



FCC TEST REPORT

According to

FCC CFR Title 47 Part 15 Subpart C

Applicant	: ZyXEL Communications Corp.
Address	: 6 innovation RD II, science park, hsinchu 300, TaiWan
Manufacturer(1)	: ZyXEL Communications Corp.
Address(1)	: 6 innovation RD II, science park, hsinchu 300, TaiWan
Manufacturer(2)	: ZyXEL Communications(Wuxi) Co Ltd.
Address(2)	: 60 – E, Minshan RD, New District, Wuxi, Jiangsu, P.R. China
Equipment	: 802.11g Wireless ADSL 2+ 4-port Gateway
Model No.	: PK5000Z
FCC ID	: I88PK5000Z

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Cerpass Technology Corp.



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Address : 6 innovation RD II, science park, hsinchu 300, TaiWan

Equipment : 802.11g Wireless ADSL 2+ 4-port Gateway

Model No. : PK5000Z

FCC ID : I88PK5000Z

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 – 2003** and the energy emitted by this equipment was **passed CISPR PUB. 22 and FCC Part 15** in both radiated and conducted emission class B limits. Testing was carried out on Dec 27, 2009 at **Cerpass Technology Corp.**

Documented By:

Approved By:

Cathy Chen/ Administration

John Wang/ Technical director



1. Report of Measurements and Examinations

FCC CFR Title 47 Part 15 Subpart C: 2007			
ANSI C63.4: 2003			
Clause	Test Parameter	Test Performed	Remark
15.207	Conducted Emission	YES	PASS
15.209	Radiated Emission	YES	PASS
15.247(a) 15.215(c)	Occupied Bandwidth	YES	PASS
15.247(b)	Maximum Peak Output Power	YES	PASS
15.247(d)	Band Edges	YES	PASS
15.247(d)	Power Spectral Density	YES	PASS



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

802.11g Wireless ADSL 2+ 4-port Gateway	Model No:	PK5000Z
I.T.E. POWER SUPPLY	Manufacturer:	LEADER ELECTRONICS INC.
	Model:	MT12-Y120100-A1
	Input:	120V~60Hz 0.3A
	Output:	12V  1A
Power Supply Cable	Non-Shielded, 1.8m	

Component/ Keypart list	
Frequency Range	2.4 ~ 2.4835GHz
Modulation Type	802.11b: DSSS 802.11g: OFDM
Number of Channels	802.11b/g (20MHz): 11
Data Rate	802.11b: 11, 5.5, 2, 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
Antenna Type	Dipole
Antenna Gain	2.79 dBi



2.2. Carrier Frequency of Channels

802.11b / 802.11g

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	08	2447
02	2417	09	2452
03	2422	10	2457
04	2427	11	2462
05	2432	---	---
06	2437	---	---
07	2442	---	---

2.3. Carrier Frequency of Channels

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst –case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table marked "*" test modes are shown in this report.

802.11b/ Transmit by 2412MHz			802.11g/ Transmit by 2412MHz		
	Date Rate (Mbps)	Maximum Peak Output Power		Date Rate (Mbps)	Maximum Peak Output Power
*	11	18.21	*	54	18.91
	5.5	17.01		48	18.76
	2	15.43		36	18.87
	1	15.40		24	18.65
	--	--		18	18.47
	--	--		12	18.44
	--	--		9	18.06
	--	--		6	17.90



2.4. Test Manner

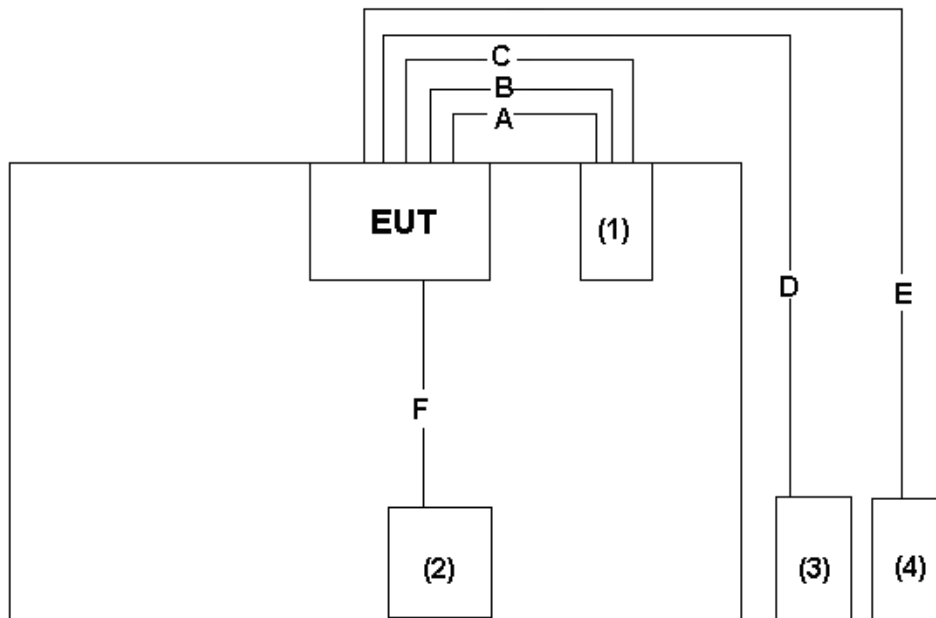
Test Manner	
a	During testing, the interface cables and equipment positions were varied according to 47 CFR, Part 2, Part 15 and CISPR PUB. 22
b	The complete test system included HUB, Phone, Notebook, IP Express and EUT.
c	Connect the HUB, Phone, Notebook, IP Express and EUT.
d	Run the W-LAN software to control the wireless off and on.
e	Adjust the EUT and then test.
The test modes: Full System	
	Test Mode 1: Transmit by 802.11b 2412MHz
	Test Mode 2: Transmit by 802.11b 2437MHz
	Test Mode 3: Transmit by 802.11b 2462MHz
	Test Mode 4: Transmit by 802.11g 2412MHz
	Test Mode 5: Transmit by 802.11g 2437MHz
	Test Mode 6: Transmit by 802.11g 2462MHz

2.5. Description of Test System

No.	Device	Manufacturer	Model No.	Description
1	HUB	D-Link	DI-504	N/A
2	Phone	TONNET	TA-8012A	N/A
3	Notebook	ASUS	W6A	Power by adaptor
4	IP Express	ZyXEL	IES-1248-71	N/A



2.6. Connection Diagram of Test System



Use Cable

No.	Cable	Quantity	Description
A	LAN Cable	1	Non-shielding, 1.0m
B	LAN Cable	1	Non-shielding, 1.0m
C	LAN Cable	1	Non-shielding, 1.0m
D	LAN Cable	1	Non-shielding, $\geq 3.0\text{m}$
E	Telephone Cable	1	Non-shielding, $\geq 3.0\text{m}$
F	Telephone Cable	1	Non-shielding, 1.5m



2.7. General Information of Test

Test Site:	Cerpass Technology Corp.
Performand Location :	No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China
NVLAP LAB Code :	200814-0
FCC Registration Number :	916572
IC Registration Number :	7290A-1
VCCI Registration Number :	T-343 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test

Laboratory accreditation



2.8. Measurement Uncertainty

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	LINE/NEUTRAL	±2.71 dB
Radiated Emission	30 MHz ~ 25GHz	Vertical	±4.11 dB
		Horizontal	±4.10 dB
Occupied Bandwidth	---	---	±7500 Hz
Maximum Peak Output Power	---	---	±1.4 dB
Band Edges	---	---	±2.2 dB
Power Spectral Density	---	---	±2.2 dB



3. Test of Conducted Emission

3.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

3.2. Test Procedures

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

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

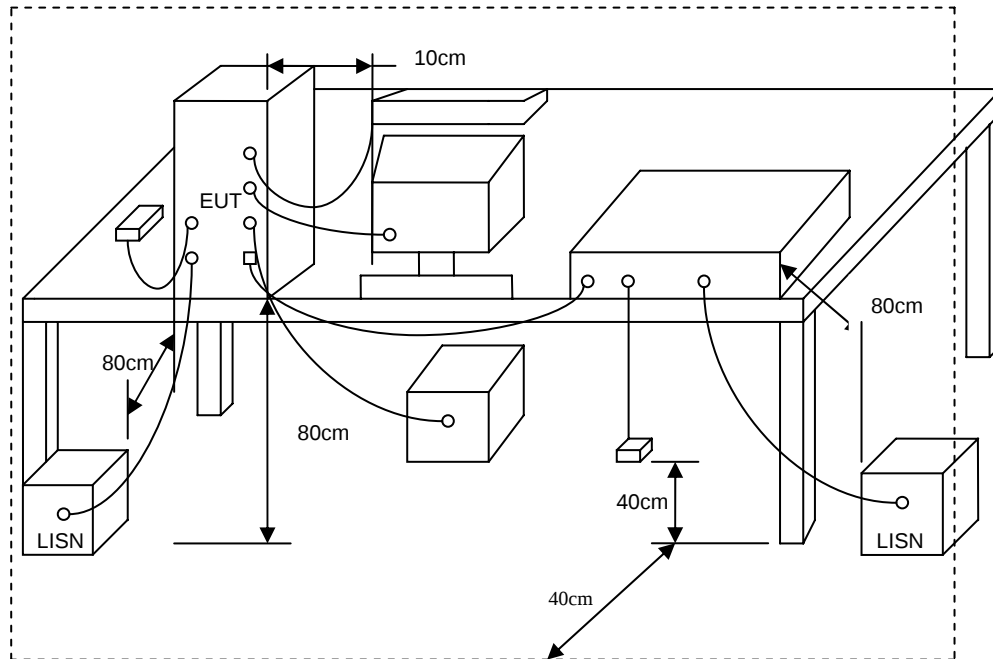
Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

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



3.3. Typical Test Setup



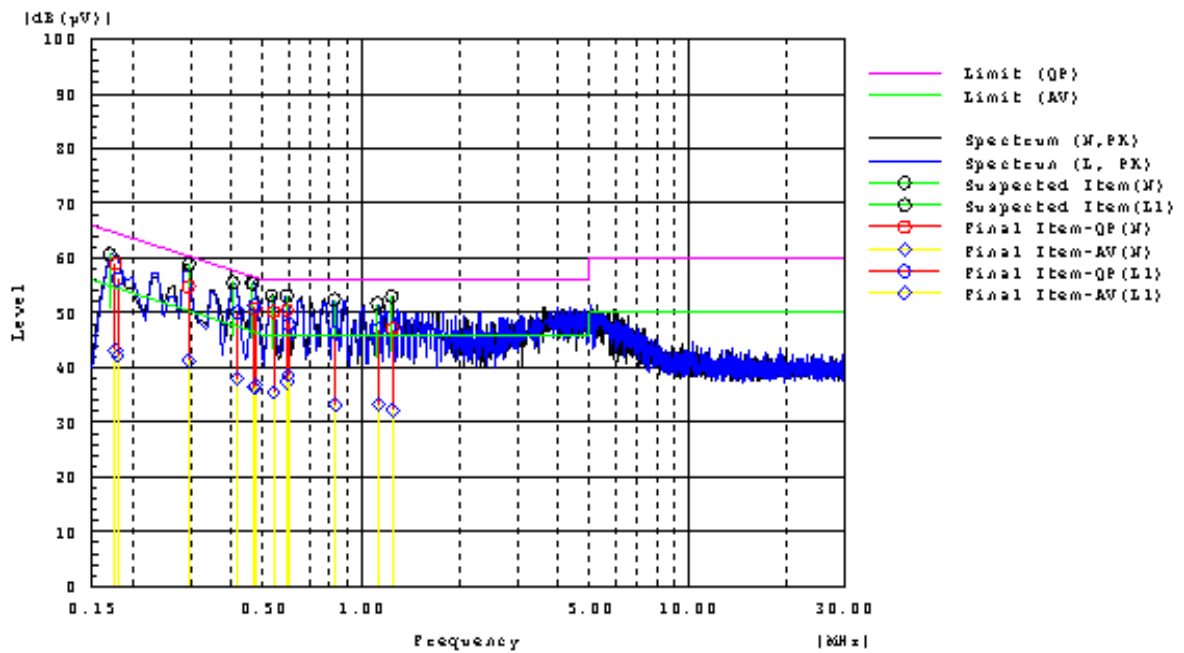
3.4. Measurement Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date
EMC Emission Tester	EMCPARTNER	Harmonics-1000	159	2009.09.08
Test Receiver	R&S	ESCI	100565	2009.06.30
AMN	R&S	ESH2-Z5	100182	2009.06.23
Two-Line V-Network	R&S	ENV216	100325	2009.06.23
ISN	FCC	FCC-TLISN-T2-02	20379	2009.06.23
ISN	FCC	FCC-TLISN-T4-02	20380	2009.06.23
ISN	FCC	FCC-TLISN-T8-02	20381	2009.06.23
Current Probe	R&S	EZ-17	100303	2009.06.23
Attenuator	R&S	ESH3-Z2	100529	2009.01.12
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2009.10.19



3.5. Test Result and Data

Test Mode :	Mode 2: Transmit by 802.11b 2437MHz		
AC Power :	AC 120V/60Hz	Phase :	Line
Temp :	26°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2009/12/25

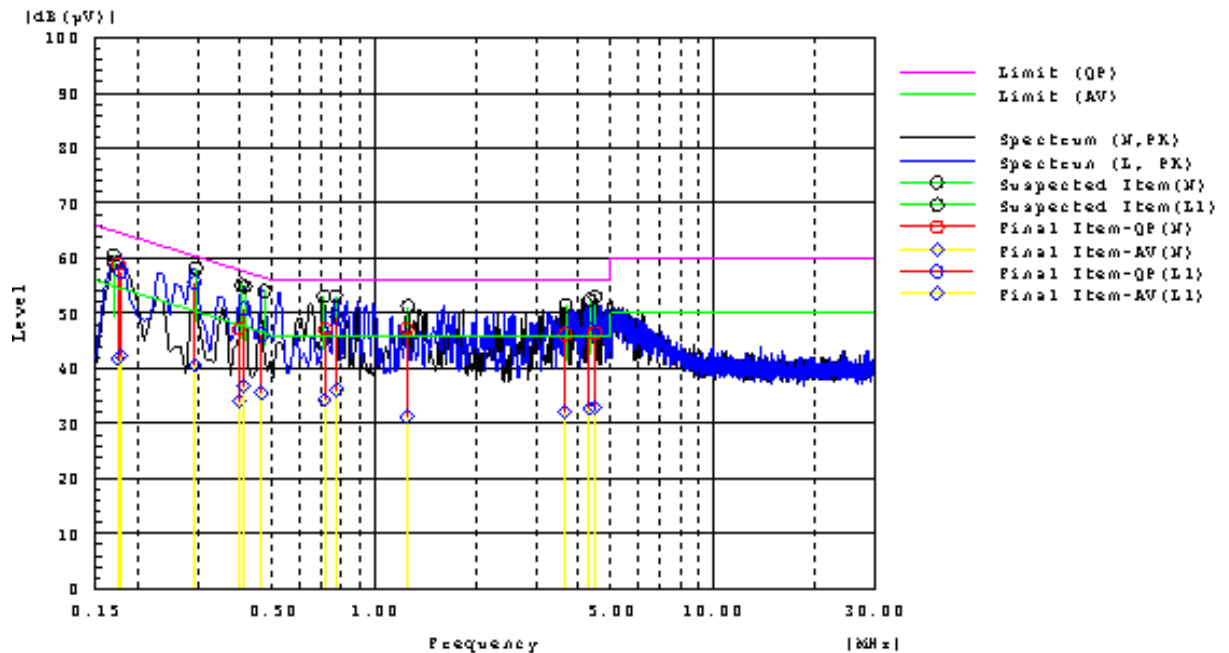


Frequency MHz	Line Phase	Reading dB(uV) QP	Reading dB(uV) AV	Factor dB	Level dB(uV) QP	Level dB(uV) AV	Limit dB(uV) QP	Limit dB(uV) AV	Margin dB QP	Margin dB AV	Pass/Fail
0.17949	L1	36.7	22.7	19.4	56.1	42.1	64.5	54.5	8.4	12.4	Pass
0.41888	L1	30.6	18.4	19.6	50.2	38.0	57.5	47.5	7.3	9.5	Pass
0.47097	L1	31.7	16.7	19.7	51.4	36.4	56.5	46.5	5.1	10.1	Pass
0.59756	L1	28.3	18.9	19.6	47.9	38.5	56.0	46.0	8.1	7.5	Pass
0.83046	L1	26.8	13.7	19.5	46.3	33.2	56.0	46.0	9.7	12.8	Pass
1.12757	L1	27.4	13.7	19.5	46.9	33.2	56.0	46.0	9.1	12.8	Pass
0.17677	N	39.4	23.6	19.5	58.9	43.1	64.6	54.6	5.7	11.5	Pass
0.29618	N	34.9	21.4	19.8	54.7	41.2	60.3	50.3	5.6	9.1	Pass
0.4734	N	31.2	17.2	19.6	50.8	36.8	56.5	46.5	5.7	9.7	Pass
0.53926	N	30.6	15.9	19.6	50.2	35.5	56.0	46.0	5.8	10.5	Pass
1.24571	N	27.6	12.7	19.5	47.1	32.2	56.0	46.0	8.9	13.8	Pass
0.59222	N	30.9	17.9	19.6	50.5	37.5	56.0	46.0	5.5	8.5	Pass

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode 5: Transmit by 802.11g 2437MHz		
AC Power :	AC 120V/60Hz	Phase :	Line
Temp :	26°C	Humidity :	50%
Pressure(mbar) :	1002	Date :	2009/12/25



Frequency MHz	Line Phase	Reading dB(uV) QP	Reading dB(uV) AV	Factor dB	Level dB(uV) QP	Level dB(uV) AV	Limit dB(uV) QP	Limit dB(uV) AV	Margin dB QP	Margin dB AV	Pass/Fail
0.17823	L1	38.2	22.8	19.4	57.6	42.2	64.6	54.6	7.0	12.4	Pass
0.77536	L1	29.7	16.5	19.6	49.3	36.1	56.0	46.0	6.7	9.9	Pass
4.31208	L1	27.3	12.9	19.8	47.1	32.7	56.0	46.0	8.9	13.3	Pass
0.29366	L1	36.1	21.1	19.5	55.6	40.6	60.4	50.4	4.8	9.8	Pass
0.4118	L1	31.2	17.2	19.6	50.8	36.8	57.6	47.6	6.8	10.8	Pass
0.46341	L1	26.4	15.9	19.7	46.1	35.6	56.6	46.6	10.5	11.0	Pass
0.17483	N	39.4	22.2	19.5	58.9	41.7	64.7	54.7	5.8	13.0	Pass
0.39754	N	27.5	14.5	19.6	47.1	34.1	57.9	47.9	10.8	13.8	Pass
0.71473	N	27.6	14.7	19.6	47.2	34.3	56.0	46.0	8.8	11.7	Pass
4.4859	N	26.8	13.3	19.7	46.5	33.0	56.0	46.0	9.5	13.0	Pass
1.2429	N	27.7	11.8	19.5	47.2	31.3	56.0	46.0	8.8	14.7	Pass
3.66276	N	26.6	12.4	19.7	46.3	32.1	56.0	46.0	9.7	13.9	Pass

Note: Measurement Level = Reading Level + Correct Factor



4. Test of Radiated Emission

4.1. Test Limit

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.4-2003. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions for unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance Meters	Radiated (μ V / M)	Radiated (dB μ V/ M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the below table.

Frequency (MHz)	Distance Meters	Radiated (dB μ V/ M)
30-230	10	30
230-1000	10	37

4.2. Test Procedures

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 plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, then the video



bandwidth is set to 1MHz for peak measurements and 10Hz for average measurements.

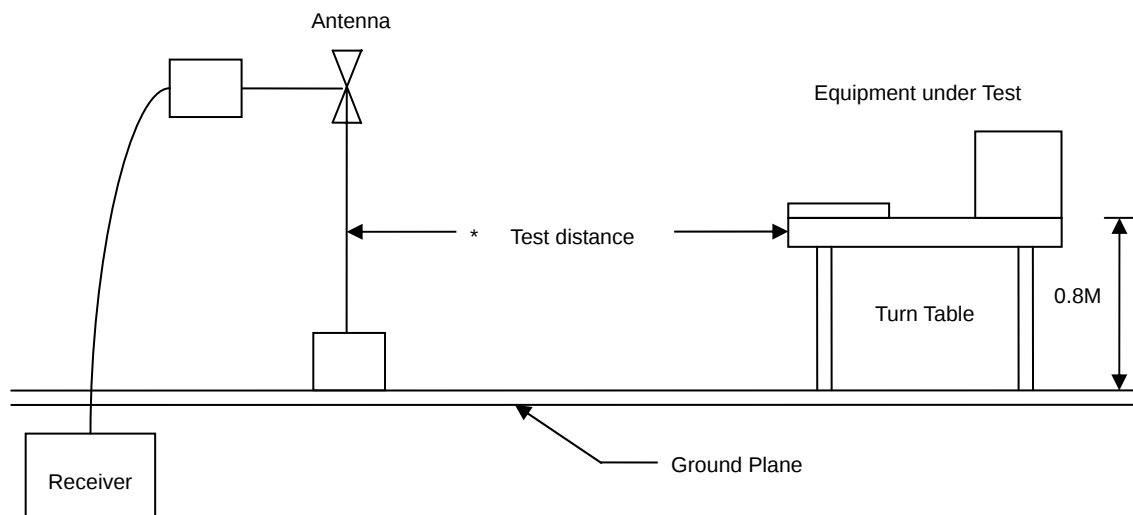
The spectrum from 30MHz to 26GHz is investigated with the transmitter set to the lowest, middle and highest channels in the 2.4GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are

Made with the antenna polarized in both the vertical and the horizontal positions.

When performing radiated measurements >1 GHz, the EUT always remains within the 3dB beam-width of the measuring antenna.

