



# FCC TEST REPORT

**REPORT NO.:** RF911128H08A

**MODEL NO.:** B11FNF

**PLATFORM:** Alpha-1, **BRAND:** Proxim

**RECEIVED:** Jan. 09, 2003

**TESTED:** Jan. 24 to Feb. 14, 2003

**APPLICANT:** Proxim Corporation

**ADDRESS:** 935 Stewart Drive, Sunnyvale, CA 94085, USA

**ISSUED BY:** Advance Data Technology Corporation

**LAB LOCATION:** No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen,  
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0536  
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Lab Code: 200376-0



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## 1 CERTIFICATION

**PRODUCT :** Wireless LAN and Mini PCI  
**BRAND NAME :** Proxim  
**MODEL NO. :** B11FNF  
**PLATFORM:** Alpha-1      **BRAND:** Proxim  
**APPLICANT :** Proxim Corporation  
**STANDARDS :** 47 CFR Part 15, Subpart C (Section 15.247),  
ANSI C63.4-1992

We, Advance Data Technology Corporation, hereby certify that one sample of the designation has been tested in our facility from Jan. 24 to Feb. 14, 2003. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

**CHECKED BY:** *Amanda Chu* , **DATE:** *Feb. 17, 2003*  
( Amanda Chu )

**APPROVED BY:** *Eric Lin* , **DATE:** *Feb. 17, 2003*  
( Eric Lin, Manager )



## 2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

<b>APPLIED STANDARD: 47 CFR Part 15, Subpart C</b>			
<b>Standard Section</b>	<b>Test Type and Limit</b>	<b>Result</b>	<b>REMARK</b>
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is -17.13dBuV at 2.451 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 -2.4dBuV at 7311.00 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

<b>PRODUCT</b>	Wireless LAN and Mini PCI
<b>MODEL NO.</b>	B11FNF
<b>PLATFORM</b>	Alpha-1
<b>POWER SUPPLY</b>	12VDC from host equipment
<b>MODULATION TYPE</b>	CCK, DBPSK, DQPSK
<b>RADIO TECHNOLOGY</b>	DSSS
<b>TRANSFER RATE</b>	1/2/5.5/11Mbps
<b>FREQUENCY RANGE</b>	2412MHz ~ 2462MHz
<b>NUMBER OF CHANNEL</b>	11
<b>OUTPUT POWER</b>	15.29dBm
<b>ANTENNA TYPE</b>	Omni-Directional Antenna, Window Antenna, Directional Wide Angle Antenna, Directional Antenna
<b>DATA CABLE</b>	NA
<b>I/O PORTS</b>	NA
<b>ASSOCIATED DEVICES</b>	NA

**NOTE:**

- This report is prepared for FCC class II permissive change. The difference compared with the original design is as the following:

◆ Add nine types of antennas which provided to this EUT, please refer to the following table :

No.	Model No.	Gain (dBi)	Antenna Type	Total loss of AMD-09 + surge arrester + extension cable	Total gain that the combination contributes to the output power of the mini pci
				Total insertion loss (dBi)	Effective antenna gain (dBi)
1	AOU24-OD-55-B	1.5	Omni-Directional	2.9	-1.4
2	AOU24-OD-77	7	Omni-Directional	2.9	4.1
3	AOU24-OD-10	10	Omni-Directional	2.9	7.1
4	AOU24-WI-12	10.5	Window	2.9	8.6
5	AOU24-WA-12-B	12	Directional Wide Angle	2.9	9.1
6	AOU24-YA-1414	13.5	Directional	2.9	10.6
7	AOU24-DI-24	23.5	Directional	2.9	20.6
8	R0205-064	14	Directional	2.9	11.1
9	R0305-019	12	Directional	2.9	9.1

These antennas shall be tested in combination with 20 FT extension cable (LMR400) + surge\_arrester (010997)+ AMD-09(1.2dBi loss to use with B14GNJ).



2. Platforms was operated with an AC/DC power adapter:

<b>BRAND:</b>	DVE
<b>MODEL:</b>	DSA-0151F-12A
<b>INPUT</b>	100-240Vac, 50/60Hz, 0.4A
<b>OUTPUT:</b>	+12V DC, 1.5A

3. 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:**

- For radiated measurement, Interface I and Interface II were pre-tested in chamber, the Interface II, worst case one, was chosen for final test. Test result (A) is for antenna 1, test result (B) is for antenna 2, test result (C) is for antenna 3, test result (D) is for antenna 4, test result (E) is for antenna 5, test result (F) is for antenna 6, test result (G) is for antenna 7, test result (H) is for antenna 8, and test result (I) is for antenna 9, which were mentioned on section 3.1.
- 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.
- Above 1 GHz, the channel 1, 6, and 11 were tested individually.

### 3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless LAN and Mini PCI. 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.

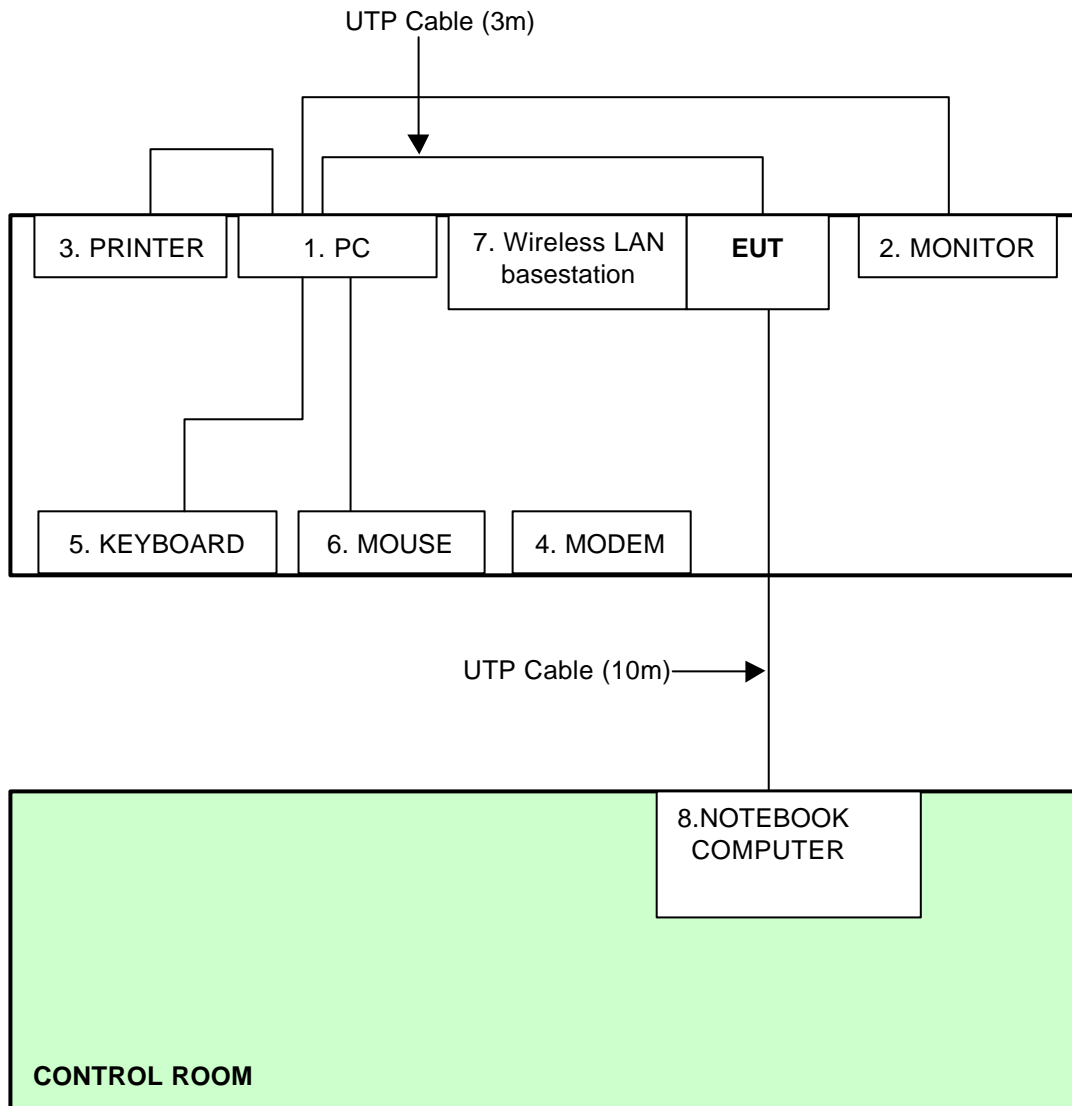
No.	Product	Brand	Model No.	Serial No.	FCC ID
1	PERSONAL COMPUTER	HP	DTPC 27	SG21103567	FCC DoC
2	MONITOR	ADI	CM100	026058T10200538	FCC DoC
3	PRINTER	HP	C2642A	MY7961C1M2	B94C2642X
4	MODEM	ACEEX	1414	980020560	IFAXDM1414
5	KEYBOARD	HP	6511-PK	99P468101CY1W 01S001482	FCC DoC
6	MOUSE	Logitech	M-S34	23-218829	NA
7	Wireless LAN basestation	Proxim	Alpha-1	NA	FCC DoC
8	NOTEBOOK COMPUTER	DELL	PP01L	TW-09C748- 12800-17Q-C504	FCC DoC

No.	Signal cable description
1	NA
2	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core.
3	1.0m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core
4	1.0 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
5	1.8 m foil shielded wire, terminal by frame, PS2 Connector, w/o Core.
6	1.8 m foil shielded wire, terminal by frame, PS2 Connector, w/o Core.
7	NA
8	NA

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

2. Support units 1-7 acted as CLIENT PC and communicated with support unit 8 which acted as SERVER PC and systems of communication partner. They communicated with each other via EUT with one UTP cable. The support unit 8 were kept in the control room during the test.





- NOTE:** 1. Support unit 8 was kept in the control room during the test.  
 2. Please refer to the photos of test configuration in Item 5 also.



## 4 TEST TYPES AND RESULTS

### 4.1 CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

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

#### 4.1.1 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	847124/029	Nov. 17, 2003
ROHDE & SCHWARZ LISN (for EUT)	ESHS-Z5	848773/004	Nov. 13, 2003
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 23, 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.



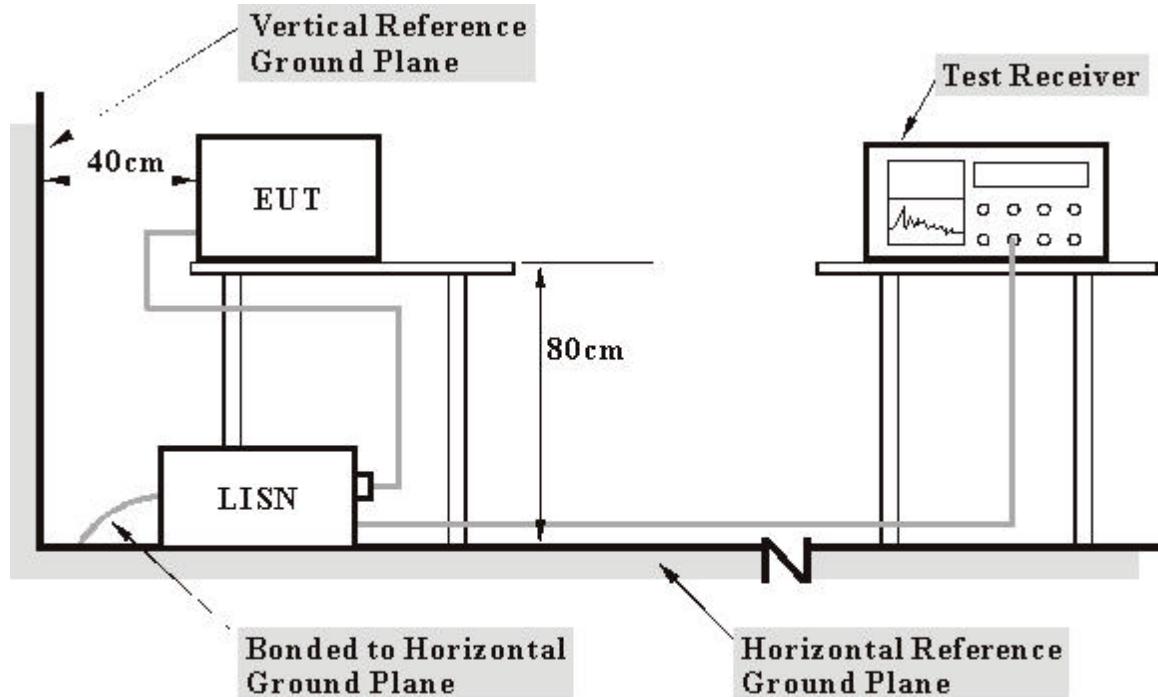
#### 4.1.2 TEST PROCEDURES

- 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 DEVIATION FROM TEST STANDARD

No deviation

#### 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. Plug the EUT into the Wireless LAN basestation 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.

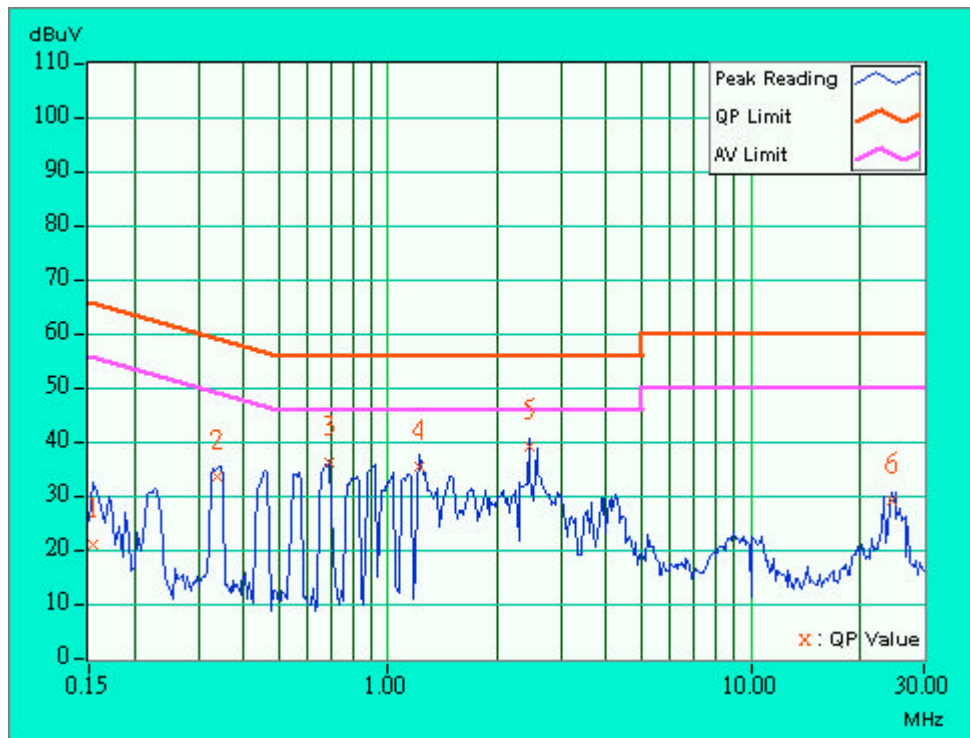


4.1.6 TEST RESULTS

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Channel 1	<b>6dB BANDWIDTH</b>	9 kHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Line (L)
<b>ENVIRONMENTAL CONDITIONS</b>	26 deg. C, 54%RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.10	19.80	-	19.90	-	65.79	55.79	-45.89	-
2	0.337	0.10	32.60	-	32.70	-	59.27	49.27	-26.57	-
3	0.693	0.10	35.02	-	35.12	-	56.00	46.00	-20.88	-
4	1.224	0.10	34.24	-	34.34	-	56.00	46.00	-21.66	-
5	2.447	0.12	38.09	-	38.21	-	56.00	46.00	-17.79	-
6	24.534	1.18	28.25	-	29.43	-	60.00	50.00	-30.57	-

