Test Report

Product Name ： WiFi Modem Gateway
Model No. ： DCW725xx
FCC ID. ： H8NDCW725

Applicant ： ASKEY COMPUTER CORP.
Address ： 10F, No. 119, Chienkang Rd., Chung-Ho, Taipei,Taiwan, R.O.C.

Date of Receipt ： 2007/08/10
Issued Date ： 2007/08/27
Report No. ： 078174R-RFUSP05V01

Test Report Certification

Issued Date : 2007/08/27
Report No. : 078174R-RFUSP05V01

QuieTek

Product Name	:	WiFi Modem Gateway
Applicant	:	ASKEY COMPUTER CORP.
Address	:	10F, No. 119, Chienkang Rd., Chung-Ho, Taipei,Taiwan, R.O.C.
Manufacturer	:	ASKEY COMPUTER CORP.
Model No.	:	DCW725xx
FCC ID.	:	H8NDCW725
Rated Voltage	:	AC 120 V / 60 Hz
EUT Voltage	:	AC 120 V / 60 Hz
Trade Name	:	RCA
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2006
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 : Sandy Chuang

(Sandy Chuang / Engineering Adm. Specialist)

Tested By : Sheena Huang

(Sheena Huang / Engineer)

Approved By : Roy Wang

(Roy Wang / Manager)

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	WiFi Modem Gateway
Trade Name	RCA
Model No.	DCW725xx
Frequency Range	2412MHz ~2462MHz
Channel Number	11
Type of Modulation	BPSK, QPSK, CCK, 16QAM, 64QAM
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	2.29dBi
Channel Control	Manual&Auto
Antenna Type	Dipole

Component	
LAN Cable	Non-Shielded, 2.0m
USB Cable	Shielded, 1.5m
Power Adapter	LEADER ELECTRONICS INC., T481210RO3CT I/P: 120V~60Hz, 220mA O/P: 12VDC, 1A Cable In: Non-Shielded, 1.8m 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 WiFi Modem Gateway included a 2.4GHz receiving function, and 2.4GHz transmitting function.
2. The variation of model number is for different strategy of marketing, x can be a-z, A-Z, 0-9 or blank.
3. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
4. Regards to the frequency band operation; the highest rate that was included the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
5. “The EUT’S antenna uses a unique coupling to the intentional radiator, and it meets all requirements of 15.203.”
6. This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 078174R-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: Transmitter
Final Test Mode	
TX	Mode 1: Transmitter

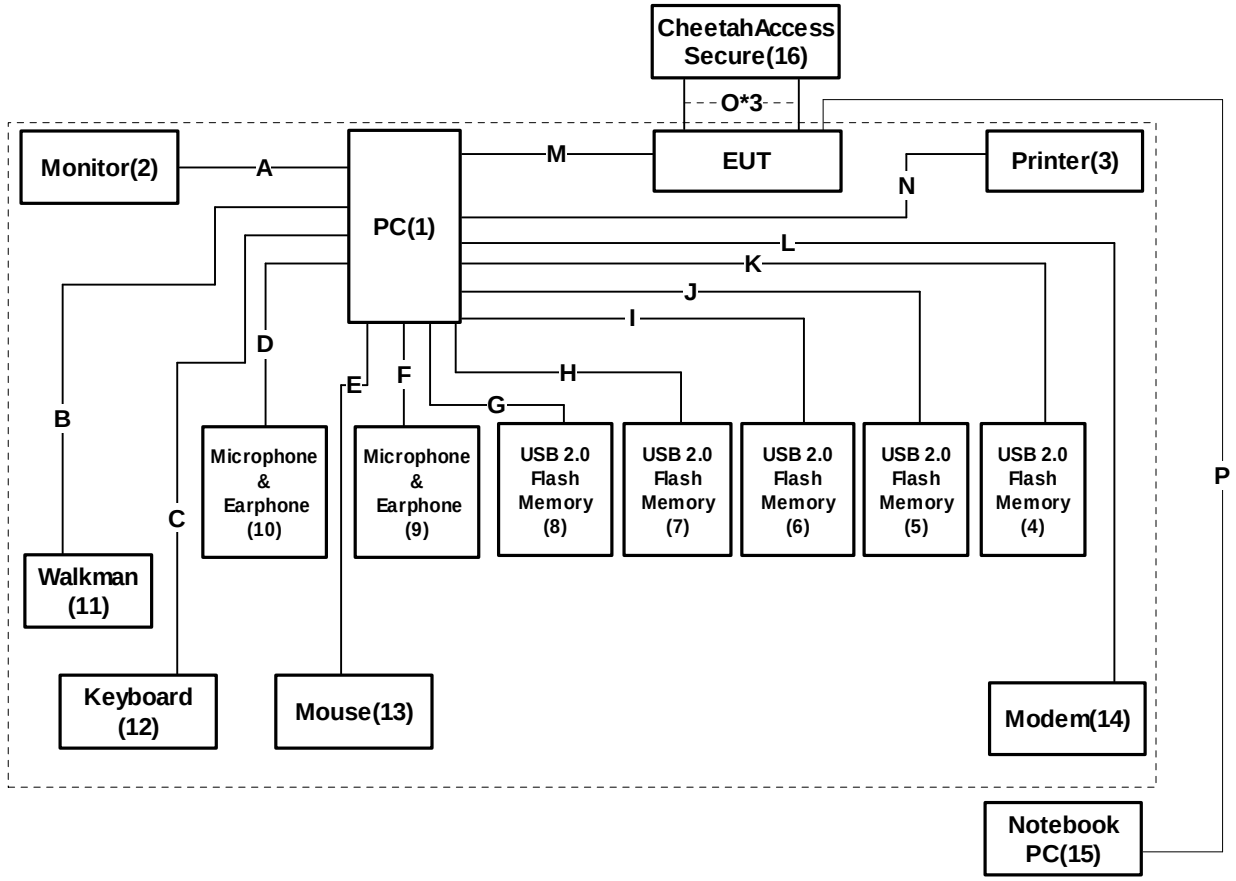
1.4. Tested System Details

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	PC	COMPAQ	PD1100	SG30801026	DoC	Non-shielded, 1.8m
2	Monitor	CHI MEI	A170E1-09	3UC120955SA1250	DoC	Non-shielded, 1.8m
3	Printer	HP	C2642A	MY75L1D2XN	DoC	Non-shielded, 0.7m
4	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
5	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
6	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
7	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
8	USB 2.0 Flash Memory	Sony	USM2GJX	N/A	DoC	--
9	Microphone & Earphone	Ronald	MOE060	N/A	DoC	--
10	Microphone & Earphone	TOKTO	SX-MI	N/A	DoC	--
11	Walkman	AIWA	US-J202	I20201	DoC	--
12	Keyboard	Logitech	Y-SM46	SY525U18099	DoC	--
13	Mouse	Logitech	M-SBF83	HCA52200184	DoC	--
14	Modem	ACEEX	DM-1414	980033034	DoC	Non-shielded, 1.6m
15	Notebook PC	DELL	LATITUDE D400	N/A	DoC	Non-shielded, 1.7m, a ferrite core bonded
16	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	VGA Cable	Shielded, 1.8m, two ferrite cores boded.
B	Walkman Cable	Non-Shielded, 1.6m
C	Keyboard Cable	Shielded, 1.8m
E	Mouse Cable	Non-Shielded, 1.2m
F	Microphone & Earphone Cable	Shielded, 1.2m
G	USB 2.0 Flash Memory Cable	Non-Shielded, 1.4m
H	USB 2.0 Flash Memory Cable	Non-Shielded, 1.4m
I	USB 2.0 Flash Memory Cable	Non-Shielded, 1.4m
J	USB 2.0 Flash Memory Cable	Non-Shielded, 1.4m
K	USB 2.0 Flash Memory Cable	Non-Shielded, 1.4m
L	Modem Cable	Shielded, 1.5m
M	USB Cable	Shielded, 1.6m
N	Printer Cable	Shielded, 1.2m
O	LAN Cable	Non-Shielded, 1.2m
P	LAN Cable	Non-Shielded, 10m

1.6. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4
2	Turn on the power of all equipment.
3	Notebook PC reads data from disk.
4	Data will be transmitting through EUT.
5	The transmitting status will be shown on the monitor.
6	Repeat the above procedure (4) to (5).
7	Data will be receiving through EUT.
8	The receiving status will be shown on the monitor.
9	Repeat the above procedure (7) to (8).

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 Band Edge (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth (DSSS)	15 - 35	25
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	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Power Density (DSSS)	15 - 35	25
Humidity (%RH)		25 - 75	50
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	50
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 CNLA
Accreditation Number: 1313
Effective through: September 27, 2007

1313

ILAC MRA

Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2007

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. Peak Power Output

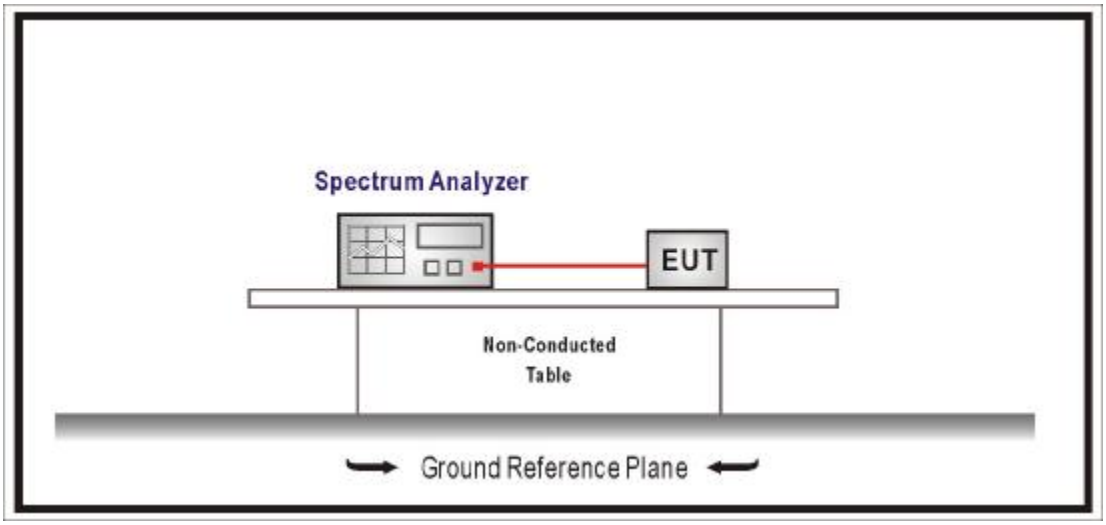
2.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R&S	FSP/ 100005	Oct., 2006
2	No.1 OATS			Sep., 2006

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

The maximum peak power shall be less 1 Watt.

2.4. Test Specification

According to FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2006

2.5. Uncertainty

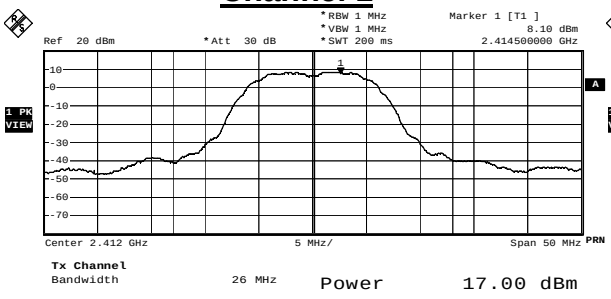
The measurement uncertainty is defined as ± 1.27 dB.

2.6. Test Result

Product	WiFi Modem Gateway		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmitter		
Date of Test	2007/08/13	Test Site	No.1 OATS

IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	17.00	1Watt= 30 dBm	Pass
6	2437	17.08	1Watt= 30 dBm	Pass
11	2462	17.14	1Watt= 30 dBm	Pass

Channel 1



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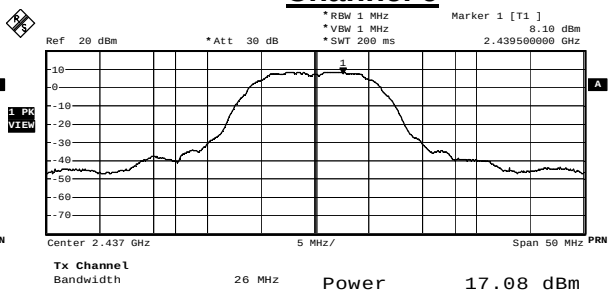
Channel 6



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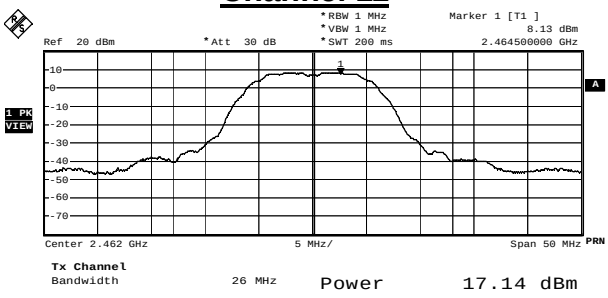
Channel 11



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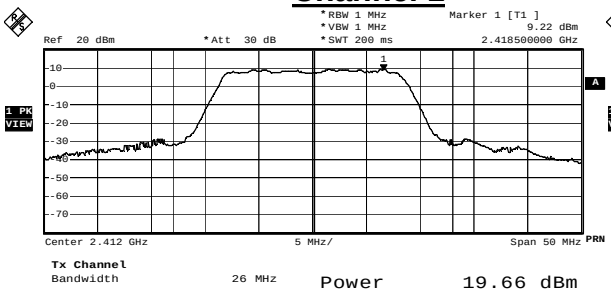
Product	WiFi Modem Gateway		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmitter		
Date of Test	2007/08/13	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	19.66	1Watt= 30 dBm	Pass
6	2437	19.61	1Watt= 30 dBm	Pass
11	2462	18.67	1Watt= 30 dBm	Pass

Channel 1



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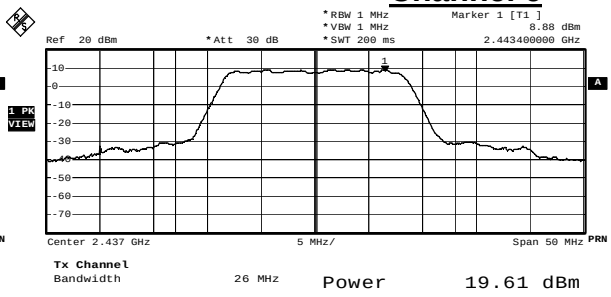
Channel 6



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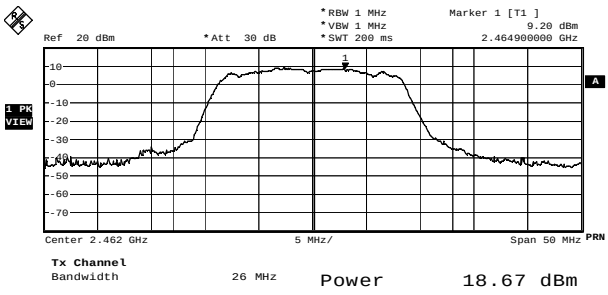
Channel 11



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3. Conducted Emission

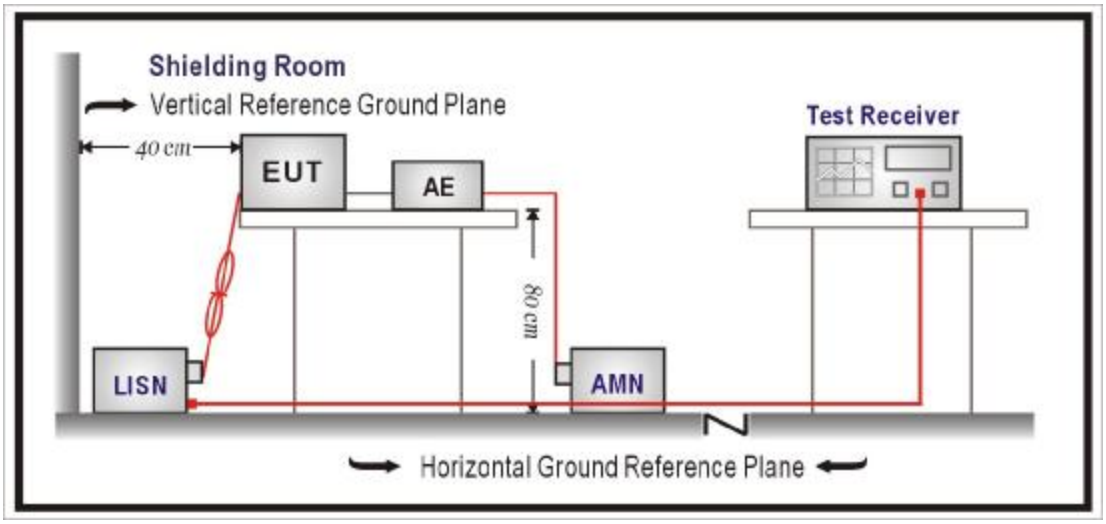
3.1. Test Equipment

The following test equipment 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., 2006	
2	Artificial Mains Network	R & S	ENV4200/848411/10	Feb., 2007	Peripherals
3	LISN	R & S	ESH3-Z5/825562/002	Feb., 2007	EUT
4	Pulse Limiter	R & S	ESH3-Z2/357.8810.52	Feb., 2007	
5	No.2 Shielded Room			N/A	

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

3.2. Test Setup



3.3. 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.

