FCC TEST REPORT

REPORT NO.: RF940407L10
MODEL NO.: WMP54GX
RECEIVED: Apr. 11, 2005
TESTED: Apr. 11 ~ Apr. 20, 2005
ISSUED: May 10, 2005

APPLICANT: Cisco-Linksys LLC

ADDRESS: 121 Theory Drive Irvine, CA 92617, U.S.A.

ISSUED BY: Advance Data Technology Corporation

LAB ADDRESS: 47 14th Lin, Chiapau Tsun, Linko, Taipei, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Kueishan, Taoyuan, Taiwan, R.O.C.

ACCREDITED
No. 2177-01

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1 CERTIFICATION

PRODUCT :	Wireless-G PCI Adapter with SRX
MODEL NO.:	WMP54GX
BRAND:	Linksys
APPLICANT :	Cisco-Linksys LLC
TESTED:	Apr. 11 ~ Apr. 20, 2005
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS :	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2003

The above equipment has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Windy Chou , **DATE:** May 10, 2005
Windy Chou

TECHNICAL ACCEPTANCE : Gary Chang , **DATE:** May 10, 2005
Responsible for RF
Gary Chang

APPROVED BY : , **DATE:** May 10, 2005
Cody Chang
Deputy Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –6.63dB at 0.638MHz.
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit : min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –2.04dB at 2390.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz ~ 30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.73 dB
	200MHz ~1000MHz	3.74 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless-G PCI Adapter with SRX
MODEL NO.	WMP54GX
POWER SUPPLY	5.0Vdc from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps (MIMO OFDM: 54/48/36Mbps see Note 9)
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER (SINGAL CHAIN)	63.980mW
MAXIMUM OUTPUT POWER (DUAL CHAIN)	52.857mW
ANTENNA TYPE	Refer to NOTE 1 below
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. The following antennas are used in this EUT.

Item	Antenna Type	Gain (dBi)
1	Dipole	2.0
2	Dipole	7.0

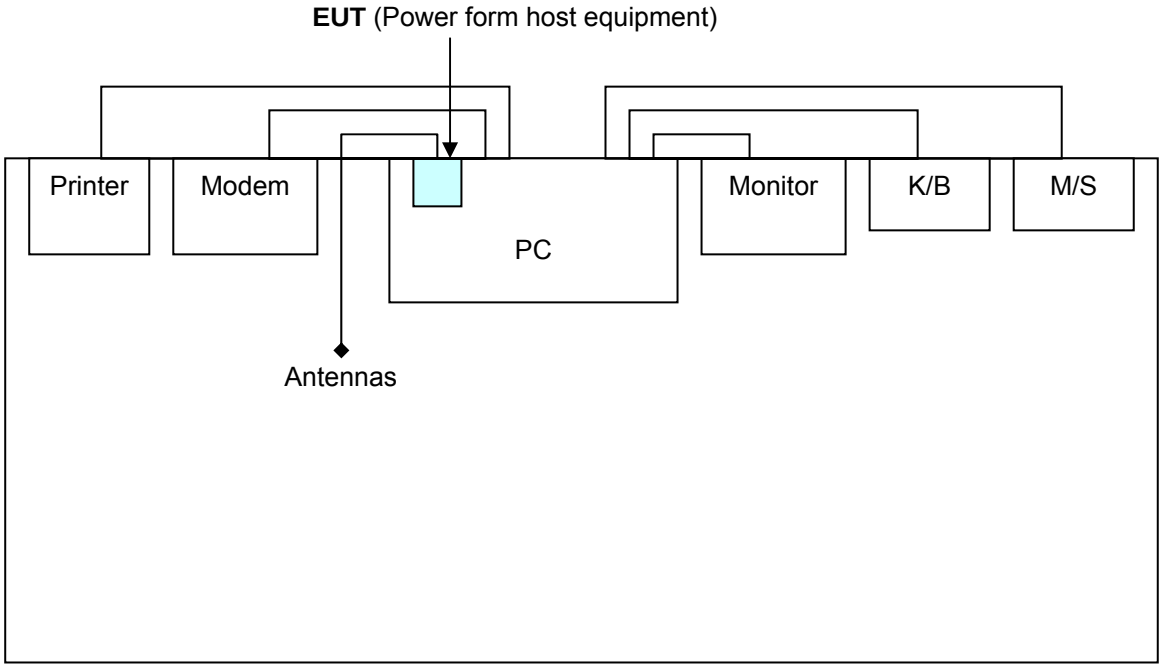
2. The EUT is a Wireless-G PCI Adapter with SRX.
3. The EUT incorporates a MIMO function with IEEE 802.11b/g. Physically, the card provides two complete transmit and three receivers. Each Tx chain can be connected to one or two antenna elements via an antenna diversity switch.
4. The EUT can operate in a single chain configuration (either chain 0 or 1 transmit individually) or dual chain configuration (both chain 0 and chain 1 transmit simultaneously).
5. When the EUT is in the 802.11b mode, it is always in the single chain configuration.
6. When the EUT is operating in the 802.11g mode, it can operate in either configuration. Switching between the single and dual chain configurations is accomplished electronically, with no hardware changes required.
7. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
8. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
9. The transfer rate of transmitting in MIMO-OFDM mode is up to 54Mbps, but only receiving could up to 108Mbps
10. The above EUT information was declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

For 802.11b/g: Eleven channels are provided to this EUT for normal mode.

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

For Single Chain (TX):

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
1	Note 1	Y	Y	Note 2	Single chain use Antenna 1 (2dBi)
2	Note 1	Y	Y	Note 2	Single chain use Antenna 2 (7dBi)

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz
RE≥1G: Radiated Emission above 1GHz APCM: Antenna Port Conducted Measurement

NOTE 1: No effect on Conducted Emission test.
NOTE 2: Conducted RF Measurement is independent on antenna.

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
2	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
1	802.11b	1 to 11	11	DSSS	CCK	11
1	802.11g	1 to 11	11	OFDM	BPSK	6
2	802.11b	1 to 11	11	DSSS	CCK	11
2	802.11g	1 to 11	11	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
1	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
2	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

Bandedge Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 11	DSSS	CCK	11
802.11g	1 to 11	1, 11	OFDM	BPSK	6

Antenna Port Conducted Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

For Dual Chain (TX):

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
1	Note 1	Y	Y	Note 2	Both chains use Antenna 1 (2dBi)
2	Note 1	Y	Y	Note 2	Both chains use Antenna 2 (7dBi)

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz
RE≥1G: Radiated Emission above 1GHz APCM: Antenna Port Conducted Measurement

NOTE 1: No effect on Conducted Emission test.
NOTE 2: Conducted RF Measurement is independent on antenna.

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
2	802.11g	1 to 11	1, 6, 11	OFDM	16QAM	36

Radiated Emission Test (Below 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
1	802.11g	1 to 11	11	OFDM	16QAM	36
2	802.11g	1 to 11	11	OFDM	16QAM	36

Radiated Emission Test (Above 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
1	802.11g	1 to 11	1, 6, 11	OFDM	16QAM	36
2	802.11g	1 to 11	1, 6, 11	OFDM	16QAM	36

Bandedge Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	1, 11	OFDM	16QAM	36

Antenna Port Conducted Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	1, 6, 11	OFDM	16QAM	36

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an Wireless-G PCI Adapter with SRX. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)
ANSI C63.4-2003

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	PC	MSI	Hetis 865G Giga	3AS0119581	FCC DoC Approved
2	KEYBOARD	DELL	SK-8110	MY-05N456-71619-3C1-1898	FCC DoC Approved
3	MOUSE	HP	M-S69	M4-010565	INZ211443
4	LCD MONITOR	ACER	AL1721	ET.L0408.010404001E6PK00	FCC DoC Approved
5	PRINTER	EPSON	LQ-300+	DCGY054147	FCC DoC Approved
6	MODEM	ACEEX	1414V/3	0401008269	IFAXDM1414

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	2.0m shielded cable without core.
3	1.8m shielded cable without core.
4	1.8m shielded cable with 2 cores.
5	1.2m shielded cable without core.
6	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.

NOTE: All power cords of the above support units are non shielded (1.8m).

4 TEST TYPES AND RESULTS (For Single Chain (TX))

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 50

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 16, 2005
RF signal cable Woken	5D-FB	Cable-HYC01-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Feb. 15, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Feb. 15, 2006
Software ADT	ADT_Cond_V3	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

4.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

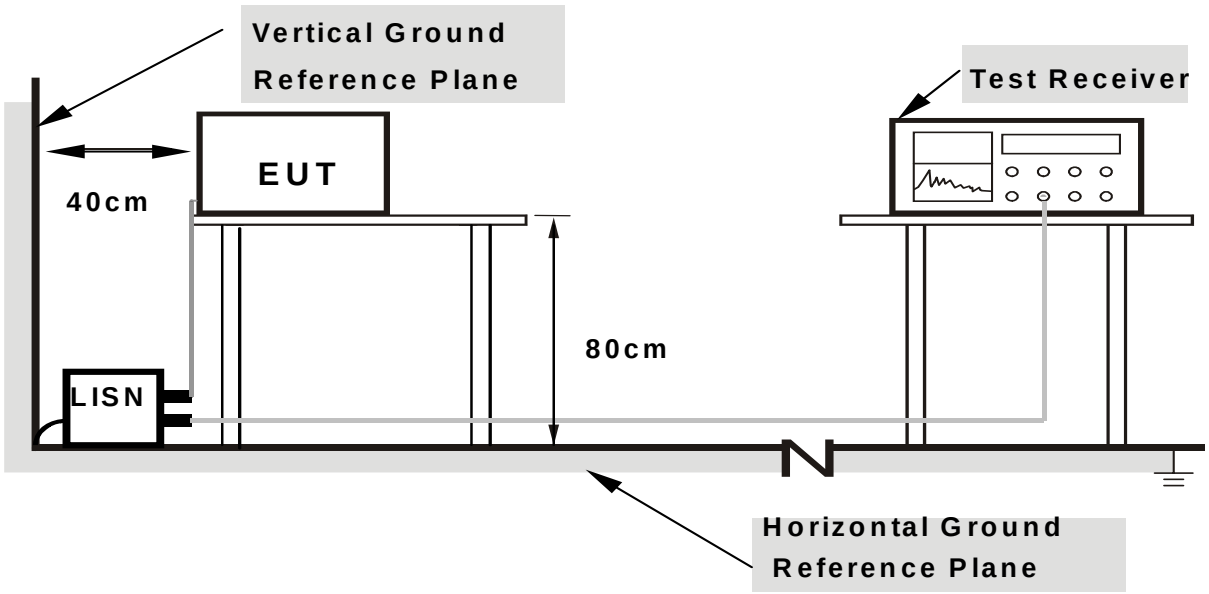
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150kHz to 30MHz was searched. Emission levels under Limit - 20dB was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

a. Connected the EUT into the computer system and placed on a testing table.
b. The computer system ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
c. The notebook system show “H” messages on its screen.
d. The notebook system show “H” messages to modem.
e. The notebook system sent "H" messages to printer and the printer prints them on paper.
f. Repeated item c ~e.

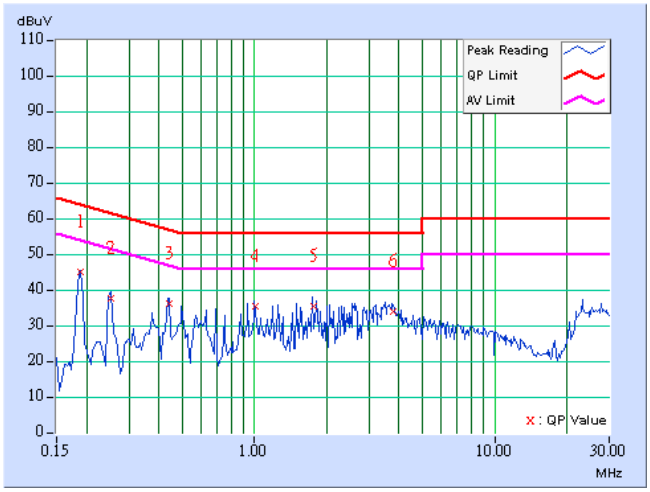
4.1.7 TEST RESULTS

Conducted Worst Case Data - 802.11b DSSS modulation

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**PHASE**	Line 1
CHANNEL	Channel 1	**6dB BANDWIDTH**	9 kHz
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TESTED BY**	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	44.67	44.20	44.78	44.31	64.08	54.08	-19.30	-9.77
2	0.252	0.11	37.54	-	37.65	-	61.71	51.71	-24.06	-
3	0.439	0.12	35.97	-	36.09	-	57.08	47.08	-20.99	-
4	1.003	0.24	35.21	-	35.45	-	56.00	46.00	-20.55	-
5	1.755	0.26	35.20	-	35.46	-	56.00	46.00	-20.54	-
6	3.765	0.37	33.82	-	34.19	-	56.00	46.00	-21.81	-

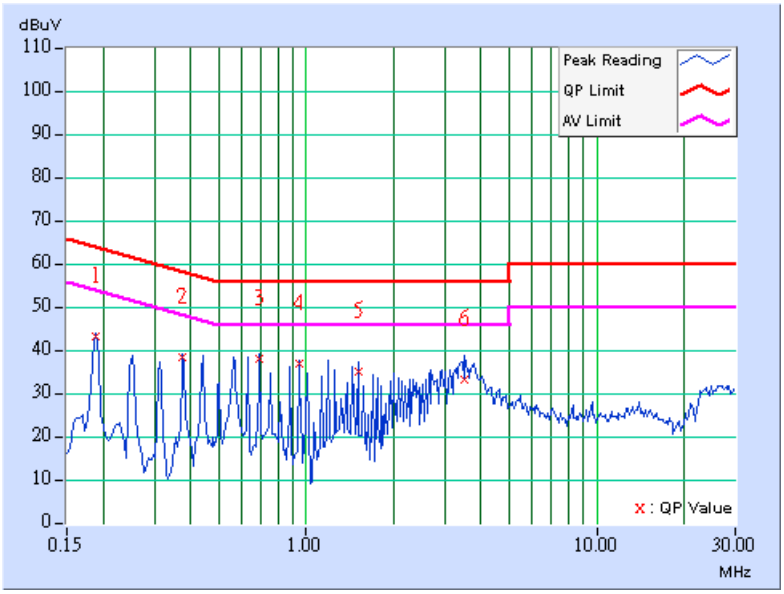
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.84	-	42.95	-	64.08	54.08	-21.13	-
2	0.377	0.11	38.18	-	38.29	-	58.35	48.35	-20.06	-
3	0.693	0.17	37.65	37.20	37.82	37.37	56.00	46.00	-18.18	-8.63
4	0.943	0.23	36.59	36.10	36.82	36.33	56.00	46.00	-19.18	-9.67
5	1.508	0.25	34.70	-	34.95	-	56.00	46.00	-21.05	-
6	3.516	0.36	33.03	-	33.39	-	56.00	46.00	-22.61	-

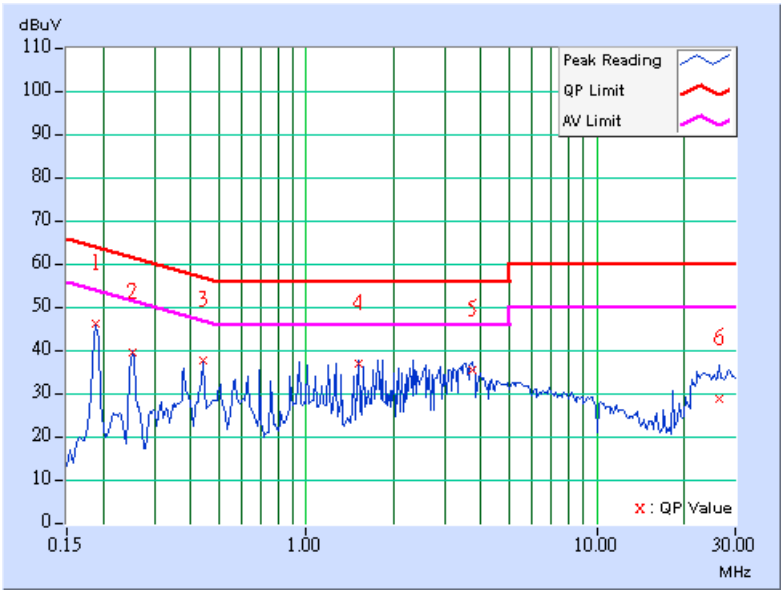
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	44.81	44.20	44.92	44.31	64.08	54.08	-19.16	-9.77
2	0.252	0.11	38.02	-	38.13	-	61.71	51.71	-23.58	-
3	0.443	0.12	36.12	-	36.24	-	57.01	47.01	-20.77	-
4	1.512	0.25	35.47	-	35.72	-	56.00	46.00	-20.28	-
5	3.719	0.37	34.05	-	34.42	-	56.00	46.00	-21.58	-
6	26.473	1.53	27.33	-	28.86	-	60.00	50.00	-31.14	-

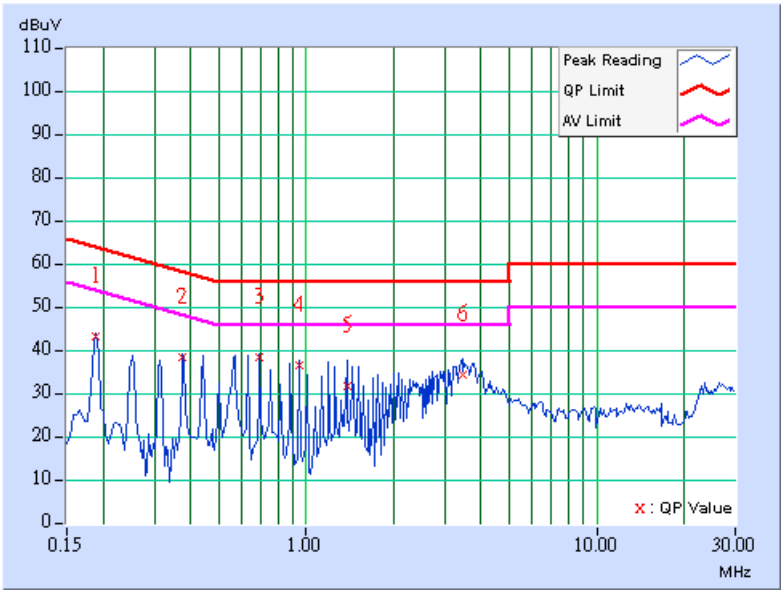
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.80	-	42.91	-	64.08	54.08	-21.17	-
2	0.377	0.11	38.08	-	38.19	-	58.35	48.35	-20.16	-
3	0.693	0.17	38.11	37.60	38.28	37.77	56.00	46.00	-17.72	-8.23
4	0.943	0.23	36.37	36.10	36.60	36.33	56.00	46.00	-19.40	9.67
5	1.387	0.25	31.61	-	31.86	-	56.00	46.00	-24.14	-
6	3.461	0.35	34.16	-	34.51	-	56.00	46.00	-21.49	-

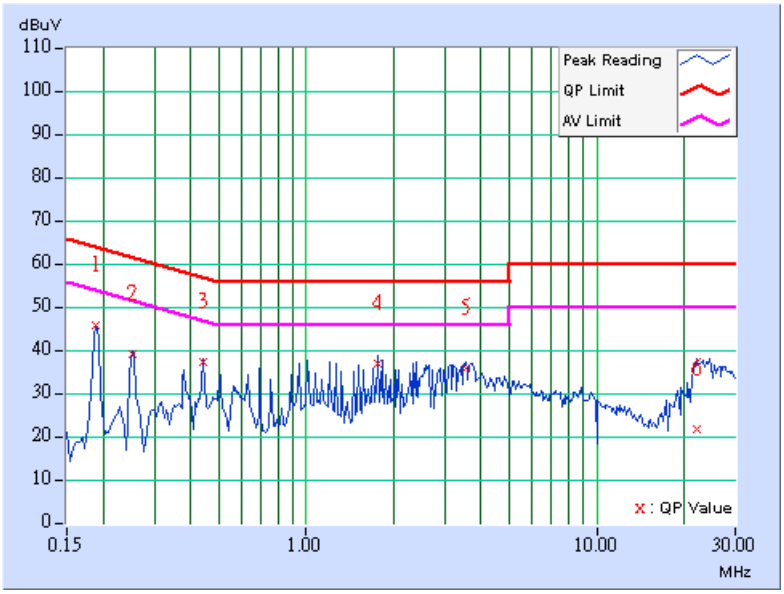
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	44.85	44.30	44.96	44.41	64.08	54.08	-19.12	-9.67
2	0.252	0.11	37.96	-	38.07	-	61.71	51.71	-23.64	-
3	0.443	0.12	36.34	-	36.46	-	57.01	47.01	-20.55	-
4	1.766	0.26	35.94	34.98	36.20	35.24	56.00	46.00	-19.80	-10.76
5	3.535	0.36	34.87	-	35.23	-	56.00	46.00	-20.77	-
6	22.074	1.16	20.70	-	21.86	-	60.00	50.00	-38.14	-

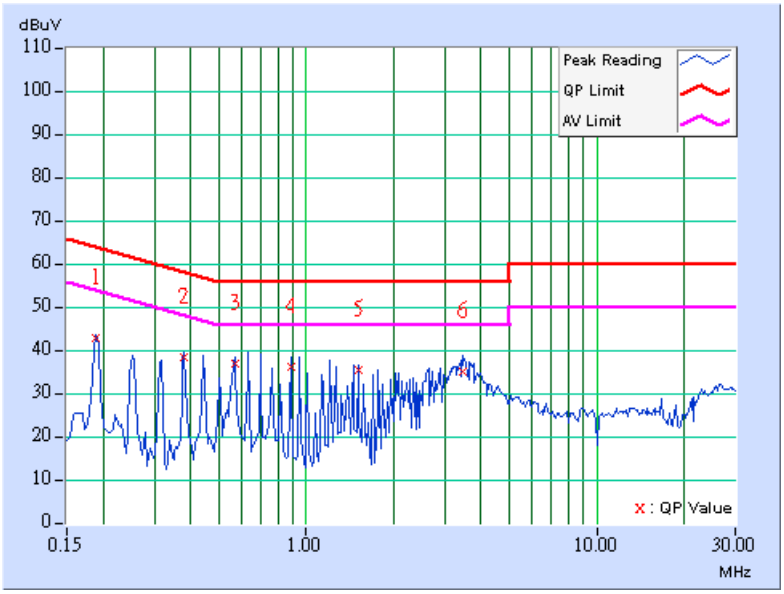
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.56	-	42.67	-	64.08	54.08	-21.41	-
2	0.380	0.11	38.31	37.80	38.42	37.91	58.27	48.27	-19.85	10.36
3	0.568	0.15	36.58	34.18	36.73	34.33	56.00	46.00	-19.27	11.67
4	0.884	0.21	35.91	36.12	36.12	35.58	56.00	46.00	-19.88	10.42
5	1.516	0.25	35.05	-	35.30	-	56.00	46.00	-20.70	-
6	3.473	0.36	34.99	-	35.35	-	56.00	46.00	-20.65	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

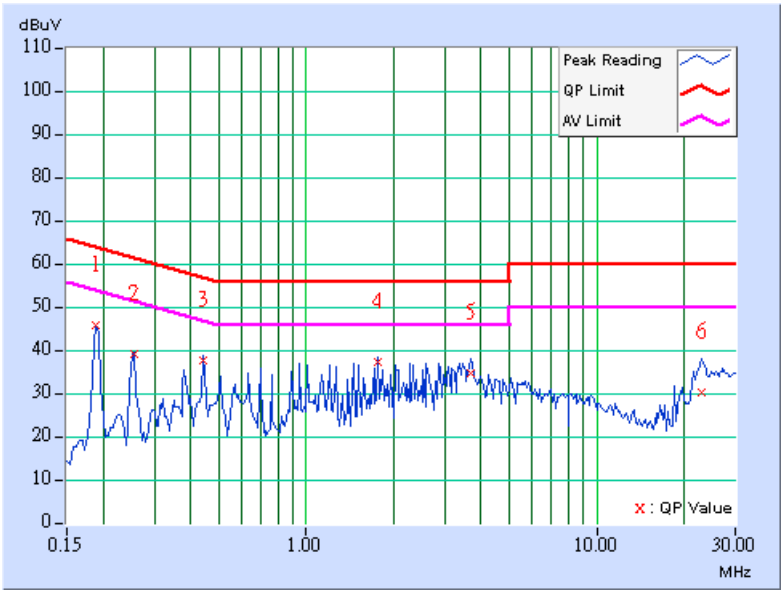


Conducted Worst Case Data - 802.11g OFDM modulation

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**PHASE**	Line 1
CHANNEL	Channel 1	**6dB BANDWIDTH**	9 kHz
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TESTED BY**	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	44.87	44.41	44.98	44.52	64.08	54.08	-19.10	-9.56
2	0.255	0.11	38.02	-	38.13	-	61.58	51.58	-23.45	-
3	0.443	0.12	36.56	-	36.68	-	57.01	47.01	-20.33	-
4	1.773	0.26	36.24	35.52	36.50	35.78	56.00	46.00	-19.50	-10.22
5	3.672	0.37	33.76	-	34.13	-	56.00	46.00	-21.87	-
6	23.098	1.23	29.03	-	30.26	-	60.00	50.00	-29.74	-

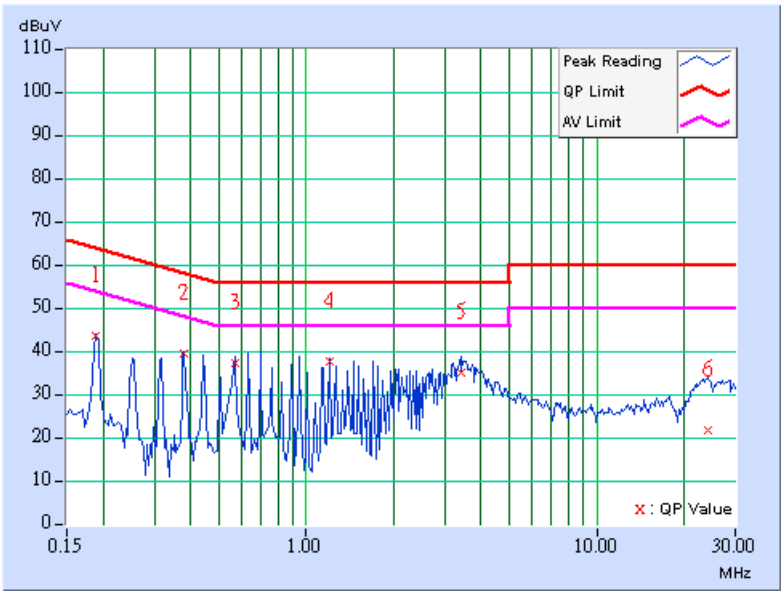
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.78	-	42.89	-	64.08	54.08	-21.19	-
2	0.380	0.11	38.89	38.31	39.00	38.42	58.27	48.27	-19.27	-9.85
3	0.568	0.15	36.56	34.18	36.71	34.33	56.00	46.00	-19.29	-11.67
4	1.203	0.24	36.86	36.34	37.10	36.58	56.00	46.00	-18.90	-9.42
5	3.414	0.35	34.52	-	34.87	-	56.00	46.00	-21.13	-
6	24.020	0.83	20.91	-	21.74	-	60.00	50.00	-38.26	-

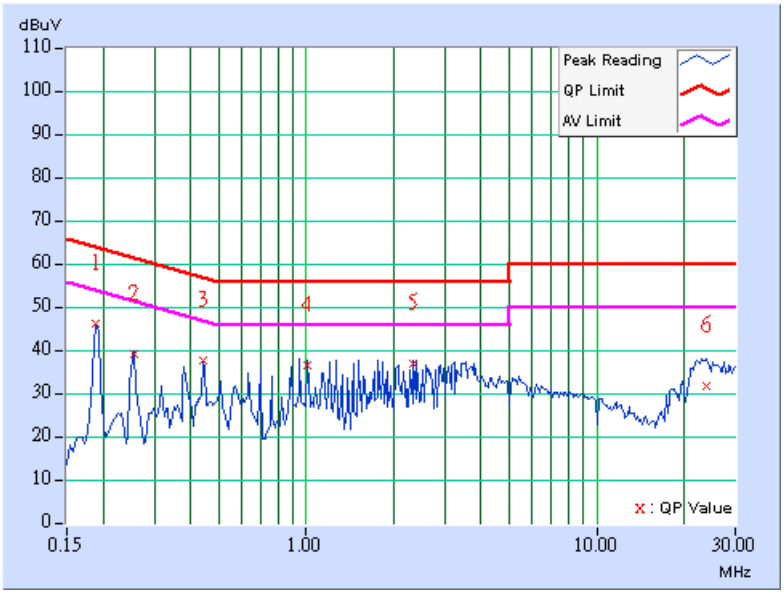
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	44.93	44.36	45.04	44.47	64.08	54.08	-19.04	-9.61
2	0.255	0.11	38.02	-	38.13	-	61.58	51.58	-23.45	-
3	0.443	0.12	36.54	-	36.66	-	57.01	47.01	-20.35	-
4	1.012	0.24	35.53	-	35.77	-	56.00	46.00	-20.23	-
5	2.344	0.28	35.85	34.95	36.13	35.23	56.00	46.00	-19.87	-10.77
6	23.996	1.29	30.39	-	31.68	-	60.00	50.00	-28.32	-

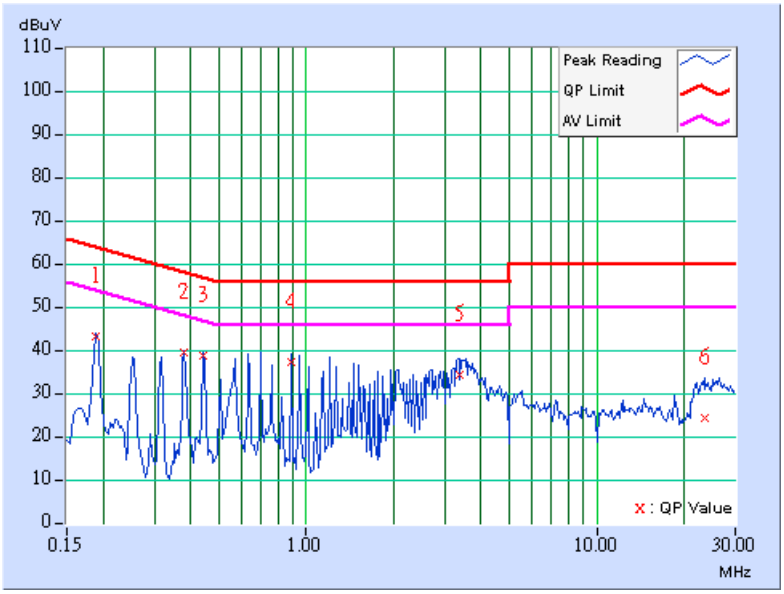
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.46	-	42.57	-	64.08	54.08	-21.51	-
2	0.380	0.11	38.93	38.28	39.04	38.39	58.27	48.27	-19.23	-9.88
3	0.443	0.12	38.20	37.84	38.32	37.96	57.01	47.01	-18.69	-9.05
4	0.888	0.22	36.67	36.52	36.89	36.74	56.00	46.00	-19.11	-9.26
5	3.359	0.35	33.71	-	34.06	-	56.00	46.00	-21.94	-
6	23.504	0.81	23.61	-	24.42	-	60.00	50.00	-35.58	-

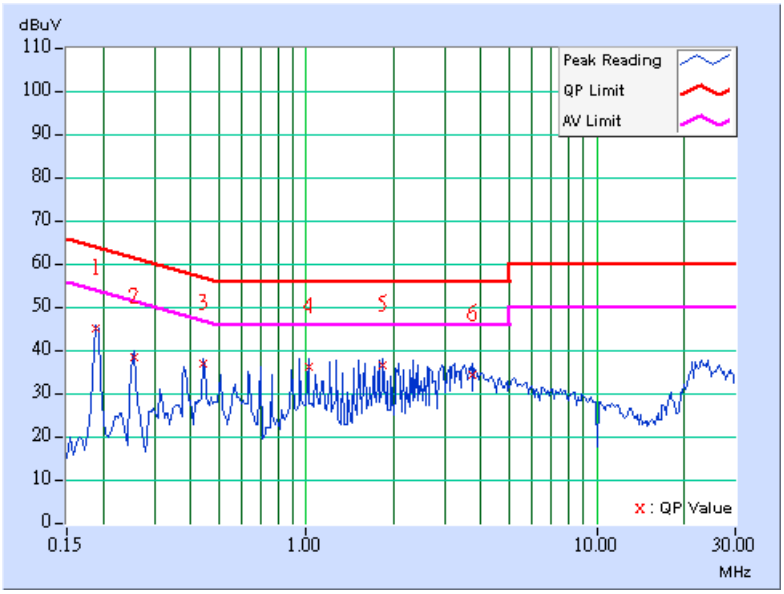
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	44.79	44.28	44.90	44.39	64.08	54.08	-19.18	-9.69
2	0.255	0.11	38.28	-	38.39	-	61.58	51.58	-23.19	-
3	0.443	0.12	36.50	-	36.62	-	57.01	47.01	-20.39	-
4	1.016	0.24	35.97	35.26	36.21	35.50	56.00	46.00	-19.79	-10.50
5	1.840	0.26	36.25	35.30	36.51	35.56	56.00	46.00	-19.49	-10.44
6	3.742	0.37	34.17	-	34.54	-	56.00	46.00	-21.46	-

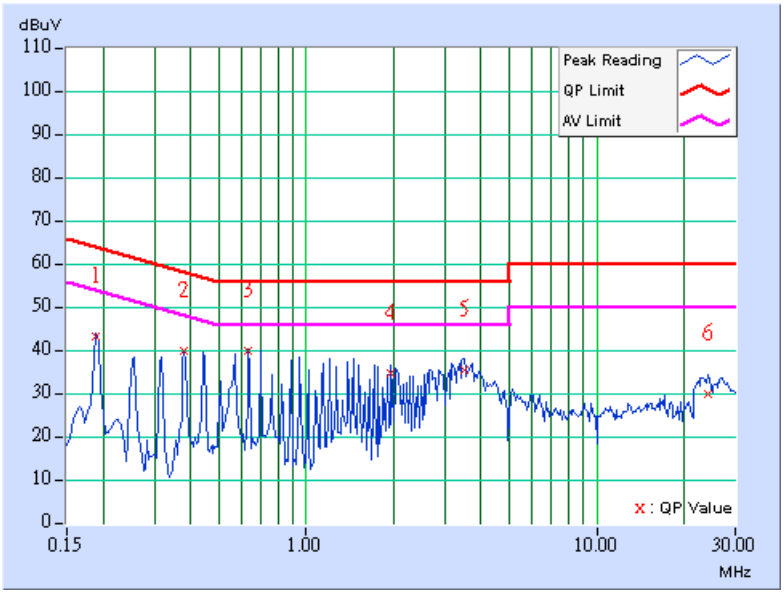
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.52	-	42.63	-	64.08	54.08	-21.45	-
2	0.380	0.11	39.17	38.75	39.28	38.86	58.27	48.27	-18.99	-9.41
3	0.634	0.16	39.10	38.91	39.26	39.07	56.00	46.00	-16.74	-6.93
4	1.965	0.26	34.11	-	34.37	-	56.00	46.00	-21.63	-
5	3.484	0.36	34.76	-	35.12	-	56.00	46.00	-20.88	-
6	24.039	0.83	29.35	-	30.18	-	60.00	50.00	-29.82	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Dec. 19, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 21, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Jan. 22, 2006
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 16, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170241	Feb. 23, 2006
Preamplifier Agilent	8449B	3008A01961	Nov. 09, 2005
Preamplifier Agilent	8447D	2944A10629	Nov. 09, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218182/4	Feb. 17, 2006
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218194/4	Feb. 17, 2006
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA
Turn Table ADT.	TT100.	TT93021702	NA
Controller ADT.	SC100.	SC93021702	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Chamber 1.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The IC Site Registration No. is IC4924-2.

