



FCC TEST REPORT

REPORT NO.: RF931115L12

MODEL NO.: WRT54GC

RECEIVED: Nov. 16, 2004

TESTED: Dec. 23, 2004 ~ Jan. 03, 2005

ISSUED: Jan. 04, 2005

APPLICANT: Cisco-Linksys, LLC

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ISSUED BY: Advance Data Technology Corporation

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1 CERTIFICATION

PRODUCT : Compact Wireless-G Broadband Router
MODEL NO. : WRT54GC
BRAND NAME : Linksys
APPLICANT : Cisco-Linksys, LLC
TESTED : Dec. 23, 2004 ~ Jan. 03, 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 : Candice Chen , **DATE:** Jan. 04, 2005
(Candice Chen)

TECHNICAL
ACCEPTANCE : Gary Chang , **DATE:** Jan. 04, 2005
Responsible for RF (Gary Chang)

APPROVED BY : Cody Chang , **DATE:** Jan. 04, 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 -17.27dB at 0.213MHz
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 -1.80dB at 800.00MHz
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 GENERAL DESCRIPTION OF EUT

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	3.55 dB
	200MHz ~1000MHz	3.58 dB
	1GHz ~ 18GHz	1.10 dB
	18GHz ~ 40GHz	0.91 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Compact Wireless-G Broadband Router
MODEL NO.	WRT54GC
POWER SUPPLY	3.3Vdc from AC adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	58.614mW
ANTENNA TYPE	Internal antenna: PIFA antenna with 1.8dBi gain External antenna: Dipole antenna with 7.0dBi gain (without base) Dipole antenna with 4.5dBi gain (with base)
DATA CABLE	NA
I/O PORTS	RJ45
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT was tested with the following adapter:

BRAND :	Linksys
MODEL :	MU12-2033200-A1
INPUT :	100-240Vac, 50-60Hz, 0.5A
OUTPUT :	3.3Vdc, 2.0A
POWER LINE :	DC 1.8m shielded cable without core

2. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
 3. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
 4. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.



3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to this EUT.

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		

NOTE:

1. Below 1GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11 with OFDM technique, worst case one, was chosen for final test.
2. Above 1GHz, the channel 1, 6, and 11 were tested individually.
3. After pre-testing all data rates, the worst cases were 11Mbps with DSSS technique, 6Mbps with OFDM technique.
4. For conducted emission test, the worst case was 6Mbps with OFDM technique after pre-testing in conducted emission test site.
5. There were two test results presented in the following sections: The test result A was for DSSS technique and the test result B was for OFDM technique.
6. For conducted emission and radiated emission test, there are three test modes provided to EUT. The test mode 1 is for PIFA antenna with 1.8dBi gain, the test mode 2 is for Dipole antenna with 4.5dBi gain, and the test mode 3 is for Dipole antenna with 7dBi gain.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Compact Wireless-G Broadband Router. 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	NOTEBOOK COMPUTER	DELL	PP05L	12130898320	E2K24CLNS
2	PRINTER	EPSON	LQ-300+	DCGY054147	FCC DoC Approved
3	MODEM	ACEEX	1414V/3	0401008269	IFAXDM1414
4	NOTEBOOK COMPUTER	DELL	PP05L	20838027664	E2K24CLNS

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.2m shielded cable without core.
3	1.2m shielded cable without core.
4	NA

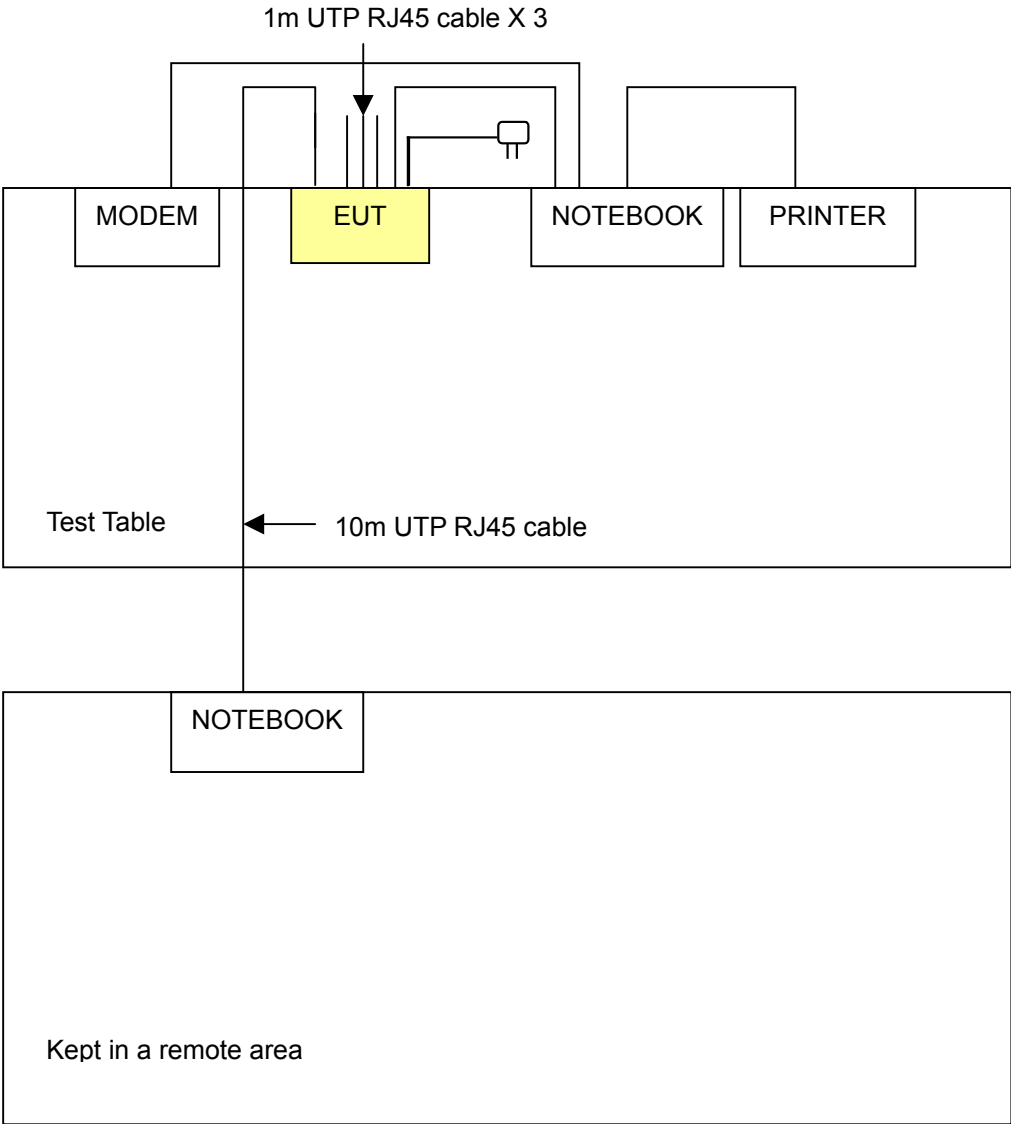
NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Item 4 act as a communication partner to transfer data.



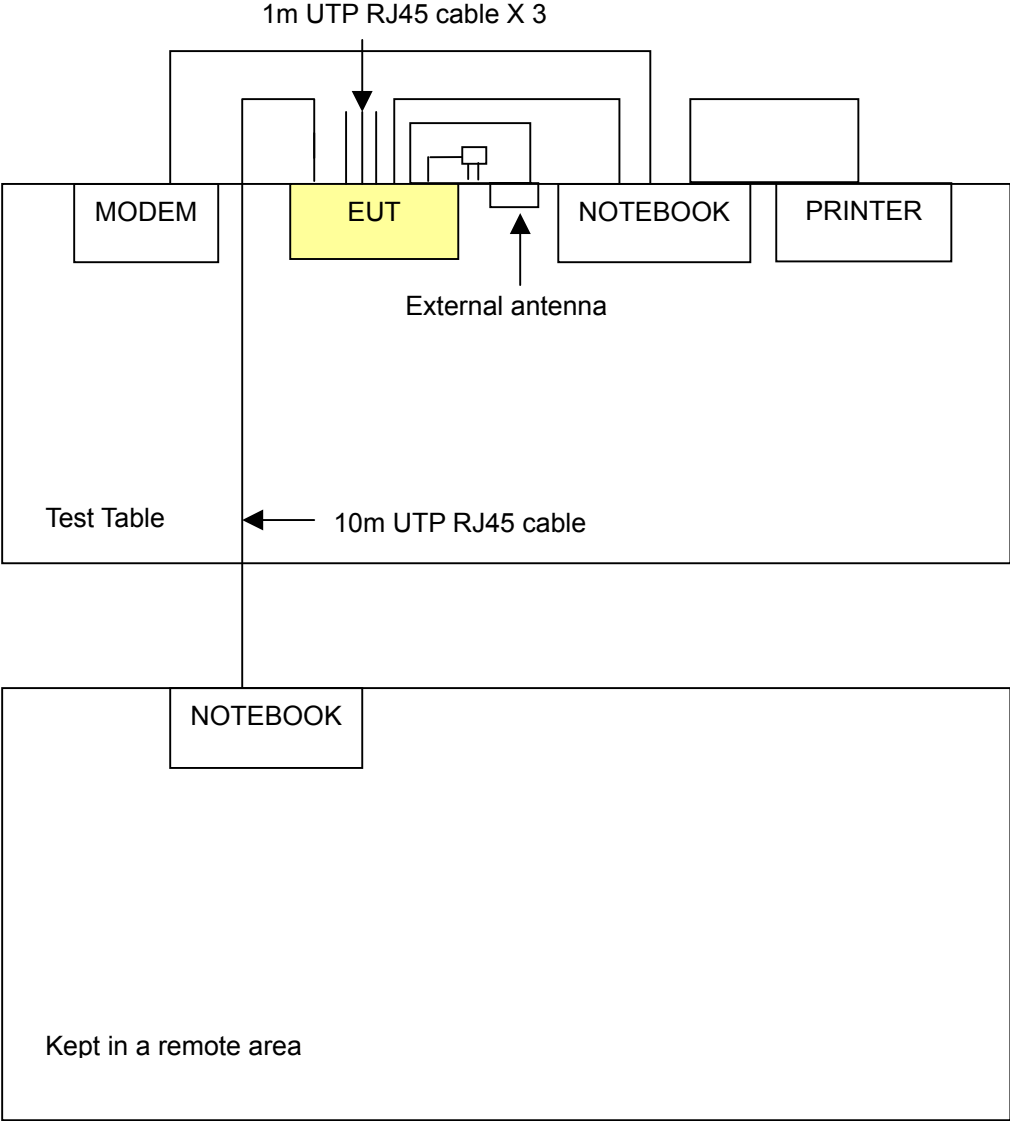
3.5 CONFIGURATION OF SYSTEM UNDER TEST

Test Mode 1 & 2





Test Mode 3





4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	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	100288	Nov. 06, 2005
RF signal cable Woken	5D-FB	Cable-HyC02-01	Mar. 07, 2005
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Mar. 10, 2005
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Mar. 04, 2005
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 2.
 3. The VCCI Site Registration No. is C-2047.



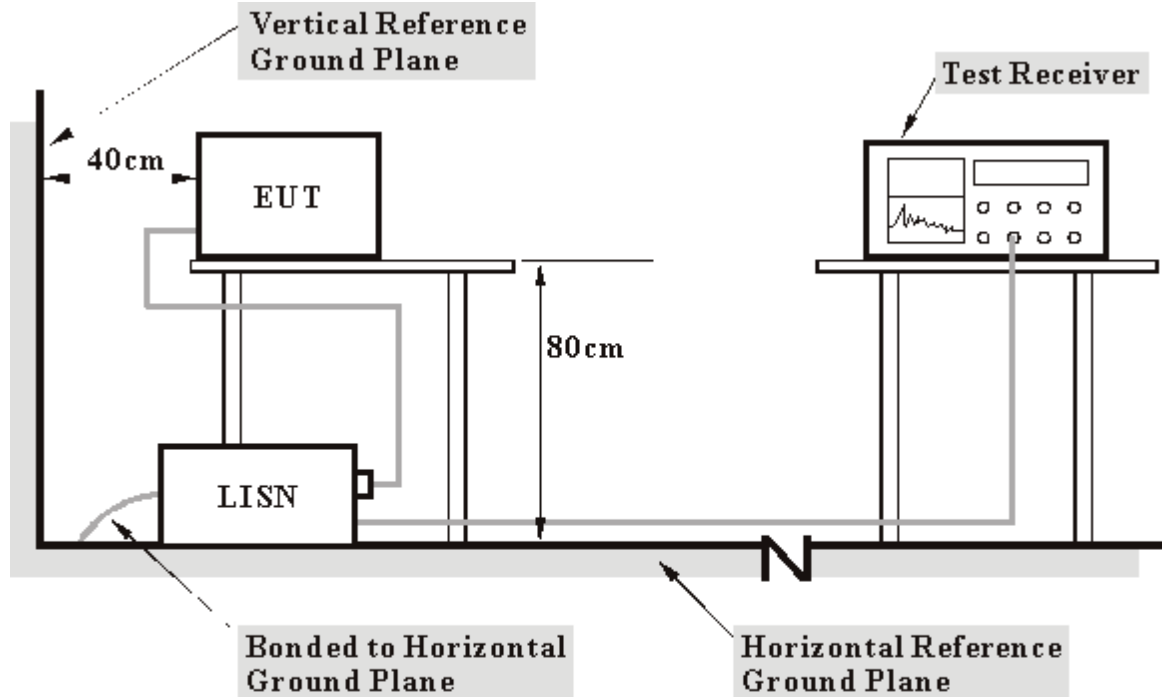
4.1.3 TEST PROCEDURES

- 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 150 kHz to 30 MHz was searched. Emission levels (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) 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.



4.1.6 EUT OPERATING CONDITIONS

- a. Placed the EUT on the testing table.
- b. Prepared another Notebook system to act as a communication partner and placed it outside of testing area.
- c. The communication partner run a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
- d. The communication and via an RJ45 cable partner sent data to EUT by command "PING".

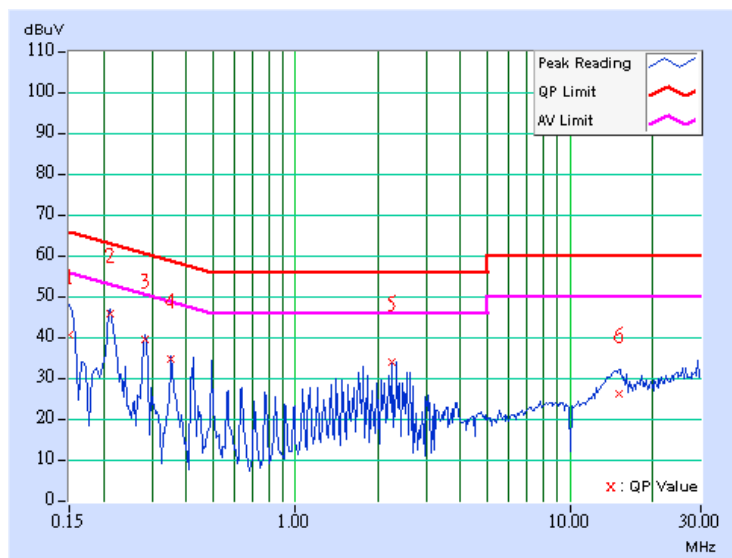


4.1.7 TEST RESULTS

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	1
TESTED BY: Steven Lu			

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.150	0.11	39.96	-	40.07	-	66.00
2	0.213	0.10	45.24	-	45.34	-	63.11	53.11	-17.77	-
3	0.283	0.11	39.01	-	39.12	-	60.73	50.73	-21.62	-
4	0.353	0.11	34.03	-	34.14	-	58.89	48.89	-24.75	-
5	2.258	0.27	33.29	-	33.56	-	56.00	46.00	-22.44	-
6	15.039	0.70	25.55	-	26.25	-	60.00	50.00	-33.75	-

- 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.



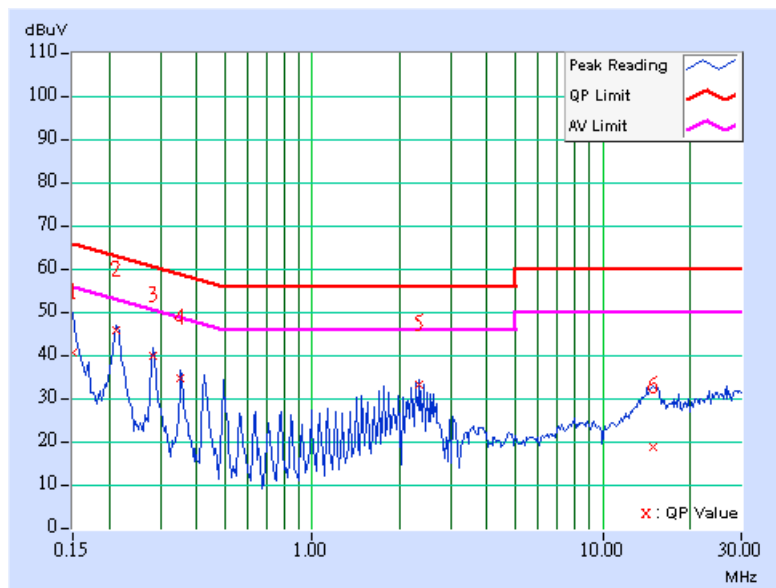


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	1

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	40.08	-	40.18	-	66.00	56.00	-25.82	-
2	0.213	0.10	45.42	-	45.52	-	63.11	53.11	-17.59	-
3	0.283	0.11	39.31	-	39.42	-	60.73	50.73	-21.32	-
4	0.353	0.11	34.30	-	34.41	-	58.89	48.89	-24.48	-
5	2.332	0.26	32.71	-	32.97	-	56.00	46.00	-23.03	-
6	15.008	0.56	18.50	-	19.06	-	60.00	50.00	-40.94	-

- 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.



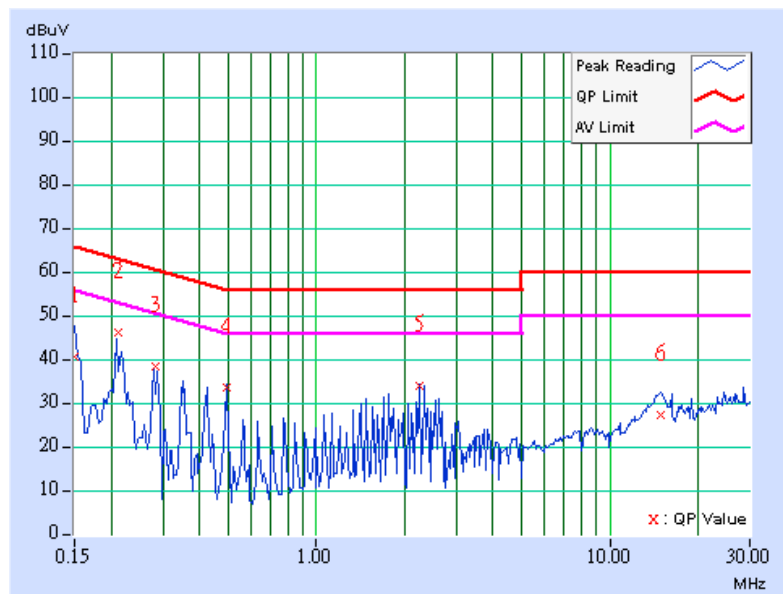


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	1

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	40.07	-	40.18	-	66.00	56.00	-25.82	-
2	0.213	0.10	45.74	-	45.84	-	63.11	53.11	-17.27	-
3	0.285	0.11	37.83	-	37.94	-	60.68	50.68	-22.75	-
4	0.494	0.14	32.88	-	33.02	-	56.10	46.10	-23.09	-
5	2.258	0.27	33.24	-	33.51	-	56.00	46.00	-22.49	-
6	14.949	0.70	26.59	-	27.29	-	60.00	50.00	-32.71	-

- 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.



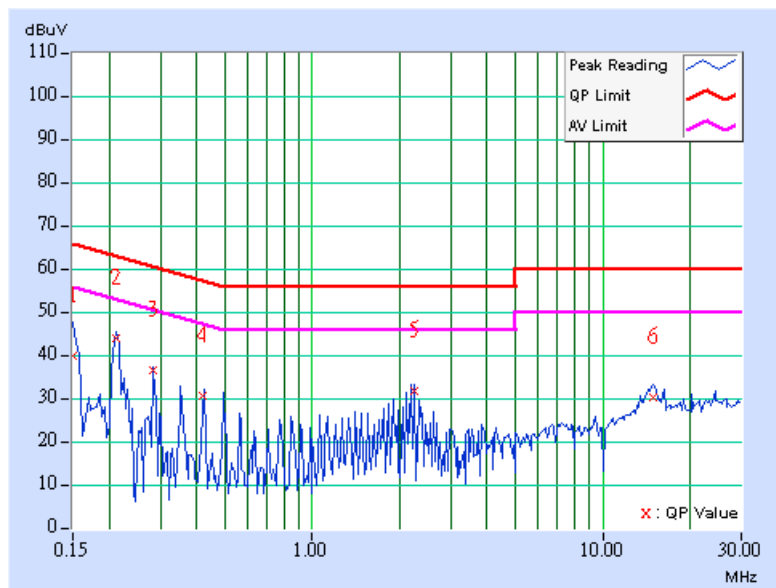


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	1

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	39.50	-	39.60	-	66.00	56.00	-26.40	-
2	0.213	0.10	43.51	-	43.61	-	63.11	53.11	-19.50	-
3	0.283	0.11	36.27	-	36.38	-	60.73	50.73	-24.36	-
4	0.422	0.12	30.20	-	30.32	-	57.41	47.41	-27.10	-
5	2.258	0.26	31.32	-	31.58	-	56.00	46.00	-24.42	-
6	14.887	0.56	29.77	-	30.33	-	60.00	50.00	-29.67	-

- 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.



