



FCC TEST REPORT

REPORT NO.: RF951222H01

MODEL NO.: RSVLC-0301B

RECEIVED: Dec. 22, 2006

TESTED: Dec. 26, 2006 to Feb. 04, 2007

ISSUED: Feb. 11, 2007

APPLICANT: Hewlett-Packard Company

ADDRESS: 8000 Foothills Blvd. Roseville, CA 95747

ISSUED BY: Advance Data Technology Corporation

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1 CERTIFICATION

PRODUCT : ProCurve Wireless Access Point 420 NA, J8130B
BRAND NAME : HP
MODEL NO. : RSVLC-0301B
TESTED: Dec. 26, 2006 to Feb. 04, 2007
APPLICANT : Hewlett-Packard Company
TEST ITEM: ENGINEERING SAMPLE
STANDARDS : 47 CFR Part 15, Subpart C (Section 15.247)
ANSI C63.4-2003

The above equipment (Model: RSVLC-0301B) 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 : Carol Liao , **DATE:** Feb. 11, 2007
(Carol Liao)

TECHNICAL ACCEPTANCE : Moris Lin , **DATE:** Feb. 11, 2007
Responsible for RF (Moris Lin)

APPROVED BY : Hank Chung , **DATE:** Feb. 11, 2007
(Hank Chung, Deputy Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	Test Type and Limit	Result	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit Minimum passing margin is -12.57 dB at 26.609 MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit
15.247(c)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is -0.10 dB at 2320.00 MHz, 2390.00 MHz and 2488.00 MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

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:

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

Measurement	Value
Conducted emissions	2.26 dB
Radiated emissions (30MHz-1GHz)	2.98 dB
Radiated emissions (1GHz ~18GHz)	2.21 dB
Radiated emissions (18GHz ~40GHz)	1.88 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	ProCurve Wireless Access Point 420 NA, J8130B
MODEL NO.	RSVLC-0301B
FCC ID	B94RSVLC-0301B
POWER SUPPLY	DC 3.3V from power adapter or DC 48V from POE
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
RADIO TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
CHANNEL SPACING	5MHz
OUTPUT POWER	Please see note 4 (on next page)
ANTENNA TYPE	Please see note 3 (on next page)
DATA CABLE	NA
I/O PORT	Ethernet x 1, RS-232 x 1
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g or IEEE 802.11b devices to the network. With its high-speed data transmissions of up to 54Mbps.
2. The EUT must be supplied with following power adapter or POE:

Adapter:	
Brand:	DVE
Model No.:	DSA-0121D-03
Input power :	100-240Vac 0.4A 50/60Hz
Output power :	+3.3Vdc 4.0A
POE : (only for test, not for sale)	
Brand:	CINCON
Model No.:	TR60A-POE-L
Input power :	100-240V , 1.5A, 47-63MHz
Output power :	48V , 1.2A

For radiated emission (Below 1 GHz), the EUT was pre-tested with above adapter and POE, the worse case was found in **Adapter**. Its test data was recorded in this report individually.

3. There are nine antennas provided to this EUT, please refer to the following table:

No.	Model No.	Frequency Range (GHz)	Antnna Coverage	Antenna Type	Gain	Connector
1	SA2-05005L-A5	2.4-2.5	Omni	Dipole	2.5dBi	RP SMA plug
2	J8441A	2.4-2.5	Omni	Dipole	4.4 dBi	Reverse SMA (male)
3	J8442A	2.4-2.5	Omni	Panel	1.5 dBi	Reverse SMA (male)
4	J8443A	2.4-2.5	Directional	Panel	6.7 dBi	Reverse SMA (male)
5	J8444A	2.4-2.5	Omni	Dipole	7.4 dBi	Reverse SMA (male)
6	J8445A	2.4-2.5	Directional	Panel	6.5 dBi	Reverse SMA (male)
7	J8446A	2.4-2.5	Directional	Panel	10.7 dBi	Reverse SMA (male)
8	J8997A	2.4-2.5/4.9-5.99	Omni	Panel	3 dBi / 4dBi	Reverse SMA (male)
9	J8999A	2.4-2.5/4.9-5.99	Directional	Panel	6.9 dBi / 7.7dBi	Reverse SMA (male)

4. RF output power for each antenna (Unit : mW):

Antenna No.	For 802.11b	For 802.11g
No. 1	138.676	231.739
No. 2	138.038	117.490
No. 3	120.226	223.872
No. 4	109.648	204.174
No. 5	117.490	181.970
No. 6	57.544	87.096
No. 7	28.184	10.715
No. 8	138.676	204.174
No. 9	46.774	23.442

5. These devices required professional install.

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 normal mode: Eleven channels are provided to this EUT.

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

3.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

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

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

Power Line Conducted Emission Test:

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

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1	DSSS	CCK	1

Radiated Emission Test (Below 1 GHz):

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

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1	DSSS	CCK	1

Radiated Emission Test (Above 1 GHz):

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

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

Bandedge Measurement:

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

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

Antenna Port Conducted Measurement:

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

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



3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a ProCurve Wireless Access Point 420 NA, J8130B. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

47 CFR Part 15, Subpart C. (15.247)
ANSI C63.4 : 2003

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



3.5 DESCRIPTION OF SUPPORT UNITS

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

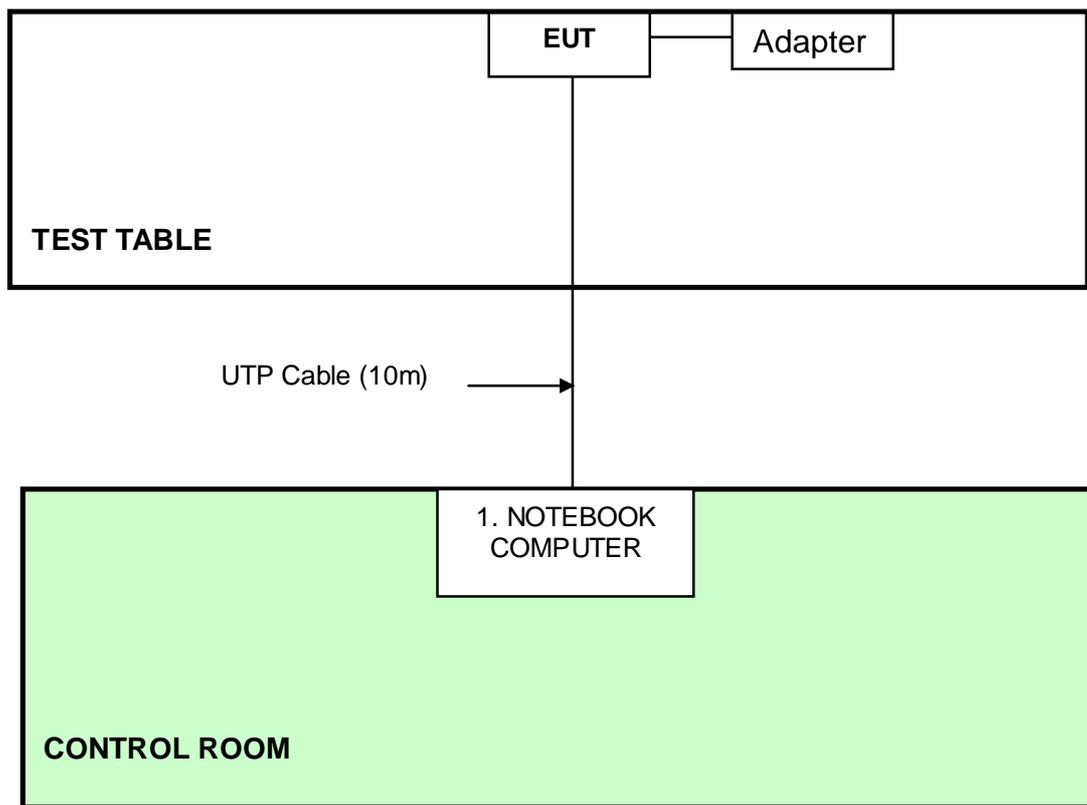
No.	Product	Brand	Model No.	Serial No.	FCC ID
1	NOTEBOOK COMPUTER	ASUS	A2400H	49NG038481	FCC DoC

No.	Signal cable description
1	NA

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

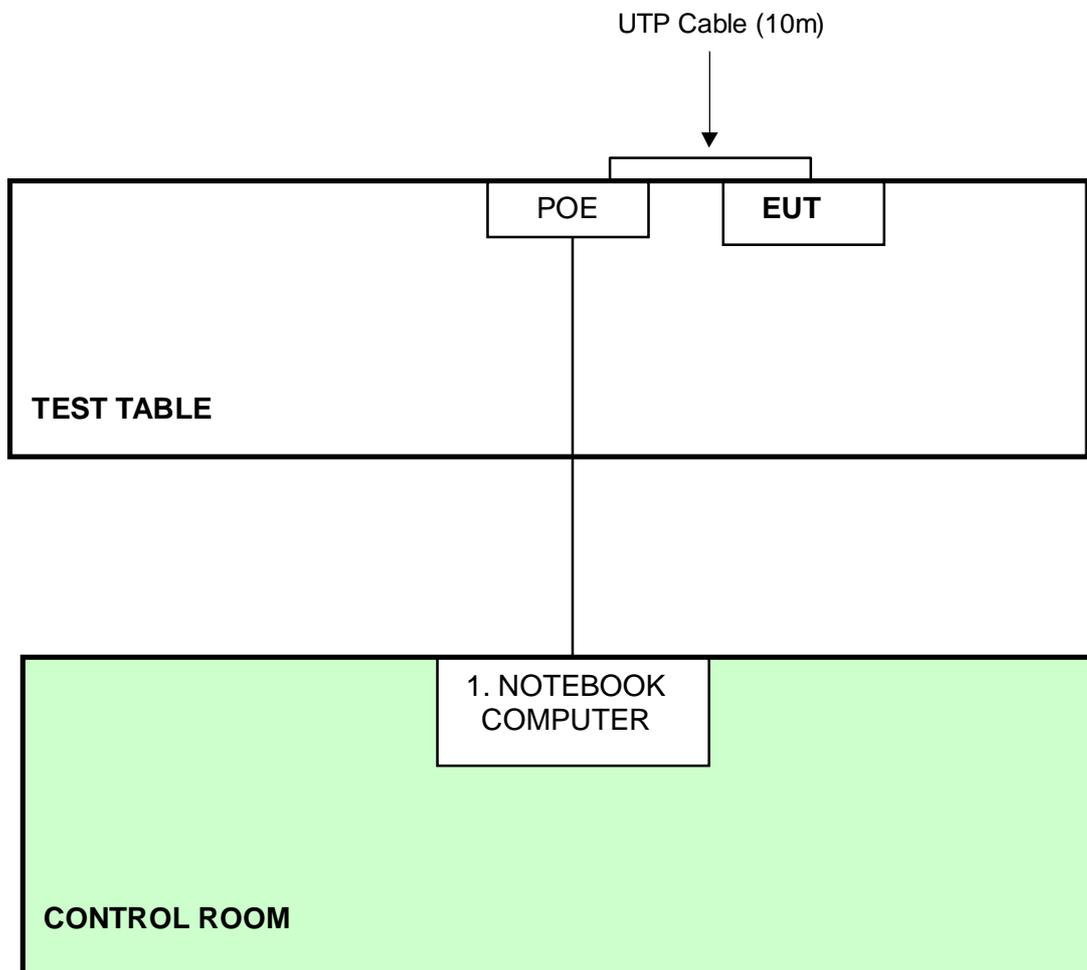
3.6 CONFIGURATION OF SYSTEM UNDER TEST

With Adapter:



NOTE: 1. Support unit 1 was kept in the control room during the test.
2. Please refer to the photos of test configuration.

With POE:



NOTE: 1. Support unit 1 was kept in the control room during the test.
2. Please refer to the photos of test configuration.



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE:

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

4.1.2 TEST INSTRUMENTS

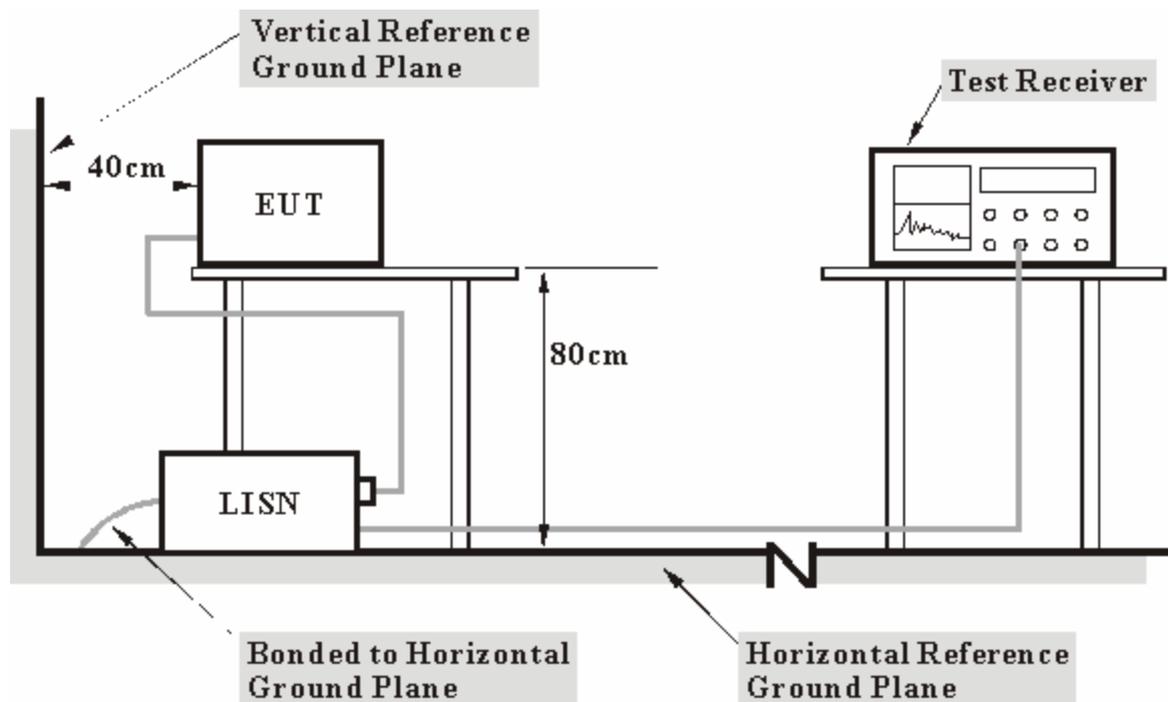
DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver	ESCS 30	847124/029	Dec. 14, 2007
Line-Impedance Stabilization Network(for EUT)	ENV-216	100071	Nov. 26, 2007
ROHDE &SCHWARZ LISN (peripheral)	ESH3-Z5	848773/004	Oct. 26, 2007
RF Cable (JETBAO)	RG233/U	Cable_CB_01	Dec. 09, 2007
Terminator	50	2	Oct. 30, 2007
Software	ADT_Cond_V7.3.2	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 ADT Shielded Room No. B.
 3. The VCCI Con B Registration No. is C-2193.

4.1.3 TEST PROCEDURES

- a. The EUT/HOST was placed 0.4 meters from the conducting wall of the shielded room with EUT/HOST 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/HOST were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.4 TEST SETUP



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

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

4.1.5 EUT OPERATING CONDITIONS

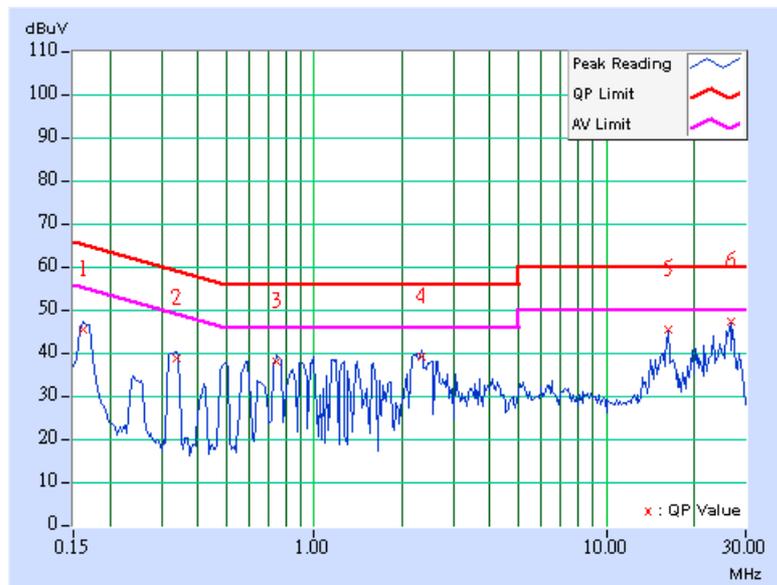
- a. Placed the EUT on the testing table.
- b. Prepared other computer system to act as a communication partner and placed it outside of testing area.
- c. The communication partner runs test program “ART 53Build5” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable.

