

FCC TEST REPORT (15.247)

REPORT NO.: RF950210L12
MODEL NO.: WAG302v2
RECEIVED: Feb. 21, 2006
TESTED: Feb. 27 ~ Mar, 07, 2006
ISSUED: Mar. 09, 2006

APPLICANT: NETGEAR, INC.

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R.O.C.

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NO. 2177-01



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1. CERTIFICATION

PRODUCT: 802.11a/g Prosafe Wireless Access Point
MODEL NO.: WAG302v2
APPLICANT: NETGEAR, INC
BRAND NAME: NETGEAR
TEST SAMPLE: ENGINEERING SAMPLE
TESTED: Feb. 27 ~ Mar, 07, 2006
STANDARDS: FCC Part 15, Subpart C (Section 15.247),
ANSI C63.4-2003

The above equipment has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

prepared BY

Wendy Liao
(Wendy Liao)

, **DATE:** Mar. 09, 2006

TECHNICAL

ACCEPTANCE

Responsible for RF

: Long Chen
(Long Chen)

, **DATE:** Mar. 09, 2006

APPROVED BY

: Gary Chang
(Gary Chang / Supervisor)

, **DATE:** Mar. 09, 2006

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	Test Type and Limit	Result	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -16.59 dB at 0.150MHz.
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 -1.64dB at 2390.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

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

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.73 dB
	200MHz ~1000MHz	3.74 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	802.11a/g Prosafe Wireless Access Point
MODEL NO.	WAG302v2
FCC ID	PY306100028
POWER SUPPLY	12Vdc from AC adapter or 48Vdc from POE
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps 802.11a: 54/48/36/24/18/12/9/6Mbps (up to 108Mbps in 802.11g & 802.11a turbo mode)
FREQUENCY RANGE	802.11b & 802.11g: 2.412 ~ 2.462GHz 802.11a: 5.150 ~ 5.350GHz and 5.725 ~ 5.850GHz
NUMBER OF CHANNEL	802.11b & 802.11g: 11 for Normal mode / 1 for Turbo mode 802.11a: 13 for Normal mode / 5 for Turbo mode
CHANNEL SPACING	802.11b & 802.11g: 5MHz 802.11a: 20MHz for Normal mode / 40MHz for Turbo mode
OUTPUT POWER	50.466mW for 802.11b 50.699mW for 802.11g 28.642mW for 5.150 ~ 5.350GHz 51.168mW for 5.725 ~ 5.850GHz
ANTENNA TYPE	Refer to Note 2
DATA CABLE	NA
I/O PORTS	Refer to user's manual

NOTE:

- The EUT was operated with the following POE and adapter:

POE	
BRAND	Netgear
MODEL	WLS538
INPUT	100-240Vac, 50-60Hz
OUTPUT	48Vdc, 2.7A

** The POE is for support unit only.

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

2. The following antennas were provided to this EUT.

Item	Antenna Type	Gain (dBi)		With cable loss (dBi)	Length of cable
		2.4G	5G		
1	Patch	14.0	-	-4.64	30m
2	Dipole	8.5	-	-1.69	10m
3	Dipole	4.59352	5.39536	-	-

3. The EUT operates in both the 5GHz and 2.4GHz Bands and compatibility with 802.11a and 802.11b, 802.11g technology.
4. The EUT is capable of providing data rates of up to 108Mbps in 802.11g & 802.11a turbo mode depending upon reception quality.
5. The following antennas were pre-tested and we found the worst case as below:

Item	Antenna Port 1	Antenna Port 2
1	Patch (antenna 1)	Dipole (antenna 3)
2	Dipole (antenna 2)	Dipole (antenna 3)
3	Dipole (antenna 3)	Dipole (antenna 3)

*Note: The item 1 ~ 3 for 2.4GHz band and recorded the test data in the test report.

The item 1 was the worst case for 5GHz band and recorded the test data in the test report.

6. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

For 802.11b/g: 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

Operated in 5725 ~ 5850MHz band:

For 802.11a: Five channels are provided to this EUT for normal mode.

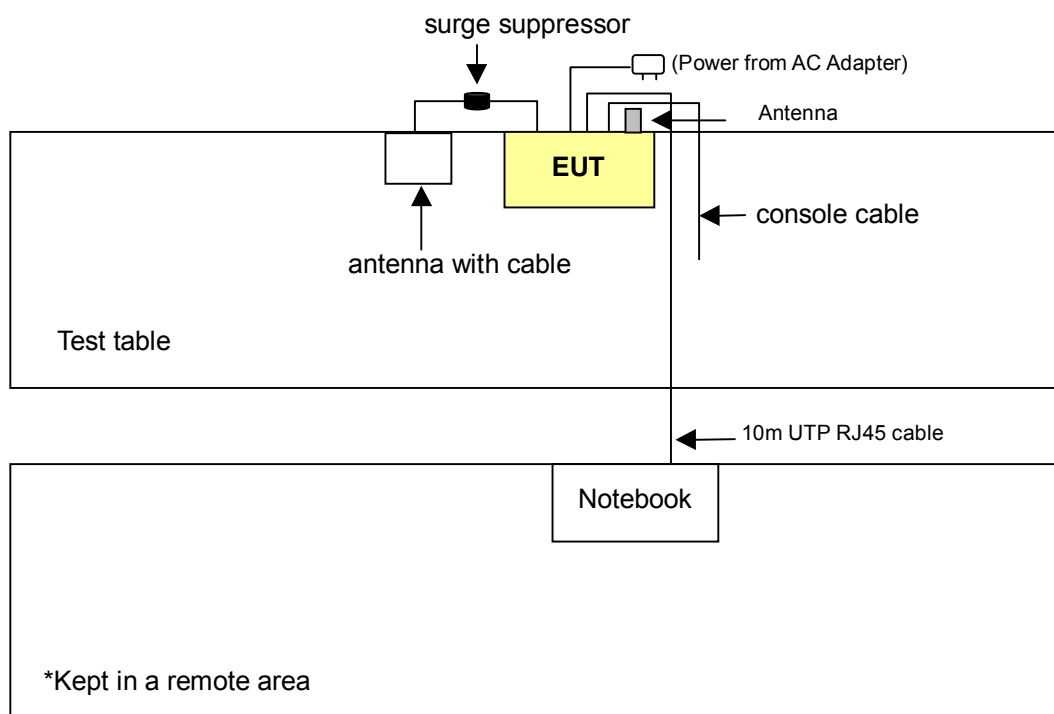
Channel	Frequency
1	5745 MHz
2	5765 MHz
3	5785 MHz
4	5805 MHz
5	5825 MHz

For 802.11a: Two channels are provided to this EUT for turbo mode.

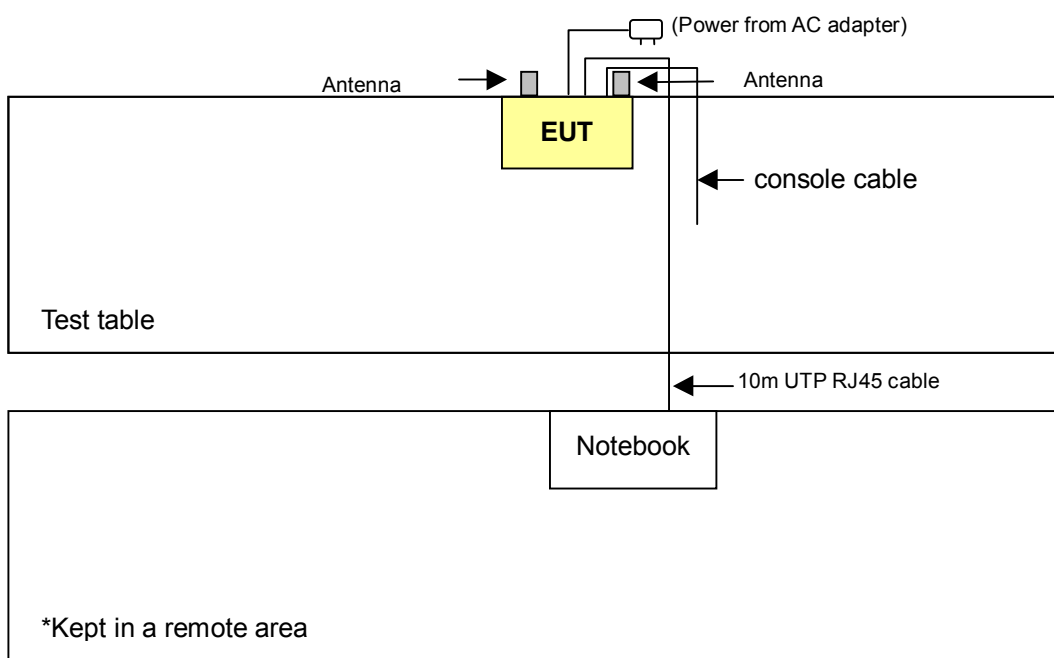
Channel	Frequency
1	5760 MHz
2	5800 MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

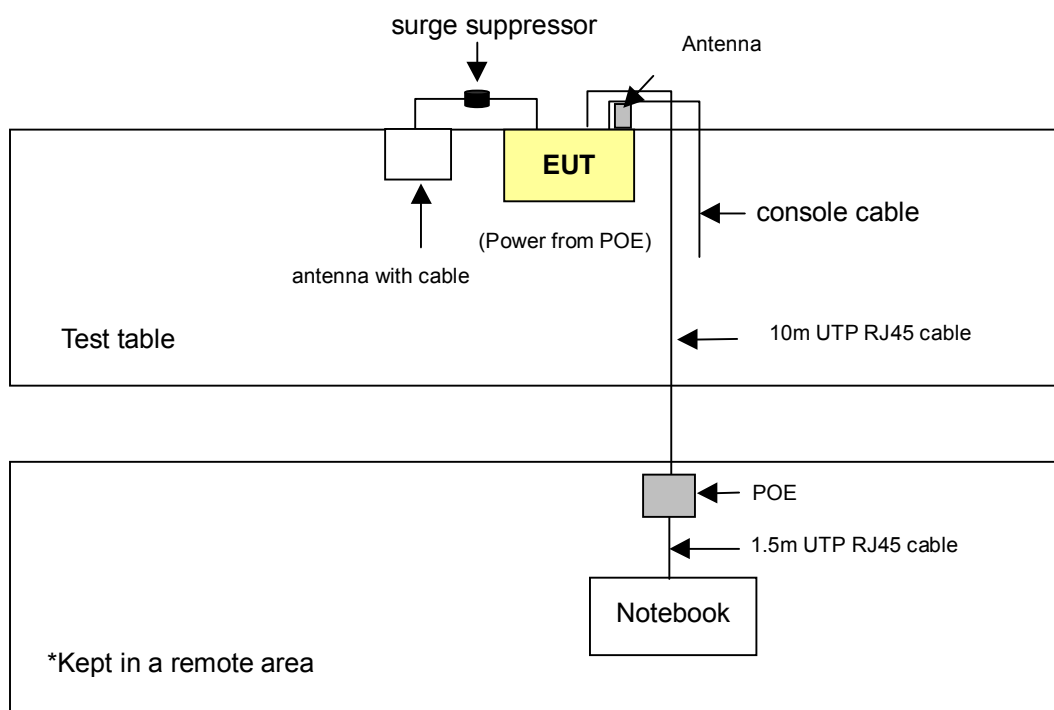
TEST MODE A & B:



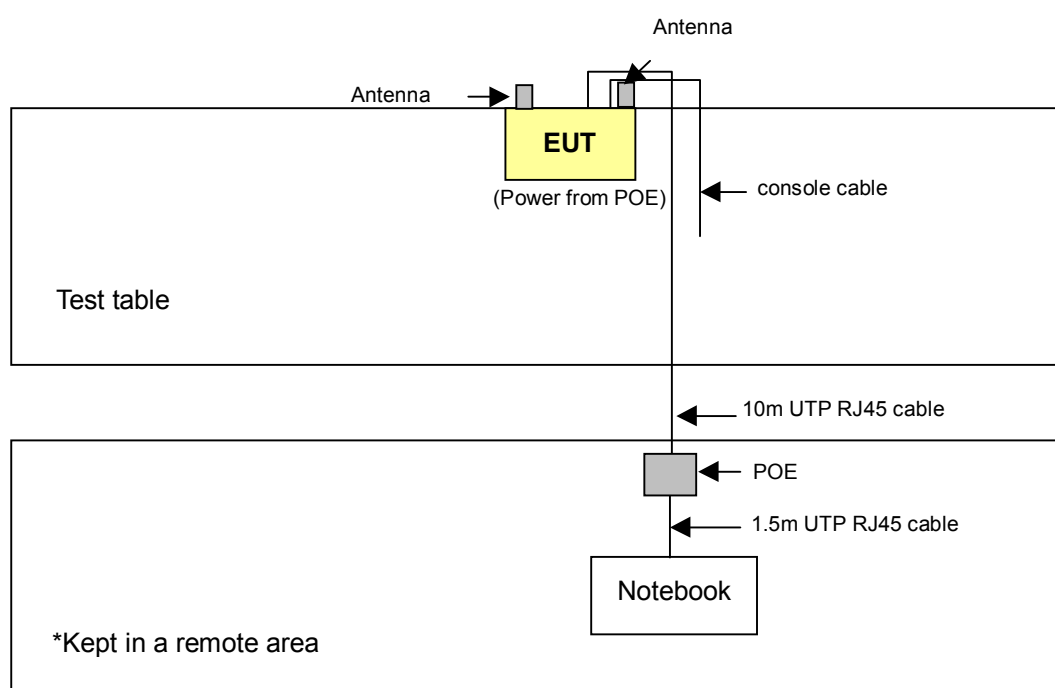
TEST MODE C:



TEST MODE D & E:



TEST MODE F:



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

For 802.11b/g

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
A	√	√	√	√	Adapter mode with antenna 1, 3
B	-	√	√	-	Adapter mode with antenna 2, 3
C	-	√	√	-	Adapter mode with antenna 3, 3
D	√	√	-	-	POE mode with antenna 1, 3
E	-	√	-	-	POE mode with antenna 2, 3
F	-	√	-	-	POE mode with antenna 3, 3

Where PLC: Power Line Conducted Emission

RE<1G: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

“ - ” : 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)
A, D	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
A, D	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)
A ~ F	802.11g	1 to 11	11	OFDM	BPSK	6
A ~ F	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)
A ~ C	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1
A ~ C	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
A ~ C	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)
A ~ C	802.11b	1 to 11	1, 11	DSSS	DBPSK	1
A ~ C	802.11g	1 to 11	1, 11	OFDM	BPSK	6
A ~ C	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

For 802.11a

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
A	√	√	√	√	Adapter mode with antenna 1, 3
D	√	√	-	-	POE mode with antenna 1, 3

Where PLC: Power Line Conducted Emission
RE≥1G: Radiated Emission above 1GHz
“-” : Mean no effect

RE<1G RE: Radiated Emission below 1GHz
APCM: Antenna Port Conducted Measurement

Power Line Conducted Emission Test:

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

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, D	802.11a	1 to 5	3	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

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

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, D	802.11a	1 to 5	3	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

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

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6
A	802.11a Turbo	1 to 2	1, 2	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.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 5	1, 5	OFDM	BPSK	6
802.11a Turbo	1 to 2	1, 2	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)
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6
802.11a Turbo	1 to 2	1, 2	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	DELL	PP05L	12130898320	E2K24CLNS
2	POE	Netgear	WLS538	NA	NA

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

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

4. TEST TYPES AND RESULTS (802.11b & g 2412~2462MHz Band)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	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.

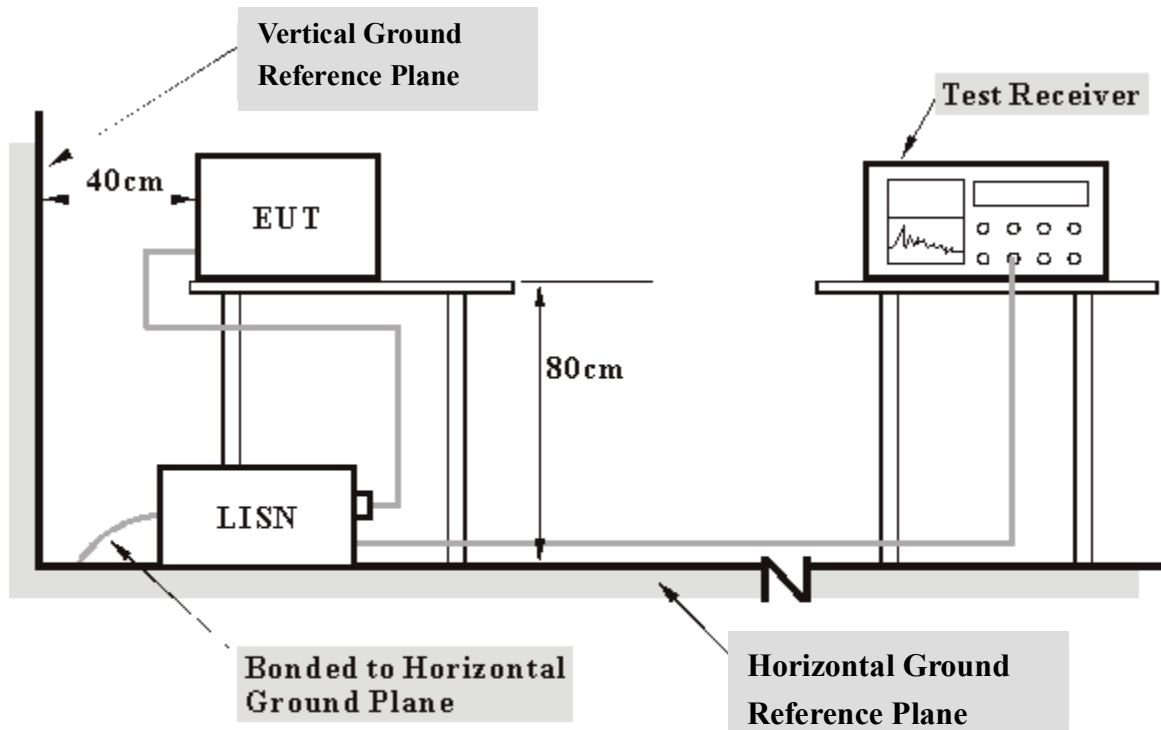
4.1.3 TEST PROCEDURES

- 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) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

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

4.1.6 EUT OPERATING CONDITIONS

- a. 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.

4.1.7 TEST RESULTS

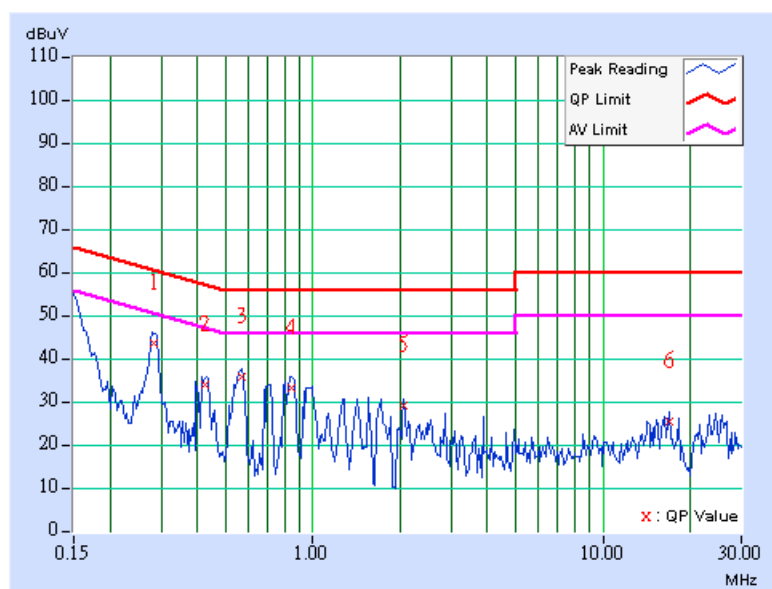
Conducted Worst-Case Data (Normal mode)

Adapter mode with antenna 1, 3

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

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	0.282	0.10	43.19	-	43.29	-	60.75	50.75	-17.46	-
2	0.427	0.10	33.31	-	33.41	-	57.30	47.30	-23.89	-
3	0.572	0.10	35.35	-	35.45	-	56.00	46.00	-20.55	-
4	0.845	0.10	32.83	-	32.93	-	56.00	46.00	-23.07	-
5	2.066	0.21	28.83	-	29.04	-	56.00	46.00	-26.96	-
6	16.902	0.60	25.09	-	25.69	-	60.00	50.00	-34.31	-

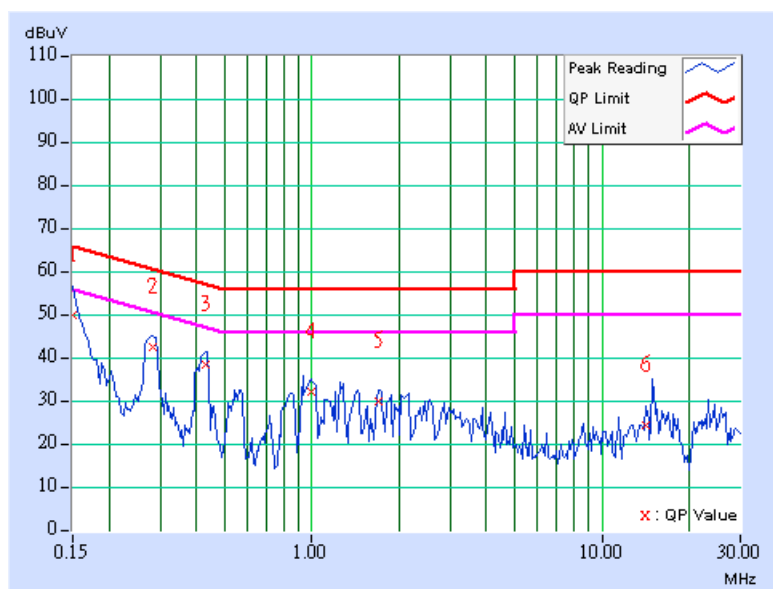
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.150	0.10	49.31	-	49.41	-	66.00	56.00	-16.59	-
2	0.283	0.10	41.92	-	42.02	-	60.73	50.73	-18.71	-
3	0.430	0.10	38.02	-	38.12	-	57.26	47.26	-19.13	-
4	0.994	0.20	31.55	-	31.75	-	56.00	46.00	-24.25	-
5	1.703	0.20	29.57	-	29.77	-	56.00	46.00	-26.23	-
6	14.154	0.60	23.78	-	24.38	-	60.00	50.00	-35.62	-

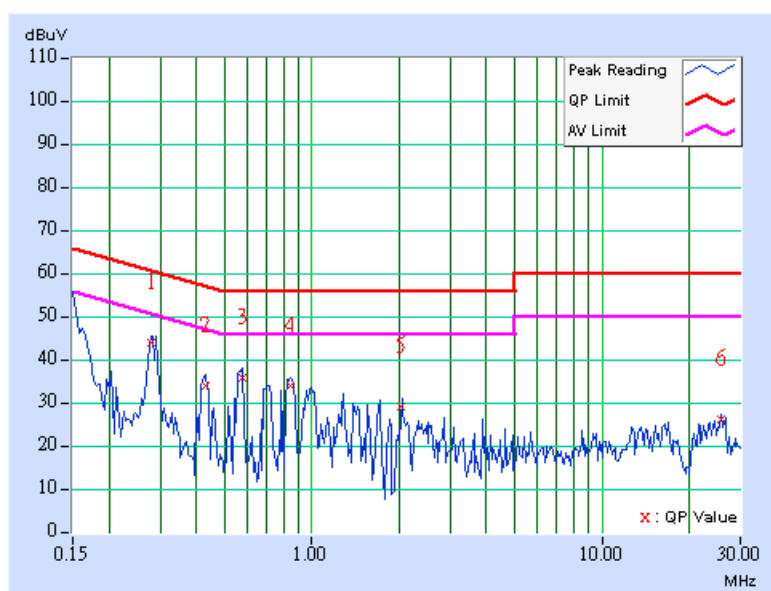
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.280	0.10	43.05	-	43.15	-	60.81	50.81	-17.66	-
2	0.431	0.10	33.03	-	33.13	-	57.23	47.23	-24.10	-
3	0.576	0.10	35.11	-	35.21	-	56.00	46.00	-20.79	-
4	0.849	0.10	32.93	-	33.03	-	56.00	46.00	-22.97	-
5	2.041	0.20	28.23	-	28.43	-	56.00	46.00	-27.57	-
6	25.840	1.00	25.21	-	26.21	-	60.00	50.00	-33.79	-

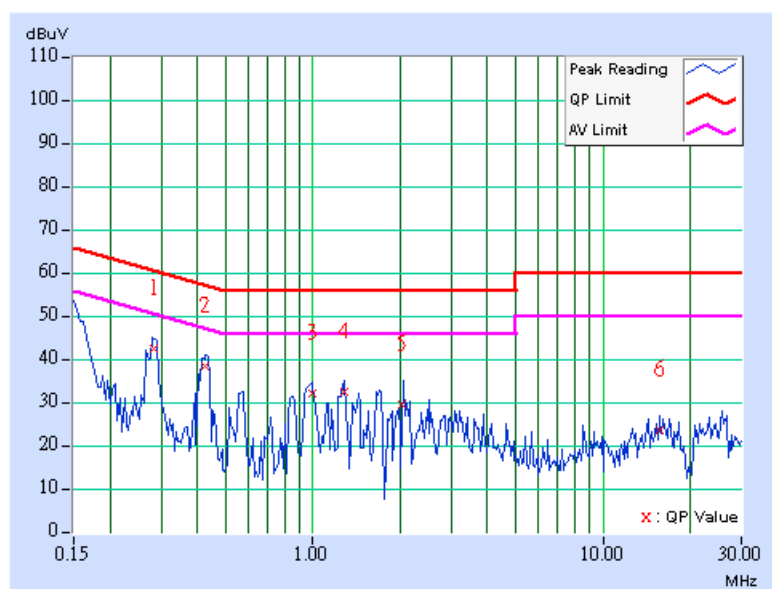
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.282	0.10	41.90	-	42.00	-	60.77	50.77	-18.77	-
2	0.427	0.10	37.86	-	37.96	-	57.30	47.30	-19.34	-
3	0.990	0.20	31.47	-	31.67	-	56.00	46.00	-24.33	-
4	1.289	0.20	32.04	-	32.24	-	56.00	46.00	-23.76	-
5	2.041	0.20	28.85	-	29.05	-	56.00	46.00	-26.95	-
6	15.621	0.62	23.12	-	23.74	-	60.00	50.00	-36.26	-