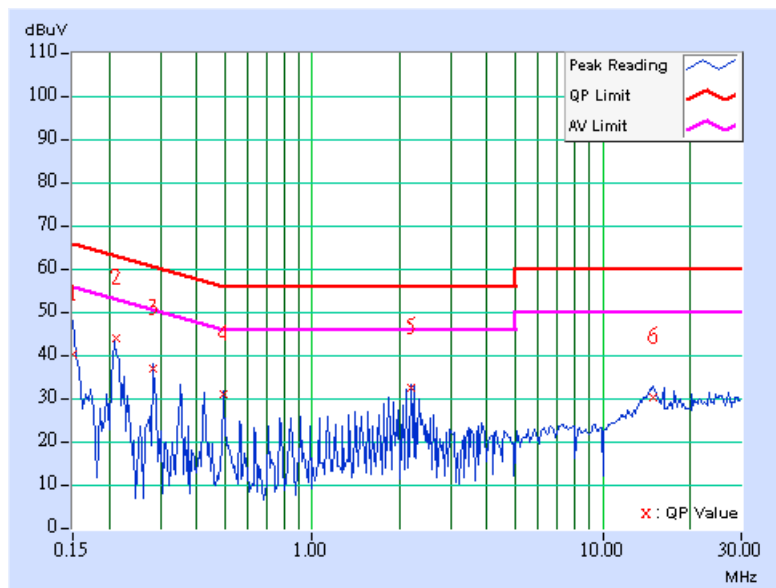


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	1

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	39.82	-	39.93	-	66.00	56.00	-26.07	-
2	0.210	0.10	43.40	-	43.50	-	63.20	53.20	-19.70	-
3	0.283	0.11	36.31	-	36.42	-	60.73	50.73	-24.32	-
4	0.494	0.14	30.33	-	30.47	-	56.10	46.10	-25.64	-
5	2.188	0.26	32.07	-	32.33	-	56.00	46.00	-23.67	-
6	14.887	0.70	29.85	-	30.55	-	60.00	50.00	-29.45	-

- 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.



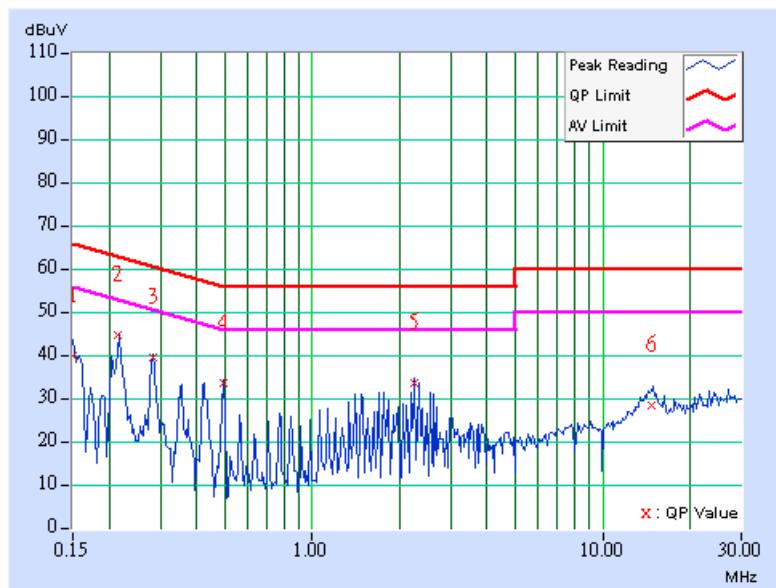


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Netural (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	1

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	39.26	-	39.36	-	66.00	56.00	-26.64	-
2	0.214	0.10	44.26	-	44.36	-	63.05	53.05	-18.69	-
3	0.283	0.11	38.89	-	39.00	-	60.73	50.73	-21.74	-
4	0.494	0.14	33.04	-	33.18	-	56.10	46.10	-22.93	-
5	2.258	0.26	33.19	-	33.45	-	56.00	46.00	-22.55	-
6	14.813	0.56	27.94	-	28.50	-	60.00	50.00	-31.50	-

- 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.



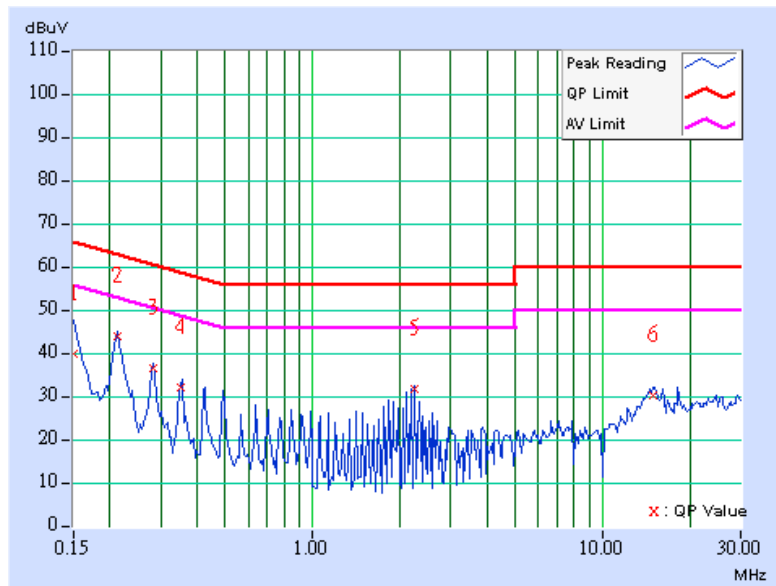


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	2

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.150	0.11	39.48	-	39.59	-	66.00
2	0.213	0.10	43.45	-	43.55	-	63.11	53.11	-19.56	-
3	0.283	0.11	36.12	-	36.23	-	60.73	50.73	-24.51	-
4	0.353	0.11	31.69	-	31.80	-	58.89	48.89	-27.09	-
5	2.254	0.27	31.26	-	31.53	-	56.00	46.00	-24.47	-
6	14.953	0.70	29.56	-	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.



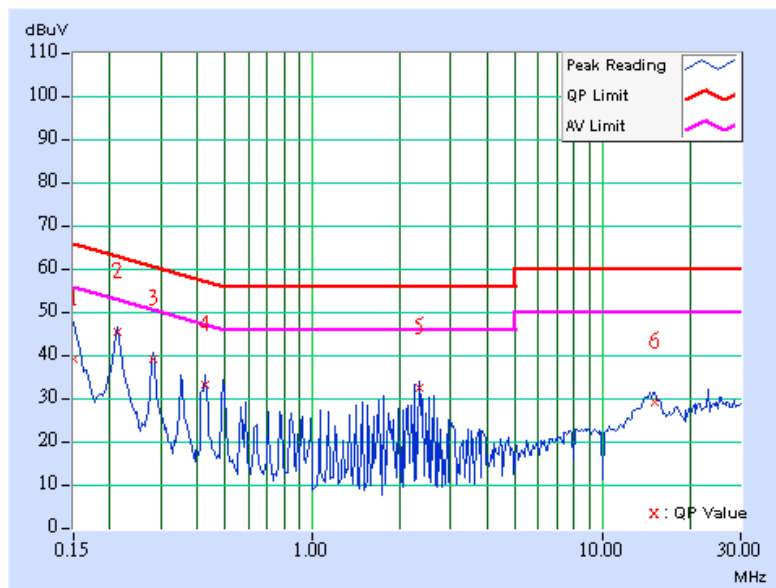


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	2

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	38.74	-	38.84	-	66.00	56.00	-27.16	-
2	0.213	0.10	44.95	-	45.05	-	63.11	53.11	-18.06	-
3	0.283	0.11	38.83	-	38.94	-	60.73	50.73	-21.80	-
4	0.423	0.12	32.60	-	32.72	-	57.38	47.38	-24.66	-
5	2.324	0.26	31.98	-	32.24	-	56.00	46.00	-23.76	-
6	15.090	0.56	28.53	-	29.09	-	60.00	50.00	-30.91	-

- 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.



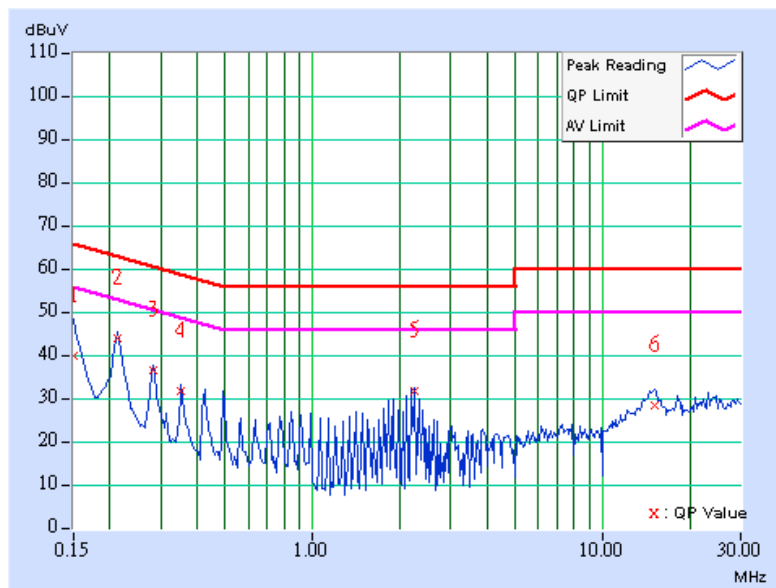


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	2

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.150	0.11	39.30	-	39.41	-	66.00
2	0.213	0.10	43.41	-	43.51	-	63.11	53.11	-19.60	-
3	0.283	0.11	36.12	-	36.23	-	60.73	50.73	-24.51	-
4	0.353	0.11	31.05	-	31.16	-	58.89	48.89	-27.73	-
5	2.258	0.27	31.14	-	31.41	-	56.00	46.00	-24.59	-
6	15.168	0.71	27.85	-	28.56	-	60.00	50.00	-31.44	-

- 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.



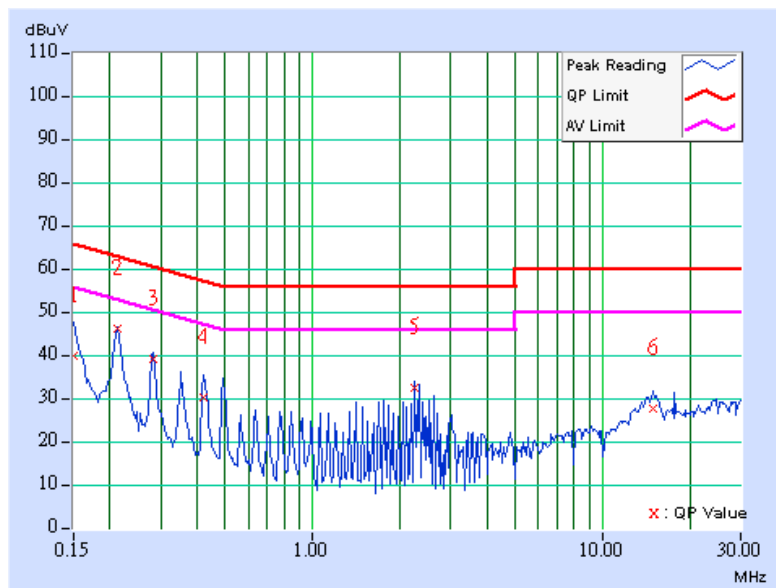


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	2

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.150	0.10	39.60	-	39.70	-	66.00
2	0.213	0.10	45.60	-	45.70	-	63.11	53.11	-17.41	-
3	0.283	0.11	38.58	-	38.69	-	60.73	50.73	-22.05	-
4	0.420	0.12	29.81	-	29.93	-	57.46	47.46	-27.53	-
5	2.258	0.26	32.08	-	32.34	-	56.00	46.00	-23.66	-
6	15.006	0.56	27.14	-	27.70	-	60.00	50.00	-32.30	-

- 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.



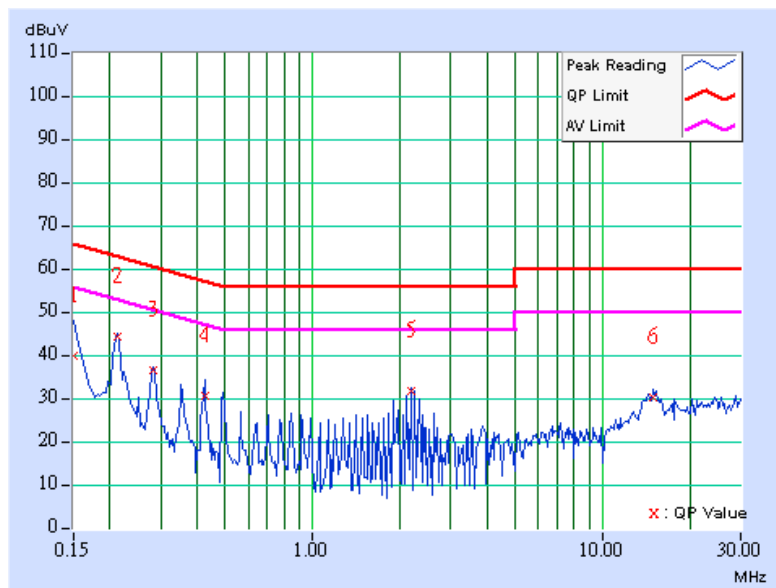


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	2

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	39.22	-	39.33	-	66.00	56.00	-26.67	-
2	0.213	0.10	43.91	-	44.01	-	63.11	53.11	-19.10	-
3	0.283	0.11	35.80	-	35.91	-	60.73	50.73	-24.83	-
4	0.423	0.12	30.13	-	30.25	-	57.38	47.38	-27.13	-
5	2.184	0.26	31.33	-	31.59	-	56.00	46.00	-24.41	-
6	15.016	0.70	29.59	-	30.29	-	60.00	50.00	-29.71	-

- 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.



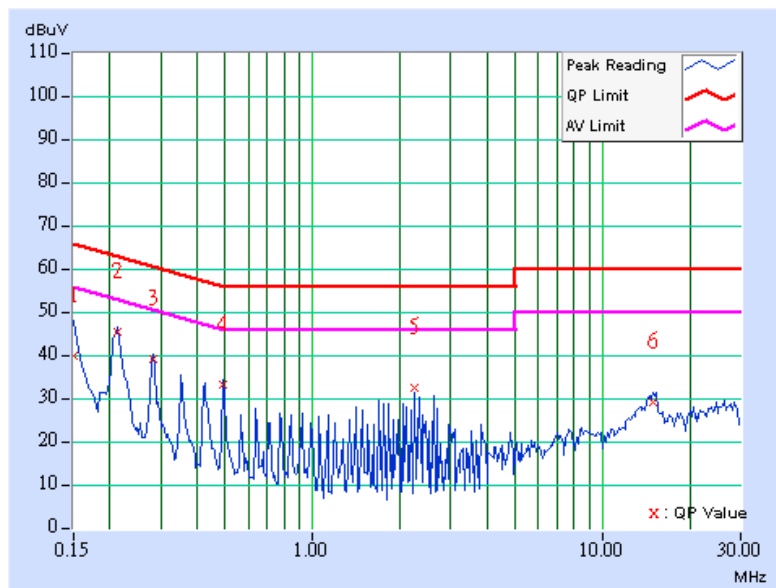


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	2

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	39.28	-	39.38	-	66.00	56.00	-26.62	-
2	0.213	0.10	44.95	-	45.05	-	63.11	53.11	-18.06	-
3	0.283	0.11	38.81	-	38.92	-	60.73	50.73	-21.82	-
4	0.494	0.14	32.93	-	33.07	-	56.10	46.10	-23.04	-
5	2.258	0.26	32.03	-	32.29	-	56.00	46.00	-23.71	-
6	14.879	0.56	28.66	-	29.22	-	60.00	50.00	-30.78	-

- 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.



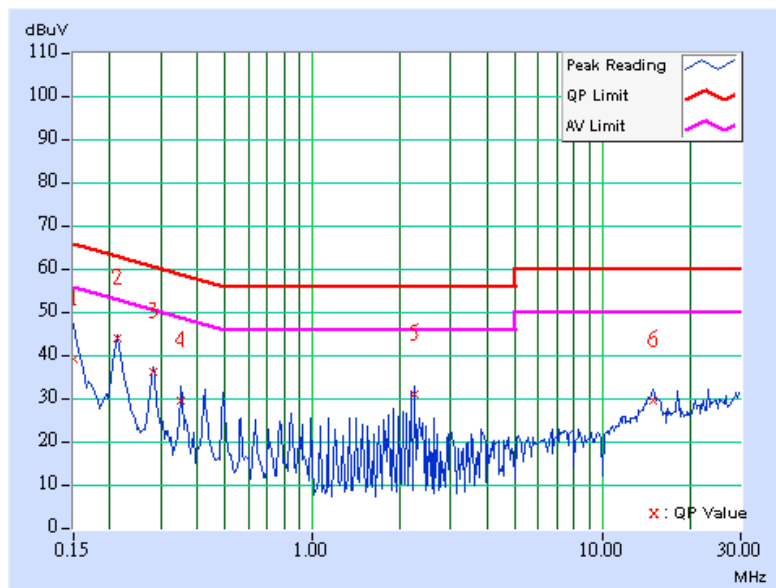


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	3

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	38.70	-	38.81	-	66.00	56.00	-27.19	-
2	0.213	0.10	43.51	-	43.61	-	63.11	53.11	-19.50	-
3	0.283	0.11	35.47	-	35.58	-	60.73	50.73	-25.16	-
4	0.349	0.11	28.82	-	28.93	-	58.98	48.98	-30.05	-
5	2.254	0.27	30.39	-	30.66	-	56.00	46.00	-25.34	-
6	15.016	0.70	28.89	-	29.59	-	60.00	50.00	-30.41	-

- 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.



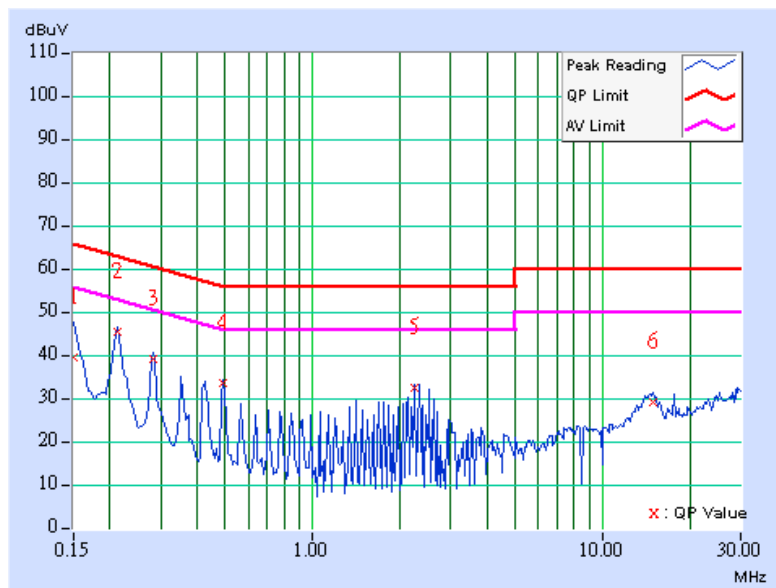


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	3

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	39.24	-	39.34	-	66.00	56.00	-26.66	-
2	0.213	0.10	44.97	-	45.07	-	63.11	53.11	-18.04	-
3	0.283	0.11	38.79	-	38.90	-	60.73	50.73	-21.84	-
4	0.494	0.14	32.99	-	33.13	-	56.10	46.10	-22.98	-
5	2.258	0.26	32.13	-	32.39	-	56.00	46.00	-23.61	-
6	14.871	0.56	28.66	-	29.22	-	60.00	50.00	-30.78	-

- 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.



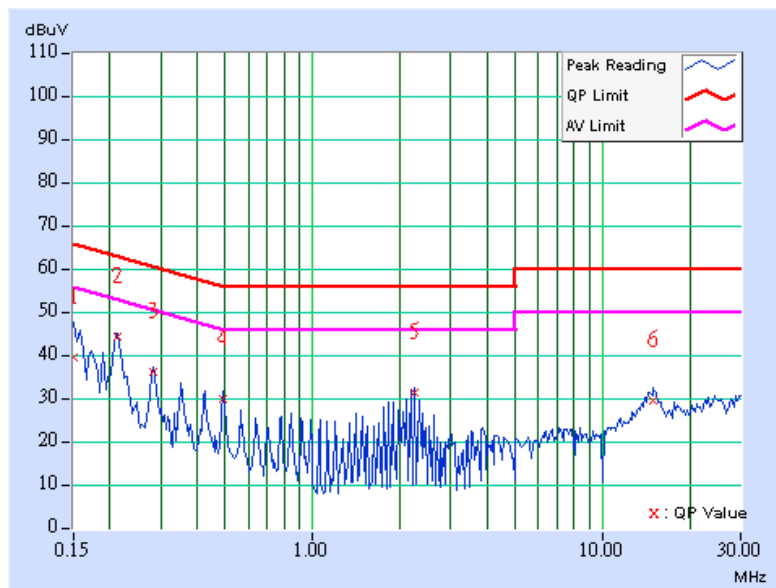


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	3

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	38.88	-	38.99	-	66.00	56.00	-27.01	-
2	0.213	0.10	43.59	-	43.69	-	63.11	53.11	-19.42	-
3	0.283	0.11	35.59	-	35.70	-	60.73	50.73	-25.04	-
4	0.494	0.14	29.48	-	29.62	-	56.10	46.10	-26.49	-
5	2.254	0.27	30.74	-	31.01	-	56.00	46.00	-24.99	-
6	14.949	0.70	28.77	-	29.47	-	60.00	50.00	-30.53	-

- 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.