- NOTES: (1) "\*": Undetectable  
 (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

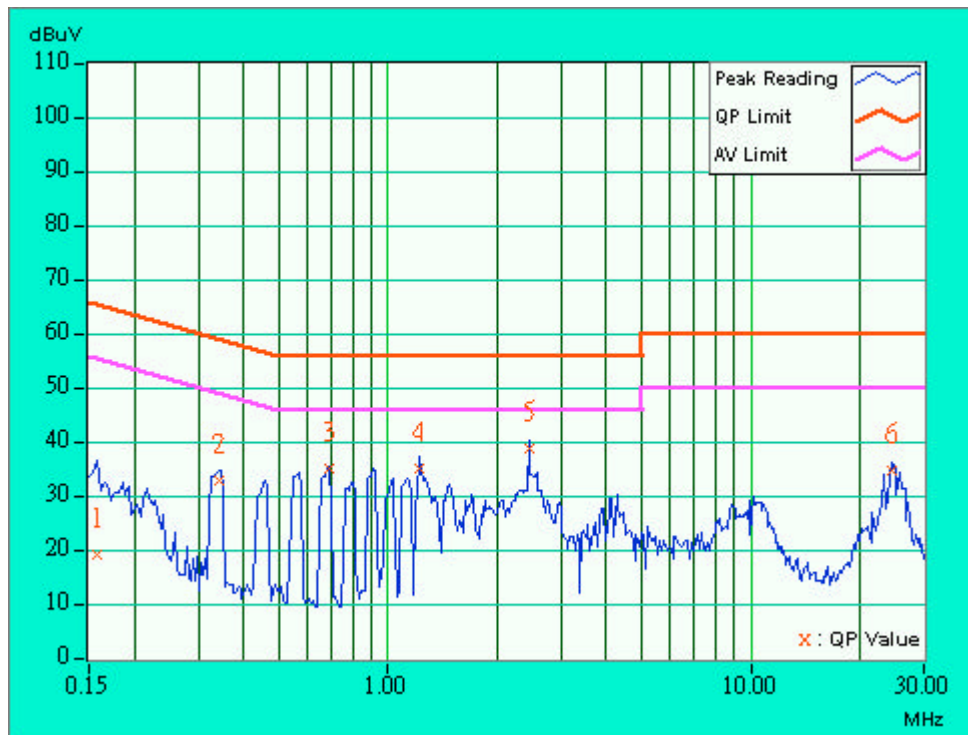




<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Channel 1	<b>6dB BANDWIDTH</b>	9 kHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Neutral (N)
<b>ENVIRONMENTAL CONDITIONS</b>	26 deg. C, 54%RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.10	18.26	-	18.36	-	65.58	55.58	-47.22	-
2	0.341	0.10	32.24	-	32.34	-	59.17	49.17	-26.83	-
3	0.689	0.10	34.14	-	34.24	-	56.00	46.00	-21.76	-
4	1.224	0.10	34.38	-	34.48	-	56.00	46.00	-21.52	-
5	2.447	0.12	37.89	-	38.01	-	56.00	46.00	-17.99	-
6	24.535	0.88	33.96	-	34.84	-	60.00	50.00	-25.16	-

- NOTES: (1) "\*\*": Undetectable  
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 (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

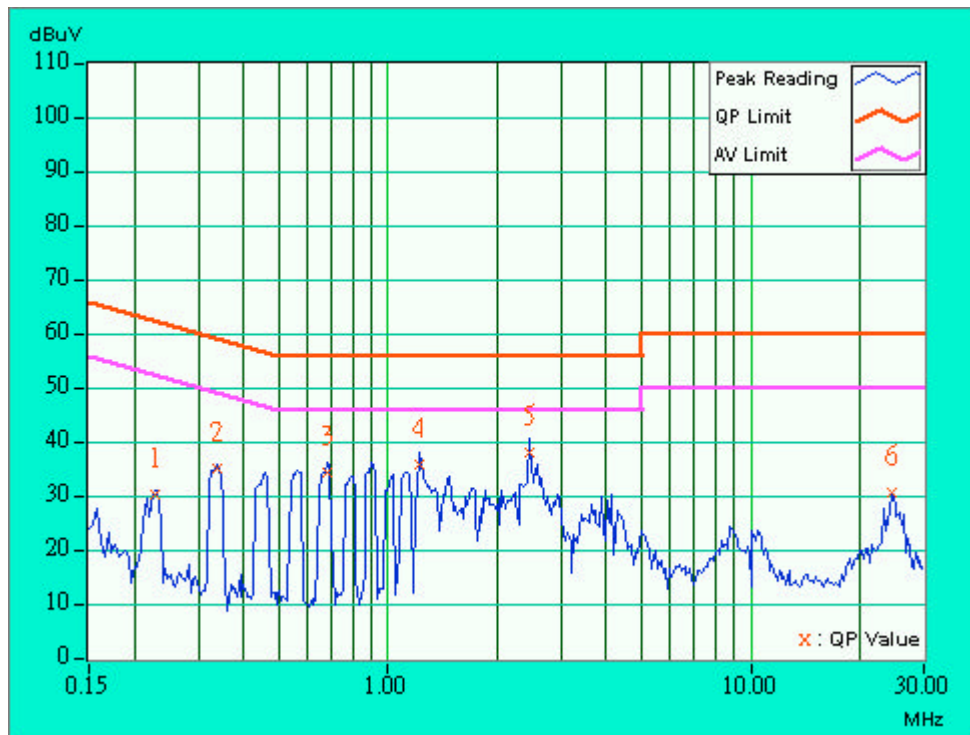




<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Channel 6	<b>6dB BANDWIDTH</b>	9 kHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Line (L)
<b>ENVIRONMENTAL CONDITIONS</b>	26 deg. C, 54%RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.228	0.10	29.35	-	29.45	-	62.52	52.52	-33.07	-
2	0.338	0.10	34.06	-	34.16	-	59.26	49.26	-25.10	-
3	0.677	0.10	33.18	-	33.28	-	56.00	46.00	-22.72	-
4	1.224	0.10	34.83	-	34.93	-	56.00	46.00	-21.07	-
5	2.451	0.12	37.05	-	37.17	-	56.00	46.00	-18.83	-
6	24.352	1.17	29.53	-	30.70	-	60.00	50.00	-29.30	-

- NOTES: (1) "\*\*": Undetectable  
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 (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

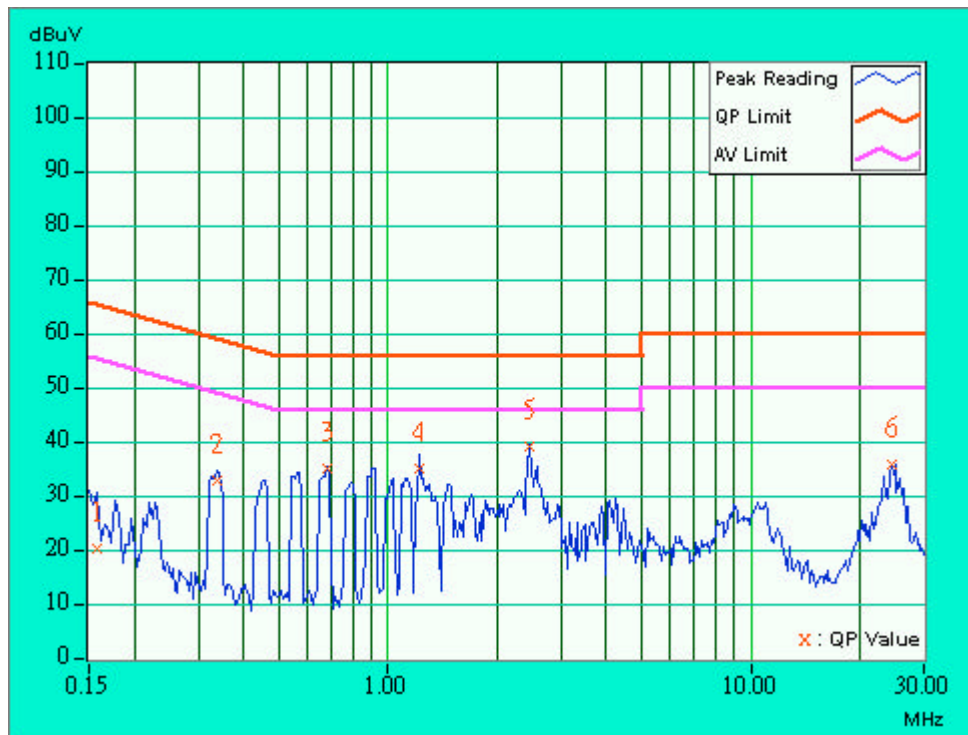




<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Channel 6	<b>6dB BANDWIDTH</b>	9 kHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Neutral (N)
<b>ENVIRONMENTAL CONDITIONS</b>	26 deg. C, 54%RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.158	0.10	19.52	-	19.62	-	65.58	55.58	-45.96	-
2	0.338	0.10	32.02	-	32.12	-	59.26	49.26	-27.14	-
3	0.677	0.10	34.20	-	34.30	-	56.00	46.00	-21.70	-
4	1.224	0.10	34.30	-	34.40	-	56.00	46.00	-21.60	-
5	2.451	0.12	38.33	-	38.45	-	56.00	46.00	-17.55	-
6	24.351	0.87	34.97	-	35.84	-	60.00	50.00	-24.16	-

- NOTES: (1) "\*\*": Undetectable  
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 (6) Margin value = Emission level - Limit value



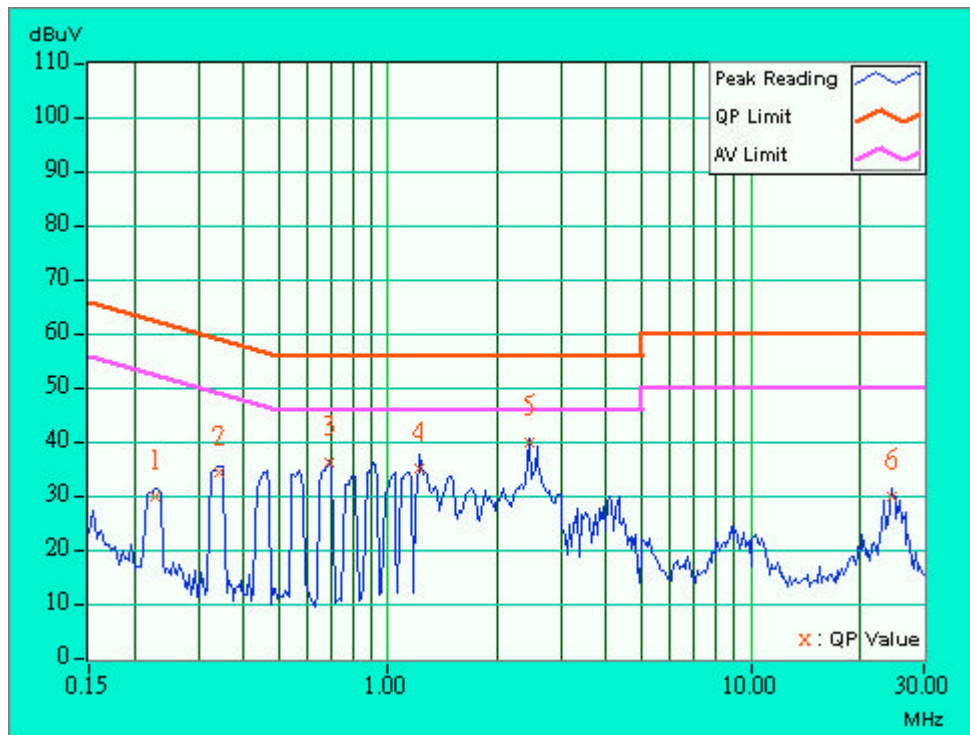




<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Channel 11	<b>6dB BANDWIDTH</b>	9 kHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Line (L)
<b>ENVIRONMENTAL CONDITIONS</b>	26 deg. C, 54%RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.228	0.10	28.89	-	28.99	-	62.51	52.51	-33.52	-
2	0.341	0.10	33.15	-	33.25	-	59.17	49.17	-25.92	-
3	0.685	0.10	35.02	-	35.12	-	56.00	46.00	-20.88	-
4	1.227	0.10	33.90	-	34.00	-	56.00	46.00	-22.00	-
<b>5</b>	<b>2.451</b>	<b>0.12</b>	<b>38.75</b>	-	<b>38.87</b>	-	<b>56.00</b>	<b>46.00</b>	<b>-17.13</b>	-
6	24.352	1.17	28.81	-	29.98	-	60.00	50.00	-30.02	-

- NOTES: (1) "\*\*": Undetectable  
 (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

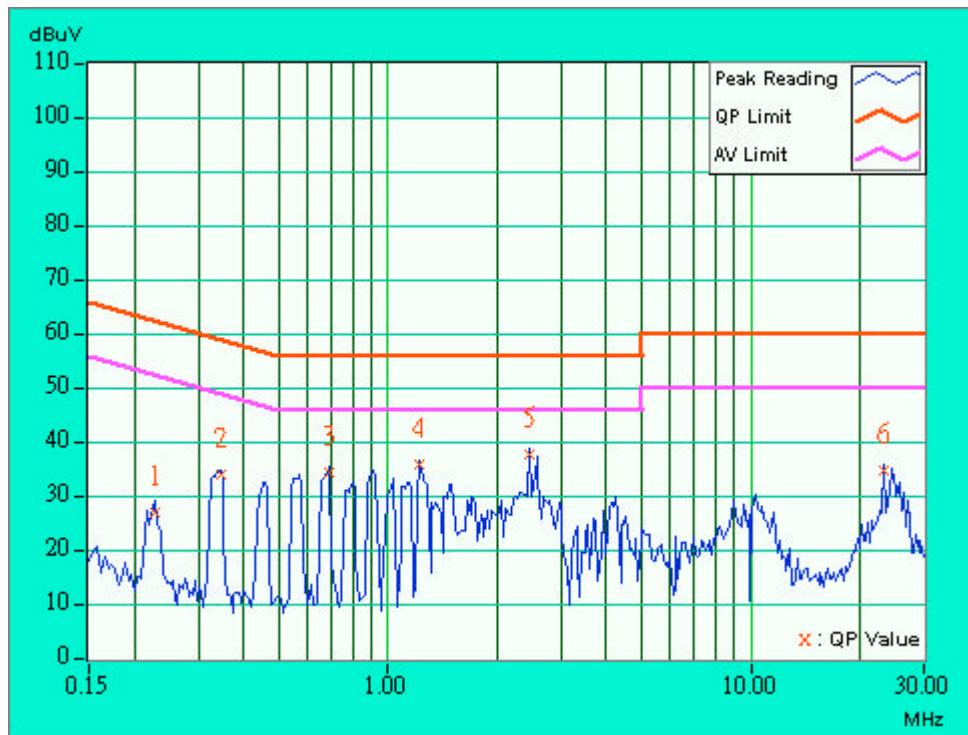




<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Channel 11	<b>6dB BANDWIDTH</b>	9 kHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Neutral (N)
<b>ENVIRONMENTAL CONDITIONS</b>	26 deg. C, 54%RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.228	0.10	26.28	-	26.38	-	62.52	52.52	-36.14	-
2	0.345	0.10	33.34	-	33.44	-	59.07	49.07	-25.63	-
3	0.685	0.10	33.75	-	33.85	-	56.00	46.00	-22.15	-
4	1.224	0.10	34.97	-	35.07	-	56.00	46.00	-20.93	-
5	2.451	0.12	36.89	-	37.01	-	56.00	46.00	-18.99	-
6	23.129	0.83	33.94	-	34.77	-	60.00	50.00	-25.23	-

- NOTES: (1) "\*\*": Undetectable  
 (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

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

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

#### NOTE:

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



#### 4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
*HP Spectrum Analyzer	8590L	3467U00646	Aug. 28, 2003
*ADVANTEST Spectrum Analyzer	R3271A	85060311	May 21, 2003
CHASE RF Pre_Amplifier	CPA9232	1010	Feb. 22, 2004
*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 Dipole Antenna	UHAP	896	Mar. 07, 2003
SCHWARZBECK Tunable Dipole Antenna	VHAP	879	Mar. 07, 2003
*RF Switches	MP59B	1-5161-28698	Jul. 29, 2003
*RF CABLE (Chaintek) 1GHz- 20GHz	Ak 9515-D	001	Aug, 20.2003
*RF Cable(CHASE)	CH A9525	STBCAB-30M- 1GHz-021	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.