4.3. Typical Test Setup



**4.4. Measurement Equipment**

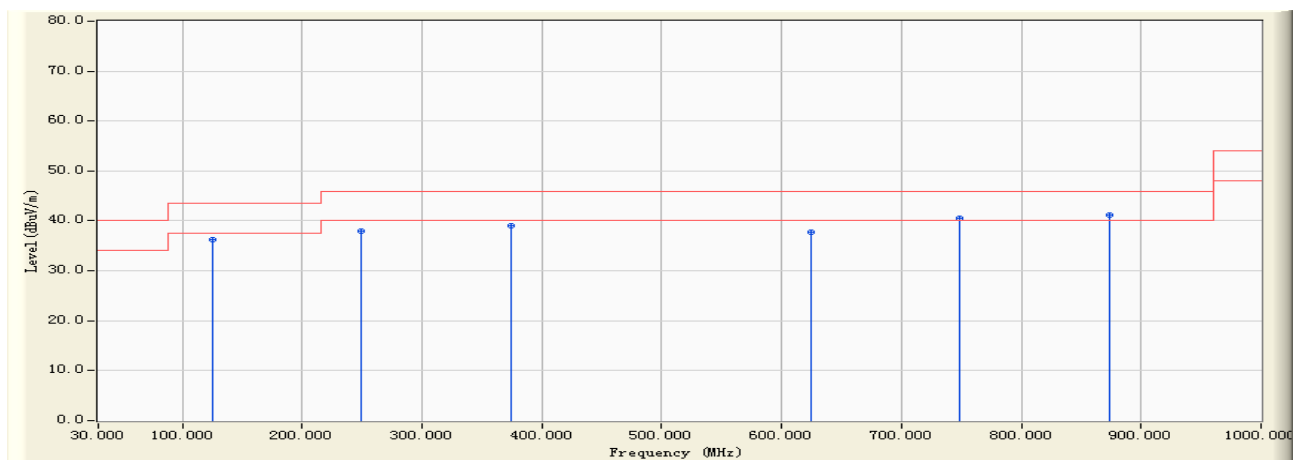
Instrument	Model No.	Manufacturer	Serial No.	Calibration Date
EMI Test Receiver	R&S	ESCI	100564	2009.06.23
H64 Amplifier	HP	8447F	3113A05582	2009.12.01
Preamplifier	Agilent	8449B	ED-HE-EMI-077	2009.02.18
Ultra Broadband Antenna	R&S	HL562	100362	2009.11.03
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-619	2009.11.10
Spectrum Analyzer	R&S	FSP40	100324	2009.11.02
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-001	2009.10.19



4.5. Test Result and Data

Under 1G:

Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/25 - 16:53
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



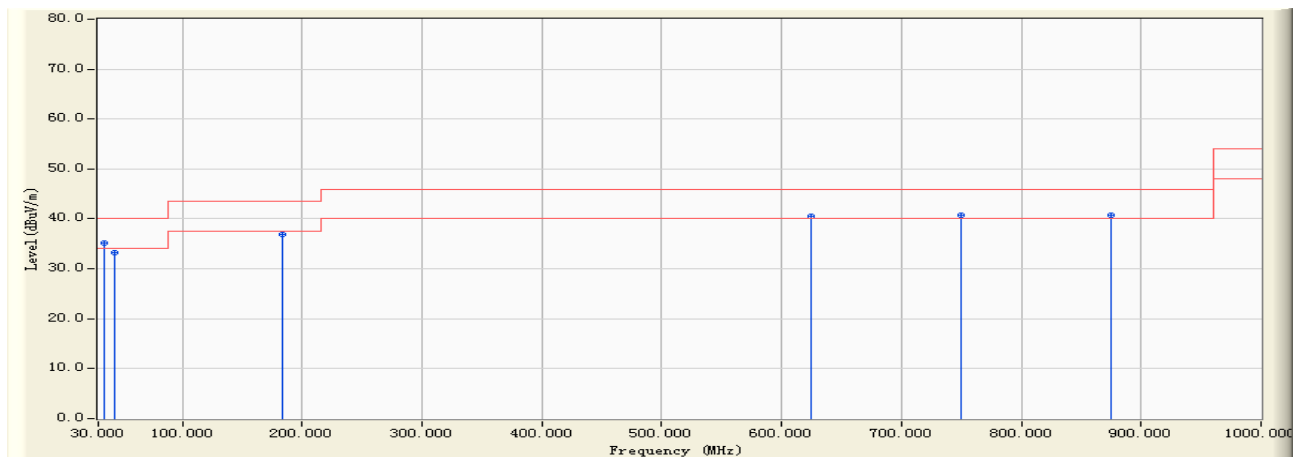
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		125.648	-13.826	50.120	36.294	-7.206	43.500	QUASIPeAK	100.000	30.000
2		249.210	-12.822	50.683	37.861	-8.139	46.000	QUASIPeAK	100.000	152.300
3		373.986	-8.422	47.490	39.068	-6.932	46.000	QUASIPeAK	100.000	305.800
4		625.010	-2.098	39.860	37.762	-8.238	46.000	QUASIPeAK	100.000	33.100
5		748.994	0.433	40.190	40.623	-5.377	46.000	QUASIPeAK	100.000	158.600
6	*	873.900	2.506	38.710	41.216	-4.784	46.000	QUASIPeAK	100.000	263.400

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/25 - 16:53
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



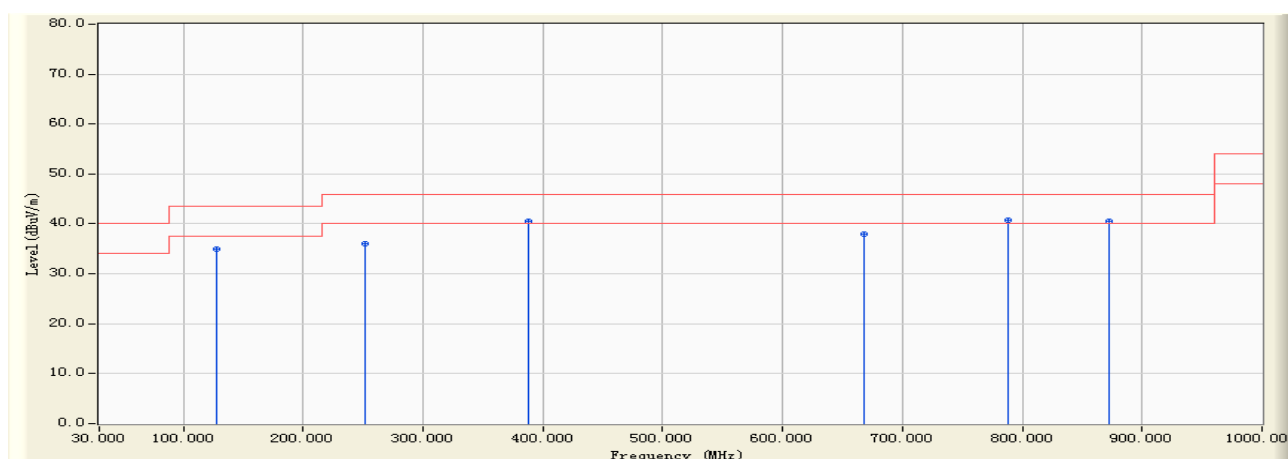
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	34.640	-7.638	42.900	35.262	-4.738	40.000	QUASIPeAK	100.000	250.000
2		43.801	-12.584	45.800	33.216	-6.784	40.000	QUASIPeAK	100.000	280.000
3		183.750	-14.924	51.780	36.856	-6.644	43.500	QUASIPeAK	100.000	163.400
4		624.993	-2.098	42.600	40.502	-5.498	46.000	QUASIPeAK	100.000	31.000
5		749.451	0.437	40.341	40.778	-5.222	46.000	QUASIPeAK	100.000	35.400
6		874.982	2.478	38.350	40.828	-5.172	46.000	QUASIPeAK	100.000	0.000

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/25 - 17:03
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 2: Transmit by 802.11b 2437MHz



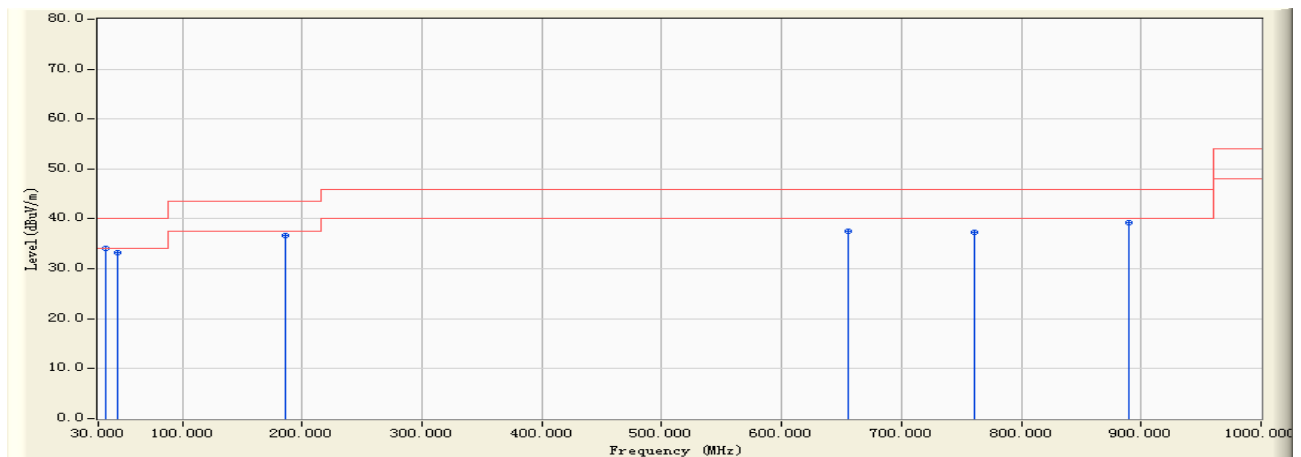
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		128.170	-14.153	49.150	34.997	-8.503	43.500	QUASIPeAK	126.500	326.400
2		251.600	-12.724	48.790	36.066	-9.934	46.000	QUASIPeAK	250.000	159.800
3		388.400	-7.910	48.400	40.490	-5.510	46.000	QUASIPeAK	200.000	122.800
4		668.150	-1.130	39.110	37.979	-8.021	46.000	QUASIPeAK	261.400	215.600
5	*	788.100	1.007	39.700	40.707	-5.293	46.000	QUASIPeAK	200.000	345.200
6		872.500	2.487	37.960	40.447	-5.553	46.000	QUASIPeAK	250.000	214.600

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/25 - 17:03
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2: Transmit by 802.11b 2437MHz



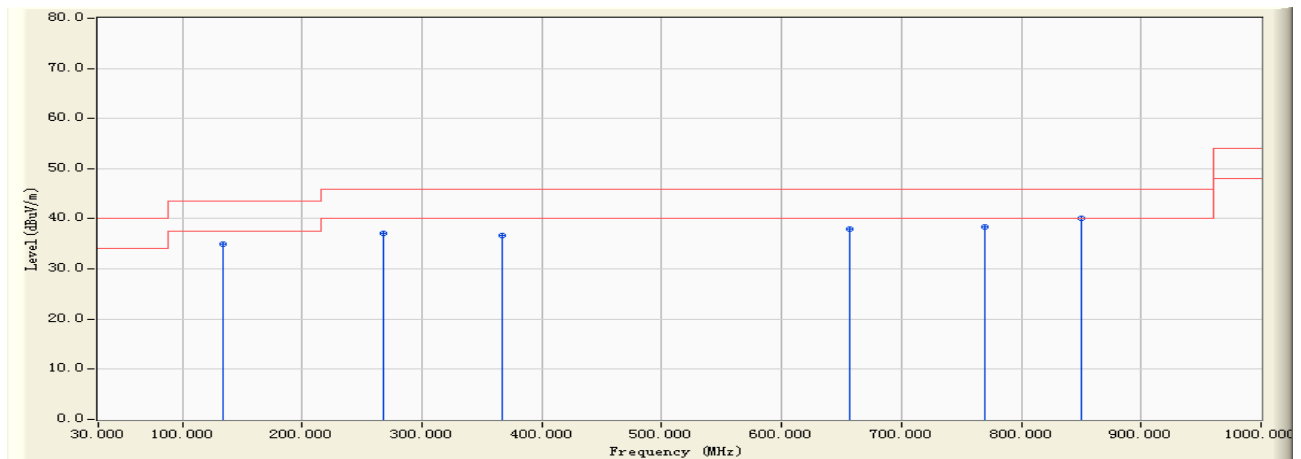
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	36.180	-11.105	45.198	34.092	-5.908	40.000	QUASIPeAK	100.000	261.400
2		45.690	-16.398	49.660	33.262	-6.738	40.000	QUASIPeAK	112.500	0.000
3		186.410	-17.542	54.160	36.618	-6.882	43.500	QUASIPeAK	100.000	320.500
4		655.200	-5.764	43.330	37.566	-8.434	46.000	QUASIPeAK	116.500	221.500
5		761.200	-4.036	41.260	37.224	-8.776	46.000	QUASIPeAK	100.000	312.200
6		890.120	-2.303	41.610	39.307	-6.693	46.000	QUASIPeAK	100.000	117.100

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/25 - 17:48
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



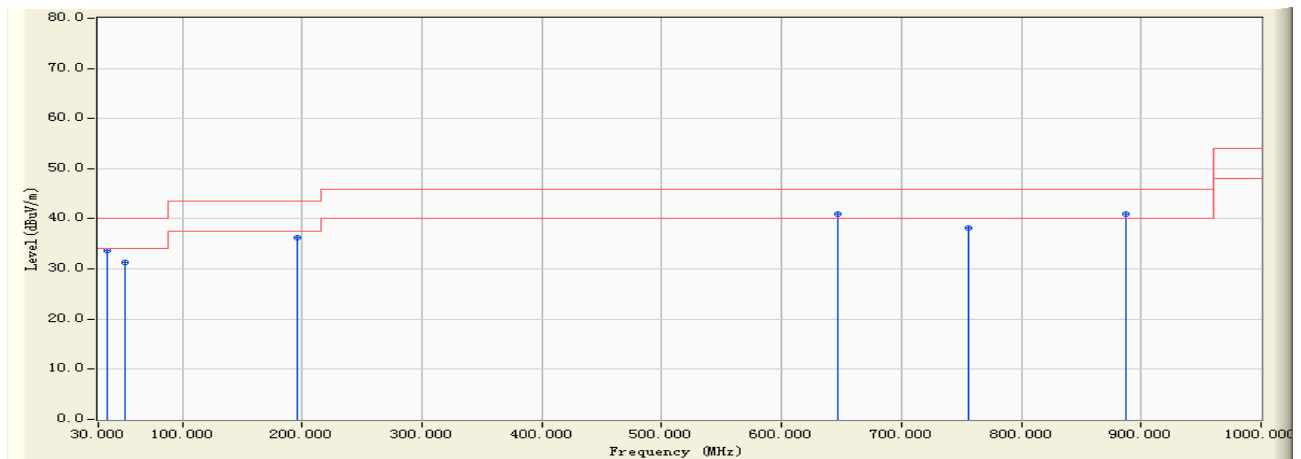
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		134.590	-17.192	52.198	35.007	-8.493	43.500	QUASIPeAK	188.400	325.500
2		268.410	-14.062	51.260	37.198	-8.802	46.000	QUASIPeAK	156.700	269.800
3		366.490	-11.401	48.150	36.749	-9.251	46.000	QUASIPeAK	200.000	229.600
4		657.150	-5.663	43.650	37.987	-8.013	46.000	QUASIPeAK	200.000	325.400
5		769.100	-3.665	42.160	38.495	-7.505	46.000	QUASIPeAK	187.100	258.400
6	*	850.230	-2.007	42.150	40.143	-5.857	46.000	QUASIPeAK	211.200	147.800

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/25 - 17:49
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



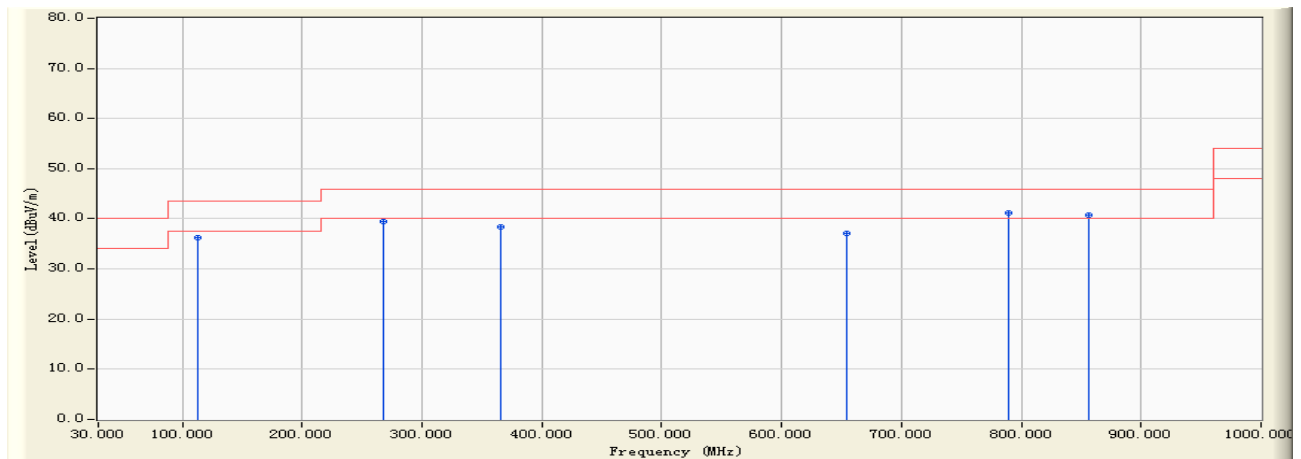
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		36.980	-11.528	45.160	33.632	-6.368	40.000	QUASIPeAK	100.000	345.200
2		52.360	-20.703	52.070	31.366	-8.634	40.000	QUASIPeAK	100.000	299.700
3		195.620	-17.824	54.060	36.237	-7.263	43.500	QUASIPeAK	120.400	312.500
4	*	646.800	-6.148	47.150	41.002	-4.998	46.000	QUASIPeAK	100.000	288.100
5		755.640	-4.211	42.450	38.239	-7.761	46.000	QUASIPeAK	100.000	154.800
6		887.510	-2.272	43.260	40.988	-5.012	46.000	QUASIPeAK	112.500	324.800

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/28 - 17:58
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



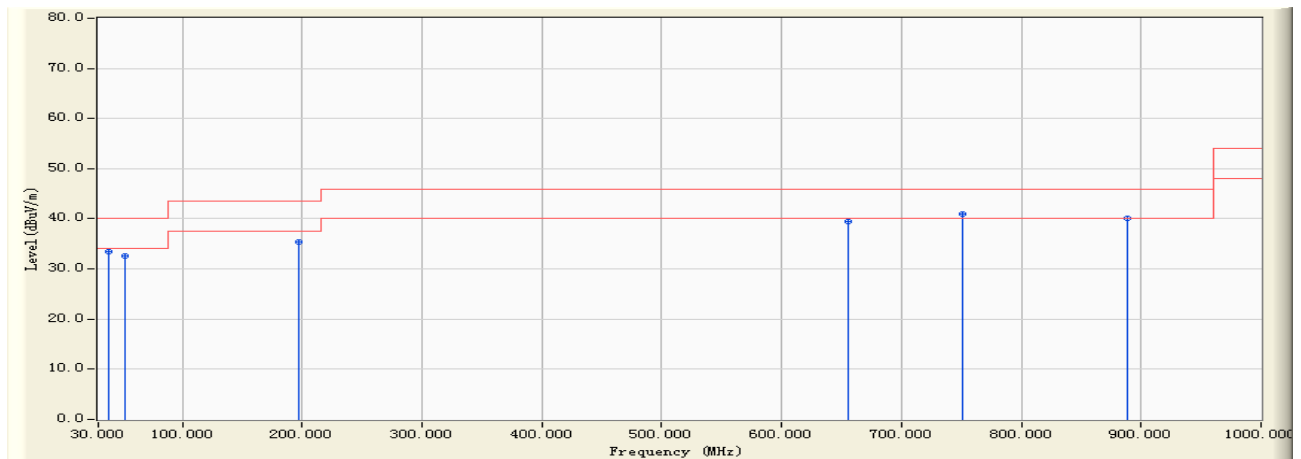
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		112.900	-16.433	52.640	36.206	-7.294	43.500	QUASIPeAK	251.600	332.500
2		267.810	-14.090	53.620	39.529	-6.471	46.000	QUASIPeAK	213.400	266.400
3		365.800	-11.408	49.810	38.402	-7.598	46.000	QUASIPeAK	100.000	350.200
4		654.200	-5.800	43.000	37.200	-8.800	46.000	QUASIPeAK	185.300	256.800
5	*	788.940	-3.051	44.150	41.099	-4.901	46.000	QUASIPeAK	200.000	360.000
6		855.690	-1.746	42.460	40.714	-5.286	46.000	QUASIPeAK	211.900	324.800

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/28 - 17:58
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