3.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Test Specification

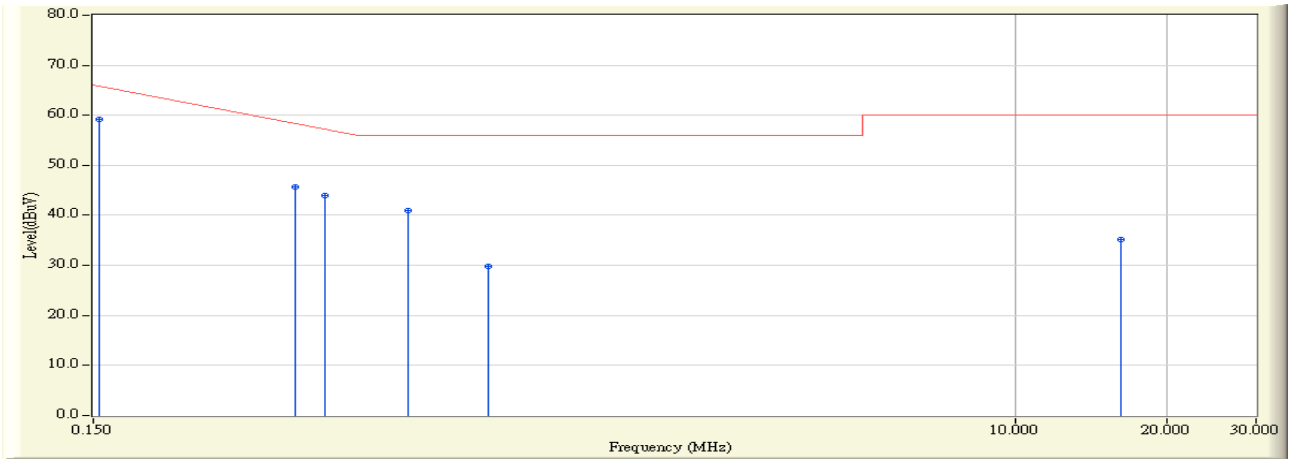
According to FCC Part 15 Subpart C Paragraph 15.207: 2006

3.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

3.7. Test Result

Site : ShieldingRoom2	Time : 2007/08/14 - 13:39
Limit : CISPR_B_00M_QP	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line1
Power : AC 120V/60Hz	Note : TX-B

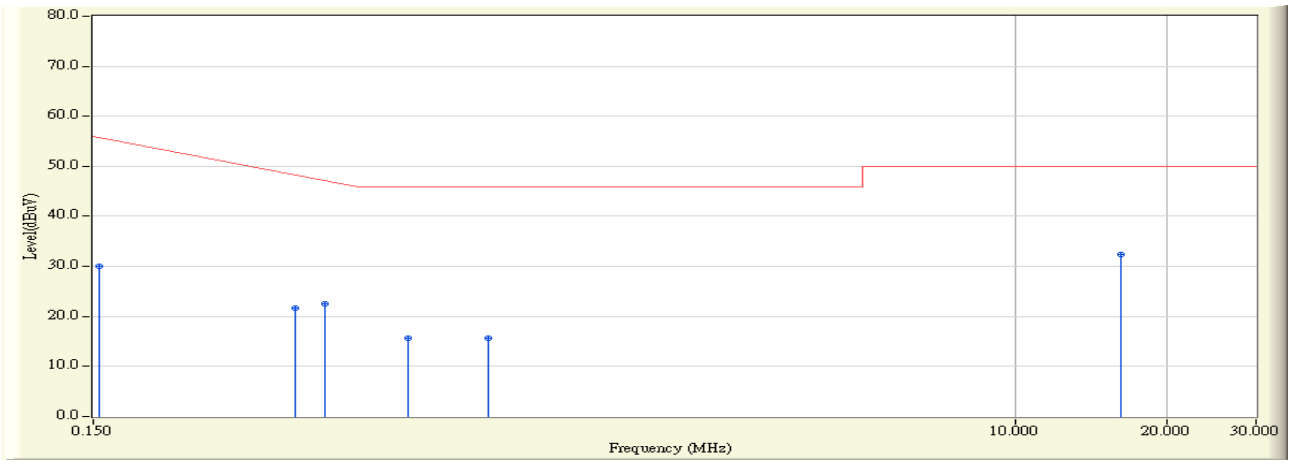


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.154	0.200	58.960	59.160	-6.726	65.886	QUASIPEAK
2		0.376	0.200	45.530	45.730	-13.813	59.543	QUASIPEAK
3		0.431	0.200	43.830	44.030	-13.941	57.971	QUASIPEAK
4		0.630	0.210	40.860	41.070	-14.930	56.000	QUASIPEAK
5		0.908	0.210	29.640	29.850	-26.150	56.000	QUASIPEAK
6		16.228	1.040	34.130	35.170	-24.830	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 : ShieldingRoom2	Time : 2007/08/14 - 13:39
Limit : CISPR_B_00M_AV	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line1
Power : AC 120V/60Hz	Note : TX-B

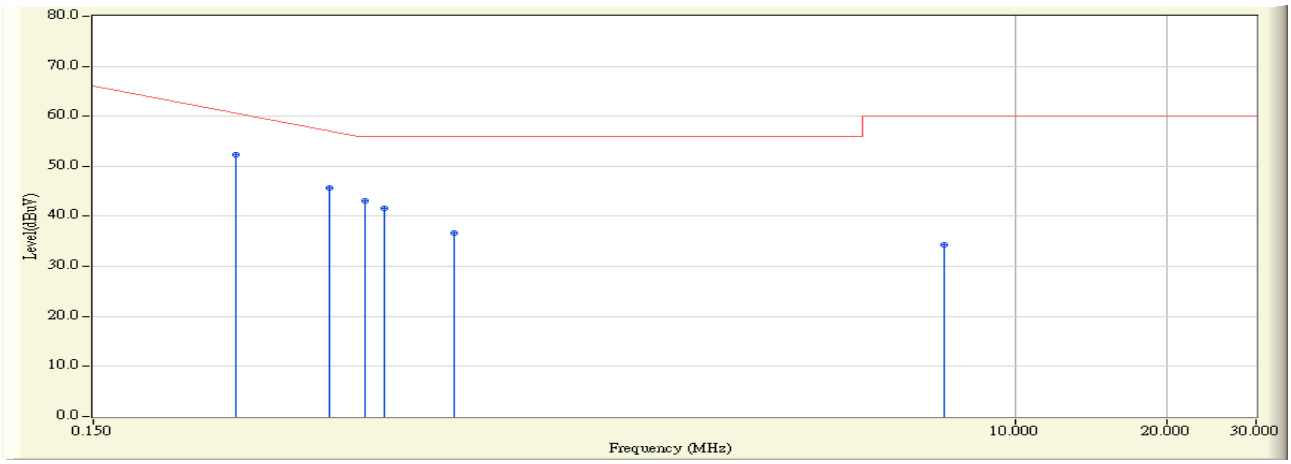


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	0.200	29.880	30.080	-25.806	55.886	AVERAGE
2		0.376	0.200	21.530	21.730	-27.813	49.543	AVERAGE
3		0.431	0.200	22.330	22.530	-25.441	47.971	AVERAGE
4		0.630	0.210	15.470	15.680	-30.320	46.000	AVERAGE
5		0.908	0.210	15.470	15.680	-30.320	46.000	AVERAGE
6	*	16.228	1.040	31.260	32.300	-17.700	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 : ShieldingRoom2	Time : 2007/08/14 - 13:45
Limit : CISPR_B_00M_QP	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line2
Power : AC 120V/60Hz	Note : TX-B

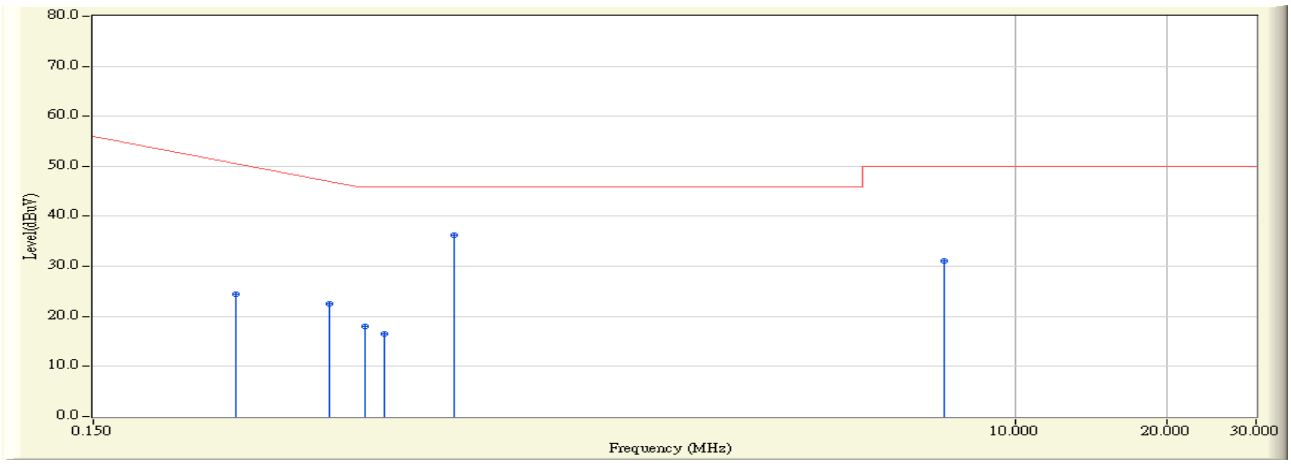


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.287	0.200	52.080	52.280	-9.806	62.086	QUASIPEAK
2		0.439	0.200	45.490	45.690	-12.053	57.743	QUASIPEAK
3		0.517	0.210	42.920	43.130	-12.870	56.000	QUASIPEAK
4		0.564	0.210	41.420	41.630	-14.370	56.000	QUASIPEAK
5		0.779	0.210	36.550	36.760	-19.240	56.000	QUASIPEAK
6		7.255	0.450	33.780	34.230	-25.770	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 : ShieldingRoom2	Time : 2007/08/14 - 13:45
Limit : CISPR_B_00M_AV	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line2
Power : AC 120V/60Hz	Note : TX-B

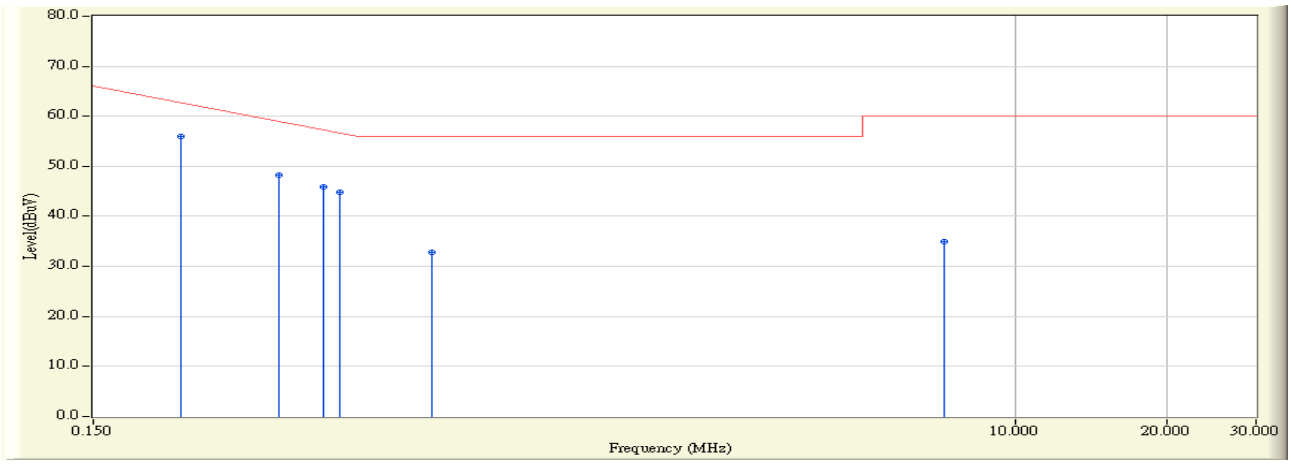


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.287	0.200	24.280	24.480	-27.606	52.086	AVERAGE
2		0.439	0.200	22.420	22.620	-25.123	47.743	AVERAGE
3		0.517	0.210	17.860	18.070	-27.930	46.000	AVERAGE
4		0.564	0.210	16.200	16.410	-29.590	46.000	AVERAGE
5	*	0.779	0.210	36.060	36.270	-9.730	46.000	AVERAGE
6		7.255	0.450	30.690	31.140	-18.860	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 : ShieldingRoom2	Time : 2007/08/14 - 14:03
Limit : CISPR_B_00M_QP	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line1
Power : AC 120V/60Hz	Note : TX-G

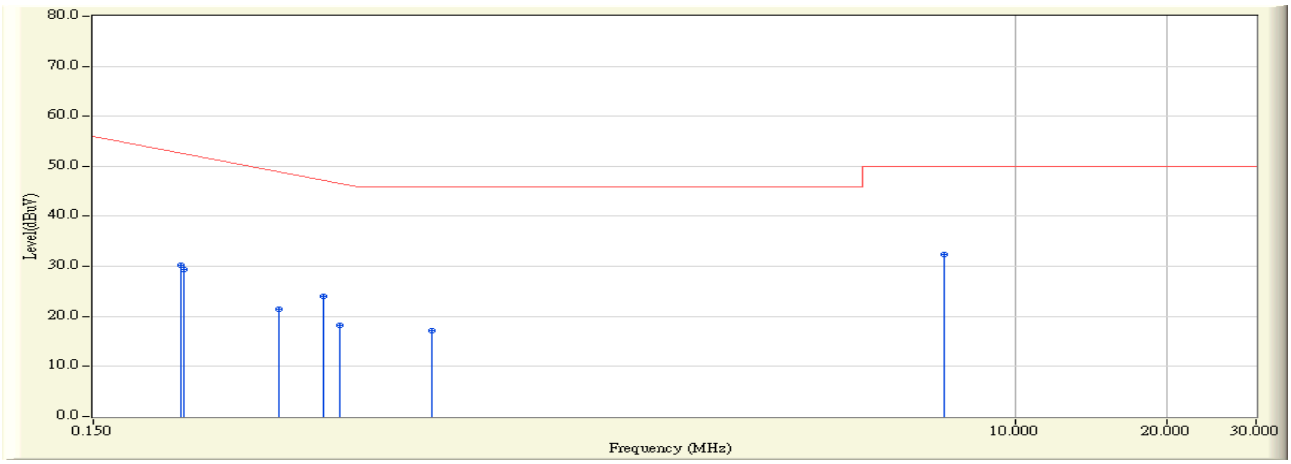


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.224	0.200	55.880	56.080	-7.806	63.886	QUASIPEAK
2		0.349	0.200	48.100	48.300	-12.014	60.314	QUASIPEAK
3		0.429	0.200	45.600	45.800	-12.229	58.029	QUASIPEAK
4		0.460	0.200	44.670	44.870	-12.273	57.143	QUASIPEAK
5		0.701	0.210	32.570	32.780	-23.220	56.000	QUASIPEAK
6		7.255	0.510	34.410	34.920	-25.080	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 : ShieldingRoom2	Time : 2007/08/14 - 14:03
Limit : CISPR_B_00M_AV	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line1
Power : AC 120V/60Hz	Note : TX-G

