

FCC TEST REPORT (15.247)

REPORT NO.: RF970306H01

MODEL NO.: WMP-ND03

RECEIVED: March 06, 2008

TESTED: April 03 to 16, 2008

ISSUED: June 04, 2008

APPLICANT: Alpha Networks Inc.

ADDRESS: No.8 Li-shing 7th Rd., Science-based
Industrial Park, Hsinchu, Taiwan, R.O.C.

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.

This test report consists of 248 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by TAF, A2LA or any government agencies. The test results in the report only apply to the tested sample.



TESTING CERT #2177-01

Table of Contents

1.	CERTIFICATION	6
2.	SUMMARY OF TEST RESULTS	7
2.1	MEASUREMENT UNCERTAINTY	9
3.	GENERAL INFORMATION	10
3.1	GENERAL DESCRIPTION OF EUT	10
3.2	DESCRIPTION OF TEST MODES	13
3.2.1	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:	14
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	18
3.4	DESCRIPTION OF SUPPORT UNITS	19
3.5	CONFIGURATION OF SYSTEM UNDER TEST	19
4.	TEST TYPES AND RESULTS (802.11b & g, 2400 ~ 2483.5MHz Band)	20
4.1	CONDUCTED EMISSION MEASUREMENT	20
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	20
4.1.2	TEST INSTRUMENTS	20
4.1.3	TEST PROCEDURES	21
4.1.4	DEVIATION FROM TEST STANDARD	21
4.1.5	TEST SETUP	22
4.1.6	EUT OPERATING CONDITIONS	22
4.1.7	TEST RESULTS	23
4.2	RADIATED EMISSION MEASUREMENT	25
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	25
4.2.2	TEST INSTRUMENTS	26
4.2.3	TEST PROCEDURES	27
4.2.4	DEVIATION FROM TEST STANDARD	27
4.2.5	TEST SETUP	28
4.2.6	EUT OPERATING CONDITIONS	28
	Below 1GHz Test Data	29
4.2.7	TEST RESULTS	29
	Above 1GHz Test Data	30
4.2.8	TEST RESULTS	30
4.3	6dB BANDWIDTH MEASUREMENT	65
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	65
4.3.2	TEST INSTRUMENTS	65
4.3.3	TEST PROCEDURE	66
4.3.4	DEVIATION FROM TEST STANDARD	66
4.3.5	TEST SETUP	66

4.3.6	EUT OPERATING CONDITIONS	66
4.3.7	TEST RESULTS	67
4.4	MAXIMUM PEAK OUTPUT POWER	97
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	97
4.4.2	INSTRUMENTS	97
4.4.3	TEST PROCEDURES	98
4.4.4	DEVIATION FROM TEST STANDARD	98
4.4.5	TEST SETUP	98
4.4.6	EUT OPERATING CONDITIONS	98
4.4.7	TEST RESULTS	99
4.5	POWER SPECTRAL DENSITY MEASUREMENT	102
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	102
4.5.2	TEST INSTRUMENTS	102
4.5.3	TEST PROCEDURE	103
4.5.4	DEVIATION FROM TEST STANDARD	103
4.5.5	TEST SETUP	103
4.5.6	EUT OPERATING CONDITION	103
4.5.7	TEST RESULTS	104
4.6	BAND EDGES MEASUREMENT	134
4.6.1	LIMITS OF BAND EDGES MEASUREMENT	134
4.6.2	TEST INSTRUMENTS	134
4.6.3	TEST PROCEDURE	134
4.6.4	DEVIATION FROM TEST STANDARD	135
4.6.5	EUT OPERATING CONDITION	135
4.6.6	TEST RESULTS	135
4.7	ANTENNA REQUIREMENT	166
4.7.1	STANDARD APPLICABLE	166
4.7.2	ANTENNA CONNECTED CONSTRUCTION	166
5.	TEST TYPES AND RESULTS (802.11a, 5725~5850MHz Band)	167
5.1	CONDUCTED EMISSION MEASUREMENT	167
5.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	167
5.1.2	TEST INSTRUMENTS	167
5.1.3	TEST PROCEDURES	168
5.1.4	DEVIATION FROM TEST STANDARD	168
5.1.5	TEST SETUP	169
5.1.6	EUT OPERATING CONDITIONS	169
5.1.7	TEST RESULTS	170
5.2	RADIATED EMISSION MEASUREMENT	172

5.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	172
5.2.2	TEST INSTRUMENTS	173
5.2.3	TEST PROCEDURES	174
5.2.4	DEVIATION FROM TEST STANDARD	174
5.2.5	TEST SETUP	175
5.2.6	EUT OPERATING CONDITIONS	175
	Below 1GHz Test Data	176
5.2.7	TEST RESULTS	176
	Above 1GHz Test Data	177
5.2.8	TEST RESULTS	177
5.3	6dB BANDWIDTH MEASUREMENT	185
5.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	185
5.3.2	TEST INSTRUMENTS	185
5.3.3	TEST PROCEDURE	186
5.3.4	DEVIATION FROM TEST STANDARD	186
5.3.5	TEST SETUP	186
5.3.6	EUT OPERATING CONDITIONS	186
5.3.7	TEST RESULTS	187
5.4	MAXIMUM PEAK OUTPUT POWER	203
5.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	203
5.4.2	INSTRUMENTS	203
5.4.3	TEST PROCEDURES	204
5.4.4	DEVIATION FROM TEST STANDARD	204
5.4.5	TEST SETUP	204
5.4.6	EUT OPERATING CONDITIONS	204
5.4.7	TEST RESULTS	205
5.5	POWER SPECTRAL DENSITY MEASUREMENT	207
5.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	207
5.5.2	TEST INSTRUMENTS	207
5.5.3	TEST PROCEDURE	208
5.5.4	DEVIATION FROM TEST STANDARD	208
5.5.5	TEST SETUP	208
5.5.6	EUT OPERATING CONDITION	208
5.5.7	TEST RESULTS	209
5.6	BAND EDGES MEASUREMENT	225
5.6.1	LIMITS OF BAND EDGES MEASUREMENT	225
5.6.2	TEST INSTRUMENTS	225
5.6.3	TEST PROCEDURE	226

5.6.4	DEVIATION FROM TEST STANDARD	226
5.6.5	EUT OPERATING CONDITION	226
5.6.6	TEST RESULTS	227
5.7	ANTENNA REQUIREMENT	246
5.7.1	STANDARD APPLICABLE	246
5.7.2	ANTENNA CONNECTED CONSTRUCTION	246
6.	INFORMATION ON THE TESTING LABORATORIES	247
7.	APPENDIX-A- MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	248

1. CERTIFICATION

PRODUCT: IEEE 802.11a/b/g/n MiniPCI Card
BRAND NAME: Alpha
MODEL NO.: WMP-ND03
TEST SAMPLE: ENGINEERING SAMPLE
TESTED: April 03 to 16, 2008
APPLICANT: Alpha Networks Inc.
STANDARDS: FCC Part 15, Subpart C (Section 15.247),
ANSI C63.4-2003

The above equipment (Model: WMP-ND03) 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 : Claire Kuan , **DATE:** June 04, 2008
(Claire Kuan, Specialist)

TECHNICAL
ACCEPTANCE : Hank Chung , **DATE:** June 04, 2008
Responsible for RF (Hank Chung, Deputy Manager)

APPROVED BY : May Chen , **DATE:** June 04, 2008
(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 -11.66dB at 3.789MHz
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 -0.34dB at 167.23MHz
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 -12.81dB at 3.844MHz
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 -0.27dB at 167.23MHz
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, 5.15~5.25GHz 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 5.15~5.25GHz 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	2.44 dB
Radiated emissions (30MHz-1GHz)	3.94 dB
Radiated emissions (1GHz -18GHz)	2.33 dB
Radiated emissions (18GHz -40GHz)	2.55 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	IEEE 802.11a/b/g/n MiniPCI Card
MODEL NO.	WMP-ND03
FCC ID	RRKWMPND03
POWER SUPPLY	DC 5V 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 HT20 MCS0~7 (800ns GI): 65 / 58.5 / 52 / 39 / 26 / 19.5 / 13 / 6.5Mbps. HT20 MCS8~15 (800ns GI): 130 / 117 / 104 / 78 / 52 / 39 / 26 / 13Mbps. HT40 MCS0~7 (800ns GI): 135 / 121.5 / 108 / 81 / 54 / 40.5 / 27 / 13.5Mbps. HT40 MCS8~15 (800ns GI): 270 / 243 / 216 / 162 / 108 / 81 / 54 / 27Mbps. HT20 MCS0~7 (400ns GI): 72.2 / 65 / 57.8 / 43.3 / 28.9 / 21.7 / 14.4 / 7.2Mbps. HT20 MCS8~15 (400ns GI): 144.444 / 130 / 115.556 / 86.667 / 57.778 / 43.333 / 28.889 / 14.444Mbps. HT40 MCS0~7 (400ns GI): 150 / 135 / 120 / 90 / 60 / 45 / 30 / 15Mbps. HT40 MCS8~15 (400ns GI): 300 / 270 / 240 / 180 / 120 / 90 / 60 / 30Mbps.
FREQUENCY RANGE	For 15.407 802.11a: 5.18 ~ 5.24GHz
	For 15.247 802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	For 15.407 4 for 802.11a, draft 802.11n (20MHz) 2 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, draft 802.11n (20MHz) 3 for draft 802.11n (40MHz)

MAXIMUM OUTPUT POWER	For 15.407 802.11a: 29.063mW draft 802.11n (20MHz): 28.621mW draft 802.11n (40MHz): 44.274mW For 15.247(2.4GHz) 802.11b: 442.301mW 802.11g: 439.189mW draft 802.11n (20MHz): 265.484mW draft 802.11n (40MHz): 152.907mW For 15.247(5GHz) 802.11a: 329.592mW draft 802.11n (20MHz): 515.461mW draft 802.11n (40MHz): 313.455mW
ANTENNA TYPE	Please see note 1
DATA CABLE	NA

NOTE:

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

No	Model No.	Antenna Gain	For 2.4GHz Gain (dBi)	For 5.15~5.25GHz Gain (dBi)	For 5.725~5.850GHz Gain (dBi)	Antenna Type	Connector
1	DAP-2590	Gain (dBi)	4	6.10	7.12	Dipole	Reverse SMA
		Cable Loss (dB)	0.3		0.6		
		Net Gain (dB)	3.7	5.5	6.52		
2	ALP05-220170	Gain (dBi)	4.83	4.98	6.00	Dipole	RP SMA Plug
		Cable Loss (dB)	0.3		0.6		
		Net Gain (dB)	4.53	4.38	5.4		

Note: From above antennas, 2.4GHz worst case was antenna 2 and 5GHz worst case was antenna 1.

2. The EUT incorporates a MIMO function with 802.11a, 802.11b, 802.11g, draft 802.11n. Physically, the EUT provides three completed transmit and three completed receivers.

3. The EUT is 3 * 3 spatial MIMO (3Tx & 3Rx) without beam forming function. The antenna configurations are three transmitter antennas and three receiver antennas, as there are 3 dipole antennas. Spatial multiplexing modes for simultaneous transmission using 3 antennas, and for simultaneous receiver using 3 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 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)	CHAIN(1) (TX)	CHAIN(2) (TX)
A	802.11 b	√	√	√
B	802.11 g	√	√	√
C	802.11 a	√	√	√
D	DRAFT 802.11n(20MHz)	√	√	√
E	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. From above mode, the different modes were chosen for pretest.

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
For 2.4 GHz 802.11b	1 to 11	6	DSSS	DBPSK	1	A
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1	OFDM	BPSK	13	D

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 802.11b	1 to 11	1	DSSS	DBPSK	1	A
For 5 GHz Draft 802.11n (40MHz)	1 to 5	1	OFDM	BPSK	13	E

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	DBPSK, CCK	1, 11	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	13	D
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	27	E
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6	C
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1, 3, 5	OFDM	BPSK	13	D
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	27	E

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	DBPSK, CCK	1, 11	A
802.11g	1 to 11	1, 11	OFDM	BPSK	6	B
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	13	D
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	27	E
802.11a	1 to 5	1, 5	OFDM	BPSK	6	C
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1, 5	OFDM	BPSK	13	D
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	27	E

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	DBPSK, CCK	1, 11	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
For 2.4 GHz Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	13	D
For 2.4 GHz Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	27	E
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6	C
For 5 GHz Draft 802.11n (20MHz)	1 to 5	1, 3, 5	OFDM	BPSK	13	D
For 5 GHz Draft 802.11n (40MHz)	1 to 3	1, 3	OFDM	BPSK	27	E

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an IEEE 802.11a/b/g/n MiniPCI Card. 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

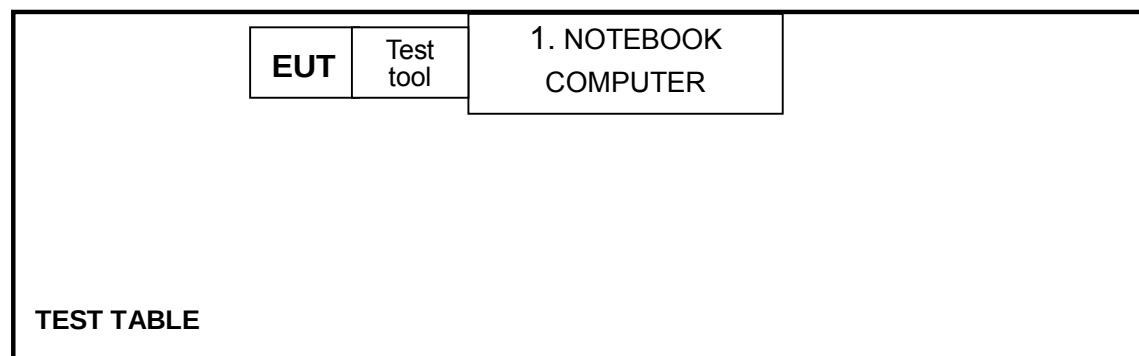
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP18L	6976685584	FCC DoC

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

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
Test Receiver	ESCS 30	847124/029	Mar. 28, 2009
Line-Impedance Stabilization Network(for EUT)	ESH3-Z5	848773/004	Nov. 08, 2008
Line-Impedance Stabilization Network(for Peripheral)	ENV-216	100071	Nov. 26, 2008
RF Cable (JETBAO)	RG233/U	Cable_CB_01	Dec. 09, 2008
50 ohms Terminator	50	3	Nov. 15, 2008
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. The measurement uncertainty is 2.44 dB, which is calculated as per the document CISPR 16-4. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

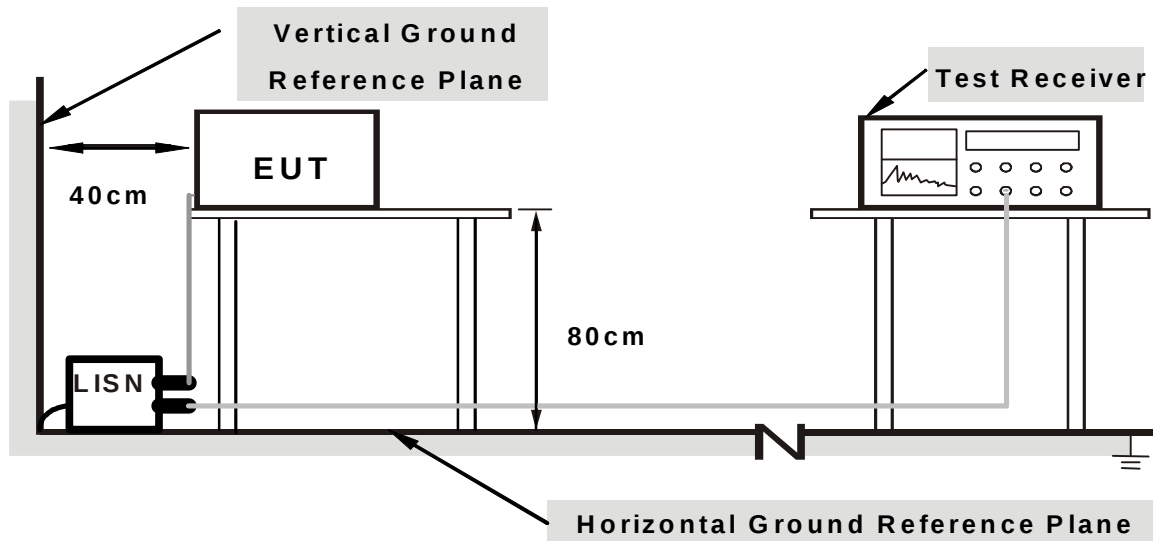
4.1.3 TEST PROCEDURES

- 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 test board and placed on the testing table.
- b. The support unit 1 (Notebook Computer) ran a test program “ART v0_5_b25ALL” to enable EUT under transmission condition continuously at specific channel frequency.

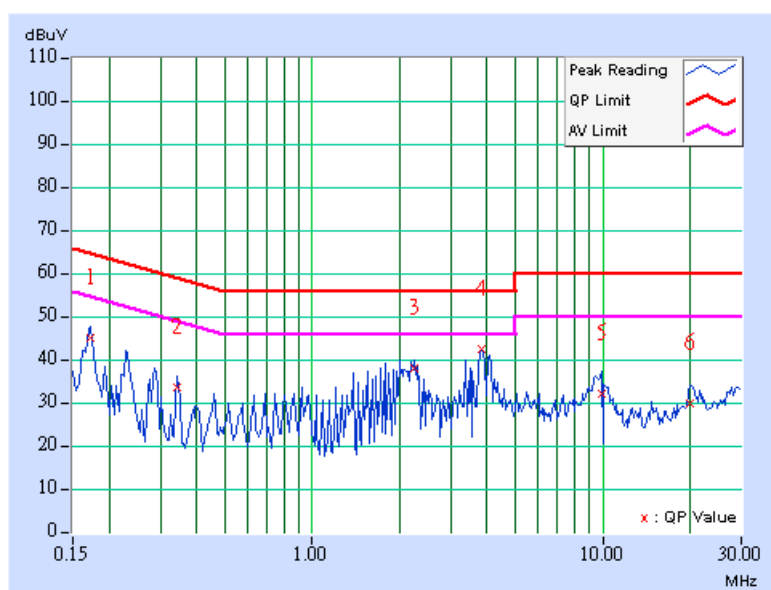
4.1.7 TEST RESULTS

DRAFT 802.11b DSSS MODULATION:

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line (L)
MODULATION TYPE	DBPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 960hPa	TESTED BY	Rex Huang

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	0.173	9.65	34.92	-	44.57	-	64.79	54.79	-20.23	-
2	0.341	9.66	23.64	-	33.30	-	59.17	49.17	-25.87	-
3	2.238	9.85	27.90	-	37.75	-	56.00	46.00	-18.25	-
4	3.844	9.79	32.44	-	42.23	-	56.00	46.00	-13.77	-
5	9.875	10.13	22.05	-	32.18	-	60.00	50.00	-27.82	-
6	19.969	10.24	19.67	-	29.91	-	60.00	50.00	-30.09	-

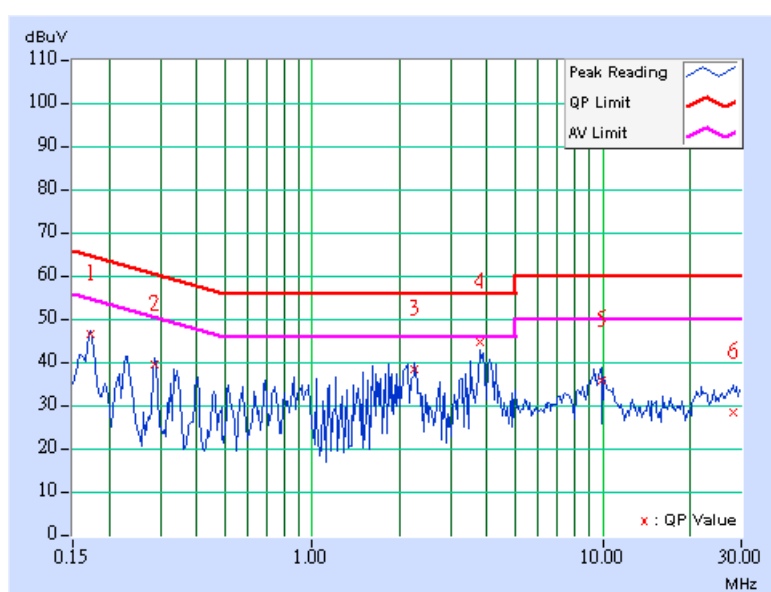
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Neutral (N)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Timmy Hu

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	0.173	9.65	36.22	-	45.87	-	64.79	54.79	-18.93	-
2	0.287	9.65	29.13	-	38.78	-	60.62	50.62	-21.84	-
3	2.238	9.85	28.26	-	38.11	-	56.00	46.00	-17.89	-
4	3.789	9.79	34.55	-	44.34	-	56.00	46.00	-11.66	-
5	9.930	10.17	25.68	-	35.85	-	60.00	50.00	-24.15	-
6	28.043	10.42	18.18	-	28.60	-	60.00	50.00	-31.40	-

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



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	Oct. 04, 2008
ROHDE & SCHWARZ Test Receiver	ESCS30	100375	Mar. 26, 2009
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	July 26, 2008
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 16, 2008
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 27, 2009
R&S Loop Antenna	HFH2-Z2	881058/15	Nov. 29, 2008
RF Switches (ARNITSU)	CS-201	1565157	Aug. 13, 2008
RF CABLE (Chaintek)	SF102	22054-2	Nov. 14, 2008
RF Cable(RICHTEC)	9913-30M N-N Cable	STCCAB-30M-1 GHz	Aug. 13, 2008
Software	ADT_Radiated_V 7.6.15.8	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 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 3789C-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 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

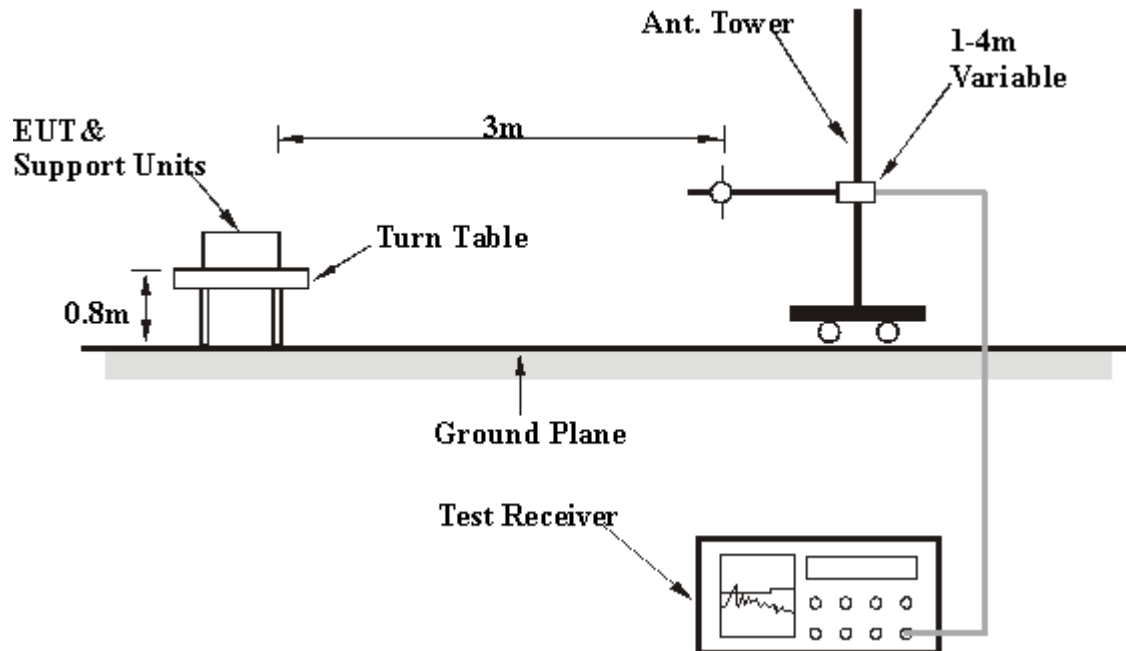
NOTE:

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 the 4.1.6

Below 1GHz Test Data

4.2.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA : 802.11b DBPSK MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 72%RH 960hPa	TESTED BY	Frank Liu

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	133.88	40.83 QP	43.50	-2.67	2.20 H	21	26.96	13.87
2	167.23	43.16 QP	43.50	-0.34	2.20 H	0	28.60	14.56
3	200.10	39.34 QP	43.50	-4.16	1.51 H	243	27.31	12.03
4	233.41	35.24 QP	46.00	-10.76	1.26 H	351	22.68	12.56
5	300.80	31.17 QP	46.00	-14.83	1.06 H	304	14.57	16.60
6	315.00	31.09 QP	46.00	-14.91	1.04 H	21	14.40	16.69
7	390.30	34.87 QP	46.00	-11.13	1.00 H	110	17.04	17.83
8	420.00	34.27 QP	46.00	-11.73	1.00 H	282	15.49	18.78
9	455.18	40.08 QP	46.00	-5.92	2.02 H	275	20.08	20.00
10	600.00	31.88 QP	46.00	-14.12	1.17 H	298	8.34	23.54
11	724.99	35.63 QP	46.00	-10.37	1.16 H	147	9.74	25.89
12	767.67	31.62 QP	46.00	-14.38	1.00 H	34	4.08	27.54
13	835.58	33.11 QP	46.00	-12.89	1.66 H	210	4.76	28.35
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	167.25	35.63 QP	43.50	-7.87	2.00 V	307	21.08	14.55
2	201.20	28.14 QP	43.50	-15.36	1.07 V	309	16.09	12.05
3	334.00	27.60 QP	46.00	-18.40	1.68 V	82	10.79	16.81
4	432.06	27.86 QP	46.00	-18.14	1.60 V	211	8.64	19.22
5	499.96	27.19 QP	46.00	-18.81	1.00 V	179	6.14	21.05
6	600.00	29.56 QP	46.00	-16.44	1.70 V	128	6.02	23.54
7	866.59	29.77 QP	46.00	-16.23	1.81 V	21	0.90	28.87

