

FCC TEST REPORT

REPORT NO.: RF960910L04
MODEL NAME: TG585 v7
(refer to item 3.1 for more details)
MODEL NO.: DSLWBC883EC
(refer to item 3.1 for more details)
RECEIVED: Sep. 06, 2007
TESTED: Sep. 06 ~ Nov. 07, 2007
ISSUED: Nov. 12, 2007

APPLICANT: Thomson Telecom Belgium

ADDRESS: Prins Boudewijnlaan 47 B-2650 Edegem -
Belgium

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, 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	8
3.2.2	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	10
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	12
3.4	DESCRIPTION OF SUPPORT UNITS	12
4	TEST TYPES AND RESULTS	13
4.1	RADIATED EMISSION MEASUREMENT	13
4.1.1	LIMITS OF RADIATED EMISSION MEASUREMENT.....	13
4.1.2	TEST INSTRUMENTS.....	14
4.1.3	TEST PROCEDURES	15
4.1.4	DEVIATION FROM TEST STANDARD.....	15
4.1.5	TEST SETUP.....	16
4.1.6	EUT OPERATING CONDITIONS	16
4.1.7	TEST RESULTS	17
4.2	CONDUCTED EMISSION MEASUREMENT	39
4.2.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT.....	39
4.2.2	TEST INSTRUMENTS.....	39
4.2.3	TEST PROCEDURES	40
4.2.4	DEVIATION FROM TEST STANDARD.....	40
4.2.5	TEST SETUP.....	41
4.2.6	EUT OPERATING CONDITIONS	41
4.2.7	TEST RESULTS	42
4.3	6dB BANDWIDTH MEASUREMENT.....	48
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	48
4.3.2	TEST INSTRUMENTS.....	48
4.3.3	TEST PROCEDURE.....	48
4.3.4	DEVIATION FROM TEST STANDARD.....	48
4.3.5	TEST SETUP.....	49
4.3.6	EUT OPERATING CONDITIONS	49
4.3.7	TEST RESULTS	50
4.4	MAXIMUM PEAK OUTPUT POWER.....	54
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	54
4.4.2	TEST INSTRUMENTS.....	54
4.4.3	TEST PROCEDURES	55
4.4.4	DEVIATION FROM TEST STANDARD.....	55
4.4.5	TEST SETUP.....	55
4.4.6	EUT OPERATING CONDITIONS	55



4.4.7	TEST RESULTS	56
4.5	POWER SPECTRAL DENSITY MEASUREMENT	57
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	57
4.5.2	TEST INSTRUMENTS.....	57
4.5.3	TEST PROCEDURE.....	57
4.5.4	DEVIATION FROM TEST STANDARD.....	57
4.5.5	TEST SETUP.....	57
4.5.6	EUT OPERATING CONDITIONS	57
4.5.7	TEST RESULTS	58
4.6	BAND EDGES MEASUREMENT	62
4.6.1	LIMITS OF BAND EDGES MEASUREMENT.....	62
4.6.2	TEST INSTRUMENTS.....	62
4.6.3	TEST PROCEDURE.....	62
4.6.4	DEVIATION FROM TEST STANDARD.....	62
4.6.5	EUT OPERATING CONDITION.....	62
4.6.6	TEST RESULTS	63
4.7	ANTENNA REQUIREMENT	73
4.7.1	STANDARD APPLICABLE	73
4.7.2	ANTENNA CONNECTED CONSTRUCTION	73
5	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	74
6	INFORMATION ON THE TESTING LABORATORIES	75
7	APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.....	76



1 CERTIFICATION

PRODUCT: ADSL Modem
MODEL NAME: TG585 v7 (refer to item 3.1 for more details)
MODEL NO.: DSLWBC883EC (refer to item 3.1 for more details)
BRAND: Thomson
APPLICANT: Thomson Telecom Belgium
TESTED: Sep. 06 ~ Nov. 07, 2007
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 15, Subpart C (Section 15.247)**
ANSI C63.4-2003

The above equipment (Model name: TG585 v7) has been tested by **Advance Data Technology Corporation**, 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 : Rennie Wang , **DATE:** Nov. 12, 2007
Rennie Wang / Senior Specialist

TECHNICAL ACCEPTANCE : Long Chen , **DATE:** Nov. 12, 2007
Responsible for RF Long Chen / Senior Engineer

APPROVED BY : Gary Chang , **DATE:** Nov. 12, 2007
Gary Chang / Assistant 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 -10.87dB at 0.154MHz.
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(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -1.37dB at 2390.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB 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 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz ~ 30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~ 1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 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	ADSL Modem
MODEL NAME:	TG585 v7 (refer to NOTE for more details)
MODEL NO.:	DSLWBC883EC (refer to NOTE for more details)
FCC ID	RSE-TG585V7
POWER SUPPLY	22Vdc from AC adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION 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
MAXIMUM OUTPUT POWER	56.885mW
ANTENNA TYPE	Printed antenna with 2.87dBi gain Dipole antenna with 2.29dBi gain
DATA CABLE	NA
I/O PORTS	RJ45
ACCESSORY DEVICES	Adapter

NOTE:

1. The models listed as below table are provided to this EUT.

MODEL NAME	MODEL NO.	ADSL	ETHERNET	WLAN
TG585 v7	DSLWBC883EC	(POTS)	(4-ports)	11 b/g
TG576 v7	DSLWBC884FD		(1-port)	

2. The EUT was operated with following adapters:

ADAPTER 1	
BRAND:	Thomson
MANUFACTURER BRAND:	OEM
MODEL:	ADS18B-W 220082
PART NO.:	DSL3616707A
INPUT:	100-240Vac, 50-60Hz, 0.5A
OUTPUT:	22Vdc, 818mA
POWER LINE:	1.8m non-shielded cable without core

ADAPTER 2	
BRAND:	Thomson
MANUFACTURER BRAND:	Friwo
MODEL:	FW7348S/22
PART NO.:	DSL3616707A
INPUT:	100-240Vac, 50-60Hz, 400mA
OUTPUT:	22Vdc, 818mA
POWER LINE:	1.8m non-shielded cable without core

ADAPTER 3	
BRAND:	Thomson
MANUFACTURER BRAND:	NetBit
MODEL:	KSA0090U-220
PART NO.:	DSL36191230
INPUT:	100-240Vac, 50-60Hz, 0.3A
OUTPUT:	22Vdc, 0.41A
POWER LINE:	1.8m non-shielded cable without core

- The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g or IEEE 802.11b devices to the network. With its high-speed data transmissions of up to 54Mbps.
- The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

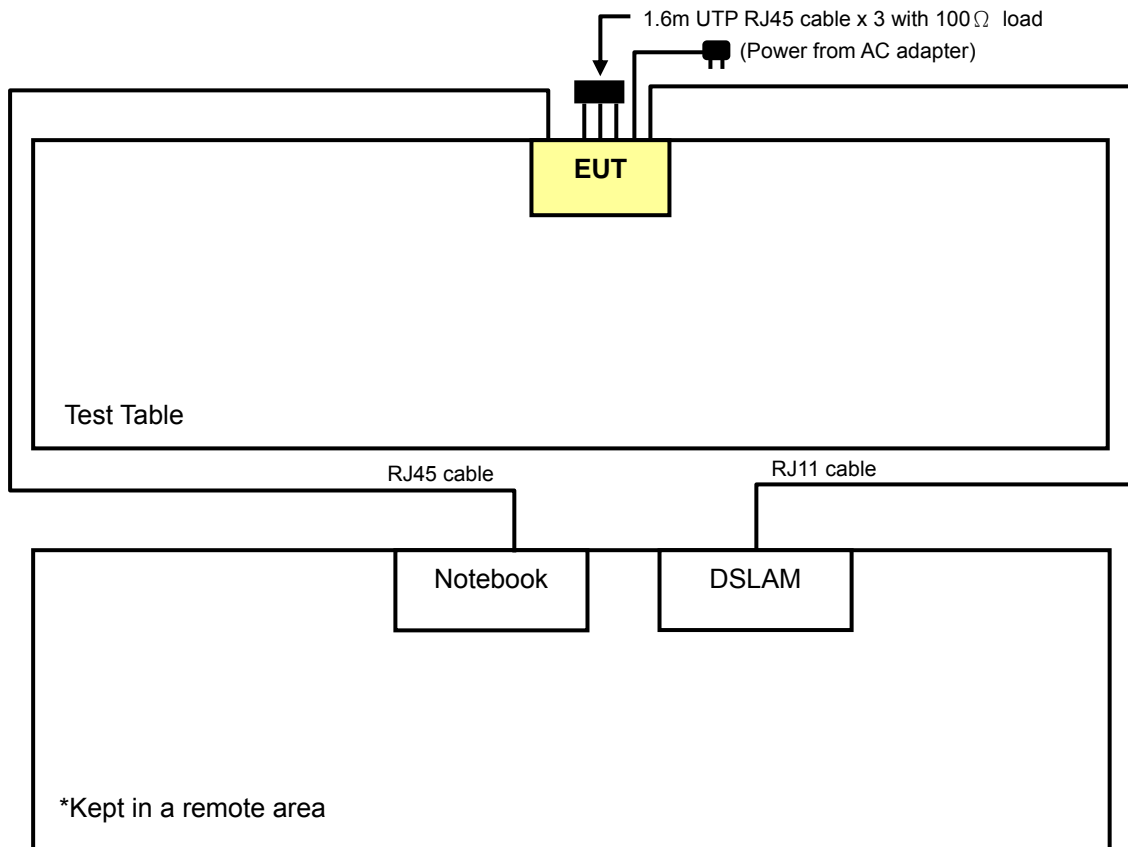
3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided to this EUT.

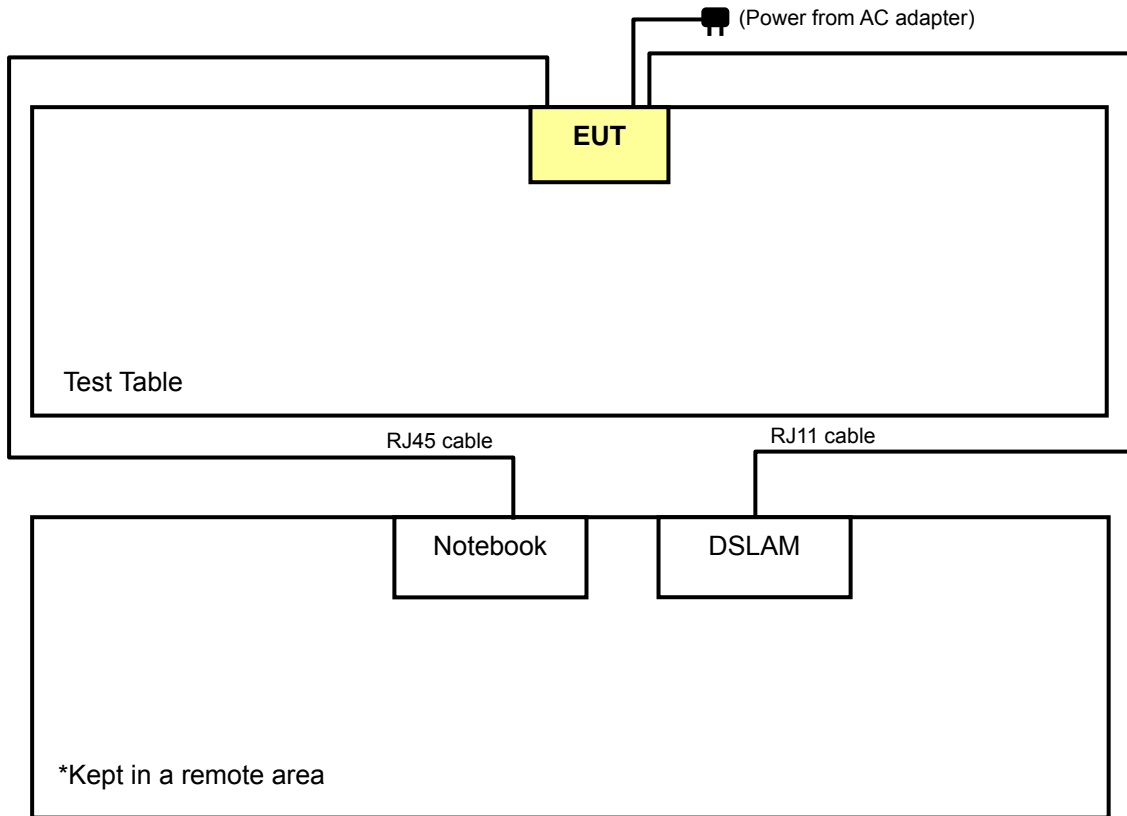
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

FOR MODEL NAME: TG585 v7



FOR MODEL NAME: TG576 v7



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT Configure Mode	Applicable to				Description
	RE \geq 1G	RE<1G	PLC	APCM	
A1	√	√	-	-	Model name: TG585 v7, with Adapter 1, Printed antenna
A2	√	√	√	√	Model name: TG585 v7, with Adapter 1, Dipole antenna
B1	-	√	-	-	Model name: TG585 v7, with Adapter 2, Printed antenna
B2	-	√	√	-	Model name: TG585 v7, with Adapter 2, Dipole antenna
C1	-	√	-	-	Model name: TG576 v7, with Adapter 3, Printed antenna
C2	-	√	√	-	Model name: TG576 v7, with Adapter 3, Dipole antenna

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

NOTE: "-" means no effect.

