

FCC TEST REPORT

REPORT NO.: RF950616H03

MODEL NO.: WRT350N

RECEIVED: June 16, 2006

TESTED: June 16 to Aug. 23, 2006

ISSUED: Aug. 24, 2006

APPLICANT: Cisco-Linksys LLC

ADDRESS: 121 Theory Drive Irvine, CA 92617(USA)

ISSUED BY: Advance Data Technology Corporation

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No. 2177-01

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1. CERTIFICATION

PRODUCT : Wireless-N Gigabit Router with Storage Link
MODEL NO.: WRT350N
BRAND: Linksys
APPLICANT : Cisco-Linksys LLC
TESTED: June 16 to Aug. 23, 2006
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS : FCC Part 15, Subpart C (Section 15.247),
ANSI C63.4-2003

The above equipment (Model: WRT350N) 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:** Aug. 24, 2006
(Carol Liao)

TECHNICAL
ACCEPTANCE : Hank Chung , **DATE:** Aug. 24, 2006
Responsible for RF (Hank Chung)

APPROVED BY : May Chen , **DATE:** Aug. 24, 2006
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -10.06dB at 3.750MHz.
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 -0.30dB at 2483.50MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.26 dB
Radiated emissions	30MHz ~ 200MHz	3.59 dB
	200MHz ~1000MHz	3.61 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless-N Gigabit Router with Storage Link
MODEL NO.	WRT350N
FCC ID	Q87-WRT350N
POWER SUPPLY	DC 12V from power adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/ 5.5/ 2/ 1Mbps 802.11g: 54/ 48/ 36/ 24/ 18/ 12/ 9/ 6Mbps Draft 802.11n (20MHz): 130/117/104/78/65/58.5/52/39/26/19.5/13/6.5Mbps Draft 802.11n (40MHz): 270/ 243/ 216/ 162/135/121.5/108/81/54/40.5/27/13.5Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11 for 802.11b, 802.11g, draft 802.11n (20MHz) 7 for draft 802.11n (40MHz)
MAXIMUM OUTPUT POWER	802.11b: 102.329mW 802.11g: 112.202mW draft 802.11n (20MHz): 184.777mW draft 802.11n (40MHz): 197.715mW
ANTENNA TYPE	Please see note 8 (on next page)
DATA CABLE	NA
I/O PORTS	WAN Port x 1, LAN Port x 4, USB Port x 1

NOTE:

1. The EUT incorporates a MIMO function with 802.11b, 802.11g, draft 802.11n. Physically, the card provides three completed transmit and three receivers.
2. The EUT is 2 * 2 spatial MIMO without beam forming function. The antenna configuration are three transmitter antennas and three receiver antennas , as there are 2 dipole antennas and one PCB monopole antenna. Spatial multiplexing modes for simultaneous transmission using 2 antennas , and for simultaneous receiver using 2 antennas.

3. When the EUT operating in draft 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.
4. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g products.
5. The EUT operates in the 2.4GHz frequency spectrum with data rate up to 270Mbps.
6. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.
7. The EUT must be supplied with a power adapter and following different models could be chosen:

Adapter 1:	
Brand:	Linksys
Model No.:	M2-15USG12R-A
Input power :	AC100V-240V, 0.5A, 60Hz cable length: 0.5m/unshielded/without core
Output power :	DC12V, 1.25A 15W cable length: 1.8m/unshielded/without core
Adapter 2:	
Brand:	Linksys
Model No.:	LS120V15ALE
Input power :	AC100V-240V, 0.5A, 60Hz cable length: 0.5m/unshielded/without core
Output power :	12VDC, 1.5A cable length: 1.8m/unshielded/without core

8. There are three antennas provided to this EUT, please refer to the following table:

No.	Gain (dBi)	Antenna Type	Antenna Connector
1	2.0	Dipole	NA
2	1.8	PCB monopole	NA
3	2.0	Dipole	NA

9. For conducted and radiated test (Below 1 GHz), the EUT was pre-tested under following test mode, and the test data was recorded in this report:

Pre-test Mode	Description
Mode A	802.11b
Mode B	802.11g
Mode C	Draft 802.11n (20MHz)
Mode D	Draft 802.11n (40MHz)

The worst emission level was found in mode D. The final test was executed under test mode with highest emission and recorded in this report individually.

3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided for 802.11b, 802.11g, draft 802.11n (20MHz):

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

Seven channels are provided for draft 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2422MHz	5	2442MHz
2	2427MHz	6	2447MHz
3	2432MHz	7	2452MHz
4	2437MHz		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

COMBINATION MODE:

COMBINATION MODE	OPERATION MODE	ANTENNA 1	ANTENNA 2	ANTENNA 3
A	802.11 B	✓		
B			✓	
C				✓
D	802.11G	✓		
E			✓	
F				✓
G	DRAFT 802.11n(20MHz)	✓	✓	
H			✓	✓
I		✓		✓
J	DRAFT 802.11n(40MHz)	✓	✓	
K			✓	✓
L		✓		✓

Note:

1. The above information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.
2. Antenna 1 and Antenna 3 are Dipole, Antenna 2 is PCB monopole.
3. From above mode, the different modes was chosen for final test and its data were recorded in this report.
4. All of the modes are different operation mode or antenna combination, we choose the worst mode (decided by pretest) for final test. Mode A, D, G, I, J, L, the worst modes, was selected as representative mode for the test.

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	PLC	RE < 1G	RE ≥ 1G	APCM	
-	✓	✓	✓	✓	-

Where **PLC**: Power Line Conducted Emission

RE < 1G: 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)	TX COMBINATION
Draft 802.11n (40MHz)	1 to 7	7	OFDM	BPSK	13.5	L

- ☒ The EUT was tested with the following modes:

Test Mode	Description
Mode 1	Draft 802.11n (40MHz): with adapter 1
Mode 2	Draft 802.11n (40MHz): with adapter 2

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)	TX COMBINATION
Draft 802.11n (40MHz)	1 to 7	7	OFDM	BPSK	13.5	L

- ☒ The EUT was tested with the following modes:

Test Mode	Description
Mode 1	Draft 802.11n (40MHz): with adapter 1
Mode 2	Draft 802.11n (40MHz): with adapter 2

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)	TX COMBINATION
802.11b	1 to 11	1, 6, 11	DSSS	CCK	1	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	D
Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	G
Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	I
Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	J
Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	L

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)	TX COMBINATION
802.11b	1 to 11	1, 11	DSSS	CCK	1	A
802.11g	1 to 11	1, 11	OFDM	BPSK	6	D
Draft 802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	6.5	G
Draft 802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	6.5	I
Draft 802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	13.5	J
Draft 802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	13.5	L

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)	TX COMBINATION
802.11b	1 to 11	1, 6, 11	DSSS	CCK	1	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	D
Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	G
Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	I
Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	J
Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	L

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)

ANSI C63.4-2003

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

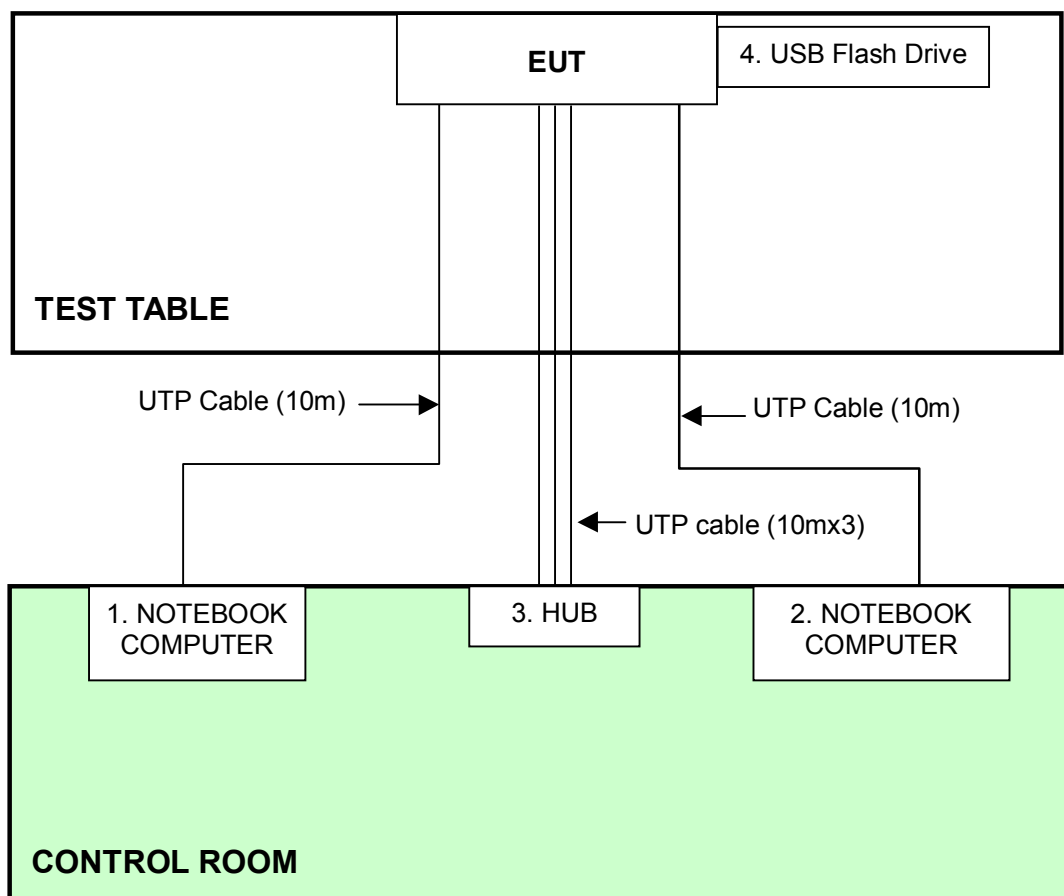
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP01L	TW-09c748-12800-165-3171	PIW632500516610
2	NOTEBOOK COMPUTER	ASUS	PP01L	TW-0791UH-12800-0CK-3735	FCC DoC
3	Switch HUB	HP	50920764	NA	NA
4	USB Flash Drive	Billionton	SEM	H4-010212	NA

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

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

3.5 CONFIGURATION OF SYSTEM UNDER TEST



NOTE: 1. Support unit 1-3 were kept in the control room during the test.
 2. Please refer to the photos of test configuration in Item 5 also.

4. TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver	ESCS 30	100375	Sep. 19, 2006
Line-Impedance Stabilization Network(for EUT)	ENV-216	100071	Nov. 10, 2006
ROHDE & SCHWARZ LISN	KNW-407	8/1395/12	Jul. 18, 2007
RF Signal Cable	RG233/U	Cable_CA_02	Dec. 10, 2006
Terminator(for KYORITSU)	50	2	Oct. 08, 2006
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.

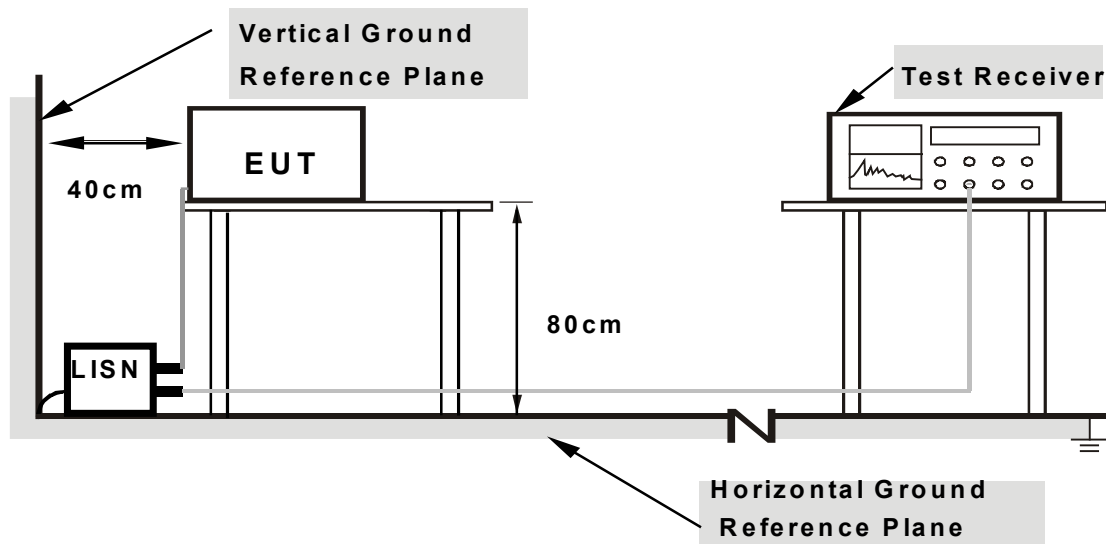
4.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



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

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

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

4.1.6 EUT OPERATING CONDITIONS

- Plug the USB Flash Drive (support unit 4) into EUT and placed them on testing table.
- Prepared other computer systems (support unit 1 ~ 3) to act as communication partners and placed them outside of testing area.
- The communication partners run test program “MFGTEST & Ping Test ” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable.

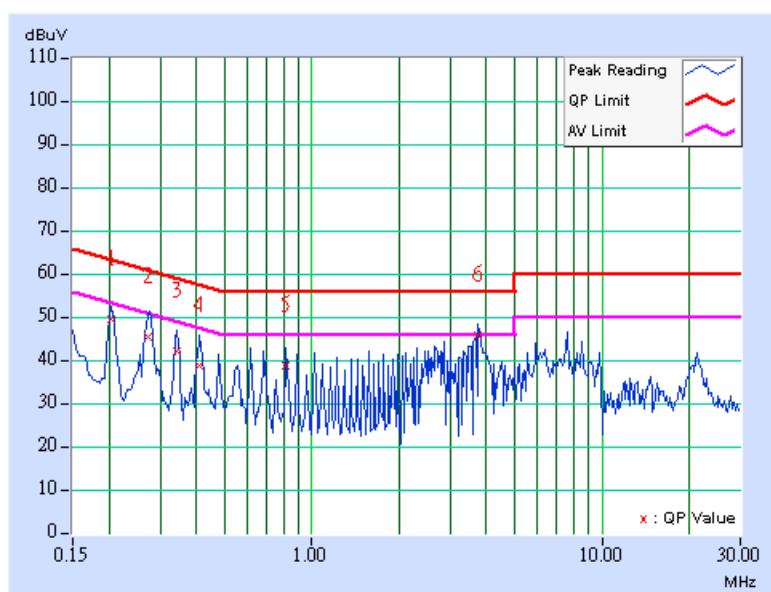
4.1.7 TEST RESULTS

DRAFT 802.11n (40MHz) OFDM MODULATION: (MODE 1)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 50%RH, 971hPa	TESTED BY	Eric Lee

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	0.205	9.60	40.10	-	49.70	-	63.42	53.42	-13.72	-
2	0.274	9.60	35.80	-	45.40	-	61.00	51.00	-15.60	-
3	0.341	9.60	32.64	-	42.24	-	59.17	49.17	-16.93	-
4	0.408	9.60	29.30	-	38.90	-	57.68	47.68	-18.78	-
5	0.818	9.60	29.36	-	38.96	-	56.00	46.00	-17.04	-
6	3.750	9.70	36.24	-	45.94	-	56.00	46.00	-10.06	-

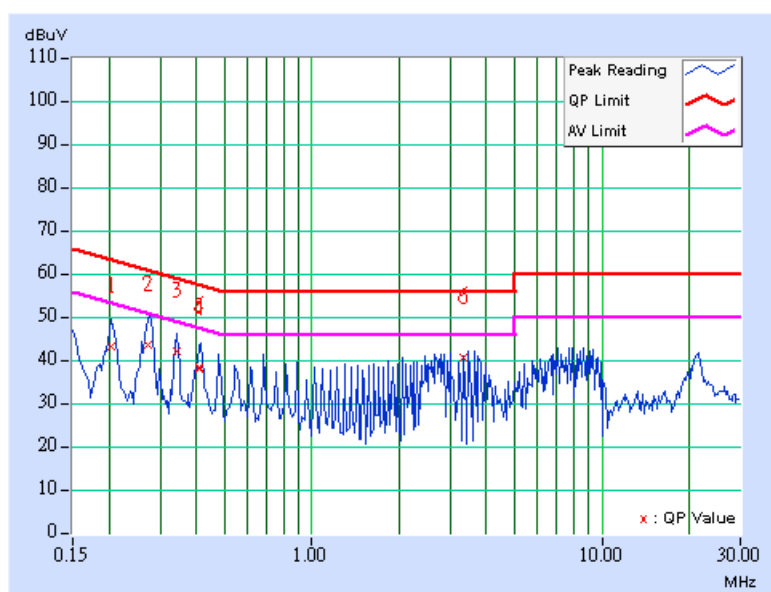
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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 7	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 50%RH, 971hPa	TESTED BY	Eric Lee

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.205	9.60	33.49	-	43.09	-	63.42	53.42	-20.33	-
2	0.271	9.60	33.86	-	43.46	-	61.08	51.08	-17.62	-
3	0.341	9.60	32.70	-	42.30	-	59.17	49.17	-16.87	-
4	0.409	9.60	28.29	-	37.89	-	57.66	47.66	-19.77	-
5	0.411	9.60	28.66	-	38.26	-	57.63	47.63	-19.37	-
6	3.343	9.70	30.93	-	40.63	-	56.00	46.00	-15.37	-

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

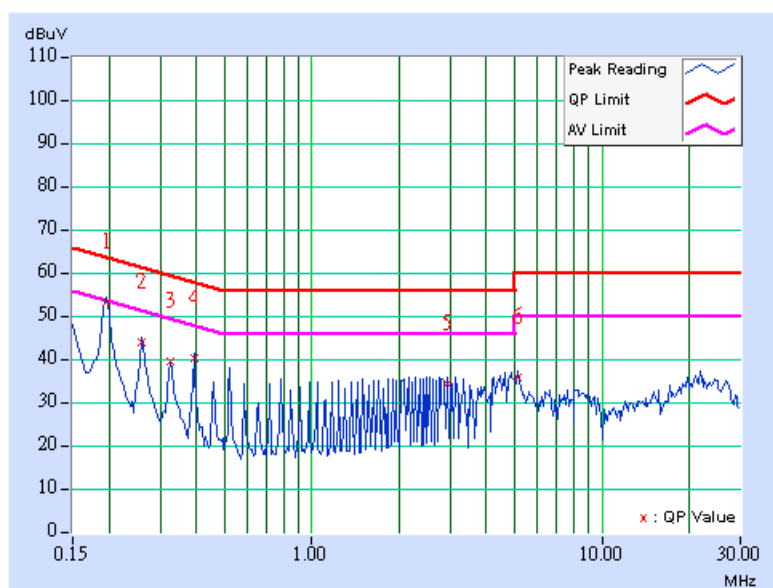


DRAFT 802.11n (40MHz) OFDM MODULATION: (MODE 2)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 50%RH, 971hPa	TESTED BY	Eric Lee

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	0.197	9.60	43.70	-	53.30	-	63.74	53.74	-10.44	-
2	0.259	9.60	34.41	-	44.01	-	61.45	51.45	-17.44	-
3	0.326	9.60	29.73	-	39.33	-	59.55	49.55	-20.22	-
4	0.392	9.60	30.70	-	40.30	-	58.02	48.02	-17.72	-
5	2.935	9.70	24.55	-	34.25	-	56.00	46.00	-21.75	-
6	5.152	9.74	26.30	-	36.04	-	60.00	50.00	-23.96	-

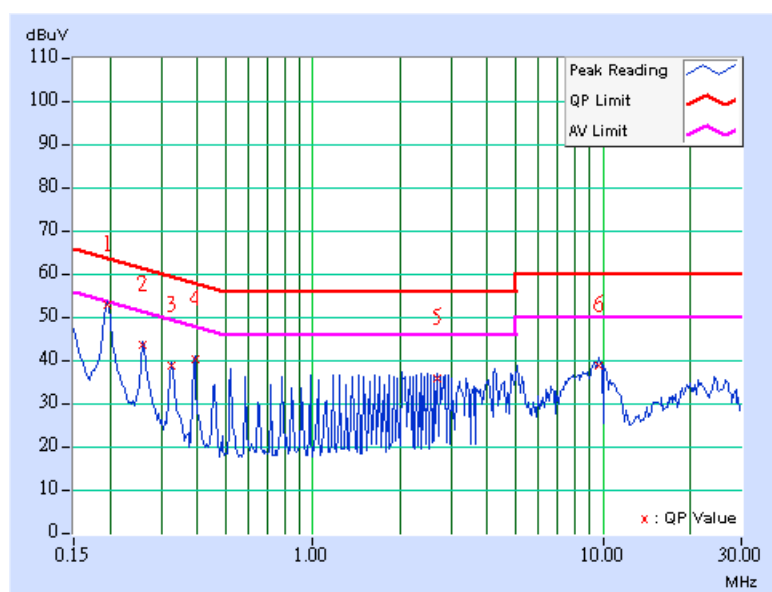
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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 7	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 50%RH, 971hPa	TESTED BY	Eric Lee

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	9.60	43.01	-	52.61	-	63.74	53.74	-11.13	-
2	0.259	9.60	33.95	-	43.55	-	61.45	51.45	-17.90	-
3	0.326	9.60	29.03	-	38.63	-	59.56	49.56	-20.93	-
4	0.392	9.60	30.60	-	40.20	-	58.02	48.02	-17.82	-
5	2.673	9.70	25.89	-	35.59	-	56.00	46.00	-20.41	-
6	9.716	9.89	29.07	-	38.96	-	60.00	50.00	-21.04	-

- 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.



