



# FCC TEST REPORT

**REPORT NO.:** RF950220L16

**MODEL NO.:** WG302v2

**RECEIVED:** Feb. 23, 2006

**TESTED:** Feb. 23 ~ Mar. 02, 2006

**ISSUED:** Mar. 09, 2006

**APPLICANT:** NETGEAR, Inc.

**ADDRESS:** 4500 Great America Parkway, Santa Clara, CA  
95054, U.S.

**ISSUED BY:** Advance Data Technology Corporation

**LAB ADDRESS:** 47 14<sup>th</sup> Lin, Chiapau Tsun, Linko, Taipei,  
Taiwan, R.O.C.

**TEST LOCATION:** No. 19, Hwa Ya 2<sup>nd</sup> Rd., Kueishan, Taoyuan,  
Taiwan, R.O.C.

This test report consists of 126 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, A2LA or any government agencies. The test results in the report only apply to the tested sample.





## 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.....	13
3.4	DESCRIPTION OF SUPPORT UNITS.....	13
4	TEST TYPES AND RESULTS .....	14
4.1	CONDUCTED EMISSION MEASUREMENT .....	14
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT.....	14
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	RADIATED EMISSION MEASUREMENT .....	33
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT.....	33
4.2.2	TEST INSTRUMENTS.....	34
4.2.3	TEST PROCEDURES .....	35
4.2.4	DEVIATION FROM TEST STANDARD .....	35
4.2.5	TEST SETUP .....	36
4.2.6	EUT OPERATING CONDITIONS .....	36
4.2.7	TEST RESULTS .....	37
4.3	6dB BANDWIDTH MEASUREMENT .....	70
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT .....	70
4.3.2	TEST INSTRUMENTS.....	70
4.3.3	TEST PROCEDURE.....	71
4.3.4	DEVIATION FROM TEST STANDARD .....	71
4.3.5	TEST SETUP .....	71
4.3.6	EUT OPERATING CONDITIONS .....	71
4.3.7	TEST RESULTS .....	72
4.4	MAXIMUM PEAK OUTPUT POWER .....	80
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT .....	80



4.4.2	TEST INSTRUMENTS.....	80
4.4.3	TEST PROCEDURES .....	81
4.4.4	DEVIATION FROM TEST STANDARD .....	81
4.4.5	TEST SETUP .....	81
4.4.6	EUT OPERATING CONDITIONS .....	81
4.4.7	TEST RESULTS .....	82
4.5	POWER SPECTRAL DENSITY MEASUREMENT .....	83
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT .....	83
4.5.2	TEST INSTRUMENTS.....	83
4.5.3	TEST PROCEDURE.....	84
4.5.4	DEVIATION FROM TEST STANDARD .....	84
4.5.5	TEST SETUP .....	84
4.5.6	EUT OPERATING CONDITIONS .....	84
4.5.7	TEST RESULTS .....	85
4.6	BAND EDGES MEASUREMENT .....	93
4.6.1	LIMITS OF BAND EDGES MEASUREMENT .....	93
4.6.2	TEST INSTRUMENTS.....	93
4.6.3	TEST PROCEDURE.....	93
4.6.4	DEVIATION FROM TEST STANDARD .....	93
4.6.5	EUT OPERATING CONDITION .....	93
4.6.6	TEST RESULTS .....	94
4.7	ANTENNA REQUIREMENT .....	112
4.7.1	STANDARD APPLICABLE .....	112
4.7.2	ANTENNA CONNECTED CONSTRUCTION .....	112
5	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	113
6	INFORMATION ON THE TESTING LABORATORIES .....	125
	APPENDIX-A.....	A-1



## 1 CERTIFICATION

**PRODUCT :** 802.11g Prosafe Wireless Access Point  
**MODEL NO.:** WG302v2  
**BRAND:** NETGEAR  
**APPLICANT :** NETGEAR, Inc.  
**TESTED:** Feb. 23 ~ Mar. 02, 2006  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**STANDARDS :** FCC Part 15, Subpart C (Section 15.247),  
ANSI C63.4-2003

The above equipment have 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 :** Rebecca Huang , **DATE:** Mar. 09, 2006  
Rebecca Huang

**TECHNICAL**  
**ACCEPTANCE :** Long Chen , **DATE:** Mar. 09, 2006  
Responsible for RF  
Long Chen

**APPROVED BY :** Gary Chang , **DATE:** Mar. 09, 2006  
Gary Chang / Supervisor

## 2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

<b>APPLIED STANDARD: FCC Part 15, Subpart C</b>			
<b>Standard Section</b>	<b>Test Type and Limit</b>	<b>Result</b>	<b>REMARK</b>
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -7.05dB at 0.166MHz.
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)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -1.20dB at 2483.50MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	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:

<b>Measurement</b>	<b>Frequency</b>	<b>Uncertainty</b>
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

<b>PRODUCT</b>	802.11g Prosafe Wireless Access Point
<b>MODEL NO.</b>	WG302v2
<b>FCC ID</b>	PY306100027
<b>POWER SUPPLY</b>	12Vdc from AC adapter 48Vdc from PoE
<b>MODULATION TYPE</b>	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
<b>MODULATION TECHNOLOGY</b>	DSSS, OFDM
<b>TRANSFER RATE</b>	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps (*Turbo mode: up to 108Mbps)
<b>FREQUENCY RANGE</b>	2412MHz ~ 2462MHz
<b>NUMBER OF CHANNEL</b>	11 for normal / 1 for turbo
<b>MAXIMUM OUTPUT POWER</b>	51.286mW
<b>ANTENNA TYPE</b>	Refer to Note 1 as below
<b>I/O PORTS</b>	RJ45
<b>DATA CABLE</b>	NA
<b>ASSOCIATED DEVICES</b>	NA

**NOTE:**

1. The following antennas were provided to the EUT.

Item	Frequency	Antenna Type	Connector	Gain (dBi)	Gain with cable loss(dBi)
1	2.4G(Main)	Patch	N-type Jack Reverse	14	-4.64
2	2.4G(Main)	Dipole	N-type Jack Reverse	8.5	-1.69
3	2.4G(Main)	Dipole	Reverse SMA	4.59352	-
4	2.4G(Aux)	Dipole	Reverse SMA	4.59352	-

2. The EUT was powered by the following adapter:

<b>BRAND:</b>	NETGEAR
<b>MODEL:</b>	DVS-120A12FUS
<b>INPUT:</b>	100-240Vac, 50-60Hz, 0.7A , 40VA
<b>OUTPUT:</b>	12Vdc, 1.2A
<b>POWER LINE:</b>	1.8m non-shielded cable without core

3. The EUT was powered by the following PoE:

<b>BRAND:</b>	Netgear
<b>MODEL:</b>	WLS538
<b>INPUT:</b>	100-240Vac
<b>OUTPUT:</b>	48Vdc, 2.7A



4. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
5. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 108Mbps.
6. 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 for normal mode.

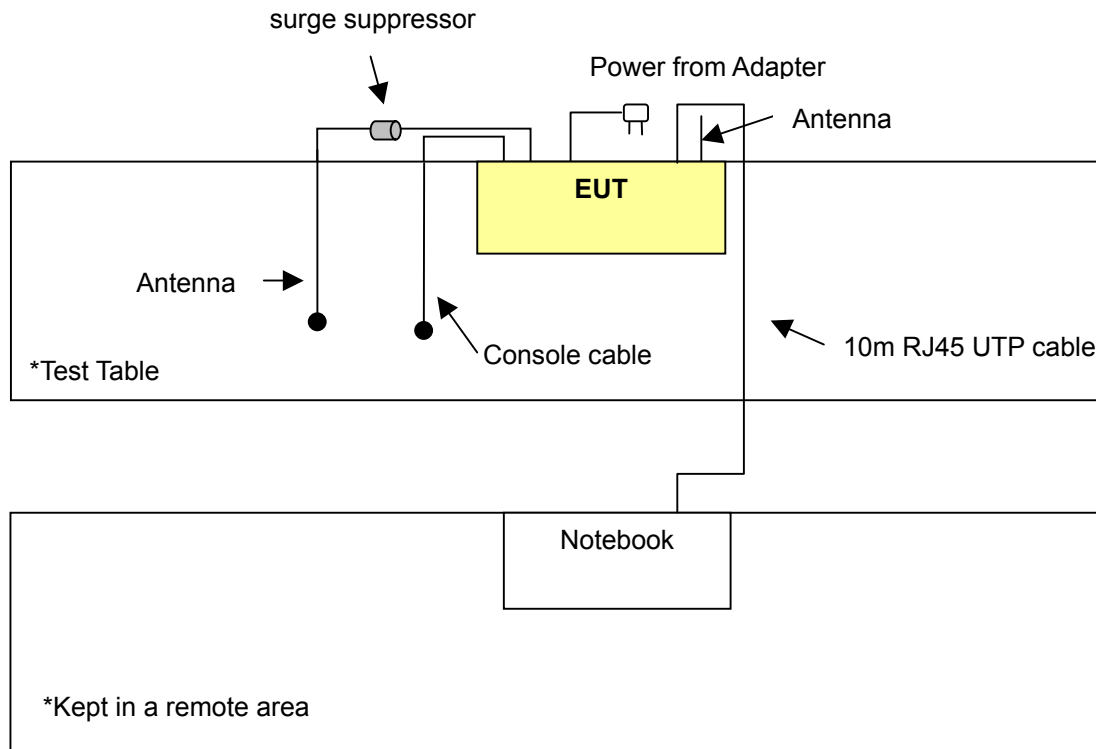
Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

For 802.11g: One channel is provided to this EUT for turbo mode:

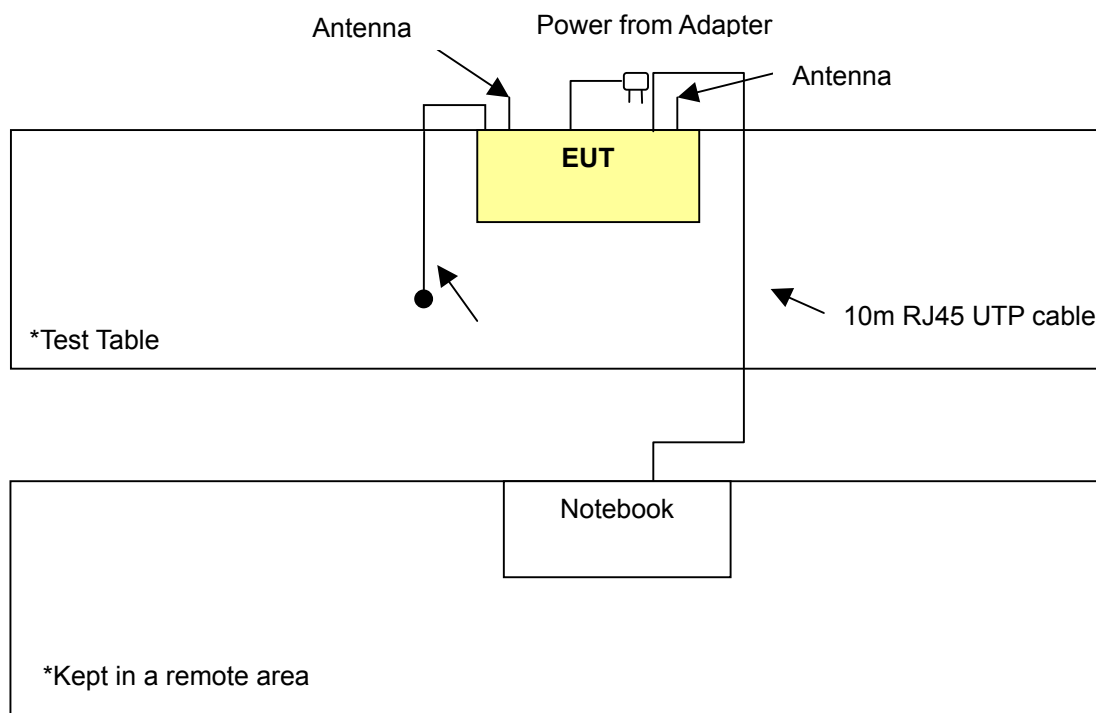
CHANNEL	FREQUENCY
6	2437 MHz

### 3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

#### TEST MODE 1, 2:

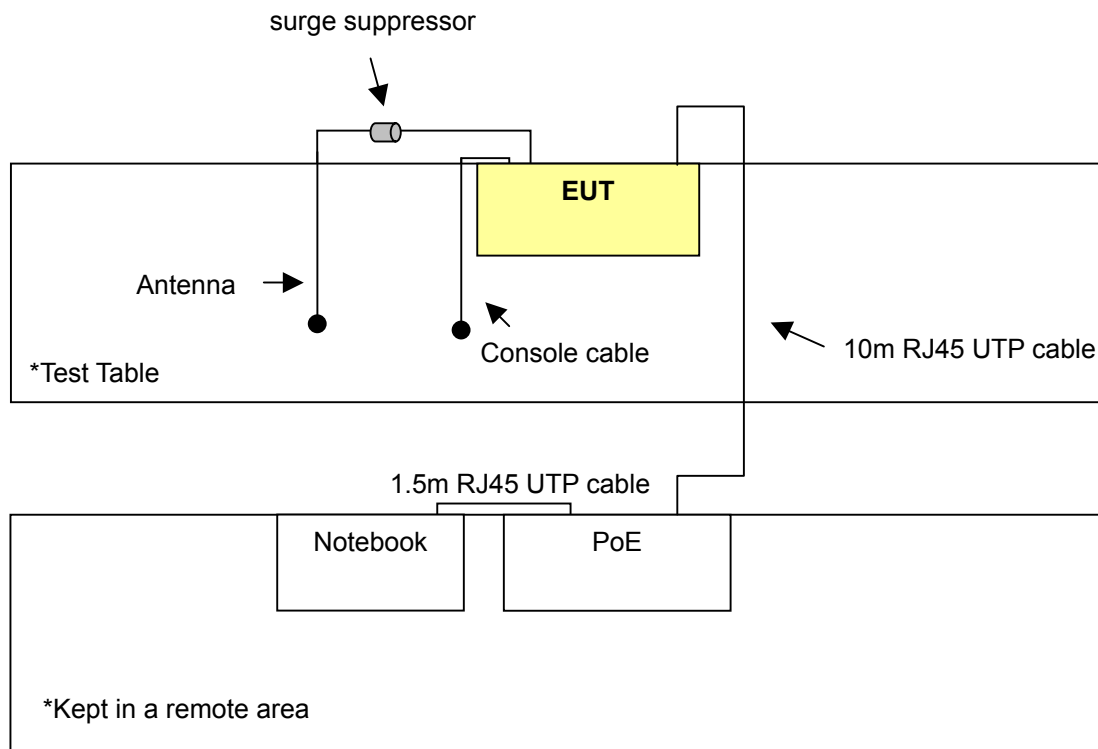


#### TEST MODE 3:

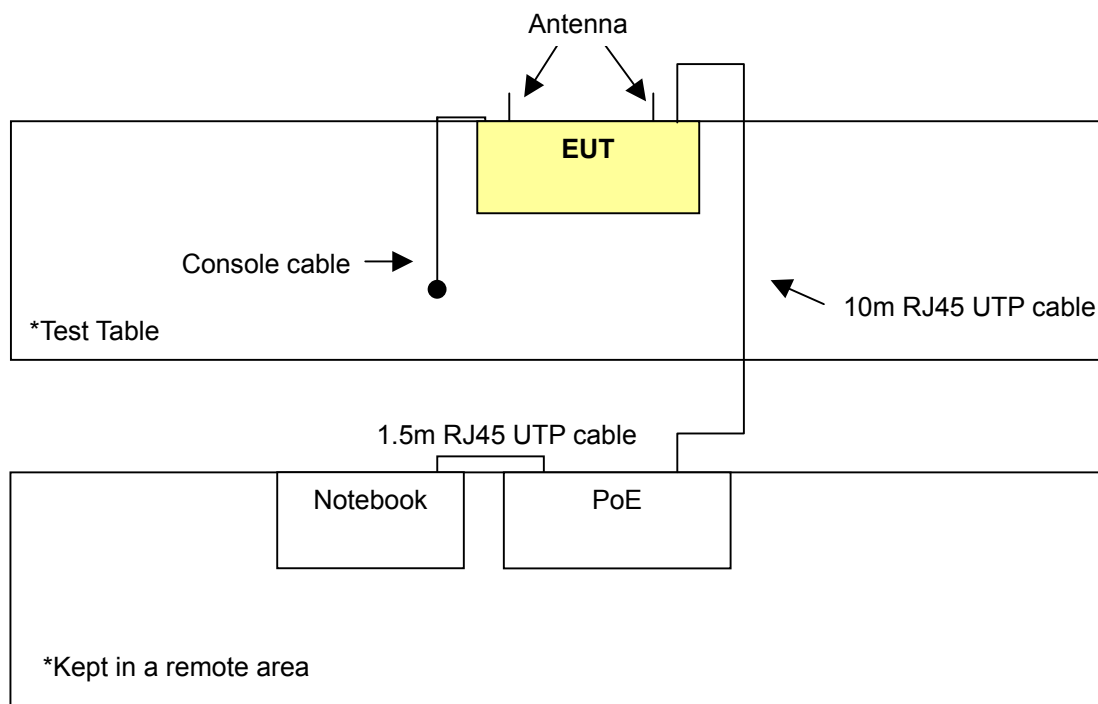




TEST MODE 4, 5:



TEST MODE 6:



### 3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
1	√	√	√	√	with antenna 1,4 and Power by adapter
2	-	√	√	-	with antenna 2,4 and Power by adapter
3	-	√	√	-	with antenna 3,4 and Power by adapter
4	√	√	-	-	with antenna 1,4 and Power by PoE
5	-	√	-	-	with antenna 2,4 and Power by PoE
6	-	√	-	-	with antenna 3,4 and Power by PoE

Where **PLC**: Power Line Conducted Emission

**RE<1G**: Radiated Emission below 1GHz

**RE≥1G**: Radiated Emission above 1GHz

**APCM**: Antenna Port Conducted Measurement

**Note** "-": mean no effect

#### **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)
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
4	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
1	802.11g turbo	6	6	OFDM	QPSK	12
4	802.11g turbo	6	6	OFDM	QPSK	12

**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)
1	802.11g	1 to 11	11	OFDM	BPSK	6
2	802.11g	1 to 11	11	OFDM	BPSK	6
3	802.11g	1 to 11	11	OFDM	BPSK	6
4	802.11g	1 to 11	11	OFDM	BPSK	6
5	802.11g	1 to 11	11	OFDM	BPSK	6
6	802.11g	1 to 11	11	OFDM	BPSK	6
1	802.11g turbo	6	6	OFDM	QPSK	12
2	802.11g turbo	6	6	OFDM	QPSK	12
3	802.11g turbo	6	6	OFDM	QPSK	12
4	802.11g turbo	6	6	OFDM	QPSK	12
5	802.11g turbo	6	6	OFDM	QPSK	12
6	802.11g turbo	6	6	OFDM	QPSK	12

**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)
1	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
2	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
3	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
3	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
1	802.11g turbo	6	6	OFDM	QPSK	12
2	802.11g turbo	6	6	OFDM	QPSK	12
3	802.11g turbo	6	6	OFDM	QPSK	12



**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)
1	802.11b	1 to 11	1, 11	DSSS	DBPSK	1
2	802.11b	1 to 11	1, 11	DSSS	DBPSK	1
3	802.11b	1 to 11	1, 11	DSSS	DBPSK	1
1	802.11g	1 to 11	1, 11	OFDM	BPSK	6
2	802.11g	1 to 11	1, 11	OFDM	BPSK	6
3	802.11g	1 to 11	1, 11	OFDM	BPSK	6
1	802.11g turbo	6	6	OFDM	QPSK	12
2	802.11g turbo	6	6	OFDM	QPSK	12
3	802.11g turbo	6	6	OFDM	QPSK	12

**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	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11g turbo	6	6	OFDM	QPSK	12



### 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	16484462992	E2K24CLNS
2	ProSafe Wireless LAN Switch	Netgear	WLS538	NA	NA

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

**NOTE:**

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

## 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 $\mu$ 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
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 02, 2006
RF signal cable Woken	5D-FB	Cable-HyC02-01	Jan. 06, 2007
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 09, 2007
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jan. 22, 2007
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 3.
  3. The VCCI Site Registration No. is C-2047.



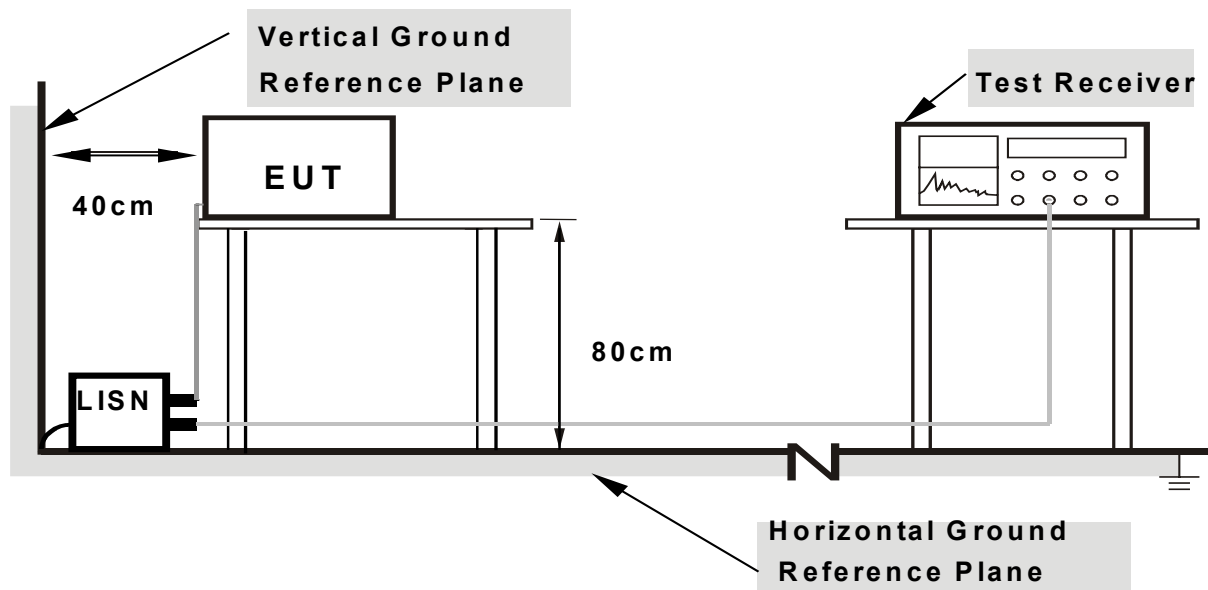
#### 4.1.3 TEST PROCEDURES

- 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) are 80 cm from EUT and at least 80 cm from other units and other metal planes

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

#### 4.1.6 EUT OPERATING CONDITIONS

- a. The EUT connected with notebook system via a RJ45 cable.
- b. The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- c. The notebook system sent "H" messages to its screen.
- d. Steps c were repeated.



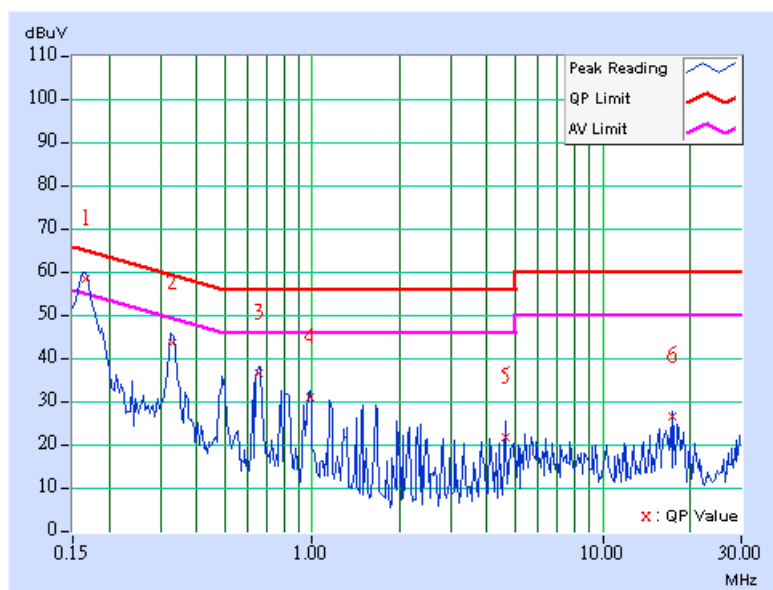
#### 4.1.7 TEST RESULTS

##### CONDUCTED WORST-CASE DATA\_NORMAL MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.166	0.10	58.03	46.82	58.13	46.92	65.18	55.18	-7.05	-8.26
2	0.328	0.10	43.06	-	43.16	-	59.49	49.49	-16.33	-
3	0.654	0.10	36.05	-	36.15	-	56.00	46.00	-19.85	-
4	0.978	0.10	30.47	-	30.57	-	56.00	46.00	-25.43	-
5	4.621	0.37	21.26	-	21.63	-	56.00	46.00	-34.37	-
6	17.441	0.60	26.00	-	26.60	-	60.00	50.00	-33.40	-

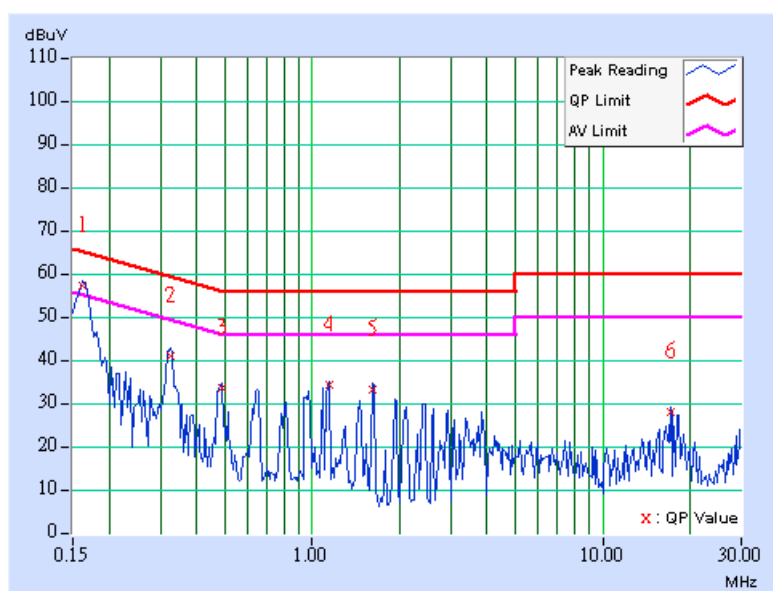
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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 1	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.162	0.10	56.63	43.99	56.73	44.09	65.38
2	0.326	0.10	40.39	-	40.49	-	59.56	49.56	-19.07	-
3	0.486	0.11	32.99	-	33.10	-	56.24	46.24	-23.13	-
4	1.141	0.20	33.81	-	34.01	-	56.00	46.00	-21.99	-
5	1.621	0.20	32.75	-	32.95	-	56.00	46.00	-23.05	-
6	17.188	0.60	27.63	-	28.23	-	60.00	50.00	-31.77	-

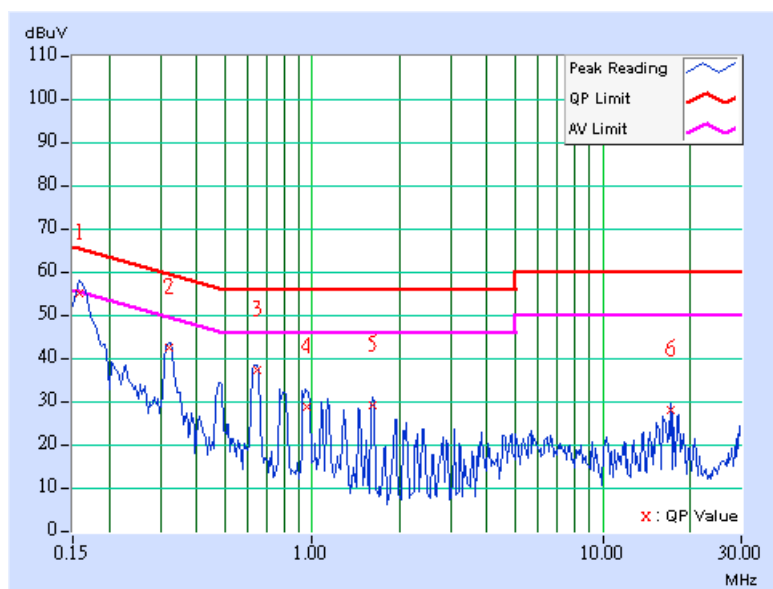
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.158	0.10	54.48	-	54.58	-	65.58
2	0.322	0.10	41.82	-	41.92	-	59.66	49.66	-17.74	-
3	0.646	0.10	36.81	-	36.91	-	56.00	46.00	-19.09	-
4	0.958	0.10	28.40	-	28.50	-	56.00	46.00	-27.50	-
5	1.617	0.16	28.54	-	28.70	-	56.00	46.00	-27.30	-
6	17.191	0.60	27.48	-	28.08	-	60.00	50.00	-31.92	-

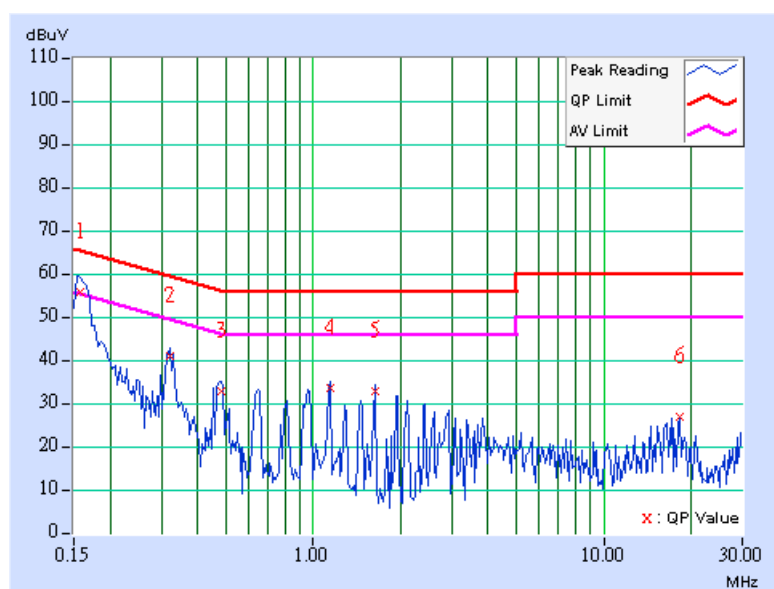
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.158	0.10	55.49	41.30	55.59	41.40	65.58
2	0.322	0.10	40.43	-	40.53	-	59.66	49.66	-19.13	-
3	0.482	0.11	32.45	-	32.56	-	56.30	46.30	-23.74	-
4	1.141	0.20	33.25	-	33.45	-	56.00	46.00	-22.55	-
5	1.625	0.20	32.45	-	32.65	-	56.00	46.00	-23.35	-
6	18.215	0.58	26.32	-	26.90	-	60.00	50.00	-33.10	-