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.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A1 ; A2	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
A1 ; A2	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.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A1 ; A2 B1 ; B2 C1 ; C2	802.11b	1 to 11	6	DSSS	DBPSK	1

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.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A2 ; B2 ; C2	802.11b	1 to 11	6	DSSS	DBPSK	1

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.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A2	802.11b	1 to 11	1, 11	DSSS	DBPSK	1
A2	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.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A2	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
A2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6



3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. 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- 2003

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 COMPUTER	DELL	PP05L	12130898320	E2K24CLNS
2	DSLAM	Alcatel	Alcatel 7300 ASAM	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m UTP RJ45 cable
2	10m UTP RJ11 cable

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Item 1-2 acted as a communication partners to transfer data.

4 TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 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.



4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Jul. 27, 2008
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Aug. 05, 2008
BILOG Antenna SCHWARZBECK	VULB9168	9168-153	Jan. 04, 2008
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-563	Jul. 30, 2008
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Jan. 16, 2008
Preamplifier Agilent	8449B	3008A01910	Sep. 19, 2008
Preamplifier Agilent	8447D	2944A10638	Dec. 20, 2007
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218188/218189	Nov. 14, 2007
RF signal cable Worken	8D-FB	Cable-HYCH9-01	Aug. 09, 2008
Software	ADT_Radiated_V7.6	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA
Turn Table EMCO	2087-2.03	NA	NA
Antenna Tower & Turn Table Controller EMCO	2090	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 9.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The IC Site Registration No. is IC3789B-9.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. 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.

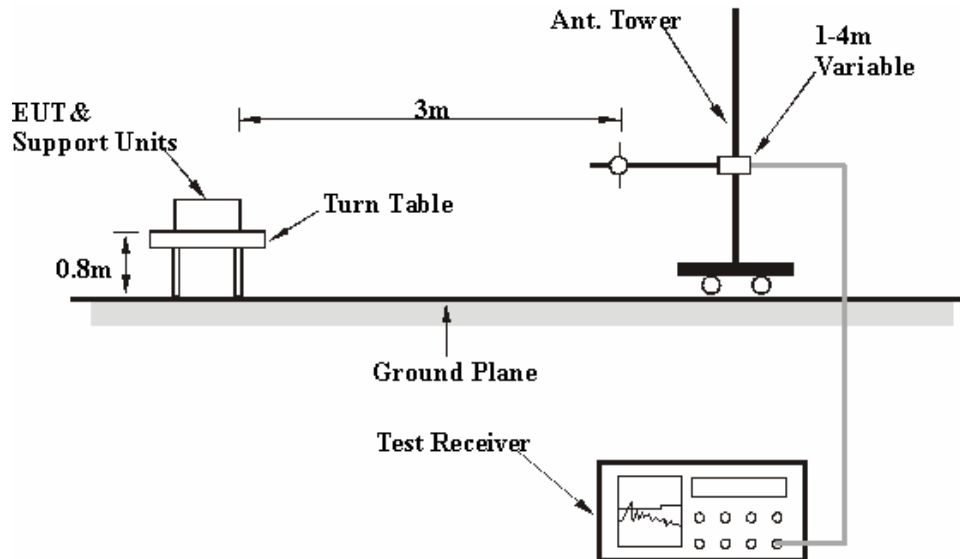
NOTE:

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 of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- a. Placed the EUT on the testing table.
- b. Prepared other notebook system and ADSL to act as a communication partners and placed them outside of testing area.
- c. The communication partners run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency via RJ45 and RJ11 cable.
- d. The communication partner sent data to EUT by command "PING".



4.1.7 TEST RESULTS

802.11b DSSS MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	2390.00	61.20 PK	74.00	-12.80	1.24 H	121	28.88	32.32
2	2390.00	51.99 AV	54.00	-2.01	1.24 H	121	19.67	32.32
3	*2412.00	111.20 PK			1.26 H	129	78.88	32.32
4	*2412.00	105.69 AV			1.26 H	129	73.37	32.32
5	2662.00	61.74 PK	91.20	-29.46	1.23 H	337	28.96	32.78
6	2662.00	49.58 AV	85.69	-36.11	1.23 H	337	16.80	32.78
7	3216.00	51.99 PK	91.20	-39.21	1.00 H	9	18.42	33.57
8	3216.00	47.32 AV	85.69	-38.37	1.00 H	9	13.75	33.57
9	4824.00	52.05 PK	74.00	-21.95	1.23 H	78	14.05	38.00
10	4824.00	46.59 AV	54.00	-7.41	1.23 H	78	8.59	38.00

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	2390.00	55.79 PK	74.00	-18.21	1.10 V	189	23.47	32.32
2	2390.00	45.81 AV	54.00	-8.19	1.10 V	189	13.49	32.32
3	*2412.00	101.49 PK			1.07 V	180	69.17	32.32
4	*2412.00	97.37 AV			1.07 V	180	65.05	32.32
5	2640.00	57.46 PK	81.49	-24.03	1.11 V	351	24.73	32.73
6	2640.00	46.22 AV	77.37	-31.15	1.11 V	351	13.49	32.73
7	3216.00	50.26 PK	81.49	-31.23	1.23 V	249	16.69	33.57
8	3216.00	45.69 AV	77.37	-31.68	1.23 V	249	12.12	33.57
9	4824.00	53.55 PK	74.00	-20.45	1.04 V	225	15.55	38.00
10	4824.00	49.37 AV	54.00	-4.63	1.04 V	225	11.37	38.00

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	*2437.00	111.15 PK			1.25 H	124	78.81	32.34
2	*2437.00	105.62 AV			1.25 H	124	73.28	32.34
3	2678.00	62.32 PK	91.15	-28.83	1.34 H	129	29.51	32.81
4	2678.00	50.09 AV	85.62	-35.53	1.34 H	129	17.28	32.81
5	3249.00	51.09 PK	91.15	-40.06	1.12 H	151	17.64	33.45
6	3249.00	46.69 AV	85.62	-38.93	1.12 H	151	13.24	33.45
7	4874.00	50.92 PK	74.00	-23.08	1.12 H	157	12.80	38.12
8	4874.00	43.38 AV	54.00	-10.62	1.12 H	157	5.26	38.12
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	*2437.00	101.79 PK			1.00 V	165	69.45	32.34
2	*2437.00	97.48 AV			1.00 V	165	65.14	32.34
3	2678.00	57.61 PK	81.79	-24.18	1.00 V	283	24.80	32.81
4	2678.00	44.28 AV	77.48	-33.20	1.00 V	283	11.47	32.81
5	3249.00	49.36 PK	81.79	-32.43	1.00 V	262	15.91	33.45
6	3249.00	43.06 AV	77.48	-34.42	1.00 V	262	9.61	33.45
7	4874.00	53.82 PK	74.00	-20.18	1.09 V	265	15.70	38.12
8	4874.00	49.77 AV	54.00	-4.23	1.09 V	265	11.65	38.12

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	*2462.00	110.61 PK			1.28 H	296	78.24	32.37
2	*2462.00	105.53 AV			1.28 H	296	73.16	32.37
3	2483.50	60.42 PK	74.00	-13.58	1.22 H	121	28.03	32.39
4	2483.50	52.33 AV	54.00	-1.67	1.22 H	121	19.94	32.39
5	2700.00	62.95 PK	74.00	-11.05	1.18 H	284	30.09	32.86
6	2700.00	50.99 AV	54.00	-3.01	1.18 H	284	18.13	32.86
7	3282.00	50.61 PK	90.61	-40.00	1.09 H	147	17.27	33.34
8	3282.00	46.02 AV	85.53	-39.51	1.09 H	147	12.68	33.34
9	4924.00	51.79 PK	74.00	-22.21	1.18 H	86	13.56	38.23
10	4924.00	44.97 AV	54.00	-9.03	1.18 H	86	6.74	38.23

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	*2462.00	101.73 PK			1.07 V	284	69.36	32.37
2	*2462.00	97.61 AV			1.07 V	284	65.24	32.37
3	2483.50	56.55 PK	74.00	-17.45	1.04 V	281	24.16	32.39
4	2483.50	47.01 AV	54.00	-6.99	1.04 V	281	14.62	32.39
5	2700.00	58.04 PK	74.00	-15.96	1.04 V	175	25.18	32.86
6	2700.00	47.80 AV	54.00	-6.20	1.04 V	175	14.94	32.86
7	3282.00	46.64 PK	81.73	-35.09	1.09 V	285	13.30	33.34
8	3282.00	36.79 AV	77.61	-40.82	1.09 V	285	3.45	33.34
9	4924.00	54.66 PK	74.00	-19.34	1.19 V	251	16.43	38.23
10	4924.00	50.40 AV	54.00	-3.60	1.19 V	251	12.17	38.23

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	2165.00	56.87 PK	83.04	-26.17	1.00 H	125	24.82	32.05
2	2165.00	46.36 AV	79.30	-32.94	1.00 H	125	14.31	32.05
3	2390.00	57.18 PK	74.00	-16.82	1.00 H	163	24.86	32.32
4	2390.00	46.57 AV	54.00	-7.43	1.00 H	163	14.25	32.32
5	*2412.00	103.04 PK			1.00 H	165	70.72	32.32
6	*2412.00	99.30 AV			1.00 H	165	66.98	32.32
7	2658.00	56.94 PK	83.04	-26.10	1.00 H	125	24.17	32.77
8	2658.00	48.48 AV	79.30	-30.82	1.00 H	125	15.71	32.77
9	3216.00	47.30 PK	83.04	-35.74	1.00 H	101	13.73	33.57
10	3216.00	37.64 AV	79.30	-41.66	1.00 H	101	4.07	33.57
11	4824.00	49.88 PK	74.00	-24.12	1.00 H	91	11.88	38.00
12	4824.00	41.76 AV	54.00	-12.24	1.00 H	91	3.76	38.00

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	2165.00	61.86 PK	89.06	-27.20	1.30 V	98	29.81	32.05
2	2165.00	50.09 AV	85.98	-35.89	1.30 V	98	18.04	32.05
3	2390.00	59.72 PK	74.00	-14.28	1.14 V	147	27.40	32.32
4	2390.00	49.27 AV	54.00	-4.73	1.14 V	147	16.95	32.32
5	*2412.00	109.06 PK			1.16 V	327	76.74	32.32
6	*2412.00	105.98 AV			1.16 V	327	73.66	32.32
7	2658.00	66.87 PK	89.06	-22.19	1.26 V	117	34.10	32.77
8	2658.00	54.45 AV	85.98	-31.53	1.26 V	117	21.68	32.77
9	3216.00	52.46 PK	89.06	-36.60	1.01 V	101	18.89	33.57
10	3216.00	48.59 AV	85.98	-37.39	1.01 V	101	15.02	33.57
11	4824.00	54.40 PK	74.00	-19.60	1.20 V	264	16.40	38.00
12	4824.00	49.63 AV	54.00	-4.37	1.20 V	264	11.63	38.00

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	2196.00	58.61 PK	83.71	-25.10	1.00 H	154	26.31	32.30
2	2196.00	46.98 AV	79.59	-32.61	1.00 H	154	14.68	32.30
3	*2437.00	103.71 PK			1.04 H	142	71.37	32.34
4	*2437.00	99.59 AV			1.04 H	142	67.25	32.34
5	2675.00	61.11 PK	83.71	-22.60	1.00 H	359	28.31	32.80
6	2675.00	49.38 AV	79.59	-30.21	1.00 H	359	16.58	32.80
7	3249.00	48.80 PK	83.71	-34.91	1.00 H	93	15.35	33.45
8	3249.00	41.08 AV	79.59	-38.51	1.00 H	93	7.63	33.45
9	4874.00	52.28 PK	74.00	-21.72	1.00 H	306	14.16	38.12
10	4874.00	43.96 AV	54.00	-10.04	1.00 H	306	5.84	38.12

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	2196.00	64.47 PK	90.49	-26.02	1.01 V	16	32.17	32.30
2	2196.00	51.80 AV	86.69	-34.89	1.01 V	16	19.50	32.30
3	*2437.00	110.49 PK			1.18 V	337	78.15	32.34
4	*2437.00	106.69 AV			1.18 V	337	74.35	32.34
5	2675.00	63.67 PK	90.49	-26.82	1.09 V	336	30.87	32.80
6	2675.00	50.91 AV	86.69	-35.78	1.09 V	336	18.10	32.80
7	3249.00	53.77 PK	90.49	-36.72	1.00 V	91	20.32	33.45
8	3249.00	50.39 AV	86.69	-36.30	1.00 V	91	16.94	33.45
9	4874.00	55.81 PK	74.00	-18.19	1.07 V	51	17.69	38.12
10	4874.00	51.28 AV	54.00	-2.72	1.07 V	51	13.16	38.12