4.1.6 TEST RESULTS

INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	With Adapter
PHASE	Line (L)	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 63%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Tony Chen		

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	0.162	9.60	35.47	-	45.07	-	65.38	55.38	-20.31	-
2	0.338	9.60	28.83	-	38.43	-	59.26	49.26	-20.83	-
3	0.748	9.60	28.13	-	37.73	-	56.00	46.00	-18.27	-
4	2.324	9.70	29.23	-	38.93	-	56.00	46.00	-17.07	-
5	16.227	10.10	35.30	-	45.40	-	60.00	50.00	-14.60	-
6	26.609	10.10	37.33	-	47.43	-	60.00	50.00	-12.57	-

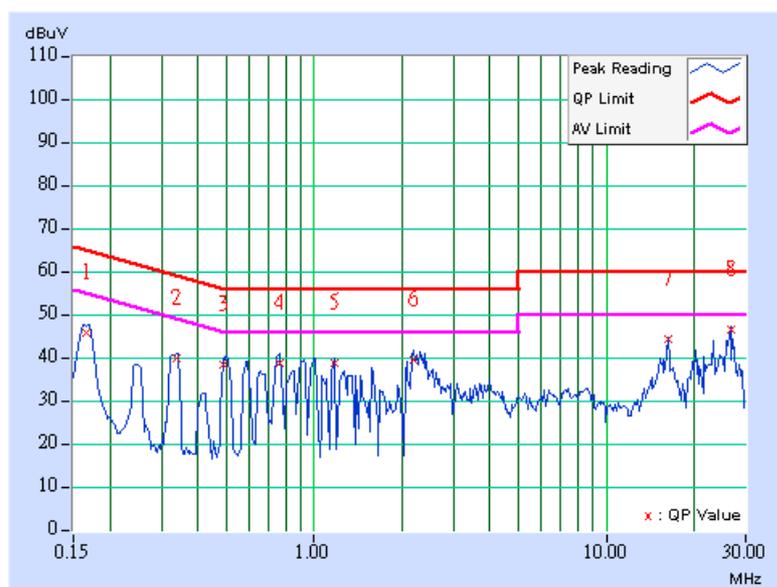
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	With Adapter
PHASE	Neutral (N)	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 63%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Tony Chen		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	9.60	35.82	-	45.42	-	65.18	55.18	-19.76	-
2	0.338	9.60	29.77	-	39.37	-	59.26	49.26	-19.89	-
3	0.486	9.60	28.46	-	38.06	-	56.24	46.24	-18.18	-
4	0.763	9.60	28.75	-	38.35	-	56.00	46.00	-17.65	-
5	1.172	9.62	28.96	-	38.58	-	56.00	46.00	-17.42	-
6	2.195	9.70	29.47	-	39.17	-	56.00	46.00	-16.83	-
7	16.227	10.02	34.38	-	44.40	-	60.00	50.00	-15.60	-
8	26.609	10.10	36.47	-	46.57	-	60.00	50.00	-13.43	-

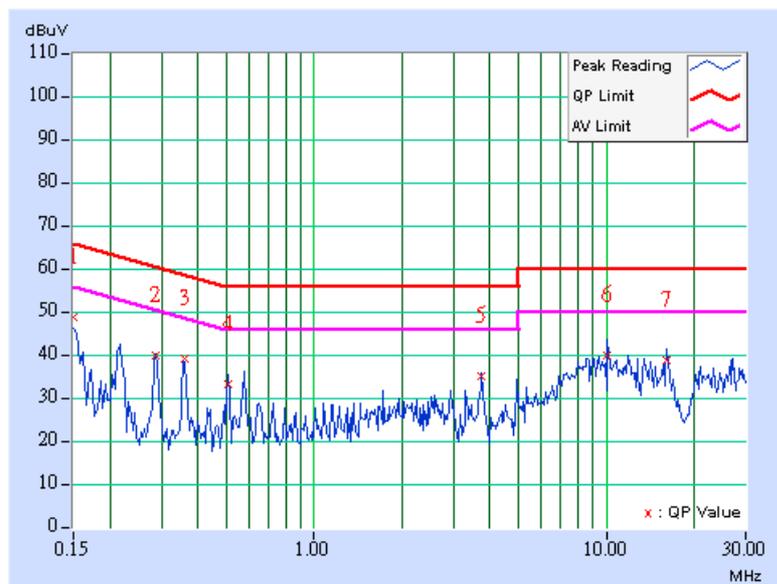
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	With POE
PHASE	Line (L)	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 63%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Tony Chen		

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	9.75	38.76	-	48.51	-	66.00	56.00	-17.49	-
2	0.289	9.80	29.65	-	39.45	-	60.57	50.57	-21.12	-
3	0.361	9.80	29.19	-	38.99	-	58.71	48.71	-19.72	-
4	0.505	9.82	23.04	-	32.86	-	56.00	46.00	-23.14	-
5	3.750	9.90	25.08	-	34.98	-	56.00	46.00	-21.02	-
6	10.063	10.00	29.91	-	39.91	-	60.00	50.00	-20.09	-
7	16.168	10.18	28.80	-	38.98	-	60.00	50.00	-21.02	-

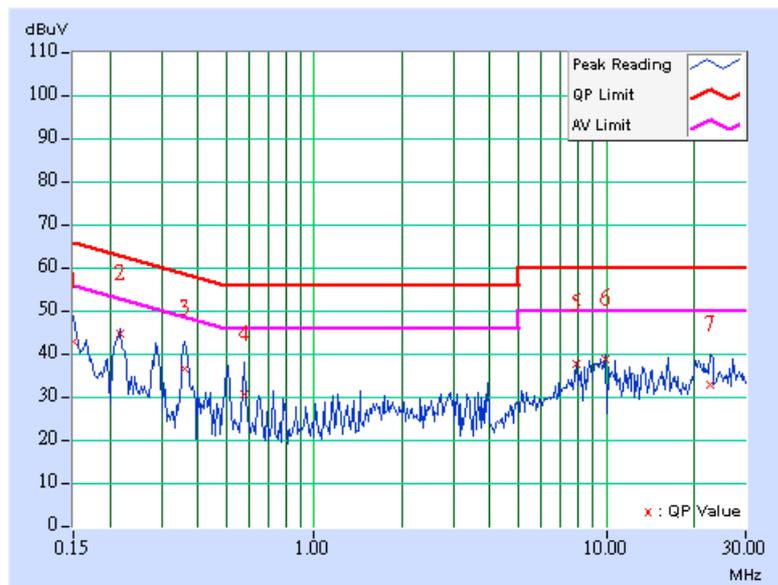
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



INPUT POWER (SYSTEM)	120Vac, 60 Hz	TEST MODE	With POE
PHASE	Neutral (N)	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 63%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Tony Chen		

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	9.80	32.49	-	42.29	-	66.00	56.00	-23.71	-
2	0.216	9.80	34.44	-	44.24	-	62.96	52.96	-18.72	-
3	0.361	9.80	26.03	-	35.83	-	58.71	48.71	-22.88	-
4	0.580	9.83	20.22	-	30.05	-	56.00	46.00	-25.95	-
5	7.922	10.07	27.19	-	37.26	-	60.00	50.00	-22.74	-
6	9.938	10.10	28.42	-	38.52	-	60.00	50.00	-21.48	-
7	22.824	10.46	22.56	-	33.02	-	60.00	50.00	-26.98	-

- 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
ADVANTEST Spectrum Analyzer	R3271A	85060311	July 03, 2007
HP Pre_Amplifier	8449B	3008A01922	Sep. 18, 2007
ROHDE & SCHWARZ Test Receiver	ESCS30	100375	Sep. 20, 2007
CHASE Broadband Antenna	VULB9168	138	Dec. 11, 2007
Schwarzbeck Horn_Antenna	BBHA9120	D124	Jan. 01, 2008
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 05, 2008
SCHWARZBECK Biconical Antenna	VHBA9123	459	Jun. 08, 2009
SCHWARZBECK Periodic Antenna	UPA6108	1148	Jun. 08, 2009
R&S Loop Antenna	HFH2-Z2	881058/15	Nov. 29, 2007
RF Switches (ARNITSU)	CS-201	1565157	NA
RF CABLE (Chaintek)	SF102	22054-2	Nov. 14, 2007
RF Cable(RICHTEC)	9913-30M N-N Cable	STCCAB-30M-1 GHz	Jul. 15, 2007
Software	ADT_Radiated_V 5.14	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

- Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Biconical and Periodic Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, HP preamplifier (model: 8449B) and Spectrum Analyzer (model: R3271A) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in ADT Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 4824A-3.
7. Loop antenna was used for all emissions below 30 MHz.

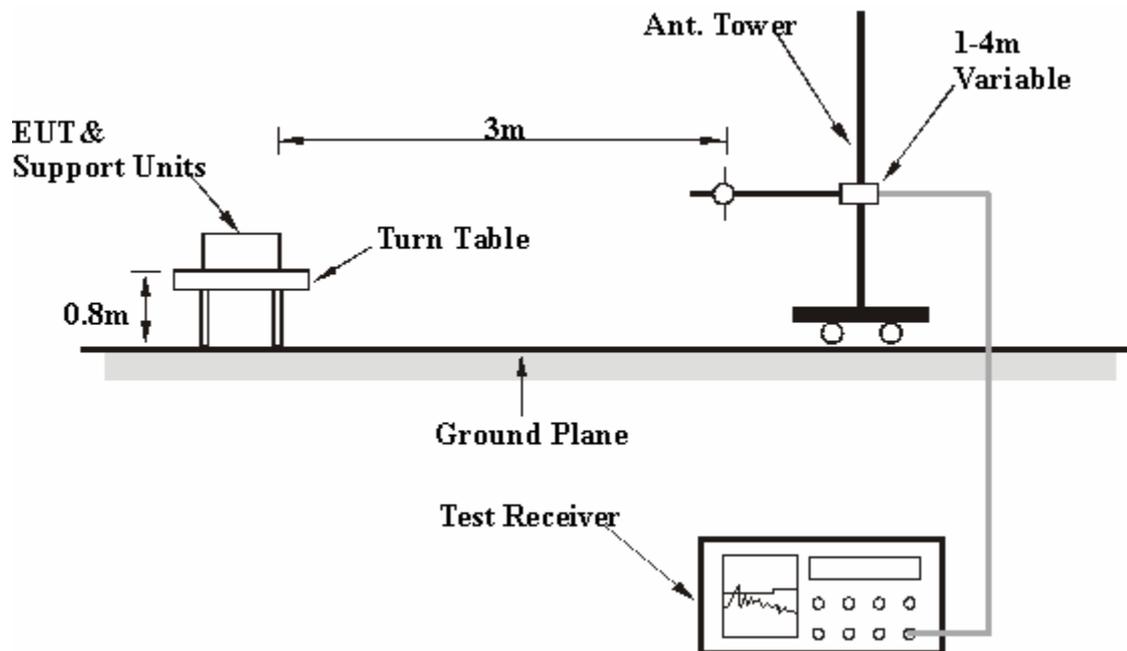
4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using 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 is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 TEST SETUP



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

4.2.5 EUT OPERATING CONDITIONS

Same as 4.1.5

4.2.6 TEST RESULTS (ANTENNA 1)

Below 1GHz Worst-Case Data

MODULATION TYPE	DSSS	CHANNEL	Channel 1
INPUT POWER (SYSTEM)	120Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Wen Yu	DETECTOR FUNCTION	Quasi-Peak, 120kHz

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	137.70	28.60 QP	43.50	-14.90	2.38 H	263	15.40	13.20
2	250.01	27.80 QP	46.00	-18.20	1.00 H	263	14.10	13.80
3	272.80	24.60 QP	46.00	-21.40	1.00 H	141	9.10	15.50
4	375.01	26.70 QP	46.00	-19.30	1.99 H	293	8.50	18.20
5	500.01	31.90 QP	46.00	-14.10	1.53 H	305	10.10	21.80
6	675.50	31.10 QP	46.00	-14.90	1.83 H	173	5.60	25.40
7	768.50	31.30 QP	46.00	-14.70	1.85 H	285	3.90	27.40
8	864.70	34.50 QP	46.00	-11.50	1.90 H	30	6.00	28.50

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	137.60	33.20 QP	43.50	-10.30	1.00 V	326	20.00	13.20
2	249.99	24.60 QP	46.00	-21.40	1.00 V	324	10.80	13.80
3	374.99	26.90 QP	46.00	-19.10	1.10 V	345	8.70	18.20
4	500.03	30.10 QP	46.00	-15.90	1.77 V	18	8.30	21.80
5	675.50	30.70 QP	46.00	-15.30	1.62 V	296	5.30	25.40
6	768.50	33.80 QP	46.00	-12.20	1.58 V	239	6.40	27.40
7	864.70	33.80 QP	46.00	-12.20	1.57 V	255	5.30	28.50

- 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

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.00	57.80 PK	74.00	-16.20	1.04 H	90	25.90	31.90
1	2386.00	45.70 AV	54.00	-8.30	1.04 H	90	13.80	31.90
2	*2412.00	105.40 PK			1.04 H	90	73.40	32.00
2	*2412.00	97.50 AV			1.04 H	90	65.50	32.00
3	4824.00	45.60 PK	74.00	-28.40	1.35 H	112	9.60	36.00
3	4824.00	32.80 AV	54.00	-21.20	1.35 H	112	-3.20	36.00
4	7236.00	52.60 PK	74.00	-21.40	1.22 H	58	10.30	42.20
4	7236.00	38.20 AV	54.00	-15.80	1.22 H	58	-4.10	42.20

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	2386.00	63.60 PK	74.00	-10.40	1.83 V	90	31.70	31.90
1	2386.00	53.60 AV	54.00	-0.40	1.83 V	90	21.70	31.90
2	*2412.00	117.00 PK			1.12 V	254	85.00	32.00
2	*2412.00	108.50 AV			1.12 V	254	76.50	32.00
3	4824.00	46.00 PK	74.00	-28.00	1.05 V	106	10.00	36.00
3	4824.00	33.10 AV	54.00	-20.90	1.05 V	106	-2.90	36.00
4	7236.00	52.80 PK	74.00	-21.20	1.21 V	45	10.50	42.20
4	7236.00	38.20 AV	54.00	-15.80	1.21 V	45	-4.10	42.20

- 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

MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.40	53.20 PK	74.00	-20.80	1.00 H	80	21.90	31.30
1	2233.40	47.10 AV	54.00	-6.90	1.00 H	80	15.80	31.30
2	2389.30	57.80 PK	74.00	-16.20	1.07 H	138	25.90	31.90
2	2389.30	45.70 AV	54.00	-8.30	1.07 H	138	13.80	31.90
3	*2437.00	108.80 PK			1.07 H	138	76.70	32.10
3	*2437.00	100.90 AV			1.07 H	138	68.80	32.10
4	2483.50	56.60 PK	74.00	-17.40	1.07 H	138	24.30	32.30
4	2483.50	45.50 AV	54.00	-8.50	1.07 H	138	13.20	32.30
5	4874.00	46.40 PK	74.00	-27.60	1.48 H	122	10.30	36.10
5	4874.00	33.80 AV	54.00	-20.20	1.48 H	122	-2.30	36.10
6	7311.00	53.20 PK	74.00	-20.80	1.77 H	288	10.60	42.50
6	7311.00	38.90 AV	54.00	-15.10	1.77 H	288	-3.70	42.50

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	2233.40	61.70 PK	74.00	-12.30	1.03 V	101	30.40	31.30
1	2233.40	53.00 AV	54.00	-1.00	1.03 V	101	21.70	31.30
2	2389.00	63.40 PK	74.00	-10.60	1.40 V	118	31.50	31.90
2	2389.00	51.90 AV	54.00	-2.10	1.40 V	118	20.00	31.90
3	*2437.00	121.90 PK			1.10 V	260	89.80	32.10
3	*2437.00	113.50 AV			1.10 V	260	81.40	32.10
4	2485.00	63.80 PK	74.00	-10.20	1.39 V	262	31.50	32.30
4	2485.00	53.10 AV	54.00	-0.90	1.39 V	262	20.80	32.30
5	4874.00	48.30 PK	74.00	-25.70	1.00 V	115	12.20	36.10
5	4874.00	40.00 AV	54.00	-14.00	1.00 V	115	3.90	36.10
6	7311.00	54.50 PK	74.00	-19.50	1.02 V	21	11.90	42.50
6	7311.00	43.60 AV	54.00	-10.40	1.02 V	21	1.00	42.50

- 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



MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	103.70 PK			1.56 H	140	71.50	32.20
1	*2462.00	95.40 AV			1.56 H	140	63.20	32.20
2	2487.30	58.60 PK	74.00	-15.40	1.58 H	4	26.30	32.30
2	2487.30	45.80 AV	54.00	-8.20	1.58 H	4	13.50	32.30
3	4924.00	46.00 PK	74.00	-28.00	1.24 H	105	9.80	36.20
3	4924.00	33.00 AV	54.00	-21.00	1.24 H	105	-3.20	36.20
4	7386.00	53.10 PK	74.00	-20.90	1.08 H	116	10.40	42.80
4	7386.00	38.60 AV	54.00	-15.40	1.08 H	116	-4.10	42.80

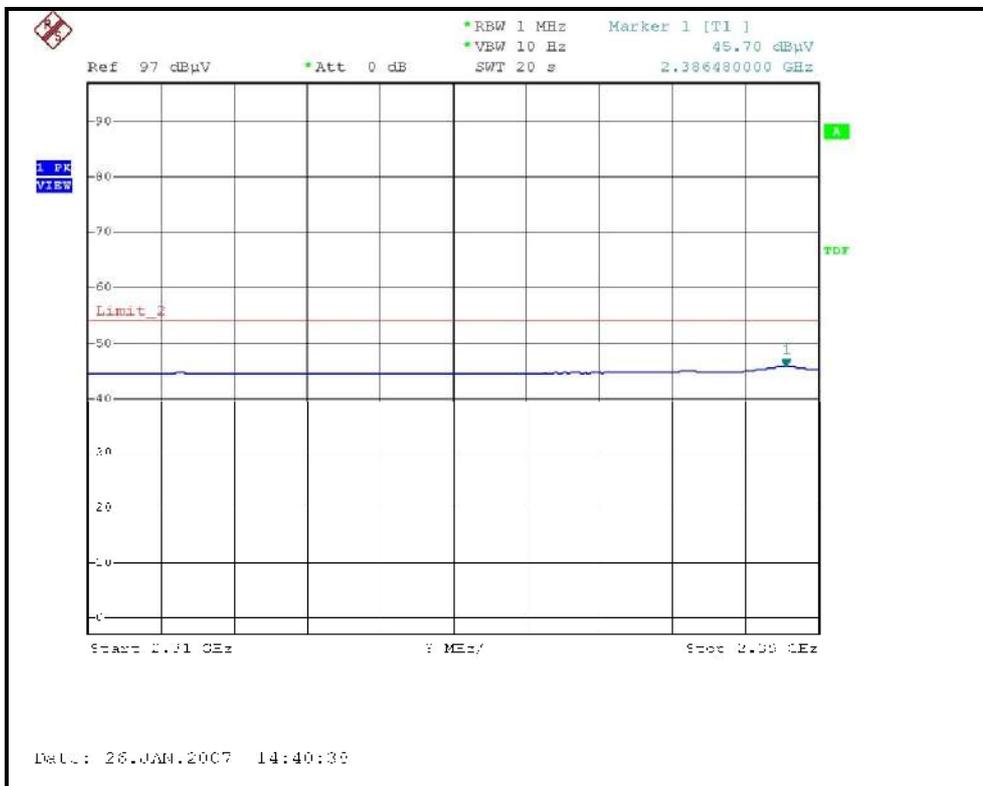
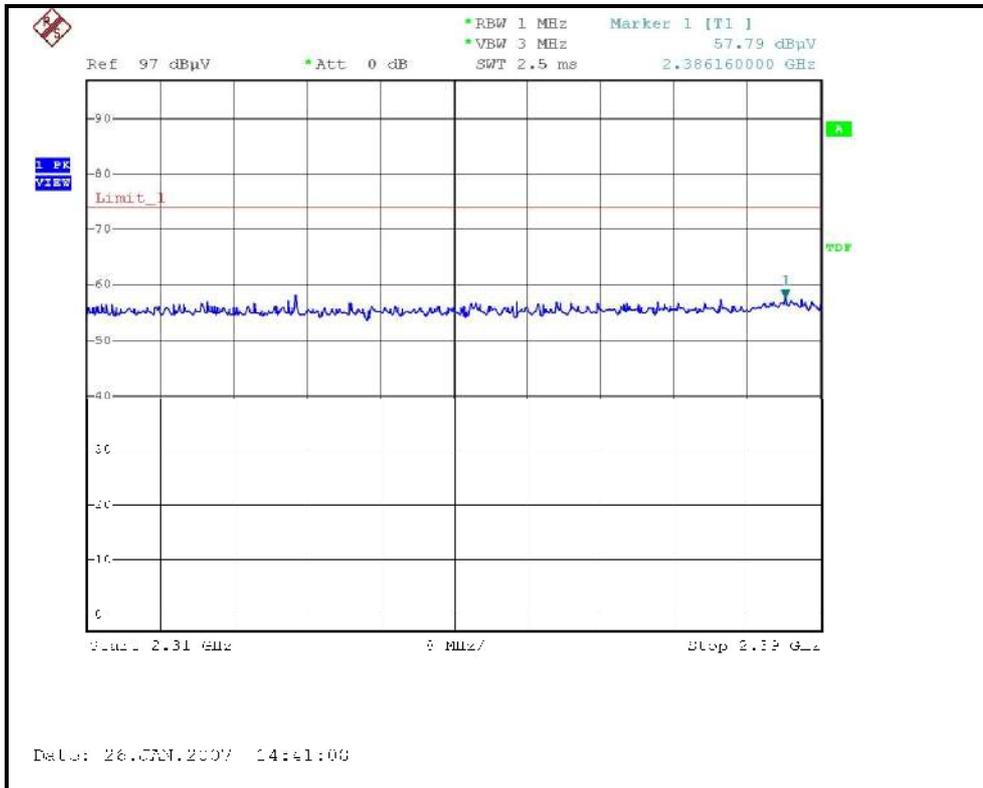
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	115.70 PK			1.10 V	262	83.50	32.20
1	*2462.00	107.20 AV			1.10 V	262	75.00	32.20
2	2488.00	64.10 PK	74.00	-9.90	1.41 V	263	31.80	32.30
2	2488.00	53.90 AV	54.00	-0.10	1.41 V	263	21.60	32.30
3	4924.00	46.20 PK	74.00	-27.80	1.02 V	48	10.00	36.20
3	4924.00	33.10 AV	54.00	-20.90	1.02 V	48	-3.10	36.20
4	7386.00	53.30 PK	74.00	-20.70	1.00 V	14	10.60	42.80
4	7386.00	38.80 AV	54.00	-15.20	1.00 V	14	-3.90	42.80

