

FCC TEST REPORT

REPORT NO.: RF910927R01

MODEL NO.: Trilogy III

RECEIVED: Sept. 27, 2002

TESTED: Sept. 28 ~ Oct. 5, 2002

APPLICANT: QUANTA COMPUTER INC.

ADDRESS: 7F, No. 116, Hou Kang St., Shih Lin, Taipei,
Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: 47 14th Lin, Chiapau Tsun, Linko, Taipei,
Taiwan, R.O.C.

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0528
ILAC MRA



Lab Code: 200102-0



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1 CERTIFICATION

PRODUCT : Wireless module (MiniPCI)
BRAND NAME : Intel
MODEL NO. : Trilogy III
APPLICANT : QUANTA COMPUTER INC.
STANDARDS : 47 CFR Part 15, Subpart C (Section 15.247),
ANSI C63.4-1992

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from Sept. 28, 2002 to Oct. 5, 2002, The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

CHECKED BY : Emily Lu , DATE : Oct. 8, 2002
Emily Lu

APPROVED BY : Alan Lane for , DATE : Oct. 8, 2002
Dr. Alan Lane, Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	Test Type and Limit	Result	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is -16.86dBuV at 0.194MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit
15.247(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is -1.10dBuV at 6188.00 MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless module (MiniPCI)
MODEL NO.	Trilogy III
POWER SUPPLY	3.3VDC from host equipment
MODULATION TYPE	CCK, BPSK, QPSK
RADIO TECHNOLOGY	DSSS
TRANSFER RATE	1/2/5.5/11Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	15.04dBm
ANTENNA TYPE	PIFA antenna and Printed Dipole antenna
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

- There are ten types of antennas provided to this EUT, please refer to the following table. The antennas remark with “*” were chosen for final test of radiated measurement.

No.	Antenna Type	Model No.	Gain (dBi)
*1	PIFA	YA1A 15.7”	-4
2	PIFA	YA1A 15”	-2
*3	PIFA	OA5-14” (FAXCONN)	2
4	PIFA	OA5-15” (FAXCONN)	0.5
5	Printed Dipole	OA5-15”	2
6	Printed Dipole	OA5-14”	3
*7	Printed Dipole	OA6-14”	4
8	Printed Dipole	OA6-15”	1
9	Printed Dipole	OA1-14”	2
*10	Printed Dipole	OA1-15”	0

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

3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided in this EUT.

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

NOTE:

1. Below 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.
3. For radiated measurement Test result (A) is for antenna 1, test result (B) is for antenna 3, test result (C) is for antenna 7 and test result (D) is for antenna 10 which were mentioned on section 3.1.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless module (MiniPCI). 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	NTI	Piii-500	P201167	NA
2	COLOR MONITOR	ADI	CM100	026058T10200611 A	FCC DoC APPROVED
3	PS/2 KEYBOARD	FORWARD	FDA-104GA	FDKB8110111	F4ZDA-104G
4	MODEM	ACEEX	1414	980020504	IFAXDM1414
5	PRINTER	EPSON	LQ-300+	DCGY017096	FCC DoC APPROVED
6	USB MOUSE	Logitech	M-BB48	LZA00354277	FCC DoC APPROVED

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core
3	1.5 m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
4	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
5	1.2m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core
6	NA

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

4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. All emanations from a class B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS30	834115/016	Mar. 3, 2003
ROHDE & SCHWARZ Artificial Mains Network (For EUT)	ESH3-Z5	847265/023	Jan. 10, 2003
* ROHDE & SCHWARZ 4-wire ISN	ENY41	838119/028	Dec. 10, 2002
* ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/018	Dec. 10, 2002
EMCO L.I.S.N. (For peripherals)	3825/2	9504-2359	July 10, 2003
Software	Cond-V2L	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C03.01	July 11, 2003
Terminator (For EMCO LISN)	NA	E1-01-300	Feb. 20, 2003
Terminator (For EMCO LISN)	NA	E1-01-301	Feb. 20, 2003
Shielded Room	Site 3	ADT-C03	NA
VCCI Site Registration No.	Site 3	C-274	NA

- NOTE:**
1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. “*”: These equipment are used for conducted telecom port test only (if tested).
 4. The test was performed in ADT Open Site No. 3.



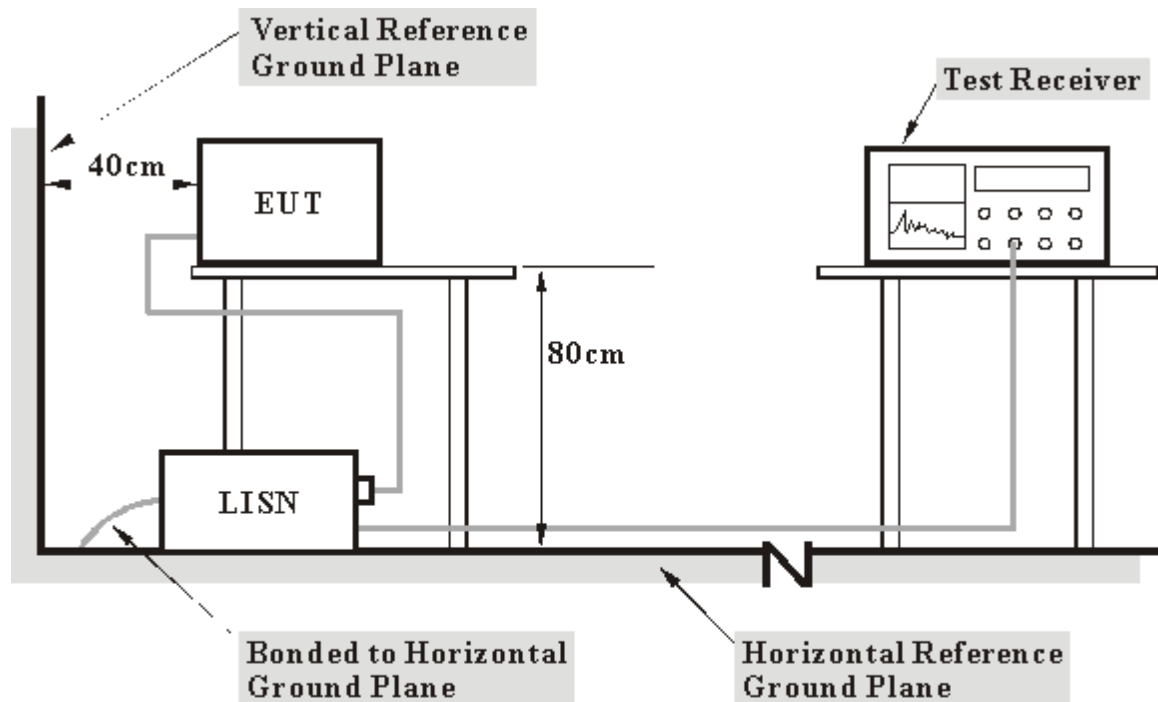
4.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

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

4.1.6 EUT OPERATING CONDITIONS

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

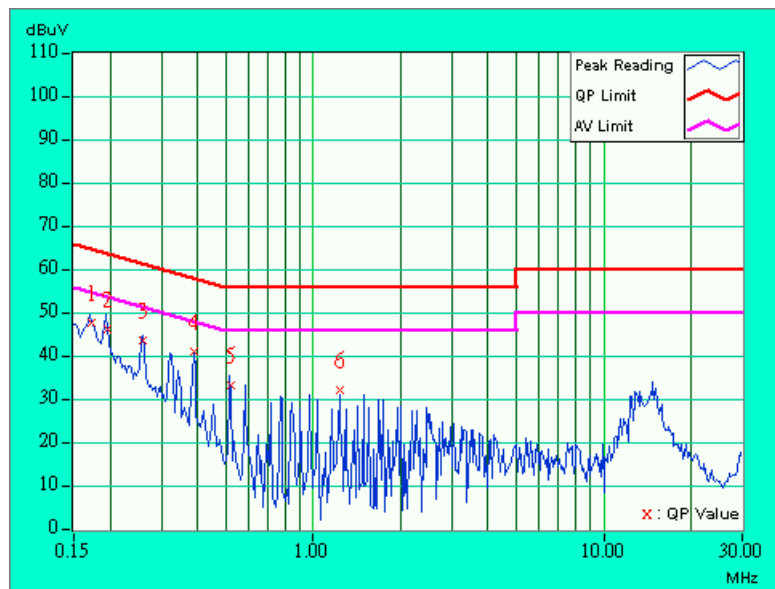
4.1.7 TEST RESULTS

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 54%RH, 1005 hPa	TESTED BY: Cody Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	47.51	-	47.61	-	64.80	54.80	-17.19	-
2	0.195	0.10	45.93	-	46.03	-	63.80	53.80	-17.77	-
3	0.259	0.10	43.55	-	43.65	-	61.45	51.45	-17.80	-
4	0.388	0.10	41.04	-	41.14	-	58.10	48.10	-16.96	-
5	0.520	0.12	33.22	-	33.34	-	56.00	46.00	-22.66	-
6	1.230	0.22	32.00	-	32.22	-	56.00	46.00	-23.78	-

NOTE:

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

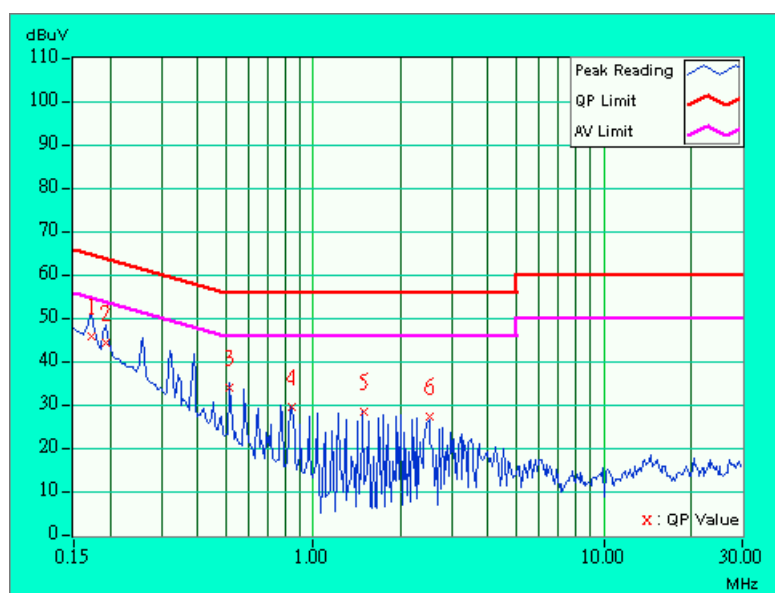


EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 54%RH, 1005 hPa	TESTED BY: Cody Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	45.52	-	45.62	-	64.79	54.79	-19.17	-
2	0.193	0.10	43.94	-	44.04	-	63.91	53.91	-19.87	-
3	0.517	0.12	33.78	-	33.90	-	56.00	46.00	-22.10	-
4	0.843	0.17	29.16	-	29.33	-	56.00	46.00	-26.67	-
5	1.489	0.25	28.31	-	28.56	-	56.00	46.00	-27.44	-
6	2.522	0.33	27.23	-	27.56	-	56.00	46.00	-28.44	-

NOTE:

