



FCC TEST REPORT

REPORT NO.: RF930209R02B

MODEL NO.: WLG-2009 (refer to page 6 for other model)

RECEIVED: NA

TESTED: Feb. 06 ~ Feb. 27, 2004

ISSUED: Sep. 09, 2005

APPLICANT: CAMEO COMMUNICATIONS, INC.

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ISSUED BY: Advance Data Technology Corporation

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TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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Table of Contents

1	CERTIFICATION	4
2	SUMMARY OF TEST RESULTS	5
2.1	MEASUREMENT UNCERTAINTY	5
3	GENERAL INFORMATION	6
3.1	GENERAL DESCRIPTION OF EUT	6
3.2	DESCRIPTION OF TEST MODES	7
3.2.1	CONFIGURATION OF SYSTEM UNDER TEST	7
3.2.2	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	8
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	10
3.4	DESCRIPTION OF SUPPORT UNITS	10
4	TEST TYPES AND RESULTS	11
4.1	CONDUCTED EMISSION MEASUREMENT	11
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	11
4.1.2	TEST INSTRUMENTS	11
4.1.3	TEST PROCEDURES	12
4.1.4	DEVIATION FROM TEST STANDARD	12
4.1.5	TEST SETUP	13
4.1.6	EUT OPERATING CONDITIONS	13
4.1.7	TEST RESULTS	14
4.2	RADIATED EMISSION MEASUREMENT	20
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	20
4.2.2	TEST INSTRUMENTS	21
4.2.3	TEST PROCEDURES	22
4.2.4	DEVIATION FROM TEST STANDARD	22
4.2.5	TEST SETUP	23
4.2.6	EUT OPERATING CONDITIONS	23
4.2.7	TEST RESULTS	24
4.3	6dB BANDWIDTH MEASUREMENT	37
4.3.1	LIMITS OF 6DB BANDWIDTH MEASUREMENT	37
4.3.2	TEST INSTRUMENTS	37
4.3.3	TEST PROCEDURE	38
4.3.4	DEVIATION FROM TEST STANDARD	38
4.3.5	TEST SETUP	38
4.3.6	EUT OPERATING CONDITIONS	38
4.3.7	TEST RESULTS	39
4.4	MAXIMUM PEAK OUTPUT POWER	45
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	45
4.4.2	TEST INSTRUMENTS	45
4.4.3	TEST PROCEDURES	46
4.4.4	DEVIATION FROM TEST STANDARD	46
4.4.5	TEST SETUP	46
4.4.6	EUT OPERATING CONDITIONS	46
4.4.7	TEST RESULTS	47
4.5	POWER SPECTRAL DENSITY MEASUREMENT	48
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	48
4.5.2	TEST INSTRUMENTS	48
4.5.3	TEST PROCEDURE	49



4.5.4	DEVIATION FROM TEST STANDARD	49
4.5.5	TEST SETUP.....	49
4.5.6	EUT OPERATING CONDITIONS	49
4.5.7	TEST RESULTS	50
4.6	BAND EDGES MEASUREMENT	56
4.6.1	LIMITS OF BAND EDGES MEASUREMENT.....	56
4.6.2	TEST INSTRUMENTS.....	56
4.6.3	TEST PROCEDURE.....	56
4.6.4	DEVIATION FROM TEST STANDARD	56
4.6.5	EUT OPERATING CONDITION	56
4.6.6	TEST RESULTS	57
4.7	ANTENNA REQUIREMENT	65
4.7.1	STANDARD APPLICABLE	65
4.7.2	ANTENNA CONNECTED CONSTRUCTION	65
5	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	66
6	INFORMATION ON THE TESTING LABORATORIES	68



1 CERTIFICATION

PRODUCT : 802.11g Wireless LAN Access Point
MODEL NO.: WLG-2009 (refer to page 5 for other model)
BRAND : Cameo (refer to page 5 for other brand)
APPLICANT : CAMEO COMMUNICATIONS, INC.
TEST SAMPLE : ENGINEERING SAMPLE
STANDARDS : FCC PART 15, SUBPART C (SECTION 15.247),
ANSI C63.4-1992

The above equipment (model no.: WLG-2009) is identical to model no.: WLAP 2454 NM, which has been tested by **Advance Data Technology Corporation** from Feb. 06 to Feb. 27, 2004, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Andrea Hsia, **DATE:** Sep. 09, 2005
(Andrea Hsia)

TECHNICAL
ACCEPTANCE : Gary Chang, **DATE:** Sep. 09, 2005
Responsible for RF (Gary Chang)

APPROVED BY : Cody Chang, **DATE:** Sep. 09, 2005
(Cody Chang, Deputy 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 -11.99dB at 0.492MHz
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 -0.30dB at 486.00MHz
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

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz ~ 30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.73 dB
	200MHz ~ 1000MHz	3.74 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	802.11g Wireless LAN Access Point
MODEL NO.	WLG-2009
POWER SUPPLY	5Vdc from power adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	47.206mW
ANTENNA TYPE	Dipole & PIFA antenna with 2dBi gain
DATA CABLE	NA
I/O PORTS	RJ45
ASSOCIATED DEVICES	NA

NOTE:

1. This report is issued as a duplicate report of RF930209R02 and differences are the brand, product name, model no and applicant.
2. The following OEMs were provided to this EUT. They are identical to each other except for their model number and brand name due to marketing requirement.

ITEM	BRAND	MODEL NO.	REMARK
1	Cameo	WLG-2009	
2	Allnet GmbH	ALL0265	OEM

3. The EUT was operated with following power adapter:

Brand:	D-Link
Model:	SMP-T1378
Input:	100-120Vac, 0.5A, 50-60Hz
Output:	5Vdc, 2.0A

4. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps
5. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
6. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

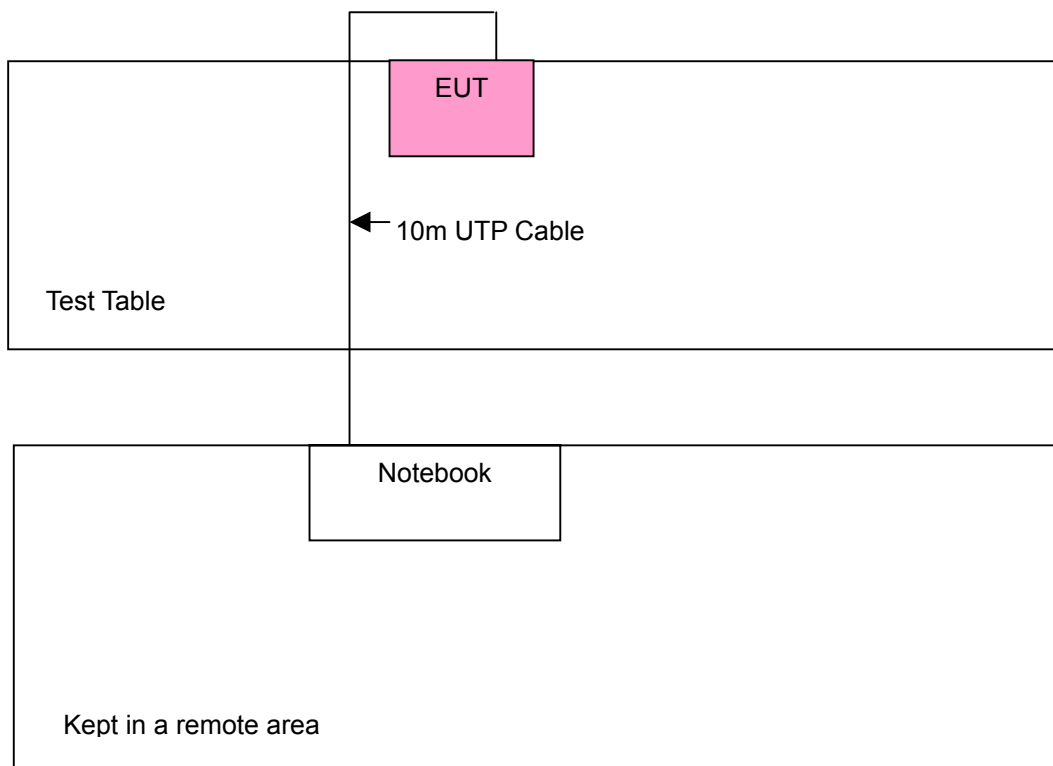


3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to 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		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST





3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
-	√	√	√	√	NA

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz
 RE≥1G: Radiated Emission above 1GHz APCM: Antenna Port Conducted Measurement

Power Line Conducted Emission Test:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	11	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

**Bandedge Measurement:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 11	DSSS	CCK	11
802.11g	1 to 11	1, 11	OFDM	BPSK	6

Antenna Port Conducted Measurement:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6



3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an 802.11g Wireless LAN Access Point. 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	NOTEBOOK	DELL	PP01L	TW-0791UH-12800-123-5423	FCC DoC Approved

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

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



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (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 UNTIL
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.



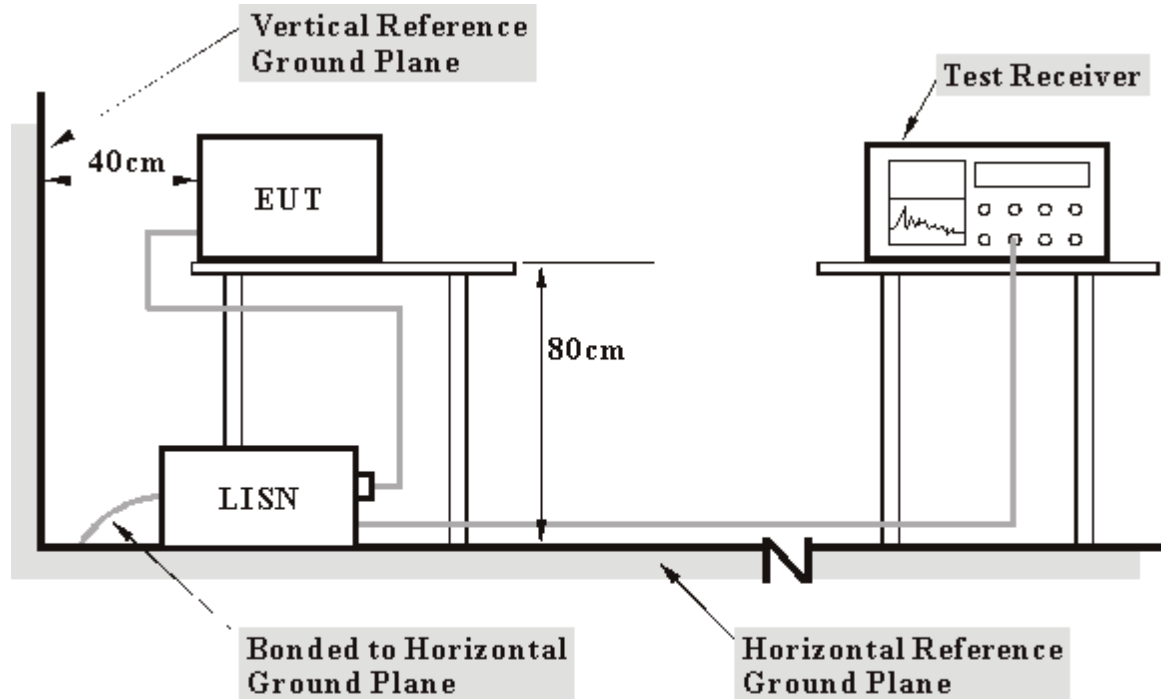
4.1.3 TEST PROCEDURES

- 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 Limit - 20dB was not recorded.

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. Placed the EUT on the testing table.
- b. Prepared another notebook 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 RJ45 cable.
- d. The communication partner sent data to EUT by command "PING".



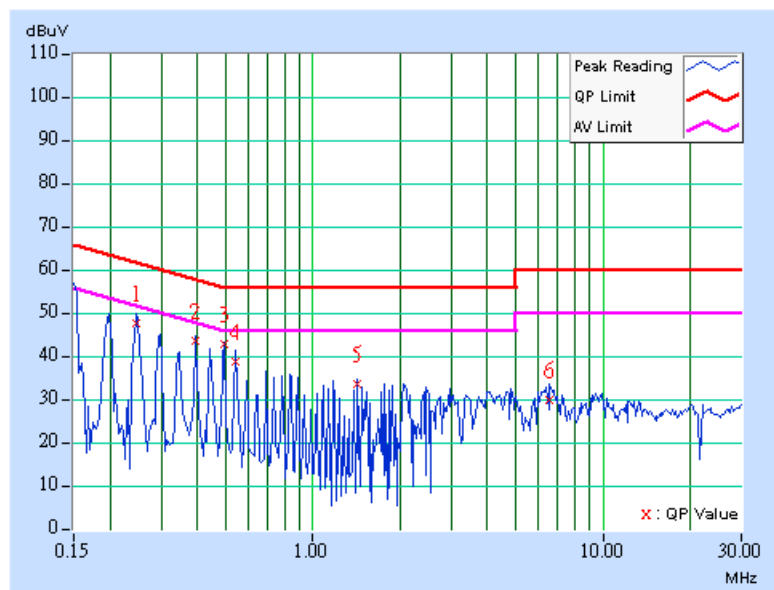
4.1.7 TEST RESULTS

EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
MODE	Channel 1	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line 1
ENVIRONMENTAL CONDITIONS	20deg. C, 75%RH, 991hPa	TESTED BY	Allen Chang

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	0.246	0.12	47.41	-	47.53	-	61.89
2	0.393	0.20	43.38	-	43.58	-	58.00	48.00	-14.42	-
3	0.495	0.20	42.41	-	42.61	-	56.08	46.08	-13.47	-
4	0.543	0.20	38.57	-	38.77	-	56.00	46.00	-17.23	-
5	1.429	0.20	33.29	-	33.49	-	56.00	46.00	-22.51	-
6	6.545	0.43	29.57	-	30.00	-	60.00	50.00	-30.00	-

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- 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.



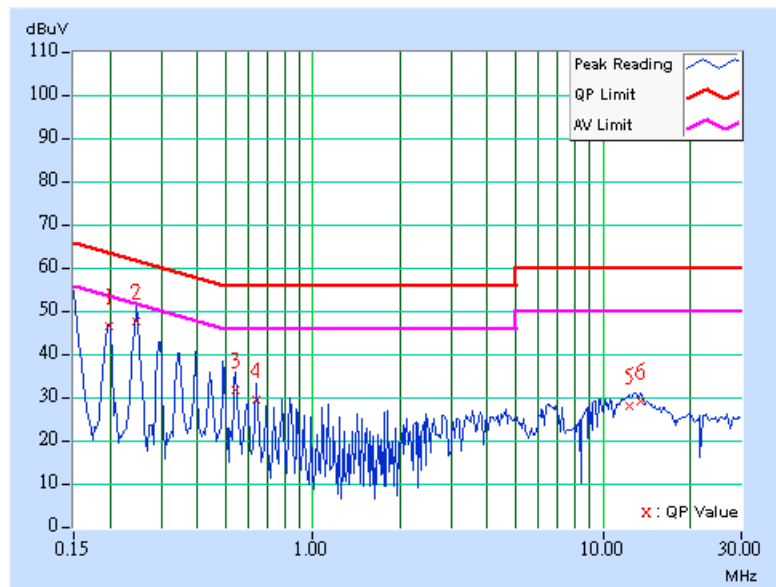


EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
MODE	Channel 1	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line 2
ENVIRONMENTAL CONDITIONS	20deg. C, 75%RH, 991hPa	TESTED BY	Allen Chang

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	0.198	0.10	46.08	-	46.18	-	63.69	53.69	-17.51
2	0.246	0.12	46.94	-	47.06	-	61.89	51.89	-14.83	-
3	0.543	0.20	31.07	-	31.27	-	56.00	46.00	-24.73	-
4	0.639	0.20	29.08	-	29.28	-	56.00	46.00	-26.72	-
5	12.392	0.64	27.44	-	28.08	-	60.00	50.00	-31.92	-
6	13.424	0.71	28.56	-	29.27	-	60.00	50.00	-30.73	-

*(The test data is in accordance with ADT Report No.: RF930209R02.)

