Test Report

Product Name	：	Wireless ADSL Router
Model No.	：	DSL-2642B, DSL-2643B, DSL-2640U, DSL-2641U
FCC ID.	：	KA2SL2642B

Applicant	：	D-Link Corporation
Address	：	No.289, Sinhu 3rd Rd., Neihu Distrct, Taipei City 114, Taiwan, R.O.C.

Date of Receipt	：	2008/02/25
Issued Date	：	2008/03/12
Report No.	：	082286R-RFUSP05V01
Version	：	V1.0

Test Report Certification

Issued Date : 2008/03/12
Report No. : 082286R-RFUSP05V01

QuieTek

Product Name	:	Wireless ADSL Router
Applicant	:	D-Link Corporation
Address	:	No.289, Sinhu 3rd Rd., Neihu Distrct, Taipei City 114, Taiwan, R.O.C.
Manufacturer	:	Alpha Networks Inc.
Model No.	:	DSL-2642B, DSL-2643B, DSL-2640U, DSL-2641U
FCC ID.	:	KA2SL2640RD
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	AC 120 V / 60 Hz
Trade Name	:	D-Link
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247
Test Result	:	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : Carol Tsai
(Carol Tsai / Senior Engineering Adm. Specialist)

Reviewed By : Lucia Lu
(Lucia Lu / Assistant Engineer)

Approved By : Roy Wang
(Roy Wang / Manager)

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1. General Information

1.1. EUT Description

Product Name	Wireless ADSL Router
Trade Name	D-Link
Model No.	DSL-2642B, DSL-2643B, DSL-2640U, DSL-2641U
Frequency Range	2412~2462MHz
Channel Number	11
Type of Modulation (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Type of Modulation (IEEE 802.11g)	Orthogonal Frequency Division Multiplexing (OFDM)
Data Speed (IEEE 802.11b)	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data Speed (IEEE 802.11g)	6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps
Antenna Gain	2dBi
Channel Control	Manual
Antenna Type	I-PEX (Application: 1/4 λ Dipole Antenna , Model Number: THW2056A)

Component	
Antenna	D-Link, 1 Set
LAN Cable	Non-Shielded, 1.5m
RJ11 Cable	Non-Shielded, 1.8m
Power Adapter AC-DC	FAIRWAY, WRG15L-120AB I/P: 100-120V 1.0Amax. 50-60Hz O/P: +12V 1.25A Cable Out: Non-Shielded, 1.8m
Power Adapter AC-AC	AMIGO, AM-121200A I/P: 120VAC 60Hz 200mA O/P: 12VAC 1200mA 14.4VA Cable Out: Non-Shielded, 1.8m

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
001	2412 MHz	002	2417 MHz	003	2422 MHz	004	2427 MHz
005	2432 MHz	006	2437 MHz	007	2442 MHz	008	2447 MHz
009	2452 MHz	010	2457 MHz	011	2462 MHz		

Note:

1. This device is a Wireless ADSL Router, which including 2.4GHz BT/WLAN and 1575.42MHz receiving function, and 2.4GHz BT/WLAN transmitting function.
2. The different of the each model is shown as below:

Model Number	Description
DSL-2642B	Annex A
DSL-2643B	Annex B
DSL-2640U	Annex A
DSL-2641U	Annex B

   The variation of model number is for different strategy of marketing
3. These test results on a sample of the device are for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247.
4. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
5. This device is a composite device in accordance with Part 15 regulations. The receiving function receiving was tested and its test report number is 082286R-RFUSP01V02 under Declaration of Conformity.

1.3. Test Mode

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:

Pre-Test Mode	
EMI	Mode 1: Transmit (AC-DC) Mode 2: Transmit (AC-AC)
Final Test Mode	
TX	Mode 1: Transmit (AC-DC) Mode 2: Transmit (AC-AC)

Emission	Mode 1	Mode 2
Conducted Emission	Yes	Yes
Peak Power Output	Yes	No
Radiated Emission	Yes	Yes
Band Edge	Yes	No
Occupied Bandwidth	Yes	No
Power Density	Yes	No

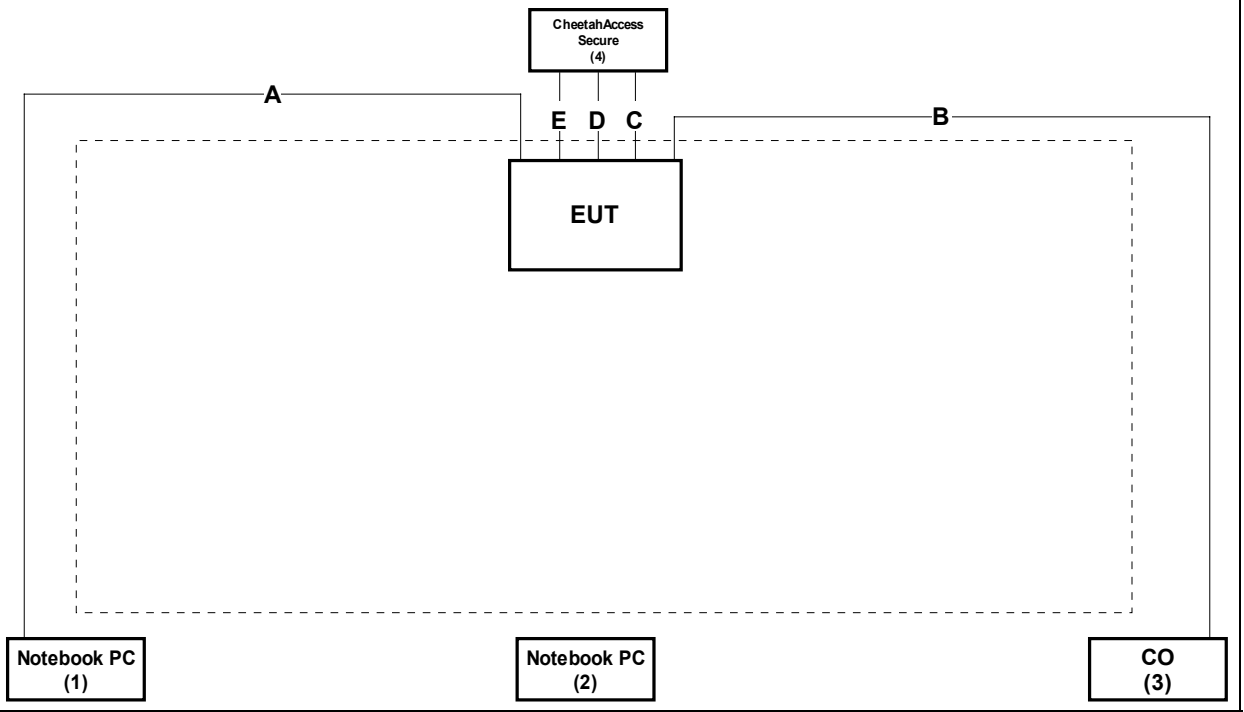
1.4. Tested System Details

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.	FCC ID	Power Cord
1	Notebook PC	DELL	LATITUDE D400	GK43D1S	DoC	Non-Shielded, 1.7m, one ferrite core bonded
2	Notebook PC	DELL	LATITUDE D400	HK43D1S	DoC	Non-Shielded, 1.7m, one ferrite core bonded
3	CO	D-Link	DAS-3224	N/A	DoC	--
4	CheetahAccess Secure	Accton	AC-IG1104	N/A	DoC	Non-Shielded, 1.8m

1.5. Configuration of Tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 3m
B	RJ11 Cable	Non-Shielded, 3m
C	LAN Cable	Non-Shielded, 3m
D	LAN Cable	Non-Shielded, 3m
E	LAN Cable	Non-Shielded, 3m

1.6. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.5.
2	Turn on the power of all equipment.
3	Boot the Notebook PC from Hard Disk.
4	Data will be communicated between computer and EUT.
5	All the peripheral will be retrieved during the test.
6	Repeat the above procedure (4) to (5).

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission	15 - 35	20
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Peak Power Output (DSSS)	15 - 35	23.5
Humidity (%RH)		25 - 75	53
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Band Edge (DSSS)	15 - 35	26
Humidity (%RH)		25 - 75	65
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth (DSSS)	15 - 35	23.5
Humidity (%RH)		25 - 75	53
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Power Density (DSSS)	15 - 35	23.5
Humidity (%RH)		25 - 75	53
Barometric pressure (mbar)		860 - 1060	950-1000

Site Description:

January 24, 2005 File on
Federal Communications Commission
Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 365520

Accredited by TAF
Accreditation Number: 1313
Effective through: December 27, 2010

Testing Laboratory 1313

Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2008

NVLAP Lab Code : 200347-0

Site Name: Quietek Corporation
Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,
Chiung-Lin, Hsin-Chu County,
Taiwan, R.O.C.
TEL : 886-3-592-8858 / FAX : 886-3-592-8859
E-Mail : service@quietek.com

2. Conducted Emission

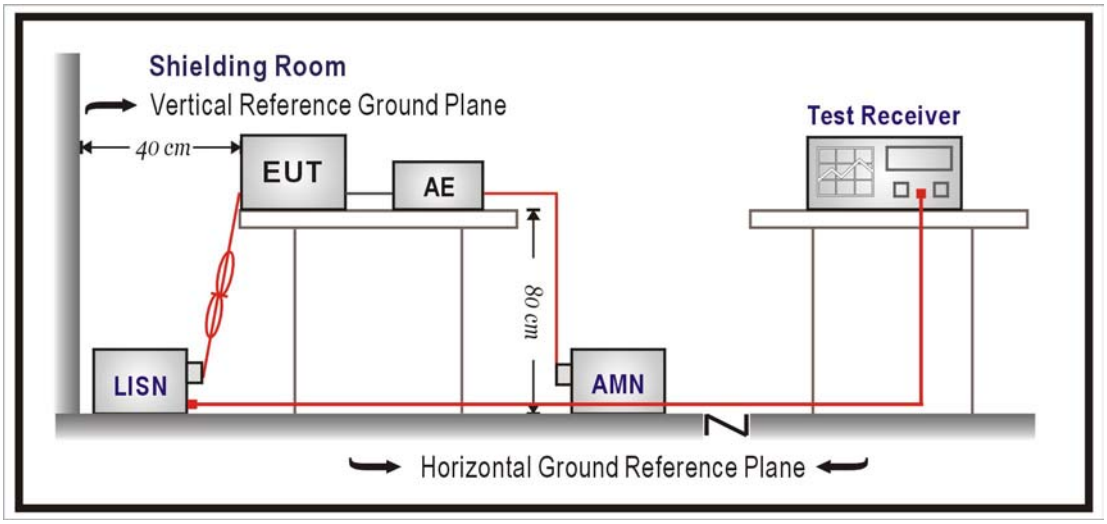
2.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/018	Sep., 2007	
2	Artificial Mains Network	R & S	ENV4200/848411/10	Feb., 2008	Peripherals
3	LISN	R & S	ESH3-Z5/825562/002	Feb., 2008	EUT
4	Pulse Limiter	R & S	ESH3-Z2/357.8810.52	Feb., 2008	
5	No.2 Shielded Room			N/A	

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

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks： In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

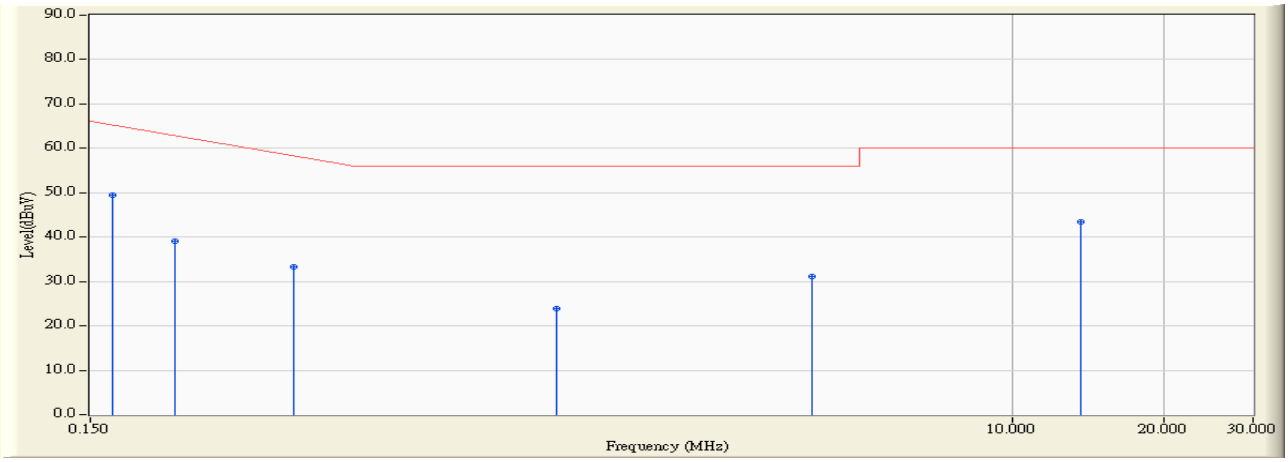
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane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

2.5. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.6. Test Result

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:16**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-B**

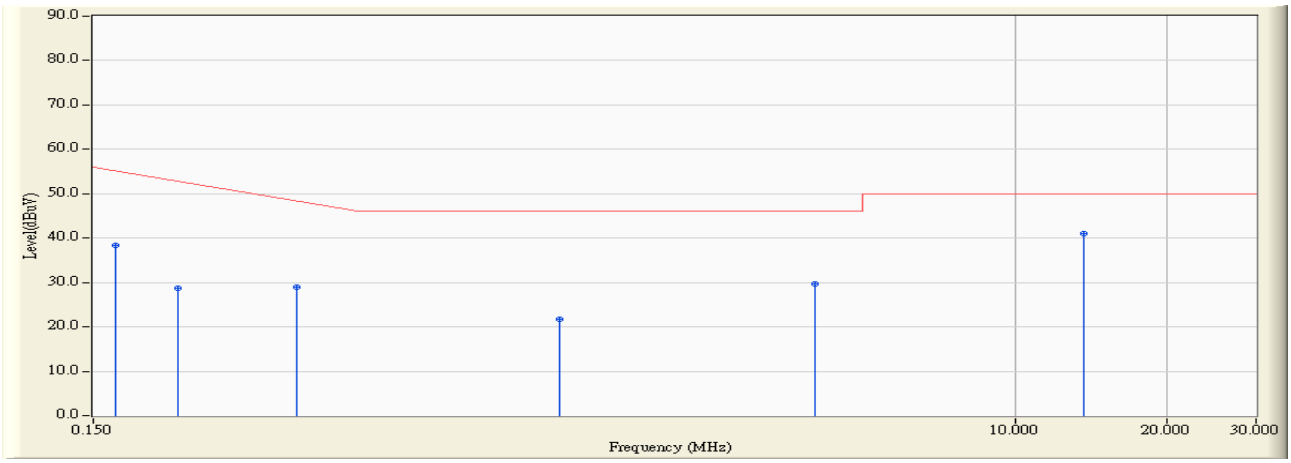


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.166	0.060	49.390	49.450	-16.093	65.543	QUASIPEAK
2		0.220	0.060	38.950	39.010	-24.990	64.000	QUASIPEAK
3		0.380	0.070	33.110	33.180	-26.249	59.429	QUASIPEAK
4		1.258	0.096	23.840	23.936	-32.064	56.000	QUASIPEAK
5		4.008	0.220	30.850	31.070	-24.930	56.000	QUASIPEAK
6		13.717	0.810	42.570	43.380	-16.620	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:16**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-B**

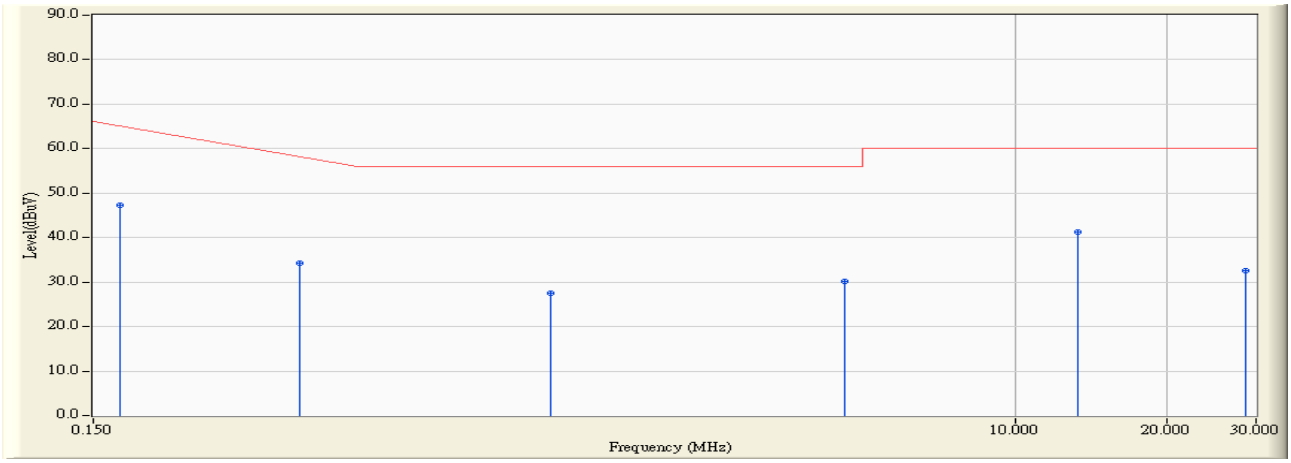


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	0.060	38.360	38.420	-17.123	55.543	AVERAGE
2		0.220	0.060	28.720	28.780	-25.220	54.000	AVERAGE
3		0.380	0.070	29.000	29.070	-20.359	49.429	AVERAGE
4		1.258	0.096	21.730	21.826	-24.174	46.000	AVERAGE
5		4.008	0.220	29.420	29.640	-16.360	46.000	AVERAGE
6	*	13.717	0.810	40.240	41.050	-8.950	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:20**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-B**

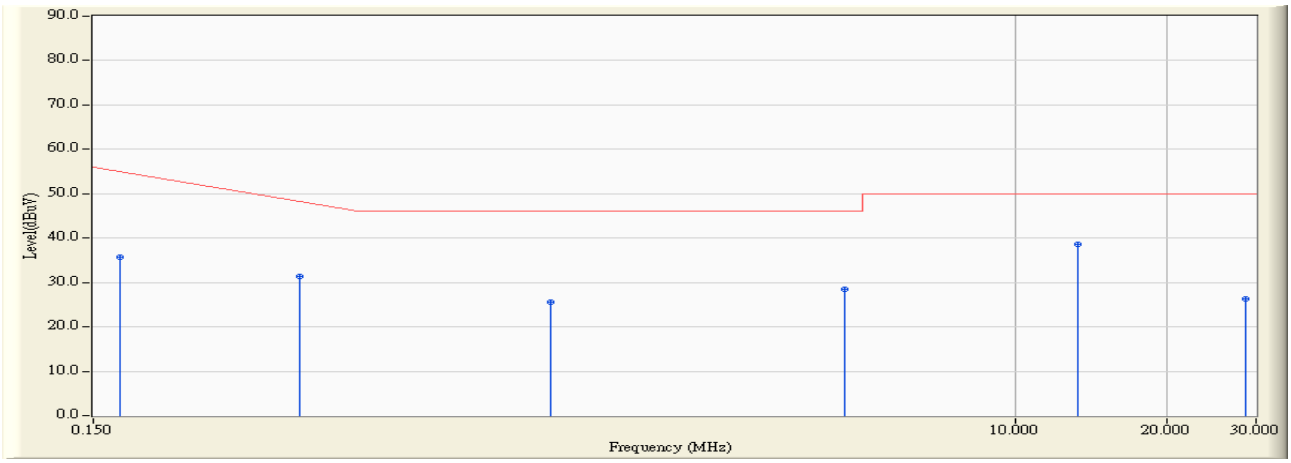


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.170	0.060	47.200	47.260	-18.169	65.429	QUASIPEAK
2		0.383	0.070	34.120	34.190	-25.153	59.343	QUASIPEAK
3		1.205	0.070	27.410	27.480	-28.520	56.000	QUASIPEAK
4		4.615	0.240	30.000	30.240	-25.760	56.000	QUASIPEAK
5		13.348	0.620	40.540	41.160	-18.840	60.000	QUASIPEAK
6		28.685	1.000	31.480	32.480	-27.520	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:20**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-B**

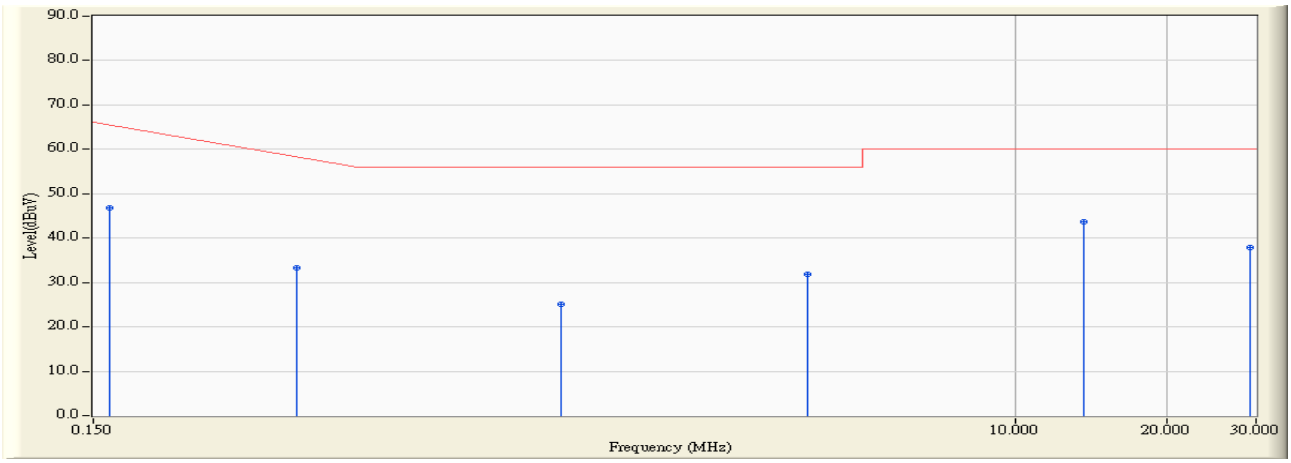


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	0.060	35.580	35.640	-19.789	55.429	AVERAGE
2		0.383	0.070	31.340	31.410	-17.933	49.343	AVERAGE
3		1.205	0.070	25.520	25.590	-20.410	46.000	AVERAGE
4		4.615	0.240	28.240	28.480	-17.520	46.000	AVERAGE
5	*	13.348	0.620	37.950	38.570	-11.430	50.000	AVERAGE
6		28.685	1.000	25.340	26.340	-23.660	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:30**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-G**

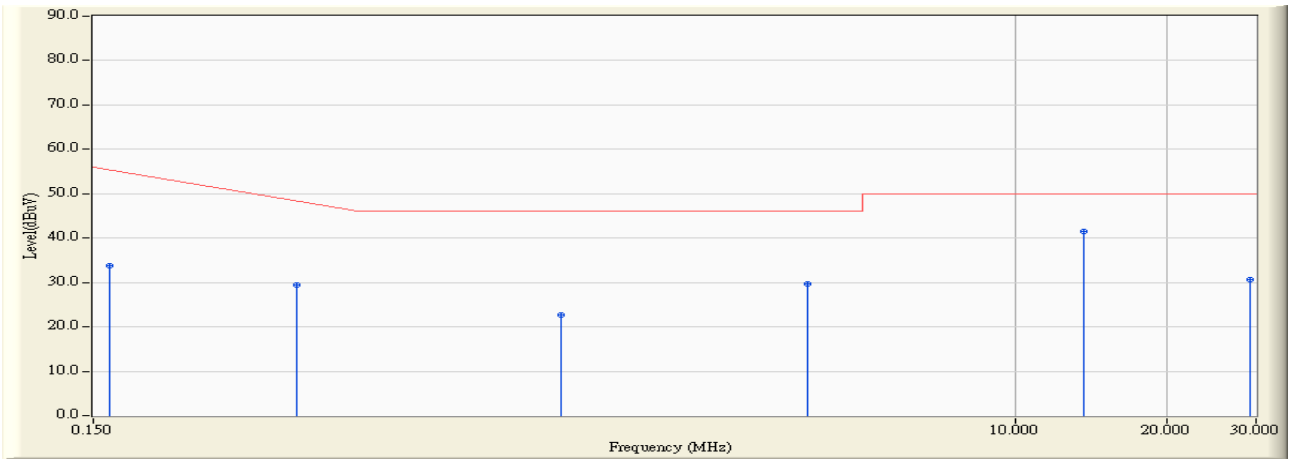


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	0.060	46.640	46.700	-18.957	65.657	QUASIPEAK
2		0.380	0.070	33.130	33.200	-26.229	59.429	QUASIPEAK
3		1.263	0.098	24.900	24.998	-31.002	56.000	QUASIPEAK
4		3.892	0.220	31.650	31.870	-24.130	56.000	QUASIPEAK
5	*	13.718	0.810	42.910	43.720	-16.280	60.000	QUASIPEAK
6		29.236	1.384	36.430	37.814	-22.186	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:30**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-G**

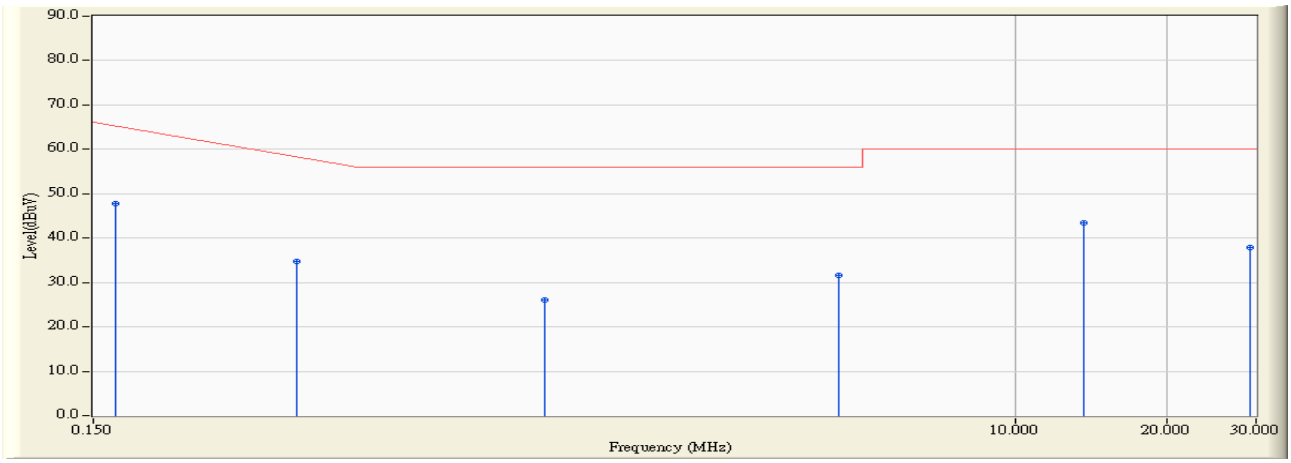


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	0.060	33.700	33.760	-21.897	55.657	AVERAGE
2		0.380	0.070	29.460	29.530	-19.899	49.429	AVERAGE
3		1.263	0.098	22.610	22.708	-23.292	46.000	AVERAGE
4		3.892	0.220	29.350	29.570	-16.430	46.000	AVERAGE
5	*	13.718	0.810	40.580	41.390	-8.610	50.000	AVERAGE
6		29.236	1.384	29.290	30.674	-19.326	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:33**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-G**

