FCC TEST REPORT

REPORT NO.: RF920617R08
MODEL NO.: GL2454MP-0T
RECEIVED: June 17, 2003
TESTED: June 19 ~ 25, 2003

APPLICANT: D-Link Corporation

ADDRESS: No.8, Li-Hsin VII Road Science Based Industrial Park Hsin-Chu,Taiwan

ISSUED BY: Advance Data Technology Corporation

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

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0528
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Lab Code: 200102-0

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1 CERTIFICATION

PRODUCT :	2.4GHz/54Mbps Wireless MINI PCI Card
MODEL NO. :	GL2454MP-0T
BRAND NAME :	D-Link
APPLICANT :	D-Link Corporation
STANDARDS :	47 CFR 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 June 19 to 25, 2003. 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: _____ , **DATE:** June 27, 2003
Emily Lu

APPROVED BY: _____ , **DATE:** June 27, 2003
Dr. Alan Lane
Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR 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 –14.10dBuV at 0.180MHz
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 –1.10dBuV at 7311.10MHz
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

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	2.4GHz/54Mbps Wireless MINI PCI Card
MODEL NO.	GL2454MP-0T
SOURCE VOLTAGE	V_{nom}= 230 V_{min}= 207 V_{max}= 253
POWER SUPPLY	3.3VDC from host equipment
MODULATION TYPE	DSSS, OFDM
TRANSFER RATE	up to 54Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
CHANNEL SPACING	5MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	19.84dBm
ANTENNA TYPE	Dipole antenna, Patch antenna
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. Fully compatible with the 802.11g standard to provide a wireless data rate of up to 54Mbps.

2. The EUT complies with IEEE 802.11g draft standards, and backwards compatible with IEEE 802.11b products.

3. Five sets of antenna were provided to this EUT. Please refer to the following:

Antenna Type	Antenna Gain (dBi)
Dipole	1.7
Dipole	1.8
Dipole	2
Patch	2.5
Dipole	5

Three antennas were selected for the final test: 1.7dBi, 2.5dBi & 5dBi

4. For more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

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, the worst case, was chosen for final test.
2. Above 1GHz, the channel 1, 6, and 11 were tested individually.
3. Transfer rate, 22Mbps with CCK technique and 6Mbps with OFDM technique, the worst cases, were chosen for final test.
4. For "Radiated Emission Measurement test (section 4.2)", three test results were provided to this EUT. The test result A was for antenna gain with 1.7dBi, the test result B was for antenna gain with 2.5dBi and test result C for antenna gain with 5dBi.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 2.4GHz/54Mbps Wireless MINI PCI Card. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 15, Subpart C. (15.247)
ANSI C63.4 : 1992

All tests 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-09C748-12800-19O-B220	FCC DoC APPROVED
2	PRINTER	EPSON	LQ-300+	DCGY017096	FCC DoC APPROVED
3	MODEM	ACEEX	1414	980020569	IFAXDM1414

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

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

4 TEST TYPES AND RESULTS

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. 20, 2004
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH3-Z5	100218	Dec. 18, 2003
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100219	Dec. 18, 2003
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100220	Dec. 18, 2003
ROHDE & SCHWARZ 4-wire ISN	ENY41	837032/016	Nov. 29 2003
ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/016	Nov. 29 2003
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.

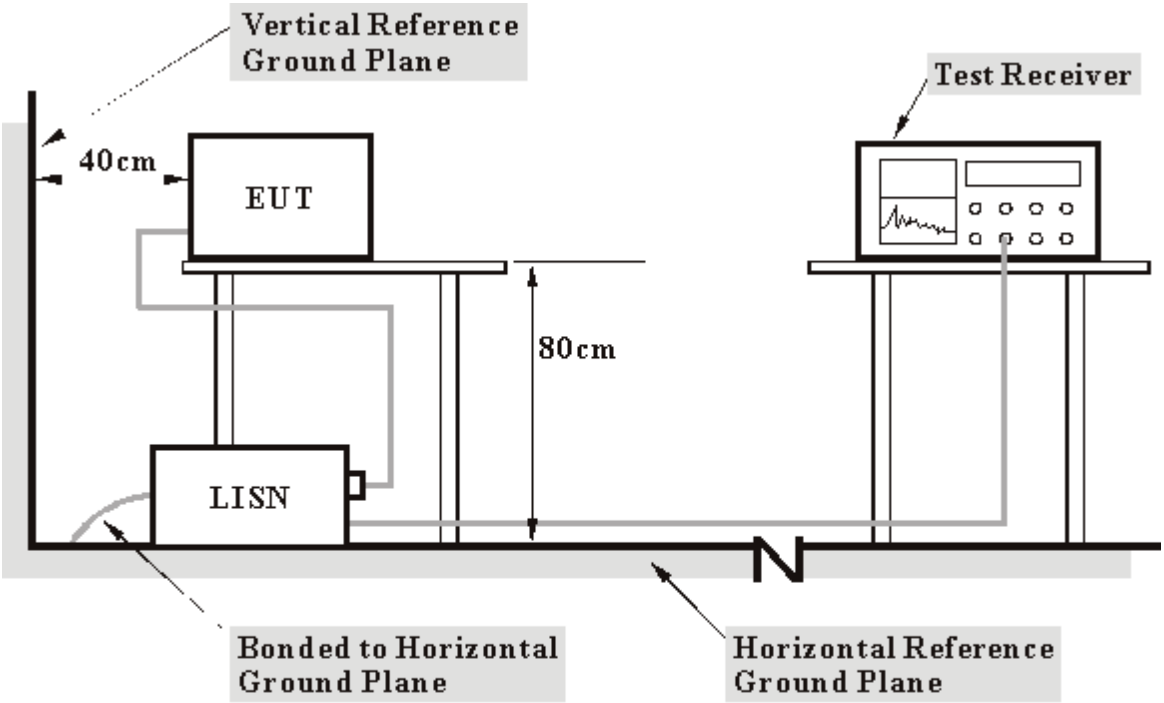
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150kHz to 30MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

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. Connected the EUT to a 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. Repeat steps b-e.

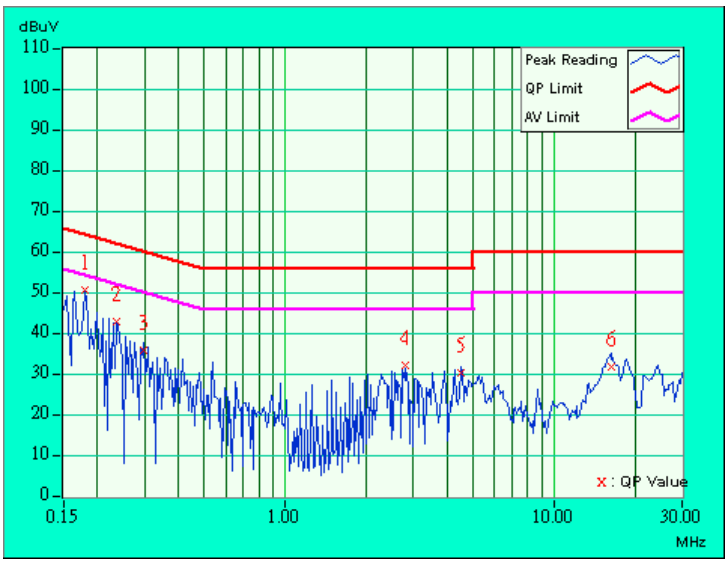
4.1.7 TEST RESULTS

EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	Channel 01	**6dB BANDWIDTH**	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.180	0.06	50.33	-	50.39	-	64.49	54.49	-14.10	-
2	0.237	0.06	42.49	-	42.55	-	62.20	52.20	-19.65	-
3	0.297	0.06	35.52	-	35.58	-	60.33	50.33	-24.75	-
4	2.803	0.20	31.58	-	31.78	-	56.00	46.00	-24.22	-
5	4.534	0.24	29.78	-	30.02	-	56.00	46.00	-25.98	-
6	16.286	0.58	31.33	-	31.91	-	60.00	50.00	-28.09	-

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.
7.



EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	Channel 01	**6dB BANDWIDTH**	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.180	0.05	47.45	-	47.50	-	64.49	54.49	-16.99	-
2	0.237	0.05	39.30	-	39.35	-	62.20	52.20	-22.85	-
3	0.294	0.05	28.75	-	28.80	-	60.41	50.41	-31.61	-
4	3.043	0.19	30.41	-	30.60	-	56.00	46.00	-25.40	-
5	4.234	0.21	31.12	-	31.33	-	56.00	46.00	-24.67	-
6	16.289	0.50	30.67	-	31.17	-	60.00	50.00	-28.83	-

REMARKS:

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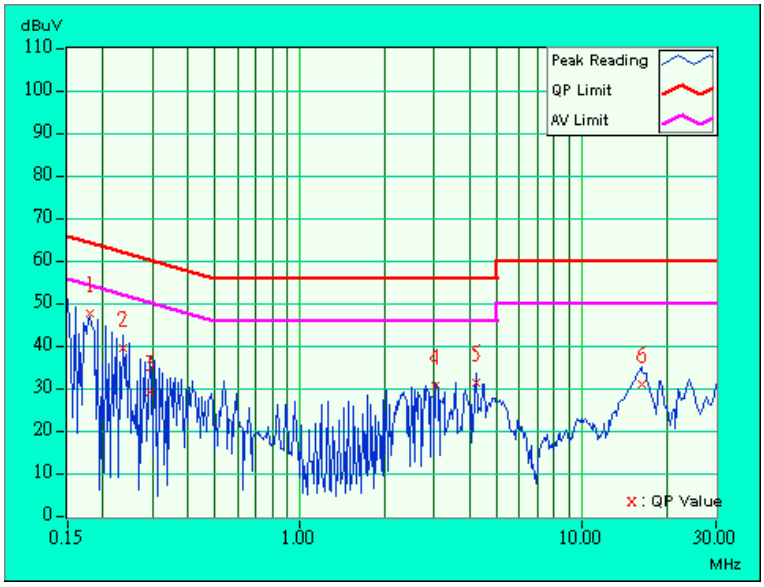
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value.
5. Correction factor = Insertion loss + Cable loss.
6. Emission Level = Correction Factor + Reading Value.

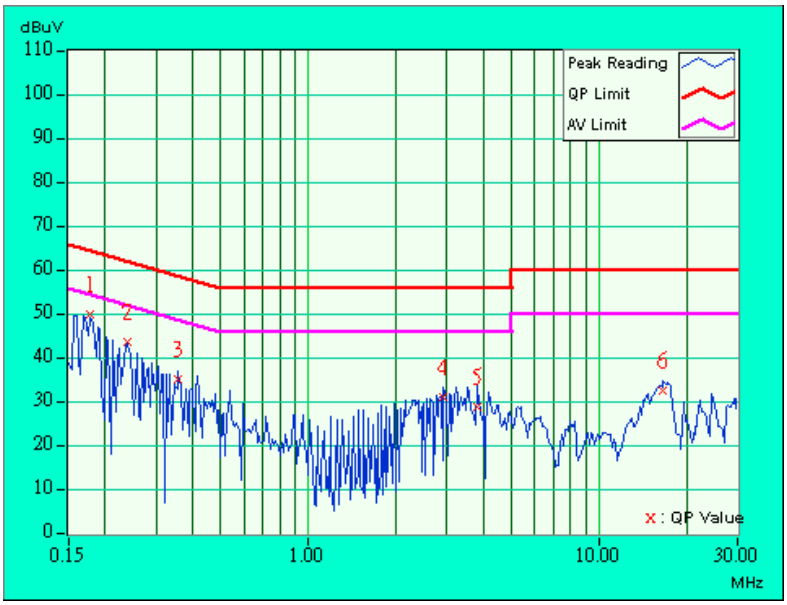


EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	Channel 06	**6dB BANDWIDTH**	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.06	49.23	-	49.29	-	64.63	54.63	-15.34	-
2	0.240	0.06	43.05	-	43.11	-	62.10	52.10	-18.99	-
3	0.357	0.06	34.49	-	34.55	-	58.80	48.80	-24.25	-
4	2.923	0.20	30.55	-	30.75	-	56.00	46.00	-25.25	-
5	3.817	0.22	28.48	-	28.70	-	56.00	46.00	-27.30	-
6	16.655	0.59	31.88	-	32.47	-	60.00	50.00	-27.53	-

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	Channel 06	**6dB BANDWIDTH**	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.174	0.05	39.80	-	39.85	-	64.77	54.77	-24.92	-
2	0.240	0.05	37.98	-	38.03	-	62.10	52.10	-24.07	-
3	0.297	0.05	33.04	-	33.09	-	60.33	50.33	-27.24	-
4	3.103	0.19	29.15	-	29.34	-	56.00	46.00	-26.66	-
5	15.638	0.49	27.85	-	28.34	-	60.00	50.00	-31.66	-
6	18.332	0.50	30.32	-	30.82	-	60.00	50.00	-29.18	-

REMARKS:

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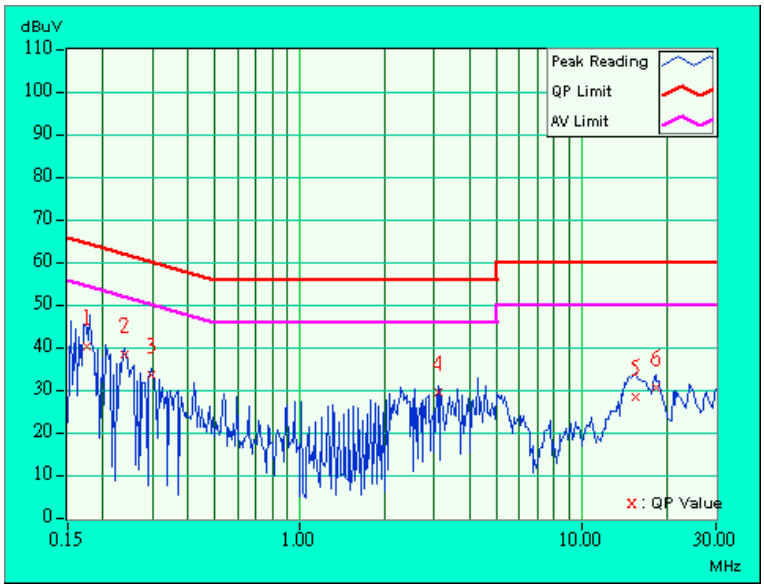
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value.
5. Correction factor = Insertion loss + Cable loss.
6. Emission Level = Correction Factor + Reading Value.



EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	Channel 11	**6dB BANDWIDTH**	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.183	0.06	46.01	-	46.07	-	64.35	54.35	-18.28	-
2	0.240	0.06	43.03	-	43.09	-	62.10	52.10	-19.01	-
3	0.417	0.06	32.75	-	32.81	-	57.51	47.51	-24.69	-
4	3.166	0.20	31.76	-	31.96	-	56.00	46.00	-24.04	-
5	4.480	0.24	28.74	-	28.98	-	56.00	46.00	-27.02	-
6	15.344	0.57	29.81	-	30.38	-	60.00	50.00	-29.62	-

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.
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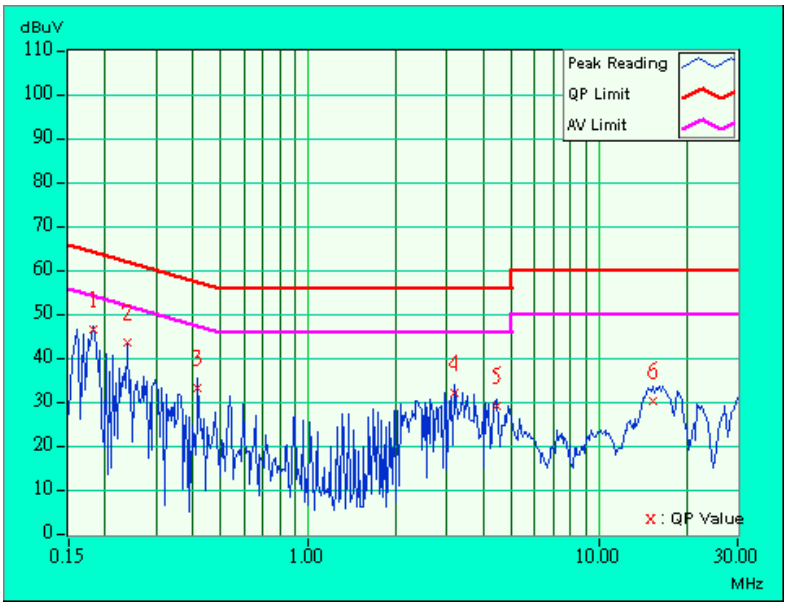
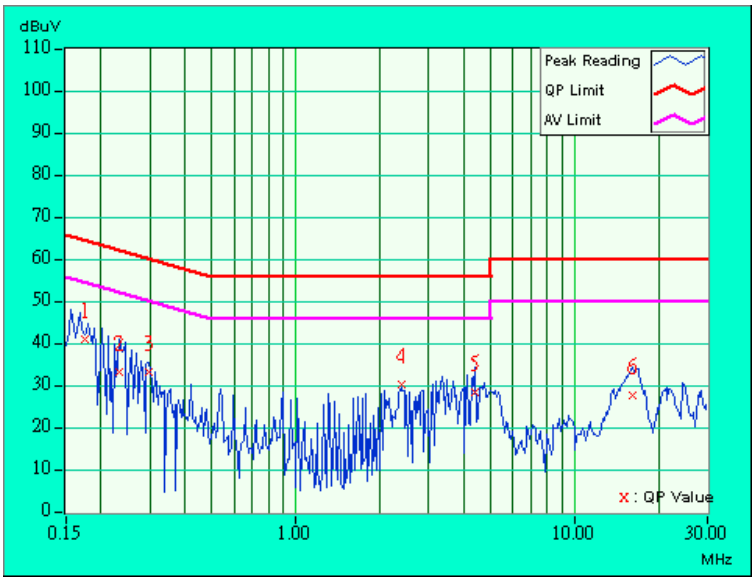


EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	Channel 11	**6dB BANDWIDTH**	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.174	0.05	40.58	-	40.63	-	64.75	54.75	-24.12	-
2	0.234	0.05	32.82	-	32.87	-	62.31	52.31	-29.44	-
3	0.297	0.05	33.00	-	33.05	-	60.33	50.33	-27.28	-
4	2.389	0.19	29.75	-	29.94	-	56.00	46.00	-26.06	-
5	4.423	0.22	27.88	-	28.10	-	56.00	46.00	-27.90	-
6	16.253	0.50	27.27	-	27.77	-	60.00	50.00	-32.23	-

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	8594E	3911A07465	July 08, 2003
* HP Preamplifier	8447D	2944A10386	Aug. 15, 2003
* HP Preamplifier	8449B	3008A01201	Dec. 01, 2003
* HP Preamplifier	8449B	3008A01292	Aug. 07, 2003
SCHAFFNER Tunable Dipole Antenna SCHWARZBECK Tunable Dipole Antenna	VHBA 9123 UHA 9105	459 977	Nov. 22, 2003
ROHDE & SCHWARZ TEST RECEIVER	ESCS 30	836858/008	Dec.13, 2003
* SCHAFFNER BILOG Antenna	CBL6111C	2727	July. 17, 2003
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	July. 03, 2003
* EMCO Horn Antenna	3115	9312-4192	Mar. 23, 2004
* ADT. Turn Table	TT100	0201	NA
* ADT. Tower	AT100	0201	NA
* Software	ADT_Radiated_V5.06	NA	NA
* ANRITSU RF Switches	MP59B	6100237246	Oct. 30, 2003
* TIMES RF cable	LMR-600	CABLE-ST10-01	Oct. 30, 2003

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-1248.

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.

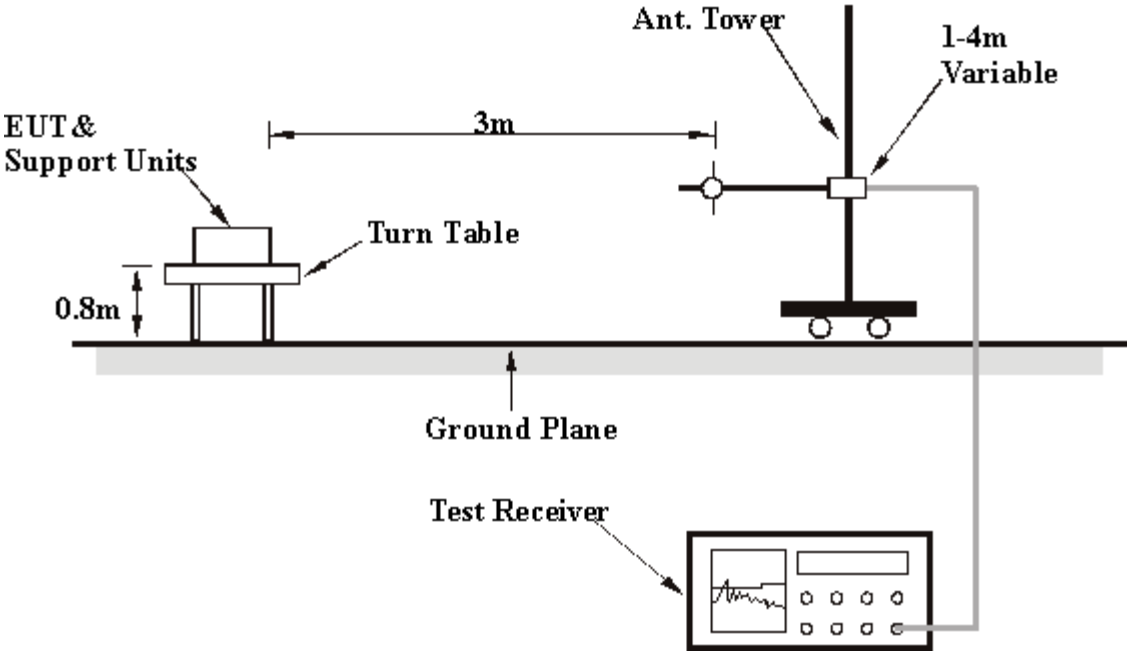
NOTE:

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 300 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 (A)

EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
CHANNEL	Channel 01	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	160.01	38.0 QP	43.50	-5.50	2.39 H	189	27.00	11.00
2	320.23	24.4 QP	46.00	-21.60	1.42 H	0	9.30	15.10
3	440.00	24.6 QP	46.00	-21.40	2.24 H	227	6.00	18.60
4	480.02	30.4 QP	46.00	-15.60	1.00 H	227	11.10	19.40
5	520.03	27.1 QP	46.00	-18.90	1.84 H	307	6.30	20.80
6	560.04	29.1 QP	46.00	-16.90	2.00 H	234	6.90	22.20
7	759.99	28.2 QP	46.00	-17.80	1.10 H	193	3.50	24.70
8	840.06	28.9 QP	46.00	-17.10	1.99 H	219	3.40	25.50
9	879.98	28.6 QP	46.00	-17.40	1.00 H	155	3.00	25.60
10	920.01	28.8 QP	46.00	-17.20	1.04 H	133	2.70	26.10

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	160.03	27.5 QP	43.50	-16.00	1.10 V	97	16.50	11.00
2	480.03	27.2 QP	46.00	-18.80	1.59 V	149	7.80	19.40
3	520.00	27.7 QP	46.00	-18.30	1.04 V	142	7.00	20.80
4	560.00	27.5 QP	46.00	-18.50	1.06 V	263	5.30	22.20
5	600.00	27.7 QP	46.00	-18.30	1.35 V	200	6.20	21.50
6	640.00	24.9 QP	46.00	-21.10	1.35 V	304	2.70	22.20
7	680.00	27.7 QP	46.00	-18.30	1.28 V	210	4.80	22.90
8	760.00	27.5 QP	46.00	-18.50	1.40 V	123	2.80	24.70
9	840.00	28.6 QP	46.00	-17.40	1.56 V	250	3.20	25.50
10	880.00	26.9 QP	46.00	-19.10	1.61 V	82	1.40	25.60

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 01		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2038.00	39.6 PK	80.20	-40.60	1.15 H	214	9.20	30.40
1	2038.00	31.2 AV	71.30	-40.10	1.15 H	214	0.80	30.40
2	*2412.00	100.2 PK			1.18 H	130	68.20	32.00
2	*2412.00	91.3 AV			1.18 H	130	59.30	30.40
3	4076.00	43.3 PK	74.00	-30.70	1.14 H	222	6.40	36.90
4	7236.00	57.6 PK	80.20	-22.60	1.35 H	135	13.00	44.60
4	7236.00	48.2 AV	71.30	-23.10	1.35 H	135	3.60	31.90

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	2038.00	41.6 PK	86.80	-45.20	1.58 V	145	11.20	30.40
1	2038.00	35.2 AV	77.20	-42.00	1.58 V	145	4.80	30.40
2	*2412.00	106.8 PK			1.24 V	155	74.80	32.00
2	*2412.00	97.2 AV			1.24 V	155	65.20	30.40
3	4076.00	46.2 PK	74.00	-27.80	1.20 V	233	9.40	36.90
4	4824.00	45.2 PK	74.00	-28.80	1.12 V	238	6.70	38.50
5	7236.10	62.1 PK	86.80	24.70	1.33 V	354	17.50	44.60
5	7236.10	53.7 AV	77.20	-23.50	1.33 V	354	9.10	31.90
6	9648.00	53.3 PK	86.80	-33.50	1.25 V	214	7.00	46.30
6	9648.00	44.2 AV	77.20	-33.00	1.25 V	214	-2.00	32.00

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2063.00	44.6 PK	82.50	-37.90	1.18 H	200	14.00	30.60
1	2063.00	35.2 AV	73.20	-38.00	1.18 H	200	4.60	30.60
2	*2437.00	102.5 PK			1.36 H	214	70.30	32.20
2	*2437.00	93.2 AV			1.36 H	214	61.00	30.60
3	4126.00	45.2 PK	74.00	-28.80	1.32 H	158	8.20	37.00
4	7315.20	55.3 PK	74.00	-18.70	1.10 H	89	10.70	44.60
4	7315.20	46.3 AV	54.00	-7.70	1.10 H	89	1.70	32.20

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	2063.00	42.5 PK	87.50	-48.00	1.12 V	210	11.90	30.60
1	2063.00	33.6 AV	78.20	-44.60	1.12 V	210	3.00	30.60
2	*2437.00	107.5 PK			1.19 V	123	75.30	32.20
2	*2437.00	98.2 AV			1.19 V	123	66.00	30.60
3	4126.00	44.7 PK	74.00	-29.30	1.32 V	102	7.70	37.00
4	7308.98	60.1 PK	74.00	-13.90	1.02 V	155	15.50	44.60
4	7308.98	51.4 AV	54.00	-2.60	1.02 V	155	6.80	32.20

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2088.00	44.2 PK	82.70	-38.50	1.22 H	163	13.40	30.80
1	2088.00	38.3 AV	73.70	-35.40	1.22 H	163	7.40	30.80
2	*2462.00	102.7 PK			1.40 H	178	70.20	32.50
2	*2462.00	93.7 AV			1.40 H	178	61.20	30.80
3	4176.00	44.3 PK	74.00	-29.70	1.06 H	199	7.30	37.00
4	7389.20	44.6 PK	82.70	-38.10	1.16 H	325	-0.40	45.00
4	7389.20	37.0 AV	73.70	-36.70	1.16 H	325	-8.10	45.00

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	2088.00	42.5 PK	90.30	-47.80	1.02 V	125	11.70	30.80
1	2088.00	35.6 AV	81.20	-45.60	1.02 V	125	4.80	30.80
2	*2462.13	110.3 PK			1.09 V	112	77.90	32.50
2	*2462.13	101.2 AV			1.09 V	112	68.80	30.80
3	4176.00	46.0 PK	74.00	-28.00	1.22 V	200	9.00	37.00
4	4924.00	45.6 PK	74.00	-28.40	1.12 V	214	6.80	38.80
5	7386.13	57.2 PK	74.00	-16.80	1.15 V	185	12.20	45.00
5	7386.13	49.4 AV	54.00	-4.60	1.15 V	185	4.40	32.50
6	9848.00	50.0 PK	90.30	-40.30	1.11 V	144	4.70	45.30

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 01		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2038.00	40.4 PK	85.40	-45.00	1.16 H	220	9.90	30.40
1	2038.00	34.2 AV	76.20	-42.00	1.16 H	220	3.80	30.40
2	*2412.00	105.4 PK			1.12 H	125	73.40	32.00
2	*2412.00	96.2 AV			1.12 H	125	64.20	30.40
3	4076.00	45.2 PK	74.00	-28.80	1.10 H	144	8.30	36.90
4	7236.10	62.5 PK	85.40	-22.90	1.25 H	135	17.90	44.60
4	7236.10	53.1 AV	76.20	-23.10	1.25 H	135	8.50	31.90

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	2038.00	42.4 PK	83.40	-41.00	1.22 V	120	11.90	30.40
1	2038.00	35.7 AV	74.20	-38.50	1.22 V	120	5.30	30.40
2	*2412.00	103.4 PK			1.14 V	225	71.40	32.00
2	*2412.00	94.2 AV			1.14 V	225	62.20	30.40
3	4076.00	46.6 PK	74.00	-27.40	1.12 V	106	9.70	36.90
4	7236.10	61.6 PK	83.40	-21.80	1.66 V	100	17.00	44.60
4	7236.10	52.3 AV	74.20	-21.90	1.66 V	100	7.70	31.90

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2063.00	43.3 PK	87.90	-44.60	1.33 H	120	12.60	30.60
1	2063.00	37.0 AV	78.00	-41.00	1.33 H	120	6.40	30.60
2	*2437.00	107.9 PK			1.00 H	144	75.70	32.20
2	*2437.00	98.0 AV			1.00 H	144	65.80	30.60
3	4126.00	46.2 PK	74.00	-27.80	1.38 H	244	9.20	37.00
4	7311.00	63.8 PK	74.00	-10.20	1.25 H	100	19.20	44.60
4	7311.00	52.7 AV	54.00	-1.30	1.25 H	100	8.10	32.20

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	2063.00	42.3 PK	87.70	-45.40	1.33 V	100	11.70	30.60
1	2063.00	34.2 AV	77.30	-43.10	1.33 V	100	3.60	30.60
2	*2437.00	107.7 PK			1.42 V	122	75.40	32.20
2	*2437.00	97.3 AV			1.42 V	122	65.00	30.60
3	4126.00	44.7 PK	74.00	-29.30	1.55 V	260	7.70	37.00
4	7311.00	61.4 PK	74.00	-12.60	1.25 V	114	16.80	44.60
4	7311.00	51.0 AV	54.00	-3.00	1.25 V	114	6.40	32.20

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2088.00	38.6 PK	87.20	-48.60	1.44 H	125	7.80	30.80
1	2088.00	35.0 AV	77.60	-42.60	1.44 H	125	4.20	30.80
2	*2462.00	107.2 PK			1.40 H	86	74.80	32.50
2	*2462.00	97.6 AV			1.40 H	86	65.20	30.80
3	4176.05	46.2 PK	74.00	-27.80	1.45 H	110	9.30	37.00
4	7381.05	57.7 PK	74.00	-16.30	1.12 H	210	12.70	45.00
4	7381.05	48.3 AV	54.00	-5.70	1.12 H	210	3.40	32.50

