FCC TEST REPORT

REPORT NO.: RF910125R05
MODEL NO.: WPC54A
RECEIVED: Jan. 25, 2002
TESTED: Jan. 29~ Mar. 6, 2002

APPLICANT: The Linksys Group, Inc.
ADDRESS: 17401 Armstrong Ave., Irvine, CA 92614

ISSUED BY: Advance Data Technology Corporation
LAB LOCATION: 47 14th Lin, Chiapau Tsun, Linko, Taipei, Taiwan, R.O.C.

0528
ILAC MRA

Lab Code: 200102-0

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1 CERTIFICATION

PRODUCT :	54Mbps Wireless Network PC Card
BRAND NAME :	Linksys
MODEL NO. :	WPC54A
APPLICANT :	The Linksys Group, Inc.
STANDARDS :	47 CFR Part 15, Subpart E (Section 15.407), ANSI C63.4-1992, Canada RSS 210

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from Jan .29, 2002 to Mar. 6, 2002, 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.

TESTED BY: Steven Lu , DATE: Mar. 13, 2002
Steven Lu

CHECKED BY: Demi Chen , DATE: Mar. 13, 2002
Demi Chen

APPROVED BY: Alan Lane , DATE: Mar. 13, 2002
Dr. Alan Lane
Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart E			
Standard Section	**Test Type**	**Result**	**REMARK**
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is –11.09dBuV at 21.251MHz
15.407(b)(5)	Electric Field Strength Spurious Emissions, 30 MHz – 40000 MHz (Transmitting)	PASS	Meet the requirement of limit Minimum passing margin is –1.6dBuV at 15535.00MHz
15.407(a/1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit
	Peak Power Excursion	PASS	Meet the requirement of limit
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit
15.407(b1/2/3)	Effective Isotropic Radiated Power Spurious Emissions, 1 GHz – 40 GHz	PASS	Meet the requirement of limit Minimum passing margin is –4.2dBm at 6.195GHz
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	54Mbps Wireless Network PC Card
MODEL NO.	WPC54A
POWER SUPPLY	3.3VDC from notebook
MODULATION TYPE	OFDM
TRANSFER RATE	6 to 54Mbps (Turbo mode: up to 72Mbps)
FREQUENCY RANGE	5180MHz ~ 5320MHz
NUMBER OF CHANNEL	8
OUTPUT POWER	10.89dBm
ANTENNA TYPE	Side Stem Antenna
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

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

3.2 DESCRIPTION OF TEST MODES

Eight channels are provided in this EUT.

Channel	Frequency	Channel	Frequency
1	5180 MHz	7	5300 MHz
2	5200 MHz	8	5320 MHz
3	5220 MHz	9	
4	5240 MHz	10	
5	5260 MHz	11	
6	5280 MHz		

NOTE:

1. The EUT was transmitting at full power on the specified channel with a duty cycle of 99% (maximum allowed). The EUT was tested in both normal mode (channel bandwidth of approximately 30MHz) and turbo mode (channel bandwidth of approximately 60MHz).
2. "Normal Mode" allows data rates of up to 54Mb/s. The device was, therefore, tested in Normal mode ate the data rate that produced the highest output power for normal mode (6Mb/s).
3. "Turbo Mode" allows data rates of up to72Mb/s. At data rates higher than 12Mb/s the PA gain is reduced to improve signal fidelity. The device was, therefore, tested in turbo mode at the data rate that produced the highest output power for turbo mode. (12Mb/s).
4. Channel 1,4,5,8 were chosen for final test.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 54Mbps Wireless Network PC Card. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC CFR 47 Part 15, Subpart E. (15.407)

ANSI C63.4 : 1992, ANSI C63.4-1992, Canada RSS 210

All tests have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	Dell	PP01L	TW-09C748-12800-19O-B220	FCC DoC Approved
2	PRINTER	HP	2225C+	3123S97230	DSI6XU2225
3	MODEM	ACEEX	1414	980020510	IFAXDM1414

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

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

4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class B (dBuV)	
	Quasi-peak	Average
0.45 – 30	48	-

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. All emanations from a class 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	ESHS30	828109/007	July 4, 2002
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH3-Z5	839135/006	July 3, 2002
* ROHDE & SCHWARZ 4-wire ISN	ENY41	838119/028	Dec. 2, 2002
* ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/016	Dec. 2, 2002
EMCO-L.I.S.N. (for peripheral)	3825/2	9204-1964	July 3, 2002
Software	Cond-V2L	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C02.01	July 5, 2002
HP Terminator (For EMCO LISN)	11593A	E1-01-298	Feb. 20, 2003
HP Terminator (For EMCO LISN)	11593A	E1-01-299	Feb. 20, 2003
Shielded Room	Site 2	ADT-C02	NA
VCCI Site Registration No.	Site 2	C-240	NA

NOTE: 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.

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

3. "*": These equipment are used for conducted telecom port test only (if tested).

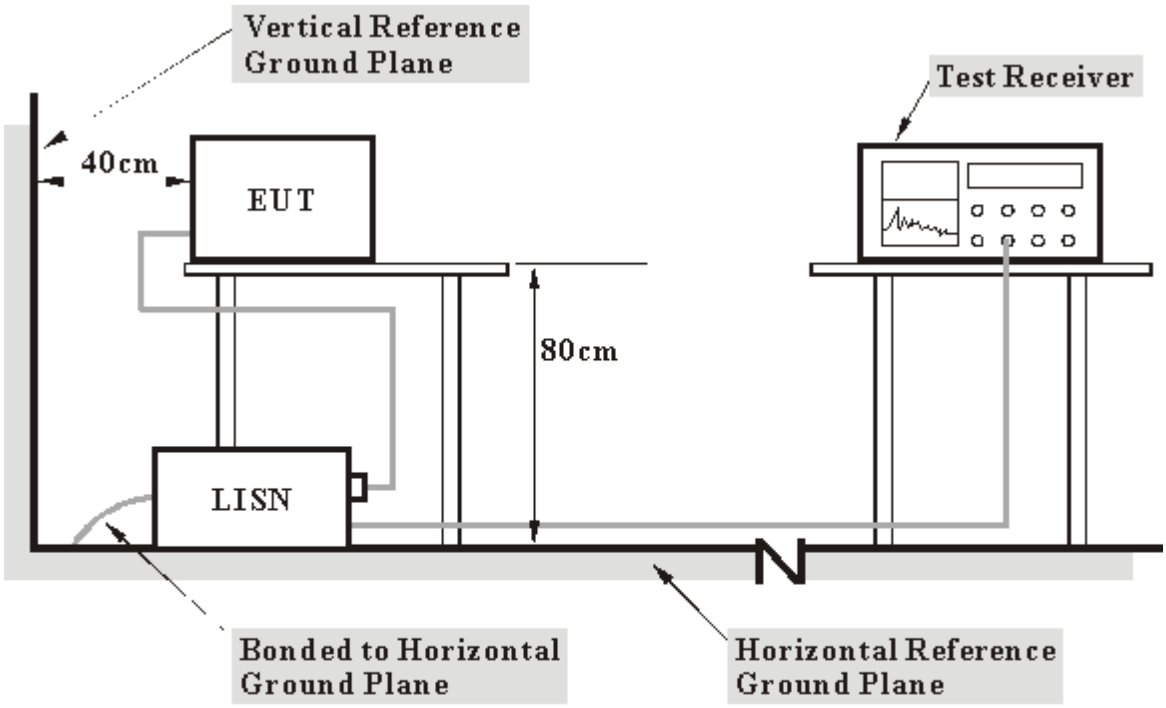
4.1.3 TEST PROCEDURES

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 450 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.4 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.

4.1.5 EUT OPERATING CONDITIONS

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

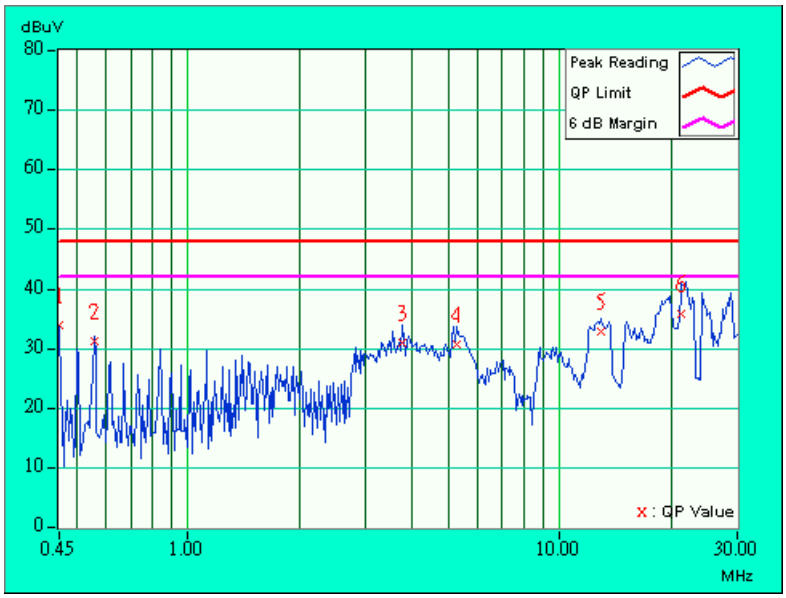
4.1.6 TEST RESULTS (TANSMITTING)

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 1	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.450	0.10	32.85	-	32.95	-	48.00	-	-15.05	-
2	0.561	0.10	30.30	-	30.40	-	48.00	-	-17.60	-
3	3.768	0.28	30.04	-	30.32	-	48.00	-	-17.68	-
4	5.286	0.34	29.61	-	29.95	-	48.00	-	-18.05	-
5	12.946	0.68	31.74	-	32.42	-	48.00	-	-15.58	-
6	21.296	1.03	34.69	-	35.72	-	48.00	-	-12.28	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

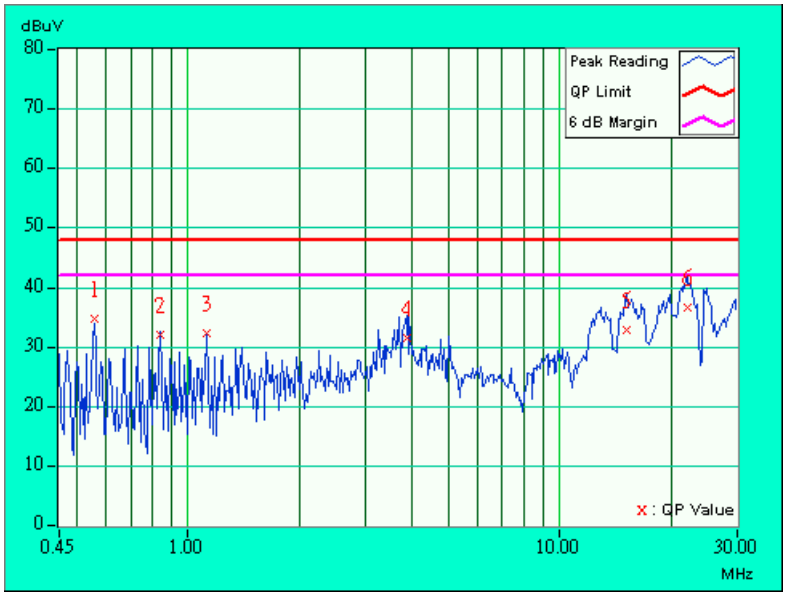


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 1	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.561	0.10	33.92	-	34.02	-	48.00	-	-13.98	-
2	0.840	0.10	31.32	-	31.42	-	48.00	-	-16.58	-
3	1.122	0.10	31.54	-	31.64	-	48.00	-	-16.36	-
4	3.867	0.29	30.78	-	31.07	-	48.00	-	-16.93	-
5	15.086	0.60	31.94	-	32.54	-	48.00	-	-15.46	-
6	21.986	0.84	35.78	-	36.62	-	48.00	-	-11.38	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