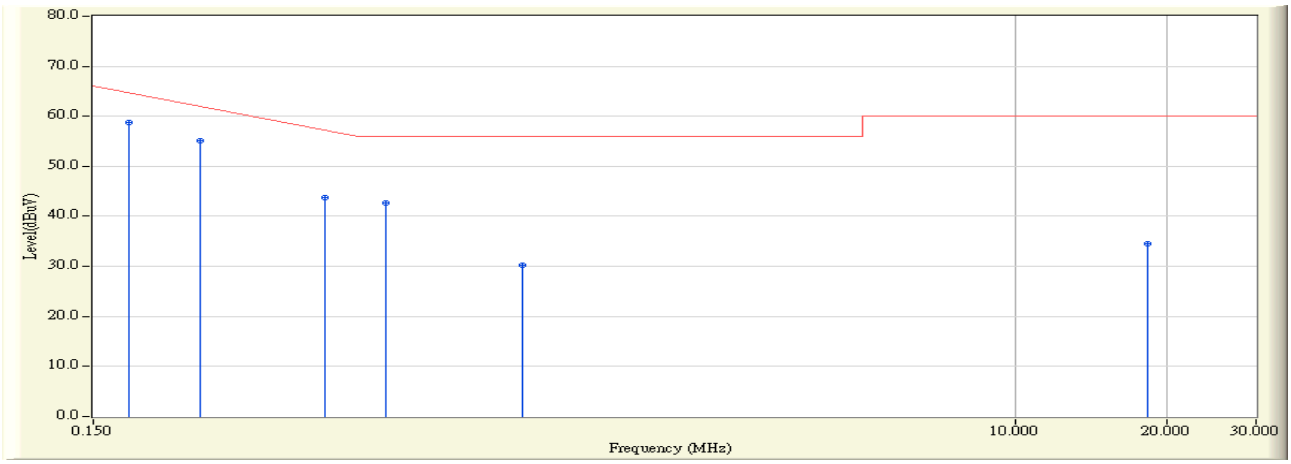


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.224	0.200	30.010	30.210	-23.676	53.886	AVERAGE
2		0.227	0.200	29.220	29.420	-24.380	53.800	AVERAGE
3		0.349	0.200	21.270	21.470	-28.844	50.314	AVERAGE
4		0.429	0.200	23.810	24.010	-24.019	48.029	AVERAGE
5		0.460	0.200	18.040	18.240	-28.903	47.143	AVERAGE
6		0.701	0.210	17.000	17.210	-28.790	46.000	AVERAGE
7	*	7.255	0.510	31.940	32.450	-17.550	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 : ShieldingRoom2	Time : 2007/08/14 - 14:10
Limit : CISPR_B_00M_QP	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line2
Power : AC 120V/60Hz	Note : TX-G

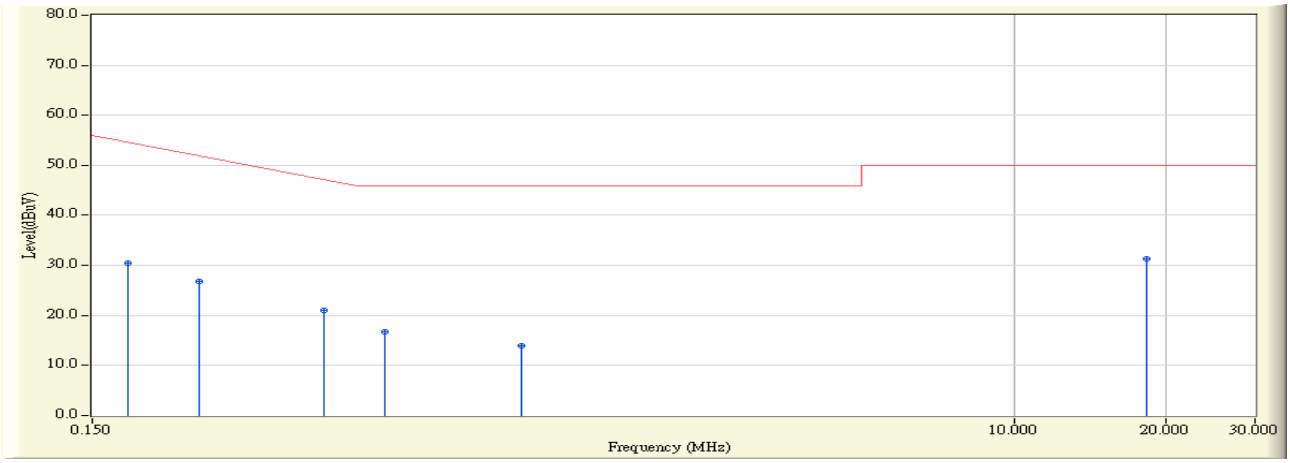


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.176	0.200	58.600	58.800	-6.457	65.257	QUASIPEAK
2		0.244	0.200	55.010	55.210	-8.104	63.314	QUASIPEAK
3		0.431	0.200	43.590	43.790	-14.181	57.971	QUASIPEAK
4		0.570	0.210	42.490	42.700	-13.300	56.000	QUASIPEAK
5		1.060	0.210	30.070	30.280	-25.720	56.000	QUASIPEAK
6		18.246	0.850	33.670	34.520	-25.480	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 : ShieldingRoom2	Time : 2007/08/14 - 14:10
Limit : CISPR_B_00M_AV	Margin : 0
EUT : WiFi Modem Gateway	Probe : QTK-LISN-SR2 - Line2
Power : AC 120V/60Hz	Note : TX-G



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.176	0.200	30.280	30.480	-24.777	55.257	AVERAGE
2		0.244	0.200	26.520	26.720	-26.594	53.314	AVERAGE
3		0.431	0.200	20.740	20.940	-27.031	47.971	AVERAGE
4		0.570	0.210	16.530	16.740	-29.260	46.000	AVERAGE
5		1.060	0.210	13.680	13.890	-32.110	46.000	AVERAGE
6	*	18.246	0.850	30.370	31.220	-18.780	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

4. Radiated Emission

4.1. Test Equipment

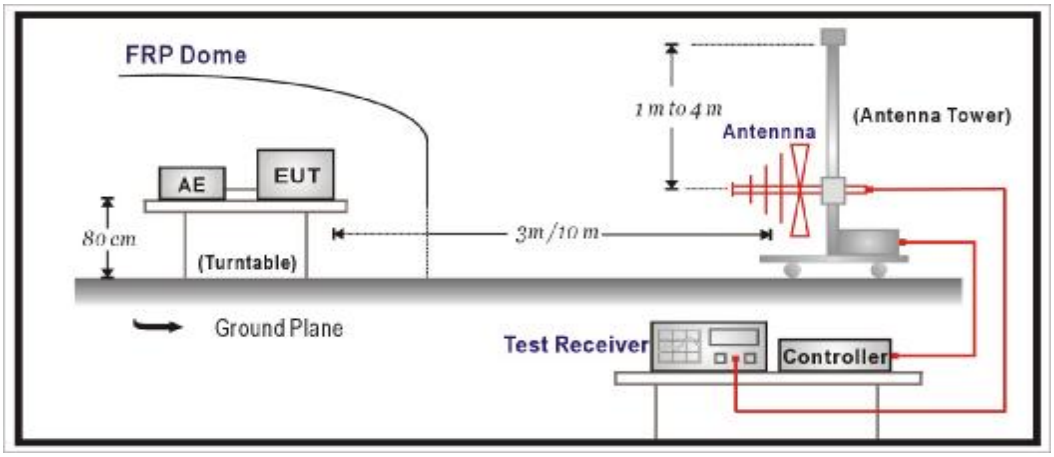
The following test equipment are used during the test:

Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Test Receiver	R & S	ESCS 30 / 825442/017	Jan., 2007
2	X	Spectrum Analyzer	Advantest	R3261C / 81720266	N/A
3	X	Pre-Amplifier	HP	8447D / 2944A09276	N/A
4	X	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2006
5	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2007
6	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2007
7	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Jul., 2007
8	No.1 OATS				Sep., 2006

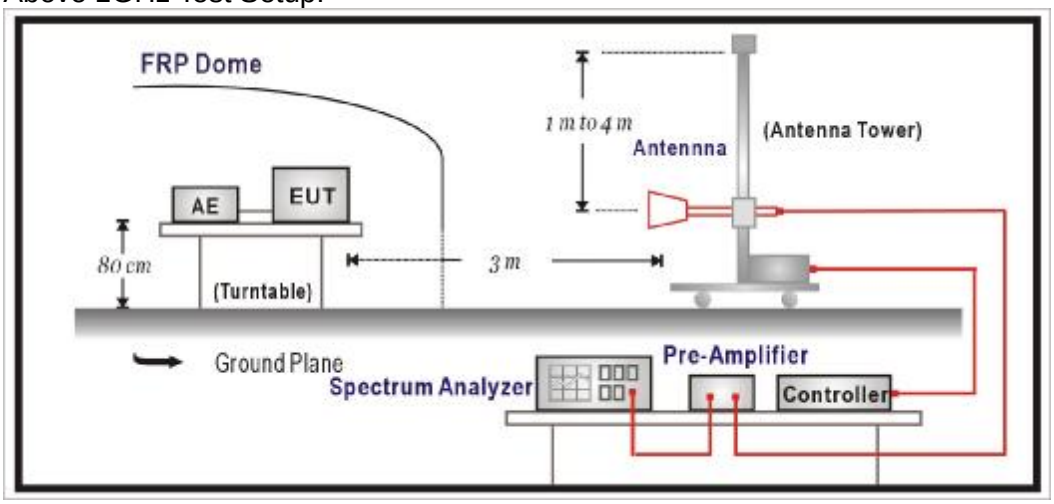
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.
2. “N/A” Ca1.Date is used to Pre-test, not final test.

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	uV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.
On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2006

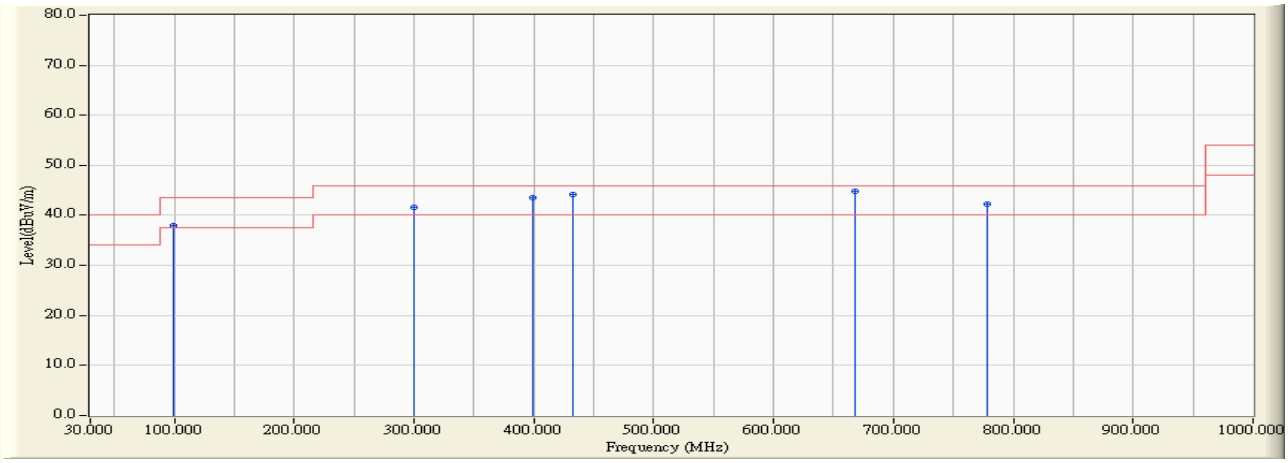
4.6. Uncertainty

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

4.7. Test Result

30MHz-1GHz Spurious:

Site : Site 1	Time : 2007/08/23 - 20:19
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_30-1G(200605) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-B

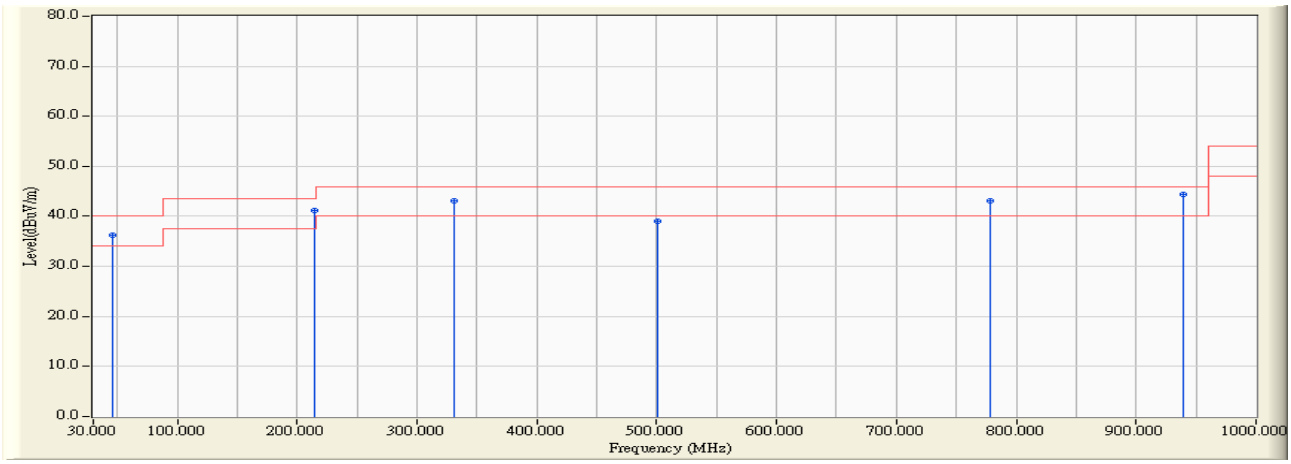


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		99.980	-8.123	46.057	37.934	-5.566	43.500	Quasi-Peak
2		300.200	-3.511	45.018	41.507	-4.493	46.000	Quasi-Peak
3		399.339	1.121	42.409	43.530	-2.470	46.000	Quasi-Peak
4		432.385	1.904	42.290	44.194	-1.806	46.000	Quasi-Peak
5	*	667.595	1.924	42.974	44.897	-1.103	46.000	Quasi-Peak
6		778.397	3.554	38.734	42.289	-3.711	46.000	Quasi-Peak

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 1	Time : 2007/08/23 - 20:19
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_30-1G(200605) - VERTICAL
Power : AC 120V/60Hz	Note : TX-B

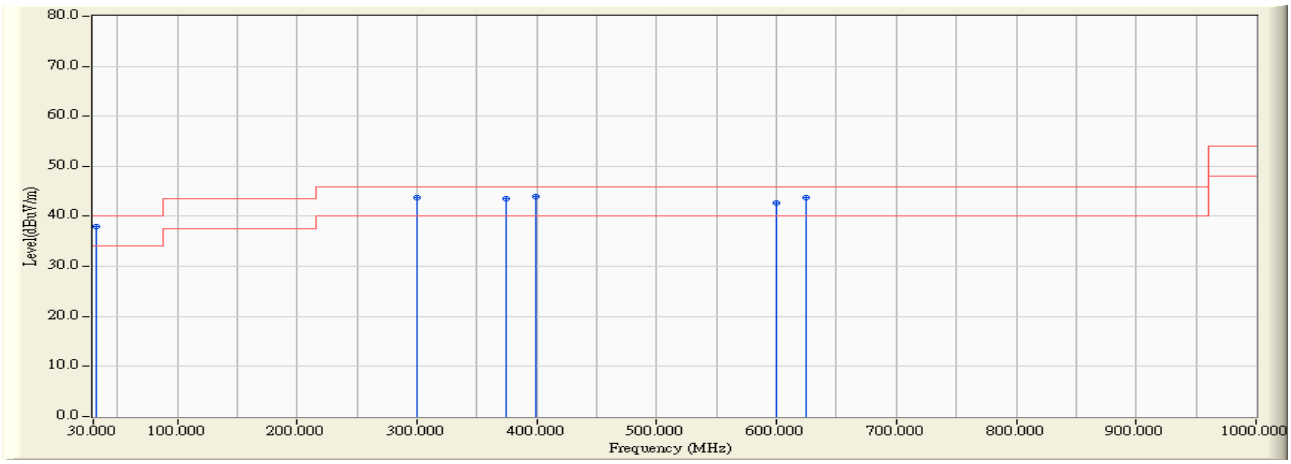


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		45.551	-0.370	36.560	36.190	-3.810	40.000	Quasi-Peak
2		214.669	-5.766	46.944	41.178	-2.322	43.500	Quasi-Peak
3		331.303	-4.052	47.161	43.108	-2.892	46.000	Quasi-Peak
4		500.421	-3.103	42.069	38.966	-7.034	46.000	Quasi-Peak
5		778.397	5.770	37.263	43.034	-2.966	46.000	Quasi-Peak
6	*	939.740	9.014	35.432	44.446	-1.554	46.000	Quasi-Peak

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 1	Time : 2007/08/23 - 20:18
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_30-1G(200605) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-G