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	2088.00	42.7 PK	88.60	-45.90	1.30 V	220	11.90	30.80
1	2088.00	37.1 AV	77.20	-40.10	1.30 V	220	6.30	30.80
2	*2462.00	108.6 PK			1.10 V	233	76.20	32.50
2	*2462.00	97.2 AV			1.10 V	233	64.80	30.80
3	4176.00	47.0 PK	74.00	-27.00	1.25 V	144	10.00	37.00
4	7381.20	59.2 PK	74.00	-14.80	1.30 V	144	14.20	45.00
4	7381.20	48.5 AV	54.00	-5.50	1.30 V	144	3.50	32.50

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

4.2.8 TEST RESULTS (B)

EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	160.02	31.8 QP	43.50	-11.70	2.00 H	1	20.80	11.00
2	280.02	28.0 QP	46.00	-18.00	1.54 H	153	13.90	14.10
3	320.02	33.0 QP	46.00	-13.00	1.32 H	10	17.90	15.10
4	440.01	29.1 QP	46.00	-16.90	1.01 H	121	10.60	18.60
5	520.01	25.4 QP	46.00	-20.60	1.95 H	139	4.60	20.80
6	560.01	26.4 QP	46.00	-19.60	1.47 H	226	4.30	22.20
7	640.01	28.1 QP	46.00	-17.90	1.37 H	178	5.80	22.20
8	720.01	28.0 QP	46.00	-18.00	1.63 H	149	4.20	23.80
9	760.01	31.2 QP	46.00	-14.80	1.23 H	293	6.50	24.70
10	880.01	28.8 QP	46.00	-17.20	1.58 H	167	3.20	25.60

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	160.01	25.9 QP	43.50	-17.60	1.13 V	351	14.90	11.00
2	280.02	24.6 QP	46.00	-21.40	1.69 V	187	10.50	14.10
3	320.00	25.0 QP	46.00	-21.00	1.27 V	139	9.90	15.10
4	440.00	24.7 QP	46.00	-21.30	1.27 V	73	6.20	18.60
5	480.02	24.6 QP	46.00	-21.40	1.64 V	258	5.30	19.40
6	520.02	23.0 QP	46.00	-23.00	1.00 V	202	2.30	20.80
7	640.00	27.2 QP	46.00	-18.80	1.30 V	290	5.00	22.20
8	720.00	27.2 QP	46.00	-18.80	1.52 V	75	3.40	23.80
9	760.02	28.8 QP	46.00	-17.20	1.12 V	134	4.10	24.70
10	880.01	27.7 QP	46.00	-18.30	1.61 V	249	2.10	25.60

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 01		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2038.00	49.0 PK	85.40	-36.40	1.31 H	178	18.50	30.40
1	2038.00	43.5 AV	73.10	-29.60	1.31 H	178	13.10	30.40
2	*2412.00	105.4 PK			1.14 H	161	73.40	32.00
2	*2412.00	93.1 AV			1.14 H	161	61.10	30.40
3	4076.00	44.3 PK	74.00	-29.70	1.02 H	275	7.40	36.90
4	7236.20	52.3 PK	85.40	-33.10	1.00 H	295	7.60	44.60
4	7236.20	43.0 AV	73.10	-30.10	1.00 H	295	-1.70	31.90
5	9648.00	54.5 PK	85.40	-30.90	1.16 H	59	8.30	46.30
5	9648.00	45.1 AV	73.10	-28.00	1.16 H	59	-1.20	32.00

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	2038.00	39.6 PK	84.40	-44.80	1.87 V	163	9.20	30.40
1	2038.00	33.9 AV	75.20	-41.30	1.87 V	163	3.50	30.40
2	*2412.00	104.4 PK			1.20 V	172	72.40	32.00
2	*2412.00	95.2 AV			1.20 V	172	63.20	30.40
3	4076.00	45.5 PK	74.00	-28.50	1.22 V	56	8.70	36.90
4	7236.10	62.6 PK	84.40	-21.80	1.33 V	358	17.90	44.60
4	7236.10	52.1 AV	75.20	-23.10	1.33 V	358	7.50	31.90
5	9648.12	55.4 PK	84.40	-29.00	1.51 V	254	9.20	46.30
5	9648.12	45.5 AV	75.20	-29.70	1.51 V	254	-0.70	32.00

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2063.00	44.3 PK	86.80	-42.50	1.26 H	176	13.70	30.60
1	2063.00	39.0 AV	76.50	-37.50	1.26 H	176	8.40	30.60
2	*2437.00	106.8 PK			1.14 H	158	74.60	32.20
2	*2437.00	96.5 AV			1.14 H	158	64.20	30.60
3	4126.00	45.0 PK	74.00	-29.00	1.16 H	304	8.00	37.00
4	7311.20	62.4 PK	74.00	-11.60	1.53 H	49	17.80	44.60
4	7311.20	51.8 AV	54.00	-2.20	1.53 H	49	7.20	32.20
5	9748.00	58.9 PK	86.80	-27.90	1.20 H	94	11.60	47.30
5	9748.00	48.2 AV	76.50	-28.30	1.20 H	94	0.90	37.00

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	2063.00	44.4 PK	87.20	-42.80	1.00 V	170	13.80	30.60
1	2063.00	40.1 AV	76.70	-36.60	1.00 V	170	9.50	30.60
2	*2437.00	107.2 PK			1.20 V	160	75.00	32.20
2	*2437.00	96.7 AV			1.20 V	160	64.50	30.60
3	4126.00	45.0 PK	74.00	-29.00	1.35 V	78	7.90	37.00
4	7310.20	53.4 PK	74.00	-20.60	1.35 V	1	8.80	44.60
4	7310.20	45.0 AV	54.00	-9.00	1.35 V	1	0.40	32.20

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2088.00	41.4 PK	84.80	-43.40	1.04 H	184	10.50	30.80
1	2088.00	33.4 AV	76.00	-42.60	1.04 H	184	2.60	30.80
2	*2462.00	104.8 PK			1.00 H	160	72.40	32.50
2	*2462.00	96.0 AV			1.00 H	160	63.60	30.80
3	4175.95	44.5 PK	74.00	-29.50	1.23 H	265	7.60	37.00
4	4924.05	44.2 PK	74.00	-29.80	1.36 H	247	5.40	38.80
5	7386.00	58.7 PK	74.00	-15.30	1.25 H	335	13.70	45.00
5	7386.00	50.4 AV	54.00	-3.60	1.25 H	335	5.40	32.50
6	9848.00	53.7 PK	84.80	-31.10	1.25 H	235	8.30	45.30
6	9848.00	43.9 AV	76.00	-32.10	1.25 H	235	-1.50	37.00

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	2088.00	44.3 PK	87.70	-43.40	1.10 V	275	13.50	30.80
1	2088.00	39.0 AV	78.50	-39.50	1.10 V	275	8.20	30.80
2	*2462.00	107.7 PK			1.15 V	160	75.20	32.50
2	*2462.00	98.5 AV			1.15 V	160	66.00	30.80
3	4176.85	44.7 PK	74.00	-29.30	1.43 V	92	7.70	37.00
4	4924.05	44.4 PK	74.00	-29.60	1.30 V	282	5.60	38.80
5	7386.20	59.5 PK	74.00	-14.50	1.52 V	356	14.50	45.00
5	7386.20	51.0 AV	54.00	-3.00	1.52 V	356	6.00	32.50
6	9848.00	54.0 PK	87.70	-33.70	1.35 V	285	8.60	45.30
6	9848.00	44.1 AV	78.50	-34.40	1.35 V	285	-1.20	32.60

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 01		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2038.00	42.4 PK	86.00	-42.60	1.32 H	222	11.90	30.40
1	2038.00	37.6 AV	77.60	-40.00	1.32 H	222	7.20	30.40
2	*2412.00	106.0 PK			1.32 H	158	73.90	32.00
2	*2412.00	97.6 AV			1.32 H	158	65.60	30.40
3	4076.32	44.7 PK	74.00	-29.30	1.47 H	300	7.80	36.90
4	7236.00	65.3 PK	86.00	-20.70	1.32 H	255	20.70	44.60
4	7236.00	54.7 AV	77.60	-22.90	1.32 H	255	10.10	31.90

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	2038.00	42.4 PK	83.5	-41.10	1.36 V	125	11.90	30.40
1	2038.00	36.0 AV	75.10	-39.10	1.36 V	125	5.50	30.40
2	*2412.00	103.5 PK			1.10 V	242	71.50	32.00
2	*2412.00	95.1 AV			1.10 V	242	63.10	30.40
3	4076.00	46.6 PK	74.00	-27.40	1.22 V	100	9.70	36.90
4	7236.10	62.3 PK	83.50	-21.20	1.32 V	245	17.70	44.60
4	7236.10	53.6 AV	75.10	-21.50	1.32 V	245	9.00	31.90

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2063.00	43.2 PK	86.70	-43.50	1.32 H	152	12.60	30.60
1	2063.00	36.9 AV	77.00	-40.10	1.32 H	152	6.20	30.60
2	*2437.00	106.7 PK			1.10 H	232	74.50	32.20
2	*2437.00	97.0 AV			1.10 H	232	64.80	30.60
3	4126.00	45.4 PK	74.00	-28.60	1.25 H	258	8.30	37.00
4	7311.25	63.6 PK	74.00	-10.40	1.10 H	163	19.00	44.60
4	7311.25	51.2 AV	54.00	-2.80	1.10 H	163	6.60	32.20

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	2063.00	42.3 PK	85.70	-43.40	1.35 V	300	11.70	30.60
1	2063.00	34.7 AV	76.20	-41.50	1.35 V	300	4.10	30.60
2	*2437.00	105.7 PK			1.42 V	200	73.40	32.20
2	*2437.00	96.2 AV			1.42 V	200	64.00	30.60
3	4126.00	46.0 PK	74.00	-28.00	1.36 V	288	8.90	37.00
4	7311.25	62.4 PK	74.00	-11.60	1.59 V	120	17.80	44.60
4	7311.25	50.3 AV	54.00	-3.70	1.59 V	120	5.70	32.20

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2088.00	42.4 PK	88.00	-45.60	1.47 H	126	11.60	30.80
1	2088.00	37.6 AV	77.80	-40.20	1.47 H	126	6.70	30.80
2	*2462.00	108.0 PK			1.00 H	235	75.50	32.50
2	*2462.00	97.8 AV			1.00 H	235	65.30	30.80
3	4176.00	48.3 PK	74.00	-25.70	1.23 H	236	11.30	37.00
4	7381.20	58.7 PK	74.00	-15.30	1.30 H	200	13.70	45.00
4	7381.20	48.4 AV	54.00	-5.60	1.30 H	200	3.40	32.50

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	2088.03	40.3 PK	87.20	-46.90	1.63 V	89	9.50	30.80
1	2088.03	36.2 AV	77.00	-40.80	1.63 V	89	9.50	30.80
2	*2462.00	107.2 PK			1.45 V	89	74.80	32.50
2	*2462.00	97.0 AV			1.45 V	89	64.60	30.80
3	4176.31	46.4 PK	74.00	-27.60	1.45 V	214	9.40	37.00
4	7381.25	57.4 PK	74.00	-16.60	1.25 V	332	12.40	45.00
4	7381.25	46.6 AV	54.00	-7.40	1.25 V	332	1.60	32.50

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 RESULTS (C)

EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	160.00	40.4 QP	43.50	-3.10	2.03 H	166	29.50	11.00
2	400.01	33.3 QP	46.00	-12.70	1.00 H	152	15.80	17.50
3	440.01	31.5 QP	46.00	-14.50	1.00 H	33	12.90	18.60
4	480.01	33.1 QP	46.00	-12.90	1.00 H	50	13.80	19.40
5	520.01	27.8 QP	46.00	-18.20	1.00 H	167	7.10	20.80
6	560.01	28.9 QP	46.00	-17.10	1.80 H	175	6.70	22.20
7	600.01	30.8 QP	46.00	-15.20	1.60 H	22	9.30	21.50
8	640.01	31.4 QP	46.00	-14.60	1.38 H	130	9.20	22.20
9	720.01	30.5 QP	46.00	-15.50	1.36 H	216	6.70	23.80
10	760.01	30.9 QP	46.00	-15.10	1.54 H	147	6.20	24.70
11	880.01	32.9 QP	46.00	-13.10	1.06 H	121	7.40	25.60

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	160.01	31.6 QP	43.50	-11.90	2.10 V	220	20.60	11.00
2	400.01	29.4 QP	46.00	-16.60	1.70 V	163	11.80	17.50
3	440.01	32.5 QP	46.00	-13.50	1.33 V	199	13.90	18.60
4	480.01	35.8 QP	46.00	-10.20	1.31 V	134	16.50	19.40
5	520.01	28.8 QP	46.00	-17.20	1.72 V	149	8.00	20.80
6	560.01	29.2 QP	46.00	-16.80	1.02 V	221	7.10	22.20
7	600.01	32.4 QP	46.00	-13.60	1.02 V	126	10.90	21.50
8	640.02	31.9 QP	46.00	-14.10	1.40 V	354	9.60	22.20
9	720.04	28.1 QP	46.00	-17.90	1.72 V	84	4.30	23.80
10	760.02	27.2 QP	46.00	-18.80	1.72 V	282	2.50	24.70
11	880.02	30.0 QP	46.00	-16.00	1.12 V	99	4.40	25.60

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 01		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2038.00	38.0 PK	83.30	-45.30	1.28 H	112	7.60	30.40
1	2038.00	30.3 AV	73.30	-43.00	1.28 H	112	-0.10	30.40
2	*2412.00	103.3 PK			1.18 H	129	71.30	32.00
2	*2412.00	93.3 AV			1.18 H	129	61.20	30.40
3	4076.00	44.1 PK	74.00	-29.90	1.27 H	171	7.20	36.90
4	7236.00	58.8 PK	83.30	-24.50	1.39 H	217	14.20	44.60
4	7236.00	49.8 AV	73.30	-23.50	1.39 H	217	5.10	31.90

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	2038.00	42.0 PK	92.00	-50.00	1.39 V	126	11.50	30.40
1	2038.00	37.3 AV	81.50	-44.20	1.39 V	126	6.90	30.40
2	*2412.00	112.0 PK			1.23 V	191	79.90	32.00
2	*2412.00	101.5 AV			1.23 V	191	69.50	30.40
3	4076.00	46.1 PK	74.00	-27.90	1.19 V	287	9.20	36.90
4	4824.00	45.7 PK	74.00	-28.30	1.00 V	174	7.20	38.50
5	7236.00	64.2 PK	92.00	-27.80	1.36 V	96	19.60	44.60
5	7236.00	55.2 AV	81.50	-26.30	1.36 V	96	10.60	31.90
6	9648.00	54.6 PK	92.00	-37.40	1.26 V	271	8.30	46.30

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2063.00	42.1 PK	84.90	-42.80	1.17 H	209	11.50	30.60
1	2063.00	36.9 AV	76.10	-39.20	1.17 H	209	6.30	30.60
2	*2437.00	104.9 PK			1.29 H	116	72.70	32.20
2	*2437.00	96.1 AV			1.29 H	116	63.90	30.60
3	4126.00	44.6 PK	74.00	-29.40	1.32 H	125	7.50	37.00
4	7315.00	54.2 PK	74.00	-19.80	1.05 H	75	9.60	44.60
4	7315.00	45.5 AV	54.00	-8.50	1.05 H	75	0.90	32.20

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	2063.00	44.1 PK	92.20	-48.10	1.16 V	204	13.50	30.60
1	2063.00	36.0 AV	82.90	-46.90	1.16 V	204	5.30	30.60
2	*2437.00	112.2 PK			1.19 V	113	80.00	32.20
2	*2437.00	102.9 AV			1.19 V	113	70.60	30.60
3	4126.00	45.4 PK	74.00	-28.60	1.31 V	103	8.30	37.00
4	7308.98	62.1 PK	74.00	-11.90	1.00 V	147	17.60	44.60
4	7308.98	52.8 AV	54.00	-1.20	1.00 V	147	8.30	32.20