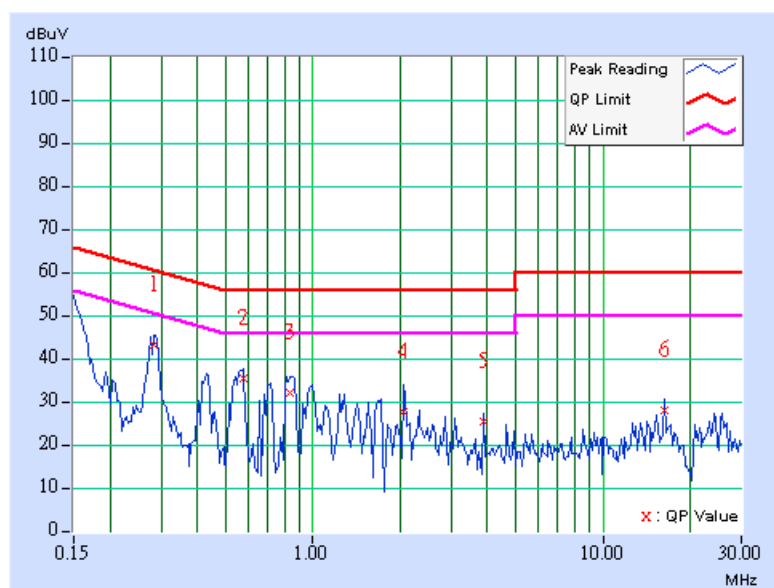
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.283	0.10	42.75	-	42.85	-	60.73	50.73	-17.88	-
2	0.576	0.10	35.07	-	35.17	-	56.00	46.00	-20.83	-
3	0.830	0.10	31.62	-	31.72	-	56.00	46.00	-24.28	-
4	2.066	0.21	26.98	-	27.19	-	56.00	46.00	-28.81	-
5	3.875	0.36	25.11	-	25.47	-	56.00	46.00	-30.53	-
6	16.229	0.61	27.53	-	28.14	-	60.00	50.00	-31.86	-

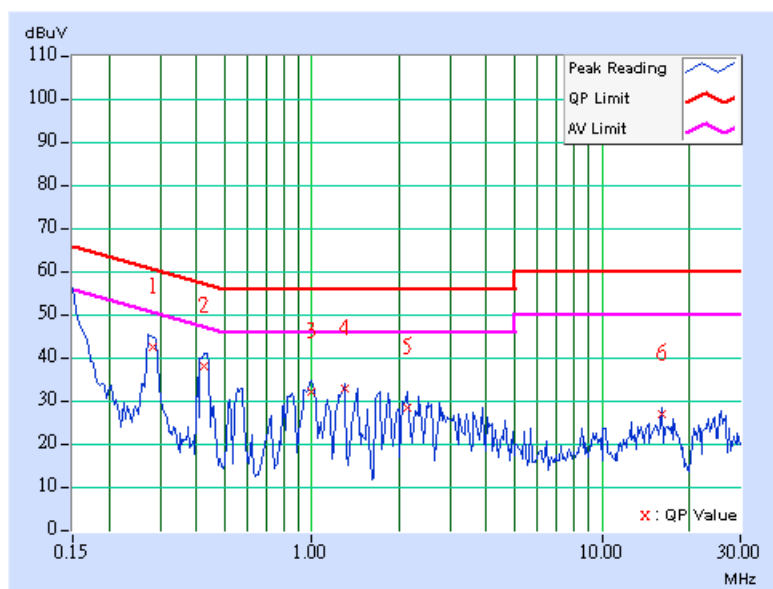
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



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

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	0.283	0.10	41.86	-	41.96	-	60.74	50.74	-18.78	-
2	0.423	0.10	37.62	-	37.72	-	57.38	47.38	-19.66	-
3	0.994	0.20	31.71	-	31.91	-	56.00	46.00	-24.09	-
4	1.293	0.20	32.28	-	32.48	-	56.00	46.00	-23.52	-
5	2.125	0.21	27.91	-	28.12	-	56.00	46.00	-27.88	-
6	16.168	0.61	26.53	-	27.14	-	60.00	50.00	-32.86	-

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

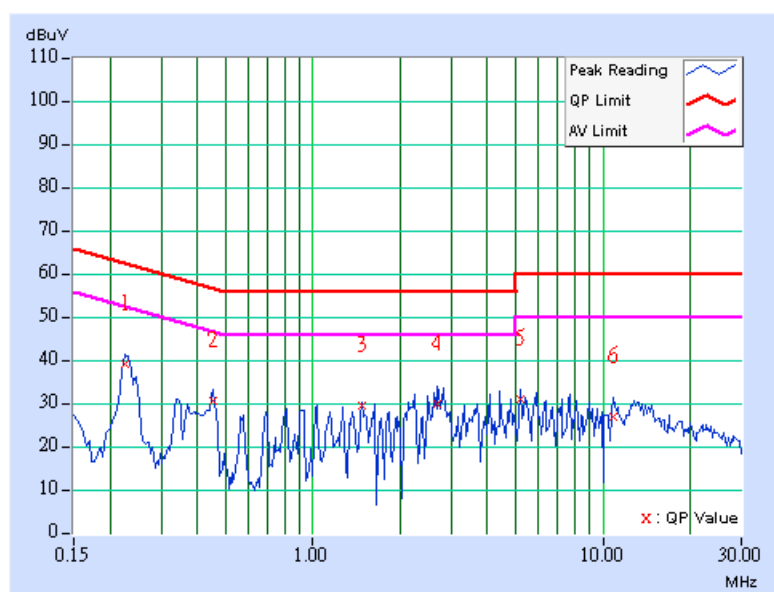


Conducted Worst-Case Data (Turbo mode)

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

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	0.224	0.10	38.86	-	38.96	-	62.66	52.66	-23.70	-
2	0.451	0.10	30.47	-	30.57	-	56.86	46.86	-26.29	-
3	1.477	0.15	29.29	-	29.44	-	56.00	46.00	-26.56	-
4	2.699	0.26	29.55	-	29.81	-	56.00	46.00	-26.19	-
5	5.168	0.37	30.60	-	30.97	-	60.00	50.00	-29.03	-
6	10.844	0.41	26.62	-	27.03	-	60.00	50.00	-32.97	-

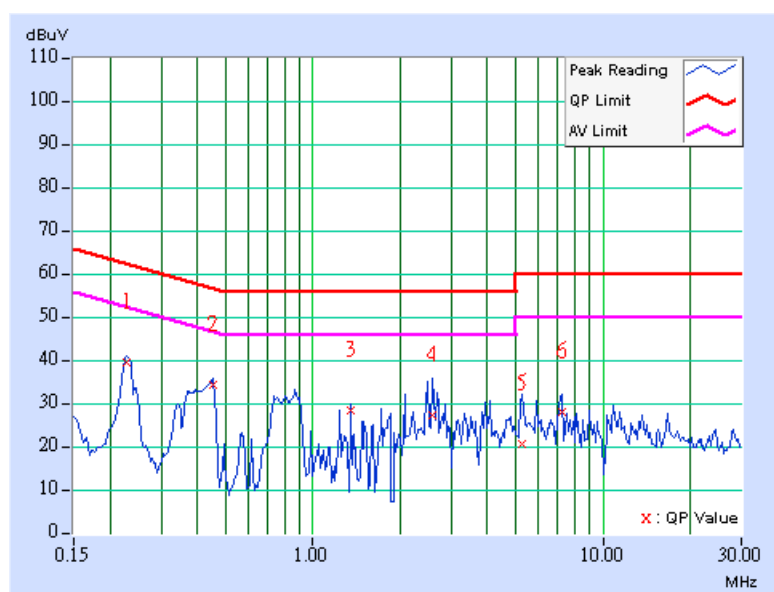
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.228	0.10	39.12	-	39.22	-	62.52	52.52	-23.30	-
2	0.451	0.11	34.15	-	34.26	-	56.86	46.86	-22.60	-
3	1.359	0.20	28.03	-	28.23	-	56.00	46.00	-27.77	-
4	2.590	0.25	26.89	-	27.14	-	56.00	46.00	-28.86	-
5	5.258	0.39	20.23	-	20.62	-	60.00	50.00	-39.38	-
6	7.203	0.42	27.67	-	28.09	-	60.00	50.00	-31.91	-

- 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.

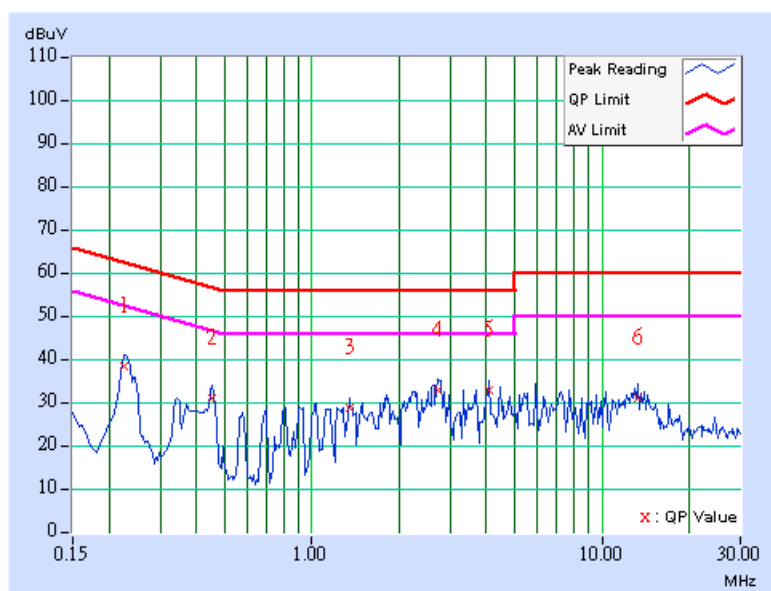


Conducted Worst-Case Data (Normal mode)
POE mode with antenna 1, 3

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

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	0.224	0.10	38.12	-	38.22	-	62.66	52.66	-24.44	-
2	0.451	0.10	30.56	-	30.66	-	56.86	46.86	-26.20	-
3	1.352	0.14	28.43	-	28.57	-	56.00	46.00	-27.43	-
4	2.727	0.26	32.30	-	32.56	-	56.00	46.00	-23.44	-
5	4.066	0.37	32.56	-	32.93	-	56.00	46.00	-23.07	-
6	13.313	0.54	30.60	-	31.14	-	60.00	50.00	-28.86	-

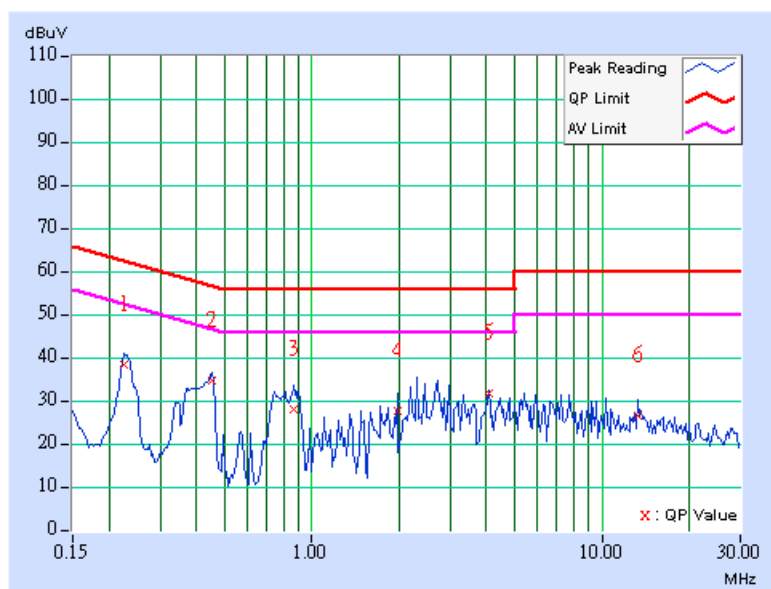
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value =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



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

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	0.224	0.10	38.10	-	38.20	-	62.66	52.66	-24.46	-
2	0.451	0.11	34.09	-	34.20	-	56.86	46.86	-22.66	-
3	0.865	0.18	27.48	-	27.66	-	56.00	46.00	-28.34	-
4	1.973	0.20	27.22	-	27.42	-	56.00	46.00	-28.58	-
5	4.066	0.37	31.18	-	31.55	-	56.00	46.00	-24.45	-
6	13.309	0.57	26.18	-	26.75	-	60.00	50.00	-33.25	-

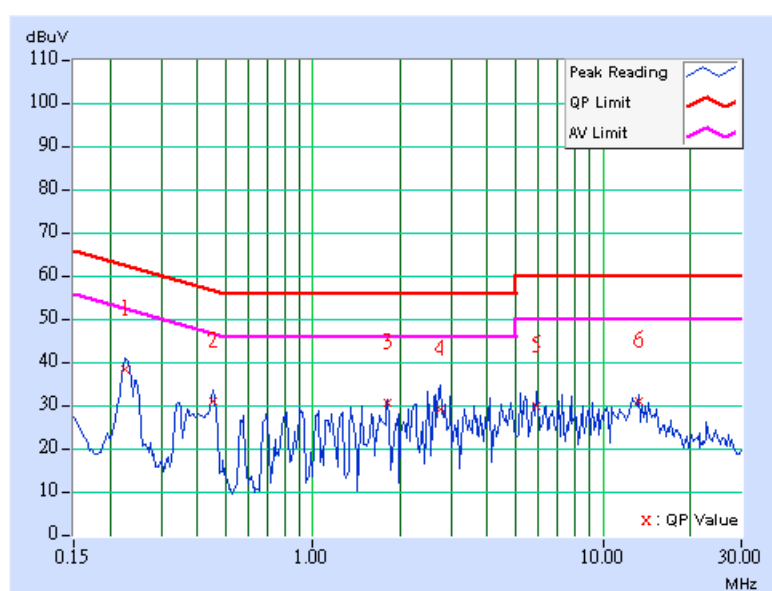
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.224	0.10	38.14	-	38.24	-	62.66	52.66	-24.42	-
2	0.451	0.10	30.56	-	30.66	-	56.86	46.86	-26.20	-
3	1.820	0.18	30.19	-	30.37	-	56.00	46.00	-25.63	-
4	2.758	0.26	28.66	-	28.92	-	56.00	46.00	-27.08	-
5	5.898	0.37	29.44	-	29.81	-	60.00	50.00	-30.19	-
6	13.313	0.54	30.50	-	31.04	-	60.00	50.00	-28.96	-

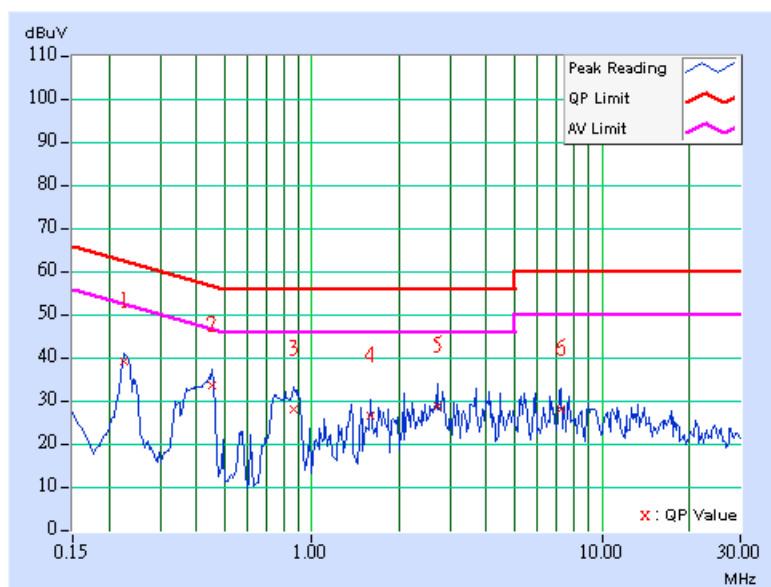
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.224	0.10	38.99	-	39.09	-	62.66	52.66	-23.57	-
2	0.455	0.11	33.36	-	33.47	-	56.79	46.79	-23.32	-
3	0.865	0.18	27.79	-	27.97	-	56.00	46.00	-28.03	-
4	1.602	0.20	26.37	-	26.57	-	56.00	46.00	-29.43	-
5	2.707	0.26	28.64	-	28.90	-	56.00	46.00	-27.10	-
6	7.191	0.42	27.74	-	28.16	-	60.00	50.00	-31.84	-

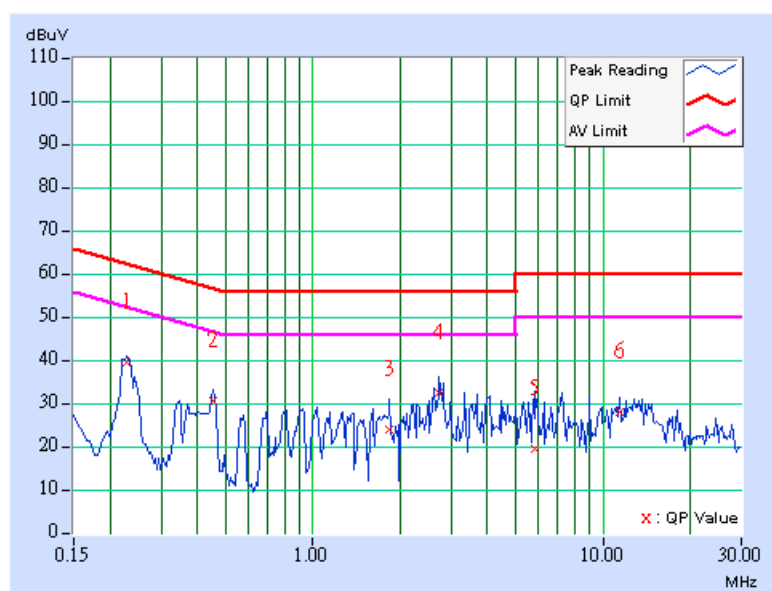
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.228	0.10	39.02	-	39.12	-	62.52	52.52	-23.40	-
2	0.455	0.10	30.21	-	30.31	-	56.79	46.79	-26.48	-
3	1.840	0.18	23.58	-	23.76	-	56.00	46.00	-32.24	-
4	2.734	0.26	32.02	-	32.28	-	56.00	46.00	-23.72	-
5	5.789	0.37	19.31	-	19.68	-	60.00	50.00	-40.32	-
6	11.465	0.44	27.71	-	28.15	-	60.00	50.00	-31.85	-

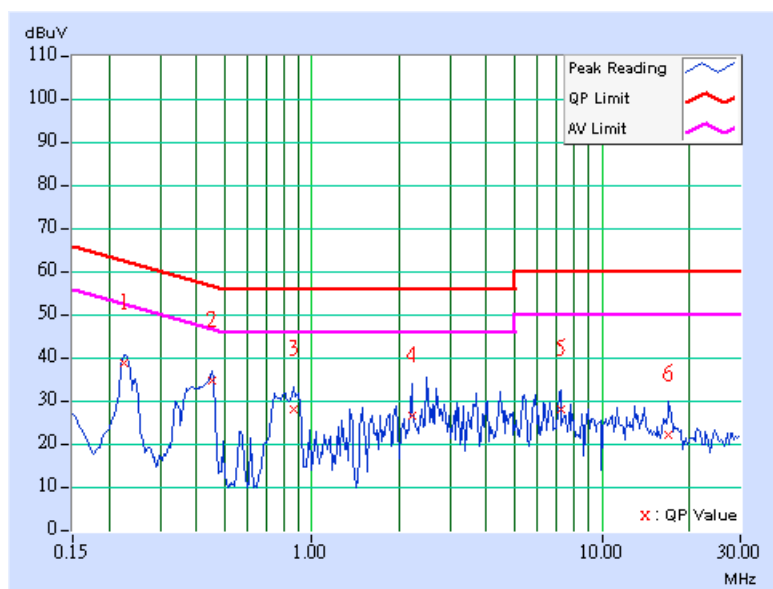
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.224	0.10	38.31	-	38.41	-	62.66	52.66	-24.25	-
2	0.451	0.11	34.17	-	34.28	-	56.86	46.86	-22.58	-
3	0.865	0.18	27.61	-	27.79	-	56.00	46.00	-28.21	-
4	2.209	0.22	26.22	-	26.44	-	56.00	46.00	-29.56	-
5	7.195	0.42	27.70	-	28.12	-	60.00	50.00	-31.88	-
6	17.001	0.60	21.75	-	22.35	-	60.00	50.00	-37.65	-

- 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.

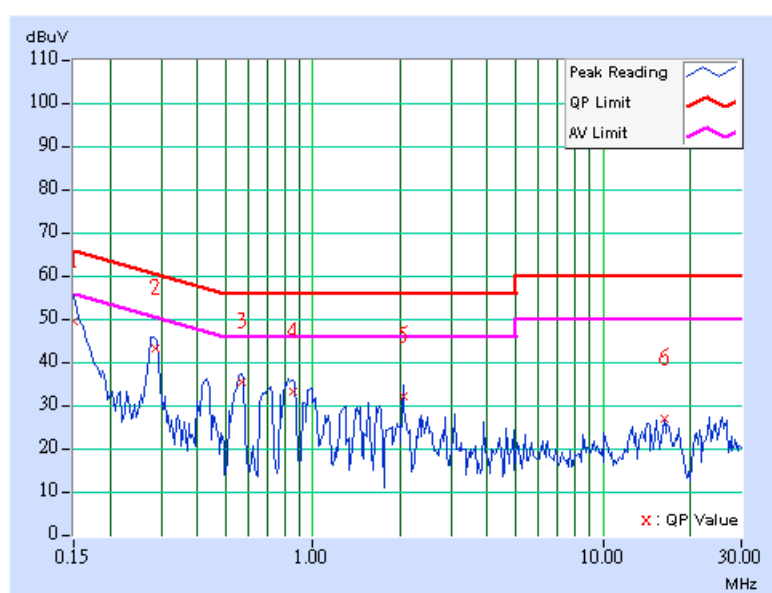


Conducted Worst-Case Data (Turbo mode)

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

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	0.150	0.10	49.11	-	49.21	-	66.00	56.00	-16.79	-
2	0.287	0.10	42.77	-	42.87	-	60.62	50.62	-17.75	-
3	0.568	0.10	34.90	-	35.00	-	56.00	46.00	-21.00	-
4	0.853	0.10	32.81	-	32.91	-	56.00	46.00	-23.09	-
5	2.047	0.20	31.59	-	31.79	-	56.00	46.00	-24.21	-
6	16.230	0.61	26.55	-	27.16	-	60.00	50.00	-32.84	-

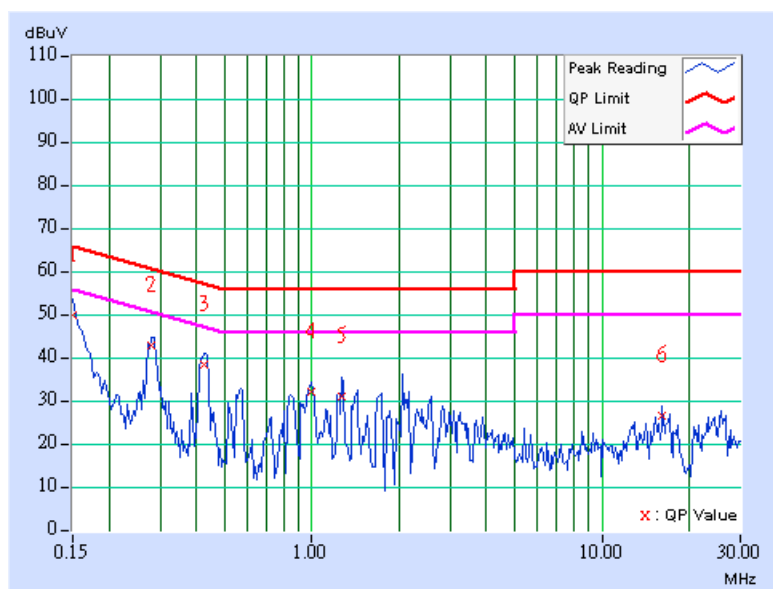
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.150	0.10	49.23	-	49.33	-	66.00	56.00	-16.67	-
2	0.280	0.10	42.23	-	42.33	-	60.81	50.81	-18.48	-
3	0.427	0.10	37.90	-	38.00	-	57.30	47.30	-19.30	-
4	0.995	0.20	31.63	-	31.83	-	56.00	46.00	-24.17	-
5	1.273	0.20	30.68	-	30.88	-	56.00	46.00	-25.12	-
6	16.168	0.61	26.01	-	26.62	-	60.00	50.00	-33.38	-

- 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 meter 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.