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

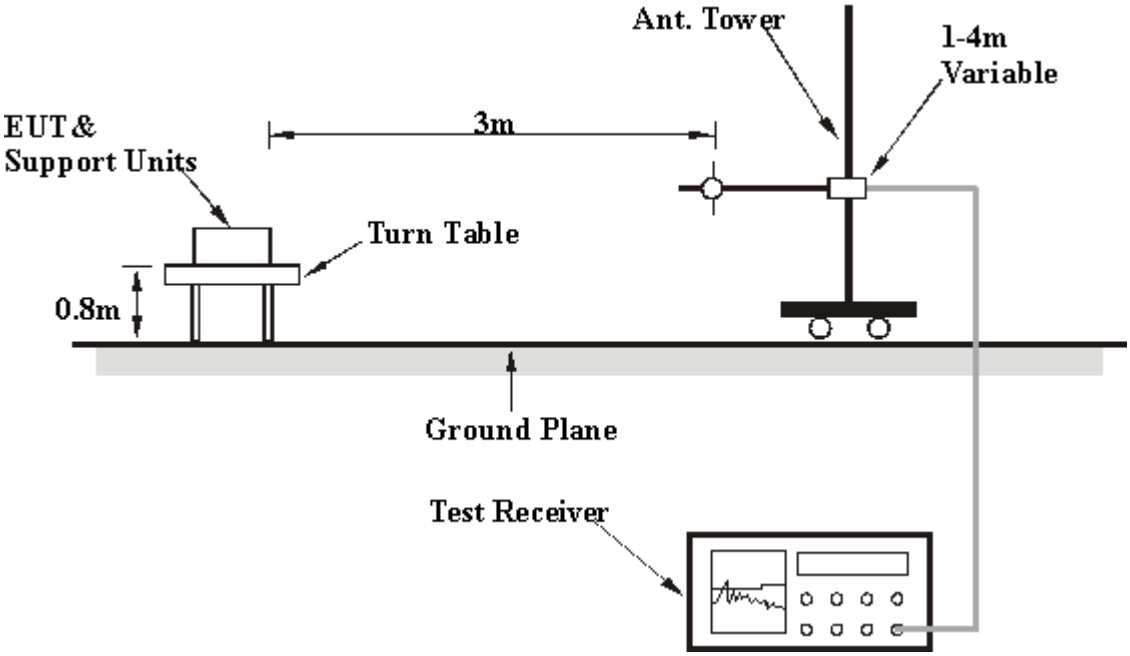
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1kHz for Average detection (AV) at frequency above 1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

802.11b DSSS modulation (Antenna 1)

EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.99	22.19 QP	40.00	-17.81	1.50 H	61	9.29	12.90
2	302.14	38.20 QP	46.00	-7.80	1.00 H	358	23.82	14.38
3	399.34	29.06 QP	46.00	-16.94	1.00 H	34	12.44	16.62
4	488.76	35.75 QP	46.00	-10.25	1.50 H	298	17.32	18.43
5	675.37	32.73 QP	46.00	-13.27	1.00 H	334	10.81	21.92
6	811.44	27.62 QP	46.00	-18.38	1.00 H	34	3.82	23.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	31.94	31.05 QP	40.00	-8.95	1.50 V	94	17.37	13.68
2	84.43	32.10 QP	40.00	-7.90	1.00 V	349	22.26	9.84
3	123.31	27.15 QP	43.50	-16.35	1.00 V	349	14.12	13.03
4	399.34	40.10 QP	46.00	-5.90	1.00 V	1	23.48	16.62
5	482.93	35.68 QP	46.00	-10.32	1.00 V	202	17.33	18.36
6	879.48	29.53 QP	46.00	-16.47	1.00 V	334	4.83	24.70

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 1	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.00	45.80 PK	74.00	-28.20	1.00 H	130	14.84	30.96
1	2386.00	36.41 AV	54.00	-17.59	1.00 H	130	5.45	30.96
2	*2412.00	92.65 PK			1.00 H	130	61.59	31.06
2	*2412.00	84.89 AV			1.00 H	130	53.83	31.06
3	4824.00	44.22 PK	74.00	-29.78	1.11 H	196	7.79	36.43
3	4824.00	31.37 AV	54.00	-22.63	1.11 H	196	-5.06	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.00	57.34 PK	74.00	-16.66	1.25 V	114	26.38	30.96
1	2386.00	48.89 AV	54.00	-5.11	1.25 V	114	17.93	30.96
2	*2412.00	108.54 PK			1.25 V	114	77.48	31.06
2	*2412.00	100.89 AV			1.25 V	114	69.83	31.06
3	4824.00	45.76 PK	74.00	-28.24	1.23 V	209	9.33	36.43
3	4824.00	32.90 AV	54.00	-21.10	1.23 V	209	-3.53	36.43

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 6	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	99.80 PK			1.01 H	10	68.63	31.17
1	*2437.00	90.60 AV			1.01 H	10	59.43	31.17
2	4874.00	45.66 PK	74.00	-28.34	1.23 H	56	9.12	36.54
2	4874.00	33.66 AV	54.00	-20.34	1.23 H	56	-2.88	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	112.13 PK			1.05 V	328	80.96	31.17
1	*2437.00	104.37 AV			1.05 V	328	73.20	31.17
2	4874.00	46.79 PK	74.00	-27.21	1.03 V	203	10.25	36.54
2	4874.00	35.12 AV	54.00	-18.88	1.03 V	203	-1.42	36.54

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	96.85 PK			1.00 H	360	65.57	31.28
1	*2462.00	89.12 AV			1.00 H	360	57.84	31.28
2	2487.00	51.12 PK	74.00	-22.88	1.00 H	360	19.74	31.38
2	2487.00	43.20 AV	54.00	-10.80	1.00 H	360	11.82	31.38
3	4924.00	44.69 PK	74.00	-29.31	1.10 H	168	8.03	36.66
3	4924.00	31.66 AV	54.00	-22.34	1.10 H	168	-5.00	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	107.35 PK			1.27 V	343	76.07	31.28
1	*2462.00	99.69 AV			1.27 V	343	68.41	31.28
2	2487.00	55.93 PK	74.00	-18.07	1.27 V	343	24.55	31.38
2	2487.00	47.61 AV	54.00	-6.39	1.27 V	343	16.23	31.38
3	4924.00	45.76 PK	74.00	-28.24	1.04 V	135	9.10	36.66
3	4924.00	34.41 AV	54.00	-19.59	1.04 V	135	-2.25	36.66

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

802.11b DSSS modulation (Antenna 2)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	45.55	24.16 QP	40.00	-15.84	1.00 H	217	9.17	14.99
2	99.98	29.64 QP	43.50	-13.86	2.00 H	91	18.90	10.74
3	208.84	26.11 QP	43.50	-17.39	2.00 H	334	14.76	11.35
4	298.26	34.94 QP	46.00	-11.06	1.00 H	94	20.64	14.30
5	482.93	38.76 QP	46.00	-7.24	1.50 H	271	20.40	18.36
6	690.92	31.18 QP	46.00	-14.82	1.00 H	301	9.06	22.13

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	35.83	30.60 QP	40.00	-9.40	1.00 V	310	16.28	14.32
2	302.14	39.23 QP	46.00	-6.77	2.00 V	265	24.86	14.38
3	488.76	39.78 QP	46.00	-6.22	1.00 V	1	21.35	18.43
4	607.33	29.88 QP	46.00	-16.12	1.50 V	193	8.89	21.00
5	813.39	29.19 QP	46.00	-16.81	2.00 V	88	5.38	23.81
6	939.74	32.20 QP	46.00	-13.80	1.00 V	169	6.70	25.51

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	21deg. C, 64%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	TEST MODE	Single chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	44.69 PK	74.00	-29.31	1.02 H	64	13.72	30.97
1	2390.00	36.84 AV	54.00	-17.16	1.02 H	64	5.87	30.97
2	*2412.00	95.65 PK			1.02 H	64	64.59	31.06
2	*2412.00	87.80 AV			1.02 H	64	56.74	31.06
3	4824.00	46.89 PK	74.00	-27.11	1.13 H	313	10.46	36.43
3	4824.00	36.83 AV	54.00	-17.17	1.13 H	313	0.40	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	60.67 PK	74.00	-13.33	1.24 V	199	28.80	31.87
1	2390.00	52.36 AV	54.00	-1.64	1.24 V	199	20.49	31.87
2	*2412.00	111.63 PK			1.24 V	199	79.67	31.96
2	*2412.00	103.32 AV			1.24 V	199	71.36	31.96
3	4824.00	52.83 PK	74.00	-21.17	1.06 V	114	15.00	37.83
3	4824.00	46.71 AV	54.00	-7.29	1.06 V	114	8.88	37.83

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 6	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	101.97 PK			1.33 H	287	70.80	31.17
1	*2437.00	93.93 AV			1.33 H	287	62.76	31.17
2	4874.00	50.46 PK	74.00	-23.54	1.13 H	320	13.92	36.54
2	4874.00	43.14 AV	54.00	-10.86	1.13 H	320	6.60	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	115.51 PK			1.26 V	196	83.45	32.06
1	*2437.00	107.36 AV			1.26 V	196	75.30	32.06
2	4874.00	52.76 PK	74.00	-21.24	1.08 V	316	14.78	37.98
2	4874.00	46.50 AV	54.00	-7.50	1.08 V	316	8.52	37.98

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	11Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	99.39 PK			1.34 H	297	68.11	31.28
1	*2462.00	91.51 AV			1.34 H	297	60.23	31.28
2	2486.00	44.22 PK	74.00	-29.78	1.34 H	297	12.84	31.38
2	2486.00	36.34 AV	54.00	-17.66	1.34 H	297	4.96	31.38
3	4924.00	47.28 PK	74.00	-26.72	1.24 H	316	10.62	36.66
3	4924.00	37.85 AV	54.00	-16.15	1.24 H	316	1.19	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	110.31 PK			1.13 V	187	79.03	31.28
1	*2462.00	102.00 AV			1.13 V	187	70.72	31.28
2	2483.50	58.05 PK	74.00	-15.95	1.13 V	187	26.68	31.37
2	2483.50	49.38 AV	54.00	-4.62	1.13 V	187	18.01	31.37
3	4924.00	45.70 PK	74.00	-28.30	1.00 V	12	9.04	36.66
3	4924.00	35.16 AV	54.00	-18.84	1.00 V	12	-1.50	36.66

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

802.11g OFDM modulation (Antenna 1)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Single chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.33	26.97 QP	40.00	-13.03	2.00 H	109	12.84	14.13
2	96.09	38.57 QP	43.50	-4.93	2.00 H	43	28.13	10.43
3	183.57	38.13 QP	43.50	-5.37	1.50 H	64	25.70	12.43
4	236.05	34.07 QP	46.00	-11.93	1.50 H	298	21.41	12.66
5	298.26	40.49 QP	46.00	-5.51	1.00 H	88	26.19	14.30
6	488.76	38.13 QP	46.00	-7.87	1.50 H	271	19.69	18.43
7	603.45	33.99 QP	46.00	-12.01	1.50 H	166	13.04	20.94
8	667.60	35.76 QP	46.00	-10.24	1.00 H	352	13.94	21.82
9	776.45	32.62 QP	46.00	-13.38	1.00 H	25	9.05	23.57

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.33	27.95 QP	40.00	-12.05	1.00 V	148	13.82	14.13
2	96.09	30.33 QP	43.50	-13.17	2.00 V	349	19.90	10.43
3	185.51	30.29 QP	43.50	-13.21	2.00 V	19	18.02	12.27
4	298.26	37.67 QP	46.00	-8.33	2.00 V	319	23.37	14.30
5	488.76	38.67 QP	46.00	-7.33	1.00 V	154	20.23	18.43
6	521.80	31.12 QP	46.00	-14.88	2.00 V	346	12.09	19.03
7	603.45	32.65 QP	46.00	-13.35	1.50 V	1	11.70	20.94
8	667.60	33.68 QP	46.00	-12.32	1.50 V	1	11.86	21.82
9	805.61	31.31 QP	46.00	-14.69	1.00 V	175	7.56	23.75
10	933.91	31.89 QP	46.00	-14.11	1.00 V	169	6.44	25.45

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	1	TEST MODE	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	54.81 PK	74.00	-19.19	1.08 H	295	23.84	30.97
1	2390.00	44.78 AV	54.00	-9.22	1.08 H	295	13.81	30.97
2	*2412.00	91.60 PK			1.08 H	295	60.54	31.06
2	*2412.00	79.80 AV			1.08 H	295	48.74	31.06
3	4824.00	44.98 PK	74.00	-29.02	1.08 H	187	8.55	36.43
3	4824.00	32.40 AV	54.00	-21.60	1.08 H	187	-4.03	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	59.71 PK	74.00	-14.29	1.01 V	277	28.74	30.97
1	2390.00	49.72 AV	54.00	-4.28	1.01 V	277	18.75	30.97
2	*2412.00	103.53 PK			1.02 V	277	72.47	31.06
2	*2412.00	93.54 AV			1.02 V	277	62.48	31.06
3	4824.00	45.58 PK	74.00	-28.42	1.11 V	10	9.15	36.43
3	4824.00	33.88 AV	54.00	-20.12	1.11 V	10	-2.55	36.43

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 6	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	90.80 PK			1.03 H	136	59.63	31.17
1	*2437.00	80.13 AV			1.03 H	136	48.96	31.17
2	4874.00	44.81 PK	74.00	-29.19	1.08 H	190	8.27	36.54
2	4874.00	32.34 AV	54.00	-21.66	1.08 H	190	-4.20	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	105.49 PK			1.22 V	220	74.32	31.17
1	*2437.00	95.40 AV			1.22 V	220	64.23	31.17
2	4874.00	46.15 PK	74.00	-27.85	1.10 V	10	9.61	36.54
2	4874.00	34.12 AV	54.00	-19.88	1.10 V	10	-2.42	36.54

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Single chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	90.12 PK			1.19 H	142	58.84	31.28
1	*2462.00	78.69 AV			1.19 H	142	47.41	31.28
2	2483.50	50.23 PK	74.00	-23.77	1.19 H	142	18.86	31.37
2	2483.50	40.48 AV	54.00	-13.52	1.19 H	142	9.11	31.37
3	4924.00	44.99 PK	74.00	-29.01	1.07 H	175	8.33	36.66
3	4924.00	32.49 AV	54.00	-21.51	1.07 H	175	-4.17	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	104.53 PK			1.06 V	360	73.25	31.28
1	*2462.00	95.75 AV			1.06 V	360	64.47	31.28
2	2483.50	62.30 PK	74.00	-11.70	1.06 V	360	30.93	31.37
2	2483.50	48.40 AV	54.00	-5.60	1.06 V	360	17.03	31.37
3	4924.00	46.09 PK	74.00	-27.91	1.11 V	350	9.43	36.66
3	4924.00	33.59 AV	54.00	-20.41	1.11 V	350	-3.07	36.66

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

802.11g OFDM modulation (Antenna 2)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	49.44	25.67 QP	40.00	-14.33	1.50 H	292	11.14	14.53
2	96.09	30.11 QP	43.50	-13.39	1.50 H	91	19.68	10.43
3	185.51	34.81 QP	43.50	-8.69	1.50 H	67	22.53	12.27
4	236.05	32.87 QP	46.00	-13.13	1.00 H	271	20.21	12.66
5	298.26	43.54 QP	46.00	-2.46	1.00 H	82	29.23	14.30
6	482.93	38.54 QP	46.00	-7.46	1.50 H	268	20.19	18.36
7	603.45	33.27 QP	46.00	-12.73	1.50 H	31	12.33	20.94
8	667.60	34.05 QP	46.00	-11.95	1.00 H	10	12.23	21.82
9	776.45	33.18 QP	46.00	-12.82	1.00 H	16	9.62	23.57
10	811.44	32.08 QP	46.00	-13.92	1.00 H	25	8.28	23.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	45.55	28.05 QP	40.00	-11.95	1.00 V	154	13.06	14.99
2	185.51	31.15 QP	43.50	-12.35	1.50 V	10	18.88	12.27
3	269.10	31.44 QP	46.00	-14.56	1.50 V	196	17.82	13.61
4	302.14	42.25 QP	46.00	-3.75	1.50 V	313	27.87	14.38
5	496.53	36.80 QP	46.00	-9.20	1.50 V	238	18.26	18.54
6	607.33	34.43 QP	46.00	-11.57	1.50 V	175	13.44	21.00
7	667.60	33.59 QP	46.00	-12.41	1.50 V	1	11.77	21.82
8	830.88	31.83 QP	46.00	-14.17	1.00 V	196	7.87	23.96
9	879.48	31.31 QP	46.00	-14.69	1.00 V	193	6.61	24.70
10	933.91	33.06 QP	46.00	-12.94	1.00 V	169	7.61	25.45

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 1	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	50.19 PK	74.00	-23.81	1.33 H	131	19.22	30.97
1	2390.00	38.25 AV	54.00	-15.75	1.33 H	131	7.28	30.97
2	*2412.00	94.68 PK			1.33 H	131	63.62	31.06
2	*2412.00	82.74 AV			1.33 H	131	51.68	31.06
3	4824.00	44.09 PK	74.00	-29.91	1.24 H	1	7.66	36.43
3	4824.00	31.37 AV	54.00	-22.63	1.24 H	1	-5.06	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	62.45 PK	74.00	-11.55	1.16 V	14	30.58	31.87
1	**2390.00**	**51.96 AV**	**54.00**	**-2.04**	**1.16 V**	**14**	**20.09**	**31.87**
2	*2412.00	106.94 PK			1.16 V	14	74.98	31.96
2	*2412.00	96.45 AV			1.16 V	14	64.49	31.96
3	4824.00	50.36 PK	74.00	-23.64	1.16 V	0	12.53	37.83
3	4824.00	37.99 AV	54.00	-16.01	1.16 V	0	0.16	37.83

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 6	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	93.54 PK			1.50 H	290	62.37	31.17
1	*2437.00	82.10 AV			1.50 H	290	50.93	31.17
2	4874.00	44.84 PK	74.00	-29.16	1.10 H	187	8.30	36.54
2	4874.00	32.51 AV	54.00	-21.49	1.10 H	187	-4.03	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	108.30 PK			1.17 V	326	77.13	31.17
1	*2437.00	96.85 AV			1.17 V	326	65.68	31.17
2	4874.00	43.61 PK	74.00	-30.39	1.00 V	163	7.07	36.54
2	4874.00	31.61 AV	54.00	-22.39	1.00 V	163	-4.93	36.54

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Single chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	92.54 PK			1.12 H	282	61.26	31.28
1	*2462.00	81.54 AV			1.12 H	282	50.26	31.28
2	2483.50	45.19 PK	74.00	-28.81	1.12 H	282	13.82	31.37
2	2483.50	34.19 AV	54.00	-19.81	1.12 H	282	2.82	31.37
3	4924.00	43.71 PK	74.00	-30.29	1.29 H	216	7.05	36.66
3	4924.00	31.60 AV	54.00	-22.40	1.29 H	216	-5.06	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	107.10 PK			1.00 V	8	74.94	32.16
1	*2462.00	97.39 AV			1.00 V	8	65.23	32.16
2	2483.50	59.75 PK	74.00	-14.25	1.00 V	8	27.51	32.24
2	2483.50	50.04 AV	54.00	-3.96	1.00 V	8	17.80	32.24
3	4924.00	50.45 PK	74.00	-23.55	1.09 V	215	12.31	38.14
3	4924.00	37.12 AV	54.00	-16.88	1.09 V	215	-1.02	38.14

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

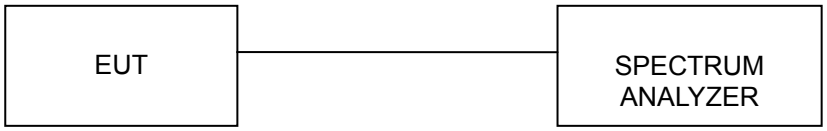
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

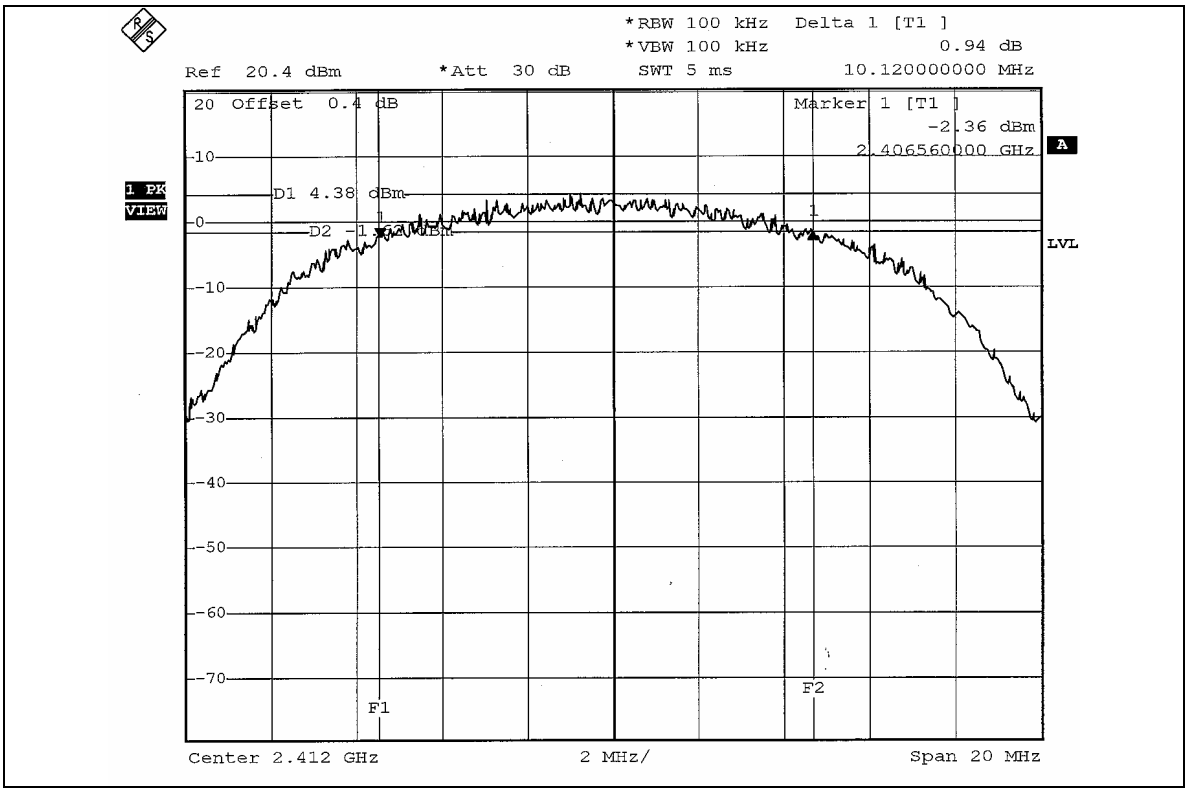
4.3.7 TEST RESULTS

802.11b DSSS modulation

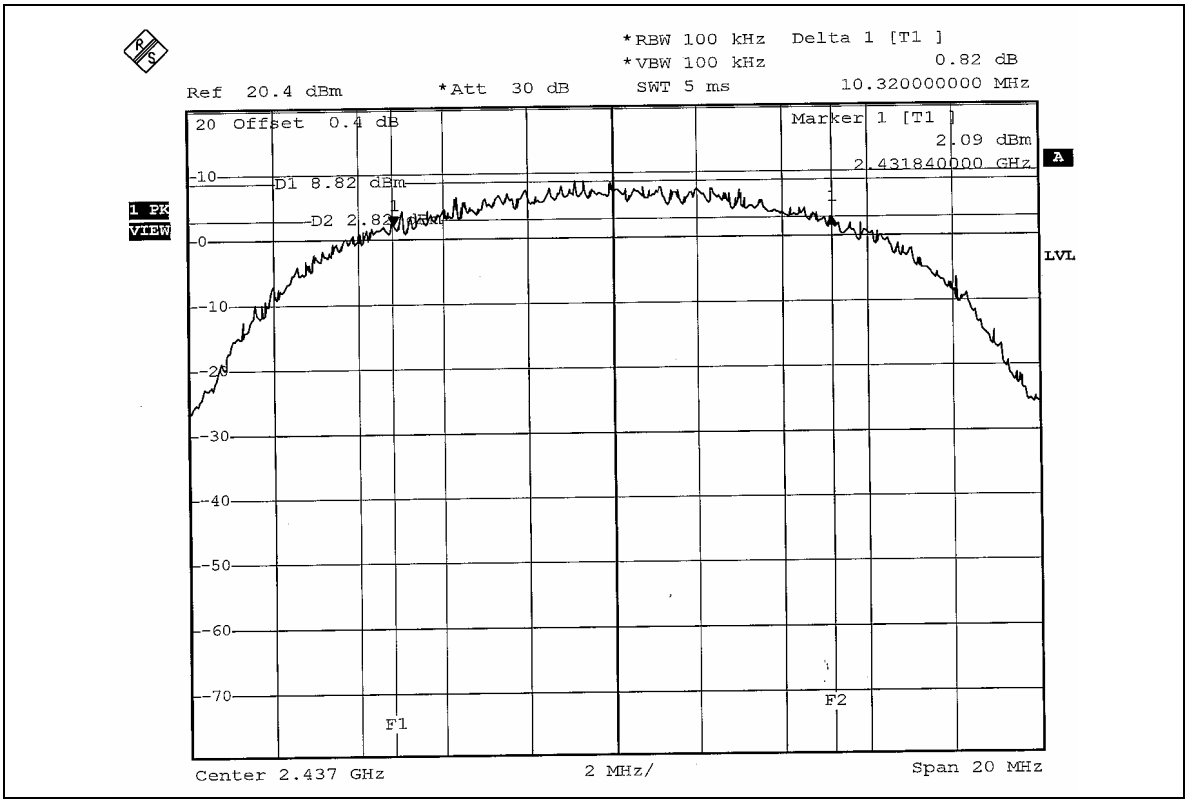
EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Single chain	**TESTED BY**	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.12	0.5	PASS
6	2437	10.32	0.5	PASS
11	2462	10.96	0.5	PASS

