

FCC TEST REPORT (15.247)

REPORT NO.: RF960626H06

MODEL NO.: WEC600N

RECEIVED: June 26, 2007

TESTED: June 29 to Aug. 06, 2007

ISSUED: Aug. 15, 2007

APPLICANT: Cisco-Linksys LLC

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

ISSUED BY: Advance Data Technology Corporation

TEST LOCATION: No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien, Taiwan, R.O.C.

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No. 2177-01

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1. CERTIFICATION

PRODUCT: Dual-band Wireless-N ExpressCard
BRAND NAME: Linksys
MODEL NO.: WEC600N
TEST SAMPLE: R&D SAMPLE
TESTED: June 29 to Aug. 06, 2007
APPLICANT: Cisco-Linksys LLC
STANDARDS: FCC Part 15, Subpart C (Section 15.247),
ANSI C63.4-2003

The above equipment (Model: WEC600N) 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 :  , **DATE:** Aug. 15, 2007
(Midoli Peng, Specialist)

TECHNICAL ACCEPTANCE :  , **DATE:** Aug. 15, 2007
Responsible for RF (Hank Chung, Deputy Manager)

APPROVED BY :  , **DATE:** Aug. 15, 2007
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 802.11b & g, 2412~2462MHz Band

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	Test Type and Limit	Result	Remark
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -10.51dB at 0.176MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -0.77dB at 2388.72MHz
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.

For 802.11a, 5725~5850MHz Band

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	Test Type and Limit	Result	Remark
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -12.36dB at 0.166MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -1.00dB at 11650.00MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

NOTE:

1. The EUT was operating in 2.412 ~ 2.462GHz, 5.15~5.35GHz, 5.47~5.725GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 2.412 ~ 2.462GHz and 5.725 ~ 5.850GHz. For the 5.15~5.35GHz and 5.47~5.725GHz RF parameters was recorded in another test report.

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	2.41 dB
Radiated emissions (30MHz-1GHz)	3.89 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	Dual-band Wireless-N ExpressCard
MODEL NO.	WEC600N
FCC ID	Q87-WEC600N
POWER SUPPLY	DC 3.3V from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11 / 5.5 / 2 / 1Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps 802.11a: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps 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	For 15.407 802.11a: 5.18 ~ 5.32GHz and 5.50 ~ 5.70GHz
	For 15.247 802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	For 15.407 8 for 802.11a (5.15 ~ 5.35GHz) , 11 for 802.11a (5.47 ~ 5.725GHz) , 4 for draft 802.11n (20MHz) 3 for draft 802.11n (40MHz)
	For 15.247(2.4GHz) 11 for 802.11b, 802.11g, draft 802.11n (20MHz) 7 for draft 802.11n (40MHz) For 15.247(5GHz) 5 for 802.11a(5.725~5.825GHz), draft 802.11n (20MHz) 3 for draft 802.11n (40MHz)

MAXIMUM OUTPUT POWER	For 15.407 802.11a: 50.234mW draft 802.11n (20MHz): 48.143mW draft 802.11n (40MHz): 45.037mW For 15.247(2.4GHz) 802.11b: 105.925mW 802.11g: 79.433mW draft 802.11n (20MHz): 159.920mW draft 802.11n (40MHz): 141.589mW For 15.247(5GHz) 802.11a: 89.125mW draft 802.11n (20MHz): 103.822mW draft 802.11n (40MHz): 159.034mW
ANTENNA TYPE	Please see note 1
DATA CABLE	NA
I/O PORT	NA

NOTE:

1. There are two antennas provided to this EUT, please refer to the following table:

No.	Antenna Type	For 2.4GHz Gain (dBi)	For 5GHz Gain (dBi)	Antenna Connector
1	Chip	2.4	1	NA
2	Chip	2.4	1	NA

2. The EUT incorporates a MIMO function with 802.11a, 802.11b, 802.11g, draft 802.11n. Physically, the card provides two completed transmit and two completed receivers.
3. The EUT is 2 * 2 spatial MIMO (2Tx & 2Rx) without beam forming function. The antenna configurations are two transmitter antennas and two receiver antennas, as there are 2 Chip antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 2 antennas.
4. 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.
5. The EUT complies with draft 802.11n standards and backwards compatible with 802.11a, 802.11b, 802.11g products.
6. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

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		

Operated in 5725 ~ 5850MHz band:

Five channels are provided for 802.11a, draft 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	5745 MHz	4	5805 MHz
2	5765 MHz	5	5825 MHz
3	5785 MHz		

Three channels are provided for 802.11a, draft 802.11n (40MHz):

CHANNEL	FREQUENCY
1	5755 MHz
2	5775 MHz
3	5795 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

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

ANTENNA COMBINATION MODE:

COMBINATION MODE	OPERATION MODE	CHAIN(0) (TX/RX)	CHAIN(1) (TX/RX)
A	802.11a, b, g	√	
B	DRAFT 802.11n(20MHz)	√	√
C	DRAFT 802.11n(40MHz)	√	√

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 2 are Chip antennas.

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
802.11b	1 to 11	1	DSSS	CCK	1	A
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1	OFDM	BPSK	6.5	B
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	3	OFDM	BPSK	13.5	C
802.11a	1 to 5	1	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (40MHz)	1 to 3	3	OFDM	BPSK	13.5	C

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
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1	OFDM	BPSK	13.5	C
For 5 GHz Draft 802.11n (40MHz)	1 to 3	3	OFDM	BPSK	13.5	C

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	A
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	B
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	C
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1, 3, 5	OFDM	BPSK	6.5	B
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	13.5	C

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	A
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	6.5	B
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	13.5	C
802.11a	1 to 5	1, 5	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1, 5	OFDM	BPSK	6.5	B
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	13.5	C

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	11	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	A
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	B
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	C
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6	A
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1, 3, 5	OFDM	BPSK	6.5	B
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	13.5	C

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Dual-band Wireless-N ExpressCard. 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

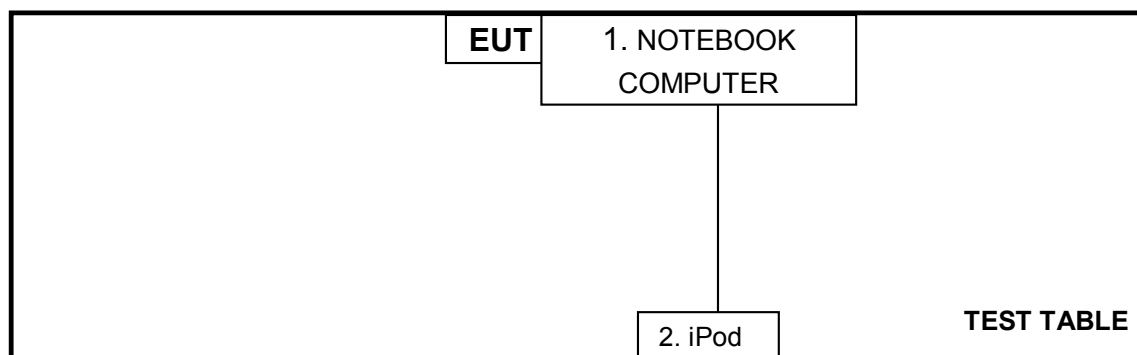
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP21L	CN-0GD366-70166-5B3-09ZX	QDS-BRCM1016
2	iPod	Apple	A1137	6U6078CCUPR	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.3 m shielded cable, terminated with USB connector, w/o core.

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

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4. TEST TYPES AND RESULTS (802.11b & g, 2400 ~ 2483.5MHz Band)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	100287	Mar. 06, 2008
Line-Impedance Stabilization Network(for EUT)	ENV-216	100072	Oct. 20, 2007
Line-Impedance Stabilization Network(for Peripheral)	KNW-407	8-1395-12	Aug. 15, 2007
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 19, 2008
Terminator	50	1	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. A.
 3. The VCCI Con A Registration No. is C-817.

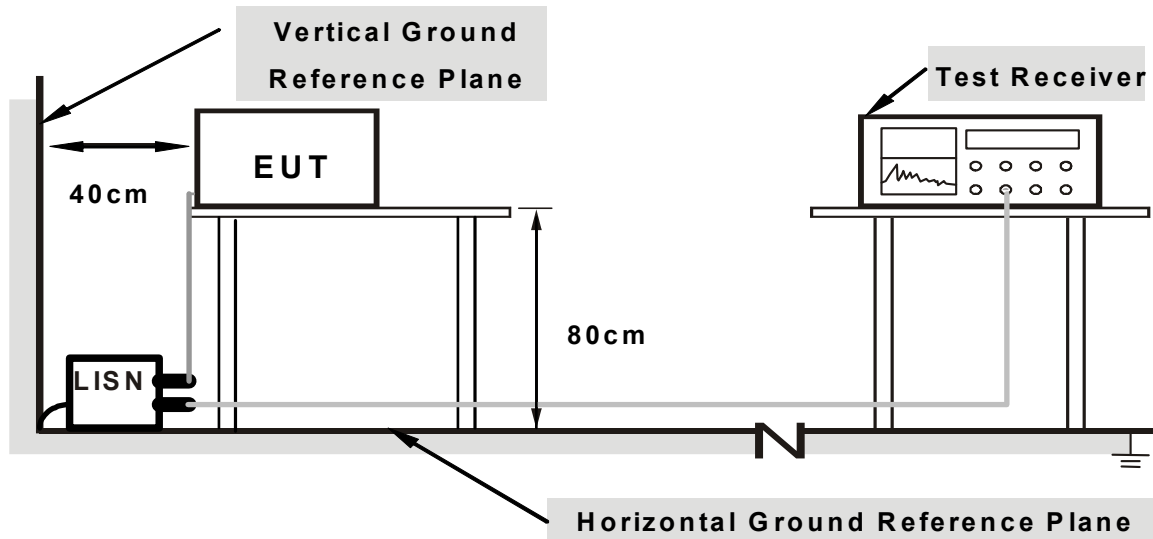
4.1.3 TEST PROCEDURES

- 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) were 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

- a. Plug the EUT into the support unit 1 (Notebook computer) which placed on a testing table.
- b. The support unit 1 (Notebook computer) ran a test program “Braodcom Mfgtest” to enable EUT under transmission condition continuously.

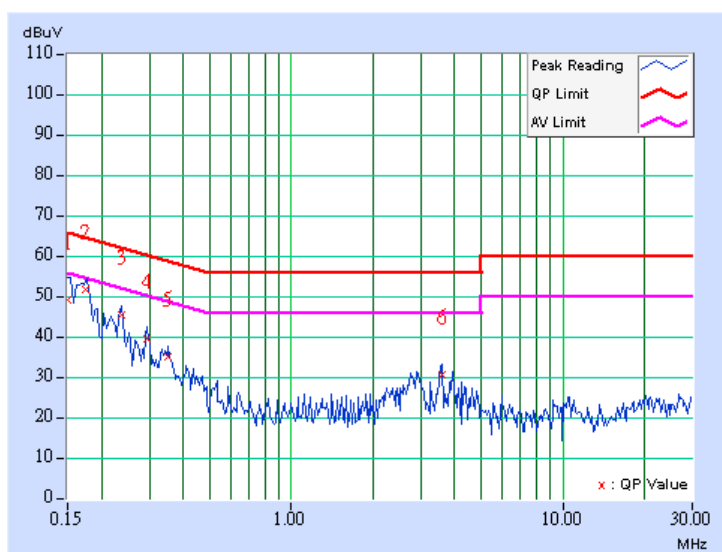
4.1.7 TEST RESULTS

802.11b DSSS MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line (L)
MODULATION TYPE	CCK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Max Tseng

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.45	49.04	-	49.49	-	66.00	56.00	-16.51	-
2	0.176	0.42	51.62	-	52.04	-	64.69	54.69	-12.64	-
3	0.236	0.38	45.28	-	45.66	-	62.24	52.24	-16.58	-
4	0.295	0.35	39.16	-	39.51	-	60.40	50.40	-20.88	-
5	0.353	0.32	34.88	-	35.20	-	58.89	48.89	-23.69	-
6	3.590	0.38	30.38	-	30.76	-	56.00	46.00	-25.24	-

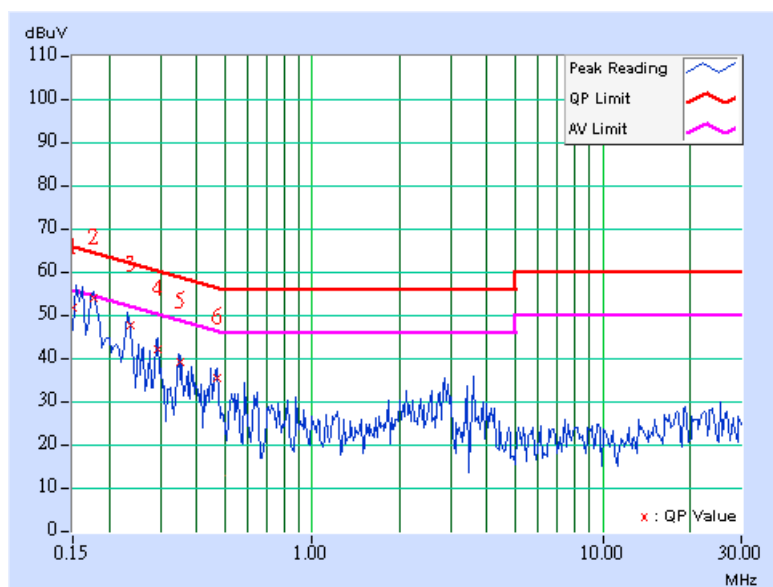
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Neutral (N)
MODULATION TYPE	CCK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Max Tseng

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.45	51.46	-	51.91	-	66.00	56.00	-14.09	-
2	0.176	0.42	53.73	-	54.15	-	64.66	54.66	-10.51	-
3	0.236	0.38	47.32	-	47.70	-	62.24	52.24	-14.54	-
4	0.295	0.35	41.85	-	42.20	-	60.40	50.40	-18.19	-
5	0.353	0.32	38.83	-	39.15	-	58.89	48.89	-19.74	-
6	0.470	0.30	35.19	-	35.49	-	56.51	46.51	-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.

