



FCC TEST REPORT

REPORT NO.: RF920813R08

MODEL NO.: DWL-G520

RECEIVED: Aug. 13, 2003

TESTED: Aug. 7 ~ Sep. 4, 2003

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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0528
ILAC MRA



Lab Code: 200102-0



Table of Contents

1.	CERTIFICATION	4
2.	SUMMARY OF TEST RESULTS	5
3.	GENERAL INFORMATION	6
3.1	GENERAL DESCRIPTION OF EUT	6
3.2	DESCRIPTION OF TEST MODES	7
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	7
3.4	DESCRIPTION OF SUPPORT UNITS	8
4.	TEST TYPES AND RESULTS	9
4.1	CONDUCTED EMISSION MEASUREMENT	9
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	9
4.1.2	TEST INSTRUMENTS	9
4.1.3	TEST PROCEDURES	10
4.1.4	DEVIATION FROM TEST STANDARD	10
4.1.5	TEST SETUP	11
4.1.6	EUT OPERATING CONDITIONS	11
4.1.7	TEST RESULTS	12
4.2	RADIATED EMISSION MEASUREMENT	18
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	18
4.2.2	TEST INSTRUMENTS	19
4.2.3	TEST PROCEDURES	20
4.2.4	DEVIATION FROM TEST STANDARD	20
4.2.5	TEST SETUP	21
4.2.6	EUT OPERATING CONDITIONS	21
4.2.7	TEST RESULTS	22
4.2.8	TEST RESULTS – FOR CCK	23
4.2.9	TEST RESULTS – FOR OFDM	29
4.3	6dB BANDWIDTH MEASUREMENT	34
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	34
4.3.2	TEST INSTRUMENTS	34
4.3.3	TEST PROCEDURE	35
4.3.4	DEVIATION FROM TEST STANDARD	35
4.3.5	TEST SETUP	35
4.3.6	EUT OPERATING CONDITIONS	35
4.3.7	TEST RESULTS – FOR CCK	36
4.3.8	TEST RESULTS – FOR OFDM	40
4.4	MAXIMUM PEAK OUTPUT POWER	45
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	45
4.4.2	INSTRUMENTS	45
4.4.3	TEST PROCEDURES	46



4.4.4	DEVIATION FROM TEST STANDARD.....	46
4.4.5	TEST SETUP	46
4.4.6	EUT OPERATING CONDITIONS	46
4.4.7	TEST RESULTS – FOR CCK	47
4.4.8	TEST RESULTS – FOR OFDM	48
4.5	POWER SPECTRAL DENSITY MEASUREMENT	49
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	49
4.5.2	TEST INSTRUMENTS.....	49
4.5.3	TEST PROCEDURE	50
4.5.4	DEVIATION FROM TEST STANDARD.....	50
4.5.5	TEST SETUP	50
4.5.6	EUT OPERATING CONDITION.....	50
4.5.7	TEST RESULTS – FOR CCK	51
4.5.8	TEST RESULTS – FOR OFDM	55
4.6	BAND EDGES MEASUREMENT	60
4.6.1	LIMITS OF BAND EDGES MEASUREMENT.....	60
4.6.2	TEST INSTRUMENTS.....	60
4.6.3	TEST PROCEDURE	60
4.6.4	DEVIATION FROM TEST STANDARD.....	60
4.6.5	EUT OPERATING CONDITION.....	61
4.6.6	TEST RESULTS – FOR CCK	61
4.6.7	TEST RESULTS – FOR OFDM	64
4.7	ANTENNA REQUIREMENT	69
4.7.1	STANDARD APPLICABLE	69
4.7.2	ANTENNA CONNECTED CONSTRUCTION	69
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	70
6.	INFORMATION ON THE TESTING LABORATORIES	72



1. CERTIFICATION

PRODUCT : 2.4GHz Wireless PCI Adapter
BRAND NAME : D-Link
MODEL NO. : DWL-G520
TEST ITEM: ENIGNEERING SAMPLE
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 Aug. 7 ~ Sep. 4, 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: Landy Soong, **DATE:** Sep. 12, 2003
Landy Soong

APPROVED BY: Dr. Alan Lane / JVP, **DATE:** Sep. 12, 2003
Dr. Alan Lane / JVP



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 -18.19dB at 0.213MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit
15.247(c)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is -1.8dB at 2483.5MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20dB 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 Wireless PCI Adapter
MODEL NO.	DWL-G520
POWER SUPPLY	5VDC from host equipment
MODULATION	BPSK, QPSK, CCK, 16QAM, 64QAM
TRANSFER RATE	up to 54Mbps (Turbo mode: up to 108Mbps)
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
CHANNEL SPACING	5MHz
OUTPUT POWER	19.24dBm
DATA CABLE	NA
ANTENNA TYPE	Dipole antenna with 2dBi antenna gain
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
2. The EUT complies with IEEE 802.11g draft standards, and backwards compatible with IEEE 802.11b products.
3. For a more detailed features description, please refer to the manufacturer's specifications or User's Manual.



3.2 DESCRIPTION OF TEST MODES

For 802.11b and draft 802.11g: Eleven channels are provided to this EUT.

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

NOTE:

1. Below 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.
3. Transfer rate of 11Mbps with CCK technique and 6Mbps with OFDM technique, the worst case, was chosen for final test.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 2.4GHz Wireless PCI Adapter. 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	PERSONAL COMPUTER	HEWLETT PACKARD	HP Vectra XE310	SG14201716	FCC DOC APPROVED
2	MATRIX PRINTER	EPSON	LQ-300+	DCGY017079	FCC DOC APPROVED
3	MODEM	ACEEX	1414	980020569	IFAXDM1414
4	MONITER	ADI	CM100	026058T10200531	FCC DOC APPROVED
5	PS/2 KEYBOARD	FORWARD	FDA-104GA	FDKB 8110056	F4ZFDA-104G
6	MOUSE	DEXIN	A2P800A	80110016	NA

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.
4	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
5	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core
6	NA

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 (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	847124/029	Nov. 17, 2003
ROHDE & SCHWARZ LISN (for EUT)	ESHS-Z5	848773/004	Nov. 13, 2003
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 23, 2004
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 03, 2004
Terminator(for KYORITSU)	50	3	Apr. 11, 2004
Software	Cond-V2e	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in ADT Shielded Room No. A.
 3. The VCCI Con A Registration No. is C-817.



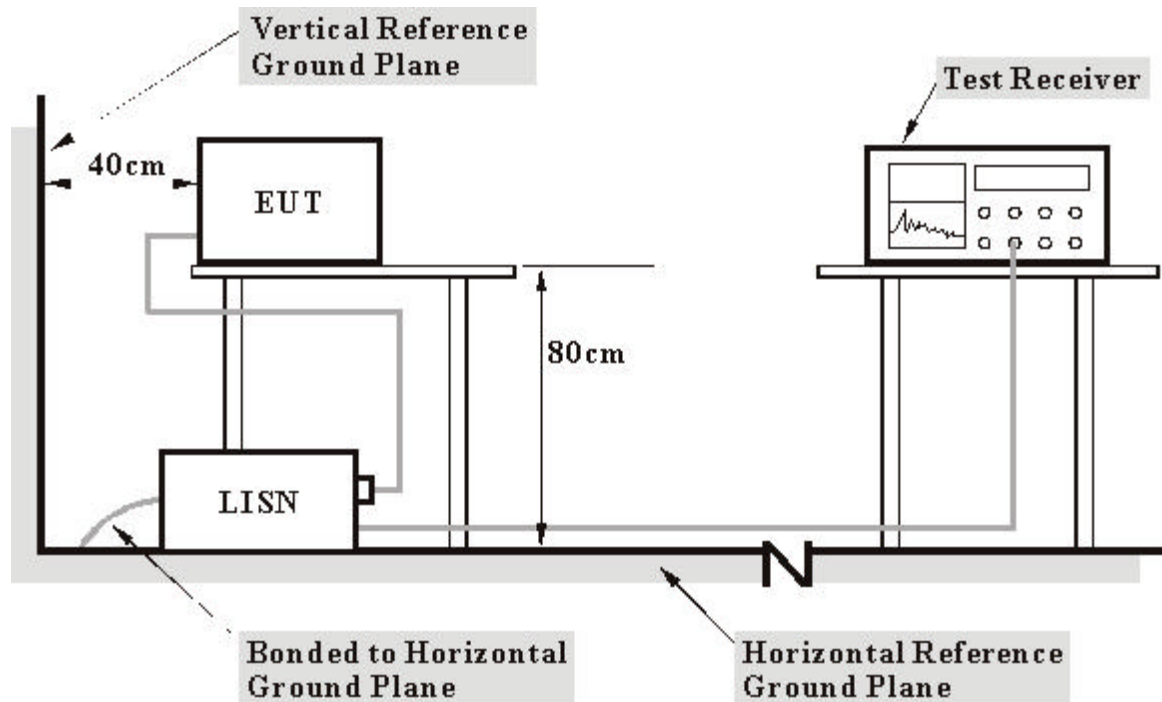
4.1.3 TEST PROCEDURES

- 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 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. Plug the EUT into the PCMCIA slot of the a computer system placed on 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 printer, and the printer prints them on paper.