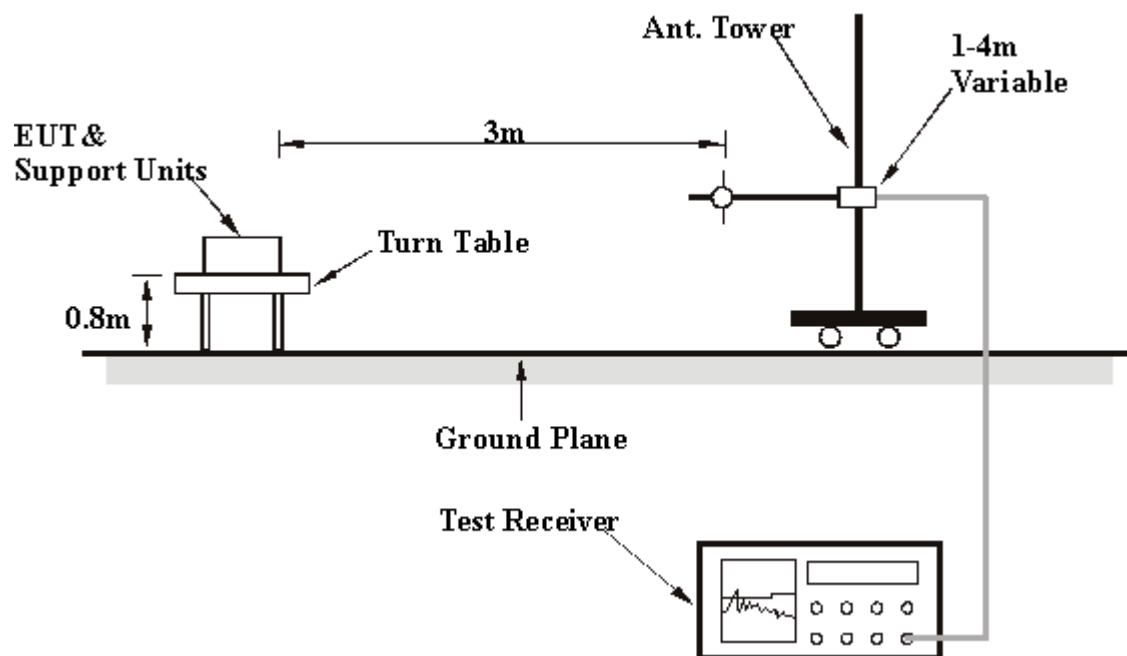
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

Below 1GHz Worst-Case Data (Normal mode)
 Adapter mode with antenna 1, 3

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

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	296.31	34.27 QP	46.00	-11.73	2.50 H	106	18.83	15.44
2	329.36	34.10 QP	46.00	-11.90	2.50 H	106	18.09	16.01
3	362.40	34.88 QP	46.00	-11.12	2.50 H	106	18.18	16.69
4	395.45	39.54 QP	46.00	-6.46	2.50 H	106	21.75	17.79
5	428.50	39.30 QP	46.00	-6.70	2.50 H	106	20.79	18.52
6	461.54	34.77 QP	46.00	-11.23	2.50 H	106	15.56	19.21
7	527.64	35.32 QP	46.00	-10.68	2.50 H	106	14.65	20.67
8	659.82	44.20 QP	46.00	-1.80	2.50 H	106	20.96	23.25
9	792.00	34.23 QP	46.00	-11.77	1.50 H	64	8.27	25.96
10	858.10	34.26 QP	46.00	-11.74	1.50 H	52	7.52	26.74
11	924.19	41.37 QP	46.00	-4.63	2.00 H	67	13.16	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.

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

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	38.21 QP	40.00	-1.79	1.00 V	223	25.67	12.54
2	158.30	32.18 QP	43.50	-11.32	1.00 V	262	18.77	13.41
3	162.18	31.56 QP	43.50	-11.94	1.00 V	265	18.29	13.27
4	395.45	39.66 QP	46.00	-6.34	1.00 V	223	21.87	17.79
5	428.50	34.08 QP	46.00	-11.92	1.00 V	223	15.56	18.52
6	461.54	34.55 QP	46.00	-11.45	1.00 V	223	15.34	19.21
7	494.59	34.21 QP	46.00	-11.79	1.00 V	223	14.27	19.94
8	527.64	34.92 QP	46.00	-11.08	1.00 V	223	14.24	20.67
9	659.82	41.50 QP	46.00	-4.50	1.00 V	223	18.25	23.25
10	924.19	44.11 QP	46.00	-1.89	1.00 V	226	15.90	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	309.92	35.89 QP	46.00	-10.11	2.50 H	43	20.15	15.75
2	329.36	34.40 QP	46.00	-11.60	1.50 H	7	18.39	16.01
3	362.40	35.26 QP	46.00	-10.74	1.50 H	7	18.56	16.69
4	395.45	39.14 QP	46.00	-6.86	1.50 H	7	21.35	17.79
5	428.50	38.97 QP	46.00	-7.03	1.50 H	7	20.45	18.52
6	461.54	35.50 QP	46.00	-10.50	1.50 H	7	16.29	19.21
7	527.64	35.47 QP	46.00	-10.53	1.50 H	7	14.80	20.67
8	659.82	44.18 QP	46.00	-1.82	1.50 H	7	20.93	23.25
9	792.00	35.19 QP	46.00	-10.81	1.00 H	13	9.23	25.96
10	858.10	35.32 QP	46.00	-10.68	2.50 H	58	8.58	26.74
11	924.19	41.74 QP	46.00	-4.26	2.50 H	43	13.53	28.21

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	38.11 QP	40.00	-1.89	1.00 V	196	25.57	12.54
2	395.45	39.62 QP	46.00	-6.38	1.00 V	196	21.83	17.79
3	428.50	34.12 QP	46.00	-11.88	1.00 V	196	15.60	18.52
4	461.54	35.08 QP	46.00	-10.92	1.00 V	196	15.87	19.21
5	494.59	34.51 QP	46.00	-11.49	1.00 V	196	14.56	19.94
6	527.64	34.83 QP	46.00	-11.17	1.00 V	196	14.16	20.67
7	659.82	41.37 QP	46.00	-4.63	1.00 V	196	18.12	23.25
8	924.19	44.01 QP	46.00	-1.99	1.00 V	238	15.80	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.

Below 1GHz Worst-Case Data (Normal mode)

Adapter mode with antenna 2, 3

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

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	395.45	37.51 QP	46.00	-8.49	2.00 H	10	19.73	17.79
2	440.16	40.23 QP	46.00	-5.77	1.50 H	82	21.48	18.75
3	461.54	38.46 QP	46.00	-7.54	2.00 H	10	19.25	19.21
4	494.59	35.31 QP	46.00	-10.69	2.00 H	10	15.37	19.94
5	527.64	38.52 QP	46.00	-7.48	2.00 H	10	17.85	20.67
6	659.82	42.29 QP	46.00	-3.71	2.00 H	10	19.04	23.25
7	758.96	34.73 QP	46.00	-11.27	1.50 H	31	8.91	25.82
8	792.00	34.21 QP	46.00	-11.79	2.00 H	10	8.25	25.96
9	924.19	43.90 QP	46.00	-2.10	2.00 H	82	15.69	28.21

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	34.03 QP	40.00	-5.97	1.00 V	181	21.49	12.54
2	395.45	39.68 QP	46.00	-6.32	1.00 V	181	21.89	17.79
3	428.50	34.88 QP	46.00	-11.12	1.00 V	181	16.36	18.52
4	461.54	37.09 QP	46.00	-8.91	1.00 V	181	17.88	19.21
5	527.64	34.34 QP	46.00	-11.66	1.00 V	181	13.67	20.67
6	659.82	39.44 QP	46.00	-6.56	1.00 V	181	16.19	23.25
7	858.10	34.41 QP	46.00	-11.59	1.00 V	151	7.67	26.74
8	924.19	43.47 QP	46.00	-2.53	1.00 V	10	15.26	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	284.65	37.31 QP	46.00	-8.69	2.00 H	130	22.44	14.87
2	395.45	36.09 QP	46.00	-9.91	2.00 H	133	18.30	17.79
3	457.66	36.66 QP	46.00	-9.34	1.00 H	100	17.54	19.12
4	461.54	36.92 QP	46.00	-9.08	2.00 H	133	17.71	19.21
5	494.59	35.18 QP	46.00	-10.82	2.00 H	133	15.23	19.94
6	527.64	36.02 QP	46.00	-9.98	2.00 H	133	15.35	20.67
7	659.82	42.00 QP	46.00	-4.00	2.00 H	133	18.75	23.25
8	758.96	34.11 QP	46.00	-11.89	1.00 H	61	8.29	25.82
9	792.00	34.90 QP	46.00	-11.10	1.00 H	1	8.94	25.96
10	924.19	42.73 QP	46.00	-3.27	1.50 H	13	14.52	28.21

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	33.72 QP	40.00	-6.28	1.00 V	175	21.19	12.54
2	160.24	32.27 QP	43.50	-11.23	1.00 V	97	18.88	13.39
3	395.45	39.72 QP	46.00	-6.28	1.00 V	175	21.93	17.79
4	428.50	34.49 QP	46.00	-11.51	1.00 V	175	15.98	18.52
5	461.54	36.14 QP	46.00	-9.86	1.00 V	175	16.93	19.21
6	527.64	35.07 QP	46.00	-10.93	1.00 V	175	14.40	20.67
7	572.34	37.72 QP	46.00	-8.28	1.00 V	124	15.97	21.75
8	659.82	39.47 QP	46.00	-6.53	1.00 V	175	16.22	23.25
9	858.10	34.34 QP	46.00	-11.66	1.00 V	28	7.60	26.74
10	924.19	43.69 QP	46.00	-2.31	1.00 V	286	15.48	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.

Below 1GHz Worst-Case Data (Normal mode)

Adapter mode with antenna 3, 3

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

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	395.45	37.52 QP	46.00	-8.48	2.50 H	43	19.73	17.79
2	442.10	36.30 QP	46.00	-9.70	1.50 H	16	17.50	18.79
3	527.64	38.74 QP	46.00	-7.26	2.50 H	43	18.07	20.67
4	659.82	41.79 QP	46.00	-4.21	2.50 H	43	18.54	23.25
5	792.00	37.31 QP	46.00	-8.69	1.50 H	58	11.35	25.96
6	924.19	41.69 QP	46.00	-4.31	1.50 H	16	13.48	28.21

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	37.48 QP	40.00	-2.52	1.00 V	130	24.94	12.54
2	395.45	39.07 QP	46.00	-6.93	1.00 V	130	21.29	17.79
3	440.16	38.76 QP	46.00	-7.24	1.00 V	325	20.01	18.75
4	461.54	34.37 QP	46.00	-11.63	1.00 V	130	15.17	19.21
5	527.64	35.68 QP	46.00	-10.32	1.00 V	130	15.01	20.67
6	659.82	37.13 QP	46.00	-8.87	1.00 V	130	13.89	23.25
7	792.00	35.04 QP	46.00	-10.96	1.00 V	178	9.08	25.96
8	924.19	42.12 QP	46.00	-3.88	1.00 V	106	13.91	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	352.69	34.74 QP	46.00	-11.26	2.50 H	154	18.37	16.37
2	395.45	38.25 QP	46.00	-7.75	2.50 H	61	20.46	17.79
3	442.10	35.82 QP	46.00	-10.18	1.50 H	109	17.02	18.79
4	527.64	37.52 QP	46.00	-8.48	2.50 H	61	16.85	20.67
5	659.82	41.69 QP	46.00	-4.31	2.50 H	61	18.44	23.25
6	792.00	36.03 QP	46.00	-9.97	2.50 H	28	10.07	25.96
7	924.19	40.43 QP	46.00	-5.57	1.50 H	109	12.22	28.21

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	38.00 QP	40.00	-2.00	1.00 V	169	25.46	12.54
2	80.54	28.06 QP	40.00	-11.94	1.00 V	178	17.60	10.46
3	117.47	31.58 QP	43.50	-11.92	1.00 V	10	21.00	10.58
4	329.36	35.65 QP	46.00	-10.35	1.00 V	169	19.65	16.01
5	395.45	38.05 QP	46.00	-7.95	1.00 V	169	20.26	17.79
6	428.50	36.61 QP	46.00	-9.39	1.00 V	169	18.10	18.52
7	527.64	35.81 QP	46.00	-10.19	1.00 V	169	15.14	20.67
8	659.82	40.99 QP	46.00	-5.01	1.00 V	169	17.74	23.25
9	924.19	41.91 QP	46.00	-4.09	1.00 V	220	13.70	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.

Below 1GHz Worst-Case Data (Normal mode)

POE mode with antenna 1, 3

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

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	131.08	33.97 QP	43.50	-9.53	1.00 H	61	21.70	12.27
2	329.36	36.07 QP	46.00	-9.93	1.00 H	61	20.06	16.01
3	362.40	36.05 QP	46.00	-9.95	1.00 H	61	19.36	16.69
4	395.45	41.55 QP	46.00	-4.45	1.00 H	61	23.77	17.79
5	428.50	35.87 QP	46.00	-10.13	1.00 H	61	17.36	18.52
6	545.13	41.16 QP	46.00	-4.84	2.00 H	133	20.11	21.06
7	659.82	38.47 QP	46.00	-7.53	1.00 H	61	15.22	23.25
8	792.00	37.97 QP	46.00	-8.03	1.00 H	91	12.00	25.96
9	858.10	35.77 QP	46.00	-10.23	2.00 H	100	9.03	26.74
10	924.19	40.50 QP	46.00	-5.50	1.50 H	127	12.29	28.21

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	29.13 QP	40.00	-10.87	1.00 V	73	15.32	13.80
2	84.43	31.48 QP	40.00	-8.52	1.00 V	37	21.55	9.92
3	395.45	38.79 QP	46.00	-7.21	1.00 V	67	21.00	17.79
4	659.82	35.38 QP	46.00	-10.62	1.00 V	67	12.13	23.25
5	792.00	36.13 QP	46.00	-9.87	1.00 V	73	10.17	25.96
6	924.19	38.49 QP	46.00	-7.51	1.00 V	73	10.28	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	131.08	34.53 QP	43.50	-8.97	1.50 H	79	22.26	12.27
2	329.36	36.37 QP	46.00	-9.63	1.50 H	79	20.36	16.01
3	362.40	36.56 QP	46.00	-9.44	1.50 H	79	19.87	16.69
4	395.45	41.66 QP	46.00	-4.34	1.50 H	79	23.87	17.79
5	428.50	36.06 QP	46.00	-9.94	1.50 H	79	17.55	18.52
6	527.64	36.80 QP	46.00	-9.20	1.50 H	79	16.13	20.67
7	659.82	38.84 QP	46.00	-7.16	1.50 H	79	15.60	23.25
8	792.00	40.20 QP	46.00	-5.80	2.00 H	121	14.23	25.96
9	858.10	35.47 QP	46.00	-10.53	1.50 H	58	8.73	26.74
10	924.19	40.62 QP	46.00	-5.38	2.00 H	142	12.41	28.21

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	28.89 QP	40.00	-11.11	1.00 V	82	15.08	13.80
2	80.54	31.08 QP	40.00	-8.92	1.00 V	88	20.62	10.46
3	109.70	30.31 QP	43.50	-13.19	1.00 V	100	20.44	9.87
4	131.08	32.25 QP	43.50	-11.25	1.00 V	40	19.98	12.27
5	395.45	38.61 QP	46.00	-7.39	1.00 V	40	20.82	17.79
6	527.64	33.33 QP	46.00	-12.67	1.00 V	40	12.66	20.67
7	659.82	35.51 QP	46.00	-10.49	1.00 V	40	12.27	23.25
8	792.00	36.33 QP	46.00	-9.67	1.00 V	82	10.37	25.96
9	858.10	32.91 QP	46.00	-13.09	1.00 V	91	6.17	26.74
10	924.19	38.18 QP	46.00	-7.82	1.00 V	52	9.97	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.

Below 1GHz Worst-Case Data (Normal mode)

POE mode with antenna 2, 3

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

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	131.08	33.55 QP	43.50	-9.95	1.00 H	277	21.28	12.27
2	164.13	30.51 QP	43.50	-12.99	1.00 H	277	17.35	13.15
3	329.36	33.94 QP	46.00	-12.06	1.00 H	277	17.94	16.01
4	362.40	36.99 QP	46.00	-9.01	1.00 H	277	20.30	16.69
5	395.45	41.30 QP	46.00	-4.70	1.00 H	277	23.51	17.79
6	527.64	35.22 QP	46.00	-10.78	1.00 H	277	14.55	20.67
7	659.82	36.86 QP	46.00	-9.14	1.00 H	277	13.62	23.25
8	792.00	34.82 QP	46.00	-11.18	1.00 H	94	8.86	25.96
9	858.10	32.43 QP	46.00	-13.57	1.50 H	340	5.69	26.74
10	924.19	38.14 QP	46.00	-7.86	2.00 H	85	9.93	28.21

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	31.28 QP	40.00	-8.72	1.00 V	313	16.56	14.72
2	84.43	32.35 QP	40.00	-7.65	1.00 V	229	22.42	9.92
3	103.87	30.93 QP	43.50	-12.57	1.00 V	337	21.59	9.34
4	362.40	32.96 QP	46.00	-13.04	1.00 V	250	16.26	16.69
5	395.45	39.38 QP	46.00	-6.62	1.00 V	250	21.59	17.79
6	527.64	32.81 QP	46.00	-13.19	1.00 V	250	12.14	20.67
7	659.82	32.68 QP	46.00	-13.32	1.00 V	250	9.43	23.25
8	792.00	34.61 QP	46.00	-11.39	1.00 V	337	8.65	25.96
9	858.10	32.41 QP	46.00	-13.59	1.00 V	277	5.67	26.74
10	924.19	37.48 QP	46.00	-8.52	1.00 V	259	9.27	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	26.00 QP	40.00	-14.00	1.50 H	10	16.08	9.92
2	131.08	33.98 QP	43.50	-9.52	2.00 H	337	21.71	12.27
3	164.13	30.19 QP	43.50	-13.31	2.00 H	337	17.03	13.15
4	313.81	32.01 QP	46.00	-13.99	1.50 H	199	16.21	15.80
5	329.36	35.00 QP	46.00	-11.00	2.00 H	337	18.99	16.01
6	362.40	36.90 QP	46.00	-9.10	2.00 H	337	20.21	16.69
7	395.45	41.21 QP	46.00	-4.79	2.00 H	337	23.42	17.79
8	453.77	33.63 QP	46.00	-12.37	1.50 H	187	14.60	19.04
9	461.54	32.13 QP	46.00	-13.87	2.00 H	337	12.92	19.21
10	550.96	36.33 QP	46.00	-9.67	2.00 H	175	15.14	21.19
11	659.82	36.49 QP	46.00	-9.51	2.00 H	337	13.25	23.25
12	792.00	35.22 QP	46.00	-10.78	1.50 H	103	9.25	25.96
13	858.10	32.06 QP	46.00	-13.94	2.00 H	28	5.32	26.74
14	924.19	37.57 QP	46.00	-8.43	2.00 H	37	9.36	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	31.14 QP	40.00	-8.86	1.00 V	253	16.42	14.72
2	84.43	31.39 QP	40.00	-8.61	1.00 V	262	21.46	9.92
3	109.70	30.77 QP	43.50	-12.73	1.00 V	271	20.90	9.87
4	329.36	32.13 QP	46.00	-13.87	1.00 V	208	16.12	16.01
5	362.40	32.68 QP	46.00	-13.32	1.00 V	208	15.99	16.69
6	395.45	38.82 QP	46.00	-7.18	1.00 V	208	21.03	17.79
7	445.99	37.45 QP	46.00	-8.55	1.00 V	241	18.58	18.87
8	527.64	34.04 QP	46.00	-11.96	1.00 V	208	13.36	20.67
9	659.82	33.52 QP	46.00	-12.48	1.00 V	208	10.28	23.25
10	792.00	34.56 QP	46.00	-11.44	1.00 V	343	8.60	25.96
11	924.19	38.59 QP	46.00	-7.41	1.00 V	238	10.38	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.

Below 1GHz Worst-Case Data (Normal mode)

POE mode with antenna 3, 3

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

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	306.03	36.54 QP	46.00	-9.46	1.00 H	40	20.84	15.70
2	329.36	37.51 QP	46.00	-8.49	1.00 H	118	21.50	16.01
3	362.40	32.95 QP	46.00	-13.05	1.00 H	118	16.26	16.69
4	395.45	43.18 QP	46.00	-2.82	1.00 H	118	25.39	17.79
5	527.64	34.63 QP	46.00	-11.37	1.00 H	118	13.96	20.67
6	659.82	32.61 QP	46.00	-13.39	1.00 H	118	9.37	23.25
7	792.00	32.49 QP	46.00	-13.51	1.00 H	253	6.53	25.96
8	924.19	36.30 QP	46.00	-9.70	1.00 H	355	8.09	28.21

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	26.37 QP	40.00	-13.63	1.00 V	280	11.65	14.72
2	84.43	32.16 QP	40.00	-7.84	1.00 V	358	22.24	9.92
3	103.87	30.05 QP	43.50	-13.45	1.00 V	97	20.71	9.34
4	395.45	39.26 QP	46.00	-6.74	1.00 V	160	21.47	17.79
5	445.99	32.58 QP	46.00	-13.42	1.00 V	232	13.71	18.87
6	527.64	36.21 QP	46.00	-9.79	1.00 V	160	15.54	20.67
7	659.82	36.18 QP	46.00	-9.82	1.00 V	160	12.93	23.25
8	792.00	34.02 QP	46.00	-11.98	1.00 V	97	8.06	25.96
9	858.10	32.67 QP	46.00	-13.33	1.00 V	235	5.93	26.74
10	924.19	39.70 QP	46.00	-6.30	1.00 V	274	11.49	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.

Below 1GHz Worst-Case Data (Turbo mode)

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

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	362.40	32.00 QP	46.00	-14.00	2.00 H	142	15.31	16.69
2	395.45	39.75 QP	46.00	-6.25	2.00 H	142	21.97	17.79
3	442.10	37.02 QP	46.00	-8.98	1.50 H	73	18.23	18.79
4	461.54	33.16 QP	46.00	-12.84	2.00 H	142	13.96	19.21
5	527.64	36.20 QP	46.00	-9.80	2.00 H	142	15.53	20.67
6	858.10	32.08 QP	46.00	-13.92	1.50 H	274	5.34	26.74
7	924.19	38.99 QP	46.00	-7.01	1.50 H	73	10.78	28.21

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	27.19 QP	40.00	-12.81	1.00 V	292	12.47	14.72
2	84.43	31.22 QP	40.00	-8.78	1.00 V	238	21.29	9.92
3	395.45	39.26 QP	46.00	-6.74	1.00 V	226	21.47	17.79
4	440.16	35.91 QP	46.00	-10.09	1.00 V	262	17.15	18.75
5	527.64	33.85 QP	46.00	-12.15	1.00 V	226	13.18	20.67
6	659.82	34.45 QP	46.00	-11.55	1.00 V	226	11.20	23.25
7	815.33	38.88 QP	46.00	-7.12	1.00 V	244	12.68	26.20
8	924.19	42.19 QP	46.00	-3.81	1.00 V	307	13.98	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.

802.11b DSSS modulation
Adapter mode with antenna 1, 3

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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	36.99 PK	74.00	-37.01	1.29 H	0	8.25	28.74
1	1608.00	25.07 AV	54.00	-28.93	1.29 H	0	-3.67	28.74
2	2390.00	51.50 PK	74.00	-22.50	1.29 H	178	20.11	31.39
2	2390.00	41.94 AV	54.00	-12.06	1.29 H	178	10.55	31.39
3	*2412.00	81.01 PK			1.29 H	178	49.55	31.46
3	*2412.00	77.27 AV			1.29 H	178	45.81	31.46

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	40.41 PK	74.00	-33.59	1.15 V	349	11.67	28.74
1	1608.00	33.27 AV	54.00	-20.73	1.15 V	349	4.53	28.74
2	2386.00	55.64 PK	74.00	-18.36	1.22 V	341	24.27	31.37
2	2386.00	45.01 AV	54.00	-8.99	1.22 V	341	13.64	31.37
3	*2412.00	101.44 PK			1.14 V	348	69.98	31.46
3	*2412.00	97.80 AV			1.14 V	348	66.34	31.46
4	4824.00	46.21 PK	74.00	-27.79	1.02 V	25	9.08	37.13
4	4824.00	33.55 AV	54.00	-20.45	1.02 V	25	-3.58	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. The limit value is defined as per 15.247
6. “ * ” : Fundamental frequency

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

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	37.12 PK	74.00	-36.88	1.12 H	310	8.33	28.79
1	1624.00	25.47 AV	54.00	-28.53	1.12 H	310	-3.32	28.79
2	*2437.00	81.12 PK			1.21 H	177	49.58	31.54
2	*2437.00	77.30 AV			1.21 H	177	45.76	31.54

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	40.78 PK	74.00	-33.22	1.11 V	311	11.99	28.79
1	1624.00	34.10 AV	54.00	-19.90	1.11 V	311	5.31	28.79
2	*2437.00	101.63 PK			1.07 V	188	70.09	31.54
2	*2437.00	97.79 AV			1.07 V	188	66.25	31.54
3	4874.00	46.21 PK	74.00	-27.79	1.00 V	358	8.92	37.29
3	4874.00	33.27 AV	54.00	-20.73	1.00 V	358	-4.02	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. The limit value is defined as per 15.247
6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	37.24 PK	74.00	-36.76	1.07 H	247	8.39	28.85
1	1641.00	25.66 AV	54.00	-28.34	1.07 H	247	-3.19	28.85
2	*2462.00	81.10 PK			1.03 H	321	49.48	31.62
2	*2462.00	77.08 AV			1.03 H	321	45.46	31.62
3	2487.00	51.07 PK	74.00	-22.93	1.03 H	321	19.36	31.71
3	2487.00	41.28 AV	54.00	-12.72	1.03 H	321	9.57	31.71

