Test Report

Product Name ： 54Mbps Wireless ADSL+ Modem Router

Model No. ： DG834GU v5, DG834G v5

FCC ID ： PY308200087

Applicant ： Netgear Inc.

Address ： 4500 Great America Pky, Santa Clara, CA 95054, USA

Date of Receipt ： 2008/05/23

Issued Date ： 2008/06/16

Report No. ： 086S018-RF-US-P05V01

Test Report Certification

Issued Date : 2008/06/16
Report No. : 086S018-RF-US-P05V01

QuieTek

Product Name	:	54Mbps Wireless ADSL+ Modem Router
Applicant	:	Netgear Inc.
Address	:	4500 Great America Pky, Santa Clara, CA 95054, USA
Manufacturer	:	Ambit Microsystems (Shanghai) Ltd.
Address	:	No. 1925, Nanle Road Songjiang Export Processing Zone Shanghai China, Post Code: 201613
Model No.	:	DG834GU v5, DG834G v5
FCC ID	:	PY308200087
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	AC 100-240 V / 50-60 Hz
Trade Name	:	Netgear
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 : 
(Any Liu)

Reviewed By : 
(Dream Cao)

Approved By : 
(Murphy Wang)

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	54Mbps Wireless ADSL+ Modem Router
Trade Name	Netgear
Model No.	DG834GU v5, DG834G v5
FCC ID	PY308200087
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	Dipole Antenna
Antenna Gain	1.6dBi

Note:

This product includes two models shown as above, from these two models, DG834GU v5 with USB port was selected as the test model and its test data was recorded in this report; the only difference of the two models is with the USB port or not.

Component	Description
NETGEAR® Switching Adapter	P/N: 332-10010-01 Model: DSA-20P-10 US 120144 Input: AC 100-240V, 50/60Hz, 0.7A, 40V Output: DC 12V, 1.2A

802.11b/gWorking 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
RF Antenna Cable Assembly	WHA YU Group	C107-510554-A	2.4GHz: 1.6dBi

1.2. Mode of Operation

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

Test Mode
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g

Note:

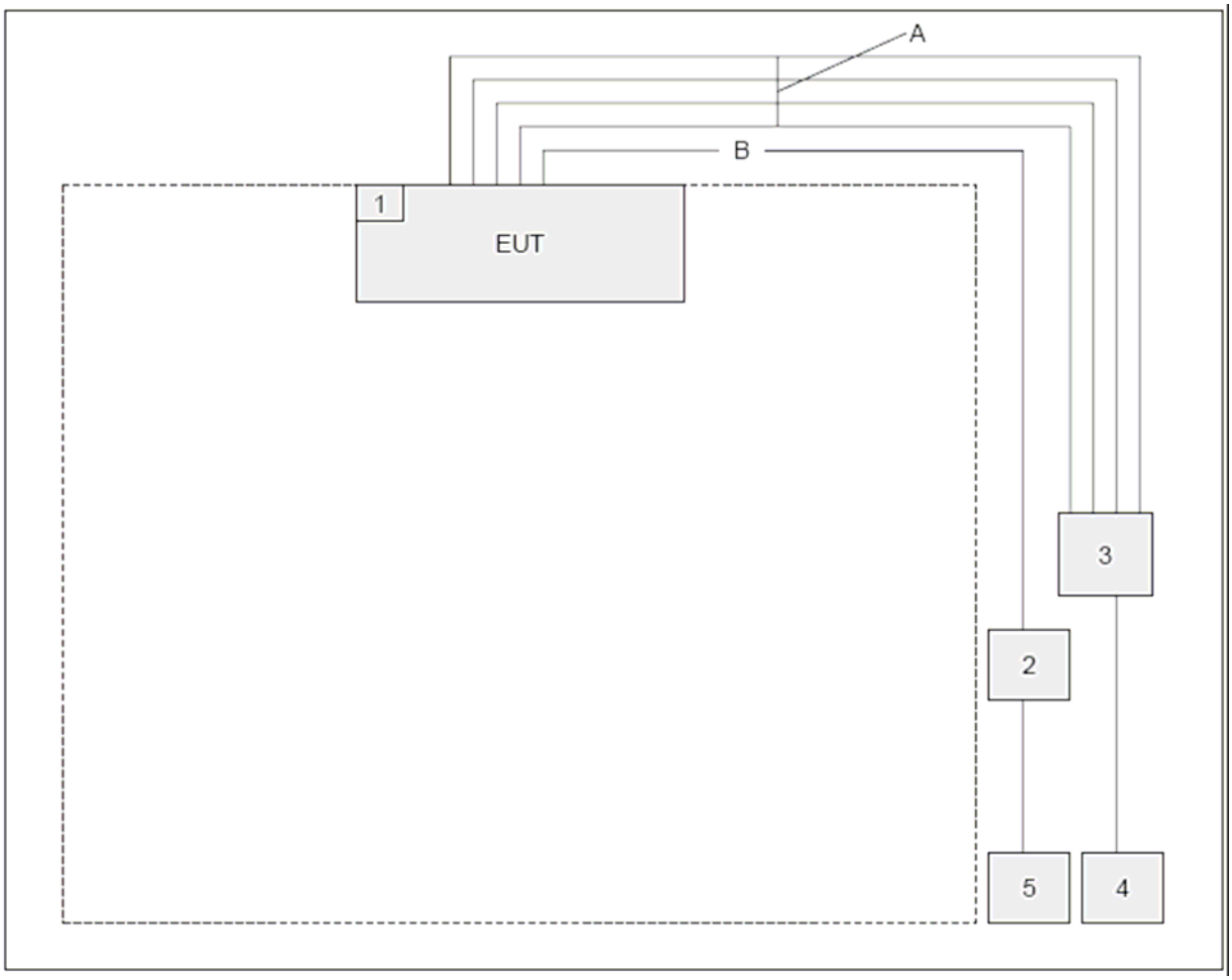
1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations. The function for the receiver was measured and made a test report that the report number is 086S018-IT-US-P01V02, certified under Declaration of Conformity.

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	USB Flash	Lenovo	T180	N/A	N/A
2	ADSL Minuet	Medialincs	DSLlinx-6512L	91000B1147	Non-Shielded, 1.8m
3	Hub	TP-LINK	TL-SF1008D	7529400587	Power by Adapter
4	Notebook	DELL	PP19L	JH097 A01	Power by adapter
5	PC	Lenovo	KaiTian M200	2726578	Non-Shielded, 1.8m

1.4. Configuration of Tested System

Connection Diagram


Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, >10m
B	Telecom 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 and run control software “Ralink wireless utility” provided by applicant.
3	Select wireless mode bandwidth and channel for test, click the “start transmit” button.

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

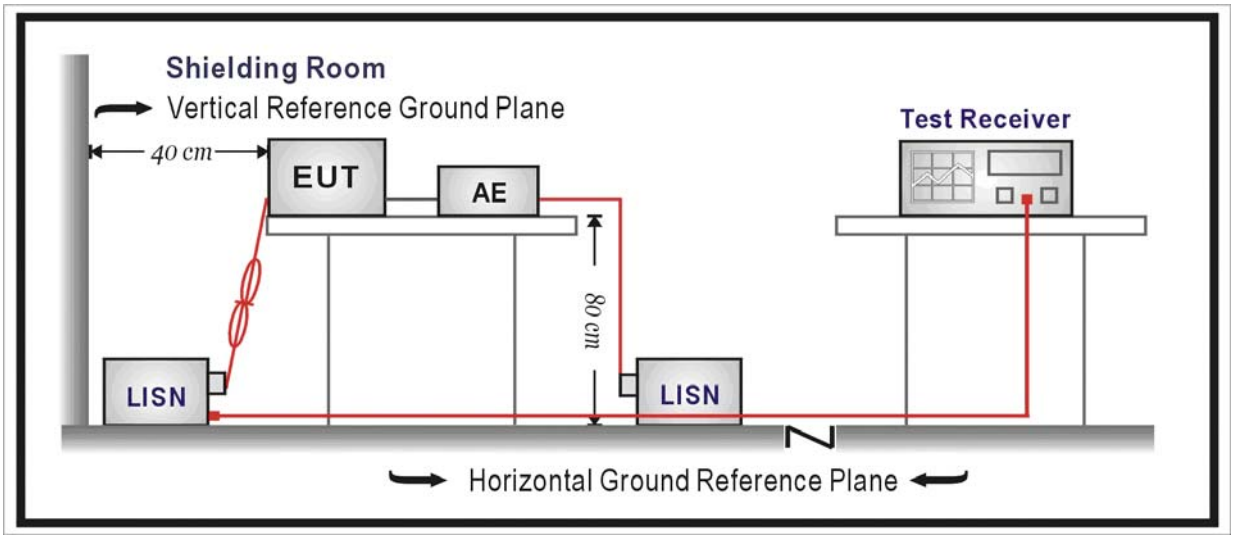
3.1. Test Equipment

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	2007/11/15
Two-Line V-Network	R&S	ENV216	100014	2007/11/15
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2007/11/25
50ohm Termination	SHX	TF2	07081401	2007/10/19
Coaxial Cable	Luthi	RG214	519358	2007/11/25
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

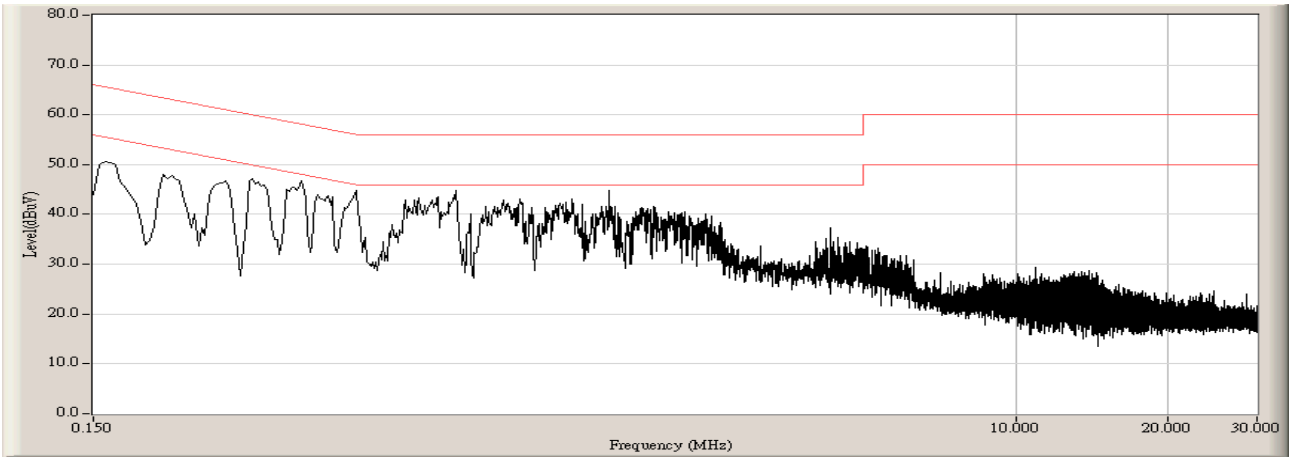
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane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

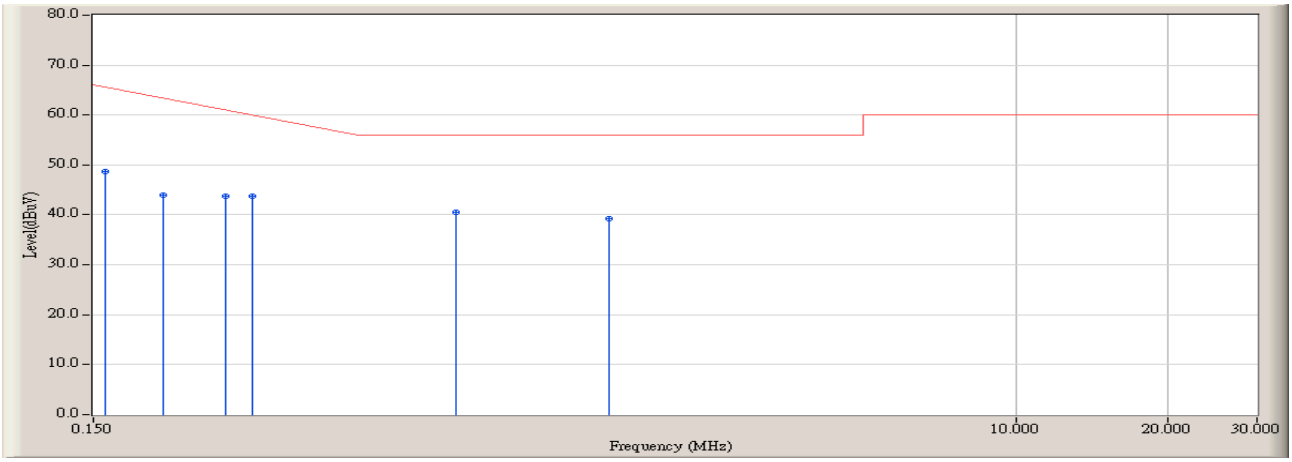
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 18:44**
Limit : FCC_Part15.207_00M_QP	**Margin : 10**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437 MHz)**



Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 18:46**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437 MHz)**

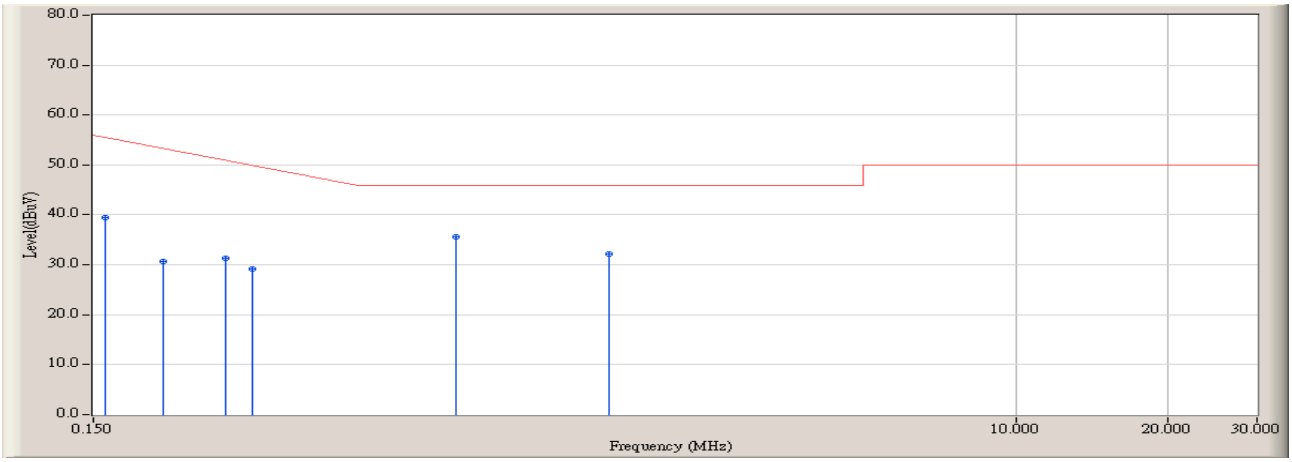


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.214	38.400	48.614	-17.157	65.771	QUASIPEAK
2		0.206	9.526	34.500	44.026	-20.374	64.400	QUASIPEAK
3		0.274	9.479	34.300	43.778	-18.679	62.457	QUASIPEAK
4		0.310	9.511	34.200	43.711	-17.718	61.429	QUASIPEAK
5	*	0.782	9.690	30.800	40.490	-15.510	56.000	QUASIPEAK
6		1.566	9.710	29.600	39.310	-16.690	56.000	QUASIPEAK

Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 18:46**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437 MHz)**

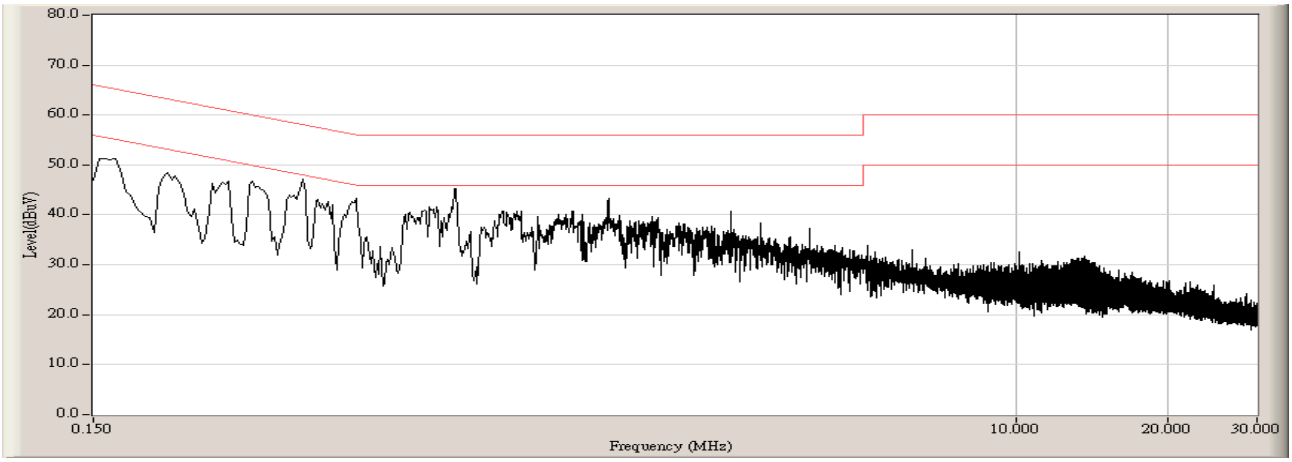


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.214	29.300	39.514	-16.257	55.771	AVERAGE
2		0.206	9.526	21.200	30.726	-23.674	54.400	AVERAGE
3		0.274	9.479	21.800	31.278	-21.179	52.457	AVERAGE
4		0.310	9.511	19.600	29.111	-22.318	51.429	AVERAGE
5	*	0.782	9.690	26.000	35.690	-10.310	46.000	AVERAGE
6		1.566	9.710	22.400	32.110	-13.890	46.000	AVERAGE

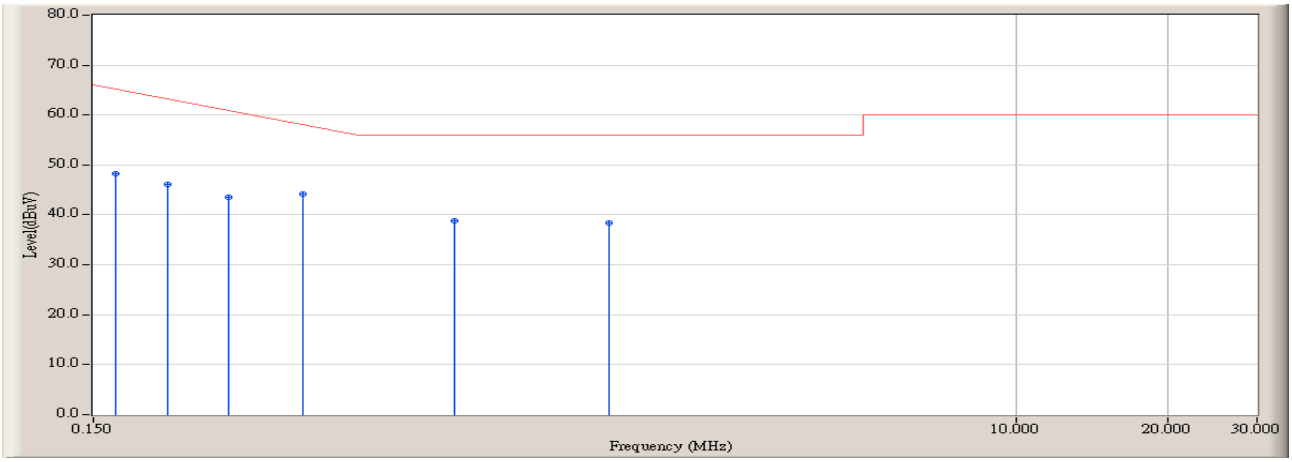
Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 18:49**
Limit : FCC_Part15.207_00M_QP	**Margin : 10**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437 MHz)**



Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 18:51**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437 MHz)**

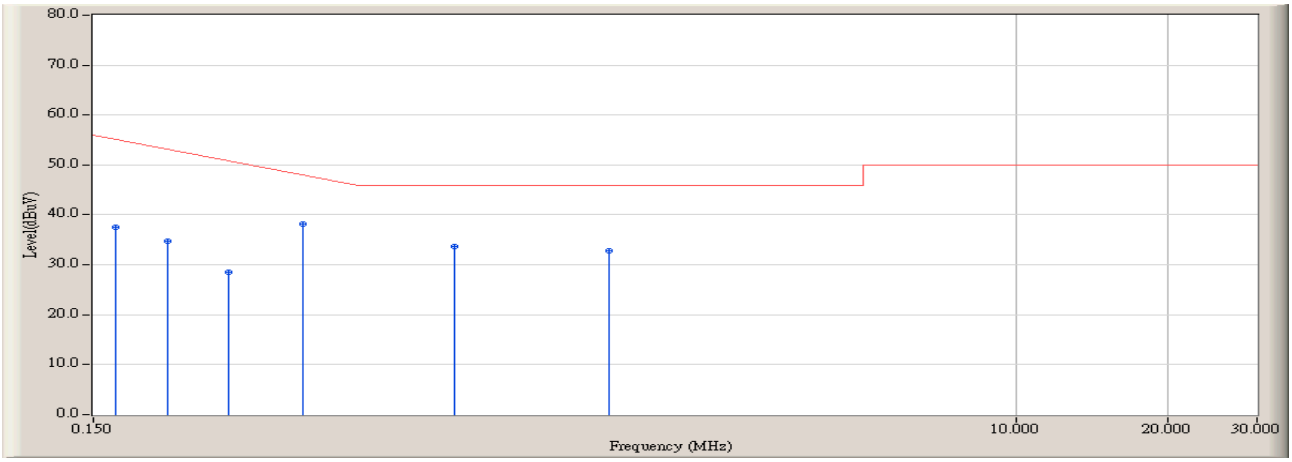


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.952	38.400	48.352	-17.191	65.543	QUASIPEAK
2		0.210	9.616	36.400	46.016	-18.270	64.286	QUASIPEAK
3		0.278	9.593	33.900	43.493	-18.850	62.343	QUASIPEAK
4	*	0.390	9.610	34.500	44.110	-15.033	59.143	QUASIPEAK
5		0.778	9.770	29.000	38.770	-17.230	56.000	QUASIPEAK
6		1.566	9.720	28.700	38.420	-17.580	56.000	QUASIPEAK

Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 18:51**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437 MHz)**

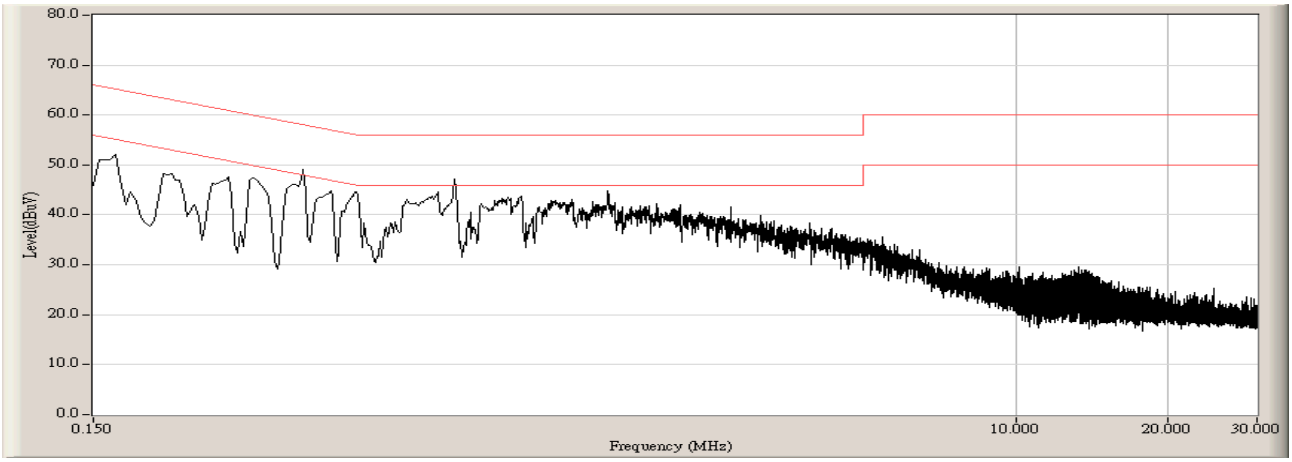


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.952	27.500	37.452	-18.091	55.543	AVERAGE
2		0.210	9.616	25.200	34.816	-19.470	54.286	AVERAGE
3		0.278	9.593	18.900	28.493	-23.850	52.343	AVERAGE
4	*	0.390	9.610	28.500	38.110	-11.033	49.143	AVERAGE
5		0.778	9.770	24.000	33.770	-12.230	46.000	AVERAGE
6		1.566	9.720	23.000	32.720	-13.280	46.000	AVERAGE

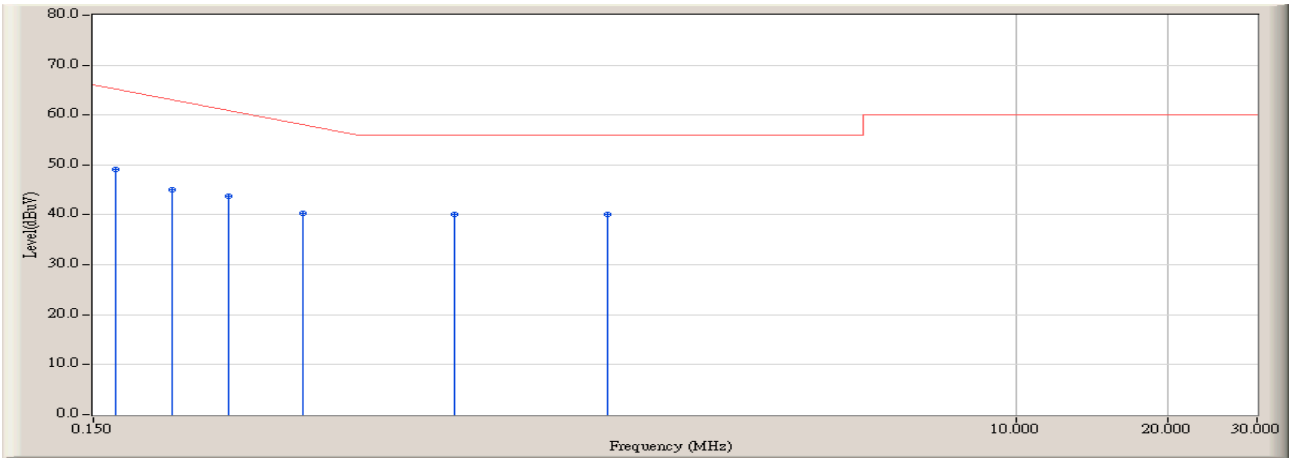
Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 19:00**
Limit : FCC_Part15.207_00M_QP	**Margin : 10**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437 MHz)**



Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 19:02**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437 MHz)**

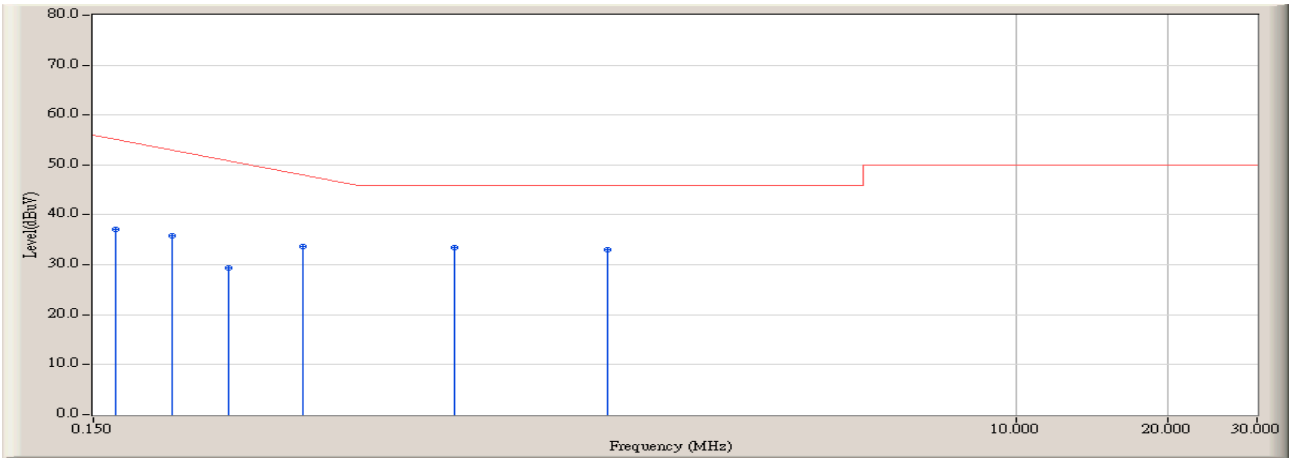


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	10.084	39.000	49.084	-16.459	65.543	QUASIPEAK
2		0.214	9.473	35.600	45.073	-19.098	64.171	QUASIPEAK
3		0.278	9.482	34.200	43.682	-18.661	62.343	QUASIPEAK
4		0.390	9.564	30.800	40.364	-18.779	59.143	QUASIPEAK
5	*	0.778	9.690	30.500	40.190	-15.810	56.000	QUASIPEAK
6		1.562	9.710	30.300	40.010	-15.990	56.000	QUASIPEAK

Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 19:02**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437 MHz)**