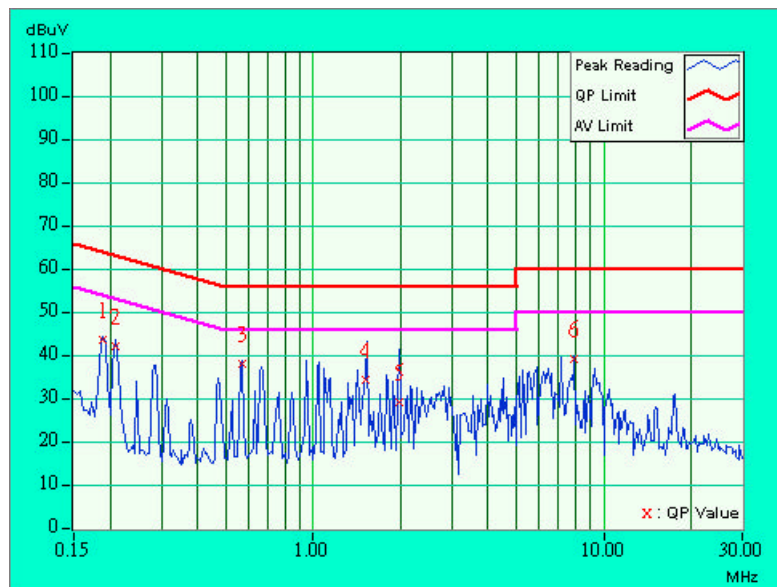


4.1.7 TEST RESULTS

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 57%RH, 991 hPa	TESTED BY: Tony Chen	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
	1	0.189	0.20	43.11	-	43.31	-	64.08	54.08	-20.77
2	0.209	0.20	41.67	-	41.87	-	63.26	53.26	-21.39	-
3	0.568	0.23	37.56	-	37.79	-	56.00	46.00	-18.21	-
4	1.524	0.30	33.93	-	34.23	-	56.00	46.00	-21.77	-
5	1.988	0.30	28.59	-	28.89	-	56.00	46.00	-27.11	-
6	7.894	0.66	38.51	-	39.17	-	60.00	50.00	-20.83	-

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

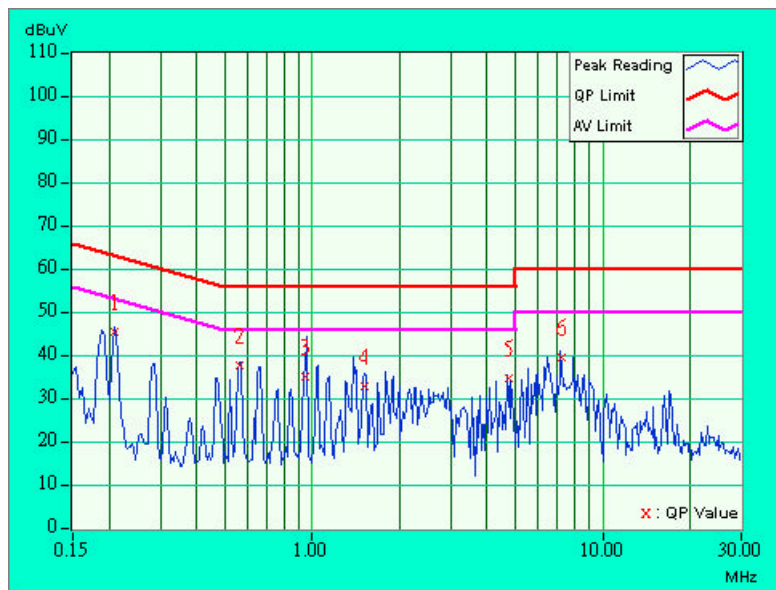




EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 57%RH, 991 hPa	TESTED BY: Tony Chen	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.209	0.20	45.12	-	45.32	-	63.26
2	0.564	0.23	37.33	-	37.56	-	56.00	46.00	-18.44	-
3	0.950	0.29	34.70	-	34.99	-	56.00	46.00	-21.01	-
4	1.510	0.30	32.56	-	32.86	-	56.00	46.00	-23.14	-
5	4.729	0.44	34.38	-	34.82	-	56.00	46.00	-21.18	-
6	7.187	0.56	39.22	-	39.78	-	60.00	50.00	-20.22	-

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

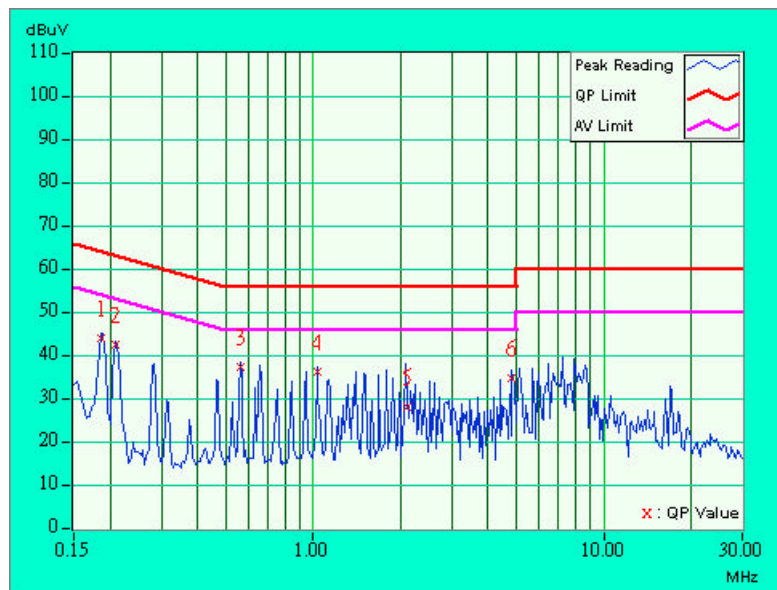




EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 57%RH, 991 hPa	TESTED BY: Tony Chen	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.185	0.20	43.51	-	43.71	-	64.25
2	0.209	0.20	42.15	-	42.35	-	63.26	53.26	-20.91	-
3	0.564	0.23	37.04	-	37.27	-	56.00	46.00	-18.73	-
4	1.033	0.30	35.92	-	36.22	-	56.00	46.00	-19.78	-
5	2.104	0.31	27.84	-	28.15	-	56.00	46.00	-27.85	-
6	4.840	0.46	34.49	-	34.95	-	56.00	46.00	-21.05	-

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

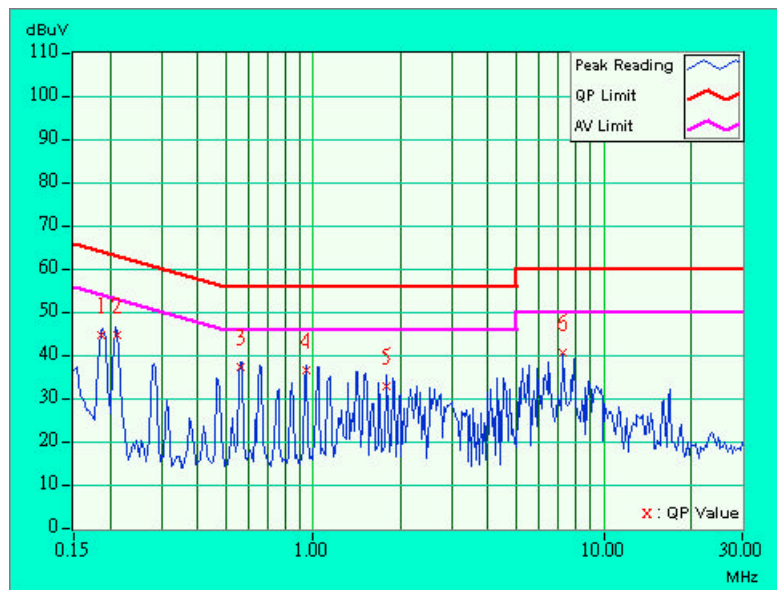




EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 57%RH, 991 hPa	TESTED BY: Tony Chen	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.185	0.20	44.44	-	44.64	-	64.25
2	0.213	0.20	44.20	-	44.40	-	63.11	53.11	-18.71	-
3	0.564	0.23	36.94	-	37.17	-	56.00	46.00	-18.83	-
4	0.947	0.29	36.09	-	36.38	-	56.00	46.00	-19.62	-
5	1.787	0.30	32.56	-	32.86	-	56.00	46.00	-23.14	-
6	7.191	0.56	40.17	-	40.73	-	60.00	50.00	-19.27	-

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

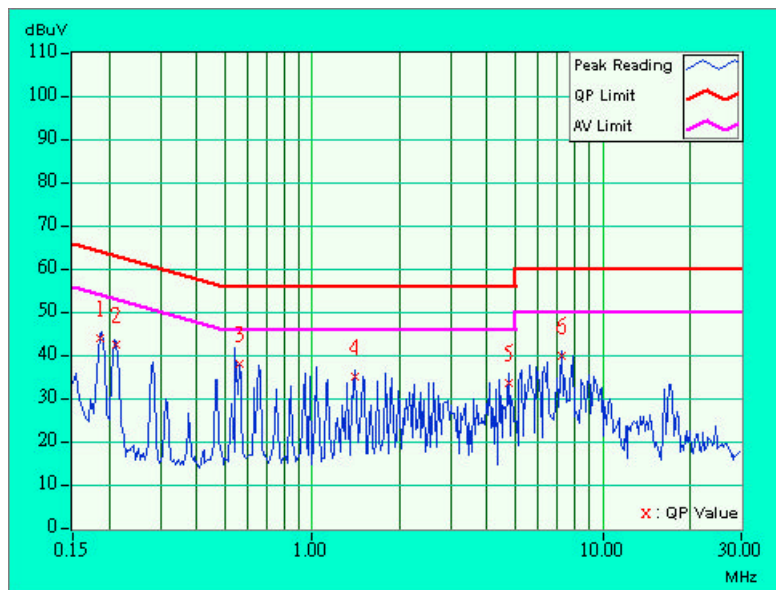




EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 57%RH, 991 hPa	TESTED BY: Tony Chen	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.185	0.20	43.55	-	43.75	-	64.25
2	0.213	0.20	41.90	-	42.10	-	63.11	53.11	-21.01	-
3	0.562	0.23	37.49	-	37.72	-	56.00	46.00	-18.28	-
4	1.404	0.30	34.69	-	34.99	-	56.00	46.00	-21.01	-
5	4.738	0.45	33.07	-	33.52	-	56.00	46.00	-22.48	-
6	7.195	0.61	39.51	-	40.12	-	60.00	50.00	-19.88	-

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

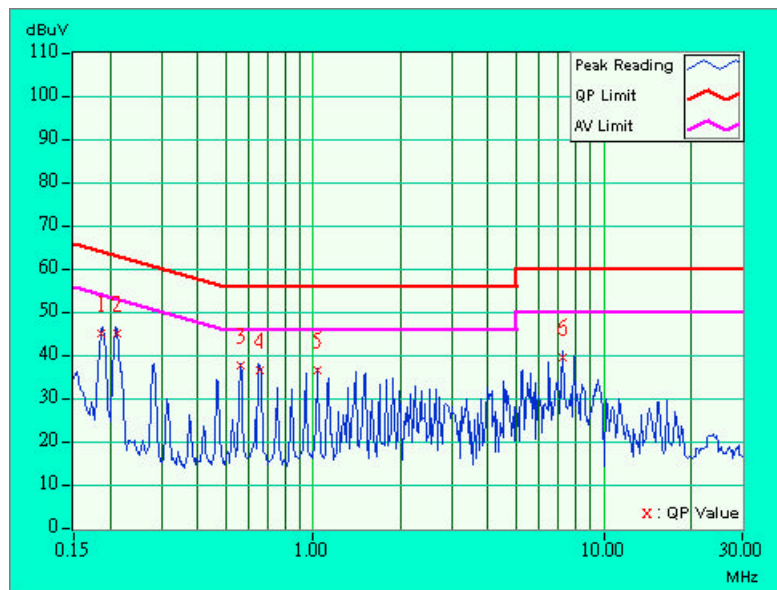




EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 57%RH, 991 hPa	TESTED BY: Tony Chen	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.185	0.20	44.64	-	44.84	-	64.25
2	0.213	0.20	44.72	-	44.92	-	63.11	53.11	-18.19	-
3	0.564	0.23	37.25	-	37.48	-	56.00	46.00	-18.52	-
4	0.659	0.24	36.17	-	36.41	-	56.00	46.00	-19.59	-
5	1.032	0.30	36.06	-	36.36	-	56.00	46.00	-19.64	-
6	7.195	0.56	39.17	-	39.73	-	60.00	50.00	-20.27	-