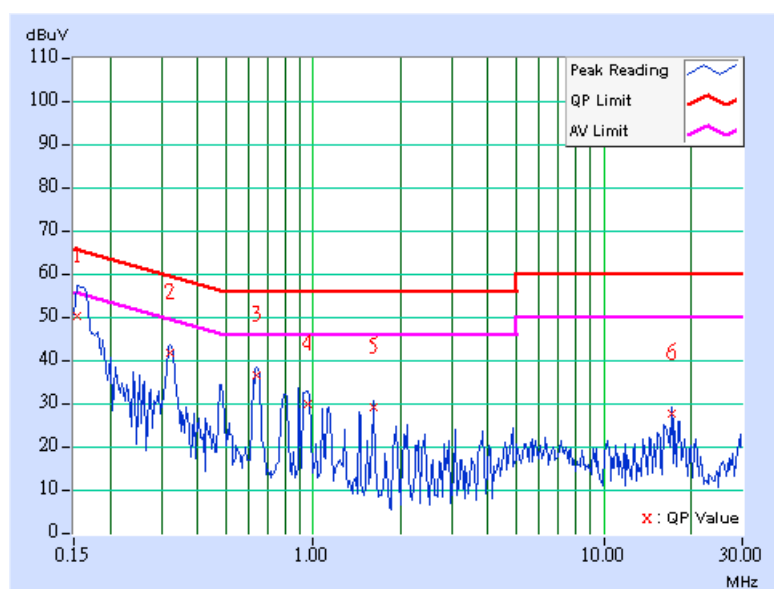
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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 11	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.154	0.10	49.61	-	49.71	-	65.79
2	0.322	0.10	41.39	-	41.49	-	59.66	49.66	-18.17	-
3	0.642	0.10	36.05	-	36.15	-	56.00	46.00	-19.85	-
4	0.959	0.10	29.57	-	29.67	-	56.00	46.00	-26.33	-
5	1.621	0.16	28.74	-	28.90	-	56.00	46.00	-27.10	-
6	17.191	0.60	27.32	-	27.92	-	60.00	50.00	-32.08	-

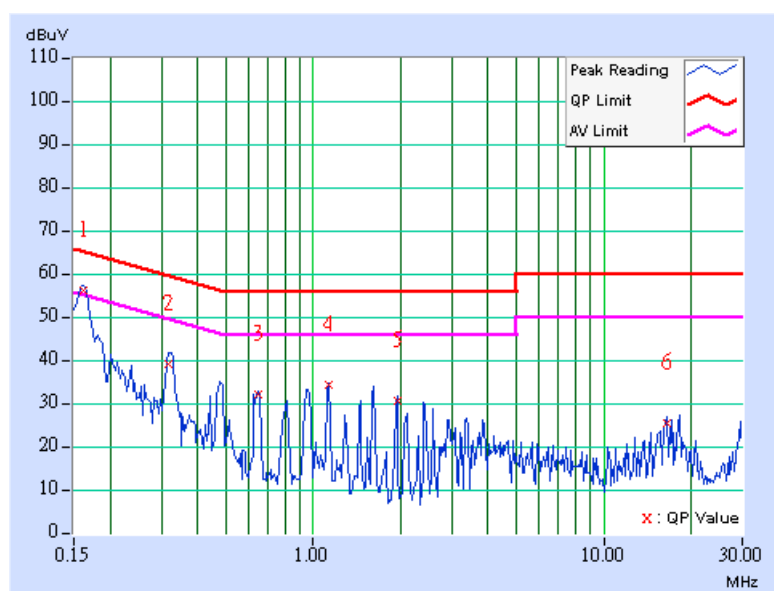
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.162	0.10	55.68	43.01	55.78	43.11	65.38
2	0.318	0.10	38.58	-	38.68	-	59.76	49.76	-21.08	-
3	0.650	0.14	31.66	-	31.80	-	56.00	46.00	-24.20	-
4	1.133	0.20	33.91	-	34.11	-	56.00	46.00	-21.89	-
5	1.949	0.20	29.99	-	30.19	-	56.00	46.00	-25.81	-
6	16.418	0.61	25.04	-	25.65	-	60.00	50.00	-34.35	-

- 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.

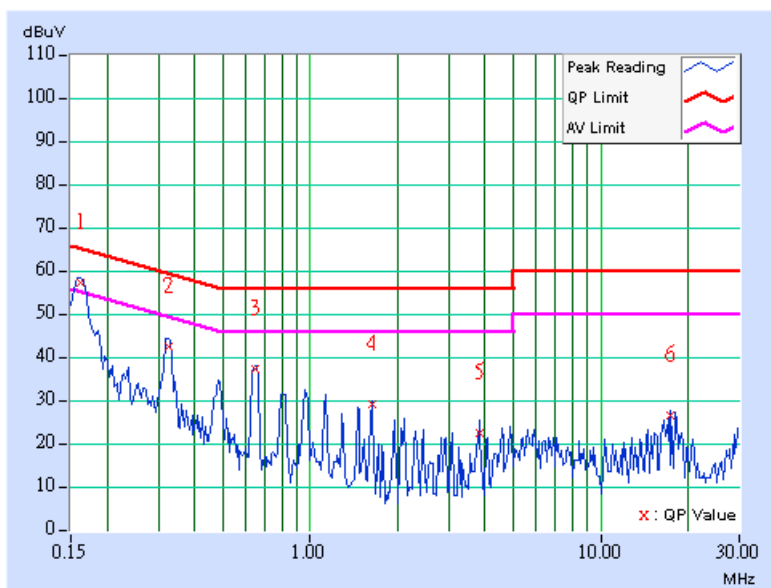


### CONDUCTED WORST-CASE DATA\_TURBO MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	QPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.162	0.10	56.65	46.04	56.75	46.14	65.38
2	0.326	0.10	42.00	-	42.10	-	59.56	49.56	-17.46	-
3	0.650	0.10	36.93	-	37.03	-	56.00	46.00	-18.97	-
4	1.625	0.16	28.58	-	28.74	-	56.00	46.00	-27.26	-
5	3.848	0.36	22.17	-	22.53	-	56.00	46.00	-33.47	-
6	17.445	0.60	26.10	-	26.70	-	60.00	50.00	-33.30	-

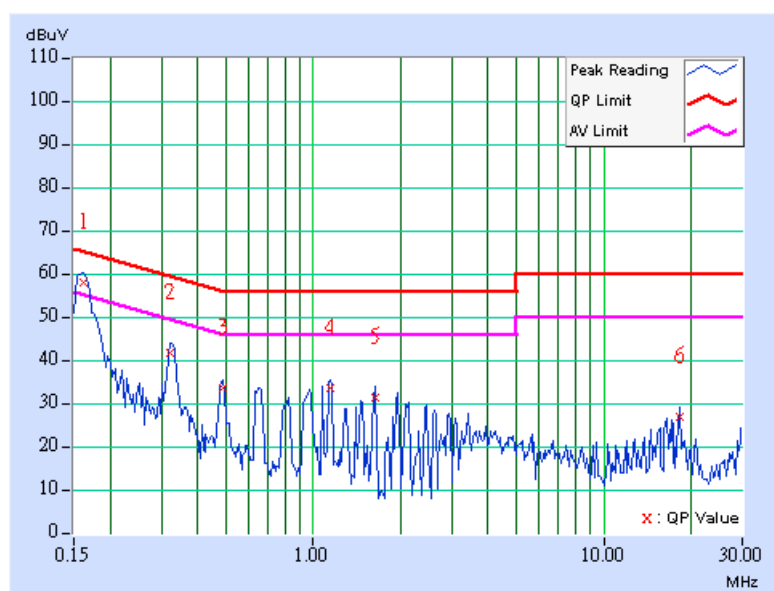
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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	QPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	1		

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	0.162	0.10	57.66	44.92	57.76	45.02	65.38
2	0.322	0.10	41.41	-	41.51	-	59.66	49.66	-18.15	-
3	0.486	0.11	33.20	-	33.31	-	56.24	46.24	-22.92	-
4	1.148	0.20	33.25	-	33.45	-	56.00	46.00	-22.55	-
5	1.645	0.20	30.82	-	31.02	-	56.00	46.00	-24.98	-
6	18.215	0.58	26.54	-	27.12	-	60.00	50.00	-32.88	-

- 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.



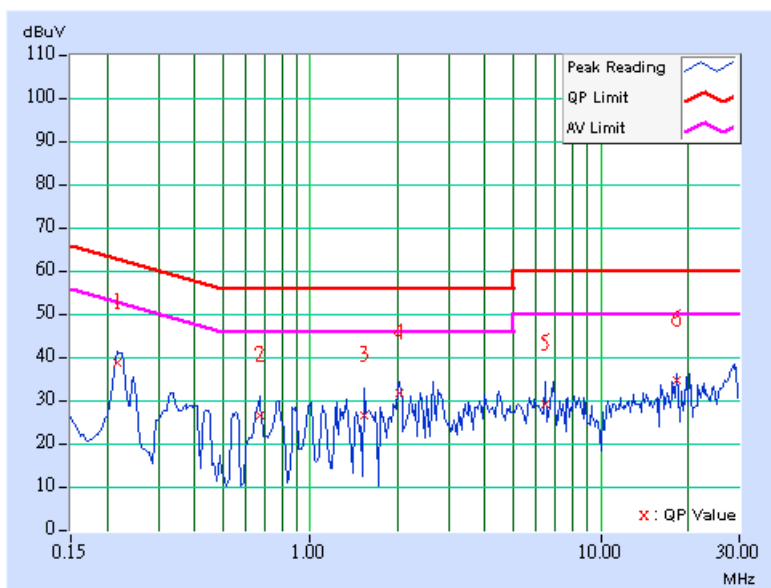


### CONDUCTED WORST-CASE DATA\_NORMAL MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.216	0.10	38.36	-	38.46	-	62.96	52.96	-24.50	-
2	0.670	0.10	26.09	-	26.19	-	56.00	46.00	-29.81	-
3	1.543	0.15	26.13	-	26.28	-	56.00	46.00	-29.72	-
4	2.039	0.20	31.29	-	31.49	-	56.00	46.00	-24.51	-
5	6.418	0.37	28.54	-	28.91	-	60.00	50.00	-31.09	-
6	18.242	0.58	34.16	-	34.74	-	60.00	50.00	-25.26	-

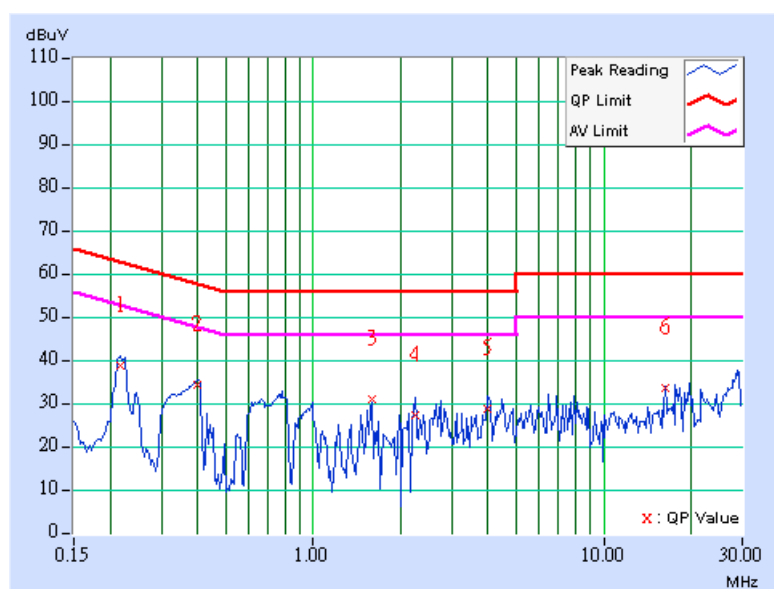
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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 1	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.216	0.10	38.18	-	38.28	-	62.96
2	0.400	0.10	33.75	-	33.85	-	57.85	47.85	-24.00	-
3	1.602	0.20	30.48	-	30.68	-	56.00	46.00	-25.32	-
4	2.234	0.22	26.65	-	26.87	-	56.00	46.00	-29.13	-
5	3.996	0.37	28.24	-	28.61	-	56.00	46.00	-27.39	-
6	16.227	0.61	33.07	-	33.68	-	60.00	50.00	-26.32	-

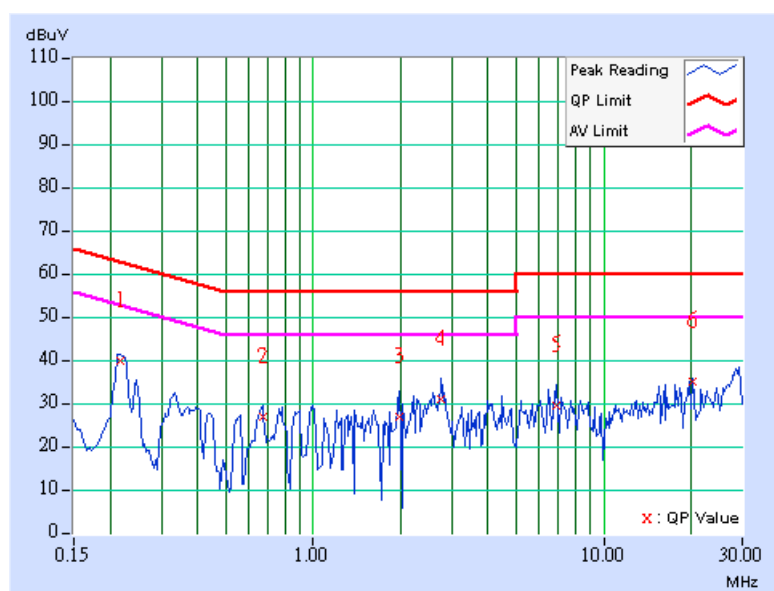
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.216	0.10	39.39	-	39.49	-	62.95
2	0.670	0.10	26.33	-	26.43	-	56.00	46.00	-29.57	-
3	1.969	0.20	26.55	-	26.75	-	56.00	46.00	-29.25	-
4	2.766	0.27	30.60	-	30.87	-	56.00	46.00	-25.13	-
5	6.879	0.37	28.97	-	29.34	-	60.00	50.00	-30.66	-
6	20.258	0.58	34.72	-	35.30	-	60.00	50.00	-24.70	-

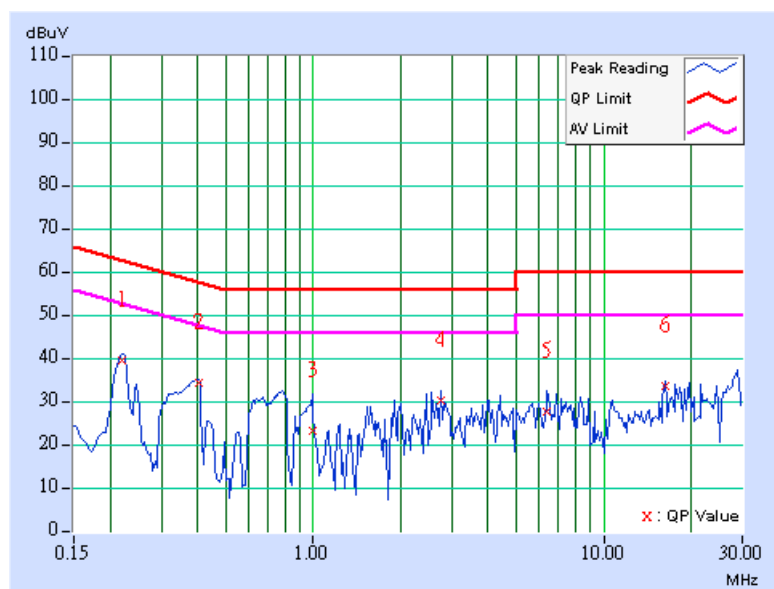
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.220	0.10	39.14	-	39.24	-	62.81
2	0.404	0.10	33.97	-	34.07	-	57.77	47.77	-23.70	-
3	0.990	0.20	22.60	-	22.80	-	56.00	46.00	-33.20	-
4	2.746	0.26	29.75	-	30.01	-	56.00	46.00	-25.99	-
5	6.391	0.41	27.24	-	27.65	-	60.00	50.00	-32.35	-
6	16.227	0.61	33.15	-	33.76	-	60.00	50.00	-26.24	-

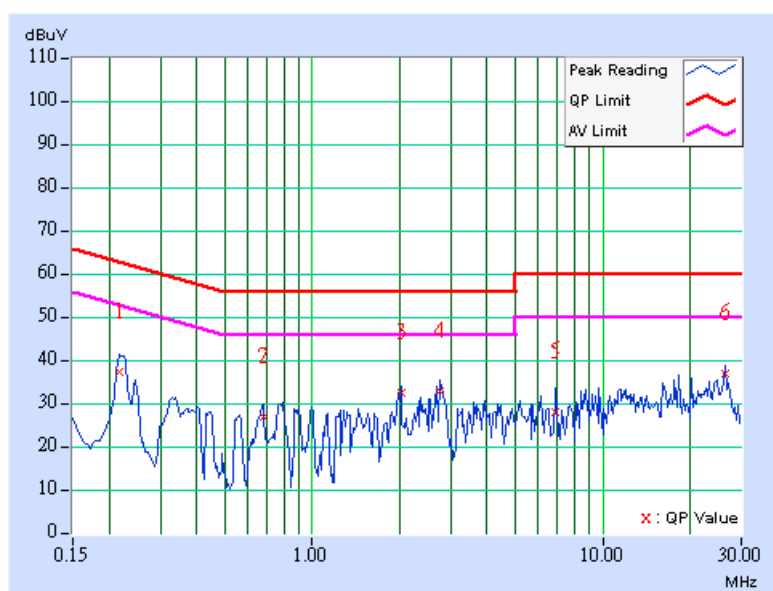
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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 11	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.216	0.10	36.31	-	36.41	-	62.96
2	0.677	0.10	25.95	-	26.05	-	56.00	46.00	-29.95	-
3	2.023	0.20	31.67	-	31.87	-	56.00	46.00	-24.13	-
4	2.758	0.26	31.94	-	32.20	-	56.00	46.00	-23.80	-
5	6.902	0.37	27.04	-	27.41	-	60.00	50.00	-32.59	-
6	26.488	1.05	35.88	-	36.93	-	60.00	50.00	-23.07	-

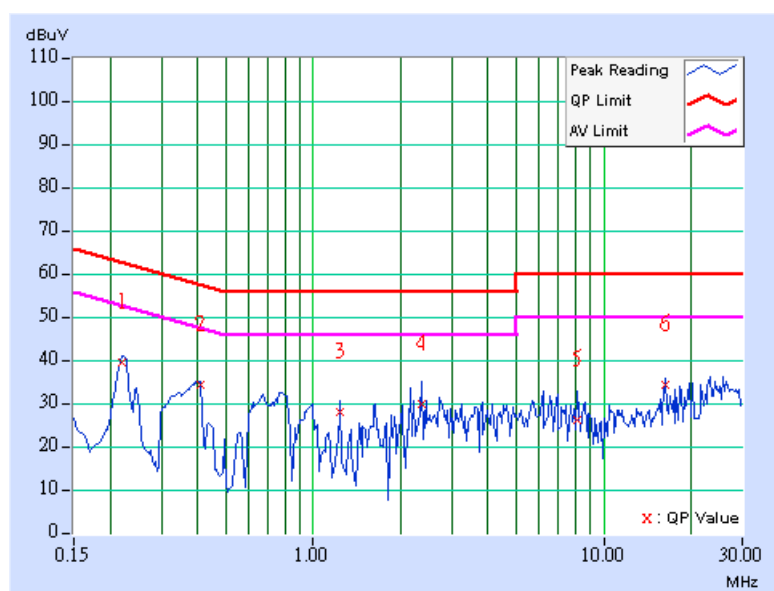
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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 11	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.220	0.10	39.12	-	39.22	-	62.81
2	0.408	0.10	33.83	-	33.93	-	57.69	47.69	-23.76	-
3	1.234	0.20	27.43	-	27.63	-	56.00	46.00	-28.37	-
4	2.367	0.23	29.39	-	29.62	-	56.00	46.00	-26.38	-
5	8.137	0.43	25.84	-	26.27	-	60.00	50.00	-33.73	-
6	16.227	0.61	33.76	-	34.37	-	60.00	50.00	-25.63	-

- 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.

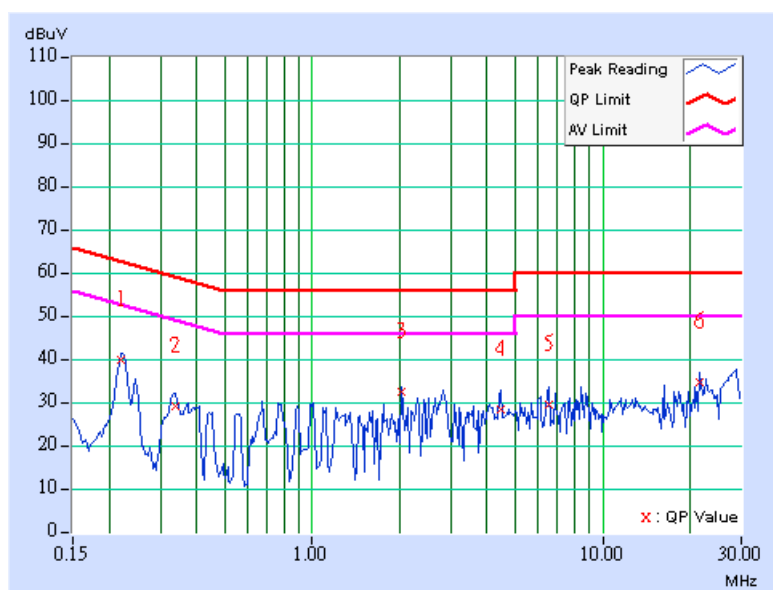


### CONDUCTED WORST-CASE DATA\_TURBO MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	QPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.220	0.10	39.30	-	39.40	-	62.81
2	0.338	0.10	28.73	-	28.83	-	59.26	49.26	-30.43	-
3	2.027	0.20	31.73	-	31.93	-	56.00	46.00	-24.07	-
4	4.465	0.37	28.01	-	28.38	-	56.00	46.00	-27.62	-
5	6.523	0.37	28.81	-	29.18	-	60.00	50.00	-30.82	-
6	21.660	0.68	33.99	-	34.67	-	60.00	50.00	-25.33	-

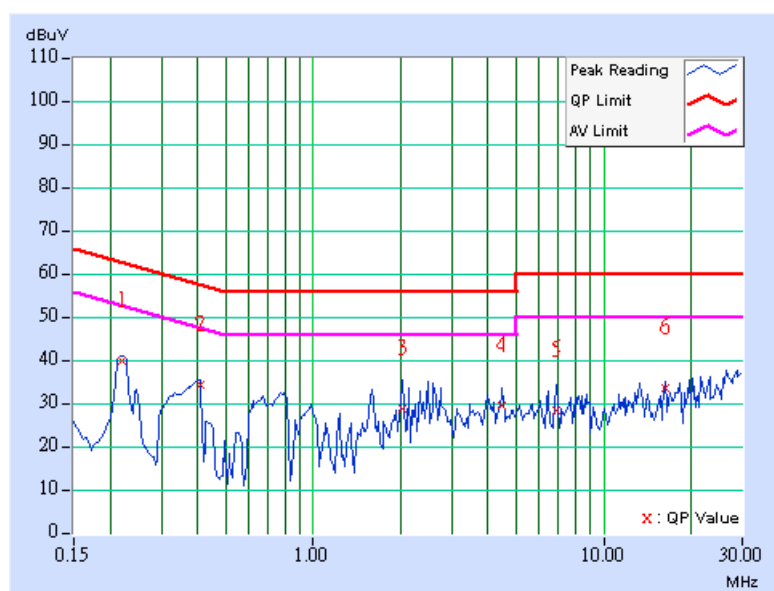
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = 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	QPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TESTED BY	Lori Chiu
TEST MODE	4		

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	0.220	0.10	39.24	-	39.34	-	62.81
2	0.408	0.10	33.91	-	34.01	-	57.69	47.69	-23.68	-
3	2.031	0.20	28.32	-	28.52	-	56.00	46.00	-27.48	-
4	4.484	0.38	29.00	-	29.38	-	56.00	46.00	-26.62	-
5	6.906	0.41	27.87	-	28.28	-	60.00	50.00	-31.72	-
6	16.227	0.61	33.07	-	33.68	-	60.00	50.00	-26.32	-

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







## 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
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Dec. 20, 2006
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 27, 2006
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Jan. 15, 2007
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 22, 2007
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170147	Jan. 26, 2007
Preamplifier Agilent	8449B	3008A01961	Oct. 23, 2006
Preamplifier Agilent	8447D	2944A10629	Oct. 27, 2006
RF signal cable HUBER+SUHNER	SUCOFLEX 104	214380/4	Jan. 16, 2007
RF signal cable HUBER+SUHNER	SUCOFLEX 104	219266/4	Jan. 16, 2007
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA
Turn Table ADT.	TT100.	TT93021702	NA
Controller ADT.	SC100.	SC93021702	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 1.
  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 IC4924-2.

### 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 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 or average method as specified and then reported in a data sheet.

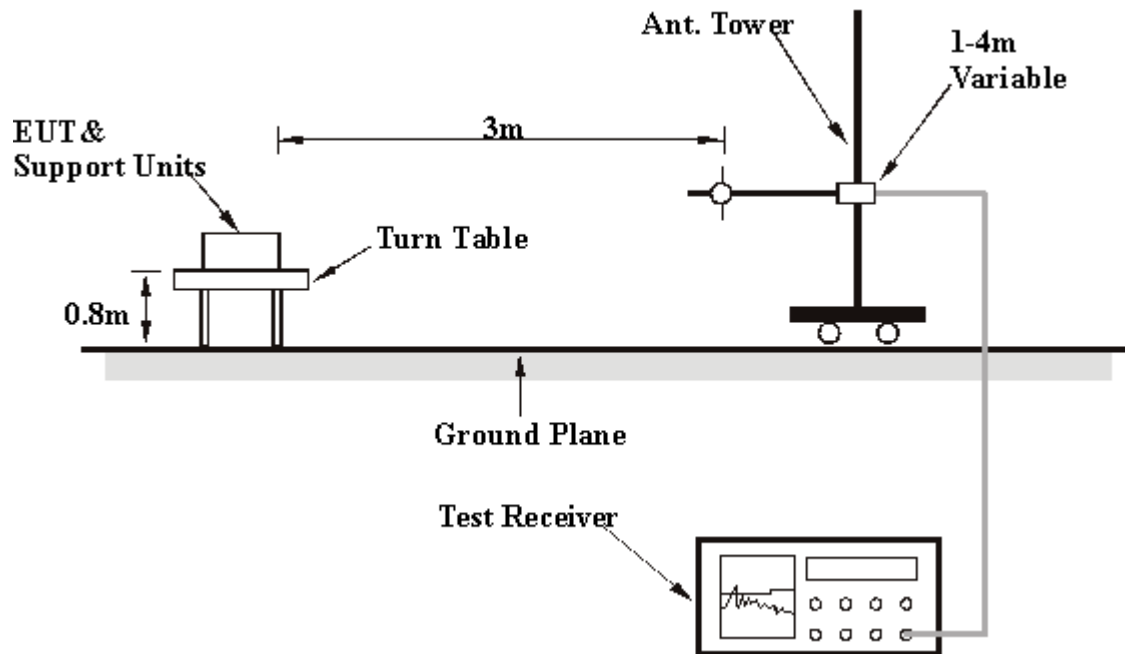
**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.

### 4.2.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.2.5 TEST SETUP



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

#### 4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

## 4.2.7 TEST RESULTS

### RADIATED WORST-CASE DATA: BELOW 1GHz\_NORMAL MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	1		

#### 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	175.79	31.25 QP	43.50	-12.25	2.00 H	25	18.81	12.43
2	296.31	38.63 QP	46.00	-7.37	1.50 H	64	23.19	15.44
3	418.78	38.30 QP	46.00	-7.70	2.00 H	1	19.98	18.32
4	442.10	32.56 QP	46.00	-13.44	2.00 H	43	13.77	18.79
5	494.59	32.48 QP	46.00	-13.52	1.50 H	64	12.53	19.94
6	560.68	32.43 QP	46.00	-13.57	1.50 H	64	10.99	21.45
7	659.82	33.99 QP	46.00	-12.01	1.50 H	64	10.75	23.25
8	758.96	32.76 QP	46.00	-13.24	1.00 H	58	6.95	25.82
9	792.00	33.46 QP	46.00	-12.54	1.50 H	103	7.50	25.96
10	891.14	33.14 QP	46.00	-12.86	2.00 H	25	6.13	27.01
11	924.19	38.33 QP	46.00	-7.67	2.00 H	43	10.12	28.21
12	957.23	35.01 QP	46.00	-10.99	2.00 H	139	5.75	29.26

#### 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	31.94	30.09 QP	40.00	-9.91	1.00 V	196	17.55	12.54
2	63.05	28.64 QP	40.00	-11.36	1.00 V	151	15.63	13.01
3	115.53	31.42 QP	43.50	-12.08	1.00 V	145	21.01	10.40
4	160.24	30.66 QP	43.50	-12.84	1.00 V	292	17.27	13.39
5	162.18	32.22 QP	43.50	-11.28	1.00 V	151	18.95	13.27
6	395.45	32.37 QP	46.00	-13.63	1.00 V	196	14.58	17.79
7	494.59	33.32 QP	46.00	-12.68	1.00 V	196	13.38	19.94
8	825.05	32.67 QP	46.00	-13.33	1.00 V	250	6.33	26.34
9	924.19	42.34 QP	46.00	-3.66	1.00 V	235	14.13	28.21
10	957.23	38.74 QP	46.00	-7.26	1.00 V	172	9.48	29.26

- 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.