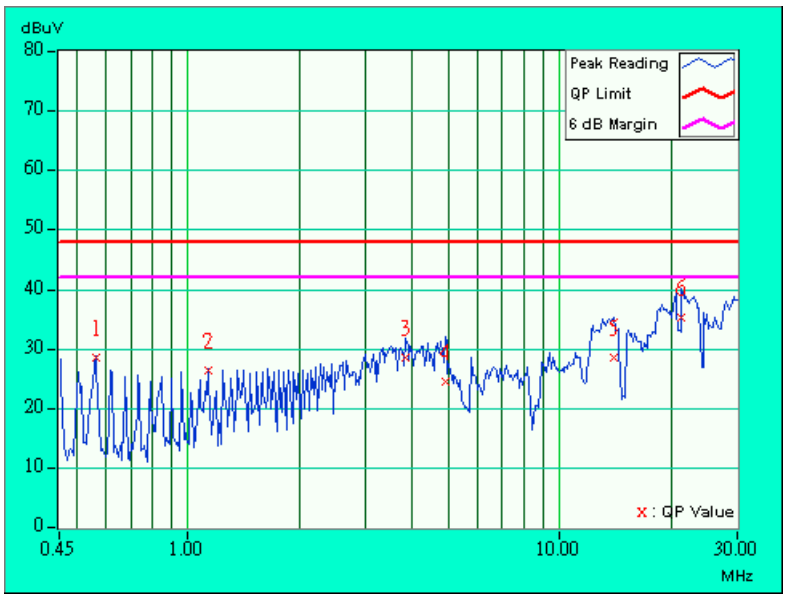


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 4	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.564	0.10	27.56	-	27.66	-	48.00	-	-20.34	-
2	1.131	0.10	25.28	-	25.38	-	48.00	-	-22.62	-
3	3.843	0.28	27.56	-	27.84	-	48.00	-	-20.16	-
4	4.920	0.33	23.40	-	23.73	-	48.00	-	-24.27	-
5	13.910	0.73	27.42	-	28.15	-	48.00	-	-19.85	-
6	21.284	1.03	34.15	-	35.18	-	48.00	-	-12.82	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

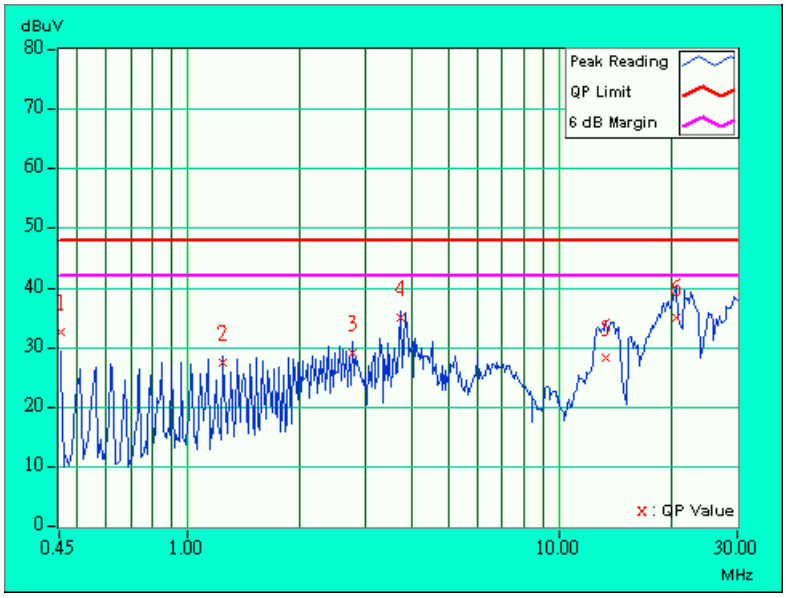


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 4	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	31.79	-	31.89	-	48.00	-	-16.11	-
2	1.245	0.10	26.78	-	26.88	-	48.00	-	-21.12	-
3	2.775	0.18	28.41	-	28.59	-	48.00	-	-19.41	-
4	3.741	0.27	34.25	-	34.52	-	48.00	-	-13.48	-
5	13.310	0.53	27.58	-	28.11	-	48.00	-	-19.89	-
6	20.612	0.81	34.26	-	35.07	-	48.00	-	-12.93	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

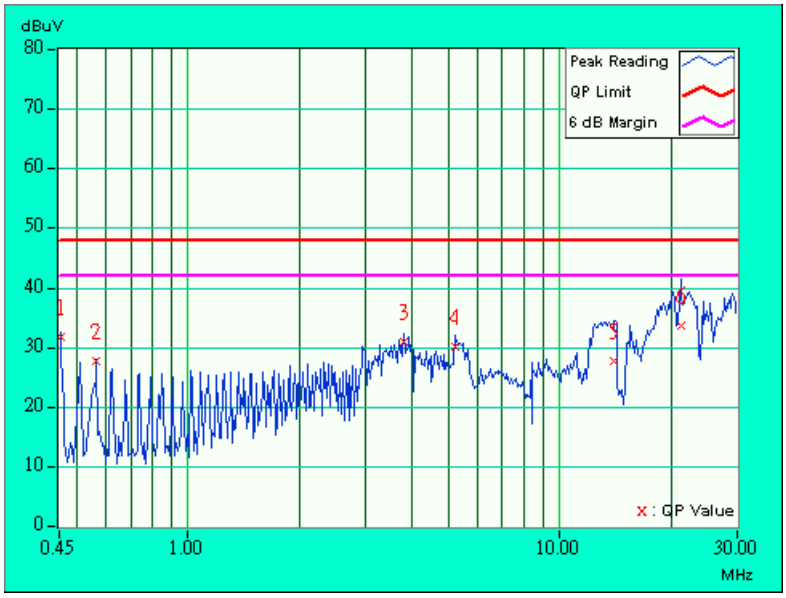


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 5	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	30.66	-	30.76	-	48.00	-	-17.24	-
2	0.567	0.10	26.77	-	26.87	-	48.00	-	-21.13	-
3	3.801	0.28	30.08	-	30.36	-	48.00	-	-17.64	-
4	5.222	0.34	29.03	-	29.37	-	48.00	-	-18.63	-
5	13.958	0.74	26.76	-	27.50	-	48.00	-	-20.50	-
6	21.170	1.02	32.70	-	33.72	-	48.00	-	-14.28	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

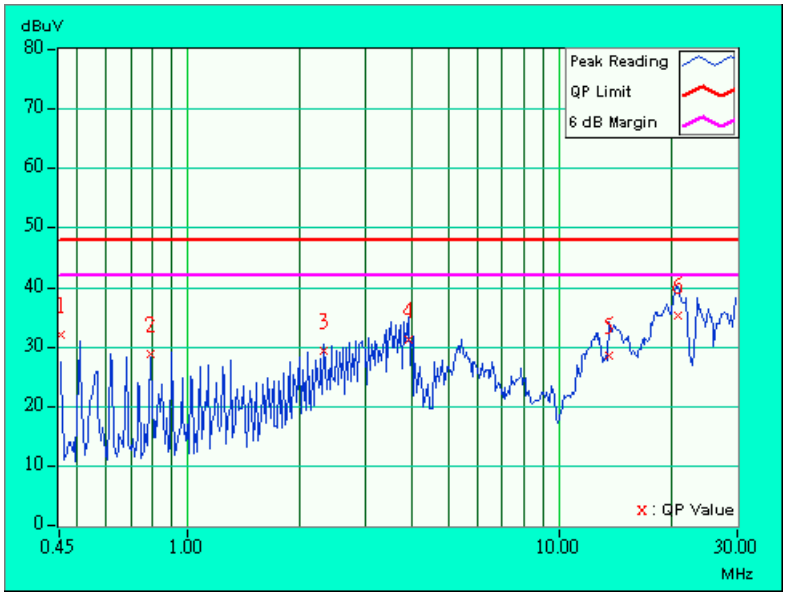


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 5	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Netural (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.454	0.10	31.36	-	31.46	-	48.00	-	-16.54	-
2	0.792	0.10	28.10	-	28.20	-	48.00	-	-19.80	-
3	2.325	0.13	28.66	-	28.79	-	48.00	-	-19.21	-
4	3.909	0.29	30.31	-	30.60	-	48.00	-	-17.40	-
5	13.607	0.54	27.62	-	28.16	-	48.00	-	-19.84	-
6	20.693	0.81	34.56	-	35.37	-	48.00	-	-12.63	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

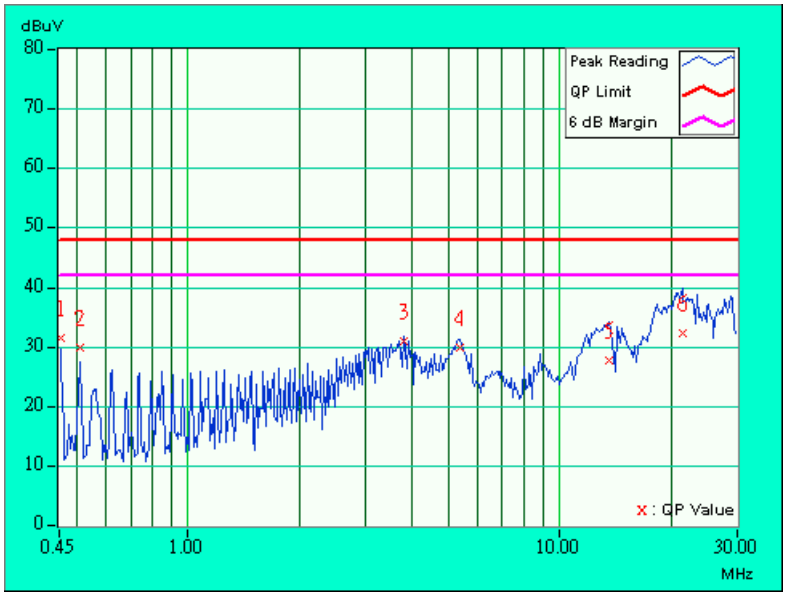


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 8	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	30.52	-	30.62	-	48.00	-	-17.38	-
2	0.510	0.10	28.91	-	29.01	-	48.00	-	-18.99	-
3	3.804	0.28	29.84	-	30.12	-	48.00	-	-17.88	-
4	5.396	0.35	28.97	-	29.32	-	48.00	-	-18.68	-
5	13.514	0.71	26.82	-	27.53	-	48.00	-	-20.47	-
6	21.326	1.03	31.32	-	32.35	-	48.00	-	-15.65	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

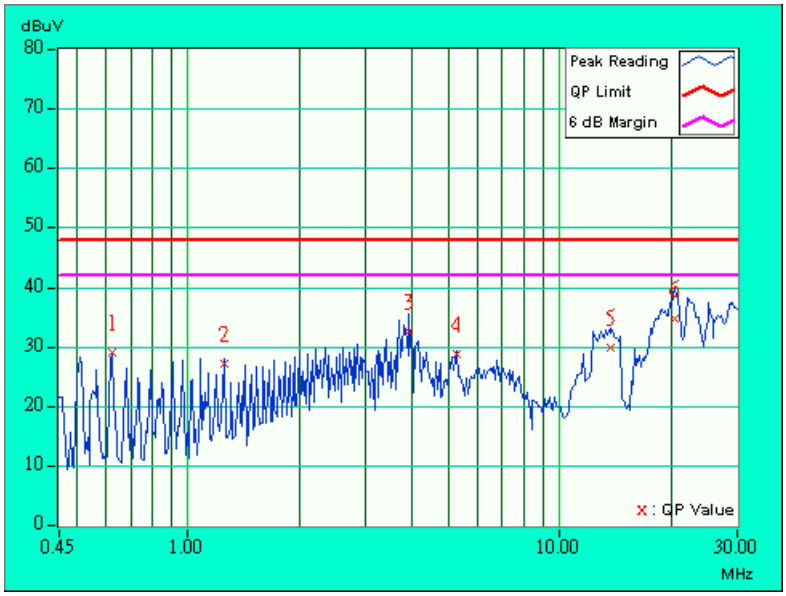


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 8	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Netural (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.624	0.10	28.20	-	28.30	-	48.00	-	-19.70	-
2	1.251	0.10	26.38	-	26.48	-	48.00	-	-21.52	-
3	3.918	0.29	31.90	-	32.19	-	48.00	-	-15.81	-
4	5.285	0.32	28.10	-	28.42	-	48.00	-	-19.58	-
5	13.640	0.55	29.04	-	29.59	-	48.00	-	-18.41	-
6	20.342	0.81	33.87	-	34.68	-	48.00	-	-13.32	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