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	*2462.00	103.53 PK			1.00 H	185	71.16	32.37
2	*2462.00	99.42 AV			1.00 H	185	67.05	32.37
3	2483.50	59.20 PK	74.00	-14.80	1.00 H	186	26.81	32.39
4	2483.50	48.30 AV	54.00	-5.70	1.00 H	186	15.91	32.39
5	2690.00	59.82 PK	74.00	-14.18	1.00 H	165	26.98	32.84
6	2690.00	48.64 AV	54.00	-5.36	1.00 H	165	15.80	32.84
7	3282.00	47.50 PK	83.53	-36.03	1.00 H	51	14.16	33.34
8	3282.00	39.98 AV	79.42	-39.44	1.00 H	51	6.64	33.34
9	4924.00	49.61 PK	74.00	-24.39	1.10 H	335	11.38	38.23
10	4924.00	40.83 AV	54.00	-13.17	1.10 H	335	2.60	38.23

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	*2462.00	109.83 PK			1.10 V	96	77.46	32.37
2	*2462.00	106.28 AV			1.10 V	96	73.91	32.37
3	2483.00	62.04 PK	89.83	-27.79	1.11 V	166	29.66	32.38
4	2483.00	52.35 AV	86.28	-33.93	1.11 V	166	19.97	32.38
5	2690.00	63.44 PK	74.00	-10.56	1.31 V	34	30.60	32.84
6	2690.00	50.93 AV	54.00	-3.07	1.31 V	34	18.09	32.84
7	3282.00	49.72 PK	89.83	-40.11	1.05 V	38	16.38	33.34
8	3282.00	44.45 AV	86.28	-41.83	1.05 V	38	11.11	33.34
9	4924.00	52.75 PK	74.00	-21.25	1.30 V	287	14.52	38.23
10	4924.00	47.72 AV	54.00	-6.28	1.30 V	287	9.49	38.23

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	2390.00	72.63 PK	74.00	-1.37	4.00 H	112	40.31	32.32
2	2390.00	52.12 AV	54.00	-1.88	4.00 H	112	19.80	32.32
3	*2412.00	110.59 PK			1.32 H	110	78.27	32.32
4	*2412.00	103.04 AV			1.32 H	110	70.72	32.32
5	2640.00	58.79 PK	90.59	-31.80	1.12 H	129	26.06	32.73
6	2640.00	48.75 AV	83.04	-34.29	1.12 H	129	16.02	32.73
7	3216.00	51.47 PK	90.59	-39.12	1.12 H	301	17.90	33.57
8	3216.00	47.19 AV	83.04	-35.85	1.12 H	301	13.62	33.57
9	4824.00	48.81 PK	74.00	-25.19	1.18 H	17	10.81	38.00
10	4824.00	38.13 AV	54.00	-15.87	1.18 H	17	0.13	38.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.82 PK	74.00	-13.18	1.20 V	178	28.50	32.32
2	2390.00	46.23 AV	54.00	-7.77	1.20 V	178	13.91	32.32
3	*2412.00	101.84 PK			1.23 V	155	69.52	32.32
4	*2412.00	94.67 AV			1.23 V	155	62.35	32.32
5	2640.00	55.10 PK	81.84	-26.74	1.43 V	156	22.37	32.73
6	2640.00	44.58 AV	74.67	-30.09	1.43 V	156	11.85	32.73
7	3216.00	48.77 PK	81.84	-33.07	1.00 V	263	15.20	33.57
8	3216.00	42.23 AV	74.67	-32.44	1.00 V	263	8.66	33.57
9	4824.00	49.91 PK	74.00	-24.09	1.25 V	236	11.91	38.00
10	4824.00	41.71 AV	54.00	-12.29	1.25 V	236	3.71	38.00

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	*2437.00	111.54 PK			1.27 H	125	79.20	32.34
2	*2437.00	103.78 AV			1.27 H	125	71.44	32.34
3	2681.00	64.38 PK	91.54	-27.16	1.19 H	150	31.56	32.82
4	2681.00	49.77 AV	83.78	-34.01	1.19 H	150	16.95	32.82
5	3249.00	48.66 PK	91.54	-42.88	1.00 H	1	15.21	33.45
6	3249.00	42.33 AV	83.78	-41.45	1.00 H	1	8.88	33.45
7	4874.00	48.69 PK	74.00	-25.31	1.26 H	83	10.57	38.12
8	4874.00	41.76 AV	54.00	-12.24	1.26 H	83	3.64	38.12
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	*2437.00	101.85 PK			1.00 V	161	69.51	32.34
2	*2437.00	93.85 AV			1.00 V	161	61.51	32.34
3	2681.00	53.85 PK	81.85	-28.00	1.84 V	283	21.03	32.82
4	2681.00	44.10 AV	73.85	-29.75	1.84 V	283	11.28	32.82
5	3249.00	48.05 PK	81.85	-33.80	1.00 V	161	14.60	33.45
6	3249.00	39.34 AV	73.85	-34.51	1.00 V	161	5.89	33.45
7	4874.00	48.81 PK	74.00	-25.19	1.24 V	78	10.69	38.12
8	4874.00	39.38 AV	54.00	-14.62	1.24 V	78	1.26	38.12

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	*2462.00	111.77 PK			1.27 H	150	79.40	32.37
2	*2462.00	103.84 AV			1.27 H	150	71.47	32.37
3	2483.50	69.61 PK	74.00	-4.39	1.00 H	153	37.22	32.39
4	2483.50	52.20 AV	54.00	-1.80	1.00 H	153	19.81	32.39
5	2700.00	62.43 PK	74.00	-11.57	1.10 H	125	29.57	32.86
6	2700.00	50.17 AV	54.00	-3.83	1.10 H	125	17.31	32.86
7	3282.00	49.56 PK	91.77	-42.21	1.11 H	146	16.22	33.34
8	3282.00	43.99 AV	83.84	-39.85	1.11 H	146	10.65	33.34
9	4924.00	48.60 PK	74.00	-25.40	1.11 H	285	10.37	38.23
10	4924.00	39.36 AV	54.00	-14.64	1.11 H	285	1.13	38.23

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	*2462.00	102.11 PK			1.00 V	157	69.74	32.37
2	*2462.00	95.01 AV			1.00 V	157	62.64	32.37
3	2483.50	59.69 PK	74.00	-14.31	1.00 V	182	27.30	32.39
4	2483.50	47.65 AV	54.00	-6.35	1.00 V	182	15.26	32.39
5	2700.00	58.06 PK	74.00	-15.94	1.00 V	208	25.20	32.86
6	2700.00	47.74 AV	54.00	-6.26	1.00 V	208	14.88	32.86
7	3282.00	47.14 PK	82.11	-34.97	1.35 V	289	13.80	33.34
8	3282.00	37.90 AV	75.01	-37.11	1.35 V	289	4.56	33.34
9	4924.00	49.65 PK	74.00	-24.35	1.01 V	259	11.42	38.23
10	4924.00	40.97 AV	54.00	-13.03	1.01 V	259	2.74	38.23

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	2390.00	59.68 PK	74.00	-14.32	1.04 H	185	27.36	32.32
2	2390.00	46.60 AV	54.00	-7.40	1.04 H	185	14.28	32.32
3	*2412.00	100.40 PK			1.04 H	185	68.08	32.32
4	*2412.00	93.44 AV			1.04 H	185	61.12	32.32
5	2672.00	60.10 PK	80.40	-20.30	1.04 H	19	27.30	32.80
6	2672.00	47.41 AV	73.44	-26.03	1.04 H	19	14.61	32.80
7	3216.00	45.42 PK	80.40	-34.98	1.01 H	224	11.85	33.57
8	3216.00	34.52 AV	73.44	-38.92	1.01 H	224	0.95	33.57
9	4824.00	48.30 PK	74.00	-25.70	1.14 H	14	10.30	38.00
10	4824.00	36.41 AV	54.00	-17.59	1.14 H	14	-1.59	38.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	67.40 PK	74.00	-6.60	1.40 V	97	35.08	32.32
2	2390.00	49.05 AV	54.00	-4.95	1.40 V	97	16.73	32.32
3	*2412.00	110.34 PK			1.13 V	223	78.02	32.32
4	*2412.00	102.75 AV			1.13 V	223	70.43	32.32
5	2672.00	61.03 PK	90.34	-29.31	1.33 V	9	28.23	32.80
6	2672.00	49.33 AV	82.75	-33.42	1.33 V	9	16.53	32.80
7	3216.00	49.68 PK	90.34	-40.66	1.02 V	83	16.11	33.57
8	3216.00	44.42 AV	82.75	-38.33	1.02 V	83	10.85	33.57
9	4824.00	48.32 PK	74.00	-25.68	1.28 V	322	10.32	38.00
10	4824.00	41.19 AV	54.00	-12.81	1.28 V	322	3.19	38.00

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	*2437.00	100.62 PK			1.26 H	82	68.28	32.34
2	*2437.00	93.94 AV			1.26 H	82	61.60	32.34
3	2675.00	59.34 PK	80.62	-21.28	1.12 H	27	26.54	32.80
4	2675.00	48.08 AV	73.94	-25.86	1.12 H	27	15.27	32.80
5	3249.00	48.53 PK	80.62	-32.09	1.09 H	99	15.08	33.45
6	3249.00	39.73 AV	73.94	-34.21	1.09 H	99	6.28	33.45
7	4874.00	48.28 PK	74.00	-25.72	1.21 H	349	10.16	38.12
8	4874.00	37.87 AV	54.00	-16.13	1.21 H	349	-0.25	38.12
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	*2437.00	110.47 PK			1.19 V	329	78.13	32.34
2	*2437.00	102.88 AV			1.19 V	329	70.54	32.34
3	2675.00	65.06 PK	90.47	-25.41	1.20 V	90	32.26	32.80
4	2675.00	51.80 AV	82.88	-31.08	1.20 V	90	19.00	32.80
5	3249.00	50.65 PK	90.47	-39.82	1.00 V	280	17.20	33.45
6	3249.00	45.10 AV	82.88	-37.78	1.00 V	280	11.65	33.45
7	4874.00	50.67 PK	74.00	-23.33	1.04 V	59	12.55	38.12
8	4874.00	45.38 AV	54.00	-8.62	1.04 V	59	7.26	38.12

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	*2462.000	100.96 PK			1.21 H	172	68.59	32.37
2	*2462.000	94.20 AV			1.21 H	172	61.83	32.37
3	2483.500	58.19 PK	74.00	-15.81	1.09 H	193	25.80	32.39
4	2483.500	46.72 AV	54.00	-7.28	1.09 H	193	14.33	32.39
5	2700.000	58.64 PK	74.00	-15.36	1.09 H	21	25.78	32.86
6	2700.000	47.37 AV	54.00	-6.63	1.09 H	21	14.51	32.86
7	3282.000	46.71 PK	74.00	-27.29	1.00 H	43	13.37	33.34
8	3282.000	36.42 AV	54.00	-17.58	1.00 H	43	3.08	33.34
9	4924.000	47.92 PK	74.00	-26.08	1.21 H	5	9.69	38.23
10	4924.000	36.23 AV	54.00	-17.77	1.21 H	5	-2.00	38.23

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	*2462.000	111.13 PK			1.15 V	191	78.76	32.37
2	*2462.000	103.64 AV			1.15 V	191	71.27	32.37
3	2483.500	68.22 PK	74.00	-5.78	1.16 V	225	35.83	32.39
4	2483.500	49.68 AV	54.00	-4.32	1.16 V	225	17.29	32.39
5	2700.000	64.81 PK	74.00	-9.19	1.20 V	122	31.95	32.86
6	2700.000	50.38 AV	54.00	-3.62	1.20 V	122	17.52	32.86
7	3282.000	50.91 PK	74.00	-23.09	1.00 V	90	17.57	33.34
8	3282.000	46.56 AV	54.00	-7.44	1.00 V	90	13.22	33.34
9	4924.000	50.68 PK	74.00	-23.32	1.55 V	44	12.45	38.23
10	4924.000	42.03 AV	54.00	-11.97	1.55 V	44	3.80	38.23

- 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.