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

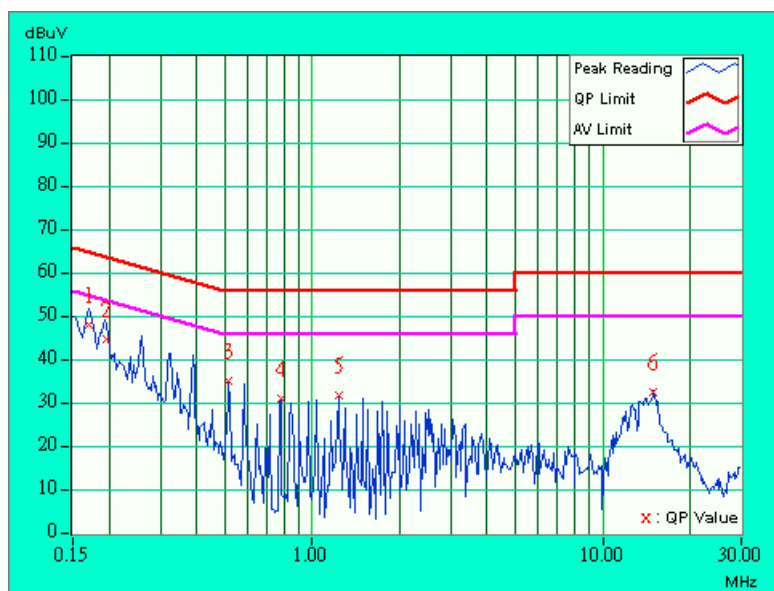


EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 54%RH, 1005 hPa	TESTED BY: Cody Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.171	0.10	47.58	-	47.68	-	64.92	54.92	-17.24	-
2	0.197	0.10	44.06	-	44.16	-	63.74	53.74	-19.58	-
3	0.517	0.12	34.39	-	34.51	-	56.00	46.00	-21.49	-
4	0.779	0.16	30.36	-	30.52	-	56.00	46.00	-25.48	-
5	1.230	0.22	31.23	-	31.45	-	56.00	46.00	-24.55	-
6	14.828	0.69	31.87	-	32.56	-	60.00	50.00	-27.44	-

NOTE:

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

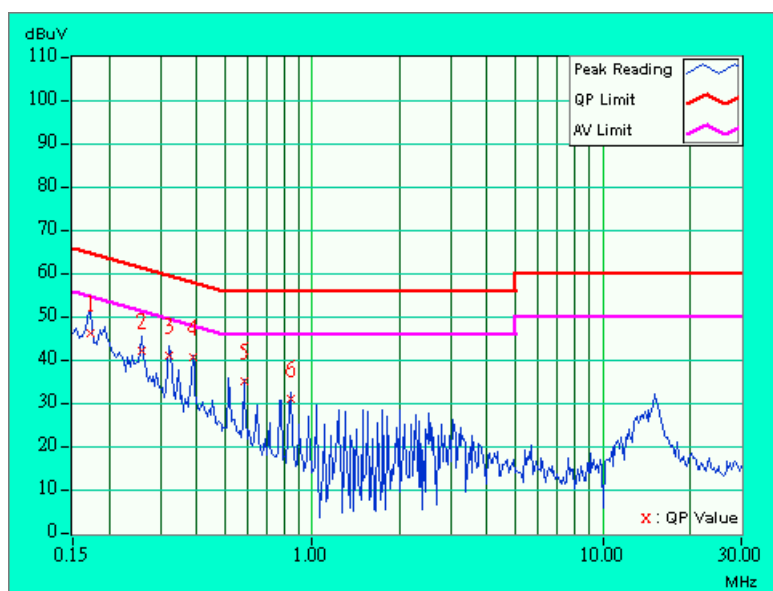


EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 54%RH, 1005 hPa	TESTED BY: Cody Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	46.00	-	46.10	-	64.79	54.79	-18.69	-
2	0.259	0.10	42.15	-	42.25	-	61.45	51.45	-19.20	-
3	0.322	0.10	41.00	-	41.10	-	59.66	49.66	-18.56	-
4	0.388	0.10	40.56	-	40.66	-	58.10	48.10	-17.44	-
5	0.584	0.13	35.00	-	35.13	-	56.00	46.00	-20.87	-
6	0.841	0.17	31.07	-	31.24	-	56.00	46.00	-24.76	-

NOTE:

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

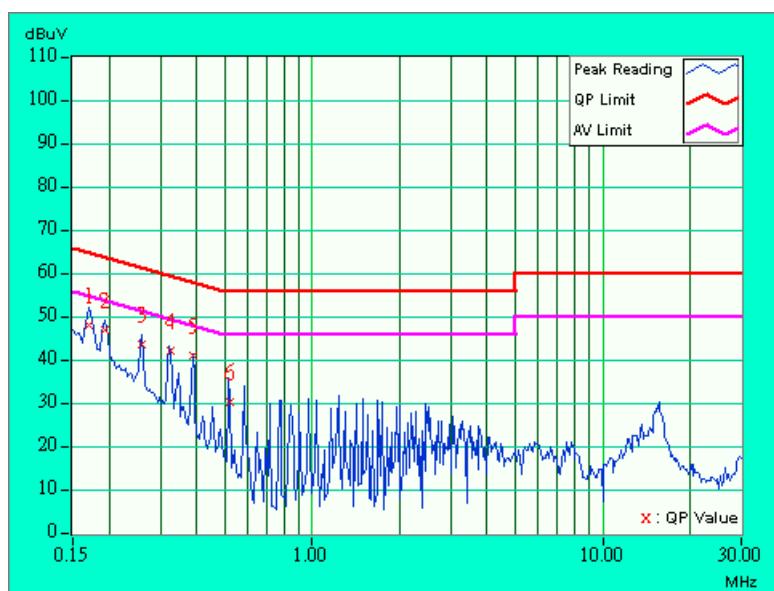


EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	25 deg. C, 54%RH, 1005 hPa	TESTED BY: Cody Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.170	0.10	48.00	-	48.10	-	64.98	54.98	-16.88	-
2	0.194	0.10	46.89	-	46.99	-	63.85	53.85	-16.86	-
3	0.259	0.10	43.43	-	43.53	-	61.45	51.45	-17.92	-
4	0.325	0.10	42.00	-	42.10	-	59.59	49.59	-17.49	-
5	0.388	0.10	41.00	-	41.10	-	58.10	48.10	-17.00	-
6	0.521	0.12	30.37	-	30.49	-	56.00	46.00	-25.51	-

NOTE:

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

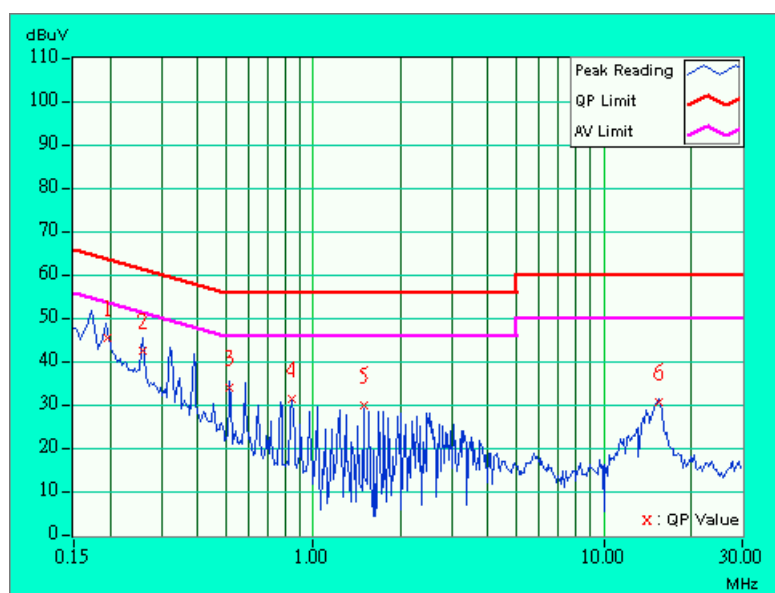


EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	25 deg. C, 54%RH, 1005 hPa	TESTED BY: Cody Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.196	0.10	45.21	-	45.31	-	63.80	53.80	-18.49	-
2	0.259	0.10	42.00	-	42.03	-	61.45	51.45	-19.42	-
3	0.517	0.12	33.66	-	33.78	-	56.00	46.00	-22.22	-
4	0.841	0.17	31.10	-	31.27	-	56.00	46.00	-24.73	-
5	1.488	0.25	29.38	-	29.63	-	56.00	46.00	-26.37	-
6	15.551	0.51	30.05	-	30.56	-	60.00	50.00	-29.44	-

NOTE:

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



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
* HP Spectrum Analyzer	8590L	3544A01176	May 13, 2003
* HP Preamplifier	8447D	2944A08485	Oct. 30, 2002
* HP Preamplifier	8449B	3008A01201	Dec. 06, 2002
* HP Preamplifier	8449B	3008A01292	Aug. 07, 2003
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Jan. 27, 2003
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 23, 2002
ANTENNA (Large Biconical)	VHBA9123	449	Dec. 10, 2002
* CHASE BILOG Antenna	CBL6112A	2221	Aug. 02, 2003
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	Jul. 03, 2003
* EMCO Horn Antenna	3115	9312-4192	Apr. 09, 2003
* EMCO Turn Table	1060	1115	NA
* SHOSHIN Tower	AP-4701	A6Y005	NA
* Software	AS61D4	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Jan. 25, 2003
* TIMES RF cable	LMR-600	CABLE-ST5-01	Jul. 12, 2003
Open Field Test Site	Site 5	ADT-R05	Jul. 19, 2003
VCCI Site Registration No.	Site 5	R-1039	NA

- NOTE:** 1. The measurement uncertainty is less than ± 3.0 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.
3. "*" = These equipment are used for the final measurement.
4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
5. The test was performed in ADT Open Site No. 5.



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.

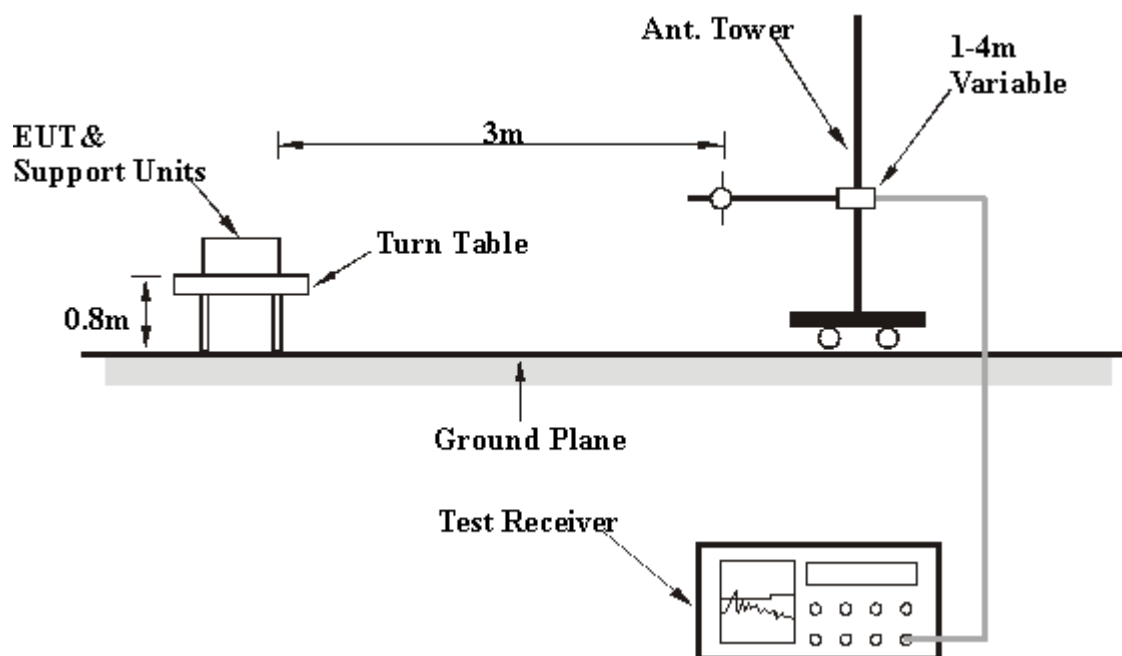
NOTE:

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)

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	264.00	38.0 QP	46.00	-8.00	1.11H	68	23.80	12.89	1.31	0.00	-14.20
2	352.00	36.5 QP	46.00	-9.50	1.58H	359	20.69	14.31	1.46	0.00	-15.76
3	396.00	38.2 QP	46.00	-7.80	1.09H	22	20.70	15.96	1.54	0.00	-17.50
4	440.00	32.0 QP	46.00	-14.00	1.07H	235	14.10	16.32	1.59	0.00	-17.90
5	484.00	30.0 QP	46.00	-16.00	1.12H	12	11.34	16.96	1.70	0.00	-18.66
6	528.00	32.0 QP	46.00	-14.00	1.11H	358	12.58	17.62	1.79	0.00	-19.42
7	660.00	31.0 QP	46.00	-15.00	1.33H	1	9.74	19.25	2.01	0.00	-21.26
8	748.00	34.0 QP	46.00	-12.00	1.02H	293	11.68	20.14	2.17	0.00	-22.32
9	792.00	30.0 QP	46.00	-16.00	1.20H	9	7.13	20.60	2.27	0.00	-22.87

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	264.00	38.0 QP	46.00	-8.00	2.19V	3	23.80	12.89	1.31	0.00	-14.20
2	308.00	35.0 QP	46.00	-11.00	1.63V	11	20.17	13.38	1.45	0.00	-14.83
3	352.00	32.0 QP	46.00	-14.00	1.78V	271	16.24	14.31	1.46	0.00	-15.76
4	396.00	40.5 QP	46.00	-5.50	1.01V	10	23.00	15.96	1.54	0.00	-17.51
5	484.00	32.0 QP	46.00	-14.00	1.99V	13	13.34	16.96	1.70	0.00	-18.67
6	616.00	29.0 QP	46.00	-17.00	1.08V	226	8.22	18.82	1.96	0.00	-20.79
7	660.00	35.0 QP	46.00	-11.00	1.03V	39	13.74	19.25	2.01	0.00	-21.27

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	50.0 PK	74.00	-24.00	1.06H	20	59.00	26.37	1.38	36.80	9.05
2	*2413.00	107.2 PK			1.23H	325	113.70	27.67	2.53	36.72	6.52
3	*2413.00	97.5 AV			1.23H	325	104.00	27.67	2.53	36.72	6.52
4	4076.00	51.3 AV	54.00	-2.70	1.48H	356	53.80	30.38	3.63	36.52	2.51
5	4076.00	52.5 PK	74.00	-21.50	1.48H	356	55.00	30.38	3.63	36.52	2.51
6	6113.00	51.7 PK	74.00	-22.30	1.33H	61	50.70	32.98	4.78	36.74	-1.02
7	8150.00	46.4 PK	74.00	-27.60	1.27H	153	41.00	36.93	5.82	37.33	-5.42

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	48.0 PK	74.00	-26.00	1.61V	289	57.00	26.37	1.38	36.80	9.05
2	*2413.00	98.5 AV			1.37V	259	105.00	27.67	2.53	36.72	6.53
3	*2413.00	107.7 PK			1.37V	259	114.20	27.67	2.53	36.72	6.53
4	4076.00	48.5 PK	74.00	-25.50	1.52V	4	51.00	30.38	3.63	36.52	2.51
5	6113.00	50.0 PK	74.00	-24.00	1.00V	3	49.00	32.98	4.78	36.74	-1.02
6	8150.00	48.4 PK	74.00	-25.60	1.37V	3	43.00	36.93	5.82	37.33	-5.42

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	43.2 PK	74.00	-30.80	1.00H	252	52.00	26.51	1.51	36.79	8.77
2	*2437.00	104.8 PK			1.04H	218	111.00	27.81	2.66	36.71	6.25
3	*2437.00	95.8 AV			1.04H	218	102.00	27.81	2.66	36.71	6.25
4	4126.00	53.0 PK	74.00	-21.00	1.12H	310	55.40	30.50	3.66	36.56	2.40
5	4126.00	51.6 AV	54.00	-2.40	1.12H	310	54.00	30.50	3.66	36.56	2.40
6	6188.00	52.0 PK	74.00	-22.00	1.21H	337	50.80	33.30	4.67	36.77	-1.20
7	8250.00	49.5 PK	74.00	-24.50	1.27H	3	44.00	36.95	5.87	37.35	-5.47

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	48.2 PK	74.00	-25.80	1.12V	3	57.00	26.51	1.51	36.79	8.77
2	*2437.00	106.3 PK			1.12V	100	112.50	27.81	2.66	36.71	6.25
3	*2437.00	96.8 AV			1.12V	100	103.00	27.81	2.66	36.71	6.25
4	4126.00	50.6 PK	74.00	-23.40	1.45V	17	53.00	30.50	3.66	36.56	2.40
5	6188.00	50.2 PK	74.00	-23.80	1.11V	16	49.00	33.30	4.67	36.77	-1.20
6	8250.00	48.5 PK	74.00	-25.50	1.33V	8	43.00	36.95	5.87	37.35	-5.47

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	50.0 PK	74.00	-24.00	1.00H	3	58.50	26.66	1.64	36.78	8.49
2	*2463.00	97.8 AV			1.10H	17	104.00	27.81	2.66	36.71	6.24
3	*2463.00	106.8 PK			1.10H	17	113.00	27.81	2.66	36.71	6.24
4	2491.00	43.9 PK	74.00	-30.10	1.33H	32	49.90	27.96	2.78	36.70	5.96
5	4176.00	51.7 AV	54.00	-2.30	1.02H	326	54.00	30.56	3.68	36.58	2.33
6	4176.00	52.9 PK	74.00	-21.10	1.02H	326	55.20	30.56	3.68	36.58	2.33
7	6263.00	51.4 PK	74.00	-22.60	1.02H	2	50.00	33.63	4.56	36.81	-1.38
8	8350.00	50.5 PK	74.00	-23.50	1.44H	334	45.00	36.97	5.89	37.37	-5.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	50.5 PK	74.00	-23.50	1.00V	3	59.00	26.66	1.64	36.78	8.49
2	*2462.00	105.8 PK			1.17V	3	112.00	27.81	2.66	36.71	6.25
3	*2462.00	97.8 AV			1.17V	3	104.00	27.81	2.66	36.71	6.25
4	2492.00	44.5 PK	74.00	-29.50	1.12V	349	50.50	27.96	2.78	36.70	5.96
5	4176.00	50.7 PK	74.00	-23.30	1.20V	318	53.00	30.56	3.68	36.58	2.33
6	6263.00	51.4 PK	74.00	-22.60	1.17V	7	50.00	33.63	4.56	36.81	-1.38
7	8350.00	48.5 PK	74.00	-25.50	1.30V	3	43.00	36.97	5.89	37.37	-5.49

NOTE:

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

4.2.8 TEST RESULTS (B)

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	176.00	31.0 QP	43.50	-12.50	1.35H	62	20.84	9.08	1.09	0.00	-10.16
2	264.00	39.0 QP	46.00	-7.00	2.06H	104	24.80	12.89	1.31	0.00	-14.20
3	308.00	30.0 QP	46.00	-16.00	1.10H	311	15.17	13.38	1.45	0.00	-14.83
4	352.00	31.0 QP	46.00	-15.00	1.40H	346	15.24	14.31	1.46	0.00	-15.76
5	396.00	36.5 QP	46.00	-9.50	1.61H	359	19.00	15.96	1.54	0.00	-17.51
6	440.00	31.0 QP	46.00	-15.00	1.05H	85	13.10	16.32	1.59	0.00	-17.91
7	484.00	30.8 QP	46.00	-15.20	1.03H	2	12.14	16.96	1.70	0.00	-18.66
8	528.00	36.0 QP	46.00	-10.00	1.14H	42	16.58	17.62	1.79	0.00	-19.43
9	616.00	35.0 QP	46.00	-11.00	1.49H	4	14.22	18.82	1.96	0.00	-20.78
10	748.00	33.0 QP	46.00	-13.00	1.26H	143	10.68	20.14	2.17	0.00	-22.32

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	264.00	32.0 QP	46.00	-14.00	1.01V	355	17.80	12.89	1.31	0.00	-14.20
2	308.00	34.0 QP	46.00	-12.00	1.51V	3	19.17	13.38	1.45	0.00	-14.83
3	352.00	33.0 QP	46.00	-13.00	1.14V	169	17.24	14.31	1.46	0.00	-15.76
4	396.00	35.0 QP	46.00	-11.00	2.12V	11	17.50	15.96	1.54	0.00	-17.51
5	440.00	32.0 QP	46.00	-14.00	1.09V	20	14.10	16.32	1.59	0.00	-17.91
6	484.00	31.0 QP	46.00	-15.00	1.16V	327	12.34	16.96	1.70	0.00	-18.66
7	528.00	36.0 QP	46.00	-10.00	1.38V	28	16.58	17.62	1.79	0.00	-19.43
8	572.00	32.8 QP	46.00	-13.20	1.06V	241	12.67	18.25	1.88	0.00	-20.13
9	616.00	31.7 QP	46.00	-14.30	1.80V	90	10.92	18.82	1.96	0.00	-20.78
10	660.00	32.0 QP	46.00	-14.00	1.33V	317	10.74	19.25	2.01	0.00	-21.26
11	880.00	32.7 QP	46.00	-13.30	1.44V	273	9.61	20.68	2.41	0.00	-23.10

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	43.0 PK	74.00	-31.00	1.24H	3	52.00	26.37	1.38	36.80	9.05
2	*2412.00	98.5 PK			1.07H	51	105.00	27.67	2.53	36.72	6.52.
3	*2412.00	91.5 AV			1.07H	51	98.00	27.67	2.53	36.72	6.52
4	4076.00	51.8 AV	54.00	-2.20	1.03H	227	54.30	30.38	3.63	36.52	2.52
5	4076.00	54.2 PK	74.00	-19.80	1.03H	227	56.70	30.38	3.63	36.52	2.51.
6	6113.00	50.8 AV	54.00	-3.20	1.04H	17	49.80	32.98	4.78	36.74	-1.02
7	6113.00	53.0 PK	74.00	-21.00	1.04H	17	52.00	32.98	4.78	36.74	-1.02
8	8150.00	47.5 PK	74.00	-26.50	1.60H	216	42.10	36.93	5.82	37.33	-5.42

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	43.0 PK	74.00	-31.00	1.00V	86	52.00	26.37	1.38	36.80	9.05
2	*2413.00	92.5 AV			1.09V	3	99.00	27.67	2.53	36.72	6.52
3	*2413.00	99.5 PK			1.09V	3	106.00	27.67	2.53	36.72	6.53
4	4076.00	48.5 PK	74.00	-25.50	1.38V	270	51.00	30.38	3.63	36.52	2.51
5	6113.00	50.0 PK	74.00	-24.00	1.11V	21	49.00	32.98	4.78	36.74	-1.02
6	8150.00	47.4 PK	74.00	-26.60	1.57V	205	42.00	36.93	5.82	37.33	-5.42