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2088.00	45.0 PK	84.20	-39.20	1.03 H	185	14.20	30.80
1	2088.00	39.7 AV	74.90	-35.20	1.03 H	185	8.90	30.80
2	*2462.00	104.2 PK			1.00 H	193	71.70	32.50
2	*2462.00	94.9 AV			1.00 H	193	62.50	30.80
3	4176.00	44.7 PK	74.00	-29.30	1.03 H	193	7.70	37.00
4	7389.20	46.4 PK	74.00	-27.60	1.19 H	88	1.30	45.00

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	2088.00	41.7 PK	95.10	-53.40	1.00 V	165	10.90	30.80
1	2088.00	34.4 AV	85.40	-51.00	1.00 V	165	3.60	30.80
2	*2462.13	115.1 PK			1.02 V	216	82.60	32.50
2	*2462.13	105.4 AV			1.02 V	216	73.00	30.80
3	4176.00	44.9 PK	74.00	-29.10	1.15 V	135	8.00	37.00
4	4924.00	46.3 PK	74.00	-27.70	1.35 V	200	7.50	38.80
5	7386.13	58.6 PK	74.00	-15.40	1.10 V	194	13.60	45.00
5	7386.13	50.2 AV	54.00	-3.80	1.10 V	194	5.20	32.50
6	9848.00	50.5 PK	95.10	-44.60	1.18 V	110	5.20	45.30

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 01		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2038.00	41.9 PK	87.20	-45.30	1.15 H	222	11.50	30.40
1	2038.00	36.0 AV	77.00	-41.00	1.15 H	222	5.60	30.40
2	*2412.00	107.2 PK			1.13 H	114	75.20	32.00
2	*2412.00	97.0 AV			1.13 H	114	64.90	30.40
3	4076.00	45.6 PK	74.00	-28.40	1.00 H	125	8.70	36.90
4	7236.10	64.6 PK	87.20	-22.60	1.42 H	145	20.00	44.60
4	7236.10	53.9 AV	77.00	-23.10	1.42 H	145	9.20	31.90

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	2038.00	43.0 PK	84.60	-41.60	1.28 V	115	12.60	30.40
1	2038.00	36.7 AV	75.20	-38.50	1.28 V	115	6.30	30.40
2	*2412.00	104.6 PK			1.12 V	266	72.60	32.00
2	*2412.00	95.2 AV			1.12 V	266	63.20	30.40
3	4076.00	47.5 PK	74.00	-26.50	1.00 V	99	10.70	36.90
4	7236.10	63.5 PK	84.60	-21.10	1.62 V	118	18.90	44.60
4	7236.10	52.1 AV	75.20	-23.10	1.62 V	118	7.50	31.90

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2063.00	44.1 PK	87.50	-43.40	1.32 H	130	13.50	30.60
1	2063.00	37.50PK	78.10	-40.60	1.32 H	130	6.90	30.60
2	*2437.00	107.5 PK			1.00 H	216	75.30	32.20
2	*2437.00	98.1 AV			1.00 H	216	65.80	30.60
3	4126.00	46.4 PK	74.00	-27.60	1.40 H	258	9.30	37.00
4	7311.10	64.8 PK	74.00	-9.20	1.26 H	95	20.30	44.60
4	7311.10	52.9 AV	54.00	-1.10	1.26 H	95	8.30	32.20

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	2063.00	42.9 PK	89.10	-46.20	1.36 V	95	12.30	30.60
1	2063.00	34.9 AV	78.50	-43.60	1.36 V	95	4.30	30.60
2	*2437.00	109.1 PK			1.42 V	114	76.80	32.20
2	*2437.00	98.5 AV			1.42 V	114	66.30	30.60
3	4126.00	45.9 PK	74.00	-28.10	1.58 V	268	8.80	37.00
4	7311.10	63.9 PK	74.00	-10.10	1.70 V	117	19.30	44.60
4	7311.10	51.4 AV	54.00	-2.60	1.70 V	117	6.90	32.20

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	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**FREQUENCY RANGE**	Above 1000MHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**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	2088.00	42.7 PK	91.00	-48.30	1.30 H	128	11.90	30.80
1	2088.00	37.4 AV	79.00	-41.60	1.30 H	128	6.60	30.80
2	*2462.00	110.0 PK			1.00 H	226	77.50	32.50
2	*2462.00	99.0 AV			1.00 H	226	66.50	30.80
3	4176.00	47.7 PK	74.00	-26.30	1.25 H	224	10.70	37.00
4	7381.20	59.9 PK	74.00	-14.10	1.30 H	147	14.90	45.00
4	7381.20	48.6 AV	54.00	-5.40	1.30 H	147	3.60	32.50

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	2088.05	39.4 PK	88.80	-49.40	1.54 V	78	8.50	30.80
1	2088.05	35.1 AV	78.80	-43.70	1.54 V	78	4.30	30.80
2	*2462.00	108.8 PK			1.40 V	96	76.40	32.50
2	*2462.00	98.8 AV			1.40 V	96	66.30	30.80
3	4176.05	45.9 PK	74.00	-28.10	1.48 V	96	9.00	37.00
4	7381.25	58.3 PK	74.00	-15.70	1.15 V	231	13.30	45.00
4	7381.25	47.1 AV	54.00	-6.90	1.15 V	231	2.10	32.50

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
SPECTRUM ANALYZER	FSEK30	100049	July 24, 2003

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

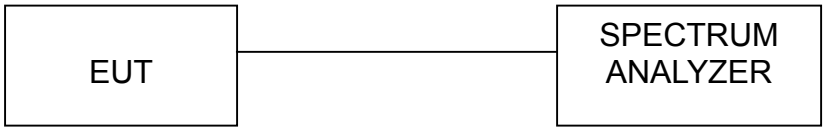
4.3.3 TEST PROCEDURE

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

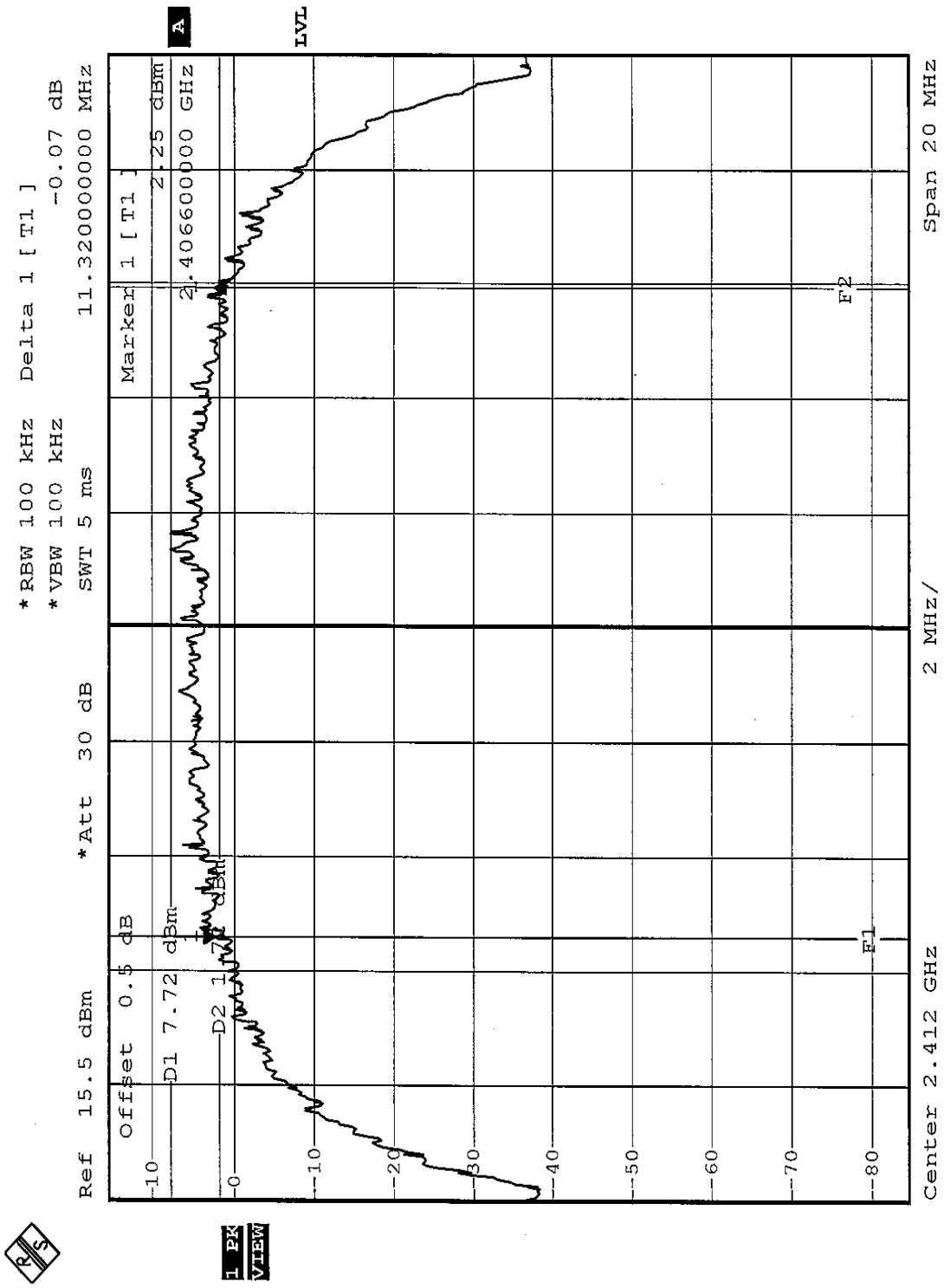
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

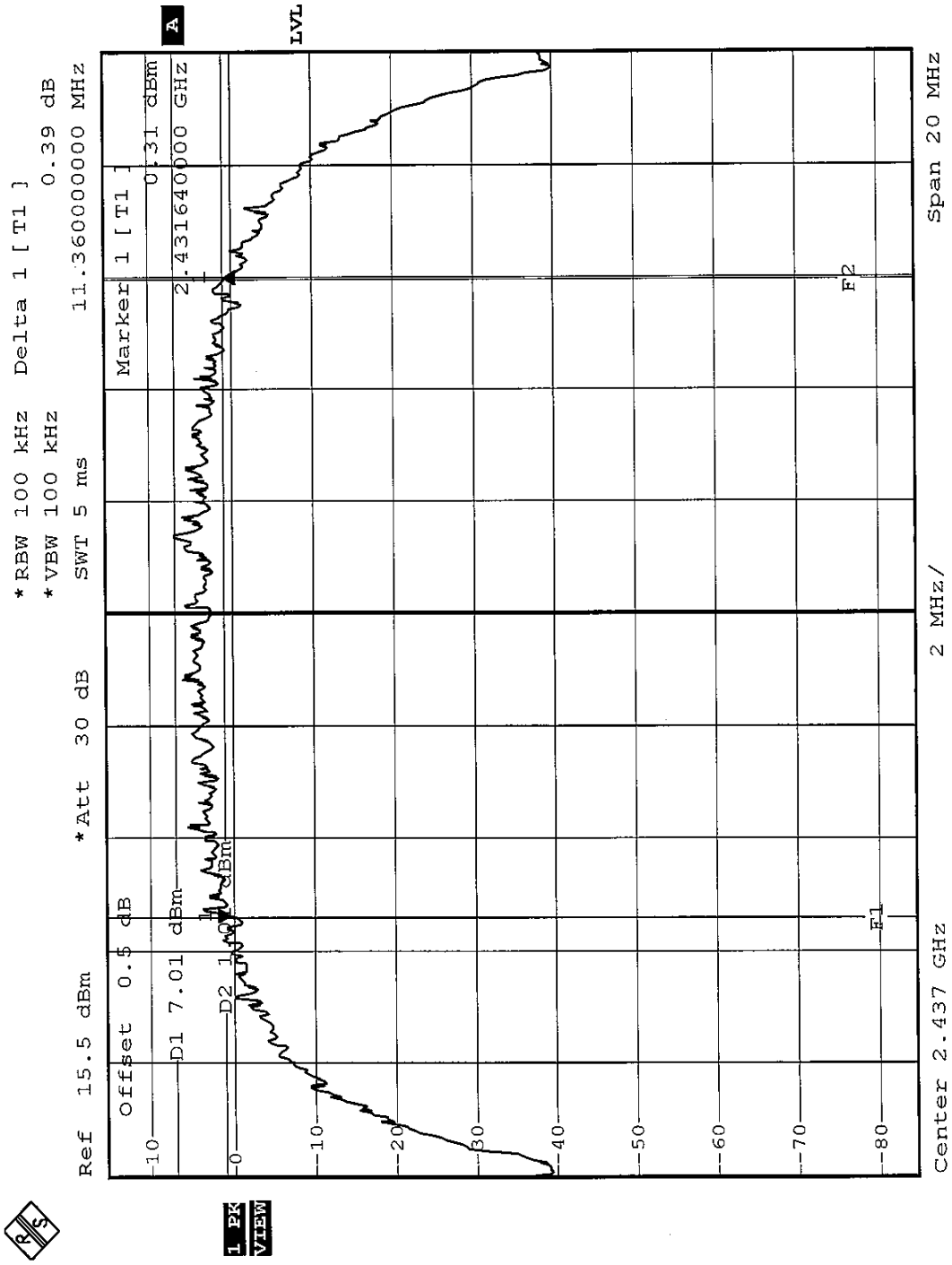
EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**: Steven Lu	

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.32	0.5	PASS
6	2437	11.36	0.5	PASS
11	2462	11.60	0.5	PASS

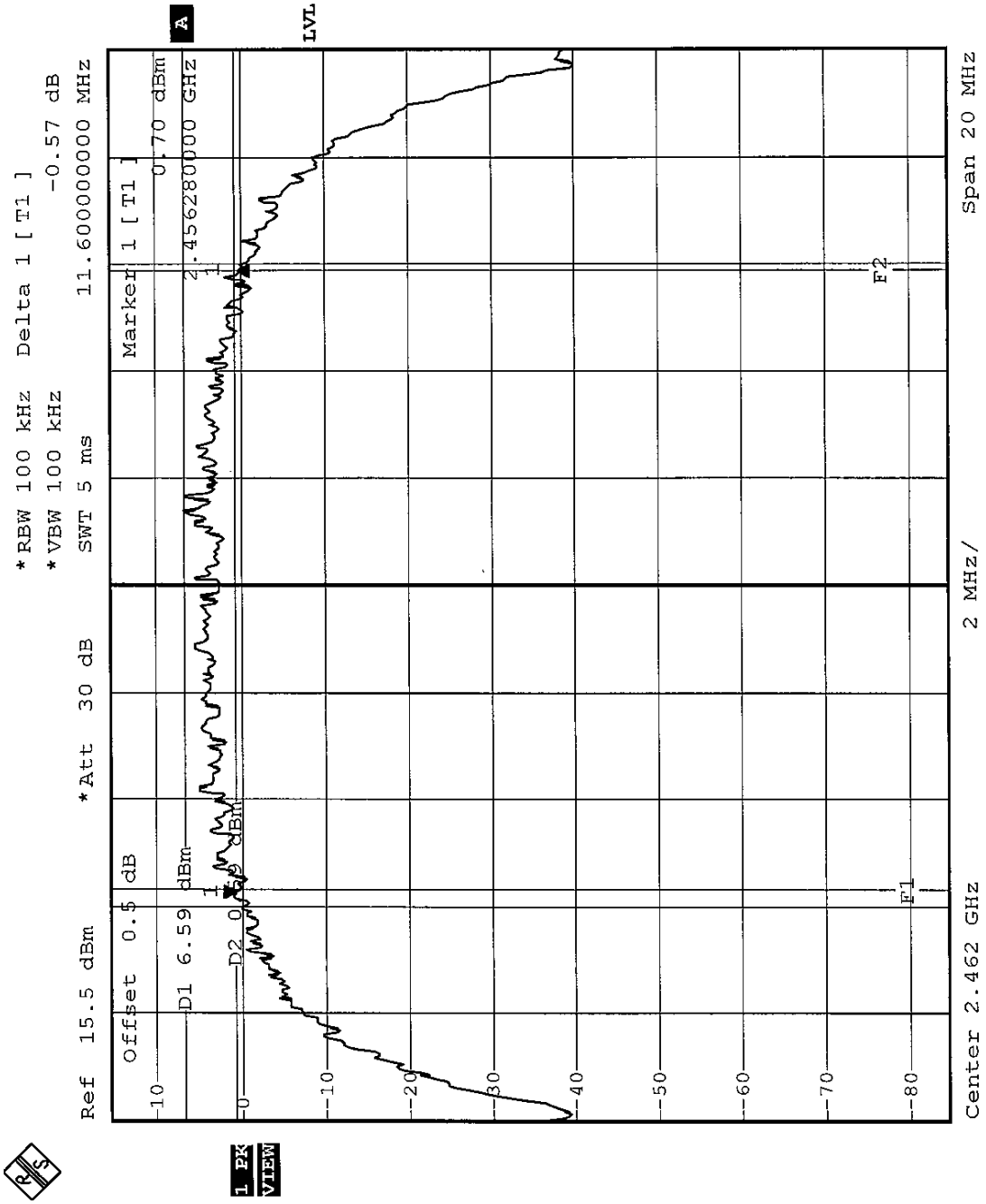
CH1


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-0.07 dB
11.32000000 MHz
Marker 1 [T1]
2.25 dBm
2.40660000 GHz
D1 7.72 dBm
D2 1.72 dBm
LVL
A
F1
F2
1 PK VIEW
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
0.39 dB
11.360000000 MHz
Marker 1 [T1]
0.31 dBm
2.431640000 GHz
D1 7.01 dBm
D2 1.01 dBm
F1
F2
LVL
A
1 PK
VIEW
Center 2.437 GHz
2 MHz/
Span 20 MHz