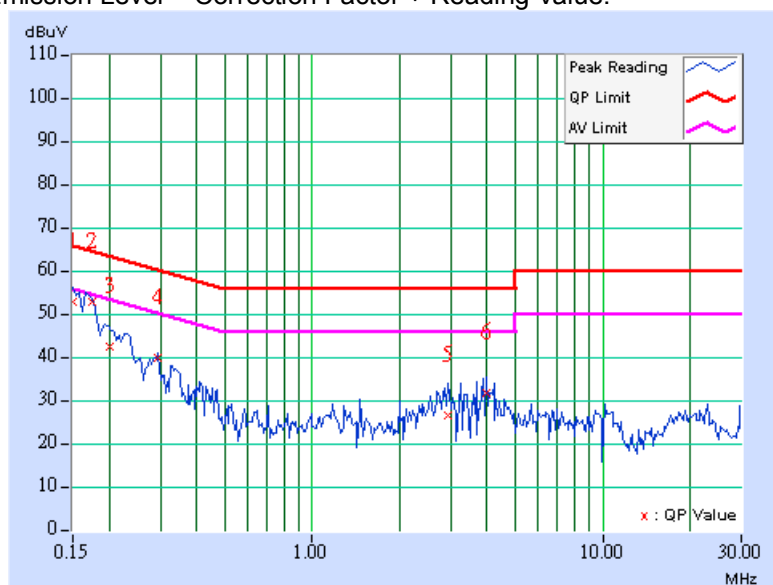


DRAFT 802.11n (20MHz) OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Max Tseng

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.45	52.44	-	52.89	-	66.00	56.00	-13.11	-
2	0.175	0.43	52.52	-	52.95	-	64.72	54.72	-11.77	-
3	0.201	0.40	42.07	-	42.47	-	63.58	53.58	-21.11	-
4	0.295	0.35	39.48	-	39.83	-	60.40	50.40	-20.56	-
5	2.927	0.35	26.45	-	26.80	-	56.00	46.00	-29.20	-
6	3.988	0.40	31.57	-	31.97	-	56.00	46.00	-24.03	-

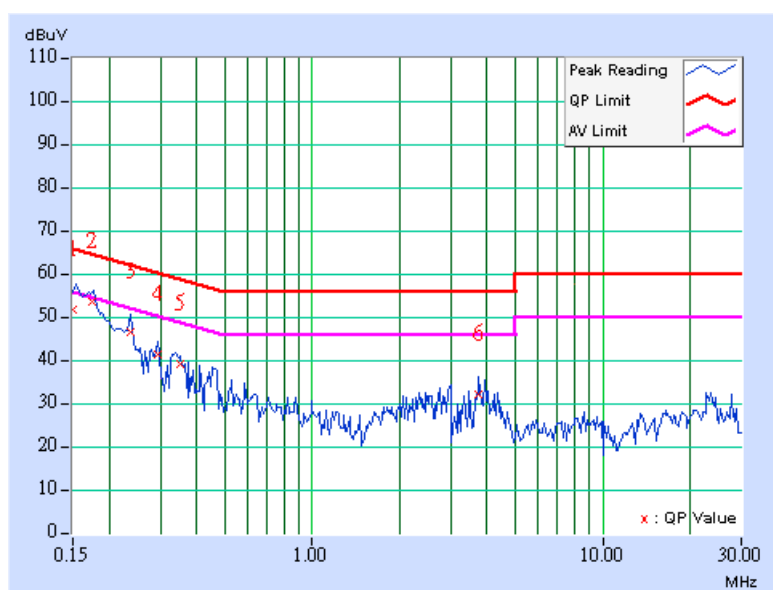
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Max Tseng

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.45	51.58	-	52.03	-	66.00	56.00	-13.97	-
2	0.175	0.43	53.14	-	53.57	-	64.72	54.72	-11.15	-
3	0.236	0.38	46.13	-	46.51	-	62.24	52.24	-15.73	-
4	0.295	0.35	40.94	-	41.29	-	60.40	50.40	-19.10	-
5	0.353	0.32	38.83	-	39.15	-	58.89	48.89	-19.74	-
6	3.750	0.40	31.84	-	32.24	-	56.00	46.00	-23.76	-

- 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.

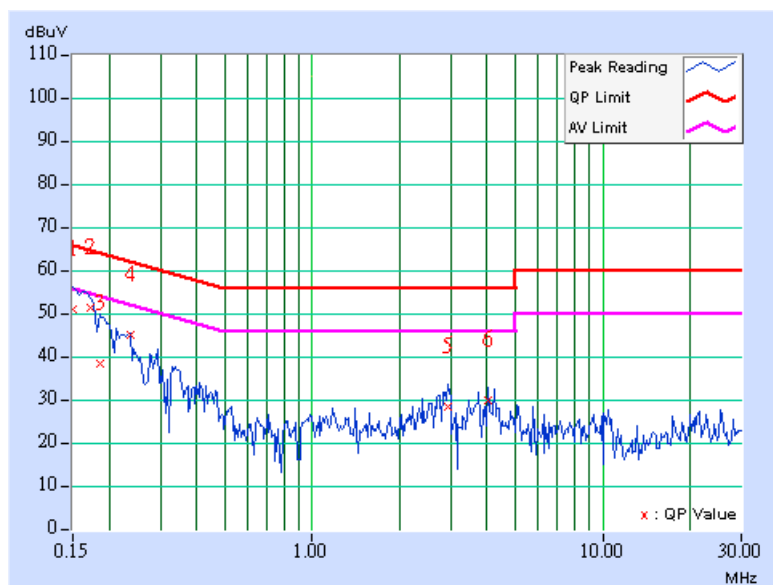


DRAFT 802.11n (40MHz) OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Max Tseng

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.45	50.79	-	51.24	-	66.00	56.00	-14.76	-
2	0.173	0.43	50.99	-	51.42	-	64.83	54.83	-13.41	-
3	0.185	0.41	38.01	-	38.42	-	64.25	54.25	-25.83	-
4	0.236	0.38	44.90	-	45.28	-	62.24	52.24	-16.96	-
5	2.931	0.35	27.97	-	28.32	-	56.00	46.00	-27.68	-
6	4.047	0.40	29.56	-	29.96	-	56.00	46.00	-26.04	-

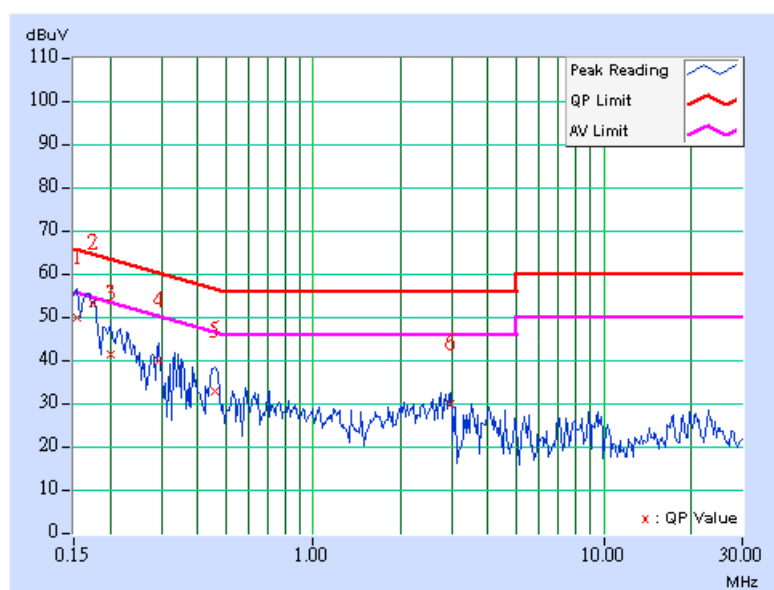
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13.5Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Max Tseng

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.45	49.49	-	49.94	-	65.79	55.79	-15.85	-
2	0.175	0.43	52.80	-	53.23	-	64.74	54.74	-11.51	-
3	0.201	0.40	41.08	-	41.48	-	63.58	53.58	-22.10	-
4	0.295	0.35	39.48	-	39.83	-	60.40	50.40	-20.56	-
5	0.459	0.30	32.47	-	32.77	-	56.72	46.72	-23.95	-
6	2.986	0.40	29.42	-	29.82	-	56.00	46.00	-26.18	-

- 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 15, 2008
HP Pre_Amplifier	8449B	3008A01922	Sep. 18, 2007
ROHDE & SCHWARZ Test Receiver	ESCS30	100375	Sep. 20, 2007
CHASE Broadband Antenna	VULB 9168	138	July 17, 2008
Schwarzbeck Horn_Antenna	BBHA9120	D124	Jan. 01, 2008
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 25, 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, 2008
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	Aug. 13, 2007
Software	ADT_Radiated_V 7.6.15.7	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.

4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic. 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 the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

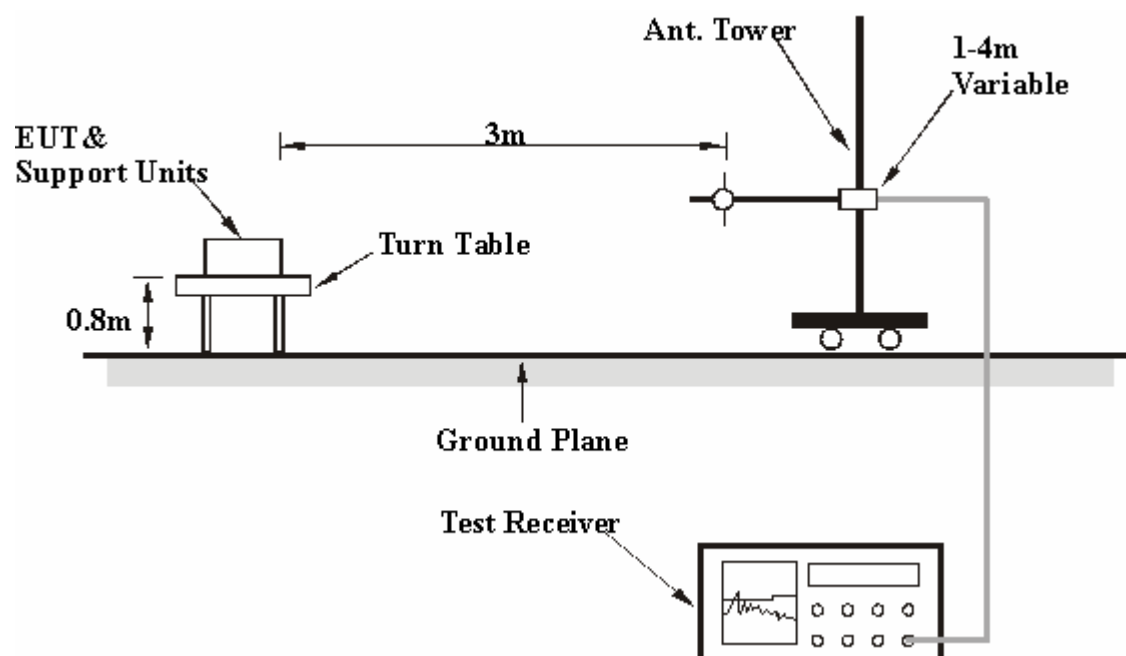
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

Below 1GHz Test Data

4.2.7 TEST RESULTS

802.11n (40MHz) OFDM MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	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	22deg. C, 65%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	240.00	24.20 QP	46.00	-21.80	1.26 H	18	10.86	13.34
2	320.00	36.60 QP	46.00	-9.40	1.08 H	312	19.55	17.05
3	360.00	25.60 QP	46.00	-20.40	1.00 H	208	7.89	17.71
4	400.00	24.80 QP	46.00	-21.20	1.50 H	26	5.78	19.02
5	480.00	26.00 QP	46.00	-20.00	1.52 H	303	4.75	21.25
6	640.00	29.20 QP	46.00	-16.80	1.40 H	218	4.28	24.92
7	720.00	25.60 QP	46.00	-20.40	1.24 H	295	-0.82	26.42
8	800.00	28.00 QP	46.00	-18.00	1.22 H	40	0.44	27.56

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	240.00	24.20 QP	46.00	-21.80	1.00 V	68	10.86	13.34
2	320.00	27.80 QP	46.00	-18.20	1.06 V	320	10.75	17.05
3	360.00	25.00 QP	46.00	-21.00	1.00 V	96	7.29	17.71
4	400.00	24.20 QP	46.00	-21.80	1.06 V	28	5.18	19.02
5	480.00	23.80 QP	46.00	-22.20	1.00 V	166	2.55	21.25
6	640.00	26.00 QP	46.00	-20.00	1.00 V	208	1.08	24.92
7	720.00	28.80 QP	46.00	-17.20	1.15 V	296	2.38	26.42
8	800.00	26.60 QP	46.00	-19.40	1.02 V	138	-0.96	27.56

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.

Above 1GHz Test Data

4.2.8 TEST RESULTS 802.11b DSSS MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	CCK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	1Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%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	2387.28	60.85 PK	74.00	-13.15	1.36 H	98	30.47	30.38
2	2387.28	52.88 AV	54.00	-1.12	1.36 H	98	22.50	30.38
3	*2412.00	106.00 PK			1.37 H	100	75.51	30.49
4	*2412.00	97.90 AV			1.37 H	100	67.41	30.49
5	4824.00	55.60 PK	74.00	-18.40	1.30 H	320	19.91	35.69
6	4824.00	53.20 AV	54.00	-0.80	1.30 H	320	17.51	35.69
7	7236.00	52.40 PK	74.00	-21.60	1.02 H	35	10.16	42.24
8	7236.00	40.20 AV	54.00	-13.80	1.02 H	35	-2.04	42.24

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	2387.28	60.04 PK	74.00	-13.96	1.08 V	353	29.66	30.38
2	2387.28	50.55 AV	54.00	-3.45	1.08 V	353	20.17	30.38
3	*2412.00	106.00 PK			1.10 V	352	75.51	30.49
4	*2412.00	101.50 AV			1.10 V	352	71.01	30.49
5	4824.00	53.10 PK	74.00	-20.90	1.74 V	214	17.41	35.69
6	4824.00	50.40 AV	54.00	-3.60	1.74 V	214	14.71	35.69
7	7236.00	52.50 PK	74.00	-21.50	1.00 V	22	10.26	42.24
8	7236.00	39.80 AV	54.00	-14.20	1.00 V	22	-2.44	42.24

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	CCK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	1Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%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	*2437.00	104.20 PK			1.48 H	86	73.59	30.61
2	*2437.00	96.60 AV			1.48 H	86	65.99	30.61
3	4874.00	56.60 PK	74.00	-17.40	1.88 H	346	20.80	35.80
4	4874.00	52.60 AV	54.00	-1.40	1.88 H	346	16.80	35.80
5	7311.00	52.20 PK	74.00	-21.80	1.00 H	48	9.68	42.52
6	7311.00	40.20 AV	54.00	-13.80	1.00 H	48	-2.32	42.52

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	105.20 PK			1.12 V	355	74.59	30.61
2	*2437.00	100.80 AV			1.12 V	355	70.19	30.61
3	4874.00	55.00 PK	74.00	-19.00	1.30 V	288	19.20	35.80
4	4874.00	51.00 AV	54.00	-3.00	1.30 V	288	15.20	35.80
5	7311.00	39.90 PK	74.00	-34.10	1.02 V	32	-2.62	42.52
6	7311.00	52.00 AV	54.00	-2.00	1.02 V	32	9.48	42.52

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.