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	ESMI	839013/007 839379/002	Jan. 24, 2007
Spectrum Analyzer ROHDE & SCHWARZ	FSEK30	100049	Aug. 13, 2007
BILOG Antenna SCHWARZBECK	VULB9163	121	Jun. 01, 2007
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 22, 2007
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Jan. 19, 2007
Preamplifier Agilent	8449B	3008A01911	Sep. 22, 2006
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218188/218189	Dec. 13, 2006
RF signal cable Worken	8D-FB	Cable-HYCH9-01	Mar. 08, 2007
Software ADT.	ADT_Radiated_ V7.6.01	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA
Antenna Tower Controller EMCO	2090	NA	NA
Turn Table EMCO	2087-2.03	NA	NA
Turn Table Controller EMCO	2090	NA	NA
26GHz ~ 40GHz Amplifier	AMF-6F-2600400	900619	Nov. 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 4.
 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 IC4924-4.

4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

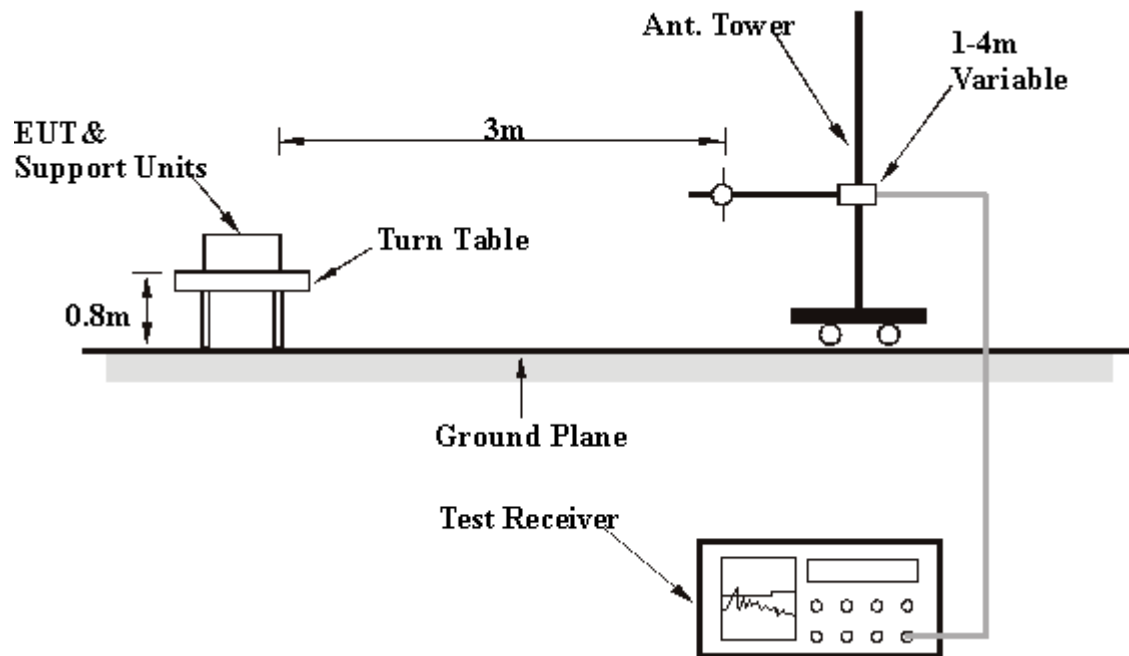
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

- Plug the USB Flash Drive (support unit 4) into EUT and placed them on testing table.
- Prepared other computer systems (support unit 1 ~ 3) to act as communication partners and placed them outside of testing area.
- The communication partners run test program “MFGTEST & Ping Test ” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable.

4.2.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA: (MODE 1)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK for draft 802.11n (40MHz)	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 68%RH, 971hPa	TESTED BY	Sky Liao

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	166.64	32.50 QP	43.50	-11.00	1.51 H	243	18.70	13.80
2	250.03	34.20 QP	46.00	-11.80	1.57 H	312	20.40	13.80
3	375.01	39.30 QP	46.00	-6.70	1.43 H	29	21.10	18.20
4	500.02	37.80 QP	46.00	-8.20	1.22 H	157	16.00	21.80
5	625.04	41.10 QP	46.00	-4.90	1.65 H	237	16.30	24.80
6	666.66	43.40 QP	46.00	-2.60	1.29 H	182	18.10	25.30
7	800.01	40.20 QP	46.00	-5.80	1.31 H	103	12.60	27.60
8	933.34	41.90 QP	46.00	-4.10	1.08 H	335	12.40	29.50

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	125.01	32.10 QP	43.50	-11.40	1.00 V	297	19.90	12.20
2	166.66	30.40 QP	43.50	-13.10	1.00 V	268	16.60	13.80
3	250.00	39.20 QP	46.00	-6.80	1.00 V	172	25.40	13.80
4	375.01	40.50 QP	46.00	-5.50	1.00 V	265	22.30	18.20
5	500.00	39.30 QP	46.00	-6.70	1.00 V	316	17.50	21.80
6	666.68	41.20 QP	46.00	-4.80	1.48 V	34	15.90	25.30
7	800.02	39.10 QP	46.00	-6.90	1.25 V	161	11.50	27.60
8	933.35	42.50 QP	46.00	-3.50	1.17 V	86	13.00	29.50

- 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.

BELOW 1GHz WORST-CASE DATA: (MODE 2)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	Below 1000MHz
MODULATION TYPE	BPSK for draft 802.11n (40MHz)	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 68%RH, 971hPa	TESTED BY	Sky Liao

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	166.68	32.30 QP	43.50	-11.20	1.48 H	237	18.50	13.80
2	250.02	34.60 QP	46.00	-11.40	1.62 H	306	20.80	13.80
3	375.01	39.10 QP	46.00	-6.90	1.37 H	143	20.90	18.20
4	500.00	37.30 QP	46.00	-8.70	1.02 H	252	15.50	21.80
5	625.02	41.60 QP	46.00	-4.40	1.43 H	164	16.80	24.80
6	666.67	43.10 QP	46.00	-2.90	1.35 H	133	17.80	25.30
7	800.00	40.90 QP	46.00	-5.10	1.20 H	109	13.30	27.60
8	933.34	42.20 QP	46.00	-3.80	1.24 H	28	12.70	29.50

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	125.00	32.60 QP	43.50	-10.90	1.00 V	343	20.40	12.20
2	166.66	30.70 QP	43.50	-12.80	1.02 V	62	16.90	13.80
3	250.01	38.80 QP	46.00	-7.20	1.00 V	136	25.00	13.80
4	375.02	40.10 QP	46.00	-5.90	1.00 V	228	21.90	18.20
5	500.01	39.70 QP	46.00	-6.30	1.27 V	312	17.90	21.80
6	666.66	40.80 QP	46.00	-5.20	1.34 V	343	15.50	25.30
7	800.01	38.60 QP	46.00	-7.40	1.21 V	296	11.00	27.60
8	933.33	42.80 QP	46.00	-3.20	1.06 V	73	13.30	29.50

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:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	DBPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	1Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

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	2388.00	55.90 PK	74.00	-18.10	1.15 H	86	24.40	31.50
1	2388.00	45.10 AV	54.00	-8.90	1.15 H	86	13.60	31.50
2	2390.00	55.40 PK	74.00	-18.60	1.15 H	86	23.89	31.51
2	2390.00	44.80 AV	54.00	-9.20	1.15 H	86	13.29	31.51
3	*2412.00	98.40 PK			1.15 H	86	66.82	31.58
3	*2412.00	94.80 AV			1.15 H	86	63.22	31.58
4	3216.00	48.20 PK	74.00	-25.80	1.14 H	314	14.97	33.23
4	3216.00	42.60 AV	54.00	-11.40	1.14 H	314	9.37	33.23
5	4824.00	48.90 PK	74.00	-25.10	1.17 H	352	11.94	36.96
5	4824.00	42.10 AV	54.00	-11.90	1.17 H	352	5.14	36.96
6	7236.00	47.10 PK	74.00	-26.90	1.45 H	50	4.10	43.00
6	7236.00	36.20 AV	54.00	-17.80	1.45 H	50	-6.80	43.00

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	2388.00	60.20 PK	74.00	-13.80	1.11 V	170	28.70	31.50
1	2388.00	51.70 AV	54.00	-2.30	1.11 V	170	20.20	31.50
2	2390.00	59.70 PK	74.00	-14.30	1.11 V	170	28.19	31.51
2	2390.00	49.20 AV	54.00	-4.80	1.11 V	170	17.69	31.51
3	*2412.00	109.80 PK			1.11 V	170	78.22	31.58
3	*2412.00	106.20 AV			1.11 V	170	74.62	31.58
4	3216.00	48.20 PK	74.00	-25.80	1.52 V	189	14.97	33.23
4	3216.00	43.90 AV	54.00	-10.10	1.52 V	189	10.67	33.23
5	4824.00	53.70 PK	74.00	-20.30	1.37 V	289	16.74	36.96
5	4824.00	50.30 AV	54.00	-3.70	1.37 V	289	13.34	36.96
6	7236.00	48.90 PK	74.00	-25.10	1.39 V	330	5.90	43.00
6	7236.00	39.20 AV	54.00	-14.80	1.39 V	330	-3.80	43.00

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	DBPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	1Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	99.60 PK			1.02 H	321	67.94	31.66
1	*2437.00	96.40 AV			1.02 H	321	64.74	31.66
2	3249.00	47.60 PK	74.00	-26.40	1.12 H	20	14.28	33.32
2	3249.00	42.10 AV	54.00	-11.90	1.12 H	20	8.78	33.32
3	4874.00	47.80 PK	74.00	-26.20	1.15 H	346	10.65	37.15
3	4874.00	40.20 AV	54.00	-13.80	1.15 H	346	3.05	37.15
4	7311.00	46.90 PK	74.00	-27.10	1.40 H	62	3.81	43.09
4	7311.00	36.20 AV	54.00	-17.80	1.40 H	62	-6.89	43.09

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	110.00 PK			1.08 V	358	78.34	31.66
1	*2437.00	106.90 AV			1.08 V	358	75.24	31.66
2	3249.00	47.80 PK	74.00	-26.20	1.13 V	312	14.48	33.32
2	3249.00	43.60 AV	54.00	-10.40	1.13 V	312	10.28	33.32
3	4874.00	52.40 PK	74.00	-21.60	1.13 V	21	15.25	37.15
3	4874.00	49.30 AV	54.00	-4.70	1.13 V	21	12.15	37.15
4	7311.00	49.70 PK	74.00	-24.30	1.35 V	33	6.61	43.09
4	7311.00	38.90 AV	54.00	-15.10	1.35 V	33	-4.19	43.09

REMARKS:

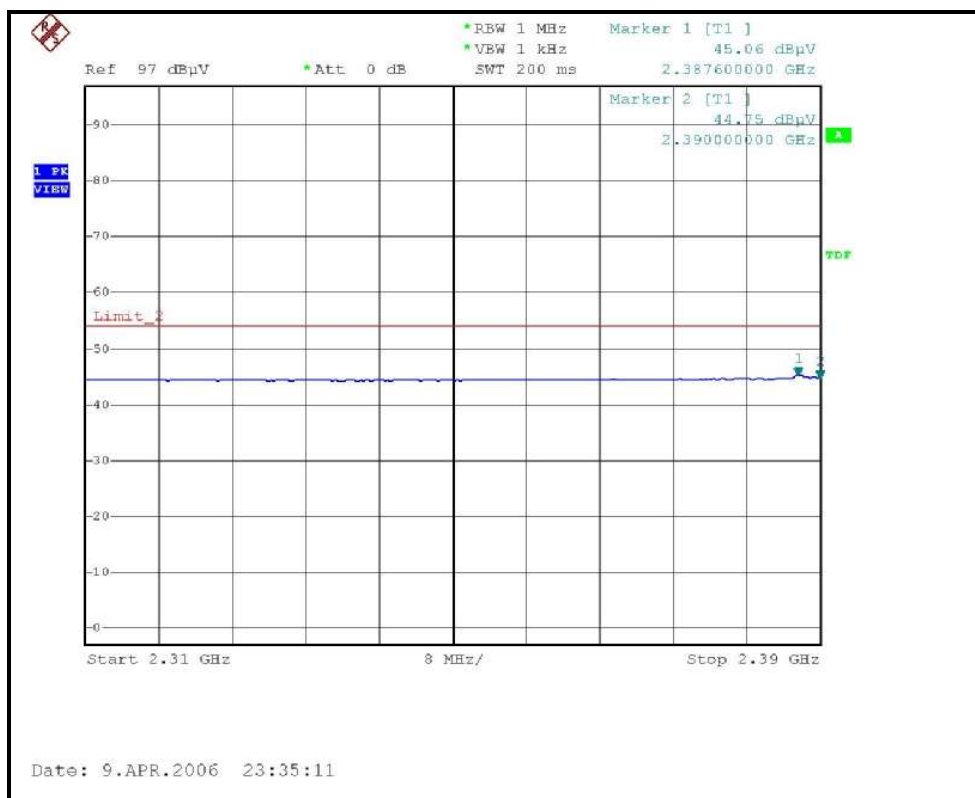
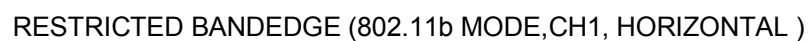
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247.
6. “ * “: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	DBPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	1Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

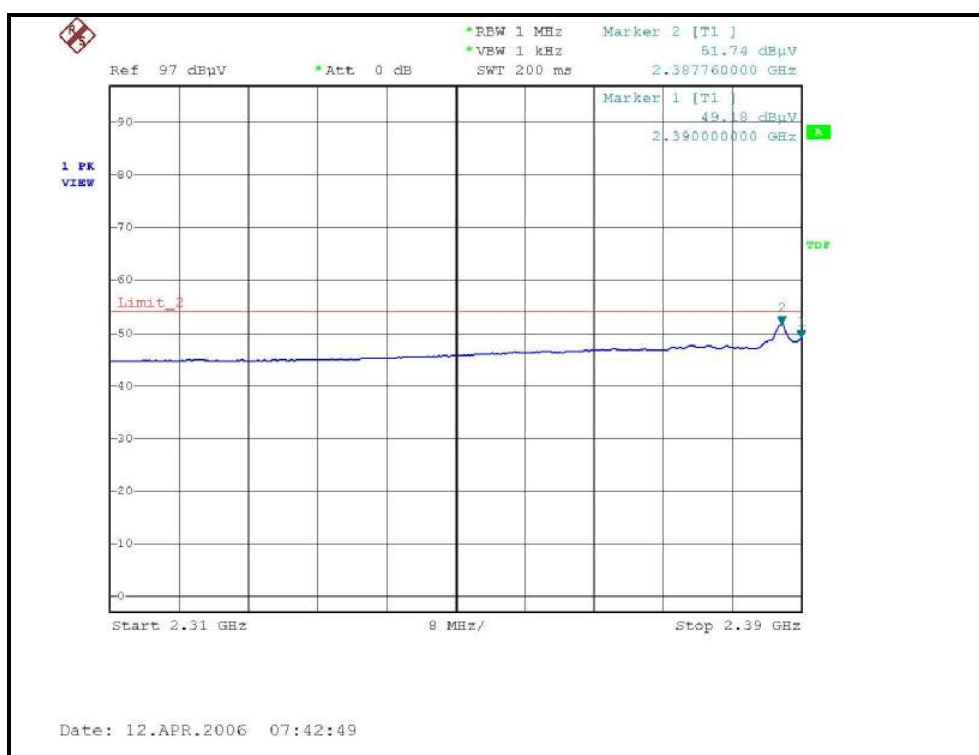
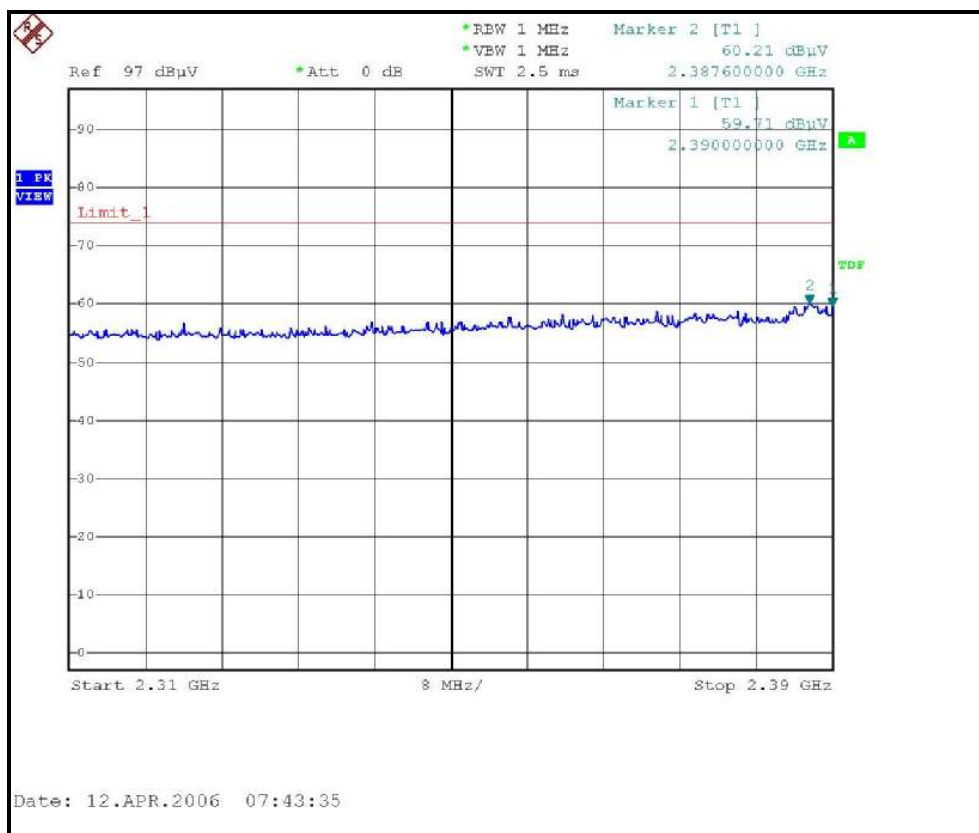
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	98.90 PK			1.00 H	313	67.16	31.74
1	*2462.00	95.70 AV			1.00 H	313	63.96	31.74
2	2483.50	55.00 PK	74.00	-19.00	1.00 H	313	23.19	31.81
2	2483.50	46.20 AV	54.00	-7.80	1.00 H	313	14.39	31.81
3	2486.00	55.80 PK	74.00	-18.20	1.00 H	313	23.98	31.82
3	2486.00	46.30 AV	54.00	-7.70	1.00 H	313	14.48	31.82
4	3282.00	47.20 PK	74.00	-26.80	1.14 H	213	13.78	33.42
4	3282.00	41.90 AV	54.00	-12.10	1.14 H	213	8.48	33.42
5	4924.00	47.10 PK	74.00	-26.90	1.35 H	351	9.81	37.29
5	4924.00	40.90 AV	54.00	-13.10	1.35 H	351	3.61	37.29
6	7386.00	47.10 PK	74.00	-26.90	1.46 H	83	3.72	43.38
6	7386.00	36.60 AV	54.00	-17.40	1.46 H	83	-6.78	43.38

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	109.40 PK			1.07 V	347	77.66	31.74
1	*2462.00	105.90 AV			1.07 V	347	74.16	31.74
2	2483.50	60.10 PK	74.00	-13.90	1.07 V	347	28.29	31.81
2	2483.50	52.10 AV	54.00	-1.90	1.07 V	347	20.29	31.81
3	2486.00	61.50 PK	74.00	-12.50	1.07 V	347	29.68	31.82
3	2486.00	52.50 AV	54.00	-1.50	1.07 V	347	20.68	31.82
4	3282.00	47.30 PK	74.00	-26.70	1.24 V	325	13.88	33.42
4	3282.00	43.20 AV	54.00	-10.80	1.24 V	325	9.78	33.42
5	4924.00	51.80 PK	74.00	-22.20	1.13 V	341	14.51	37.29
5	4924.00	47.90 AV	54.00	-6.10	1.13 V	341	10.61	37.29
6	7386.00	49.50 PK	74.00	-24.50	1.41 V	276	6.12	43.38
6	7386.00	38.40 AV	54.00	-15.60	1.41 V	276	-4.98	43.38

