FCC TEST REPORT

REPORT NO.:	RF910124R06C
MODEL NO.:	WAP22
	WAP11 ver. 2.2
	GL2422AP-0T0
	GL2422AP-0T1
RECEIVED:	April 11, 2002
TESTED:	April 15 ~ April 19, 2002

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

Lab Code: 200102-0

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1 CERTIFICATION

PRODUCT :	Wireless Network Access Point
	Wireless 22Mbps Access Point
BRAND NAME :	GLOBAL SUN, Linksys
MODEL NO. :	WAP22
	WAP11 ver. 2.2
	GL2422AP-0T0
	GL2422AP-0T1
APPLICANT :	GLOBAL SUN TECHNOLOGY INC.
STANDARDS :	47 CFR Part 15, Subpart C (Section 15.247), ANSI C63.4-1992, Canada RSS 210, New Zealand RFS 29

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from Apr. 15 ~ Apr. 19, 2002. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

TESTED BY: Gary Chang , **DATE:** April 24, 2002
Gary Chang

CHECKED BY: Rennie Wang , **DATE:** April. 24. 2002
Rennie Wang

APPROVED BY: Alan Lane , **DATE:** April 24, 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 Limit: 48dBuV	PASS	Meet the requirement of limit Minimum passing margin is –10.56dBuV at 0.544MHz
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)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –6.70dBuV at 748.00 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 22Mbps Access Point Wireless Network Access Point
MODEL NO.	WAP22 WAP11 ver. 2.2 GL2422AP-0T0 GL2422AP-0T1
POWER SUPPLY	5VDC from AC adapter
MODULATION TYPE	BPSK, QPSK, CCK, PBCC
RADIO TECHNOLOGY	DSSS
TRANSFER RATE	1/2/5.5/11/22Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	15.87dBm
ANTENNA TYPE	Dipole antenna (2dBi) Dipole antenna (1dBi)
POWER CABLE	1.8m (Nonshielded)
I/O PORTS	RJ45 port
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT is operated with the following power adapter.

Model No. :	HPW-2005U A1
Input Power :	100V ~ 240V, 2.0A, Max 50-60Hz
Output Power :	5.0VDC,2.5A

2. The combinations for product name and model are shown as following:

Product Name	Model No
Wireless Network Access Point	WAP22
Wireless Network Access Point	WAP11 ver. 2.2
Wireless 22Mbps Access Point	GL2422AP-0T0

3. Add one more new model name as shown as following:

Product Name	Model No
Wireless 22Mbps Access Point	GL2422AP-0T1

4. There are two combinations on the antenna connector as following.

Antenna Connector	Set 1	Set 2
Internal	MCX	MCX
External	Reversed TNC	NA

5. This report is prepared for FCC class II permissive change. The difference compared with the original one is the component change of the DC regulator from 5V to 3.3VDC transfer. Two new antennas with 2dBi and 1dBi gain have been also included in this filing. The metal shield inside the housing has been added too.

6. After original one do the FCC class II permissive change, there is one more model added to this report (please see note 3) and also is prepared for FCC class II permissive change. The difference compared with the original one is the outer appearance of the EUT and non-shield of mental.

7. For a more detailed features description, please refer to the manufacturer's specifications or the 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. Two antenna gains are provided in this EUT. 2 dBi antenna gain is for model WAP22, WAP11 ver. 2.2, and GL2422AP-0T0. 1dBi antenna gain is for model GL2422AP-0T1.
4. The test result A is for 2dBi antenna gain and the test result B is for 1dBi antenna gain.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless Network Access Point and Wireless 22Mpbs Network Access. 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, Canada RSS 210, New Zealand RFS 29

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

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

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	Dell	PP01L	TW-09C748-12800-19O-B220	FCC DoC APPROVED
2	LAN CARD	D-Link	DU-E100	UR15001597	FCC DoC APPROVED

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	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 (MHz)	Class B (dBuV)	
	Quasi-peak	Average
0.45 – 30	48	-

NOTE:

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS30	845552/004	May. 22, 2002
ROHDE & SCHWARZ Artificial Mains Network (for EUT)	ESH2-Z5	828075/003	July 19, 2002
ROHDE & SCHWARZ 200-A Four-line V-Network	ENV4200	830326/018	Oct. 25, 2002
* ROHDE & SCHWARZ 4-wire ISN	ENY41	838119/028	Dec. 2, 2002
* ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/018	Dec. 2, 2002
EMCO-L.I.S.N. (for peripheral)	3825/2	90031627	July 19, 2002
Software	Cond-V2L	NA	NA
RF cable (JYEBAO)	5D-FB	Cable-C05.01	July 19, 2002
LYNICS Terminator (For EMCO LISN)	0900510	E1-01-305	Feb. 20, 2003
LYNICS Terminator (For EMCO LISN)	0900510	E1-01-306	Feb. 20, 2003
Shielded Room	Site 5	ADT-C05	NA
VCCI Site Registration No.	Site 5	C-1093	NA

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

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

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

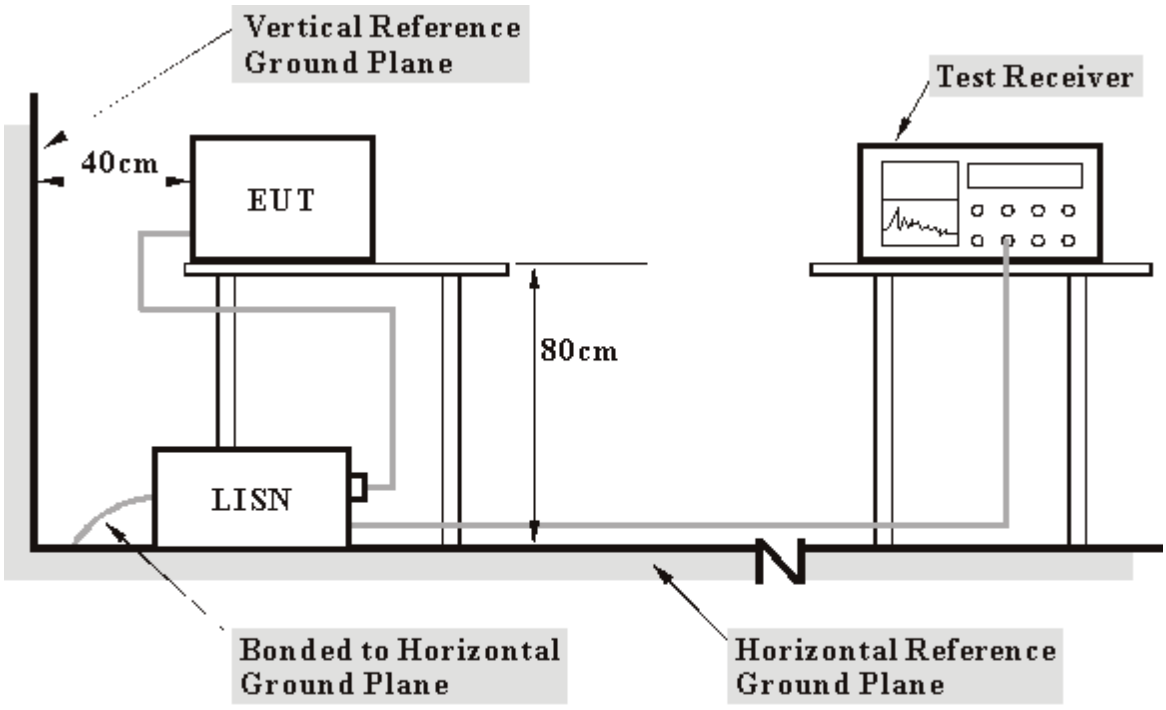
4.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

4.1.4 TEST SETUP



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

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

4.1.5 EUT OPERATING CONDITIONS

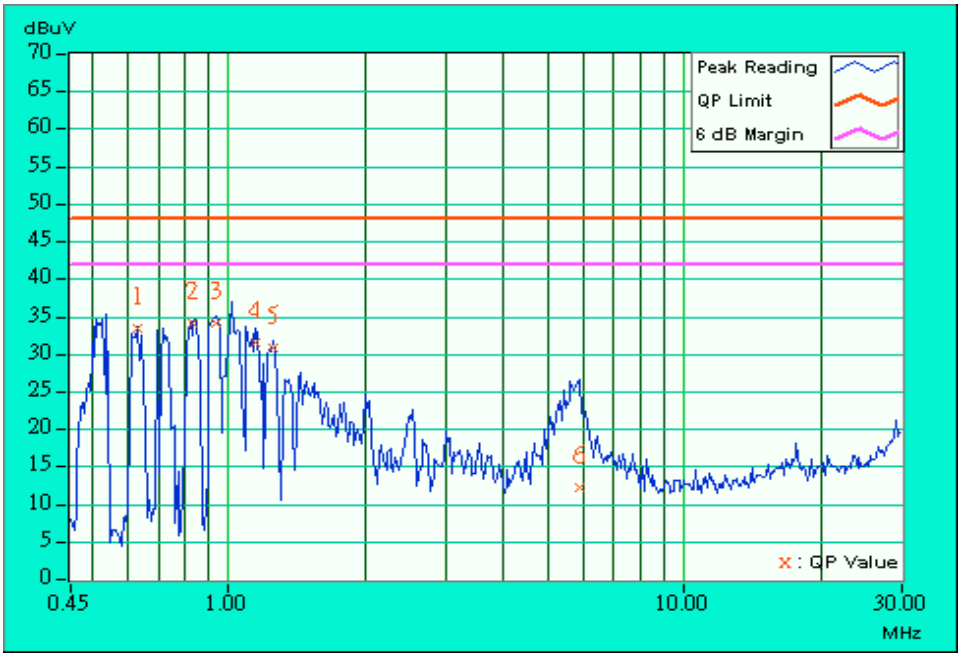
a. Placed the EUT on the testing table.
b. Prepared another computer system to act as a communication partner and placed it outside of testing area.
c. The communication partner run a test program to enable EUT under transmission/receiving condition continuously at specific channel frequency via an RJ 45 cable.
d. The communication partner sent data to EUT by command "PIN".

