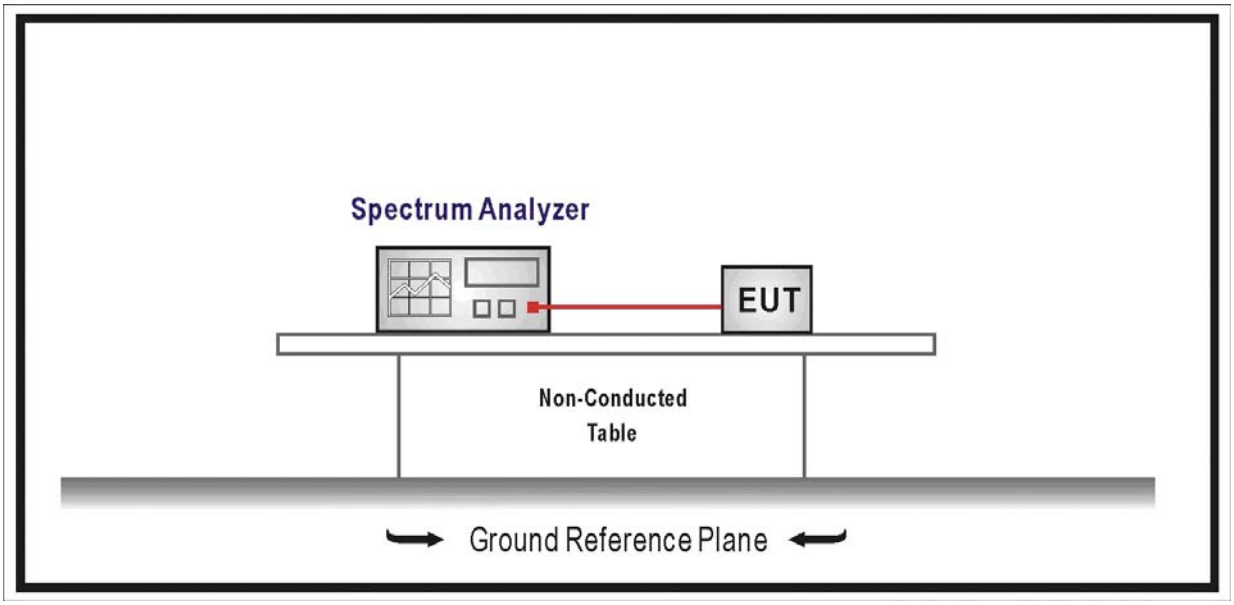
8.1. Test Equipment

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	2008/10/21
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

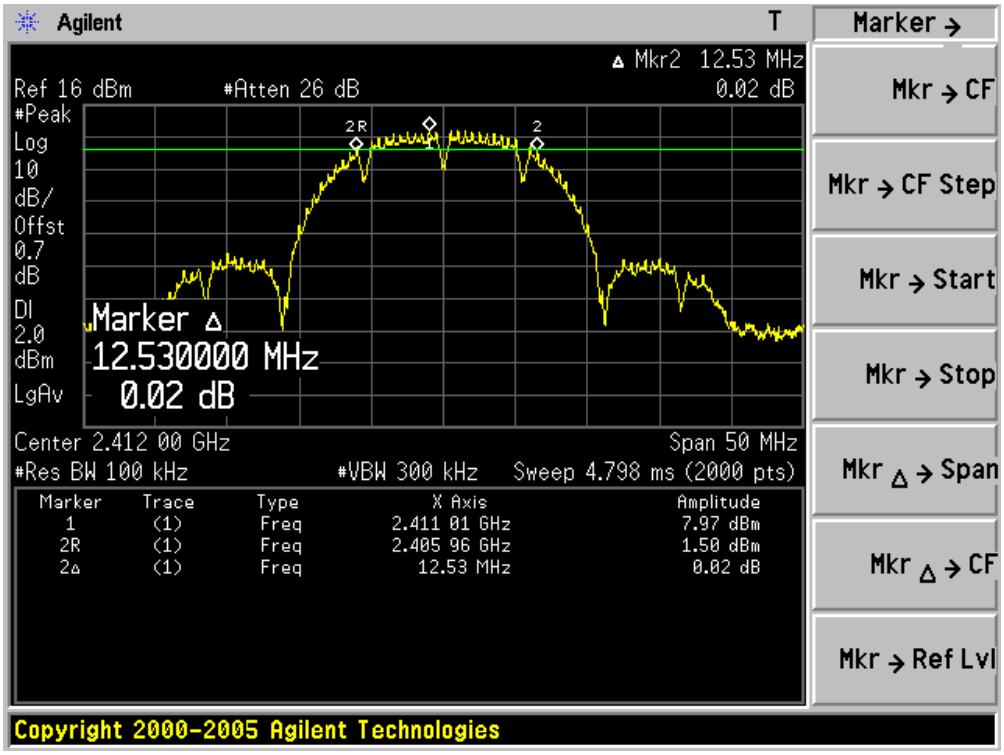
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

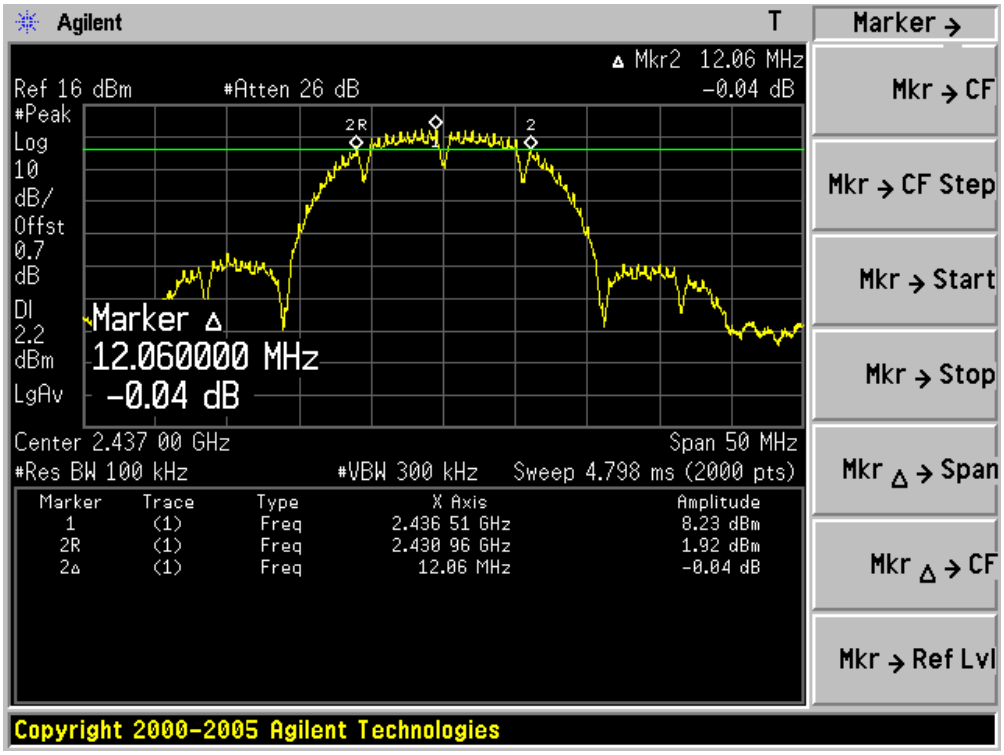
Product	:	RF Module
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12530	500	Pass
06	2437	12060	500	Pass
11	2462	12080	500	Pass