**RADIATED WORST-CASE DATA: BELOW 1GHz TURBO MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	QPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	1		

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	175.79	31.25 QP	43.50	-12.25	2.00 H	25	18.81	12.43
2	296.31	38.63 QP	46.00	-7.37	1.50 H	64	23.19	15.44
3	418.78	38.30 QP	46.00	-7.70	2.00 H	1	19.98	18.32
4	659.82	33.99 QP	46.00	-12.01	1.50 H	64	10.75	23.25
5	792.00	33.46 QP	46.00	-12.54	1.50 H	103	7.50	25.96
6	891.14	33.14 QP	46.00	-12.86	2.00 H	25	6.13	27.01
7	924.19	38.33 QP	46.00	-7.67	2.00 H	43	10.12	28.21
8	957.23	35.01 QP	46.00	-10.99	2.00 H	139	5.75	29.26

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	31.94	30.09 QP	40.00	-9.91	1.00 V	196	17.55	12.54
2	63.05	28.64 QP	40.00	-11.36	1.00 V	151	15.63	13.01
3	115.53	31.42 QP	43.50	-12.08	1.00 V	145	21.01	10.40
4	162.18	32.22 QP	43.50	-11.28	1.00 V	151	18.95	13.27
5	395.45	32.37 QP	46.00	-13.63	1.00 V	196	14.58	17.79
6	494.59	33.32 QP	46.00	-12.68	1.00 V	196	13.38	19.94
7	825.05	32.67 QP	46.00	-13.33	1.00 V	250	6.33	26.34
8	924.19	42.34 QP	46.00	-3.66	1.00 V	235	14.13	28.21
9	957.23	38.74 QP	46.00	-7.26	1.00 V	172	9.48	29.26

- 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.

**RADIATED WORST-CASE DATA: BELOW 1GHz\_NORMAL MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	2		

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	64.99	26.20 QP	40.00	-13.80	2.50 H	115	13.52	12.68
2	296.31	39.69 QP	46.00	-6.31	2.50 H	115	24.25	15.44
3	362.40	35.56 QP	46.00	-10.44	2.50 H	115	18.87	16.69
4	395.45	35.95 QP	46.00	-10.05	2.50 H	115	18.17	17.79
5	428.50	32.23 QP	46.00	-13.77	2.50 H	115	13.72	18.52
6	659.82	33.85 QP	46.00	-12.15	2.50 H	115	10.60	23.25
7	758.96	34.27 QP	46.00	-11.73	1.50 H	79	8.45	25.82
8	924.19	37.93 QP	46.00	-8.07	2.00 H	133	9.72	28.21
9	957.23	34.53 QP	46.00	-11.47	2.00 H	346	5.27	29.26

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	57.21	29.33 QP	40.00	-10.67	1.00 V	286	15.56	13.77
2	63.05	29.78 QP	40.00	-10.22	1.00 V	238	16.76	13.01
3	115.53	31.05 QP	43.50	-12.45	1.00 V	349	20.64	10.40
4	158.30	29.70 QP	43.50	-13.80	1.00 V	301	16.29	13.41
5	164.13	31.82 QP	43.50	-11.68	1.00 V	145	18.67	13.15
6	197.17	32.34 QP	43.50	-11.16	1.00 V	145	21.31	11.02
7	296.31	32.36 QP	46.00	-13.64	1.00 V	145	16.92	15.44
8	395.45	32.10 QP	46.00	-13.90	1.00 V	145	14.31	17.79
9	445.99	36.96 QP	46.00	-9.04	1.00 V	349	18.09	18.87
10	494.59	33.55 QP	46.00	-12.45	1.00 V	145	13.60	19.94
11	692.87	32.49 QP	46.00	-13.51	1.00 V	145	8.51	23.98
12	924.19	39.90 QP	46.00	-6.10	1.00 V	181	11.69	28.21
13	957.23	36.92 QP	46.00	-9.08	1.00 V	199	7.67	29.26

- 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.



**RADIATED WORST-CASE DATA: BELOW 1GHz\_TURBO MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	QPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	2		

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	64.99	26.20 QP	40.00	-13.80	2.50 H	115	13.52	12.68
2	296.31	39.69 QP	46.00	-6.31	2.50 H	115	24.25	15.44
3	362.40	35.56 QP	46.00	-10.44	2.50 H	115	18.87	16.69
4	395.45	35.95 QP	46.00	-10.05	2.50 H	115	18.17	17.79
5	659.82	33.85 QP	46.00	-12.15	2.50 H	115	10.60	23.25
6	758.96	34.27 QP	46.00	-11.73	1.50 H	79	8.45	25.82
7	924.19	37.93 QP	46.00	-8.07	2.00 H	133	9.72	28.21
8	957.23	34.53 QP	46.00	-11.47	2.00 H	346	5.27	29.26

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	37.78	30.26 QP	40.00	-9.74	1.00 V	172	16.46	13.80
2	64.99	28.70 QP	40.00	-11.30	1.00 V	190	16.02	12.68
3	115.53	31.04 QP	43.50	-12.46	1.00 V	259	20.64	10.40
4	166.07	31.38 QP	43.50	-12.12	1.00 V	223	18.34	13.03
5	418.78	38.08 QP	46.00	-7.92	1.00 V	307	19.76	18.32
6	494.59	33.74 QP	46.00	-12.26	1.00 V	190	13.79	19.94
7	692.87	32.77 QP	46.00	-13.23	1.00 V	190	8.79	23.98
8	924.19	39.84 QP	46.00	-6.16	1.50 V	313	11.63	28.21
9	957.23	37.54 QP	46.00	-8.46	1.00 V	61	8.28	29.26

- 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.





**RADIATED WORST-CASE DATA: BELOW 1GHz\_NORMAL MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	3		

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	418.78	35.50 QP	46.00	-10.50	2.50 H	133	17.18	18.32
2	438.22	34.05 QP	46.00	-11.95	1.00 H	148	15.34	18.71
3	484.87	37.43 QP	46.00	-8.57	2.50 H	133	17.70	19.73
4	659.82	33.59 QP	46.00	-12.41	2.50 H	40	10.34	23.25
5	924.19	38.38 QP	46.00	-7.62	2.00 H	124	10.17	28.21
6	957.23	36.05 QP	46.00	-9.95	1.50 H	10	6.79	29.26

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	31.94	35.50 QP	40.00	-4.50	1.00 V	208	22.96	12.54
2	64.99	30.44 QP	40.00	-9.56	1.00 V	208	17.76	12.68
3	428.50	34.79 QP	46.00	-11.21	1.00 V	208	16.27	18.52
4	659.82	35.20 QP	46.00	-10.80	1.00 V	208	11.95	23.25
5	924.19	41.70 QP	46.00	-4.30	1.50 V	85	13.49	28.21
6	957.23	40.96 QP	46.00	-5.04	1.25 V	85	11.70	29.26

- 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.

**RADIATED WORST-CASE DATA: BELOW 1GHz\_TURBO MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	QPSK	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TRANSFER RATE</b>	12Mbps	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	3		

**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	64.99	27.35 QP	40.00	-12.65	1.00 H	73	14.67	12.68
2	249.66	27.74 QP	46.00	-18.26	1.00 H	133	15.28	12.45
3	395.45	37.66 QP	46.00	-8.34	1.00 H	73	19.87	17.79
4	428.50	35.46 QP	46.00	-10.54	1.00 H	73	16.95	18.52
5	494.59	34.41 QP	46.00	-11.59	1.00 H	73	14.47	19.94
6	659.82	31.55 QP	46.00	-14.45	1.50 H	343	8.30	23.25
7	924.19	37.45 QP	46.00	-8.55	1.50 H	7	9.24	28.21
8	957.23	33.57 QP	46.00	-12.43	1.00 H	334	4.31	29.26

**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	31.94	35.50 QP	40.00	-4.50	1.00 V	208	22.96	12.54
2	64.99	30.44 QP	40.00	-9.56	1.00 V	208	17.76	12.68
3	164.13	30.42 QP	43.50	-13.08	1.00 V	172	17.27	13.15
4	307.98	32.28 QP	46.00	-13.72	1.50 V	73	16.56	15.72
5	428.50	34.79 QP	46.00	-11.21	1.00 V	208	16.27	18.52
6	659.82	35.20 QP	46.00	-10.80	1.00 V	208	11.95	23.25
7	924.19	41.70 QP	46.00	-4.30	1.50 V	85	13.49	28.21
8	957.23	40.96 QP	46.00	-5.04	1.25 V	85	11.70	29.26

- 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.

**RADIATED WORST-CASE DATA: BELOW 1GHz\_NORMAL MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
<b>CHANNEL</b>	Channel 11	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	BPSK	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TRANSFER RATE</b>	6Mbps	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	4		

**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	47.49	27.25 QP	40.00	-12.75	1.50 H	136	12.53	14.72
2	123.31	29.74 QP	43.50	-13.76	1.00 H	100	18.50	11.25
3	138.86	32.51 QP	43.50	-10.99	1.50 H	49	19.21	13.30
4	274.93	31.52 QP	46.00	-14.48	2.00 H	118	17.11	14.40
5	296.31	38.67 QP	46.00	-7.33	1.50 H	49	23.23	15.44
6	362.40	32.85 QP	46.00	-13.15	1.50 H	49	16.16	16.69
7	428.50	38.06 QP	46.00	-7.94	1.50 H	49	19.55	18.52
8	560.68	32.38 QP	46.00	-13.62	1.50 H	49	10.94	21.45
9	758.96	32.15 QP	46.00	-13.85	1.00 H	145	6.33	25.82
10	792.00	32.95 QP	46.00	-13.05	1.50 H	82	6.98	25.96
11	924.19	33.36 QP	46.00	-12.64	2.00 H	109	5.15	28.21
12	957.23	33.18 QP	46.00	-12.82	1.50 H	136	3.93	29.26

**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	47.49	30.95 QP	40.00	-9.05	1.00 V	82	16.23	14.72
2	72.77	30.70 QP	40.00	-9.30	1.00 V	34	19.24	11.46
3	107.76	29.83 QP	43.50	-13.67	1.00 V	88	20.14	9.70
4	142.75	30.09 QP	43.50	-13.41	1.00 V	106	16.65	13.44
5	296.31	32.36 QP	46.00	-13.64	1.00 V	79	16.92	15.44
6	428.50	34.41 QP	46.00	-11.59	1.00 V	79	15.89	18.52
7	924.19	36.44 QP	46.00	-9.56	1.00 V	94	8.23	28.21
8	957.23	34.21 QP	46.00	-11.79	1.00 V	82	4.95	29.26

- 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.

**RADIATED WORST-CASE DATA: BELOW 1GHz\_TURBO MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	QPSK	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TRANSFER RATE</b>	12Mbps	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	4		

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	47.49	27.25 QP	40.00	-12.75	1.50 H	136	12.53	14.72
2	138.86	32.51 QP	43.50	-10.99	1.50 H	49	19.21	13.30
3	296.31	38.67 QP	46.00	-7.33	1.50 H	49	23.23	15.44
4	428.50	38.06 QP	46.00	-7.94	1.50 H	49	19.55	18.52
5	560.68	32.38 QP	46.00	-13.62	1.50 H	49	10.94	21.45
6	792.00	32.95 QP	46.00	-13.05	1.50 H	82	6.98	25.96
7	924.19	33.36 QP	46.00	-12.64	2.00 H	109	5.15	28.21
8	957.23	33.18 QP	46.00	-12.82	1.50 H	136	3.93	29.26

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	47.49	30.41 QP	40.00	-9.59	1.00 V	91	15.69	14.72
2	84.43	30.36 QP	40.00	-9.64	1.00 V	10	20.44	9.92
3	107.76	29.18 QP	43.50	-14.32	1.00 V	118	19.48	9.70
4	142.75	30.07 QP	43.50	-13.43	1.00 V	109	16.63	13.44
5	428.50	33.91 QP	46.00	-12.09	1.00 V	82	15.39	18.52
6	924.19	35.94 QP	46.00	-10.06	1.00 V	112	7.73	28.21

- 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.



**RADIATED WORST-CASE DATA: BELOW 1GHz\_NORMAL MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	5		

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	72.77	27.07 QP	40.00	-12.93	2.00 H	40	15.61	11.46
2	131.08	30.70 QP	43.50	-12.80	2.50 H	31	18.43	12.27
3	296.31	39.52 QP	46.00	-6.48	2.50 H	31	24.08	15.44
4	362.40	32.05 QP	46.00	-13.95	2.50 H	31	15.36	16.69
5	428.50	35.66 QP	46.00	-10.34	2.50 H	31	17.15	18.52
6	758.96	32.04 QP	46.00	-13.96	1.00 H	67	6.22	25.82
7	792.00	34.23 QP	46.00	-11.77	2.50 H	16	8.27	25.96
8	924.19	32.09 QP	46.00	-13.91	2.00 H	205	3.88	28.21
9	957.23	32.58 QP	46.00	-13.42	2.00 H	217	3.32	29.26

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	43.61	29.66 QP	40.00	-10.34	1.00 V	268	14.75	14.90
2	72.77	30.35 QP	40.00	-9.65	1.00 V	238	18.89	11.46
3	103.87	28.74 QP	43.50	-14.76	1.00 V	331	19.40	9.34
4	142.75	30.26 QP	43.50	-13.24	1.00 V	268	16.81	13.44
5	428.50	33.46 QP	46.00	-12.54	1.00 V	247	14.95	18.52
6	924.19	37.08 QP	46.00	-8.92	1.00 V	301	8.87	28.21
7	957.23	32.77 QP	46.00	-13.23	1.00 V	292	3.51	29.26

- 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.

**RADIATED WORST-CASE DATA: BELOW 1GHz TURBO MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	QPSK	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TRANSFER RATE</b>	12Mbps	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	5		

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	72.77	27.07 QP	40.00	-12.93	2.00 H	40	15.61	11.46
2	131.08	30.70 QP	43.50	-12.80	2.50 H	31	18.43	12.27
3	296.31	39.52 QP	46.00	-6.48	2.50 H	31	24.08	15.44
4	362.40	32.05 QP	46.00	-13.95	2.50 H	31	15.36	16.69
5	428.50	35.66 QP	46.00	-10.34	2.50 H	31	17.15	18.52
6	659.82	28.99 QP	46.00	-17.01	1.00 H	247	5.75	23.25
7	758.96	32.04 QP	46.00	-13.96	1.00 H	67	6.22	25.82
8	792.00	34.23 QP	46.00	-11.77	2.50 H	16	8.27	25.96
9	957.23	32.58 QP	46.00	-13.42	2.00 H	217	3.32	29.26

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	45.55	30.17 QP	40.00	-9.83	1.00 V	304	15.17	15.00
2	94.15	29.71 QP	43.50	-13.79	1.00 V	31	20.62	9.09
3	142.75	30.93 QP	43.50	-12.57	1.00 V	268	17.49	13.44
4	296.31	29.16 QP	46.00	-16.84	1.00 V	145	13.72	15.44
5	362.40	28.57 QP	46.00	-17.43	1.00 V	295	11.88	16.69
6	428.50	33.79 QP	46.00	-12.21	1.00 V	358	15.27	18.52
7	560.68	29.35 QP	46.00	-16.65	2.00 V	310	7.90	21.45
8	659.82	29.53 QP	46.00	-16.47	1.00 V	241	6.29	23.25
9	924.19	37.04 QP	46.00	-8.96	1.00 V	304	8.83	28.21
10	957.23	32.39 QP	46.00	-13.61	1.00 V	283	3.13	29.26

- 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.

**RADIATED WORST-CASE DATA: BELOW 1GHz\_NORMAL MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	6		

**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	84.43	24.89 QP	40.00	-15.11	2.50 H	58	14.97	9.92
2	395.45	31.85 QP	46.00	-14.15	1.00 H	151	14.06	17.79
3	428.50	38.43 QP	46.00	-7.57	1.00 H	151	19.92	18.52
4	792.00	29.07 QP	46.00	-16.93	1.00 H	154	3.11	25.96
5	924.19	33.29 QP	46.00	-12.71	1.50 H	61	5.08	28.21
6	957.23	33.14 QP	46.00	-12.86	2.50 H	34	3.89	29.26

**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	47.49	28.64 QP	40.00	-11.36	1.00 V	307	13.92	14.72
2	72.77	31.94 QP	40.00	-8.06	1.00 V	244	20.49	11.46
3	111.64	30.21 QP	43.50	-13.29	1.00 V	352	20.16	10.05
4	424.61	33.43 QP	46.00	-12.57	1.00 V	103	15.00	18.44
5	428.50	33.94 QP	46.00	-12.06	1.00 V	265	15.43	18.52
6	659.82	31.03 QP	46.00	-14.97	1.00 V	265	7.79	23.25
7	924.19	34.26 QP	46.00	-11.74	1.00 V	352	6.05	28.21
8	957.23	32.70 QP	46.00	-13.30	1.00 V	307	3.44	29.26

- 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.



**RADIATED WORST-CASE DATA: BELOW 1GHz\_TURBO MODE**

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	QPSK	DETECTOR FUNCTION	Quasi-Peak
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	6		

**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	84.43	24.89 QP	40.00	-15.11	2.50 H	58	14.97	9.92
2	274.93	27.89 QP	46.00	-18.11	1.00 H	100	13.49	14.40
3	395.45	31.85 QP	46.00	-14.15	1.00 H	151	14.06	17.79
4	428.50	38.43 QP	46.00	-7.57	1.00 H	151	19.92	18.52
5	659.82	27.72 QP	46.00	-18.28	1.00 H	220	4.47	23.25
6	792.00	29.07 QP	46.00	-16.93	1.00 H	154	3.11	25.96
7	924.19	33.29 QP	46.00	-12.71	1.50 H	61	5.08	28.21
8	957.23	33.14 QP	46.00	-12.86	2.50 H	34	3.89	29.26

**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	47.49	28.66 QP	40.00	-11.34	1.00 V	304	13.94	14.72
2	84.43	31.75 QP	40.00	-8.25	2.00 V	97	21.83	9.92
3	142.75	29.18 QP	43.50	-14.32	1.00 V	328	15.74	13.44
4	428.50	35.69 QP	46.00	-10.31	1.00 V	226	17.18	18.52
5	560.68	29.24 QP	46.00	-16.76	1.00 V	226	7.79	21.45
6	659.82	32.36 QP	46.00	-13.64	1.00 V	226	9.12	23.25
7	758.96	31.14 QP	46.00	-14.86	1.00 V	28	5.32	25.82
8	924.19	36.19 QP	46.00	-9.81	1.00 V	256	7.98	28.21
9	957.23	33.60 QP	46.00	-12.40	1.00 V	304	4.34	29.26

- 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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	DBPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	1		

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	1608.00	38.96 PK	74.00	-35.04	1.04 H	180	10.22	28.74
1	1608.00	33.45 AV	54.00	-20.55	1.04 H	180	4.71	28.74
2	2390.00	52.41 PK	74.00	-21.59	1.29 H	100	21.02	31.39
2	2390.00	43.47 AV	54.00	-10.53	1.29 H	100	12.08	31.39
3	*2412.00	89.27 PK			1.29 H	100	57.81	31.46
3	*2412.00	85.78 AV			1.29 H	100	54.32	31.46
4	4824.00	45.41 PK	74.00	-28.59	1.00 H	360	8.28	37.13
4	4824.00	32.19 AV	54.00	-21.81	1.00 H	360	-4.94	37.13

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	1608.00	43.12 PK	74.00	-30.88	1.11 V	358	14.38	28.74
1	1608.00	39.75 AV	54.00	-14.25	1.11 V	358	11.01	28.74
2	2386.00	57.66 PK	74.00	-16.34	1.09 V	310	26.29	31.37
2	2386.00	47.59 AV	54.00	-6.41	1.09 V	310	16.22	31.37
3	*2412.00	102.94 PK			1.09 V	310	71.48	31.46
3	*2412.00	99.89 AV			1.09 V	310	68.43	31.46
4	4824.00	45.18 PK	74.00	-28.82	1.17 V	360	8.05	37.13
4	4824.00	32.29 AV	54.00	-21.71	1.17 V	360	-4.84	37.13

- 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	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	DBPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	1Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	1		

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	1624.00	38.41 PK	74.00	-35.59	1.10 H	347	9.62	28.79
1	1624.00	32.75 AV	54.00	-21.25	1.10 H	347	3.96	28.79
2	*2437.00	89.42 PK			1.20 H	299	57.88	31.54
2	*2437.00	85.29 AV			1.20 H	299	53.75	31.54
3	4874.00	46.87 PK	74.00	-27.13	1.03 H	360	9.58	37.29
3	4874.00	31.98 AV	54.00	-22.02	1.03 H	360	-5.31	37.29

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	1624.00	43.85 PK	74.00	-30.15	1.24 V	14	15.06	28.79
1	1624.00	40.12 AV	54.00	-13.88	1.24 V	14	11.33	28.79
2	*2437.00	102.65 PK			1.10 V	247	71.11	31.54
2	*2437.00	99.94 AV			1.10 V	247	68.40	31.54
3	4874.00	45.07 PK	74.00	-28.93	1.08 V	120	7.78	37.29
3	4874.00	32.01 AV	54.00	-21.99	1.08 V	120	-5.28	37.29

- 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
MODULATION TYPE	DBPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	1		

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	1641.00	41.25 PK	74.00	-32.75	1.07 H	214	12.40	28.85
1	1641.00	32.96 AV	54.00	-21.04	1.07 H	214	4.11	28.85
2	*2462.00	89.09 PK			1.40 H	218	57.47	31.62
2	*2462.00	85.96 AV			1.40 H	218	54.34	31.62
3	2483.50	53.14 PK	74.00	-20.86	1.40 H	218	21.44	31.70
3	2483.50	43.84 AV	54.00	-10.16	1.40 H	218	12.14	31.70
4	4924.00	45.74 PK	74.00	-28.26	1.06 H	230	8.30	37.44
4	4924.00	32.45 AV	54.00	-21.55	1.06 H	230	-4.99	37.44

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	1641.00	42.44 PK	74.00	-31.56	1.23 V	247	13.59	28.85
1	1641.00	39.53 AV	54.00	-14.47	1.23 V	247	10.68	28.85
2	*2462.00	102.47 PK			1.10 V	245	70.85	31.62
2	*2462.00	100.01 AV			1.10 V	245	68.39	31.62
3	2488.00	61.12 PK	74.00	-12.88	1.10 V	245	29.41	31.71
3	2488.00	46.51 AV	54.00	-7.49	1.10 V	245	14.80	31.71
4	4924.00	46.27 PK	74.00	-27.73	1.07 V	210	8.83	37.44
4	4924.00	32.09 AV	54.00	-21.91	1.07 V	210	-5.35	37.44

- 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	
<b>CHANNEL</b>	Channel 1	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	DBPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	1Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	2		

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	1608.00	39.85 PK	74.00	-34.15	1.00 H	146	11.11	28.74
1	1608.00	33.99 AV	54.00	-20.01	1.00 H	146	5.25	28.74
2	2390.00	52.21 PK	74.00	-21.79	1.35 H	77	20.82	31.39
2	2390.00	43.64 AV	54.00	-10.36	1.35 H	77	12.25	31.39
3	*2412.00	92.27 PK			1.35 H	77	60.81	31.46
3	*2412.00	88.71 AV			1.35 H	77	57.25	31.46
4	3216.00	43.45 PK	72.27	-28.82	1.00 H	307	10.34	33.11
4	3216.00	31.26 AV	68.71	-37.45	1.00 H	307	-1.85	33.11

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	1608.00	44.63 PK	74.00	-29.37	1.14 V	345	15.89	28.74
1	1608.00	41.16 AV	54.00	-12.84	1.14 V	345	12.42	28.74
2	2386.00	58.34 PK	74.00	-15.66	1.07 V	241	26.97	31.37
2	2386.00	48.34 AV	54.00	-5.66	1.07 V	241	16.97	31.37
3	*2412.00	104.78 PK			1.05 V	228	73.32	31.46
3	*2412.00	101.57 AV			1.05 V	228	70.11	31.46
4	3216.00	44.49 PK	84.78	-40.29	1.31 V	20	11.38	33.11
4	3216.00	35.74 AV	81.57	-45.83	1.31 V	20	2.63	33.11
5	4824.00	45.04 PK	74.00	-28.96	1.00 V	10	7.91	37.13
5	4824.00	33.01 AV	54.00	-20.99	1.00 V	10	-4.12	37.13

- 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	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	DBPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	1Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	2		

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	1624.00	40.04 PK	74.00	-33.96	1.01 H	182	11.25	28.79
1	1624.00	34.17 AV	54.00	-19.83	1.01 H	182	5.38	28.79
2	*2437.00	92.57 PK			1.24 H	100	61.03	31.54
2	*2437.00	89.10 AV			1.24 H	100	57.56	31.54
3	4874.00	45.81 PK	74.00	-28.19	1.00 H	354	8.52	37.29
3	4874.00	32.85 AV	54.00	-21.15	1.00 H	354	-4.44	37.29

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	1624.00	45.24 PK	74.00	-28.76	1.10 V	311	16.45	28.79
1	1624.00	41.65 AV	54.00	-12.35	1.10 V	311	12.86	28.79
2	*2437.00	104.82 PK			1.07 V	300	73.28	31.54
2	*2437.00	101.65 AV			1.07 V	300	70.11	31.54
3	4874.00	45.21 PK	74.00	-28.79	1.00 V	0	7.92	37.29
3	4874.00	33.40 AV	54.00	-20.60	1.00 V	0	-3.89	37.29

- 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	
<b>CHANNEL</b>	Channel 11	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	DBPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	1Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	2		

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	1641.00	40.10 PK	72.11	-32.01	1.05 H	347	11.25	28.85
1	1641.00	33.57 AV	79.24	-45.67	1.05 H	347	4.72	28.85
2	*2462.00	92.11 PK			1.27 H	100	60.49	31.62
2	*2462.00	99.24 AV			1.27 H	100	67.62	31.62
3	2483.50	53.21 PK	74.00	-20.79	1.27 H	100	21.51	31.70
3	2483.50	43.80 AV	54.00	-10.20	1.27 H	100	12.10	31.70
4	4924.00	46.36 PK	74.00	-27.64	1.00 H	360	8.92	37.44
4	4924.00	32.89 AV	54.00	-21.11	1.00 H	360	-4.55	37.44

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	1641.00	45.27 PK	84.56	-39.29	1.10 V	10	16.42	28.85
1	1641.00	41.65 AV	81.48	-39.83	1.10 V	10	12.80	28.85
2	*2462.00	104.56 PK			1.07 V	300	72.94	31.62
2	*2462.00	101.48 AV			1.07 V	300	69.86	31.62
3	2488.00	59.65 PK	74.00	-14.35	1.07 V	300	27.94	31.71
3	2488.00	48.87 AV	54.00	-5.13	1.07 V	300	17.16	31.71
4	4824.00	45.54 PK	74.00	-28.46	1.04 V	360	8.41	37.13
4	4824.00	33.12 AV	54.00	-20.88	1.04 V	360	-4.01	37.13

- 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
MODULATION TYPE	DBPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Lori Chiu
TEST MODE	3		

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	2386.00	56.40 PK	74.00	-17.60	1.06 H	25	25.20	31.20
1	2386.00	46.33 AV	54.00	-7.67	1.06 H	25	15.13	31.20
2	*2412.00	98.36 PK			1.04 H	25	67.05	31.31
2	*2412.00	94.87 AV			1.04 H	25	63.56	31.31
3	3216.00	44.24 PK	78.36	-34.12	1.37 H	298	11.29	32.95
3	3216.00	35.29 AV	74.87	-39.58	1.37 H	298	2.34	32.95

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	1608.00	44.79 PK	74.00	-29.21	1.10 V	107	16.67	28.13
1	1608.00	40.74 AV	54.00	-13.26	1.10 V	107	12.62	28.13
2	2360.00	54.29 PK	74.00	-19.71	1.08 V	29	23.19	31.10
2	2360.00	45.25 AV	54.00	-8.75	1.08 V	29	14.15	31.10
3	2386.00	60.67 PK	74.00	-13.33	1.31 V	36	29.47	31.20
3	2386.00	52.61 AV	54.00	-1.39	1.31 V	36	21.41	31.20
4	*2412.00	109.64 PK			1.03 V	360	78.33	31.31
4	*2412.00	106.30 AV			1.03 V	360	74.99	31.31
5	3216.00	48.51 PK	89.64	-41.13	1.23 V	22	15.56	32.95
5	3216.00	44.38 AV	86.30	-41.92	1.23 V	22	11.43	32.95
6	4824.00	45.84 PK	74.00	-28.16	1.25 V	342	8.84	37.00
6	4824.00	34.21 AV	54.00	-19.79	1.25 V	342	-2.79	37.00

- 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	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	DBPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	1Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Lori Chiu
<b>TEST MODE</b>	3		

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	1624.00	44.19 PK	74.00	-29.81	1.00 H	123	16.04	28.16
1	1624.00	41.38 AV	54.00	-12.62	1.00 H	123	13.23	28.16
2	*2437.00	101.45 PK			1.04 H	16	70.05	31.40
2	*2437.00	97.68 AV			1.04 H	16	66.28	31.40

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	1624.00	46.58 PK	74.00	-27.42	1.19 V	170	18.43	28.16
1	1624.00	44.34 AV	54.00	-9.66	1.19 V	170	16.19	28.16
2	2360.00	58.95 PK	74.00	-15.05	1.27 V	317	27.85	31.10
2	2360.00	48.81 AV	54.00	-5.19	1.27 V	317	17.71	31.10
3	*2437.00	110.07 PK			1.24 V	116	78.67	31.40
3	*2437.00	106.49 AV			1.24 V	116	75.09	31.40
4	3248.00	46.94 PK	90.07	-43.13	1.22 V	20	13.95	32.99
4	3248.00	41.67 AV	86.49	-44.82	1.22 V	20	8.68	32.99