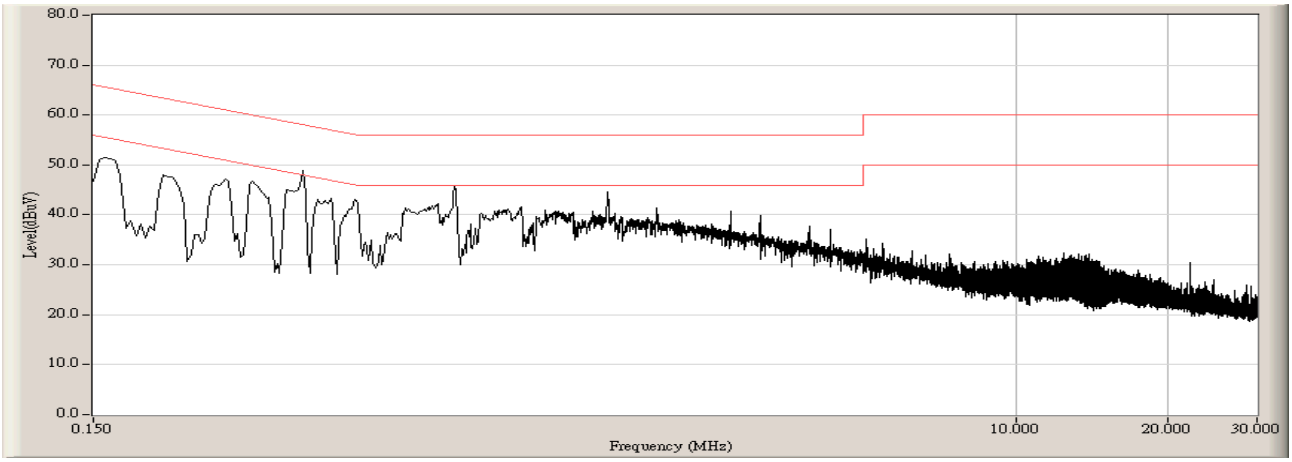


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	10.084	27.000	37.084	-18.459	55.543	AVERAGE
2		0.214	9.473	26.300	35.773	-18.398	54.171	AVERAGE
3		0.278	9.482	19.800	29.282	-23.061	52.343	AVERAGE
4		0.390	9.564	24.200	33.764	-15.379	49.143	AVERAGE
5	*	0.778	9.690	23.800	33.490	-12.510	46.000	AVERAGE
6		1.562	9.710	23.400	33.110	-12.890	46.000	AVERAGE

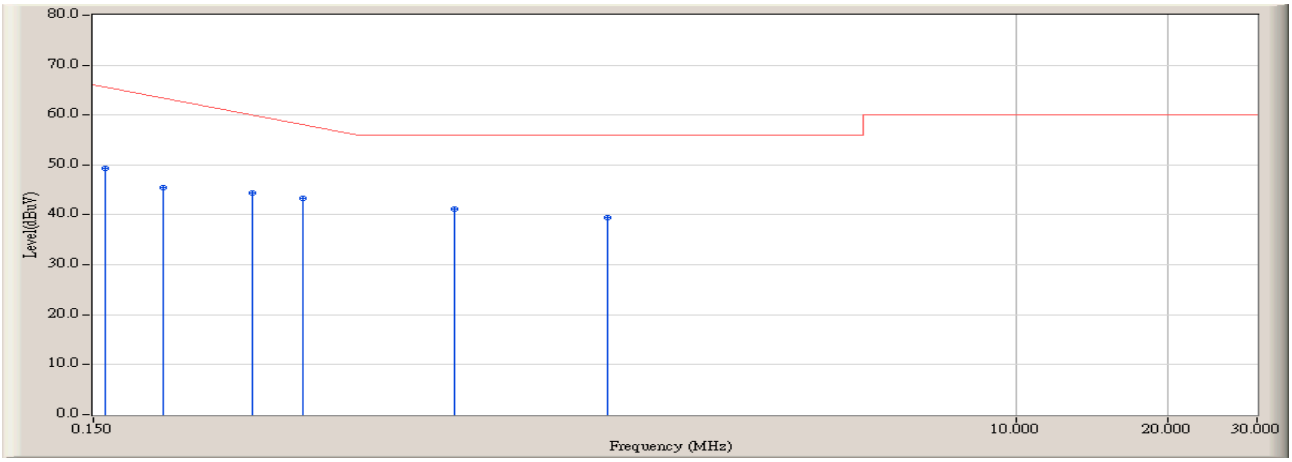
Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 19:14**
Limit : FCC_Part15.207_00M_QP	**Margin : 10**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437 MHz)**



Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 19:18**
Limit : FCC_Part15.207_00M_QP	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437 MHz)**

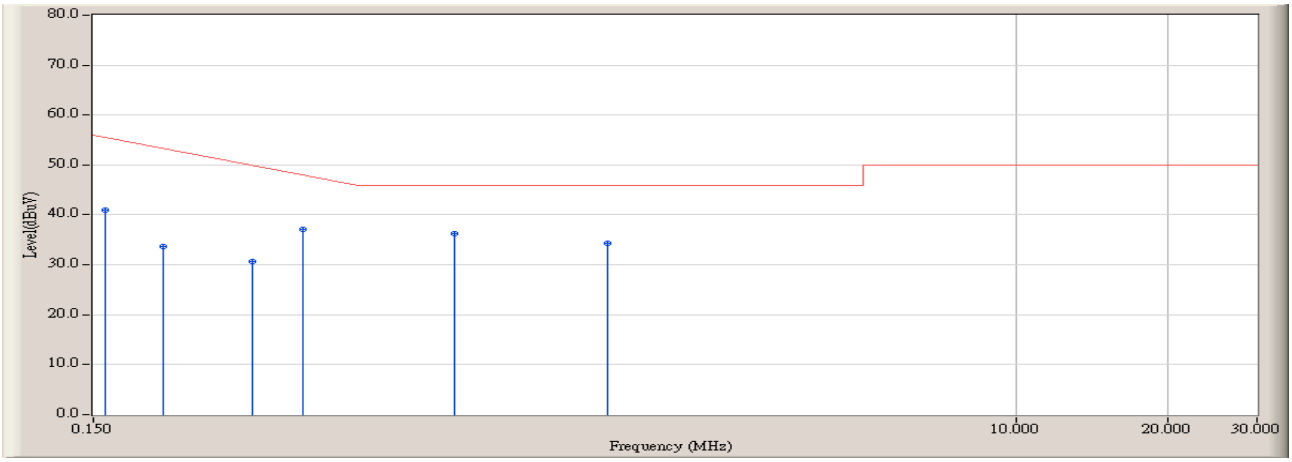


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.027	39.300	49.327	-16.444	65.771	QUASIPEAK
2		0.206	9.632	35.800	45.432	-18.968	64.400	QUASIPEAK
3		0.310	9.600	34.900	44.500	-16.929	61.429	QUASIPEAK
4		0.390	9.610	33.800	43.410	-15.733	59.143	QUASIPEAK
5	*	0.778	9.770	31.400	41.170	-14.830	56.000	QUASIPEAK
6		1.562	9.720	29.700	39.420	-16.580	56.000	QUASIPEAK

Note:

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

Engineer : Marlin	
Site : SR1 (Shielded Room for Conducted Emission and Power Disturbance Test)	**Time : 2008/06/04 - 19:18**
Limit : FCC_Part15.207_00M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : ENV216_100014(0.009-30MHz) - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437 MHz)**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	10.027	31.000	41.027	-14.744	55.771	AVERAGE
2		0.206	9.632	24.000	33.632	-20.768	54.400	AVERAGE
3		0.310	9.600	21.000	30.600	-20.829	51.429	AVERAGE
4		0.390	9.610	27.500	37.110	-12.033	49.143	AVERAGE
5	*	0.778	9.770	26.500	36.270	-9.730	46.000	AVERAGE
6		1.562	9.720	24.500	34.220	-11.780	46.000	AVERAGE

Note:

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

4. Radiated Emission

4.1. Test Equipment

☒Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4408B	MY45102679	2007/11/12
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
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	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
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	2007/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112D	22254	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
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	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	05	2007/11/25

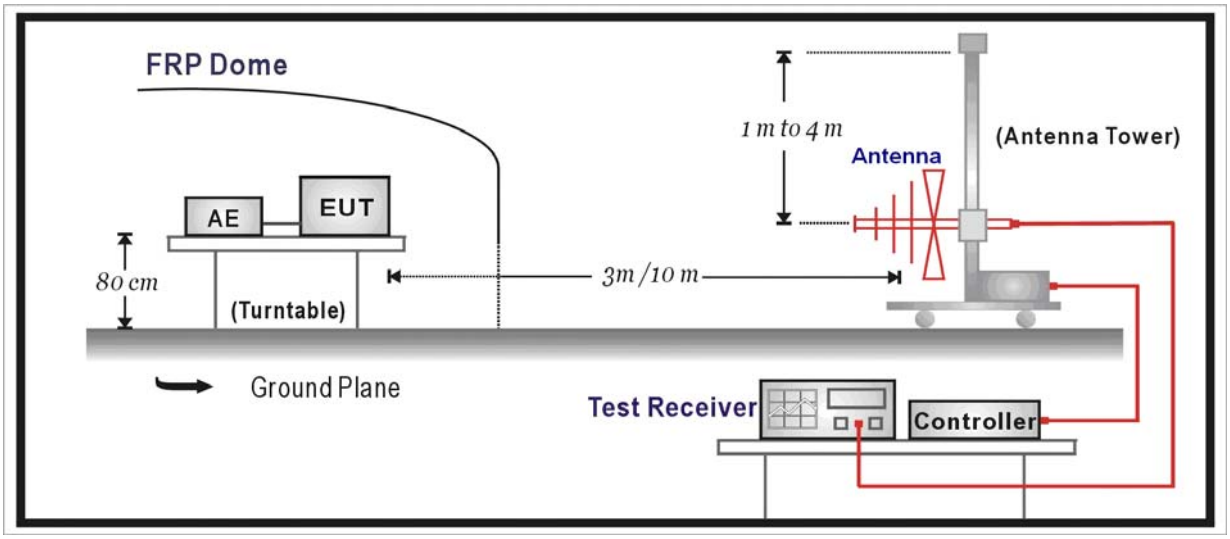
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH003	2008/03/31

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

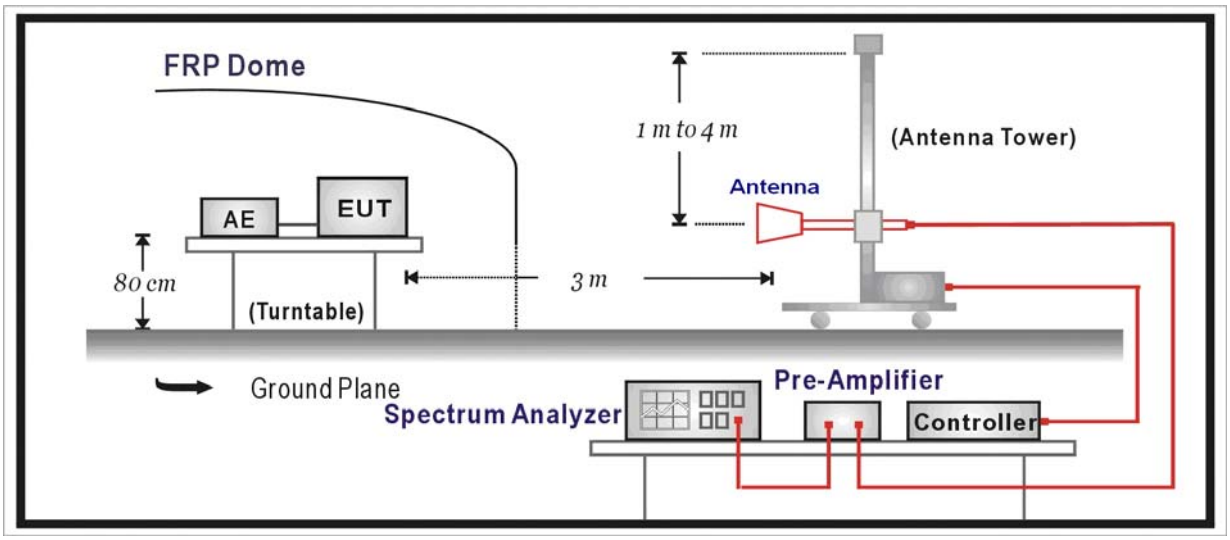
Note 2: The test instruments marked with “X” are used to measure the final test results.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

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

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

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

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

4.4. Test Procedure

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

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

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

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

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

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

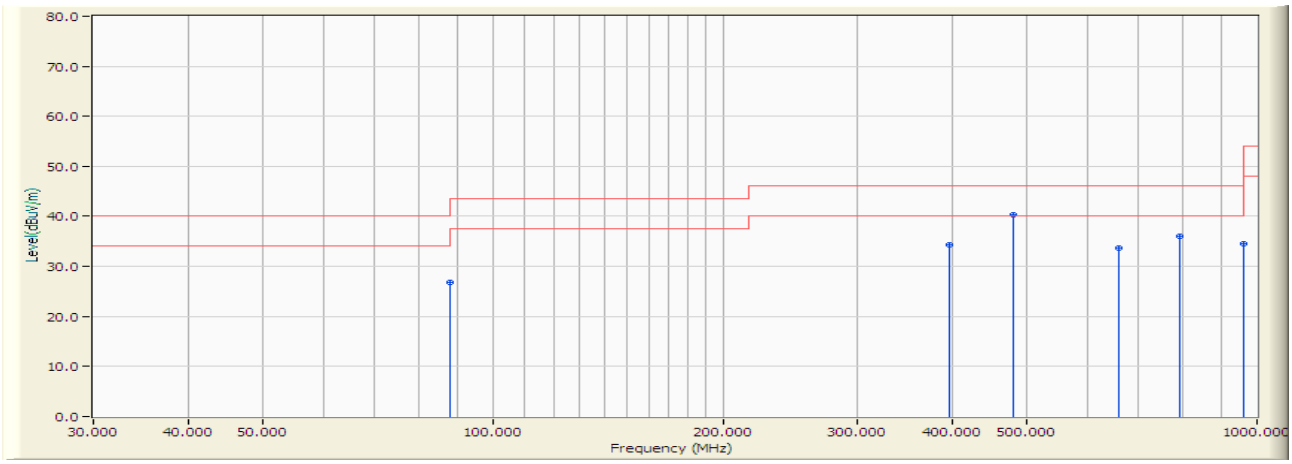
4.5. Uncertainty

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

below 1G is defined as ± 3.8 dB

4.6. Test Result

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 03:42**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

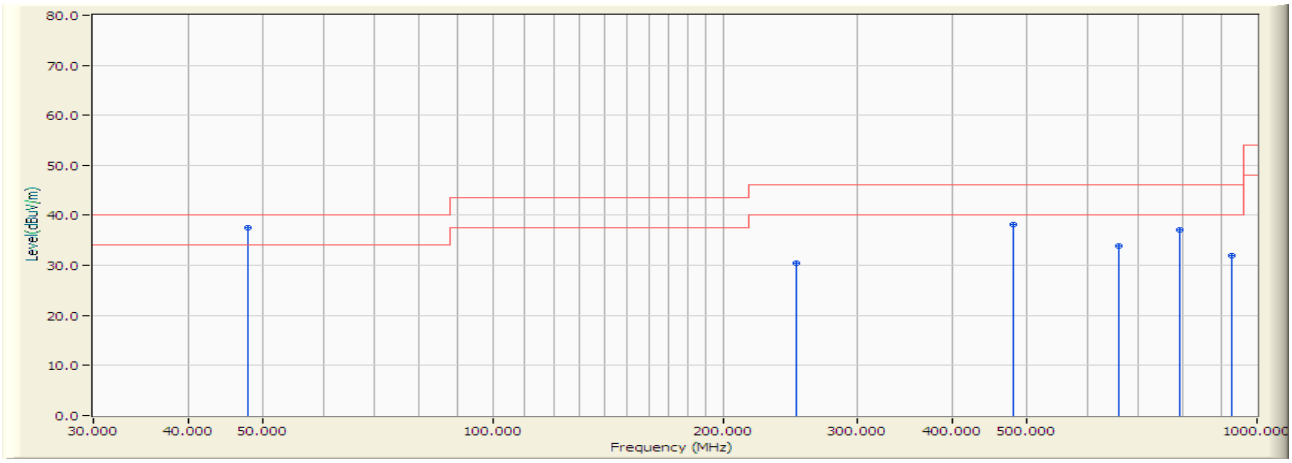


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		88.000	-13.842	40.600	26.758	-13.242	40.000	QUASIPEAK	204.000	160.000
2		396.000	-5.581	40.000	34.419	-11.601	46.020	QUASIPEAK	188.000	198.000
3	*	480.000	-3.964	44.200	40.236	-5.784	46.020	QUASIPEAK	218.000	207.000
4		660.000	-1.732	35.300	33.568	-12.452	46.020	QUASIPEAK	140.000	181.000
5		792.000	-0.152	36.200	36.048	-9.972	46.020	QUASIPEAK	162.000	43.000
6		960.050	1.134	33.400	34.534	-19.436	53.970	QUASIPEAK	184.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 03:22**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

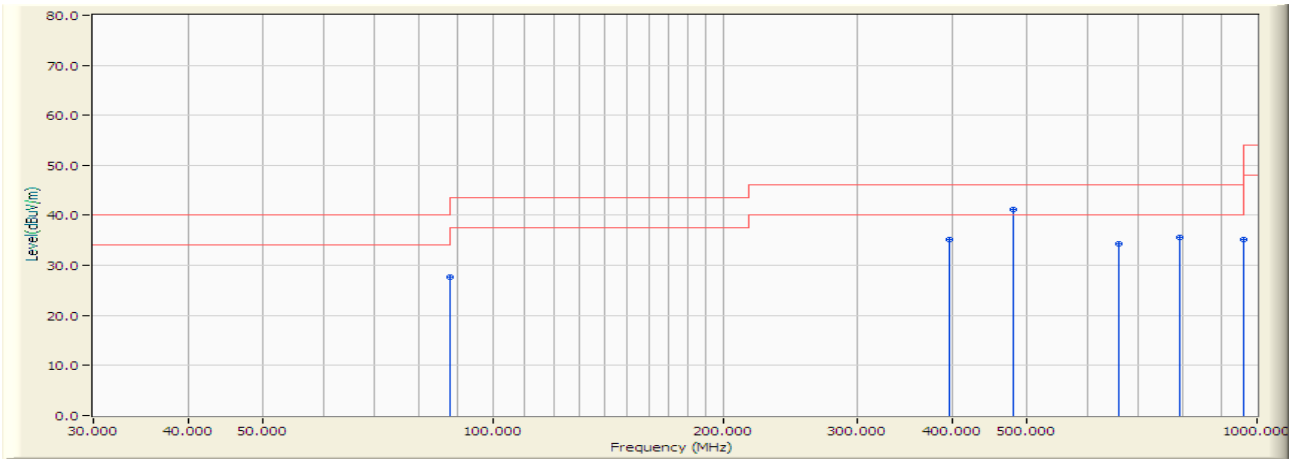


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	47.780	-13.832	51.300	37.468	-2.532	40.000	QUASIPEAK	100.000	150.000
2		250.000	-9.636	40.000	30.363	-15.657	46.020	QUASIPEAK	100.000	168.000
3		480.000	-3.964	42.200	38.236	-7.784	46.020	QUASIPEAK	100.000	234.000
4		660.000	-1.732	35.600	33.868	-12.152	46.020	QUASIPEAK	100.000	83.000
5		791.000	-0.156	37.200	37.044	-8.976	46.020	QUASIPEAK	100.000	22.000
6		924.800	0.902	31.000	31.902	-14.118	46.020	QUASIPEAK	100.000	220.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 04:24**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437MHz)**

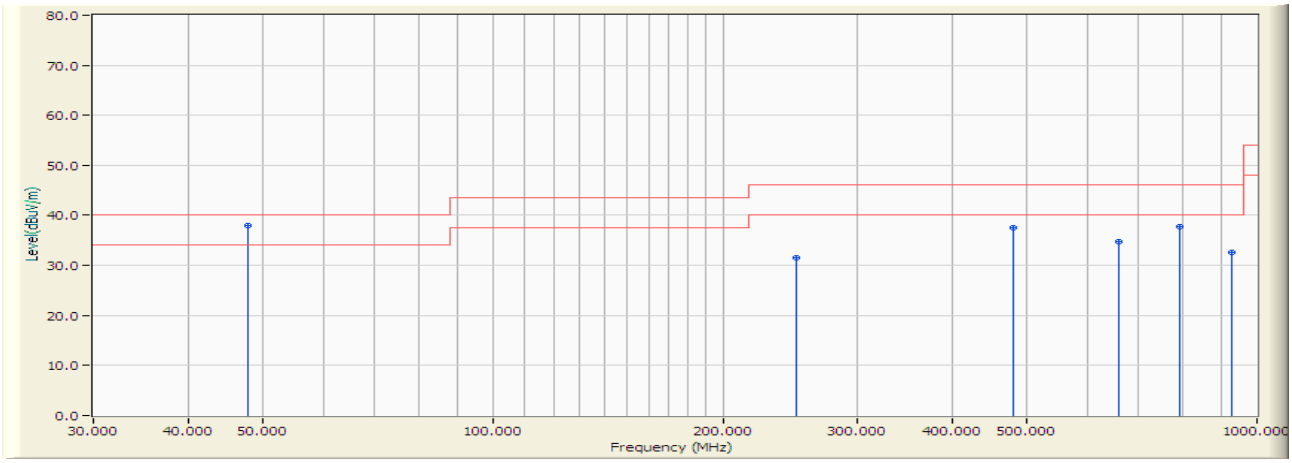


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		88.000	-13.842	41.600	27.758	-12.242	40.000	QUASIPEAK	204.000	160.000
2		396.000	-5.581	40.700	35.119	-10.901	46.020	QUASIPEAK	188.000	198.000
3	*	480.000	-3.964	45.200	41.236	-4.784	46.020	QUASIPEAK	218.000	207.000
4		660.000	-1.732	36.100	34.368	-11.652	46.020	QUASIPEAK	140.000	181.000
5		792.000	-0.152	35.700	35.548	-10.472	46.020	QUASIPEAK	162.000	43.000
6		960.050	1.134	34.100	35.234	-18.736	53.970	QUASIPEAK	184.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 04:03**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437MHz)**

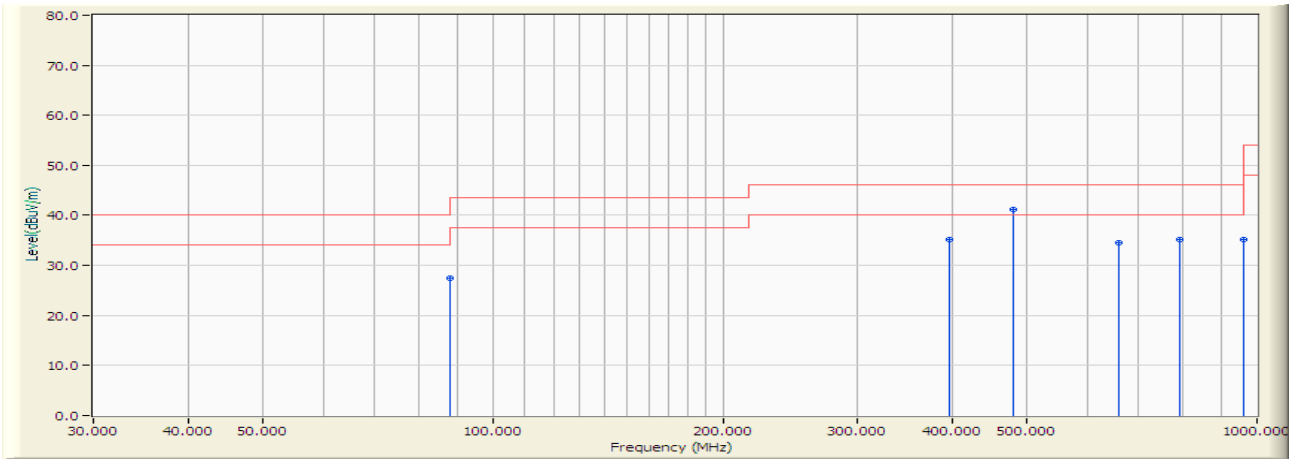


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	47.780	-13.832	51.700	37.868	-2.132	40.000	QUASIPEAK	100.000	150.000
2		250.000	-9.636	41.200	31.563	-14.457	46.020	QUASIPEAK	100.000	168.000
3		480.000	-3.964	41.400	37.436	-8.584	46.020	QUASIPEAK	100.000	234.000
4		660.000	-1.732	36.400	34.668	-11.352	46.020	QUASIPEAK	100.000	83.000
5		791.000	-0.156	37.800	37.644	-8.376	46.020	QUASIPEAK	100.000	22.000
6		924.800	0.902	31.800	32.702	-13.318	46.020	QUASIPEAK	100.000	220.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 05:02**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

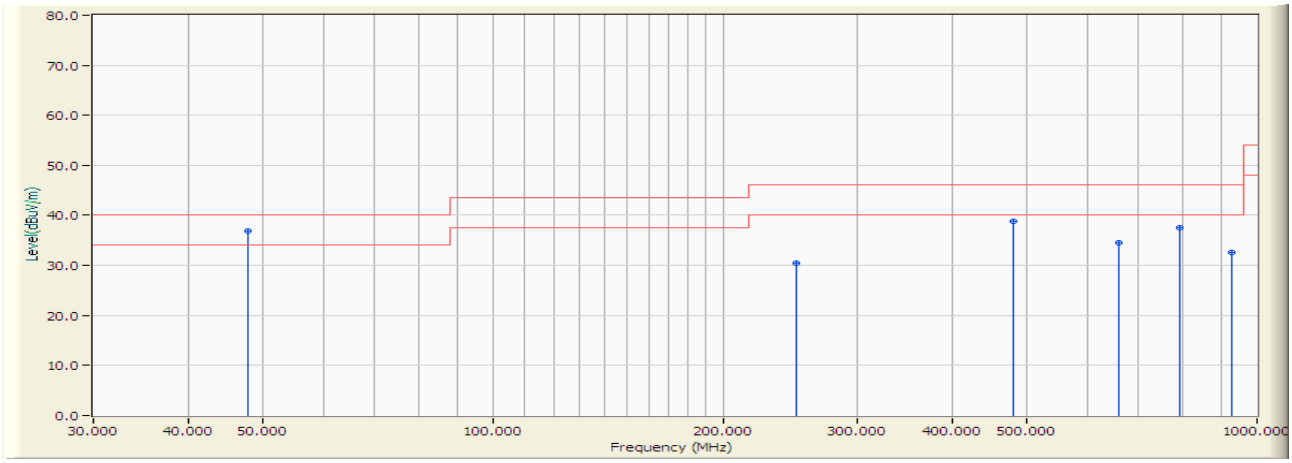


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		88.000	-13.842	41.400	27.558	-12.442	40.000	QUASIPEAK	204.000	160.000
2		396.000	-5.581	40.800	35.219	-10.801	46.020	QUASIPEAK	188.000	198.000
3	*	480.000	-3.964	45.100	41.136	-4.884	46.020	QUASIPEAK	218.000	207.000
4		660.000	-1.732	36.300	34.568	-11.452	46.020	QUASIPEAK	140.000	181.000
5		792.000	-0.152	35.300	35.148	-10.872	46.020	QUASIPEAK	162.000	43.000
6		960.050	1.134	34.000	35.134	-18.836	53.970	QUASIPEAK	184.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 04:44**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

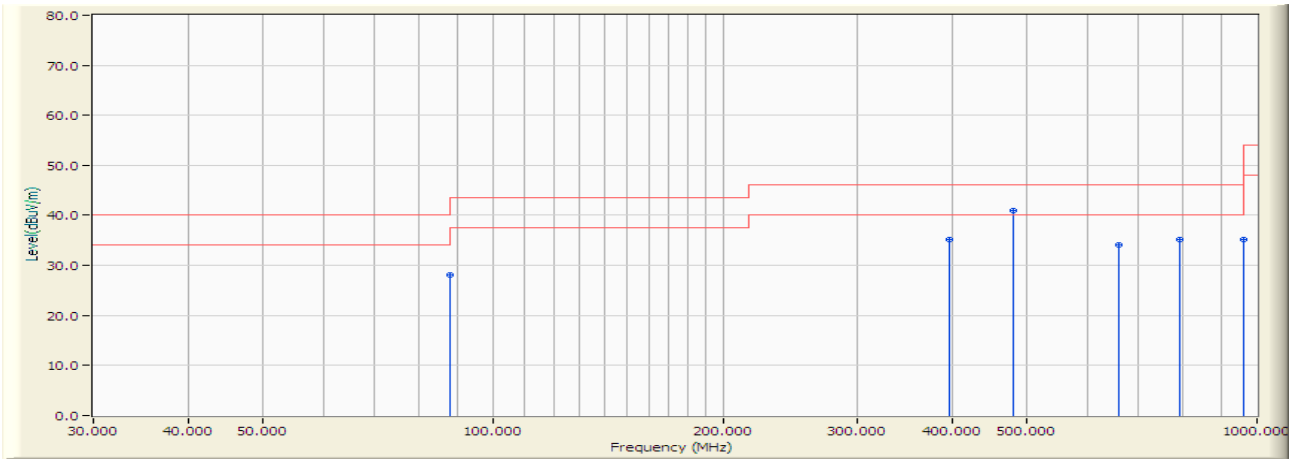


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	47.780	-13.832	50.700	36.868	-3.132	40.000	QUASIPEAK	100.000	150.000
2		250.000	-9.636	40.100	30.463	-15.557	46.020	QUASIPEAK	100.000	168.000
3		480.000	-3.964	42.800	38.836	-7.184	46.020	QUASIPEAK	100.000	234.000
4		660.000	-1.732	36.200	34.468	-11.552	46.020	QUASIPEAK	100.000	83.000
5		791.000	-0.156	37.700	37.544	-8.476	46.020	QUASIPEAK	100.000	22.000
6		924.800	0.902	31.600	32.502	-13.518	46.020	QUASIPEAK	100.000	220.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 05:39**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