BELOW 1GHz WORST-CASE DATA : 802.11b DSSS MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 66%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A1		

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	179.61	32.83 QP	43.50	-10.67	1.50 H	256	20.77	12.06
2	467.36	35.87 QP	46.00	-10.13	1.00 H	196	18.12	17.75
3	533.47	35.46 QP	46.00	-10.54	1.00 H	256	15.92	19.54
4	599.58	38.10 QP	46.00	-7.90	1.50 H	4	17.01	21.09
5	751.23	38.77 QP	46.00	-7.23	1.00 H	214	15.55	23.22
6	840.67	36.86 QP	46.00	-9.14	2.00 H	55	12.10	24.76
7	879.55	39.51 QP	46.00	-6.49	1.00 H	28	14.39	25.12
8	900.94	39.99 QP	46.00	-6.01	1.00 H	10	14.66	25.32
9	945.66	41.04 QP	46.00	-4.96	1.00 H	292	15.34	25.69
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	49.34	29.79 QP	40.00	-10.21	1.50 V	73	16.28	13.52
2	179.61	33.04 QP	43.50	-10.46	1.00 V	214	20.98	12.06
3	500.42	34.29 QP	46.00	-11.71	1.00 V	148	15.52	18.76
4	599.58	38.33 QP	46.00	-7.67	1.00 V	217	17.24	21.09
5	751.23	34.39 QP	46.00	-11.61	1.00 V	193	11.17	23.22
6	879.55	37.59 QP	46.00	-8.41	1.50 V	157	12.47	25.12
7	945.66	41.30 QP	46.00	-4.70	1.00 V	13	15.61	25.69

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	A2		

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	47.40	30.81 QP	40.00	-9.19	1.00 H	61	17.82	12.99
2	97.95	32.12 QP	43.50	-11.38	1.75 H	220	22.99	9.12
3	249.60	35.42 QP	46.00	-10.58	1.00 H	115	22.88	12.54
4	360.43	35.35 QP	46.00	-10.65	1.00 H	202	20.55	14.80
5	500.42	37.32 QP	46.00	-8.68	1.50 H	244	18.56	18.76
6	601.52	42.42 QP	46.00	-3.58	1.00 H	226	21.32	21.11
7	626.80	39.42 QP	46.00	-6.58	1.00 H	229	18.08	21.34
8	751.23	35.60 QP	46.00	-10.40	1.50 H	223	12.38	23.22
9	842.61	36.45 QP	46.00	-9.55	1.50 H	43	11.67	24.77
10	902.89	44.39 QP	46.00	-1.61	1.50 H	133	19.05	25.34

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	47.40	32.47 QP	40.00	-7.53	1.00 V	241	19.48	12.99
2	92.12	34.10 QP	43.50	-9.40	1.00 V	178	25.05	9.05
3	97.95	35.75 QP	43.50	-7.75	1.00 V	190	26.63	9.12
4	132.95	32.25 QP	43.50	-11.25	1.00 V	301	20.20	12.05
5	249.60	36.02 QP	46.00	-9.98	1.00 V	310	23.49	12.54
6	500.42	37.21 QP	46.00	-8.79	1.00 V	181	18.45	18.76
7	601.52	37.05 QP	46.00	-8.95	1.25 V	208	15.94	21.11
8	626.80	35.81 QP	46.00	-10.19	1.00 V	217	14.47	21.34
9	751.23	37.30 QP	46.00	-8.70	1.00 V	196	14.08	23.22
10	877.61	34.53 QP	46.00	-11.47	1.00 V	256	9.42	25.11
11	953.44	34.26 QP	46.00	-11.74	1.25 V	223	8.52	25.74

- 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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	B1		

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	249.60	37.43 QP	46.00	-8.57	1.00 H	142	24.90	12.54
2	374.04	36.40 QP	46.00	-9.60	1.00 H	139	21.29	15.11
3	500.42	37.84 QP	46.00	-8.16	1.50 H	133	19.08	18.76
4	599.58	38.17 QP	46.00	-7.83	1.50 H	136	17.08	21.09
5	751.23	38.46 QP	46.00	-7.54	1.00 H	130	15.24	23.22
6	951.49	36.78 QP	46.00	-9.22	1.50 H	67	11.05	25.73
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	267.10	33.34 QP	46.00	-12.66	1.50 V	181	20.52	12.82
2	360.43	34.30 QP	46.00	-11.70	1.50 V	298	19.50	14.80
3	500.42	36.74 QP	46.00	-9.26	1.00 V	52	17.98	18.76
4	624.85	35.00 QP	46.00	-11.00	1.50 V	187	13.68	21.32
5	840.67	34.74 QP	46.00	-11.26	1.50 V	310	9.99	24.76
6	947.60	34.87 QP	46.00	-11.13	1.00 V	205	9.16	25.71

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	B2		

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	49.34	30.68 QP	40.00	-9.32	1.25 H	358	17.16	13.52
2	500.42	38.00 QP	46.00	-8.00	1.50 H	226	19.24	18.76
3	601.52	37.86 QP	46.00	-8.14	1.00 H	262	16.75	21.11
4	626.80	36.13 QP	46.00	-9.87	1.50 H	100	14.79	21.34
5	751.23	36.78 QP	46.00	-9.22	1.50 H	229	13.55	23.22
6	877.61	36.35 QP	46.00	-9.65	1.25 H	238	11.25	25.11
7	916.50	36.14 QP	46.00	-9.86	1.00 H	85	10.69	25.45

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	47.40	33.19 QP	40.00	-6.81	1.00 V	109	20.20	12.99
2	84.34	32.64 QP	40.00	-7.36	1.00 V	211	24.25	8.39
3	107.67	35.47 QP	43.50	-8.03	1.00 V	94	25.40	10.08
4	132.95	33.55 QP	43.50	-9.95	1.00 V	121	21.51	12.05
5	360.43	36.05 QP	46.00	-9.95	1.25 V	157	21.25	14.80
6	500.42	37.60 QP	46.00	-8.40	1.00 V	223	18.83	18.76
7	601.52	38.76 QP	46.00	-7.24	1.50 V	190	17.65	21.11
8	626.80	37.09 QP	46.00	-8.91	1.25 V	199	15.75	21.34
9	801.78	36.26 QP	46.00	-9.74	1.00 V	199	11.88	24.38

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	C1		

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	249.60	35.63 QP	46.00	-10.37	1.50 H	277	23.09	12.54
2	360.43	32.26 QP	46.00	-13.74	1.00 H	10	17.46	14.80
3	624.85	33.16 QP	46.00	-12.84	1.25 H	244	11.84	21.32
4	720.12	34.32 QP	46.00	-11.68	1.25 H	196	11.85	22.48
5	840.67	37.21 QP	46.00	-8.79	1.00 H	151	12.45	24.76
6	961.21	41.03 QP	54.00	-12.97	1.25 H	55	15.26	25.77
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	59.06	36.81 QP	40.00	-3.19	1.50 V	76	23.51	13.30
2	374.04	31.67 QP	46.00	-14.33	1.25 V	229	16.55	15.11
3	479.03	32.53 QP	46.00	-13.47	1.00 V	208	14.42	18.11
4	599.58	33.93 QP	46.00	-12.07	1.00 V	286	12.84	21.09
5	720.12	31.71 QP	46.00	-14.29	1.00 V	160	9.23	22.48
6	840.67	33.69 QP	46.00	-12.31	1.25 V	247	8.93	24.76

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 987hPa	TESTED BY	Lori Chiu
TEST MODE	C2		

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	49.34	30.72 QP	40.00	-9.28	1.25 H	28	17.21	13.52
2	107.67	29.44 QP	43.50	-14.06	1.50 H	187	19.36	10.08
3	179.61	29.16 QP	43.50	-14.34	1.50 H	112	17.10	12.06
4	360.43	35.26 QP	46.00	-10.74	1.00 H	31	20.46	14.80
5	480.97	31.69 QP	46.00	-14.31	1.50 H	73	13.52	18.17
6	626.80	31.83 QP	46.00	-14.17	1.00 H	163	10.49	21.34
7	782.34	32.56 QP	46.00	-13.44	2.00 H	10	8.61	23.95
8	842.61	36.07 QP	46.00	-9.93	1.50 H	73	11.30	24.77
9	902.89	32.27 QP	46.00	-13.73	1.50 H	28	6.93	25.34
10	963.16	41.81 QP	54.00	-12.19	1.25 H	40	16.04	25.78

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	49.34	30.53 QP	40.00	-9.47	1.25 V	289	17.02	13.52
2	80.45	27.90 QP	40.00	-12.10	1.00 V	223	19.95	7.95
3	109.62	33.53 QP	43.50	-9.97	1.25 V	220	23.22	10.31
4	132.95	30.72 QP	43.50	-12.78	1.00 V	139	18.67	12.05
5	249.60	34.66 QP	46.00	-11.34	1.00 V	283	22.12	12.54
6	333.21	33.02 QP	46.00	-12.98	1.00 V	10	18.86	14.16
7	480.97	31.43 QP	46.00	-14.57	1.25 V	247	13.26	18.17
8	626.80	31.26 QP	46.00	-14.74	1.00 V	211	9.92	21.34
9	722.07	31.52 QP	46.00	-14.48	1.50 V	310	9.00	22.52
10	842.61	33.69 QP	46.00	-12.31	2.00 V	154	8.91	24.77
11	953.44	35.31 QP	46.00	-10.69	1.00 V	217	9.57	25.74

- 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.

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 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.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Dec. 08, 2007
RF signal cable Woken	5D-FB	Cable-HYCO3-01	Jan. 06, 2008
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 08, 2008
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jan. 16, 2008
Software ADT	ADT_Cond_V3	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

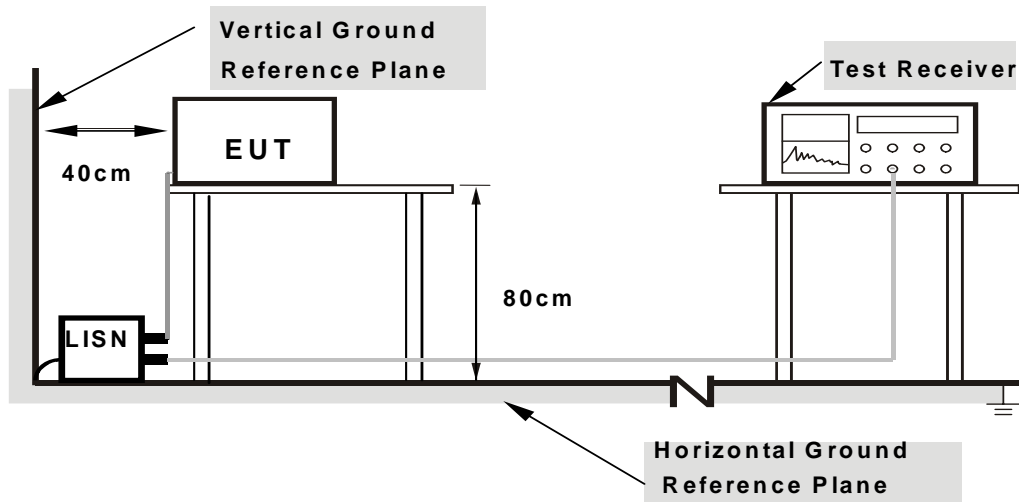
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80
from other units and other metal planes**

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

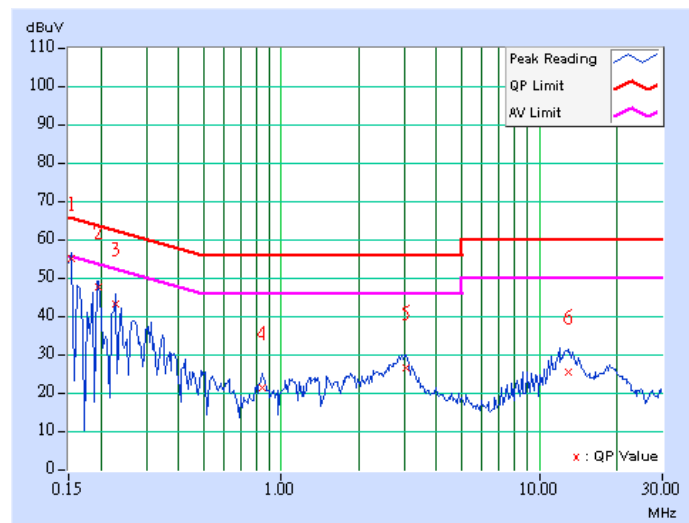
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 981hPa
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A2		

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	0.154	0.10	54.82	-	54.92	-	65.79	55.79	-10.87	-
2	0.197	0.10	47.50	-	47.60	-	63.74	53.74	-16.14	-
3	0.228	0.10	42.90	-	43.00	-	62.52	52.52	-19.52	-
4	0.849	0.11	21.02	-	21.13	-	56.00	46.00	-34.87	-
5	3.039	0.25	26.09	-	26.34	-	56.00	46.00	-29.66	-
6	13.039	0.42	24.98	-	25.40	-	60.00	50.00	-34.60	-

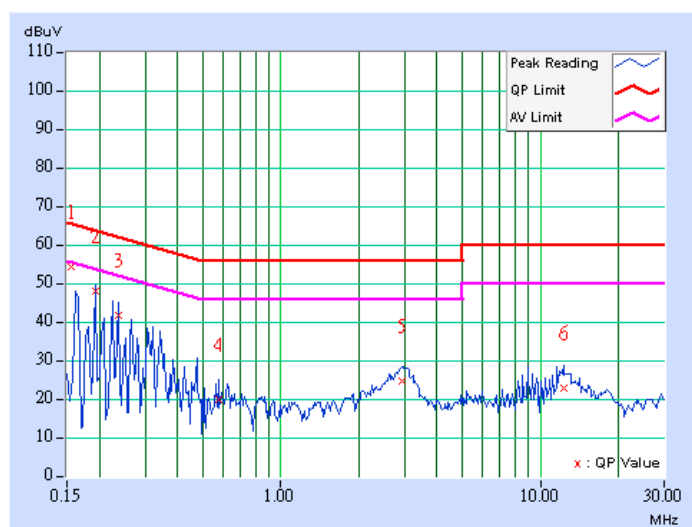
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 2
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 981hPa
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A2		