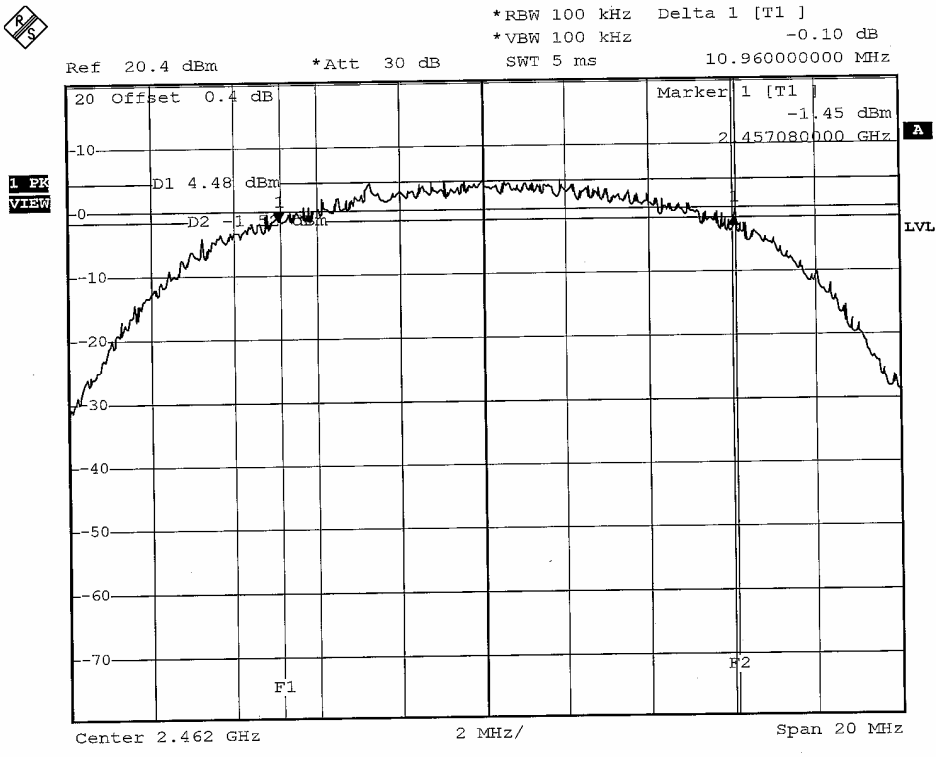
CH1


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.94 dB
10.120000000 MHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
Marker 1 [T1]
-2.36 dBm
2.406560000 GHz
D1 4.38 dBm
D2 -1.62 dBm
1 PK
VIEW
A
LVL
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.82 dB
10.320000000 MHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
Marker 1 [T1]
2.09 dBm
2.431840000 GHz
D1 8.82 dBm
D2 2.82 dBm
1 PK
VIEW
A
LVL
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11

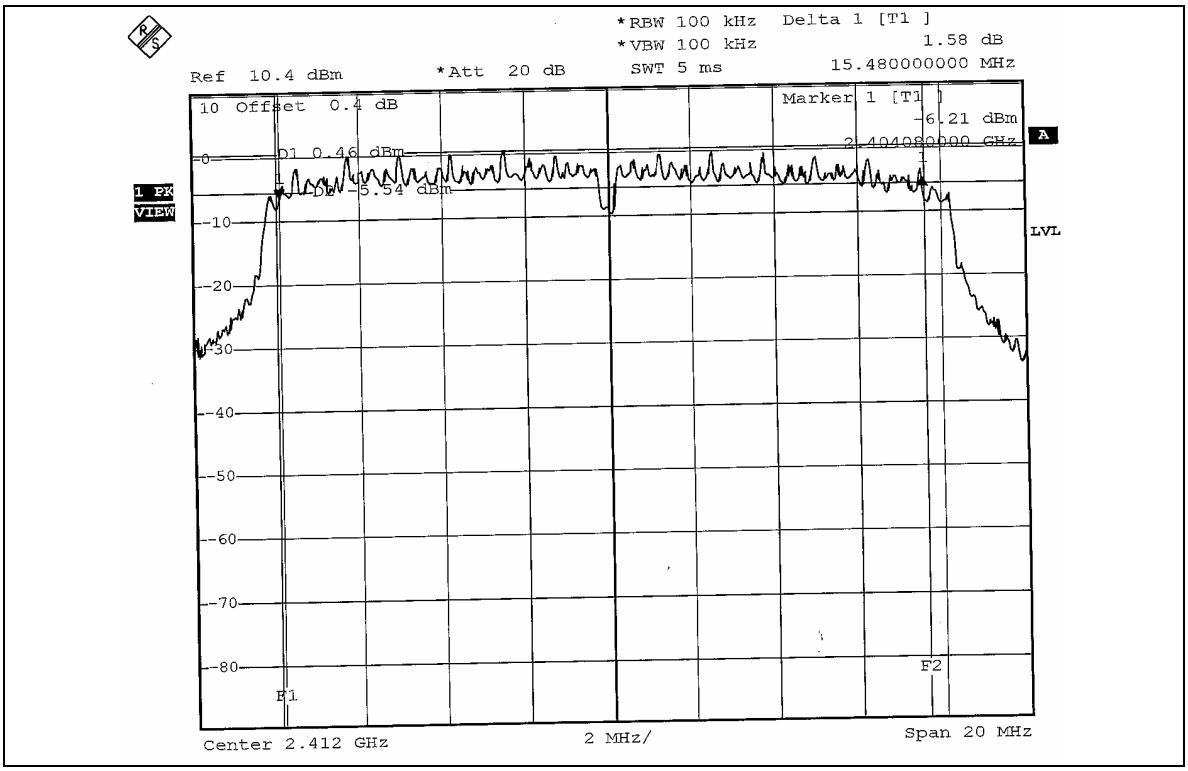

*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-0.10 dB
10.960000000 MHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
Marker 1 [T1]
-1.45 dBm
2.457080000 GHz
D1 4.48 dBm
D2 -1.52 dBm
LVL
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

802.11g OFDM modulation

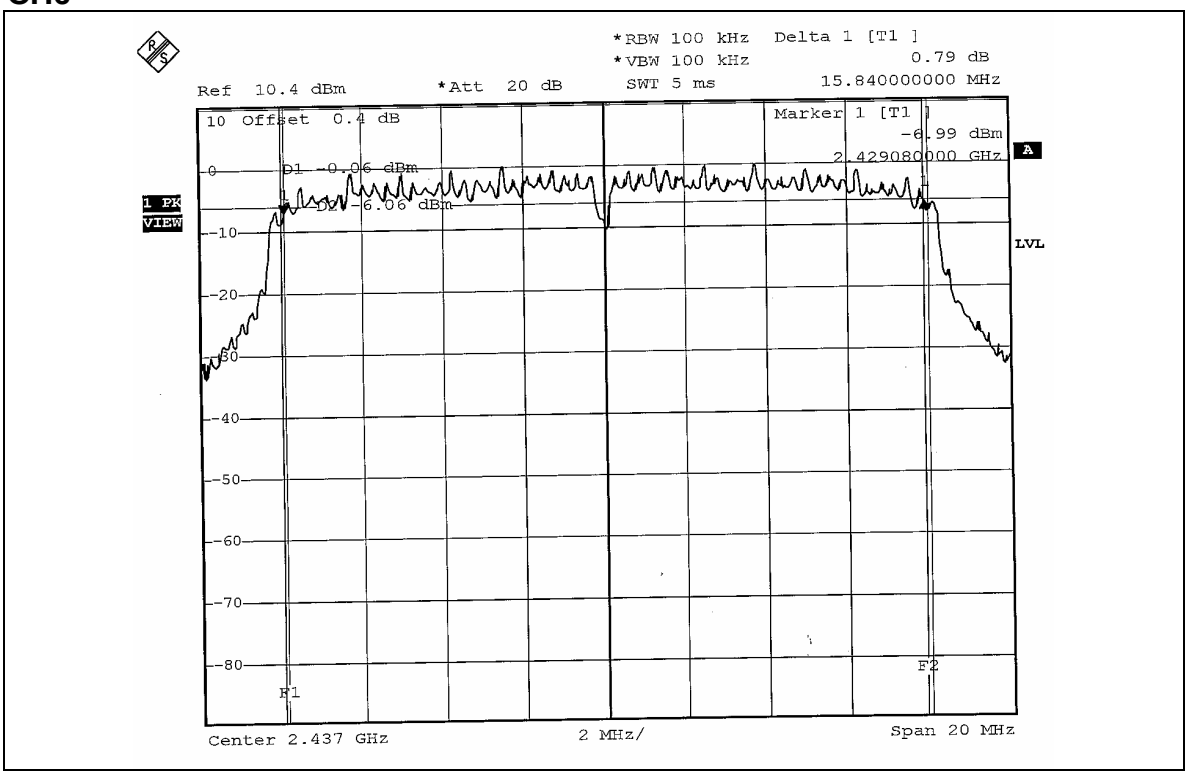
EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Single chain	**TESTED BY**	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	15.48	0.5	PASS
6	2437	15.84	0.5	PASS
11	2462	15.48	0.5	PASS

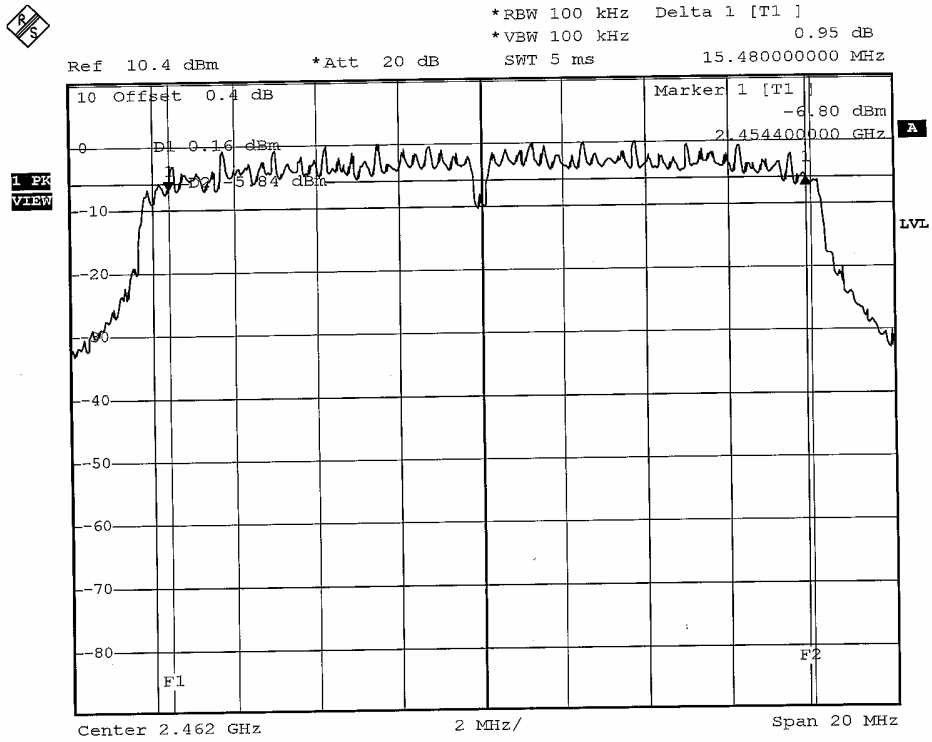
CH1


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
1.58 dB
15.480000000 MHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
Marker 1 [T1]
-6.21 dBm
2.404080000 GHz
D1 0.46 dBm
D2 -5.54 dBm
1 PK VIEW
A
LVL
0
-10
-20
-30
-40
-50
-60
-70
-80
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.79 dB
15.840000000 MHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
Marker 1 [T1]
-6.99 dBm
2.429080000 GHz
D1 -0.06 dBm
D2 -6.06 dBm
1 PK VIEW
A
LVL
0
-10
-20
-30
-40
-50
-60
-70
-80
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.95 dB
15.480000000 MHz
Ref 10.4 dBm
*Att 20 dB
Offset 0.4 dB
Marker 1 [T1]
-6.80 dBm
2.454400000 GHz
D1 0.16 dBm
D2 -5.84 dBm
1 PK VIEW
A
LVL
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm. .

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 06, 2005
TEKTRONIX OSCILLOSCOPE	TDS 220	C019167	Feb. 01, 2006
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to peak the response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same peak reading on oscilloscope. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.7 TEST RESULTS

802.11b DSSS modulation

EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Single chain	**TESTED BY**	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	32.509	15.12	29	PASS
6	2437	63.980	18.04	29	PASS
11	2462	32.734	15.15	29	PASS

Note: According to 15.247(b) (4), the maximum antenna gain 7dBi is higher than 6dBi, so limit of peak power shall be reduced by 1dBi.

802.11g OFDM modulation

EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Single chain	**TESTED BY**	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	26.303	14.20	29	PASS
6	2437	26.002	14.15	29	PASS
11	2462	25.882	14.13	29	PASS

Note: According to 15.247(b) (4), the maximum antenna gain 7dBi is higher than 6dBi, so limit of peak power shall be reduced by 1dBi.

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

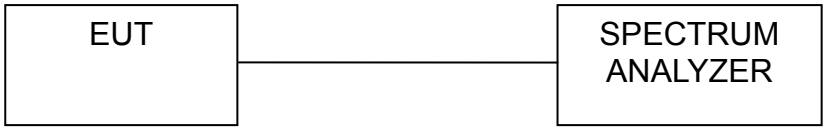
4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time=span/3kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6

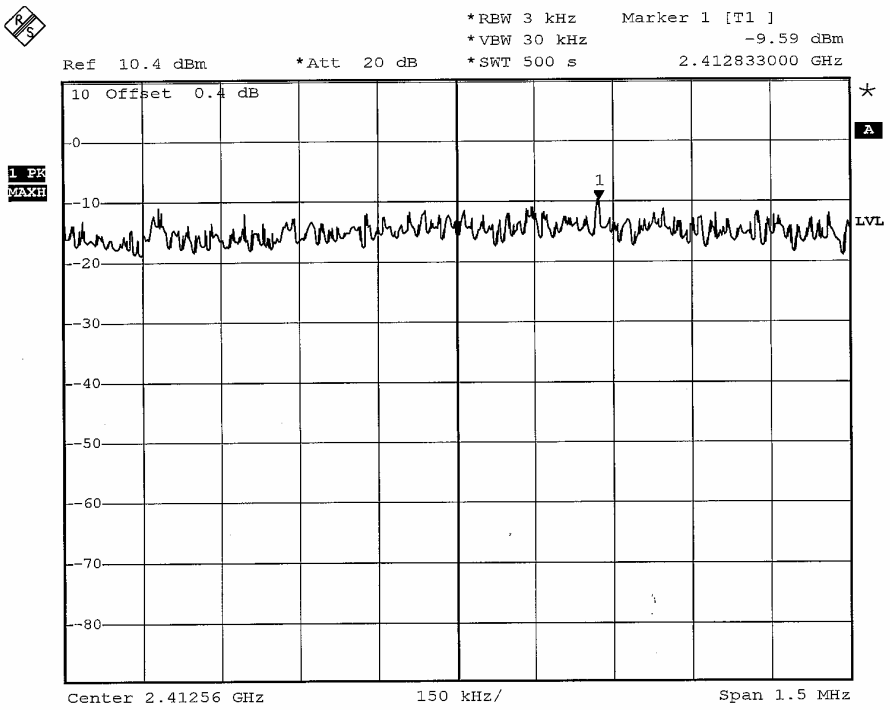
4.5.7 TEST RESULTS

802.11b DSSS modulation

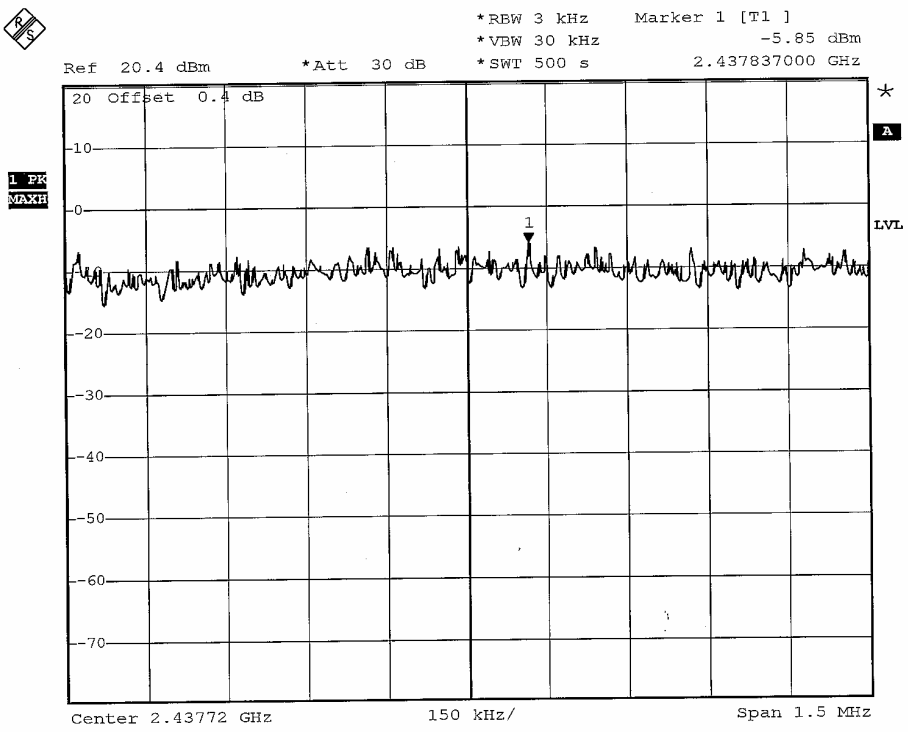
EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	BPSK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Single chain	**TESTED BY**	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-9.59	8	PASS
6	2437	-5.85	8	PASS
11	2462	-9.29	8	PASS

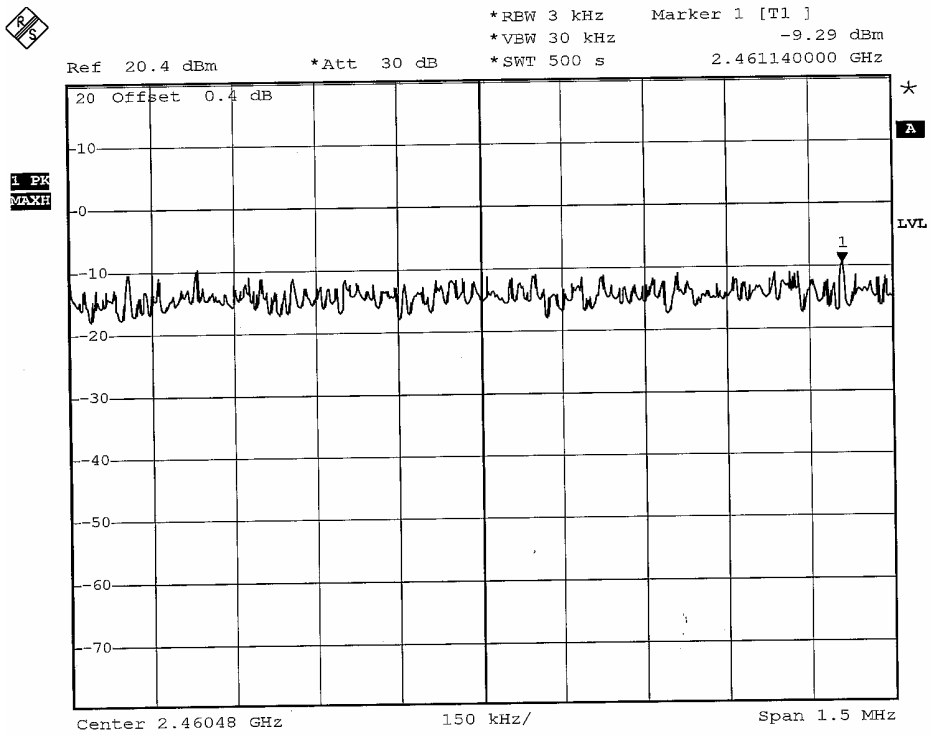
CH1


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.59 dBm
2.412833000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
1 PK
MAXH
A
LVL
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.41256 GHz
150 kHz/
Span 1.5 MHz

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-5.85 dBm
2.437837000 GHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
1 PK
MAXH
A
LVL
10
0
-20
-30
-40
-50
-60
-70
Center 2.43772 GHz
150 kHz/
Span 1.5 MHz

CH11

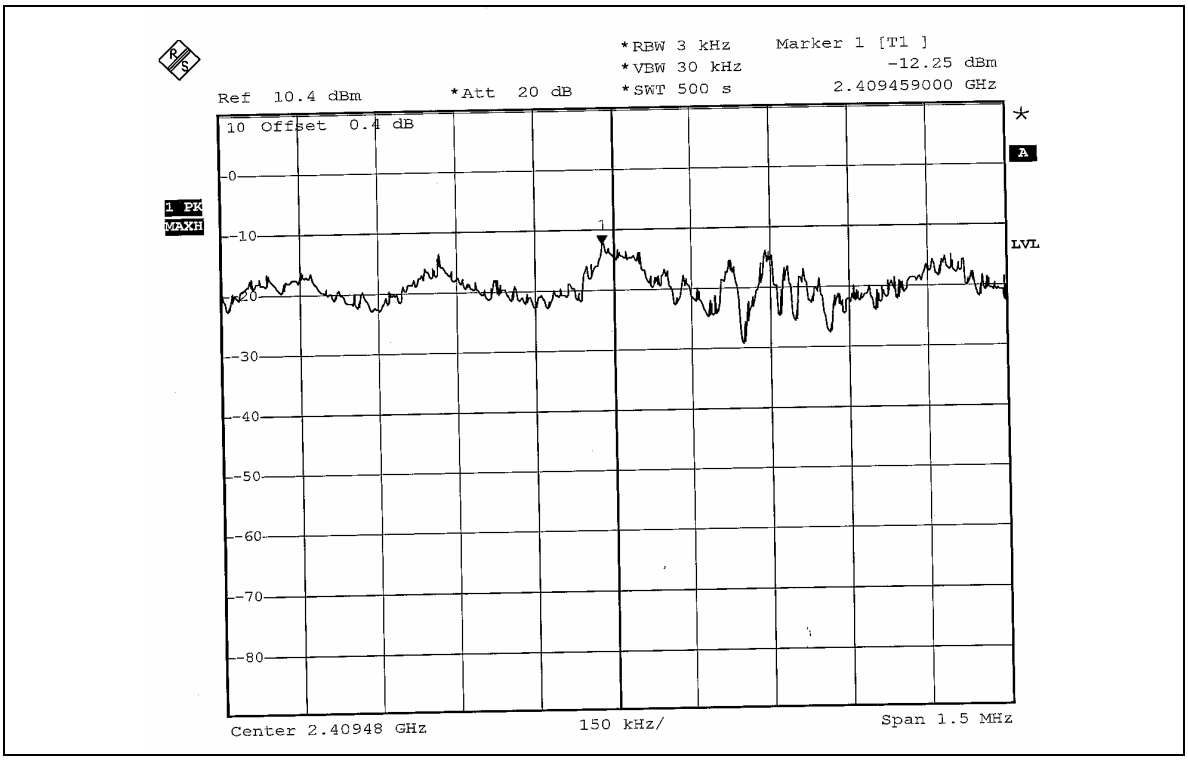

*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.29 dBm
2.461140000 GHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
1 PK
MAXH
A
LVL
1
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.46048 GHz
150 kHz/
Span 1.5 MHz

802.11g OFDM modulation

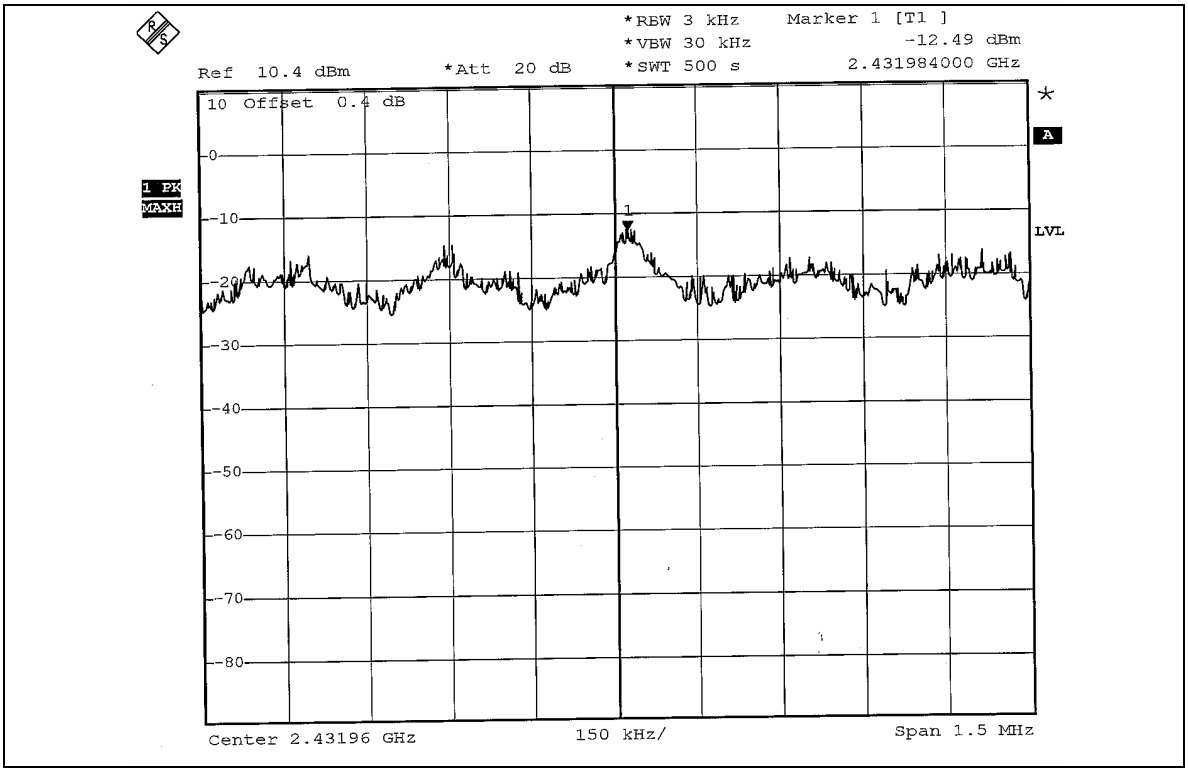
EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Single chain	**TESTED BY**	Match Tsui

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-12.25	8	PASS
6	2437	-12.49	8	PASS
11	2462	-12.29	8	PASS

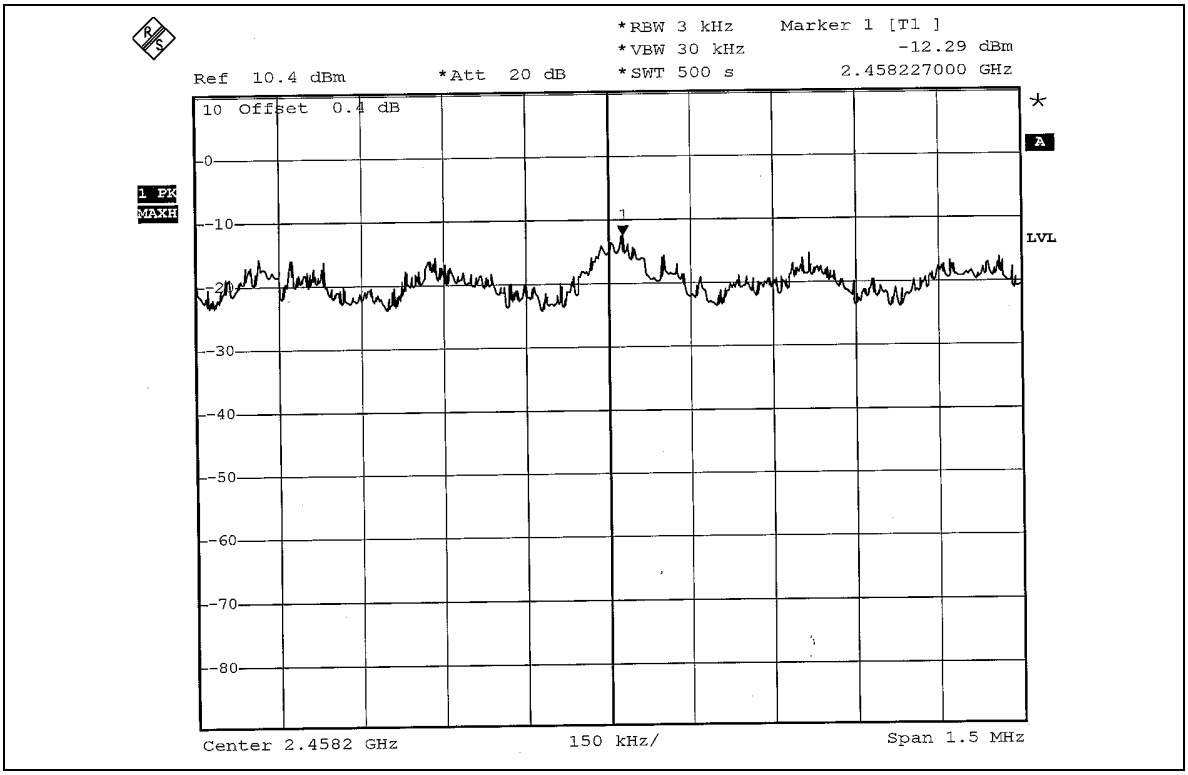
CH1


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-12.25 dBm
2.409459000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
1 PK
MAXH
A
LVL
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.40948 GHz
150 kHz/
Span 1.5 MHz

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-12.49 dBm
2.431984000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
1 PK
MAXH
A
LVL
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.43196 GHz
150 kHz/
Span 1.5 MHz

CH11


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-12.29 dBm
2.458227000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
1 PK
MAXH
A
LVL
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.4582 GHz
150 kHz/
Span 1.5 MHz

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.
The spectrum plots (Peak RBW=VBW=100kHz ; Average RBW=1MHz, VBW=1kHz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

4.6.6 TEST RESULTS

The spectrum plots are attached on the following 18 images. D2 line indicates the highest level, and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS modulation

For test configure mode 1 (Antenna 1)

NOTE 1: The band edge emission plot on page 74 shows 49.32dBc between carrier maximum power and local maximum emission in restrict band (2.3858GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 108.54dBuV/m (Peak), so the maximum field strength in restrict band is 108.54-49.32=59.22dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 74 shows 51.43dBc between carrier maximum power and local maximum emission in restrict band (2.3868GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 100.89dBuV/m (Average), so the maximum field strength in restrict band is100.89-51.43=49.46dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 75 shows 50.11dBc between carrier maximum power and local maximum emission in restrict band (2.4876GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 107.35dBuV/m (Peak), so the maximum field strength in restrict band is 107.35-50.11=57.24dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 76 shows 55.02dBc between carrier maximum power and local maximum emission in restrict band (2.4878GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 99.69dBuV/m (Average), so the maximum field strength in restrict band is 99.69-55.02=44.67dBuV/m which is under 54dBuV/m limit.

For test configure mode 2 (Antenna 2)

NOTE 1: The band edge emission plot on page 74 shows 49.32dBc between carrier maximum power and local maximum emission in restrict band (2.3858GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 111.63dBuV/m (Peak), so the maximum field strength in restrict band is 111.63-49.32=62.31dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 74 shows 51.43dBc between carrier maximum power and local maximum emission in restrict band (2.3868GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 103.32dBuV/m (Average), so the maximum field strength in restrict band is103.32-51.43=51.89dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 75 shows 50.11dBc between carrier maximum power and local maximum emission in restrict band (2.4876GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 110.31dBuV/m (Peak), so the maximum field strength in restrict band is 110.31-50.11=60.20dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 76 shows 55.02dBc between carrier maximum power and local maximum emission in restrict band (2.4878GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 102.00dBuV/m (Average), so the maximum field strength in restrict band is 102.00-55.02=46.98dBuV/m which is under 54dBuV/m limit.

802.11g OFDM modulation

For test configure mode 1 (Antenna 1)

NOTE 1: The band edge emission plot on page 77 shows 44.54dBc between carrier maximum power and local maximum emission in restrict band (2.3893GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 103.53dBuV/m (Peak), so the maximum field strength in restrict band is 103.53-44.54=58.99dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 77 shows 44.18dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 93.54dBuV/m (Average), so the maximum field strength in restrict band is 93.54-44.18=49.36dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 78 shows 49.11dBc between carrier maximum power and local maximum emission in restrict band (2.4846GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 104.53dBuV/m (Peak), so the maximum field strength in restrict band is 104.53-49.11=55.42dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 79 shows 47.25dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 95.75dBuV/m (Average), so the maximum field strength in restrict band is 95.75-47.25=48.50dBuV/m which is under 54dBuV/m limit.

