FCC TEST REPORT

REPORT NO.: RF930203R02
MODEL NO.: WGT634U
RECEIVED: Jan. 6, 2004
TESTED: Jan. 6 ~ Feb. 12, 2004

APPLICANT: Netgear, Inc.

ADDRESS: 4500 Great America Parkway, Santa Clara, CA 95054, U.S.A.

ISSUED BY: Advance Data Technology Corporation

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

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1 CERTIFICATION

PRODUCT :	108 Mbps Wireless Media Router
BRAND NAME :	NETGEAR
MODEL NO. :	WGT634U
TEST ITEM:	Engineering Sample
APPLICANT :	Netgear, Inc.
STANDARDS :	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-1992

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from Jan. 6 ~ Feb. 12, 2004. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

PREPARED BY: Rennie Wang, **DATE:** Feb. 13, 2004

APPROVED BY: Ellis Wu, Manager, **DATE:** Feb. 13, 2004

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 –13.29dB at 0.556MHz
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(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –2.28dB at 2483.50MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

NOTE: The information of measurement uncertainty is available upon the customer's request.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	108 Mbps Wireless Media Router
MODEL NO.	WGT634U
POWER SUPPLY	12Vdc from AC adapter
MODULATION TYPE	BPSK, QPSK, CCK, 16QAM, 64QAM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	IEEE 802.11b: 11/5.5/2/1Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps)
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER	17.02dBm
ANTENNA TYPE	Dipole antenna with 2.0dBi antenna gain
DATA CABLE	NA
I/O PORTS	RJ-45
ASSOCIATED DEVICES	NA

NOTE:

1. The following adapter is provided to this EUT:

BRAND:	Netgear
MODEL:	481210OO3CT
INPUT:	120Vac, 60Hz, 18W
OUTPUT:	12Vdc, 1000mA

2. Fully compatible with the 802.11g standard to provide a wireless data rate of up to 54Mbps.
3. This EUT is capable of providing data rates up to 108Mbps in turbo mode.
4. Backwards compatible with the 802.11b standard to provide a wireless data rate of up to 11Mbps.
5. 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 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.
3. Data rate 11Mbps with CCK technique and 6Mbps with OFDM technique, the worst cases, were chosen for final test.
4. One turbo mode was presented at frequency 2437MHz.
5. Two test results were presented in the following sections, the test result A is for CCK technique and the test result B is for OFDM technique.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 108 Mbps Wireless Media 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 : 1992

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.

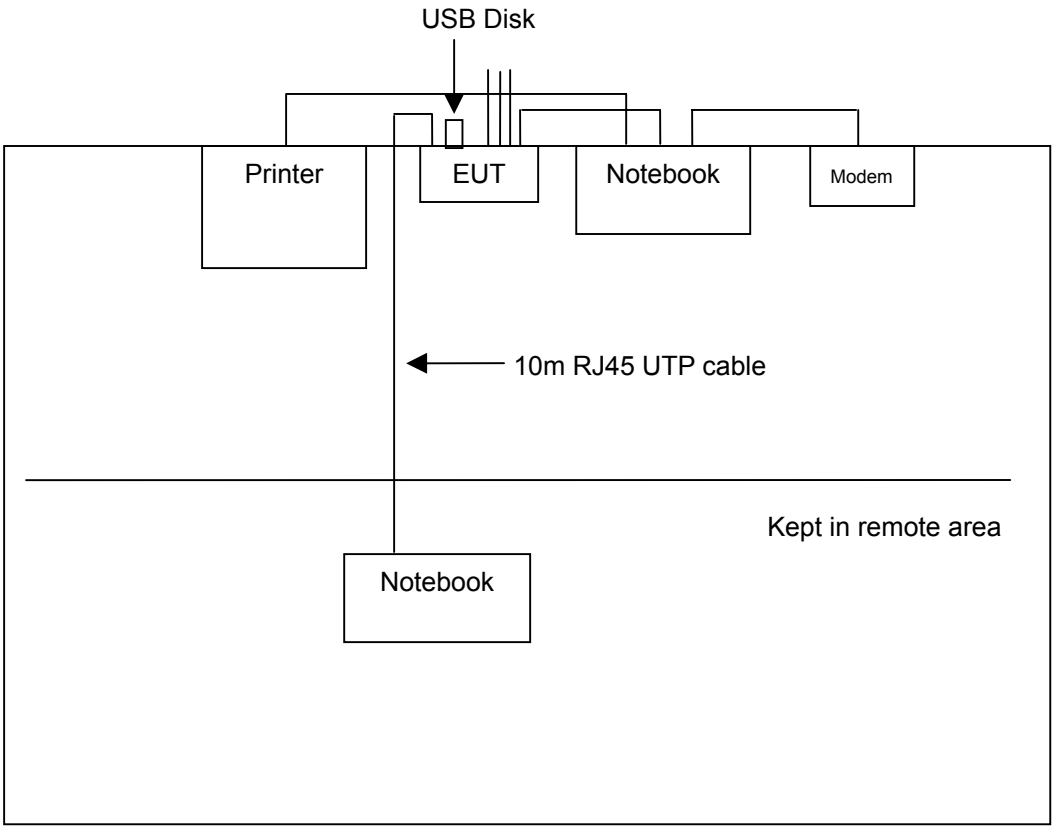
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	PP01L	TW-0791UH-12800-123-5423	FCC DoC Approved
2	NOTEBOOK	DELL	PP01L	TW-0791UH-12800-11A-1063	FCC DoC Approved
3	MODEM	ACEEX	1414	980020516	IFAXDM1414
4	PRINTER	EPSON	LQ-300+	DCGY038839	FCC DoC Approved
5	USB FLASH DISK	E-Spidi	6180	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA
3	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
4	1.2m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core
5	NA

NOTE:

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

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5	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
ROHDE & SCHWARZ Test Receiver	ESCS 30	838251/021	Jan. 04, 2005
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH3-Z5	100218	Dec. 09, 2004
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100219	Dec. 09, 2004
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100220	Dec. 09, 2004
*ROHDE & SCHWARZ 4-wire ISN	ENY41	837032/016	Nov. 19, 2004
*ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/016	Nov. 19, 2004
Software	Cond-V2M3	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C10.01	May 01, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010770	Mar. 24, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010773	Apr. 06, 2004

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 conducted telecom port test only (if tested).
3. The test was performed in ADT Shielded Room No. 10.
4. The VCCI Site Registration No. is C-1312.

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.

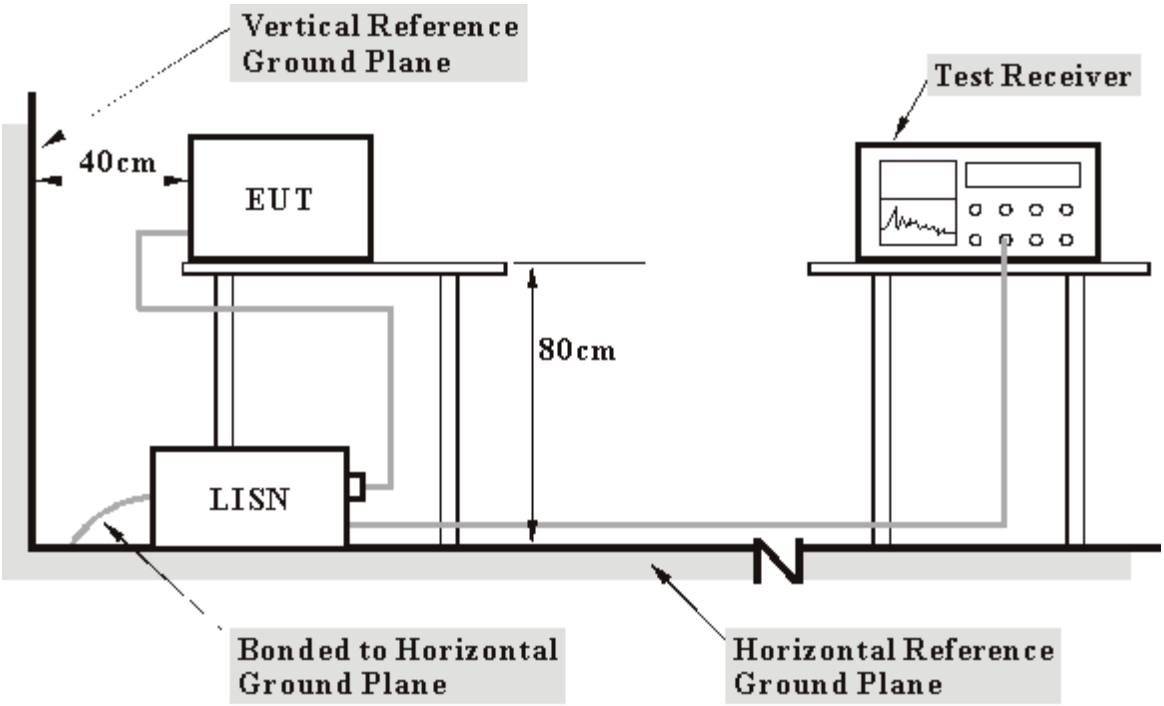
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 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