- 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.
 - 0 The emission levels of other frequencies were very low against the limit.
 - 0 Margin value = Emission level – Limit value
 - 0 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	8594ER	3829U04676	Jul. 14, 2004
ADVANTEST Spectrum Analyzer	R3271A	85060311	May 21, 2004
CHASE RF Pre_Amplifier	CPA9232	1057	Apr. 24, 2004
HP Pre_Amplifier	8449B	3008A01281	June 27, 2004
ROHDE & SCHWARZ Test Receiver	ESVS 10	849231 /019	Nov. 03, 2003
CHASE Broadband Antenna	CBL6111c	2730	Jul 17, 2004
Schwarzbeck Horn_Antenna	3115	5619	Jul. 17, 2004
SCHWARZBECK Tunable Dipole Antenna	UHAP	897	Mar. 07, 2005
SCHWARZBECK Tunable Dipole Antenna	VHAP	880	Mar. 07, 2005
RF Switches (ARNITSU)	CS-201	1565157	Dec. 01, 2003
RF CABLE (Chaintek) 1GHz-20GHz	SF102	22054-2	Feb. 10. 2004
RF Cable(RICHTEC)	9913-30M	STCCAB-30M- 1GHz-021	Nov. 5, 2003
Software	AS60P8	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Dipole Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.

2. * = These equipment are used for the final measurement.

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

The test was performed in ADT Open Site No. C.

The FCC Site Registration No. is 656396.

6. The VCCI Site Registration No. is R-1626.

7. The CANADA Site Registration No. is IC 3789-C.



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 the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

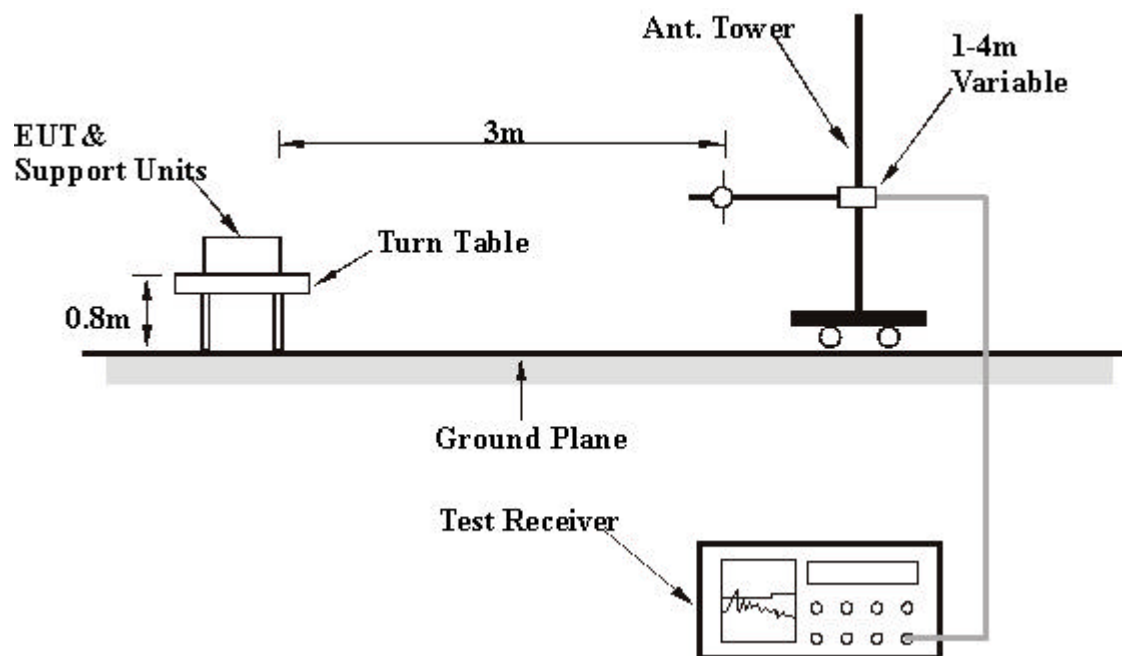
NOTE:

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

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 11	FREQUENCY RANGE	Below 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	36.24	26.4 QP	40.00	-13.60	1.00 H	291	10.40	16.00
2	65.36	24.6 QP	40.00	-15.40	1.69 H	287	19.30	5.30
3	122.68	25.0 QP	43.50	-18.50	1.66 H	182	13.20	11.80
4	133.32	30.0 QP	43.50	-13.50	1.22 H	45	18.30	11.70
5	165.27	28.7 QP	43.50	-14.80	1.68 H	57	18.80	10.00
6	199.86	29.6 QP	43.50	-13.90	1.24 H	356	20.50	9.00
7	265.80	32.0 QP	46.00	-14.00	1.25 H	8	18.10	13.90
8	426.30	27.2 QP	46.00	-18.80	1.28 H	111	9.30	17.90
9	479.85	24.1 QP	46.00	-21.90	1.26 H	312	5.30	18.90
10	500.10	30.0 QP	46.00	-16.00	1.02 H	9	10.70	19.30

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	46.19	25.3 QP	40.00	-14.70	1.02 V	10	14.70	10.60
2	50.26	29.3 QP	40.00	-10.70	1.08 V	9	20.90	8.40
3	124.20	28.7 QP	43.50	-14.80	1.36 V	24	16.70	12.00
4	133.50	32.6 QP	43.50	-10.90	1.49 V	314	20.90	11.70
5	164.29	26.5 QP	43.50	-17.00	1.00 V	291	16.50	10.00
6	200.35	28.9 QP	43.50	-14.60	1.40 V	111	19.90	9.00
7	276.24	29.9 QP	46.00	-16.10	1.85 V	49	16.40	13.50
8	298.64	29.6 QP	46.00	-16.40	1.42 V	1	15.40	14.20
9	352.63	30.0 QP	46.00	-16.00	1.36 V	156	14.50	15.50
10	481.23	34.7 QP	46.00	-11.30	1.02 V	4	15.80	18.90
11	499.86	21.3 QP	46.00	-24.70	1.11 V	95	2.00	19.30

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.



4.2.8 TEST RESULTS – FOR CCK

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1592.00	44.2 PK	74.00	-29.80	1.68 H	5	16.10	28.10
2	2328.00	46.4 PK	74.00	-27.60	1.28 H	5	16.20	30.20
3	2390.00	51.8 PK	74.00	-22.20	1.66 H	32	21.40	30.40
3	2390.00	40.3 AV	54.00	-13.70	1.66 H	32	9.90	30.40
4	*2412.00	107.5 PK			1.52 H	1	77.00	30.50
4	*2412.00	100.1 AV			1.52 H	1	69.60	30.50
5	2688.00	38.4 PK	74.00	-35.60	1.08 H	7	7.20	31.30
6	4824.00	46.3 PK	74.00	-27.70	1.54 H	350	10.10	36.20
7	7236.00	44.7 PK	74.00	-29.30	1.13 H	39	3.00	41.70
8	9648.00	47.0 PK	74.00	-27.00	1.82 H	54	2.10	44.90

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1591.00	50.0 PK	74.00	-24.00	1.41 V	9	21.90	28.10
2	2328.00	56.6 PK	74.00	-17.40	1.18 V	0	26.30	30.20
2	2328.00	44.5 AV	54.00	-9.50	1.18 V	0	14.30	30.20
3	2390.00	60.1 PK	74.00	-13.90	1.08 V	1	29.70	30.40
3	2390.00	50.7 AV	54.00	-3.30	1.08 V	1	20.20	30.40
4	*2412.00	115.5 PK			1.48 V	1	84.90	30.50
4	*2412.00	108.4 AV			1.48 V	1	77.80	30.50
5	2688.00	53.7 PK	74.00	-20.30	1.65 V	21	22.40	31.30
5	2688.00	51.9 AV	54.00	-2.10	1.65 V	21	20.60	31.30
6	4824.00	53.6 PK	74.00	-20.40	1.25 V	30	17.40	36.20
6	4824.00	42.5 AV	54.00	-11.50	1.25 V	30	6.30	36.20
7	7236.00	50.2 PK	74.00	-23.80	1.54 V	7	8.50	41.70
8	9648.00	49.0 PK	74.00	-25.00	1.54 V	5	4.10	44.90

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 The limit value is defined as per 15.247
- 6 “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1590.00	44.1 PK	74.00	-29.90	1.52 H	40	16.00	28.10
2	2390.00	50.4 PK	74.00	-23.60	1.59 H	6	20.00	30.40
3	*2437.00	108.9 PK			1.25 H	23	78.20	30.70
3	*2437.00	100.3 AV			1.25 H	23	69.60	30.70
4	2483.50	50.6 PK	74.00	-23.40	1.43 H	329	19.70	31.00
5	2688.00	38.5 PK	74.00	-35.50	1.60 H	358	7.20	31.30
6	4874.00	45.5 PK	74.00	-28.50	1.00 H	1	9.00	36.50
7	7311.00	43.8 PK	74.00	-30.20	1.64 H	14	2.10	41.80
8	9748.00	47.7 PK	74.00	-26.30	1.20 H	15	3.10	44.60