#### 4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

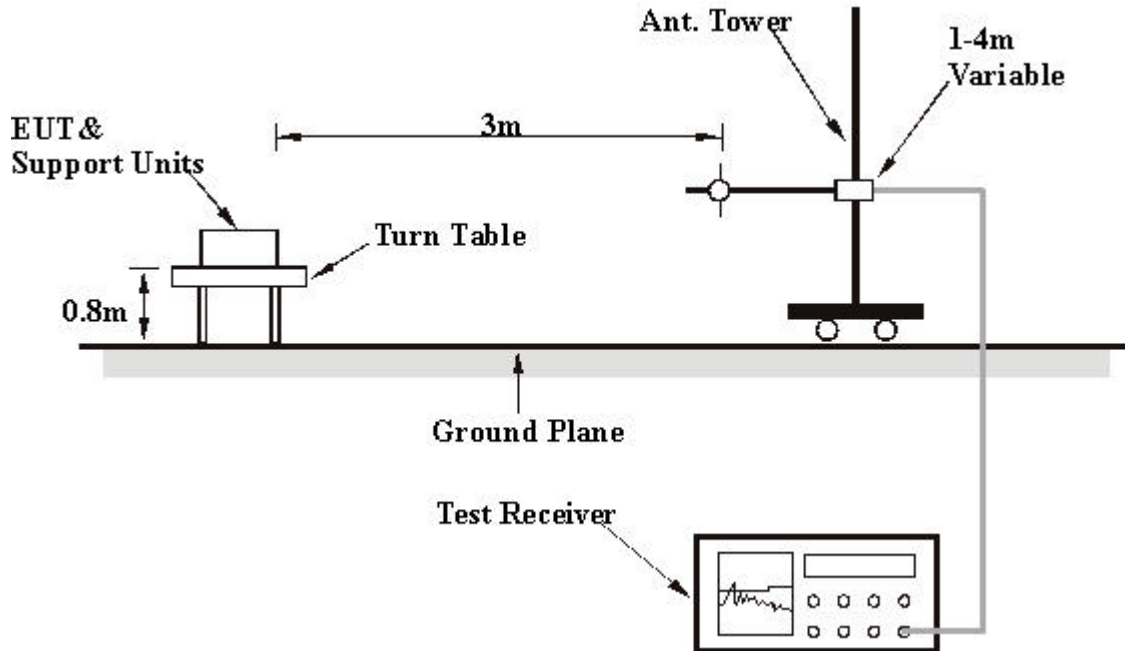
**NOTE:**

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

#### 4.2.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.2.5 TEST SETUP



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

#### 4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



## 4.2.7 TEST RESULTS (A)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 1, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	28.6 QP	43.50	-14.90	1.10 H	142	13.80	14.80
2	224.00	35.0 QP	46.00	-11.00	1.44 H	50	24.00	11.10
3	288.00	42.7 QP	46.00	-3.30	1.00 H	319	28.00	14.70
4	384.01	42.9 QP	46.00	-3.10	1.17 H	225	25.00	17.90
5	480.01	33.2 QP	46.00	-12.80	2.31 H	186	13.50	19.70
6	672.01	35.7 QP	46.00	-10.30	1.13 H	262	13.50	22.10
7	736.00	37.4 QP	46.00	-8.60	1.23 H	319	14.60	22.80
8	768.01	40.0 QP	46.00	-6.00	1.82 H	10	16.90	23.10
9	864.01	37.0 QP	46.00	-9.00	1.84 H	43	13.10	23.90
10	960.01	37.1 QP	54.00	-16.90	1.89 H	240	12.50	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 1, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	33.1 QP	43.50	-10.40	1.00 V	242	18.30	14.80
2	192.00	32.5 QP	43.50	-11.00	1.00 V	0	22.10	10.50
3	256.00	31.5 QP	46.00	-14.50	1.00 V	350	16.90	14.60
4	288.00	39.9 QP	46.00	-6.10	1.00 V	0	25.20	14.70
5	384.01	42.8 QP	46.00	-3.20	1.00 V	347	24.90	17.90
6	480.00	36.8 QP	46.00	-9.20	1.16 V	20	17.10	19.70
7	672.00	36.7 QP	46.00	-9.30	1.50 V	307	14.60	22.10
8	768.01	40.7 QP	46.00	-5.30	1.38 V	36	17.50	23.10
9	864.02	40.7 QP	46.00	-5.30	2.01 V	14	16.80	23.90
10	960.01	41.5 QP	54.00	-12.50	1.00 V	310	16.80	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247





<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 1, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1535.00	46.6 PK	74.00	-27.40	1.05 H	343	14.20	32.40
2	1728.00	47.1 PK	74.00	-26.90	1.26 H	300	14.20	32.90
3	2304.00	47.0 PK	74.00	-27.00	1.30 H	151	11.70	35.30
4	2316.00	45.1 PK	74.00	-28.90	1.06 H	303	9.70	35.40
5	*2412.00	102.4 PK			1.00 H	355	66.80	35.60
5	*2412.00	93.5 AV			1.00 H	355	57.90	32.40
6	2496.00	55.3 PK	74.00	-18.70	1.59 H	110	16.40	38.90
6	2496.00	50.0 AV	54.00	-4.00	1.59 H	110	11.10	32.90
7	2688.00	48.6 PK	74.00	-25.40	1.22 H	89	11.50	37.10

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	51.5 PK	74.00	-22.50	1.27 V	200	19.10	32.40
1	1536.00	45.8 AV	54.00	-8.20	1.27 V	200	13.40	32.40
2	1728.00	52.1 PK	74.00	-21.90	1.45 V	353	19.10	32.90
2	1728.00	48.7 AV	54.00	-5.30	1.45 V	353	15.80	32.90
3	2304.00	52.3 PK	74.00	-21.70	1.03 V	51	17.00	35.30
3	2304.00	47.8 AV	54.00	-6.20	1.03 V	51	12.50	35.30
4	2387.00	48.2 PK	74.00	-25.80	1.00 V	345	10.40	37.80
5	*2412.00	109.2 PK			1.01 V	348	73.60	35.60
5	*2412.00	101.5 AV			1.01 V	348	65.90	37.80
6	2496.00	55.2 PK	74.00	-18.80	1.42 V	63	16.30	38.90
6	2496.00	50.2 AV	54.00	-3.80	1.42 V	63	11.30	35.60
7	2688.00	50.9 PK	74.00	-23.10	1.08 V	356	13.80	37.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. " \* " : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 1, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	1356.00	45.5 PK	74.00	-28.50	1.01 H	298	13.80	31.70
2	1728.00	48.9 PK	74.00	-25.10	1.24 H	300	16.00	32.90
3	2304.00	48.1 PK	74.00	-25.90	1.29 H	298	12.80	35.30
4	2311.00	42.5 PK	74.00	-31.50	1.25 H	298	7.20	35.30
5	*2437.00	100.1 PK			1.09 H	5	64.10	36.00
5	*2437.00	93.5 AV			1.09 H	5	57.60	31.70
6	2496.00	53.6 PK	74.00	-20.40	1.60 H	110	14.70	38.90
6	2496.00	48.1 AV	54.00	-5.90	1.60 H	110	9.20	32.90
7	2688.00	46.2 PK	74.00	-27.80	1.38 H	69	9.10	37.10

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	1536.00	49.8 PK	74.00	-24.20	1.63 V	121	17.40	32.40
2	1726.00	47.4 PK	74.00	-26.60	1.66 V	216	14.50	32.90
3	2305.00	47.5 PK	74.00	-26.50	1.23 V	263	12.20	35.30
4	2311.00	43.6 PK	74.00	-30.40	1.25 V	333	8.20	35.30
5	*2437.00	108.1 PK			1.04 V	340	72.10	36.00
5	*2437.00	99.9 AV			1.04 V	340	64.00	32.40
6	2496.00	54.5 PK	74.00	-19.50	1.33 V	58	15.60	38.90
6	2496.00	49.9 AV	54.00	-4.10	1.33 V	58	11.00	32.90
7	2688.00	48.7 PK	74.00	-25.30	1.32 V	347	11.60	37.10

- REMARKS:**
1. Emission level(dBUV/m)=Raw Value(dBUV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 1, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.5 PK	74.00	-27.50	1.56 H	216	14.10	32.40
2	1726.00	45.9 PK	74.00	-28.10	1.62 H	25	13.00	32.90
3	2304.00	47.4 PK	74.00	-26.60	1.33 H	79	12.10	35.30
4	2376.00	40.8 PK	74.00	-33.20	1.04 H	350	5.20	35.70
5	*2462.00	103.1 PK			1.20 H	130	66.80	36.30
5	*2462.00	95.5 AV			1.20 H	130	59.20	32.40
6	2496.00	52.7 PK	74.00	-21.30	1.35 H	254	13.80	38.90
6	2496.00	46.1 AV	54.00	-7.90	1.35 H	254	7.20	32.90
7	2688.00	48.2 PK	74.00	-25.80	1.33 H	64	11.10	37.10

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.9 PK	74.00	-25.10	1.65 V	111	16.50	32.40
2	1728.00	53.6 PK	74.00	-20.40	1.09 V	4	20.70	32.90
2	1728.00	50.3 AV	54.00	-3.70	1.09 V	4	17.40	32.40
3	2304.00	51.6 PK	74.00	-22.40	1.49 V	351	16.30	35.30
3	2304.00	48.6 AV	54.00	-5.40	1.49 V	351	13.30	32.90
4	2376.00	42.5 PK	74.00	-31.50	1.20 V	296	6.90	35.70
5	*2462.00	111.1 PK			1.03 V	342	74.80	36.30
5	*2462.00	103.2 AV			1.03 V	342	66.90	35.30
6	2496.00	54.3 PK	74.00	-19.70	1.59 V	63	15.40	38.90
6	2496.00	48.3 AV	54.00	-5.70	1.59 V	63	9.40	35.70
7	2688.00	54.2 PK	74.00	-19.80	1.35 V	257	17.10	37.10
7	2688.00	44.8 AV	54.00	-9.20	1.35 V	257	7.70	36.30

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. " \* " : Fundamental frequency



## 4.2.8 TEST RESULTS (B)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 2, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.01	24.7 QP	40.00	-15.30	2.88 H	68	17.10	7.60
2	160.02	27.8 QP	43.50	-15.70	2.52 H	204	16.40	11.40
3	256.02	33.0 QP	46.00	-13.00	1.22 H	85	18.40	14.60
4	288.00	36.1 QP	46.00	-9.90	1.96 H	186	21.40	14.70
5	384.00	43.6 QP	46.00	-2.40	1.00 H	157	25.70	17.90
6	480.01	39.1 QP	46.00	-6.90	2.10 H	260	19.50	19.70
7	544.03	31.7 QP	46.00	-14.30	2.16 H	262	10.30	21.40
8	768.02	36.5 QP	46.00	-9.50	1.58 H	150	13.40	23.10
9	864.02	36.7 QP	46.00	-9.30	2.09 H	213	12.80	23.90
10	960.03	37.3 QP	54.00	-16.70	1.61 H	207	12.70	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 2, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	192.01	27.7 QP	43.50	-15.80	1.07 V	125	17.20	10.50
2	224.02	26.1 QP	46.00	-19.90	1.51 V	143	15.00	11.10
3	256.01	29.4 QP	46.00	-16.60	1.00 V	173	14.80	14.60
4	288.01	36.7 QP	46.00	-9.30	1.00 V	101	22.10	14.70
5	384.01	41.2 QP	46.00	-4.80	1.23 V	280	23.30	17.90
6	480.01	34.2 QP	46.00	-11.80	1.74 V	266	14.60	19.70
7	672.02	35.0 QP	46.00	-11.00	1.07 V	106	12.90	22.10
8	768.01	37.7 QP	46.00	-8.30	1.00 V	239	14.60	23.10
9	864.02	37.4 QP	46.00	-8.60	1.37 V	193	13.50	23.90
10	960.01	42.5 QP	54.00	-11.50	1.25 V	177	17.80	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 2, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiao

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	43.5 PK	74.00	-30.50	1.91 H	218	14.70	28.90
2	1728.00	46.0 PK	74.00	-28.00	4.00 H	360	16.90	29.20
3	*2412.00	97.0 PK			2.00 H	320	66.20	30.80
3	*2412.00	86.6 AV			2.00 H	320	55.80	28.90
4	2496.00	49.5 PK	74.00	-24.50	2.11 H	247	15.70	33.80
5	2688.00	48.5 PK	74.00	-25.50	1.80 H	217	15.50	33.00
6	4824.00	40.4 PK	74.00	-33.60	2.51 H	114	2.60	37.80

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	43.8 PK	74.00	-30.20	2.09 V	295	15.00	28.90
2	1728.00	51.2 PK	74.00	-22.80	1.26 V	291	22.00	29.20
2	1728.00	50.0 AV	54.00	-4.00	1.26 V	291	20.80	28.90
3	*2412.00	108.0 PK			1.78 V	203	77.20	30.80
3	*2412.00	101.0 AV			1.78 V	203	70.20	29.20
4	2496.00	54.6 PK	74.00	-19.40	1.21 V	288	20.80	33.80
4	2496.00	52.1 AV	54.00	-1.90	1.21 V	288	18.30	30.80
5	2688.00	53.0 PK	74.00	-21.00	1.38 V	297	20.00	33.00
5	2688.00	50.3 AV	54.00	-3.70	1.38 V	297	17.30	33.80

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 2, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	42.9 PK	74.00	-31.10	2.86 H	236	14.00	28.90
2	1728.00	45.5 PK	74.00	-28.50	1.64 H	298	16.30	29.20
3	*2437.00	93.9 PK			1.00 H	255	62.80	31.20
3	*2437.00	90.1 AV			1.00 H	255	58.90	28.90
4	2496.00	50.1 PK	74.00	-23.90	1.24 H	304	16.30	33.80
5	2688.00	45.2 PK	74.00	-28.80	1.53 H	299	12.20	33.00