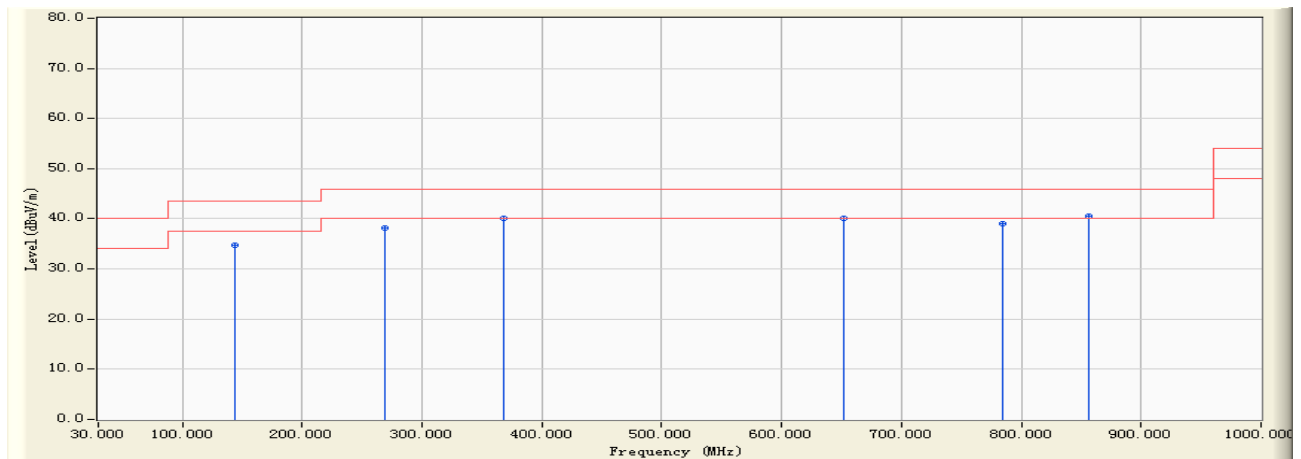
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		38.150	-12.139	45.690	33.551	-6.449	40.000	QUASIPeAK	100.000	259.300
2		52.160	-20.576	53.260	32.684	-7.316	40.000	QUASIPeAK	100.000	312.800
3		196.800	-17.791	53.200	35.409	-8.091	43.500	QUASIPeAK	115.400	250.400
4		655.260	-5.762	45.230	39.468	-6.532	46.000	QUASIPeAK	108.300	360.000
5	*	751.360	-4.390	45.320	40.930	-5.070	46.000	QUASIPeAK	100.000	265.400
6		888.210	-2.284	42.360	40.076	-5.924	46.000	QUASIPeAK	100.000	211.400

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/28 - 18:22
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 5: Transmit by 802.11g 2437MHz



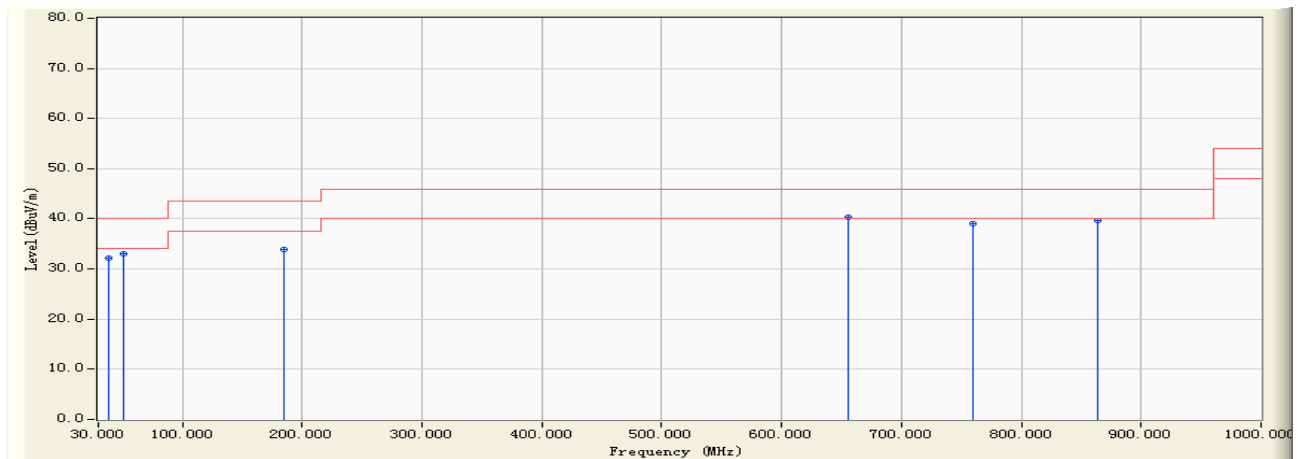
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		144.230	-17.685	52.360	34.675	-8.825	43.500	QUASIPeAK	200.000	314.800
2		268.910	-14.032	52.140	38.107	-7.893	46.000	QUASIPeAK	156.800	254.300
3		368.460	-11.352	51.360	40.007	-5.993	46.000	QUASIPeAK	200.000	345.800
4		651.800	-5.849	45.880	40.031	-5.969	46.000	QUASIPeAK	200.000	148.600
5		784.260	-3.169	42.150	38.981	-7.019	46.000	QUASIPeAK	211.800	335.200
6	*	856.210	-1.707	42.150	40.443	-5.557	46.000	QUASIPeAK	188.900	253.800

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/28 - 18:22
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 5: Transmit by 802.11g 2437MHz



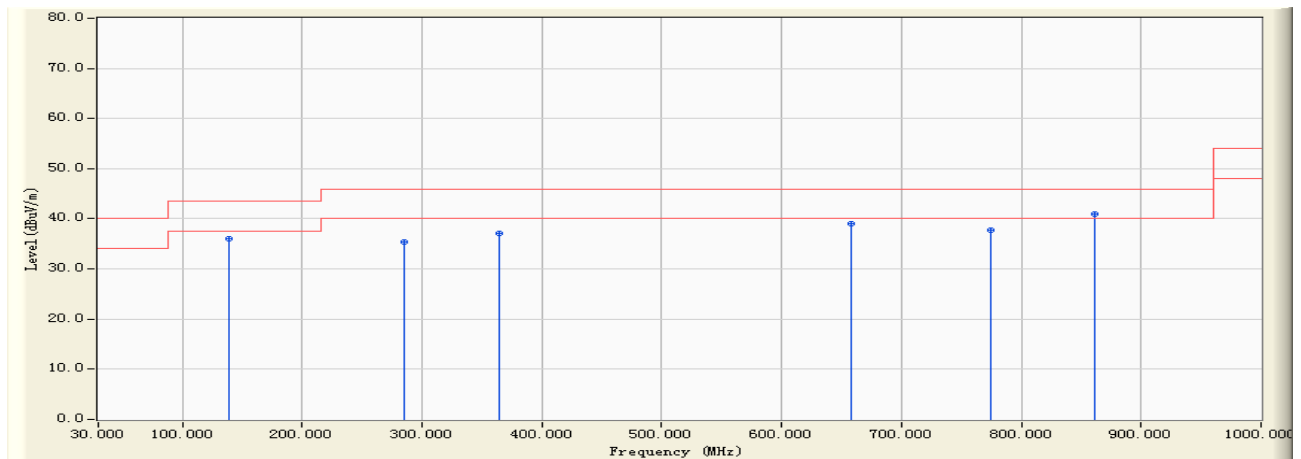
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		38.160	-12.144	44.210	32.066	-7.934	40.000	QUASIPeAK	100.000	258.700
2		51.230	-19.975	52.980	33.004	-6.996	40.000	QUASIPeAK	100.000	263.800
3		184.620	-17.390	51.230	33.840	-9.660	43.500	QUASIPeAK	100.000	256.800
4	*	655.230	-5.764	46.120	40.357	-5.643	46.000	QUASIPeAK	112.500	312.200
5		759.620	-4.081	43.220	39.139	-6.861	46.000	QUASIPeAK	100.000	159.800
6		864.250	-1.677	41.250	39.573	-6.427	46.000	QUASIPeAK	100.000	287.600

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/28 - 18:32
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



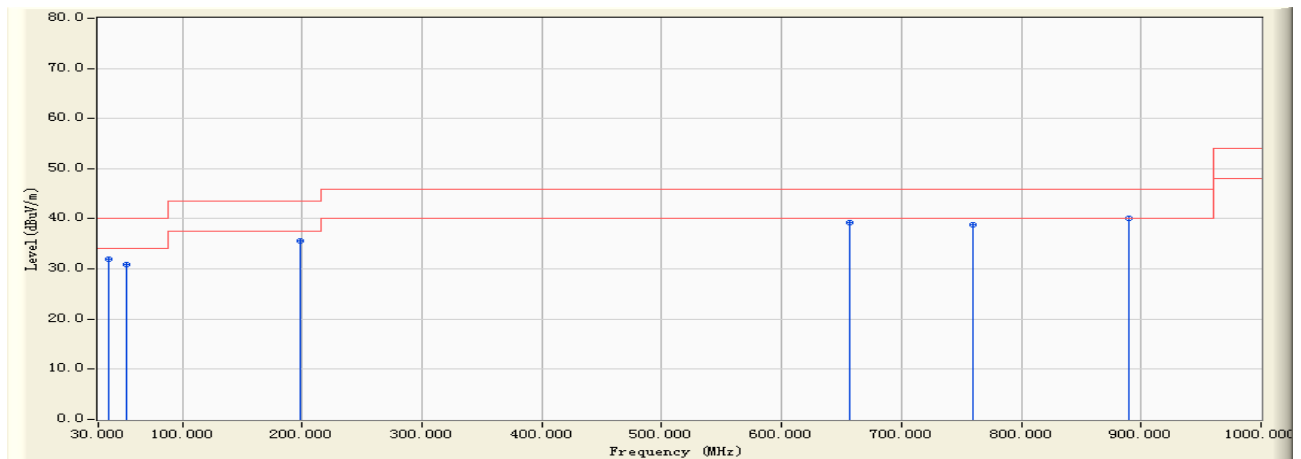
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		138.990	-17.520	53.460	35.940	-7.560	43.500	QUASIPeAK	169.800	326.500
2		284.600	-13.617	48.940	35.323	-10.677	46.000	QUASIPeAK	200.000	258.400
3		364.230	-11.432	48.610	37.178	-8.822	46.000	QUASIPeAK	200.000	267.500
4		657.810	-5.633	44.750	39.116	-6.884	46.000	QUASIPeAK	250.000	321.500
5		774.180	-3.529	41.180	37.651	-8.349	46.000	QUASIPeAK	169.800	335.900
6	*	861.240	-1.533	42.460	40.927	-5.073	46.000	QUASIPeAK	251.400	354.200

Note:

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



Engineer : Sandy	
Site : EMC Lab AC 102	Time : 2009/12/28 - 18:32
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (30-1000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1		39.180	-12.685	44.740	32.055	-7.945	40.000	QUASIPeAK	100.000	258.700
2		53.690	-21.537	52.400	30.864	-9.136	40.000	QUASIPeAK	100.000	312.400
3		198.630	-17.735	53.240	35.505	-7.995	43.500	QUASIPeAK	123.500	325.300
4		656.900	-5.676	45.000	39.324	-6.676	46.000	QUASIPeAK	108.900	98.400
5		760.250	-4.057	42.780	38.723	-7.277	46.000	QUASIPeAK	100.000	241.500
6	*	889.500	-2.305	42.510	40.205	-5.795	46.000	QUASIPeAK	100.000	88.100

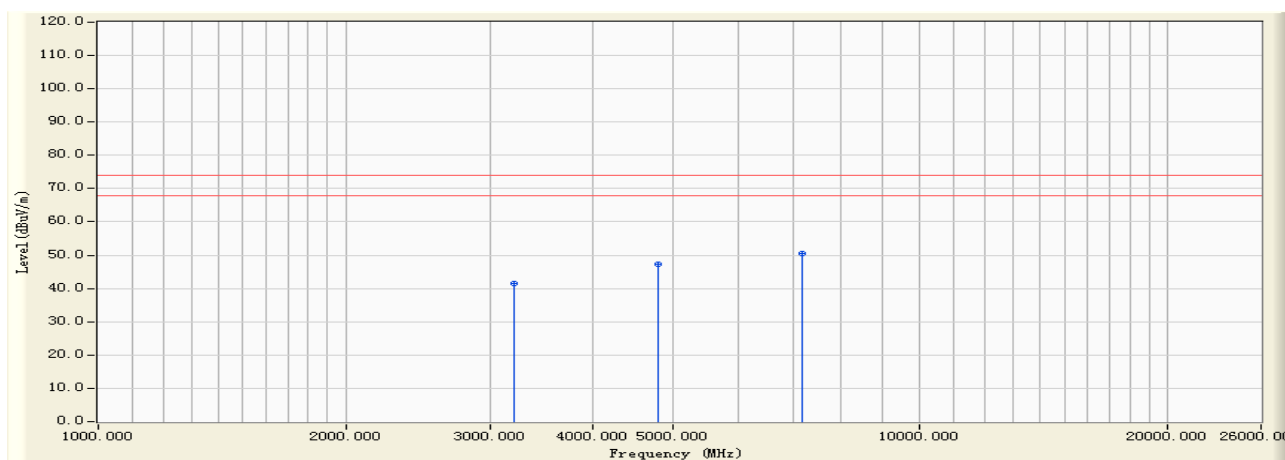
Note:

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



Above 1G:

Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



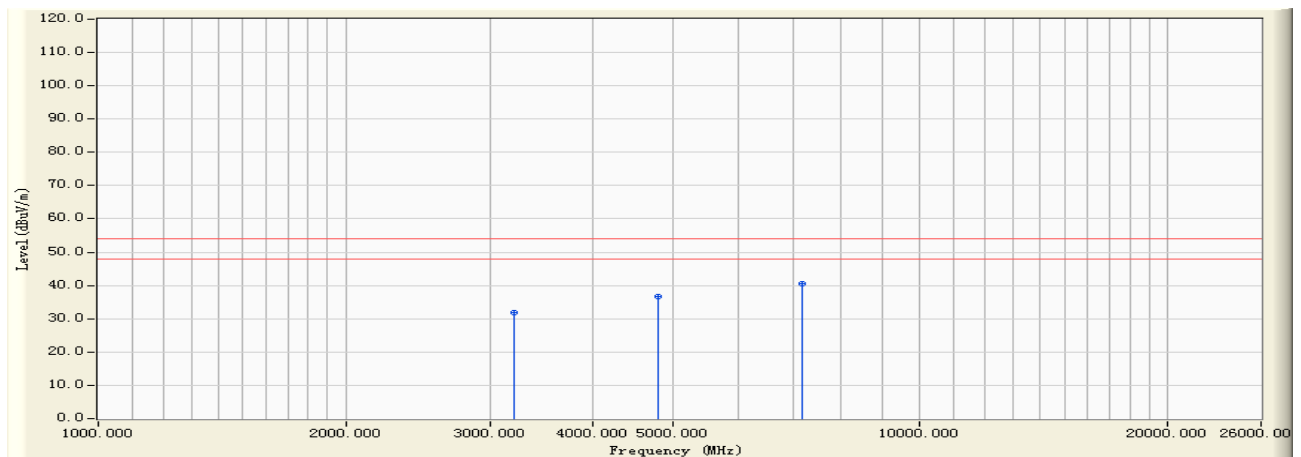
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	53.763	41.478	-32.492	73.970	PEAK
2		4800.000	-5.389	52.697	47.308	-26.662	73.970	PEAK
3	*	7200.000	-1.672	52.025	50.353	-23.617	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



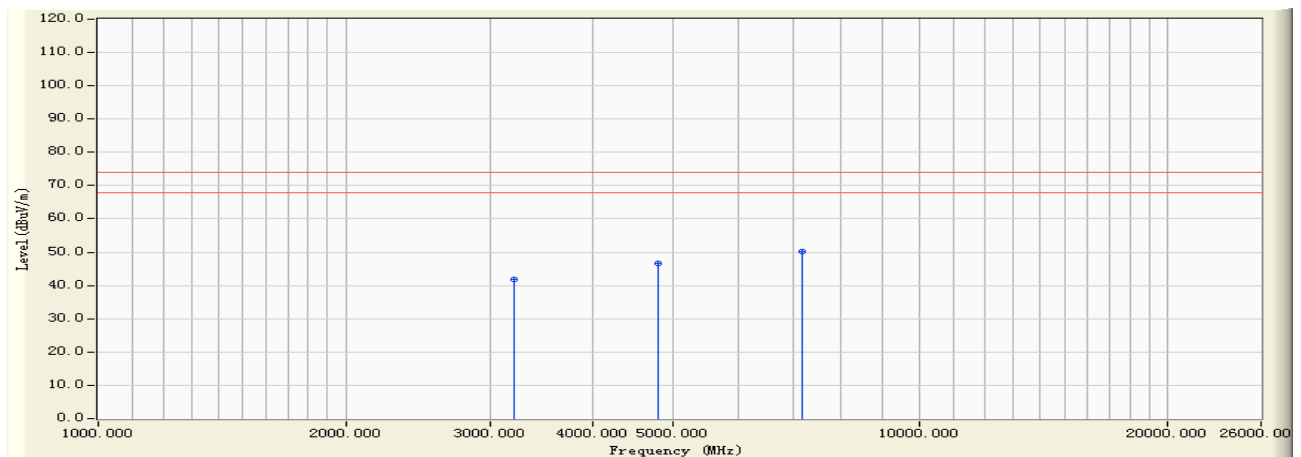
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	43.990	31.705	-22.265	53.970	AVERAGE
2		4800.000	-5.389	42.150	36.761	-17.209	53.970	AVERAGE
3	*	7200.000	-1.672	42.230	40.558	-13.412	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



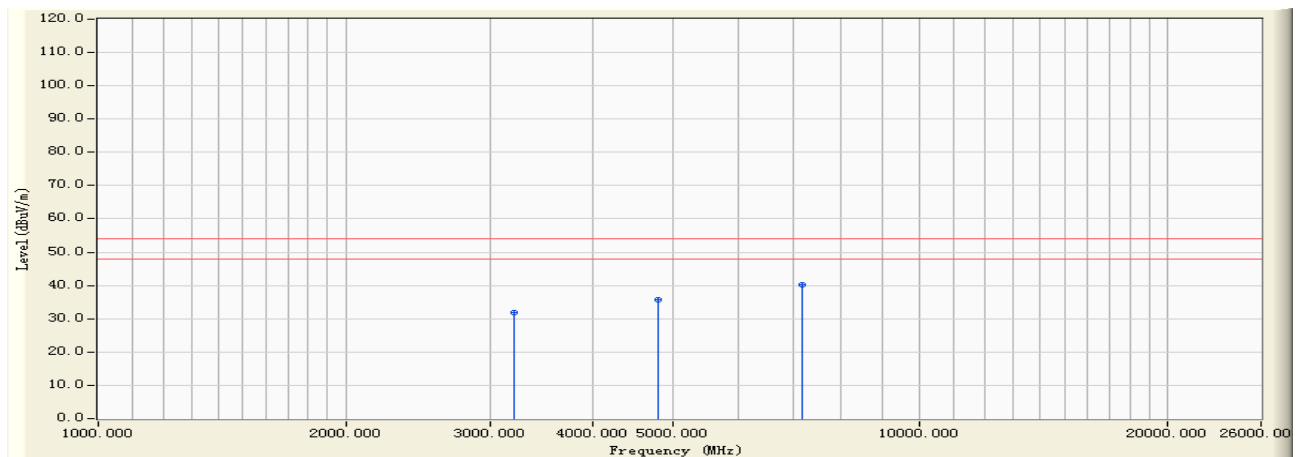
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	54.081	41.796	-32.174	73.970	PEAK
2		4800.000	-5.389	51.920	46.531	-27.439	73.970	PEAK
3	*	7200.000	-1.672	51.954	50.282	-23.688	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



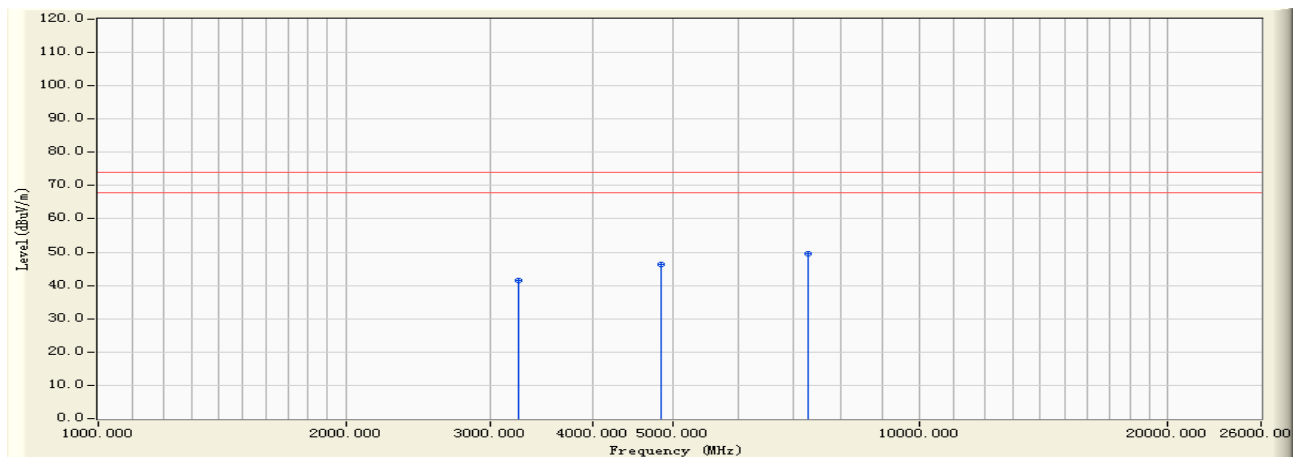
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	44.120	31.835	-22.135	53.970	AVERAGE
2		4800.000	-5.389	41.210	35.821	-18.149	53.970	AVERAGE
3	*	7200.000	-1.672	41.970	40.298	-13.672	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 2: Transmit by 802.11b 2437MHz