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 The limit value is defined as per 15.247
- 6 “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1592.00	50.1 PK	74.00	-23.90	1.15 V	2	22.00	28.10
2	2390.00	55.6 PK	74.00	-18.40	1.45 V	34	25.20	30.40
2	2390.00	43.9 AV	54.00	-10.10	1.45 V	34	13.50	30.40
3	*2437.00	115.6 PK			1.42 V	21	84.90	30.70
3	*2437.00	108.9 AV			1.42 V	21	78.20	30.70
4	2483.50	52.3 PK	74.00	-21.70	1.55 V	10	21.40	31.00
4	2483.50	43.9 AV	54.00	-10.10	1.55 V	10	12.90	31.00
5	2688.00	45.1 PK	74.00	-28.90	1.40 V	22	13.80	31.30
6	4874.00	55.3 PK	74.00	-18.70	1.04 V	11	18.80	36.50
6	4874.00	43.7 AV	54.00	-10.30	1.04 V	11	7.20	36.50
7	7311.00	51.3 PK	74.00	-22.70	1.14 V	5	9.60	41.80
7	7311.00	44.0 AV	54.00	-10.00	1.14 V	5	2.30	41.80
8	9748.00	50.0 PK	74.00	-24.00	1.08 V	5	5.40	44.60

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1592.00	43.7 PK	74.00	-30.30	1.62 H	16	15.50	28.10
2	*2462.00	107.8 PK			1.41 H	350	77.00	30.80
2	*2462.00	100.8 AV			1.41 H	350	70.00	30.80
3	2483.50	54.5 PK	74.00	-19.50	1.52 H	4	23.50	31.00
3	2483.50	43.3 AV	54.00	-10.70	1.52 H	4	12.40	31.00
4	2688.00	39.4 PK	74.00	-34.60	1.26 H	346	8.20	31.30
5	4924.00	47.9 PK	74.00	-26.10	1.36 H	9	11.20	36.70
6	7386.00	45.2 PK	74.00	-28.80	1.87 H	45	3.40	41.80
7	9848.00	46.7 PK	74.00	-27.30	1.66 H	21	2.40	44.40

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M								
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	1591.00	50.1 PK	74.00	-23.90	1.68 V	359	22.00	28.10
2	*2462.00	115.8 PK			1.27 V	28	85.00	30.80
2	*2462.00	108.8 AV			1.27 V	28	78.00	30.80
3	2483.50	59.6 PK	74.00	-14.40	1.07 V	9	28.60	31.00
3	2483.50	47.2 AV	54.00	-6.80	1.07 V	9	16.20	31.00
4	2688.00	44.8 PK	74.00	-29.20	1.37 V	35	13.50	31.30
5	4924.00	55.5 PK	74.00	-18.50	1.03 V	321	18.80	36.70
5	4924.00	43.9 AV	54.00	-10.10	1.03 V	321	7.30	36.70
6	7386.00	51.4 PK	74.00	-22.60	1.52 V	21	9.60	41.80
6	7386.00	43.2 AV	54.00	-10.80	1.52 V	21	1.40	41.80
7	9848.00	48.9 PK	74.00	-25.10	1.05 V	8	4.60	44.40

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



4.2.9 TEST RESULTS – FOR OFDM

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel1 (NORMAL MODE)	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1592.00	44.7 PK	74.00	-29.30	1.05 H	20	16.50	28.10
2	2328.00	46.9 PK	74.00	-27.10	1.79 H	21	16.70	30.20
3	2390.00	55.4 PK	74.00	-18.60	1.22 H	36	25.00	30.40
3	2390.00	43.7 AV	54.00	-10.30	1.22 H	36	13.30	30.40
4	*2412.00	101.2 PK			1.67 H	5	70.70	30.50
4	*2412.00	92.7 AV			1.67 H	5	62.10	30.50
5	2688.00	40.3 PK	74.00	-33.70	1.55 H	19	9.00	31.30
6	4824.00	42.0 PK	74.00	-32.00	1.45 H	9	5.80	36.20
7	7236.00	43.4 PK	74.00	-30.60	1.66 H	3	1.70	41.70
8	9648.00	50.1 PK	74.00	-23.90	1.32 H	9	5.20	44.90

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel1 (NORMAL MODE)	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1591.00	50.0 PK	74.00	-24.00	1.41 V	9	21.90	28.10
2	2328.00	56.6 PK	74.00	-17.40	1.18 V	0	26.30	30.20
2	2328.00	44.5 AV	54.00	-9.50	1.18 V	0	14.30	30.20
3	2390.00	62.0 PK	74.00	-12.00	1.26 V	30	31.60	30.40
3	2390.00	51.9 AV	54.00	-2.10	1.26 V	30	21.50	30.40
4	2412.00	108.6 PK	74.00	34.60	1.24 V	23	78.10	30.50
4	2412.00	100.9 AV	54.00	46.90	1.24 V	23	70.40	30.50
5	2688.00	46.9 PK	74.00	-27.10	1.54 V	22	15.60	31.30
6	4824.00	51.9 PK	74.00	-22.10	1.54 V	21	15.70	36.20
6	4824.00	40.5 AV	54.00	-13.50	1.54 V	21	4.30	36.20
7	7236.00	50.8 PK	74.00	-23.20	1.47 V	10	9.10	41.70
8	9648.00	48.2 PK	74.00	-25.80	1.09 V	5	3.30	44.90

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel6 (NORMAL MODE)	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1590.00	45.1 PK	74.00	-28.90	1.45 H	24	17.00	28.10
2	2390.00	52.0 PK	74.00	-22.00	1.47 H	6	21.60	30.40
2	2390.00	40.6 AV	54.00	-13.40	1.47 H	6	10.20	30.40
3	*2437.00	101.7 PK			1.58 H	44	71.00	30.70
3	*2437.00	92.8 AV			1.58 H	44	62.10	30.70
4	2483.50	48.9 PK	74.00	-25.10	1.39 H	348	17.90	31.00
5	2687.00	41.3 PK	74.00	-32.70	1.49 H	15	10.10	31.30
6	4874.00	42.3 PK	74.00	-31.70	1.06 H	4	5.80	36.50
7	7311.00	46.9 PK	74.00	-27.10	1.49 H	32	5.20	41.80
8	9748.00	48.0 PK	74.00	-26.00	1.22 H	8	3.40	44.60

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	1590.00	51.7 PK	74.00	-22.30	1.52 V	15	23.60	28.10
1	1590.00	41.2 AV	54.00	-12.80	1.52 V	15	13.10	28.10
2	2390.00	55.2 PK	74.00	-18.80	1.76 V	2	24.80	30.40
2	2390.00	43.6 AV	54.00	-10.40	1.76 V	2	13.20	30.40
3	*2437.00	108.9 PK			1.25 V	41	78.20	30.70
3	*2437.00	100.6 AV			1.25 V	41	69.90	30.70
4	2483.50	56.5 PK	74.00	-17.50	1.09 V	359	25.50	31.00
4	2483.50	44.6 AV	54.00	-9.40	1.09 V	359	13.60	31.00
5	2688.00	48.6 PK	74.00	-25.40	1.25 V	29	17.40	31.30
6	4874.00	49.5 PK	74.00	-24.50	1.59 V	13	13.00	36.50
7	7311.00	51.1 PK	74.00	-22.90	1.41 V	5	9.40	41.80
7	7311.00	41.2 AV	54.00	-12.80	1.41 V	5	-0.50	41.80
8	9748.00	48.4 PK	74.00	-25.60	1.52 V	21	3.70	44.60

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel11 (NORMAL MODE)	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1592.00	46.4 PK	74.00	-27.60	1.58 H	349	18.30	28.10
2	*2462.00	99.8 PK			1.49 H	15	69.00	30.80
2	*2462.00	92.1 AV			1.49 H	15	61.20	30.80
3	2483.50	55.0 PK	74.00	-19.00	1.63 H	32	24.00	31.00
3	2483.50	44.6 AV	54.00	-9.40	1.63 H	32	13.70	31.00
4	2688.00	38.6 PK	74.00	-35.40	1.42 H	15	7.40	31.30
5	4924.00	41.6 PK	74.00	-32.40	1.68 H	24	4.90	36.70
6	7386.00	44.7 PK	74.00	-29.30	1.01 H	2	2.90	41.80
7	9848.00	46.8 PK	74.00	-27.20	1.00 H	9	2.50	44.40

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1592.00	52.1 PK	74.00	-21.90	1.75 V	356	24.00	28.10
1	1592.00	41.1 AV	54.00	-12.90	1.75 V	356	13.00	28.10
2	*2462.00	107.8 PK			1.26 V	24	77.00	30.80
2	*2462.00	99.9 AV			1.26 V	24	69.10	30.80
3	2483.50	62.4 PK	74.00	-11.60	1.56 V	32	31.50	31.00
3	2483.50	52.2 AV	54.00	-1.80	1.56 V	32	21.20	31.00
4	2688.00	46.6 PK	74.00	-27.40	1.09 V	5	15.40	31.30
5	4924.00	52.3 PK	74.00	-21.70	1.63 V	30	15.60	36.70
5	4924.00	41.9 AV	54.00	-12.10	1.63 V	30	5.30	36.70
6	7386.00	52.0 PK	74.00	-22.00	1.55 V	9	10.20	41.80
6	7386.00	42.8 AV	54.00	-11.20	1.55 V	9	1.00	41.80
7	9848.00	48.3 PK	74.00	-25.70	1.34 V	21	3.90	44.40

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
MODE	Channel6 (TURBO MODE)	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 59%RH, 991 hPa	TESTED BY: Eric Lee	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1590.00	44.3 PK	74.00	-29.70	1.45 H	213	16.20	28.10
2	2390.00	50.4 PK	74.00	-23.60	1.86 H	326	20.00	30.40
3	*2437.00	96.6 PK			1.39 H	95	65.90	30.70
3	*2437.00	87.9 AV			1.39 H	95	57.20	30.70
4	2483.50	48.0 PK	74.00	-26.00	1.45 H	210	17.00	31.00
5	2687.00	41.3 PK	74.00	-32.70	1.49 H	15	10.10	31.30
6	4874.00	42.3 PK	74.00	-31.70	1.06 H	4	5.80	36.50
7	7311.00	46.0 PK	74.00	-28.00	1.42 H	208	4.20	41.80
8	9748.00	47.6 PK	74.00	-26.40	1.08 H	85	3.00	44.60

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	1590.00	52.7 PK	74.00	-21.30	1.65 V	333	24.60	28.10
1	1590.00	42.4 AV	54.00	-11.60	1.65 V	333	14.20	28.10
2	2390.00	51.6 PK	74.00	-22.40	1.47 V	354	21.20	30.40
2	2390.00	42.7 AV	54.00	-11.30	1.47 V	354	12.20	30.40
3	*2437.00	103.2 PK			1.14 V	54	72.50	30.70
3	*2437.00	94.9 AV			1.14 V	54	64.20	30.70
4	2483.50	55.5 PK	74.00	-18.50	1.44 V	154	24.60	31.00
4	2483.50	43.5 AV	54.00	-10.50	1.44 V	154	12.50	31.00
5	2688.00	50.2 PK	74.00	-23.80	1.65 V	222	18.90	31.30
6	4874.00	50.8 PK	74.00	-23.20	1.25 V	1	14.30	36.50
7	7311.00	50.2 PK	74.00	-23.80	1.37 V	52	8.50	41.80
8	9748.00	48.6 PK	74.00	-25.40	1.61 V	123	4.00	44.60