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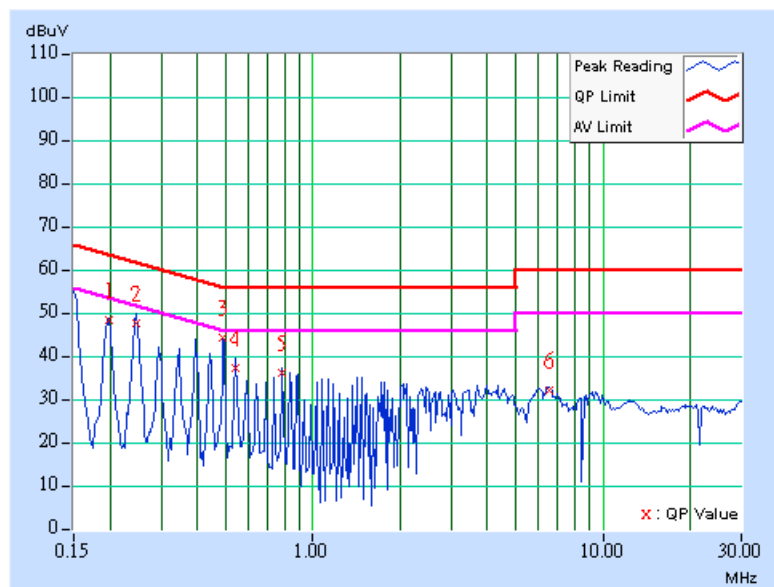


EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
MODE	Channel 6	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line 1
ENVIRONMENTAL CONDITIONS	20deg. C, 75%RH, 991hPa	TESTED BY	Allen Chang

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	0.198	0.10	48.23	-	48.33	-	63.69	53.69	-15.36	-
2	0.246	0.12	47.24	-	47.36	-	61.89	51.89	-14.53	-
3	0.492	0.20	43.94	-	44.14	-	56.13	46.13	-11.99	-
4	0.543	0.20	37.13	-	37.33	-	56.00	46.00	-18.67	-
5	0.786	0.20	35.78	-	35.98	-	56.00	46.00	-20.02	-
6	6.533	0.43	31.74	-	32.17	-	60.00	50.00	-27.83	-

*(The test data is in accordance with ADT Report No.: RF930209R02.)

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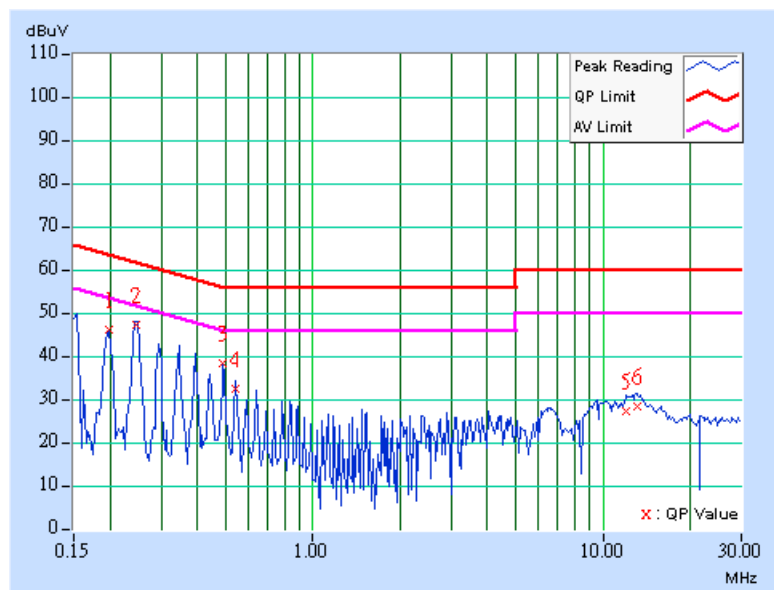


EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
MODE	Channel 6	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line 2
ENVIRONMENTAL CONDITIONS	20deg. C, 75%RH, 991hPa	TESTED BY	Allen Chang

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	0.198	0.10	45.72	-	45.82	-	63.69
2	0.246	0.12	46.84	-	46.96	-	61.89	51.89	-14.93	-
3	0.492	0.20	37.98	-	38.18	-	56.13	46.13	-17.95	-
4	0.540	0.20	32.02	-	32.22	-	56.00	46.00	-23.78	-
5	11.945	0.62	26.90	-	27.52	-	60.00	50.00	-32.48	-
6	13.076	0.68	27.97	-	28.65	-	60.00	50.00	-31.35	-

*(The test data is in accordance with ADT Report No.: RF930209R02.)

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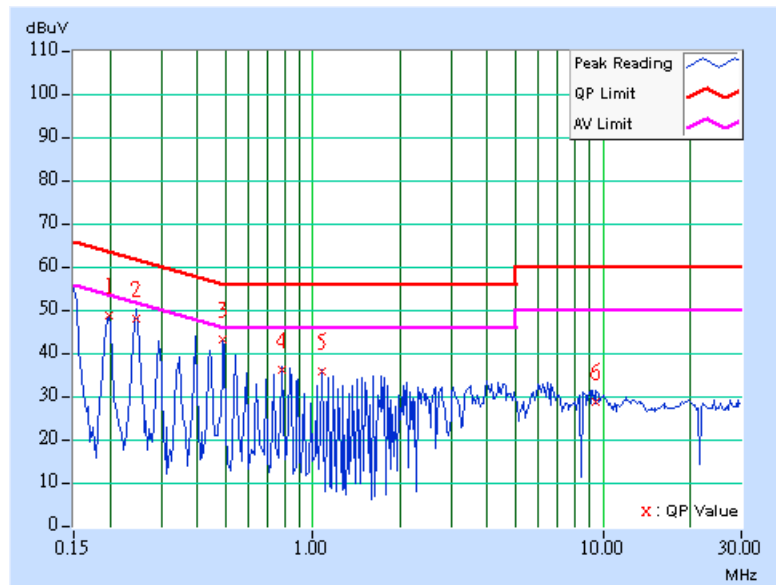


EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
MODE	Channel 11	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line 1
ENVIRONMENTAL CONDITIONS	20deg. C, 75%RH, 991hPa	TESTED BY	Allen Chang

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	0.198	0.10	48.27	-	48.37	-	63.69	53.69	-15.32	-
2	0.246	0.12	47.41	-	47.53	-	61.89	51.89	-14.36	-
3	0.489	0.20	42.71	-	42.91	-	56.18	46.18	-13.27	-
4	0.786	0.20	35.82	-	36.02	-	56.00	46.00	-19.98	-
5	1.081	0.20	35.42	-	35.62	-	56.00	46.00	-20.38	-
6	9.482	0.57	28.41	-	28.98	-	60.00	50.00	-31.02	-

*(The test data is in accordance with ADT Report No.: RF930209R02.)

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 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.



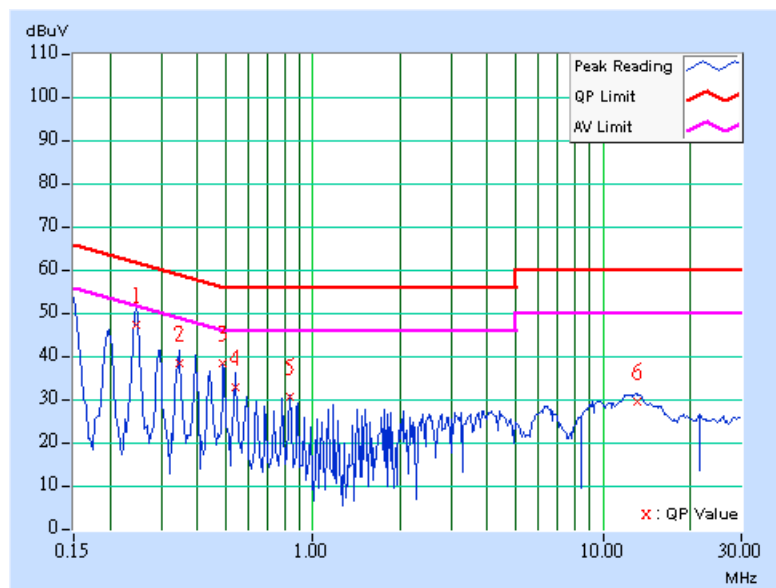


EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
MODE	Channel 11	6dB BANDWIDTH	9kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line 2
ENVIRONMENTAL CONDITIONS	20deg. C, 75%RH, 991hPa	TESTED BY	Allen Chang

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	0.246	0.12	46.72	-	46.84	-	61.89	51.89	-15.05	-
2	0.345	0.17	37.67	-	37.84	-	59.08	49.08	-21.24	-
3	0.492	0.20	37.98	-	38.18	-	56.13	46.13	-17.95	-
4	0.540	0.20	32.22	-	32.42	-	56.00	46.00	-23.58	-
5	0.834	0.20	30.09	-	30.29	-	56.00	46.00	-25.71	-
6	13.061	0.68	29.07	-	29.75	-	60.00	50.00	-30.25	-

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- 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 UNTIL
*HP Spectrum Analyzer	8593E	3911A07465	Jul. 07, 2004
*HP Preamplifier	8447D	2944A10386	Aug. 12, 2004
* HP Preamplifier	8449B	3008A01292	Aug. 11, 2004
SCHAFFNER Tunable Dipole Antenna	VHBA 9123	459	Jun. 26, 2004
SCHWARZBECK Tunable Dipole Antenna	UHA 9105	977	
*SCHAFFNER TEST RECEIVER	SCR 3501	409	Nov. 06, 2004
* SCHAFFNER BILOG Antenna	CBL6111C	2727	Jul. 15, 2004
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	Jun. 30, 2004
* ADT. Turn Table	TT100	0201	NA
* ADT. Tower	AT100	0201	NA
* Software	ADT_Radiated_V5.14	NA	NA
* ANRITSU RF Switches	MP59B	6100237246	Oct. 17, 2004
* TIMES RF cable	LMR-600	CABLE-ST10-01	Oct. 17, 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 Open Site No. 10.
 5. The VCCI Site Registration No. is R-1625.



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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak method or average method as specified and then reported in data sheet.

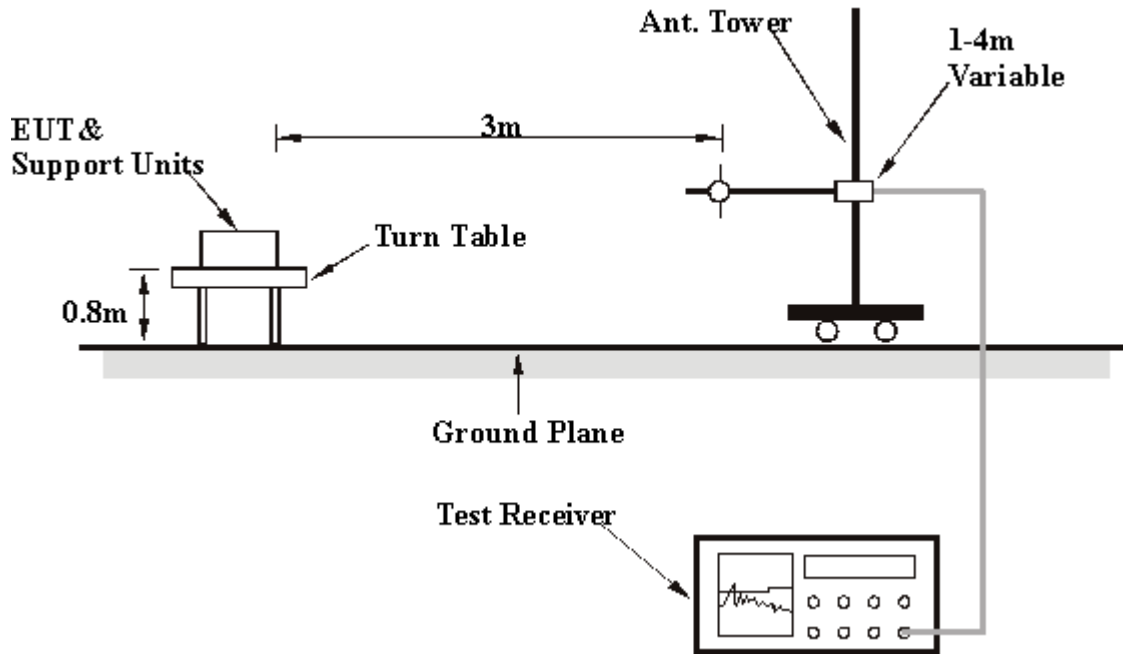
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6



4.2.7 TEST RESULTS

RADIATED WORST-CASE DATA

EUT	802.11g Wireless LAN Access Point	Model	WLG-2009
MODE	Channel 11	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 64%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	43.61	37.13 QP	40.00	-2.87	1.25 H	4	23.04	14.08
2	96.09	40.78 QP	43.50	-2.72	4.00 H	337	31.25	9.53
3	127.19	40.71 QP	43.50	-2.79	4.00 H	217	28.30	12.42
4	156.35	40.28 QP	43.50	-3.22	4.00 H	352	26.60	13.68
5	288.54	34.67 QP	46.00	-11.33	4.00 H	214	20.57	14.10
6	428.50	35.66 QP	46.00	-10.34	1.50 H	241	17.89	17.77
7	479.04	35.36 QP	46.00	-10.64	4.00 H	196	16.57	18.79
8	558.74	32.72 QP	46.00	-13.28	4.00 H	193	12.26	20.46
9	640.38	37.65 QP	46.00	-8.35	1.25 H	133	15.53	22.12
10	665.65	35.92 QP	46.00	-10.08	1.50 H	325	13.47	22.45
11	751.18	32.93 QP	46.00	-13.07	1.00 H	142	8.68	24.24
12	799.78	42.79 QP	46.00	-3.21	1.00 H	145	18.38	24.41

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	58.75	34.63 QP	40.00	-5.37	1.25 V	286	21.96	12.67
2	83.06	33.13 QP	40.00	-6.87	1.76 V	305	24.27	8.86
3	187.45	39.04 QP	43.50	-4.46	1.25 V	178	27.74	11.29
4	245.77	35.08 QP	46.00	-10.92	1.00 V	340	22.49	12.59
5	276.87	41.43 QP	46.00	-4.57	1.25 V	319	27.66	13.77
6	383.79	31.01 QP	46.00	-14.99	1.25 V	310	14.49	16.52
7	479.04	33.25 QP	46.00	-12.75	1.00 V	256	14.46	18.79
8	535.41	35.33 QP	46.00	-10.67	1.50 V	151	15.44	19.89
9	564.57	37.93 QP	46.00	-8.07	1.25 V	337	17.32	20.62
10	622.89	36.58 QP	46.00	-9.42	1.25 V	346	14.69	21.89
11	640.38	35.40 QP	46.00	-10.60	1.25 V	178	13.27	22.12
12	700.64	32.77 QP	46.00	-13.23	1.25 V	202	9.86	22.91
13	799.78	37.10 QP	46.00	-8.90	1.00 V	22	12.69	24.41

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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.