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- TRANSFER RATE 1Mbps

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	54.64 PK	74.00	-19.36	1.54 H	76	24.24	30.40
2	2390.00	43.01 AV	54.00	-10.99	1.54 H	76	12.61	30.40
3	*2412.00	100.30 PK			1.54 H	76	69.81	30.49
4	*2412.00	98.70 AV			1.54 H	76	68.21	30.49
5	4824.00	48.60 PK	74.00	-25.40	1.72 H	106	12.91	35.69
6	4824.00	44.40 AV	54.00	-9.60	1.72 H	106	8.71	35.69
7	7236.00	51.40 PK	80.30	-28.90	1.36 H	36	9.16	42.24
8	7236.00	38.60 AV	78.70	-40.10	1.36 H	36	-3.64	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	2386.96	63.00 PK	74.00	-11.00	1.64 V	84	32.62	30.38
2	2386.96	52.02 AV	54.00	-1.98	1.64 V	84	21.64	30.38
3	*2412.00	118.00 PK			1.64 V	84	87.51	30.49
4	*2412.00	114.80 AV			1.64 V	84	84.31	30.49
5	4824.00	55.70 PK	74.00	-18.30	1.15 V	80	20.01	35.69
6	4824.00	53.30 AV	54.00	-0.70	1.15 V	80	17.61	35.69
7	7236.00	53.20 PK	98.00	-44.80	1.18 V	265	10.96	42.24
8	7236.00	39.80 AV	94.80	-55.00	1.18 V	265	-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. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	55.00 PK	74.00	-19.00	1.64 H	92	24.60	30.40
2	2390.00	43.02 AV	54.00	-10.98	1.64 H	92	12.62	30.40
3	*2437.00	101.10 PK			1.64 H	92	70.49	30.61
4	*2437.00	98.60 AV			1.64 H	92	67.99	30.61
5	2484.45	55.49 PK	74.00	-18.51	1.64 H	92	24.67	30.82
6	2484.45	43.54 AV	54.00	-10.46	1.64 H	92	12.72	30.82
7	4874.00	50.00 PK	74.00	-24.00	1.77 H	122	14.20	35.80
8	4874.00	45.10 AV	54.00	-8.90	1.77 H	122	9.30	35.80
9	7311.00	52.20 PK	74.00	-21.80	1.22 H	30	9.68	42.52
10	7311.00	38.90 AV	54.00	-15.10	1.22 H	30	-3.62	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	2389.36	60.60 PK	74.00	-13.40	1.60 V	78	30.21	30.39
2	2389.36	48.55 AV	54.00	-5.45	1.60 V	78	18.16	30.39
3	*2437.00	117.50 PK			1.60 V	78	86.89	30.61
4	*2437.00	115.30 AV			1.60 V	78	84.69	30.61
5	2484.35	62.79 PK	74.00	-11.21	1.60 V	78	31.97	30.82
6	2484.35	52.71 AV	54.00	-1.29	1.60 V	78	21.89	30.82
7	4874.00	55.60 PK	74.00	-18.40	1.13 V	80	19.80	35.80
8	4874.00	53.10 AV	54.00	-0.90	1.13 V	80	17.30	35.80
9	7311.00	53.40 PK	74.00	-20.60	1.10 V	272	10.88	42.52
10	7311.00	40.20 AV	54.00	-13.80	1.10 V	272	-2.32	42.52

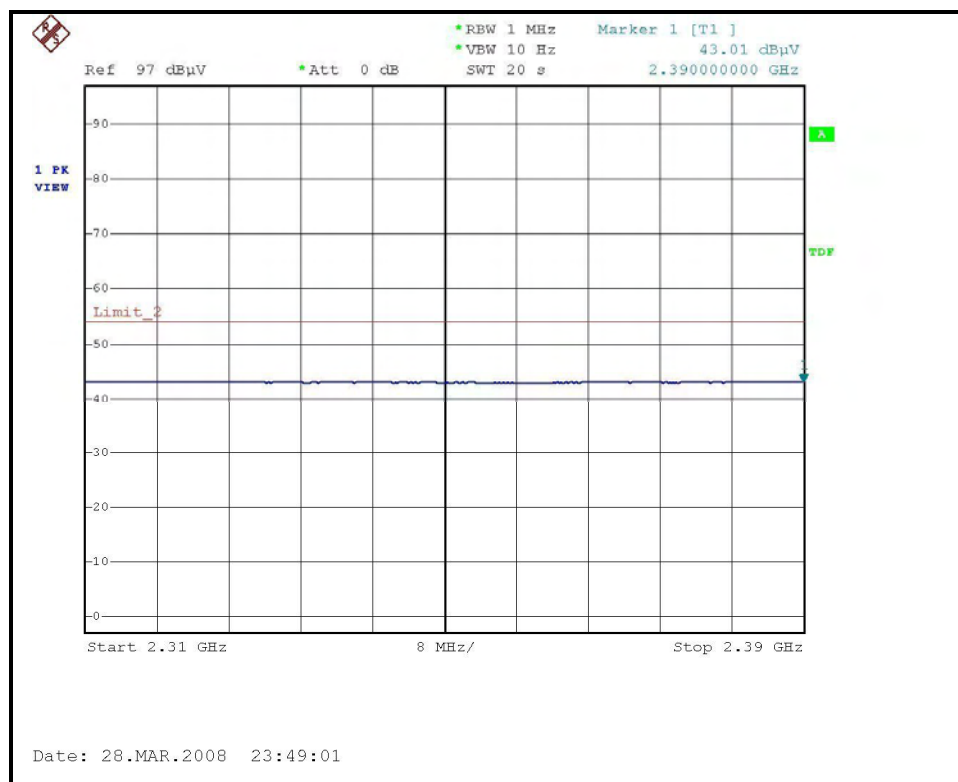
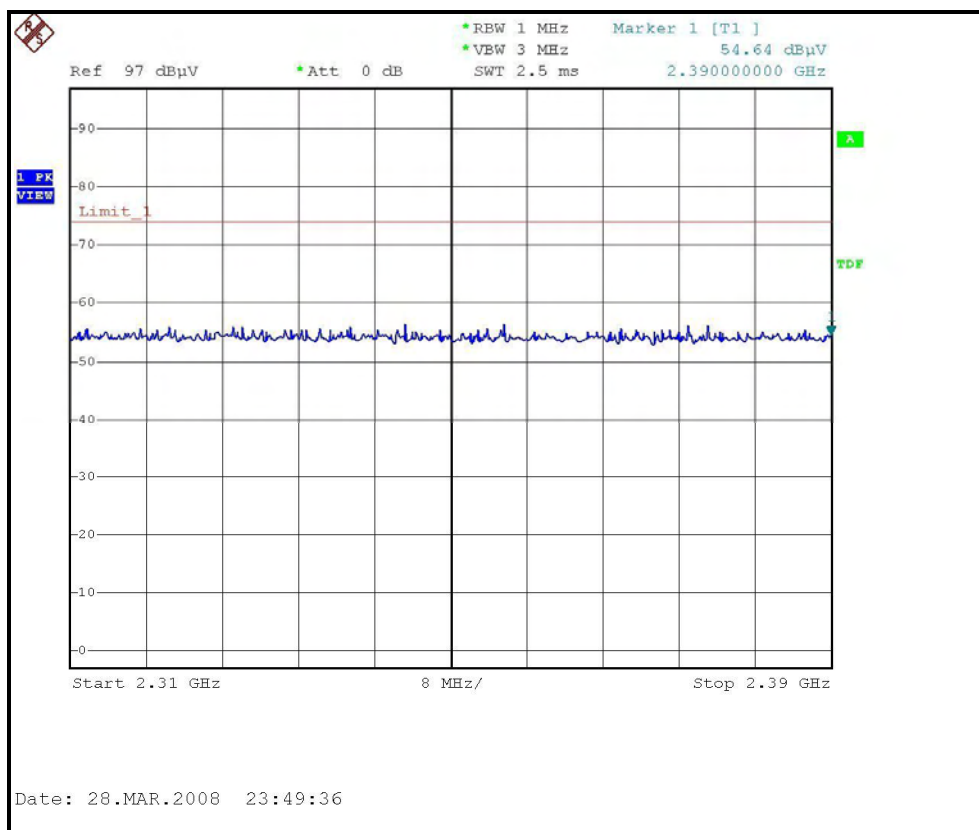
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	TESTED BY	Sky Liao

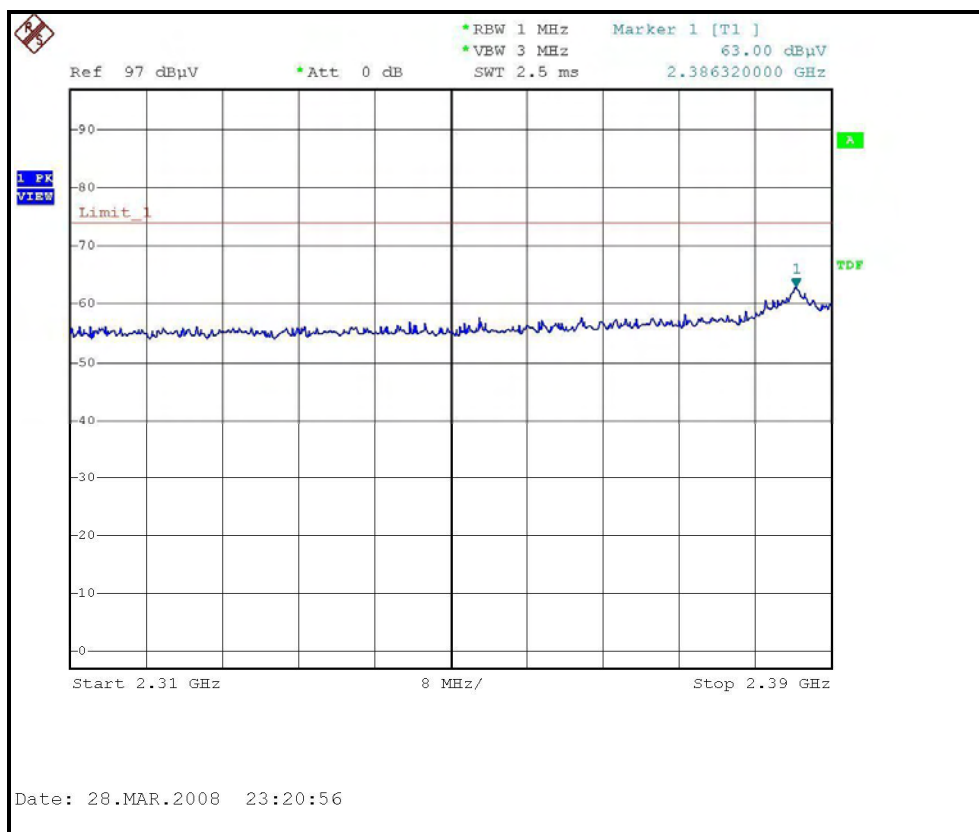
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	100.10 PK			1.60 H	98	69.38	30.72
2	*2462.00	98.00 AV			1.60 H	98	67.28	30.72
3	2483.50	55.55 PK	74.00	-18.45	1.60 H	98	24.73	30.82
4	2483.50	43.42 AV	54.00	-10.58	1.60 H	98	12.60	30.82
5	4924.00	49.80 PK	74.00	-24.20	1.68 H	114	13.90	35.90
6	4924.00	44.60 AV	54.00	-9.40	1.68 H	114	8.70	35.90
7	7236.00	52.00 PK	80.10	-28.10	1.25 H	22	9.76	42.24
8	7236.00	38.80 AV	78.00	-39.20	1.25 H	22	-3.44	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	*2462.00	117.30 PK			1.38 V	90	86.58	30.72
2	*2462.00	114.20 AV			1.38 V	90	83.48	30.72
3	2487.26	63.46 PK	74.00	-10.54	1.60 V	92	32.63	30.83
4	2487.26	52.96 AV	54.00	-1.04	1.60 V	92	22.13	30.83
5	4924.00	55.50 PK	74.00	-18.50	1.32 V	80	19.60	35.90
6	4924.00	52.80 AV	54.00	-1.20	1.32 V	80	16.90	35.90
7	7386.00	52.90 PK	74.00	-21.10	1.12 V	292	10.10	42.80
8	7386.00	39.80 AV	54.00	-14.20	1.12 V	292	-3.00	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. “ * “: Fundamental frequency.

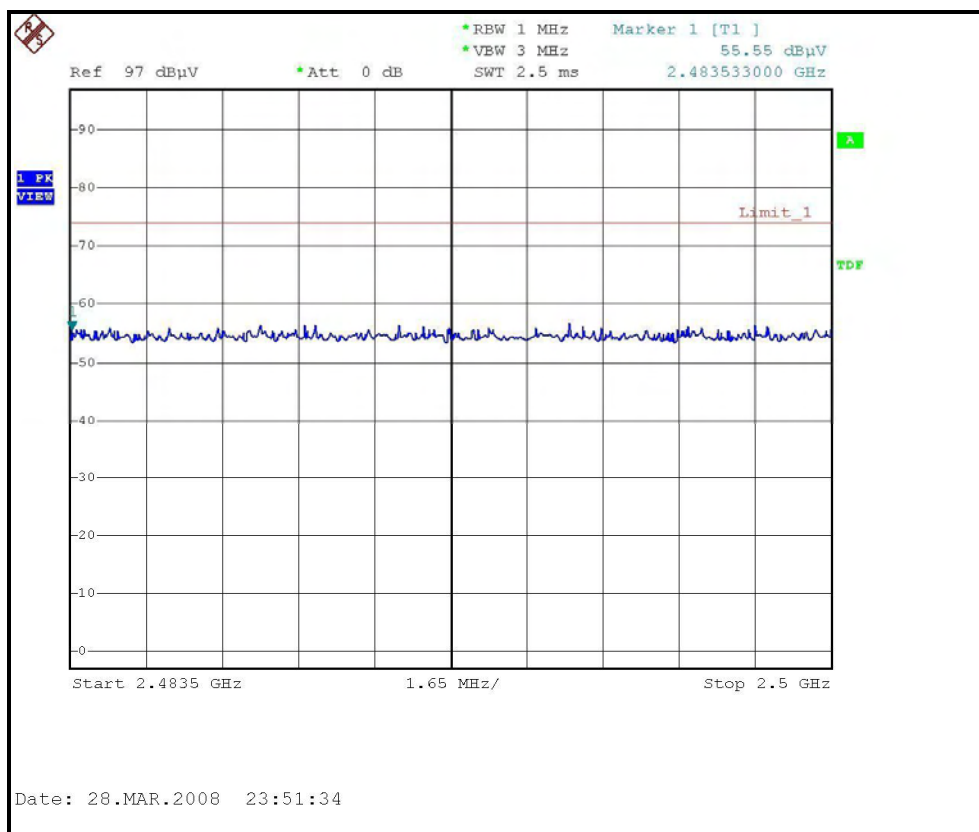
RESTRICTED BANDEDGE (802.11b MODE,CH 1, HORIZONTAL)



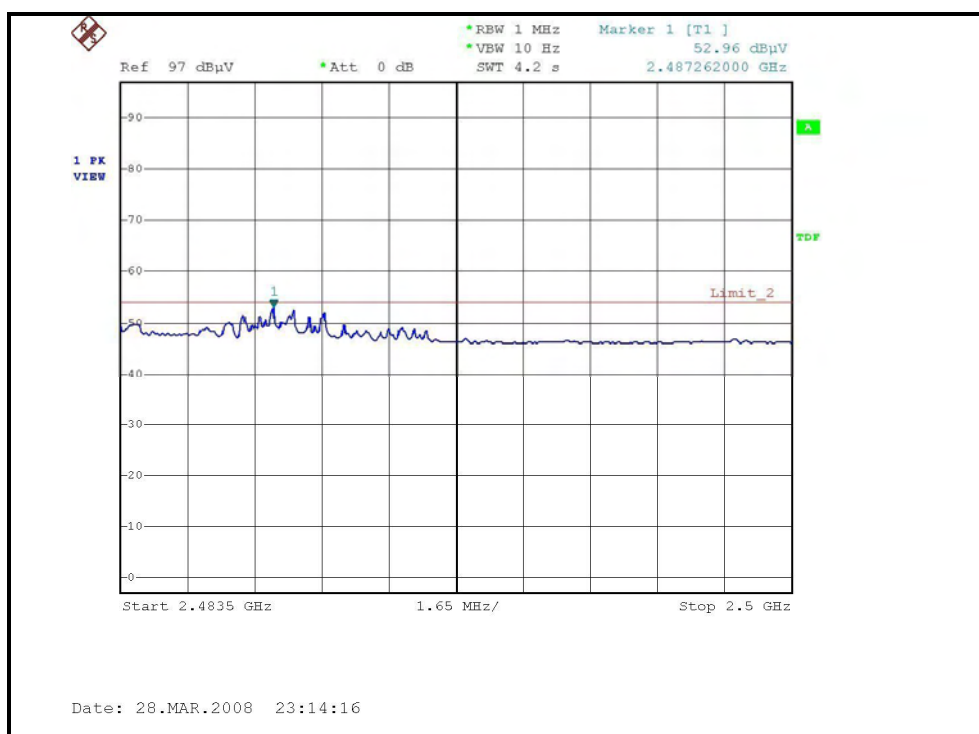
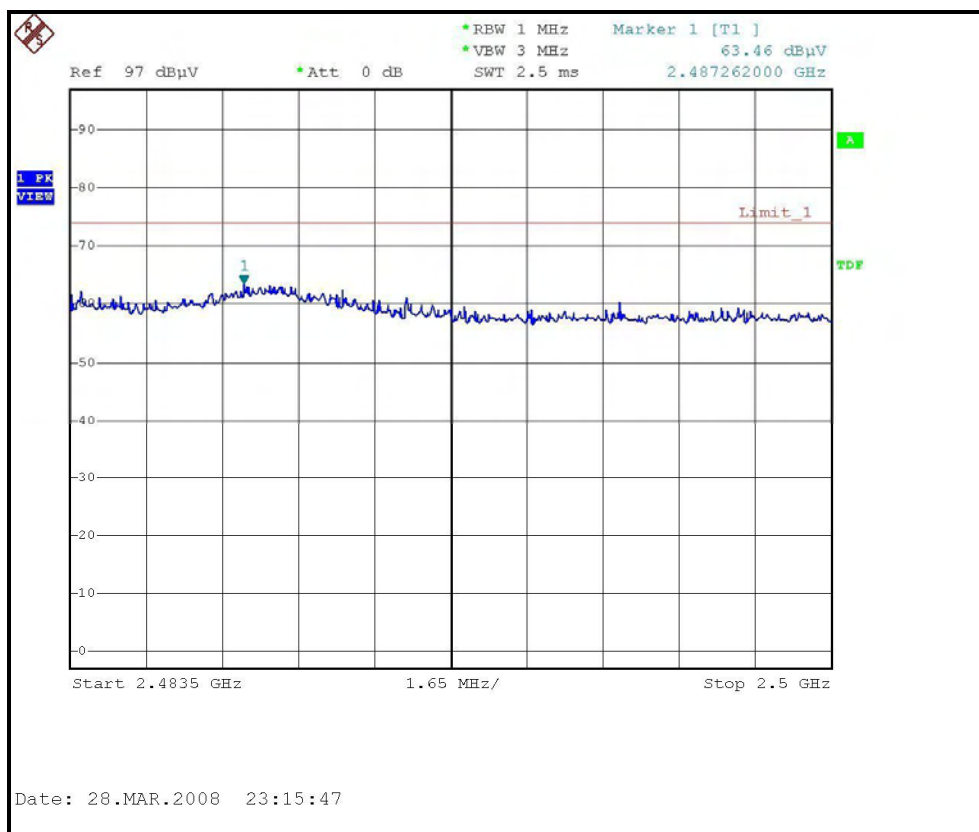
RESTRICTED BANDEDGE (802.11b MODE,CH 1, VERTICAL)



RESTRICTED BANDEDGE (802.11b MODE,CH 11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE,CH 11, VERTICAL)



802.11b DSSS MODULATION- TRANSFER RATE 11Mbps

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	2386.48	59.02 PK	74.00	-14.98	1.80 H	285	28.97	30.05
2	2386.48	45.25 AV	54.00	-8.75	1.80 H	285	15.20	30.05
3	*2412.00	109.40 PK			1.46 H	285	79.25	30.15
4	*2412.00	96.80 AV			1.46 H	285	66.65	30.15
5	4824.00	49.30 PK	74.00	-24.70	1.72 H	186	13.71	35.59
6	4824.00	35.00 AV	54.00	-19.00	1.72 H	186	-0.59	35.59
7	7236.00	52.90 PK	89.40	-36.50	1.32 H	180	11.15	41.75
8	7236.00	39.20 AV	76.80	-37.60	1.32 H	180	-2.55	41.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2386.48	68.29 PK	74.00	-5.71	1.40 V	265	38.24	30.05
2	2386.48	52.24 AV	54.00	-1.76	1.40 V	265	22.19	30.05
3	*2412.00	121.00 PK			1.40 V	265	90.85	30.15
4	*2412.00	108.60 AV			1.40 V	265	78.45	30.15
5	4824.00	60.20 PK	74.00	-13.80	1.24 V	80	24.61	35.59
6	4824.00	45.00 AV	54.00	-9.00	1.24 V	80	9.41	35.59
7	7236.00	54.20 PK	101.00	-46.80	1.30 V	85	12.45	41.75
8	7236.00	40.20 AV	88.60	-48.40	1.30 V	85	-1.55	41.75

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	111.10 PK			1.78 H	270	80.86	30.24
2	*2437.00	100.20 AV			1.78 H	270	69.96	30.24
3	4874.00	52.00 PK	74.00	-22.00	1.72 H	282	16.30	35.70
4	4874.00	37.70 AV	54.00	-16.30	1.72 H	282	2.00	35.70
5	7311.00	52.50 PK	74.00	-21.50	1.30 H	165	10.56	41.94
6	7311.00	40.00 AV	54.00	-14.00	1.30 H	165	-1.94	41.94
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	124.40 PK			1.35 V	279	94.16	30.24
2	*2437.00	112.20 AV			1.35 V	279	81.96	30.24
3	4874.00	61.90 PK	74.00	-12.10	1.12 V	80	26.20	35.70
4	4874.00	47.50 AV	54.00	-6.50	1.12 V	80	11.80	35.70
5	7311.00	54.40 PK	74.00	-19.60	1.26 V	80	12.46	41.94
6	7311.00	40.40 AV	54.00	-13.60	1.26 V	80	-1.54	41.94

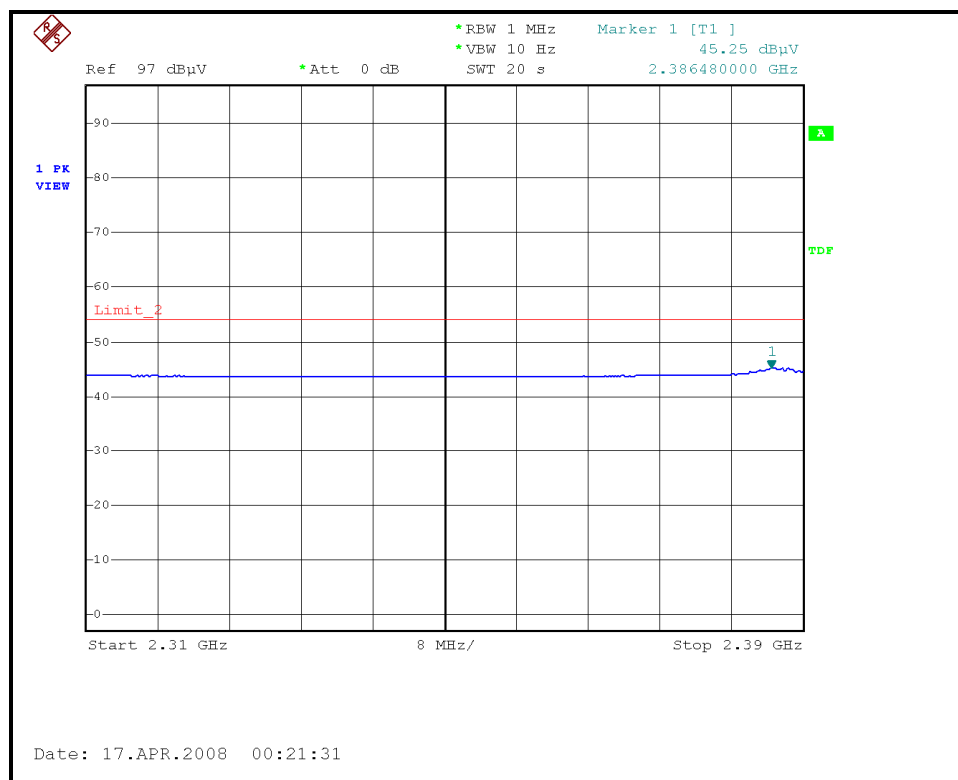
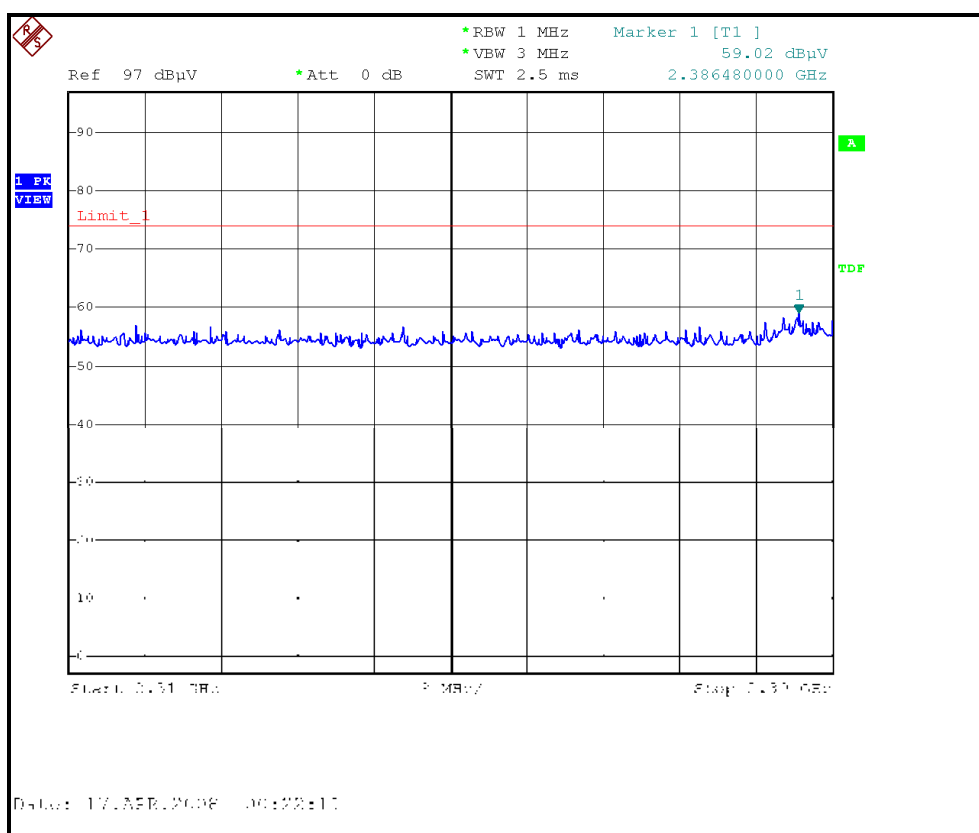
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	TESTED BY	Sky Liao