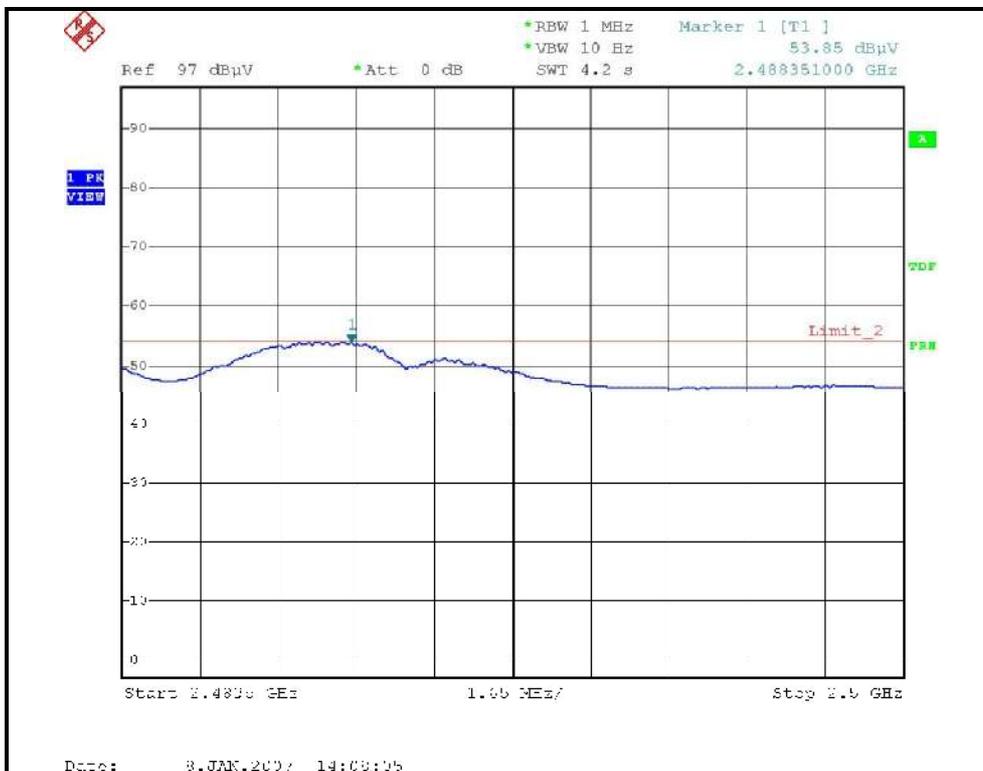
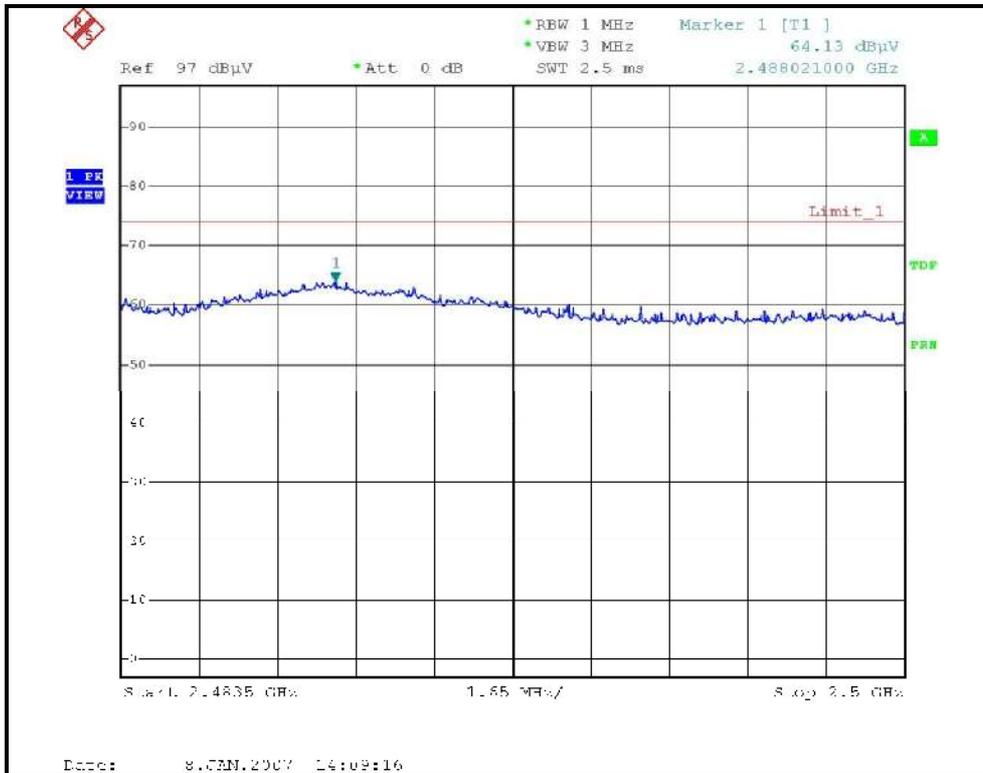
REMARKS:

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

RESTRICTED BANDEDGE (802.11b MODE, CH1, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE, CH11, VERTICAL)





802.11g OFDM modulation

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	57.10 PK	74.00	-16.90	1.02 H	23	25.20	31.90
1	2390.00	45.20 AV	54.00	-8.80	1.02 H	23	13.30	31.90
2	*2412.00	100.10 PK			1.02 H	23	68.10	32.00
2	*2412.00	89.30 AV			1.02 H	23	57.30	32.00
3	4824.00	45.20 PK	74.00	-28.80	1.08 H	42	9.20	36.00
3	4824.00	31.70 AV	54.00	-22.30	1.08 H	42	-4.30	36.00
4	7236.00	51.40 PK	74.00	-22.60	1.00 H	10	9.10	42.20
4	7236.00	37.80 AV	54.00	-16.20	1.00 H	10	-4.50	42.20

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	69.90 PK	74.00	-4.10	1.83 V	90	38.00	31.90
1	2390.00	53.30 AV	54.00	-0.70	1.83 V	90	21.40	31.90
2	*2412.00	115.70 PK			1.11 V	262	83.70	32.00
2	*2412.00	104.50 AV			1.11 V	262	72.50	32.00
3	4824.00	45.40 PK	74.00	-28.60	1.00 V	2	9.40	36.00
3	4824.00	31.80 AV	54.00	-22.20	1.00 V	2	-4.20	36.00
4	7236.00	51.20 PK	74.00	-22.80	1.06 V	55	8.90	42.20
4	7236.00	38.00 AV	54.00	-16.00	1.06 V	55	-4.30	42.20

- 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

MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.40	53.70 PK	74.00	-20.30	1.04 H	76	22.40	31.30
1	2233.40	47.20 AV	54.00	-6.80	1.04 H	76	15.90	31.30
2	2390.00	58.20 PK	74.00	-15.80	1.08 H	27	26.30	31.90
2	2390.00	45.80 AV	54.00	-8.20	1.08 H	27	13.90	31.90
3	*2437.00	108.30 PK			1.08 H	27	76.20	32.10
3	*2437.00	97.80 AV			1.08 H	27	65.70	32.10
4	2483.50	61.50 PK	74.00	-12.50	1.08 H	27	29.20	32.30
4	2483.50	46.10 AV	54.00	-7.90	1.08 H	27	13.80	32.30
5	4874.00	45.90 PK	74.00	-28.10	1.02 H	6	9.80	36.10
5	4874.00	32.10 AV	54.00	-21.90	1.02 H	6	-4.00	36.10
6	7311.00	51.90 PK	74.00	-22.10	1.06 H	45	9.30	42.50
6	7311.00	38.60 AV	54.00	-15.40	1.06 H	45	-4.00	42.50

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	2233.40	62.30 PK	74.00	-11.70	1.06 V	108	31.00	31.30
1	2233.40	53.20 AV	54.00	-0.80	1.06 V	108	21.90	31.30
2	2390.00	67.40 PK	74.00	-6.60	1.48 V	273	35.50	31.90
2	2390.00	51.40 AV	54.00	-2.60	1.48 V	273	19.50	31.90
3	*2437.00	122.20 PK			1.10 V	255	90.10	32.10
3	*2437.00	111.40 AV			1.10 V	255	79.30	32.10
4	2483.50	69.40 PK	74.00	-4.60	1.40 V	274	37.10	32.30
4	2483.50	51.80 AV	54.00	-2.20	1.40 V	274	19.50	32.30
5	4874.00	45.70 PK	74.00	-28.30	1.26 V	96	9.60	36.10
5	4874.00	32.20 AV	54.00	-21.80	1.26 V	96	-3.90	36.10
6	7311.00	52.10 PK	74.00	-21.90	1.00 V	44	9.50	42.50
6	7311.00	38.50 AV	54.00	-15.50	1.00 V	44	-4.10	42.50

- 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



MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

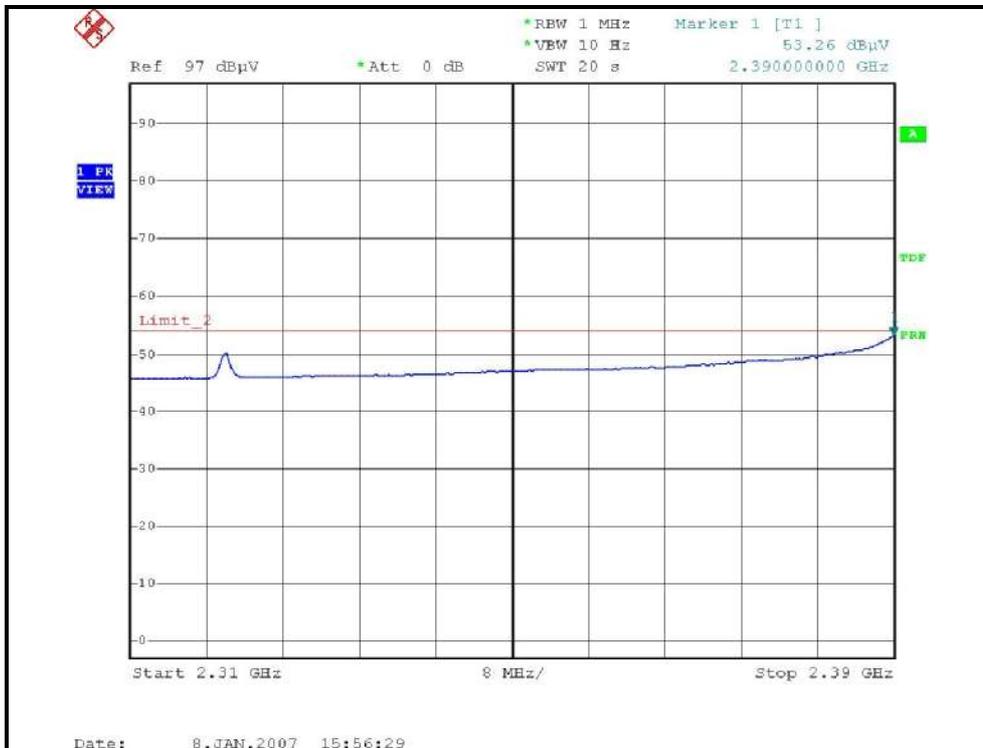
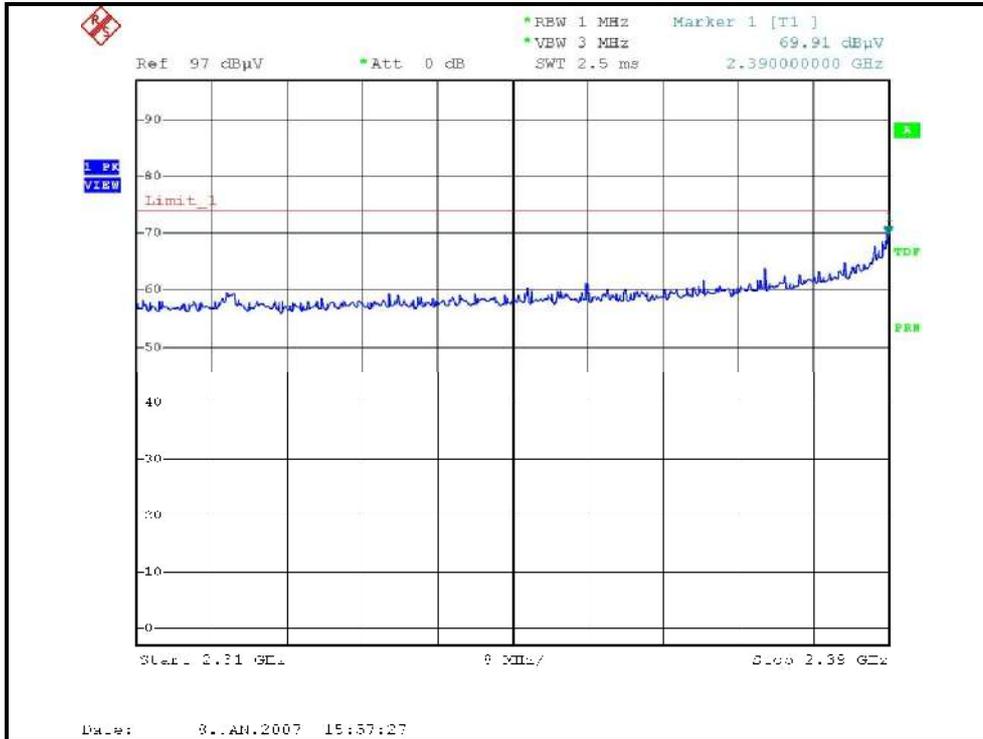
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.70 PK			1.01 H	27	68.50	32.20
1	*2462.00	89.50 AV			1.01 H	27	57.30	32.20
2	2483.50	60.80 PK	74.00	-13.20	1.00 H	27	28.50	32.30
2	2483.50	46.70 AV	54.00	-7.30	1.00 H	27	14.40	32.30
3	4924.00	45.30 PK	74.00	-28.70	1.05 H	45	9.10	36.20
3	4924.00	32.00 AV	54.00	-22.00	1.05 H	45	-4.20	36.20
4	7386.00	51.70 PK	74.00	-22.30	1.02 H	16	9.00	42.80
4	7386.00	38.50 AV	54.00	-15.50	1.02 H	16	-4.20	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

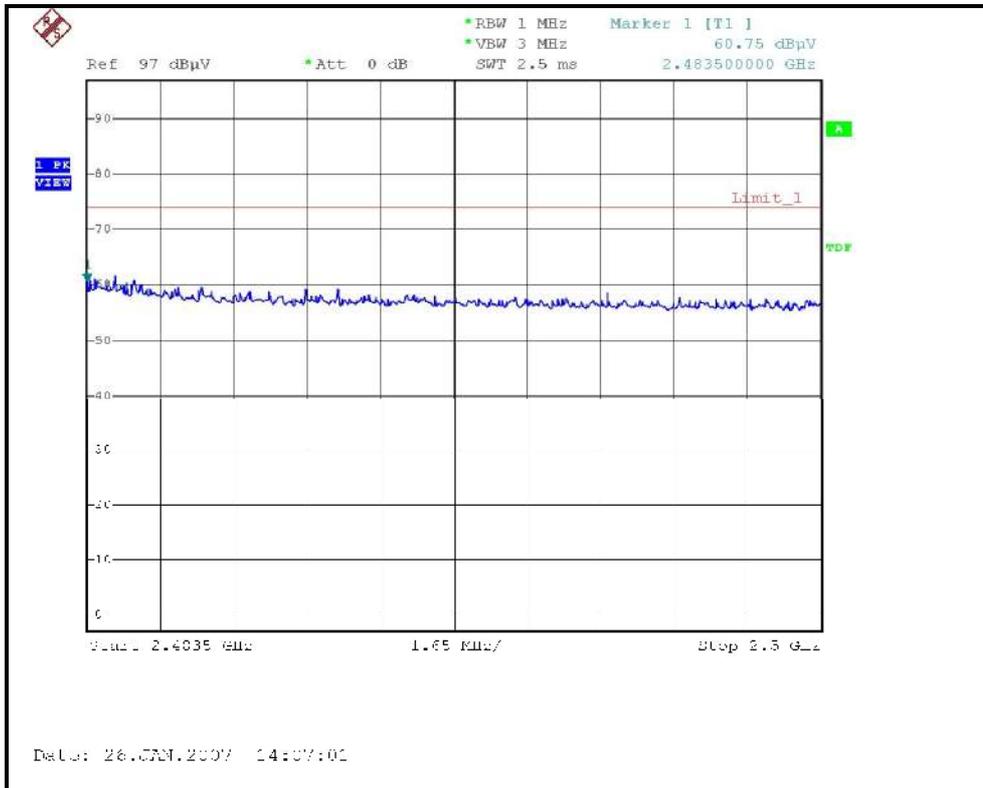
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	115.20 PK			1.11 V	263	83.00	32.20
1	*2462.00	104.40 AV			1.11 V	263	72.20	32.20
2	2483.50	70.60 PK	74.00	-3.40	1.41 V	263	38.30	32.30
2	2483.50	53.40 AV	54.00	-0.60	1.41 V	263	21.10	32.30
3	4924.00	45.40 PK	74.00	-28.60	1.02 V	78	9.20	36.20
3	4924.00	32.00 AV	54.00	-22.00	1.02 V	78	-4.20	36.20
4	7386.00	51.90 PK	74.00	-22.10	1.00 V	106	9.20	42.80
4	7386.00	38.60 AV	54.00	-15.40	1.00 V	106	-4.10	42.80