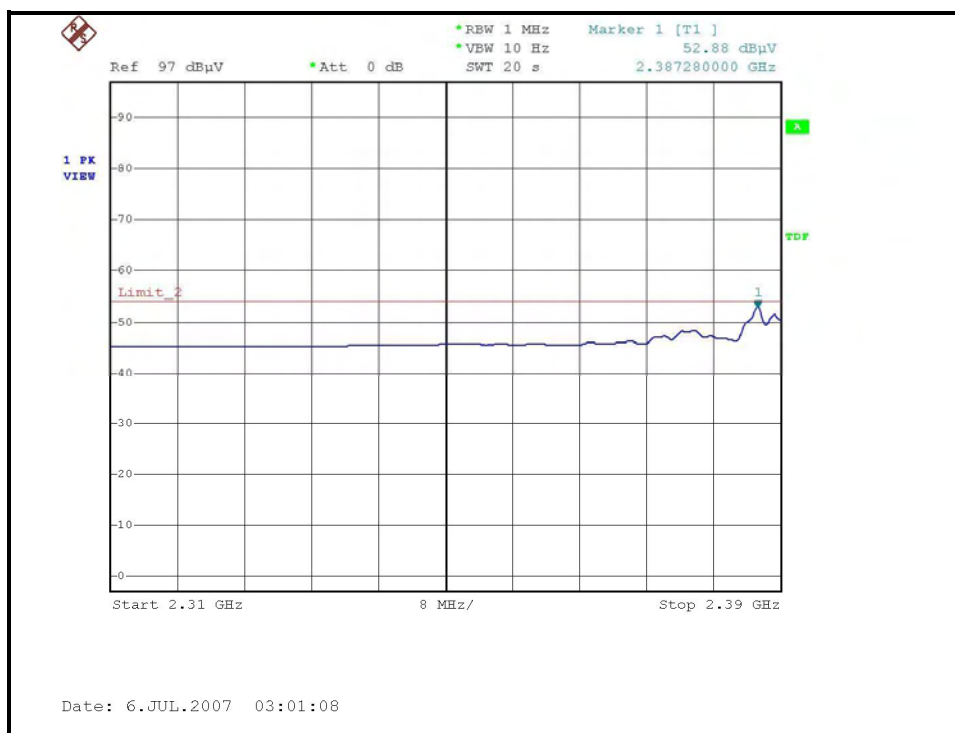
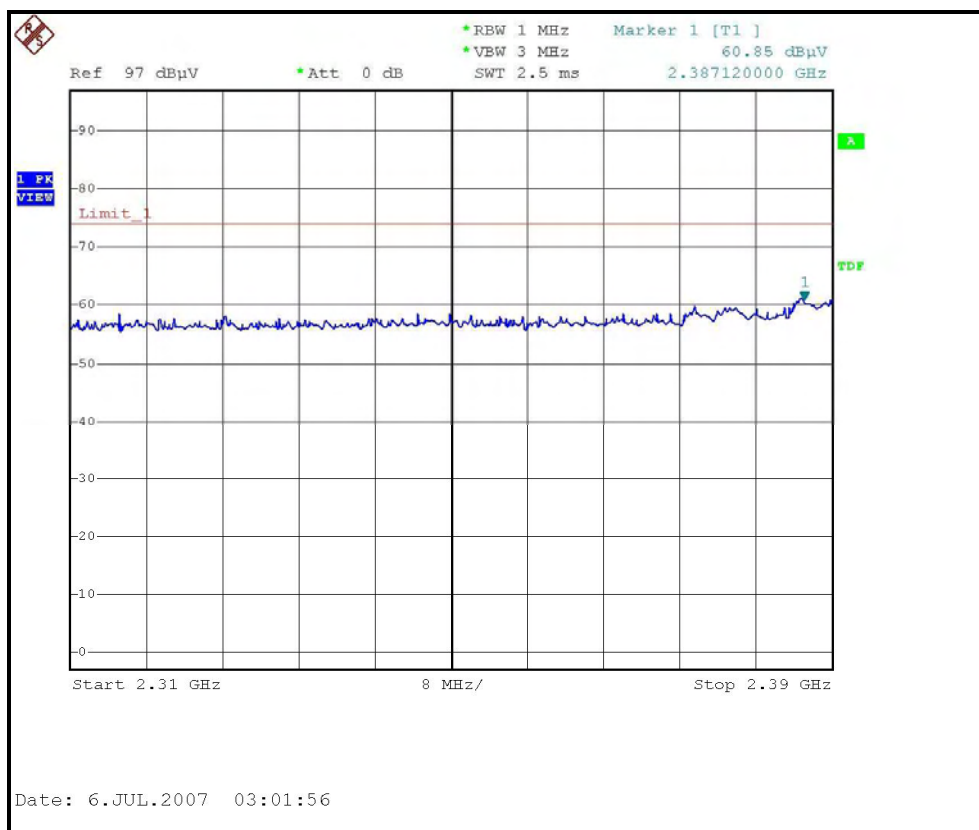
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	CCK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	1Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 971hPa	TESTED BY	Sky Liao

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	*2462.00	103.10 PK			2.02 H	75	72.38	30.72
2	*2462.00	95.30 AV			2.02 H	75	64.58	30.72
3	2483.50	60.30 PK	74.00	-13.70	1.94 H	72	29.48	30.82
4	2483.50	52.15 AV	54.00	-1.85	1.94 H	72	21.33	30.82
5	4924.00	55.40 PK	74.00	-18.60	1.85 H	95	19.50	35.90
6	4924.00	52.50 AV	54.00	-1.50	1.85 H	95	16.60	35.90
7	7386.00	52.50 PK	74.00	-21.50	1.00 H	62	9.70	42.80
8	7386.00	40.40 AV	54.00	-13.60	1.00 H	62	-2.40	42.80

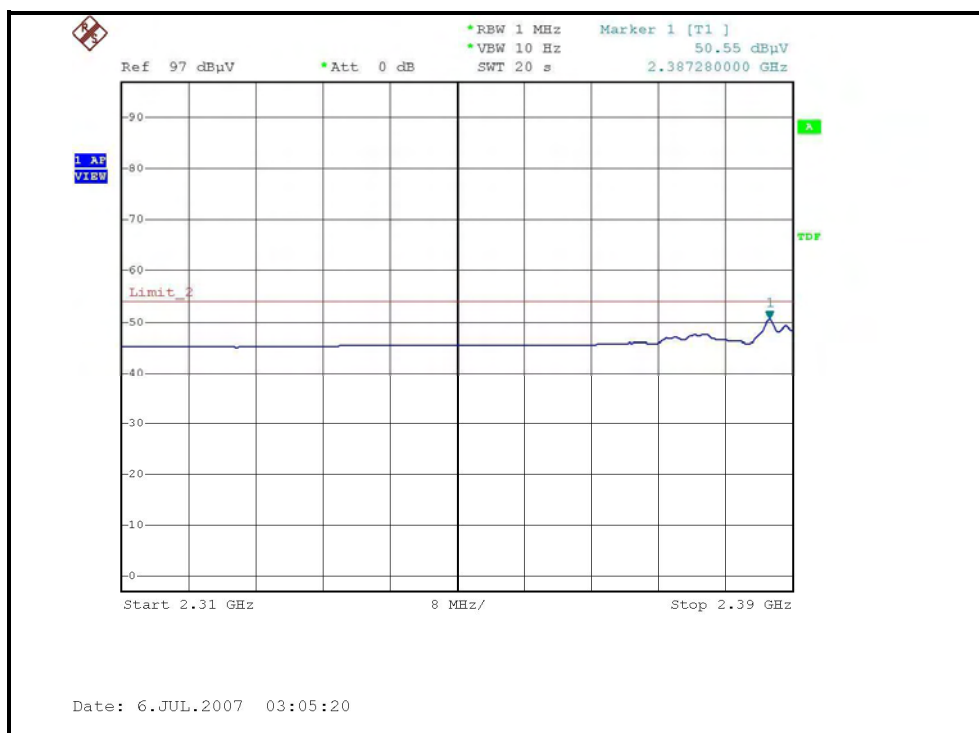
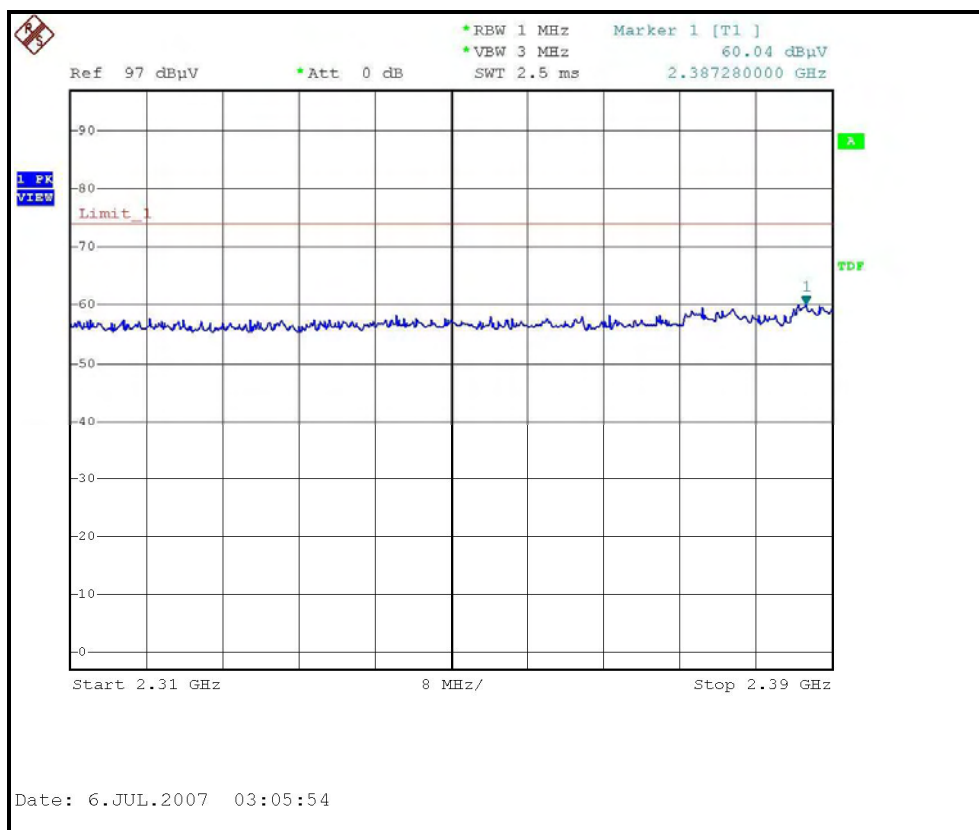
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	105.00 PK			1.10 V	353	74.28	30.72
2	*2462.00	100.50 AV			1.10 V	353	69.78	30.72
3	2483.50	60.69 PK	74.00	-13.31	1.10 V	342	29.87	30.82
4	2483.50	51.81 AV	54.00	-2.19	1.10 V	342	20.99	30.82
5	4924.00	52.20 PK	74.00	-21.80	1.13 V	328	16.30	35.90
6	4924.00	48.10 AV	54.00	-5.90	1.13 V	328	12.20	35.90
7	7386.00	52.60 PK	74.00	-21.40	1.00 V	30	9.80	42.80
8	7386.00	40.00 AV	54.00	-14.00	1.00 V	30	-2.80	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.

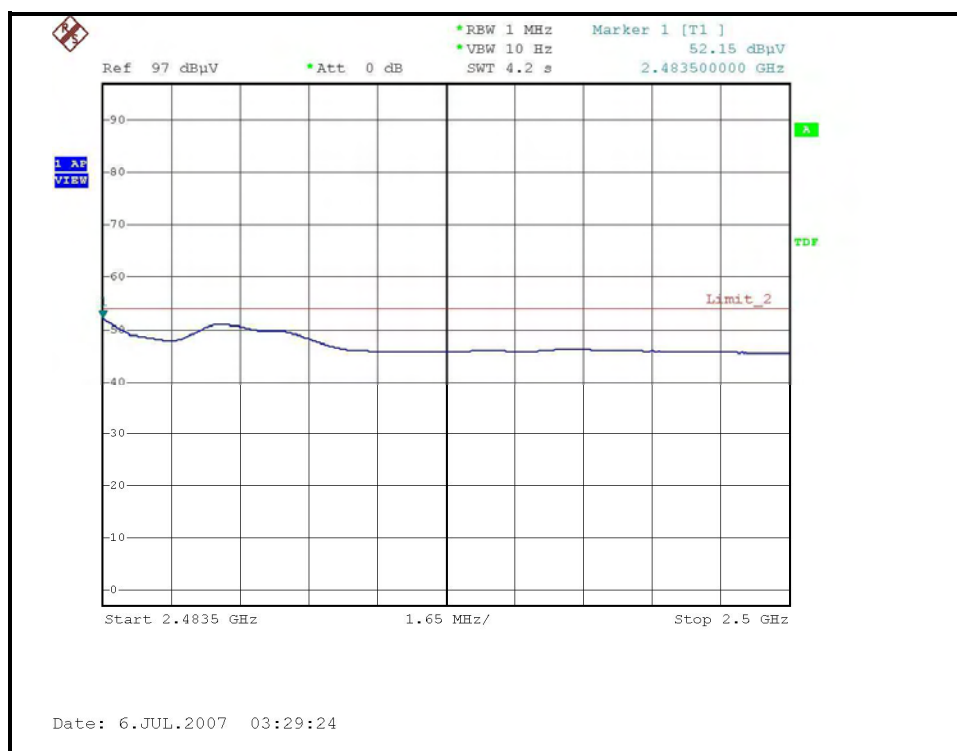
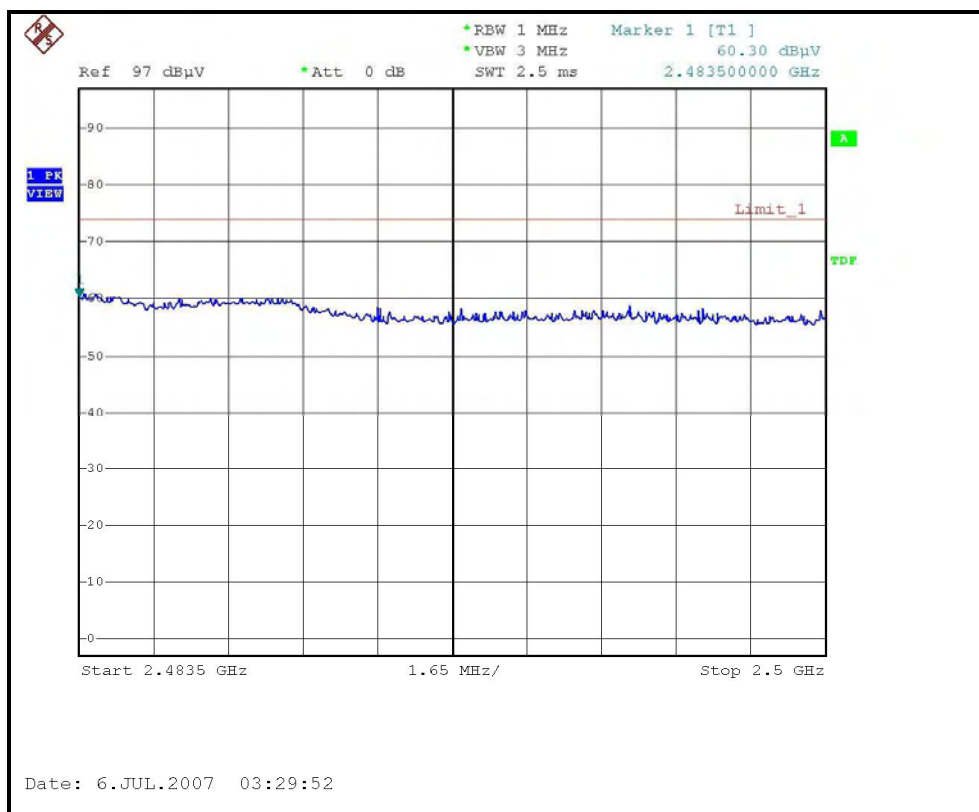
RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)



