

FCC TEST REPORT

REPORT NO.: RF910828H04 **MODEL NO.:** RF50702-02 **RECEIVED:** Aug. 28, 2002

TESTED: Aug. 30 to Sep. 03, 2002

APPLICANT: RF-LINK SYSTEMS INC.

ADDRESS: 1F, No 9 Chan Yen Road 1 Science-Based

Industrial Park

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 NVLAP

Lab Code: 200102-0



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CERTIFICATION

PRODUCT: WLAN Card

BRAND NAME: RF-LINK system Inc.

MODEL NO.: RF50702-02

APPLICANT: RF-LINK SYSTEMS INC.

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. 30 to Sep. 03, 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.

CHECKED BY: Amanda Chu , DATE: <u>Sep. 19, 2002</u> (Amanda Chu)

____, DATE: _____ Sep. 19, 2002 **APPROVED BY:**

(Eric Lin, Manager)



Issued: Sep. 19, 2002

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 Limit: 48dBuV	PASS	Meet the requirement of limit Minimum passing margin is –16.10 dBuV at 0.173 MHz				
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	MEET THE REQUIREMENT OF LIMIT				
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit				
15.247(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –3.2 dBuV at 176.00 MHz				
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	MEET THE REQUIREMENT OF LIMIT				
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit				



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	WLAN Card
MODEL NO.	RF50702-02
POWER SUPPLY	3.3VDC from host equipment
MODULATION TYPE	CCK, BPSK, QPSK
RADIO TECHNOLOGY	DSSS
TRANSFER RATE	1/2/5.5/11Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	13.98dBm
ANTENNA TYPE	Dipole 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

Eleven channels are provided in 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.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a WLAN Card. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

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

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

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



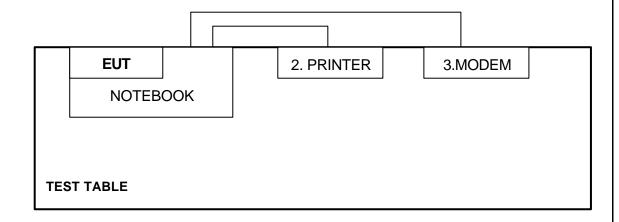
3.4 DESCRIPTION OF SUPPORT UNITS

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

No.	Product	Brand	Model No.	Serial No.	FCC ID	
1	NOTEBOOK		DDO41	TW-09C748-	500 D 0	
	NOTEBOOK	DELL PP01L		12800-1A3-1999	FCC DoC	
2	PRINTER	HP	C2642A	MY7961C1K3	B94C2642X	
3	MODEM	ACEEX	1414	980020557	IFAXDM1414	

No.	Signal cable description
1	NA
	1.8 m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core.
	1.0 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.

Note: 1. The power cords of the above support units were unshielded (1.8m).



NOTE: 1. Please refer to the photos of test configuration in Item 5 also.



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTE	ED LIMIT (dBµV)
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. 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.	CALIBRATION DATE
ROHDE & SCHWARZ	ESCS 30	847124/029	Dec. 21, 2002
Test Receiver			
ROHDE & SCHWARZ LISN	ESHS-Z5	848773/004	Nov. 22, 2002
(for EUT)			
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 23, 2003
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 03, 2003
Terminator(for KYORITSU)	50	#1	Apr. 11, 2003
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.

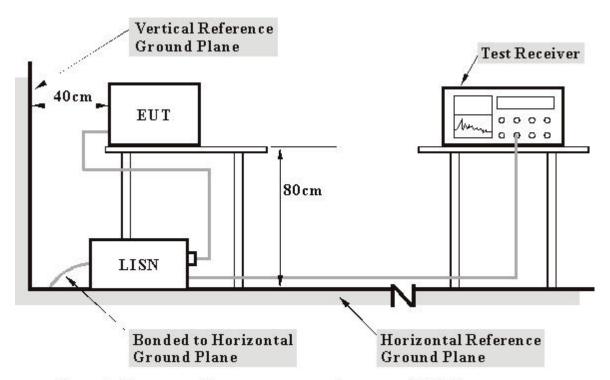
- 2. The test was performed in ADT Shielded Room No. A.
- 3. The VCCI Con A Registration No. is C-817.



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

4.1.3 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.



4.1.4 EUT OPERATING CONDITIONS

- a. Connected the EUT to a computer system via a PCMCIA ADAPTER placed on a testing table.
- 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 modem.
- d. The computer system sent "H" messages to printer and the printer prints them on paper.

ADT No.: 910808H04

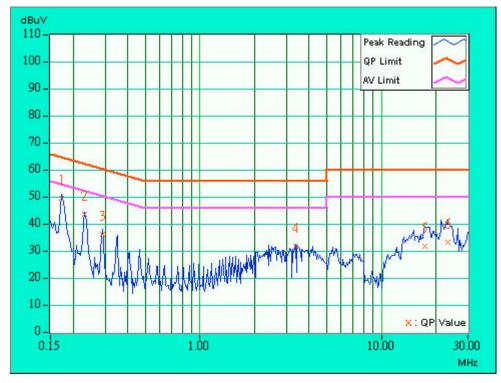


4.1.5 TEST RESULTS

EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	28 deg. C, 57%RH, 971 hPa	TESTED BY	Tony Chen

No	Freq.	Corr.	Readin	g Value	Emissio	n Level	Lir	mit	Mai	rgin
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	48.59	•	48.69	-	64.79	54.79	-16.10	-
2	0.232	0.10	42.60	ı	42.70	-	62.38	52.38	-19.68	-
3	0.291	0.10	35.18	-	35.28	-	60.51	50.51	-25.23	-
4	3.367	0.17	30.90	ı	31.07	-	56.00	46.00	-24.93	-
5	17.469	0.90	30.73	ı	31.63	-	60.00	50.00	-28.37	-
6	23.227	1.13	32.21	ı	33.34	-	60.00	50.00	-26.66	-

