FCC TEST REPORT

REPORT NO.: RF930304R02A
MODEL NO.: DWL-G630
RECEIVED: NA
TESTED: March 17 ~ 18, 2004

APPLICANT: D-Link Corporation

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

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 :	802.11g Wireless Cardbus Adapter
BRAND NAME :	D-Link
MODEL NO. :	DWL-G630
TEST ITEM:	Engineering Sample
TESTED :	March 17 ~ 18, 2004
APPLICANT :	D-Link Corporation
STANDARDS :	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2001

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

PREPARED BY: Stacy Hsueh , **DATE:** April 29, 2004

Stacy Hsueh

APPROVED BY: Cody Chang , **DATE:** April 29, 2004

Cody Chang, Supervisor

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 –16.87dB at 0.179MHz
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 –1.21dB at 2488.00MHz
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	802.11g Wireless Cardbus Adapter
MODEL NO.	DWL-G630
BRAND NAME	D-Link
POWER SUPPLY	3.3Vdc from host equipment
MODULATION TYPE	BPSK, QPSK, CCK, 16QAM, 64QAM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	17.39dBm
ANTENNA TYPE	Printed antenna with 0dBi gain
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. This report is issued as a duplicate report of ADT report no.: RF930304R02. The model name, brand name and applicant are different to the original one.
2. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
3. The EUT complies with IEEE 802.11g draft standards and backwards compatible with IEEE 802.11b products.
4. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to this EUT.

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

NOTE:

1. Below 1GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, the worst case, was chosen for final test.
2. Above 1GHz, the channel 1, 6, and 11 were tested individually.
3. From our experience and technical viewpoint, we have chosen data rates-11Mbps with CCK technique and 6Mbps with OFDM technique-as the worst cases for the test among other data rates.
4. Two test results are presented in the following sections. The test results A is for CCK technique and the test results B is for OFDM technique.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an 802.11g Wireless Cardbus Adapter. According to the specifications of the manufacturer, it must complies with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)
ANSI C63.4: 2001

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

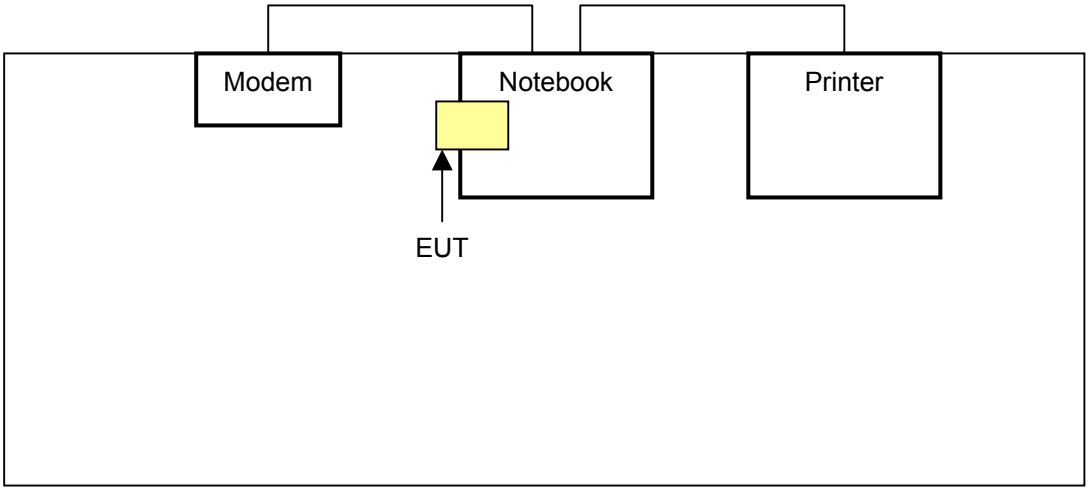
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	Dell	PP01L	TW-09C748-12800-16M-5064	FCC DoC Approved
2	MODEM	ACEEX	1414	980020536	IFAXDM1414
3	PRINTER	EPSON	LQ-300+	DCGY017076	FCC DoC Approved

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

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

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 ON
ROHDE & SCHWARZ Test Receiver	ESCS30	847793/022	Feb. 18, 2005
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH2-Z5	828075/003	July 08, 2004
ROHDE & SCHWARZ 200-A Four-line V-Network	ENV4200	830326/018	Oct. 02, 2004
* ROHDE & SCHWARZ 4-wire ISN	ENY41	838119/028	Nov. 16, 2004
* ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/018	Nov. 16, 2004
EMCO-L.I.S.N. (for peripheral)	3825/2	9003-1627	July 08, 2004
Software	Cond-V2M3	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C05.01	May 23, 2004
LYNICS Terminator (For EMCO LISN)	0900510	E1-01-305	Feb. 22, 2005
LYNICS Terminator (For EMCO LISN)	0900510	E1-01-306	Feb. 22, 2005

NOTE:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. "*": These equipment are used for conducted telecom port test only (if tested).
3. The test was performed in ADT Shielded Room No. 5.
4. The VCCI Site Registration No. is C-1093.

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4.1.3 TEST PROCEDURES

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

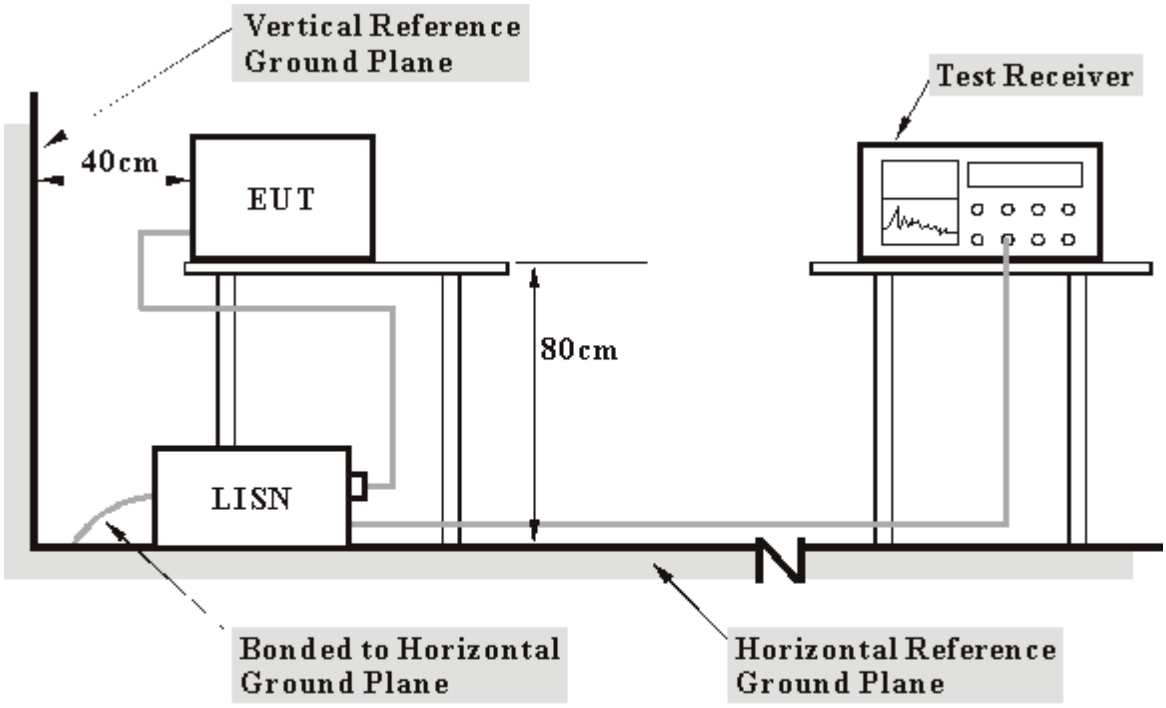
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels (Limit –20dBi) 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

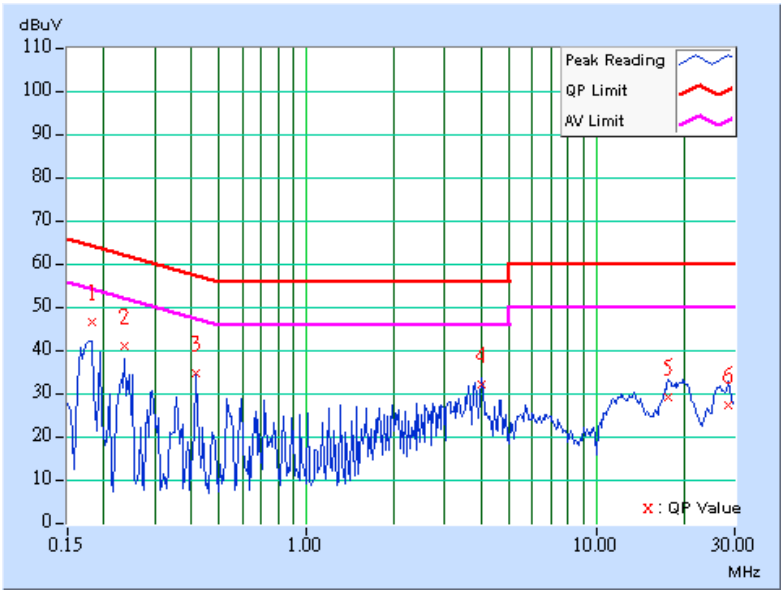
a. Connected the EUT to a notebook system placed on a testing table.
b. The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
c. The computer system sent "H" messages to its screen.
d. The computer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

4.1.7 TEST RESULTS

EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	26deg. C, 78%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	0.181	0.18	45.40	-	45.58	-	64.43	54.43	-18.85	-
2	0.236	0.20	39.83	-	40.03	-	62.24	52.24	-22.21	-
3	0.416	0.20	33.28	-	33.48	-	57.54	47.54	-24.05	-
4	3.992	0.40	30.80	-	31.20	-	56.00	46.00	-24.80	-
5	17.688	0.96	27.99	-	28.95	-	60.00	50.00	-31.05	-
6	28.656	1.37	26.04	-	27.41	-	60.00	50.00	-32.59	-

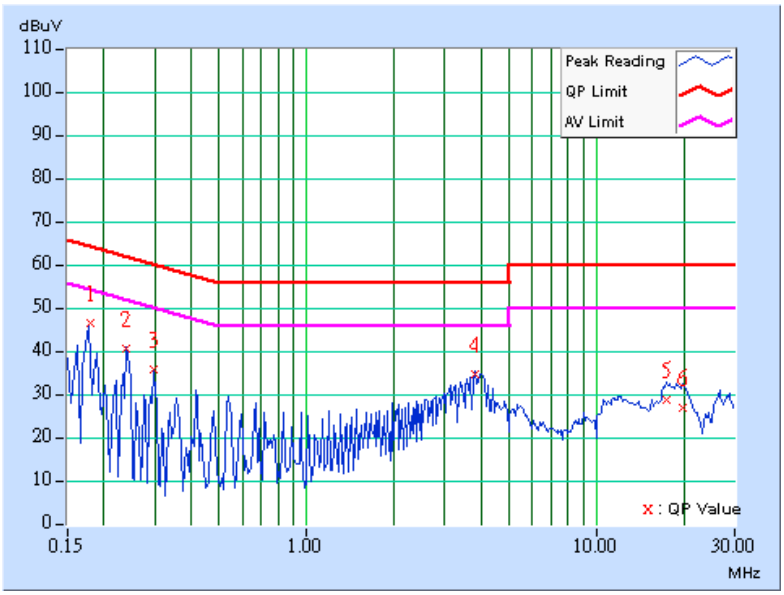
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	26deg. C, 78%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	0.179	0.18	45.70	-	45.88	-	64.55	54.55	-18.67	-
2	0.240	0.20	39.81	-	40.01	-	62.10	52.10	-22.09	-
3	0.298	0.20	34.81	-	35.01	-	60.29	50.29	-25.28	-
4	3.813	0.40	33.82	-	34.22	-	56.00	46.00	-21.78	-
5	17.559	0.80	27.97	-	28.77	-	60.00	50.00	-31.23	-
6	19.938	1.00	26.11	-	27.11	-	60.00	50.00	-32.89	-

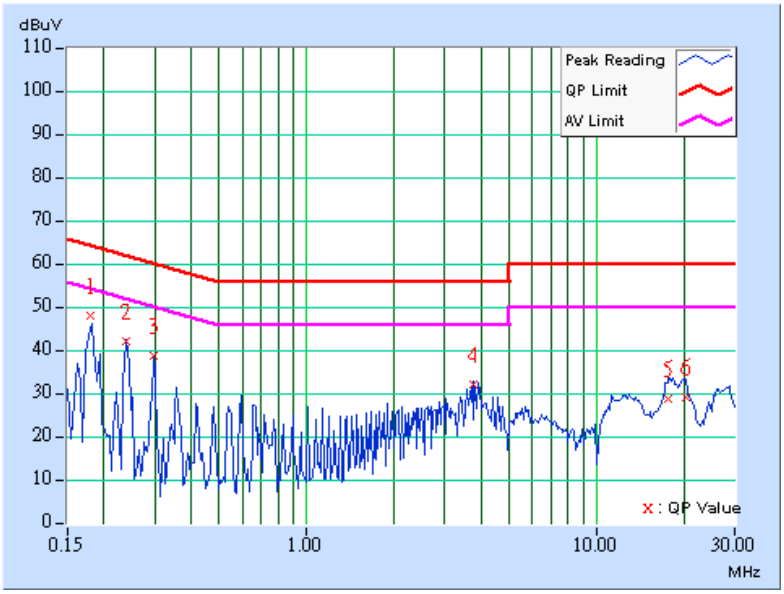
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	26deg. C, 78%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	0.180	0.18	47.18	-	47.36	-	64.49	54.49	-17.13	-
2	0.240	0.20	41.25	-	41.45	-	62.11	52.11	-20.66	-
3	0.298	0.20	37.93	-	38.13	-	60.29	50.29	-22.16	-
4	3.754	0.40	31.14	-	31.54	-	56.00	46.00	-24.46	-
5	17.715	0.96	27.87	-	28.83	-	60.00	50.00	-31.17	-
6	20.441	1.12	28.20	-	29.32	-	60.00	50.00	-30.68	-

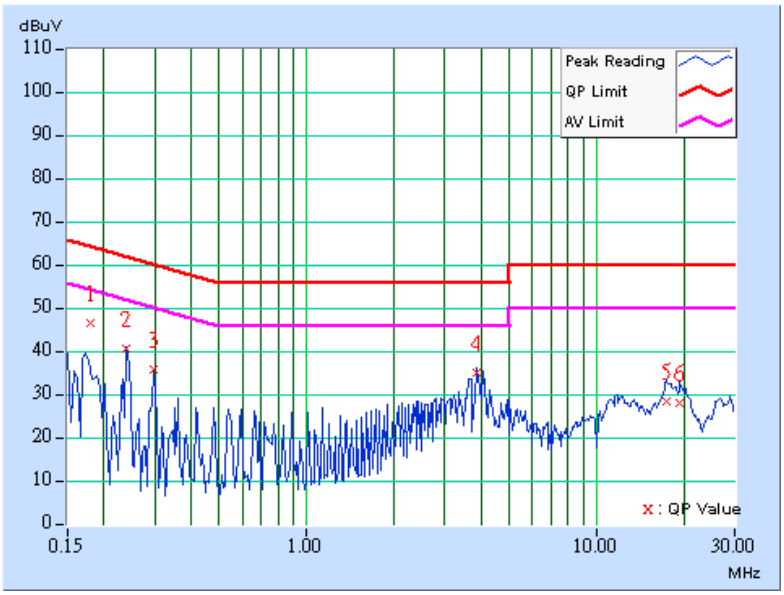
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	26deg. C, 78%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	0.179	0.18	45.85	-	46.03	-	64.55	54.55	-18.52	-
2	0.240	0.20	39.67	-	39.87	-	62.10	52.10	-22.23	-
3	0.298	0.20	35.14	-	35.34	-	60.29	50.29	-24.95	-
4	3.871	0.40	34.23	-	34.63	-	56.00	46.00	-21.37	-
5	17.499	0.80	27.48	-	28.28	-	60.00	50.00	-31.72	-
6	19.423	0.95	27.21	-	28.16	-	60.00	50.00	-31.84	-