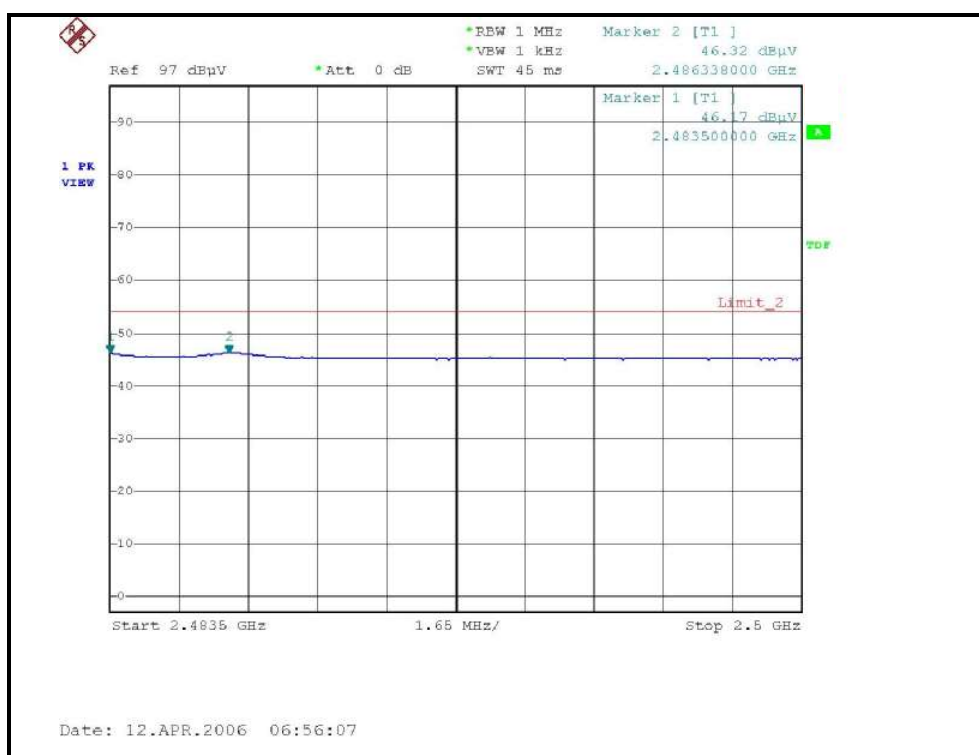
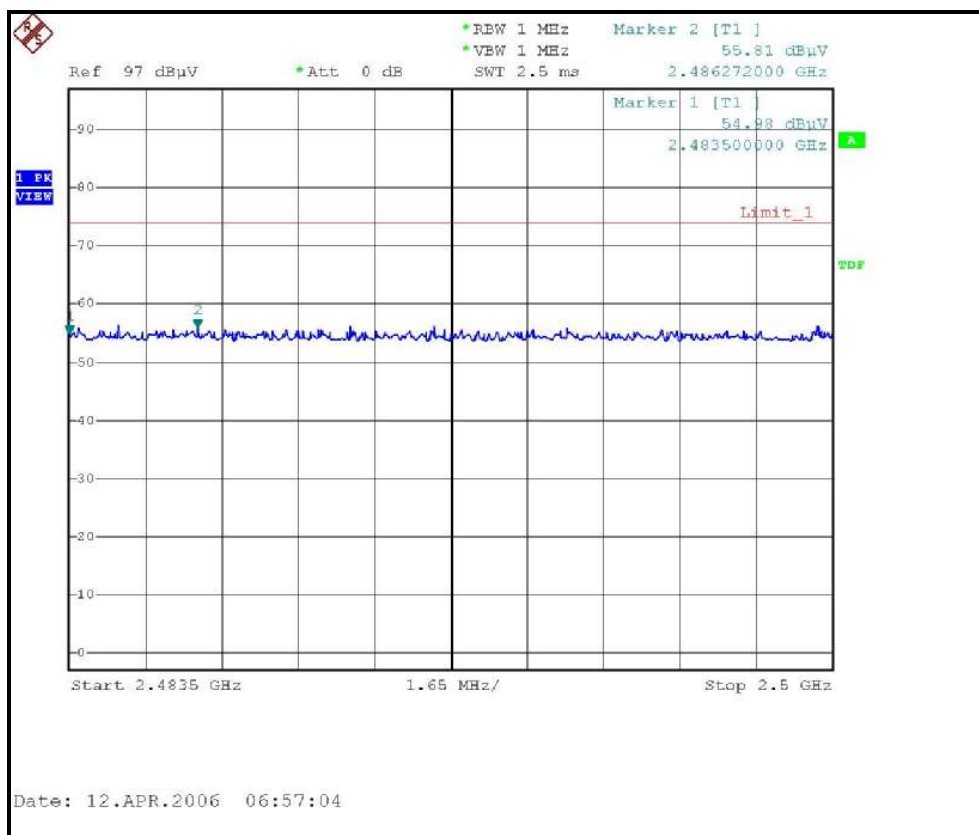
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247.
 6. “ * ”: Fundamental frequency.



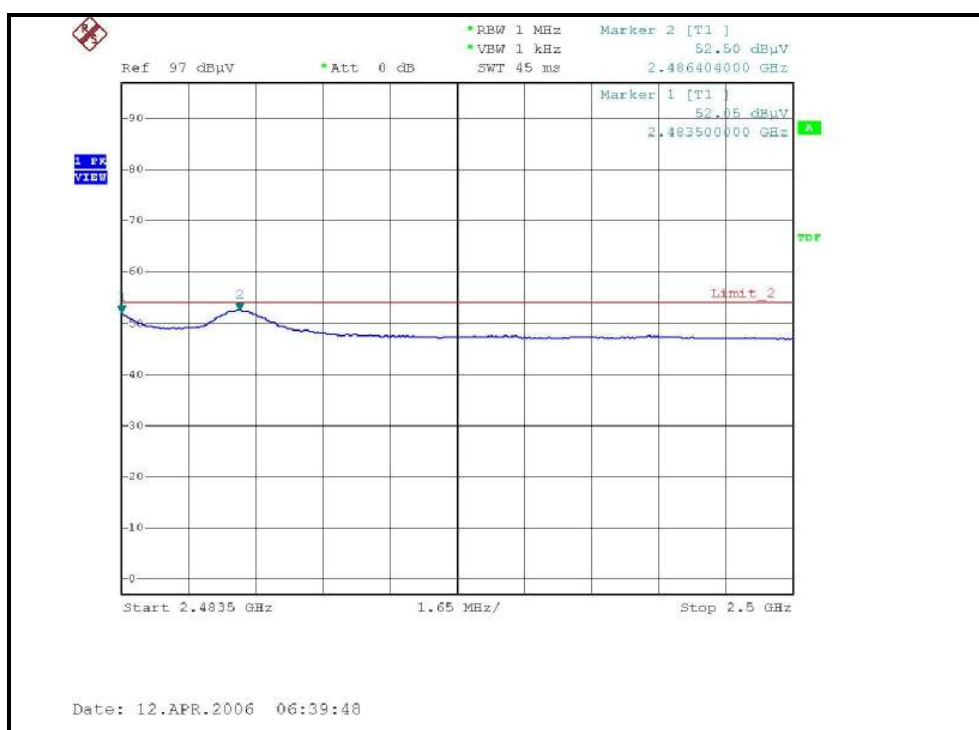
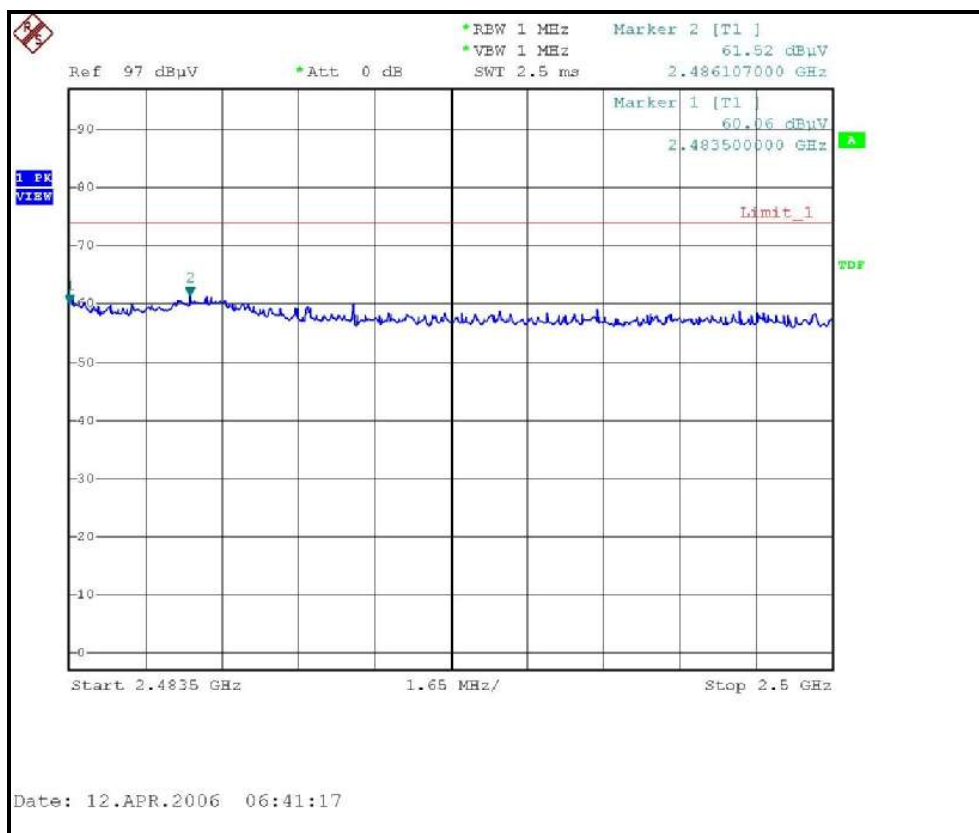
RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11b MODE, CH11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)



802.11g OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

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	56.90 PK	74.00	-17.10	1.04 H	298	25.39	31.51
1	2390.00	45.20 AV	54.00	-8.80	1.04 H	298	13.69	31.51
2	*2412.00	98.30 PK			1.04 H	298	66.72	31.58
2	*2412.00	88.90 AV			1.04 H	298	57.32	31.58
3	3216.00	49.10 PK	74.00	-24.90	1.55 H	12	15.87	33.23
3	3216.00	44.40 AV	54.00	-9.60	1.55 H	12	11.17	33.23
4	4824.00	50.50 PK	74.00	-23.50	1.51 H	1	13.54	36.96
4	4824.00	46.50 AV	54.00	-7.50	1.51 H	1	9.54	36.96
5	7236.00	49.10 PK	74.00	-24.90	1.16 H	8	6.10	43.00
5	7236.00	38.20 AV	54.00	-15.80	1.16 H	8	-4.80	43.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.20 PK	74.00	-7.80	1.07 V	347	34.69	31.51
1	2390.00	48.70 AV	54.00	-5.30	1.07 V	347	17.19	31.51
2	*2412.00	108.70 PK			1.07 V	347	77.12	31.58
2	*2412.00	98.70 AV			1.07 V	347	67.12	31.58
3	3216.00	49.40 PK	74.00	-24.60	1.50 V	201	16.17	33.23
3	3216.00	45.30 AV	54.00	-8.70	1.50 V	201	12.07	33.23
4	4824.00	53.20 PK	74.00	-20.80	1.47 V	291	16.24	36.96
4	4824.00	50.40 AV	54.00	-3.60	1.47 V	291	13.44	36.96
5	7236.00	52.10 PK	74.00	-21.90	1.11 V	62	9.10	43.00
5	7236.00	39.10 AV	54.00	-14.90	1.11 V	62	-3.90	43.00

- 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	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.20 PK			1.02 H	296	69.54	31.66
1	*2437.00	91.40 AV			1.02 H	296	59.74	31.66
2	3249.00	47.80 PK	74.00	-26.20	1.56 H	13	14.48	33.32
2	3249.00	43.80 AV	54.00	-10.20	1.56 H	13	10.48	33.32
3	4874.00	51.80 PK	74.00	-22.20	1.49 H	3	14.65	37.15
3	4874.00	44.20 AV	54.00	-9.80	1.49 H	3	7.05	37.15
4	7311.00	49.20 PK	74.00	-24.80	1.13 H	352	6.11	43.09
4	7311.00	37.90 AV	54.00	-16.10	1.13 H	352	-5.19	43.09

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	111.40 PK			1.06 V	334	79.74	31.66
1	*2437.00	100.30 AV			1.06 V	334	68.64	31.66
2	3249.00	49.30 PK	74.00	-24.70	1.34 V	315	15.98	33.32
2	3249.00	45.00 AV	54.00	-9.00	1.34 V	315	11.68	33.32
3	4874.00	52.20 PK	74.00	-21.80	1.31 V	342	15.05	37.15
3	4874.00	49.50 AV	54.00	-4.50	1.31 V	342	12.35	37.15
4	7311.00	52.60 PK	74.00	-21.40	1.14 V	89	9.51	43.09
4	7311.00	39.40 AV	54.00	-14.60	1.14 V	89	-3.69	43.09

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.

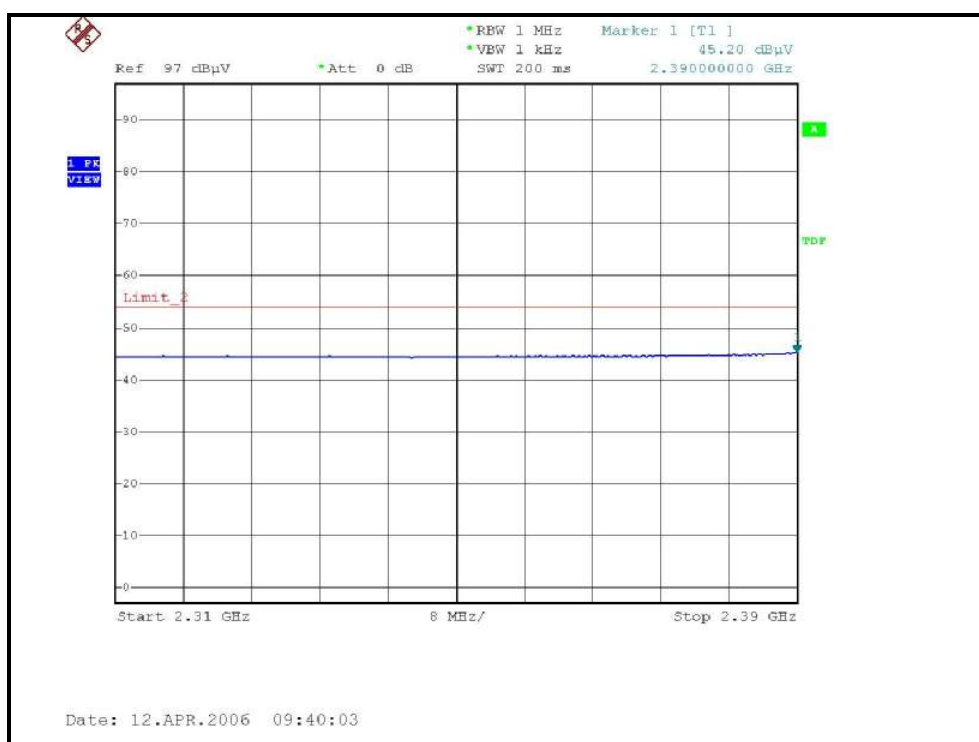
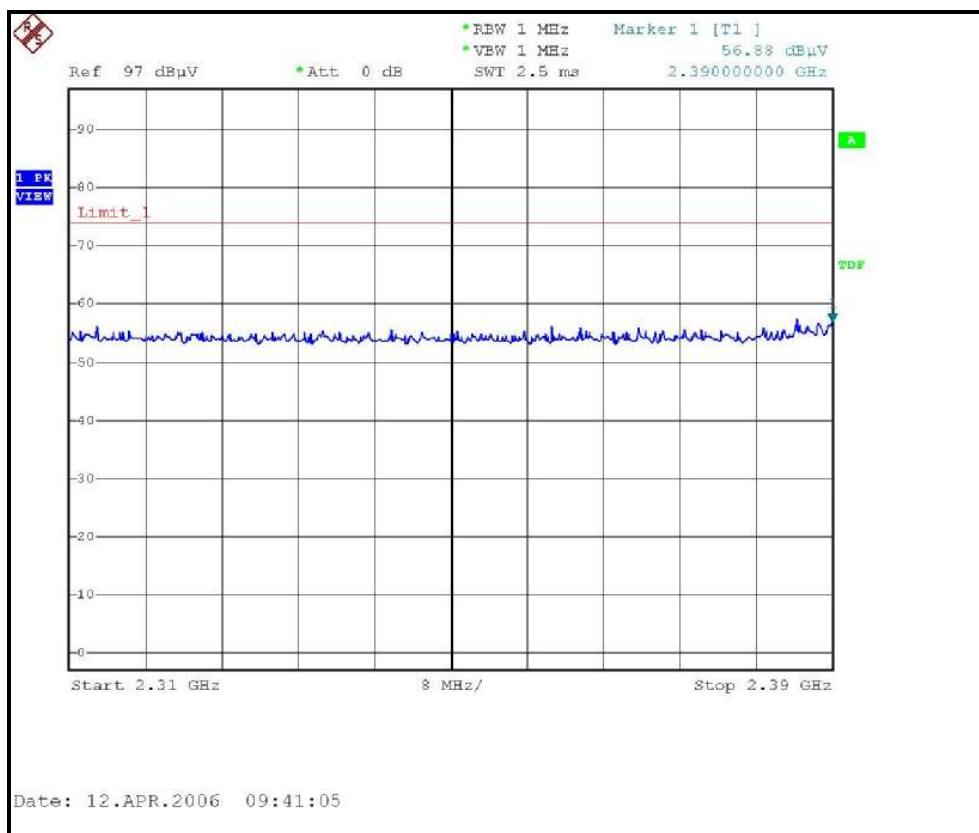
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

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			1.00 H	298	70.06	31.74
1	*2462.00	91.90 AV			1.00 H	298	60.16	31.74
2	2483.50	63.70 PK	74.00	-10.30	1.00 H	298	31.89	31.81
2	2483.50	47.50 AV	54.00	-6.50	1.00 H	298	15.69	31.81
3	3282.00	48.90 PK	74.00	-25.10	1.59 H	29	15.48	33.42
3	3282.00	44.10 AV	54.00	-9.90	1.59 H	29	10.68	33.42
4	4924.00	52.40 PK	74.00	-21.60	1.29 H	4	15.11	37.29
4	4924.00	43.90 AV	54.00	-10.10	1.29 H	4	6.61	37.29
5	7386.00	49.60 PK	74.00	-24.40	1.24 H	239	6.22	43.38
5	7386.00	38.30 AV	54.00	-15.70	1.24 H	239	-5.08	43.38