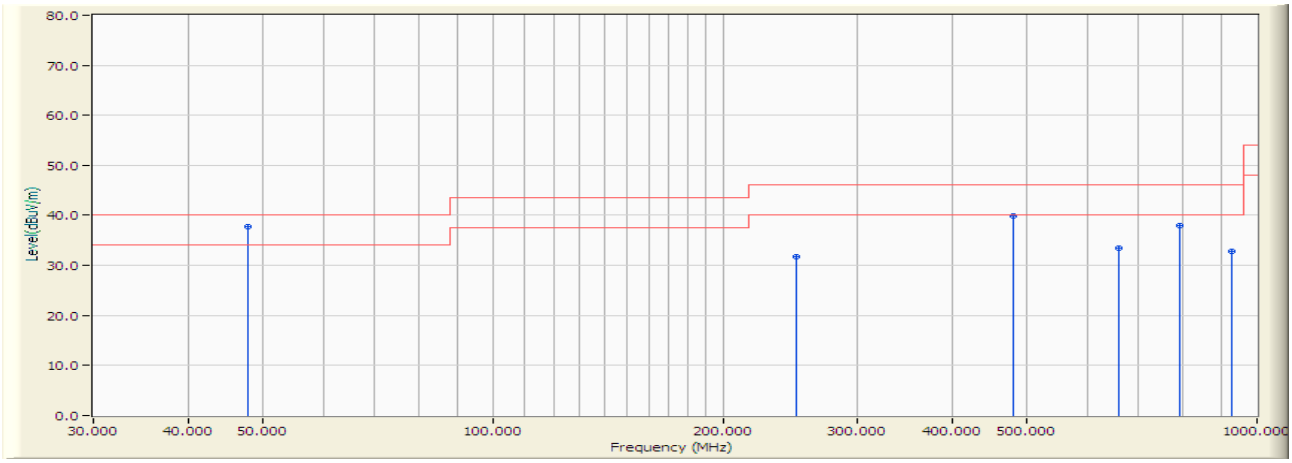


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		88.000	-13.842	41.900	28.058	-11.942	40.000	QUASIPEAK	204.000	160.000
2		396.000	-5.581	40.700	35.119	-10.901	46.020	QUASIPEAK	188.000	198.000
3	*	480.000	-3.964	45.000	41.036	-4.984	46.020	QUASIPEAK	218.000	207.000
4		660.000	-1.732	35.800	34.068	-11.952	46.020	QUASIPEAK	140.000	181.000
5		792.000	-0.152	35.300	35.148	-10.872	46.020	QUASIPEAK	162.000	43.000
6		960.050	1.134	34.100	35.234	-18.736	53.970	QUASIPEAK	184.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 05:30**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

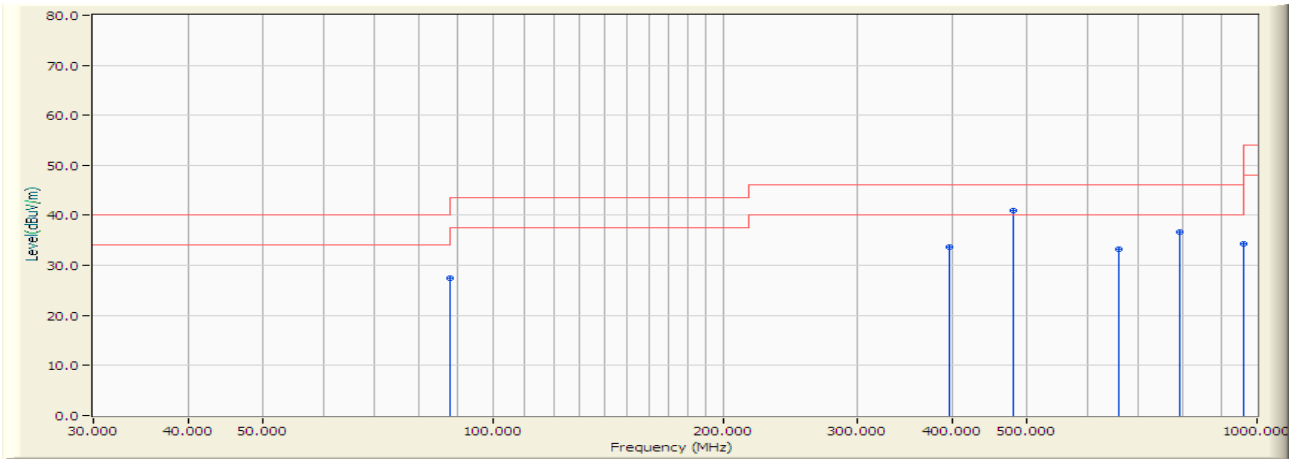


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	47.780	-13.832	51.600	37.768	-2.232	40.000	QUASIPEAK	100.000	150.000
2		250.000	-9.636	41.400	31.763	-14.257	46.020	QUASIPEAK	100.000	168.000
3		480.000	-3.964	43.800	39.836	-6.184	46.020	QUASIPEAK	100.000	234.000
4		660.000	-1.732	35.100	33.368	-12.652	46.020	QUASIPEAK	100.000	83.000
5		791.000	-0.156	38.200	38.044	-7.976	46.020	QUASIPEAK	100.000	22.000
6		924.800	0.902	31.900	32.802	-13.218	46.020	QUASIPEAK	100.000	220.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 06:11**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437MHz)**

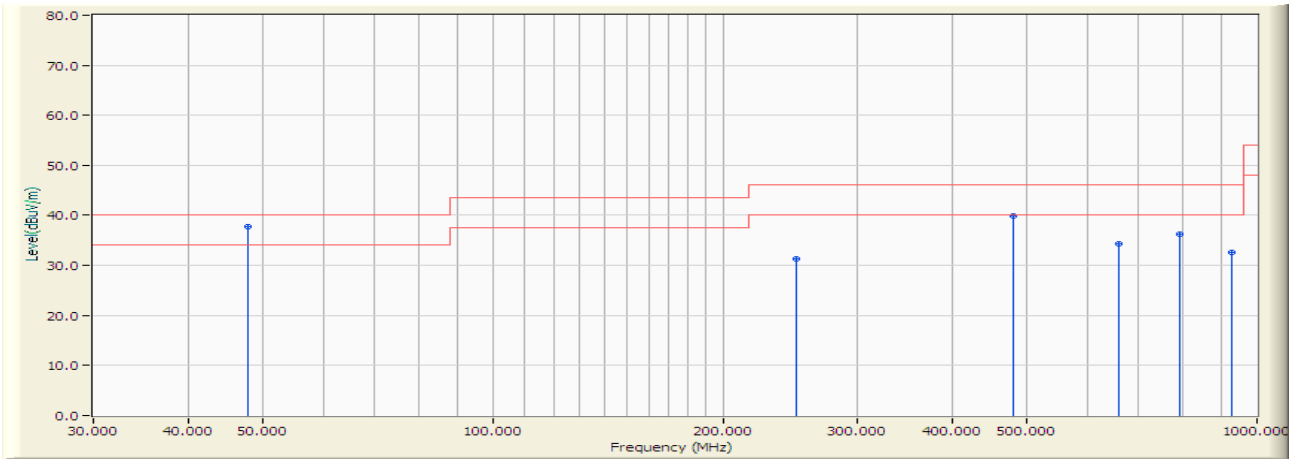


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		88.000	-13.842	41.200	27.358	-12.642	40.000	QUASIPEAK	204.000	160.000
2		396.000	-5.581	39.300	33.719	-12.301	46.020	QUASIPEAK	188.000	198.000
3	*	480.000	-3.964	45.000	41.036	-4.984	46.020	QUASIPEAK	218.000	207.000
4		660.000	-1.732	34.900	33.168	-12.852	46.020	QUASIPEAK	140.000	181.000
5		792.000	-0.152	36.900	36.748	-9.272	46.020	QUASIPEAK	162.000	43.000
6		960.050	1.134	33.100	34.234	-19.736	53.970	QUASIPEAK	184.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 05:51**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437MHz)**

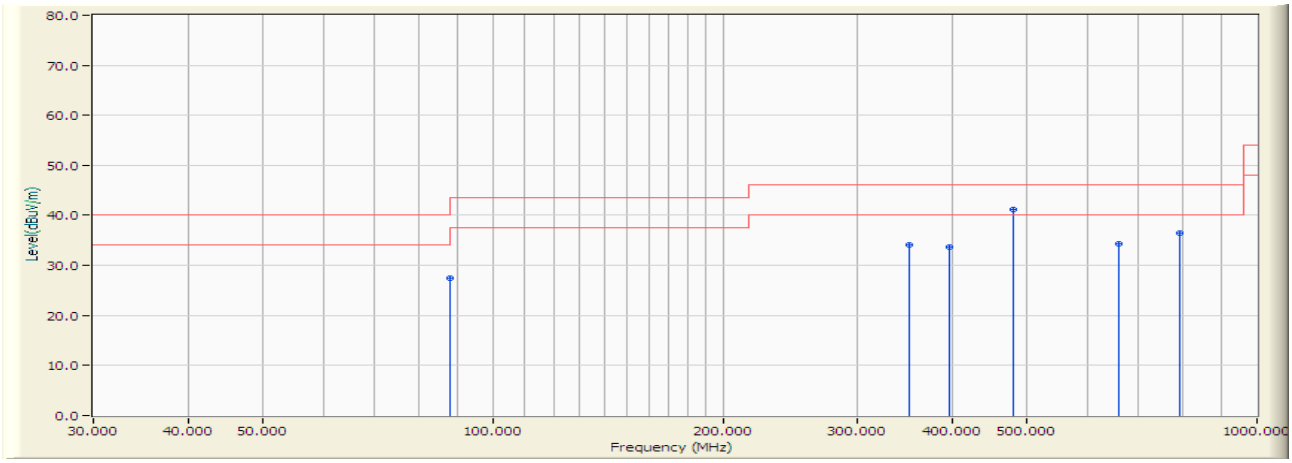


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	47.780	-13.832	51.600	37.768	-2.232	40.000	QUASIPEAK	100.000	150.000
2		250.000	-9.636	40.900	31.263	-14.757	46.020	QUASIPEAK	100.000	168.000
3		480.000	-3.964	43.900	39.936	-6.084	46.020	QUASIPEAK	100.000	234.000
4		660.000	-1.732	36.000	34.268	-11.752	46.020	QUASIPEAK	100.000	83.000
5		791.000	-0.156	36.300	36.144	-9.876	46.020	QUASIPEAK	100.000	22.000
6		924.800	0.902	31.600	32.502	-13.518	46.020	QUASIPEAK	100.000	220.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 06:43**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

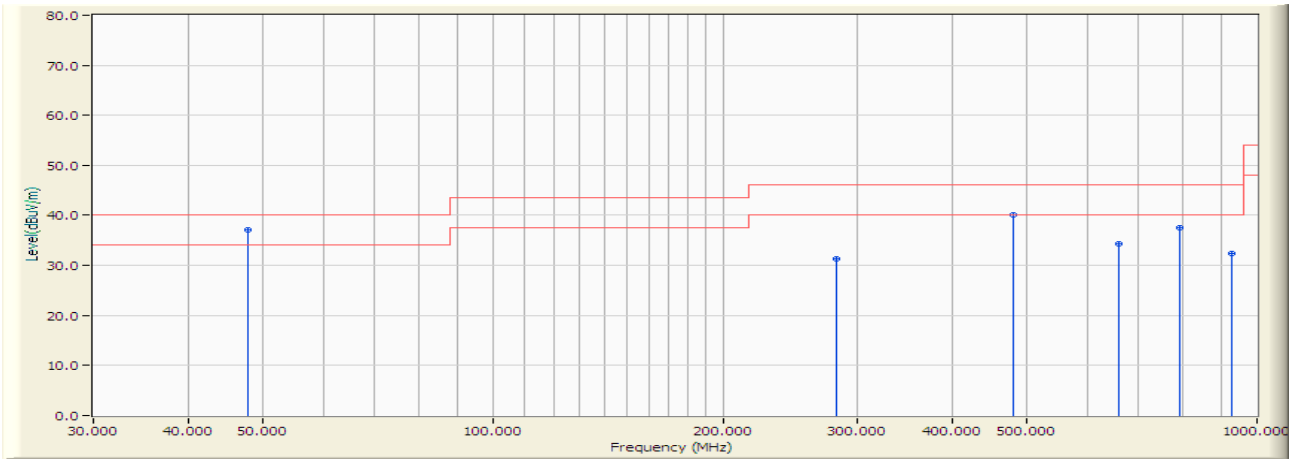


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		88.000	-13.842	41.400	27.558	-12.442	40.000	QUASIPEAK	204.000	160.000
2		350.000	-6.860	41.000	34.140	-11.880	46.020	QUASIPEAK	176.000	94.000
3		396.000	-5.581	39.300	33.719	-12.301	46.020	QUASIPEAK	188.000	198.000
4	*	480.000	-3.964	45.100	41.136	-4.884	46.020	QUASIPEAK	218.000	207.000
5		660.000	-1.732	36.000	34.268	-11.752	46.020	QUASIPEAK	140.000	181.000
6		792.000	-0.152	36.700	36.548	-9.472	46.020	QUASIPEAK	162.000	43.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/05 - 06:32**
Limit : FCC_Part15.209_03M_QP	**Margin : 6**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : CBL6112B_2932(30-2000MHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

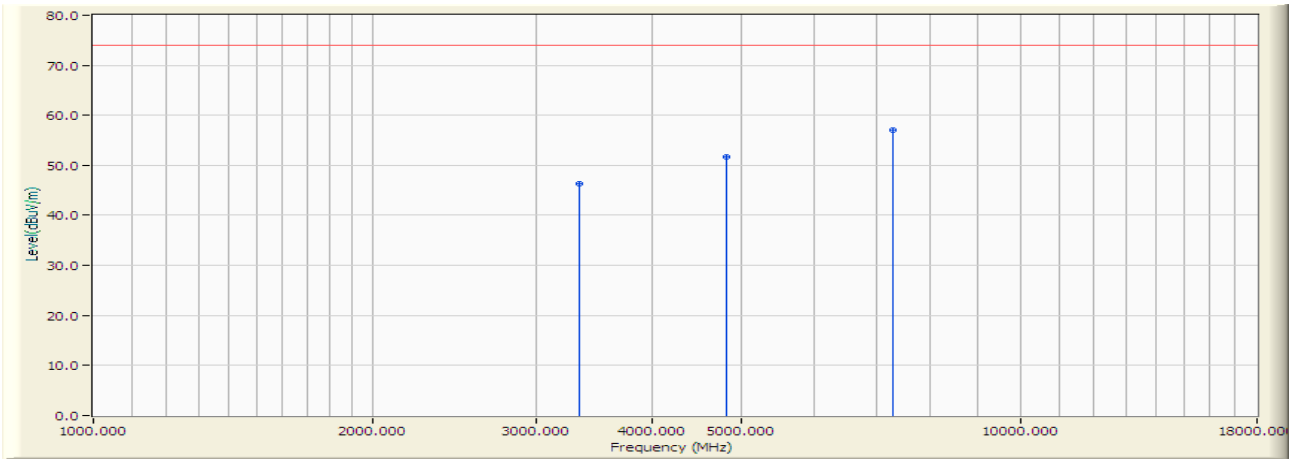


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	47.780	-13.832	51.000	37.168	-2.832	40.000	QUASIPEAK	100.000	150.000
2		282.000	-8.963	40.300	31.337	-14.683	46.020	QUASIPEAK	100.000	163.000
3		480.000	-3.964	44.000	40.036	-5.984	46.020	QUASIPEAK	100.000	234.000
4		660.000	-1.732	36.000	34.268	-11.752	46.020	QUASIPEAK	100.000	83.000
5		791.000	-0.156	37.600	37.444	-8.576	46.020	QUASIPEAK	100.000	22.000
6		924.800	0.902	31.500	32.402	-13.618	46.020	QUASIPEAK	100.000	220.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

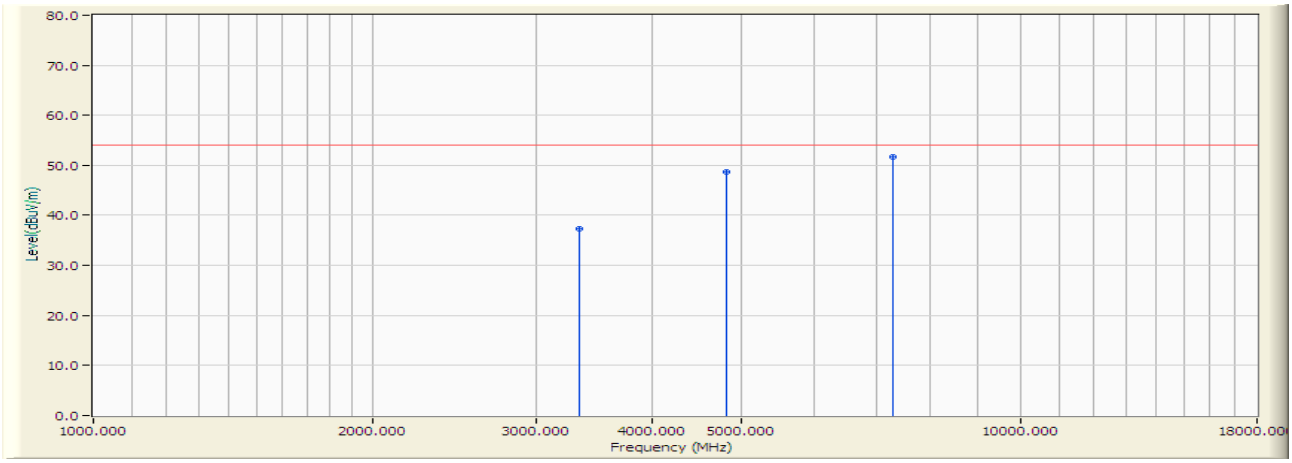


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3347.000	-3.898	50.219	46.321	-27.649	73.970	PEAK	120.000	62.000
2		4824.000	-0.408	52.026	51.619	-22.351	73.970	PEAK	108.000	174.000
3	*	7292.000	9.564	47.396	56.960	-17.010	73.970	PEAK	104.000	82.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

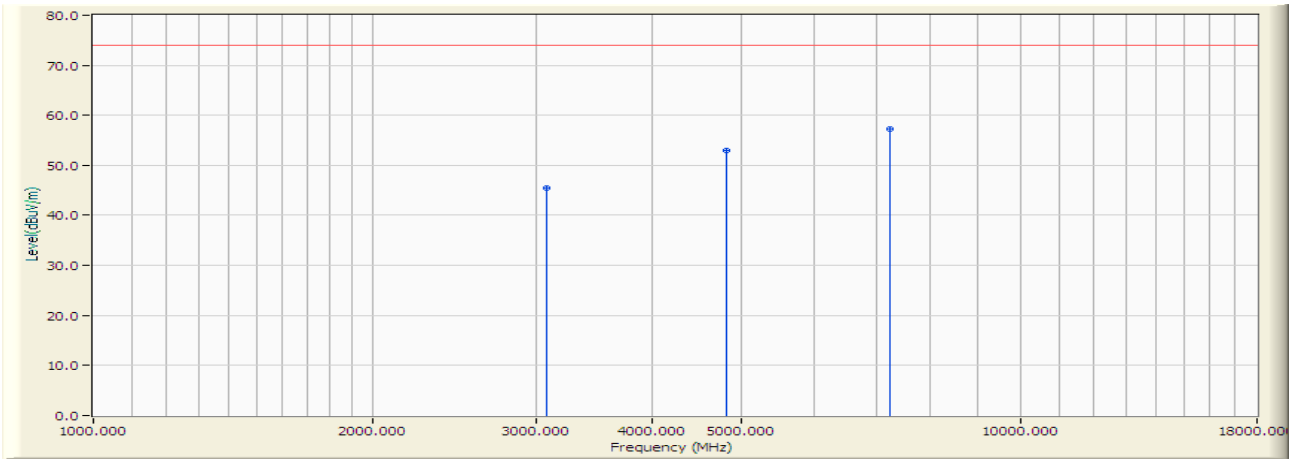


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3347.000	-3.896	41.200	37.303	-16.667	53.970	AVERAGE	120.000	62.000
2		4824.000	-0.443	49.100	48.657	-5.313	53.970	AVERAGE	108.000	174.000
3	*	7292.000	9.555	42.200	51.755	-2.215	53.970	AVERAGE	104.000	82.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

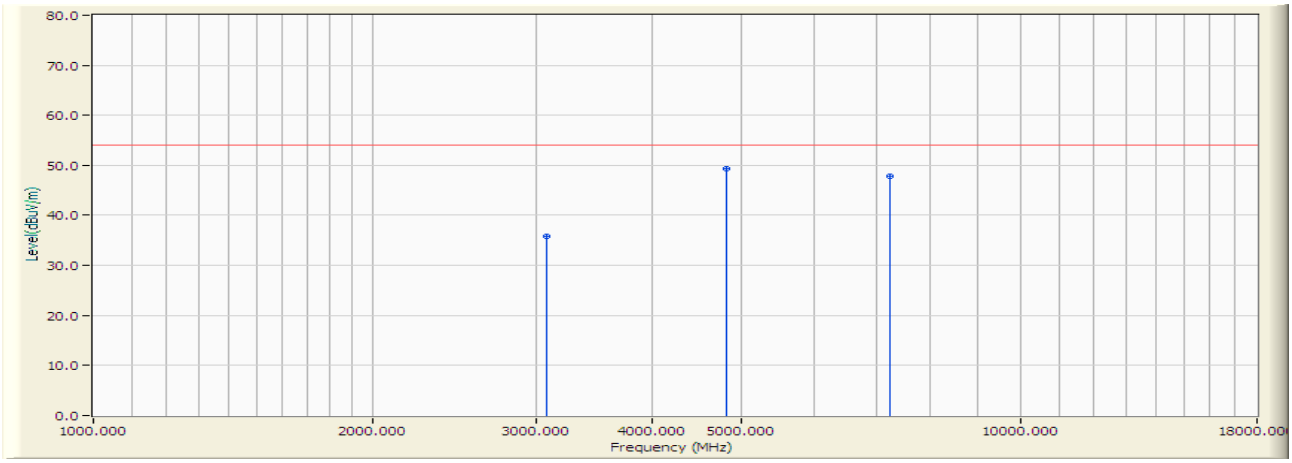


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3083.500	-3.275	48.804	45.528	-28.442	73.970	PEAK	100.000	46.000
2		4824.000	-0.443	53.510	53.067	-20.903	73.970	PEAK	100.000	121.000
3	*	7236.000	8.750	48.600	57.351	-16.619	73.970	PEAK	100.000	162.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

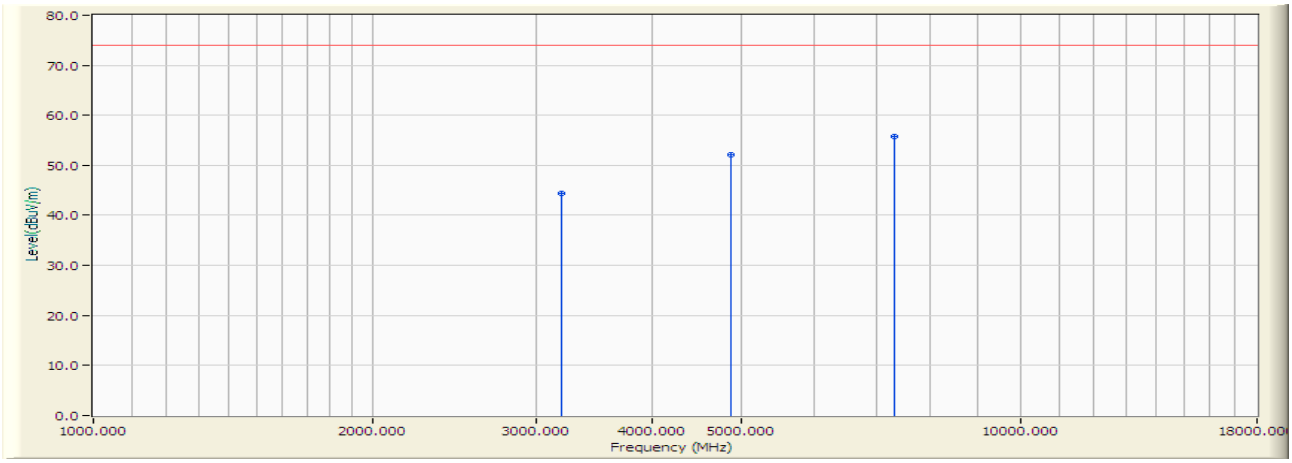


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3083.500	-3.275	39.200	35.924	-18.046	53.970	AVERAGE	100.000	46.000
2	*	4824.000	-0.443	49.800	49.357	-4.613	53.970	AVERAGE	100.000	121.000
3		7236.000	8.750	39.000	47.751	-6.219	53.970	AVERAGE	100.000	162.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437MHz)**

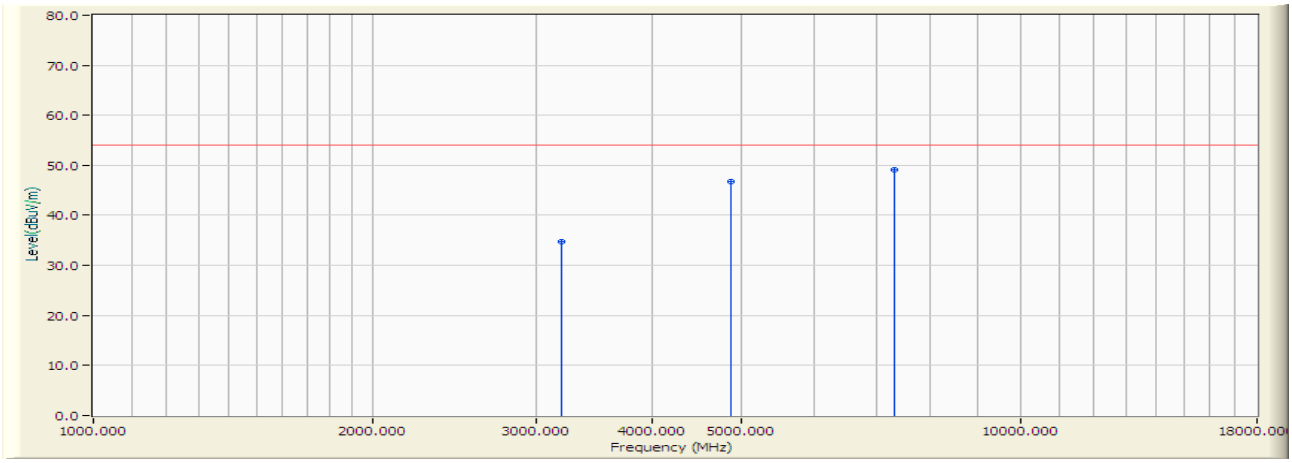


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3202.600	-3.376	47.767	44.391	-29.579	73.970	PEAK	106.000	95.000
2		4878.000	-0.174	52.319	52.146	-21.824	73.970	PEAK	116.000	84.000
3	*	7301.000	9.629	46.116	55.745	-18.225	73.970	PEAK	100.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437MHz)**

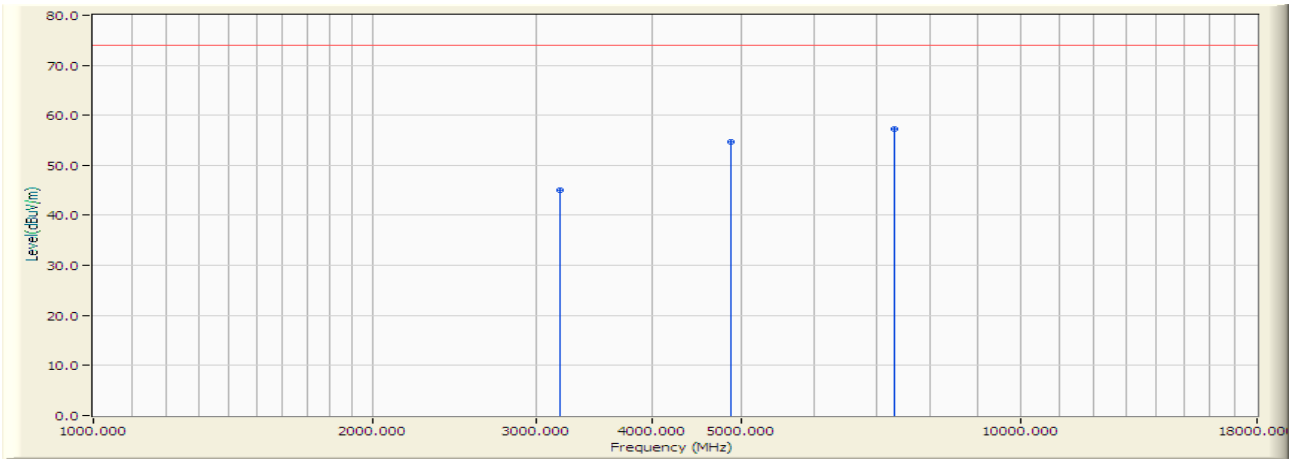


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3202.600	-3.376	38.200	34.824	-19.146	53.970	AVERAGE	106.000	95.000
2		4878.000	-0.173	46.900	46.726	-7.244	53.970	AVERAGE	116.000	84.000
3	*	7301.000	9.624	39.500	49.124	-4.846	53.970	AVERAGE	100.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437MHz)**

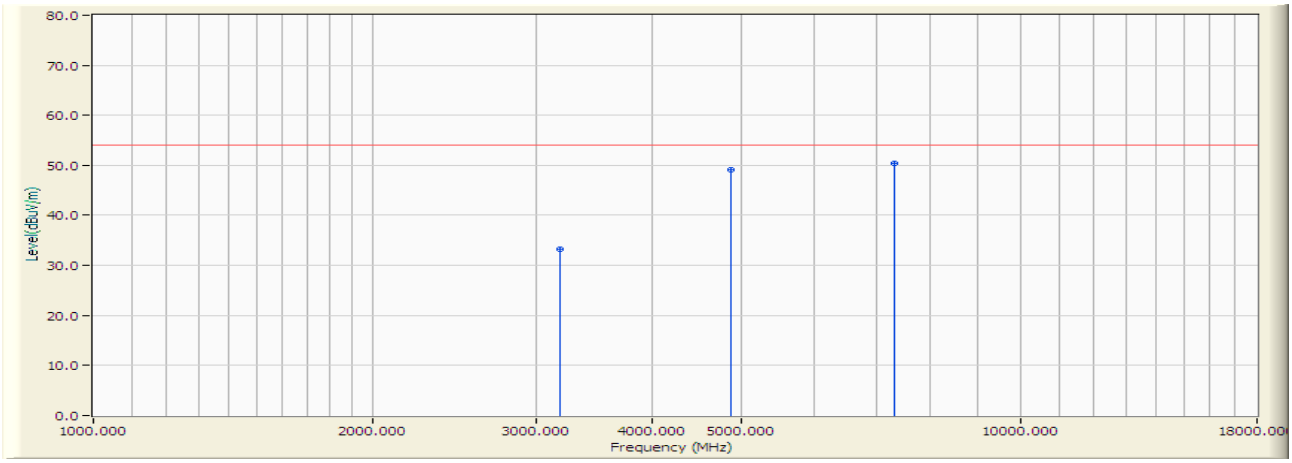


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3185.000	-3.350	48.368	45.017	-28.953	73.970	PEAK	100.000	94.000
2		4878.000	-0.174	54.832	54.659	-19.311	73.970	PEAK	100.000	126.000
3	*	7310.000	9.620	47.631	57.251	-16.719	73.970	PEAK	100.000	246.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2437MHz)**