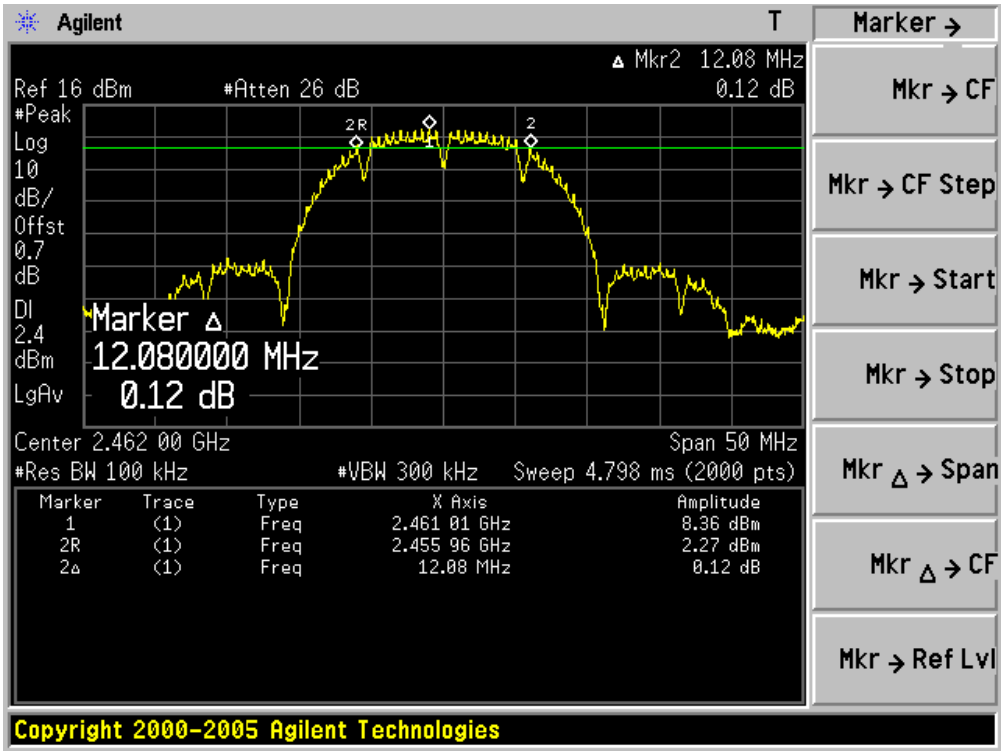
Channel 01 (2412MHz)



Channel 06 (2437MHz)



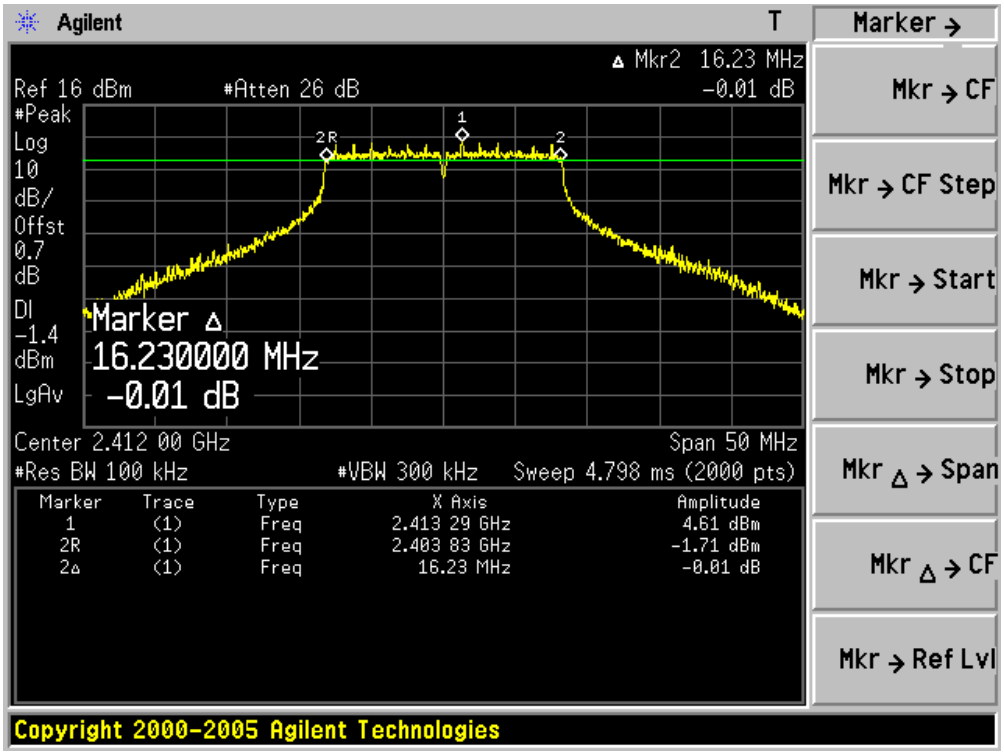
Channel 11 (2462MHz)



