FCC TEST REPORT

REPORT NO.: RF970520H04
MODEL NO.: WL-603
RECEIVED: May 20, 2008
TESTED: May 21 to June 12, 2008
ISSUED: June 16, 2008

APPLICANT: 3Com Corporation

ADDRESS: 350 Campus Drive, Marlborough, MA 01752-3064. U.S.A.

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.

TESTING CERT #2177-01

Table of Contents

1. CERTIFICATION

PRODUCT:	3Com Wireless 11n ADSL Firewall Router
BRAND NAME:	3Com
MODEL NO.:	WL-603
TEST SAMPLE:	R&D SAMPLE
TESTED:	May 21 to June 12, 2008
APPLICANT:	3Com Corporation
STANDARDS:	FCC Part 15, Subpart C (Section 15.247) ANSI C63.4-2003

The above equipment (Model: WL-603) 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:** June 16, 2008
(Midoli Peng, Specialist)

TECHNICAL ACCEPTANCE : _____ , **DATE:** June 16, 2008
Responsible for RF
(Hank Chung, Deputy Manager)

APPROVED BY : _____ , **DATE:** June 16, 2008
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C (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 –13.89dB at 0.582MHz
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 –0.80dB at 2483.50MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

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

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	3Com Wireless 11n ADSL Firewall Router
MODEL NO.	WL-603
FCC ID	O9C-WL603
POWER SUPPLY	DC 15V from power adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11 / 5.5 / 2 / 1Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps Draft 802.11n (20MHz, 800ns GI): 130 / 117 / 104 / 78 / 65 / 58.5 / 52 / 39 / 26 / 19.5 /13 / 6.5Mbps Draft 802.11n (40MHz, 800ns GI): 270 / 243 / 216 / 162 / 135 / 121.5 / 108 / 81 /54 / 40.5 / 27 / 13.5Mbps Draft 802.11n (20MHz, 400ns GI): 144.4 / 130 / 115.6/ 86.7 / 72.2 / 65 / 57.8 / 43.3 / 28.9 / 21.7 / 14.4 / 7.2Mbps Draft 802.11n (40MHz, 400ns GI): 300 / 270 / 240 / 180 / 150 / 135 / 120 / 90 / 60 / 45 / 30 / 15Mbps
FREQUENCY RANGE	2412 ~ 2462MHz
NUMBER OF CHANNEL	11 for 802.11b, 802.11g, draft 802.11n (20MHz) 7 for draft 802.11n (40MHz)
MAXIMUM OUTPUT POWER	802.11b: 87.297mW 802.11g: 131.826mW draft 802.11n (20MHz): 159.786mW draft 802.11n (40MHz): 157.782mW
ANTENNA TYPE	Please see note 1 (on next page)
DATA CABLE	NA
I/O PORT	ADSL port x 1, LAN port x 4

NOTE:

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

Transmitter Circuit	Antenna Type	Gain (dBi)	Antenna Connector	Note
Chain(0)	Dipole	2	NA	TX & RX function
Chain(1)	Dipole	2	NA	TX & RX function
Chain(2)	PIFA	2	NA	Only RX function

2. The EUT must be supplied with a power adapter as following :

Brand:	DVE
Model No.:	DSA-20P-15 FUS 1 150
Input power :	100-240V, 0.7A, 50-60Hz
Output power :	15V, 1A, Cable : unshielded without core , 1.9m

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

4. The EUT is 2 * 3 spatial MIMO (2Tx & 3Rx) without beam forming function. The antenna configurations are two transmitter antennas and three receiver antennas, as there are 2 Dipole antennas and one PIFA antenna. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 3 antennas. The 11b/g legacy mode is limited to single transmitter only.

5. 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.

6. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g products.

7. 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

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

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

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

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

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

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)
A	802.11 b	√	
B	802.11 g	√	
C	DRAFT 802.11n(20MHz)	√	
D	DRAFT 802.11n(20MHz)	√	√
E	DRAFT 802.11n(40MHz)	√	
F	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.
3. Mode A, B, D & F the worst modes, was selected as representative mode for the report.

POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
Draft 802.11n (20MHz)	1 to 11	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
Draft 802.11n (20MHz)	1 to 11	1	OFDM	BPSK	13	D

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 N TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	13	D
Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	27	F

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	1	A
802.11g	1 to 11	1, 11	OFDM	BPSK	6	B
Draft 802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	13	D
Draft 802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	27	F

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	1	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
Draft 802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	13	D
Draft 802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	27	F

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 3Com Wireless 11n ADSL Firewall Router. 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

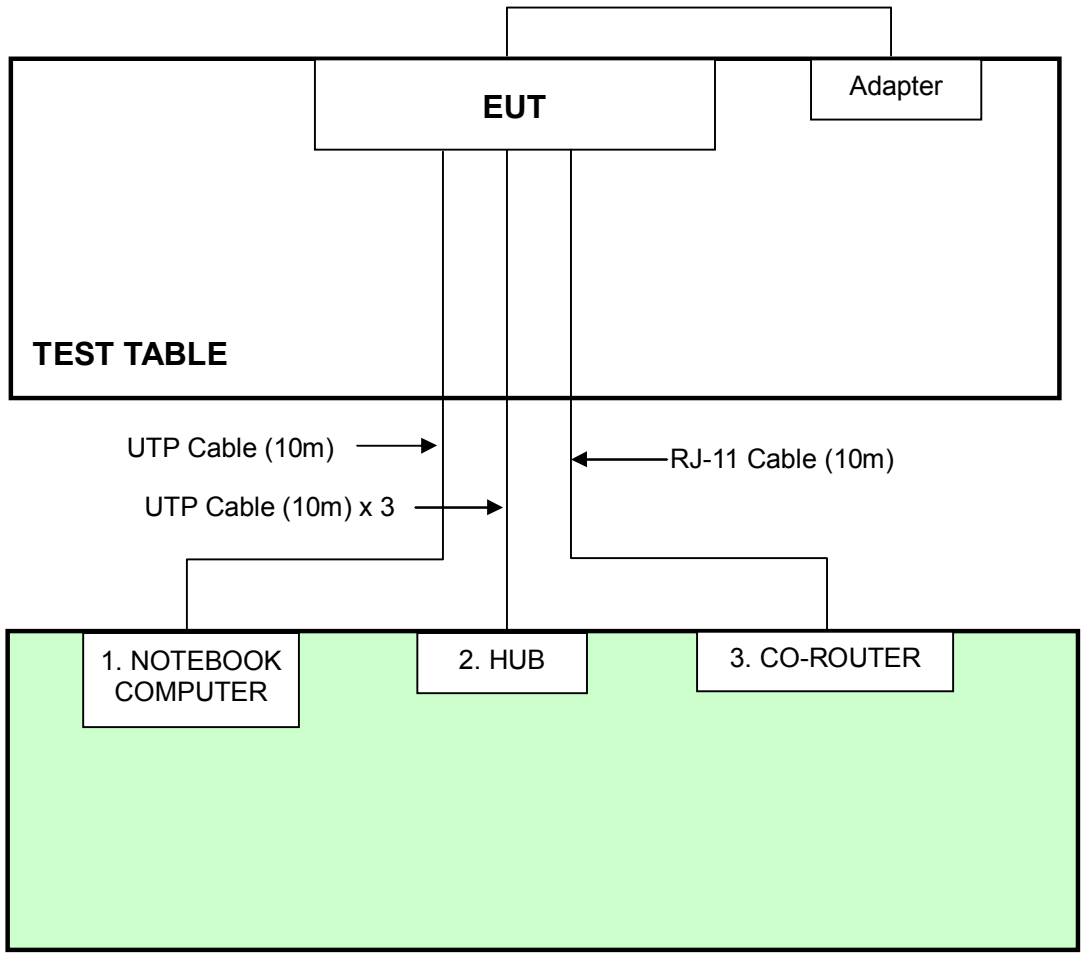
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP18L	6976685584	FCC DoC
2	HUB	AVSYS	110H8	01-20E-000002	FCC DoC
3	CO-ROUTER	ZyXEL	IES-1000	S4Z3112558	NA

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

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. 10, 2009
Line-Impedance Stabilization Network(for EUT)	KNW-407	8-1395-12	Aug. 19, 2008
Line-Impedance Stabilization Network(for Peripheral)	ENV-216	100072	Nov. 08, 2008
RF Cable (JETBAO)	RG5B/U-6m	COACAB-9KHz-30MHz	Aug. 15, 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. 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.

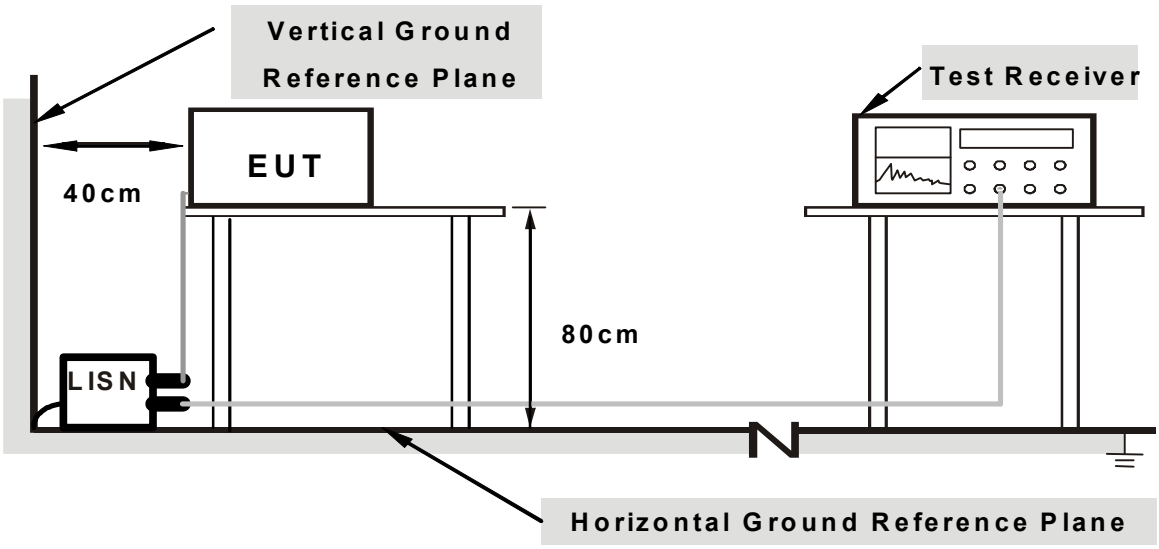
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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. Placed the EUT on testing table.

b. Prepared other computer systems (support unit 1 & 3) to act as communication partners and placed them outside of testing area.