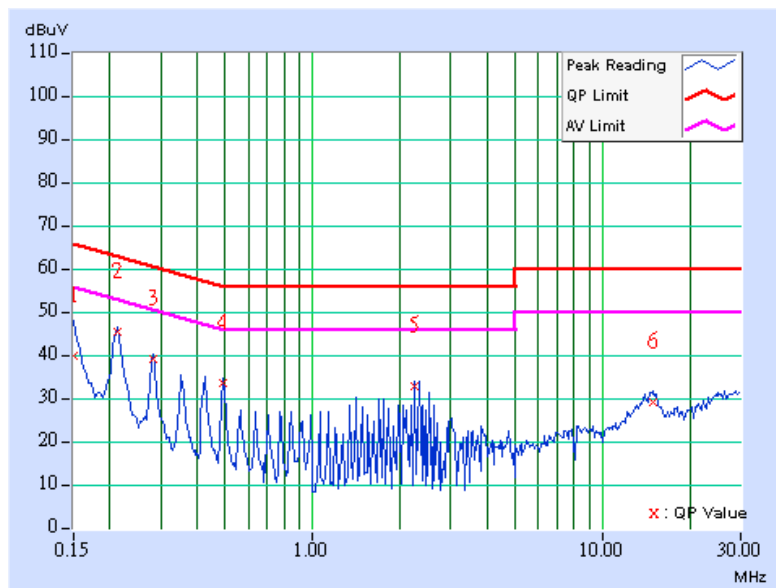


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	3

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	39.32	-	39.42	-	66.00	56.00	-26.58	-
2	0.213	0.10	44.99	-	45.09	-	63.11	53.11	-18.02	-
3	0.283	0.11	38.83	-	38.94	-	60.73	50.73	-21.80	-
4	0.494	0.14	33.00	-	33.14	-	56.10	46.10	-22.97	-
5	2.258	0.26	32.54	-	32.80	-	56.00	46.00	-23.20	-
6	15.016	0.56	28.87	-	29.43	-	60.00	50.00	-30.57	-

- 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.



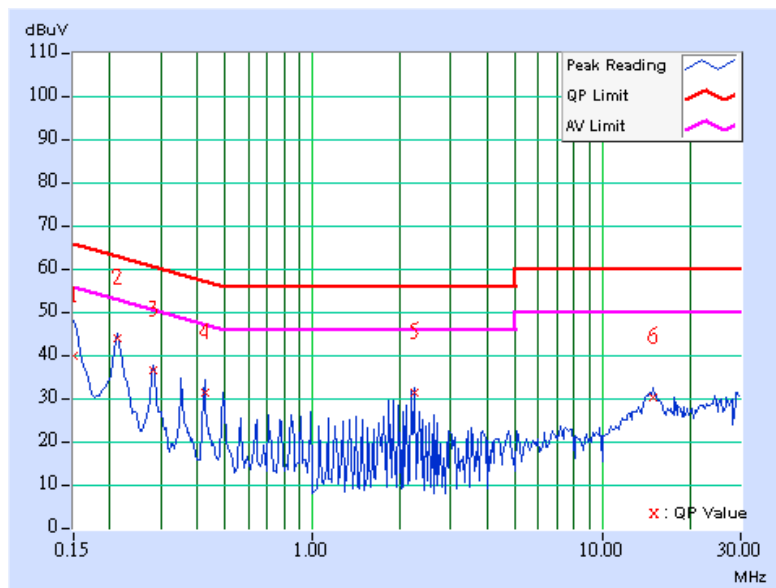


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	3

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	39.34	-	39.45	-	66.00	56.00	-26.55	-
2	0.213	0.10	43.43	-	43.53	-	63.11	53.11	-19.58	-
3	0.283	0.11	36.13	-	36.24	-	60.73	50.73	-24.50	-
4	0.423	0.12	30.61	-	30.73	-	57.38	47.38	-26.65	-
5	2.258	0.27	30.87	-	31.14	-	56.00	46.00	-24.86	-
6	14.945	0.70	29.74	-	30.44	-	60.00	50.00	-29.56	-

- 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.



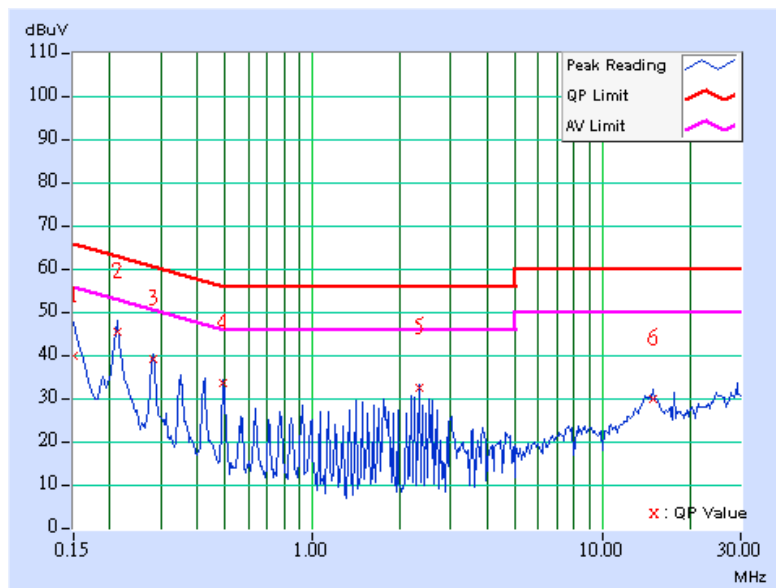


EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23 deg. C, 69% RH, 991 hPa	TEST MODE	3

TESTED BY: Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	39.30	-	39.40	-	66.00	56.00	-26.60	-
2	0.213	0.10	44.97	-	45.07	-	63.11	53.11	-18.04	-
3	0.283	0.11	38.79	-	38.90	-	60.73	50.73	-21.84	-
4	0.494	0.14	33.02	-	33.16	-	56.10	46.10	-22.95	-
5	2.328	0.26	32.02	-	32.28	-	56.00	46.00	-23.72	-
6	15.012	0.56	29.36	-	29.92	-	60.00	50.00	-30.08	-

- 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
HP Spectrum Analyzer	8590L	3544A01176	May. 31, 2005
HP Preamplifier	8447D	2944A08485	Apr. 26, 2005
* HP Preamplifier	8449B	3008A01924	Sep. 19, 2005
* HP Preamplifier	8449B	3008A01638	Sep. 30, 2005
SCHAFFNER TEST RECEIVER	SCR 3501	408	Jan. 08, 2005
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Feb. 12, 2005
SCHWARZBECK Tunable Dipole Antenna	VHA 9103	NA	Oct. 29, 2005
SCHWARZBECK Tunable Dipole Antenna	UHA 9105	977	
* CHASE BILOG Antenna	CBL6112A	2221	Oct. 19, 2005
* EMCO Horn Antenna	3115	6714	Oct. 28, 2005
* EMCO Horn Antenna	3115	9312-4192	Feb. 28, 2005
* EMCO Turn Table	1060	1115	NA
* CHANCE Tower	CM-AT40	CM-A010	NA
* Software	ADT_Radiated_V7.5.14	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Dec. 02, 2005
* TIMES RF cable	LMR-600	CABLE-ST5-01	Dec. 02, 2005

- 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. "*" = These equipment are used for the final measurement.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The test was performed in ADT Open Site No. 5.
 5. The VCCI Site Registration No. R-1039.



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 10 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.

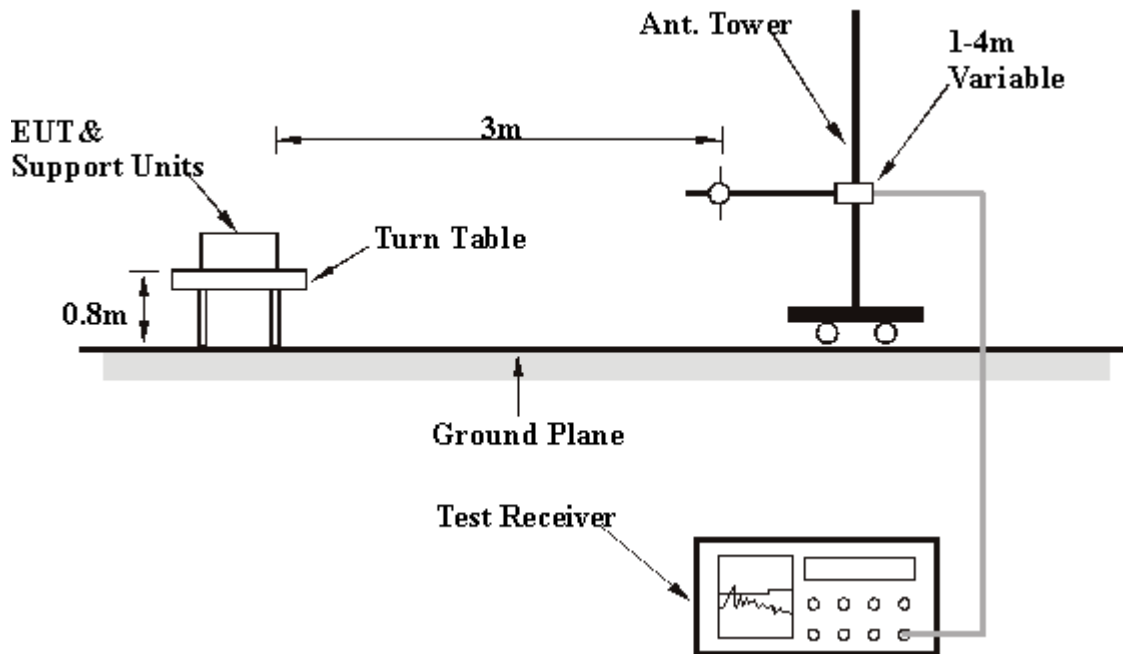
NOTE:

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 10 Hz 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

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22 deg. C, 53% RH, 991 hPa	TEST MODE	1
TESTED BY	Steven Lu		

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	250.00	36.20 QP	46.00	-9.80	1.85 H	128	22.79	13.41
2	350.00	39.33 QP	46.00	-6.67	2.02 H	221	22.81	16.52
3	375.00	41.38 QP	46.00	-4.62	1.96 H	234	23.92	17.46
4	400.00	42.68 QP	46.00	-3.32	1.95 H	236	24.28	18.40
5	500.00	40.94 QP	46.00	-5.06	1.88 H	312	20.72	20.22
6	525.00	36.47 QP	46.00	-9.53	1.89 H	265	15.73	20.74
7	600.00	41.31 QP	46.00	-4.69	1.88 H	204	18.88	22.43
8	625.00	40.32 QP	46.00	-5.68	2.00 H	199	17.69	22.63
9	650.00	39.18 QP	46.00	-6.82	2.12 H	267	16.35	22.83
10	800.00	43.29 QP	46.00	-2.71	1.96 H	301	19.00	24.29
11	850.00	41.36 QP	46.00	-4.64	1.87 H	312	16.67	24.69

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	250.00	35.00 QP	46.00	-11.00	1.02 V	78	21.59	13.41
2	350.00	40.33 QP	46.00	-5.67	1.01 V	83	23.81	16.52
3	375.00	42.80 QP	46.00	-3.20	1.00 V	112	25.43	17.46
4	400.00	40.38 QP	46.00	-5.32	1.00 V	105	22.28	18.40
5	500.00	38.94 QP	46.00	-7.06	1.01 V	98	18.72	20.22
6	525.00	37.47 QP	46.00	-8.53	1.02 V	123	16.73	20.74
7	600.00	42.10 QP	46.00	-3.90	1.03 V	117	19.67	22.43
8	625.00	38.45 QP	46.00	-7.55	1.05 V	120	15.82	22.63
9	650.00	38.18 QP	46.00	-7.82	1.02 V	125	15.53	22.83
10	800.00	44.20 QP	46.00	-1.80	1.03 V	111	19.91	24.29
11	850.00	39.21 QP	46.00	-6.79	1.10 V	354	14.2	24.69

- 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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22 deg. C, 53% RH, 991 hPa	TEST MODE	2
TESTED BY	Steven Lu		

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	250.00	35.85 QP	46.00	-10.15	1.58 H	125	22.44	13.41
2	350.00	39.19 QP	46.00	-6.81	1.99 H	261	22.67	16.52
3	375.00	41.18 QP	46.00	-4.82	1.96 H	229	23.72	17.46
4	400.00	42.37 QP	46.00	-3.63	2.00 H	229	23.97	18.40
5	500.00	41.21 QP	46.00	-4.79	2.02 H	308	20.99	20.22
6	525.00	35.59 QP	46.00	-10.41	2.05 H	228	14.85	20.74
7	600.00	40.85 QP	46.00	-5.15	1.98 H	211	18.42	22.43
8	625.00	38.97 QP	46.00	-7.03	2.00 H	222	16.34	22.63
9	650.00	39.33 QP	46.00	-6.67	1.98 H	258	16.50	22.83
10	800.00	42.81 QP	46.00	-3.19	1.98 H	311	18.52	24.29
11	850.00	40.37 QP	46.00	-5.63	1.82 H	310	15.68	24.69

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	250.00	35.37 QP	46.00	-10.63	1.00 V	84	21.96	13.41
2	350.00	40.53 QP	46.00	-5.47	1.05 V	84	24.01	16.52
3	375.00	42.59 QP	46.00	-3.41	1.00 V	108	25.13	17.46
4	400.00	40.61 QP	46.00	-5.39	1.00 V	121	22.21	18.40
5	500.00	38.76 QP	46.00	-7.24	1.00 V	96	18.54	20.22
6	525.00	37.11 QP	46.00	-8.89	1.00 V	126	16.37	20.74
7	600.00	42.23 QP	46.00	-3.77	1.05 V	115	19.80	22.43
8	625.00	38.22 QP	46.00	-7.78	1.02 V	119	15.59	22.63
9	650.00	38.21 QP	46.00	-7.79	1.05 V	118	15.38	22.83
10	800.00	42.03 QP	46.00	-3.97	1.05 V	112	17.74	24.29
11	850.00	39.17 QP	46.00	-6.83	1.02 V	351	14.48	24.69

- 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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120 Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22 deg. C, 53% RH, 991 hPa	TEST MODE	3
TESTED BY	Steven Lu		

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	250.00	36.64 QP	46.00	-9.36	1.86 H	131	23.23	13.41
2	350.00	39.64 QP	46.00	-6.36	2.05 H	208	23.12	16.52
3	375.00	41.69 QP	46.00	-4.31	1.98 H	237	24.23	17.46
4	400.00	43.11 QP	46.00	-2.89	1.97 H	242	24.71	18.40
5	500.00	41.03 QP	46.00	-4.97	1.92 H	308	20.81	20.22
6	525.00	37.53 QP	46.00	-8.47	1.91 H	257	16.79	20.74
7	600.00	41.86 QP	46.00	-4.14	1.92 H	214	19.43	22.43
8	625.00	40.21 QP	46.00	-5.79	1.97 H	203	17.58	22.63
9	650.00	39.77 QP	46.00	-6.23	2.08 H	272	16.94	22.83
10	800.00	43.79 QP	46.00	-2.21	2.02 H	295	19.50	24.29
11	850.00	42.10 QP	46.00	-3.90	1.87 H	308	17.41	24.69

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	250.00	35.63 QP	46.00	-10.37	1.01 V	104	22.22	13.41
2	350.00	40.65 QP	46.00	-5.35	1.03 V	94	24.13	16.52
3	375.00	42.72 QP	46.00	-3.28	1.02 V	106	25.26	17.46
4	400.00	41.02 QP	46.00	-4.98	1.03 V	125	22.62	18.40
5	500.00	38.91 QP	46.00	-7.09	1.05 V	106	18.69	20.22
6	525.00	37.49 QP	46.00	-8.51	1.01 V	134	16.75	20.74
7	600.00	42.49 QP	46.00	-3.51	1.04 V	161	20.06	22.43
8	625.00	38.42 QP	46.00	-7.58	1.00 V	123	15.79	22.63
9	650.00	38.33 QP	46.00	-7.67	1.06 V	121	15.50	22.83
10	800.00	42.00 QP	46.00	-4.00	1.05 V	112	17.71	24.29
11	850.00	39.23 QP	46.00	-6.77	1.03 V	348	14.54	24.69

- 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.

4.2.8 TEST RESULTS (A)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	1
TESTED BY	Long Chen		

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	1120.00	48.69 PK	74.00	-25.31	1.54 H	17	20.66	28.03
2	1929.60	46.31 PK	74.00	-27.69	1.38 H	49	16.96	29.35
3	2390.00	53.35 PK	74.00	-20.65	1.14 H	178	21.74	31.61
3	2390.00	45.70 AV	54.00	-8.30	1.14 H	178	14.09	31.61
4	*2412.00	110.21 PK			1.14 H	178	78.51	31.70
4	*2412.00	102.56 AV			1.14 H	178	70.86	31.70
5	4824.00	56.89 PK	74.00	-17.11	1.17 H	248	19.31	37.58
5	4824.00	45.89 AV	54.00	-8.11	1.17 H	248	8.31	37.58

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	1120.00	44.17 PK	74.00	-29.83	1.36 V	274	16.14	28.03
2	1929.60	41.87 PK	74.00	-32.13	1.63 V	278	12.52	29.35
3	2390.00	35.45 PK	74.00	-38.55	1.04 V	192	3.84	31.61
4	*2412.00	92.31 PK			1.04 V	192	60.61	31.70
4	*2412.00	85.16 AV			1.04 V	192	53.46	31.70
5	4824.00	56.36 PK	74.00	-17.64	1.17 V	168	18.78	37.58
5	4824.00	44.54 AV	54.00	-9.46	1.17 V	168	6.96	37.58

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	1
TESTED BY	Long Chen		

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	1120.00	47.36 PK	74.00	-26.64	1.36 H	247	19.33	28.03
2	1949.60	46.24 PK	74.00	-27.76	1.20 H	66	16.75	29.49
3	*2437.00	110.12 PK			1.14 H	254	78.27	31.85
3	*2437.00	102.32 AV			1.14 H	254	70.47	31.85
4	4874.00	57.88 PK	74.00	-16.12	1.36 H	118	20.22	37.66
4	4874.00	47.02 AV	54.00	-6.98	1.36 H	118	9.36	37.66

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	1120.00	42.30 PK	74.00	-31.70	1.35 V	287	14.27	28.03
2	1949.60	45.87 PK	74.00	-28.13	1.48 V	143	16.38	29.49
3	*2347.00	91.89 PK			1.17 V	23	60.39	31.50
3	*2347.00	84.63 AV			1.17 V	23	53.13	31.50
4	4874.00	55.48 PK	74.00	-18.52	1.42 V	339	17.82	37.66
4	4874.00	44.39 AV	54.00	-9.61	1.42 V	339	6.73	37.66

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



EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	1
TESTED BY	Long Chen		

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	1120.00	48.35 PK	74.00	-25.65	1.14 H	337	20.32	28.03
2	1969.60	46.14 PK	74.00	-27.86	1.52 H	174	16.51	29.63
3	*2462.00	111.42 PK			1.00 H	89	79.42	32.00
3	*2462.00	103.37 AV			1.00 H	89	71.37	32.00
4	2483.50	55.41 PK	74.00	-18.59	1.00 H	89	23.28	32.13
4	2483.50	47.36 AV	54.00	-6.64	1.00 H	89	15.23	32.13
5	4924.00	58.36 PK	74.00	-15.64	1.33 H	187	20.62	37.74
5	4924.00	47.54 AV	54.00	-6.46	1.33 H	187	9.80	37.74

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	1120.00	45.38 PK	74.00	-28.62	1.35 V	227	17.35	28.03
2	1969.60	42.98 PK	74.00	-31.02	1.36 V	195	13.35	29.63
3	*2462.00	93.46 PK			1.14 V	249	61.46	32.00
3	*2462.00	85.81 AV			1.14 V	249	53.81	32.00
4	2483.50	37.45 PK	74.00	-36.55	1.14 V	249	5.32	32.13
5	4924.00	55.36 PK	74.00	-18.64	1.52 V	339	17.62	37.74
5	4924.00	44.19 AV	54.00	-9.81	1.52 V	339	6.45	37.74

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23 deg. C, 61% RH, 991 hPa	TEST MODE	2
TESTED BY	Long Chen		

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	1120.00	47.89 PK	74.00	-26.11	1.35 H	27	21.16	26.73
2	1929.60	44.38 PK	74.00	-29.62	1.22 H	148	15.61	28.77
3	2390.00	40.79 PK	74.00	-33.21	1.51 H	23	10.08	30.71
4	*2412.00	97.45 PK			1.51 H	23	66.65	30.80
4	*2412.00	90.30 AV			1.51 H	23	59.50	30.80
5	4824.00	60.20 PK	74.00	-13.80	1.17 H	236	23.62	36.58
5	4824.00	48.80 AV	54.00	-5.20	1.17 H	236	12.22	36.58