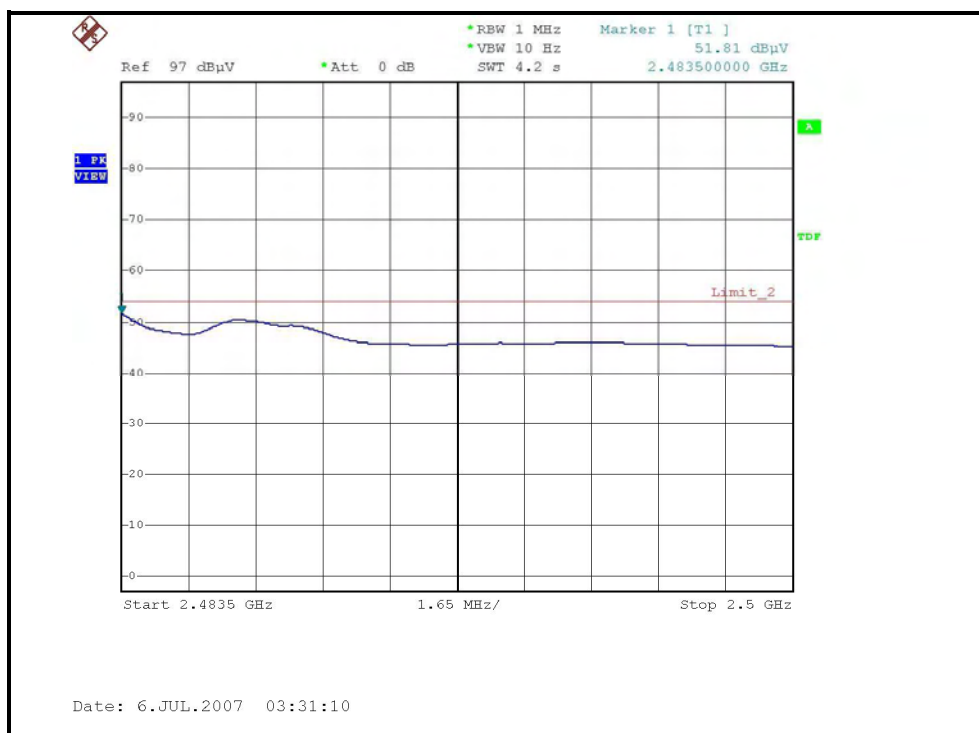
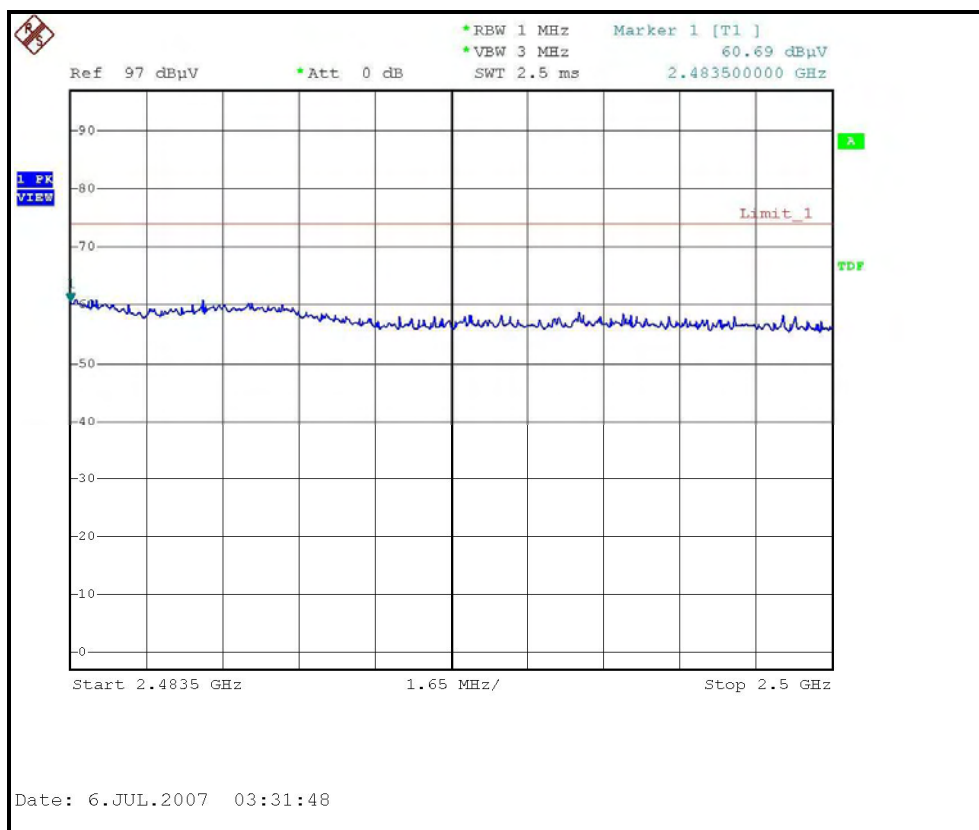
RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)



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	22deg. C, 65%RH, 971hPa	TESTED BY	Phoenix Huang

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	63.90 PK	74.00	-10.10	1.35 H	99	33.58	30.32
2	2390.00	48.30 AV	54.00	-5.70	1.35 H	99	17.98	30.32
3	*2412.00	101.30 PK			1.38 H	262	70.89	30.41
4	*2412.00	89.40 AV			1.38 H	262	58.99	30.41
5	4824.00	52.89 PK	74.00	-21.11	1.87 H	237	17.10	35.79
6	4824.00	45.27 AV	54.00	-8.73	1.87 H	237	9.48	35.79
7	7236.00	61.30 PK	74.00	-12.70	1.36 H	55	19.70	41.60
8	7236.00	42.40 AV	54.00	-11.60	1.36 H	55	0.80	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	2390.00	62.11 PK	74.00	-11.89	1.10 V	344	31.79	30.32
2	2390.00	47.29 AV	54.00	-6.71	1.10 V	344	16.97	30.32
3	*2412.00	103.90 PK			1.10 V	337	73.49	30.41
4	*2412.00	92.13 AV			1.10 V	337	61.72	30.41
5	4824.00	58.10 PK	74.00	-15.90	1.50 V	116	22.31	35.79
6	4824.00	51.23 AV	54.00	-2.77	1.50 V	116	15.44	35.79
7	7236.00	59.70 PK	74.00	-14.30	1.36 V	27	18.10	41.60
8	7236.00	40.90 AV	54.00	-13.10	1.36 V	27	-0.70	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.

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	22deg. C, 65%RH, 971hPa	TESTED BY	Phoenix Huang

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	101.50 PK			1.38 H	8	70.98	30.52
2	*2437.00	89.80 AV			1.38 H	8	59.28	30.52
3	4874.00	53.20 PK	74.00	-20.80	1.64 H	230	17.28	35.92
4	4874.00	47.20 AV	54.00	-6.80	1.64 H	230	11.28	35.92
5	7311.00	65.10 PK	74.00	-8.90	1.63 H	331	23.29	41.81
6	7311.00	40.30 AV	54.00	-13.70	1.63 H	331	-1.51	41.81

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	104.80 PK			1.08 V	337	74.28	30.52
2	*2437.00	92.90 AV			1.08 V	337	62.38	30.52
3	4874.00	56.50 PK	74.00	-17.50	1.13 V	0	20.58	35.92
4	4874.00	51.20 AV	54.00	-2.80	1.13 V	0	15.28	35.92
5	7311.00	58.30 PK	74.00	-15.70	1.26 V	17	16.49	41.81
6	7311.00	39.70 AV	54.00	-14.30	1.26 V	17	-2.11	41.81

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	22deg. C, 65%RH, 971hPa	TESTED BY	Phoenix Huang

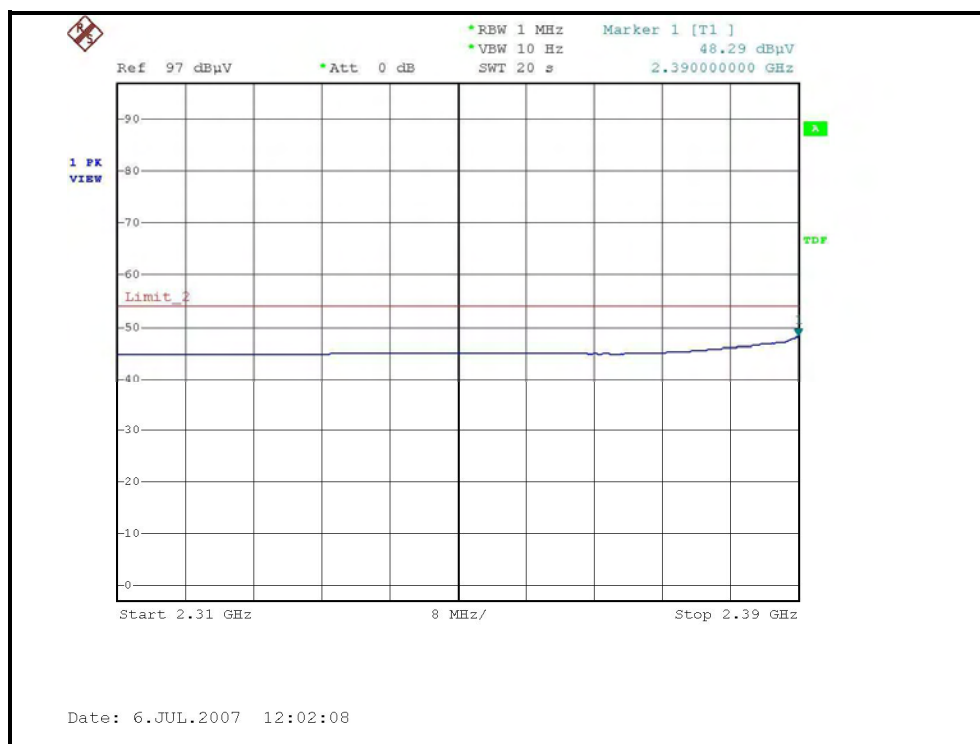
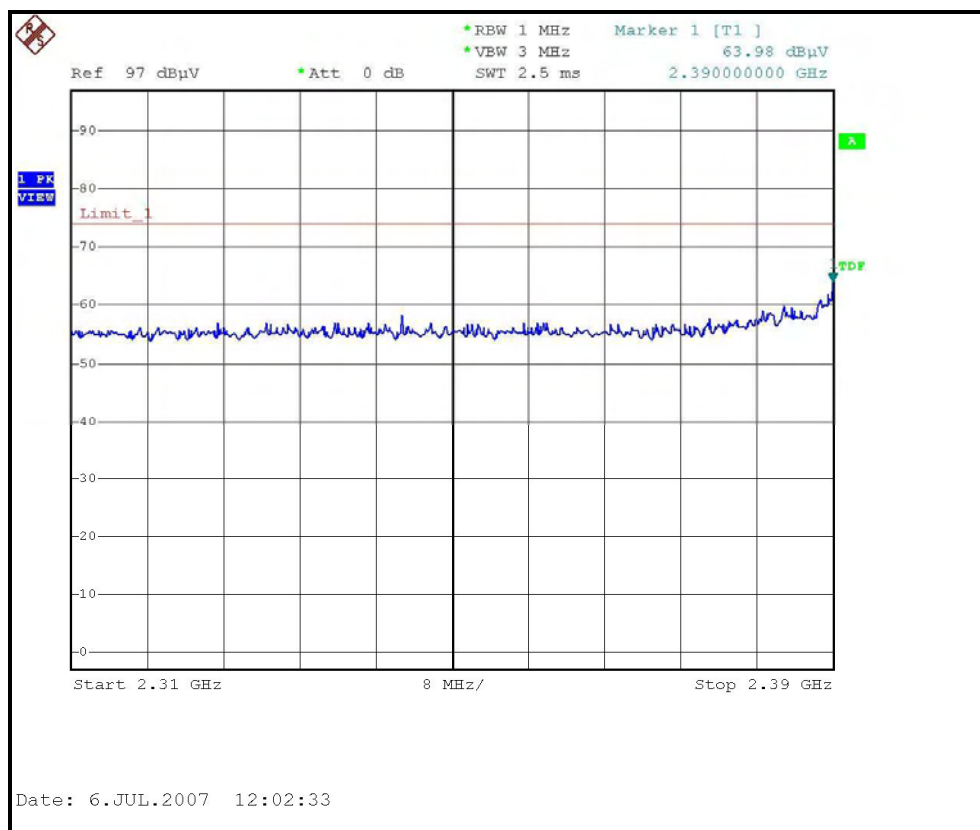
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	101.60 PK			1.39 H	8	70.97	30.63
2	*2462.00	89.90 AV			1.39 H	8	59.27	30.63
3	2483.50	60.60 PK	74.00	-13.40	1.38 H	8	29.88	30.72
4	2483.50	46.10 AV	54.00	-7.90	1.38 H	8	15.38	30.72
5	4924.00	54.84 PK	74.00	-19.16	1.55 H	58	18.78	36.06
6	4924.00	45.48 AV	54.00	-8.52	1.55 H	58	9.42	36.06
7	7386.00	60.90 PK	74.00	-13.10	1.38 H	74	18.89	42.01
8	7386.00	42.30 AV	54.00	-11.70	1.38 H	74	0.29	42.01