4.1.6 TEST RESULTS (A)

EUT	Wireless Network Access Point	**MODEL**	WAP22
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.634	0.14	32.91	-	33.05	-	48.00	-	-14.95	-
2	0.837	0.17	33.61	-	33.78	-	48.00	-	-14.22	-
3	0.938	0.19	33.77	-	33.96	-	48.00	-	-14.04	-
4	1.148	0.20	31.05	-	31.25	-	48.00	-	-16.75	-
5	1.246	0.20	30.46	-	30.66	-	48.00	-	-17.34	-
6	5.863	0.46	11.91	-	12.37	-	48.00	-	-35.63	-

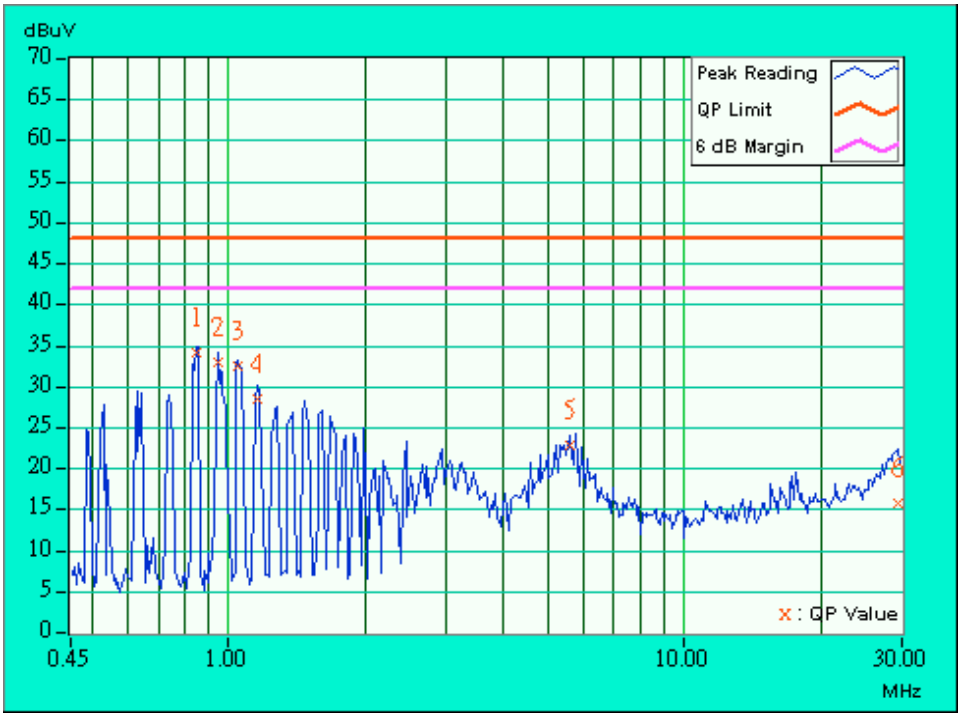
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Network Access Point	**MODEL**	WAP22
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.852	0.18	33.38	-	33.56	-	48.00	-	-14.44	-
2	0.946	0.19	32.13	-	32.32	-	48.00	-	-15.68	-
3	1.051	0.20	31.71	-	31.91	-	48.00	-	-16.09	-
4	1.152	0.20	27.75	-	27.95	-	48.00	-	-20.05	-
5	5.578	0.33	22.04	-	22.37	-	48.00	-	-25.63	-
6	29.395	0.79	14.94	-	15.73	-	48.00	-	-32.27	-

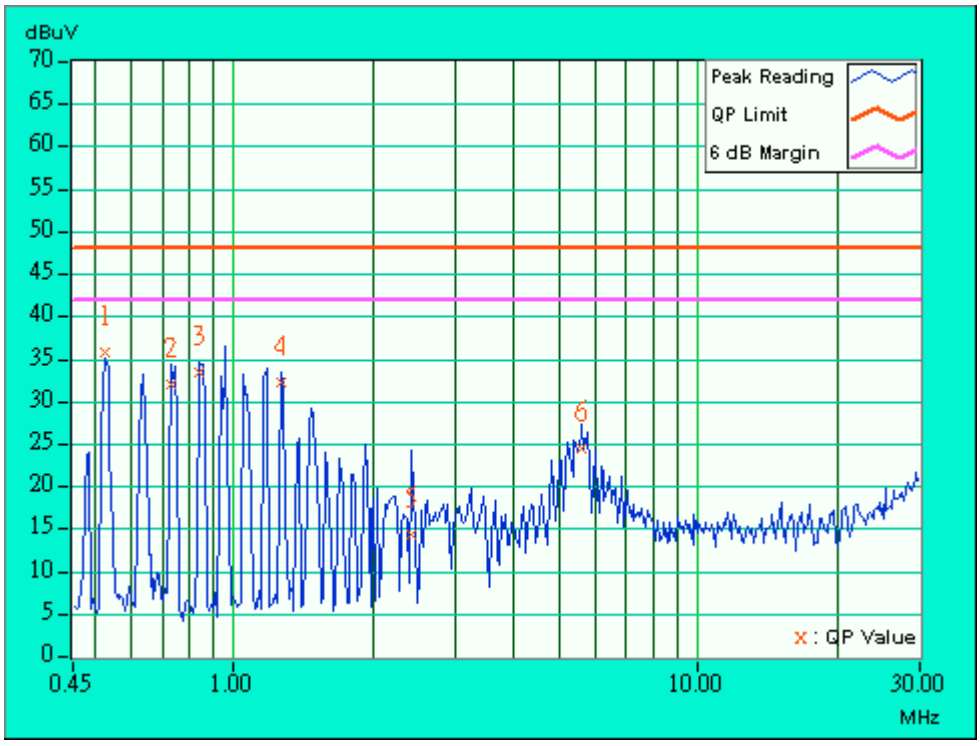
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Network Access Point	MODEL	WAP22
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.528	0.12	35.35	-	35.47	-	48.00	-	-12.53	-
2	0.731	0.16	31.50	-	31.66	-	48.00	-	-16.34	-
3	0.841	0.17	32.98	-	33.15	-	48.00	-	-14.85	-
4	1.258	0.20	31.75	-	31.95	-	48.00	-	-16.05	-
5	2.418	0.24	13.97	-	14.21	-	48.00	-	-33.79	-
6	5.602	0.45	24.10	-	24.55	-	48.00	-	-23.45	-

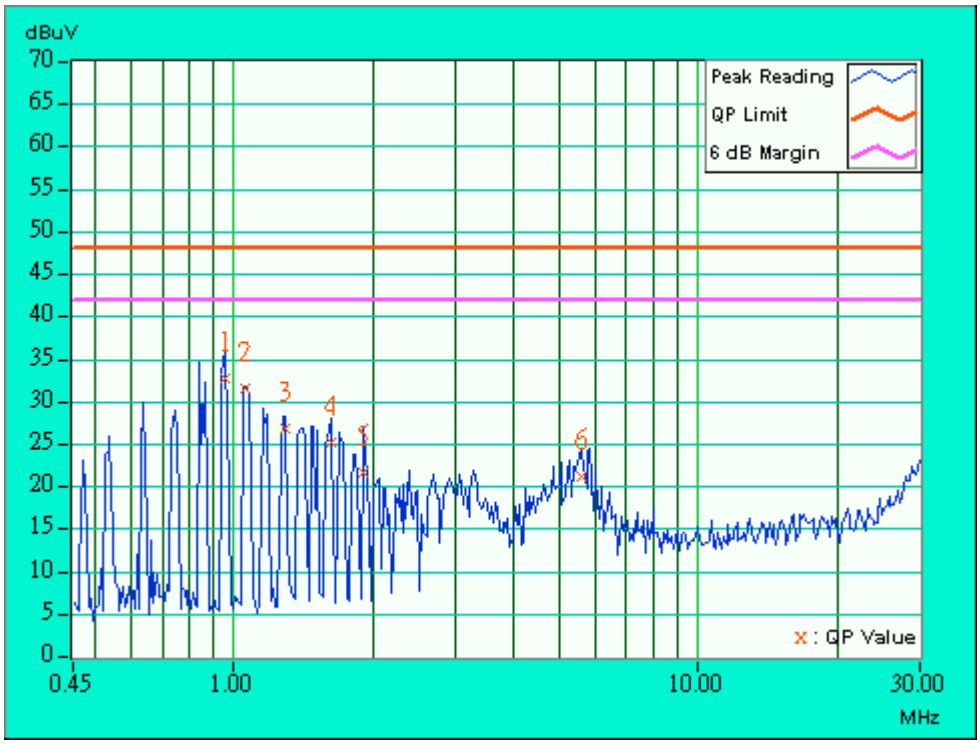
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Network Access Point	**MODEL**	WAP22
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.954	0.19	32.42	-	32.61	-	48.00	-	-15.39	-
2	1.059	0.20	31.31	-	31.51	-	48.00	-	-16.49	-
3	1.289	0.20	26.44	-	26.64	-	48.00	-	-21.36	-
4	1.617	0.20	24.94	-	25.14	-	48.00	-	-22.86	-
5	1.898	0.20	21.27	-	21.47	-	48.00	-	-26.53	-
6	5.586	0.33	20.78	-	21.11	-	48.00	-	-26.89	-

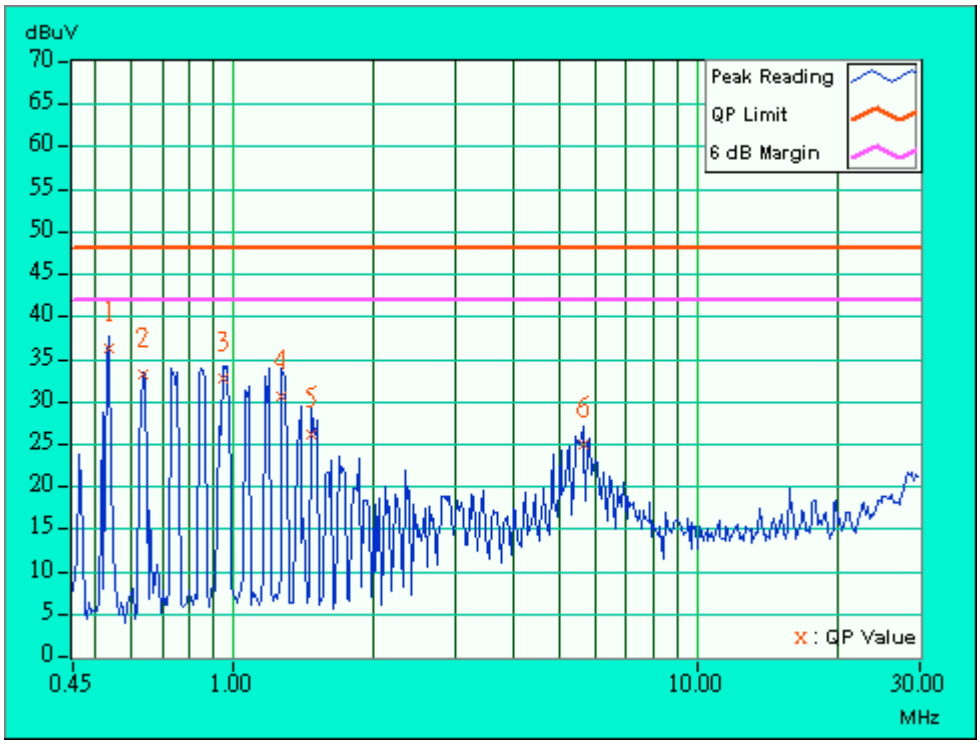
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Network Access Point	**MODEL**	WAP22
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.536	0.12	35.89	-	36.01	-	48.00	-	-11.99	-
2	0.638	0.14	32.79	-	32.93	-	48.00	-	-15.07	-
3	0.946	0.19	32.21	-	32.40	-	48.00	-	-15.60	-
4	1.262	0.20	30.23	-	30.43	-	48.00	-	-17.57	-
5	1.473	0.20	25.69	-	25.89	-	48.00	-	-22.11	-
6	5.633	0.45	24.61	-	25.06	-	48.00	-	-22.94	-