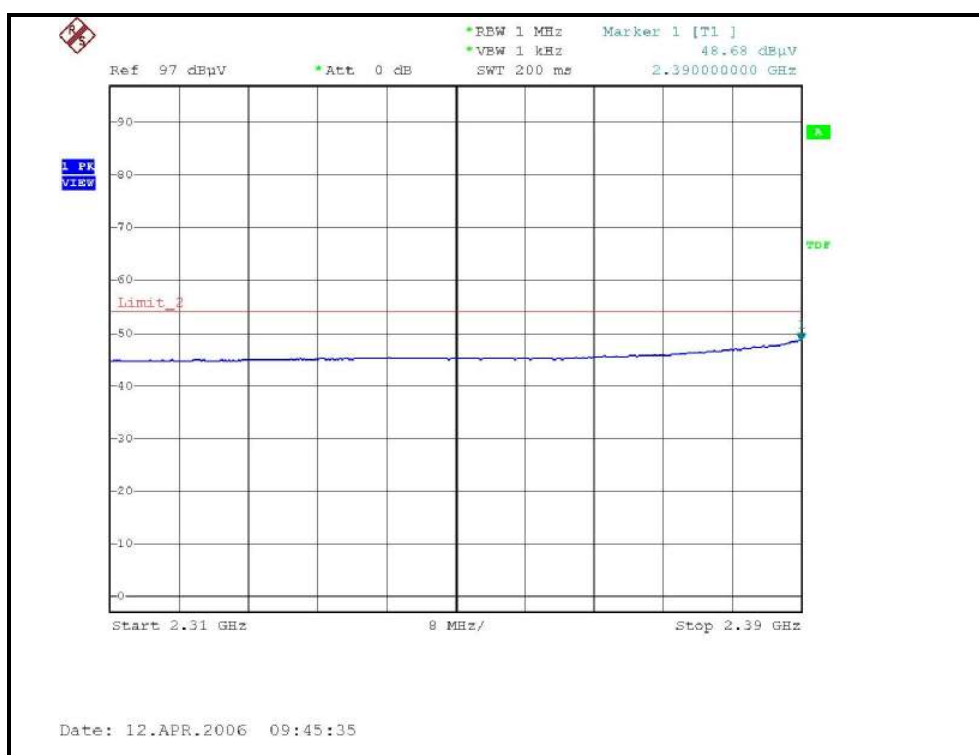
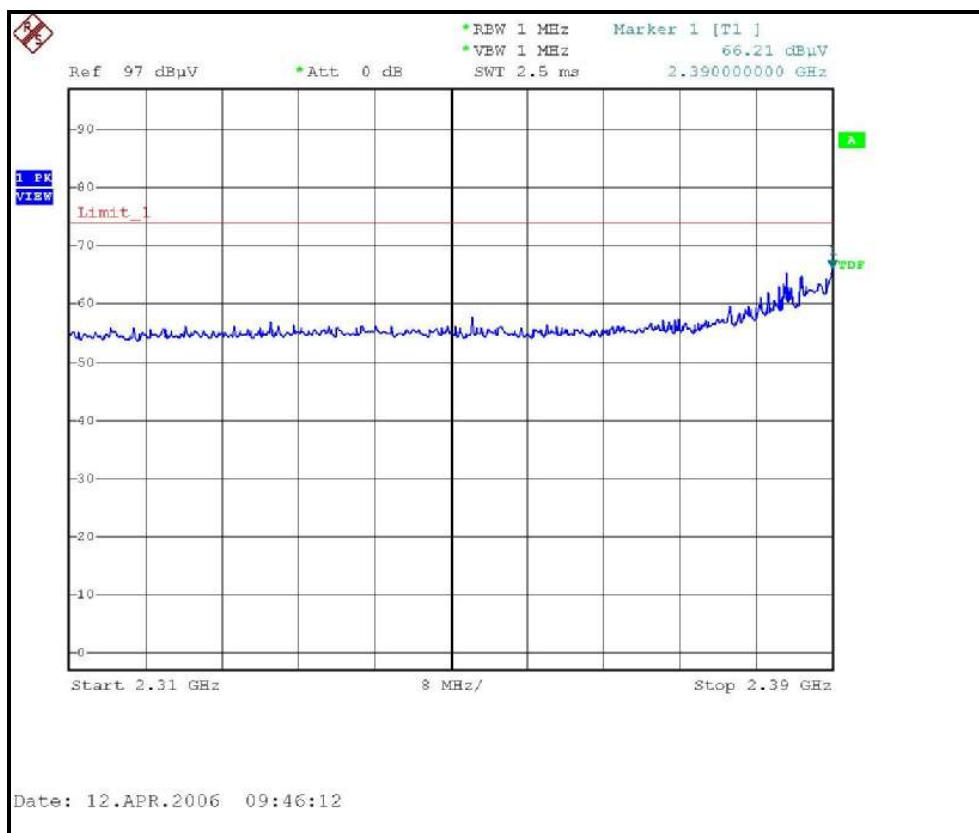
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	111.70 PK			1.06 V	176	79.96	31.74
1	*2462.00	100.70 AV			1.06 V	176	68.96	31.74
2	2483.50	69.60 PK	74.00	-4.40	1.06 V	176	37.79	31.81
2	2483.50	52.20 AV	54.00	-1.80	1.06 V	176	20.39	31.81
3	3282.00	50.10 PK	74.00	-23.90	1.15 V	326	16.68	33.42
3	3282.00	45.10 AV	54.00	-8.90	1.15 V	326	11.68	33.42
4	4924.00	52.90 PK	74.00	-21.10	1.14 V	325	15.61	37.29
4	4924.00	49.80 AV	54.00	-4.20	1.14 V	325	12.51	37.29
5	7386.00	52.70 PK	74.00	-21.30	1.22 V	117	9.32	43.38
5	7386.00	39.70 AV	54.00	-14.30	1.22 V	117	-3.68	43.38

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247.
 6. “ * ”: Fundamental frequency.

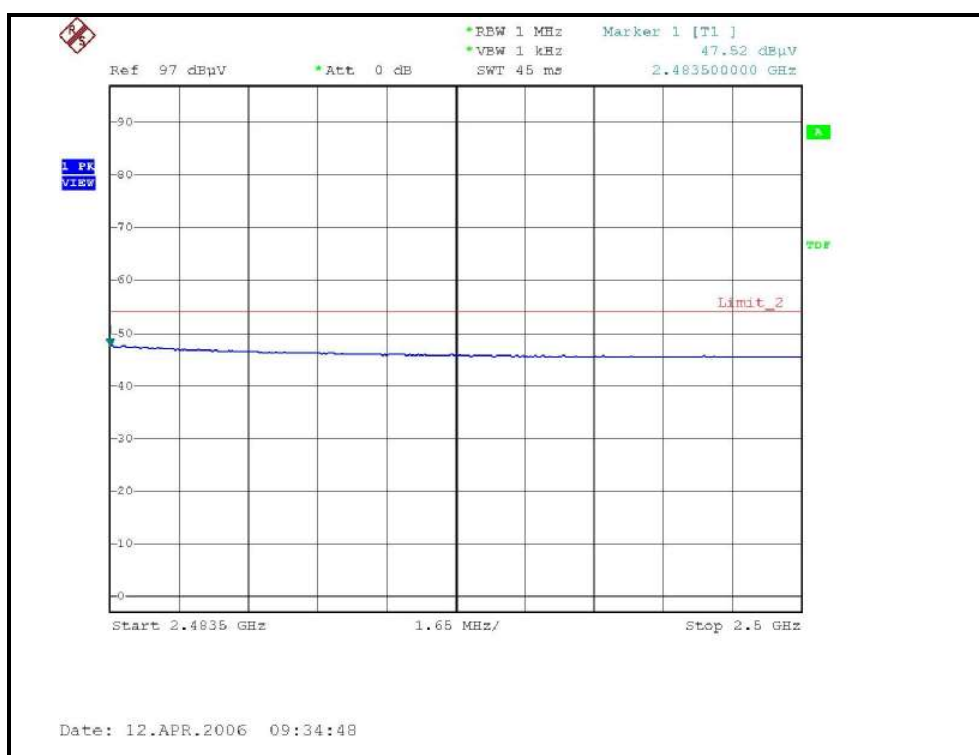
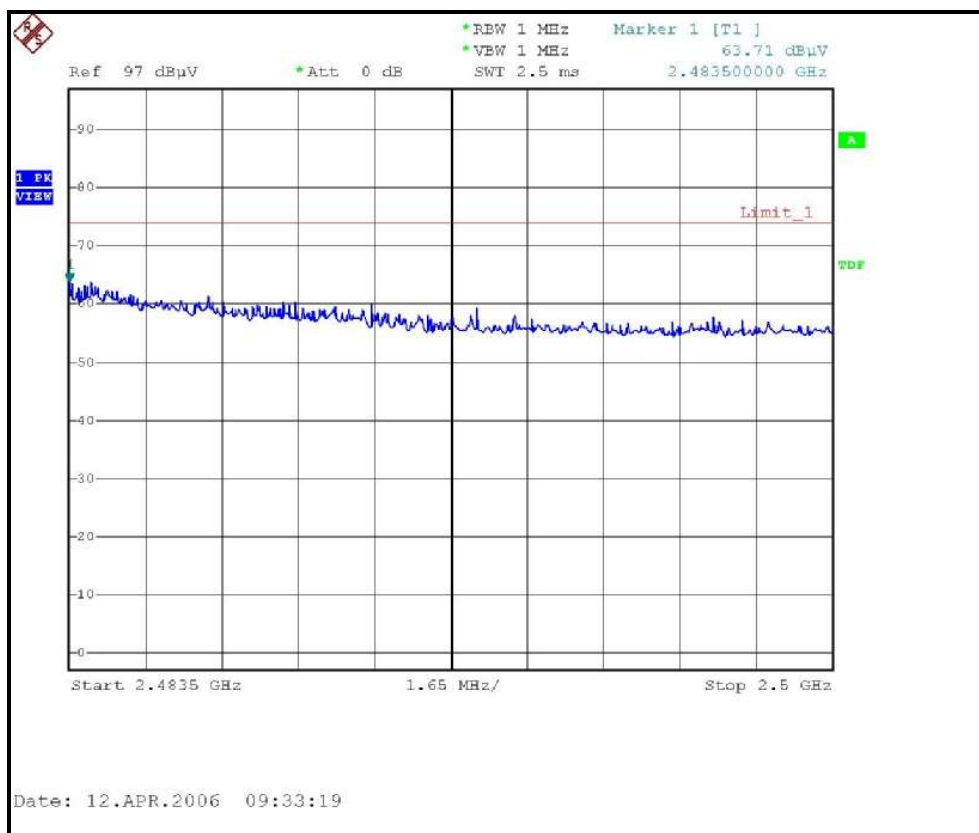
RESTRICTED BANDEDGE (802.11g MODE, CH1, HORIZONTAL)



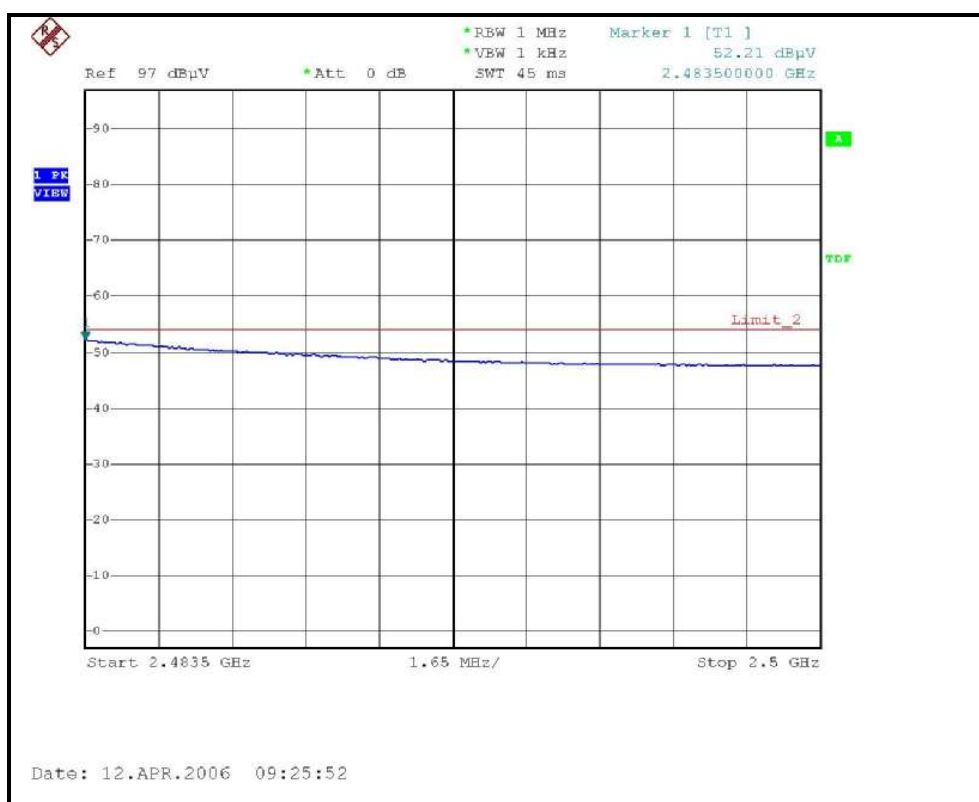
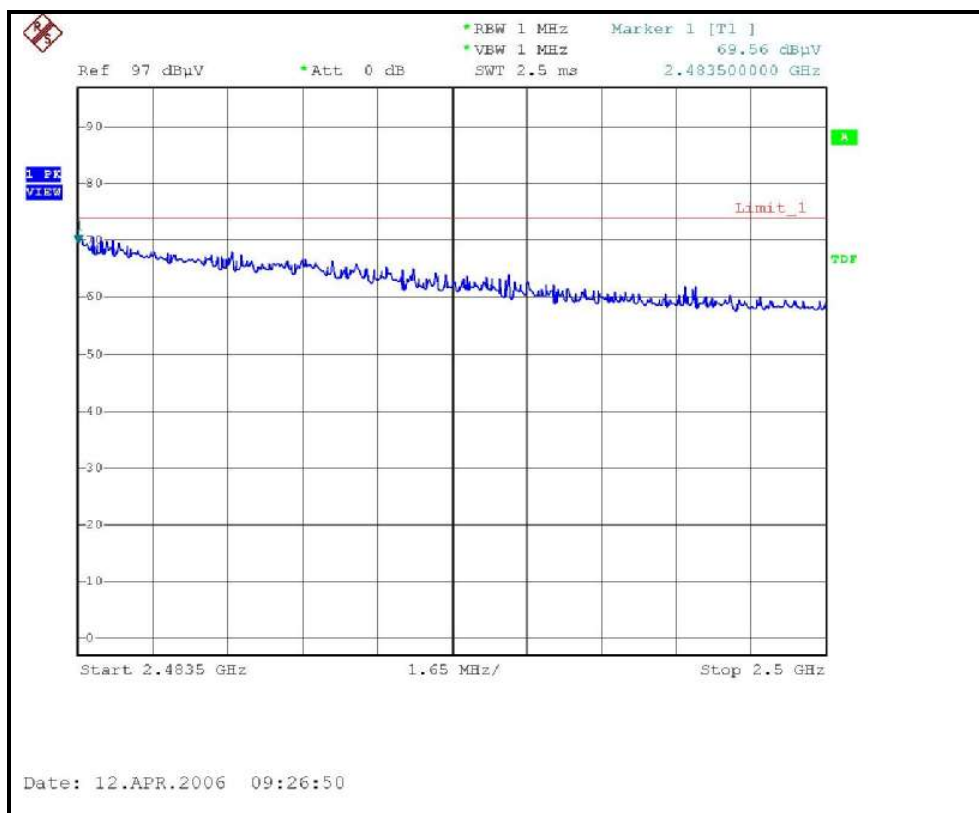
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11g MODE, CH11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)



DRAFT 802.11n (20MHz) OFDM MODULATION: DUAL TX: (ANTENNA 1 AND 3)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

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	55.20 PK	74.00	-18.80	1.20 H	335	23.69	31.51
1	2390.00	44.90 AV	54.00	-9.10	1.20 H	335	13.39	31.51
2	*2412.00	97.20 PK			1.20 H	335	65.62	31.58
2	*2412.00	88.10 AV			1.20 H	335	56.52	31.58
3	3216.00	48.10 PK	74.00	-25.90	1.42 H	285	14.87	33.23
3	3216.00	44.20 AV	54.00	-9.80	1.42 H	285	10.97	33.23
4	4824.00	49.20 PK	74.00	-24.80	1.33 H	65	12.24	36.96
4	4824.00	44.20 AV	54.00	-9.80	1.33 H	65	7.24	36.96
5	7236.00	50.80 PK	74.00	-23.20	1.27 H	316	7.80	43.00
5	7236.00	38.40 AV	54.00	-15.60	1.27 H	316	-4.60	43.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.30 PK	74.00	-7.70	1.10 V	11	34.79	31.51
1	2390.00	49.50 AV	54.00	-4.50	1.10 V	11	17.99	31.51
2	*2412.00	110.60 PK			1.10 V	11	79.02	31.58
2	*2412.00	101.90 AV			1.10 V	11	70.32	31.58
3	3216.00	50.40 PK	74.00	-23.60	1.48 V	358	17.17	33.23
3	3216.00	47.20 AV	54.00	-6.80	1.48 V	358	13.97	33.23
4	4824.00	51.50 PK	74.00	-22.50	1.33 V	266	14.54	36.96
4	4824.00	48.10 AV	54.00	-5.90	1.33 V	266	11.14	36.96
5	7236.00	51.20 PK	74.00	-22.80	1.49 V	29	8.20	43.00
5	7236.00	39.60 AV	54.00	-14.40	1.49 V	29	-3.40	43.00

- 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	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.30 PK			1.21 H	329	69.64	31.66
1	*2437.00	91.50 AV			1.21 H	329	59.84	31.66
2	3249.00	47.50 PK	74.00	-26.50	1.49 H	28	14.18	33.32
2	3249.00	43.70 AV	54.00	-10.30	1.49 H	28	10.38	33.32
3	4874.00	48.80 PK	74.00	-25.20	1.29 H	301	11.65	37.15
3	4874.00	43.70 AV	54.00	-10.30	1.29 H	301	6.55	37.15
4	7311.00	51.30 PK	74.00	-22.70	1.32 H	342	8.21	43.09
4	7311.00	38.70 AV	54.00	-15.30	1.32 H	342	-4.39	43.09

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	111.10 PK			1.07 V	357	79.44	31.66
1	*2437.00	102.40 AV			1.07 V	357	70.74	31.66
2	3249.00	50.90 PK	74.00	-23.10	1.42 V	315	17.58	33.32
2	3249.00	48.20 AV	54.00	-5.80	1.42 V	315	14.88	33.32
3	4874.00	52.10 PK	74.00	-21.90	1.44 V	342	14.95	37.15
3	4874.00	48.70 AV	54.00	-5.30	1.44 V	342	11.55	37.15
4	7311.00	51.40 PK	74.00	-22.60	1.38 V	86	8.31	43.09
4	7311.00	39.90 AV	54.00	-14.10	1.38 V	86	-3.19	43.09

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.

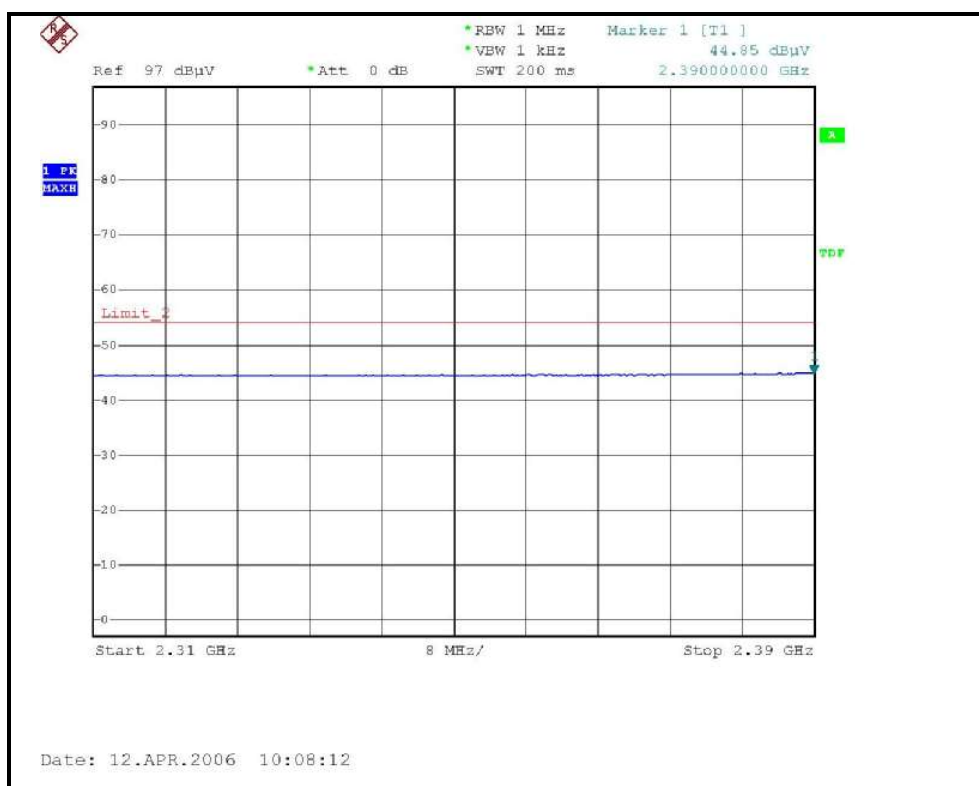
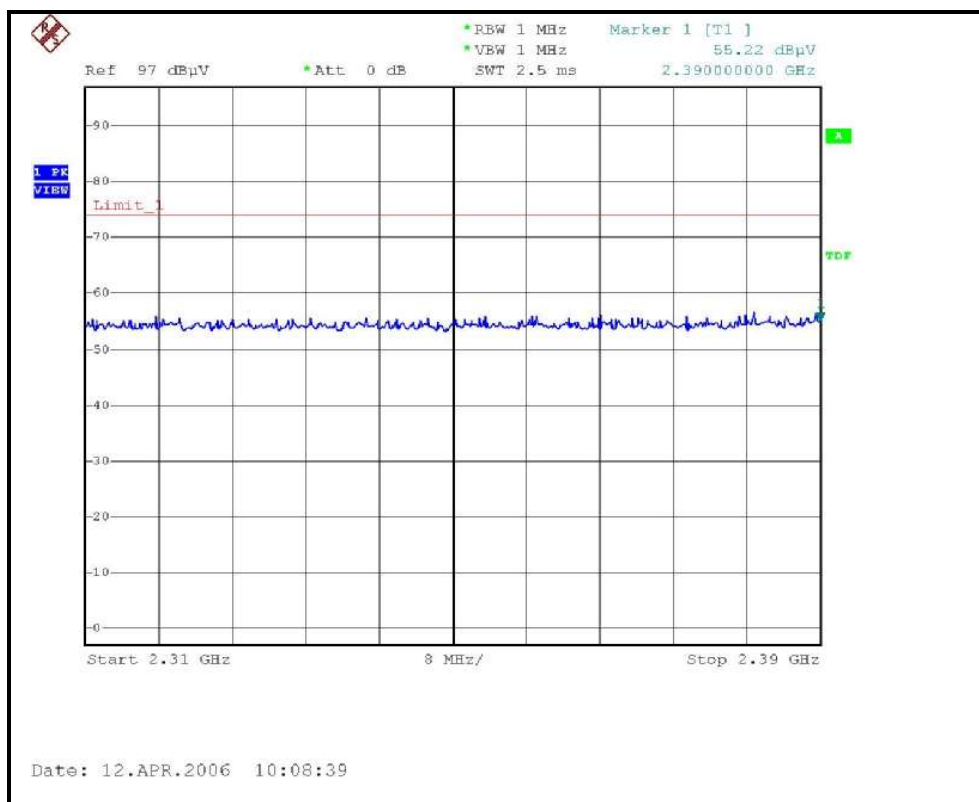
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