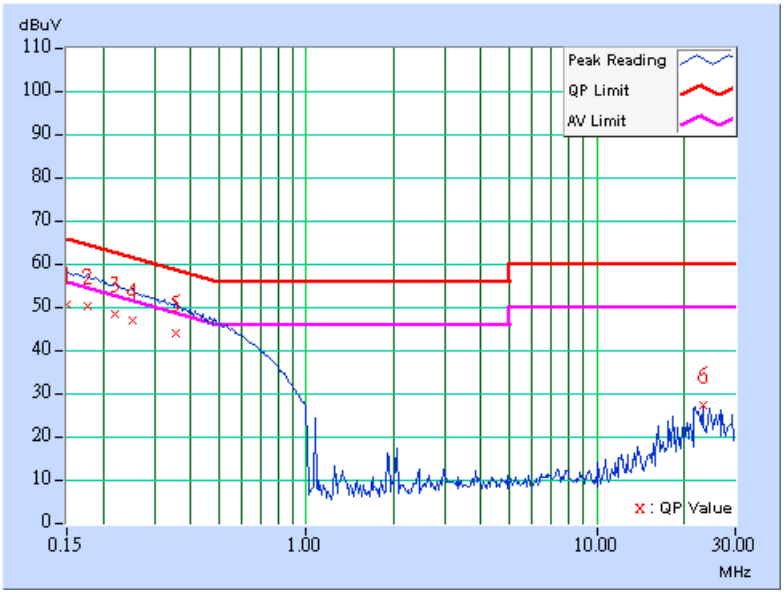
a. Plug the EUT a notebook computer system placed on a testing table.
b. The computer system ran a test program to enable EUT under transmission/receiving condition continuously at specific channel frequency.
c. The computer system sent "H" messages to its screen.
d. The computer system sent “H” messages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

4.1.7 TEST RESULTS

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	18deg. C, 73%RH, 991 hPa	**TESTED BY**: Jun Wu	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	49.72	-	49.82	-	66.00	56.00	-16.18	-
2	0.177	0.10	49.36	-	49.46	-	64.61	54.61	-15.15	-
3	0.220	0.10	47.42	-	47.52	-	62.81	52.81	-15.29	-
4	0.252	0.10	45.95	-	46.05	-	61.71	51.71	-15.66	-
5	0.357	0.10	42.93	-	43.03	-	58.80	48.80	-15.77	-
6	23.129	1.09	26.19	-	27.28	-	60.00	50.00	-32.72	-

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	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	18deg. C, 73%RH, 991 hPa	**TESTED BY**: Jun Wu	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	50.14	-	50.24	-	66.00	56.00	-15.76	-
2	0.279	0.10	45.68	-	45.78	-	60.85	50.85	-15.07	-
3	0.537	0.12	41.94	-	42.06	-	56.00	46.00	-13.94	-
4	0.705	0.15	38.71	-	38.86	-	56.00	46.00	-17.14	-
5	1.074	0.20	25.93	-	26.13	-	56.00	46.00	-29.87	-
6	23.112	0.92	28.52	-	29.44	-	60.00	50.00	-30.56	-

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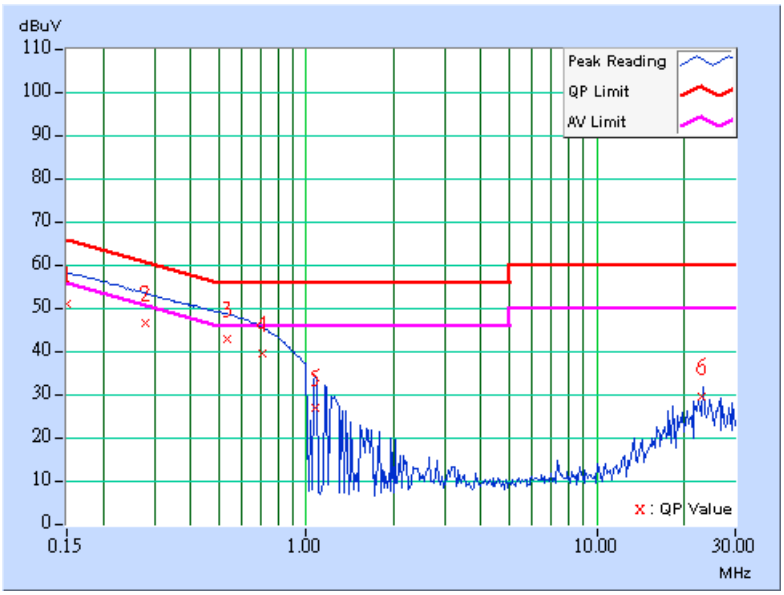
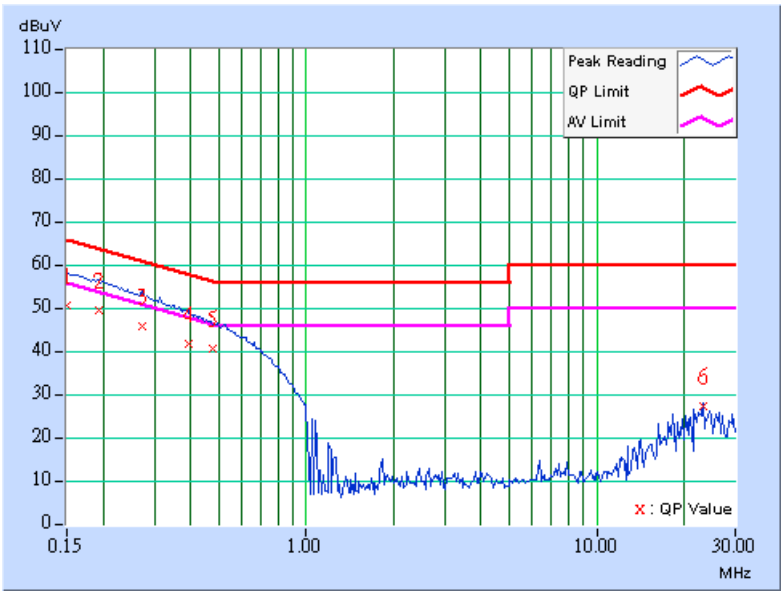
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	18deg. C, 73%RH, 991 hPa	**TESTED BY**: Jun Wu	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	49.74	-	49.84	-	66.00	56.00	-16.16	-
2	0.193	0.10	48.48	-	48.58	-	63.91	53.91	-15.33	-
3	0.271	0.10	44.80	-	44.90	-	61.08	51.08	-16.18	-
4	0.396	0.10	40.94	-	41.04	-	57.93	47.93	-16.89	-
5	0.477	0.11	39.68	-	39.79	-	56.39	46.39	-16.59	-
6	23.129	1.09	26.39	-	27.48	-	60.00	50.00	-32.52	-