- 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

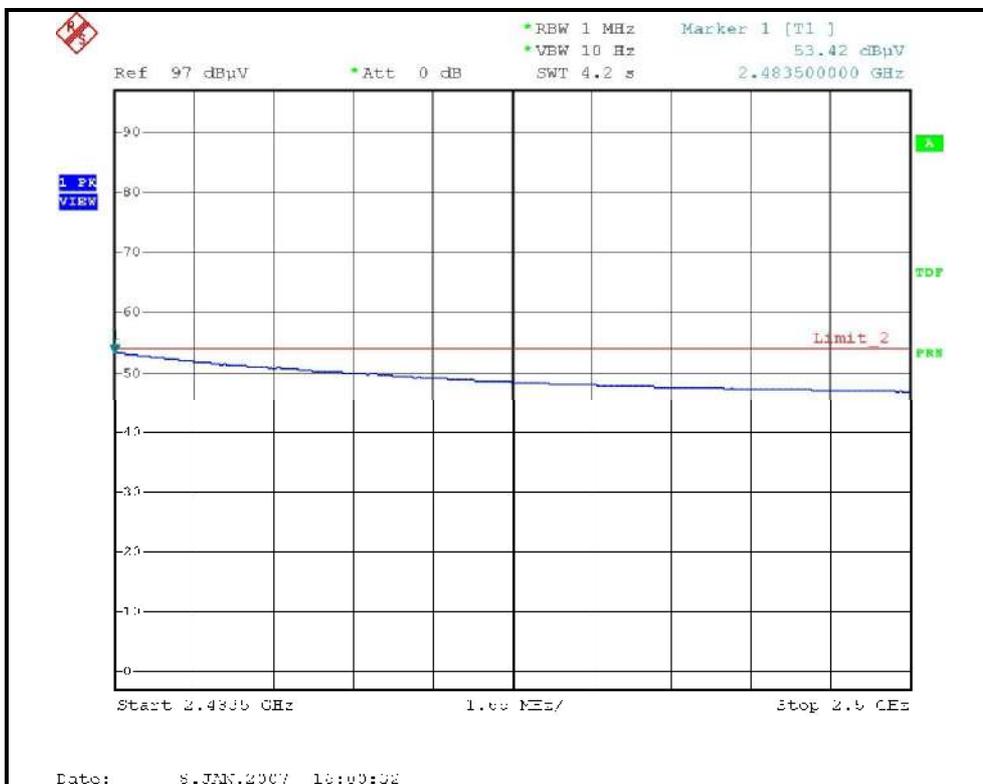
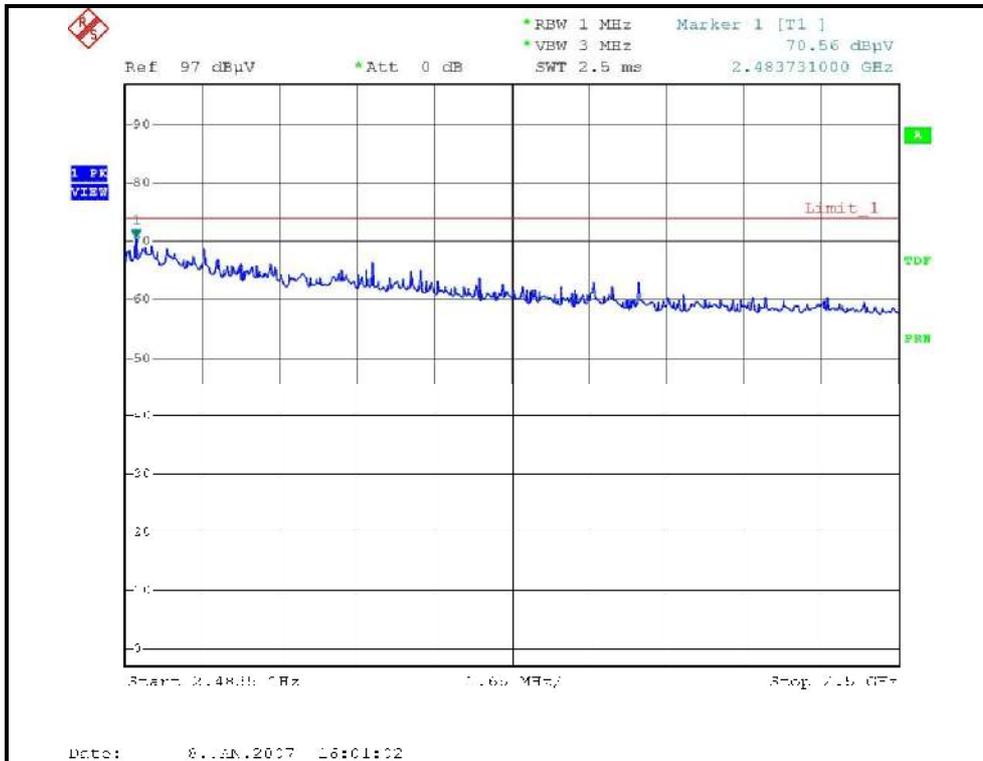
RESTRICTED BANDEDGE (802.11g MODE, CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11g MODE, CH11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11g MODE, CH11, VERTICAL)



4.2.7 TEST RESULTS (ANTENNA 2)

Below 1GHz Worst-Case Data

MODULATION TYPE	DSSS	CHANNEL	Channel 1
INPUT POWER (SYSTEM)	120Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Wen Yu	DETECTOR FUNCTION	Quasi-Peak, 120kHz

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	147.25	34.90 QP	43.50	-8.60	1.30 H	80	21.20	13.70
2	264.80	28.00 QP	46.00	-18.00	1.10 H	111	13.40	14.60
3	365.00	26.90 QP	46.00	-19.10	1.00 H	8	9.10	17.90
4	500.02	34.10 QP	46.00	-11.90	1.00 H	172	12.30	21.80
5	674.88	36.40 QP	46.00	-9.60	1.14 H	328	10.90	25.40
6	762.88	36.10 QP	46.00	-9.90	1.06 H	343	8.70	27.40
7	863.25	38.40 QP	46.00	-7.60	1.00 H	328	9.90	28.50

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	138.13	30.80 QP	43.50	-12.70	1.04 V	210	17.50	13.30
2	242.88	27.80 QP	46.00	-18.20	1.00 V	101	14.30	13.50
3	375.02	28.00 QP	46.00	-18.00	1.00 V	1	9.80	18.20
4	500.02	34.10 QP	46.00	-11.90	1.00 V	172	12.30	21.80
5	674.38	38.10 QP	46.00	-7.90	1.08 V	338	12.70	25.40
6	866.87	32.90 QP	46.00	-13.10	1.00 V	97	4.30	28.60

- 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

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.00	57.70 PK	74.00	-16.30	1.41 H	142	25.80	31.90
1	2386.00	45.00 AV	54.00	-9.00	1.41 H	142	13.10	31.90
2	*2412.00	92.70 PK			1.41 H	142	60.70	32.00
2	*2412.00	89.10 AV			1.41 H	142	57.10	32.00
3	4824.00	44.70 PK	74.00	-29.30	1.27 H	343	8.70	36.00
3	4824.00	34.20 AV	54.00	-19.80	1.27 H	343	-1.80	36.00
4	7236.00	57.50 PK	74.00	-16.50	1.05 H	167	15.20	42.20
4	7236.00	44.70 AV	54.00	-9.30	1.05 H	167	2.40	42.20

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	2386.00	62.50 PK	74.00	-11.50	1.08 V	266	30.60	31.90
1	2386.00	53.80 AV	54.00	-0.20	1.08 V	266	21.80	31.90
2	*2412.00	110.40 PK			1.26 V	220	78.40	32.00
2	*2412.00	106.50 AV			1.26 V	220	74.50	32.00
3	4824.00	45.30 PK	74.00	-28.70	1.27 V	249	9.30	36.00
3	4824.00	34.70 AV	54.00	-19.30	1.27 V	249	-1.30	36.00
4	7236.00	58.50 PK	74.00	-15.50	1.16 V	312	16.20	42.20
4	7236.00	45.80 AV	54.00	-8.20	1.16 V	312	3.50	42.20

- 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

MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.00	57.30 PK	74.00	-16.70	1.40 H	162	26.00	31.30
1	2233.00	44.70 AV	54.00	-9.30	1.40 H	162	13.40	31.30
2	2320.00	57.50 PK	74.00	-16.50	1.41 H	157	25.80	31.70
2	2320.00	45.20 AV	54.00	-8.80	1.41 H	157	13.50	31.70
3	2389.00	59.40 PK	74.00	-14.60	1.45 H	134	27.50	31.90
3	2389.00	47.10 AV	54.00	-6.90	1.45 H	134	15.20	31.90
4	*2437.00	101.60 PK			1.45 H	131	69.50	32.10
4	*2437.00	97.00 AV			1.45 H	131	64.90	32.10
5	2486.00	59.70 PK	74.00	-14.30	1.45 H	134	27.40	32.30
5	2486.00	46.80 AV	54.00	-7.20	1.45 H	134	14.50	32.30
6	4874.00	45.50 PK	74.00	-28.50	1.34 H	315	9.40	36.10
6	4874.00	34.90 AV	54.00	-19.10	1.34 H	315	-1.20	36.10
7	7311.00	53.60 PK	74.00	-20.40	1.08 H	243	11.10	42.50
7	7311.00	41.80 AV	54.00	-12.20	1.08 H	243	-0.70	42.50

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	2233.00	60.40 PK	74.00	-13.60	1.04 V	311	29.10	31.30
1	2233.00	52.40 AV	54.00	-1.60	1.04 V	311	21.10	31.30
2	2320.00	60.60 PK	74.00	-13.40	1.02 V	105	28.90	31.70
2	2320.00	52.30 AV	54.00	-1.70	1.02 V	105	20.70	31.70
3	2389.00	63.10 PK	74.00	-10.90	1.02 V	108	31.20	31.90
3	2389.00	53.60 AV	54.00	-0.40	1.02 V	108	21.60	31.90
4	*2437.00	118.80 PK			1.23 V	223	86.70	32.10
4	*2437.00	112.20 AV			1.23 V	223	80.10	32.10
5	2486.00	64.20 PK	74.00	-9.80	1.02 V	108	31.90	32.30
5	2486.00	53.50 AV	54.00	-0.50	1.02 V	108	21.20	32.30
6	4874.00	46.10 PK	74.00	-27.90	1.26 V	259	10.00	36.10
6	4874.00	35.70 AV	54.00	-18.30	1.26 V	259	-0.40	36.10
7	7311.00	56.20 PK	74.00	-17.80	1.13 V	307	13.70	42.50
7	7311.00	47.90 AV	54.00	-6.10	1.13 V	307	5.40	42.50

- 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



MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

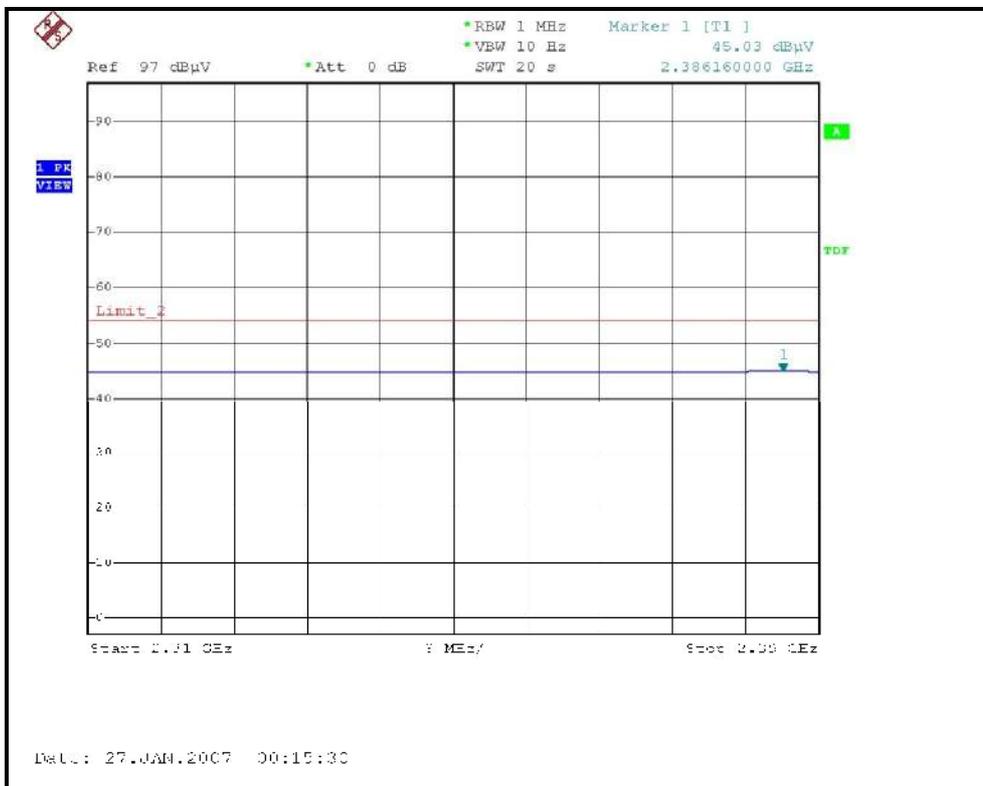
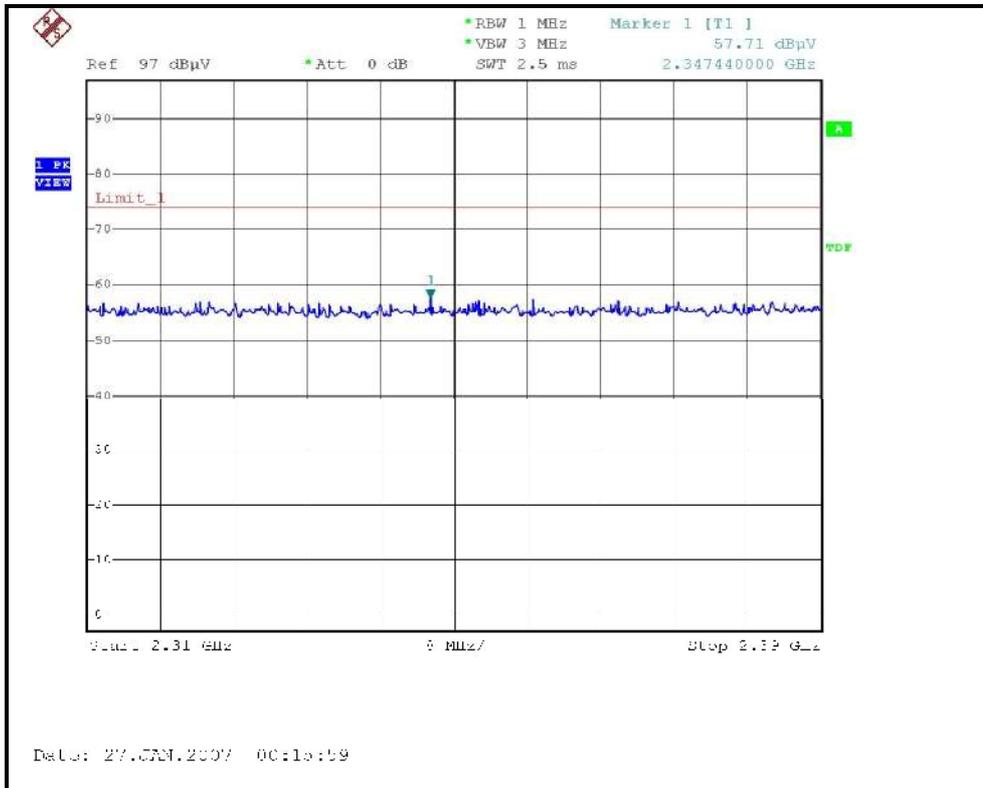
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	93.20 PK			1.45 H	131	61.00	32.20
1	*2462.00	88.70 AV			1.45 H	131	56.50	32.20
2	2488.00	58.50 PK	74.00	-15.50	1.45 H	131	26.20	32.30
2	2488.00	45.30 AV	54.00	-8.70	1.45 H	131	13.00	32.30
3	4924.00	45.70 PK	74.00	-28.30	1.24 H	323	9.50	36.20
3	4924.00	34.90 AV	54.00	-19.10	1.24 H	323	-1.30	36.20
4	7386.00	51.80 PK	74.00	-22.20	1.37 H	286	9.00	42.80
4	7386.00	39.30 AV	54.00	-14.70	1.37 H	286	-3.50	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

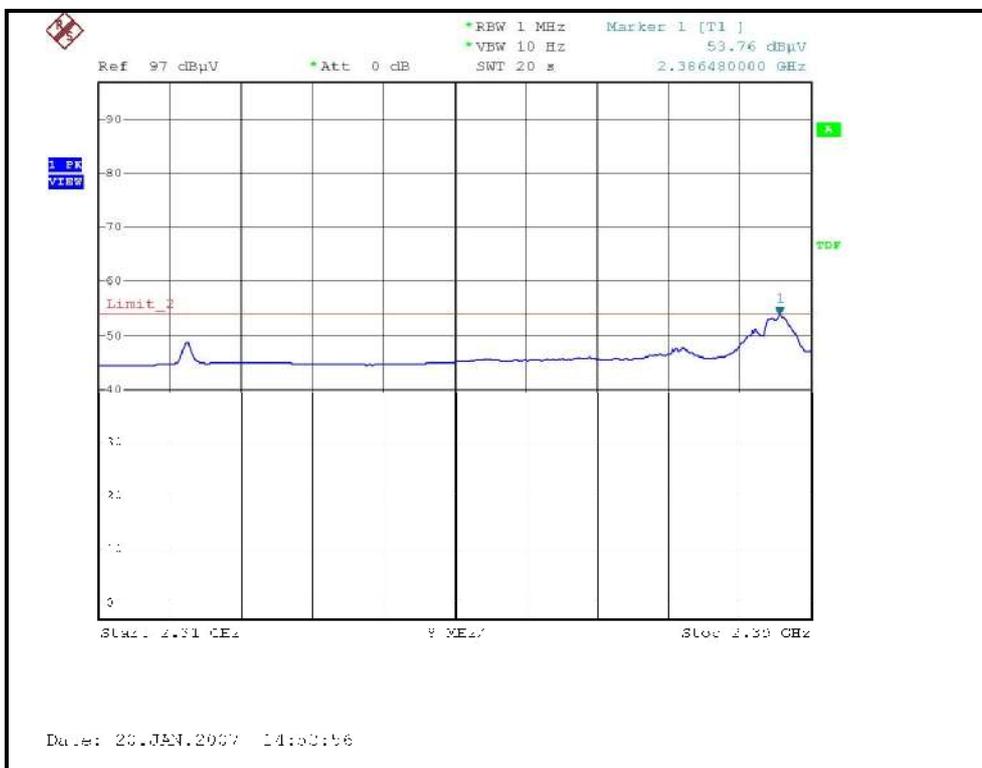
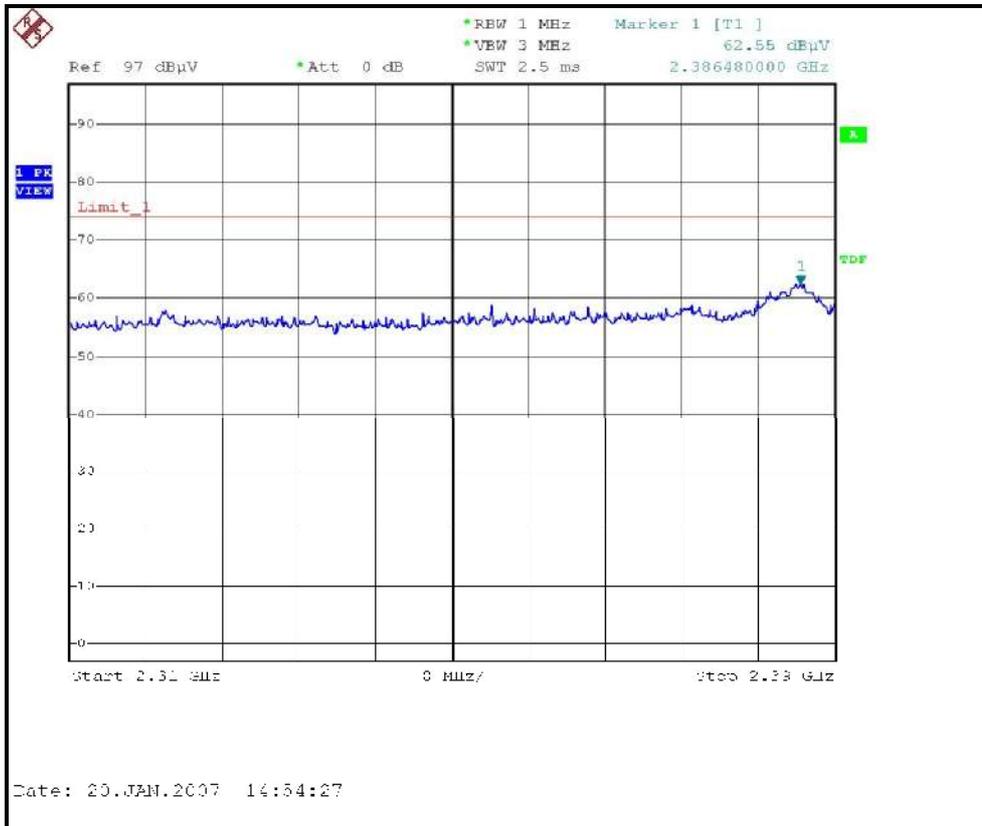
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	110.00 PK			1.16 V	223	77.80	32.20
1	*2462.00	105.40 AV			1.16 V	223	73.20	32.20
2	2488.00	63.20 PK	74.00	-10.80	1.02 V	263	30.90	32.30
2	2488.00	53.70 AV	54.00	-0.30	1.02 V	263	21.40	32.30
3	4924.00	45.80 PK	74.00	-28.20	1.31 V	197	9.60	36.20
3	4924.00	35.40 AV	54.00	-18.60	1.31 V	197	-0.80	36.20
4	7386.00	52.70 PK	74.00	-21.30	1.27 V	328	9.90	42.80
4	7386.00	41.10 AV	54.00	-12.90	1.27 V	328	-1.70	42.80