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	102.40 PK			1.21 H	334	70.66	31.74
1	*2462.00	92.60 AV			1.21 H	334	60.86	31.74
2	2483.50	62.10 PK	74.00	-11.90	1.21 H	334	30.29	31.81
2	2483.50	47.70 AV	54.00	-6.30	1.21 H	334	15.89	31.81
3	3282.00	48.80 PK	74.00	-25.20	1.41 H	63	15.38	33.42
3	3282.00	44.70 AV	54.00	-9.30	1.41 H	63	11.28	33.42
4	4924.00	49.70 PK	74.00	-24.30	1.26 H	317	12.41	37.29
4	4924.00	45.10 AV	54.00	-8.90	1.26 H	317	7.81	37.29
5	7386.00	50.80 PK	74.00	-23.20	1.37 H	334	7.42	43.38
5	7386.00	38.50 AV	54.00	-15.50	1.37 H	334	-4.88	43.38

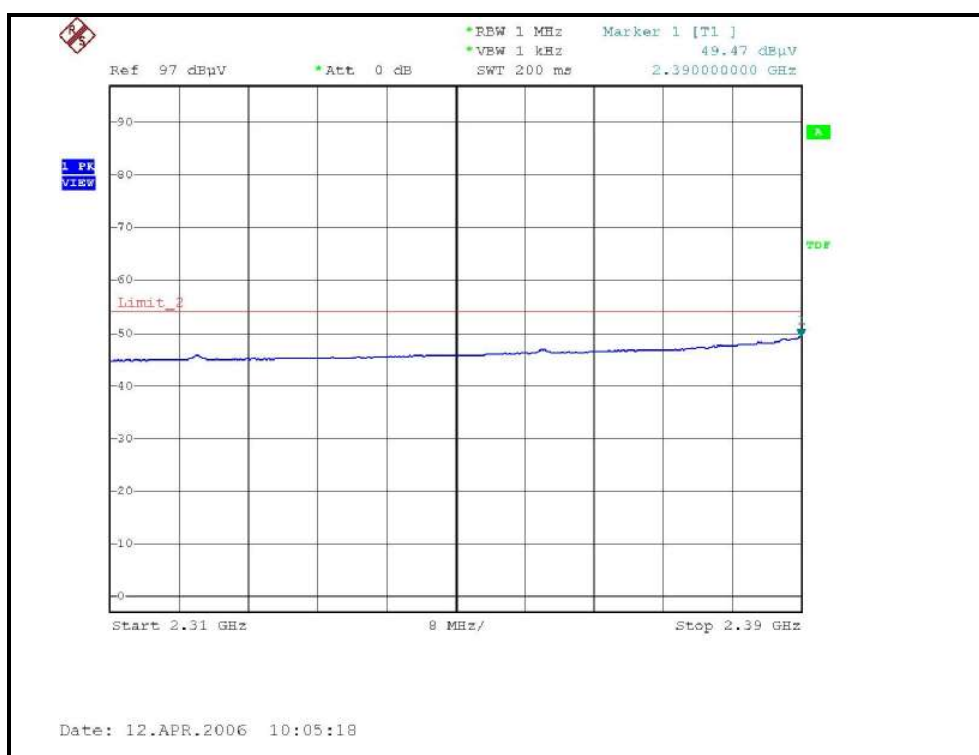
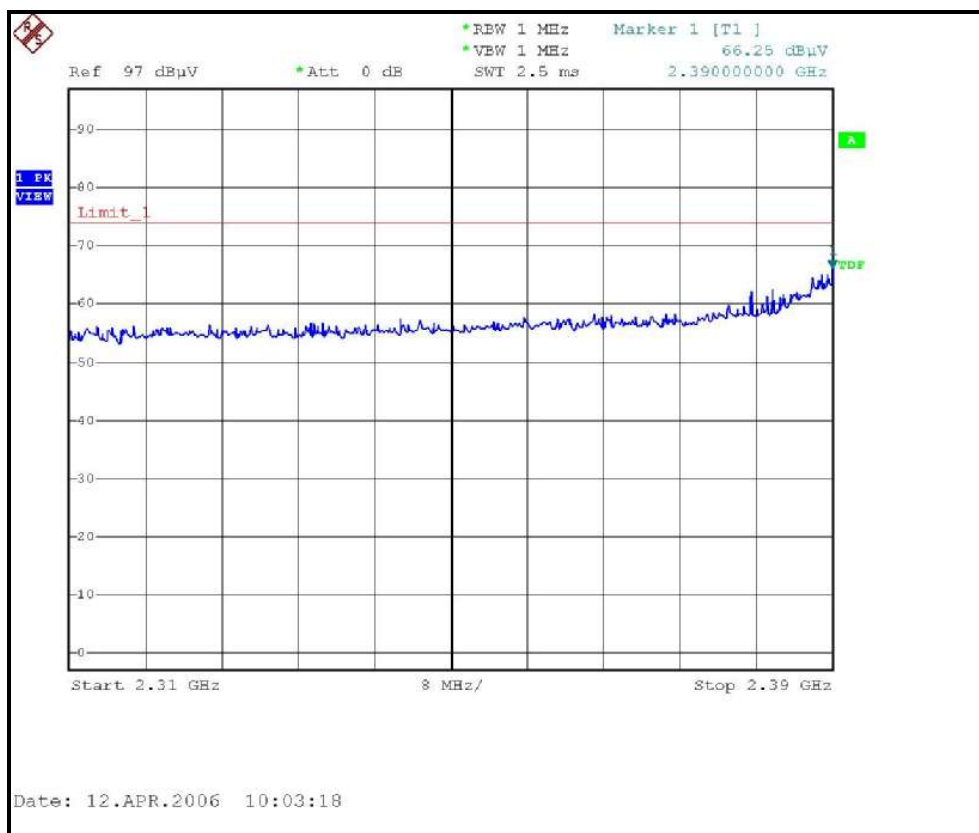
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	112.00 PK			1.05 V	343	80.26	31.74
1	*2462.00	103.20 AV			1.05 V	343	71.46	31.74
2	2483.50	68.60 PK	74.00	-5.40	1.05 V	343	36.79	31.81
2	2483.50	53.00 AV	54.00	-1.00	1.05 V	343	21.19	31.81
3	2484.00	71.90 PK	74.00	-2.10	1.05 V	343	40.09	31.81
3	2484.00	53.50 AV	54.00	-0.50	1.05 V	343	21.69	31.81
4	3282.00	51.60 PK	74.00	-22.40	1.47 V	293	18.18	33.42
4	3282.00	48.90 AV	54.00	-5.10	1.47 V	293	15.48	33.42
5	4924.00	51.80 PK	74.00	-22.20	1.41 V	289	14.51	37.29
5	4924.00	48.40 AV	54.00	-5.60	1.41 V	289	11.11	37.29
6	7386.00	51.10 PK	74.00	-22.90	1.28 V	117	7.72	43.38
6	7386.00	39.70 AV	54.00	-14.30	1.28 V	117	-3.68	43.38

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247.
6. “ * “: Fundamental frequency.

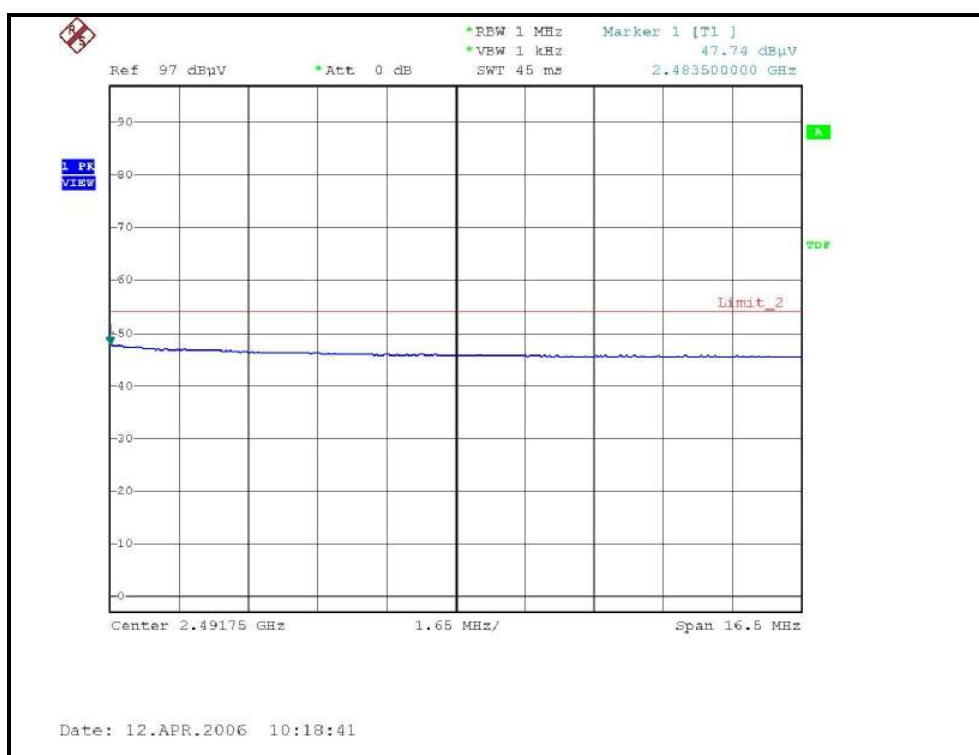
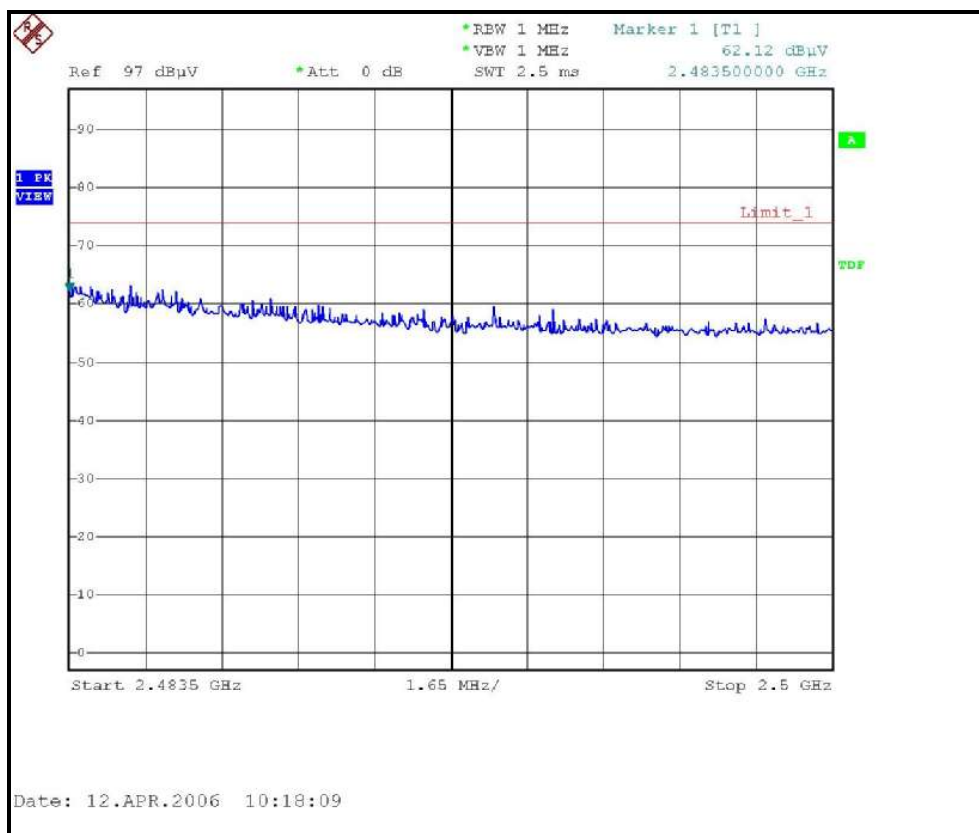
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, HORIZONTAL)



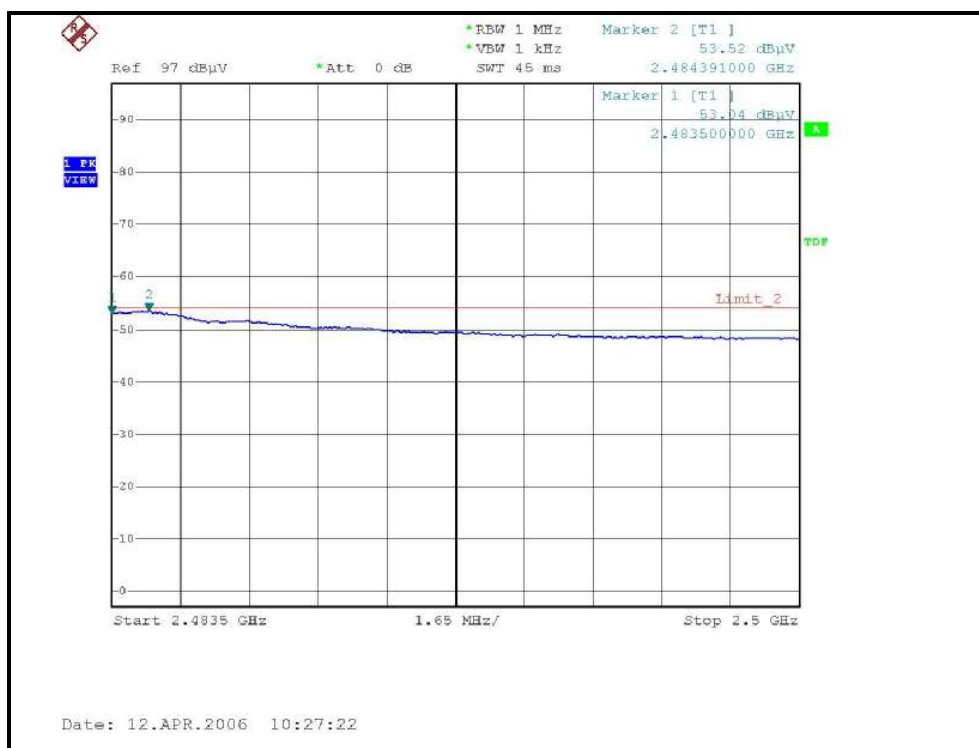
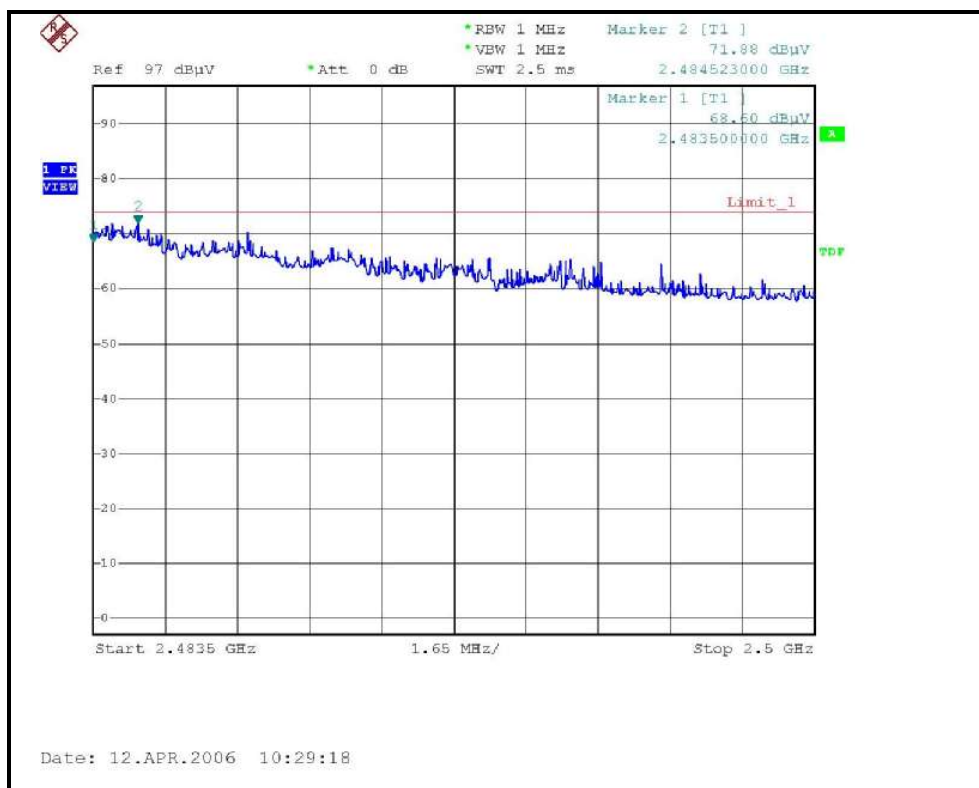
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH11, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE, CH11, VERTICAL)



DRAFT 802.11n (20MHz) OFDM MODULATION: DUAL TX: (ANTENNA 1 AND 2)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.80 PK	74.00	-12.20	1.26 H	318	30.29	31.51
1	2390.00	48.80 AV	54.00	-5.20	1.26 H	318	17.29	31.51
2	*2412.00	105.20 PK			1.26 H	318	73.62	31.58
2	*2412.00	95.10 AV			1.26 H	318	63.52	31.58
3	3216.00	48.10 PK	74.00	-25.90	1.34 H	217	14.87	33.23
3	3216.00	43.00 AV	54.00	-11.00	1.34 H	217	9.77	33.23
4	4824.00	48.50 PK	74.00	-25.50	1.24 H	230	11.54	36.96
4	4824.00	39.60 AV	54.00	-14.40	1.24 H	230	2.64	36.96
5	7236.00	50.40 PK	74.00	-23.60	1.47 H	276	7.40	43.00
5	7236.00	37.80 AV	54.00	-16.20	1.47 H	276	-5.20	43.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.30 PK	74.00	-1.70	1.09 V	340	40.79	31.51
1	2390.00	53.60 AV	54.00	-0.40	1.09 V	340	22.09	31.51
2	*2412.00	114.60 PK			1.09 V	340	83.02	31.58
2	*2412.00	105.20 AV			1.09 V	340	73.62	31.58
3	3216.00	48.40 PK	74.00	-25.60	1.35 V	12	15.17	33.23
3	3216.00	43.30 AV	54.00	-10.70	1.35 V	12	10.07	33.23
4	4824.00	49.60 PK	74.00	-24.40	1.00 V	46	12.64	36.96
4	4824.00	43.00 AV	54.00	-11.00	1.00 V	46	6.04	36.96
5	7236.00	50.90 PK	74.00	-23.10	1.29 V	94	7.90	43.00
5	7236.00	38.60 AV	54.00	-15.40	1.29 V	94	-4.40	43.00

- 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	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	104.10 PK			1.23 H	305	72.44	31.66
1	*2437.00	93.60 AV			1.23 H	305	61.94	31.66
2	3249.00	47.69 PK	74.00	-26.31	1.32 H	223	14.37	33.32
2	3249.00	42.60 AV	54.00	-11.40	1.32 H	223	9.28	33.32
3	4874.00	48.70 PK	74.00	-25.30	1.22 H	224	11.55	37.15
3	4874.00	39.90 AV	54.00	-14.10	1.22 H	224	2.75	37.15
4	7311.00	50.90 PK	74.00	-23.10	1.41 H	239	7.81	43.09
4	7311.00	38.40 AV	54.00	-15.60	1.41 H	239	-4.69	43.09

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	114.20 PK			1.12 V	347	82.54	31.66
1	*2437.00	104.90 AV			1.12 V	347	73.24	31.66
2	3249.00	48.10 PK	74.00	-25.90	1.27 V	26	14.78	33.32
2	3249.00	43.10 AV	54.00	-10.90	1.27 V	26	9.78	33.32
3	4874.00	50.10 PK	74.00	-23.90	1.00 V	49	12.95	37.15
3	4874.00	43.60 AV	54.00	-10.40	1.00 V	49	6.45	37.15
4	7311.00	51.30 PK	74.00	-22.70	1.31 V	83	8.21	43.09
4	7311.00	39.20 AV	54.00	-14.80	1.31 V	83	-3.89	43.09

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.