No	Freq. [MHz]	Corr.	Reading Value		Emission Level		Limit		Margin	
		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.157	0.10	54.15	-	54.25	-	65.64	55.64	-11.39	-
2	0.193	0.10	47.60	-	47.70	-	63.91	53.91	-16.21	-
3	0.236	0.10	41.32	-	41.42	-	62.24	52.24	-20.82	-
4	0.576	0.13	19.44	-	19.57	-	56.00	46.00	-36.43	-
5	2.918	0.25	24.52	-	24.77	-	56.00	46.00	-31.23	-
6	12.313	0.45	22.38	-	22.83	-	60.00	50.00	-37.17	-

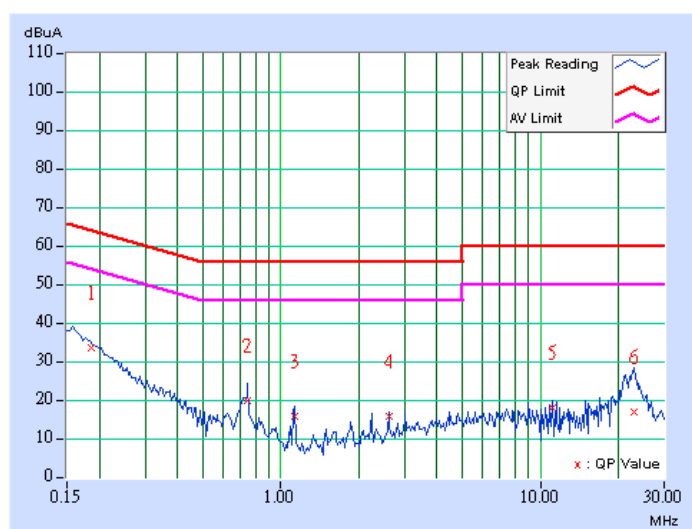
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 981hPa
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B2		

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	0.185	0.10	33.07	-	33.17	-	64.25
2	0.748	0.11	19.30	-	19.41	-	56.00	46.00	-36.59	-
3	1.125	0.12	15.21	-	15.33	-	56.00	46.00	-40.67	-
4	2.621	0.24	15.20	-	15.44	-	56.00	46.00	-40.56	-
5	11.180	0.37	17.55	-	17.92	-	60.00	50.00	-42.08	-
6	22.852	0.71	16.35	-	17.06	-	60.00	50.00	-42.94	-

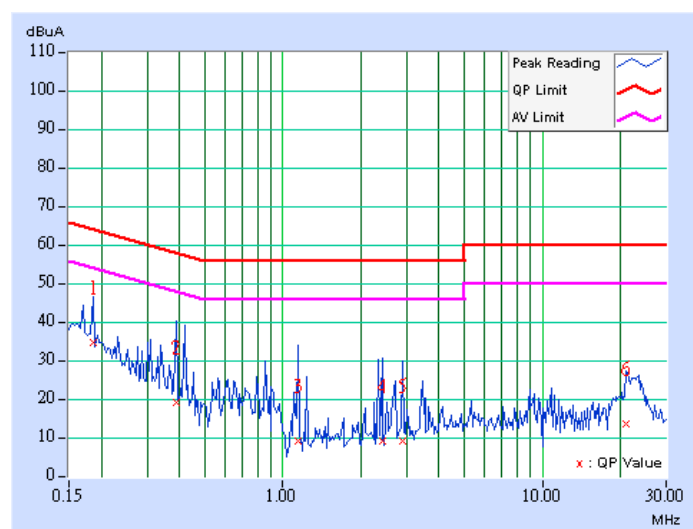
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 2
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 981hPa
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B2		

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	0.185	0.10	34.17	-	34.27	-	64.25	54.25	-29.98	-
2	0.388	0.10	18.51	-	18.61	-	58.10	48.10	-39.49	-
3	1.141	0.21	8.74	-	8.95	-	56.00	46.00	-47.05	-
4	2.418	0.23	8.56	-	8.79	-	56.00	46.00	-47.21	-
5	2.906	0.25	8.75	-	9.00	-	56.00	46.00	-47.00	-
6	20.996	0.60	13.03	-	13.63	-	60.00	50.00	-46.37	-

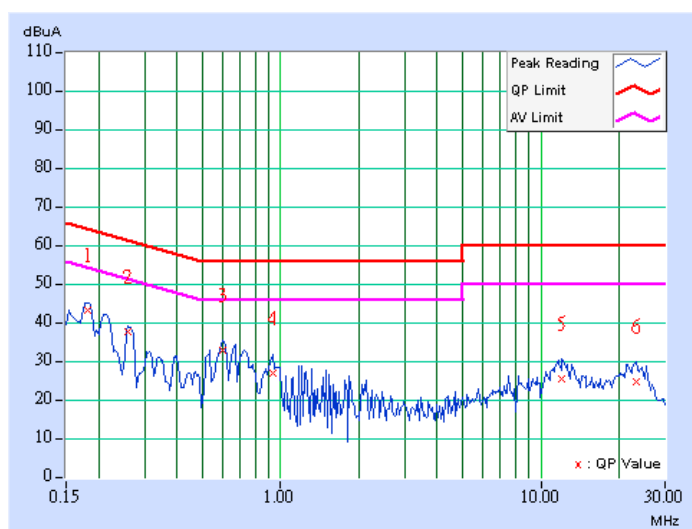
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 981hPa
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C2		

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	0.181	0.10	42.54	-	42.64	-	64.43
2	0.259	0.10	36.97	-	37.07	-	61.45	51.45	-24.38	-
3	0.599	0.10	32.09	-	32.19	-	56.00	46.00	-23.81	-
4	0.939	0.11	26.34	-	26.45	-	56.00	46.00	-29.55	-
5	12.039	0.39	24.81	-	25.20	-	60.00	50.00	-34.80	-
6	23.172	0.73	24.05	-	24.78	-	60.00	50.00	-35.22	-

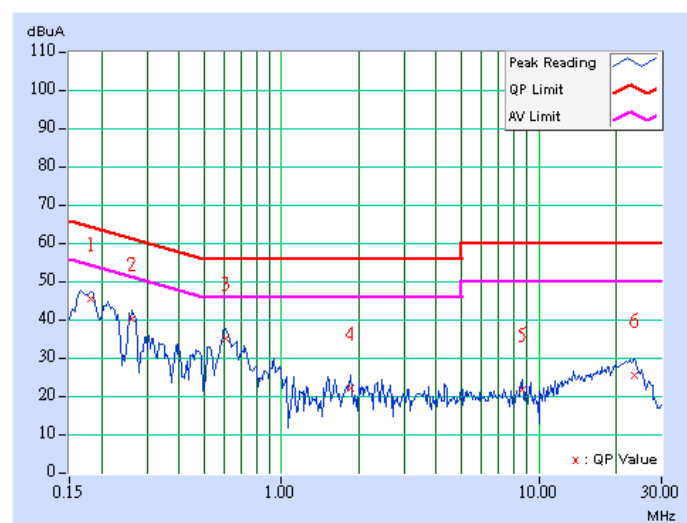
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 2
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 981hPa
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C2		

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	0.181	0.10	44.73	-	44.83	-	64.43	54.43	-19.60	-
2	0.263	0.10	39.55	-	39.65	-	61.33	51.33	-21.68	-
3	0.603	0.14	34.47	-	34.61	-	56.00	46.00	-21.39	-
4	1.859	0.22	21.57	-	21.79	-	56.00	46.00	-34.21	-
5	8.598	0.39	21.29	-	21.68	-	60.00	50.00	-38.32	-
6	23.477	0.67	24.83	-	25.50	-	60.00	50.00	-34.50	-

- 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.





4.3 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	FSP 40	100040	Jun. 28, 2008

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

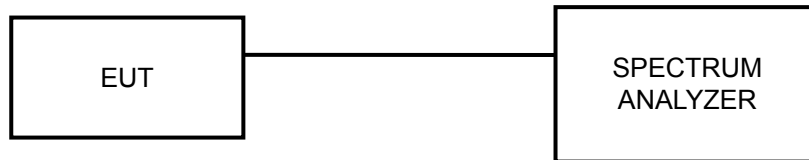
4.3.3 TEST PROCEDURE

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 300kHz 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.



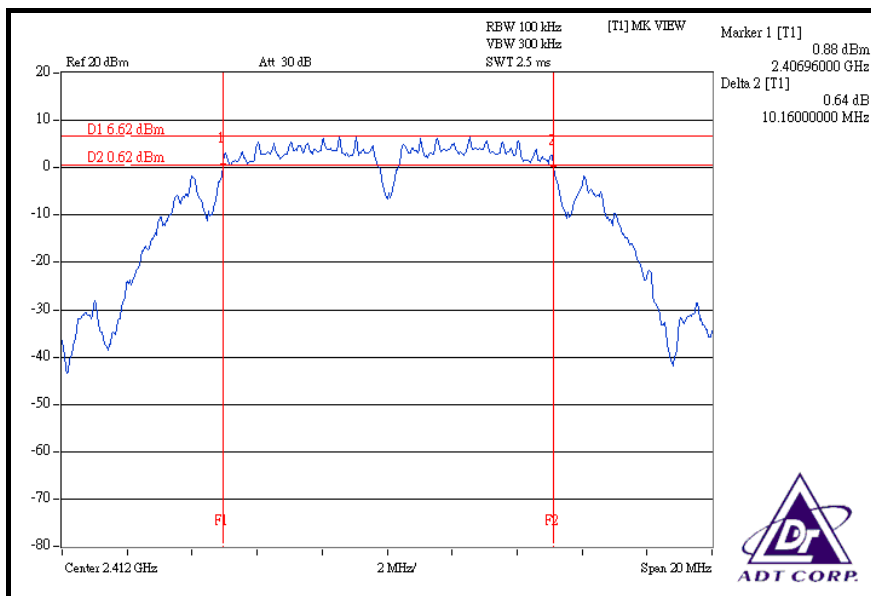
4.3.7 TEST RESULTS

802.11b DSSS MODULATION

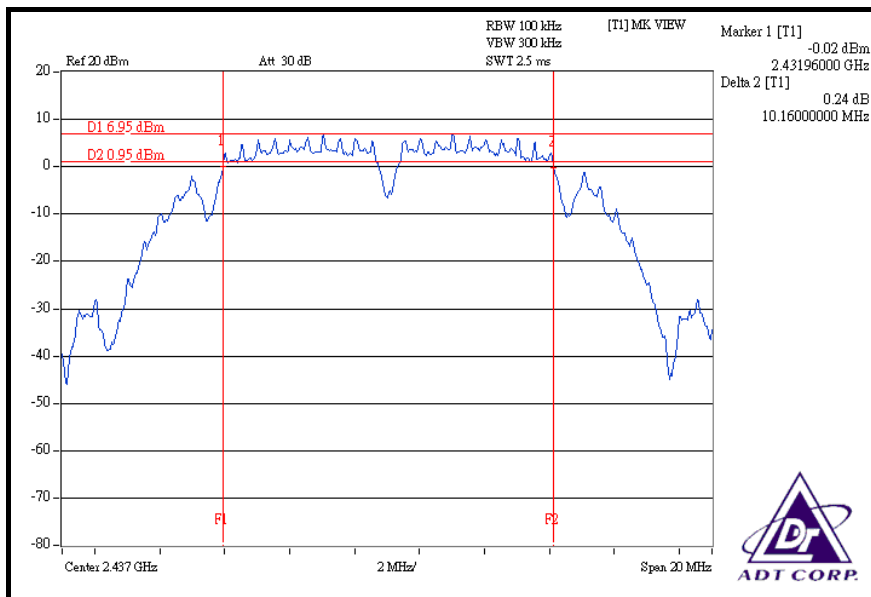
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH, 1005hPa
TESTED BY	Brad Wu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.16	0.5	PASS
6	2437	10.16	0.5	PASS
11	2462	10.16	0.5	PASS