- 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	
<b>CHANNEL</b>	Channel 11	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	DBPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	1Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Lori Chiu
<b>TEST MODE</b>	3		

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	1641.00	45.22 PK	79.46	-34.24	1.62 H	75	17.03	28.19
1	1641.00	42.24 AV	76.05	-33.81	1.62 H	75	14.05	28.19
2	*2462.00	99.46 PK			1.30 H	129	67.96	31.50
2	*2462.00	96.05 AV			1.30 H	129	64.55	31.50
3	2488.00	56.29 PK	74.00	-17.71	1.28 H	121	24.69	31.60
3	2488.00	46.02 AV	54.00	-7.98	1.28 H	121	14.42	31.60

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	1641.00	46.11 PK	89.59	-43.48	1.04 V	81	17.92	28.19
1	1641.00	43.84 AV	85.99	-42.15	1.04 V	81	15.65	28.19
2	2360.00	54.05 PK	74.00	-19.95	1.10 V	318	22.95	31.10
2	2360.00	44.79 AV	54.00	-9.21	1.10 V	318	13.69	31.10
3	*2462.00	109.59 PK			1.11 V	327	78.09	31.50
3	*2462.00	105.99 AV			1.11 V	327	74.49	31.50
4	2488.00	62.06 PK	74.00	-11.94	1.00 V	332	30.46	31.60
4	2488.00	52.69 AV	54.00	-1.31	1.00 V	332	21.09	31.60
5	3282.00	45.89 PK	89.59	-43.70	1.17 V	20	12.86	33.03
5	3282.00	38.54 AV	85.99	-47.45	1.17 V	20	5.51	33.03
6	4924.00	46.15 PK	74.00	-27.85	1.10 V	45	8.88	37.27
6	4924.00	33.86 AV	54.00	-20.14	1.10 V	45	-3.41	37.27

- 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\_NORMAL MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	1		

#### 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	1608.00	36.91 PK	74.00	-37.09	1.51 H	35	8.17	28.74
1	1608.00	25.98 AV	54.00	-28.02	1.51 H	35	-2.76	28.74
2	2390.00	53.40 PK	74.00	-20.60	1.10 H	22	22.01	31.39
2	2390.00	43.69 AV	54.00	-10.31	1.10 H	22	12.30	31.39
3	*2412.00	87.54 PK			1.06 H	22	56.08	31.46
3	*2412.00	78.06 AV			1.06 H	22	46.60	31.46
4	3216.00	43.06 PK	67.54	-24.48	1.12 H	360	9.95	33.11
4	3216.00	30.81 AV	58.06	-27.25	1.12 H	360	-2.30	33.11
5	4824.00	45.82 PK	74.00	-28.18	1.10 H	0	8.69	37.13
5	4824.00	32.43 AV	54.00	-21.57	1.10 H	0	-4.70	37.13

#### 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	1608.00	43.11 PK	74.00	-30.89	1.15 V	168	14.37	28.74
1	1608.00	39.04 AV	54.00	-14.96	1.15 V	168	10.30	28.74
2	2360.00	56.16 PK	74.00	-17.84	1.26 V	172	24.88	31.28
2	2360.00	45.15 AV	54.00	-8.85	1.26 V	172	13.87	31.28
3	2390.00	63.40 PK	74.00	-10.60	1.11 V	169	32.01	31.39
3	2390.00	47.05 AV	54.00	-6.95	1.11 V	169	15.66	31.39
4	*2412.00	105.47 PK			1.08 V	166	74.01	31.46
4	*2412.00	95.20 AV			1.08 V	166	63.74	31.46
5	3216.00	44.22 PK	85.47	-41.27	1.23 V	148	11.11	33.11
5	3216.00	33.15 AV	75.20	-42.05	1.23 V	148	0.04	33.11
6	4824.00	45.53 PK	74.00	-28.47	1.26 V	360	8.40	37.13
6	4824.00	32.51 AV	54.00	-21.49	1.26 V	360	-4.62	37.13

- 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
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	1		

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	1624.00	37.21 PK	74.00	-36.79	1.47 H	10	8.42	28.79
1	1624.00	26.64 AV	54.00	-27.36	1.47 H	10	-2.15	28.79
2	*2437.00	87.63 PK			1.10 H	186	56.09	31.54
2	*2437.00	78.12 AV			1.10 H	186	46.58	31.54
3	4874.00	46.07 PK	74.00	-27.93	1.00 H	0	8.78	37.29
3	4874.00	32.50 AV	54.00	-21.50	1.00 H	0	-4.79	37.29

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	1624.00	43.51 PK	74.00	-30.49	1.11 V	196	14.72	28.79
1	1624.00	39.26 AV	54.00	-14.74	1.11 V	196	10.47	28.79
2	*2437.00	105.56 PK			1.10 V	180	74.02	31.54
2	*2437.00	95.48 AV			1.10 V	180	63.94	31.54
3	4874.00	45.24 PK	74.00	-28.76	1.30 V	1	7.95	37.29
3	4874.00	32.47 AV	54.00	-21.53	1.30 V	1	-4.82	37.29

- 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	
<b>CHANNEL</b>	Channel 11	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	BPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	6Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	1		

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	1641.00	37.57 PK	65.78	-28.21	1.30 H	24	8.72	28.85
1	1641.00	26.57 AV	57.21	-30.64	1.30 H	24	-2.28	28.85
2	*2462.00	85.78 PK			1.00 H	350	54.16	31.62
2	*2462.00	77.21 AV			1.00 H	350	45.59	31.62
3	2483.50	53.44 PK	74.00	-20.56	1.00 H	350	21.74	31.70
3	2483.50	43.72 AV	54.00	-10.28	1.00 H	350	12.02	31.70
4	4924.00	45.93 PK	74.00	-28.07	1.00 H	360	8.49	37.44
4	4924.00	32.50 AV	54.00	-21.50	1.00 H	360	-4.94	37.44

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	1641.00	43.85 PK	83.86	-40.01	1.20 V	198	15.00	28.85
1	1641.00	39.24 AV	72.57	-33.33	1.20 V	198	10.39	28.85
2	*2462.00	103.86 PK			1.10 V	178	72.24	31.62
2	*2462.00	93.57 AV			1.10 V	178	61.95	31.62
3	2483.50	63.15 PK	74.00	-10.85	1.15 V	189	31.45	31.70
3	2483.50	47.20 AV	54.00	-6.80	1.15 V	189	15.50	31.70
4	4874.00	45.28 PK	74.00	-28.72	1.20 V	0	7.99	37.29
4	4874.00	32.66 AV	54.00	-21.34	1.20 V	0	-4.63	37.29

- 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\_TURBO MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	QPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	12Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	1		

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	1624.00	37.56 PK	74.00	-36.44	1.30 H	350	8.77	28.79
1	1624.00	26.89 AV	54.00	-27.11	1.30 H	350	-1.90	28.79
2	2390.00	54.12 PK	74.00	-19.88	1.00 H	360	22.73	31.39
2	2390.00	43.89 AV	54.00	-10.11	1.00 H	360	12.50	31.39
3	*2437.00	85.44 PK			1.00 H	360	53.90	31.54
3	*2437.00	76.42 AV			1.00 H	360	44.88	31.54
4	2483.50	54.12 PK	74.00	-19.88	1.00 H	360	22.42	31.70
4	2483.50	44.46 AV	54.00	-9.54	1.00 H	360	12.76	31.70
5	4874.00	46.58 PK	74.00	-27.42	1.10 H	355	9.29	37.29
5	4874.00	32.75 AV	54.00	-21.25	1.10 H	355	-4.54	37.29

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	1624.00	44.89 PK	74.00	-29.11	1.13 V	165	16.10	28.79
1	1624.00	40.32 AV	54.00	-13.68	1.13 V	165	11.53	28.79
2	2390.00	57.04 PK	74.00	-16.96	1.19 V	178	25.65	31.39
2	2390.00	45.50 AV	54.00	-8.50	1.19 V	178	14.11	31.39
3	*2437.00	103.31 PK			1.09 V	163	71.77	31.54
3	*2437.00	92.27 AV			1.09 V	163	60.73	31.54
4	2483.50	59.36 PK	74.00	-14.64	1.19 V	175	27.66	31.70
4	2483.50	47.36 AV	54.00	-6.64	1.19 V	175	15.66	31.70
5	4874.00	46.78 PK	74.00	-27.22	1.09 V	310	9.49	37.29
5	4874.00	32.57 AV	54.00	-21.43	1.09 V	310	-4.72	37.29

- 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\_NORMAL MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	2		

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	1608.00	39.21 PK	74.00	-34.79	1.54 H	131	11.09	28.13
1	1608.00	32.24 AV	54.00	-21.76	1.54 H	131	4.12	28.13
2	2390.00	52.42 PK	74.00	-21.58	1.17 H	132	21.20	31.22
2	2390.00	43.64 AV	54.00	-10.36	1.17 H	132	12.42	31.22
3	*2412.00	90.59 PK			1.17 H	132	59.28	31.31
3	*2412.00	81.52 AV			1.17 H	132	50.21	31.31
4	3216.00	42.83 PK	70.59	-27.76	1.00 H	333	9.88	32.95
4	3216.00	30.99 AV	61.52	-30.53	1.00 H	333	-1.96	32.95

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	1608.00	45.28 PK	74.00	-28.72	1.14 V	343	17.16	28.13
1	1608.00	41.71 AV	54.00	-12.29	1.14 V	343	13.59	28.13
2	2360.00	54.71 PK	74.00	-19.29	1.17 V	324	23.61	31.10
2	2360.00	45.21 AV	54.00	-8.79	1.17 V	324	14.11	31.10
3	2390.00	63.98 PK	74.00	-10.02	1.02 V	132	32.76	31.22
3	2390.00	47.17 AV	54.00	-6.83	1.02 V	132	15.95	31.22
4	*2412.00	107.40 PK			1.02 V	132	76.09	31.31
4	*2412.00	98.15 AV			1.02 V	132	66.84	31.31
5	3216.00	45.09 PK	87.40	-42.31	1.13 V	20	12.14	32.95
5	3216.00	36.28 AV	78.15	-41.87	1.13 V	20	3.33	32.95
6	4824.00	45.67 PK	74.00	-28.33	1.00 V	0	8.67	37.00
6	4824.00	32.52 AV	54.00	-21.48	1.00 V	0	-4.48	37.00

- 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	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	QPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	6Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	2		

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	1624.00	40.54 PK	74.00	-33.46	1.41 H	147	11.75	28.79
1	1624.00	33.57 AV	54.00	-20.43	1.41 H	147	4.78	28.79
2	*2437.00	90.14 PK			1.14 H	163	58.60	31.54
2	*2437.00	81.98 AV			1.14 H	163	50.44	31.54
3	4874.00	45.90 PK	74.00	-28.10	1.07 H	110	8.61	37.29
3	4874.00	32.85 AV	54.00	-21.15	1.07 H	110	-4.44	37.29

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	1624.00	46.11 PK	74.00	-27.89	1.10 V	360	17.95	28.16
1	1624.00	42.12 AV	54.00	-11.88	1.10 V	360	13.96	28.16
2	2360.00	55.45 PK	74.00	-18.55	1.15 V	317	24.35	31.10
2	2360.00	46.24 AV	54.00	-7.76	1.15 V	317	15.14	31.10
3	*2437.00	107.89 PK			1.07 V	154	76.49	31.40
3	*2437.00	98.65 AV			1.07 V	154	67.25	31.40
4	4874.00	46.12 PK	74.00	-27.88	1.07 V	360	8.98	37.14
4	4874.00	32.86 AV	54.00	-21.14	1.07 V	360	-4.28	37.14

- 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	
<b>CHANNEL</b>	Channel 11	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	BPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	6Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	2		

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	1641.00	47.69 PK	74.00	-26.31	1.31 H	123	18.84	28.85
1	1641.00	45.63 AV	54.00	-8.37	1.31 H	123	16.78	28.85
2	*2462.00	90.47 PK			1.10 H	147	58.85	31.62
2	*2462.00	81.86 AV			1.10 H	147	50.24	31.62
3	2483.50	53.24 PK	74.00	-20.76	1.10 H	147	21.54	31.70
3	2483.50	44.36 AV	54.00	-9.64	1.10 H	147	12.66	31.70
4	4924.00	46.49 PK	74.00	-27.51	1.17 H	132	9.05	37.44
4	4924.00	33.23 AV	54.00	-20.77	1.17 H	132	-4.21	37.44

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	1641.00	46.27 PK	74.00	-27.73	1.17 V	314	17.42	28.85
1	1641.00	42.68 AV	54.00	-11.32	1.17 V	314	13.83	28.85
2	*2462.00	105.21 PK			1.03 V	182	73.59	31.62
2	*2462.00	96.45 AV			1.03 V	182	64.83	31.62
3	2483.50	64.15 PK	74.00	-9.85	1.03 V	182	32.45	31.70
3	2483.50	47.98 AV	54.00	-6.02	1.03 V	182	16.28	31.70
4	3282.00	46.57 PK	85.21	-38.64	1.17 V	127	13.30	33.27
4	3282.00	37.21 AV	76.45	-39.24	1.17 V	127	3.94	33.27
5	4924.00	46.24 PK	74.00	-27.76	1.00 V	0	8.80	37.44
5	4924.00	33.57 AV	54.00	-20.43	1.00 V	0	-3.87	37.44

- 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\_TURBO MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	QPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	12Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	2		

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	1624.00	40.23 PK	74.00	-33.77	1.65 H	215	11.44	28.79
1	1624.00	35.15 AV	54.00	-18.85	1.65 H	215	6.36	28.79
2	2390.00	54.95 PK	74.00	-19.05	1.51 H	115	23.56	31.39
2	2390.00	43.65 AV	54.00	-10.35	1.51 H	115	12.26	31.39
3	*2437.00	91.49 PK			1.04 H	102	59.95	31.54
3	*2437.00	81.05 AV			1.04 H	102	49.51	31.54
4	2483.50	54.51 PK	74.00	-19.49	1.22 H	113	22.81	31.70
4	2483.50	44.23 AV	54.00	-9.77	1.22 H	113	12.53	31.70
5	4874.00	46.05 PK	74.00	-27.95	1.23 H	111	8.76	37.29
5	4874.00	33.08 AV	54.00	-20.92	1.23 H	111	-4.21	37.29

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	1624.00	48.85 PK	74.00	-25.15	1.07 V	295	20.06	28.79
1	1624.00	46.98 AV	54.00	-7.02	1.07 V	295	18.19	28.79
2	2390.00	58.84 PK	74.00	-15.16	1.00 V	102	27.45	31.39
2	2390.00	46.86 AV	54.00	-7.14	1.00 V	102	15.47	31.39
3	*2437.00	105.69 PK			1.00 V	142	74.15	31.54
3	*2437.00	95.46 AV			1.00 V	142	63.92	31.54
4	2483.50	59.79 PK	74.00	-14.21	1.23 V	117	28.09	31.70
4	2483.50	48.29 AV	54.00	-5.71	1.23 V	117	16.59	31.70
5	4874.00	46.91 PK	74.00	-27.09	1.10 V	110	9.62	37.29
5	4874.00	33.05 AV	54.00	-20.95	1.10 V	110	-4.24	37.29

- 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\_NORMAL MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	3		

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	1608.00	45.56 PK	74.00	-28.44	1.18 H	111	17.44	28.13
1	1608.00	42.54 AV	54.00	-11.46	1.18 H	111	14.42	28.13
2	2360.00	47.81 PK	74.00	-26.19	1.34 H	119	16.71	31.10
2	2360.00	37.04 AV	54.00	-16.96	1.34 H	119	5.94	31.10
3	2390.00	54.26 PK	74.00	-19.74	1.10 H	175	23.04	31.22
3	2390.00	44.92 AV	54.00	-9.08	1.10 H	175	13.70	31.22
4	*2412.00	102.13 PK			1.10 H	175	70.82	31.31
4	*2412.00	92.12 AV			1.10 H	175	60.81	31.31
5	3216.00	45.22 PK	82.13	-36.91	1.00 H	284	12.27	32.95
5	3216.00	37.88 AV	72.12	-34.24	1.00 H	284	4.93	32.95

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	1608.00	45.61 PK	74.00	-28.39	1.53 V	118	17.49	28.13
1	1608.00	42.93 AV	54.00	-11.07	1.53 V	118	14.81	28.13
2	2320.00	57.55 PK	74.00	-16.45	1.14 V	249	26.61	30.94
2	2320.00	48.93 AV	54.00	-5.07	1.14 V	249	17.99	30.94
3	2360.00	59.43 PK	74.00	-14.57	1.11 V	319	28.33	31.10
3	2360.00	50.18 AV	54.00	-3.82	1.11 V	319	19.08	31.10
4	2390.00	72.47 PK	74.00	-1.53	1.33 V	33	41.25	31.22
4	2390.00	52.29 AV	54.00	-1.71	1.33 V	33	21.07	31.22
5	*2412.00	111.23 PK			1.07 V	35	79.92	31.31
5	*2412.00	101.01 AV			1.07 V	35	69.70	31.31
6	3216.00	50.09 PK	91.23	-41.14	1.23 V	23	17.14	32.95
6	3216.00	46.53 AV	81.01	-34.48	1.23 V	23	13.58	32.95
7	4824.00	45.38 PK	74.00	-28.62	4.00 V	89	8.38	37.00
7	4824.00	32.50 AV	54.00	-21.50	4.00 V	89	-4.50	37.00

- 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	
<b>CHANNEL</b>	Channel 6	<b>FREQUENCY RANGE</b>	1 ~ 25GHz
<b>MODULATION TYPE</b>	BPSK	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TRANSFER RATE</b>	6Mbps	<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 991hPa
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TESTED BY</b>	Match Tsui
<b>TEST MODE</b>	3		

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	104.81 PK			1.28 H	80	73.41	31.40
1	*2437.00	94.57 AV			1.28 H	80	63.17	31.40
2	3249.00	41.75 PK	84.81	-43.06	1.25 H	318	8.76	32.99
2	3249.00	31.80 AV	74.57	-42.77	1.25 H	318	-1.19	32.99

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	1624.00	45.19 PK	74.00	-28.81	1.43 V	280	17.04	28.16
1	1624.00	42.24 AV	54.00	-11.76	1.43 V	280	14.09	28.16
2	2360.00	58.61 PK	74.00	-15.39	1.00 V	26	27.51	31.10
2	2360.00	49.21 AV	54.00	-4.79	1.00 V	26	18.11	31.10
3	*2437.00	111.34 PK			1.28 V	210	79.94	31.40
3	*2437.00	101.12 AV			1.28 V	210	69.72	31.40
4	3249.00	46.57 PK	91.34	-44.77	1.05 V	21	13.58	32.99
4	3249.00	41.18 AV	81.12	-39.94	1.05 V	21	8.19	32.99

- 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
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	3		

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	101.15 PK			1.10 H	149	69.65	31.50
1	*2462.00	90.84 AV			1.10 H	149	59.34	31.50
2	2483.50	59.32 PK	74.00	-14.68	1.10 H	149	27.73	31.59
2	2483.50	46.10 AV	54.00	-7.90	1.10 H	149	14.51	31.59
3	3282.00	43.51 PK	81.15	-37.64	1.00 H	301	10.48	33.03
3	3282.00	34.16 AV	70.84	-36.68	1.00 H	301	1.13	33.03

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	1641.00	47.55 PK	74.00	-26.45	1.41 V	23	19.36	28.19
1	1641.00	45.27 AV	54.00	-8.73	1.41 V	23	17.08	28.19
2	2360.00	60.81 PK	74.00	-13.19	1.08 V	319	29.71	31.10
2	2360.00	50.69 AV	54.00	-3.31	1.08 V	319	19.59	31.10
3	*2462.00	110.33 PK			1.10 V	307	78.83	31.50
3	*2462.00	100.07 AV			1.10 V	307	68.57	31.50
4	2483.50	70.68 PK	74.00	-3.32	1.05 V	360	39.09	31.59
<b>4</b>	<b>2483.50</b>	<b>52.80 AV</b>	<b>54.00</b>	<b>-1.20</b>	<b>1.05 V</b>	<b>360</b>	<b>21.21</b>	<b>31.59</b>
5	3282.00	47.85 PK	90.33	-42.48	1.18 V	21	14.82	33.03
5	3282.00	43.59 AV	80.07	-36.48	1.18 V	21	10.56	33.03

- 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\_TURBO MODE

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	QPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	12Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TESTED BY	Match Tsui
TEST MODE	3		

#### 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	52.35 PK	74.00	-21.65	1.07 H	21	21.13	31.22
1	2390.00	44.58 AV	54.00	-9.42	1.07 H	21	13.36	31.22
2	*2437.00	100.14 PK			1.07 H	21	68.74	31.40
2	*2437.00	89.75 AV			1.07 H	21	58.35	31.40
3	2483.50	55.02 PK	74.00	-18.98	1.07 H	21	23.43	31.59
3	2483.50	45.17 AV	54.00	-8.83	1.07 H	21	13.58	31.59
4	3249.00	43.40 PK	80.14	-36.74	1.00 H	291	10.41	32.99
4	3249.00	34.08 AV	69.75	-35.67	1.00 H	291	1.09	32.99

#### 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	1624.00	47.00 PK	74.00	-27.00	1.20 V	160	18.85	28.16
1	1624.00	44.87 AV	54.00	-9.13	1.20 V	160	16.72	28.16
2	2360.00	58.22 PK	74.00	-15.78	1.03 V	200	27.12	31.10
2	2360.00	49.14 AV	54.00	-4.86	1.03 V	200	18.04	31.10
3	2390.00	61.50 PK	74.00	-12.50	1.04 V	351	30.28	31.22
3	2390.00	48.87 AV	54.00	-5.13	1.04 V	351	17.65	31.22
4	*2437.00	110.13 PK			1.07 V	342	78.73	31.40
4	*2437.00	99.41 AV			1.07 V	342	68.01	31.40
5	2483.50	66.93 PK	74.00	-7.07	1.07 V	334	35.34	31.59
5	2483.50	50.44 AV	54.00	-3.56	1.07 V	334	18.85	31.59
6	3249.00	45.89 PK	90.13	-44.24	1.07 V	335	12.90	32.99
6	3249.00	40.44 AV	79.41	-38.97	1.07 V	335	7.45	32.99

- 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. 14, 2006

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

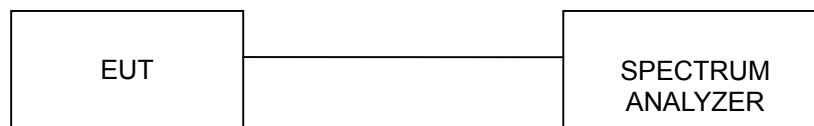
#### 4.3.3 TEST PROCEDURE

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

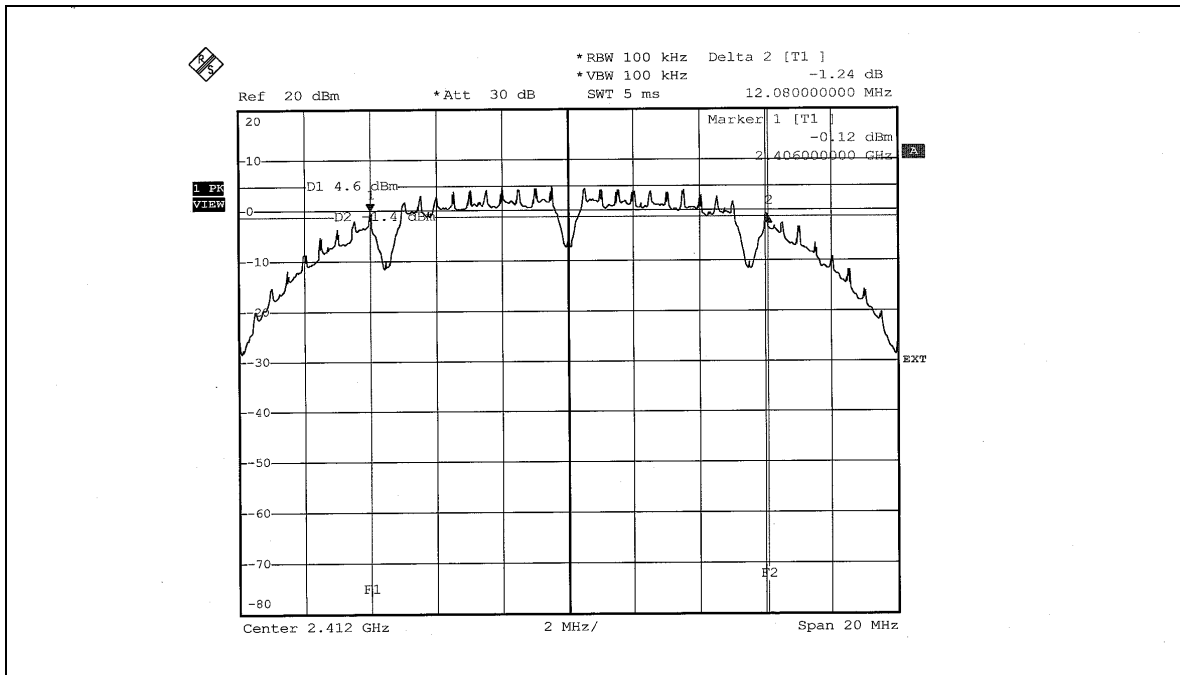
##### 802.11b DSSS MODULATION

<b>MODULATION TYPE</b>	DBPSK	<b>TRANSFER RATE</b>	1Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

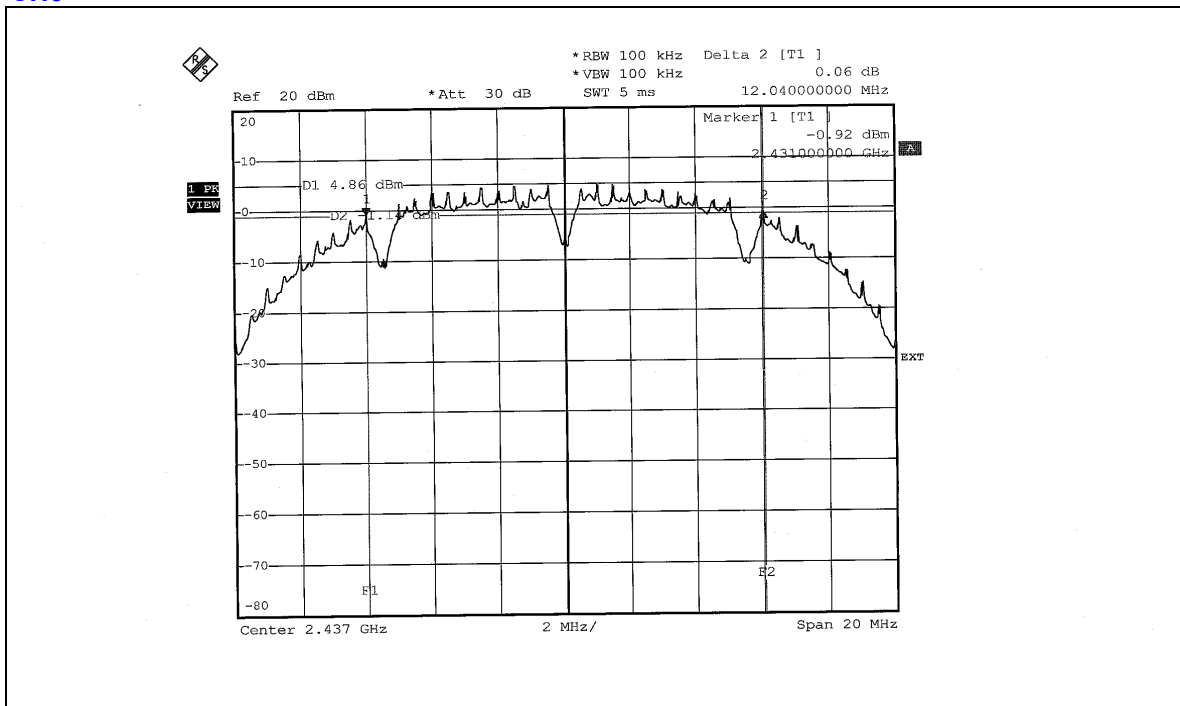
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	2412	12.08	0.5	PASS
6	2437	12.04	0.5	PASS
11	2462	12.04	0.5	PASS