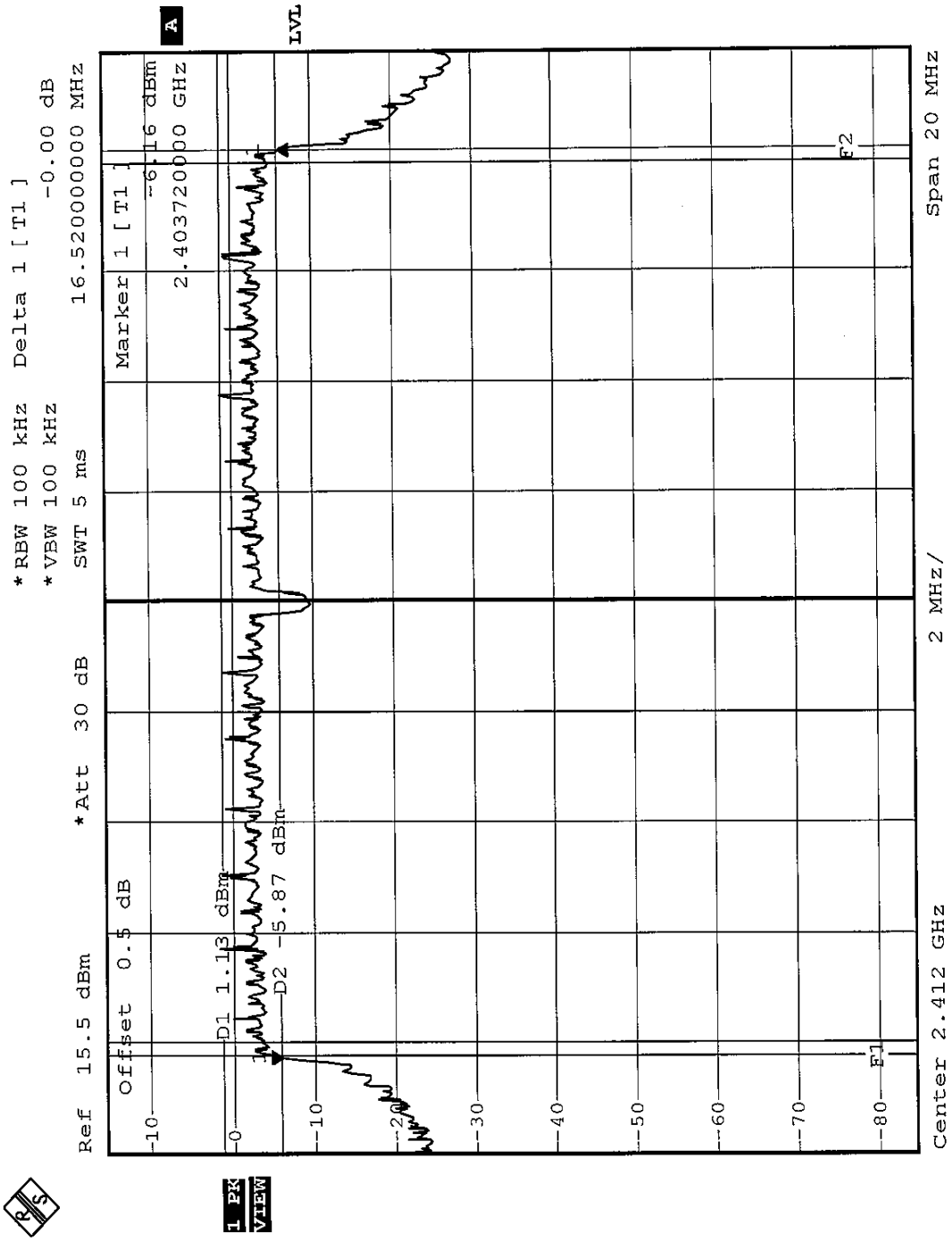
CH11


Ref 15.5 dBm
Offset 0.5 dB
D1 6.59 dBm
D2 0.00 dBm
*Att 30 dB
SWT 5 ms
*RBW 100 kHz
*VBW 100 kHz
Delta 1 [T1]
-0.57 dB
11.600000000 MHz
Marker 1 [T1]
0.70 dBm
2.456280000 GHz
LVL
A
1 PK
VIEW
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

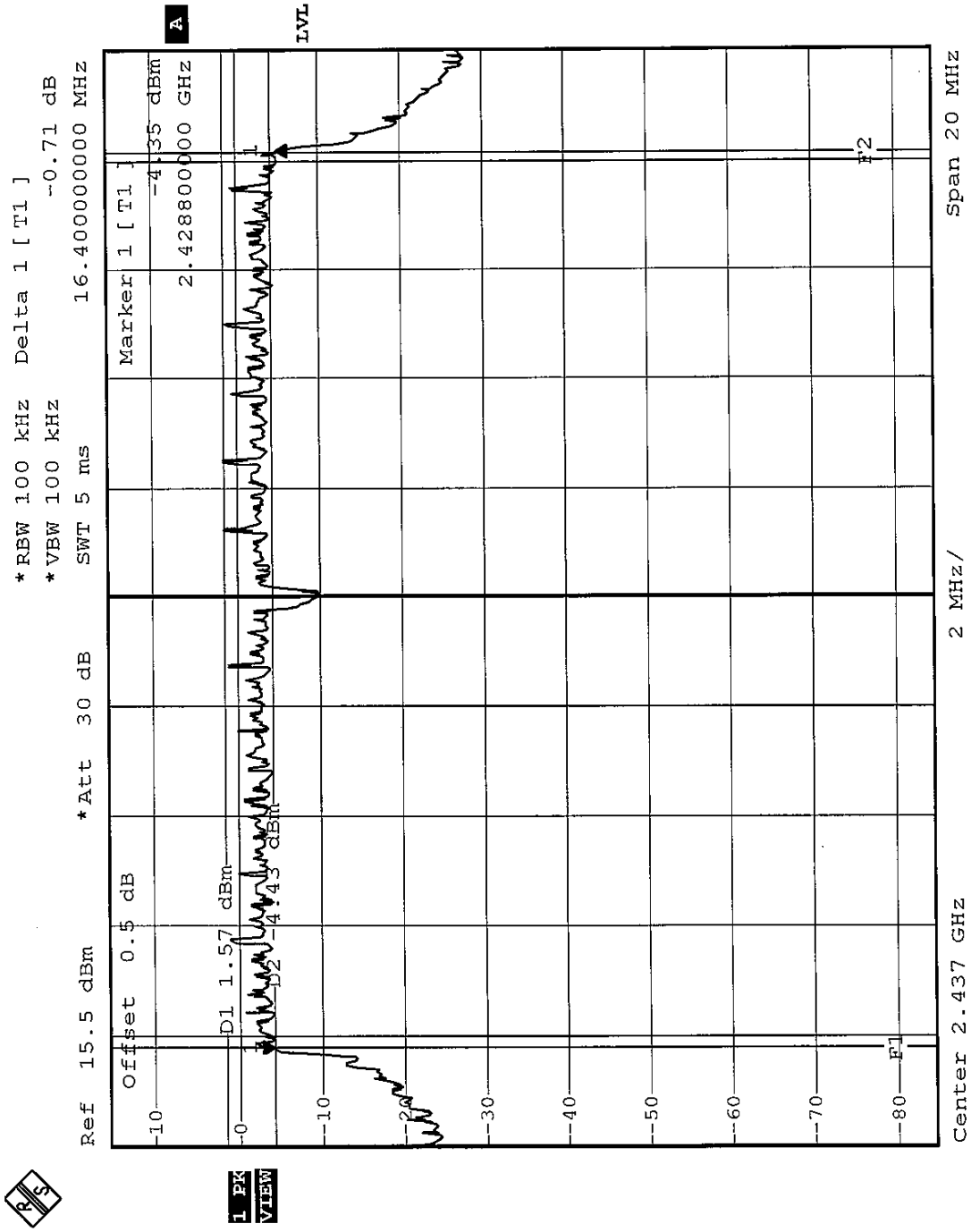
EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**ENVIRONMENTAL CONDITIONS**	27deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**: Steven Lu	

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.52	0.5	PASS
6	2437	16.40	0.5	PASS
11	2462	16.40	0.5	PASS

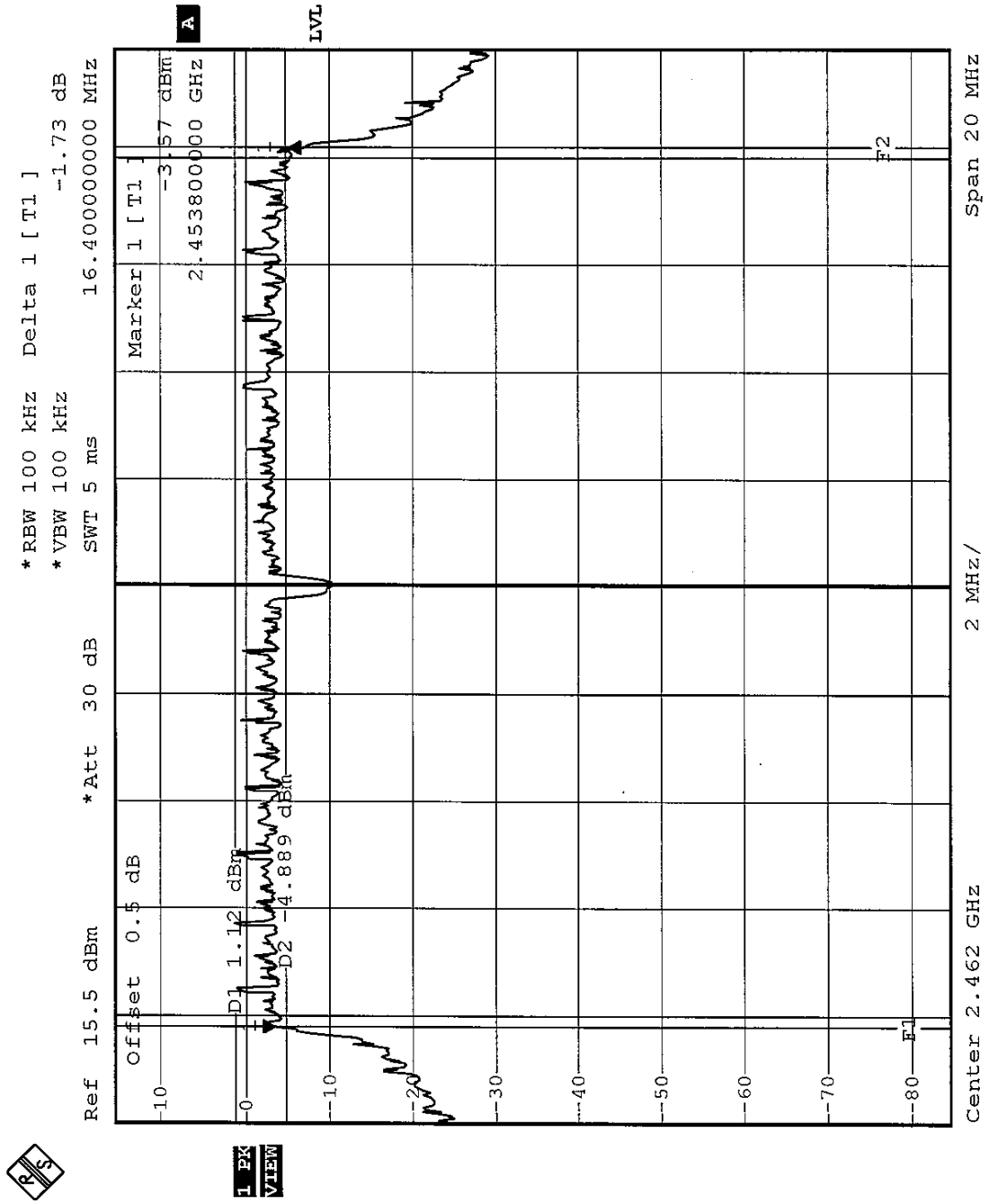
CH1


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-0.00 dB
16.520000000 MHz
Marker 1 [T1]
-6.16 dBm
2.403720000 GHz
A
LVL
D1 1.13 dBm
D2 -5.87 dBm
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz
1 PK
VIEW

CH6


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
SWT 5 ms
*RBW 100 kHz
*VBW 100 kHz
Delta 1 [T1]
-0.71 dB
16.400000000 MHz
Marker 1 [T1]
-4.35 dBm
2.428800000 GHz
D1 1.57 dBm
D2 -4.43 dBm
LVL
A
1 PK
VBW
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 1 [T1]
-1.73 dB
16.400000000 MHz
Marker 1 [T1]
-3.57 dBm
2.453800000 GHz
D1 1.12 dBm
D2 -4.889 dBm
LVL
A
1 PK
VIEW
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Jul. 24, 2003
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.