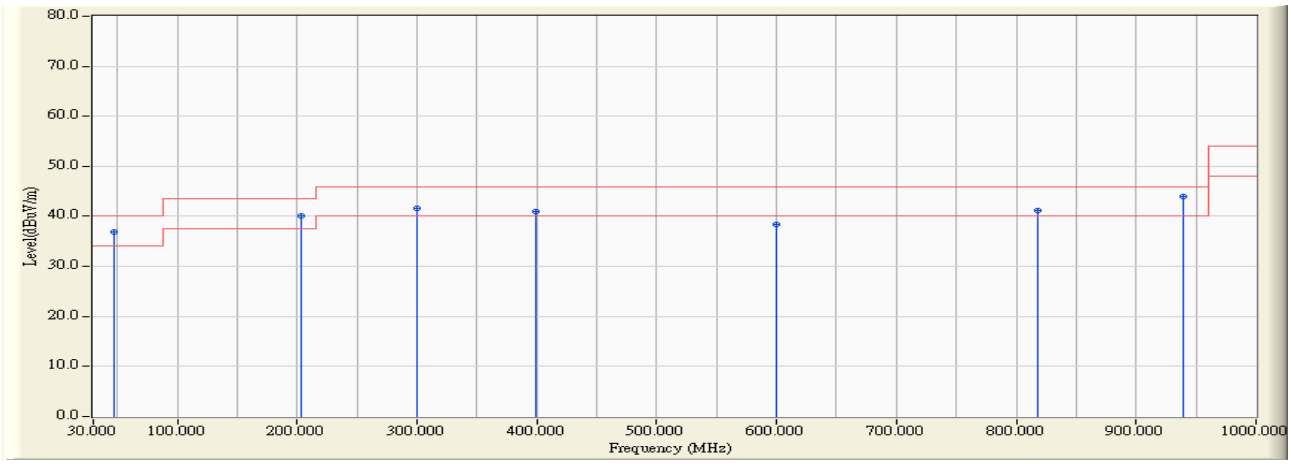


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	31.944	3.403	34.614	38.017	-1.983	40.000	Quasi-Peak
2		300.200	-3.511	47.249	43.738	-2.262	46.000	Quasi-Peak
3		374.068	-4.703	48.349	43.646	-2.354	46.000	Quasi-Peak
4		399.339	1.121	42.846	43.967	-2.033	46.000	Quasi-Peak
5		599.559	2.470	40.289	42.758	-3.242	46.000	Quasi-Peak
6		624.830	1.779	41.999	43.778	-2.222	46.000	Quasi-Peak

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 1	Time : 2007/08/23 - 20:10
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_30-1G(200605) - VERTICAL
Power : AC 120V/60Hz	Note : TX-G



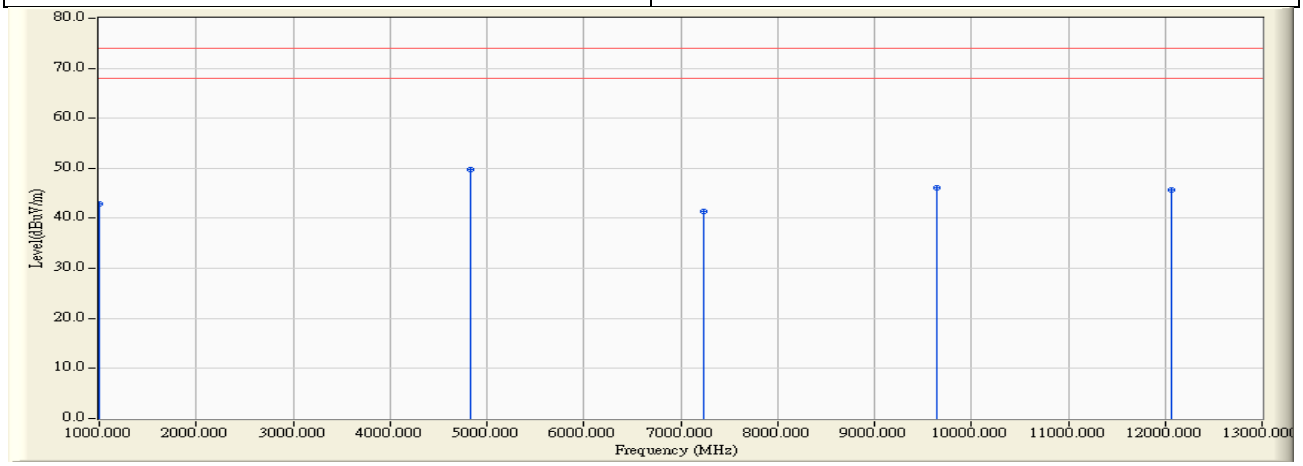
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		47.495	-1.521	38.421	36.900	-3.100	40.000	Quasi-Peak
2		203.006	-3.127	43.289	40.162	-3.338	43.500	Quasi-Peak
3		300.200	-8.515	50.019	41.504	-4.496	46.000	Quasi-Peak
4		399.339	-0.493	41.544	41.052	-4.948	46.000	Quasi-Peak
5		599.559	1.358	37.009	38.366	-7.634	46.000	Quasi-Peak
6		817.275	4.825	36.335	41.160	-4.840	46.000	Quasi-Peak
7	*	939.740	9.014	35.003	44.017	-1.983	46.000	Quasi-Peak

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 1	Time : 2007/08/15 - 13:32
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-CH1-B

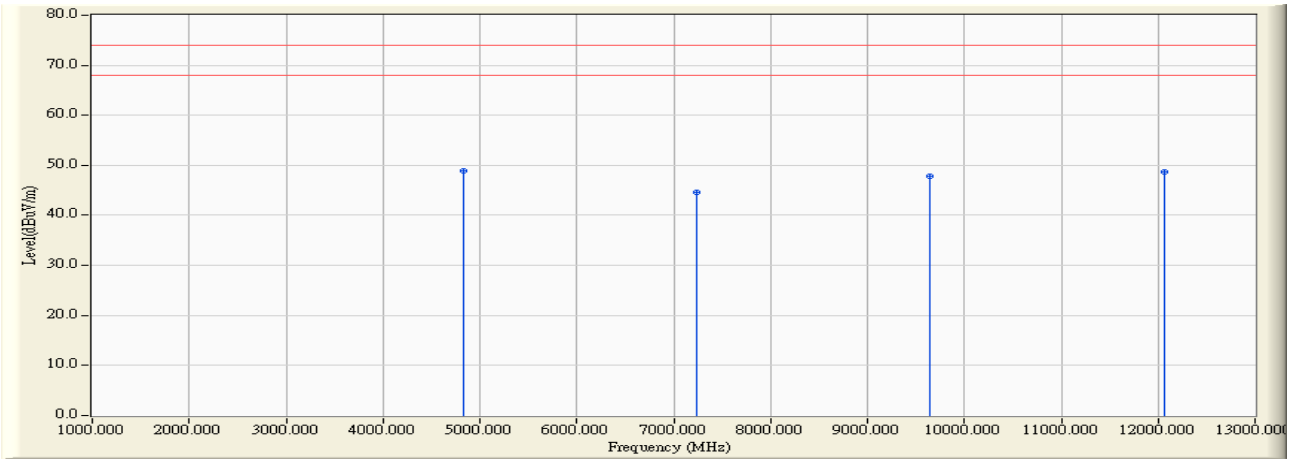


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1		1000.000	-13.470	56.360	42.890	-31.110	74.000	54.000	PEAK
2	*	4824.640	3.738	46.050	49.787	-24.213	74.000	54.000	PEAK
3		7236.000	8.726	32.750	41.476	-32.524	74.000	54.000	PEAK
4		9648.040	12.707	33.450	46.157	-27.843	74.000	54.000	PEAK
5		12060.040	15.061	30.690	45.750	-28.250	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 13:52
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : TX-CH1-B

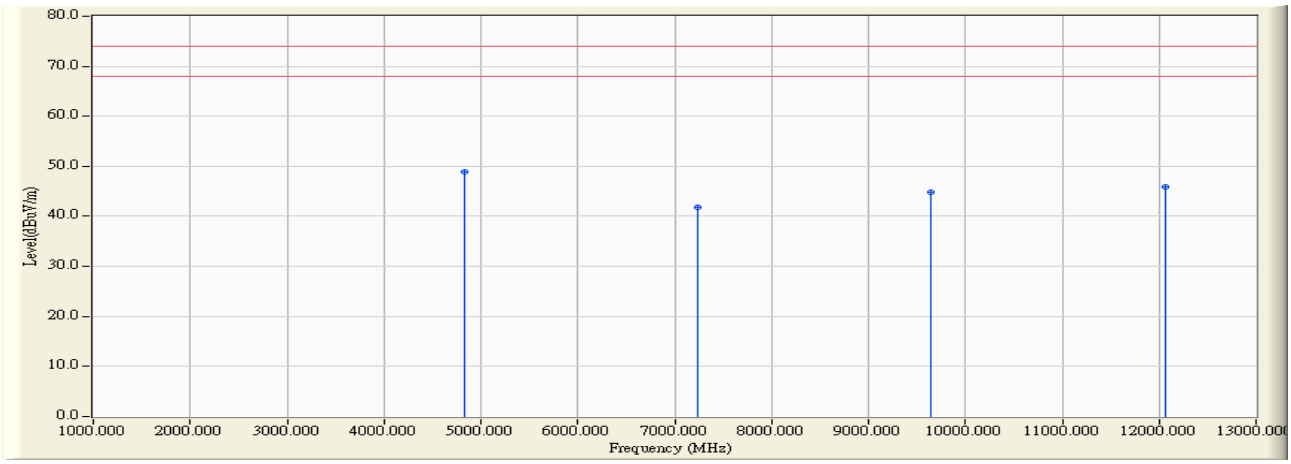


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1	*	4824.640	1.987	46.940	48.927	-25.073	74.000	54.000	PEAK
2		7236.450	8.728	35.980	44.707	-29.293	74.000	54.000	PEAK
3		9648.000	14.707	33.030	47.737	-26.263	74.000	54.000	PEAK
4		12060.090	17.225	31.520	48.745	-25.255	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 14:50
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-CH1-G

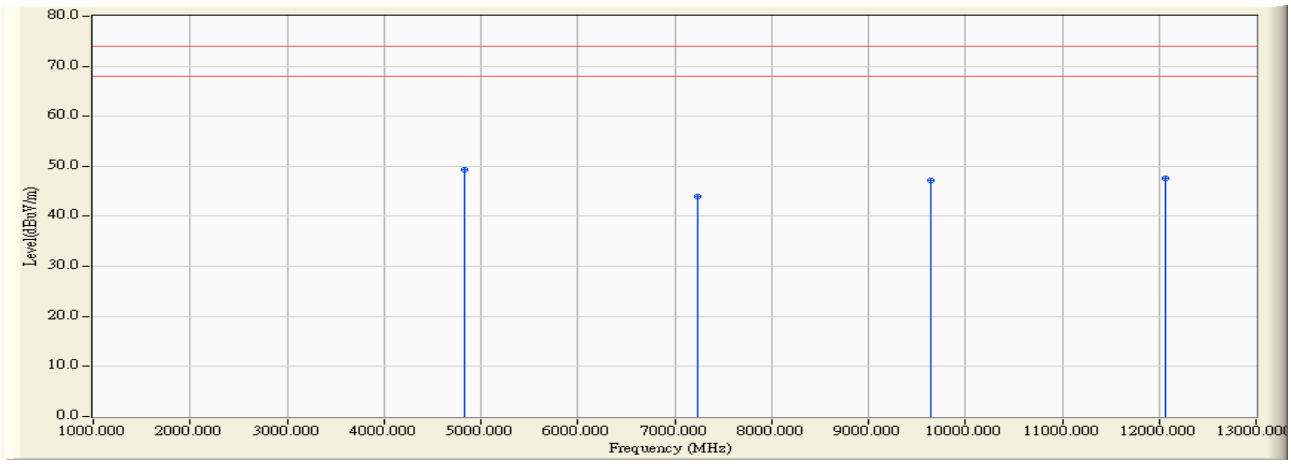


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1	*	4824.460	3.736	45.090	48.826	-25.174	74.000	54.000	PEAK
2		7236.230	8.727	33.050	41.777	-32.223	74.000	54.000	PEAK
3		9648.230	12.707	32.210	44.917	-29.083	74.000	54.000	PEAK
4		12060.450	15.095	30.760	45.855	-28.145	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 14:58
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : TX-CH1-G

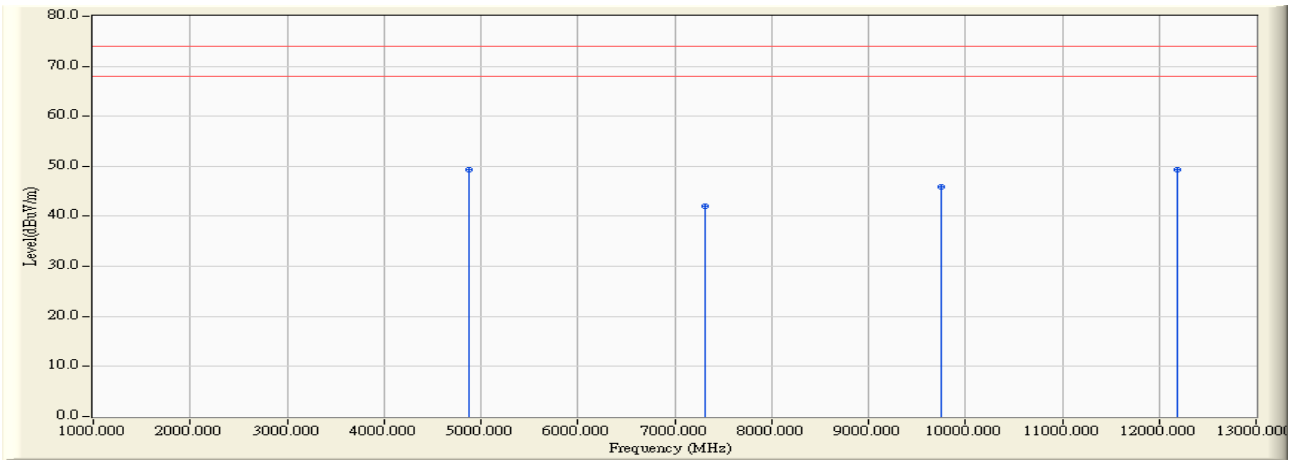


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1	*	4824.460	1.985	47.370	49.355	-24.645	74.000	54.000	PEAK
2		7236.020	8.726	35.150	43.876	-30.124	74.000	54.000	PEAK
3		9648.360	14.707	32.450	47.157	-26.843	74.000	54.000	PEAK
4		12060.350	17.227	30.280	47.508	-26.492	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 14:02
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-CH6-B

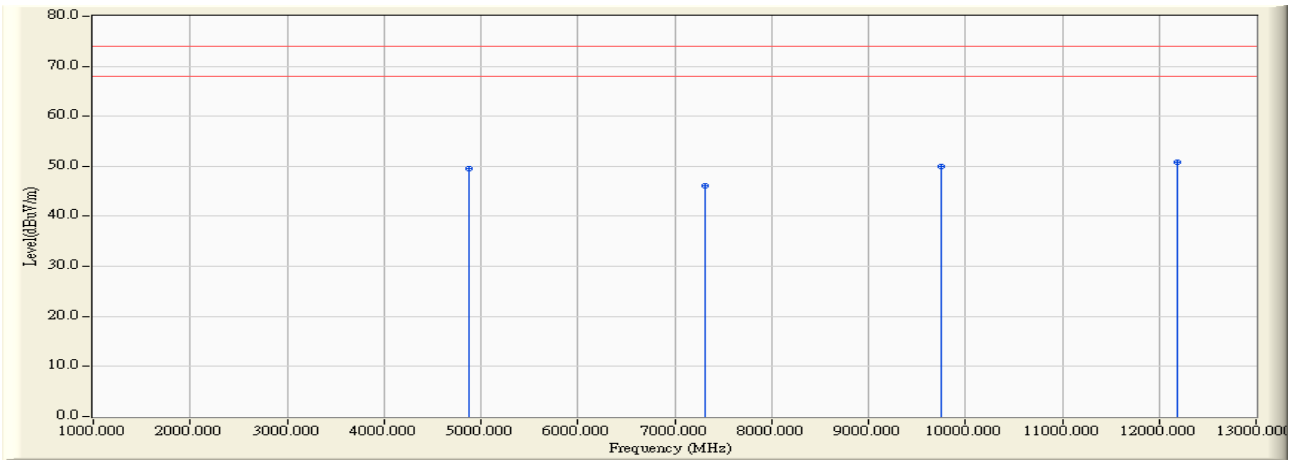


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1		4874.000	4.087	45.160	49.247	-24.753	74.000	54.000	PEAK
2		7311.000	8.845	33.150	41.995	-32.005	74.000	54.000	PEAK
3		9748.023	13.133	32.790	45.923	-28.077	74.000	54.000	PEAK
4	*	12185.010	18.997	30.290	49.287	-24.713	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 14:10
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : TX-CH6-B