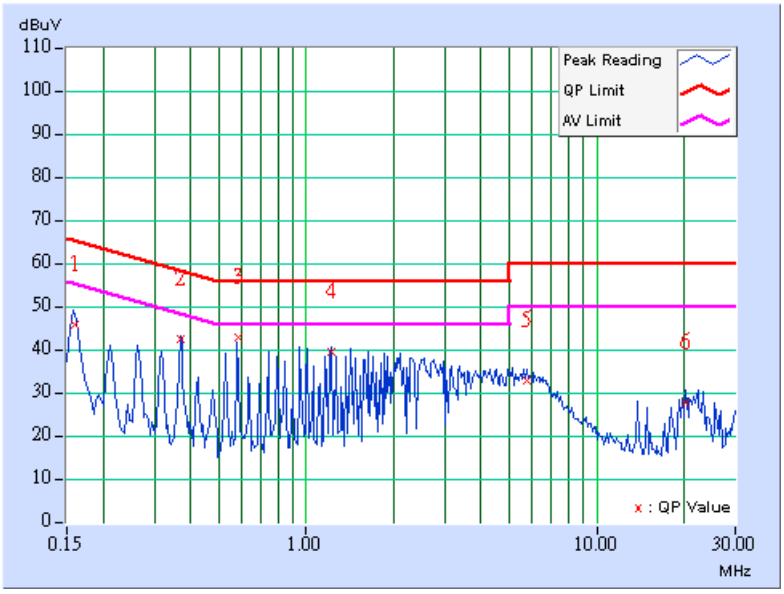
c. The communication partners run test program “MFGTEST .exe” to enable EUT under transmission/receiving condition continuously via wireless transmission.

4.1.7 TEST RESULTS

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line (L)
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	13Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Hart Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.161	0.35	44.99	-	45.34	-	65.42	55.42	-20.08	-
2	0.371	0.13	41.88	-	42.01	-	58.48	48.48	-16.46	-
3	**0.582**	**0.17**	**41.94**	**-**	**42.11**	**-**	**56.00**	**46.00**	**-13.89**	**-**
4	1.216	0.31	38.61	-	38.92	-	56.00	46.00	-17.08	-
5	5.762	0.45	32.26	-	32.71	-	60.00	50.00	-27.29	-
6	20.259	0.88	26.89	-	27.77	-	60.00	50.00	-32.23	-

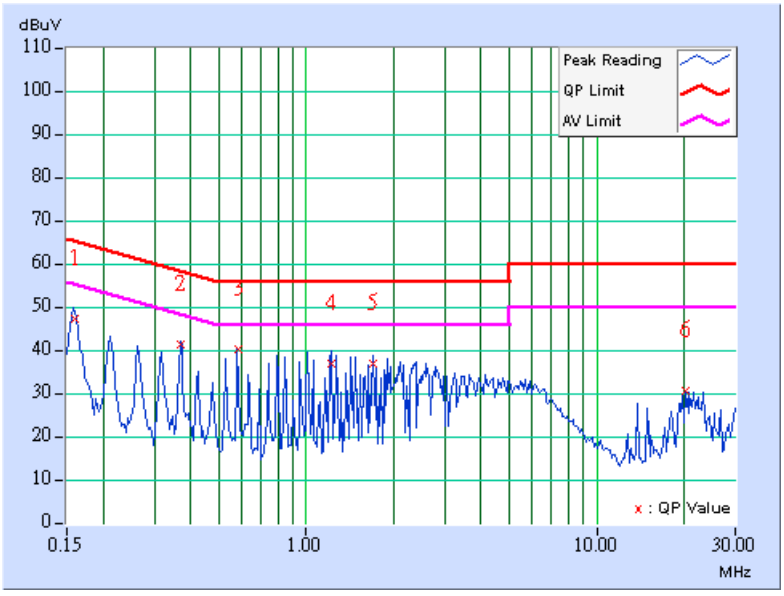
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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	13Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 971hPa	TESTED BY	Hart Chang

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.159	0.37	46.48	-	46.85	-	65.50	55.50	-18.65	-
2	0.371	0.13	40.77	-	40.90	-	58.48	48.48	-17.58	-
3	0.583	0.16	39.63	-	39.79	-	56.00	46.00	-16.21	-
4	1.216	0.31	36.26	-	36.57	-	56.00	46.00	-19.43	-
5	1.693	0.29	36.10	-	36.39	-	56.00	46.00	-19.61	-
6	20.260	0.87	29.93	-	30.80	-	60.00	50.00	-29.20	-

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. 31, 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
RF Switches (ARNITSU)	CS-201	1565157	Aug. 13, 2008
RF CABLE (Chaintek)	SF102	22054-2	Dec. 06. 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 10dB 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 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

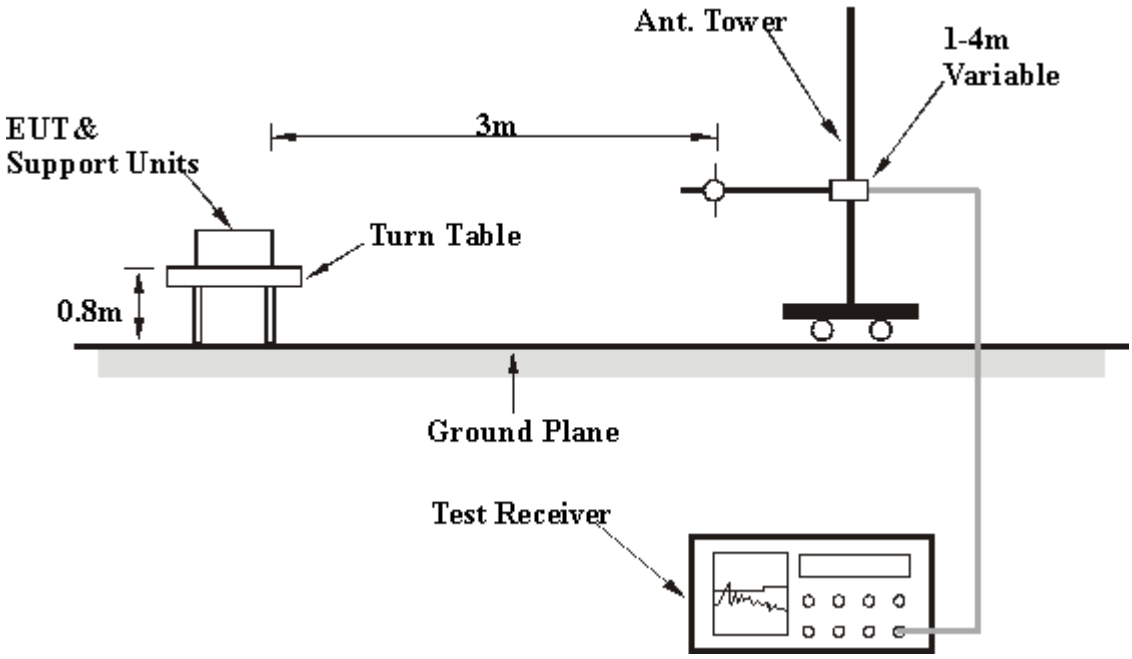
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for 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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH 999hPa	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	125.01	30.58 QP	43.50	-12.92	3.89 H	21	17.69	12.89
2	250.02	38.90 QP	46.00	-7.10	3.55 H	79	25.30	13.60
3	375.00	42.40 QP	46.00	-3.60	2.75 H	223	25.04	17.36
4	499.89	38.12 QP	46.00	-7.88	2.41 H	130	17.82	20.30
5	625.01	40.11 QP	46.00	-5.89	1.80 H	122	16.83	23.28
6	750.00	41.38 QP	46.00	-4.62	1.24 H	80	16.13	25.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	125.00	32.68 QP	43.50	-10.82	1.00 V	28	19.79	12.89
2	250.01	40.34 QP	46.00	-5.66	1.09 V	80	26.74	13.60
3	375.02	41.89 QP	46.00	-4.11	1.54 V	18	24.52	17.37
4	499.98	39.43 QP	46.00	-6.57	1.88 V	28	19.13	20.30
5	625.01	41.24 QP	46.00	-4.76	2.87 V	141	17.96	23.28
6	750.00	42.96 QP	46.00	-3.04	2.70 V	113	17.71	25.25

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
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 999hPa	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	54.69 PK	74.00	-19.31	1.29 H	353	24.29	30.40
2	2390.00	43.62 AV	54.00	-10.38	1.29 H	353	13.22	30.40
3	*2412.00	97.60 PK			1.31 H	352	67.11	30.49
4	*2412.00	92.10 AV			1.31 H	352	61.61	30.49
5	4824.00	45.20 PK	74.00	-28.80	1.33 H	27	9.51	35.69
6	4824.00	35.70 AV	54.00	-18.30	1.33 H	27	0.01	35.69
7	#7236.00	50.30 PK	77.60	-27.30	1.13 H	189	8.06	42.24
8	#7236.00	38.20 AV	72.10	-33.90	1.13 H	189	-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	2386.00	62.70 PK	74.00	-11.30	1.80 V	294	32.65	30.05
2	2386.00	52.96 AV	54.00	-1.04	1.80 V	294	22.91	30.05
3	*2412.00	109.76 PK			2.06 V	321	79.61	30.15
4	*2412.00	105.13 AV			2.06 V	321	74.98	30.15
5	4824.00	51.99 PK	74.00	-22.01	1.41 V	27	16.53	35.46
6	4824.00	46.60 AV	54.00	-7.40	1.41 V	27	11.14	35.46
7	#7236.00	56.78 PK	89.76	-32.98	1.43 V	247	14.93	41.85
8	#7236.00	46.93 AV	85.13	-38.20	1.43 V	247	5.08	41.85

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.
6. "#":The radiated frequency is out the restricted band.

