



FCC TEST REPORT

REPORT NO.: RF921231R01A
MODEL NO.: WL VP 2454 NM
(Refer to page 6 for the other models)
RECEIVED: NA
TESTED: January 10 ~ January 14, 2004

APPLICANT: GLOBAL SUN TECHNOLOGY INC.
ADDRESS: NO.13 Tung Yuan Rd., Jung Li Industrial Park,
Jung Li City, Tao Yuan Hsien, 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



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1 CERTIFICATION

PRODUCT : 802.11g Wireless PCI Adapter

MODEL NO. : WL VP 2454 NM
(Refer to page 6 for the other models)

BRAND NAME : GLOBAL SUN
(Refer to page 6 for the other brands)

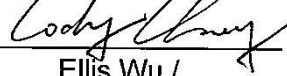
APPLICANT : GLOBAL SUN TECHNOLOGY INC.

TEST ITEM: ENGINEERING SAMPLE

STANDARDS : FCC 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 January 10, 2004 to January 14, 2004. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

PREPARED BY:  , **DATE:** February 10, 2004

APPROVED BY:  , **DATE:** February 10, 2004
Ellis Wu / *for.*
Technical Manager



2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC 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 -11.38dB at 20.758MHz
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 -0.38dB at 2310.00MHz
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	802.11g Wireless PCI Adapter
MODEL NO.	WL VP 2454 NM
POWER SUPPLY	3.3Vdc from host equipment
MODULATION TYPE	DBPSK, DQPSK, CCK, 16QAM, 64QAM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:1/2/5.5/11Mbps 802.11g:6/12/18/24/36/48/54Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
CHANNEL SPACING	5MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	16.00dBm
ANTENNA TYPE	Dipole antenna with 2dBi gain
TEMPERATURE RANGE	0°C ~ 55°C
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. This is a duplicate report of RF921231R01, and the only difference is changing the applicant, model and brand.
2. Fully compatible with the 802.11g standard to provide a wireless data rate of up to 54Mbps.
3. The EUT complies with IEEE 802.11g draft standards, and backward compatible with IEEE 802.11b products.
4. The models as below are identical to each other except for their brand and model due to marketing requirement.

Brand	Model	Remark
GLOBAL SUN	WL VP 2454 NM	
Level One	WNC-0301	OEM model
Aopen	AOI-832	OEM model
ORIGO	WLL-3310M	OEM model
Etherwan Systems Inc	EWP-0102-G	OEM model
KCORP Lifestyle	KLS-5305	OEM model
Topcom	Skyl @cer PCI 11G	OEM model
TP-LINK	TL-WN550	OEM model
Tenwell	TW-PI54M	OEM model
Q-Tee	Q-TEC PCI ADAPTER WIRELESS 54G	OEM model
PLANET	WL-8313	OEM model

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



3.2 DESCRIPTION OF TEST MODES

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

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 802.11g Wireless PCI Adapter. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)

ANSI C63.4: 1992

All test items 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.

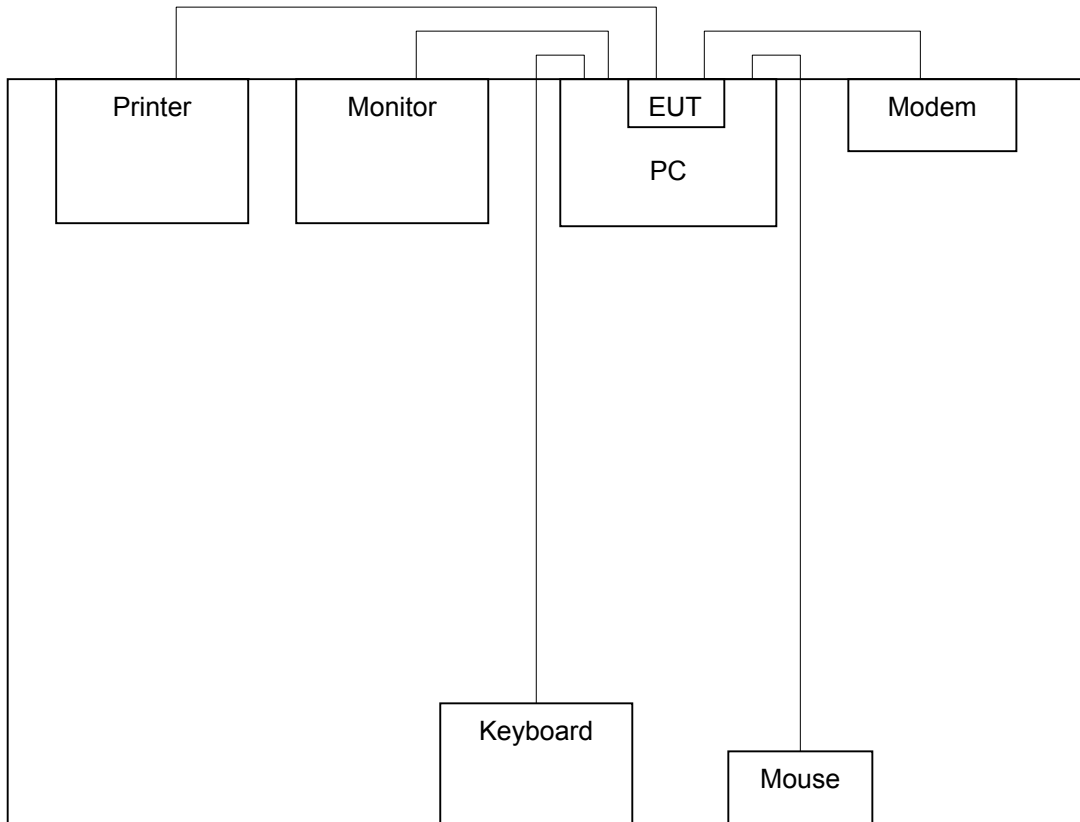
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	PERSONAL COMPUTER	MSI	Hetis 865G Giga	1A36I98A000220	FCC DoC Approved
2	MONITOR	HP	D2842A	KR93473113	BEJCB910
3	PS/2 KEYBOARD	BTC	5200T	F24800235	E5XKB5122WTH 0110
4	PS/2 MOUSE	BTC	M851	N/A	E5XMSM860
5	PRINTER	EPSON	LQ-300+	DCGY017058	FCC DoC Approved
6	MODEM	ACEEX	1414	980020516	IFAXDM1414

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	1.6 m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
4	1.5 m Non shielded wire, terminated with PS/2 connector via drain wire, w/o core.
5	1.2m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core.
6	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.