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	104.90 PK			1.06 V	335	74.27	30.63
2	*2462.00	92.60 AV			1.06 V	335	61.97	30.63
3	2483.50	64.70 PK	74.00	-9.30	1.37 V	335	33.98	30.72
4	2483.50	48.00 AV	54.00	-6.00	1.37 V	335	17.28	30.72
5	4924.00	59.98 PK	74.00	-14.02	2.31 V	117	23.92	36.06
6	4924.00	52.14 AV	54.00	-1.86	2.31 V	117	16.08	36.06
7	7386.00	57.90 PK	74.00	-16.10	1.11 V	55	15.89	42.01
8	7386.00	40.80 AV	54.00	-13.20	1.11 V	55	-1.21	42.01

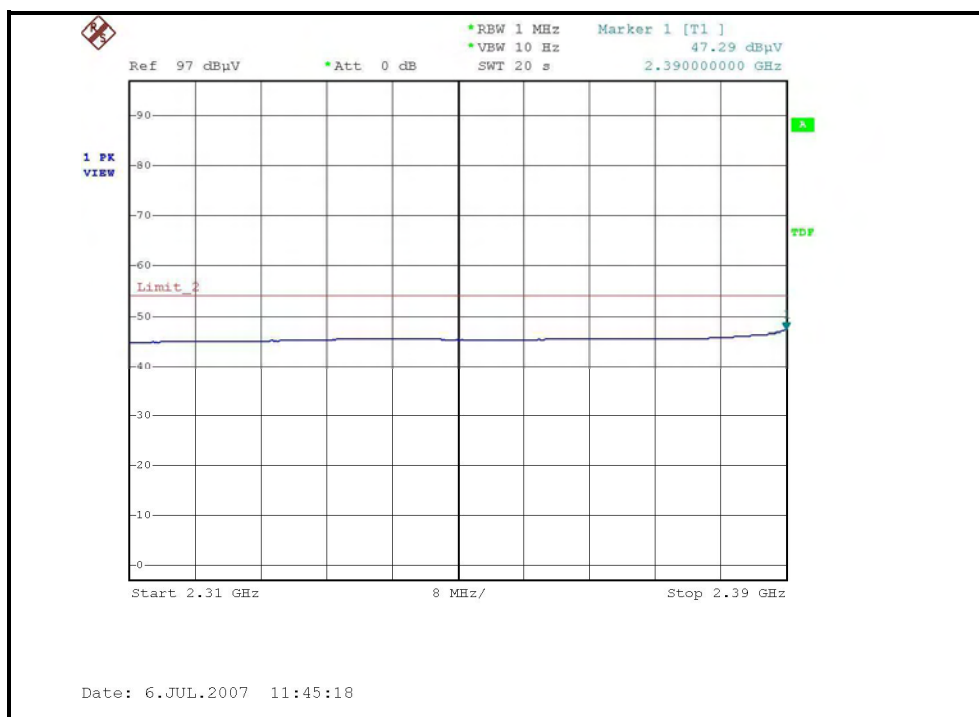
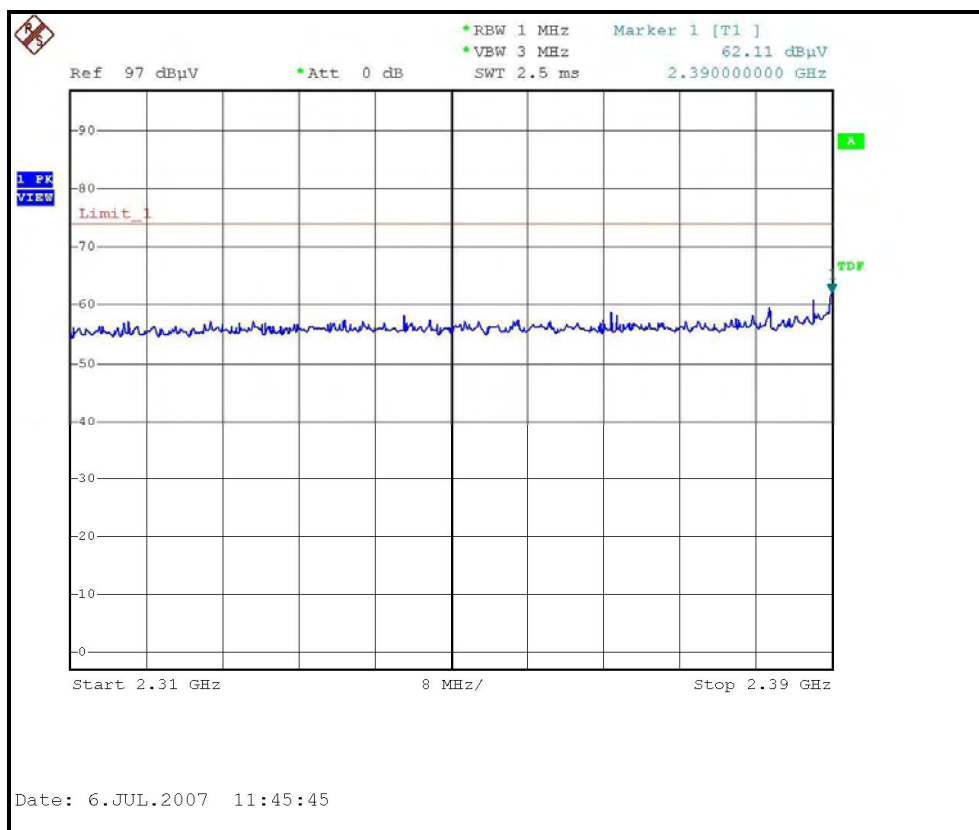
REMARKS:

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.

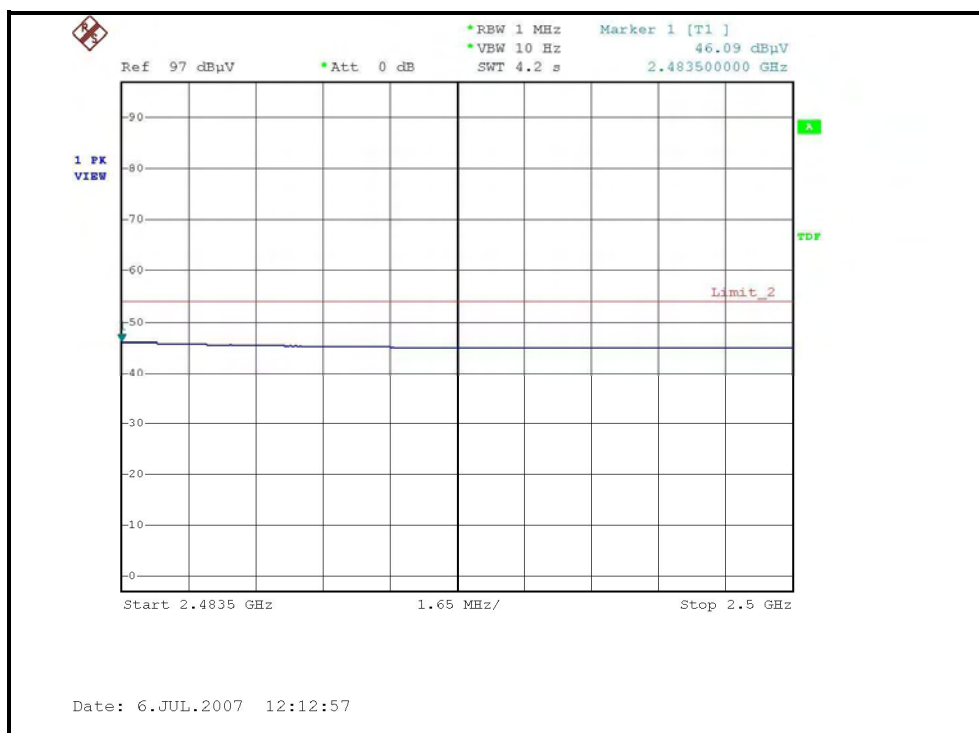
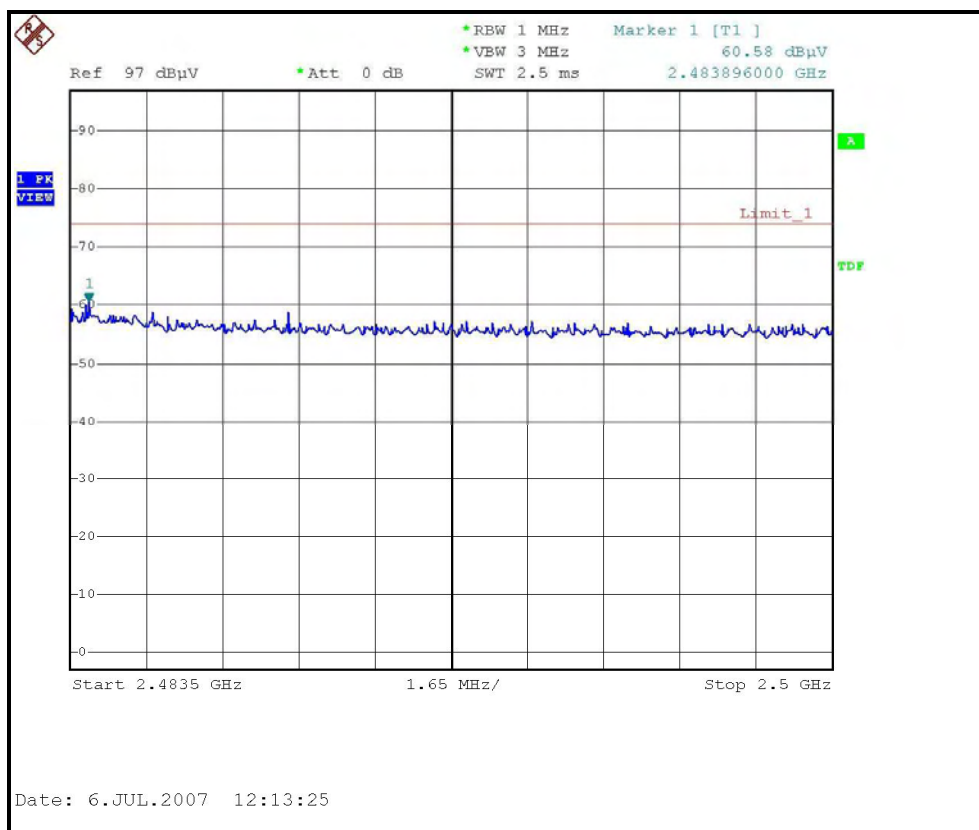
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



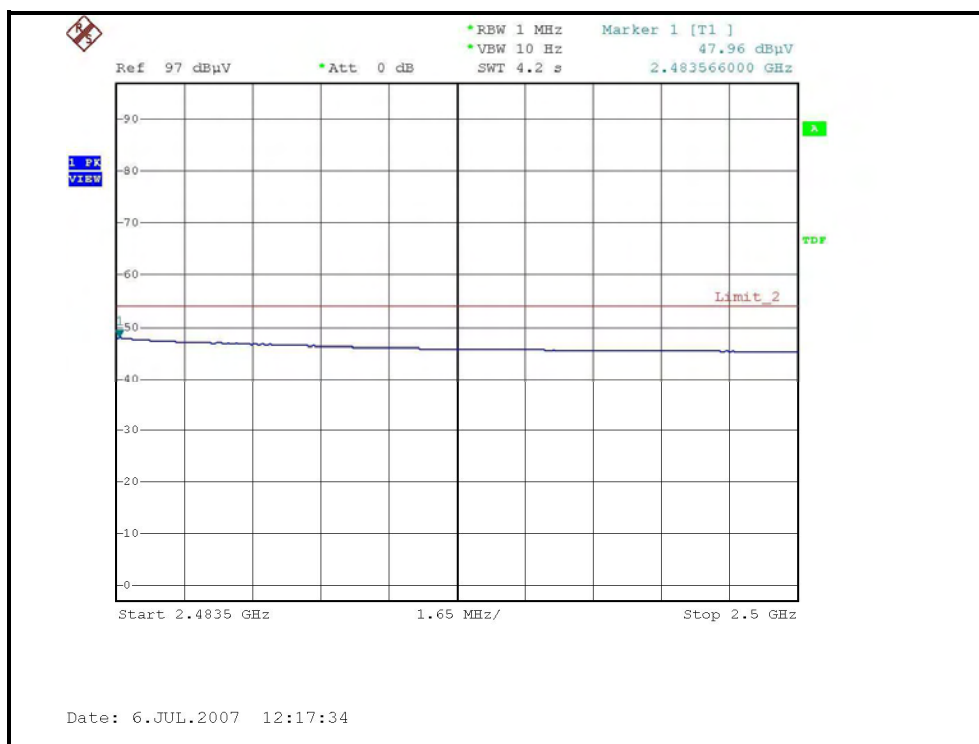
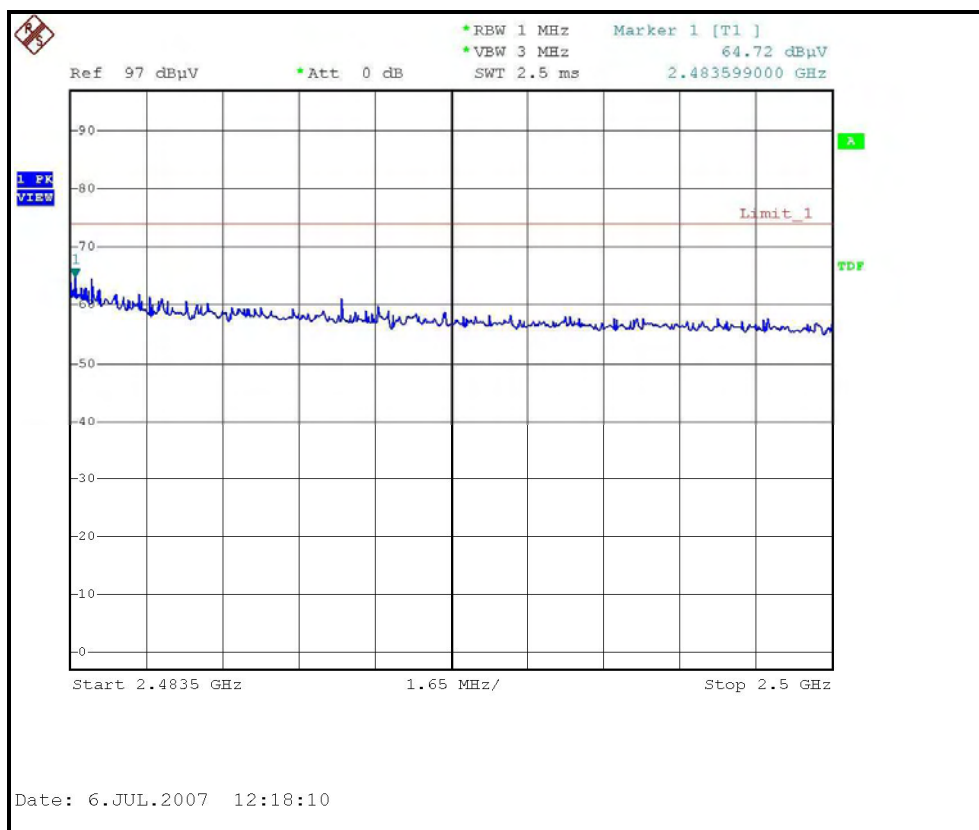
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)