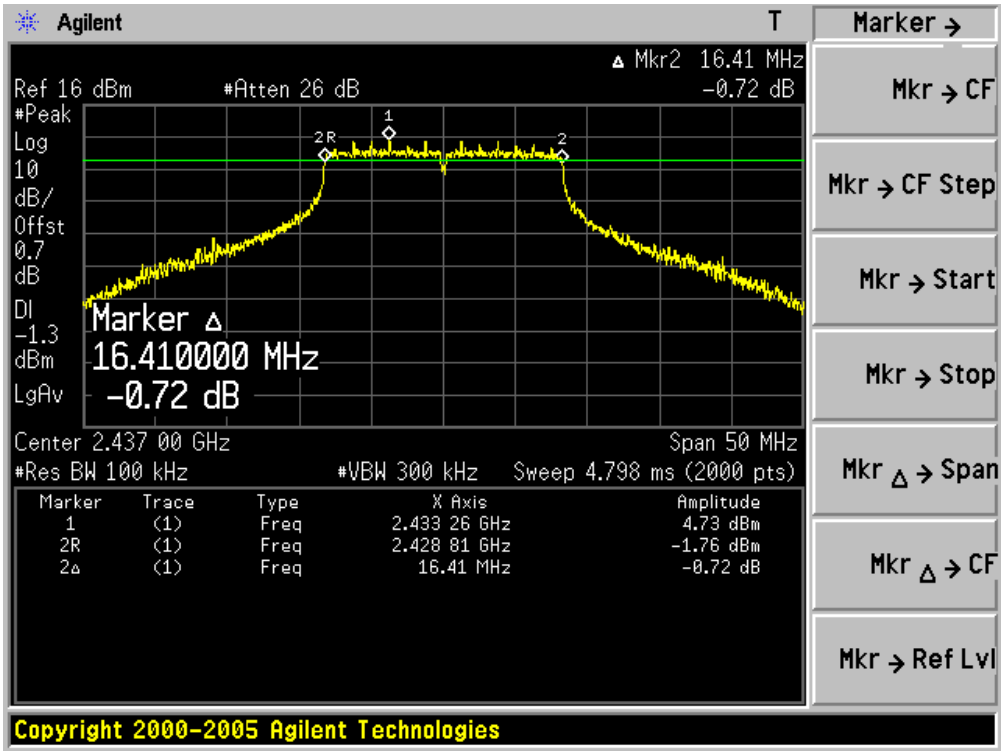
Product	:	RF Module
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16230	500	Pass
06	2437	16410	500	Pass
11	2462	16380	500	Pass

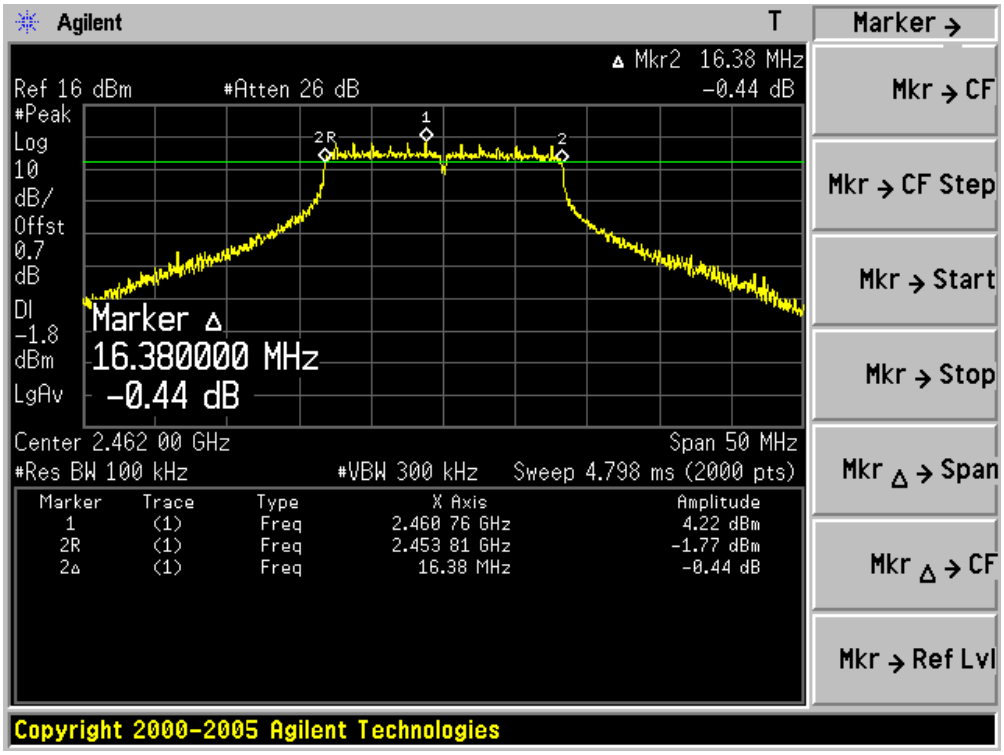
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