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. The limit value is defined as per 15.247
6. “ * “ : Fundamental frequency



4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

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

NOTE:

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

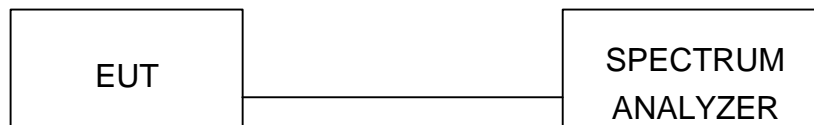
4.3.3 TEST PROCEDURE

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 6 dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

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



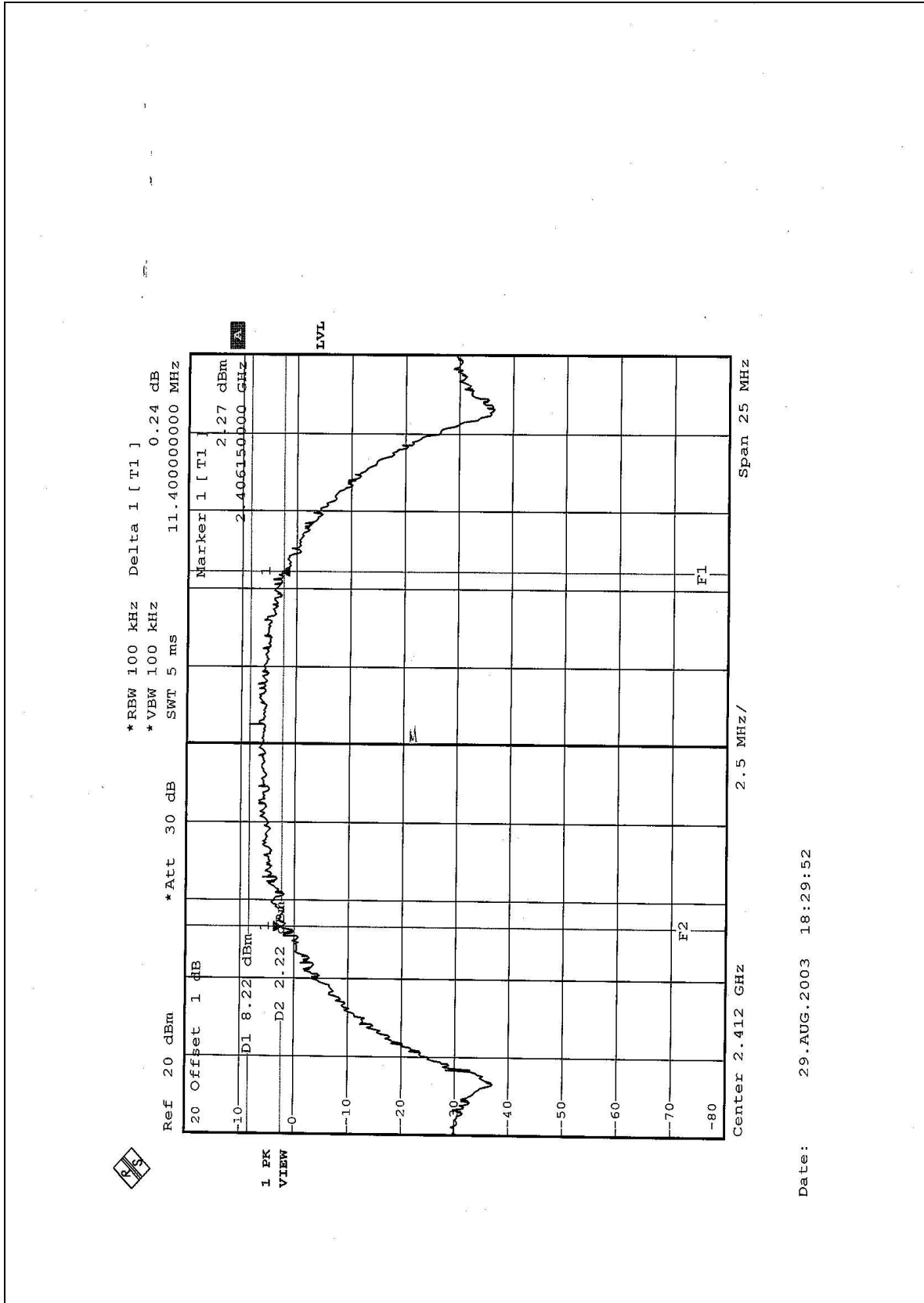
4.3.7 TEST RESULTS – FOR CCK

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58RH, 991 hPa
TESTED BY: Eric Lee			

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.40	0.5	PASS
6	2437	12.05	0.5	PASS
11	2462	11.50	0.5	PASS