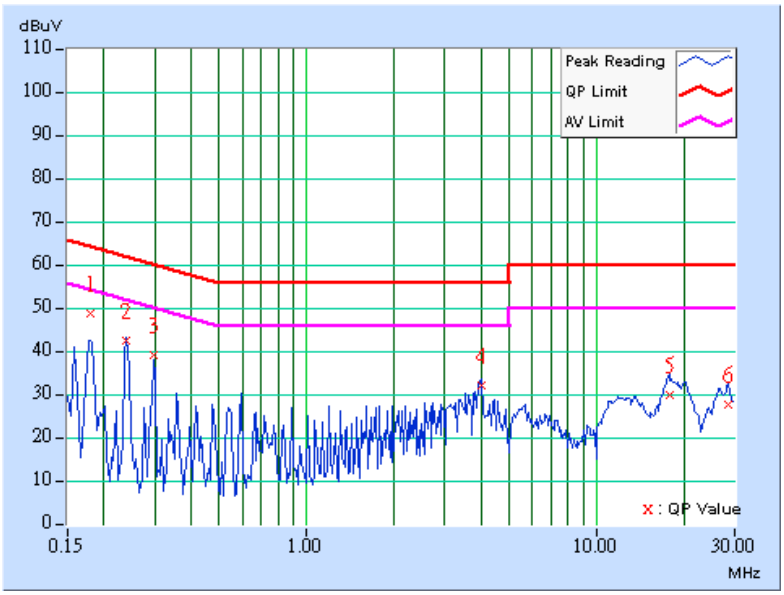
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	26deg. C, 78%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	**0.179**	**0.18**	**47.50**	**-**	**47.68**	**-**	**64.55**	**54.55**	**-16.87**	**-**
2	0.240	0.20	41.09	-	41.29	-	62.10	52.10	-20.81	-
3	0.298	0.20	37.73	-	37.93	-	60.29	50.29	-22.36	-
4	3.992	0.40	30.92	-	31.32	-	56.00	46.00	-24.68	-
5	17.879	0.97	28.80	-	29.77	-	60.00	50.00	-30.23	-
6	28.676	1.37	26.25	-	27.62	-	60.00	50.00	-32.38	-

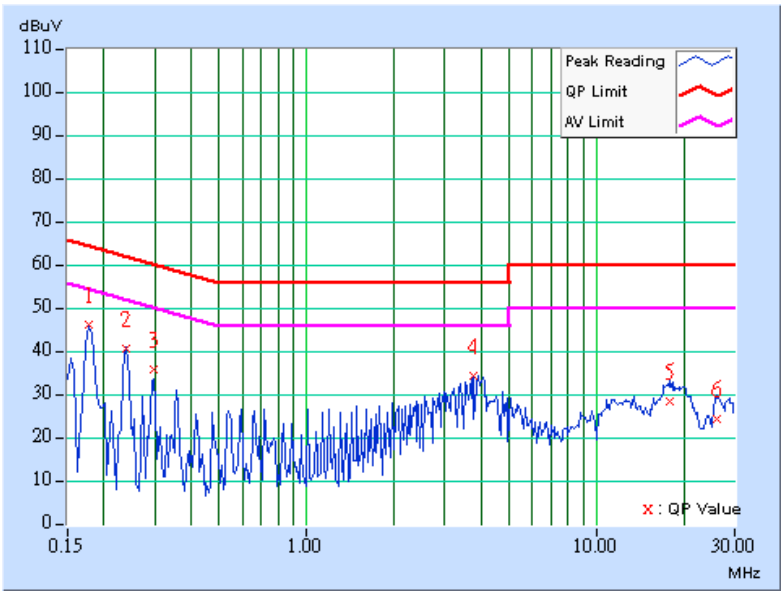
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Netural (N)
ENVIRONMENTAL CONDITIONS	26deg. C, 78%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	0.177	0.18	45.35	-	45.53	-	64.61	54.61	-19.08	-
2	0.240	0.20	39.79	-	39.99	-	62.10	52.10	-22.11	-
3	0.298	0.20	35.12	-	35.32	-	60.29	50.29	-24.97	-
4	3.754	0.40	33.38	-	33.78	-	56.00	46.00	-22.22	-
5	17.992	0.84	27.78	-	28.62	-	60.00	50.00	-31.38	-
6	25.918	0.90	23.57	-	24.47	-	60.00	50.00	-35.53	-

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.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
* HP Spectrum Analyzer	8590L	3544A01176	Jun. 10, 2004
* HP Preamplifier	8447D	2944A08485	May 01, 2004
* HP Spectrum Analyzer	8593E	3926A04191	Mar. 23, 2005
* HP Preamplifier	8449B	3008A01292	Aug. 13, 2004
ROHDE & SCHWARZ TEST RECEIVER	ESI7	838496/016	Feb. 08, 2005
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Feb. 12, 2005
SCHAFFNER Tunable Dipole Antenna	VHBA 9123	459	Jun. 26, 2004
SCHWARZBECK Tunable Dipole Antenna	UHA 9105	977	
* CHASE BILOG Antenna	CBL6112A	2221	Jul. 26, 2004
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	Jun. 30, 2004
* EMCO Turn Table	1060	1115	NA
* CHANCE Tower	CM-AT40	CM-A010	NA
* Software	ADT_Radiated _V5.14	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Oct. 9, 2004
* TIMES RF cable	LMR-600	CABLE-ST5-01	Oct. 9, 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. 5.
5. The VCCI Site Registration No. is R-1039.

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter 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.

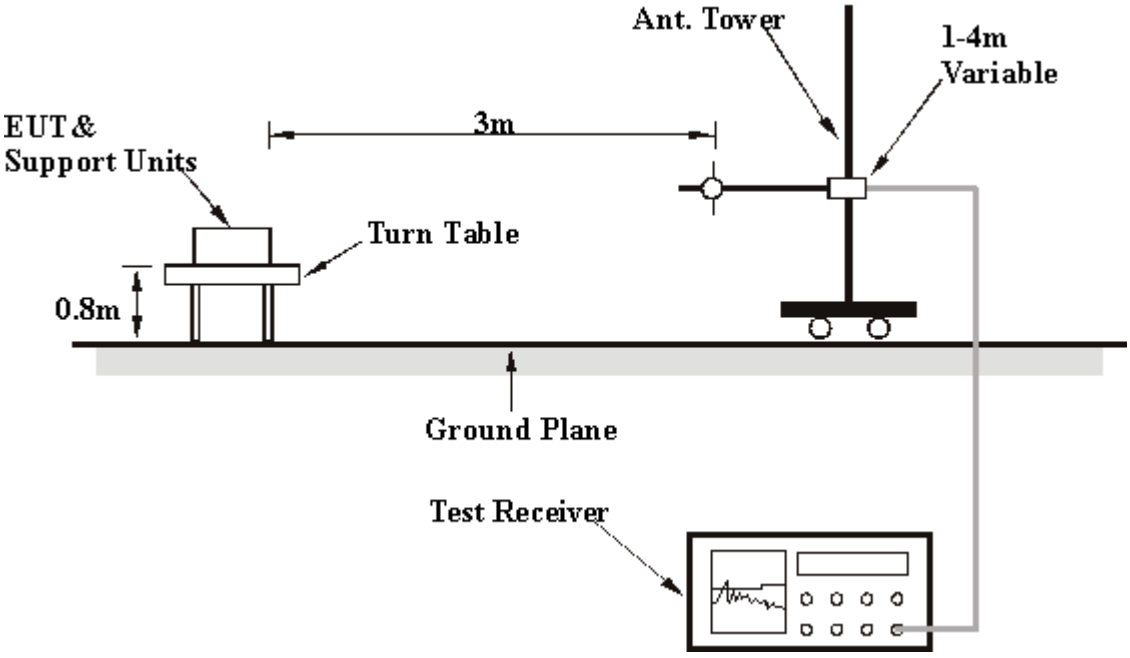
NOTE:

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	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 11	**FREQUENCY RANGE**	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	200.91	40.3 QP	43.50	-3.22	1.38 H	86	29.91	10.37
2	239.95	37.1 QP	46.00	-8.91	1.26 H	121	24.34	12.75
3	364.32	39.3 QP	46.00	-6.75	1.00 H	174	22.49	16.76
4	385.73	40.5 QP	46.00	-5.49	1.00 H	190	22.96	17.55
5	407.11	38.5 QP	46.00	-7.55	1.16 H	185	20.31	18.14
6	601.50	37.1 QP	46.00	-8.87	1.50 H	256	15.36	21.77
7	648.16	36.2 QP	46.00	-9.82	3.00 H	208	14.18	22.00

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	74.71	30.4 QP	40.00	-9.63	1.00 V	229	23.28	7.09
2	199.12	36.5 QP	43.50	-7.00	1.00 V	124	26.20	10.30
3	239.94	36.4 QP	46.00	-9.65	2.00 V	13	23.60	12.75
4	401.28	33.3 QP	46.00	-12.66	1.00 V	163	15.25	18.09
5	648.16	34.7 QP	46.00	-11.33	1.75 V	103	12.67	22.00
6	801.72	39.7 QP	46.00	-6.32	1.25 V	259	16.33	23.35

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 RESULTS (A)

EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	2320.00	55.9 PK	74.00	-18.08	1.19 H	273	25.97	29.95
1	2320.00	49.7 AV	54.00	-4.26	1.19 H	273	19.79	29.95
2	2390.00	54.7 PK	74.00	-19.31	1.15 H	273	24.37	30.32
2	2390.00	46.4 AV	54.00	-7.65	1.15 H	273	16.03	30.32
3	*2412.00	113.1 PK			1.15 H	273	82.69	30.41
3	*2412.00	104.78 AV			1.15 H	273	74.37	30.41
4	2580.00	52.7 PK	74.00	-21.33	1.25 H	278	21.96	30.71
4	2580.00	47.8 AV	54.00	-6.25	1.25 H	278	17.04	30.71
5	4824.00	51.3 PK	74.00	-22.67	1.73 H	202	15.83	35.50
5	4824.00	38.2 AV	54.00	-15.83	1.73 H	202	2.67	35.50
6	9648.00	53.9 PK	74.00	-20.12	1.25 H	217	8.56	45.32
6	9648.00	41.9 AV	54.00	-12.11	1.25 H	217	-3.43	45.32

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	2320.00	53.5 PK	74.00	-20.50	1.00 V	102	23.55	29.95
1	2320.00	45.3 AV	54.00	-8.71	1.00 V	102	15.34	29.95
2	2390.00	48.8 PK	74.00	-25.24	1.00 V	102	18.44	30.32
3	*2412.00	108.2 PK			1.00 V	102	77.78	30.41
3	*2412.00	99.9 AV			1.00 V	102	69.52	30.41
4	2580.00	58.0 PK	74.00	-16.05	1.00 V	103	27.24	30.71
4	2580.00	49.9 AV	54.00	-4.06	1.00 V	103	19.23	30.71
5	4824.00	50.0 PK	74.00	-24.05	1.57 V	221	14.45	35.50
6	9648.00	54.1 PK	74.00	-19.93	1.00 V	67	8.75	45.32
6	9648.00	41.4 AV	54.00	-12.64	1.00 V	67	-3.96	45.32

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	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	111.1 PK			1.36 H	276	80.57	30.50
1	*2437.00	103.2 AV			1.36 H	276	72.68	30.50
2	4874.00	59.3 PK	74.00	-14.67	2.11 H	189	23.57	35.76
2	4874.00	46.7 AV	54.00	-7.30	2.11 H	189	10.94	35.76
3	7311.00	58.6 PK	74.00	-15.36	1.43 H	220	17.40	41.24
3	7311.00	46.7 AV	54.00	-7.33	1.43 H	220	5.43	41.24
4	9748.00	57.3 PK	74.00	-16.74	1.96 H	208	12.23	45.04
4	9748.00	41.8 AV	54.00	-12.18	1.96 H	208	-3.21	45.04

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	104.7 PK			1.26 V	113	74.21	30.50
1	*2437.00	96.5 AV			1.26 V	113	65.95	30.50
2	4874.00	59.6 PK	74.00	-14.37	1.00 V	207	23.87	35.76
2	4874.00	48.4 AV	54.00	-5.56	1.00 V	207	12.68	35.76
3	7311.00	56.3 PK	74.00	-17.72	1.23 V	183	15.04	41.24
3	7311.00	44.4 AV	54.00	-9.59	1.23 V	183	3.17	41.24
4	9748.00	53.2 PK	74.00	-20.77	1.98 V	247	8.20	45.04
4	9748.00	41.7 AV	54.00	-12.31	1.98 V	247	-3.34	45.04

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	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	2408.00	62.7 PK	92.33	-29.63	1.01 H	248	32.34	30.40
1	2408.00	54.5 AV	84.11	-29.61	1.01 H	248	24.12	30.40
2	*2462.00	112.3 PK			1.01 H	248	81.74	30.59
2	*2462.00	104.1 AV			1.01 H	248	73.52	30.59
3	2483.50	49.5 PK	74.00	-24.46	1.01 H	248	18.87	30.67
3	2483.50	41.32 AV	54.00	-12.68	1.01 H	248	10.65	30.67
4	2488.00	58.9 PK	74.00	-15.13	1.01 H	248	28.18	30.69
4	2488.00	50.7 AV	54.00	-3.35	1.01 H	248	19.96	30.69
5	4924.00	52.4 PK	74.00	-21.65	1.98 H	204	16.37	35.99
5	4924.00	39.0 AV	54.00	-15.01	1.98 H	204	3.00	35.99
6	9848.00	53.5 PK	74.00	-20.53	1.99 H	291	8.54	44.93
6	9848.00	40.4 AV	54.00	-13.61	1.99 H	291	-4.54	44.93

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	2408.00	60.4 PK	74.00	-13.60	1.05 V	62	30.00	30.40
1	2408.00	52.2 AV	54.00	-1.81	1.05 V	62	21.79	30.40
2	*2462.00	110.0 PK			1.05 V	62	79.40	30.59
2	*2462.00	101.8 AV			1.05 V	62	71.19	30.59
3	2483.50	47.2 PK	74.00	-26.80	1.05 V	62	16.53	30.67
3	2483.50	38.99 AV	54.00	-15.01	1.05 V	62	8.32	30.67
4	2488.00	56.5 PK	74.00	-17.47	1.05 V	62	25.84	30.69
4	2488.00	48.3 AV	54.00	-5.68	1.05 V	62	17.63	30.69
5	4924.00	53.1 PK	74.00	-20.93	1.38 V	223	17.09	35.99
5	4924.00	40.6 AV	54.00	-13.37	1.38 V	223	4.65	35.99
6	7386.00	52.8 PK	74.00	-21.19	1.22 V	68	11.12	41.69
6	7386.00	40.1 AV	54.00	-13.86	1.22 V	68	-1.55	41.69
7	9848.00	56.5 PK	74.00	-17.51	1.72 V	243	11.56	44.93
7	9848.00	46.4 AV	54.00	-7.65	1.72 V	243	1.42	44.93