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	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	18deg. C, 73%RH, 991 hPa	**TESTED BY**: Jun Wu	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	50.59	-	50.69	-	66.00	56.00	-15.31	-
2	0.216	0.10	47.78	-	47.88	-	62.96	52.96	-15.08	-
3	0.361	0.10	44.33	-	44.43	-	58.71	48.71	-14.28	-
4	0.477	0.11	42.56	-	42.67	-	56.39	46.39	-13.72	-
5	1.531	0.20	24.58	-	24.78	-	56.00	46.00	-31.22	-
6	23.129	0.93	28.40	-	29.33	-	60.00	50.00	-30.67	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
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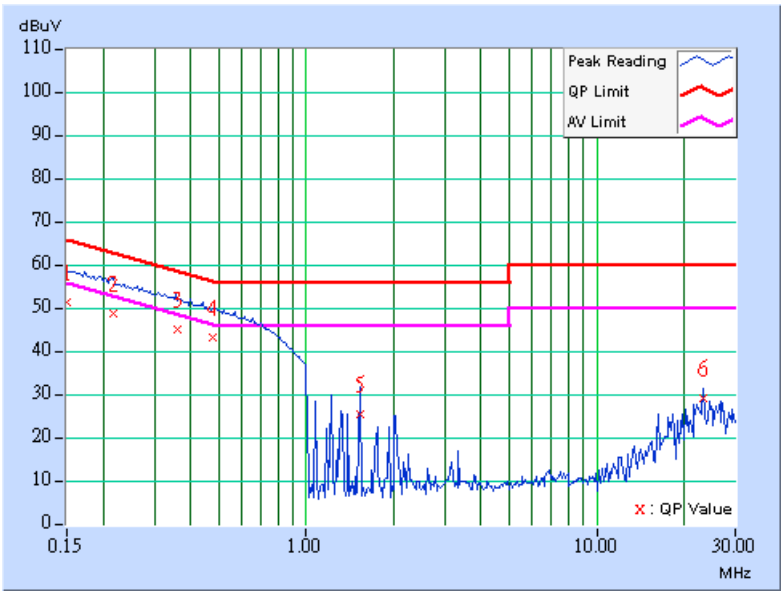
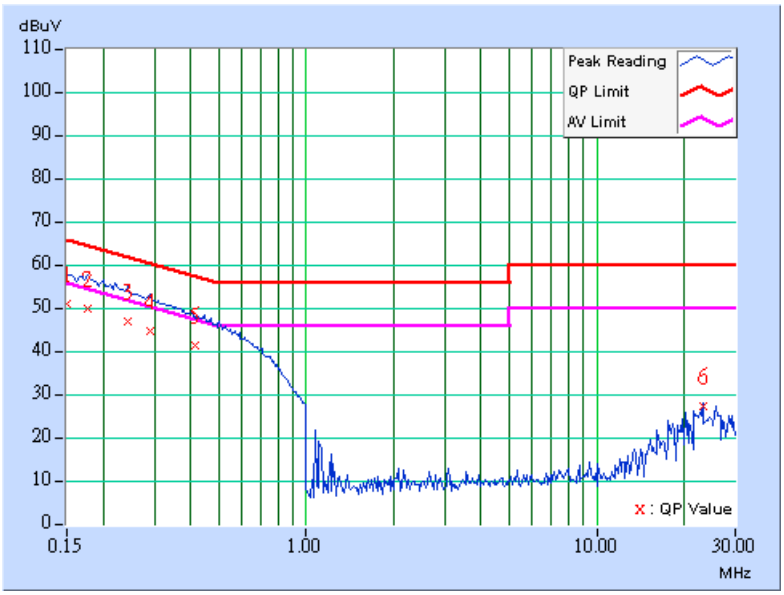
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	18deg. C, 73%RH, 991 hPa	**TESTED BY**: Jun Wu	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	49.88	-	49.98	-	66.00	56.00	-16.02	-
2	0.177	0.10	48.83	-	48.93	-	64.61	54.61	-15.68	-
3	0.244	0.10	46.07	-	46.17	-	61.97	51.97	-15.80	-
4	0.291	0.10	43.90	-	44.00	-	60.51	50.51	-16.51	-
5	0.413	0.10	40.44	-	40.54	-	57.59	47.59	-17.05	-
6	23.129	1.09	26.31	-	27.40	-	60.00	50.00	-32.60	-

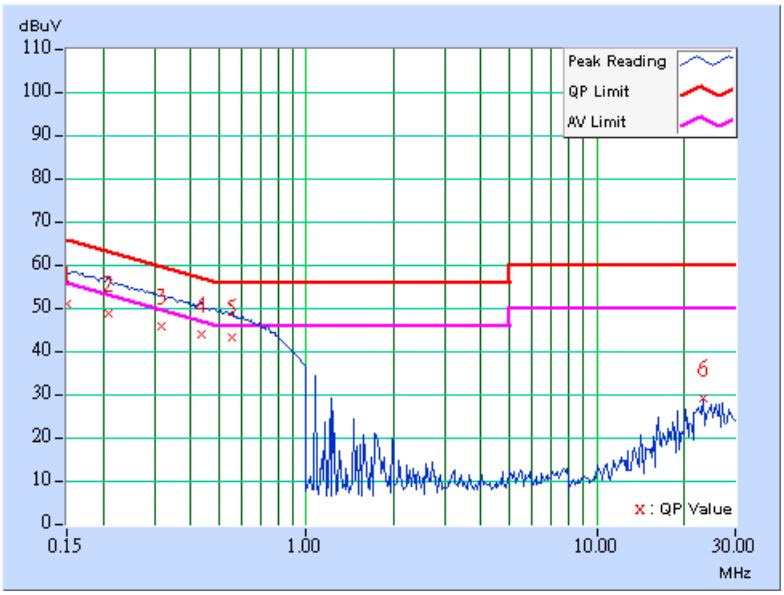
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	18deg. C, 73%RH, 991 hPa	**TESTED BY**: Jun Wu	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	50.31	-	50.41	-	66.00	56.00	-15.59	-
2	0.209	0.10	48.09	-	48.19	-	63.26	53.26	-15.07	-
3	0.318	0.10	45.17	-	45.27	-	59.76	49.76	-14.49	-
4	0.435	0.11	43.09	-	43.20	-	57.15	47.15	-13.96	-
5	**0.556**	**0.13**	**42.58**	**-**	**42.71**	**-**	**56.00**	**46.00**	**-13.29**	**-**
6	23.129	0.93	28.42	-	29.35	-	60.00	50.00	-30.65	-

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



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	8593E	3911A07465	Jul. 07, 2004
*HP Preamplifier	8447D	2944A10386	Aug. 12, 2004
* HP Preamplifier	8449B	3008A01292	Aug. 11, 2004
SCHAFFNER Tunable Dipole Antenna SCHWARZBECK Tunable Dipole Antenna	VHBA 9123 UHA 9105	459 977	Jun. 26, 2004
*SCHAFFNER TEST RECEIVER	SCR 3501	409	Nov. 06, 2004
* SCHAFFNER BILOG Antenna	CBL6111C	2727	Jul. 15, 2004
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	Jun. 30, 2004
* ADT. Turn Table	TT100	0201	NA
* ADT. Tower	AT100	0201	NA
* Software	ADT_Radiated_V 5.14	NA	NA
* ANRITSU RF Switches	MP59B	6100237246	Oct. 17, 2004
* TIMES RF cable	LMR-600	CABLE-ST10-01	Oct. 17, 2004

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. 10.
5. The VCCI Site Registration No. is R-1625.

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 open area test site. 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.

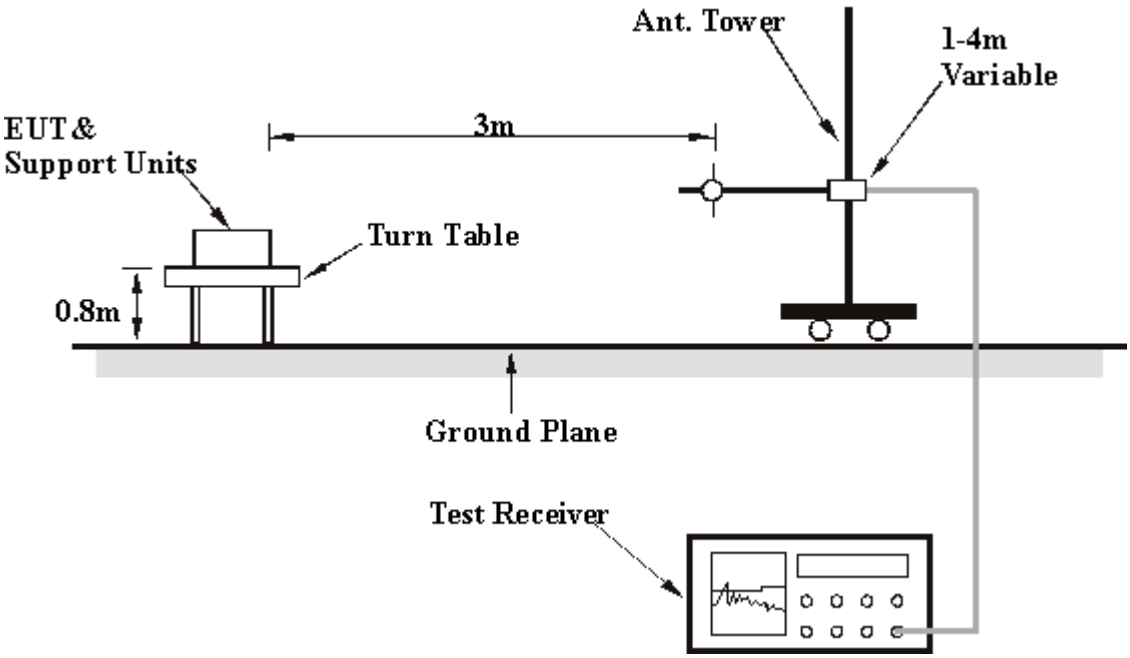
NOTE:

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	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20 deg. C, 70 % RH, 991 hPa	**TESTED BY**: Martin Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.80	32.64 QP	40.00	-7.36	1.40 H	290	23.38	9.26
2	111.60	28.13 QP	43.50	-15.37	1.77 H	3	16.49	11.64
3	166.72	32.11 QP	43.50	-11.39	1.50 H	117	21.58	10.53
4	200.05	37.75 QP	43.50	-5.75	1.80 H	80	27.28	10.47
5	301.80	35.72 QP	46.00	-10.28	1.78 H	259	19.39	16.33
6	403.30	35.62 QP	46.00	-10.38	1.52 H	24	16.14	19.48
7	503.00	37.85 QP	46.00	-8.15	1.36 H	20	15.86	21.99
8	602.80	38.42 QP	46.00	-7.58	1.22 H	338	13.89	24.53
9	800.00	41.81 QP	46.00	-4.19	1.13 H	79	14.62	27.19
10	900.20	40.29 QP	46.00	-5.71	1.07 H	9	11.14	29.15
11	1000.00	40.51 QP	54.00	-13.49	1.22 H	90	9.88	30.63

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20 deg. C, 70 % RH, 991 hPa	**TESTED BY**: Martin Lee	

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.81	37.51 QP	40.00	-2.49	1.00 V	321	28.25	9.26
2	110.78	36.88 QP	43.50	-6.62	1.52 V	316	25.32	11.56
3	166.70	34.04 QP	43.50	-9.46	1.31 V	178	23.51	10.53
4	200.06	36.61 QP	43.50	-6.89	1.06 V	0	26.14	10.47
5	212.80	29.32 QP	43.50	-14.18	1.78 V	33	17.97	11.35
6	281.63	32.74 QP	46.00	-13.26	1.00 V	20	17.12	15.62
7	403.30	37.87 QP	46.00	-8.13	1.00 V	75	18.39	19.48
8	499.99	42.95 QP	46.00	-3.05	1.21 V	344	21.05	21.90
9	600.00	38.60 QP	46.00	-7.40	1.92 V	231	14.14	24.46
10	625.00	36.28 QP	46.00	-9.72	1.00 V	192	11.24	25.04
11	800.00	39.60 QP	46.00	-6.40	1.27 V	23	12.41	27.19
12	900.00	41.61 QP	46.00	-4.39	1.00 V	177	12.47	29.14

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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 RESULT (A)

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 1	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70 % RH, 991 hPa	**TESTED BY**: Martin Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	43.91 PK	74.00	-30.09	1.00 H	145	13.61	30.30
2	*2412.00	100.91 PK			1.00 H	145	70.67	30.24
2	*2412.00	92.74 AV			1.00 H	145	62.50	30.24
3	2688.00	45.98 PK	74.00	-28.02	1.00 H	145	14.26	31.72
4	4824.00	54.92 PK	74.00	-19.08	1.25 H	46	18.40	36.53
4	4824.00	40.76 AV	54.00	-13.24	1.25 H	46	4.24	36.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	54.74 PK	74.00	-19.26	1.23 V	13	24.44	30.30
1	2390.00	46.91 AV	54.00	-7.09	1.23 V	13	16.61	30.30
2	*2412.00	112.24 PK			1.23 V	13	82.00	30.24
2	*2412.00	103.91 AV			1.23 V	13	73.67	30.24
3	2688.00	57.24 PK	74.00	-16.76	1.23 V	13	25.52	31.72
3	2688.00	48.91 AV	54.00	-5.09	1.23 V	13	17.19	31.72
4	4824.00	55.26 PK	74.00	-18.74	1.24 V	208	18.74	36.53
4	4824.00	39.59 AV	54.00	-14.41	1.24 V	208	3.07	36.53

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70 % RH, 991 hPa	**TESTED BY**: Martin Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	103.81 PK			1.00 H	154	73.50	30.31
1	*2437.00	95.81 AV			1.00 H	154	65.50	30.31
2	4874.00	56.08 PK	74.00	-17.92	1.50 H	64	19.39	36.69
2	4874.00	41.75 AV	54.00	-12.25	1.50 H	64	5.06	36.69

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	*2437.00	110.81 PK			1.23 V	34	80.50	30.31
1	*2437.00	102.64 AV			1.23 V	34	72.33	30.31
2	4874.00	53.75 PK	74.00	-20.25	1.35 V	204	17.06	36.69
2	4874.00	39.75 AV	54.00	-14.25	1.35 V	204	3.06	36.69

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 11	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70 % RH, 991 hPa	**TESTED BY**: Martin Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	101.54 PK			1.00 H	45	71.17	30.37
1	*2462.00	94.04 AV			1.00 H	45	63.67	30.37
2	2483.50	41.54 PK	74.00	-32.46	1.00 H	45	11.11	30.43
3	2688.00	48.54 PK	74.00	-25.46	1.00 H	45	16.82	31.72
4	4924.00	53.91 PK	74.00	-20.09	1.00 H	127	17.06	36.85
4	4924.00	37.91 AV	54.00	-16.09	1.00 H	127	1.06	36.85

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	110.37 PK			1.00 V	16	80.00	30.37
1	*2462.00	102.04 AV			1.00 V	16	71.67	30.37
2	2483.50	50.37 PK	74.00	-23.63	1.00 V	16	19.94	30.43
3	2688.00	57.37 PK	74.00	-16.63	1.00 V	16	25.65	31.72
3	2688.00	49.04 AV	54.00	-4.96	1.00 V	16	17.32	31.72
4	4924.00	54.61 PK	74.00	-19.39	1.55 V	43	17.76	36.85
4	4924.00	40.08 AV	54.00	-13.92	1.55 V	43	3.23	36.85

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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 RESULT (B)

Normal mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 1	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60 % RH, 991 hPa	**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	2390.00	61.67 PK	74.00	-12.33	1.92 H	147	21.23	40.44
1	2390.00	41.61 AV	54.00	-12.39	1.92 H	147	1.17	40.44
2	*2412.00	102.40 PK			1.92 H	147	61.94	40.46
2	*2412.00	92.14 AV			1.92 H	147	51.68	40.46
3	4824.00	54.42 PK	74.00	-19.58	1.73 H	116	12.21	42.21
3	4824.00	41.74 AV	54.00	-12.26	1.73 H	116	-0.47	42.21

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	68.90 PK	74.00	-5.10	1.00 V	350	28.46	40.44
1	2390.00	51.48 AV	54.00	-2.52	1.00 V	350	11.04	40.44
2	*2412.00	112.20 PK			1.00 V	350	71.74	40.46
2	*2412.00	102.01 AV			1.00 V	350	61.55	40.46
3	2688.00	51.95 PK	74.00	-22.05	1.00 V	345	11.31	40.64
3	2688.00	49.12 AV	54.00	-4.88	1.00 V	345	8.48	40.64
4	4824.00	49.99 PK	74.00	-24.01	1.00 V	345	7.78	42.21

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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

Normal mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60 % RH, 991 hPa	**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	*2437.00	100.97 PK			1.85 H	228	60.49	40.48
1	*2437.00	91.70 AV			1.85 H	228	51.22	40.48
2	4874.00	62.92 PK	74.00	-11.08	1.77 H	318	20.73	42.19
2	4874.00	47.19 AV	54.00	-6.81	1.77 H	318	5.00	42.19

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	112.64 PK			1.00 V	226	72.16	40.48
1	*2437.00	102.60 AV			1.00 V	226	62.12	40.48
2	4874.00	58.64 PK	74.00	-15.36	1.77 V	318	16.45	42.19
2	4874.00	44.51 AV	54.00	-9.49	1.77 V	318	2.32	42.19