For test configure mode 2 (Antenna 2)

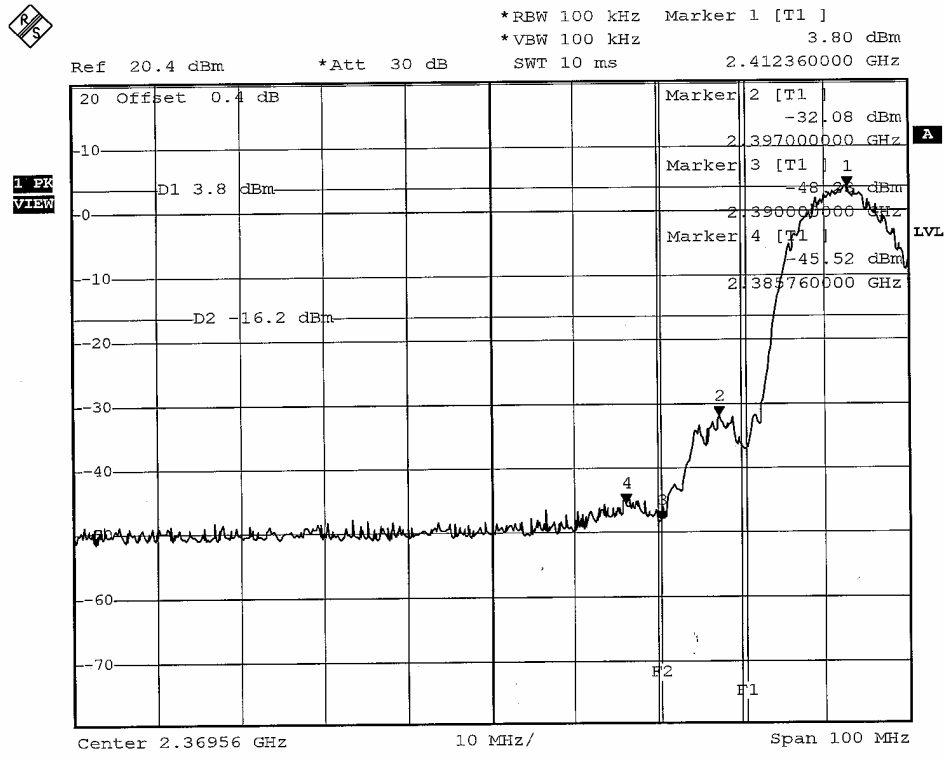
NOTE 1: The band edge emission plot on page 77 shows 44.54dBc between carrier maximum power and local maximum emission in restrict band (2.3893GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.94dBuV/m (Peak), so the maximum field strength in restrict band is 106.94-44.54=62.40dBuV/m which is under 74dBuV/m limit.

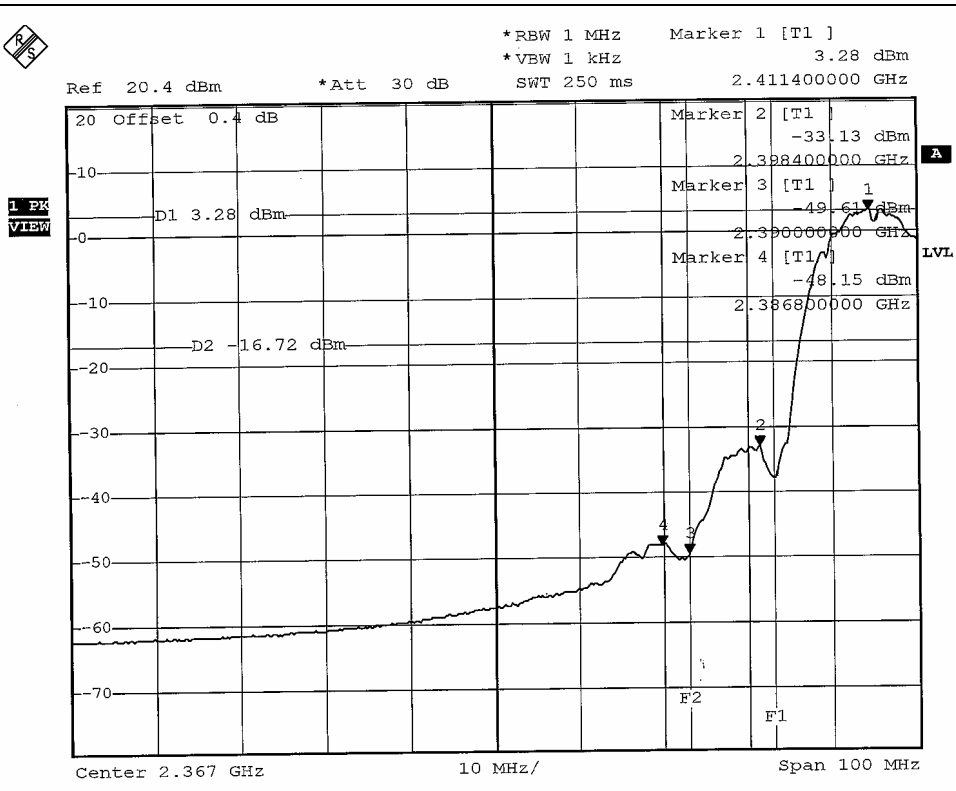
The band edge emission plot on page 77 shows 44.18dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 96.45dBuV/m (Average), so the maximum field strength in restrict band is 96.45-44.18=52.27dBuV/m which is under 54dBuV/m limit.

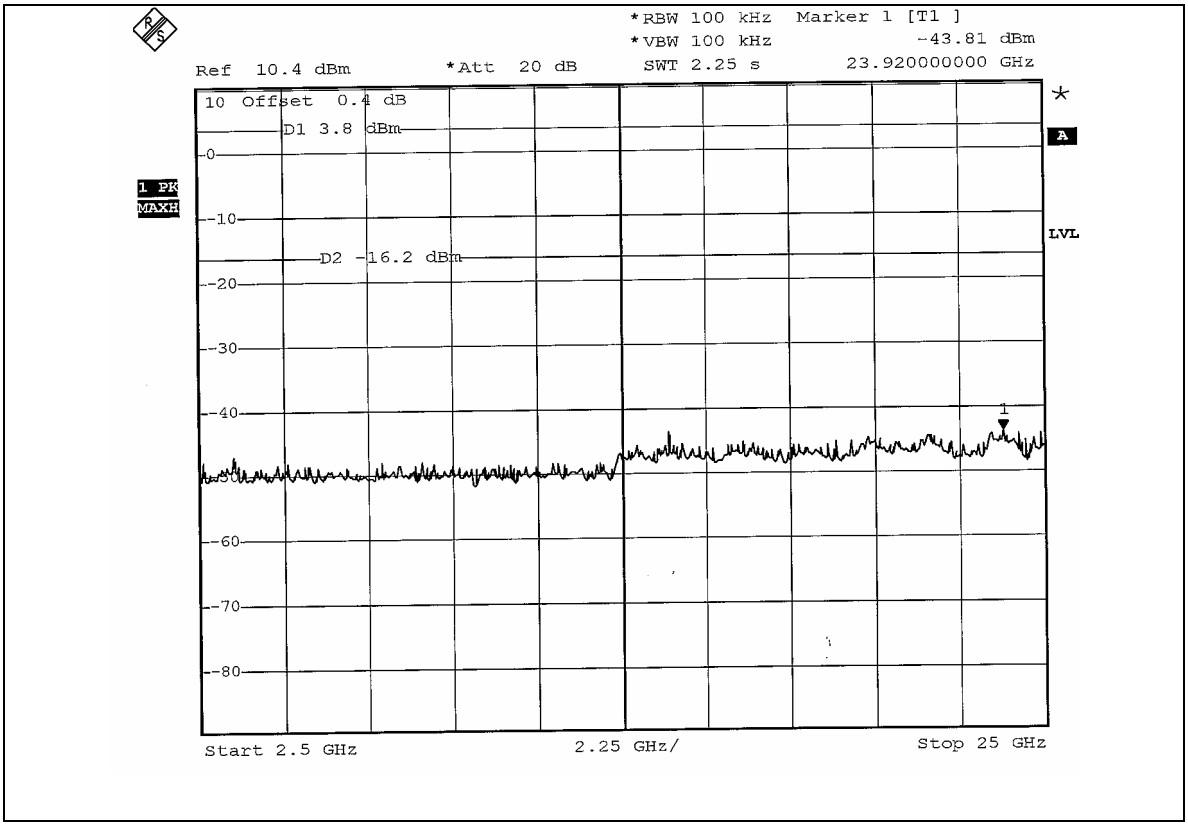
NOTE 2: The band edge emission plot on page 78 shows 49.11dBc between carrier maximum power and local maximum emission in restrict band (2.4846GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 107.10dBuV/m (Peak), so the maximum field strength in restrict band is 107.10-49.11=57.99dBuV/m which is under 74dBuV/m limit.

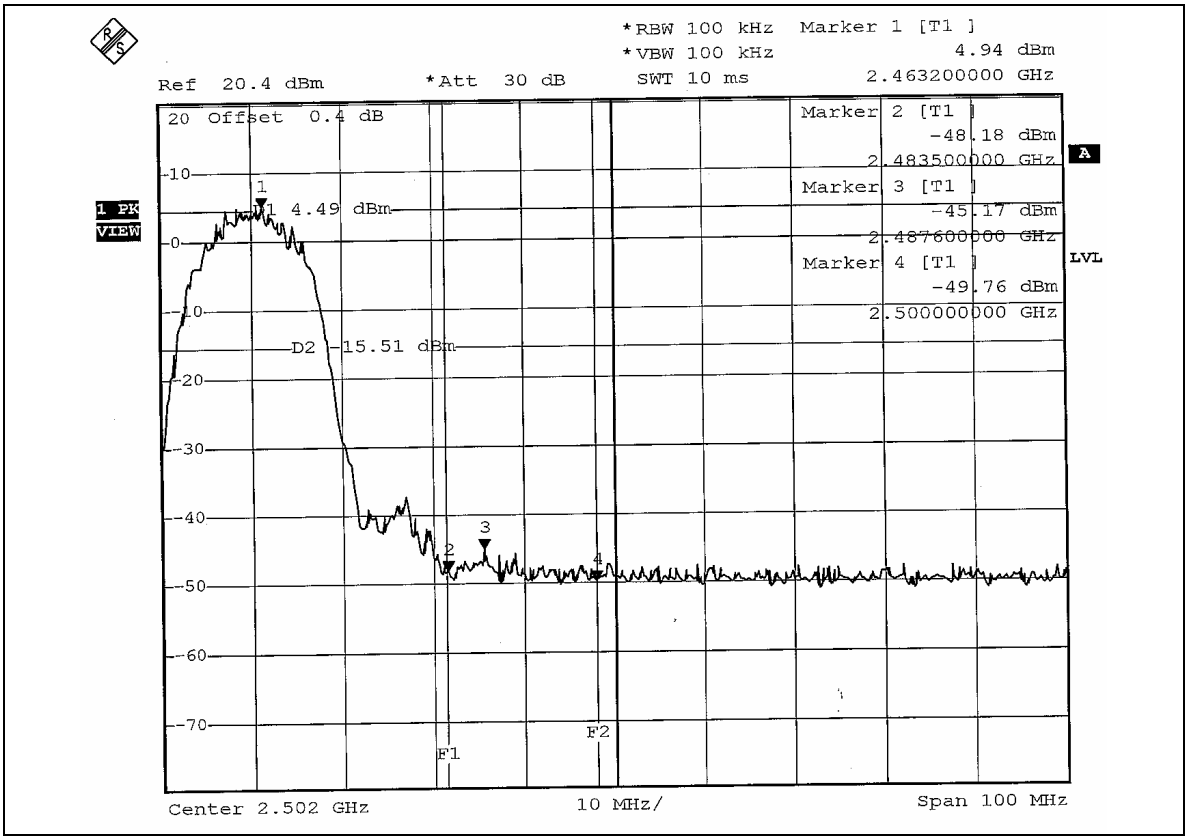
The band edge emission plot on page 79 shows 47.25dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 97.39dBuV/m (Average), so the maximum field strength in restrict band is 97.39-47.25=50.14dBuV/m which is under 54dBuV/m limit.

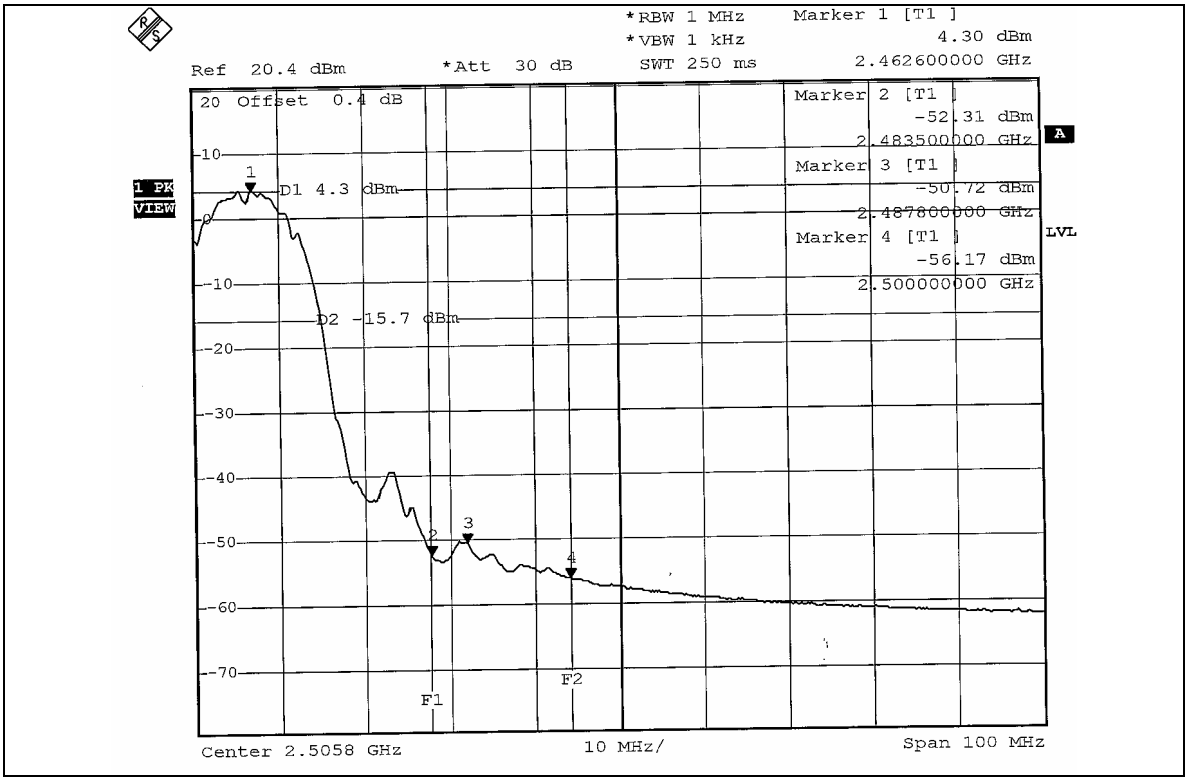
802.11b DSSS modulation

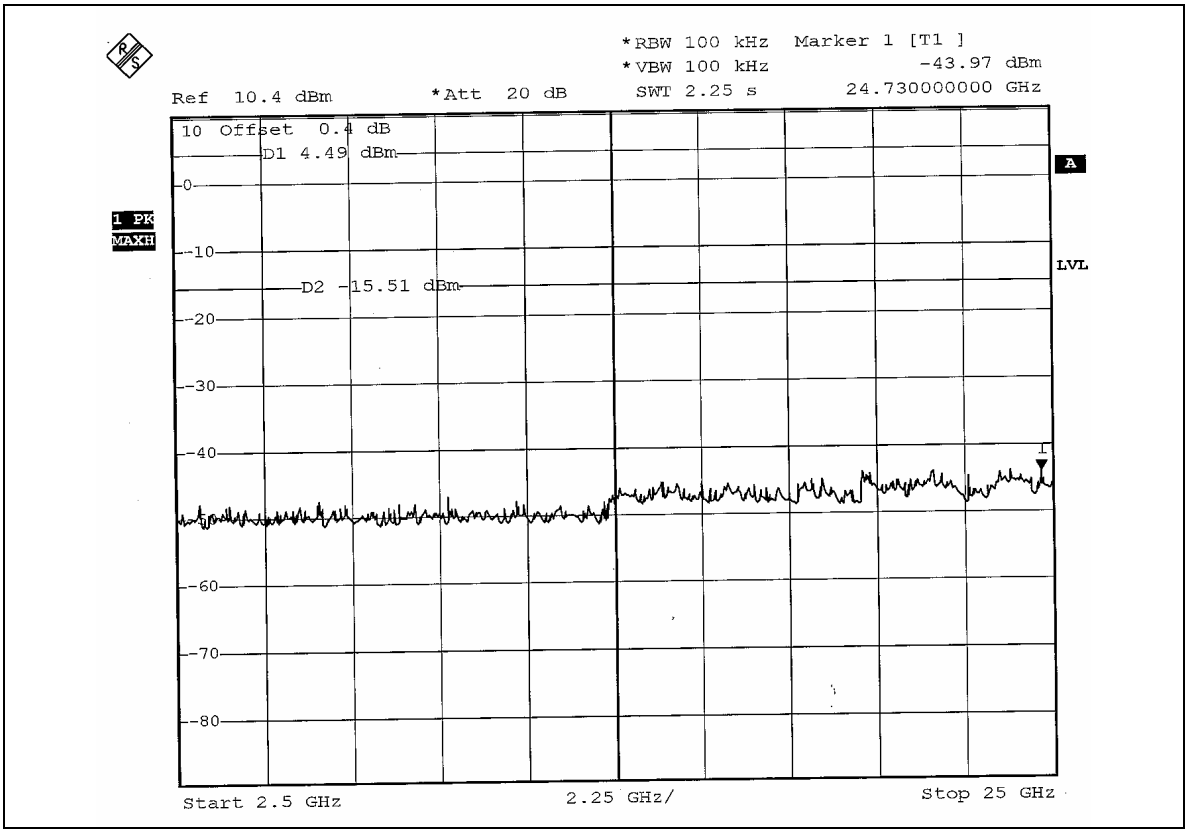




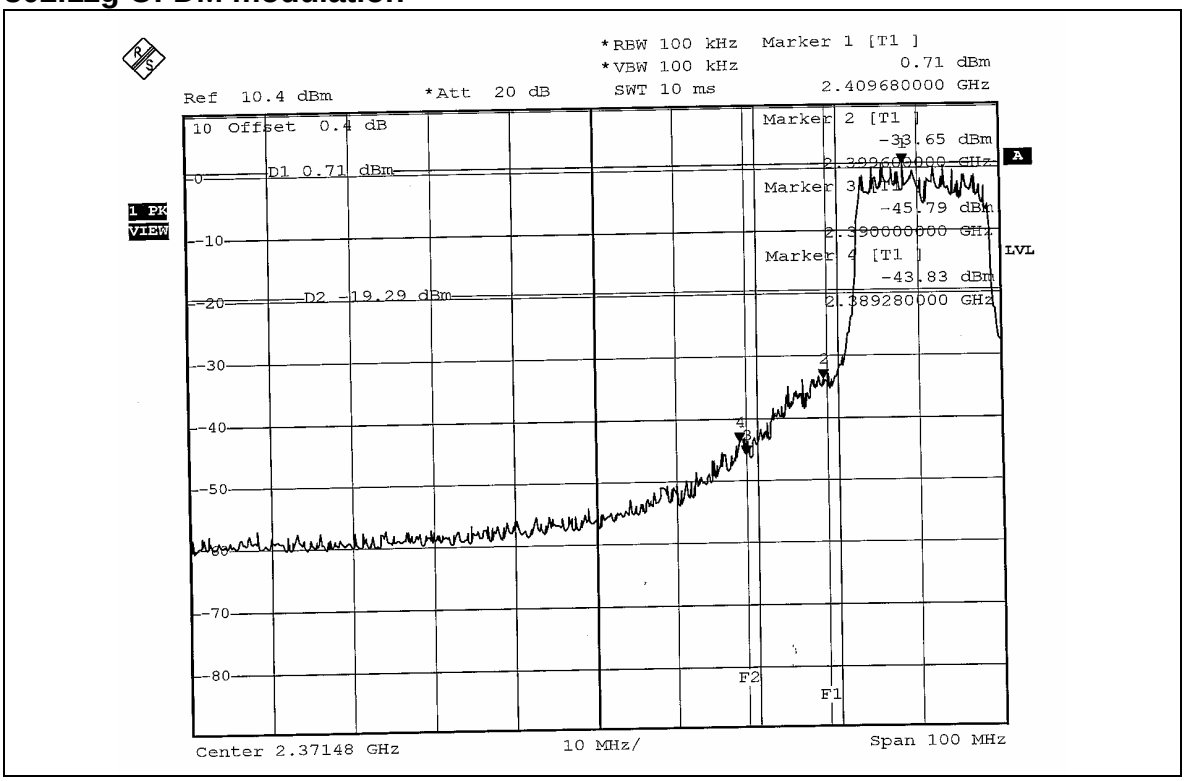

*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-43.81 dBm
23.920000000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
D1 3.8 dBm
D2 -16.2 dBm
1 PK
MAXH
A
LVL
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

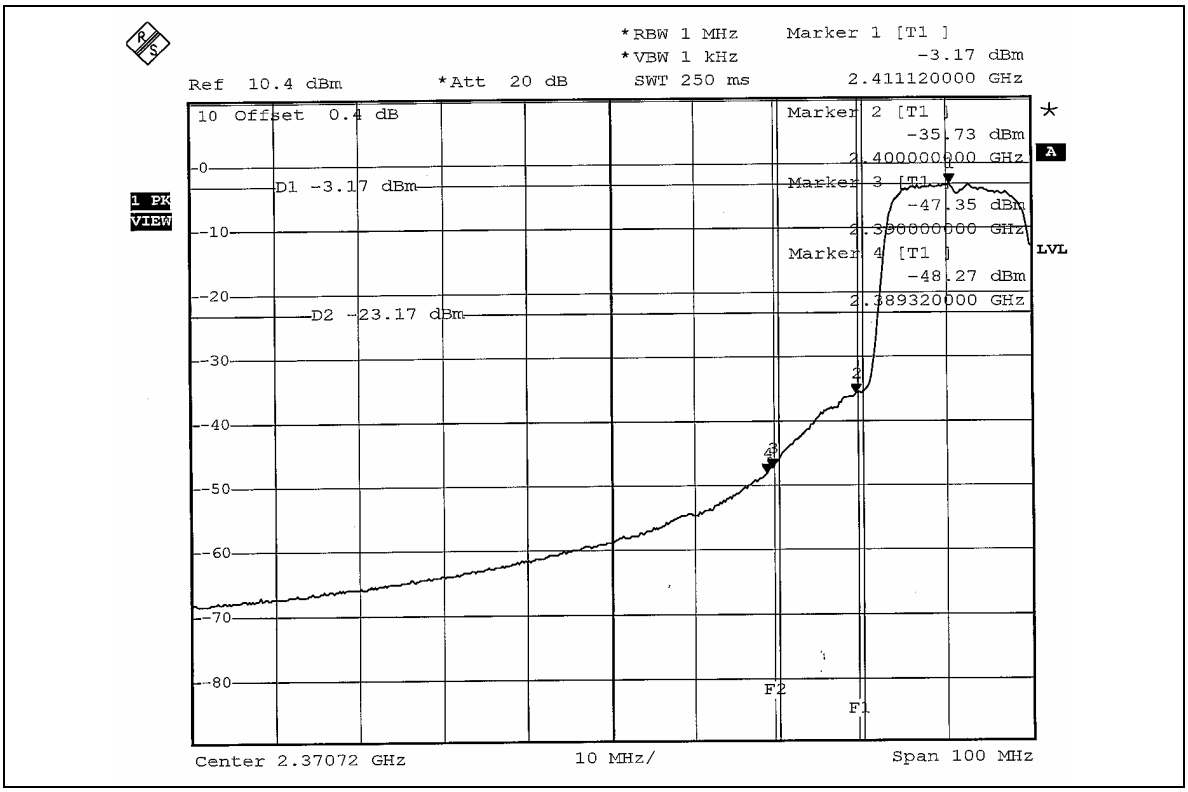

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
4.94 dBm
2.463200000 GHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
Marker 2 [T1]
-48.18 dBm
2.483500000 GHz
Marker 3 [T1]
-45.17 dBm
2.487600000 GHz
Marker 4 [T1]
-49.76 dBm
2.500000000 GHz
D1 4.49 dBm
D2 -15.51 dBm
1 PK
VIEW
A
LVL
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz

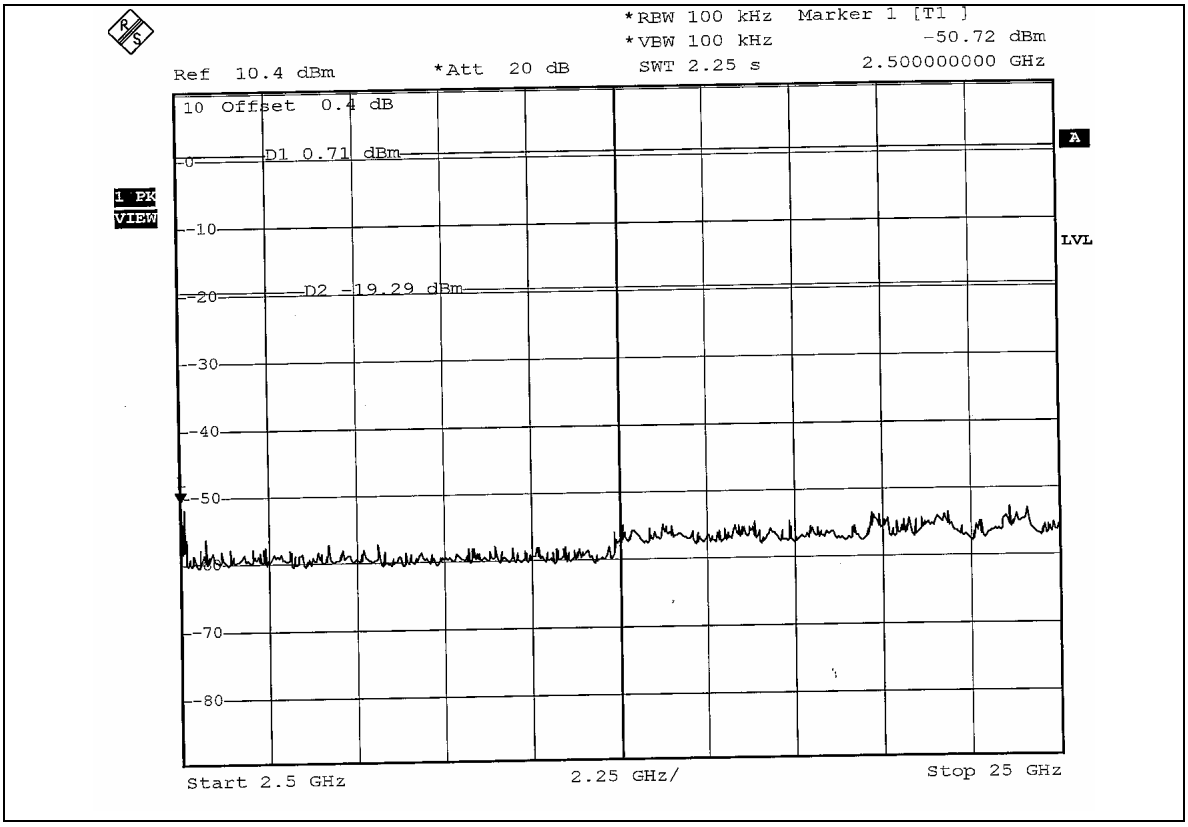

*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
4.30 dBm
2.462600000 GHz
Ref 20.4 dBm
*Att 30 dB
20 Offset 0.4 dB
Marker 2 [T1]
-52.31 dBm
2.483500000 GHz
Marker 3 [T1]
-50.72 dBm
2.487600000 GHz
Marker 4 [T1]
-56.17 dBm
2.500000000 GHz
1 PK
VIEW
D1 4.3 dBm
D2 -15.7 dBm
A
LVL
F1
F2
Center 2.5058 GHz
10 MHz/
Span 100 MHz

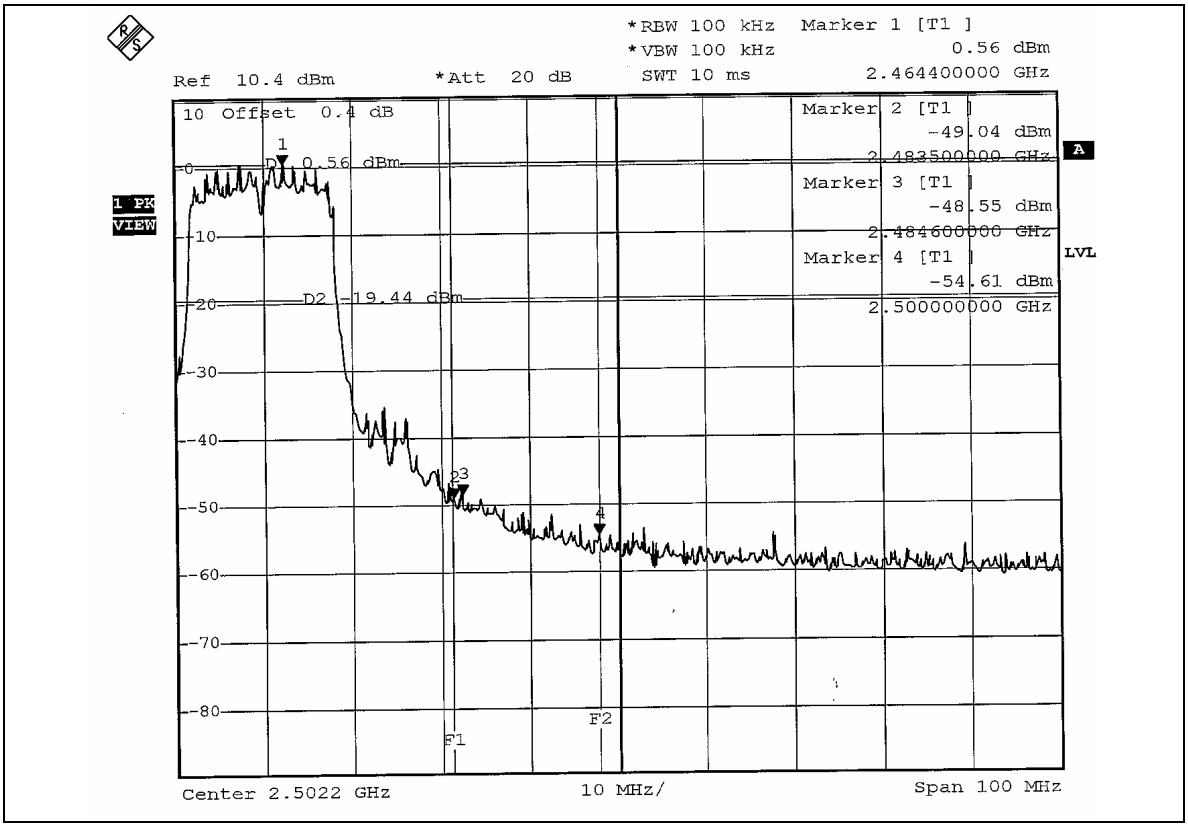

*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-43.97 dBm
24.730000000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
D1 4.49 dBm
D2 -15.51 dBm
1 PK
MAXH
A
LVL
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