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

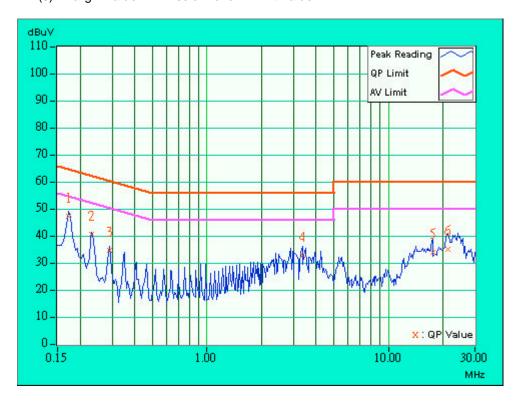




EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	28 deg. C, 57%RH, 971 hPa	TESTED BY	Tony Chen

No	Freq.	Corr.	Readin	g Value	Emissio	n Level	Lir	nit	Mai	gin
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	В)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	46.65	-	46.75	-	64.79	54.79	-18.04	-
2	0.232	0.10	39.96	-	40.06	-	62.38	52.38	-22.32	-
3	0.291	0.10	34.18	ı	34.28	1	60.51	50.51	-26.23	-
4	3.363	0.17	32.23	-	32.40	-	56.00	46.00	-23.60	-
5	17.594	0.65	33.43	-	34.08	-	60.00	50.00	-25.92	-
6	21.418	0.76	34.43	-	35.19	-	60.00	50.00	-24.81	-

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

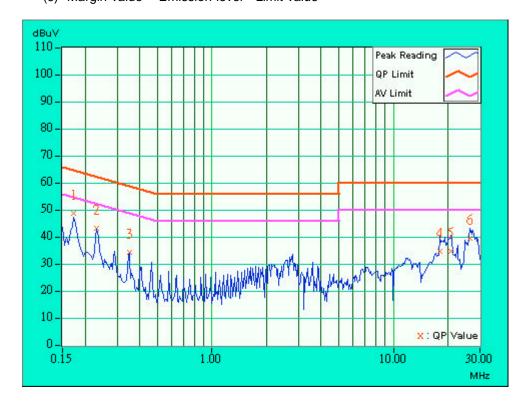




EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	28 deg. C, 57%RH, 971 hPa	TESTED BY	Tony Chen

No	Freq.	Corr.	Readin	g Value	Emissic	n Level	Lir	nit	Mai	rgin
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	47.61	-	47.71	-	64.79	54.79	-17.08	-
2	0.232	0.10	42.29	-	42.39	-	62.38	52.38	-19.99	-
3	0.349	0.10	33.41	-	33.51	1	58.98	48.98	-25.47	-
4	17.980	0.92	33.44	-	34.36	-	60.00	50.00	-25.64	-
5	20.789	1.03	33.48	-	34.51	-	60.00	50.00	-25.49	-
6	26.332	1.20	38.29	-	39.49	-	60.00	50.00	-20.51	-

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



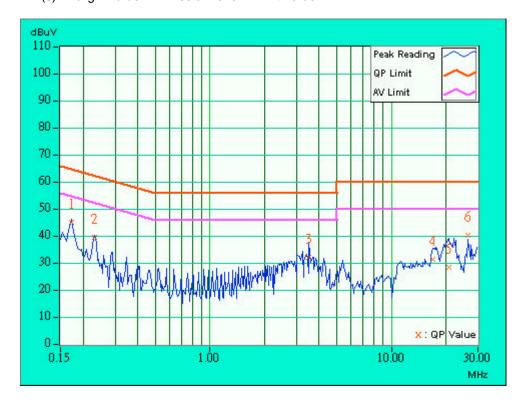


Issued: Sep. 19, 2002

EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	28 deg. C, 57%RH, 971 hPa	TESTED BY	Tony Chen

No	Freq.	Corr.	Readin	g Value	Emissio	n Level	Lir	mit	Mai	rgin
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	44.21	-	44.31	-	64.79	54.79	-20.48	-
2	0.232	0.10	38.63	-	38.73	-	62.38	52.38	-23.65	-
3	3.516	0.18	31.45	ı	31.63	1	56.00	46.00	-24.37	-
4	16.879	0.64	30.76	-	31.40	-	60.00	50.00	-28.60	-
5	20.773	0.73	27.58	-	28.31	-	60.00	50.00	-31.69	-
6	26.332	0.90	39.53	-	40.43	-	60.00	50.00	-19.57	-

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

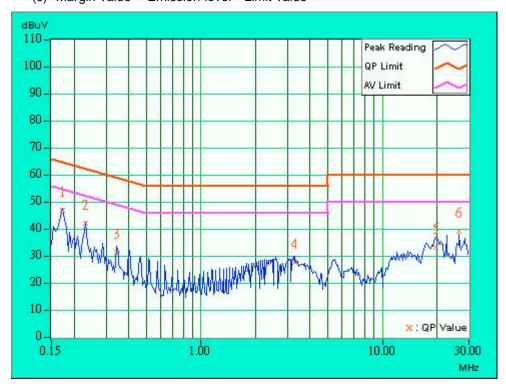




EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	28 deg. C, 57%RH, 971 hPa	TESTED BY	Tony Chen

No	Freq.	Corr.	Readin	g Value	Emissio	n Level	Lir	mit	Mai	rgin
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	45.84	-	45.94	-	64.79	54.79	-18.85	-
2	0.232	0.10	41.16	-	41.26	-	62.38	52.38	-21.12	-
3	0.341	0.10	30.43	ı	30.53	1	59.17	49.17	-28.64	-
4	3.285	0.16	26.56	-	26.72	-	56.00	46.00	-29.28	-
5	19.750	0.99	32.15	-	33.14	-	60.00	50.00	-26.86	-
6	26.332	1.20	38.21	-	39.41	-	60.00	50.00	-20.59	-