- 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

RESTRICTED BANDEDGE (802.11b MODE, CH1, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE, CH1, VERTICAL)



802.11g OFDM modulation

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2320.00	55.70 PK	74.00	-18.30	1.49 H	286	24.00	31.70
1	2320.00	45.90 AV	54.00	-8.10	1.49 H	286	14.20	31.70
2	2390.00	57.80 PK	74.00	-16.20	1.48 H	238	25.90	31.90
2	2390.00	45.00 AV	54.00	-9.00	1.48 H	238	13.10	31.90
3	*2412.00	96.10 PK			1.48 H	238	64.10	32.00
3	*2412.00	86.20 AV			1.48 H	238	54.20	32.00
4	4824.00	45.90 PK	74.00	-28.10	1.23 H	340	9.90	36.00
4	4824.00	34.10 AV	54.00	-19.90	1.23 H	340	-1.90	36.00
5	7236.00	51.50 PK	74.00	-22.50	1.04 H	152	9.30	42.20
5	7236.00	39.30 AV	54.00	-14.70	1.04 H	152	-2.90	42.20

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	2320.00	59.90 PK	74.00	-14.10	1.07 V	274	28.20	31.70
1	2320.00	50.50 AV	54.00	-3.50	1.07 V	274	18.90	31.70
2	2390.00	72.40 PK	74.00	-1.60	1.07 V	274	40.50	31.90
2	2390.00	53.90 AV	54.00	-0.10	1.07 V	274	22.00	31.90
3	*2412.00	113.00 PK			1.29 V	262	81.00	32.00
3	*2412.00	103.00 AV			1.29 V	262	71.00	32.00
4	4824.00	46.30 PK	74.00	-27.70	1.29 V	286	10.30	36.00
4	4824.00	34.70 AV	54.00	-19.30	1.29 V	286	-1.30	36.00
5	7236.00	53.70 PK	74.00	-20.30	1.13 V	327	11.50	42.20
5	7236.00	41.20 AV	54.00	-12.80	1.13 V	327	-1.00	42.20

- 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



MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.00	58.10 PK	74.00	-15.90	1.49 H	284	26.80	31.30
1	2233.00	48.20 AV	54.00	-5.80	1.49 H	284	16.90	31.30
2	2320.00	57.80 PK	74.00	-16.20	1.49 H	284	26.10	31.70
2	2320.00	47.60 AV	54.00	-6.40	1.49 H	284	15.90	31.70
3	*2437.00	101.30 PK			1.48 H	292	69.10	32.10
3	*2437.00	91.20 AV			1.48 H	292	59.00	32.10
4	4874.00	46.40 PK	74.00	-27.60	1.31 H	276	10.30	36.10
4	4874.00	34.30 AV	54.00	-19.70	1.31 H	276	-1.80	36.10
5	7311.00	52.60 PK	74.00	-21.40	1.06 H	237	10.10	42.50
5	7311.00	40.90 AV	54.00	-13.10	1.06 H	237	-1.60	42.50

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	2233.00	60.80 PK	74.00	-13.20	1.09 V	97	29.50	31.30
1	2233.00	53.70 AV	54.00	-0.30	1.09 V	97	22.40	31.30
2	2320.00	62.10 PK	74.00	-11.90	1.09 V	97	30.40	31.70
2	2320.00	53.50 AV	54.00	-0.50	1.09 V	97	21.80	31.70
3	*2437.00	119.50 PK			1.26 V	262	87.40	32.10
3	*2437.00	118.00 AV			1.26 V	262	85.80	32.10
4	4874.00	47.20 PK	74.00	-26.80	1.24 V	216	11.10	36.10
4	4874.00	36.70 AV	54.00	-17.30	1.24 V	216	0.60	36.10
5	7311.00	55.10 PK	74.00	-18.90	1.15 V	304	12.60	42.50
5	7311.00	44.80 AV	54.00	-9.20	1.15 V	304	2.30	42.50

- 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



MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

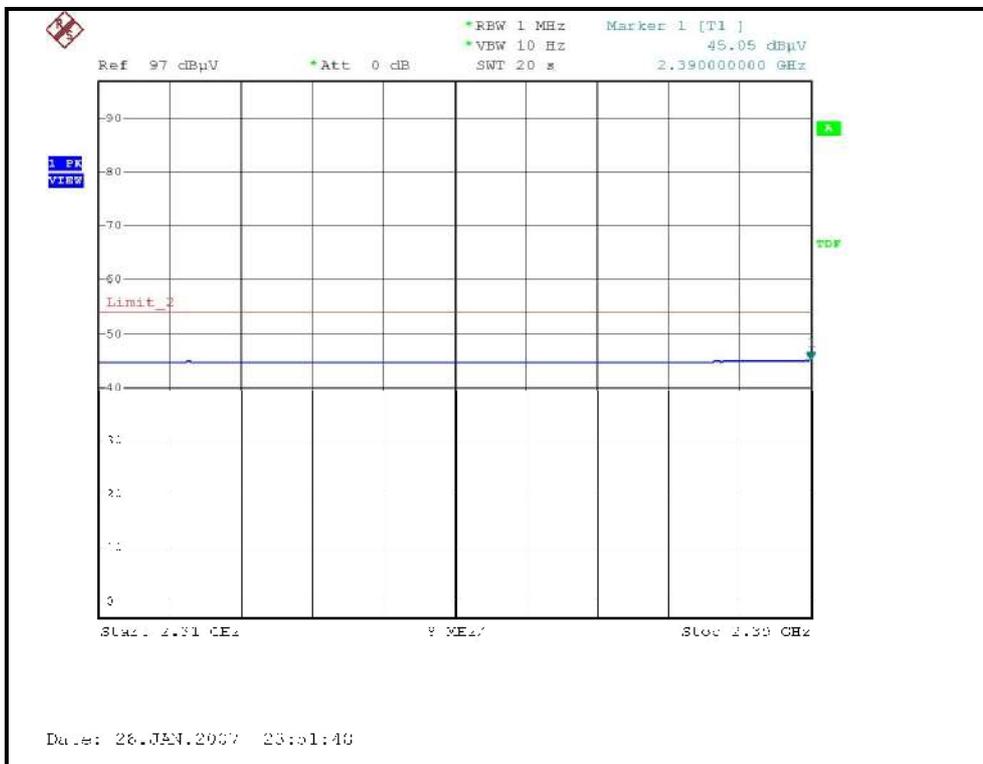
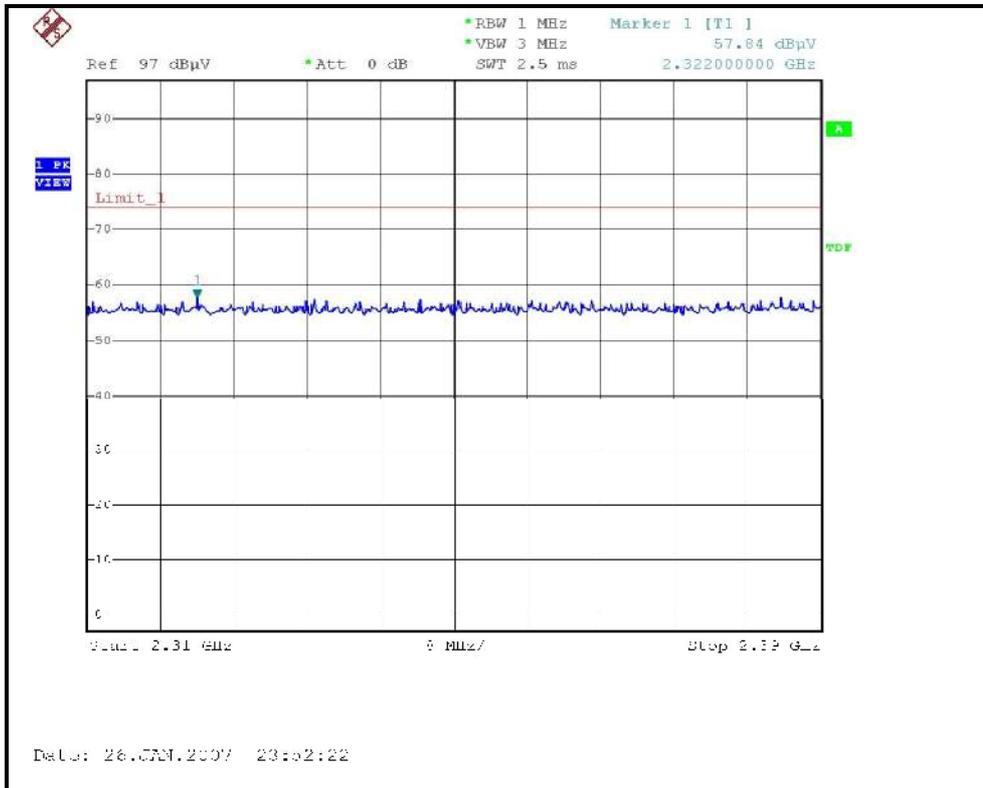
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	95.50 PK			1.44 H	131	63.20	32.20
1	*2462.00	85.10 AV			1.44 H	131	52.90	32.20
2	2483.50	58.40 PK	74.00	-15.60	1.44 H	131	26.10	32.30
2	2483.50	45.40 AV	54.00	-8.60	1.44 H	131	13.10	32.30
3	4924.00	46.30 PK	74.00	-27.70	1.13 H	351	10.10	36.20
3	4924.00	34.70 AV	54.00	-19.30	1.13 H	351	-1.50	36.20
4	7386.00	51.90 PK	74.00	-22.10	1.48 H	262	9.10	42.80
4	7386.00	39.60 AV	54.00	-14.40	1.48 H	262	-3.20	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

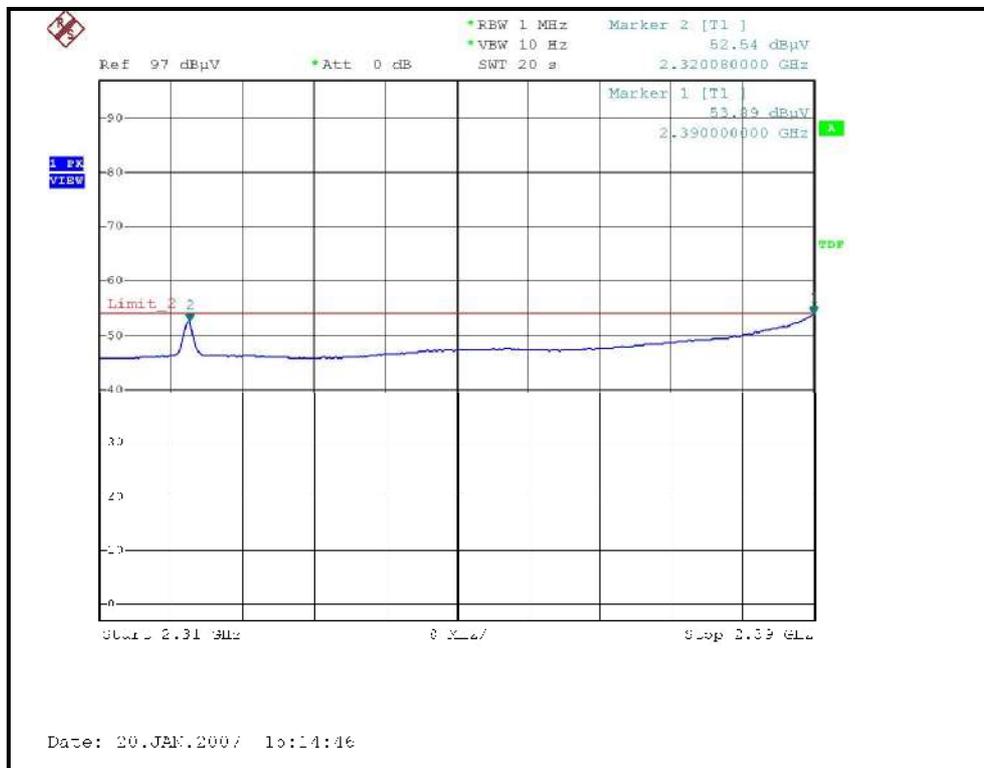
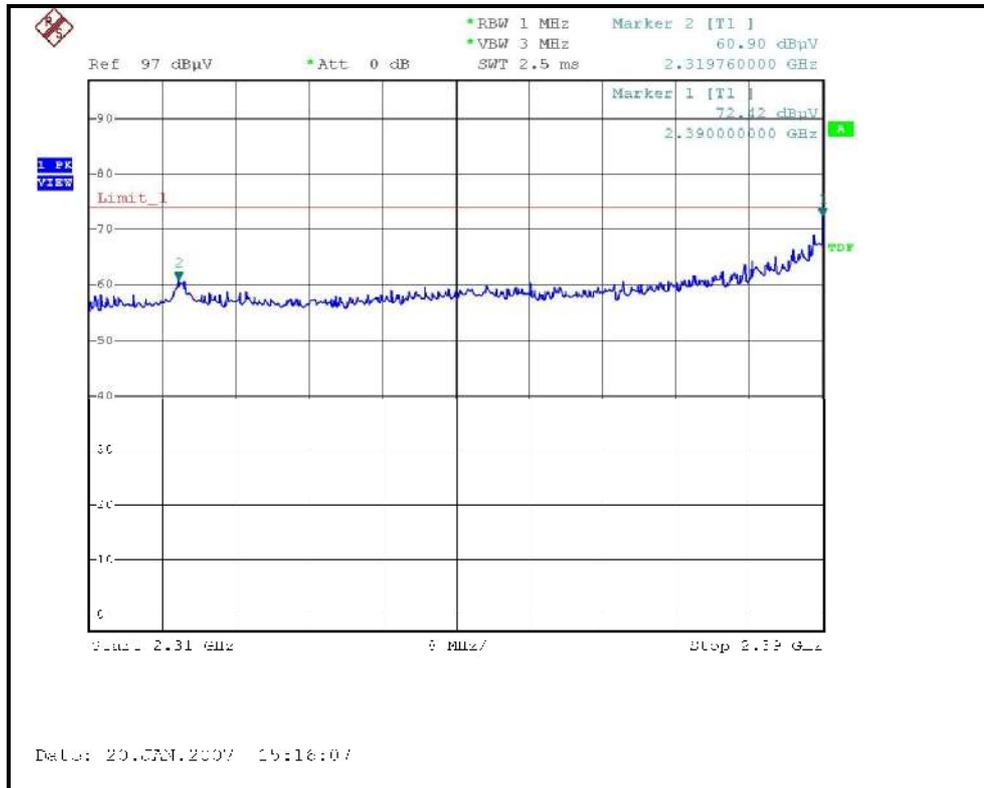
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	113.30 PK			1.22 V	271	81.10	32.20
1	*2462.00	103.00 AV			1.22 V	271	70.80	32.20
2	2483.50	69.70 PK	74.00	-4.30	1.01 V	271	37.40	32.30
2	2483.50	53.50 AV	54.00	-0.50	1.01 V	271	21.20	32.30
3	4924.00	46.50 PK	74.00	-27.50	1.37 V	311	10.30	36.20
3	4924.00	35.40 AV	54.00	-18.60	1.37 V	311	-0.80	36.20
4	7386.00	53.40 PK	74.00	-20.60	1.23 V	254	10.60	42.80
4	7386.00	41.10 AV	54.00	-12.90	1.23 V	254	-1.70	42.80