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	40.88 PK	74.00	-33.12	1.10 V	134	12.03	28.85
1	1641.00	33.57 AV	54.00	-20.43	1.10 V	134	4.72	28.85
2	*2462.00	101.27 PK			1.30 V	179	69.65	31.62
2	*2462.00	97.68 AV			1.30 V	179	66.06	31.62
3	2487.00	56.00 PK	74.00	-18.00	1.30 V	179	24.29	31.71
3	2487.00	45.82 AV	54.00	-8.18	1.30 V	179	14.11	31.71
4	4924.00	47.20 PK	74.00	-26.80	1.07 V	120	9.76	37.44
4	4924.00	32.86 AV	54.00	-21.14	1.07 V	120	-4.58	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	37.42 PK	74.00	-36.58	1.03 H	0	8.68	28.74
1	1608.00	26.75 AV	54.00	-27.25	1.03 H	0	-1.99	28.74
2	2390.00	52.11 PK	74.00	-21.89	1.31 H	300	20.72	31.39
2	2390.00	42.63 AV	54.00	-11.37	1.31 H	300	11.24	31.39
3	*2412.00	83.42 PK			1.31 H	300	51.96	31.46
3	*2412.00	80.17 AV			1.31 H	300	48.71	31.46
4	4824.00	46.62 PK	74.00	-27.38	1.04 H	135	9.49	37.13
4	4824.00	32.52 AV	54.00	-21.48	1.04 H	135	-4.61	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	39.85 PK	74.00	-34.15	1.20 V	314	11.11	28.74
1	1608.00	32.94 AV	54.00	-21.06	1.20 V	314	4.20	28.74
2	2390.00	55.41 PK	74.00	-18.59	1.11 V	310	24.02	31.39
2	2390.00	44.39 AV	54.00	-9.61	1.11 V	310	13.00	31.39
3	*2412.00	104.86 PK			1.11 V	310	73.40	31.46
3	*2412.00	93.77 AV			1.11 V	310	62.31	31.46
4	4824.00	45.36 PK	74.00	-28.64	1.06 V	10	8.23	37.13
4	4824.00	32.94 AV	54.00	-21.06	1.06 V	10	-4.19	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	38.66 PK	74.00	-35.34	1.09 H	196	9.87	28.79
1	1624.00	27.49 AV	54.00	-26.51	1.09 H	196	-1.30	28.79
2	*2437.00	83.53 PK			1.29 H	321	51.99	31.54
2	*2437.00	80.46 AV			1.29 H	321	48.92	31.54
3	4874.00	46.09 PK	74.00	-27.91	1.08 H	147	8.80	37.29
3	4874.00	32.86 AV	54.00	-21.14	1.08 H	147	-4.43	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	40.12 PK	74.00	-33.88	1.08 V	344	11.33	28.79
1	1624.00	33.10 AV	54.00	-20.90	1.08 V	344	4.31	28.79
2	*2437.00	104.95 PK			1.31 V	263	73.41	31.54
2	*2437.00	93.86 AV			1.31 V	263	62.32	31.54
3	4824.00	45.23 PK	74.00	-28.77	1.06 V	360	8.10	37.13
3	4824.00	33.01 AV	54.00	-20.99	1.06 V	360	-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. The limit value is defined as per 15.247
 6. “ * “ : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	38.69 PK	74.00	-35.31	1.21 H	233	9.84	28.85
1	1641.00	27.89 AV	54.00	-26.11	1.21 H	233	-0.96	28.85
2	*2462.00	82.11 PK			1.29 H	347	50.49	31.62
2	*2462.00	79.34 AV			1.29 H	347	47.72	31.62
3	2483.50	52.32 PK	74.00	-21.68	1.29 H	347	20.62	31.70
3	2483.50	42.79 AV	54.00	-11.21	1.29 H	347	11.09	31.70
4	4924.00	45.90 PK	74.00	-28.10	1.00 H	0	8.46	37.44
4	4924.00	32.18 AV	54.00	-21.82	1.00 H	0	-5.26	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	38.97 PK	74.00	-35.03	1.07 V	169	10.12	28.85
1	1641.00	32.65 AV	54.00	-21.35	1.07 V	169	3.80	28.85
2	*2462.00	103.07 PK			1.09 V	333	71.45	31.62
2	*2462.00	92.45 AV			1.09 V	333	60.83	31.62
3	2483.50	56.80 PK	74.00	-17.20	1.09 V	333	25.10	31.70
3	2483.50	45.02 AV	54.00	-8.98	1.09 V	333	13.32	31.70
4	4924.00	45.21 PK	74.00	-28.79	1.11 V	360	7.77	37.44
4	4924.00	32.47 AV	54.00	-21.53	1.11 V	360	-4.97	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. The limit value is defined as per 15.247
6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	38.34 PK	74.00	-35.66	1.07 H	147	9.55	28.79
1	1624.00	27.56 AV	54.00	-26.44	1.07 H	147	-1.23	28.79
2	2390.00	52.30 PK	74.00	-21.70	1.29 H	360	20.91	31.39
2	2390.00	42.68 AV	54.00	-11.32	1.29 H	360	11.29	31.39
3	*2437.00	81.98 PK			1.29 H	360	50.44	31.54
3	*2437.00	78.24 AV			1.29 H	360	46.70	31.54
4	2483.50	52.45 PK	74.00	-21.55	1.29 H	360	20.75	31.70
4	2483.50	42.98 AV	54.00	-11.02	1.29 H	360	11.28	31.70
5	4874.00	47.10 PK	74.00	-26.90	1.07 H	144	9.81	37.29
5	4874.00	32.63 AV	54.00	-21.37	1.07 H	144	-4.66	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	38.44 PK	74.00	-35.56	1.31 V	247	9.65	28.79
1	1624.00	31.87 AV	54.00	-22.13	1.31 V	247	3.08	28.79
2	2390.00	55.34 PK	74.00	-18.66	1.12 V	181	23.95	31.39
2	2390.00	44.46 AV	54.00	-9.54	1.12 V	181	13.07	31.39
3	*2437.00	102.07 PK			1.12 V	181	70.53	31.54
3	*2437.00	91.86 AV			1.12 V	181	60.32	31.54
4	2483.50	55.14 PK	74.00	-18.86	1.12 V	181	23.44	31.70
4	2483.50	44.80 AV	54.00	-9.20	1.12 V	181	13.10	31.70
5	4874.00	45.24 PK	74.00	-28.76	1.11 V	0	7.95	37.29
5	4874.00	32.76 AV	54.00	-21.24	1.11 V	0	-4.53	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. The limit value is defined as per 15.247
 6. “ * ” : Fundamental frequency

802.11b DSSS modulation Adapter mode with antenna 2, 3

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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B		

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	38.52 PK	74.00	-35.48	1.44 H	166	9.78	28.74
1	1608.00	27.32 AV	54.00	-26.68	1.44 H	166	-1.42	28.74
2	2390.00	52.67 PK	74.00	-21.33	1.49 H	171	21.28	31.39
2	2390.00	43.88 AV	54.00	-10.12	1.49 H	171	12.49	31.39
3	*2412.00	89.05 PK			1.49 H	171	57.59	31.46
3	*2412.00	85.51 AV			1.49 H	171	54.05	31.46
4	4824.00	45.54 PK	74.00	-28.46	1.41 H	240	8.41	37.13
4	4824.00	32.87 AV	54.00	-21.13	1.41 H	240	-4.26	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	40.96 PK	74.00	-33.04	1.81 V	11	12.22	28.74
1	1608.00	35.62 AV	54.00	-18.38	1.81 V	11	6.88	28.74
2	2386.00	58.02 PK	74.00	-15.98	1.01 V	31	26.65	31.37
2	2386.00	47.49 AV	54.00	-6.51	1.01 V	31	16.12	31.37
3	*2412.00	103.52 PK			1.18 V	17	72.06	31.46
3	*2412.00	100.09 AV			1.18 V	17	68.63	31.46
4	3216.00	43.47 PK	74.00	-30.53	1.29 V	0	10.36	33.11
4	3216.00	33.33 AV	54.00	-20.67	1.29 V	0	0.22	33.11
5	4824.00	45.53 PK	74.00	-28.47	1.21 V	4	8.40	37.13
5	4824.00	33.39 AV	54.00	-20.61	1.21 V	4	-3.74	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. The limit value is defined as per 15.247
6. “ * ” : Fundamental frequency

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

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	38.64 PK	74.00	-35.36	1.45 H	170	9.85	28.79
1	1624.00	27.85 AV	54.00	-26.15	1.45 H	170	-0.94	28.79
2	*2437.00	89.12 PK			1.50 H	175	57.58	31.54
2	*2437.00	86.32 AV			1.50 H	175	54.78	31.54
3	4874.00	45.66 PK	74.00	-28.34	1.45 H	220	8.37	37.29
3	4874.00	32.19 AV	54.00	-21.81	1.45 H	220	-5.10	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	41.14 PK	74.00	-32.86	1.30 V	360	12.35	28.79
1	1624.00	35.82 AV	54.00	-18.18	1.30 V	360	7.03	28.79
2	*2437.00	103.87 PK			1.21 V	350	72.33	31.54
2	*2437.00	100.11 AV			1.21 V	350	68.57	31.54
3	4874.00	45.88 PK	74.00	-28.12	1.23 V	7	8.59	37.29
3	4874.00	33.52 AV	54.00	-20.48	1.23 V	7	-3.77	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. The limit value is defined as per 15.247
 6. “ * “ : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B		

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	38.42 PK	74.00	-35.58	1.51 H	170	9.57	28.85
1	1641.00	27.98 AV	54.00	-26.02	1.51 H	170	-0.87	28.85
2	*2462.00	90.10 PK			1.45 H	169	58.48	31.62
2	*2462.00	85.46 AV			1.45 H	169	53.84	31.62
3	2483.50	52.54 PK	74.00	-21.46	1.50 H	164	20.84	31.70
3	2483.50	43.70 AV	54.00	-10.30	1.50 H	164	12.00	31.70
4	4924.00	45.26 PK	74.00	-28.74	1.39 H	246	7.82	37.44
4	4924.00	33.21 AV	54.00	-20.79	1.39 H	246	-4.23	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	41.15 PK	74.00	-32.85	1.75 V	360	12.30	28.85
1	1641.00	35.49 AV	54.00	-18.51	1.75 V	360	6.64	28.85
2	*2462.00	103.24 PK			1.20 V	21	71.62	31.62
2	*2462.00	101.03 AV			1.20 V	21	69.41	31.62
3	2483.50	58.13 PK	74.00	-15.87	1.03 V	45	26.43	31.70
3	2483.50	47.19 AV	54.00	-6.81	1.03 V	45	15.49	31.70
4	4924.00	45.61 PK	74.00	-28.39	1.25 V	10	8.17	37.44
4	4924.00	34.10 AV	54.00	-19.90	1.25 V	10	-3.34	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B		

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	40.08 PK	74.00	-33.92	1.08 H	249	11.34	28.74
1	1608.00	31.83 AV	54.00	-22.17	1.08 H	249	3.09	28.74
2	2390.00	54.72 PK	74.00	-19.28	1.39 H	254	23.33	31.39
2	2390.00	43.94 AV	54.00	-10.06	1.39 H	254	12.55	31.39
3	*2412.00	91.01 PK			1.39 H	254	59.55	31.46
3	*2412.00	81.18 AV			1.39 H	254	49.72	31.46
4	4824.00	45.68 PK	74.00	-28.32	1.08 H	240	8.55	37.13
4	4824.00	32.57 AV	54.00	-21.43	1.08 H	240	-4.56	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	43.42 PK	74.00	-30.58	1.00 V	90	14.68	28.74
1	1608.00	39.74 AV	54.00	-14.26	1.00 V	90	11.00	28.74
2	2390.00	56.26 PK	74.00	-17.74	1.40 V	286	24.87	31.39
2	2390.00	45.82 AV	54.00	-8.18	1.40 V	286	14.43	31.39
3	*2412.00	106.24 PK			1.40 V	286	74.78	31.46
3	*2412.00	95.46 AV			1.40 V	286	64.00	31.46
4	3216.00	45.08 PK	74.00	-28.92	1.14 V	156	11.97	33.11
4	3216.00	36.45 AV	54.00	-17.55	1.14 V	156	3.34	33.11
5	4824.00	45.85 PK	74.00	-28.15	1.02 V	60	8.72	37.13
5	4824.00	32.94 AV	54.00	-21.06	1.02 V	60	-4.19	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B		

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	40.12 PK	74.00	-33.88	1.10 H	250	11.33	28.79
1	1624.00	31.58 AV	54.00	-22.42	1.10 H	250	2.79	28.79
2	*2437.00	91.20 PK			1.42 H	256	59.66	31.54
2	*2437.00	81.25 AV			1.42 H	256	49.71	31.54

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	43.39 PK	74.00	-30.61	1.01 V	65	14.60	28.79
1	1624.00	39.86 AV	54.00	-14.14	1.01 V	65	11.07	28.79
2	*2437.00	106.16 PK			1.40 V	290	74.62	31.54
2	*2437.00	95.52 AV			1.40 V	290	63.98	31.54

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. The limit value is defined as per 15.247
6. “ * “ : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B		

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	74.00	-33.90	1.06 H	261	11.25	28.85
1	1641.00	31.46 AV	54.00	-22.54	1.06 H	261	2.61	28.85
2	*2462.00	90.23 PK			1.35 H	217	58.61	31.62
2	*2462.00	80.14 AV			1.35 H	217	48.52	31.62
3	2483.50	54.35 PK	74.00	-19.65	1.42 H	280	22.65	31.70
3	2483.50	43.82 AV	54.00	-10.18	1.42 H	280	12.12	31.70
4	4924.00	45.27 PK	74.00	-28.73	1.21 H	235	7.83	37.44
4	4924.00	32.19 AV	54.00	-21.81	1.21 H	235	-5.25	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	43.27 PK	74.00	-30.73	1.06 V	94	14.42	28.85
1	1641.00	39.10 AV	54.00	-14.90	1.06 V	94	10.25	28.85
2	*2462.00	105.41 PK			1.45 V	264	73.79	31.62
2	*2462.00	94.28 AV			1.45 V	264	62.66	31.62
3	2483.50	55.39 PK	74.00	-18.61	1.35 V	210	23.69	31.70
3	2483.50	44.21 AV	54.00	-9.79	1.35 V	210	12.51	31.70
4	4924.00	44.91 PK	74.00	-29.09	1.22 V	65	7.47	37.44
4	4924.00	32.55 AV	54.00	-21.45	1.22 V	65	-4.89	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. The limit value is defined as per 15.247
6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	B		

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	40.57 PK	74.00	-33.43	1.10 H	265	11.78	28.79
1	1624.00	32.08 AV	54.00	-21.92	1.10 H	265	3.29	28.79
2	2390.00	53.40 PK	74.00	-20.60	1.11 H	180	22.01	31.39
2	2390.00	42.67 AV	54.00	-11.33	1.11 H	180	11.28	31.39
3	*2437.00	89.20 PK			1.11 H	180	57.66	31.54
3	*2437.00	79.50 AV			1.11 H	180	47.96	31.54
4	2483.50	52.47 PK	74.00	-21.53	1.11 H	180	20.77	31.70
4	2483.50	43.20 AV	54.00	-10.80	1.11 H	180	11.50	31.70

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	43.54 PK	74.00	-30.46	1.11 V	14	14.75	28.79
1	1624.00	39.21 AV	54.00	-14.79	1.11 V	14	10.42	28.79
2	2390.00	56.47 PK	74.00	-17.53	1.21 V	300	25.08	31.39
2	2390.00	45.39 AV	54.00	-8.61	1.21 V	300	14.00	31.39
3	*2437.00	105.02 PK			1.21 V	300	73.48	31.54
3	*2437.00	94.24 AV			1.21 V	300	62.70	31.54
4	2483.50	55.10 PK	74.00	-18.90	1.21 V	300	23.40	31.70
4	2483.50	44.36 AV	54.00	-9.64	1.21 V	300	12.66	31.70
5	4874.00	44.20 PK	74.00	-29.80	1.07 V	100	6.91	37.29
5	4874.00	31.04 AV	54.00	-22.96	1.07 V	100	-6.25	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. The limit value is defined as per 15.247
 6. “ * ” : Fundamental frequency

802.11b DSSS modulation Adapter mode with antenna 3, 3

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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C		

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	42.09 PK	74.00	-31.91	1.28 H	222	13.35	28.74
1	1608.00	36.95 AV	54.00	-17.05	1.28 H	222	8.21	28.74
2	2386.00	54.20 PK	74.00	-19.80	1.04 H	208	22.83	31.37
2	2386.00	44.80 AV	54.00	-9.20	1.04 H	208	13.43	31.37
3	*2412.00	98.58 PK			1.04 H	208	67.12	31.46
3	*2412.00	95.17 AV			1.04 H	208	63.71	31.46
4	3216.00	42.73 PK	74.00	-31.27	1.05 H	204	9.62	33.11
4	3216.00	32.03 AV	54.00	-21.97	1.05 H	204	-1.08	33.11
5	4824.00	46.92 PK	74.00	-27.08	1.05 H	304	9.79	37.13
5	4824.00	33.96 AV	54.00	-20.04	1.05 H	304	-3.17	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	42.72 PK	74.00	-31.28	1.25 V	355	13.98	28.74
1	1608.00	37.53 AV	54.00	-16.47	1.25 V	355	8.79	28.74
2	2360.00	57.98 PK	74.00	-16.02	1.28 V	242	26.70	31.28
2	2360.00	48.27 AV	54.00	-5.73	1.28 V	242	16.99	31.28
3	2386.00	60.53 PK	74.00	-13.47	1.00 V	133	29.16	31.37
3	2386.00	51.96 AV	54.00	-2.04	1.00 V	133	20.59	31.37
4	*2412.00	109.22 PK			1.17 V	157	77.76	31.46
4	*2412.00	105.35 AV			1.17 V	157	73.89	31.46
5	3216.00	47.54 PK	74.00	-26.46	1.00 V	151	14.43	33.11
5	3216.00	42.53 AV	54.00	-11.47	1.00 V	151	9.42	33.11
6	4824.00	46.67 PK	74.00	-27.33	1.09 V	8	9.54	37.13
6	4824.00	36.95 AV	54.00	-17.05	1.09 V	8	-0.18	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. The limit value is defined as per 15.247
6. “ * ” : Fundamental frequency

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

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	43.14 PK	74.00	-30.86	1.30 H	340	14.35	28.79
1	1624.00	37.08 AV	54.00	-16.92	1.30 H	340	8.29	28.79
2	*2437.00	98.47 PK			1.07 H	310	66.93	31.54
2	*2437.00	95.07 AV			1.07 H	310	63.53	31.54
3	4874.00	47.11 PK	74.00	-26.89	1.07 H	100	9.82	37.29
3	4874.00	34.20 AV	54.00	-19.80	1.07 H	100	-3.09	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	43.20 PK	74.00	-30.80	1.21 V	10	14.41	28.79
1	1624.00	38.44 AV	54.00	-15.56	1.21 V	10	9.65	28.79
2	*2437.00	109.54 PK			1.20 V	160	78.00	31.54
2	*2437.00	105.56 AV			1.20 V	160	74.02	31.54
3	3248.00	48.56 PK	74.00	-25.44	1.00 V	144	15.37	33.19
3	3248.00	43.10 AV	54.00	-10.90	1.00 V	144	9.91	33.19
4	4874.00	47.50 PK	74.00	-26.50	1.11 V	360	10.21	37.29
4	4874.00	37.08 AV	54.00	-16.92	1.11 V	360	-0.21	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. The limit value is defined as per 15.247
6. “ * “ : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C		

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	43.54 PK	74.00	-30.46	1.30 H	211	14.69	28.85
1	1641.00	37.21 AV	54.00	-16.79	1.30 H	211	8.36	28.85
2	*2462.00	98.89 PK			1.07 H	180	67.27	31.62
2	*2462.00	95.47 AV			1.07 H	180	63.85	31.62
3	2488.00	55.70 PK	74.00	-18.30	1.10 H	181	23.99	31.71
3	2488.00	45.68 AV	54.00	-8.32	1.10 H	181	13.97	31.71
4	4924.00	46.54 PK	74.00	-27.46	1.11 H	300	9.10	37.44
4	4924.00	33.70 AV	54.00	-20.30	1.11 H	300	-3.74	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	43.14 PK	74.00	-30.86	1.21 V	247	14.29	28.85
1	1641.00	38.08 AV	54.00	-15.92	1.21 V	247	9.23	28.85
2	2360.00	59.20 PK	74.00	-14.80	1.10 V	194	27.92	31.28
2	2360.00	48.69 AV	54.00	-5.31	1.10 V	194	17.41	31.28
3	*2462.00	109.27 PK			1.27 V	49	77.65	31.62
3	*2462.00	105.56 AV			1.27 V	49	73.94	31.62
4	2488.00	60.54 PK	74.00	-13.46	1.27 V	47	28.83	31.71
4	2488.00	51.57 AV	54.00	-2.43	1.27 V	47	19.86	31.71
5	3282.00	46.70 PK	74.00	-27.30	1.01 V	151	13.43	33.27
5	3282.00	42.08 AV	54.00	-11.92	1.01 V	151	8.81	33.27
6	4924.00	55.39 PK	74.00	-18.61	1.24 V	298	17.95	37.44
6	4924.00	42.52 AV	54.00	-11.48	1.24 V	298	5.08	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C		

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	45.72 PK	74.00	-28.28	1.00 H	296	17.60	28.13
1	1608.00	42.68 AV	54.00	-11.32	1.00 H	296	14.56	28.13
2	2390.00	53.10 PK	74.00	-20.90	1.47 H	358	21.88	31.22
2	2390.00	43.62 AV	54.00	-10.38	1.47 H	358	12.40	31.22
3	*2412.00	99.64 PK			1.47 H	358	68.33	31.31
3	*2412.00	88.23 AV			1.47 H	358	56.92	31.31
4	3216.00	44.66 PK	74.00	-29.34	1.01 H	298	11.71	32.95
4	3216.00	36.08 AV	54.00	-17.92	1.01 H	298	3.13	32.95
5	4824.00	44.87 PK	74.00	-29.13	1.00 H	75	7.87	37.00
5	4824.00	32.73 AV	54.00	-21.27	1.00 H	75	-4.27	37.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1608.00	46.73 PK	74.00	-27.27	1.37 V	360	18.61	28.13
1	1608.00	43.65 AV	54.00	-10.35	1.37 V	360	15.53	28.13
2	2360.00	60.46 PK	74.00	-13.54	1.00 V	198	29.36	31.10
2	2360.00	50.61 AV	54.00	-3.39	1.00 V	198	19.51	31.10
3	2390.00	68.31 PK	74.00	-5.69	1.00 V	133	37.09	31.22
3	2390.00	52.36 AV	54.00	-1.64	1.00 V	133	21.14	31.22
4	*2412.00	110.78 PK			1.00 V	148	79.47	31.31
4	*2412.00	100.51 AV			1.00 V	148	69.20	31.31
5	3216.00	51.03 PK	74.00	-22.97	1.16 V	152	18.08	32.95
5	3216.00	47.87 AV	54.00	-6.13	1.16 V	152	14.92	32.95
6	4824.00	45.25 PK	74.00	-28.75	1.00 V	0	8.25	37.00
6	4824.00	32.55 AV	54.00	-21.45	1.00 V	0	-4.45	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C		

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	44.89 PK	74.00	-29.11	1.01 H	311	16.73	28.16
1	1624.00	42.07 AV	54.00	-11.93	1.01 H	311	13.91	28.16
2	*2437.00	99.85 PK			1.40 H	0	68.45	31.40
2	*2437.00	88.40 AV			1.40 H	0	57.00	31.40
3	3248.00	43.57 PK	74.00	-30.43	1.04 H	314	10.58	32.99
3	3248.00	35.68 AV	54.00	-18.32	1.04 H	314	2.69	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	46.20 PK	74.00	-27.80	1.21 V	354	18.04	28.16
1	1624.00	43.31 AV	54.00	-10.69	1.21 V	354	15.15	28.16
2	2360.00	60.21 PK	74.00	-13.79	1.00 V	199	29.11	31.10
2	2360.00	50.39 AV	54.00	-3.61	1.00 V	199	19.29	31.10
3	*2437.00	110.83 PK			1.00 V	181	79.43	31.40
3	*2437.00	100.67 AV			1.00 V	181	69.27	31.40
4	3248.00	50.47 PK	74.00	-23.53	1.10 V	163	17.48	32.99
4	3248.00	47.53 AV	54.00	-6.47	1.10 V	163	14.54	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. The limit value is defined as per 15.247
 6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C		

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	46.50 PK	74.00	-27.50	1.23 H	247	17.65	28.85
1	1641.00	43.10 AV	54.00	-10.90	1.23 H	247	14.25	28.85
2	*2462.00	98.50 PK			1.39 H	360	66.88	31.62
2	*2462.00	87.46 AV			1.39 H	360	55.84	31.62
3	2483.50	53.40 PK	74.00	-20.60	1.39 H	360	21.70	31.70
3	2483.50	44.10 AV	54.00	-9.90	1.39 H	360	12.40	31.70
4	3282.00	46.50 PK	74.00	-27.50	1.07 H	147	13.23	33.27
4	3282.00	37.80 AV	54.00	-16.20	1.07 H	147	4.53	33.27

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	46.57 PK	74.00	-27.43	1.21 V	344	18.38	28.19
1	1641.00	43.89 AV	54.00	-10.11	1.21 V	344	15.70	28.19
2	2360.00	59.67 PK	74.00	-14.33	1.11 V	258	28.57	31.10
2	2360.00	49.52 AV	54.00	-4.48	1.11 V	258	18.42	31.10
3	*2462.00	109.25 PK			1.27 V	204	77.75	31.50
3	*2462.00	99.10 AV			1.27 V	204	67.60	31.50
4	2483.50	60.60 PK	74.00	-13.40	1.27 V	204	29.01	31.59
4	2483.50	47.40 AV	54.00	-6.60	1.27 V	204	15.81	31.59
5	3282.00	50.89 PK	74.00	-23.11	1.19 V	145	17.86	33.03
5	3282.00	47.59 AV	54.00	-6.41	1.19 V	145	14.56	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. The limit value is defined as per 15.247
6. “ * ” : 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
TESTED BY	Match Tsui	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	C		

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	44.54 PK	74.00	-29.46	1.04 H	211	15.75	28.79
1	1624.00	41.07 AV	54.00	-12.93	1.04 H	211	12.28	28.79
2	2390.00	54.47 PK	74.00	-19.53	1.34 H	180	23.08	31.39
2	2390.00	44.38 AV	54.00	-9.62	1.34 H	180	12.99	31.39
3	*2437.00	97.54 PK			1.37 H	178	66.00	31.54
3	*2437.00	86.09 AV			1.37 H	178	54.55	31.54
4	2483.50	54.88 PK	74.00	-19.12	1.21 H	196	23.18	31.70
4	2483.50	44.89 AV	54.00	-9.11	1.21 H	196	13.19	31.70
5	3248.00	43.87 PK	74.00	-30.13	1.11 H	136	10.68	33.19
5	3248.00	35.98 AV	54.00	-18.02	1.11 H	136	2.79	33.19