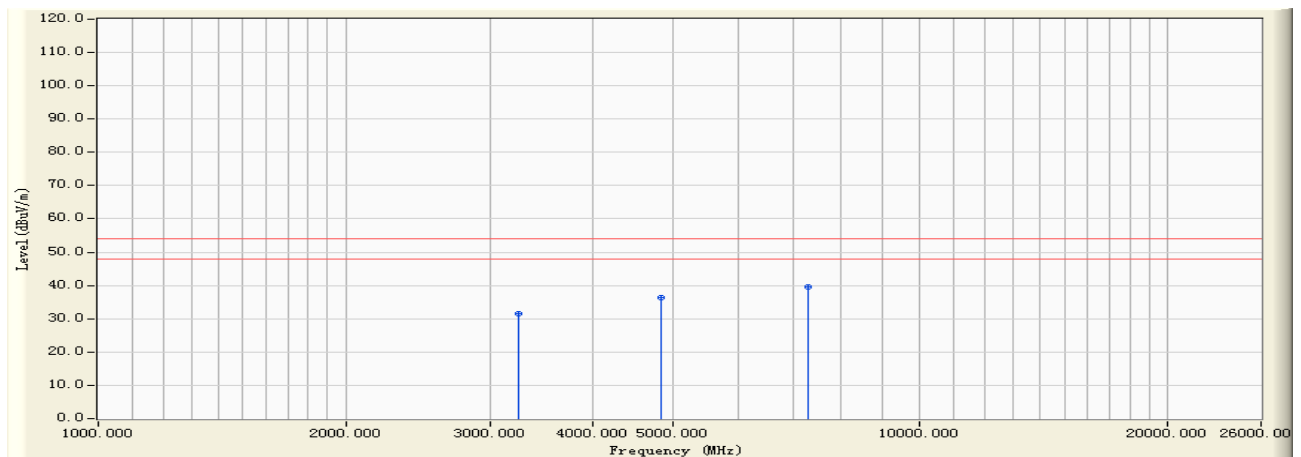
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	53.666	41.410	-32.560	73.970	PEAK
2		4850.000	-5.369	51.769	46.400	-27.570	73.970	PEAK
3	*	7300.000	-1.888	51.520	49.632	-24.338	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 2: Transmit by 802.11b 2437MHz



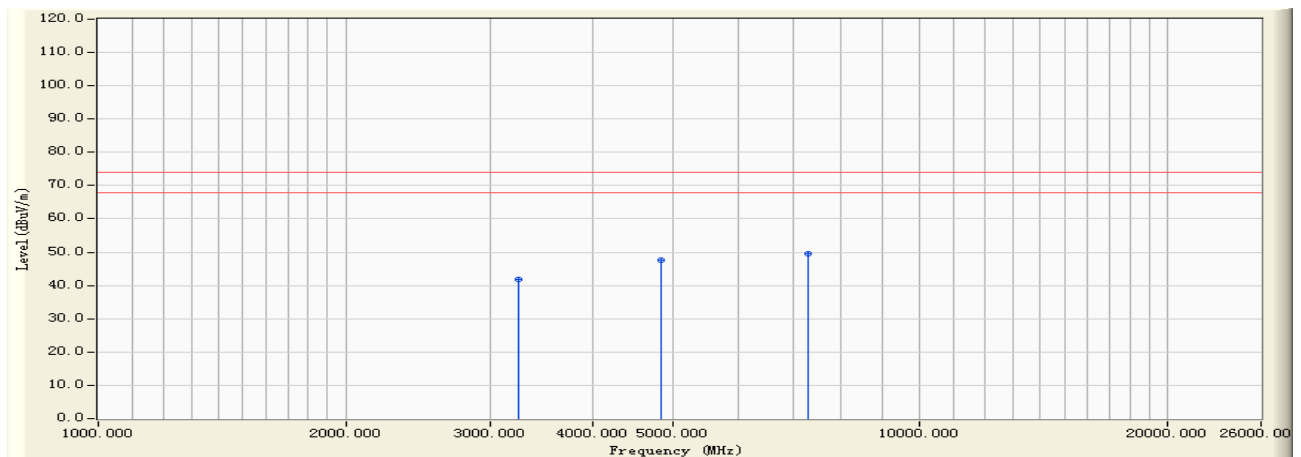
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	43.750	31.494	-22.476	53.970	AVERAGE
2		4850.000	-5.369	41.810	36.441	-17.529	53.970	AVERAGE
3	*	7300.000	-1.888	41.610	39.722	-14.248	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2: Transmit by 802.11b 2437MHz



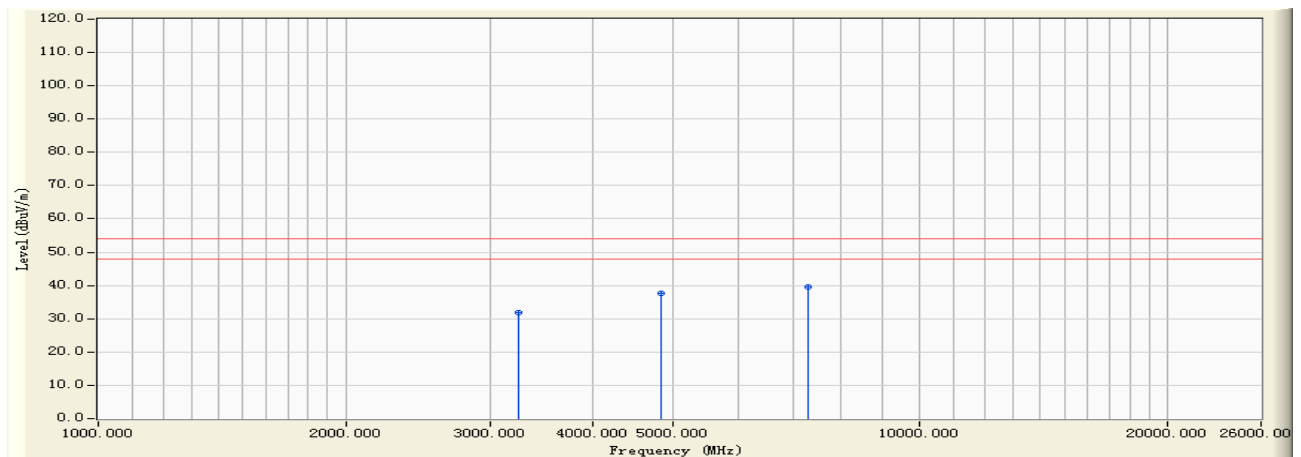
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	54.059	41.803	-32.167	73.970	PEAK
2		4850.000	-5.369	52.982	47.613	-26.357	73.970	PEAK
3	*	7300.000	-1.888	51.590	49.702	-24.268	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 2: Transmit by 802.11b 2437MHz



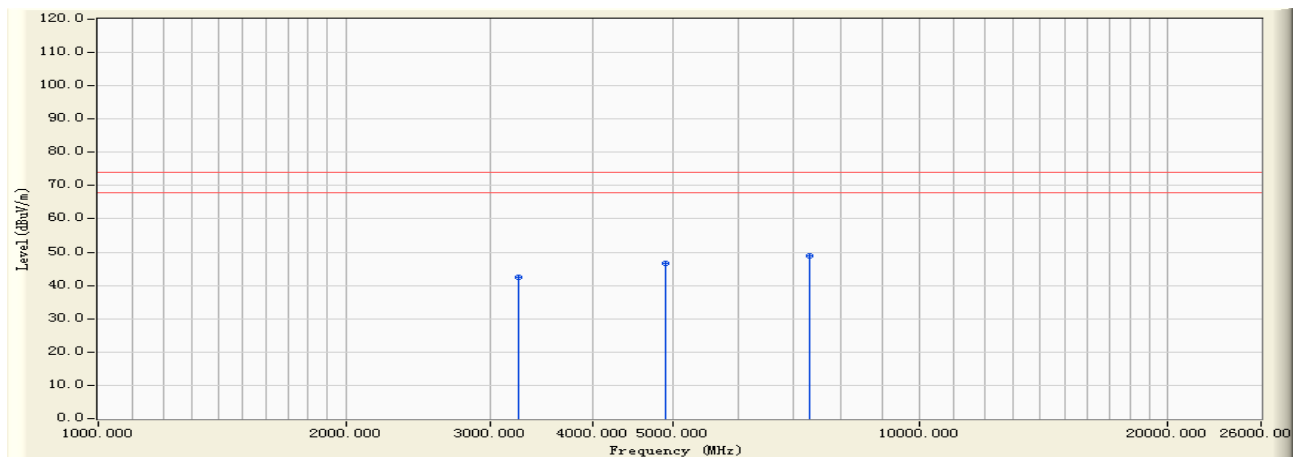
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	44.010	31.754	-22.216	53.970	AVERAGE
2		4850.000	-5.369	42.880	37.511	-16.459	53.970	AVERAGE
3	*	7300.000	-1.888	41.610	39.722	-14.248	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



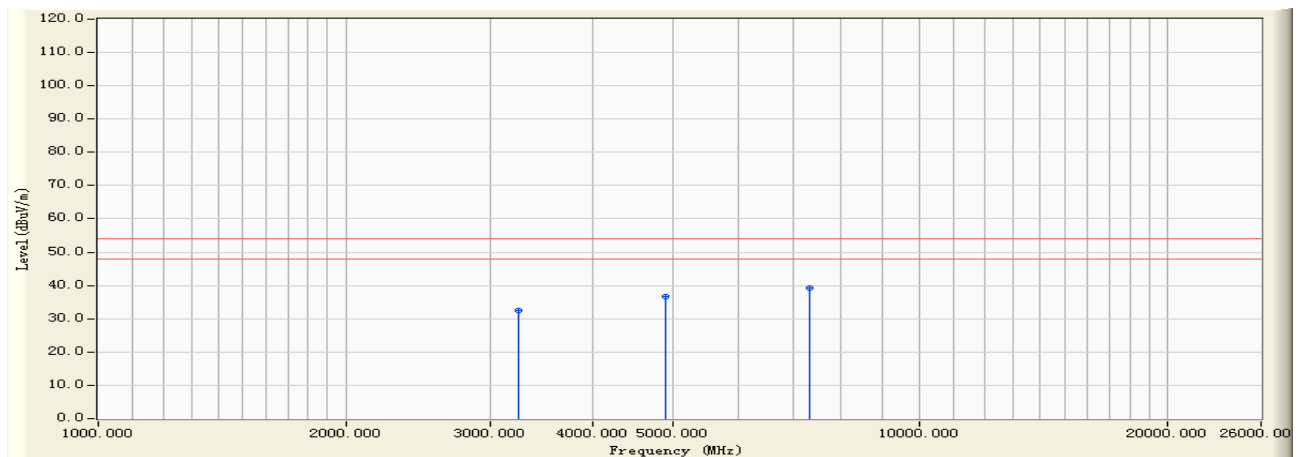
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	54.617	42.361	-31.609	73.970	PEAK
2		4900.000	-5.338	51.985	46.647	-27.323	73.970	PEAK
3	*	7350.000	-2.010	50.866	48.856	-25.114	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:28
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



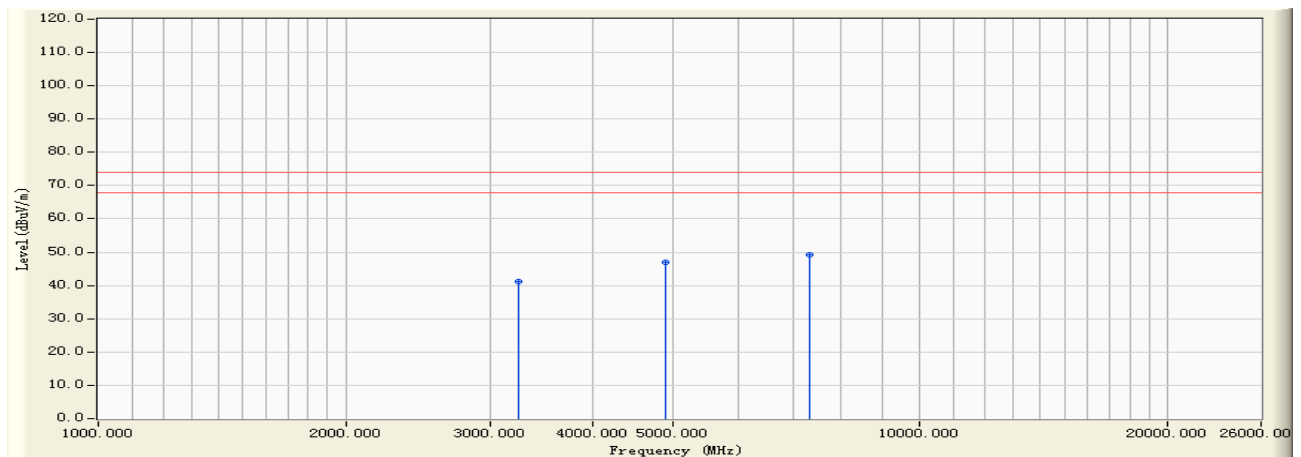
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	44.770	32.514	-21.456	53.970	AVERAGE
2		4900.000	-5.338	42.100	36.762	-17.208	53.970	AVERAGE
3	*	7350.000	-2.010	41.120	39.110	-14.860	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:29
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



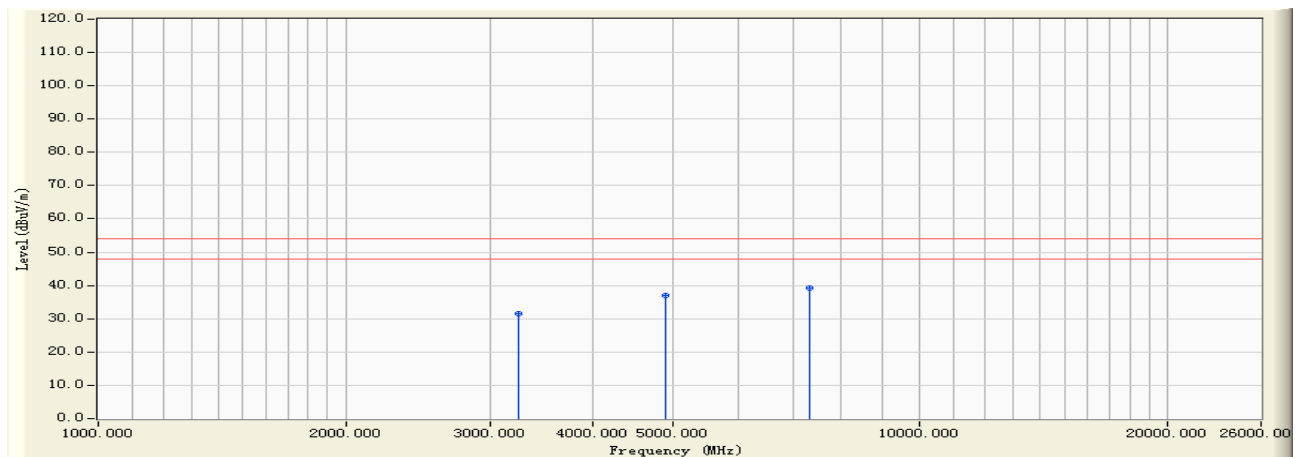
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	53.479	41.223	-32.747	73.970	PEAK
2		4900.000	-5.338	52.291	46.953	-27.017	73.970	PEAK
3	*	7350.000	-2.010	51.079	49.069	-24.901	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:29
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



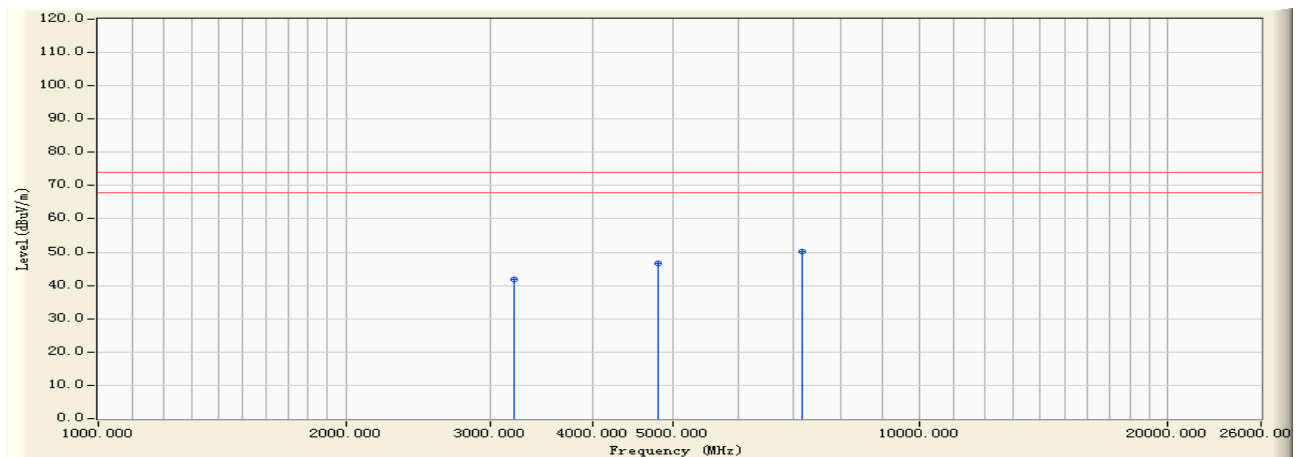
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3250.000	-12.256	43.670	31.414	-22.556	53.970	AVERAGE
2		4900.000	-5.338	42.380	37.042	-16.928	53.970	AVERAGE
3	*	7350.000	-2.010	41.360	39.350	-14.620	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



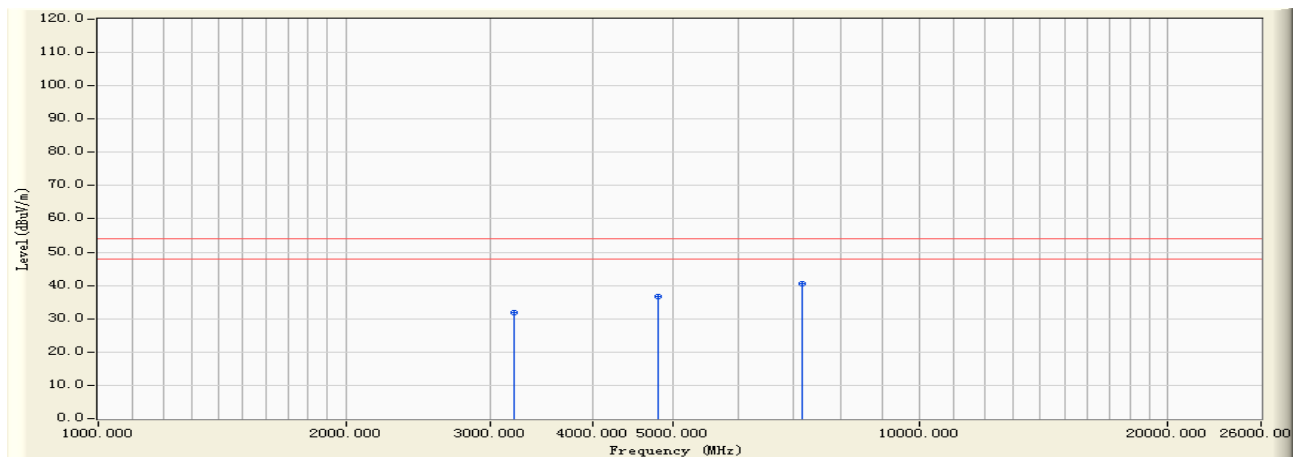
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	54.030	41.745	-32.225	73.970	PEAK
2		4800.000	-5.389	52.021	46.632	-27.338	73.970	PEAK
3	*	7200.000	-1.672	51.904	50.232	-23.738	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



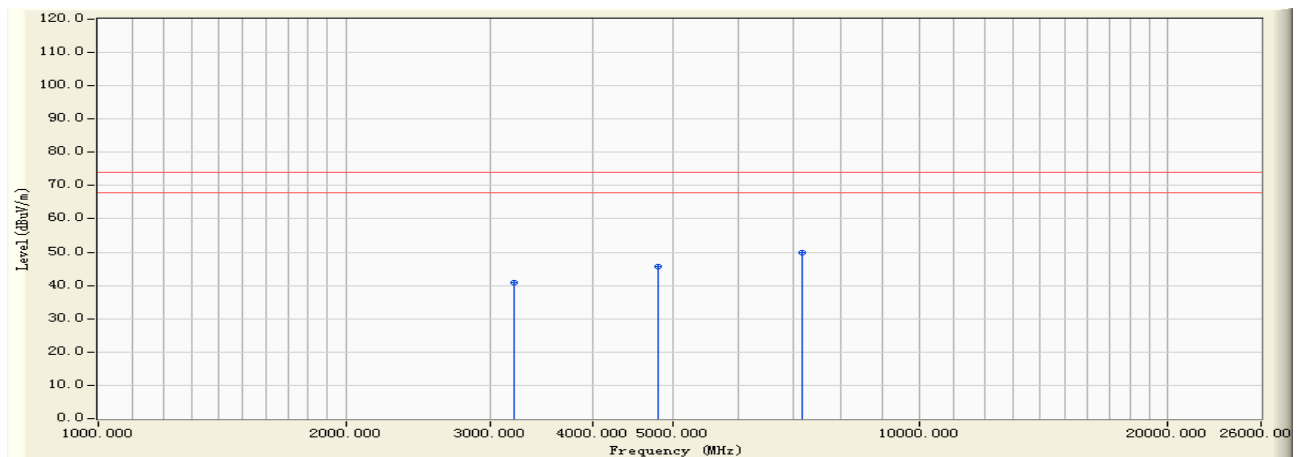
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	44.100	31.815	-22.155	53.970	AVERAGE
2		4800.000	-5.389	42.150	36.761	-17.209	53.970	AVERAGE
3	*	7200.000	-1.672	42.110	40.438	-13.532	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