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	43.2 PK	74.00	-30.80	1.00H	3	52.00	26.51	1.51	36.79	8.77
2	*2437.00	100.8 PK			1.37H	99	107.00	27.81	2.66	36.71	6.25
3	*2437.00	93.3 AV			1.37H	99	99.50	27.81	2.66	36.71	6.24
4	4126.00	51.3 AV	54.00	-2.70	1.00H	218	53.70	30.50	3.66	36.56	2.39
5	4126.00	52.8 PK	74.00	-21.20	1.00H	218	55.20	30.50	3.66	36.56	2.39
6	6188.00	52.7 AV	54.00	-1.30	1.21H	141	51.50	33.30	4.67	36.77	-1.20
7	8250.00	49.0 AV	54.00	-5.00	1.26H	3	43.50	36.95	5.87	37.35	-5.47
8	8250.00	53.5 PK	74.00	-20.50	1.26H	3	48.00	36.95	5.87	37.35	-5.47

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	42.2 PK	74.00	-31.80	1.49V	7	51.00	26.51	1.51	36.79	8.77
2	*2437.00	98.8 PK			1.31V	263	105.00	27.81	2.66	36.71	6.25
3	*2437.00	92.3 AV			1.31V	263	98.50	27.81	2.66	36.71	6.24
4	4126.00	49.6 PK	74.00	-24.40	1.66V	9	52.00	30.50	3.66	36.56	2.39
5	6188.00	52.0 PK	74.00	-22.00	1.44V	47	50.80	33.30	4.67	36.77	-1.21
6	8250.00	52.5 PK	74.00	-21.50	1.13V	3	47.00	36.95	5.87	37.35	-5.47
7	8250.00	48.0 AV	54.00	-6.00	1.13V	3	42.50	36.95	5.87	37.35	-5.47

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	40.5 PK	74.00	-33.50	1.48H	3	49.00	26.66	1.64	36.78	8.49
2	*2463.00	91.8 AV			1.12H	334	98.00	27.81	2.66	36.71	6.24.
3	*2463.00	101.8 PK			1.12H	334	108.00	27.81	2.66	36.71	6.24
4	2488.00	45.0 PK	74.00	-29.00	1.49H	27	51.00	27.96	2.78	36.70	5.96
5	4176.00	50.0 AV	54.00	-4.00	1.00H	3	52.30	30.56	3.68	36.58	2.34
6	4176.00	53.4 PK	74.00	-20.60	1.00H	3	55.70	30.56	3.68	36.58	2.34
7	6263.00	52.6 AV	54.00	-1.40	1.50H	0	51.20	33.63	4.56	36.81	-1.38
8	6263.00	55.4 PK	74.00	-18.60	1.50H	0	54.00	33.63	4.56	36.81	-1.38.
9	8350.00	49.3 AV	54.00	-4.70	1.00H	3	43.80	36.97	5.89	37.37	-5.49
10	8350.00	52.5 PK	74.00	-21.50	1.00H	3	47.00	36.97	5.89	37.37	-5.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	44.9 PK	74.00	-29.10	1.05V	151	53.40	26.66	1.64	36.78	8.49
2	*2463.00	99.8 PK			1.17V	293	106.00	27.81	2.66	36.71	6.25
3	*2463.00	93.6 AV			1.17V	293	99.80	27.81	2.66	36.71	6.24
4	2492.00	44.7 PK	74.00	-29.30	1.07V	253	50.70	27.96	2.78	36.70	5.96
5	4176.00	48.9 PK	74.00	-25.10	1.46V	45	51.20	30.56	3.68	36.58	2.34
6	6263.00	51.8 PK	74.00	-22.20	1.42V	3	50.40	33.63	4.56	36.81	-1.38
7	8350.00	50.5 PK	74.00	-23.50	1.14V	70	45.00	36.97	5.89	37.37	-5.50

NOTE:

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

4.2.9 TEST RESULTS (C)

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	264.00	34.0 QP	46.00	-12.00	1.32H	322	19.80	12.89	1.31	0.00	-14.20
2	308.00	31.0 QP	46.00	-15.00	1.52H	10	16.17	13.38	1.45	0.00	-14.83
3	352.00	33.0 QP	46.00	-13.00	1.39H	356	17.24	14.31	1.46	0.00	-15.76
4	396.00	40.2 QP	46.00	-5.80	1.00H	13	22.70	15.96	1.54	0.00	-17.51
5	440.00	32.0 QP	46.00	-14.00	1.54H	335	14.10	16.32	1.59	0.00	-17.90
6	484.00	33.0 QP	46.00	-13.00	1.76H	64	14.34	16.96	1.70	0.00	-18.66
7	528.00	33.5 QP	46.00	-12.50	1.03H	354	14.08	17.62	1.79	0.00	-19.42
8	572.00	34.0 QP	46.00	-12.00	1.36H	18	13.87	18.25	1.88	0.00	-20.13
9	792.00	30.0 QP	46.00	-16.00	1.22H	354	7.13	20.60	2.27	0.00	-22.87

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	132.00	33.0 QP	43.50	-10.50	1.03V	20	20.75	11.16	1.09	0.00	-12.25
2	264.00	32.0 QP	46.00	-14.00	1.05V	10	17.80	12.89	1.31	0.00	-14.20
3	352.00	31.0 QP	46.00	-15.00	1.35V	299	15.24	14.31	1.46	0.00	-15.76
4	396.00	41.2 QP	46.00	-4.80	1.85V	7	23.70	15.96	1.54	0.00	-17.50
5	440.00	37.0 QP	46.00	-9.00	1.58V	38	19.10	16.32	1.59	0.00	-17.91
6	484.00	37.0 QP	46.00	-9.00	1.38V	356	18.34	16.96	1.70	0.00	-18.67
7	528.00	38.0 QP	46.00	-8.00	1.28V	1	18.58	17.62	1.79	0.00	-19.43
8	572.00	30.0 QP	46.00	-16.00	1.33V	3	9.87	18.25	1.88	0.00	-20.14
9	660.00	35.2 QP	46.00	-10.80	1.03V	127	13.94	19.25	2.01	0.00	-21.26
10	748.00	31.4 QP	46.00	-14.60	1.12V	3	9.08	20.14	2.17	0.00	-22.33
11	792.00	31.0 QP	46.00	-15.00	1.44V	111	8.13	20.60	2.27	0.00	-22.88
12	880.00	31.0 QP	46.00	-15.00	1.11V	181	7.91	20.68	2.41	0.00	-23.10

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	49.6 PK	74.00	-24.40	1.00H	6	58.60	26.37	1.38	36.80	9.05
2	*2412.00	93.7 PK			1.05H	19	100.20	27.67	2.53	36.72	6.52
3	*2412.00	89.7 AV			1.05H	19	96.20	27.67	2.53	36.72	6.52
4	4076.00	48.5 PK	74.00	-25.50	1.59H	2	51.00	30.38	3.63	36.52	2.51
5	6113.00	51.4 AV	54.00	-2.60	1.33H	286	50.40	32.98	4.78	36.74	-1.02
6	6113.00	53.8 PK	74.00	-20.20	1.33H	286	52.80	32.98	4.78	36.74	-1.02
7	8150.00	48.4 PK	74.00	-25.60	1.59H	46	43.00	36.93	5.82	37.33	-5.42

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	48.0 PK	74.00	-26.00	1.00V	3	57.00	26.37	1.38	36.80	9.05
2	*2412.00	89.1 AV			1.12V	36	95.60	27.67	2.53	36.72	6.52
3	*2412.00	96.5 PK			1.12V	36	103.00	27.67	2.53	36.72	6.52
4	4076.00	49.5 PK	74.00	-24.50	1.51V	46	52.00	30.38	3.63	36.52	2.52
5	6113.00	48.0 PK	74.00	-26.00	1.19V	335	47.00	32.98	4.78	36.74	-1.02
6	8150.00	49.4 PK	74.00	-24.60	1.19V	16	44.00	36.93	5.82	37.33	-5.42

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	49.0 PK	74.00	-25.00	1.00H	215	57.80	26.51	1.51	36.79	8.77
2	*2437.00	87.8 AV			1.88H	9	94.00	27.81	2.66	36.71	6.25
3	*2437.00	94.8 PK			1.88H	9	101.00	27.81	2.66	36.71	6.24.
4	4126.00	49.6 PK	74.00	-24.40	1.27H	3	52.00	30.50	3.66	36.56	2.39
5	6188.00	51.4 AV	54.00	-2.60	1.00H	15	50.25	33.30	4.67	36.77	-1.20
6	6188.00	54.0 PK	74.00	-20.00	1.00H	15	52.80	33.30	4.67	36.77	-1.20
7	8250.00	48.7 PK	74.00	-25.30	1.45H	3	43.20	36.95	5.87	37.35	-5.47

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	46.2 PK	74.00	-27.80	1.07V	6	55.00	26.51	1.51	36.79	8.77
2	*2437.00	98.8 PK			1.10V	3	105.00	27.81	2.66	36.71	6.24.
3	*2437.00	90.8 AV			1.10V	3	97.00	27.81	2.66	36.71	6.24
4	4126.00	48.6 PK	74.00	-25.40	1.18V	7	51.00	30.50	3.66	36.56	2.40
5	6188.00	51.6 PK	74.00	-22.40	1.16V	335	50.40	33.30	4.67	36.77	-1.20
6	8250.00	50.0 PK	74.00	-24.00	1.10V	11	44.50	36.95	5.87	37.35	-5.47

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	47.5 PK	74.00	-26.50	1.33H	198	56.00	26.66	1.64	36.78	8.49
2	*2490.00	96.0 PK			1.88H	3	102.00	27.96	2.78	36.70	5.97
3	*2490.00	91.0 AV			1.88H	3	97.00	27.96	2.78	36.70	5.97
4	4176.00	48.7 PK	74.00	-25.30	1.43H	22	51.00	30.56	3.68	36.58	2.34
5	6263.00	51.4 AV	54.00	-2.60	1.45H	3	50.00	33.63	4.56	36.81	-1.38
6	6263.00	55.4 PK	74.00	-18.60	1.45H	3	54.00	33.63	4.56	36.81	-1.38
7	8351.00	51.5 PK	74.00	-22.50	1.00H	7	46.00	36.97	5.89	37.37	-5.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	43.5 PK	74.00	-30.50	1.19V	15	52.00	26.66	1.64	36.78	8.49
2	*2462.00	88.5 AV			1.60V	249	95.00	27.67	2.53	36.72	6.52
3	*2462.00	94.5 PK			1.60V	249	101.00	27.67	2.53	36.72	6.53
4	2489.00	42.0 PK	74.00	-32.00	1.49V	358	48.00	27.96	2.78	36.70	5.96
5	4176.00	45.2 PK	74.00	-28.80	1.40V	89	47.50	30.56	3.68	36.58	2.34
6	6263.00	52.4 PK	74.00	-21.60	1.52V	359	51.00	33.63	4.56	36.81	-1.38
7	8350.00	49.3 PK	74.00	-24.70	1.13V	114	43.80	36.97	5.89	37.37	-5.49

NOTE:

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

4.2.10 TEST RESULTS (D)

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	264.00	39.8 QP	46.00	-6.20	1.60H	29	25.60	12.89	1.31	0.00	-14.20
2	308.00	34.0 QP	46.00	-12.00	1.09H	3	19.17	13.38	1.45	0.00	-14.83
3	352.00	32.0 QP	46.00	-14.00	1.10H	72	16.24	14.31	1.46	0.00	-15.76
4	396.00	39.0 QP	46.00	-7.00	1.00H	3	21.50	15.96	1.54	0.00	-17.50
5	440.00	32.0 QP	46.00	-14.00	1.47H	17	14.10	16.32	1.59	0.00	-17.90
6	484.00	31.2 QP	46.00	-14.80	1.01H	279	12.54	16.96	1.70	0.00	-18.66
7	528.00	32.4 QP	46.00	-13.60	1.09H	23	12.98	17.62	1.79	0.00	-19.43
8	792.00	29.0 QP	46.00	-17.00	1.23H	3	6.13	20.60	2.27	0.00	-22.88

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	264.00	37.0 QP	46.00	-9.00	1.15V	102	22.80	12.89	1.31	0.00	-14.20
2	308.00	30.0 QP	46.00	-16.00	1.15V	3	15.17	13.38	1.45	0.00	-14.83
3	352.00	31.8 QP	46.00	-14.20	1.05V	26	16.04	14.31	1.46	0.00	-15.76
4	396.00	38.5 QP	46.00	-7.50	2.27V	1	21.00	15.96	1.54	0.00	-17.50
5	440.00	33.0 QP	46.00	-13.00	1.17V	104	15.10	16.32	1.59	0.00	-17.90
6	484.00	32.0 QP	46.00	-14.00	1.43V	298	13.34	16.96	1.70	0.00	-18.66
7	528.00	37.0 QP	46.00	-9.00	1.32V	25	17.58	17.62	1.79	0.00	-19.43
8	572.00	36.0 QP	46.00	-10.00	1.61V	223	15.87	18.25	1.88	0.00	-20.13
9	616.00	35.0 QP	46.00	-11.00	1.89V	109	14.22	18.82	1.96	0.00	-20.78
10	792.00	27.0 QP	46.00	-19.00	1.07V	144	4.13	20.60	2.27	0.00	-22.88
11	792.00	27.0 QP	46.00	-19.00	1.07V	250	4.13	20.60	2.27	0.00	-22.88

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	43.0 PK	74.00	-31.00	1.10H	231	52.00	26.37	1.38	36.80	9.05
2	*2412.00	104.5 PK			1.07H	217	111.00	27.67	2.53	36.72	6.52
3	*2412.00	95.5 AV			1.07H	217	102.00	27.67	2.53	36.72	6.52
4	4076.00	46.5 PK	74.00	-27.50	1.18H	157	49.00	30.38	3.63	36.52	2.52
5	6113.00	50.2 AV	54.00	-3.80	1.10H	26	49.20	32.98	4.78	36.74	-1.02
6	6113.00	54.0 PK	74.00	-20.00	1.10H	26	53.00	32.98	4.78	36.74	-1.02
7	8150.00	49.4 AV	54.00	-4.60	1.18H	65	44.00	36.93	5.82	37.33	-5.42
8	8151.00	50.4 PK	74.00	-23.60	1.00H	3	45.00	36.93	5.82	37.33	-5.42

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2038.00	42.0 PK	74.00	-32.00	1.15V	68	51.00	26.37	1.38	36.80	9.05
2	*2412.00	108.5 PK			1.22V	328	115.00	27.67	2.53	36.72	6.53
3	*2412.00	100.5 AV			1.22V	328	107.00	27.67	2.53	36.72	6.53
4	4076.00	47.0 PK	74.00	-27.00	1.06V	302	49.50	30.38	3.63	36.52	2.51
5	6113.00	49.0 PK	74.00	-25.00	1.06V	7	48.00	32.98	4.78	36.74	-1.02
6	8150.00	50.4 PK	74.00	-23.60	1.19V	200	45.00	36.93	5.82	37.33	-5.42

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	45.2 PK	74.00	-28.80	1.27H	276	54.00	26.51	1.51	36.79	8.77
2	*2437.00	106.8 PK			1.04H	132	113.00	27.81	2.66	36.71	6.25
3	*2437.00	98.8 AV			1.04H	132	105.00	27.81	2.66	36.71	6.25
4	4126.00	48.0 PK	74.00	-26.00	1.12H	232	50.40	30.50	3.66	36.56	2.39
5	6188.00	52.9 AV	54.00	-1.10	1.18H	239	51.70	33.30	4.67	36.77	-1.20
6	6188.00	55.7 PK	74.00	-18.30	1.18H	239	54.50	33.30	4.67	36.77	-1.20
7	8251.00	49.5 PK	74.00	-24.50	1.12H	7	44.00	36.95	5.87	37.35	-5.47

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2063.00	42.2 PK	74.00	-31.80	1.25V	282	51.00	26.51	1.51	36.79	8.77
2	*2437.00	105.8 PK			1.20V	262	112.00	27.81	2.66	36.71	6.25
3	*2437.00	96.8 AV			1.20V	262	103.00	27.81	2.66	36.71	6.25
4	4126.00	46.6 PK	74.00	-27.40	1.08V	330	49.00	30.50	3.66	36.56	2.40
5	6188.00	51.2 PK	74.00	-22.80	1.05V	350	50.00	33.30	4.67	36.77	-1.20
6	8205.00	52.5 PK	74.00	-21.50	1.13V	3	47.00	36.94	5.85	37.35	-5.45

NOTE:

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60 % RH, 1050 hPa	TESTED BY: Gary Chang	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	45.5 PK	74.00	-28.50	1.24H	0	54.00	26.66	1.64	36.78	8.49
2	*2463.00	97.8 AV			1.00H	3	104.00	27.81	2.66	36.71	6.24
3	*2463.00	105.8 PK			1.00H	3	112.00	27.81	2.66	36.71	6.24
4	2491.00	46.0 PK	74.00	-28.00	1.00H	3	52.00	27.96	2.78	36.70	5.96
5	4176.00	47.7 PK	74.00	-26.30	1.18H	239	50.00	30.56	3.68	36.58	2.33
6	6263.00	52.9 AV	54.00	-1.10	1.23H	256	51.50	33.63	4.56	36.81	-1.38
7	6263.00	55.4 PK	74.00	-18.60	1.23H	256	54.00	33.63	4.56	36.81	-1.38.

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (DbuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB)
1	2088.00	45.5 PK	74.00	-28.50	1.83V	11	54.00	26.66	1.64	36.78	8.49
2	*2463.00	97.8 PK			1.24V	80	104.00	27.81	2.66	36.71	6.25
3	*2463.00	88.8 AV			1.24V	80	95.00	27.81	2.66	36.71	6.24
4	2499.00	48.0 PK	74.00	-26.00	1.04V	3	54.00	27.96	2.78	36.70	5.96
5	4176.00	51.0 PK	74.00	-23.00	1.02V	173	53.35	30.56	3.68	36.58	2.33
6	6263.00	49.4 AV	54.00	-4.60	1.37V	21	48.00	33.63	4.56	36.81	-1.38
7	6263.00	53.4 PK	74.00	-20.60	1.37V	21	52.00	33.63	4.56	36.81	-1.38
8	8351.00	48.8 AV	54.00	-5.20	1.33V	165	43.28	36.97	5.89	37.37	-5.49
9	8351.00	53.5 PK	74.00	-20.50	1.33V	165	48.00	36.97	5.89	37.37	-5.49

NOTE:

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

4.3 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.

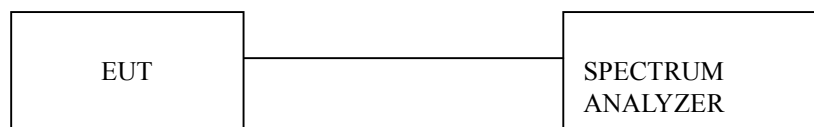
4.3.3 TEST PROCEDURE

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

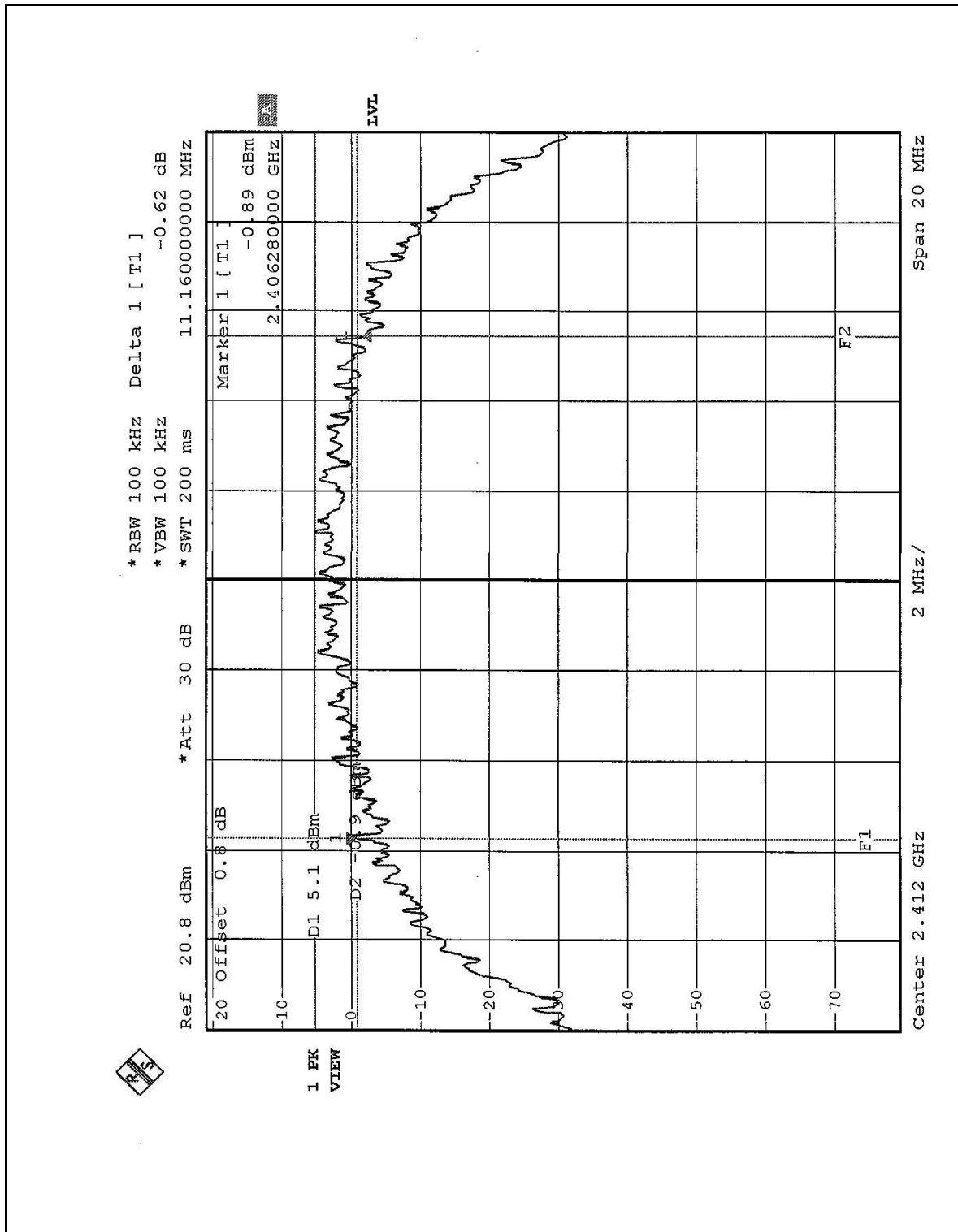
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