9. Power Output

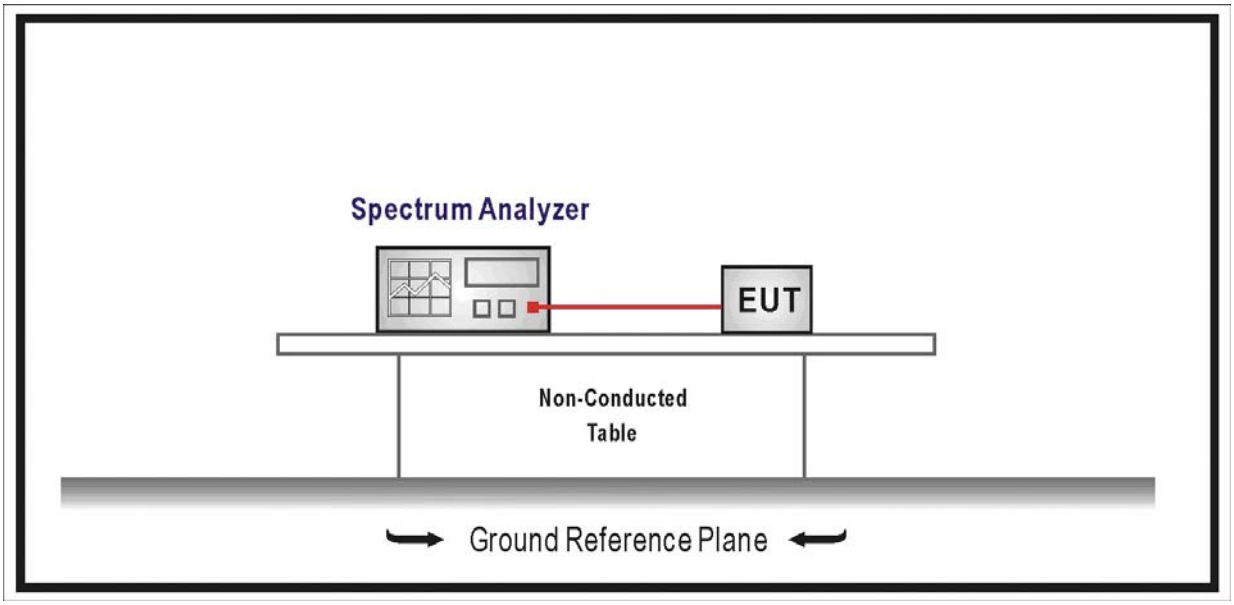
9.1. Test Equipment

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	2008/10/21
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

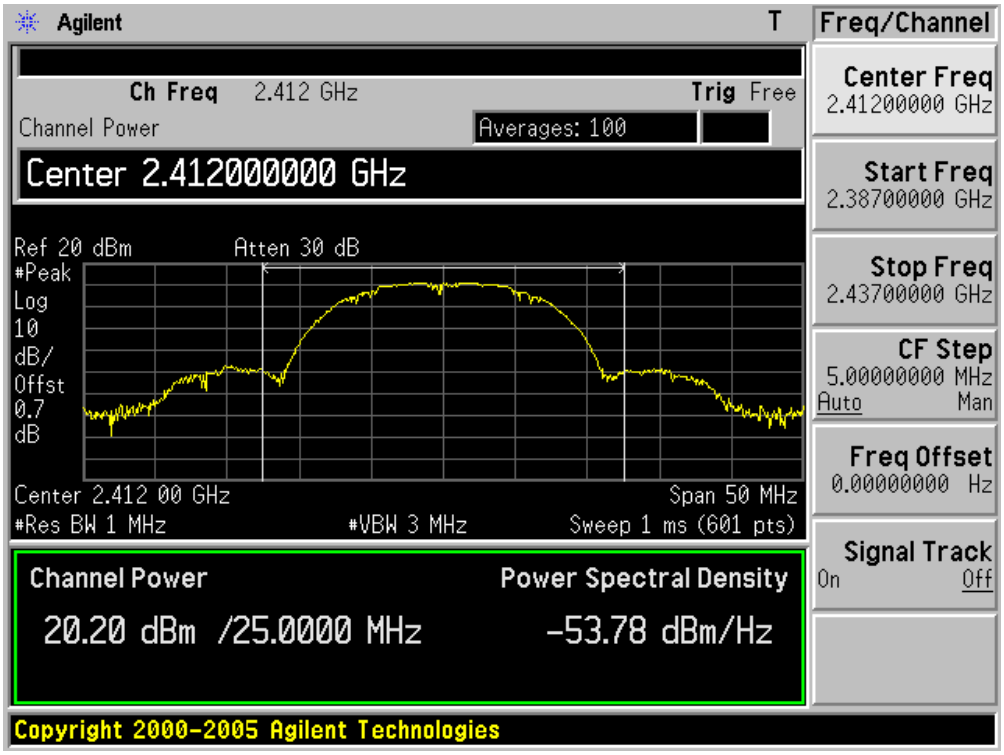
9.6. Test Result

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

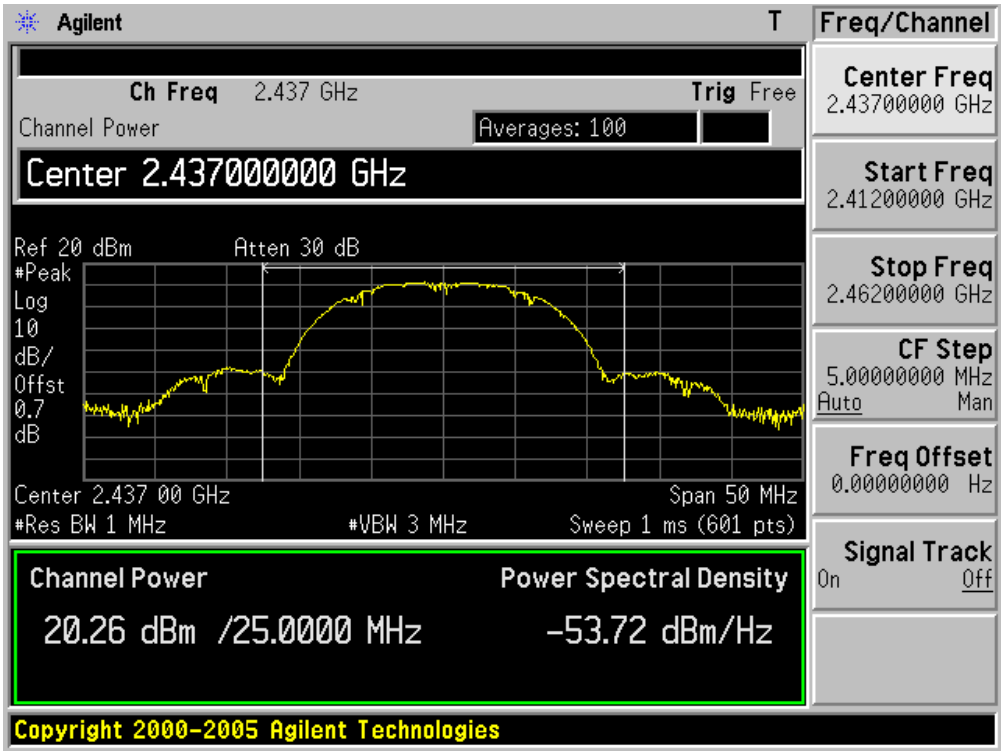
Channel No.	Frequency (MHz)	Data Rate (Mbps)				Limit (dBm)
		1	2	5.5	11	
01	2412	20.20	--	--	--	30
06	2437	20.26	19.98	19.72	19.48	30
11	2462	20.61	--	--	--	30

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.