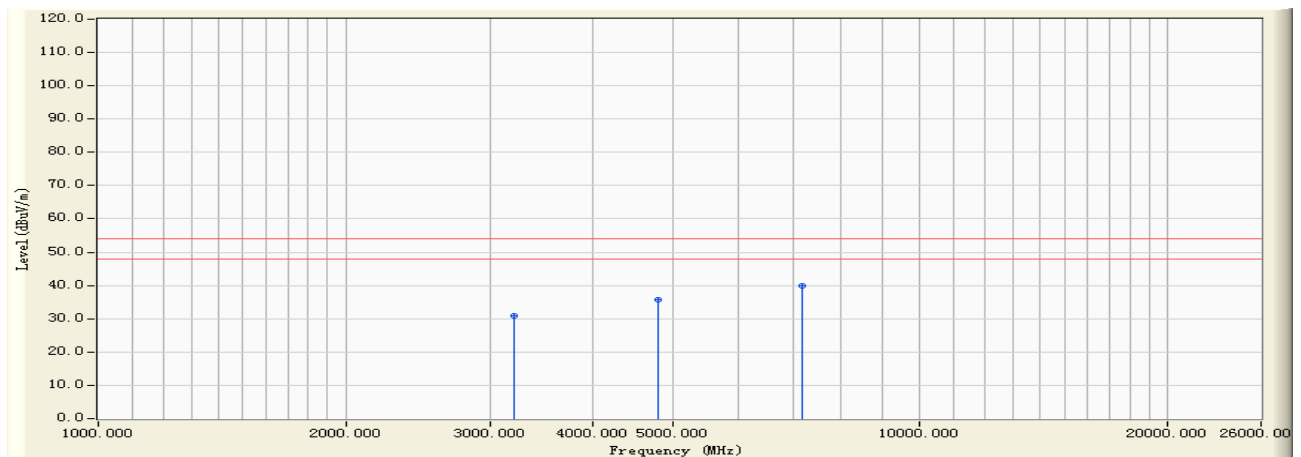
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	53.127	40.842	-33.128	73.970	PEAK
2		4800.000	-5.389	51.104	45.715	-28.255	73.970	PEAK
3	*	7200.000	-1.672	51.550	49.878	-24.092	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



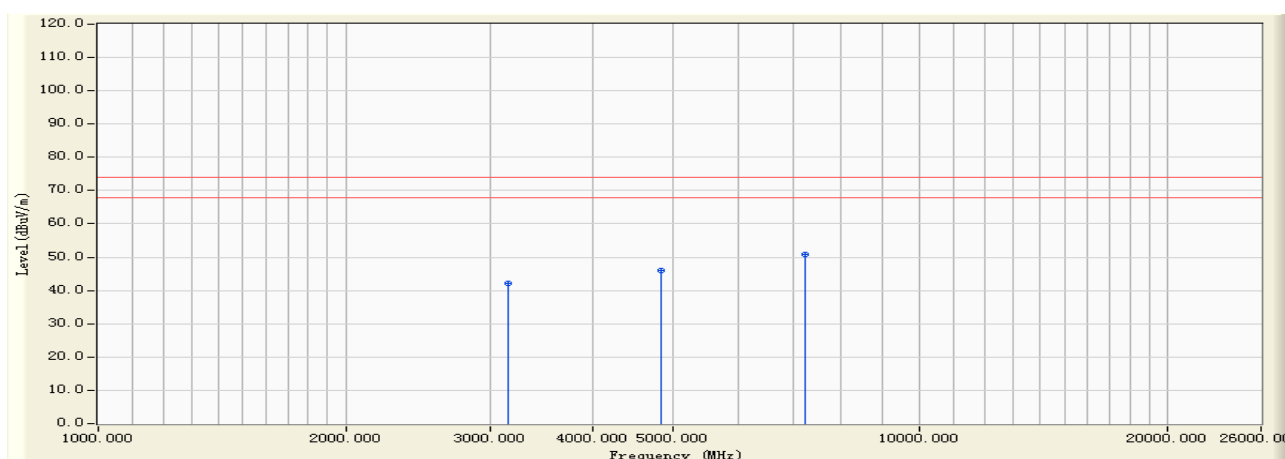
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3200.000	-12.285	43.150	30.865	-23.105	53.970	AVERAGE
2		4800.000	-5.389	41.250	35.861	-18.109	53.970	AVERAGE
3	*	7200.000	-1.672	41.670	39.998	-13.972	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 5: Transmit by 802.11g 2437MHz



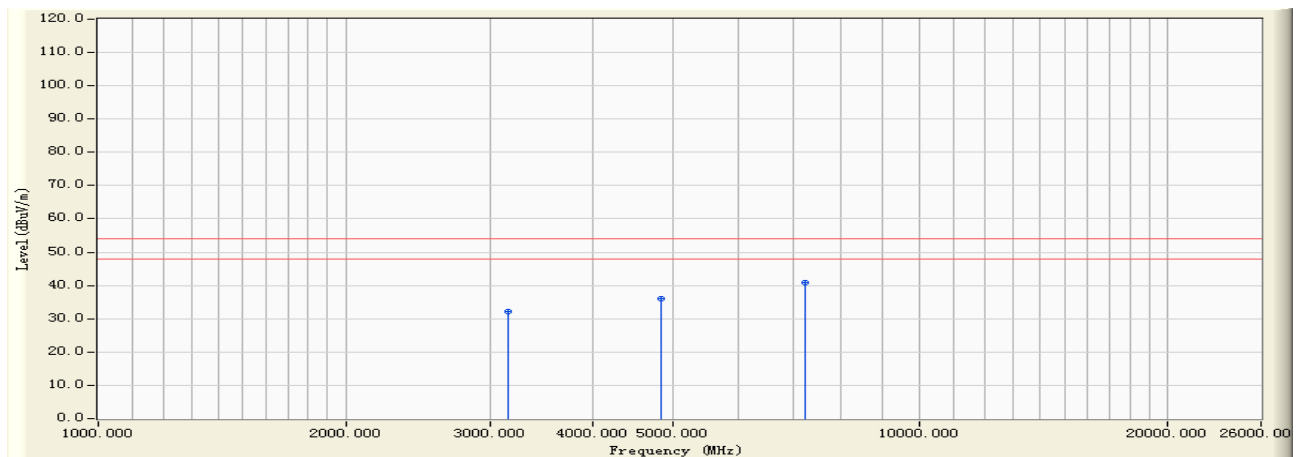
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	54.451	42.228	-31.742	73.970	PEAK
2		4850.000	-5.369	51.414	46.045	-27.925	73.970	PEAK
3	*	7250.000	-1.791	52.543	50.751	-23.219	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 5: Transmit by 802.11g 2437MHz



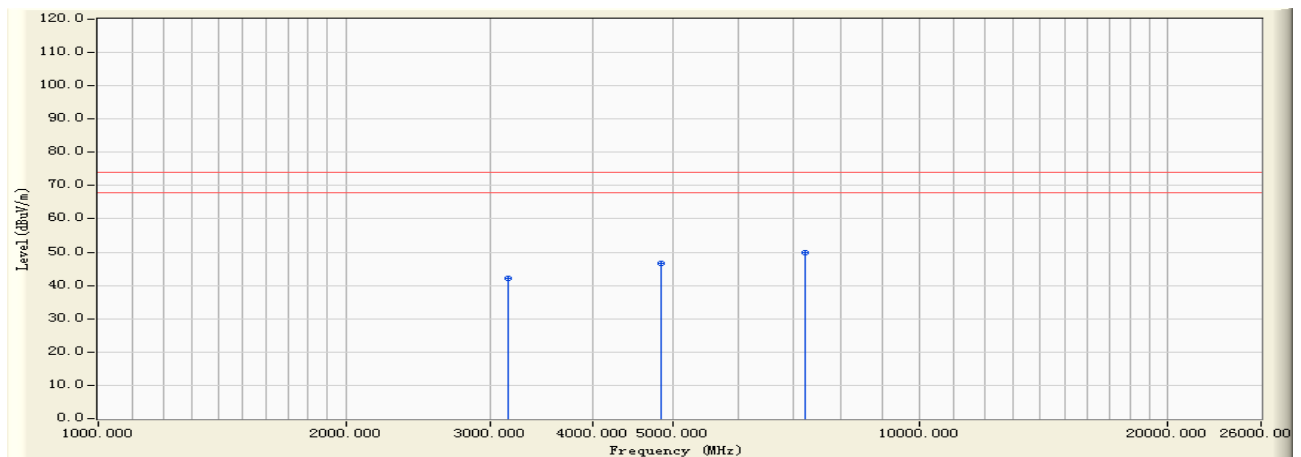
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	44.510	32.287	-21.683	53.970	AVERAGE
2		4850.000	-5.369	41.550	36.181	-17.789	53.970	AVERAGE
3	*	7250.000	-1.791	42.630	40.838	-13.132	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 5: Transmit by 802.11g 2437MHz



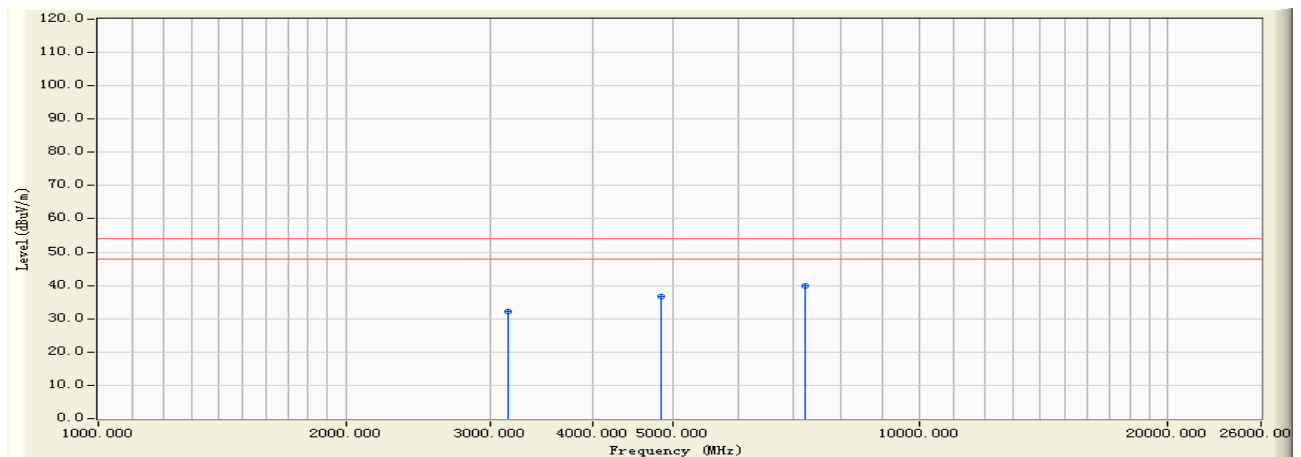
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	54.308	42.085	-31.885	73.970	PEAK
2		4850.000	-5.369	51.885	46.516	-27.454	73.970	PEAK
3	*	7250.000	-1.791	51.525	49.733	-24.237	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 5: Transmit by 802.11g 2437MHz



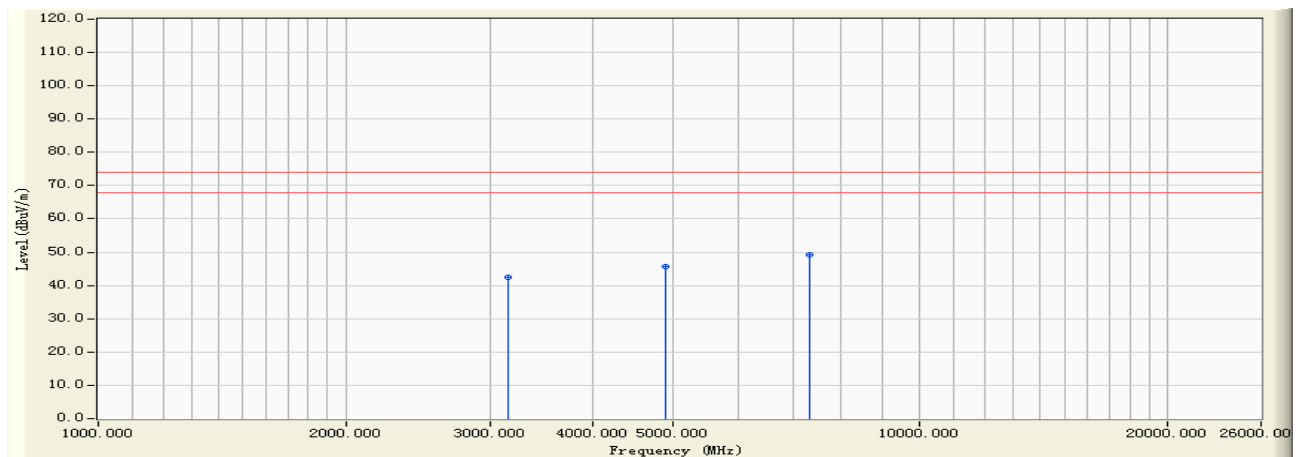
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	44.380	32.157	-21.813	53.970	AVERAGE
2		4850.000	-5.369	41.940	36.571	-17.399	53.970	AVERAGE
3	*	7250.000	-1.791	41.670	39.878	-14.092	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



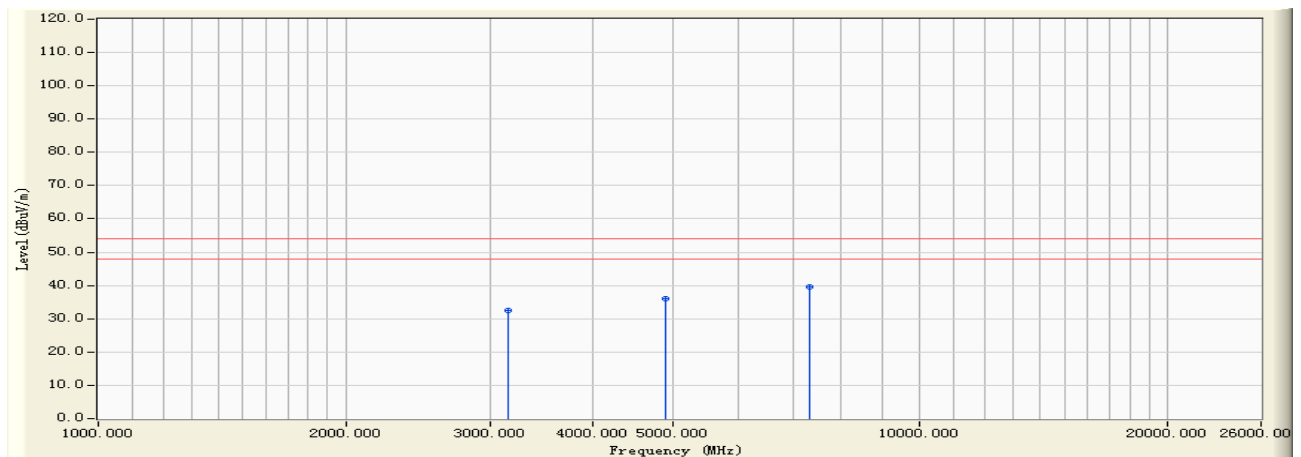
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	54.797	42.574	-31.396	73.970	PEAK
2		4900.000	-5.338	50.934	45.596	-28.374	73.970	PEAK
3	*	7350.000	-2.010	51.300	49.290	-24.680	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



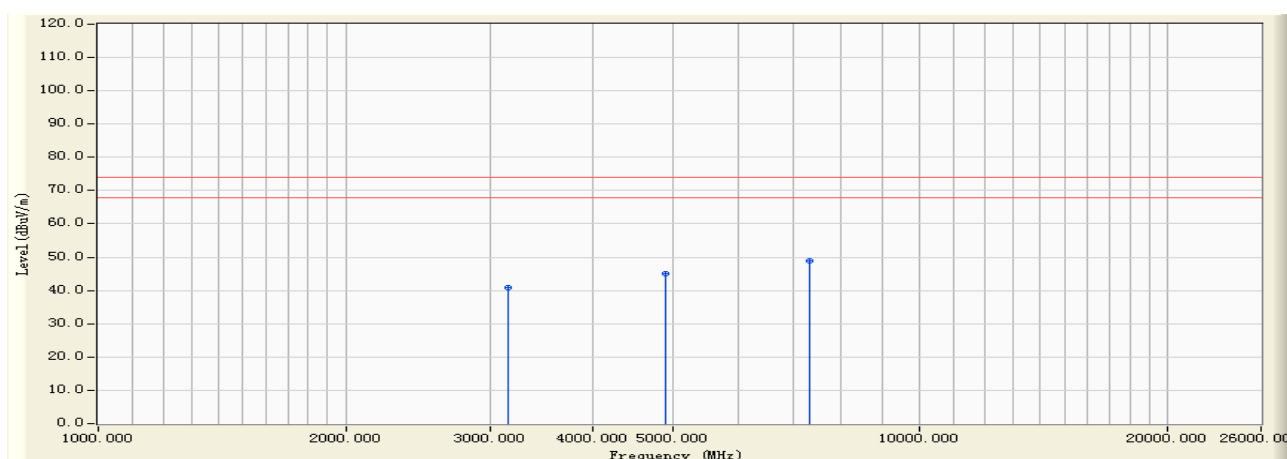
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	44.860	32.637	-21.333	53.970	AVERAGE
2		4900.000	-5.338	41.210	35.872	-18.098	53.970	AVERAGE
3	*	7350.000	-2.010	41.450	39.440	-14.530	53.970	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



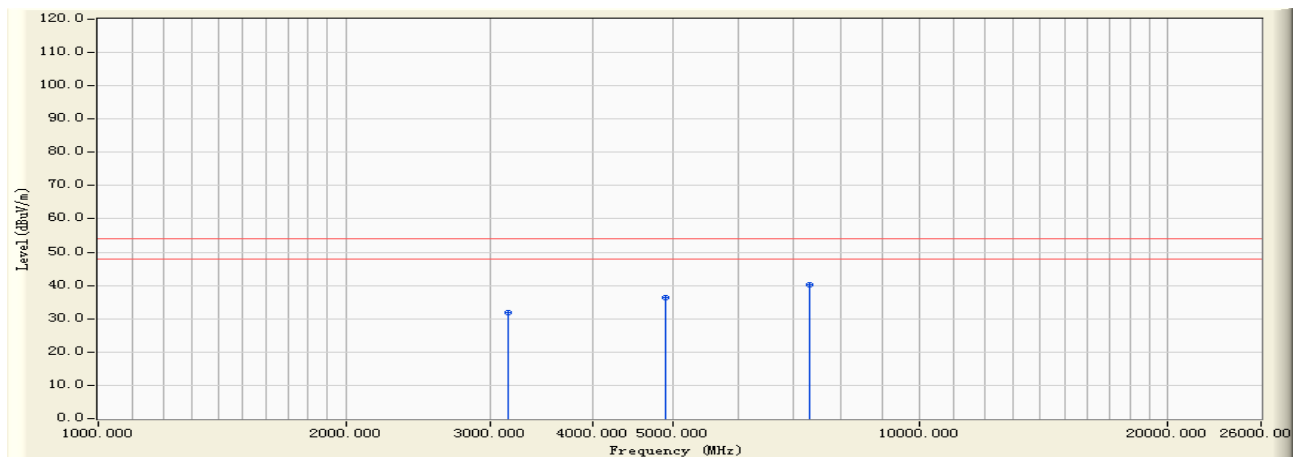
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	53.091	40.868	-33.102	73.970	PEAK
2		4900.000	-5.338	50.312	44.974	-28.996	73.970	PEAK
3	*	7350.000	-2.010	51.045	49.035	-24.935	73.970	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 17:47
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : (1000-26000MHz) - VERTICAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3150.000	-12.223	44.010	31.787	-22.183	53.970	AVERAGE
2		4900.000	-5.338	41.540	36.202	-17.768	53.970	AVERAGE
3	*	7350.000	-2.010	42.100	40.090	-13.880	53.970	AVERAGE

Note:

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



5. Occupied Bandwidth

5.1. Test Limit

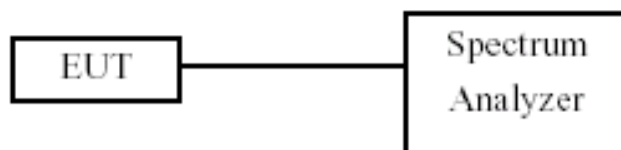
Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725- 5850 MHz band. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.2. Test Procedures

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

Set RBW = 100 kHz, Span greater than RBW.