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 (B)

EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 1	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	2320.00	61.7 PK	74.00	-12.34	1.15 H	275	31.71	29.95
1	2320.00	52.2 AV	54.00	-1.83	1.15 H	275	22.22	29.95
2	2390.00	56.5 PK	74.00	-17.48	1.15 H	275	26.20	30.32
2	2390.00	47.0 AV	54.00	-6.97	1.15 H	275	16.71	30.32
3	*2412.00	107.2 PK			1.15 H	275	76.81	30.41
3	*2412.00	97.7 AV			1.15 H	275	67.32	30.41
4	2580.00	64.6 PK	87.20	-22.60	1.15 H	275	33.86	30.71
4	2580.00	55.08 AV	77.70	-22.62	1.15 H	275	24.37	30.71
5	4824.00	47.4 PK	74.00	-26.60	2.30 H	179	11.90	35.50
5	4824.00	34.00 AV	54.00	-20.03	2.30 H	179	-1.53	35.50

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	2320.00	55.2 PK	74.00	-18.85	1.00 V	101	25.20	29.95
1	2320.00	45.6 AV	54.00	-8.42	1.00 V	101	15.63	29.95
2	2390.00	50.0 PK	74.00	-23.99	1.00 V	101	19.69	30.32
2	2390.00	10.12 AV	54.00	-13.56	1.00 V	101	10.12	30.32
3	*2412.00	100.7 PK			1.00 V	101	70.30	30.41
3	*2412.00	91.1 AV			1.00 V	101	60.73	30.41
4	2580.00	58.1 PK	74.00	-15.91	1.00 V	101	27.38	30.71
4	2580.00	48.5 AV	54.00	-5.51	1.00 V	101	17.78	30.71
5	4824.00	46.5 PK	74.00	-27.54	1.76 V	304	10.96	35.50
5	4824.00	33.3 AV	54.00	-20.74	1.76 V	304	-2.24	35.50

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

EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 6	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	2343.00	60.6 PK	74.00	-13.36	1.13 H	276	30.57	30.07
1	2343.00	51.2 AV	54.00	-2.76	1.13 H	276	21.17	30.07
2	2383.00	61.7 PK	74.00	-12.31	1.13 H	276	31.41	30.28
2	2383.00	52.3 AV	54.00	-1.71	1.13 H	276	22.01	30.28
3	*2437.00	109.6 PK			1.13 H	276	79.06	30.50
3	*2437.00	100.2 AV			1.13 H	276	69.66	30.50
4	2574.00	55.5 PK	74.00	-18.51	1.28 H	272	24.78	30.72
4	2574.00	44.9 AV	54.00	-9.15	1.28 H	272	14.14	30.72
5	4874.00	57.9 PK	74.00	-16.06	1.29 H	177	22.18	35.76
5	4874.00	43.9 AV	54.00	-10.06	1.29 H	177	8.18	35.76
6	7311.00	58.7 PK	74.00	-15.31	1.43 H	181	17.45	41.24
6	7311.00	44.5 AV	54.00	-9.48	1.43 H	181	3.28	41.24

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	2343.00	53.0 PK	74.00	-21.00	1.05 V	84	22.93	30.07
1	2343.00	43.7 AV	54.00	-10.31	1.05 V	84	13.62	30.07
2	2383.00	54.1 PK	74.00	-19.95	1.05 V	84	23.77	30.28
2	2383.00	44.7 AV	54.00	-9.26	1.05 V	84	14.46	30.28
3	*2437.00	101.9 PK			1.05 V	84	71.42	30.50
3	*2437.00	92.6 AV			1.05 V	84	62.11	30.50
4	2574.00	47.0 PK	74.00	-27.03	1.00 V	86	16.26	30.72
4	2574.00	36.7 AV	54.00	-17.26	1.00 V	86	6.03	30.72
5	4874.00	57.6 PK	74.00	-16.37	1.00 V	206	21.87	35.76
5	4874.00	43.6 AV	54.00	-10.44	1.00 V	206	7.80	35.76
6	7311.00	56.9 PK	74.00	-17.06	1.12 V	183	15.70	41.24
6	7311.00	42.5 AV	54.00	-11.49	1.12 V	183	1.27	41.24

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	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
MODE	Channel 11	**FREQUENCY RANGE**	1~25 GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 991hPa	**TESTED BY**: Vincent Lin	

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	106.2 PK			1.17 H	276	75.57	30.59
1	*2462.00	96.8 AV			1.17 H	276	66.22	30.59
2	2483.50	51.8 PK	74.00	-22.25	1.17 H	276	21.08	30.67
2	2483.50	42.4 AV	54.00	-11.60	1.17 H	276	11.73	30.67
3	2488.00	62.1 PK	74.00	-11.86	1.17 H	276	31.45	30.69
3	**2488.00**	**52.8 AV**	**54.00**	**-1.21**	**1.17 H**	**276**	**22.10**	**30.69**
4	2573.00	49.9 PK	74.00	-24.11	1.00 H	309	19.17	30.72
4	2573.00	40.6 AV	54.00	-13.45	1.00 H	309	9.83	30.72
5	4924.00	47.6 PK	74.00	-26.45	1.89 H	173	11.57	35.99
5	4924.00	34.2 AV	54.00	-19.81	1.89 H	173	-1.79	35.99

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	99.0 PK			1.00 V	96	68.44	30.59
1	*2462.00	89.6 AV			1.00 V	96	59.05	30.59
2	2483.50	44.6 PK	74.00	-29.38	1.00 V	96	13.95	30.67
3	2488.00	55.0 PK	74.00	-18.99	1.00 V	96	24.32	30.69
3	2488.00	45.6 AV	54.00	-8.38	1.00 V	96	14.93	30.69
4	2573.00	50.2 PK	74.00	-23.85	1.00 V	90	19.44	30.72
4	2573.33	39.8 AV	54.00	-14.16	1.00 V	90	9.13	30.72
5	4924.00	47.2 PK	74.00	-26.80	1.00 V	218	11.22	35.99
5	4924.00	33.6 AV	54.00	-20.40	1.00 V	218	-2.38	35.99

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 0.5MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
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.

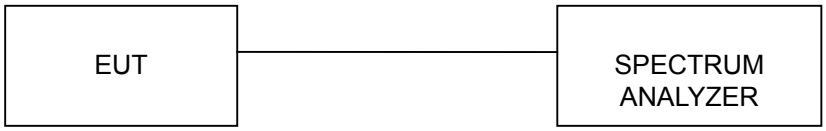
4.3.3 TEST PROCEDURE

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

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



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

4.3.6 EUT OPERATING CONDITIONS

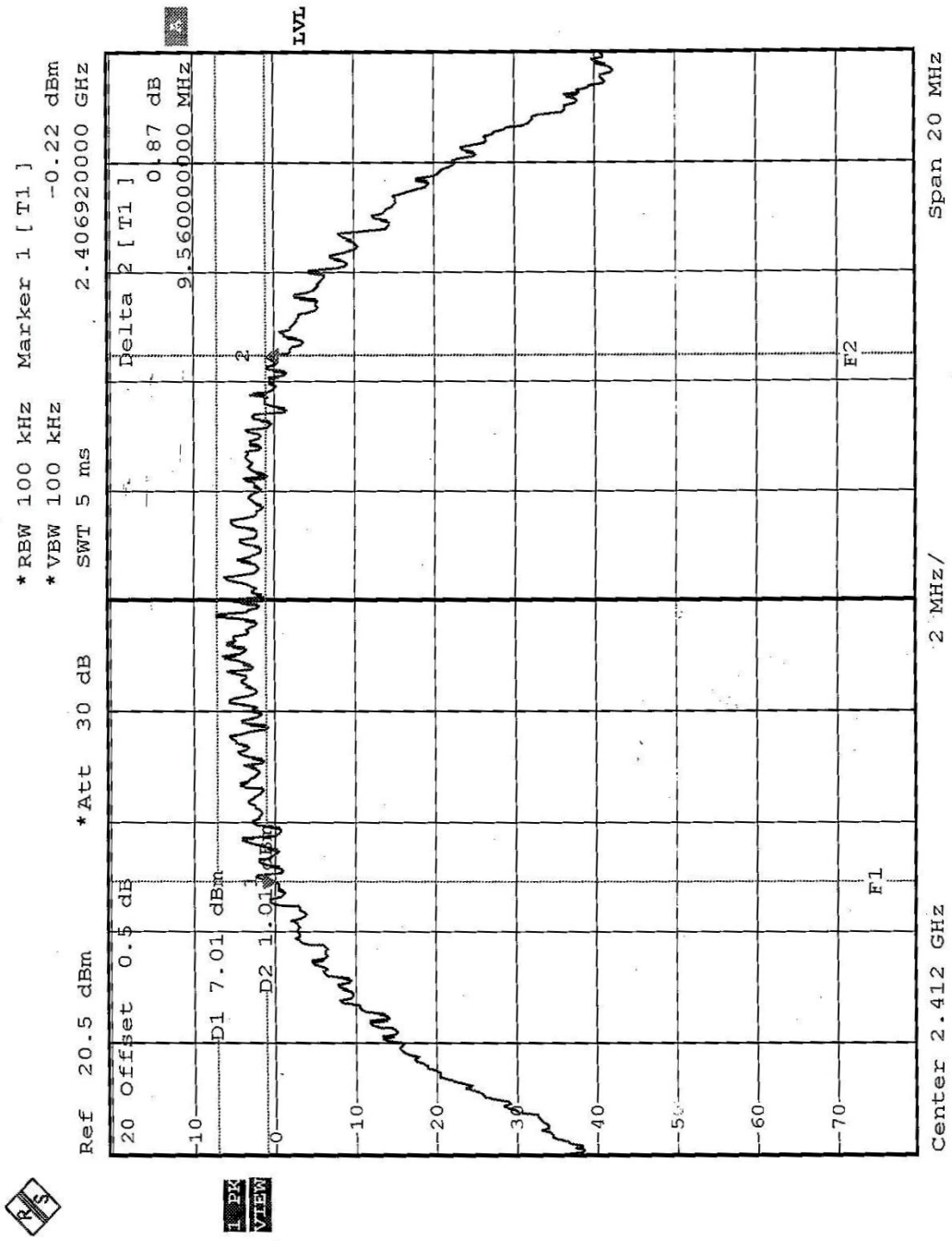
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS (A)

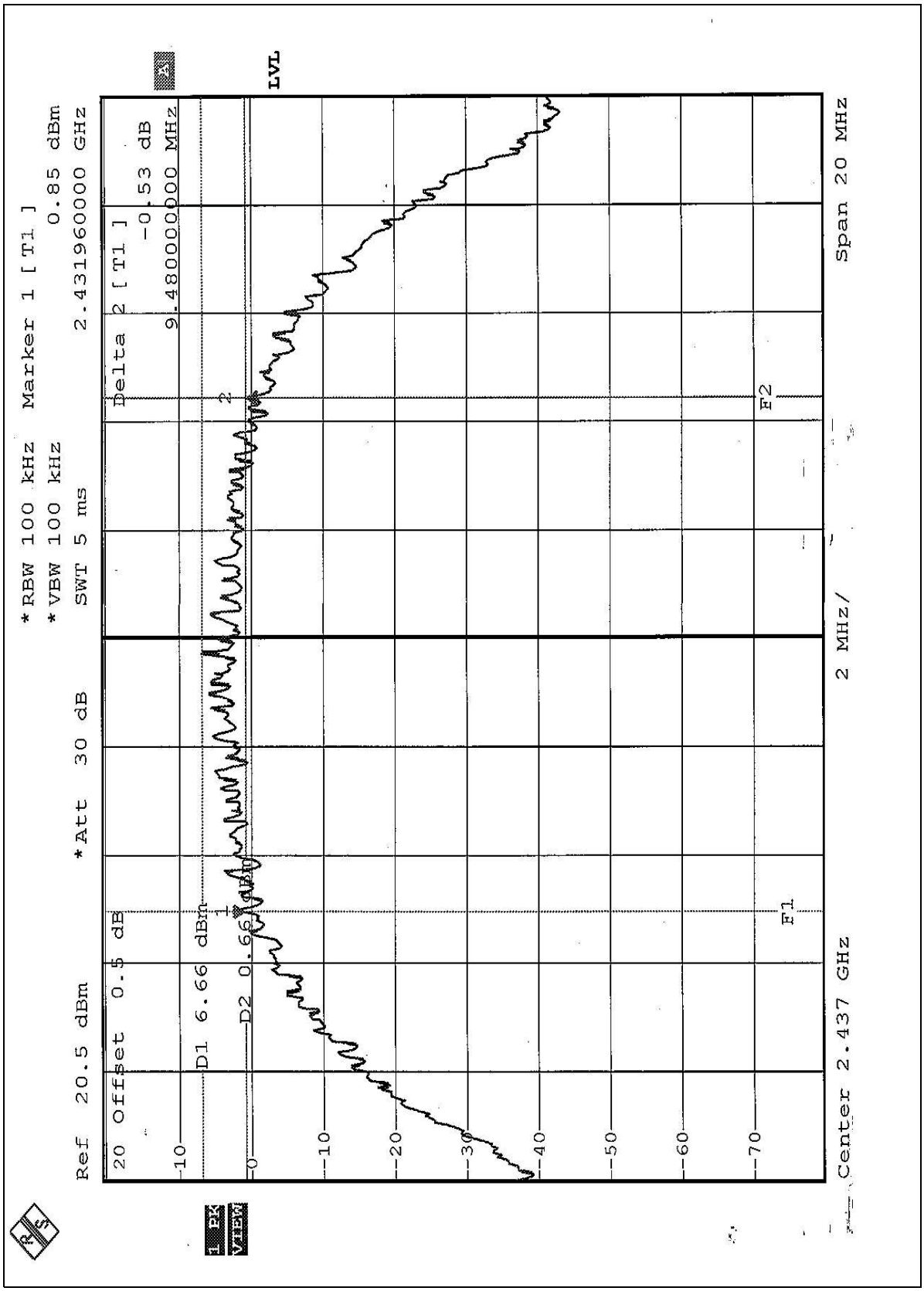
EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 62%RH, 991hPa
TESTED BY: Stanely Hsu			

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	9.56	0.5	PASS
6	2437	9.48	0.5	PASS
11	2462	8.20	0.5	PASS