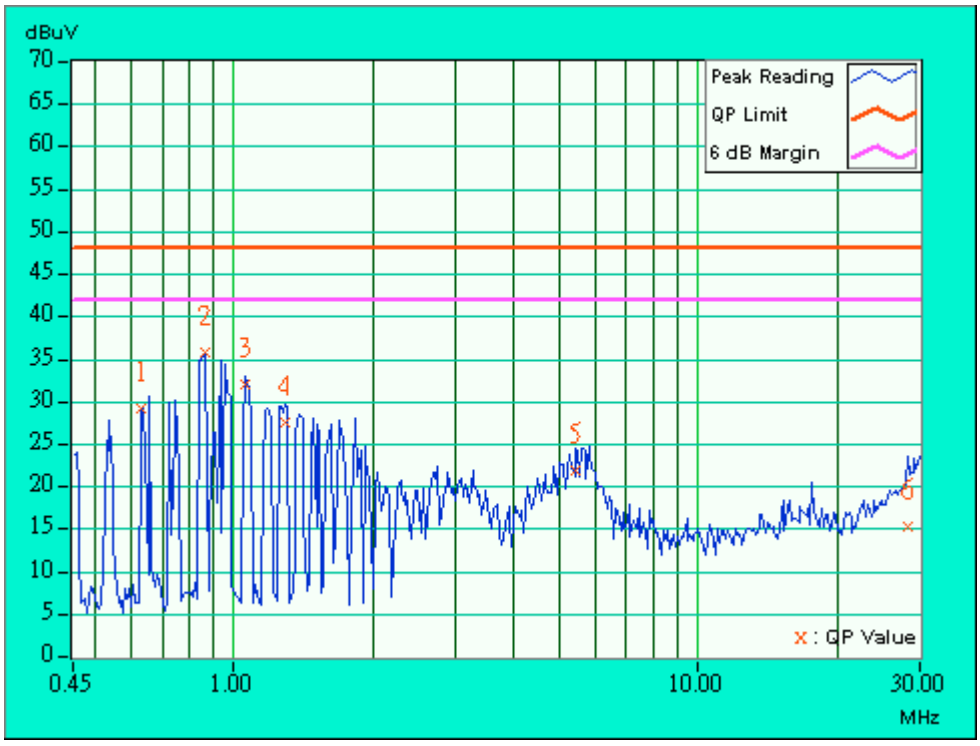
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Network Access Point	MODEL	WAP22
MODE	Channel 11	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.634	0.14	28.41	-	28.55	-	48.00	-	-19.45	-
2	0.868	0.18	35.14	-	35.32	-	48.00	-	-12.68	-
3	1.059	0.20	31.35	-	31.55	-	48.00	-	-16.45	-
4	1.289	0.20	26.87	-	27.07	-	48.00	-	-20.93	-
5	5.449	0.32	21.07	-	21.39	-	48.00	-	-26.61	-
6	28.250	0.77	14.64	-	15.41	-	48.00	-	-32.59	-

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

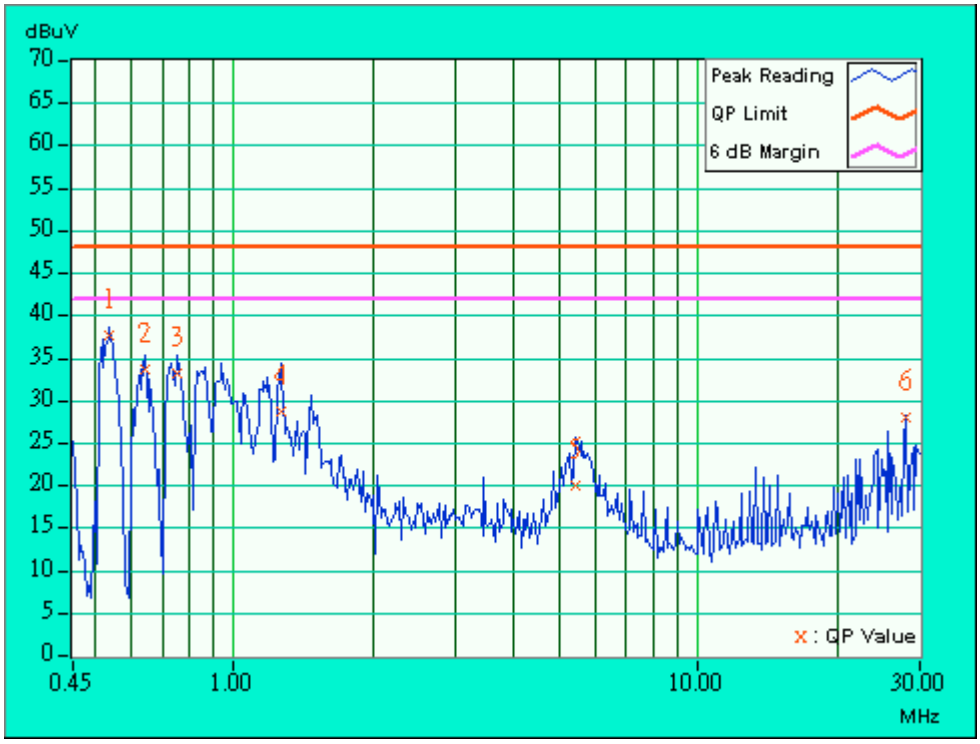


4.1.7 TEST RESULTS (B)

EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.540	0.12	36.34	-	36.46	-	48.00	-	-11.54	-
2	0.645	0.14	32.41	-	32.55	-	48.00	-	-15.45	-
3	0.755	0.16	31.91	-	32.07	-	48.00	-	-15.93	-
4	1.258	0.20	27.46	-	27.66	-	48.00	-	-20.34	-
5	5.453	0.45	18.87	-	19.32	-	48.00	-	-28.68	-
6	28.098	1.26	26.68	-	27.94	-	48.00	-	-20.06	-

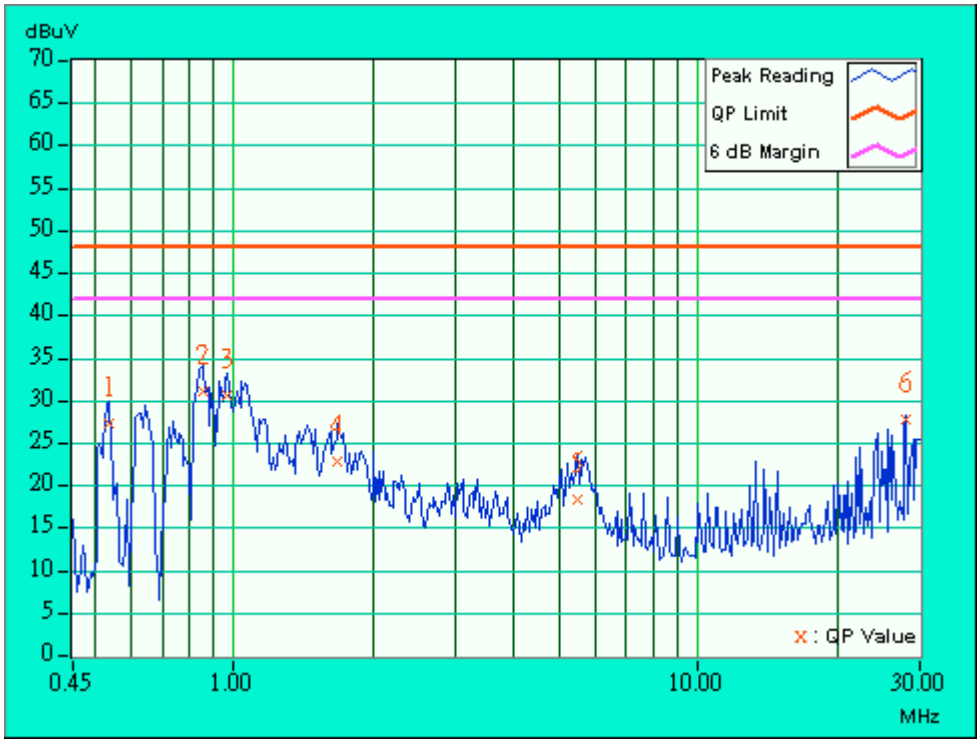
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.


dBuV
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Peak Reading
QP Limit
6 dB Margin
1
2
3
4
6
x : QP Value
0.45
1.00
10.00
30.00
MHz

EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 1	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.536	0.12	26.57	-	26.69	-	48.00	-	-21.31	-
2	0.856	0.18	30.45	-	30.63	-	48.00	-	-17.37	-
3	0.970	0.19	29.85	-	30.04	-	48.00	-	-17.96	-
4	1.672	0.20	22.13	-	22.33	-	48.00	-	-25.67	-
5	5.469	0.32	17.63	-	17.95	-	48.00	-	-30.05	-
6	28.098	0.76	27.06	-	27.82	-	48.00	-	-20.18	-

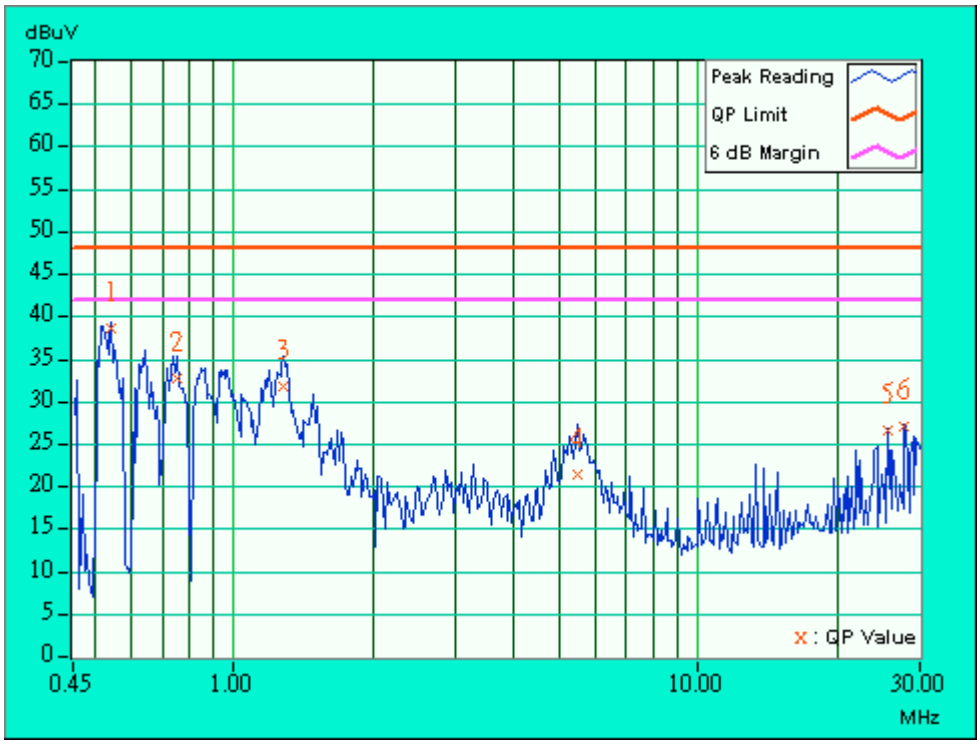
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless 22Mbps Access Point	MODEL	GL2422AP-0T1
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.544	0.12	37.32	-	37.44	-	48.00	-	-10.56	-
2	0.755	0.16	31.57	-	31.73	-	48.00	-	-16.27	-
3	1.281	0.20	30.57	-	30.77	-	48.00	-	-17.23	-
4	5.469	0.45	20.13	-	20.58	-	48.00	-	-27.42	-
5	25.711	1.21	25.37	-	26.58	-	48.00	-	-21.42	-
6	27.625	1.25	25.83	-	27.08	-	48.00	-	-20.92	-