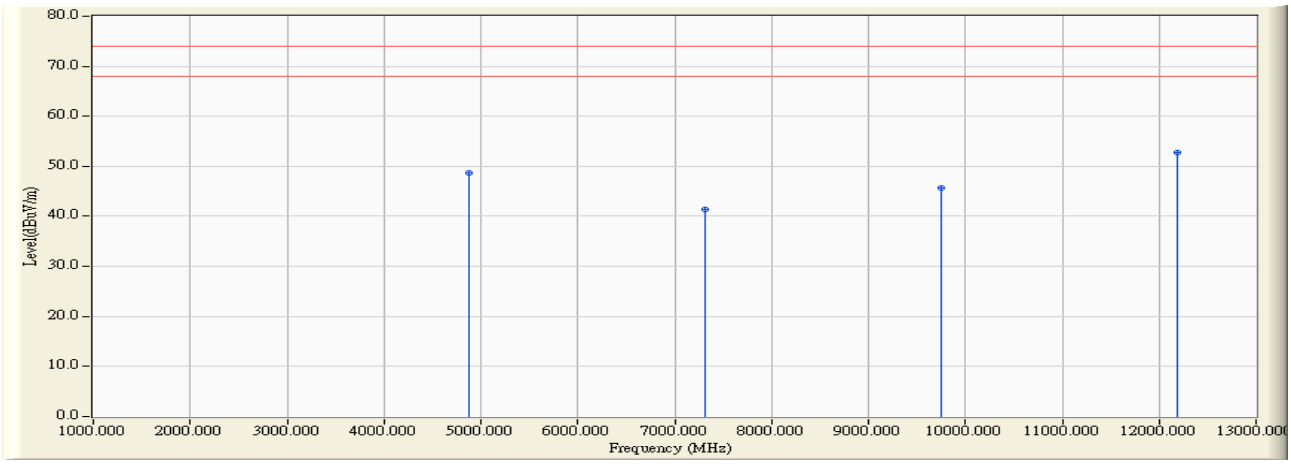


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1		4874.430	2.437	47.080	49.517	-24.483	74.000	54.000	PEAK
2		7311.000	8.845	37.280	46.125	-27.875	74.000	54.000	PEAK
3		9748.010	15.133	34.740	49.873	-24.127	74.000	54.000	PEAK
4	*	12185.030	19.391	31.500	50.891	-23.109	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 15:17
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-CH6-G

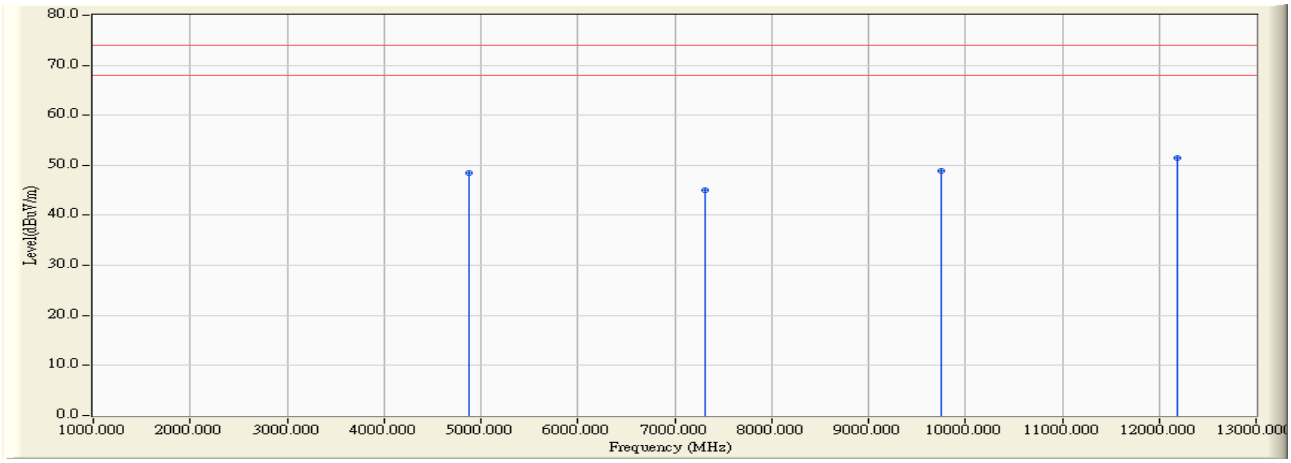


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1		4874.740	4.092	44.620	48.712	-25.288	74.000	54.000	PEAK
2		7311.050	8.845	32.570	41.415	-32.585	74.000	54.000	PEAK
3		9748.030	13.134	32.550	45.683	-28.317	74.000	54.000	PEAK
4	*	12185.090	18.997	33.710	52.707	-21.293	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 15:33
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : TX-CH6-G

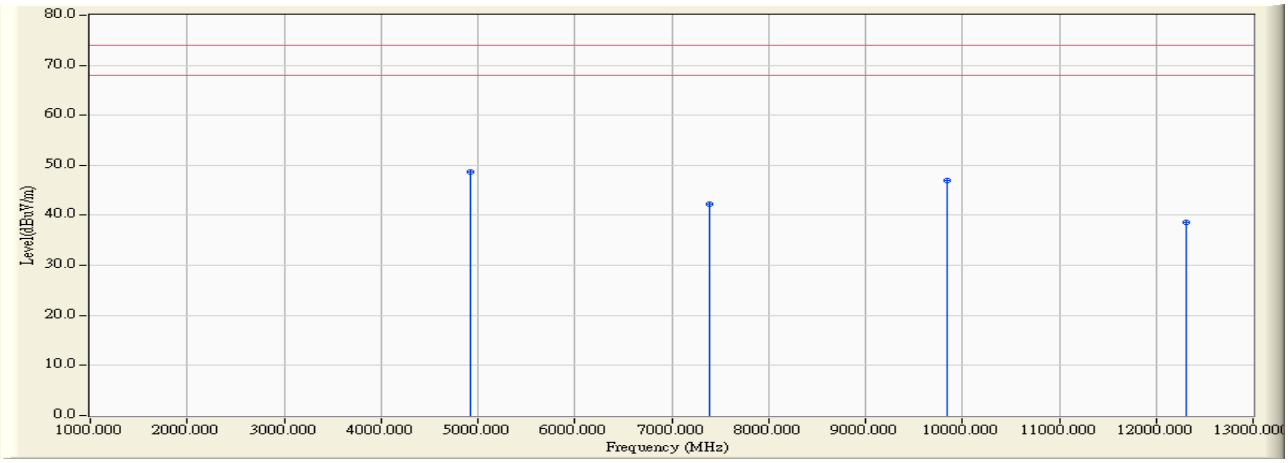


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1		4874.740	2.440	45.970	48.410	-25.590	74.000	54.000	PEAK
2		7311.050	8.845	36.290	45.135	-28.865	74.000	54.000	PEAK
3		9748.000	15.133	33.760	48.893	-25.107	74.000	54.000	PEAK
4	*	12185.020	19.391	31.980	51.370	-22.630	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 14:25
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-CH11-B

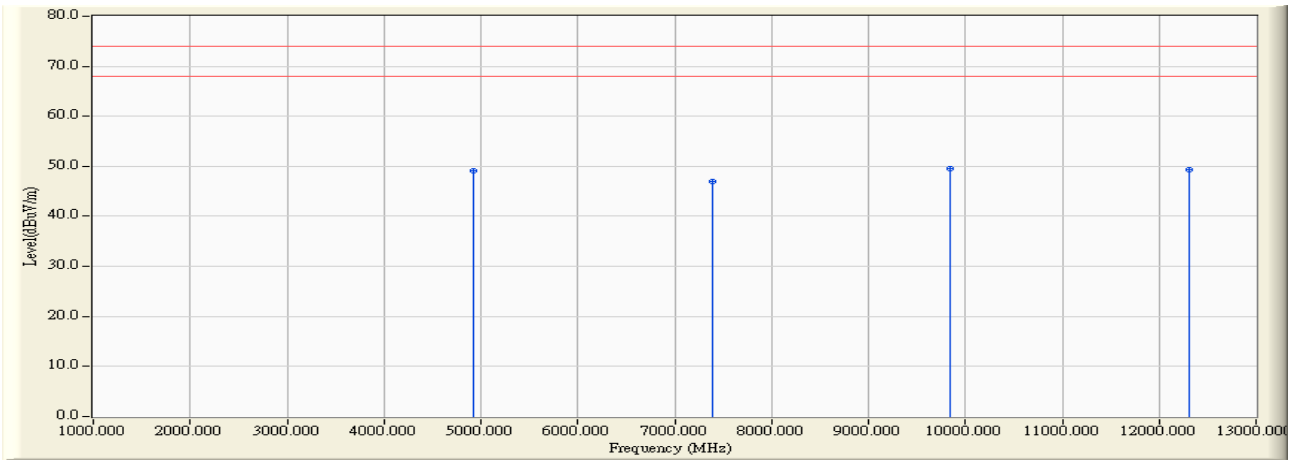


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1	*	4924.230	4.381	44.270	48.652	-25.348	74.000	54.000	PEAK
2		7386.040	8.943	33.300	42.243	-31.757	74.000	54.000	PEAK
3		9848.020	13.836	33.060	46.895	-27.105	74.000	54.000	PEAK
4		12310.014	6.435	32.090	38.525	-35.475	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 14:39
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : TX-CH11-B

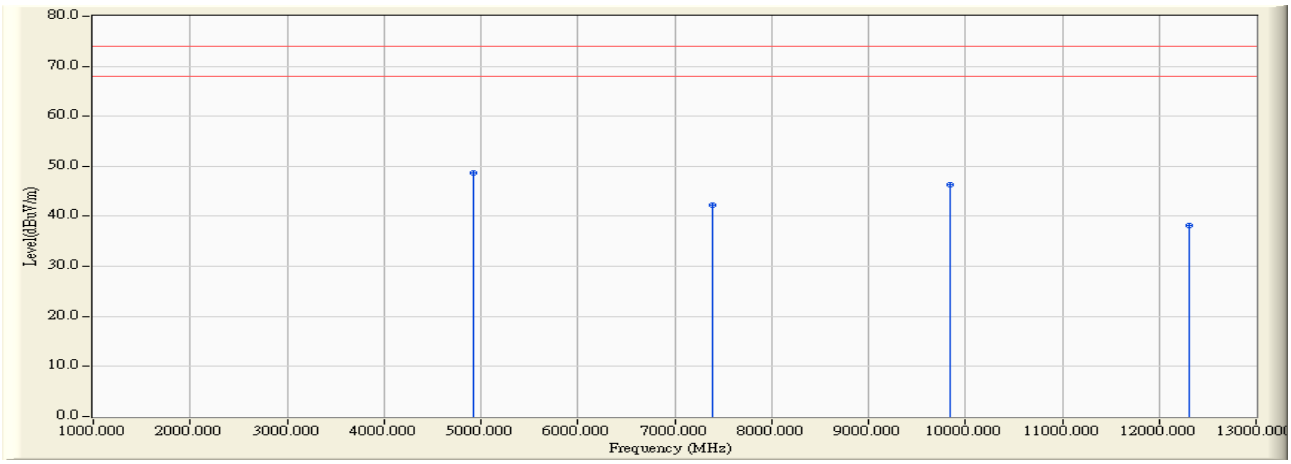


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1		4924.050	2.834	46.270	49.104	-24.896	74.000	54.000	PEAK
2		7386.010	8.943	37.970	46.913	-27.087	74.000	54.000	PEAK
3	*	9848.060	15.355	34.150	49.505	-24.495	74.000	54.000	PEAK
4		12310.030	17.902	31.490	49.392	-24.608	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 15:54
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : TX-CH11-G

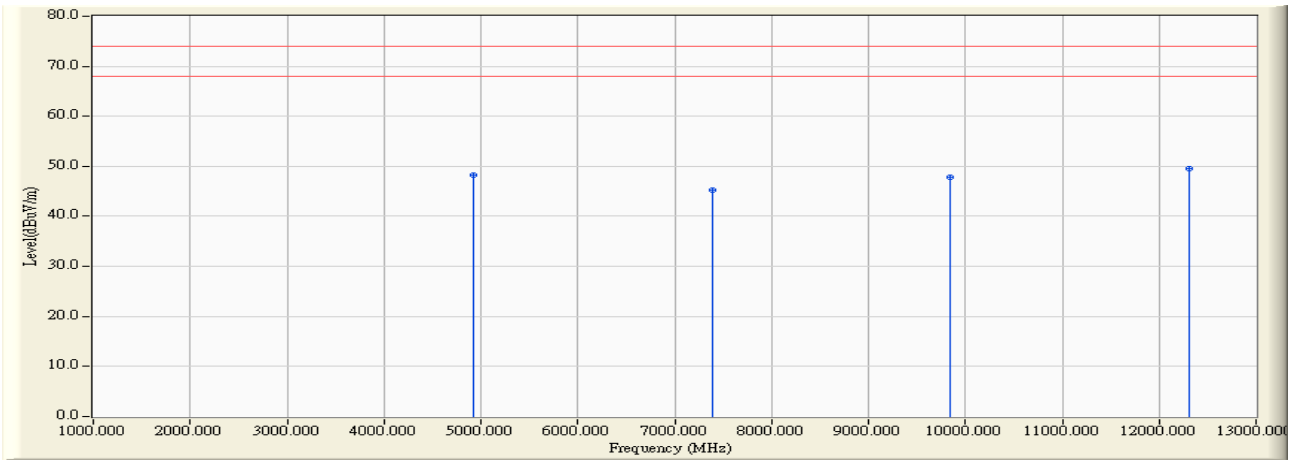


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	**Peak Limit (dBuV/m)**	**Average Limit (dBuV/m)**	Detector Type
1	*	4924.390	4.382	44.340	48.722	-25.278	74.000	54.000	PEAK
2		7386.050	8.944	33.320	42.263	-31.737	74.000	54.000	PEAK
3		9848.020	13.836	32.410	46.245	-27.755	74.000	54.000	PEAK
4		12310.230	6.470	31.790	38.260	-35.740	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/15 - 16:10
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : TX-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		4924.390	2.836	45.400	48.236	-25.764	74.000	54.000	PEAK
2		7386.020	8.943	36.350	45.293	-28.707	74.000	54.000	PEAK
3		9848.010	15.355	32.470	47.825	-26.175	74.000	54.000	PEAK
4	*	12310.020	17.903	31.620	49.523	-24.477	74.000	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

5. Band Edge

5.1. Test Equipment

The following test equipment are used during the test:

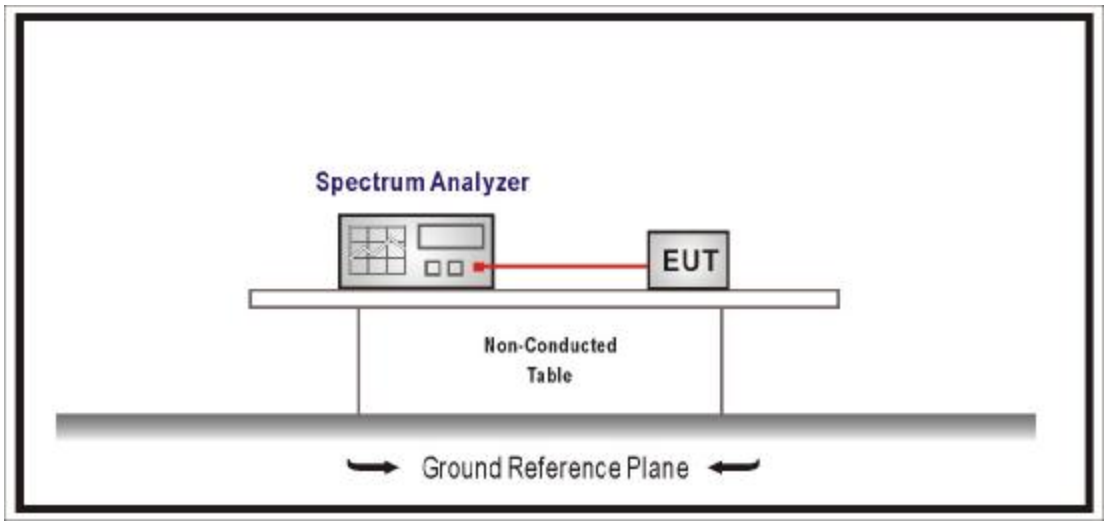
RF Conducted Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer		R & S	FSP / 100561	Mar., 2007
2	No.1 OATS				Sep., 2006
RF Radiated Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2007
2	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2007
3		Loop Antenna	R & S	HFH2-Z2 / 833799/004	Sep., 2006
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2006
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2006
6	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2006
7	No.1 OATS				Sep., 2006

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

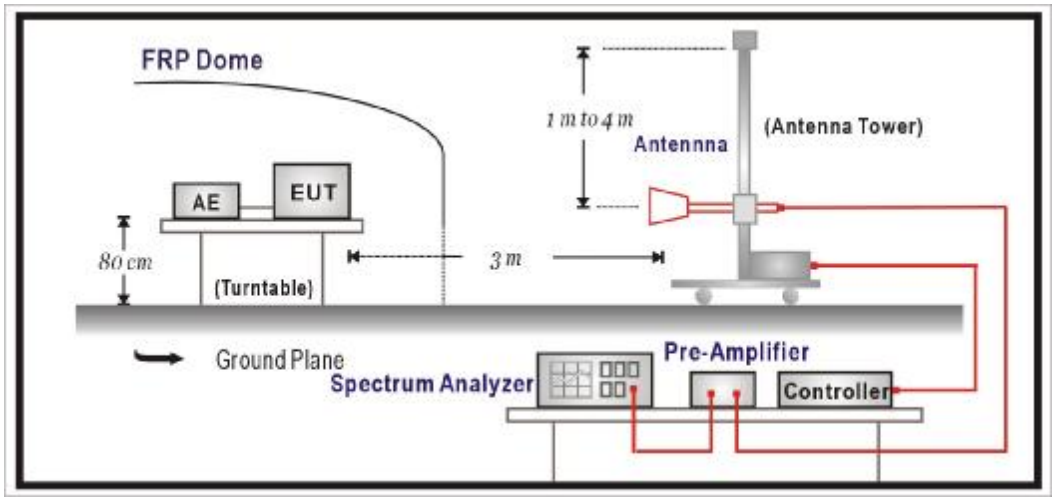
2. Mark “X” test instruments are used to measure the final test results.