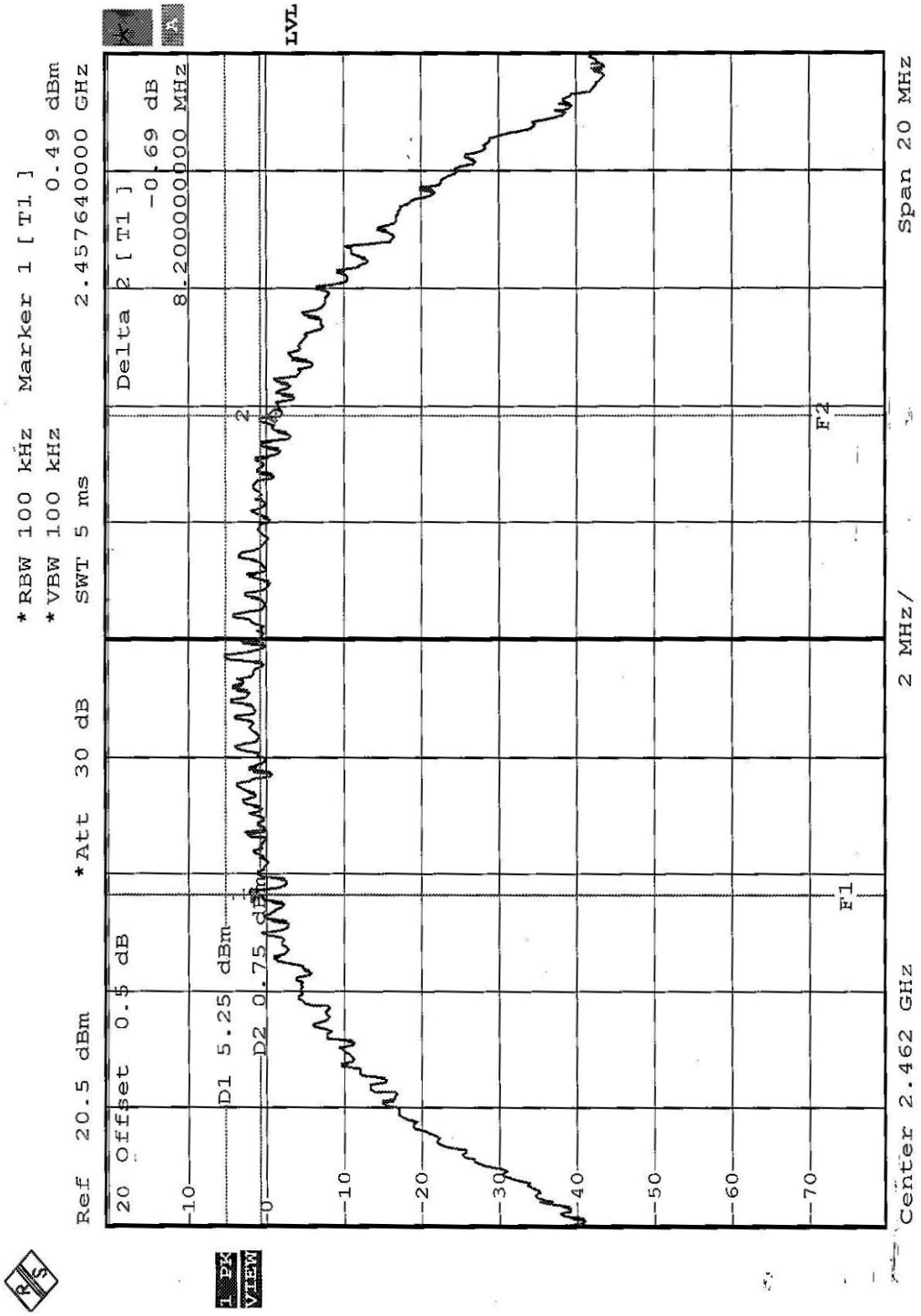
CH1


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Marker 1 [T1]
-0.22 dBm
2.40692000 GHz
Delta 2 [T1]
0.87 dB
9.56000000 MHz
Ref 20.5 dBm
Offset 0.5 dB
*Att 30 dB
D1 7.01 dBm
D2 1.01 dB
Center 2.412 GHz
2 MHz/
Span 20 MHz
F1
F2
1 PK VIEW

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Marker 1 [T1]
0.85 dBm
2.431960000 GHz
Delta 2 [T1]
-0.53 dB
9.480000000 MHz
Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
D1 6.66 dBm
D2 0.66 dB
Center 2.437 GHz
2 MHz/
Span 20 MHz
F1
F2
LVL
PK
VIEW

CH11

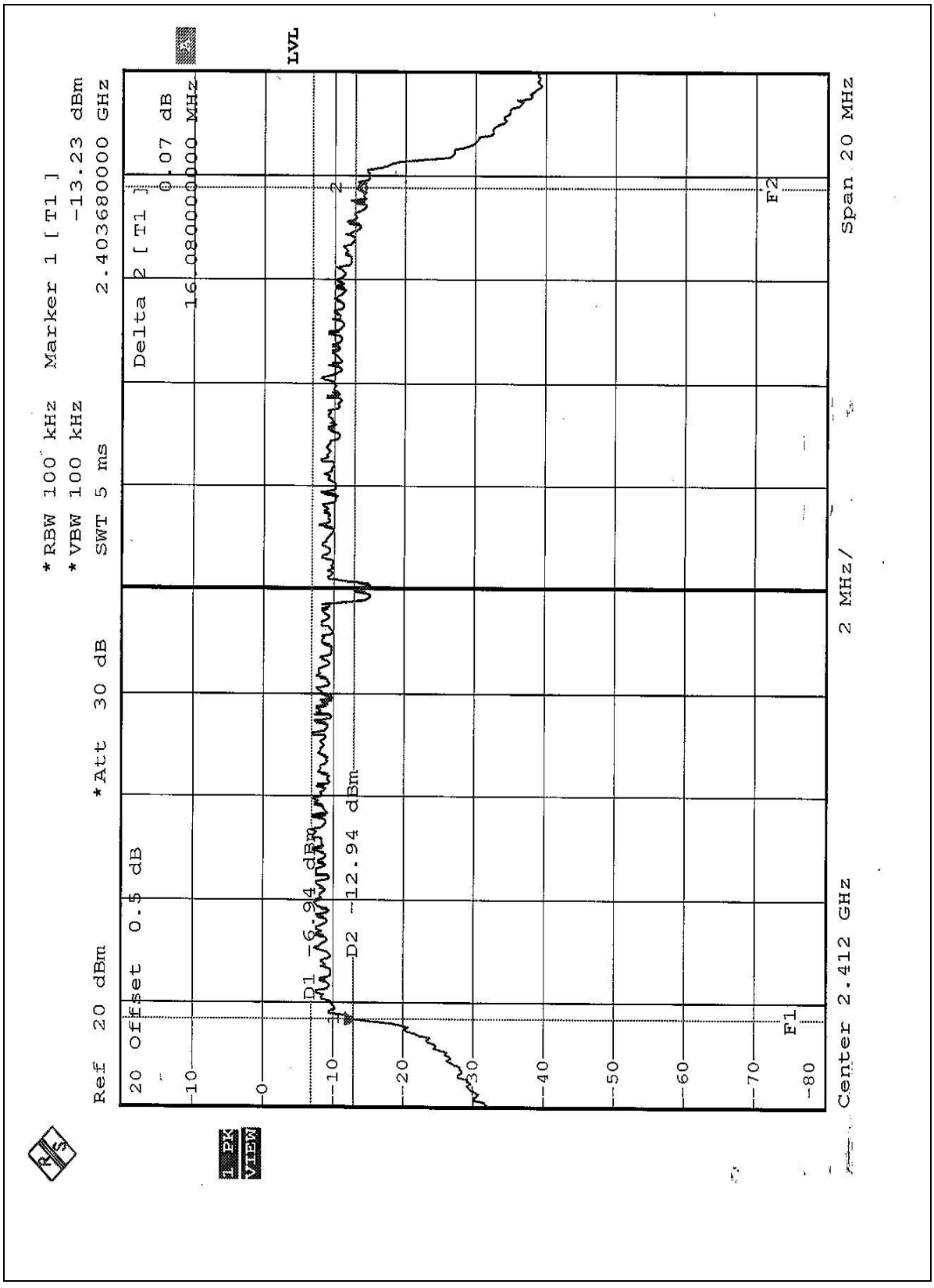

Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Marker 1 [T1]
0.49 dBm
2.457640000 GHz
Delta 2 [T1]
-0.69 dB
8.200000000 MHz
D1 5.25 dBm
D2 0.75 dBm
Center 2.462 GHz
2 MHz/
Span 20 MHz
F1
F2
LVL
1 PK
VIEW

4.3.8 TEST RESULTS (B)

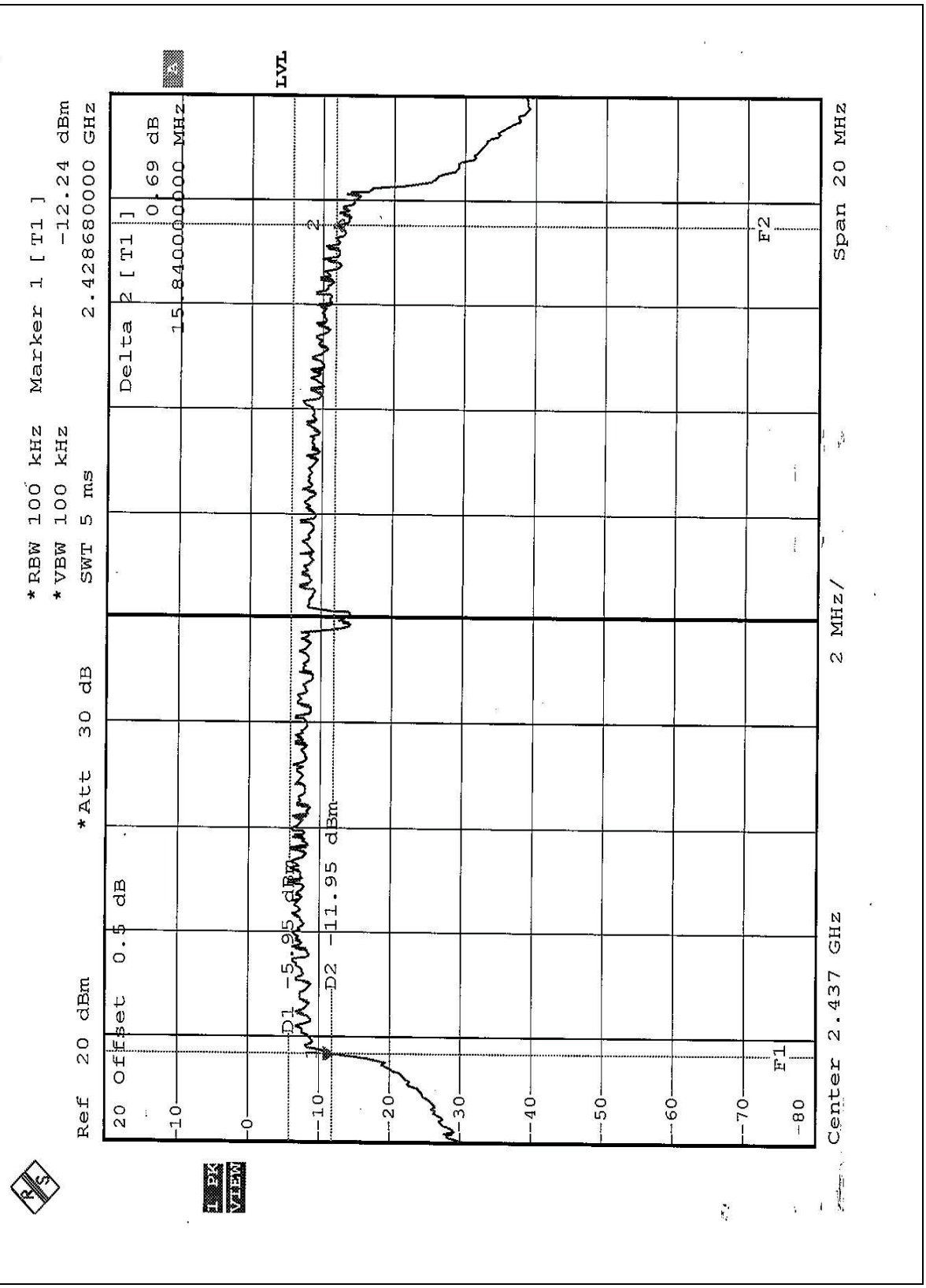
EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 62%RH, 991hPa
TESTED BY: Stanely Hsu			

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.08	0.5	PASS
6	2437	15.84	0.5	PASS
11	2462	15.84	0.5	PASS

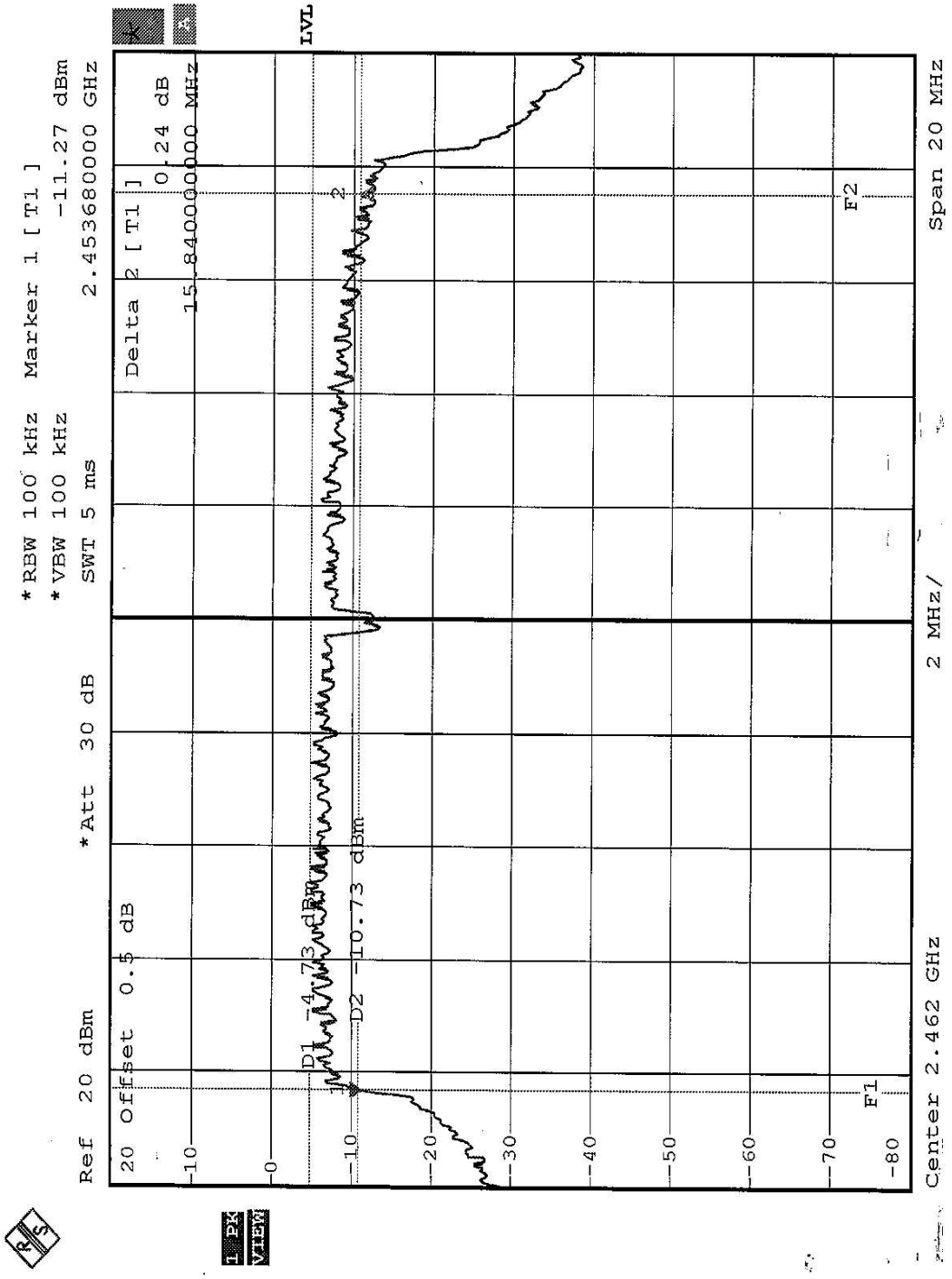
CH1


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Marker 1 [T1]
-13.23 dBm
2.403680000 GHz
Delta 2 [T1]
0.07 dB
16.080000000 MHz
LVL
D1 -6.94 dBm
D2 -12.94 dBm
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz
PK
VIEW

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Marker 1 [T1]
-12.24 dBm
2.428680000 GHz
Delta 2 [T1]
0.69 dB
15.840000000 MHz
Ref 20 dBm
Offset 0.5 dB
*Att 30 dB
D1 -5.95 dBm
D2 -11.95 dBm
Center 2.437 GHz
2 MHz/
Span 20 MHz
F1
F2
LVL

CH11


Marker 1 [T1]
-11.27 dBm
2.453680000 GHz
Delta 2 [T1]
0.24 dB
15.840000000 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
Att 30 dB
Ref 20 dBm
Offset 0.5 dB
LVL
D1 -4.73 dBm
D2 -10.73 dBm
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
1 PK VIEW

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 On
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.