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



3.5 CONFIGURATION OF SYSTEM UNDER TEST





4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED ON
ROHDE & SCHWARZ Test Receiver	ESCS 30	838251/021	Jan. 04, 2005
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH3-Z5	100218	Dec. 09, 2004
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100219	Dec. 09, 2004
ROHDE & SCHWARZ Artificial Mains Network (for peripherals)	ESH3-Z5	100220	Dec. 09, 2004
*ROHDE & SCHWARZ 4-wire ISN	ENY41	837032/016	Nov. 19, 2004
*ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/016	Nov. 19, 2004
Software	Cond-V2M3	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C10.01	May 01, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010770	Mar. 24, 2004
SUHNER Terminator (For ROHDE & SCHWARZ LISN)	65BNC-5001	E1-010773	Apr. 06, 2004

- 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 conducted telecom port test only (if tested).
 3. The test was performed in ADT Shielded Room No. 10.
 4. The VCCI Site Registration No. is C-1312.



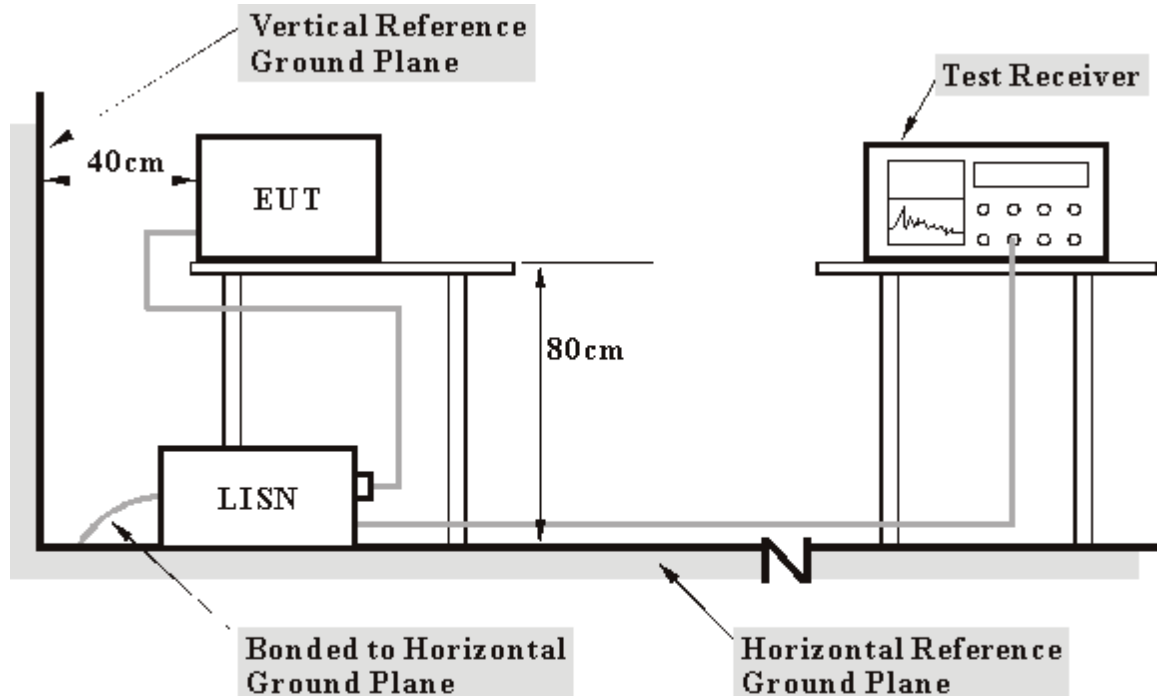
4.1.3 TEST PROCEDURES

- 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 150kHz to 30MHz was searched. Emission levels under 20dB of 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. Connected the EUT to a computer system placed on a testing table.
- b. The computer system ran a test program to enable EUT under transmission/receiving condition continuously at specific channel frequency.
- c. The computer system sent "H" messages to its screen.
- d. The computer system sent "H" messages to modem.
- e. The computer system sent "H" messages to printer, and the printer prints them on paper.
- f. Repeat steps c~e.