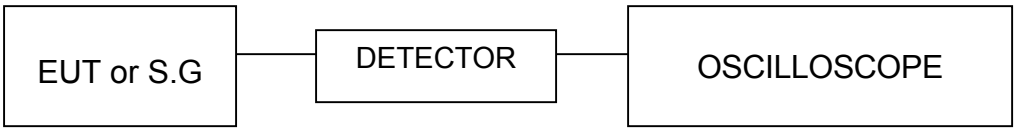
4.4.3 TEST PROCEDURES

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 RESULTS

EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**: Steven Lu	

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	19.72	30	PASS
6	2437	19.84	30	PASS
11	2462	19.76	30	PASS

EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**ENVIRONMENTAL CONDITIONS**	27deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**: Steven Lu	

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	18.84	30	PASS
6	2437	18.82	30	PASS
11	2462	18.84	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	July 24, 2003

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

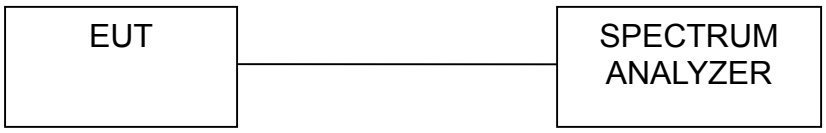
4.5.3 TEST PROCEDURE

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

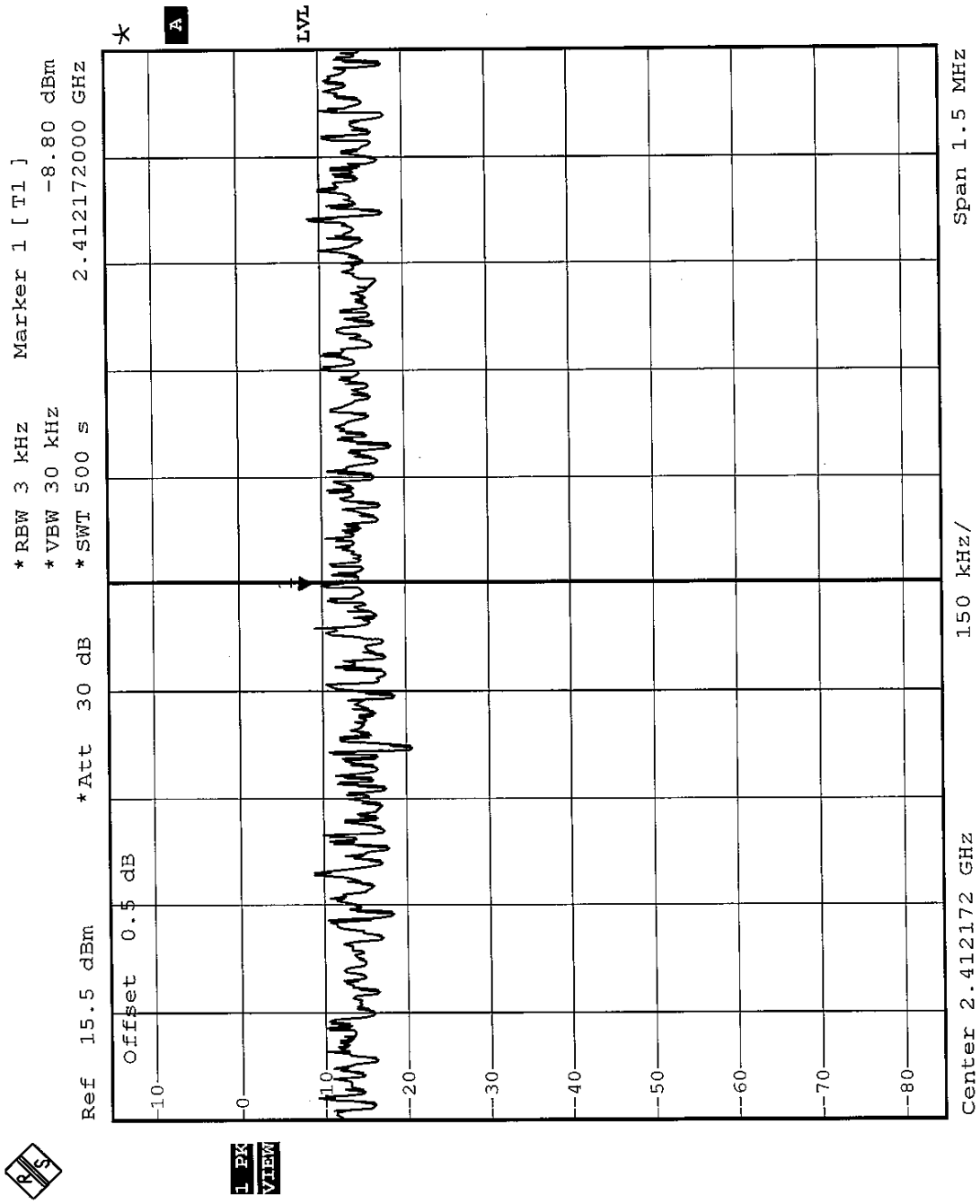
Same as 4.3.6

4.5.7 TEST RESULTS

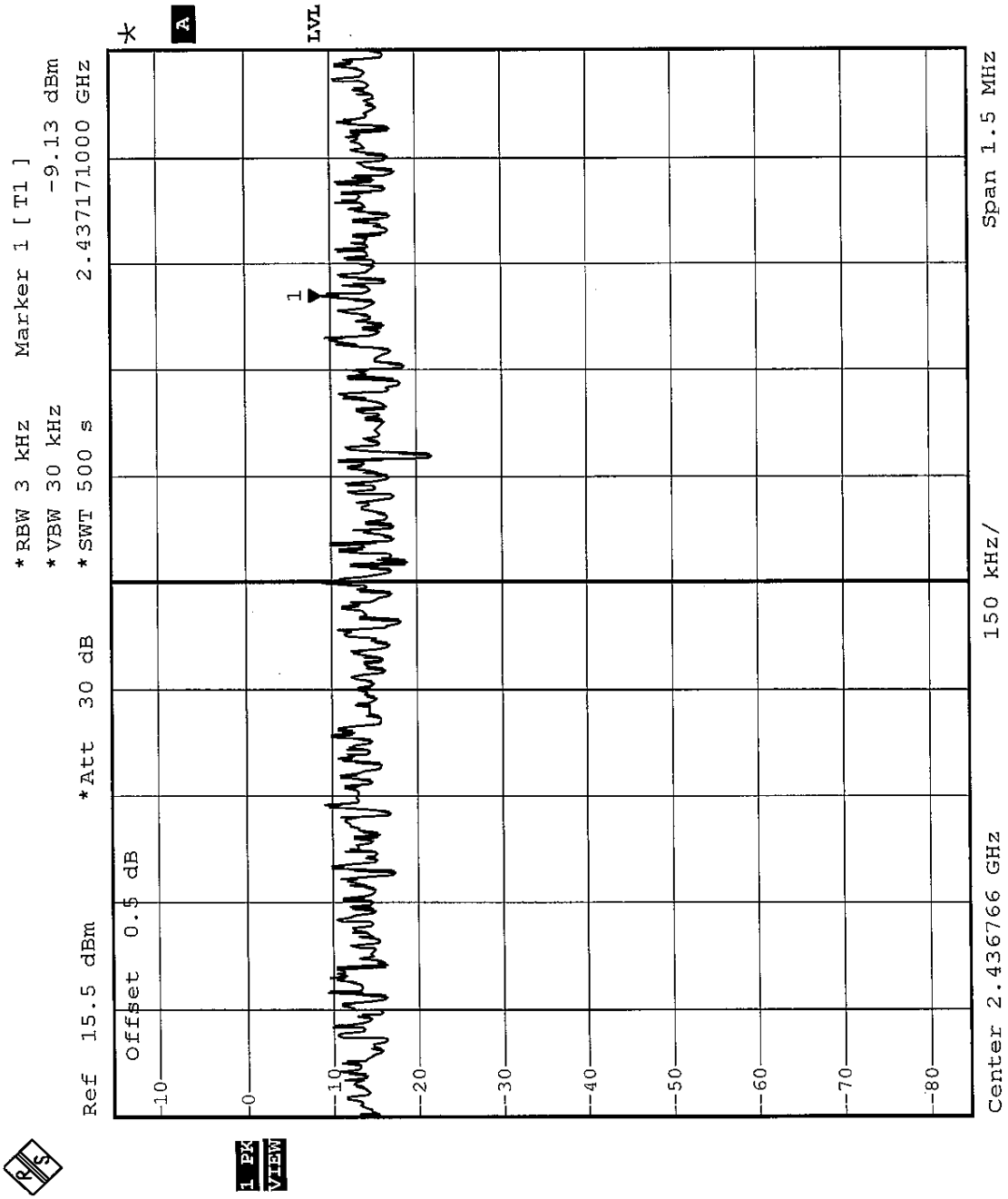
EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	CCK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**: Steven Lu	

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-8.80	8	PASS
6	2437	-9.13	8	PASS
11	2462	-9.35	8	PASS

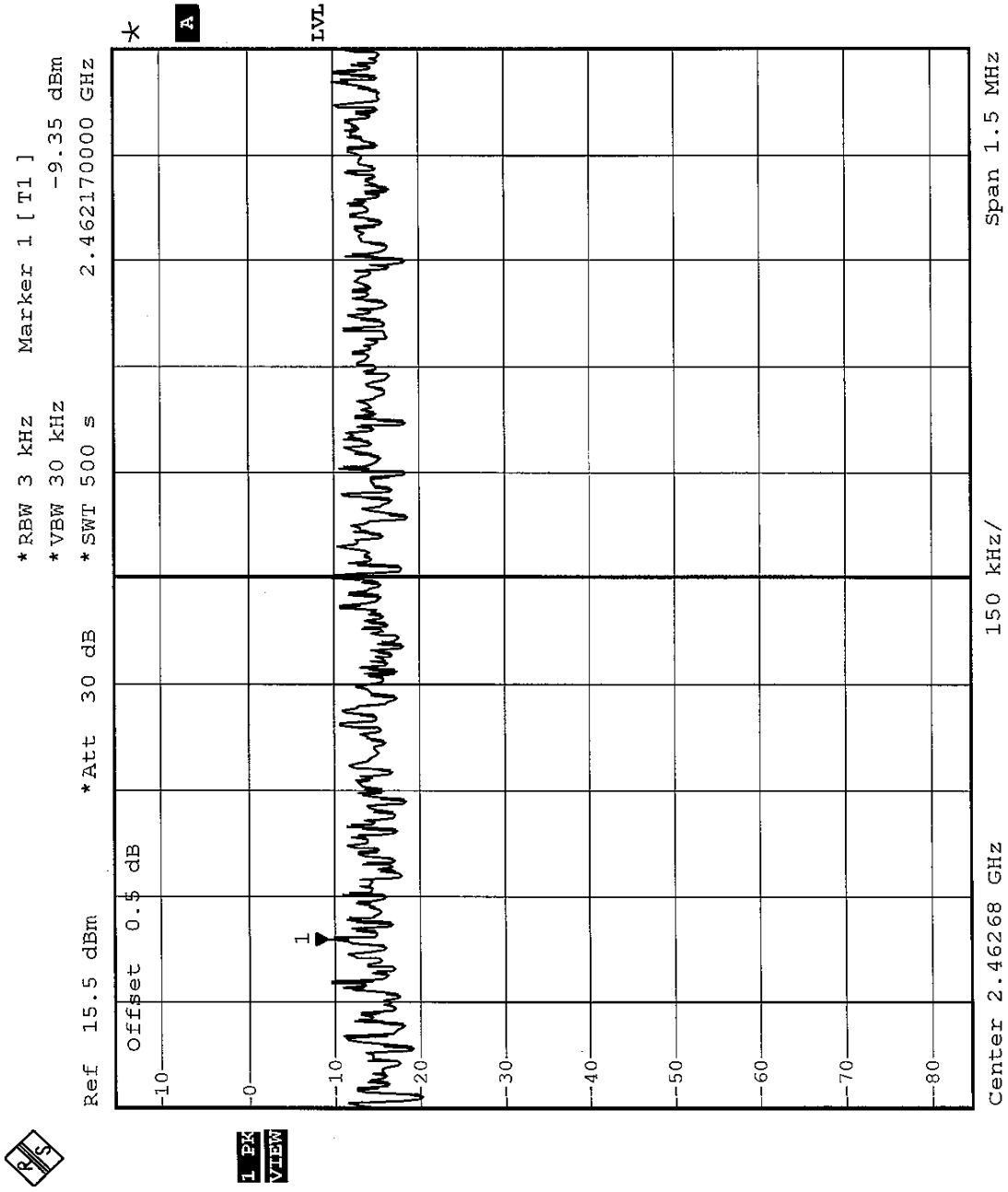
CH1


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-8.80 dBm
2.412172000 GHz
Center 2.412172 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW
A
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80

CH6


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.13 dBm
2.437171000 GHz
Center 2.436766 GHz
150 kHz/
Span 1.5 MHz
LVL
A
1 PK
VIEW

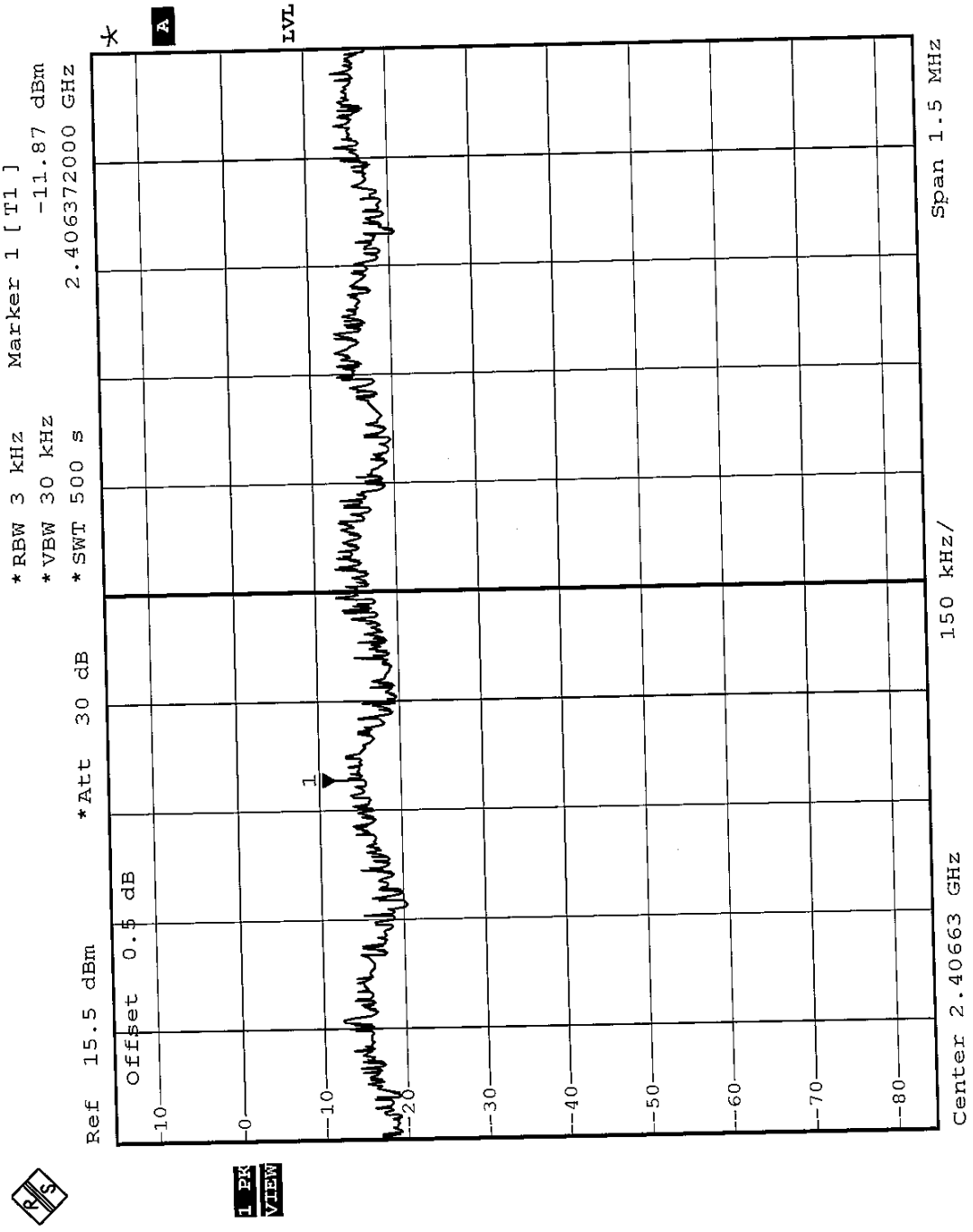
CH11


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.35 dBm
2.462170000 GHz
Center 2.46268 GHz
150 kHz/
Span 1.5 MHz
LVL
1 PK
VIEW