- 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

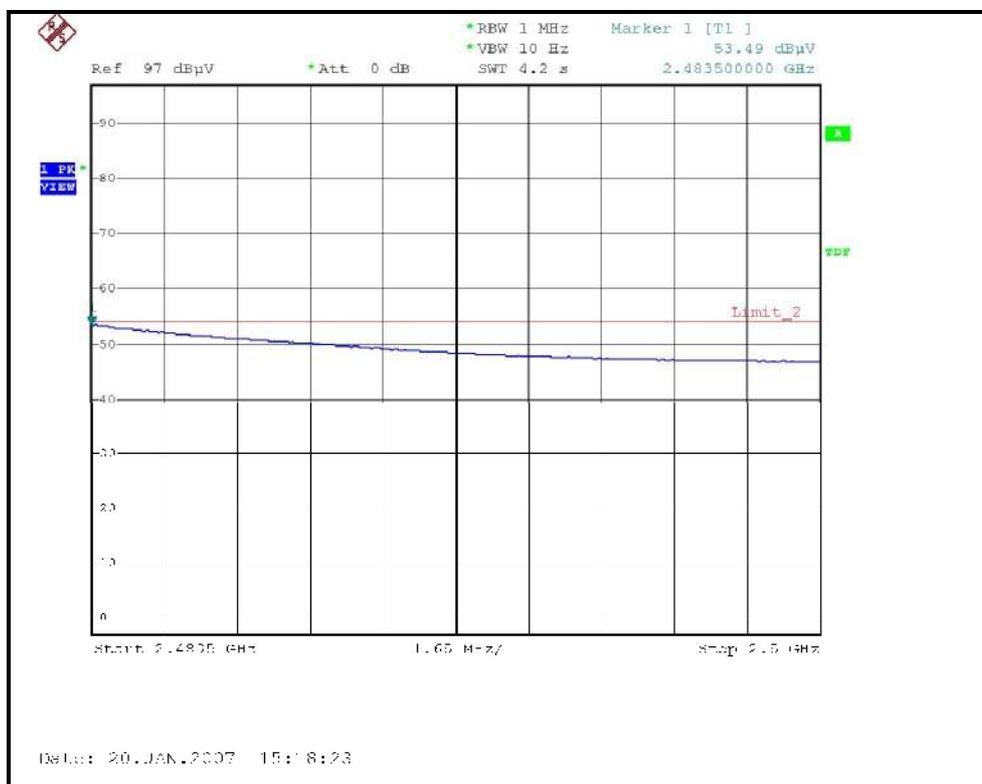
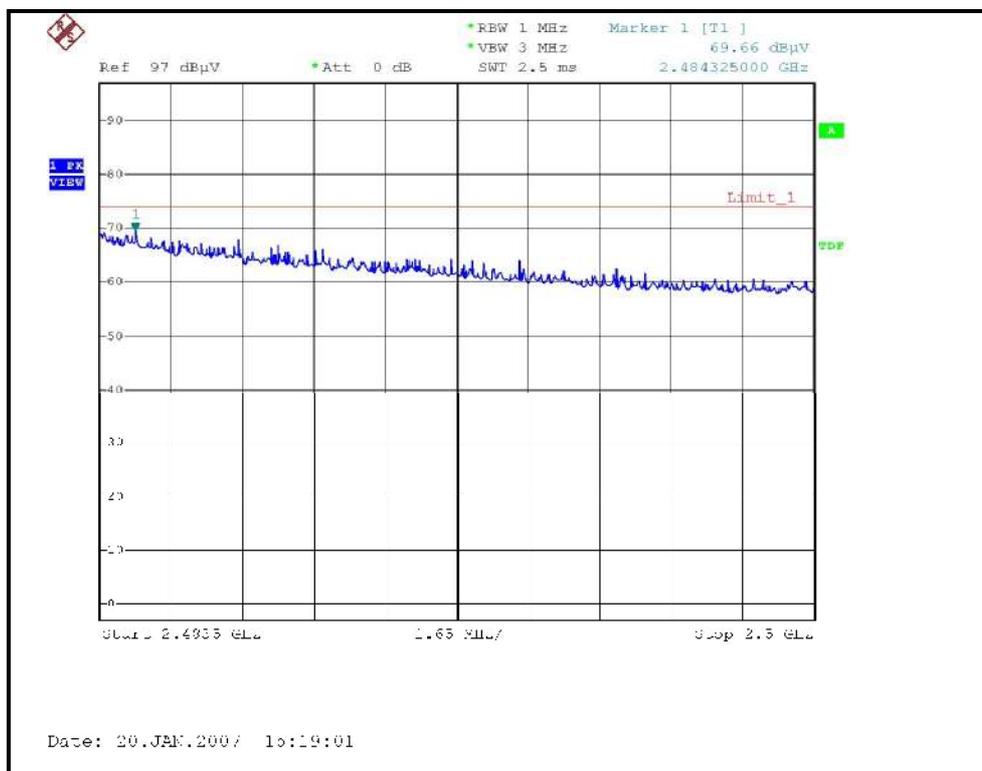
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



RESTRICTED BANDEDGE (802.11g MODE, CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11g MODE, CH11, VERTICAL)



4.2.8 TEST RESULTS (ANTENNA 3)

Below 1GHz Worst-Case Data

MODULATION TYPE	DSSS	CHANNEL	Channel 1
INPUT POWER (SYSTEM)	120Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Wen Yu	DETECTOR FUNCTION	Quasi-Peak, 120kHz

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	132.20	34.40 QP	43.50	-9.10	1.12 H	328	21.60	12.80
2	234.48	33.20 QP	46.00	-12.80	1.16 H	254	20.10	13.10
3	375.01	30.90 QP	46.00	-15.10	1.00 H	61	12.70	18.20
4	500.01	38.40 QP	46.00	-7.60	1.17 H	72	16.60	21.80
5	672.75	40.40 QP	46.00	-5.60	1.01 H	307	15.00	25.40
6	865.25	34.70 QP	46.00	-11.30	1.49 H	339	6.20	28.50

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	132.30	33.90 QP	43.50	-9.60	1.01 V	192	21.10	12.80
2	232.18	33.50 QP	46.00	-12.50	1.00 V	71	20.50	13.00
3	375.00	32.90 QP	46.00	-13.10	1.07 V	211	14.70	18.20
4	500.01	32.70 QP	46.00	-13.30	1.05 V	94	10.90	21.80
5	675.25	39.70 QP	46.00	-6.30	1.13 V	355	14.30	25.40
6	766.25	31.30 QP	46.00	-14.70	1.06 V	115	3.80	27.40
7	864.95	34.70 QP	46.00	-11.30	1.00 V	21	6.20	28.50

- 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

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.00	62.90 PK	74.00	-11.10	1.00 H	304	31.00	31.90
1	2386.00	53.40 AV	54.00	-0.60	1.00 H	304	21.50	31.90
2	*2412.00	111.10 PK			1.66 H	54	79.10	32.00
2	*2412.00	106.50 AV			1.66 H	54	74.50	32.00
3	4824.00	45.70 PK	74.00	-28.30	1.10 H	38	9.70	36.00
3	4824.00	35.40 AV	54.00	-18.60	1.10 H	38	-0.60	36.00
4	7236.00	51.70 PK	74.00	-22.30	1.22 H	96	9.50	42.20
4	7236.00	39.40 AV	54.00	-14.60	1.22 H	96	-2.80	42.20

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	2386.00	57.80 PK	74.00	-16.20	1.71 V	190	25.80	31.90
1	2386.00	47.10 AV	54.00	-6.90	1.71 V	190	15.10	31.90
2	*2412.00	101.00 PK			1.71 V	190	68.90	32.00
2	*2412.00	96.30 AV			1.71 V	190	64.30	32.00
3	4824.00	44.80 PK	74.00	-29.20	1.46 V	283	8.80	36.00
3	4824.00	34.30 AV	54.00	-19.70	1.46 V	283	-1.70	36.00
4	7236.00	51.30 PK	74.00	-22.70	1.21 V	216	9.10	42.20
4	7236.00	39.10 AV	54.00	-14.90	1.21 V	216	-3.10	42.20

- 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



MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.00	59.60 PK	74.00	-14.40	1.00 H	235	28.30	31.30
1	2233.00	50.50 AV	54.00	-3.50	1.00 H	235	19.20	31.30
2	2320.00	59.40 PK	74.00	-14.60	1.04 H	31	27.70	31.70
2	2320.00	50.60 AV	54.00	-3.40	1.04 H	31	18.90	31.70
3	2389.00	63.20 PK	74.00	-10.80	1.04 H	33	31.30	31.90
3	2389.00	53.10 AV	54.00	-0.90	1.04 H	33	21.20	31.90
4	*2437.00	116.40 PK			1.56 H	52	84.30	32.10
4	*2437.00	111.70 AV			1.56 H	52	79.60	32.10
5	2485.00	61.70 PK	74.00	-12.30	1.01 H	34	29.40	32.30
5	2485.00	49.50 AV	54.00	-4.50	1.01 H	34	17.20	32.30
6	4874.00	47.40 PK	74.00	-26.60	1.23 H	225	11.30	36.10
6	4874.00	39.20 AV	54.00	-14.80	1.23 H	225	3.10	36.10
7	7311.00	55.10 PK	74.00	-18.90	1.36 H	147	12.60	42.50
7	7311.00	45.70 AV	54.00	-8.30	1.36 H	147	3.20	42.50

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	2233.00	56.50 PK	74.00	-17.50	1.02 V	180	25.20	31.30
1	2233.00	46.20 AV	54.00	-7.80	1.02 V	180	14.90	31.30
2	2320.00	57.50 PK	74.00	-16.50	1.30 V	357	25.80	31.70
2	2320.00	46.80 AV	54.00	-7.20	1.30 V	357	15.10	31.70
3	2389.00	63.70 PK	74.00	-10.30	1.08 V	357	31.80	31.90
3	2389.00	48.20 AV	54.00	-5.80	1.08 V	357	16.30	31.90
4	*2437.00	106.70 PK			1.08 V	0	74.50	32.10
4	*2437.00	102.70 AV			1.08 V	0	70.60	32.10
5	2485.00	63.60 PK	74.00	-10.40	1.08 V	357	31.30	32.30
5	2485.00	47.20 AV	54.00	-6.80	1.08 V	357	14.90	32.30
6	4874.00	46.10 PK	74.00	-27.90	1.38 V	262	10.00	36.10
6	4874.00	36.80 AV	54.00	-17.20	1.38 V	262	0.70	36.10
7	7311.00	54.20 PK	74.00	-19.80	1.21 V	235	11.70	42.50
7	7311.00	44.10 AV	54.00	-9.90	1.21 V	235	1.60	42.50

- 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



MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

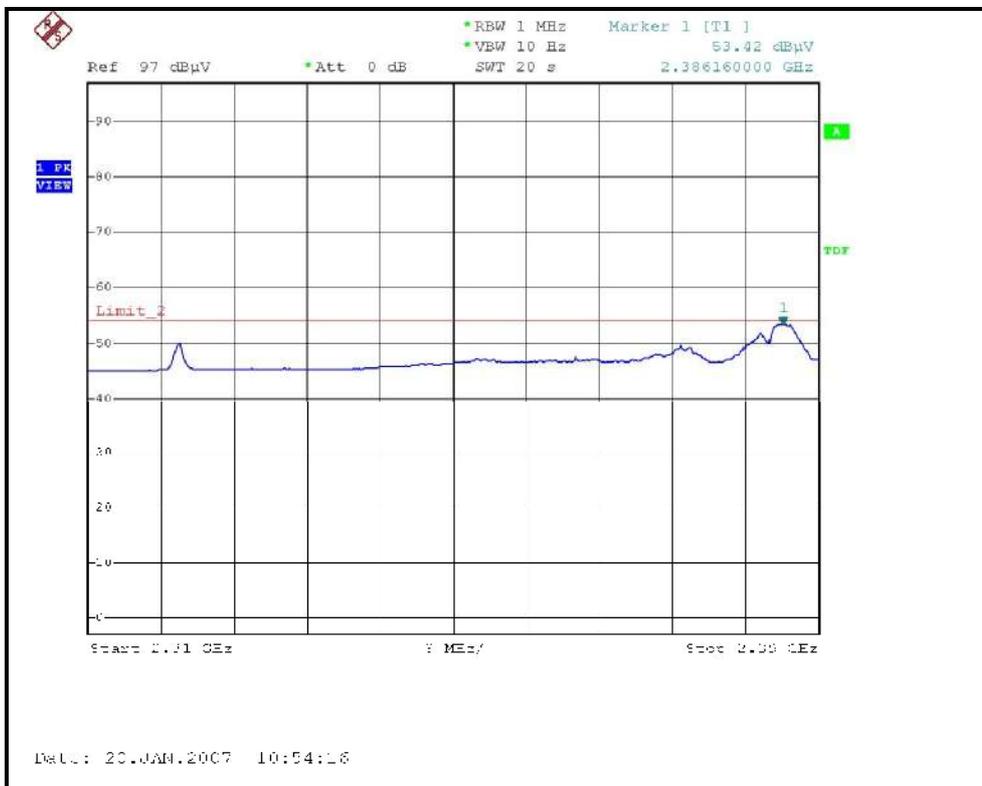
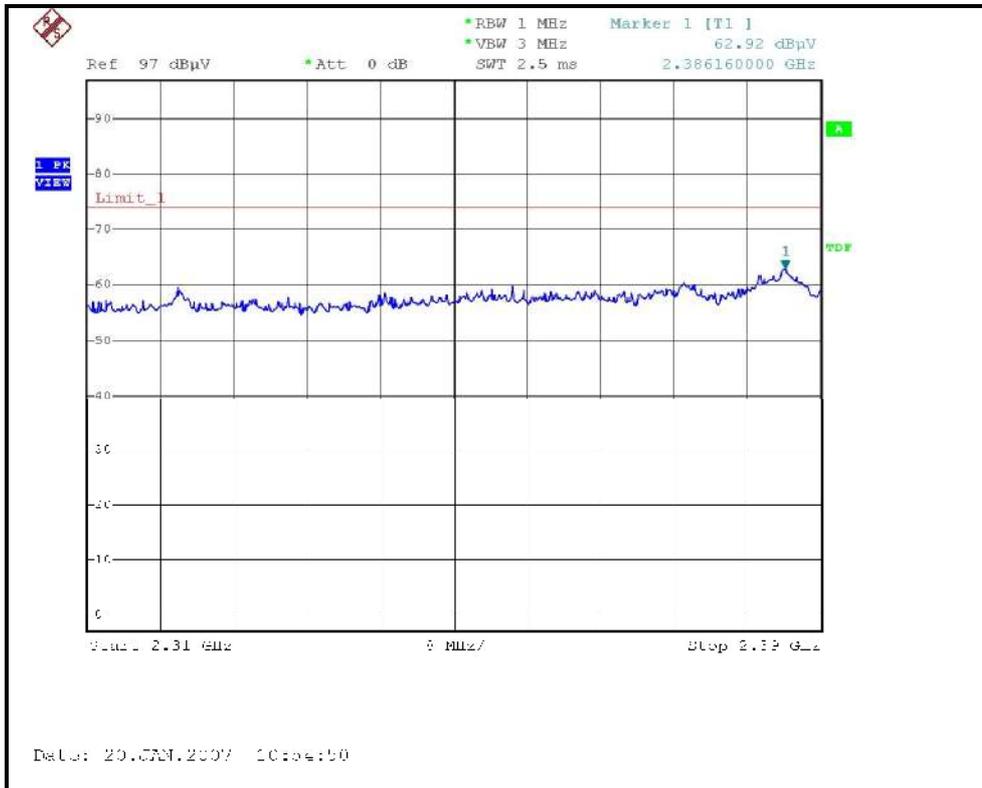
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	109.90 PK			1.57 H	54	77.70	32.20
1	*2462.00	105.20 AV			1.57 H	54	73.00	32.20
2	2488.00	62.40 PK	74.00	-11.60	1.03 H	45	30.10	32.30
2	2488.00	52.90 AV	54.00	-1.10	1.03 H	45	20.60	32.30
3	4924.00	46.10 PK	74.00	-27.90	1.21 H	269	9.90	36.20
3	4924.00	35.30 AV	54.00	-18.70	1.21 H	269	-0.90	36.20
4	7386.00	51.90 PK	74.00	-22.10	1.33 H	21	9.10	42.80
4	7386.00	39.70 AV	54.00	-14.30	1.33 H	21	-3.10	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

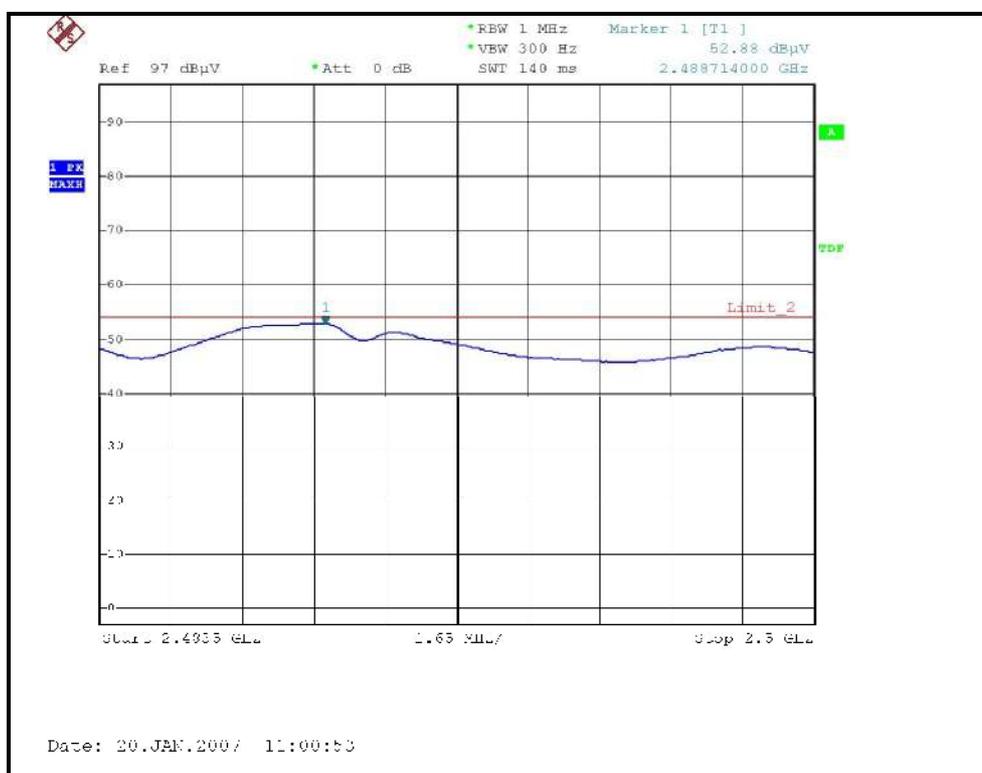
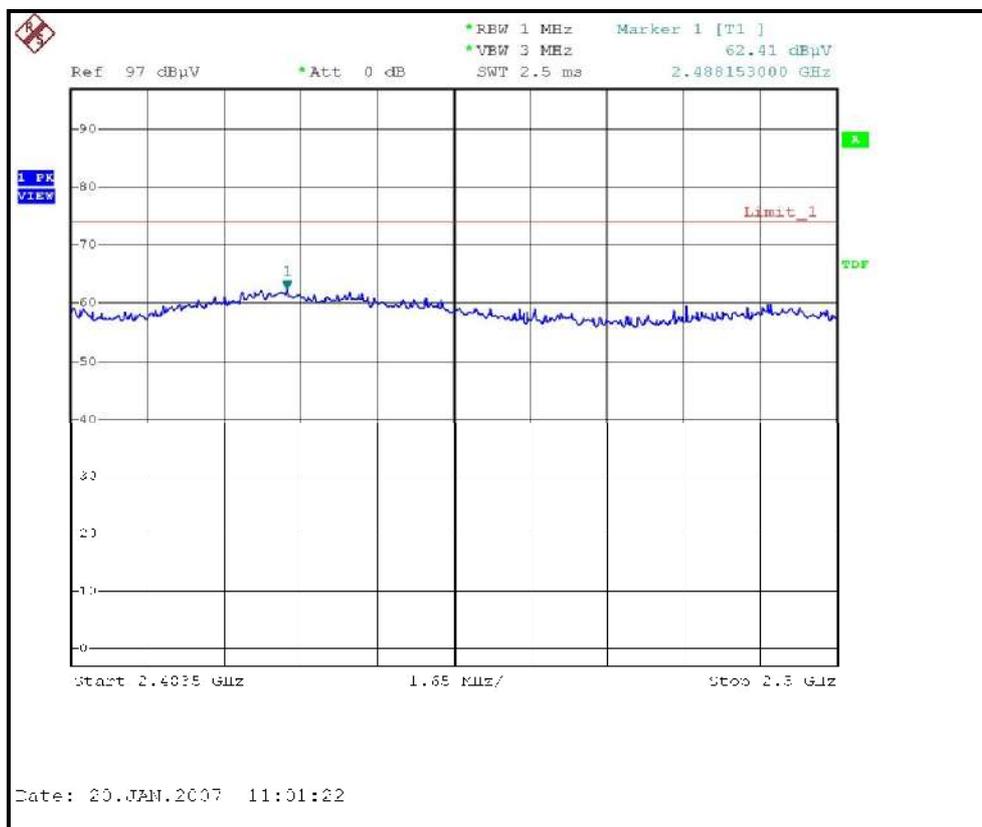
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	102.90 PK			1.10 V	1	70.70	32.20
1	*2462.00	98.50 AV			1.10 V	1	66.30	32.20
2	2488.00	59.40 PK	74.00	-14.60	1.10 V	1	27.10	32.30
2	2488.00	47.90 AV	54.00	-6.10	1.10 V	1	15.60	32.30
3	4824.00	45.60 PK	74.00	-28.40	1.34 V	278	9.60	36.00
3	4824.00	35.10 AV	54.00	-18.90	1.34 V	278	-0.90	36.00
4	7386.00	51.50 PK	74.00	-22.50	1.12 V	217	8.70	42.80
4	7386.00	39.40 AV	54.00	-14.60	1.12 V	217	-3.40	42.80