**802.11b DSSS MODULATION**

EUT	802.11g Wireless LAN Access Point	Model	WLG-2009
CHANNEL	Channel 1	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%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	1120.00	41.12 PK	74.00	-32.88	1.00 H	41	12.10	29.02
1	1120.00	35.12 AV	54.00	-18.88	1.00 H	41	6.10	29.02
2	1280.00	42.41 PK	74.00	-31.59	1.26 H	329	13.51	28.90
2	1280.00	37.64 AV	54.00	-16.36	1.26 H	329	8.74	28.90
3	2266.00	44.73 PK	74.00	-29.27	1.33 H	326	13.29	31.44
3	2266.00	38.51 AV	54.00	-15.49	1.33 H	326	7.07	31.44
4	2300.00	45.62 PK	74.00	-28.38	1.33 H	326	14.11	31.51
4	2300.00	38.89 AV	54.00	-15.11	1.33 H	326	7.38	31.51
5	2310.00	44.88 PK	74.00	-29.12	1.33 H	326	13.48	31.40
5	2310.00	37.96 AV	54.00	-16.04	1.33 H	326	6.56	31.40
6	2354.00	43.04 PK	74.00	-30.96	1.00 H	325	12.13	30.92
6	2354.00	32.04 AV	54.00	-21.96	1.00 H	325	1.13	30.92
7	2376.00	41.27 PK	74.00	-32.73	1.00 H	325	10.59	30.67
7	2376.00	30.80 AV	54.00	-23.20	1.00 H	325	0.12	30.67
8	*2412.00	99.43 PK			1.20 H	327	69.01	30.42
8	*2412.00	91.27 AV			1.20 H	327	60.85	30.42
9	2500.00	46.00 PK	74.00	-28.00	1.26 H	27	15.53	30.47
9	2500.00	38.74 AV	54.00	-15.26	1.26 H	27	8.27	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 1	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%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	1120.00	40.43 PK	74.00	-33.57	1.04 V	328	11.41	29.02
1	1120.00	34.47 AV	54.00	-19.53	1.04 V	328	5.45	29.02
2	1280.00	40.98 PK	74.00	-33.02	1.27 V	140	12.08	28.90
2	1280.00	34.63 AV	54.00	-19.37	1.27 V	140	5.73	28.90
3	2354.00	48.69 PK	74.00	-25.31	1.11 V	360	17.78	30.92
3	2354.00	41.72 AV	54.00	-12.28	1.11 V	360	10.81	30.92
4	2376.00	49.18 PK	74.00	-24.82	1.16 V	343	18.50	30.67
4	2376.00	41.87 AV	54.00	-12.13	1.16 V	343	11.19	30.67
5	*2412.00	111.91 PK			1.13 V	347	81.49	30.42
5	*2412.00	103.77 AV			1.13 V	347	73.35	30.42
6	2500.00	56.00 PK	74.00	-18.00	1.15 V	24	25.53	30.47
6	2500.00	50.88 AV	54.00	-3.12	1.15 V	24	20.41	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 6	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1120.00	40.12 PK	74.00	-33.88	1.40 H	83	11.10	29.02
1	1120.00	34.37 AV	54.00	-19.63	1.40 H	83	5.35	29.02
2	1280.00	42.22 PK	74.00	-31.78	1.21 H	86	13.32	28.90
2	1280.00	38.20 AV	54.00	-15.80	1.21 H	86	9.30	28.90
3	2240.00	42.02 PK	74.00	-31.98	1.00 H	68	10.64	31.38
3	2240.00	35.21 AV	54.00	-18.79	1.00 H	68	3.83	31.38
4	2250.00	42.01 PK	74.00	-31.99	1.02 H	326	10.61	31.40
4	2250.00	34.73 AV	54.00	-19.27	1.02 H	326	3.33	31.40
5	2266.00	45.29 PK	74.00	-28.71	1.02 H	328	13.85	31.44
5	2266.00	39.46 AV	54.00	-14.54	1.02 H	328	8.02	31.44
6	2300.00	45.85 PK	74.00	-28.15	1.35 H	327	14.34	31.51
6	2300.00	36.34 AV	54.00	-17.66	1.35 H	327	4.83	31.51
7	2310.00	45.24 PK	74.00	-28.76	1.34 H	327	13.84	31.40
7	2310.00	38.24 AV	54.00	-15.76	1.34 H	327	6.84	31.40
8	*2437.00	102.82 PK			1.00 H	55	71.31	31.51
8	*2437.00	94.74 AV			1.00 H	55	63.23	31.51
9	2486.00	54.90 PK	74.00	-19.10	1.00 H	55	24.44	30.46
9	2486.00	46.82 AV	54.00	-7.18	1.00 H	55	16.36	30.46
10	2500.00	51.43 PK	74.00	-22.57	1.00 H	55	20.96	30.47
10	2500.00	43.35 AV	54.00	-10.65	1.00 H	55	12.88	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 6	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M								
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	1120.00	39.12 PK	74.00	-34.88	1.16 V	328	10.10	29.02
1	1120.00	33.57 AV	54.00	-20.43	1.16 V	328	4.55	29.02
2	1280.00	40.35 PK	74.00	-33.65	1.52 V	7	11.45	28.90
2	1280.00	32.80 AV	54.00	-21.20	1.52 V	7	3.90	28.90
3	2240.00	47.69 PK	74.00	-26.31	1.00 V	10	16.31	31.38
3	2240.00	43.15 AV	54.00	-10.85	1.00 V	10	11.77	31.38
4	2250.00	47.54 PK	74.00	-26.46	1.00 V	10	16.14	31.40
4	2250.00	42.04 AV	54.00	-11.96	1.00 V	10	10.64	31.40
5	2266.00	53.50 PK	74.00	-20.50	1.28 V	350	22.06	31.44
5	2266.00	48.89 AV	54.00	-5.11	1.28 V	350	17.45	31.44
6	2300.00	50.42 PK	74.00	-23.58	1.01 V	330	18.91	31.51
6	2300.00	43.00 AV	54.00	-11.00	1.01 V	330	11.49	31.51
7	2310.00	50.61 PK	74.00	-23.39	1.01 V	330	19.21	31.40
7	2310.00	46.36 AV	54.00	-7.64	1.01 V	330	14.96	31.40
8	*2437.00	112.79 PK			1.16 V	22	82.36	30.43
8	*2437.00	104.65 AV			1.16 V	22	74.22	30.43
9	2486.00	61.84 PK	74.00	-12.16	1.16 V	22	31.38	30.46
9	2486.00	53.70 AV	54.00	-0.30	1.16 V	22	23.24	30.46
10	2500.00	59.40 PK	74.00	-14.60	1.16 V	22	28.93	30.47
10	2500.00	51.26 AV	54.00	-2.74	1.16 V	22	20.79	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 11	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M								
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	1120.00	40.76 PK	74.00	-33.24	1.00 H	40	11.74	29.02
1	1120.00	34.36 AV	54.00	-19.64	1.00 H	40	5.34	29.02
2	1280.00	43.02 PK	74.00	-30.98	1.12 H	92	14.12	28.90
2	1280.00	38.37 AV	54.00	-15.63	1.12 H	92	9.47	28.90
3	2244.00	41.97 PK	74.00	-32.03	1.00 H	328	10.58	31.39
3	2244.00	34.74 AV	54.00	-19.26	1.00 H	328	3.35	31.39
4	2250.00	42.71 PK	74.00	-31.29	1.00 H	328	11.31	31.40
4	2250.00	36.37 AV	54.00	-17.63	1.00 H	328	4.97	31.40
5	2266.00	41.88 PK	74.00	-32.12	1.25 H	303	10.44	31.44
5	2266.00	36.14 AV	54.00	-17.86	1.25 H	303	4.70	31.44
6	2300.00	46.53 PK	74.00	-27.47	1.34 H	328	15.02	31.51
6	2300.00	38.64 AV	54.00	-15.36	1.34 H	328	7.13	31.51
7	2310.00	44.85 PK	74.00	-29.15	1.28 H	332	13.45	31.40
7	2310.00	36.74 AV	54.00	-17.26	1.28 H	332	5.34	31.40
8	*2462.00	100.31 PK			1.00 H	301	69.86	30.45
8	*2462.00	92.34 AV			1.00 H	301	61.89	30.45
9	2500.00	48.68 PK	74.00	-25.32	1.00 H	301	18.21	30.47
9	2500.00	40.71 AV	54.00	-13.29	1.00 H	301	10.24	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 11	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M								
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	1120.00	39.43 PK	74.00	-34.57	1.16 V	290	10.41	29.02
1	1120.00	32.36 AV	54.00	-21.64	1.16 V	290	3.34	29.02
2	1280.00	40.23 PK	74.00	-33.77	1.25 V	142	11.33	28.90
2	1280.00	33.67 AV	54.00	-20.33	1.25 V	142	4.77	28.90
3	2250.00	48.32 PK	74.00	-25.68	1.29 V	353	16.92	31.40
3	2250.00	43.12 AV	54.00	-10.88	1.29 V	353	11.72	31.40
4	2266.00	53.36 PK	74.00	-20.64	1.29 V	353	21.92	31.44
4	2266.00	49.05 AV	54.00	-4.95	1.29 V	353	17.61	31.44
5	2300.00	53.77 PK	74.00	-20.23	1.00 V	350	22.26	31.51
5	2300.00	48.21 AV	54.00	-5.79	1.00 V	350	16.70	31.51
6	2310.00	53.69 PK	74.00	-20.31	1.00 V	350	22.29	31.40
6	2310.00	47.57 AV	54.00	-6.43	1.00 V	350	16.17	31.40
7	*2462.00	109.30 PK			1.08 V	24	78.85	30.45
7	*2462.00	101.47 AV			1.08 V	24	71.02	30.45
8	2500.00	59.67 PK	74.00	-14.33	1.08 V	24	29.20	30.47
8	2500.00	51.84 AV	54.00	-2.16	1.08 V	24	21.37	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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.



802.11g OFDM MODULATION

EUT	802.11g Wireless LAN Access Point	Model	WLG-2009
CHANNEL	Channel 1	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%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	1120.00	40.63 PK	74.00	-33.37	1.00 H	42	11.61	29.02
1	1120.00	34.43 AV	54.00	-19.57	1.00 H	42	5.41	29.02
2	1280.00	42.79 PK	74.00	-31.21	1.14 H	88	13.89	28.90
2	1280.00	38.33 AV	54.00	-15.67	1.14 H	88	9.43	28.90
3	2266.00	45.53 PK	74.00	-28.47	1.04 H	326	14.09	31.44
3	2266.00	39.81 AV	54.00	-14.19	1.04 H	326	8.37	31.44
4	2300.00	47.18 PK	74.00	-26.82	1.36 H	325	15.67	31.51
4	2300.00	38.89 AV	54.00	-15.11	1.36 H	325	7.38	31.51
5	2310.00	45.54 PK	74.00	-28.46	1.36 H	325	14.14	31.40
5	2310.00	38.26 AV	54.00	-15.74	1.36 H	325	6.86	31.40
6	2354.00	43.54 PK	74.00	-30.46	1.00 H	320	12.62	30.92
6	2354.00	34.14 AV	54.00	-19.86	1.00 H	320	3.22	30.92
7	*2412.00	94.94 PK			1.00 H	320	64.52	30.42
7	*2412.00	85.54 AV			1.00 H	320	55.12	30.42
8	2500.00	48.07 PK	74.00	-25.93	1.00 H	300	17.60	30.47
8	2500.00	42.29 AV	54.00	-11.71	1.00 H	300	11.82	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 1	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%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	1120.00	39.12 PK	74.00	-34.88	1.22 V	287	10.10	29.02
1	1120.00	34.13 AV	54.00	-19.87	1.22 V	287	5.11	29.02
2	1280.00	40.72 PK	74.00	-33.28	1.28 V	40	11.82	28.90
2	1280.00	34.36 AV	54.00	-19.64	1.28 V	40	5.46	28.90
3	2300.00	54.37 PK	74.00	-19.63	1.00 V	353	22.86	31.51
3	2300.00	48.06 AV	54.00	-5.94	1.00 V	353	16.55	31.51
4	2310.00	53.00 PK	74.00	-21.00	1.00 V	353	21.60	31.40
4	2310.00	48.10 AV	54.00	-5.90	1.00 V	353	16.70	31.40
5	2354.00	55.10 PK	74.00	-18.90	1.26 V	274	24.18	30.92
5	2354.00	45.44 AV	54.00	-8.56	1.26 V	274	14.52	30.92
6	*2412.00	106.05 PK			1.26 V	274	75.63	30.42
6	*2412.00	96.84 AV			1.26 V	274	66.42	30.42
7	2500.00	55.17 PK	74.00	-18.83	1.00 V	52	24.70	30.47
7	2500.00	50.10 AV	54.00	-3.90	1.00 V	52	19.63	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 6	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1120.00	40.32 PK	74.00	-33.68	1.00 H	40	11.30	29.02
1	1120.00	33.96 AV	54.00	-20.04	1.00 H	40	4.94	29.02
2	1280.00	41.79 PK	74.00	-32.21	1.28 H	328	12.89	28.90
2	1280.00	36.96 AV	54.00	-17.04	1.28 H	328	8.06	28.90
3	2266.00	44.67 PK	74.00	-29.33	1.34 H	326	13.23	31.44
3	2266.00	38.98 AV	54.00	-15.02	1.34 H	326	7.54	31.44
4	2300.00	44.31 PK	74.00	-29.69	1.34 H	326	12.80	31.51
4	2300.00	35.44 AV	54.00	-18.56	1.34 H	326	3.93	31.51
5	2310.00	44.78 PK	74.00	-29.22	1.32 H	325	13.38	31.40
5	2310.00	37.64 AV	54.00	-16.36	1.32 H	325	6.24	31.40
6	2350.00	40.49 PK	74.00	-33.51	1.25 H	330	9.53	30.96
6	2350.00	29.87 AV	54.00	-24.13	1.25 H	330	-1.09	30.96
7	2354.00	41.33 PK	74.00	-32.67	1.25 H	330	10.42	30.92
7	2354.00	31.15 AV	54.00	-22.85	1.25 H	330	0.24	30.92
8	*2437.00	98.18 PK			1.20 H	334	67.75	30.43
8	*2437.00	88.57 AV			1.20 H	334	58.14	30.43
9	2486.36	50.05 PK	74.00	-23.95	1.20 H	334	19.59	30.46
9	2486.36	40.44 AV	54.00	-13.56	1.20 H	334	9.98	30.46
10	2500.00	49.39 PK	74.00	-24.61	1.20 H	334	18.92	30.47
10	2500.00	39.78 AV	54.00	-14.22	1.20 H	334	9.31	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 6	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1120.00	39.12 PK	74.00	-34.88	1.00 V	310	10.10	29.02
1	1120.00	30.97 AV	54.00	-23.03	1.00 V	310	1.95	29.02
2	1280.00	40.03 PK	74.00	-33.97	1.40 V	312	11.13	28.90
2	1280.00	32.98 AV	54.00	-21.02	1.40 V	312	4.08	28.90
3	2266.00	53.71 PK	74.00	-20.29	1.00 V	351	22.27	31.44
3	2266.00	49.40 AV	54.00	-4.60	1.00 V	351	17.96	31.44
4	2300.00	52.75 PK	74.00	-21.25	1.00 V	351	21.24	31.51
4	2300.00	45.31 AV	54.00	-8.69	1.00 V	351	13.80	31.51
5	2310.00	52.88 PK	74.00	-21.12	1.00 V	351	21.48	31.40
5	2310.00	47.87 AV	54.00	-6.13	1.00 V	351	16.47	31.40
6	2350.00	48.78 PK	74.00	-25.22	1.00 V	351	17.82	30.96
6	2350.00	39.38 AV	54.00	-14.62	1.00 V	351	8.42	30.96
7	2354.00	48.74 PK	74.00	-25.26	1.00 V	351	17.83	30.92
7	2354.00	40.26 AV	54.00	-13.74	1.00 V	351	9.38	30.92
8	*2437.00	108.57 PK			1.18 V	342	78.14	30.43
8	*2437.00	99.13 AV			1.18 V	342	68.70	30.43
9	2486.36	60.44 PK	74.00	-13.56	1.18 V	342	29.98	30.46
9	2486.36	51.00 AV	54.00	-3.00	1.18 V	342	20.54	30.46
10	2500.00	59.78 PK	74.00	-14.22	1.18 V	342	29.31	30.47
10	2500.00	50.34 AV	54.00	-3.66	1.18 V	342	19.87	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 11	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M								
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	1120.00	39.32 PK	74.00	-34.68	1.01 H	20	10.30	29.02
1	1120.00	33.04 AV	54.00	-20.96	1.01 H	20	4.02	29.02
2	1280.00	41.99 PK	74.00	-32.01	1.28 H	329	13.09	28.90
2	1280.00	36.91 AV	54.00	-17.09	1.28 H	329	8.01	28.90
3	2240.00	41.99 PK	74.00	-32.01	1.00 H	327	10.61	31.39
3	2240.00	33.30 AV	54.00	-20.70	1.00 H	327	1.92	31.39
4	2244.00	42.80 PK	74.00	-31.20	1.00 H	327	11.41	31.39
4	2244.00	36.04 AV	54.00	-17.96	1.00 H	327	4.65	31.39
5	2250.00	41.69 PK	74.00	-32.31	1.00 H	327	10.29	31.40
5	2250.00	35.27 AV	54.00	-18.73	1.00 H	327	3.87	31.40
6	2266.00	44.09 PK	74.00	-29.91	1.00 H	327	12.65	31.44
6	2266.00	39.13 AV	54.00	-14.87	1.00 H	327	7.69	31.44
7	2300.00	45.68 PK	74.00	-28.32	1.34 H	329	14.17	31.51
7	2300.00	38.84 AV	54.00	-15.16	1.34 H	329	7.33	31.51
8	2310.00	45.00 PK	74.00	-29.00	1.34 H	329	13.60	31.40
8	2310.00	37.42 AV	54.00	-16.58	1.34 H	329	6.02	31.40
9	*2462.00	94.57 PK			1.00 H	56	64.12	30.45
9	*2462.00	85.72 AV			1.00 H	56	55.27	30.45
10	2500.00	49.57 PK	74.00	-24.43	1.00 H	56	19.10	30.47
10	2500.00	40.72 AV	54.00	-13.28	1.00 H	56	10.25	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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 LAN Access Point	Model	WLG-2009
CHANNEL	Channel 11	FREQUENCY RANGE	1~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 55%RH, 991hPa	TESTED BY	Steven Lu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M								
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	1120.00	39.30 PK	74.00	-34.70	1.13 V	293	10.28	29.02
1	1120.00	33.50 AV	54.00	-20.50	1.13 V	293	4.48	29.02
2	1280.00	39.72 PK	74.00	-34.28	1.00 V	159	10.82	28.90
2	1280.00	31.99 AV	54.00	-22.01	1.00 V	159	3.09	28.90
3	2240.00	45.64 PK	74.00	-28.36	1.00 V	9	14.26	31.38
3	2240.00	40.55 AV	54.00	-13.45	1.00 V	9	9.17	31.38
4	2244.00	47.31 PK	74.00	-26.69	1.00 V	9	15.92	31.39
4	2244.00	41.02 AV	54.00	-12.98	1.00 V	9	9.63	31.39
5	2250.00	47.01 PK	74.00	-26.99	1.00 V	9	15.61	31.40
5	2250.00	43.21 AV	54.00	-10.79	1.00 V	9	11.81	31.40
6	2266.00	52.21 PK	74.00	-21.79	1.17 V	350	20.77	31.44
6	2266.00	48.97 AV	54.00	-5.03	1.17 V	350	17.53	31.44
7	2300.00	52.51 PK	74.00	-21.49	1.26 V	327	21.00	31.51
7	2300.00	46.79 AV	54.00	-7.21	1.26 V	327	15.28	31.51
8	2310.00	51.31 PK	74.00	-22.69	1.28 V	328	19.91	31.40
8	2310.00	46.49 AV	54.00	-7.51	1.28 V	328	15.09	31.40
9	*2462.00	106.21 PK			1.14 V	23	75.76	30.45
9	*2462.00	96.91 AV			1.14 V	23	66.46	30.45
10	2500.00	61.21 PK	74.00	-12.79	1.14 V	23	30.74	30.47
10	2500.00	51.91 AV	54.00	-2.09	1.14 V	23	21.44	30.47