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

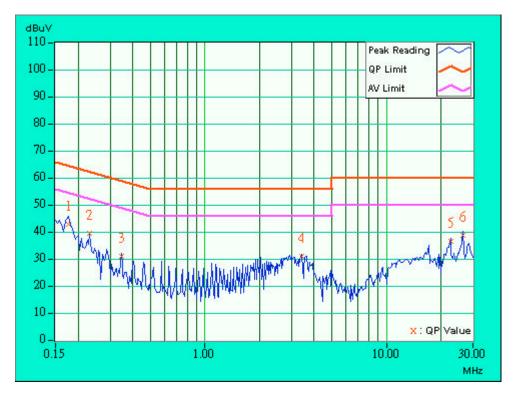




EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	28 deg. C, 57%RH, 971 hPa	TESTED BY	Tony Chen

No	Freq.	Corr.	Reading	g Value	Emissio	n Level	Lir	mit	Mai	rgin
		Factor	[dB	(uV)]	[dB	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.10	41.98	-	42.08	-	64.61	54.61	-22.53	-
2	0.232	0.10	38.55	-	38.65	-	62.38	52.38	-23.73	-
3	0.345	0.10	30.31	ı	30.41	1	59.07	49.07	-28.66	-
4	3.395	0.17	30.33	-	30.50	-	56.00	46.00	-25.50	-
5	22.570	0.80	35.66	-	36.46	-	60.00	50.00	-23.54	-
6	26.332	0.90	37.94	-	38.84	-	60.00	50.00	-21.16	-

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





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	Field Strength of Fundamental				
(MHz)	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.

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4.2.2 TEST INSTRUMENTS (please check again)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATION DATE
*HP Spectrum Analyzer	8590L	3467U00646	Aug. 28, 2003
*ADVANTEST Spectrum Analyzer	R3271A	85060311	May 21, 2003
CHASE RF Pre_Amplifier	CPA9232	1010	Feb. 22, 2003
*HP Pre_Amplifier	8449B	3008A01281	Jun. 27, 2003
*ROHDE & SCHWARZ Test Receiver	ESVS 30	841977/002	Jan. 14, 2003
*CHASE Broadband Antenna	CBL6112B	2798	May 17, 2003
*Schwarzbeck Horn_Antenna	BBHA9120-D1	D123	Jul. 31, 2003
SCHWARZBECK Tunable	UHAP9105	E101055	Nov. 23, 2002
Dipole Antenna			
SCHWARZBECK Tunable	VHAP9103	E101051	Nov. 23, 2002
Dipole Antenna			
*RF Switches	MP59B	1-5161-28698	Jul. 29, 2003
*RF Cable(CHASE)	CH A9525	Cable_OB_01	Jul. 29, 2003
*Software	AS60P8	NA	NA
*CHANCE MOST Antenna Tower	AT-100	CM-A007	NA
*CHANCE MOST Turn Table	TC-008	CM-T007	NA
*CORCOM AC Filter	MRI2030	024/019	NA
*BAND REJECT FILTER	WRCT2400/2483 -2375/2505- 30/10SS	SN1	NA
Highpass filter	WHK3600/8000- 5SS	SN4	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. * = These equipment are used for the final measurement.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The test was performed in ADT Open Site No. B.
- 5. The VCCI Site Registration No. is R-847.
- 6. The FCC Site Registration No. is 92753.

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4.2.3 TEST PROCEDURES

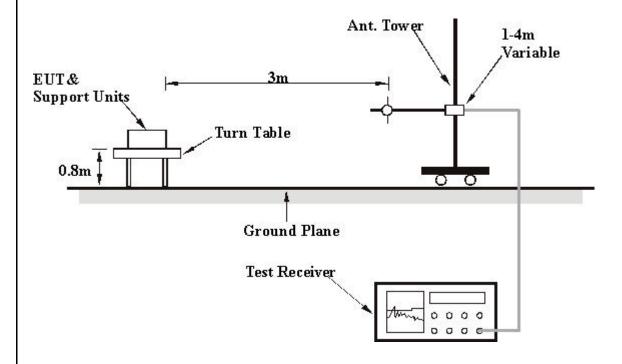
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on 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

EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	27 deg. C, 58 % RH, 971 hPa	TESTED BY	Tony Chen

	AN	TENNA	POLAR	ITY &	TEST	DISTA	NCE:	HORIZ	ATNC	LAT3	M
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor
	(IVITZ)	(dBuV/m)	(ubuv/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)
1	176.00	40.30 QP	43.50	-3.20	1.66H	191	30.13	8.69	1.50	0.00	-10.19
2	220.00	28.70 QP	46.00	-17.30	1.26H	176	18.59	8.47	1.59	0.00	-10.07
3	264.00	32.80 QP	46.00	-13.20	1.00H	199	18.10	13.00	1.73	0.00	-14.73
4	308.00	35.60 QP	46.00	-10.40	1.04H	207	20.30	13.38	1.94	0.00	-15.31
5	352.00	34.50 QP	46.00	-11.50	1.00H	191	18.14	14.29	2.12	0.00	-16.40
6	396.00	36.30 QP	46.00	-9.70	1.01H	5	18.16	15.77	2.38	0.00	-18.15.
7	616.00	29.70 QP	46.00	-16.30	1.66H	272	7.90	18.84	2.93	0.00	-21.77
8	792.00	30.10 QP	46.00	-15.90	1.26H	237	6.80	20.37	2.95	0.00	-23.31
9	924.00	33.00 QP	46.00	-13.00	1.10H	230	8.80	20.85	3.40	0.00	-24.25

NOTES: (1) Emission level (dBuV/m) = Reading value (dBuV) - Correction Factor (dB).