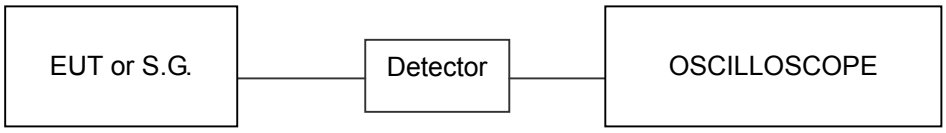
4.4.3 TEST PROCEDURES

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 RESULTS (A)

EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 62%RH, 991hPa
TESTED BY: Stanely Hsu			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	17.39	30	PASS
6	2437	16.60	30	PASS
11	2462	16.61	30	PASS

4.4.8 TEST RESULTS (B)

EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 62%RH, 991hPa
TESTED BY: Stanely Hsu			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	16.62	30	PASS
6	2437	16.64	30	PASS
11	2462	17.37	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

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

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

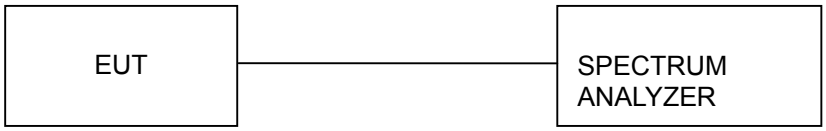
4.5.3 TEST PROCEDURE

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

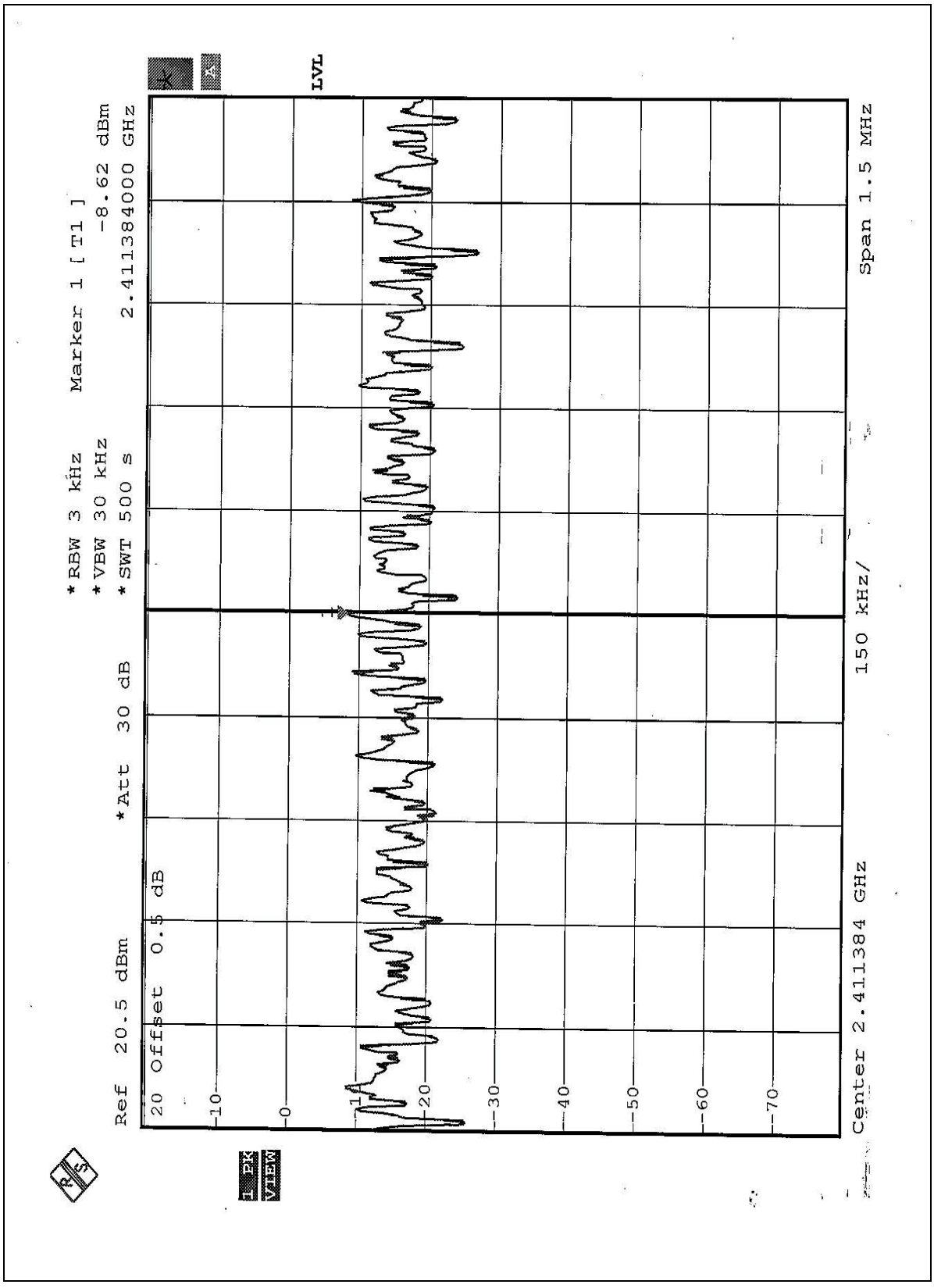
Same as 4.3.6

4.5.7 TEST RESULTS (A)

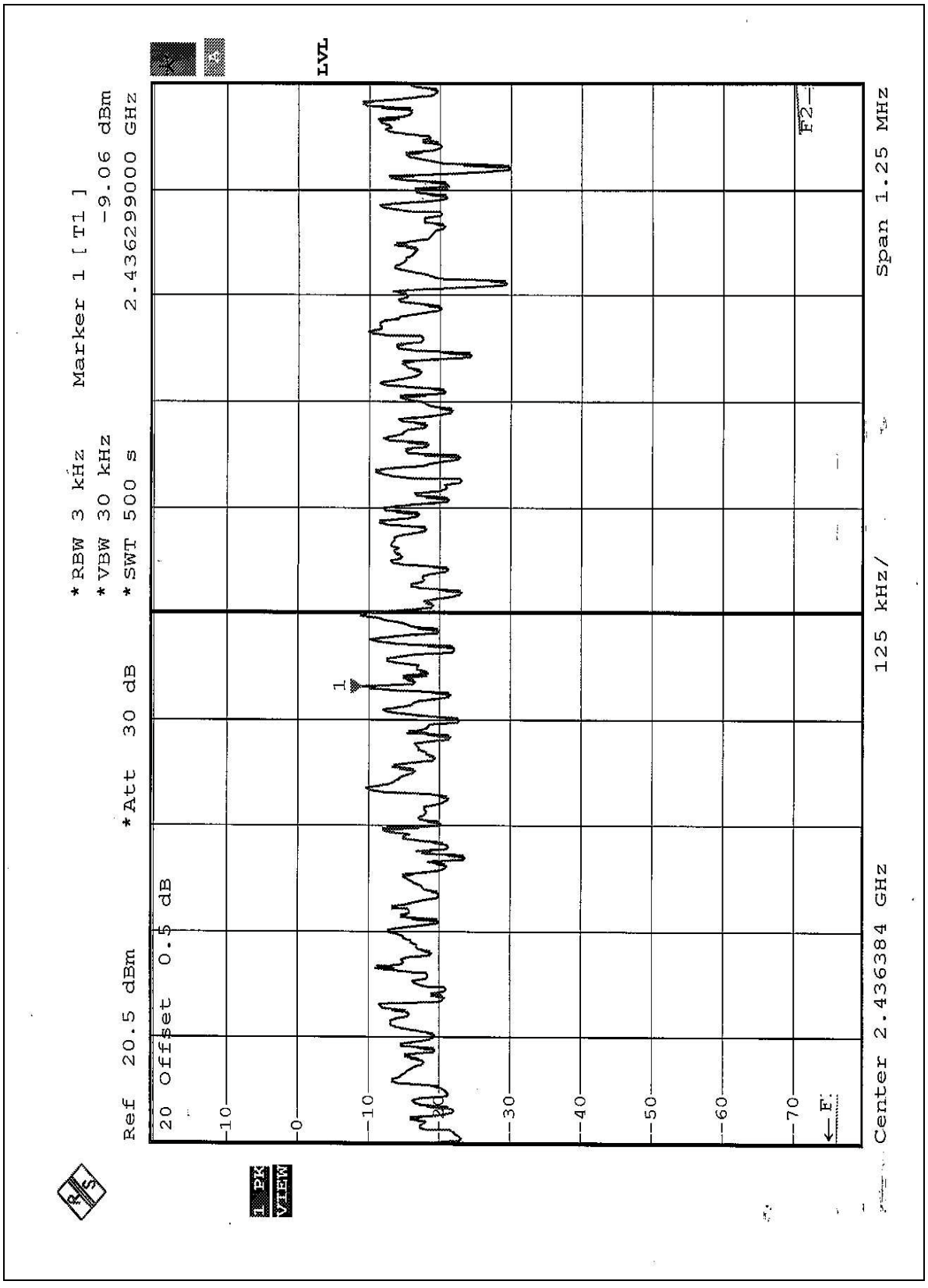
EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 62%RH, 991hPa
TESTED BY: Stanely Hsu			

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-8.62	8	PASS
6	2437	-9.06	8	PASS
11	2462	-10.26	8	PASS

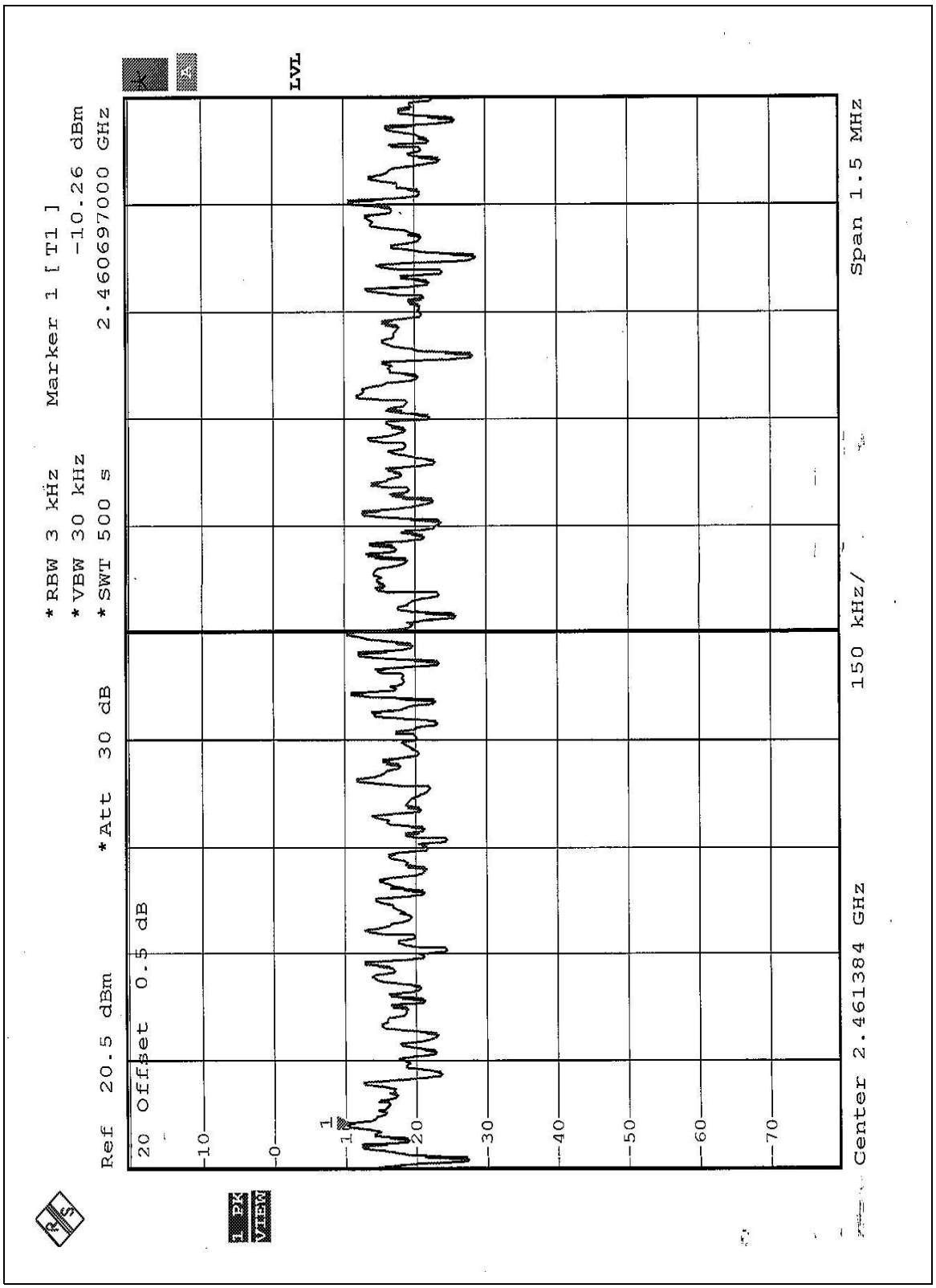
CH1


Marker 1 [T1]
-8.62 dBm
2.411384000 GHz
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
*Att 30 dB
Ref 20.5 dBm
20 Offset 0.5 dB
Center 2.411384 GHz
150 kHz/
Span 1.5 MHz
LVL

CH6


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.06 dBm
2.436299000 GHz
LVL
Center 2.436384 GHz
125 kHz/
Span 1.25 MHz
F2
1 PK VIEW