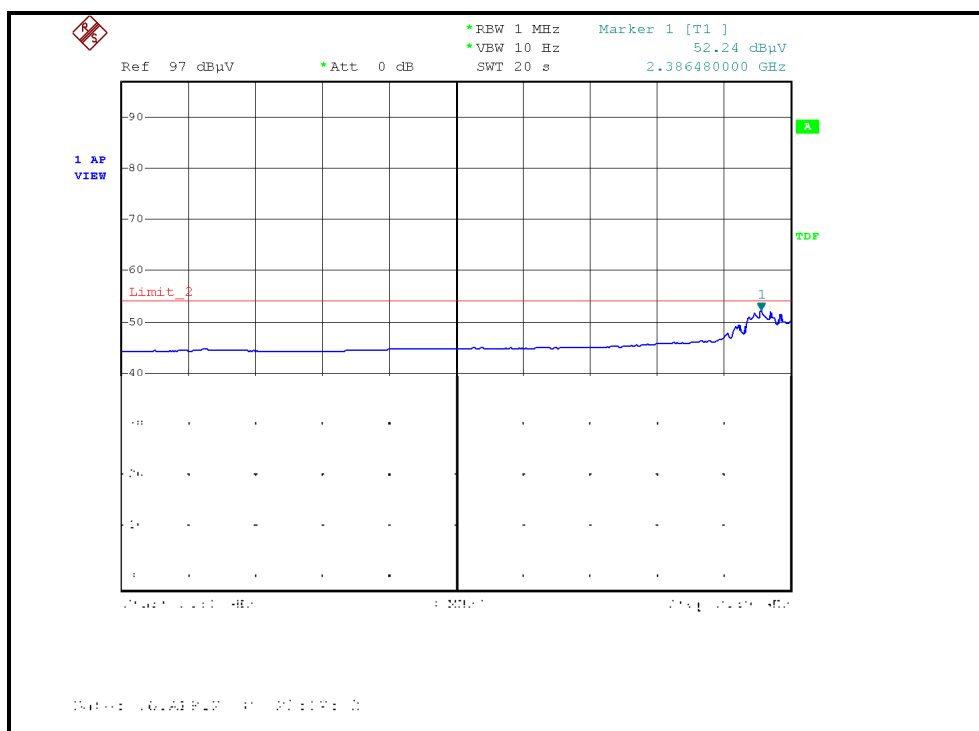
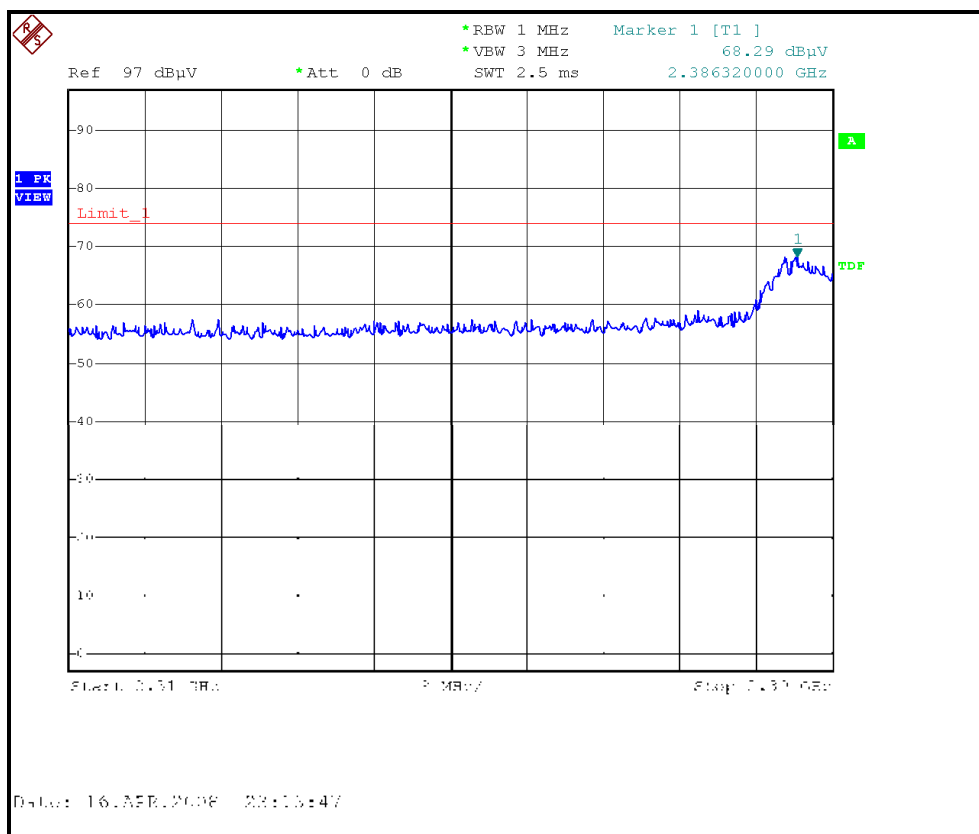
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	109.10 PK			1.44 H	228	78.76	30.34
2	*2462.00	96.10 AV			1.44 H	228	65.76	30.34
3	2483.50	56.42 PK	74.00	-17.58	1.44 H	228	25.99	30.43
4	2483.50	44.47 AV	54.00	-9.53	1.44 H	228	14.04	30.43
5	4924.00	48.50 PK	74.00	-25.50	1.80 H	311	12.70	35.80
6	4924.00	34.60 AV	54.00	-19.40	1.80 H	311	-1.20	35.80
7	7386.00	52.60 PK	74.00	-21.40	1.36 H	172	10.47	42.13
8	7386.00	40.20 AV	54.00	-13.80	1.36 H	172	-1.93	42.13
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	122.60 PK			1.32 V	264	92.26	30.34
2	*2462.00	110.40 AV			1.32 V	264	80.06	30.34
3	2486.86	65.57 PK	74.00	-8.43	1.33 V	265	35.13	30.44
4	2486.86	52.97 AV	54.00	-1.03	1.33 V	265	22.53	30.44
5	4924.00	57.80 PK	74.00	-16.20	1.32 V	75	22.00	35.80
6	4924.00	43.70 AV	54.00	-10.30	1.32 V	75	7.90	35.80
7	7386.00	54.30 PK	74.00	-19.70	1.34 V	85	12.17	42.13
8	7386.00	41.00 AV	54.00	-13.00	1.34 V	85	-1.13	42.13

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

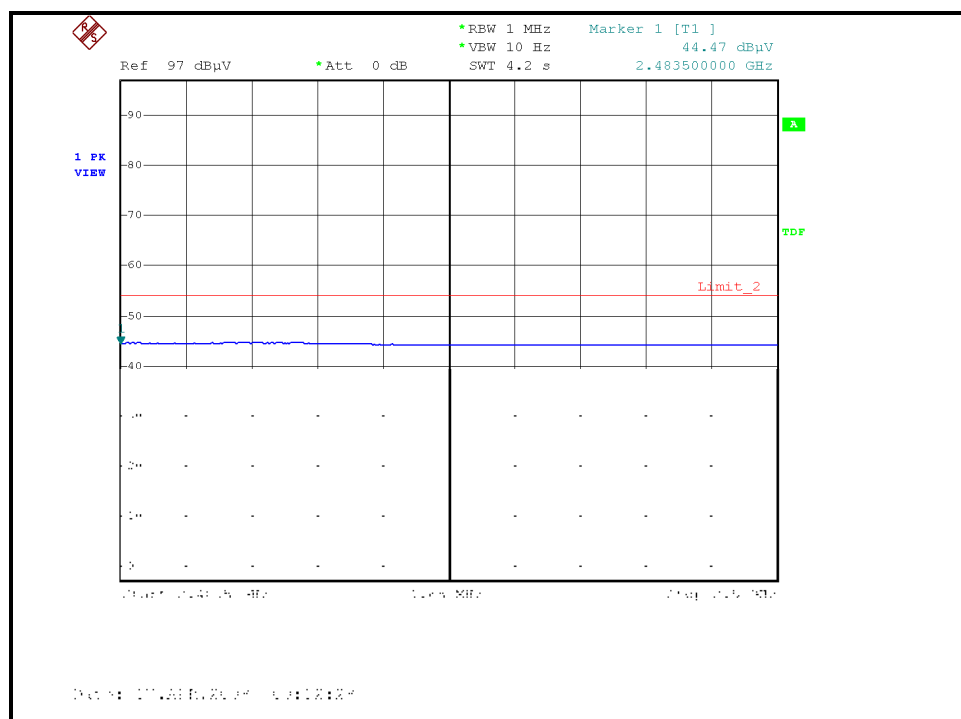
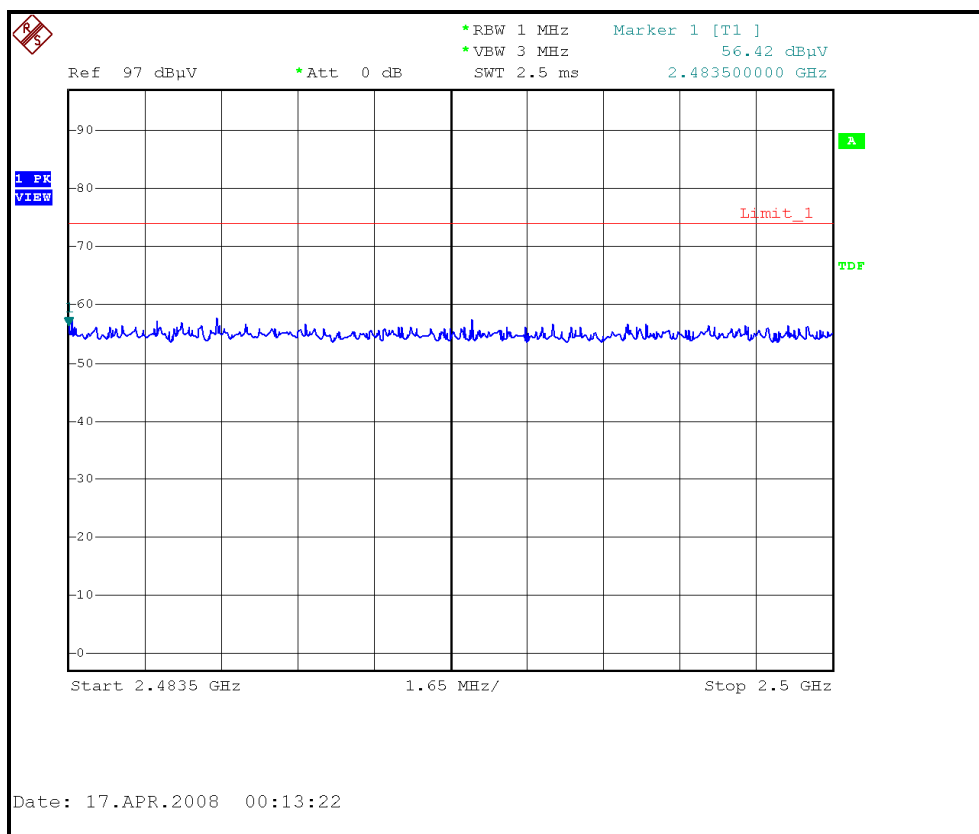
RESTRICTED BANDEDGE (802.11b MODE, CH 1, HORIZONTAL)



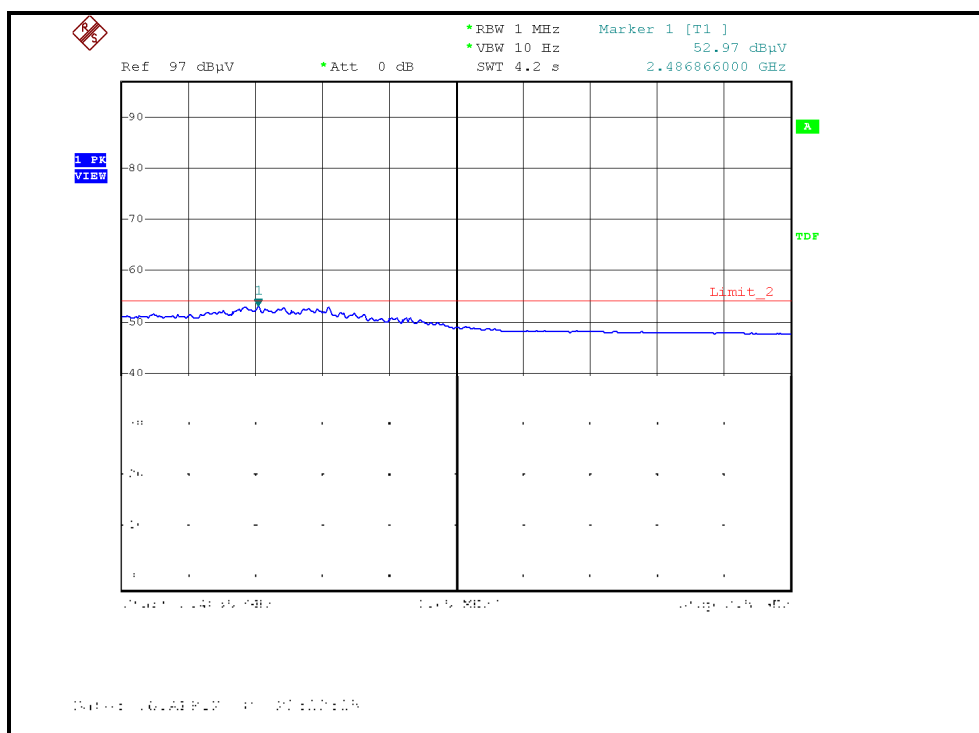
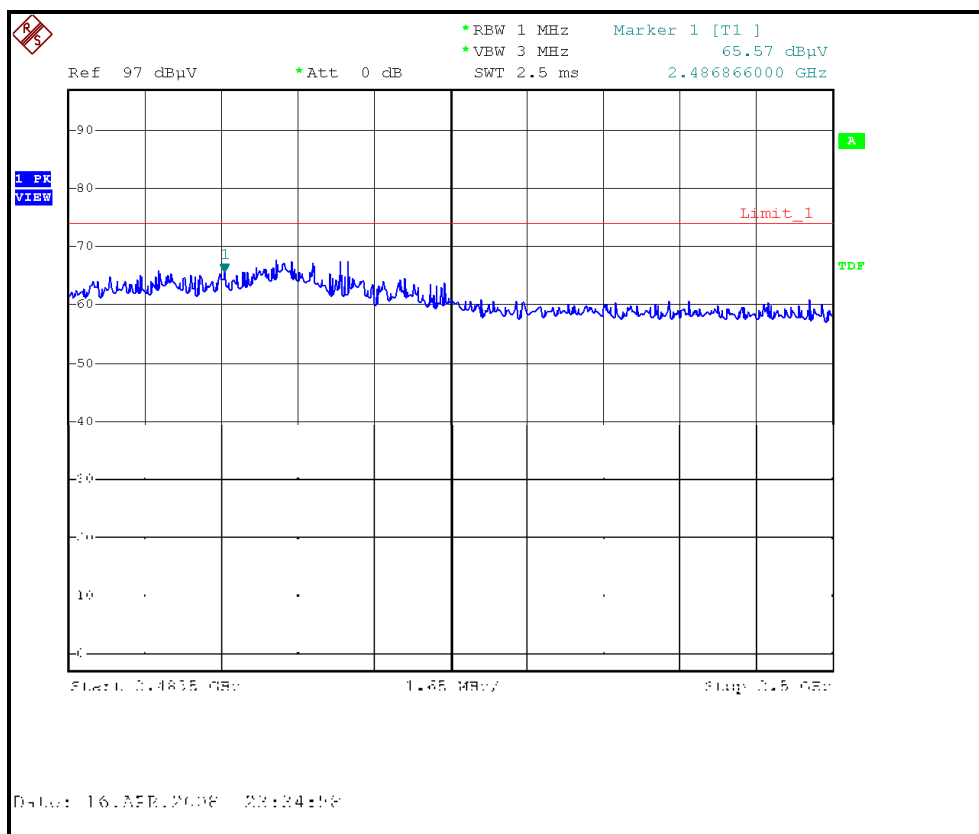
RESTRICTED BANDEDGE (802.11b MODE,CH 1, VERTICAL)



RESTRICTED BANDEDGE (802.11b MODE,CH 11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11b MODE,CH 11, VERTICAL)



802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	54.56 PK	74.00	-19.44	1.80 H	78	24.16	30.40
2	2390.00	43.25 AV	54.00	-10.75	1.80 H	78	12.85	30.40
3	*2412.00	101.20 PK			1.80 H	78	70.71	30.49
4	*2412.00	88.00 AV			1.80 H	78	57.51	30.49
5	4824.00	47.00 PK	74.00	-27.00	1.72 H	60	11.31	35.69
6	4824.00	33.20 AV	54.00	-20.80	1.72 H	60	-2.49	35.69
7	7236.00	52.20 PK	81.20	-29.00	1.48 H	86	9.96	42.24
8	7236.00	38.40 AV	68.00	-29.60	1.48 H	86	-3.84	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	71.39 PK	74.00	-2.61	1.64 V	85	40.99	30.40
2	2390.00	53.13 AV	54.00	-0.87	1.64 V	85	22.73	30.40
3	*2412.00	119.20 PK			1.64 V	85	88.71	30.49
4	*2412.00	105.30 AV			1.64 V	85	74.81	30.49
5	4824.00	57.60 PK	74.00	-16.40	1.15 V	82	21.91	35.69
6	4824.00	40.40 AV	54.00	-13.60	1.15 V	82	4.71	35.69
7	7236.00	57.50 PK	99.20	-41.70	1.25 V	306	15.26	42.24
8	7236.00	38.40 AV	85.30	-46.90	1.25 V	306	-3.84	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. “ * “: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	54.50 PK	74.00	-19.50	1.47 H	74	24.10	30.40
2	2390.00	43.24 AV	54.00	-10.76	1.47 H	74	12.84	30.40
3	*2437.00	106.30 PK			1.47 H	74	75.69	30.61
4	*2437.00	93.40 AV			1.47 H	74	62.79	30.61
5	2483.50	59.33 PK	74.00	-14.67	1.47 H	74	28.51	30.82
6	2483.50	44.41 AV	54.00	-9.59	1.47 H	74	13.59	30.82
7	4874.00	47.50 PK	74.00	-26.50	1.66 H	56	11.70	35.80
8	4874.00	33.80 AV	54.00	-20.20	1.66 H	56	-2.00	35.80
9	7311.00	52.50 PK	74.00	-21.50	1.36 H	76	9.98	42.52
10	7311.00	38.70 AV	54.00	-15.30	1.36 H	76	-3.82	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	2390.00	70.11 PK	74.00	-3.89	1.65 V	75	39.71	30.40
2	2390.00	51.82 AV	54.00	-2.18	1.65 V	75	21.42	30.40
3	*2437.00	121.60 PK			1.65 V	75	90.99	30.61
4	*2437.00	108.20 AV			1.65 V	75	77.59	30.61
5	2483.50	70.76 PK	74.00	-3.24	1.65 V	75	39.94	30.82
6	2483.50	52.96 AV	54.00	-1.04	1.65 V	75	22.14	30.82
7	4874.00	58.50 PK	74.00	-15.50	1.14 V	80	22.70	35.80
8	4874.00	43.40 AV	54.00	-10.60	1.14 V	80	7.60	35.80
9	7311.00	58.60 PK	74.00	-15.40	1.24 V	303	16.08	42.52
10	7311.00	39.70 AV	54.00	-14.30	1.24 V	303	-2.82	42.52

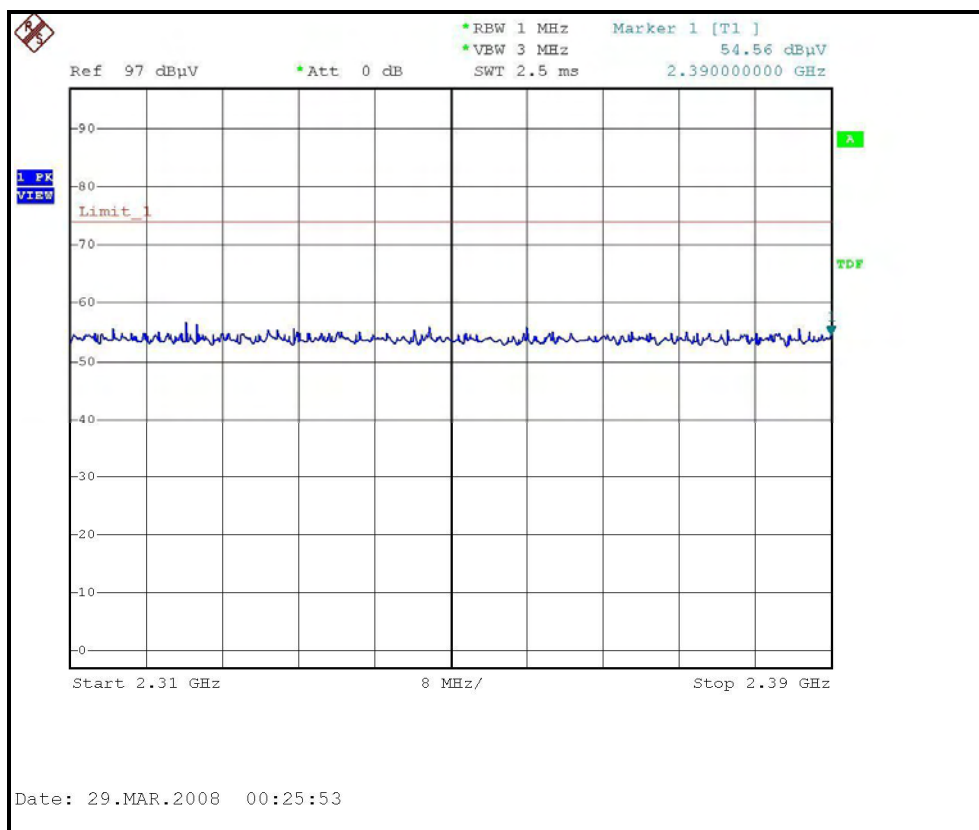
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	TESTED BY	Sky Liao

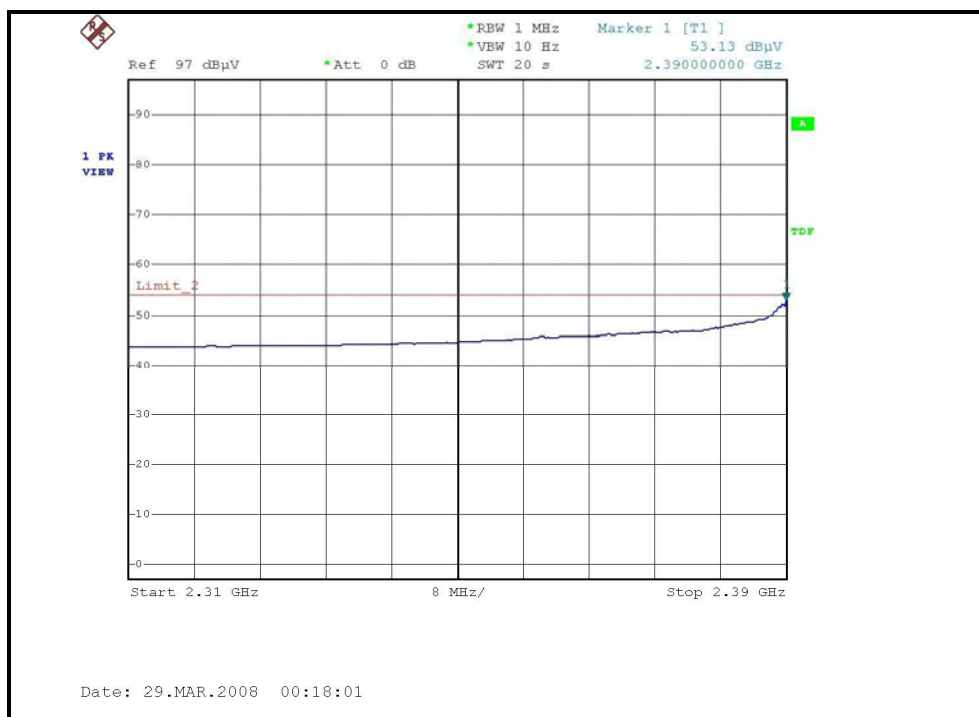
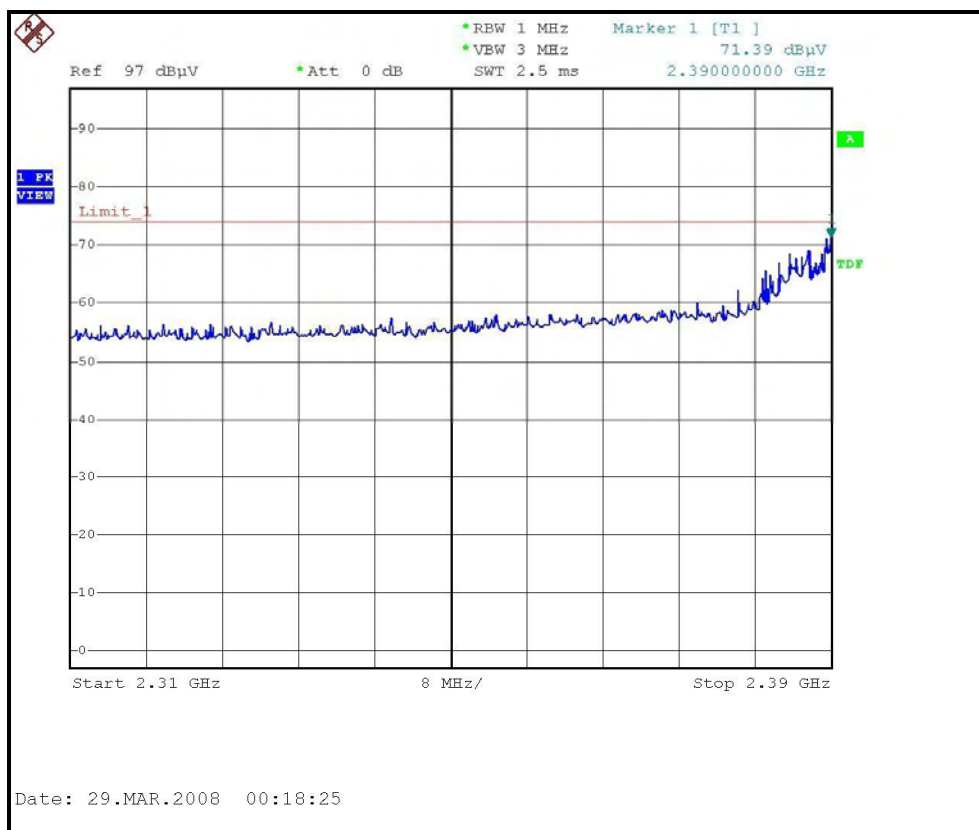
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	101.50 PK			1.75 H	80	70.78	30.72
2	*2462.00	88.40 AV			1.75 H	80	57.68	30.72
3	2483.50	57.39 PK	74.00	-16.61	1.75 H	80	26.57	30.82
4	2483.50	44.37 AV	54.00	-9.63	1.75 H	80	13.55	30.82
5	4924.00	47.20 PK	74.00	-26.80	1.52 H	65	11.30	35.90
6	4924.00	33.50 AV	54.00	-20.50	1.52 H	65	-2.40	35.90
7	7386.00	52.00 PK	74.00	-22.00	1.44 H	82	9.20	42.80
8	7386.00	38.20 AV	54.00	-15.80	1.44 H	82	-4.60	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	120.20 PK			1.40 V	88	89.48	30.72
2	*2462.00	106.50 AV			1.40 V	88	75.78	30.72
3	2483.50	70.62 PK	74.00	-3.38	1.57 V	100	39.80	30.82
4	2483.50	53.20 AV	54.00	-0.80	1.57 V	100	22.38	30.82
5	4924.00	51.30 PK	74.00	-22.70	1.20 V	80	15.40	35.90
6	4924.00	37.40 AV	54.00	-16.60	1.20 V	80	1.50	35.90
7	7386.00	57.20 PK	74.00	-16.80	1.28 V	296	14.40	42.80
8	7386.00	38.20 AV	54.00	-15.80	1.28 V	296	-4.60	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. “ * “: Fundamental frequency.