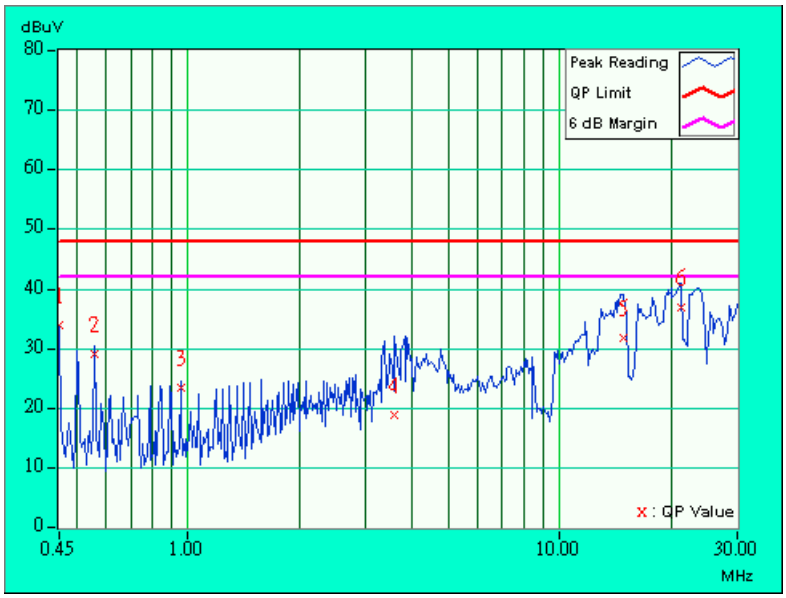


4.1.7 TEST RESULTS (RECEIVING)

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 1	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.450	0.10	32.79	-	32.89	-	48.00	-	-15.11	-
2	0.561	0.10	27.98	-	28.08	-	48.00	-	-19.92	-
3	0.957	0.10	22.42	-	22.52	-	48.00	-	-25.48	-
4	3.600	0.26	17.80	-	18.06	-	48.00	-	-29.94	-
5	14.807	0.79	30.72	-	31.51	-	48.00	-	-16.49	-
6	21.251	1.03	35.88	-	36.91	-	48.00	-	-11.09	-

NOTE:
1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

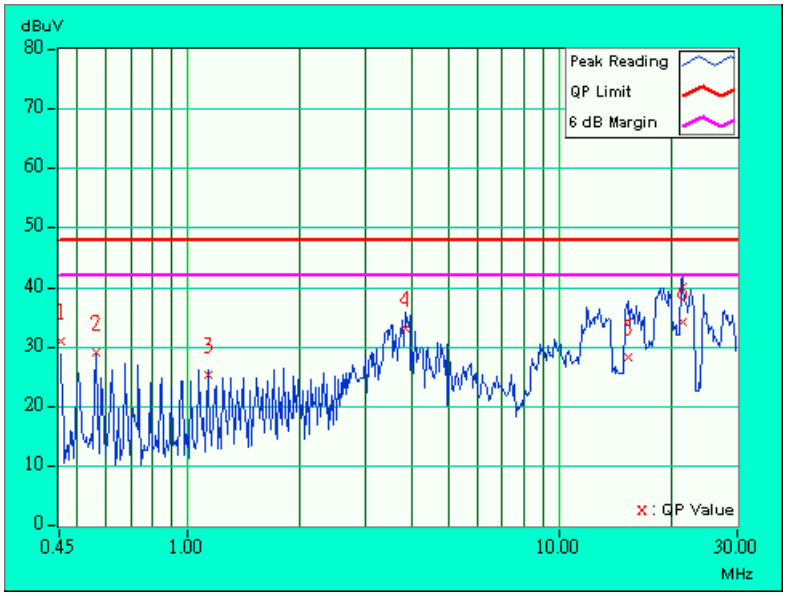


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 1	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	30.12	-	30.22	-	48.00	-	-17.78	-
2	0.564	0.10	28.16	-	28.26	-	48.00	-	-19.74	-
3	1.131	0.10	24.50	-	24.60	-	48.00	-	-23.40	-
4	3.841	0.28	32.43	-	32.71	-	48.00	-	-15.29	-
5	15.200	0.61	27.34	-	27.95	-	48.00	-	-20.05	-
6	21.362	0.83	33.51	-	34.34	-	48.00	-	-13.66	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

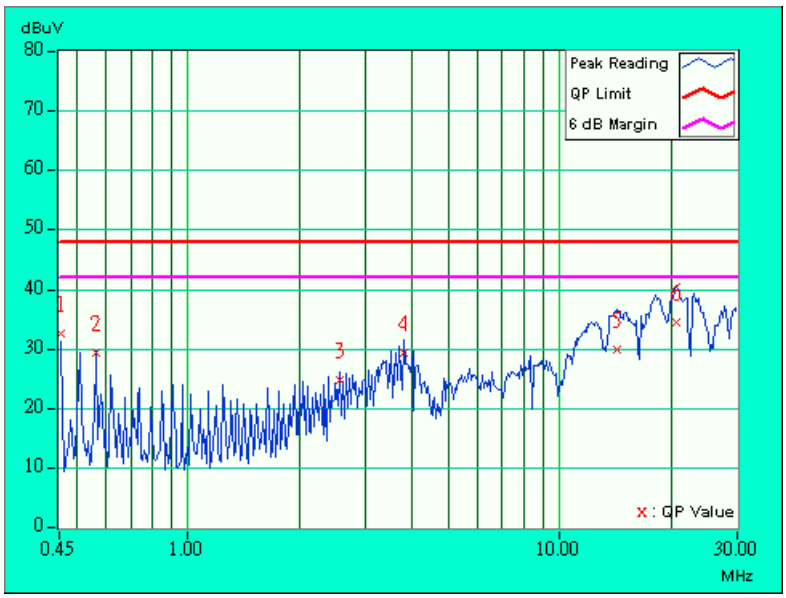


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 4	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	31.60	-	31.70	-	48.00	-	-16.30	-
2	0.567	0.10	28.36	-	28.46	-	48.00	-	-19.54	-
3	2.553	0.16	23.74	-	23.90	-	48.00	-	-24.10	-
4	3.798	0.28	28.32	-	28.60	-	48.00	-	-19.40	-
5	14.183	0.75	28.95	-	29.70	-	48.00	-	-18.30	-
6	20.483	1.01	33.49	-	34.50	-	48.00	-	-13.50	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

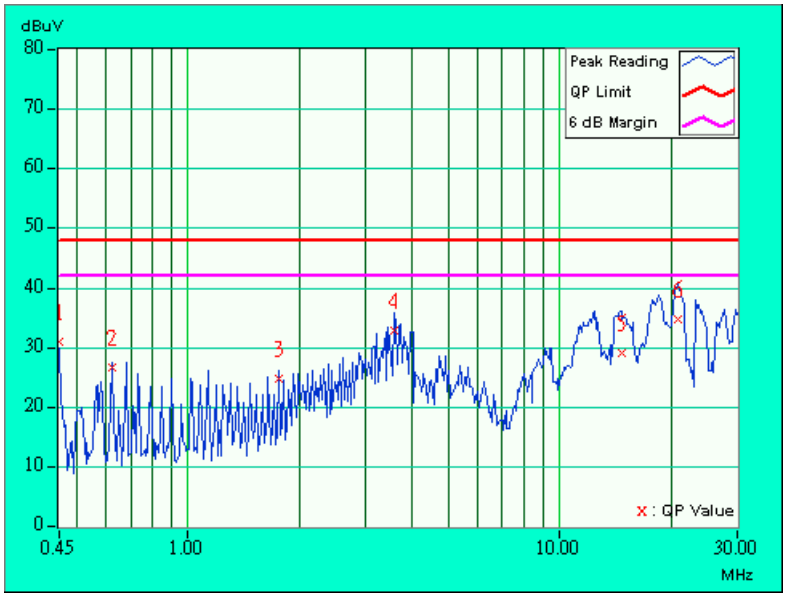


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 4	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.452	0.10	30.26	-	30.36	-	48.00	-	-17.64	-
2	0.624	0.10	25.93	-	26.03	-	48.00	-	-21.97	-
3	1.758	0.10	23.87	-	23.97	-	48.00	-	-24.03	-
4	3.570	0.26	32.00	-	32.26	-	48.00	-	-15.74	-
5	14.681	0.59	28.20	-	28.79	-	48.00	-	-19.21	-
6	20.684	0.81	34.04	-	34.85	-	48.00	-	-13.15	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

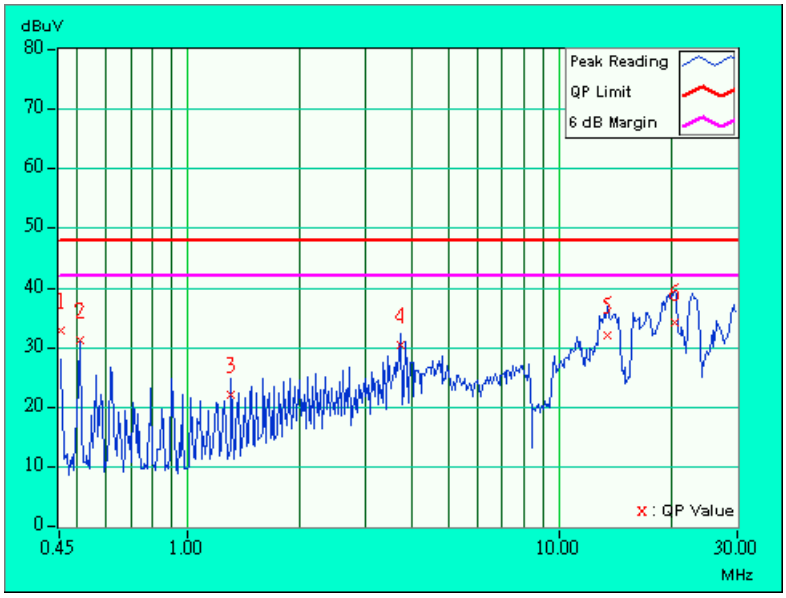


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 5	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	31.85	-	31.95	-	48.00	-	-16.05	-
2	0.510	0.10	30.20	-	30.30	-	48.00	-	-17.70	-
3	1.305	0.10	21.02	-	21.12	-	48.00	-	-26.88	-
4	3.744	0.27	29.32	-	29.59	-	48.00	-	-18.41	-
5	13.409	0.70	31.16	-	31.86	-	48.00	-	-16.14	-
6	20.378	1.01	33.09	-	34.10	-	48.00	-	-13.90	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

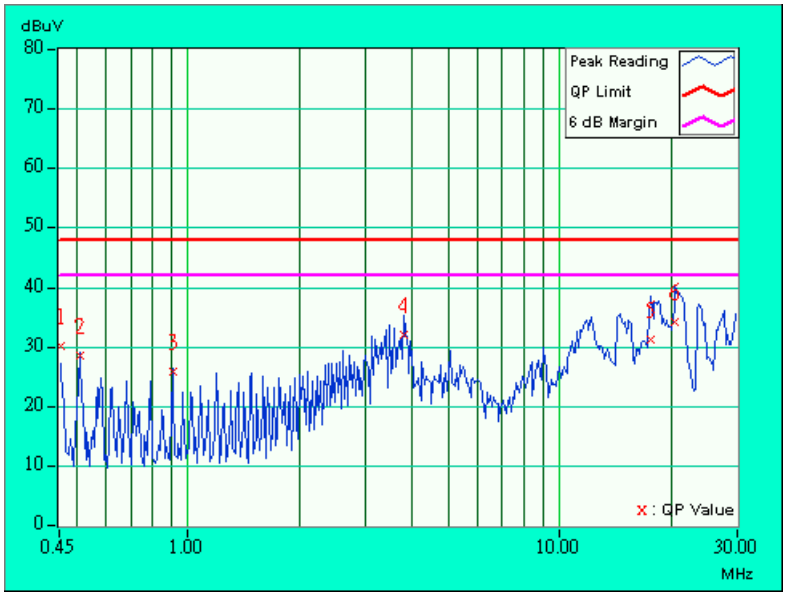


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 5	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Netural (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.453	0.10	29.29	-	29.39	-	48.00	-	-18.61	-
2	0.510	0.10	27.84	-	27.94	-	48.00	-	-20.06	-
3	0.909	0.10	24.94	-	25.04	-	48.00	-	-22.96	-
4	3.804	0.28	31.28	-	31.56	-	48.00	-	-16.44	-
5	17.618	0.70	30.44	-	31.14	-	48.00	-	-16.86	-
6	20.402	0.81	33.27	-	34.08	-	48.00	-	-13.92	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