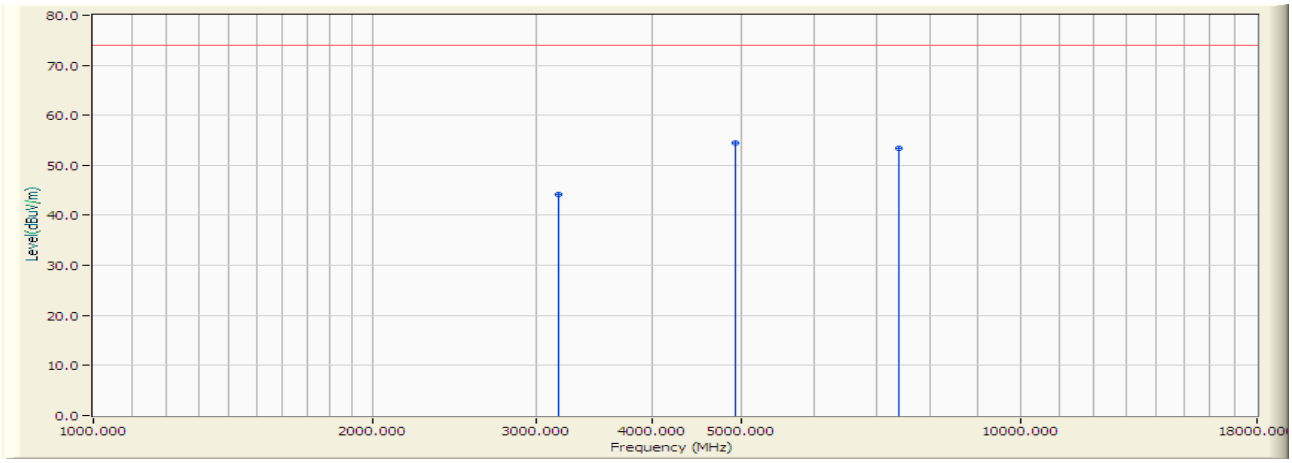


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3185.000	-3.353	36.700	33.347	-20.623	53.970	AVERAGE	100.000	94.000
2		4878.000	-0.173	49.300	49.126	-4.844	53.970	AVERAGE	100.000	126.000
3	*	7310.000	9.623	40.800	50.422	-3.548	53.970	AVERAGE	100.000	246.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

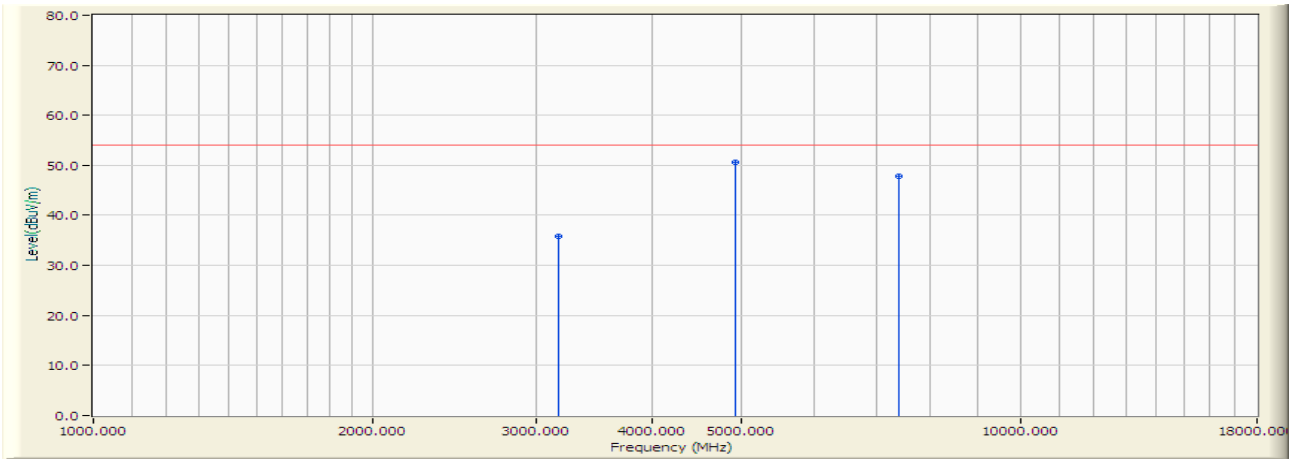


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3178.000	-3.385	47.622	44.236	-29.734	73.970	PEAK	114.000	84.000
2	*	4924.000	-0.188	54.563	54.375	-19.595	73.970	PEAK	104.000	112.000
3		7386.000	8.832	44.513	53.345	-20.625	73.970	PEAK	112.000	82.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:28**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

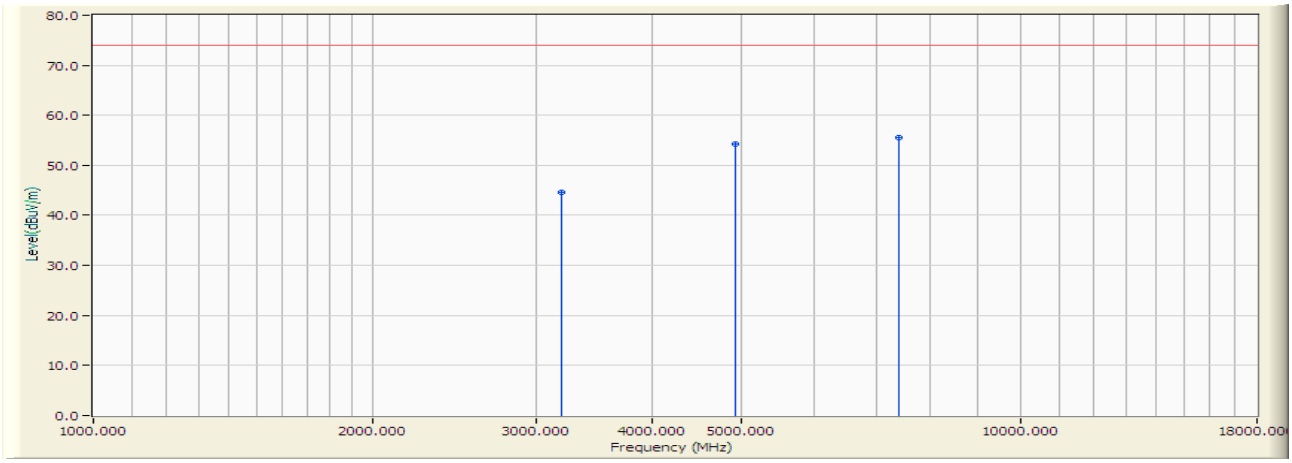


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3178.000	-3.382	39.200	35.818	-18.152	53.970	AVERAGE	114.000	84.000
2	*	4924.000	-0.183	50.700	50.516	-3.454	53.970	AVERAGE	104.000	112.000
3		7386.000	8.834	39.100	47.935	-6.035	53.970	AVERAGE	112.000	82.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

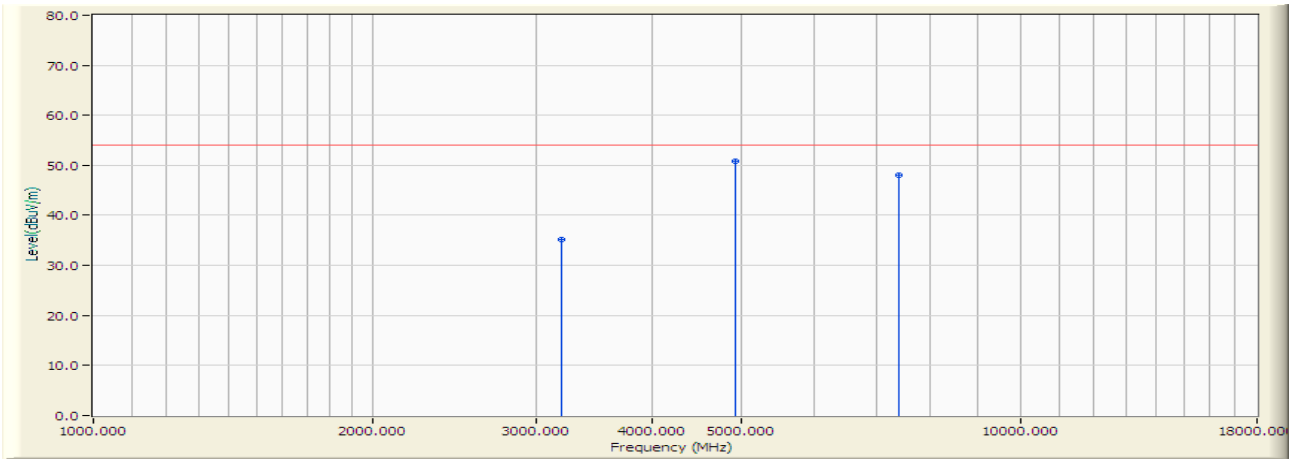


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3202.600	-3.376	47.997	44.621	-29.349	73.970	PEAK	100.000	104.000
2		4924.000	-0.188	54.466	54.278	-19.692	73.970	PEAK	100.000	114.000
3	*	7386.000	8.832	46.765	55.597	-18.373	73.970	PEAK	100.000	122.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

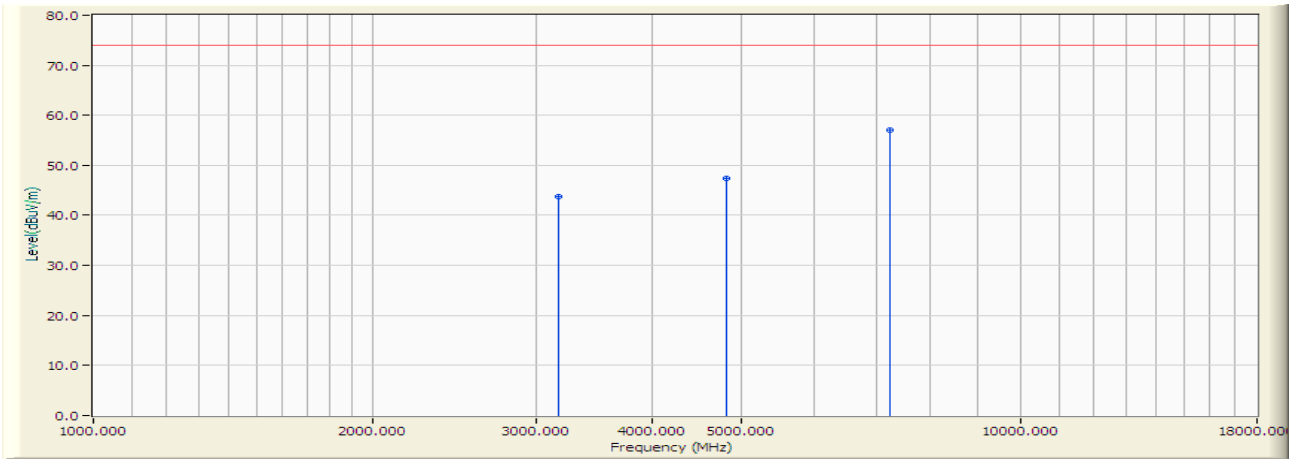


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3202.600	-3.376	38.600	35.224	-18.746	53.970	AVERAGE	100.000	104.000
2	*	4924.000	-0.183	51.100	50.916	-3.054	53.970	AVERAGE	100.000	114.000
3		7386.000	8.834	39.200	48.035	-5.935	53.970	AVERAGE	100.000	122.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

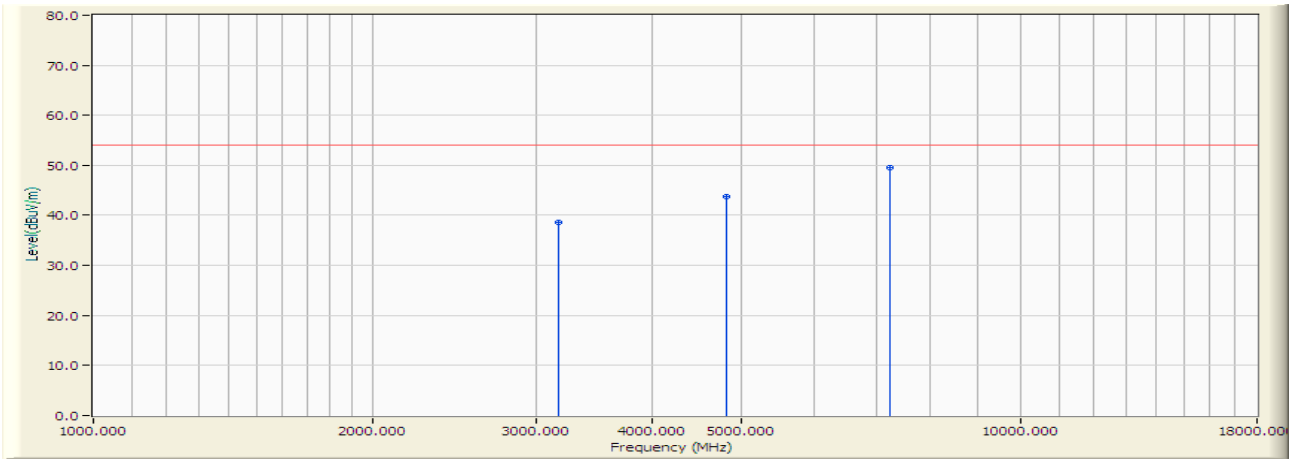


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3177.000	-3.385	47.063	43.677	-30.293	73.970	PEAK	122.000	64.000
2		4827.000	-0.408	47.814	47.407	-26.563	73.970	PEAK	104.000	141.000
3	*	7233.000	8.783	48.211	56.994	-16.976	73.970	PEAK	113.000	167.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

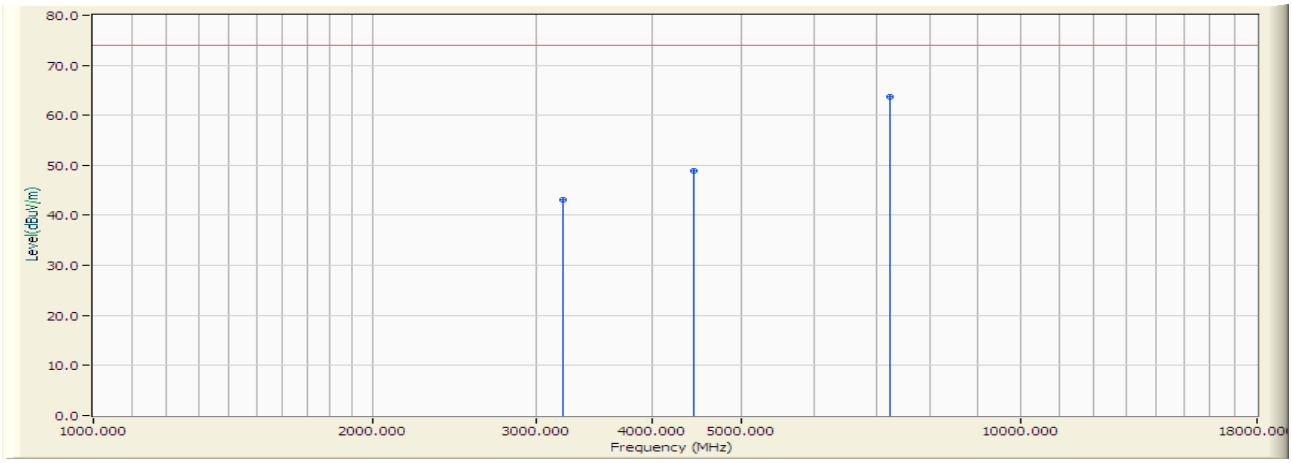


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3177.000	-3.386	41.900	38.514	-15.456	53.970	AVERAGE	122.000	64.000
2		4827.000	-0.407	44.200	43.794	-10.176	53.970	AVERAGE	104.000	141.000
3	*	7233.000	8.791	40.800	49.591	-4.379	53.970	AVERAGE	113.000	167.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

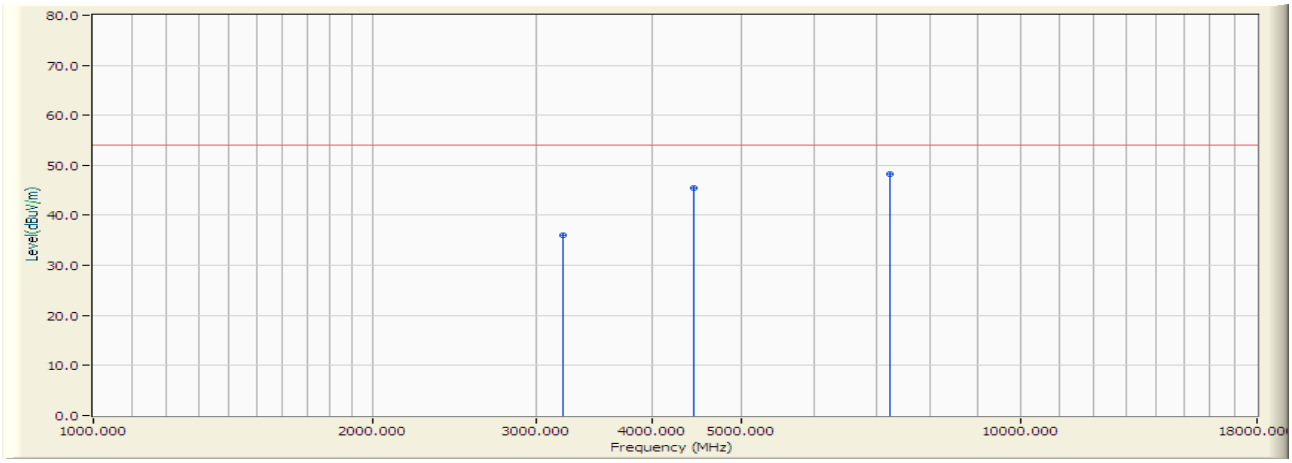


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3210.000	-3.434	46.555	43.122	-30.848	73.970	PEAK	100.000	84.000
2		4435.000	-0.997	49.827	48.830	-25.140	73.970	PEAK	100.000	121.000
3	*	7242.000	8.712	54.940	63.652	-10.318	73.970	PEAK	100.000	142.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

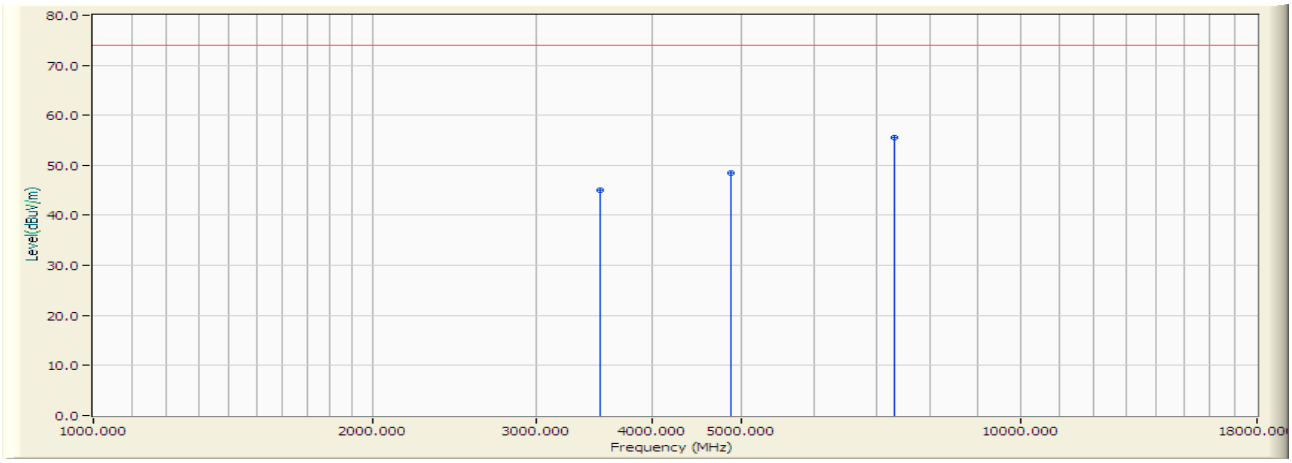


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3210.000	-3.420	39.400	35.980	-17.990	53.970	AVERAGE	100.000	84.000
2		4435.000	-0.994	46.500	45.506	-8.464	53.970	AVERAGE	100.000	121.000
3	*	7242.000	8.712	39.500	48.212	-5.758	53.970	AVERAGE	100.000	142.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437MHz)**

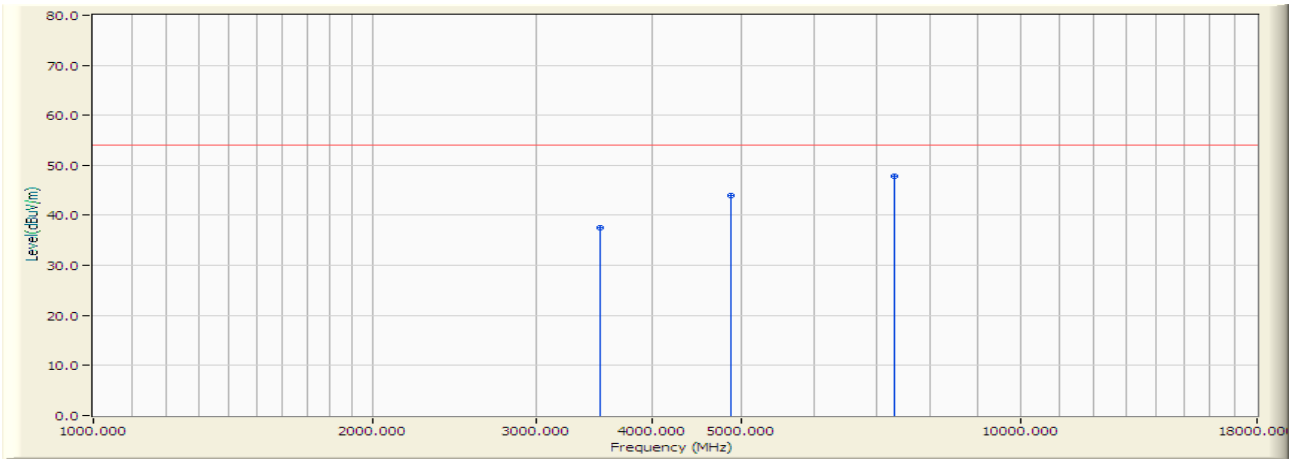


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3517.000	-3.479	48.585	45.105	-28.865	73.970	PEAK	120.000	84.000
2		4878.000	-0.174	48.633	48.460	-25.510	73.970	PEAK	114.000	184.000
3	*	7310.000	9.620	45.837	55.457	-18.513	73.970	PEAK	114.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437MHz)**

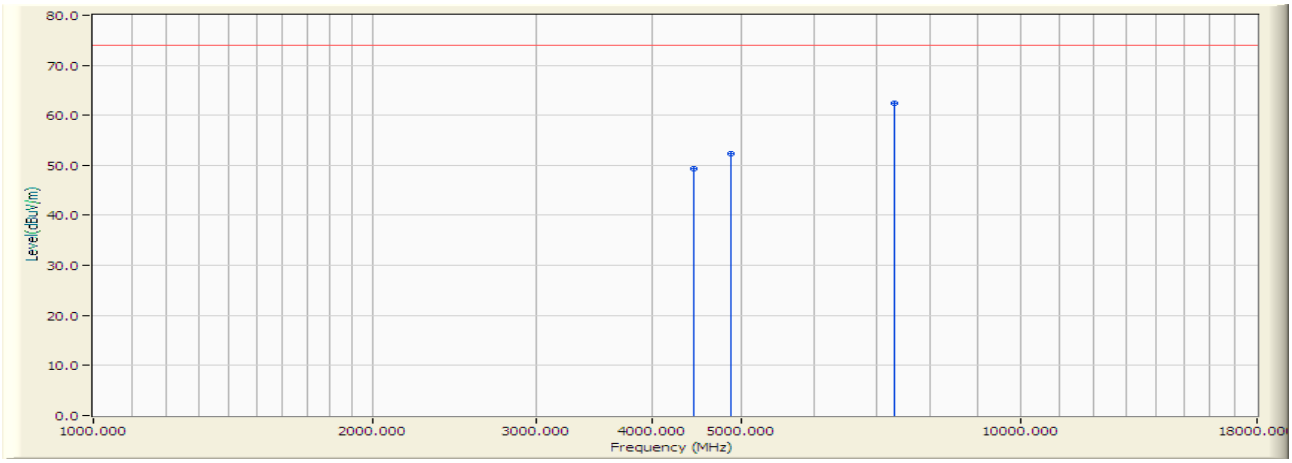


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3517.000	-3.477	41.100	37.622	-16.348	53.970	AVERAGE	120.000	84.000
2		4878.000	-0.173	44.100	43.926	-10.044	53.970	AVERAGE	114.000	184.000
3	*	7310.000	9.623	38.300	47.922	-6.048	53.970	AVERAGE	114.000	324.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437MHz)**

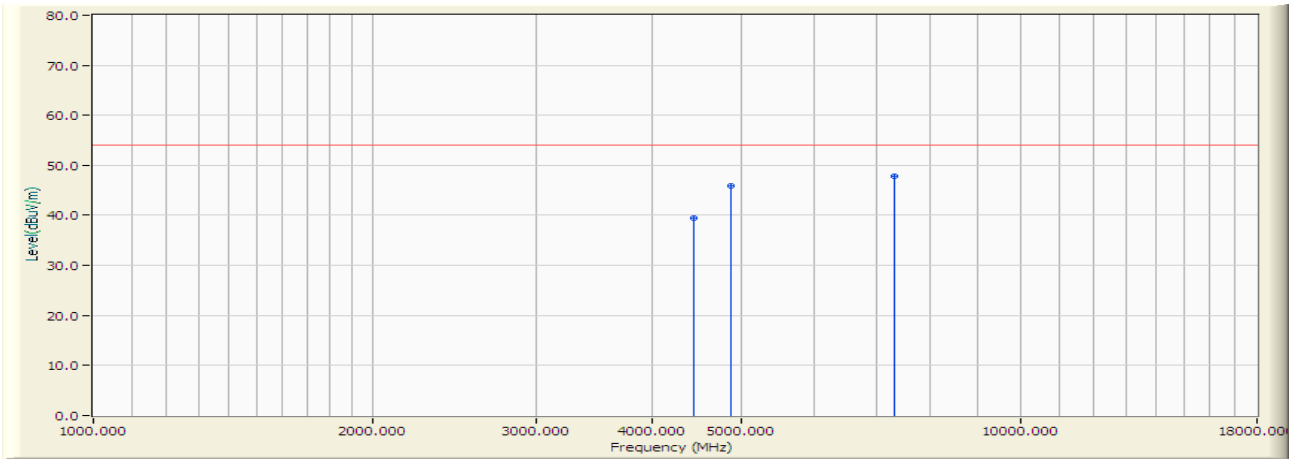


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		4435.700	-0.997	50.388	49.391	-24.579	73.970	PEAK	100.000	98.000
2		4878.000	-0.174	52.565	52.392	-21.578	73.970	PEAK	100.000	116.000
3	*	7301.600	9.629	52.877	62.506	-11.464	73.970	PEAK	100.000	94.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2437MHz)**

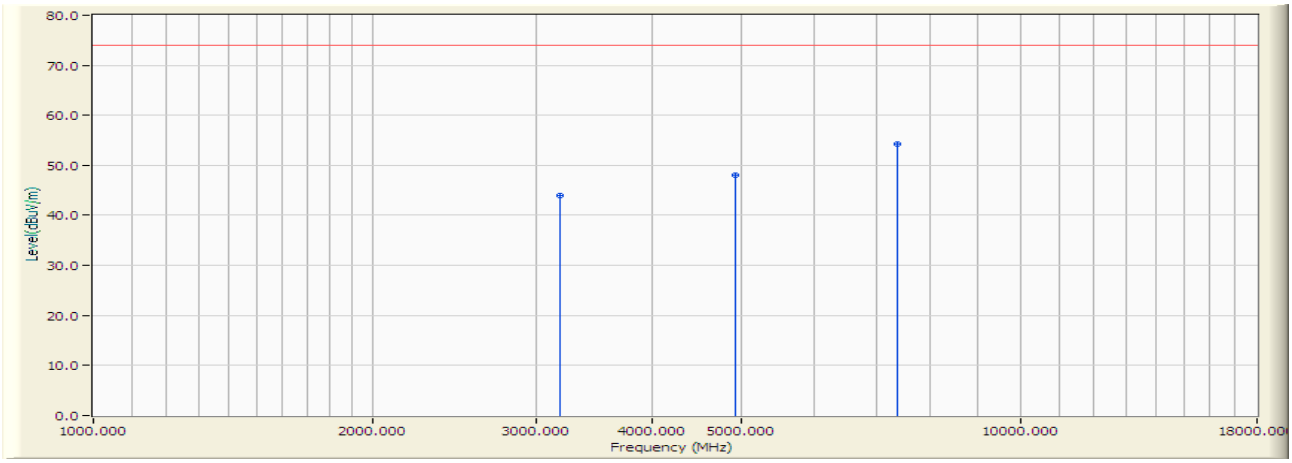


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		4435.700	-0.997	40.500	39.503	-14.467	53.970	AVERAGE	100.000	98.000
2		4878.000	-0.173	46.000	45.826	-8.144	53.970	AVERAGE	100.000	116.000
3	*	7301.600	9.629	38.100	47.729	-6.241	53.970	AVERAGE	100.000	94.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