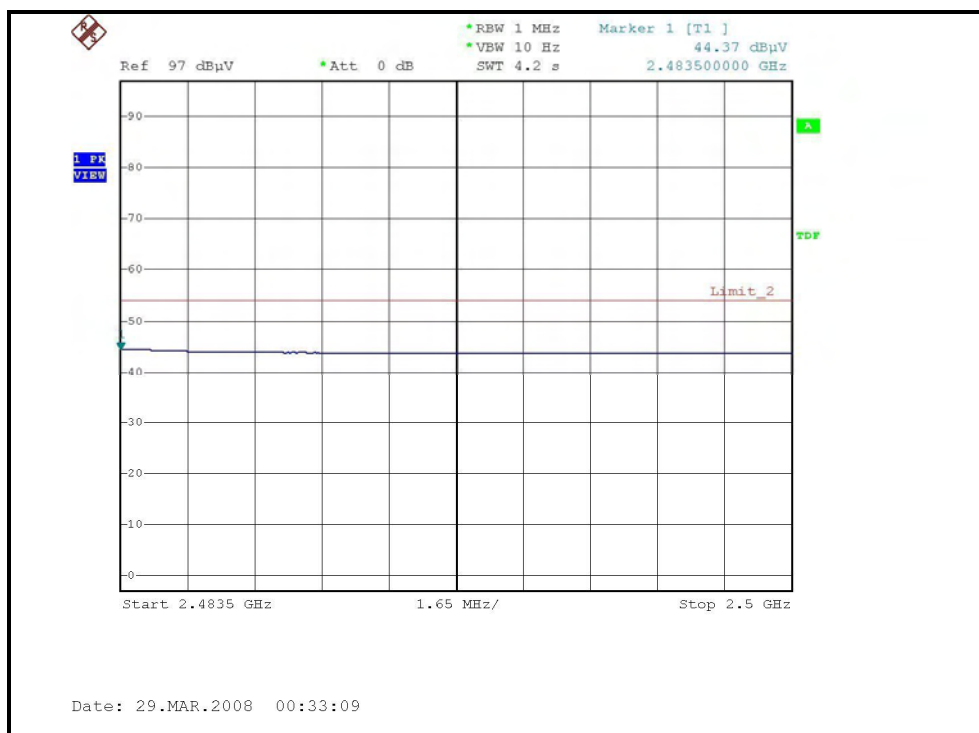
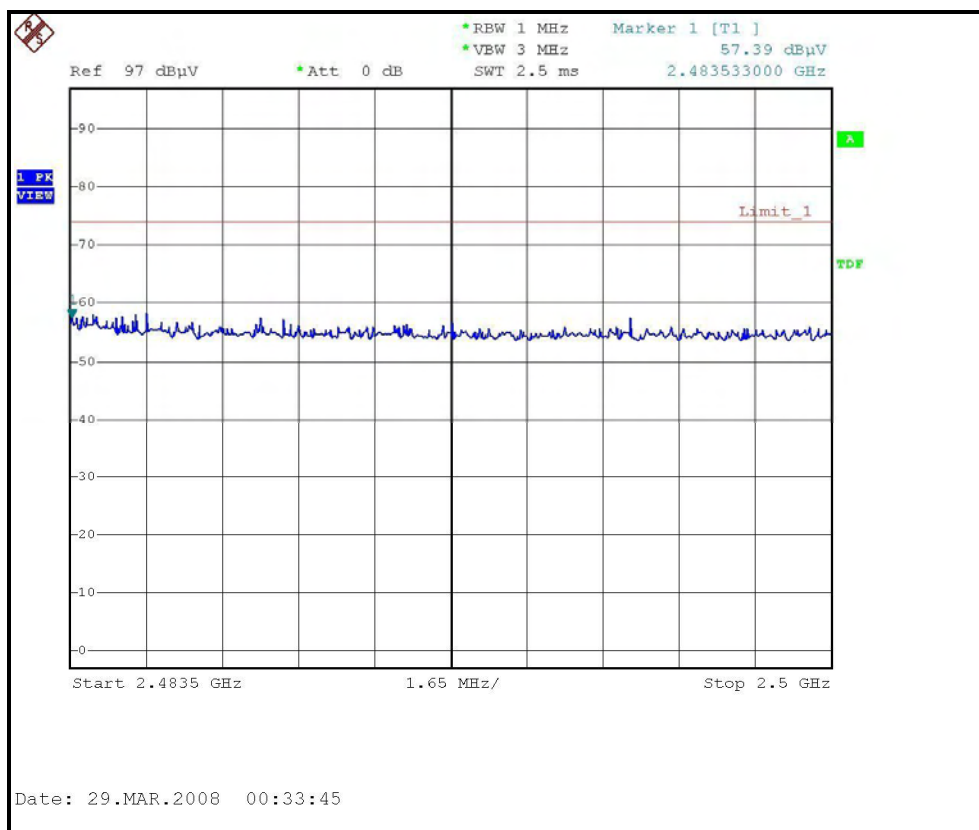
RESTRICTED BANDEDGE (802.11g MODE, CH 1, HORIZONTAL)



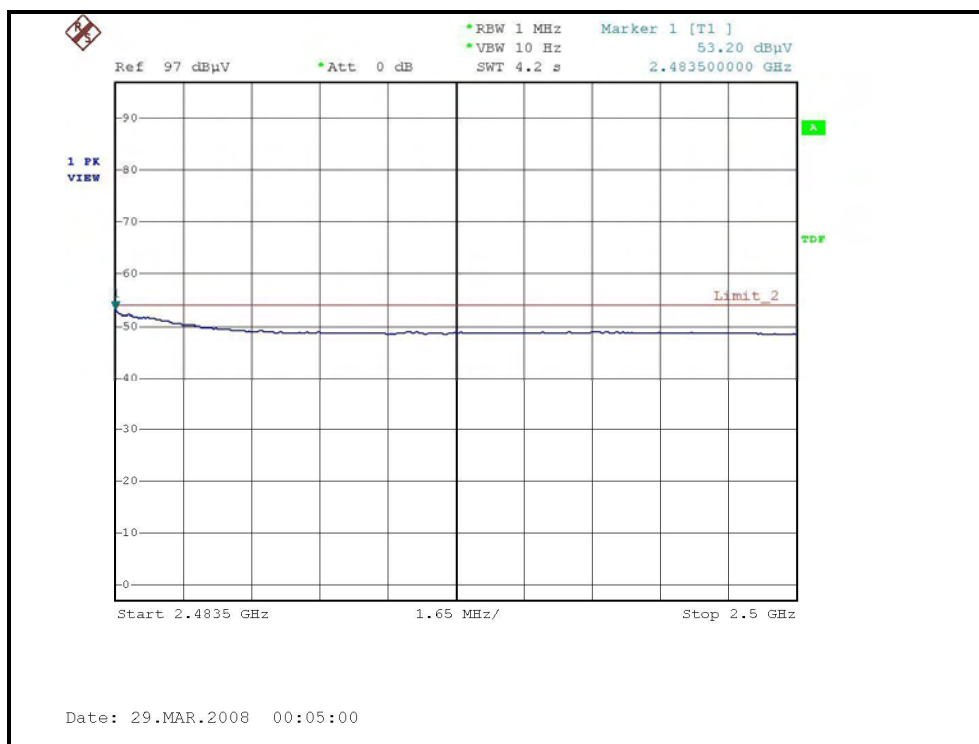
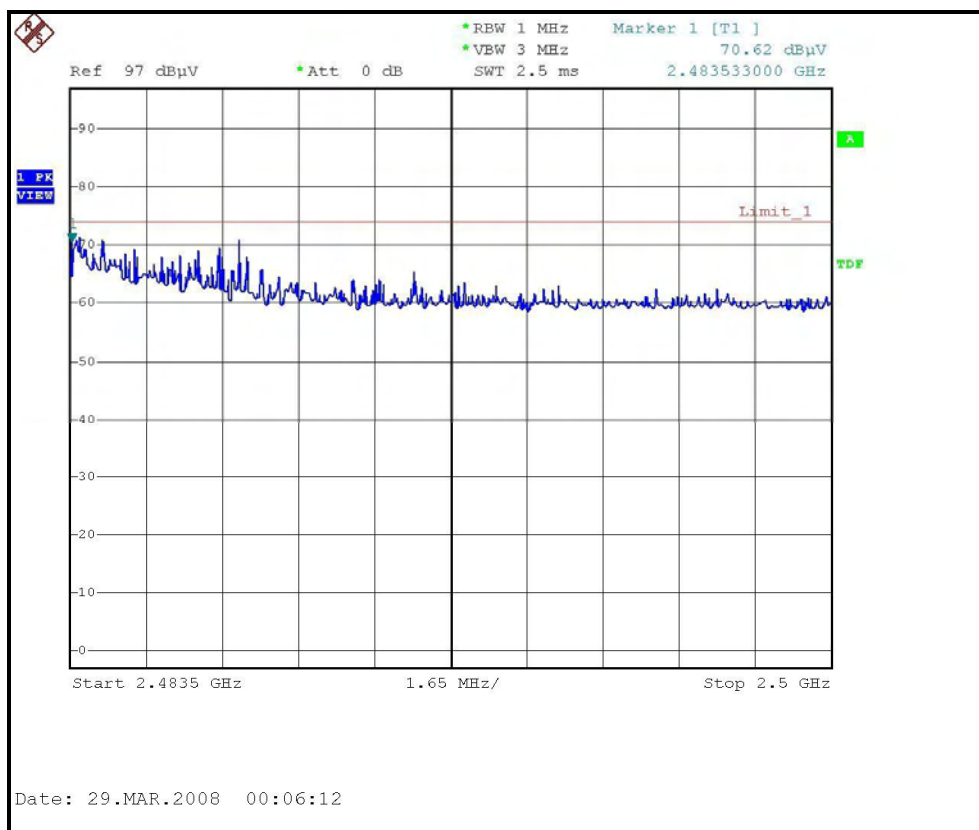
RESTRICTED BANDEDGE (802.11g MODE, CH 1, VERTICAL)



RESTRICTED BANDEDGE (802.11g MODE, CH 11, HORIZONTAL)



RESTRICTED BANDEDGE (802.11g MODE,CH 11, VERTICAL)



DRAFT 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	58.27 PK	74.00	-15.73	1.50 H	240	27.87	30.40
2	2390.00	43.97 AV	54.00	-10.03	1.50 H	240	13.57	30.40
3	*2412.00	101.10 PK			1.50 H	240	70.61	30.49
4	*2412.00	87.30 AV			1.50 H	240	56.81	30.49
5	4824.00	44.60 PK	74.00	-29.40	1.12 H	55	8.91	35.69
6	4824.00	32.20 AV	54.00	-21.80	1.12 H	55	-3.49	35.69
7	7236.00	51.60 PK	81.10	-29.50	1.20 H	68	9.36	42.24
8	7236.00	38.20 AV	67.30	-29.10	1.20 H	68	-4.04	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	2390.00	69.39 PK	74.00	-4.61	1.35 V	92	38.99	30.40
2	2390.00	52.87 AV	54.00	-1.13	1.35 V	92	22.47	30.40
3	*2412.00	117.20 PK			1.35 V	92	86.71	30.49
4	*2412.00	103.40 AV			1.35 V	92	72.91	30.49
5	4824.00	53.50 PK	74.00	-20.50	1.28 V	77	17.81	35.69
6	4824.00	39.20 AV	54.00	-14.80	1.28 V	77	3.51	35.69
7	7236.00	51.80 PK	97.20	-45.40	1.16 V	30	9.56	42.24
8	7236.00	38.50 AV	83.40	-44.90	1.16 V	30	-3.74	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. “ * “: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	57.42 PK	74.00	-16.58	1.55 H	242	27.02	30.40
2	2390.00	44.01 AV	54.00	-9.99	1.55 H	242	13.61	30.40
3	*2437.00	105.60 PK			1.55 H	242	74.99	30.61
4	*2437.00	92.20 AV			1.55 H	242	61.59	30.61
5	2483.50	56.27 PK	74.00	-17.73	1.52 H	232	25.45	30.82
6	2483.50	44.14 AV	54.00	-9.86	1.52 H	232	13.32	30.82
7	4874.00	45.30 PK	74.00	-28.70	1.42 H	44	9.50	35.80
8	4874.00	32.80 AV	54.00	-21.20	1.42 H	44	-3.00	35.80
9	7311.00	51.80 PK	74.00	-22.20	1.28 H	78	9.28	42.52
10	7311.00	38.20 AV	54.00	-15.80	1.28 H	78	-4.32	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	2390.00	68.36 PK	74.00	-5.64	1.40 V	86	37.96	30.40
2	2390.00	52.01 AV	54.00	-1.99	1.40 V	86	21.61	30.40
3	*2437.00	120.10 PK			1.40 V	86	89.49	30.61
4	*2437.00	105.20 AV			1.40 V	86	74.59	30.61
5	2483.50	69.82 PK	74.00	-4.18	1.40 V	86	39.00	30.82
6	2483.50	52.94 AV	54.00	-1.06	1.40 V	86	22.12	30.82
7	4874.00	54.00 PK	74.00	-20.00	1.20 V	75	18.20	35.80
8	4874.00	39.70 AV	54.00	-14.30	1.20 V	75	3.90	35.80
9	7311.00	52.30 PK	74.00	-21.70	1.32 V	14	9.78	42.52
10	7311.00	38.70 AV	54.00	-15.30	1.32 V	14	-3.82	42.52

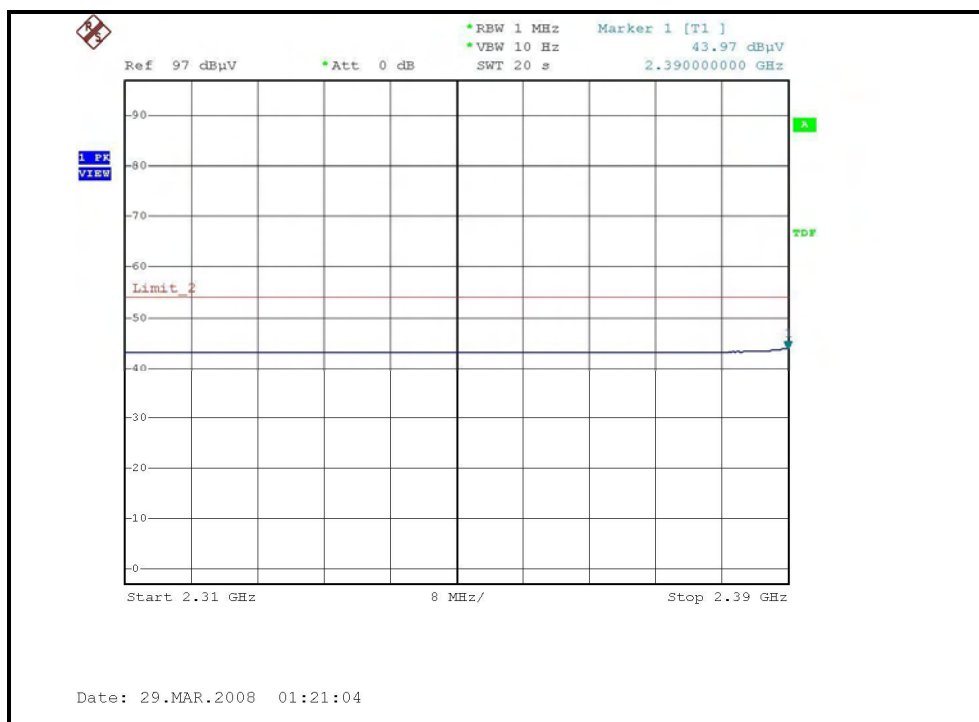
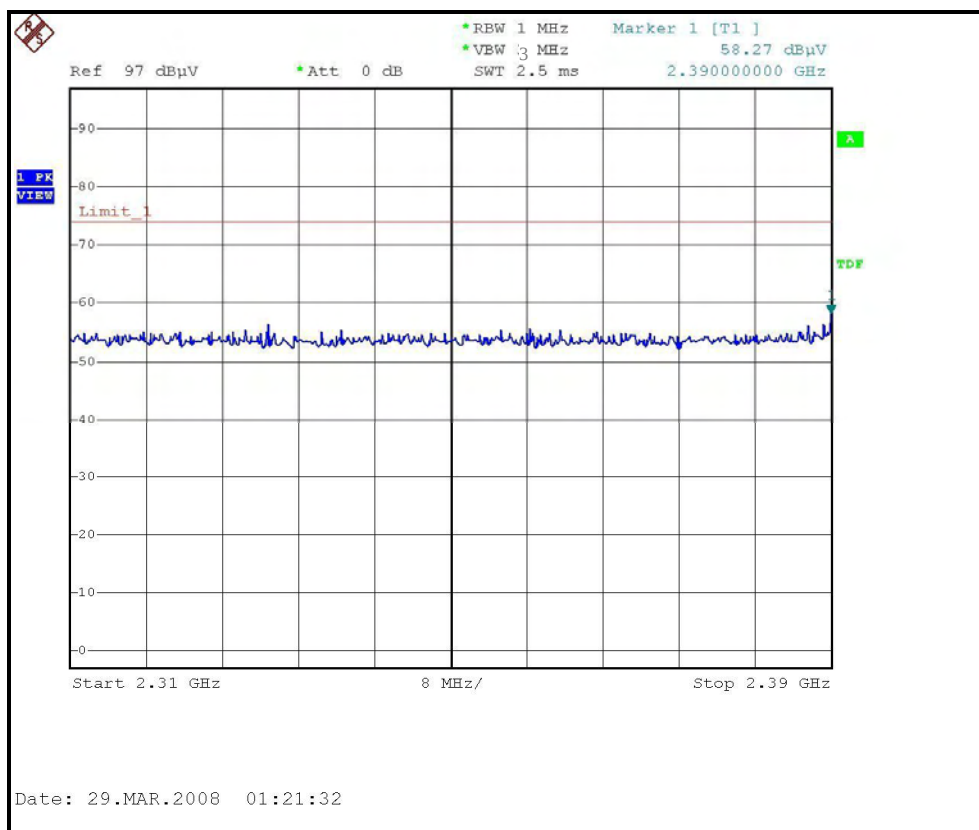
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	TESTED BY	Sky Liao

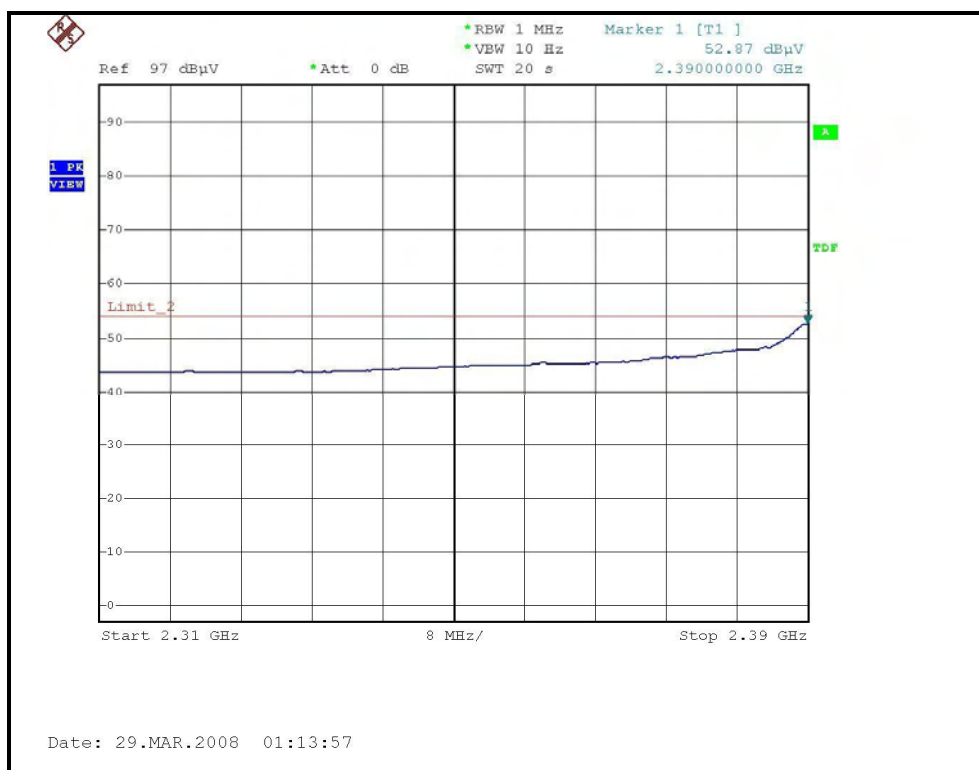
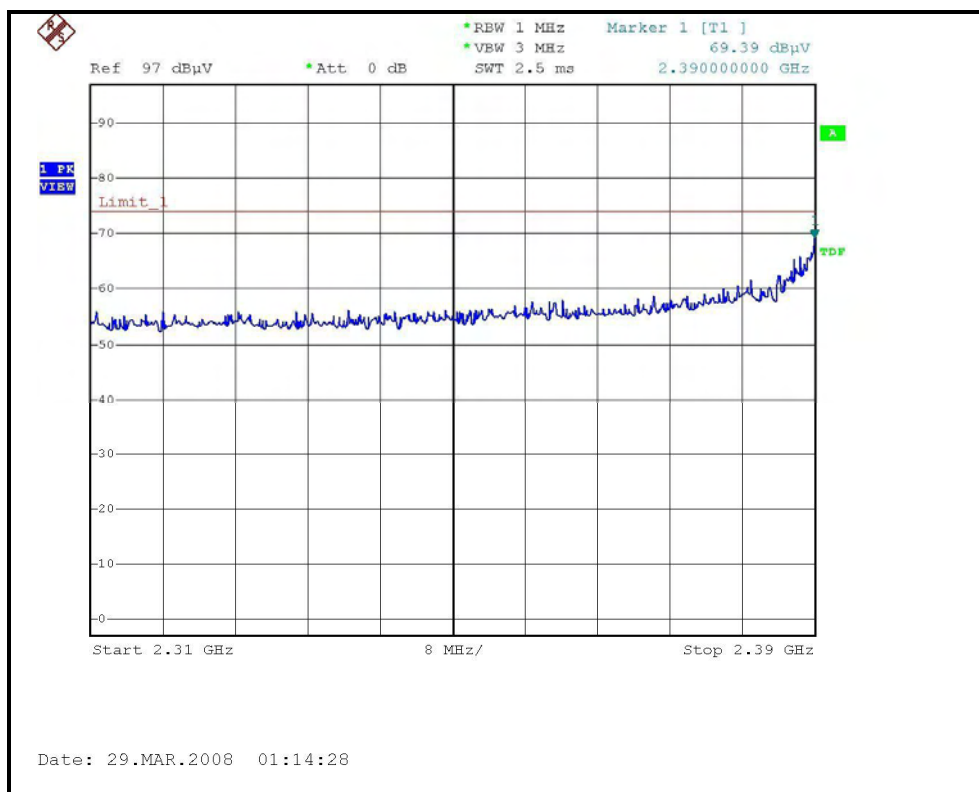
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	100.80 PK			1.52 H	232	70.08	30.72
2	*2462.00	87.80 AV			1.52 H	232	57.08	30.72
3	2483.50	55.59 PK	74.00	-18.41	1.52 H	232	24.77	30.82
4	2483.50	44.12 AV	54.00	-9.88	1.52 H	232	13.30	30.82
5	4924.00	44.60 PK	74.00	-29.40	1.36 H	22	8.70	35.90
6	4924.00	32.20 AV	54.00	-21.80	1.36 H	22	-3.70	35.90
7	7386.00	51.40 PK	74.00	-22.60	1.16 H	42	8.60	42.80
8	7386.00	38.00 AV	54.00	-16.00	1.16 H	42	-4.80	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	116.60 PK			1.37 V	94	85.88	30.72
2	*2462.00	103.00 AV			1.37 V	94	72.28	30.72
3	2483.50	69.67 PK	74.00	-4.33	1.37 V	94	38.85	30.82
4	2483.50	52.84 AV	54.00	-1.16	1.37 V	94	22.02	30.82
5	4924.00	53.20 PK	74.00	-20.80	1.32 V	86	17.30	35.90
6	4924.00	39.00 AV	54.00	-15.00	1.32 V	86	3.10	35.90
7	7386.00	51.50 PK	74.00	-22.50	1.38 V	35	8.70	42.80
8	7386.00	38.20 AV	54.00	-15.80	1.38 V	35	-4.60	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. “ * “: Fundamental frequency.