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	26deg. C, 65%RH 999hPa	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	98.60 PK			1.24 H	359	67.99	30.61
2	*2437.00	93.10 AV			1.24 H	359	62.49	30.61
3	4874.00	47.30 PK	74.00	-26.70	1.40 H	310	11.50	35.80
4	4874.00	34.20 AV	54.00	-19.80	1.40 H	310	-1.60	35.80
5	7311.00	50.90 PK	74.00	-23.10	1.20 H	178	8.38	42.52
6	7311.00	38.50 AV	54.00	-15.50	1.20 H	178	-4.02	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	110.08 PK			2.05 V	322	79.84	30.24
2	*2437.00	105.42 AV			2.05 V	322	75.18	30.24
3	4874.00	49.90 PK	74.00	-24.10	1.24 V	28	14.35	35.55
4	4874.00	43.00 AV	54.00	-11.00	1.24 V	28	7.45	35.55
5	7311.00	51.70 PK	74.00	-22.30	1.46 V	358	9.66	42.04
6	7311.00	40.30 AV	54.00	-13.70	1.46 V	358	-1.74	42.04

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	26deg. C, 65%RH 999hPa	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	96.34 PK			1.24 H	258	65.62	30.72
2	*2462.00	90.90 AV			1.24 H	258	60.18	30.72
3	2487.56	56.00 PK	74.00	-18.00	1.22 H	255	25.17	30.83
4	2487.56	43.62 AV	54.00	-10.38	1.22 H	255	12.79	30.83
5	4924.00	46.90 PK	74.00	-27.10	1.36 H	303	11.00	35.90
6	4924.00	35.30 AV	54.00	-18.70	1.36 H	303	-0.60	35.90
7	7386.00	50.40 PK	74.00	-23.60	1.23 H	188	7.60	42.80
8	7386.00	38.20 AV	54.00	-15.80	1.23 H	188	-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	109.92 PK			2.02 V	320	79.58	30.34
2	*2462.00	105.20 AV			2.02 V	320	74.86	30.34
3	2487.46	63.32 PK	74.00	-10.68	1.81 V	292	32.88	30.44
4	2487.46	52.88 AV	54.00	-1.12	1.81 V	292	22.44	30.44
5	4924.00	52.13 PK	74.00	-21.87	1.30 V	81	16.50	35.63
6	4924.00	46.04 AV	54.00	-7.96	1.30 V	81	10.41	35.63
7	7386.00	54.05 PK	74.00	-19.95	1.52 V	240	11.82	42.23
8	7386.00	41.03 AV	54.00	-12.97	1.52 V	240	-1.20	42.23

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

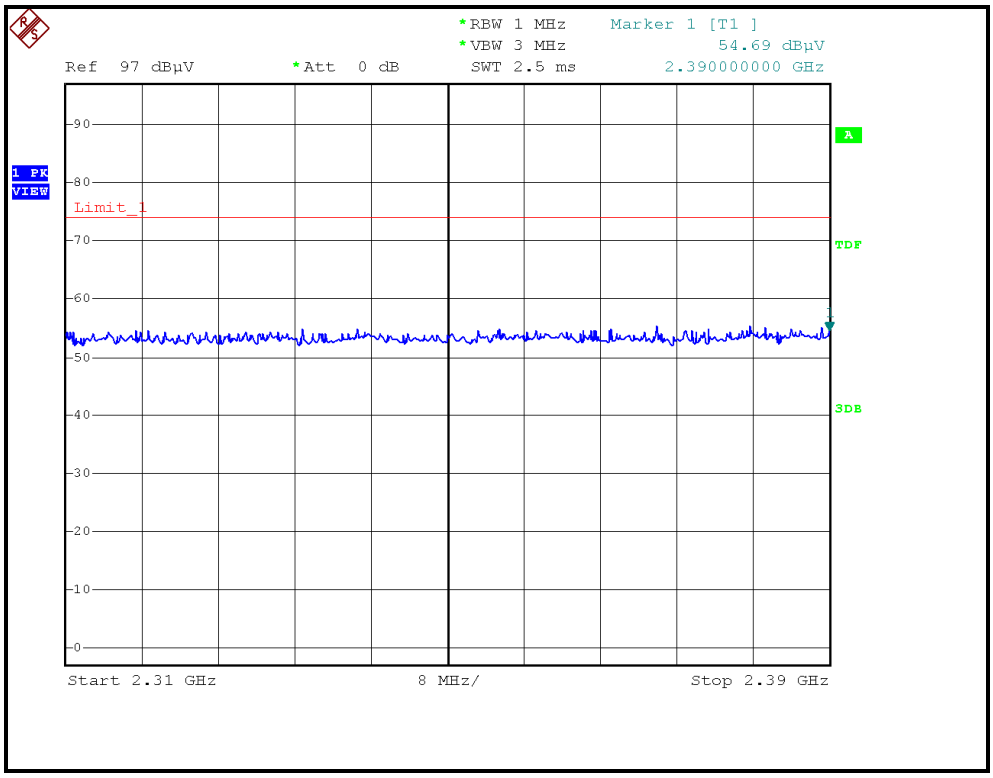
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

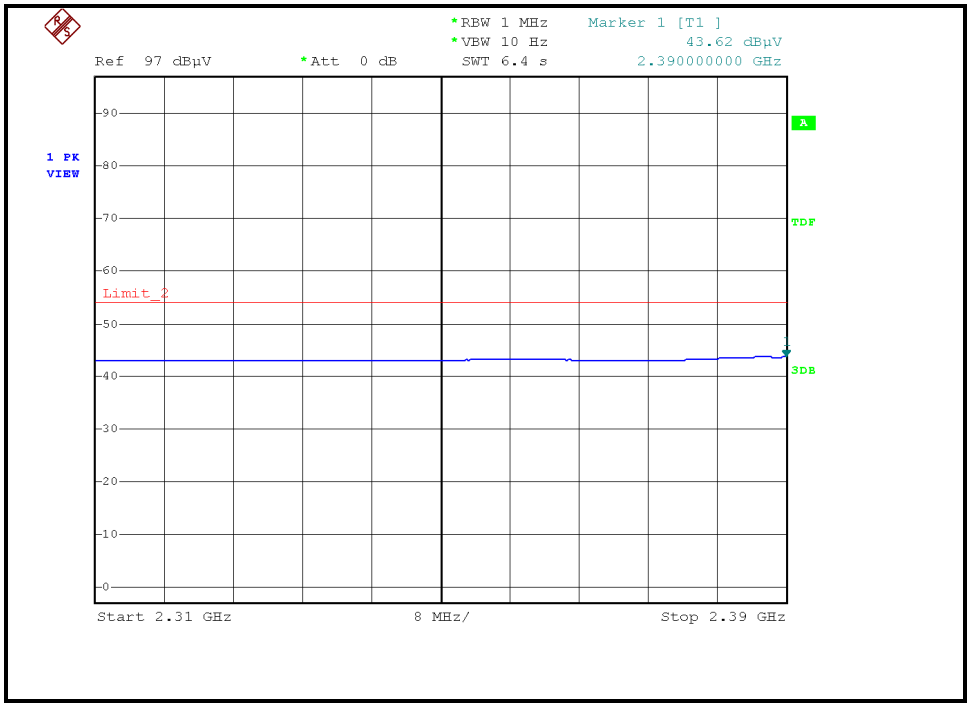
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)





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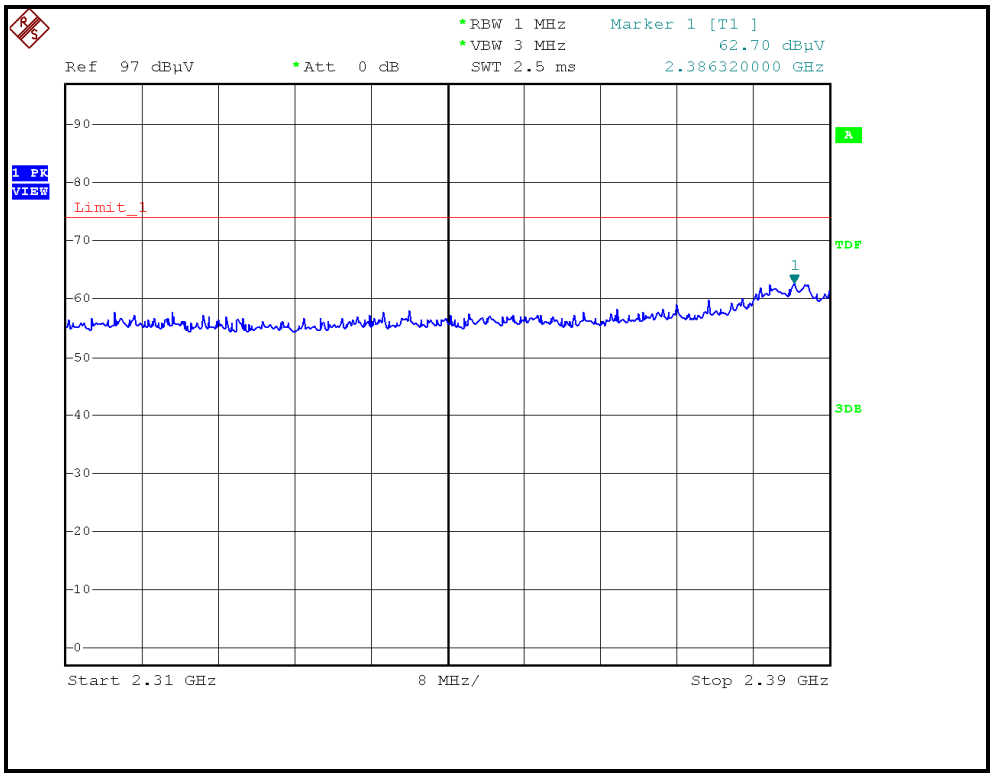