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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

Normal mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 11	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60 % RH, 991 hPa	**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	*2462.00	101.87 PK			1.83 H	229	61.38	40.49
1	*2462.00	92.14 AV			1.83 H	229	51.65	40.49
2	2483.50	54.31 PK	74.00	-19.69	1.83 H	229	13.80	40.51
2	2483.50	42.68 AV	54.00	-11.32	1.83 H	229	2.17	40.51
3	4924.00	54.23 PK	74.00	-19.77	1.22 H	214	12.06	42.17
3	4924.00	45.27 AV	54.00	-8.73	1.22 H	214	3.10	42.17

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	113.49 PK			1.81 V	228	73.00	40.49
1	*2462.00	103.42 AV			1.81 V	228	62.93	40.49
2	2483.50	62.87 PK	74.00	-11.13	1.81 V	228	22.36	40.51
2	**2483.50**	**51.72 AV**	**54.00**	**-2.28**	**1.81 V**	**228**	**11.21**	**40.51**
3	2688.00	52.30 PK	74.00	-21.70	1.00 V	215	11.66	40.64
3	2688.00	48.90 AV	54.00	-5.10	1.00 V	215	8.26	40.64
4	4924.00	51.85 PK	74.00	-22.15	1.19 V	354	9.68	42.17
4	4924.00	46.80 AV	54.00	-7.20	1.19 V	354	4.63	42.17

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
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

Turbo mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	17 deg. C, 65 % RH, 991 hPa	**TESTED BY**: Jun Wu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	48.54 PK	74.00	-25.46	1.00 H	45	17.06	31.48
2	*2437.00	102.08 PK			1.00 H	45	66.54	31.54
2	*2437.00	91.77 AV			1.00 H	45	56.23	31.54
3	2483.50	44.53 PK	74.00	-29.47	1.00 H	45	12.93	31.60
4	4874.00	45.15 PK	74.00	-28.85	1.39 H	221	7.21	37.94

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.98 PK	74.00	-15.02	1.16 V	360	27.50	31.48
1	2390.00	48.38 AV	54.00	-5.62	1.16 V	360	16.90	31.48
2	*2437.00	108.52 PK			1.16 V	360	76.98	31.54
2	*2437.00	97.92 AV			1.16 V	360	66.38	31.54
3	2483.50	54.79 PK	74.00	-19.21	1.16 V	360	23.19	31.60
3	2483.50	44.19 AV	54.00	-9.81	1.16 V	360	12.59	31.60
4	4874.00	45.79 PK	74.00	-28.21	1.06 V	224	7.85	37.94

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

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

4.3.3 TEST PROCEDURE

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

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP

4.3.6 EUT OPERATING CONDITIONS

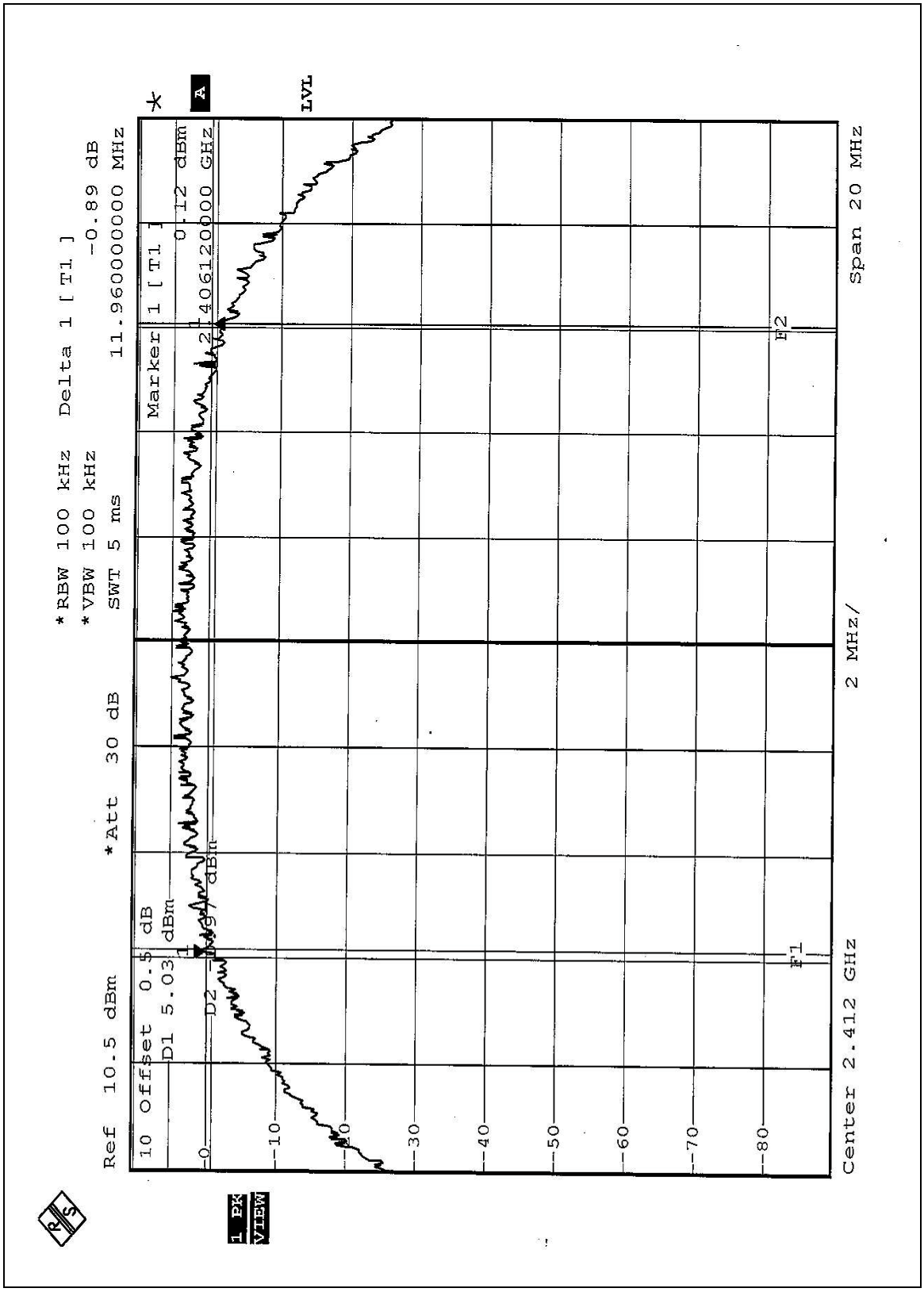
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULT (A)