*(The test data is in accordance with ADT Report No.: RF930209R02.)

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 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.



4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

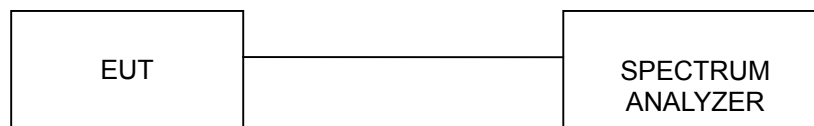
4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



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

4.3.6 EUT OPERATING CONDITIONS

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



4.3.7 TEST RESULTS

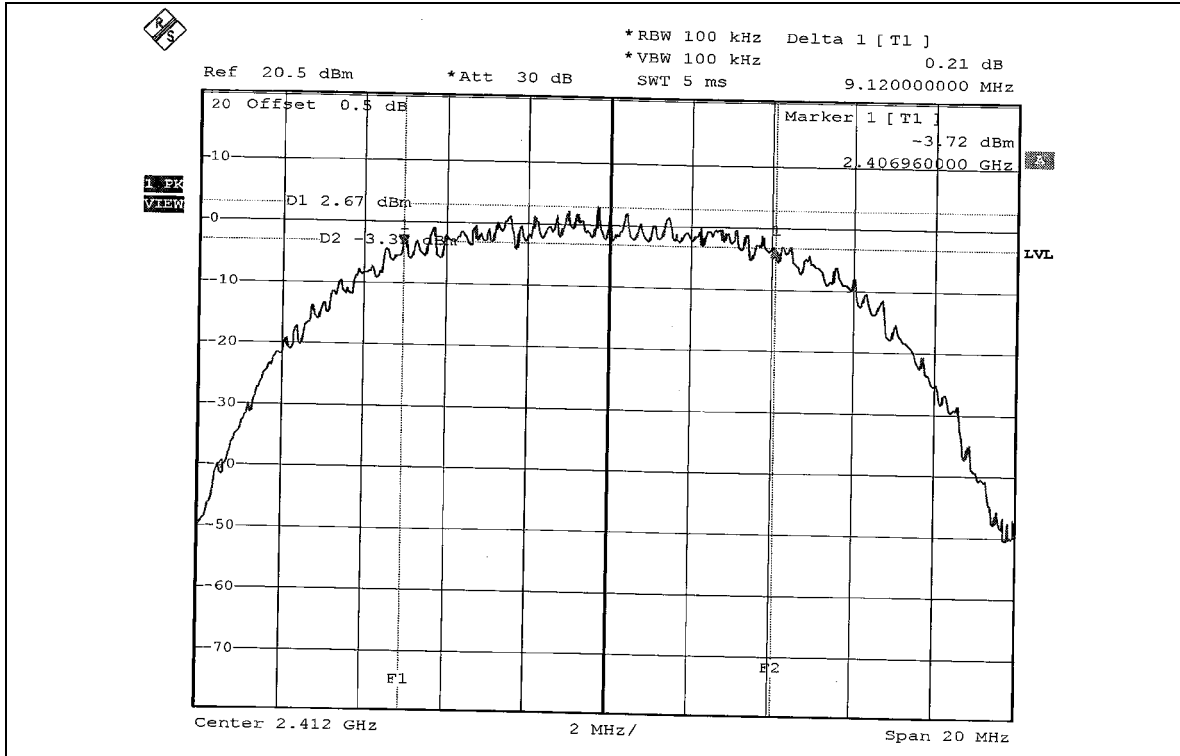
EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	CCK
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	TESTED BY	Steven Lu

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	9.12	0.5	PASS
6	2437	9.48	0.5	PASS
11	2462	9.52	0.5	PASS

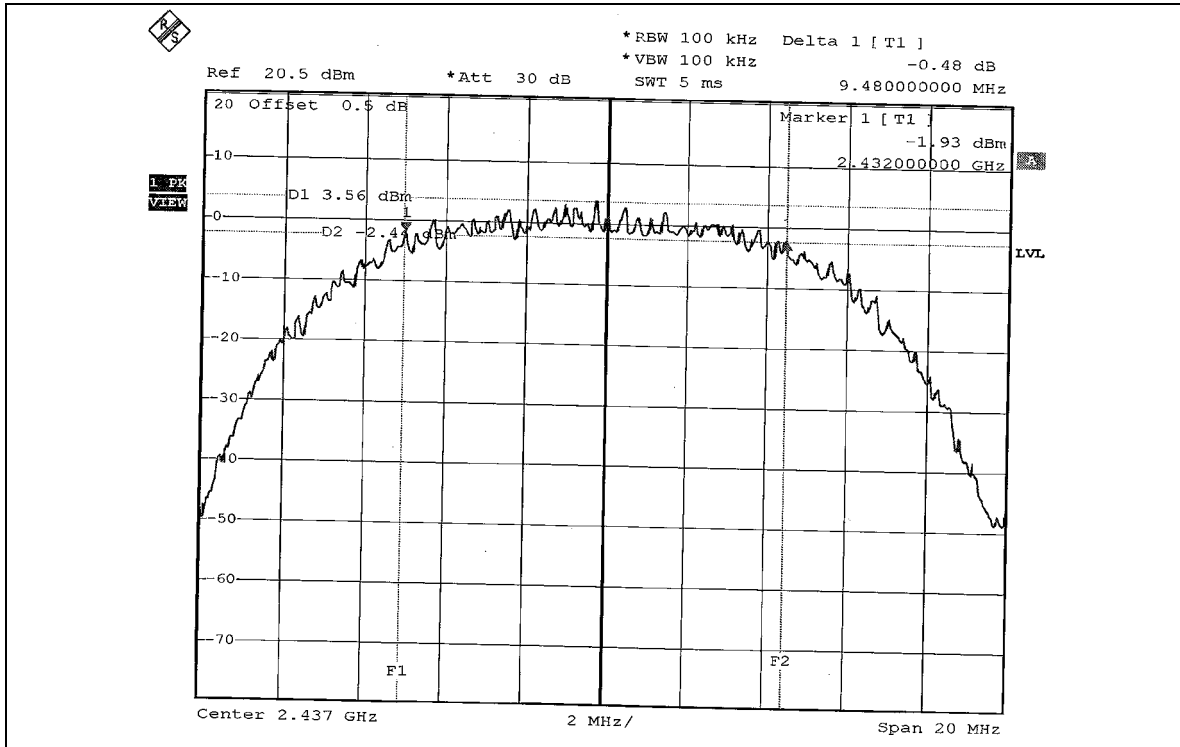
*(The test data is in accordance with ADT Report No.: RF930209R02.)



CH1

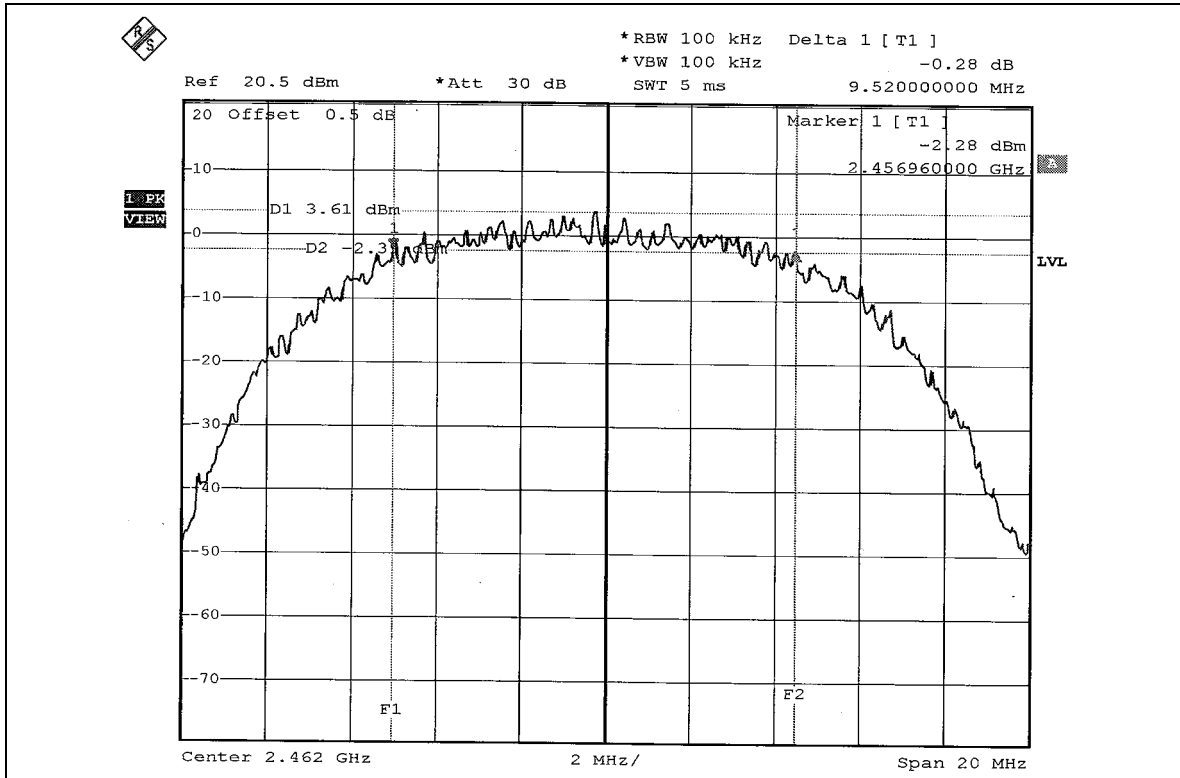


CH6





CH11





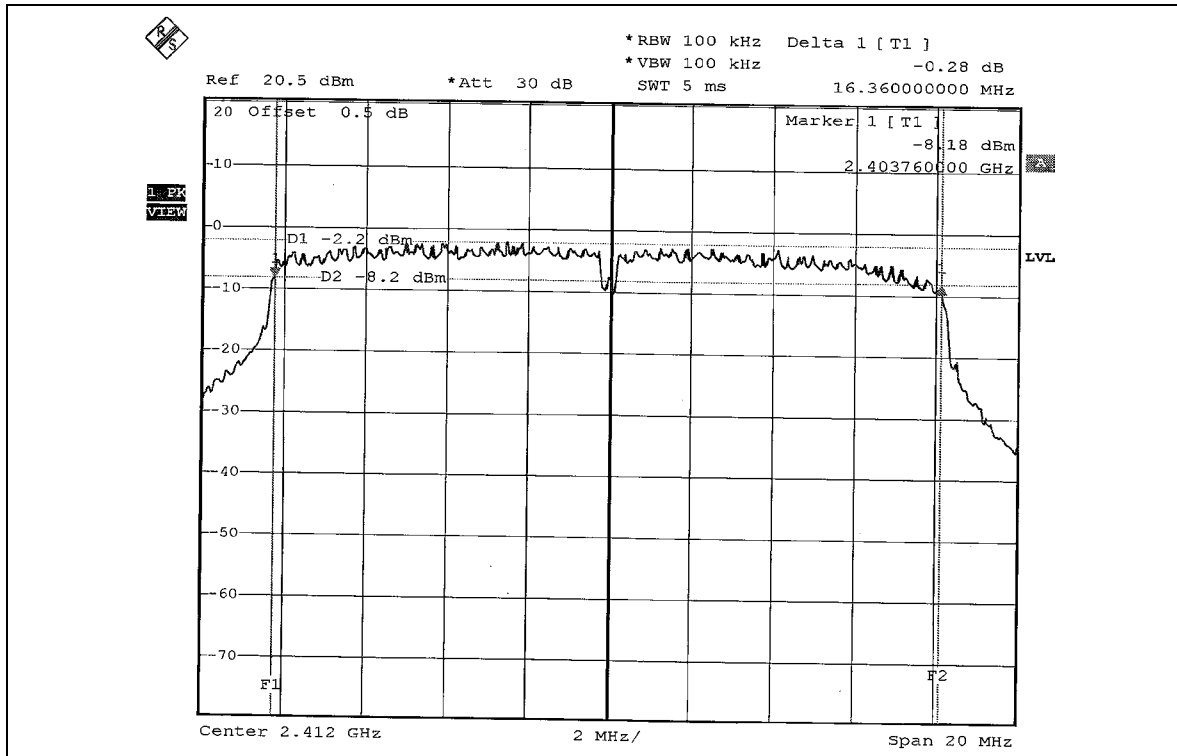
EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	OFDM
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	TESTED BY	Steven Lu

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.36	0.5	PASS
6	2437	16.12	0.5	PASS
11	2462	16.08	0.5	PASS