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	1120.00	44.38 PK	74.00	-29.62	1.32 V	274	17.65	26.73
2	1929.60	42.32 PK	74.00	-31.68	1.06 V	337	13.55	28.77
3	2390.00	58.91 PK	74.00	-15.09	1.05 V	344	28.20	30.71
3	2390.00	51.19 AV	54.00	-2.81	1.05 V	344	20.48	30.71
4	*2412.00	115.57 PK			1.05 V	344	84.77	30.80
4	*2412.00	107.85 AV			1.05 V	344	77.05	30.80
5	4824.00	61.38 PK	74.00	-12.62	1.07 V	299	24.80	36.58
5	4824.00	49.86 AV	54.00	-4.14	1.07 V	299	13.28	36.58

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23 deg. C, 61% RH, 991 hPa	TEST MODE	2
TESTED BY	Long Chen		

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	1120.00	47.89 PK	74.00	-26.11	1.47 H	188	21.16	26.73
2	1949.60	44.15 PK	74.00	-29.85	1.34 H	224	15.26	28.89
3	*2437.00	97.23 PK			1.49 H	20	66.33	30.90
3	*2437.00	89.94 AV			1.49 H	20	59.04	30.90
4	4874.00	59.26 PK	74.00	-14.74	1.28 H	173	22.50	36.76
4	4874.00	47.63 AV	54.00	-6.37	1.28 H	173	10.87	36.76

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	1120.00	45.36 PK	74.00	-28.64	1.52 V	14	18.63	26.73
2	1949.60	41.33 PK	74.00	-32.67	1.18 V	329	12.44	28.89
3	*2437.00	115.59 PK			1.13 V	302	84.69	30.90
3	*2437.00	107.61 AV			1.13 V	302	76.71	30.90
4	4874.00	60.38 PK	74.00	-13.62	1.57 V	66	23.62	36.76
4	4874.00	48.93 AV	54.00	-5.07	1.57 V	66	12.17	36.76

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23 deg. C, 61% RH, 991 hPa	TEST MODE	2
TESTED BY	Long Chen		

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	1120.00	47.80 PK	74.00	-26.20	1.36 H	224	21.07	26.73
2	1969.60	44.21 PK	74.00	-29.79	1.17 H	283	15.20	29.01
3	*2462.00	98.18 PK			1.58 H	22	67.19	30.99
3	*2462.00	90.69 AV			1.58 H	22	59.70	30.99
4	2483.50	41.71 PK	74.00	-32.29	1.58 H	22	10.64	31.07
5	4924.00	60.47 PK	74.00	-13.53	1.06 H	360	23.49	36.97
5	4924.00	48.80 AV	54.00	-5.20	1.06 H	360	11.82	36.97

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	1120.00	45.01 PK	74.00	-28.99	1.25 V	21	18.28	26.73
2	1969.60	42.70 PK	74.00	-31.30	1.31 V	344	13.69	29.01
3	*2462.00	116.13 PK			1.05 V	339	85.14	30.99
3	*2462.00	108.12 AV			1.05 V	339	77.13	30.99
4	2483.50	59.66 PK	74.00	-14.34	1.05 V	339	28.59	31.07
4	2483.50	51.65 AV	54.00	-2.35	1.05 V	339	20.58	31.07
5	4924.00	61.10 PK	74.00	-12.90	1.13 V	43	24.12	36.97
5	4924.00	49.31 AV	54.00	-4.69	1.13 V	43	12.33	36.97

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	3
TESTED BY	Long Chen		

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	1120.00	46.98 PK	74.00	-27.02	1.54 H	55	18.95	28.03
2	1929.60	43.58 PK	74.00	-30.42	1.36 H	274	14.23	29.35
3	2390.00	38.99 PK	74.00	-35.01	1.08 H	49	7.38	31.61
4	*2412.00	95.85 PK			1.08 H	49	64.15	31.70
4	*2412.00	88.25 AV			1.08 H	49	56.55	31.70
5	4824.00	58.74 PK	74.00	-15.26	1.36 H	287	21.16	37.58
5	4824.00	46.89 AV	54.00	-7.11	1.36 H	287	9.31	37.58

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	1120.00	43.87 PK	74.00	-30.13	1.35 V	54	15.84	28.03
2	1929.60	41.89 PK	74.00	-32.11	1.62 V	227	12.54	29.35
3	2390.00	56.99 PK	74.00	-17.01	1.12 V	10	25.38	31.61
3	2390.00	48.83 AV	54.00	-5.17	1.12 V	10	17.22	31.61
4	*2412.00	113.85 PK			1.12 V	10	82.15	31.70
4	*2412.00	105.69 AV			1.12 V	10	73.99	31.70
5	4824.00	60.30 PK	74.00	-13.70	1.35 V	22	22.72	37.58
5	4824.00	48.39 AV	54.00	-5.61	1.35 V	22	10.81	37.58

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	3
TESTED BY	Long Chen		

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	1120.00	46.39 PK	74.00	-27.61	1.38 H	249	18.36	28.03
2	1949.60	43.69 PK	74.00	-30.31	1.77 H	121	14.20	29.49
3	*2437.00	95.69 PK			1.48 H	39	63.84	31.85
3	*2437.00	88.17 AV			1.48 H	39	56.32	31.85
4	4874.00	57.63 PK	74.00	-16.37	1.22 H	163	19.97	37.66
4	4874.00	46.37 AV	54.00	-7.63	1.22 H	163	8.71	37.66

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	1120.00	44.87 PK	74.00	-29.13	1.22 V	18	16.84	28.03
2	1949.60	41.85 PK	74.00	-32.15	1.36 V	28	12.36	29.49
3	*2437.00	113.67 PK			1.26 V	338	81.82	31.85
3	*2437.00	105.48 AV			1.26 V	338	73.63	31.85
4	4874.00	61.29 PK	74.00	-12.71	1.32 V	214	23.63	37.66
4	4874.00	49.73 AV	54.00	-4.27	1.32 V	214	12.07	37.66

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



EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	3
TESTED BY	Long Chen		

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	1120.00	46.90 PK	74.00	-27.10	1.38 H	360	18.87	28.03
2	1969.60	45.87 PK	74.00	-28.13	1.38 H	236	16.24	29.63
3	*2462.00	96.54 PK			1.51 H	26	64.54	32.00
3	*2462.00	88.91 AV			1.51 H	26	56.91	32.00
4	2483.50	40.53 PK	74.00	-33.47	1.51 H	26	8.40	32.13
5	4924.00	59.26 PK	74.00	-14.74	1.26 H	38	21.52	37.74
5	4924.00	47.33 AV	54.00	-6.67	1.26 H	38	9.59	37.74

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	1120.00	44.87 PK	74.00	-29.13	1.32 V	28	16.84	28.03
2	1969.60	41.85 PK	74.00	-32.15	1.47 V	347	12.22	29.63
3	*2462.00	114.46 PK			1.04 V	341	82.46	32.00
3	*2462.00	106.48 AV			1.04 V	341	74.48	32.00
4	2483.50	58.45 PK	74.00	-15.55	1.04 V	341	26.32	32.13
4	2483.50	50.47 AV	54.00	-3.53	1.04 V	341	18.34	32.13
5	4924.00	62.38 PK	74.00	-11.62	1.17 V	229	24.64	37.74
5	4924.00	50.88 AV	54.00	-3.12	1.17 V	229	13.14	37.74

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



4.2.9 TEST RESULTS (B)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	1
TESTED BY	Long Chen		

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	1120.00	48.63 PK	74.00	-25.37	1.36 H	331	20.60	28.03
2	1929.60	45.31 PK	74.00	-28.69	1.20 H	122	15.96	29.35
3	2390.00	53.36 PK	74.00	-20.64	1.17 H	88	21.75	31.61
3	2390.00	44.42 AV	54.00	-9.58	1.17 H	88	12.81	31.61
4	*2412.00	102.95 PK			1.17 H	88	71.25	31.70
4	*2412.00	94.01 AV			1.17 H	88	62.31	31.70
5	4824.00	57.35 PK	74.00	-16.65	1.36 H	229	19.77	37.58
5	4824.00	46.87 AV	54.00	-7.13	1.36 H	229	9.29	37.58

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	1120.00	45.98 PK	74.00	-28.02	1.36 V	1	17.95	28.03
2	1929.60	41.97 PK	74.00	-32.03	1.63 V	33	12.62	29.35
3	2390.00	40.22 PK	74.00	-33.78	1.56 V	337	8.61	31.61
4	*2412.00	89.81 PK			1.56 V	337	58.11	31.70
4	*2412.00	80.14 AV			1.56 V	337	48.44	31.70
5	4824.00	55.43 PK	74.00	-18.57	1.48 V	179	17.85	37.58
5	4824.00	44.32 AV	54.00	-9.68	1.48 V	179	6.74	37.58

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	1
TESTED BY	Long Chen		

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	1120.00	47.56 PK	74.00	-26.44	1.39 H	134	19.53	28.03
2	1949.60	46.30 PK	74.00	-27.70	1.43 H	207	16.81	29.49
3	*2437.00	103.10 PK			1.47 H	307	71.25	31.85
3	*2437.00	94.05 AV			1.47 H	307	62.20	31.85
4	4874.00	57.30 PK	74.00	-16.70	1.64 H	119	19.64	37.66
4	4874.00	45.74 AV	54.00	-8.26	1.64 H	119	8.08	37.66

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	1120.00	46.58 PK	74.00	-27.42	1.63 V	217	18.55	28.03
2	1949.60	42.73 PK	74.00	-31.27	1.17 V	109	13.24	29.49
3	*2437.00	90.30 PK			1.17 V	124	58.45	31.85
3	*2437.00	81.24 AV			1.17 V	124	49.39	31.85
4	4874.00	54.60 PK	74.00	-19.40	1.30 V	227	16.94	37.66
4	4874.00	43.92 AV	54.00	-10.08	1.30 V	227	6.26	37.66

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



EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	1
TESTED BY	Long Chen		

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	1120.00	48.67 PK	74.00	-25.33	1.33 H	307	20.64	28.03
2	1969.60	45.37 PK	74.00	-28.63	1.43 H	169	15.74	29.63
3	*2462.00	104.16 PK			1.07 H	56	72.16	32.00
3	*2462.00	94.97 AV			1.07 H	56	62.97	32.00
4	2483.50	54.15 PK	74.00	-19.85	1.07 H	56	22.02	32.13
4	2483.50	44.87 AV	54.00	-9.13	1.07 H	56	12.74	32.13
5	4924.00	58.31 PK	74.00	-15.69	1.15 H	22	20.57	37.74
5	4924.00	47.04 AV	54.00	-6.96	1.15 H	22	9.30	37.74

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	1120.00	45.89 PK	74.00	-28.11	1.32 V	198	17.86	28.03
2	1969.60	41.69 PK	74.00	-32.31	1.05 V	227	12.06	29.63
3	*2462.00	90.60 PK			1.14 V	299	58.60	32.00
3	*2462.00	81.42 AV			1.14 V	299	49.42	32.00
4	2483.50	40.59 PK	74.00	-33.41	1.14 V	299	8.46	32.13
5	4924.00	56.39 PK	74.00	-17.61	1.54 V	278	18.65	37.74
5	4924.00	45.17 AV	54.00	-8.83	1.54 V	278	7.43	37.74

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23 deg. C, 61% RH, 991 hPa	TEST MODE	2
TESTED BY	Long Chen		

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	1120.00	46.89 PK	74.00	-27.11	1.28 H	38	20.16	26.73
2	1929.60	47.30 PK	74.00	-26.70	1.35 H	217	18.53	28.77
3	2390.00	47.22 PK	74.00	-26.78	1.40 H	138	16.51	30.71
4	*2412.00	94.62 PK			1.40 H	138	63.82	30.80
4	*2412.00	85.32 AV			1.40 H	138	54.52	30.80
5	4824.00	51.21 PK	74.00	-22.79	1.55 H	88	14.63	36.58
5	4824.00	40.63 AV	54.00	-13.37	1.55 H	88	4.05	36.58

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	1120.00	42.36 PK	74.00	-31.64	1.38 V	276	15.63	26.73
2	1929.60	41.86 PK	74.00	-32.14	1.08 V	287	13.09	28.77
3	2390.00	60.82 PK	74.00	-13.18	1.35 V	180	30.11	30.71
3	2390.00	51.74 AV	54.00	-2.26	1.35 V	180	21.03	30.71
4	*2412.00	108.22 PK			1.35 V	180	77.42	30.80
4	*2412.00	99.14 AV			1.35 V	180	68.34	30.80
5	4824.00	53.26 PK	74.00	-20.74	1.55 V	88	16.68	36.58
5	4824.00	40.42 AV	54.00	-13.58	1.55 V	88	3.84	36.58

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23 deg. C, 61% RH, 991 hPa	TEST MODE	2
TESTED BY	Long Chen		

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	1120.00	46.29 PK	74.00	-27.71	1.36 H	214	19.56	26.73
2	1949.60	43.36 PK	74.00	-30.64	1.03 H	196	14.47	28.89
3	*2437.00	95.19 PK			1.05 H	275	64.29	30.90
3	*2437.00	86.09 AV			1.05 H	275	55.19	30.90
4	4874.00	53.82 PK	74.00	-20.18	1.28 H	337	17.06	36.76
4	4874.00	40.49 AV	54.00	-13.51	1.28 H	337	3.73	36.76

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	1120.00	43.36 PK	74.00	-30.64	1.08 V	207	16.63	26.73
2	1949.60	40.85 PK	74.00	-33.15	1.08 V	274	11.96	28.89
3	*2437.00	108.39 PK			1.09 V	298	77.49	30.90
3	*2437.00	99.29 AV			1.09 V	298	68.39	30.90
4	4874.00	54.75 PK	74.00	-19.25	1.43 V	339	17.99	36.76
4	4874.00	43.84 AV	54.00	-10.16	1.43 V	339	7.08	36.76

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23 deg. C, 61% RH, 991 hPa	TEST MODE	2
TESTED BY	Long Chen		

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	1120.00	46.38 PK	74.00	-27.62	1.50 H	218	19.65	26.73
2	1969.60	42.66 PK	74.00	-31.34	1.06 H	104	13.65	29.01
3	*2462.00	95.45 PK			1.04 H	275	64.46	30.99
3	*2462.00	86.21 AV			1.04 H	275	55.22	30.99
4	2483.50	48.69 PK	74.00	-25.31	1.04 H	275	17.62	31.07
5	4924.00	53.97 PK	74.00	-20.03	1.00 H	322	16.99	36.97
5	4924.00	40.88 AV	54.00	-13.12	1.00 H	322	3.90	36.97

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	1120.00	44.54 PK	74.00	-29.46	1.35 V	0	17.81	26.73
2	1969.60	41.38 PK	74.00	-32.62	1.20 V	334	12.37	29.01
3	*2462.00	108.95 PK			1.00 V	283	77.96	30.99
3	*2462.00	99.71 AV			1.00 V	283	68.72	30.99
4	2483.50	61.09 PK	74.00	-12.91	1.00 V	283	30.02	31.07
4	2483.50	51.95 AV	54.00	-2.05	1.00 V	283	20.88	31.07
5	4924.00	54.82 PK	74.00	-19.18	1.00 V	29	17.84	36.97
5	4924.00	41.71 AV	54.00	-12.29	1.00 V	29	4.73	36.97

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	1	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	3
TESTED BY	Long Chen		

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	1120.00	47.82 PK	74.00	-26.18	1.34 H	247	19.79	28.03
2	1929.60	48.38 PK	74.00	-25.62	1.45 H	274	19.03	29.35
3	2390.00	43.30 PK	74.00	-30.70	1.62 H	137	11.69	31.61
4	*2412.00	92.89 PK			1.62 H	137	61.19	31.70
4	*2412.00	83.54 AV			1.62 H	137	51.84	31.70
5	4824.00	50.84 PK	74.00	-23.16	1.34 H	227	13.26	37.58
5	4824.00	39.47 AV	54.00	-14.53	1.34 H	227	1.89	37.58

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	1120.00	41.54 PK	74.00	-32.46	1.36 V	287	13.51	28.03
2	1929.60	43.89 PK	74.00	-30.11	1.48 V	211	14.54	29.35
3	2390.00	56.86 PK	74.00	-17.14	1.36 V	189	25.25	31.61
3	2390.00	48.26 AV	54.00	-5.74	1.36 V	189	16.65	31.61
4	*2412.00	106.45 PK			1.36 V	189	74.75	31.70
4	*2412.00	97.85 AV			1.36 V	189	66.15	31.70
5	4824.00	53.51 PK	74.00	-20.49	1.33 V	83	15.93	37.58
5	4824.00	40.71 AV	54.00	-13.29	1.33 V	83	3.13	37.58

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	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	6	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	3
TESTED BY	Long Chen		

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	1120.00	45.87 PK	74.00	-28.13	1.36 H	258	17.84	28.03
2	1949.60	42.70 PK	74.00	-31.30	1.54 H	229	13.21	29.49
3	*2437.00	93.80 PK			1.52 H	338	61.95	31.85
3	*2437.00	84.74 AV			1.52 H	338	52.89	31.85
4	4874.00	52.89 PK	74.00	-21.11	1.14 H	224	15.23	37.66
4	4874.00	41.97 AV	54.00	-12.03	1.14 H	224	4.31	37.66

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	1120.00	42.89 PK	74.00	-31.11	1.14 V	276	14.86	28.03
2	1949.60	41.83 PK	74.00	-32.17	1.38 V	254	12.34	29.49
3	*2437.00	106.51 PK			1.08 V	294	74.66	31.85
3	*2437.00	97.44 AV			1.08 V	294	65.59	31.85
4	4874.00	55.63 PK	74.00	-18.37	1.33 V	259	17.97	37.66
4	4874.00	44.78 AV	54.00	-9.22	1.33 V	259	7.12	37.66

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



EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
CHANNEL	11	FREQUENCY RANGE	1~25 GHz
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 65% RH, 991 hPa	TEST MODE	3
TESTED BY	Long Chen		

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	1120.00	44.36 PK	74.00	-29.64	1.15 H	278	16.33	28.03
2	1969.60	41.54 PK	74.00	-32.46	1.36 H	32	11.91	29.63
3	*2462.00	93.63 PK			1.17 H	257	61.63	32.00
3	*2462.00	84.44 AV			1.17 H	257	52.44	32.00
4	2483.50	43.62 PK	74.00	-30.38	1.17 H	257	11.49	32.13
5	4924.00	52.63 PK	74.00	-21.37	1.14 H	211	14.89	37.74
5	4924.00	39.87 AV	54.00	-14.13	1.14 H	211	2.13	37.74

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	1120.00	44.21 PK	74.00	-29.79	1.36 V	287	16.18	28.03
2	1969.60	40.24 PK	74.00	-33.76	1.54 V	247	10.61	29.63
3	*2462.00	107.02 PK			1.14 V	229	75.02	32.00
3	*2462.00	96.95 AV			1.14 V	229	64.95	32.00
4	2483.50	57.01 PK	74.00	-16.99	1.14 V	229	24.88	32.13
4	2483.50	46.94 AV	54.00	-7.06	1.14 V	229	14.81	32.13
5	4924.00	53.81 PK	74.00	-20.19	1.35 V	55	16.07	37.74
5	4924.00	42.36 AV	54.00	-11.64	1.35 V	55	4.62	37.74

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 0.5MHz.

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.

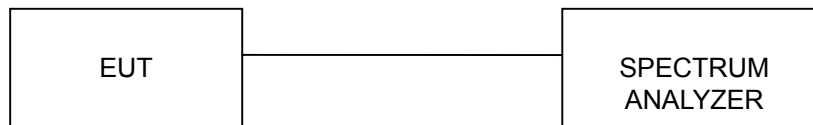
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz 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.