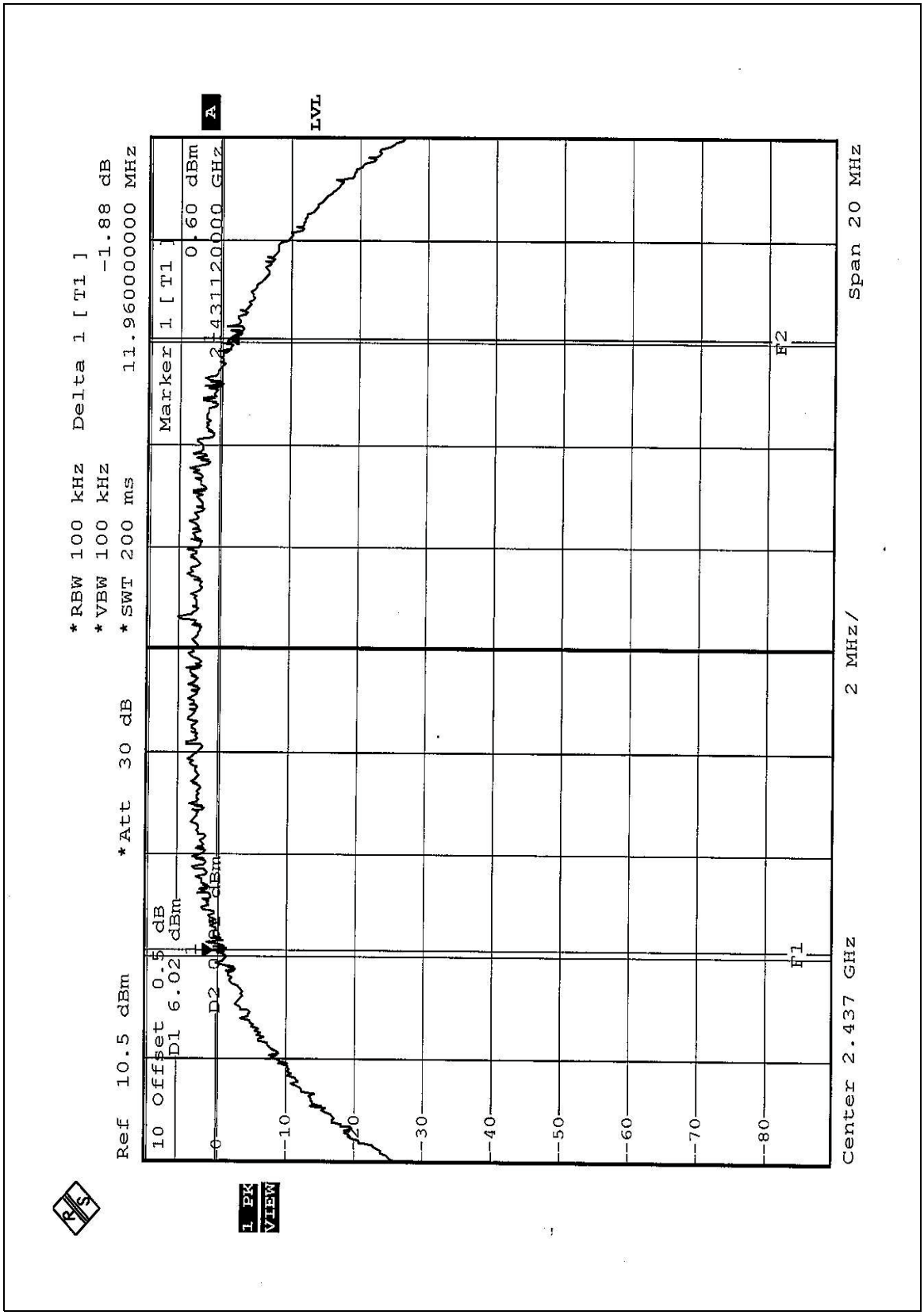
EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	18deg. C, 69%RH, 991 hPa
TESTED BY: Steven Lu			

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.96	0.5	PASS
6	2437	11.96	0.5	PASS
11	2462	11.88	0.5	PASS

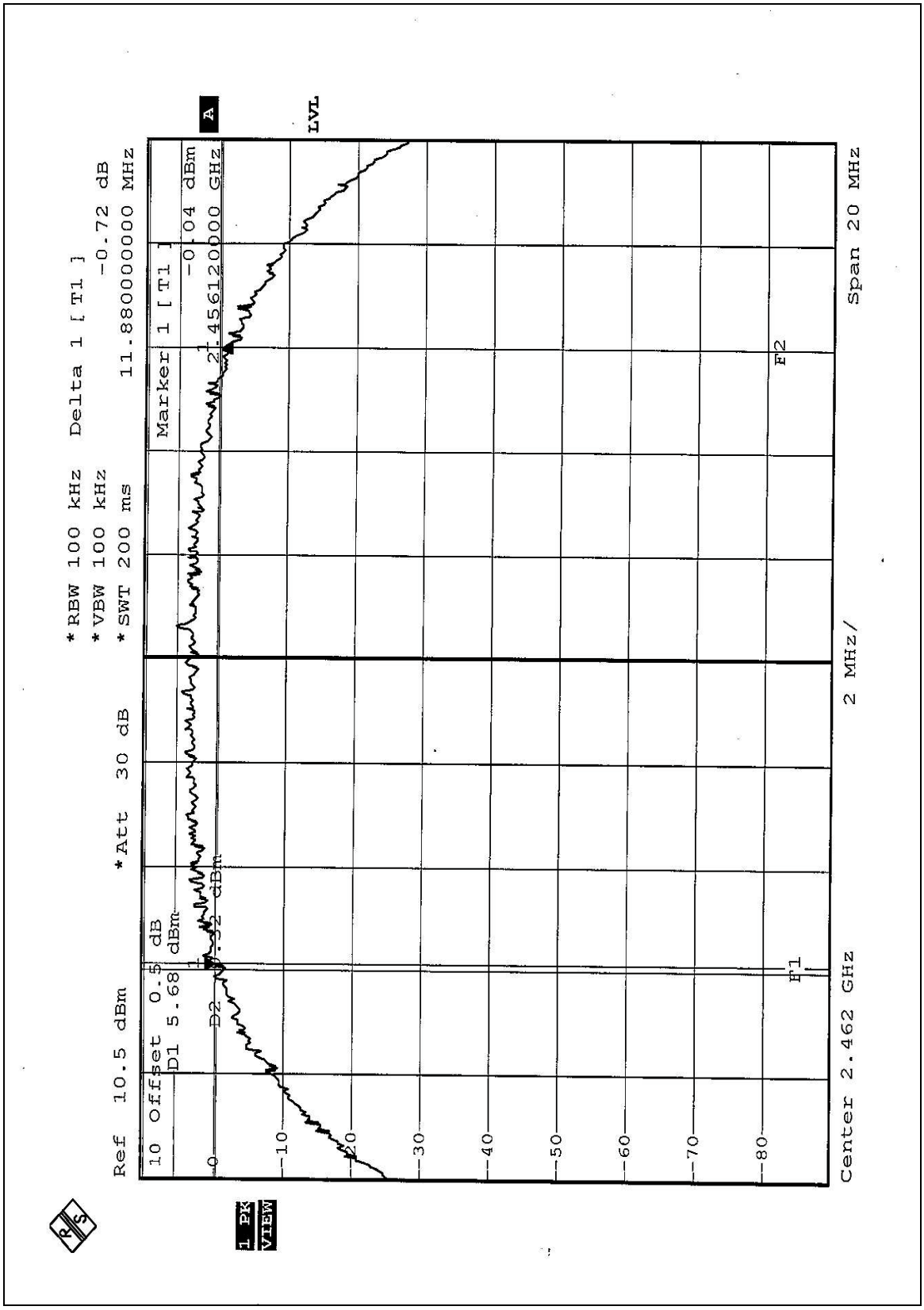
CH1


Ref 10.5 dBm
10 Offset 0.5 dB
D1 5.03 dBm
D2 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-0.89 dB
11.960000000 MHz
Marker 1 [T1]
0.12 dBm
2.406120000 GHz
LVL
A
1 PK
VIEW
Center 2.412 GHz
2 MHz/
Span 20 MHz
F1
F2

CH6


Ref 10.5 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
*SWT 200 ms
Delta 1 [T1]
-1.88 dB
11.960000000 MHz
10 Offset 0.5 dB
D1 6.02 dBm
D2 0 dBm
Marker 1 [T1]
0.60 dBm
2.431120000 GHz
A
LVL
1 PK VIEW
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
0
-10
-20
-30
-40
-50
-60
-70
-80

CH11


Ref 10.5 dBm
10 Offset 0.5 dB
D1 5.68 dBm
D2 -0.72 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
*SWT 200 ms
Delta 1 [T1]
-0.72 dB
11.880000000 MHz
Marker 1 [T1]
-0.04 dBm
2.456120000 GHz
A
LVL
F1
F2
1 PK
VIEW
Center 2.462 GHz
2 MHz/
Span 20 MHz