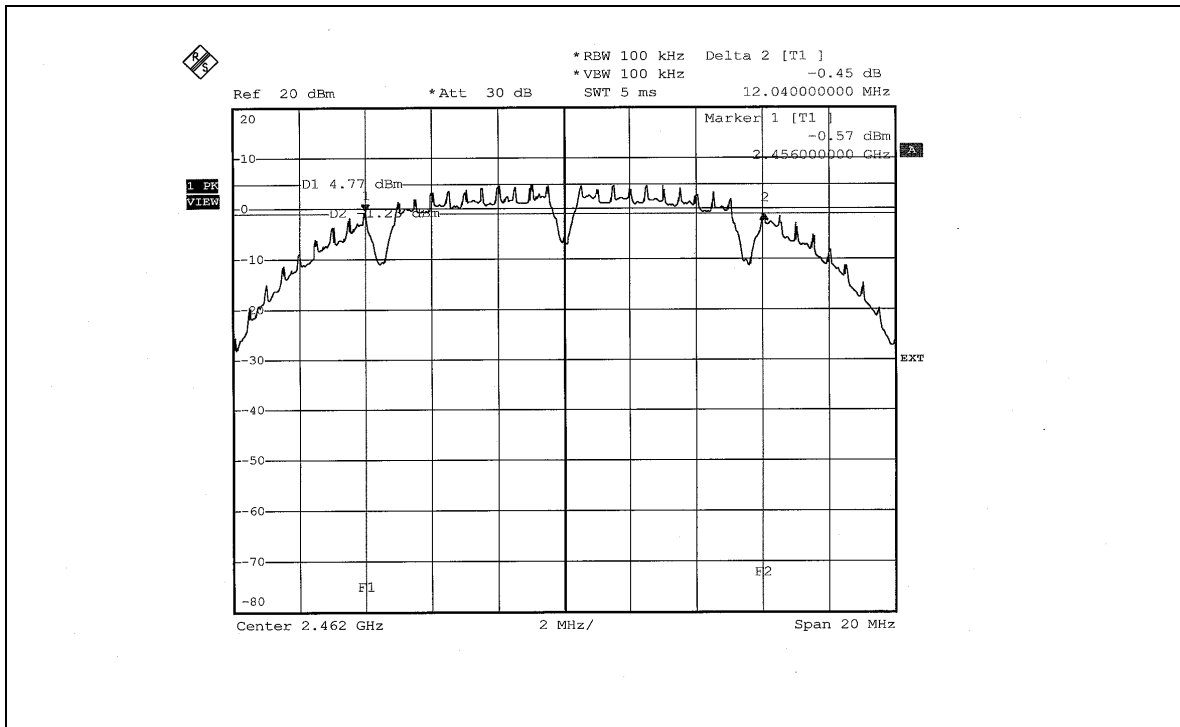
CH1



CH6



CH11



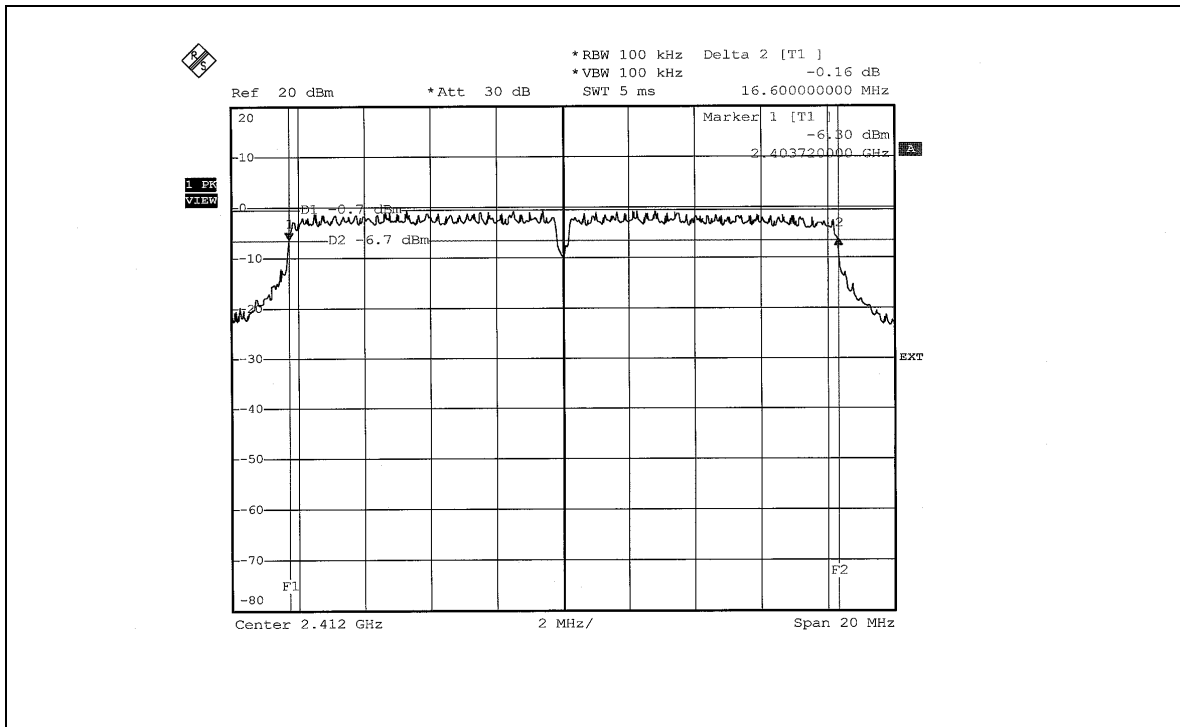


**802.11g OFDM MODULATION\_NORMAL MODE**

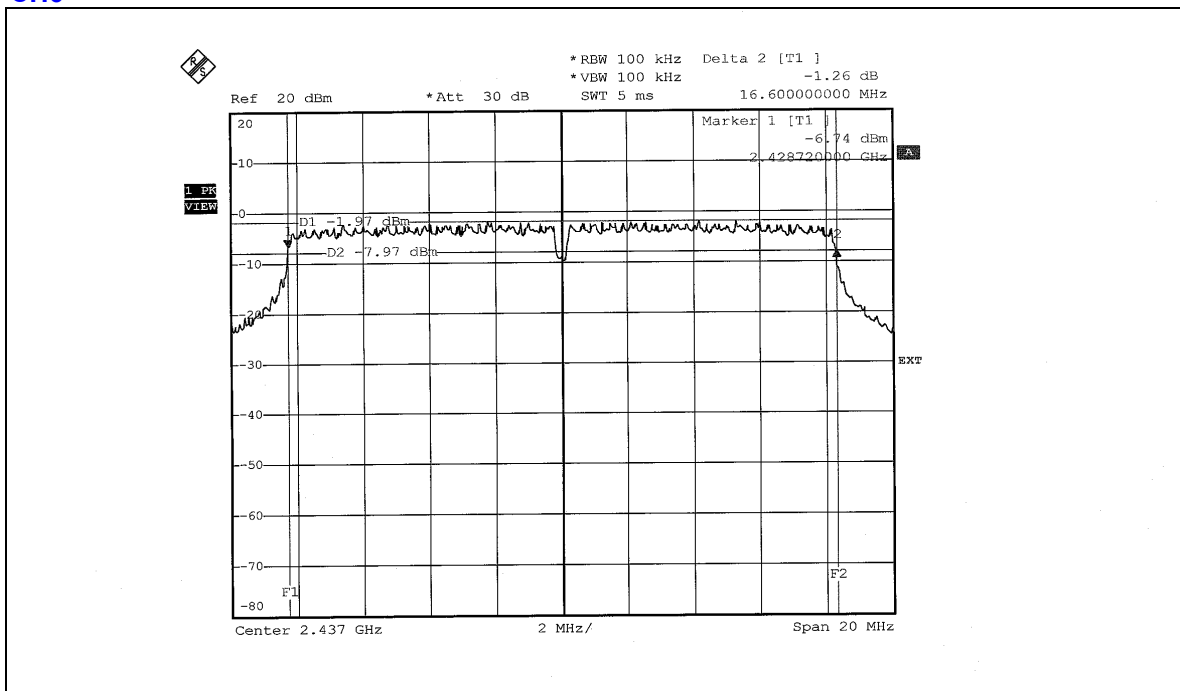
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	2412	16.60	0.5	PASS
6	2437	16.60	0.5	PASS
11	2462	16.60	0.5	PASS

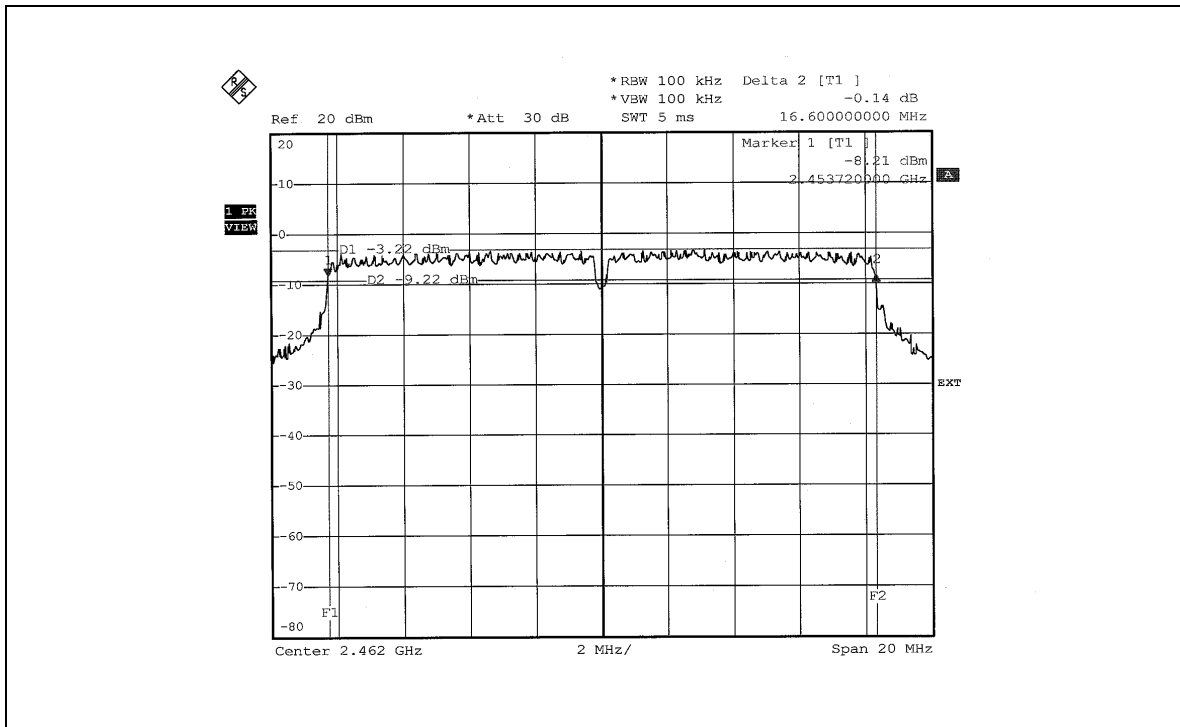
### CH1



### CH6



CH11



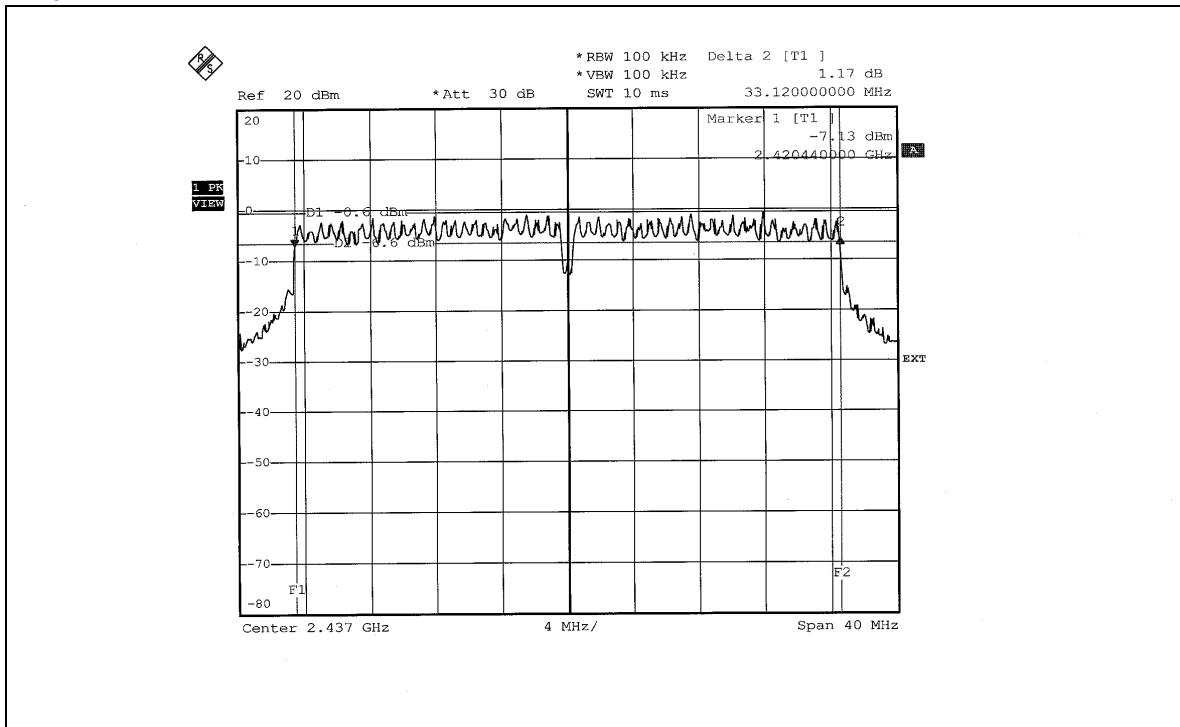


### 802.11g OFDM MODULATION\_TUOBO MODE

<b>MODULATION TYPE</b>	QPSK	<b>TRANSFER RATE</b>	12Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
6	2437	33.12	0.5	PASS

CH6





#### 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. 14, 2006
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 07, 2006
DIGITAL RT OSCILLOSCOPE	TDS1012	C037299	Nov. 28, 2006
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 peak 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 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 Item 4.3.6



#### 4.4.7 TEST RESULTS

##### 802.11b DSSS MODULATION

<b>MODULATION TYPE</b>	DBPSK	<b>TRANSFER RATE</b>	1Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.816	17.06	30	PASS
6	2437	50.816	17.06	30	PASS
11	2462	50.699	17.05	30	PASS

##### 802.11g OFDM MODULATION\_NORMAL MODE

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	51.286	17.10	30	PASS
6	2437	50.119	17.00	30	PASS
11	2462	35.645	15.52	30	PASS

##### 802.11g OFDM MODULATION\_TURBO MODE

<b>MODULATION TYPE</b>	QPSK	<b>TRANSFER RATE</b>	12Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	50.933	17.07	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
SPECTRUM ANALYZER	FSEK30	100049	Aug. 14, 2006

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

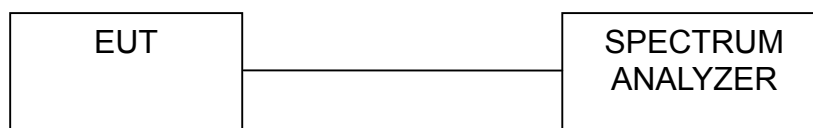
#### 4.5.3 TEST PROCEDURE

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



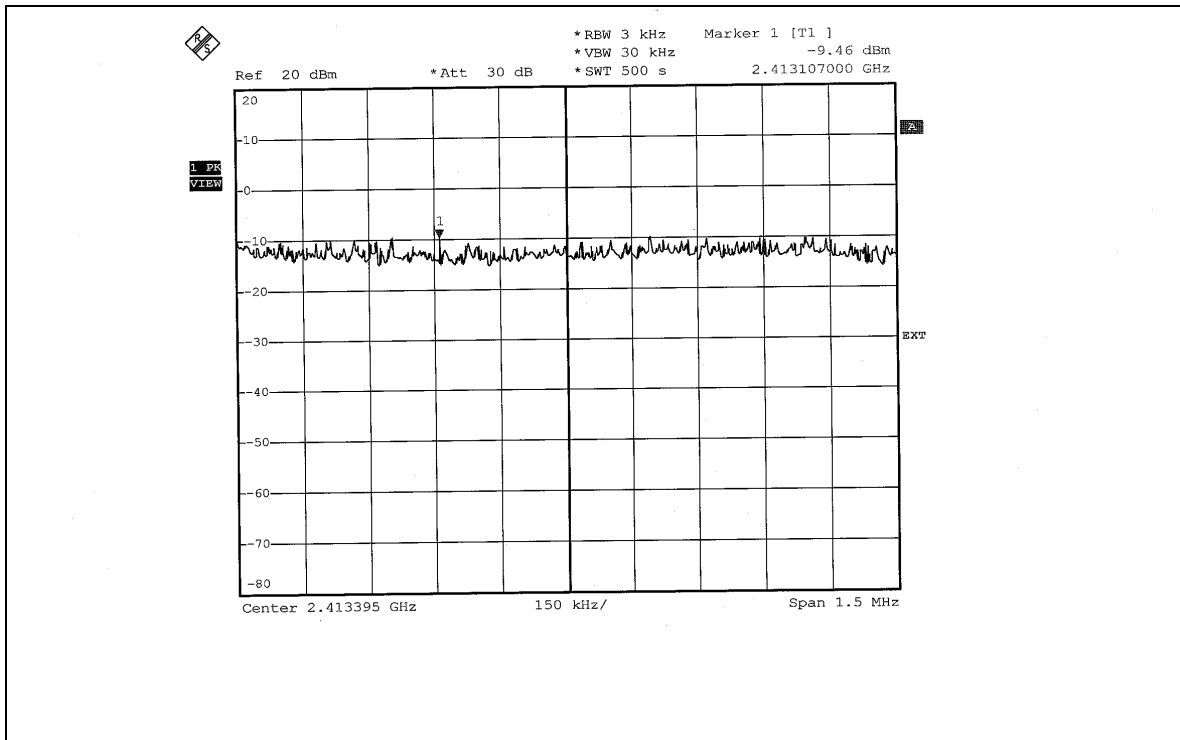
#### 4.5.7 TEST RESULTS

##### 802.11b DSSS MODULATION

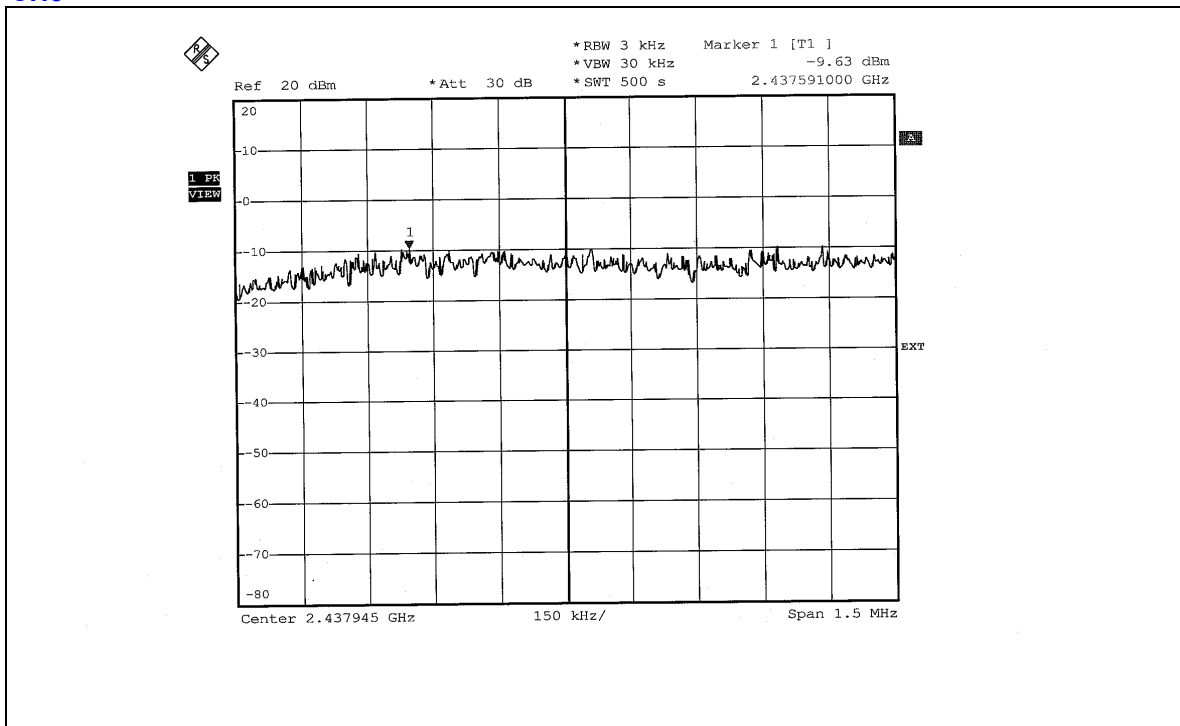
<b>MODULATION TYPE</b>	DBPSK	<b>TRANSFER RATE</b>	1Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz )</b>	<b>RF POWER LEVEL IN 3 kHz BW (dBm)</b>	<b>MAXIMUM LIMIT (dBm)</b>	<b>PASS/FAIL</b>
1	2412	-9.46	8	PASS
6	2437	-9.63	8	PASS
11	2462	-9.70	8	PASS

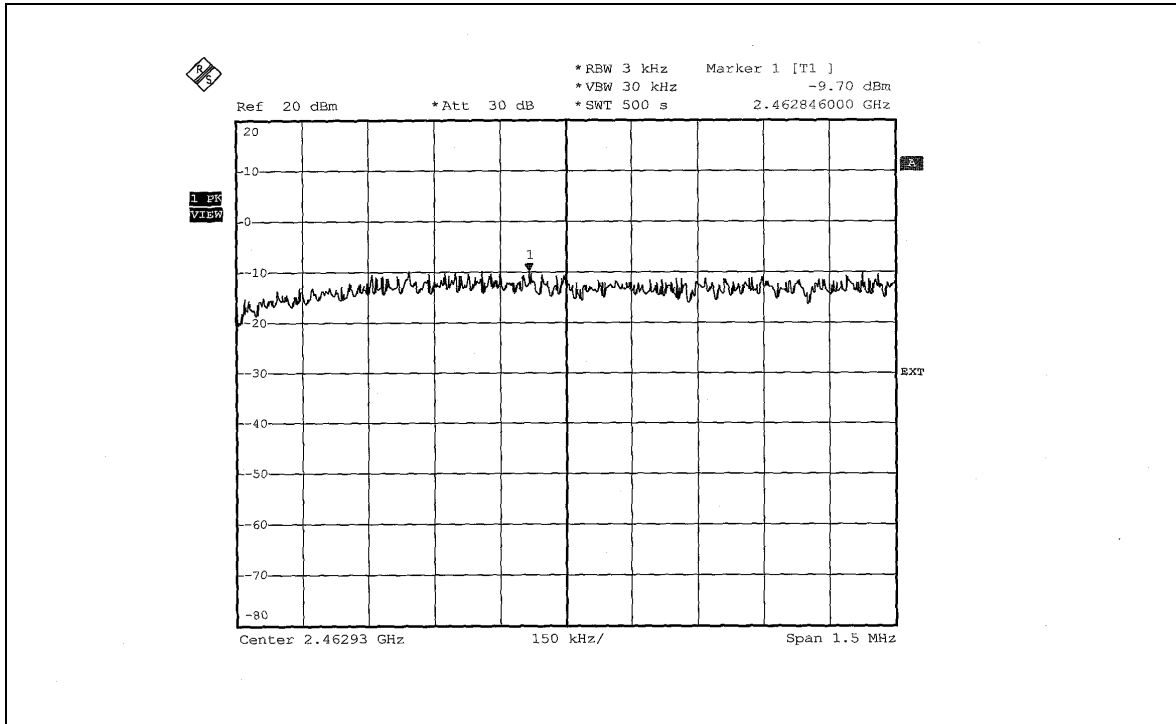
CH1



CH6



CH11





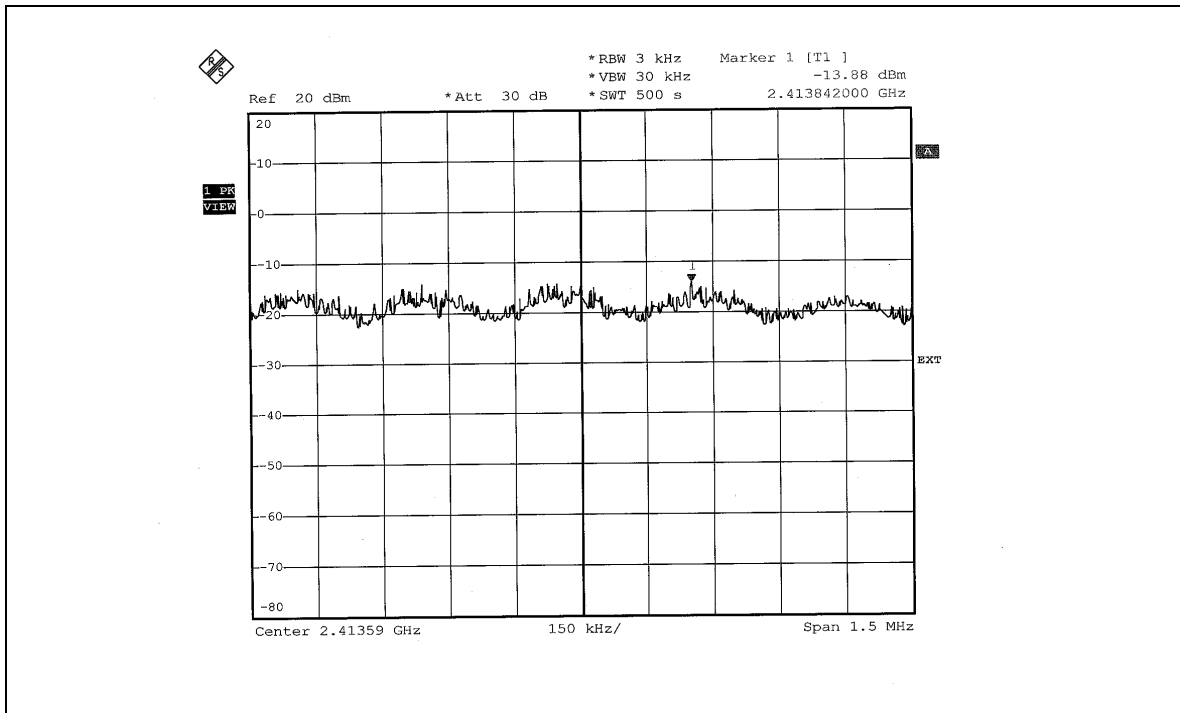
**802.11g OFDM MODULATION\_NORMAL MODE**

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

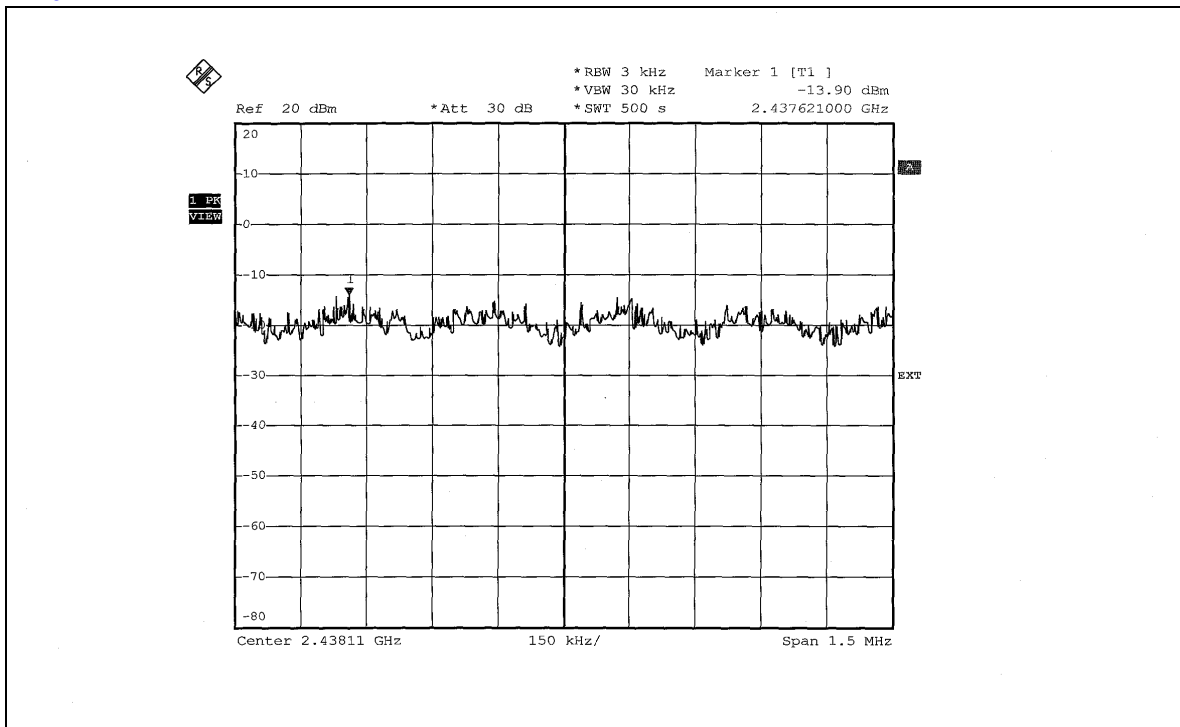
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz )</b>	<b>RF POWER LEVEL IN 3 kHz BW (dBm)</b>	<b>MAXIMUM LIMIT (dBm)</b>	<b>PASS/FAIL</b>
1	2412	-13.88	8	PASS
6	2437	-13.90	8	PASS
11	2462	-15.66	8	PASS