- (2) Correction Factor (dB/m) = Pre-Amp. Factor [Ant. Factor (dB/m)+Cable loss (dB)].
- (3) The other emission levels were very low against the limit.
- (4) Margin value = Emission level Limit value





EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	27 deg. C, 58 % RH, 971 hPa	TESTED BY	Tony Chen

	Α	NTENN	A POLA	RITY	& TES	T DIST	ANCE	: VERT	ICAL	AT 3 M	
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor
	(1011 12)	(dBuV/m)	(ubuv/iii)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)
1	132.00	29.30 QP	43.50	-14.20	1.29V	280	16.20	11.73	1.32	0.00	-13.05
2	176.00	31.60 QP	43.50	-11.90	1.97V	132	21.43	8.69	1.50	0.00	-10.20
3	220.00	25.10 QP	46.00	-20.90	1.96V	227	15.08	8.47	1.59	0.00	-10.07
4	264.00	25.40 QP	46.00	-20.60	2.33V	279	10.70	13.00	1.73	0.00	-14.73
5	308.00	29.10 QP	46.00	-16.90	1.40V	242	13.80	13.38	1.94	0.00	-15.31
6	396.00	31.80 QP	46.00	-14.20	1.11V	312	13.70	15.77	2.38	0.00	-18.15
7	528.00	31.70 QP	46.00	-14.30	1.69V	224	10.70	18.55	2.45	0.00	-21.01
8	704.00	31.50 QP	46.00	-14.50	1.07V	92	9.10	19.56	2.88	0.00	-22.44
9	792.00	30.70 QP	46.00	-15.30	1.05V	307	7.40	20.37	2.95	0.00	-23.31
10	924.00	32.60 QP	46.00	-13.40	1.29V	310	8.40	20.85	3.40	0.00	-24.25

NOTES: (1) Emission level (dBuV/m) = Reading value (dBuV) - Correction Factor (dB).

- (2) Correction Factor (dB/m) = Pre-Amp. Factor [Ant. Factor (dB/m)+Cable loss (dB)].
- (3) The other emission levels were very low against the limit.
- (4) Margin value = Emission level Limit value



EUT	WLAN Card	MODEL	RF50702-02	
MODE	Channel 1	FREQUENCY	Above 1000 MHz	
		RANGE	,	
INPUT POWER	120Vac, 60 Hz	DETECTOR	Peak(PK)	
(SYSTEM)	120 (40, 00 112	FUNCTION	Average(AV)	
ENVIRONMENTAL	27 deg. C, 58 % RH,	TECTED DV	Taran Olaran	
CONDITIONS	971 hPa	TESTED BY	Tony Chen	

	AN ⁻	TENNA	POLAR	ITY &	TEST	DISTA	NCE:	HORIZ	ONTA	L AT 3	M
	Frog	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction
No.	Freq.	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor
	(MHz)	(dBuV/m)	(ubuv/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)
1	*2412.00	94.10 PK			1.47H	248	58.31	28.59	7.19	0.00	-35.78
2	2489.00	39.50 PK	74.00	-34.50	1.47H	312	41.84	29.32	7.33	39.00	2.35
3	4824.00	48.30 PK	74.00	-25.70	1.78H	11	44.13	31.56	10.98	38.37	-4.18

	Α	NTENN	A POLA	RITY	& TES	T DIST	ANCE	: VERT	ICAL	AT 3 M	
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction
No.	(MHz)	Level	(dBuV/m)	0	Height	Angle	Value	Factor	Factor	Factor	Factor
	(IVITZ)	(dBuV/m)	(ubuv/III)	(dB)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)
1	2412.00	104.10 PK			1.00V	210	68.28	28.59	7.19	0.00	-35.78
2	2490.00	39.70 PK	74.00	-34.30	1.06V	33	42.10	29.32	7.33	39.00	2.35
3	4823.00	46.10 PK	74.00	-27.90	2.71V	56	41.88	31.56	10.98	38.37	-4.18

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M													
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction			
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor			
	(IVITZ)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)			
1	*2412.00	87.70 AV			1.47H	248	51.91	28.59	7.19	0.00	-35.78			
2	2489.00	29.20 AV	54.00	-24.80	1.47H	312	31.59	29.32	7.33	39.00	2.35			
3	4824.00	43.20 AV	54.00	-10.80	1.78H	11	39.06	31.56	10.98	38.37	-4.18			

	Α	NTENN	A POLA	RITY	& TES	T DIST	ANCE	: VERT	TCAL	AT 3 M	
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction
No.	(MHz)	Level	(dBuV/m)	J	Height	Angle	Value	Factor	Factor	Factor	Factor
	(IVITZ)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)
1	*2412.00	97.70 AV			1.00V	210	61.91	28.59	7.19	0.00	-35.78
2	2490.00	30.70 AV	54.00	-23.30	1.06V	33	33.10	29.32	7.33	39.00	2.35
3	4823.00	39.40 AV	54.00	-14.60	2.71V	56	35.20	31.56	10.98	38.37	-4.18

NOTES: (1) Emission level (dBuV/m) = Reading value (dBuV) - Correction Factor (dB).

- (2) Correction Factor (dB/m) = Pre-Amp. Factor [Ant. Factor (dB/m)+Cable loss (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.

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EUT	WLAN Card	MODEL	RF50702-02
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR	Peak(PK)
(SYSTEM)	,	FUNCTION	Average (AV)
ENVIRONMENTAL	27 deg. C, 58 % RH,	TESTED BY	Tony Chon
CONDITIONS	971 hPa	IESIED BI	Tony Chen

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M													
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction			
No.	(MHz)	Level	(dBuV/m)	J	Height	Angle	Value	Factor	Factor	Factor	Factor			
	(IVITZ)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)			
1	*2437.00	91.80 PK			2.93H	251	55.56	28.95	7.26	0.00	-36.21			
2	2489.00	38.60 PK	74.00	-35.40	1.27H	50	40.91	29.32	7.33	39.00	2.35			
3	4873.00	49.20 PK	74.00	-24.80	2.48H	50	44.97	31.59	11.03	38.35	-4.27			

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M													
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction			
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor			
	(IVIIIZ)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)			
1	*2436.00	107.20 PK			1.00V	133	71.03	28.95	7.26	0.00	-36.21			
2	2491.00	39.90 PK	74.00	-34.10	2.20V	67	42.22	29.32	7.33	39.00	2.35			
3	4873.00	49.00 PK	74.00	-25.00	2.21V	51	44.69	31.59	11.03	38.35	-4.27			