- 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

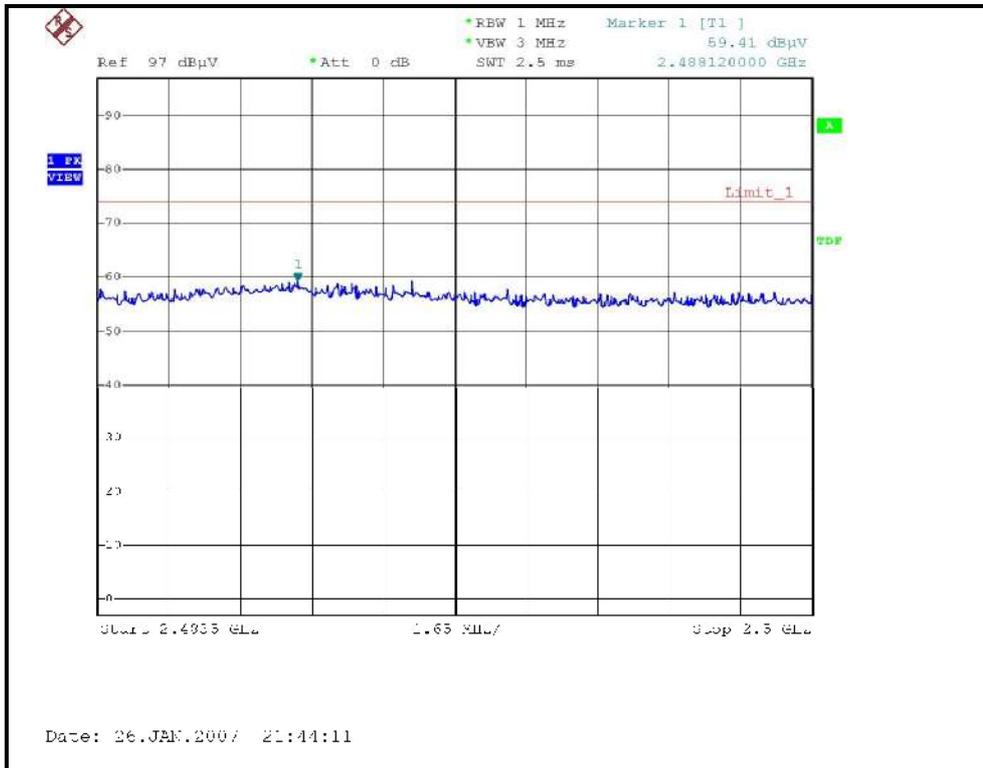
RESTRICTED BANDEDGE (802.11b MODE, CH1, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE, CH11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE, CH11, VERTICAL)



802.11g OFDM modulation

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2320.00	59.90 PK	74.00	-14.10	1.03 H	304	28.30	31.70
1	2320.00	51.40 AV	54.00	-2.60	1.03 H	304	19.80	31.70
2	2390.00	69.20 PK	74.00	-4.80	1.03 H	304	37.30	31.90
2	2390.00	52.80 AV	54.00	-1.20	1.03 H	304	20.90	31.90
3	*2412.00	112.90 PK			1.65 H	275	80.90	32.00
3	*2412.00	101.10 AV			1.65 H	275	69.10	32.00
4	4824.00	47.10 PK	74.00	-26.90	1.00 H	72	11.10	36.00
4	4824.00	35.40 AV	54.00	-18.60	1.00 H	72	-0.60	36.00
5	7236.00	51.50 PK	74.00	-22.50	1.03 H	231	9.30	42.20
5	7236.00	39.20 AV	54.00	-14.80	1.03 H	231	-3.00	42.20

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	2320.00	59.20 PK	74.00	-14.80	1.00 V	133	27.50	31.70
1	2320.00	46.10 AV	54.00	-7.90	1.00 V	133	14.40	31.70
2	2390.00	59.50 PK	74.00	-14.50	1.00 V	134	27.60	31.90
2	2390.00	46.20 AV	54.00	-7.80	1.00 V	134	14.30	31.90
3	*2412.00	102.10 PK			1.00 V	134	70.10	32.00
3	*2412.00	91.40 AV			1.00 V	134	59.40	32.00
4	4824.00	46.30 PK	74.00	-27.70	1.43 V	291	10.30	36.00
4	4824.00	34.60 AV	54.00	-19.40	1.43 V	291	-1.40	36.00
5	7236.00	51.40 PK	74.00	-22.60	1.24 V	243	9.20	42.20
5	7236.00	39.30 AV	54.00	-14.70	1.24 V	243	-2.90	42.20

- 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

MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.00	60.40 PK	74.00	-13.60	1.00 H	235	29.10	31.30
1	2233.00	52.40 AV	54.00	-1.60	1.00 H	235	21.10	31.30
2	2390.00	71.10 PK	74.00	-2.90	1.03 H	307	39.20	31.90
2	2390.00	53.20 AV	54.00	-0.80	1.03 H	307	21.30	31.90
3	*2437.00	119.90 PK			1.56 H	52	87.70	32.10
3	*2437.00	108.90 AV			1.56 H	52	76.80	32.10
4	2483.50	70.50 PK	74.00	-3.50	1.20 H	272	38.20	32.30
4	2483.50	50.70 AV	54.00	-3.30	1.20 H	272	18.40	32.30
5	4874.00	49.20 PK	74.00	-24.80	1.00 H	43	13.10	36.10
5	4874.00	38.60 AV	54.00	-15.40	1.00 H	43	2.50	36.10
6	7311.00	60.30 PK	74.00	-13.70	1.07 H	257	17.80	42.50
6	7311.00	45.70 AV	54.00	-8.30	1.07 H	257	3.20	42.50

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	2233.00	56.80 PK	74.00	-17.20	1.00 V	188	25.40	31.30
1	2233.00	46.50 AV	54.00	-7.50	1.00 V	188	15.20	31.30
2	2390.00	67.90 PK	74.00	-6.10	1.01 V	132	36.00	31.90
2	2390.00	48.60 AV	54.00	-5.40	1.01 V	132	16.70	31.90
3	*2437.00	109.20 PK			1.00 V	133	77.10	32.10
3	*2437.00	98.70 AV			1.00 V	133	66.50	32.10
4	2483.50	65.30 PK	74.00	-8.70	1.01 V	133	33.00	32.30
4	2483.50	47.70 AV	54.00	-6.30	1.01 V	133	15.40	32.30
5	4874.00	43.90 PK	74.00	-30.10	1.37 V	312	7.80	36.10
5	4874.00	35.70 AV	54.00	-18.30	1.37 V	312	-0.40	36.10
6	7311.00	59.80 PK	74.00	-14.20	1.20 V	254	17.30	42.50
6	7311.00	44.90 AV	54.00	-9.10	1.20 V	254	2.40	42.50

- 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

MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

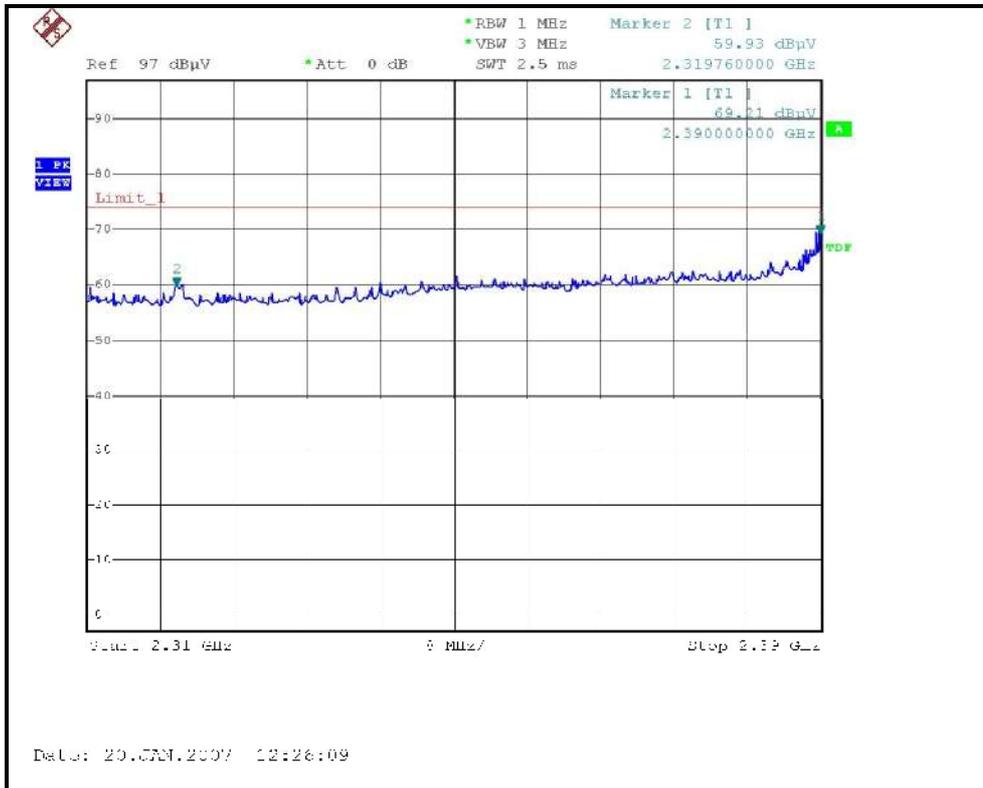
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	111.00 PK			1.59 H	55	78.70	32.20
1	*2462.00	100.70 AV			1.59 H	55	68.40	32.20
2	2483.50	73.40 PK	74.00	-0.60	1.20 H	40	41.10	32.30
2	2483.50	53.10 AV	54.00	-0.90	1.20 H	40	20.90	32.30
3	4924.00	46.60 PK	74.00	-27.40	1.03 H	86	10.40	36.20
3	4924.00	35.40 AV	54.00	-18.60	1.03 H	86	-0.80	36.20
4	7386.00	52.20 PK	74.00	-21.80	1.06 H	249	9.40	42.80
4	7386.00	39.90 AV	54.00	-14.10	1.06 H	249	-2.90	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

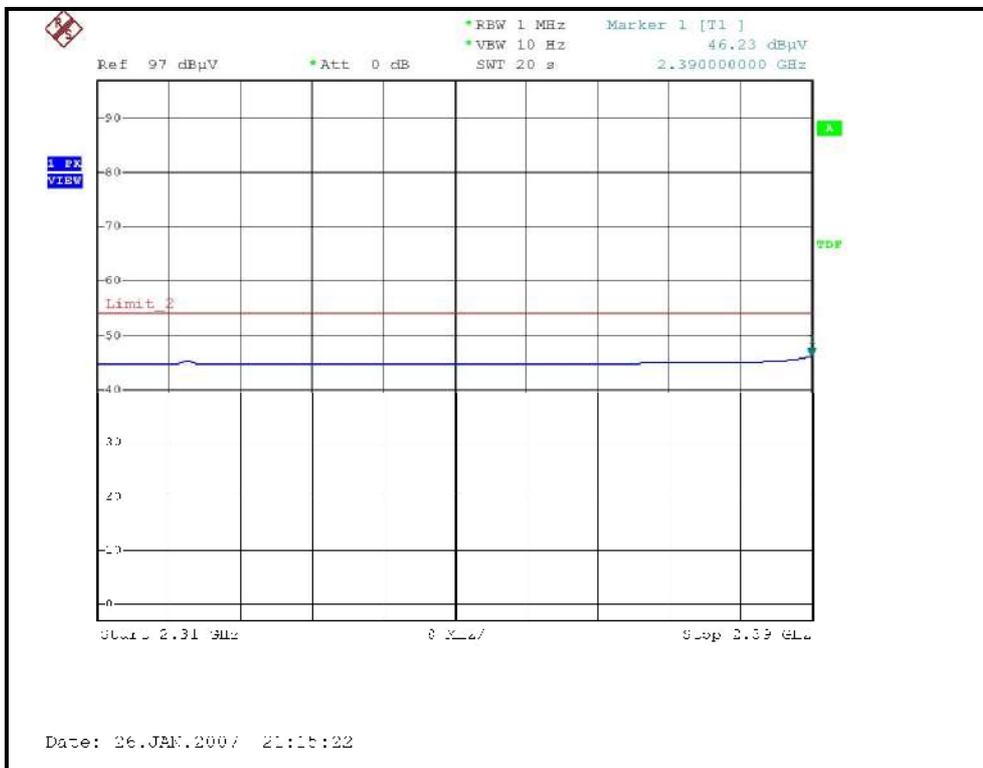
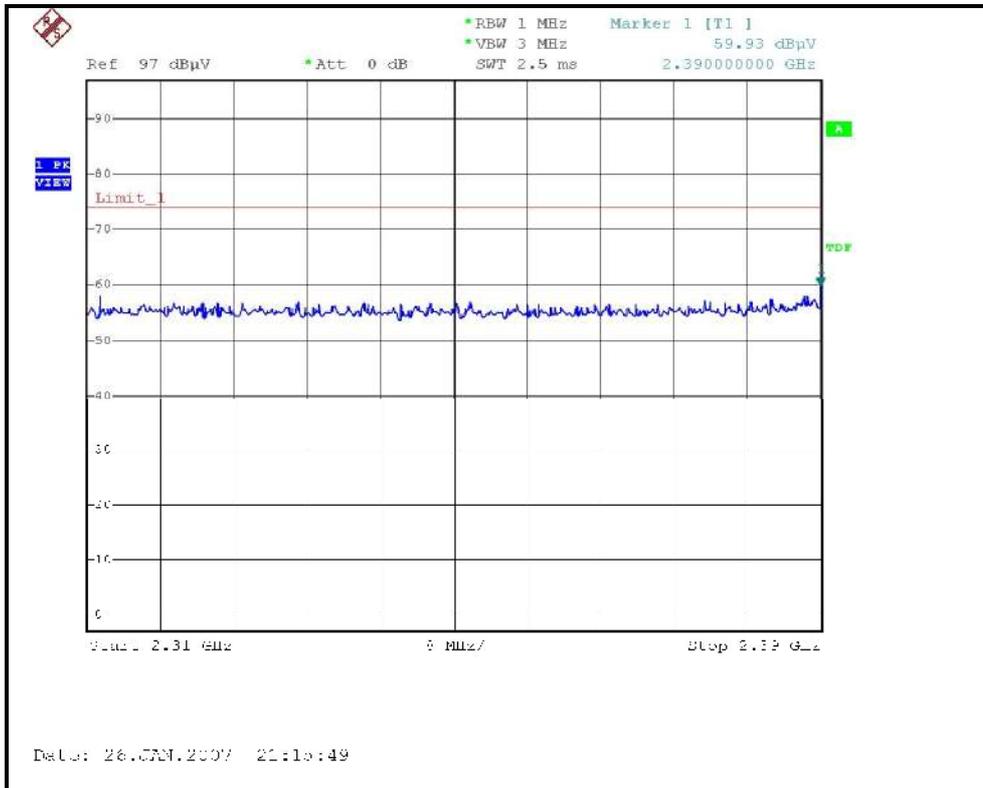
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	104.20 PK			1.10 V	357	71.90	32.20
1	*2462.00	93.80 AV			1.10 V	357	61.60	32.20
2	2483.50	65.30 PK	74.00	-8.70	1.10 V	357	33.10	32.30
2	2483.50	49.00 AV	54.00	-5.00	1.10 V	357	16.70	32.30
3	4924.00	46.10 PK	74.00	-27.90	1.41 V	293	9.90	36.20
3	4924.00	35.00 AV	54.00	-19.00	1.41 V	293	-1.20	36.20
4	7386.00	52.10 PK	74.00	-21.90	1.14 V	186	9.30	42.80
4	7386.00	39.70 AV	54.00	-14.30	1.14 V	186	-3.10	42.80

- 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

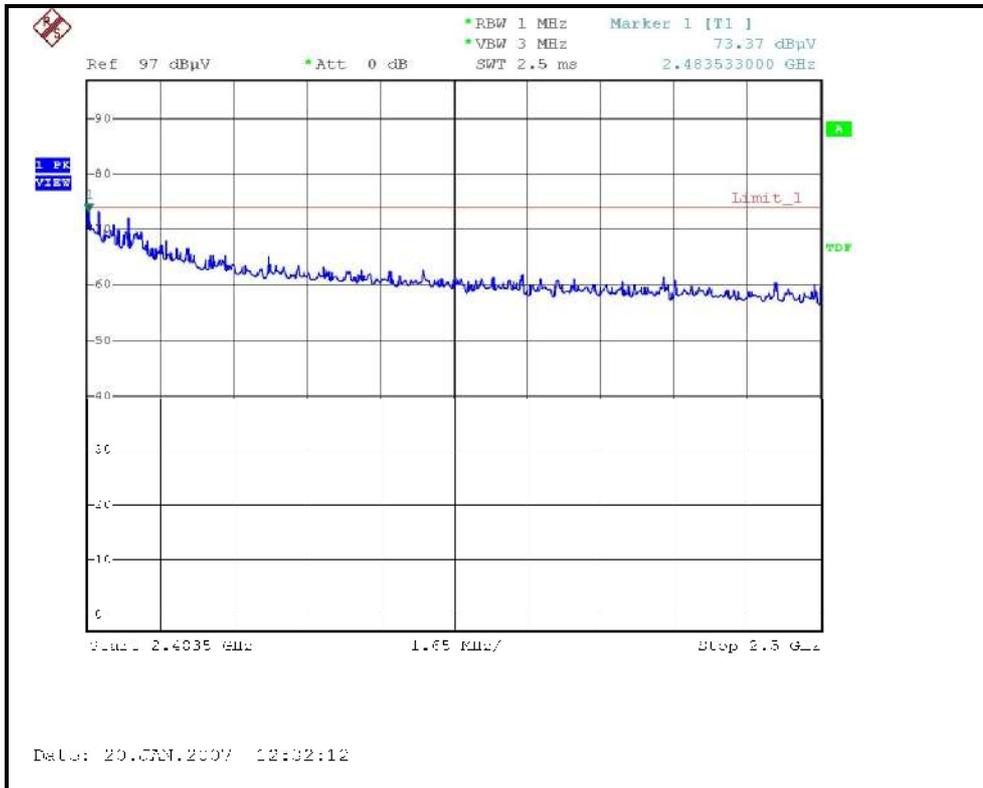
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