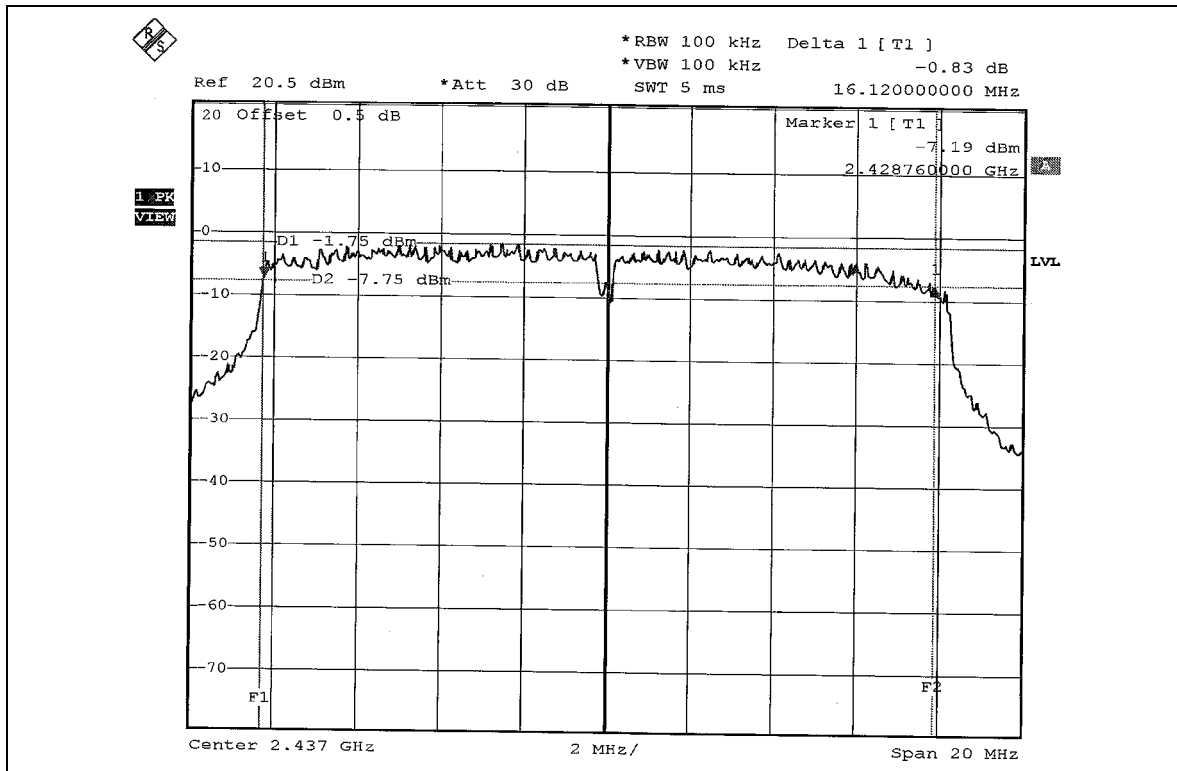
*(The test data is in accordance with ADT Report No.: RF930209R02.)



CH1

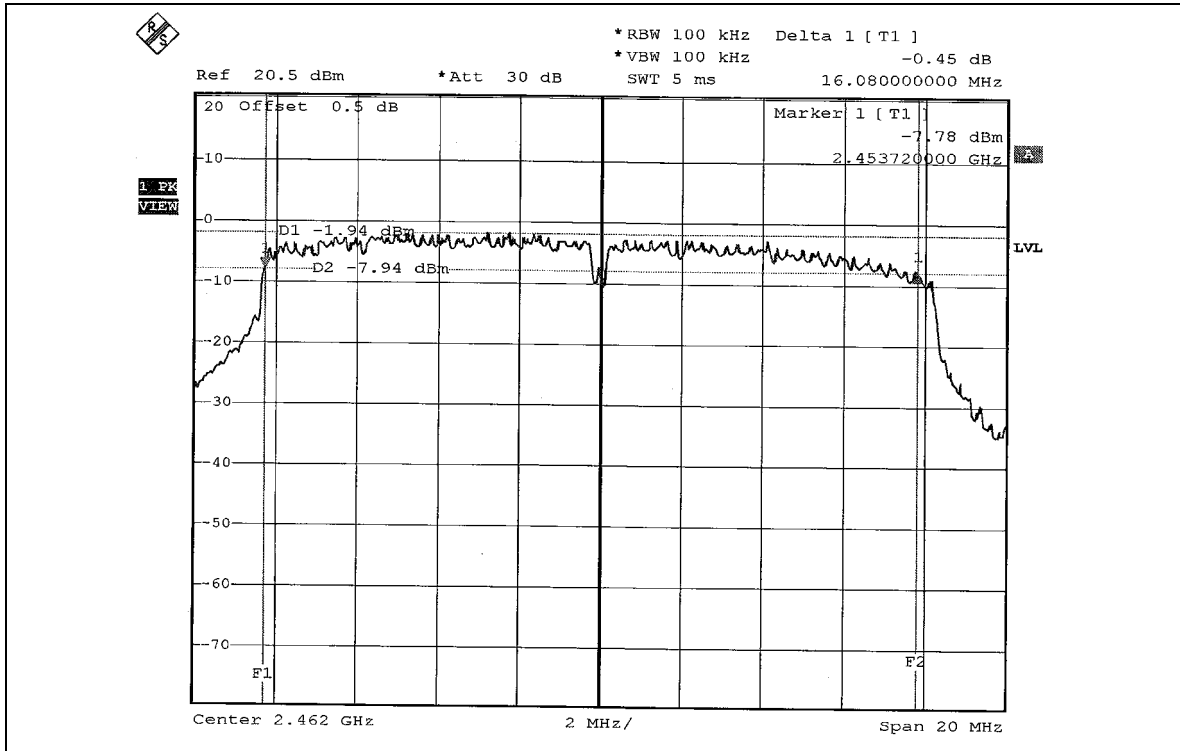


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CH11





4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004
R&S SIGNAL GENERATOR	SMP04	100011	May 28, 2004
TEKTRONIX OSCILLOSCOPE	TDS 1012	C30657	Mar. 19, 2004
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

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

4.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.



4.4.7 TEST RESULTS

EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	CCK
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	TESTED BY	Steven Lu

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	41.976	16.23	30	PASS
6	2437	47.206	16.74	30	PASS
11	2462	42.462	16.28	30	PASS

*(The test data is in accordance with ADT Report No.: RF930209R02.)

EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	OFDM
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	TESTED BY	Steven Lu

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	36.058	15.57	30	PASS
6	2437	36.644	15.64	30	PASS
11	2462	34.594	15.39	30	PASS

*(The test data is in accordance with ADT Report No.: RF930209R02.)



4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

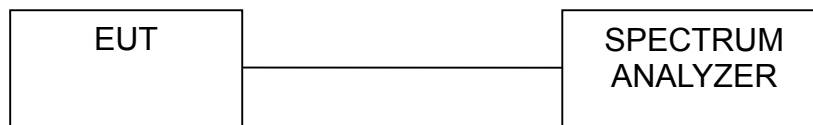
4.5.3 TEST PROCEDURE

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6



4.5.7 TEST RESULTS

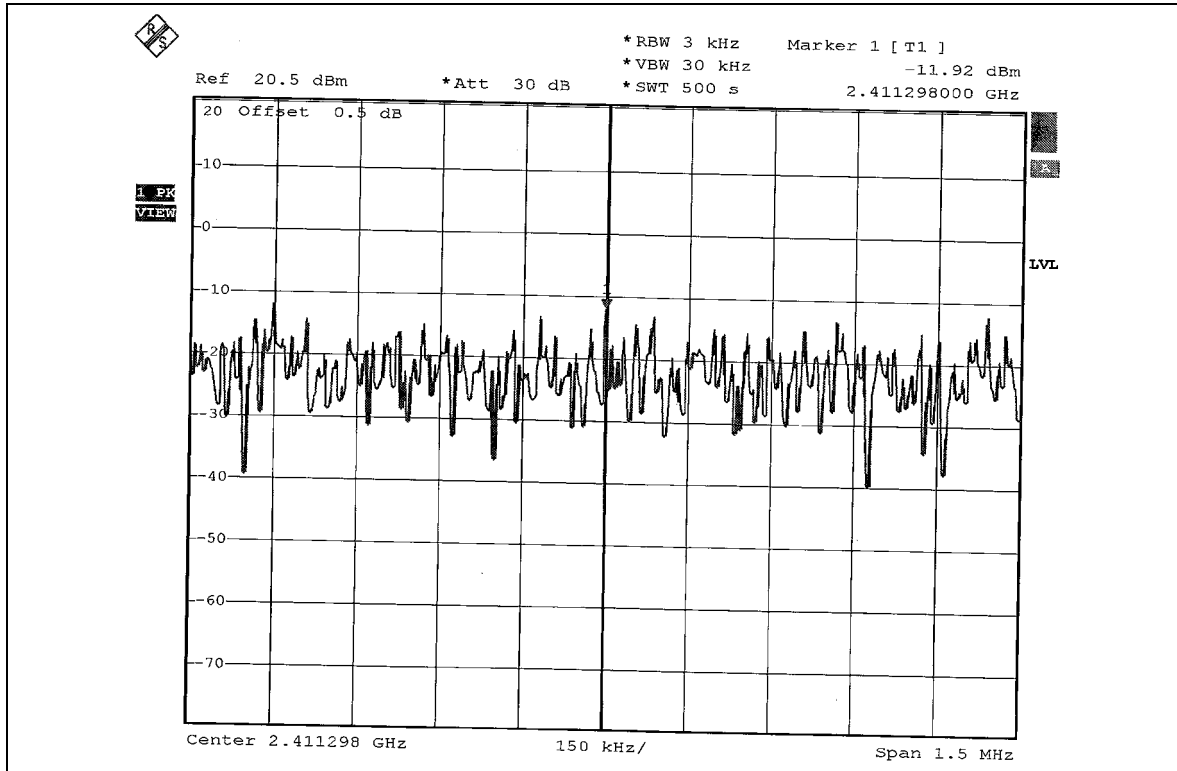
EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	CCK
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	TESTED BY	Steven Lu

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.92	8	PASS
6	2437	-10.16	8	PASS
11	2462	-10.71	8	PASS

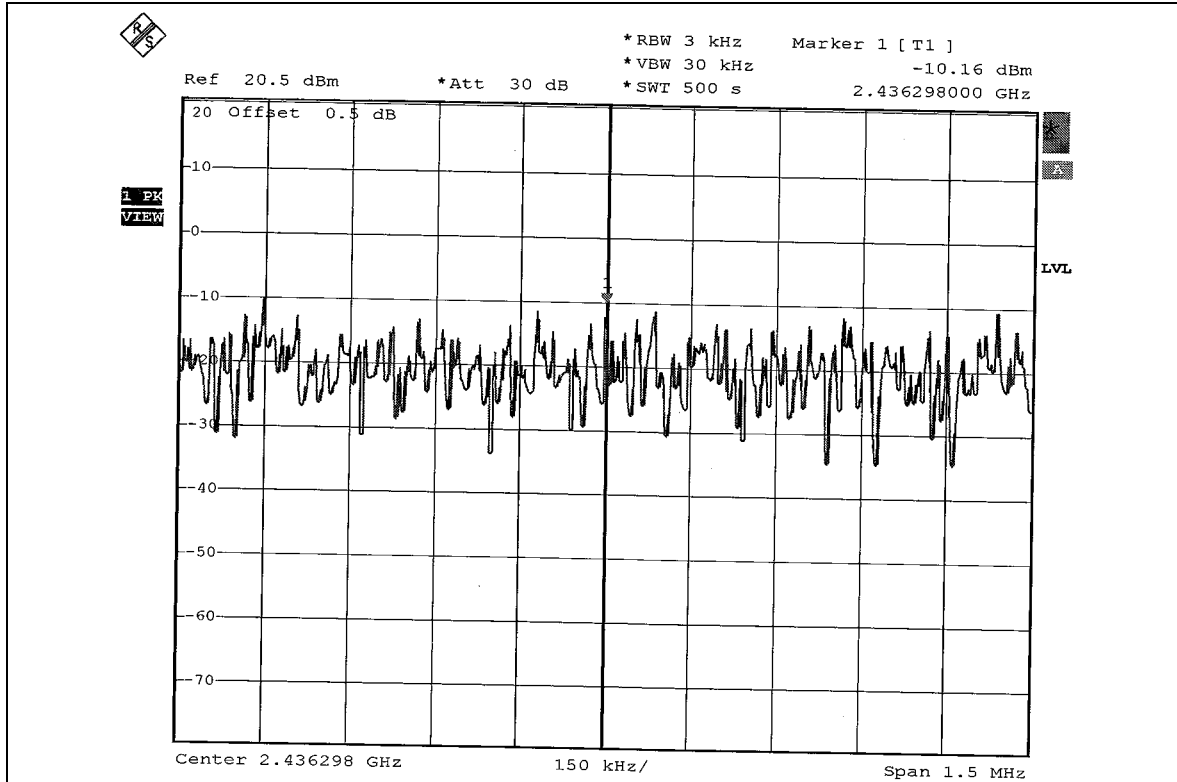
*(The test data is in accordance with ADT Report No.: RF930209R02.)