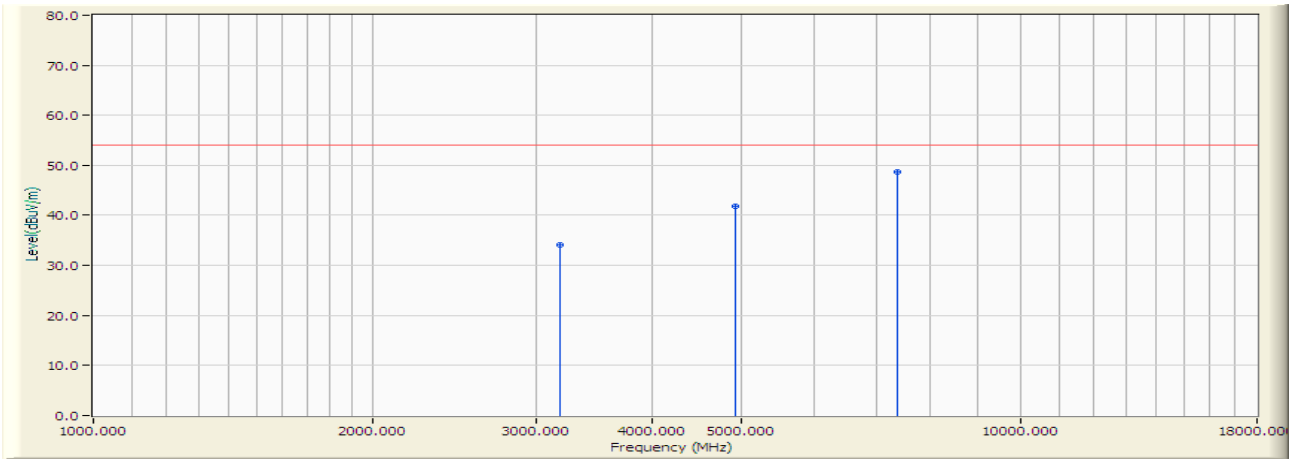


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3185.600	-3.350	47.256	43.905	-30.065	73.970	PEAK	106.000	52.000
2		4924.000	-0.178	48.313	48.135	-25.835	73.970	PEAK	112.000	162.000
3	*	7378.200	8.867	45.364	54.231	-19.739	73.970	PEAK	100.000	84.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

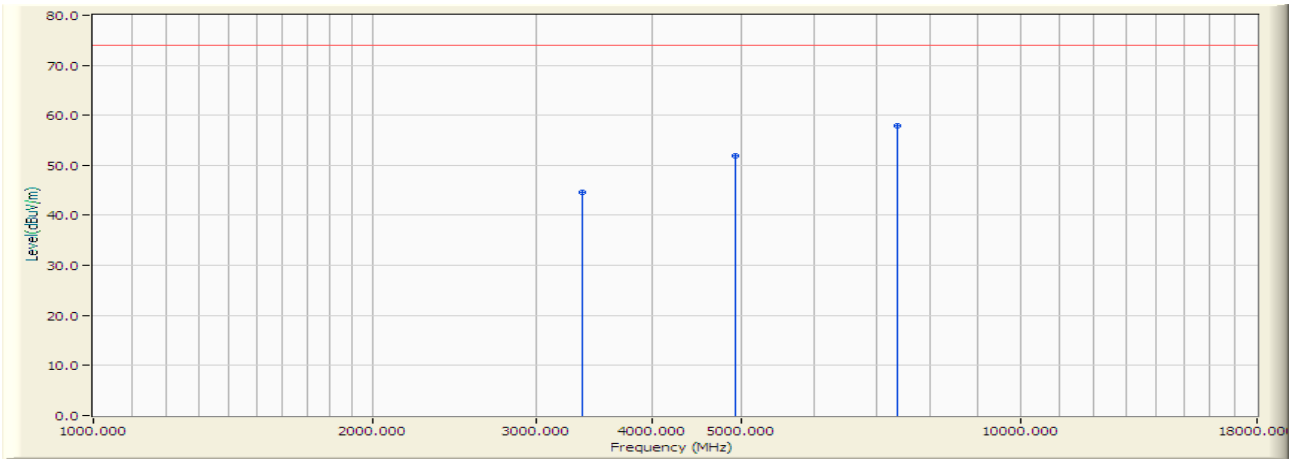


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3185.600	-3.350	37.500	34.150	-19.820	53.970	AVERAGE	106.000	52.000
2		4924.000	-0.183	42.000	41.816	-12.154	53.970	AVERAGE	112.000	162.000
3	*	7378.200	8.867	39.900	48.767	-5.203	53.970	AVERAGE	100.000	84.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

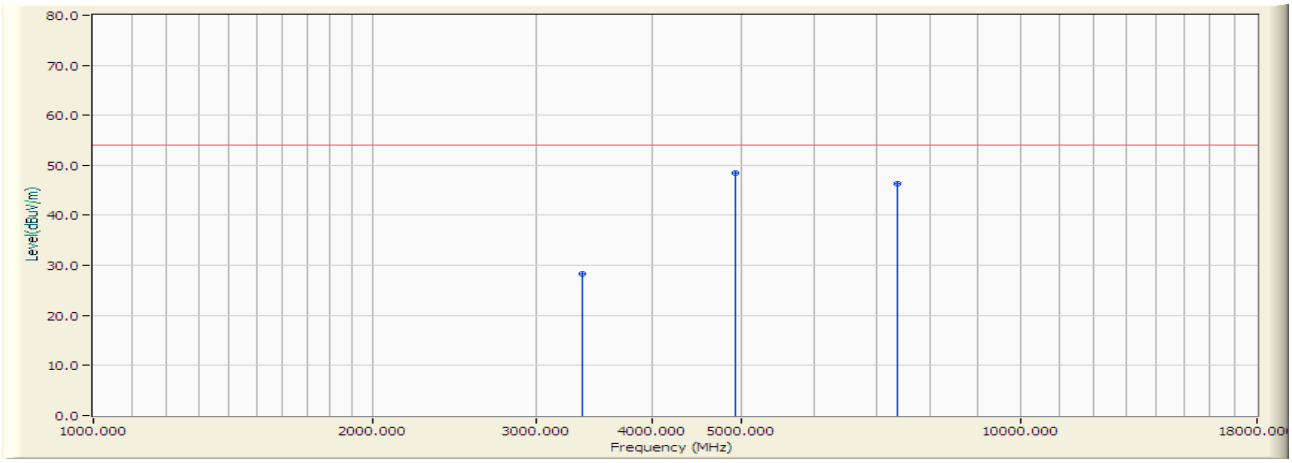


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		3364.200	-4.023	48.700	44.677	-29.293	73.970	PEAK	100.000	132.000
2		4926.000	-0.181	52.120	51.939	-22.031	73.970	PEAK	100.000	112.000
3	*	7378.000	8.867	49.091	57.958	-16.012	73.970	PEAK	100.000	26.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 17:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (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		3364.200	-4.023	32.400	28.377	-25.593	53.970	AVERAGE	100.000	132.000
2	*	4926.000	-0.181	48.600	48.419	-5.551	53.970	AVERAGE	100.000	112.000
3		7378.000	8.868	37.500	46.368	-7.602	53.970	AVERAGE	100.000	26.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

5. RF Antenna Conducted Spurious

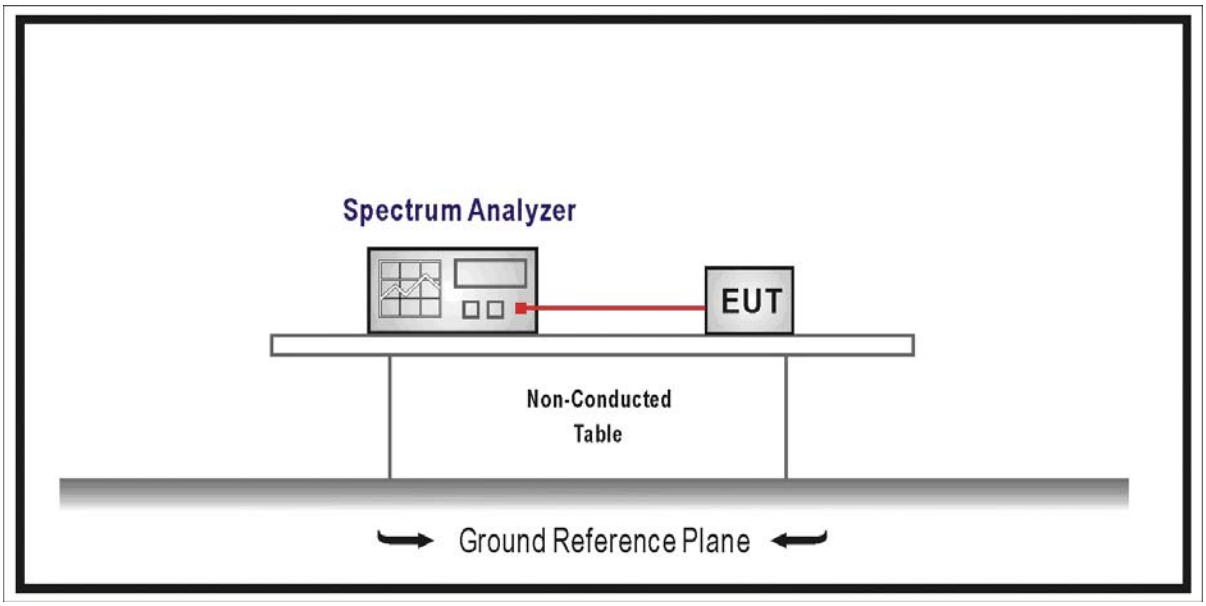
5.1. Test Equipment

RF Antenna Conducted Spurious / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2007/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
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.

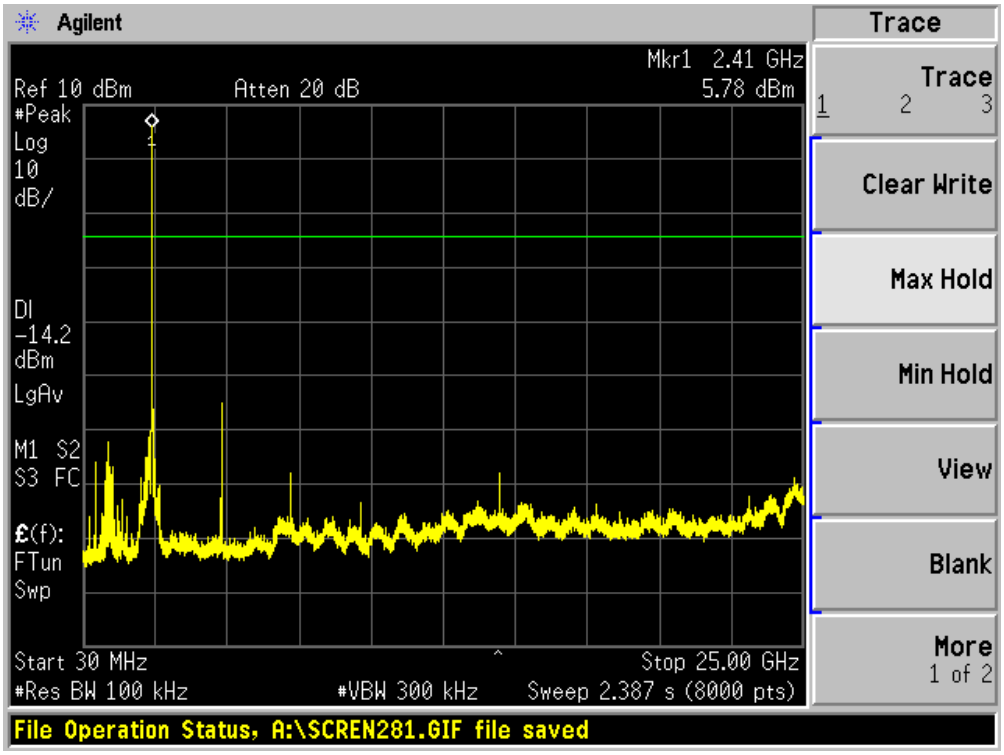
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

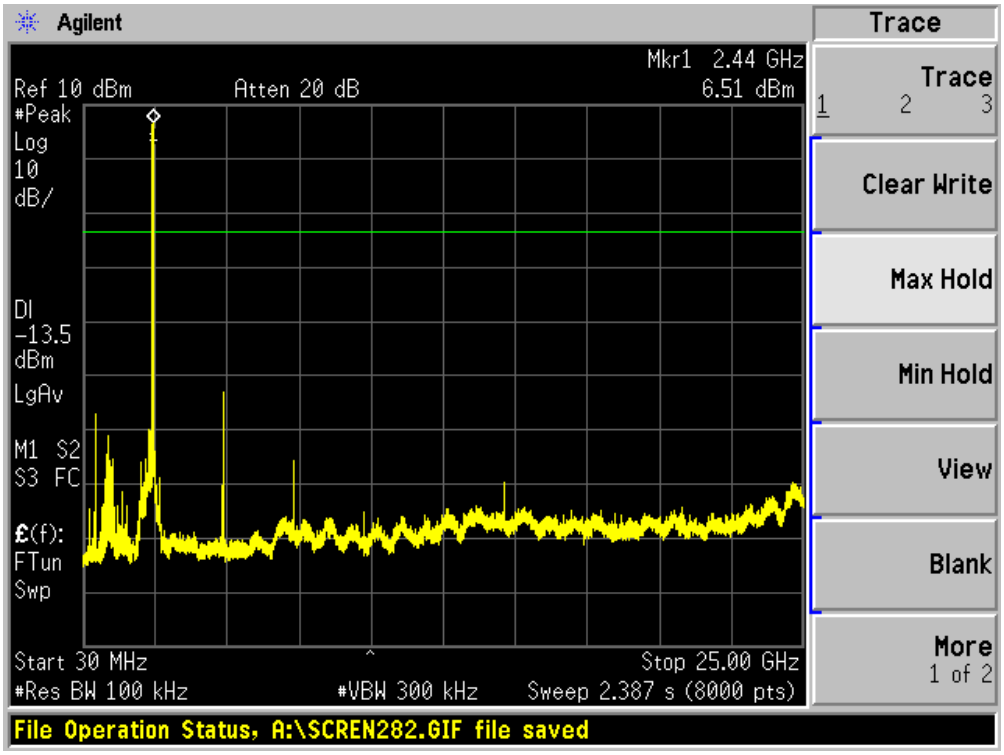
5.6. Test Result

Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

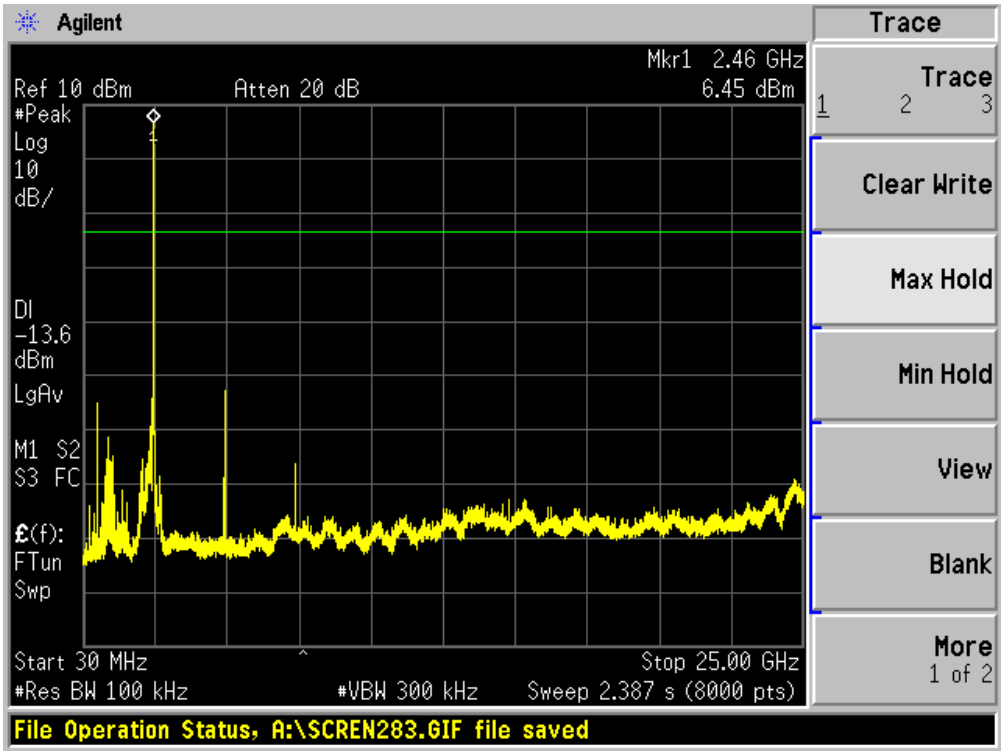
Channel 01 (2412MHz)



Channel 06 (2437MHz)

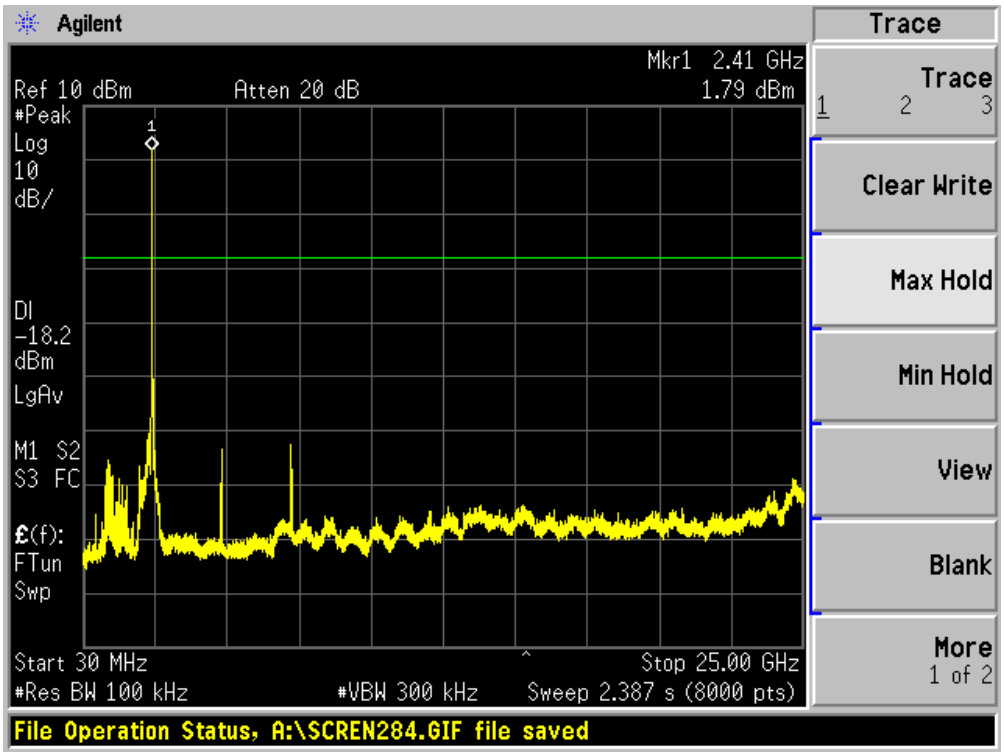


Channel 11 (2462MHz)

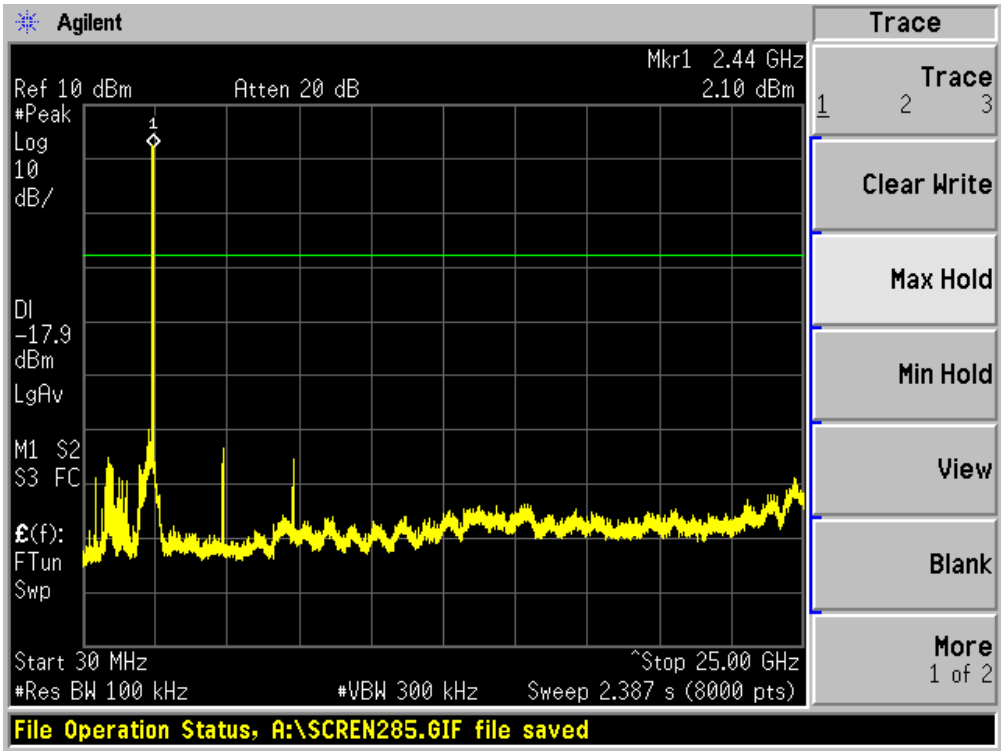


Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	RF Antenna Conducted Spurious
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

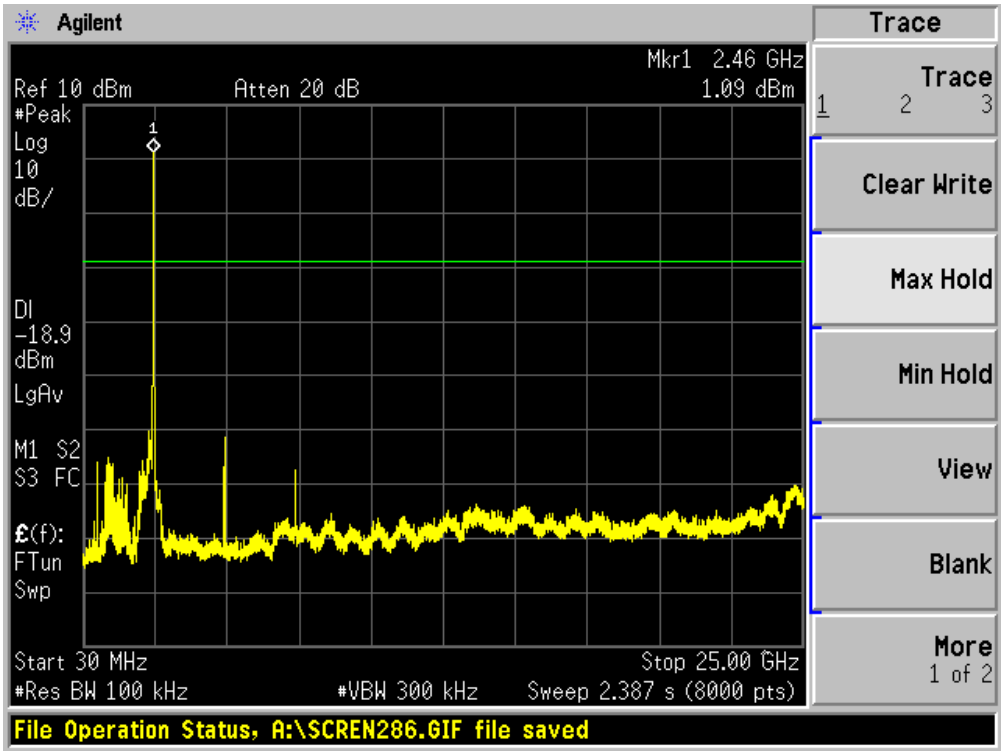
Channel 01 (2412MHz)



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	2007/11/12
EMI Test Receiver	R&S	ESCI	100573	2008/05/10
Preamplifier	Quietek	AP-025C	QT-AP003	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112B	2932	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
50ohm Coaxial Switch	Anritsu	MP59B	6200447304	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	04	2007/11/25
Temperature/Humidity Meter	zhicheng	ZC1-2	QT-TH002	2008/03/31

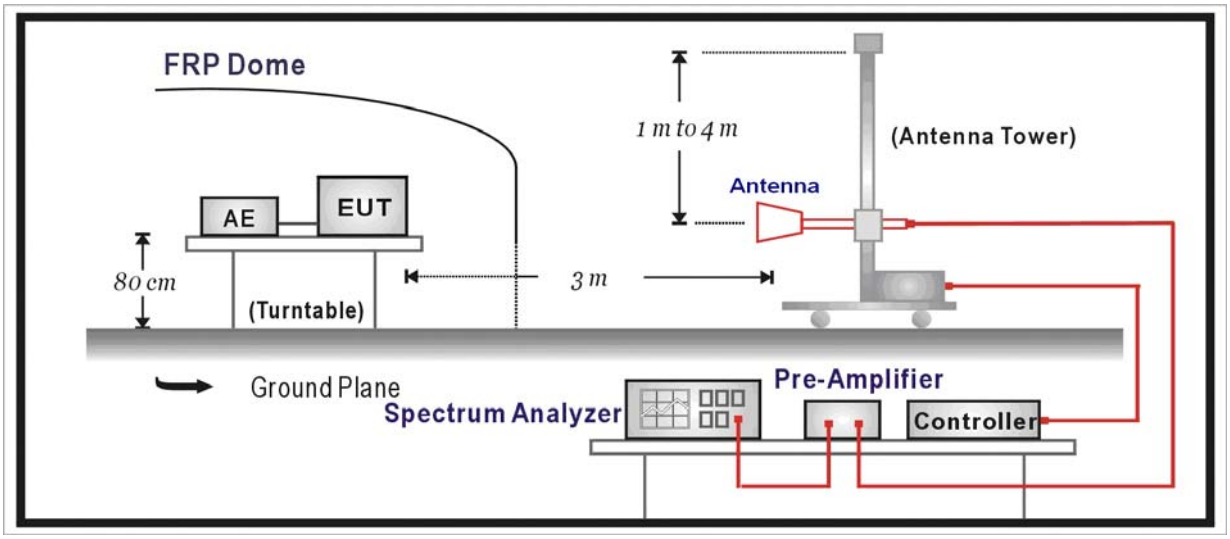
☐Radiated Emission / AC-3

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2008/04/24
EMI Test Receiver	R&S	ESCI	100176	2007/11/15
Preamplifier	Quietek	AP-025C	QT-AP004	2007/11/25
Preamplifier	Quietek	AP-180C	CHM-0602012	2007/11/25
Bilog Type Antenna	Schaffner	CBL6112D	22254	2007/11/22
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	496	2007/11/25
50ohm Coaxial Switch	Anritsu	MP59B	6200464463	2007/11/25
Coaxial Cable	Huber+Suhner	AC2-C	05	2007/11/25
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

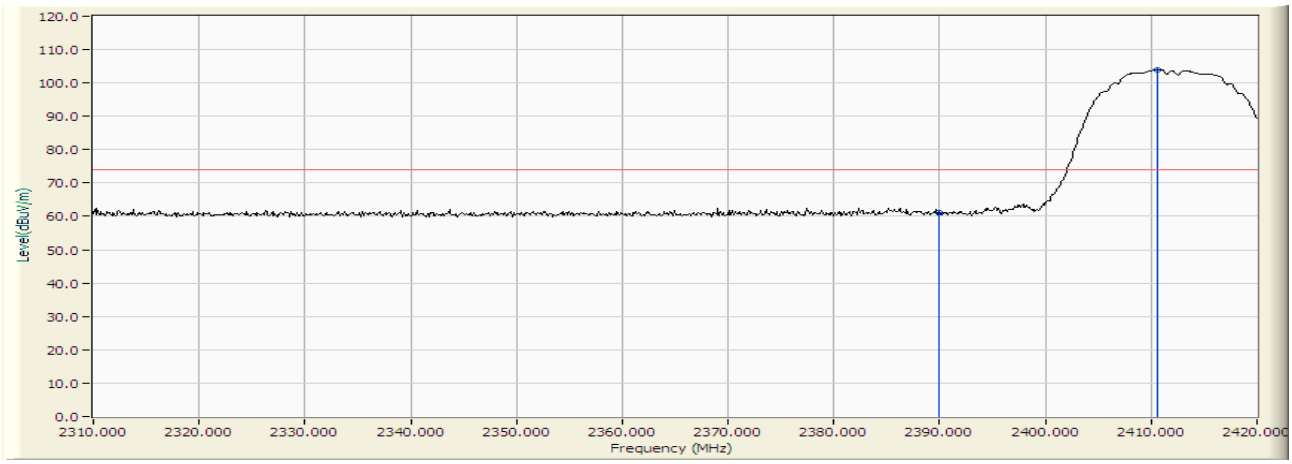
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum 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 : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:14**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

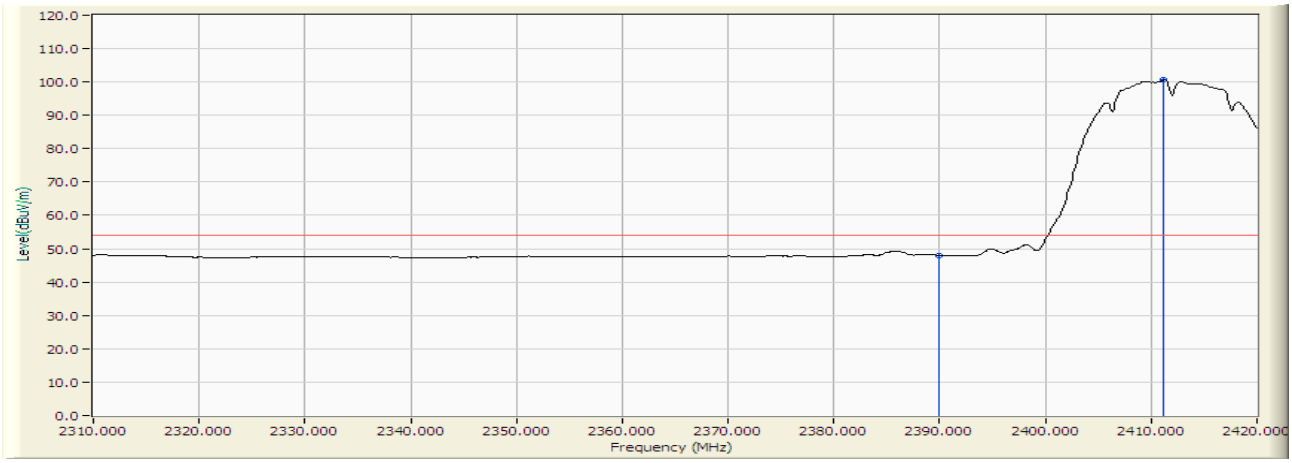


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2390.000	30.715	30.490	61.205	-12.765	73.970	PEAK	0.000	0.000
2	*	2410.650	30.710	73.331	104.041	30.071	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:15**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