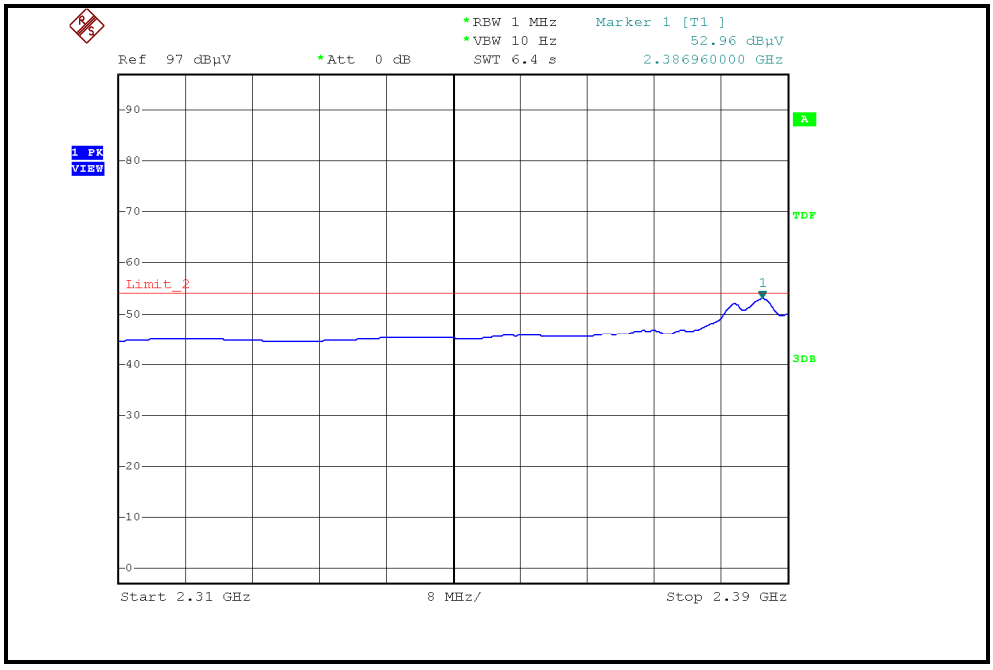

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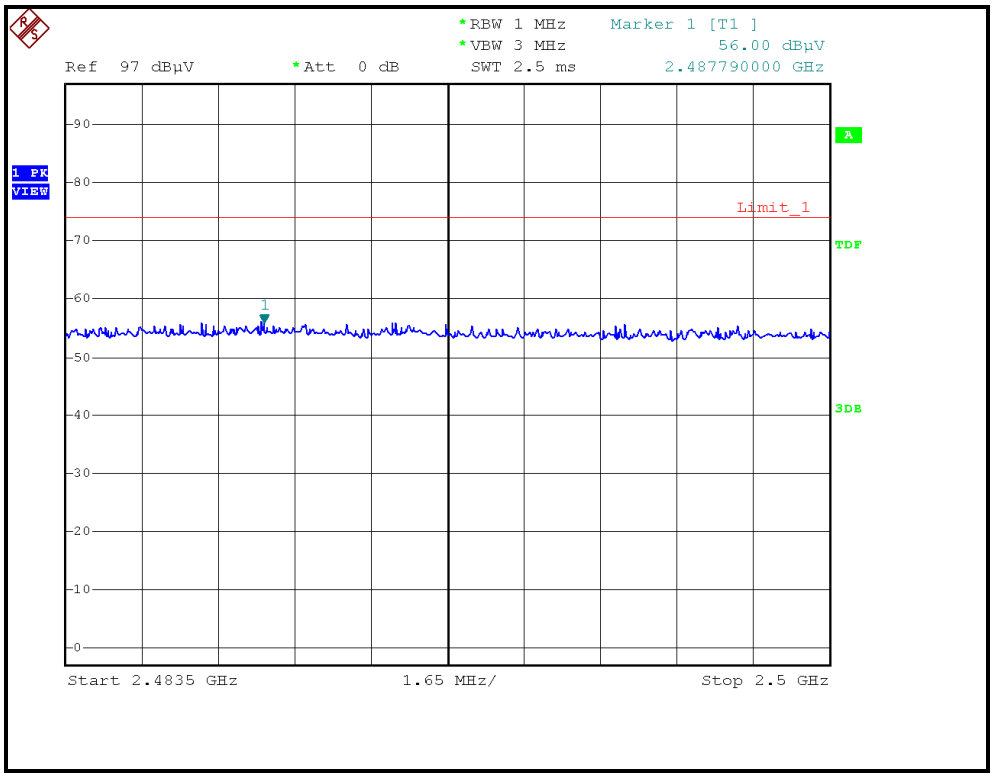
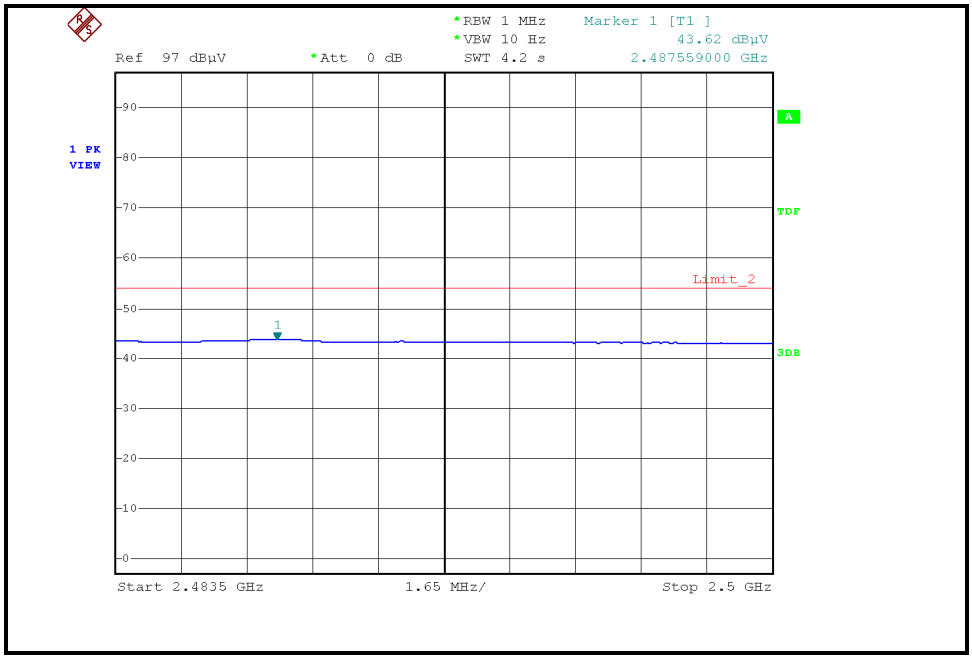
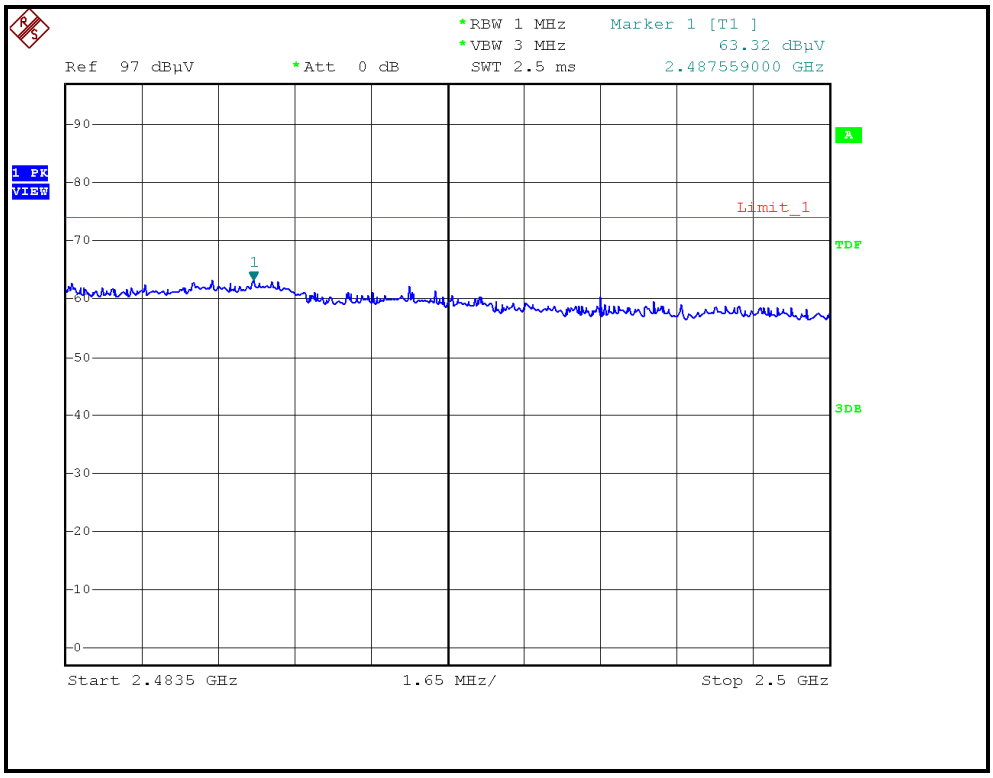
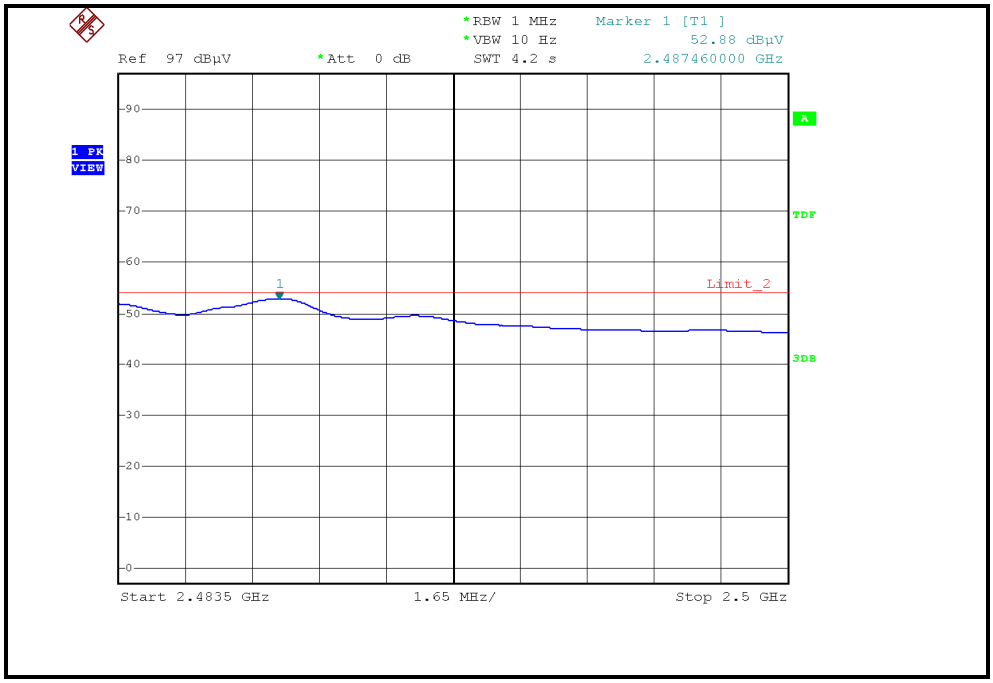




RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





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	26deg. C, 65%RH 999hPa	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	57.78 PK	74.00	-16.22	1.35 H	74	27.38	30.40
2	2390.00	44.96 AV	54.00	-9.04	1.35 H	74	14.56	30.40
3	*2412.00	101.51 PK			1.35 H	72	71.02	30.49
4	*2412.00	90.68 AV			1.35 H	72	60.19	30.49
5	4824.00	50.00 PK	74.00	-24.00	1.27 H	36	14.31	35.69
6	4824.00	34.10 AV	54.00	-19.90	1.27 H	36	-1.59	35.69
7	#7236.00	52.63 PK	81.51	-28.88	1.18 H	347	10.39	42.24
8	#7236.00	39.50 AV	70.68	-31.18	1.18 H	347	-2.74	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	70.40 PK	74.00	-3.60	1.62 V	292	40.34	30.06
2	2390.00	52.94 AV	54.00	-1.06	1.62 V	292	22.88	30.06
3	*2412.00	112.16 PK			1.61 V	293	82.01	30.15
4	*2412.00	101.54 AV			1.61 V	293	71.39	30.15
5	4824.00	49.20 PK	74.00	-24.80	1.30 V	26	13.74	35.46
6	4824.00	34.50 AV	54.00	-19.50	1.30 V	26	-0.96	35.46
7	#7236.00	53.00 PK	92.16	-39.16	1.38 V	358	11.15	41.85
8	#7236.00	39.60 AV	81.54	-41.94	1.38 V	358	-2.25	41.85

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.
6. "#":The radiated frequency is out the restricted band.

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	26deg. C, 65%RH 999hPa	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	100.19 PK			1.33 H	32	69.58	30.61
2	*2437.00	89.23 AV			1.33 H	32	58.62	30.61
3	4874.00	50.10 PK	74.00	-23.90	1.43 H	16	14.30	35.80
4	4874.00	34.56 AV	54.00	-19.44	1.43 H	16	-1.24	35.80
5	7311.00	53.08 PK	74.00	-20.92	1.21 H	31	10.56	42.52
6	7311.00	39.11 AV	54.00	-14.89	1.21 H	31	-3.41	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	112.83 PK			1.60 V	292	82.59	30.24
2	*2437.00	102.11 AV			1.60 V	292	71.87	30.24
3	4874.00	50.00 PK	74.00	-24.00	1.24 V	28	14.45	35.55
4	4874.00	34.90 AV	54.00	-19.10	1.24 V	28	-0.65	35.55
5	7311.00	53.30 PK	74.00	-20.70	1.46 V	3	11.26	42.04
6	7311.00	39.30 AV	54.00	-14.70	1.46 V	3	-2.74	42.04

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	26deg. C, 65%RH 999hPa	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	98.59 PK			1.22 H	280	67.87	30.72
2	*2462.00	87.25 AV			1.22 H	280	56.53	30.72
3	2483.50	58.01 PK	74.00	-15.99	1.22 H	255	27.19	30.82
4	2483.50	44.17 AV	54.00	-9.83	1.22 H	255	13.35	30.82
5	4924.00	49.50 PK	74.00	-24.50	1.27 H	105	13.60	35.90
6	4924.00	33.63 AV	54.00	-20.37	1.27 H	105	-2.27	35.90
7	7386.00	53.52 PK	74.00	-20.48	1.00 H	273	10.72	42.80
8	7386.00	39.63 AV	54.00	-14.37	1.00 H	273	-3.17	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	111.17 PK			1.61 V	292	80.83	30.34
2	*2462.00	100.61 AV			1.61 V	292	70.27	30.34
3	2483.50	72.77 PK	74.00	-1.23	1.62 V	297	42.34	30.43
4	**2483.50**	**53.20 AV**	**54.00**	**-0.80**	**1.62 V**	**297**	**22.77**	**30.43**
5	4924.00	48.50 PK	74.00	-25.50	1.42 V	24	12.87	35.63
6	4924.00	33.80 AV	54.00	-20.20	1.42 V	24	-1.83	35.63
7	7386.00	53.70 PK	74.00	-20.30	1.39 V	13	11.47	42.23
8	7386.00	39.80 AV	54.00	-14.20	1.39 V	13	-2.43	42.23

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

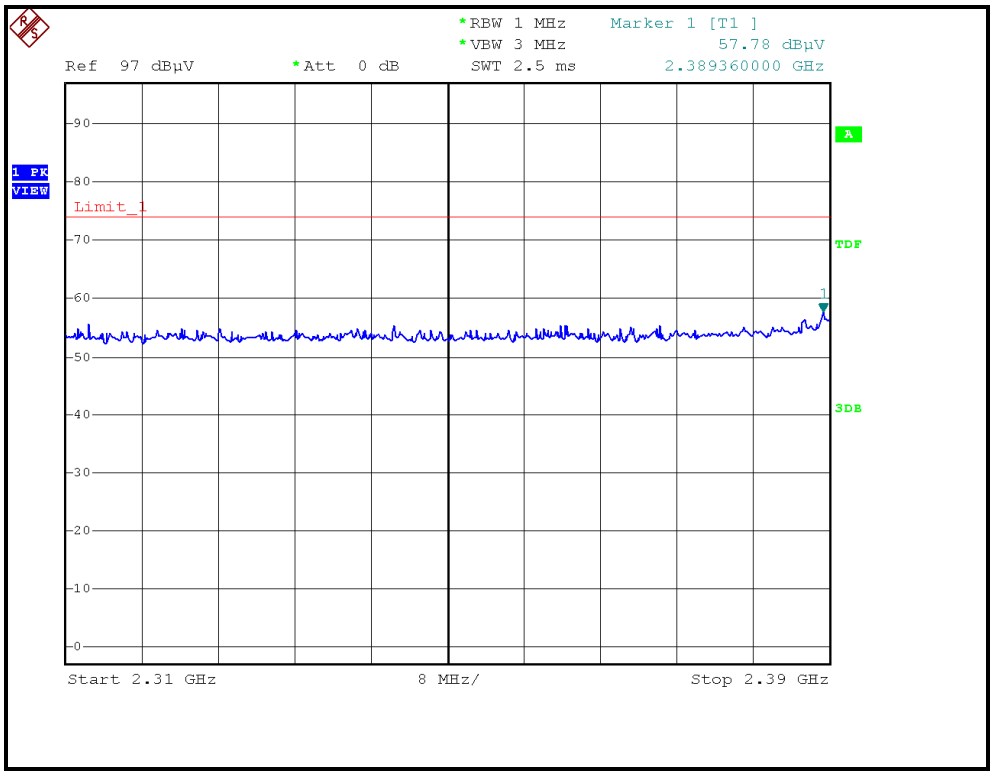
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

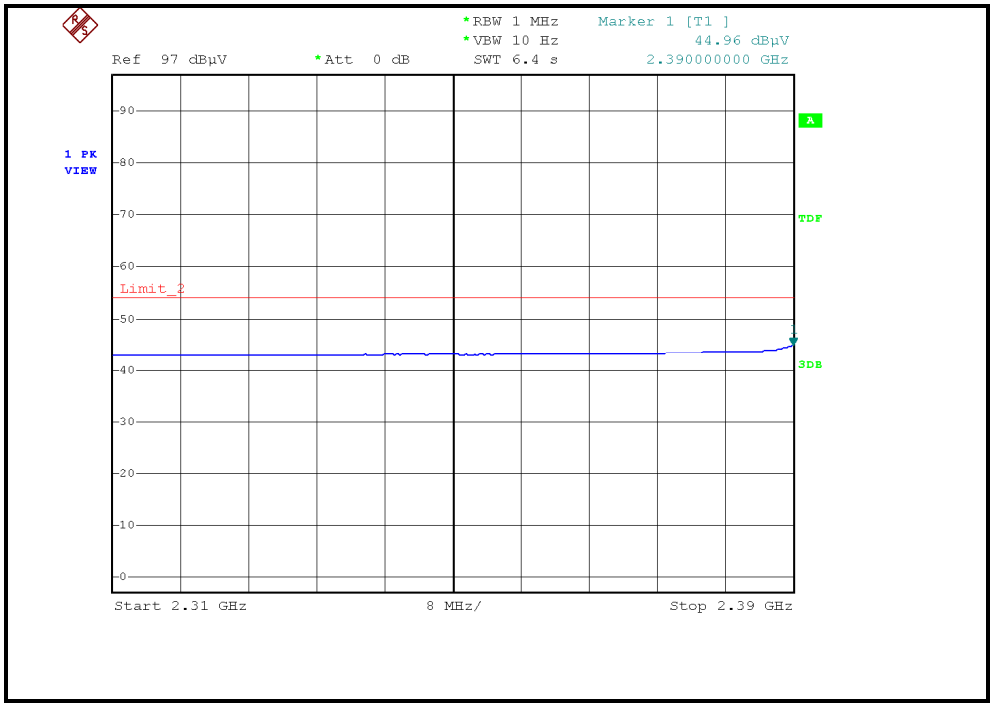
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

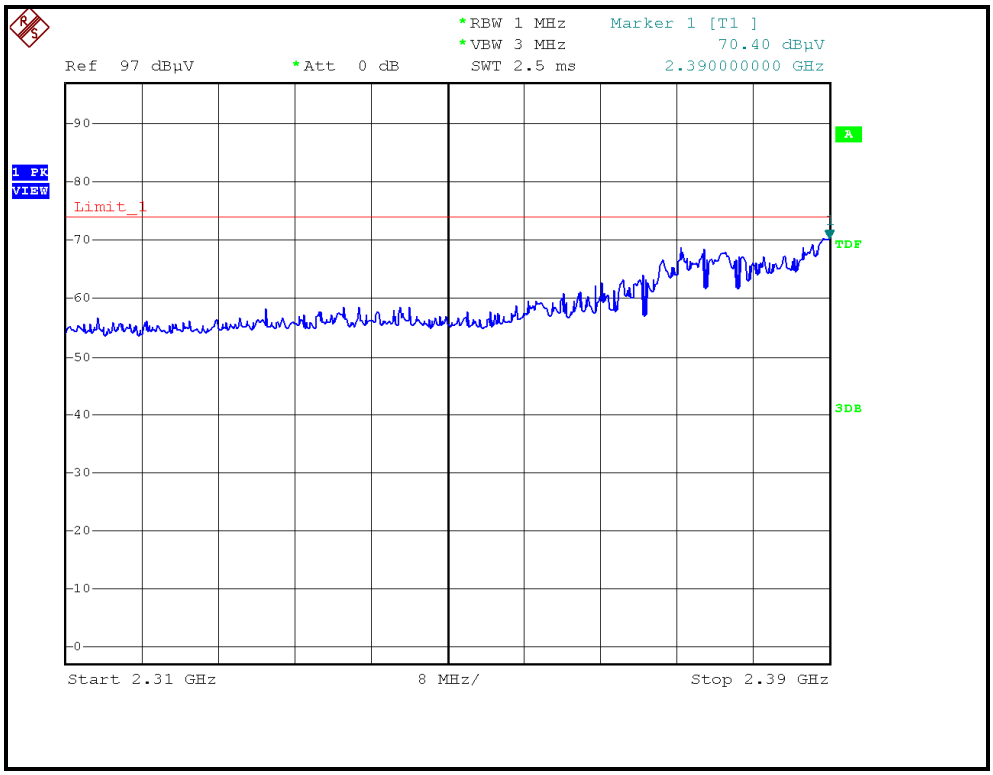
5. " * ": Fundamental frequency.