CH11

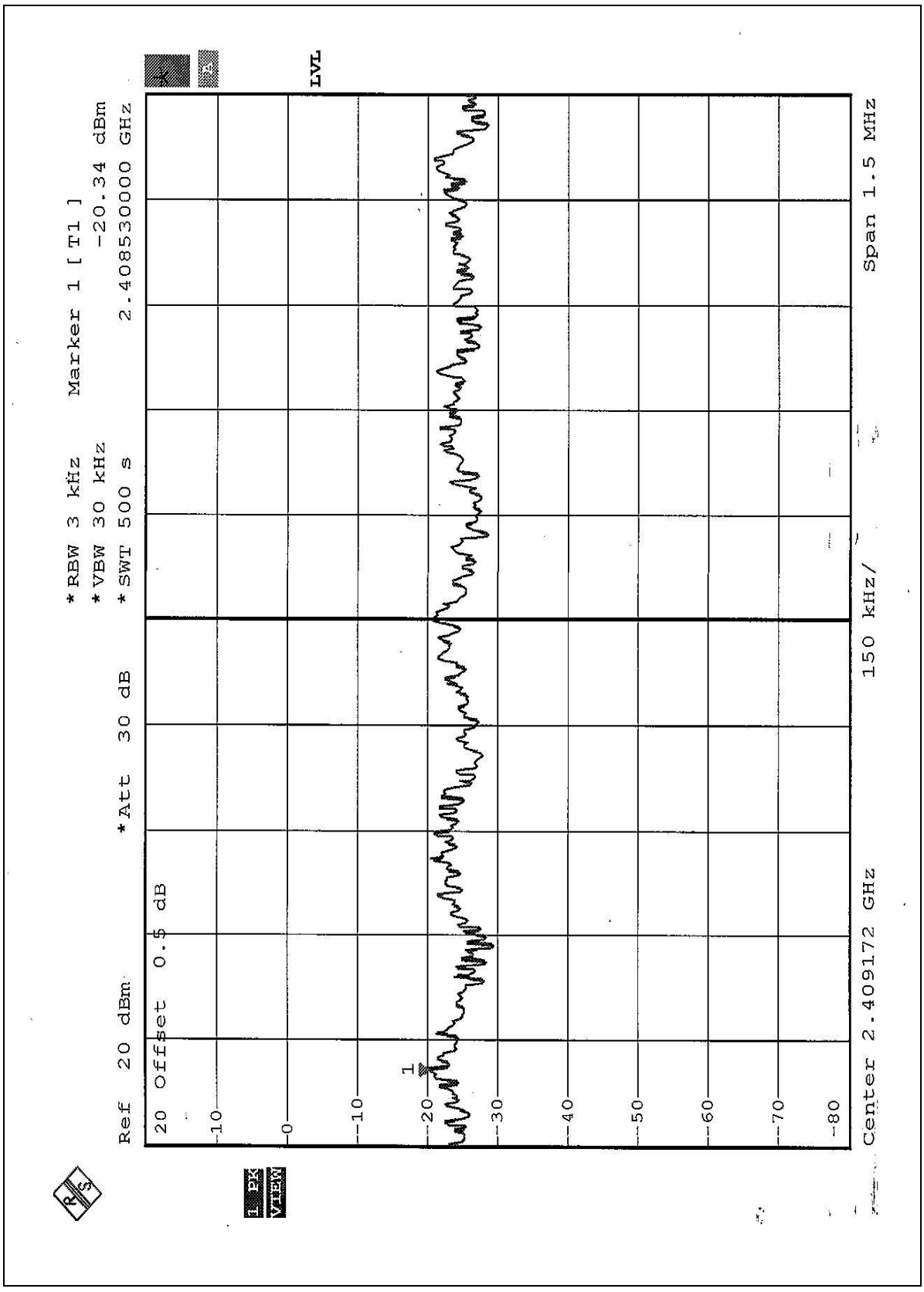

RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-10.26 dBm
2.460697000 GHz
Ref 20.5 dBm
Offset 0.5 dB
Att 30 dB
LVL
Center 2.461384 GHz
150 kHz/
Span 1.5 MHz
1 PK
MAXH

4.5.8 TEST RESULTS (B)

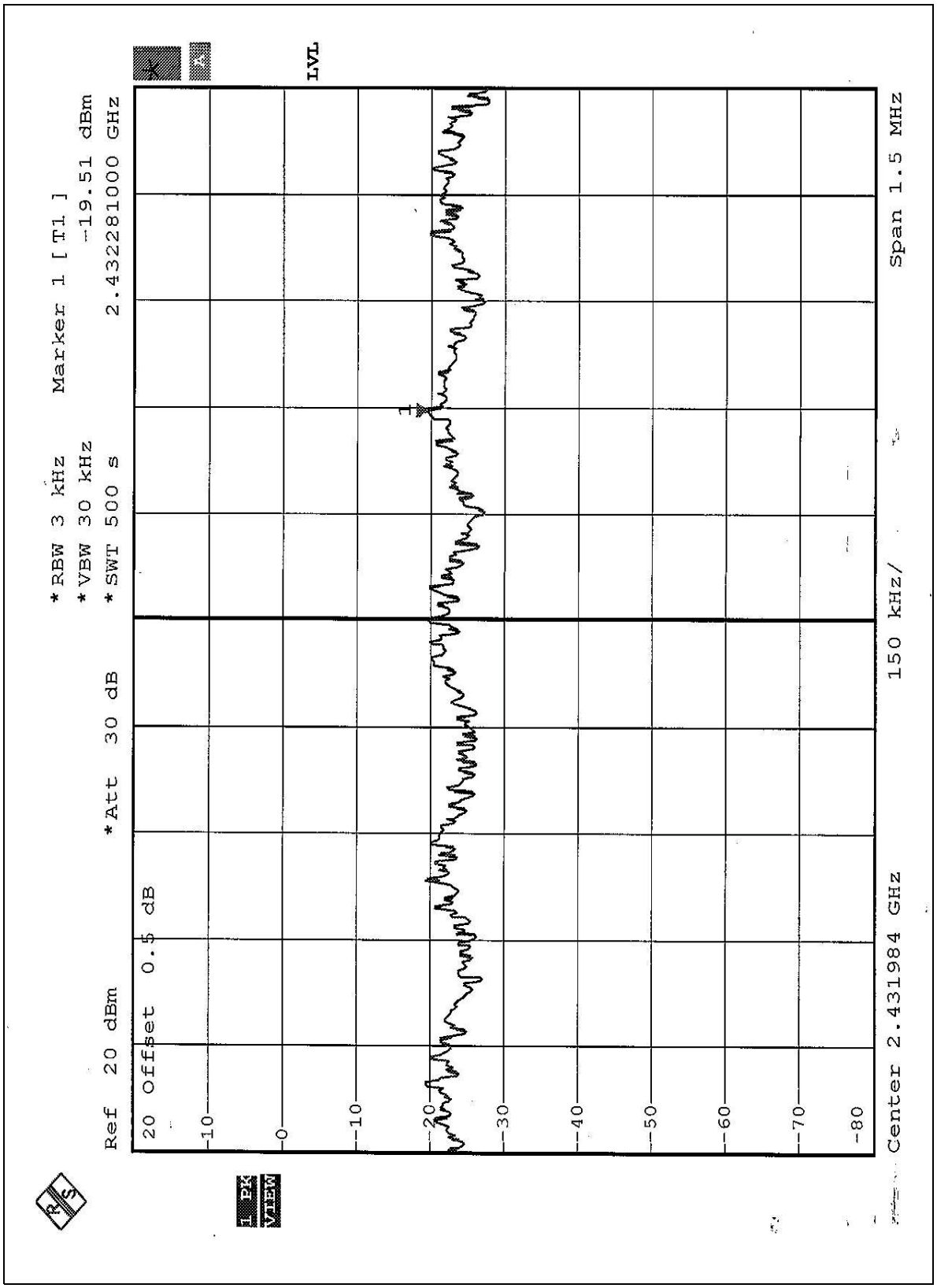
EUT	802.11g Wireless Cardbus Adapter	**MODEL**	DWL-G630
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	20deg. C, 62%RH, 991hPa
TESTED BY: Stanely Hsu			

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-20.34	8	PASS
6	2437	-19.51	8	PASS
11	2462	-18.66	8	PASS

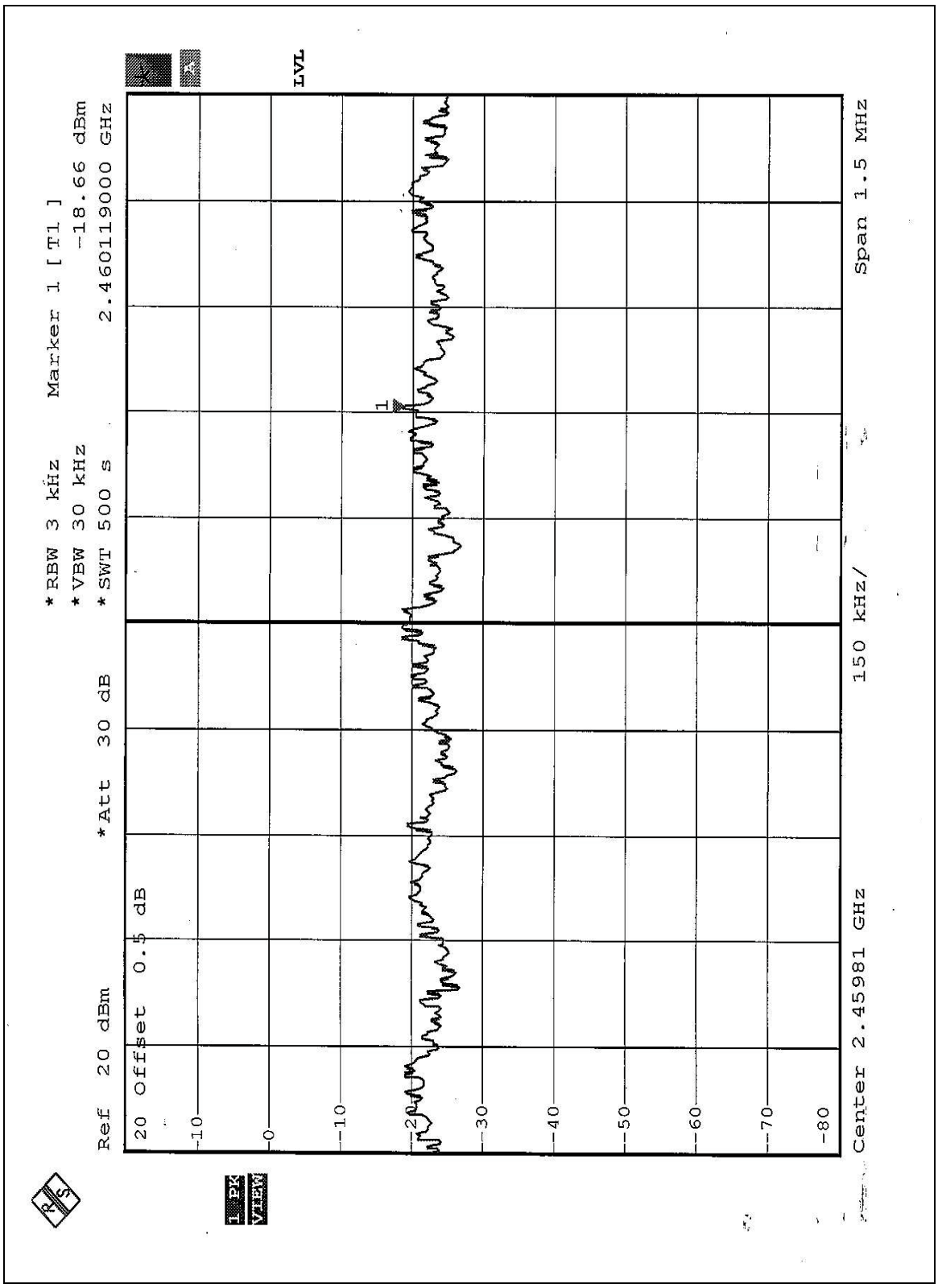
CH1


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-20.34 dBm
2.408530000 GHz
LVL
Center 2.409172 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW

CH6


Marker 1 [T1]
-19.51 dBm
2.432281000 GHz
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
*Att 30 dB
Ref 20 dBm
20 Offset 0.5 dB
Center 2.431984 GHz
150 kHz/
Span 1.5 MHz
1 PK VIEW
LVL

CH11


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-18.66 dBm
2.460119000 GHz
LVL
Center 2.45981 GHz
150 kHz/
Span 1.5 MHz
1 PK VIEW

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

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

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

4.6.3 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 1MHz and 10Hz with suitable frequency span including 100MHz 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