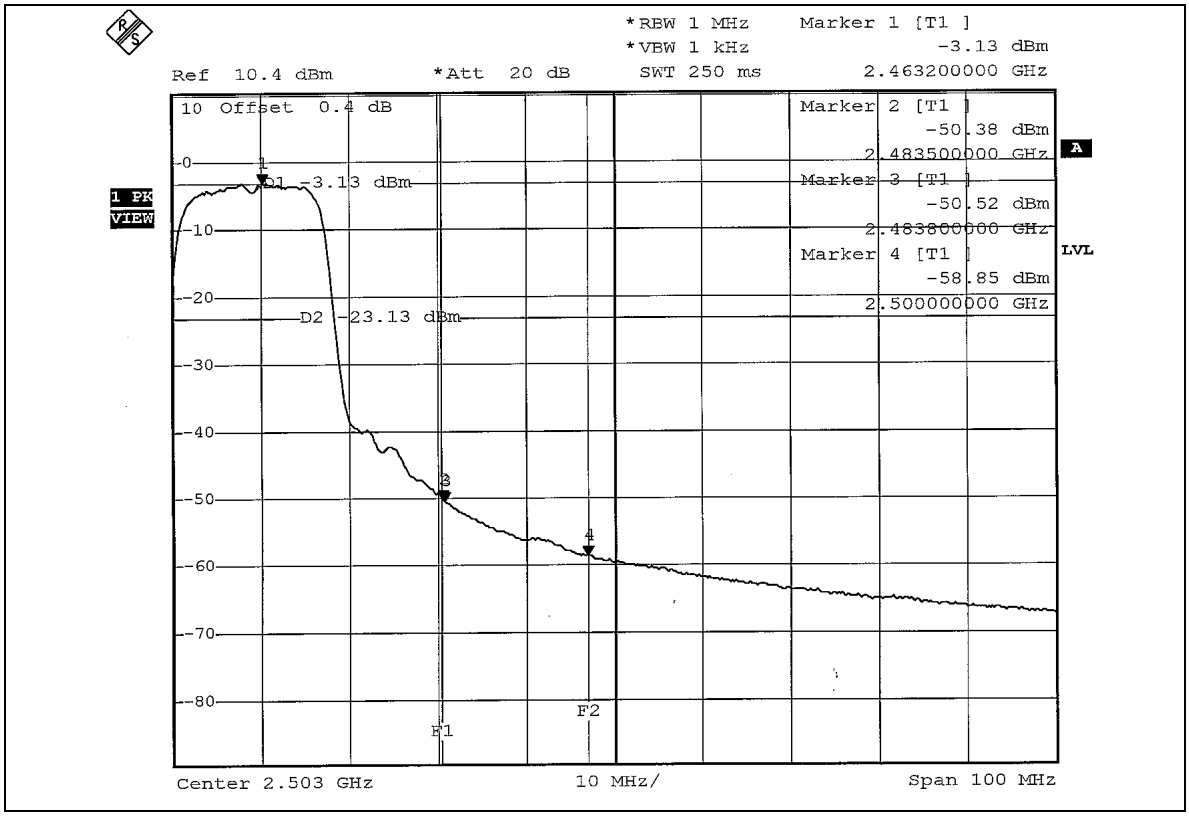
802.11g OFDM modulation

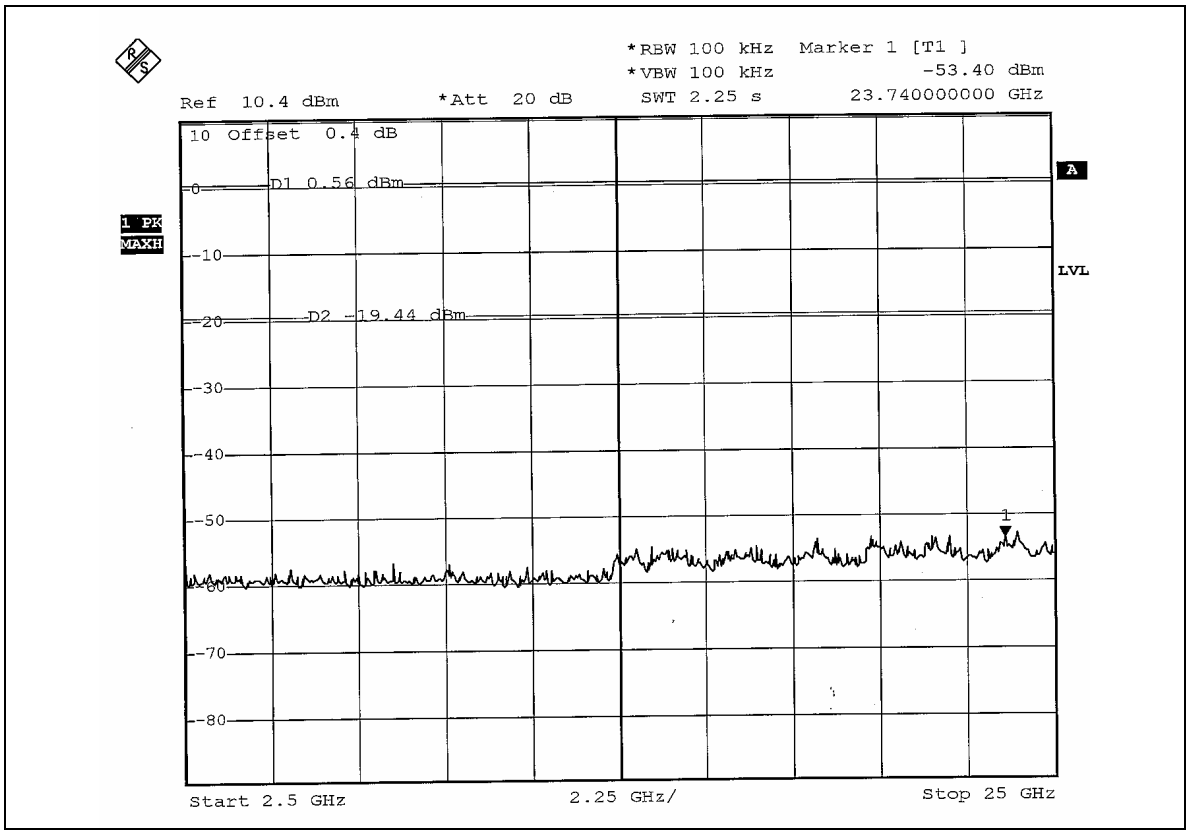





*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-50.72 dBm
2.500000000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
D1 0.71 dBm
D2 -19.29 dBm
1 PK
VIEW
A
LVL
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
0.56 dBm
2.464400000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
D1 0.56 dBm
D2 -19.44 dBm
Marker 2 [T1]
-49.04 dBm
2.483500000 GHz
Marker 3 [T1]
-48.55 dBm
2.484600000 GHz
Marker 4 [T1]
-54.61 dBm
2.500000000 GHz
1 PK
VIEW
A
LVL
F1
F2
Center 2.5022 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
-3.13 dBm
2.463200000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
Marker 2 [T1]
-50.38 dBm
2.483500000 GHz
Marker 3 [T1]
-50.52 dBm
2.483800000 GHz
Marker 4 [T1]
-58.85 dBm
2.500000000 GHz
D1 -3.13 dBm
D2 -23.13 dBm
1 PK
VIEW
A
LVL
F1
F2
Center 2.503 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-53.40 dBm
23.740000000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
D1 0.56 dBm
D2 -19.44 dBm
1 PK
MAXH
A
LVL
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

5 TEST TYPES AND RESULTS (For Dual Chain (TX))

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 50

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 16, 2005
RF signal cable Woken	5D-FB	Cable-HYC01-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Feb. 15, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Feb. 15, 2006
Software ADT	ADT_Cond_V3	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

5.1.3 TEST PROCEDURES

d. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

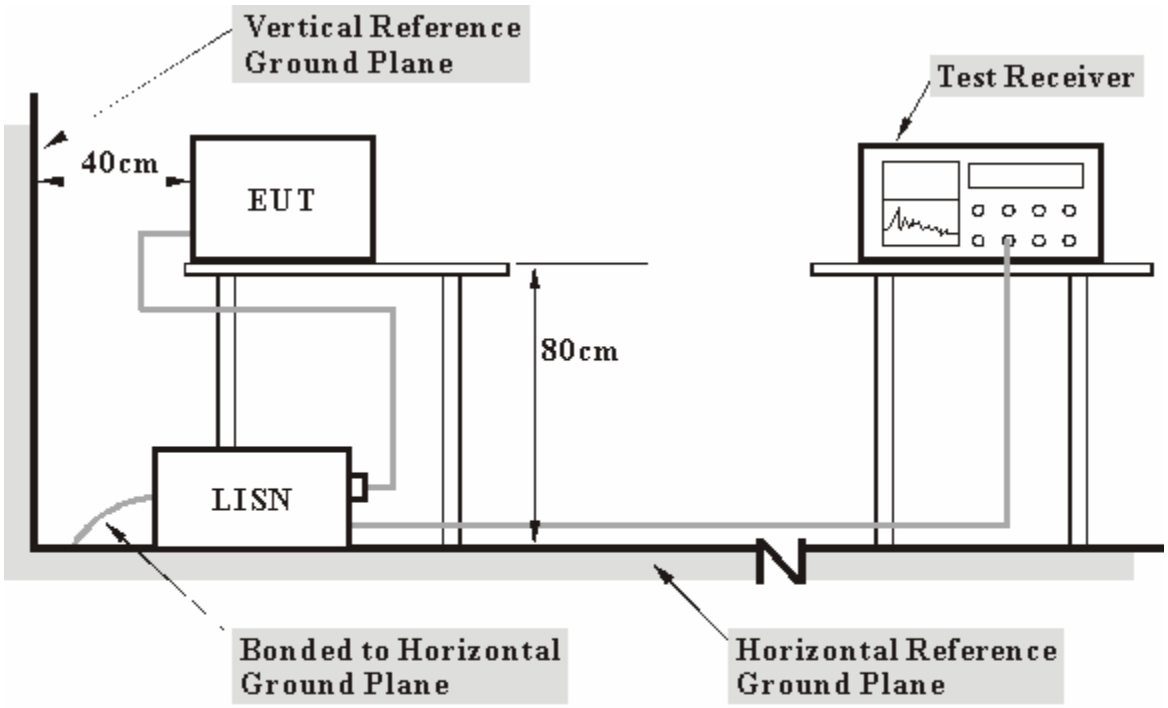
e. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

f. The frequency range from 150kHz to 30MHz was searched. Emission levels under Limit - 20dB was not recorded.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.1.6 EUT OPERATING CONDITIONS

a. Connected the EUT into the computer system and placed on a testing table.
b. The computer system ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
c. The notebook system show “H” messages on its screen.
d. The notebook system show “H” messages to modem.
e. The notebook system sent "H" messages to printer and the printer prints them on paper.
f. Repeated item c ~e.

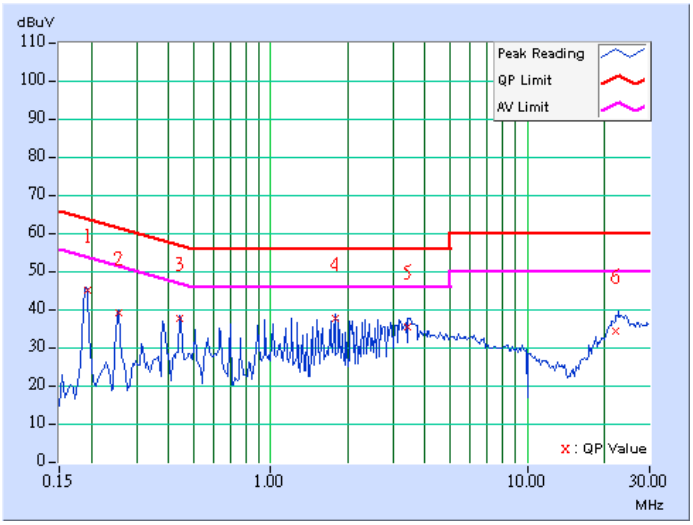
5.1.7 TEST RESULTS

Conducted Worst Case Data - 802.11g OFDM modulation

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**PHASE**	Line 1
CHANNEL	Channel 1	**6dB BANDWIDTH**	9 kHz
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	23deg. C, 65%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TESTED BY**	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.17	43.84	44.28	43.95	63.91	53.91	-19.63	-9.96
2	0.255	0.11	38.18	-	38.29	-	61.58	51.58	-23.29	-
3	0.443	0.12	36.54	-	36.66	-	57.01	47.01	-20.35	-
4	1.777	0.26	36.58	35.81	36.84	36.07	56.00	46.00	-19.16	-9.93
5	3.426	0.35	34.56	-	34.91	-	56.00	46.00	-21.09	-
6	22.152	1.17	33.36	-	34.53	-	60.00	50.00	-25.47	-

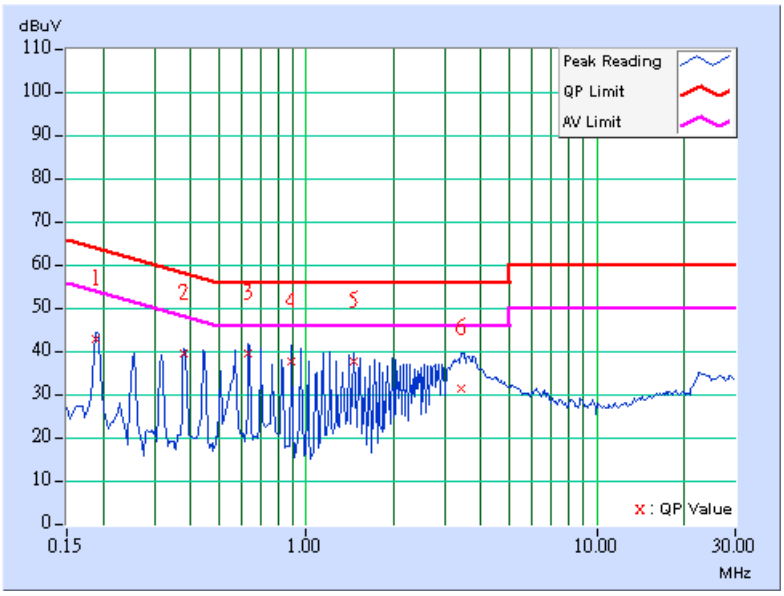
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	16QAM	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	36Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.11	42.64	-	42.75	-	64.08	54.08	-21.33	-
2	0.380	0.11	39.35	39.12	39.46	39.23	58.27	48.27	-18.81	-9.04
3	0.634	0.16	39.16	38.91	39.32	39.07	56.00	46.00	-16.68	-6.93
4	0.888	0.22	37.43	36.72	37.65	36.94	56.00	46.00	-18.35	-9.06
5	1.465	0.25	37.51	37.21	37.76	37.46	56.00	46.00	-18.24	-8.54
6	3.430	0.35	31.28	-	31.63	-	56.00	46.00	-24.37	-

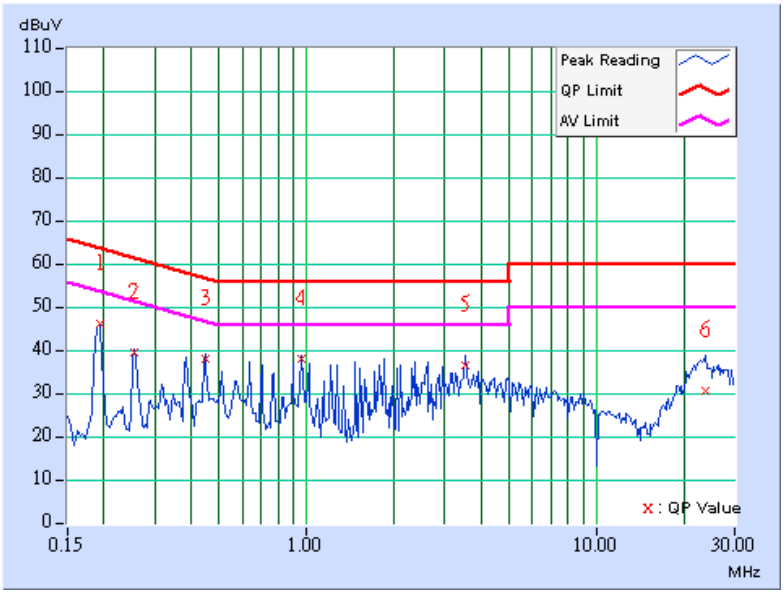
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	16QAM	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	36Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.95	44.48	45.06	44.59	63.91	53.91	-18.85	-9.32
2	0.255	0.11	38.48	-	38.59	-	61.58	51.58	-22.99	-
3	0.447	0.12	37.04	36.38	37.16	36.50	56.93	46.93	-19.77	-10.43
4	0.959	0.23	36.73	37.16	36.96	36.32	56.00	46.00	-19.04	-9.68
5	3.512	0.36	35.56	-	35.92	-	56.00	46.00	-20.08	-
6	23.746	1.27	29.30	-	30.57	-	60.00	50.00	-29.43	-

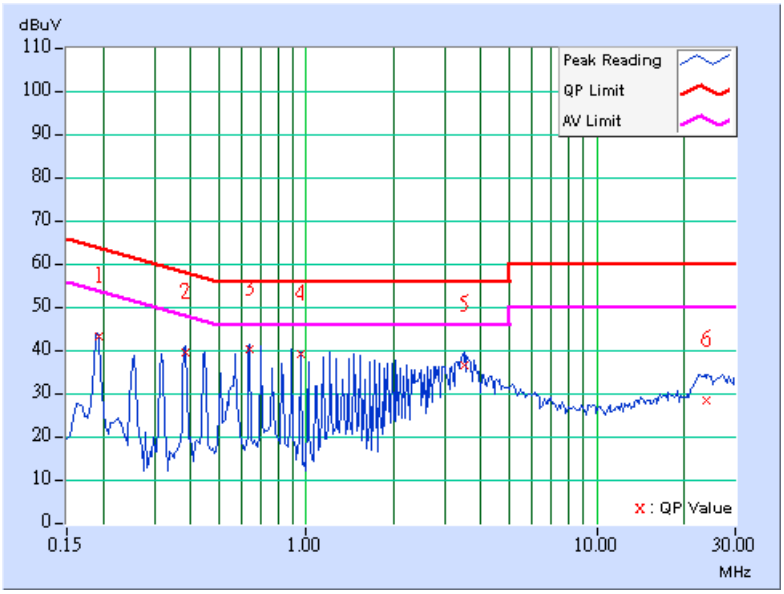
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	16QAM	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	36Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	42.66	-	42.77	-	63.91	53.91	-21.14	-
2	0.384	0.11	38.93	38.27	39.04	38.38	58.18	48.18	-19.14	-9.80
3	**0.638**	**0.16**	**39.57**	**39.21**	**39.73**	**39.37**	**56.00**	**46.00**	**-16.27**	**-6.63**
4	0.955	0.23	38.59	38.51	38.82	38.74	56.00	46.00	-17.18	-7.26
5	3.500	0.36	35.80	32.51	36.16	32.87	56.00	46.00	-19.84	-13.13
6	23.996	0.83	27.72	-	28.55	-	60.00	50.00	-31.45	-

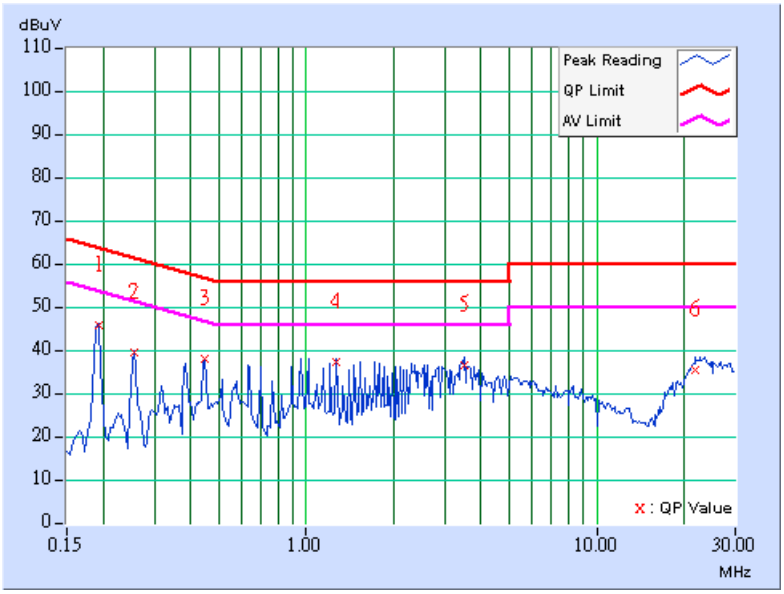
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	16QAM	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	36Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.83	44.52	44.94	44.63	63.91	53.91	-18.97	-9.28
2	0.255	0.11	38.52	-	38.63	-	61.58	51.58	-22.95	-
3	0.447	0.12	37.00	36.31	37.12	36.43	56.93	46.93	-19.81	-10.50
4	1.273	0.25	36.12	35.64	36.37	-35.89	56.00	46.00	-19.63	-10.11
5	3.504	0.36	35.62	-	35.98	-	56.00	46.00	-20.02	-
6	21.922	1.15	34.44	-	35.59	-	60.00	50.00	-24.41	-

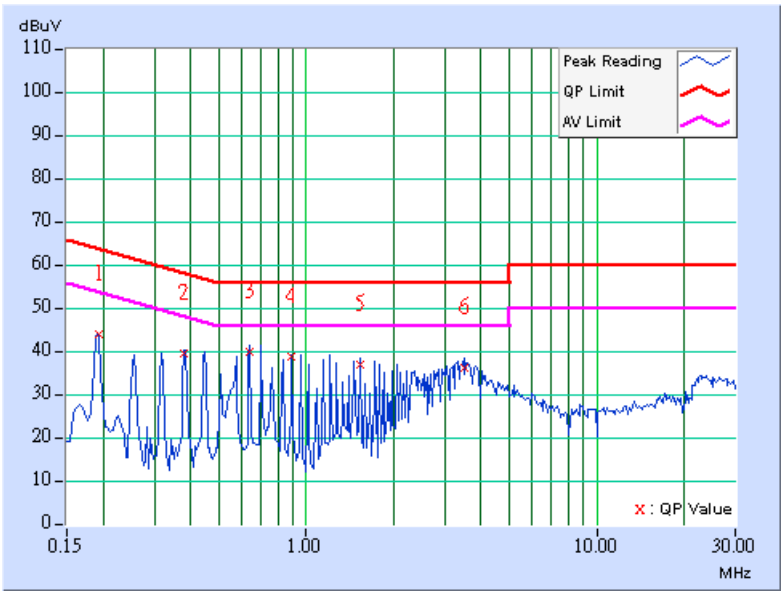
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless-G PCI Adapter with SRX	MEASUREMENT DETAIL	
MODEL	WMP54GX	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	16QAM	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	36Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST CONFIGURE MODE	2	TESTED BY	Gary Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	43.55	-	43.66	-	63.91	53.91	-20.25	-
2	0.380	0.11	39.09	38.89	39.20	39.00	58.27	48.27	-19.07	-9.27
3	0.638	0.16	39.81	39.58	39.97	39.74	56.00	46.00	-16.03	-6.26
4	0.892	0.22	38.57	37.95	38.79	38.17	56.00	46.00	-17.21	-7.83
5	1.531	0.25	36.73	36.16	36.98	36.41	56.00	46.00	-19.02	-9.59
6	3.504	0.36	35.84	-	36.20	-	56.00	46.00	-19.80	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

5.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Dec. 19, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 21, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Jan. 22, 2006
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 16, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170241	Feb. 23, 2006
Preamplifier Agilent	8449B	3008A01961	Nov. 09, 2005
Preamplifier Agilent	8447D	2944A10629	Nov. 09, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218182/4	Feb. 17, 2006
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218194/4	Feb. 17, 2006
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA
Turn Table ADT.	TT100.	TT93021702	NA
Controller ADT.	SC100.	SC93021702	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Chamber 1.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The IC Site Registration No. is IC4924-2.

5.2.3 TEST PROCEDURES

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.

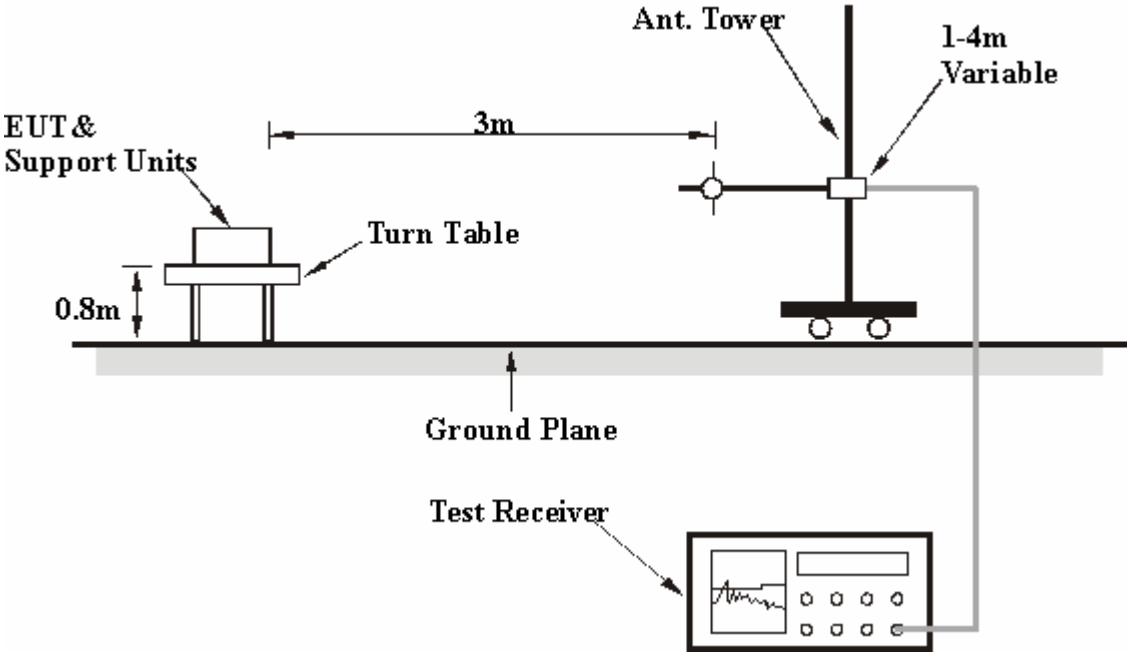
b. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.

c. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1KHz for Average detection (AV) at frequency above 1GHz.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation

5.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

5.2.7 TEST RESULTS

Below 1GHz Worst Case Data (Antenna 1)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Dual chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.33	25.24 QP	40.00	-14.76	1.50 H	250	11.11	14.13
2	96.09	30.87 QP	43.50	-12.63	1.50 H	61	20.43	10.43
3	185.51	37.83 QP	43.50	-5.67	1.50 H	61	25.55	12.27
4	236.05	34.45 QP	46.00	-11.55	1.50 H	163	21.79	12.66
5	269.10	34.38 QP	46.00	-11.62	1.00 H	172	20.77	13.61
6	302.14	41.41 QP	46.00	-4.59	1.00 H	187	27.04	14.38
7	488.76	38.35 QP	46.00	-7.65	1.50 H	274	19.91	18.43
8	603.45	33.29 QP	46.00	-12.71	1.50 H	37	12.35	20.94
9	667.60	35.81 QP	46.00	-10.19	1.00 H	358	13.99	21.82
10	698.70	32.47 QP	46.00	-13.53	1.00 H	19	10.24	22.23
11	792.00	33.49 QP	46.00	-12.51	1.00 H	16	9.84	23.66

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Dual chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.33	28.81 QP	40.00	-11.19	1.00 V	310	14.68	14.13
2	86.37	25.23 QP	40.00	-14.77	1.00 V	172	15.36	9.88
3	185.51	29.96 QP	43.50	-13.54	1.50 V	31	17.68	12.27
4	302.14	39.64 QP	46.00	-6.36	1.50 V	325	25.26	14.38
5	488.76	39.67 QP	46.00	-6.33	1.00 V	148	21.23	18.43
6	607.33	32.77 QP	46.00	-13.23	1.50 V	172	11.77	21.00
7	667.60	33.95 QP	46.00	-12.05	1.50 V	355	12.13	21.82
8	879.48	31.12 QP	46.00	-14.88	1.00 V	172	6.42	24.70
9	945.57	32.67 QP	46.00	-13.33	1.00 V	175	7.10	25.57

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

Below 1GHz Worst Case Data (Antenna 2)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Dual chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.49	27.21 QP	40.00	-12.79	2.50 H	289	12.45	14.76
2	96.09	35.06 QP	43.50	-8.44	2.50 H	94	24.62	10.43
3	185.51	35.42 QP	43.50	-8.08	2.00 H	73	23.15	12.27
4	236.05	32.20 QP	46.00	-13.80	1.00 H	127	19.54	12.66
5	269.10	33.52 QP	46.00	-12.48	1.00 H	115	19.90	13.61
6	**302.14**	**44.55 QP**	**46.00**	**-1.45**	**1.00 H**	**64**	**30.18**	**14.38**
7	496.53	39.87 QP	46.00	-6.13	1.50 H	235	21.33	18.54
8	603.45	33.77 QP	46.00	-12.23	1.25 H	28	12.83	20.94
9	667.60	37.08 QP	46.00	-8.92	1.25 H	1	15.26	21.82
10	698.70	32.87 QP	46.00	-13.13	1.25 H	13	10.64	22.23
11	776.45	33.65 QP	46.00	-12.35	1.00 H	25	10.08	23.57
12	811.44	31.22 QP	46.00	-14.78	1.00 H	28	7.43	23.80

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	24deg. C, 63%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Dual chain
TESTED BY	Bright Chang		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.49	30.46 QP	40.00	-9.54	1.25 V	301	15.70	14.76
2	86.37	26.80 QP	40.00	-13.20	1.00 V	97	16.93	9.88
3	185.51	31.94 QP	43.50	-11.56	1.75 V	28	19.66	12.27
4	269.10	31.76 QP	46.00	-14.24	2.00 V	187	18.15	13.61
5	302.14	42.36 QP	46.00	-3.64	1.75 V	307	27.98	14.38
6	488.76	40.47 QP	46.00	-5.53	1.00 V	151	22.04	18.43
7	607.33	34.10 QP	46.00	-11.90	1.50 V	166	13.11	21.00
8	667.60	33.63 QP	46.00	-12.37	1.50 V	349	11.81	21.82
9	811.44	31.84 QP	46.00	-14.16	1.25 V	157	8.04	23.80
10	879.48	31.92 QP	46.00	-14.08	1.00 V	175	7.22	24.70
11	933.91	31.63 QP	46.00	-14.37	1.00 V	175	6.18	25.45

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

802.11g OFDM modulation (Antenna 1)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 1	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Dual chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	55.42 PK	74.00	-18.58	1.06 H	360	24.45	30.97
1	2390.00	44.11 AV	54.00	-9.89	1.06 H	360	13.14	30.97
2	*2412.00	95.39 PK			1.06 H	360	64.33	31.06
2	*2412.00	76.59 AV			1.06 H	360	45.53	31.06
3	4824.00	44.40 PK	74.00	-29.60	1.06 H	180	7.97	36.43
3	4824.00	31.60 AV	54.00	-22.40	1.06 H	180	-4.83	36.43