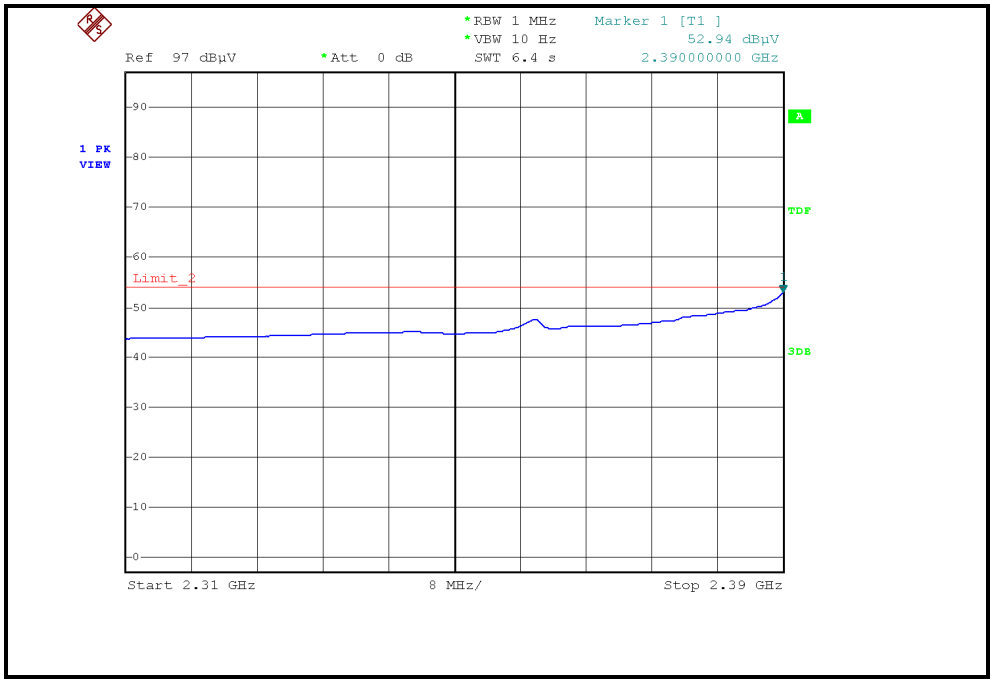
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



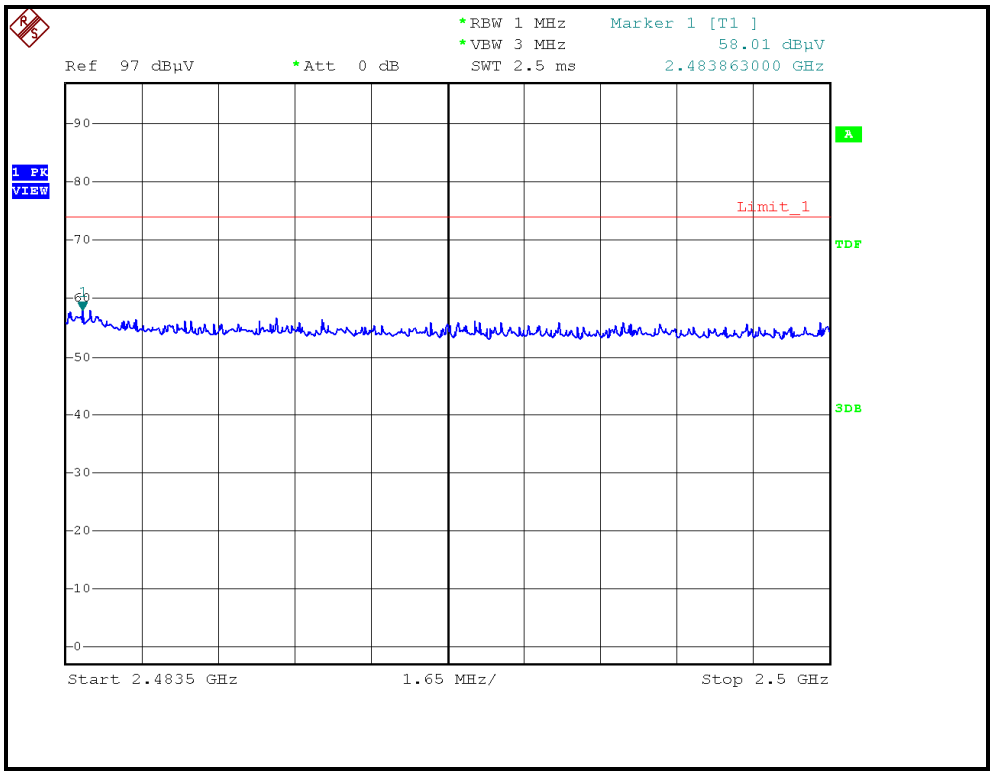


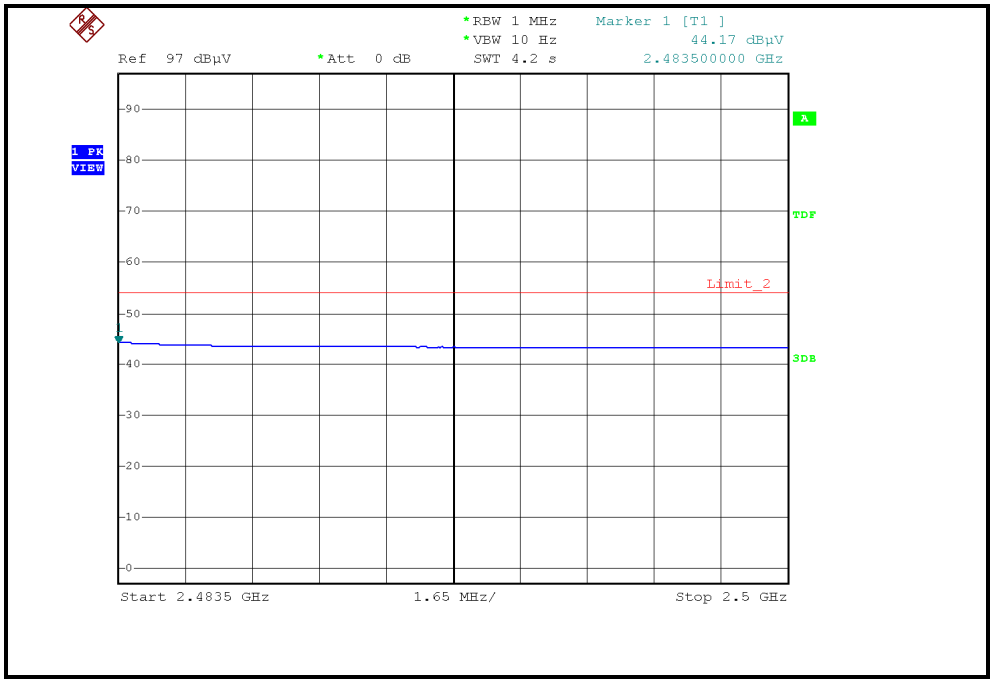
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