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	46.22 PK	74.00	-27.78	1.16 V	54	17.43	28.79
1	1624.00	43.89 AV	54.00	-10.11	1.16 V	54	15.10	28.79
2	2320.00	56.22 PK	74.00	-17.78	1.09 V	134	25.07	31.15
2	2320.00	47.45 AV	54.00	-6.55	1.09 V	134	16.30	31.15
3	2360.00	59.92 PK	74.00	-14.08	1.09 V	134	28.64	31.28
3	2360.00	49.36 AV	54.00	-4.64	1.09 V	134	18.08	31.28
4	2390.00	61.08 PK	74.00	-12.92	1.12 V	153	29.69	31.39
4	2390.00	50.10 AV	54.00	-3.90	1.12 V	153	18.71	31.39
5	*2437.00	108.01 PK			1.07 V	154	76.47	31.54
5	*2437.00	97.47 AV			1.07 V	154	65.93	31.54
6	2483.50	60.40 PK	74.00	-13.60	1.07 V	154	28.70	31.70
6	2483.50	49.24 AV	54.00	-4.76	1.07 V	154	17.54	31.70
7	3249.00	47.80 PK	74.00	-26.20	1.23 V	206	14.61	33.19
7	3249.00	43.01 AV	54.00	-10.99	1.23 V	206	9.82	33.19

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. The limit value is defined as per 15.247
6. “ * ” : 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	FSEK 30	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 100kHz 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



4.3.6 EUT OPERATING CONDITIONS

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

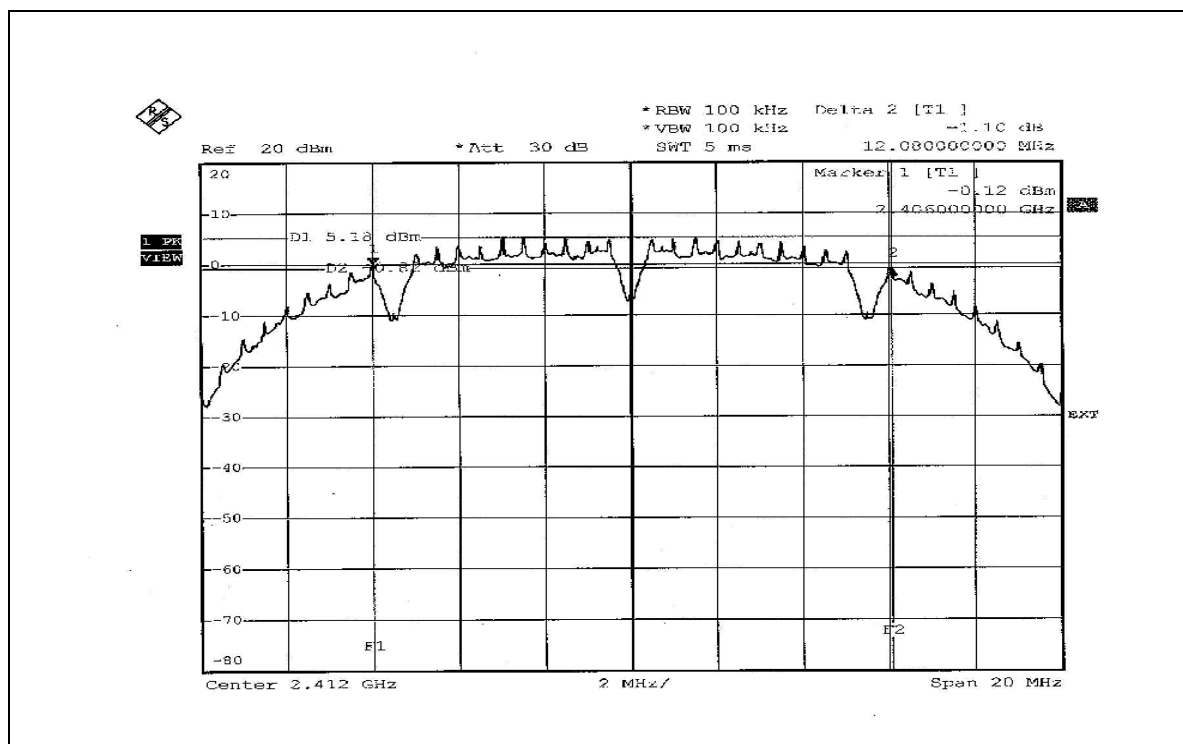
4.3.7 TEST RESULTS

802.11b DSSS modulation

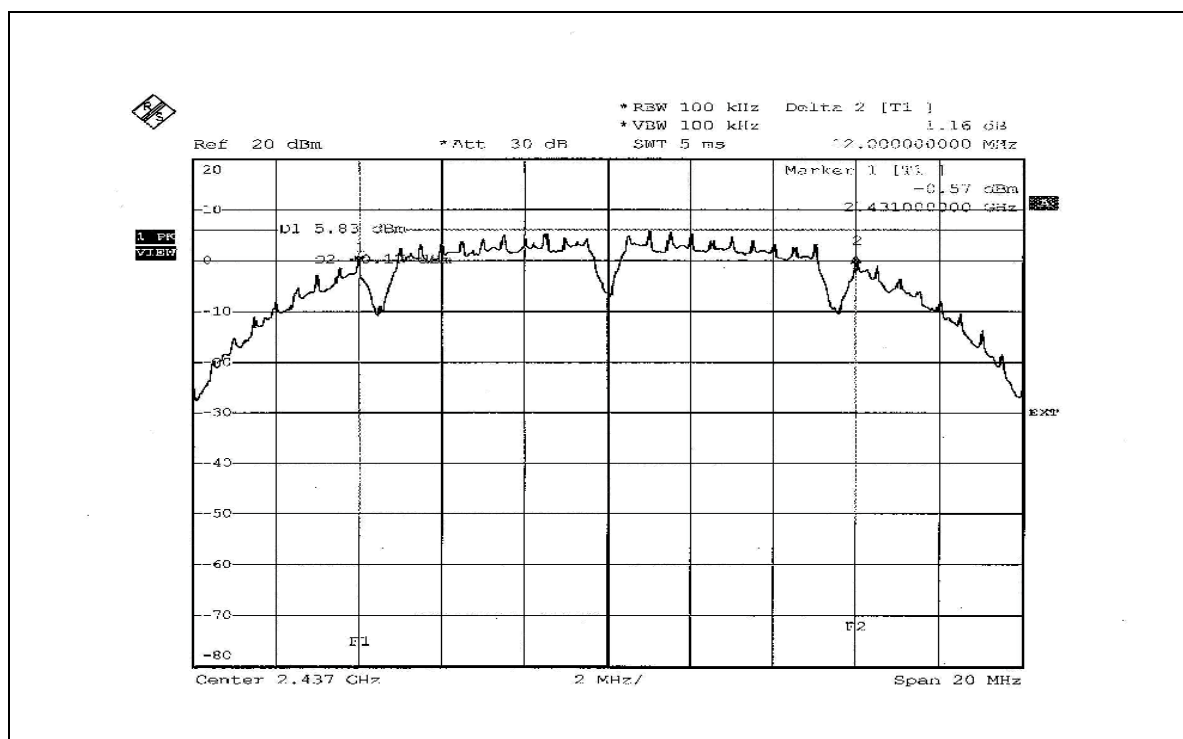
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 68%RH, 991hPa
TESTED BY	Morgan Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.08	0.5	PASS
6	2437	12.00	0.5	PASS
11	2462	11.12	0.5	PASS

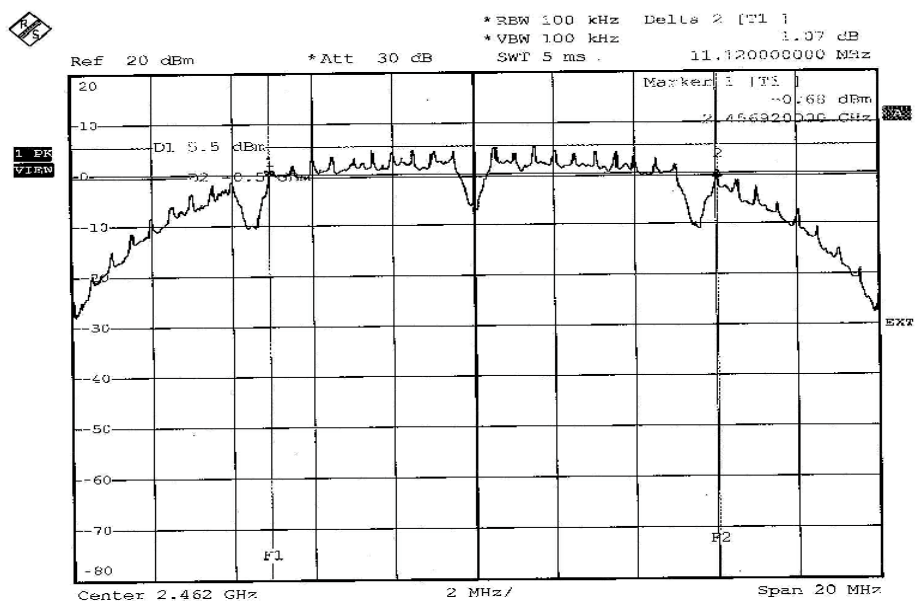
CH 1



CH 6



CH 11

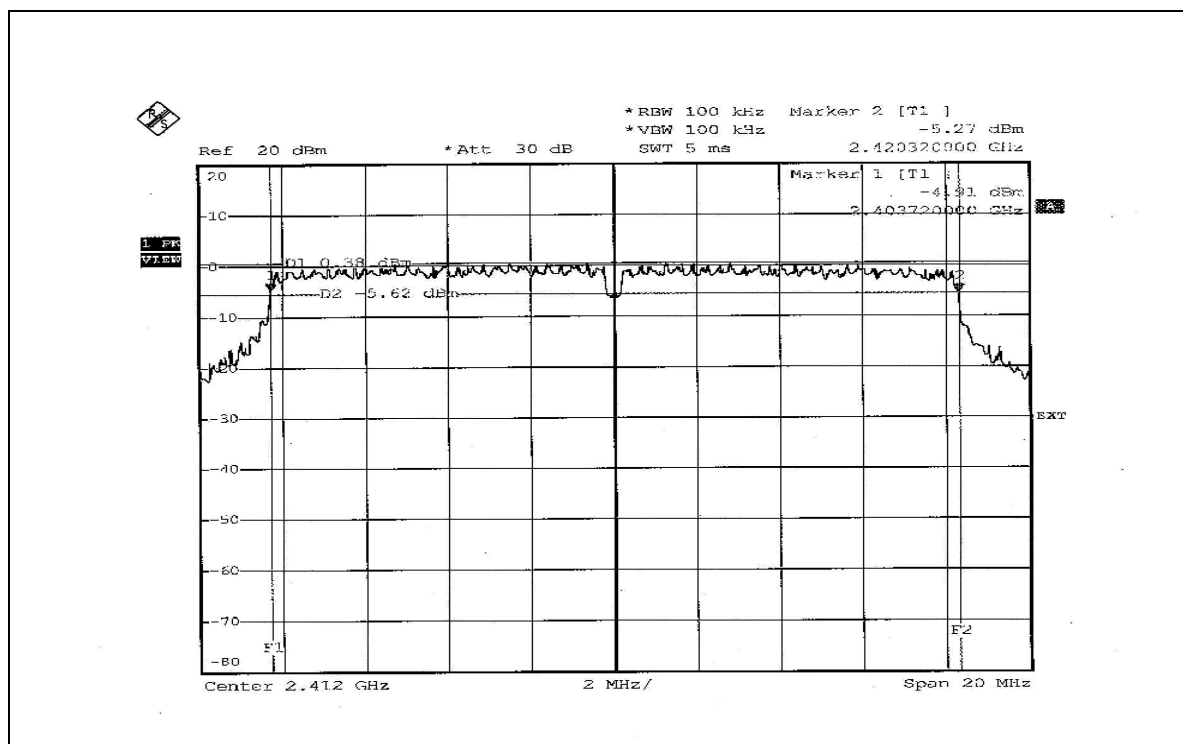


802.11g OFDM modulation

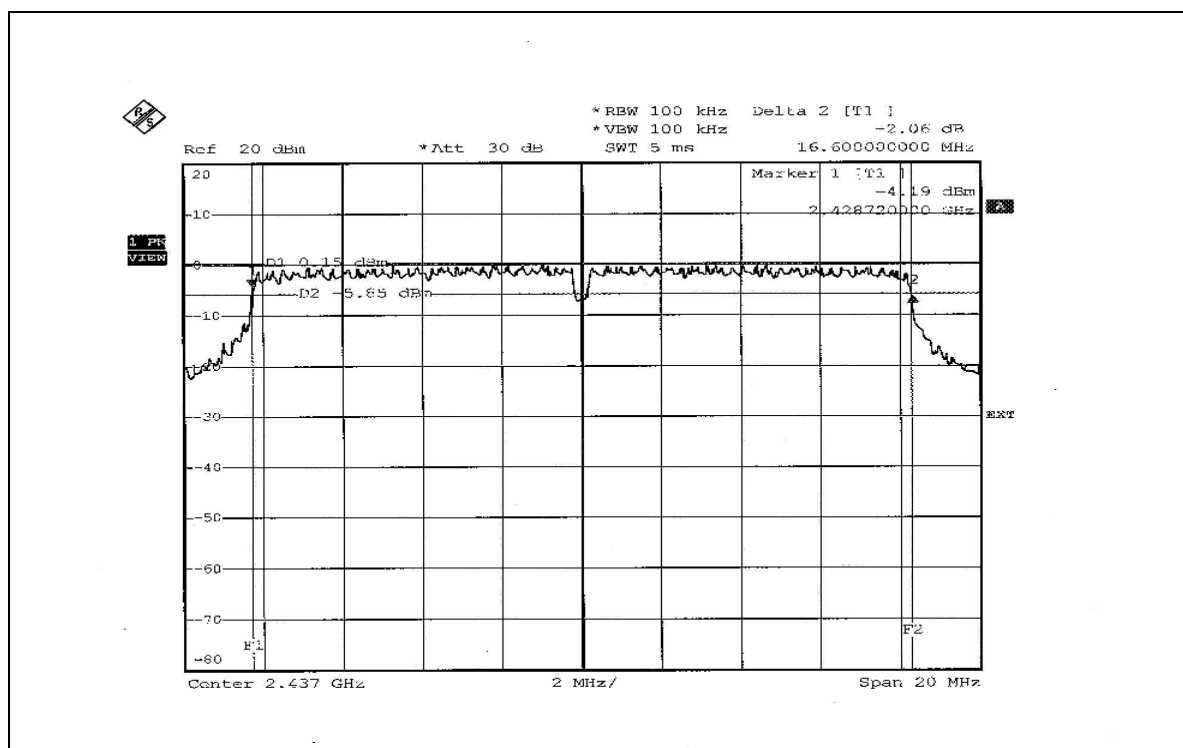
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 68%RH, 991hPa
TESTED BY	Morgan Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.60	0.5	PASS
6	2437	16.60	0.5	PASS
11	2462	16.64	0.5	PASS

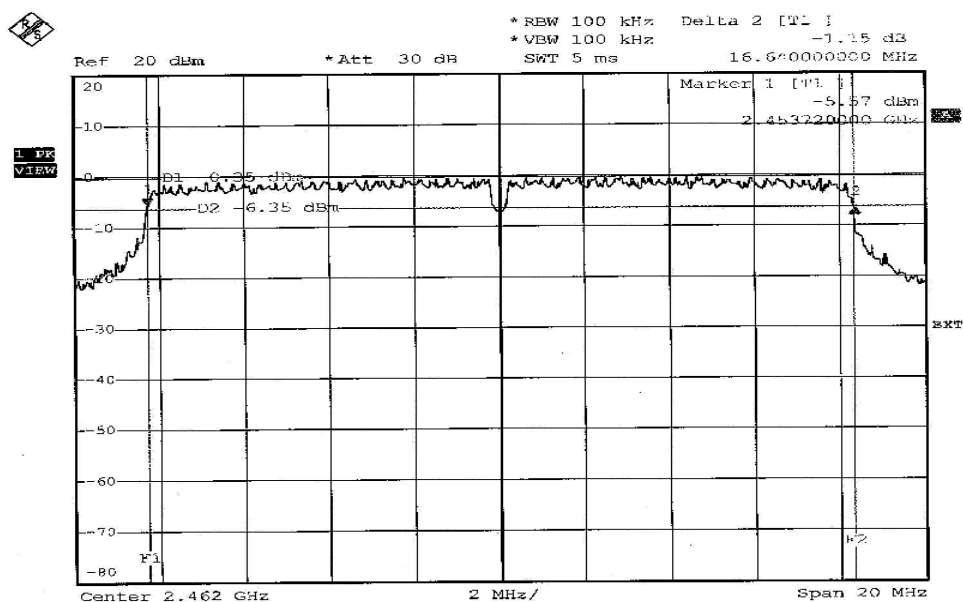
CH 1



CH 6



CH 11

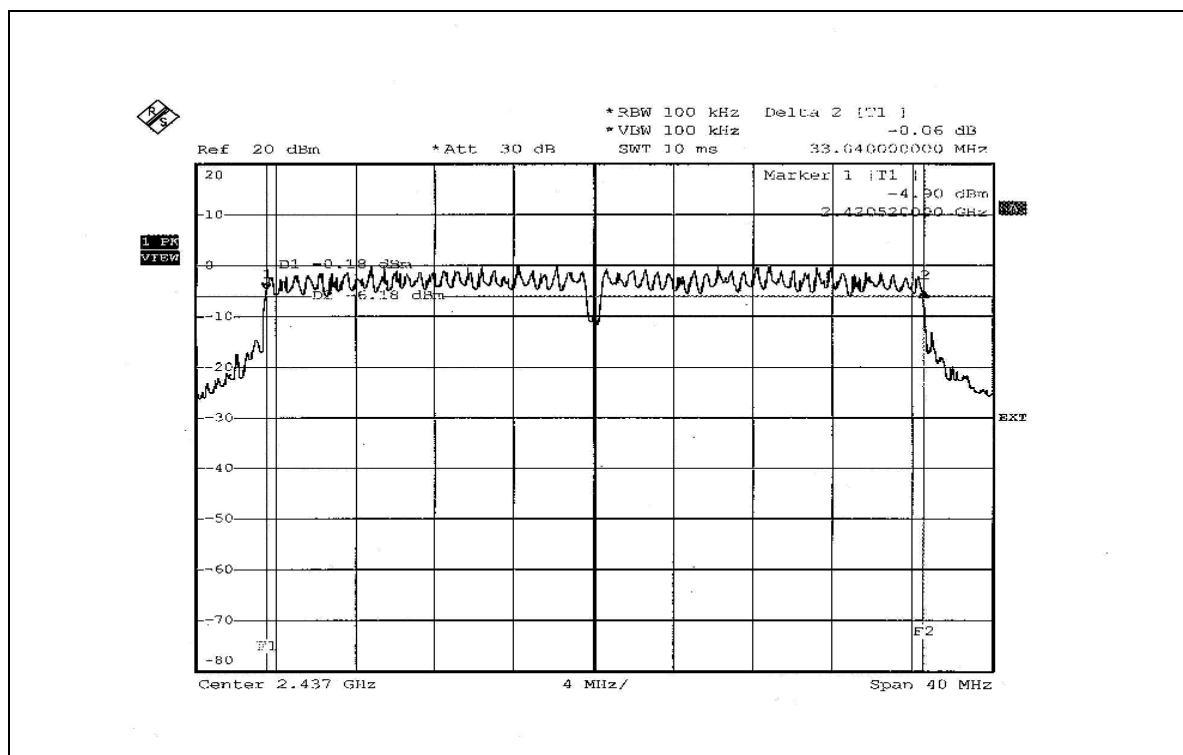


802.11g Turbo OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	33.04	0.5	PASS

CH 6



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 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
TEKTRONIX OSCILLOSCOPE	TDS 1012	C019167	Jan. 16, 2007
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

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

4.4.1 TEST PROCEDURES

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

4.4.2 DEVIATION FROM TEST STANDARD

No deviation

4.4.3 TEST SETUP



4.4.4 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.3 TEST RESULTS

802.11b DSSS modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.466	17.03	30	PASS
6	2437	50.466	17.03	30	PASS
11	2462	50.350	17.02	30	PASS

802.11g OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.699	17.05	30	PASS
6	2437	50.234	17.01	30	PASS
11	2462	50.350	17.02	30	PASS

802.11g Turbo OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	50.699	17.05	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	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.

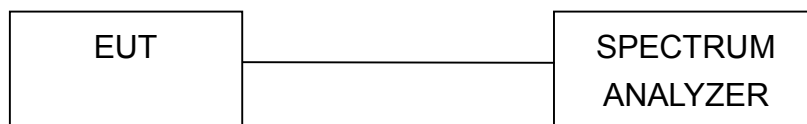
4.5.3 TEST PROCEDURE

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 CONDITION

Same as Item 4.3.6

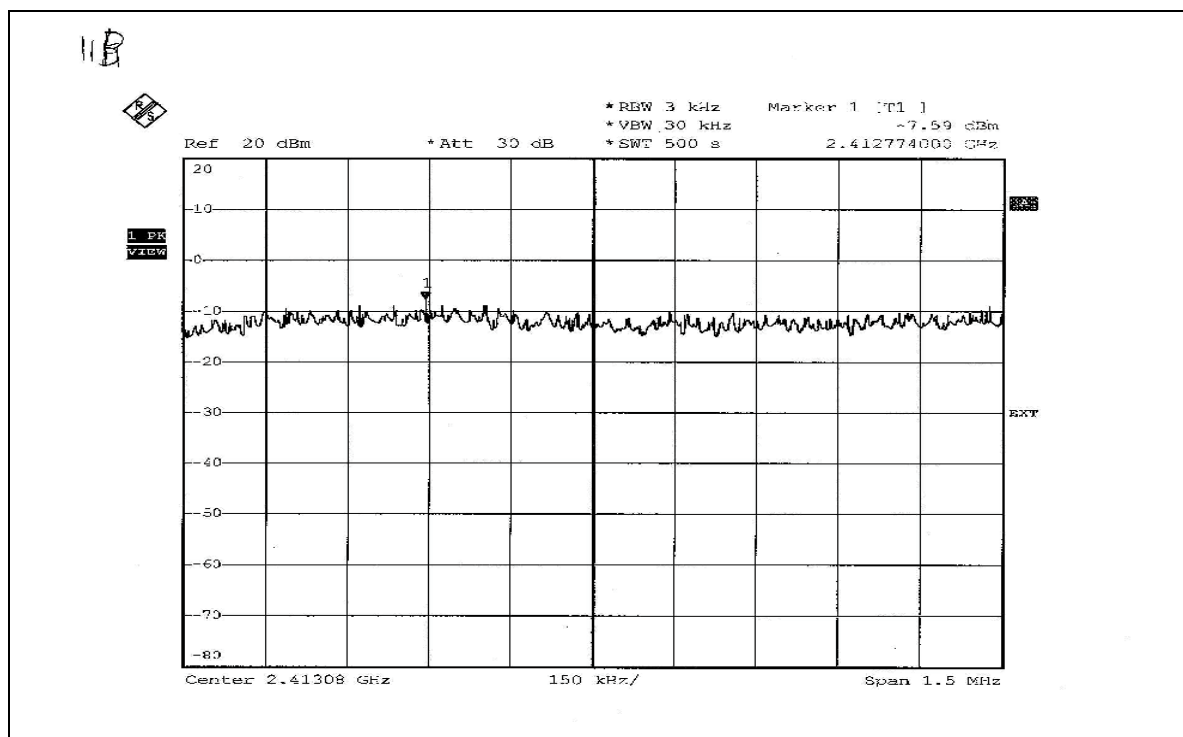
4.5.7 TEST RESULTS

802.11b DSSS modulation

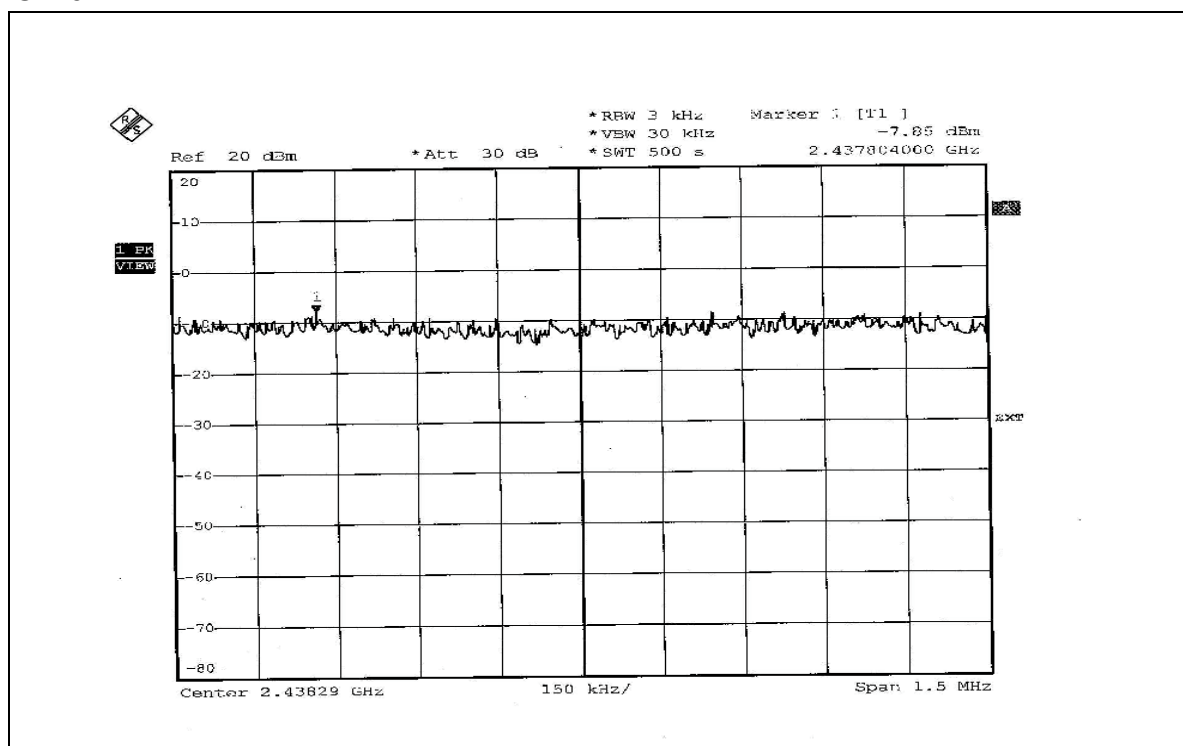
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 68%RH, 991hPa
TESTED BY	Morgan Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.59	8	PASS
6	2437	-7.85	8	PASS
11	2462	-7.69	8	PASS