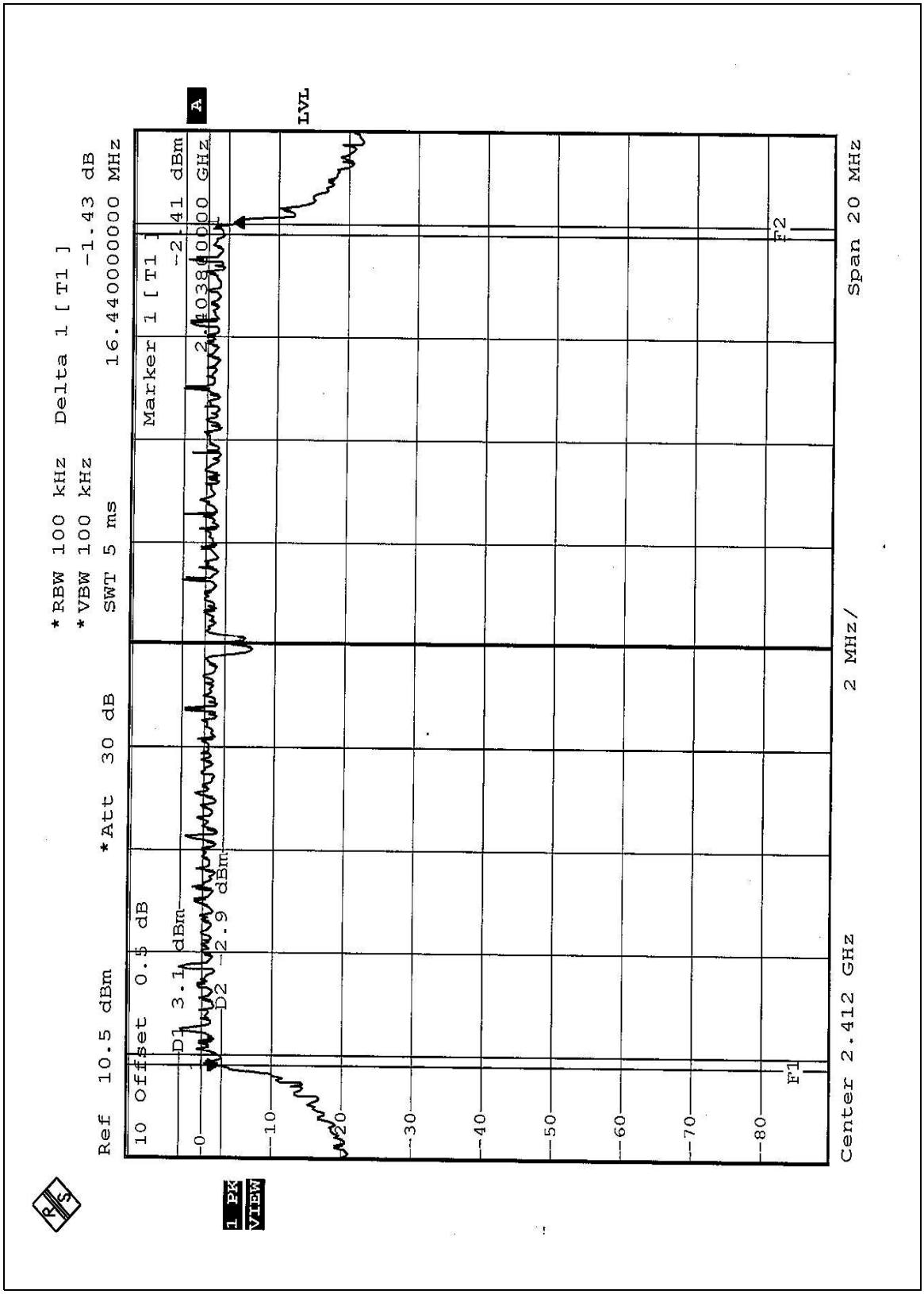
4.3.8 TEST RESULT (B)

Normal mode:

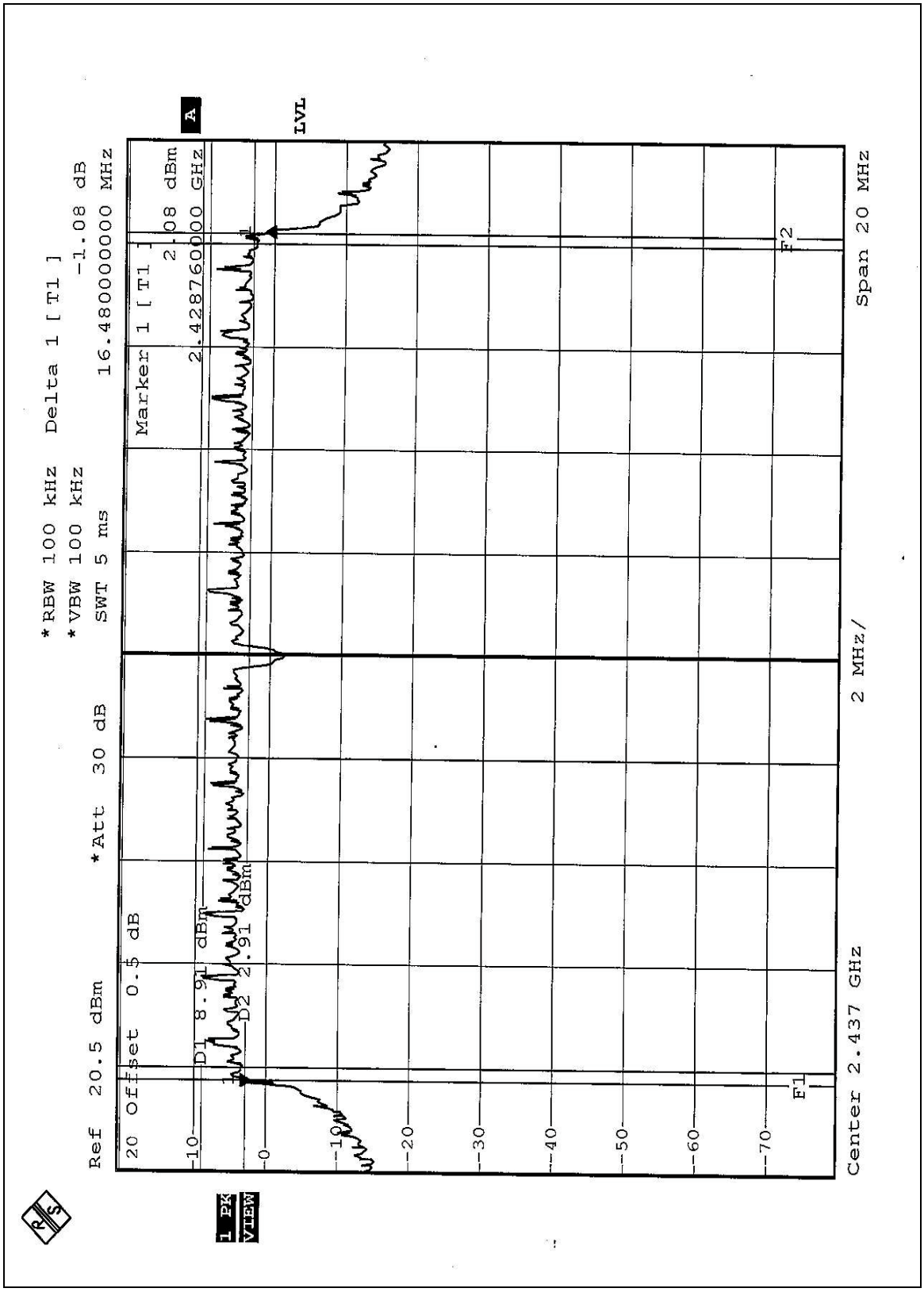
EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	18deg. C, 69%RH, 991 hPa
TESTED BY: Steven Lu			

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.44	0.5	PASS
6	2437	16.48	0.5	PASS
11	2462	16.44	0.5	PASS