	AN ⁻	TENNA	POLAR	ITY &	TEST	DISTA	NCE:	HORIZ	ONTA	L AT 3	M
	Freq.	Emission	Limit	Margin	Antenna		Raw	Antenna	Cable	Pre-Amp.	Correction
No.	(MHz)	Level (dBuV/m)	(dBuV/m)	(dB)	Height (m)	Angle (Degree)	Value (dBuV)	Factor (dB/m)	Factor (dB)	Factor (dB)	Factor (dB/m)
1	*2437.00	85.00 AV			2.93H	251	48.81	28.95	7.26	0.00	-36.21
2	2489.00	29.60 AV	54.00	-24.40	1.27H	50	31.91	29.32	7.33	39.00	2.35
3	4873.00	41.40 AV	54.00	-12.60	2.48H	50	37.13	31.59	11.03	38.35	-4.27

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
	Freq.	Emission	Limit	Morgin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction	
No.	(MHz)	Level	(dBuV/m)	Margin (dB)	Height	Angle	Value	Factor	Factor	Factor	Factor	
	(IVITZ)	(dBuV/m)	(ubu v/III)	(dbu v/III) (db)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)	
1	*2436.00	99.80 AV			1.00V	133	63.56	28.95	7.26	0.00	-36.21	
2	2491.00	29.60 AV	54.00	-24.40	2.20V	67	31.91	29.32	7.33	39.00	2.35	
3	4873.00	42.90 AV	54.00	-11.10	2.21V	51	38.66	31.59	11.03	38.35	-4.27	

- NOTES: (1) Emission level (dBuV/m) = Reading value (dBuV) Correction Factor (dB).
 (2) Correction Factor (dB/m) = Pre-Amp. Factor [Ant. Factor (dB/m)+Cable loss (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	WLAN Card	MODEL	RF50702-02
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	27 deg. C, 58 % RH, 971 hPa	TESTED BY	Tony Chen

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
	Frea.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction	
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor	
	(IVITZ)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)	
1	*2462.00	94.10 PK			1.59H	287	57.84	28.95	7.26	0.00	-36.21	
2	2498.00	44.90 PK	74.00	-29.10	1.78H	312	47.23	29.32	7.33	39.00	2.35	
3	4923.00	48.60 PK	74.00	-25.40	2.14H	3	44.19	31.63	11.07	38.34	-4.36	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Antenna Height	Table Angle	Raw Value	Antenna Factor	Cable Factor	Pre-Amp. Factor	Correction Factor	
	(IVIIIZ)	(dBuV/m)	(ubu v/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)	
1	*2462.00	103.70 PK			1.00V	76	67.50	28.95	7.26	0.00	-36.21	
2	2498.00	45.60 PK	74.00	-28.40	1.75V	17	47.94	29.32	7.33	39.00	2.35	
3	4923.00	47.70 PK	74.00	-26.30	1.40V	124	43.38	31.63	11.07	38.34	-4.36	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
	Freq.	Emission	Limit	Morgin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction	
No.	' '	Level	(dBuV/m)	Margin (dB)	Height	Angle	Value	Factor	Factor	Factor	Factor	
	(MHz)	(dBuV/m)	n) (aBu v/m)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)	
1	*2462.00	88.80 AV			1.59H	287	52.63	28.95	7.26	0.00	-36.21	
2	2498.00	39.00 AV	54.00	-15.00	1.78H	312	41.36	29.32	7.33	39.00	2.35	
3	4923.00	43.70 AV	54.00	-10.30	2.14H	3	39.29	31.63	11.07	38.34	-4.36	

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Antenna	Cable	Pre-Amp.	Correction	
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor	Factor	Factor	Factor	
	(IVITZ)	(dBuV/m)	(dBuV/m) (dB)	(m)	(Degree)	(dBuV)	(dB/m)	(dB)	(dB)	(dB/m)		
1	*2462.00	96.80 AV			1.00V	76	60.63	28.95	7.26	0.00	-36.21	
2	2498.00	38.00 AV	54.00	-16.00	1.75V	17	40.38	29.32	7.33	39.00	2.35	
3	4923.00	42.20 AV	54.00	-11.80	1.40V	124	37.88	31.63	11.07	38.34	-4.36	

NOTES: (1) Emission level (dBuV/m) = Reading value (dBuV) - Correction Factor (dB).

- (2) Correction Factor (dB/m) = Pre-Amp. Factor [Ant. Factor (dB/m)+Cable loss
- (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
R&S SPECTRUM ANALYZER	FSEK30	100049	July 24, 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 spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100 kHz VBW. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

4.3.4 TEST SETUP



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

4.3.5 EUT OPERATING CONDITIONS

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



4.3.6 TEST RESULTS

EUT	WLAN Card	MODEL	RF50702-02	
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL	30 deg. C, 55 %RH,	
(SYSTEM)	120 vac, 00 112	CONDITIONS	971 hPa	

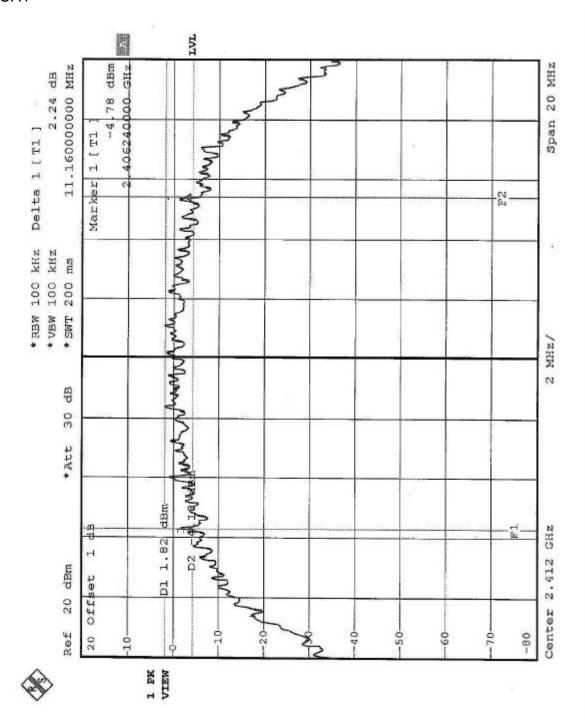
TESTED BY: Bruce Shiau

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.16	0.5	PASS
6	2437	11.16	0.5	PASS
11	2462	11.16	0.5	PASS