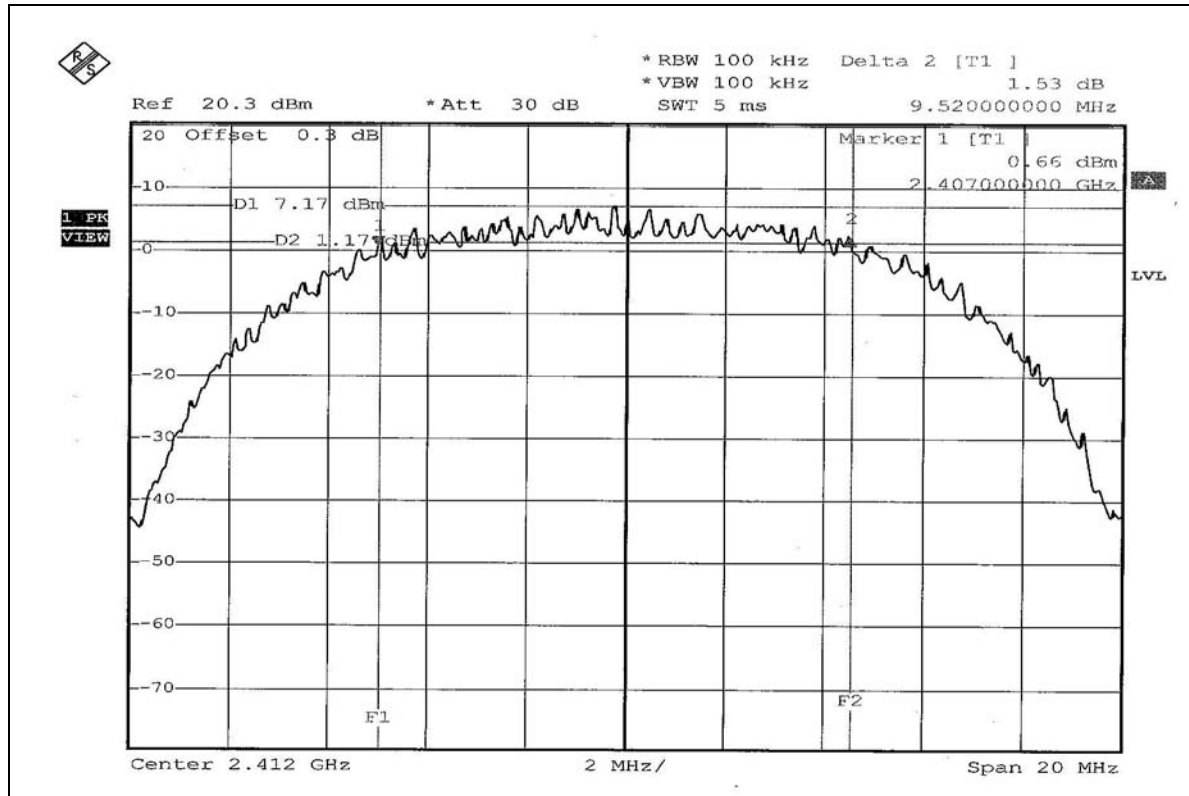
4.3.7 TEST RESULTS (A)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

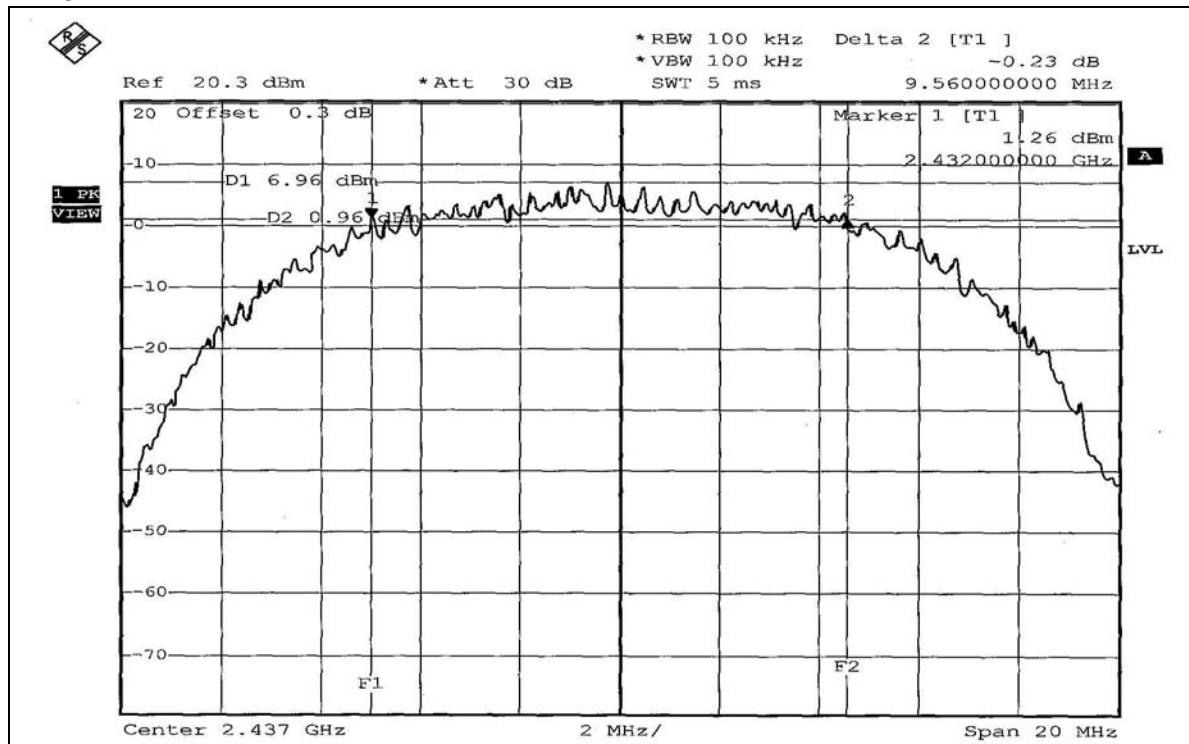
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	9.52	0.5	PASS
6	2437	9.56	0.5	PASS
11	2462	9.96	0.5	PASS



CH1

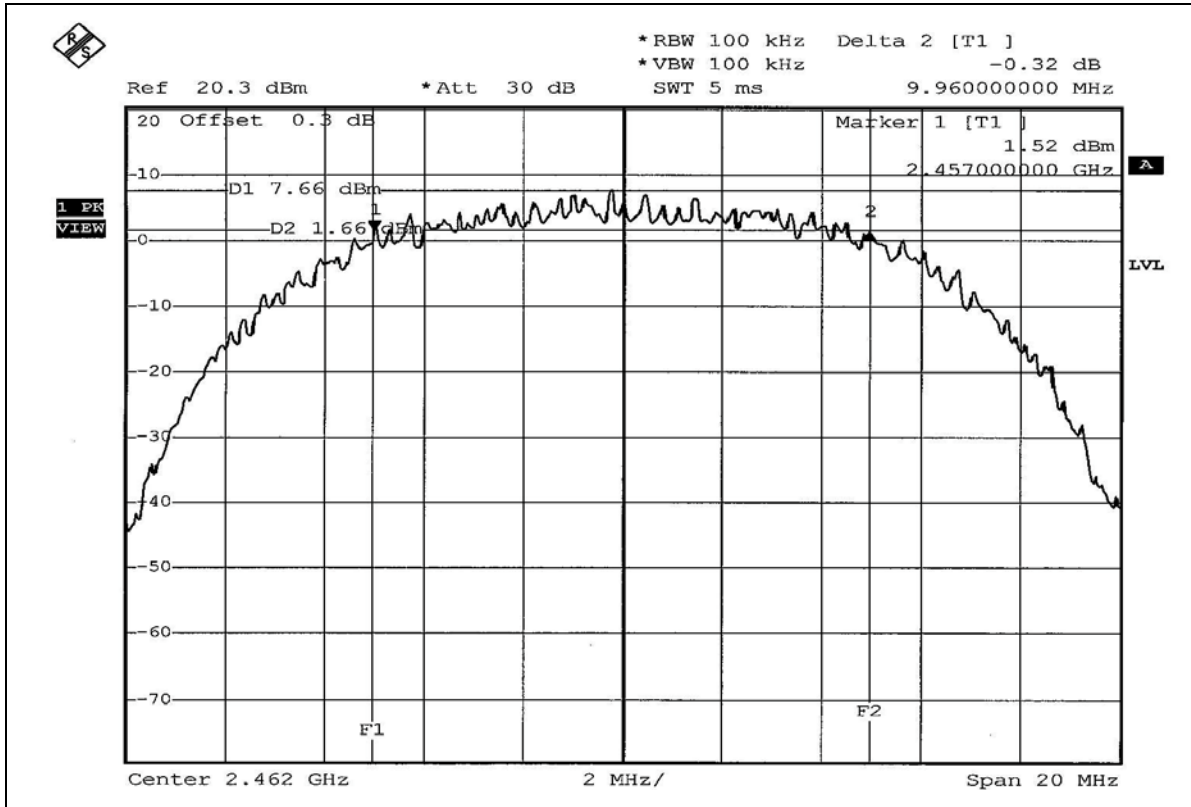


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CH11





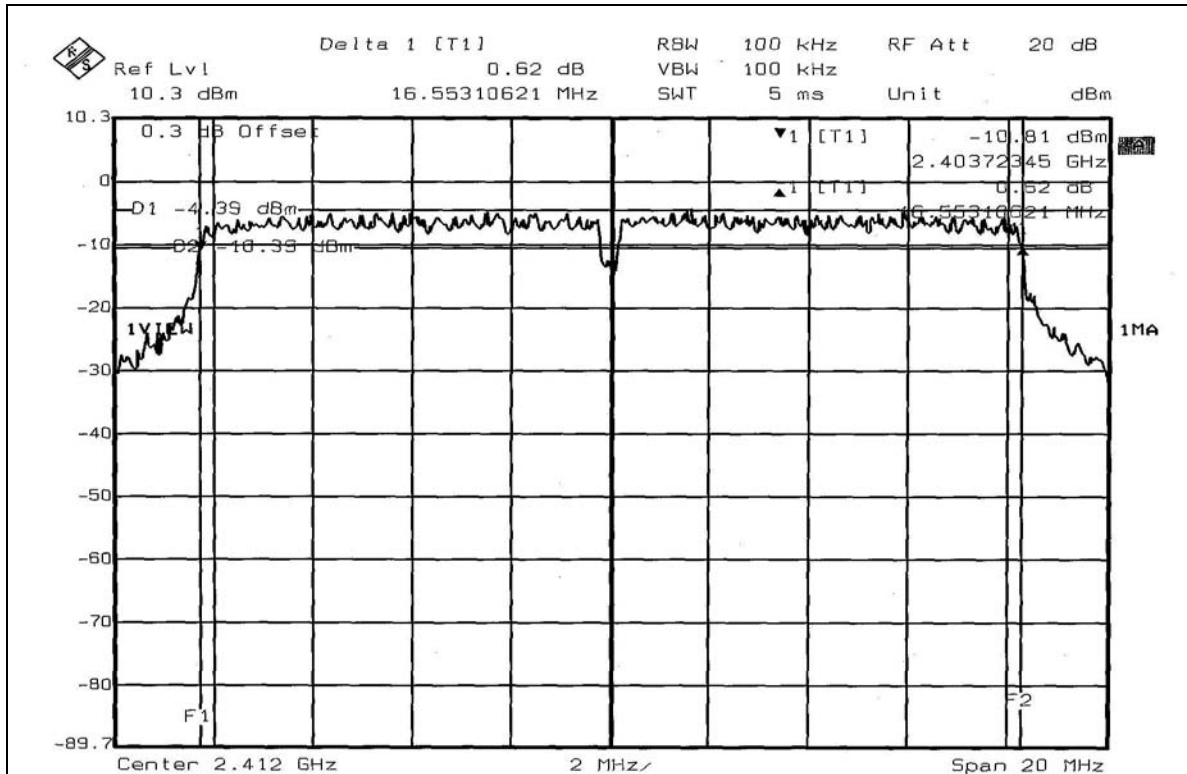
4.3.8 TEST RESULTS (B)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

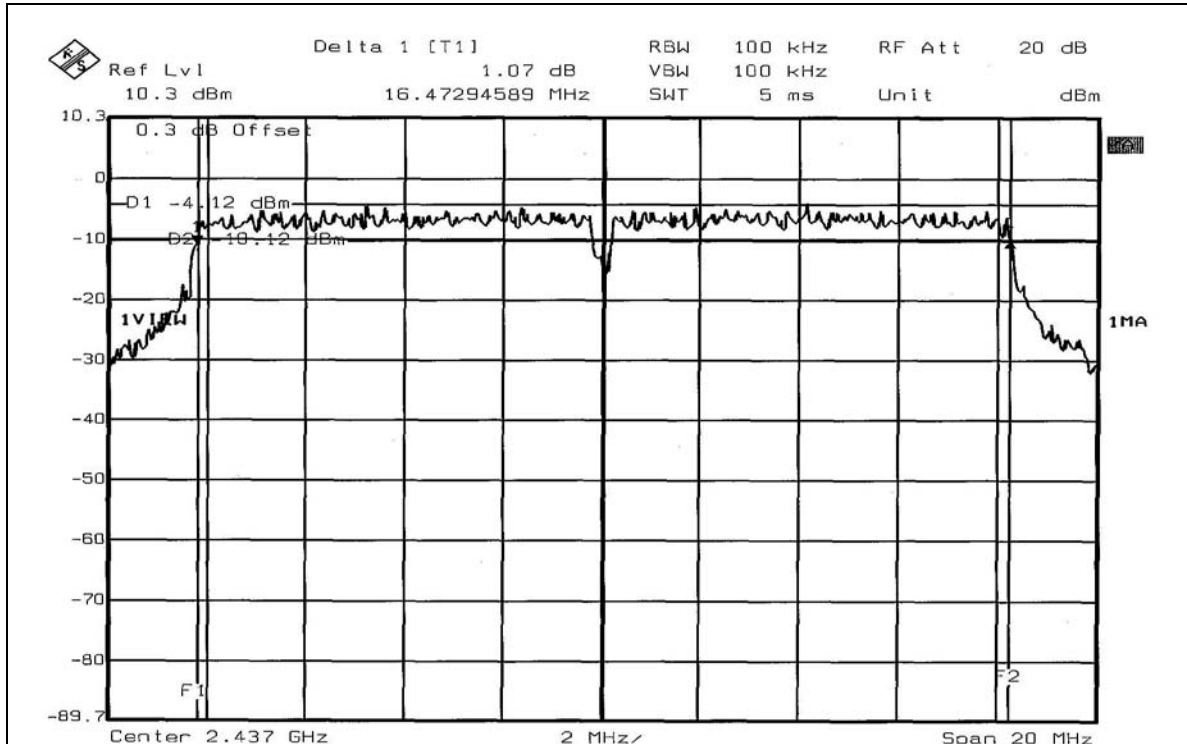
CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.55	0.5	PASS
6	2437	16.47	0.5	PASS
11	2462	16.51	0.5	PASS



CH1

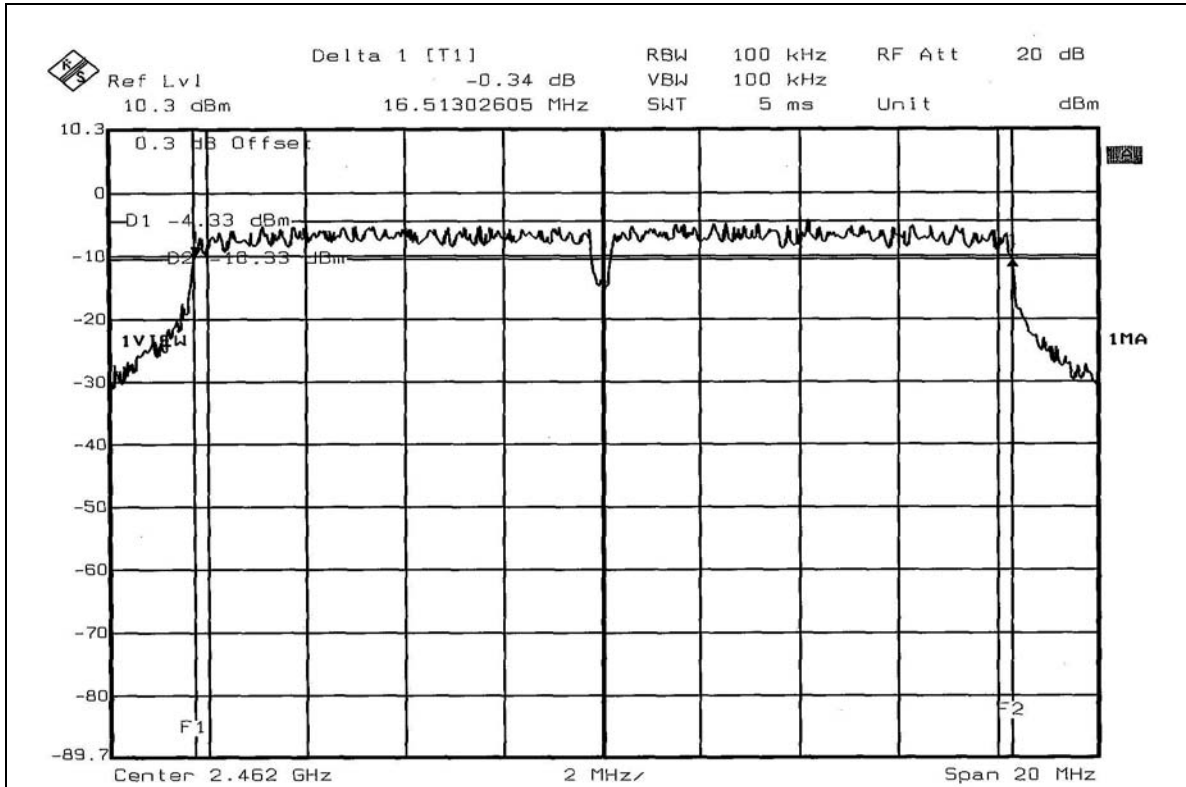


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4.4 MAXIMUM PEAK OUTPUT POWER

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. 1, 2005
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.



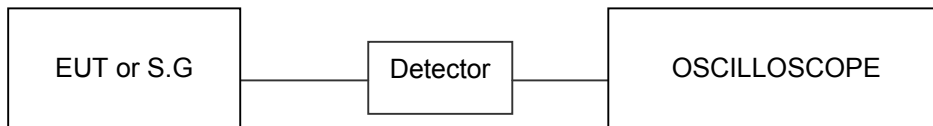
4.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read 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 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 (A)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	58.614	17.68	30	PASS
6	2437	58.614	17.68	30	PASS
11	2462	56.754	17.54	30	PASS



4.4.8 TEST RESULTS (B)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	26.062	14.16	30	PASS
6	2437	26.122	14.17	30	PASS
11	2462	25.704	14.10	30	PASS



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.

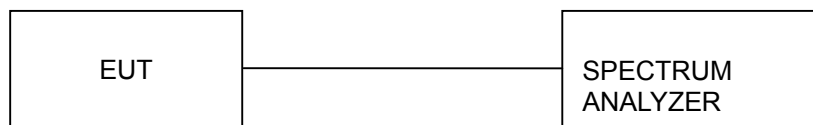
4.5.3 TEST PROCEDURE

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 3 kHz RBW and 30 kHz 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



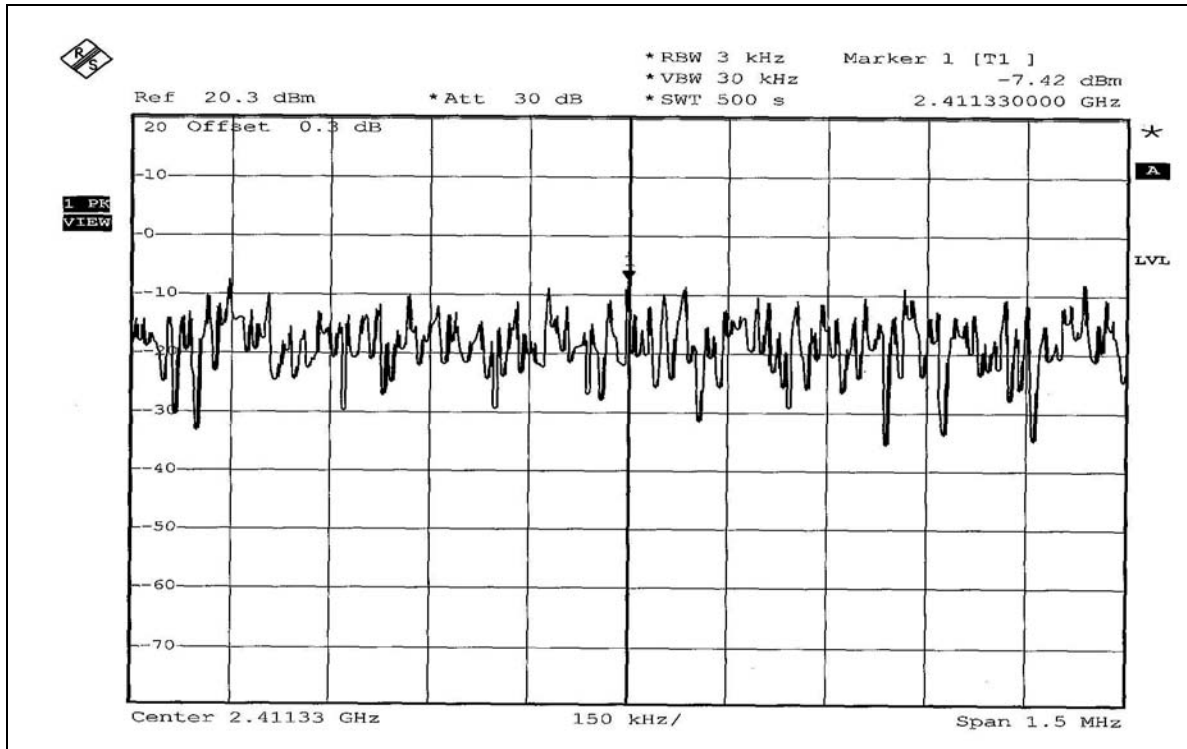
4.5.7 TEST RESULTS (A)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