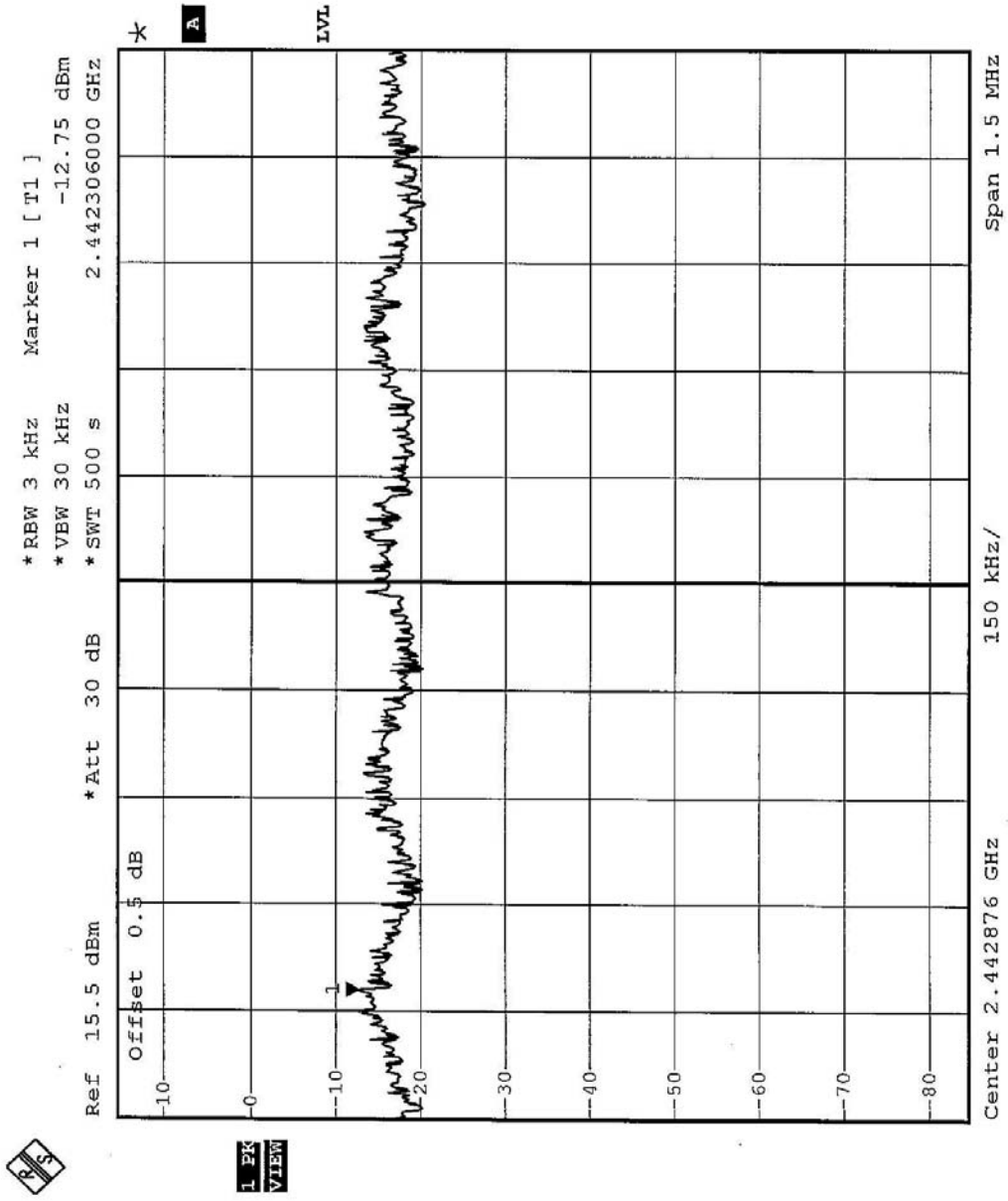
EUT	2.4GHz/54Mbps Wireless MINI PCI Card	**MODEL**	GL2454MP-0T
MODE	OFDM	**ENVIRONMENTAL CONDITIONS**	27deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**: Steven Lu	

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.87	8	PASS
6	2437	-12.75	8	PASS
11	2462	-12.68	8	PASS

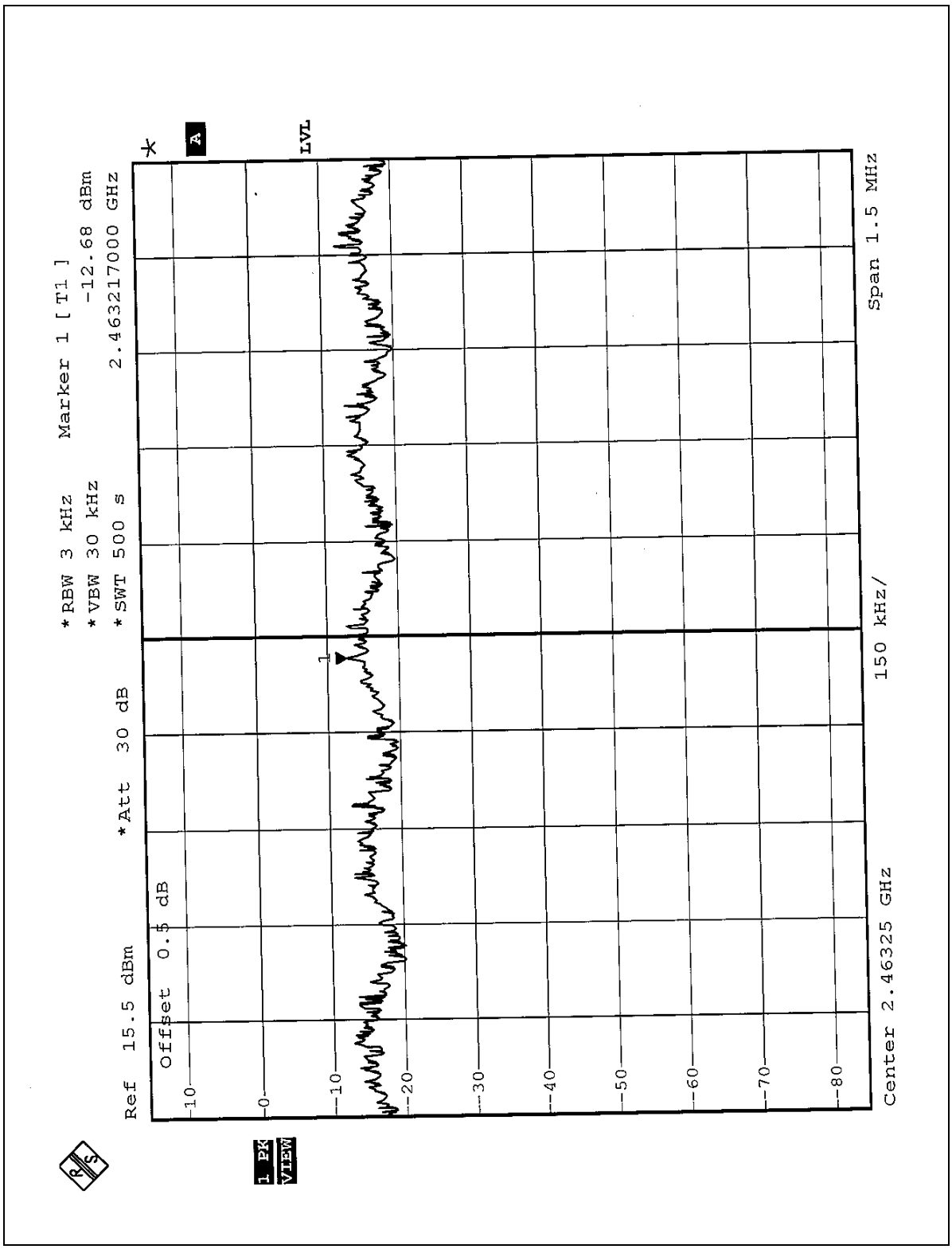
CH1


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.87 dBm
2.406372000 GHz
1 PK
VIEW
A
IVL
Center 2.40663 GHz
150 kHz/
Span 1.5 MHz

CH6


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-12.75 dBm
2.442306000 GHz
1 PK VIEW
A
LVL
Center 2.442876 GHz
150 kHz/
Span 1.5 MHz

CH11


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-12.68 dBm
2.463217000 GHz
1 PK
VIEW
A
LVL
Center 2.46325 GHz
150 kHz/
Span 1.5 MHz

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	July 24, 2003

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 for CCK technique and 1MHz and 300Hz for OFDM technique with suitable frequency span including 100kHz bandwidth from band edge. The band edges was measured and recorded.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