CH1

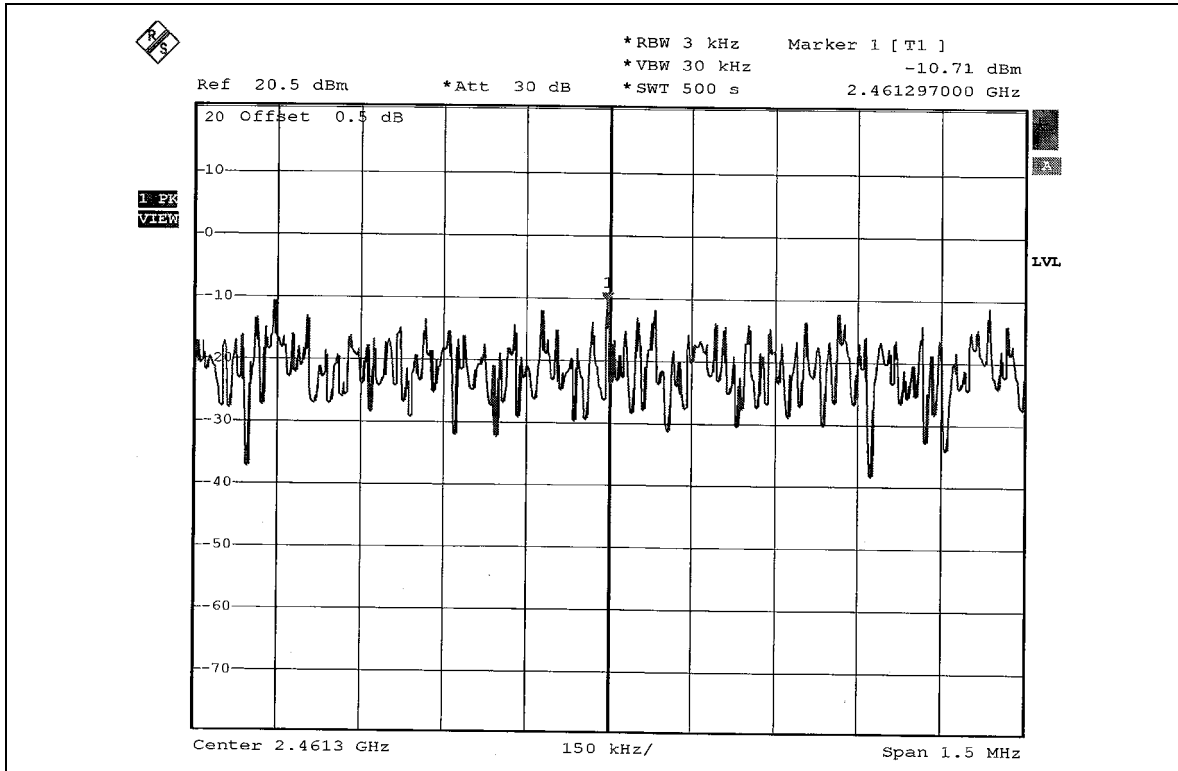


CH6





CH11





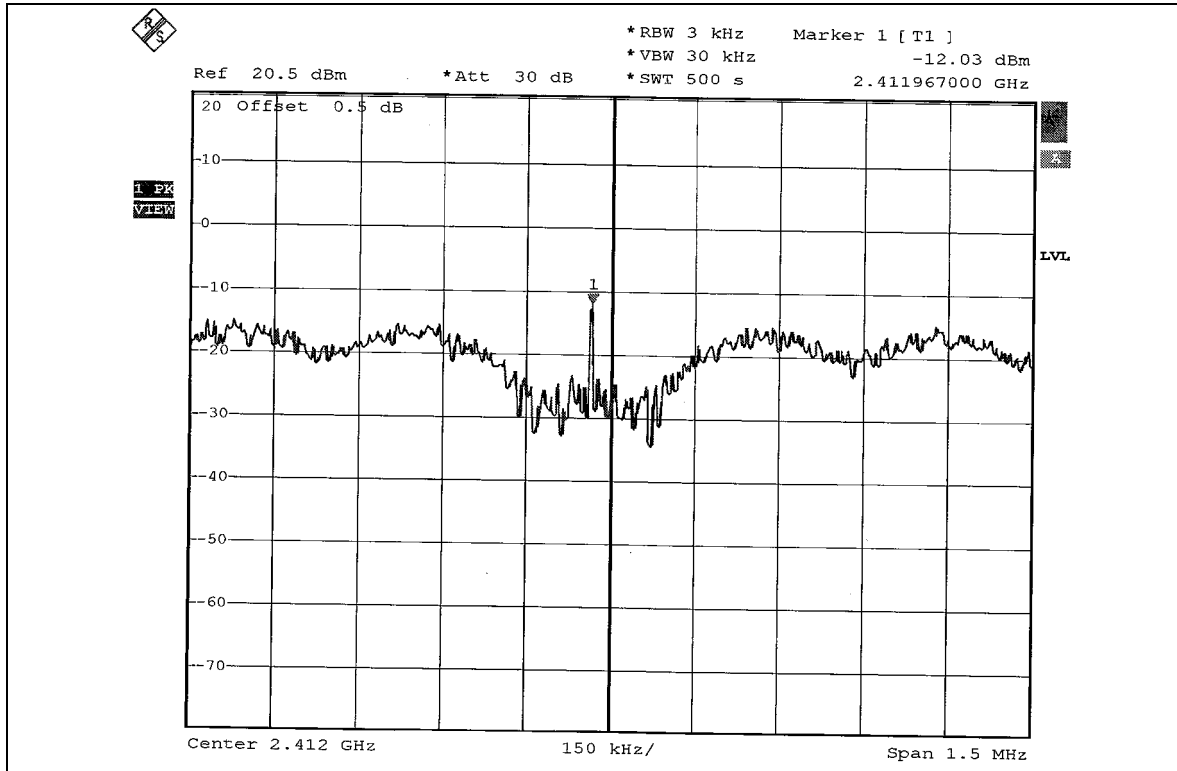
EUT	802.11g Wireless LAN Access Point	MODEL	WLG-2009
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	OFDM
ENVIRONMENTAL CONDITIONS	24deg. C, 63%RH, 991hPa	TESTED BY	Steven Lu

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-12.03	8	PASS
6	2437	-12.96	8	PASS
11	2462	-13.94	8	PASS

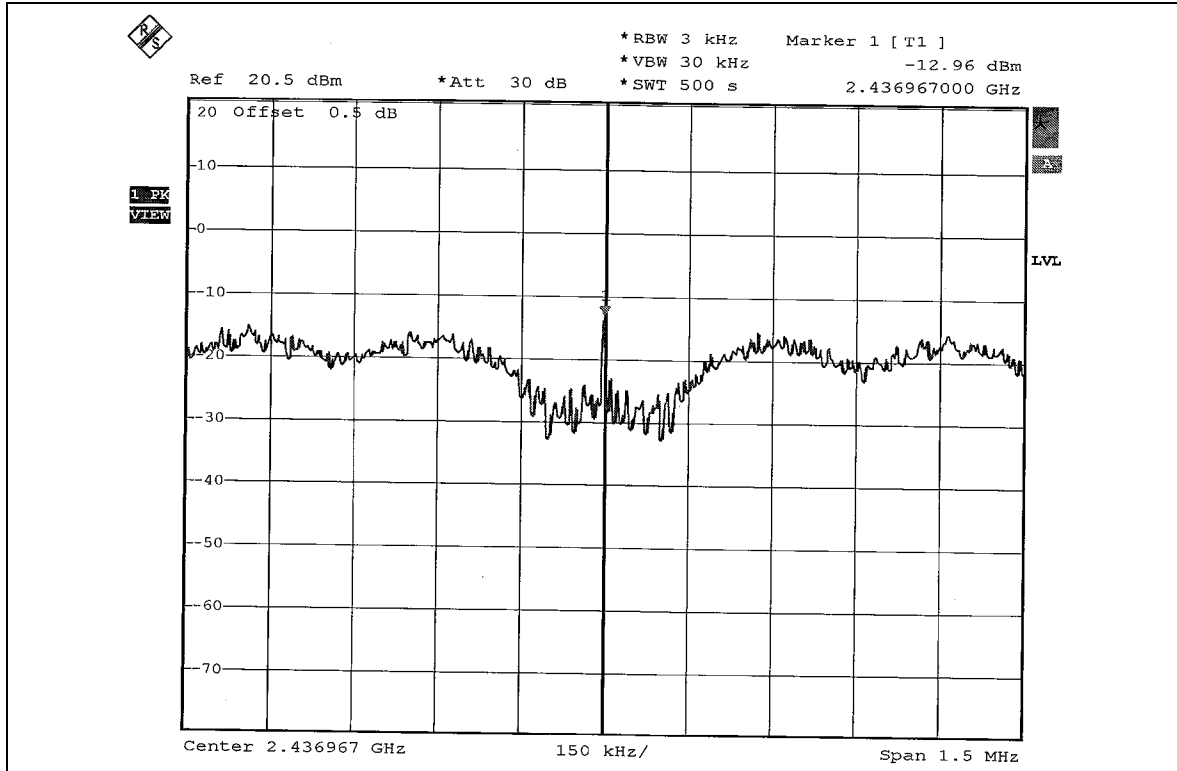
*(The test data is in accordance with ADT Report No.: RF930209R02.)



CH1

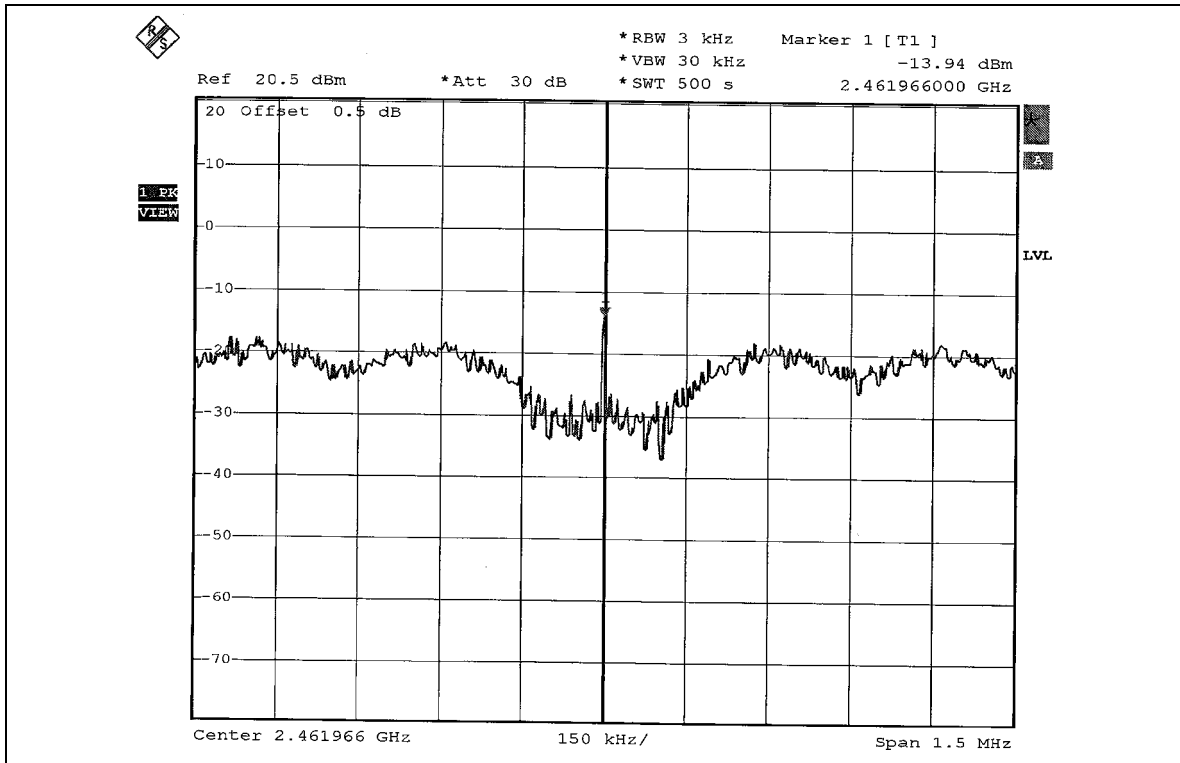


CH6





CH11





4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2004

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

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded. The spectrum plots (Peak RBW=VBW=100kHz; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6



4.6.6 TEST RESULTS

The spectrum plots are attached on the following 12 images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION

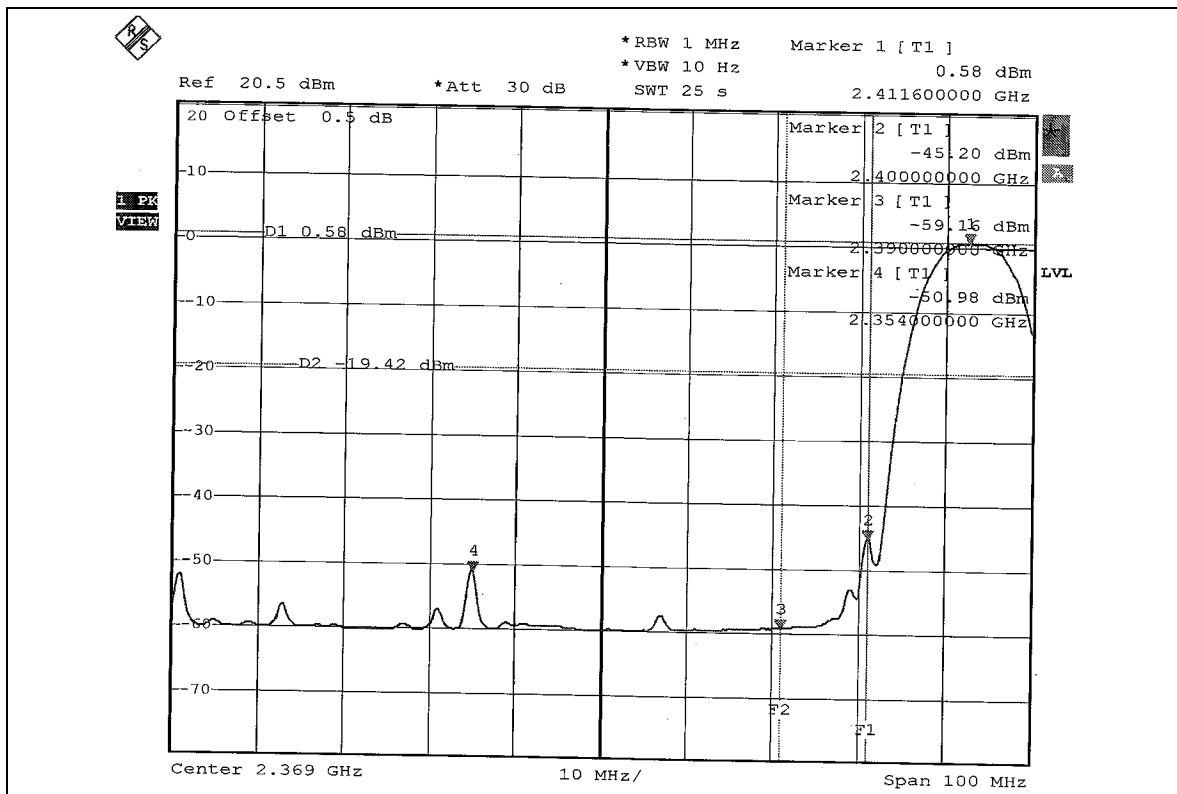
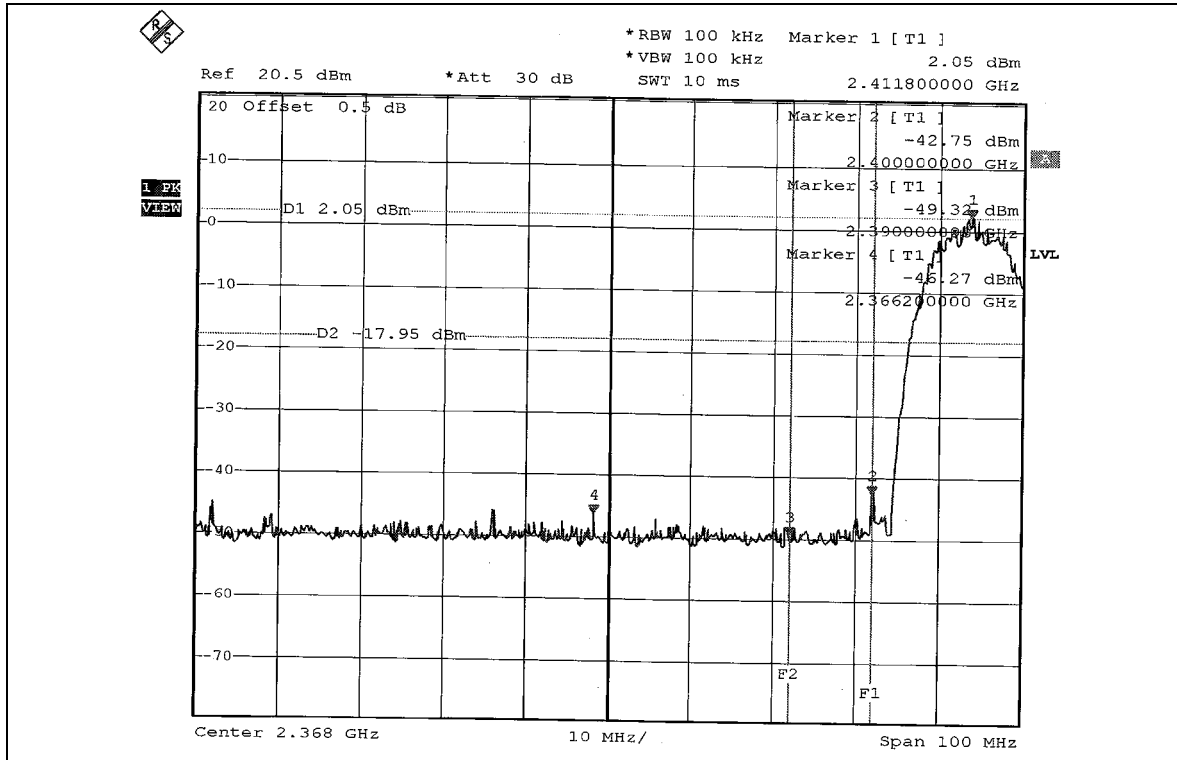
NOTE 1: The band edge emission plot of DSSS technique on page 58 shows 48.32dBc between carrier maximum power and local maximum emission in restrict band (2.3662GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 111.91dBuV/m (Peak), so the maximum field strength in restrict band is $111.91 - 48.32 = 63.59$ dBuV/m which is under 74dBuV/m limit.