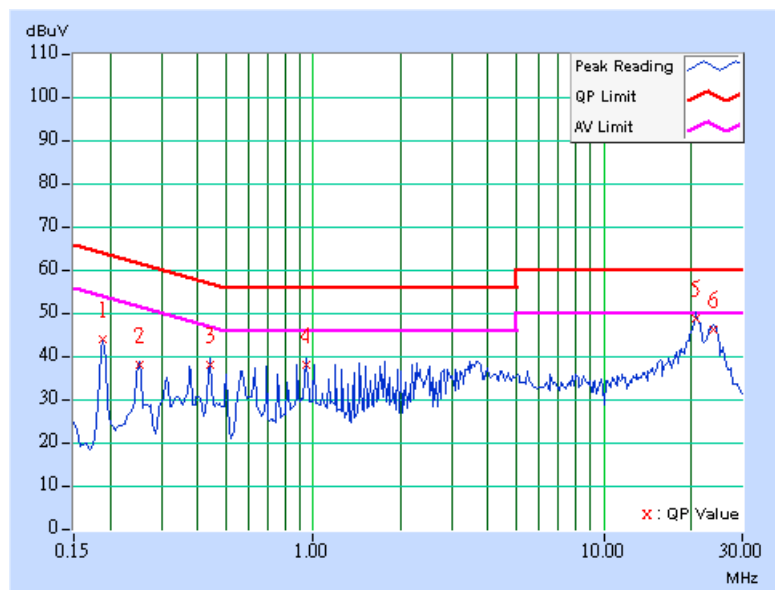


4.1.7 TEST RESULTS

EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 1	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY: Jamison Chan	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.189	0.10	42.92	-	43.02	-	64.08
2	0.252	0.10	36.85	-	36.95	-	61.71	51.71	-24.76	-
3	0.439	0.11	36.86	-	36.97	-	57.08	47.08	-20.11	-
4	0.943	0.19	36.84	-	37.03	-	56.00	46.00	-18.97	-
5	20.758	0.95	47.67	-	48.62	-	60.00	50.00	-11.38	-
6	23.914	1.13	45.01	-	46.14	-	60.00	50.00	-13.86	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

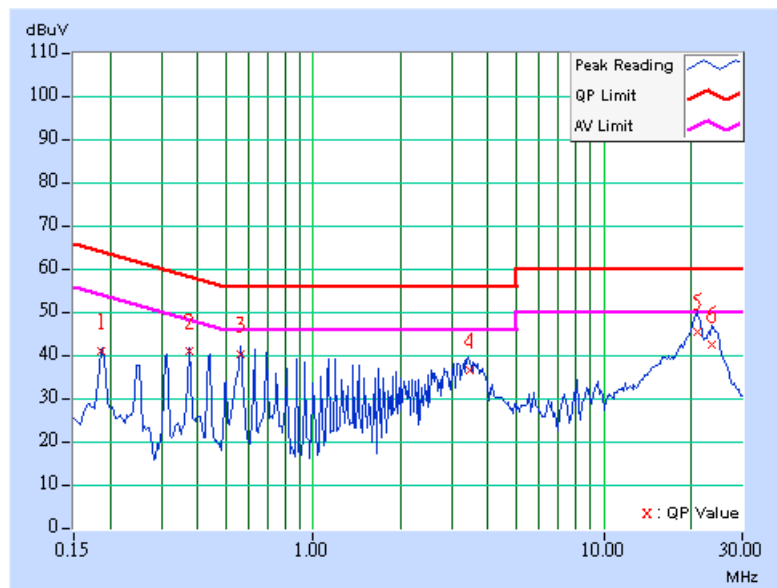




EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 1	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY: Jamison Chan	

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	0.187	0.10	40.06	-	40.16	-	64.16
2	0.377	0.10	40.08	-	40.18	-	58.35	48.35	-18.17	-
3	0.564	0.13	39.46	-	39.59	-	56.00	46.00	-16.41	-
4	3.456	0.27	35.77	-	36.04	-	56.00	46.00	-19.96	-
5	20.945	0.84	44.61	-	45.45	-	60.00	50.00	-14.55	-
6	23.458	0.94	41.74	-	42.68	-	60.00	50.00	-17.32	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

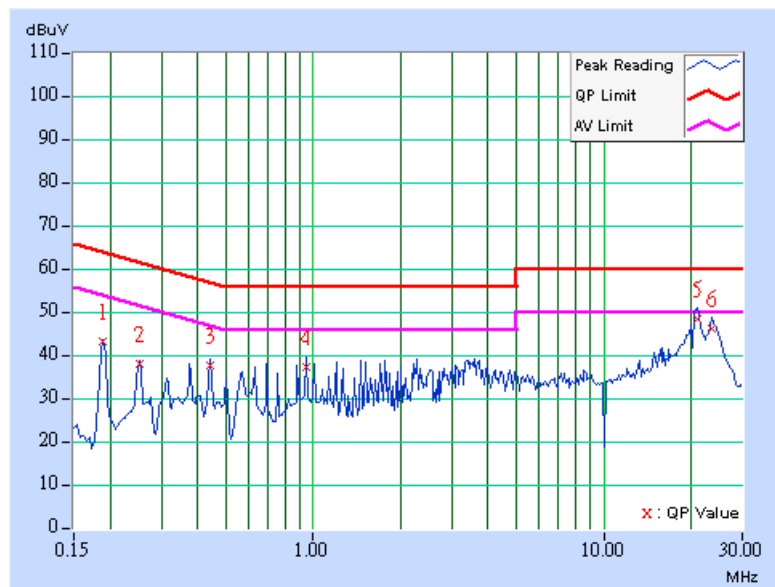




EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 06	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY: Jamison Chan	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	42.05	-	42.15	-	64.08	54.08	-21.93	-
2	0.252	0.10	36.91	-	37.01	-	61.71	51.71	-24.70	-
3	0.439	0.11	36.70	-	36.81	-	57.08	47.08	-20.27	-
4	0.943	0.19	36.13	-	36.32	-	56.00	46.00	-19.68	-
5	20.926	0.96	47.46	-	48.42	-	60.00	50.00	-11.58	-
6	23.500	1.11	45.34	-	46.45	-	60.00	50.00	-13.55	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