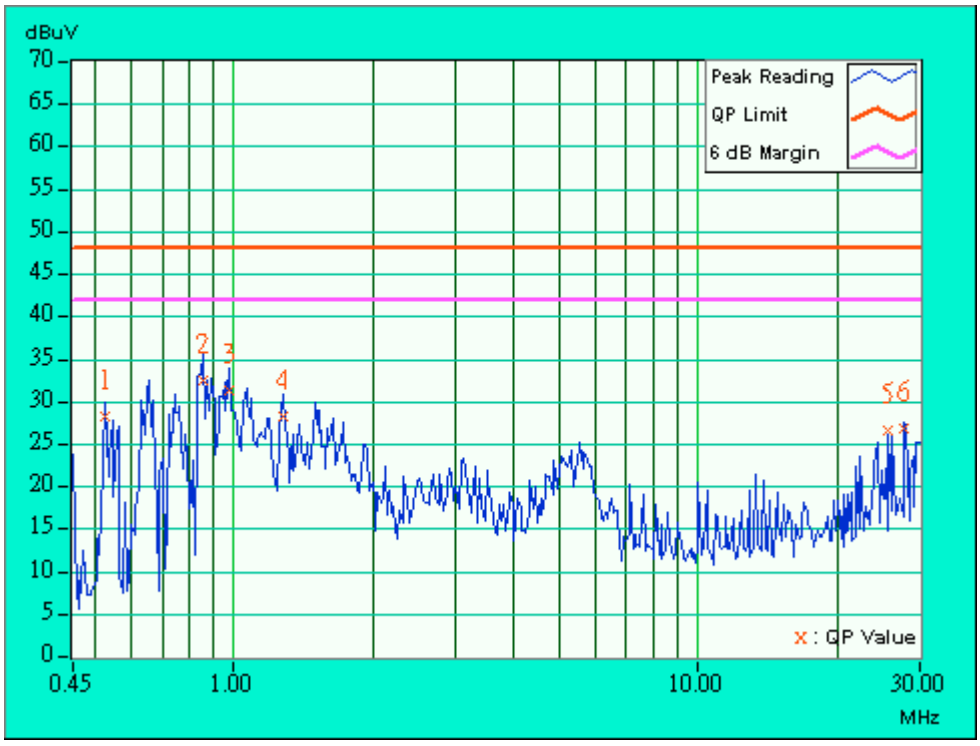
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.528	0.12	27.46	-	27.58	-	48.00	-	-20.42	-
2	0.860	0.18	31.75	-	31.93	-	48.00	-	-16.07	-
3	0.973	0.20	30.55	-	30.75	-	48.00	-	-17.25	-
4	1.273	0.20	27.57	-	27.77	-	48.00	-	-20.23	-
5	25.711	0.71	25.79	-	26.50	-	48.00	-	-21.50	-
6	27.625	0.75	26.10	-	26.85	-	48.00	-	-21.15	-

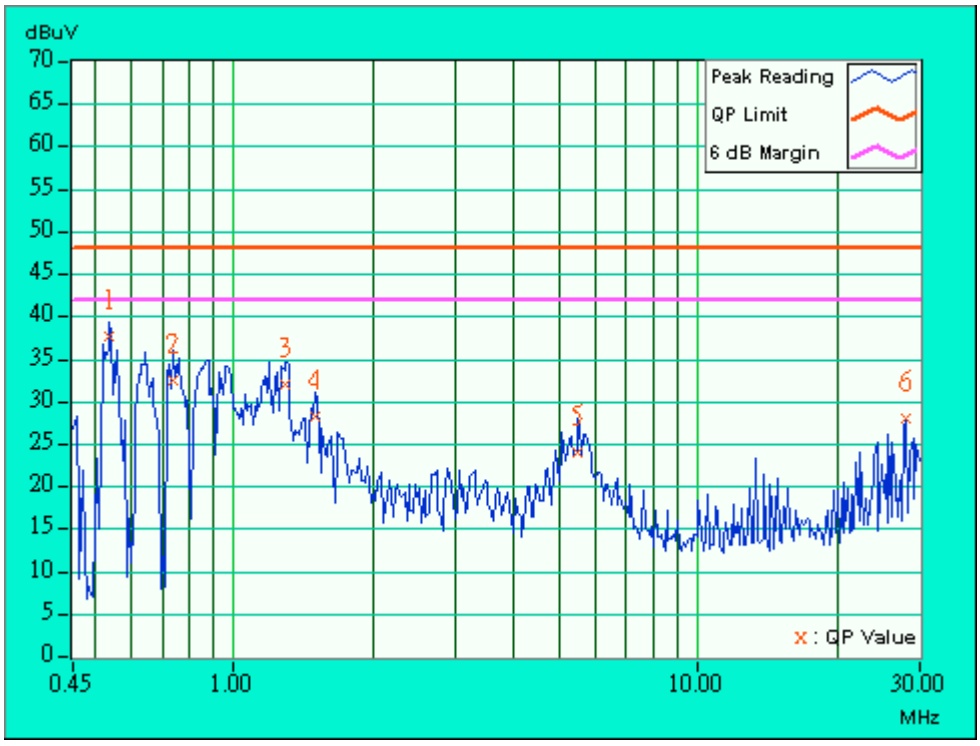
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.540	0.12	36.35	-	36.47	-	48.00	-	-11.53	-
2	0.739	0.16	31.33	-	31.49	-	48.00	-	-16.51	-
3	1.293	0.20	30.87	-	31.07	-	48.00	-	-16.93	-
4	1.500	0.20	27.11	-	27.31	-	48.00	-	-20.69	-
5	5.516	0.45	22.77	-	23.22	-	48.00	-	-24.78	-
6	28.098	1.26	26.74	-	28.00	-	48.00	-	-20.00	-

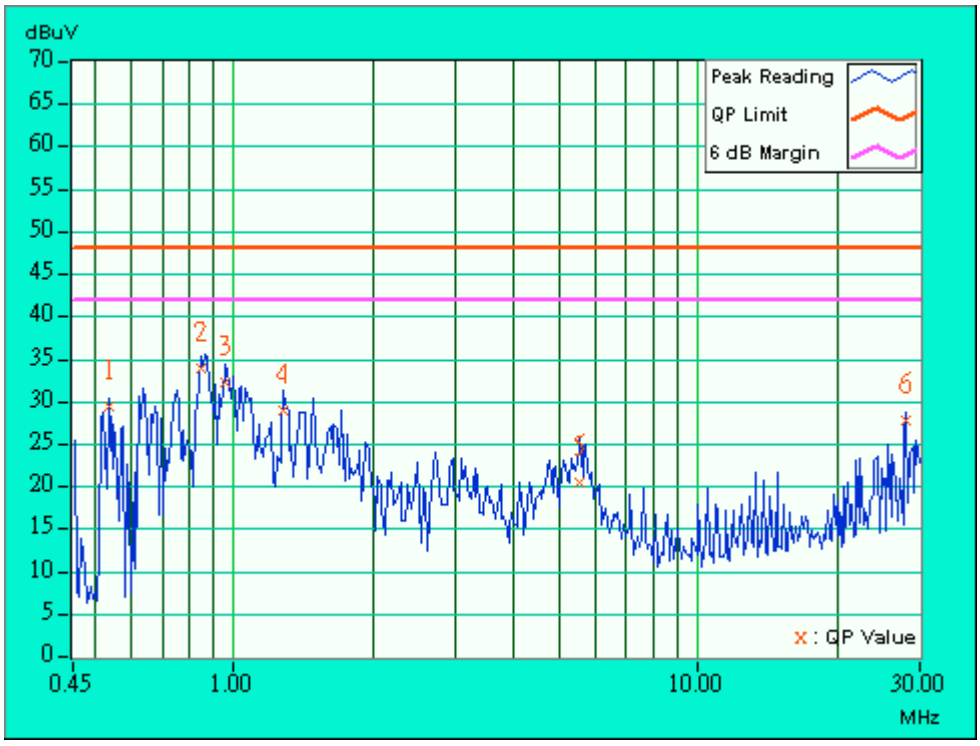
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.540	0.12	28.70	-	28.82	-	48.00	-	-19.18	-
2	0.852	0.18	33.14	-	33.32	-	48.00	-	-14.68	-
3	0.962	0.19	31.59	-	31.78	-	48.00	-	-16.22	-
4	1.277	0.20	28.24	-	28.44	-	48.00	-	-19.56	-
5	5.570	0.33	19.78	-	20.11	-	48.00	-	-27.89	-
6	28.098	0.76	27.10	-	27.86	-	48.00	-	-20.14	-

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



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
*HP Spectrum Analyzer	8590L	3544A01176	May 7, 2002
*HP Preamplifier	8447D	2944A08485	May 7, 2002
* HP Preamplifier	8449B	3008A01201	Dec. 06, 2002
* HP Preamplifier	8449B	3008A01292	Aug. 21, 2002
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Jan. 27, 2003
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 23, 2002
* CHASE BILOG Antenna	CBL6112A	2221	Aug. 2, 2002
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	July 6, 2002
* EMCO Horn Antenna	3115	9312-4192	April 9, 2003
* EMCO Turn Table	1060	1115	NA
* SHOSHIN Tower	AP-4701	A6Y005	NA
* Software	AS61D4	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Aug. 2, 2002
* TIMES RF cable	LMR-600	CABLE-ST5-01	Aug. 2, 2002
Open Field Test Site	Site 5	ADT-R05	July 28, 2002
VCCI Site Registration No.	Site 5	R-1039	NA
Site Registration No.	FCC: 90422 Canada IC: IC 3789 VCCI : R-1039		

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

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

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

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

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.

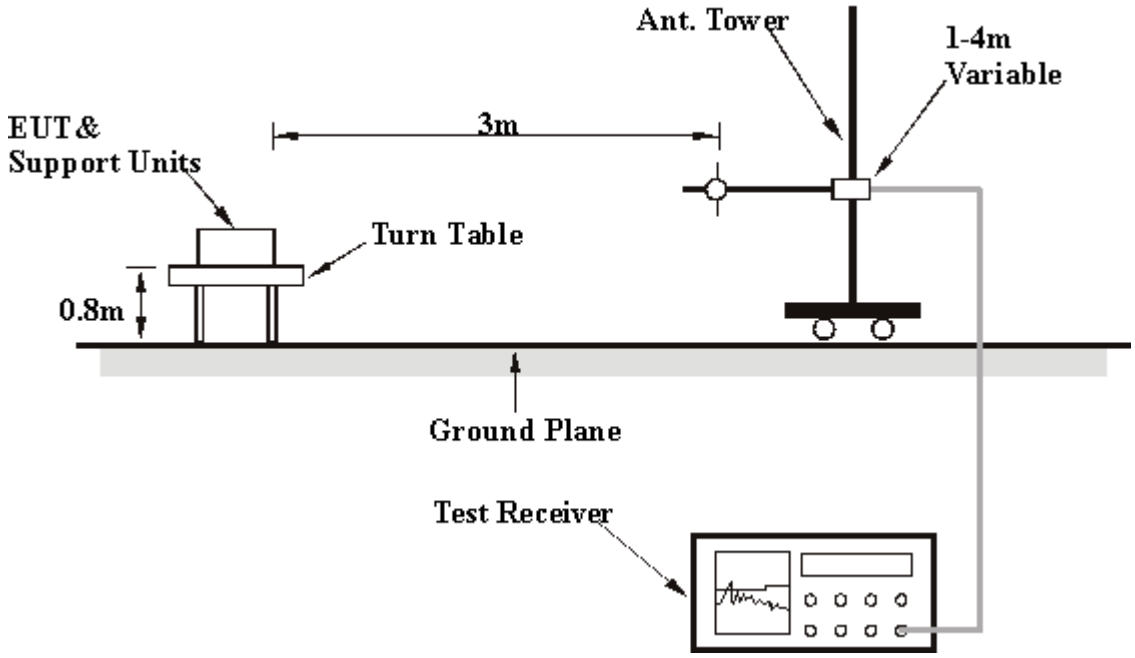
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

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 the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

NOTE:

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

4.2.4 TEST SETUP



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

4.2.5 EUT OPERATING CONDITIONS

Same as 4.1.5.