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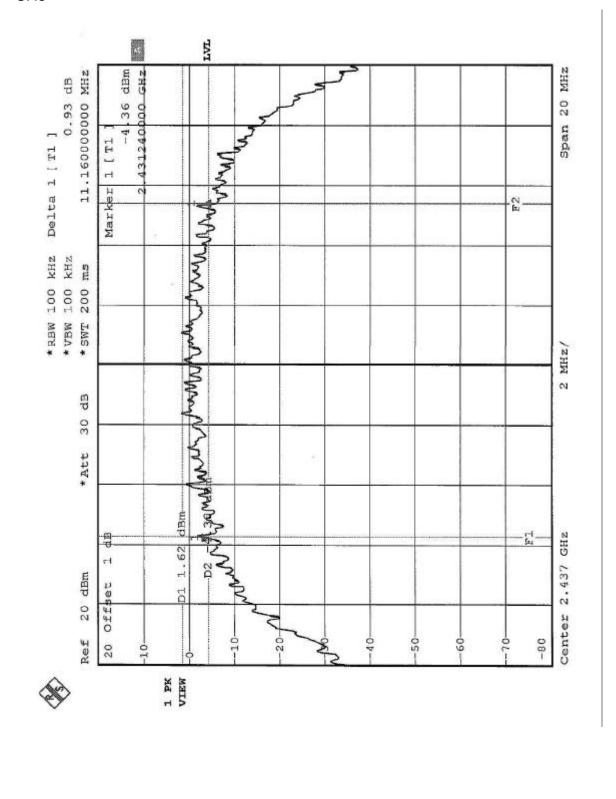












FCC ID: MIBRF50702-02 CH11 IM MHZ 11.200000000 MHz 1.36 dB Span 20 07 Delta 1 [T1] Marker 1 [Tl * RBW 100 kHz * VBW 100 kHz EIIS 200 IMS * MHZ/ qB 30 * Att 2.462 GHz 20 dBm Offset Center -50 08-1 PK VIEW



4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 TEST INSTRUMENTS

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

NOTE:

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

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

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4.4.3 TEST PROCEDURES

The transmitter output was connected to the peak power meter.

4.4.4 TEST SETUP



4.4.5 EUT OPERATING CONDITIONS

Same as Item 4.3.5



4.4.6 TEST RESULTS

EUT	WLAN Card	MODEL	RF50702-02	
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL	31 deg. C, 52 %RH,	
(SYSTEM)		CONDITIONS	971 hPa	

TESTED BY: Bruce Shiau

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	13.98	30	PASS
6	2437	13.47	30	PASS
11	2462	13.38	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
R&S SPECTRUM ANALYZER	FSEK30	100049	July 24, 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.



4.5.3 TEST PROCEDURE

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

The sweep time is allowed to be longer than span/3KHz for a full response of the mixer in the spectrum analyzer.

4.5.4 TEST SETUP



4.5.5 EUT OPERATING CONDITIONS

Same as 4.3.5



Issued: Sep. 19, 2002

4.5.6 TEST RESULTS

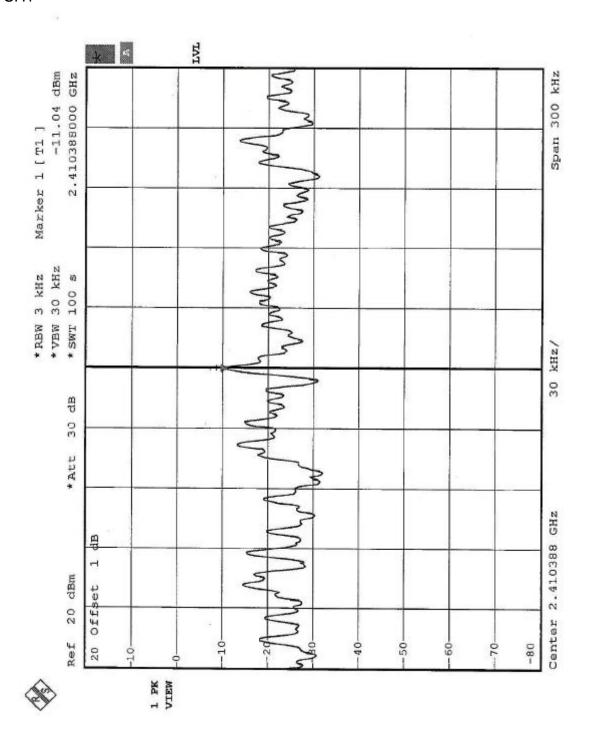
EUT	WLAN Card	MODEL	RF50702-02
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL	31 deg. C, 52 %RH,
		CONDITIONS	971 hPa

TESTED BY: Bruce Shiau

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.04	8	PASS
6	2437	-10.95	8	PASS
11	2462	-11.22	8	PASS