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	50.3 PK	74.00	-23.70	2.58 V	142	21.40	28.90
2	1728.00	50.7 PK	74.00	-23.30	1.45 V	268	21.50	29.20
3	*2437.00	112.0 PK			1.00 V	310	80.80	31.20
3	*2437.00	106.5 AV			1.00 V	310	75.30	28.90
4	2496.00	52.4 PK	74.00	-21.60	2.21 V	168	18.60	33.80
4	2496.00	50.7 AV	54.00	-3.30	2.21 V	168	16.90	29.20
5	2688.00	49.8 PK	74.00	-24.20	1.56 V	298	16.80	33.00

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 2, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	43.9 PK	74.00	-30.10	1.14 H	245	15.00	28.90
2	1728.00	49.4 PK	74.00	-24.60	1.23 H	310	20.20	29.20
3	*2462.00	92.7 PK			1.41 H	299	61.20	31.50
3	*2462.00	87.9 AV			1.41 H	299	56.40	28.90
4	2496.00	50.8 PK	74.00	-23.20	1.02 H	247	17.00	33.80
5	2688.00	45.4 PK	74.00	-28.60	1.00 H	268	12.40	33.00

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	47.6 PK	74.00	-26.40	1.54 V	247	18.70	28.90
2	1728.00	50.0 PK	74.00	-24.00	2.41 V	211	20.90	29.20
3	*2462.00	112.4 PK			1.03 V	296	80.90	31.50
3	*2462.00	106.3 AV			1.03 V	296	74.80	28.90
4	2496.00	54.8 PK	74.00	-19.20	1.00 V	247	21.00	33.80
4	2496.00	52.0 AV	54.00	-2.00	1.00 V	247	18.20	29.20
5	2688.00	50.6 PK	74.00	-23.40	1.07 V	235	17.60	33.00

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency





## 4.2.9 TEST RESULTS (C)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 3, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.01	30.7 QP	43.50	-12.80	2.21 H	324	15.90	14.80
2	192.01	32.5 QP	43.50	-11.00	1.34 H	308	22.00	10.50
3	224.01	32.8 QP	46.00	-13.20	1.39 H	305	21.70	11.10
4	256.02	35.0 QP	46.00	-11.00	1.00 H	77	20.40	14.60
5	288.01	37.6 QP	46.00	-8.40	1.00 H	305	23.00	14.70
6	384.01	37.4 QP	46.00	-8.60	1.00 H	294	19.50	17.90
7	672.02	36.7 QP	46.00	-9.30	1.36 H	255	14.60	22.10
8	768.02	38.3 QP	46.00	-7.70	2.02 H	276	15.10	23.10
9	864.02	38.3 QP	46.00	-7.70	1.21 H	167	14.40	23.90
10	960.02	37.0 QP	54.00	-17.00	1.00 H	134	12.40	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 3, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.01	35.6 QP	43.50	-7.90	1.00 V	232	20.80	14.80
2	192.01	33.1 QP	43.50	-10.40	1.00 V	271	22.60	10.50
3	224.02	30.6 QP	46.00	-15.40	1.00 V	88	19.50	11.10
4	288.02	35.2 QP	46.00	-10.80	1.05 V	262	20.60	14.70
5	384.01	39.0 QP	46.00	-7.00	1.43 V	284	21.10	17.90
6	512.03	33.3 QP	46.00	-12.70	1.80 V	126	12.80	20.50
7	672.02	39.2 QP	46.00	-6.80	1.53 V	278	17.10	22.10
8	768.02	39.6 QP	46.00	-6.40	2.19 V	195	16.40	23.10
9	864.02	40.6 QP	46.00	-5.40	1.48 V	321	16.80	23.90
10	960.02	37.3 QP	54.00	-16.70	1.54 V	271	12.70	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 3, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	44.4 PK	74.00	-29.60	1.95 H	211	15.60	28.90
2	1728.00	48.4 PK	74.00	-25.60	1.34 H	266	19.30	29.20
3	*2412.00	102.3 PK			1.90 H	303	71.50	30.80
3	*2412.00	96.7 AV			1.90 H	303	65.90	28.90
4	2496.00	47.7 PK	74.00	-26.30	1.92 H	226	13.90	33.80
5	2688.00	46.7 PK	74.00	-27.30	1.51 H	256	13.70	33.00

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.0 PK	74.00	-26.00	2.04 V	292	19.10	28.90
2	1728.00	48.5 PK	74.00	-25.50	1.31 V	236	19.40	29.20
3	*2412.00	113.3 PK			1.31 V	259	82.50	30.80
3	*2412.00	106.1 AV			1.31 V	259	75.20	28.90
4	2496.00	52.4 PK	74.00	-21.60	1.94 V	268	18.60	33.80
4	2496.00	49.6 AV	54.00	-4.40	1.94 V	268	15.80	29.20
5	2688.00	44.5 PK	74.00	-29.50	1.91 V	265	11.50	33.00

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 3, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	45.2 PK	74.00	-28.80	2.34 H	342	16.40	28.90
2	1728.00	50.8 PK	74.00	-23.20	1.52 H	274	21.60	29.20
3	2304.00	47.5 PK	74.00	-26.50	1.38 H	349	16.30	31.20
4	*2437.00	104.7 PK			1.23 H	15	73.60	31.20
4	*2437.00	99.8 AV			1.23 H	15	68.60	28.90
5	2496.00	51.1 PK	74.00	-22.90	1.16 H	351	17.30	33.80
5	2496.00	48.8 AV	54.00	-5.20	1.16 H	351	15.00	29.20
6	2688.00	45.8 PK	74.00	-28.20	1.29 H	349	12.80	33.00

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	49.3 PK	74.00	-24.70	2.59 V	267	20.40	28.90
2	1728.00	48.5 PK	74.00	-25.50	1.84 V	299	19.30	29.20
3	2304.00	51.8 PK	74.00	-22.20	1.34 V	298	20.70	31.20
3	2304.00	49.0 AV	54.00	-5.00	1.34 V	298	17.90	28.90
4	*2437.00	113.1 PK			1.23 V	345	82.00	31.20
4	*2437.00	106.2 AV			1.23 V	345	75.00	29.20
5	2496.00	52.9 PK	74.00	-21.10	1.50 V	304	19.10	33.80
5	2496.00	51.2 AV	54.00	-2.80	1.50 V	304	17.40	31.20
6	2688.00	47.8 PK	74.00	-26.20	1.57 V	264	14.80	33.00

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 3, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	45.2 PK	74.00	-28.80	2.34 H	343	16.30	28.90
2	1728.00	48.8 PK	74.00	-25.20	1.50 H	277	19.60	29.20
3	2304.00	46.7 PK	74.00	-27.30	1.33 H	337	15.50	31.20
4	*2462.00	105.6 PK			1.10 H	253	74.10	31.50
4	*2462.00	99.2 AV			1.10 H	253	67.70	28.90
5	2496.00	50.6 PK	74.00	-23.40	1.24 H	295	16.80	33.80
6	2688.00	46.8 PK	74.00	-27.20	1.30 H	351	13.80	33.00
7	2688.00	44.7 PK	74.00	-29.30	1.07 H	355	11.70	33.00

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.0 PK	74.00	-26.00	1.57 V	272	19.20	28.90
2	1728.00	49.9 PK	74.00	-24.10	2.29 V	269	20.70	29.20
3	2304.00	49.0 PK	74.00	-25.00	3.08 V	270	17.90	31.20
4	*2462.00	113.4 PK			1.32 V	256	81.90	31.50
4	*2462.00	106.2 AV			1.32 V	256	74.70	28.90
5	2496.00	53.2 PK	74.00	-20.80	1.35 V	228	19.40	33.80
5	2496.00	50.7 AV	54.00	-3.30	1.35 V	228	16.90	29.20
6	2688.00	49.0 PK	74.00	-25.00	1.24 V	268	16.00	33.00

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



## 4.2.10 TEST RESULTS (D)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 4, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	40.2 QP	43.50	-3.30	1.65 H	325	25.40	14.80
2	192.01	31.9 QP	43.50	-11.60	1.74 H	136	21.40	10.50
3	256.01	35.9 QP	46.00	-10.10	1.26 H	101	21.30	14.60
4	288.01	33.6 QP	46.00	-12.40	1.26 H	258	19.00	14.70
5	320.00	28.8 QP	46.00	-17.20	1.07 H	32	13.00	15.80
6	384.02	31.2 QP	46.00	-14.80	1.78 H	213	13.40	17.90
7	480.08	31.4 QP	46.00	-14.60	2.60 H	147	11.70	19.70
8	576.01	36.0 QP	46.00	-10.00	2.53 H	134	14.40	21.70
9	672.02	40.0 QP	46.00	-6.00	1.46 H	25	17.80	22.10
10	768.01	41.7 QP	46.00	-4.30	1.21 H	313	18.60	23.10
11	864.01	41.9 QP	46.00	-4.10	1.53 H	29	18.00	23.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 4, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.01	31.9 QP	40.00	-8.10	1.00 V	19	24.20	7.60
2	128.01	39.4 QP	43.50	-4.10	1.00 V	341	24.50	14.80
3	192.01	35.5 QP	43.50	-8.00	1.00 V	293	25.00	10.50
4	224.01	29.9 QP	46.00	-16.10	1.00 V	157	18.90	11.10
5	288.02	34.8 QP	46.00	-11.20	1.00 V	301	20.10	14.70
6	384.01	39.3 QP	46.00	-6.70	4.00 V	208	21.40	17.90
7	576.01	43.1 QP	46.00	-2.90	1.15 V	104	21.50	21.70
8	672.01	41.5 QP	46.00	-4.50	1.57 V	206	19.30	22.10
9	768.01	41.8 QP	46.00	-4.20	1.14 V	20	18.70	23.10
10	864.02	43.0 QP	46.00	-3.00	1.29 V	253	19.10	23.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 4, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiao

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.4 PK	74.00	-27.60	1.64 H	265	16.70	29.60
2	1728.00	44.2 PK	74.00	-29.80	1.23 H	301	14.10	30.20
3	2304.00	44.6 PK	74.00	-29.40	1.36 H	100	12.50	32.10
4	*2412.00	90.2 PK			1.10 H	218	57.70	32.60
4	*2412.00	84.7 AV			1.10 H	218	52.10	29.60
5	2496.00	45.7 PK	74.00	-28.30	1.10 H	147	12.80	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.6 PK	74.00	-25.40	1.59 V	2	19.00	29.60
2	1728.00	50.5 PK	74.00	-23.50	1.70 V	34	20.40	30.20
3	2304.00	45.6 PK	74.00	-28.40	1.23 V	313	13.50	32.10
4	*2412.00	107.2 PK			1.00 V	176	74.70	32.60
4	*2412.00	101.5 AV			1.00 V	176	68.90	29.60
5	2496.00	45.1 PK	74.00	-28.90	1.08 V	262	12.20	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency





<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 4, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.5 PK	74.00	-27.50	1.02 H	200	16.90	29.60
2	1728.00	43.3 PK	74.00	-30.70	1.30 H	60	13.10	30.20
3	2304.00	44.2 PK	74.00	-29.80	1.30 H	310	12.00	32.10
4	*2437.00	88.8 PK			1.10 H	295	56.10	32.70
4	*2437.00	84.5 AV			1.10 H	295	51.90	29.60
5	2496.00	46.5 PK	74.00	-27.50	1.66 H	100	13.60	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	50.1 PK	74.00	-23.90	1.60 V	324	20.40	29.60
2	1728.00	49.4 PK	74.00	-24.60	1.57 V	0	19.20	30.20
3	2304.00	48.7 PK	74.00	-25.30	1.32 V	80	16.60	32.10
4	*2437.00	107.7 PK			1.01 V	126	75.00	32.70
4	*2437.00	100.5 AV			1.01 V	126	67.90	29.60
5	2496.00	49.2 PK	74.00	-24.80	1.54 V	201	16.40	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. " \* " : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 4, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	44.7 PK	74.00	-29.30	1.03 H	200	15.10	29.60
2	1728.00	42.9 PK	74.00	-31.10	1.21 H	300	12.80	30.20
3	2304.00	45.2 PK	74.00	-28.80	1.29 H	84	13.10	32.10
4	*2462.00	88.4 PK			1.06 H	294	55.60	32.80
4	*2462.00	83.4 AV			1.06 H	294	50.70	29.60
5	2496.00	44.6 PK	74.00	-29.40	1.06 H	98	11.70	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.6 PK	74.00	-27.40	1.60 V	262	17.00	29.60
2	1728.00	48.8 PK	74.00	-25.20	1.84 V	65	18.70	30.20
3	2304.00	47.1 PK	74.00	-26.90	1.41 V	68	15.00	32.10
4	*2462.00	107.4 PK			1.49 V	125	74.60	32.80
4	*2462.00	100.1 AV			1.49 V	125	67.40	29.60
5	2496.00	47.4 PK	74.00	-26.60	1.51 V	165	14.50	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



## 4.2.11 TEST RESULTS (E)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 5, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	31.1 QP	43.50	-12.40	2.01 H	219	16.20	14.80
2	160.04	30.8 QP	43.50	-12.70	1.83 H	0	19.40	11.40
3	224.00	31.3 QP	46.00	-14.70	1.53 H	346	20.20	11.10
4	256.01	31.2 QP	46.00	-14.80	2.26 H	0	16.60	14.60
5	288.01	38.8 QP	46.00	-7.20	1.00 H	18	24.10	14.70
6	384.00	41.7 QP	46.00	-4.30	1.00 H	229	23.80	17.90
7	480.00	34.8 QP	46.00	-11.20	1.88 H	17	15.10	19.70
8	672.00	33.5 QP	46.00	-12.50	1.45 H	349	11.40	22.10
9	768.00	34.8 QP	46.00	-11.20	1.35 H	75	11.70	23.10
10	960.00	37.5 QP	46.00	-8.50	1.55 H	202	12.90	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 5, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.00	22.8 QP	40.00	-17.20	2.03 V	23	15.20	7.60
2	128.00	33.6 QP	43.50	-9.90	1.52 V	250	18.80	14.80
3	224.00	31.6 QP	46.00	-14.40	1.00 V	142	20.60	11.10
4	288.02	40.0 QP	46.00	-6.00	1.00 V	139	25.30	14.70
5	384.01	40.0 QP	46.00	-6.00	1.81 V	253	22.10	17.90
6	480.00	32.2 QP	46.00	-13.80	1.69 V	320	12.60	19.70
7	672.01	35.0 QP	46.00	-11.00	1.40 V	292	12.90	22.10
8	768.01	35.8 QP	46.00	-10.20	1.47 V	359	12.60	23.10
9	864.01	36.5 QP	46.00	-9.50	1.68 V	54	12.60	23.90
10	960.01	36.4 QP	54.00	-17.60	2.68 V	21	11.80	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 5, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiao