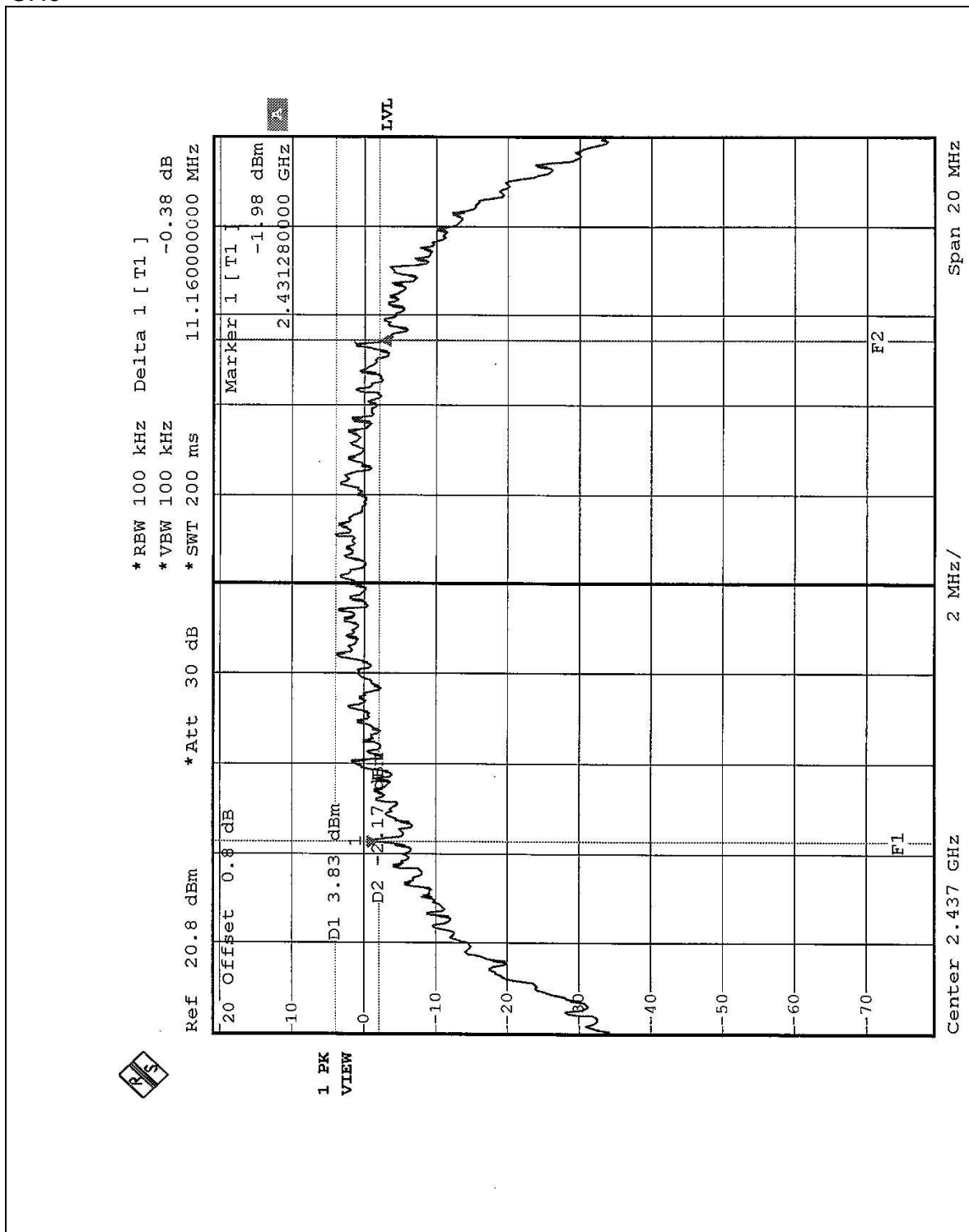
EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 65 %RH, 1005 hPa
TESTED BY: Ansen Lei			

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

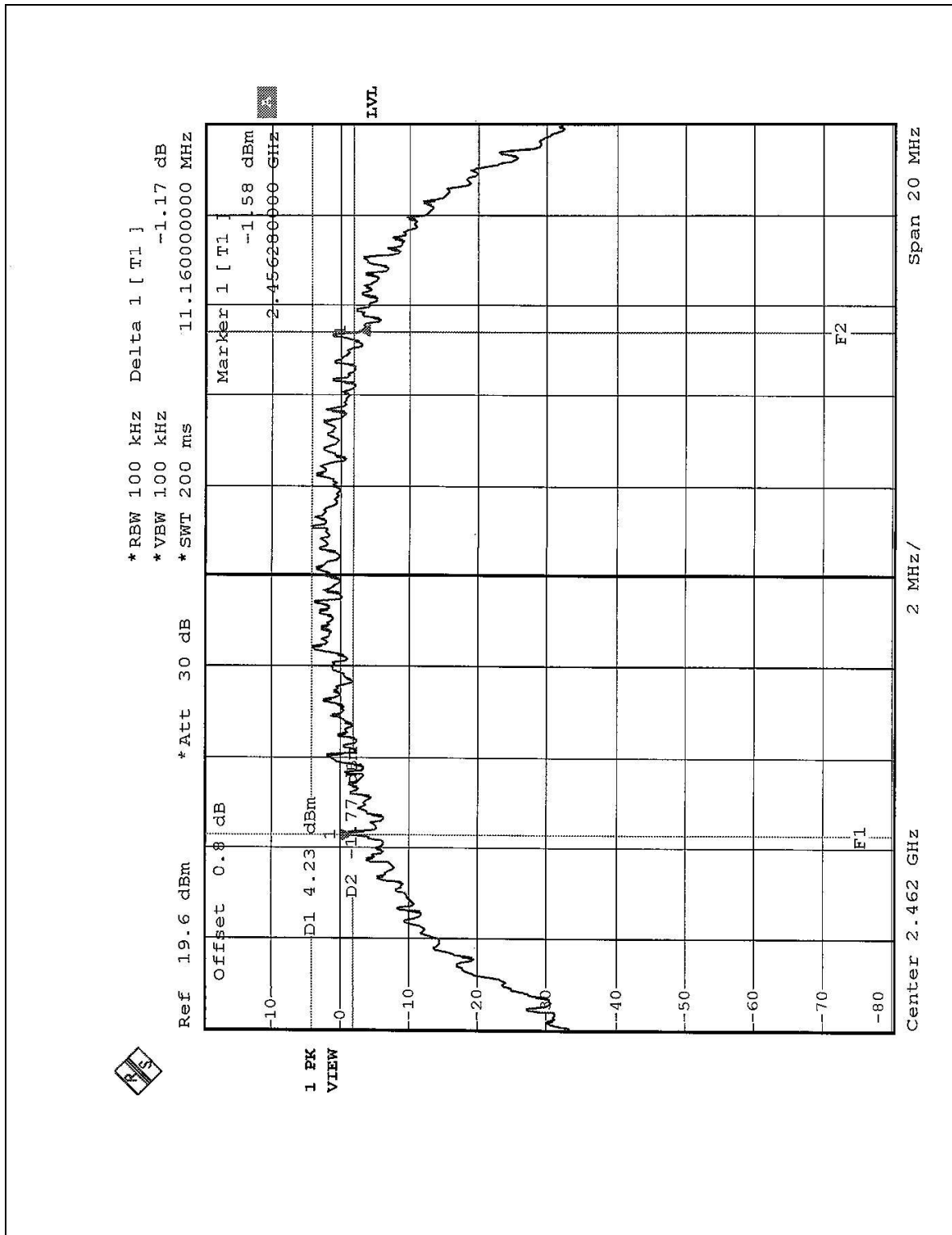
CH1



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
PEAK POWER SENSOR	NRV-Z32	100013	Feb. 21, 2003
POWER METER	NRVS	100026	Feb. 20, 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.

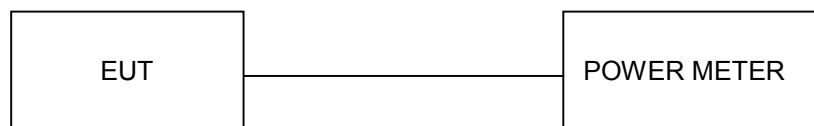
4.4.3 TEST PROCEDURES

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

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 65 %RH, 1005 hPa
TESTED BY: Ansen Lei			

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	15.04	30	PASS
6	2437	14.93	30	PASS
11	2462	15.04	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

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

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

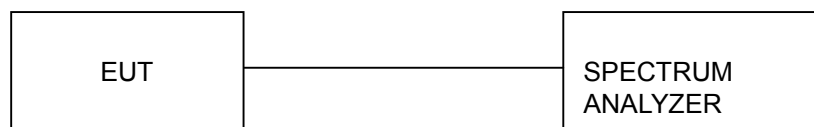
4.5.3 TEST PROCEDURE

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



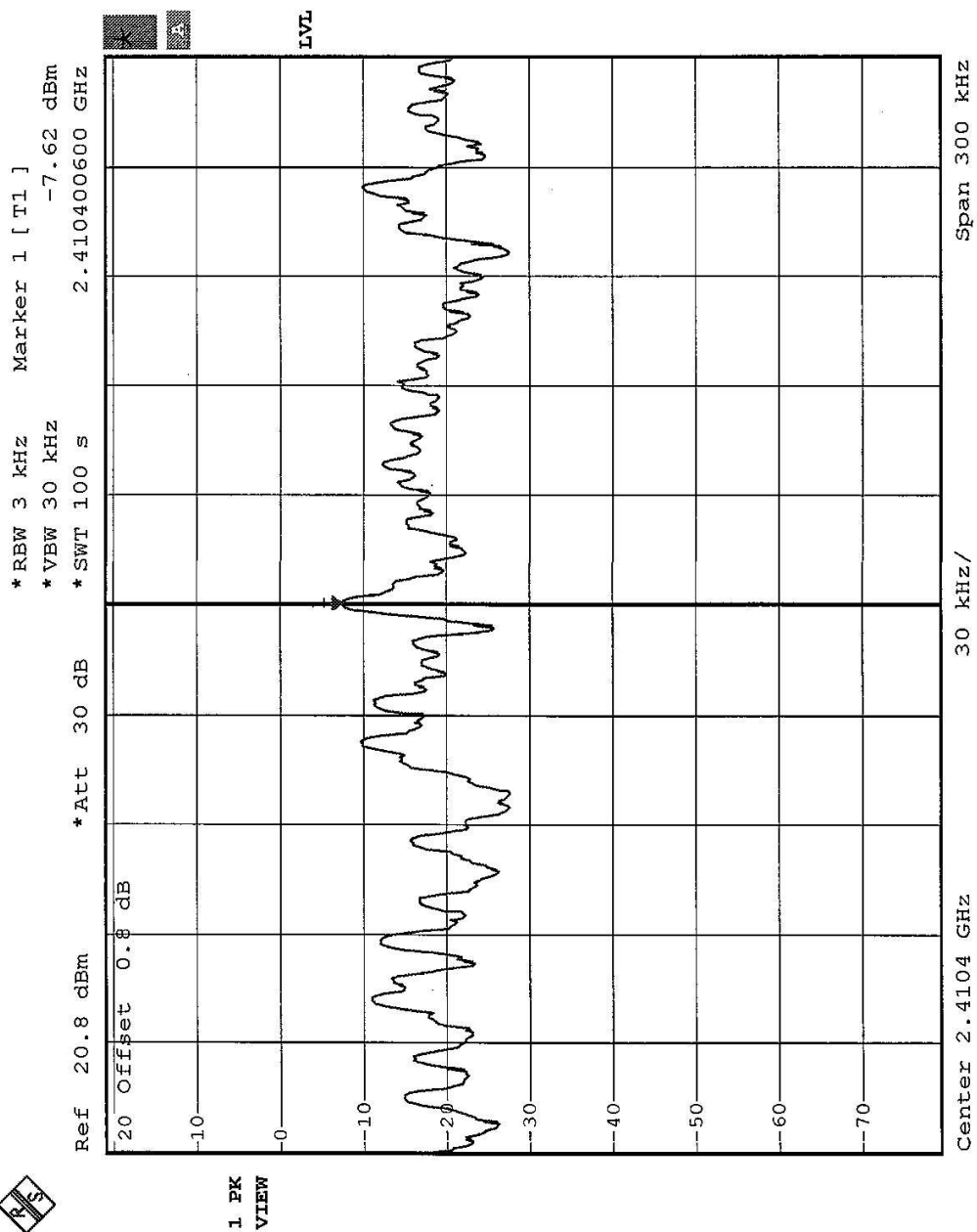
4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6.