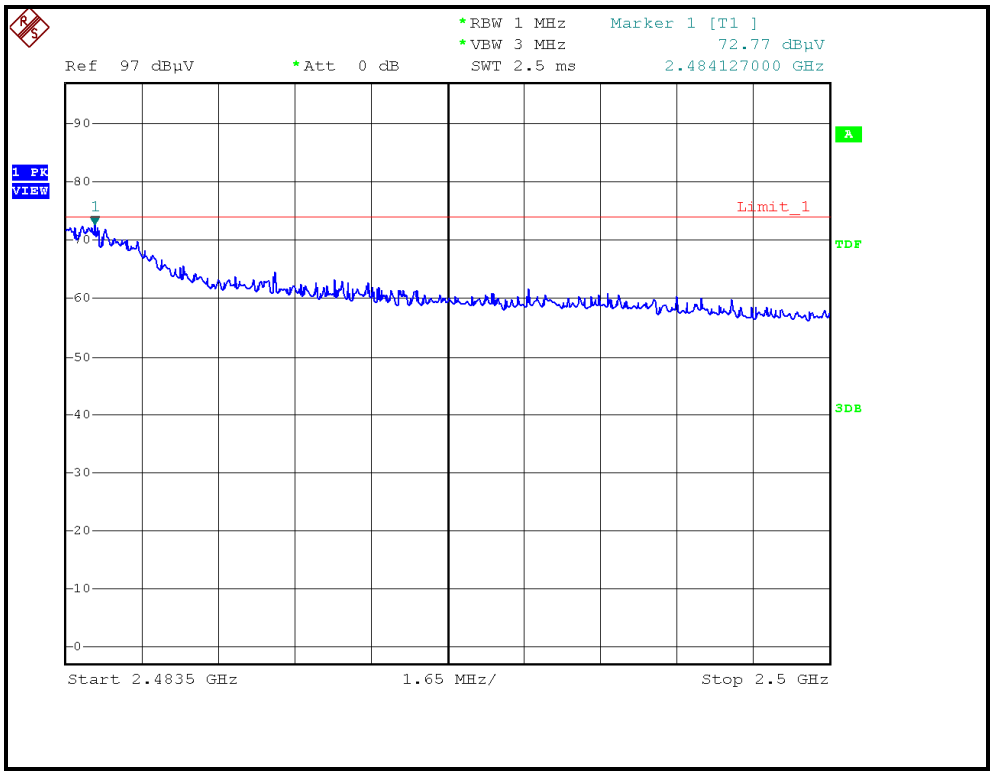


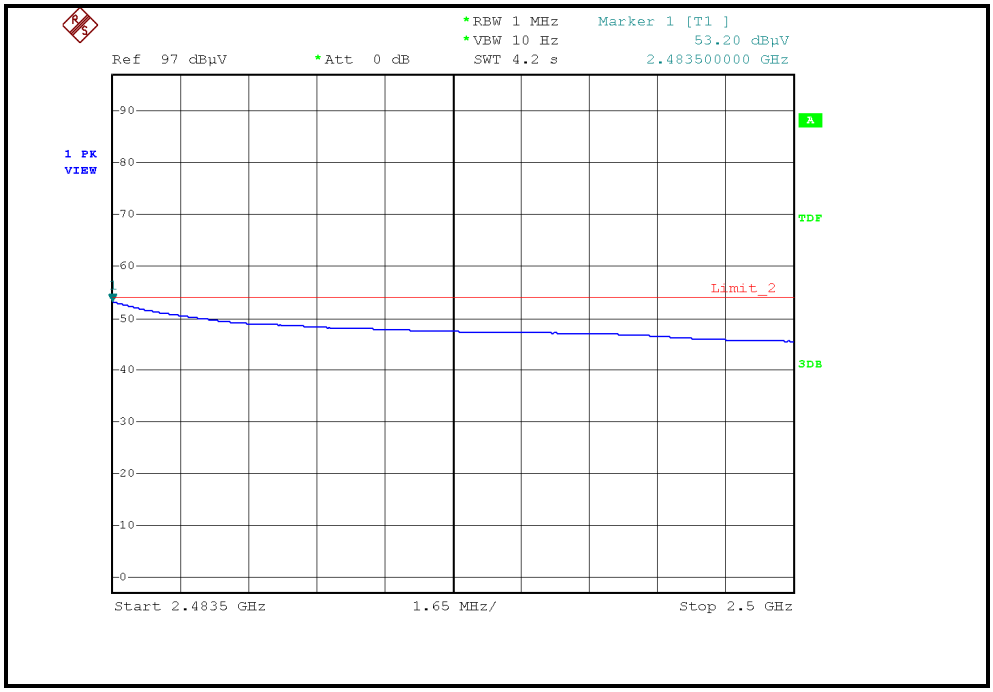
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





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
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 999hPa	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	56.99 PK	74.00	-17.01	1.34 H	74	26.59	30.40
2	2390.00	44.42 AV	54.00	-9.58	1.34 H	74	14.02	30.40
3	*2412.00	102.11 PK			1.36 H	74	71.62	30.49
4	*2412.00	90.12 AV			1.36 H	74	59.63	30.49
5	4824.00	45.70 PK	74.00	-28.30	1.40 H	131	10.01	35.69
6	4824.00	31.90 AV	54.00	-22.10	1.40 H	131	-3.79	35.69
7	#7236.00	52.50 PK	82.11	-29.61	1.17 H	114	10.26	42.24
8	#7236.00	37.63 AV	70.12	-32.49	1.17 H	114	-4.61	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	65.63 PK	74.00	-8.37	1.68 V	282	35.57	30.06
2	2390.00	52.97 AV	54.00	-1.03	1.68 V	282	22.91	30.06
3	*2412.00	112.50 PK			1.69 V	281	82.35	30.15
4	*2412.00	100.71 AV			1.69 V	281	70.56	30.15
5	4824.00	46.00 PK	74.00	-28.00	1.22 V	71	10.54	35.46
6	4824.00	32.20 AV	54.00	-21.80	1.22 V	71	-3.26	35.46
7	#7236.00	52.70 PK	92.50	-39.80	1.11 V	104	10.85	41.85
8	#7236.00	38.10 AV	80.71	-42.61	1.11 V	104	-3.75	41.85

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.
6. "#":The radiated frequency is out the restricted band.

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	26deg. C, 65%RH 999hPa	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	101.22 PK			1.37 H	74	70.61	30.61
2	*2437.00	89.50 AV			1.37 H	74	58.89	30.61
3	4874.00	46.50 PK	74.00	-27.50	1.43 H	84	10.70	35.80
4	4874.00	32.30 AV	54.00	-21.70	1.43 H	84	-3.50	35.80
5	7311.00	53.00 PK	74.00	-21.00	1.05 H	113	10.48	42.52
6	7311.00	37.96 AV	54.00	-16.04	1.05 H	113	-4.56	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	113.78 PK			1.70 V	282	83.54	30.24
2	*2437.00	101.96 AV			1.70 V	282	71.72	30.24
3	4874.00	46.30 PK	74.00	-27.70	1.17 V	73	10.75	35.55
4	4874.00	32.50 AV	54.00	-21.50	1.17 V	73	-3.05	35.55
5	7311.00	53.20 PK	74.00	-20.80	1.19 V	107	11.16	42.04
6	7311.00	38.30 AV	54.00	-15.70	1.19 V	107	-3.74	42.04

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

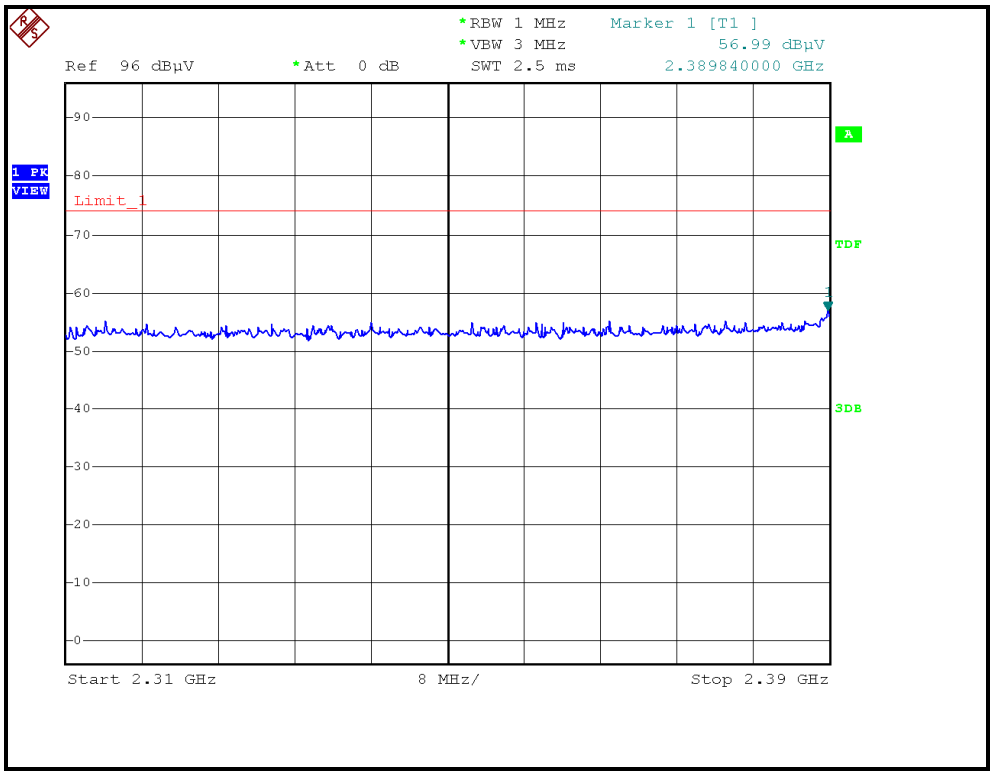
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

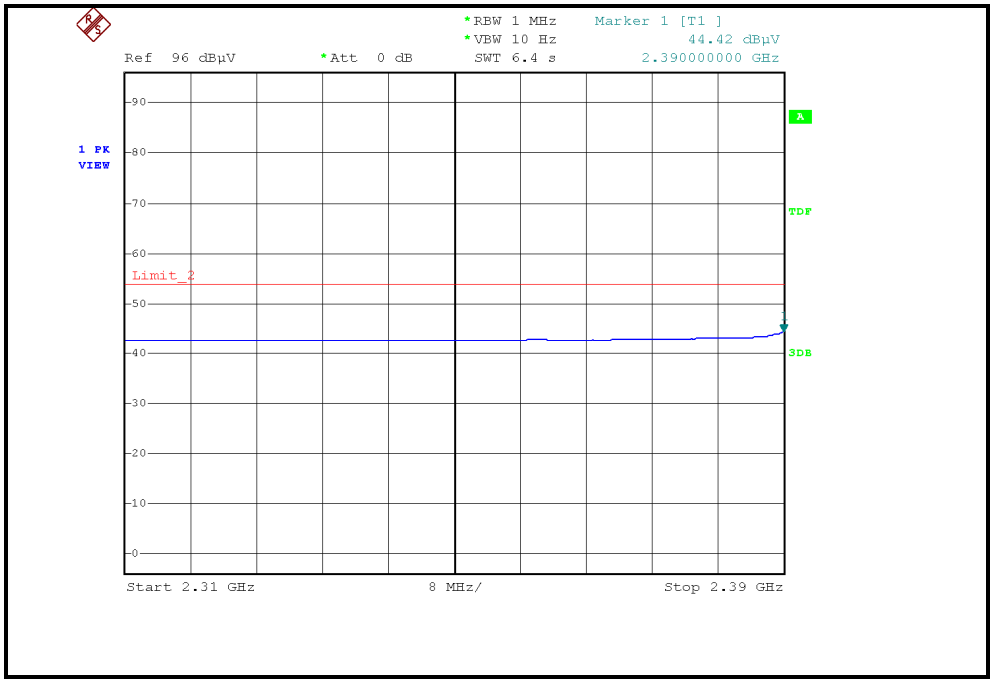
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 999hPa	TESTED BY	Phoenix Huang