4.2.6 TEST RESULTS (A)

EUT	Wireless Network Access Point	**MODEL**	WAP22
MODE	Channel 11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	125.00	31.0 QP	43.50	-12.50	1.25H	204	18.43	11.47	1.10	0.00	-12.57
2	220.00	26.0 QP	46.00	-20.00	1.56H	63	14.37	10.12	1.51	0.00	-11.64
3	250.00	28.0 QP	46.00	-18.00	1.59H	170	14.31	12.02	1.66	0.00	-13.69
4	300.00	27.0 QP	46.00	-19.00	1.84H	170	11.94	13.18	1.88	0.00	-15.06
5	350.00	32.5 QP	46.00	-13.50	1.06H	159	16.25	14.21	2.04	0.00	-16.25
6	400.00	32.0 QP	46.00	-14.00	1.46H	352	13.65	16.11	2.24	0.00	-18.35
7	440.00	30.0 QP	46.00	-16.00	1.20H	49	11.31	16.32	2.38	0.00	-18.70
8	450.00	32.1 QP	46.00	-13.90	1.43H	206	13.32	16.37	2.41	0.00	-18.78
9	500.00	29.6 QP	46.00	-16.40	1.28H	352	9.84	17.26	2.50	0.00	-19.77
10	550.00	33.0 QP	46.00	-13.00	1.44H	206	12.40	17.93	2.68	0.00	-20.60
11	748.00	31.0 QP	46.00	-15.00	1.18H	271	7.60	20.14	3.26	0.00	-23.40
12	750.00	32.6 QP	46.00	-13.40	1.28H	142	9.16	20.18	3.26	0.00	-23.44
13	875.00	32.1 QP	46.00	-13.90	1.10H	75	7.93	20.63	3.54	0.00	-24.17
14	950.00	32.7 QP	46.00	-13.30	1.12H	130	7.71	21.20	3.79	0.00	-24.99

NOTE: 1 Emission level = Raw Value - Correction Factor
2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3 The other emission levels were very low against the limit.
4 Margin value = Emission level - Limit value

EUT	Wireless Network Access Point	MODEL	WAP22
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	200.00	28.0 QP	43.50	-15.50	1.56V	11	17.60	8.98	1.42	0.00	-10.40
2	220.00	32.0 QP	46.00	-14.00	1.00V	240	20.37	10.12	1.51	0.00	-11.63
3	250.00	31.0 QP	46.00	-15.00	1.08V	219	17.31	12.02	1.66	0.00	-13.69
4	350.00	32.0 QP	46.00	-14.00	1.03V	357	15.75	14.21	2.04	0.00	-16.25
5	375.00	34.6 QP	46.00	-11.40	1.08V	221	17.33	15.13	2.14	0.00	-17.27
6	400.00	33.0 QP	46.00	-13.00	1.28V	68	14.65	16.11	2.24	0.00	-18.36
7	500.00	30.0 QP	46.00	-16.00	1.14V	357	10.24	17.26	2.50	0.00	-19.76
8	625.00	31.4 QP	46.00	-14.60	1.57V	314	9.57	18.91	2.92	0.00	-21.84
9	748.00	32.7 QP	46.00	-13.30	1.36V	253	9.30	20.14	3.26	0.00	-23.41
10	750.00	32.5 QP	46.00	-13.50	1.05V	222	9.06	20.18	3.26	0.00	-23.45
11	850.00	30.4 QP	46.00	-15.60	1.60V	44	6.42	20.48	3.50	0.00	-23.98
12	950.00	27.0 QP	46.00	-19.00	1.18V	87	2.01	21.20	3.79	0.00	-24.99

NOTE: 1 Emission level = Raw Value - Correction Factor

2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)

3 The other emission levels were very low against the limit.

4 Margin value = Emission level - Limit value

EUT	Wireless Network Access Point	MODEL	WAP22
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.00	48.6 PK	74.00	-25.40	1.02H	241	53.40	25.20	4.86	34.90	4.84
2	*2412.00	94.4 PK	-	-	1.00H	339	62.20	27.11	5.10	0.00	-32.21
3	*2412.00	88.2 AV	-	-	1.00H	339	56.00	27.11	5.10	0.00	-32.21
4	4076.00	45.4 PK	74.00	-28.60	1.37H	14	43.00	30.13	6.78	34.52	-2.39
5	4824.00	47.2 PK	74.00	-26.80	1.38H	312	43.20	31.43	7.23	34.63	-4.02

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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.00	47.3 PK	74.00	-26.70	1.00V	47	52.10	25.20	4.86	34.90	4.84
2	*2412.00	105.2 PK	-	-	1.05V	27	73.00	27.11	5.10	0.00	-32.21
3	*2412.00	98.4 AV	-	-	1.05V	27	66.20	27.11	5.10	0.00	-32.21
4	4076.00	45.9 PK	74.00	-28.10	1.22V	341	43.50	30.13	6.78	34.52	-2.39
5	4824.00	47.7 PK	74.00	-26.30	1.36V	85	43.70	31.43	7.23	34.63	-4.03

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Network Access Point	**MODEL**	WAP22
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.00	46.3 PK	74.00	-27.70	1.85H	151	50.80	25.41	4.96	34.90	4.53
2	*2437.00	94.8 PK	-	-	1.73H	65	62.40	27.33	5.08	0.00	-32.41
3	*2437.00	90.4 AV	-	-	1.73H	65	58.00	27.33	5.08	0.00	-32.41
4	4126.00	46.2 PK	74.00	-27.80	1.28H	99	43.70	30.32	6.70	34.56	-2.46
5	4874.00	47.2 PK	74.00	-26.80	1.42H	310	43.10	31.47	7.21	34.63	-4.05

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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.00	46.2 PK	74.00	-27.80	1.31V	71	50.70	25.41	4.96	34.90	4.53
2	*2437.00	105.9 PK	-	-	1.27V	319	73.50	27.33	5.08	0.00	-32.40
3	*2437.00	99.4 AV	-	-	1.27V	319	67.00	27.33	5.08	0.00	-32.40
4	4126.00	46.7 PK	74.00	-27.30	1.28V	122	44.20	30.32	6.70	34.56	-2.46
5	4874.00	48.1 PK	74.00	-25.90	1.28V	355	44.00	31.47	7.21	34.63	-4.05

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Network Access Point	MODEL	WAP22
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.00	46.7 PK	74.00	-27.30	1.16H	80	51.00	25.62	5.02	34.90	4.26
2	*2463.00	94.4 PK	-	-	1.58H	14	62.00	27.33	5.08	0.00	-32.41
3	*2463.00	89.4 AV	-	-	1.58H	14	57.00	27.33	5.08	0.00	-32.41
4	2489.00	44.5 PK	74.00	-29.50	1.16H	298	46.80	27.54	5.06	34.90	2.31
5	4176.00	45.9 PK	74.00	-28.10	1.29H	160	43.40	30.41	6.68	34.58	-2.51
6	4924.00	47.1 PK	74.00	-26.90	1.45H	12	43.00	31.51	7.21	34.62	-4.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.00	48.7 PK	74.00	-25.30	1.11V	164	53.00	25.62	5.02	34.90	4.26
2	*2463.00	106.1 PK	-	-	1.16V	302	73.74	27.33	5.08	0.00	-32.41
3	*2463.00	99.4 AV	-	-	1.16V	302	67.00	27.33	5.08	0.00	-32.41
4	2492.00	45.7 PK	74.00	-28.30	1.11V	235	48.00	27.54	5.06	34.90	2.31
5	4176.00	45.5 PK	74.00	-28.50	1.30V	136	43.00	30.41	6.68	34.58	-2.51
6	4924.00	47.3 PK	74.00	-26.70	1.44V	345	43.20	31.51	7.21	34.62	-4.10

NOTE: 1. Emission level= Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.2.7 TEST RESULTS (B)

EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	200.00	28.0 QP	43.50	-15.50	1.54H	95	17.60	8.98	1.42	0.00	-10.40
2	250.00	29.7 QP	46.00	-16.30	1.45H	140	16.01	12.02	1.66	0.00	-13.69
3	375.00	36.2 QP	46.00	-9.80	1.06H	192	18.93	15.13	2.14	0.00	-17.28
4	400.00	32.4 QP	46.00	-13.60	1.73H	134	14.05	16.11	2.24	0.00	-18.35
5	500.00	33.0 QP	46.00	-13.00	1.03H	178	13.24	17.26	2.50	0.00	-19.76
6	550.00	32.0 QP	46.00	-14.00	1.66H	120	11.40	17.93	2.68	0.00	-20.60
7	600.00	30.4 QP	46.00	-15.60	1.74H	167	8.96	18.61	2.83	0.00	-21.44
8	625.00	35.5 QP	46.00	-10.50	2.05H	322	13.67	18.91	2.92	0.00	-21.83
9	650.00	33.0 QP	46.00	-13.00	1.77H	10	10.75	19.23	3.02	0.00	-22.25
10	675.00	28.0 QP	46.00	-18.00	1.29H	356	5.64	19.27	3.09	0.00	-22.36
11	725.00	32.0 QP	46.00	-14.00	1.61H	193	9.03	19.76	3.21	0.00	-22.97
12	748.00	39.3 QP	46.00	-6.70	1.28H	358	15.90	20.14	3.26	0.00	-23.40
13	750.00	32.0 QP	46.00	-14.00	1.46H	169	8.56	20.18	3.26	0.00	-23.44
14	800.00	31.0 QP	46.00	-15.00	1.26H	358	6.99	20.69	3.32	0.00	-24.01
15	875.00	31.4 QP	46.00	-14.60	1.69H	97	7.23	20.63	3.54	0.00	-24.17
16	950.00	31.0 QP	46.00	-15.00	1.00H	358	6.01	21.20	3.79	0.00	-24.99

NOTE: 1 Emission level = Raw Value - Correction Factor

2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)