5.3. Test Setup Layout



5.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2009.11.02
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2009.10.19

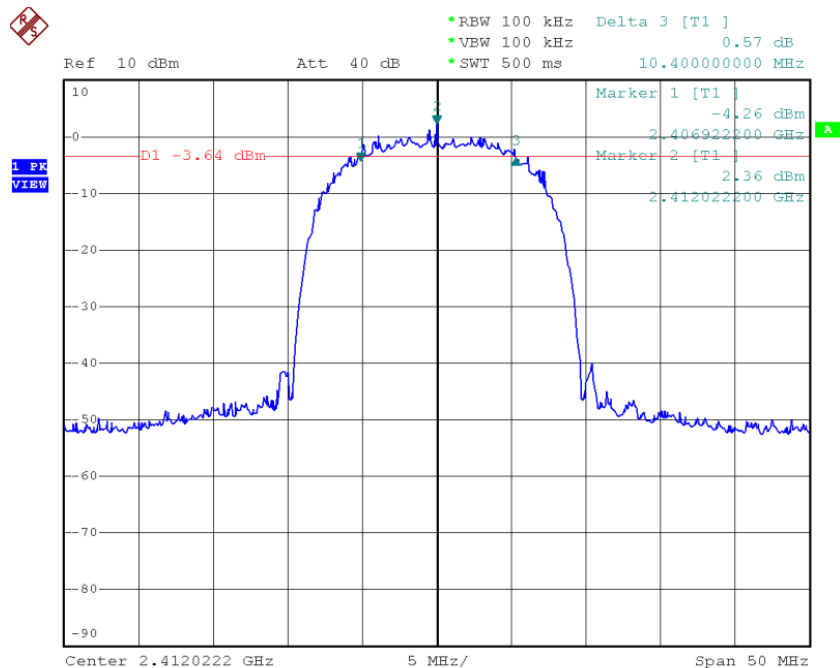


5.5. Test Result and Data

Test Item	Occupied Bandwidth
Test Mode	Transmit by 802.11b
Test Date	2009-12-26

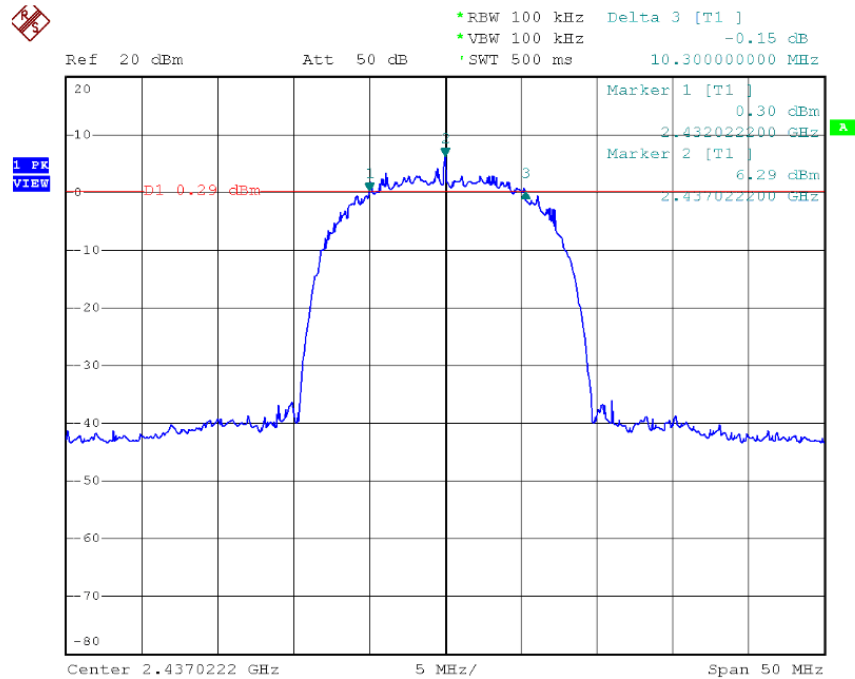
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	10400	500	Pass
06	2437	10300	500	Pass
11	2462	8500	500	Pass

Channel 01 (2412MHz)

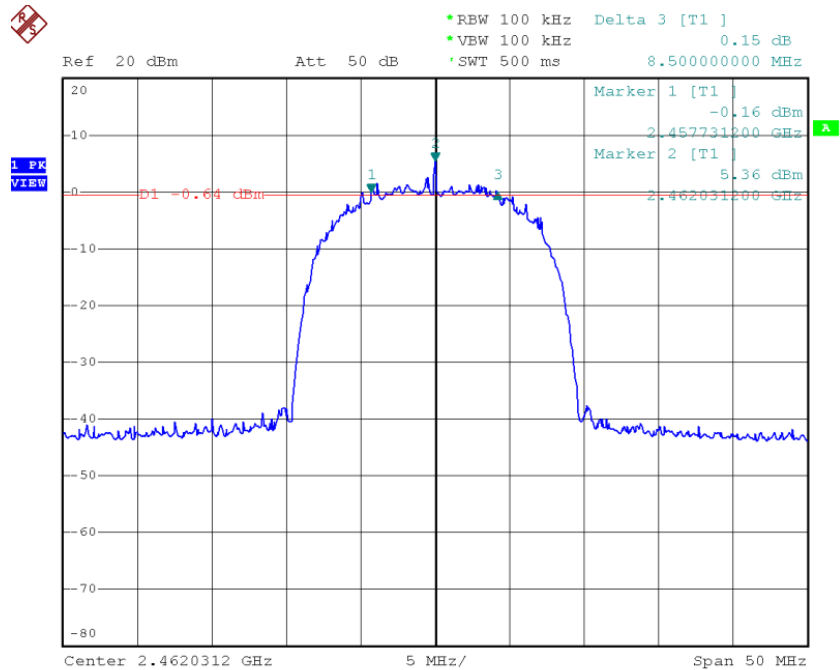




Channel 06 (2437MHz)



Channel 11 (2462MHz)

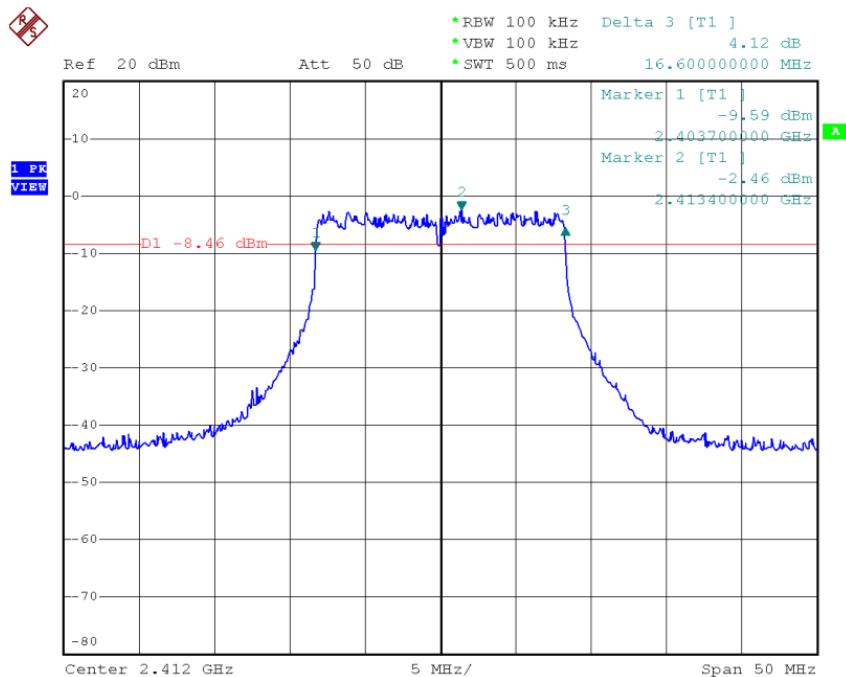




Test Item	Occupied Bandwidth
Test Mode	Transmit by 802.11g
Test Date	2009-12-26

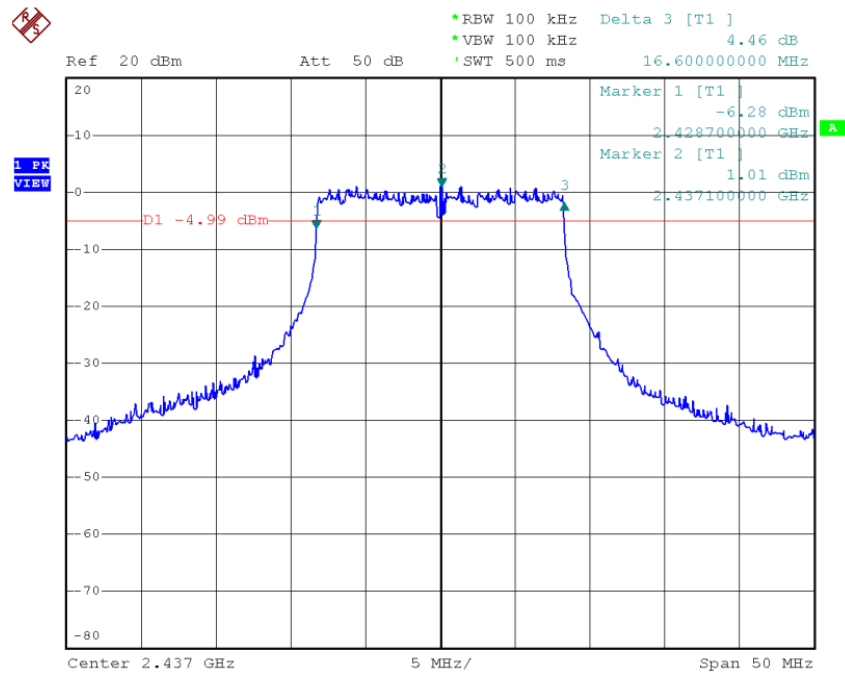
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	16600	500	Pass
06	2437	16600	500	Pass
11	2462	16600	500	Pass

Channel 01 (2412MHz)

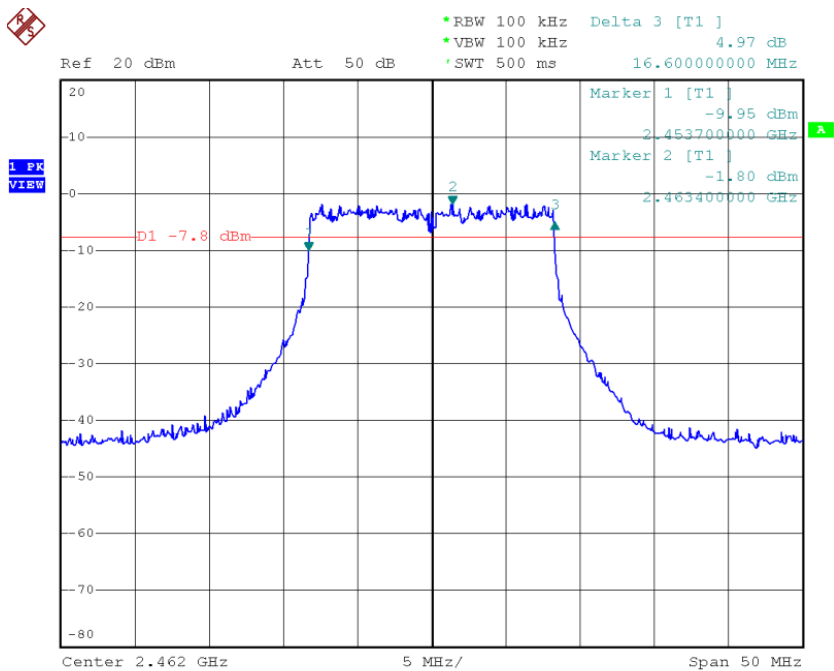




Channel 06 (2437MHz)



Channel 11 (2462MHz)





6. Maximum Peak Output Power

6.1. Test Limit

The maximum peak power shall be less 1Watt (30dBm).

The conducted output power limit is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of standard FCC part 15.247, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6 dBi.

6.2. Test Procedure

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

In the following, "T" is the transmission pulse duration over which the transmitter is on and transmitting at its maximum power control level. Measurements are performed with a spectrum analyzer. Three methods are provided to accommodate measurement limitations of the spectrum analyzer depending on signal parameters. Set resolution bandwidth (RBW) = 1 MHz. Set span to encompass the entire emission bandwidth (EBW) of the signal. Use automatic setting for analyzer sweep time (except in Method #2). Check the sweep time to determine which procedure to use.

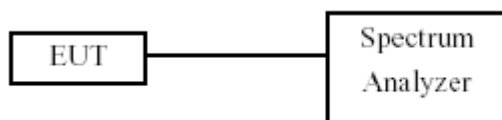
As "T" $\geq$ sweep time, the test procedure will be used as following:

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



levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.

6.3. Test Setup Layout



6.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2009.11.02
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2009.10.19

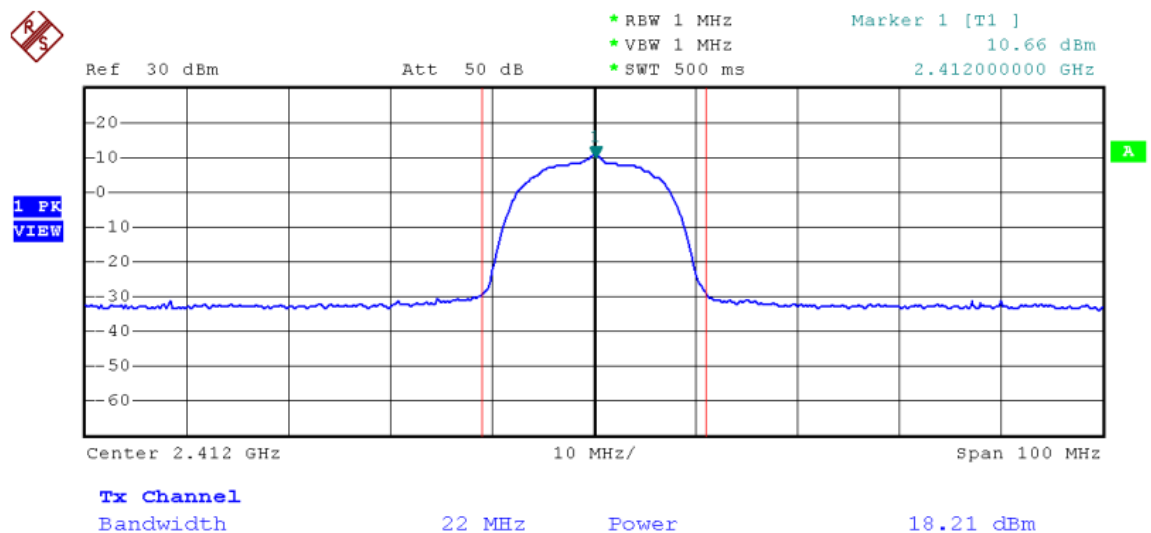


6.5. Test Result and Data

Test Item	Maximum Peak Output Power
Test Mode	Transmit by 802.11b
Test Date	2009-12-26

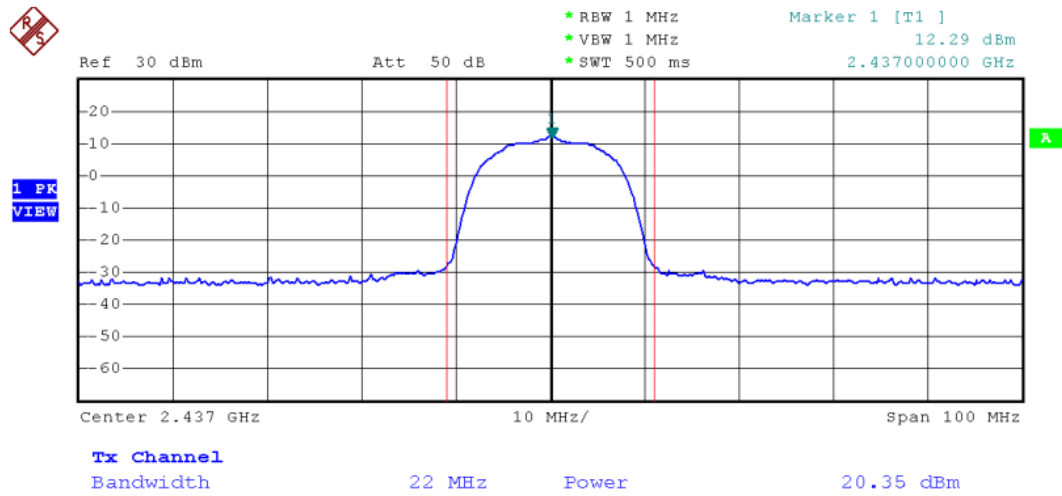
Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit (dBm)	Result
01	2412	18.21	30 dBm	Pass
06	2437	20.35	30 dBm	Pass
11	2462	18.72	30 dBm	Pass

Channel 01 (2412MHz)

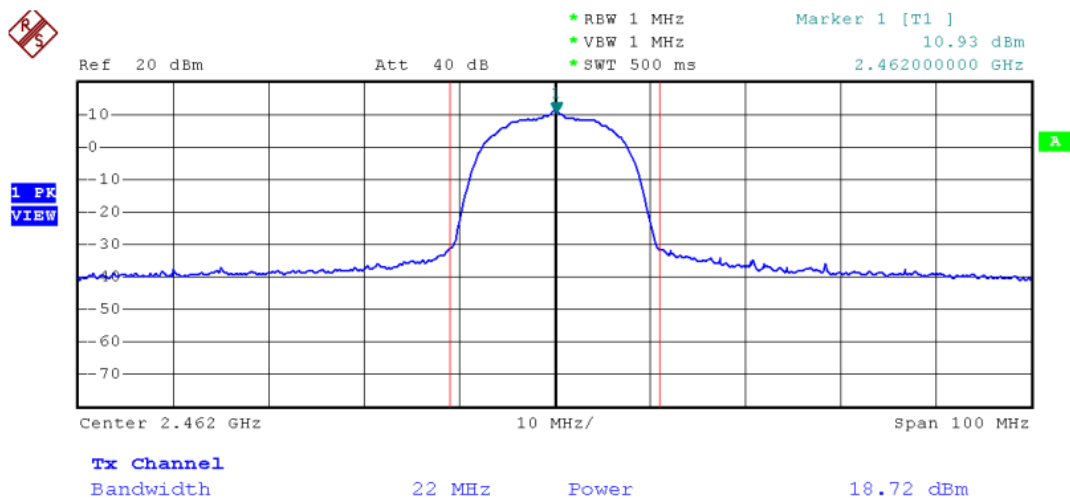




Channel 06 (2437MHz)



Channel 11 (2462MHz)

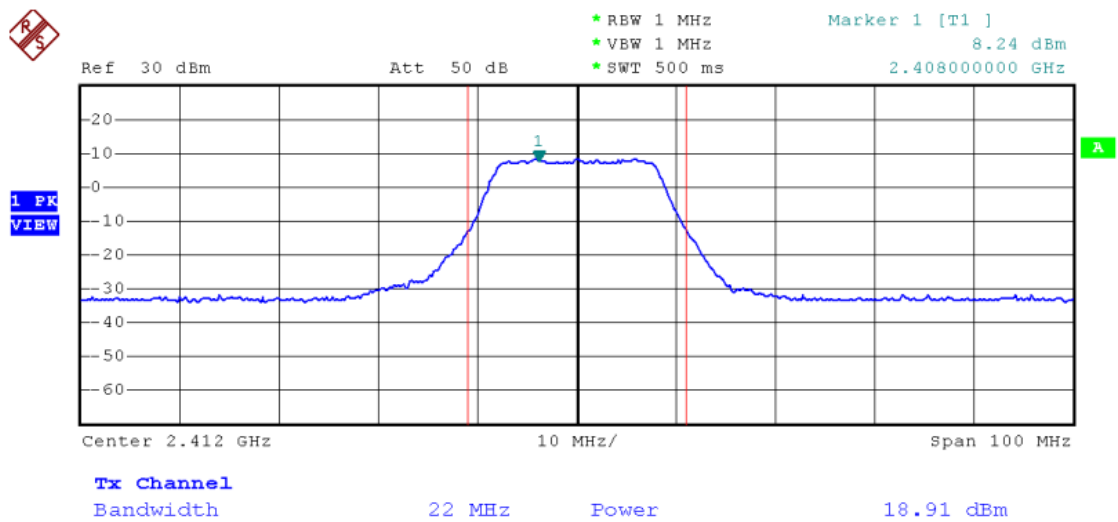




Test Item	Maximum Peak Output Power
Test Mode	Transmit by 802.11g
Test Date	2009-12-26

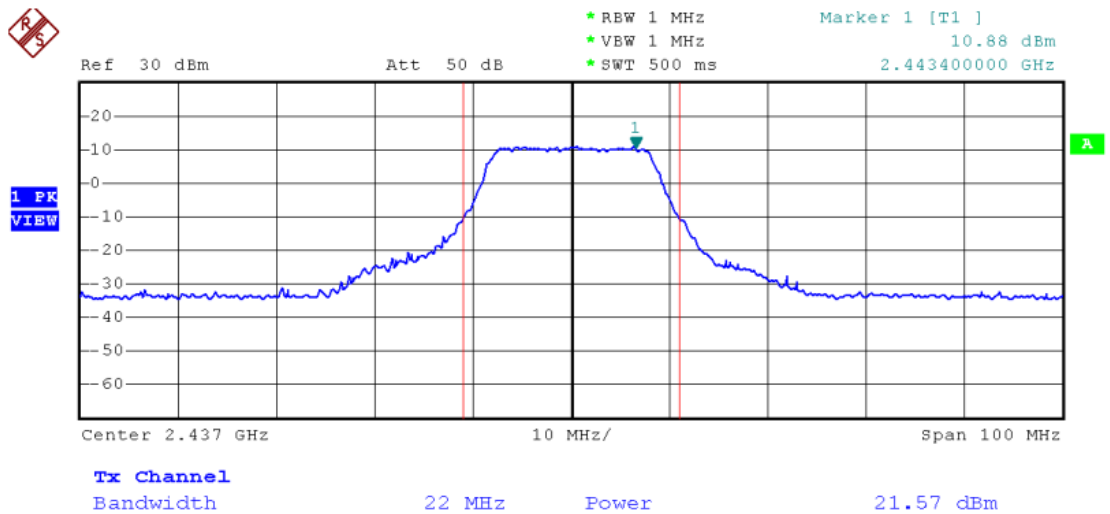
Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit (dBm)	Result
01	2412	18.91	30 dBm	Pass
06	2437	21.57	30 dBm	Pass
11	2462	19.36	30 dBm	Pass

Channel 01 (2412MHz)

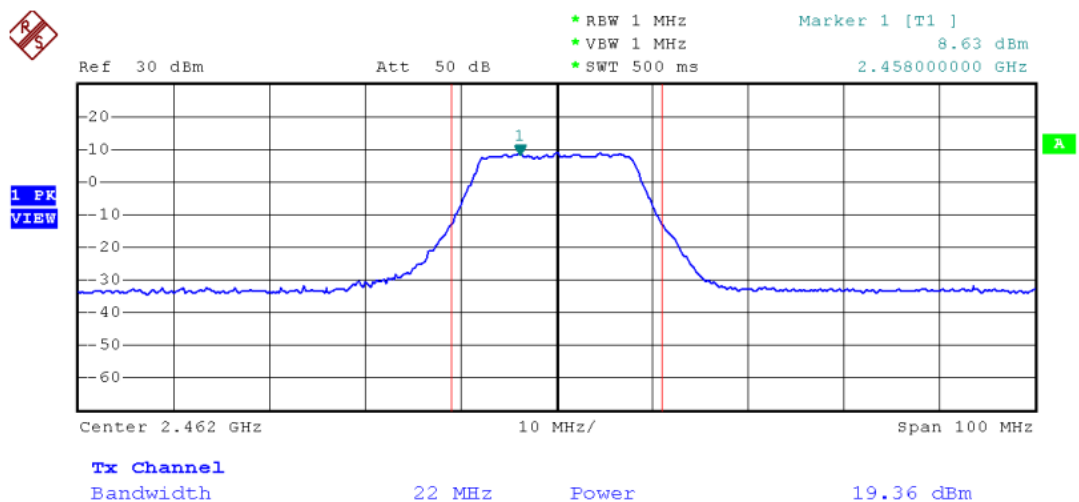




Channel 06 (2437MHz)



Channel 11 (2462MHz)





7. Band Edges

7.1. Test Limit

For RF Conducted requirement:

20 dB bandwidth of the emission is contained within the operation frequency band.