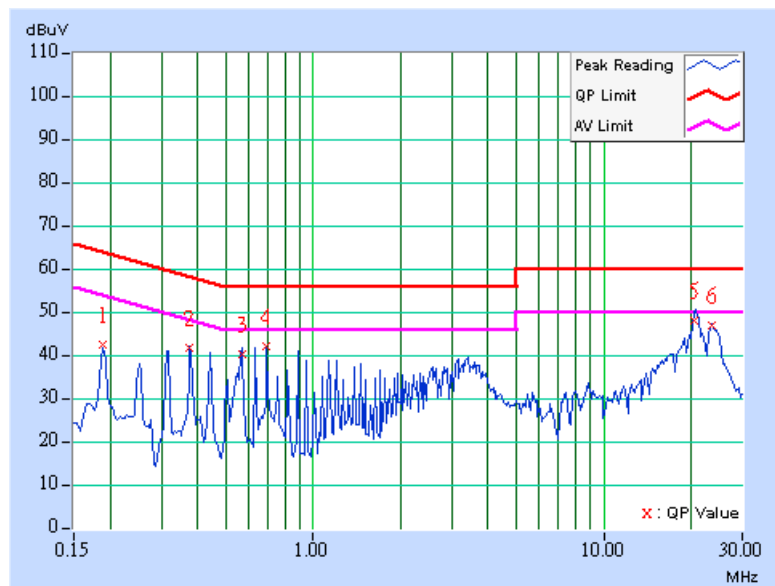




EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 06	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY: Jamison Chan	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	41.79	-	41.89	-	64.08	54.08	-22.19	-
2	0.377	0.10	41.08	-	41.18	-	58.35	48.35	-17.17	-
3	0.568	0.13	39.32	-	39.45	-	56.00	46.00	-16.55	-
4	0.693	0.15	41.26	-	41.41	-	56.00	46.00	-14.59	-
5	20.375	0.82	47.13	-	47.95	-	60.00	50.00	-12.05	-
6	23.648	0.95	45.97	-	46.92	-	60.00	50.00	-13.08	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

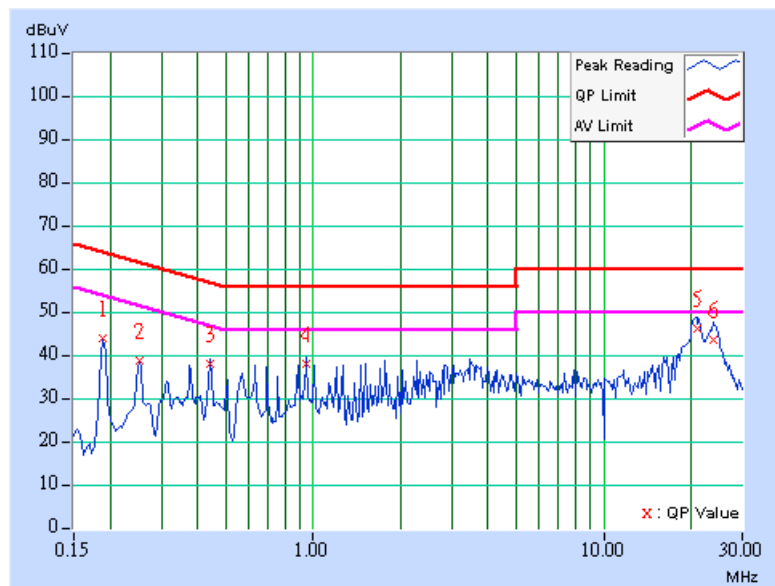




EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 11	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY: Jamison Chan	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.189	0.10	43.13	-	43.23	-	64.08
2	0.252	0.10	37.65	-	37.75	-	61.71	51.71	-23.96	-
3	0.443	0.11	37.10	-	37.21	-	57.01	47.01	-19.80	-
4	0.947	0.19	37.08	-	37.27	-	56.00	46.00	-18.73	-
5	20.963	0.96	45.07	-	46.03	-	60.00	50.00	-13.97	-
6	23.738	1.12	42.60	-	43.72	-	60.00	50.00	-16.28	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

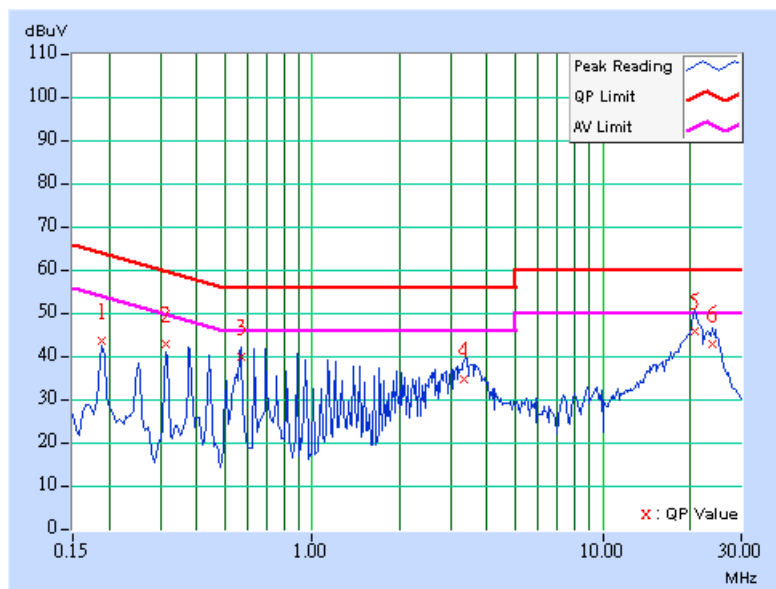




EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 11	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY: Jamison Chan	

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.189	0.10	42.79	-	42.89	-	64.08
2	0.314	0.10	42.02	-	42.12	-	59.86	49.86	-17.74	-
3	0.568	0.13	39.14	-	39.27	-	56.00	46.00	-16.73	-
4	3.340	0.27	34.00	-	34.27	-	56.00	46.00	-21.73	-
5	20.768	0.83	44.97	-	45.80	-	60.00	50.00	-14.20	-
6	23.923	0.96	42.11	-	43.07	-	60.00	50.00	-16.93	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.





4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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



4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED ON
* HP Spectrum Analyzer	8593E	3911A07465	July 07, 2004
* HP Preamplifier	8447D	2432A03504	June 10, 2004
* HP Preamplifier	8449B	3008A01201	Dec. 11, 2004
SCHAFFNER Tunable Dipole Antenna	VHBA 9123	459	Jun. 26, 2004
SCHWARZBECK Tunable Dipole Antenna	UHA 9105	977	
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Feb. 12, 2005
*Schwarzbeck Antenna	VULB9168	137	Apr. 03, 2004
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	June 30, 2004
*ADT. Turn Table	TT100	0306	NA
*ADT. Tower	AT100	0306	NA
*Software	ADT_Radiated_V5.14	NA	NA
*TIMES RF cable	LL142	CABLE-CH6-01	Apr. 30, 2004

- 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 Chamber No. 6.