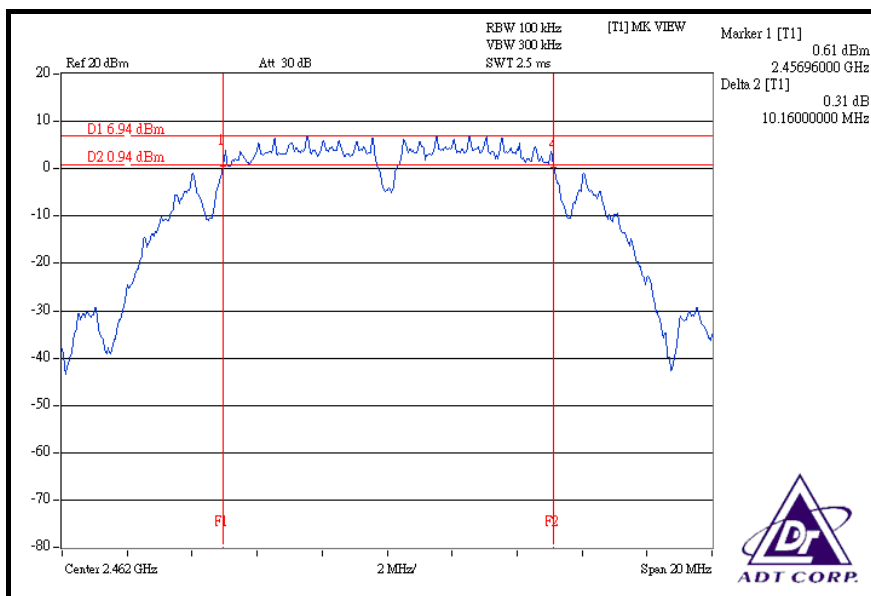
CH 1



CH 6



CH 11



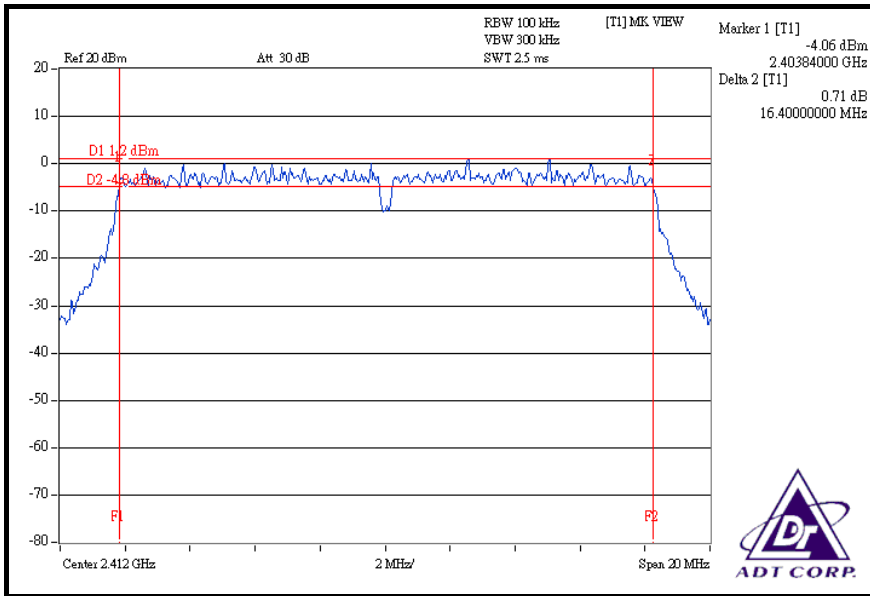


802.11g OFDM MODULATION

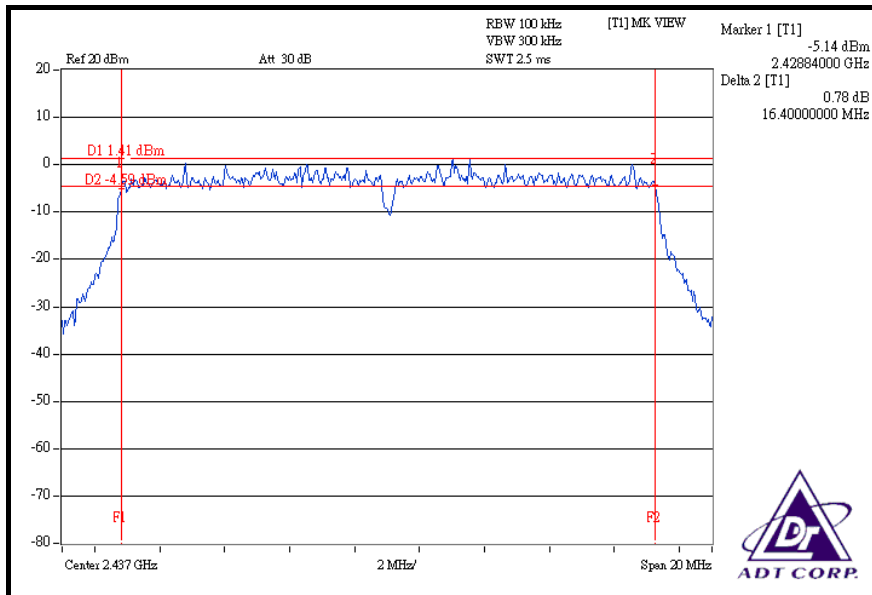
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH, 1005hPa
TESTED BY	Brad Wu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.40	0.5	PASS
6	2437	16.40	0.5	PASS
11	2462	16.44	0.5	PASS

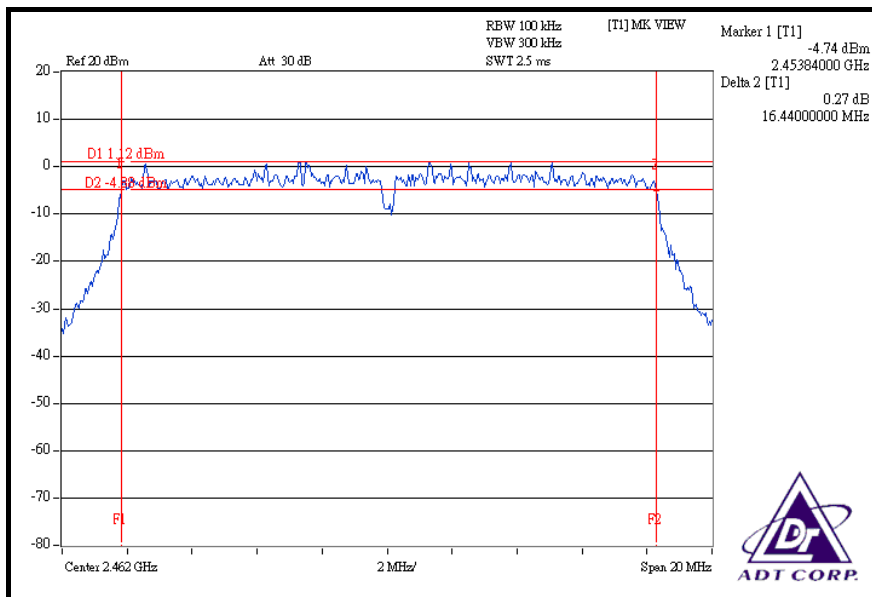
CH 1



CH 6



CH 11





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	FSP40	100040	Jun. 28, 2008
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 28, 2007
TEKTRONIX OSCILLOSCOPE	TDS1012	C037299	Nov. 27, 2007
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.

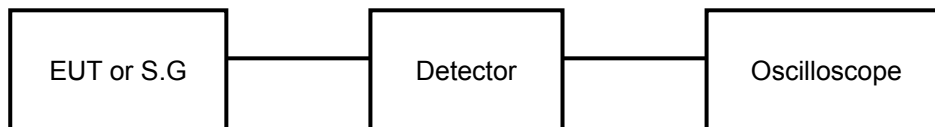
4.4.3 TEST PROCEDURES

- a. A detector was used on the output port of the EUT. An oscilloscope was used to peak the response of the detector.
- b. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
- c. Adjusted the power to have the same peak 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 4.3.6.



4.4.7 TEST RESULTS

802.11b DSSS MODULATION

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH, 1005hPa
TESTED BY	Brad Wu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.119	17.00	30	PASS
6	2437	56.885	17.55	30	PASS
11	2462	56.754	17.54	30	PASS

802.11g OFDM MODULATION

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH, 1005hPa
TESTED BY	Brad Wu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	45.082	16.54	30	PASS
6	2437	44.875	16.52	30	PASS
11	2462	44.978	16.53	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP 40	100040	Jun. 28, 2008

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

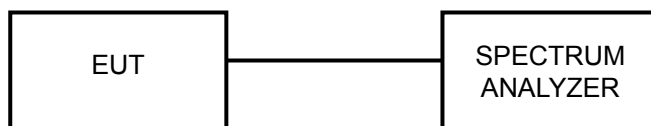
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

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.



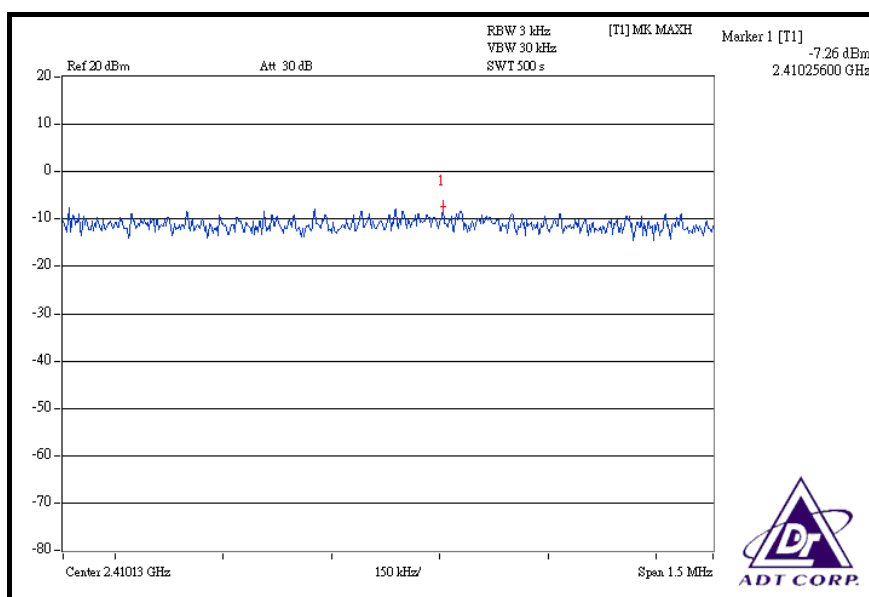
4.5.7 TEST RESULTS

802.11b DSSS MODULATION

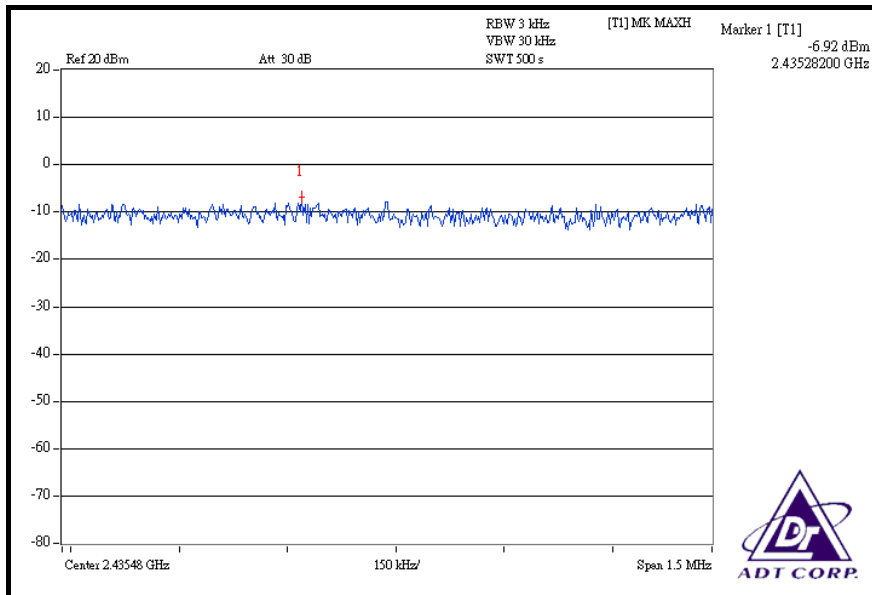
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH, 1005hPa
TESTED BY	Brad Wu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.26	8	PASS
6	2437	-6.92	8	PASS
11	2462	-6.56	8	PASS

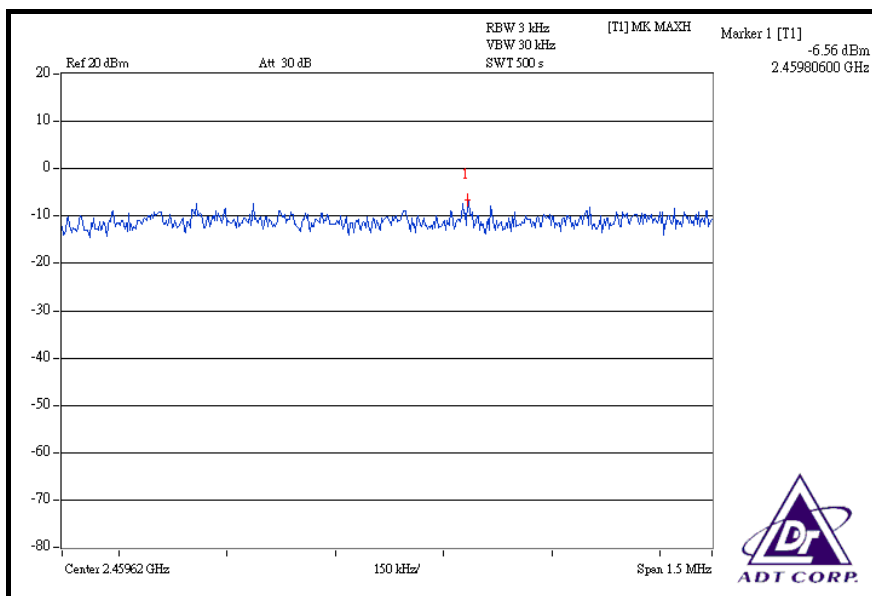
CH 1



CH 6



CH 11



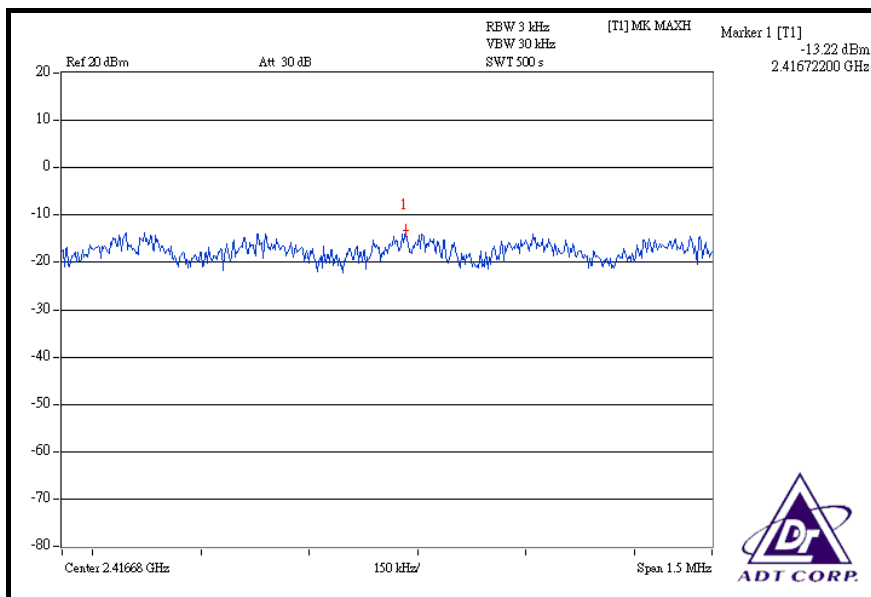


802.11g OFDM MODULATION

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH, 1005hPa
TESTED BY	Brad Wu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-13.22	8	PASS
6	2437	-12.98	8	PASS
11	2462	-13.01	8	PASS

CH 1





4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP 40	100040	Jun. 28, 2008

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 loss cable. Set both RBW and VBW of spectrum analyzer to 100kHz and 300kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW=100kHz, VBW=300kHz; Average RBW=1MHz, VBW= 1kHz are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation.