3 The other emission levels were very low against the limit.

4 Margin value = Emission level - Limit value

EUT	Wireless 22Mbps Access Point	MODEL	GL2422AP-0T1
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	125.00	32.2 QP	43.50	-11.30	1.03V	270	19.63	11.47	1.10	0.00	-12.57
2	141.00	33.0 QP	43.50	-10.50	1.00V	300	21.11	10.72	1.17	0.00	-11.89
3	164.00	34.0 QP	43.50	-9.50	1.03V	144	23.19	9.53	1.28	0.00	-10.82
4	176.00	32.0 QP	43.50	-11.50	1.03V	205	21.59	9.08	1.33	0.00	-10.42
5	220.00	32.8 QP	46.00	-13.20	1.06V	11	21.17	10.12	1.51	0.00	-11.64
6	250.00	31.0 QP	46.00	-15.00	1.03V	73	17.31	12.02	1.66	0.00	-13.70
7	350.00	33.0 QP	46.00	-13.00	1.15V	18	16.75	14.21	2.04	0.00	-16.26
8	375.00	32.0 QP	46.00	-14.00	1.18V	286	14.73	15.13	2.14	0.00	-17.27
9	400.00	30.8 QP	46.00	-15.20	1.40V	30	12.45	16.11	2.24	0.00	-18.36
10	500.00	31.4 QP	46.00	-14.60	1.23V	116	11.64	17.26	2.50	0.00	-19.76
11	550.00	33.7 QP	46.00	-12.30	1.14V	288	13.10	17.93	2.68	0.00	-20.60
12	625.00	33.5 QP	46.00	-12.50	1.14V	178	11.67	18.91	2.92	0.00	-21.83
13	650.00	34.2 QP	46.00	-11.80	1.05V	82	11.95	19.23	3.02	0.00	-22.25
14	660.00	32.0 QP	46.00	-14.00	1.12V	117	9.71	19.25	3.05	0.00	-22.29
15	700.00	32.0 QP	46.00	-14.00	1.76V	271	9.54	19.31	3.15	0.00	-22.46
16	748.00	36.0 QP	46.00	-10.00	1.05V	357	12.60	20.14	3.26	0.00	-23.40
17	750.00	31.0 QP	46.00	-15.00	1.00V	198	7.56	20.18	3.26	0.00	-23.44
18	950.00	32.0 QP	46.00	-14.00	1.12V	113	7.01	21.20	3.79	0.00	-24.99

NOTE: 1 Emission level = Raw Value - Correction Factor

2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)

3 The other emission levels were very low against the limit.

4 Margin value = Emission level - Limit value

EUT	Wireless 22Mbps Access Point	MODEL	GL2422AP-0T1
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.00	47.6 PK	74.00	-26.40	1.03H	300	52.40	25.20	4.86	34.90	4.84
2	*2412.00	96.4 PK	-	-	1.14H	356	64.20	27.11	5.10	0.00	-32.21
3	*2412.00	91.9 AV	-	-	1.14H	356	59.70	27.11	5.10	0.00	-32.21
4	4076.00	46.9 PK	74.00	-27.10	1.52H	37	44.50	30.13	6.78	34.52	-2.39
5	4824.00	47.3 PK	74.00	-26.70	1.38H	10	43.30	31.43	7.23	34.63	-4.02

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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.00	46.2 PK	74.00	-27.80	1.67V	61	51.00	25.20	4.86	34.90	4.84
2	*2412.00	104.8 PK	-	-	1.67V	158	72.60	27.11	5.10	0.00	-32.21
3	*2412.00	99.4 AV	-	-	1.67V	158	67.20	27.11	5.10	0.00	-32.21
4	4076.00	46.2 PK	74.00	-27.80	1.09V	149	43.80	30.13	6.78	34.52	-2.39
5	4824.00	46.7 PK	74.00	-27.30	1.43V	64	42.70	31.43	7.23	34.63	-4.03

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 6	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.00	47.9 PK	74.00	-26.10	2.41H	16	52.40	25.41	4.96	34.90	4.53
2	*2437.00	97.2 PK	-	-	2.53H	108	64.80	27.33	5.08	0.00	-32.40
3	*2437.00	92.4 AV	-	-	2.53H	108	60.00	27.33	5.08	0.00	-32.40
4	4126.00	45.1 PK	74.00	-28.90	1.29H	283	42.60	30.32	6.70	34.56	-2.46
5	4874.00	47.1 PK	74.00	-26.90	1.45H	16	43.00	31.47	7.21	34.63	-4.06

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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.00	48.9 PK	74.00	-25.10	1.31V	353	53.40	25.41	4.96	34.90	4.53
2	*2437.00	104.4 PK	-	-	1.26V	337	72.00	27.33	5.08	0.00	-32.40
3	*2437.00	99.6 AV	-	-	1.26V	337	67.20	27.33	5.08	0.00	-32.40
4	4126.00	46.0 PK	74.00	-28.00	1.28V	323	43.50	30.32	6.70	34.56	-2.46
5	4874.00	47.2 PK	74.00	-26.80	1.27V	288	43.10	31.47	7.21	34.63	-4.05

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless 22Mbps Access Point	**MODEL**	GL2422AP-0T1
MODE	Channel 11	**FREQUENCY RANGE**	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 70%RH, 1005 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/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.00	49.7 PK	74.00	-24.30	1.16H	56	54.00	25.62	5.02	34.90	4.26
2	*2463.00	96.4 PK	-	-	1.28H	36	64.00	27.33	5.08	0.00	-32.41
3	*2463.00	91.4 AV	-	-	1.28H	36	59.00	27.33	5.08	0.00	-32.41
4	2496.00	46.2 PK	74.00	-27.80	1.38H	53	48.50	27.54	5.06	34.90	2.31
5	4176.00	46.5 PK	74.00	-27.50	1.21H	336	44.00	30.41	6.68	34.58	-2.51
6	4924.00	47.1 PK	74.00	-26.90	1.47H	20	43.00	31.51	7.21	34.62	-4.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.00	49.5 PK	74.00	-24.50	1.67V	302	53.80	25.62	5.02	34.90	4.26
2	*2463.00	106.4 PK	-	-	1.40V	228	74.00	27.33	5.08	0.00	-32.41
3	*2463.00	100.4 AV	-	-	1.40V	228	68.00	27.33	5.08	0.00	-32.41
4	2495.00	46.7 PK	74.00	-27.30	1.00V	242	49.00	27.54	5.06	34.90	2.31
5	4176.00	47.2 PK	74.00	-26.80	1.46V	217	44.70	30.41	6.68	34.58	-2.51
6	4924.00	46.9 PK	74.00	-27.10	1.44V	170	42.80	31.51	7.21	34.62	-4.10

NOTE: 1. Emission level= Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.3 BAND EDGES MEASUREMENT