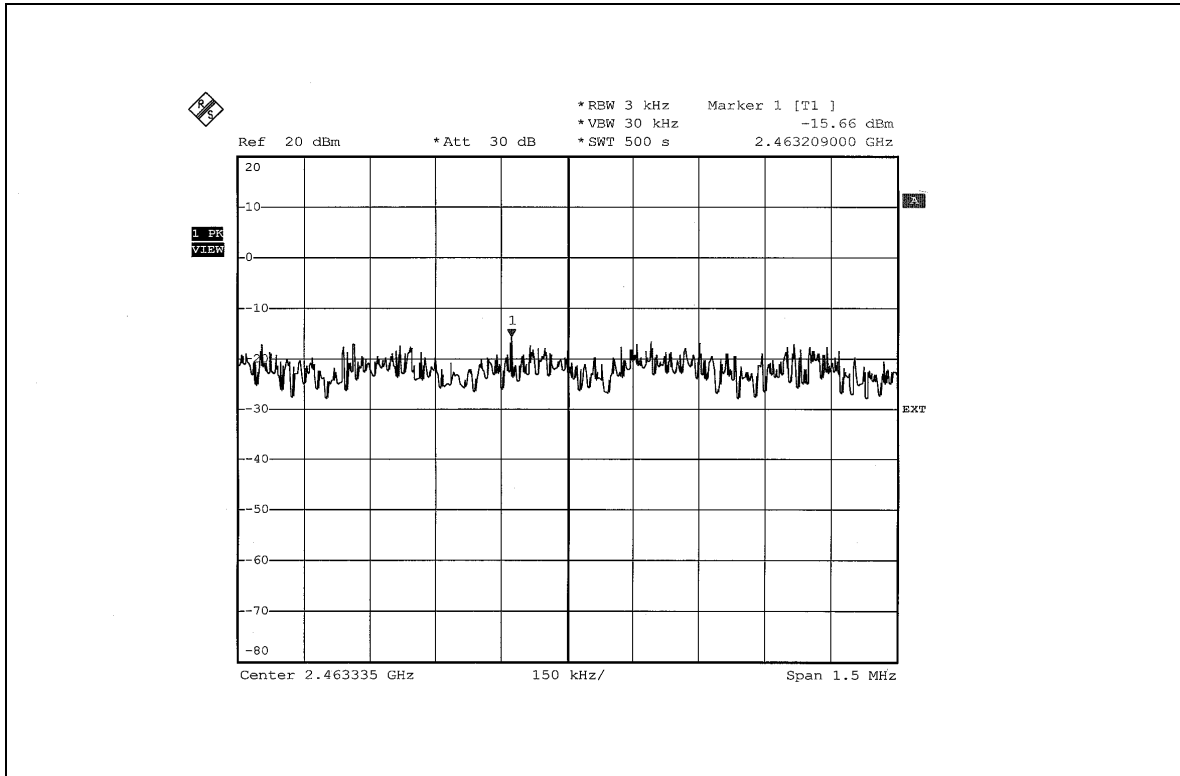
CH1



CH6



CH11



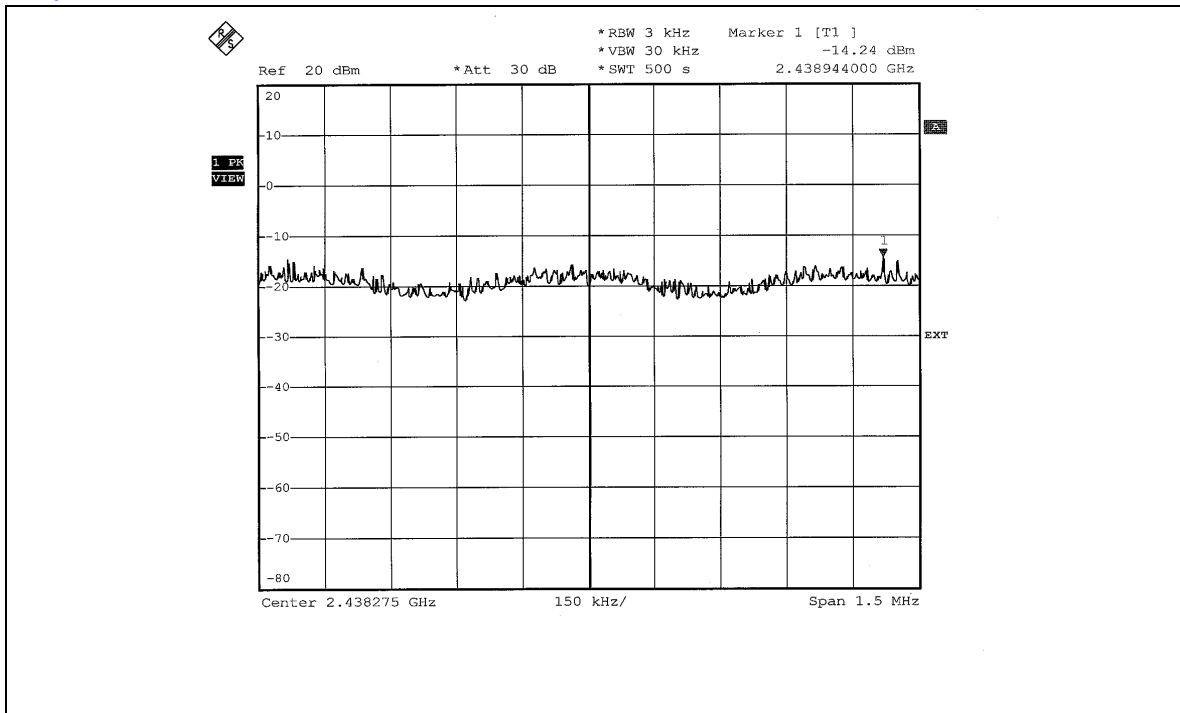


### 802.11g OFDM MODULATION\_TURBO MODE

<b>MODULATION TYPE</b>	QPSK	<b>TRANSFER RATE</b>	12Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 68%RH, 991hPa
<b>TESTED BY</b>	Morgan Chen		

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz )</b>	<b>RF POWER LEVEL IN 3 kHz BW (dBm)</b>	<b>MAXIMUM LIMIT (dBm)</b>	<b>PASS/FAIL</b>
6	2437	-14.24	8	PASS

CH6





## 4.6 BAND EDGES MEASUREMENT

### 4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below  $-20\text{dB}$  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. 14, 2006

**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 18 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

#### MODE 1

**NOTE 1:** The band edge emission plot of DSSS technique on the next third page shows 50.41dBc between carrier maximum power and local maximum emission in restrict band (2.3873GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 102.94dBuV/m (Peak), so the maximum field strength in restrict band is  $102.94 - 50.41 = 52.53$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on the next third page shows 53.15dBc between carrier maximum power and local maximum emission in restrict band (2.3870GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 99.89dBuV/m (Average), so the maximum field strength in restrict band is  $99.89 - 53.15 = 46.74$ dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of DSSS technique on the next fourth page shows 49.80dBc between carrier maximum power and local maximum emission in restrict band (2.4875GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 102.47dBuV/m (Peak), so the maximum field strength in restrict band is  $102.47 - 49.80 = 52.67$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on the next fifth page shows 52.88dBc between carrier maximum power and local maximum emission in restrict band (2.4884GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 100.01dBuV/m (Average), so the maximum field strength in restrict band is  $100.01 - 52.88 = 47.13$ dBuV/m which is under 54dBuV/m limit.

## MODE 2

**NOTE 1:** The band edge emission plot of DSSS technique on the next second page shows 50.41dBc between carrier maximum power and local maximum emission in restrict band (2.3873GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 104.78dBuV/m (Peak), so the maximum field strength in restrict band is  $104.78 - 50.41 = 54.37$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on the next second page shows 53.15dBc between carrier maximum power and local maximum emission in restrict band (2.3870GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 101.57dBuV/m (Average), so the maximum field strength in restrict band is  $101.57 - 53.15 = 48.42$ dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of DSSS technique on the next third page shows 49.80dBc between carrier maximum power and local maximum emission in restrict band (2.4875GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 104.56dBuV/m (Peak), so the maximum field strength in restrict band is  $104.56 - 49.80 = 54.76$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on the next fourth page shows 52.88dBc between carrier maximum power and local maximum emission in restrict band (2.4884GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 101.48dBuV/m (Average), so the maximum field strength in restrict band is  $101.48 - 52.88 = 48.60$ dBuV/m which is under 54dBuV/m limit.

### MODE 3

**NOTE 1:** The band edge emission plot of DSSS technique on the next page shows 50.41dBc between carrier maximum power and local maximum emission in restrict band (2.3873GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 109.64dBuV/m (Peak), so the maximum field strength in restrict band is  $109.64 - 50.41 = 59.23$ dBuV/m which is under 74dBuV/m limit.

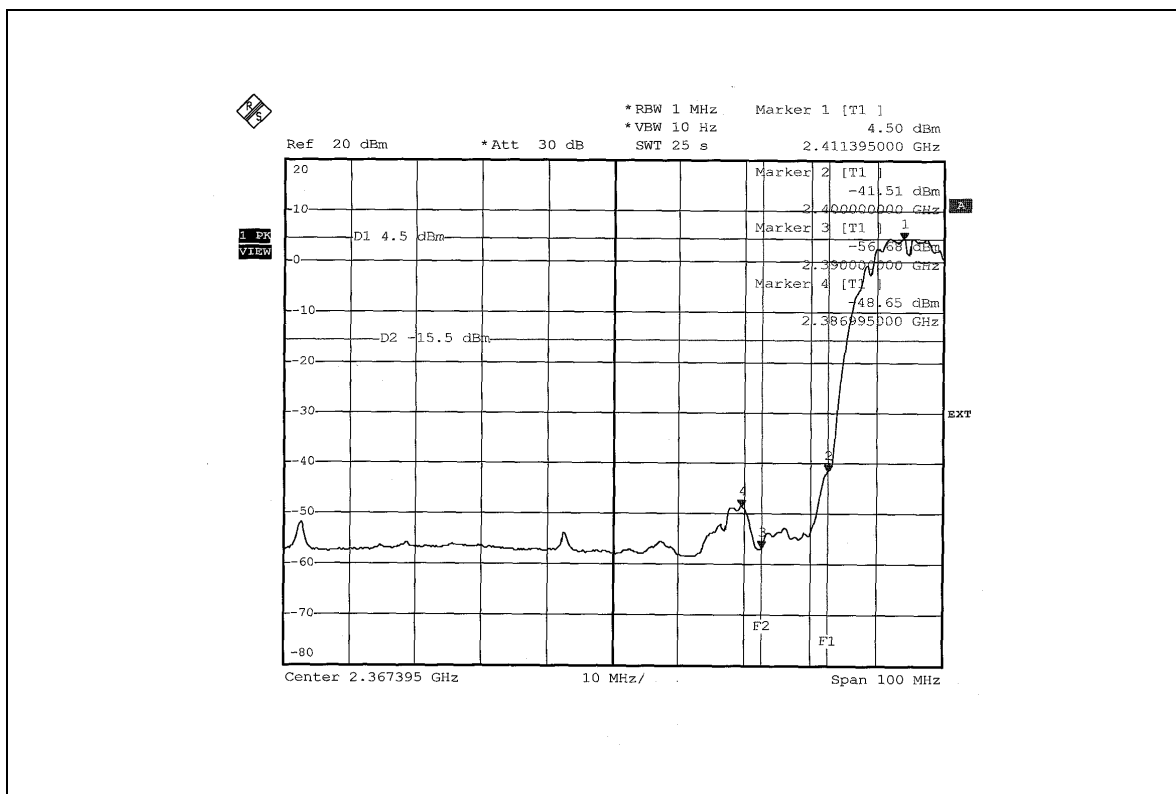
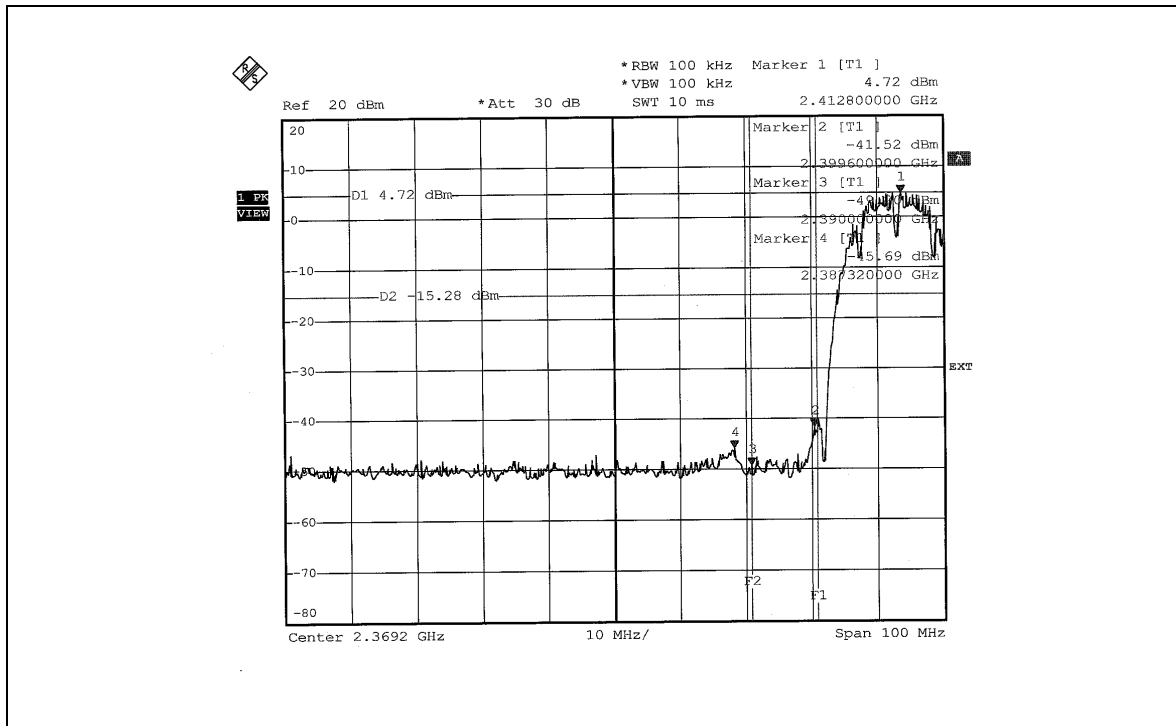
The band edge emission plot of DSSS technique on the next page shows 53.15dBc between carrier maximum power and local maximum emission in restrict band (2.3870GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.30dBuV/m (Average), so the maximum field strength in restrict band is  $106.30 - 53.15 = 53.15$ dBuV/m which is under 54dBuV/m limit.

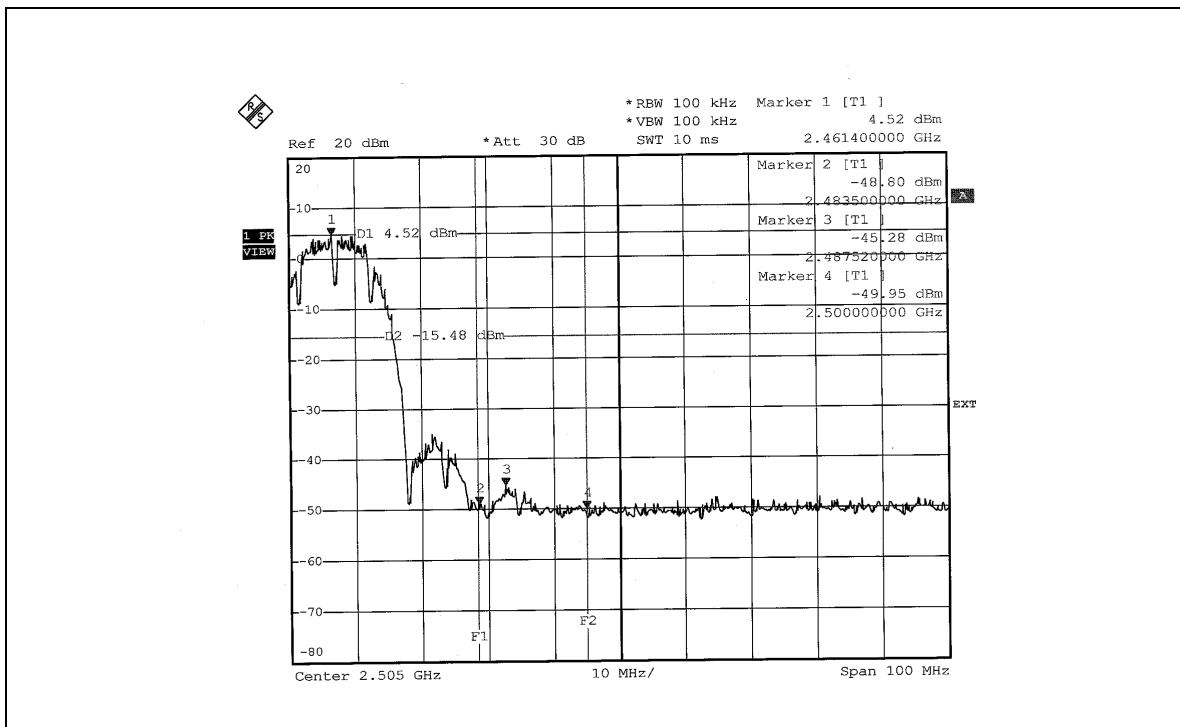
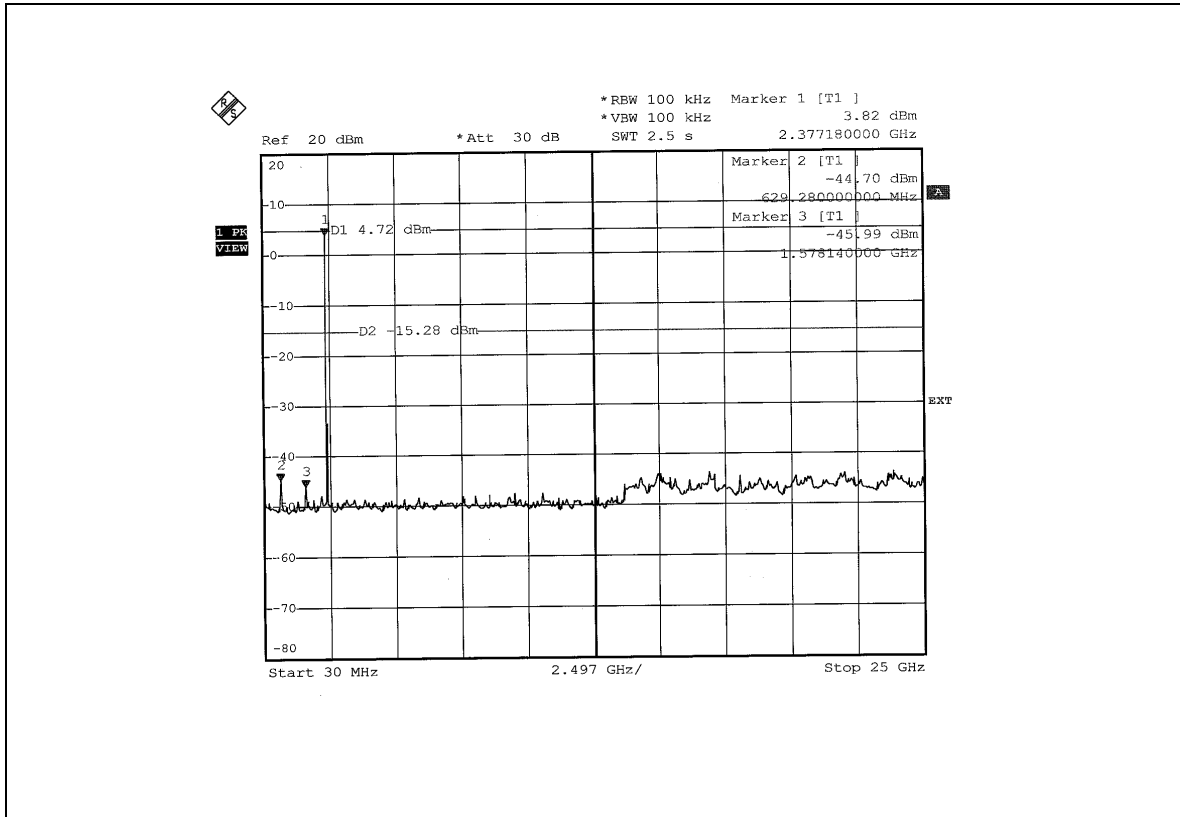
**NOTE 2:** The band edge emission plot of DSSS technique on the next second page shows 49.80dBc between carrier maximum power and local maximum emission in restrict band (2.4875GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 109.59dBuV/m (Peak), so the maximum field strength in restrict band is  $109.59 - 49.80 = 59.79$ dBuV/m which is under 74dBuV/m limit.

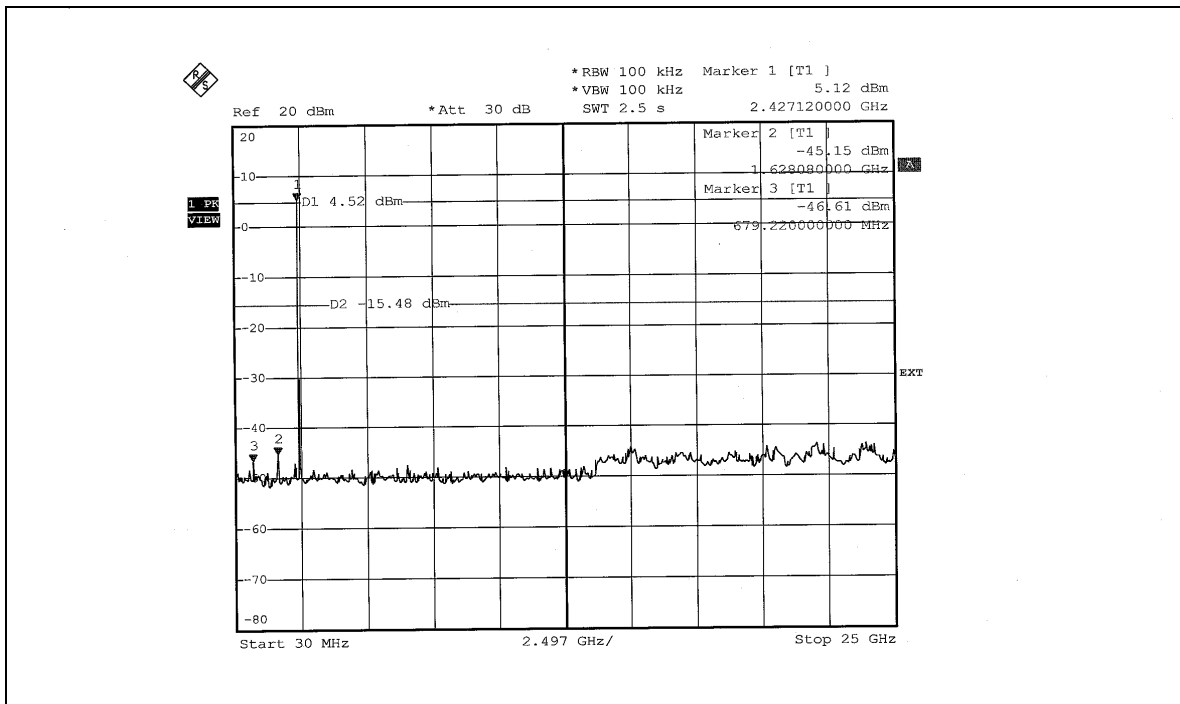
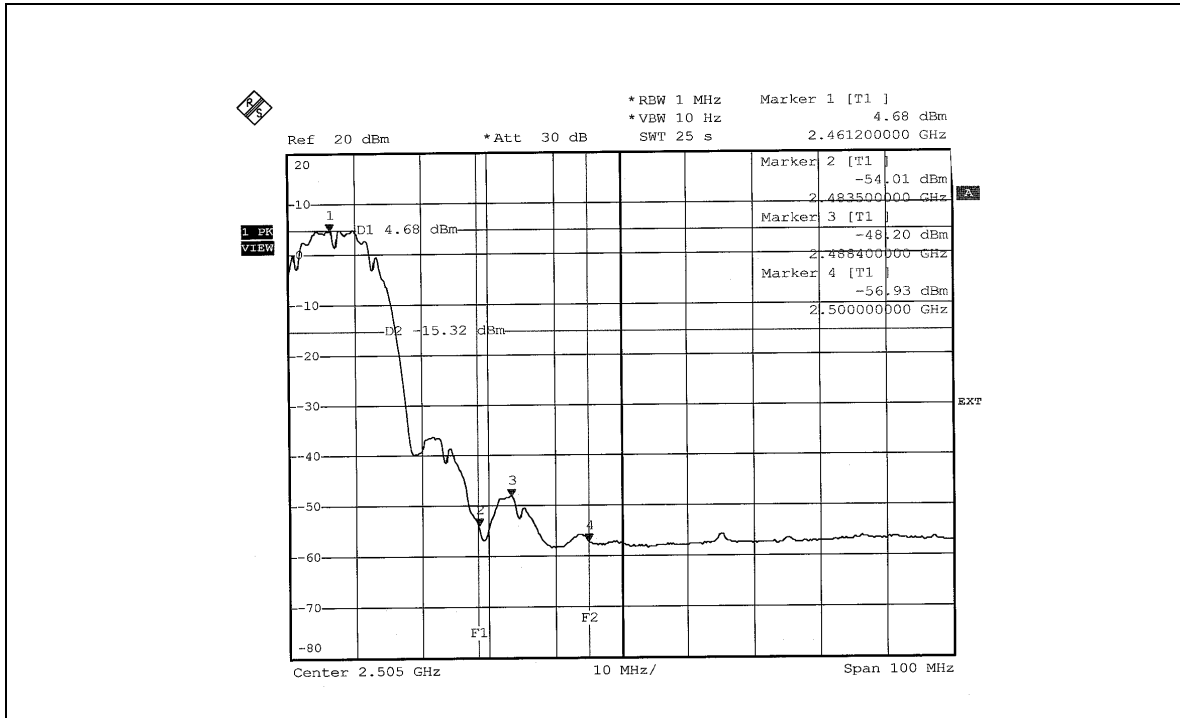
The band edge emission plot of DSSS technique on the next third page shows 52.88dBc between carrier maximum power and local maximum emission in restrict band (2.4884GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 105.99dBuV/m (Average), so the maximum field strength in restrict band is  $105.99 - 52.88 = 53.11$ dBuV/m which is under 54dBuV/m limit.



### 802.11b DSSS MODULATION







## 802.11g OFDM MODULATION\_NORMAL MODE

### MODE 1

**NOTE 1:** The band edge emission plot of OFDM technique on the next third page shows 43.53dBc between carrier maximum power and local maximum emission in restrict band (2.3600GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 105.47dBuV/m (Peak), so the maximum field strength in restrict band is  $105.47 - 43.53 = 61.94$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next third page shows 47.09dBc between carrier maximum power and local maximum emission in restrict band (2.3200GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 95.20dBuV/m (Average), so the maximum field strength in restrict band is  $95.20 - 47.09 = 48.11$ dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of OFDM technique on the next fourth page shows 43.54dBc between carrier maximum power and local maximum emission in restrict band (2.4849GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 103.86dBuV/m (Peak), so the maximum field strength in restrict band is  $103.86 - 43.54 = 60.32$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next fifth page shows 48.95dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 93.57dBuV/m (Average), so the maximum field strength in restrict band is  $93.57 - 48.95 = 44.62$ dBuV/m which is under 54dBuV/m limit.

## MODE 2

**NOTE 1:** The band edge emission plot of OFDM technique on the next second page shows 43.53dBc between carrier maximum power and local maximum emission in restrict band (2.3600GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 107.40dBuV/m (Peak), so the maximum field strength in restrict band is  $107.40 - 43.53 = 63.87$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next second page shows 47.09dBc between carrier maximum power and local maximum emission in restrict band (2.3200GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 98.15dBuV/m (Average), so the maximum field strength in restrict band is  $98.15 - 47.09 = 51.06$ dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of OFDM technique on the next third page shows 43.54dBc between carrier maximum power and local maximum emission in restrict band (2.4849GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 105.21dBuV/m (Peak), so the maximum field strength in restrict band is  $105.21 - 43.54 = 61.67$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next forth page shows 48.95dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 96.45dBuV/m (Average), so the maximum field strength in restrict band is  $96.45 - 48.95 = 47.50$ dBuV/m which is under 54dBuV/m limit.

### MODE 3

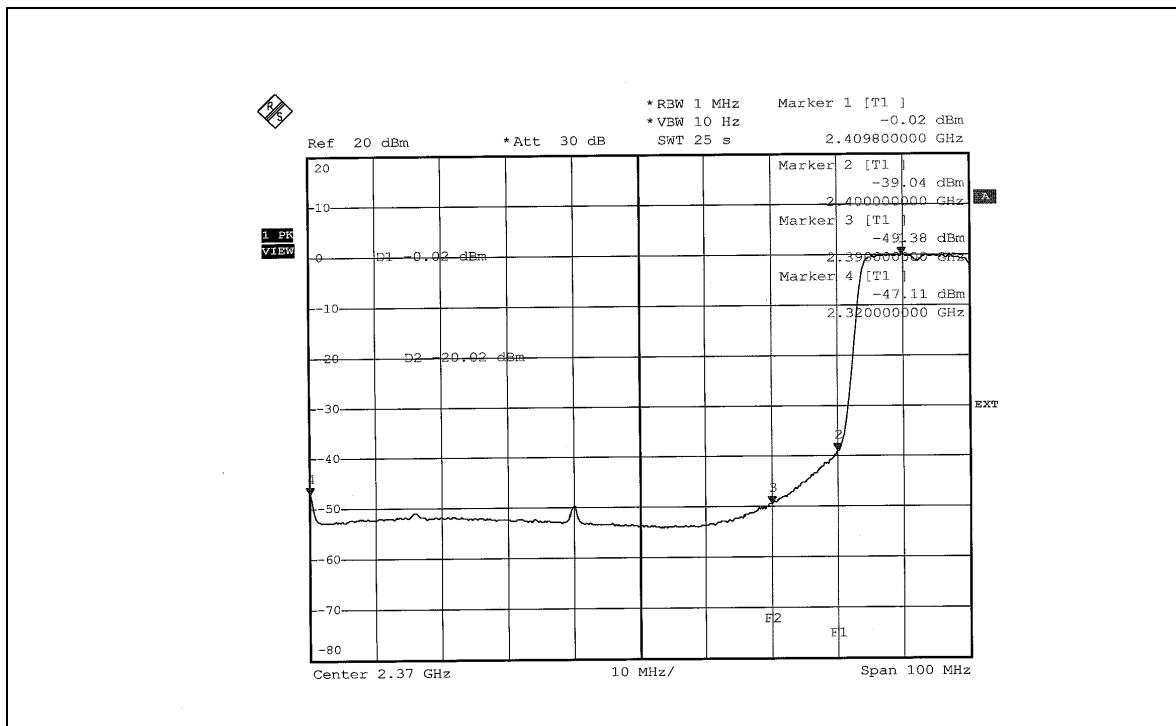
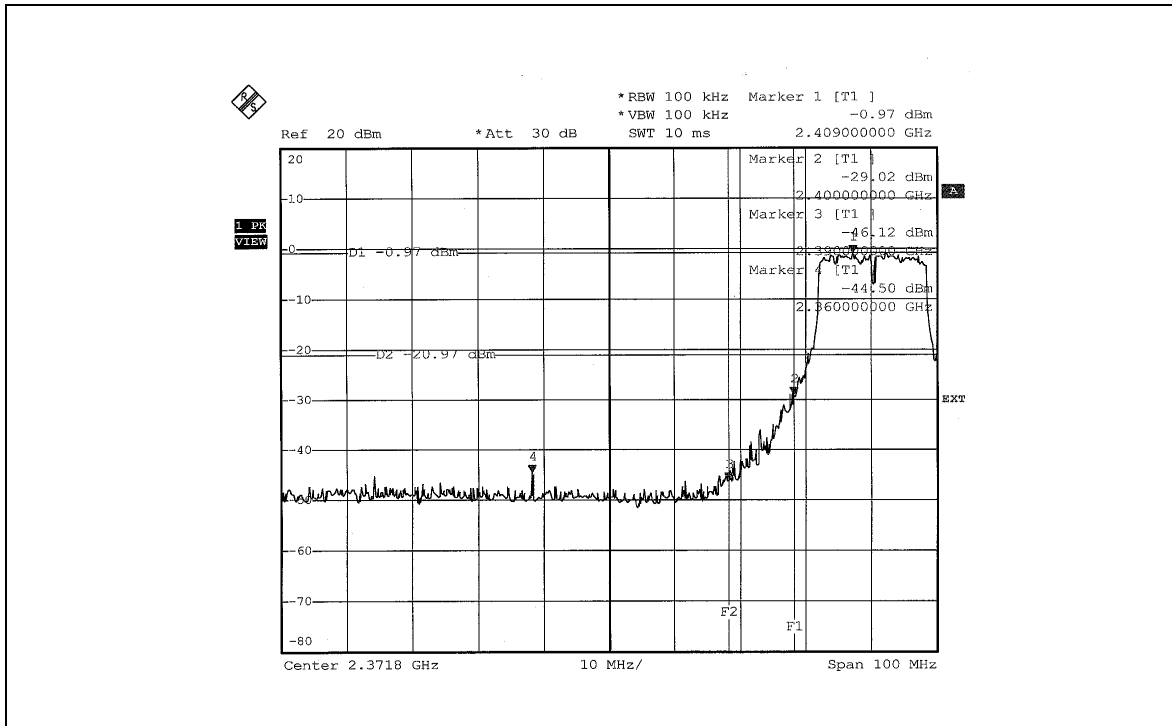
**NOTE 1:** The band edge emission plot of OFDM technique on the next page shows 43.53dBc between carrier maximum power and local maximum emission in restrict band (2.3600GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 111.23dBuV/m (Peak), so the maximum field strength in restrict band is  $111.23 - 43.53 = 67.70$ dBuV/m which is under 74dBuV/m limit.