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.

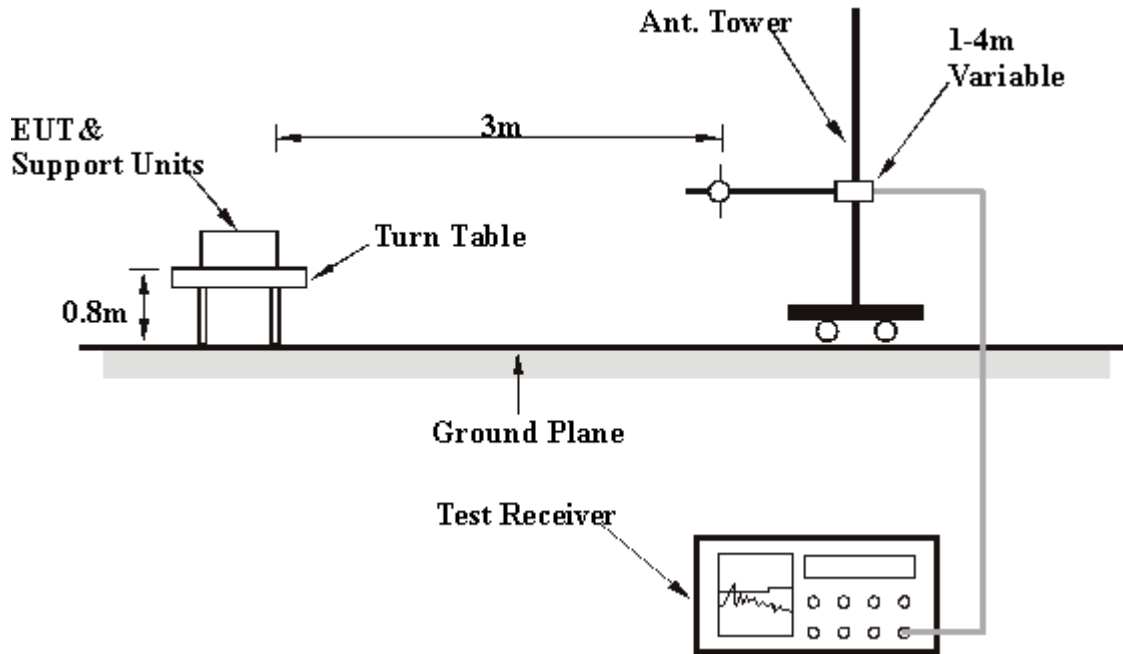
NOTE:

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 10Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6



4.2.7 TEST RESULTS

EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 11	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	168.02	37.80 QP	43.50	-5.70	1.75 H	64	24.23	13.57
2	236.05	34.05 QP	46.00	-11.95	1.25 H	355	21.07	12.98
3	302.14	30.11 QP	46.00	-15.89	1.00 H	1	14.96	15.15
4	331.30	32.07 QP	46.00	-13.93	1.00 H	340	16.14	15.92
5	368.24	31.27 QP	46.00	-14.73	1.00 H	124	14.38	16.89
6	436.27	31.65 QP	46.00	-14.35	1.75 H	10	12.78	18.86
7	473.21	35.37 QP	46.00	-10.63	1.75 H	4	15.74	19.63
8	502.36	34.28 QP	46.00	-11.72	1.50 H	4	14.22	20.06
9	539.30	38.33 QP	46.00	-7.67	1.50 H	13	17.44	20.88
10	574.29	39.56 QP	46.00	-6.44	1.25 H	1	17.72	21.84
11	603.45	37.24 QP	46.00	-8.76	1.25 H	352	14.59	22.64
12	659.82	37.54 QP	46.00	-8.46	1.00 H	346	14.15	23.39
13	675.57	41.00 QP	46.00	-5.00	1.50 H	210	17.38	23.62
14	704.53	41.83 QP	46.00	-4.17	1.00 H	343	17.72	24.10
15	720.08	41.87 QP	46.00	-4.13	1.00 H	346	17.34	24.53
16	811.44	39.43 QP	46.00	-6.57	1.00 H	298	13.69	25.74

- 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.



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	Channel 11	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	166.07	27.64 QP	43.50	-15.86	1.00 V	34	13.90	13.74
2	234.11	25.66 QP	46.00	-20.34	1.75 V	313	12.78	12.88
3	473.21	29.29 QP	46.00	-16.71	1.00 V	235	9.66	19.63
4	502.36	30.27 QP	46.00	-15.73	1.75 V	142	10.21	20.06
5	539.30	34.73 QP	46.00	-11.27	1.00 V	232	13.84	20.88
6	574.29	36.70 QP	46.00	-9.30	1.75 V	52	14.86	21.84
7	603.45	34.31 QP	46.00	-11.69	1.50 V	43	11.67	22.64
8	642.32	34.28 QP	46.00	-11.72	1.25 V	40	11.13	23.15
9	671.48	38.04 QP	46.00	-7.96	1.25 V	34	14.47	23.56
10	720.08	37.14 QP	46.00	-8.86	2.00 V	25	12.61	24.53
11	745.35	39.47 QP	46.00	-6.53	1.25 V	169	14.25	25.22
12	809.50	34.51 QP	46.00	-11.49	1.50 V	4	8.79	25.72
13	881.42	34.45 QP	46.00	-11.55	1.00 V	154	7.68	26.77
14	916.41	35.40 QP	46.00	-10.60	1.00 V	148	8.08	27.33

- 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.