For RF Radiated requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

7.2. Test Procedure

For RF Conducted Measurement:

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

Set RBW = 100 kHz, Span greater than RBW.

For RF Radiated Measurement:

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 plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

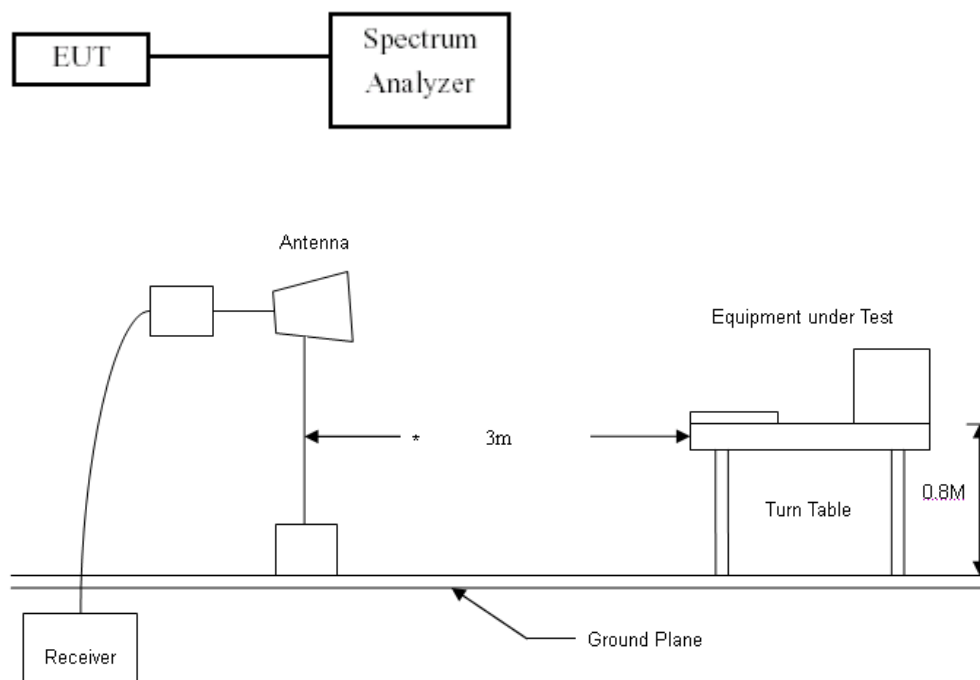
For measurements above 1GHz the resolution bandwidth is set to 1MHz, then the video bandwidth is set to 1MHz for peak measurements and 10Hz for average measurements.

The spectrum from 30MHz to 26GHz is investigated with the transmitter set to the lowest, middle and highest channels in the 2.4GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are Made with the antenna polarized in both the vertical and the horizontal positions.



7.3. Test Setup Layout



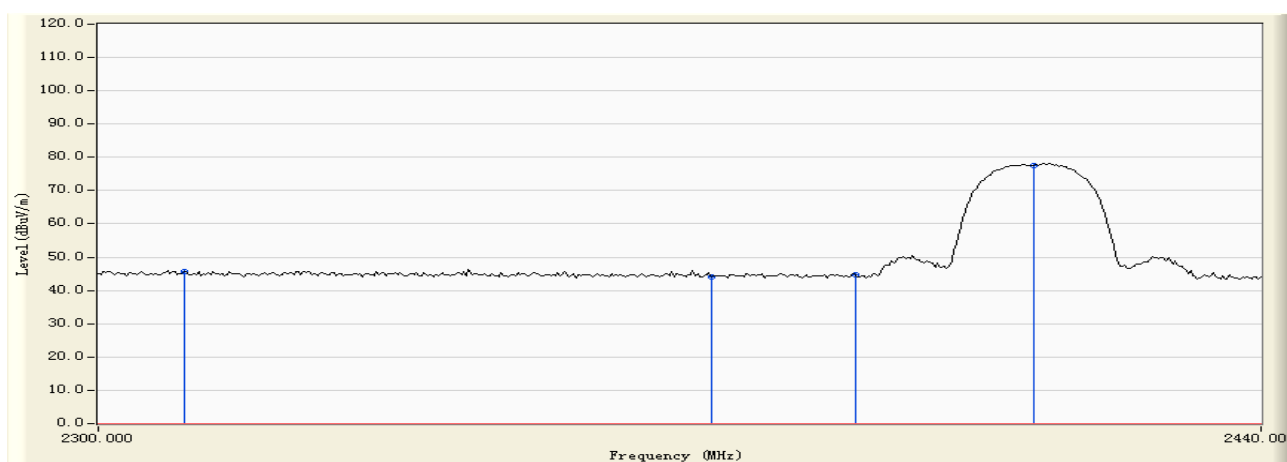
7.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2009.11.02
H64 Amplifier	HP	8447F	3113A05582	2009.12.01
Preamplifier	Agilent	8449B	ED-HE-EMI-077	2009.02.18
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	100363	2009.11.10
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2009.10.19



7.5. Test Result and Data

Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:05
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



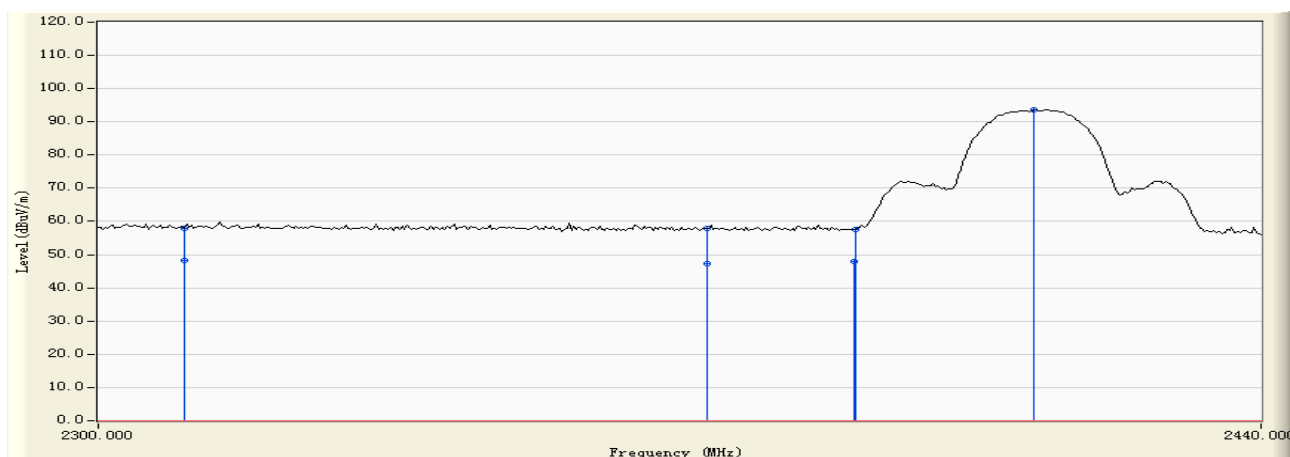
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.080	-39.787	85.357	45.570	28.430	74	PEAK
2		2372.800	-39.916	84.115	44.199	29.801	74	PEAK
3		2390.160	-39.947	84.777	44.830	29.170	74	PEAK
4	*	2412.000	-40.070	117.749	77.679	N/A	N/A	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 13:57
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : VERTICAL
Power : AC 120V/60Hz	Note : Mode 1: Transmit by 802.11b 2412MHz



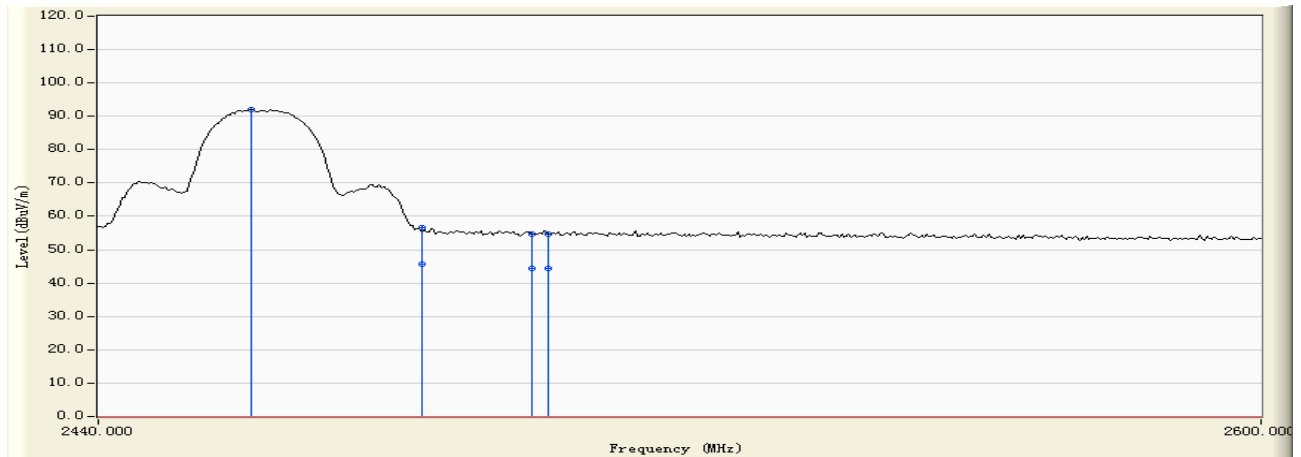
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.068	-26.532	74.640	48.108	5.892	54	AVERAGE
2		2310.080	-26.532	84.601	58.069	15.931	74	PEAK
3		2372.240	-26.750	84.582	57.832	16.168	74	PEAK
4		2372.339	-26.751	73.950	47.199	6.801	54	AVERAGE
5		2390.144	-26.810	74.660	47.850	6.150	54	AVERAGE
6		2390.160	-26.810	84.550	57.740	16.260	74	PEAK
7	*	2412.000	-27.190	120.781	93.592	N/A	N/A	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:00
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : VERTICAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



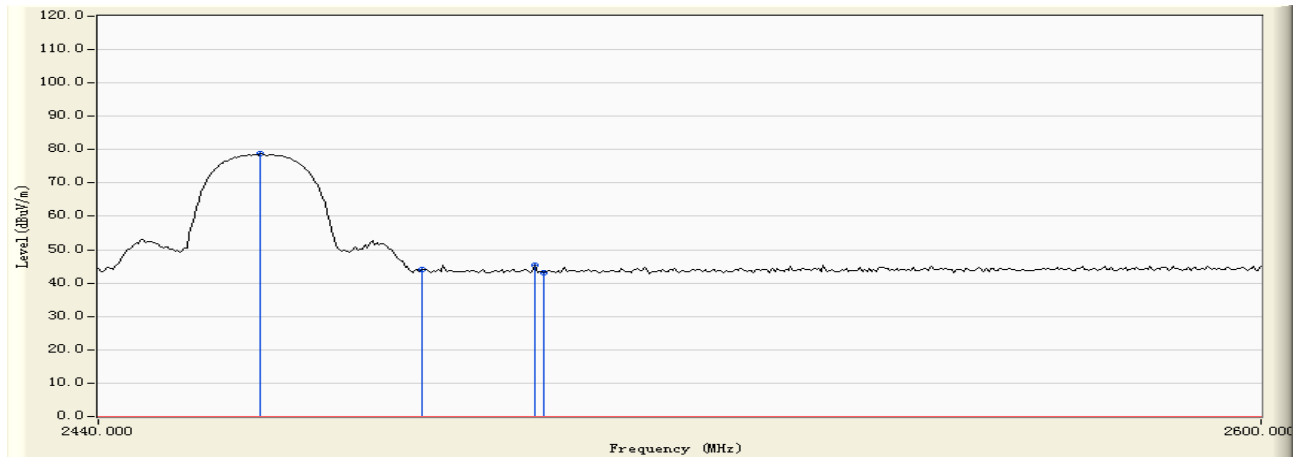
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.480	-28.594	120.628	92.034	N/A	N/A	PEAK
2		2483.498	-29.263	86.040	56.776	17.224	74	PEAK
3		2483.523	-29.264	74.930	45.665	8.335	54	AVERAGE
4		2498.560	-29.668	84.353	54.685	19.315	74	PEAK
5		2498.575	-29.668	74.220	44.551	9.449	54	AVERAGE
6		2500.800	-29.725	84.273	54.548	19.452	74	PEAK
7		2500.810	-29.726	74.120	44.395	9.605	54	AVERAGE

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:03
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 3: Transmit by 802.11b 2462MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.760	-40.519	119.235	78.716	N/A	N/A	PEAK
2		2483.520	-40.722	84.842	44.119	29.881	74	PEAK
3		2498.880	-40.815	86.026	45.211	28.789	74	PEAK
4		2500.160	-40.821	83.876	43.056	30.944	74	PEAK

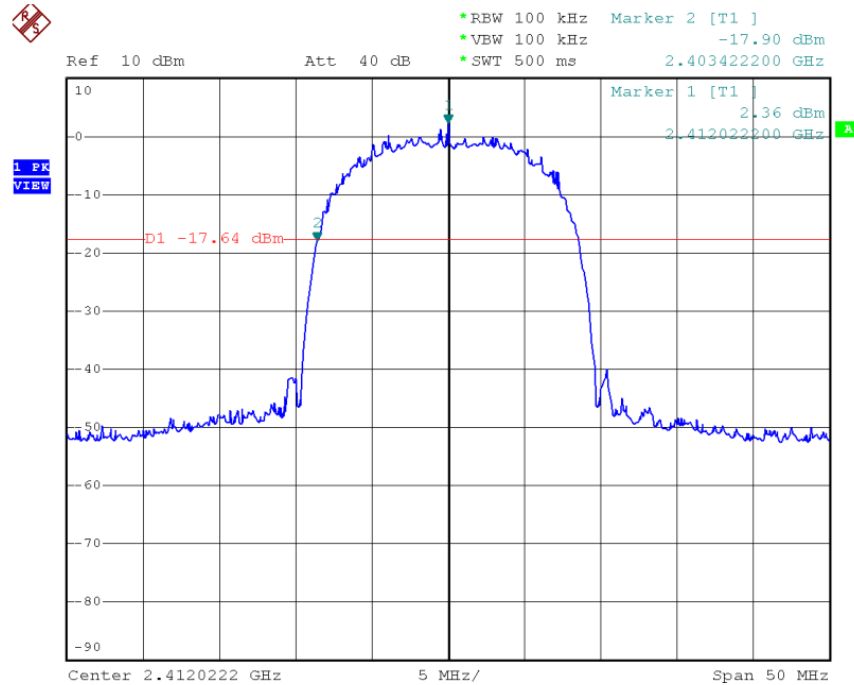
Note:

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



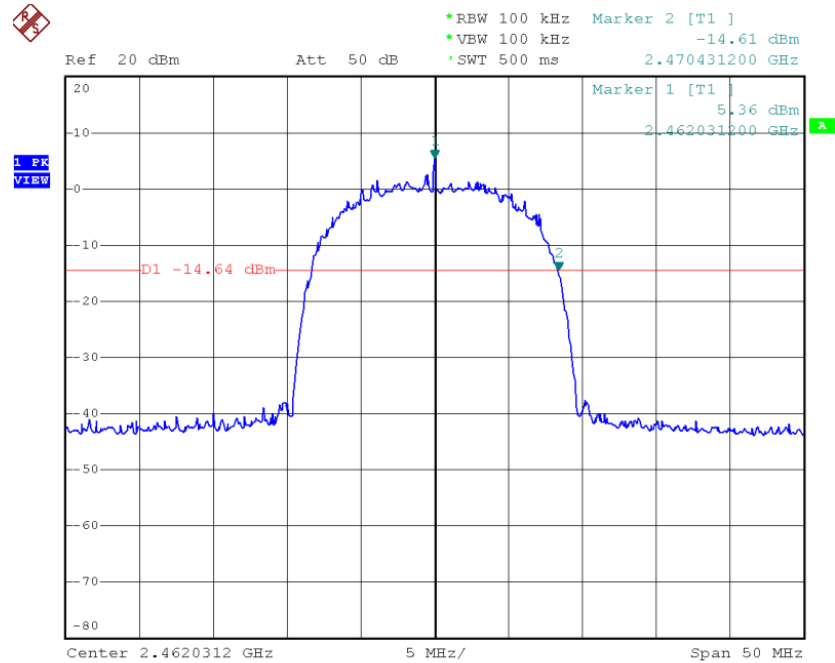
Band Edge (20dBc RF Conducted Measurement)

Mode 1: Transmit by 802.11b (2412MHz)



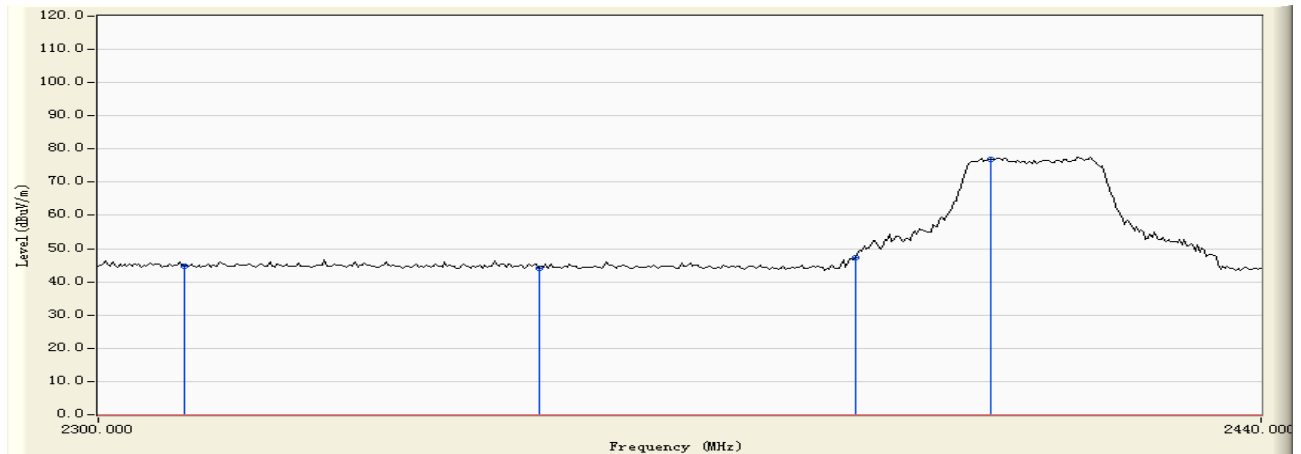
Band Edge (20dBc RF Conducted Measurement)

Mode 3: Transmit by 802.11b (2462MHz)





Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:09
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



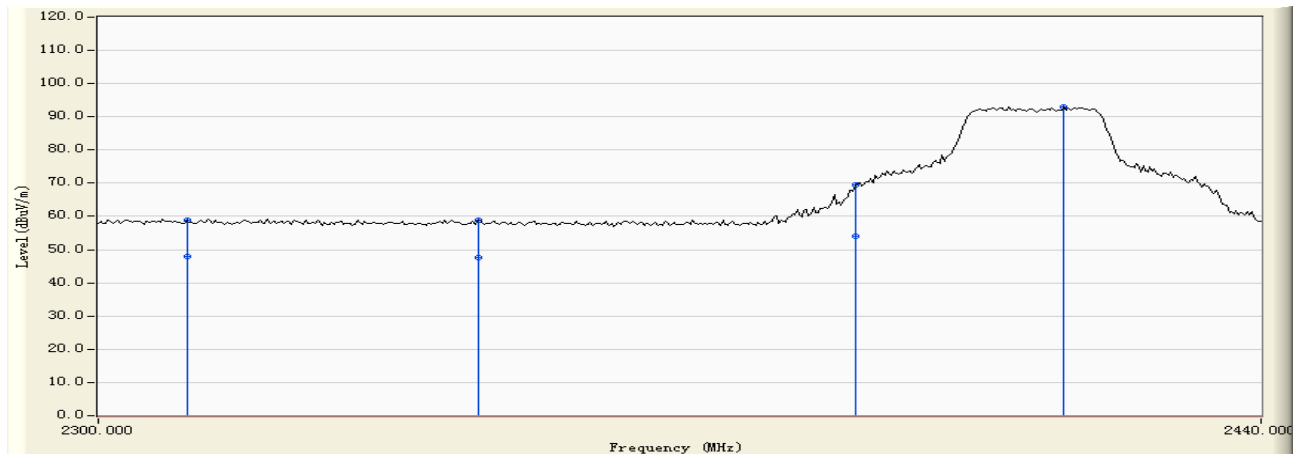
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.080	-39.787	84.641	44.854	29.146	74	PEAK
2		2352.080	-39.871	83.934	44.063	29.937	74	PEAK
3		2390.160	-39.947	87.112	47.165	26.835	74	PEAK
4	*	2406.680	-40.024	116.907	76.883	N/A	N/A	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:50
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : VERTICAL
Power : AC 120V/60Hz	Note : Mode 4: Transmit by 802.11g 2412MHz