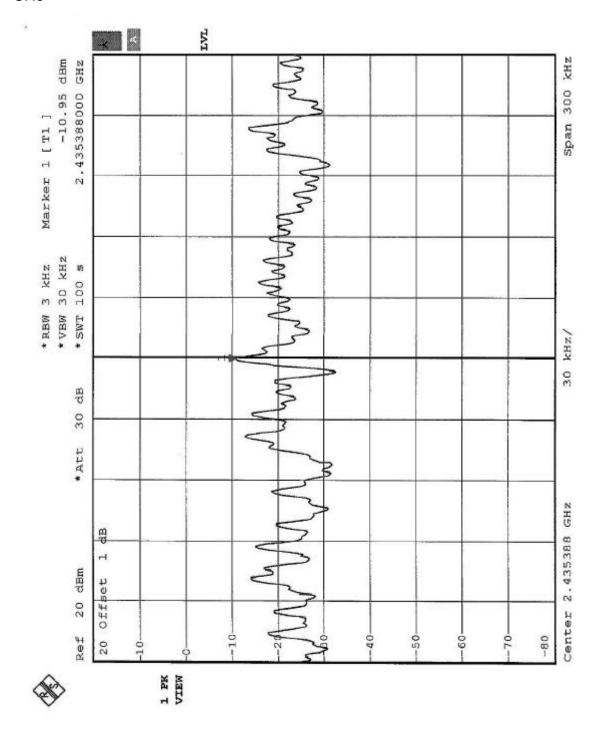


CH1



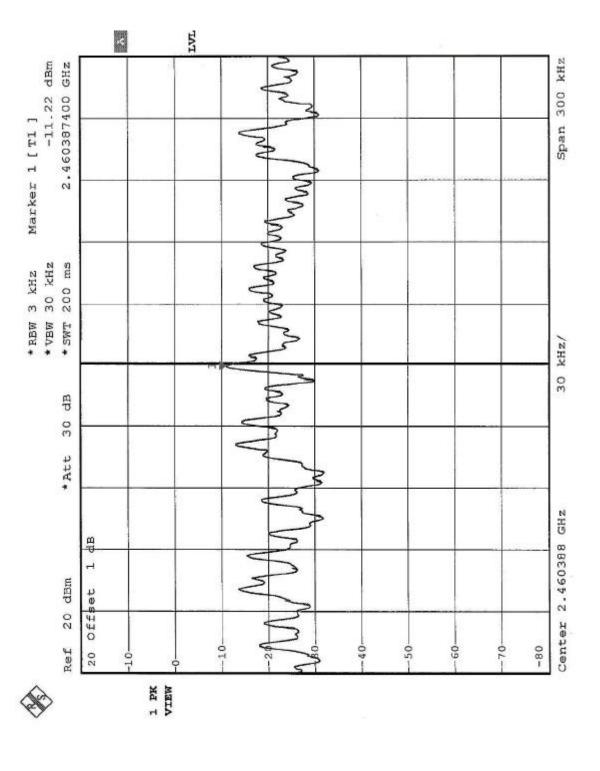


CH6





CH11





4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

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

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.



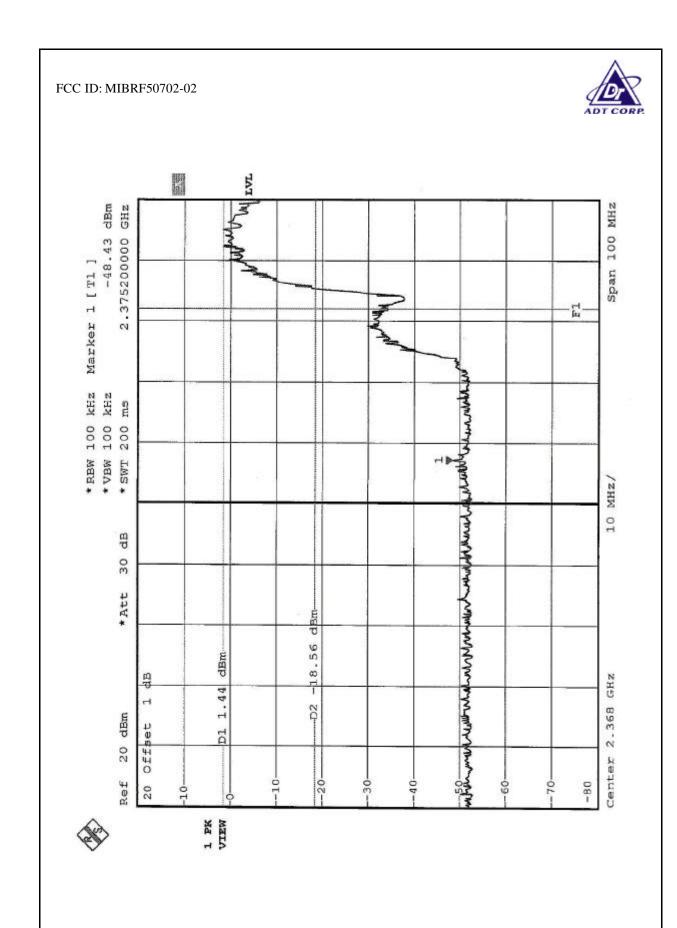
4.6.4 EUT OPERATING CONDITION

Same as Item 4.3.5

4.6.5 TEST RESULTS

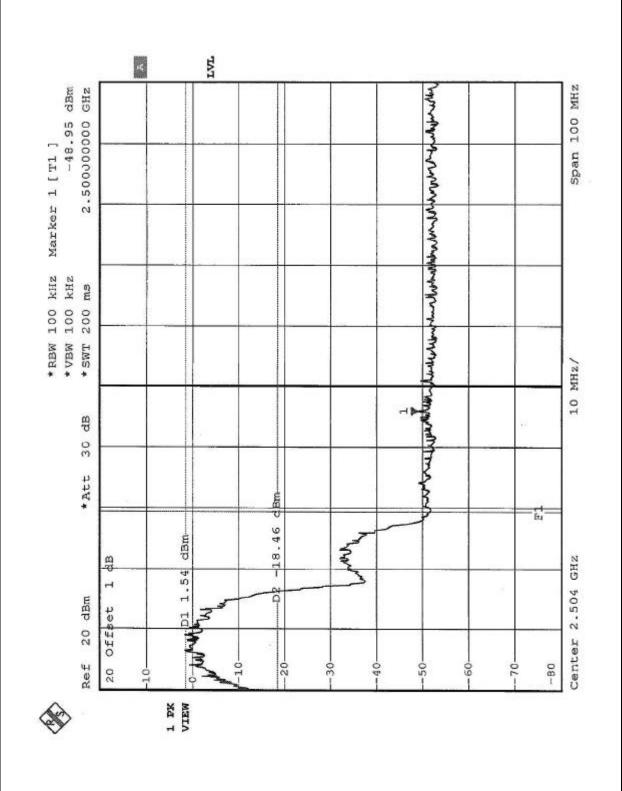
The spectrum plots are attached on the following 2 pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