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	CCK	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 1		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2038.00	44.33 PK	74.00	-29.67	1.82 H	63	13.32	31.00
2	2320.00	56.29 PK	74.00	-17.71	1.80 H	63	24.90	31.39
2	2320.00	48.43 AV	54.00	-5.57	1.80 H	63	17.04	31.39
3	2376.00	56.03 PK	74.00	-17.97	1.80 H	63	24.57	31.46
3	2376.00	48.17 AV	54.00	-5.83	1.80 H	63	16.71	31.46
4	*2412.00	108.59 PK			1.80 H	63	77.08	31.51
4	*2412.00	100.73 AV			1.80 H	63	69.22	31.51
5	2580.00	56.13 PK	88.59	-32.46	1.82 H	63	24.16	31.96
5	2580.00	52.43 AV	80.73	-28.30	1.82 H	63	20.46	31.96

- 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. " * " : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	CCK	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 1		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	2038.00	44.37 PK	74.00	-29.63	1.15 V	20	13.36	31.00
2	2320.00	59.73 PK	74.00	-14.27	1.48 V	65	28.34	31.39
2	2320.00	52.16 AV	54.00	-1.84	1.48 V	65	20.77	31.39
3	2376.00	59.47 PK	74.00	-14.53	1.48 V	65	28.01	31.46
3	2376.00	51.90 AV	54.00	-2.10	1.48 V	65	20.44	31.46
4	*2412.00	112.03 PK			1.48 V	65	80.52	31.51
4	*2412.00	104.46 AV			1.48 V	65	72.95	31.51
5	2580.00	59.77 PK	92.03	-32.26	1.07 V	32	27.80	31.96
5	2580.00	56.98 AV	84.46	-27.48	1.07 V	32	25.01	31.96

- 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. “ * “ : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	CCK	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2063.00	44.05 PK	74.00	-29.95	2.16 H	67	13.01	31.04
2	2280.00	54.34 PK	74.00	-19.66	1.47 H	54	23.01	31.33
2	2280.00	46.69 AV	54.00	-7.31	1.47 H	54	15.36	31.33
3	2310.00	56.23 PK	74.00	-17.77	1.47 H	54	24.86	31.37
3	2310.00	48.58 AV	54.00	-5.42	1.47 H	54	17.21	31.37
4	2332.00	52.13 PK	74.00	-21.87	1.47 H	54	20.73	31.40
4	2332.00	44.48 AV	54.00	-9.52	1.47 H	54	13.08	31.40
5	2354.00	54.78 PK	74.00	-19.22	1.47 H	54	23.35	31.43
5	2354.00	47.13 AV	54.00	-6.87	1.47 H	54	15.70	31.43
6	2376.00	53.27 PK	74.00	-20.73	1.47 H	54	21.81	31.46
6	2376.00	45.62 AV	54.00	-8.38	1.47 H	54	14.16	31.46
7	2400.00	60.05 PK	87.26	-27.21	1.47 H	54	28.56	31.49
7	2400.00	52.43 AV	79.61	-27.18	1.47 H	54	20.94	31.49
8	*2437.00	107.26 PK			1.47 H	54	75.72	31.54
8	*2437.00	99.61 AV			1.47 H	54	68.07	31.54
9	2560.00	52.56 PK	87.26	-34.70	1.36 H	136	20.69	31.88
9	2560.00	46.75 AV	79.61	-32.86	1.36 H	136	14.88	31.88

- 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. " * " : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	CCK	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	2063.00	44.34 PK	74.00	-29.66	1.47 V	20	13.30	31.04
2	2280.00	58.34 PK	74.00	-15.66	1.16 V	82	27.01	31.33
2	2280.00	50.38 AV	54.00	-3.62	1.16 V	82	19.05	31.33
3	2310.00	59.96 PK	74.00	-14.04	1.16 V	82	28.59	31.37
3	2310.00	52.27 AV	54.00	-1.73	1.16 V	82	20.90	31.37
4	2320.00	58.85 PK	74.00	-15.15	1.16 V	82	27.46	31.39
4	2320.00	51.16 AV	54.00	-2.84	1.16 V	82	19.77	31.39
5	2332.00	55.86 PK	74.00	-18.14	1.16 V	82	24.46	31.40
5	2332.00	48.17 AV	54.00	-5.83	1.16 V	82	16.77	31.40
6	2354.00	58.51 PK	74.00	-15.49	1.16 V	82	27.08	31.43
6	2354.00	50.82 AV	54.00	-3.18	1.16 V	82	19.39	31.43
7	2376.00	57.00 PK	74.00	-17.00	1.16 V	82	25.54	31.46
7	2376.00	49.31 AV	54.00	-4.69	1.16 V	82	17.85	31.46
8	2400.00	63.81 PK	90.99	-27.18	1.16 V	82	32.32	31.49
8	2400.00	56.12 AV	83.30	-27.18	1.16 V	82	24.63	31.49
9	*2437.00	110.99 PK			1.16 V	82	79.45	31.54
9	*2437.00	103.30 AV			1.16 V	82	71.76	31.54
10	2560.00	58.29 PK	90.99	-32.70	1.30 V	212	26.42	31.88
10	2560.00	52.82 AV	83.30	-30.48	1.30 V	212	20.95	31.88

- 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. “ * ” : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	CCK	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2088.00	44.04 PK	74.00	-29.96	1.52 H	20	12.97	31.07
2	2280.00	55.49 PK	74.00	-18.51	1.42 H	52	24.16	31.33
2	2280.00	48.15 AV	54.00	-5.85	1.42 H	52	16.82	31.33
3	2310.00	56.58 PK	74.00	-17.42	1.42 H	52	25.21	31.37
3	2310.00	49.24 AV	54.00	-4.76	1.42 H	52	17.87	31.37
4	2354.00	55.50 PK	74.00	-18.50	1.42 H	52	24.07	31.43
4	2354.00	48.16 AV	54.00	-5.84	1.42 H	52	16.73	31.43
5	2376.00	54.03 PK	74.00	-19.97	1.42 H	52	22.57	31.46
5	2376.00	46.69 AV	54.00	-7.31	1.42 H	52	15.23	31.46
6	2400.00	59.46 PK	87.44	-27.98	1.42 H	52	27.97	31.49
6	2400.00	52.12 AV	80.10	-27.98	1.42 H	52	20.63	31.49
7	*2462.00	107.44 PK			1.42 H	52	75.87	31.57
7	*2462.00	100.10 AV			1.42 H	52	68.53	31.57
8	2484.00	50.81 PK	74.00	-23.19	1.42 H	52	19.21	31.60
9	2560.00	52.63 PK	87.44	-34.81	1.22 H	312	20.76	31.88
9	2560.00	46.74 AV	80.10	-33.36	1.22 H	312	14.87	31.88