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	65.76 PK	74.00	-8.24	1.10 V	29	34.79	30.97
1	2390.00	50.05 AV	54.00	-3.95	1.10 V	29	19.08	30.97
2	*2412.00	109.20 PK			1.10 V	29	78.14	31.06
2	*2412.00	88.45 AV			1.10 V	29	57.39	31.06
3	4824.00	44.17 PK	74.00	-29.83	1.05 V	70	7.74	36.43
3	4824.00	31.92 AV	54.00	-22.08	1.05 V	70	-4.51	36.43

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 6	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Dual chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	98.55 PK			1.04 H	187	67.38	31.17
1	*2437.00	79.96 AV			1.04 H	187	48.79	31.17
2	4874.00	44.51 PK	74.00	-29.49	1.04 H	187	7.97	36.54
2	4874.00	32.37 AV	54.00	-21.63	1.04 H	187	-4.17	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	110.96 PK			1.08 V	21	79.79	31.17
1	*2437.00	89.55 AV			1.08 V	21	58.38	31.17
2	4874.00	44.90 PK	74.00	-29.10	1.04 V	10	8.36	36.54
2	4874.00	32.84 AV	54.00	-21.16	1.04 V	10	-3.70	36.54

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**1**	**TEST MODE**	Dual chain
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	97.95 PK			1.32 H	228	66.67	31.28
1	*2462.00	78.52 AV			1.32 H	228	47.24	31.28
2	2483.50	53.37 PK	74.00	-20.63	1.32 H	228	22.00	31.37
2	2483.50	44.57 AV	54.00	-9.43	1.32 H	228	13.20	31.37
3	4924.00	44.61 PK	74.00	-29.39	1.08 H	177	7.95	36.66
3	4924.00	32.52 AV	54.00	-21.48	1.08 H	177	-4.14	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	110.57 PK			1.07 V	23	79.29	31.28
1	*2462.00	90.12 AV			1.07 V	23	58.84	31.28
2	2483.50	64.37 PK	74.00	-9.63	1.07 V	23	33.00	31.37
2	2483.50	49.78 AV	54.00	-4.22	1.07 V	23	18.41	31.37
3	4924.00	45.62 PK	74.00	-28.38	1.10 V	350	8.96	36.66
3	4924.00	32.62 AV	54.00	-21.38	1.10 V	350	-4.04	36.66

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

802.11g OFDM modulation (Antenna 2)

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 1	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Dual chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	57.86 PK	74.00	-16.14	1.32 H	286	26.89	30.97
1	2390.00	38.66 AV	54.00	-15.34	1.32 H	286	7.69	30.97
2	*2412.00	98.52 PK			1.32 H	286	67.46	31.06
2	*2412.00	79.32 AV			1.32 H	286	48.26	31.06

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	66.74 PK	74.00	-7.26	1.09 V	140	34.87	31.87
1	2390.00	52.33 AV	54.00	-1.67	1.09 V	140	20.46	31.87
2	*2412.00	113.18 PK			1.09 V	140	81.22	31.96
2	*2412.00	91.54 AV			1.09 V	140	59.58	31.96
3	4824.00	50.26 PK	74.00	-23.74	1.08 V	33	12.43	37.83
3	4824.00	36.81 AV	54.00	-17.19	1.08 V	33	-1.02	37.83

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 6	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Dual chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	101.19 PK			1.30 H	288	70.02	31.17
1	*2437.00	81.82 AV			1.30 H	288	50.65	31.17
2	4874.00	43.84 PK	74.00	-30.16	1.10 H	180	7.30	36.54
2	4874.00	32.07 AV	54.00	-21.93	1.10 H	180	-4.47	36.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	113.45 PK			1.01 V	128	82.28	31.17
1	*2437.00	90.81 AV			1.01 V	128	59.64	31.17
2	4874.00	44.63 PK	74.00	-29.37	1.19 V	253	8.09	36.54
2	4874.00	33.36 AV	54.00	-20.64	1.19 V	253	-3.18	36.54

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

EUT	Wireless-G PCI Adapter with SRX	**MEASUREMENT DETAIL**	
MODEL	WMP54GX	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
MODULATION TYPE	16QAM	**ENVIRONMENTAL CONDITIONS**	21deg. C, 64%RH, 991hPa
TRANSFER RATE	36Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST CONFIGURE MODE	**2**	**TEST MODE**	Dual chain
TESTED BY	Brad Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.48 PK			1.27 H	288	69.20	31.28
1	*2462.00	81.38 AV			1.27 H	288	50.10	31.28
2	2483.50	58.68 PK	74.00	-15.32	1.27 H	288	27.31	31.37
2	2483.50	39.58 AV	54.00	-14.42	1.27 H	288	8.21	31.37
3	4924.00	44.94 PK	74.00	-29.06	1.10 H	174	8.28	36.66
3	4924.00	32.70 AV	54.00	-21.30	1.10 H	174	-3.96	36.66

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	113.20 PK			1.00 V	322	81.04	32.16
1	*2462.00	92.34 AV			1.00 V	322	60.18	32.16
2	2483.50	71.40 PK	74.00	-2.60	1.00 V	322	39.16	32.24
2	2483.50	50.54 AV	54.00	-3.46	1.00 V	322	18.30	32.24
3	4924.00	50.58 PK	74.00	-23.42	1.06 V	88	12.44	38.14
3	4924.00	36.97 AV	54.00	-17.03	1.06 V	88	-1.17	38.14

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency.

5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

5.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

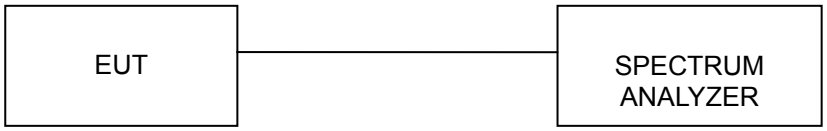
5.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP



For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

5.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

5.3.7 TEST RESULTS

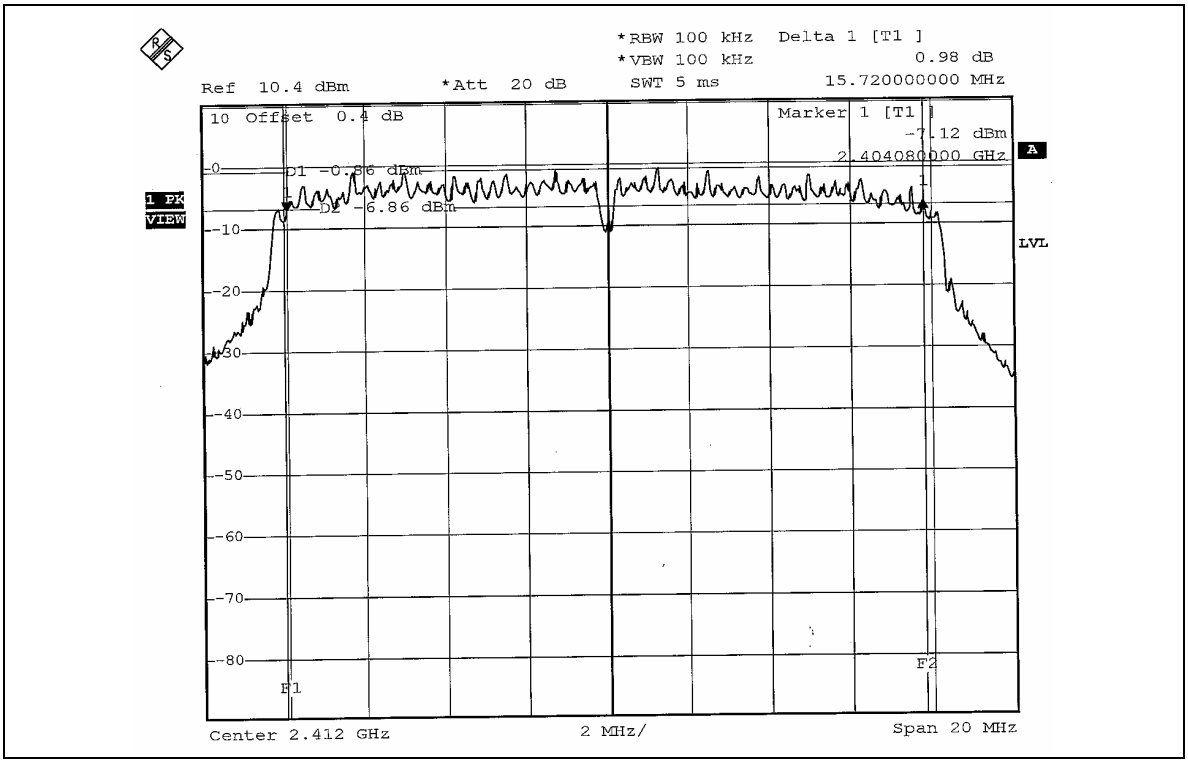
802.11g OFDM modulation

EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	16QAM	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Dual chain	**TESTED BY**	Match Tsui

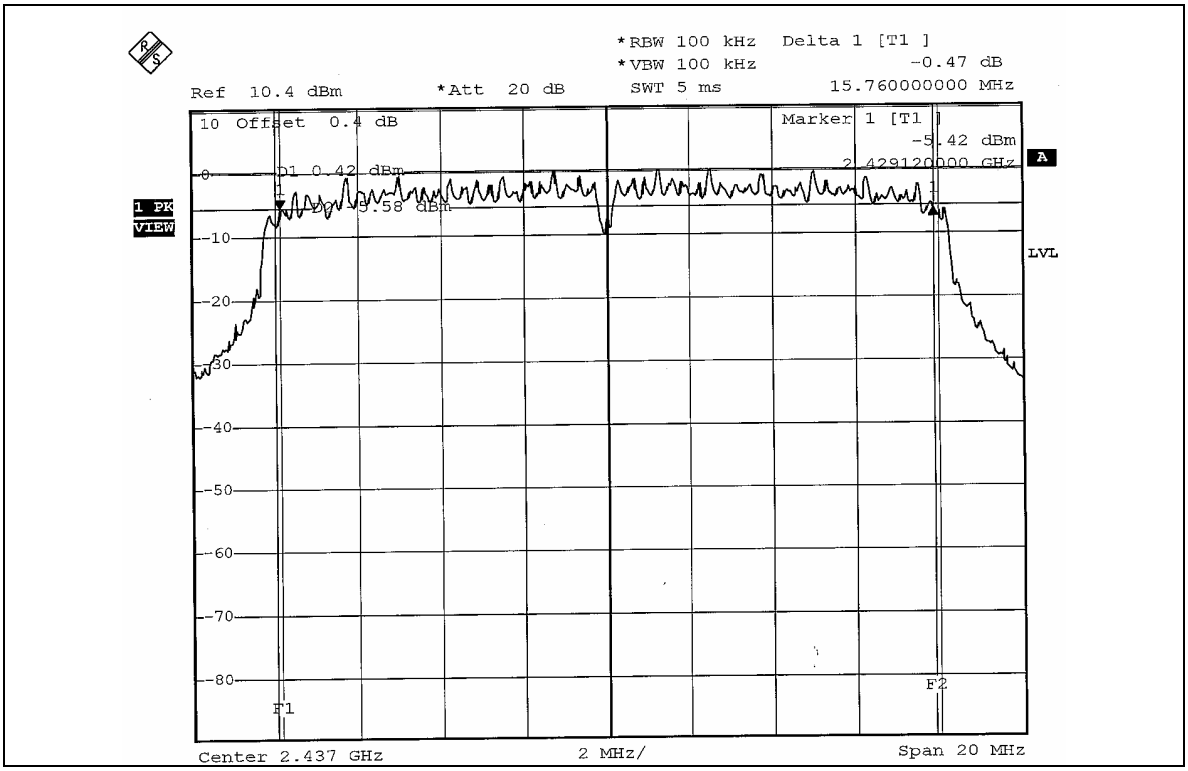
CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS/FAIL
		Chain 0	Chain 1		
1	2412	15.72	15.68	0.5	PASS
6	2437	15.76	15.96	0.5	PASS
11	2462	15.76	15.60	0.5	PASS

For Dual Chain (Chain 0):

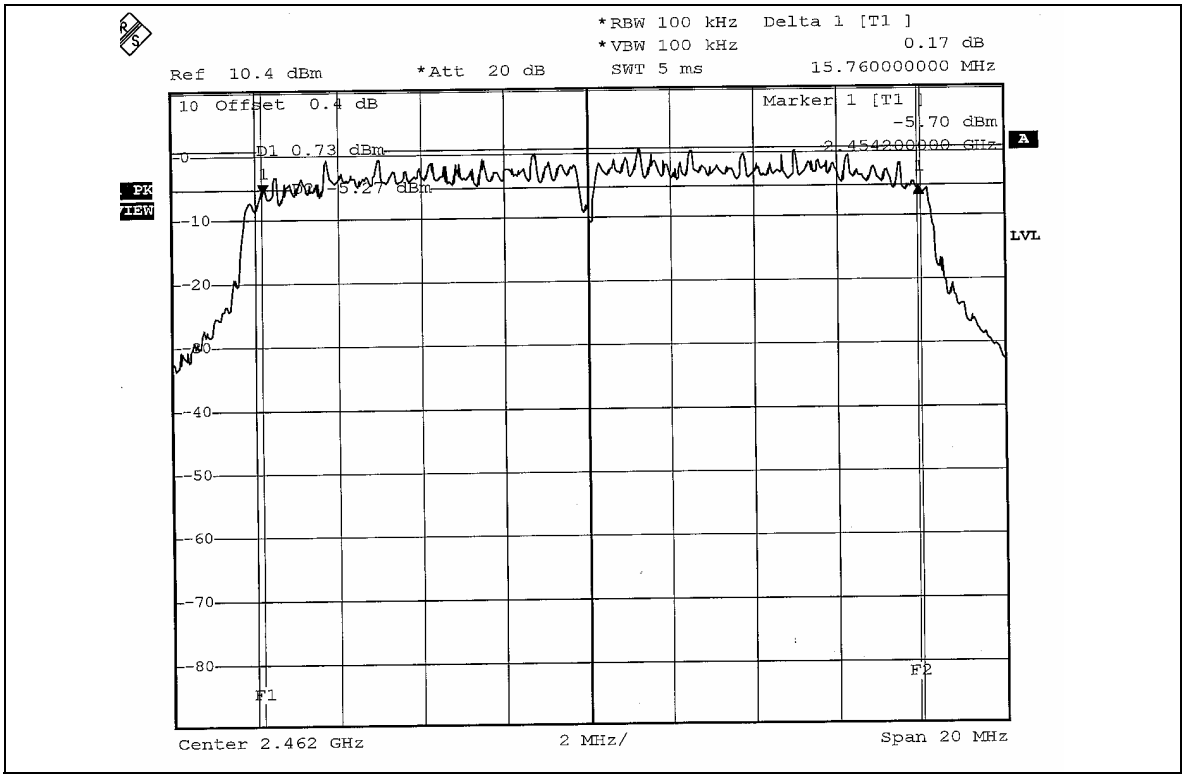
CH1



CH6

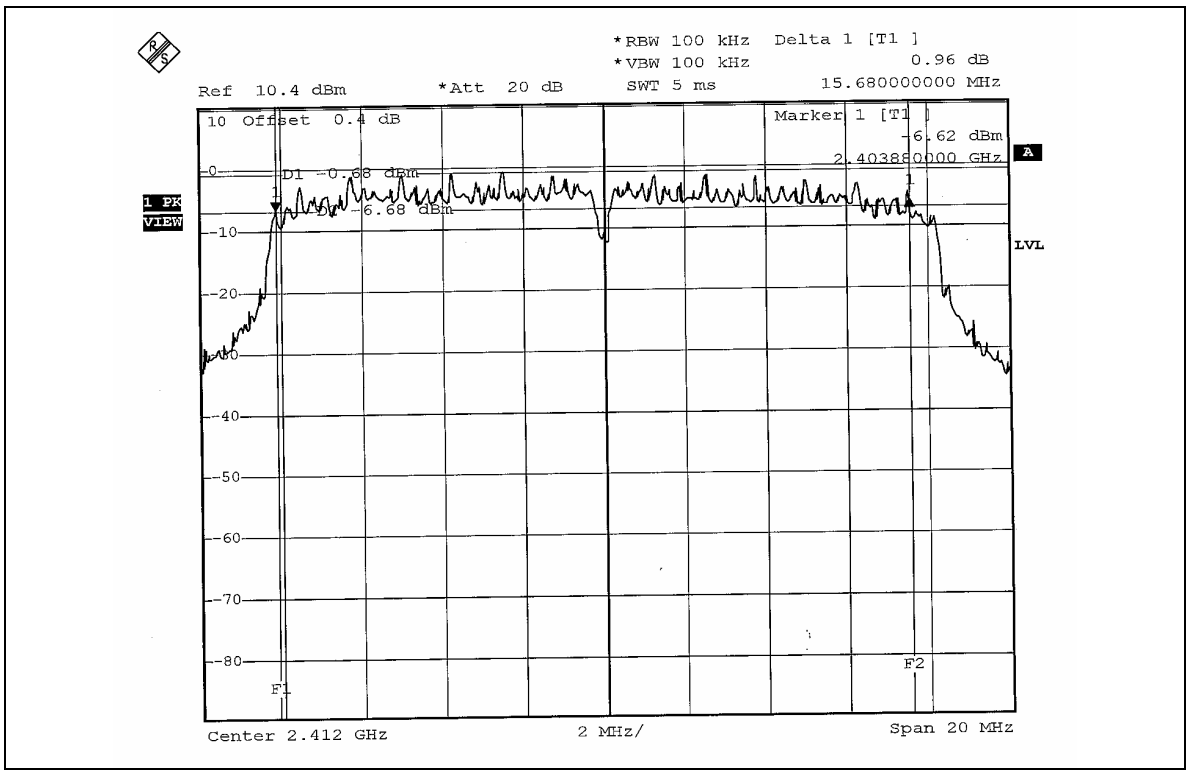


CH11

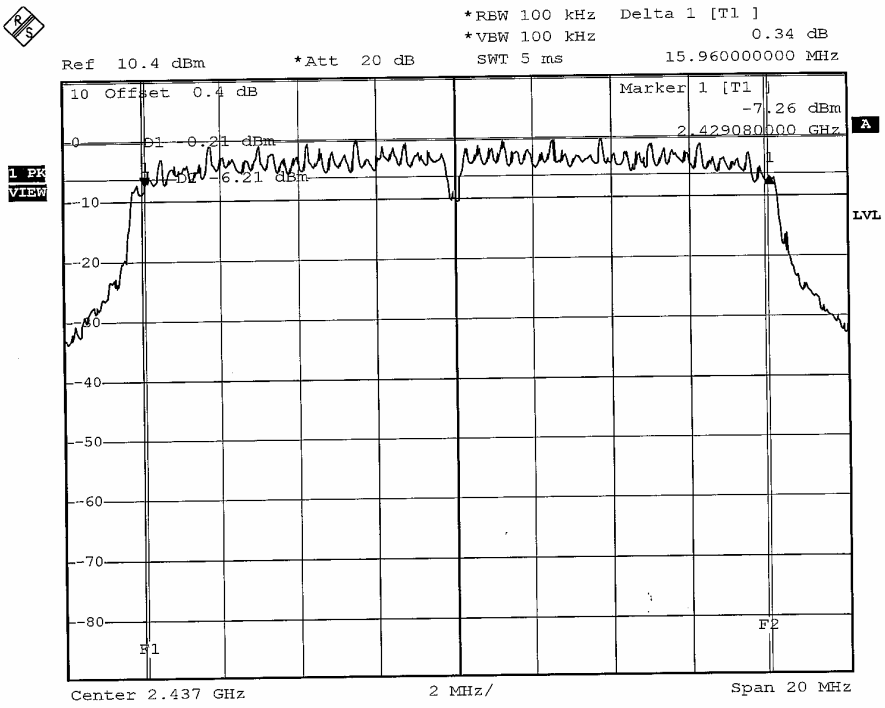


For Dual Chain (Chain 1):

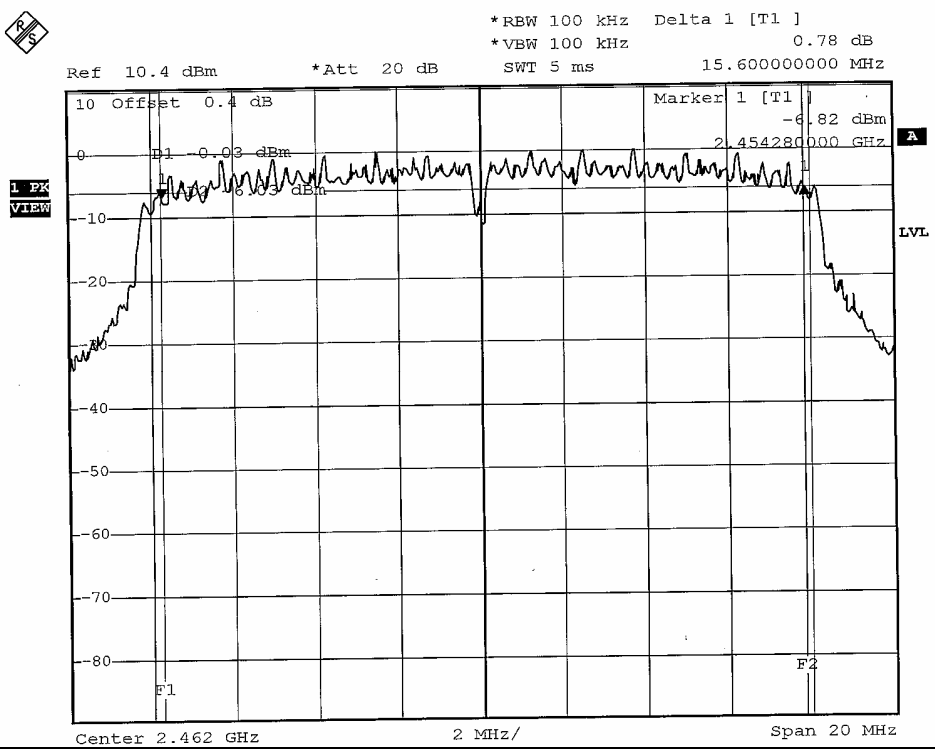
CH1



CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.34 dB
15.960000000 MHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
Marker 1 [T1]
-7.26 dBm
2.429080000 GHz
D1 -0.21 dBm
D2 -6.21 dBm
1 PK VIEW
A
LVL
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.78 dB
15.600000000 MHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
Marker 1 [T1]
-6.82 dBm
2.454280000 GHz
D1 -0.03 dBm
D2 -6.03 dBm
1 PK VIEW
A
LVL
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

5.4 MAXIMUM PEAK OUTPUT POWER

5.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm. .

5.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 06, 2005
TEKTRONIX OSCILLOSCOPE	TDS 220	C019167	Feb. 01, 2006
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.4.3 TEST PROCEDURES

A detector was used on the output port of the EUT. An oscilloscope was used to peak the response of the detector.

Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.

Adjusted the power to have the same peak reading on oscilloscope. Record the power level.

5.4.4 DEVIATION FROM TEST STANDARD

No deviation

5.4.5 TEST SETUP

5.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

5.4.7 TEST RESULTS

802.11g OFDM modulation

EUT	Wireless-G PCI Adapter with SRX	MODEL	WMP54GX
MODULATION TYPE	16QAM	TRANSFER RATE	36Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 63%RH, 991hPa
TEST MODE	Dual chain	TESTED BY	Match Tsui

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)		PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
		Chain 0	Chain 1	Chain 0	Chain 1				
1	2412	26.363	26.002	14.21	14.15	52.360	17.190	29	PASS
6	2437	26.485	26.182	14.23	14.18	52.662	17.215	29	PASS
11	2462	26.915	25.942	14.30	14.14	52.857	17.231	29	PASS

Note: According to 15.247(b) (4), the maximum antenna gain 7dBi is higher than 6dBi, so limit of peak power shall be reduced by 1dBi.

5.5 POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

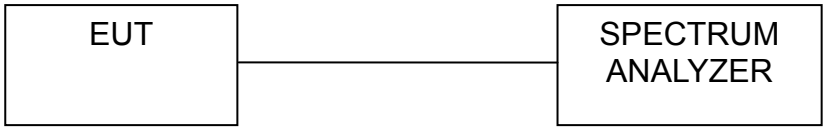
5.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time=span/3kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

5.5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6

5.5.7 TEST RESULTS

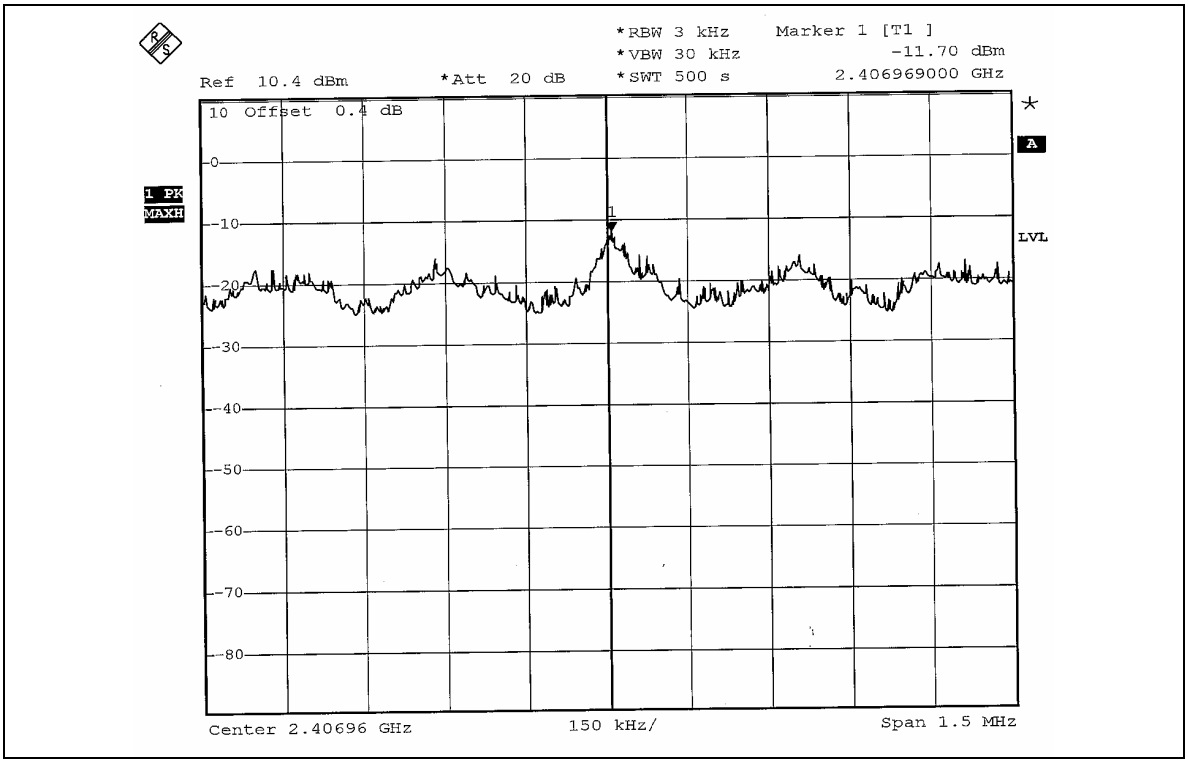
802.11g OFDM modulation

EUT	Wireless-G PCI Adapter with SRX	**MODEL**	WMP54GX
MODULATION TYPE	16QAM	**TRANSFER RATE**	36Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 63%RH, 991hPa
TEST MODE	Dual chain	**TESTED BY**	Match Tsui

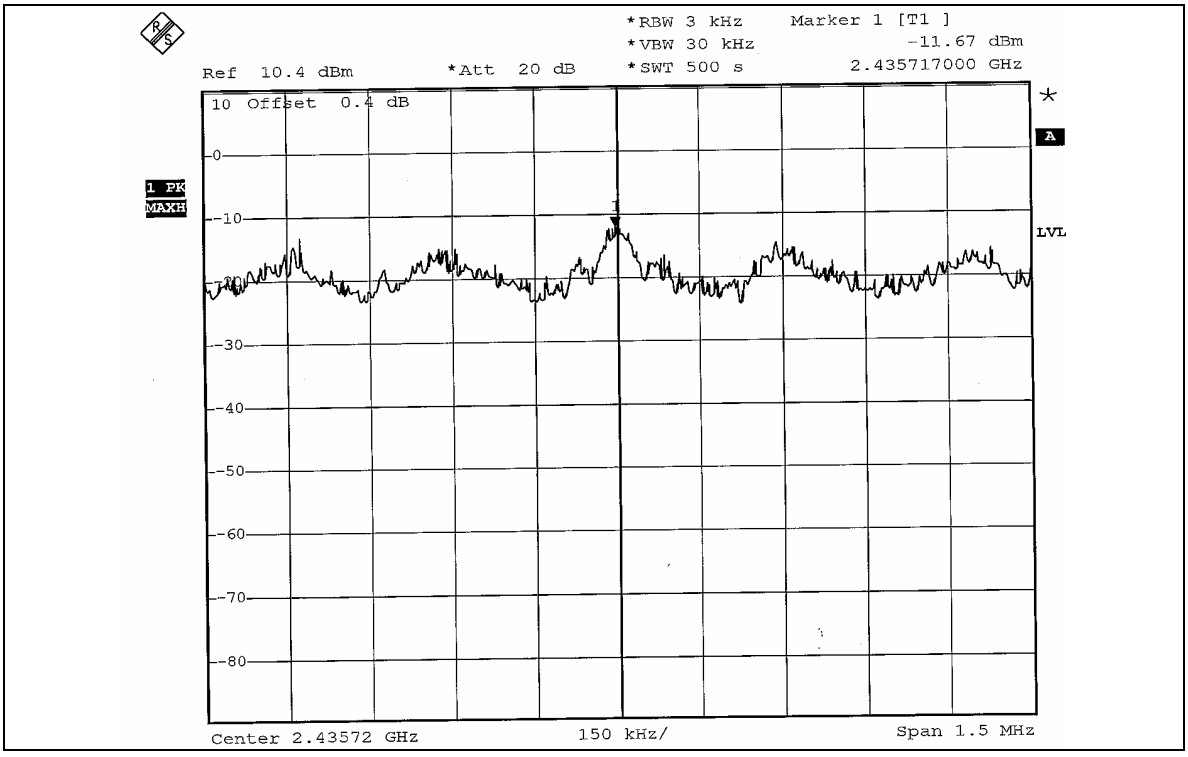
CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain 0	Chain 1		
1	2412	-11.70	-12.08	8	PASS
6	2437	-11.67	-11.87	8	PASS
11	2462	-10.91	-11.23	8	PASS

For Dual Chain (Chain 0):