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	50.8 PK	74.00	-23.20	1.08 H	130	22.00	28.90
2	1728.00	46.3 PK	74.00	-27.70	1.63 H	70	17.10	29.20
3	2304.00	46.0 PK	74.00	-28.00	1.35 H	111	14.80	31.20
4	2376.00	41.9 PK	74.00	-32.10	1.42 H	3	10.30	31.50
5	*2412.00	99.5 PK			1.44 H	180	68.70	30.80
5	*2412.00	92.8 AV			1.44 H	180	62.00	28.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	43.0 PK	74.00	-31.00	1.29 V	142	14.10	28.90
2	1728.00	46.4 PK	74.00	-27.60	1.35 V	350	17.20	29.20
3	2304.00	44.2 PK	74.00	-29.80	1.29 V	333	13.00	31.20
4	2376.00	44.5 PK	74.00	-29.50	1.43 V	300	12.90	31.50
5	*2412.00	113.0 PK			1.02 V	347	82.20	30.80
5	*2412.00	104.1 AV			1.02 V	347	73.30	28.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 5, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.5 PK	74.00	-27.50	1.83 H	83	17.70	28.90
2	1728.00	42.7 PK	74.00	-31.30	1.30 H	24	13.50	29.20
3	2304.00	44.6 PK	74.00	-29.40	1.66 H	101	13.40	31.20
4	*2437.00	100.2 PK			1.74 H	222	69.10	31.20
4	*2437.00	93.7 AV			1.74 H	222	62.50	28.90
5	2496.00	46.2 PK	74.00	-27.80	1.23 H	19	12.40	33.80

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	41.5 PK	74.00	-32.50	1.29 V	294	12.60	28.90
2	1728.00	45.0 PK	74.00	-29.00	1.30 V	332	15.80	29.20
3	2304.00	48.2 PK	74.00	-25.80	1.03 V	330	17.00	31.20
4	*2437.00	114.4 PK			1.06 V	358	83.20	31.20
4	*2437.00	105.2 AV			1.06 V	358	74.10	28.90
5	2496.00	50.0 PK	74.00	-24.00	1.20 V	166	16.20	33.80

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. " \* " : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 5, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	42.8 PK	74.00	-31.20	1.01 H	42	14.00	28.90
2	1728.00	45.5 PK	74.00	-28.50	1.93 H	83	16.30	29.20
3	2304.00	41.8 PK	74.00	-32.20	1.41 H	100	10.70	31.20
4	*2462.00	100.5 PK			1.00 H	19	69.00	31.50
4	*2462.00	94.5 AV			1.00 H	19	63.00	28.90
5	2496.00	45.9 PK	74.00	-28.10	1.32 H	342	12.10	33.80

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.9 PK	74.00	-25.10	1.75 V	103	20.10	28.90
2	1728.00	43.6 PK	74.00	-30.40	1.21 V	104	14.50	29.20
3	2304.00	46.1 PK	74.00	-27.90	1.00 V	25	15.00	31.20
4	*2462.00	112.9 PK			1.10 V	19	81.40	31.50
4	*2462.00	106.2 AV			1.10 V	19	74.70	28.90
5	2496.00	49.8 PK	74.00	-24.20	1.21 V	144	16.10	33.80

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



## 4.2.12 TEST RESULTS (F)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 6, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.03	27.1 QP	40.00	-12.90	2.57 H	82	19.50	7.60
2	132.01	27.2 QP	43.50	-16.30	1.44 H	92	12.50	14.70
3	192.00	33.8 QP	43.50	-9.70	1.53 H	317	23.30	10.50
4	288.01	42.9 QP	46.00	-3.10	1.00 H	286	28.20	14.70
5	384.01	42.4 QP	46.00	-3.60	2.10 H	289	24.50	17.90
6	480.02	32.7 QP	46.00	-13.30	2.97 H	208	13.00	19.70
7	672.00	34.8 QP	46.00	-11.20	1.96 H	223	12.60	22.10
8	672.01	34.9 QP	46.00	-11.10	2.07 H	149	12.70	22.10
9	768.01	37.2 QP	46.00	-8.80	2.05 H	266	14.10	23.10
10	864.01	38.3 QP	46.00	-7.70	1.72 H	299	14.40	23.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247





<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 6, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.00	32.2 QP	40.00	-7.80	1.00 V	326	24.60	7.60
2	224.00	29.5 QP	46.00	-16.50	1.00 V	186	18.40	11.10
3	288.00	43.6 QP	46.00	-2.40	1.00 V	293	29.00	14.70
4	384.02	37.6 QP	46.00	-8.40	3.50 V	140	19.70	17.90
5	448.00	30.4 QP	46.00	-15.60	1.82 V	62	11.60	18.90
6	528.00	28.7 QP	46.00	-17.30	2.03 V	214	7.70	21.00
7	672.01	35.4 QP	46.00	-10.60	1.64 V	22	13.30	22.10
8	768.02	35.2 QP	46.00	-10.80	2.90 V	149	12.00	23.10
9	792.00	31.2 QP	46.00	-14.80	1.08 V	172	8.00	23.20
10	864.01	40.4 QP	46.00	-5.60	2.01 V	28	16.50	23.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 6, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiao

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	45.5 PK	74.00	-28.50	1.89 H	11	15.90	29.60
2	1728.00	49.7 PK	74.00	-24.30	1.53 H	337	19.50	30.20
3	2304.00	45.8 PK	74.00	-28.20	1.78 H	359	13.70	32.10
4	*2412.00	82.6 PK			1.32 H	192	50.00	32.60
4	*2412.00	91.6 AV			1.32 H	192	59.00	29.60
5	2496.00	44.1 PK	74.00	-29.90	1.60 H	330	11.20	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	49.8 PK	74.00	-24.20	1.02 V	107	20.20	29.60
2	1728.00	50.2 PK	74.00	-23.80	1.02 V	154	20.10	30.20
3	2304.00	45.7 PK	74.00	-28.30	1.19 V	253	13.60	32.10
4	*2412.00	95.7 PK			1.03 V	198	63.10	32.60
4	*2412.00	92.9 AV			1.03 V	198	60.30	29.60
5	2496.00	45.7 PK	74.00	-28.30	1.03 V	57	12.80	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 6, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.9 PK	74.00	-27.10	1.62 H	360	17.20	29.60
2	1728.00	44.8 PK	74.00	-29.20	1.21 H	154	14.70	30.20
3	2304.00	44.8 PK	74.00	-29.20	1.58 H	21	12.60	32.10
4	*2437.00	101.2 PK			1.57 H	184	68.50	32.70
4	*2437.00	94.5 AV			1.57 H	184	61.80	29.60
5	2496.00	46.0 PK	74.00	-28.00	1.24 H	221	13.10	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	49.2 PK	74.00	-24.80	1.20 V	45	19.60	29.60
2	1728.00	49.2 PK	74.00	-24.80	1.90 V	56	19.10	30.20
3	2304.00	47.4 PK	74.00	-26.60	1.37 V	166	15.30	32.10
4	*2437.00	98.4 PK			1.10 V	230	65.70	32.70
4	*2437.00	92.9 AV			1.10 V	230	60.20	29.60
5	2496.00	48.0 PK	74.00	-26.00	1.32 V	154	15.10	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. " \* " : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 6, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	47.3 PK	74.00	-26.70	1.72 H	340	17.70	29.60
2	1728.00	46.2 PK	74.00	-27.80	1.11 H	54	16.10	30.20
3	2304.00	45.8 PK	74.00	-28.20	1.60 H	353	13.70	32.10
4	*2462.00	101.8 PK			2.02 H	80	69.10	32.80
4	*2462.00	95.4 AV			2.02 H	80	62.60	29.60
5	2496.00	47.1 PK	74.00	-26.90	1.00 H	341	14.20	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.1 PK	74.00	-25.90	1.58 V	23	18.50	29.60
2	1728.00	50.0 PK	74.00	-24.00	1.82 V	310	19.80	30.20
3	2304.00	49.1 PK	74.00	-24.90	1.17 V	68	17.00	32.10
4	*2462.00	98.0 PK			1.17 V	31	65.30	32.80
4	*2462.00	91.9 AV			1.17 V	31	59.20	29.60
5	2496.00	47.7 PK	74.00	-26.30	1.12 V	59	14.80	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



## 4.2.13 TEST RESULTS (G)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 7, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	160.01	33.4 QP	43.50	-10.10	1.92 H	238	21.90	11.40
2	192.01	34.5 QP	43.50	-9.00	1.35 H	148	24.00	10.50
3	224.01	38.4 QP	46.00	-7.60	1.45 H	291	27.40	11.10
4	288.01	42.1 QP	46.00	-3.90	1.50 H	116	27.40	14.70
5	384.02	33.7 QP	46.00	-12.30	1.88 H	105	15.80	17.90
6	576.03	32.0 QP	46.00	-14.00	3.71 H	254	10.40	21.70
7	672.01	38.4 QP	46.00	-7.60	1.27 H	20	16.30	22.10
8	800.04	36.9 QP	46.00	-9.10	2.03 H	308	13.60	23.20
9	864.02	41.1 QP	46.00	-4.90	2.20 H	179	17.20	23.90
10	960.00	36.9 QP	54.00	-17.10	1.23 H	321	12.30	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 7, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	40.0 QP	43.50	-3.50	1.11 V	231	25.20	14.80
2	192.00	41.5 QP	43.50	-2.00	1.84 V	90	31.00	10.50
3	224.01	32.7 QP	46.00	-13.30	1.10 V	192	21.60	11.10
4	288.00	43.7 QP	46.00	-2.30	3.09 V	341	29.00	14.70
5	320.02	29.9 QP	46.00	-16.10	1.78 V	347	14.10	15.80
6	384.02	37.9 QP	46.00	-8.10	1.14 V	46	20.00	17.90
7	480.02	31.0 QP	46.00	-15.00	1.31 V	20	11.30	19.70
8	576.02	31.6 QP	46.00	-14.40	1.32 V	198	9.90	21.70
9	672.01	35.3 QP	46.00	-10.70	2.88 V	142	13.20	22.10
10	960.01	36.8 QP	54.00	-17.20	2.80 V	350	12.20	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 7, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiao

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	54.2 PK	74.00	-19.80	1.24 H	140	21.80	32.40
1	1536.00	48.6 AV	54.00	-5.40	1.24 H	140	16.20	32.40
2	1728.00	46.8 PK	74.00	-27.20	1.50 H	3	13.90	32.90
3	2304.00	49.5 PK	74.00	-24.50	1.57 H	190	14.20	35.30
4	2311.00	39.9 PK	74.00	-34.10	1.24 H	210	4.60	35.30
5	*2412.00	108.9 PK			1.24 H	357	73.30	35.60
5	*2412.00	102.1 AV			1.24 H	357	66.50	32.90
6	2496.00	48.0 PK	74.00	-26.00	1.63 H	18	9.10	38.90
7	2688.00	40.6 PK	74.00	-33.40	1.45 H	189	3.50	37.10

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	53.9 PK	74.00	-20.10	1.49 V	135	21.50	32.40
1	1536.00	51.9 AV	54.00	-2.10	1.49 V	135	19.50	32.40
2	1728.00	54.2 PK	74.00	-19.80	1.08 V	39	21.20	32.90
2	1728.00	45.2 AV	54.00	-8.80	1.08 V	39	12.20	32.90
3	2304.00	50.0 PK	74.00	-24.00	1.07 V	40	14.70	35.30
4	2311.00	41.4 PK	74.00	-32.60	1.47 V	210	6.10	35.30
5	*2412.00	105.2 PK			1.00 V	7	69.60	35.60
5	*2412.00	99.0 AV			1.00 V	7	63.40	35.30
6	2496.00	50.8 PK	74.00	-23.20	1.28 V	148	11.90	38.90
7	2688.00	46.3 PK	74.00	-27.70	1.60 V	70	9.30	37.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 7, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	48.4 PK	74.00	-25.60	1.74 H	30	16.00	32.40
2	1728.00	49.4 PK	74.00	-24.60	1.33 H	160	16.50	32.90
3	2304.00	48.2 PK	74.00	-25.80	1.39 H	60	12.90	35.30
4	2311.00	43.2 PK	74.00	-30.80	1.41 H	104	7.80	35.30
5	*2437.00	112.5 PK			1.52 H	18	76.50	36.00
5	*2437.00	102.8 AV			1.52 H	18	66.80	32.40
6	2496.00	48.6 PK	74.00	-25.40	1.92 H	259	9.70	38.90
7	2688.00	45.5 PK	74.00	-28.50	1.62 H	2	8.40	37.10

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	53.3 PK	74.00	-20.70	1.46 V	130	20.90	32.40
1	1536.00	50.9 AV	54.00	-3.10	1.46 V	130	18.50	32.40
2	1728.00	49.1 PK	74.00	-24.90	1.40 V	64	16.20	32.90
3	2304.00	50.9 PK	74.00	-23.10	1.50 V	110	15.60	35.30
4	2311.00	45.1 PK	74.00	-28.90	1.63 V	20	9.70	35.30
5	*2437.00	101.1 PK			1.41 V	330	65.10	36.00
5	*2437.00	93.4 AV			1.41 V	330	57.40	32.90
6	2496.00	51.4 PK	74.00	-22.60	1.88 V	110	12.50	38.90
6	2496.00	42.5 AV	54.00	-11.50	1.88 V	110	3.60	35.30
7	2688.00	48.9 PK	74.00	-25.10	1.40 V	360	11.80	37.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency





<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 7, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	49.7 PK	74.00	-24.30	1.35 H	21	17.30	32.40
2	1728.00	49.1 PK	74.00	-24.90	1.84 H	210	16.10	32.90
3	2304.00	45.0 PK	74.00	-29.00	1.48 H	110	9.70	35.30
4	2311.00	42.4 PK	74.00	-31.60	1.35 H	301	7.00	35.30
5	*2462.00	112.1 PK			1.49 H	148	75.80	36.30
5	*2462.00	103.9 AV			1.49 H	148	67.60	32.40
6	2496.00	49.8 PK	74.00	-24.20	1.68 H	170	10.90	38.90
7	2688.00	49.7 PK	74.00	-24.30	1.64 H	64	12.60	37.10

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	52.8 PK	74.00	-21.20	1.44 V	137	20.40	32.40
1	1536.00	49.8 AV	54.00	-4.20	1.44 V	137	17.40	32.40
2	1728.00	50.5 PK	74.00	-23.50	1.32 V	163	17.50	32.90
3	2304.00	48.4 PK	74.00	-25.60	1.48 V	107	13.10	35.30
4	2311.00	41.7 PK	74.00	-32.30	1.24 V	230	6.30	35.30
5	*2462.00	99.8 PK			1.40 V	56	63.50	36.30
5	*2462.00	92.8 AV			1.40 V	56	56.50	32.90
6	2496.00	50.7 PK	74.00	-23.30	1.86 V	107	11.80	38.90
7	2688.00	48.3 PK	74.00	-25.70	1.33 V	42	11.20	37.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