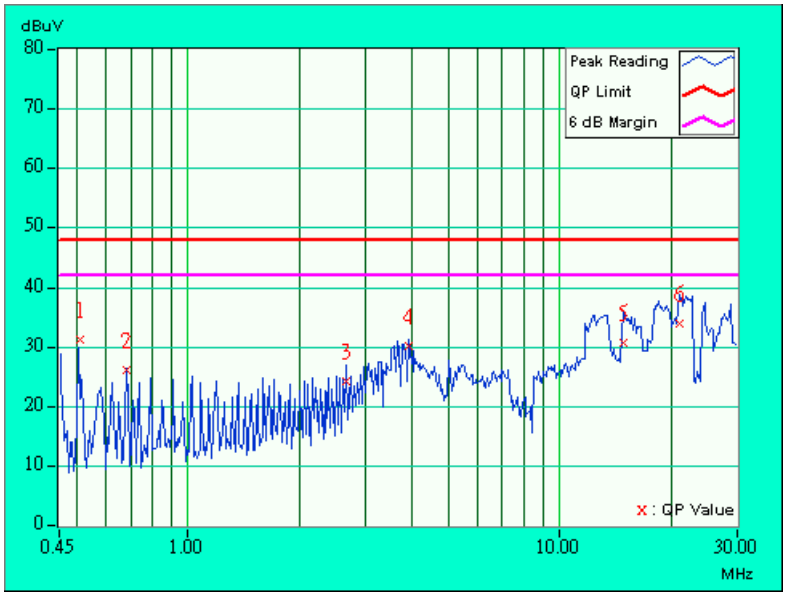


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 8	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.510	0.10	30.26	-	30.36	-	48.00	-	-17.64	-
2	0.684	0.10	25.14	-	25.24	-	48.00	-	-22.76	-
3	2.673	0.17	23.33	-	23.50	-	48.00	-	-24.50	-
4	3.927	0.29	29.28	-	29.57	-	48.00	-	-18.43	-
5	14.798	0.79	29.59	-	30.38	-	48.00	-	-17.62	-
6	20.990	1.02	32.91	-	33.93	-	48.00	-	-14.07	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.

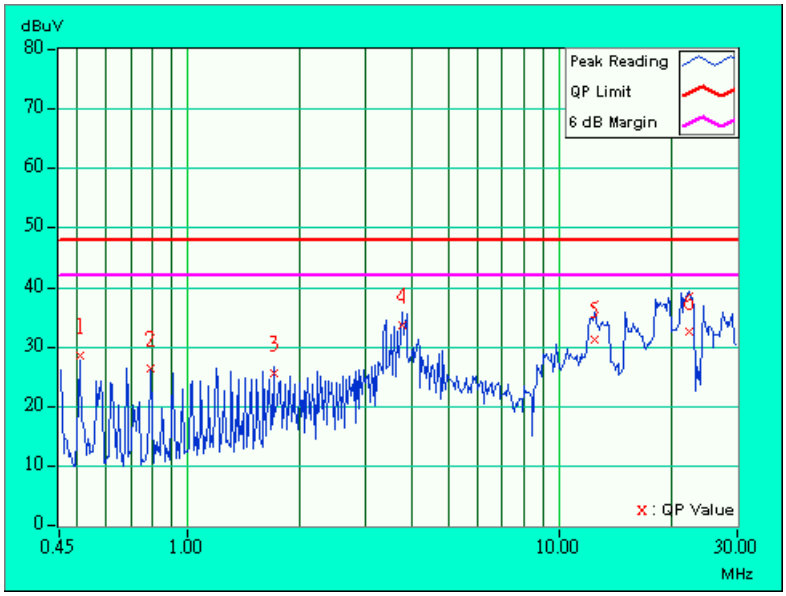


EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Channel 8	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Netural (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60%RH, 1005 hPa	**TESTED BY**: James Lee	

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	0.510	0.10	27.72	-	27.82	-	48.00	-	-20.18	-
2	0.795	0.10	25.54	-	25.64	-	48.00	-	-22.36	-
3	1.704	0.10	24.81	-	24.91	-	48.00	-	-23.09	-
4	3.750	0.28	32.77	-	33.05	-	48.00	-	-14.95	-
5	12.401	0.50	30.30	-	30.80	-	48.00	-	-17.20	-
6	22.289	0.85	31.76	-	32.61	-	48.00	-	-15.39	-

NOTE:

1. QP. and AV. are abbreviations of quasi-peak and average individually.
2. "-": NA
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Reading Value + Correction Factor.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Field strength limits are at the distance of 3 meters, emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field Strength of Fundamental	
	uV/m	dBuV/m
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above 960	500	54.0

NOTE:

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
* HP Spectrum Analyzer	8590L	3544A01176	May 7, 2002
* HP Preamplifier	8447D	2944A08485	May 7, 2002
* HP Preamplifier	8449B	3008A01201	Dec. 06, 2002
* HP Preamplifier	8449B	3008A01292	Aug. 21, 2002
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Jan. 27, 2003
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 23, 2002
* CHASE BILOG Antenna	CBL6112A	2221	Aug. 2, 2002
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	July 6, 2002
* EMCO Horn Antenna	3115	9312-4192	April 15, 2002
* EMCO Turn Table	1060	1115	NA
* SHOSHIN Tower	AP-4701	A6Y005	NA
* Software	AS61D4	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Aug. 2, 2002
* TIMES RF cable	LMR-600	CABLE-ST5-01	Aug. 2, 2002
Antenna (Horn)	BBHA9120-D	D130	July 10, 2002
Open Field Test Site	Site 5	ADT-R05	July 28, 2002
VCCI Site Registration No.	Site 5	R-1039	NA
Site Registration No.	FCC: 90422 Canada IC: IC 3789 VCCI : R-1039		

NOTE: 1. The measurement uncertainty is less than +/- 3.0dB, which is calculated as per the NAMAS document NIS81.

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

3. "*" = These equipment are used for the final measurement.

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

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

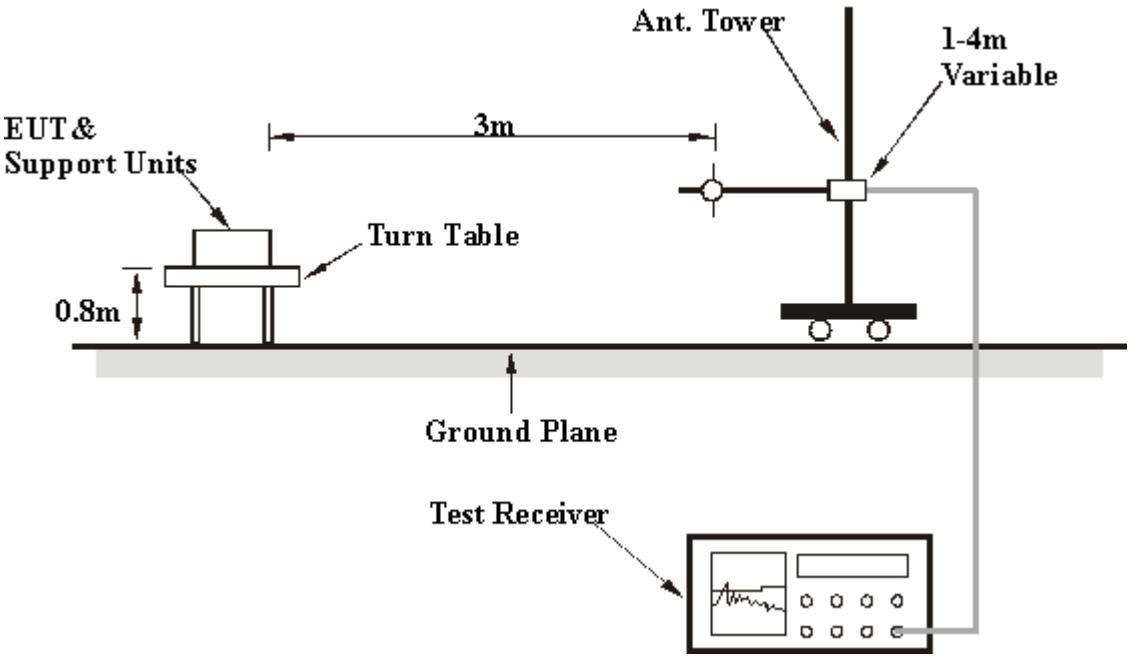
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 TEST SETUP



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

4.2.5 EUT OPERATING CONDITIONS

Same as 4.1.5.

4.2.6 TEST RESULTS(TRANSMITTING)

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Normal Mode	**CHANNEL**	1
FREQUENCY RANGE	30-1000 MHz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	18 deg. C, 60%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Steven Lu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	384.01	22.9 QP	46.0	-23.1	1.08H	190	32.20	15.50	2.18	27.00	9.33
2	512.30	28.7 QP	46.0	-17.3	1.08H	349	35.69	17.42	2.55	27.00	7.03
3	544.20	32.8 QP	46.0	-13.2	1.08H	208	39.25	17.86	2.66	27.00	6.48
4	608.00	26.1 QP	46.0	-19.9	1.36H	104	31.58	18.70	2.86	27.00	5.44
5	736.00	28.8 QP	46.0	-17.2	1.36H	104	32.69	19.93	3.23	27.00	3.84
6	832.00	31.2 QP	46.0	-14.5	1.19H	25	34.25	20.55	3.44	27.00	3.01

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	384.00	25.9 QP	46.0	-20.1	1.14V	192	35.20	15.50	2.18	27.00	9.33
2	512.05	31.9 QP	46.0	-14.1	1.63V	83	38.96	17.42	2.55	27.00	7.03
3	544.10	30.0 QP	46.0	-16.0	1.42V	317	36.50	17.86	2.66	27.00	6.48
4	608.00	24.8 QP	46.0	-21.2	1.08V	310	30.20	18.70	2.86	27.00	5.44
5	736.01	28.7 QP	46.0	-17.3	1.13V	38	32.58	19.83	3.23	27.00	3.84
6	832.00	29.6 QP	46.0	-16.4	1.08V	310	32.58	20.55	3.44	27.00	3.01

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Normal Mode	**CHANNEL**	1
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Steven Lu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1036.00	33.8 PK	74.0	-40.2	1.00H	362	42.00	24.50	3.21	35.94	8.23
2	4144.00	41.8 PK	74.0	-32.2	1.37H	279	39.36	30.32	6.70	34.56	-2.46
3	6216.30	51.0 PK	74.0	-23.0	1.37H	238	44.30	33.31	8.03	34.60	-6.74
4	10362.00	49.1 AV	54.0	-4.90	1.07H	124	33.00	38.86	11.92	34.65	-16.12
5	10362.00	53.3 PK	74.0	-20.70	1.07H	124	37.20	38.86	11.92	34.65	-16.12
6	15545.00	54.9 PK	74.0	-19.10	1.06H	113	37.50	39.07	13.16	34.80	-17.43.
7	15545.00	50.2 AV	54.0	-3.80	1.06H	113	32.80	39.07	13.16	34.80	-17.43

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1036.00	36.5 PK	74.0	-37.5	1.00V	282	44.69	24.50	3.21	35.94	8.23
2	4143.90	45.1 PK	74.0	-28.9	1.09V	240	42.60	30.32	6.70	34.56	-2.46
3	6216.00	51.8 PK	74.0	-22.2	1.09V	195	45.10	33.31	8.03	34.60	-6.74
4	10362.00	53.1 PK	74.00	-20.90	1.06V	109	37.00	38.86	11.92	34.65	-16.12
5	10362.00	48.1 AV	54.00	-5.90	1.06V	109	32.00	38.86	11.92	34.65	-16.12
6	15531.00	49.8 AV	54.00	-4.20	1.05V	122	32.40	39.07	13.16	34.80	-17.43
7	15531.00	55.4 PK	74.00	-18.60	1.05V	122	38.00	39.07	13.16	34.80	-17.43.