4.6.5 EUT OPERATING CONDITION

Same as 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_FOR TEST MODE A1

NOTE 1: The band edge emission plot on the next second page shows 51.38dBc between carrier maximum power and local maximum emission in restrict band (2.38960GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 111.20dBuV/m (Peak), so the maximum field strength in restrict band is $111.20 - 51.38 = 59.82$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next second page shows 52.21dBc between carrier maximum power and local maximum emission in restrict band (2.38940GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 105.69dBuV/m (Peak), so the maximum field strength in restrict band is $105.69 - 52.21 = 53.48$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on the next third page shows 53.88dBc between carrier maximum power and local maximum emission in restrict band (2.48700GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 110.61dBuV/m (Peak), so the maximum field strength in restrict band is $110.61 - 53.88 = 56.73$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next fourth page shows 56.48dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 105.53dBuV/m (Peak), so the maximum field strength in restrict band is $105.53 - 56.48 = 49.05$ dBuV/m which is under 54dBuV/m limit.

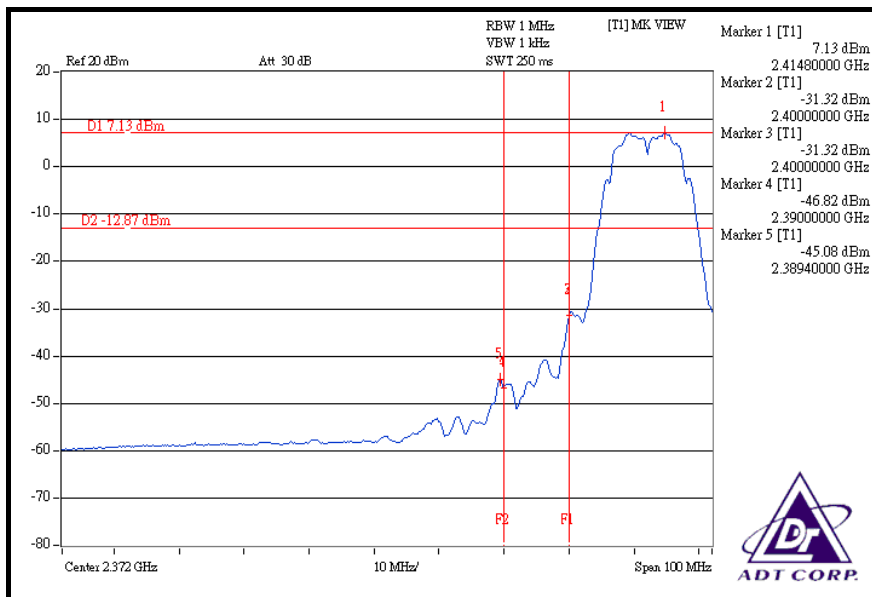
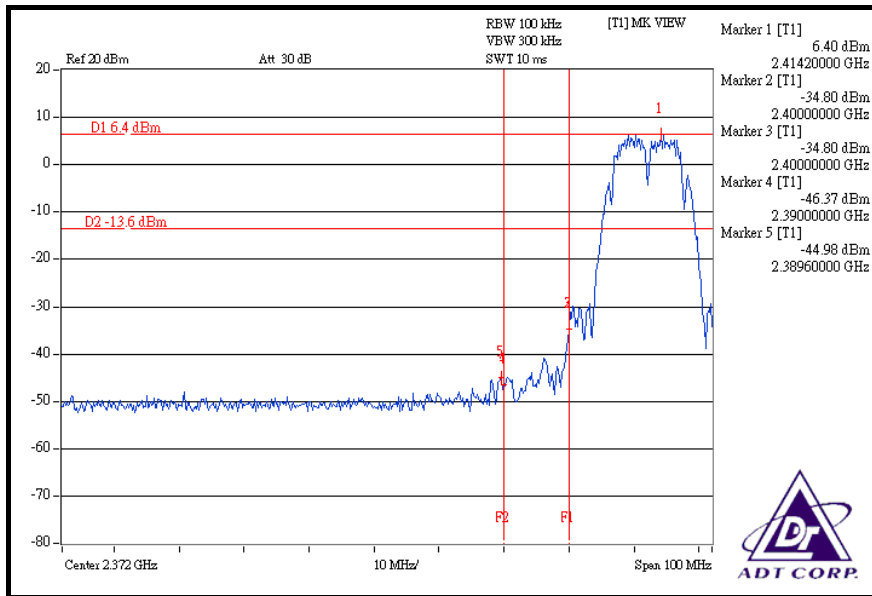
FOR TEST MODE A2

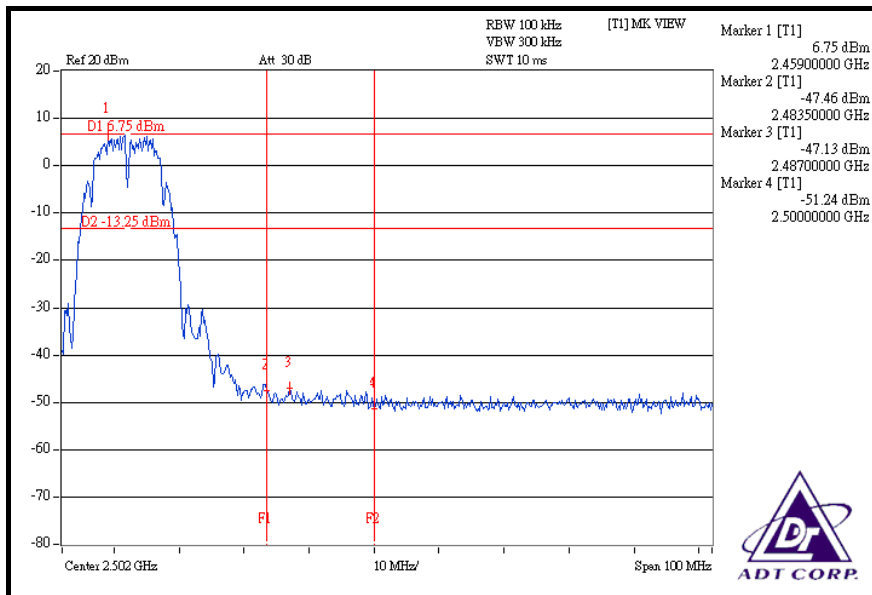
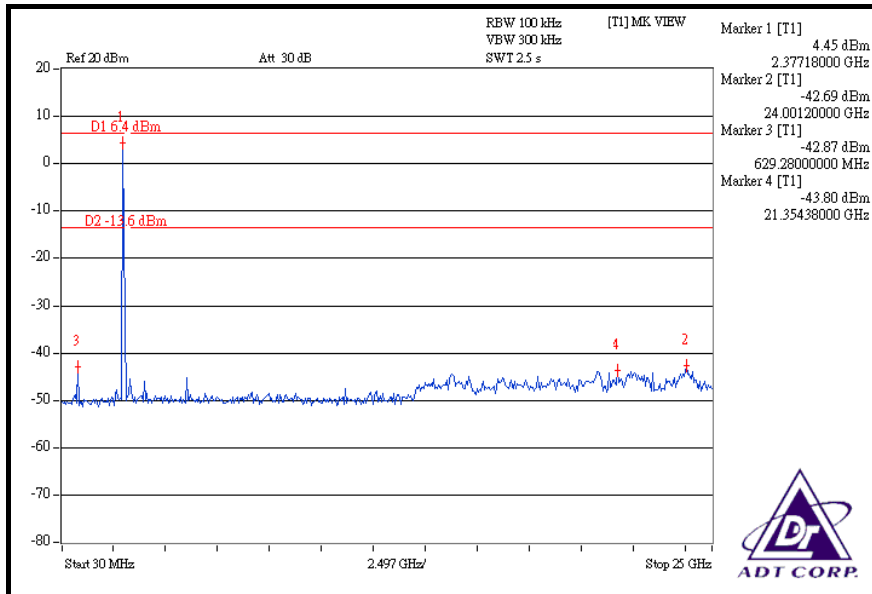
NOTE 1: The band edge emission plot on the next page shows 51.38dBc between carrier maximum power and local maximum emission in restrict band (2.38960GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 109.06dBuV/m (Peak), so the maximum field strength in restrict band is $109.06 - 51.38 = 57.68$ dBuV/m which is under 74dBuV/m limit.

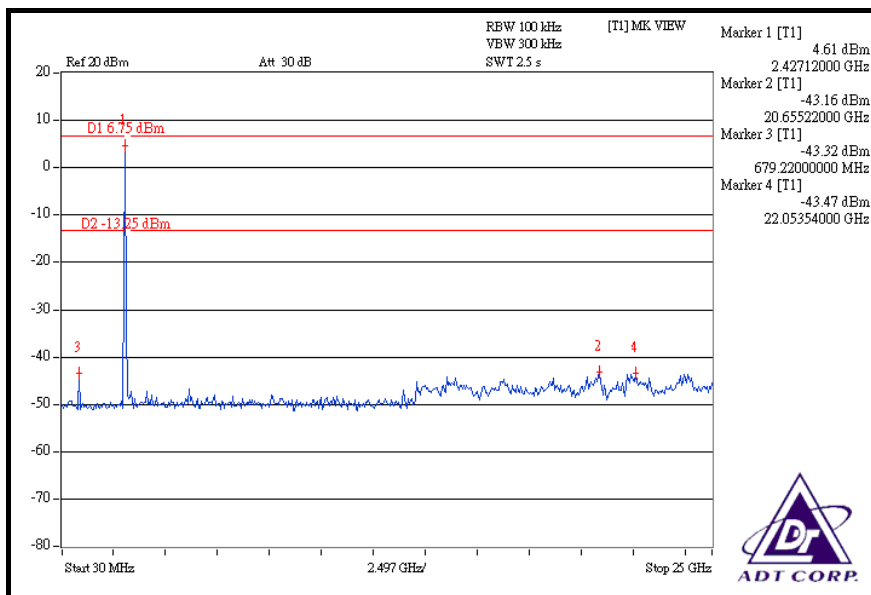
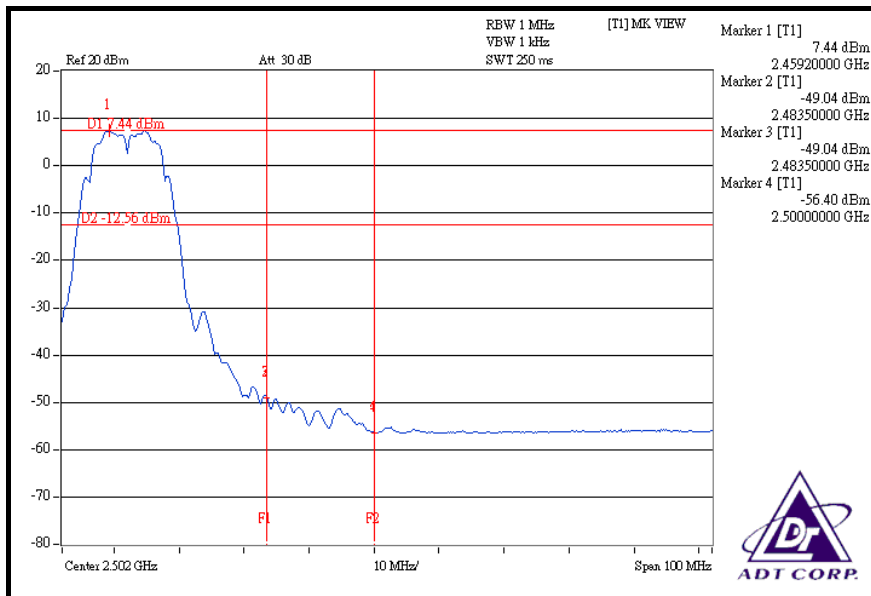
The band edge emission plot on the next page shows 52.21dBc between carrier maximum power and local maximum emission in restrict band (2.38940GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 105.98dBuV/m (Peak), so the maximum field strength in restrict band is $105.98 - 52.21 = 53.77$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on the next second page shows 53.88dBc between carrier maximum power and local maximum emission in restrict band (2.48700GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 109.83dBuV/m (Peak), so the maximum field strength in restrict band is $109.83 - 53.88 = 55.95$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next third page shows 56.48dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 106.28dBuV/m (Peak), so the maximum field strength in restrict band is $106.28 - 56.48 = 49.80$ dBuV/m which is under 54dBuV/m limit.