## 4.2.14 TEST RESULTS (H)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 8, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.01	30.9 QP	43.50	-12.60	2.16 H	34	16.00	14.80
2	224.00	35.2 QP	46.00	-10.80	1.39 H	303	24.10	11.10
3	256.00	34.4 QP	46.00	-11.60	1.17 H	306	19.80	14.60
4	384.00	36.1 QP	46.00	-9.90	2.66 H	166	18.20	17.90
5	480.03	33.3 QP	46.00	-12.70	1.26 H	262	13.70	19.70
6	672.01	35.5 QP	46.00	-10.50	1.55 H	3	13.40	22.10
7	768.01	37.4 QP	46.00	-8.60	2.22 H	326	14.30	23.10
8	800.04	35.0 QP	46.00	-11.00	1.34 H	112	11.80	23.20
9	864.02	37.7 QP	46.00	-8.30	1.00 H	277	13.80	23.90
10	960.02	35.0 QP	54.00	-19.00	2.02 H	98	10.40	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 8, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	34.8 QP	43.50	-8.70	1.40 V	228	20.00	14.80
2	256.01	33.3 QP	46.00	-12.70	1.04 V	61	18.70	14.60
3	288.02	33.4 QP	46.00	-12.60	3.21 V	218	18.70	14.70
4	384.00	37.1 QP	46.00	-8.90	1.61 V	359	19.20	17.90
5	480.02	36.1 QP	46.00	-9.90	1.28 V	321	16.40	19.70
6	512.03	34.7 QP	46.00	-11.30	1.91 V	235	14.10	20.50
7	672.00	34.4 QP	46.00	-11.60	1.76 V	102	12.20	22.10
8	768.01	39.4 QP	46.00	-6.60	1.39 V	346	16.30	23.10
9	864.01	42.5 QP	46.00	-3.50	1.19 V	2	18.60	23.90
10	960.01	36.3 QP	54.00	-17.70	2.23 V	285	11.70	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 8, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	43.9 PK	74.00	-30.10	1.25 H	125	14.30	29.60
2	1728.00	48.0 PK	74.00	-26.00	1.22 H	78	17.80	30.20
3	2304.00	49.5 PK	74.00	-24.50	1.67 H	21	17.40	32.10
4	*2412.00	96.8 PK			1.19 H	196	64.20	32.60
4	*2412.00	91.9 AV			1.19 H	196	59.40	29.60
5	2496.00	46.2 PK	74.00	-27.80	1.42 H	57	13.30	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.6 PK	74.00	-27.40	2.15 V	78	17.00	29.60
2	1728.00	52.4 PK	74.00	-21.60	1.03 V	36	22.20	30.20
2	1728.00	49.3 AV	54.00	-4.70	1.03 V	36	19.10	29.60
3	2304.00	56.3 PK	74.00	-17.70	1.12 V	77	24.20	32.10
3	2304.00	52.1 AV	54.00	-1.90	1.12 V	77	20.00	30.20
4	*2412.00	111.0 PK			1.26 V	185	78.40	32.60
4	*2412.00	103.9 AV			1.26 V	185	71.30	32.10
5	2496.00	56.3 PK	74.00	-17.70	1.26 V	185	23.40	32.90
5	2496.00	52.8 AV	54.00	-1.20	1.26 V	185	19.90	32.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 8, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	43.8 PK	74.00	-30.20	1.90 H	111	14.20	29.60
2	1728.00	57.5 PK	74.00	-16.50	2.00 H	295	27.30	30.20
2	1728.00	50.5 AV	54.00	-3.50	2.00 H	295	20.30	29.60
3	2304.00	50.0 PK	74.00	-24.00	1.54 H	279	17.90	32.10
4	*2437.00	103.9 PK			1.70 H	316	71.20	32.70
4	*2437.00	97.2 AV			1.70 H	316	64.50	30.20
5	2496.00	48.0 PK	74.00	-26.00	1.54 H	300	15.10	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	45.6 PK	74.00	-28.40	1.46 V	266	16.00	29.60
2	1728.00	53.3 PK	74.00	-20.70	1.06 V	299	23.10	30.20
2	1728.00	48.0 AV	54.00	-6.00	1.06 V	299	17.80	29.60
3	2304.00	52.3 PK	74.00	-21.70	1.54 V	147	20.20	32.10
3	2304.00	46.8 AV	54.00	-7.20	1.54 V	147	14.60	30.20
4	*2437.00	97.0 PK			1.01 V	306	64.30	32.70
4	*2437.00	89.7 AV			1.01 V	306	57.10	32.10
5	2496.00	52.6 PK	74.00	-21.40	1.69 V	32	19.70	32.90
5	2496.00	48.1 AV	54.00	-5.90	1.69 V	32	15.20	32.70

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 8, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	44.4 PK	74.00	-29.60	1.87 H	126	14.80	29.60
2	1728.00	56.4 PK	74.00	-17.60	2.01 H	277	26.20	30.20
2	1728.00	52.6 AV	54.00	-1.40	2.01 H	277	22.40	29.60
3	2304.00	50.0 PK	74.00	-24.00	1.39 H	197	17.90	32.10
4	*2462.00	104.1 PK			1.74 H	317	71.40	32.80
4	*2462.00	96.6 AV			1.74 H	317	63.90	30.20
5	2496.00	47.9 PK	74.00	-26.10	1.74 H	87	15.00	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	44.6 PK	74.00	-29.40	2.07 V	247	14.90	29.60
2	1728.00	48.4 PK	74.00	-25.60	1.79 V	279	18.20	30.20
3	2304.00	53.0 PK	74.00	-21.00	1.46 V	280	20.90	32.10
3	2304.00	47.6 AV	54.00	-6.40	1.46 V	280	15.50	29.60
4	*2462.00	97.0 PK			1.05 V	275	64.20	32.80
4	*2462.00	90.1 AV			1.05 V	275	57.30	30.20
5	2496.00	53.1 PK	74.00	-20.90	1.33 V	279	20.20	32.90
5	2496.00	48.4 AV	54.00	-5.60	1.33 V	279	15.50	32.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



## 4.2.15 TEST RESULTS (I)

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 9, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	21 deg. C, 77 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.00	27.8 QP	40.00	-12.20	2.68 H	336	20.10	7.60
2	128.01	30.4 QP	43.50	-13.10	1.80 H	327	15.50	14.80
3	224.01	30.5 QP	46.00	-15.50	1.17 H	305	19.40	11.10
4	288.01	36.1 QP	46.00	-9.90	1.98 H	70	21.50	14.70
5	384.01	38.6 QP	46.00	-7.40	1.51 H	90	20.70	17.90
6	480.01	37.0 QP	46.00	-9.00	1.13 H	211	17.30	19.70
7	544.03	30.3 QP	46.00	-15.70	1.37 H	307	8.90	21.40
8	768.01	41.6 QP	46.00	-4.40	1.07 H	318	18.50	23.10
9	864.00	34.5 QP	46.00	-11.50	1.43 H	119	10.60	23.90
10	960.02	36.1 QP	54.00	-17.90	1.48 H	48	11.50	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 9, Channel 11	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	128.00	34.3 QP	43.50	-9.20	1.25 V	178	19.40	14.80
2	192.01	32.4 QP	43.50	-11.10	1.00 V	259	21.90	10.50
3	288.01	36.8 QP	46.00	-9.20	1.00 V	281	22.10	14.70
4	384.00	34.9 QP	46.00	-11.10	2.08 V	106	17.00	17.90
5	480.02	35.6 QP	46.00	-10.40	1.63 V	257	16.00	19.70
6	544.02	31.3 QP	46.00	-14.70	1.50 V	239	9.90	21.40
7	672.01	37.2 QP	46.00	-8.80	1.00 V	104	15.10	22.10
8	768.01	42.1 QP	46.00	-3.90	1.01 V	156	18.90	23.10
9	864.00	37.4 QP	46.00	-8.60	1.64 V	341	13.50	23.90
10	960.01	37.6 QP	54.00	-16.40	1.69 V	178	13.00	24.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247





<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 9, Channel 1	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiao

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	42.7 PK	74.00	-31.30	1.51 H	322	13.00	29.60
2	1728.00	54.4 PK	74.00	-19.60	1.60 H	266	24.20	30.20
2	1728.00	52.9 AV	54.00	-1.10	1.60 H	266	22.70	29.60
3	2304.00	45.6 PK	74.00	-28.40	1.01 H	7	13.50	32.10
4	*2412.00	92.7 PK			1.25 H	193	60.10	32.60
4	*2412.00	85.4 AV			1.25 H	193	52.80	30.20
5	2496.00	47.0 PK	74.00	-27.00	1.54 H	16	14.10	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	49.9 PK	74.00	-24.10	1.18 V	1	20.20	29.60
2	1728.00	51.6 PK	74.00	-22.40	1.00 V	276	21.50	30.20
2	1728.00	49.5 AV	54.00	-4.50	1.00 V	276	19.40	29.60
3	2304.00	51.2 PK	74.00	-22.80	1.01 V	66	19.10	32.10
3	2304.00	45.6 AV	54.00	-8.40	1.01 V	66	13.50	30.20
4	*2412.00	112.5 PK			1.00 V	181	80.00	32.60
4	*2412.00	105.1 AV			1.00 V	181	72.50	32.10
5	2496.00	54.1 PK	74.00	-19.90	1.24 V	231	21.20	32.90
5	2496.00	52.3 AV	54.00	-1.70	1.24 V	231	19.50	32.60

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 9, Channel 6	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	44.5 PK	74.00	-29.50	1.28 H	283	14.90	29.60
2	1728.00	52.8 PK	74.00	-21.20	1.72 H	58	22.60	30.20
2	1728.00	51.1 AV	54.00	-2.90	1.72 H	58	20.90	29.60
3	2304.00	46.8 PK	74.00	-27.20	1.22 H	78	14.70	32.10
4	*2437.00	93.7 PK			1.33 H	325	61.00	32.70
4	*2437.00	85.7 AV			1.33 H	325	53.00	30.20
5	2496.00	45.2 PK	74.00	-28.80	1.00 H	20	12.40	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	47.9 PK	74.00	-26.10	1.11 V	32	18.20	29.60
2	1728.00	49.9 PK	74.00	-24.10	1.39 V	162	19.70	30.20
3	2304.00	52.4 PK	74.00	-21.60	1.42 V	153	20.30	32.10
3	2304.00	46.3 AV	54.00	-7.70	1.42 V	153	14.20	29.60
4	*2437.00	112.5 PK			1.21 V	40	79.90	32.70
4	*2437.00	105.0 AV			1.21 V	40	72.40	30.20
5	2496.00	49.0 PK	74.00	-25.00	1.86 V	161	16.10	32.90

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>MODE</b>	Antenna 9, Channel 11	<b>FREQUENCY RANGE</b>	Above 1000 MHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	20 deg. C, 50 % RH, 980 hPa	<b>TESTED BY</b>	Bruce Shiau

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	42.7 PK	74.00	-31.30	1.51 H	322	13.00	29.60
2	1728.00	54.7 PK	74.00	-19.30	1.60 H	266	24.50	30.20
2	1728.00	52.9 AV	54.00	-1.10	1.60 H	266	22.70	29.60
3	2304.00	45.6 PK	74.00	-28.40	1.01 H	7	13.50	32.10
4	*2462.00	90.7 PK			1.01 H	200	58.00	32.80
4	*2462.00	84.0 AV			1.01 H	200	51.20	30.20
5	2496.00	48.1 PK	74.00	-25.90	1.47 H	243	15.20	32.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1536.00	46.6 PK	74.00	-27.40	1.17 V	322	17.00	29.60
2	1728.00	47.7 PK	74.00	-26.30	1.00 V	18	17.50	30.20
3	2304.00	51.2 PK	74.00	-22.80	1.01 V	66	19.10	32.10
3	2304.00	45.6 AV	54.00	-8.40	1.01 V	66	13.50	29.60
4	*2462.00	111.4 PK			1.32 V	60	78.70	32.80
4	*2462.00	105.8 AV			1.32 V	60	73.00	30.20
5	2496.00	54.1 PK	74.00	-19.90	1.24 V	231	21.20	32.90
5	2496.00	52.3 AV	54.00	-1.70	1.24 V	231	19.50	32.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. The limit value is defined as per 15.247
  6. “ \* “ : Fundamental frequency



### 4.3 6dB BANDWIDTH MEASUREMENT

#### 4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

#### 4.3.2 TEST INSTRUMENTS

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

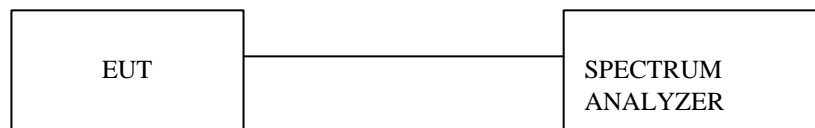
#### 4.3.3 TEST PROCEDURE

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 DEVIATION FROM TEST STANDARD

No deviation

#### 4.3.5 TEST SETUP



#### 4.3.6 EUT OPERATING CONDITIONS

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



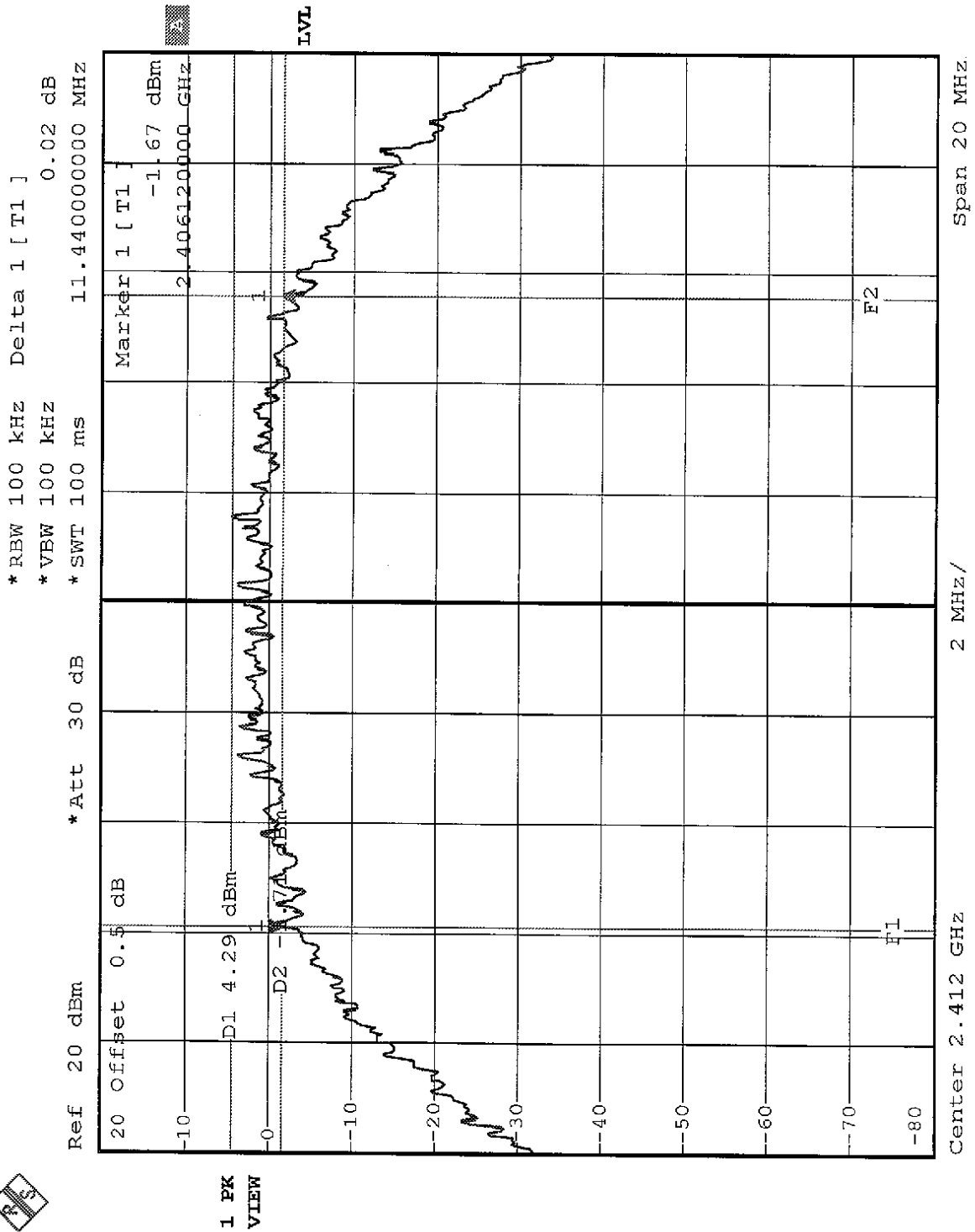
## 4.3.7 TEST RESULTS

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	22 deg. C, 60 %RH, 980 hPa
<b>TESTED BY</b>	Bruce Shiau		