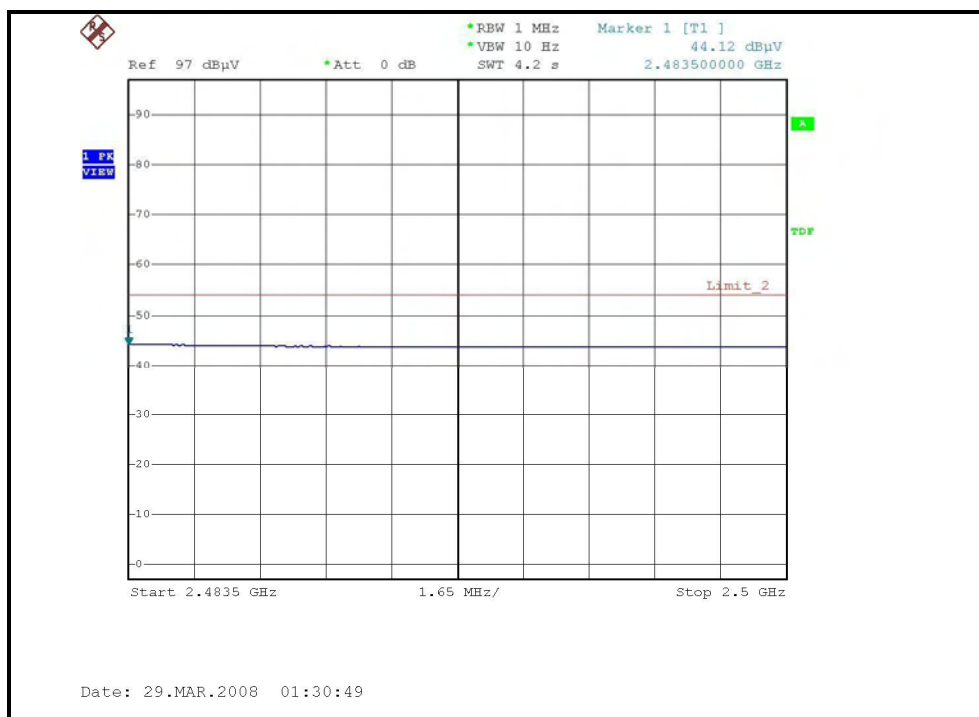
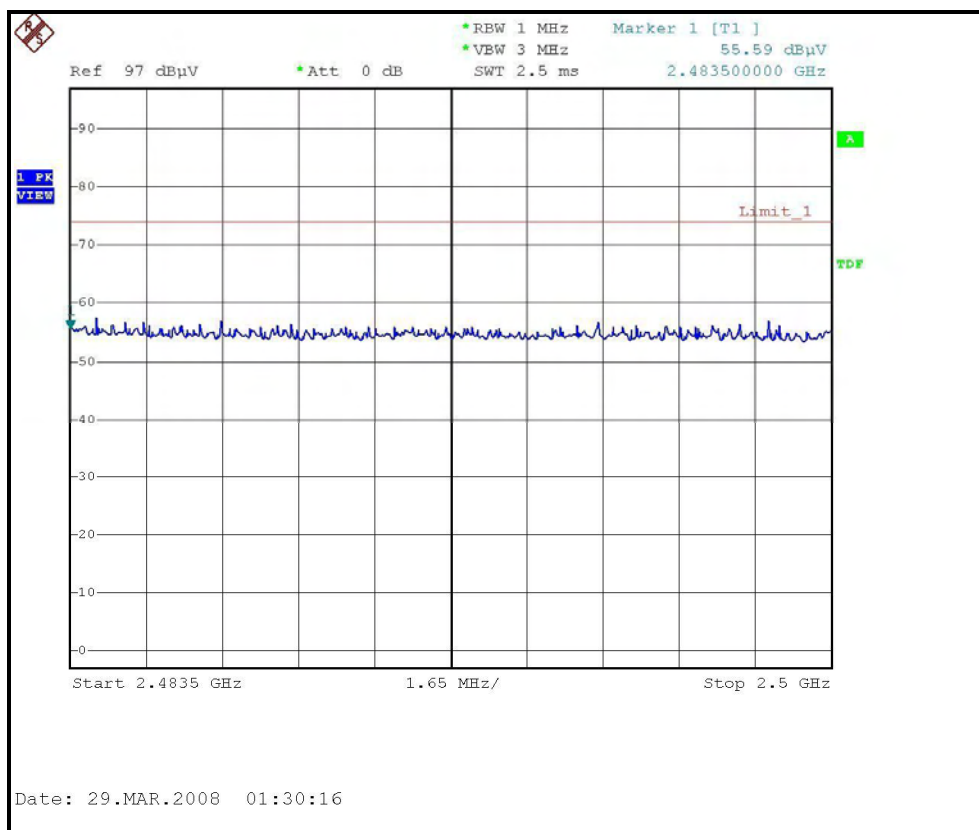
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE, CH 1, HORIZONTAL)



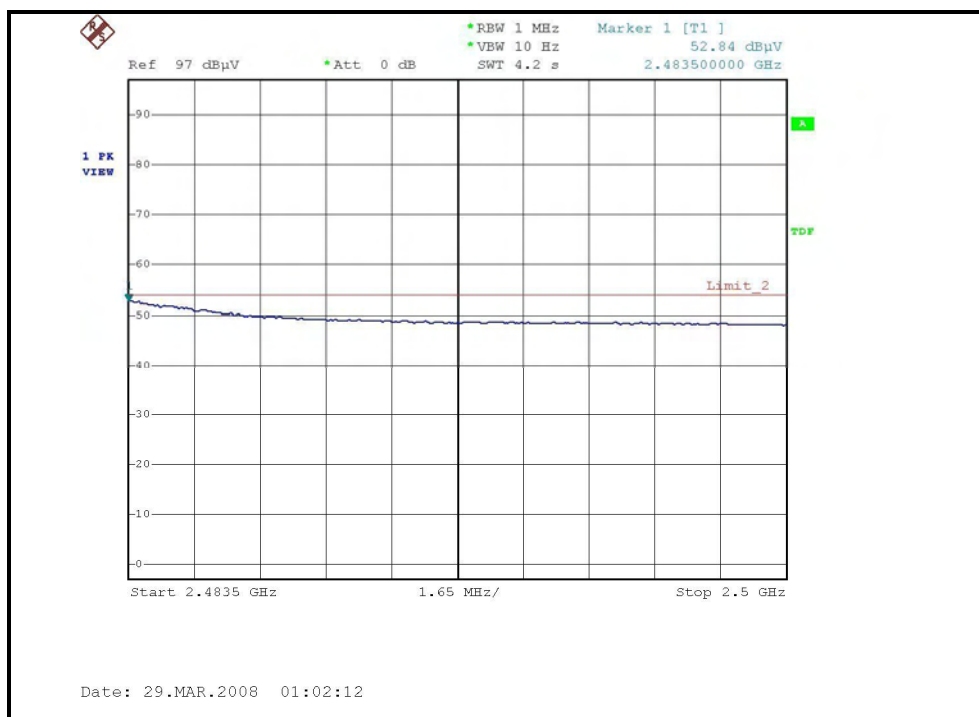
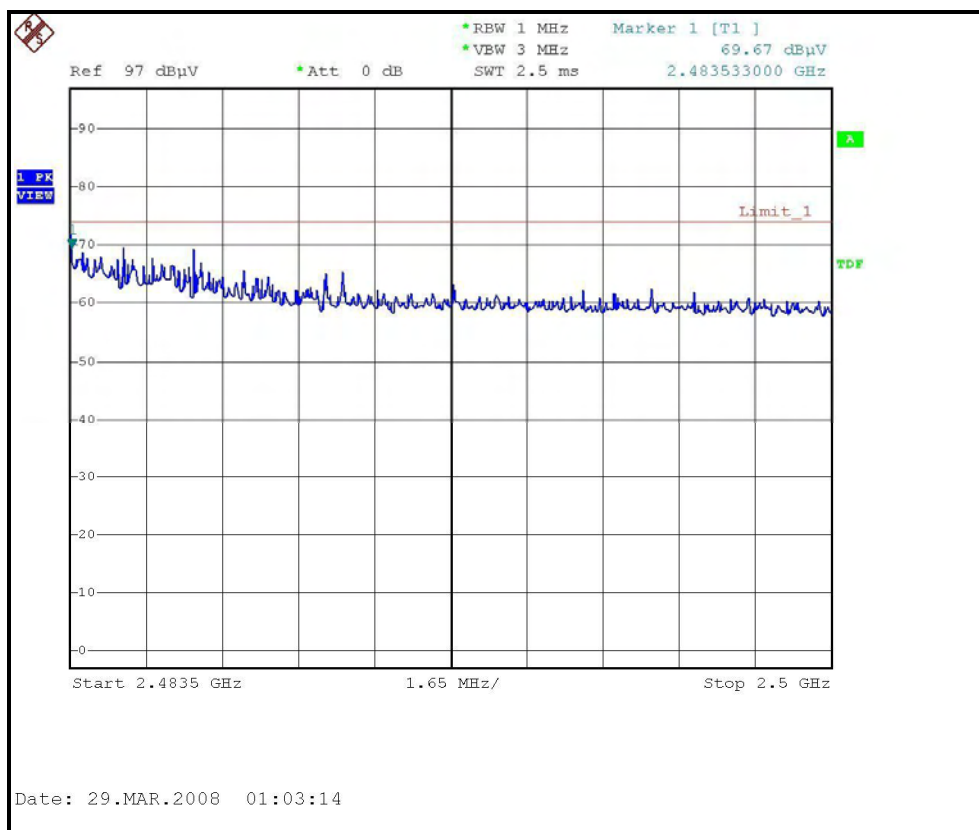
RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH 1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE, CH 11, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH 11, VERTICAL)



DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	56.07 PK	74.00	-17.93	1.65 H	90	25.67	30.40
2	2390.00	44.15 AV	54.00	-9.85	1.65 H	90	13.75	30.40
3	*2422.00	99.20 PK			1.65 H	90	68.66	30.54
4	*2422.00	85.90 AV			1.65 H	90	55.36	30.54
5	4844.00	44.00 PK	74.00	-30.00	1.33 H	42	8.26	35.74
6	4844.00	30.80 AV	54.00	-23.20	1.33 H	42	-4.94	35.74
7	7266.00	51.60 PK	74.00	-22.40	1.20 H	88	9.25	42.35
8	7266.00	37.80 AV	54.00	-16.20	1.20 H	88	-4.55	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	69.74 PK	74.00	-4.26	1.44 V	102	39.34	30.40
2	2390.00	53.13 AV	54.00	-0.87	1.44 V	102	22.73	30.40
3	*2422.00	111.80 PK			1.44 V	102	81.26	30.54
4	*2422.00	97.70 AV			1.44 V	102	67.16	30.54
5	4844.00	51.20 PK	74.00	-22.80	1.22 V	88	15.46	35.74
6	4844.00	35.20 AV	54.00	-18.80	1.22 V	88	-0.54	35.74
7	7266.00	52.20 PK	74.00	-21.80	1.08 V	25	9.85	42.35
8	7266.00	38.00 AV	54.00	-16.00	1.08 V	25	-4.35	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. “ * “: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	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	57.10 PK	74.00	-16.90	1.55 H	95	26.70	30.40
2	2390.00	44.13 AV	54.00	-9.87	1.55 H	95	13.73	30.40
3	*2437.00	101.40 PK			1.55 H	95	70.79	30.61
4	*2437.00	87.50 AV			1.55 H	95	56.89	30.61
5	2483.50	58.26 PK	74.00	-15.74	1.55 H	95	27.44	30.82
6	2483.50	44.45 AV	54.00	-9.55	1.55 H	95	13.63	30.82
7	4874.00	44.80 PK	74.00	-29.20	1.28 H	50	9.00	35.80
8	4874.00	31.20 AV	54.00	-22.80	1.28 H	50	-4.60	35.80
9	7311.00	52.40 PK	74.00	-21.60	1.12 H	78	9.88	42.52
10	7311.00	38.40 AV	54.00	-15.60	1.12 H	78	-4.12	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	2390.00	68.84 PK	74.00	-5.16	1.60 V	92	38.45	30.40
2	2390.00	52.21 AV	54.00	-1.79	1.60 V	92	21.81	30.40
3	*2437.00	113.70 PK			1.60 V	92	83.09	30.61
4	*2437.00	99.10 AV			1.60 V	92	68.49	30.61
5	2483.50	72.28 PK	74.00	-1.72	1.60 V	92	41.46	30.82
6	2483.50	53.22 AV	54.00	-0.78	1.60 V	92	22.40	30.82
7	4874.00	52.10 PK	74.00	-21.90	1.20 V	76	16.30	35.80
8	4874.00	36.00 AV	54.00	-18.00	1.20 V	76	0.20	35.80
9	7311.00	52.80 PK	74.00	-21.20	1.15 V	20	10.28	42.52
10	7311.00	38.60 AV	54.00	-15.40	1.15 V	20	-3.92	42.52

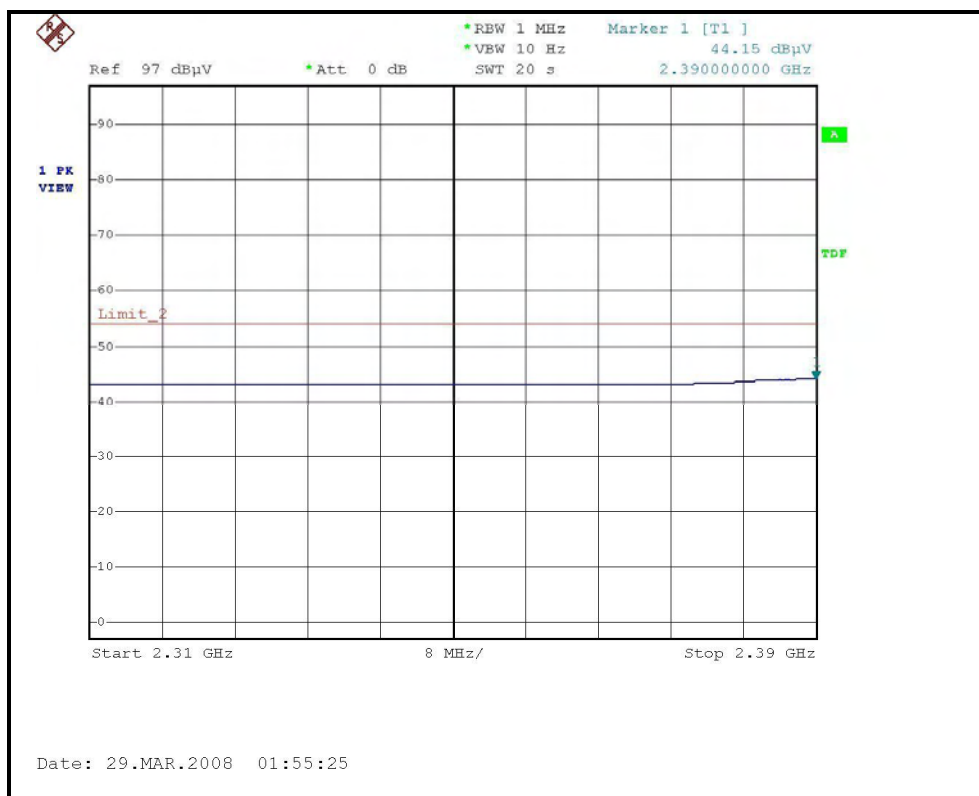
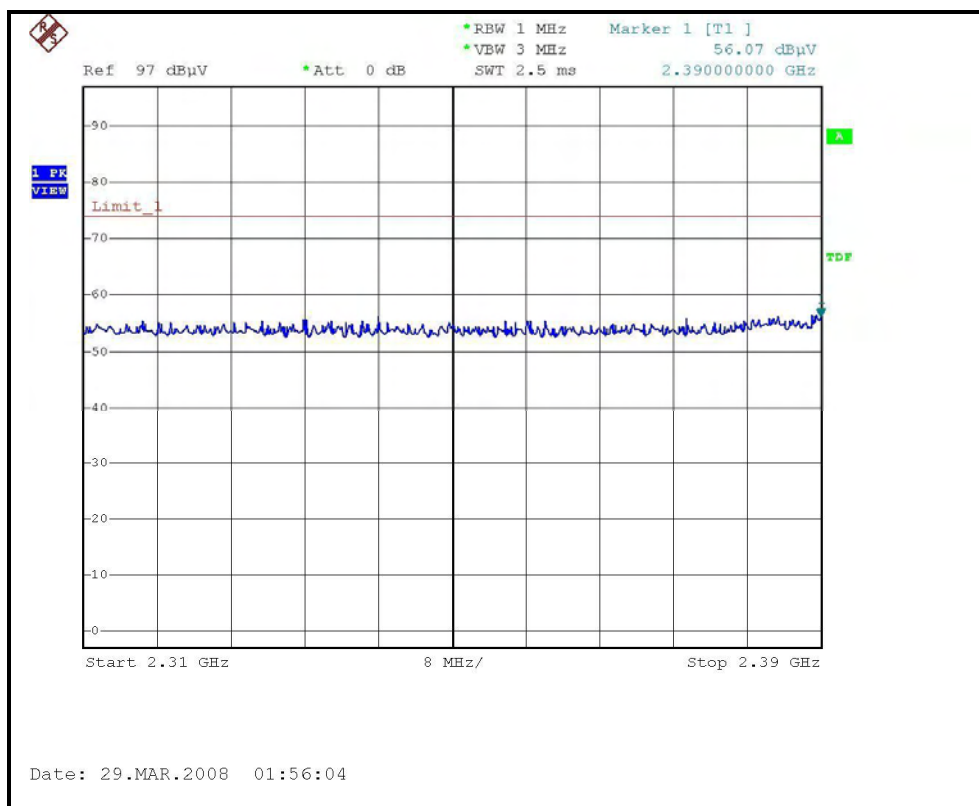
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH 960hPa	TESTED BY	Sky Liao

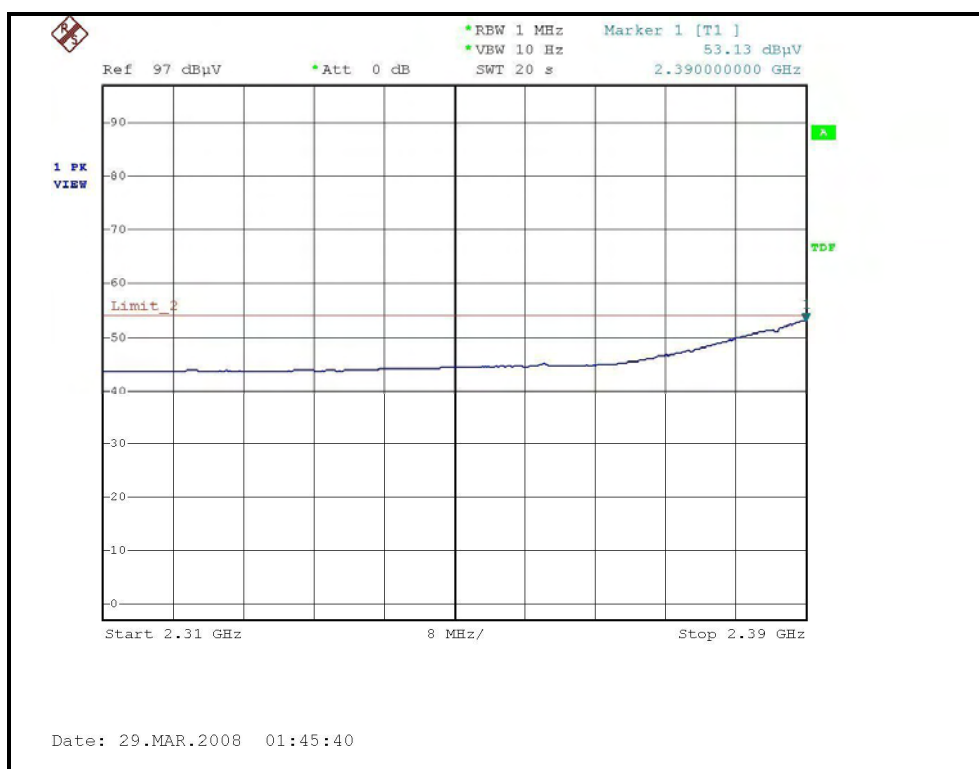
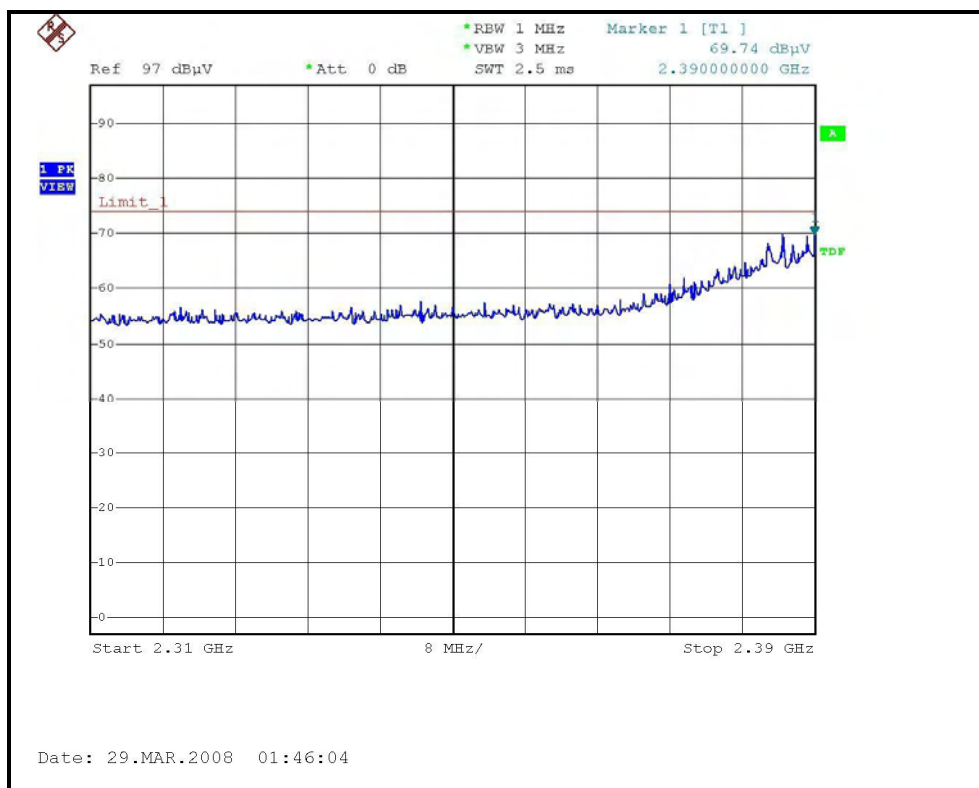
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	99.00 PK			1.47 H	94	68.33	30.67
2	*2452.00	85.20 AV			1.47 H	94	54.53	30.67
3	2483.50	58.53 PK	74.00	-15.47	1.47 H	94	27.71	30.82
4	2483.50	44.44 AV	54.00	-9.56	1.47 H	94	13.62	30.82
5	4904.00	43.60 PK	74.00	-30.40	1.22 H	55	7.74	35.86
6	4904.00	30.60 AV	54.00	-23.40	1.22 H	55	-5.26	35.86
7	7356.00	51.20 PK	74.00	-22.80	1.08 H	62	8.52	42.68
8	7356.00	37.20 AV	54.00	-16.80	1.08 H	62	-5.48	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	111.00 PK			1.57 V	96	80.33	30.67
2	*2452.00	97.00 AV			1.57 V	96	66.33	30.67
3	2483.50	71.81 PK	74.00	-2.19	1.57 V	96	40.99	30.82
4	2483.50	53.20 AV	54.00	-0.80	1.57 V	96	22.38	30.82
5	4904.00	50.60 PK	74.00	-23.40	1.16 V	92	14.74	35.86
6	4904.00	34.60 AV	54.00	-19.40	1.16 V	92	-1.26	35.86
7	7356.00	51.60 PK	74.00	-22.40	1.05 V	38	8.92	42.68
8	7356.00	37.60 AV	54.00	-16.40	1.05 V	38	-5.08	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. “ * “: Fundamental frequency.

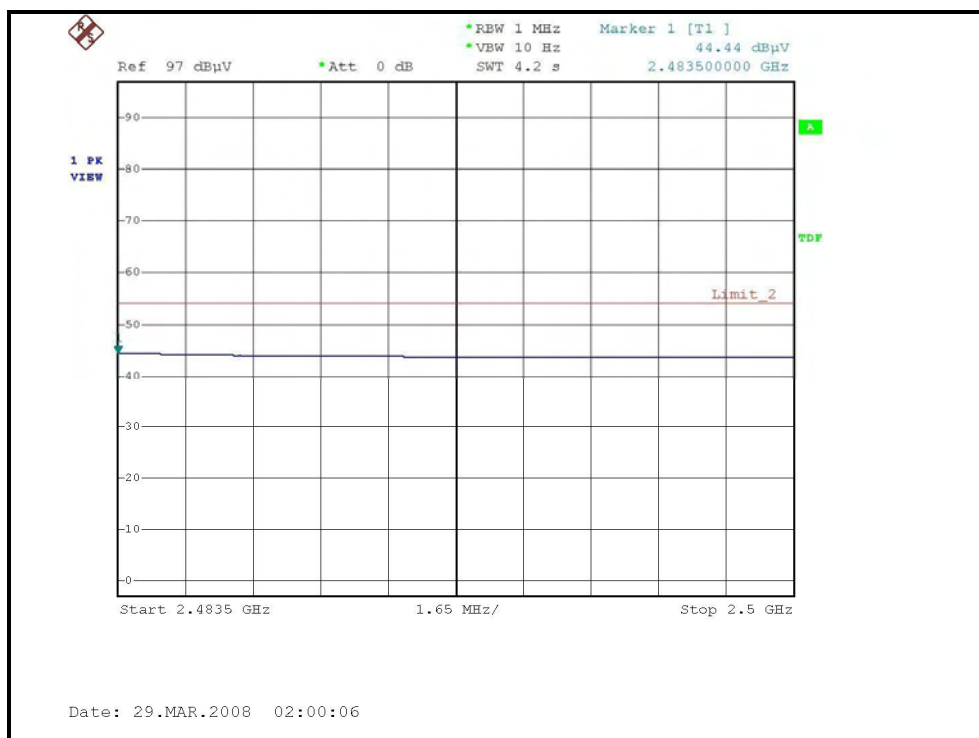
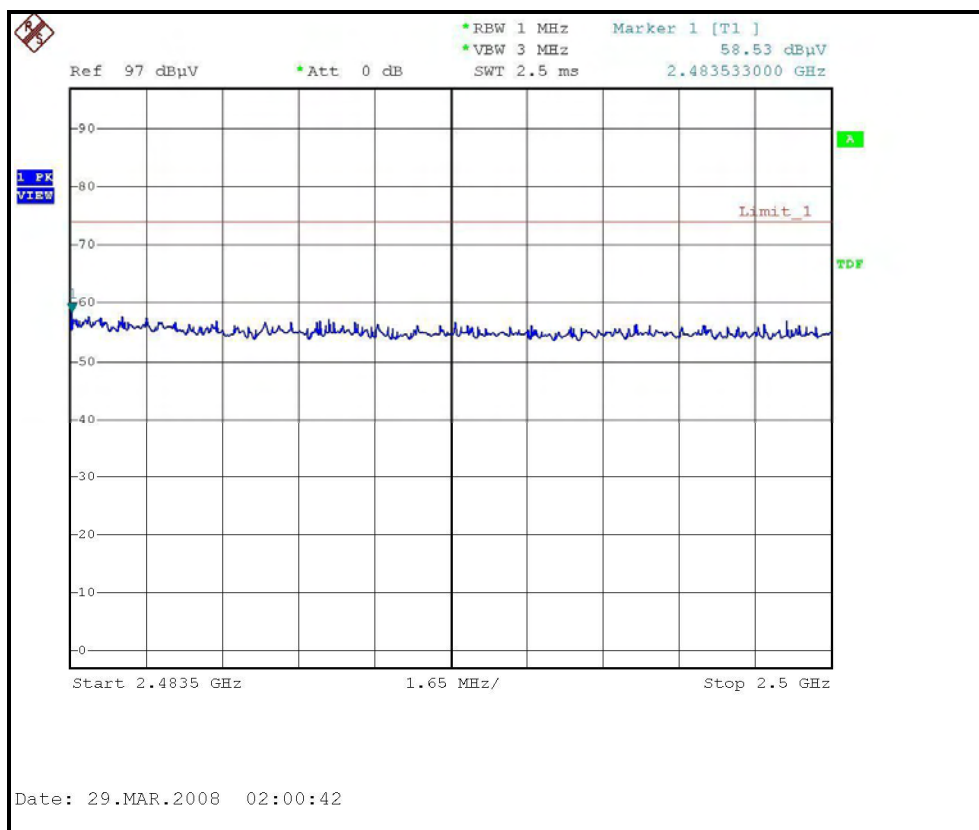
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH 1, HORIZONTAL)



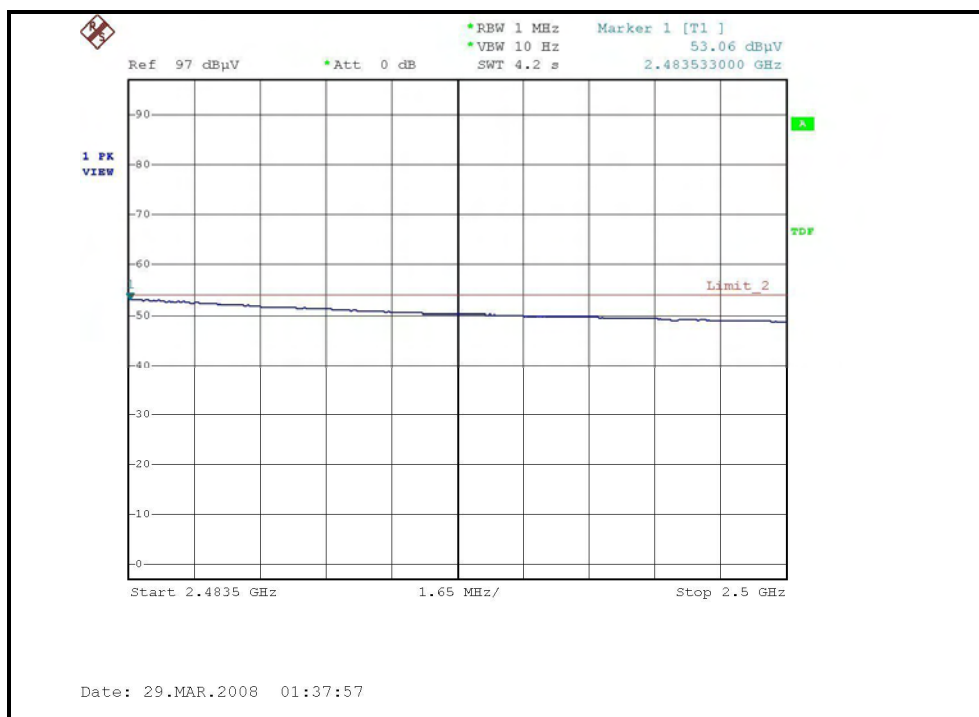
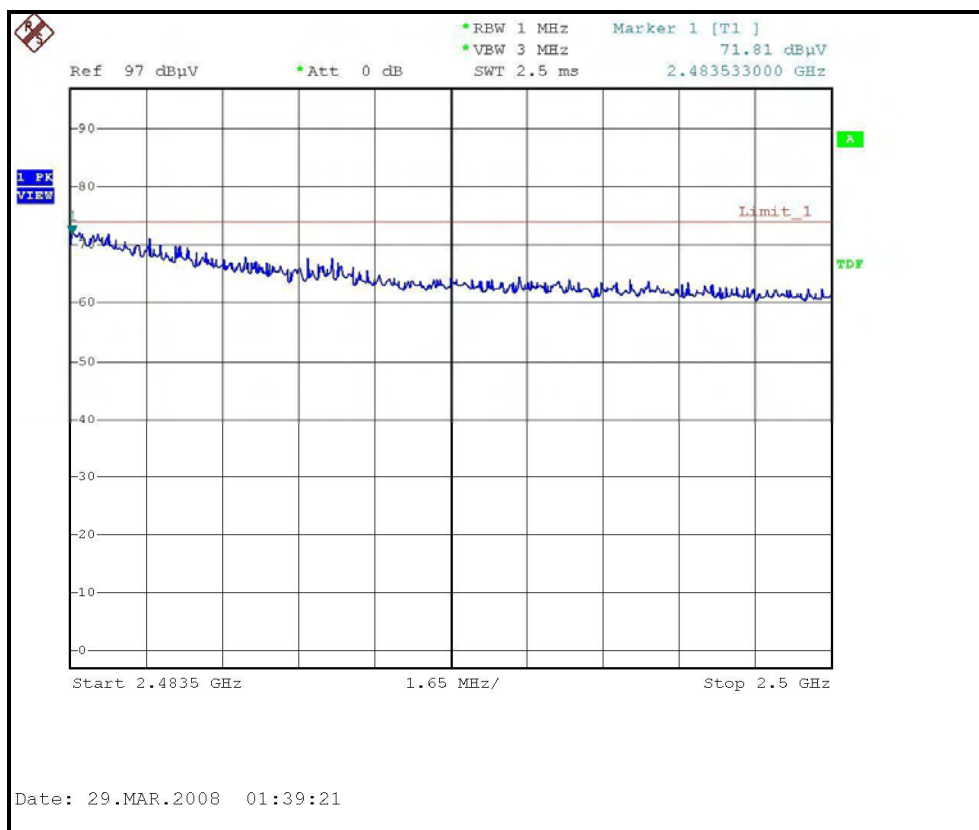
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH 1, VERTICAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE, CH 7, HORIZONTAL)



RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH 7, 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	100037	Aug. 12, 2008

NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 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.