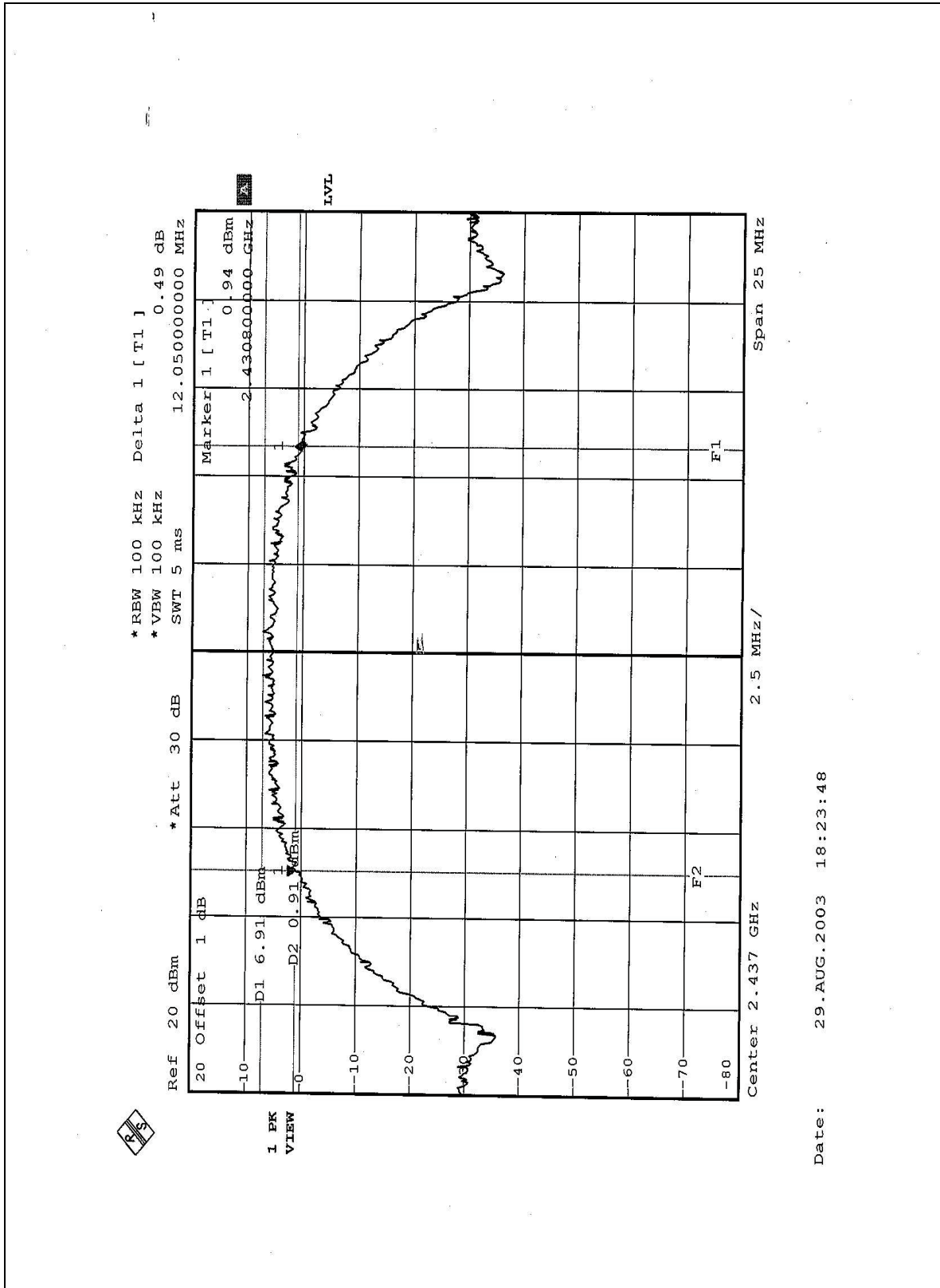
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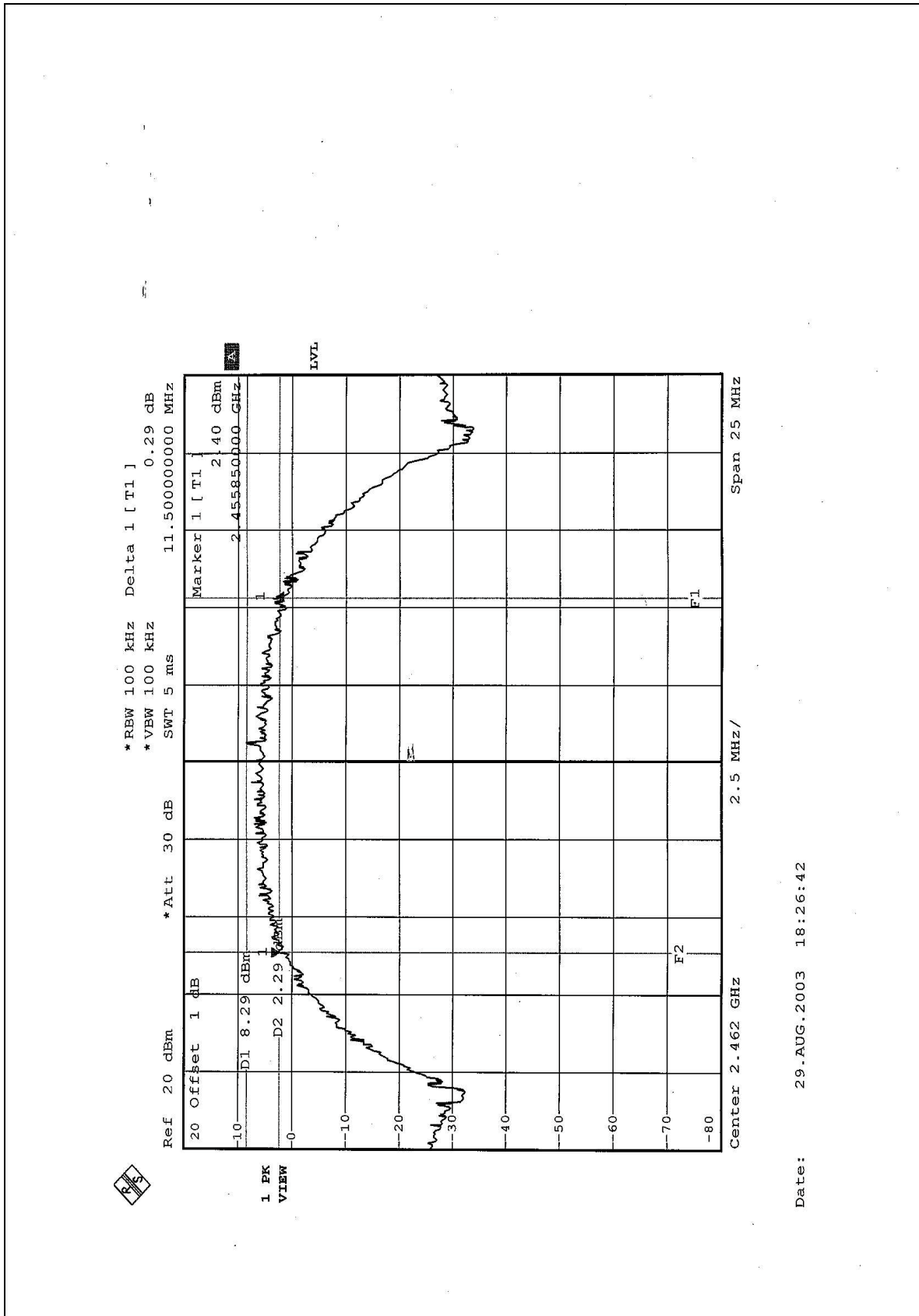
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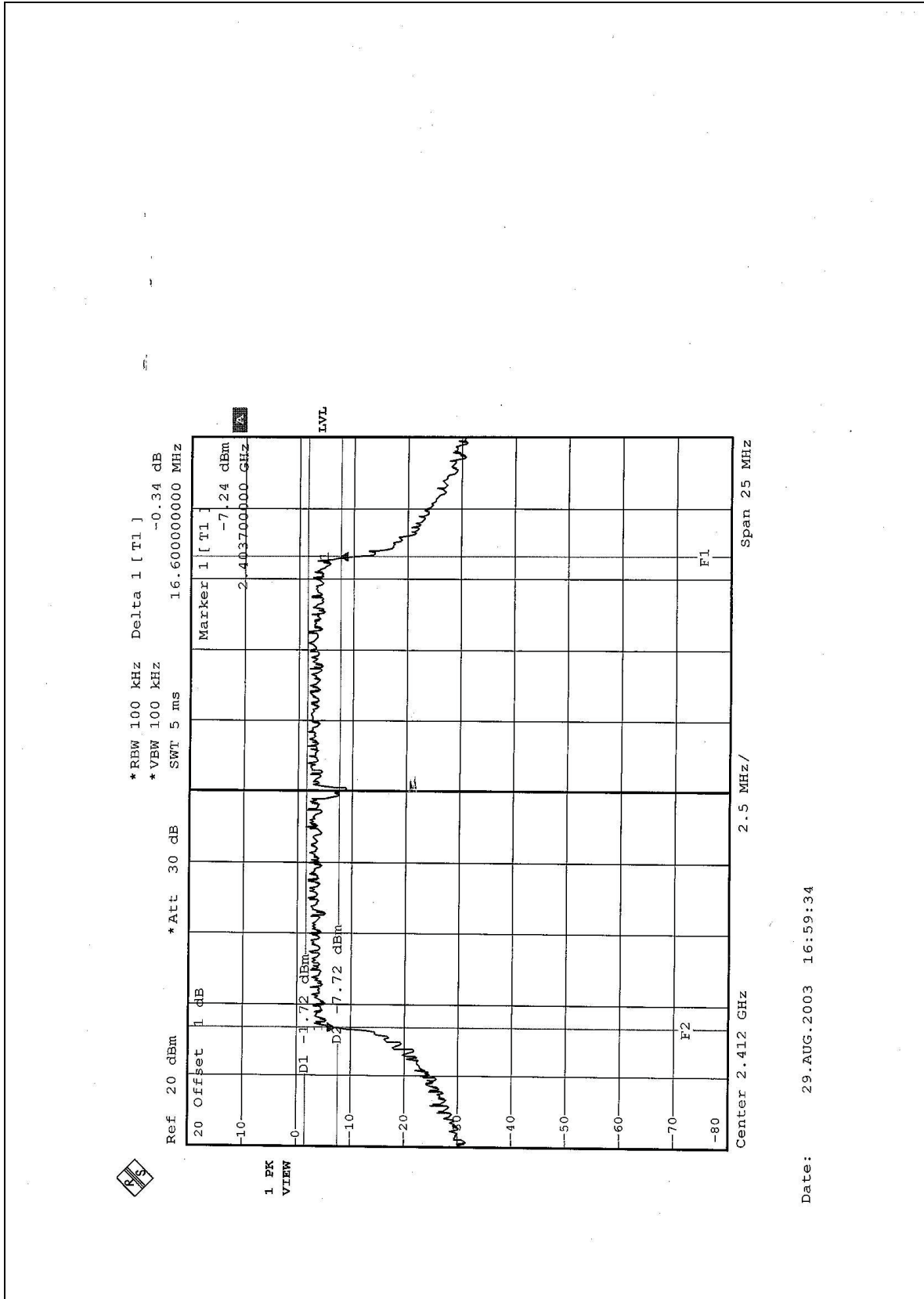
4.3.8 TEST RESULTS – FOR OFDM

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58RH, 991 hPa
TESTED BY: Eric Lee			

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.60	0.5	PASS
6	2437	16.55	0.5	PASS
11	2462	16.55	0.5	PASS
Turbo Mode 6	2437	31.40	0.5	PASS