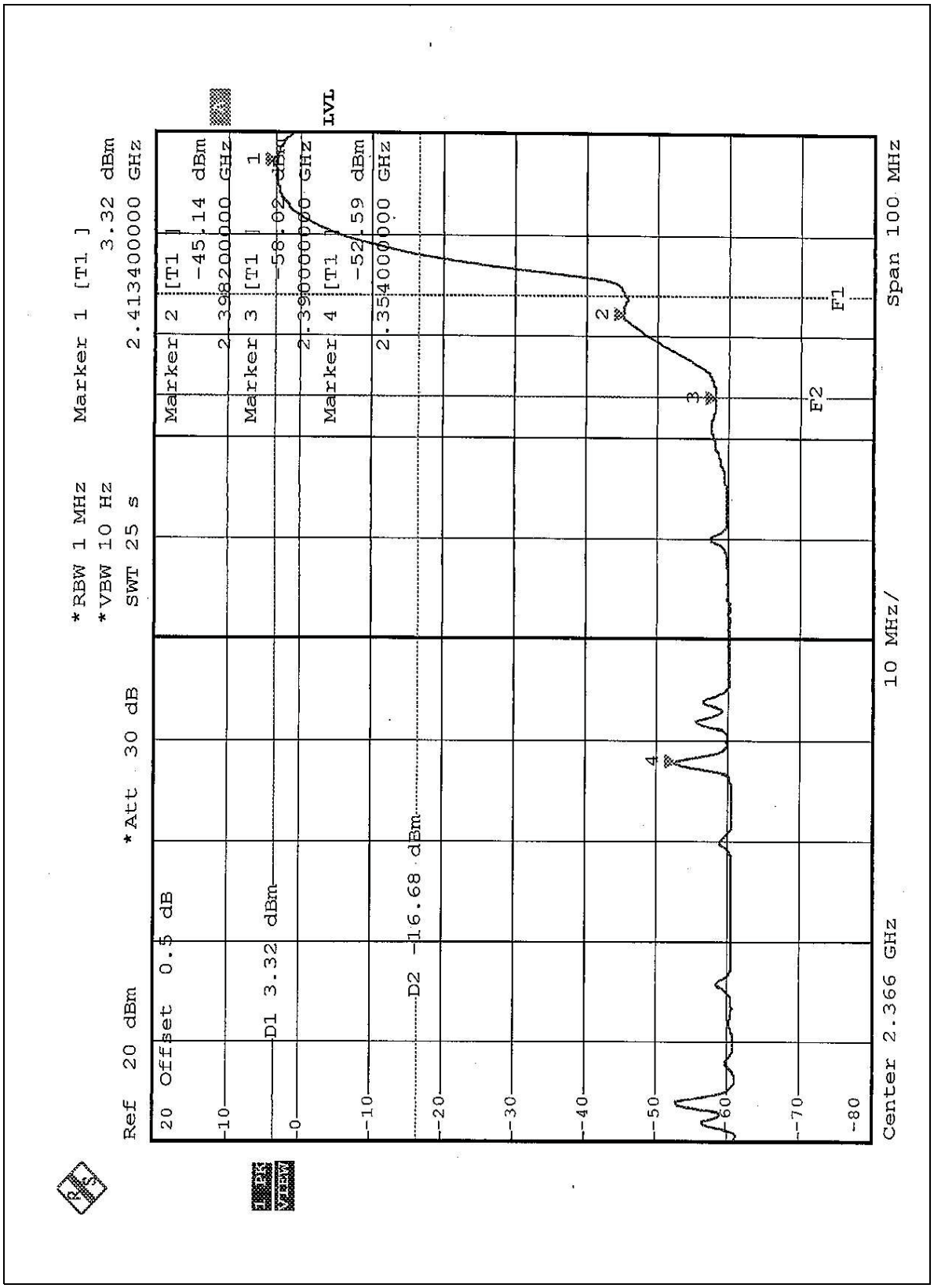
Same as Item 4.3.6

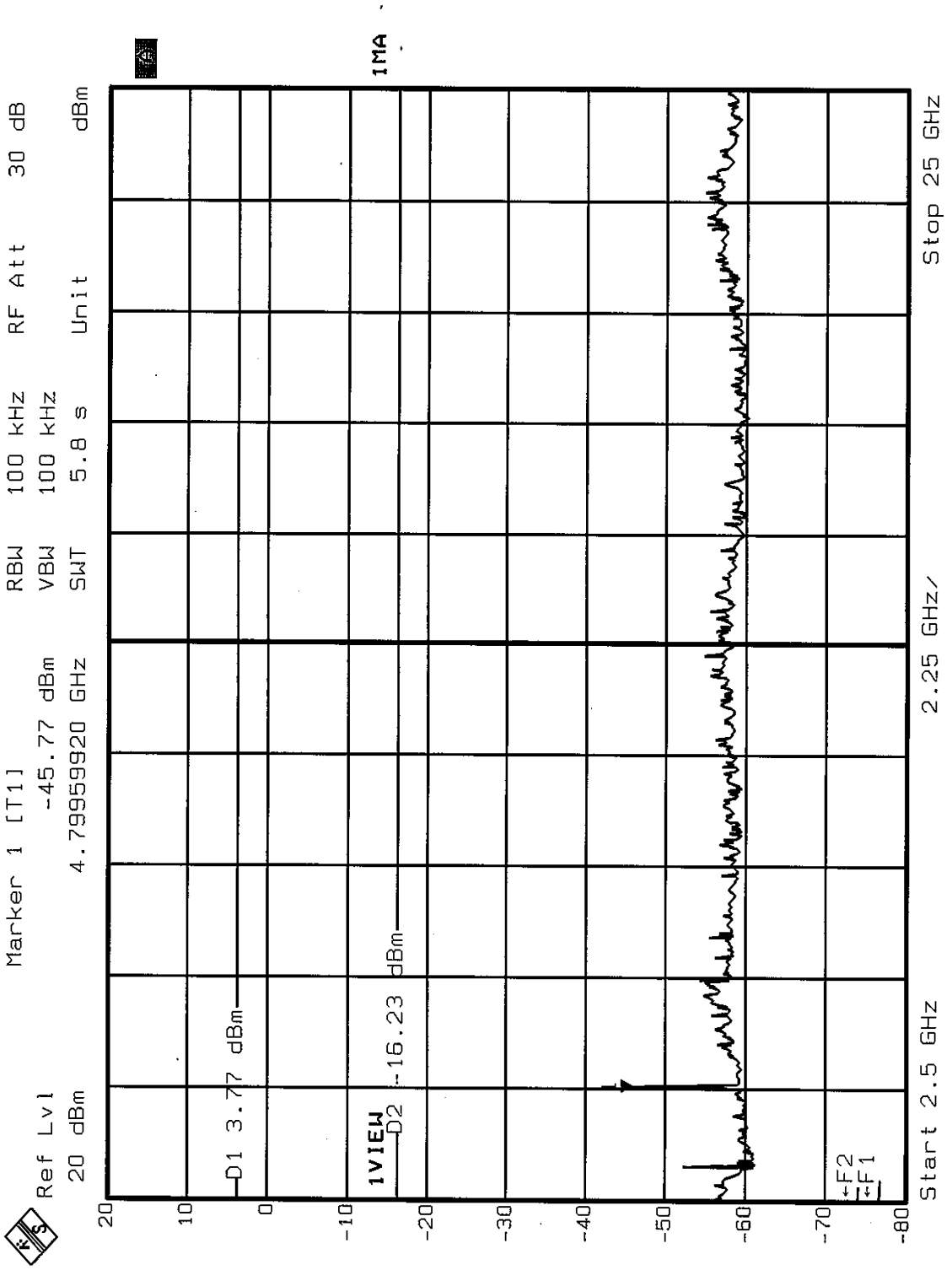
4.6.6 TEST RESULTS (A)

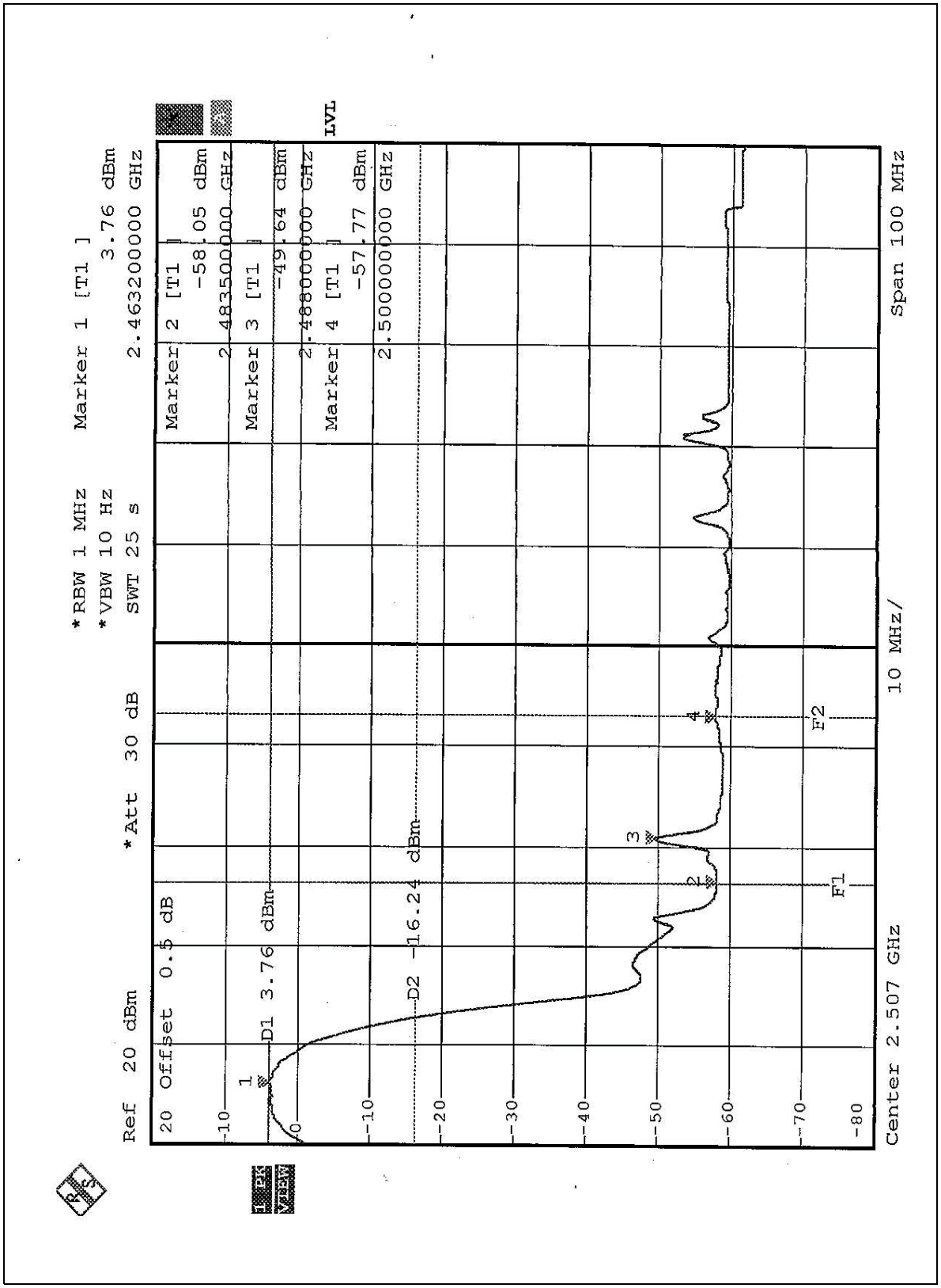
The spectrum plots are attached on the following 4 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

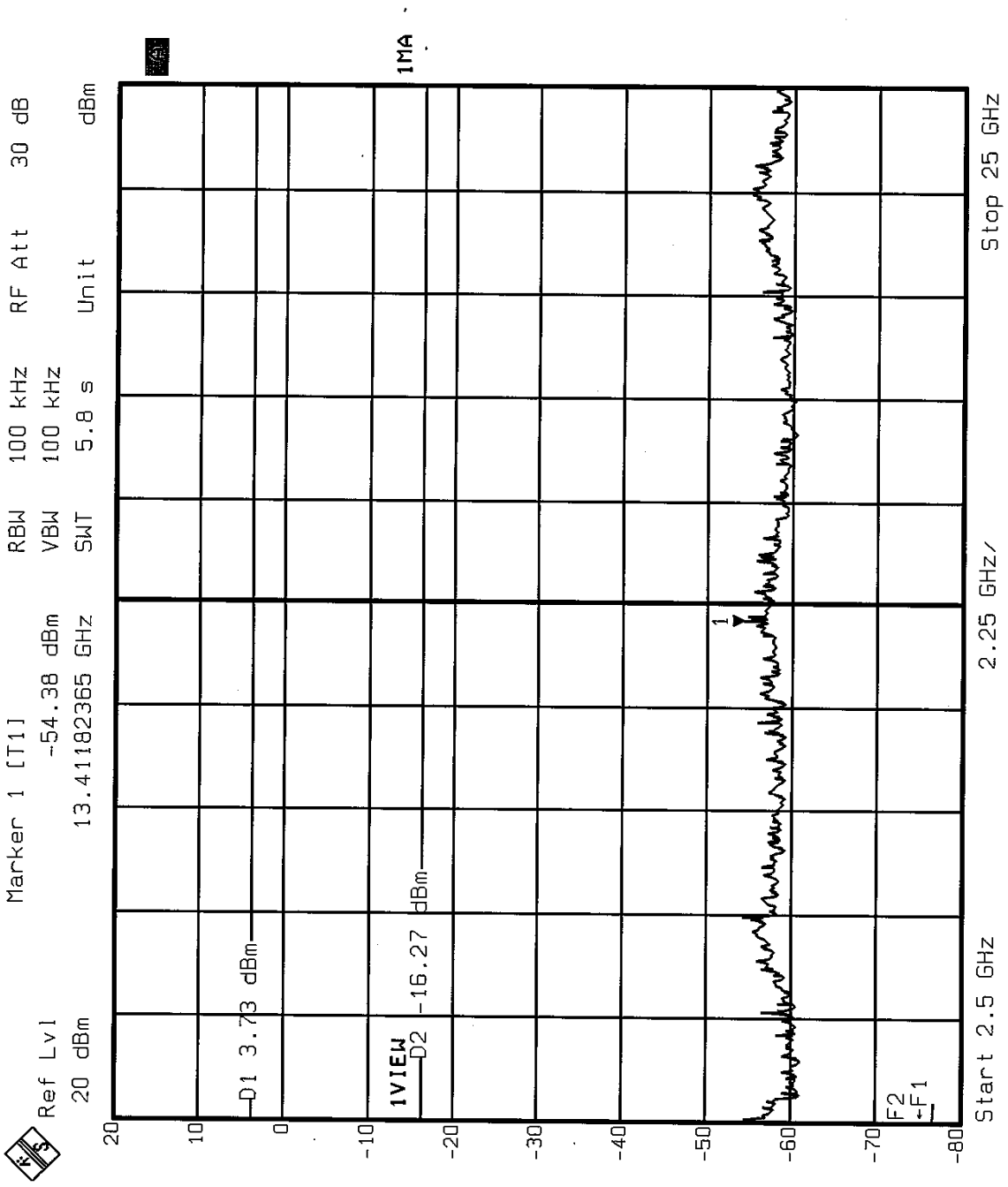
NOTE:
The band edge emission plot on the following 1 ~ 2 page shows 55.91dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 104.78dBuV/m, so the maximum field strength in restrict band is 104.78-55.91=48.87dBuV/m which is under 54dBuV/m limit.

The band edge emission plot on the following 3 ~ 4 page shows 53.40dB delta between carrier maximum power and local maximum emission in restrict band (2.4880GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 104.10dBuV/m, so the maximum field strength in restrict band is 104.10-53.40=50.70dBuV/m which is under 54dBuV/m limit.


*RBW 1 MHz
*VBW 10 Hz
SWT 25 s
Marker 1 [T1]
3.32 dBm
2.413400000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
D1 3.32 dBm
D2 -16.68 dBm
Marker 2 [T1]
-45.14 dBm
2.398200000 GHz
Marker 3 [T1]
-58.02 dBm
2.390000000 GHz
Marker 4 [T1]
-52.59 dBm
2.354000000 GHz
LVL
F1
F2
Center 2.366 GHz
10 MHz/
Span 100 MHz


Ref Lvl
20 dBm
Marker 1 [T1]
-45.77 dBm
4.79959920 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
1MA
D1 3.77 dBm
1VIEW
D2 -16.23 dBm
F2
F1
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz


*RBW 1 MHz
*VBW 10 Hz
SWT 25 s
Marker 1 [T1]
3.76 dBm
2.463200000 GHz
Ref 20 dBm
*Att 30 dB
Offset 0.5 dB
D1 3.76 dBm
D2 -16.24 dBm
Marker 2 [T1]
-58.05 dBm
2.483500000 GHz
Marker 3 [T1]
-49.64 dBm
2.488000000 GHz
Marker 4 [T1]
-57.77 dBm
2.500000000 GHz
LVL
Center 2.507 GHz
10 MHz/
Span 100 MHz
F1
F2

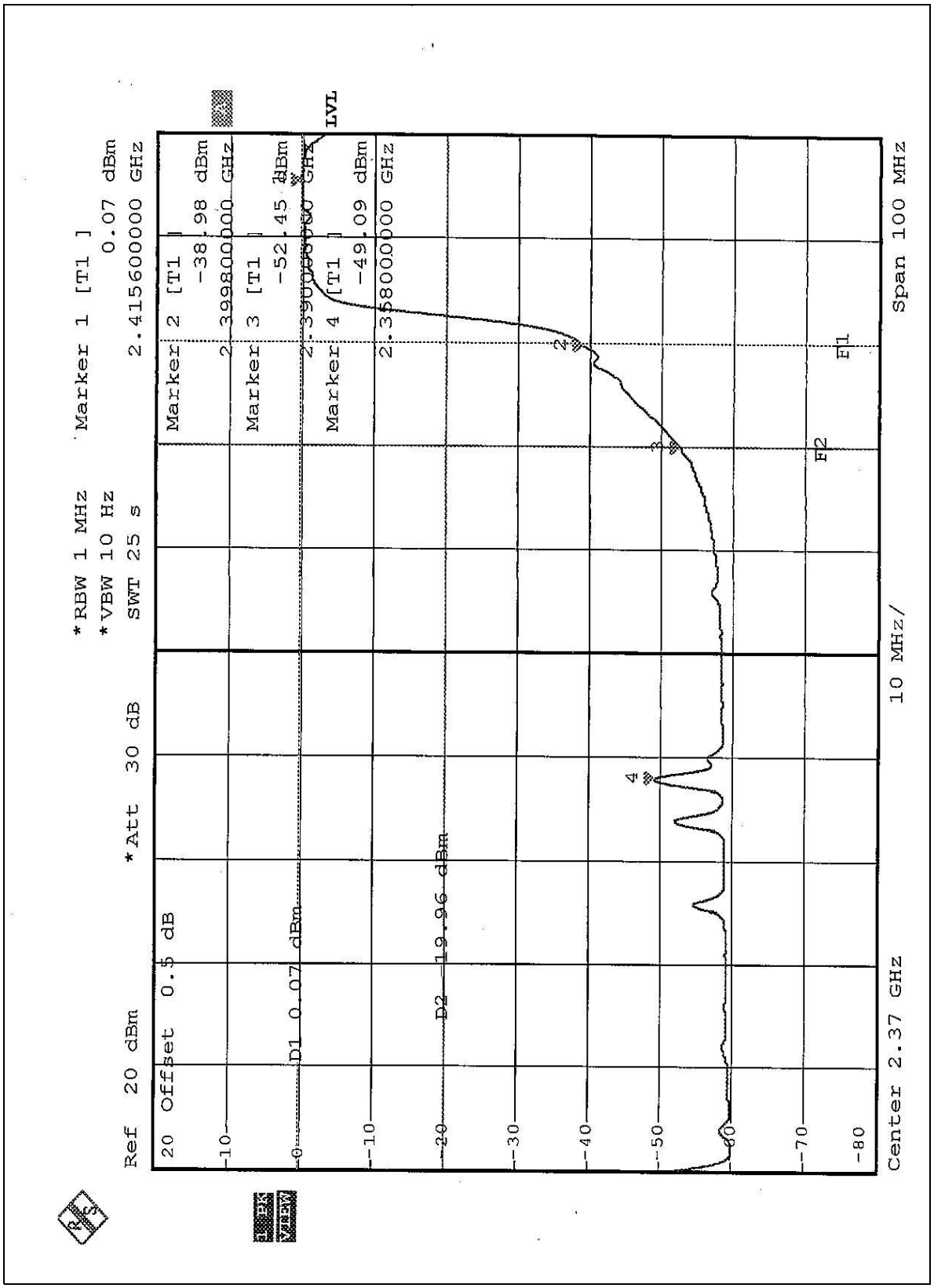

Ref Lvl
20 dBm
Marker 1 [T1]
-54.38 dBm
13.41182365 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
1MA
D1 3.73 dBm
1VIEW
D2 -16.27 dBm
F2
F1
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80