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	2412	11.44	0.5	PASS
6	2437	11.48	0.5	PASS
11	2462	11.44	0.5	PASS

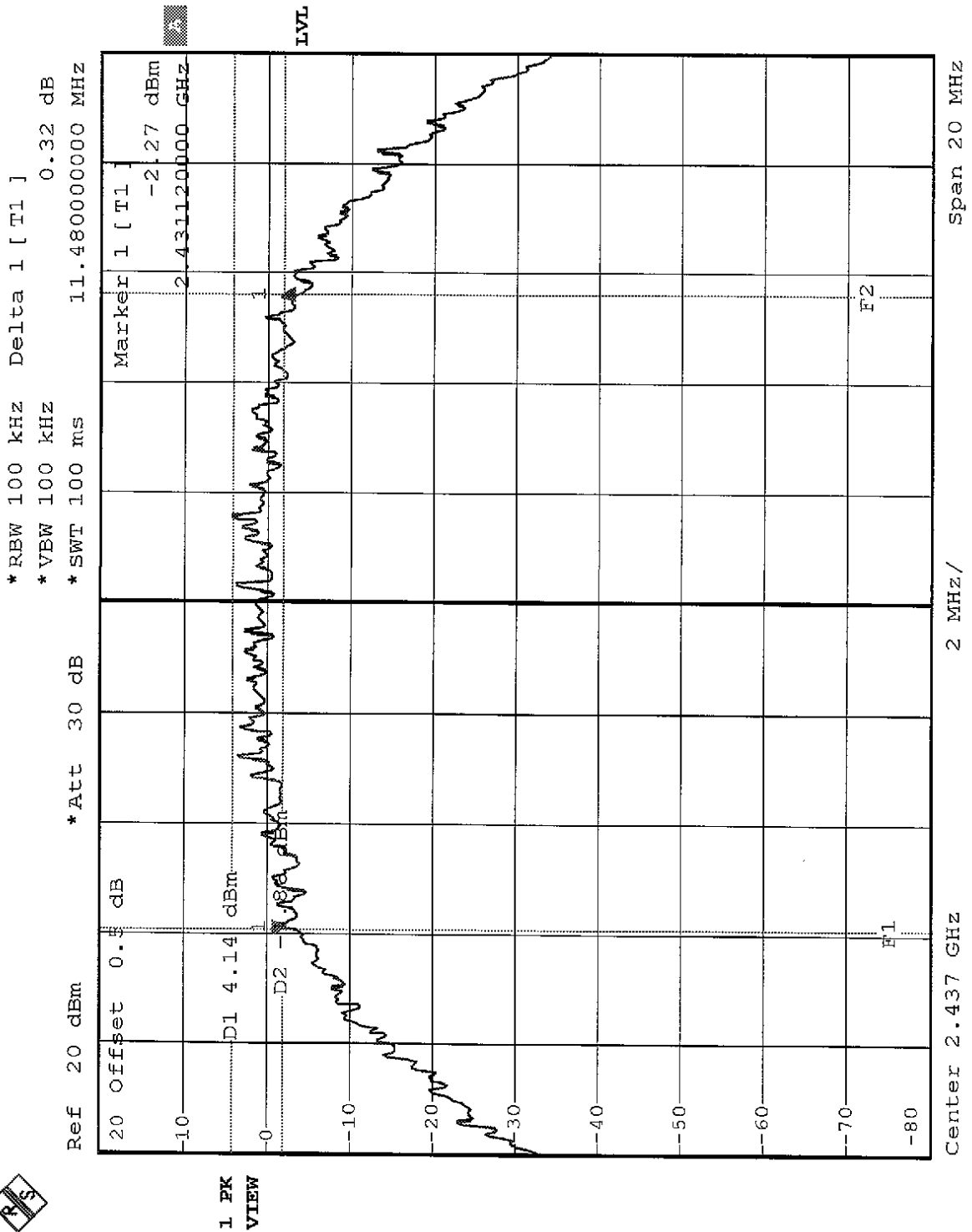


CH1





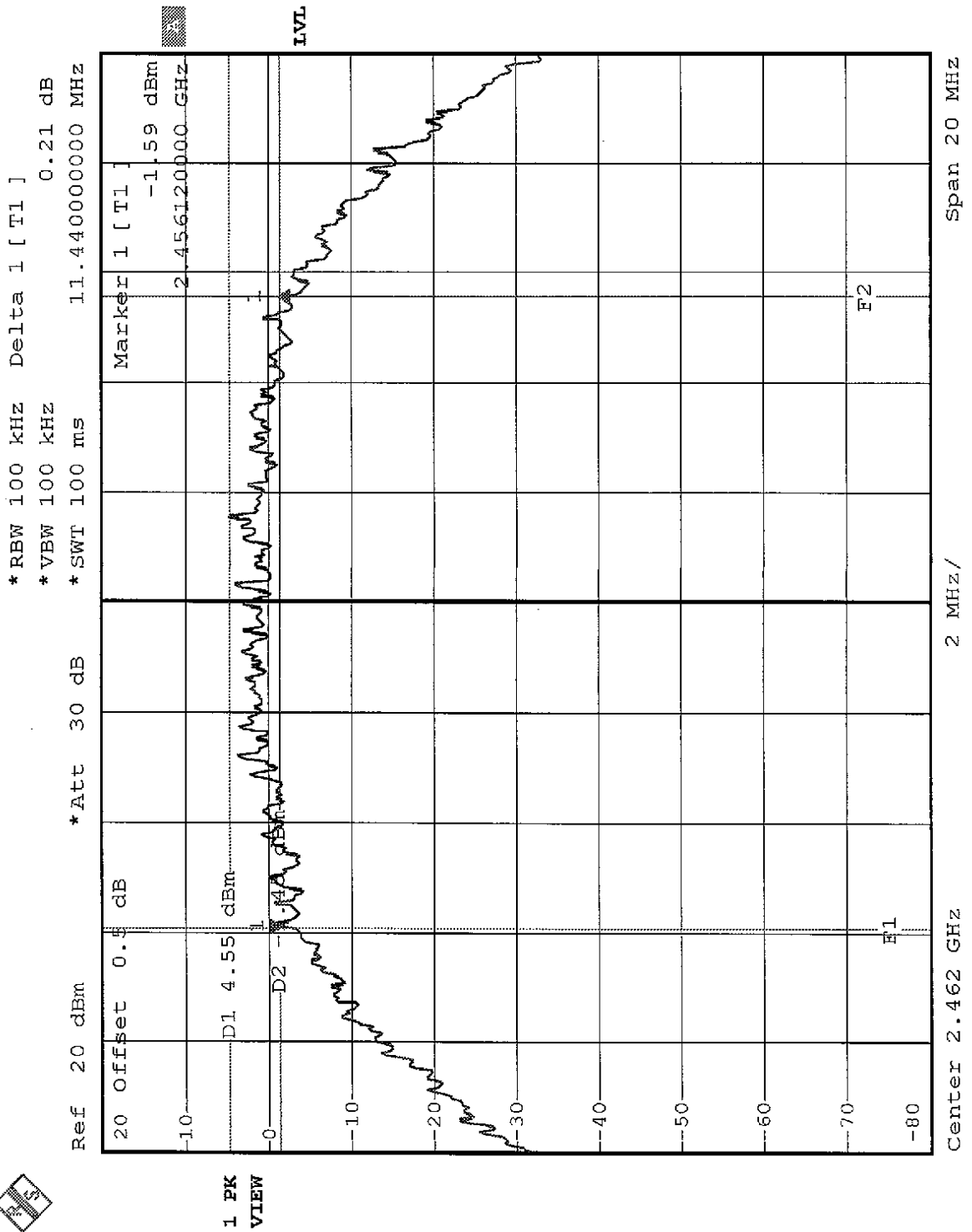
CH6







CH11





#### 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
SINGLE CHANNEL POWER METER	NRVS	100026	Feb. 21, 2003
PEAK POWER SENSOR	NRV-Z32	100013	Feb. 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.



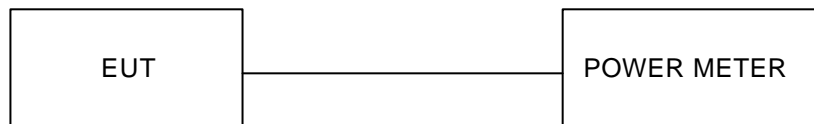
#### 4.4.3 TEST PROCEDURES

The transmitter output was connected to the power meter.

#### 4.4.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.4.5 TEST SETUP



#### 4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.



## 4.4.7 TEST RESULTS

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60 %RH, 980 hPa
<b>TESTED BY</b>	Bruce Shiau		

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>PEAK POWER OUTPUT (dBm)</b>	<b>PEAK POWER LIMIT (dBm)</b>	<b>PASS/FAIL</b>
1	2412	15.17	24 (*Note)	PASS
6	2437	15.27	24 (*Note)	PASS
11	2462	15.29	24 (*Note)	PASS

**\*Note:**

According to 47 CFR Part 15, Subpart C 15.247-(b)(3)(i):

Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.



## 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

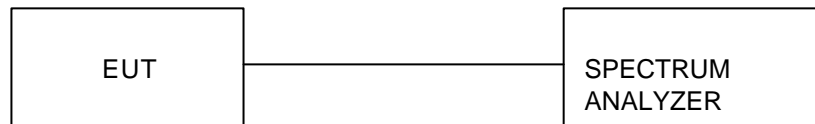
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW, set sweep time=span/3kHz. The power spectral density was measured and recorded.

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 DEVIATION FROM TEST STANDARD

No deviation

#### 4.5.5 TEST SETUP



#### 4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6.



## 4.5.7 TEST RESULTS

<b>EUT</b>	Wireless LAN and Mini PCI	<b>MODEL</b>	B11FNF
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	22 deg. C, 60 %RH, 980 hPa
<b>TESTED BY</b>	Bruce Shiau		

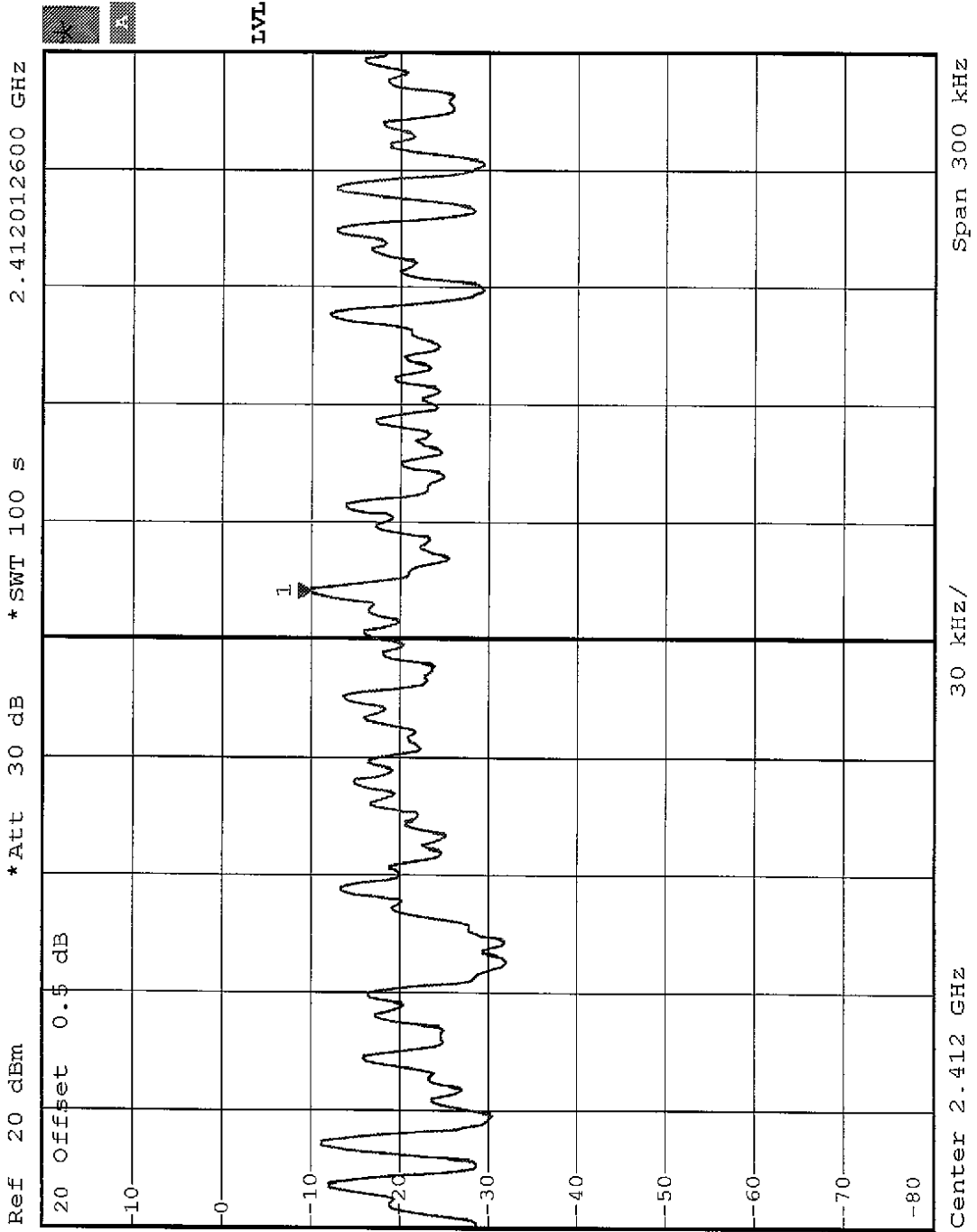
<b>CHANNEL NUMBER</b>	<b>CHANNEL FREQUENCY (MHz )</b>	<b>RF POWER LEVEL IN 3 KHz BW (dBm)</b>	<b>MAXIMUM LIMIT (dBm)</b>	<b>PASS/FAIL</b>
1	2412	-10.01	8	PASS
6	2437	-10.27	8	PASS
11	2462	-9.78	8	PASS



CH1



\*RBW 3 kHz  
 \*VBW 30 kHz  
 \*SWT 100 s  
 Marker 1 [ T1 ]  
 -10.01 dBm  
 2.412012600 GHz