- 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. “ * “ : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	CCK	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	2088.00	44.09 PK	74.00	-29.91	1.48 V	52	13.02	31.07
2	2280.00	59.95 PK	74.00	-14.05	1.40 V	55	28.62	31.33
2	2280.00	52.20 AV	54.00	-1.80	1.40 V	55	20.87	31.33
3	2310.00	61.04 PK	74.00	-12.96	1.21 V	62	29.67	31.37
3	2310.00	53.29 AV	54.00	-0.71	1.21 V	62	21.92	31.37
4	2354.00	59.96 PK	74.00	-14.04	1.40 V	55	28.53	31.43
4	2354.00	52.10 AV	54.00	-1.90	1.40 V	55	20.67	31.43
5	2376.00	58.49 PK	74.00	-15.51	1.40 V	55	27.03	31.46
5	2376.00	50.74 AV	54.00	-3.26	1.40 V	55	19.28	31.46
6	2400.00	63.92 PK	91.90	-27.98	1.40 V	55	32.43	31.49
6	2400.00	56.17 AV	84.15	-27.98	1.40 V	55	24.68	31.49
7	*2462.00	111.90 PK			1.40 V	55	80.33	31.57
7	*2462.00	104.15 AV			1.40 V	55	72.58	31.57
8	2484.00	55.27 PK	74.00	-18.73	1.40 V	55	23.67	31.60
8	2484.00	47.52 AV	54.00	-6.48	1.40 V	55	15.92	31.60
9	2560.00	57.33 PK	91.90	-34.57	1.83 V	205	25.46	31.88
9	2560.00	52.08 AV	84.15	-32.07	1.83 V	205	20.21	31.88



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	OFDM	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 1		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2038.00	44.44 PK	74.00	-29.56	1.21 H	310	13.43	31.00
2	2280.00	59.50 PK	84.25	-24.75	1.32 H	307	28.17	31.33
2	2280.00	50.38 AV	75.13	-24.75	1.32 H	307	19.05	31.33
3	2310.00	59.13 PK	74.00	-14.87	1.32 H	307	27.76	31.37
3	2310.00	50.01 AV	54.00	-3.99	1.32 H	307	18.64	31.37
4	2320.00	57.01 PK	74.00	-16.99	1.32 H	307	25.62	31.39
4	2320.00	47.89 AV	54.00	-6.11	1.32 H	307	16.50	31.39
5	2332.00	54.34 PK	74.00	-19.66	1.32 H	307	22.94	31.40
5	2332.00	45.22 AV	54.00	-8.78	1.32 H	307	13.82	31.40
6	2354.00	57.57 PK	74.00	-16.43	1.32 H	307	26.14	31.43
6	2354.00	48.45 AV	54.00	-5.55	1.32 H	307	17.02	31.43
7	2390.00	53.08 PK	74.00	-20.92	1.32 H	307	21.60	31.48
7	2390.00	43.96 AV	54.00	-10.04	1.32 H	307	12.48	31.48
8	*2412.00	104.25 PK			1.32 H	307	72.74	31.51
8	*2412.00	95.13 AV			1.32 H	307	63.62	31.51
9	2580.00	54.20 PK	84.25	-30.05	1.15 H	140	22.23	31.96
9	2580.00	50.16 AV	75.13	-24.97	1.15 H	140	18.19	31.96

- 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. “ * ” : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	OFDM	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 1		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	2038.00	48.62 PK	74.00	-25.38	1.44 V	60	17.61	31.00
2	2280.00	57.28 PK	89.72	-32.44	1.27 V	66	25.95	31.33
2	2280.00	52.77 AV	80.41	-27.64	1.27 V	66	21.44	31.33
3	2310.00	61.60 PK	74.00	-12.40	1.68 V	40	30.23	31.37
3	2310.00	52.29 AV	54.00	-1.71	1.68 V	40	20.92	31.37
4	2320.00	59.48 PK	74.00	-14.52	1.68 V	40	28.09	31.39
4	2320.00	50.17 AV	54.00	-3.83	1.68 V	40	18.78	31.39
5	2332.00	56.81 PK	74.00	-17.19	1.68 V	40	25.41	31.40
5	2332.00	47.50 AV	54.00	-6.50	1.68 V	40	16.10	31.40
6	2354.00	60.04 PK	74.00	-13.96	1.68 V	40	28.61	31.43
6	2354.00	50.73 AV	54.00	-3.27	1.68 V	40	19.30	31.43
7	2390.00	55.55 PK	74.00	-18.45	1.68 V	40	24.07	31.48
7	2390.00	46.24 AV	54.00	-7.76	1.68 V	40	14.76	31.48
8	*2412.00	109.72 PK			1.68 V	40	73.21	31.51
8	*2412.00	100.41 AV			1.68 V	40	68.90	31.51
9	2580.00	62.01 PK	89.72	-27.71	1.40 V	100	30.04	31.96
9	2580.00	58.01 AV	80.41	-22.40	1.40 V	100	26.04	31.96