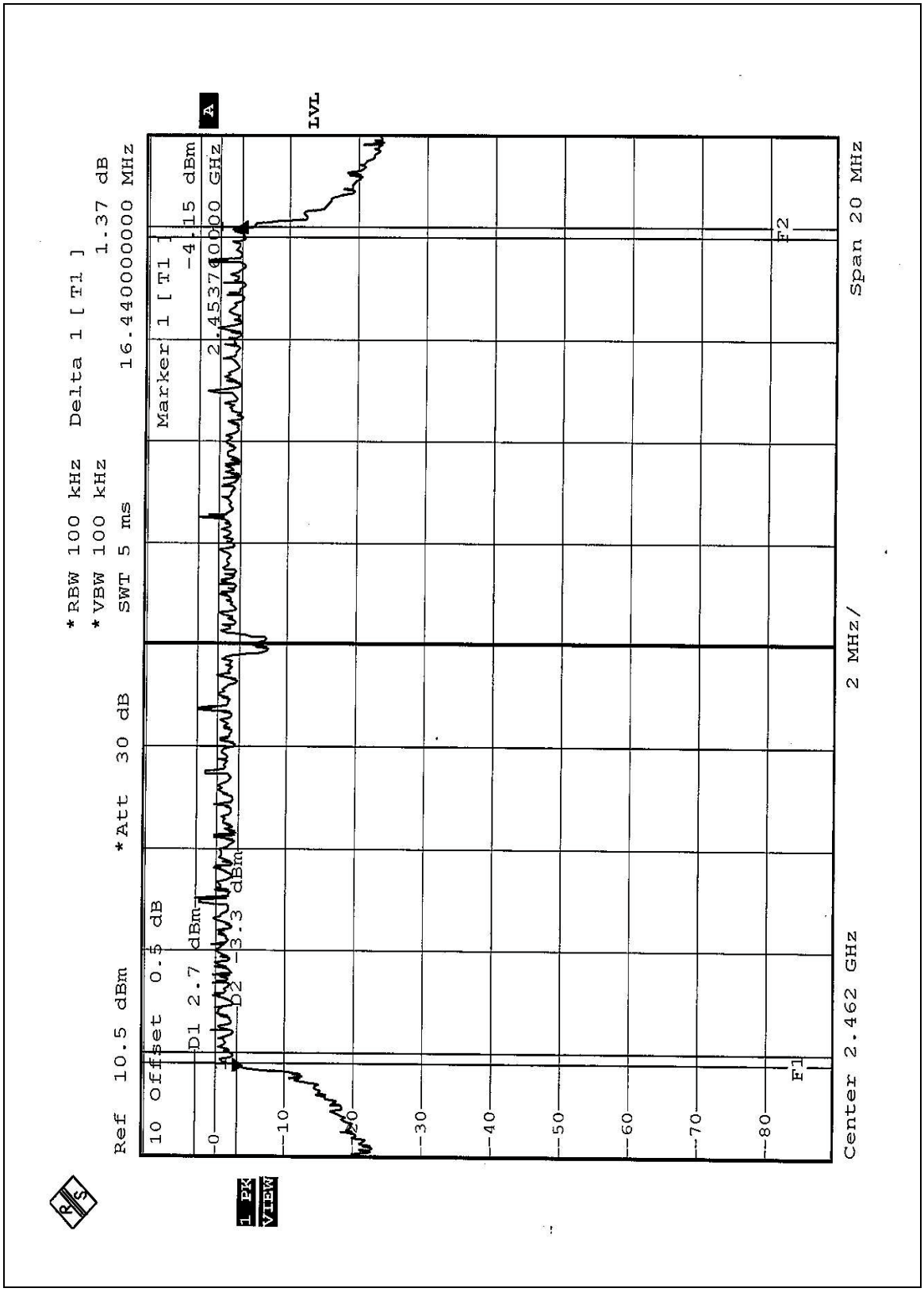
CH1


Ref 10.5 dBm
10 Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-1.43 dB
16.440000000 MHz
Marker 1 [T1]
-2.41 dBm
2.410000000 GHz
D1 3.1 dBm
D2 -2.9 dBm
A
LVL
F1
F2
1 PK
VIEW
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


Ref 20.5 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-1.08 dB
16.480000000 MHz
Marker 1 [T1]
2.08 dBm
2.428760000 GHz
20 Offset 0.5 dB
D1 8.91 dBm
D2 2.91 dBm
A
LVL
F1
F2
1 PK
VIEW
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11

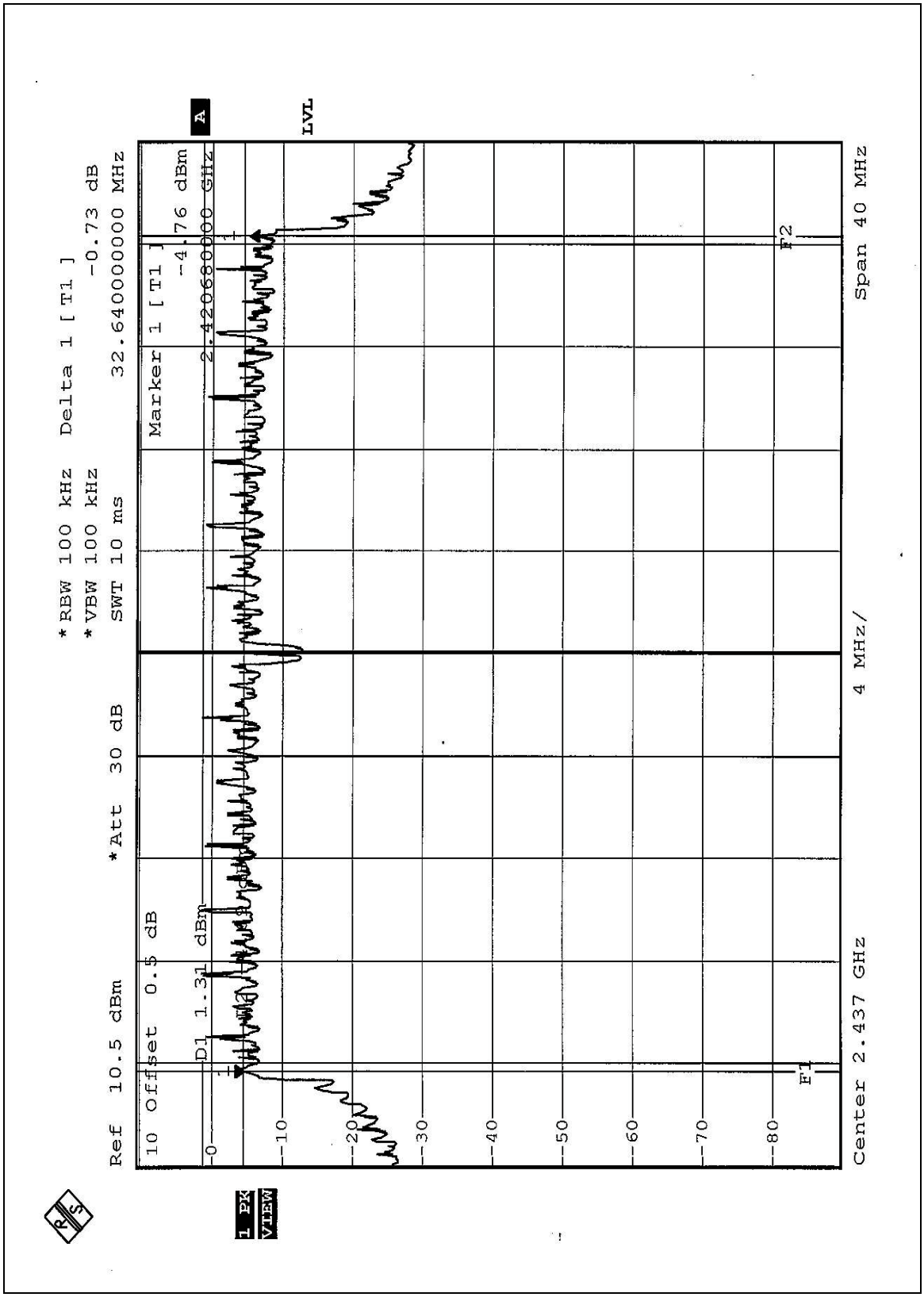

Ref 10.5 dBm
*Att 30 dB
SWT 5 ms
*RBW 100 kHz
*VBW 100 kHz
Delta 1 [T1]
1.37 dB
16.44000000 MHz
Marker 1 [T1]
-4.15 dBm
2.45374000 GHz
10 Offset 0.5 dB
D1 2.7 dBm
D2 -3.3 dBm
LVL
A
1 PK
VIEW
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

Turbo mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	18deg. C, 69%RH, 991 hPa
TESTED BY: Steven Lu			

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	32.64	0.5	PASS

CH6


Ref 10.5 dBm
10 Offset 0.5 dB
D1 1.31 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
-0.73 dB
32.640000000 MHz
Marker 1 [T1]
-4.76 dBm
2.420680000 GHz
A
LVL
1 PK
VIEW
F1
F2
Center 2.437 GHz
4 MHz/
Span 40 MHz

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004
R&S SIGNAL GENERATOR	SMP04	100011	May 28, 2004
TEKTRONIX OSCILLOSCOPE	TDS 220	B048470	Mar. 05, 2004
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 RESULT (A)

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	18deg. C, 69%RH, 991 hPa
TESTED BY: Steven Lu			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	16.94	30	PASS
6	2437	16.96	30	PASS
11	2462	16.98	30	PASS

4.4.8 TEST RESULT (B)

Normal Mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	18deg. C, 69%RH, 991 hPa
TESTED BY: Steven Lu			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	17.00	30	PASS
6	2437	16.98	30	PASS
11	2462	17.02	30	PASS

Turbo Mode:

EUT	108 Mbps Wireless Media Router	**MODEL**	WGT634U
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	18deg. C, 69%RH, 991 hPa
TESTED BY: Steven Lu			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	16.00	30	PASS