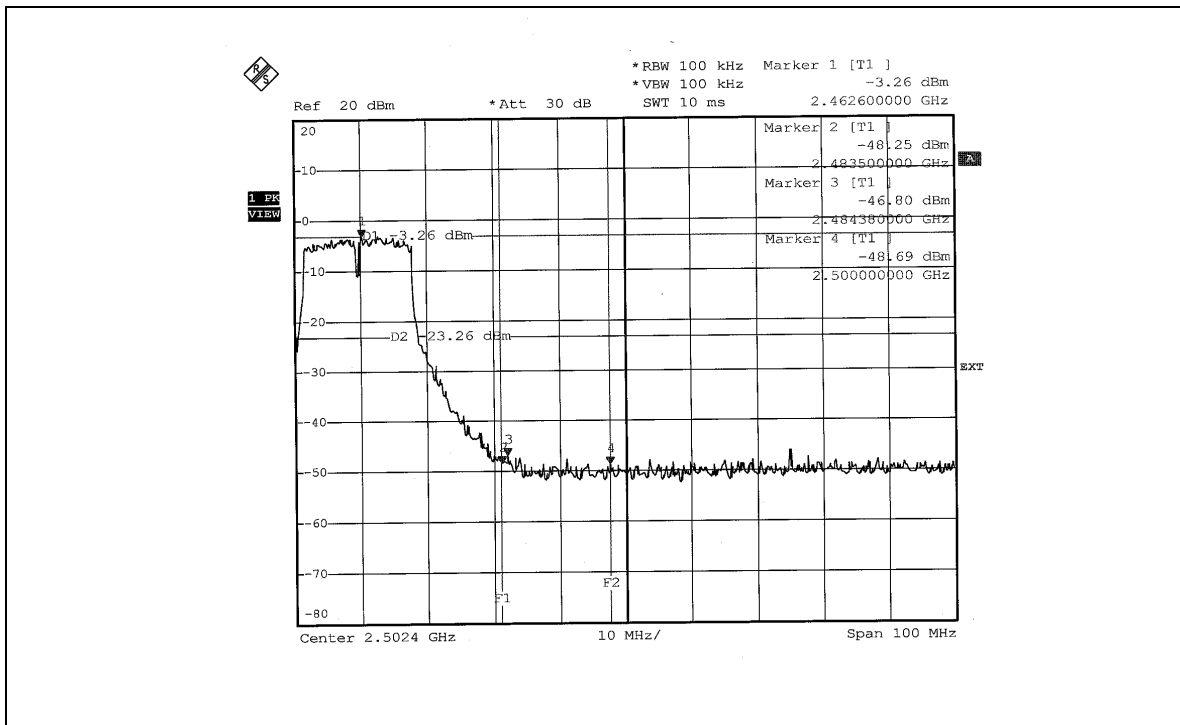
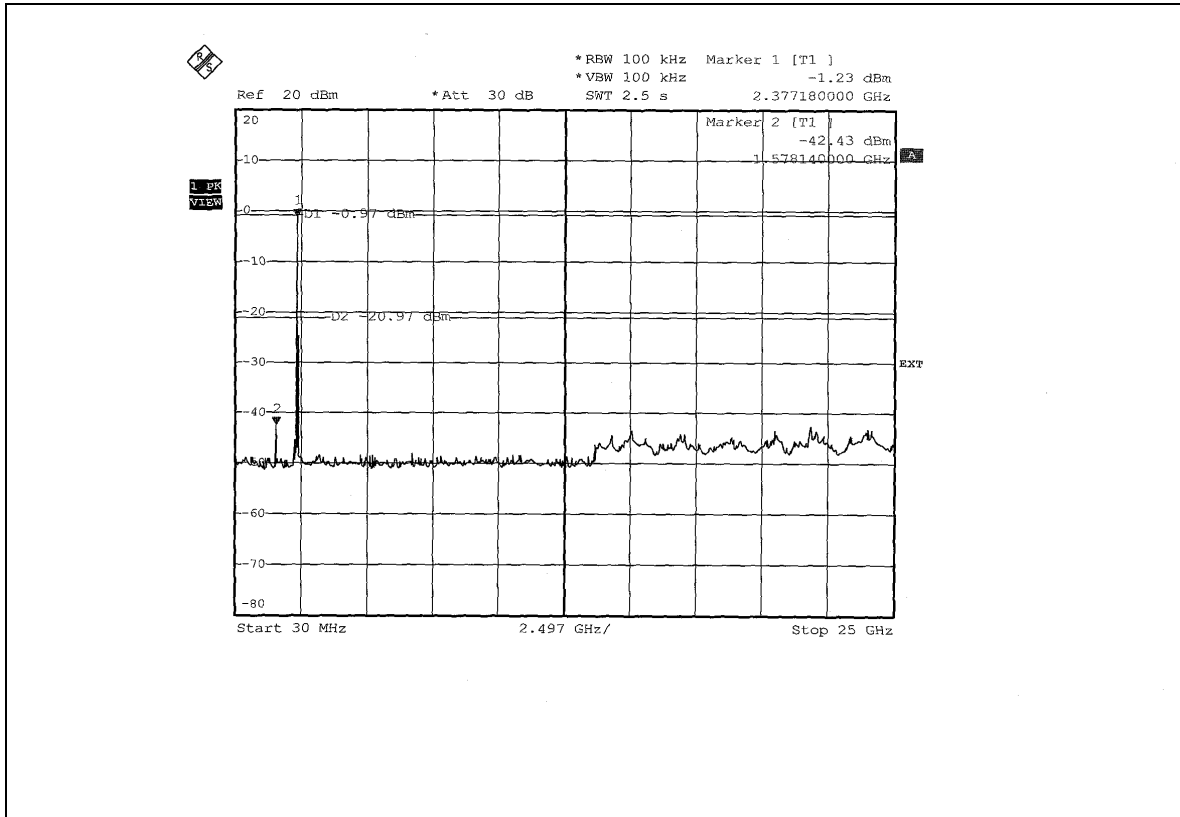
The band edge emission plot of OFDM technique on the next page shows 47.09dBc between carrier maximum power and local maximum emission in restrict band (2.3200GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 101.01dBuV/m (Average), so the maximum field strength in restrict band is  $101.01 - 47.09 = 53.93$ dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of OFDM technique on the next second page shows 43.54dBc between carrier maximum power and local maximum emission in restrict band (2.4849GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 110.33dBuV/m (Peak), so the maximum field strength in restrict band is  $110.33 - 43.54 = 66.79$ dBuV/m which is under 74dBuV/m limit.

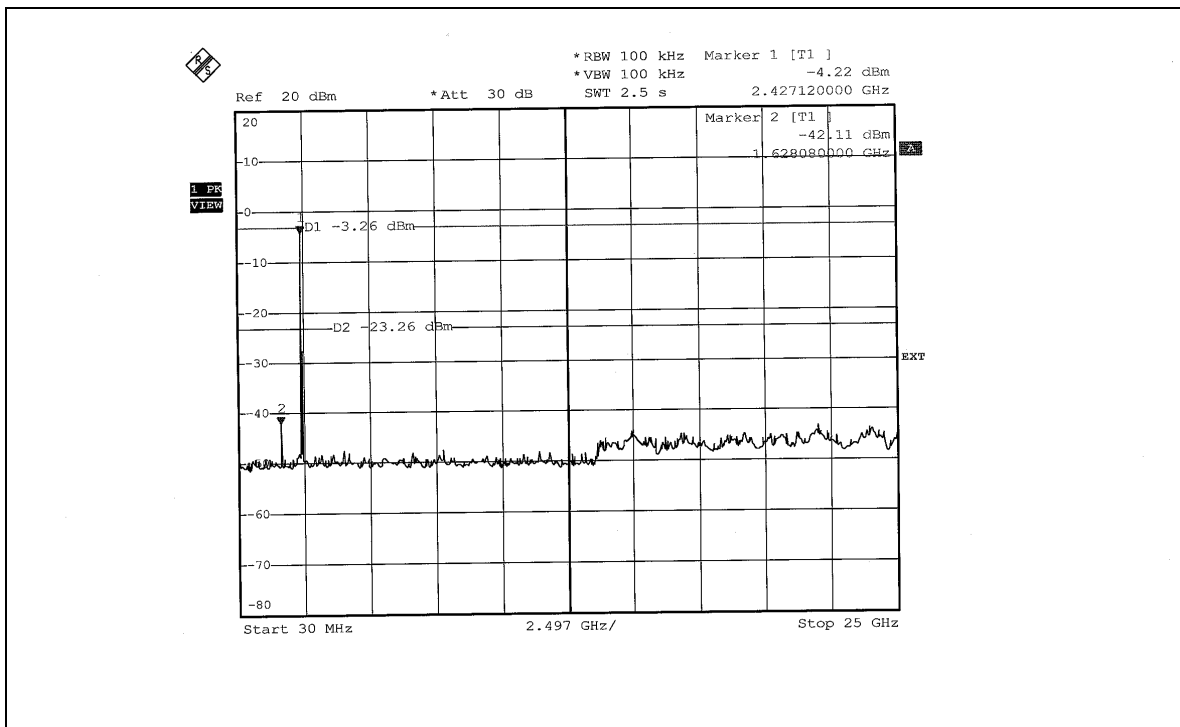
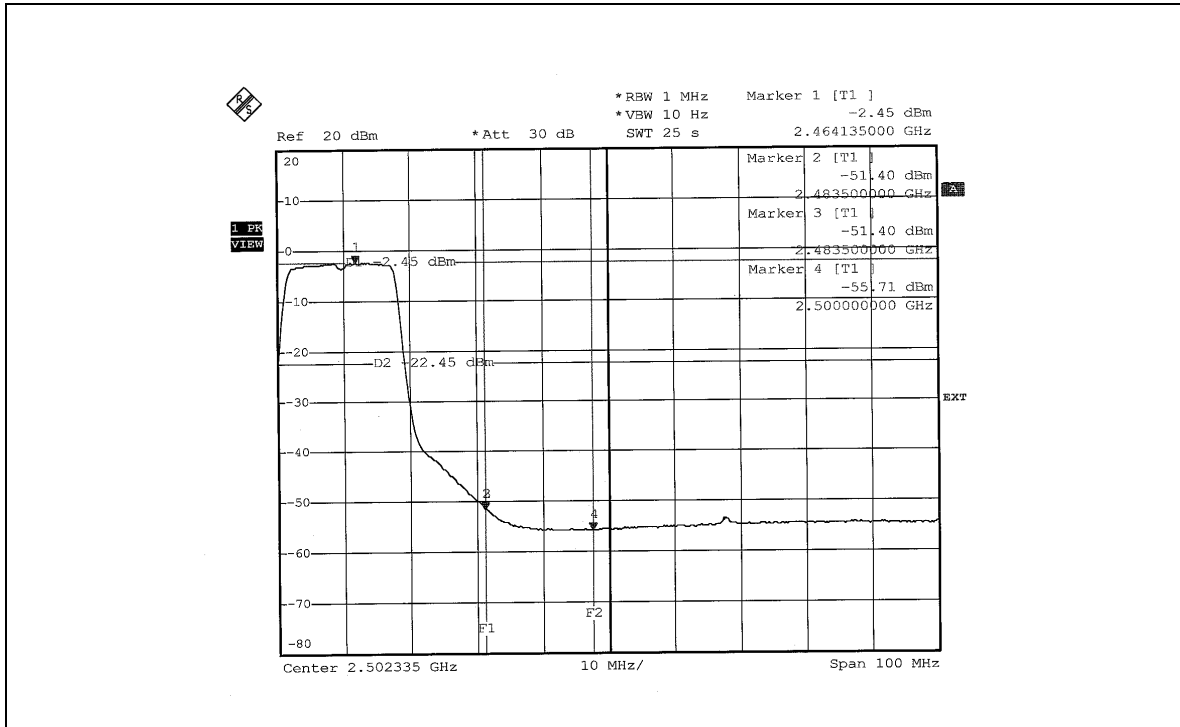
The band edge emission plot of OFDM technique on the next third page shows 48.95dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 100.07dBuV/m (Average), so the maximum field strength in restrict band is  $100.07 - 48.95 = 51.12$ dBuV/m which is under 54dBuV/m limit.

### 802.11g OFDM MODULATION









## 802.11g OFDM MODULATION\_TURBO MODE

### MODE 1

**NOTE 1:** The band edge emission plot of OFDM technique on the next page shows 42.59dBc between carrier maximum power and local maximum emission in restrict band (2.3202GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 103.31dBuV/m (Peak), so the maximum field strength in restrict band is  $103.31 - 42.59 = 60.72$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next page shows 48.06dBc between carrier maximum power and local maximum emission in restrict band (2.3200GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 92.27dBuV/m (Average), so the maximum field strength in restrict band is  $92.27 - 48.06 = 44.21$ dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of OFDM technique on the next second page shows 46.23dBc between carrier maximum power and local maximum emission in restrict band (2.4869GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 103.31dBuV/m (Peak), so the maximum field strength in restrict band is  $103.31 - 46.23 = 57.08$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next third page shows 49.08dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 92.27dBuV/m (Average), so the maximum field strength in restrict band is  $92.27 - 49.08 = 43.19$ dBuV/m which is under 54dBuV/m limit.

## MODE 2

**NOTE 1:** The band edge emission plot of OFDM technique on the next second page shows 42.59dBc between carrier maximum power and local maximum emission in restrict band (2.3202GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 105.69dBuV/m (Peak), so the maximum field strength in restrict band is  $105.69 - 42.59 = 63.10$  dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next second page shows 48.06dBc between carrier maximum power and local maximum emission in restrict band (2.3200GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 95.46dBuV/m (Average), so the maximum field strength in restrict band is  $95.46 - 48.06 = 47.40$  dBuV/m which is under 54dBuV/m limit.

**NOTE 2:** The band edge emission plot of OFDM technique on the next third page shows 46.23dBc between carrier maximum power and local maximum emission in restrict band (2.4869GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 105.69dBuV/m (Peak), so the maximum field strength in restrict band is  $105.69 - 46.23 = 59.46$  dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next fourth page shows 49.08dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 95.46dBuV/m (Average), so the maximum field strength in restrict band is  $95.46 - 49.08 = 46.38$  dBuV/m which is under 54dBuV/m limit.

### MODE 3

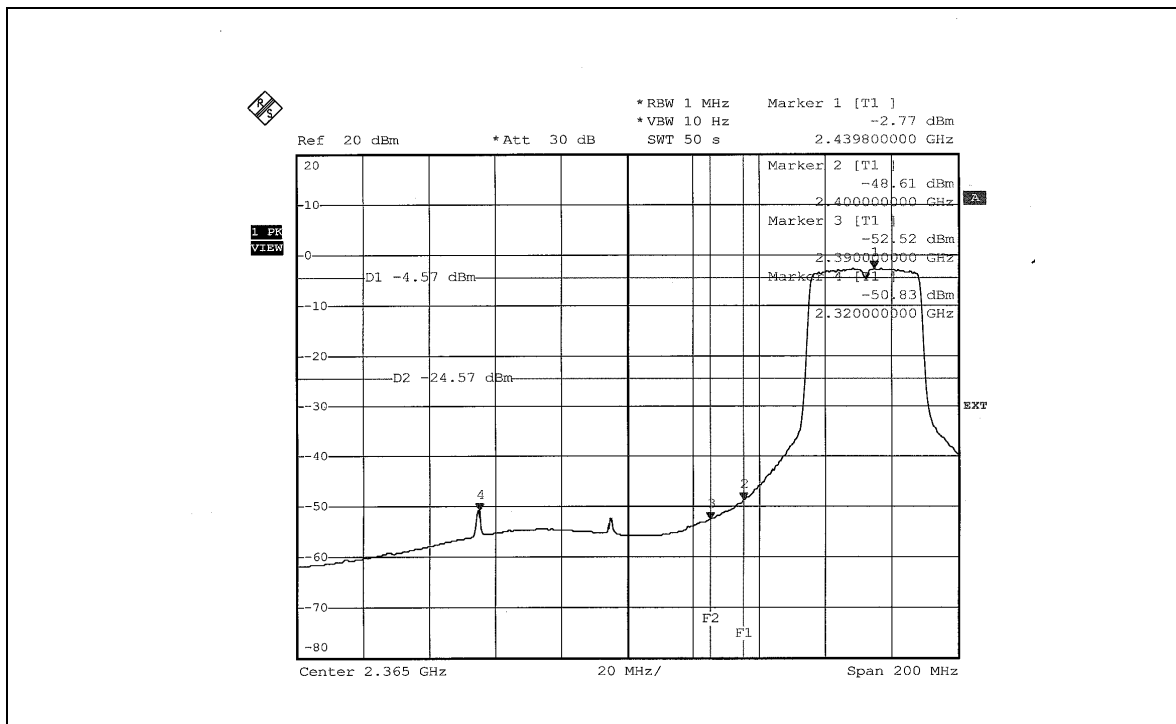
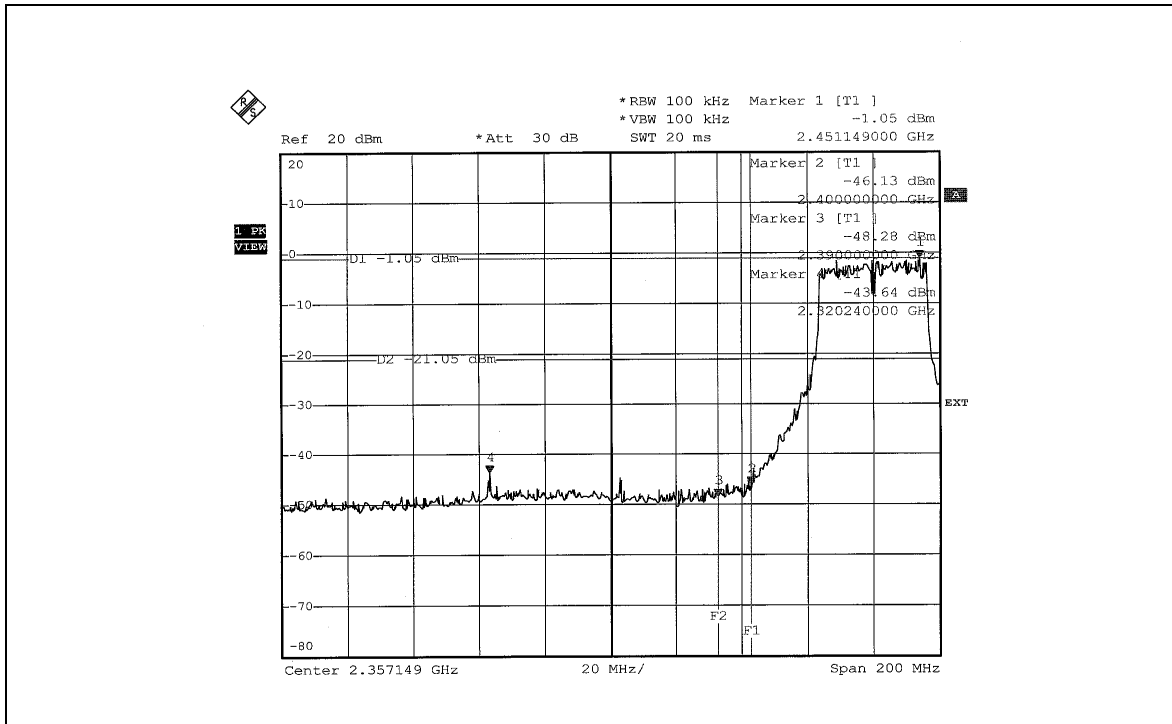
**NOTE 1:** The band edge emission plot of OFDM technique on the next page shows 42.59dBc between carrier maximum power and local maximum emission in restrict band (2.3202GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 110.13dBuV/m (Peak), so the maximum field strength in restrict band is  $110.13 - 42.59 = 67.54$ dBuV/m which is under 74dBuV/m limit.

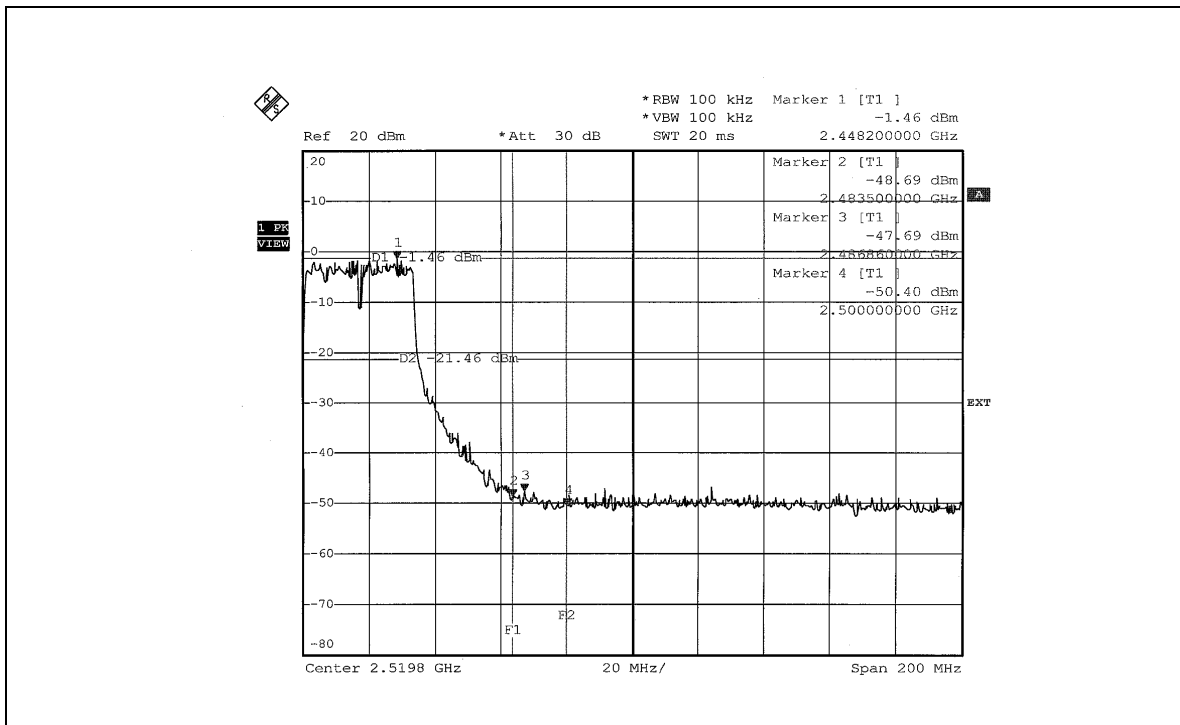
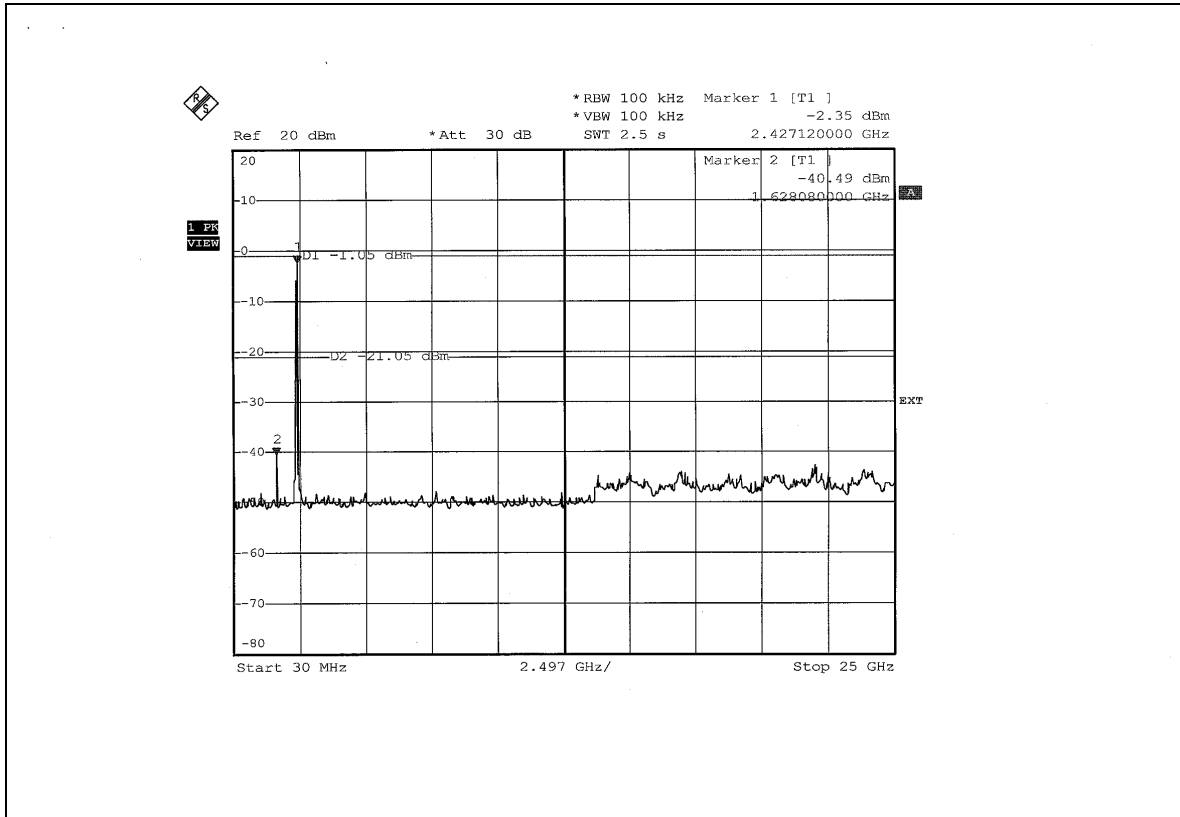
The band edge emission plot of OFDM technique on the next page shows 48.06dBc between carrier maximum power and local maximum emission in restrict band (2.3200GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 99.41dBuV/m (Average), so the maximum field strength in restrict band is  $99.41 - 48.06 = 51.35$ dBuV/m which is under 54dBuV/m limit.