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Normal Mode	**CHANNEL**	4
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Steven Lu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1048.00	32.1 PK	74.00	-41.9	1.25H	191	40.36	24.50	3.21	35.94	8.23
2	4192.00	46.9 PK	74.00	-27.1	1.18H	60	44.36	30.41	6.68	34.58	-2.51
3	6288.00	50.2 PK	74.00	-23.8	1.21H	155	43.20	33.48	8.13	34.60	-7.01
4	10477.00	49.5 AV	54.00	-4.50	1.07H	119	32.20	39.06	12.73	34.52	-17.27
5	10477.00	55.3 PK	74.00	-18.70	1.07H	119	38.00	39.06	12.73	34.52	-17.27.
6	15717.00	54.8 PK	74.00	-19.20	1.08H	134	37.80	38.46	13.31	34.80	-16.97.
7	15717.00	49.4 AV	54.00	-4.60	1.08H	134	32.40	38.46	13.31	34.80	-16.97

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1048.00	32.1 PK	74.00	-41.9	1.25V	193	40.36	24.50	3.21	35.94	8.23
2	4195.00	47.4 PK	74.00	-26.6	1.00V	-4	44.90	30.41	6.68	34.58	-2.51
3	6288.00	51.9 PK	74.00	-22.1	1.09V	236	44.90	33.48	8.13	34.60	-7.01
4	10478.00	54.1 PK	74.00	-19.90	1.05V	119	36.80	39.06	12.73	34.52	-17.27
5	10478.00	49.8 AV	54.00	-4.20	1.05V	119	32.50	39.06	12.73	34.52	-17.27
6	15717.00	49.0 AV	54.00	-5.00	1.08V	134	32.00	38.46	13.31	34.80	-16.97
7	15717.00	55.0 PK	74.00	-19.00	1.08V	134	38.00	38.46	13.31	34.80	-16.97.

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Normal Mode	**CHANNEL**	5
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Steven Lu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1052.00	38.1 PK	74.00	-35.9	1.18H	114	46.36	24.50	3.21	35.94	8.23
2	4208.00	45.7 PK	74.00	-28.3	1.07H	23	43.20	30.41	6.68	34.58	-2.51
3	6312.00	50.4 PK	74.00	-23.6	1.17H	282	43.20	33.65	8.19	34.60	-7.24
4	10521.00	49.7 AV	54.00	-4.30	1.17H	106	32.10	39.13	12.92	34.48	-17.56
5	10521.00	54.6 PK	74.00	-19.4	1.17H	106	37.00	39.13	12.92	34.48	-17.56.
6	15781.00	54.9 PK	74.00	-19.1	1.20H	112	38.20	38.16	13.35	34.80	-16.71.
7	15781.00	49.1 AV	54.00	-4.90	1.20H	112	32.40	38.16	13.35	34.80	-16.71

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1052.00	37.3 PK	74.00	-36.7	1.16V	147	45.55	24.50	3.32	35.94	8.23
2	4208.00	48.2 PK	74.00	-25.8	1.16V	-2	45.69	30.41	6.68	34.58	-2.51
3	6312.00	51.8 PK	74.00	-22.2	1.18V	240	44.60	33.65	8.19	34.60	-7.24
4	10521.00	55.0 PK	74.00	-19.0	1.04V	124	37.40	39.13	12.92	34.48	-17.56
5	10521.00	49.8 AV	54.00	-4.20	1.04V	124	32.20	39.13	12.92	34.48	-17.56
6	15781.00	49.9 AV	54.00	-4.10	1.23V	119	33.20	38.16	13.35	34.80	-16.71
7	15781.00	54.7 PK	74.00	-19.3	1.23V	119	38.00	38.16	13.35	34.80	-16.71.

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Normal Mode	**CHANNEL**	8
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Steven Lu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1064.00	37.7 PK	74.00	-36.6	1.19H	197	45.69	24.60	3.31	35.88	7.97
2	4256.00	47.3 PK	74.00	-26.7	1.37H	283	44.60	30.60	6.75	34.61	-2.74
3	6384.00	51.1 PK	74.00	-22.9	1.29H	27	43.60	33.99	8.09	34.60	-7.48
4	10638.00	50.1 AV	54.00	-3.90	1.00H	113	32.40	39.31	12.77	34.38	-17.69
5	10638.00	54.9 PK	74.00	-19.1	1.00H	113	37.20	39.31	12.77	34.38	-17.69.
6	15958.00	53.4 PK	74.00	-20.60	1.13H	88	37.20	37.54	13.45	34.80	-16.20
7	15958.00	48.5 AV	54.00	-5.50	1.13H	88	32.30	37.54	13.45	34.80	-16.20

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	1064.00	38.7 PK	74.00	-35.3	1.18V	192	46.70	24.60	3.31	35.88	7.97
2	4256.00	51.2 PK	74.00	-22.8	1.18V	36	48.50	30.60	6.75	34.61	-2.74
3	6384.00	52.0 PK	74.00	-22.0	1.15V	302	44.50	33.99	8.09	34.60	-7.48
4	10638.00	55.2 PK	54.00	-18.8	1.19V	100	37.50	39.31	12.77	34.38	-17.69
5	10638.00	49.7 AV	54.00	-4.30	1.19V	100	32.00	39.31	12.77	34.38	-17.69
6	15958.00	48.7 AV	54.00	-5.30	1.16V	92	32.50	37.54	13.45	34.80	-16.20
7	15958.00	54.2 PK	74.00	-19.8	1.16V	92	38.00	37.54	13.45	34.80	-16.19.

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Turbo Mode	**CHANNEL**	1
FREQUENCY RANGE	30-1000 MHz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	18 deg. C, 60%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Steven Lu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	384.01	22.9 QP	46.0	-23.1	1.08H	190	32.20	15.50	2.18	27.00	9.33
2	512.30	28.7 QP	46.0	-17.3	1.08H	349	35.69	17.42	2.55	27.00	7.03
3	544.20	32.8 QP	46.0	-13.2	1.08H	208	39.25	17.86	2.66	27.00	6.48
4	608.00	26.1 QP	46.0	-19.9	1.36H	104	31.58	18.70	2.86	27.00	5.44
5	736.00	28.8 QP	46.0	-17.2	1.36H	104	32.69	19.93	3.23	27.00	3.84
6	832.00	31.2 QP	46.0	-14.5	1.19H	25	34.25	20.55	3.44	27.00	3.01

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	384.00	25.9 QP	46.0	-20.1	1.14V	192	35.20	15.50	2.18	27.00	9.33
2	512.05	31.9 QP	46.0	-14.1	1.63V	83	38.96	17.42	2.55	27.00	7.03
3	544.10	30.0 QP	46.0	-16.0	1.42V	317	36.50	17.86	2.66	27.00	6.48
4	608.00	24.8 QP	46.0	-21.2	1.08V	310	30.20	18.70	2.86	27.00	5.44
5	736.01	28.7 QP	46.0	-17.3	1.13V	38	32.58	19.83	3.23	27.00	3.84
6	832.00	29.6 QP	46.0	-16.4	1.08V	310	32.58	20.55	3.44	27.00	3.01

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Turbo Mode	**CHANNEL**	1
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Gary Chang		

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10365.00	48.1 AV	54.00	-5.90	1.07H	157	32.00	38.86	11.92	34.65	-16.12
2	10365.00	52.1 PK	74.00	-21.90	1.07H	157	36.00	38.86	11.92	34.65	-16.12
3	15535.00	57.4 PK	74.00	-16.60	1.10H	175	40.00	39.07	13.16	34.80	-17.43.
4	15535.00	50.4 AV	54.00	-3.60	1.10H	175	33.00	39.07	13.16	34.80	-17.43

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10359.00	48.1 AV	54.00	-5.90	1.07V	182	32.00	38.86	11.92	34.65	-16.12
2	10359.00	53.1 PK	74.00	-20.90	1.07V	182	37.00	38.86	11.92	34.65	-16.12
3	15535.00	52.4 AV	54.00	-1.60	1.14V	181	35.00	39.07	13.16	34.80	-17.43
4	15535.00	58.4 PK	74.00	-15.60	1.14V	181	41.00	39.07	13.16	34.80	-17.43.

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Turbo Mode	**CHANNEL**	4
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Gary Chang		

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10479.00	49.3 AV	54.00	-4.70	1.07H	146	32.00	39.06	12.73	34.52	-17.27
2	10479.00	54.3 PK	74.00	-19.70	1.07H	146	37.00	39.06	12.73	34.52	-17.27.
3	15715.00	50.0 AV	54.00	-4.00	1.09H	142	33.00	38.46	13.31	34.80	-16.97
4	15715.00	55.0 PK	74.00	-19.00	1.09H	142	38.00	38.46	13.31	34.80	-16.97.

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10365.00	47.9 AV	54.00	-6.10	1.06V	153	31.80	38.86	11.92	34.65	-16.12
2	10365.00	52.1 PK	74.00	-21.90	1.06V	153	36.00	38.86	11.92	34.65	-16.12
3	15715.00	50.0 AV	54.00	-4.00	1.12V	147	33.00	38.46	13.31	34.80	-16.97
4	15715.00	54.0 PK	74.00	-20.00	1.12V	147	37.00	38.46	13.31	34.80	-16.97

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Turbo Mode	**CHANNEL**	5
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Gary Chang		

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10519.00	54.8 PK	74.00	-19.20	1.13H	138	37.20	39.13	12.92	34.48	-17.56
2	10519.00	50.1 AV	54.00	-3.90	1.13H	138	32.50	39.13	12.92	34.48	-17.56
3	15782.00	49.1 AV	54.00	-4.90	1.06H	123	32.40	38.16	13.35	34.80	-16.71
4	15782.00	54.1 PK	74.00	-19.90	1.06H	123	37.40	38.16	13.35	34.80	-16.71.

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10522.00	49.8 AV	54.00	-4.20	1.05V	142	32.20	39.13	12.92	34.48	-17.56
2	10522.00	55.6 PK	74.00	-18.40	1.05V	142	38.00	39.13	12.92	34.48	-17.56.
3	15782.00	53.7 PK	74.00	-20.30	1.08V	130	37.00	38.16	13.35	34.80	-16.71
4	15782.00	48.7 AV	54.00	-5.30	1.08V	130	32.00	38.16	13.35	34.80	-16.71

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Turbo Mode	**CHANNEL**	8
FREQUENCY RANGE	Above 1000 MHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1050 hPa	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Gary Chang		

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10640.00	50.7 AV	54.00	-3.30	1.08H	117	33.00	39.31	12.77	34.38	-17.69
2	10640.00	54.7 PK	74.00	-19.30	1.08H	117	37.00	39.31	12.77	34.38	-17.69.
3	15960.00	53.0 PK	74.00	-21.00	1.10H	103	36.80	37.54	13.45	34.80	-16.19
4	15960.00	48.4 AV	54.00	-5.60	1.10H	103	32.20	37.54	13.45	34.80	-16.19

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	10631.00	49.7 AV	54.00	-4.30	1.14V	124	32.00	39.31	12.77	34.38	-17.69
2	10631.00	54.5 PK	74.00	-19.50	1.14V	124	36.80	39.31	12.77	34.38	-17.69.
3	15960.00	48.2 AV	54.00	-5.80	1.12V	118	32.00	37.54	13.45	34.80	-16.19
4	15960.00	53.2 PK	74.00	-20.80	1.12V	118	37.00	37.54	13.45	34.80	-16.19

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

4.2.7 TEST RESULTS(RECEIVING)

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
CHANNEL	11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	18 deg. C, 60 % RH, 1050 hPa	**TESTED BY**: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	320.00	18.8 QP	46.0	-27.2	1.11H	144	30.20	13.62	1.95	27.00	11.43
2	384.01	25.9 QP	46.0	-20.1	1.11H	259	35.20	15.50	2.18	27.00	9.33
3	512.30	31.7 QP	46.0	-14.3	1.08H	353	38.69	17.42	2.55	27.00	7.03
4	544.20	31.8 QP	46.0	-14.2	1.08H	305	38.25	17.86	2.66	27.00	6.48
5	608.00	30.2 QP	46.0	-15.8	1.08H	214	35.68	18.70	2.86	27.00	5.44
6	736.00	31.8 QP	46.0	-14.2	1.08H	211	35.60	19.93	3.23	27.00	3.84
7	832.00	32.6 QP	46.0	-13.4	1.36H	339	35.60	20.55	3.44	27.00	3.01

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	320.00	18.2 QP	46.0	-27.8	1.11V	106	29.63	13.62	1.95	27.00	11.43
2	384.00	23.7 QP	46.0	-22.3	1.06V	248	33.00	15.50	2.18	27.00	9.33
3	512.00	25.3 QP	46.0	-20.7	1.06V	306	32.30	17.42	2.55	27.00	7.03
4	544.00	28.8 QP	46.0	-17.2	1.18V	326	35.26	17.86	2.66	27.00	6.48
5	608.00	26.6 QP	46.0	-19.4	1.32V	234	32.00	18.70	2.86	27.00	5.44
6	736.00	30.0 QP	46.0	-16.0	1.32V	151	33.80	19.83	3.23	27.00	3.84
7	832.00	29.3 QP	46.0	-16.7	1.11V	61	32.30	20.55	3.44	27.00	3.01