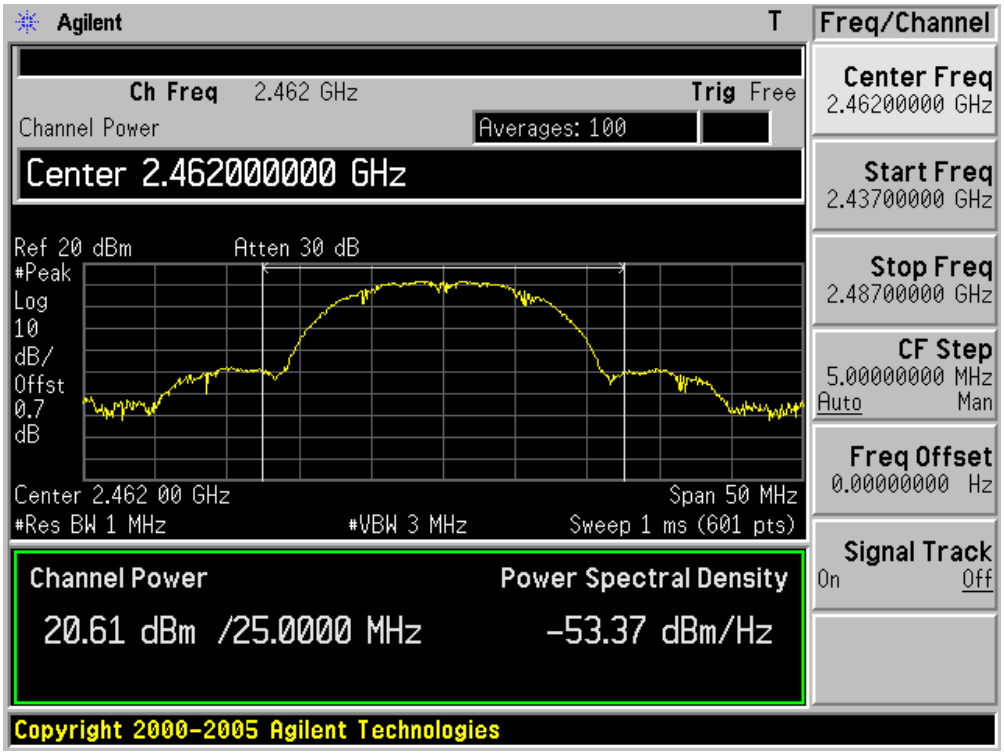
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

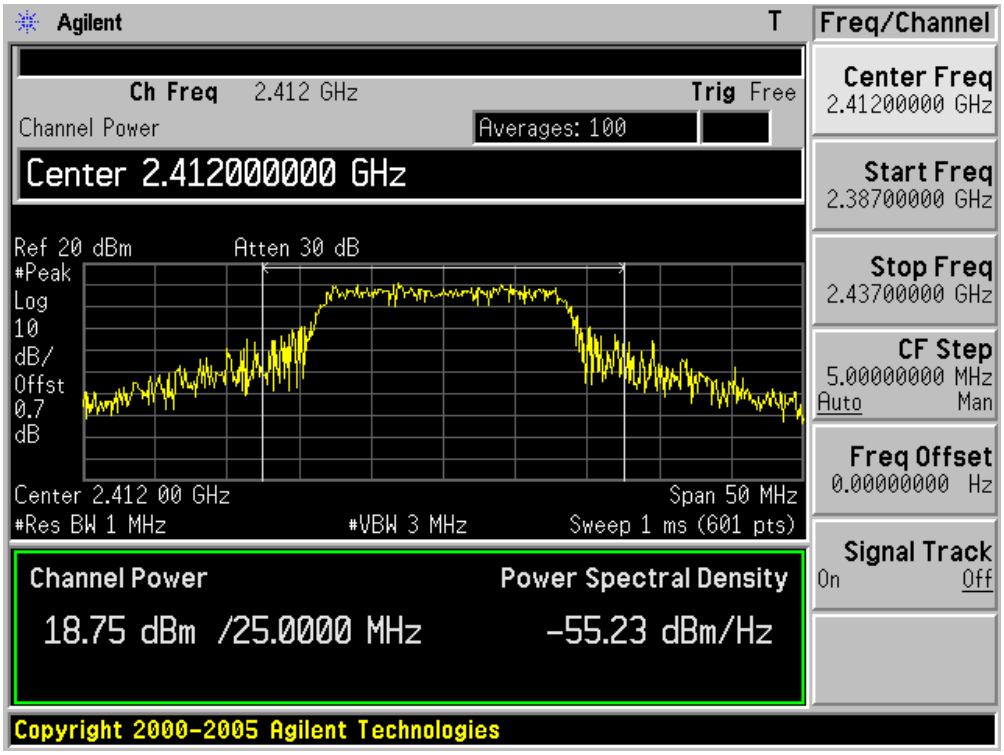


Product	:	RF Module
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

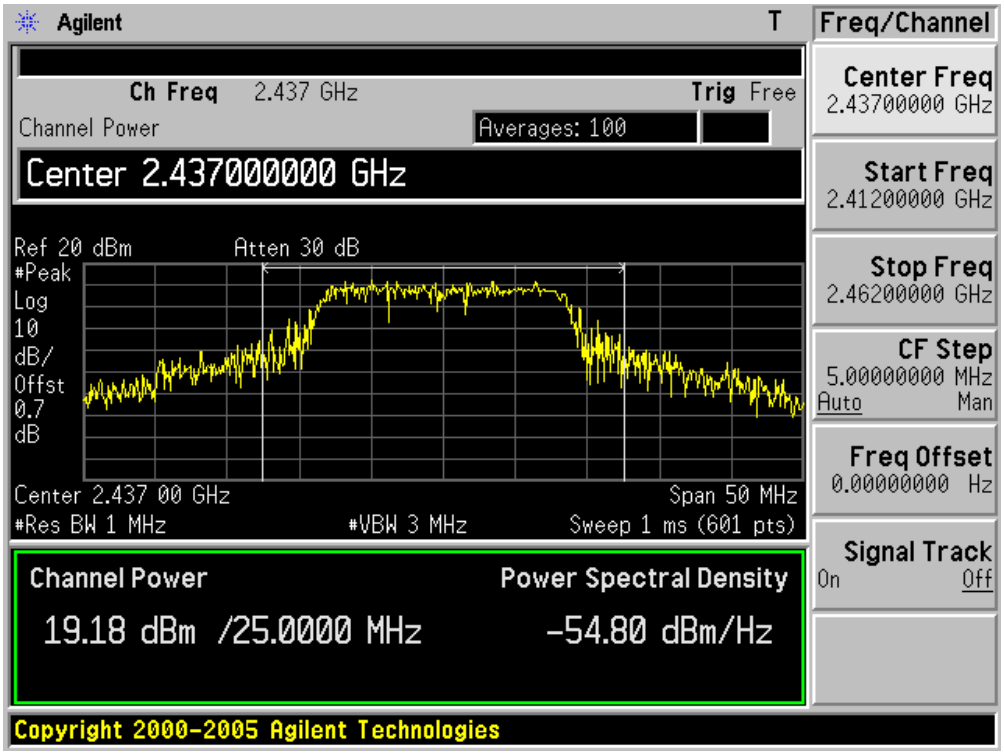
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Limit (dBm)
		6	9	12	18	24	36	48	54	
01	2412	18.75	--	--	--	--	--	--	--	30
06	2437	19.18	19.16	19.12	19.10	19.11	19.09	18.89	18.85	30
11	2462	18.90	--	--	--	--	--	--	--	30