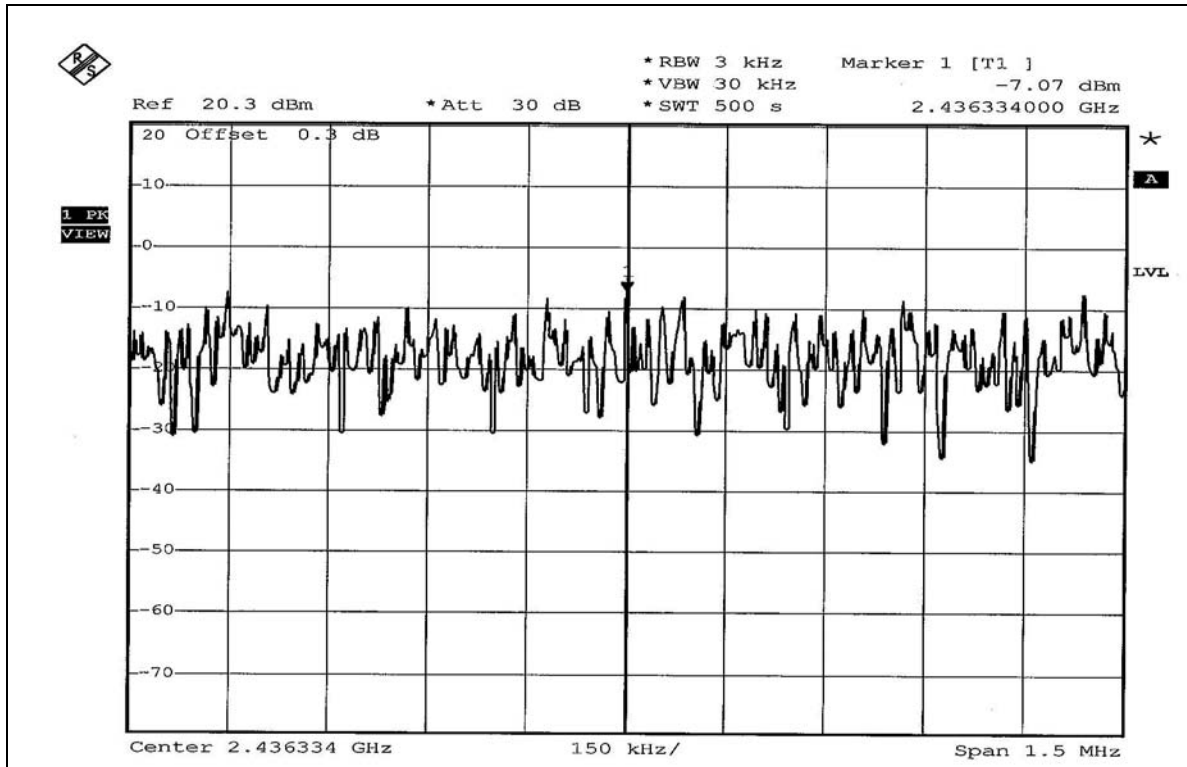
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.42	8	PASS
6	2437	-7.07	8	PASS
11	2462	-7.77	8	PASS



CH1

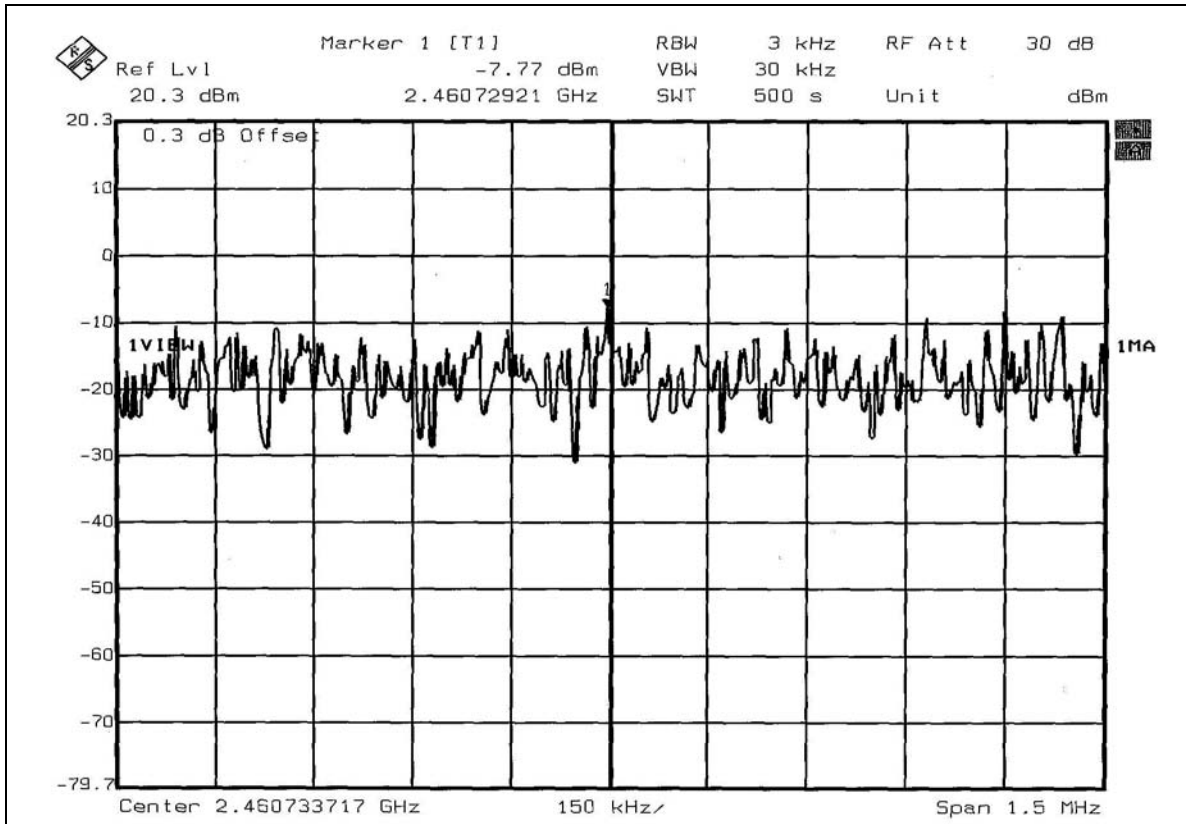


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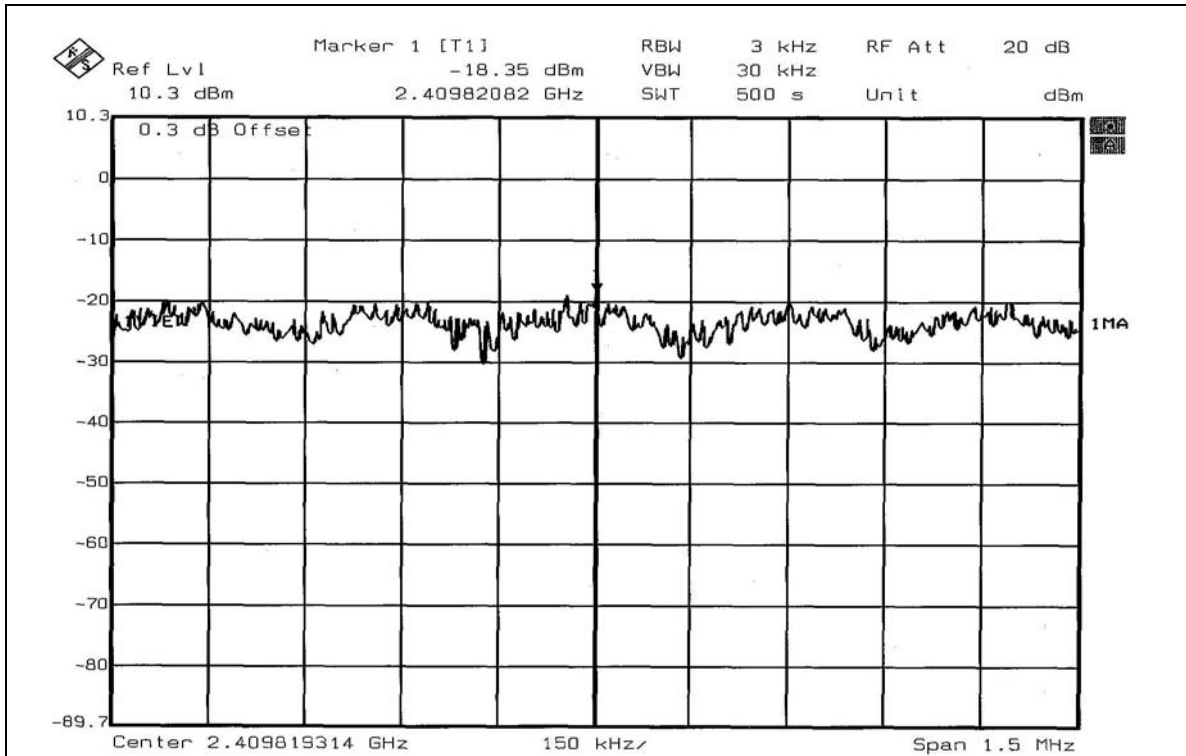
4.5.8 TEST RESULTS (B)

EUT	Compact Wireless-G Broadband Router	MODEL	WRT54GC
INPUT POWER (SYSTEM)	120 Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa
TESTED BY	Leo Hung		

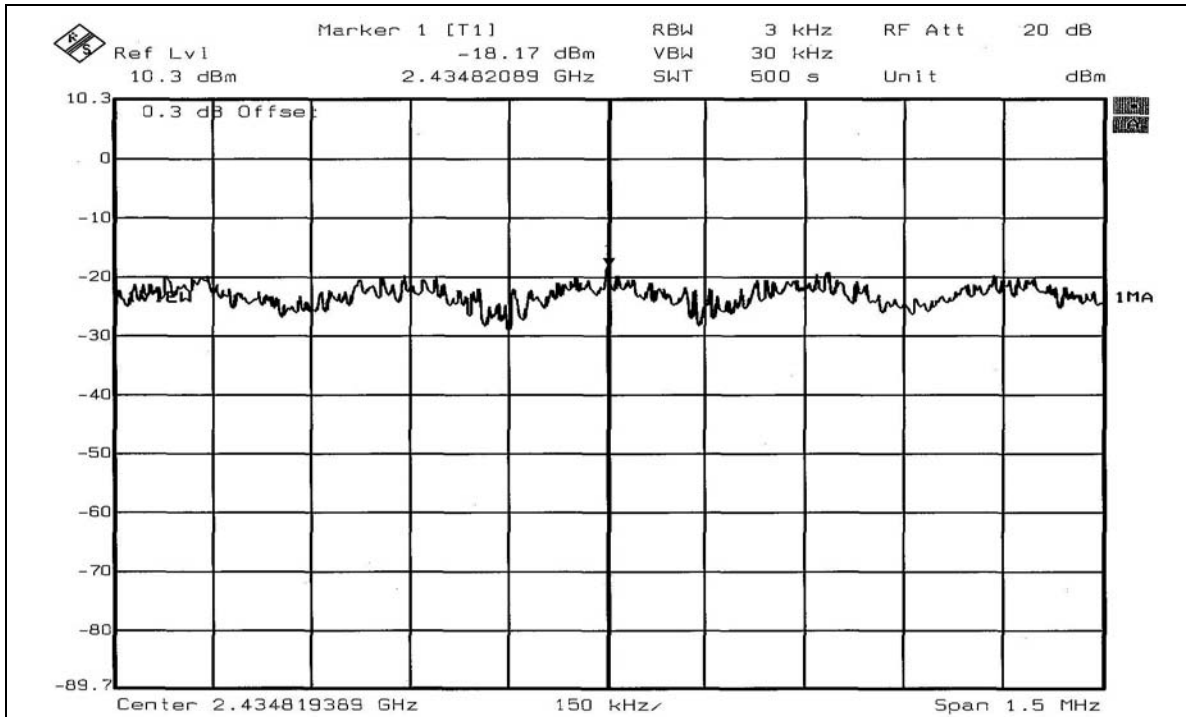
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-18.35	8	PASS
6	2437	-18.17	8	PASS
11	2462	-19.22	8	PASS



CH1

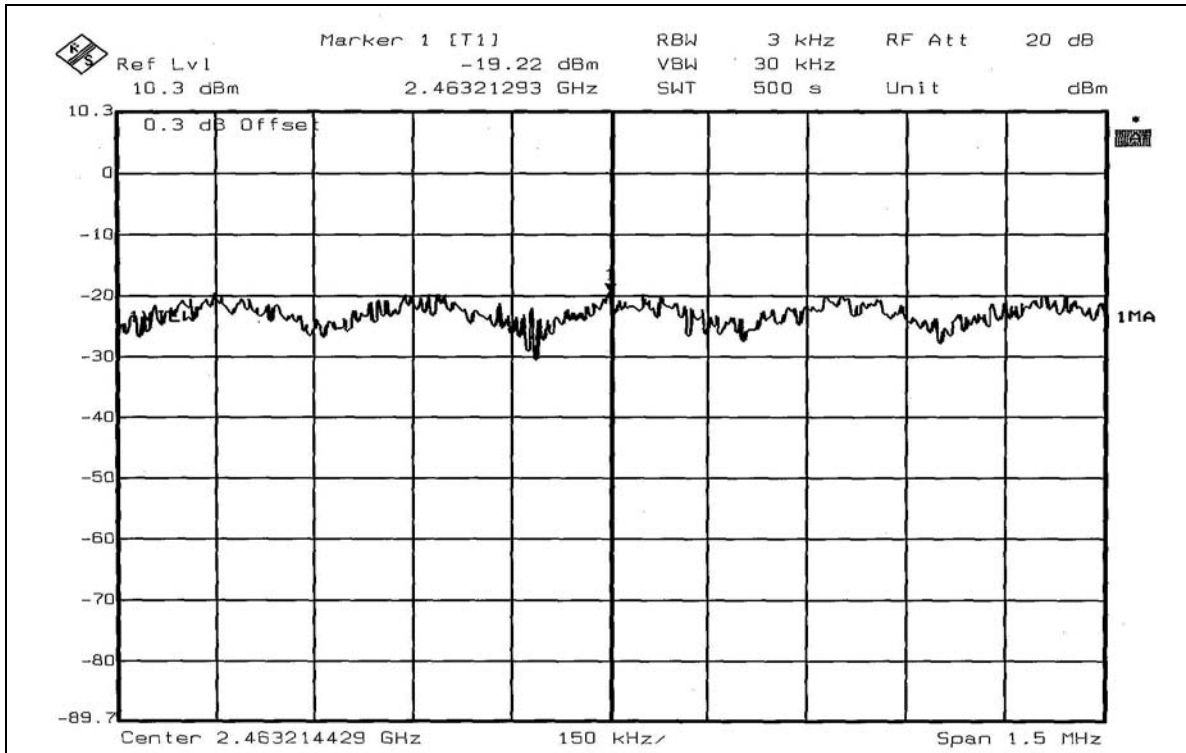


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4.6 BAND EDGES MEASUREMENT

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=10Hz) 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 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).

4.6.7 TEST RESULTS(A)

NOTE:

The band edge emission plot of DSSS technique on page 82 show 52.53dB delta 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 4.2.8 is 115.57dBuV/m (Peak), so the maximum field strength in restrict band is $115.57-52.53=63.04$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on page 82 show 56.86dB delta 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 4.2.8 is 107.85dBuV/m (Average), so the maximum field strength in restrict band is $107.85-56.86=50.99$ dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of DSSS technique on the page 83 show 52.08dB delta 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 4.2.8 is 116.13dBuV/m (Peak), so the maximum field strength in restrict band is $116.13-52.08=64.05$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on the page 84 show 56.01dB delta between carrier maximum power and local maximum emission in restrict band (2.4838GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 108.12dBuV/m (Average), so the maximum field strength in restrict band is $108.12-56.01=52.11$ dBuV/m which is under 54dBuV/m limit.



4.6.8 TEST RESULTS(B)

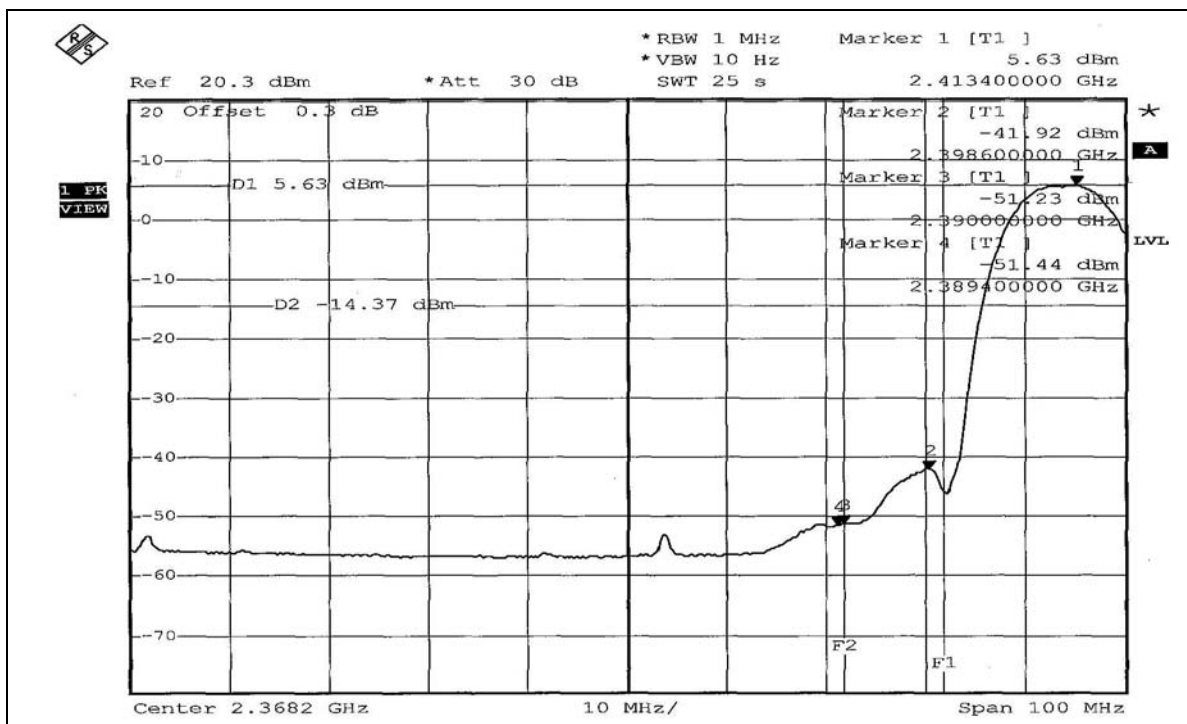
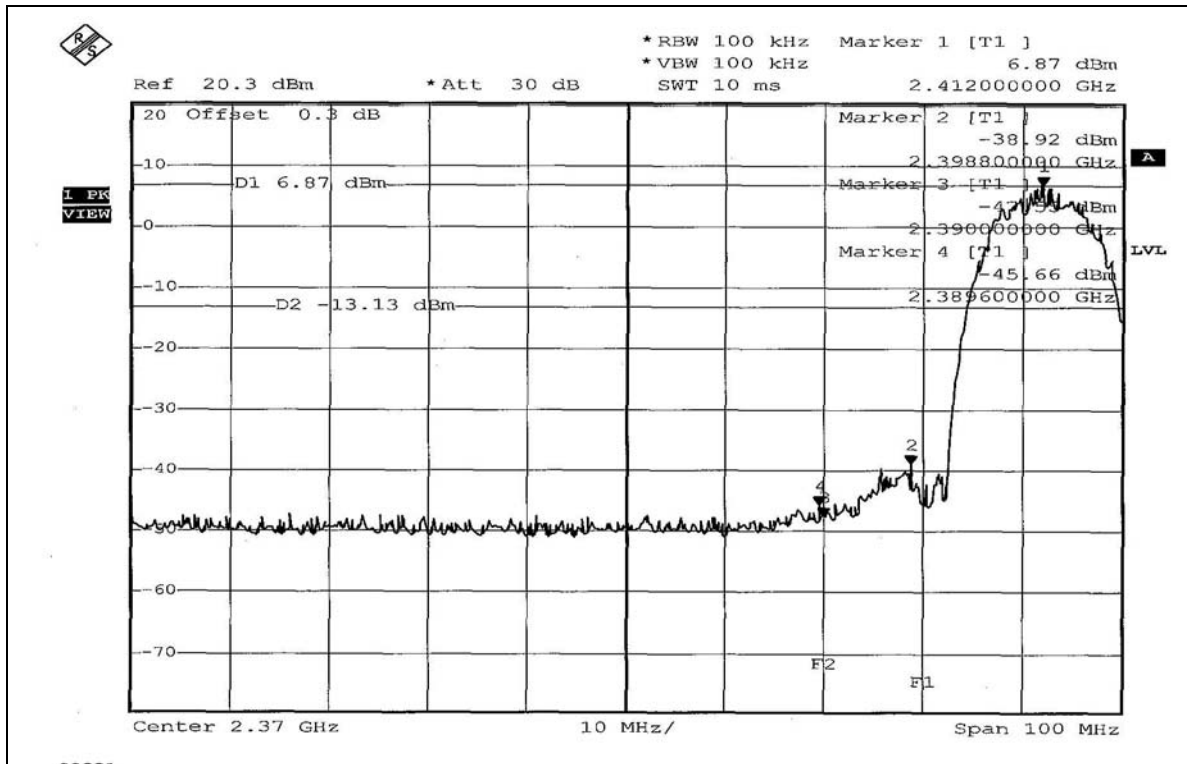
NOTE:

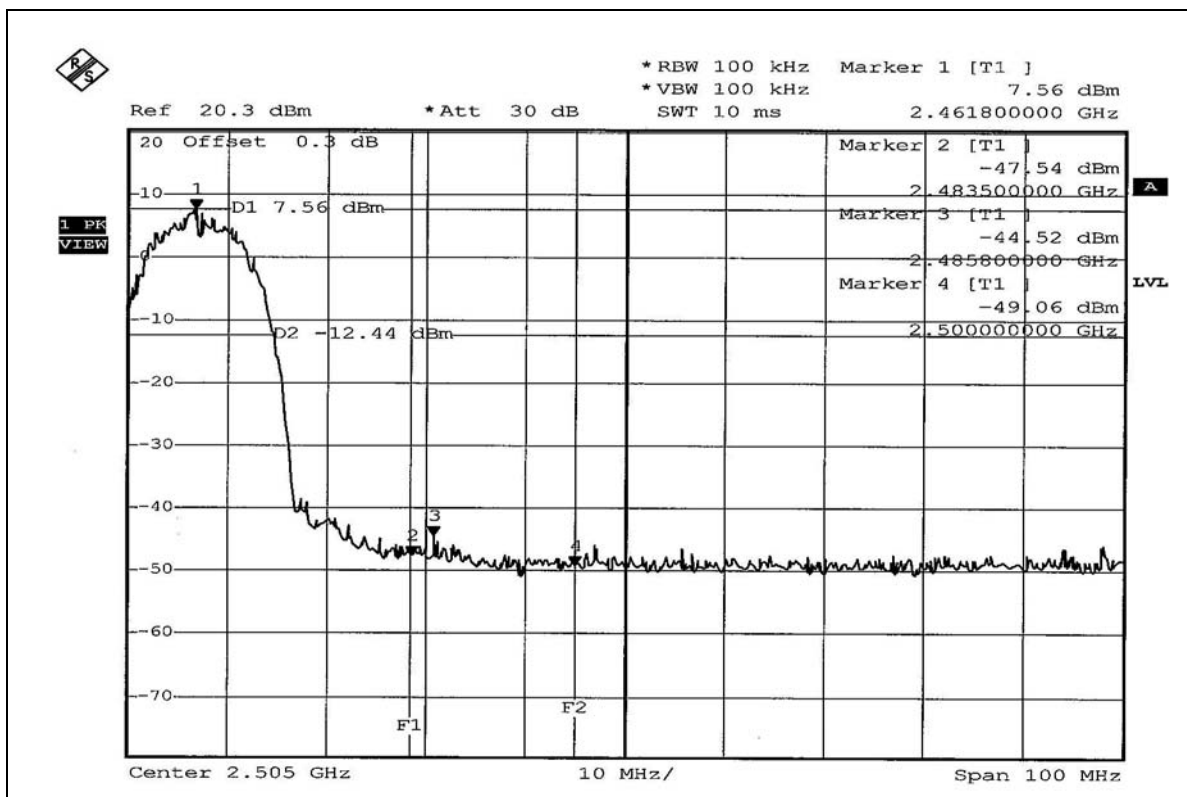
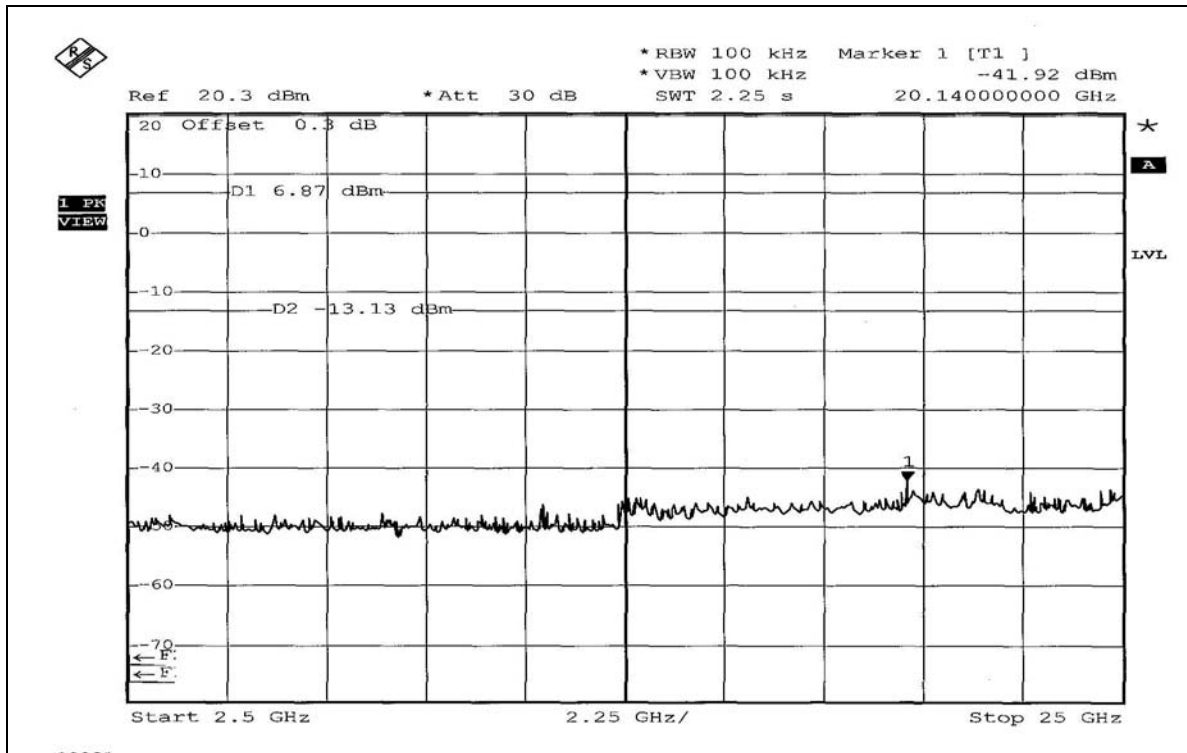
The band edge emission plot of OFDM technique on page 85 show 43.19dB delta between carrier maximum power and local maximum emission in restrict band (2.3893GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 108.22dBuV/m (Peak), so the maximum field strength in restrict band is $108.22-43.19=65.03$ dBuV/m which is under 74dBuV/m limit.

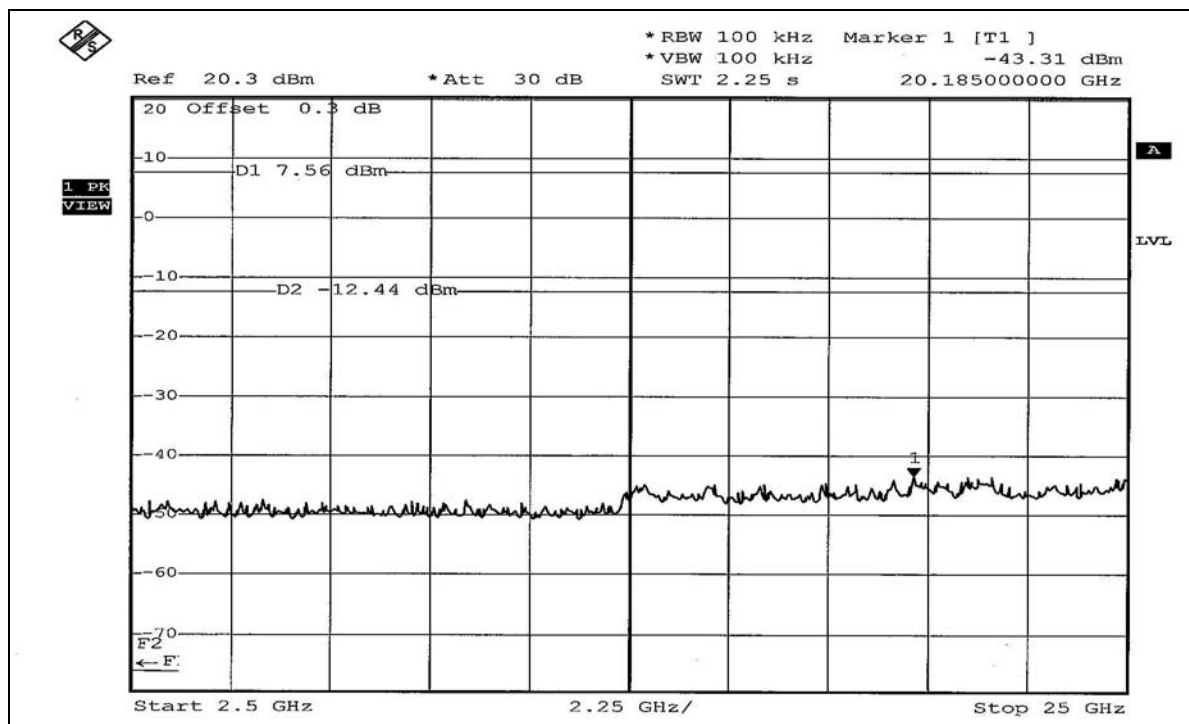
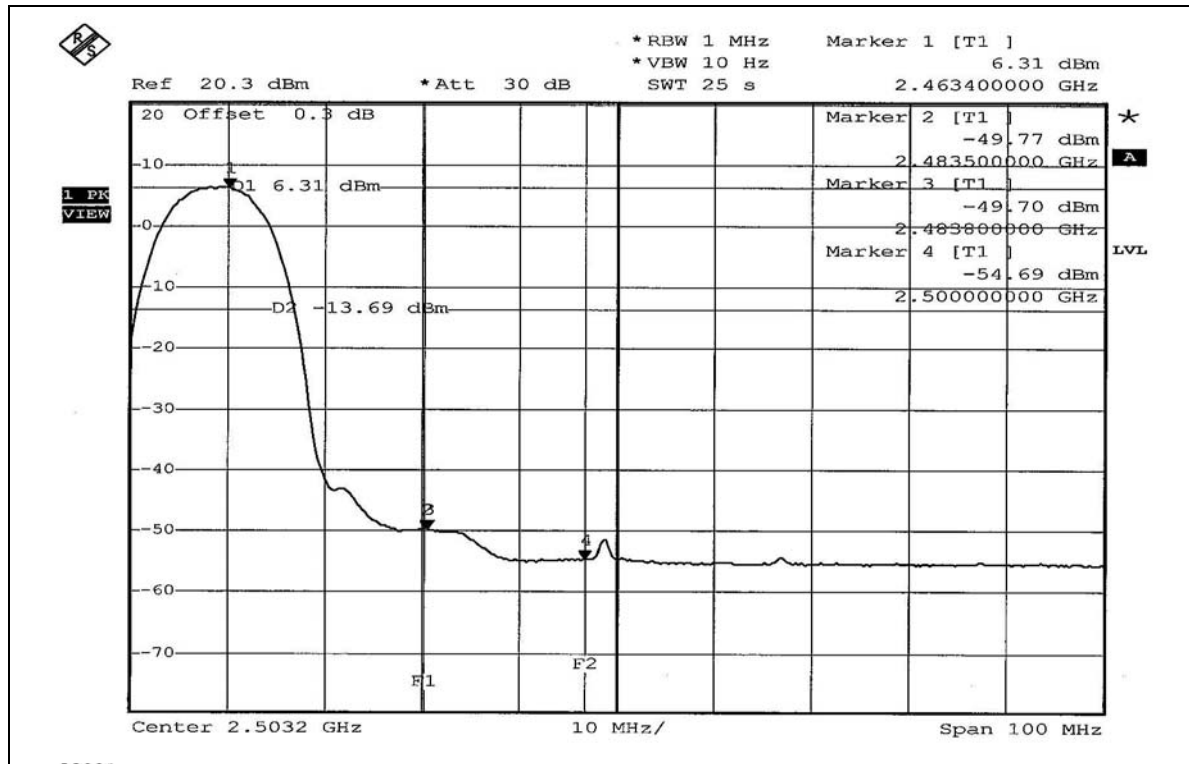
The band edge emission plot of OFDM technique on page 85 show 49.59dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 99.14dBuV/m (Average), so the maximum field strength in restrict band is $99.14-49.59=49.55$ dBuV/m which is under 54dBuV/m limit.

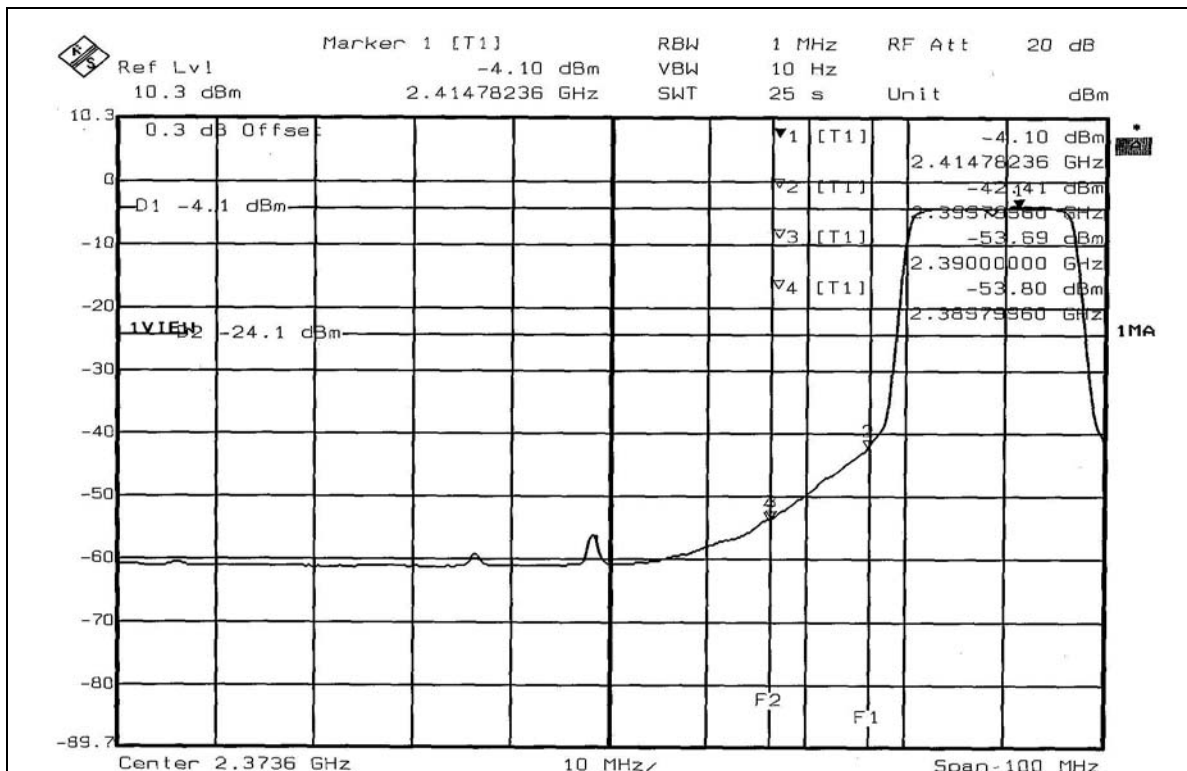
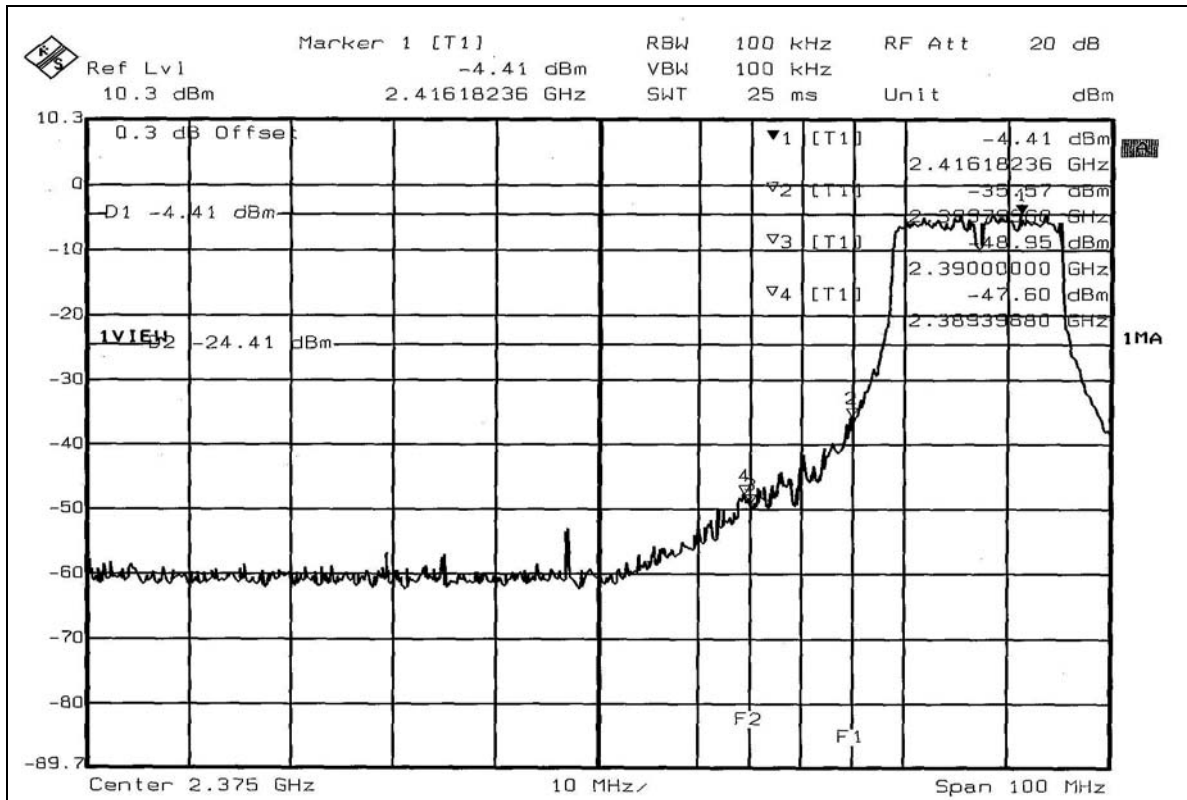
The band edge emission plot of OFDM technique on page 86 show 45.07dB delta between carrier maximum power and local maximum emission in restrict band (2.4849GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 108.95dBuV/m (Peak), so the maximum field strength in restrict band is $108.95-45.07=63.88$ dBuV/m which is under 74dBuV/m limit.

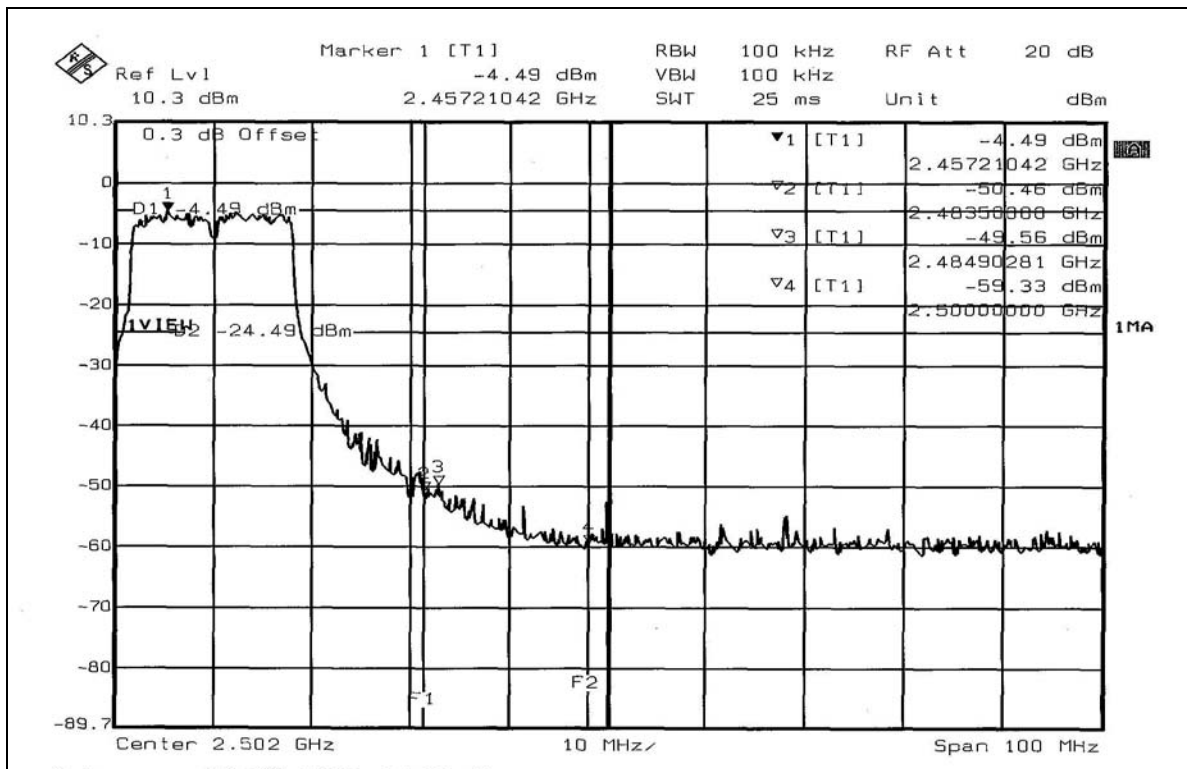
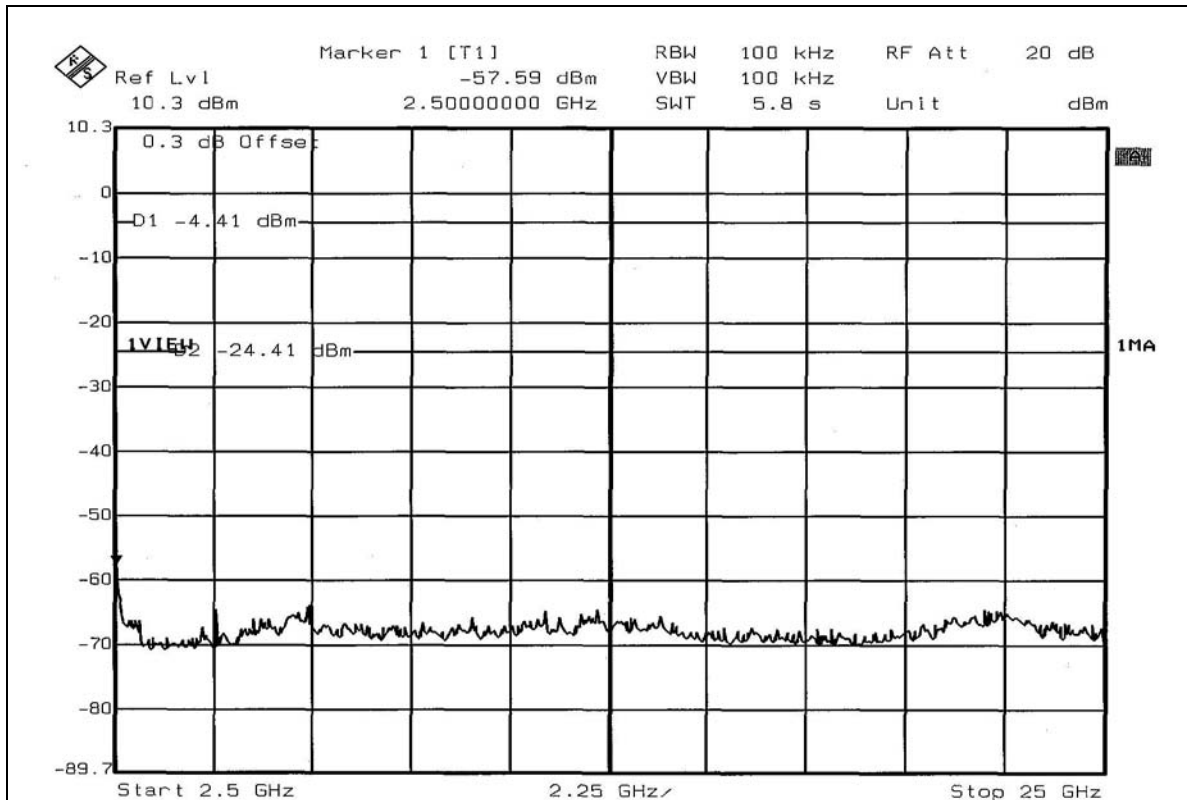
The band edge emission plot of OFDM technique on page 87 show 50.01dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 99.71dBuV/m (Average), so the maximum field strength in restrict band is $99.71-50.01=49.70$ dBuV/m which is under 54dBuV/m limit.