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
CHANNEL	1	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60 % RH, 1050 hPa	**TESTED BY**: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6216.0	39.2 PK	74.00	-34.8	1.08H	83	32.50	33.31	8.03	34.60	-6.71

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6216.0	41.0 PK	74.00	-33.0	1.19V	25	34.25	33.31	8.03	34.60	-6.74

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
CHANNEL	4	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60 % RH, 1050 hPa	**TESTED BY**: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6288.00	40.2 PK	74.00	-33.8	1.13H	227	33.20	33.48	8.13	34.60	-7.01

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6288.00	42.2 PK	74.00	-31.8	1.08V	366	35.20	33.48	8.13	34.60	-7.01

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
CHANNEL	5	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60 % RH, 1050 hPa	**TESTED BY**: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6312.00	43.0 PK	74.00	-31.0	1.10H	177	35.80	33.65	8.19	34.60	-7.24

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6312.00	45.0 PK	74.00	-29.0	1.13V	275	37.80	33.65	8.19	34.60	-7.24

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
CHANNEL	8	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18 deg. C, 60 % RH, 1050 hPa	**TESTED BY**: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6384.00	43.3 PK	74.00	-30.7	1.10H	177	35.80	33.99	8.09	34.60	-7.48

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)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	6384.00	45.0 PK	74.00	-29.00	1.06V	248	37.54	33.99	8.09	34.60	-7.48

NOTE:

1. Emission level = Raw value - Correction Factor
2. Correction Factor = Pre-Amp. Factor - Ant. Factor - Cable loss
   (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
3. Margin value = Emission level - Limit value
4. " * " : Fundamental frequency
5. The other emission levels were very low against the limit.

4.3 PEAK TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	50mW or 4 dBm +10 log B
5.25 – 5.35 GHz	250 mW or 11 dBm +10 log B
5.725 – 5.825 GHz	1W or 17 dBm +10 log B

Note: Where B is the 26 dB emission bandwidth in MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE&SCHWARZ SINGLE CHANNEL POWER METER	NRVS	100026	Mar. 21, 2003
ROHDE&SCHWARZ PEAK POWER METER	NRV-Z32	100013	Mar. 21, 2003

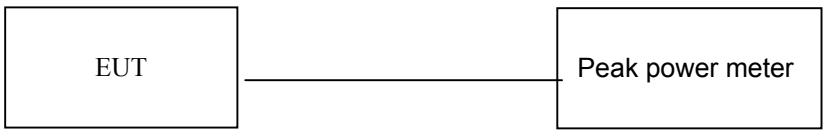
NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. 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 peak power senser.

4.3.4 TEST SETUP



4.3.5 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

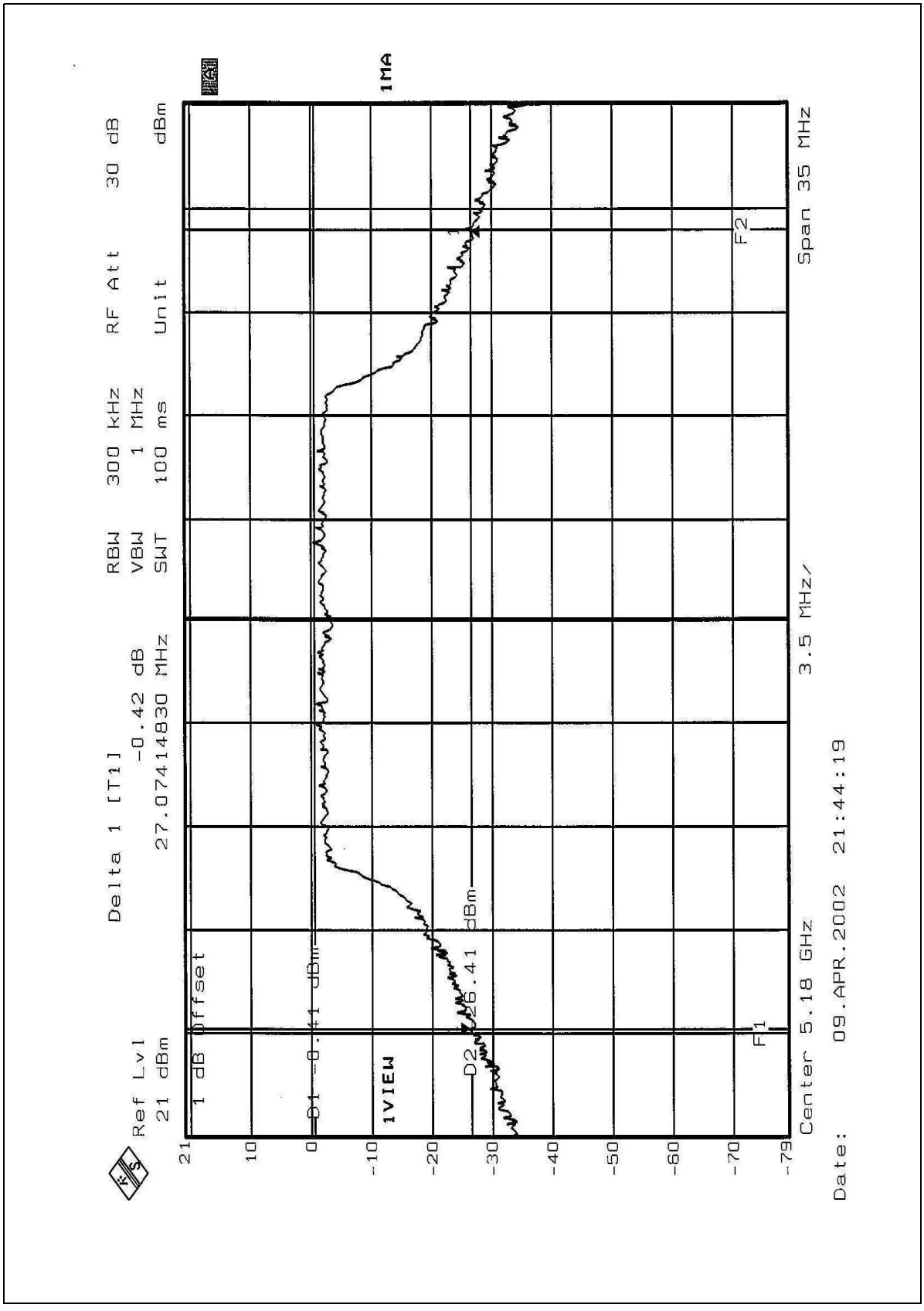
4.3.6 TEST RESULTS

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	21 deg. C, 50%RH, 1005 hPa	**TESTED BY**	Bruce Shiau

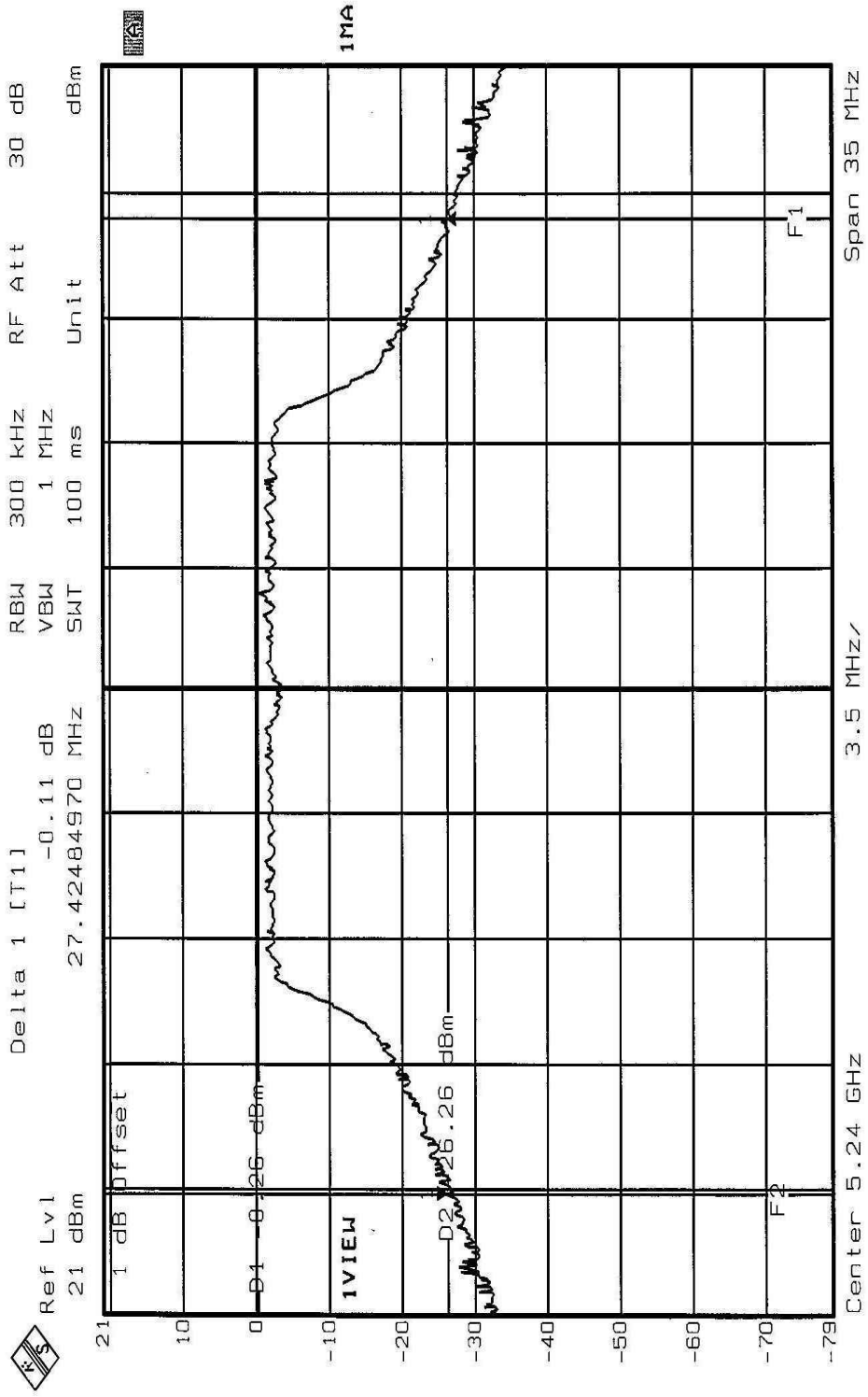
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	10.69	18.32	27.04	PASS
4	5240	10.40	18.38	27.42	PASS
5	5260	10.50	25.47	27.99	PASS
8	5320	10.89	25.28	26.79	PASS

NOTE: The 26dBc Occupied Bandwidth plot, please refer next 3 pages.