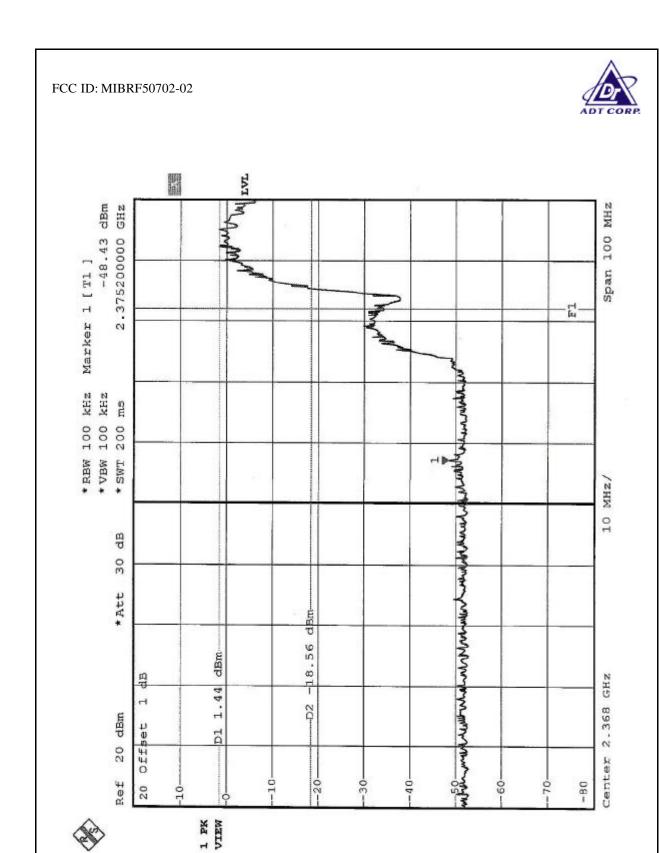
NOTE: The band edge emission plot on the following 2 pages shows 50.49dB / 51.93dB delta between carrier maximum power and local maximum emission in restrict band (2.5000GHz / 2.3752GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.6 (Page 26) is 96.80dBuV/m, so the maximum field strength in restrict band is 96.8-50.49=46.31dBuV/m which is under 54 dBuV/m limit.













4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Dipole antenna. The antenna connector is Reversed MMCX. And the maximum Gain of this antenna is only 1dBi.



5 PHOTOGRAPHS OF THE TEST CONFIGURATION

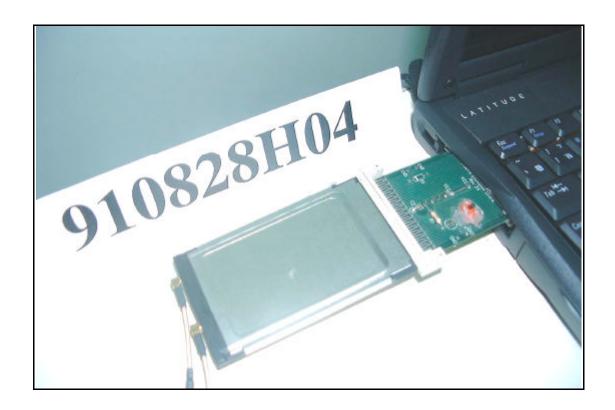
CONDUCTED EMISSION TEST





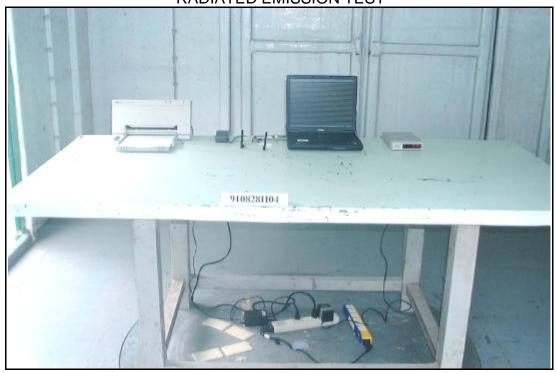


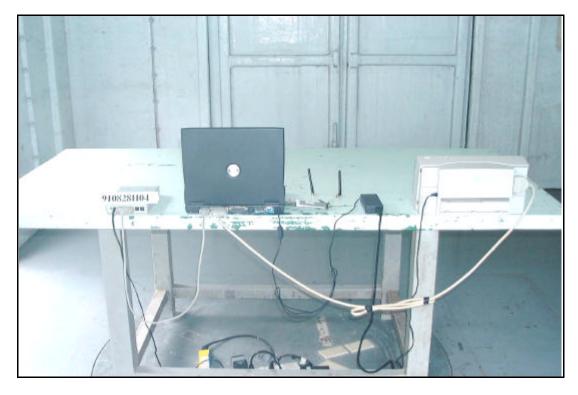
Issued: Sep. 19, 2002





RADIATED EMISSION TEST











6 INFORMATION ON THE TESTING LABORATORIES

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

USA FCC, NVLAP, UL TUV Rheinland

Japan VCCI
New Zealand MoC
Norway NEMKO

Canada INDUSTRY CANADA

R.O.C. CNLA, BSMI

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC Lab:Hsin Chu EMC Lab:Tel: 886-2-26052180Tel: 886-35-935343Fax: 886-2-26052943Fax: 886-35-935342

Lin Kou Safety Lab: Lin Kou RF&Telecom Lab

Tel: 886-2-26093195 Tel: 886-3-3270910 Fax: 886-2-26093184 Fax: 886-3-3270892

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

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

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