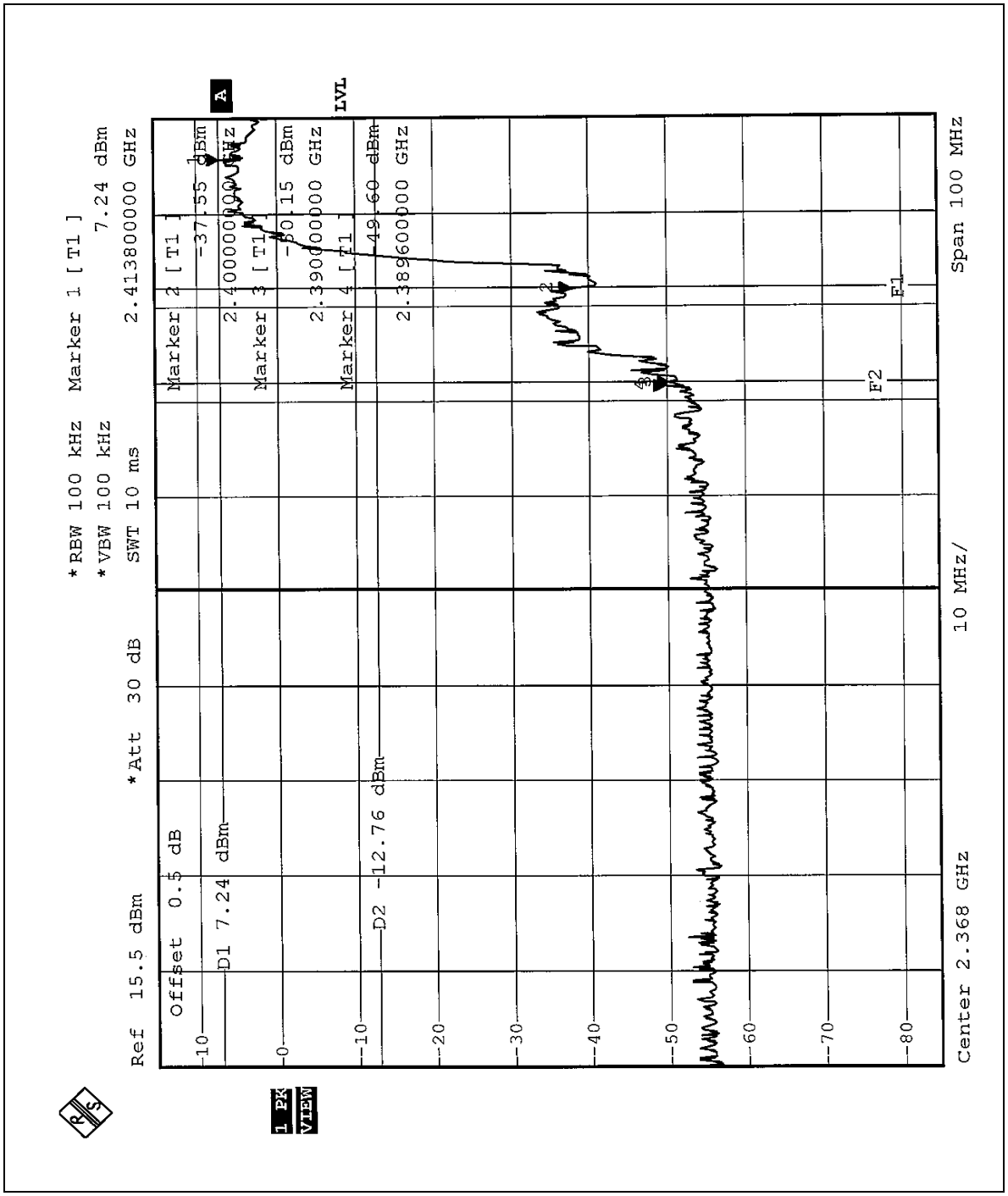
Same as Item 4.3.6

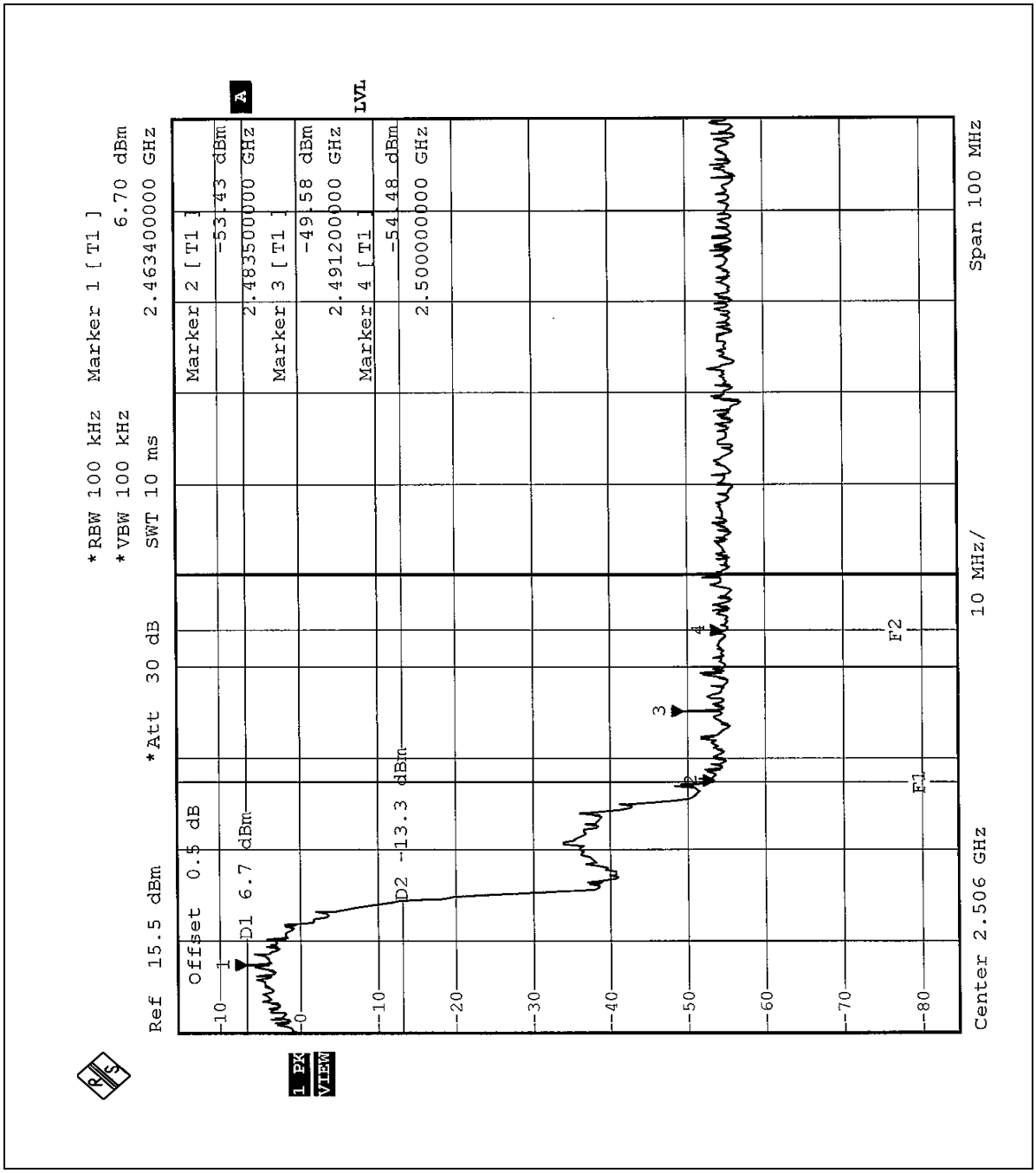
4.6.6 TEST RESULTS

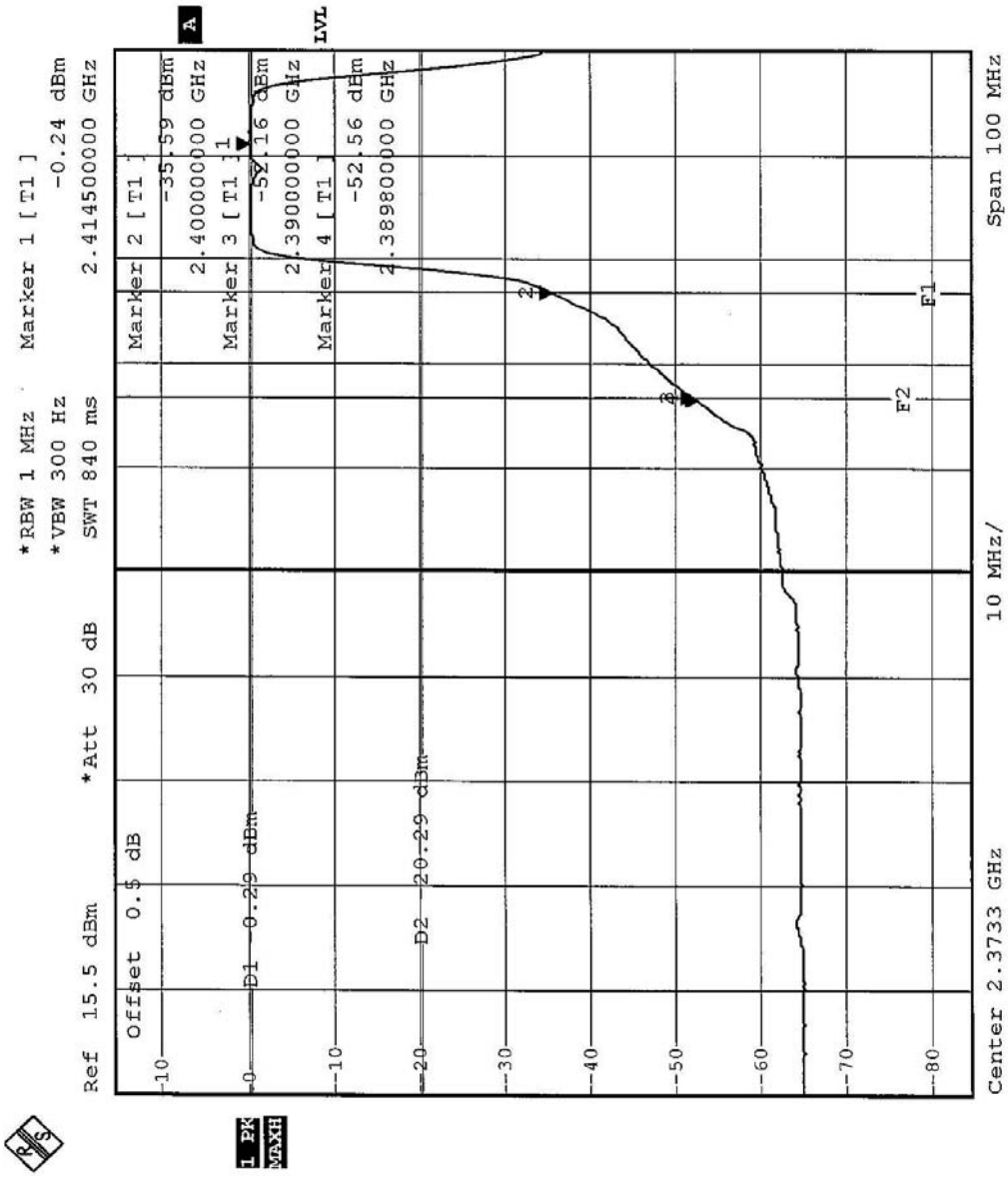
The spectrum plots are attached on the following 2 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

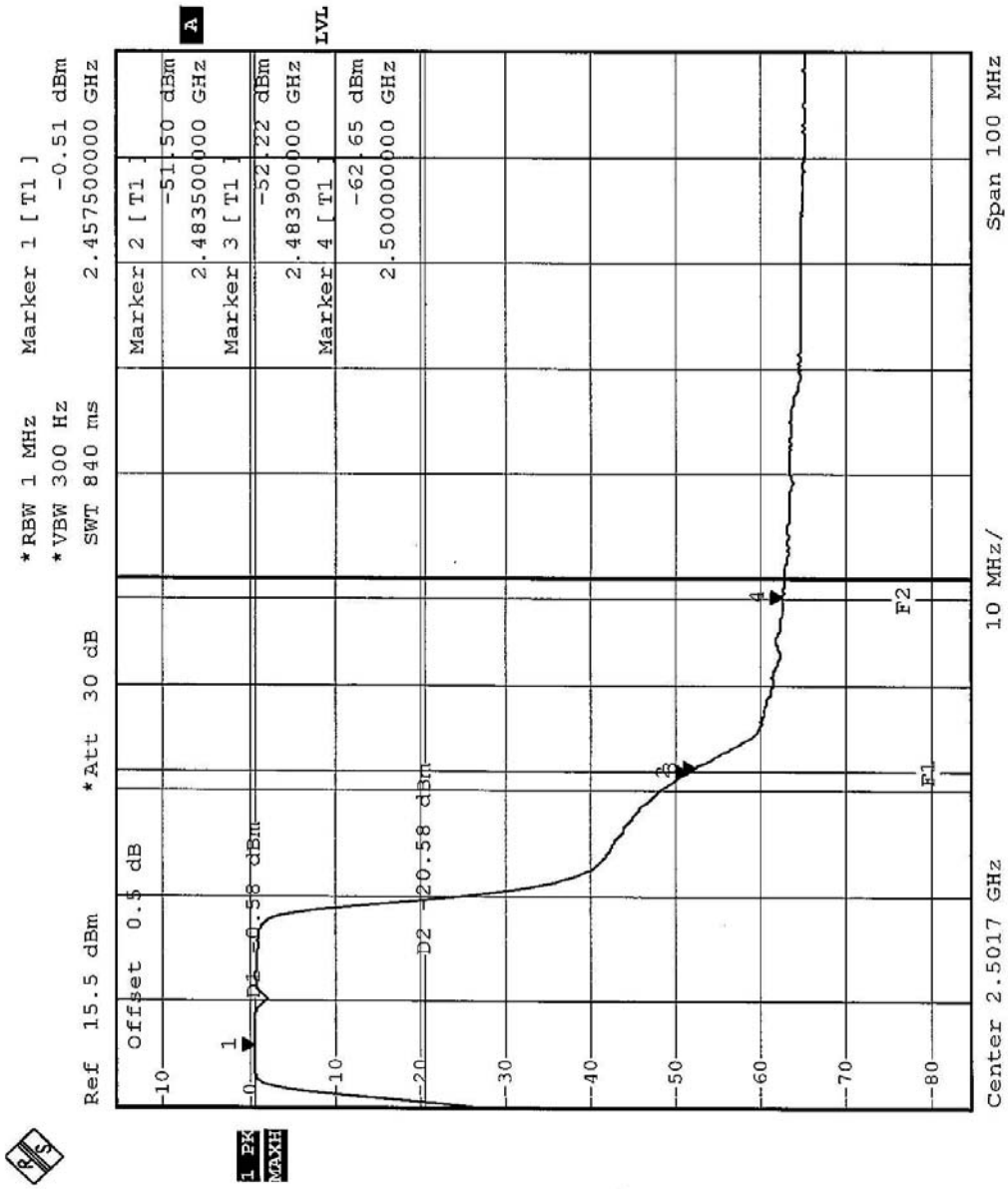
NOTE 1: The band edge emission plot on the following 1-2 pages shows 56.84dB / 56.28dB delta between carrier maximum power and local maximum emission in restrict band (2.3896GHz / 2.4912GHz). The emission of carrier strength list in the test result of channel 11 of CCK technique at the item 4.2.9 is 105.4BuV/m, so the maximum field strength in restrict band is105.4-56.28=49.12dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on the following 3-4 pages shows 51.92dB / 50.99dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz / 2.4835GHz). The emission of carrier strength list in the test result of channel 11 of OFDM technique at the item 4.2.9 is 99.0dBuV/m, so the maximum field strength in restrict band is 99.0-50.99=48.01dBuV/m which is under 54dBuV/m limit.


Ref 15.5 dBm
Offset 0.5 dB
D1 7.24 dBm
D2 -12.76 dBm
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
7.24 dBm
2.413800000 GHz
Marker 2 [T1]
-37.55 dBm
2.400000000 GHz
Marker 3 [T1]
-50.15 dBm
2.390000000 GHz
Marker 4 [T1]
-49.60 dBm
2.389600000 GHz
A
LVL
1 PK
VIEW
F1
F2
Center 2.368 GHz
10 MHz/
Span 100 MHz


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
6.70 dBm
2.463400000 GHz
Marker 2 [T1]
-53.43 dBm
2.483500000 GHz
Marker 3 [T1]
-49.58 dBm
2.491200000 GHz
Marker 4 [T1]
-54.48 dBm
2.500000000 GHz
D1 6.7 dBm
D2 -13.3 dBm
F1
F2
Center 2.506 GHz
10 MHz/
Span 100 MHz


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 1 [T1]
-0.24 dBm
2.414500000 GHz
Marker 2 [T1]
-35.59 dBm
2.400000000 GHz
Marker 3 [T1]
-52.16 dBm
2.390000000 GHz
Marker 4 [T1]
-52.56 dBm
2.389800000 GHz
D1 -0.29 dBm
D2 -20.29 dBm
A
LVL
1 PK
MAXH
F1
F2
Center 2.3733 GHz
10 MHz/
Span 100 MHz


Ref 15.5 dBm
Offset 0.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 1 [T1]
-0.51 dBm
2.457500000 GHz
Marker 2 [T1]
-51.50 dBm
2.483500000 GHz
Marker 3 [T1]
-52.22 dBm
2.483900000 GHz
Marker 4 [T1]
-62.65 dBm
2.500000000 GHz
D1 -0.58 dBm
D2 -20.58 dBm
1 PK MAXH
A
LVL
F1
F2
Center 2.5017 GHz
10 MHz/
Span 100 MHz

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

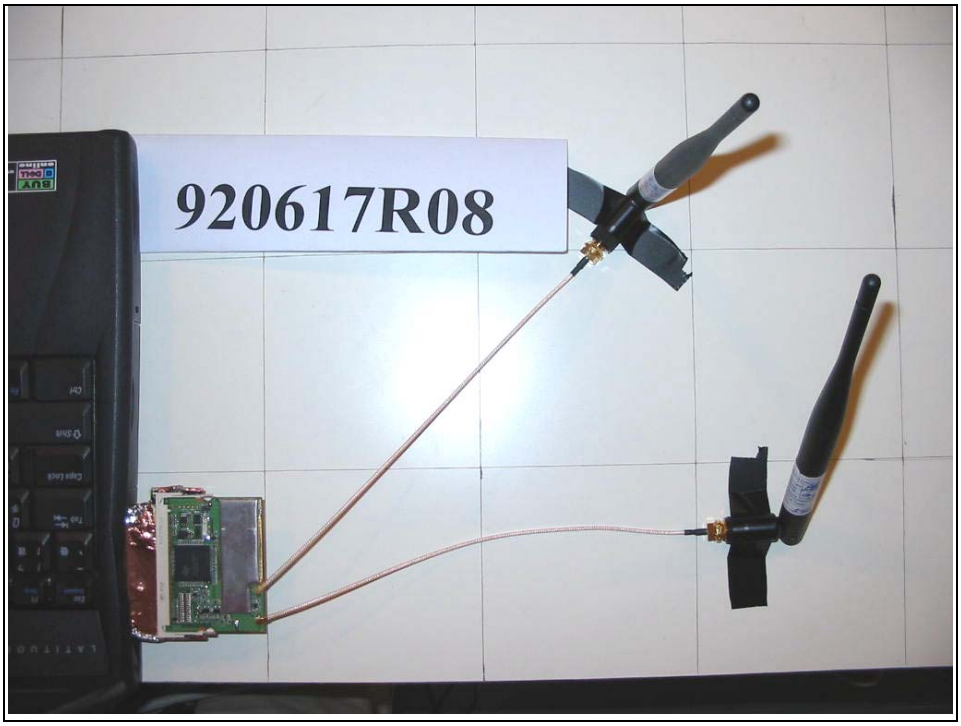
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional 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

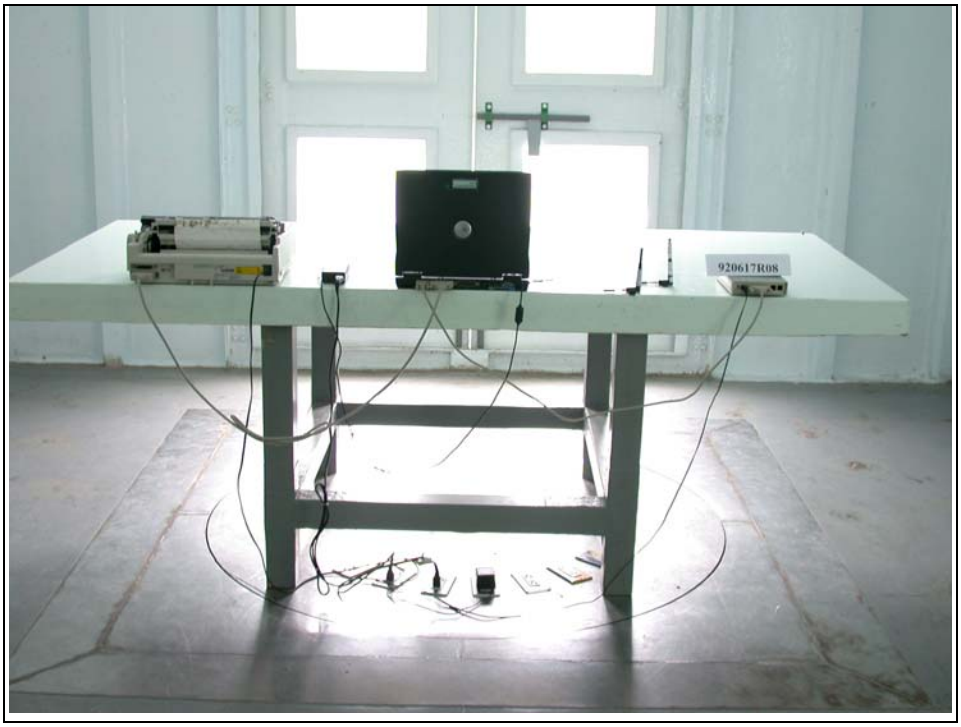
The antenna types used in this product are Dipole and patch antennas with UFL connector. The maximum Gain of this antenna is 5dBi.

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST


920617R08

RADIATED EMISSION TEST



920617R08

6 INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025, Guide 25 or EN 45001:

USA	FCC, NVLAP
Germany	TUV Rheinland
Japan	VCCI
New Zealand	MoC
Norway	NEMKO
R.O.C.	BSMI, DGT, CNLA

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

Hsin Chu EMC Lab:
Tel: 886-35-935343
Fax: 886-35-935342

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Fax: 886-2-26093184

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Tel: 886-3-3270910
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Web Site: www.adt.com.tw

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