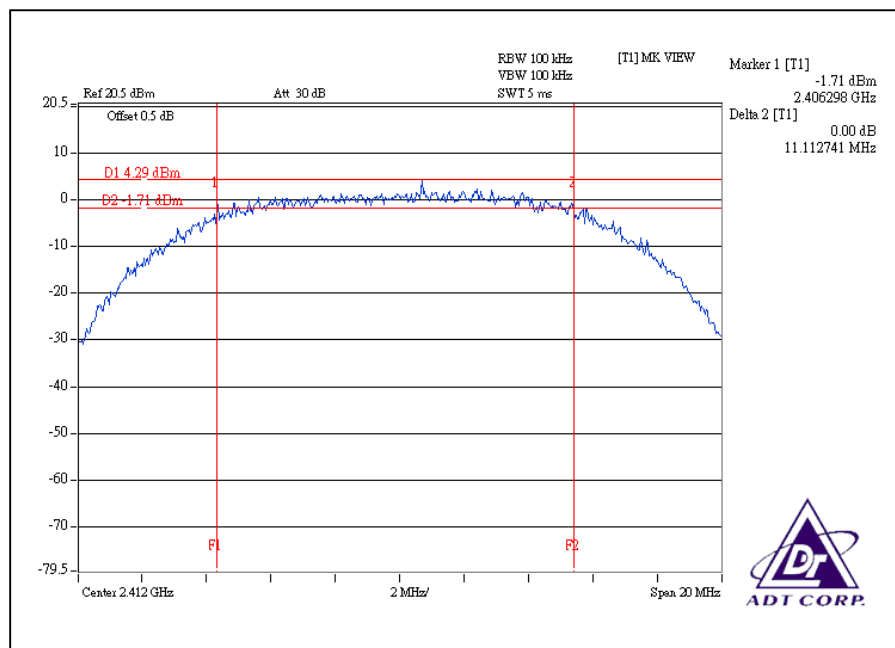
4.3.7 TEST RESULTS

802.11b DSSS MODULATION:

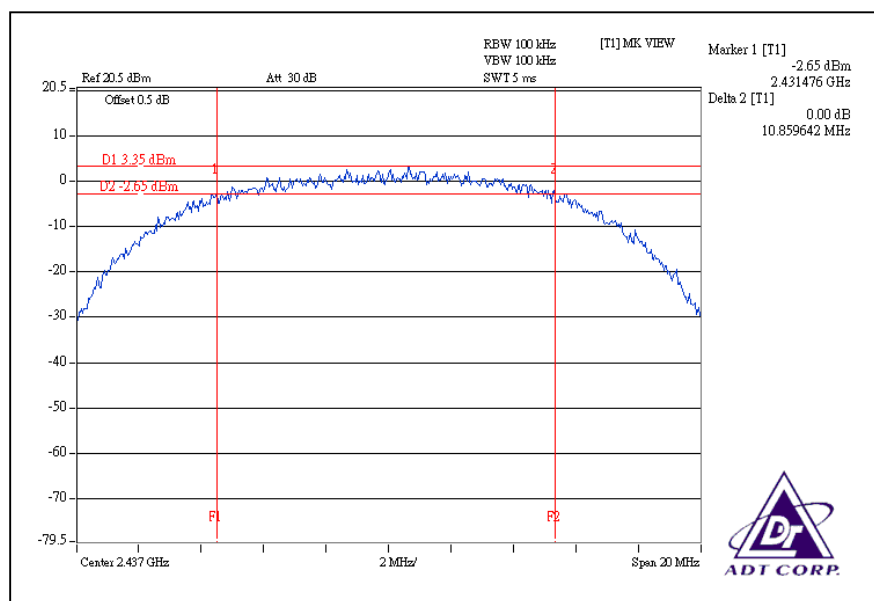
MODULATION TYPE	CCK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	11.11	11.35	11.49	0.5	PASS
6	2437	10.86	11.11	11.19	0.5	PASS
11	2462	10.57	10.98	11.83	0.5	PASS

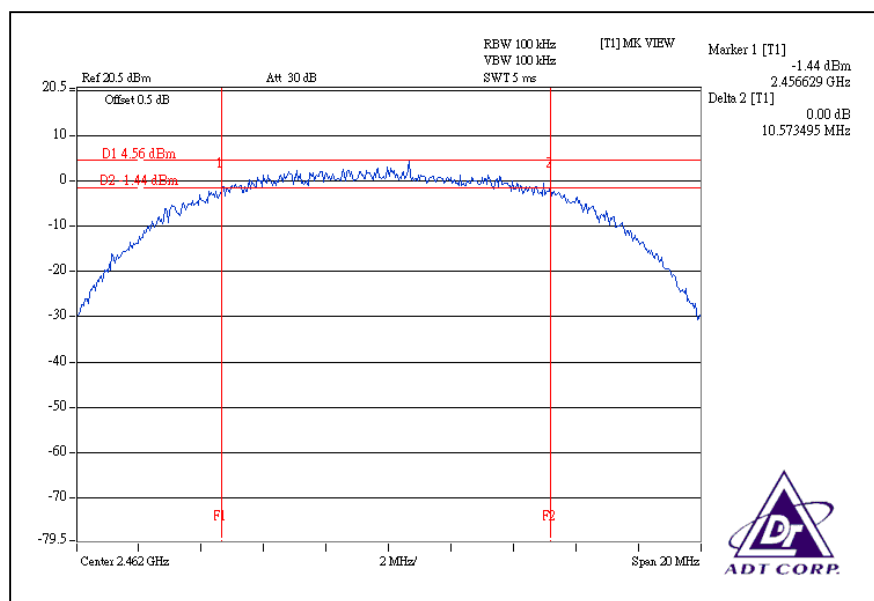
Chain 0 CH1



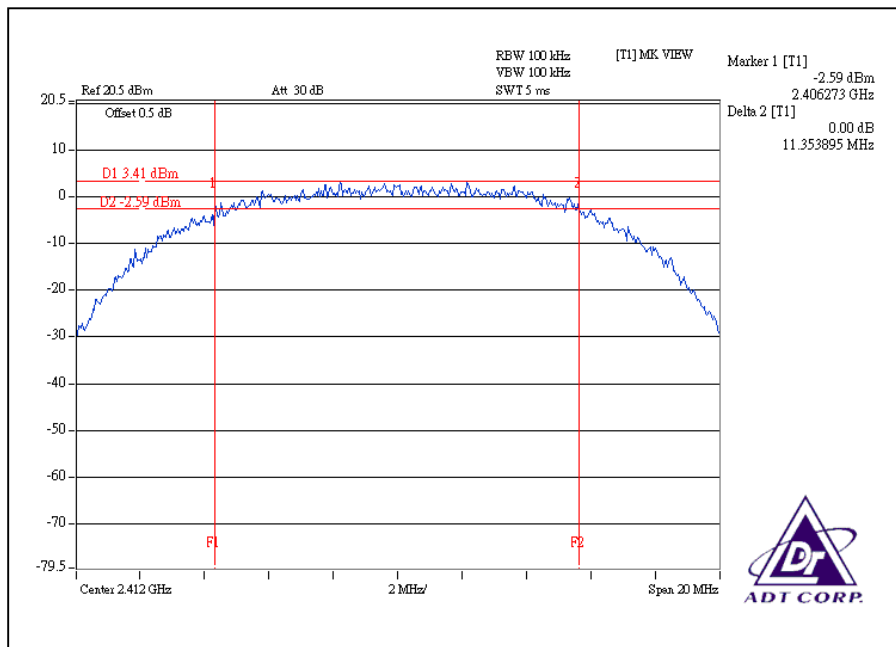
CH6



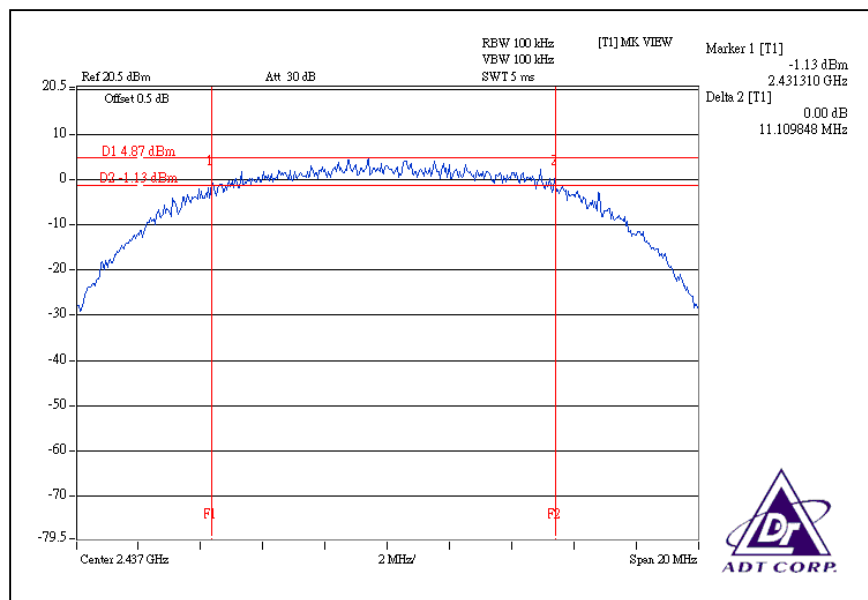
CH11



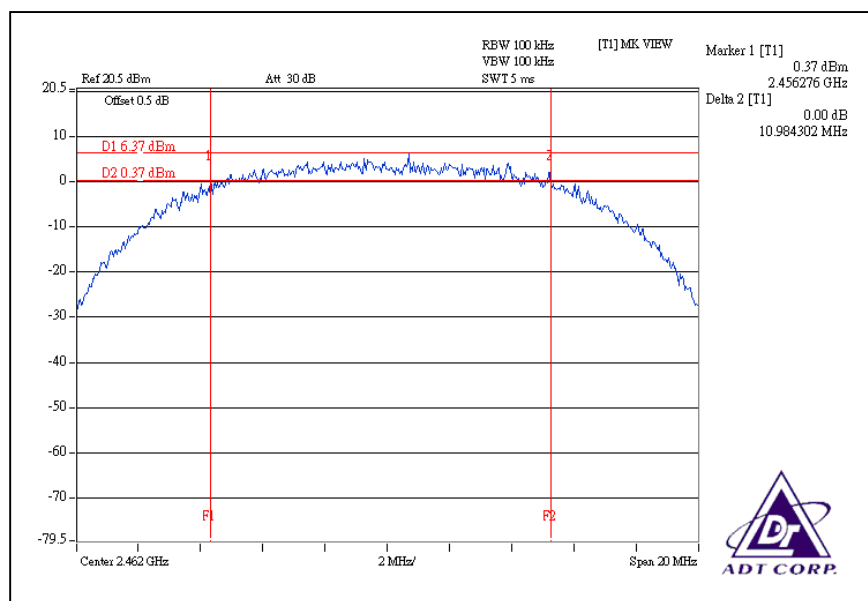
Chain 1 CH1



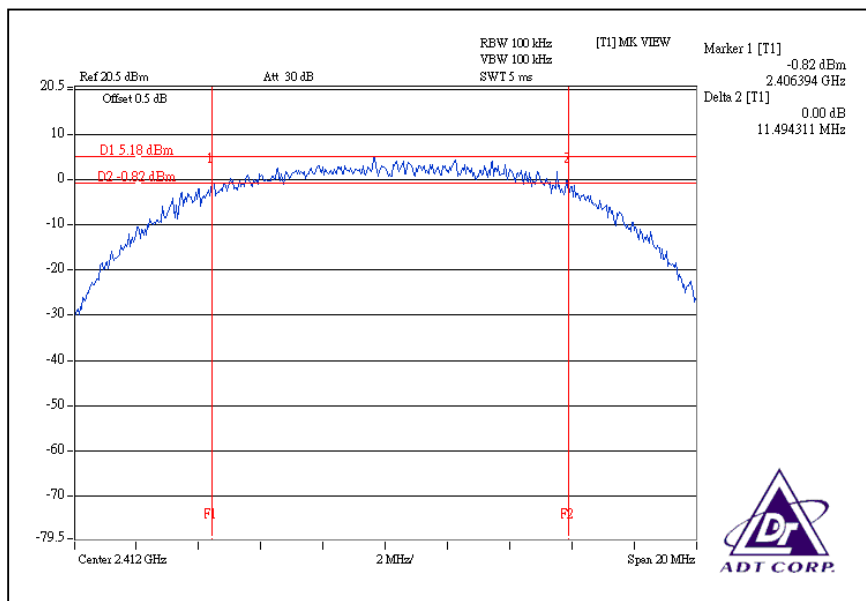
CH6



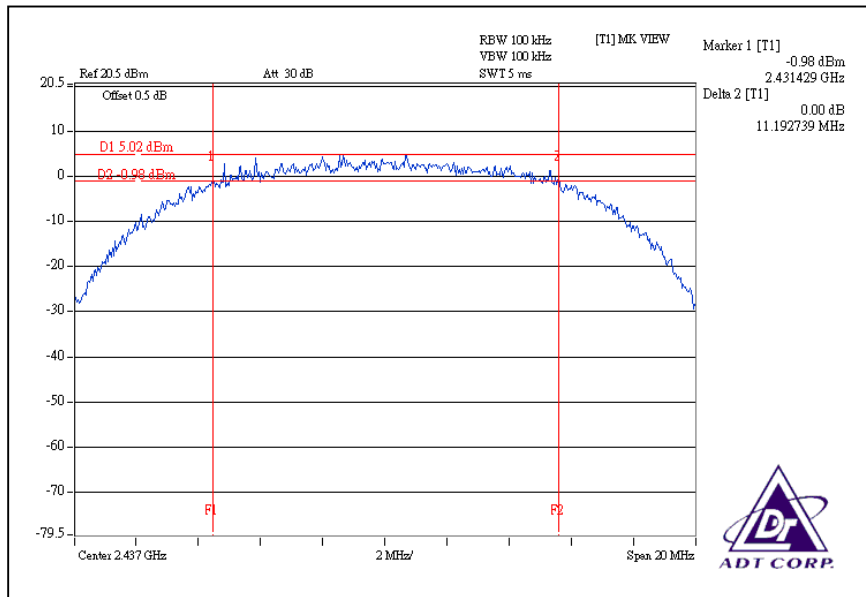
CH11



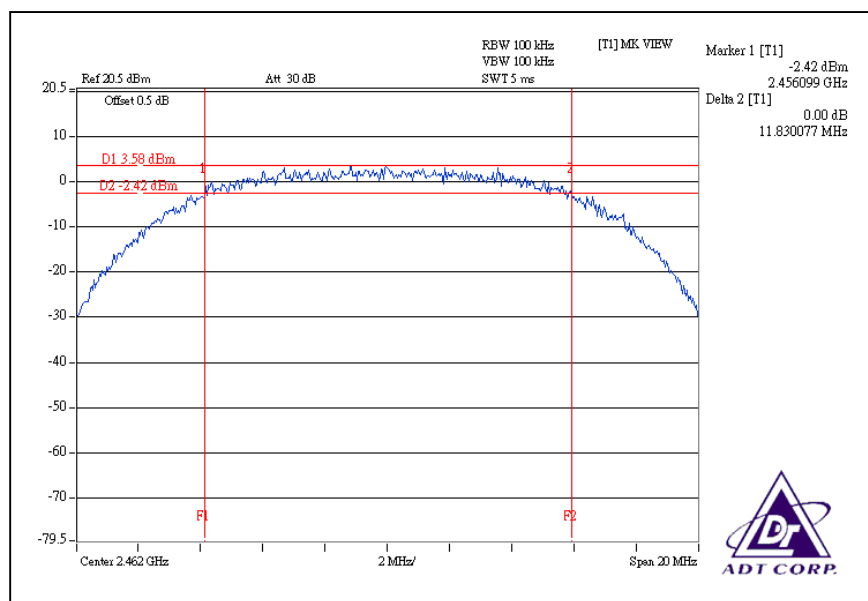
Chain 2 CH1



CH6



CH11

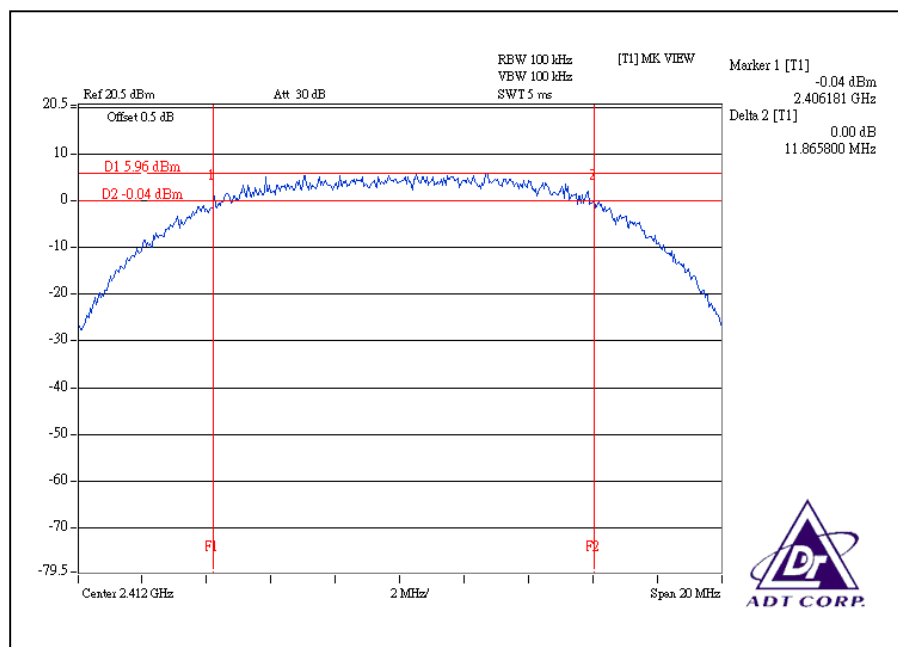


MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Wen Yu		

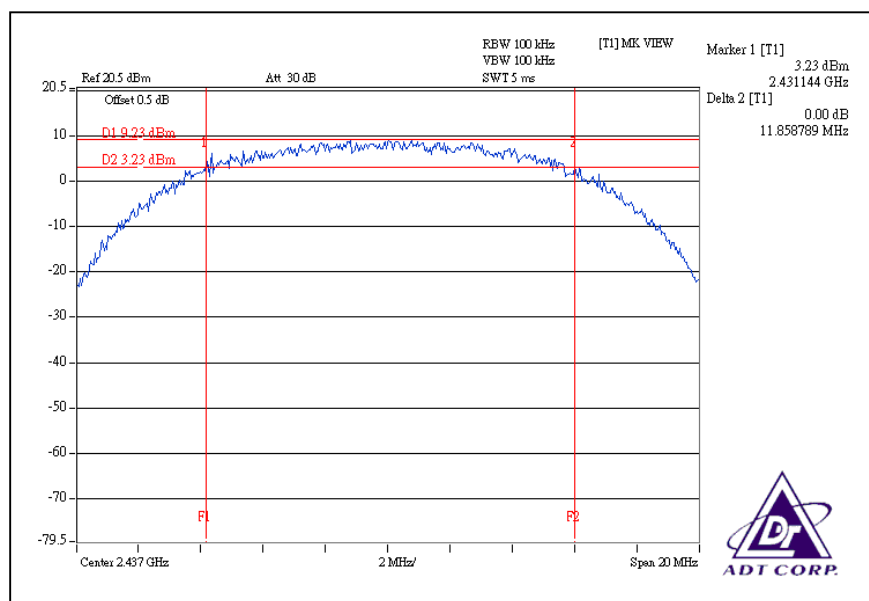
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	11.87	11.50	11.85	0.5	PASS
6	2437	11.86	11.34	12.29	0.5	PASS
11	2462	11.59	11.85	11.12	0.5	PASS