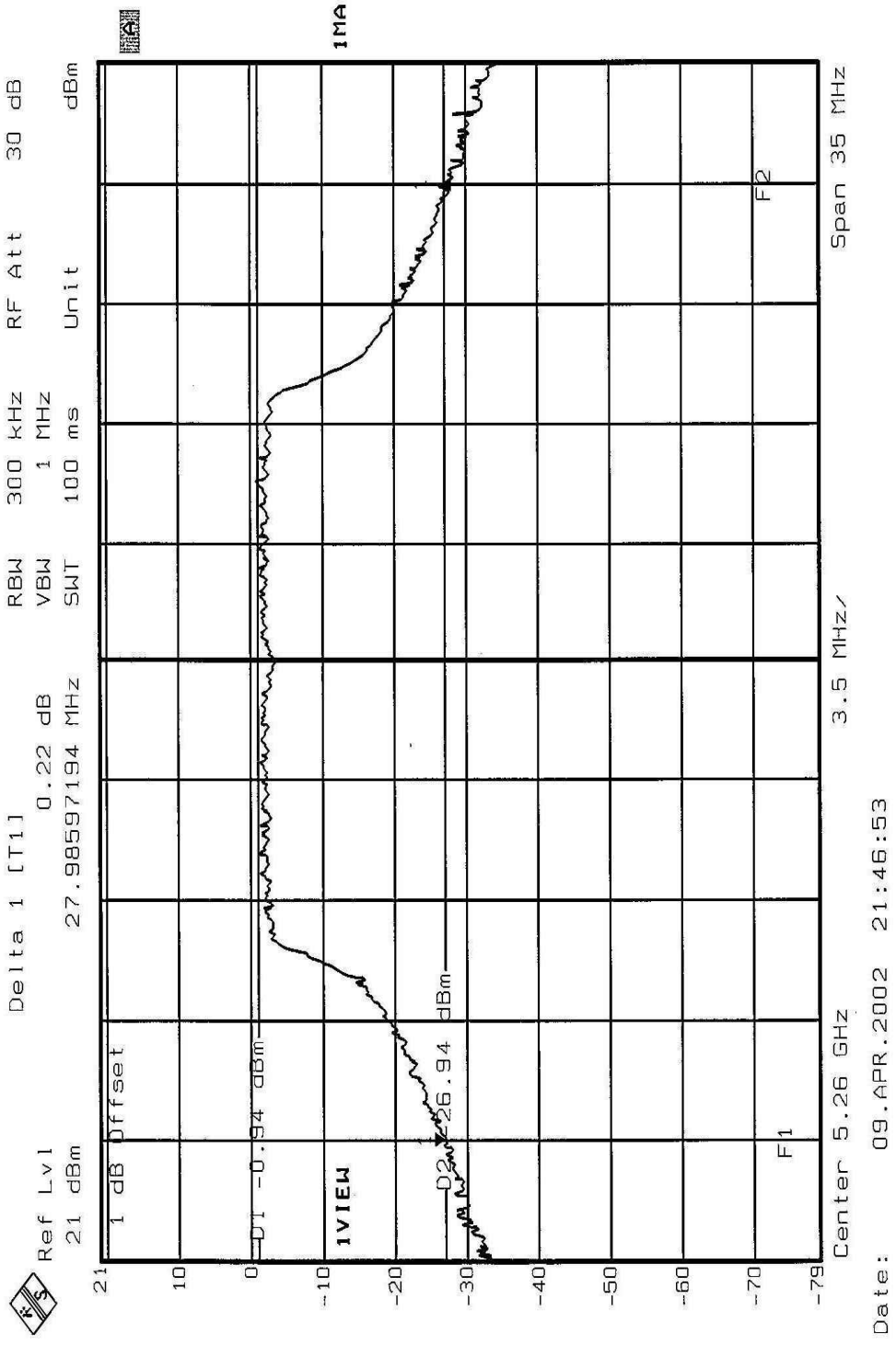
CHANNEL 1


Ref Lvl
21 dBm
1 dB Offset
Delta 1 [T1]
-0.42 dB
27.074148 30 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 -8.41 dBm
D2 -26.41 dBm
F1
F2
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
Date: 09.APR.2002 21:44:19

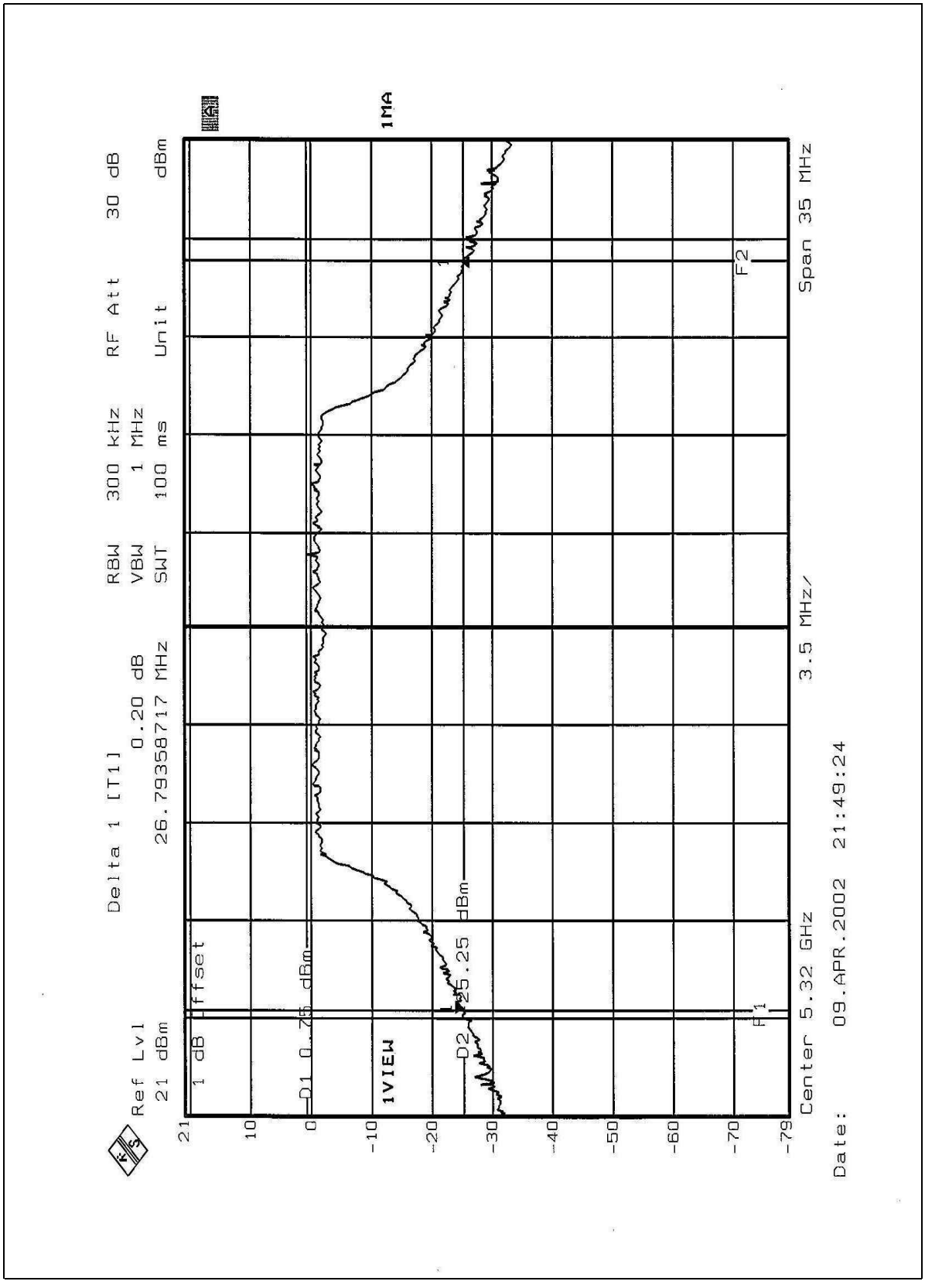
CHANNEL 4


Delta 1 [T1]
-0.11 dB
27.42484970 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB offset
D1 -8.26 dBm
D2 -26.26 dBm
1VIEW
1MA
F1
F2
Span 35 MHz
3.5 MHz/
Center 5.24 GHz
Date: 09.APR.2002 21:45:59
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79

CHANNEL 5


Delta 1 [T1]
0.22 dB
27.98597194 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB Offset
D1 -0.94 dBm
D2 -26.94 dBm
1VIEW
1MA
F1
F2
Span 35 MHz
3.5 MHz/
Center 5.26 GHz
Date: 09.APR.2002 21:46:53
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79

CHANNEL 8

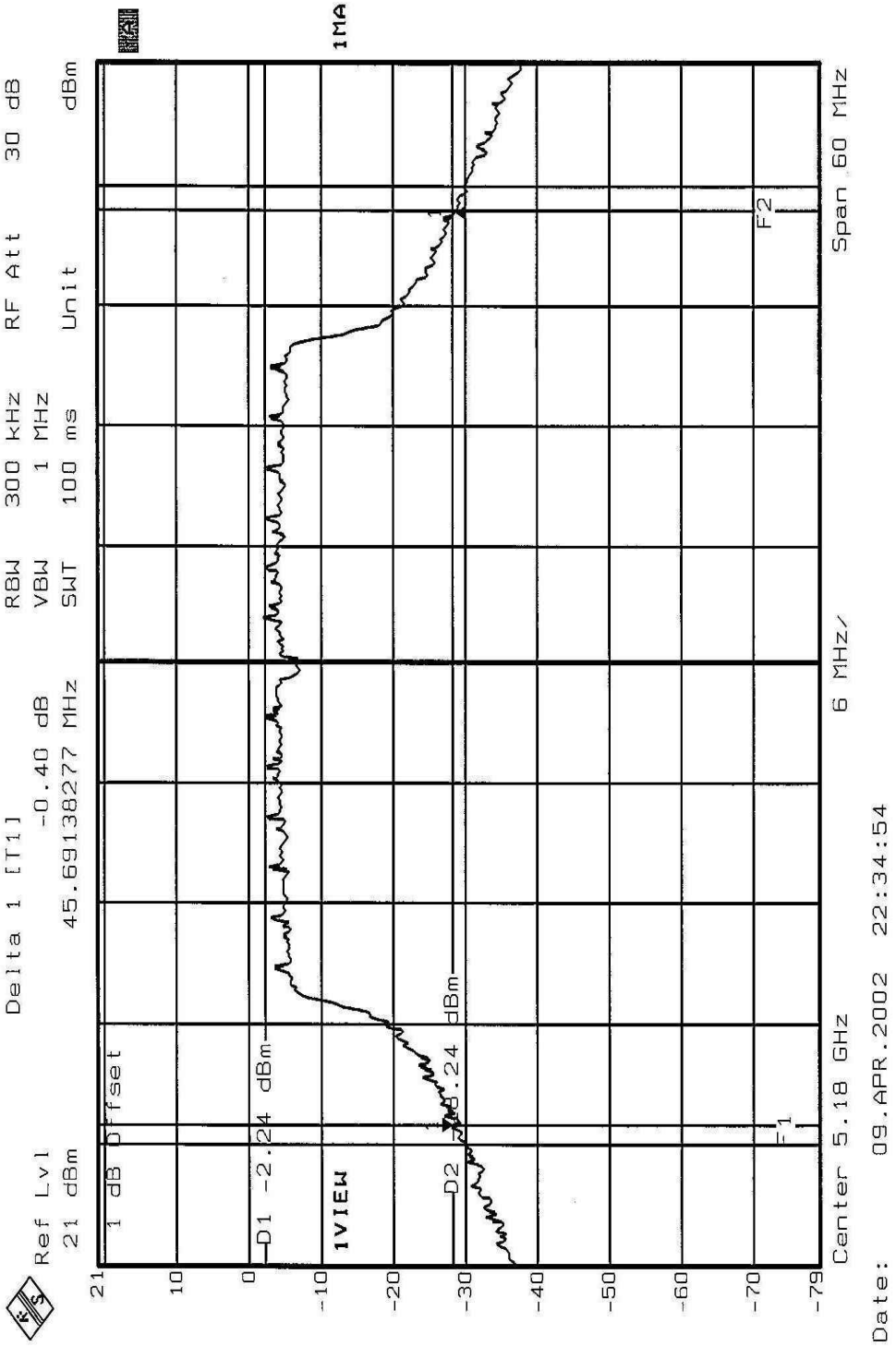

Ref Lvl
21 dBm
1 dB Offset
Delta 1 [T1]
0.20 dB
26.79358717 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 0.75 dBm
D2 25.25 dBm
F1
F2
Span 35 MHz
3.5 MHz/
Center 5.32 GHz
Date: 09.APR.2002 21:49:24

EUT	54Mbps Wireless Network PC Card	**MODEL**	WPC54A
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	21 deg. C, 50%RH, 1005 hPa	**TESTED BY**	Bruce Shiau