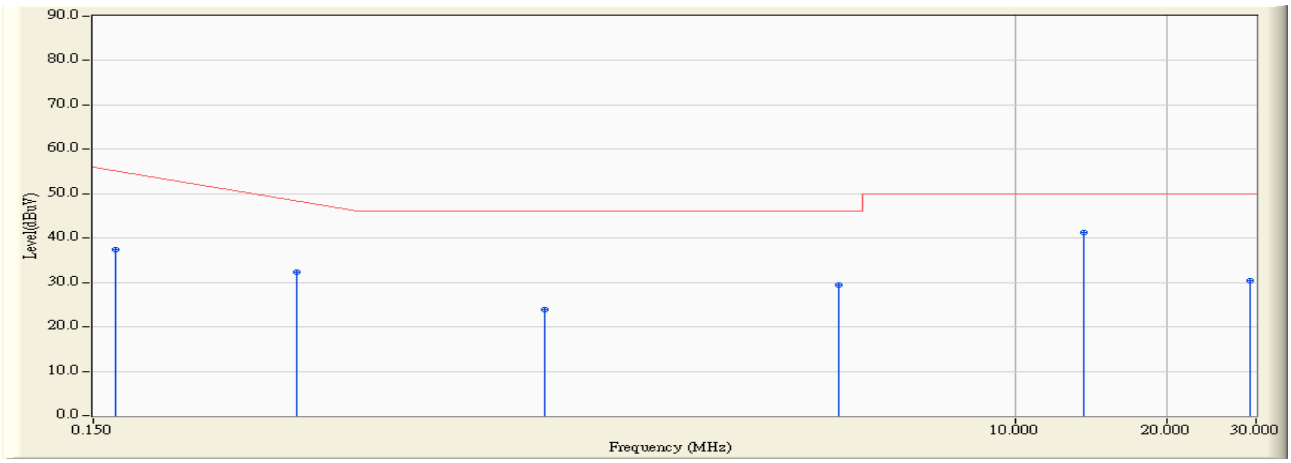


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	0.060	47.610	47.670	-17.873	65.543	QUASIPEAK
2		0.380	0.070	34.670	34.740	-24.689	59.429	QUASIPEAK
3		1.177	0.070	26.000	26.070	-29.930	56.000	QUASIPEAK
4		4.494	0.240	31.250	31.490	-24.510	56.000	QUASIPEAK
5	*	13.710	0.640	42.790	43.430	-16.570	60.000	QUASIPEAK
6		29.236	0.999	36.830	37.829	-22.171	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 13:33**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-G**

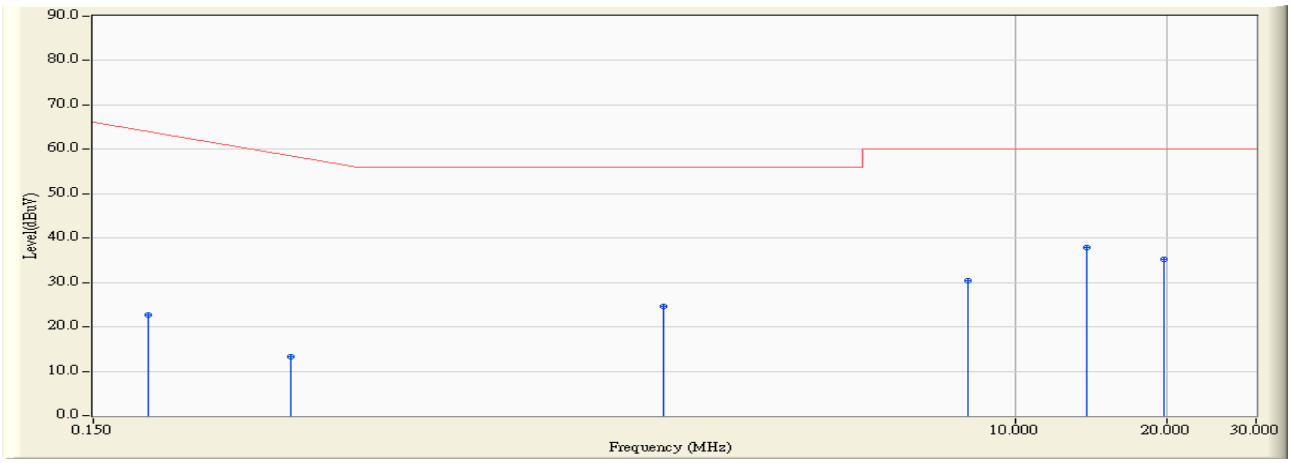


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	0.060	37.230	37.290	-18.253	55.543	AVERAGE
2		0.380	0.070	32.150	32.220	-17.209	49.429	AVERAGE
3		1.177	0.070	23.780	23.850	-22.150	46.000	AVERAGE
4		4.494	0.240	29.230	29.470	-16.530	46.000	AVERAGE
5	*	13.710	0.640	40.500	41.140	-8.860	50.000	AVERAGE
6		29.236	0.999	29.430	30.429	-19.571	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 09:57**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-B**

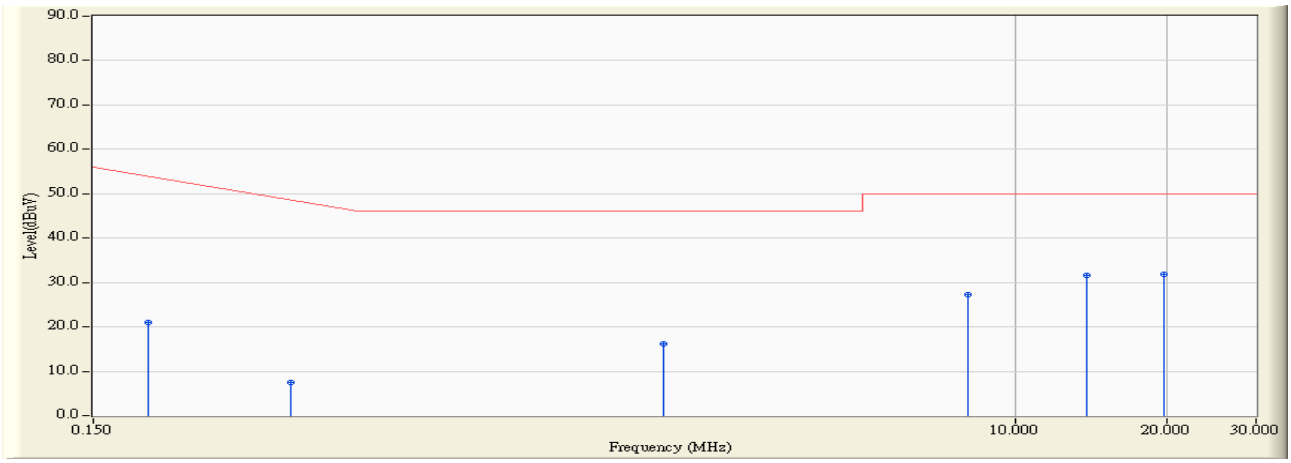


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	22.690	22.750	-42.021	64.771	QUASIPEAK
2		0.369	0.070	13.150	13.220	-46.523	59.743	QUASIPEAK
3		2.013	0.180	24.350	24.530	-31.470	56.000	QUASIPEAK
4		8.055	0.423	30.070	30.493	-29.507	60.000	QUASIPEAK
5	*	13.916	0.837	37.070	37.907	-22.093	60.000	QUASIPEAK
6		19.709	1.088	34.170	35.258	-24.742	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 09:57**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-B**

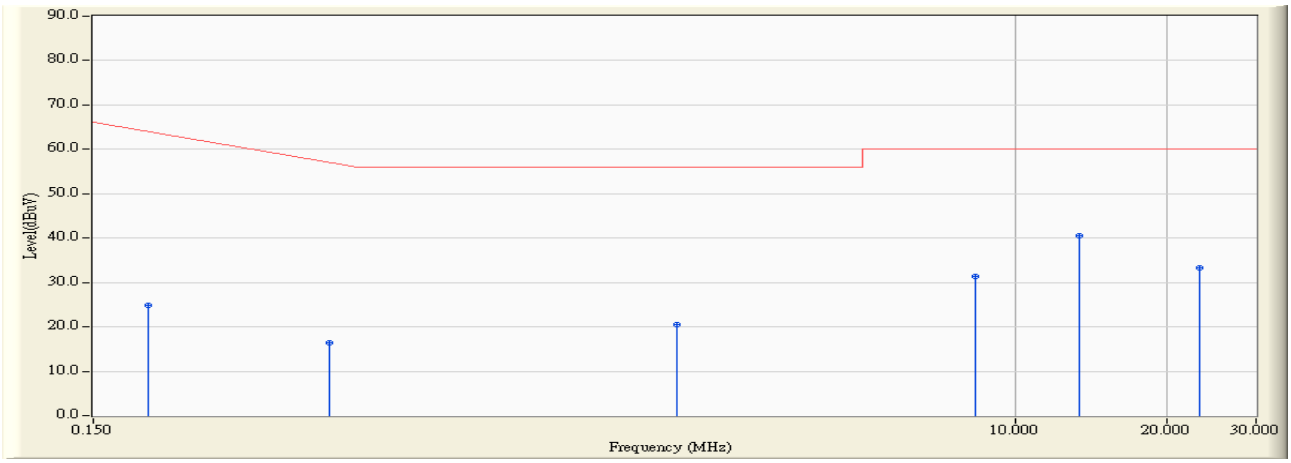


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	20.960	21.020	-33.751	54.771	AVERAGE
2		0.369	0.070	7.400	7.470	-42.273	49.743	AVERAGE
3		2.013	0.180	15.890	16.070	-29.930	46.000	AVERAGE
4		8.055	0.423	26.910	27.333	-22.667	50.000	AVERAGE
5		13.916	0.837	30.720	31.557	-18.443	50.000	AVERAGE
6	*	19.709	1.088	30.770	31.858	-18.142	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 10:14**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-B**

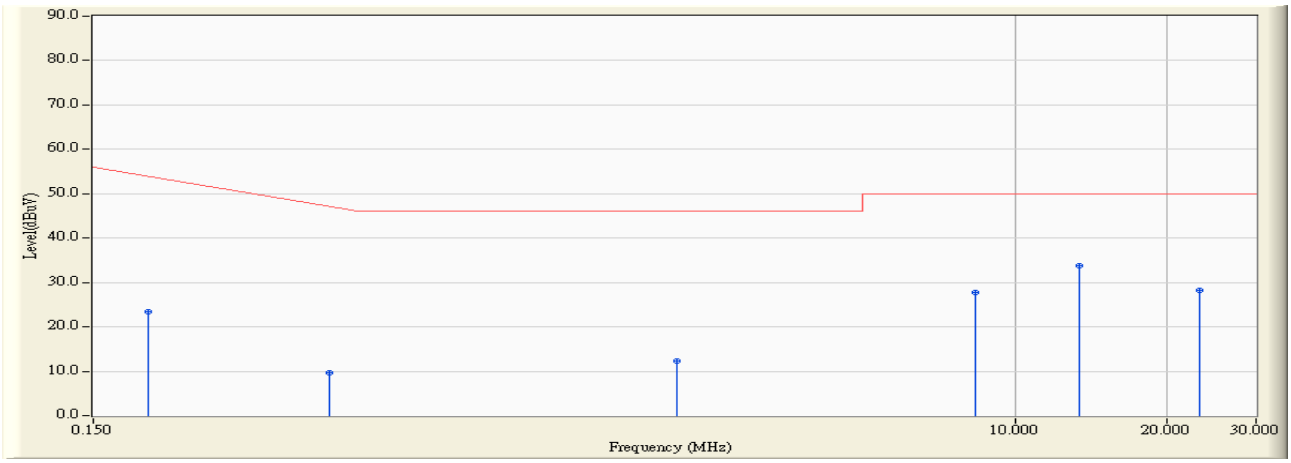


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	24.750	24.810	-39.961	64.771	QUASIPEAK
2		0.439	0.070	16.240	16.310	-41.433	57.743	QUASIPEAK
3		2.146	0.090	20.300	20.390	-35.610	56.000	QUASIPEAK
4		8.323	0.360	30.920	31.280	-28.720	60.000	QUASIPEAK
5	*	13.395	0.630	39.850	40.480	-19.520	60.000	QUASIPEAK
6		23.127	0.920	32.400	33.320	-26.680	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 10:14**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-B**

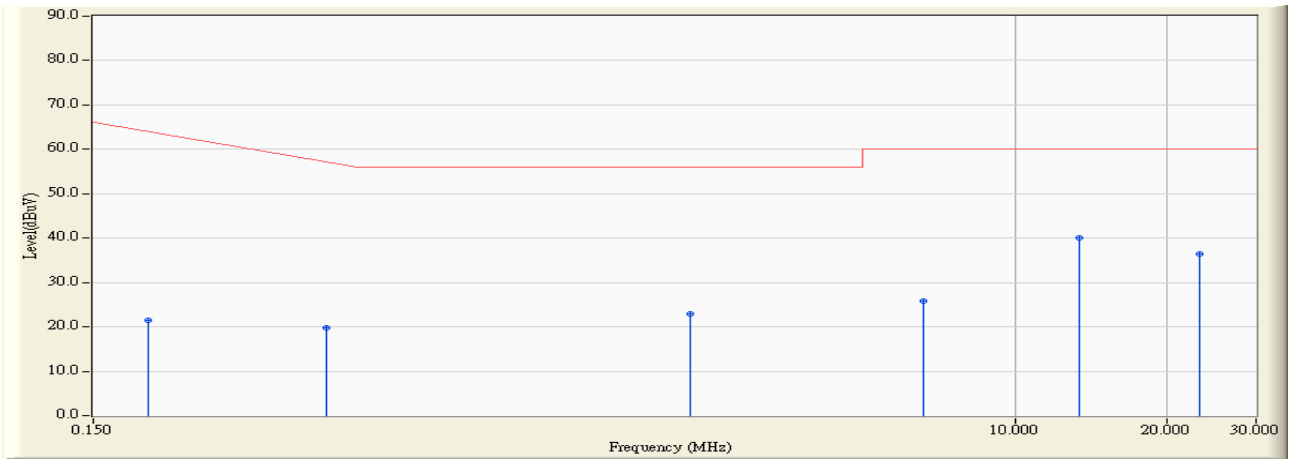


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	23.270	23.330	-31.441	54.771	AVERAGE
2		0.439	0.070	9.650	9.720	-38.023	47.743	AVERAGE
3		2.146	0.090	12.160	12.250	-33.750	46.000	AVERAGE
4		8.323	0.360	27.440	27.800	-22.200	50.000	AVERAGE
5	*	13.395	0.630	33.250	33.880	-16.120	50.000	AVERAGE
6		23.127	0.920	27.380	28.300	-21.700	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 10:19**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-G**

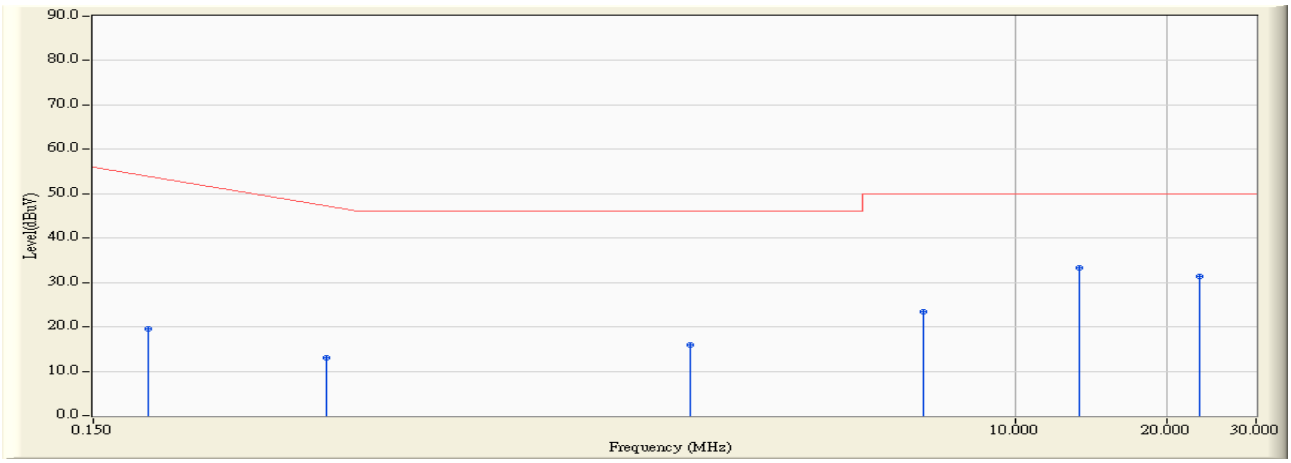


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	21.400	21.460	-43.311	64.771	QUASIPEAK
2		0.435	0.070	19.810	19.880	-37.977	57.857	QUASIPEAK
3		2.271	0.190	22.840	23.030	-32.970	56.000	QUASIPEAK
4		6.576	0.355	25.520	25.875	-34.125	60.000	QUASIPEAK
5	*	13.382	0.790	39.160	39.950	-20.050	60.000	QUASIPEAK
6		23.129	1.220	35.290	36.510	-23.490	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 10:19**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line1**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-G**

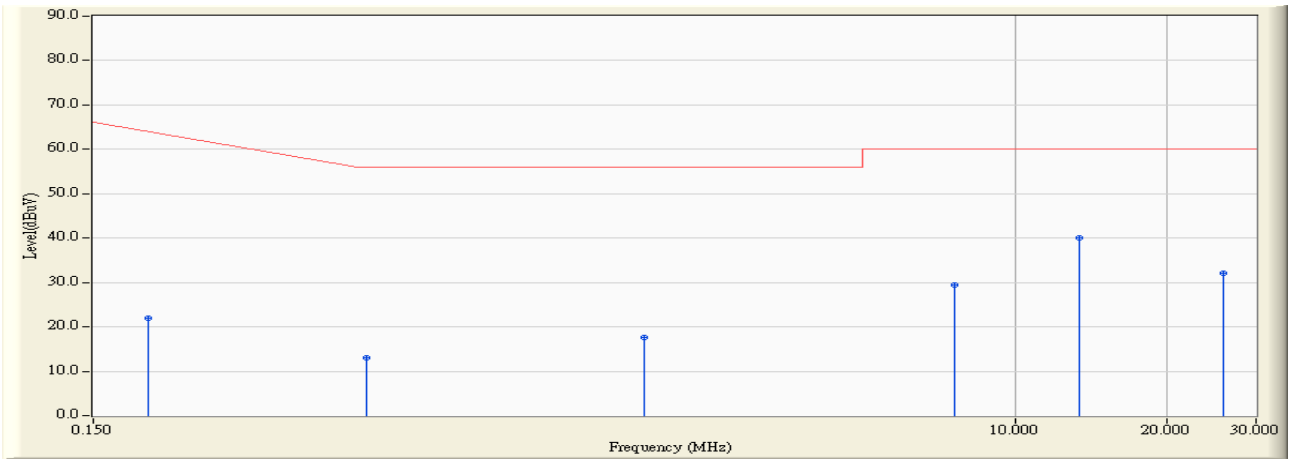


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	19.580	19.640	-35.131	54.771	AVERAGE
2		0.435	0.070	13.040	13.110	-34.747	47.857	AVERAGE
3		2.271	0.190	15.700	15.890	-30.110	46.000	AVERAGE
4		6.576	0.355	22.940	23.295	-26.705	50.000	AVERAGE
5	*	13.382	0.790	32.450	33.240	-16.760	50.000	AVERAGE
6		23.129	1.220	30.190	31.410	-18.590	50.000	AVERAGE

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 10:25**
Limit : CISPR_B_00M_QP	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-G**

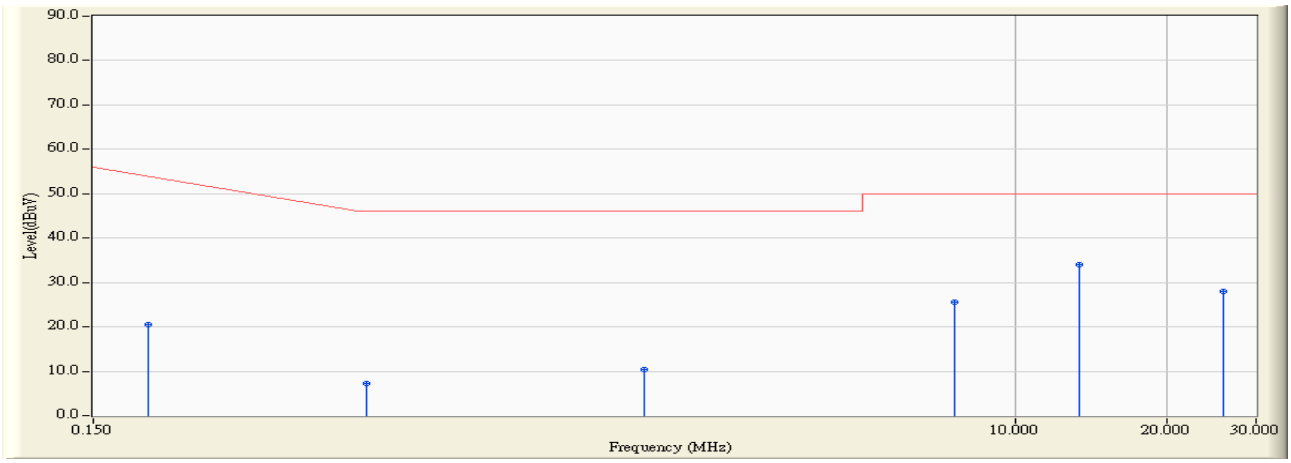


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	21.980	22.040	-42.731	64.771	QUASIPEAK
2		0.521	0.070	12.890	12.960	-43.040	56.000	QUASIPEAK
3		1.841	0.080	17.610	17.690	-38.310	56.000	QUASIPEAK
4		7.591	0.340	29.160	29.500	-30.500	60.000	QUASIPEAK
5	*	13.374	0.626	39.360	39.986	-20.014	60.000	QUASIPEAK
6		25.877	1.000	31.130	32.130	-27.870	60.000	QUASIPEAK

Note:

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

Site : ShieldingrRoom 2	**Time : 2008/02/21 - 10:25**
Limit : CISPR_B_00M_AV	**Margin : 0**
EUT : Wireless ADSL Router	**Probe : QTK-LISN-SR2 - Line2**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-G**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	0.060	20.380	20.440	-34.331	54.771	AVERAGE
2		0.521	0.070	7.150	7.220	-38.780	46.000	AVERAGE
3		1.841	0.080	10.210	10.290	-35.710	46.000	AVERAGE
4		7.591	0.340	25.210	25.550	-24.450	50.000	AVERAGE
5	*	13.374	0.626	33.400	34.026	-15.974	50.000	AVERAGE
6		25.877	1.000	26.870	27.870	-22.130	50.000	AVERAGE

Note:

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

3. Peak Power Output

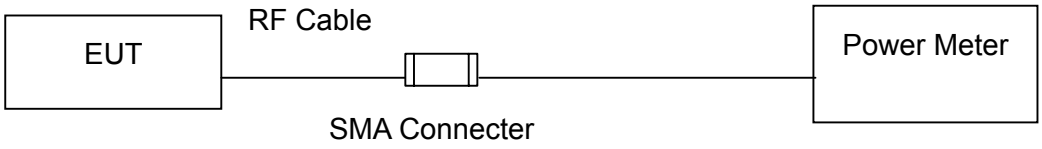
3.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Power Meter	Anritsz	ML2495/ 6K00003357	May, 2007
2	Power Sensor	Anritsz	MA2491 /034457	May, 2007
3	No.1 OATS			Sep., 2007

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

3.2. Test Setup



3.3. Test procedures

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.4. Limits

The maximum peak power shall be less 1 Watt.

3.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB.