RESTRICTED BANDEDGE (802.11g MODE, CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)



4.2.9 TEST RESULTS (ANTENNA 4)

Below 1GHz Worst-Case Data

MODULATION TYPE	DSSS	CHANNEL	Channel 1
INPUT POWER (SYSTEM)	120Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56%RH, 970hPa	TRANSFER RATE	1Mbps
TESTED BY	Wen Yu	DETECTOR FUNCTION	Quasi-Peak, 120kHz

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	139.03	31.90 QP	43.50	-11.60	1.23 H	70	18.50	13.40
2	252.11	32.40 QP	46.00	-13.60	1.11 H	110	18.60	13.80
3	375.01	28.60 QP	46.00	-17.40	1.00 H	320	10.40	18.20
4	500.01	34.70 QP	46.00	-11.30	1.70 H	1	12.90	21.80
5	672.63	40.40 QP	46.00	-5.60	1.21 H	338	15.00	25.40
6	766.13	34.70 QP	46.00	-11.30	1.12 H	11	7.30	27.40
7	863.70	35.60 QP	46.00	-10.40	1.00 H	78	7.00	28.50

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	131.90	30.60 QP	43.50	-12.90	1.03 V	218	17.80	12.80
2	235.93	27.60 QP	46.00	-18.40	1.15 V	6	14.40	13.20
3	375.04	27.20 QP	46.00	-18.80	1.03 V	192	9.00	18.20
4	500.01	33.70 QP	46.00	-12.30	1.00 V	177	11.90	21.80
5	678.13	37.10 QP	46.00	-8.90	1.01 V	170	11.70	25.50
6	863.70	33.70 QP	46.00	-12.30	1.04 V	0	5.20	28.50

- 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

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.00	57.60 PK	74.00	-16.40	1.05 H	210	25.70	31.90
1	2386.00	46.10 AV	54.00	-7.90	1.05 H	210	14.10	31.90
2	*2412.00	102.20 PK			1.05 H	210	70.20	32.00
2	*2412.00	97.30 AV			1.05 H	210	65.30	32.00
3	4824.00	45.20 PK	74.00	-28.80	1.07 H	34	9.20	36.00
3	4824.00	34.10 AV	54.00	-19.90	1.07 H	34	-1.90	36.00
4	7236.00	51.80 PK	74.00	-22.20	1.25 H	87	9.60	42.20
4	7236.00	39.40 AV	54.00	-14.60	1.25 H	87	-2.80	42.20

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	2386.00	62.20 PK	74.00	-11.80	1.19 V	345	30.30	31.90
1	2386.00	53.40 AV	54.00	-0.60	1.19 V	345	21.40	31.90
2	*2412.00	110.00 PK			1.15 V	357	77.90	32.00
2	*2412.00	105.50 AV			1.15 V	357	73.50	32.00
3	4824.00	46.10 PK	74.00	-27.90	1.03 V	247	10.10	36.00
3	4824.00	35.50 AV	54.00	-18.50	1.03 V	247	-0.50	36.00
4	7236.00	52.10 PK	74.00	-21.90	1.06 V	316	9.90	42.20
4	7236.00	41.30 AV	54.00	-12.70	1.06 V	316	-0.90	42.20

- 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



MODE	Channel 6	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2233.00	57.50 PK	74.00	-16.50	1.00 H	275	26.20	31.30
1	2233.00	46.10 AV	54.00	-7.90	1.00 H	275	14.80	31.30
2	2320.00	57.40 PK	74.00	-16.60	1.04 H	231	25.70	31.70
2	2320.00	45.30 AV	54.00	-8.70	1.04 H	231	13.60	31.70
3	2389.00	57.50 PK	74.00	-16.50	1.03 H	228	25.60	31.90
3	2389.00	45.70 AV	54.00	-8.30	1.03 H	228	13.80	31.90
4	*2437.00	107.90 PK			1.03 H	228	75.80	32.10
4	*2437.00	103.20 AV			1.03 H	228	71.10	32.10
5	2485.00	58.40 PK	74.00	-15.60	1.03 H	228	26.10	32.30
5	2485.00	46.80 AV	54.00	-7.20	1.03 H	228	14.50	32.30
6	4874.00	46.10 PK	74.00	-27.90	1.03 H	29	10.00	36.10
6	4874.00	34.80 AV	54.00	-19.20	1.03 H	29	-1.30	36.10
7	7311.00	53.60 PK	74.00	-20.40	1.31 H	116	11.10	42.50
7	7311.00	43.30 AV	54.00	-10.70	1.31 H	116	0.80	42.50

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	2233.00	61.40 PK	74.00	-12.60	1.05 V	194	30.10	31.30
1	2233.00	53.60 AV	54.00	-0.40	1.05 V	194	22.30	31.30
2	2320.00	61.60 PK	74.00	-12.40	1.12 V	9	30.00	31.70
2	2320.00	53.60 AV	54.00	-0.40	1.12 V	9	21.90	31.70
3	2389.00	62.80 PK	74.00	-11.20	1.12 V	9	30.80	31.90
3	2389.00	51.50 AV	54.00	-2.50	1.12 V	9	19.60	31.90
4	*2437.00	116.40 PK			1.13 V	338	84.30	32.10
4	*2437.00	111.70 AV			1.13 V	338	79.60	32.10
5	2485.00	63.20 PK	74.00	-10.80	1.07 V	8	30.90	32.30
5	2485.00	51.50 AV	54.00	-2.50	1.07 V	8	19.20	32.30
6	4874.00	47.30 PK	74.00	-26.70	1.12 V	343	11.20	36.10
6	4874.00	36.40 AV	54.00	-17.60	1.12 V	343	0.30	36.10
7	7311.00	57.80 PK	74.00	-16.20	1.03 V	294	15.30	42.50
7	7311.00	48.40 AV	54.00	-5.60	1.03 V	294	5.90	42.50

- 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



MODE	Channel 11	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 1 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	101.80 PK			1.25 H	213	69.60	32.20
1	*2462.00	97.60 AV			1.25 H	213	65.40	32.20
2	2488.00	58.90 PK	74.00	-15.10	1.25 H	213	26.60	32.30
2	2488.00	47.20 AV	54.00	-6.80	1.25 H	213	14.90	32.30
3	4924.00	45.60 PK	74.00	-28.40	1.08 H	47	9.40	36.20
3	4924.00	34.40 AV	54.00	-19.60	1.08 H	47	-1.80	36.20
4	7386.00	51.90 PK	74.00	-22.10	1.32 H	264	9.10	42.80
4	7386.00	39.70 AV	54.00	-14.30	1.32 H	264	-3.10	42.80

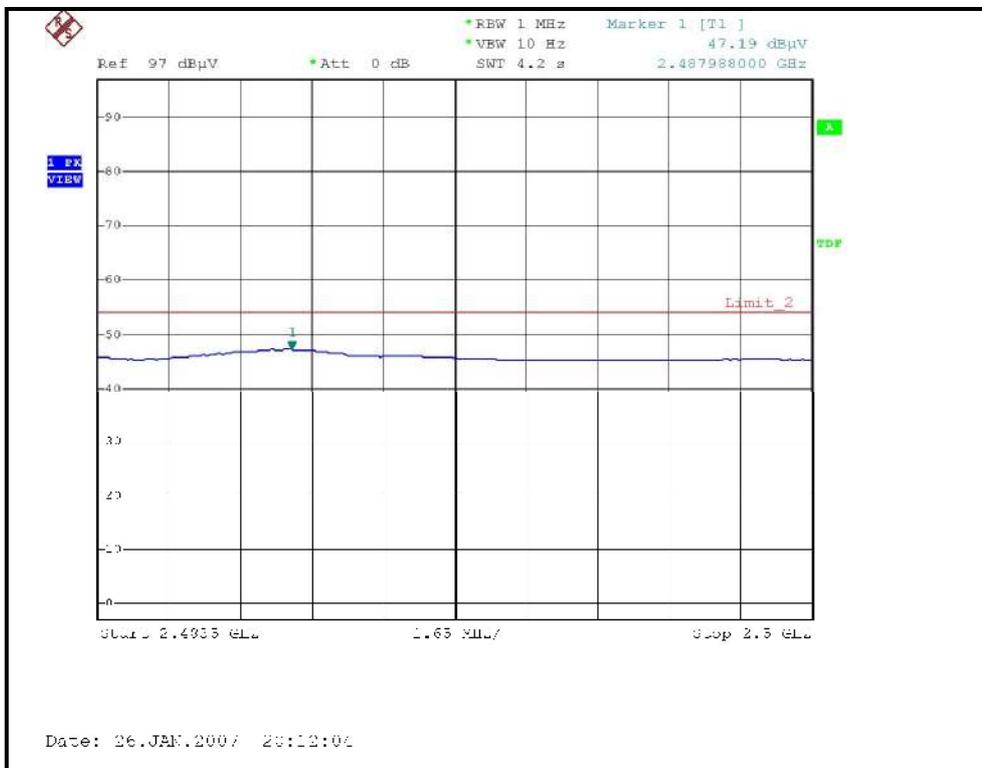
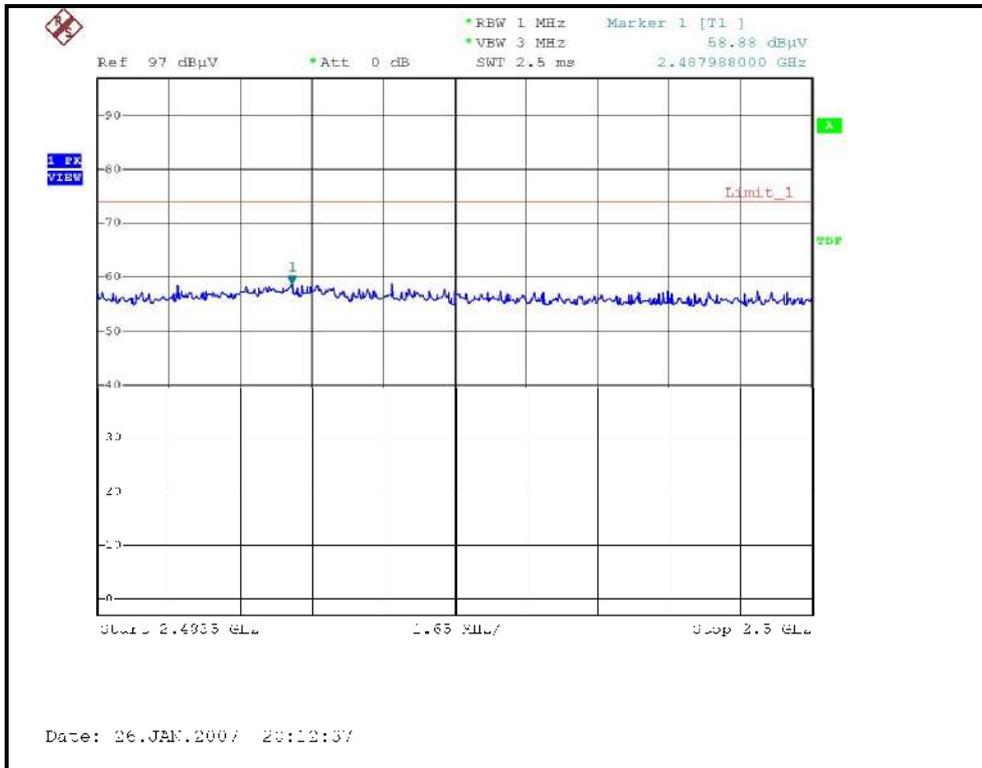
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	109.80 PK			1.12 V	353	77.60	32.20
1	*2462.00	105.80 AV			1.12 V	353	73.60	32.20
2	2487.00	63.40 PK	74.00	-10.60	1.08 V	8	31.10	32.30
2	2487.00	53.20 AV	54.00	-0.80	1.08 V	8	20.90	32.30
3	4924.00	45.80 PK	74.00	-28.20	1.21 V	284	9.60	36.20
3	4924.00	34.90 AV	54.00	-19.10	1.21 V	284	-1.30	36.20
4	7386.00	52.90 PK	74.00	-21.10	1.36 V	37	10.10	42.80
4	7386.00	42.10 AV	54.00	-11.90	1.36 V	37	-0.70	42.80

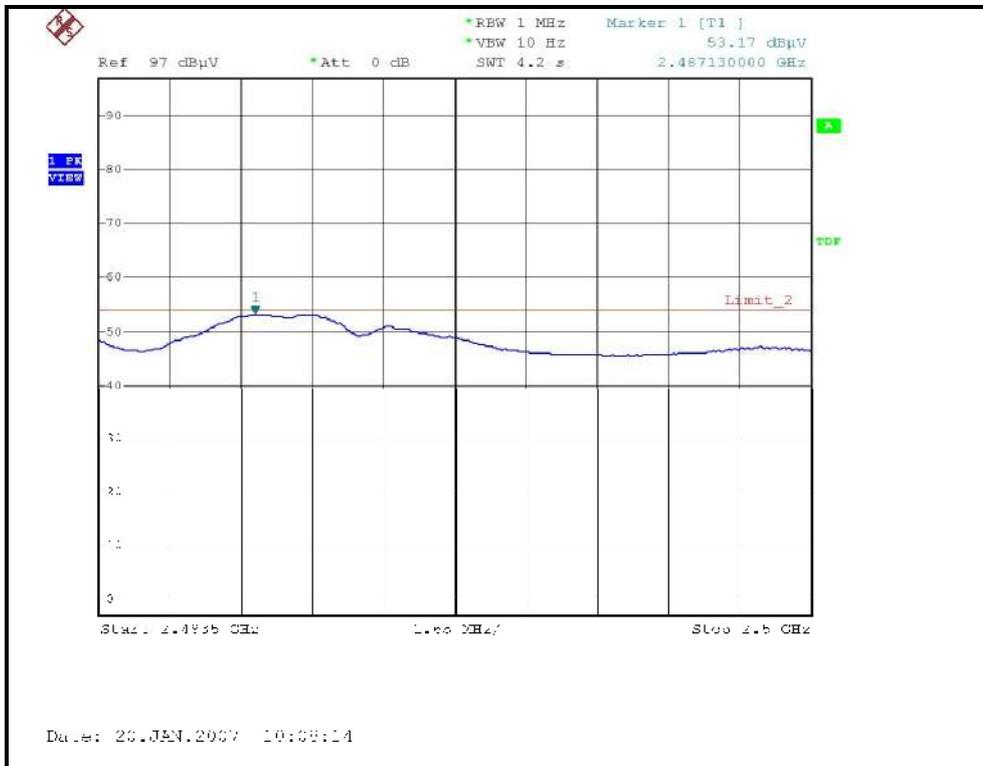
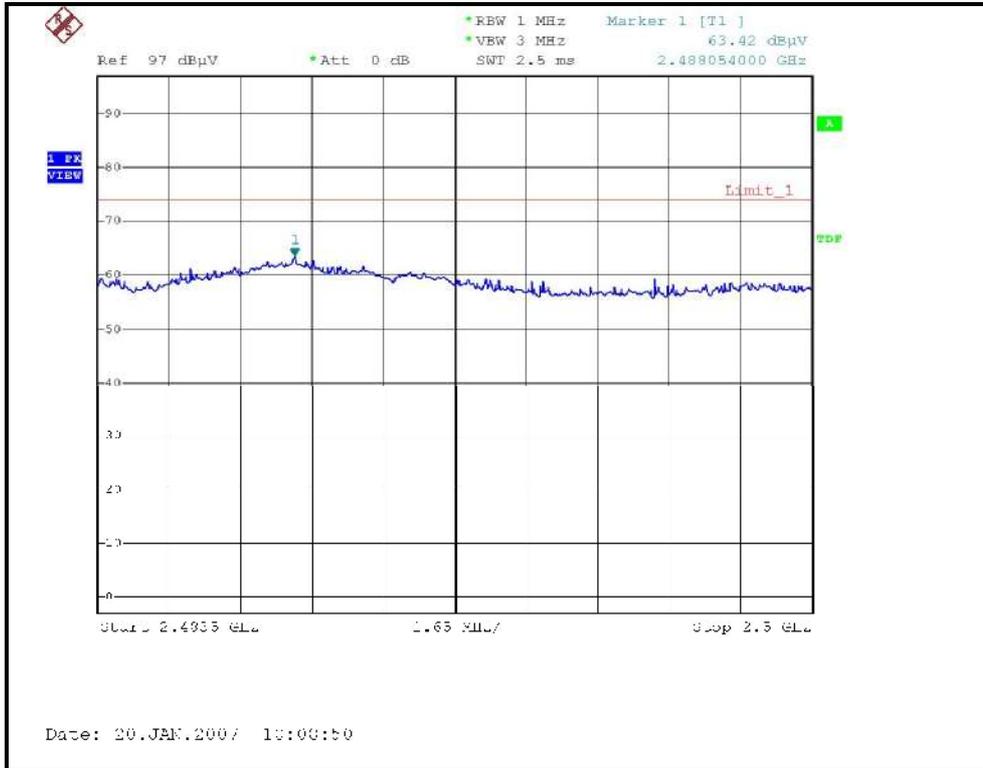
REMARKS:

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

RESTRICTED BANDEDGE (802.11b MODE, CH11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE, CH11, VERTICAL)





802.11g OFDM modulation

MODE	Channel 1	FREQUENCY RANGE	1000~25000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION & BANDWIDTH	Peak (PK) Average (AV) 6 MHz
ENVIRONMENTAL CONDITIONS	23 deg. C, 63%RH, 970hPa	TESTED BY	Tony Chen

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	2320.00	62.60 PK	74.00	-11.40	1.01 H	213	30.90	31.70
1	2320.00	45.30 AV	54.00	-8.70	1.01 H	213	13.60	31.70
2	2390.00	63.60 PK	74.00	-10.40	1.00 H	209	31.60	31.90
2	2390.00	47.00 AV	54.00	-7.00	1.00 H	209	15.00	31.90
3	*2412.00	104.80 PK			1.00 H	209	72.80	32.00
3	*2412.00	93.70 AV			1.00 H	209	61.70	32.00
4	4824.00	45.30 PK	74.00	-28.70	1.06 H	35	9.30	36.00
4	4824.00	33.40 AV	54.00	-20.60	1.06 H	35	-2.60	36.00
5	7236.00	51.20 PK	74.00	-22.80	1.21 H	103	9.00	42.20
5	7236.00	39.40 AV	54.00	-14.60	1.21 H	103	-2.80	42.20

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	2320.00	60.50 PK	74.00	-13.50	1.10 V	339	28.80	31.70
1	2320.00	52.60 AV	54.00	-1.40	1.10 V	339	20.90	31.70
2	2390.00	71.30 PK	74.00	-2.70	1.10 V	339	39.30	31.90
2	2390.00	53.20 AV	54.00	-0.80	1.10 V	339	21.20	31.90
3	*2412.00	112.10 PK			1.16 V	338	80.10	32.00
3	*2412.00	101.70 AV			1.16 V	338	69.70	32.00
4	4824.00	46.10 PK	74.00	-27.90	1.00 V	346	10.10	36.00
4	4824.00	34.70 AV	54.00	-19.30	1.00 V	346	-1.30	36.00
5	7236.00	51.70 PK	74.00	-22.30	1.00 V	317	9.50	42.20
5	7236.00	39.60 AV	54.00	-14.40	1.00 V	317	-2.60	42.20

- 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