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.

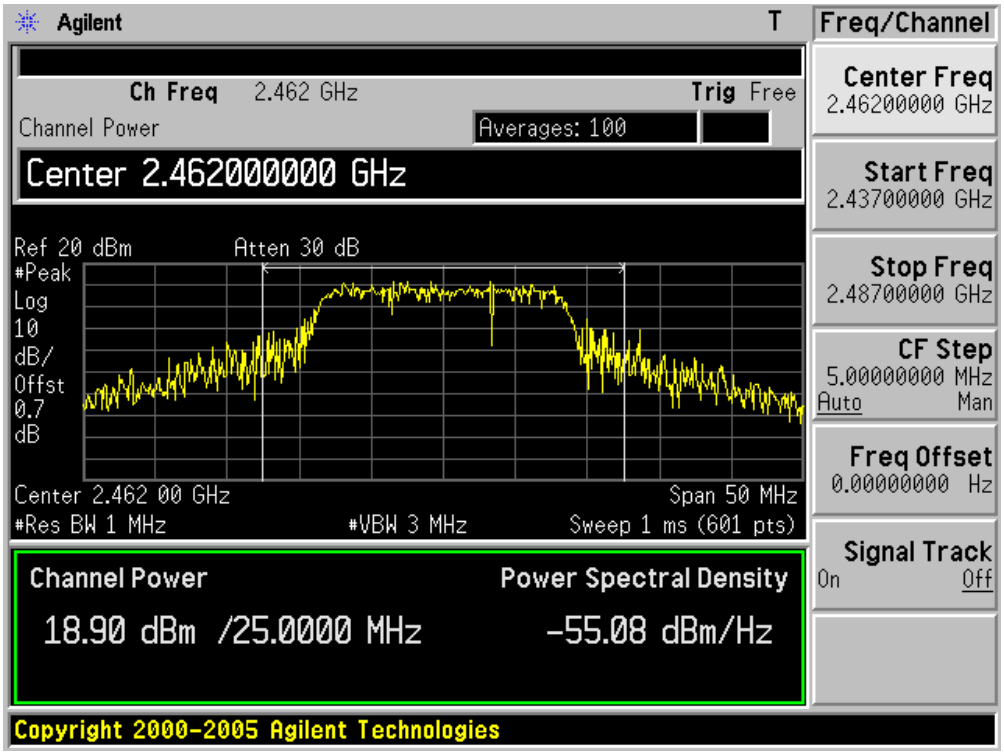
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



10. Power Spectral Density

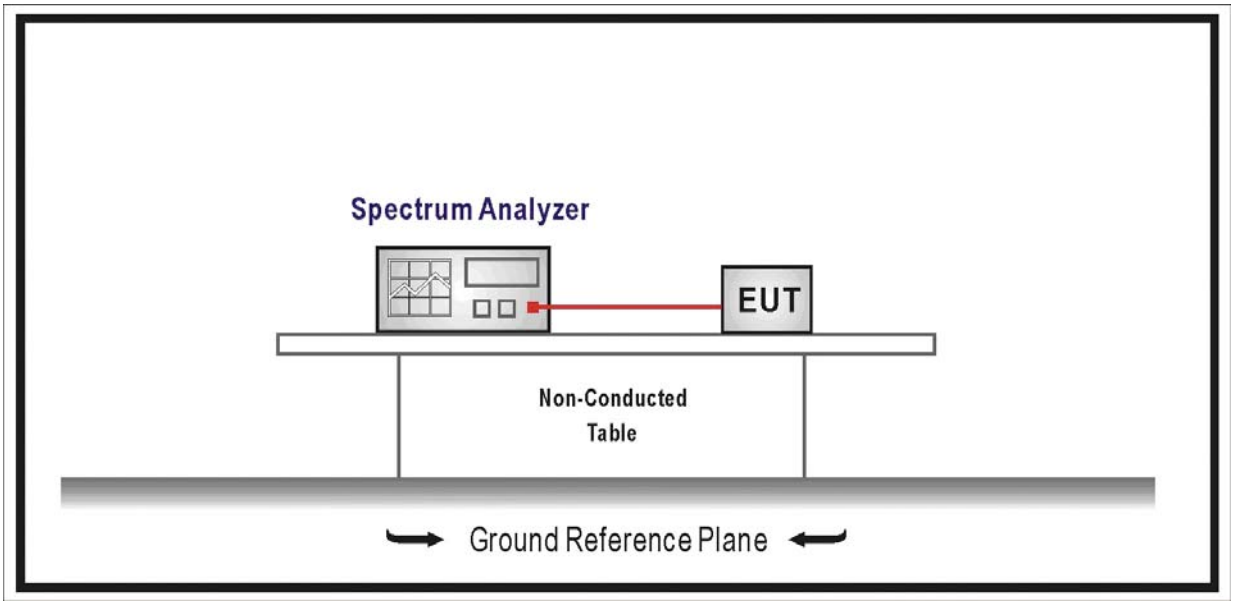
10.1. Test Equipment

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	2008/10/21
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.