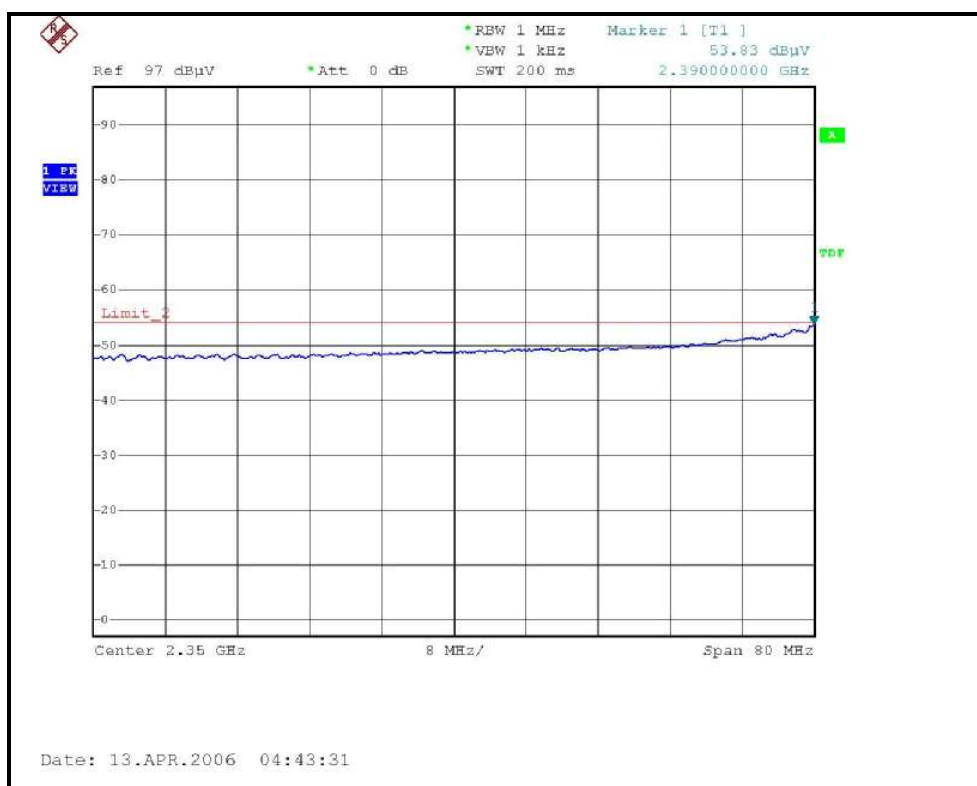
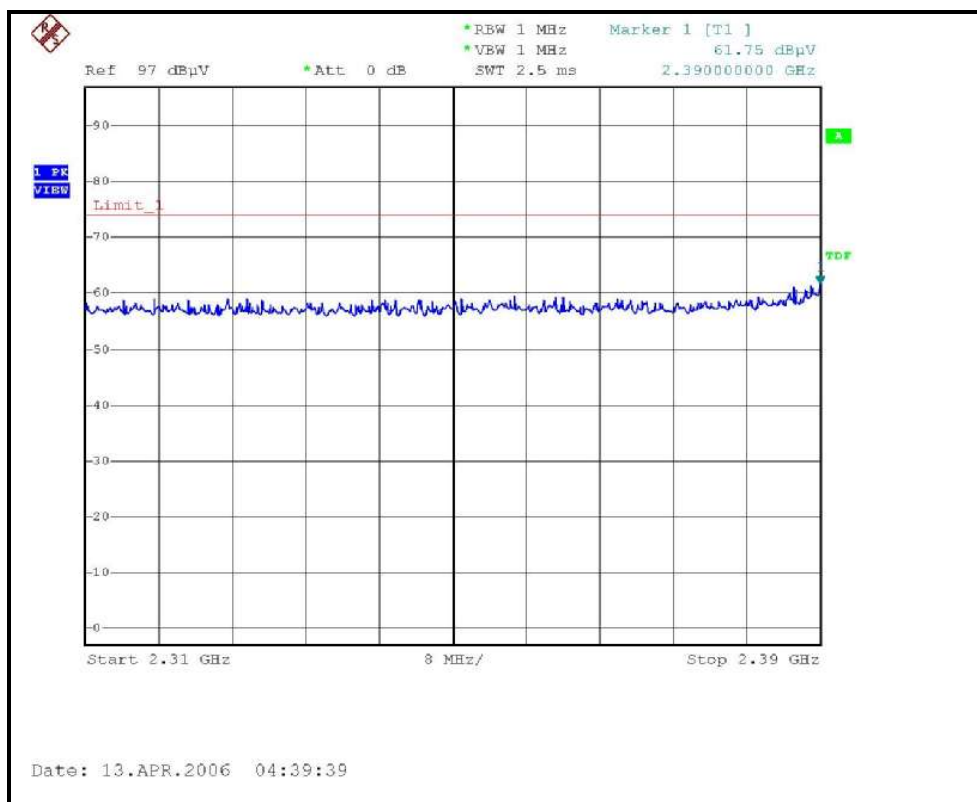
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 65%RH, 971hPa	TESTED BY	Moris Lin

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	104.30 PK			1.00 H	297	72.56	31.74
1	*2462.00	93.90 AV			1.00 H	297	62.16	31.74
2	2483.50	60.40 PK	74.00	-13.60	1.00 H	297	28.59	31.81
2	2483.50	49.60 AV	54.00	-4.40	1.00 H	297	17.79	31.81
3	3282.00	46.60 PK	74.00	-27.40	1.34 H	236	13.18	33.42
3	3282.00	41.40 AV	54.00	-12.60	1.34 H	236	7.98	33.42
4	4924.00	48.30 PK	74.00	-25.70	1.26 H	233	11.01	37.29
4	4924.00	39.30 AV	54.00	-14.70	1.26 H	233	2.01	37.29
5	7386.00	50.10 PK	74.00	-23.90	1.52 H	314	6.72	43.38
5	7386.00	37.90 AV	54.00	-16.10	1.52 H	314	-5.48	43.38

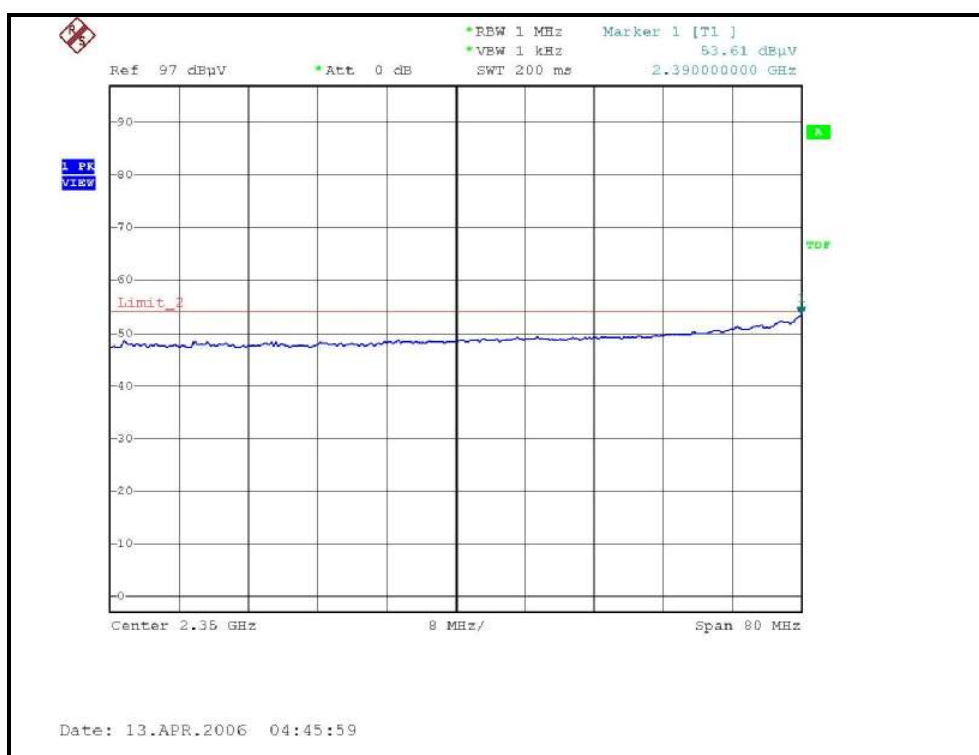
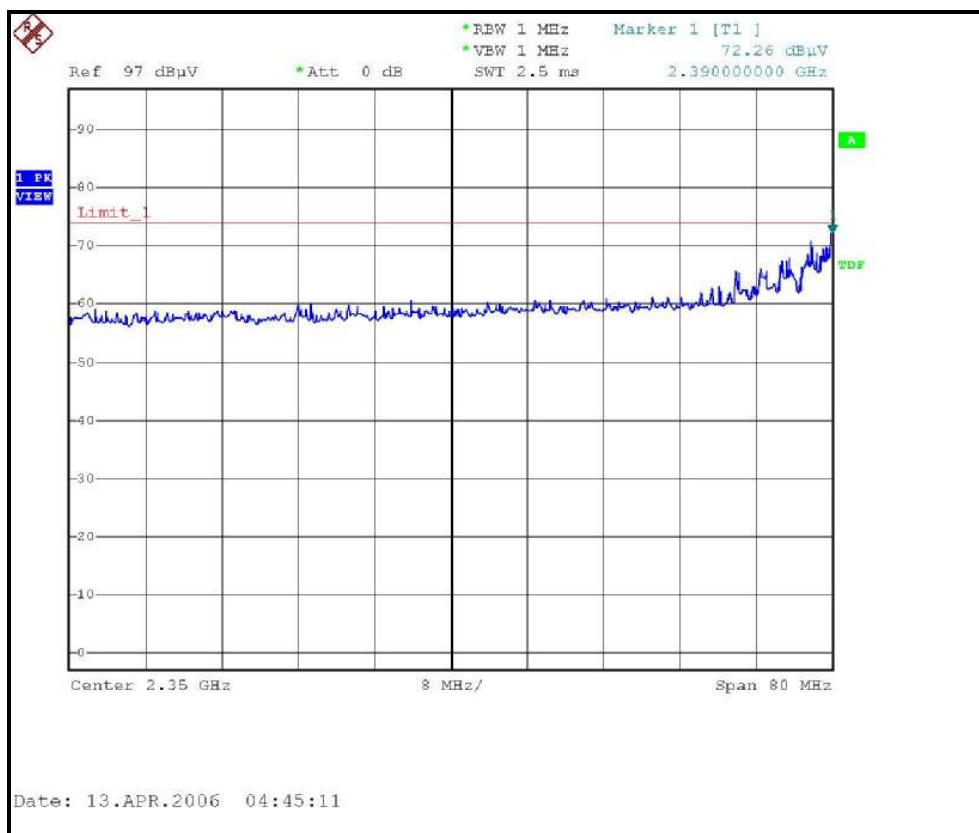
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	114.00 PK			1.08 V	355	82.26	31.74
1	*2462.00	104.60 AV			1.08 V	355	72.86	31.74
2	2483.50	67.70 PK	74.00	-6.30	1.08 V	355	35.89	31.81
2	2483.50	51.90 AV	54.00	-2.10	1.08 V	355	20.09	31.81
3	2484.00	70.00 PK	74.00	-4.00	1.08 V	355	38.19	31.81
3	2484.00	52.60 AV	54.00	-1.40	1.08 V	355	20.79	31.81
4	3282.00	47.60 PK	74.00	-26.40	1.31 V	27	14.18	33.42
4	3282.00	42.40 AV	54.00	-11.60	1.31 V	27	8.98	33.42
5	4924.00	48.90 PK	74.00	-25.10	1.02 V	54	11.61	37.29
5	4924.00	42.10 AV	54.00	-11.90	1.02 V	54	4.81	37.29
6	7386.00	50.60 PK	74.00	-23.40	1.21 V	86	7.22	43.38
6	7386.00	38.50 AV	54.00	-15.50	1.21 V	86	-4.88	43.38

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247.
6. “ * “: Fundamental frequency.

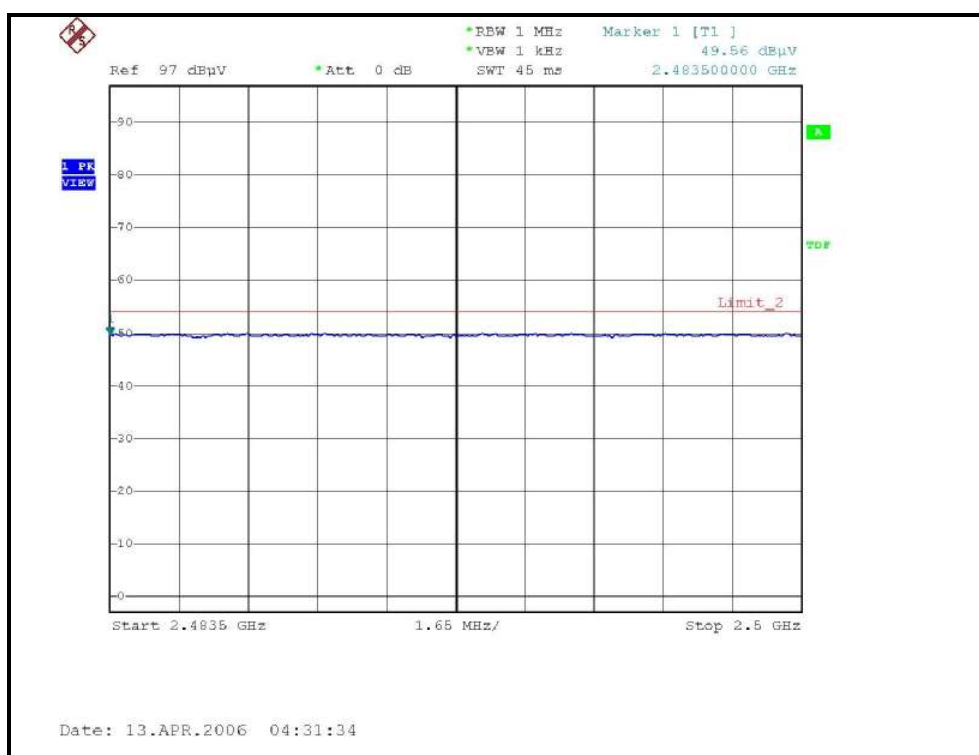
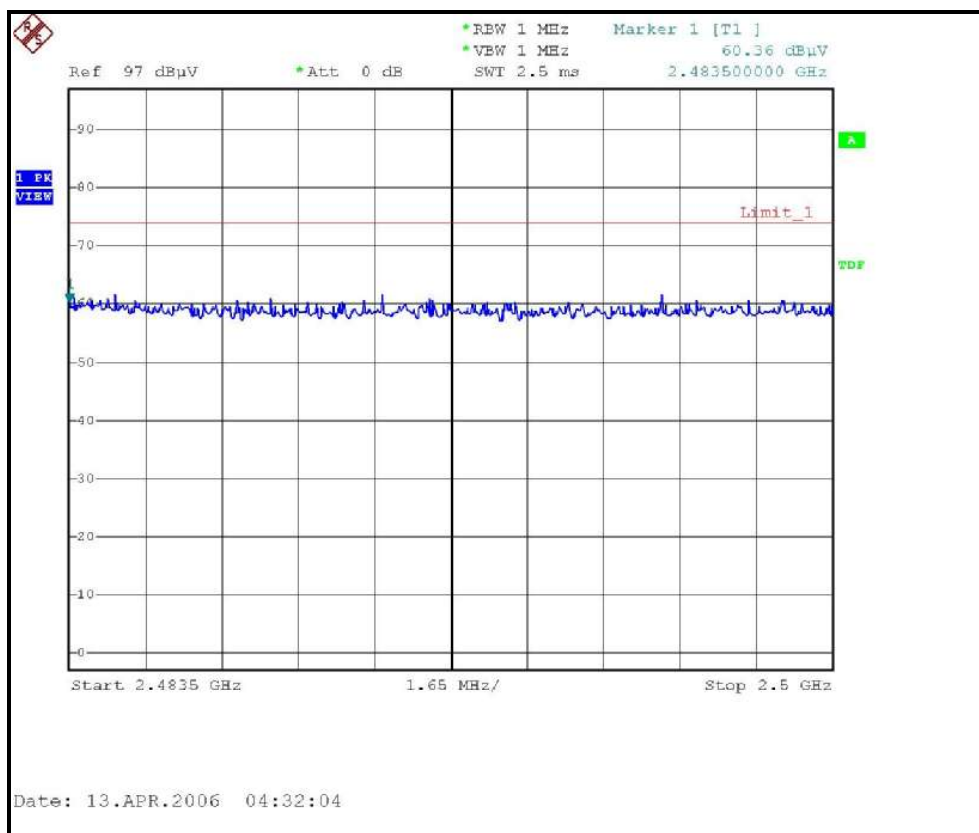
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, HORIZONTAL)



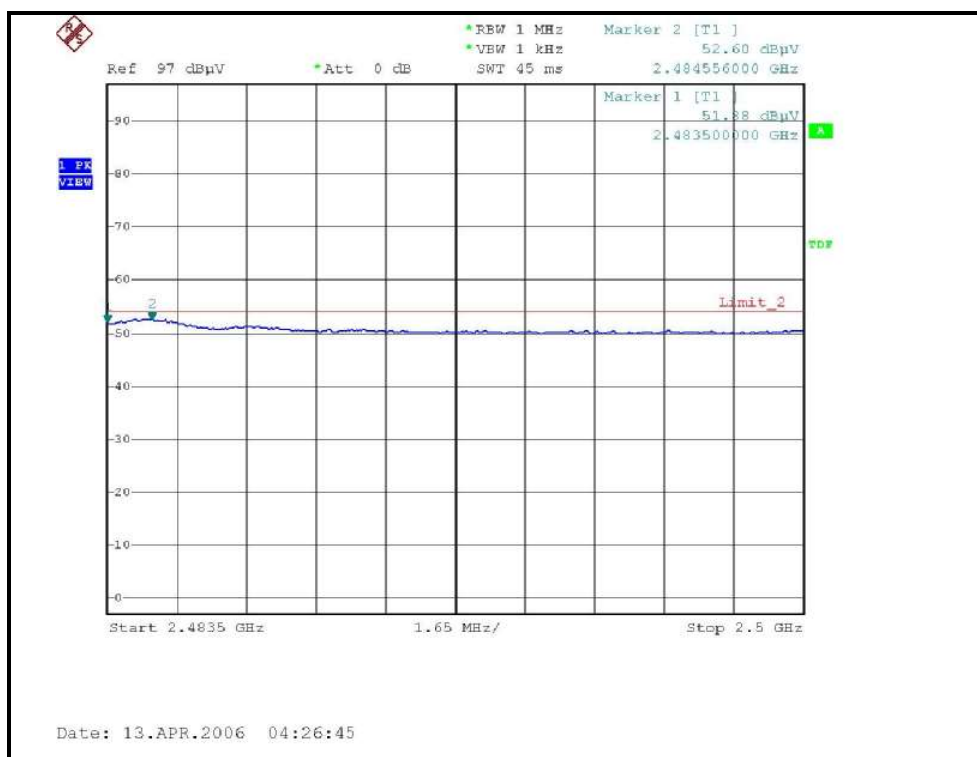
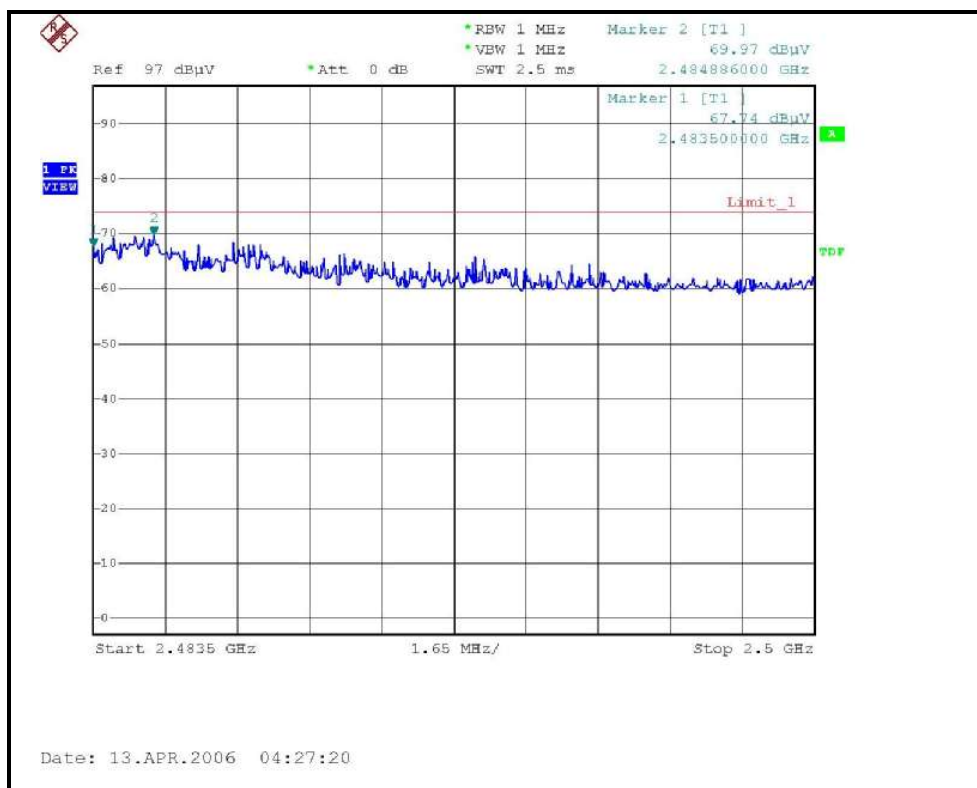
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH11, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH11, VERTICAL)