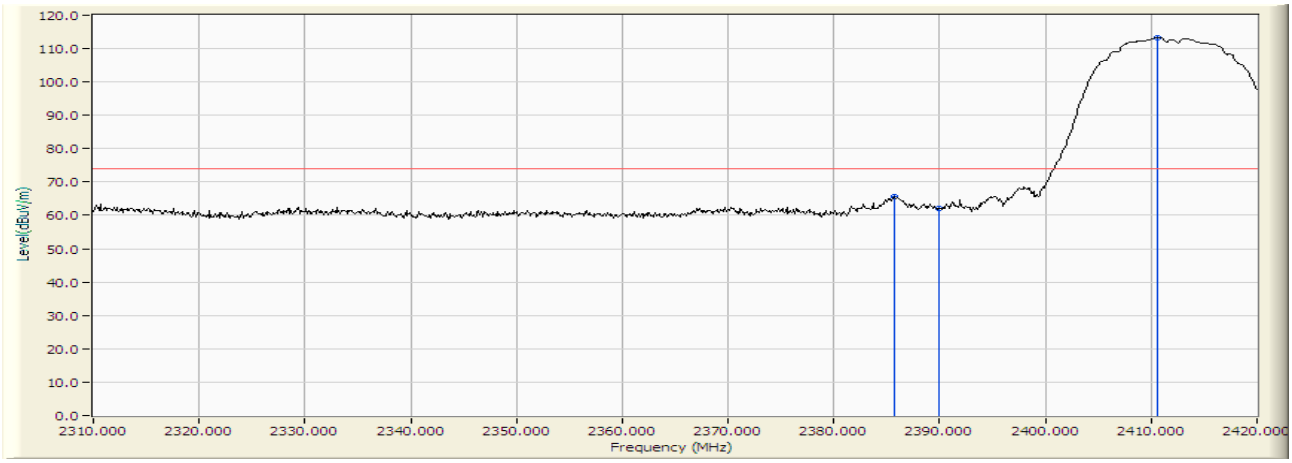


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2390.000	30.715	17.239	47.954	-6.016	53.970	AVERAGE	0.000	0.000
2	*	2411.200	30.710	69.856	100.566	46.596	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:09**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

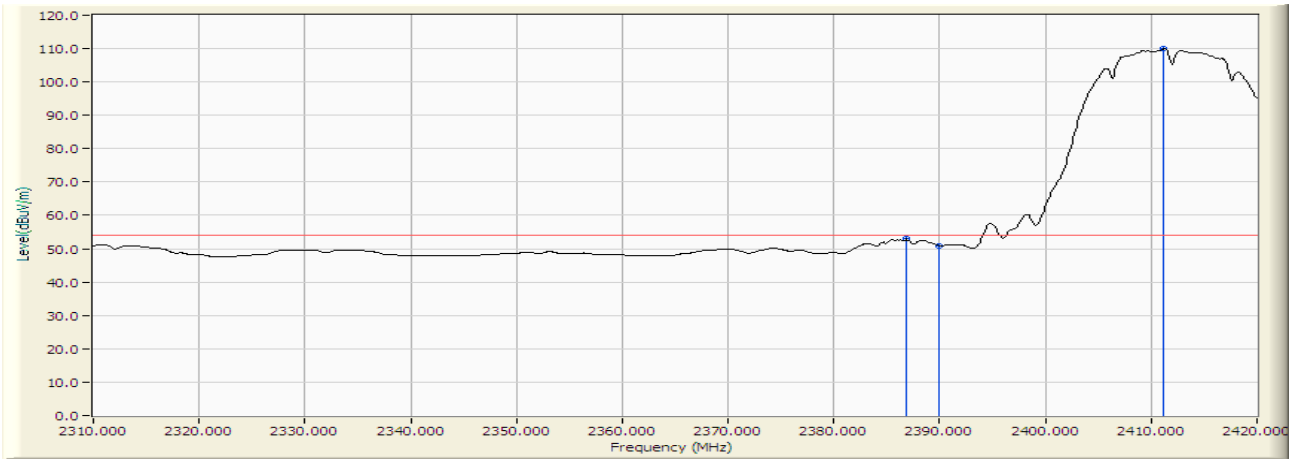


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2385.680	30.720	34.863	65.583	-8.387	73.970	PEAK	0.000	0.000
2		2390.000	30.715	31.495	62.210	-11.760	73.970	PEAK	0.000	0.000
3	*	2410.650	30.710	82.487	113.197	39.227	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:10**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2412MHz)**

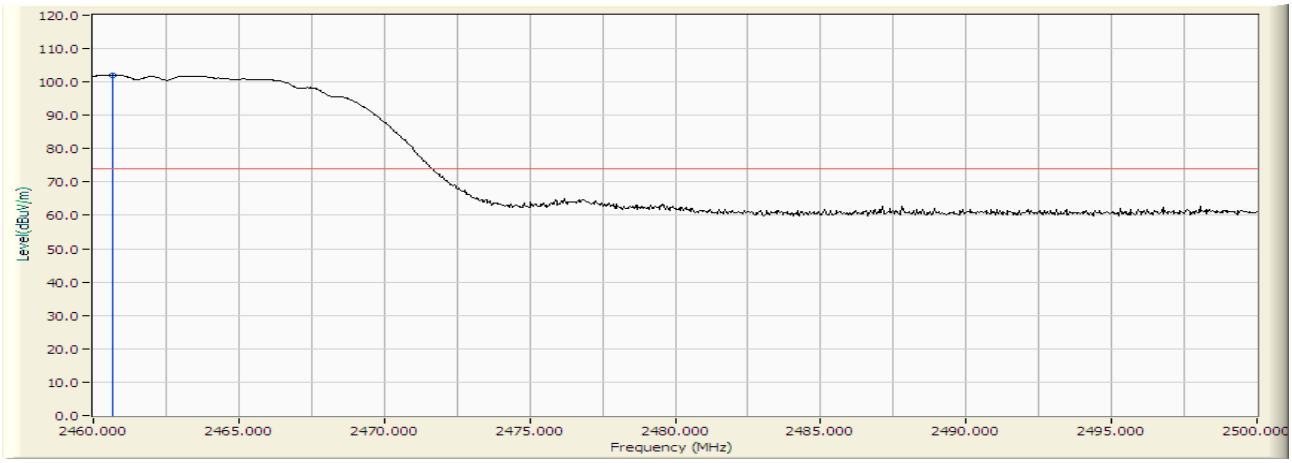


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2386.890	30.719	22.235	52.953	-1.017	53.970	AVERAGE	0.000	0.000
2		2390.000	30.715	20.204	50.919	-3.051	53.970	AVERAGE	0.000	0.000
3	*	2411.200	30.710	79.167	109.877	55.907	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:22**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

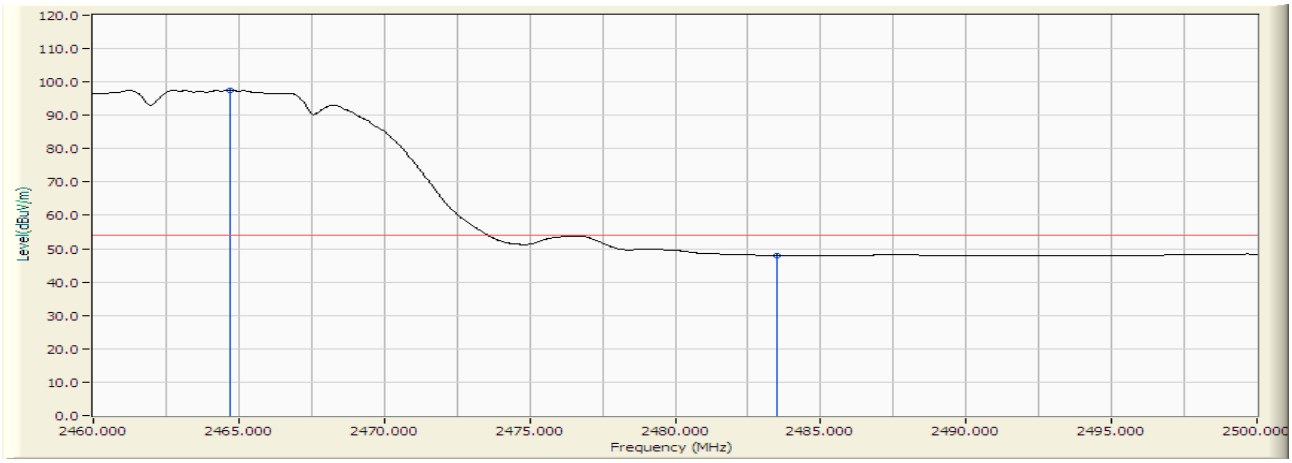


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2460.680	30.729	71.379	102.108	28.138	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:22**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

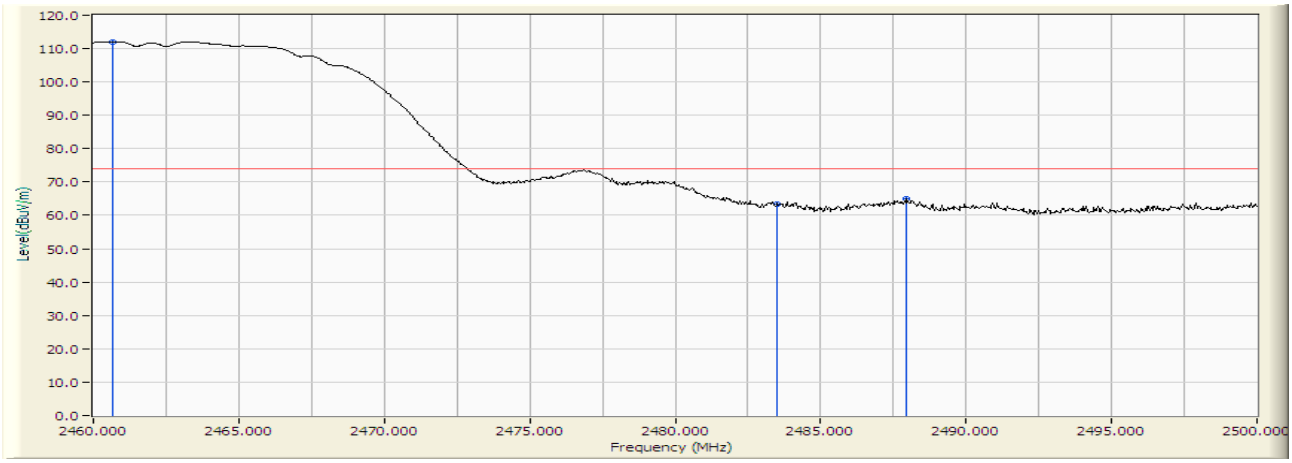


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2464.720	30.730	66.858	97.588	43.618	53.970	AVERAGE	0.000	0.000
2		2483.500	30.730	17.359	48.089	-5.881	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:16**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

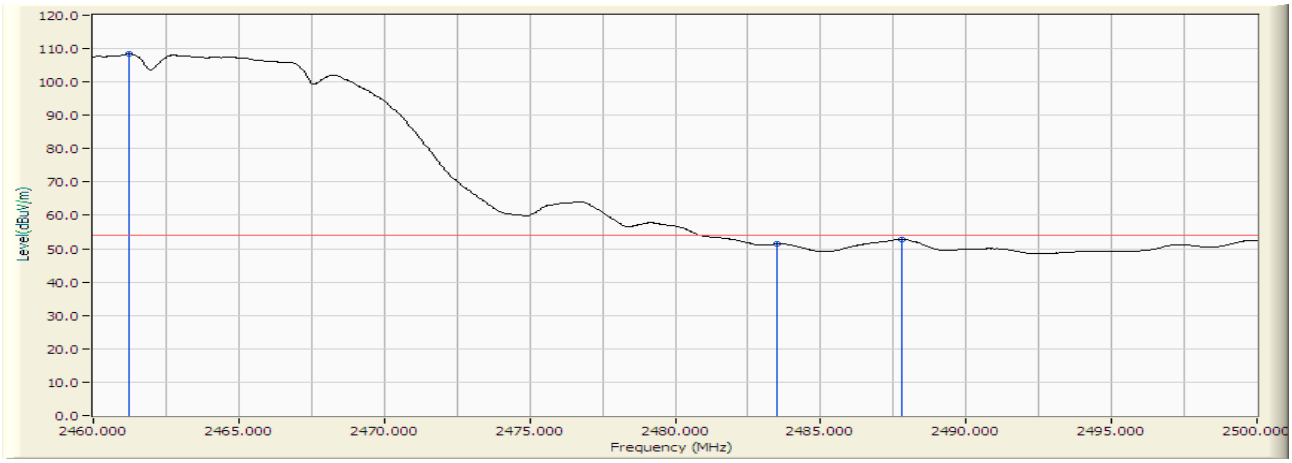


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2460.640	30.729	81.388	112.117	38.147	73.970	PEAK	0.000	0.000
2		2483.500	30.730	32.703	63.433	-10.537	73.970	PEAK	0.000	0.000
3		2487.920	30.730	34.215	64.945	-9.025	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit by 802.11b (Channel 2462MHz)**

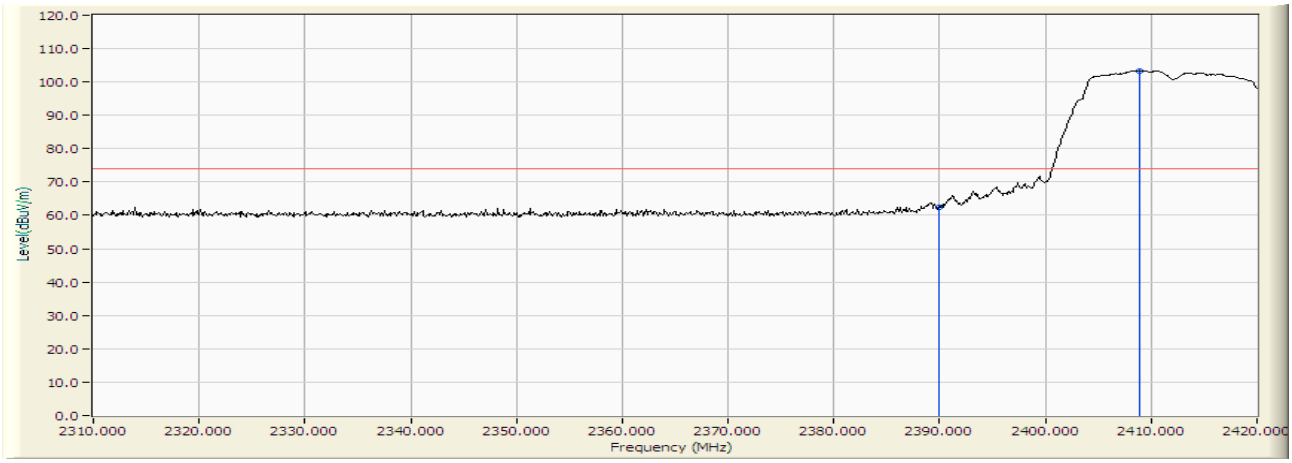


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2461.240	30.730	77.600	108.330	54.360	53.970	AVERAGE	0.000	0.000
2		2483.500	30.730	20.631	51.361	-2.609	53.970	AVERAGE	0.000	0.000
3		2487.800	30.730	22.022	52.752	-1.218	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:42**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

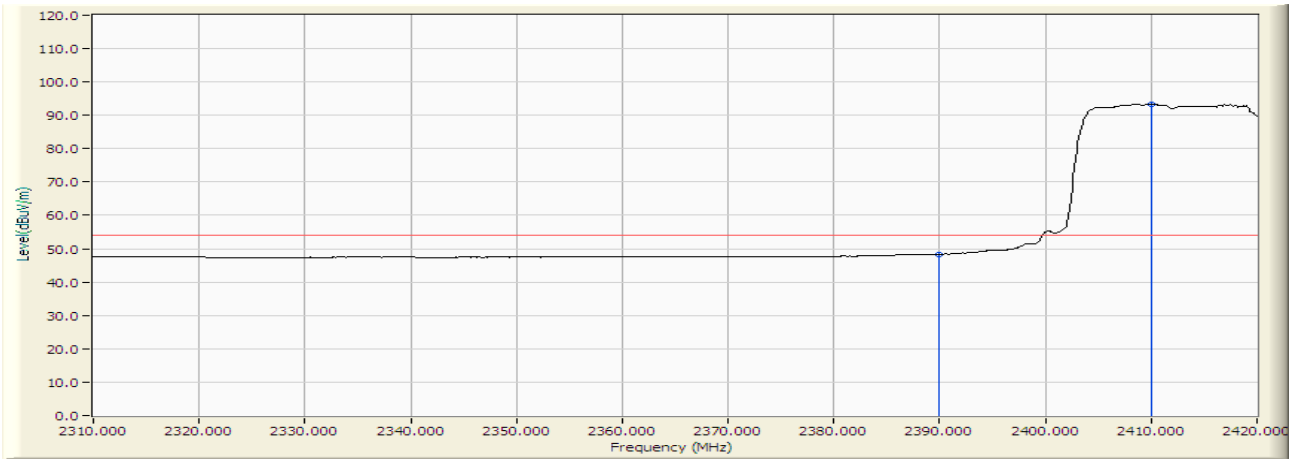


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2390.000	30.715	31.574	62.289	-11.681	73.970	PEAK	0.000	0.000
2	*	2408.890	30.710	72.652	103.362	29.392	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:43**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

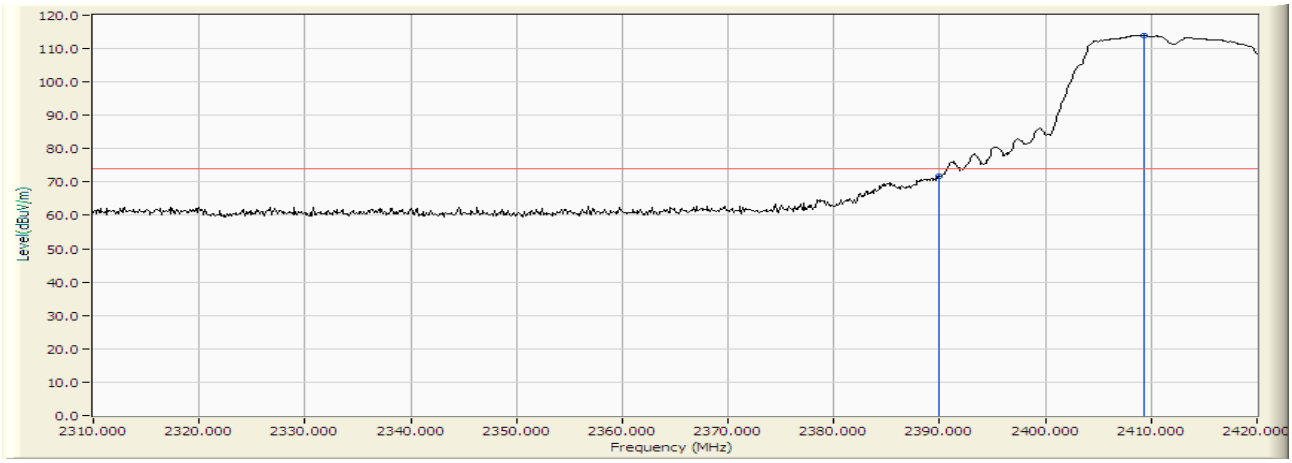


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2390.000	30.715	17.679	48.394	-5.576	53.970	AVERAGE	0.000	0.000
2	*	2409.990	30.710	62.681	93.391	39.421	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:32**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

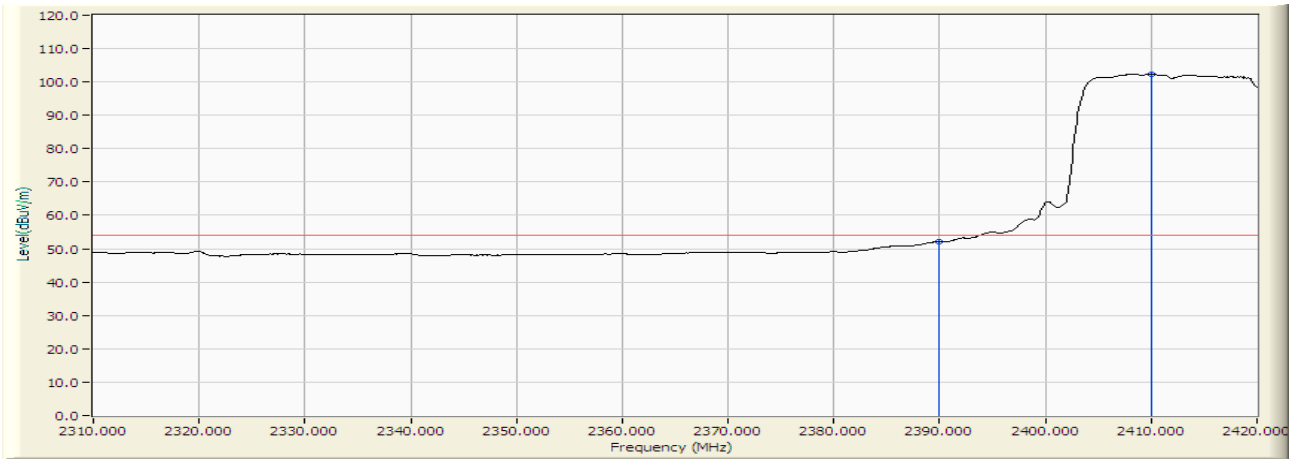


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2390.000	30.715	40.952	71.667	-2.303	73.970	PEAK	0.000	0.000
2	*	2409.330	30.710	83.189	113.899	39.929	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:38**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2412MHz)**

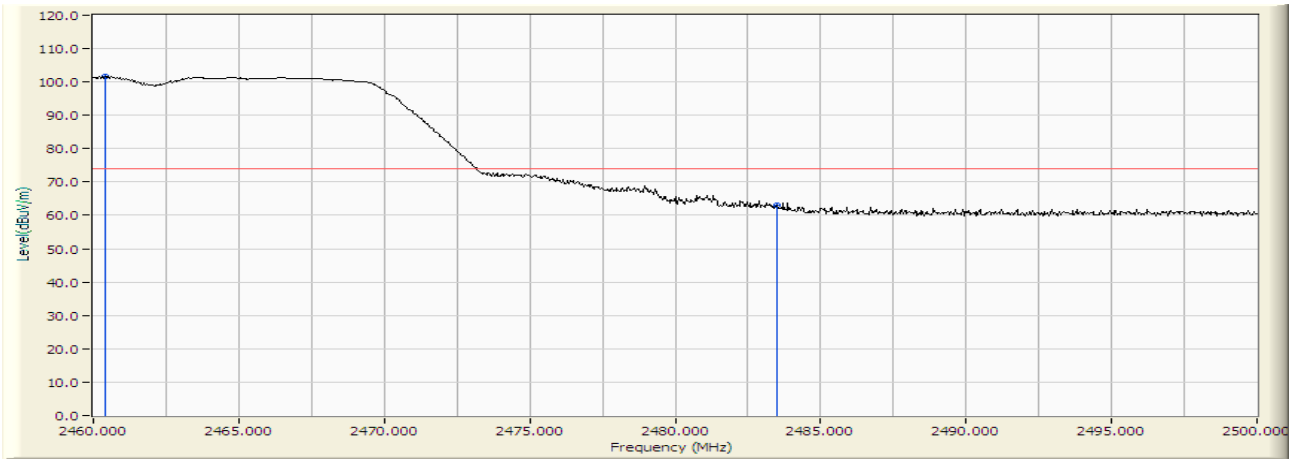


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		2390.000	30.715	21.373	52.088	-1.882	53.970	AVERAGE	0.000	0.000
2	*	2409.990	30.710	71.643	102.353	48.383	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:49**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

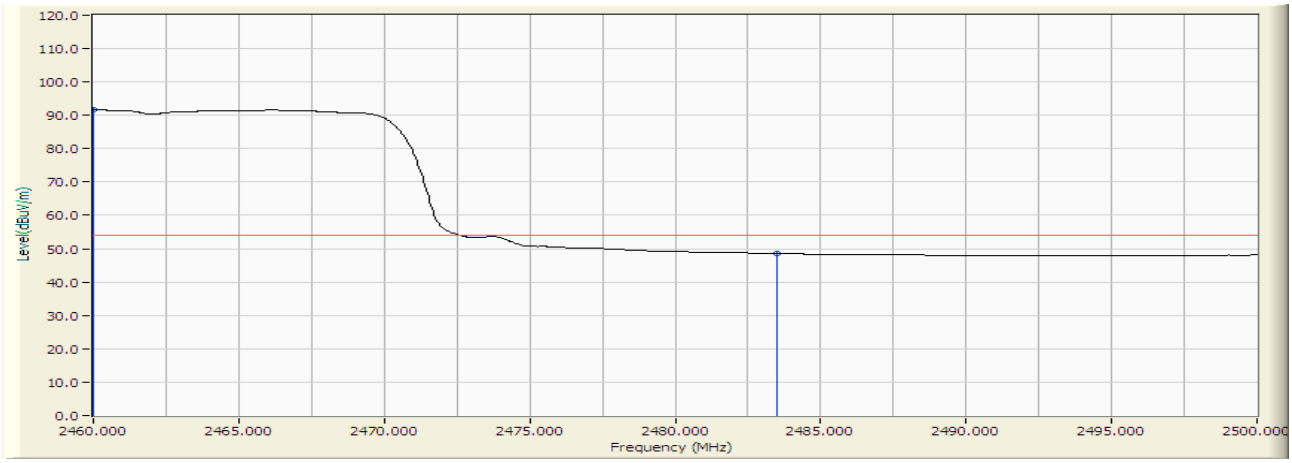


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2460.400	30.729	70.875	101.604	27.634	73.970	PEAK	0.000	0.000
2		2483.500	30.730	32.325	63.055	-10.915	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

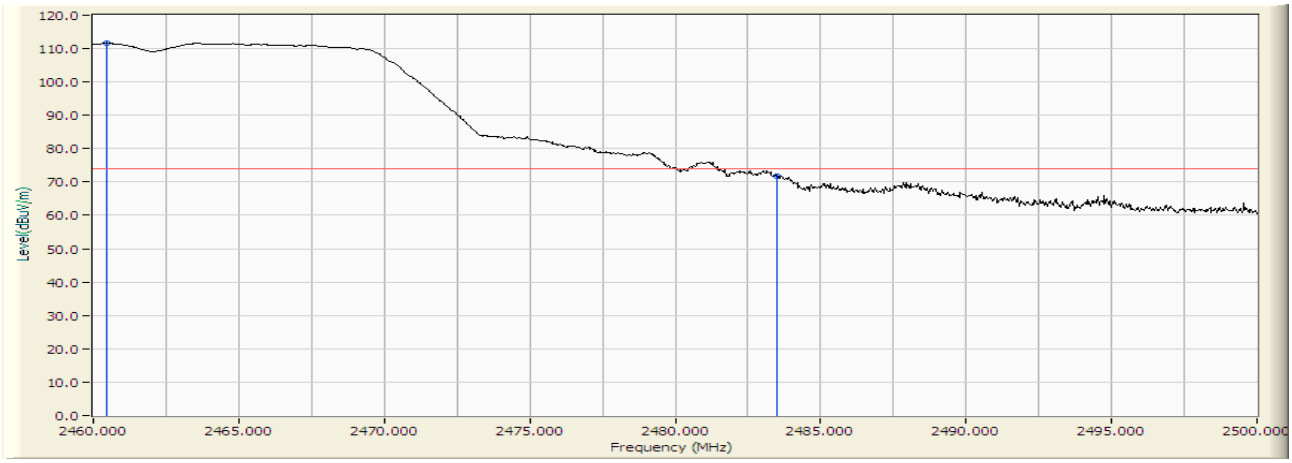


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2460.000	30.729	61.065	91.794	37.824	53.970	AVERAGE	0.000	0.000
2		2483.500	30.730	17.847	48.577	-5.393	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:47**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (Channel 2462MHz)**

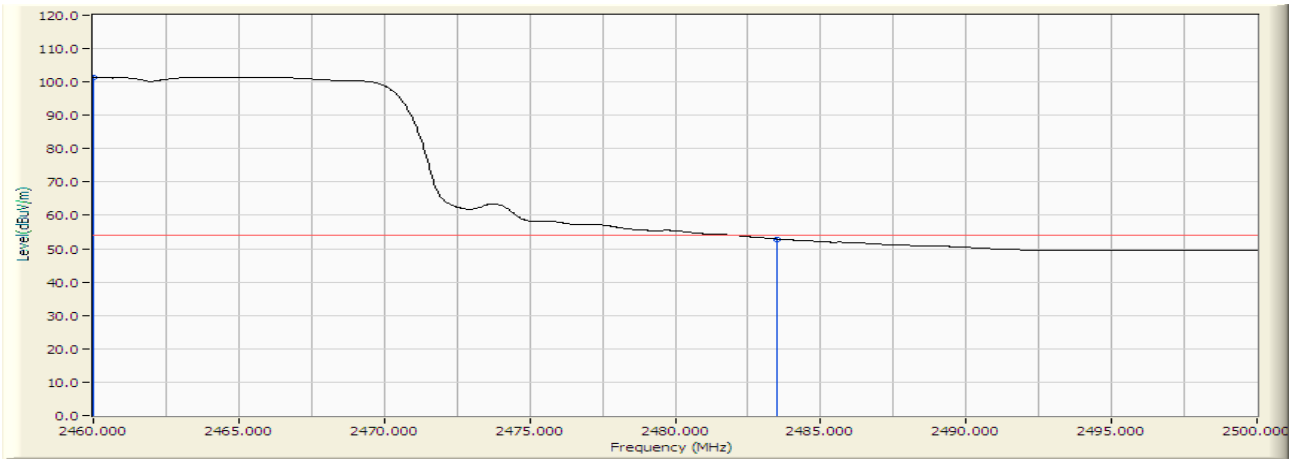


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	2460.440	30.729	80.805	111.534	37.564	73.970	PEAK	0.000	0.000
2		2483.500	30.730	41.060	71.790	-2.180	73.970	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Engineer : Marlin	
Site : AC2 (3m Semi-Anechoic Chamber)	**Time : 2008/06/01 - 14:48**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 0**
EUT : 54Mbps Wireless ADSL+ Modem Router	**Probe : BBHA9120D_496(1-18GHz) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit by 802.11g (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	*	2460.000	30.729	70.693	101.422	47.452	53.970	AVERAGE	0.000	0.000
2		2483.500	30.730	22.138	52.868	-1.102	53.970	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

7. Operation Frequency Range of 20dB Bandwidth

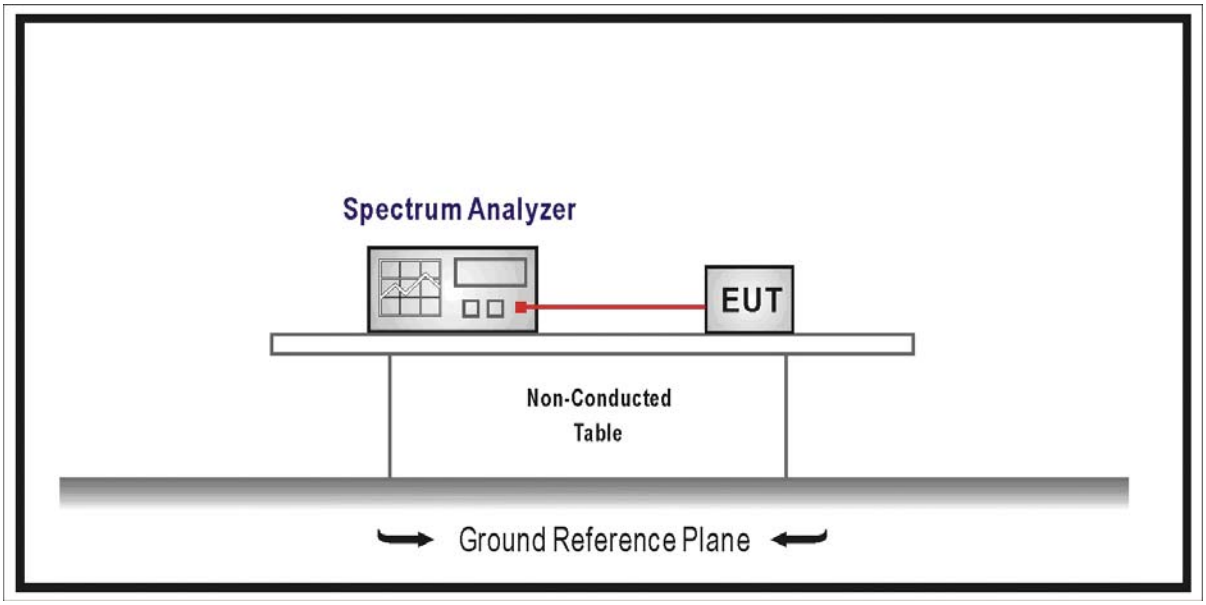
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2007/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
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.