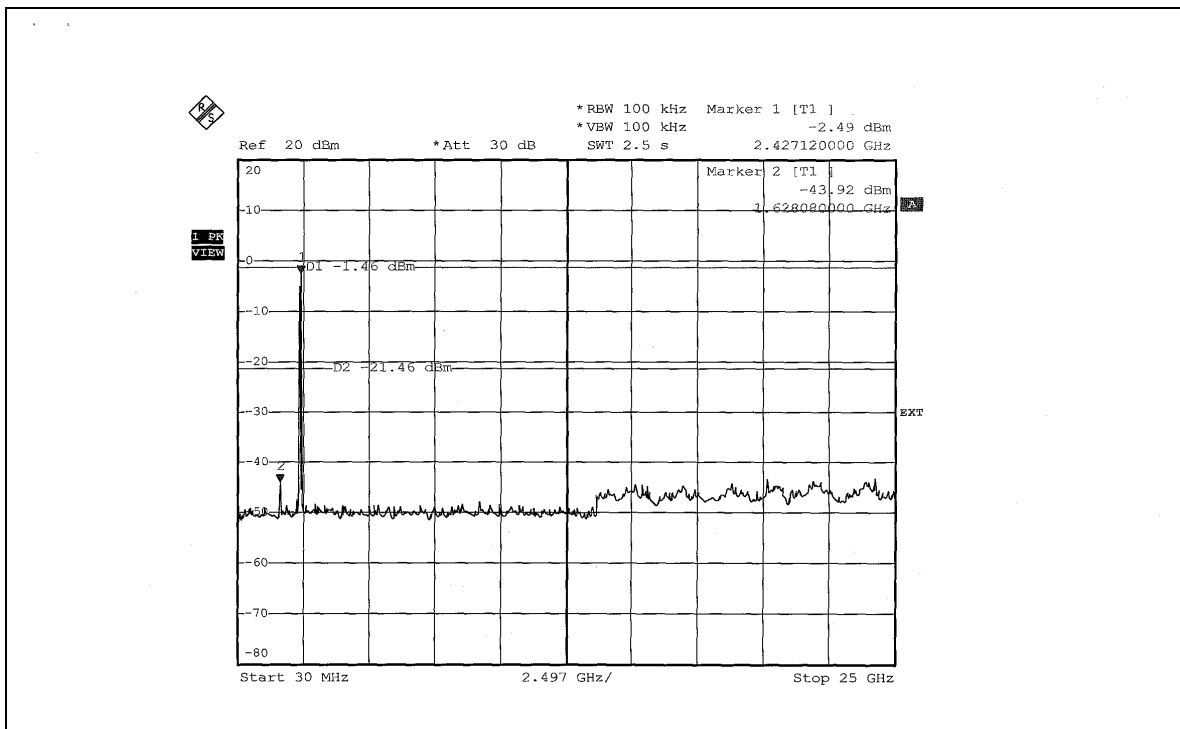
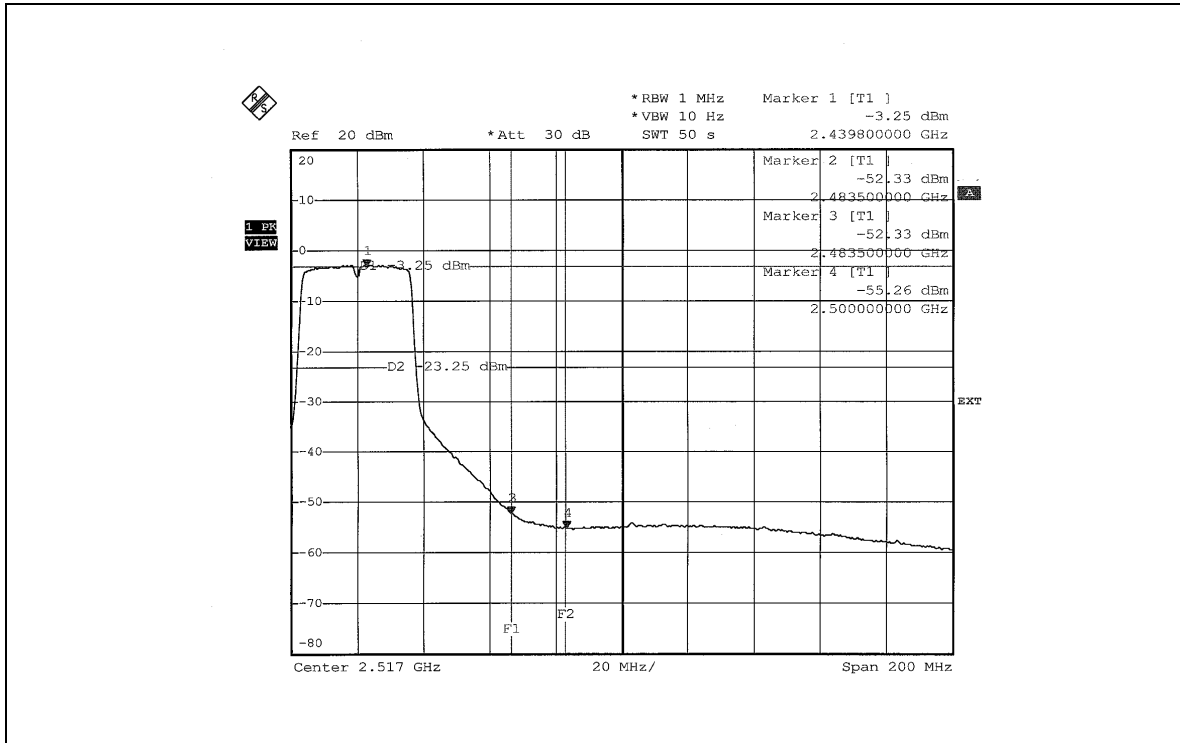
**NOTE 2:** The band edge emission plot of OFDM technique on the next second page shows 46.23dBc between carrier maximum power and local maximum emission in restrict band (2.4869GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 110.13dBuV/m (Peak), so the maximum field strength in restrict band is  $110.13 - 46.23 = 63.90$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on the next third page shows 49.08dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 99.41dBuV/m (Average), so the maximum field strength in restrict band is  $99.41 - 49.08 = 50.33$ dBuV/m which is under 54dBuV/m limit.

### 802.11g OFDM MODULATION









## **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 used in this product are Patch antenna with N-type Jack Reverse antenna connector and Dipole antenna with N-type Jack Reverse and Reverse SMA antenna connector. The maximum Gain of the antenna is 4.59352dBi.



## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST  
TEST MODE 1



### TEST MODE 2



TEST MODE 3



TEST MODE 4



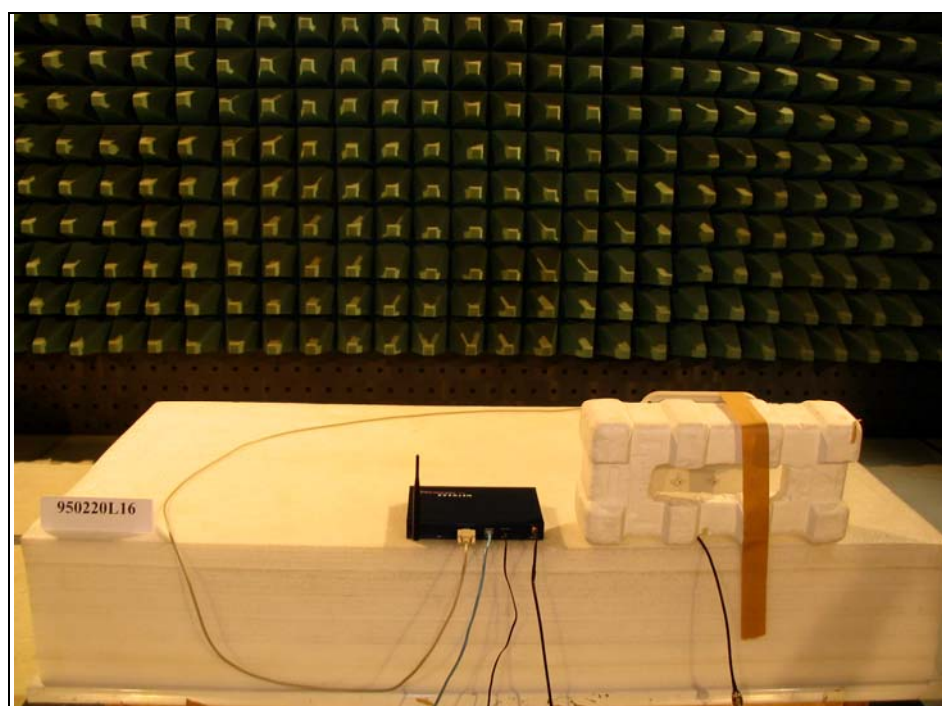
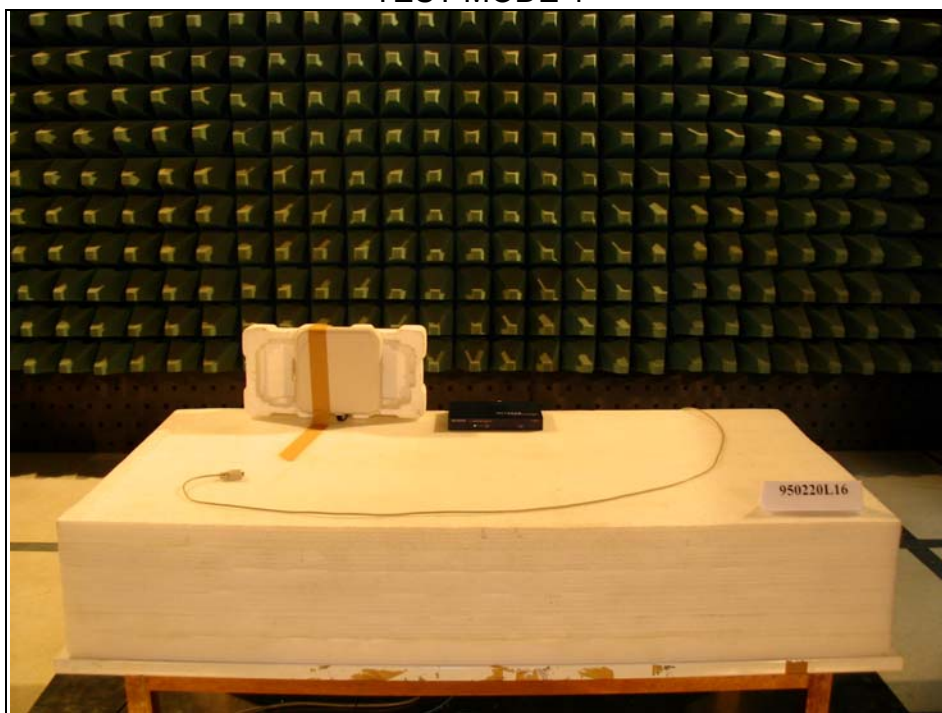
### TEST MODE 5



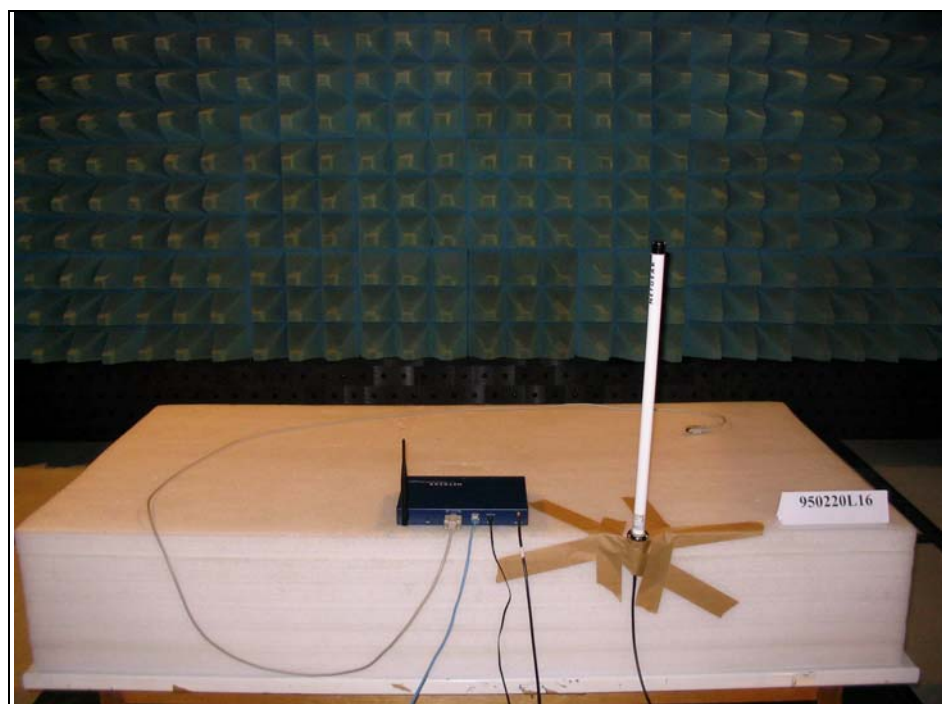
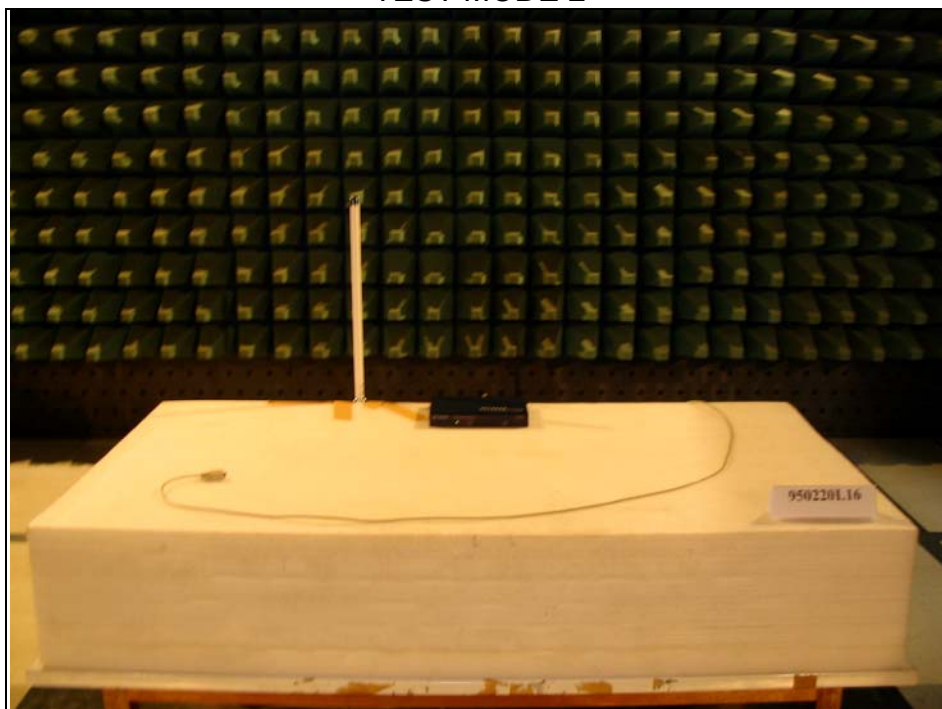
TEST MODE 6



### RADIATED EMISSION TEST TEST MODE 1

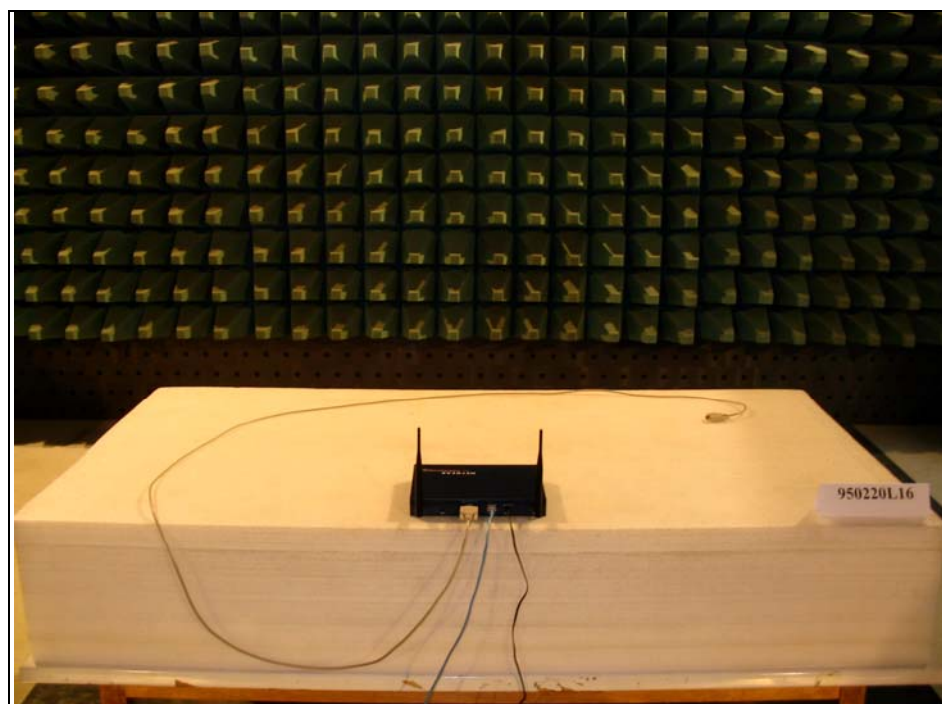
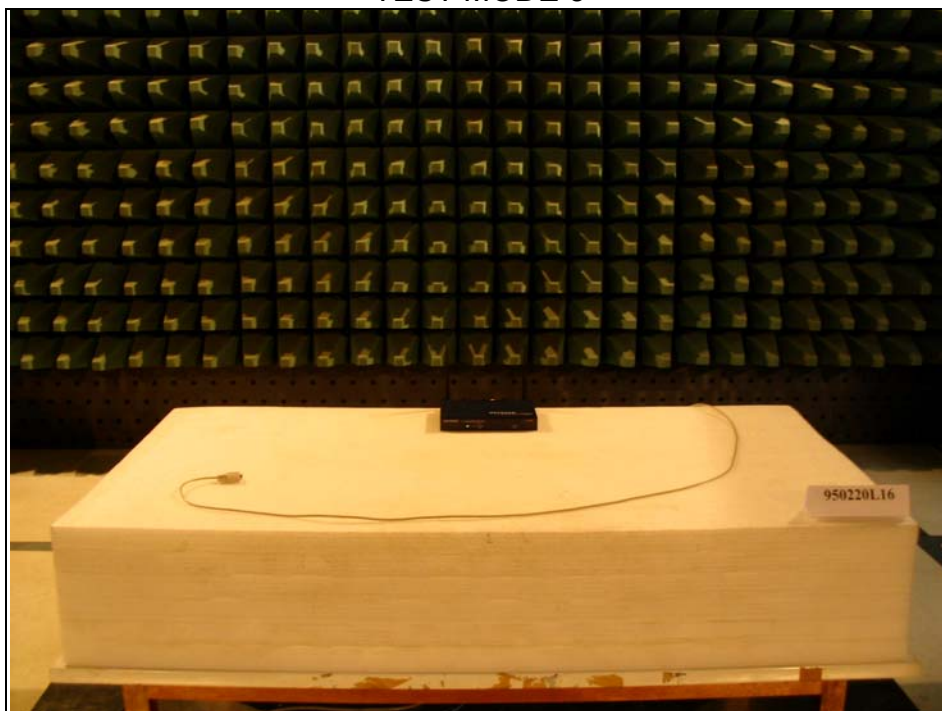


### TEST MODE 2

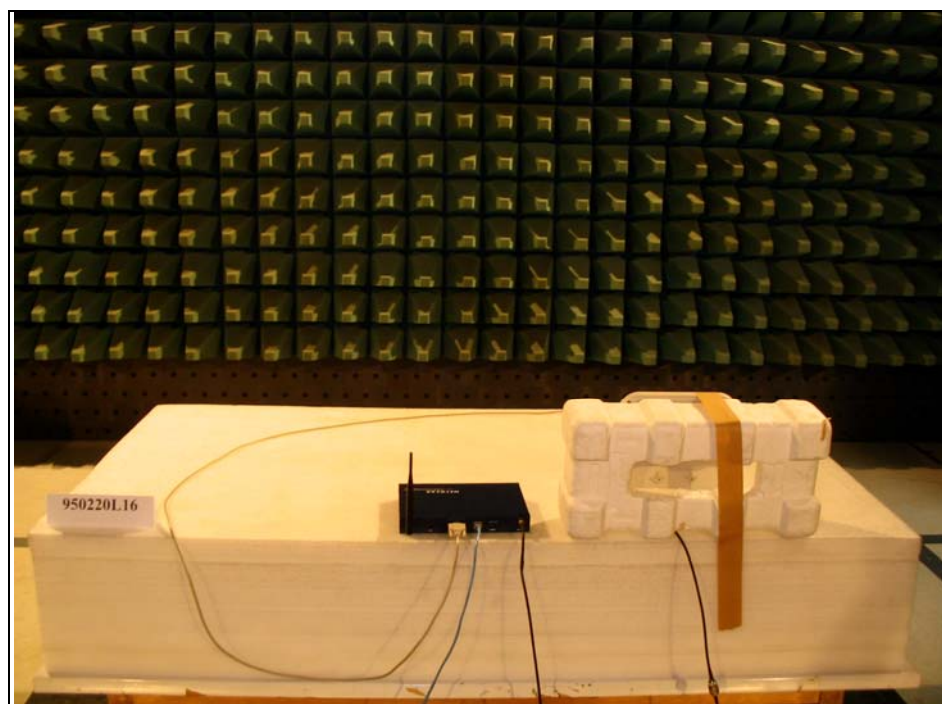
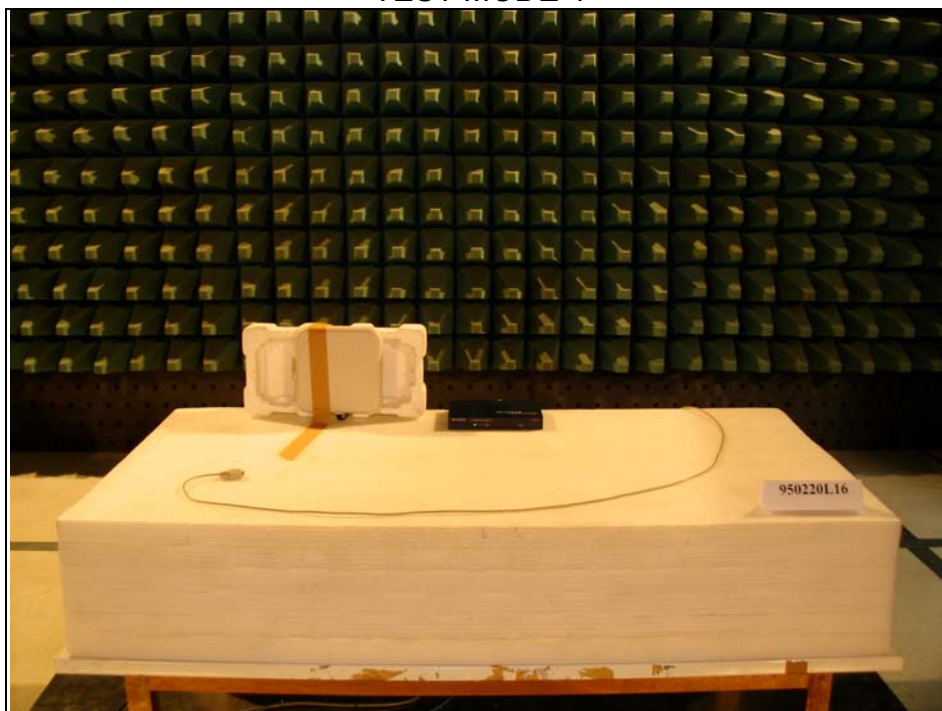




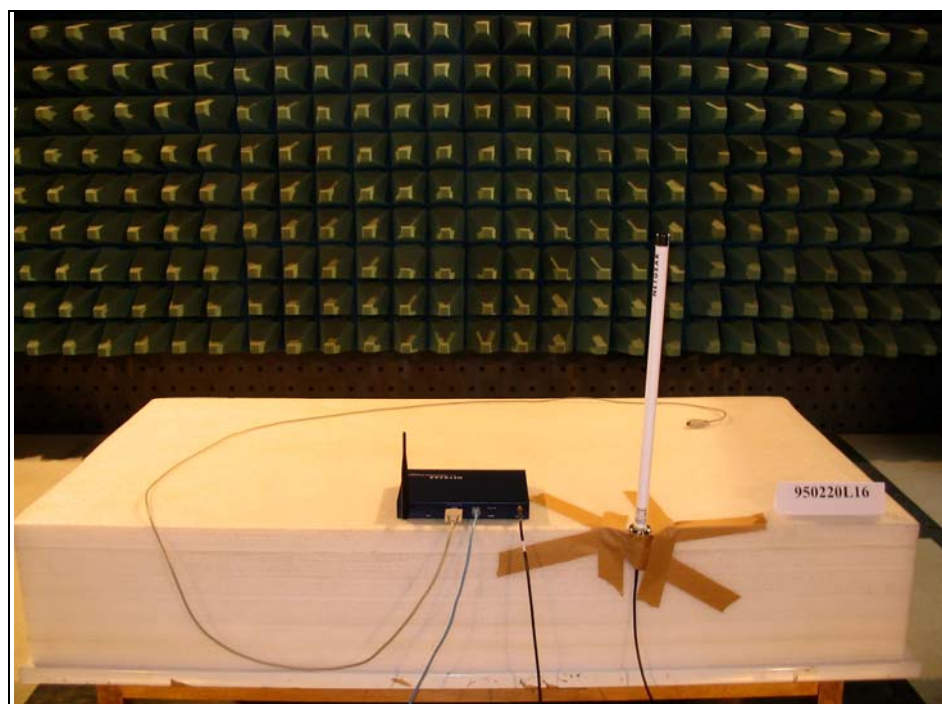
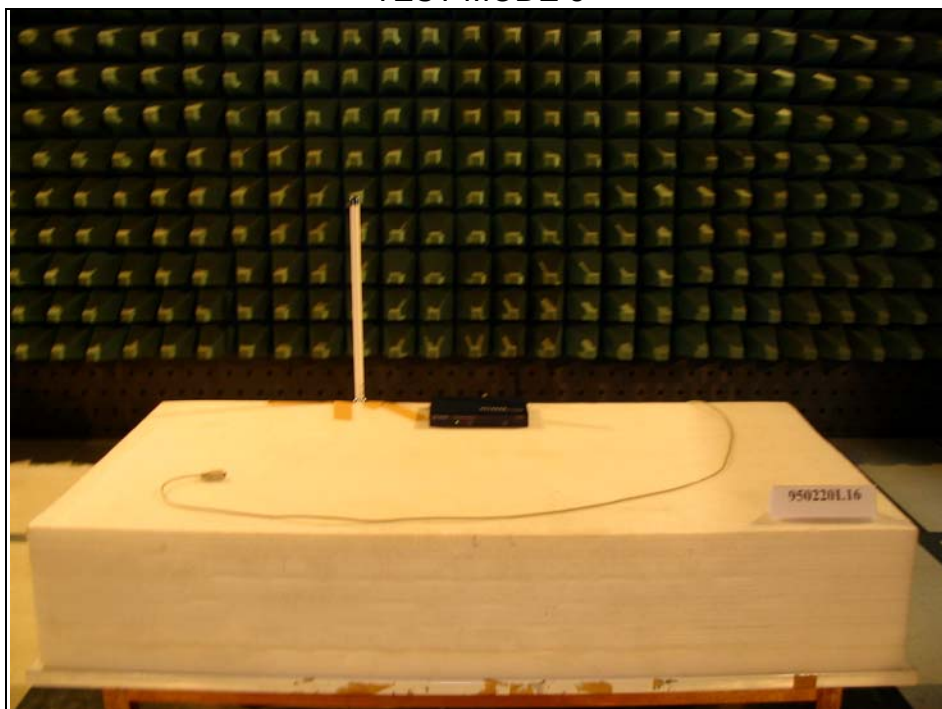
### TEST MODE 3



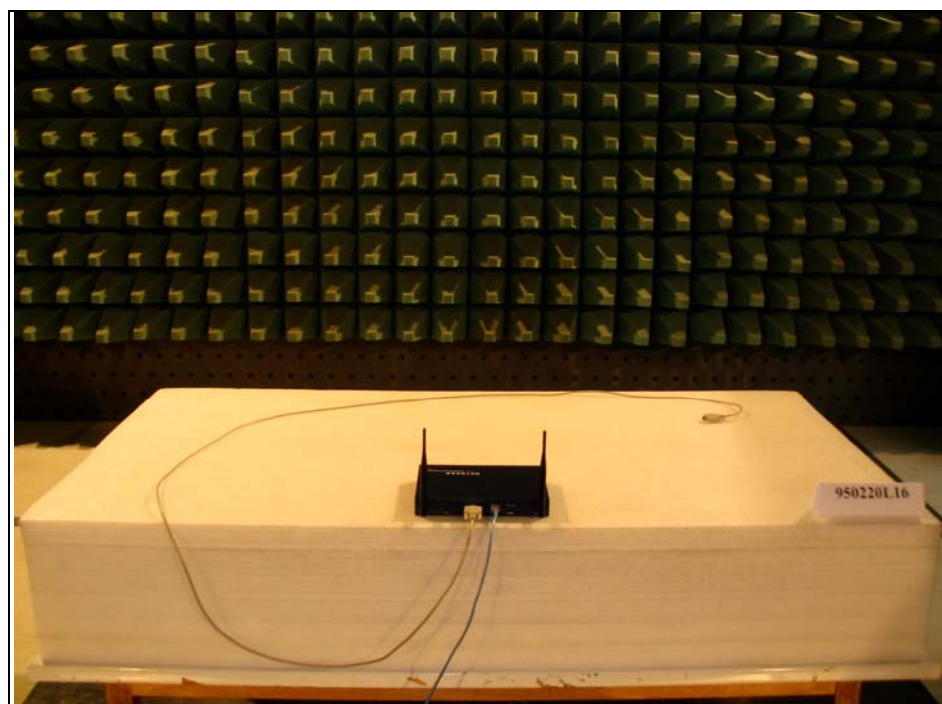
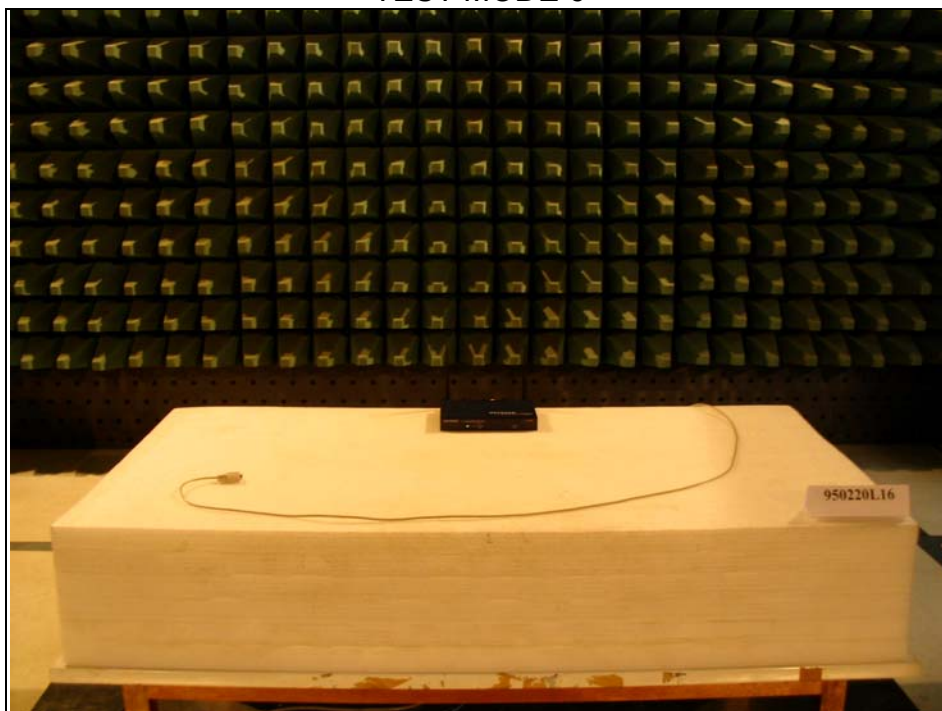
### TEST MODE 4



### TEST MODE 5



### TEST MODE 6





## 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

<b>USA</b>	FCC, UL, A2LA
<b>Germany</b>	TUV Rheinland
<b>Japan</b>	VCCI
<b>Norway</b>	NEMKO
<b>Canada</b>	INDUSTRY CANADA , CSA
<b>R.O.C.</b>	CNLA, BSMI, DGT
<b>Netherlands</b>	Telefication
<b>Singapore</b>	PSB , GOST-ASIA(MOU)
<b>Russia</b>	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](http://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:**

Tel: 886-3-3183232

Fax: 886-3-3185050

**Linko RF Lab.**

Tel: 886-3-3270910

Fax: 886-3-3270892

**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

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



## **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.