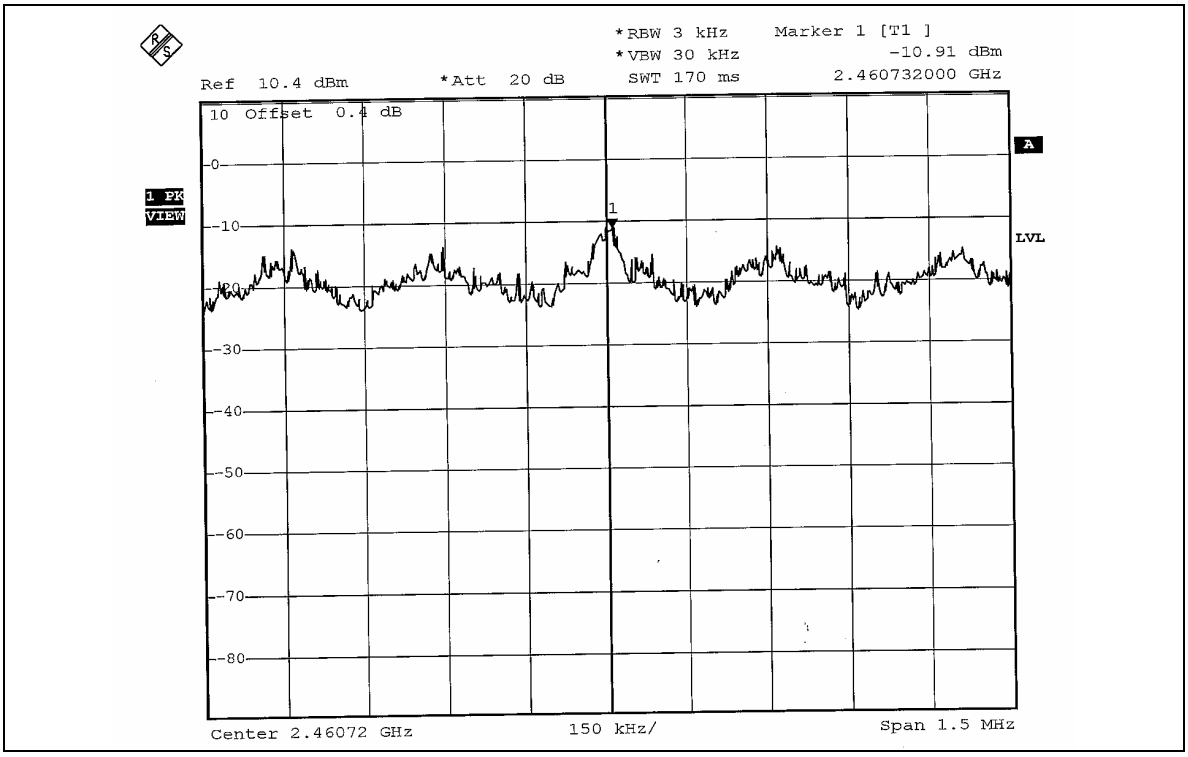
CH1



CH6

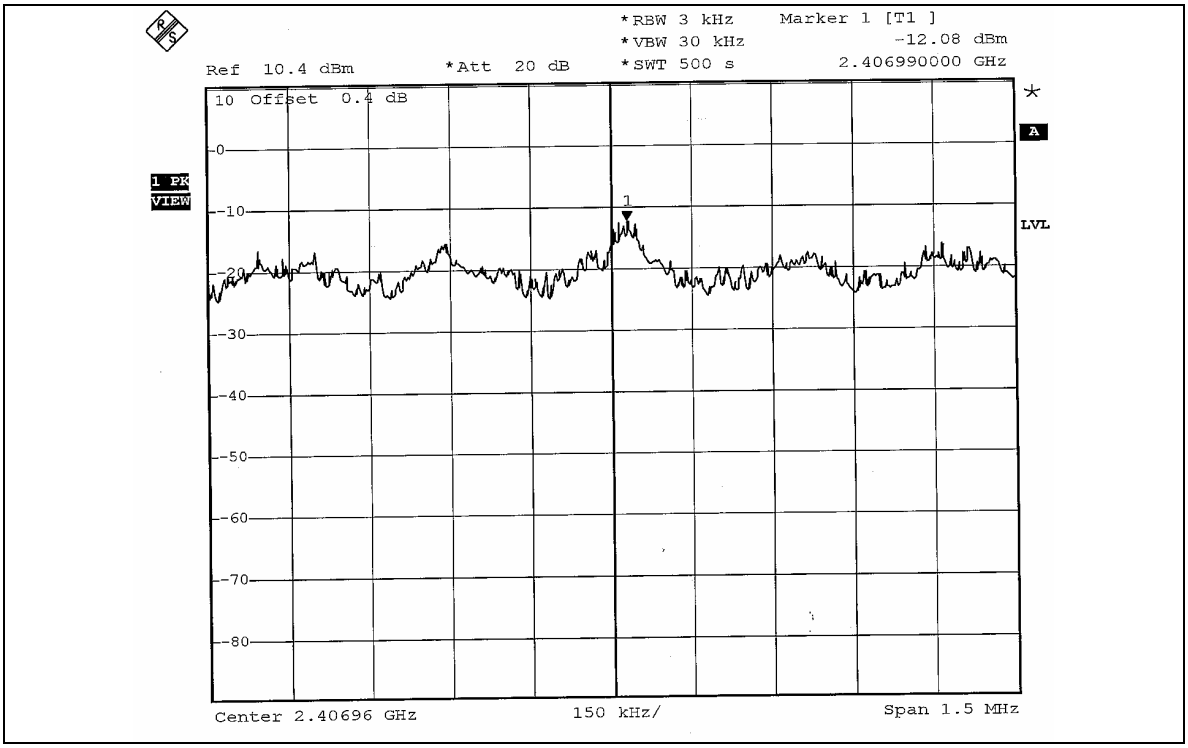


CH11

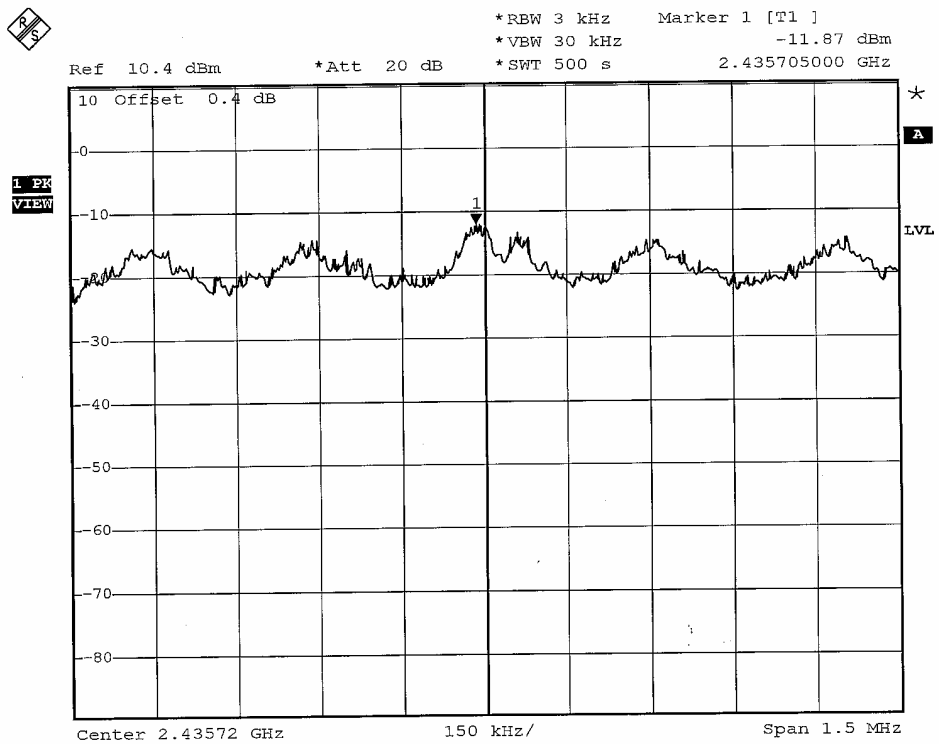


For Dual Chain (Chain 1):

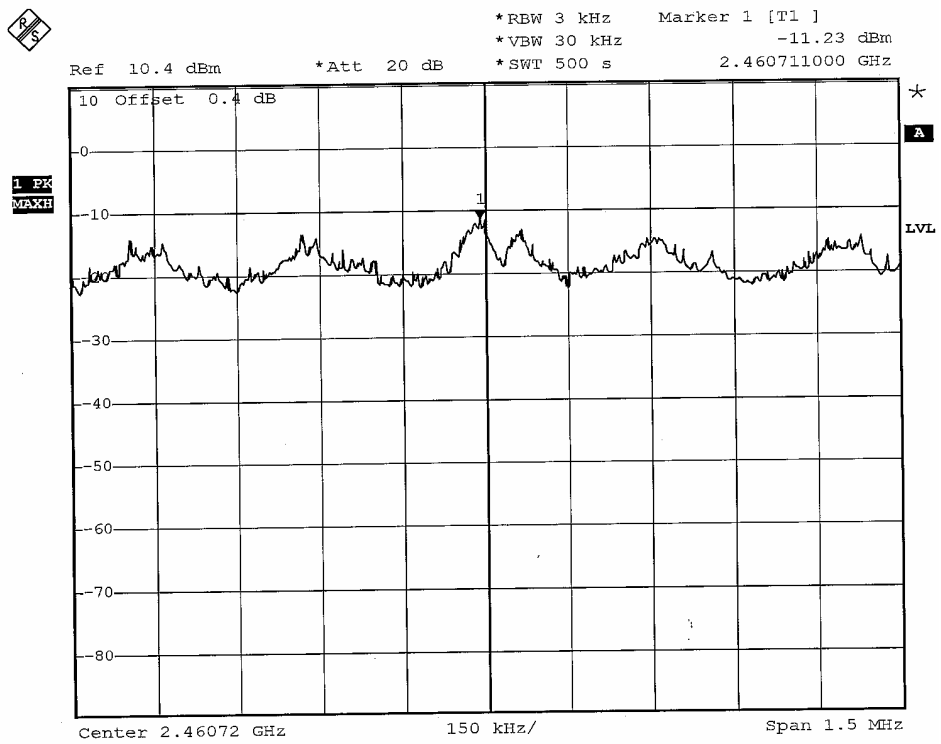
CH1



CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.87 dBm
2.435705000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
1 PK
VIEW
A
LVL
0
-10
-30
-40
-50
-60
-70
-80
Center 2.43572 GHz
150 kHz/
Span 1.5 MHz

CH11


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.23 dBm
2.460711000 GHz
Ref 10.4 dBm
*Att 20 dB
10 Offset 0.4 dB
1 PK
MAXH
A
LVL
0
-10
-30
-40
-50
-60
-70
-80
Center 2.46072 GHz
150 kHz/
Span 1.5 MHz

5.6 BAND EDGES MEASUREMENT

5.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

5.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

5.6.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 1 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

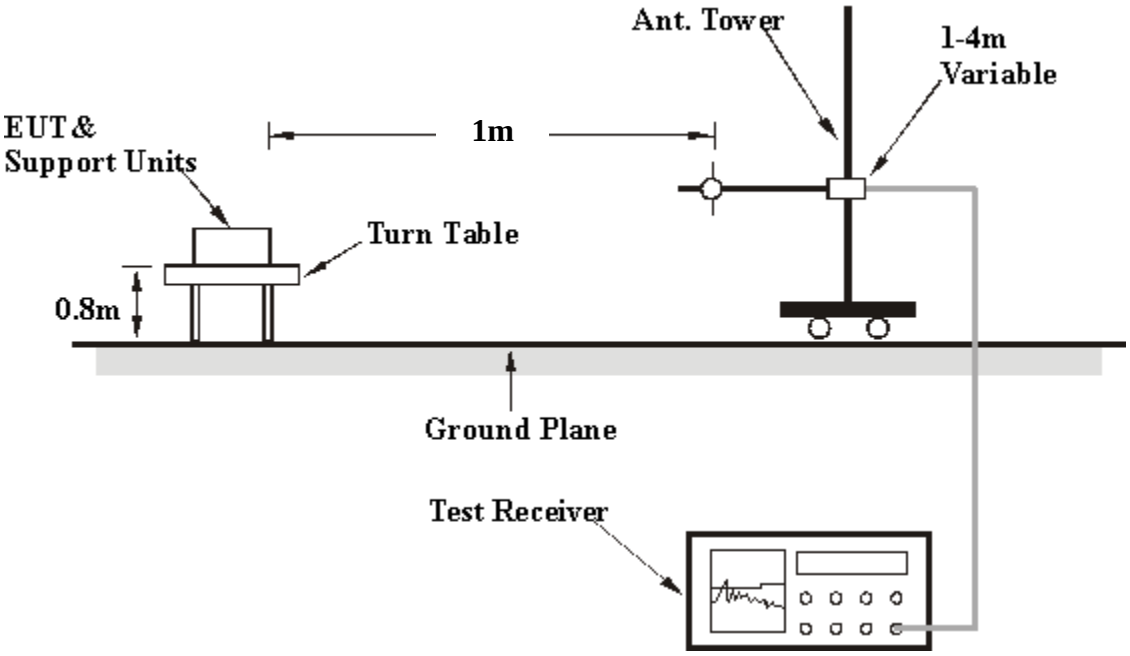
The spectrum plots (Peak RBW=VBW=100kHz ; Average RBW=1MHz, VBW=1kHz)

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1kHz for Average detection (AV) at frequency above 1GHz.

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

5.6.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.6.6 TEST RESULTS

The spectrum plots are attached on the following 12 images. D2 line indicates the highest level, and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

802.11g OFDM modulation

For test configure mode 1 (Both chains on with Antenna 1)

NOTE 1: The band edge emission plot on page 121 shows 48.65dBc between carrier maximum power and local maximum emission in restrict band (2.3896GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 109.20dBuV/m (Peak), so the maximum field strength in restrict band is 109.20-48.65=60.55dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 121 shows 41.64dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 88.45dBuV/m (Average), so the maximum field strength in restrict band is 88.45-41.64=46.81dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on page 122 shows 52.49dBc between carrier maximum power and local maximum emission in restrict band (2.48435GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 110.57dBuV/m (Peak), so the maximum field strength in restrict band is 110.57-52.49=58.08dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 123 shows 43.07dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 90.12dBuV/m (Average), so the maximum field strength in restrict band is 90.12-43.07=47.05dBuV/m which is under 54dBuV/m limit.

For test configure mode 2 (Both chains on with Antenna 2)

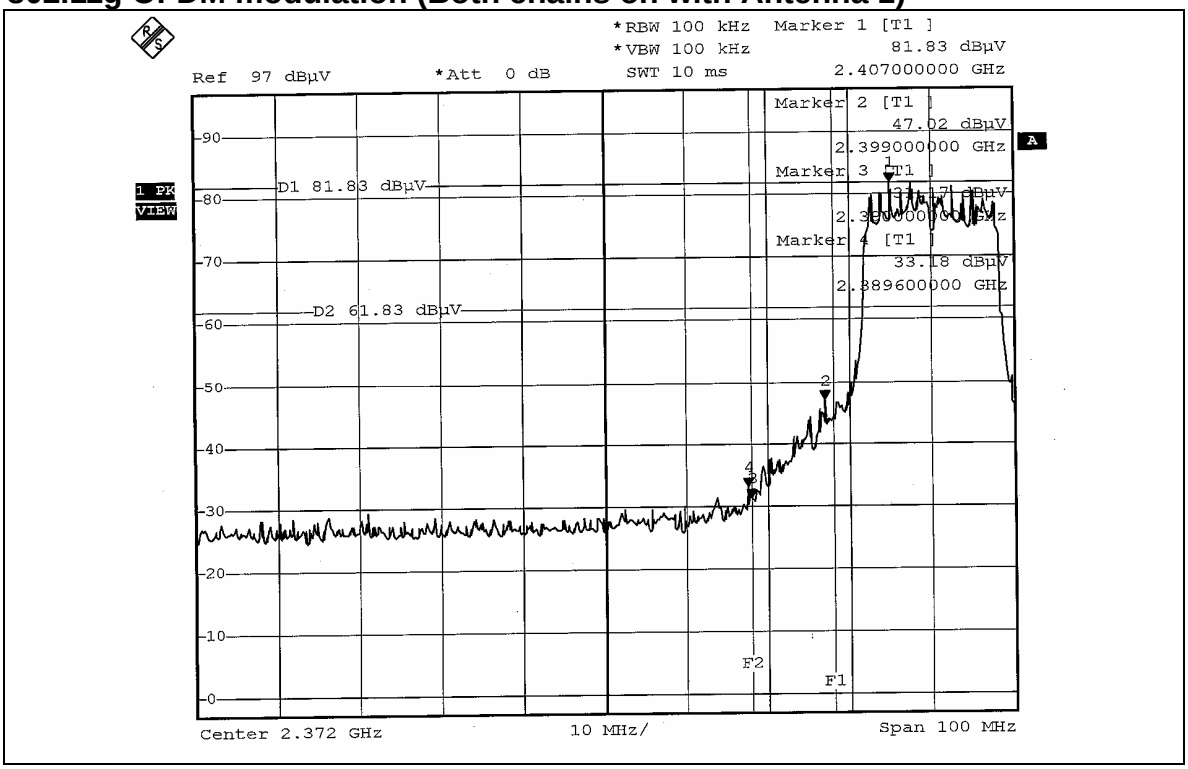
NOTE 1: The band edge emission plot on page 124 shows 48.53dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 113.18dBuV/m (Peak), so the maximum field strength in restrict band is 113.18-48.53=64.65dBuV/m which is under 74dBuV/m limit.

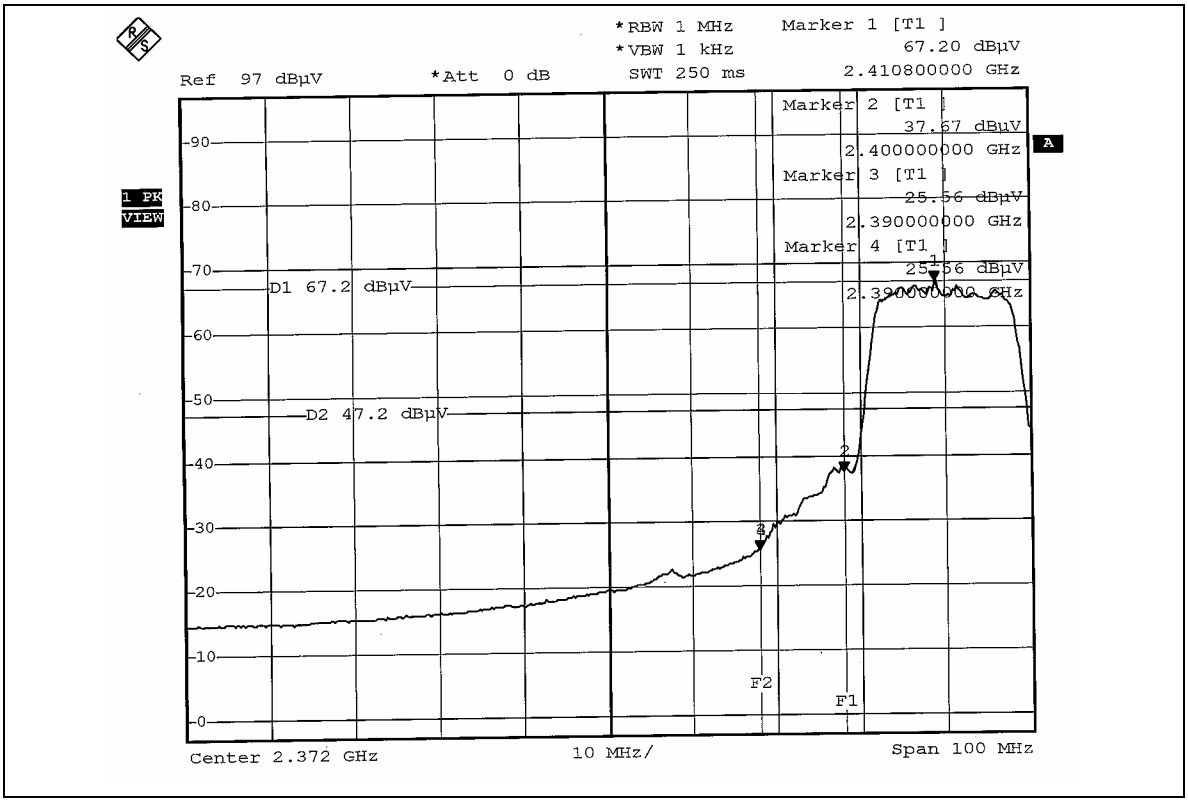
The band edge emission plot on page 124 shows 40.61Bc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 91.54dBuV/m (Average), so the maximum field strength in restrict band is 91.54-40.61=50.93dBuV/m which is under 54dBuV/m limit.

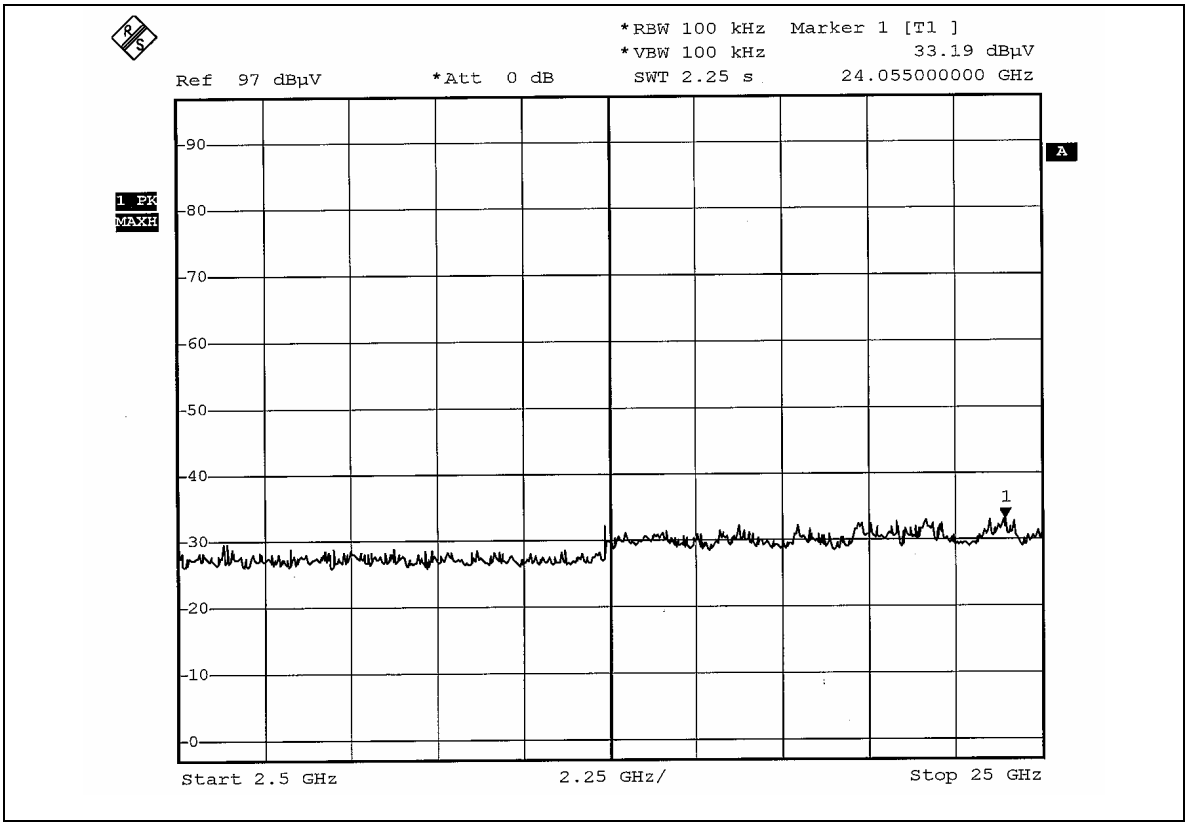
NOTE 2: The band edge emission plot on page 125 shows 50.05dBc between carrier maximum power and local maximum emission in restrict band (2.4858GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 113.20dBuV/m (Peak), so the maximum field strength in restrict band is 113.20-50.05=63.15dBuV/m which is under 74dBuV/m limit.

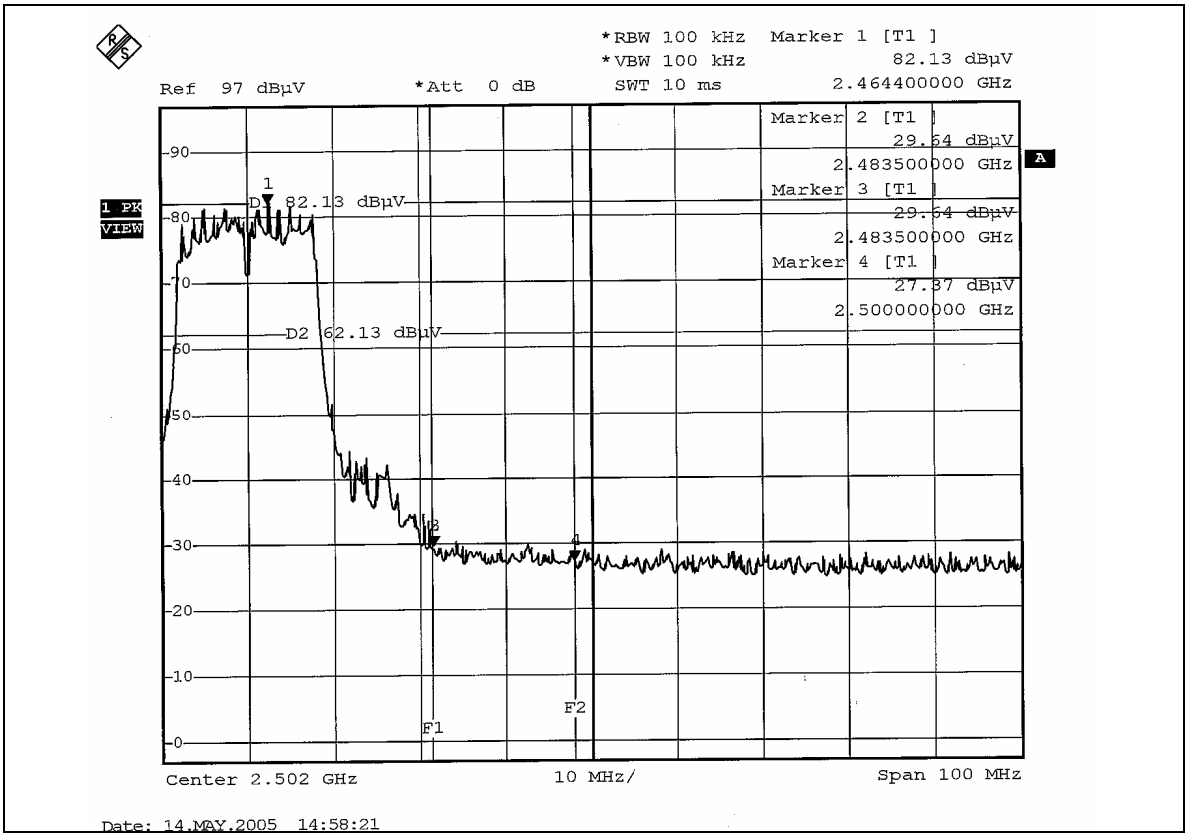
The band edge emission plot on page 126 shows 41.27dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 92.34dBuV/m (Average), so the maximum field strength in restrict band is 92.34-41.27=51.07dBuV/m which is under 54dBuV/m limit.

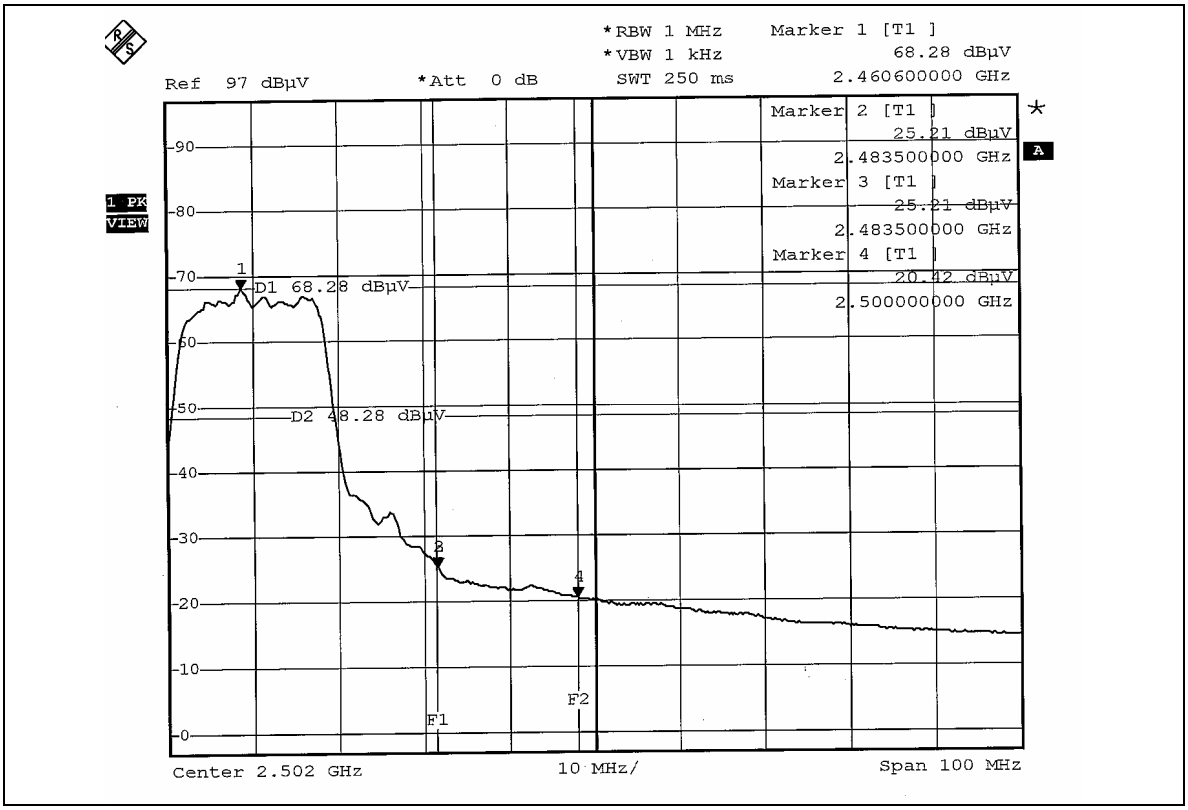
802.11g OFDM modulation (Both chains on with Antenna 1)