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

10.5. Uncertainty

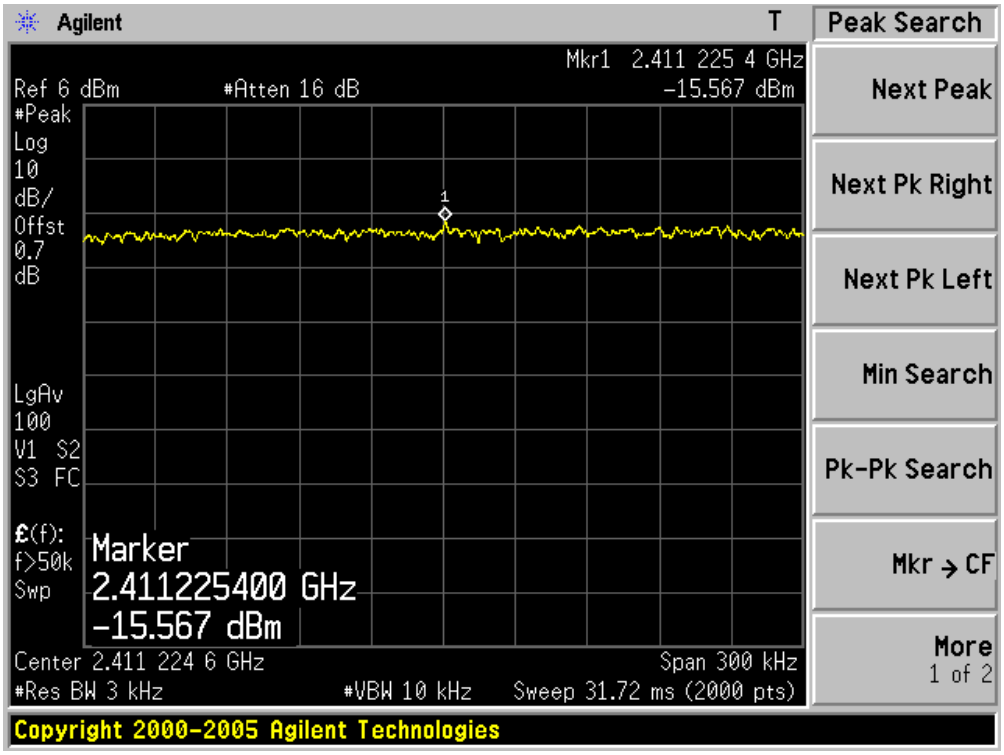
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

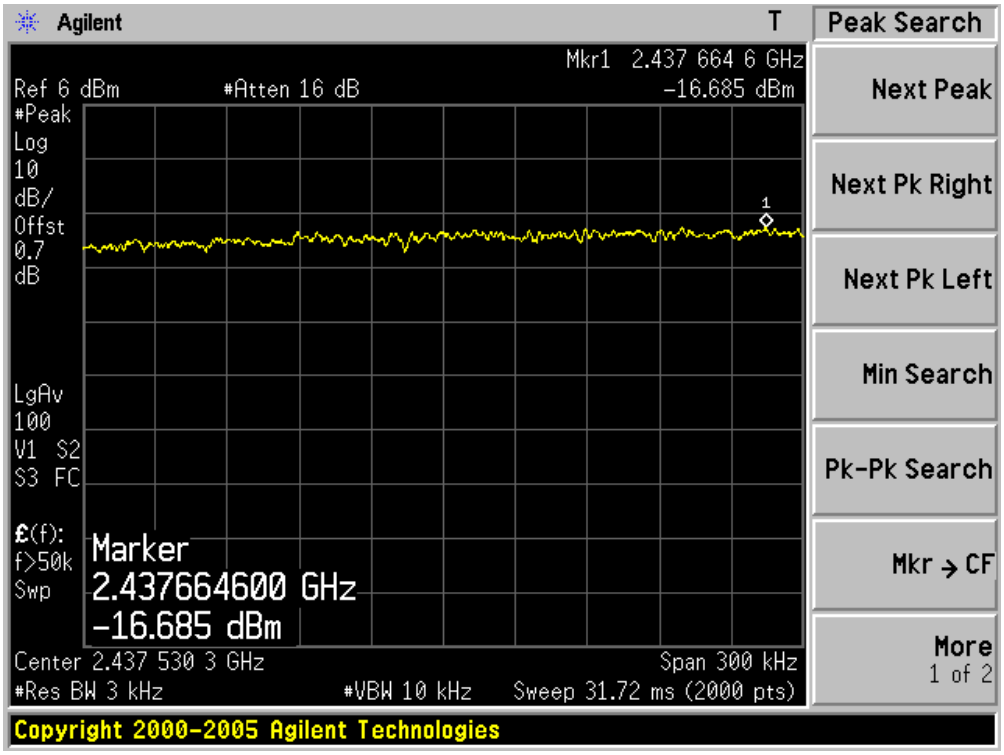
Product	:	RF Module
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-15.567	8	Pass
06	2437	-16.685	8	Pass
11	2462	-17.414	8	Pass