3.6. Test Result

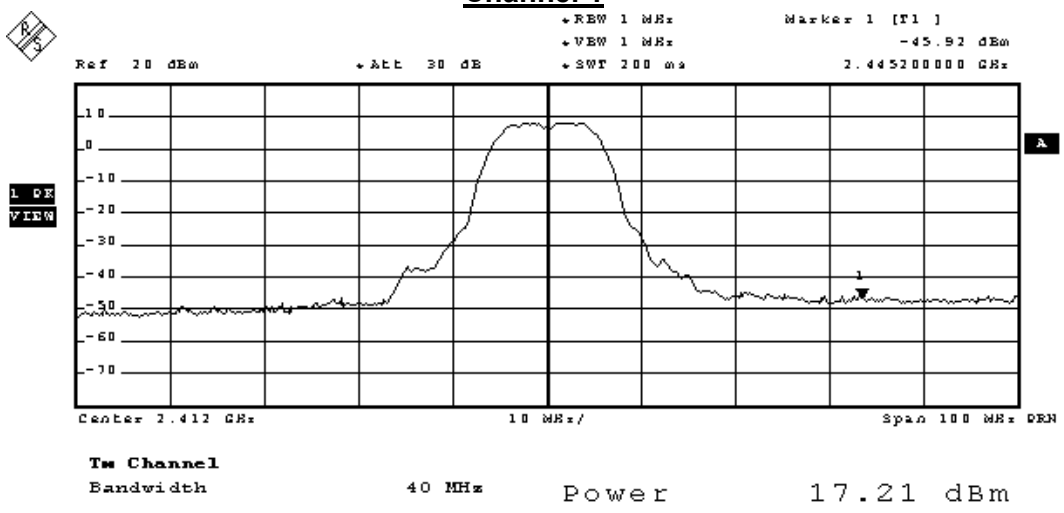
Product	Wireless ADSL Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2008/02/25	Test Site	No.1 OATS

IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	17.21	1Watt= 30 dBm	Pass
6	2437	16.75	1Watt= 30 dBm	Pass
11	2462	16.96	1Watt= 30 dBm	Pass

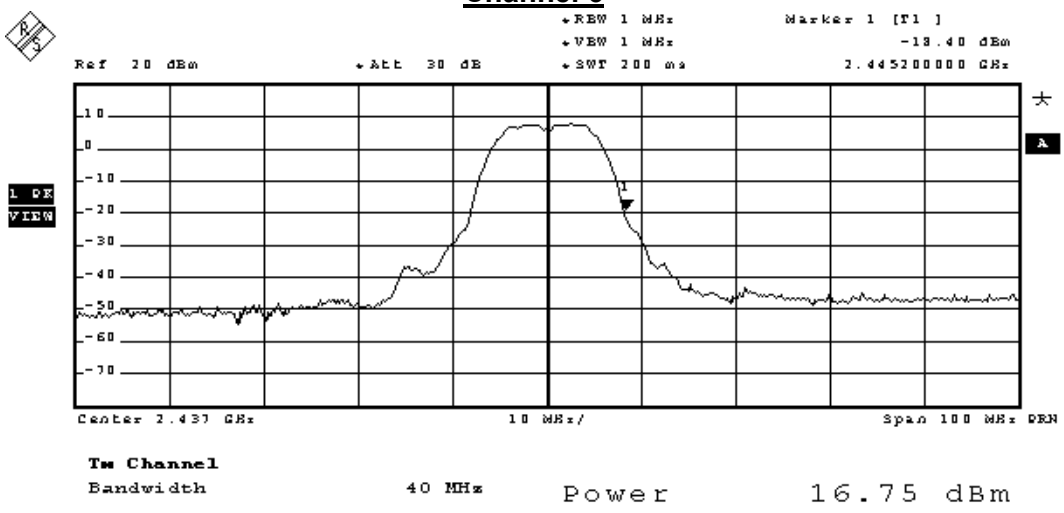
Peak Power Output Value (dBm)						
Channel No.	Frequency (MHz)	Data Rate				Required Limit
		1 Mbps	2Mbps	5.5Mbps	11Mbps	
1	2412.00	17.21	16.86	16.37	15.46	1Watt= 30 dBm
6	2437.00	16.75	16.02	15.43	14.41	1Watt= 30 dBm
11	2462.00	16.96	16.14	15.49	14.39	1Watt= 30 dBm

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

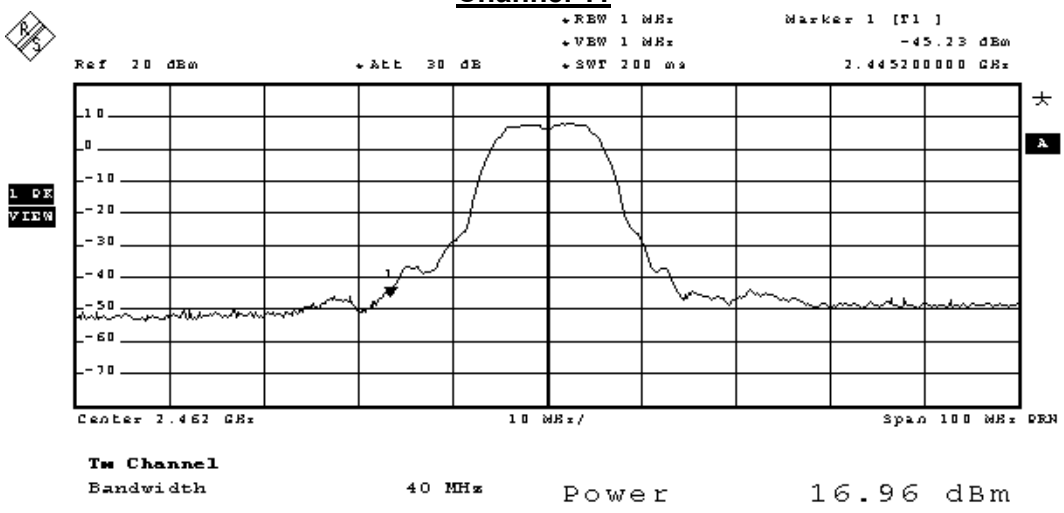
Channel 1


RBW 1 MHz
VBW 1 MHz
SWT 200 ms
Marker 1 [T1]
-45.92 dBm
2.44520000 GHz
Ref 20 dBm
Att 30 dB
1 PK
VIEW
A
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.412 GHz
10 MHz/
Span 100 MHz
Tx Channel
Bandwidth
40 MHz
Power
17.21 dBm

Channel 6


RBW 1 MHz
VBW 1 MHz
SWT 200 ms
Marker 1 [T1]
-13.40 dBm
2.44520000 GHz
Ref 20 dBm
Att 30 dB
10
0
-10
-20
-30
-40
-50
-60
-70
1 PK
VIEW
A
Center 2.437 GHz
10 MHz/
Span 100 MHz
RBW
Tx Channel
Bandwidth
40 MHz
Power
16.75 dBm

Channel 11


RBW 1 MHz
VBW 1 MHz
SWT 200 ms
Marker 1 [T1]
-45.23 dBm
2.44520000 GHz
Ref 20 dBm
Att 30 dB
1 PK
VIEW
10
0
-10
-20
-30
-40
-50
-60
-70
A
Center 2.462 GHz
10 MHz/
Span 100 MHz
Tx Channel
Bandwidth
40 MHz
Power
16.96 dBm

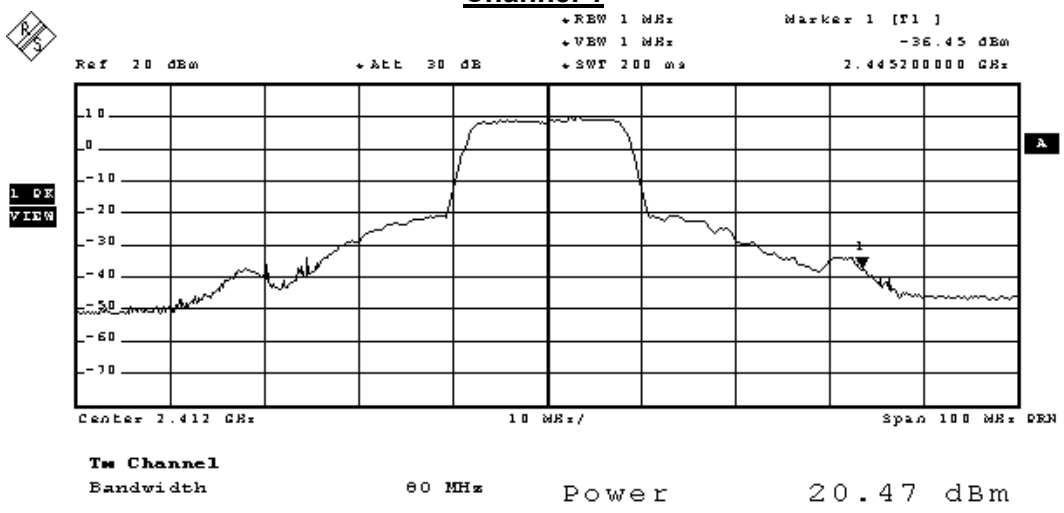
Product	Wireless ADSL Router		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2008/02/25	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	20.47	1Watt= 30 dBm	Pass
6	2437	20.82	1Watt= 30 dBm	Pass
11	2462	20.45	1Watt= 30 dBm	Pass

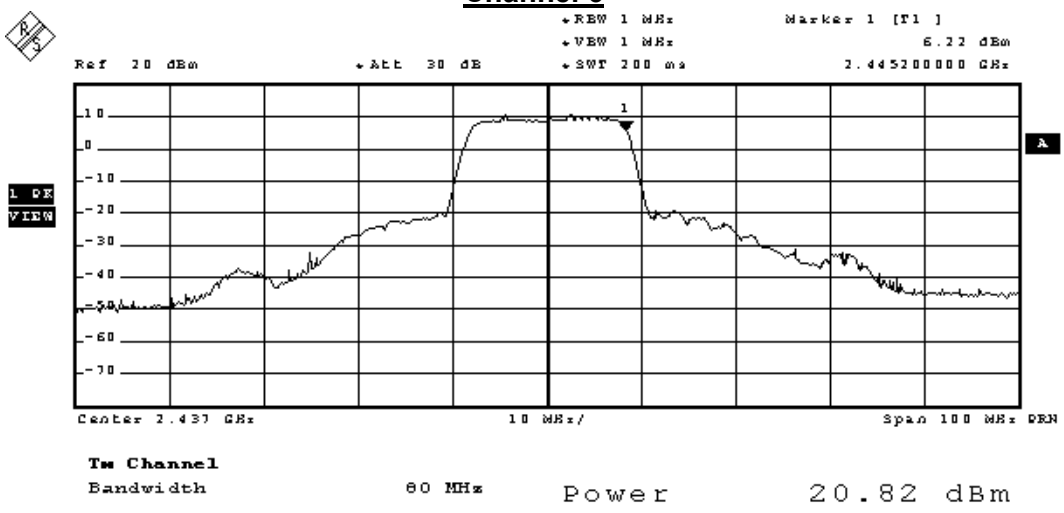
Peak Power Output Value(dBm)										
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps	
1	2412.00	20.47	20.14	19.40	18.46	17.70	16.86	15.59	14.97	1Watt= 30 dBm
6	2437.00	20.82	20.12	19.04	18.44	17.15	16.56	15.84	15.08	1Watt= 30 dBm
11	2462.00	20.45	19.86	19.21	18.31	17.64	16.62	15.74	15.02	1Watt= 30 dBm

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

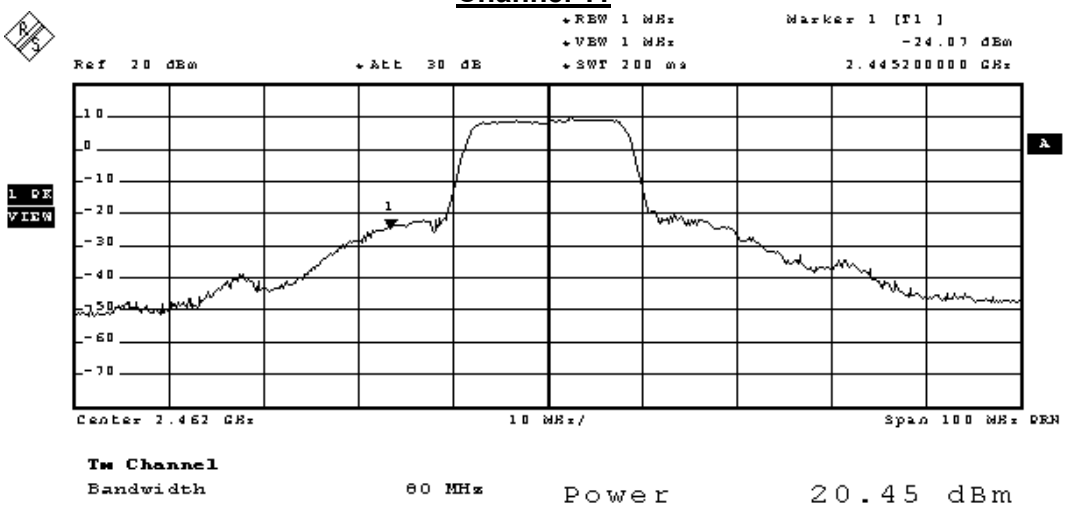
Channel 1


RBW 1 MHz
VBW 1 MHz
SWT 200 ms
Marker 1 [T1]
-36.45 dBm
2.445200000 GHz
Ref 20 dBm
Att 30 dB
10
0
-10
-20
-30
-40
-50
-60
-70
1 PK
VIEW
A
Center 2.412 GHz
10 MHz/
Span 100 MHz
Tx Channel
Bandwidth
80 MHz
Power
20.47 dBm

Channel 6


RBW 1 MHz
VBW 1 MHz
SWT 200 ms
Marker 1 [T1]
6.22 dBm
2.44520000 GHz
Ref 20 dBm
Att 30 dB
10
0
-10
-20
-30
-40
-50
-60
-70
1 PK VIEW
A
Center 2.437 GHz
10 MHz/
Span 100 MHz
Tx Channel
Bandwidth
80 MHz
Power
20.82 dBm

Channel 11


RBW 1 MHz
VBW 1 MHz
SWT 200 ms
Marker 1 [T1]
-24.07 dBm
2.445200000 GHz
Ref 20 dBm
Att 30 dB
10
0
-10
-20
-30
-40
-50
-60
-70
1 PK
VIEW
A
Center 2.462 GHz
10 MHz/
Span 100 MHz
Tx Channel
Bandwidth
80 MHz
Power
20.45 dBm

4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the test:

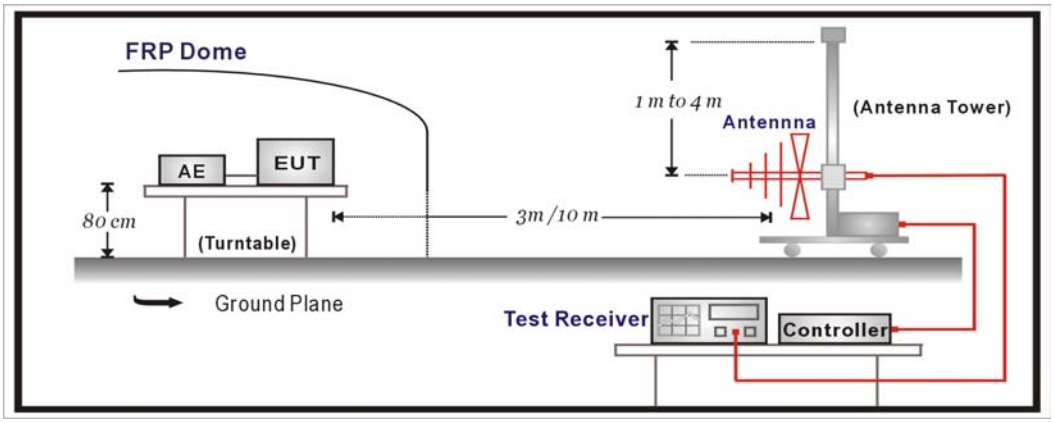
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Test Receiver	R & S	ESCS 30 / 836858/023	Apr., 2007
2	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2007
3	X	Pre-Amplifier	HP	8449B / 3008A01123	Nov., 2007
4	X	Bilog Antenna	Schaffner	CBL6112B / 2708	Sep., 2007
5	X	Spectrum Analyzer	Advantest	R3162 / 121200166	Feb., 2008
6	X	Pre-Amplifier	QuieTek	AP-025C / 002	N/A
7	X	Horn Antenna	Electro Metrics	EM-6961 / 103325	Mar., 2007
8	No.2 OATS				Sep., 2007

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

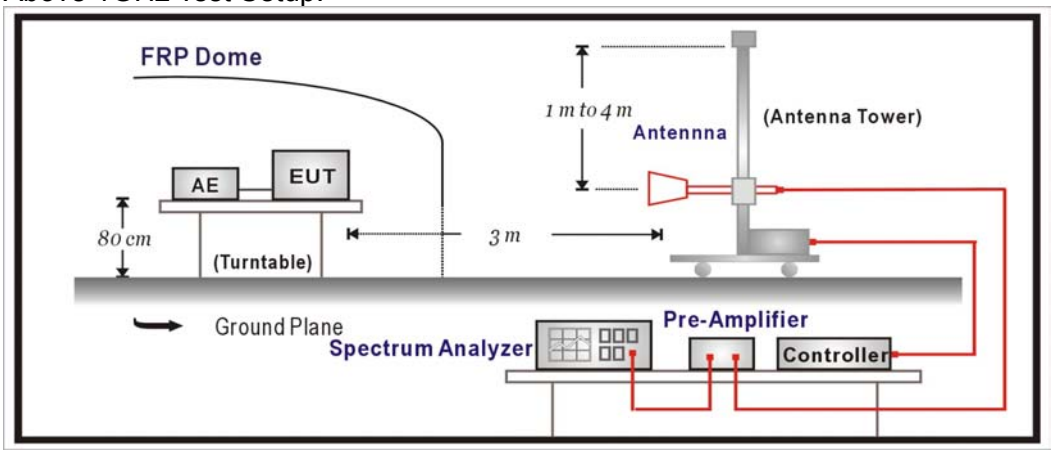
2. Last Cal showing “N/A” means it is used to Pre-test, not for final test.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	dBuV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: 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 harminics is checked.

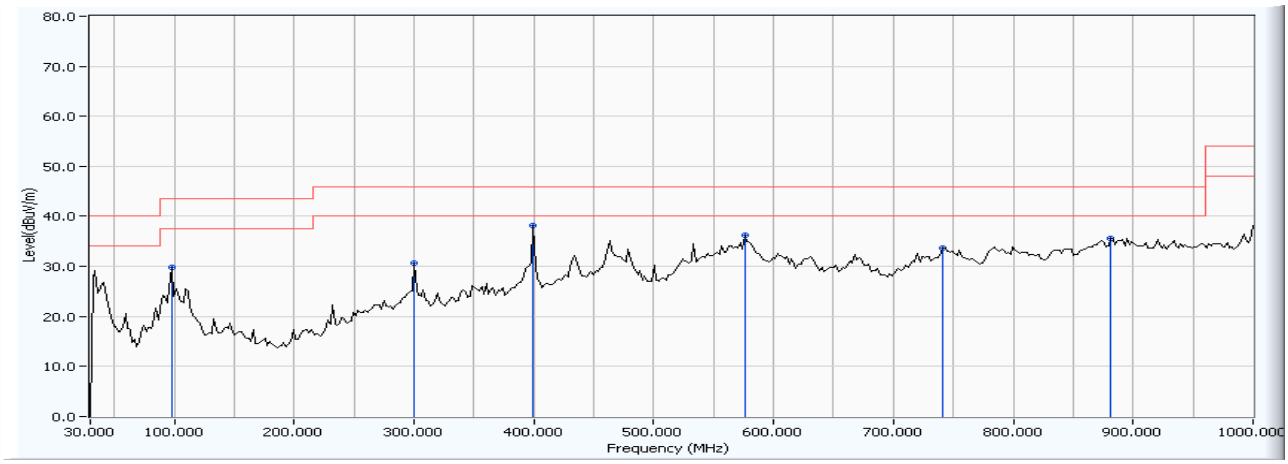
4.5. Uncertainty

The measurement uncertainty
30MHz～1GHz as ±3.19dB
1GHz～26.5Ghz as ±3.9dB

4.6. Test Result

30MHz-1GHz Spurious

Site : Site 2	**Time : 2008/02/22 - 13:15**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-B**

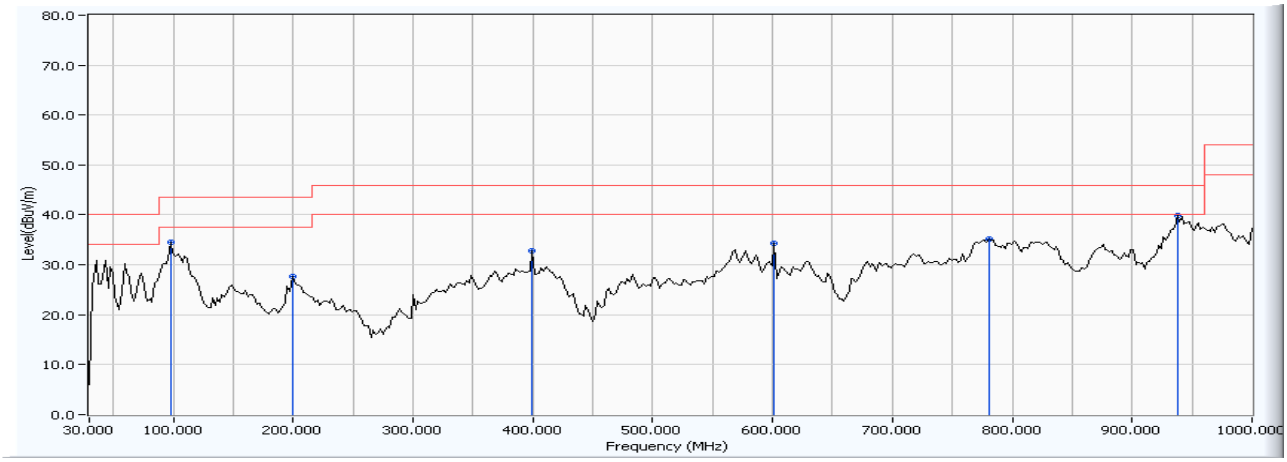


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		98.036	0.922	28.862	29.784	-13.716	43.500	QUASIPEAK
2		300.200	6.038	24.556	30.594	-15.406	46.000	QUASIPEAK
3	*	399.339	10.661	27.453	38.114	-7.886	46.000	QUASIPEAK
4		576.232	13.930	22.221	36.151	-9.849	46.000	QUASIPEAK
5		741.463	13.358	20.340	33.698	-12.302	46.000	QUASIPEAK
6		881.423	13.399	22.226	35.624	-10.376	46.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/22 - 13:19**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-B**

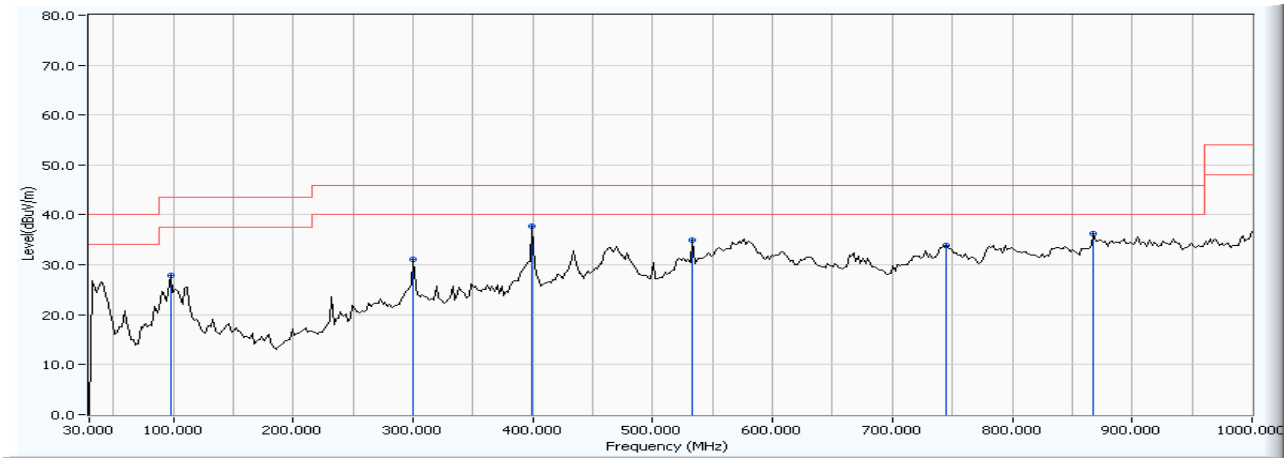


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		98.036	8.509	26.045	34.554	-8.946	43.500	QUASIPEAK
2		199.118	6.196	21.501	27.697	-15.803	43.500	QUASIPEAK
3		399.339	9.047	23.803	32.851	-13.149	46.000	QUASIPEAK
4		601.503	8.141	26.071	34.212	-11.788	46.000	QUASIPEAK
5		780.341	14.363	20.848	35.211	-10.789	46.000	QUASIPEAK
6	*	937.796	17.679	22.288	39.967	-6.033	46.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/22 - 13:32**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-G**

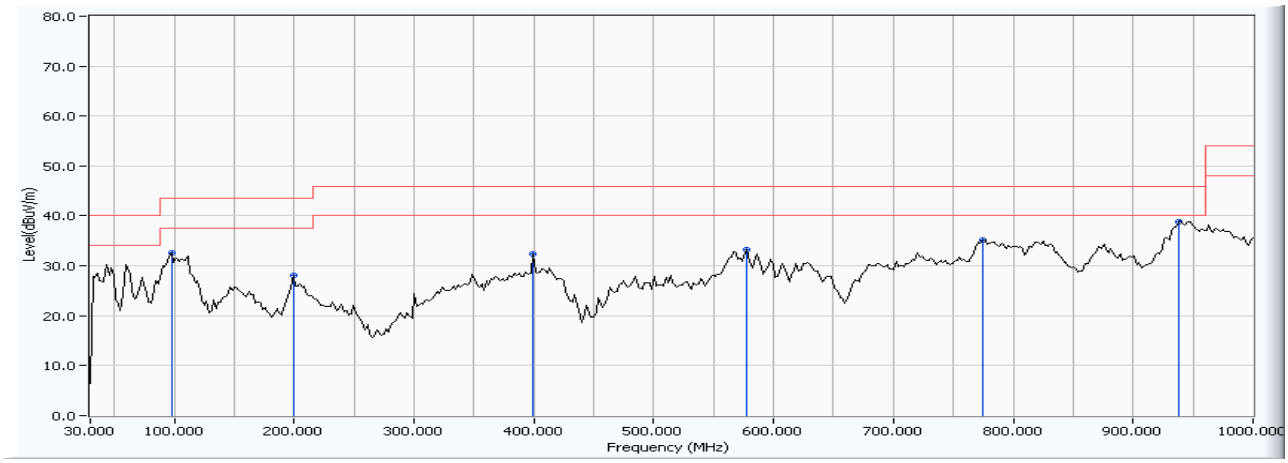


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		98.036	0.922	26.858	27.780	-15.720	43.500	QUASIPEAK
2		300.200	6.038	24.963	31.001	-14.999	46.000	QUASIPEAK
3	*	399.339	10.661	27.172	37.833	-8.167	46.000	QUASIPEAK
4		533.467	9.938	24.977	34.915	-11.085	46.000	QUASIPEAK
5		745.351	12.923	20.938	33.861	-12.139	46.000	QUASIPEAK
6		867.816	13.607	22.547	36.154	-9.846	46.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/22 - 13:38**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-G**