CH 1



CH 6

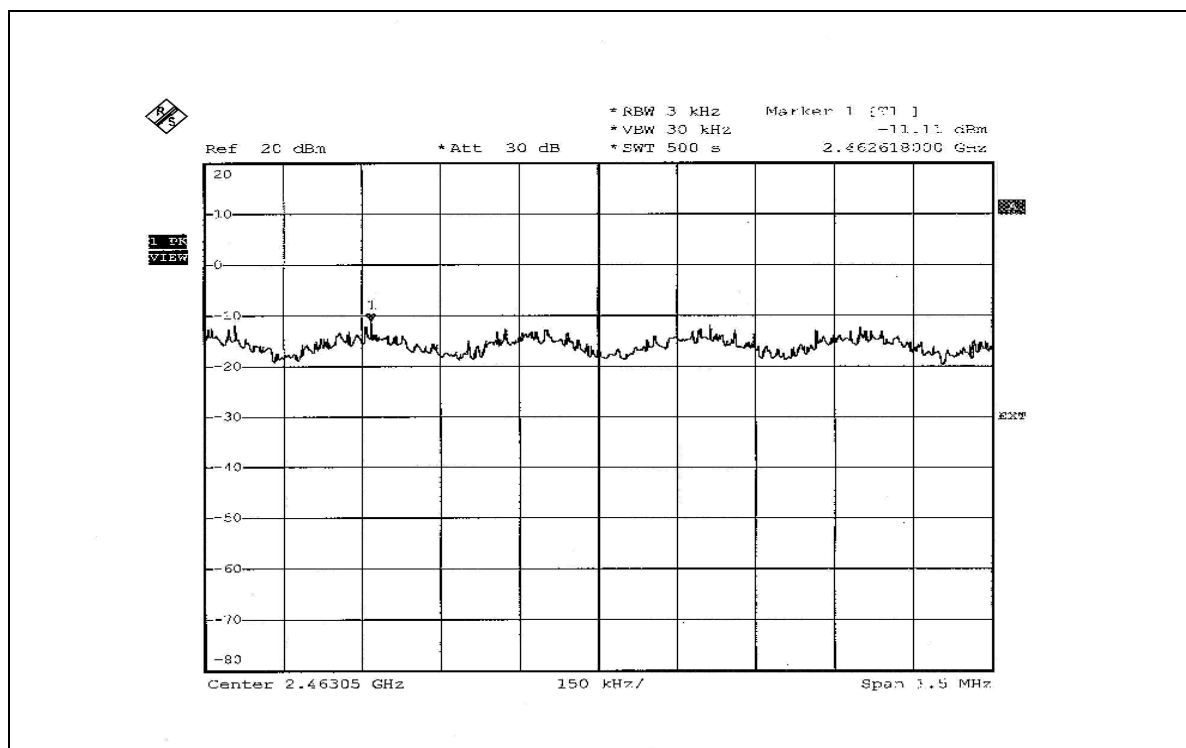


802.11g OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-10.99	8	PASS
6	2437	-11.13	8	PASS
11	2462	-11.11	8	PASS

CH 11

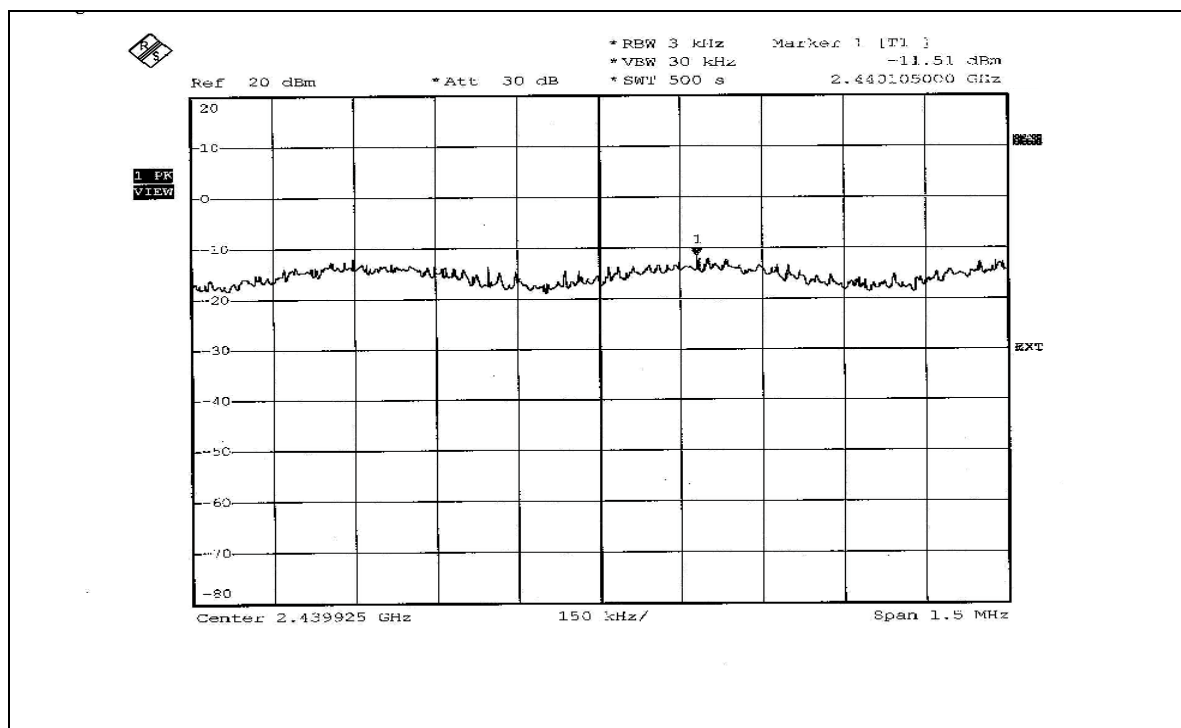


802.11g Turbo OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
6	2437	-11.51	8	PASS

CH 6



4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	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 100 MHz 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 A

NOTE 1: The band edge emission plot on the page 102 shows 49.73dBc between carrier maximum power and local maximum emission in restrict band (2.38664GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 101.44dBuV/m (Peak), so the maximum field strength in restrict band is $101.44 - 49.73 = 51.71$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on the page 102 shows 53.33dBc between carrier maximum power and local maximum emission in restrict band (2.38640GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 97.80dBuV/m (Average), so the maximum field strength in restrict band is $97.80 - 53.33 = 44.47$ dBuV/m which is under 54dBuV/m limit.

MODE B

NOTE 1: The band edge emission plot on the page 102 shows 49.73dBc between carrier maximum power and local maximum emission in restrict band (2.38664GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 103.52dBuV/m (Peak), so the maximum field strength in restrict band is $103.52 - 49.73 = 53.79$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on the page 102 shows 53.33dBc between carrier maximum power and local maximum emission in restrict band (2.38640GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 100.09dBuV/m (Average), so the maximum field strength in restrict band is $100.09 - 53.33 = 46.76$ dBuV/m which is under 54dBuV/m limit.

MODE C

NOTE 1: The band edge emission plot on the page 102 shows 49.73dBc between carrier maximum power and local maximum emission in restrict band (2.38664GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 109.22dBuV/m (Peak), so the maximum field strength in restrict band is $109.22 - 49.73 = 59.49$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on the page 102 shows 53.33dBc between carrier maximum power and local maximum emission in restrict band (2.38640GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 105.35dBuV/m (Average), so the maximum field strength in restrict band is $105.35 - 53.33 = 52.02$ dBuV/m which is under 54dBuV/m limit.

MODE A

NOTE 2: The band edge emission plot on the page 103 shows 50.29dBc between carrier maximum power and local maximum emission in restrict band (2.48664GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 101.27dBuV/m (Peak), so the maximum field strength in restrict band is $101.27 - 50.29 = 50.98$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the page 104 shows 52.29dBc between carrier maximum power and local maximum emission in restrict band (2.48829GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 97.68dBuV/m (Average), so the maximum field strength in restrict band is $97.68 - 52.29 = 45.39$ dBuV/m which is under 54dBuV/m limit.

MODE B

NOTE 2: The band edge emission plot on the page 103 shows 50.29dBc between carrier maximum power and local maximum emission in restrict band (2.48664GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 103.24dBuV/m (Peak), so the maximum field strength in restrict band is $103.24 - 50.29 = 52.95$ dBuV/m which is under 74dBuV/m limit.

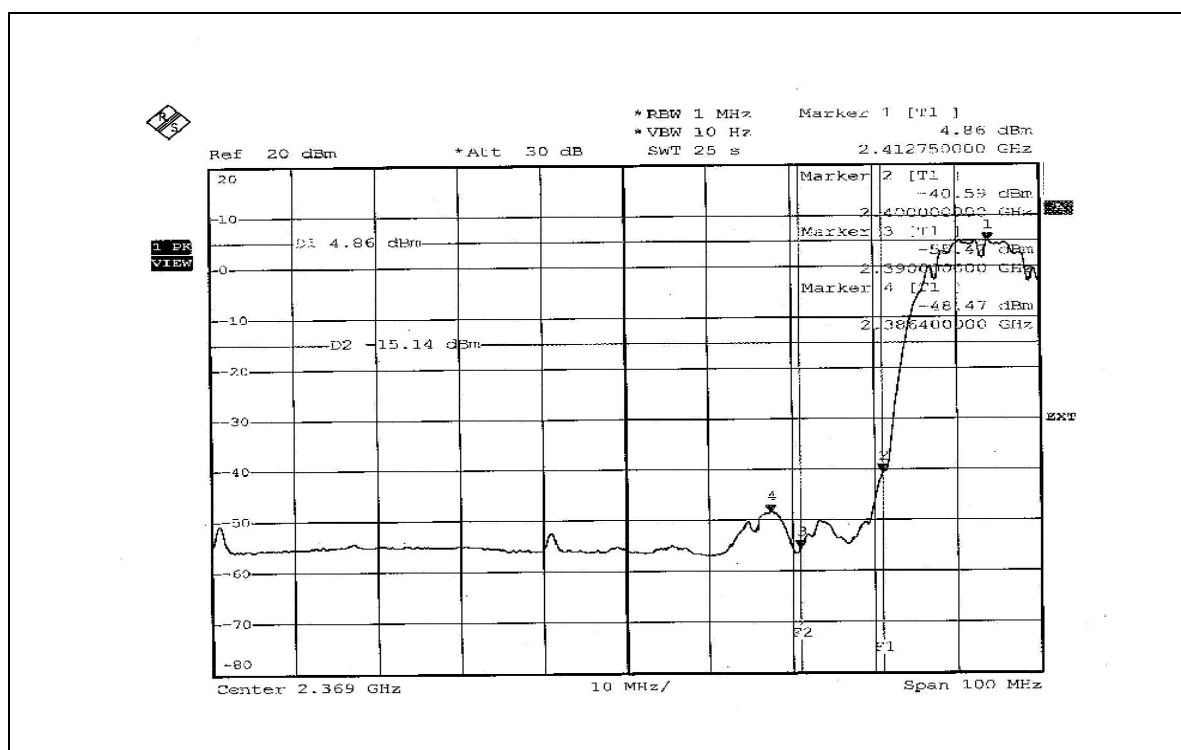
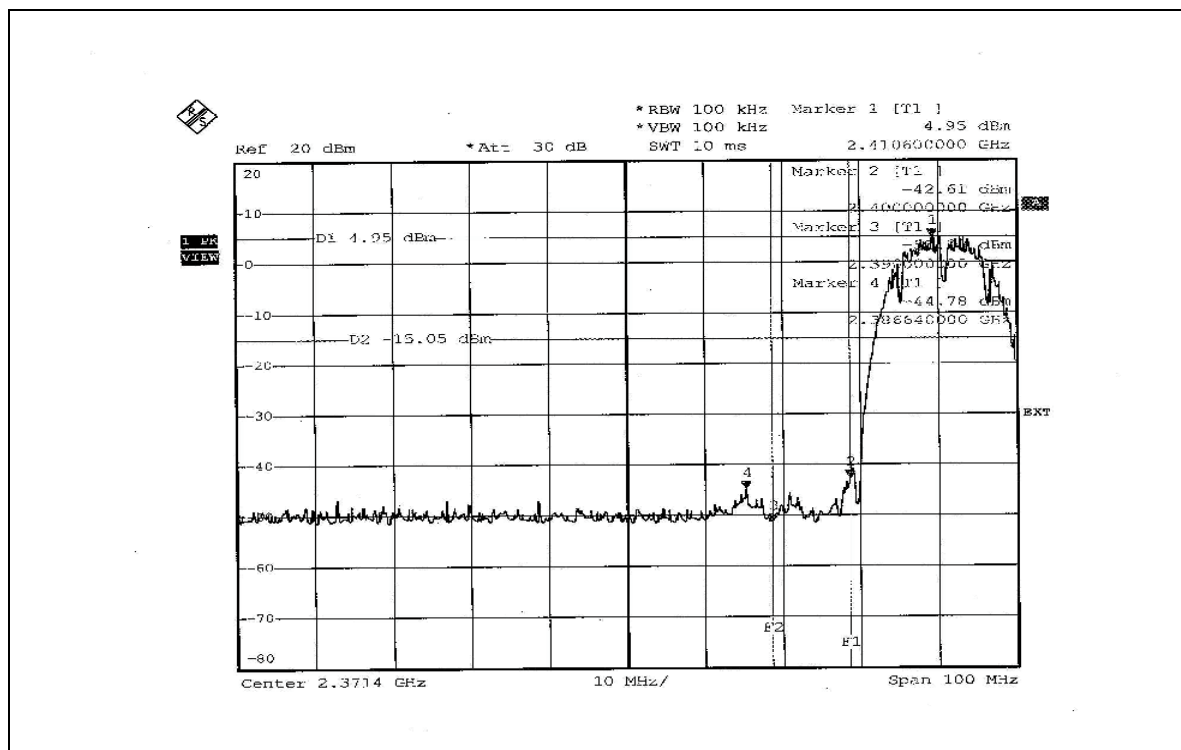
The band edge emission plot on the page 104 page shows 52.29dBc between carrier maximum power and local maximum emission in restrict band (2.48829GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 101.03dBuV/m (Average), so the maximum field strength in restrict band is $101.03 - 52.29 = 48.74$ dBuV/m which is under 54dBuV/m limit.

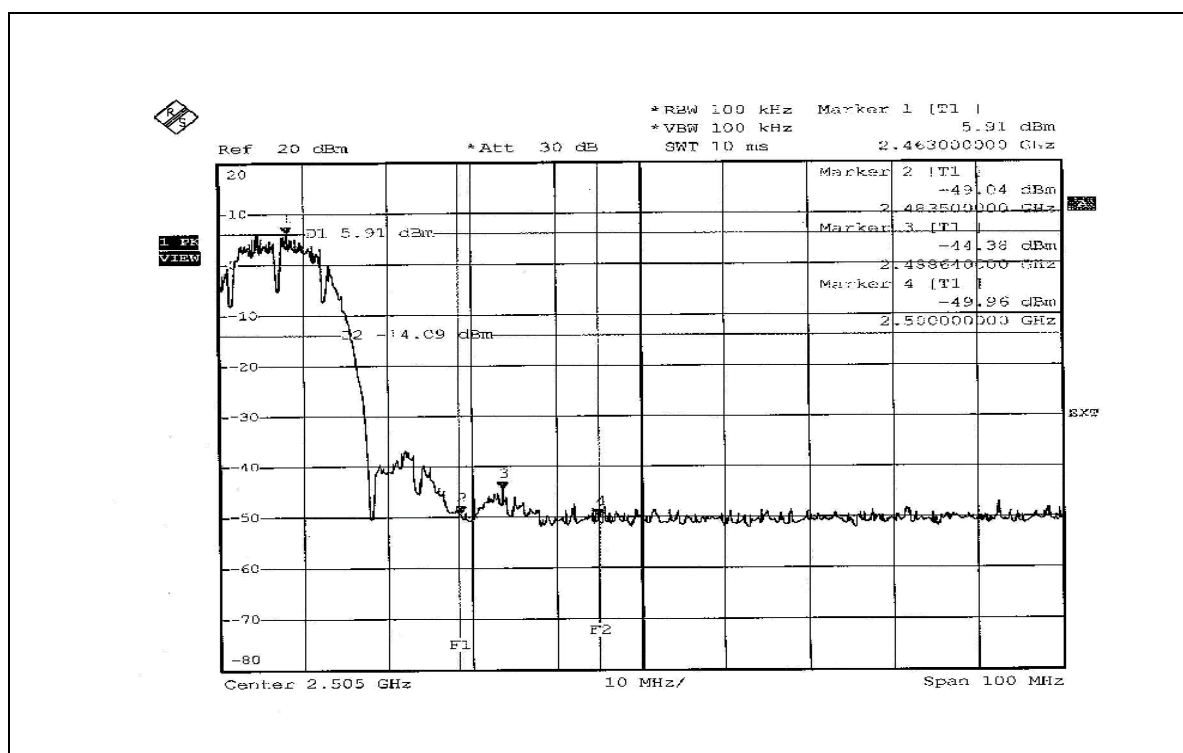
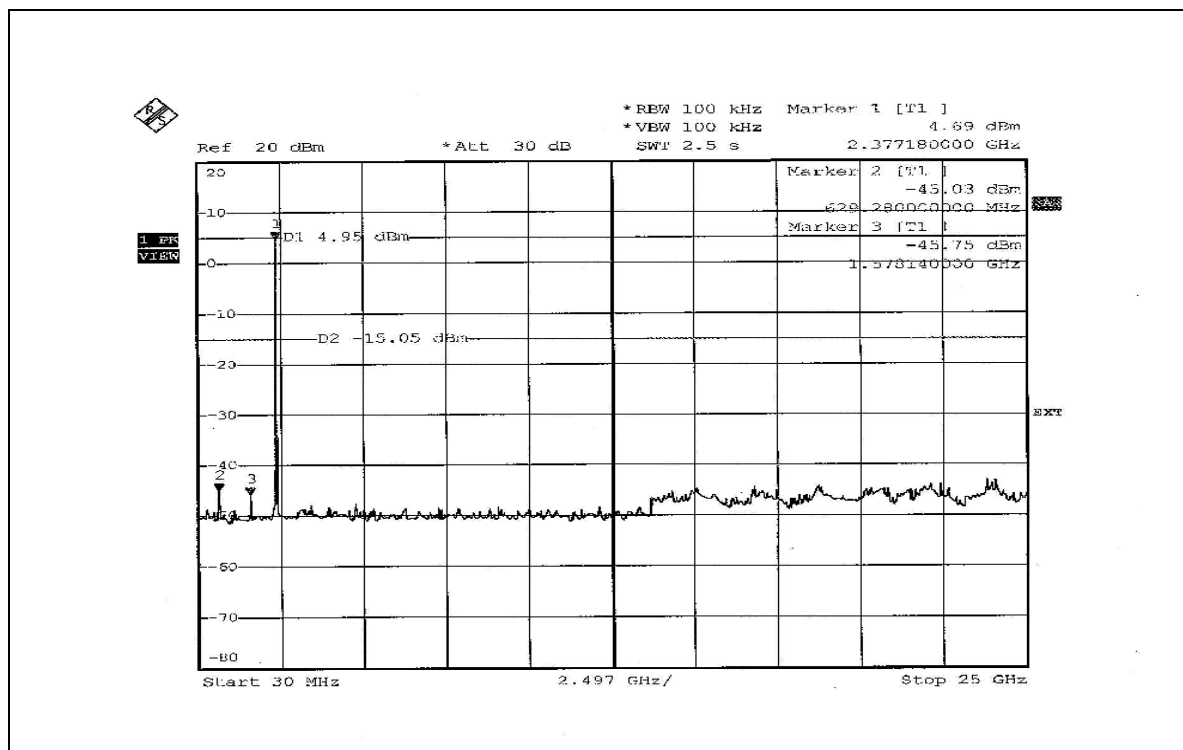
MODE C

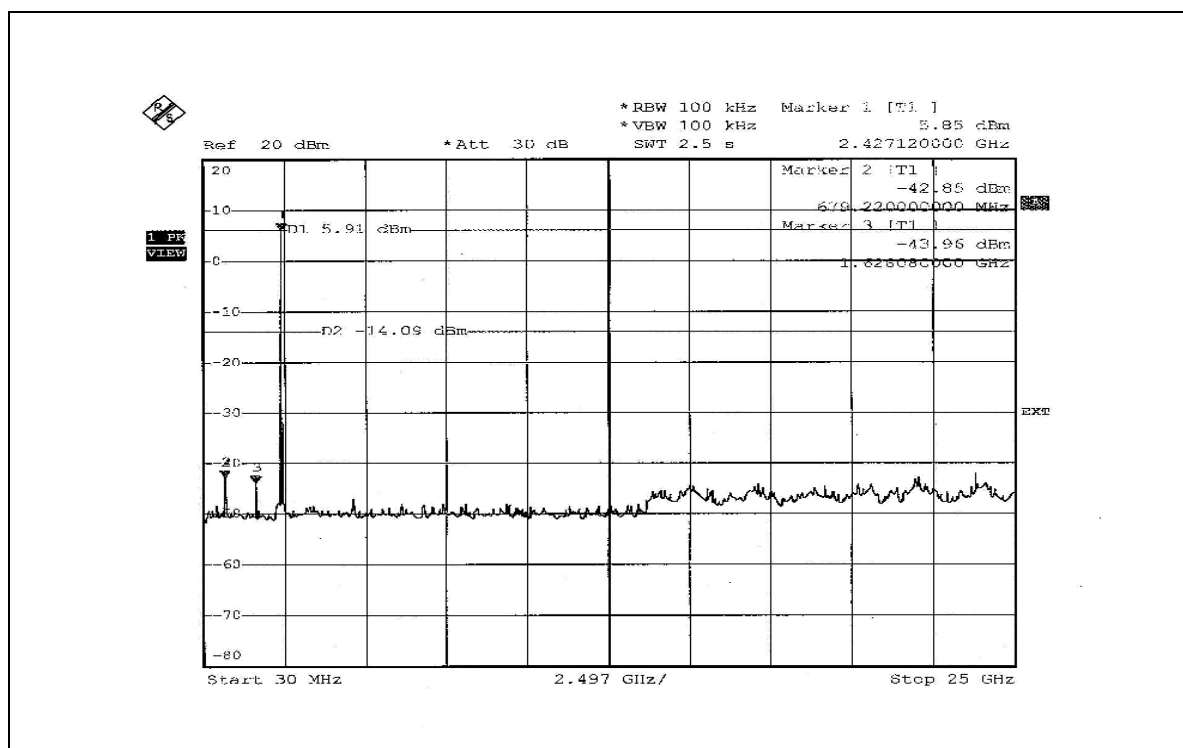
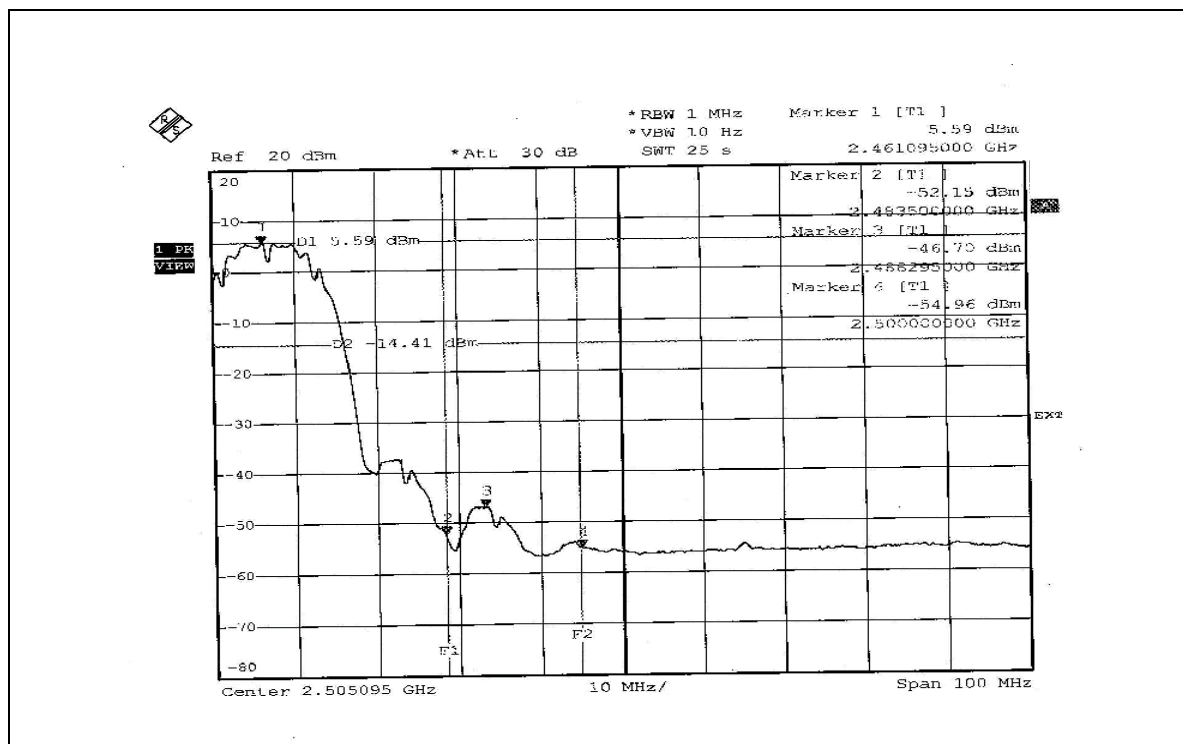
NOTE 2: The band edge emission plot on the page 103 shows 50.29dBc between carrier maximum power and local maximum emission in restrict band (2.48664GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 109.27dBuV/m (Peak), so the maximum field strength in restrict band is $109.27 - 50.29 = 58.98$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the page 104 shows 52.29dBc between carrier maximum power and local maximum emission in restrict band (2.48829GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 105.56dBuV/m (Average), so the maximum field strength in restrict band is $105.56 - 52.29 = 53.27$ dBuV/m which is under 54dBuV/m limit.