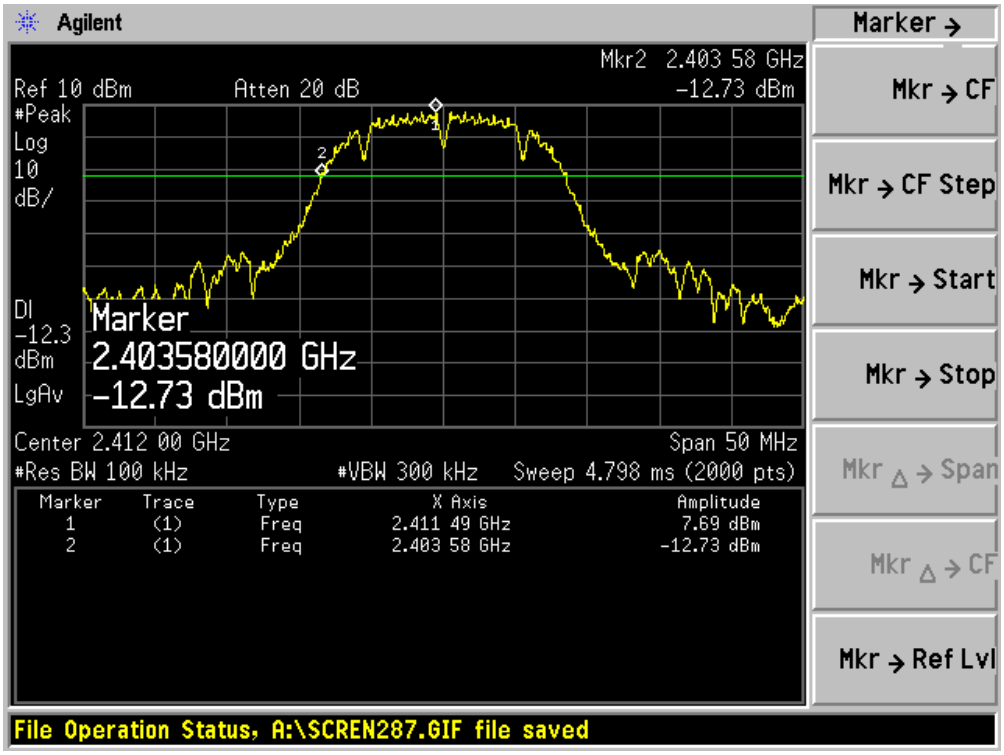
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

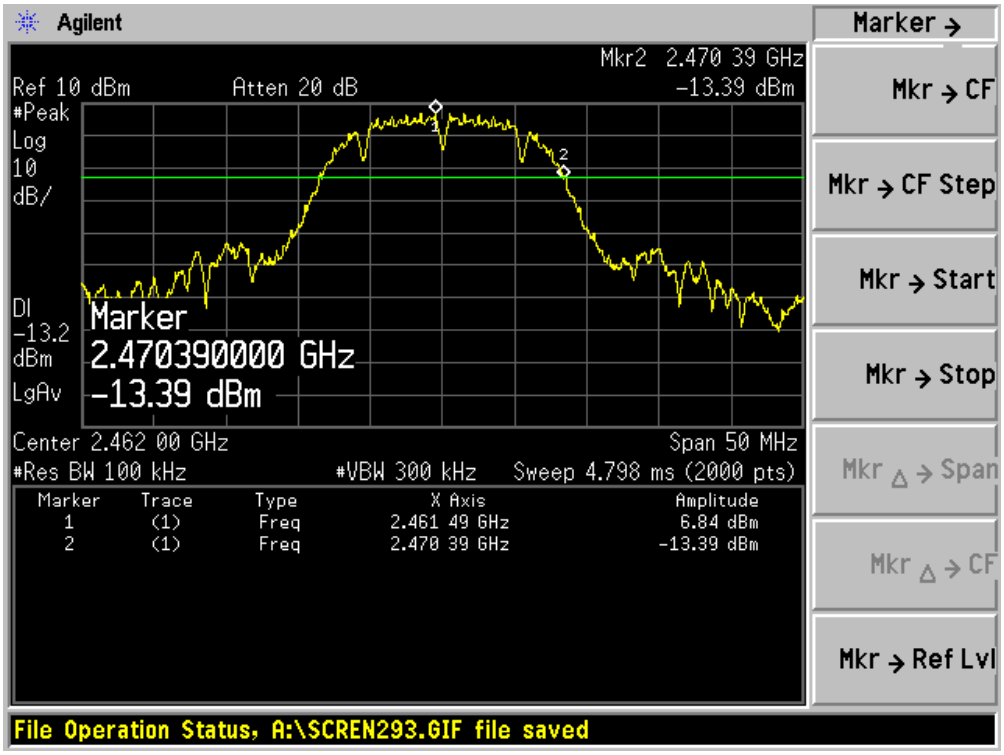
7.6. Test Result

Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel 01 (2412MHz)

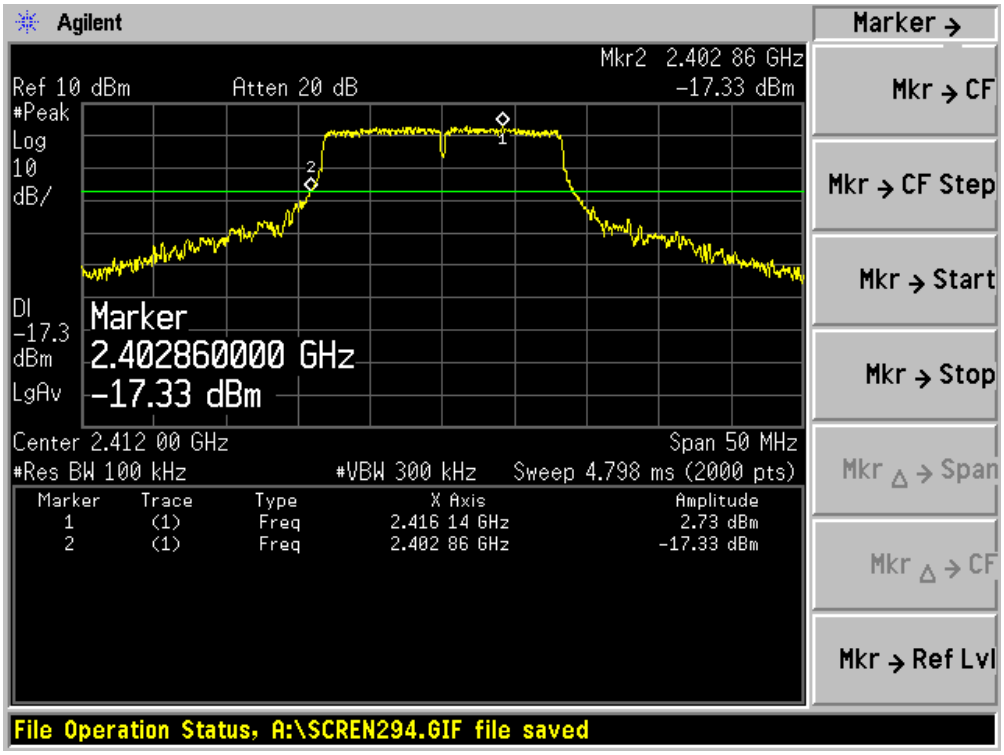


Channel 11 (2462MHz)

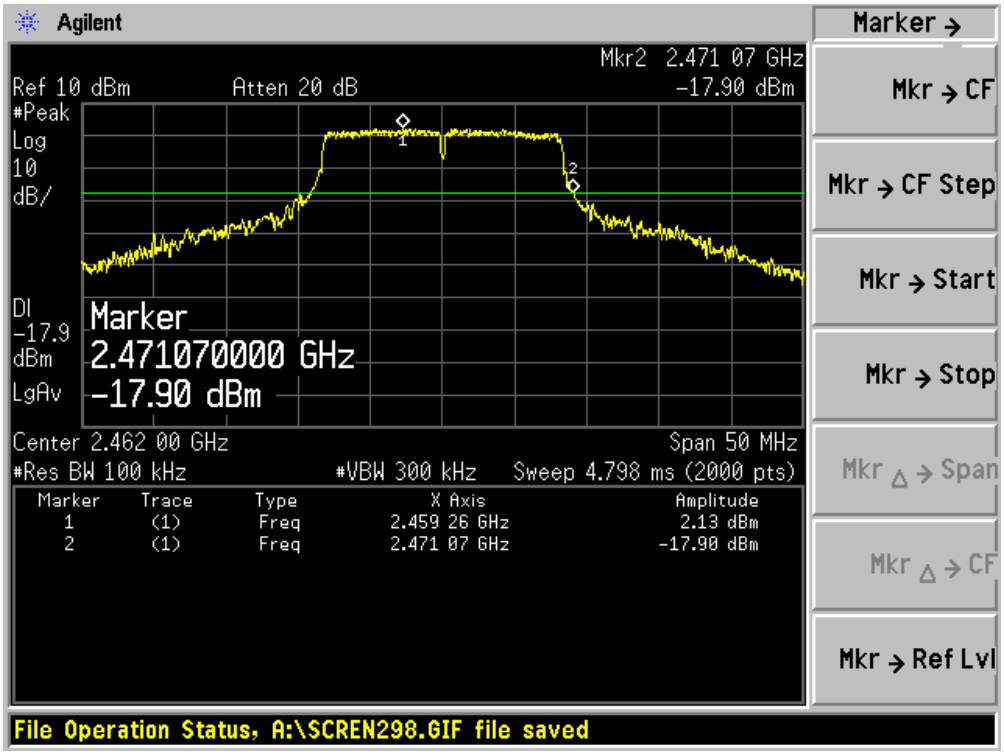


Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel 01 (2412MHz)



Channel 11 (2462MHz)



8. Occupied Bandwidth

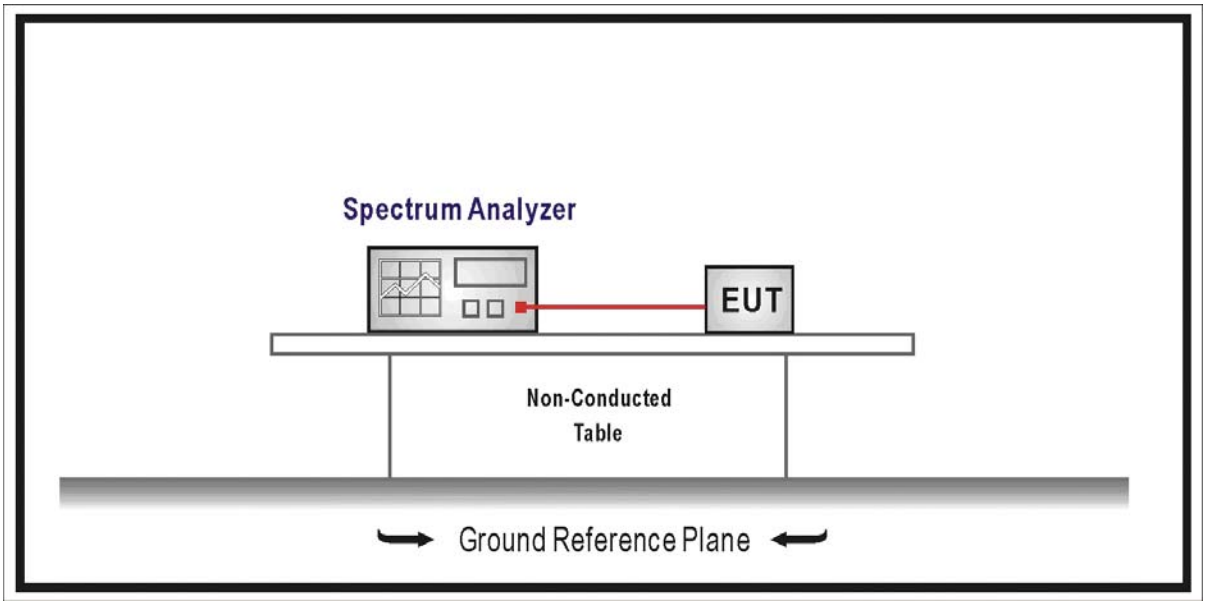
8.1. Test Equipment

Occupied Bandwidth / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2007/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
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

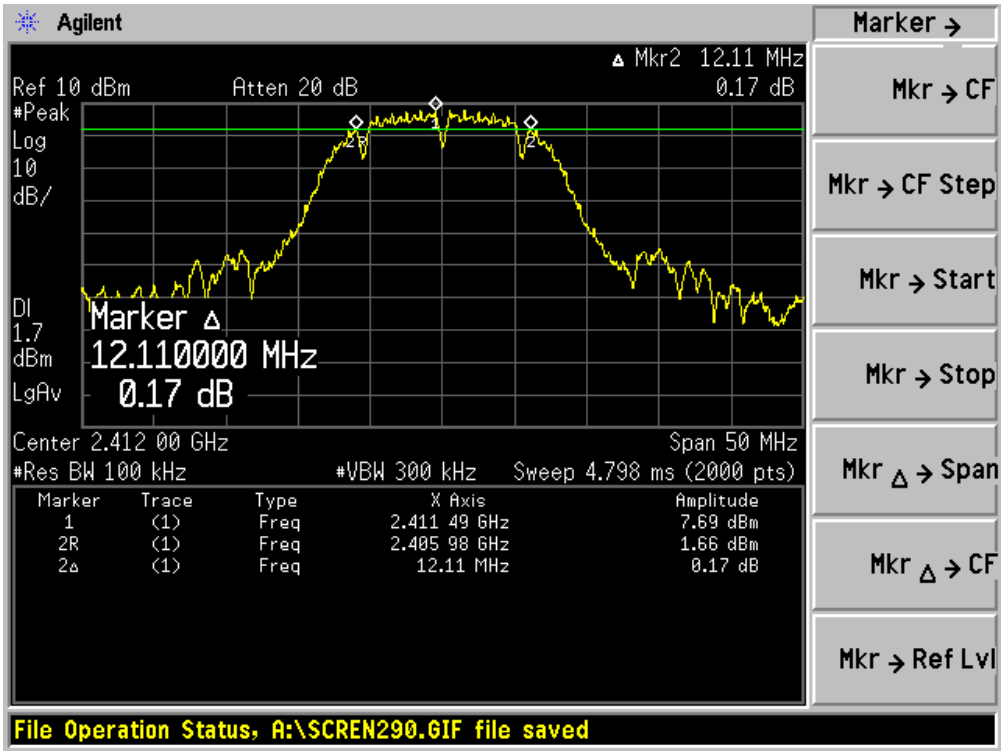
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

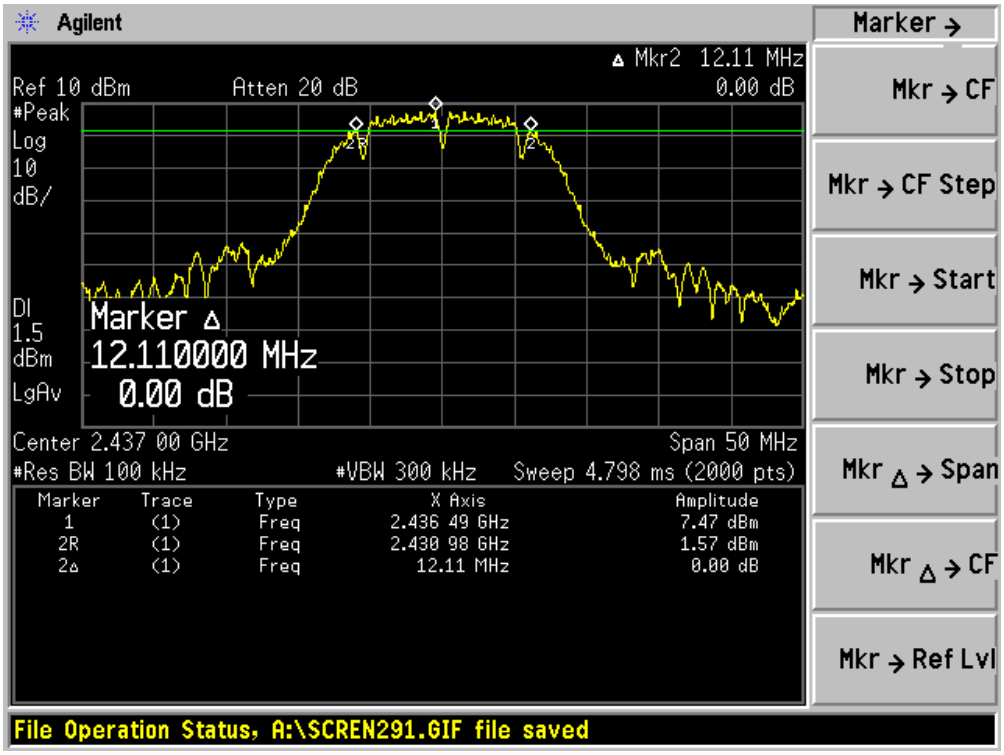
Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	12110	500	Pass
06	2437	12110	500	Pass
11	2462	12130	500	Pass

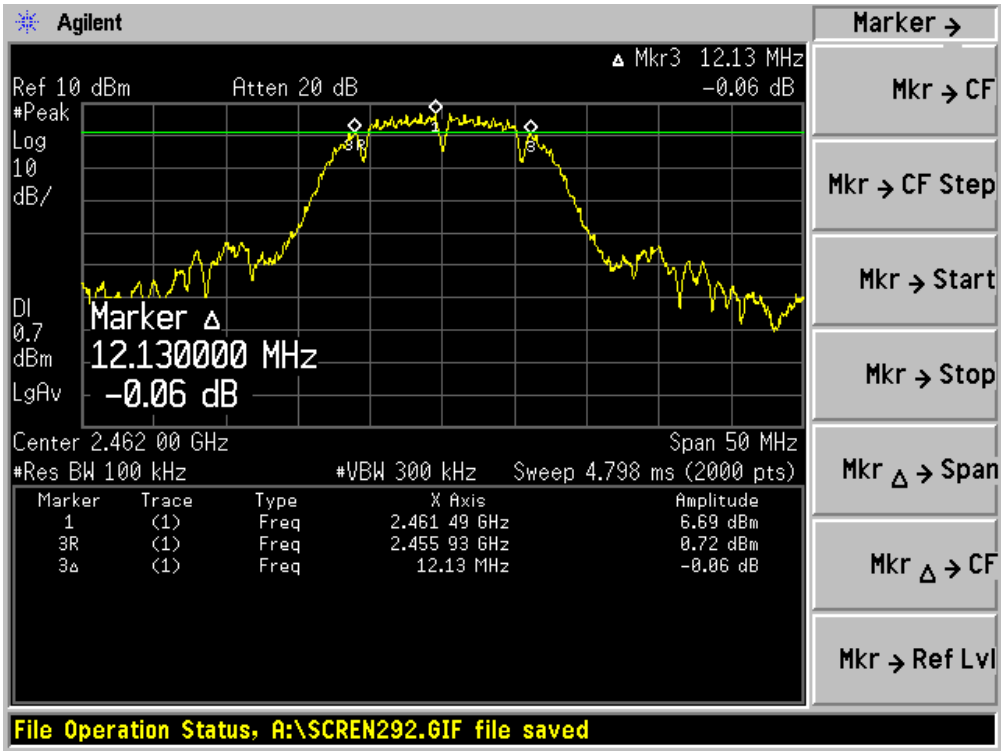
Channel 01 (2412MHz)



Channel 06 (2437MHz)



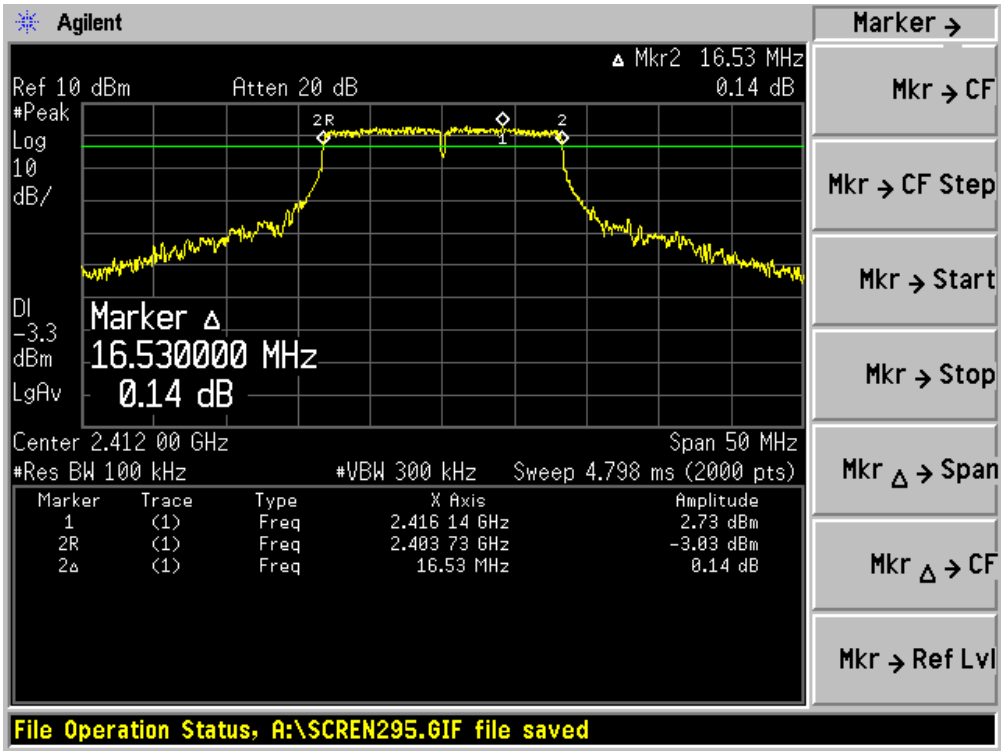
Channel 11 (2462MHz)



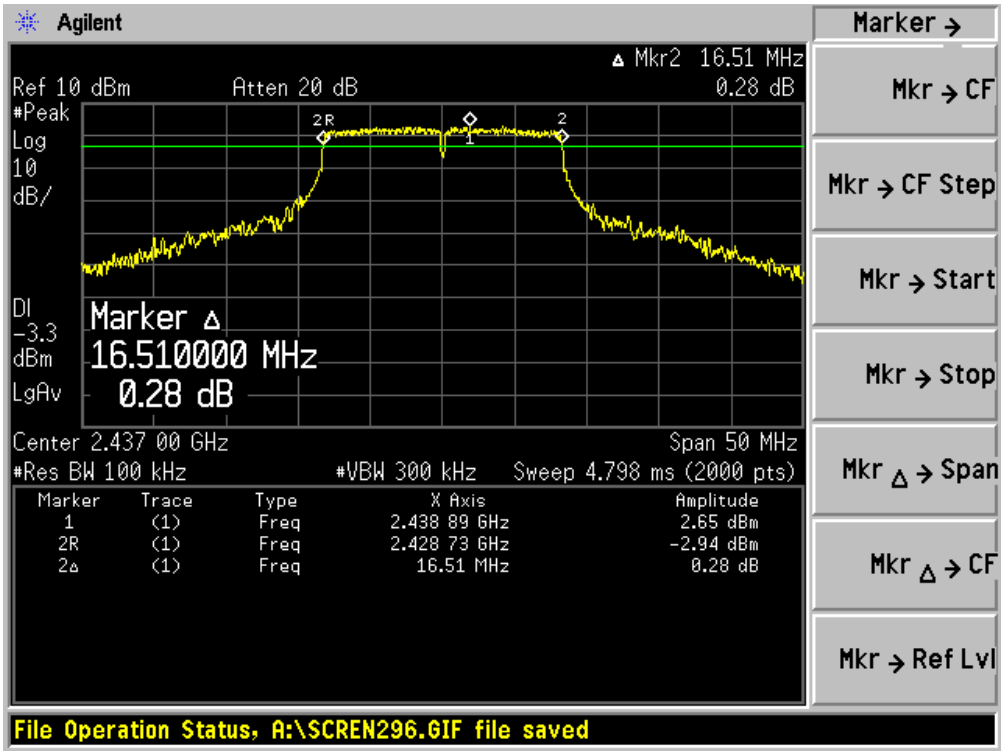
Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Occupied Bandwidth
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16530	500	Pass
06	2437	16510	500	Pass
11	2462	16560	500	Pass

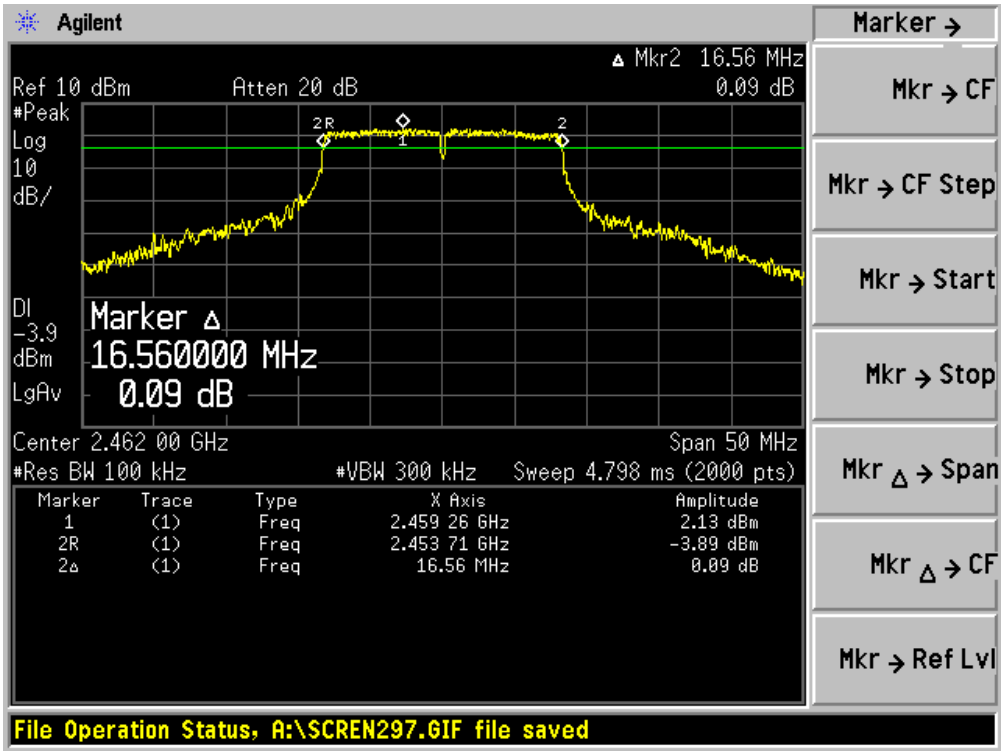
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



9. Power Output

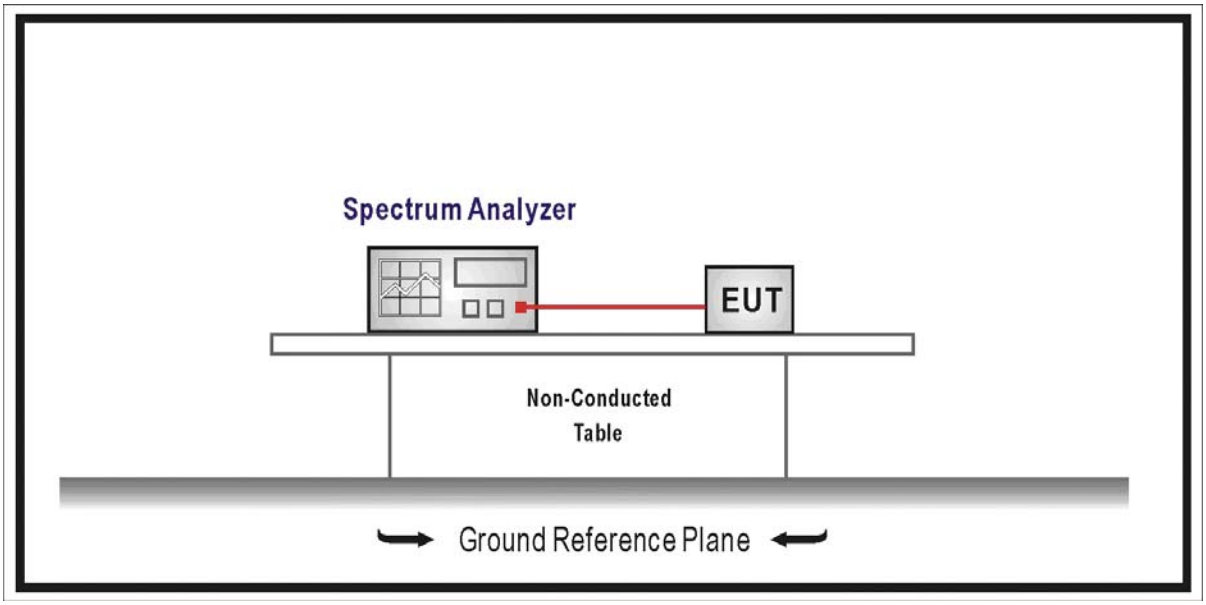
9.1. Test Equipment

Power Output / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2007/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
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