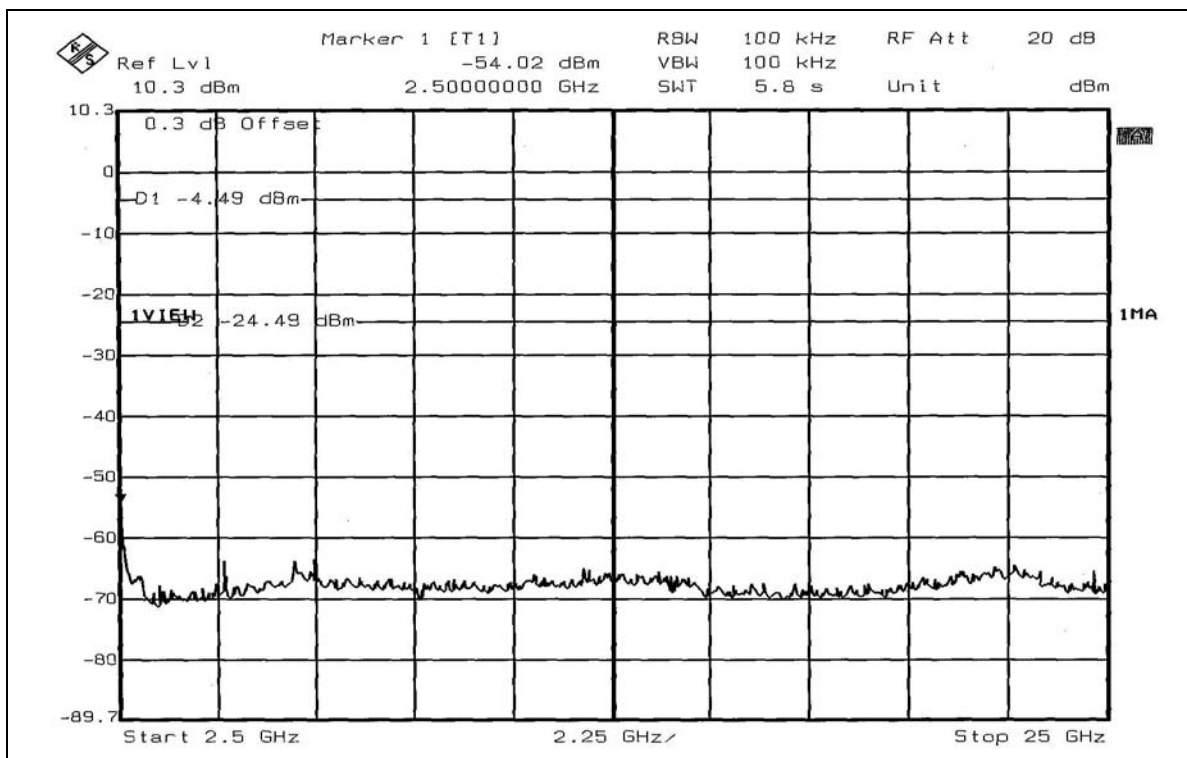
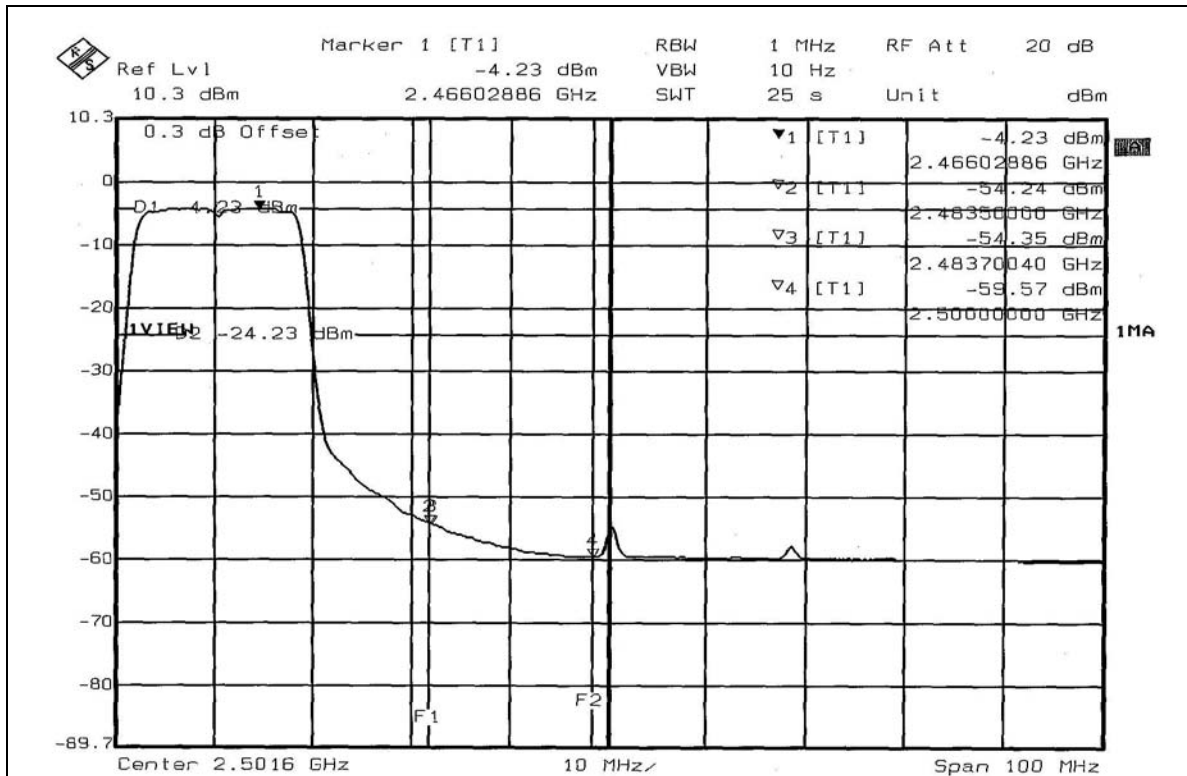














4.7 ANTENNA REQUIREMENT

4.7.1 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.

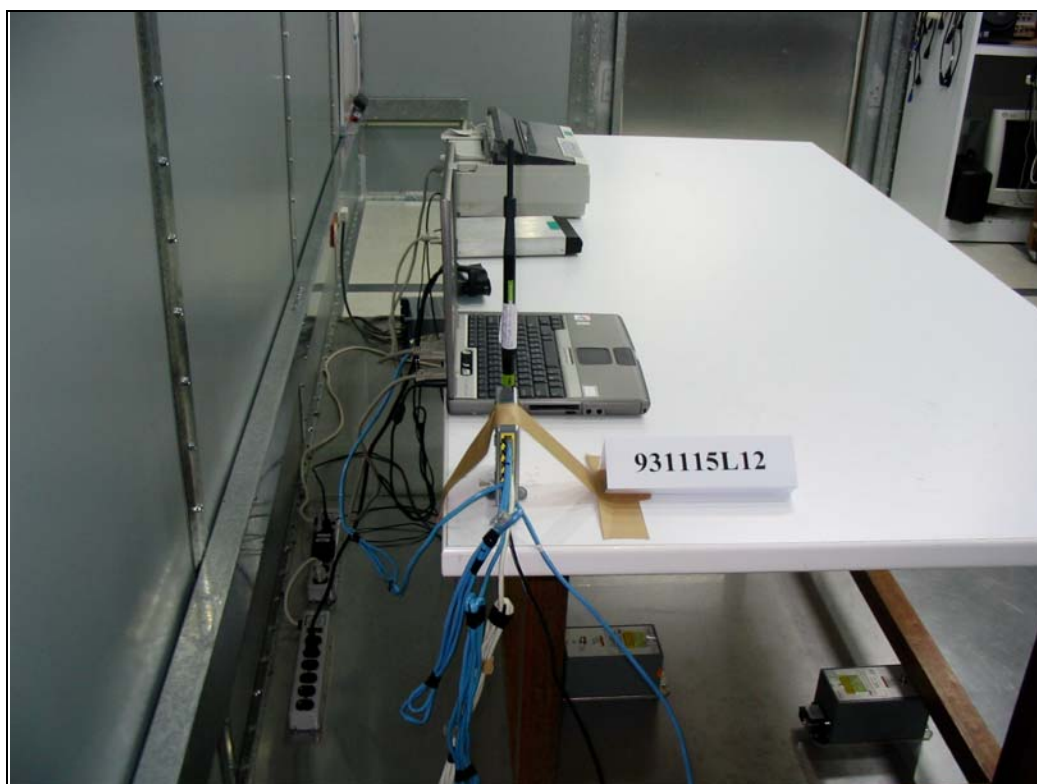
4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are PIFA antenna without antenna connector and Dipole antenna with RSMA antenna connector. And the maximum Gain of this antenna is 7dBi.

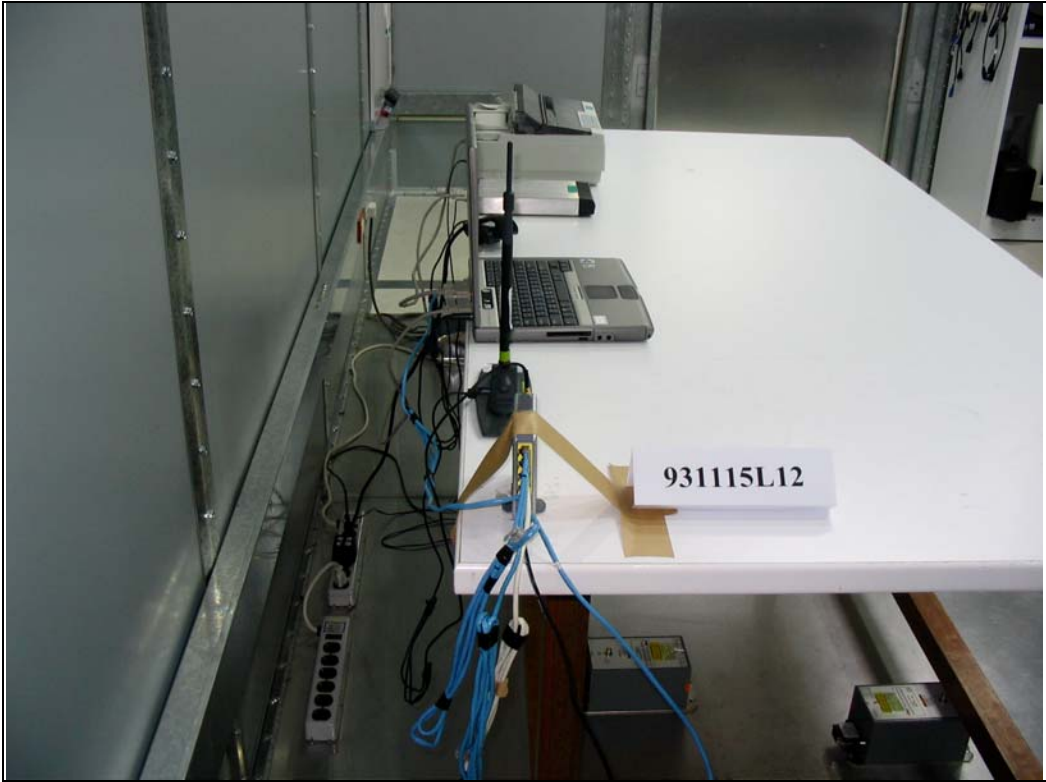
5 PHOTOGRAPHS OF THE TEST CONFIGURATION
CONDUCTED EMISSION TEST
Test Mode 1



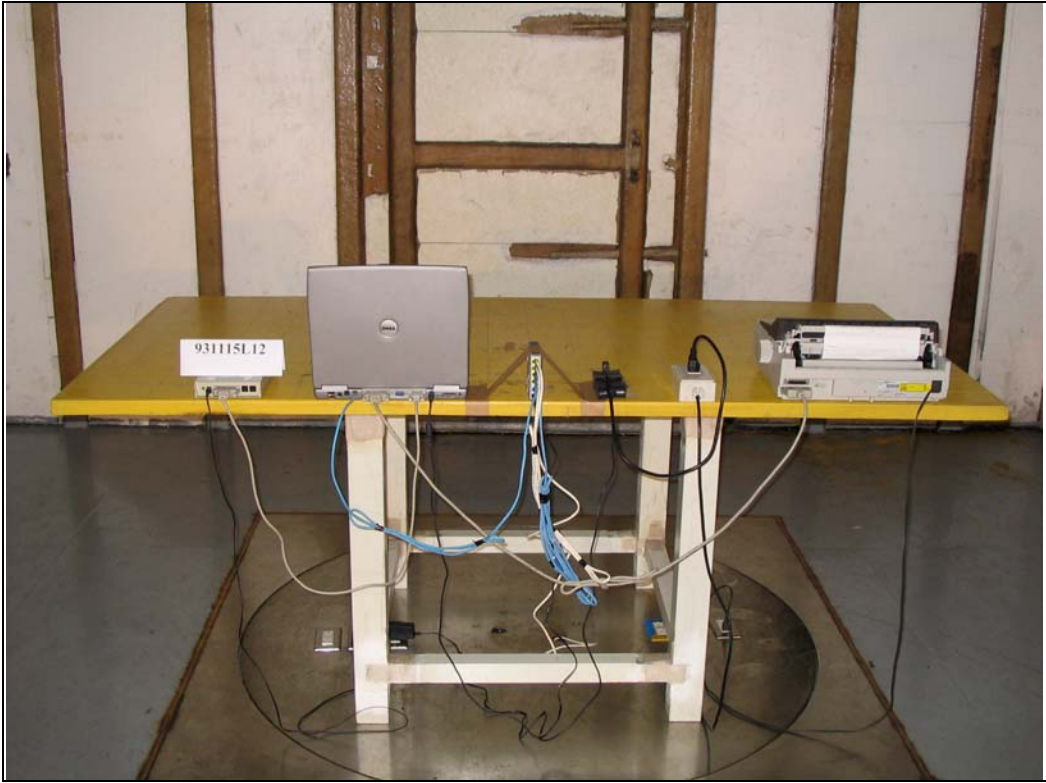
Test Mode 2



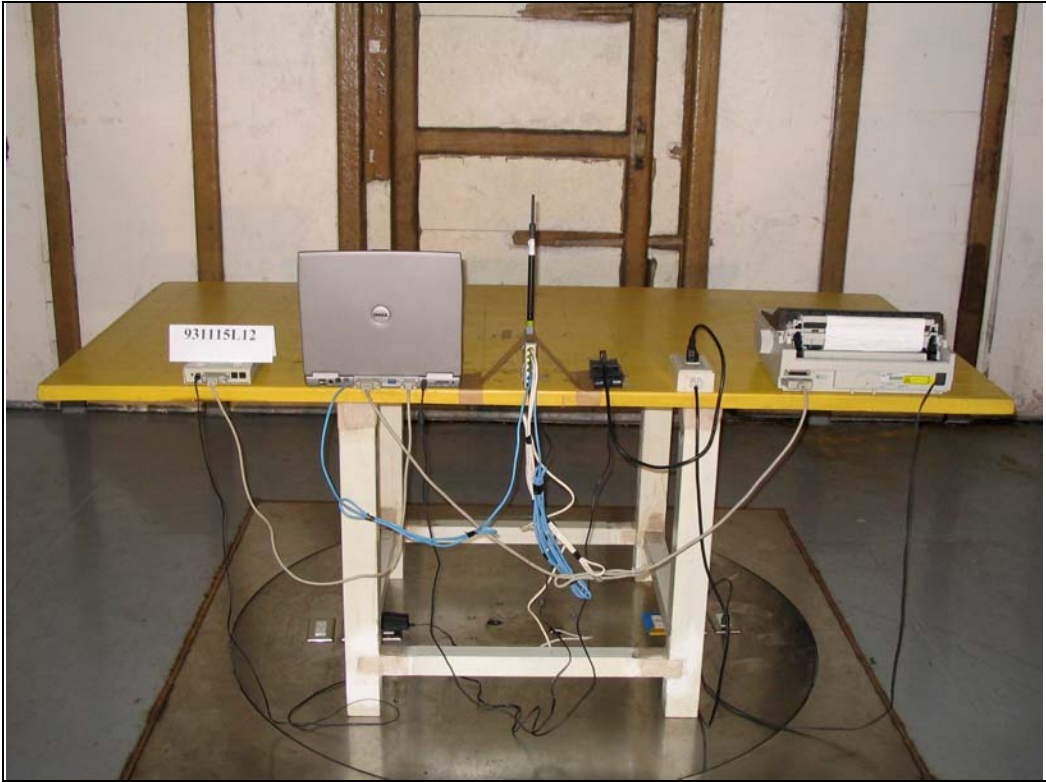
Test Mode 3



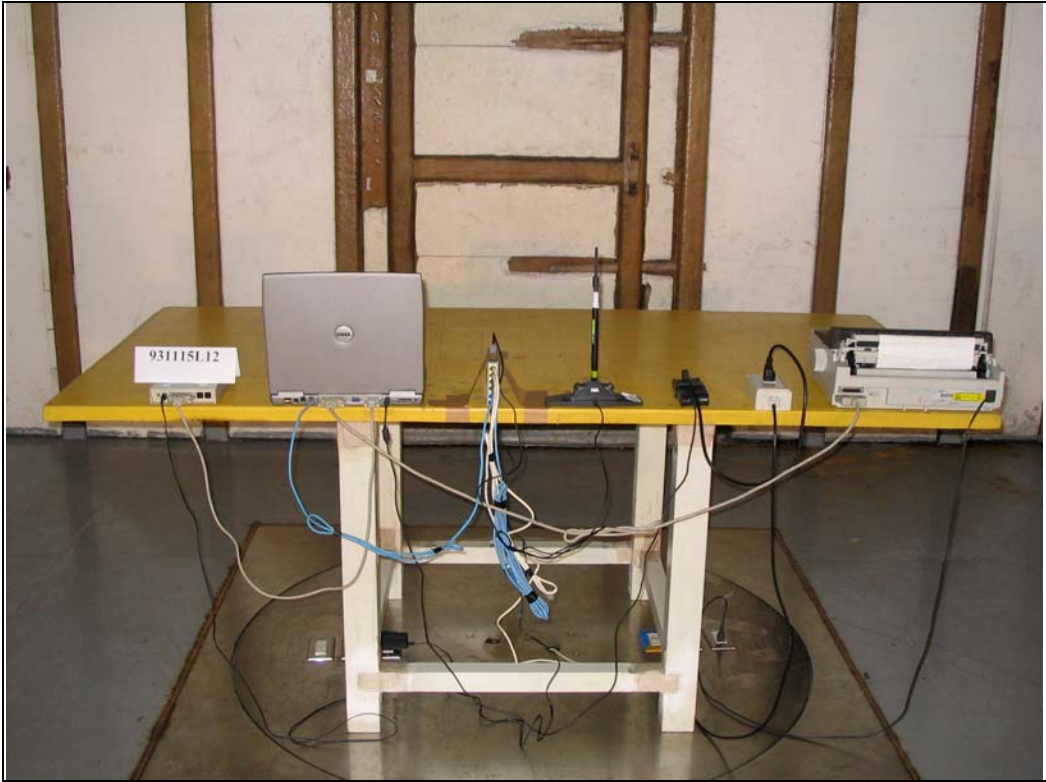
RADIATED EMISSION TEST
Test Mode 1



Test Mode 2



Test Mode 3





6 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:

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Fax: 886-2-26052943

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