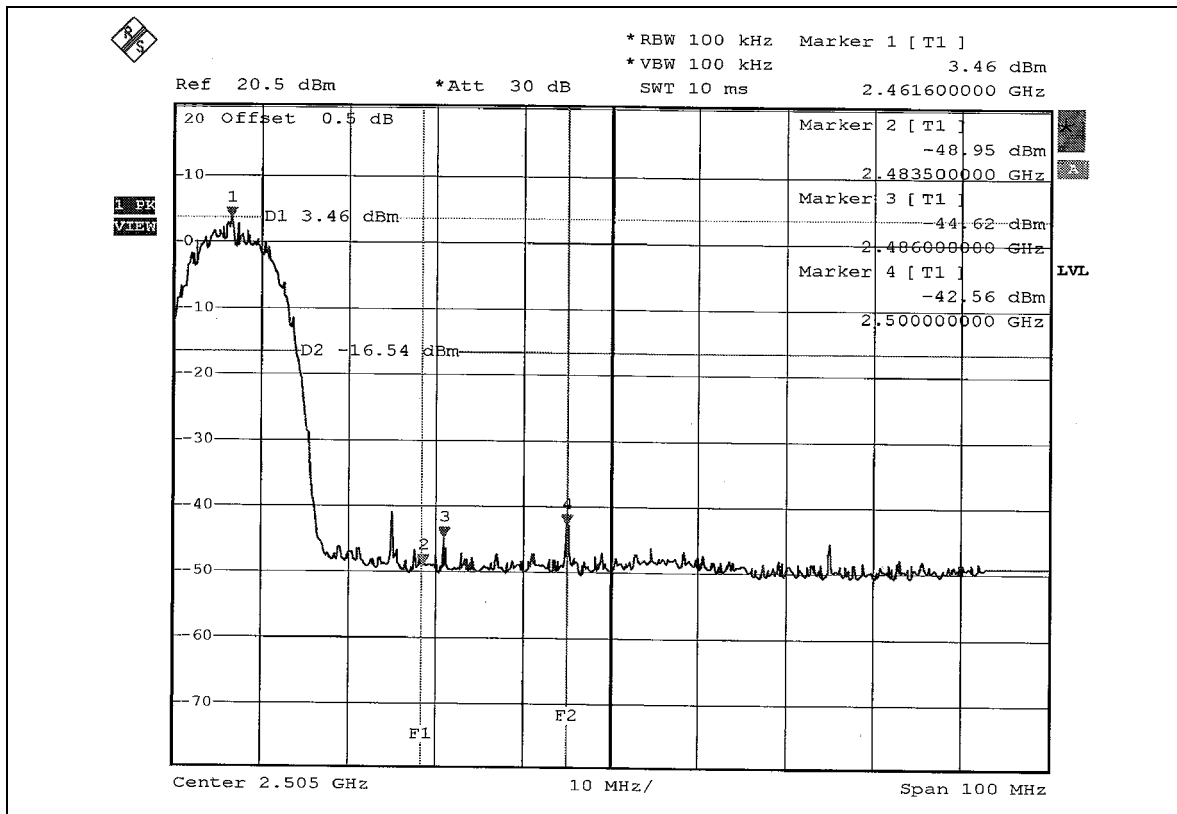
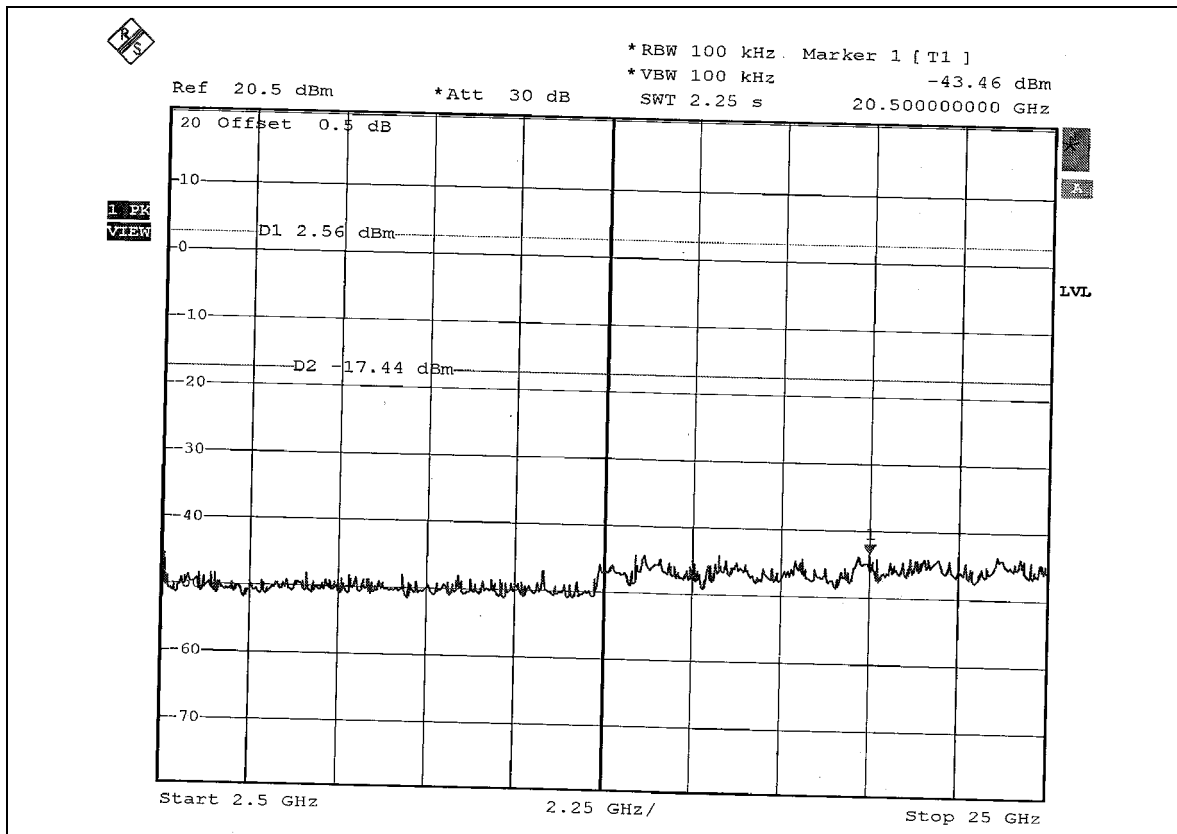
The band edge emission plot of DSSS technique on page 58 shows 51.56dBc between carrier maximum power and local maximum emission in restrict band (2.3540GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 103.77dBuV/m (Average), so the maximum field strength in restrict band is $103.77 - 51.56 = 52.21$ dBuV/m which is under 54dBuV/m limit.

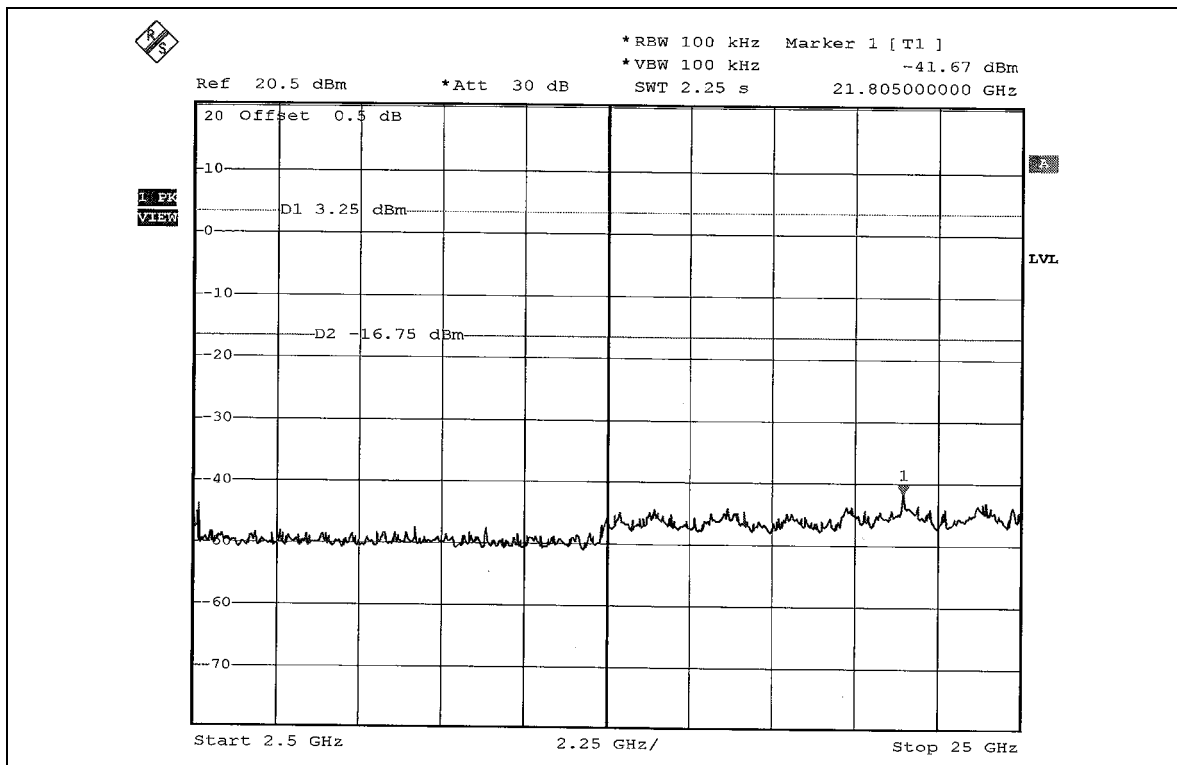
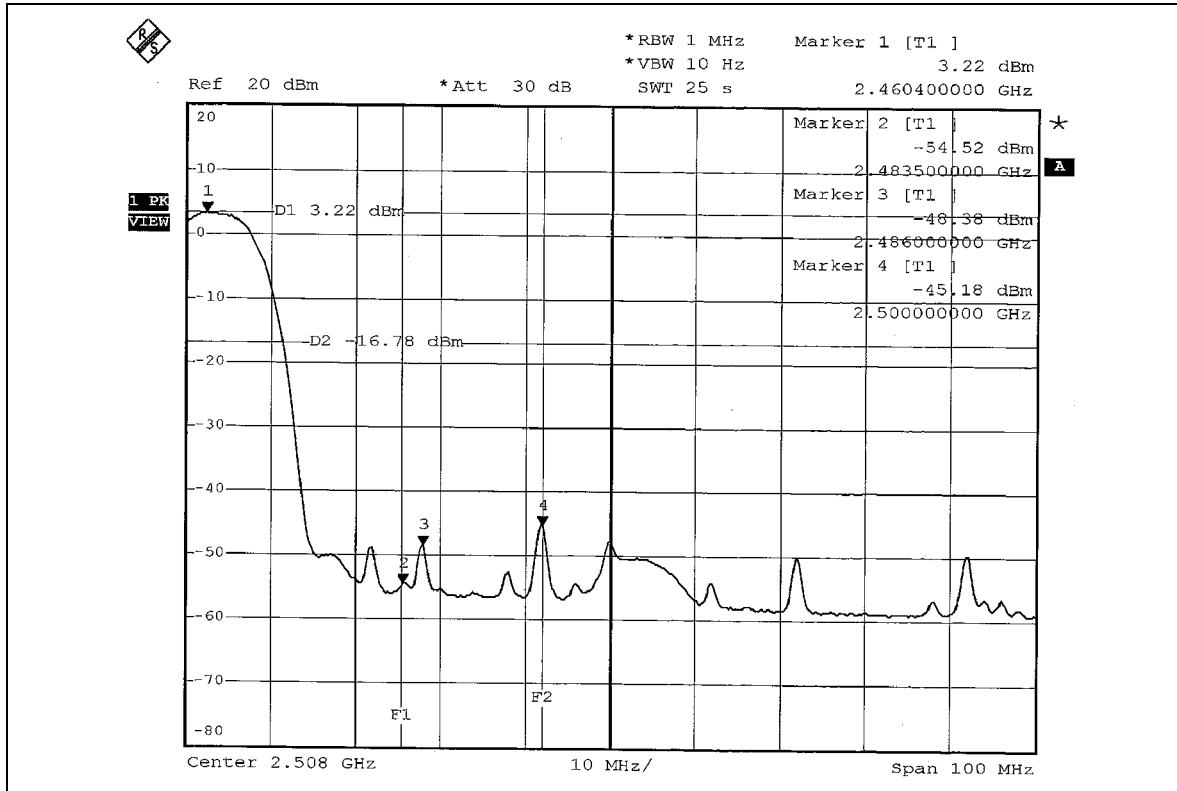
NOTE 2: The band edge emission plot of DSSS technique on page 59 shows 46.02dBc between carrier maximum power and local maximum emission in restrict band (2.5000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 109.30dBuV/m (Peak), so the maximum field strength in restrict band is $109.30 - 46.02 = 63.28$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on page 60 shows 51.60dBc between carrier maximum power and local maximum emission in restrict band (2.5000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 101.47dBuV/m (Average), so the maximum field strength in restrict band is $101.47 - 51.60 = 49.87$ dBuV/m which is under 54dBuV/m limit.

*(The test data is in accordance with ADT Report No.: RF930209R02.)









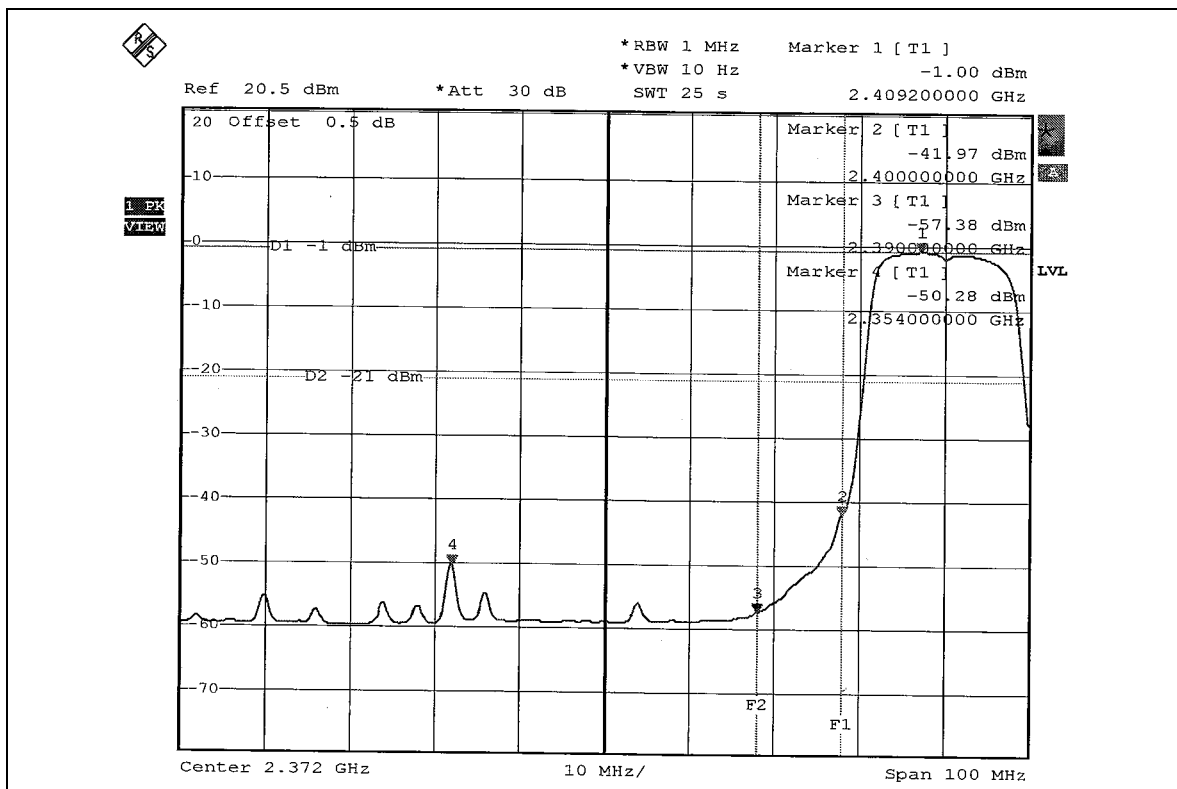
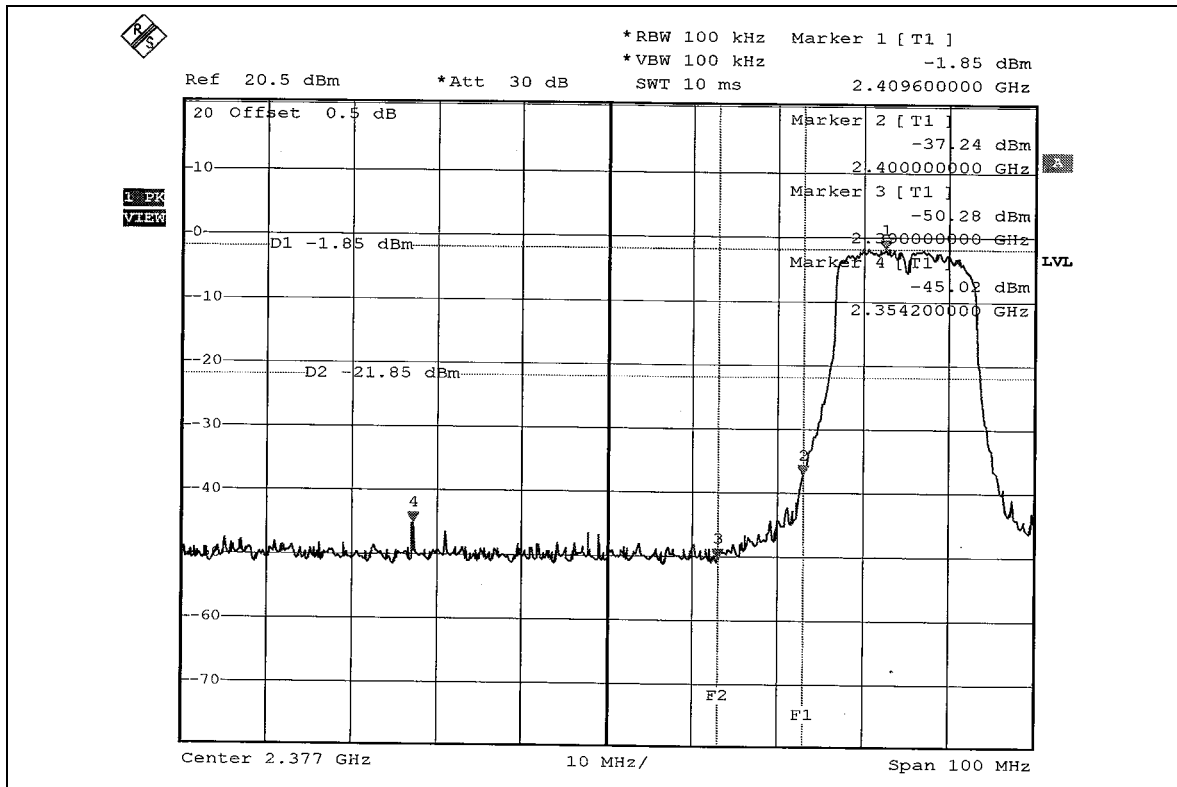
802.11g OFDM MODULATION