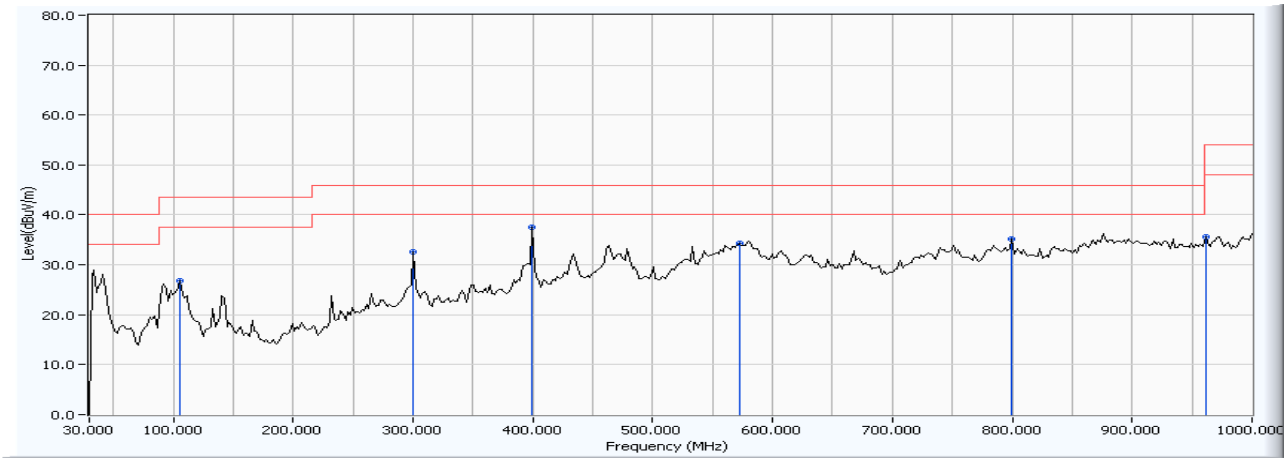


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		98.036	8.509	24.072	32.581	-10.919	43.500	QUASIPEAK
2		199.118	6.196	21.863	28.059	-15.441	43.500	QUASIPEAK
3		399.339	9.047	23.264	32.312	-13.688	46.000	QUASIPEAK
4		578.176	13.025	20.326	33.350	-12.650	46.000	QUASIPEAK
5		774.509	14.410	20.814	35.224	-10.776	46.000	QUASIPEAK
6	*	937.796	17.679	21.192	38.871	-7.129	46.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/23 - 15:17**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-B**

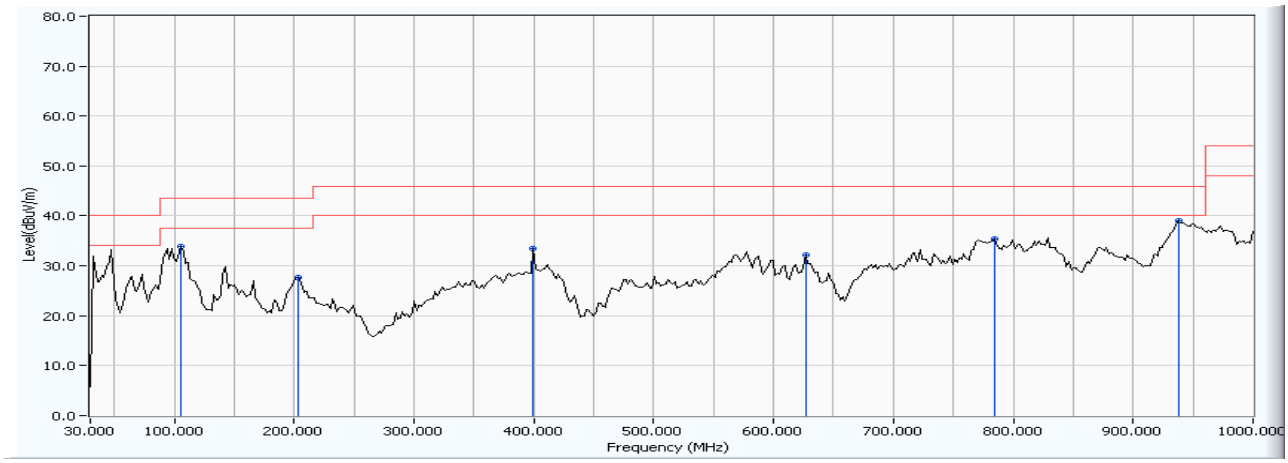


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		105.812	1.255	25.583	26.839	-16.661	43.500	QUASIPEAK
2		300.200	6.038	26.577	32.615	-13.385	46.000	QUASIPEAK
3	*	399.339	10.661	26.912	37.573	-8.427	46.000	QUASIPEAK
4		572.345	13.609	20.642	34.251	-11.749	46.000	QUASIPEAK
5		799.780	12.186	23.023	35.209	-10.791	46.000	QUASIPEAK
6		961.122	12.608	23.005	35.613	-18.387	54.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/23 - 15:21**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-B**

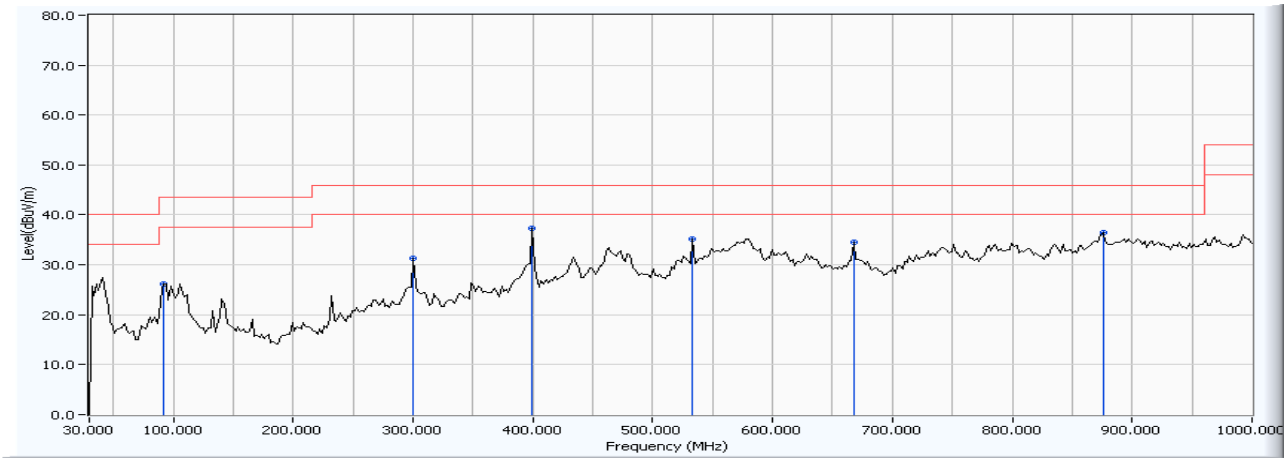


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		105.812	9.512	24.338	33.851	-9.649	43.500	QUASIPEAK
2		203.006	6.513	21.105	27.618	-15.882	43.500	QUASIPEAK
3		399.339	9.047	24.513	33.561	-12.439	46.000	QUASIPEAK
4		626.774	10.606	21.634	32.240	-13.760	46.000	QUASIPEAK
5		784.228	14.108	21.221	35.329	-10.671	46.000	QUASIPEAK
6	*	937.796	17.679	21.442	39.121	-6.879	46.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/23 - 15:30**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-G**

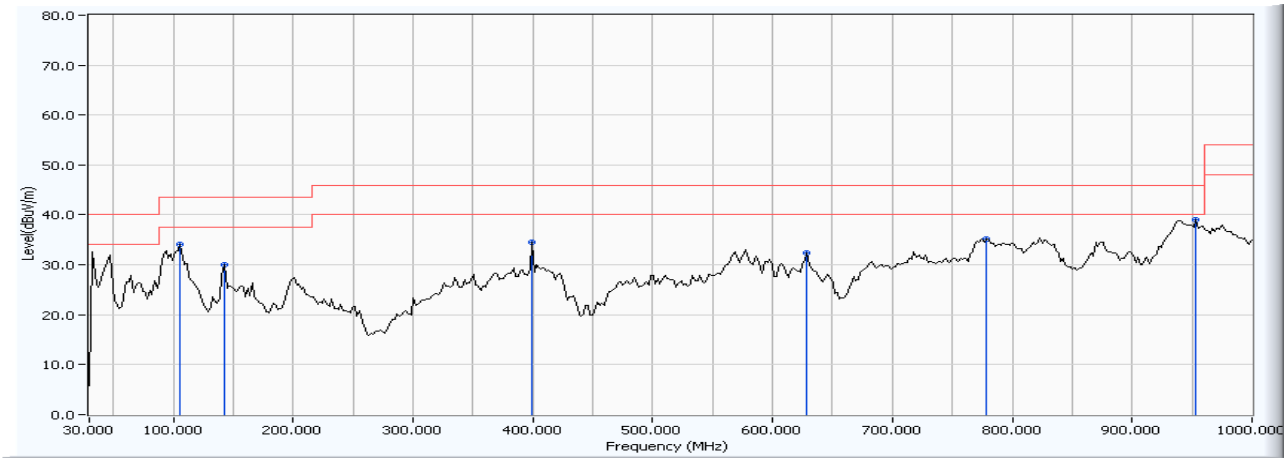


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		92.204	0.416	25.768	26.184	-17.316	43.500	QUASIPEAK
2		300.200	6.038	25.375	31.413	-14.587	46.000	QUASIPEAK
3	*	399.339	10.661	26.572	37.233	-8.767	46.000	QUASIPEAK
4		533.467	9.938	25.194	35.132	-10.868	46.000	QUASIPEAK
5		667.595	10.493	24.090	34.583	-11.417	46.000	QUASIPEAK
6		875.591	14.086	22.374	36.460	-9.540	46.000	QUASIPEAK

Note:

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

Site : Site 2	**Time : 2008/02/23 - 15:34**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB3_FCC_30-1G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 2: Transmit (AC-AC)-G**



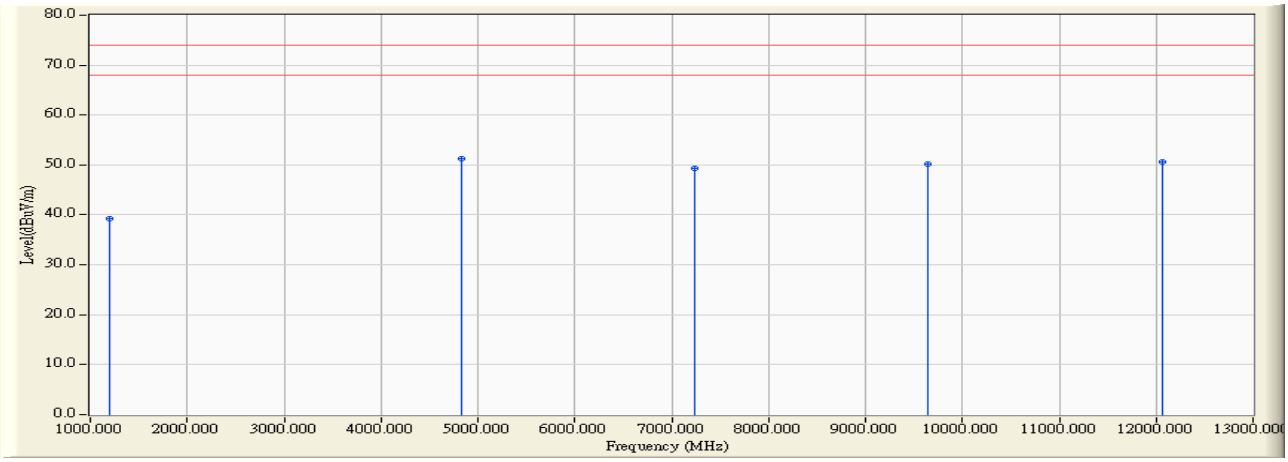
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		105.812	9.512	24.688	34.201	-9.299	43.500	QUASIPEAK
2		142.745	3.861	26.218	30.079	-13.421	43.500	QUASIPEAK
3		399.339	9.047	25.479	34.527	-11.473	46.000	QUASIPEAK
4		628.717	10.817	21.641	32.458	-13.542	46.000	QUASIPEAK
5		778.397	14.405	20.837	35.242	-10.758	46.000	QUASIPEAK
6	*	953.347	16.132	22.819	38.951	-7.049	46.000	QUASIPEAK

Note:

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

Harmonic & Spurious:

Site : Site 2	**Time : 2008/02/25 - 19:39**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-B**

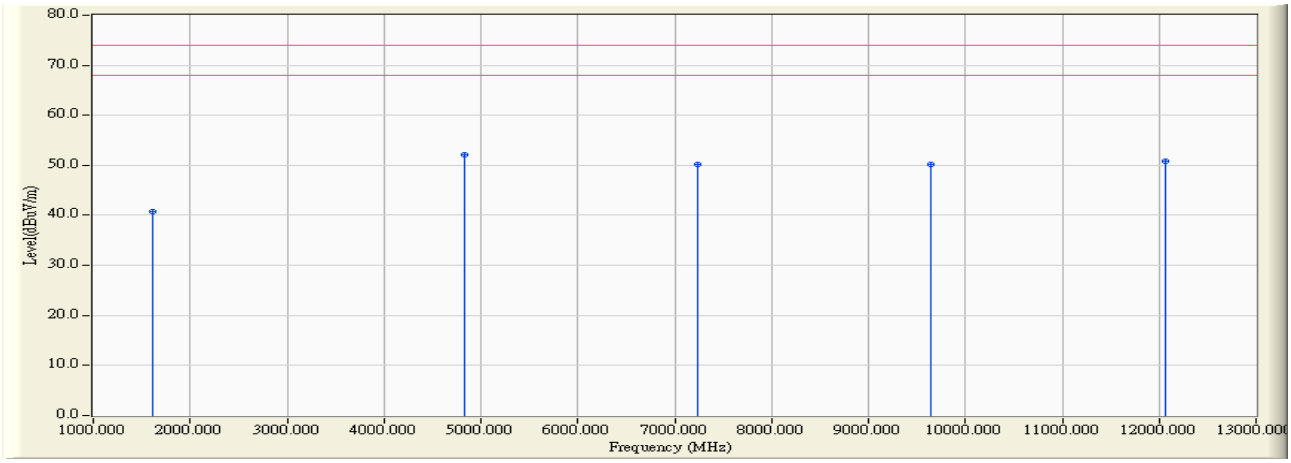


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1200.120	-7.987	47.300	39.314	-34.686	74.000	54.000	PEAK
2	*	4823.960	3.976	47.260	51.236	-22.764	74.000	54.000	PEAK
3		7235.800	11.440	37.800	49.241	-24.759	74.000	54.000	PEAK
4		9647.880	16.092	34.000	50.092	-23.908	74.000	54.000	PEAK
5		12060.400	17.524	33.140	50.664	-23.336	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 19:49**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-B**

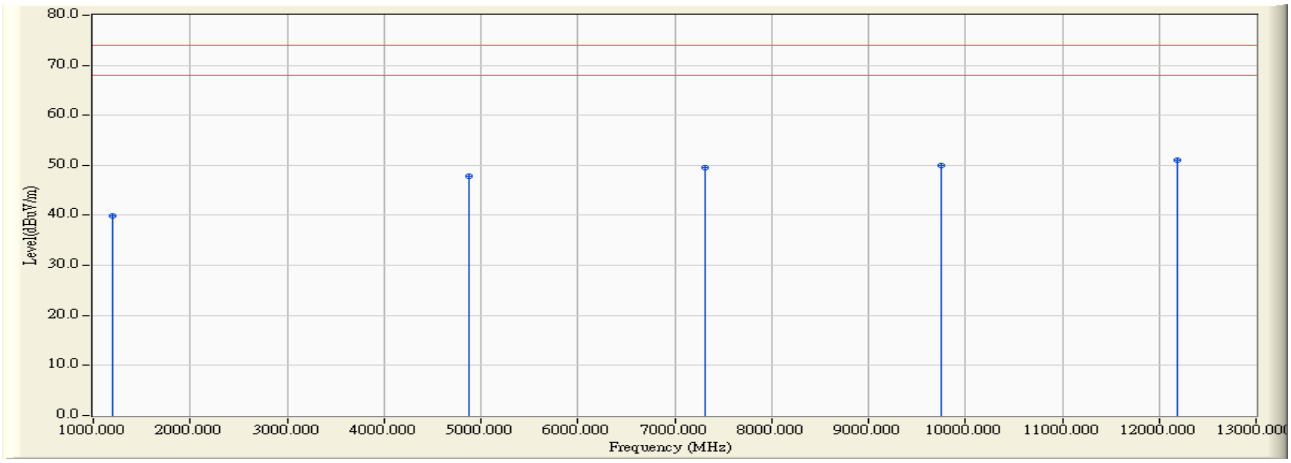


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1607.940	-6.384	47.180	40.796	-33.204	74.000	54.000	PEAK
2	*	4824.030	3.976	48.110	52.086	-21.914	74.000	54.000	PEAK
3		7235.960	11.914	38.260	50.174	-23.826	74.000	54.000	PEAK
4		9647.780	14.794	35.340	50.134	-23.866	74.000	54.000	PEAK
5		12060.230	17.406	33.460	50.866	-23.134	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 20:28**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH6-B**

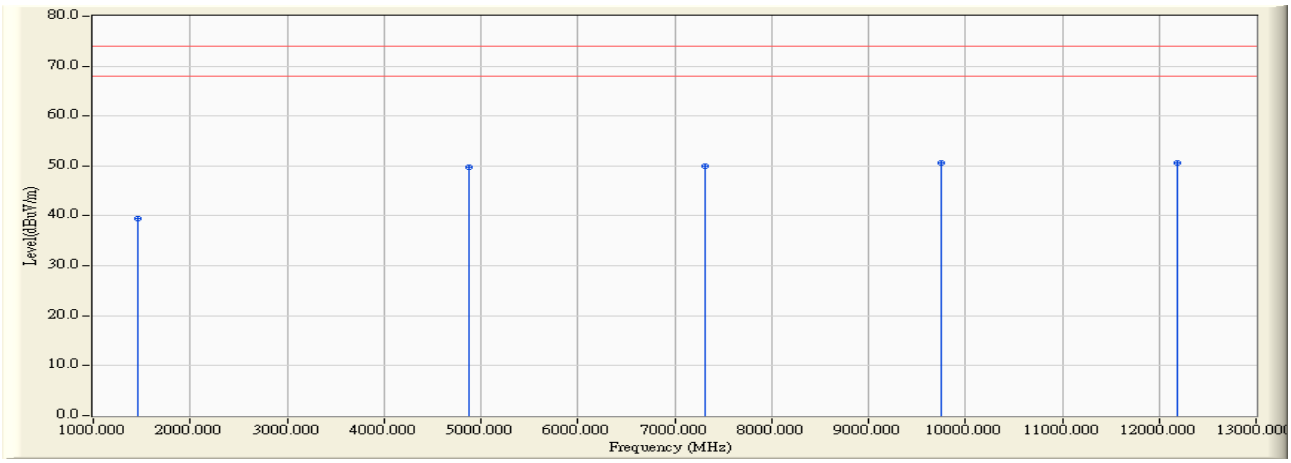


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1199.980	-7.987	47.950	39.963	-34.037	74.000	54.000	PEAK
2		4874.040	4.144	43.700	47.843	-26.157	74.000	54.000	PEAK
3		7311.080	11.640	37.830	49.470	-24.530	74.000	54.000	PEAK
4		9748.320	16.420	33.630	50.050	-23.950	74.000	54.000	PEAK
5	*	12185.040	17.887	33.080	50.967	-23.033	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 20:39**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH6-B**

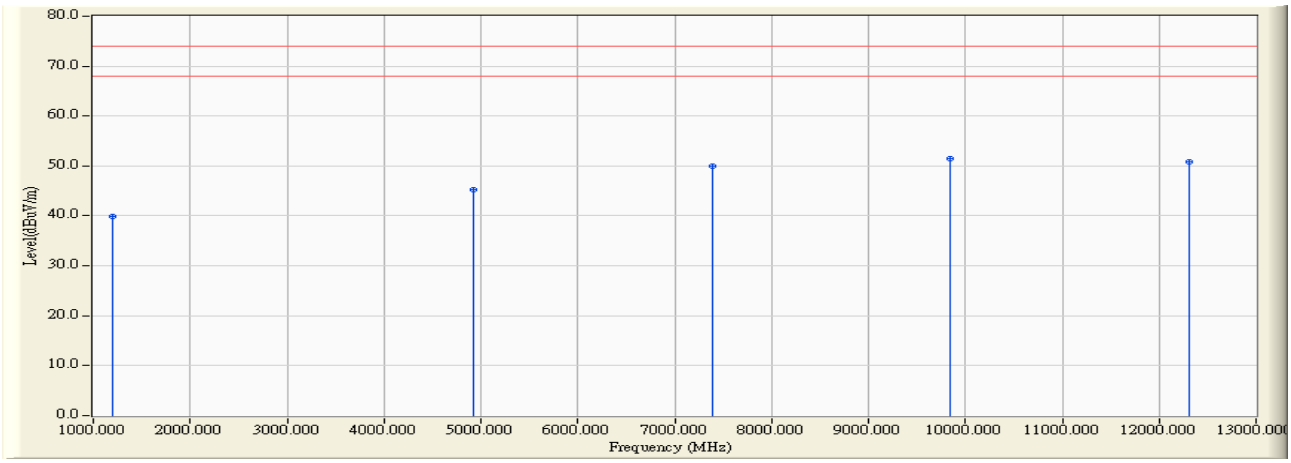


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1466.780	-6.923	46.320	39.397	-34.603	74.000	54.000	PEAK
2		4873.950	4.143	45.660	49.803	-24.197	74.000	54.000	PEAK
3		7311.030	12.259	37.780	50.039	-23.961	74.000	54.000	PEAK
4	*	9748.220	14.922	35.730	50.652	-23.348	74.000	54.000	PEAK
5		12184.980	17.519	33.060	50.579	-23.421	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 21:20**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-B**

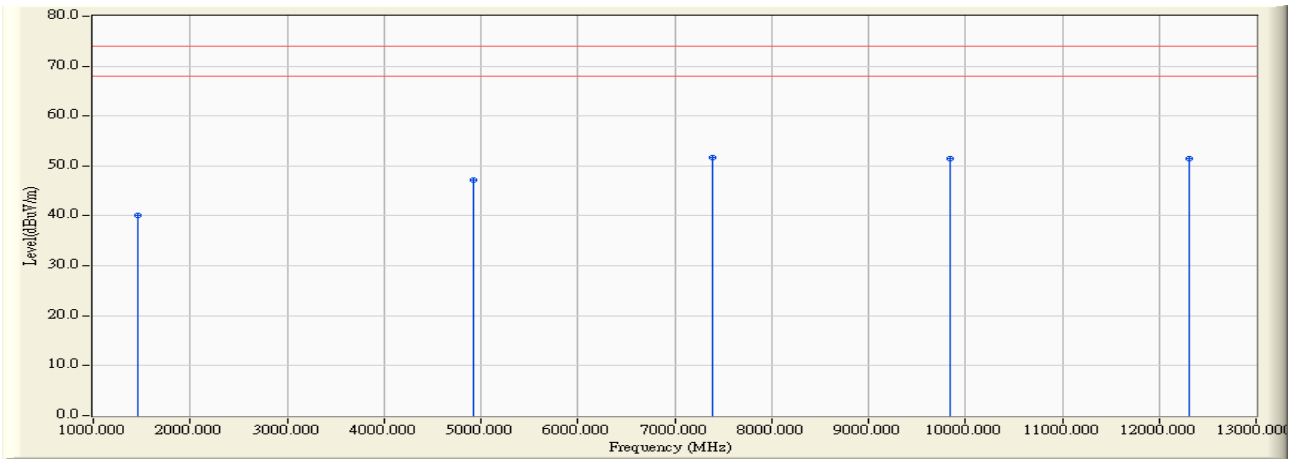


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1200.220	-7.985	47.940	39.954	-34.046	74.000	54.000	PEAK
2		4924.060	4.310	40.880	45.190	-28.810	74.000	54.000	PEAK
3		7386.100	11.856	38.170	50.026	-23.974	74.000	54.000	PEAK
4	*	9847.940	16.728	34.680	51.408	-22.592	74.000	54.000	PEAK
5		12310.060	18.255	32.500	50.755	-23.245	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 21:26**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-B**

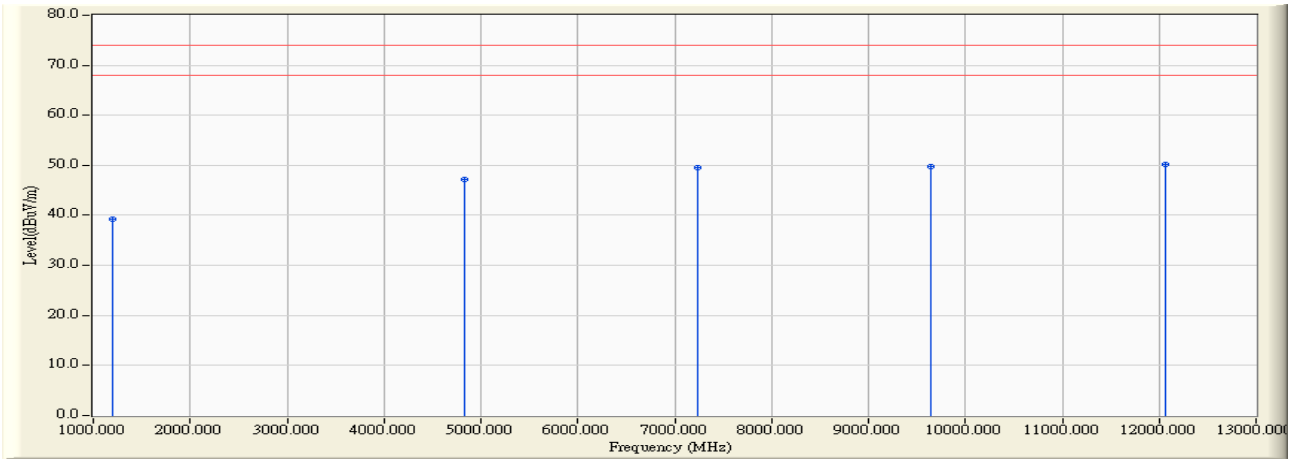


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1466.700	-6.923	46.960	40.036	-33.964	74.000	54.000	PEAK
2		4923.950	4.309	42.880	47.189	-26.811	74.000	54.000	PEAK
3	*	7386.040	12.625	39.010	51.635	-22.365	74.000	54.000	PEAK
4		9847.920	15.034	36.480	51.514	-22.486	74.000	54.000	PEAK
5		12310.110	17.636	33.790	51.426	-22.574	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 20:00**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-G**