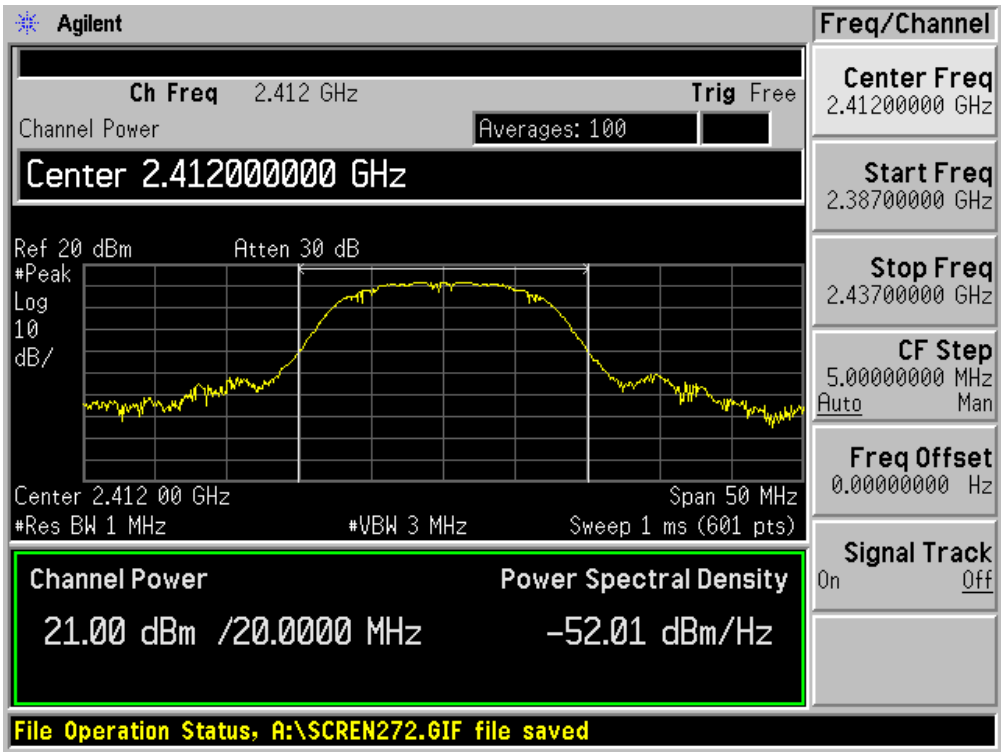
9.6. Test Result

Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

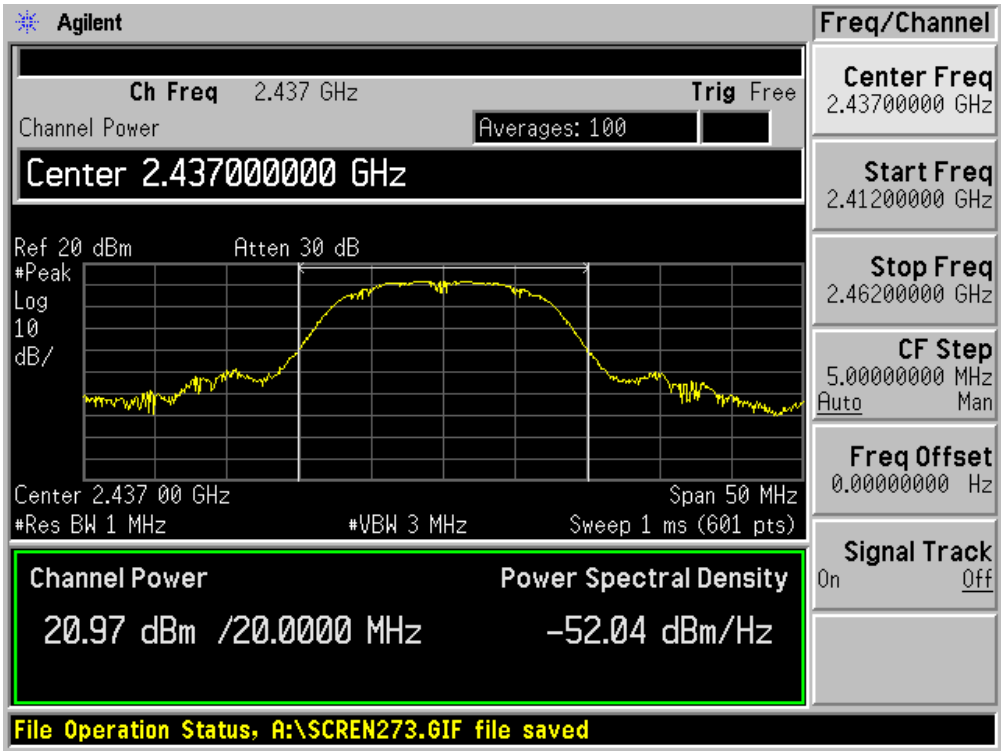
Channel No.	Frequency (MHz)	Data Rate (Mbps)				Limit (dBm)
		1	2	5.5	11	
01	2412	21.00	--	--	--	30
06	2437	20.97	--	--	--	30
11	2462	19.94	19.90	19.84	19.75	30

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.

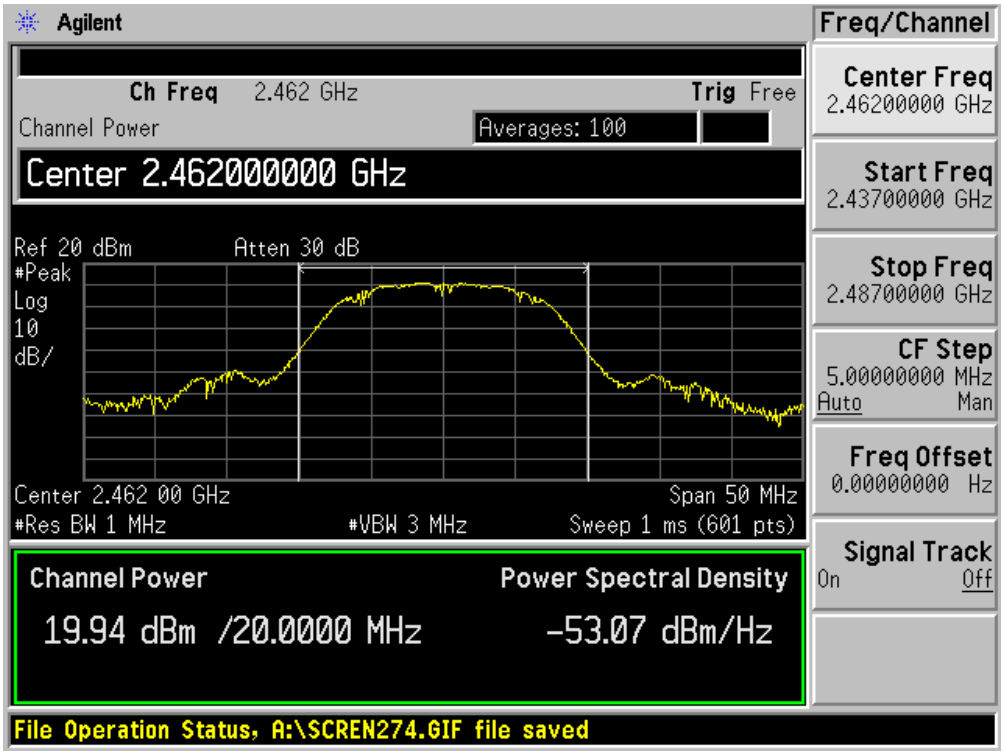
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

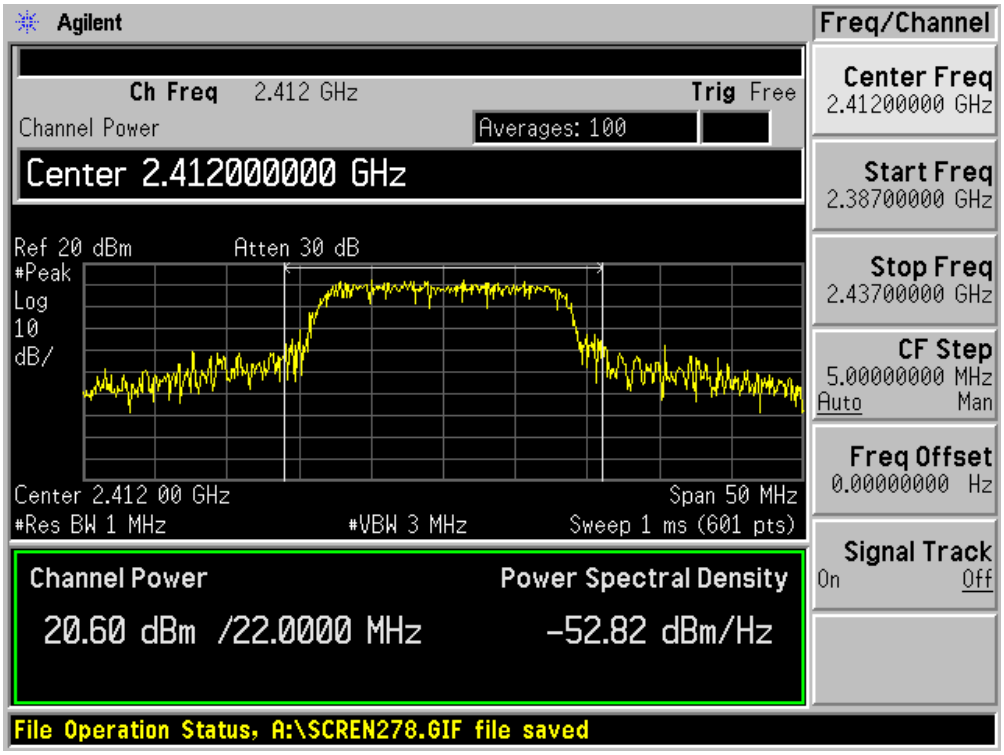


Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Power Output
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

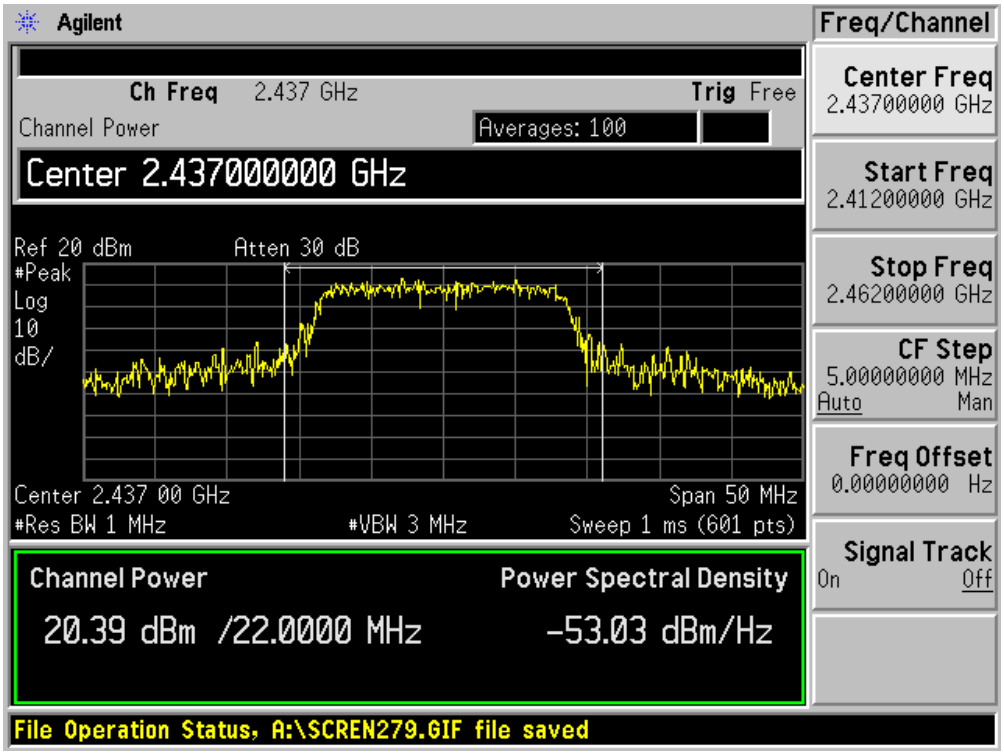
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Limit (dBm)
		6	9	12	18	24	36	48	54	
01	2412	20.60	--	--	--	--	--	--	--	30
06	2437	20.39	--	--	--	--	--	--	--	30
11	2462	19.67	19.64	19.60	19.58	19.57	19.54	19.51	19.49	30

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.

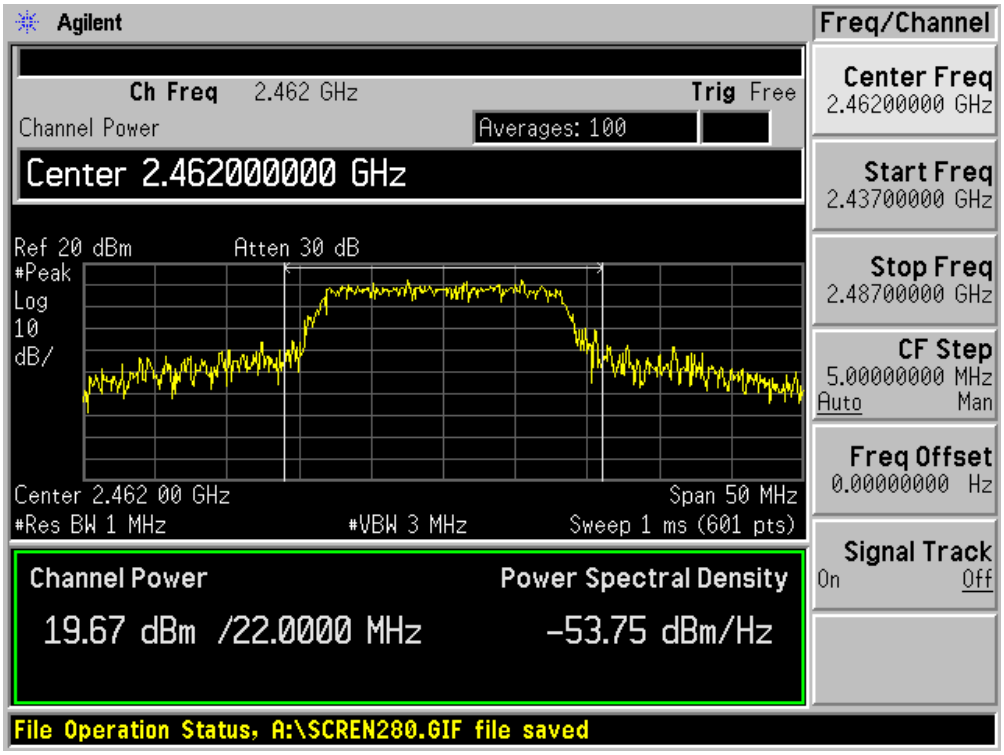
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



10. Power Spectral Density

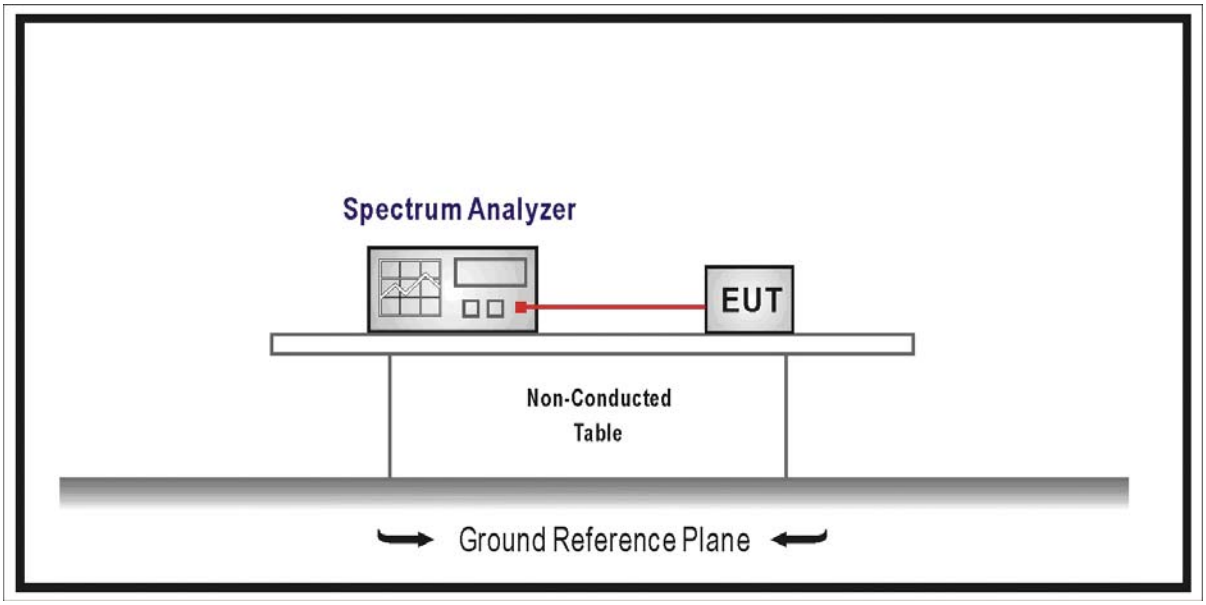
10.1. Test Equipment

Power Spectral Density / AC-4

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2007/06/11
Coaxial Cable	Huber+Suhner	AC4-RF	09	2007/11/25
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

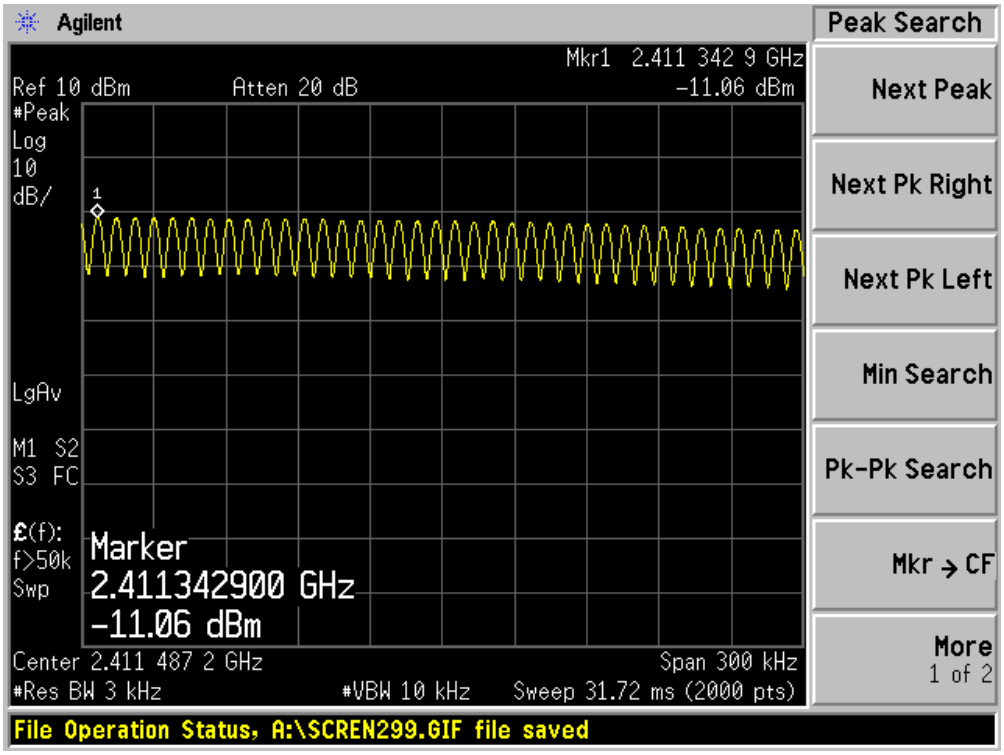
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

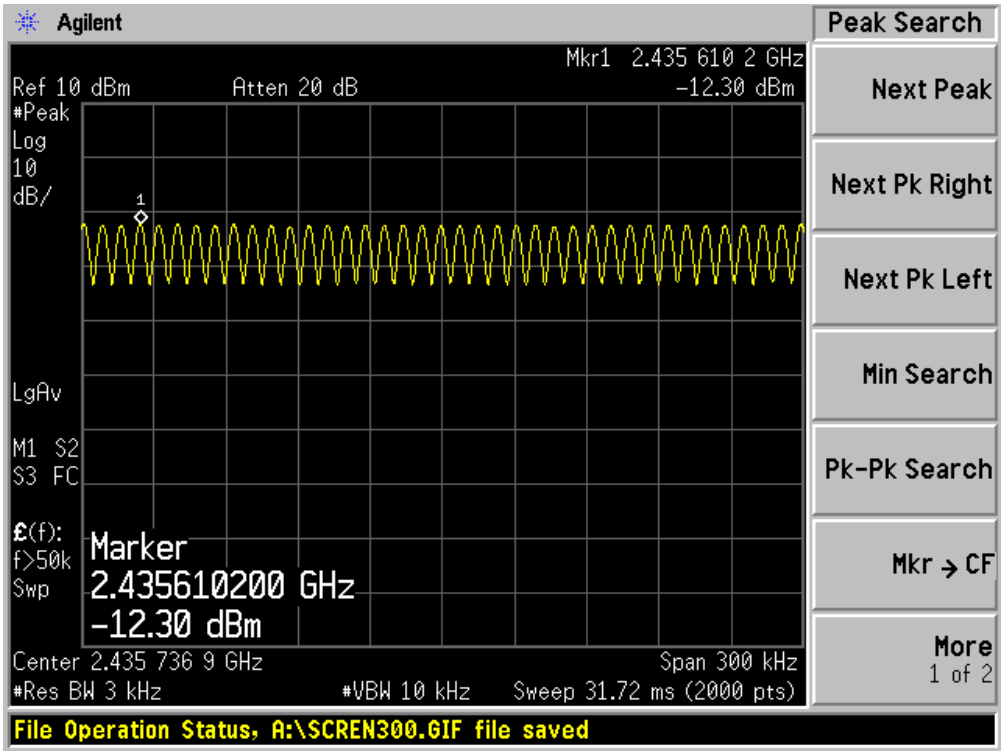
Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-11.06	8	Pass
06	2437	-12.30	8	Pass
11	2462	-12.96	8	Pass

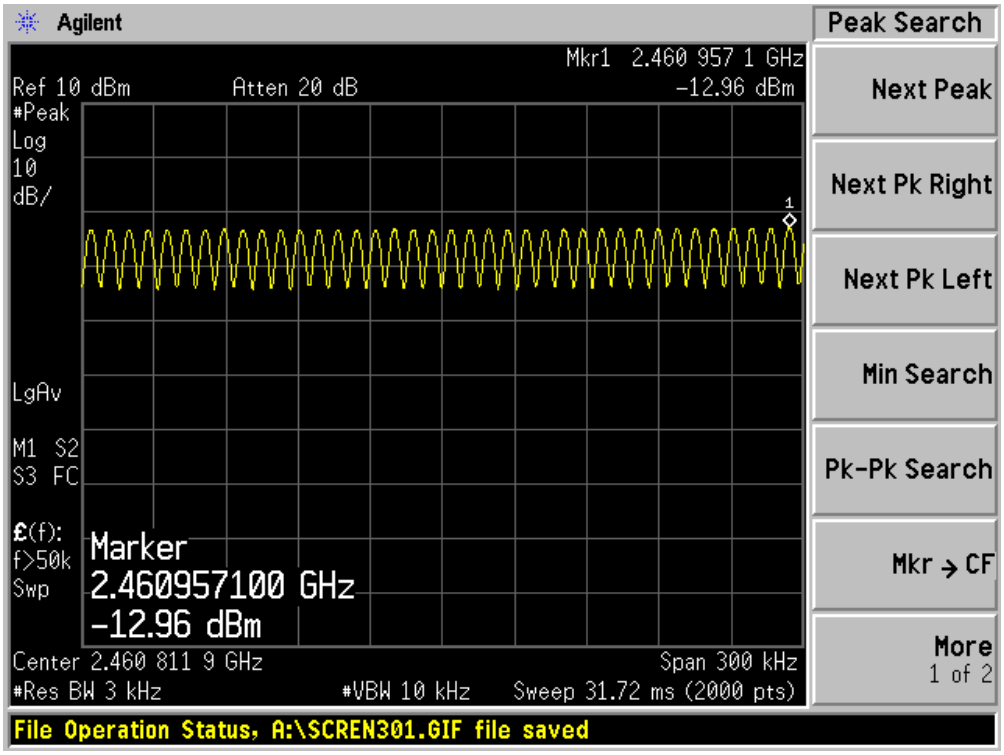
Channel 01 (2412MHz)



Channel 06 (2437MHz)



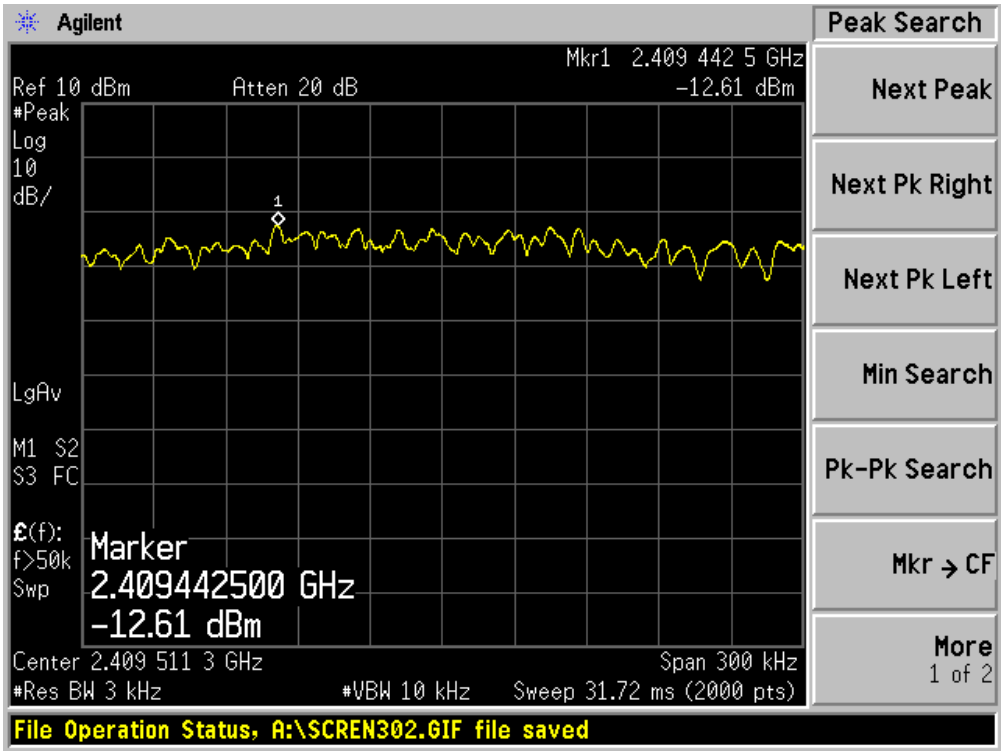
Channel 11 (2462MHz)



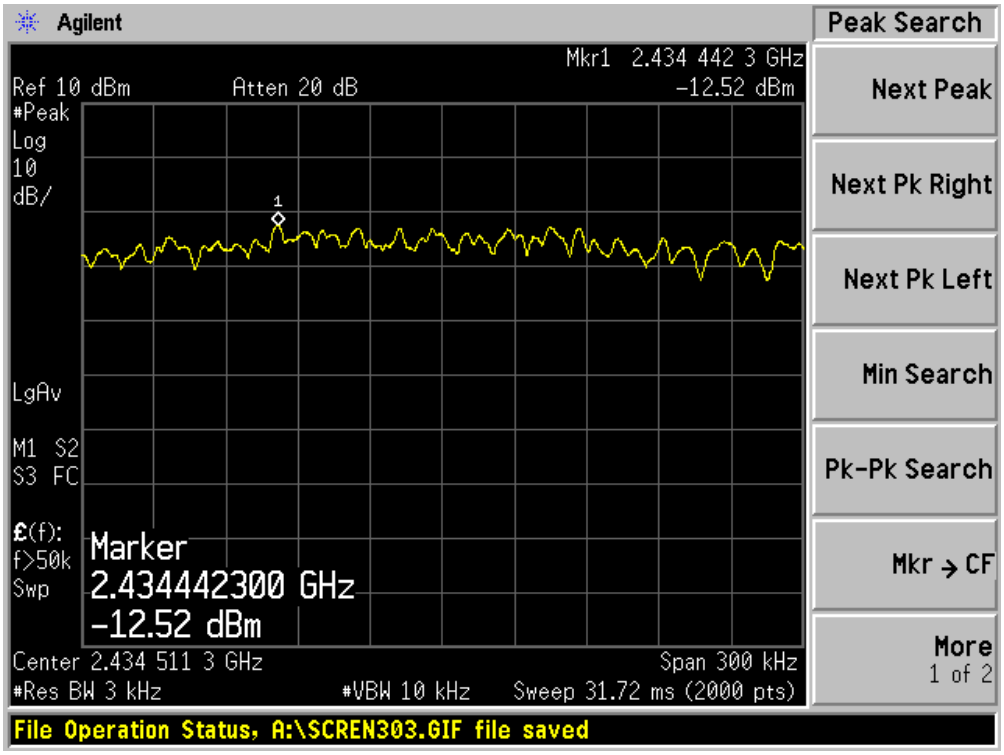
Product	:	54Mbps Wireless ADSL+ Modem Router
Test Item	:	Power Spectral Density
Test Site	:	AC-4
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-12.61	8	Pass
06	2437	-12.52	8	Pass
11	2462	-13.10	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)