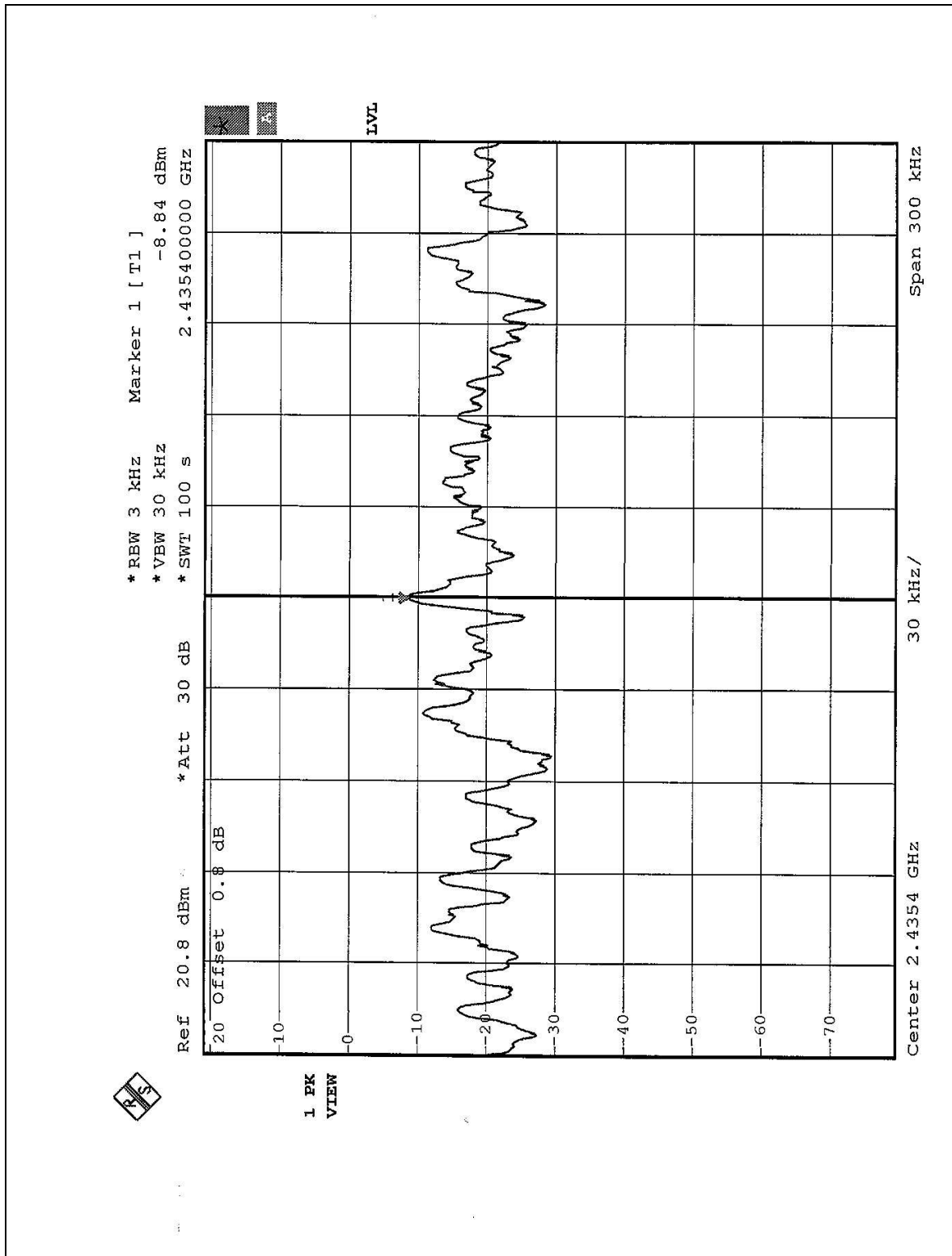
4.5.7 TEST RESULTS

EUT	Wireless module (MiniPCI)	MODEL	Trilogy III
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 65 %RH, 1005 hPa
TESTED BY: Ansen Lei			

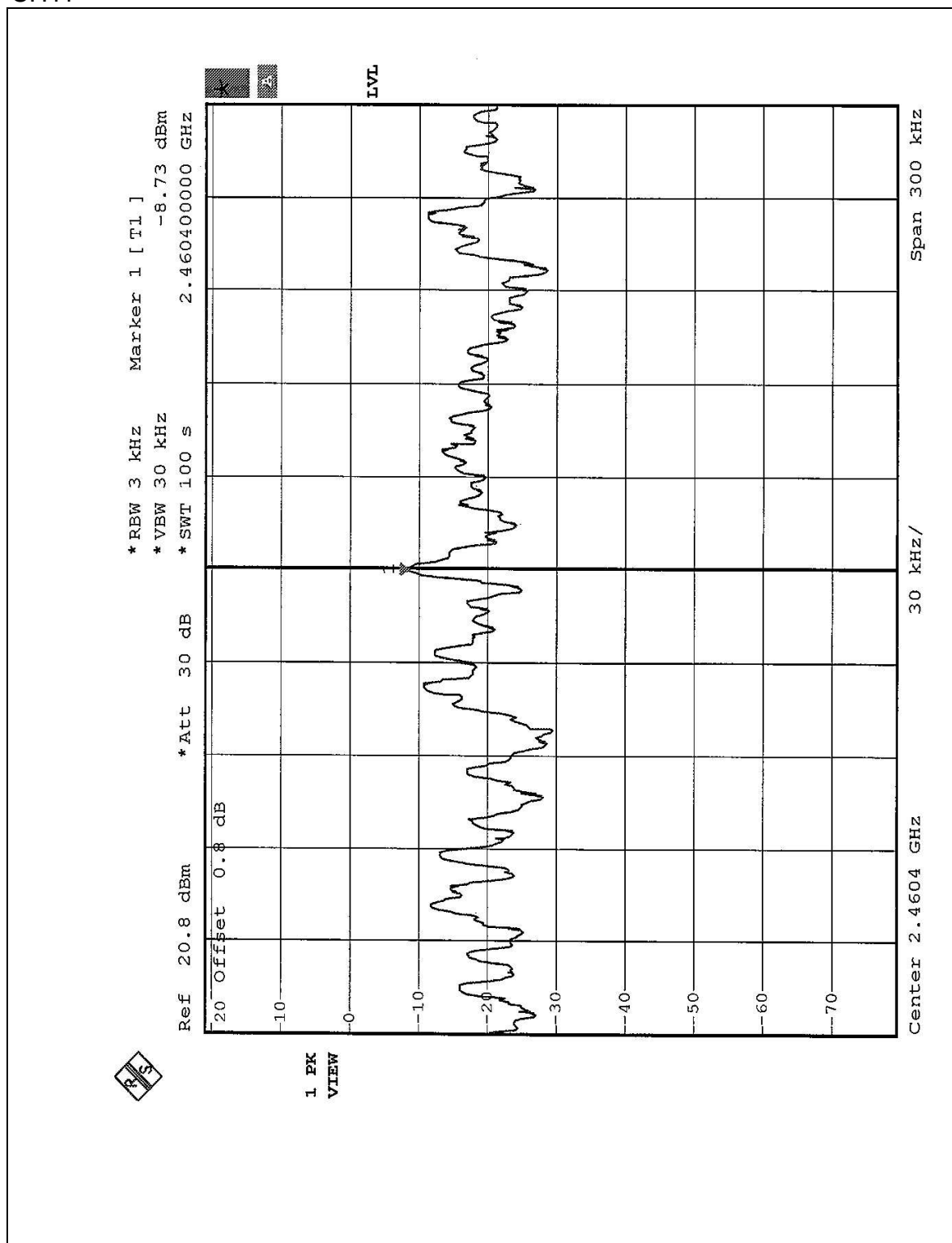
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.62	8	PASS
6	2437	-8.84	8	PASS
11	2462	-8.73	8	PASS



CH6



CH11



4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

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

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low loss 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 were measured and recorded.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation