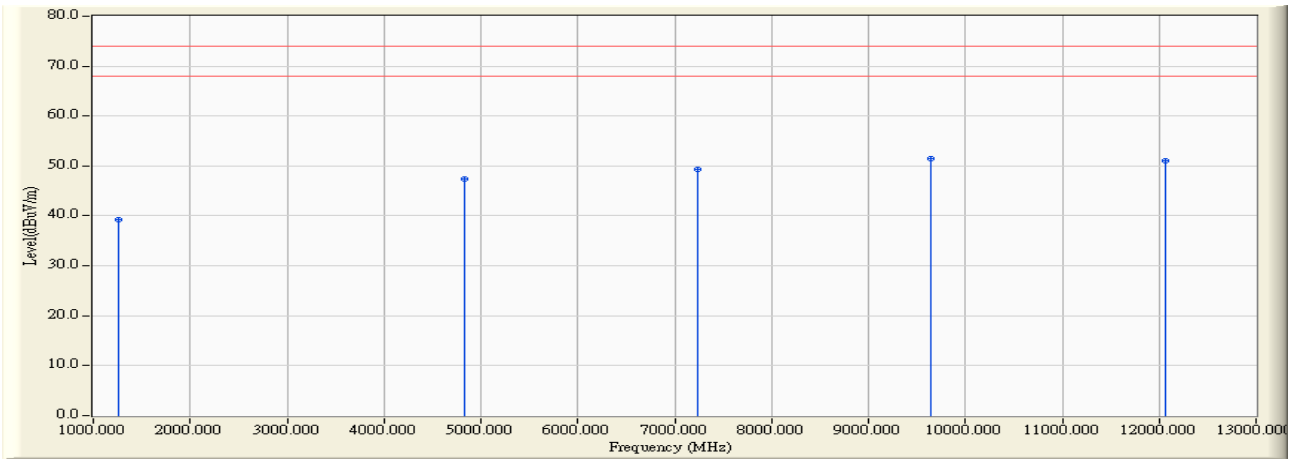


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1200.220	-7.985	47.280	39.294	-34.706	74.000	54.000	PEAK
2		4824.060	3.976	43.200	47.176	-26.824	74.000	54.000	PEAK
3		7235.880	11.441	38.010	49.451	-24.549	74.000	54.000	PEAK
4		9648.060	16.093	33.590	49.683	-24.317	74.000	54.000	PEAK
5	*	12060.240	17.524	32.650	50.174	-23.826	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 20:13**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-G**

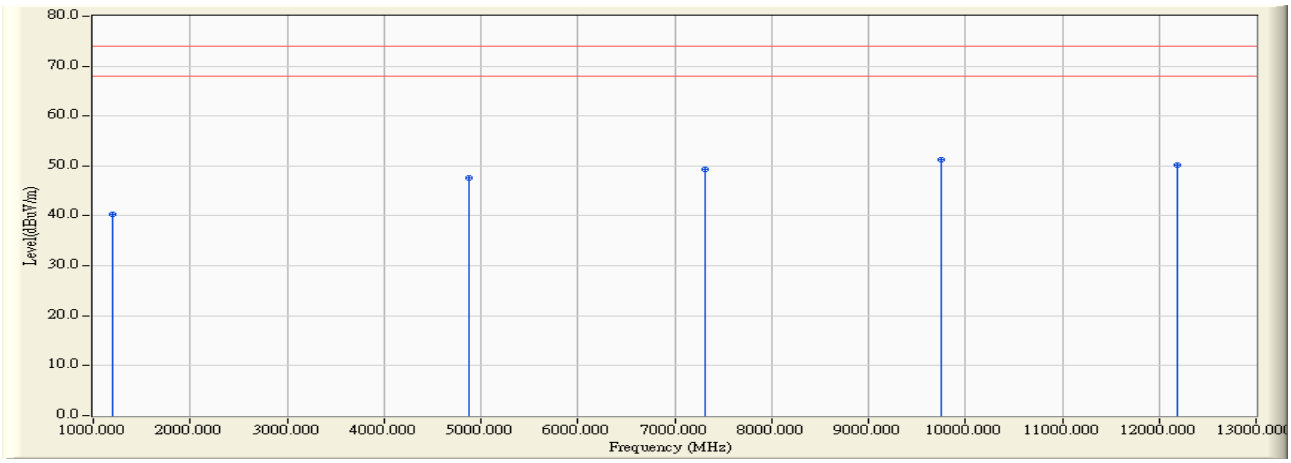


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1266.560	-7.712	46.960	39.248	-34.752	74.000	54.000	PEAK
2		4824.110	3.976	43.410	47.386	-26.614	74.000	54.000	PEAK
3		7235.940	11.914	37.450	49.364	-24.636	74.000	54.000	PEAK
4	*	9648.050	14.794	36.720	51.514	-22.486	74.000	54.000	PEAK
5		12060.180	17.406	33.730	51.136	-22.864	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 20:55**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH6-G**

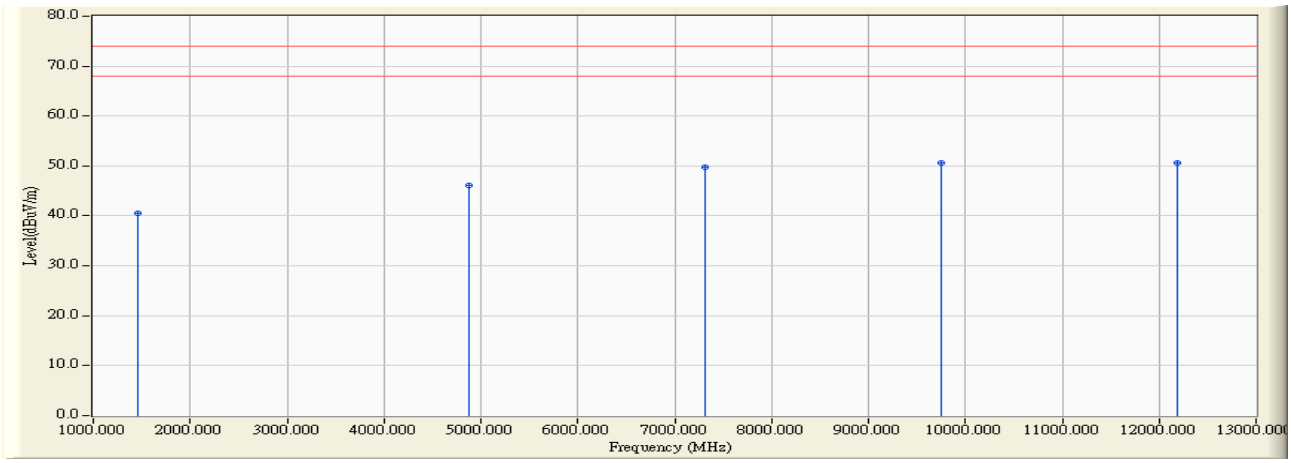


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1199.960	-7.987	48.260	40.273	-33.727	74.000	54.000	PEAK
2		4873.920	4.143	43.480	47.623	-26.377	74.000	54.000	PEAK
3		7311.060	11.640	37.630	49.270	-24.730	74.000	54.000	PEAK
4	*	9748.140	16.420	34.770	51.190	-22.810	74.000	54.000	PEAK
5		12184.890	17.887	32.390	50.277	-23.723	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 21:09**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH6-G**

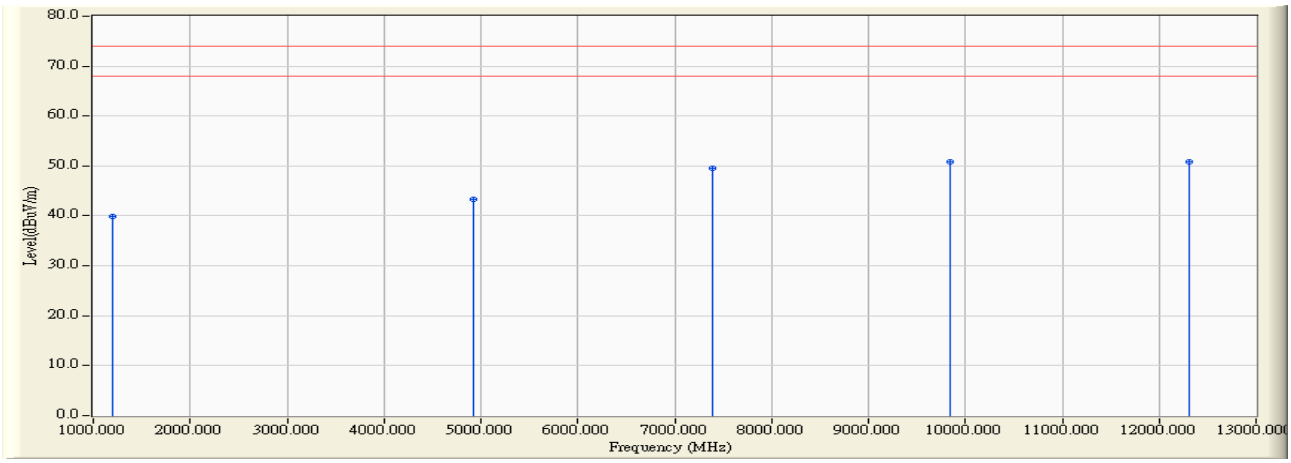


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1465.890	-6.928	47.360	40.432	-33.568	74.000	54.000	PEAK
2		4873.880	4.143	41.950	46.093	-27.907	74.000	54.000	PEAK
3		7311.120	12.259	37.410	49.669	-24.331	74.000	54.000	PEAK
4	*	9748.240	14.922	35.730	50.652	-23.348	74.000	54.000	PEAK
5		12184.930	17.519	33.090	50.609	-23.391	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 21:34**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-G**

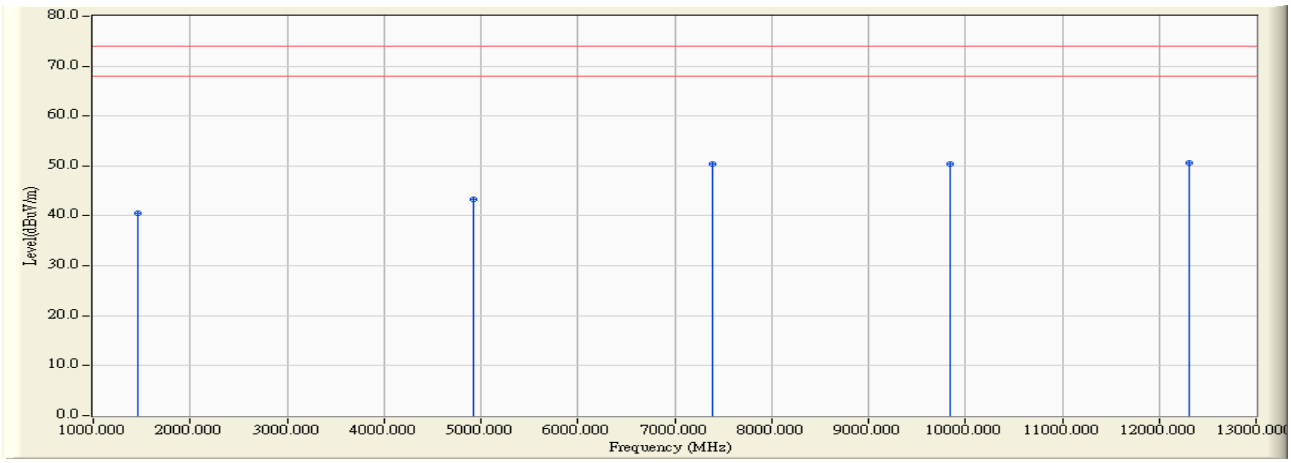


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1200.130	-7.987	47.840	39.854	-34.146	74.000	54.000	PEAK
2		4923.970	4.309	39.080	43.389	-30.611	74.000	54.000	PEAK
3		7386.120	11.856	37.610	49.466	-24.534	74.000	54.000	PEAK
4	*	9847.870	16.728	34.020	50.748	-23.252	74.000	54.000	PEAK
5		12310.100	18.255	32.480	50.735	-23.265	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 2	**Time : 2008/02/25 - 21:43**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-G**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1466.560	-6.925	47.460	40.536	-33.464	74.000	54.000	PEAK
2		4923.950	4.309	39.020	43.329	-30.671	74.000	54.000	PEAK
3		7386.030	12.625	37.700	50.325	-23.675	74.000	54.000	PEAK
4		9847.940	15.034	35.470	50.504	-23.496	74.000	54.000	PEAK
5	*	12310.070	17.636	33.010	50.646	-23.354	74.000	54.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the test:

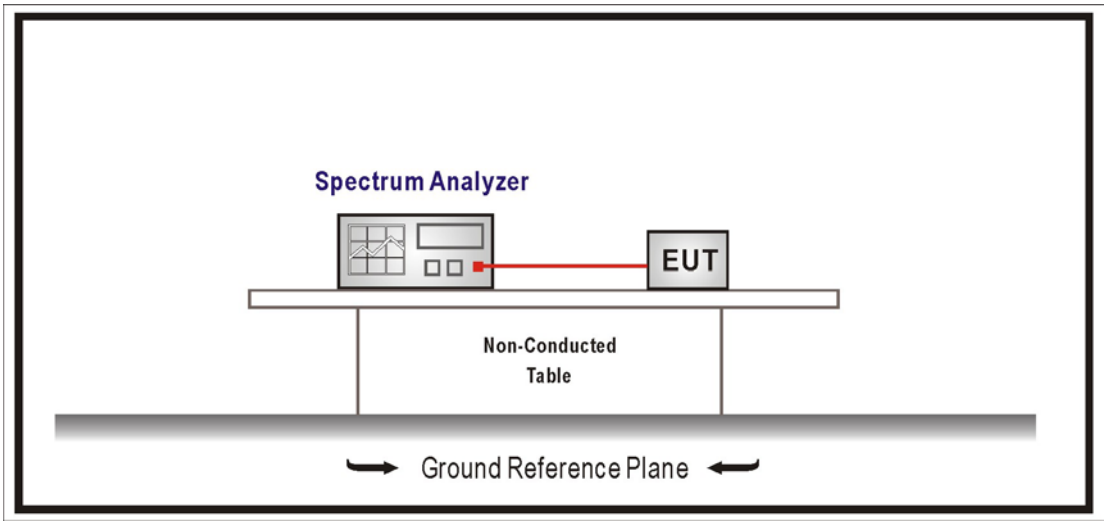
RF Conducted Measurement:				
Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2007
2	No.1 OATS			Sep., 2007

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

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

5.2. Test Setup

RF Antenna Conducted Measurement:



5.3. Limits

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 an RF conducted or radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

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

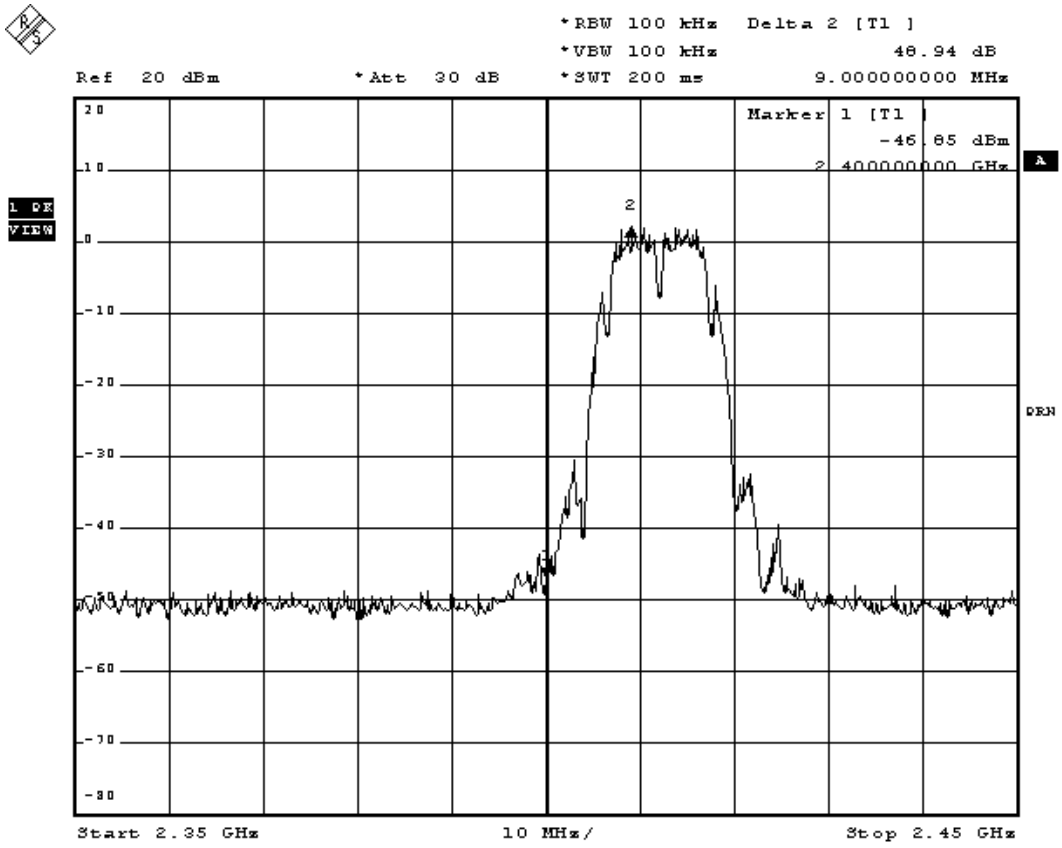
The measurement uncertainty
Conducted is defined as ± 1.27dB
Radiated is defined as ± 3.9dB

5.6. Test Result

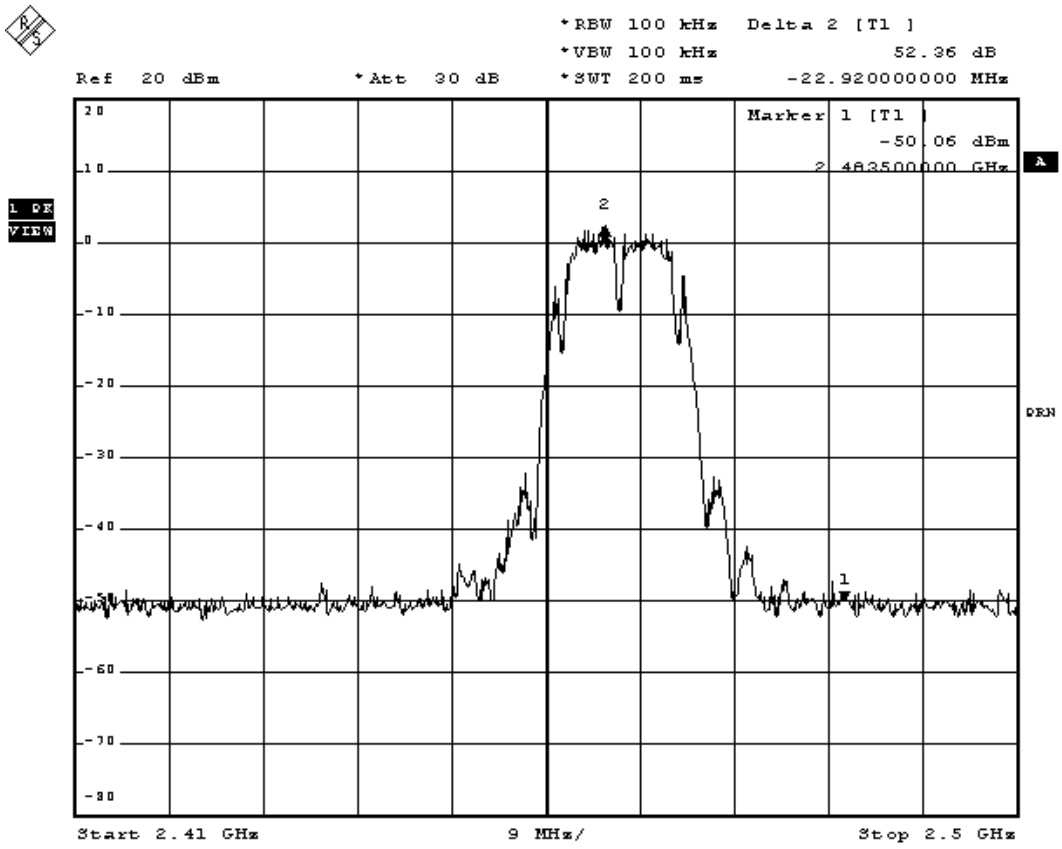
Product	Wireless ADSL Router		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2008/03/06	Test Site	

802.11b

Channel 01 (2412MHz)



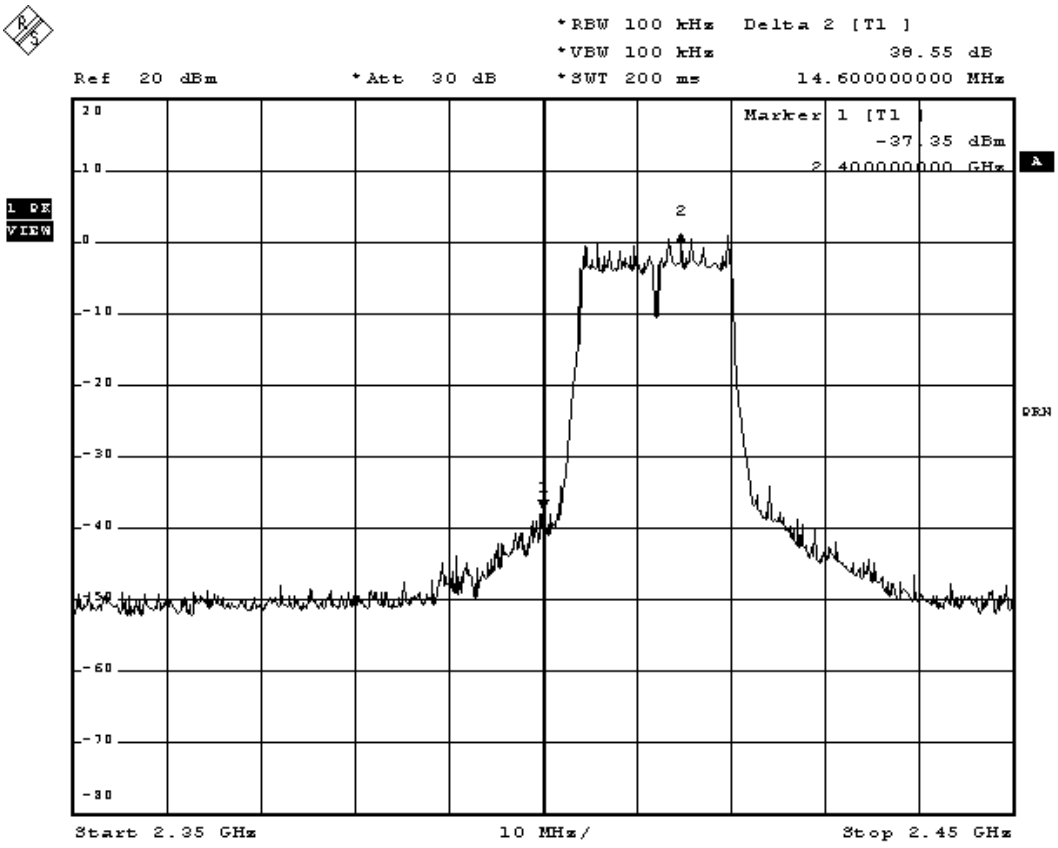
Channel 11 (2462MHz)



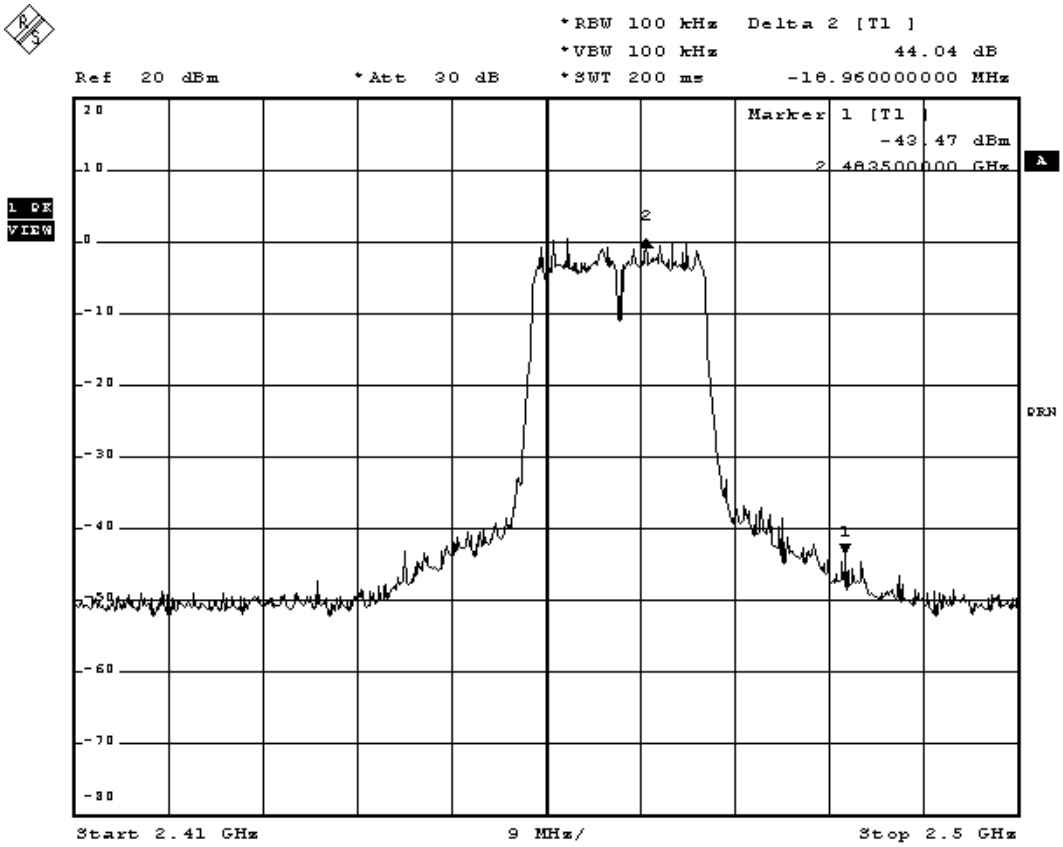
Product	Wireless ADSL Router		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2008/03/06	Test Site	

802.11g

Channel 01 (2412MHz)



Channel 11 (2462MHz)