802.11g OFDM MODULATION _FOR TEST MODE A1

NOTE 1: The band edge emission plot on the next second page shows 43.65dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 110.59dBuV/m (Peak), so the maximum field strength in restrict band is $110.59 - 43.65 = 66.94$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next second page shows 51.78dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 103.04dBuV/m (Peak), so the maximum field strength in restrict band is $103.04 - 51.78 = 51.26$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on the next third page shows 42.87dBc between carrier maximum power and local maximum emission in restrict band (2.48380GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 111.77dBuV/m (Peak), so the maximum field strength in restrict band is $111.77 - 42.87 = 68.90$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next fourth page shows 51.04dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 103.84dBuV/m (Peak), so the maximum field strength in restrict band is $103.84 - 51.04 = 52.80$ dBuV/m which is under 54dBuV/m limit.

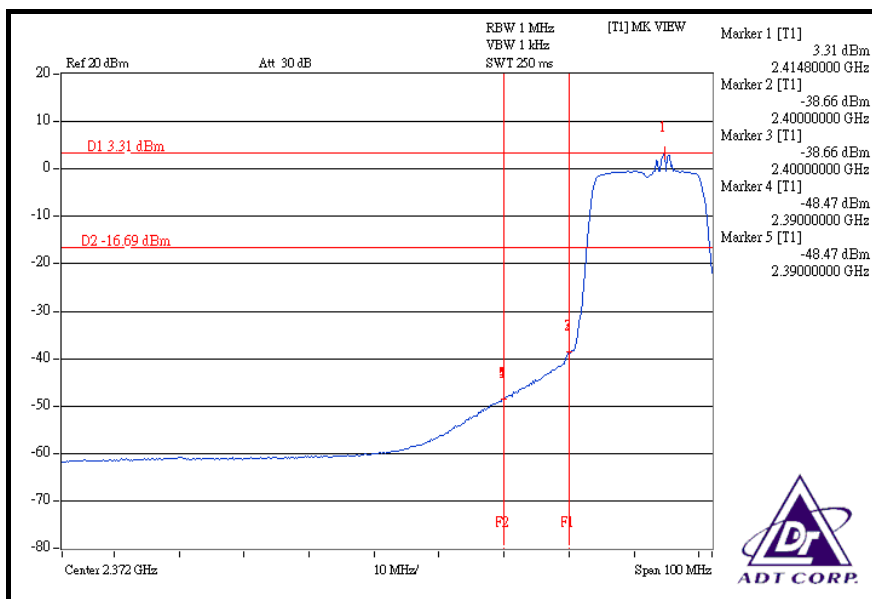
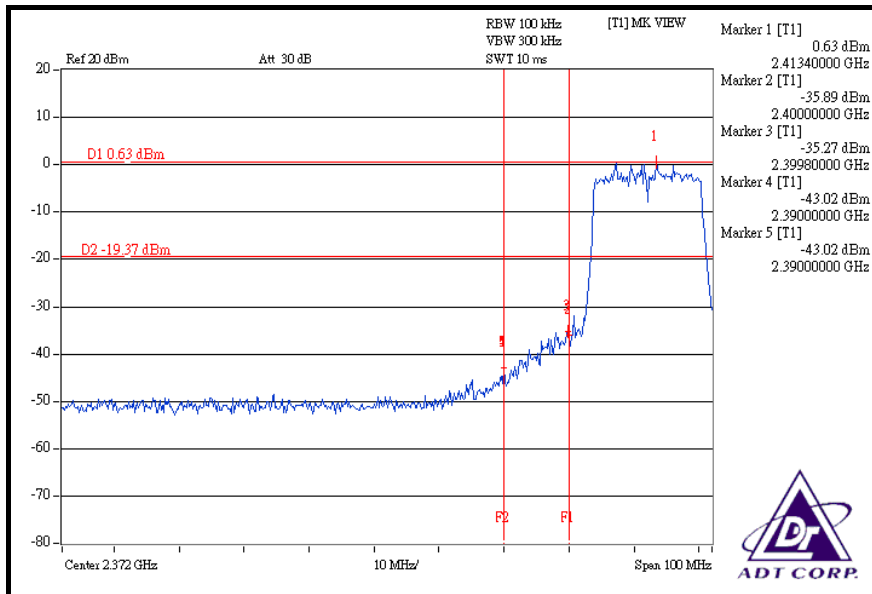
FOR TEST MODE A2

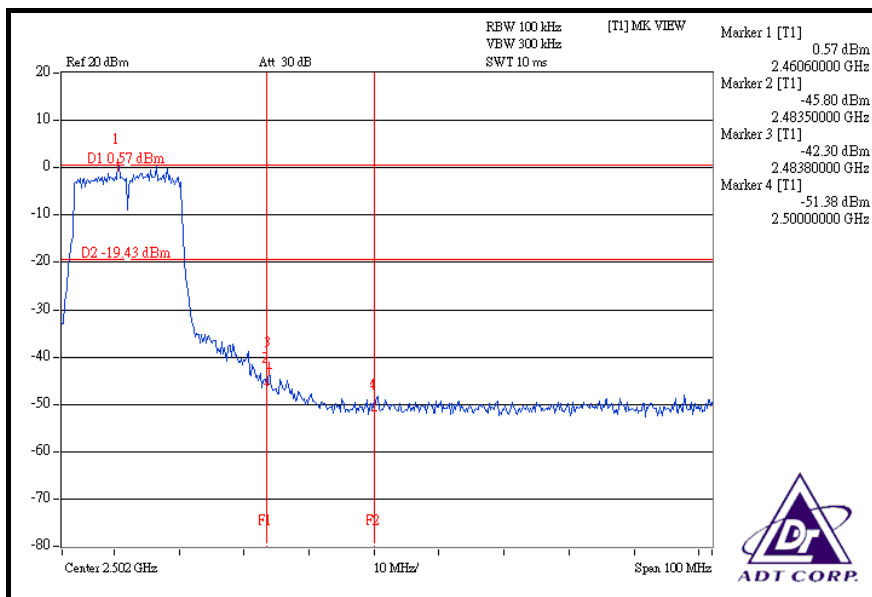
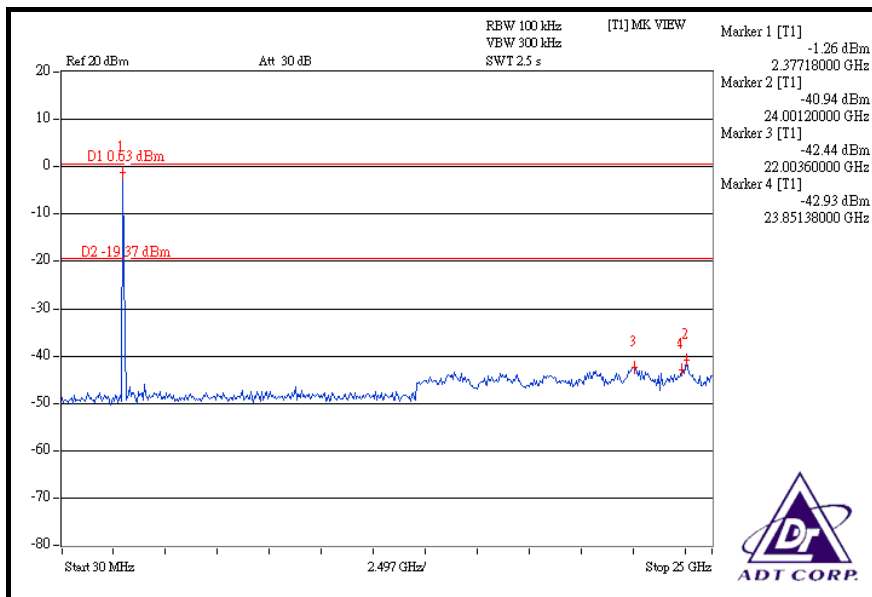
NOTE 1: The band edge emission plot on the next page shows 43.65dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 110.34dBuV/m (Peak), so the maximum field strength in restrict band is $110.34 - 43.65 = 66.69$ dBuV/m which is under 74dBuV/m limit.

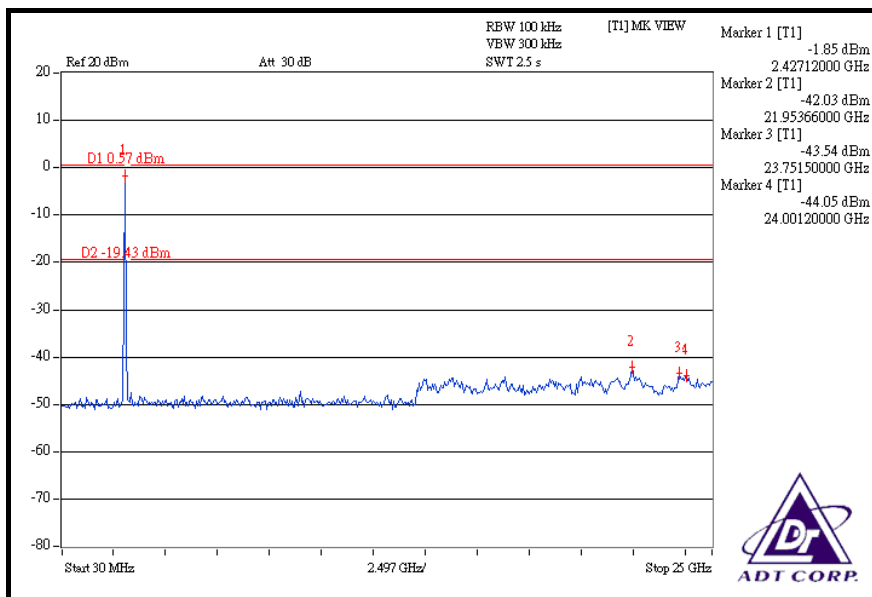
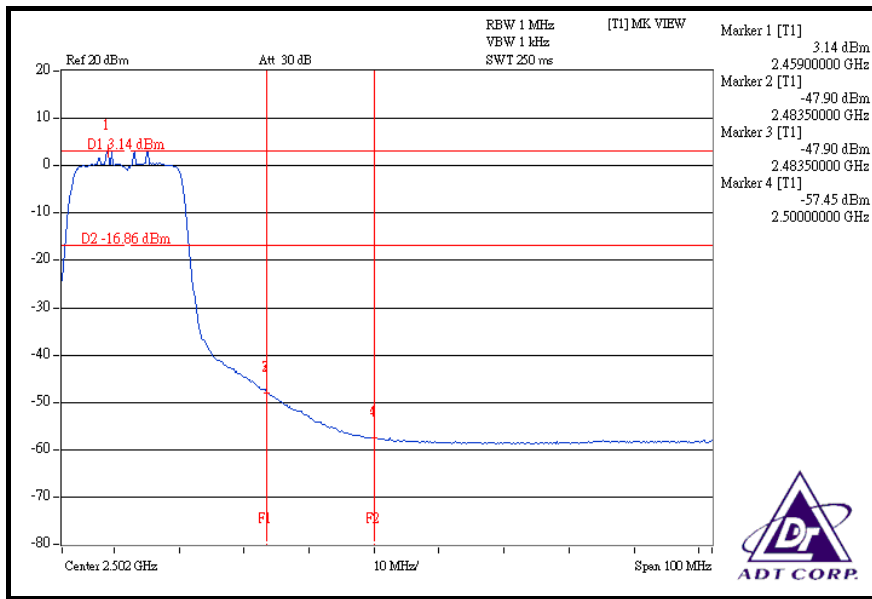
The band edge emission plot on the next page shows 51.78dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 102.75dBuV/m (Peak), so the maximum field strength in restrict band is $102.75 - 51.78 = 50.97$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot on the next second page shows 42.87dBc between carrier maximum power and local maximum emission in restrict band (2.48380GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 111.13dBuV/m (Peak), so the maximum field strength in restrict band is $111.13 - 42.87 = 68.26$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next third page shows 51.04dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 103.64dBuV/m (Peak), so the maximum field strength in restrict band is $103.64 - 51.04 = 52.60$ 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 antennas used in this product are Printed antenna and dipole antenna with UFL antenna connector. The maximum Gain of the antenna is 2.87dBi.



5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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.

USA	FCC, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	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: 886-2-26051924

Hsin Chu EMC/RF Lab
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab
Tel: 886-3-3183232
Fax: 886-3-3185050

Web Site: www.adt.com.tw

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

7 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.