802.11b DSSS modulation







802.11g OFDM modulation

MODE A

NOTE 1: The band edge emission plot on the page 107 shows 41.62dBc between carrier maximum power and local maximum emission in restrict band (2.38920GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 104.86dBuV/m (Peak), so the maximum field strength in restrict band is $104.86 - 41.62 = 63.24$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on the page 107 shows 47.12dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 93.77dBuV/m (Average), so the maximum field strength in restrict band is $93.77 - 47.12 = 46.65$ dBuV/m which is under 54dBuV/m limit.

MODE B

NOTE 1: The band edge emission plot on the page 107 shows 41.62dBc between carrier maximum power and local maximum emission in restrict band (2.38920GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.24dBuV/m (Peak), so the maximum field strength in restrict band is $106.24 - 41.62 = 64.62$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on the page 107 shows 47.12dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 95.46dBuV/m (Average), so the maximum field strength in restrict band is $95.46 - 47.12 = 48.34$ dBuV/m which is under 54dBuV/m limit.

MODE C

NOTE 1: The band edge emission plot on the page 107 shows 41.62dBc between carrier maximum power and local maximum emission in restrict band (2.38920GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 110.78dBuV/m (Peak), so the maximum field strength in restrict band is $110.78 - 41.62 = 69.16$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on the page 107 shows 47.12dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 100.51dBuV/m (Average), so the maximum field strength in restrict band is $100.51 - 47.12 = 53.39$ dBuV/m which is under 54dBuV/m limit.

MODE A

NOTE 2: The band edge emission plot on the page 108 shows 39.72dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 103.07dBuV/m (Peak), so the maximum field strength in restrict band is $103.07 - 39.72 = 63.35$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the page 109 shows 46.97dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 92.45dBuV/m (Average), so the maximum field strength in restrict band is $92.45 - 46.97 = 45.48$ dBuV/m which is under 54dBuV/m limit.

MODE B

NOTE 2: The band edge emission plot on the page 108 shows 39.72dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 105.41dBuV/m (Peak), so the maximum field strength in restrict band is $105.41 - 39.72 = 65.69$ dBuV/m which is under 74dBuV/m limit.

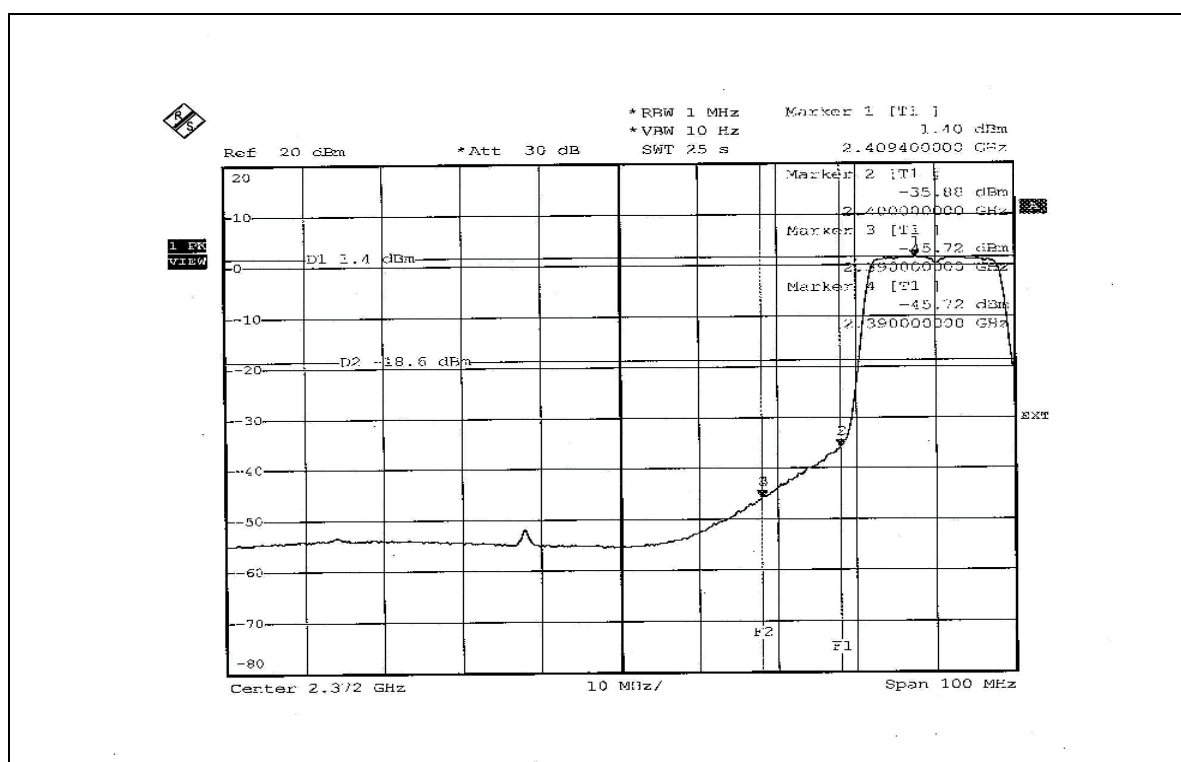
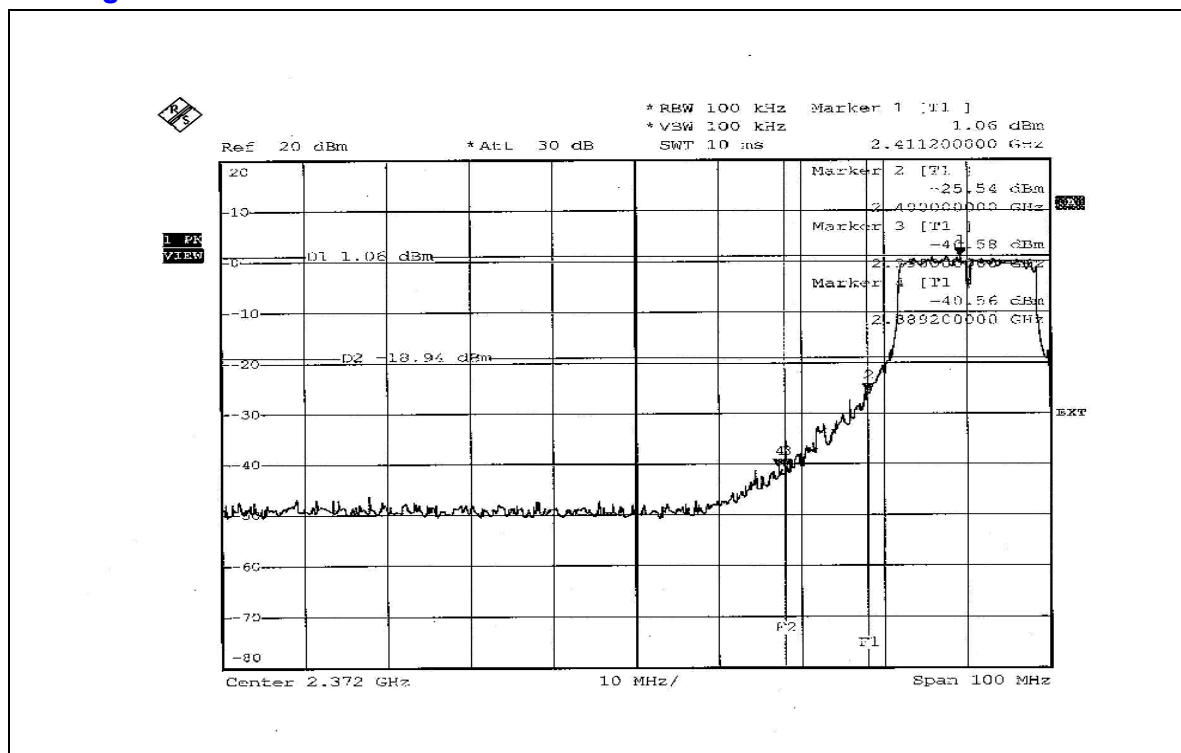
The band edge emission plot on the page 109 shows 46.97dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 94.28dBuV/m (Average), so the maximum field strength in restrict band is $94.28 - 46.97 = 47.31$ dBuV/m which is under 54dBuV/m limit.

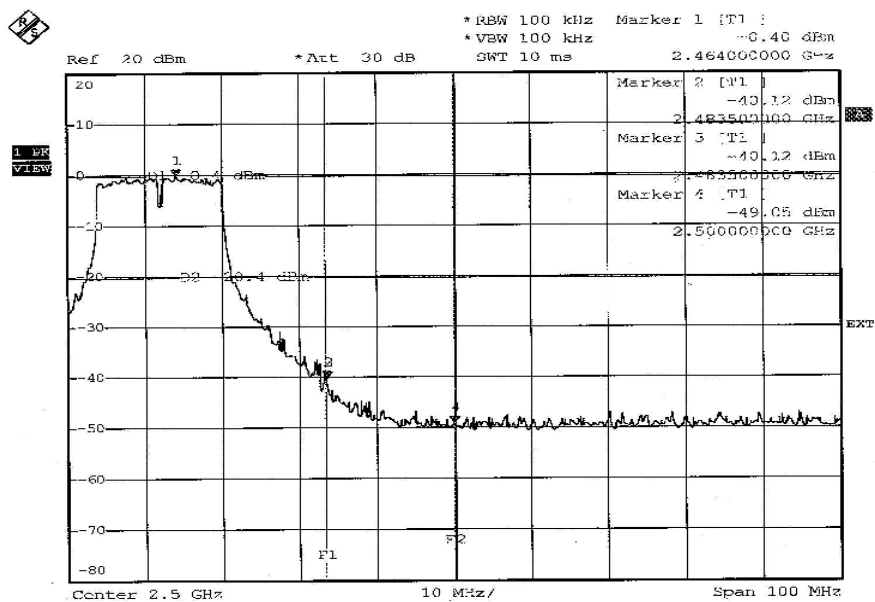
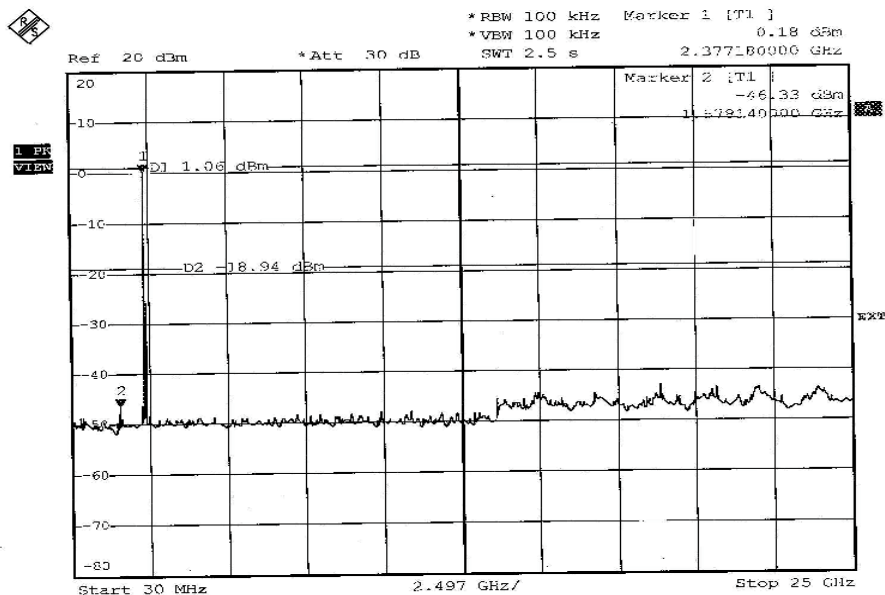
MODE C

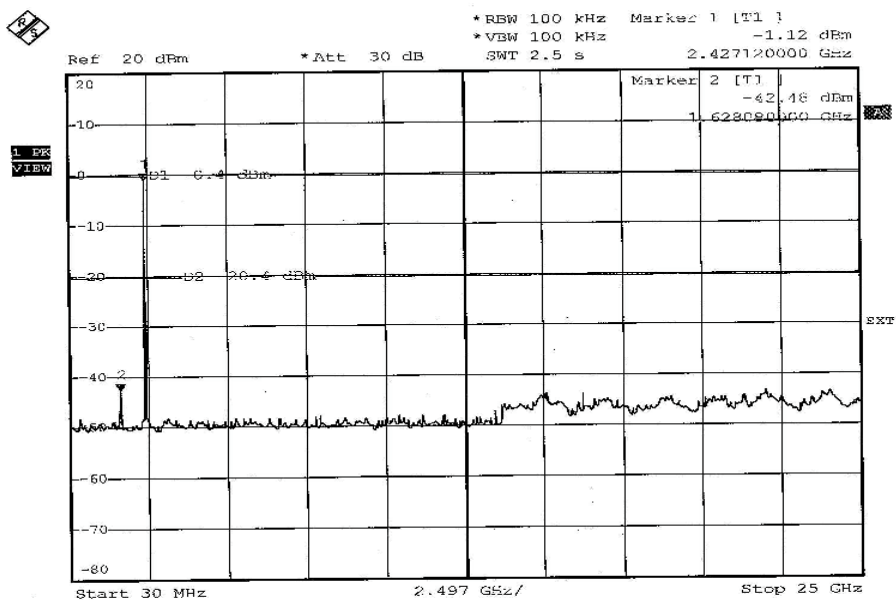
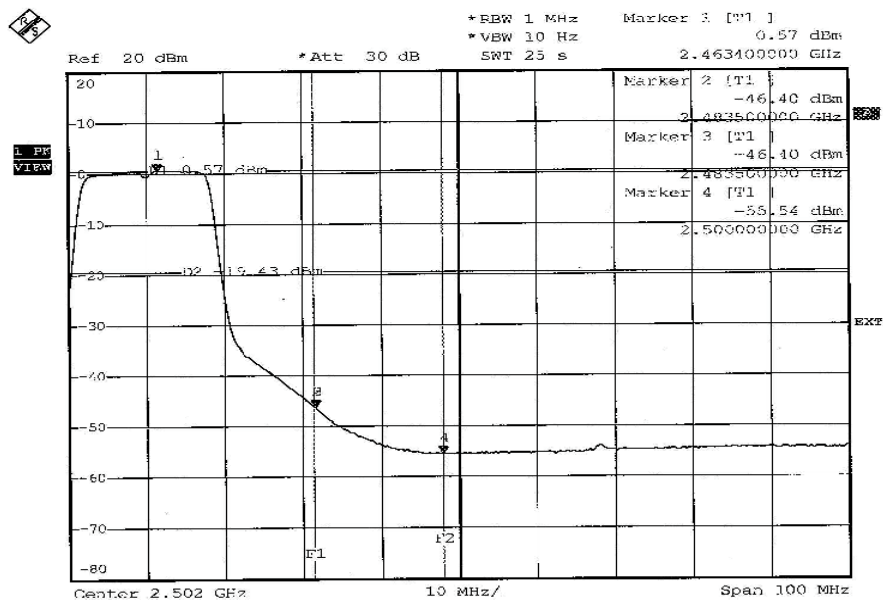
NOTE 2: The band edge emission plot on the page 108 shows 39.72dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 109.25dBuV/m (Peak), so the maximum field strength in restrict band is $109.25 - 39.72 = 69.53$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the page 109 shows 46.97dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 99.10dBuV/m (Average), so the maximum field strength in restrict band is $99.10 - 46.97 = 52.13$ dBuV/m which is under 54dBuV/m limit.

802.11g OFDM modulation







802.11g Turbo OFDM modulation

MODE A

NOTE 1: The band edge emission plot on page 112 shows 44.46dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 102.07dBuV/m (Peak), so the maximum field strength in restrict band is $102.07 - 44.46 = 57.61$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on page 112 shows 47.52dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 91.86dBuV/m (Average), so the maximum field strength in restrict band is $91.86 - 47.52 = 44.34$ dBuV/m which is under 54dBuV/m limit.

MODE B

NOTE 1: The band edge emission plot on page 112 shows 44.46dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 105.02dBuV/m (Peak), so the maximum field strength in restrict band is $105.02 - 44.46 = 60.56$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on page 112 shows 47.52dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 94.24dBuV/m (Average), so the maximum field strength in restrict band is $94.24 - 47.52 = 46.72$ dBuV/m which is under 54dBuV/m limit.

MODE C

NOTE 1: The band edge emission plot on page 112 shows 44.46dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 108.01dBuV/m (Peak), so the maximum field strength in restrict band is $108.01 - 44.46 = 63.55$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of on page 112 shows 47.52dBc between carrier maximum power and local maximum emission in restrict band (2.39000GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 97.47dBuV/m (Average), so the maximum field strength in restrict band is $97.47 - 47.52 = 49.95$ dBuV/m which is under 54dBuV/m limit.

MODE A

NOTE 2: The band edge emission plot on page 113 shows 43.68dBc between carrier maximum power and local maximum emission in restrict band (2.48390GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 102.07dBuV/m (Peak), so the maximum field strength in restrict band is $102.07 - 43.68 = 58.39$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 114 shows 47.14dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 91.86dBuV/m (Average), so the maximum field strength in restrict band is $91.86 - 47.14 = 44.72$ dBuV/m which is under 54dBuV/m limit.

MODE B

NOTE 2: The band edge emission plot on page 113 shows 43.68dBc between carrier maximum power and local maximum emission in restrict band (2.48390GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 105.02dBuV/m (Peak), so the maximum field strength in restrict band is $105.02 - 43.68 = 61.34$ dBuV/m which is under 74dBuV/m limit.

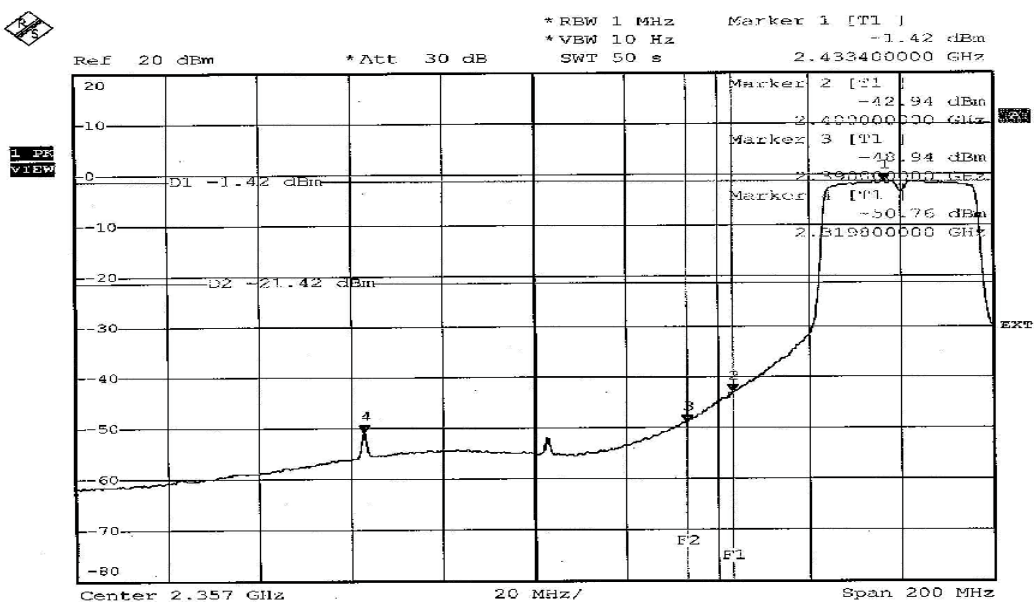
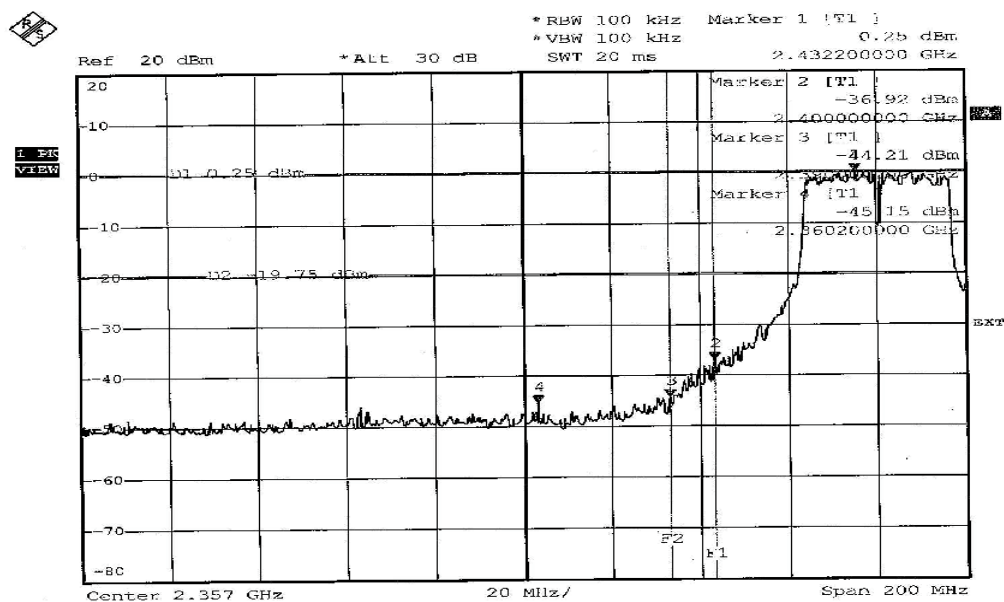
The band edge emission plot on page 114 shows 47.14dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 94.24dBuV/m (Average), so the maximum field strength in restrict band is $94.24 - 47.14 = 47.10$ dBuV/m which is under 54dBuV/m limit.

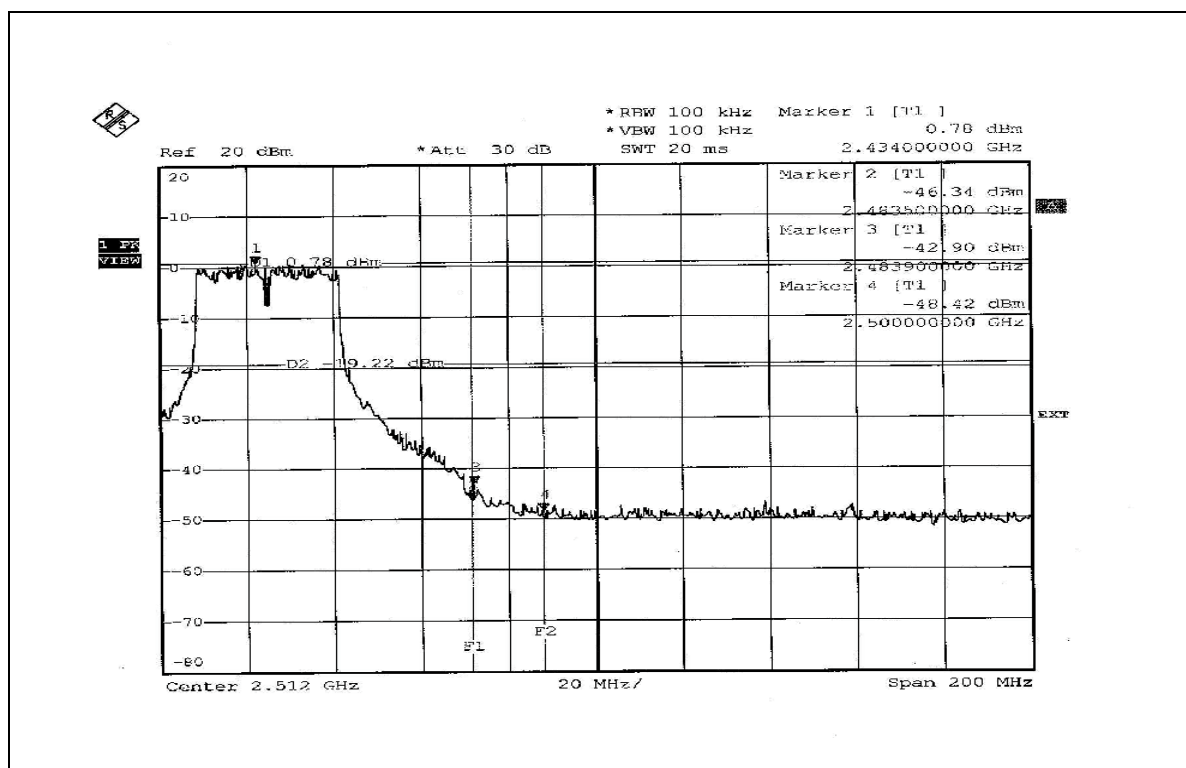
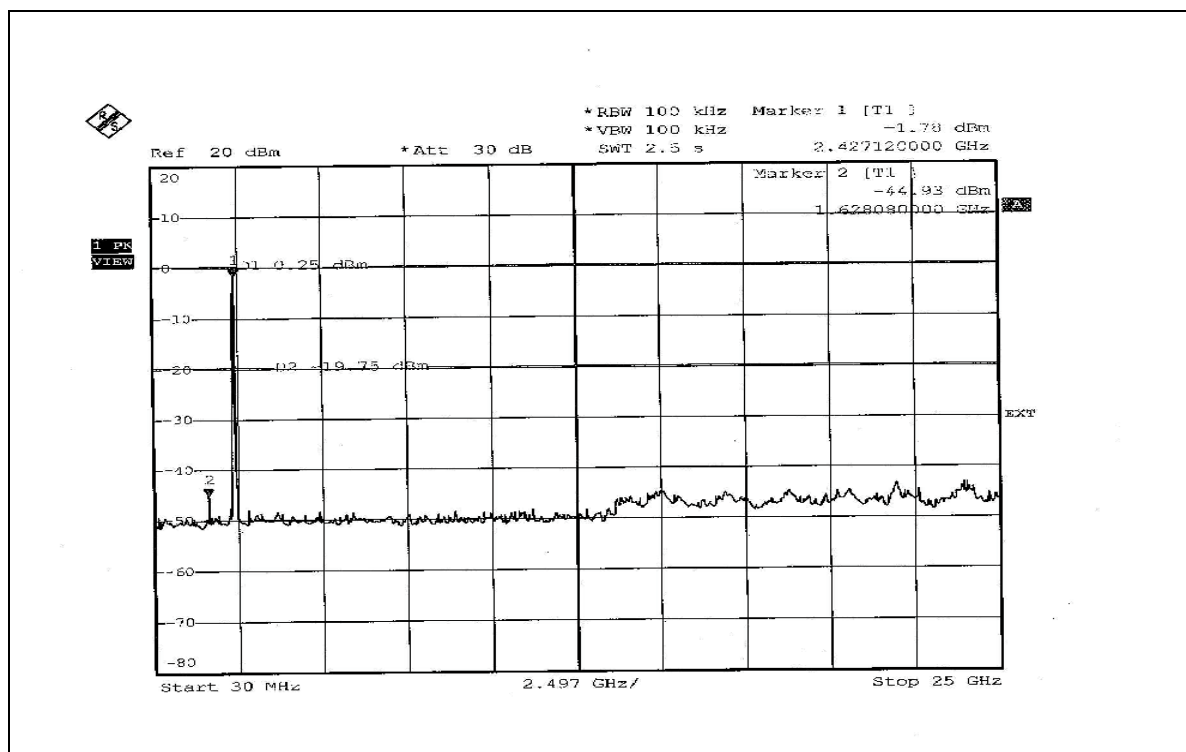
MODE C