4.3.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	July 17, 2002

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

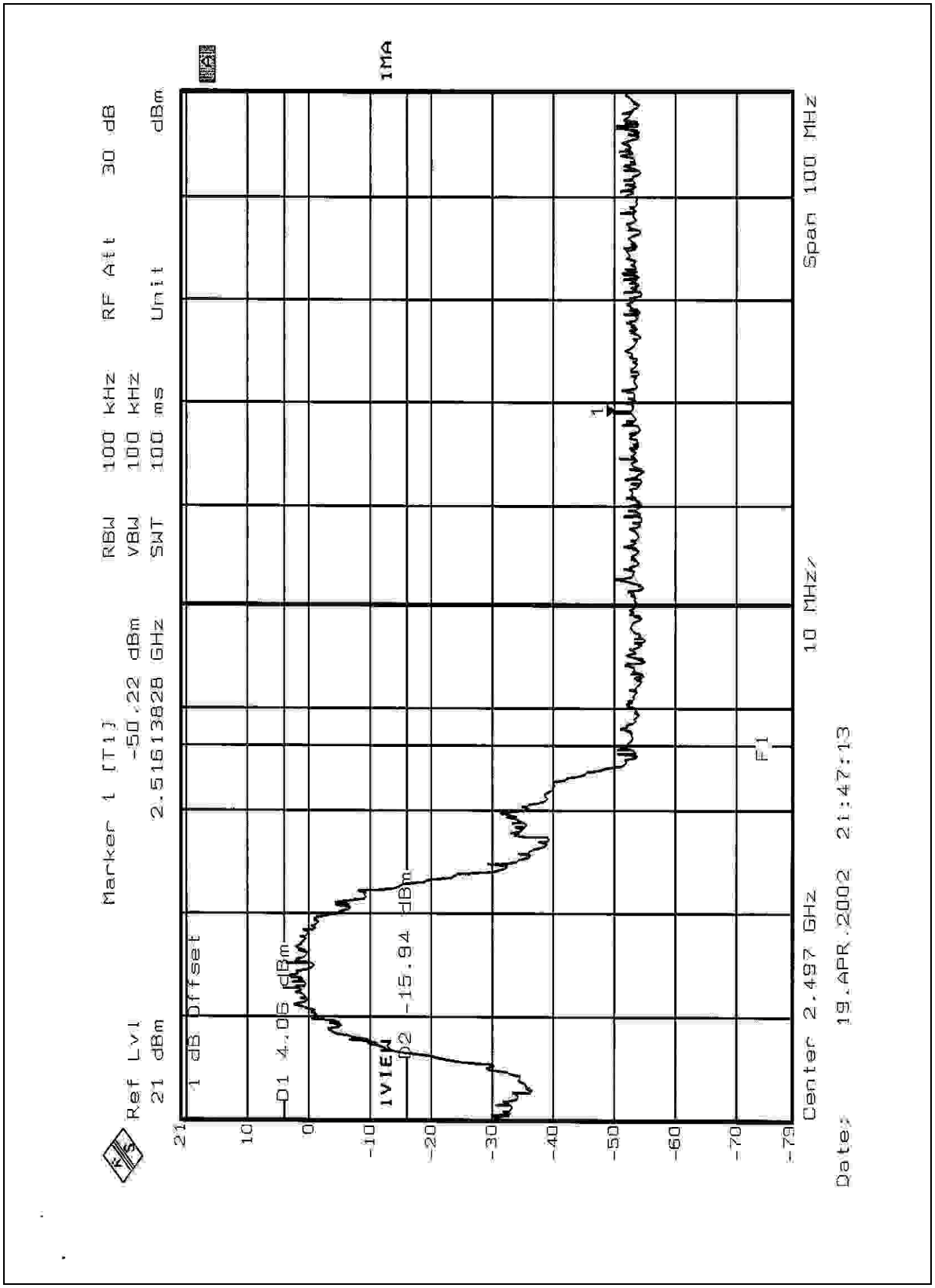
4.3.4 EUT OPERATING CONDITION

Same as Item 3.4.5

4.3.5 TEST RESULTS

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

NOTE: The band edge emission plot on the following 4 pages (chose front two pages for model GL2411AP-0T1) shows 54.28dB delta between carrier maximum power and local maximum emission in restrict band (2.5161GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.6 (Page 38) is 100.4dBuV/m, so the maximum field strength in restrict band is 100.4-54.28=46.12dBuV/m which is under 54 dBuV/m limit.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RBW 100 kHz
VBW 100 kHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB Offset
D1 4.0 dB
1VIEW
D2 -15.94 dBm
1MA
F1
Center 2.497 GHz
10 MHz/
Span 100 MHz
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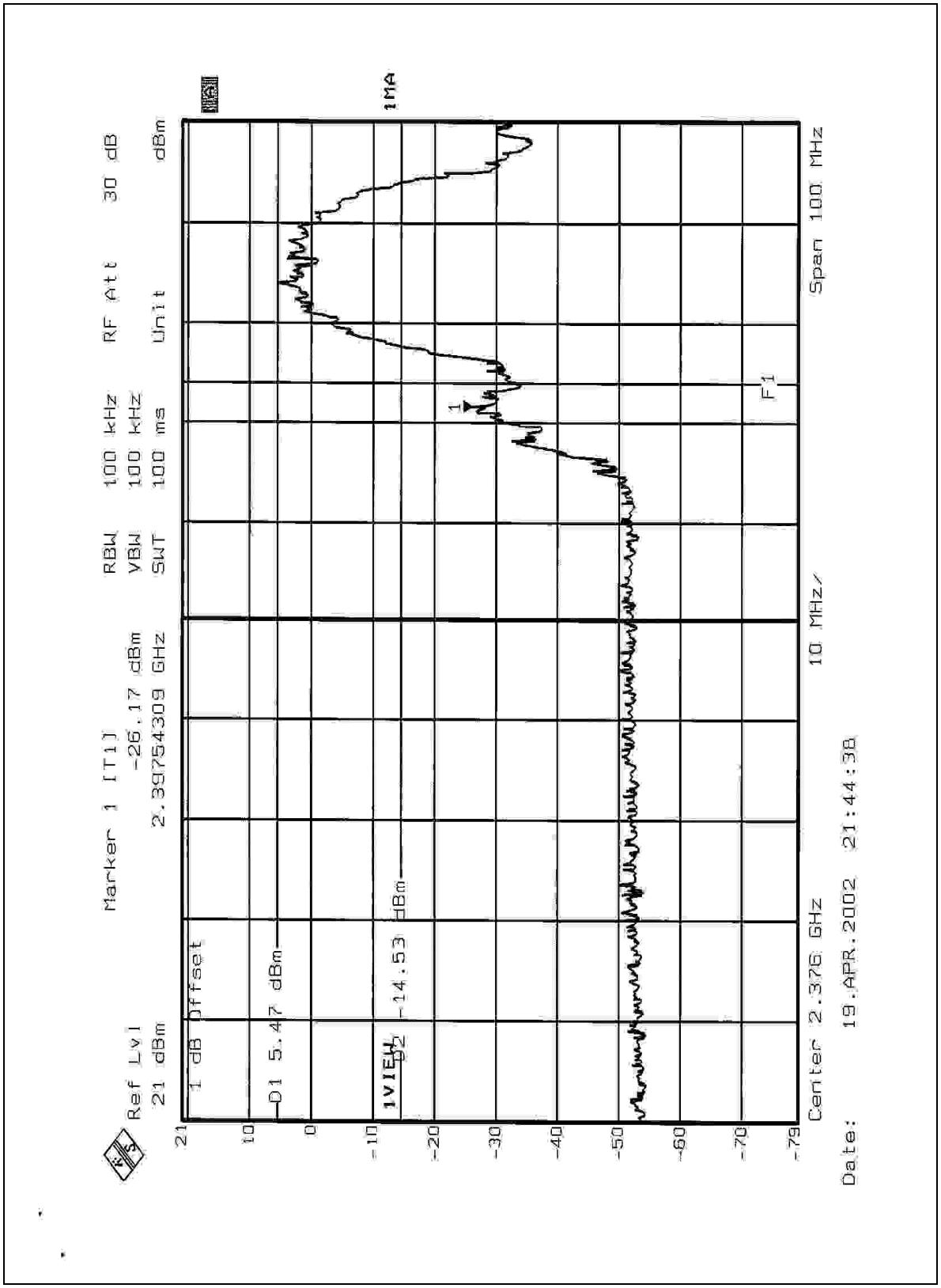
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1 dB Offset
D1 5.47 dBm
Marker 1 [T1]
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1VIEW
-14.53 dBm
RBW 100 kHz
VBW 100 kHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1MA
F1
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10 MHz/
Center 2.376 GHz
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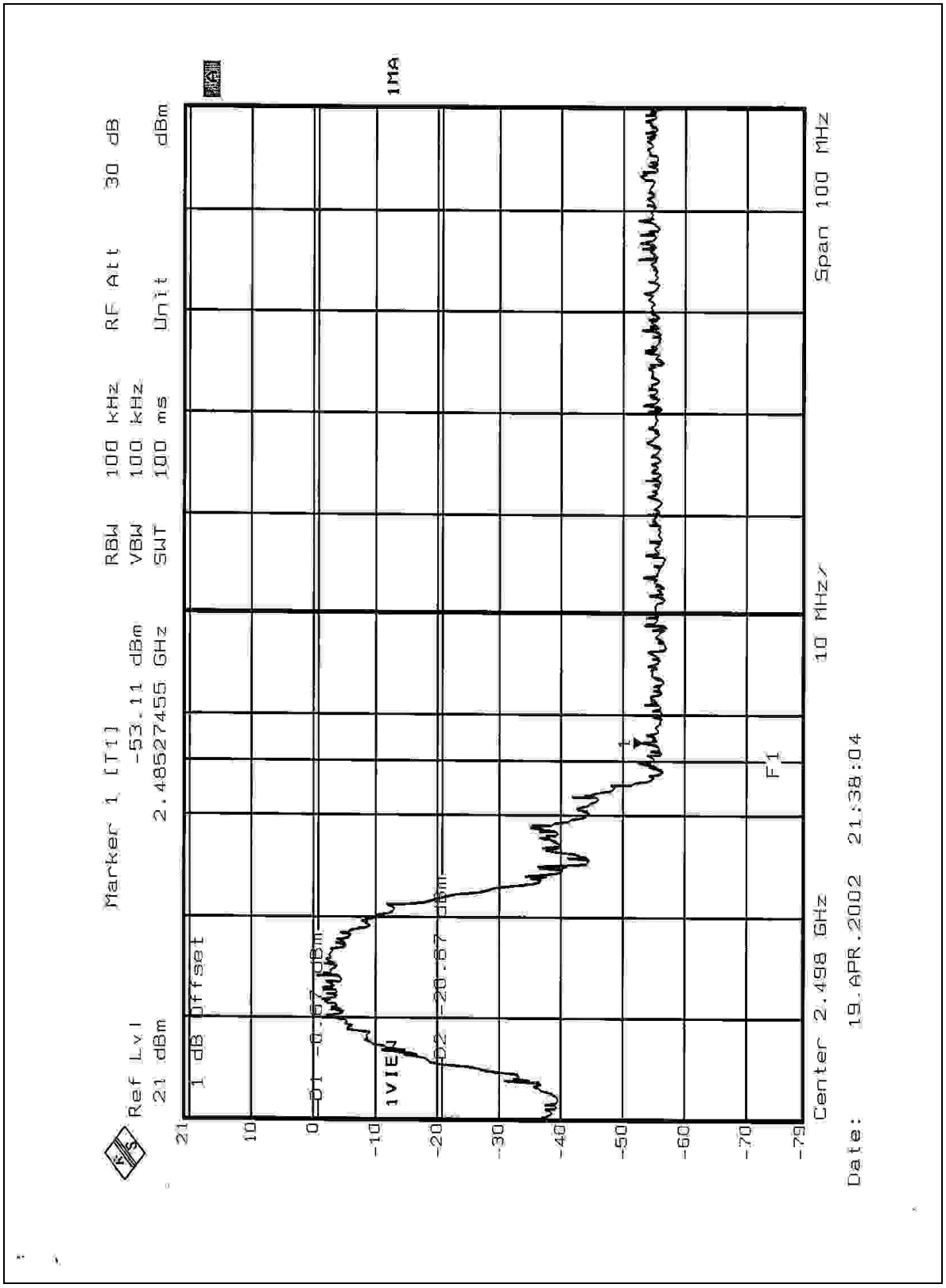
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1 dB Offset
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RBW 100 kHz
VBW 100 kHz
SWT 100 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
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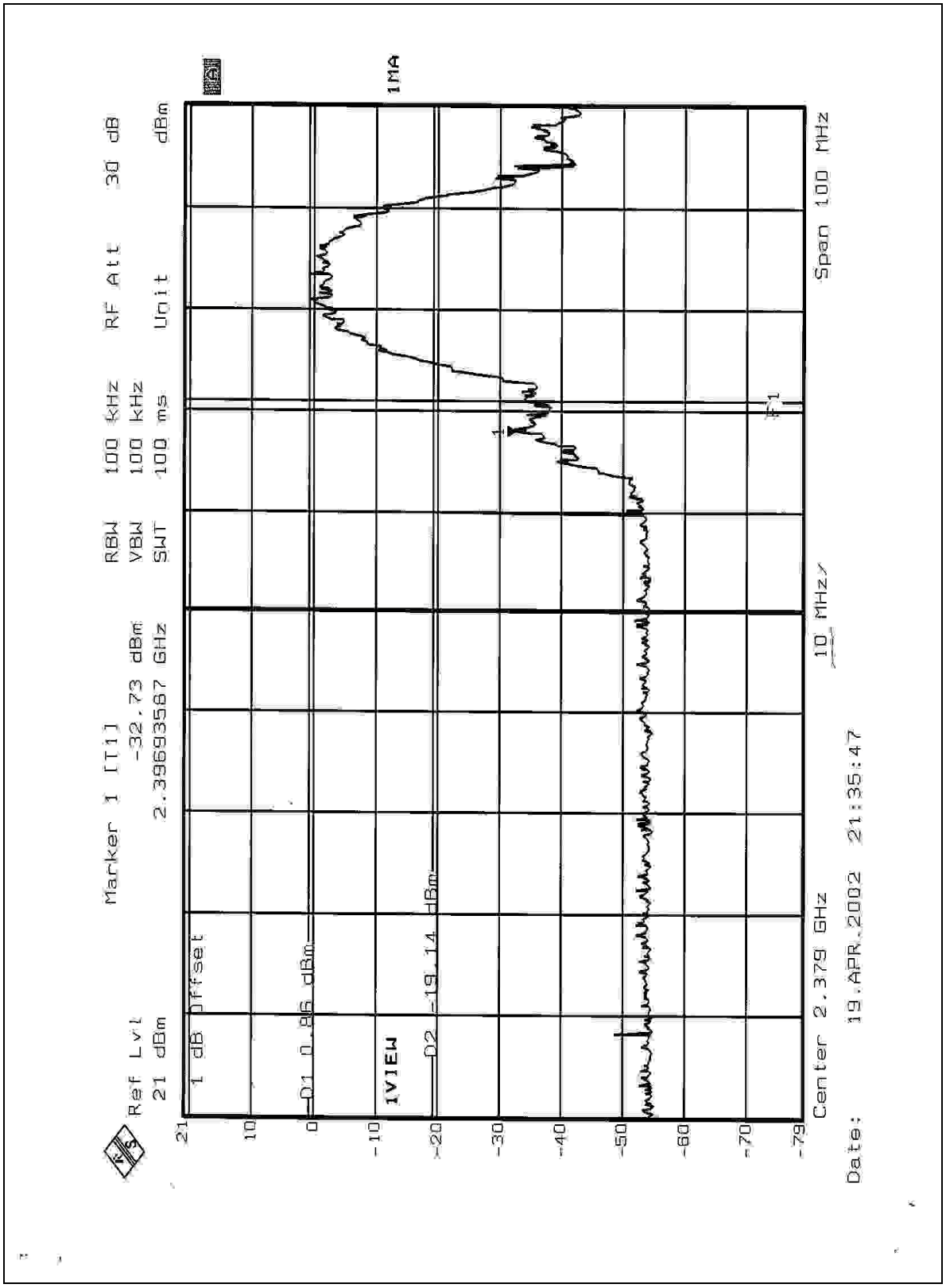
D2 -20.87 dBm
F1
Center 2.498 GHz
10 MHz/
Span 100 MHz
Date: 19.APR.2002 21:38:04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RBW 100 kHz
VBW 100 kHz
SWT 100 ms
RF Att 30 dB
Unit dBm
Ref Lvl
21 dBm
1 dB Offset
01 0.96 dBm
1VIEW
02 -19.14 dBm
1MA
F1
Span 100 MHz
10 MHz/
Center 2.379 GHz
Date: 19.APR.2002 21:35:47

4.4 ANTENNA REQUIREMENT

4.4.1 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.