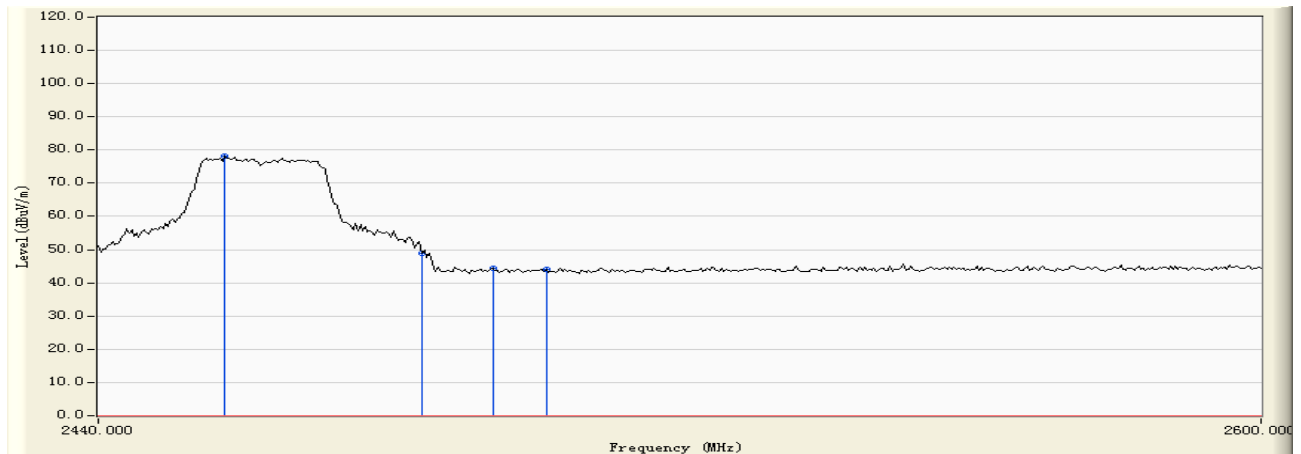
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.360	-26.533	85.389	58.856	15.144	74	PEAK
2		2310.447	-26.533	74.420	47.887	6.113	54	AVERAGE
3		2344.800	-26.655	85.636	58.981	15.019	74	PEAK
4		2344.824	-26.655	74.230	47.575	6.425	54	AVERAGE
5		2390.160	-26.810	96.299	69.489	4.511	74	PEAK
6		2390.248	-27.811	80.910	53.099	0.901	54	AVERAGE
7	*	2415.640	-27.293	120.307	93.014	N/A	N/A	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:19
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : HORIZONTAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



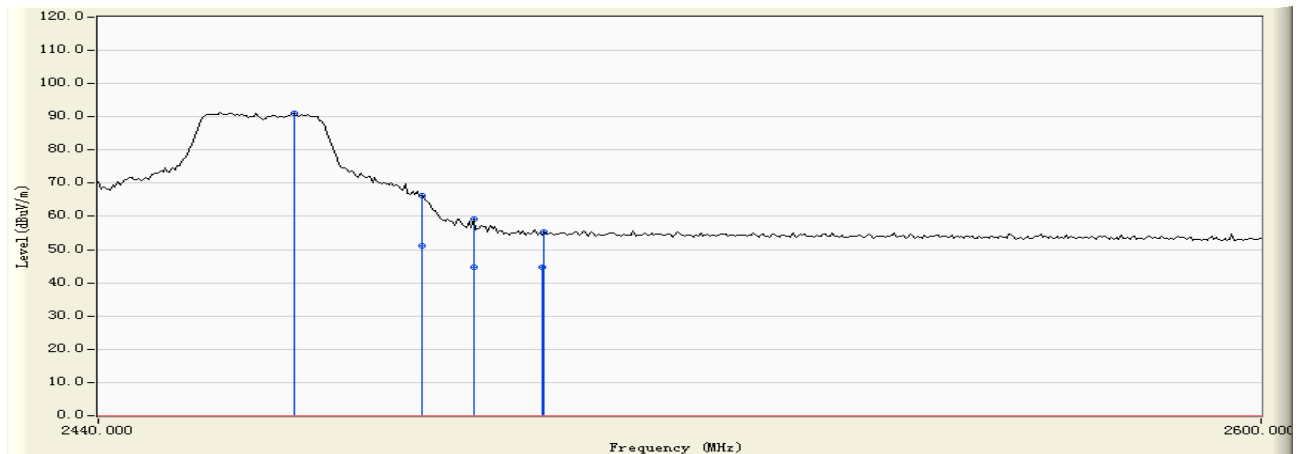
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.960	-40.472	118.502	78.031	N/A	N/A	PEAK
2		2483.520	-40.722	89.671	48.948	25.052	74	PEAK
3		2493.120	-40.795	85.207	44.412	29.588	74	PEAK
4		2500.480	-40.821	84.980	44.158	29.842	74	PEAK

Note:

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



Engineer : Tony	
Site : EMC Lab AC102	Time : 2009/12/25 - 14:22
EUT : 802.11g Wireless ADSL 2+ 4-port Gateway	Probe : 20090417_Above1G - VERTICAL
Power : AC 120V/60Hz	Note : Mode 6: Transmit by 802.11g 2462MHz



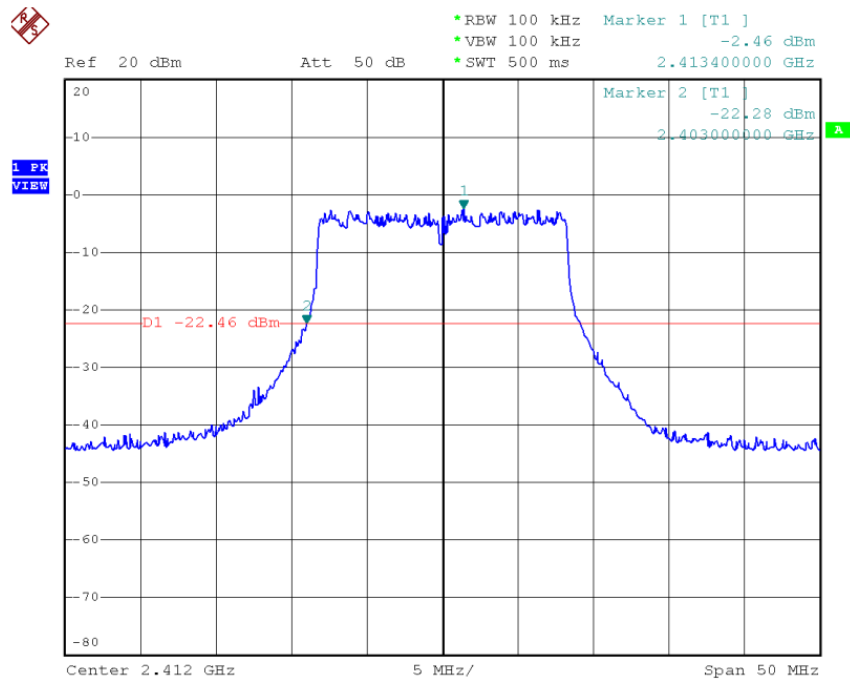
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2466.240	-28.765	119.961	91.196	N/A	N/A	PEAK
2		2483.504	-29.263	80.300	51.036	2.964	54	AVERAGE
3		2483.520	-29.264	95.604	66.339	7.661	74	PEAK
4		2490.560	-29.465	88.818	59.353	14.647	74	PEAK
5		2490.583	-29.465	74.090	44.625	9.375	54	AVERAGE
6		2499.980	-29.704	74.370	44.666	9.334	54	AVERAGE
7		2500.160	-29.709	85.026	55.317	18.683	74	PEAK

Note:

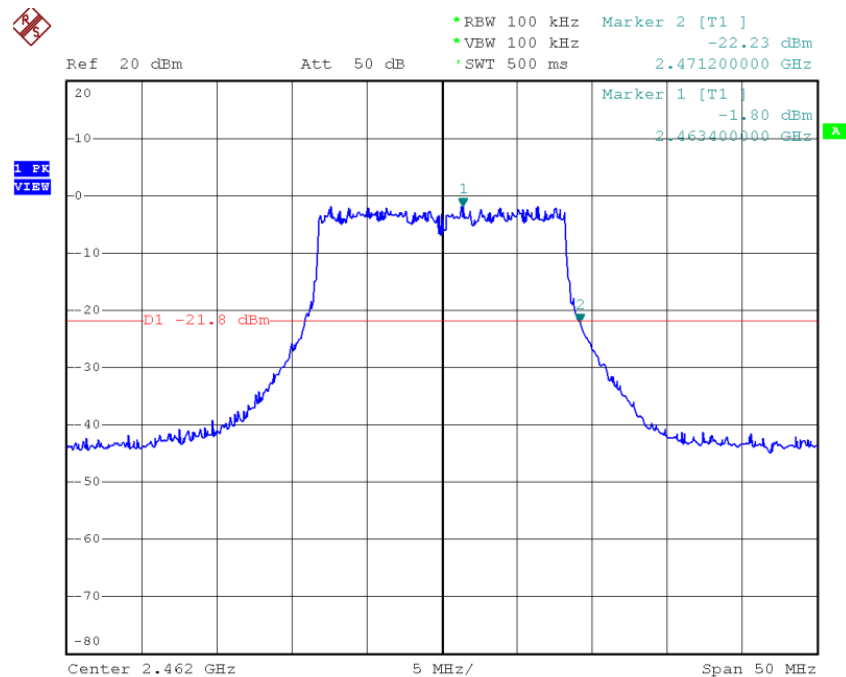
1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Band Edge (20dBc RF Conducted Measurement)
Mode 4: Transmit by 802.11g (2412MHz)



Band Edge (20dBc RF Conducted Measurement)
Mode 6: Transmit by 802.11g (2462MHz)





8. Power Spectral Density

8.1. Test Limit

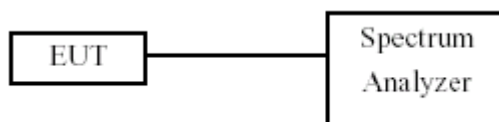
For digitally modulated systems, the power spectral density conducted from the intentional radiated to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

8.2. Test Procedure

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

Set RBW= 3 kHz, Set VBW $\geq$ 9 kHz, Sweep time=Auto, Set detector=Peak detector.

8.3. Test Setup Layout



8.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2009.11.02
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2009.10.19

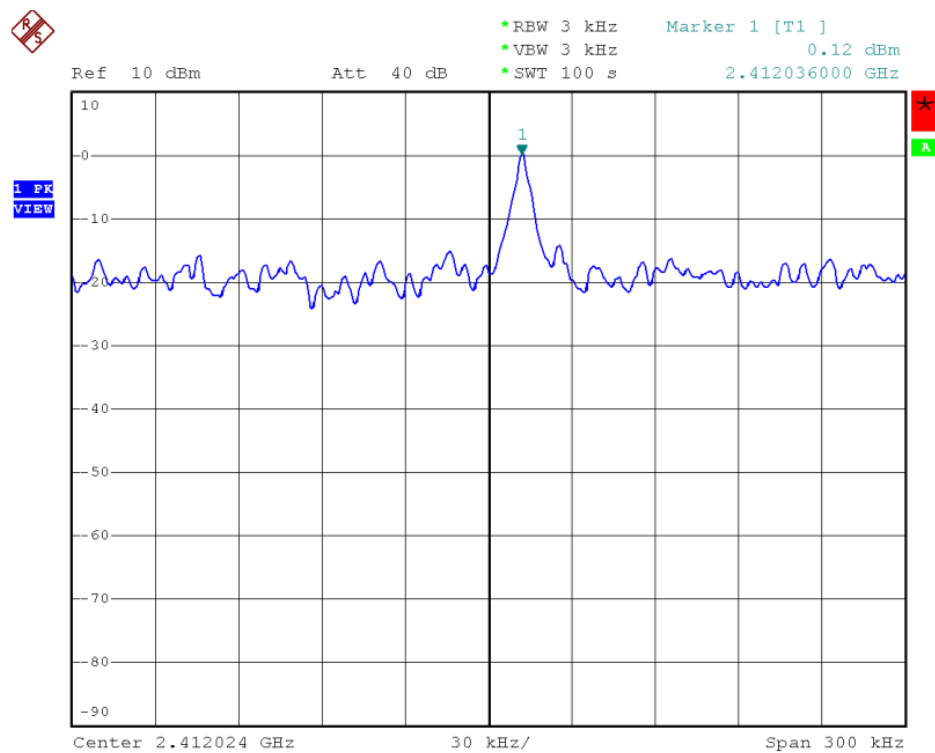


8.5. Test Result and Data

Test Item	Power Spectral Density
Test Mode	Transmit by 802.11b
Test Date	2009-12-27

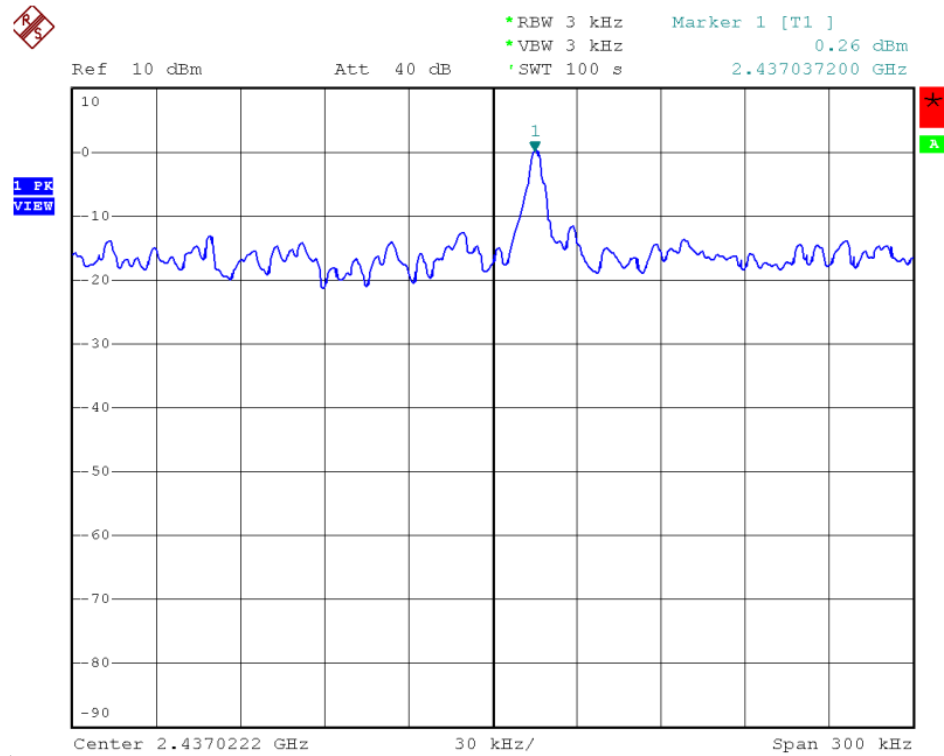
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	0.12	8	Pass
06	2437	0.26	8	Pass
11	2462	0.04	8	Pass

Channel 01 (2412MHz)

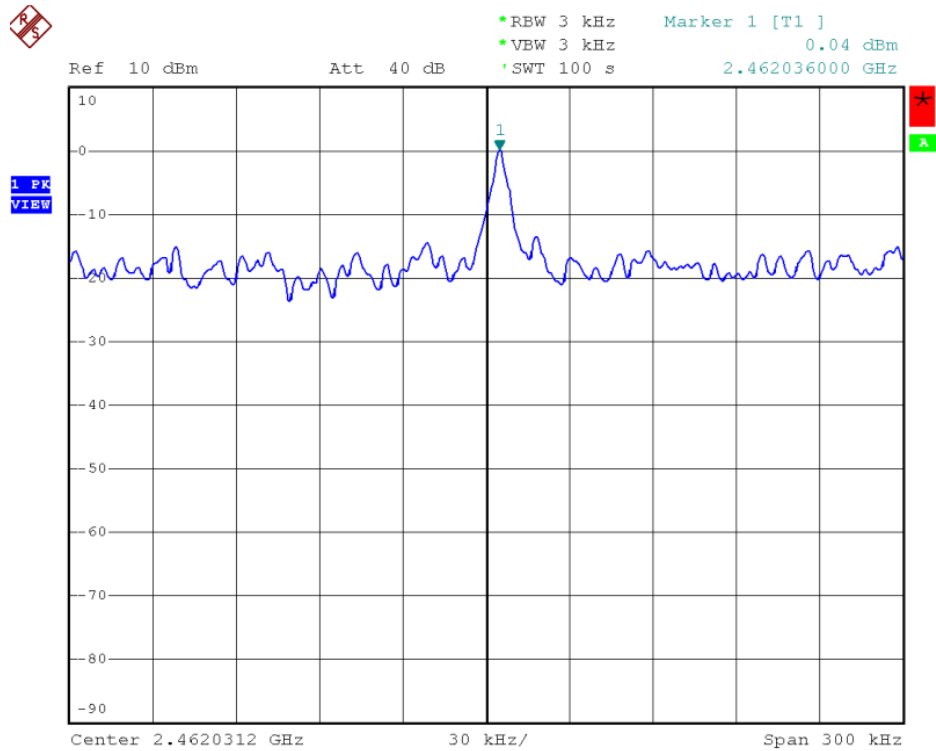




Channel 06 (2437MHz)



Channel 11 (2462MHz)

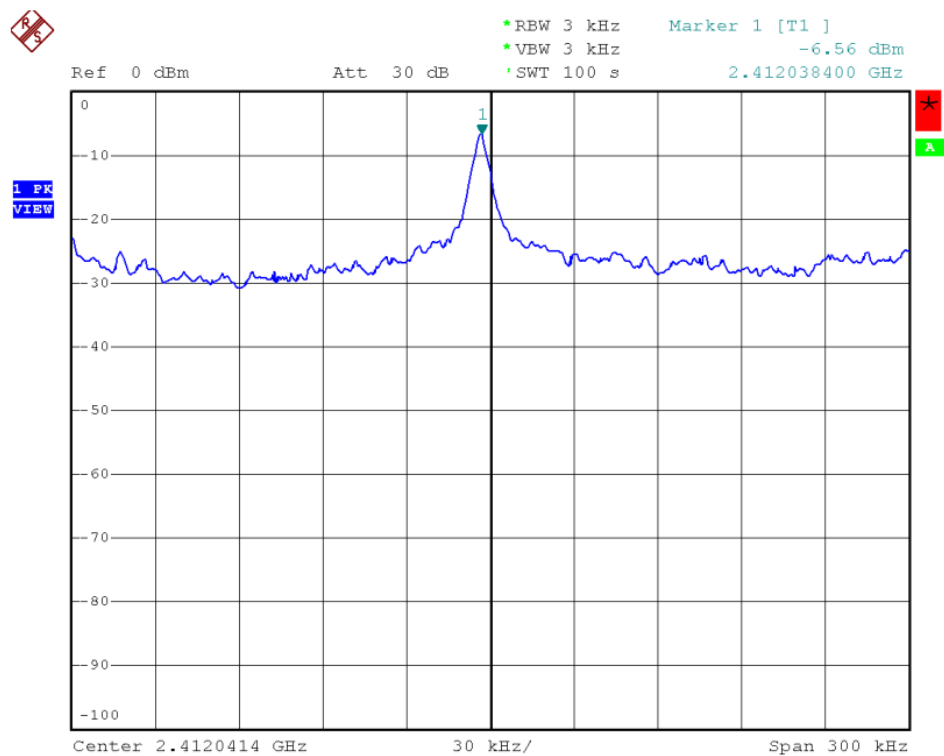




Test Item	Power Spectral Density
Test Mode	Transmit by 802.11g
Test Date	2009-12-27

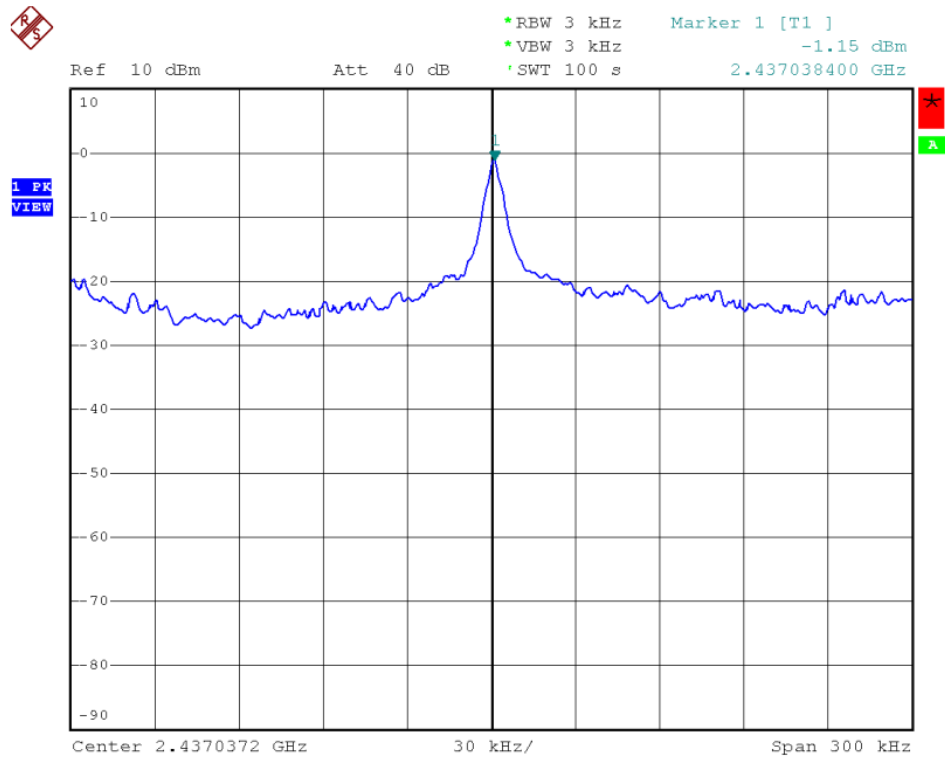
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-6.56	8	Pass
06	2437	-1.15	8	Pass
11	2462	-6.70	8	Pass

Channel 01 (2412MHz)





Channel 06 (2437MHz)



Channel 11 (2462MHz)