5.2. Test Setup

RF Conducted Measurement:



RF Radiated 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 either an RF conducted or a 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 and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

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

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2006

5.6. Uncertainty

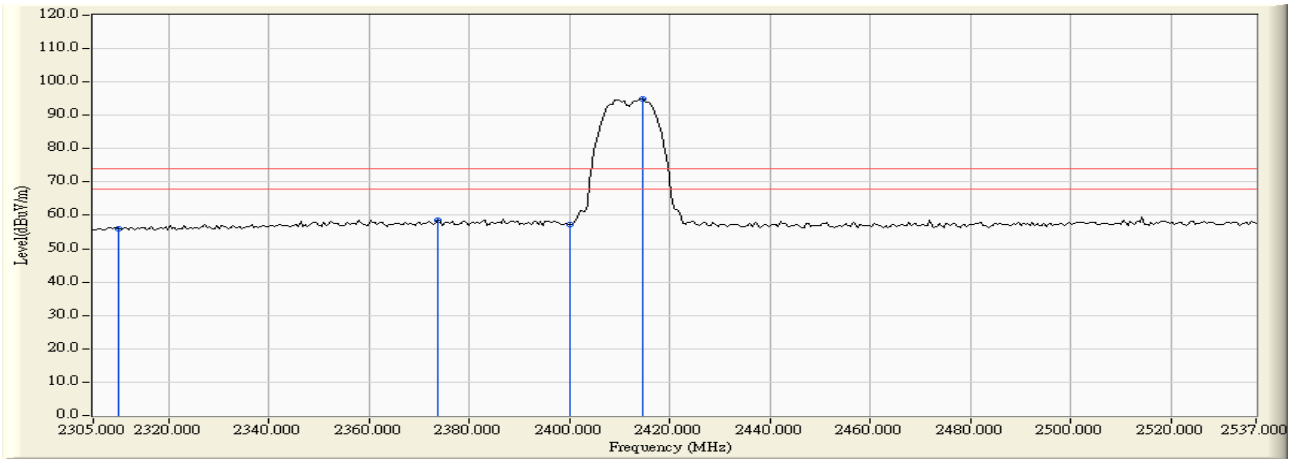
The measurement uncertainty

Conducted is defined as ± 1.27dB

Radiated is defined as ± 3.9dB

5.7. Test Result

Site : Site 1	Time : 2007/08/16 - 15:34
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH1-B

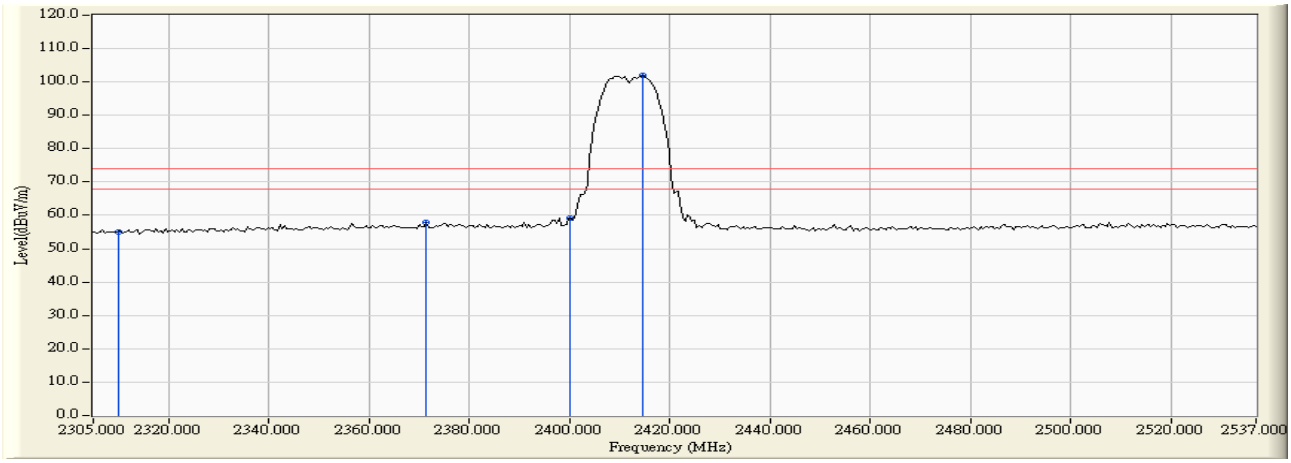


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2373.810	24.421	4.498	29.638	58.557	-15.443	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 15:53
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH1-B

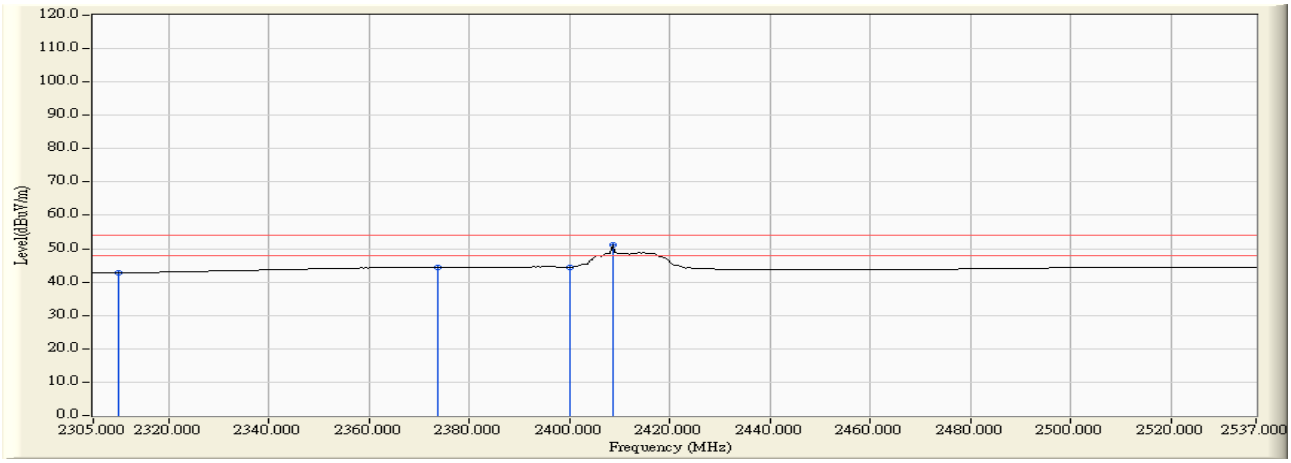


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2371.485	22.814	4.497	30.624	57.935	-16.065	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 15:45
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH1-B

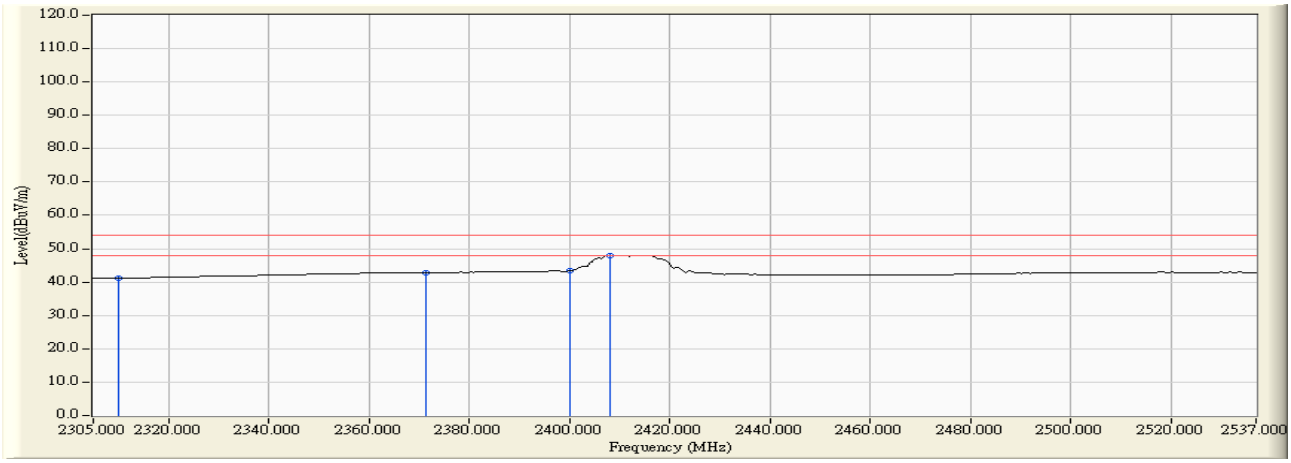


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2373.810	24.421	4.498	15.516	44.435	-9.565	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 16:04
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH1-B

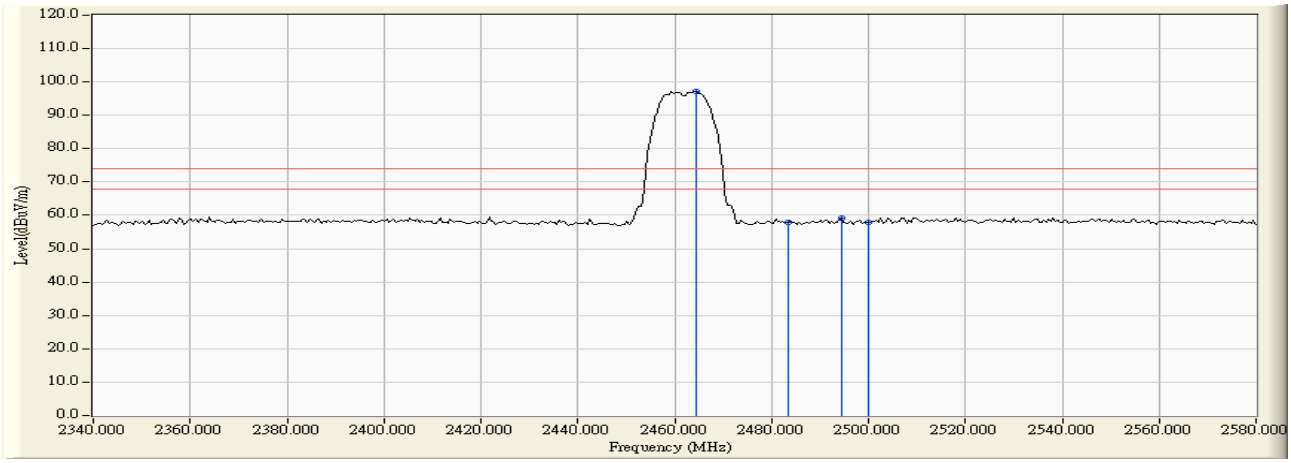


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2371.485	22.814	4.497	15.552	42.863	-11.137	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 16:13
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH11-B

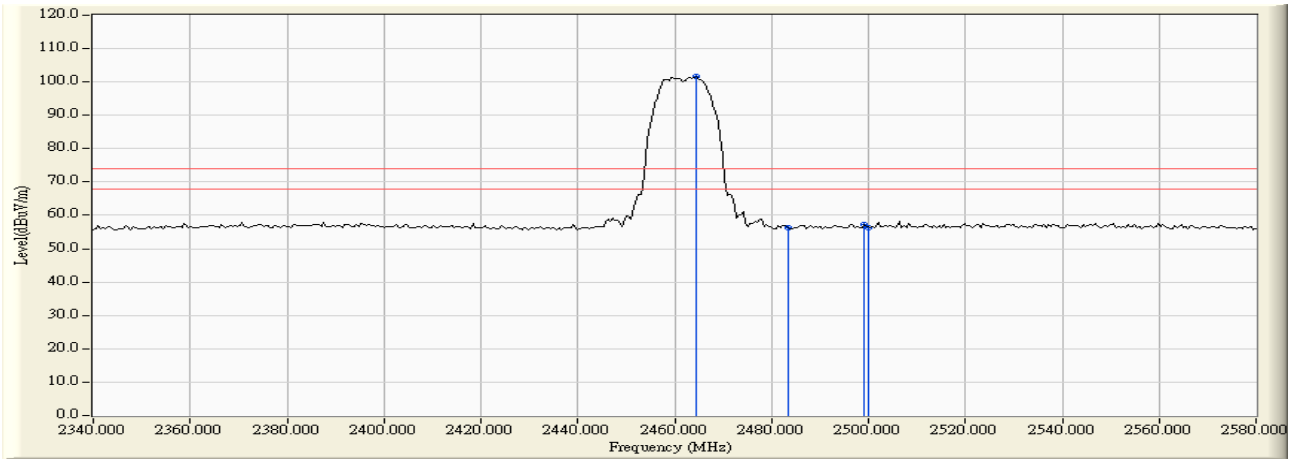


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2494.389	24.746	4.579	29.779	59.104	-14.896	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 16:24
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH11-B

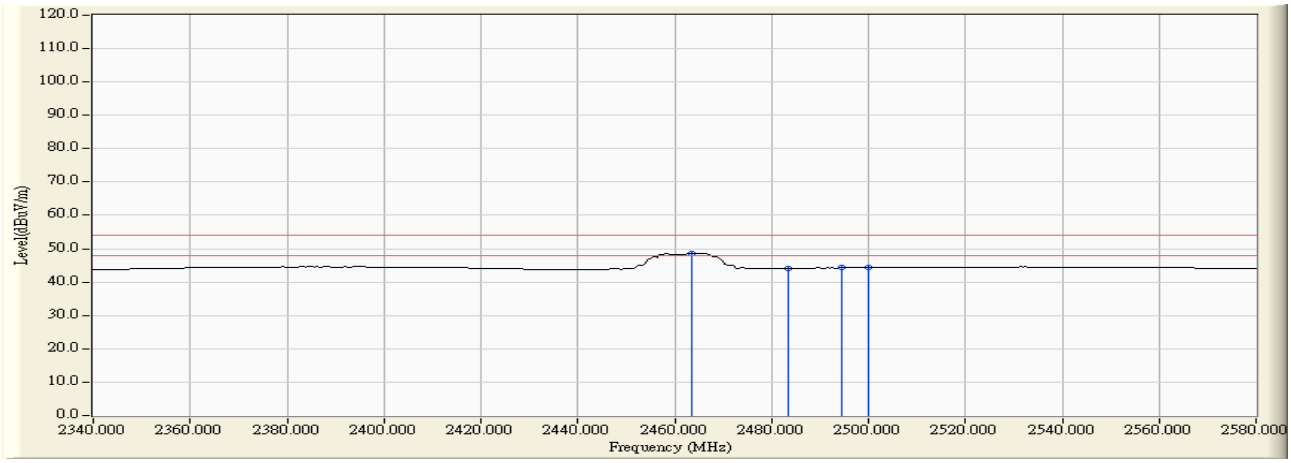


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2499.198	23.158	4.584	29.573	57.314	-16.686	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 16:16
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH11-B

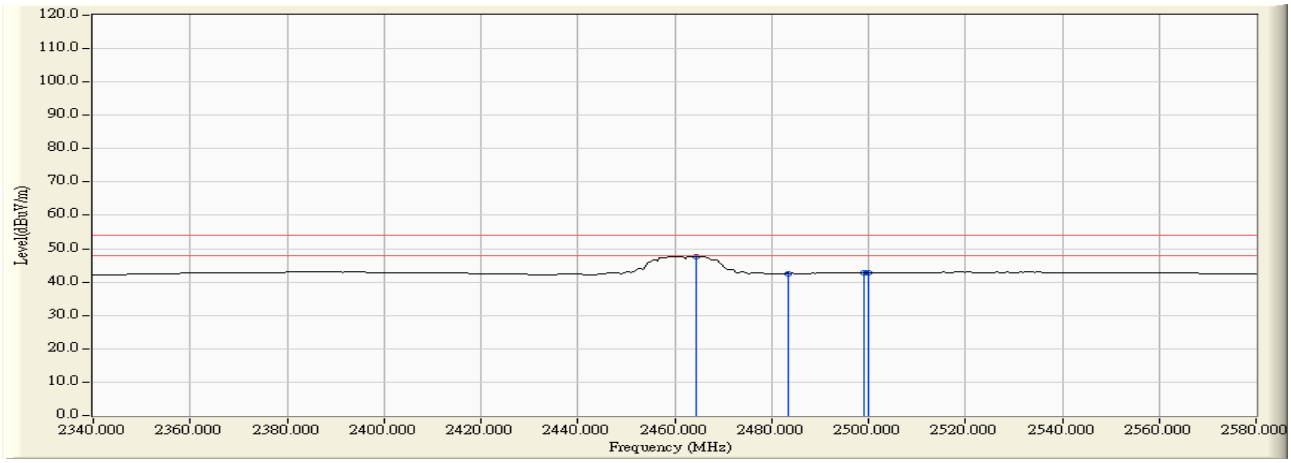


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2494.389	24.746	4.579	14.947	44.272	-9.728	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 16:26
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH11-B