DRAFT 802.11n (40MHz) OFDM MODULATION: DUAL TX: (ANTENNA 1 AND 3)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 971hPa	TESTED BY	Wen Yu

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	60.80 PK	74.00	-13.20	1.00 H	237	30.50	30.30
1	2390.00	46.30 AV	54.00	-7.70	1.00 H	237	16.00	30.30
2	*2422.00	101.40 PK			1.14 H	360	71.00	30.40
2	*2422.00	81.20 AV			1.14 H	360	50.80	30.40
3	3229.00	47.00 PK	74.00	-27.00	1.06 H	43	14.70	32.30
3	3229.00	40.00 AV	54.00	-14.00	1.06 H	43	7.70	32.30
4	4844.00	48.40 PK	74.00	-25.60	1.06 H	80	12.60	35.80
4	4844.00	43.00 AV	54.00	-11.00	1.06 H	80	7.20	35.80
5	7266.00	53.20 PK	74.00	-20.80	1.24 H	54	11.90	41.30
5	7266.00	41.30 AV	54.00	-12.70	1.24 H	54	0.00	41.30

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	2390.00	71.00 PK	74.00	-3.00	1.23 V	6	40.70	30.30
1	2390.00	50.50 AV	54.00	-3.50	1.23 V	6	20.20	30.30
2	*2422.00	108.50 PK			1.24 V	18	78.10	30.40
2	*2422.00	93.90 AV			1.24 V	18	63.50	30.40
3	3229.00	45.10 PK	74.00	-28.90	1.06 V	1	12.80	32.30
3	3229.00	38.90 AV	54.00	-15.10	1.06 V	1	6.60	32.30
4	4844.00	49.90 PK	74.00	-24.10	1.08 V	334	14.10	35.80
4	4844.00	44.20 AV	54.00	-9.80	1.08 V	334	8.40	35.80
5	7226.00	51.20 PK	74.00	-22.80	1.36 V	6	10.00	41.20
5	7226.00	38.90 AV	54.00	-15.10	1.36 V	6	-2.30	41.20

- 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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 971hPa	TESTED BY	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.10 PK			1.15 H	320	70.60	30.50
1	*2437.00	80.90 AV			1.15 H	320	50.40	30.50
2	3249.00	47.20 PK	74.00	-26.80	1.10 H	50	14.90	32.30
2	3249.00	41.20 AV	54.00	-12.80	1.10 H	50	8.90	32.30
3	4874.00	48.90 PK	74.00	-25.10	1.10 H	90	13.00	35.90
3	4874.00	44.00 AV	54.00	-10.00	1.10 H	90	8.10	35.90
4	7311.00	53.20 PK	74.00	-20.80	1.25 H	24	11.70	41.50
4	7311.00	42.00 AV	54.00	-12.00	1.25 H	24	0.50	41.50

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	*2437.00	108.90 PK			1.01 V	20	78.40	30.50
1	*2437.00	93.70 AV			1.01 V	20	63.20	30.50
2	3249.00	44.10 PK	74.00	-29.90	1.52 V	24	11.80	32.30
2	3249.00	37.20 AV	54.00	-16.80	1.52 V	24	4.90	32.30
3	4874.00	51.00 PK	74.00	-23.00	1.01 V	120	15.10	35.90
3	4874.00	42.90 AV	54.00	-11.10	1.01 V	120	7.00	35.90
4	7311.00	52.20 PK	74.00	-21.80	1.45 V	24	10.70	41.50
4	7311.00	40.00 AV	54.00	-14.00	1.45 V	24	-1.50	41.50

REMARKS:

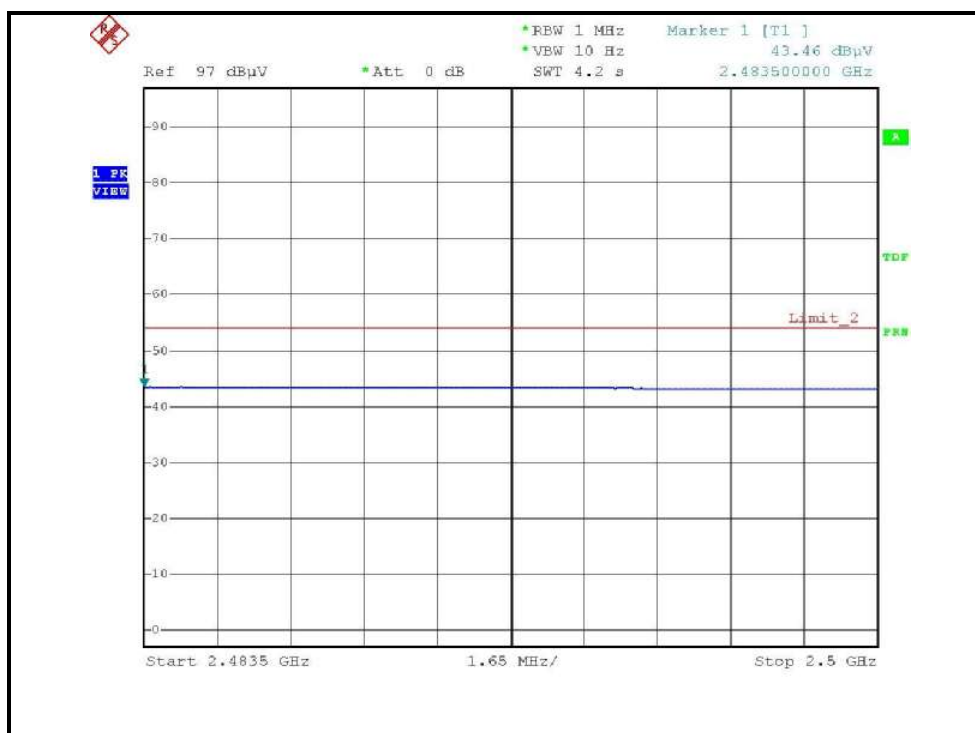
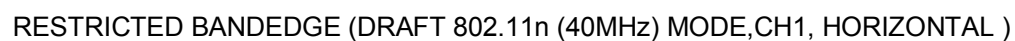
1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247.
6. “ * “: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 971hPa	TESTED BY	Wen Yu

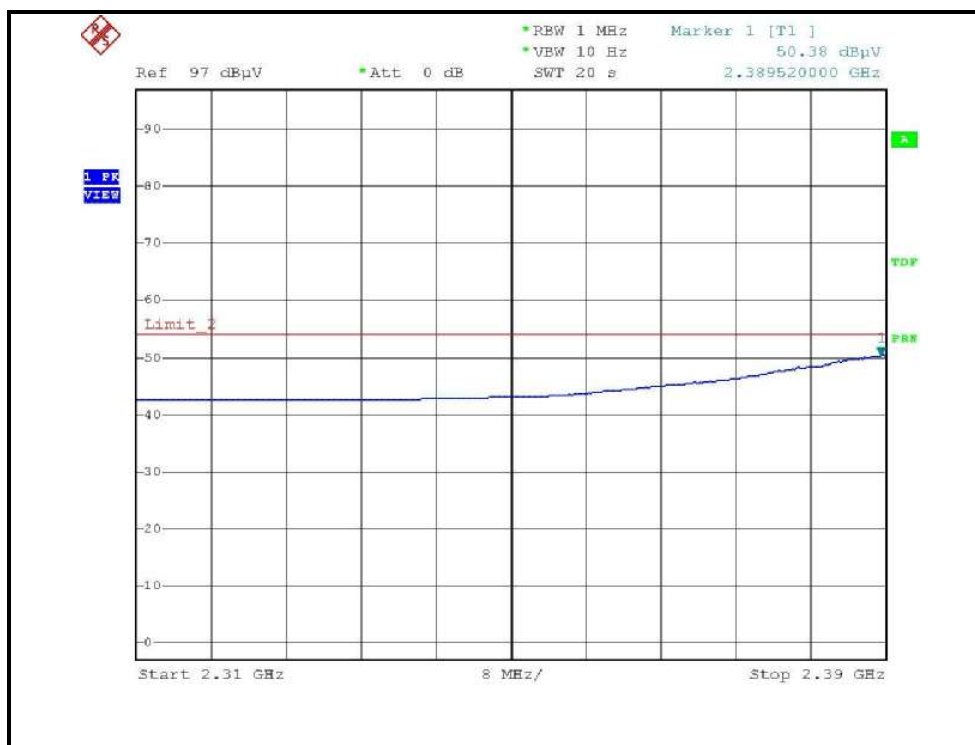
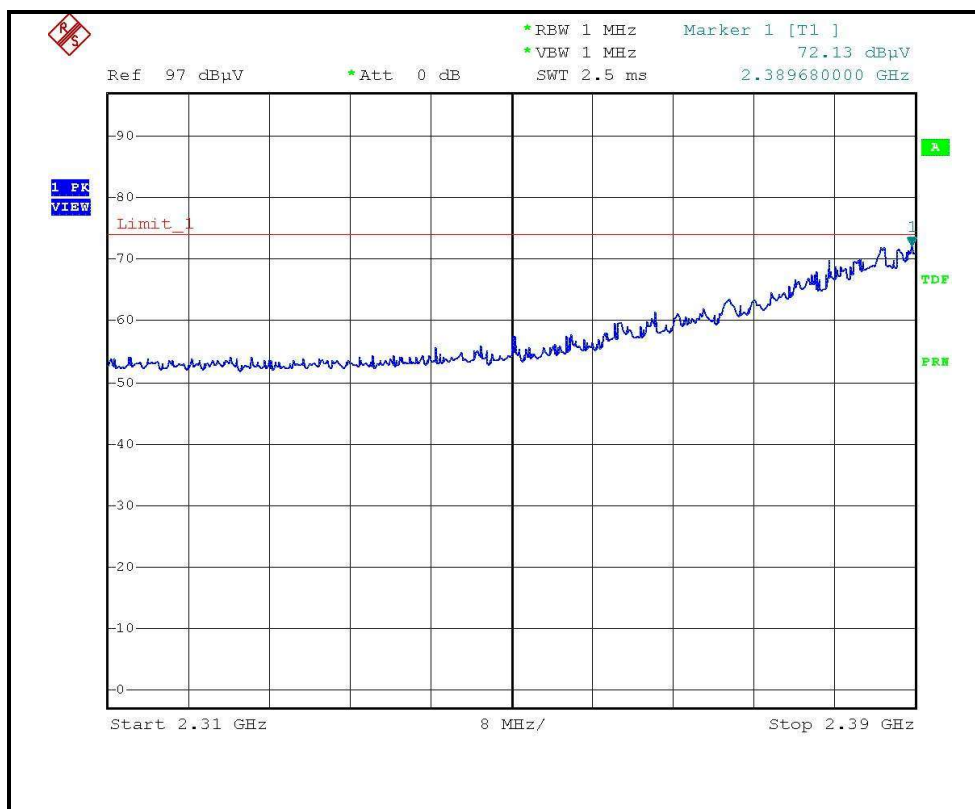
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	101.30 PK			1.12 H	86	70.70	30.60
1	*2452.00	81.00 AV			1.12 H	86	50.40	30.60
2	2483.50	62.50 PK	74.00	-11.50	1.32 H	341	31.80	30.70
2	2483.50	47.00 AV	54.00	-7.00	1.32 H	341	16.30	30.70
3	3269.00	46.90 PK	74.00	-27.10	1.01 H	360	14.60	32.30
3	3269.00	40.00 AV	54.00	-14.00	1.01 H	360	7.70	32.30
4	4904.00	49.60 PK	74.00	-24.40	1.01 H	19	13.60	36.00
4	4904.00	41.80 AV	54.00	-12.20	1.01 H	19	5.80	36.00
5	7356.00	54.20 PK	74.00	-19.80	1.14 H	24	12.60	41.60
5	7356.00	41.10 AV	54.00	-12.90	1.14 H	24	-0.50	41.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	109.50 PK			1.00 V	20	78.90	30.60
1	*2452.00	94.20 AV			1.00 V	20	63.60	30.60
2	2483.50	70.80 PK	74.00	-3.20	1.00 V	16	40.10	30.70
2	2483.50	53.70 AV	54.00	-0.30	1.00 V	16	23.00	30.70
3	3269.00	44.50 PK	74.00	-29.50	1.00 V	13	12.20	32.30
3	3269.00	37.00 AV	54.00	-17.00	1.00 V	13	4.70	32.30
4	4904.00	50.60 PK	74.00	-23.40	1.01 V	115	14.60	36.00
4	4904.00	43.70 AV	54.00	-10.30	1.01 V	115	7.70	36.00
5	7356.00	52.20 PK	74.00	-21.80	1.25 V	24	10.60	41.60
5	7356.00	39.20 AV	54.00	-14.80	1.25 V	24	-2.40	41.60

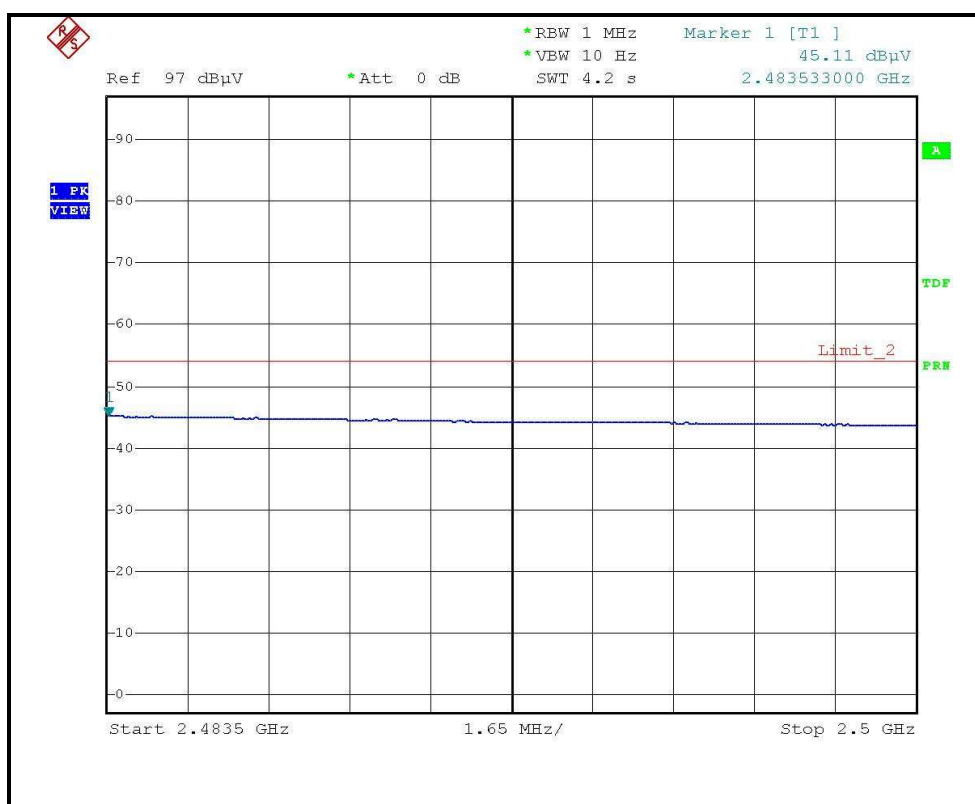
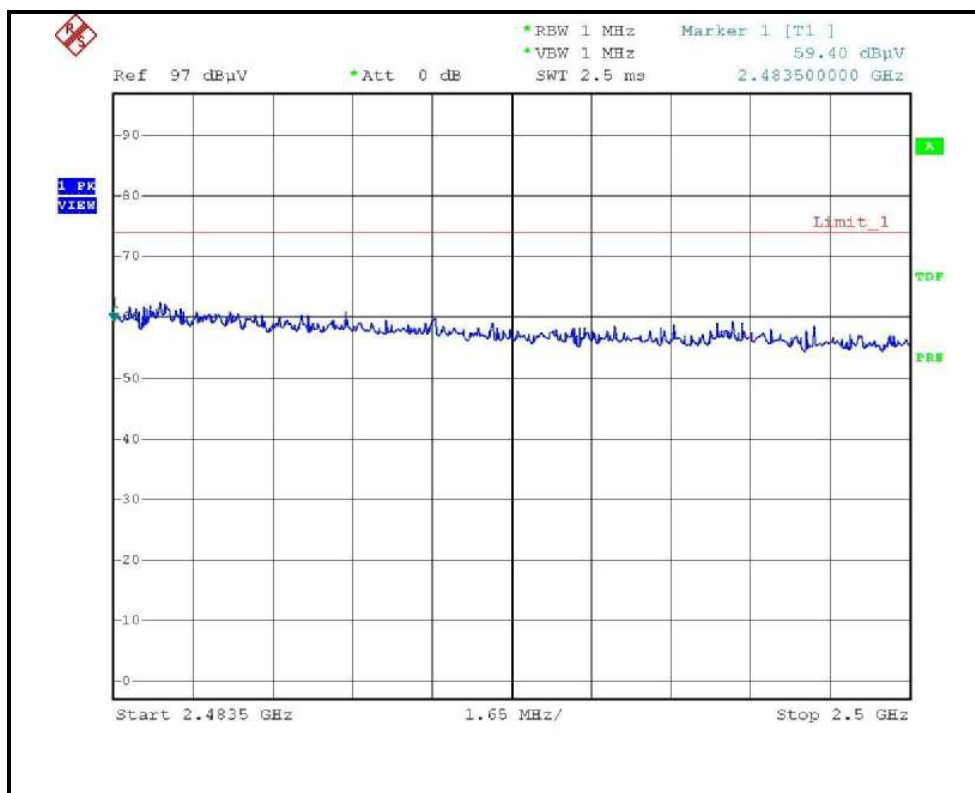
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247.
6. “ * ”: Fundamental frequency.