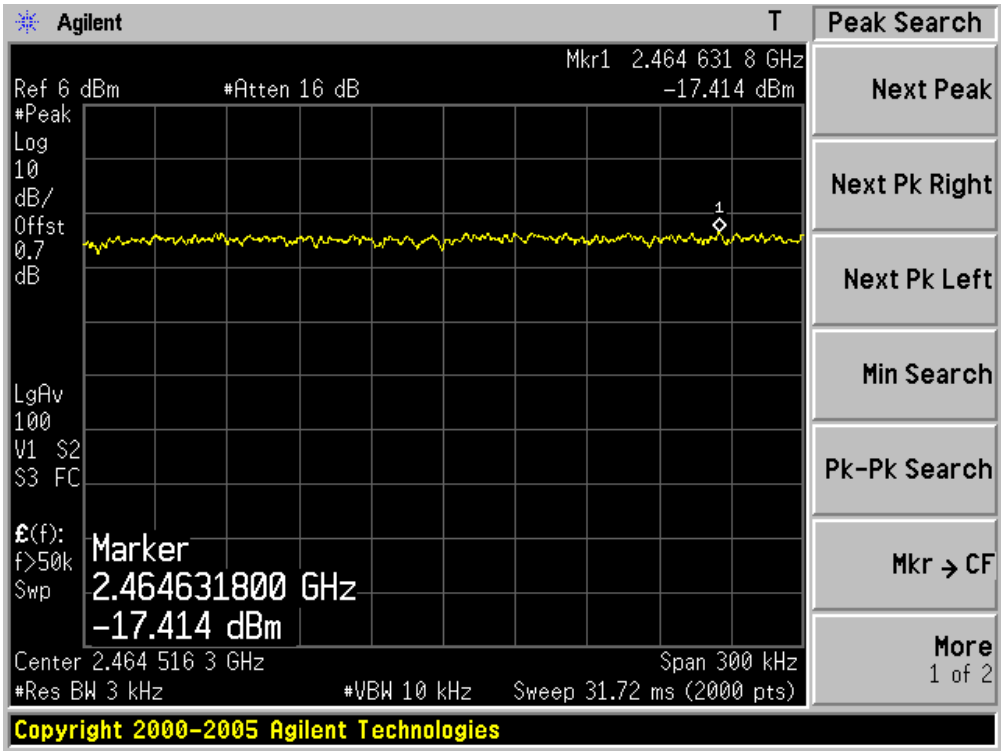
Channel 01 (2412MHz)



Channel 06 (2437MHz)



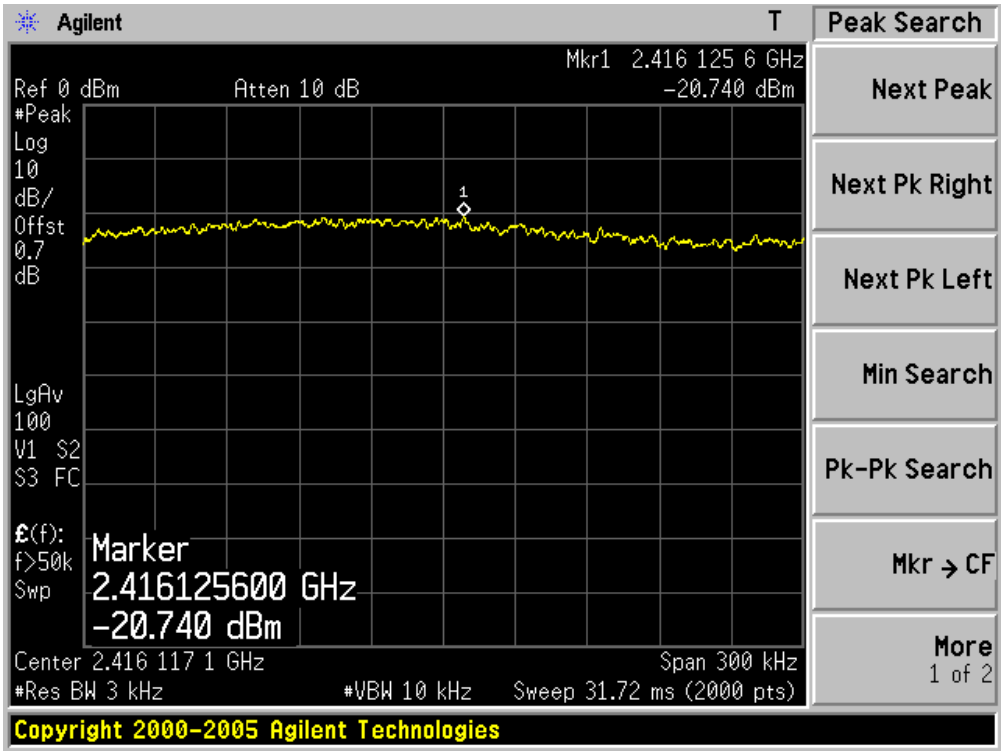
Channel 11 (2462MHz)



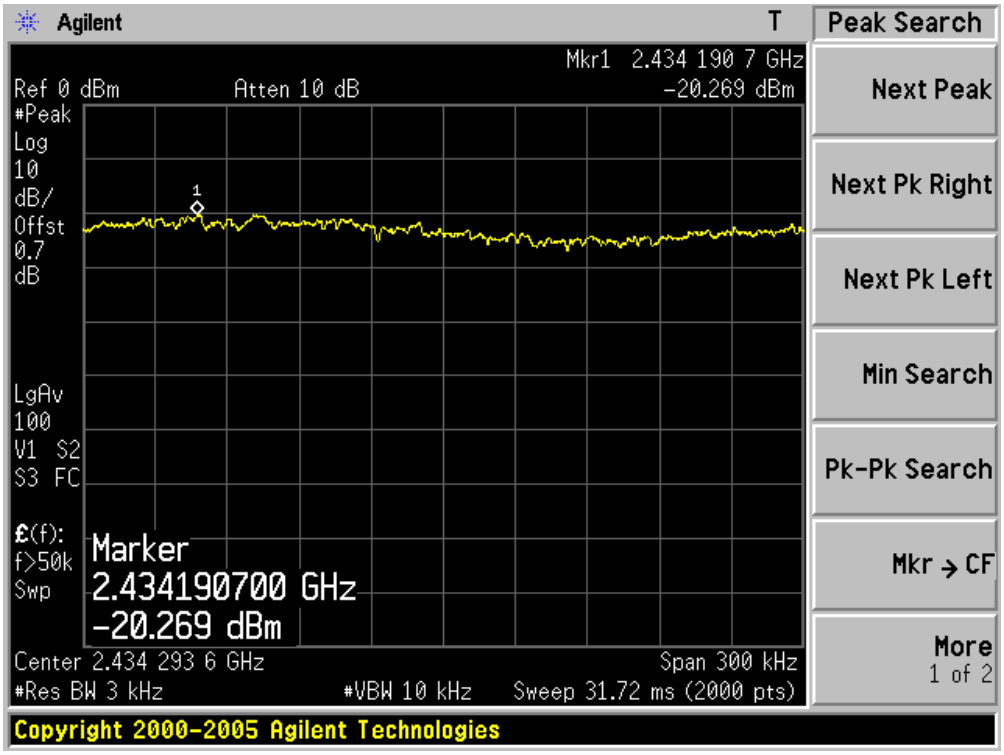
Product	:	RF Module
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-20.740	8	Pass
06	2437	-20.269	8	Pass
11	2462	-15.040	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)