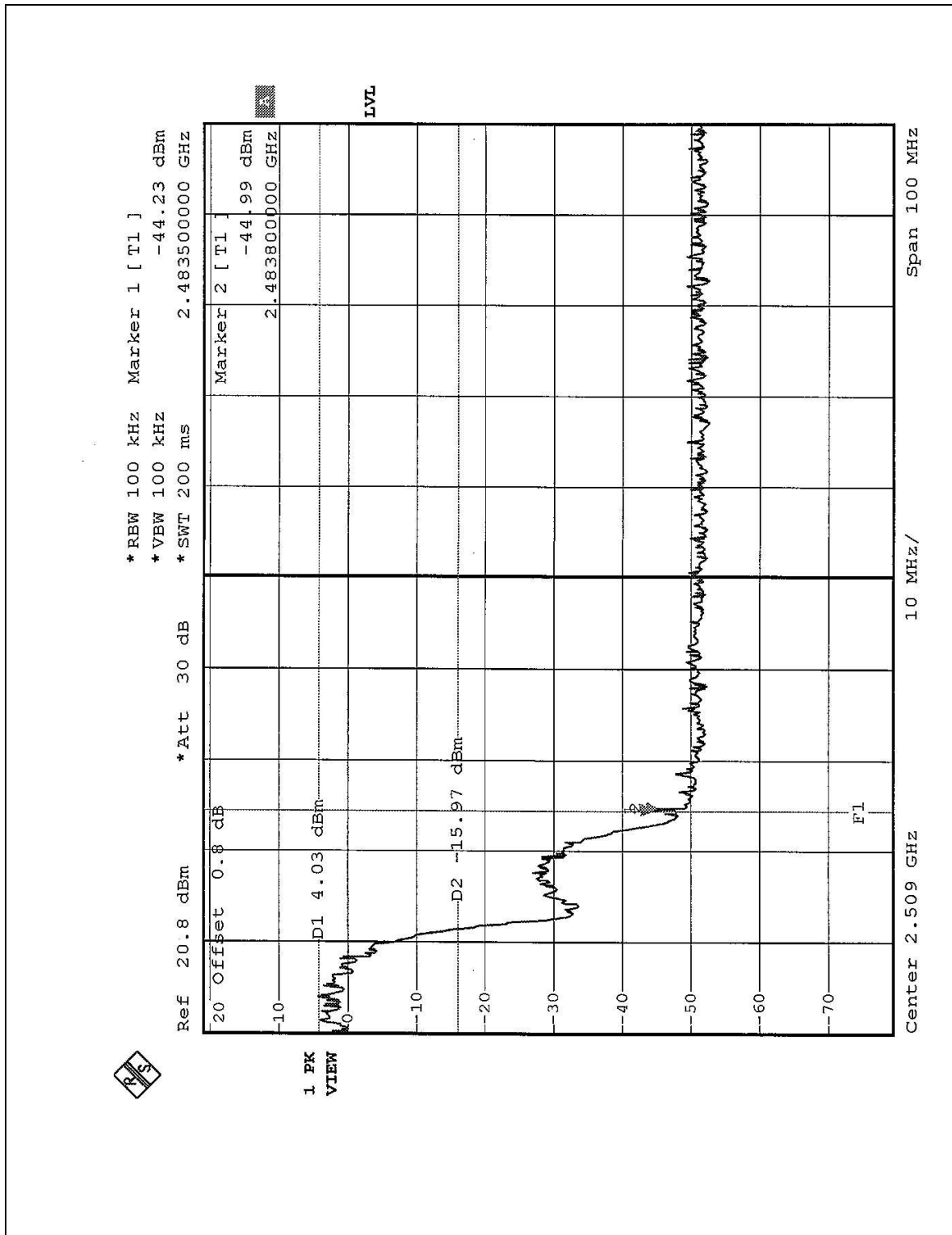
4.6.5 EUT OPERATING CONDITION

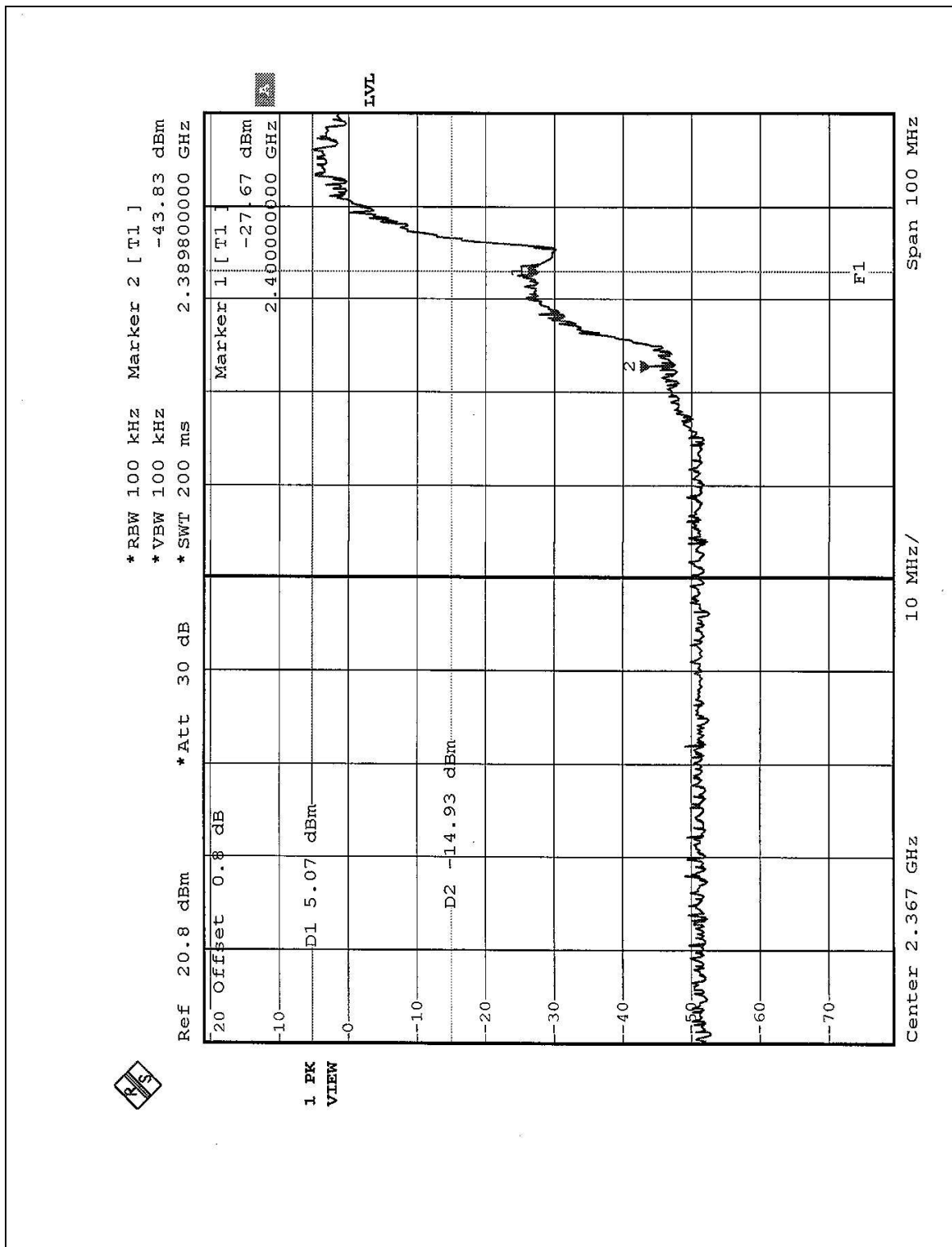
Same as Item 4.3.6.

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 48.26dB / 48.90dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz / 2.3898GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.10 (Page 35) is 100.5dBuV/m, so the maximum field strength in restrict band is $100.5 - 48.9 = 51.6$ 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 printed dipole antenna, and the antenna connector type for the EUT is UFL. And the maximum Gain of these antennas is 4dBi.

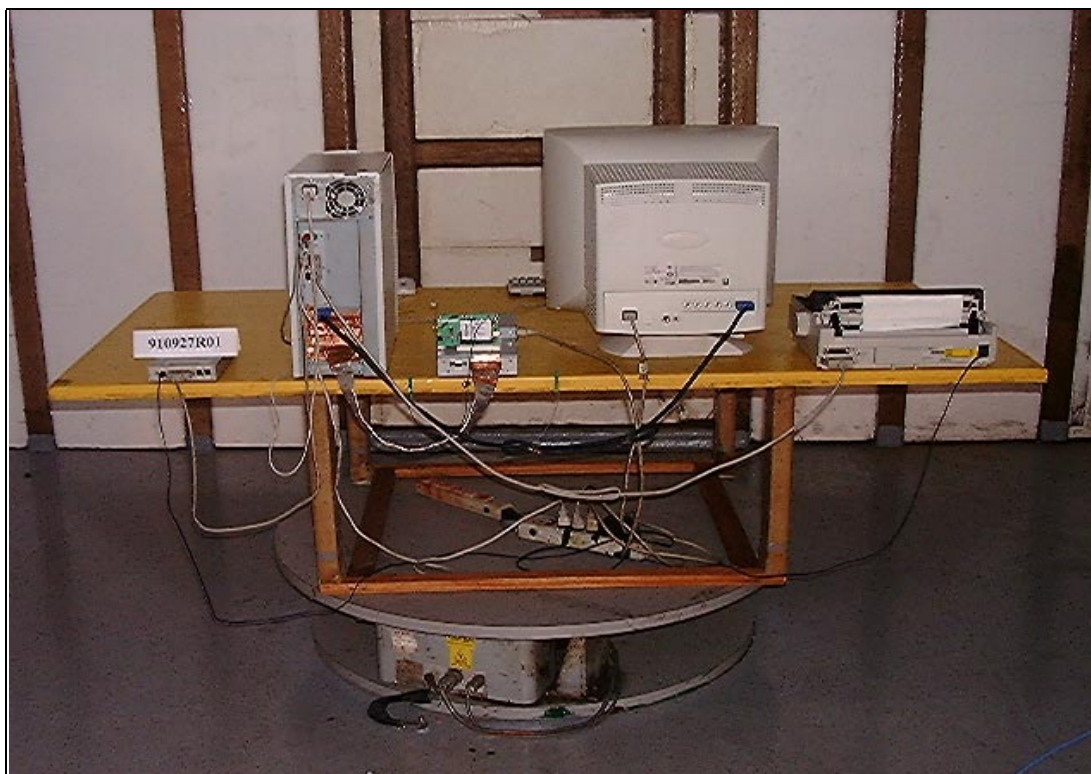
5 PHOTOGRAPHS OF THE TEST CONFIGURATION

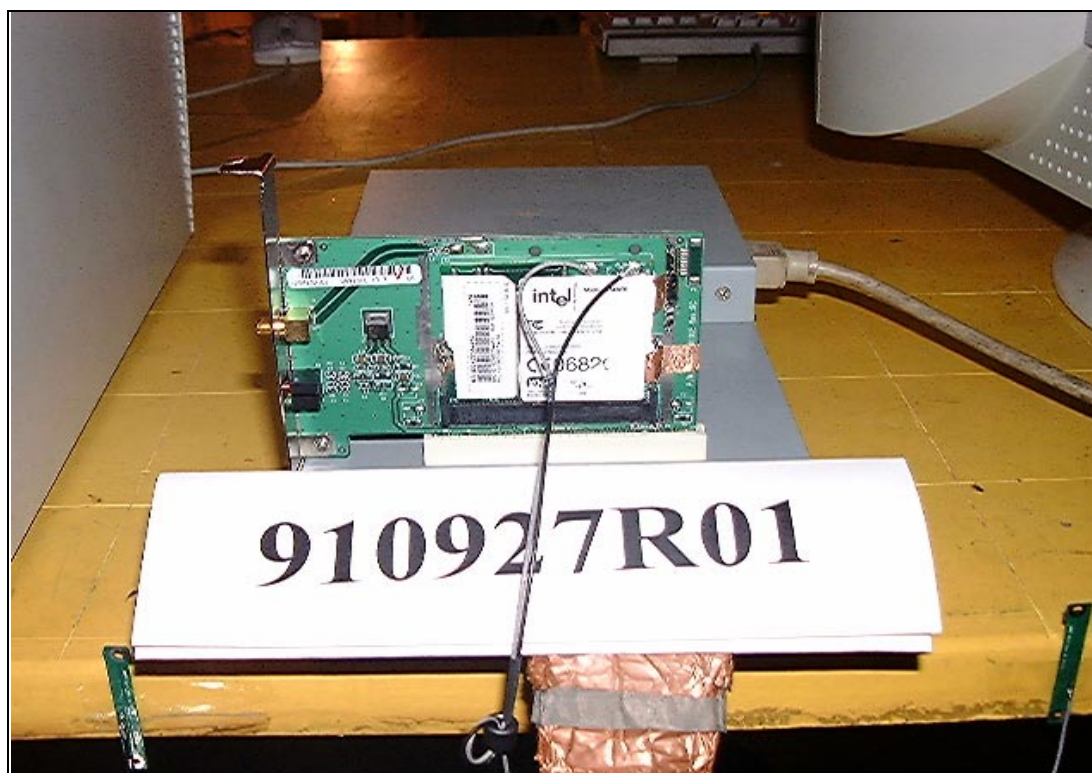
CONDUCTED EMISSION TEST





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:

USA	FCC, NVLAP
Germany	TUV Rheinland
Japan	VCCI
New Zealand	MoC
Norway	NEMKO
R.O.C.	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.

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

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Fax: 886-2-26052943

Hsin Chu EMC Lab:

Tel: 886-35-935343

Fax: 886-35-935342

Lin Kou Safety Lab:

Tel: 886-2-26093195

Fax: 886-2-26093184

Lin Kou RF&Telecom Lab

Tel: 886-3-3270910

Fax: 886-3-3270892

Email: service@mail.adt.com.tw

Web Site: www.adt.com.tw

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