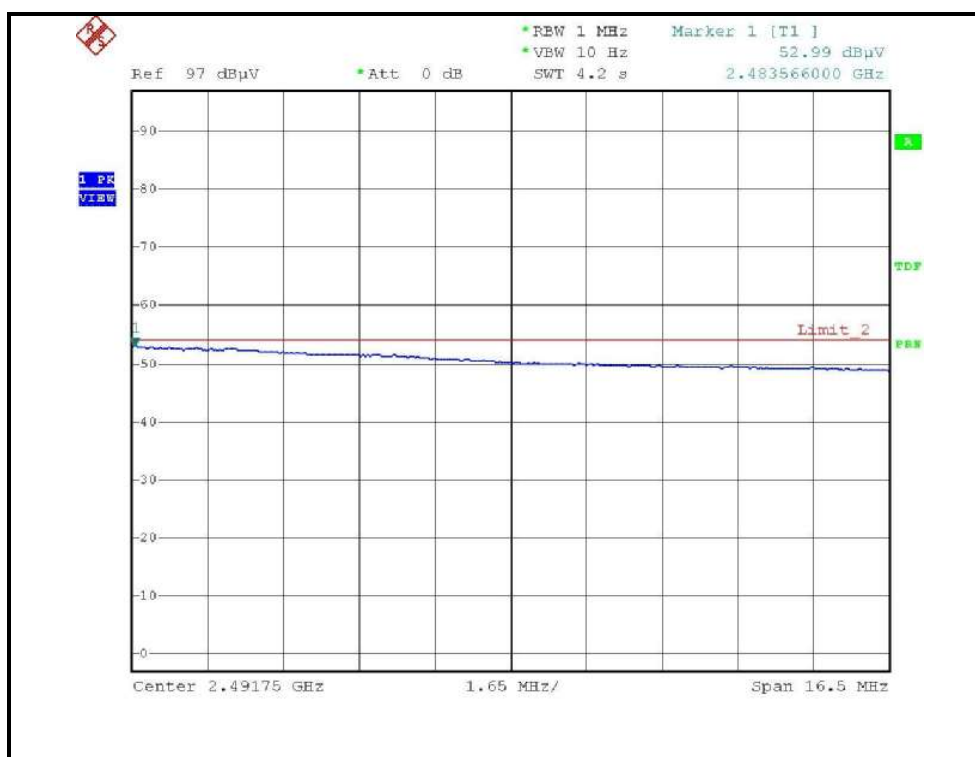
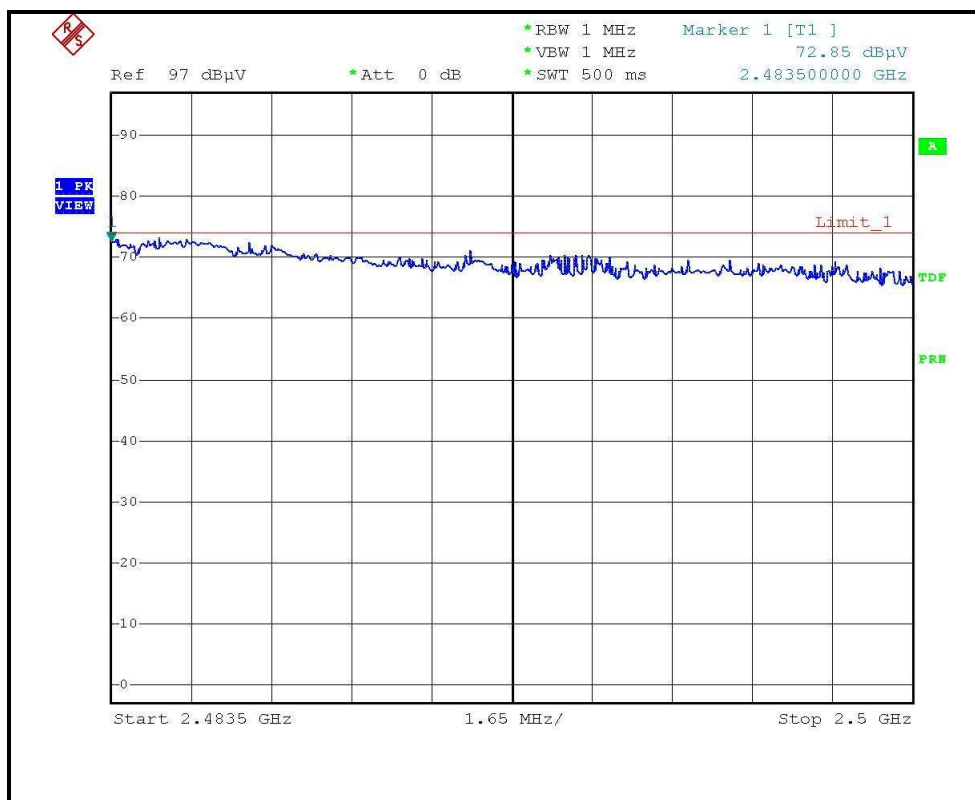
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH7, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH7, VERTICAL)



DRAFT 802.11n (40MHz) OFDM MODULATION: DUAL TX: (ANTENNA 1 AND 2)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 971hPa	TESTED BY	Wen Yu

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	54.20 PK	74.00	-19.80	1.64 H	212	24.00	30.30
1	2390.00	43.50 AV	54.00	-10.50	1.64 H	212	13.20	30.30
2	*2422.00	97.60 PK			1.73 H	216	67.10	30.40
2	*2422.00	82.80 AV			1.73 H	216	52.30	30.40
3	3229.00	45.80 PK	74.00	-28.20	1.38 H	90	13.50	32.30
3	3229.00	39.10 AV	54.00	-14.90	1.38 H	90	6.80	32.30
4	4844.00	47.50 PK	74.00	-26.50	1.60 H	53	11.80	35.80
4	4844.00	37.90 AV	54.00	-16.10	1.60 H	53	2.20	35.80
5	7266.00	53.20 PK	74.00	-20.80	1.15 H	31	11.90	41.30
5	7266.00	41.90 AV	54.00	-12.10	1.15 H	31	0.50	41.30

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	2390.00	72.10 PK	74.00	-1.90	1.34 V	288	41.80	30.30
1	2390.00	50.40 AV	54.00	-3.60	1.34 V	288	20.10	30.30
2	*2422.00	110.10 PK			1.33 V	272	79.70	30.40
2	*2422.00	95.60 AV			1.33 V	272	65.20	30.40
3	3229.00	46.70 PK	74.00	-27.30	1.54 V	356	14.40	32.30
3	3229.00	41.80 AV	54.00	-12.20	1.54 V	356	9.50	32.30
4	4844.00	46.70 PK	74.00	-27.30	1.55 V	42	11.00	35.80
4	4844.00	36.20 AV	54.00	-17.80	1.55 V	42	0.50	35.80
5	7266.00	52.80 PK	74.00	-21.20	1.15 V	332	11.50	41.30
5	7266.00	41.80 AV	54.00	-12.20	1.15 V	332	0.50	41.30

- 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 4	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 971hPa	TESTED BY	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	95.60 PK			1.07 H	20	65.10	30.50
1	*2437.00	81.70 AV			1.07 H	20	51.20	30.50
2	3249.00	44.70 PK	74.00	-29.30	1.10 H	320	12.40	32.30
2	3249.00	39.30 AV	54.00	-14.70	1.10 H	320	7.00	32.30
3	4874.00	48.30 PK	74.00	-25.70	1.12 H	88	12.40	35.90
3	4874.00	39.90 AV	54.00	-14.10	1.12 H	88	4.00	35.90
4	7311.00	53.10 PK	74.00	-20.90	1.54 H	265	11.60	41.50
4	7311.00	42.00 AV	54.00	-12.00	1.54 H	265	0.50	41.50

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	*2437.00	111.20 PK			1.08 V	0	80.70	30.50
1	*2437.00	93.90 AV			1.08 V	0	63.40	30.50
2	3249.00	45.30 PK	74.00	-28.70	1.09 V	42	13.00	32.30
2	3249.00	39.00 AV	54.00	-15.00	1.09 V	42	6.70	32.30
3	4874.00	49.10 PK	74.00	-24.90	1.08 V	109	13.20	35.90
3	4874.00	39.90 AV	54.00	-14.10	1.08 V	109	4.00	35.90
4	7311.00	53.00 PK	74.00	-21.00	1.14 V	128	11.50	41.50
4	7311.00	41.90 AV	54.00	-12.10	1.14 V	128	0.40	41.50

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.

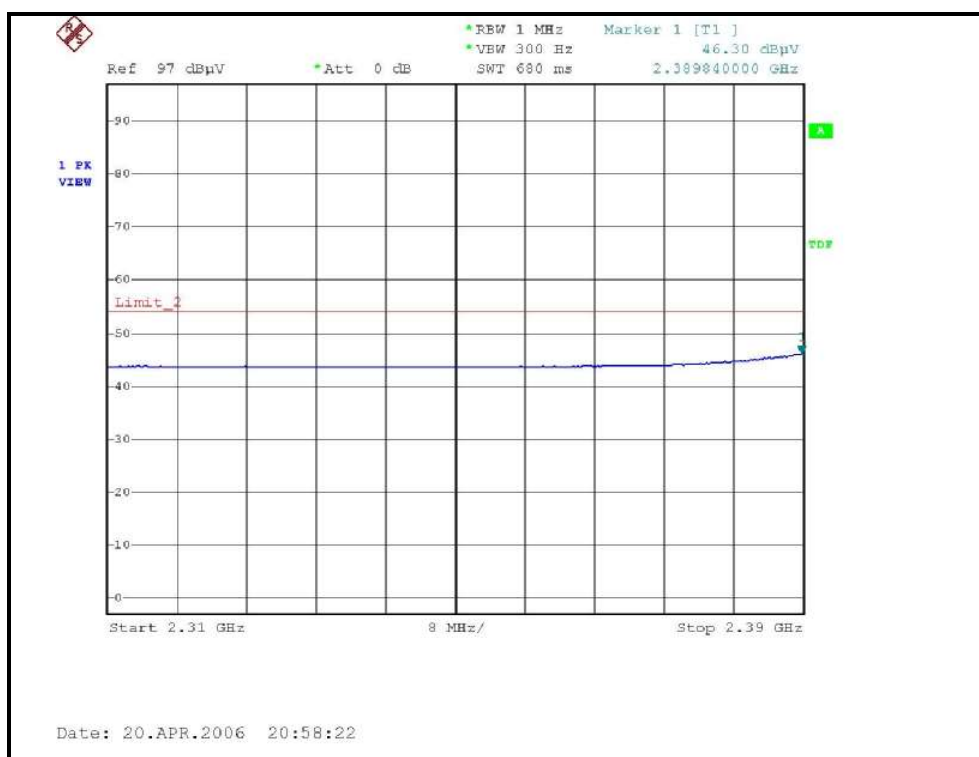
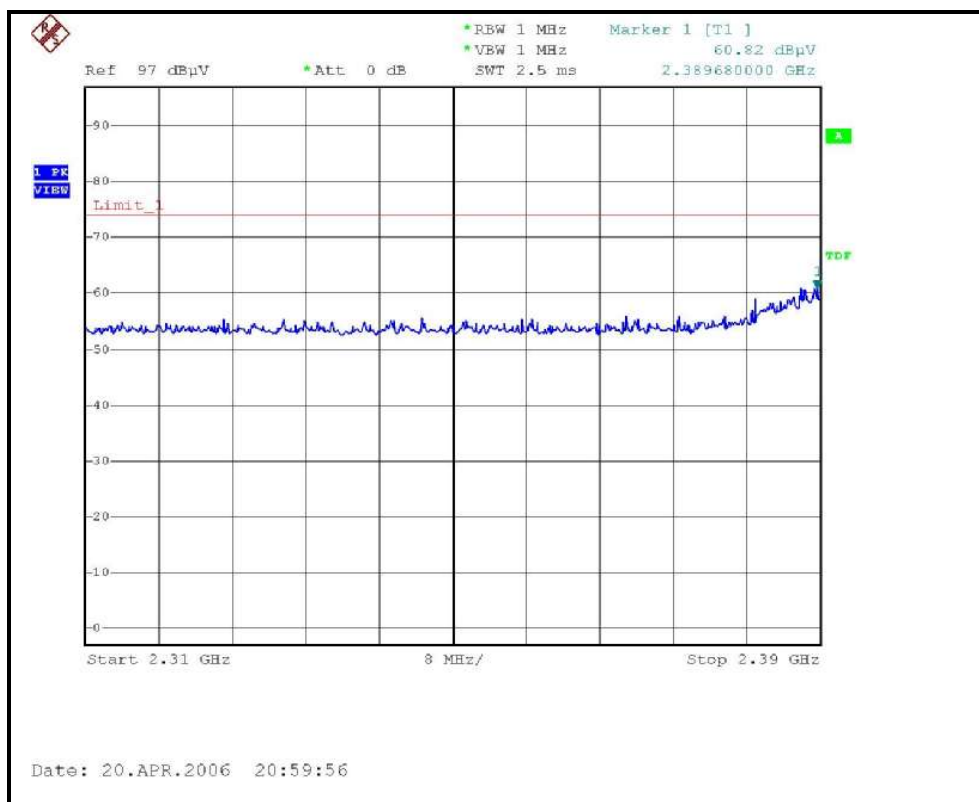
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	13.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 70%RH, 971hPa	TESTED BY	Wen Yu

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	*2452.00	95.50 PK			1.14 H	19	64.90	30.60
1	*2452.00	81.90 AV			1.14 H	19	51.30	30.60
2	2483.50	59.40 PK	74.00	-14.60	1.14 H	20	28.70	30.70
2	2483.50	45.10 AV	54.00	-8.90	1.14 H	20	14.40	30.70
3	3269.00	46.10 PK	74.00	-27.90	1.19 H	103	13.80	32.30
3	3269.00	38.00 AV	54.00	-16.00	1.19 H	103	5.70	32.30
4	4904.00	48.70 PK	74.00	-25.30	1.22 H	88	12.80	36.00
4	4904.00	40.00 AV	54.00	-14.00	1.22 H	88	4.10	36.00
5	7356.00	53.10 PK	74.00	-20.90	1.18 H	324	11.60	41.60
5	7356.00	42.00 AV	54.00	-12.00	1.18 H	324	0.50	41.60

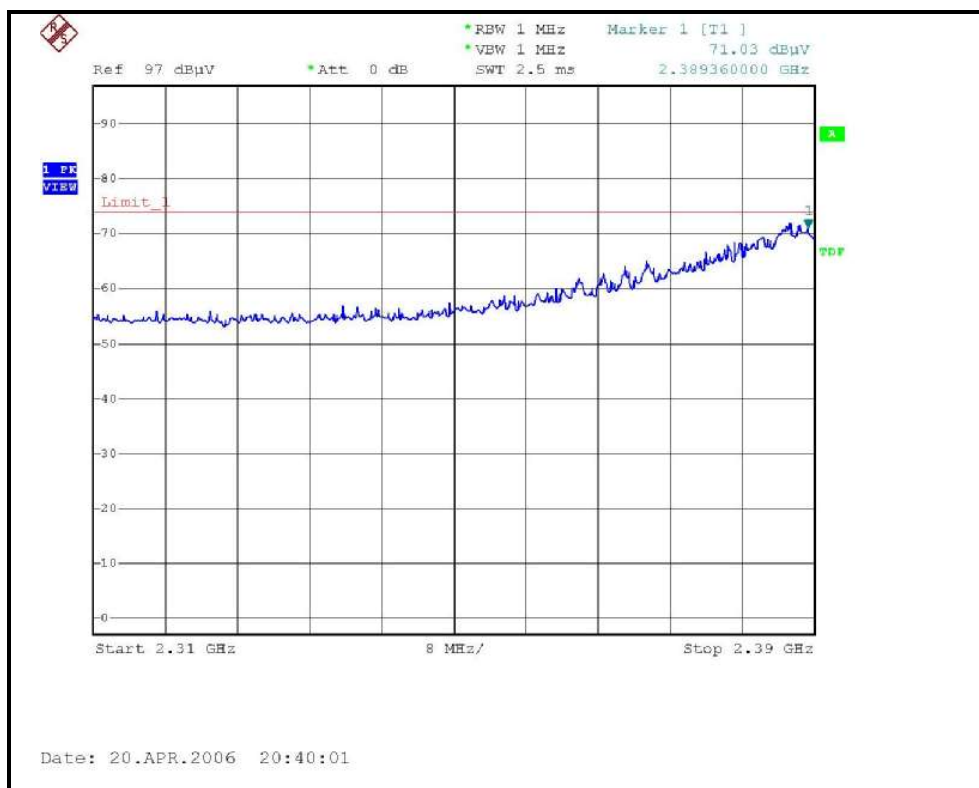
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	110.00 PK			1.19 V	0	79.40	30.60
1	*2452.00	94.70 AV			1.19 V	0	64.10	30.60
2	2483.50	72.80 PK	74.00	-1.20	1.44 V	4	42.20	30.70
2	2483.50	53.00 AV	54.00	-1.00	1.44 V	4	22.30	30.70
3	3269.00	47.50 PK	74.00	-26.50	1.51 V	354	15.20	32.30
3	3269.00	43.60 AV	54.00	-10.40	1.51 V	354	11.30	32.30
4	4904.00	47.10 PK	74.00	-26.90	1.54 V	27	11.20	36.00
4	4904.00	36.90 AV	54.00	-17.10	1.54 V	27	1.00	36.00
5	7356.00	53.10 PK	74.00	-20.90	1.47 V	224	11.60	41.60
5	7356.00	41.90 AV	54.00	-12.10	1.47 V	224	0.40	41.60

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.
 5. The limit value is defined as per 15.247.
 6. “ * ”: Fundamental frequency.

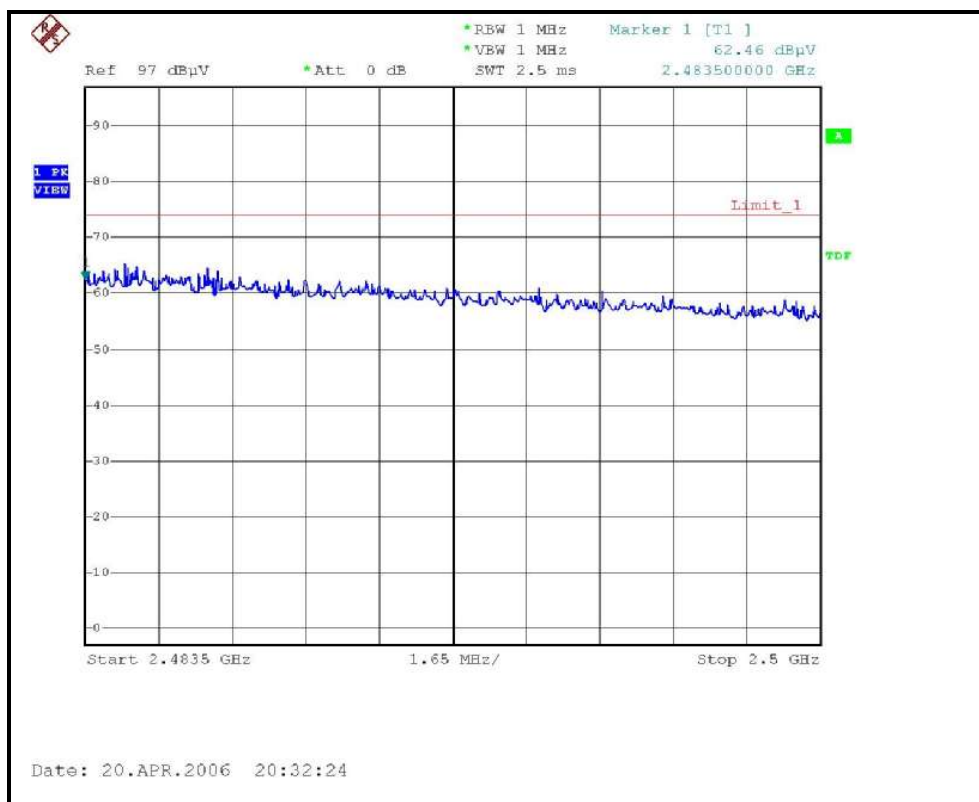
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, HORIZONTAL)



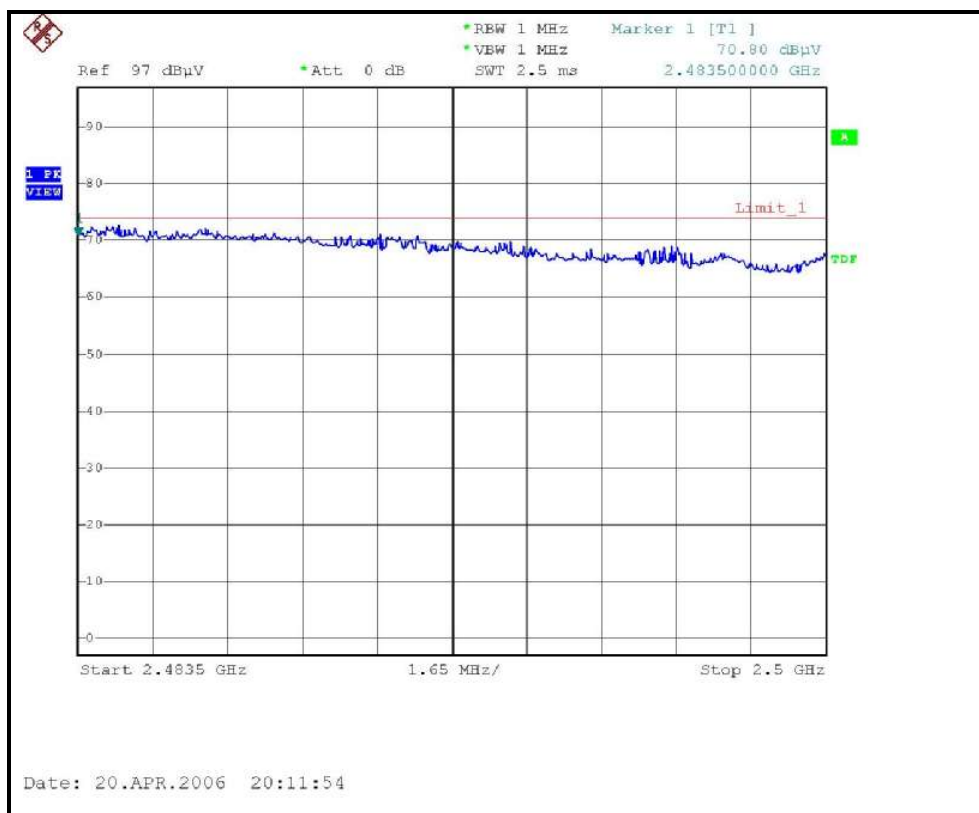
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH7, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH7, VERTICAL)



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
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2006

NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

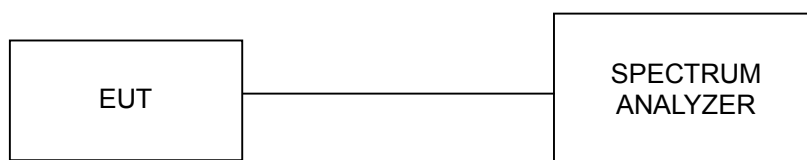
4.3.3 TEST PROCEDURE

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.