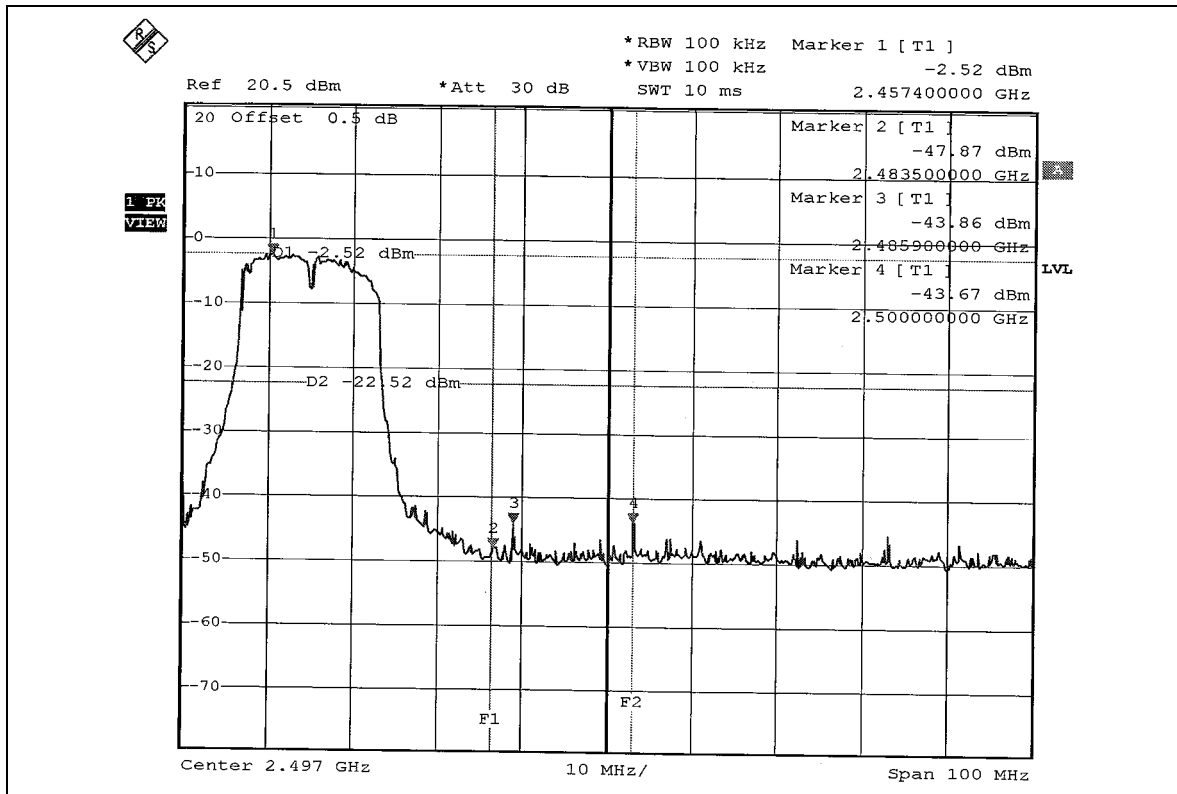
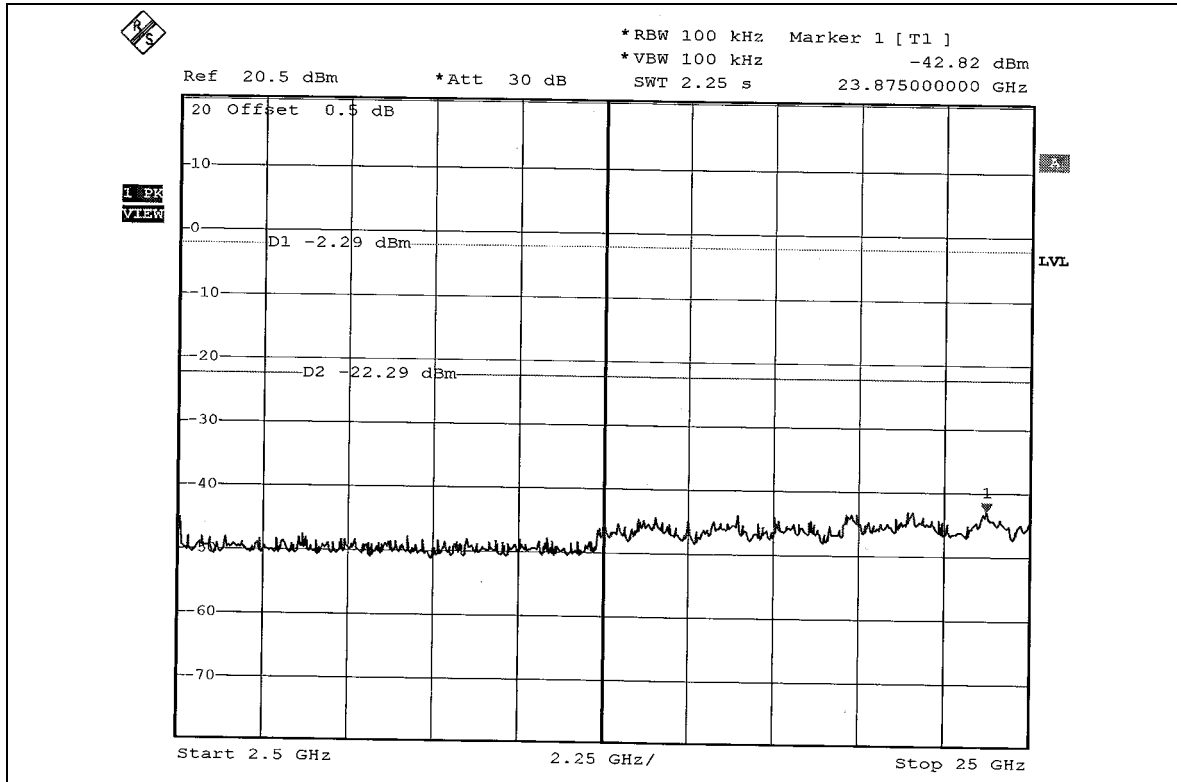
NOTE 1: The band edge emission plot of OFDM technique on page 62 shows 43.17dBc between carrier maximum power and local maximum emission in restrict band (2.3542GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.05dBuV/m (Peak), so the maximum field strength in restrict band is $106.05 - 43.17 = 62.88$ dBuV/m which is under 74dBuV/m limit.

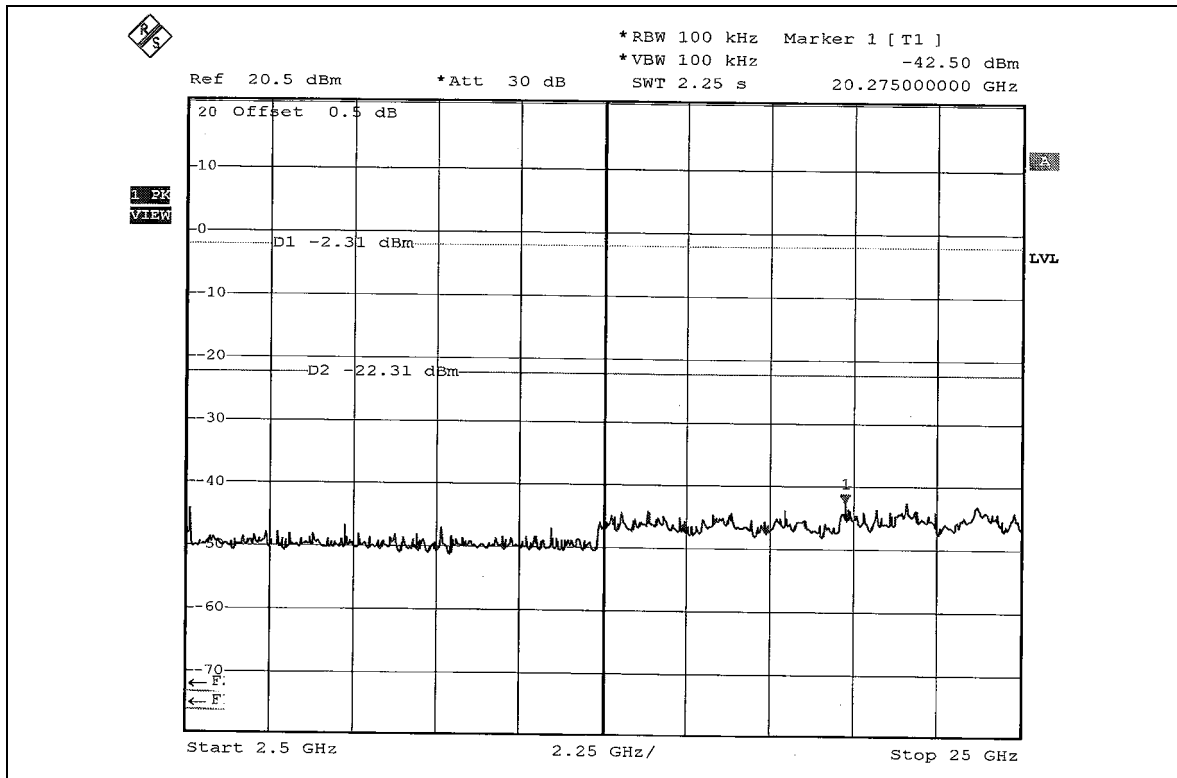
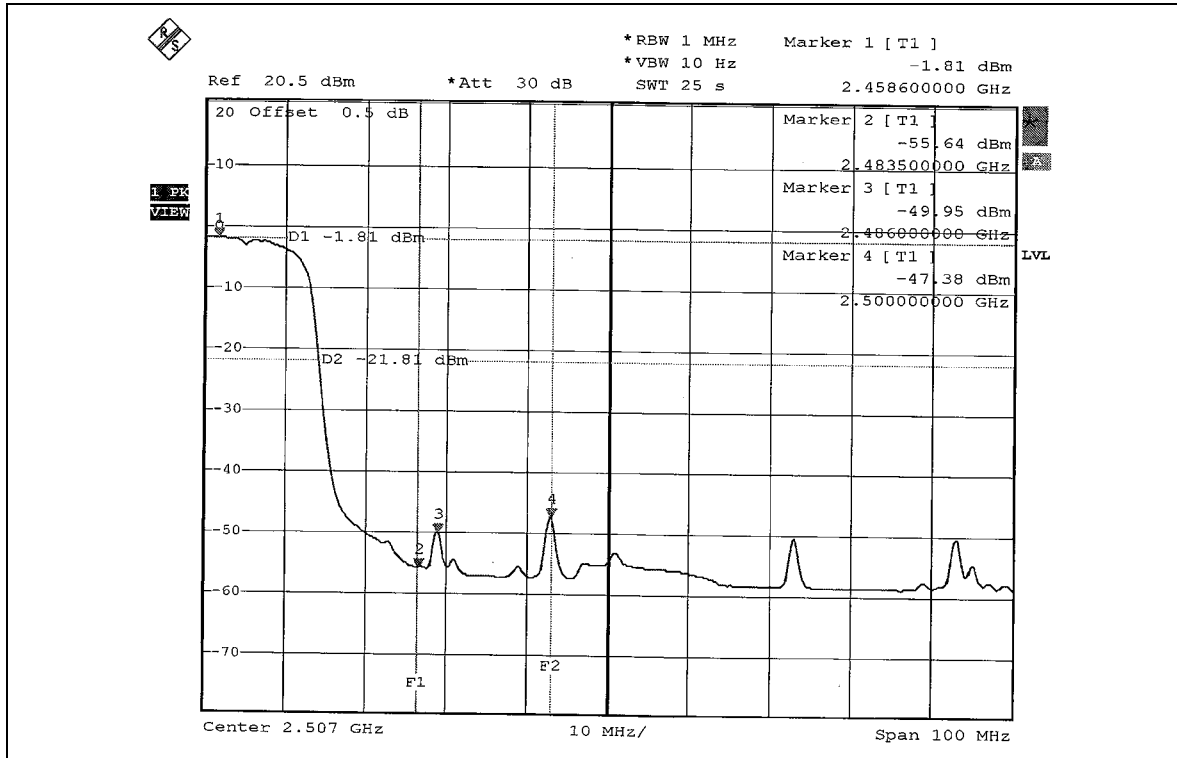
The band edge emission plot of OFDM technique on page 62 shows 49.28dBc between carrier maximum power and local maximum emission in restrict band (2.3540GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 98.84dBuV/m (Average), so the maximum field strength in restrict band is $98.84 - 49.28 = 49.56$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot of OFDM technique on page 63 shows 41.15dBc between carrier maximum power and local maximum emission in restrict band (2.5000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 106.21dBuV/m (Peak), so the maximum field strength in restrict band is $106.21 - 41.15 = 65.06$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on page 64 shows 45.57Bc between carrier maximum power and local maximum emission in restrict band (2.4860GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 96.91dBuV/m (Average), so the maximum field strength in restrict band is $96.91 - 45.57 = 51.34$ dBuV/m which is under 54dBuV/m limit.









4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

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

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

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna type used in this product is Dipole & PIFA Antenna with Reverse SMA antenna connector. The maximum Gain of this antenna is only 2.0dBi.

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, Radio, Telecom 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, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

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Fax: 886-3-3185050

Linko RF Lab.

Tel: 886-3-3270910

Fax: 886-3-3270892

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