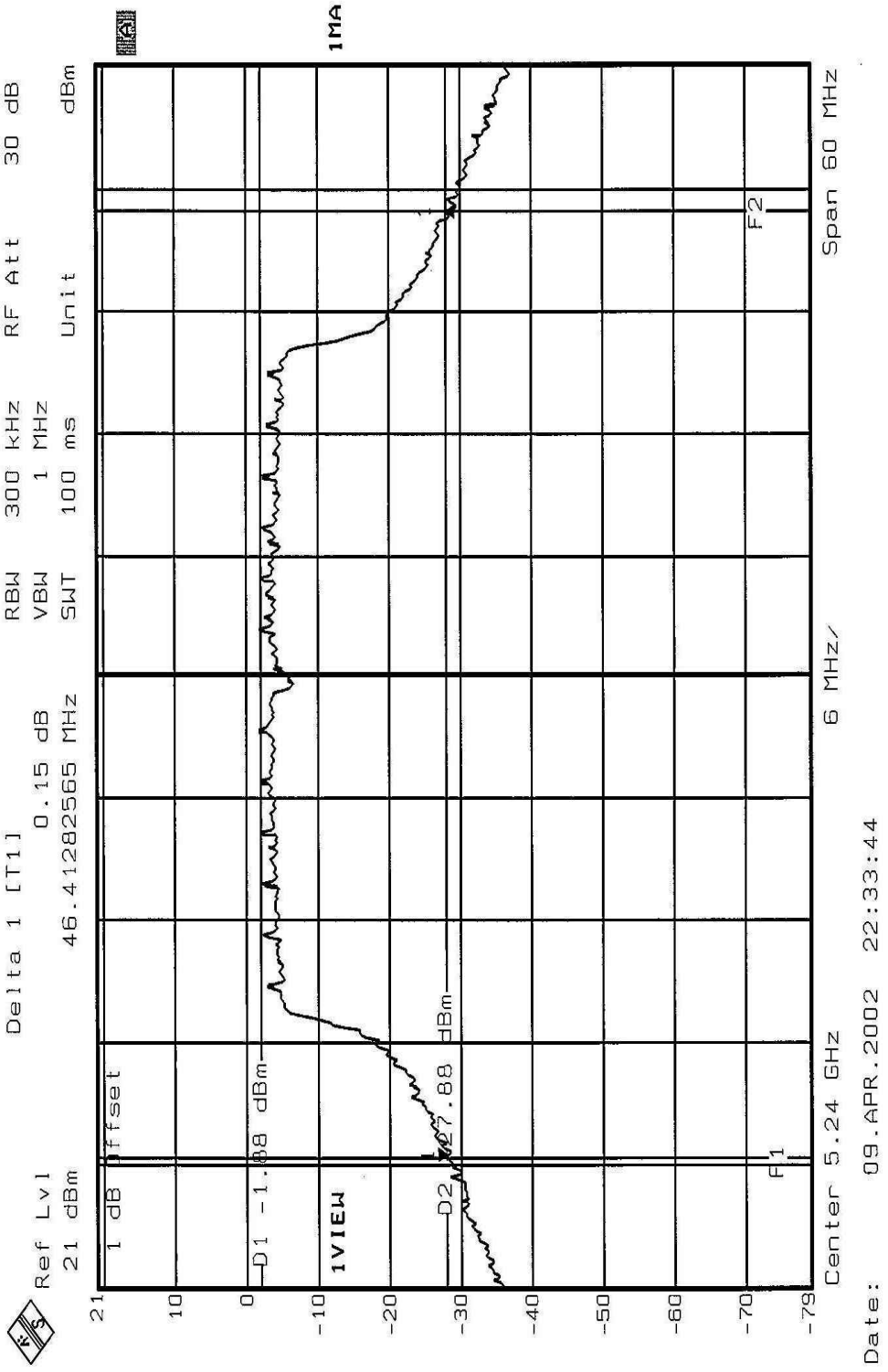
CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	10.59	20.60	45.69	PASS
4	5240	10.67	20.67	46.41	PASS
5	5260	10.69	27.61	45.81	PASS
8	5320	10.86	27.52	44.85	PASS

NOTE: The 26dBc Occupied Bandwidth plot, please refer next 3 pages.

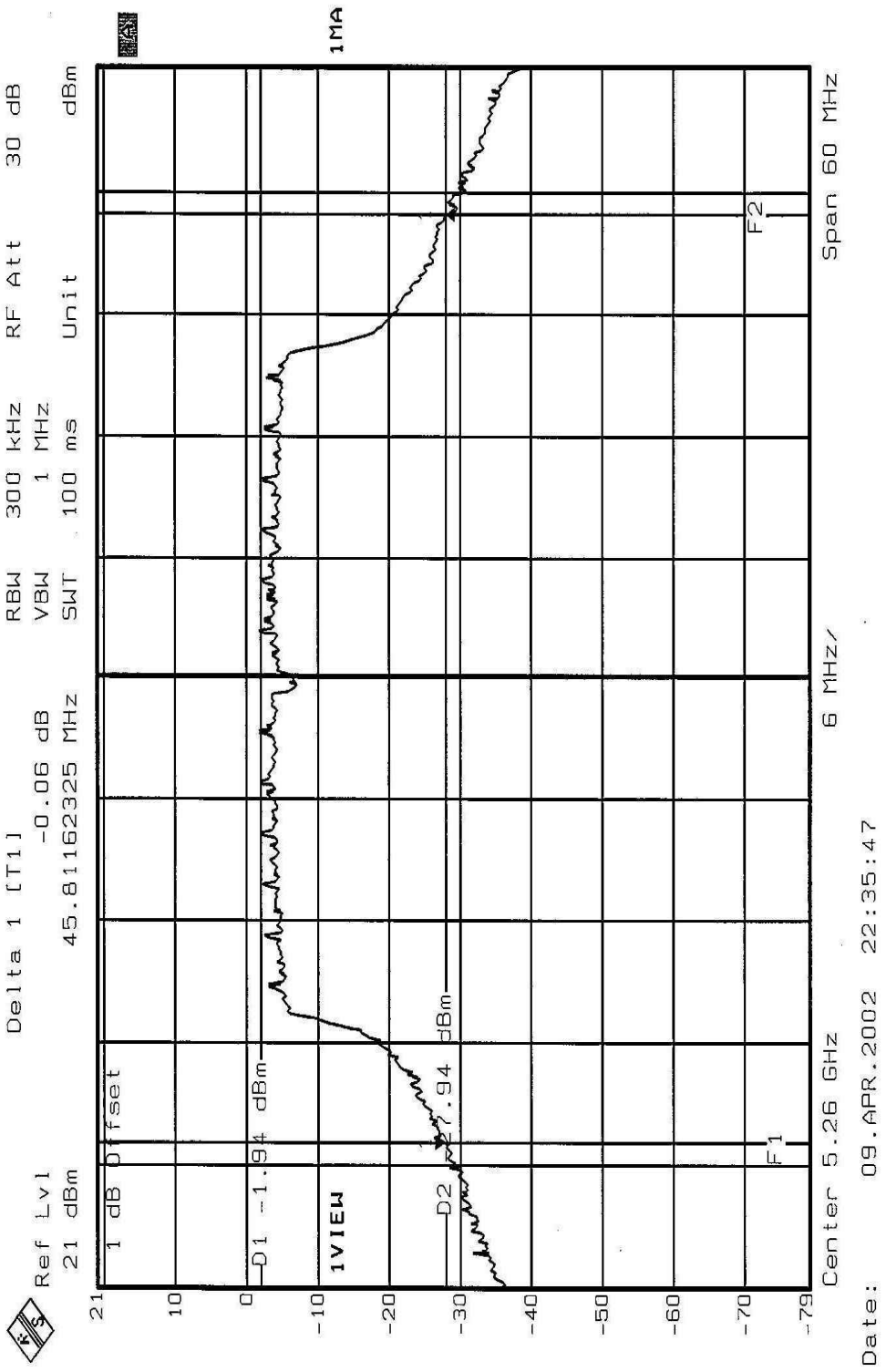
CHANNEL 1


Delta 1 [T1]
-0.40 dB
45.69138277 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB Offset
D1 -2.24 dBm
D2 -8.24 dBm
1VIEW
1MA
F1
F2
Center 5.18 GHz
6 MHz/
Span 60 MHz
Date: 09.APR.2002 22:34:54

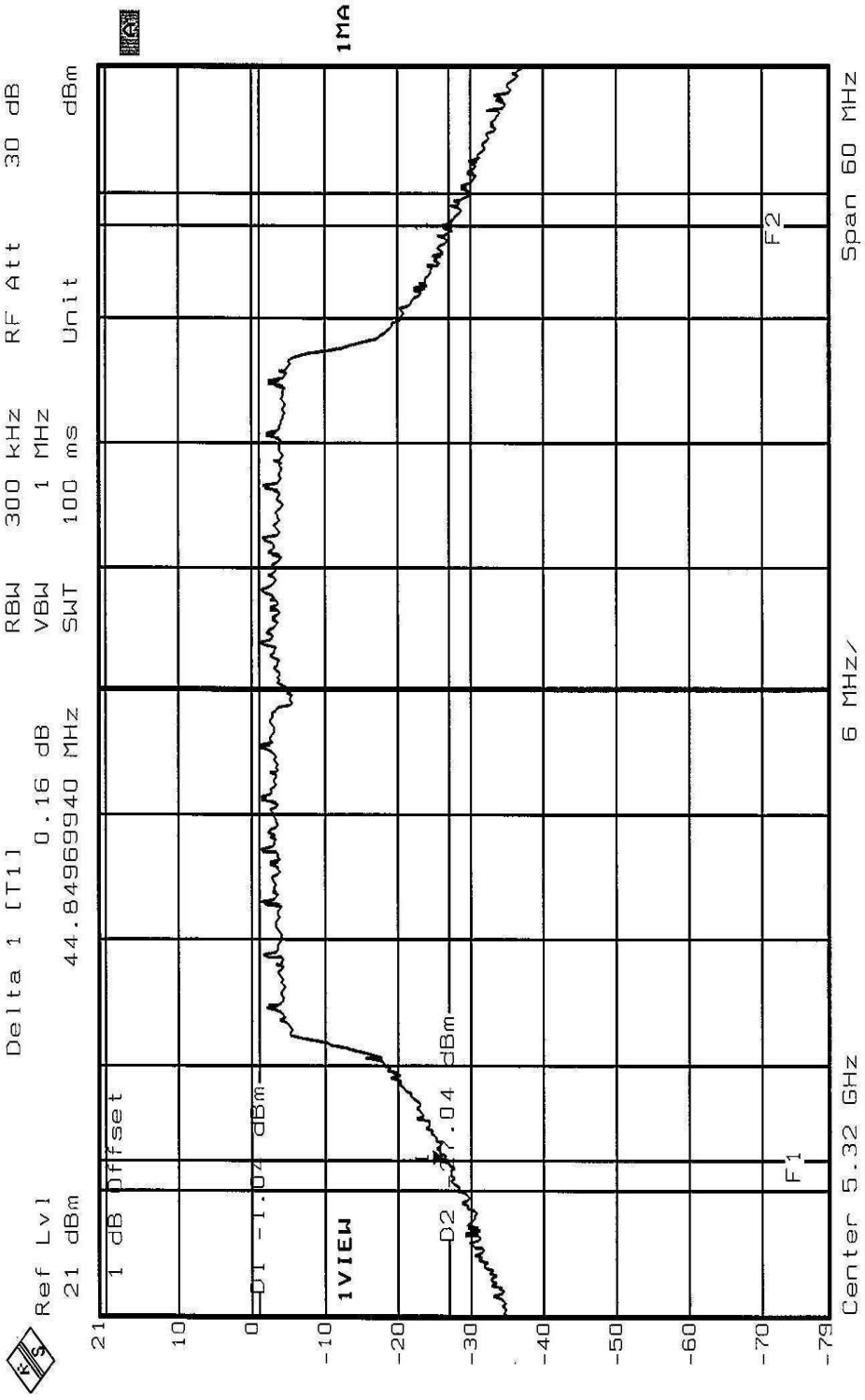
CHANNEL 4


Ref Lvl
21 dBm
1 dB Offset
Delta 1 [T1]
0.15 dB
46.41282565 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 -1.88 dBm
D2 -27.88 dBm
F1
F2
Center 5.24 GHz
6 MHz/
Span 60 MHz
Date: 09.APR.2002 22:33:44

CHANNEL 5


Delta 1 [T1]
-0.06 dB
45.81162325 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB/ Offset
D1 -1.94 dBm
D2 -27.94 dBm
1VIEW
1MA
F1
F2
Center 5.26 GHz
6 MHz/
Span 60 MHz
Date: 09.APR.2002 22:35:47

CHANNEL 8


Delta 1 [T1]
0.16 dB
44.84969940 MHz
RBW 300 kHz
VBW 1 MHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB Offset
D1 -1.02 dBm
D2 -7.04 dBm
1VIEW
1MA
F1
F2
Center 5.32 GHz
6 MHz/
Span 60 MHz
Date: 09.APR.2002 22:36:32