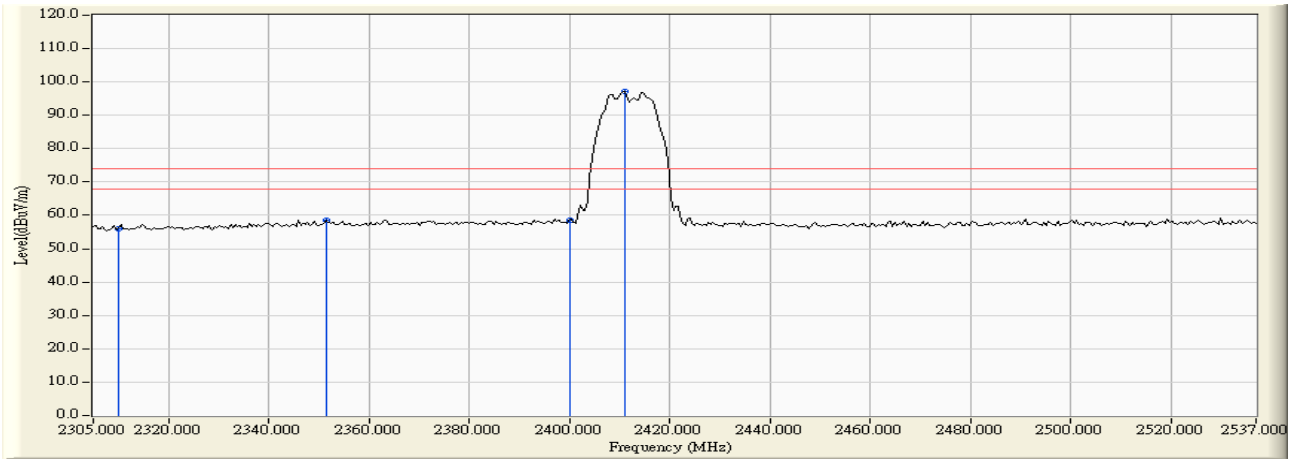


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2499.198	23.158	4.584	15.026	42.767	-11.233	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 17:02
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH1-G

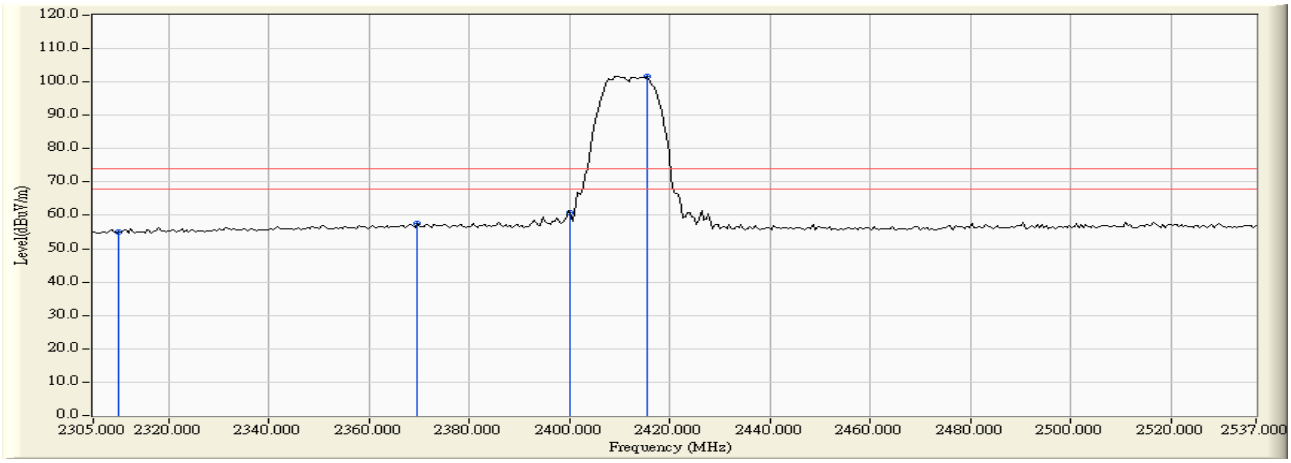


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2351.493	24.355	4.480	29.600	58.435	-15.565	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 17:17
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH1-G

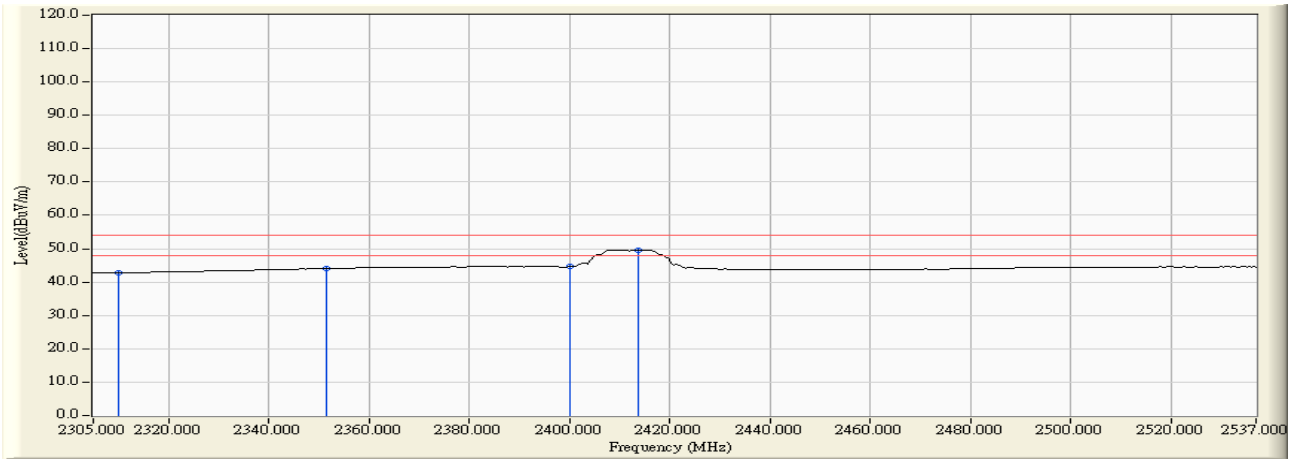


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2369.625	22.808	4.496	30.283	57.587	-16.413	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 17:09
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH1-G

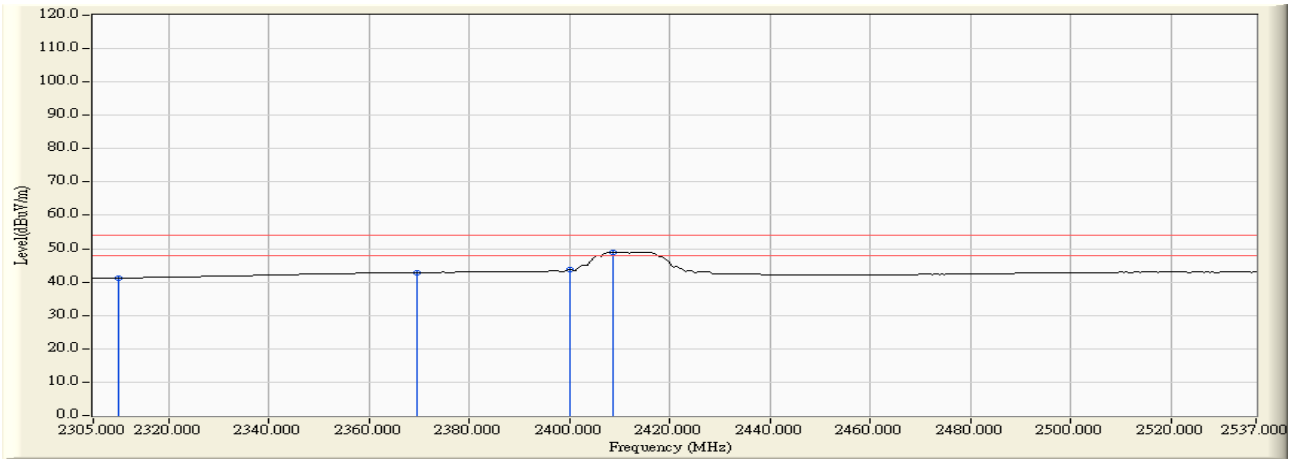


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2351.493	24.355	4.480	15.217	44.052	-9.948	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 17:27
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH1-G

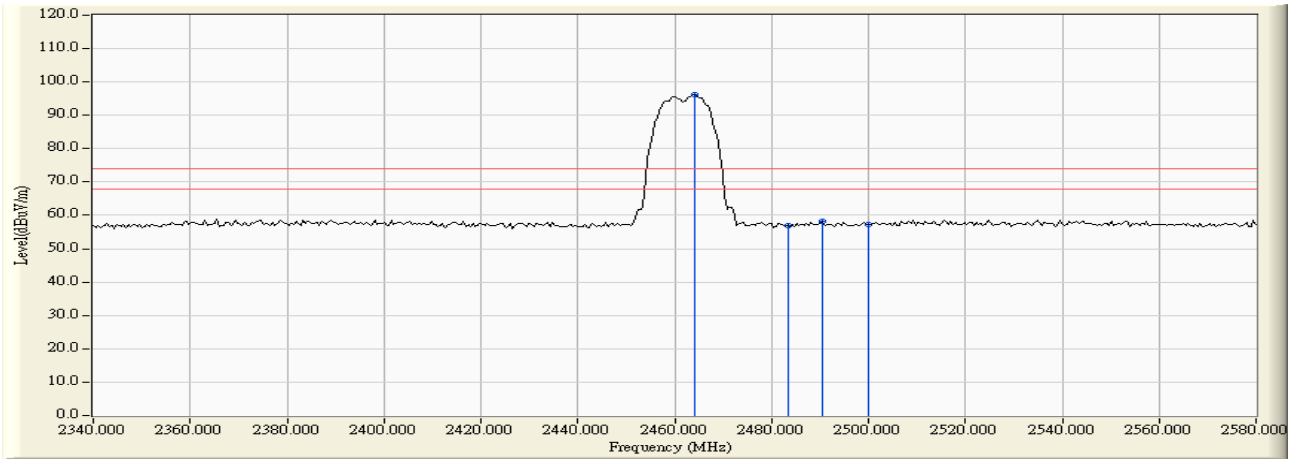


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2369.625	22.808	4.496	15.589	42.893	-11.107	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 20:20
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH11-G

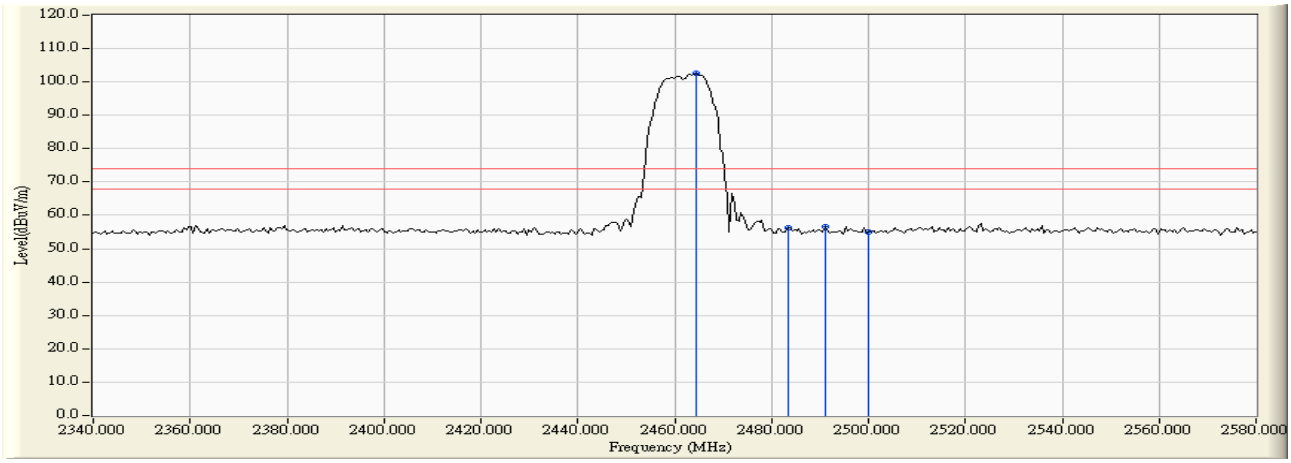


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2490.541	24.737	4.577	28.912	58.226	-15.774	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 20:32
Limit : fcc_partc_15.209_03M_PK	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH11-G

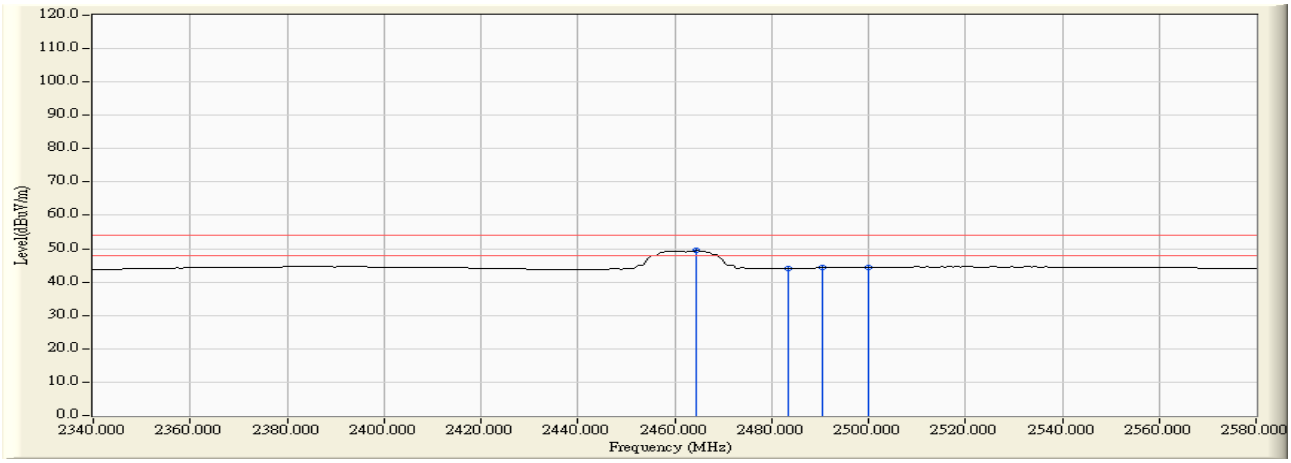


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2491.022	23.138	4.577	29.037	56.752	-17.248	74.000	PEAK

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 20:24
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : AC 120V/60Hz	Note : CH11-G

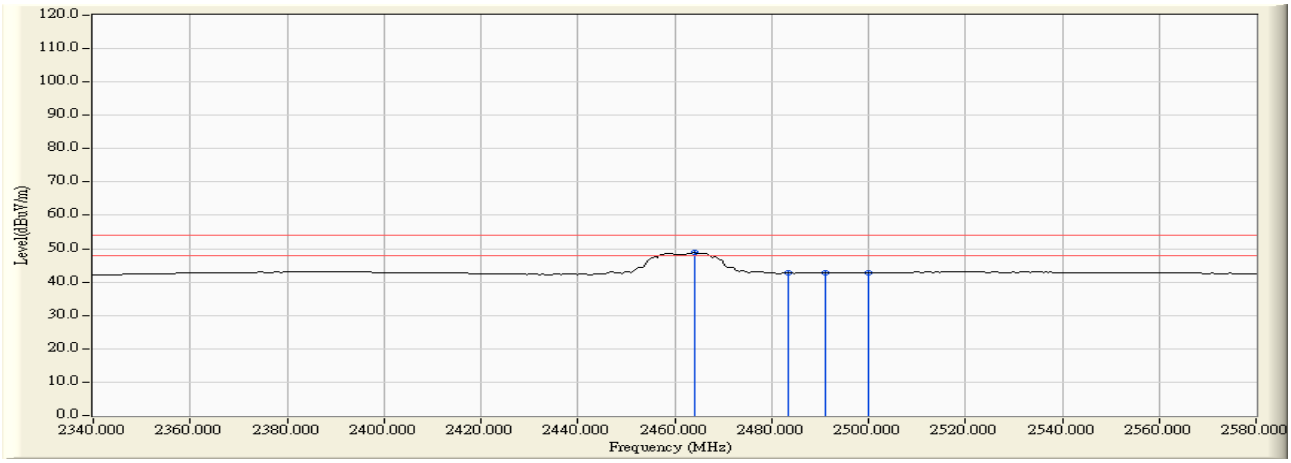


		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2490.541	24.737	4.577	14.946	44.260	-9.740	54.000	AVERAGE

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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2007/08/16 - 20:36
Limit : FCC_PARTC_15.209_03M_AV	Margin : 6
EUT : WiFi Modem Gateway	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : AC 120V/60Hz	Note : CH11-G