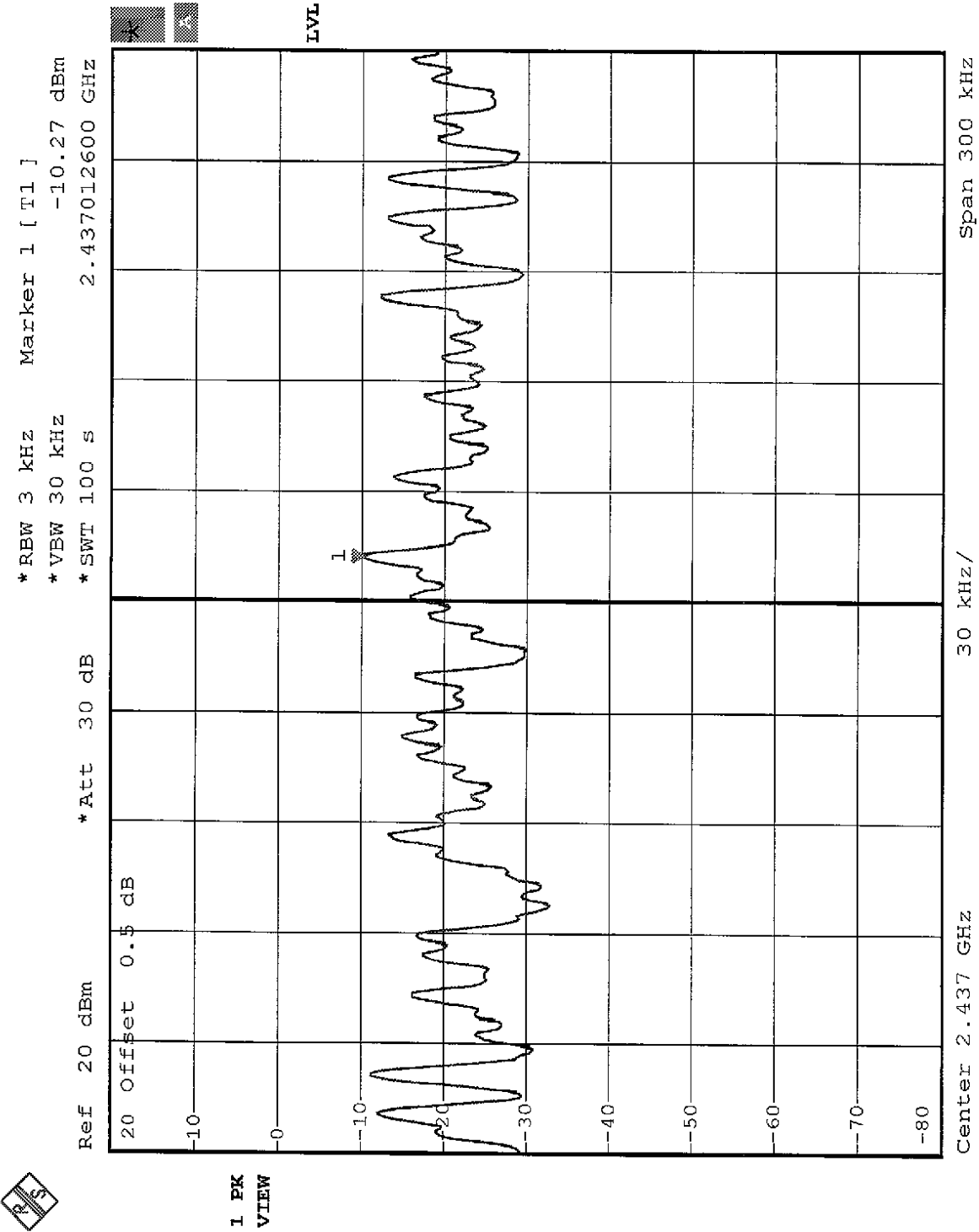


1 PK VIEW



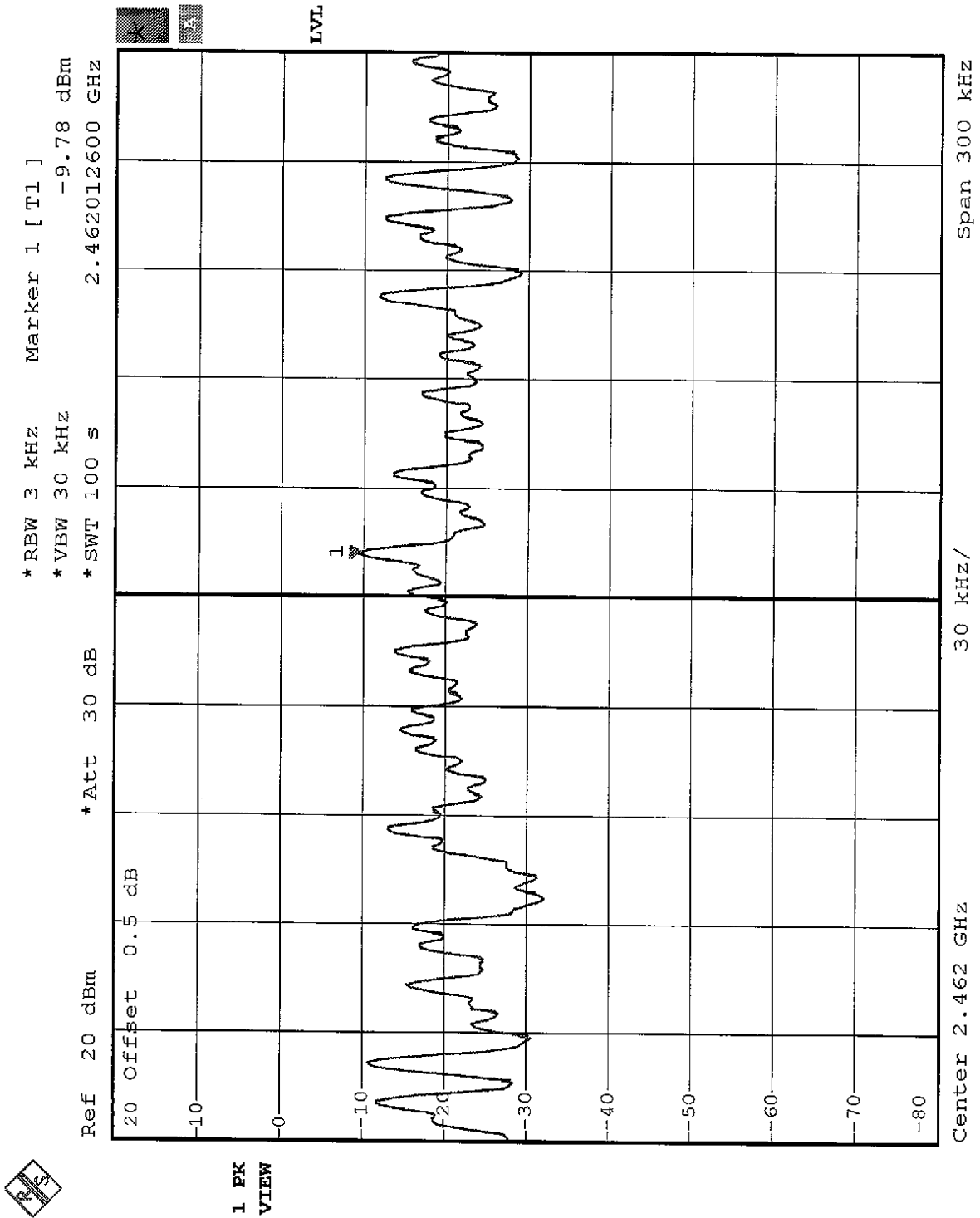


CH6





CH11





## 4.6 BAND EDGES MEASUREMENT

### 4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below  $-20$ dB 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  $\pm 2.6$ dB, 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 DEVIATION FROM TEST STANDARD

No deviation



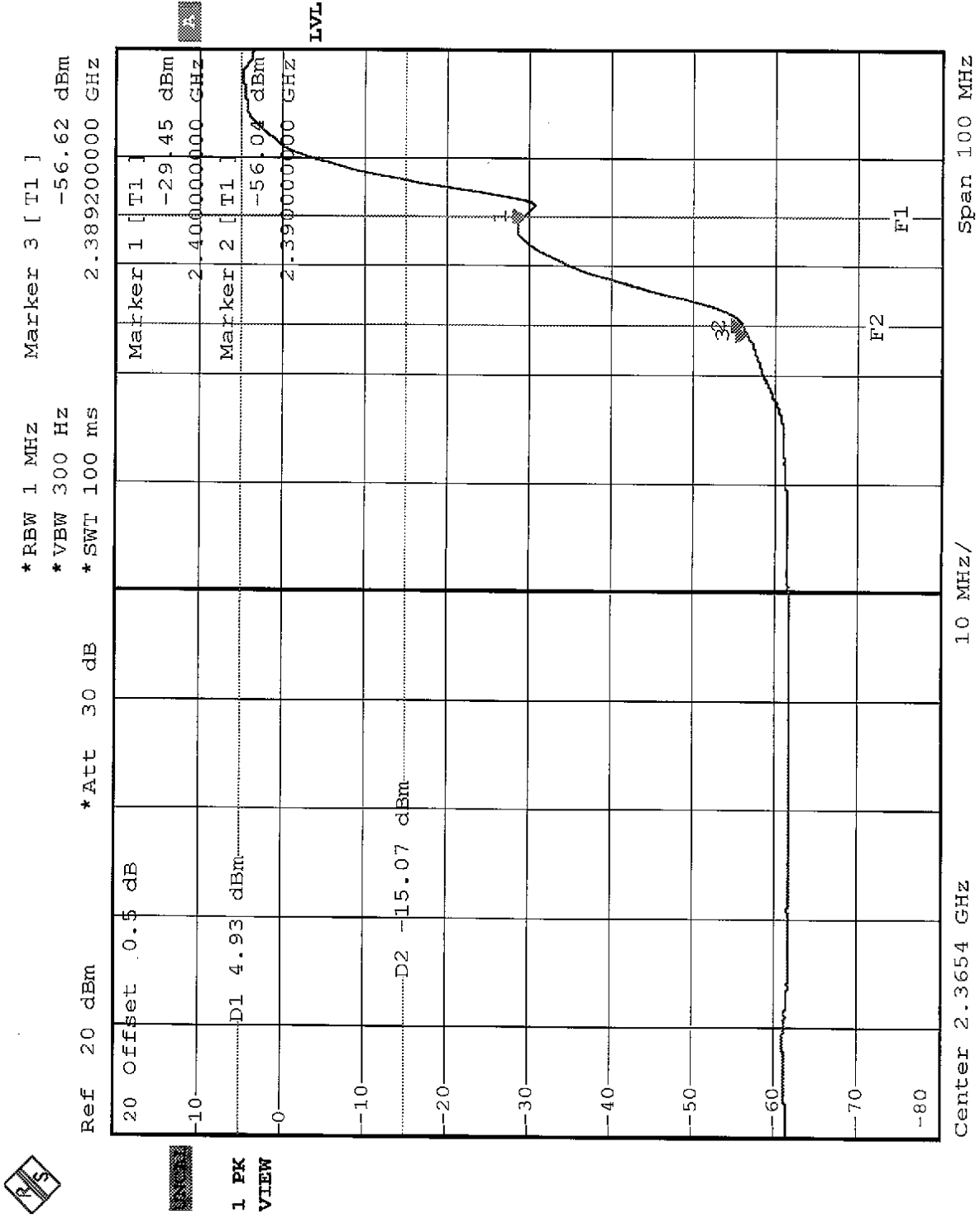
#### 4.6.5 EUT OPERATING CONDITION

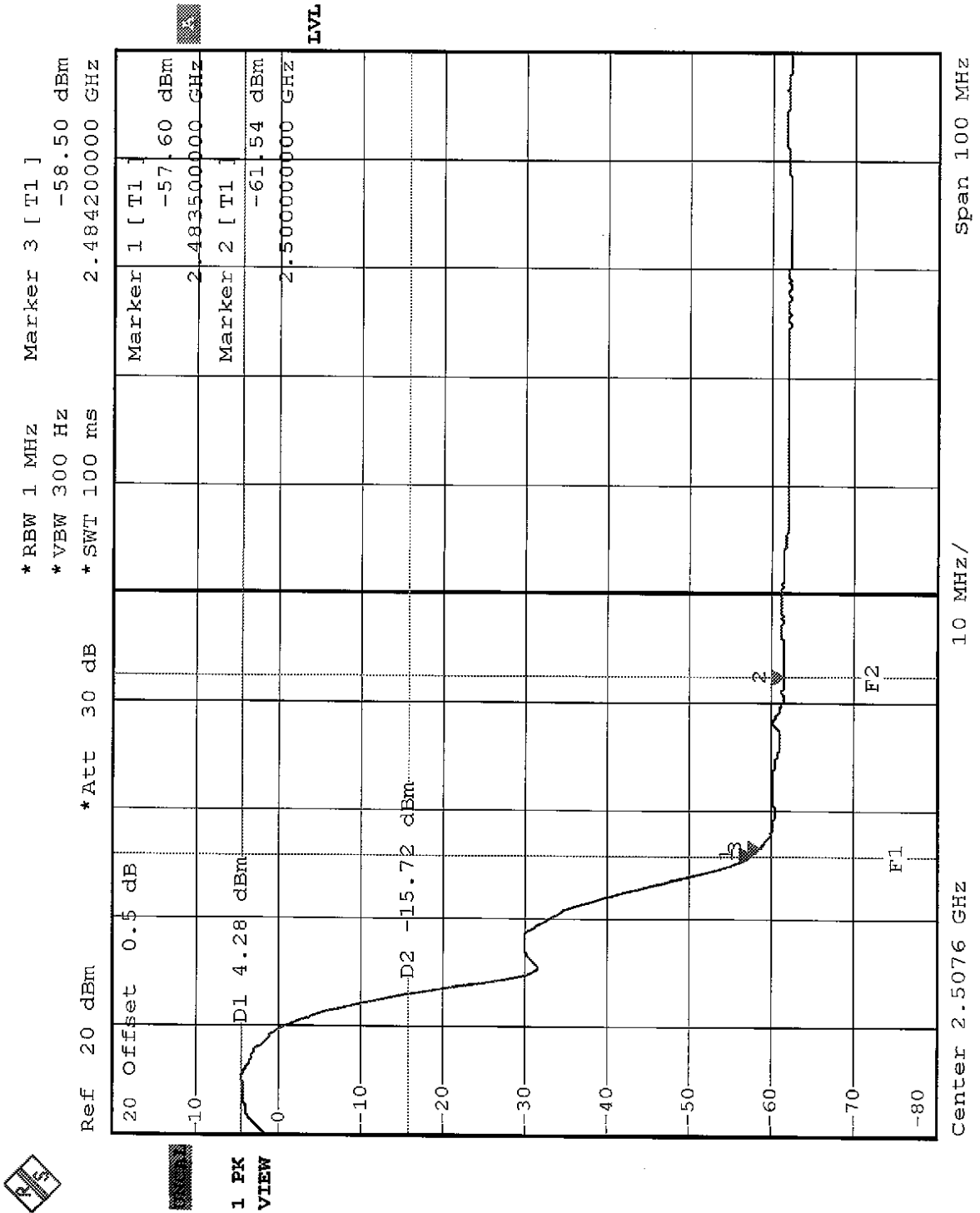
Same as Item 4.3.6.

#### 4.6.6 TEST RESULTS

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

**NOTE:** The band edge emission plot on the following 2 pages shows 61.55 dB / 62.78dB delta between carrier maximum power and local maximum emission in restrict band (2.3892GHz / 2.4842GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.10 (Page 32) is 106.3dBuV/m, so the maximum field strength in restrict band is  $106.3 - 62.78 = 43.52$  dBuV/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 maximum Gain antenna used in this product is Directional antenna, and the antenna connector type for the EUT is MMCX connector. And the maximum Gain of these antennas is 23.5dBi.

## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST





### RADIATED EMISSION TEST





## 6 INFORMATION ON THE TESTING LABORATORIES

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

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

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

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**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

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