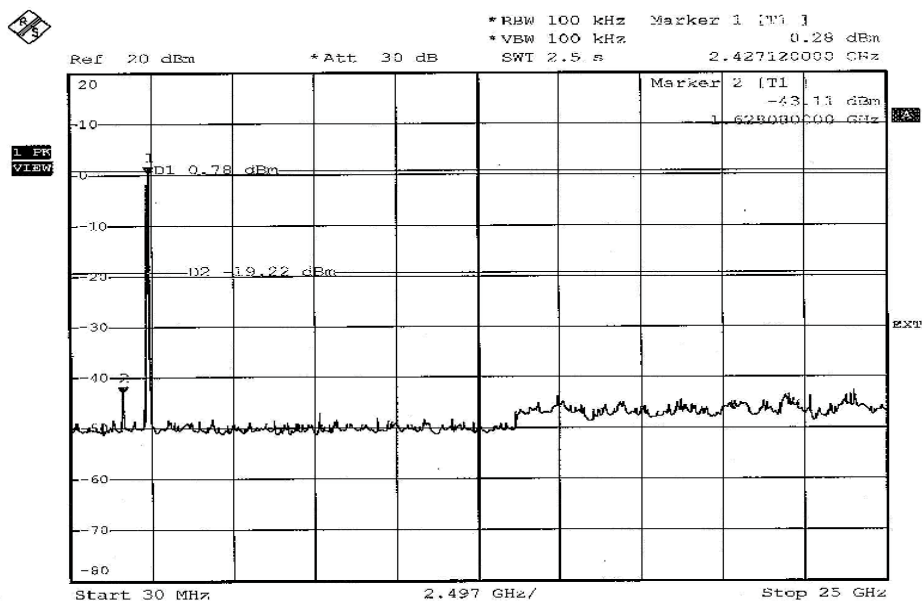
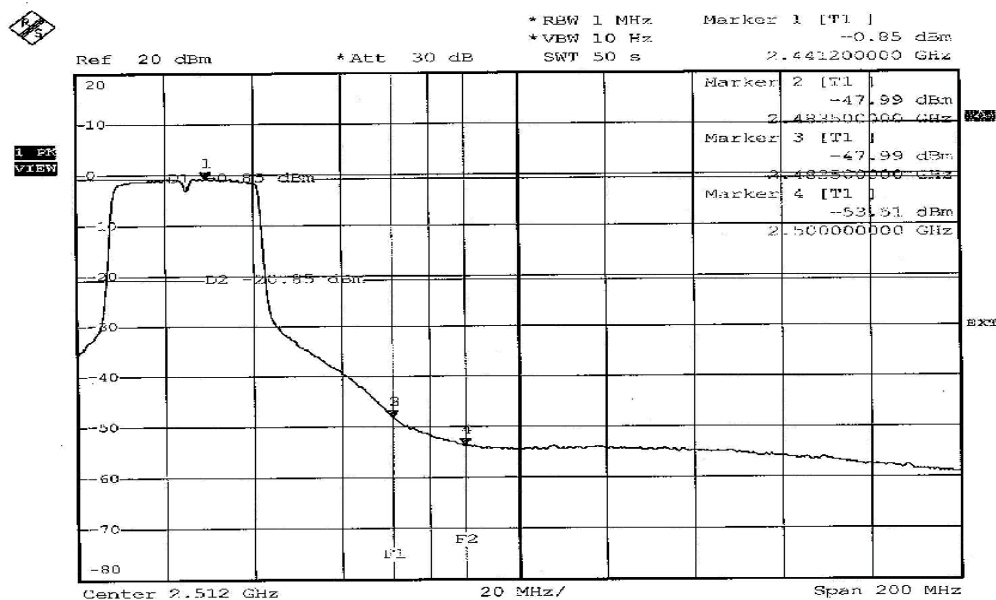
NOTE 2: The band edge emission plot on page 113 shows 43.68dBc between carrier maximum power and local maximum emission in restrict band (2.48390GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 108.01dBuV/m (Peak), so the maximum field strength in restrict band is $108.01 - 43.68 = 64.33$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on page 114 shows 47.14dBc between carrier maximum power and local maximum emission in restrict band (2.48350GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 97.47dBuV/m (Average), so the maximum field strength in restrict band is $97.47 - 47.14 = 50.33$ dBuV/m which is under 54dBuV/m limit.

802.11g Turbo 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 is Patch and Dipole antenna with N-type Jack Reverse and Reverse SMA connector. The maximum Gain with the antenna is 4.59352dBi.

5. TEST TYPES AND RESULTS (802.11a 5725~5850MHz Band)

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

- NOTE:**
- The lower limit shall apply at the transition frequencies.
 - The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
 - 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.

5.1.2 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:**
- The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 - The test was performed in HwaYa Shielded Room 3.
 - The VCCI Site Registration No. is C-2047.

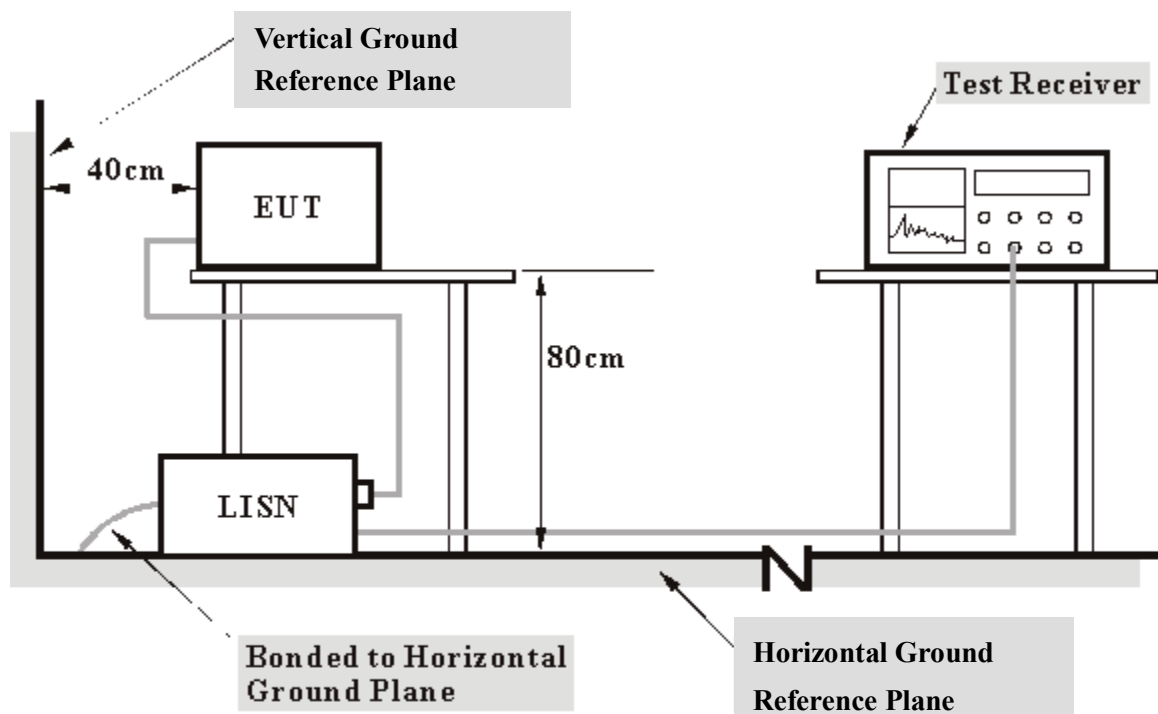
5.1.3 TEST PROCEDURES

- 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.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



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

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

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6

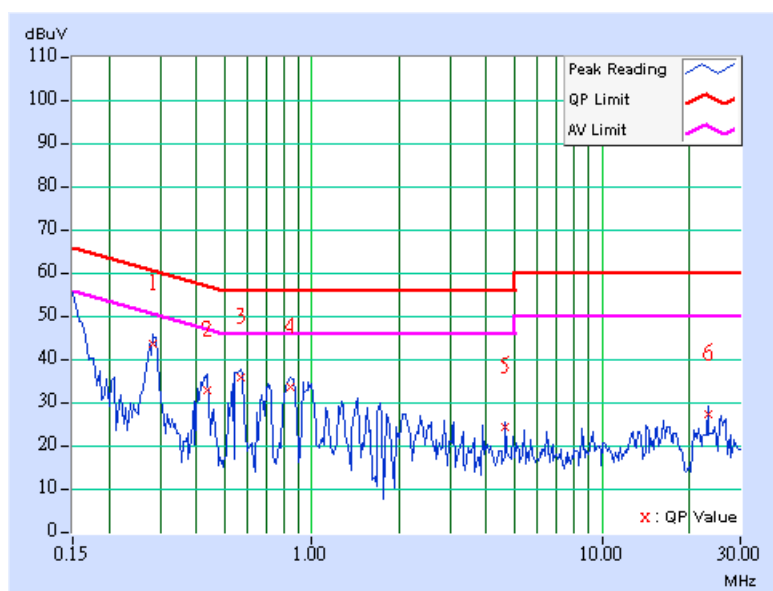
5.1.7 TEST RESULTS

Conducted Worst-Case Data Adapter mode with antenna 1, 3

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TESTED BY	Lori Chiu	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	A		

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	0.283	0.10	42.77	-	42.87	-	60.73	50.73	-17.86	-
2	0.435	0.10	32.32	-	32.42	-	57.15	47.15	-24.73	-
3	0.572	0.10	34.98	-	35.08	-	56.00	46.00	-20.92	-
4	0.849	0.10	32.97	-	33.07	-	56.00	46.00	-22.93	-
5	4.652	0.37	23.79	-	24.16	-	56.00	46.00	-31.84	-
6	23.129	0.79	26.70	-	27.49	-	60.00	50.00	-32.51	-

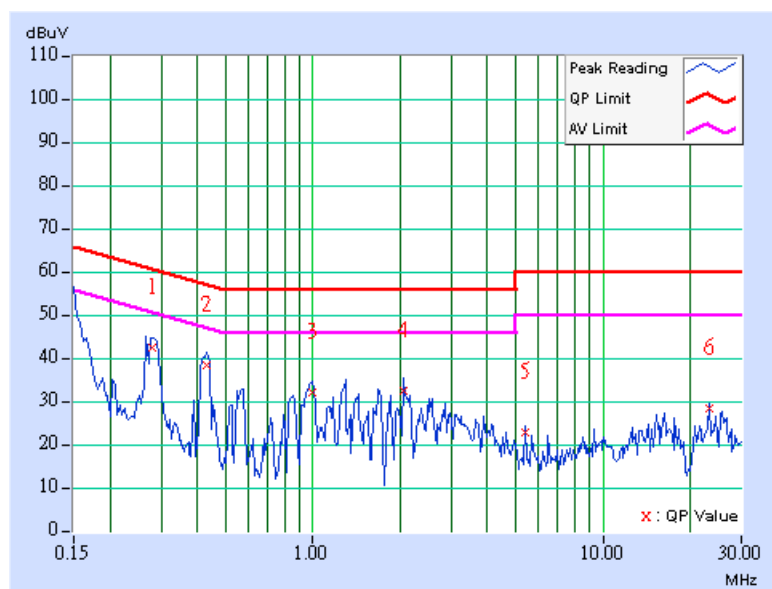
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.280	0.10	41.92	-	42.02	-	60.80	50.80	-18.78	-
2	0.429	0.10	37.92	-	38.02	-	57.28	47.28	-19.26	-
3	0.990	0.20	31.51	-	31.71	-	56.00	46.00	-24.29	-
4	2.047	0.20	32.04	-	32.24	-	56.00	46.00	-23.76	-
5	5.426	0.39	22.13	-	22.52	-	60.00	50.00	-37.48	-
6	23.129	0.73	27.68	-	28.41	-	60.00	50.00	-31.59	-

- 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.

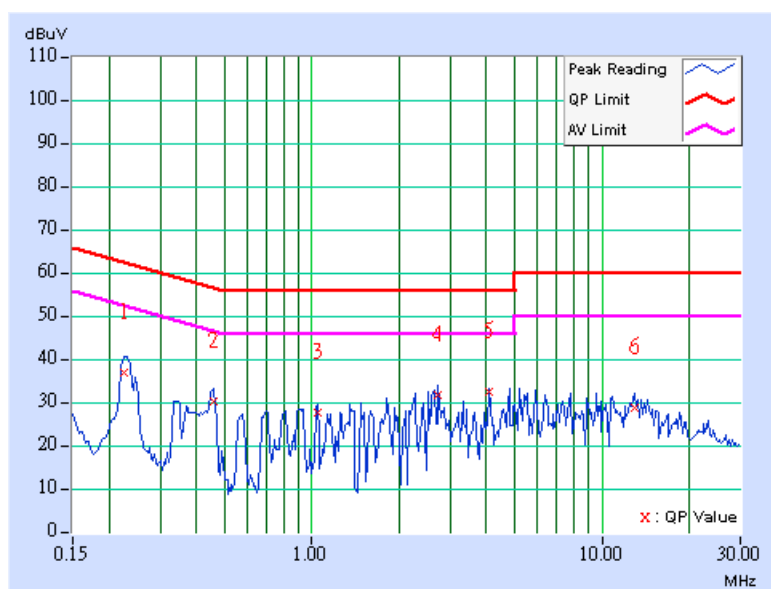


Conducted Worst-Case Data POE mode with antenna 1, 3

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TESTED BY	Lori Chiu	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	D		

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	0.224	0.10	36.64	-	36.74	-	62.66	52.66	-25.92	-
2	0.459	0.10	29.73	-	29.83	-	56.72	46.72	-26.89	-
3	1.051	0.11	27.26	-	27.37	-	56.00	46.00	-28.63	-
4	2.730	0.26	31.28	-	31.54	-	56.00	46.00	-24.46	-
5	4.066	0.37	32.14	-	32.51	-	56.00	46.00	-23.49	-
6	12.945	0.52	28.44	-	28.96	-	60.00	50.00	-31.04	-

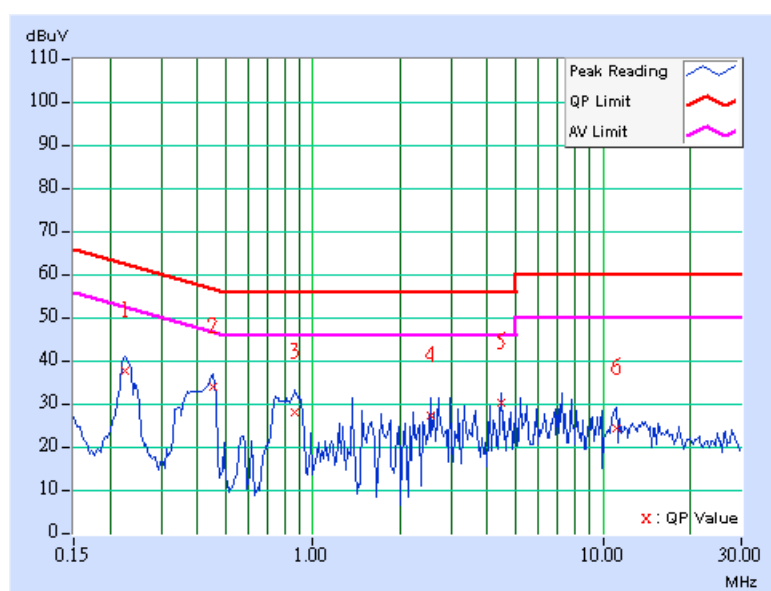
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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

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	0.224	0.10	37.37	-	37.47	-	62.66	52.66	-25.19	-
2	0.455	0.11	33.66	-	33.77	-	56.79	46.79	-23.02	-
3	0.865	0.18	27.50	-	27.68	-	56.00	46.00	-28.32	-
4	2.547	0.25	27.01	-	27.26	-	56.00	46.00	-28.74	-
5	4.438	0.38	30.03	-	30.41	-	56.00	46.00	-25.59	-
6	11.098	0.50	24.09	-	24.59	-	60.00	50.00	-35.41	-

- 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.



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 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.

5.2.2 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
26GHz ~ 40GHz Amplifier	AMF-6F-2600400	923362	Mar. 13, 2006

- 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.

5.2.3 TEST PROCEDURES

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

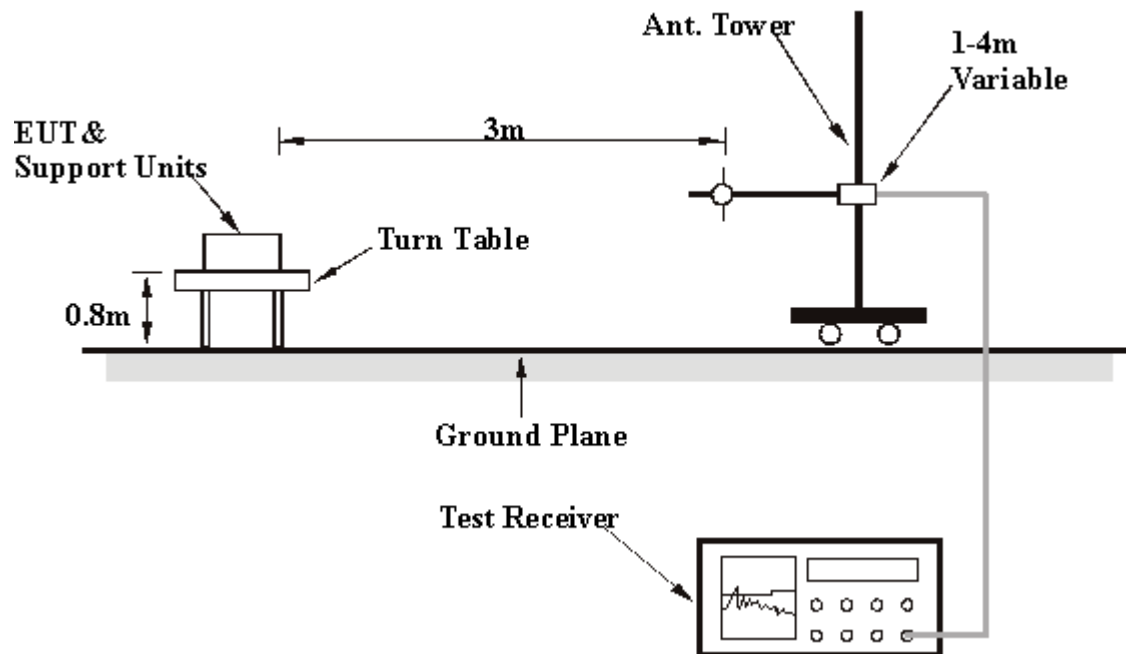
NOTE:

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 1 MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation

5.2.5 TEST SETUP



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

5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

5.2.7 TEST RESULTS

Below 1GHz Worst-Case Data
Adapter mode with antenna 1, 3

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

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	430.44	39.27 QP	46.00	-6.73	2.00 H	85	20.71	18.56
2	479.04	34.51 QP	46.00	-11.49	1.50 H	55	14.91	19.60
3	494.59	34.19 QP	46.00	-11.81	1.50 H	43	14.25	19.94
4	527.64	38.63 QP	46.00	-7.37	1.50 H	43	17.96	20.67
5	659.82	41.45 QP	46.00	-4.55	1.50 H	43	18.21	23.25
6	792.00	36.99 QP	46.00	-9.01	1.50 H	10	11.03	25.96
7	924.19	41.67 QP	46.00	-4.33	1.00 H	88	13.46	28.21

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	37.81 QP	40.00	-2.19	1.00 V	205	25.27	12.54
2	78.60	28.23 QP	40.00	-11.77	1.00 V	241	17.52	10.72
3	395.45	38.87 QP	46.00	-7.13	1.00 V	205	21.08	17.79
4	428.50	36.62 QP	46.00	-9.38	1.00 V	205	18.10	18.52
5	461.54	34.01 QP	46.00	-11.99	1.00 V	205	14.81	19.21
6	527.64	35.86 QP	46.00	-10.14	1.00 V	205	15.19	20.67
7	659.82	36.86 QP	46.00	-9.14	1.00 V	205	13.61	23.25
8	792.00	34.54 QP	46.00	-11.46	1.00 V	214	8.58	25.96
9	924.19	42.61 QP	46.00	-3.39	1.00 V	241	14.40	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.

Below 1GHz Worst-Case Data
POE mode with antenna 1, 3

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

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	284.65	34.33 QP	46.00	-11.67	1.00 H	337	19.46	14.87
2	362.40	33.13 QP	46.00	-12.87	1.50 H	130	16.44	16.69
3	395.45	43.26 QP	46.00	-2.74	1.50 H	130	25.47	17.79
4	428.50	33.49 QP	46.00	-12.51	1.50 H	130	14.97	18.52
5	461.54	32.90 QP	46.00	-13.10	1.50 H	130	13.69	19.21
6	527.64	34.37 QP	46.00	-11.63	1.50 H	130	13.70	20.67
7	659.82	33.88 QP	46.00	-12.12	1.50 H	130	10.64	23.25
8	924.19	37.49 QP	46.00	-8.51	1.00 H	10	9.28	28.21
9	947.52	32.10 QP	46.00	-13.90	1.00 H	190	2.80	29.30

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	26.69 QP	40.00	-13.31	1.00 V	313	11.97	14.72
2	84.43	31.44 QP	40.00	-8.56	1.00 V	229	21.51	9.92
3	103.87	29.69 QP	43.50	-13.81	1.00 V	244	20.35	9.34
4	362.40	32.21 QP	46.00	-13.79	1.00 V	121	15.51	16.69
5	395.45	39.48 QP	46.00	-6.52	1.00 V	121	21.69	17.79
6	445.99	32.40 QP	46.00	-13.60	1.00 V	280	13.53	18.87
7	461.54	35.01 QP	46.00	-10.99	1.00 V	121	15.80	19.21
8	494.59	32.51 QP	46.00	-13.49	1.00 V	121	12.57	19.94
9	527.64	35.32 QP	46.00	-10.68	1.00 V	121	14.65	20.67
10	659.82	36.32 QP	46.00	-9.68	1.00 V	121	13.07	23.25
11	792.00	33.98 QP	46.00	-12.02	1.00 V	244	8.01	25.96
12	858.10	32.37 QP	46.00	-13.63	1.00 V	190	5.62	26.74
13	924.19	39.67 QP	46.00	-6.33	1.00 V	316	11.45	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.

802.11a OFDM modulation

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
TESTED BY	Lori Chiu	INPUT POWER (SYSTEM)	120Vac, 60 Hz

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	#3830.00	47.14 PK	74.00	-26.86	1.16 H	285	12.47	34.67
1	#3830.00	39.91 AV	54.00	-14.09	1.16 H	285	5.24	34.67
2	5725.00	69.74 PK	74.86	-5.12	1.08 H	334	30.81	38.92
2	5725.00	60.41 AV	65.04	-4.63	1.08 H	334	30.81	38.92
3	*5745.00	94.86 PK			1.08 H	334	55.88	38.98
3	*5745.00	85.04 AV			1.08 H	334	46.06	38.98
4	#7660.00	53.79 PK	74.00	-20.21	1.20 H	0	8.42	45.38
4	#7660.00	43.05 AV	54.00	-10.95	1.20 H	0	-2.32	45.38
5	#11490.00	62.19 PK	74.00	-11.81	1.50 H	43	11.00	51.19
5	#11490.00	49.52 AV	54.00	-4.48	1.50 H	43	-1.67	51.19
6	17235.00	71.67 PK	74.86	-3.19	1.32 H	272	18.27	53.41
6	17235.00	56.12 AV	65.04	-8.92	1.32 H	272	2.72	53.41

- NOTE:**
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
 6. “#”The radiated frequency falling in the restricted band.
 7. The limit value is defined as per 15.247

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	DETECTOR FUNCTION	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa
TESTED BY	Lori Chiu	INPUT POWER (SYSTEM)	120Vac, 60 Hz

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	#3830.00	55.07 PK	74.00	-18.93	1.35 V	338	20.40	34.67
1	#3830.00	49.07 AV	54.00	-4.93	1.35 V	338	14.40	34.67
2	5725.00	78.36 PK	87.73	-9.37	1.00 V	352	39.44	38.92
2	5725.00	69.19 AV	77.43	-8.24	1.00 V	352	30.27	38.92
3	*5745.00	107.73 PK			1.00 V	352	68.75	38.98
3	*5745.00	97.43 AV			1.00 V	352	58.45	38.98
4	#7660.00	55.34 PK	74.00	-18.66	1.38 V	341	9.97	45.38
4	#7660.00	44.91 AV	54.00	-9.09	1.38 V	341	-0.46	45.38
5	#11490.00	60.72 PK	74.00	-13.28	1.33 V	279	9.53	51.19
5	#11490.00	48.55 AV	54.00	-5.45	1.33 V	279	-2.63	51.19
6	17235.00	65.81 PK	87.73	-21.92	1.22 V	86	12.41	53.41
6	17235.00	52.88 AV	77.43	-24.55	1.22 V	86	-0.52	53.41

- NOTE:**
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
 6. "#"The radiated frequency falling in the restricted band.
 7. The limit value is defined as per 15.247