6. Radiated Emission Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

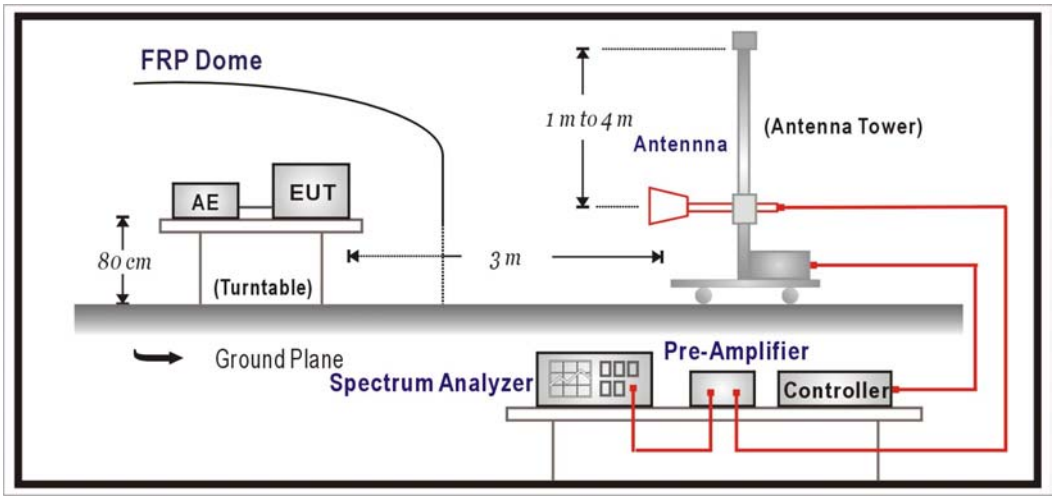
RF Radiated Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2007
2	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2008
3		Loop Antenna	R & S	HFH2-Z2 / 833799/004	Sep., 2007
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2007
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2007
6	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2007
7	No.1 OATS				Sep., 2007

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

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

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

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

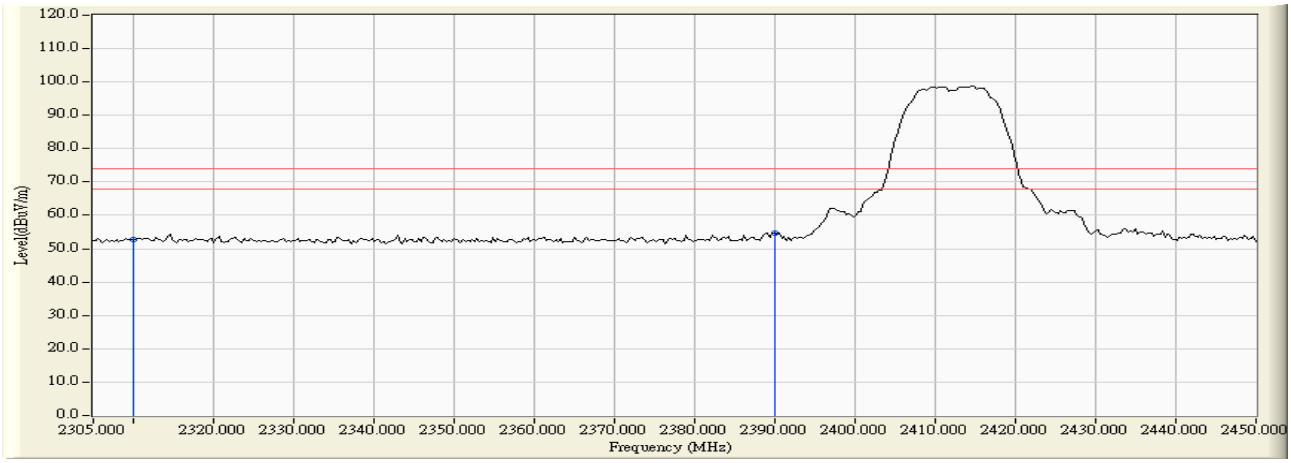
The measurement uncertainty

± 3.9 dB above 1GHz

6.6. Test Result

Radiated is defined as

Site : Site 1	**Time : 2008/03/06 - 15:13**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-B**

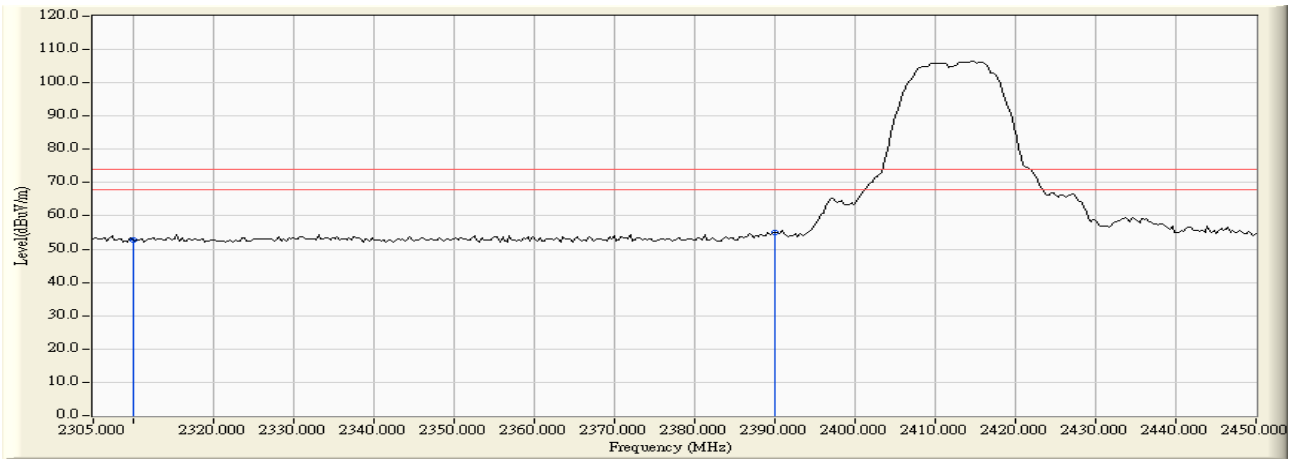


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	21.513	52.627	-21.373	74.000	54.00	PEAK
2	*	2390.000	31.396	23.150	54.546	-19.454	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 14:46**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-B**

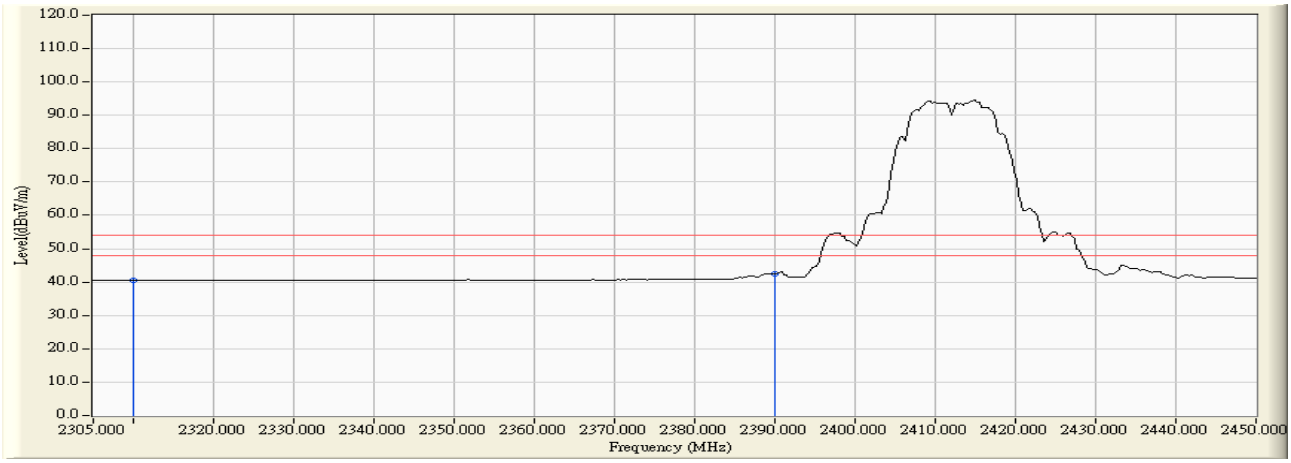


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	21.589	52.703	-21.297	74.000	54.00	PEAK
2	*	2390.000	31.396	23.501	54.897	-19.103	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 15:14**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-B**

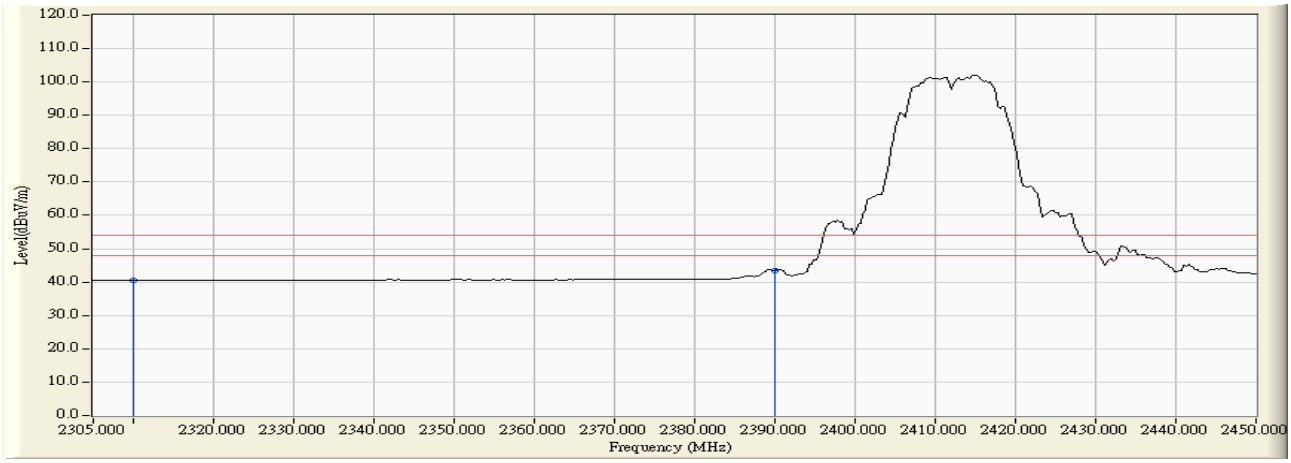


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	9.483	40.597	-13.403	74.000	54.00	AVERAGE
2	*	2390.000	31.396	11.140	42.536	-11.464	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 14:47**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-B**

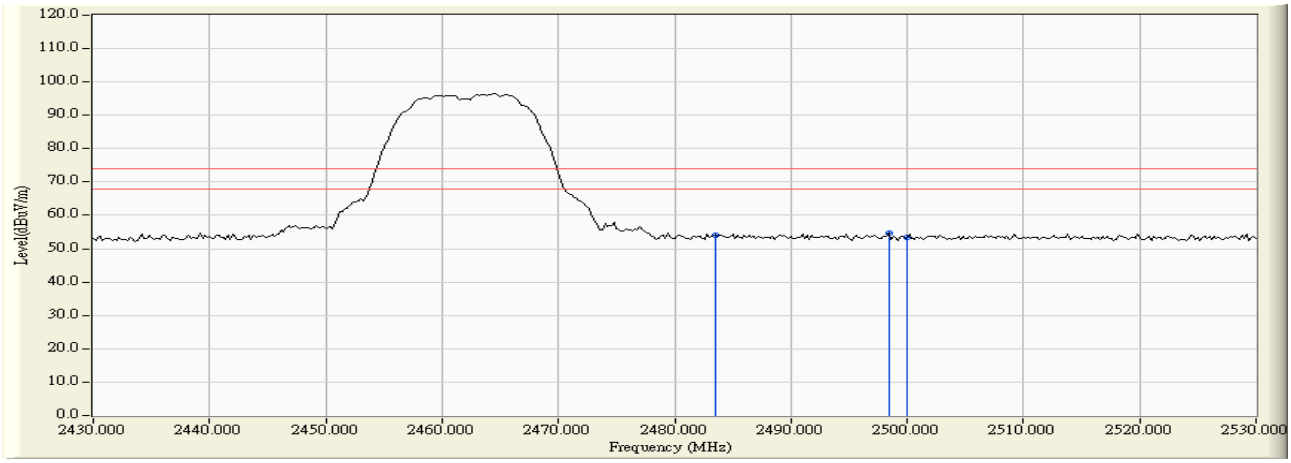


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	9.497	40.611	-13.389	74.000	54.00	AVERAGE
2	*	2390.000	31.396	12.092	43.488	-10.512	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:41**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-B**

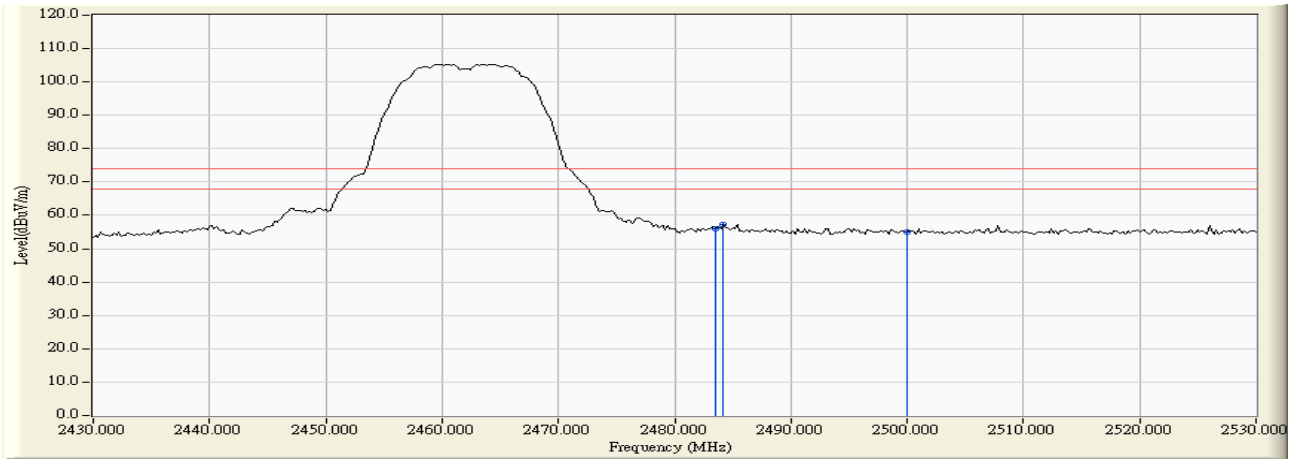


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2483.500	31.736	22.306	54.042	-19.958	74.000	54.00	PEAK
2	*	2498.400	31.785	22.817	54.603	-19.397	74.000	54.00	PEAK
3		2500.000	31.789	21.759	53.548	-20.452	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:48**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-B**

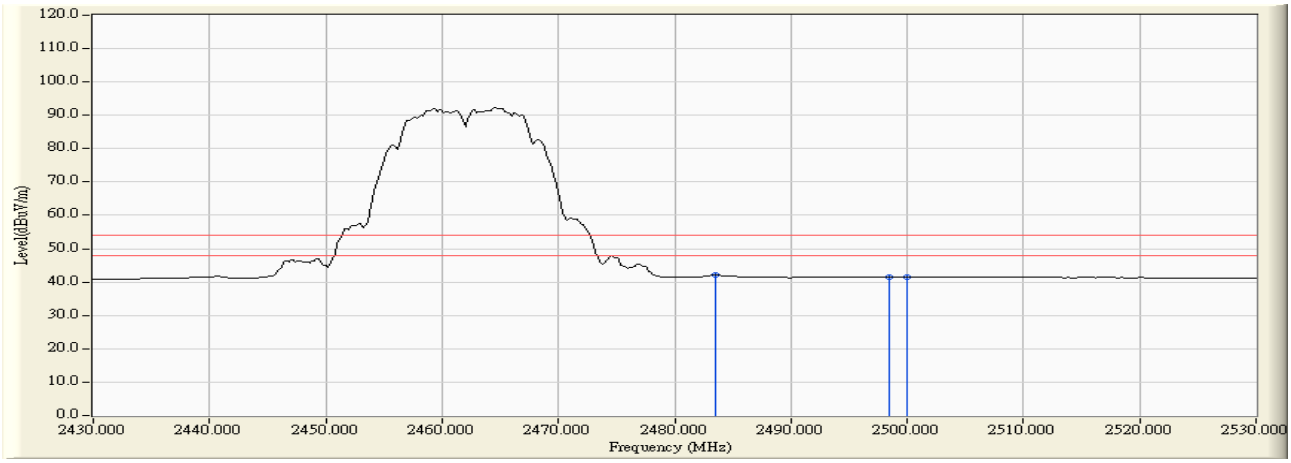


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2483.500	31.736	24.388	56.124	-17.876	74.000	54.00	PEAK
2	*	2484.200	31.738	25.654	57.392	-16.608	74.000	54.00	PEAK
3		2500.000	31.789	23.267	55.056	-18.944	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:42**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-B**

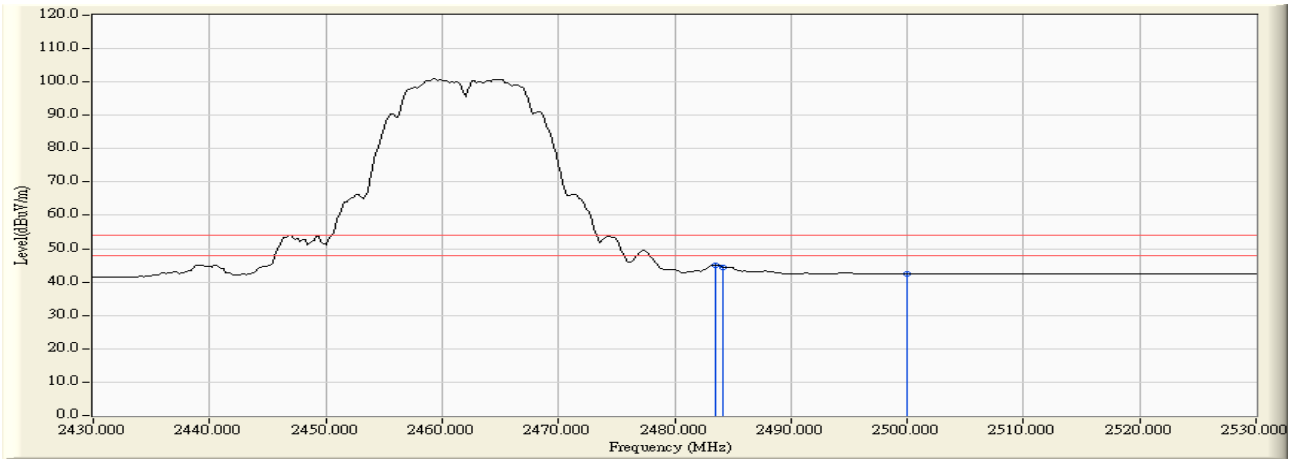


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2483.500	31.736	10.354	42.090	-11.910	74.000	54.00	AVERAGE
2	*	2498.400	31.785	9.625	41.411	-12.589	74.000	54.00	AVERAGE
3		2500.000	31.789	9.619	41.408	-12.592	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:49**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-B**

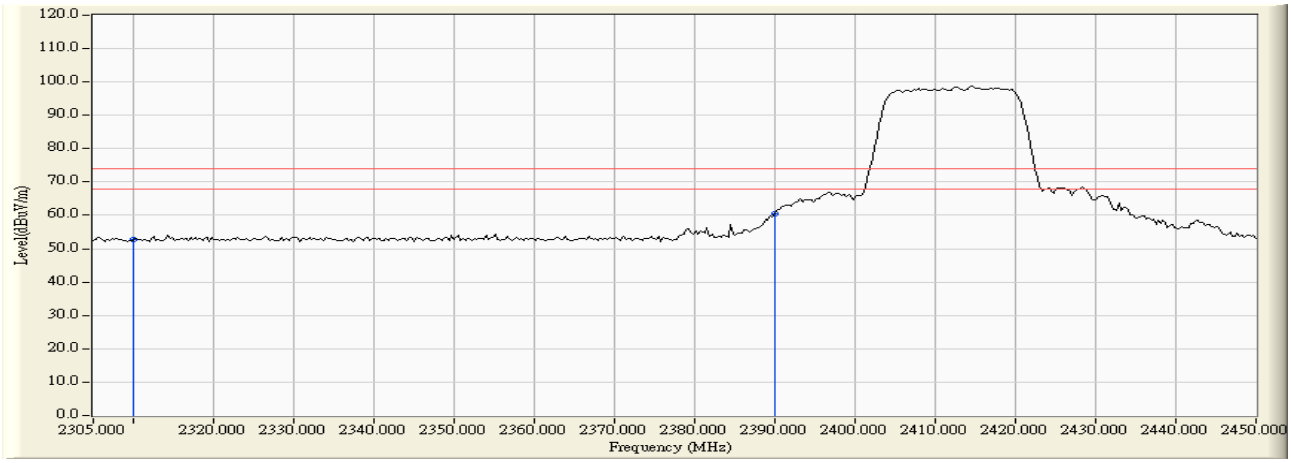


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2483.500	31.736	13.439	45.175	-8.825	74.000	54.00	AVERAGE
2	*	2484.200	31.738	12.801	44.539	-9.461	74.000	54.00	AVERAGE
3		2500.000	31.789	10.712	42.501	-11.499	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 15:15**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-G**

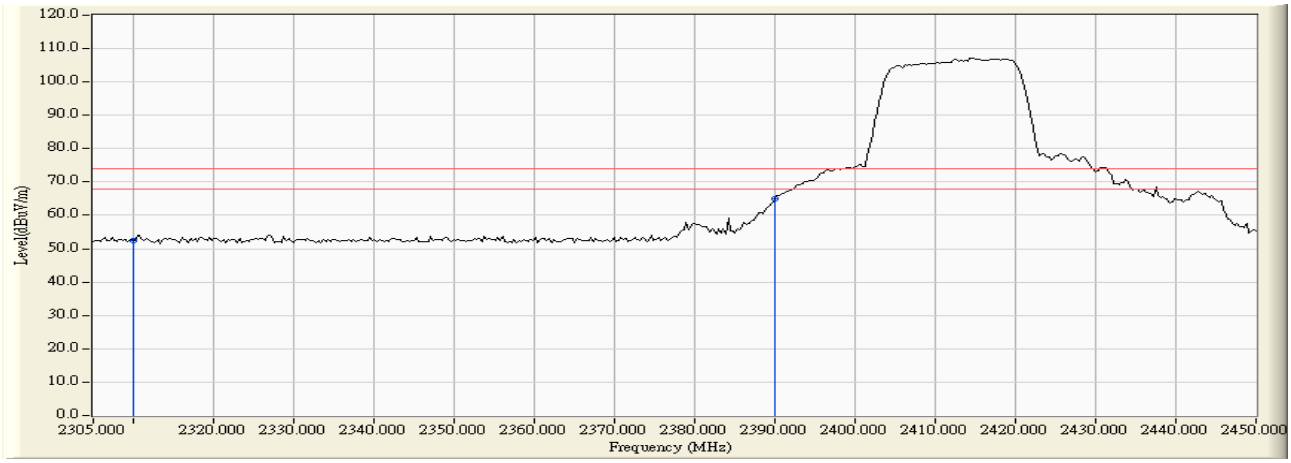


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	21.611	52.725	-21.275	74.000	54.00	PEAK
2	*	2390.000	31.396	29.107	60.503	-13.497	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 14:48**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-G**

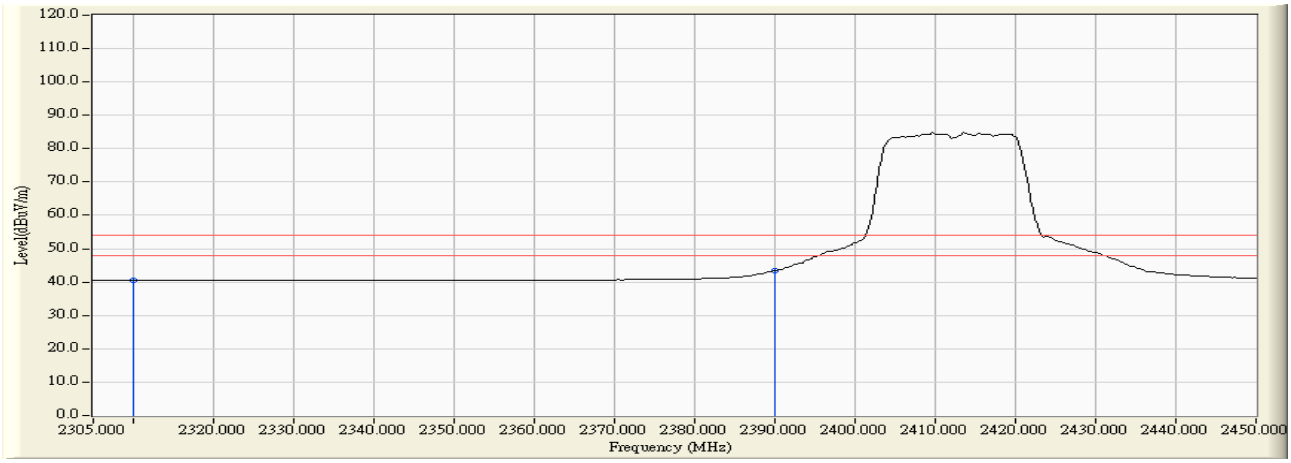


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	21.231	52.345	-21.655	74.000	54.00	PEAK
2	*	2390.000	31.396	33.430	64.826	-9.174	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 15:16**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-G**