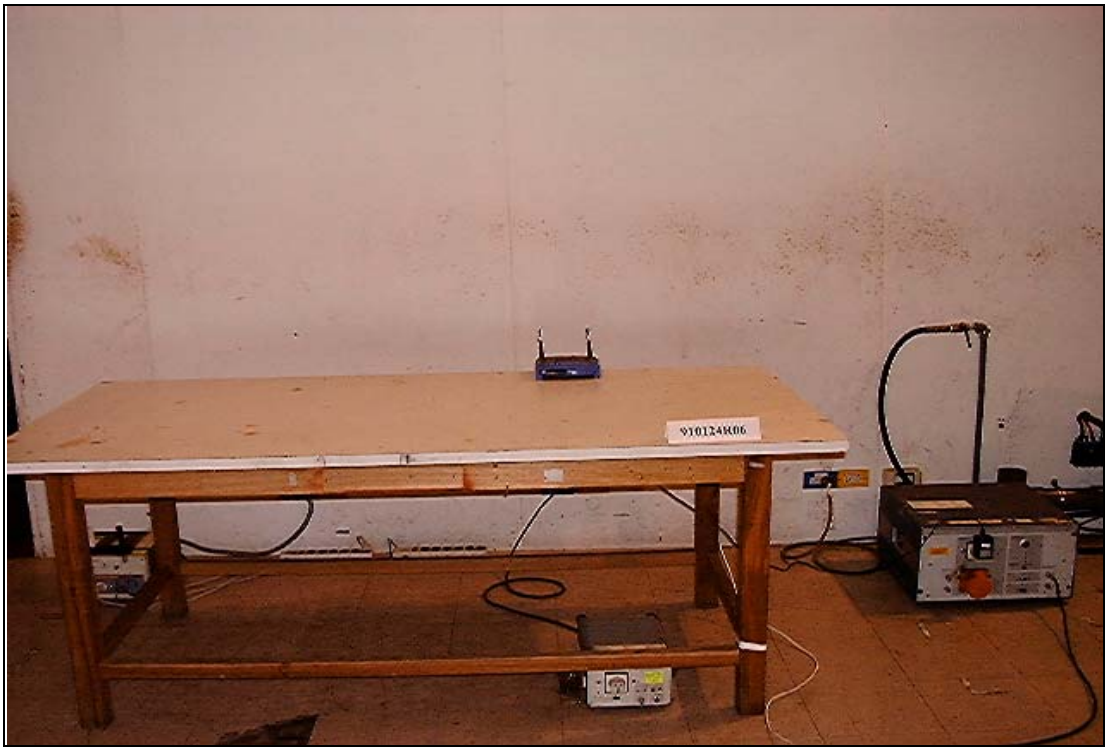
4.4.2 ANTENNA CONNECTED CONSTRUCTION

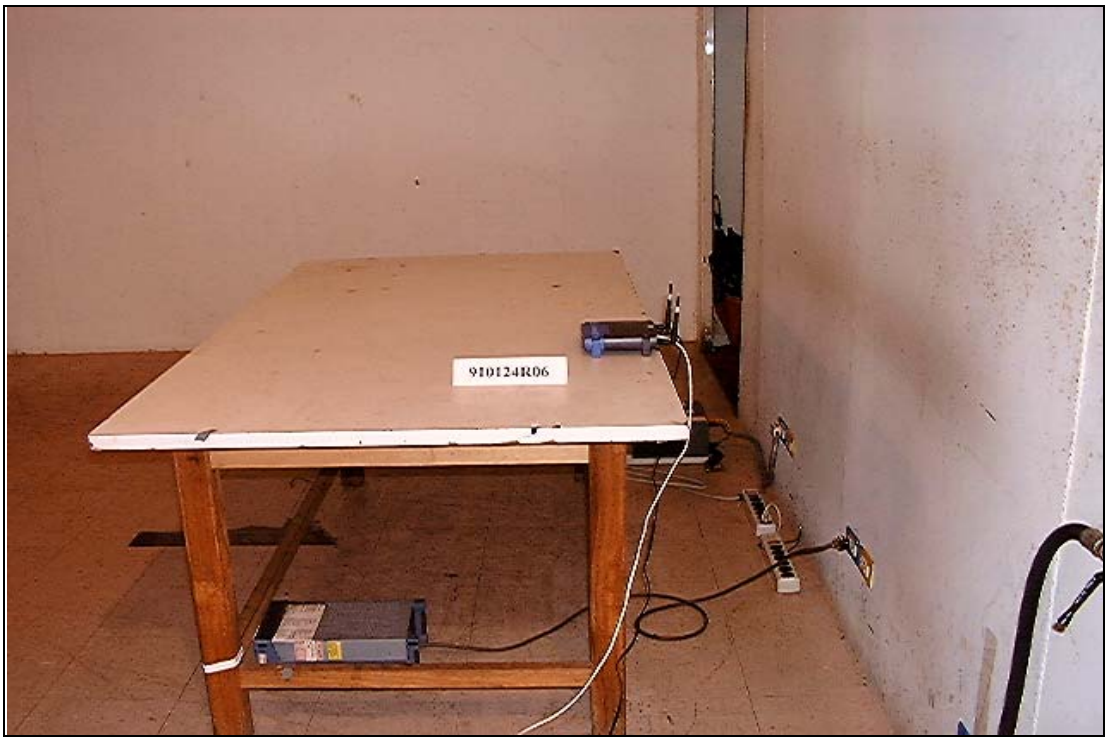
The antenna used in this product is Dipole Antenna. There are two combinations on the antenna connector as following,

Antenna Connector	Set 1	Set 2
Internal	MCX	MCX
External	Reversed TNC	NA

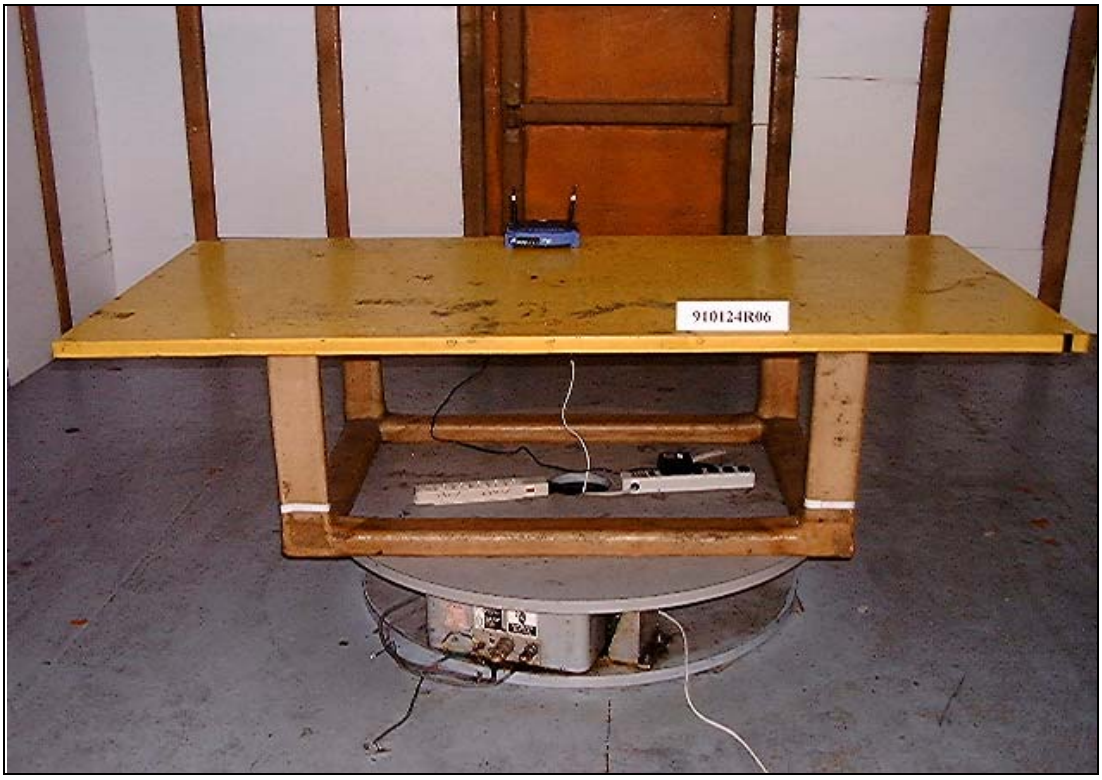
5 PHOTOGRAPHS OF THE TEST CONFIGURATION

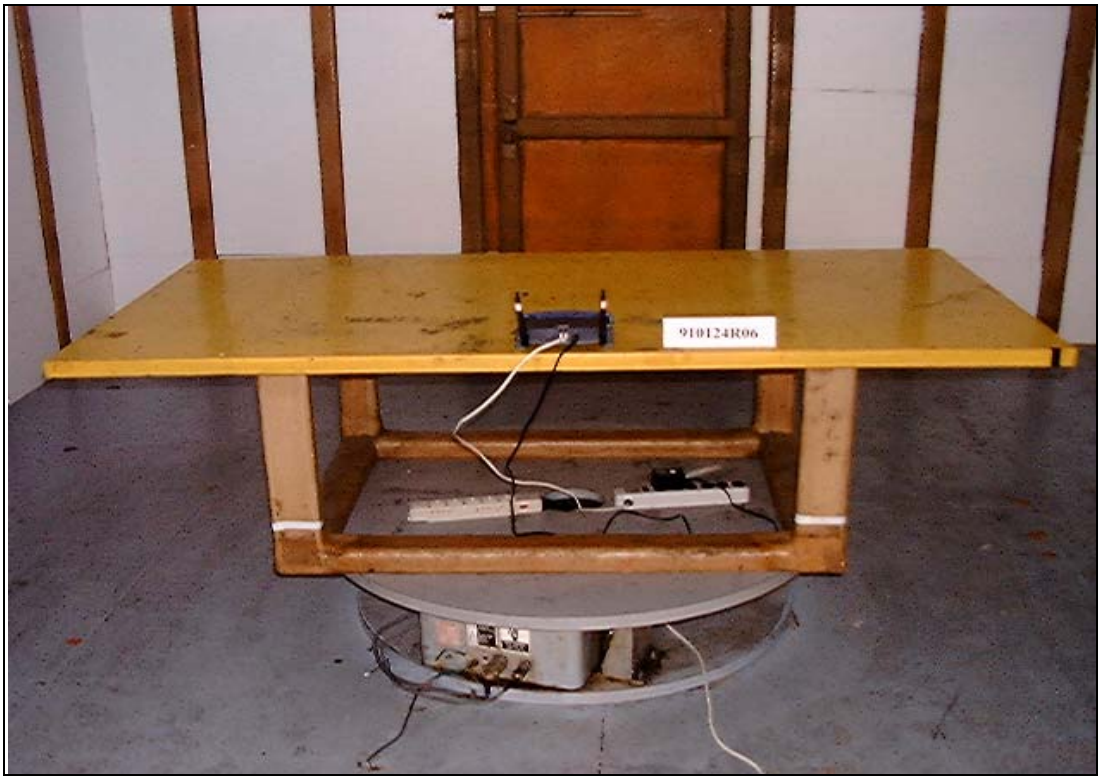
CONDUCTED EMISSION TEST





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, UL
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.

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