DRAFT 802.11n (20MHz) OFDM MODULATION:

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	23deg. C, 70%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	2390.00	66.02 PK	74.00	-7.98	1.28 H	172	34.09	31.93
2	2390.00	49.22 AV	54.00	-4.78	1.28 H	172	17.29	31.93
3	*2412.00	111.20 PK			1.29 H	176	79.18	32.02
4	*2412.00	96.50 AV			1.29 H	176	64.48	32.02
5	4824.00	51.20 PK	74.00	-22.80	1.52 H	328	15.23	35.97
6	4824.00	45.20 AV	54.00	-8.80	1.52 H	328	9.23	35.97
7	7236.00	58.50 PK	74.00	-15.50	1.42 H	220	16.26	42.24
8	7236.00	41.30 AV	54.00	-12.70	1.42 H	220	-0.94	42.24

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	62.26 PK	74.00	-11.74	1.38 V	15	30.33	31.93
2	2390.00	47.14 AV	54.00	-6.86	1.38 V	15	15.21	31.93
3	*2412.00	104.10 PK			1.44 V	6	72.08	32.02
4	*2412.00	90.40 AV			1.44 V	6	58.38	32.02
5	4824.00	50.60 PK	74.00	-23.40	1.11 V	24	14.63	35.97
6	4824.00	44.50 AV	54.00	-9.50	1.11 V	24	8.53	35.97
7	7236.00	52.30 PK	74.00	-21.70	1.20 V	123	10.06	42.24
8	7236.00	40.20 AV	54.00	-13.80	1.20 V	123	-2.04	42.24

- 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	23deg. C, 70%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	*2437.00	111.40 PK			1.29 H	191	79.29	32.11
2	*2437.00	96.80 AV			1.29 H	191	64.69	32.11
3	4874.00	51.50 PK	74.00	-22.50	1.55 H	259	15.42	36.08
4	4874.00	45.00 AV	54.00	-9.00	1.55 H	259	8.92	36.08
5	7311.00	56.70 PK	74.00	-17.30	1.29 H	13	14.18	42.52
6	7311.00	42.10 AV	54.00	-11.90	1.29 H	13	-0.42	42.52

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	103.70 PK			1.39 V	357	71.59	32.11
2	*2437.00	90.60 AV			1.39 V	357	58.49	32.11
3	4874.00	52.50 PK	74.00	-21.50	1.29 V	192	16.42	36.08
4	4874.00	45.40 AV	54.00	-8.60	1.29 V	192	9.32	36.08
5	7311.00	53.20 PK	74.00	-20.80	1.22 V	118	10.68	42.52
6	7311.00	41.80 AV	54.00	-12.20	1.22 V	118	-0.72	42.52

- 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.

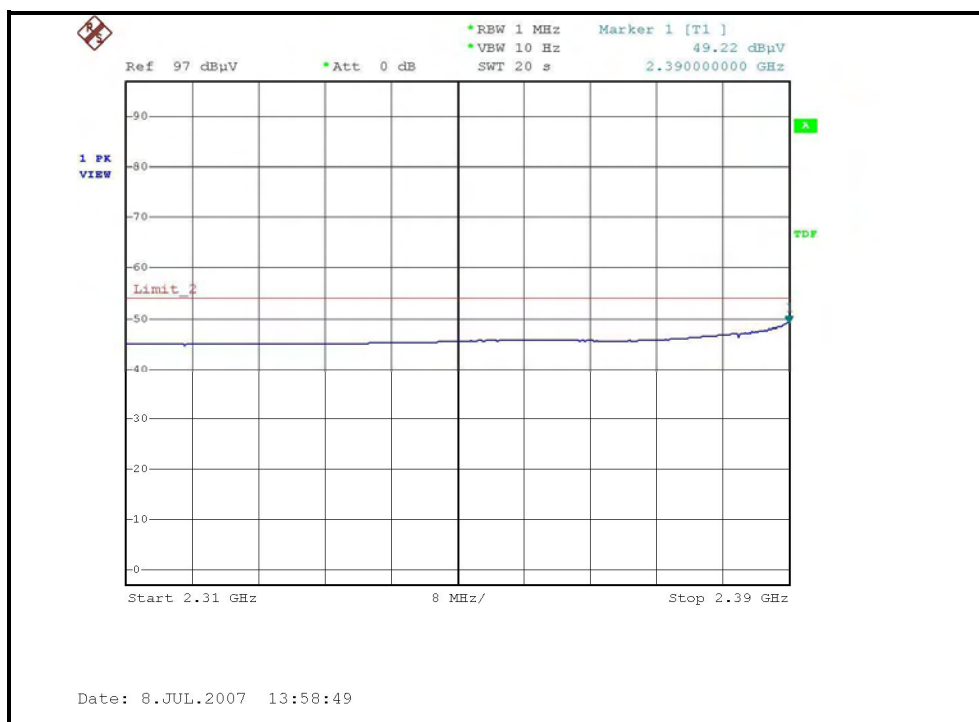
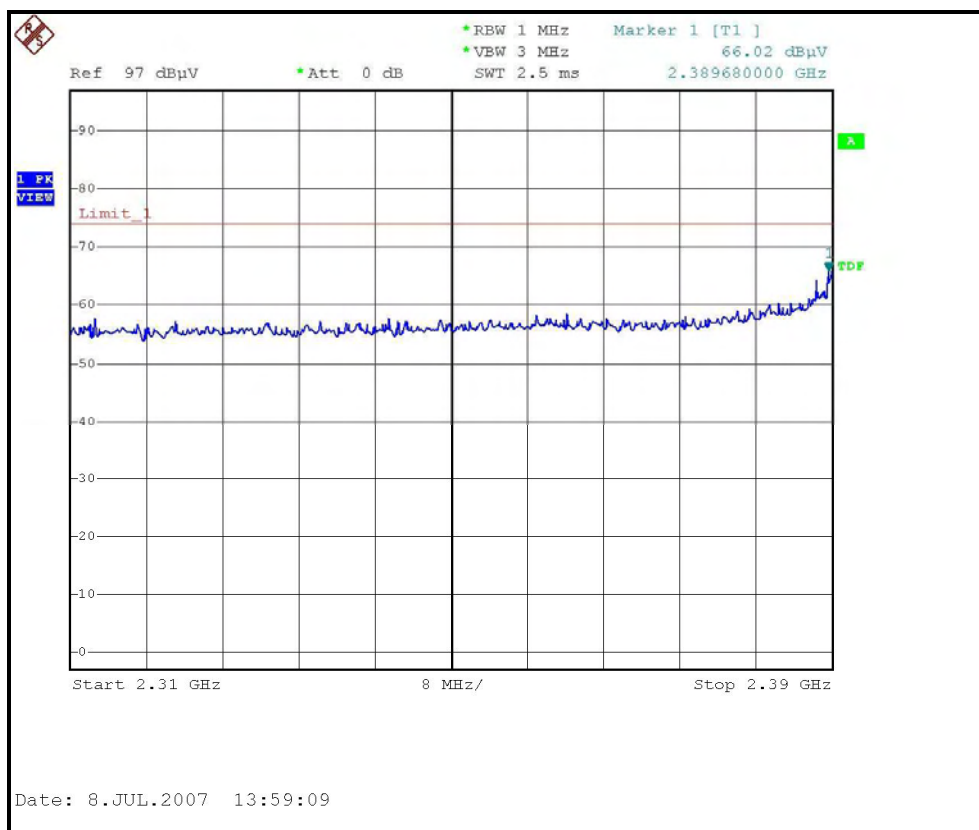
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TRANSFER RATE	6.5Mbps	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH, 971hPa	TESTED BY	Sky Liao

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	*2462.00	110.40 PK			1.31 H	191	78.19	32.21
2	*2462.00	95.80 AV			1.31 H	191	63.59	32.21
3	2483.56	58.40 PK	74.00	-15.60	1.69 H	176	26.11	32.29
4	2483.56	45.74 AV	54.00	-8.26	1.69 H	176	13.45	32.29
5	4924.00	57.70 PK	74.00	-16.30	1.39 H	260	21.51	36.19
6	4924.00	47.20 AV	54.00	-6.80	1.39 H	260	11.01	36.19
7	7386.00	60.20 PK	74.00	-13.80	1.32 H	211	17.40	42.80
8	7386.00	42.70 AV	54.00	-11.30	1.32 H	211	-0.10	42.80

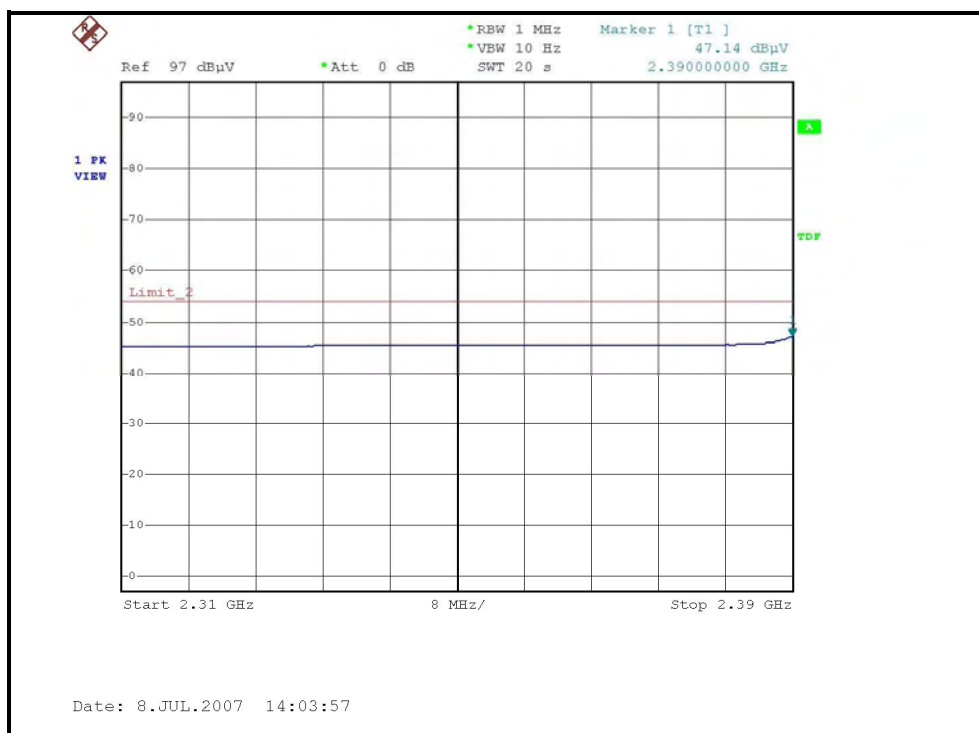
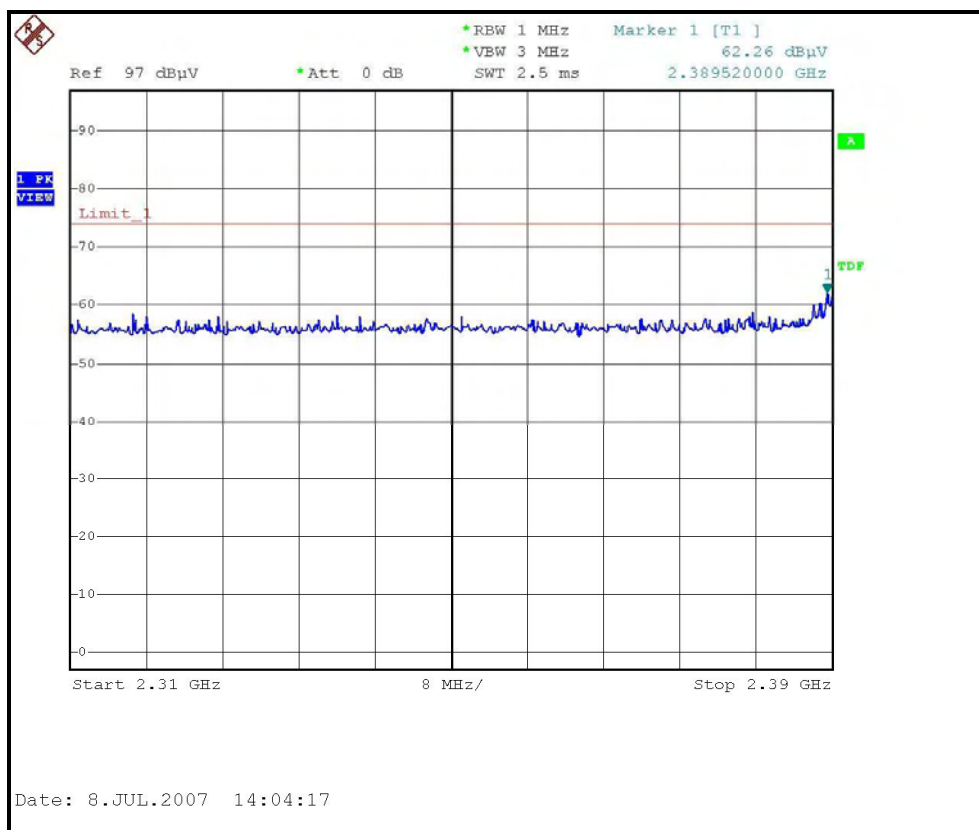
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	105.60 PK			1.34 V	0	73.39	32.21
2	*2462.00	92.10 AV			1.34 V	0	59.89	32.21
3	2483.63	58.68 PK	74.00	-15.32	1.34 V	358	26.39	32.29
4	2483.63	45.89 AV	54.00	-8.11	1.34 V	358	13.60	32.29
5	4924.00	57.80 PK	74.00	-16.20	1.29 V	200	21.61	36.19
6	4924.00	47.80 AV	54.00	-6.20	1.29 V	200	11.61	36.19
7	7386.00	59.30 PK	74.00	-14.70	1.30 V	178	16.50	42.80
8	7386.00	42.40 AV	54.00	-11.60	1.30 V	178	-0.40	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.