Chain 0

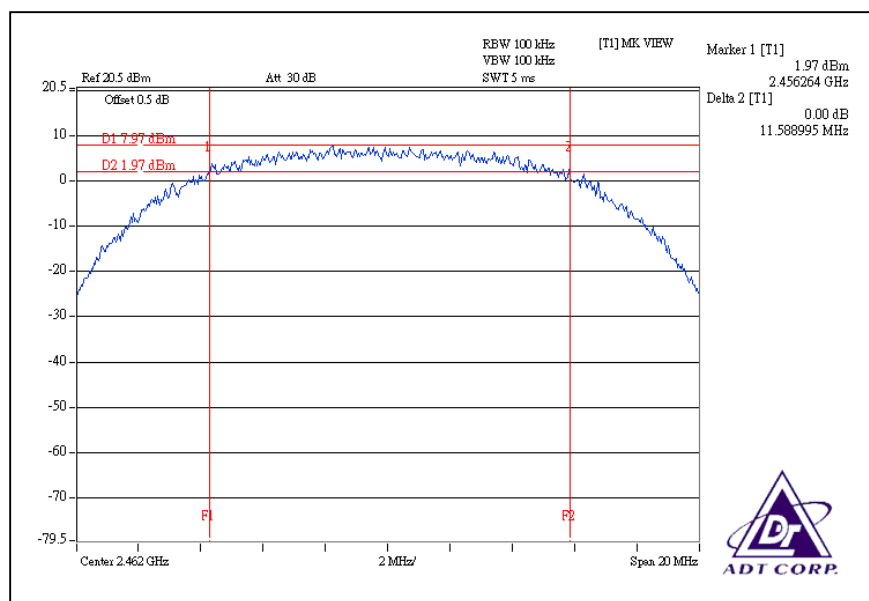
CH1



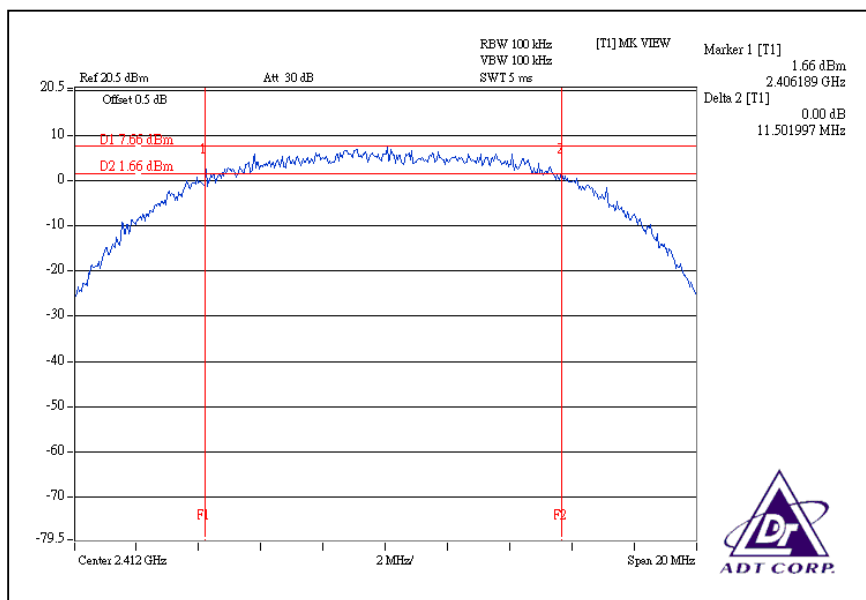
CH6



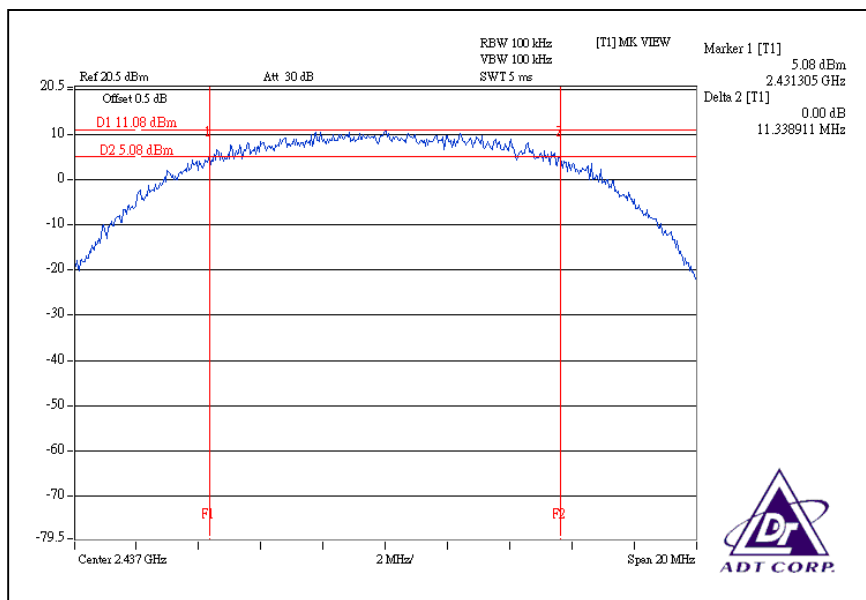
CH11



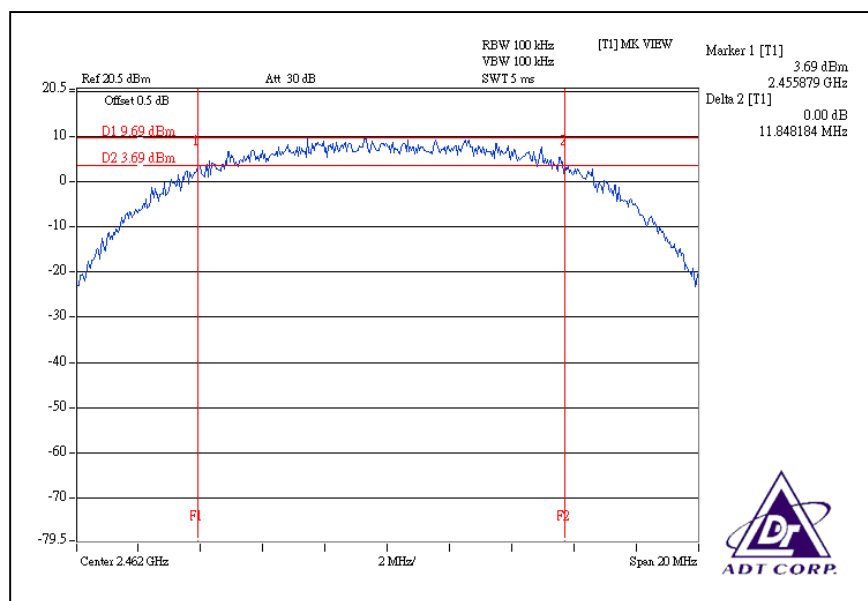
Chain 1 CH1



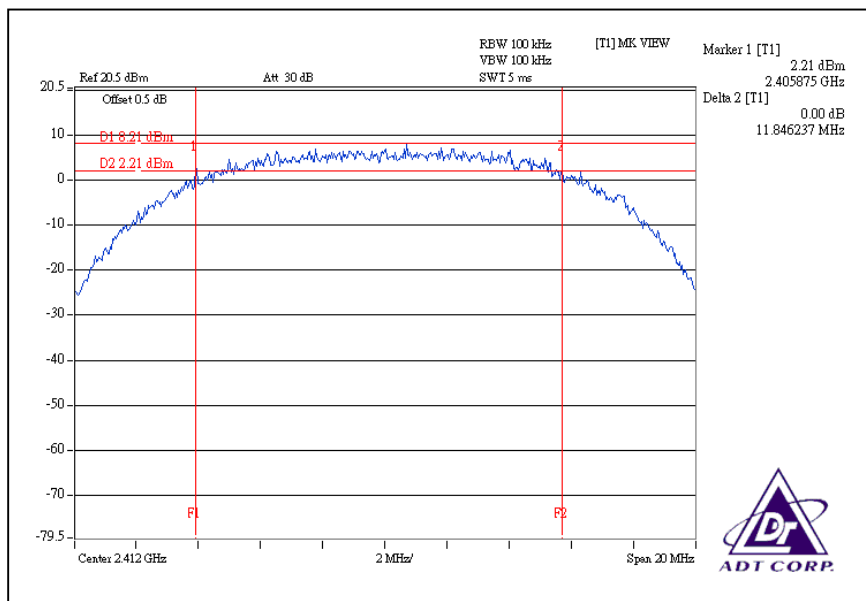
CH6



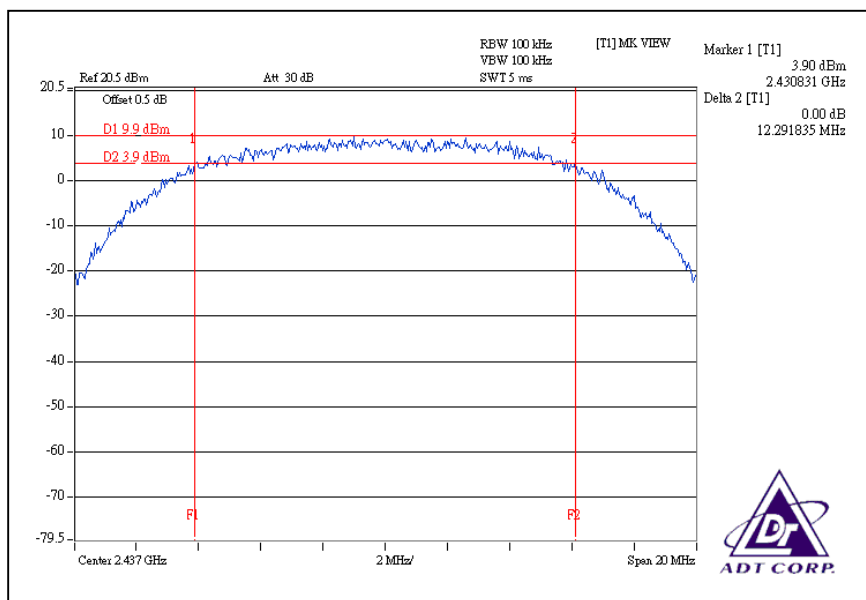
CH11



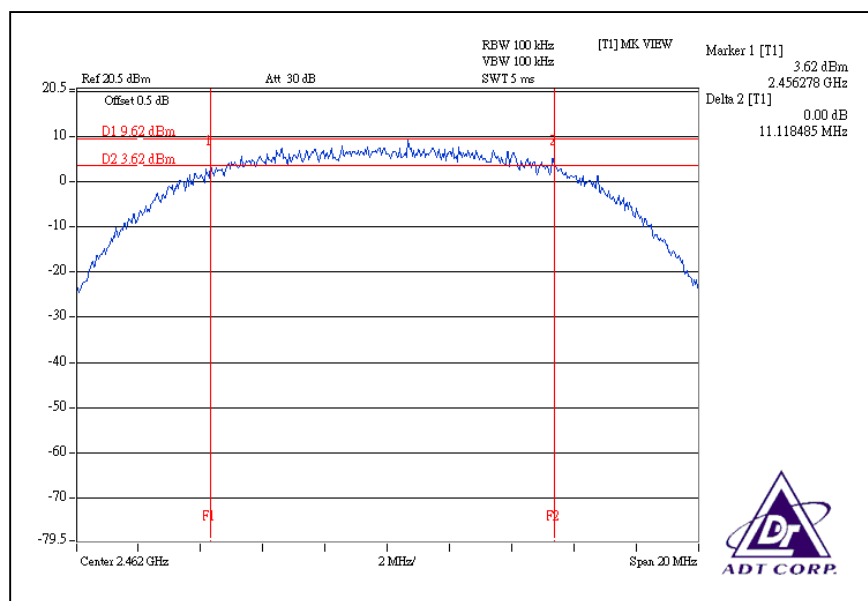
Chain 2 CH1



CH6



CH11

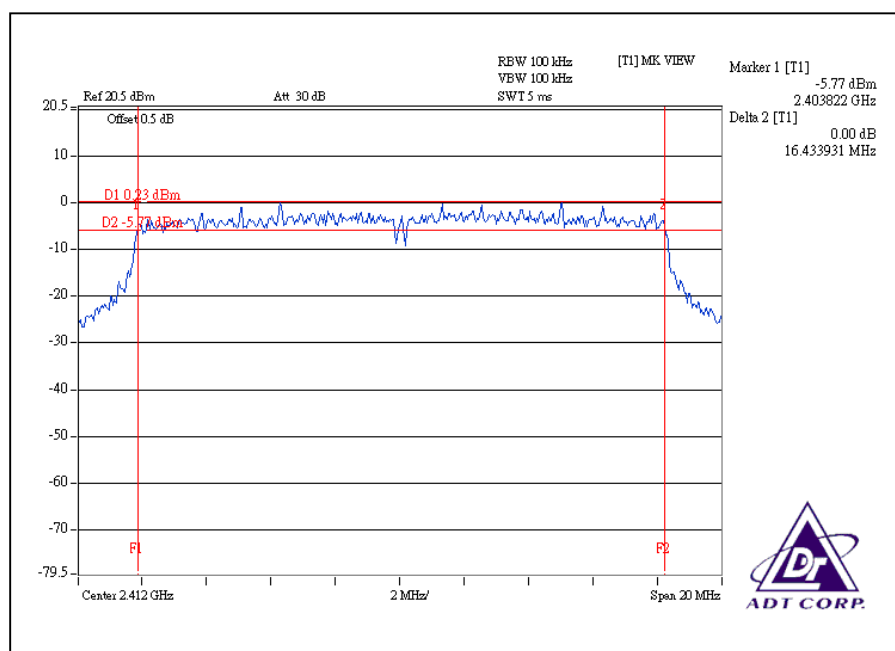


802.11g OFDM MODULATION:

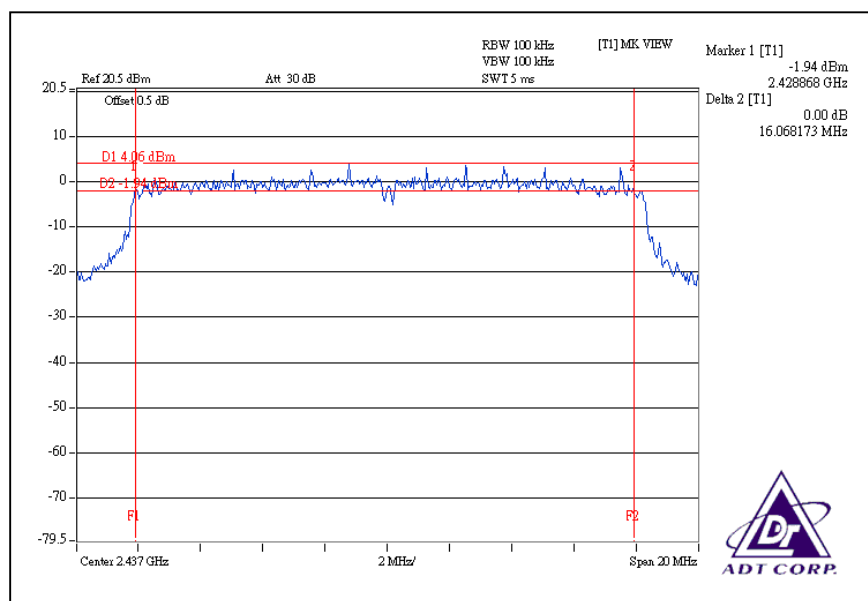
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.43	16.41	16.40	0.5	PASS
6	2437	16.07	16.39	16.37	0.5	PASS
11	2462	16.37	16.43	16.39	0.5	PASS

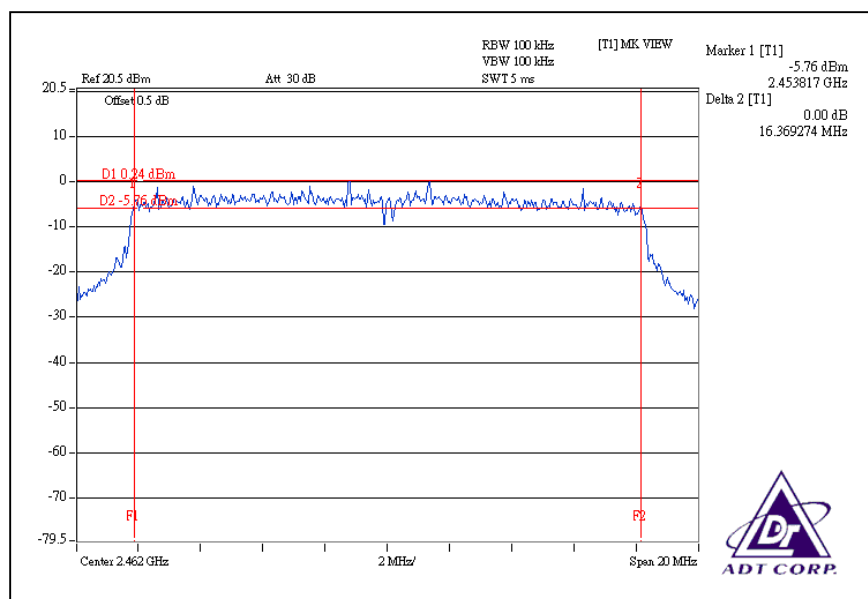
Chain 0 CH1



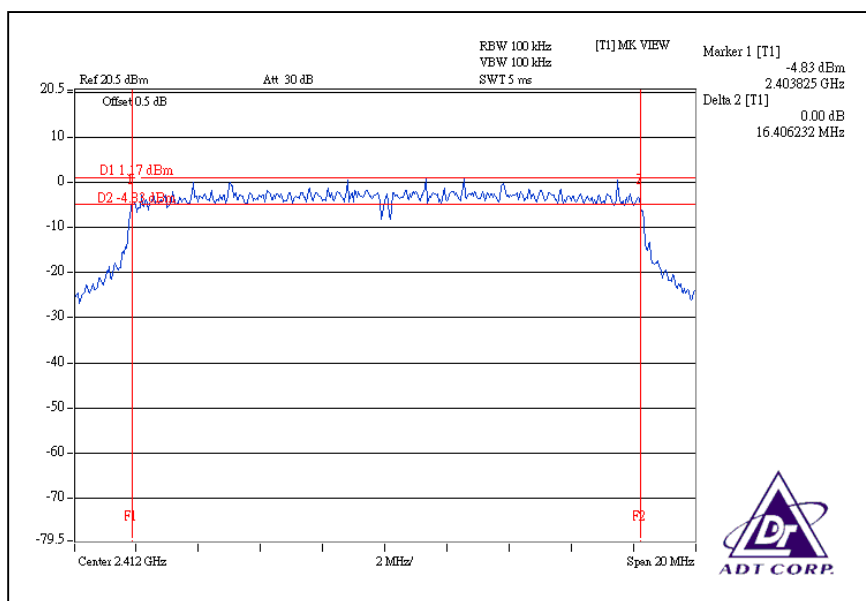
CH6



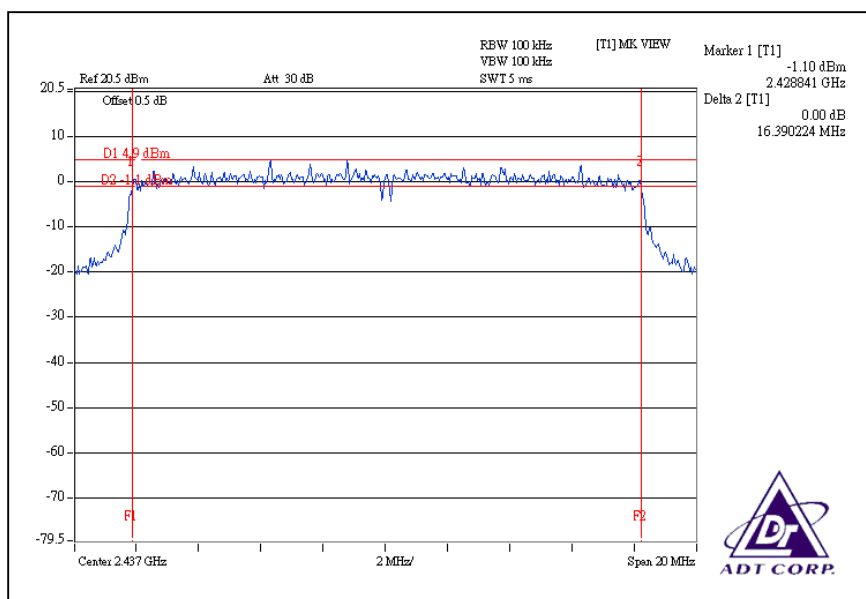
CH11



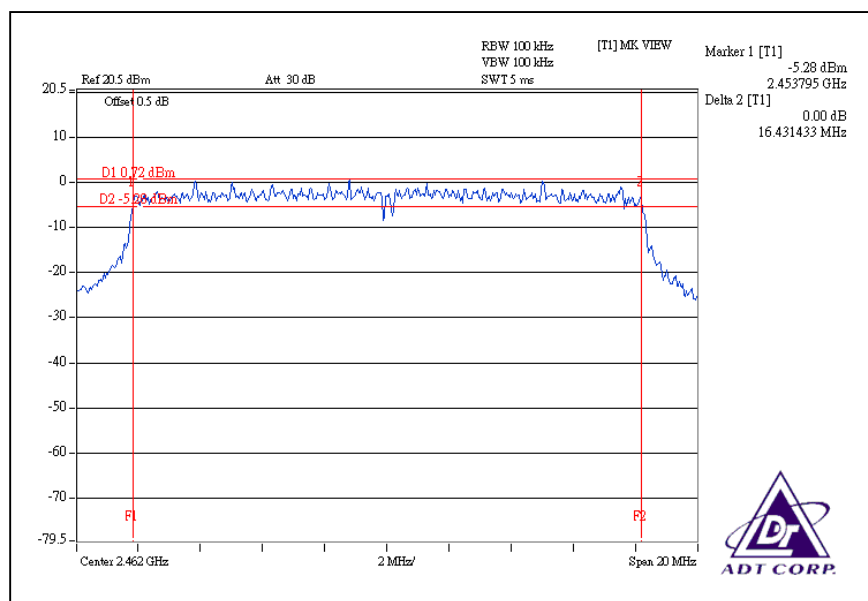
Chain 1 CH1



CH6

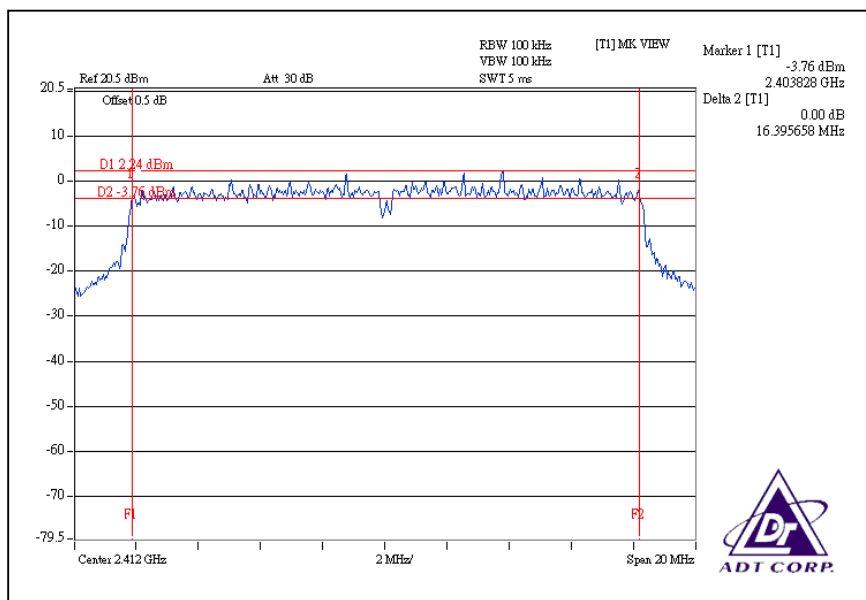


CH11

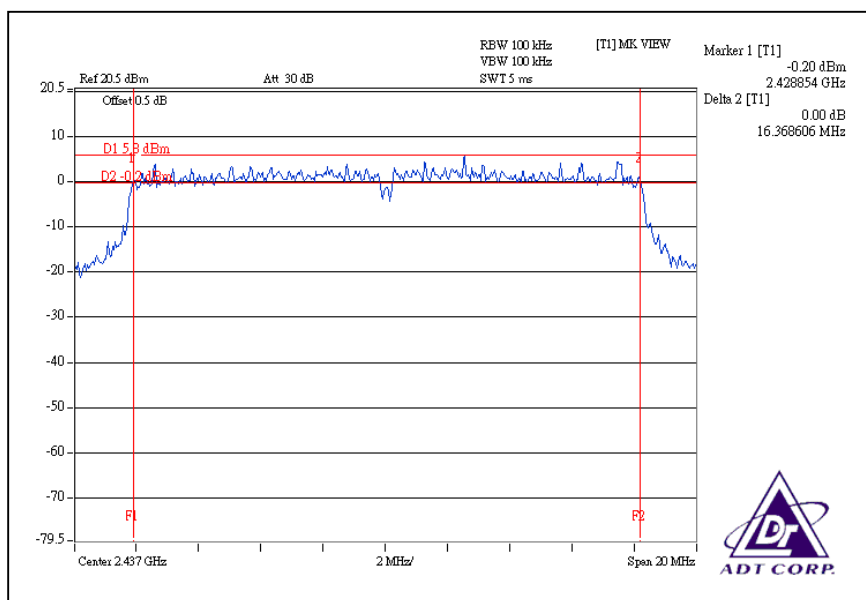


Chain 2

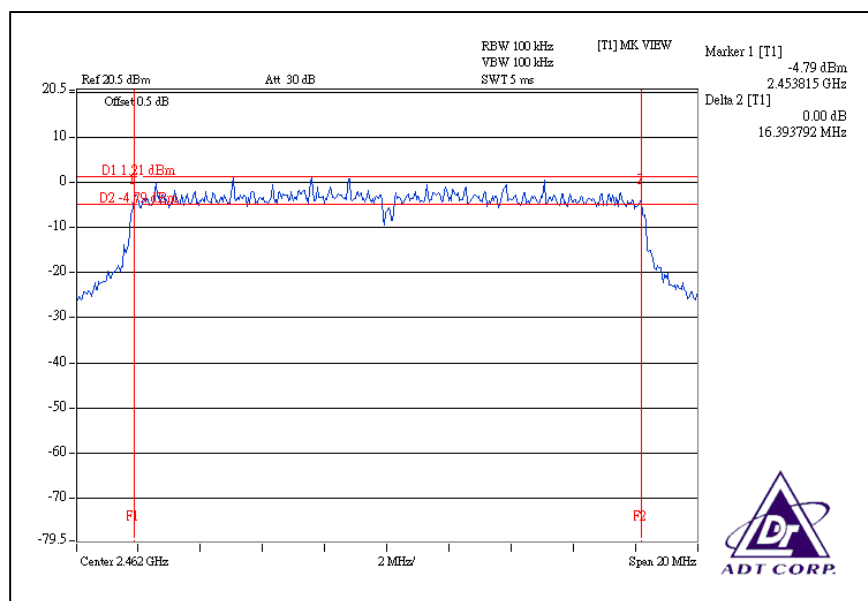
CH1



CH6



CH11

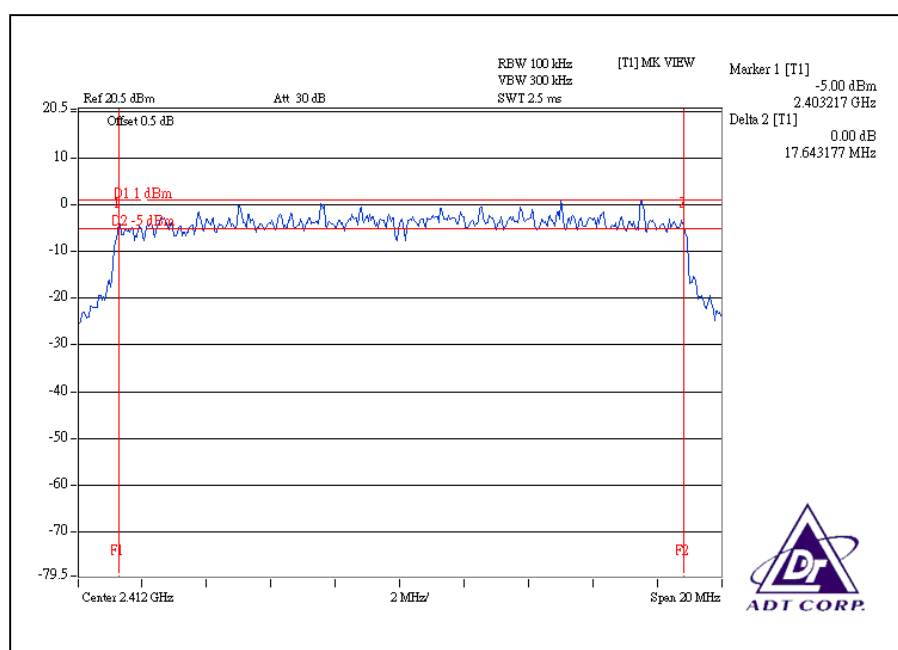


DRAFT 802.11n (20MHz) OFDM MODULATION:

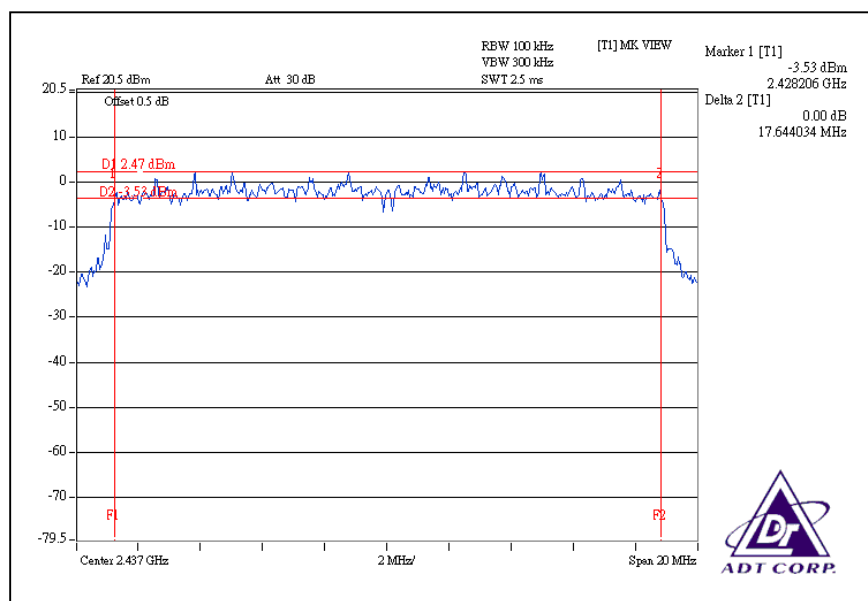
MODULATION TYPE	BPSK	TRANSFER RATE	13Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	17.64	17.64	17.66	0.5	PASS
6	2437	17.64	17.57	17.64	0.5	PASS
11	2462	16.43	17.65	17.69	0.5	PASS