- 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. " * " : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	OFDM	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2063.00	43.92 PK	74.00	-30.08	1.47 H	54	12.88	31.04
2	2280.00	53.94 PK	86.00	-32.06	1.60 H	66	22.61	31.33
2	2280.00	47.82 AV	76.71	-28.89	1.60 H	66	16.49	31.33
3	2310.00	58.32 PK	74.00	-15.68	1.44 H	53	26.95	31.37
3	2310.00	49.03 AV	54.00	-4.97	1.44 H	53	17.66	31.37
4	2320.00	58.09 PK	74.00	-15.91	1.44 H	53	26.70	31.39
4	2320.00	48.74 AV	54.00	-5.26	1.44 H	53	17.35	31.39
5	2343.00	57.62 PK	74.00	-16.38	1.90 H	65	26.21	31.42
5	2343.00	51.53 AV	54.00	-2.47	1.90 H	65	20.12	31.42
6	2354.00	56.73 PK	74.00	-17.27	1.44 H	53	25.30	31.43
6	2354.00	47.44 AV	54.00	-6.56	1.44 H	53	16.01	31.43
7	2382.00	56.62 PK	74.00	-17.38	1.44 H	53	25.15	31.47
7	2382.00	47.33 AV	54.00	-6.67	1.44 H	53	15.86	31.47
8	2400.00	60.18 PK	74.00	-13.82	1.44 H	53	28.69	31.49
8	2400.00	50.89 AV	54.00	-3.11	1.44 H	53	19.40	31.49
9	*2437.00	106.00 PK			1.44 H	53	74.46	31.54
9	*2437.00	96.71 AV			1.44 H	53	65.17	31.54
10	2560.00	54.00 PK	86.00	-32.00	1.62 H	134	22.13	31.88
10	2560.00	47.23 AV	76.71	-29.48	1.62 H	134	15.36	31.88

- 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. “ * “ : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	OFDM	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 06		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	2063.00	44.72 PK	74.00	-29.28	1.14 V	24	13.68	31.04
2	2280.00	63.30 PK	91.67	-28.37	1.13 V	100	31.97	31.33
2	2280.00	53.69 AV	82.06	-28.37	1.13 V	100	22.36	31.33
3	2310.00	59.80 PK	74.00	-14.20	1.26 V	64	28.42	31.37
3	2310.00	53.62 AV	54.00	-0.38	1.26 V	64	22.24	31.37
4	2320.00	58.50 PK	74.00	-15.50	1.25 V	60	27.11	31.39
4	2320.00	51.21 AV	54.00	-2.79	1.25 V	60	19.82	31.39
5	2343.00	61.86 PK	74.00	-12.14	1.13 V	100	30.44	31.42
5	2343.00	52.25 AV	54.00	-1.75	1.13 V	100	20.83	31.42
6	2354.00	62.40 PK	74.00	-11.60	1.13 V	100	30.97	31.43
6	2354.00	52.79 AV	54.00	-1.21	1.13 V	100	21.36	31.43
7	2382.00	62.29 PK	74.00	-11.71	1.13 V	100	30.82	31.47
7	2382.00	52.68 AV	54.00	-1.32	1.13 V	100	21.21	31.47
9	*2437.00	111.67 PK			1.49 V	60	80.13	31.54
9	*2437.00	102.06 AV			1.49 V	60	70.52	31.54
10	2560.00	58.91 PK	91.67	-32.76	1.13 V	100	27.04	31.88
10	2560.00	53.00 AV	82.06	-29.06	1.13 V	100	21.13	31.88

- 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. " * " : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	OFDM	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2088.00	43.99 PK	74.00	-30.01	1.82 H	42	12.92	31.07
2	2280.00	57.88 PK	85.14	-27.26	1.49 H	52	26.55	31.33
2	2280.00	48.47 AV	75.73	-27.26	1.49 H	52	17.14	31.33
3	2320.00	55.08 PK	74.00	-18.92	1.32 H	24	23.69	31.39
3	2320.00	48.96 AV	54.00	-5.04	1.32 H	24	17.57	31.39
5	*2462.00	105.14 PK			1.49 H	52	73.57	31.57
5	*2462.00	95.73 AV			1.49 H	52	64.16	31.57
6	2484.00	55.55 PK	74.00	-18.45	1.49 H	52	23.95	31.60
6	2484.00	46.14 AV	54.00	-7.86	1.49 H	52	14.54	31.60
7	2560.00	53.95 PK	85.14	-31.19	1.20 H	135	22.08	31.88
7	2560.00	48.02 AV	75.73	-27.71	1.20 H	135	16.15	31.88

- 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. “ * “ : Fundamental frequency



EUT	802.11g Wireless PCI Adapter	MODEL	WL VP 2454 NM
MODE	OFDM	FREQUENCY RANGE	1~25 GHz
CHANNEL	Channel 11		
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 76%RH, 991hPa	TESTED BY: Steven Lu	

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	2088.00	47.91 PK	74.00	-26.09	1.12 V	87	16.84	31.07
2	2280.00	61.88 PK	89.14	-27.26	1.15 V	83	30.55	31.33
2	2280.00	52.46 AV	79.72	-27.26	1.15 V	83	21.13	31.33
3	2320.00	58.74 PK	74.00	-15.26	1.47 V	28	27.35	31.39
3	2320.00	53.29 AV	54.00	-0.71	1.47 V	28	21.90	31.39
4	2354.00	61.45 PK	74.00	-12.55	1.15 V	83	30.02	31.43
4	2354.00	52.03 AV	54.00	-1.97	1.15 V	83	20.60	31.43
5	*2462.00	109.14 PK			1.15 V	83	77.57	31.57
5	*2462.00	99.72 AV			1.15 V	83	68.15	31.57
6	2484.00	59.55 PK	74.00	-14.45	1.15 V	83	27.95	31.60
6	2484.00	50.13 AV	54.00	-3.87	1.15 V	83	18.53	31.60
7	2560.00	60.80 PK	89.14	-28.34	1.40 V	85	28.93	31.88
7	2560.00	55.56 AV	79.72	-24.16	1.40 V	85	23.69	31.88

- 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. “ * “ : Fundamental frequency