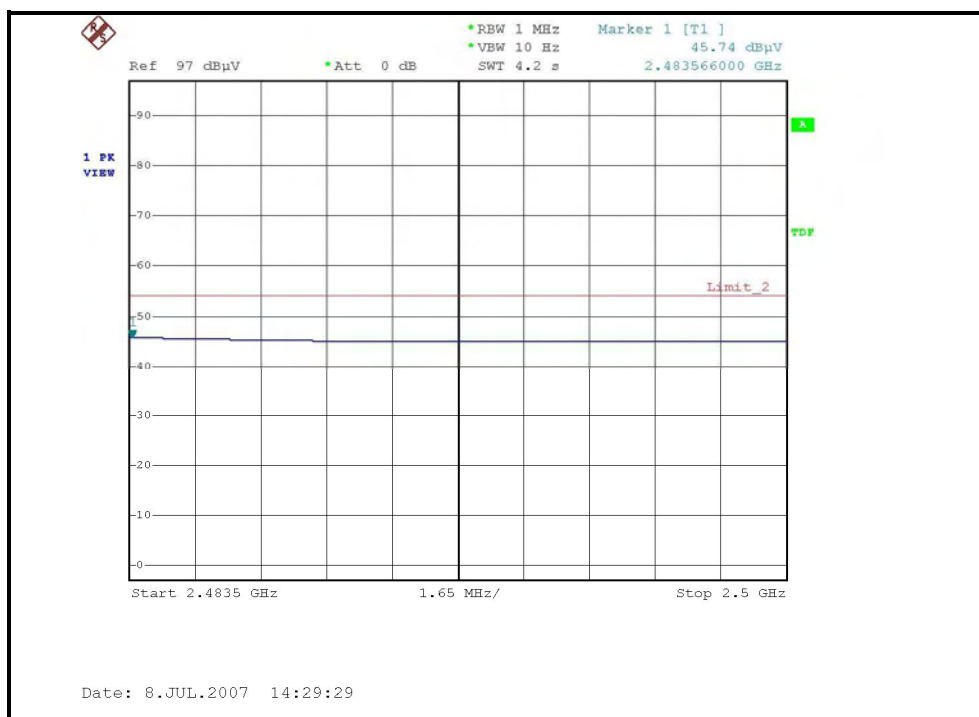
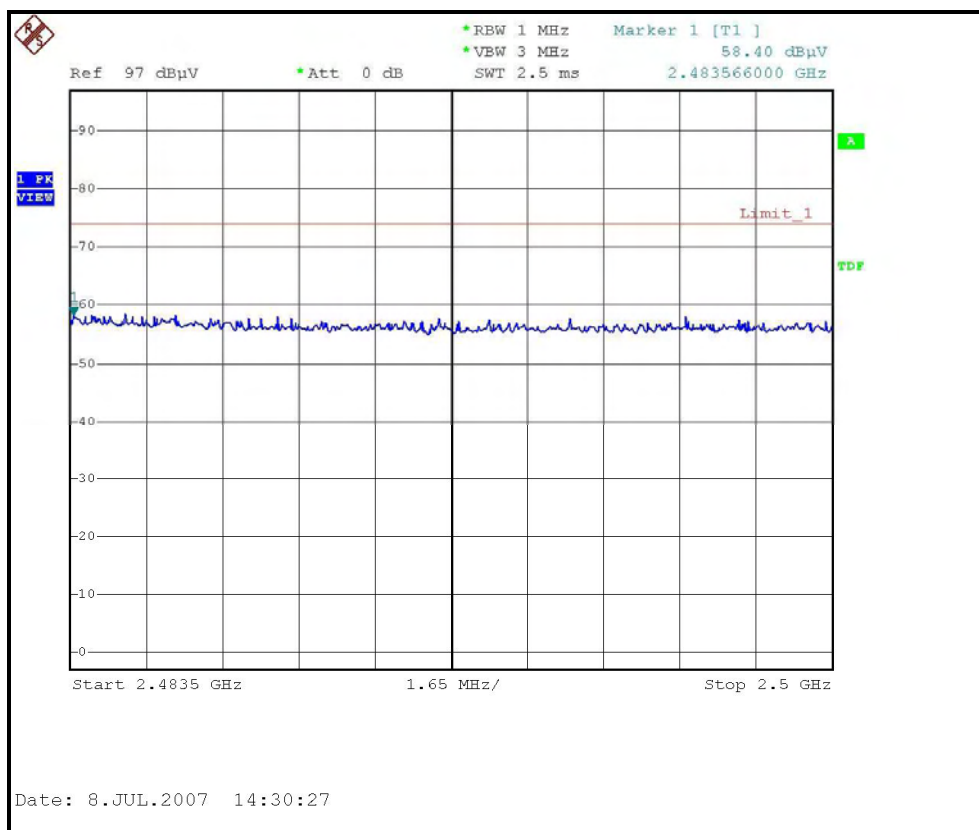
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, HORIZONTAL)



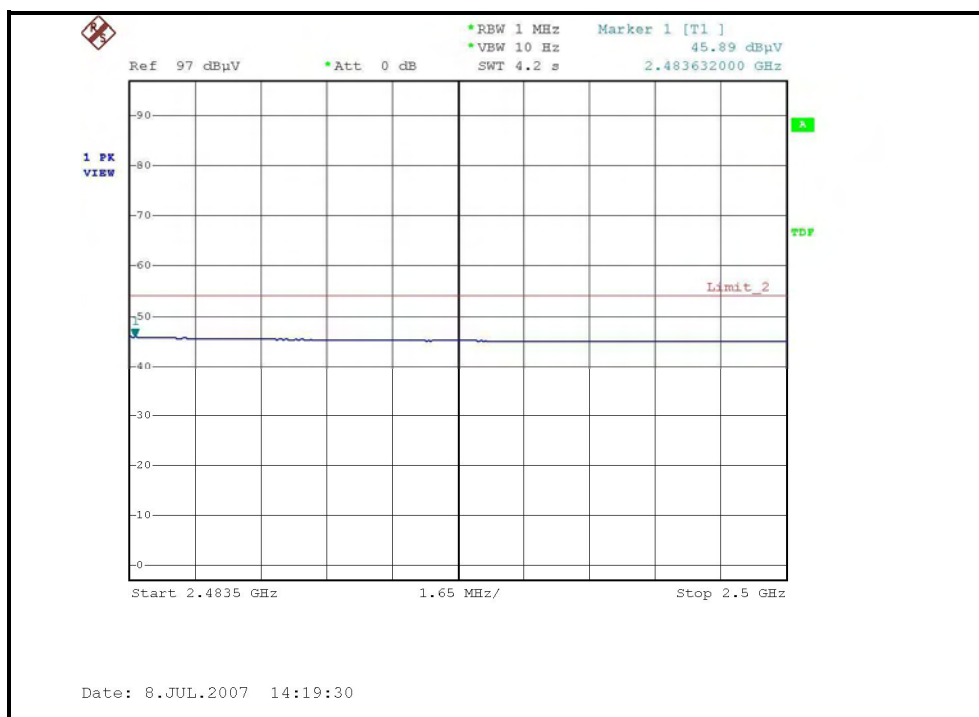
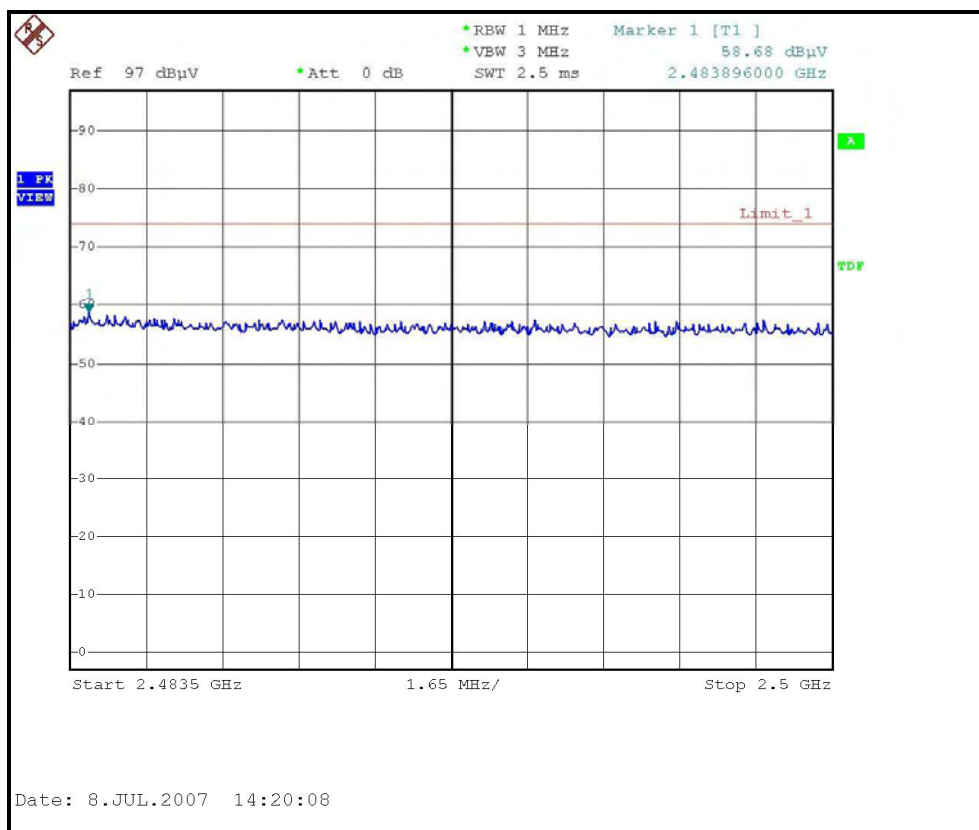
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH1, VERTICAL)



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



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



DRAFT 802.11n (40MHz) OFDM MODULATION:

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	23deg. C, 70%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	2388.72	69.80 PK	74.00	-4.20	1.28 H	190	37.87	31.93
2	2388.72	53.23 AV	54.00	-0.77	1.28 H	190	21.30	31.93
3	*2422.00	108.10 PK			1.29 H	194	76.05	32.05
4	*2422.00	94.60 AV			1.29 H	194	62.55	32.05
5	4844.00	50.40 PK	74.00	-23.60	1.78 H	115	14.39	36.01
6	4844.00	43.90 AV	54.00	-10.10	1.78 H	115	7.89	36.01
7	7266.00	52.20 PK	74.00	-21.80	1.30 H	50	9.85	42.35
8	7266.00	38.90 AV	54.00	-15.10	1.30 H	50	-3.45	42.35

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	67.30 PK	74.00	-6.70	1.11 V	344	35.37	31.93
2	2390.00	50.95 AV	54.00	-3.05	1.11 V	344	19.02	31.93
3	*2422.00	103.20 PK			1.04 V	344	71.15	32.05
4	*2422.00	90.30 AV			1.04 V	344	58.25	32.05
5	4844.00	54.00 PK	74.00	-20.00	1.20 V	190	17.99	36.01
6	4844.00	50.20 AV	54.00	-3.80	1.20 V	190	14.19	36.01
7	7266.00	53.00 PK	74.00	-21.00	1.50 V	30	10.65	42.35
8	7266.00	39.00 AV	54.00	-15.00	1.50 V	30	-3.35	42.35

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	23deg. C, 70%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	*2437.00	108.80 PK			1.28 H	192	76.69	32.11
2	*2437.00	95.40 AV			1.28 H	192	63.29	32.11
3	4874.00	50.60 PK	74.00	-23.40	1.68 H	90	14.52	36.08
4	4874.00	44.30 AV	54.00	-9.70	1.68 H	90	8.22	36.08
5	7311.00	52.50 PK	74.00	-21.50	1.12 H	28	9.98	42.52
6	7311.00	39.10 AV	54.00	-14.90	1.12 H	28	-3.42	42.52

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	104.10 PK			1.05 V	345	71.99	32.11
2	*2437.00	90.80 AV			1.05 V	345	58.69	32.11
3	4874.00	52.70 PK	74.00	-21.30	1.14 V	10	16.62	36.08
4	4874.00	47.00 AV	54.00	-7.00	1.14 V	10	10.92	36.08
5	7311.00	52.10 PK	74.00	-21.90	1.08 V	66	9.58	42.52
6	7311.00	39.20 AV	54.00	-14.80	1.08 V	66	-3.32	42.52

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	23deg. C, 70%RH, 971hPa	TESTED BY	Sky Liao