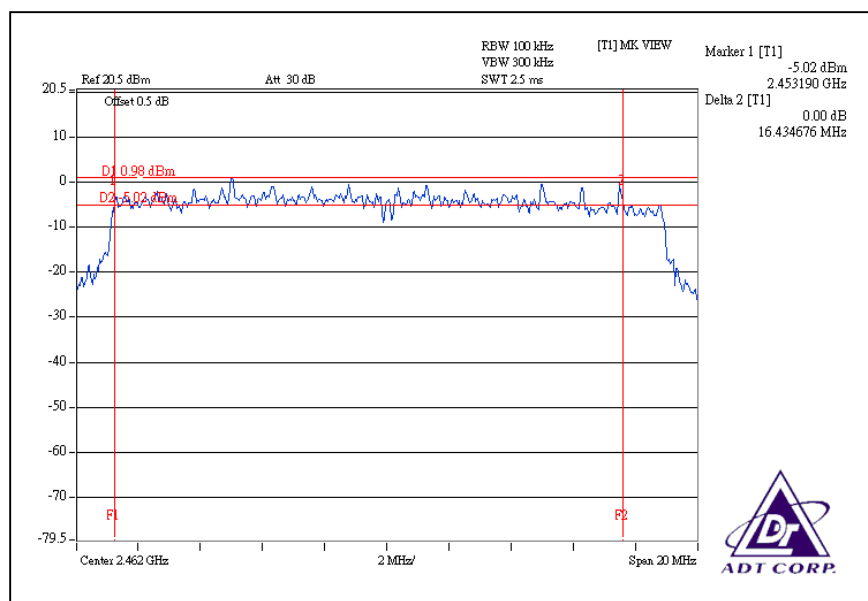
Chain 0 CH1



CH6

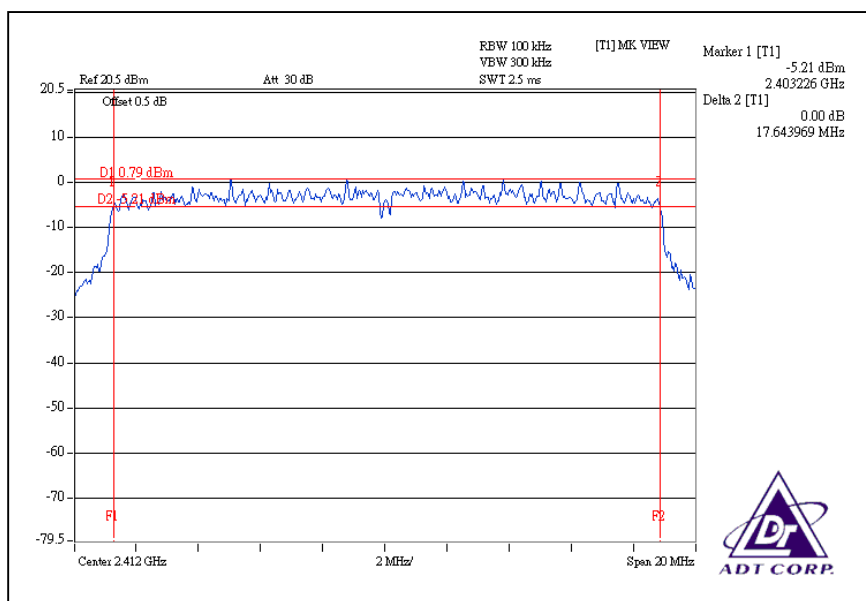


CH11

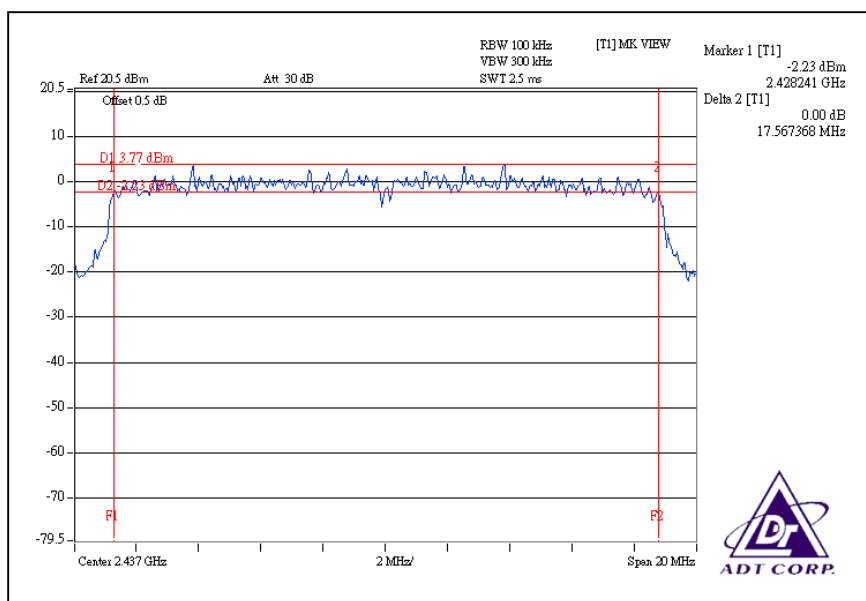


Chain 1

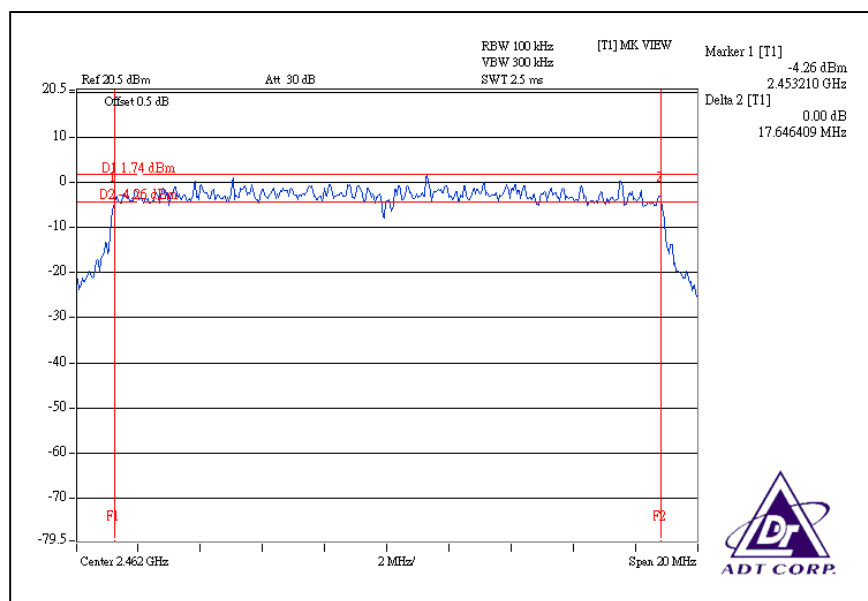
CH1



CH6

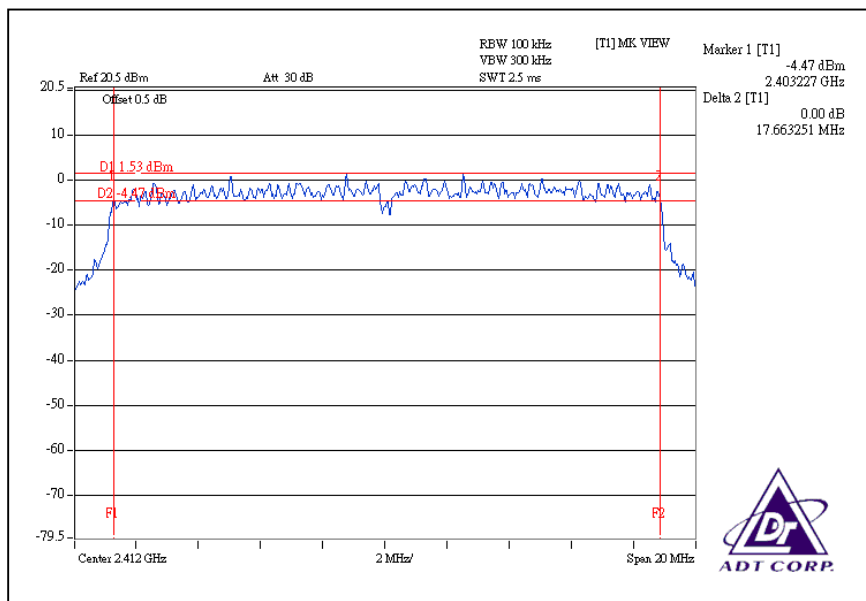


CH11

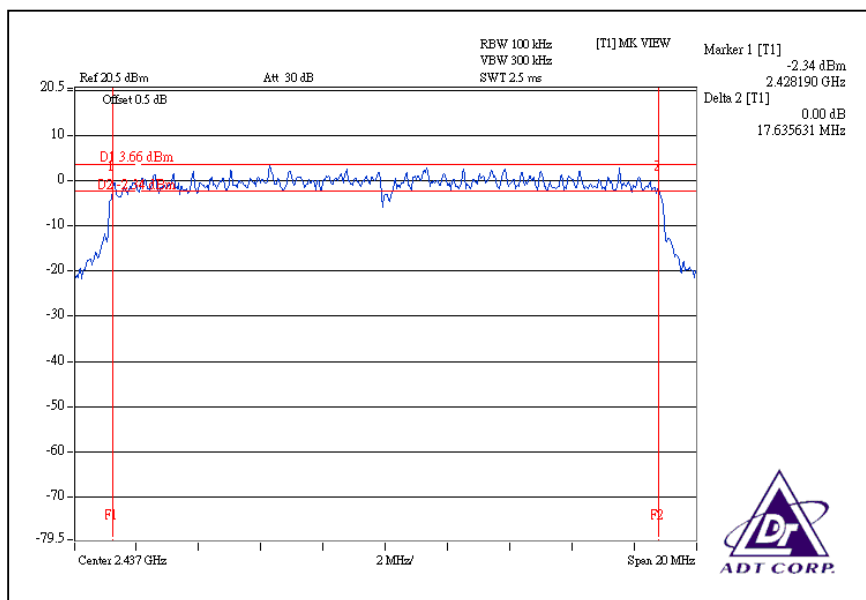


Chain 2

CH1



CH6

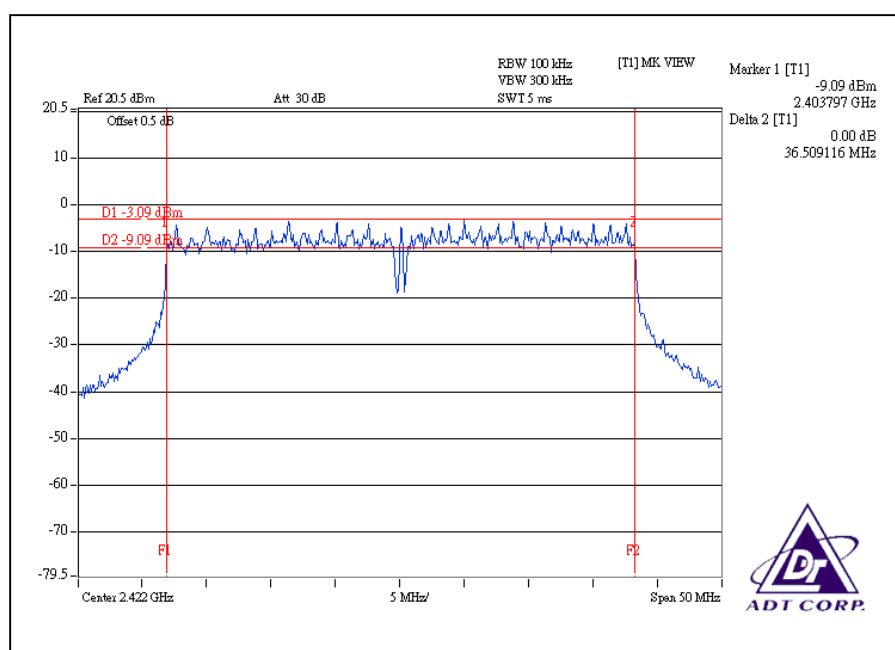


DRAFT 802.11n (40MHz) OFDM MODULATION:

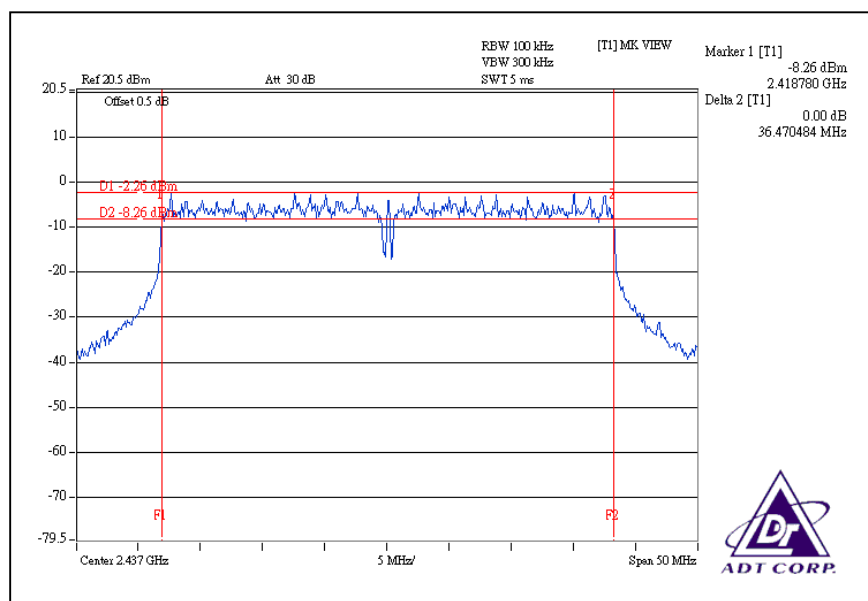
MODULATION TYPE	BPSK	TRANSFER RATE	27Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	36.51	36.57	36.54	0.5	PASS
6	2437	36.47	36.60	36.58	0.5	PASS
11	2462	36.17	36.57	36.44	0.5	PASS

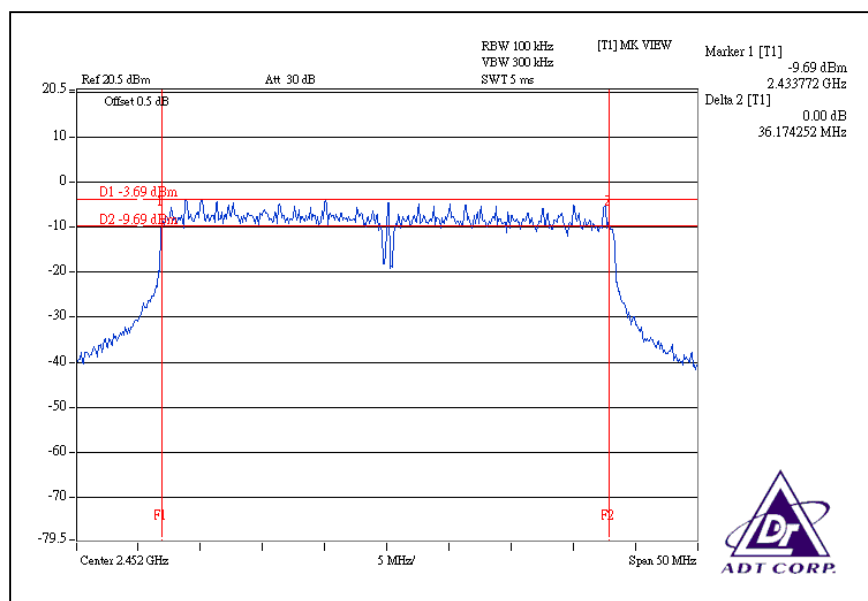
Chain 0 CH1



CH6

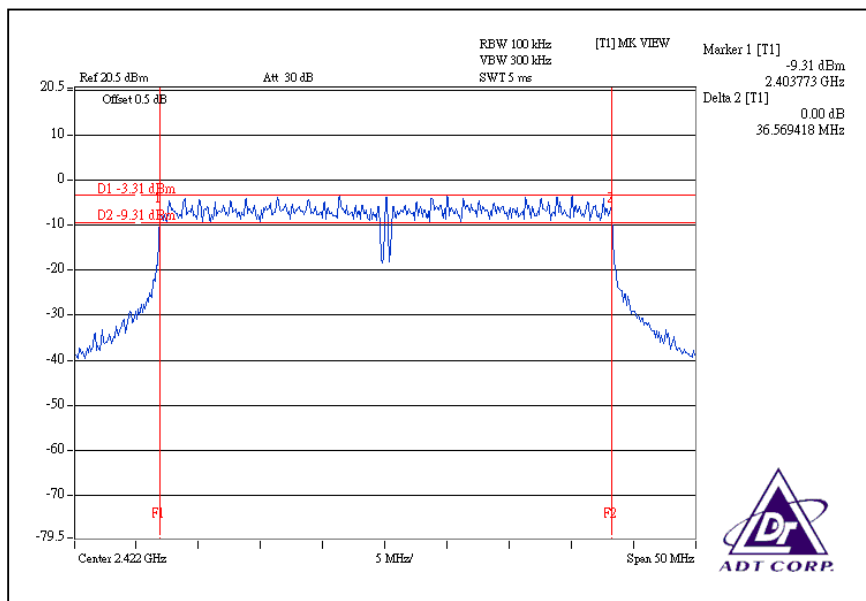


CH11

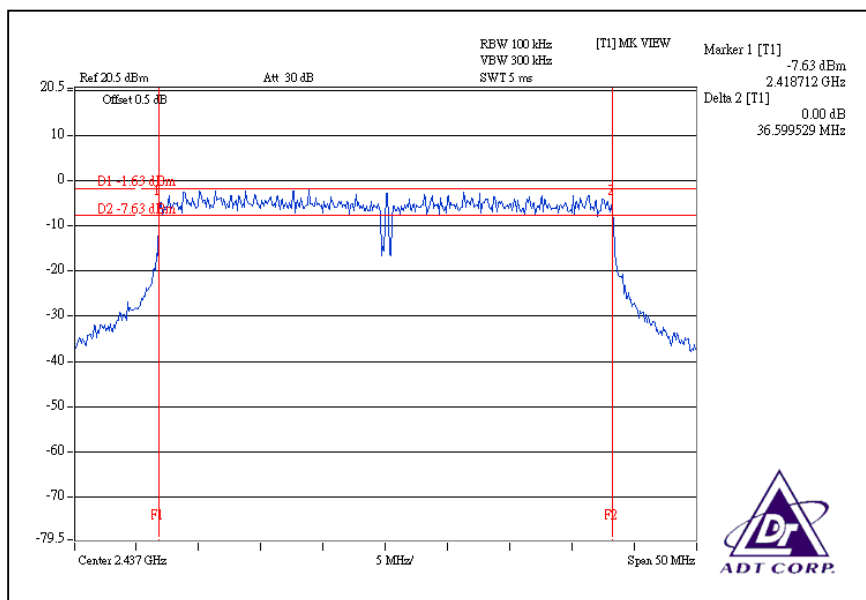


Chain 1

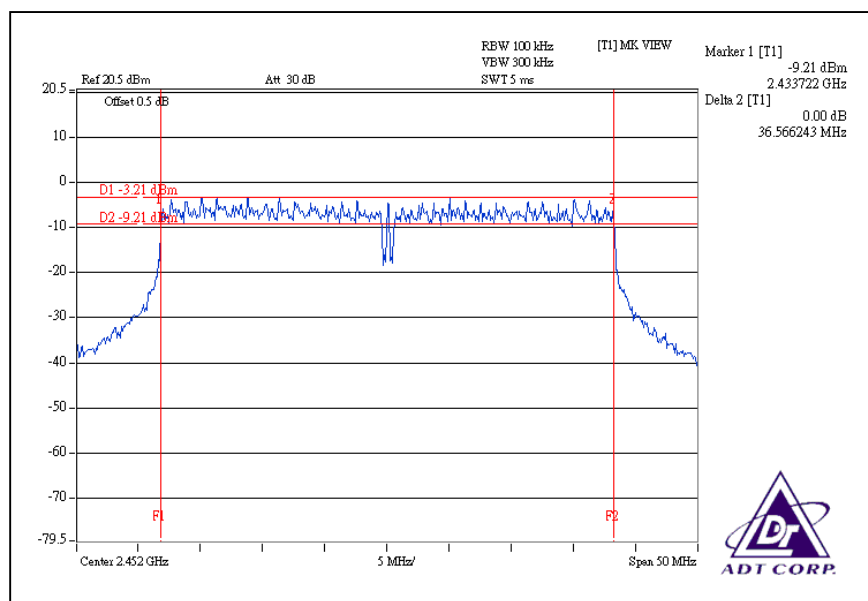
CH1



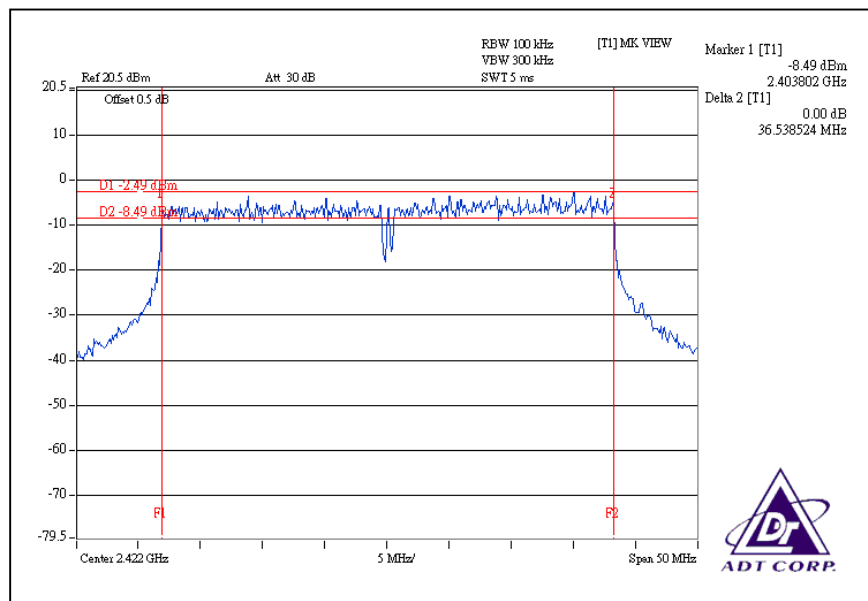
CH6



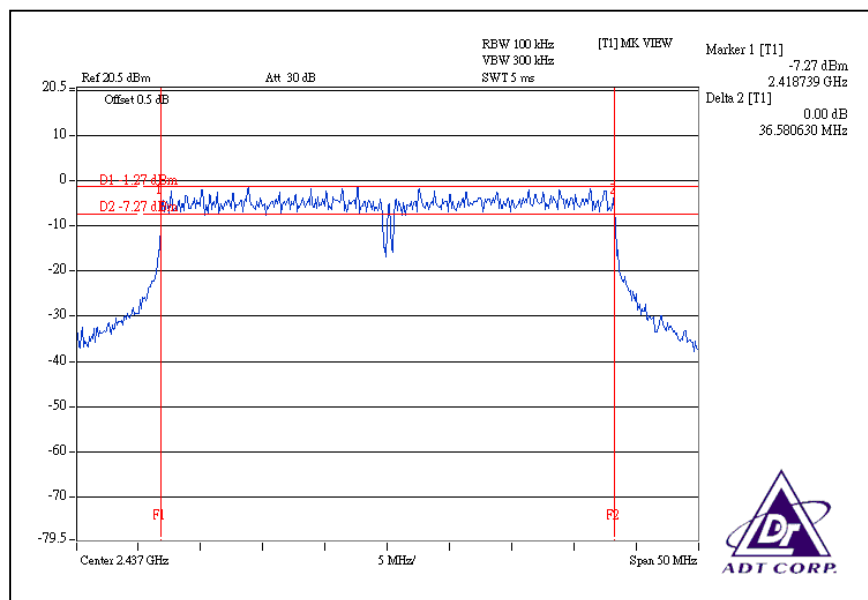
CH11



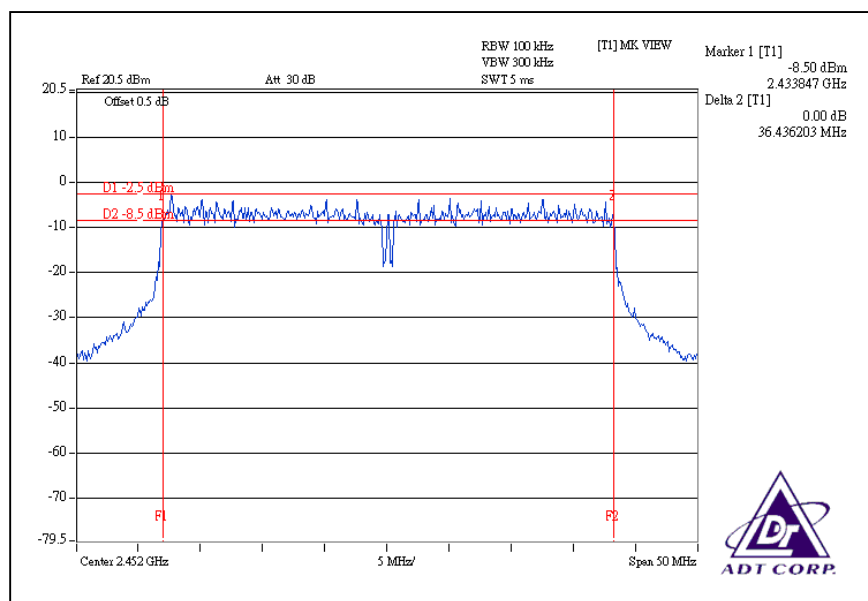
Chain 2 CH1



CH6



CH11



4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 12, 2008
Agilent SIGNAL GENERATOR	E8257C	MY43320668	Dec. 25, 2008
TEKTRON	TDS380	B016335	Aug. 15, 2008
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

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

4.4.3 TEST PROCEDURES

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

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.7 TEST RESULTS

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)			PEAK POWER OUTPUT (dBm)			TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2				
1	2412	34.119	39.446	63.096	15.33	15.96	18.00	136.661	21.36	30	PASS
6	2437	36.813	45.920	47.863	15.66	16.62	16.80	130.596	21.16	30	PASS
11	2462	38.282	61.802	43.652	15.83	17.91	16.40	143.736	21.58	30	PASS

MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)			PEAK POWER OUTPUT (dBm)			TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2				
1	2412	54.325	101.158	129.420	17.35	20.05	21.12	284.903	24.55	30	PASS
6	2437	94.624	205.116	142.561	19.76	23.12	21.54	442.301	26.46	30	PASS
11	2462	75.509	112.460	79.068	18.78	20.51	18.98	267.037	24.27	30	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	20deg.C, 60%RH, 960hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)			PEAK POWER OUTPUT (dBm)			TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2				
1	2412	56.234	63.096	75.509	17.50	18.00	18.78	194.839	22.90	30	PASS
6	2437	112.202	152.405	174.582	20.50	21.83	22.42	439.189	26.42	30	PASS
11	2462	50.119	70.795	60.674	17.00	18.50	17.83	181.588	22.59	30	PASS