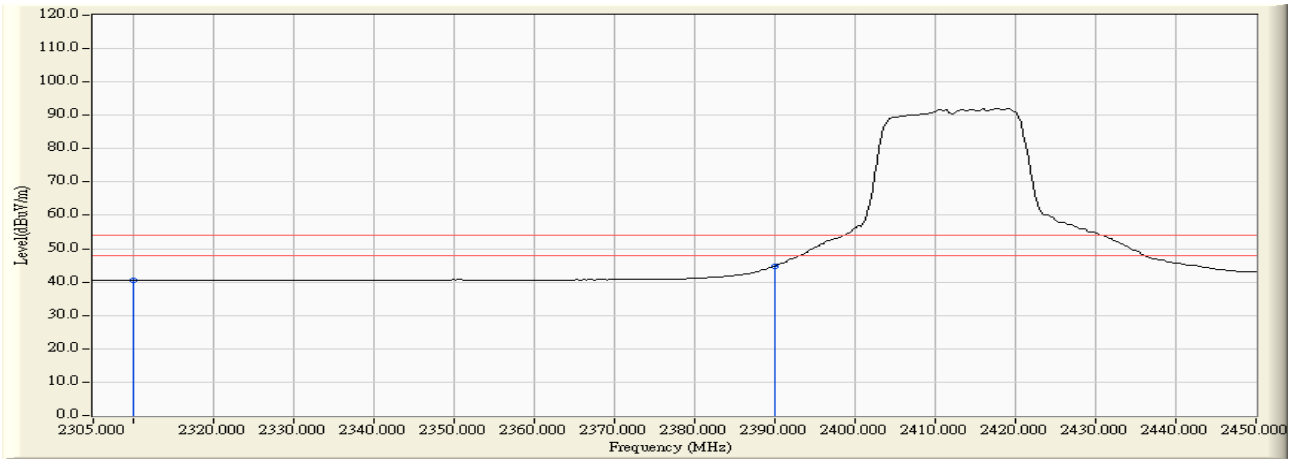


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	9.472	40.586	-13.414	74.000	54.00	AVERAGE
2	*	2390.000	31.396	11.918	43.314	-10.686	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 14:49**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH1-G**

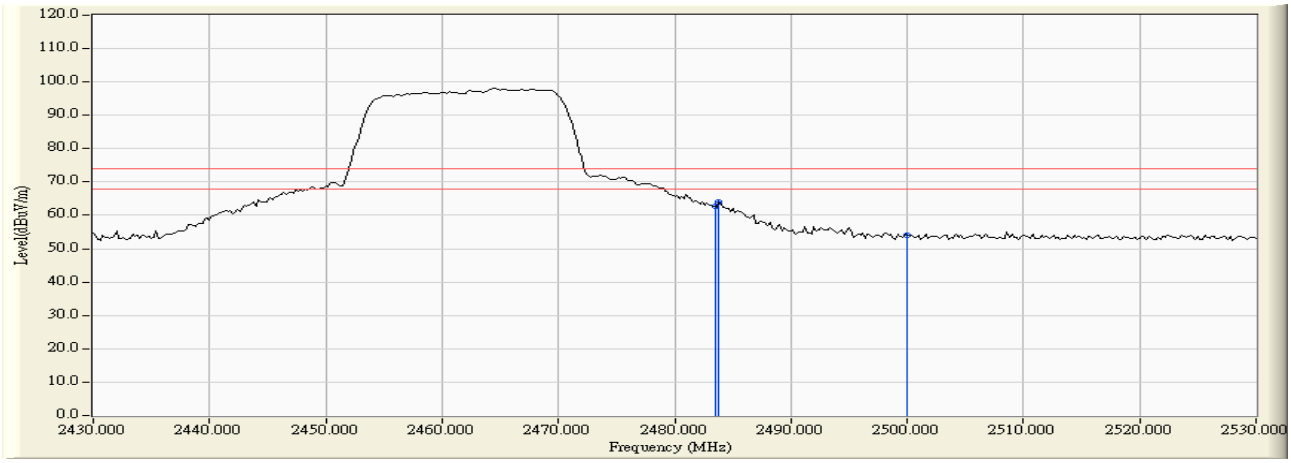


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2310.000	31.114	9.492	40.606	-13.394	74.000	54.00	AVERAGE
2	*	2390.000	31.396	13.342	44.738	-9.262	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:43**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-G**

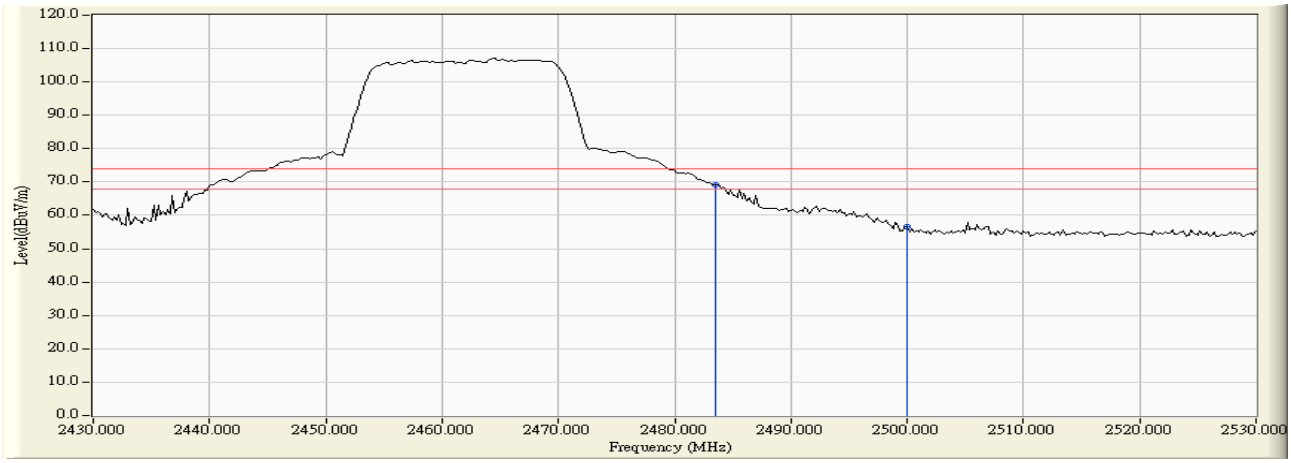


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2483.500	31.736	30.970	62.706	-11.294	74.000	54.00	PEAK
2	*	2483.800	31.737	32.235	63.972	-10.028	74.000	54.00	PEAK
3		2500.000	31.789	22.213	54.002	-19.998	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:49**
Limit : FCC_15.209(961011)_03M_PK	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-G**

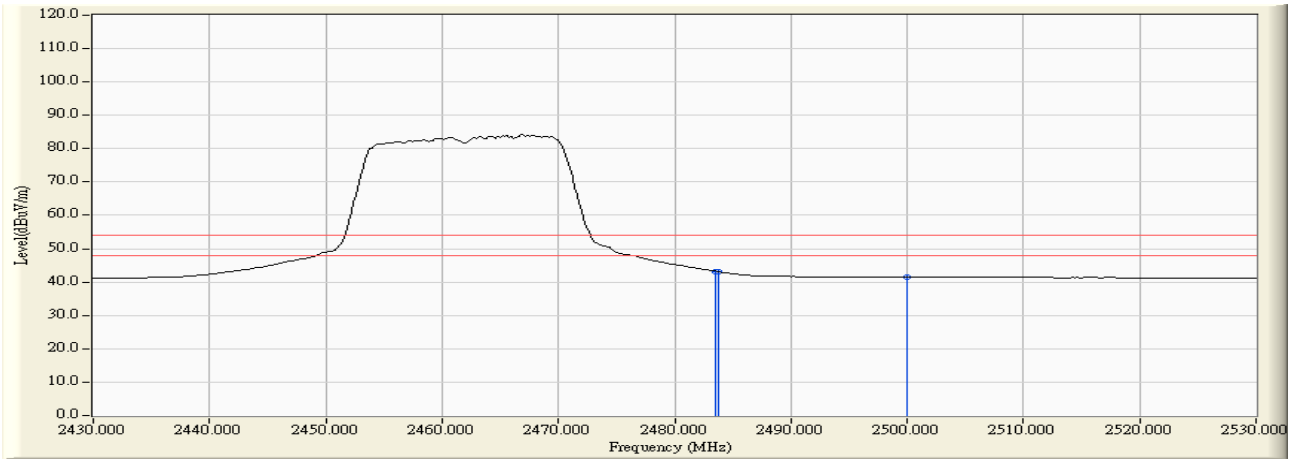


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	2483.500	31.736	37.369	69.105	-4.895	74.000	54.00	PEAK
2		2500.000	31.789	24.774	56.563	-17.437	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:44**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - HORIZONTAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-G**

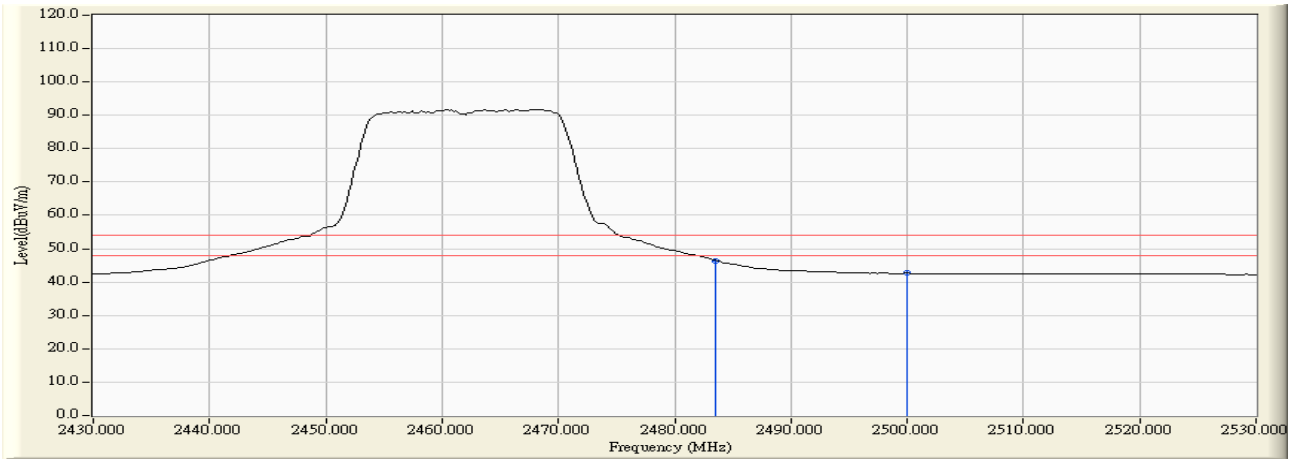


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		2483.500	31.736	11.504	43.240	-10.760	74.000	54.00	AVERAGE
2	*	2483.800	31.737	11.353	43.090	-10.910	74.000	54.00	AVERAGE
3		2500.000	31.789	9.657	41.446	-12.554	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : Site 1	**Time : 2008/03/06 - 16:50**
Limit : FCC_15.209(961011)_03M_AV	**Margin : 6**
EUT : Wireless ADSL Router	**Probe : CB4_FCC_1-18G(2007) - VERTICAL**
Power : AC 120V/60Hz	**Note : Mode 1: Transmit (AC-DC)-CH11-G**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1	*	2483.500	31.736	14.683	46.419	-7.581	74.000	54.00	AVERAGE
2		2500.000	31.789	10.846	42.635	-11.365	74.000	54.00	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

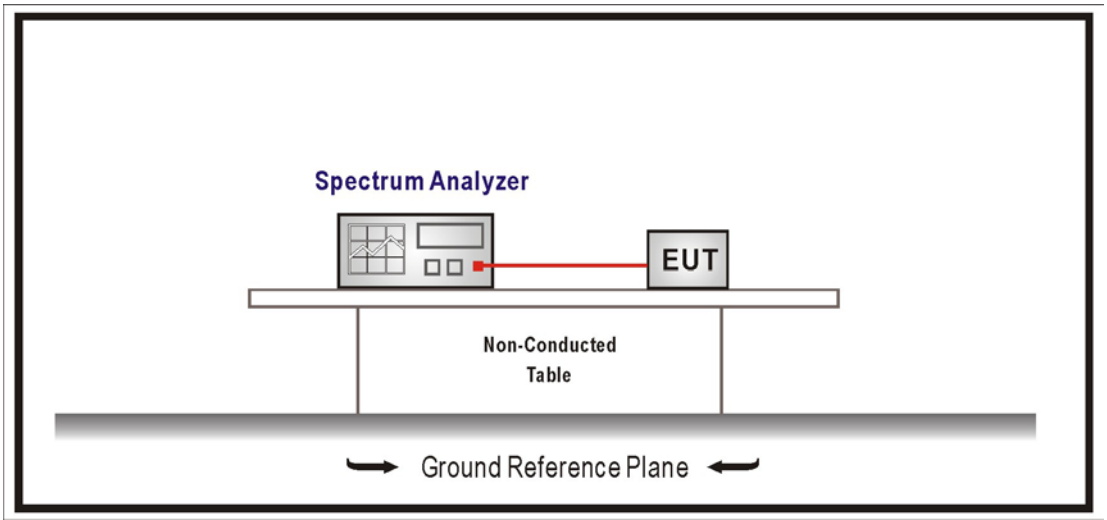
7.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2007
2	No.1 OATS			Sep., 2007

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

7.2. Test Setup



7.3. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; 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.

7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.5. Uncertainty

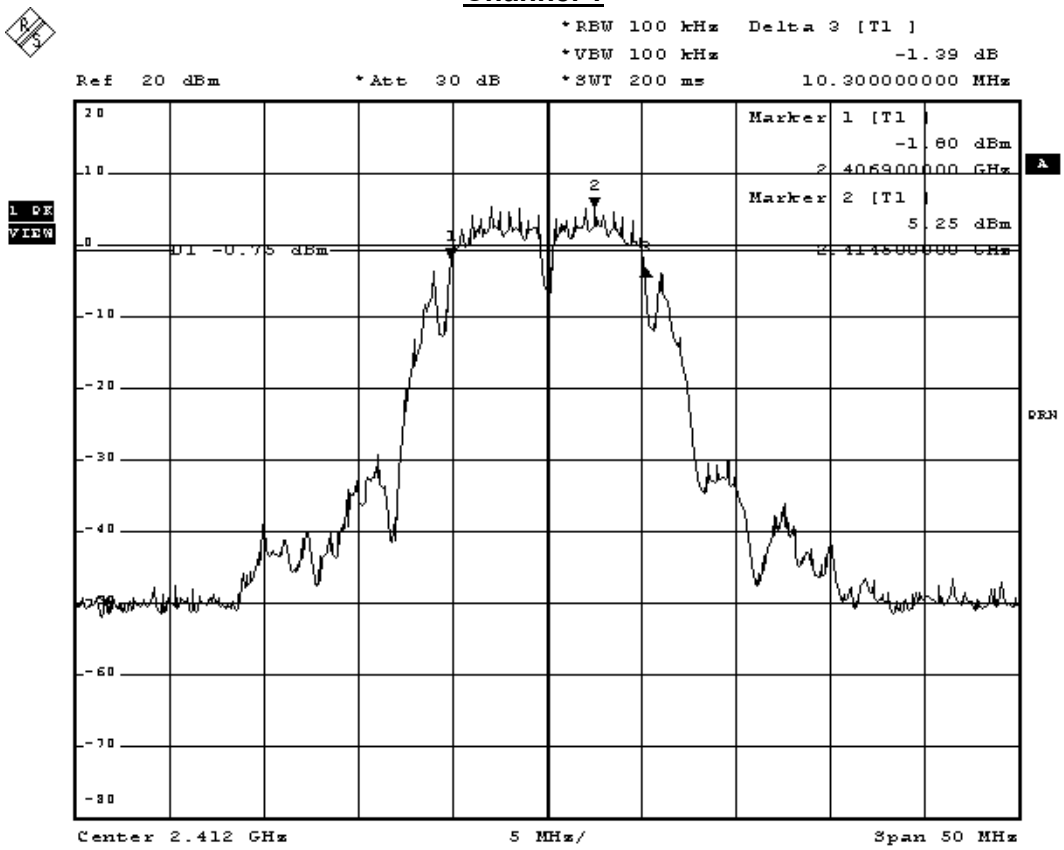
The measurement uncertainty is defined as ±150Hz

7.6. Test Result

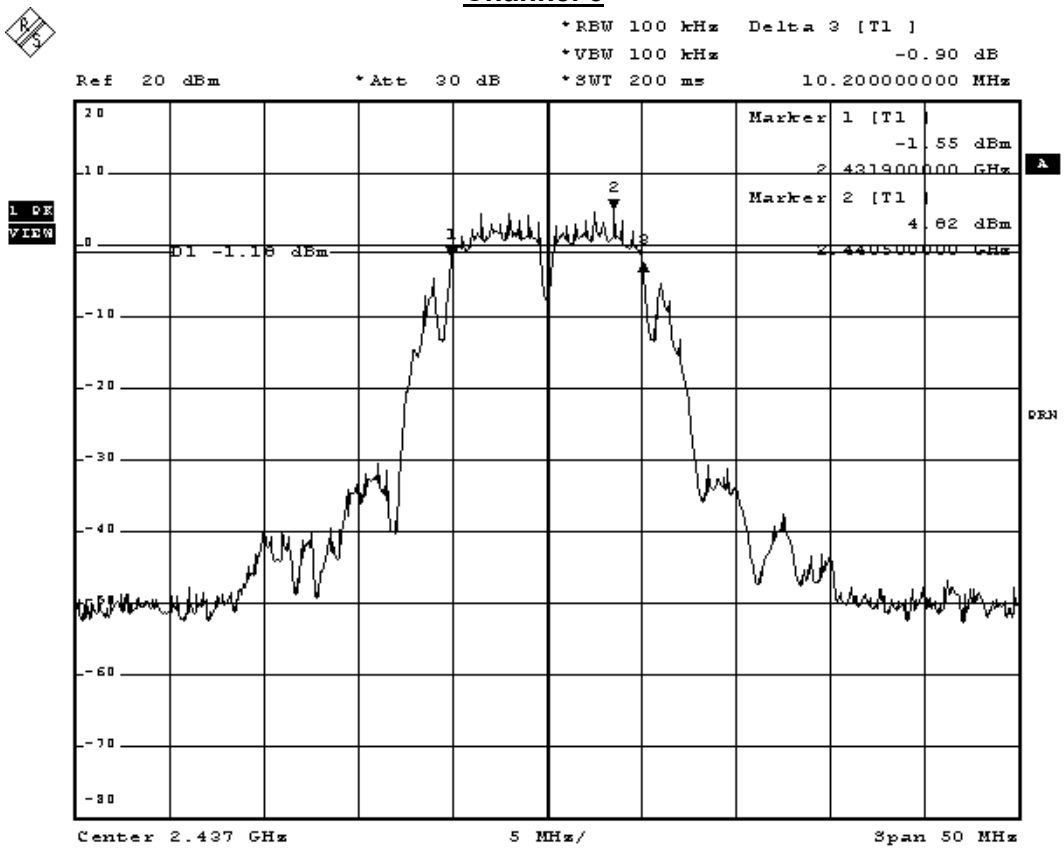
Product	Wireless ADSL Router		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2008/02/25	Test Site	No.1 OATS

802.11 b				
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10300	>500	Pass
6	2437.00	10200	>500	Pass
11	2462.00	10400	>500	Pass

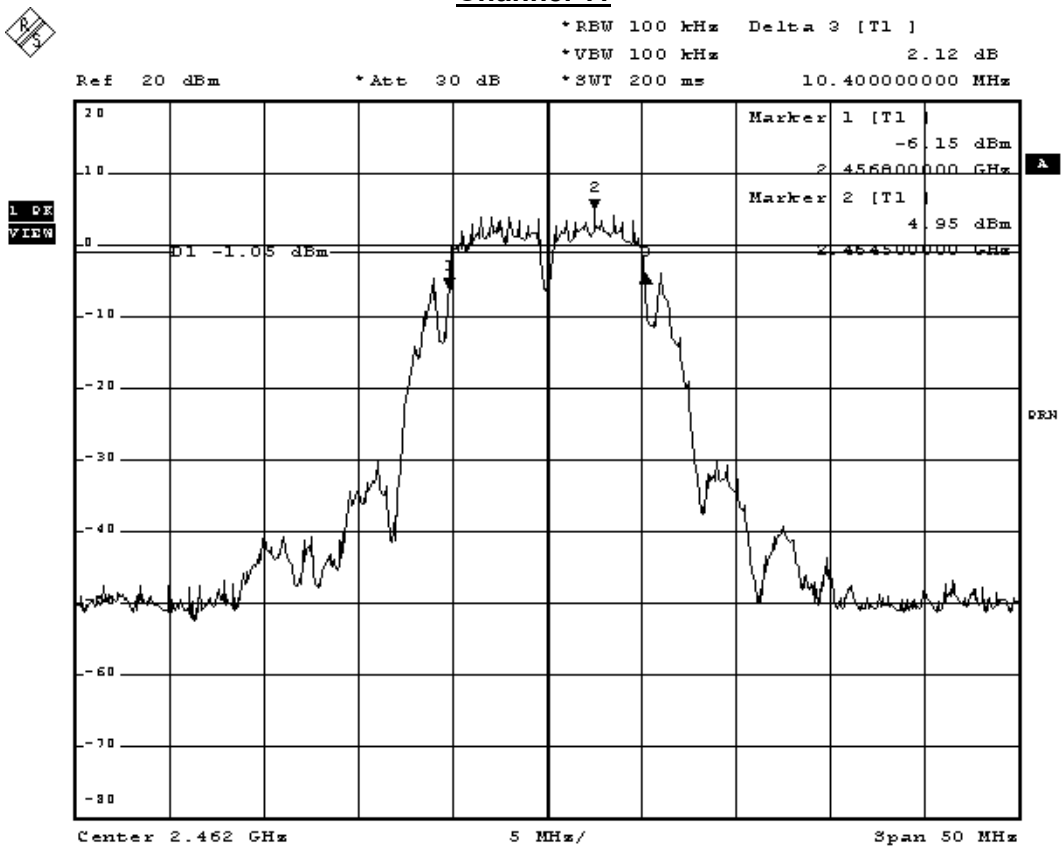
Channel 1



Channel 6


*RBW 100 kHz
Delta 3 [T1]
*VBW 100 kHz
-0.90 dB
Ref 20 dBm
*Att 30 dB
*SWT 200 ms
10.200000000 MHz
Marker 1 [T1]
-1.55 dBm
2.431900000 GHz
Marker 2 [T1]
4.62 dBm
2.441500000 GHz
D1 -1.18 dBm
1 PK VIEW
A
PRN
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.437 GHz
5 MHz/
Span 50 MHz

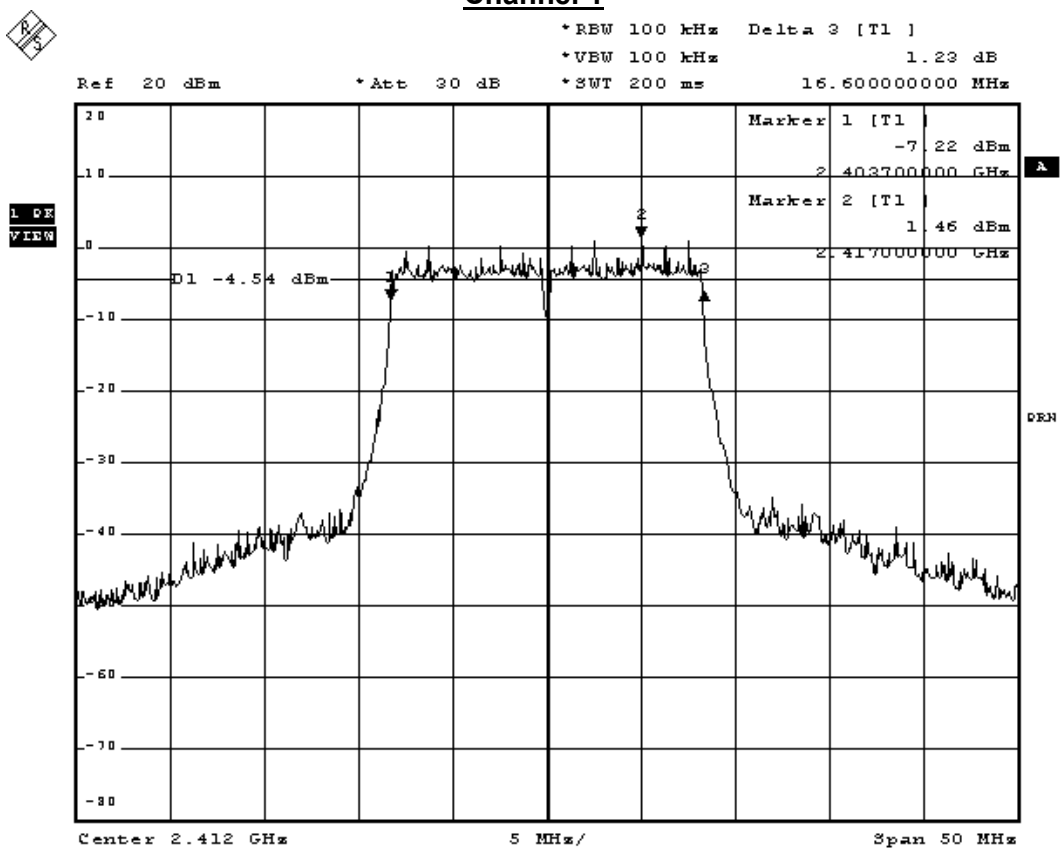
Channel 11


*RBW 100 kHz
*VBW 100 kHz
*SWT 200 ms
Delta 3 [T1]
2.12 dB
10.400000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-6.15 dBm
2.456800000 GHz
Marker 2 [T1]
4.95 dBm
2.464500000 GHz
D1 -1.05 dBm
1 PK VIEW
A
PRN
20
10
0
-10
-20
-30
-40
-60
-70
-80
Center 2.462 GHz
5 MHz/
Span 50 MHz