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

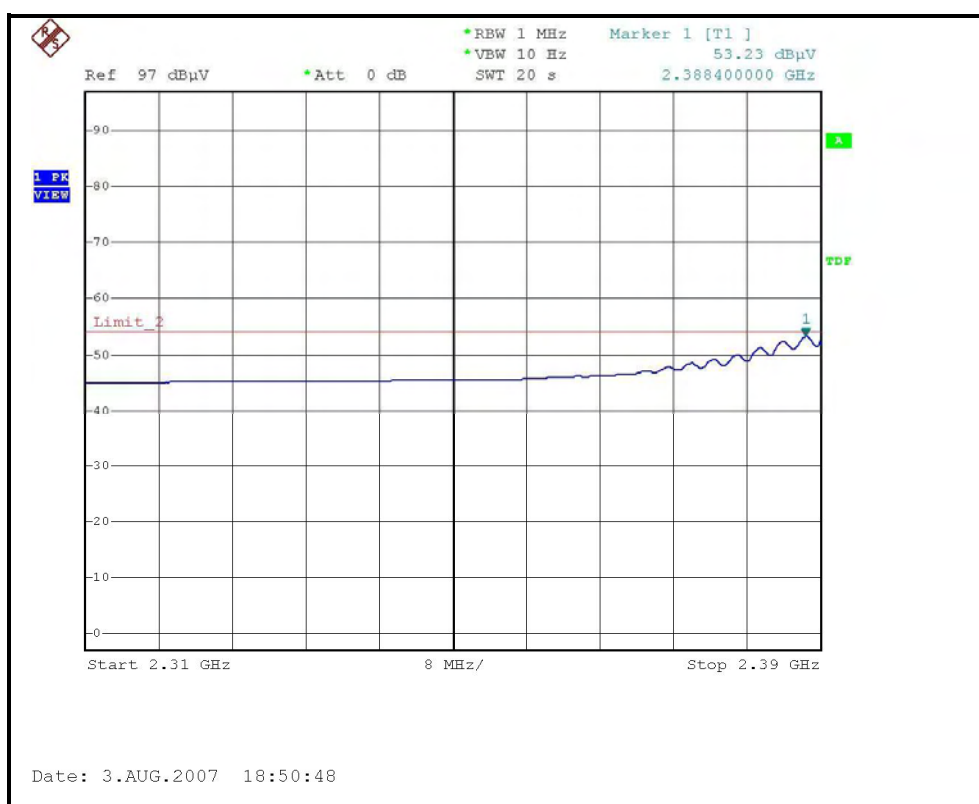
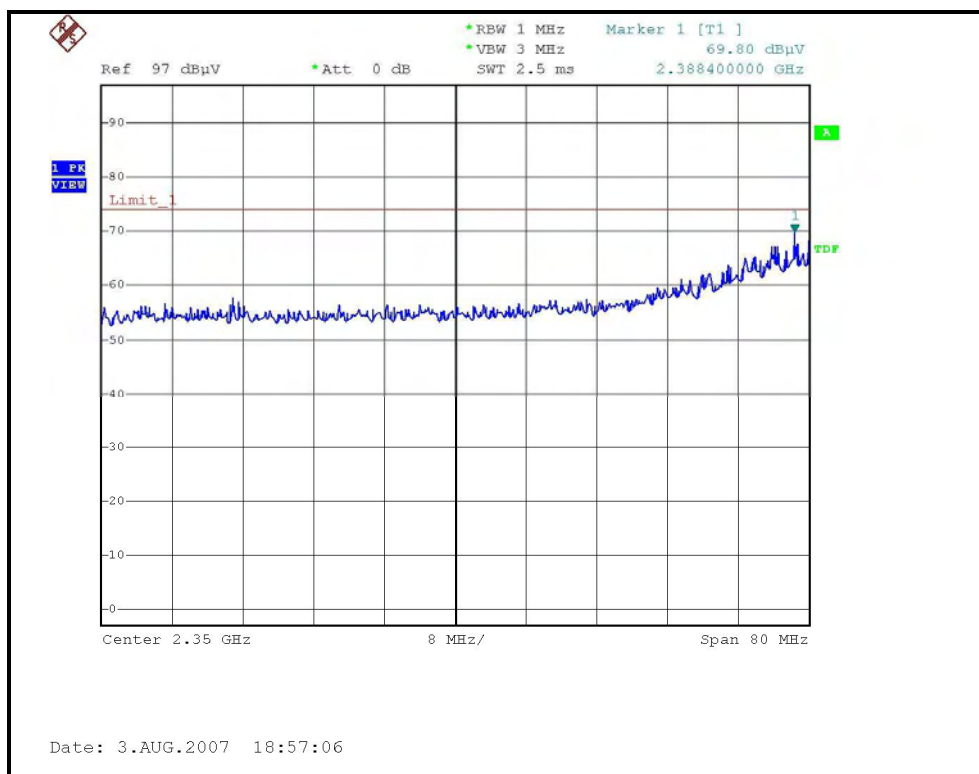
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	109.30 PK			1.28 H	190	77.13	32.17
2	*2452.00	96.20 AV			1.28 H	190	64.03	32.17
3	2483.50	66.30 PK	74.00	-7.70	1.68 H	170	34.01	32.29
4	2483.50	50.36 AV	54.00	-3.64	1.68 H	170	18.07	32.29
5	4904.00	50.30 PK	74.00	-23.70	1.70 H	350	14.15	36.15
6	4904.00	44.20 AV	54.00	-9.80	1.70 H	350	8.05	36.15
7	7356.00	52.80 PK	74.00	-21.20	1.26 H	62	10.12	42.68
8	7356.00	39.20 AV	54.00	-14.80	1.26 H	62	-3.48	42.68

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

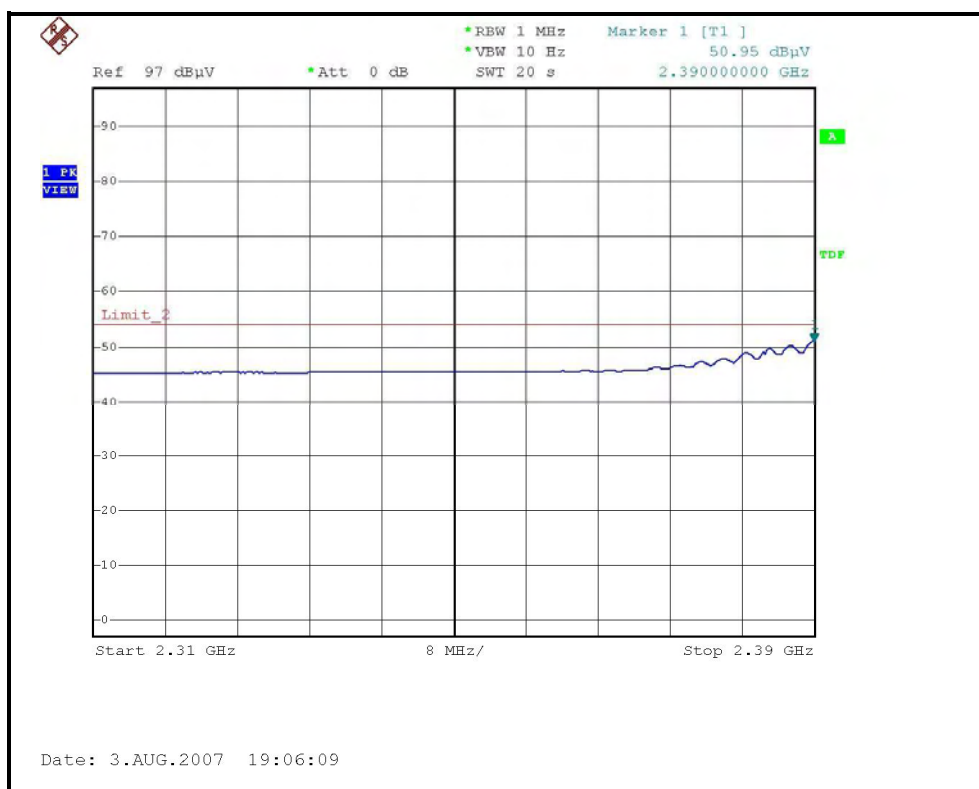
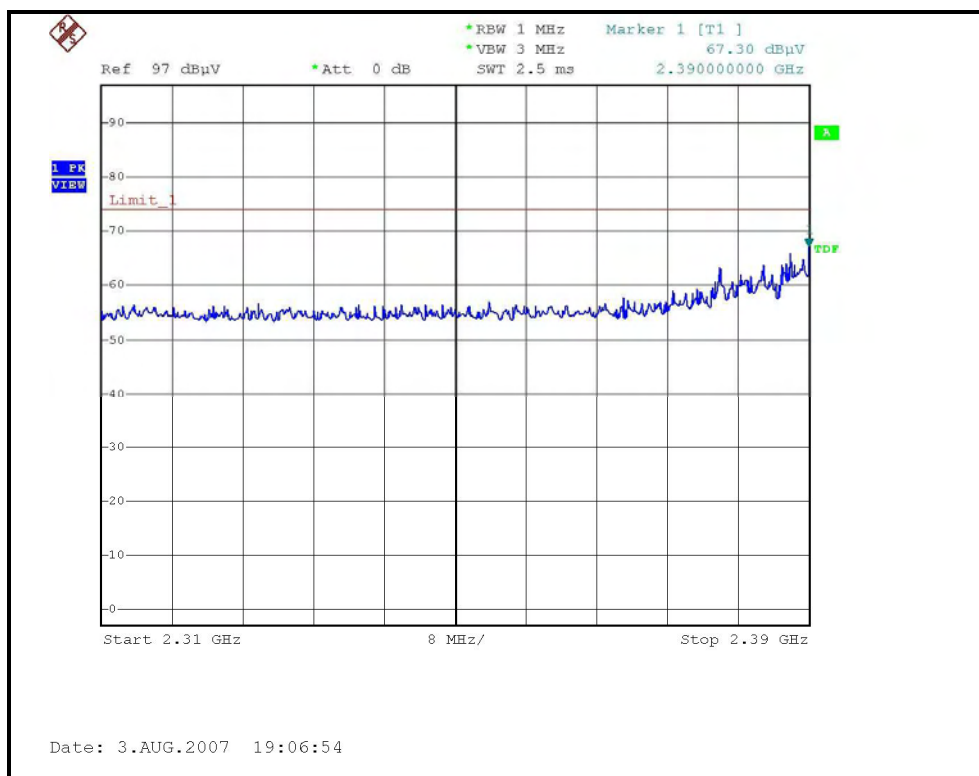
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2452.00	103.80 PK			1.34 V	348	71.63	32.17
2	*2452.00	91.50 AV			1.34 V	348	59.33	32.17
3	2484.90	66.09 PK	74.00	-7.91	1.06 V	356	33.80	32.29
4	2484.90	49.41 AV	54.00	-4.59	1.06 V	356	17.12	32.29
5	4904.00	51.80 PK	74.00	-22.20	1.68 V	20	15.65	36.15
6	4904.00	45.60 AV	54.00	-8.40	1.68 V	20	9.45	36.15
7	7356.00	52.40 PK	74.00	-21.60	1.15 V	38	9.72	42.68
8	7356.00	39.10 AV	54.00	-14.90	1.15 V	38	-3.58	42.68

- 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.

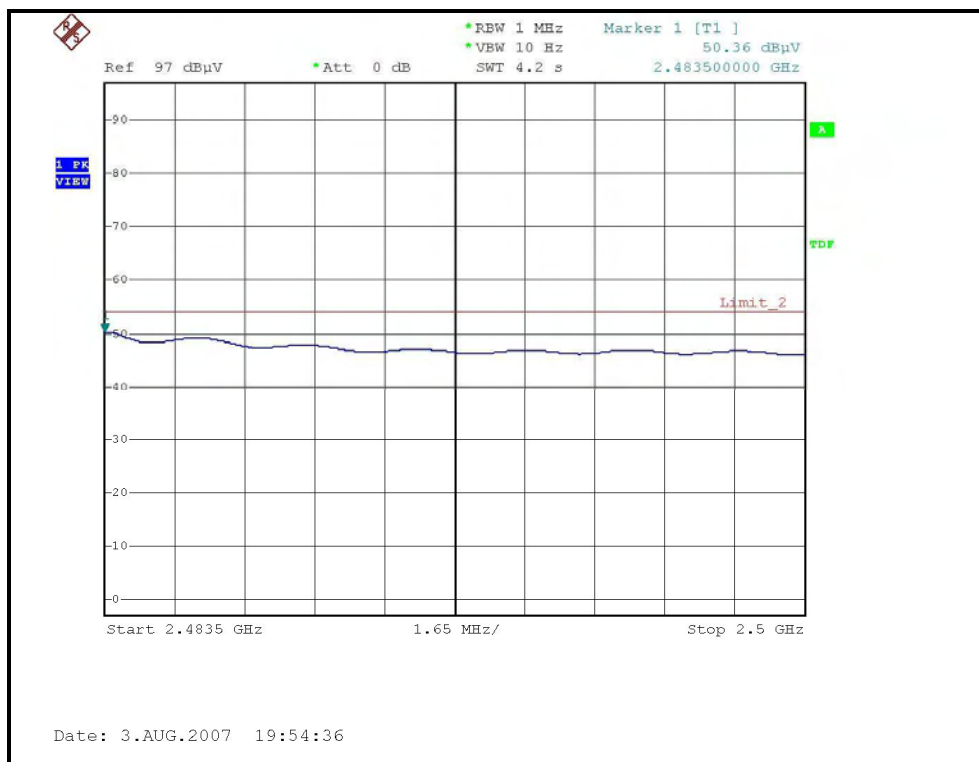
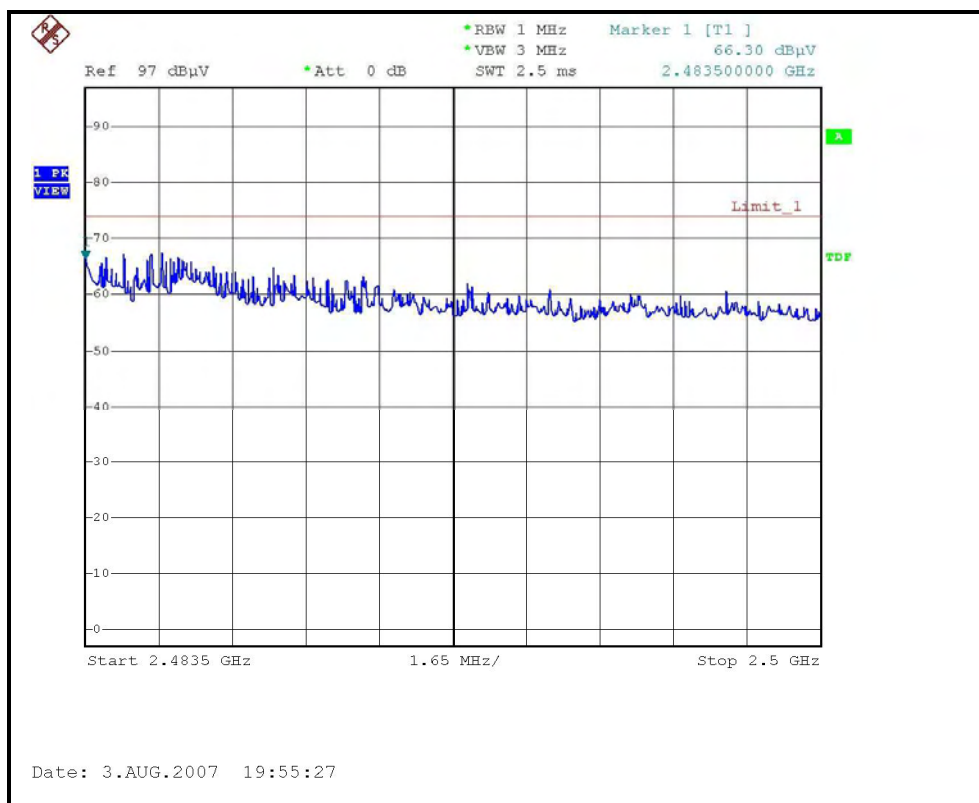
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, HORIZONTAL)



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)