		Frequency (MHz)	Probe Factor (dB/m)	Cable Loss (dB/m)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2491.022	23.138	4.577	14.971	42.686	-11.314	54.000	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.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

6. Occupied Bandwidth

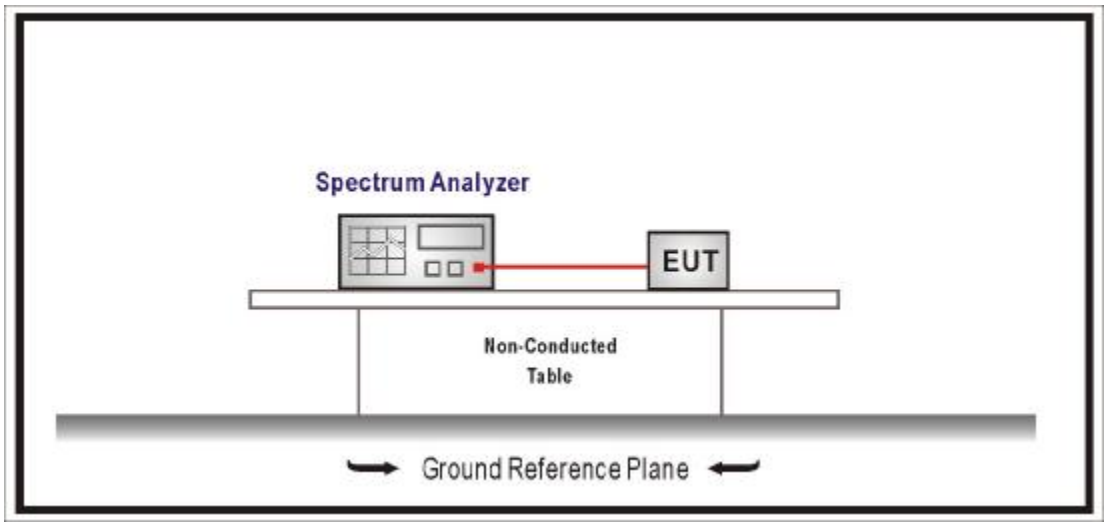
6.1. Test Equipment

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., 2006

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



6.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
For frequency hopping systems operating in the 5725-5850 MHz bands. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.
For frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2006

6.5. Uncertainty

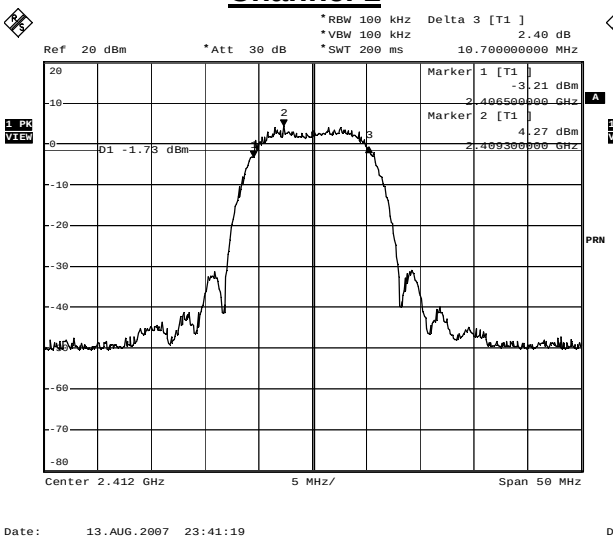
The measurement uncertainty is defined as ±50kHz

6.6. Test Result

Product	WiFi Modem Gateway		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmitter		
Date of Test	2007/08/13	Test Site	No.1 OATS

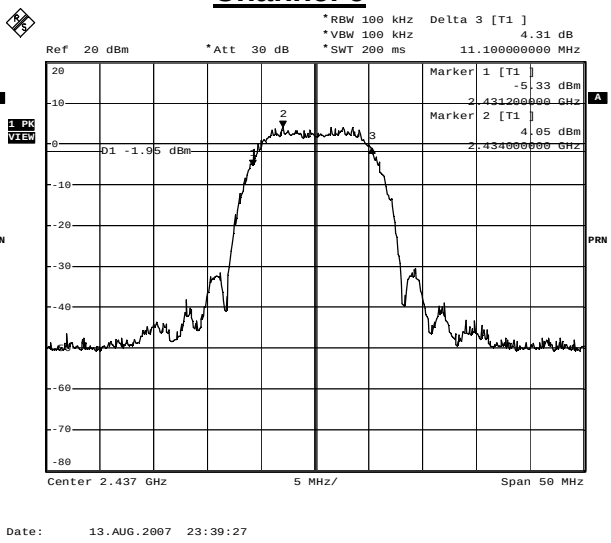
IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Value (kHz)	Limit (kHz)	Result
1	2412	10700	≧500	Pass
6	2437	11100	≧500	Pass
11	2462	10900	≧500	Pass

Channel 1



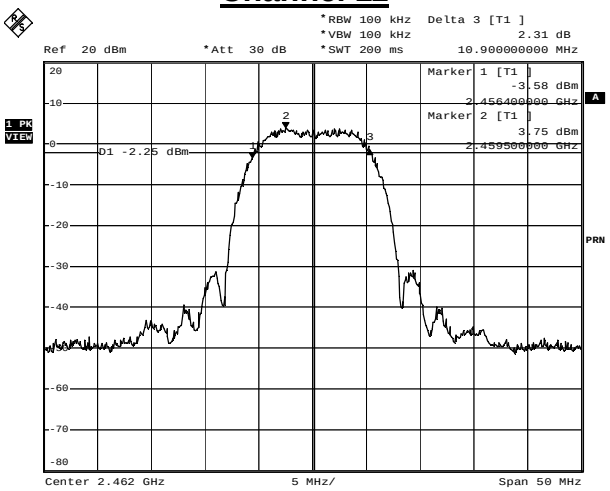
Date: 13.AUG.2007 23:41:19

Channel 6



Date: 13.AUG.2007 23:39:27

Channel 11

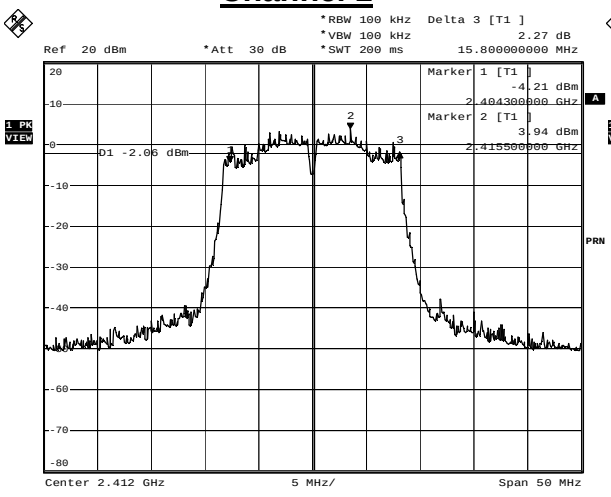


Date: 13.AUG.2007 23:37:14

Product	WiFi Modem Gateway		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmitter		
Date of Test	2007/08/13	Test Site	No.1 OATS

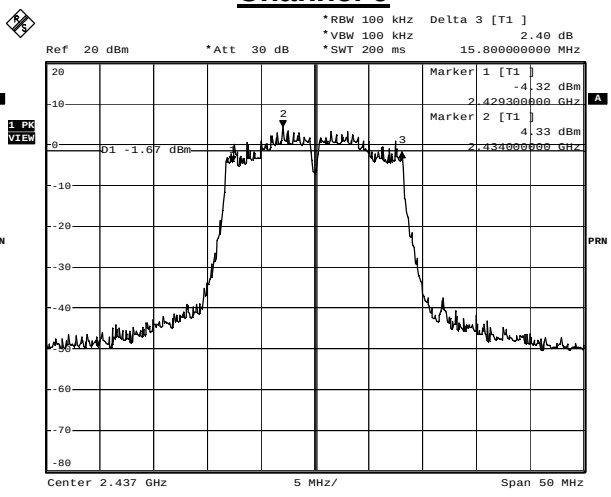
IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Value (kHz)	Limit (kHz)	Result
1	2412	15800	≧500	Pass
6	2437	15800	≧500	Pass
11	2462	15200	≧500	Pass

Channel 1



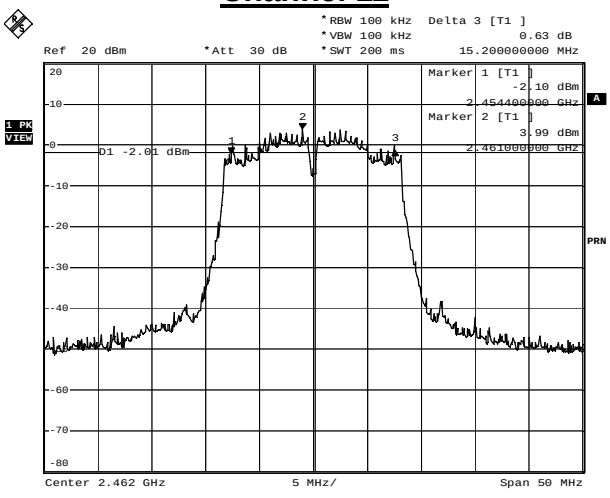
Date: 13.AUG.2007 23:28:08

Channel 6



Date: 13.AUG.2007 23:30:57

Channel 11



Date: 13.AUG.2007 23:33:07

7. Power Density

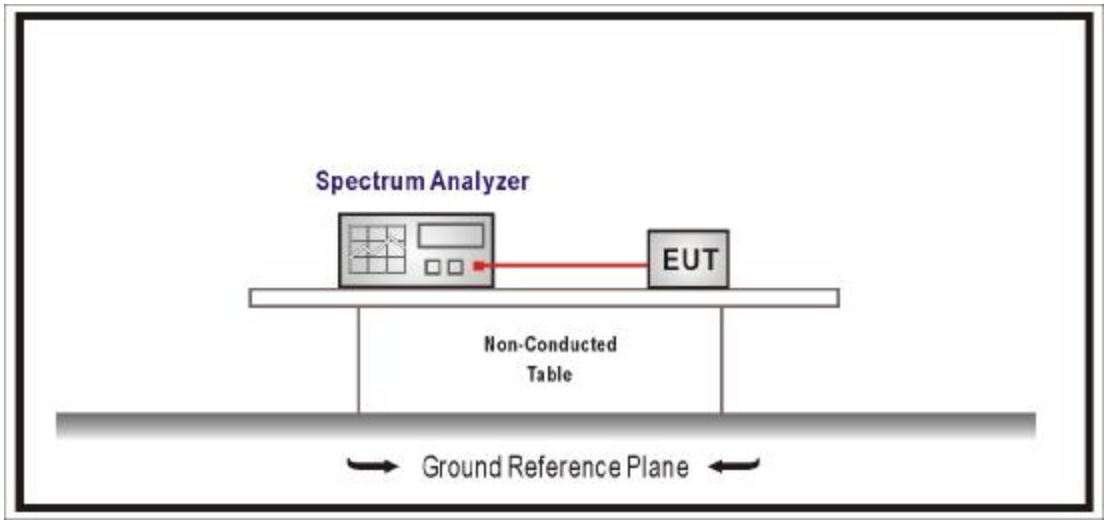
7.1. Test Equipment

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., 2006

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. 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.

7.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2006

7.5. Uncertainty

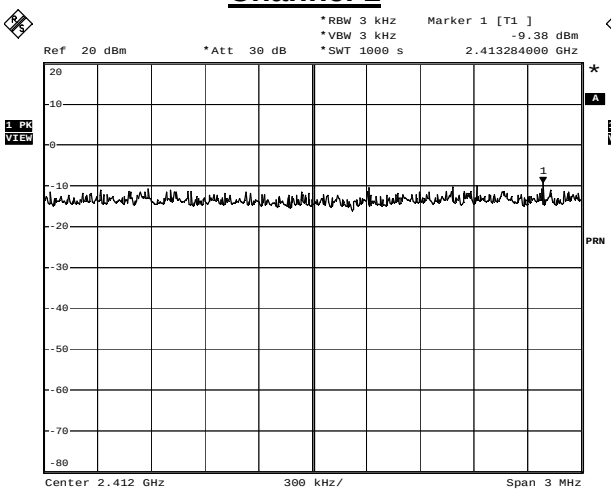
The measurement uncertainty is defined as ±1.27dB.

7.6. Test Result

Product	WiFi Modem Gateway		
Test Item	Power Density		
Test Mode	Mode 1: Transmitter		
Date of Test	2007/08/13	Test Site	No.1 OATS

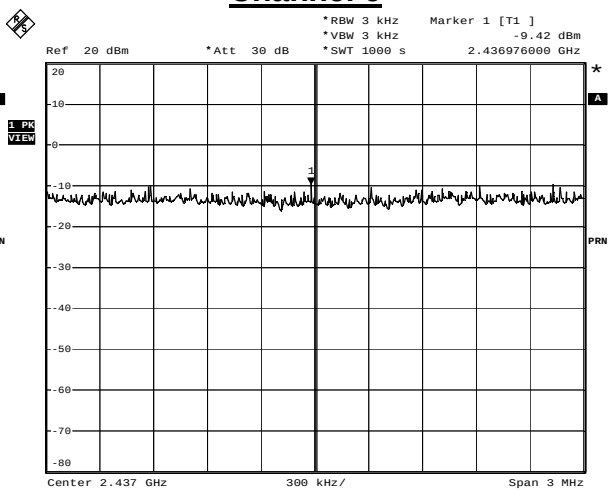
IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-9.38	<8	Pass
6	2437	-9.42	<8	Pass
11	2462	-9.06	<8	Pass

Channel 1



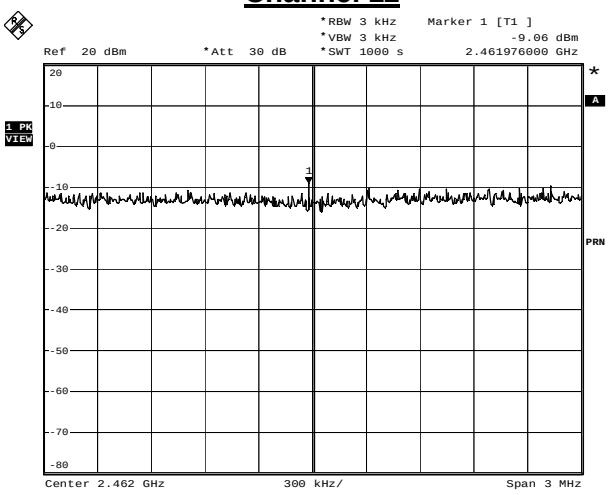
Date: 14.AUG.2007 00:07:10

Channel 6



Date: 14.AUG.2007 00:11:05

Channel 11

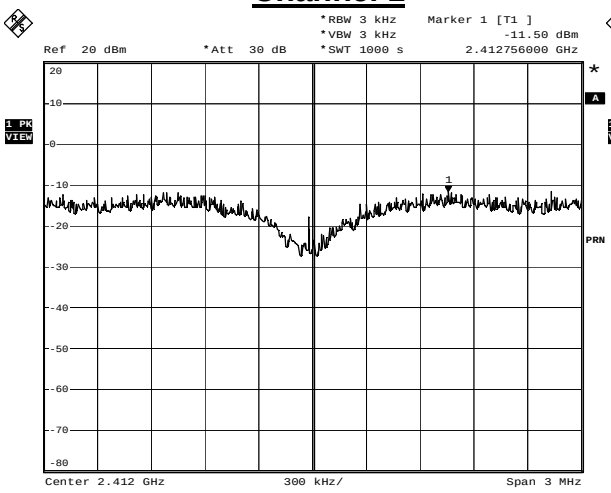


Date: 14.AUG.2007 00:18:18

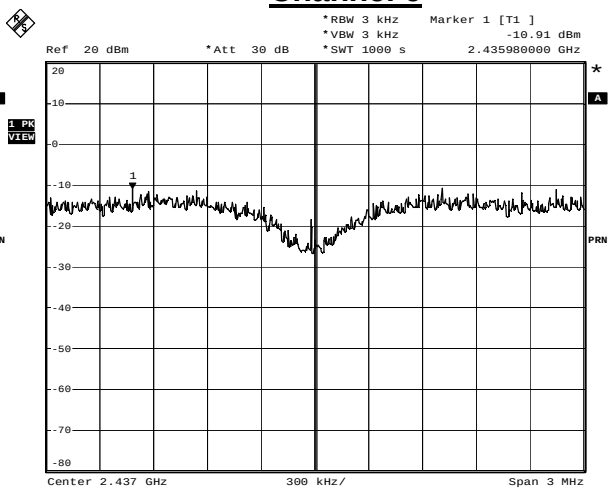
Product	WiFi Modem Gateway		
Test Item	Power Density		
Test Mode	Mode 1: Transmitter		
Date of Test	2007/08/13	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-11.50	<8	Pass
6	2437	-10.91	<8	Pass
11	2462	-11.54	<8	Pass

Channel 1



Channel 6



Channel 11