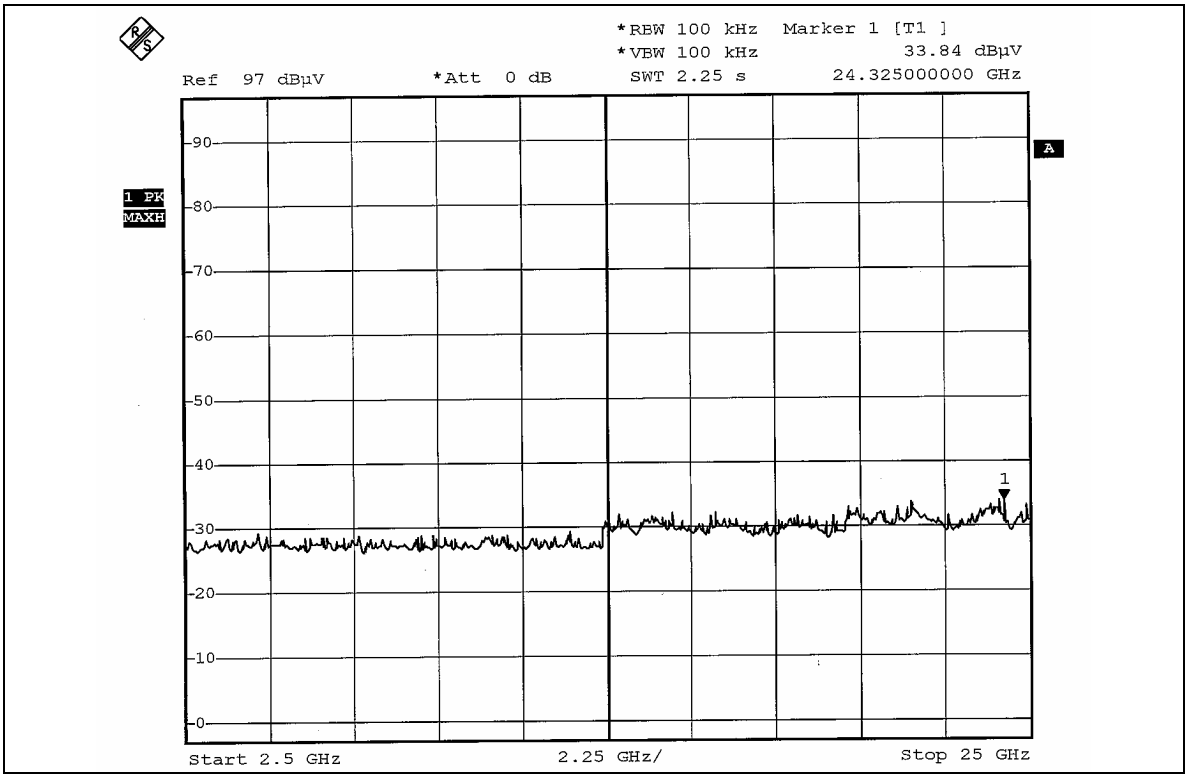




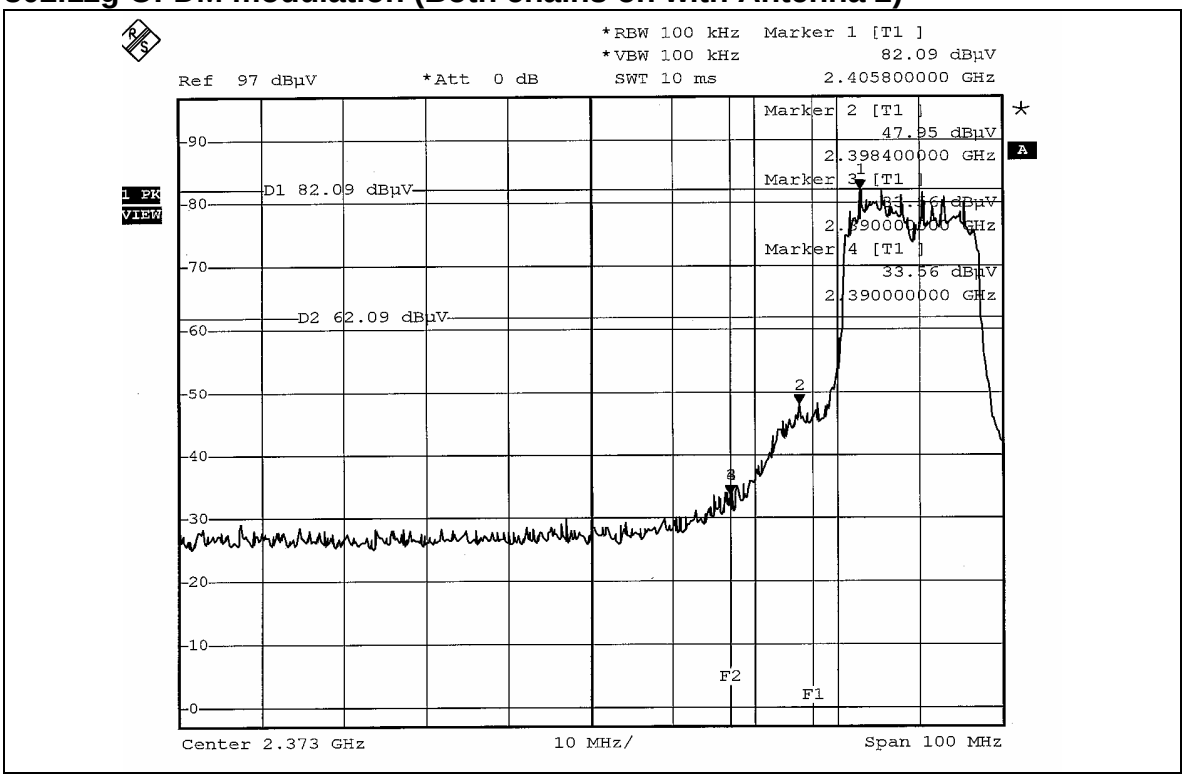

*RBW 100 kHz
*VBW 100 kHz
Marker 1 [T1]
33.19 dBµV
Ref 97 dBµV
*Att 0 dB
SWT 2.25 s
24.055000000 GHz
1 PK
MAXH
A
90
80
70
60
50
40
30
20
10
0
1
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

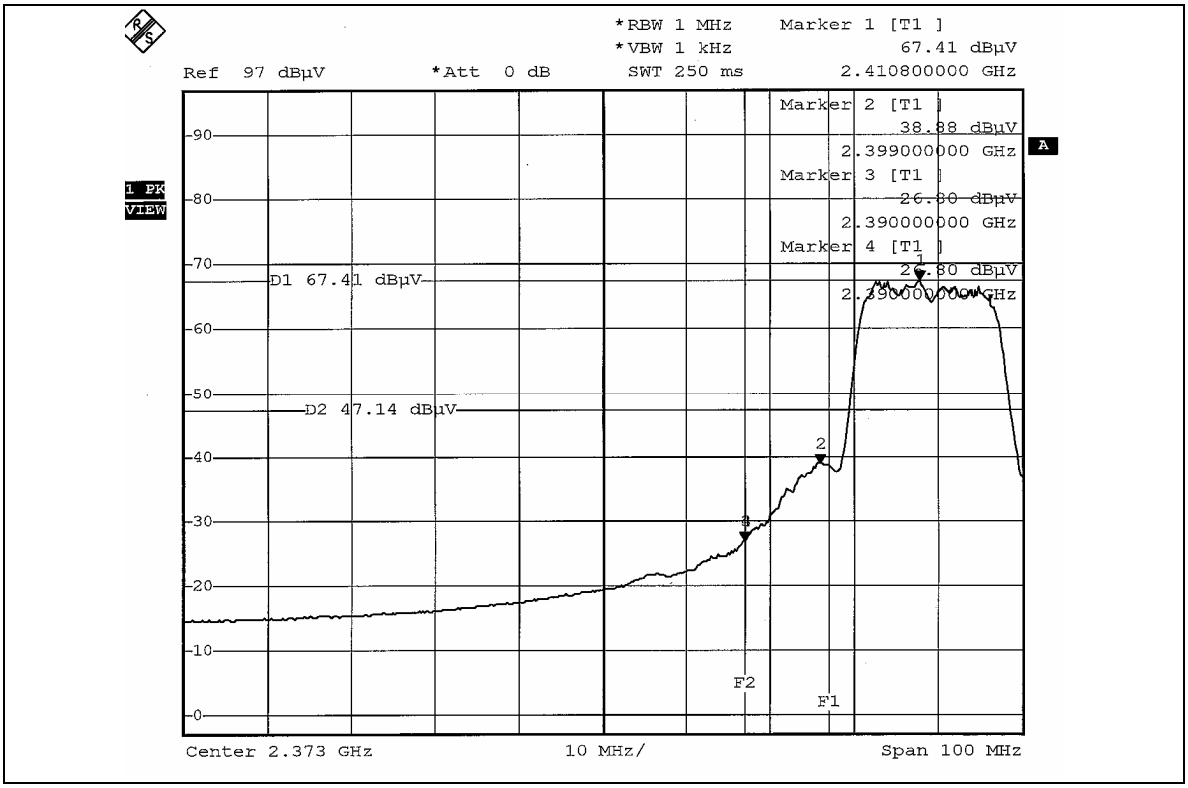

*RBW 100 kHz
*VBW 100 kHz
Marker 1 [T1]
82.13 dBµV
Ref 97 dBµV
*Att 0 dB
SWT 10 ms
2.464400000 GHz
Marker 2 [T1]
29.64 dBµV
2.483500000 GHz
Marker 3 [T1]
29.64 dBµV
2.483500000 GHz
Marker 4 [T1]
27.87 dBµV
2.500000000 GHz
1 PK
VIEW
A
D1 82.13 dBµV
D2 82.13 dBµV
90
80
70
60
50
40
30
20
10
0
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz
Date: 14.MAY.2005 14:58:21

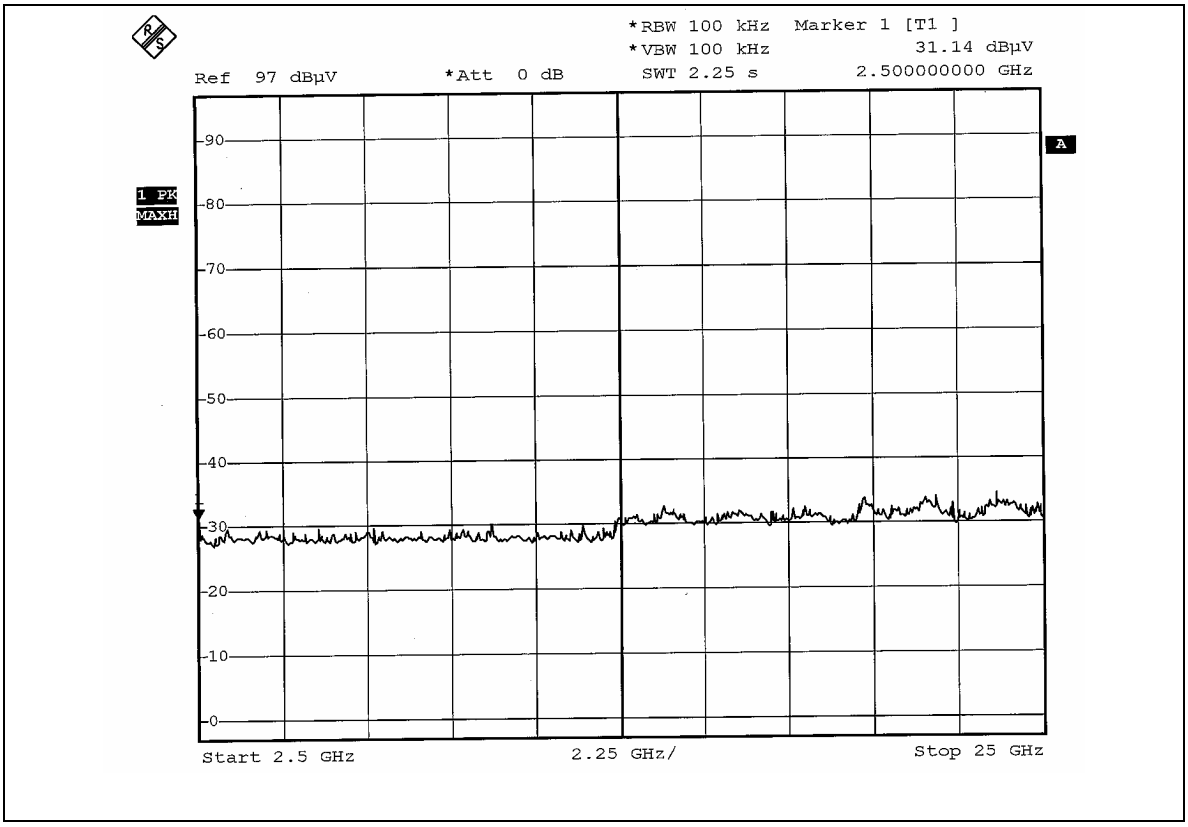

*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
68.28 dBµV
2.460600000 GHz
Ref 97 dBµV
*Att 0 dB
Marker 2 [T1]
25.21 dBµV
2.483500000 GHz
Marker 3 [T1]
25.21 dBµV
2.483500000 GHz
Marker 4 [T1]
20.42 dBµV
2.500000000 GHz
1 PK
VIEW
A
D1 68.28 dBµV
D2 48.28 dBµV
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz

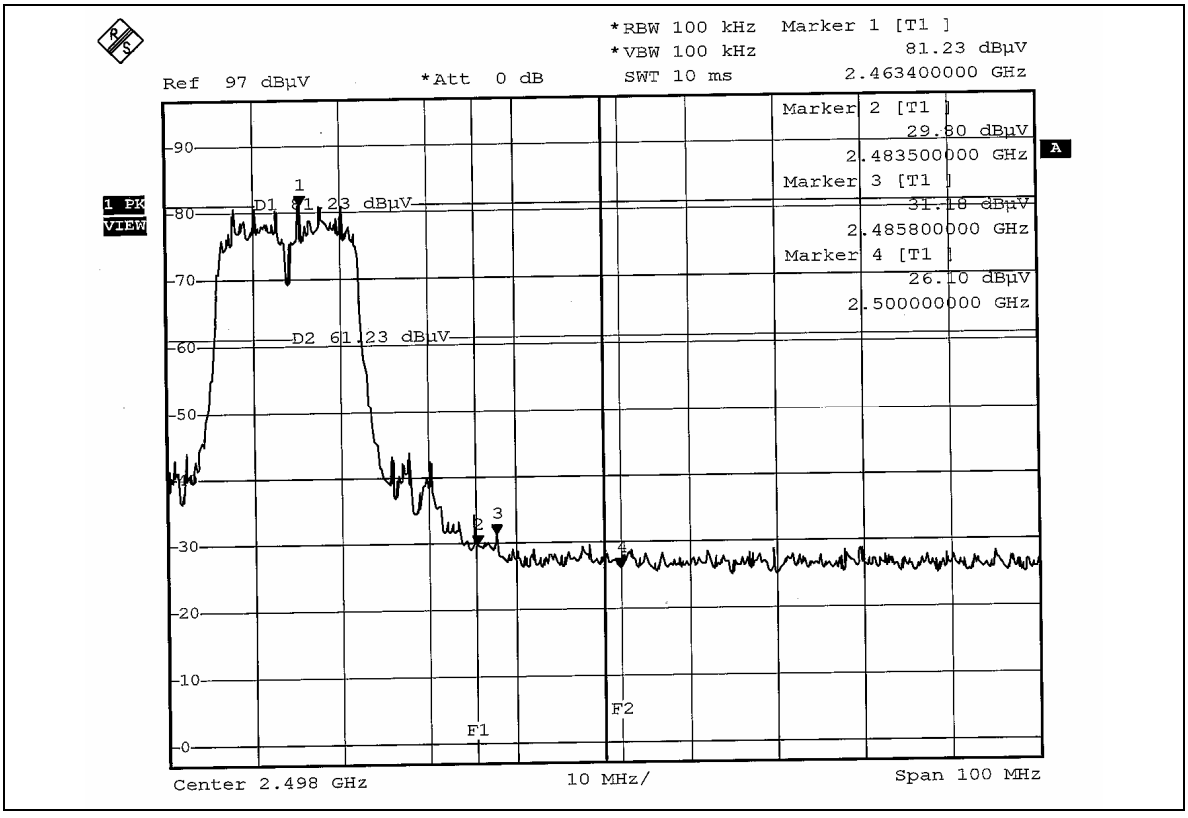

*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
33.84 dBµV
24.325000000 GHz
Ref 97 dBµV
*Att 0 dB
1 PK
MAXH
A
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

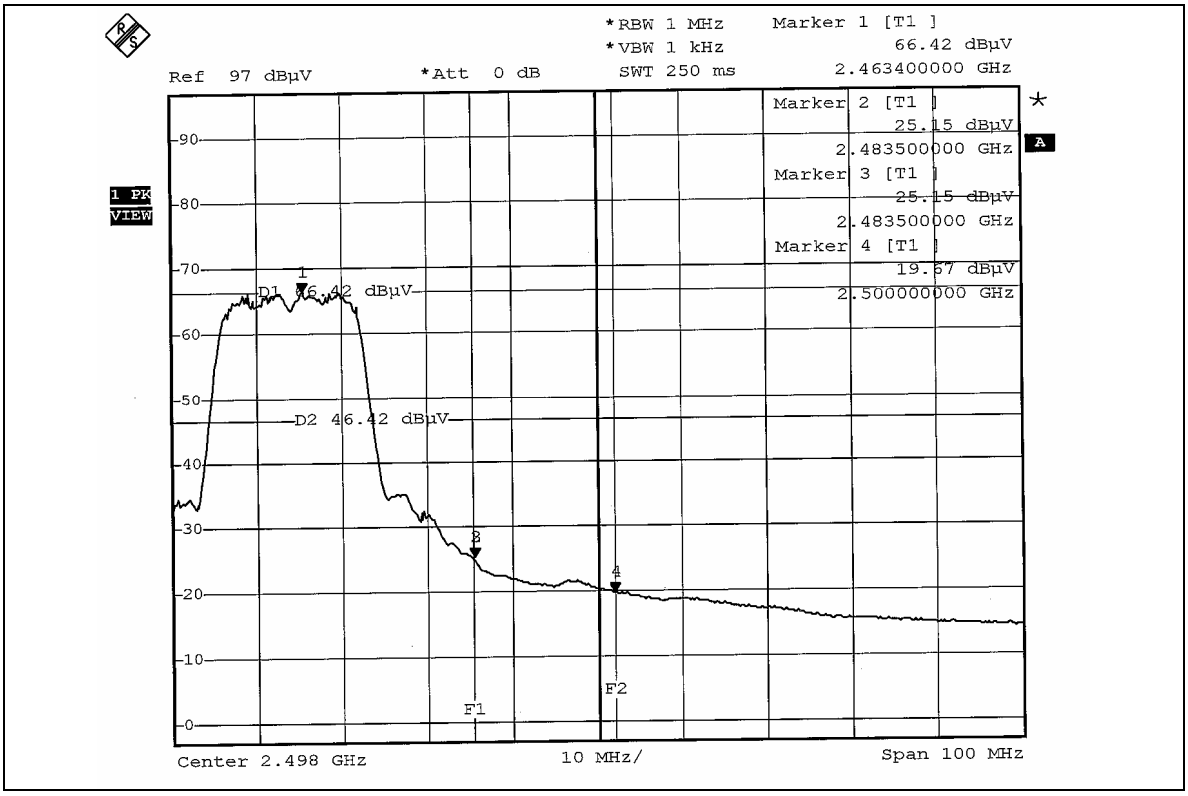
802.11g OFDM modulation (Both chains on with Antenna 2)

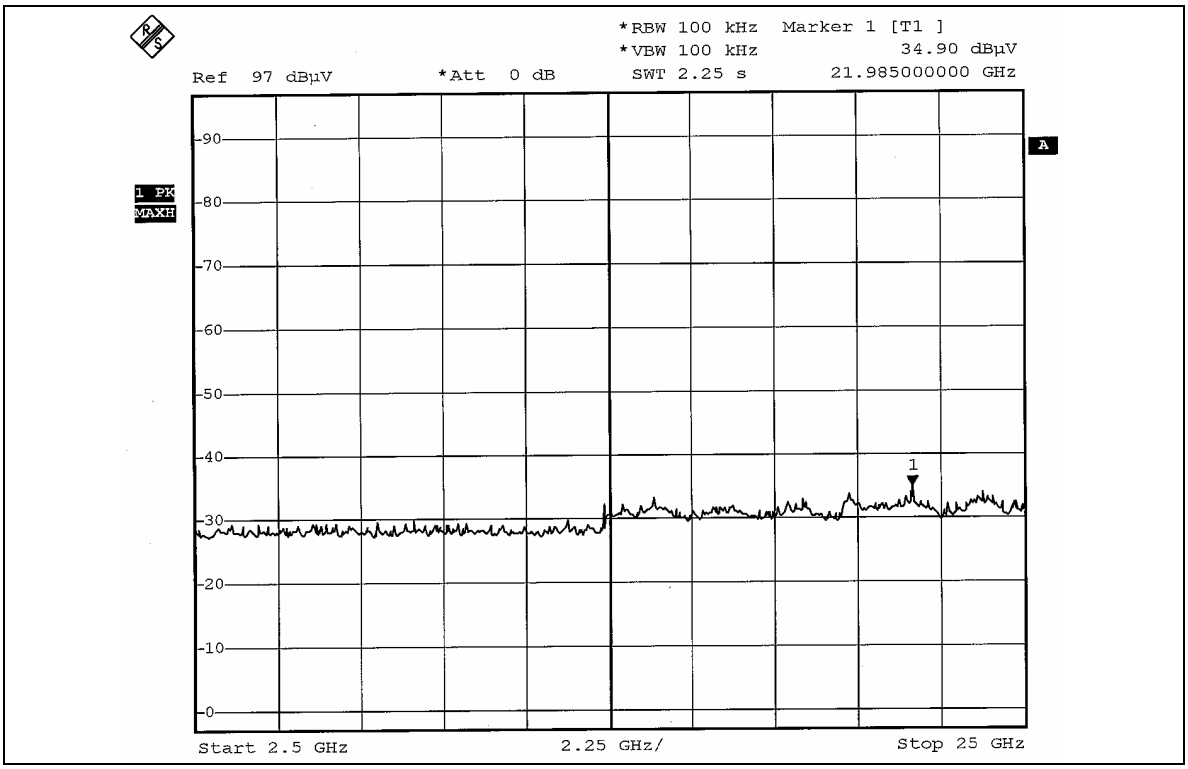





*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
31.14 dBµV
2.500000000 GHz
Ref 97 dBµV
*Att 0 dB
1 PK
MAXH
A
90
80
70
60
50
40
30
20
10
0
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
81.23 dBµV
2.463400000 GHz
Ref 97 dBµV
*Att 0 dB
Marker 2 [T1]
29.80 dBµV
2.483500000 GHz
Marker 3 [T1]
31.18 dBµV
2.485800000 GHz
Marker 4 [T1]
26.10 dBµV
2.500000000 GHz
1 PK
VIEW
A
D1 81.23 dBµV
D2 61.23 dBµV
F1
F2
Center 2.498 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
66.42 dBµV
2.463400000 GHz
Marker 2 [T1]
25.15 dBµV
2.483500000 GHz
Marker 3 [T1]
25.15 dBµV
2.483500000 GHz
Marker 4 [T1]
19.67 dBµV
2.500000000 GHz
Ref 97 dBµV
*Att 0 dB
1 PK
VIEW
A
D1 66.42 dBµV
D2 46.42 dBµV
F1
F2
Center 2.498 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
34.90 dBµV
21.985000000 GHz
Ref 97 dBµV
*Att 0 dB
1 PK
MAXH
A
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

5.7 ANTENNA REQUIREMENT

5.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

5.7.2 ANTENNA CONNECTED CONSTRUCTION

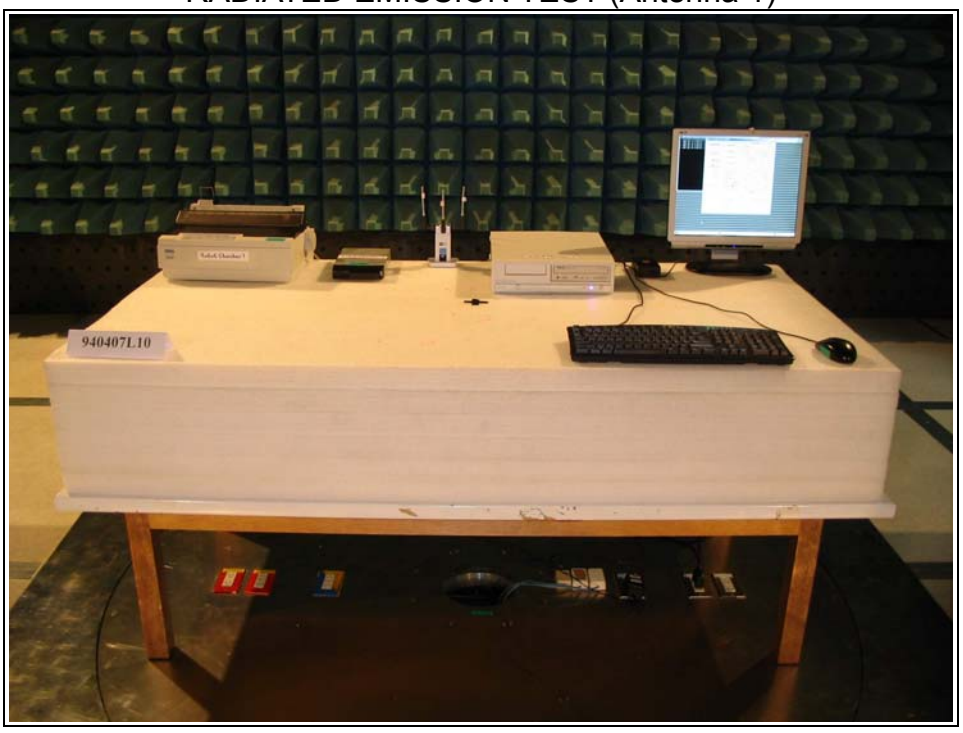
The antenna type used in this product is Dipole antenna with Reverse SMA antenna connector. The maximum Gain of this antenna is 7.0dBi.

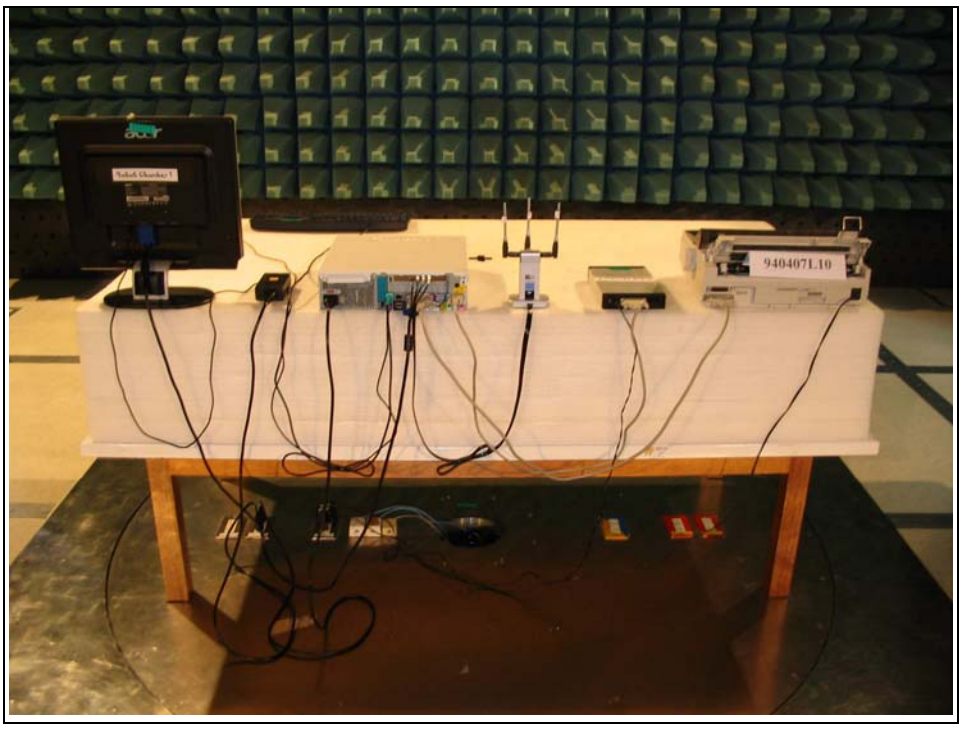
6 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST (Antenna 1)

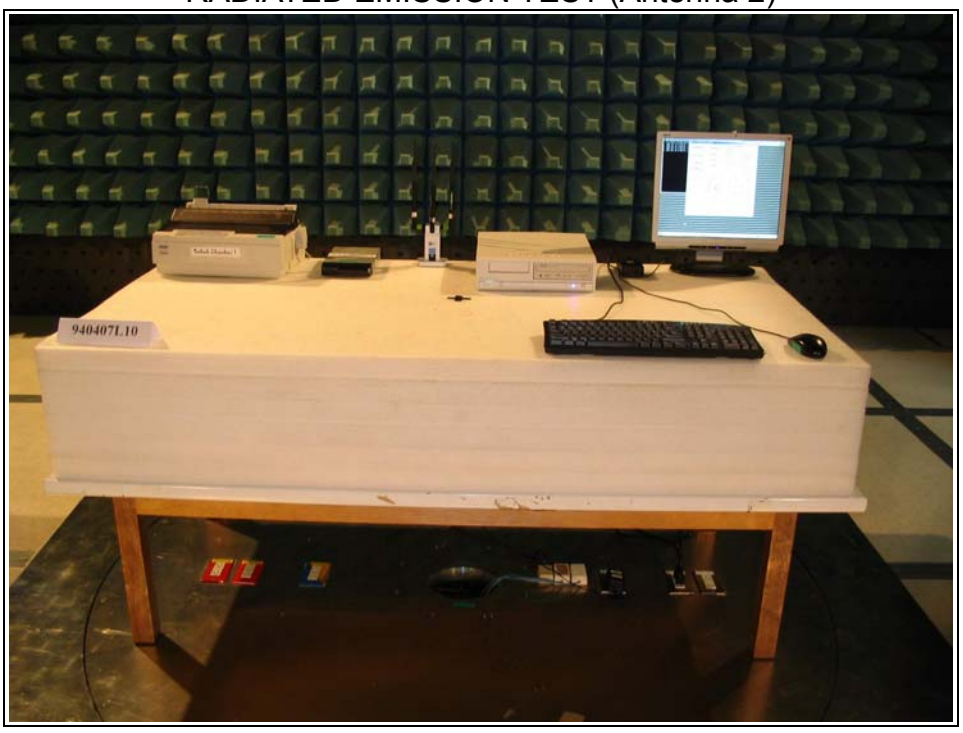
CONDUCTED EMISSION TEST (Antenna 2)

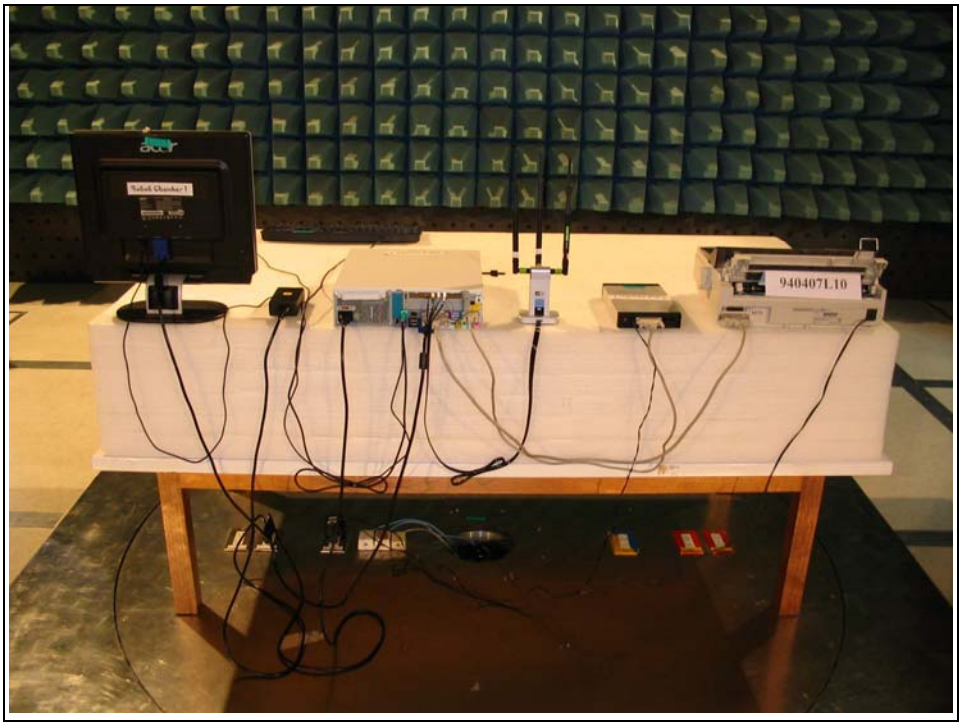
RADIATED EMISSION TEST (Antenna 1)





RADIATED EMISSION TEST (Antenna 2)





7 INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Linko RF Lab.
Tel: 886-3-3270910
Fax: 886-3-3270892

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.