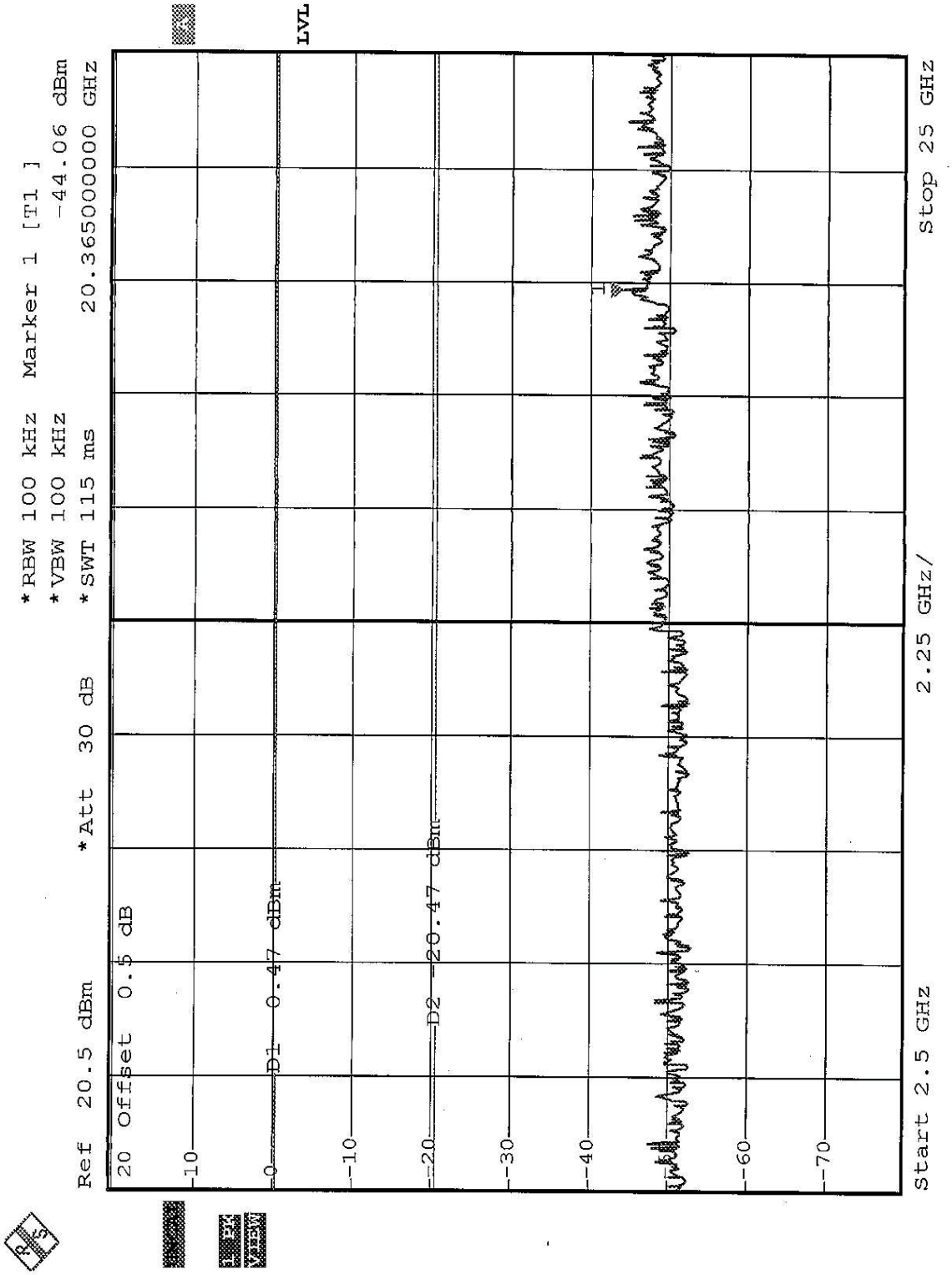
4.6.7 TEST RESULTS (B)

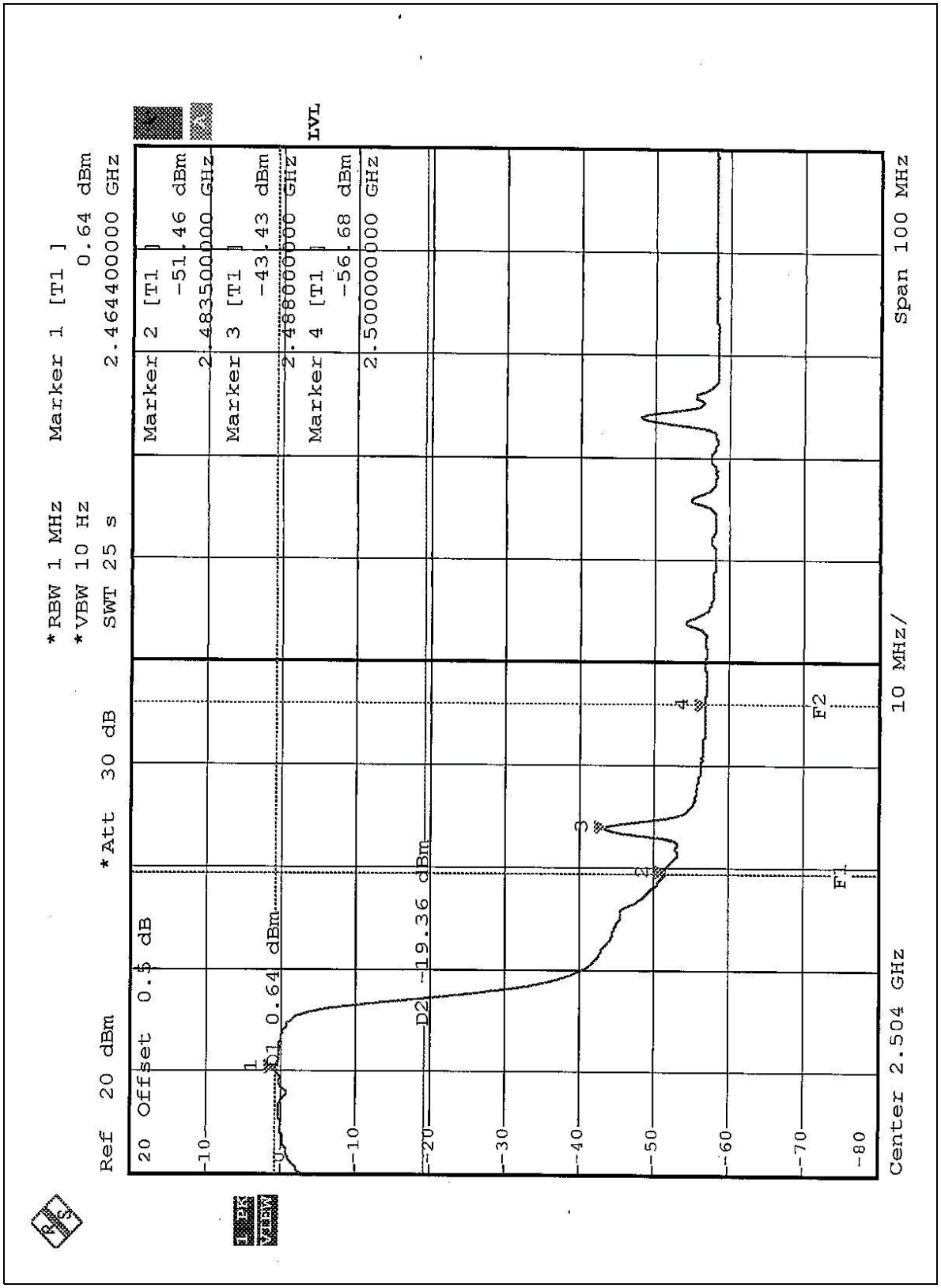
The spectrum plots are attached on the following 4 pages. D2 line indicates the highest level and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

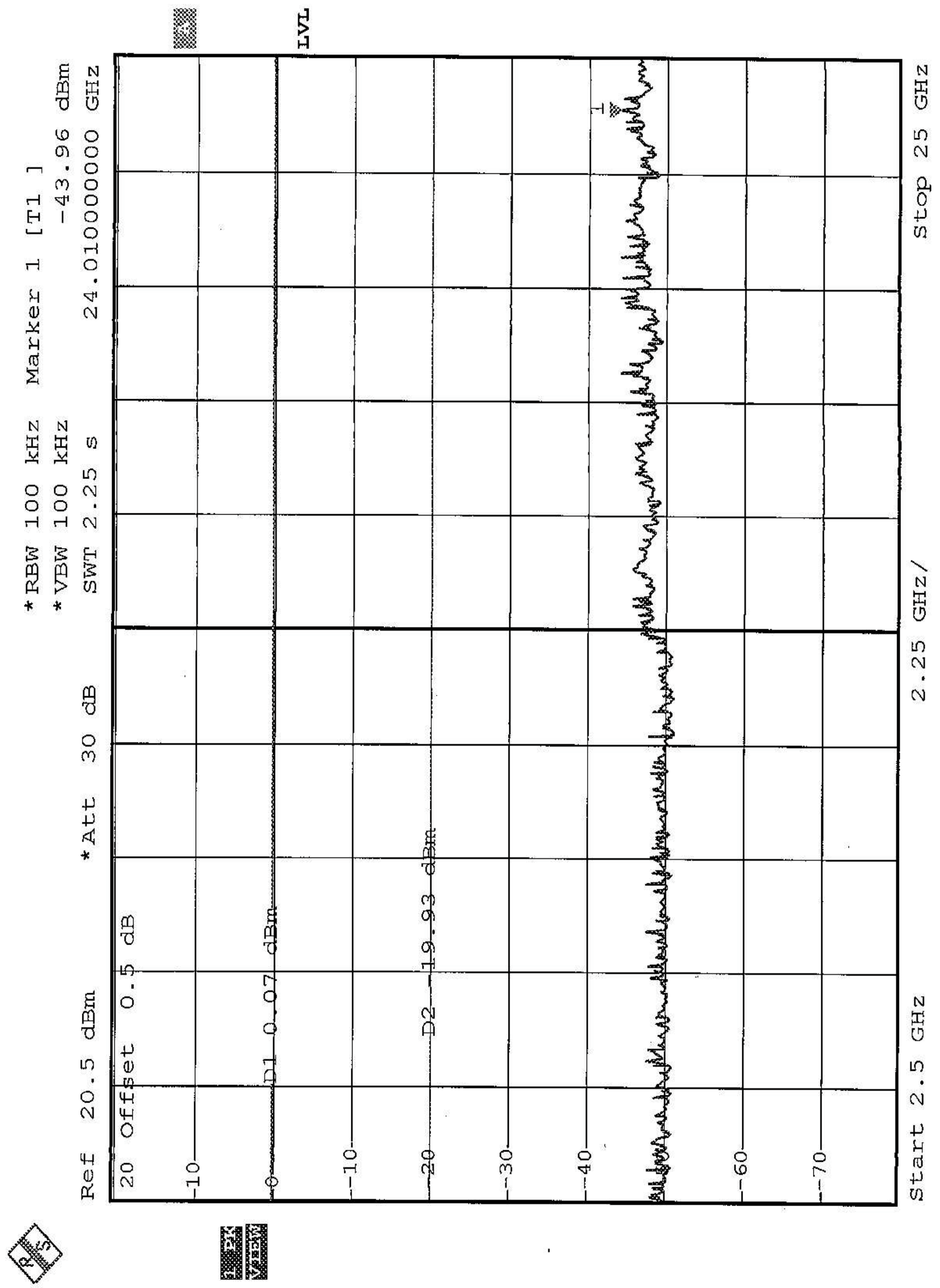
NOTE:
The band edge emission plot on the following 1 ~ 2 page shows 49.16dB delta between carrier maximum power and local maximum emission in restrict band (2.3580GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 97.70dBuV/m, so the maximum field strength in restrict band is 97.70-49.16=48.54dBuV/m which is under 54dBuV/m limit.

The band edge emission plot on the following 3 ~ 4 page shows 44.07dB delta between carrier maximum power and local maximum emission in restrict band (2.4880GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 96.80dBuV/m, so the maximum field strength in restrict band is 96.80-44.07=52.73dBuV/m which is under 54dBuV/m limit.


*RBW 1 MHz
*VBW 10 Hz
SWT 25 s
Marker 1 [T1]
0.07 dBm
2.415600000 GHz
*Att 30 dB
Ref 20 dBm
20 Offset 0.5 dB
Marker 2 [T1]
-38.98 dBm
2.399800000 GHz
Marker 3 [T1]
-52.45 dBm
Marker 4 [T1]
-49.09 dBm
2.358000000 GHz
LVL
D1 0.07 dBm
D2 -19.96 dBm
F1
F2
Center 2.37 GHz
10 MHz/
Span 100 MHz


Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
*RBW 100 kHz
*VBW 100 kHz
*SWT 115 ms
Marker 1 [T1]
-44.06 dBm
20.365000000 GHz
D1 0.47 dBm
D2 -20.47 dBm
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
LVL


Ref 20 dBm
20 Offset 0.5 dB
*Att 30 dB
SWT 25 s
*VBW 10 Hz
*RBW 1 MHz
Marker 1 [T1]
0.64 dBm
2.464400000 GHz
Marker 2 [T1]
-51.46 dBm
2.483500000 GHz
Marker 3 [T1]
-43.43 dBm
2.488000000 GHz
Marker 4 [T1]
-56.68 dBm
2.500000000 GHz
D1 0.64 dBm
D2 -19.36 dBm
F1
F2
Center 2.504 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.25 s
Marker 1 [T1]
-43.96 dBm
24.010000000 GHz
Ref 20.5 dBm
*Att 30 dB
20 Offset 0.5 dB
D1 0.07 dBm
D2 -19.93 dBm
LVL
1 PK
VIEW
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz

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 used in this product is Printed antenna without connector. And the maximum Gain of this antenna is 0dBi.

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST

RADIATED EMISSION TEST

6 INFORMATION ON THE TESTING LABORATORIES

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

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

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

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

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

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

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

Email: service@mail.adt.com.tw
Web Site: www.adt.com.tw

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

Report Format Version 1.0