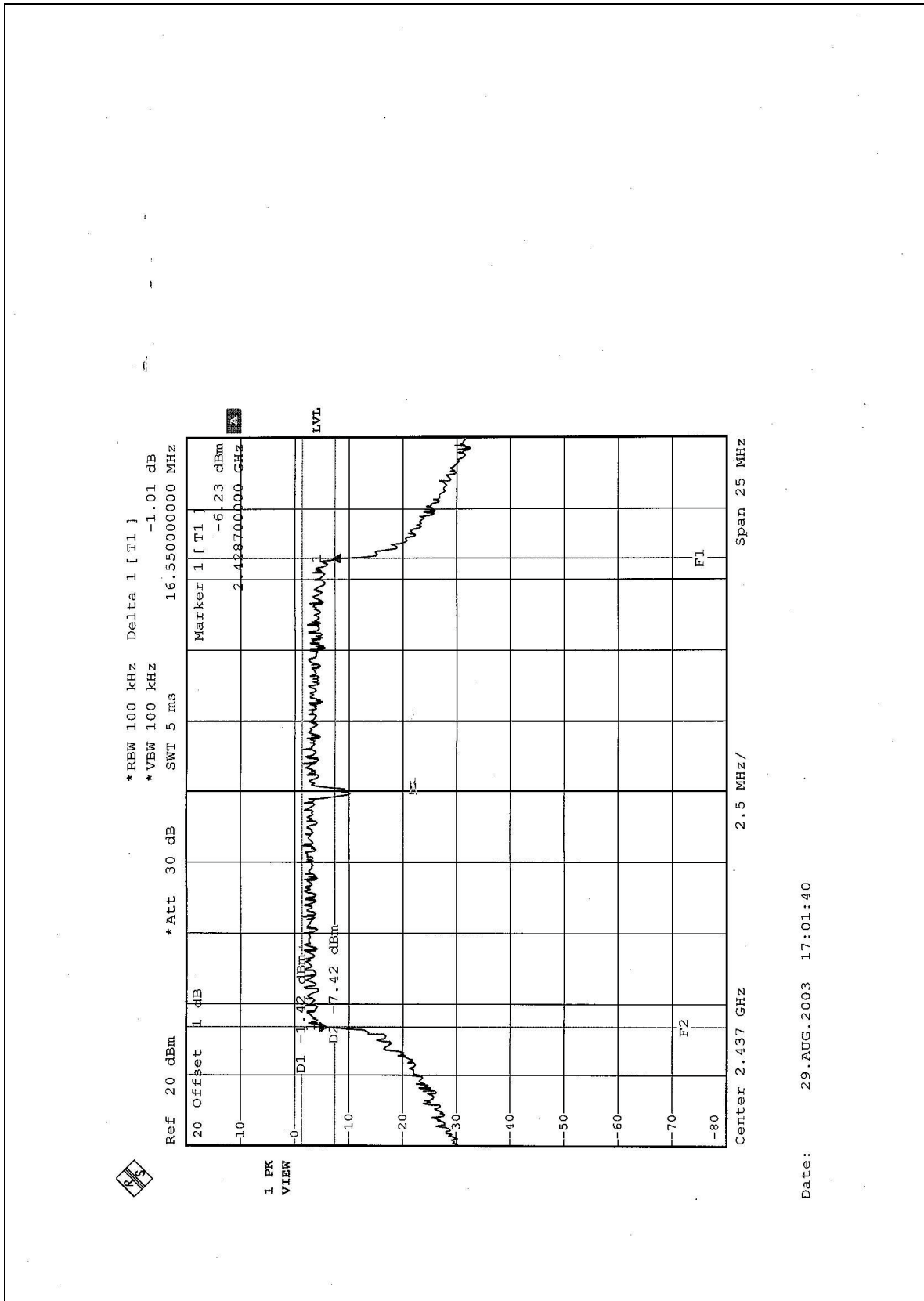
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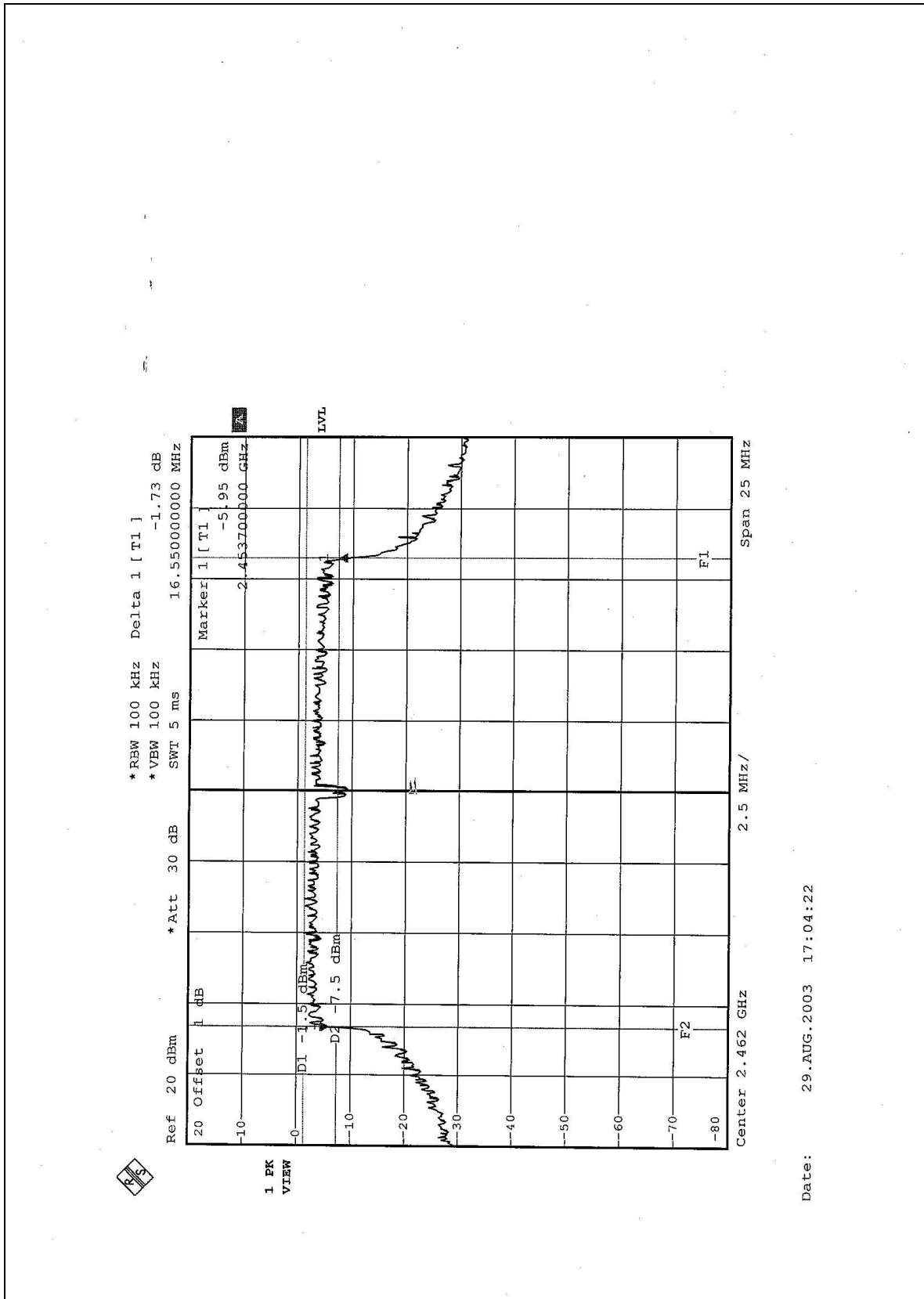
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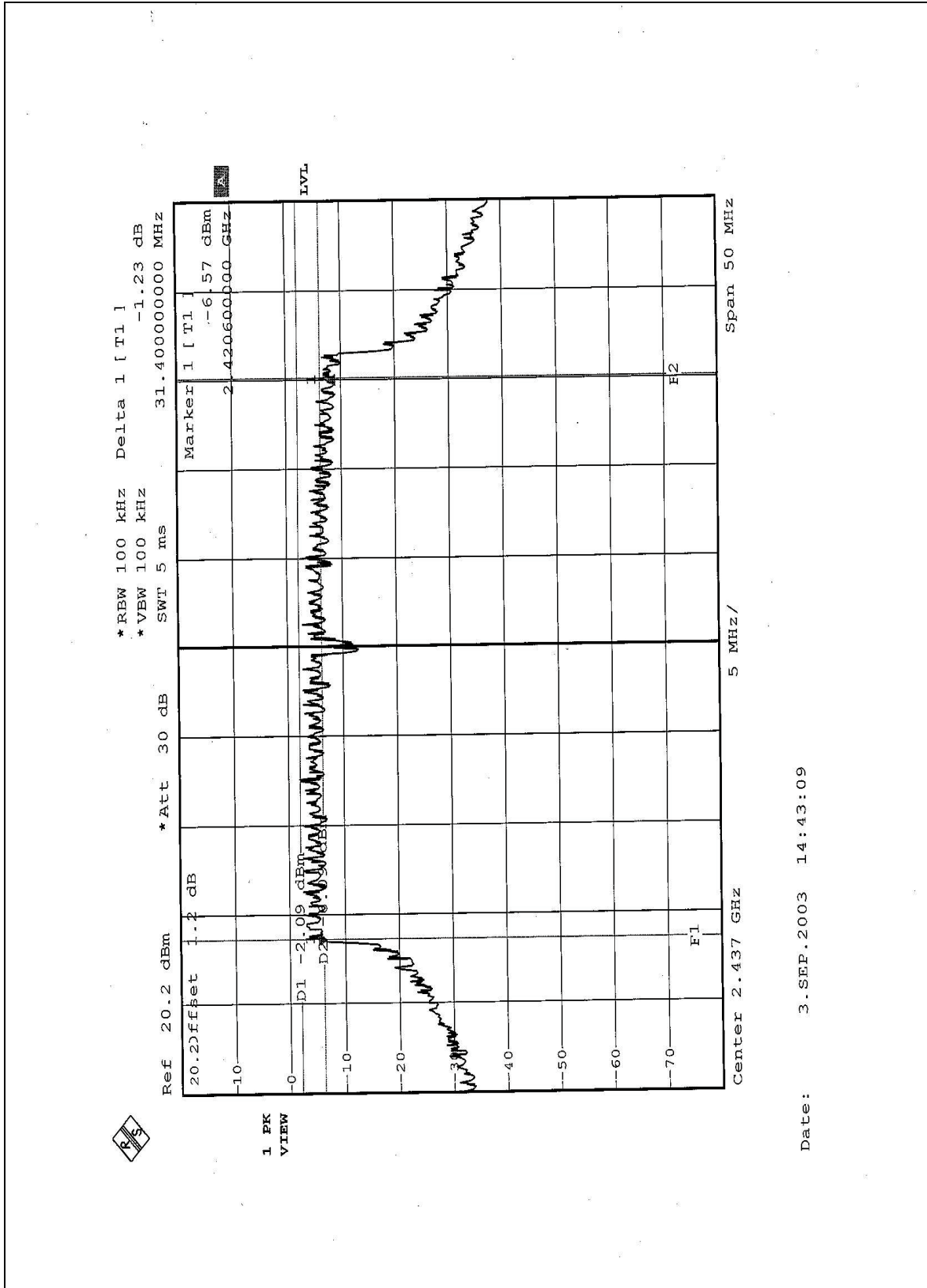
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CH6 (Turbo Mode)



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4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004
R&S SIGNAL GENERATOR	SMP04	100011	May 28, 2004
TEKTRONIX OSCILLOSCOPE	TDS 220	B048470	Mar. 05, 2004
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

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



4.4.3 TEST PROCEDURES

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

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6



4.4.7 TEST RESULTS – FOR CCK

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg.C, 58%RH, 991 hPa
TESTED BY: Eric Lee			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	19.05	30	PASS
6	2437	19.24	30	PASS
11	2462	19.10	30	PASS



4.4.8 TEST RESULTS – FOR OFDM

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg.C, 58%RH, 991 hPa
TESTED BY: Eric Lee			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	18.65	30	PASS
6	2437	18.33	30	PASS
11	2462	18.10	30	PASS
Turbo Mode 6	2437	18.00	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

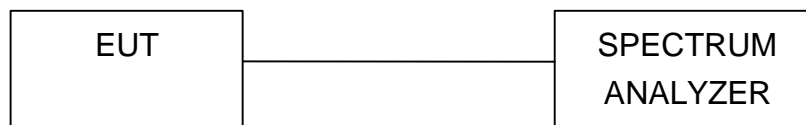
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW, set sweep time = span/3 kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3 kHz 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 CONDITION