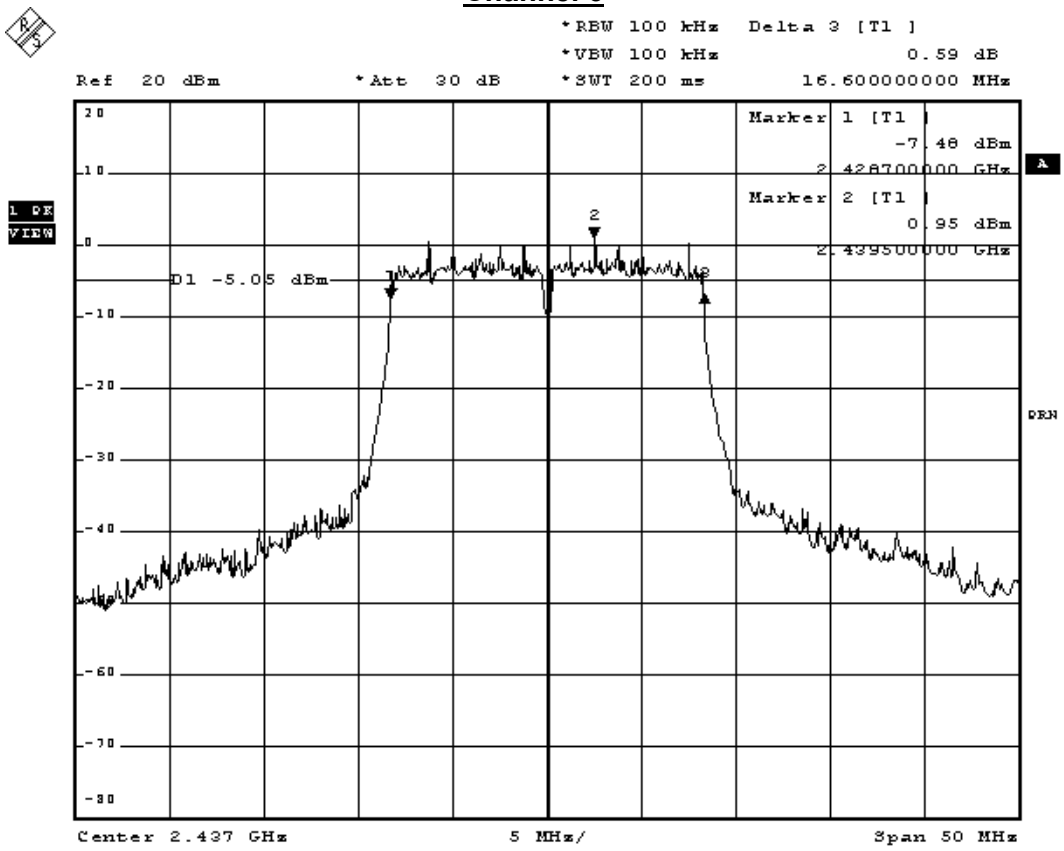
Product	Wireless ADSL Router		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2008/02/25	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16600	>500	Pass
6	2437.00	16600	>500	Pass
11	2462.00	16600	>500	Pass

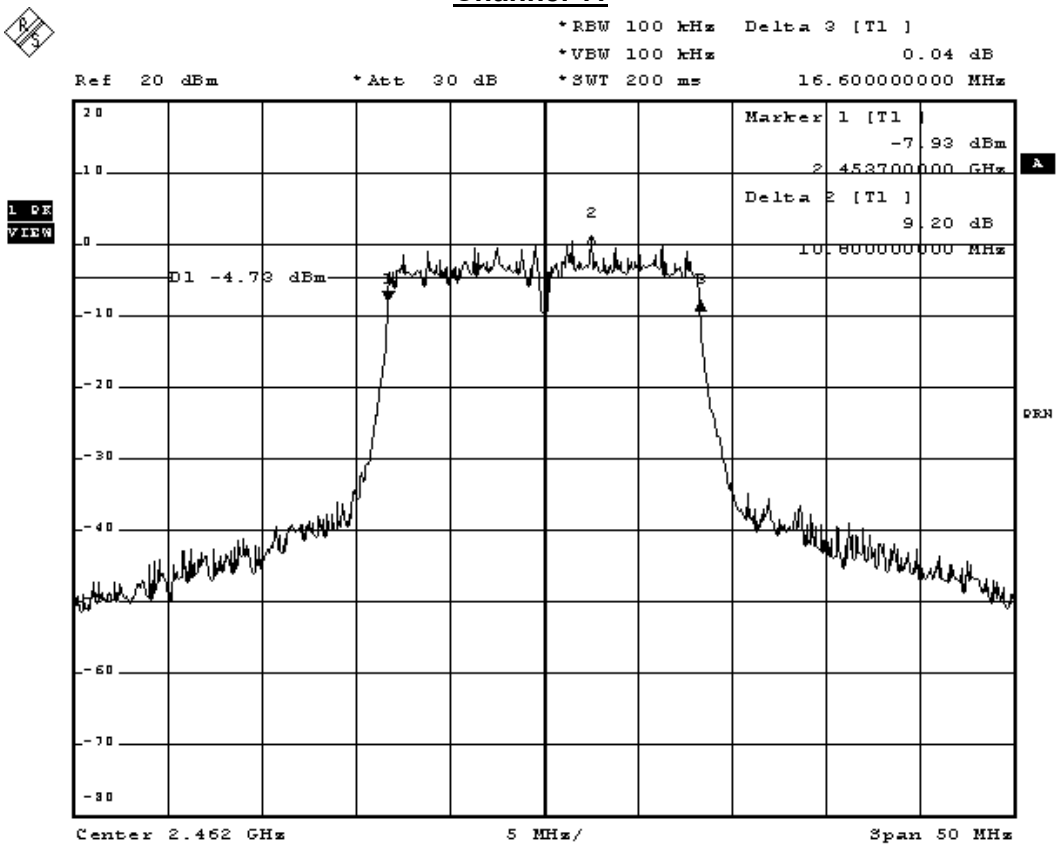
Channel 1



Channel 6


*RBW 100 kHz
Delta 3 [T1]
*VBW 100 kHz
0.59 dB
Ref 20 dBm
*Att 30 dB
*SWT 200 ms
16.600000000 MHz
Marker 1 [T1]
-7.48 dBm
2.428700000 GHz
Marker 2 [T1]
0.95 dBm
2.439500000 GHz
D1 -5.05 dBm
1 PK VIEW
A
PRN
20
10
0
-10
-20
-30
-40
-60
-70
-80
Center 2.437 GHz
5 MHz/
Span 50 MHz

Channel 11


*RBW 100 kHz
*VBW 100 kHz
*SWT 200 ms
Delta 3 [T1]
0.04 dB
16.600000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-7.93 dBm
2.453700000 GHz
Delta 2 [T1]
9.20 dB
10.800000000 MHz
D1 -4.73 dBm
Center 2.462 GHz
5 MHz/
Span 50 MHz

8. Power Density

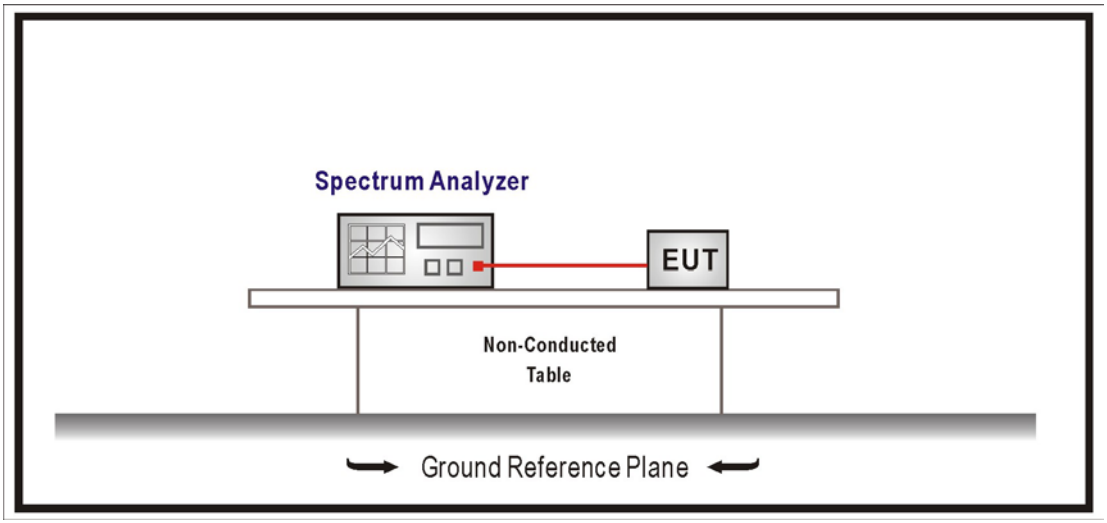
8.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2007
2	No.1 OATS			Sep., 2007

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

8.2. Test Setup



8.3. Limits

The peak 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.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; 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

8.5. Uncertainty

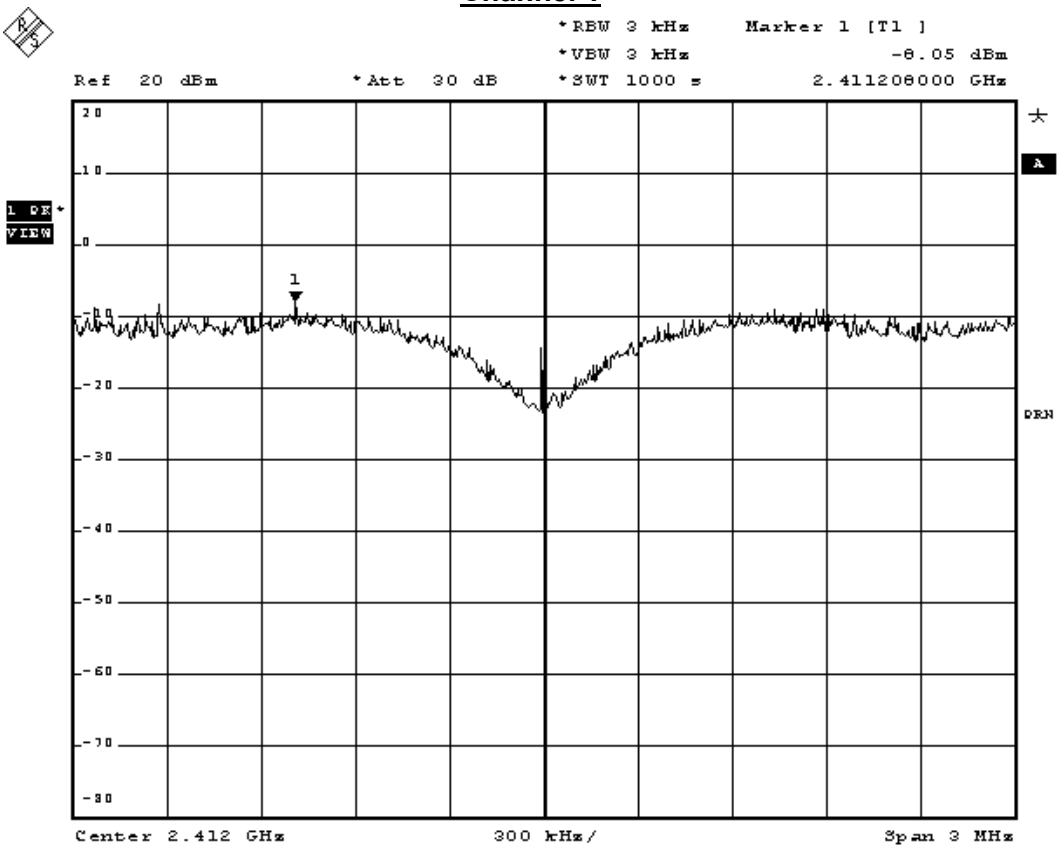
The measurement uncertainty is defined as ±1.27dB.

8.6. Test Result

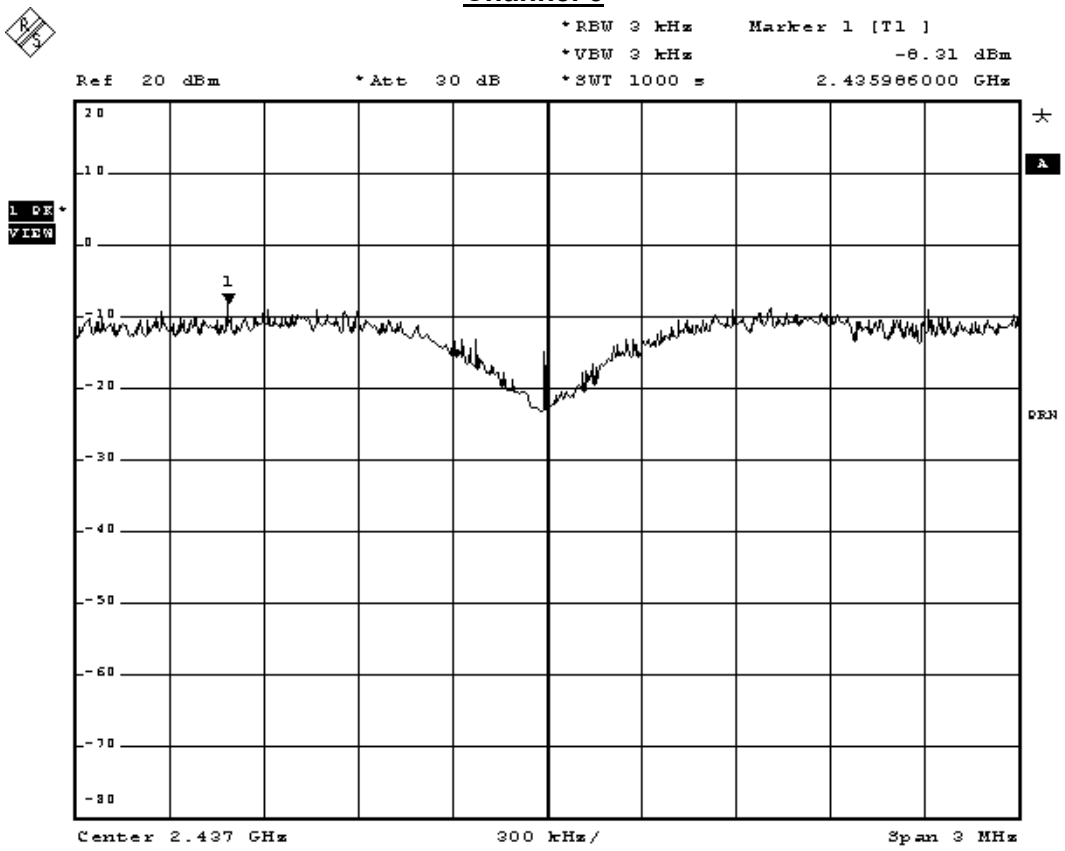
Product	Wireless ADSL Router		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2008/02/25	Test Site	No.1 OATS

IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-8.05	<8	Pass
6	2437	-8.31	<8	Pass
11	2462	-7.49	<8	Pass

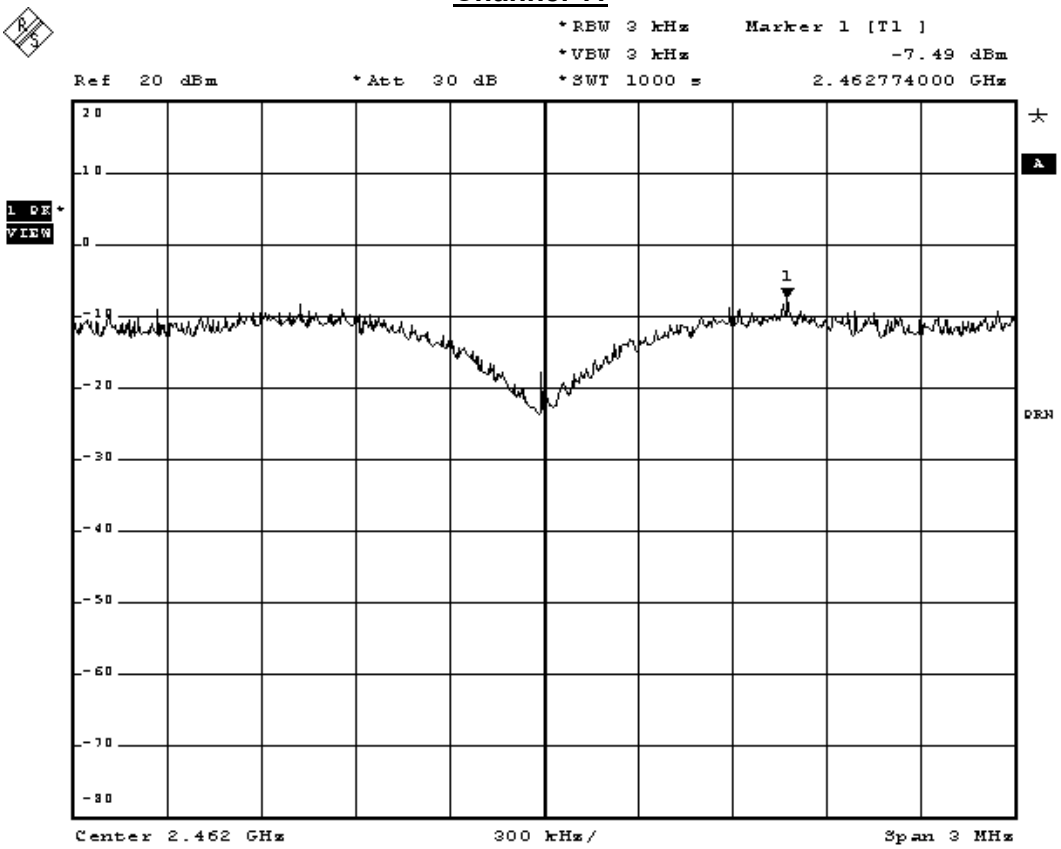
Channel 1



Channel 6


*RBW 3 kHz
Marker 1 [T1]
*VBW 3 kHz
-8.31 dBm
Ref 20 dBm
*Att 30 dB
*SWT 1000 s
2.435986000 GHz
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1 PK VIEW
A
DRN
Center 2.437 GHz
300 kHz/
Span 3 MHz

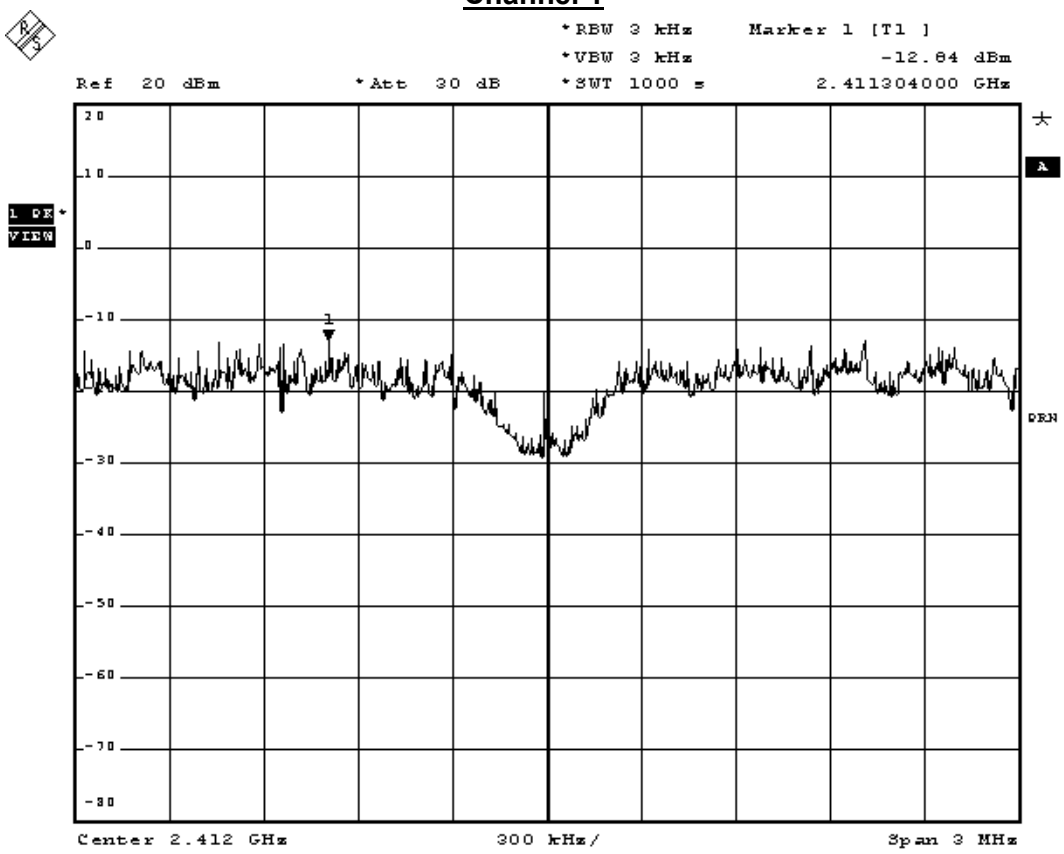
Channel 11


*RBW 3 kHz
Marker 1 [T1]
*VBW 3 kHz
-7.49 dBm
Ref 20 dBm
*Att 30 dB
*SWT 1000 s
2.462774000 GHz
1 PK
VIEW
A
WRN
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1
Center 2.462 GHz
300 kHz/
Span 3 MHz

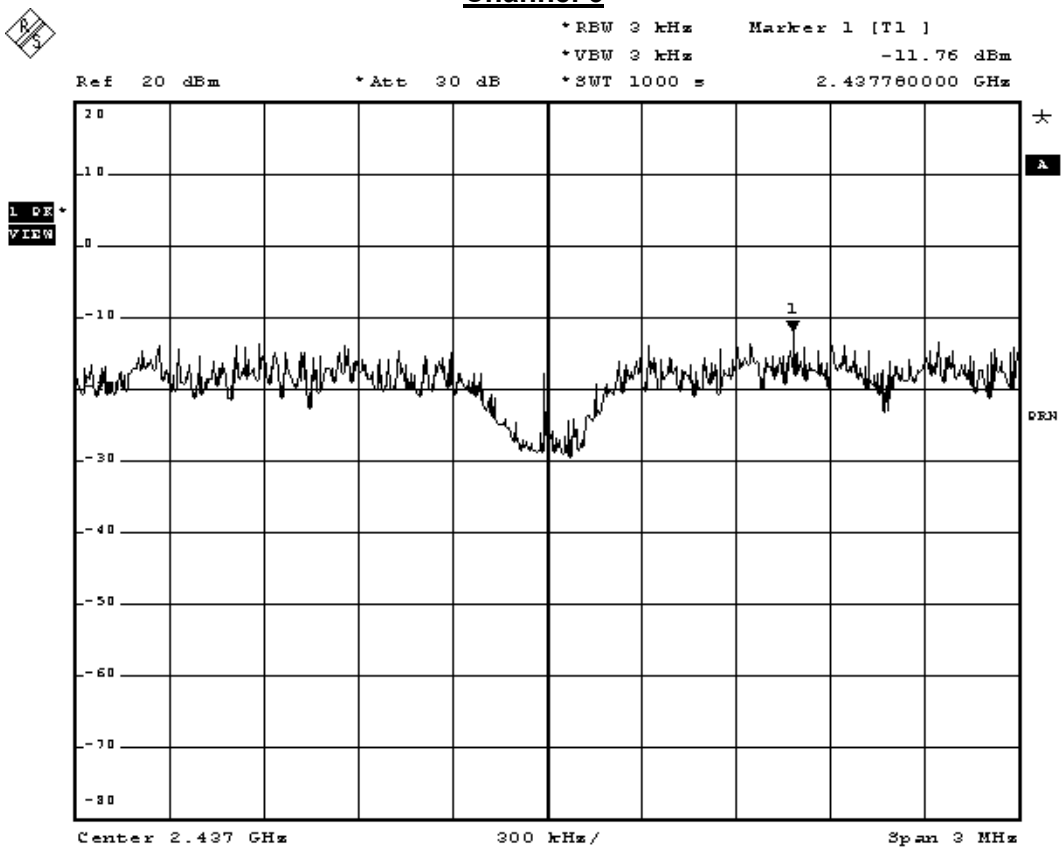
Product	Wireless ADSL Router		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2008/02/25	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-12.84	<8	Pass
6	2437	-11.76	<8	Pass
11	2462	-12.63	<8	Pass

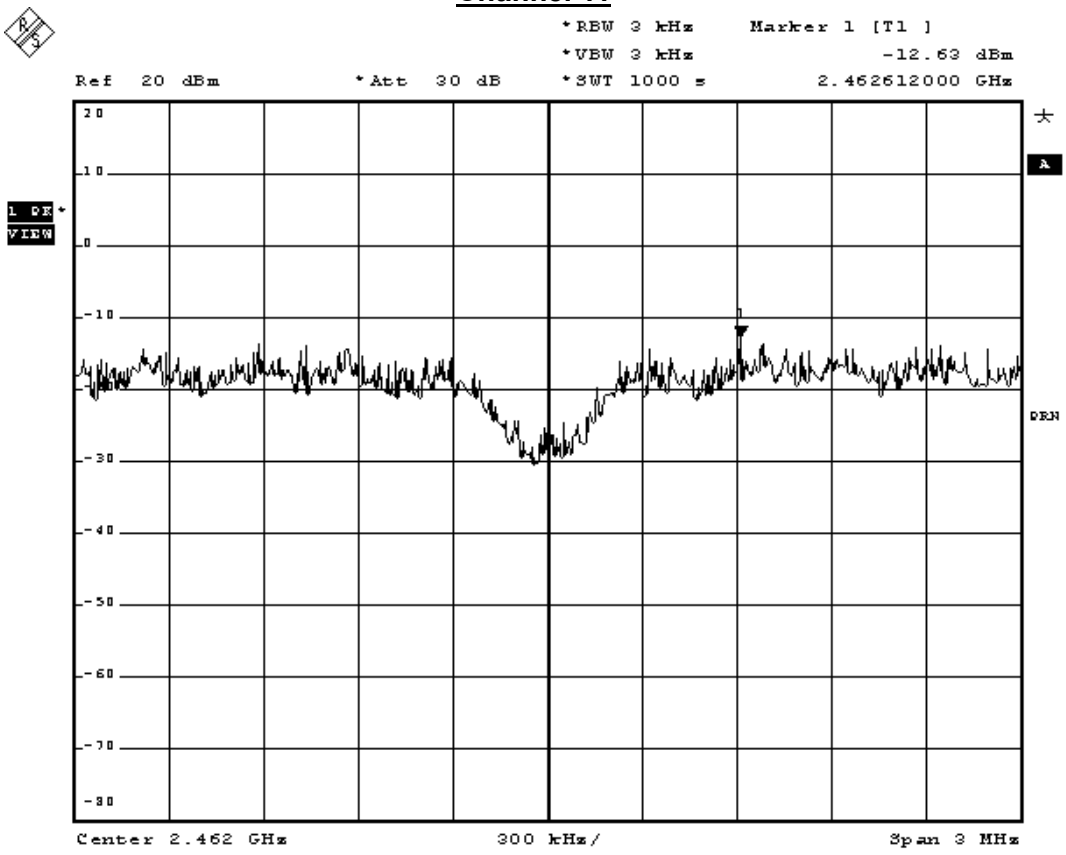
Channel 1



Channel 6


*RBW 3 kHz
*VBW 3 kHz
*SWT 1000 s
Marker 1 [T1]
-11.76 dBm
2.437760000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
A
1
DRN
20
10
0
-10
-30
-40
-50
-60
-70
-80
Center 2.437 GHz
300 kHz/
Span 3 MHz

Channel 11


*RBW 3 kHz
Marker 1 [T1]
*VBW 3 kHz
-12.63 dBm
Ref 20 dBm
*Att 30 dB
*SWT 1000 s
2.462612000 GHz
1 PK
VIEW
A
WRN
20
10
0
-10
-30
-40
-50
-60
-70
-80
Center 2.462 GHz
300 kHz/
Span 3 MHz