Same as Item 4.3.6



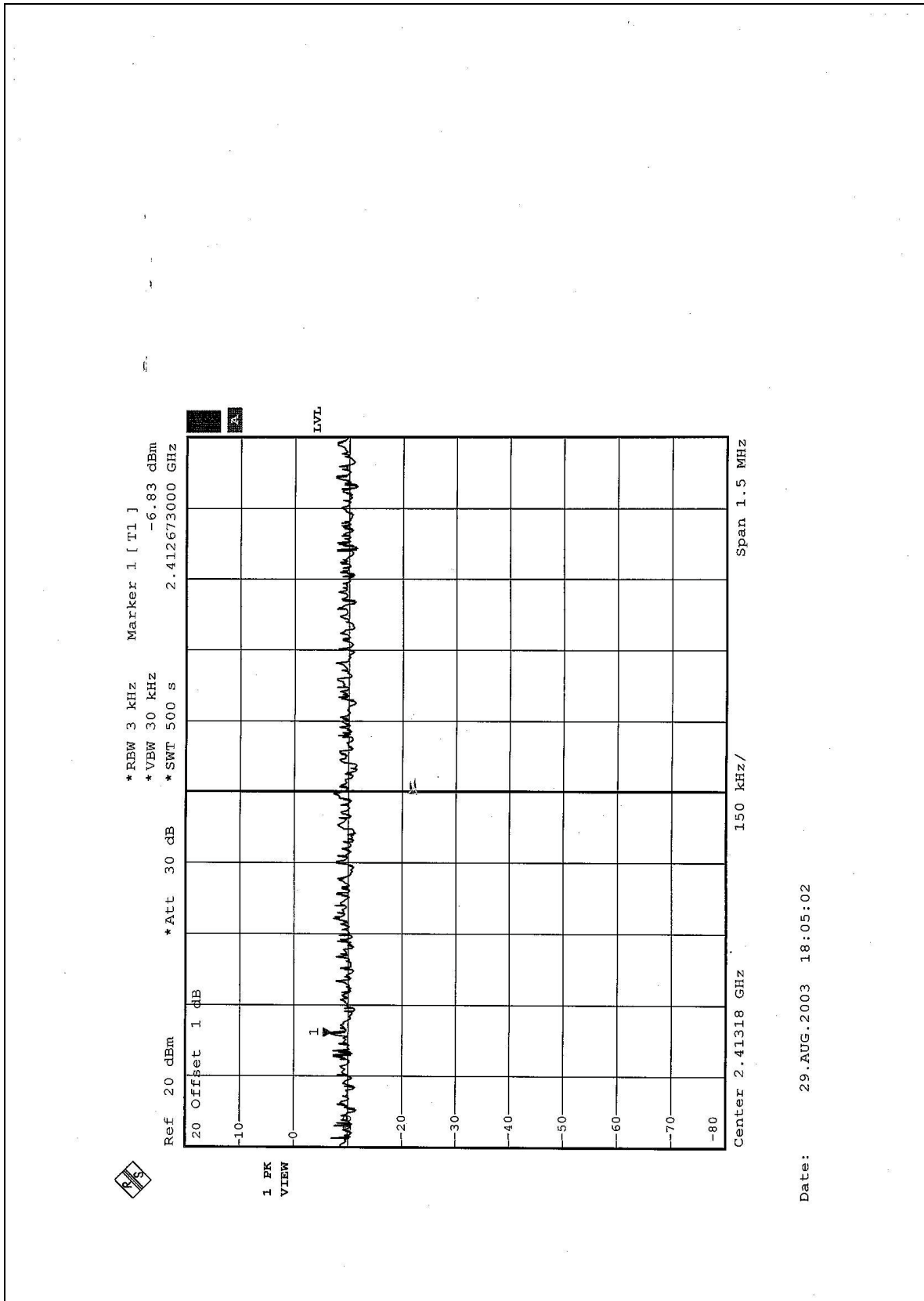
4.5.7 TEST RESULTS – FOR CCK

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58%RH, 991 hPa
TESTED BY: Eric Lee			

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-6.83	8	PASS
6	2437	-6.91	8	PASS
11	2462	-4.57	8	PASS



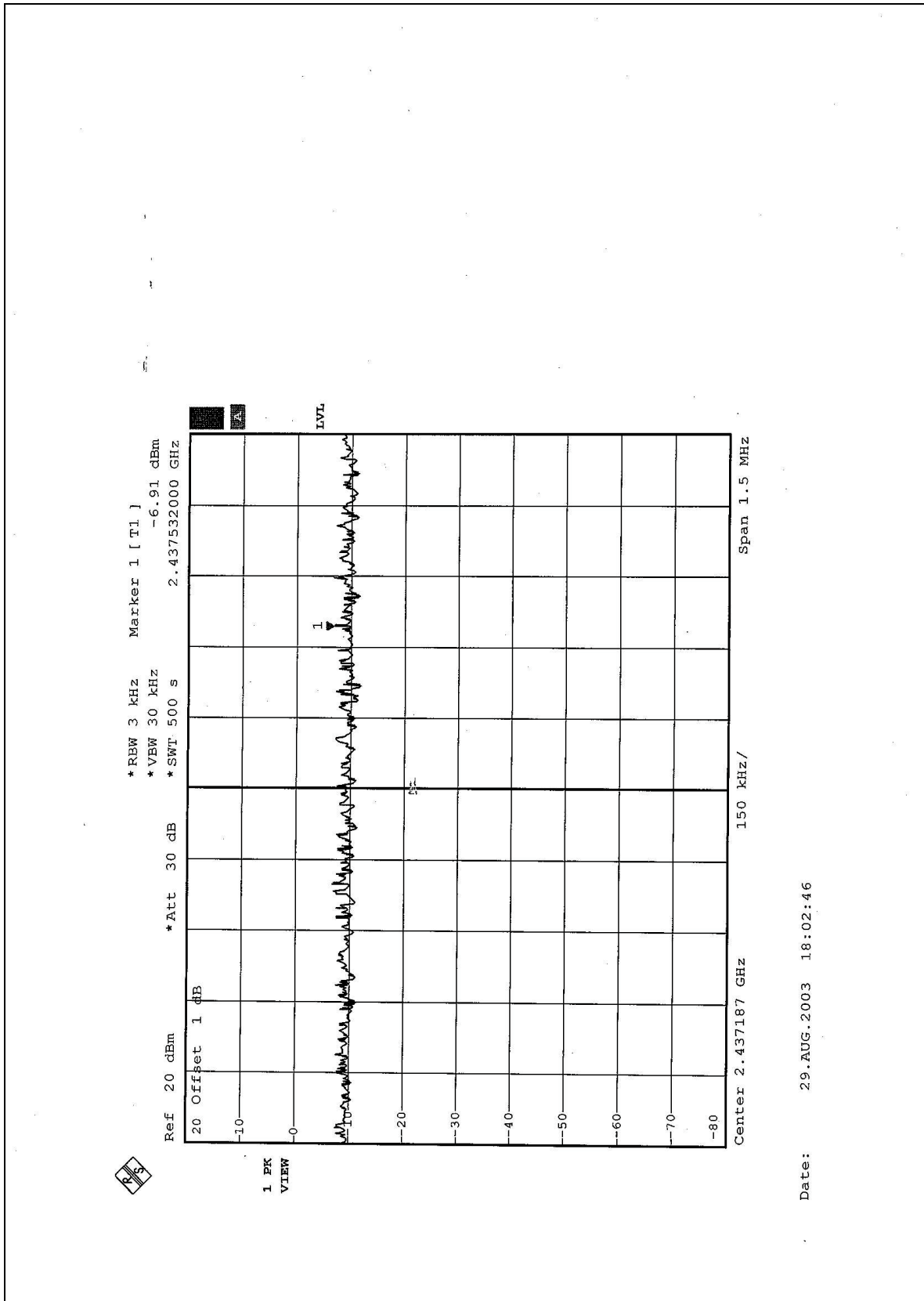
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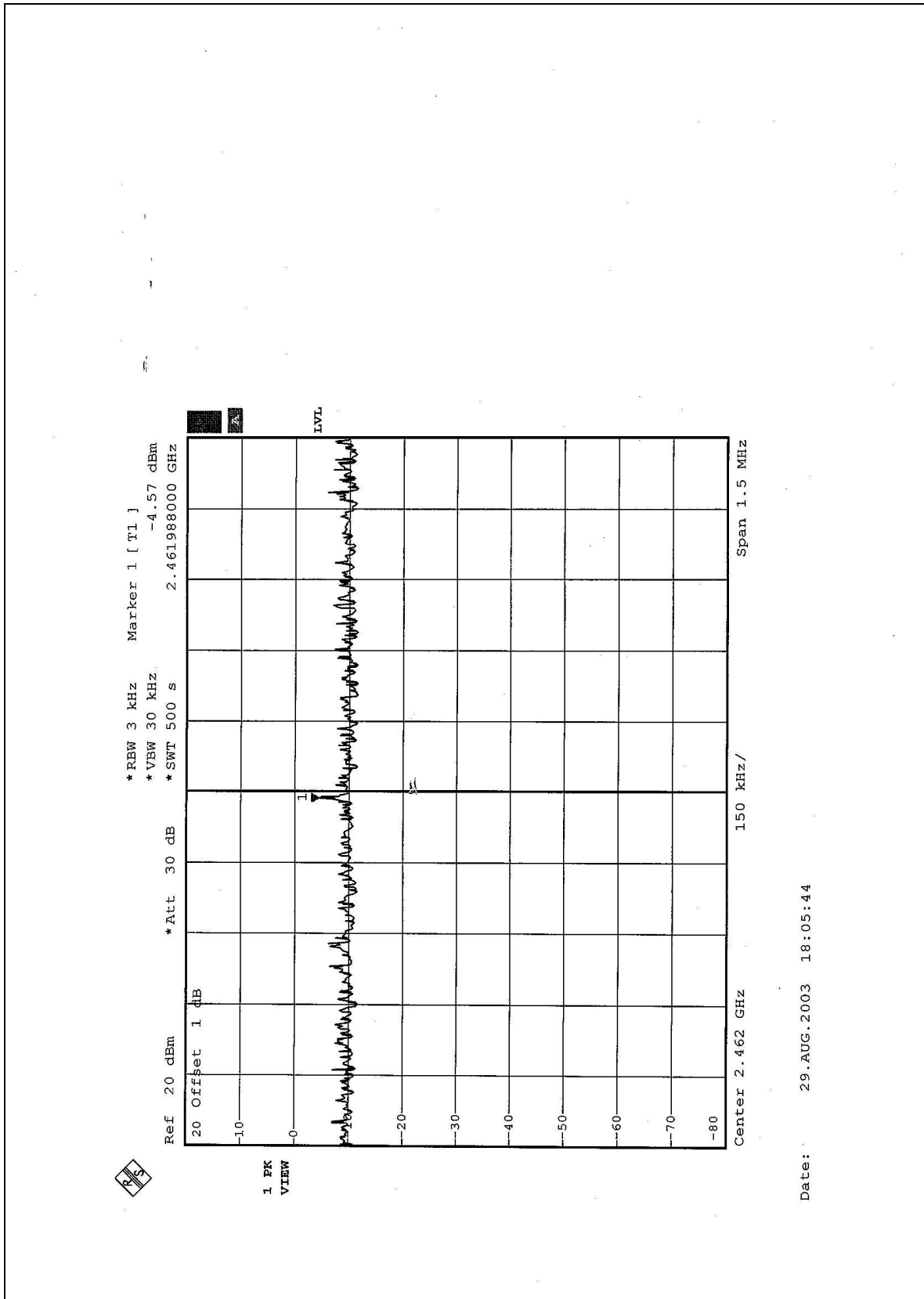
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CH11



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4.5.8 TEST RESULTS – FOR OFDM

EUT	2.4GHz Wireless PCI Adapter	MODEL	DWL-G520
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58%RH, 991 hPa
TESTED BY: Eric Lee			

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-12.96	8	PASS
6	2437	-12.56	8	PASS
11	2462	-12.14	8	PASS
Turbo Mode 6	2437	-13.38	8	PASS