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	99.10 PK			1.35 H	112	68.38	30.72
2	*2462.00	87.30 AV			1.35 H	112	56.58	30.72
3	2483.50	57.13 PK	74.00	-16.87	1.30 H	113	26.31	30.82
4	2483.50	44.33 AV	54.00	-9.67	1.30 H	113	13.51	30.82
5	4924.00	46.63 PK	74.00	-27.37	1.32 H	100	10.73	35.90
6	4924.00	32.76 AV	54.00	-21.24	1.32 H	100	-3.14	35.90
7	7386.00	52.21 PK	74.00	-21.79	1.29 H	87	9.41	42.80
8	7386.00	38.00 AV	54.00	-16.00	1.29 H	87	-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	112.52 PK			1.63 V	291	82.18	30.34
2	*2462.00	100.62 AV			1.63 V	291	70.28	30.34
3	2483.50	66.67 PK	74.00	-7.33	1.63 V	292	36.24	30.43
4	2483.50	52.66 AV	54.00	-1.34	1.63 V	292	22.23	30.43
5	4924.00	46.80 PK	74.00	-27.20	1.25 V	90	11.17	35.63
6	4924.00	32.90 AV	54.00	-21.10	1.25 V	90	-2.73	35.63
7	7386.00	52.40 PK	74.00	-21.60	1.60 V	96	10.17	42.23
8	7386.00	38.10 AV	54.00	-15.90	1.60 V	96	-4.13	42.23

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,CH1, HORIZONTAL)





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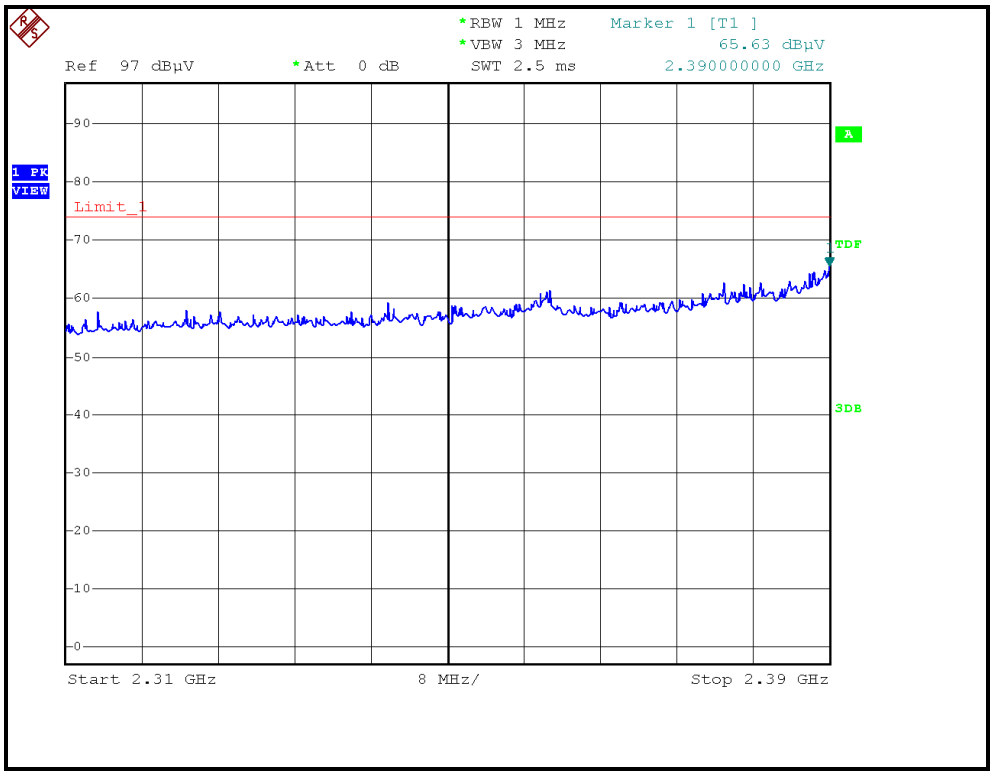

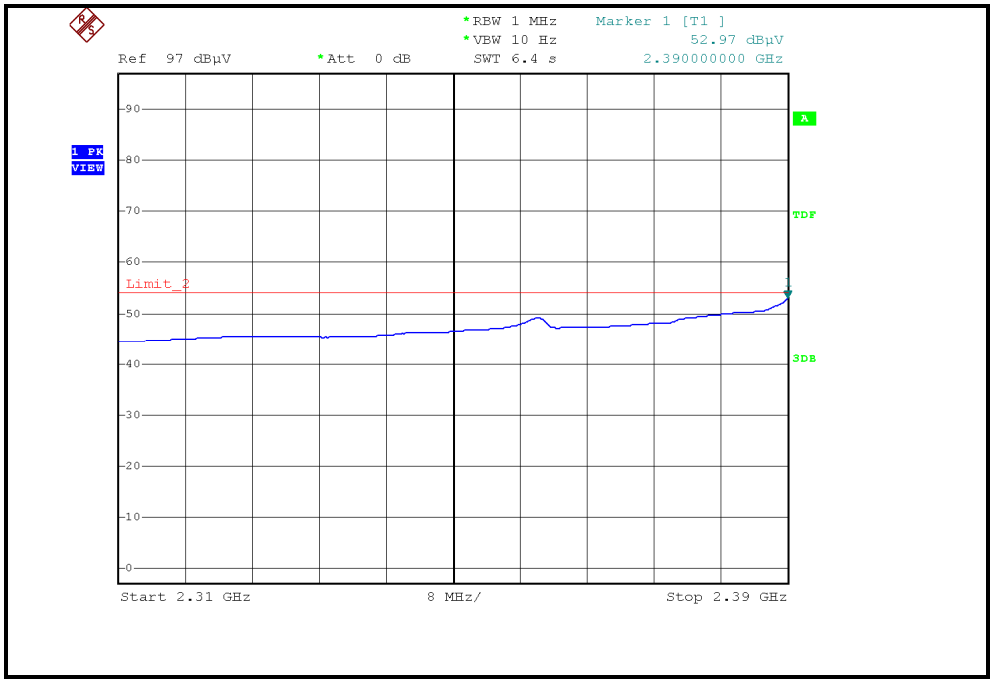

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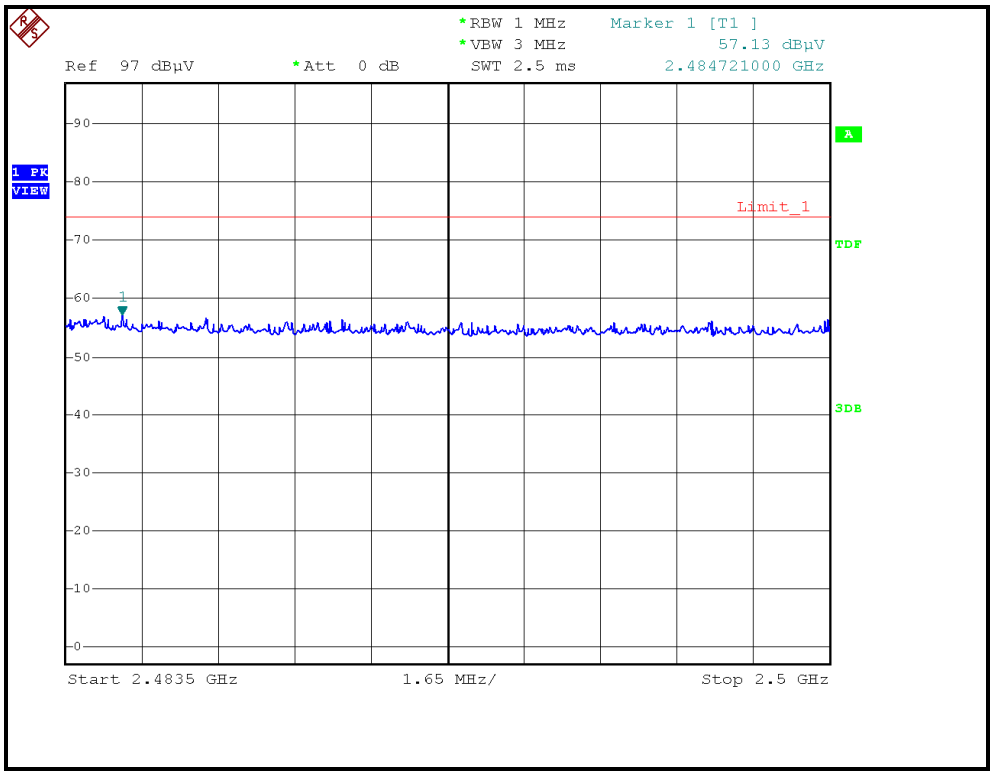
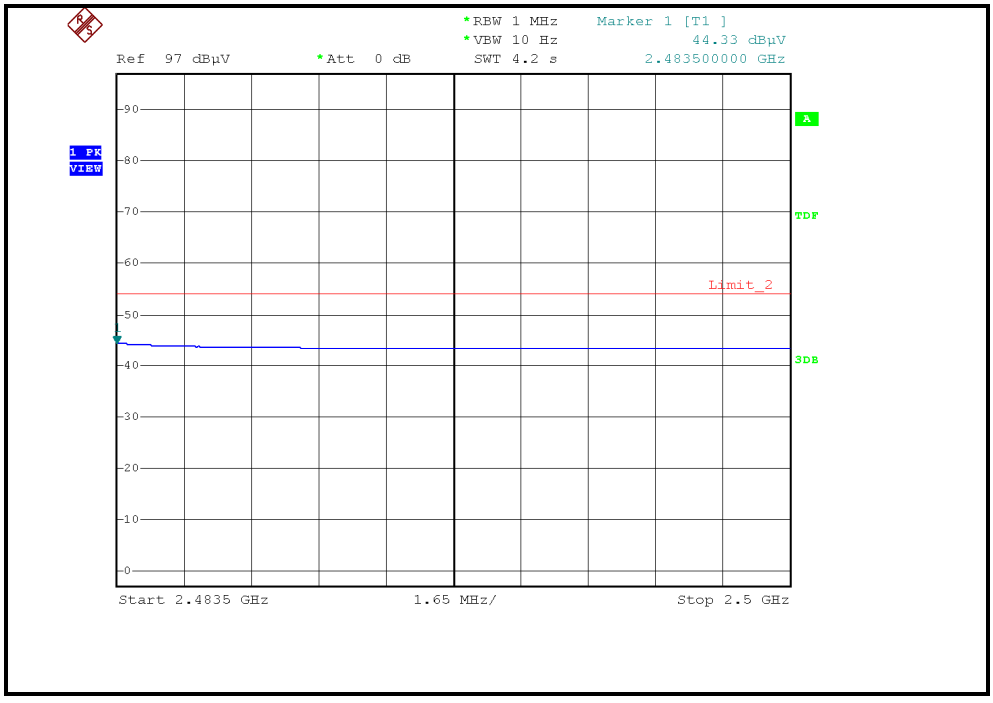
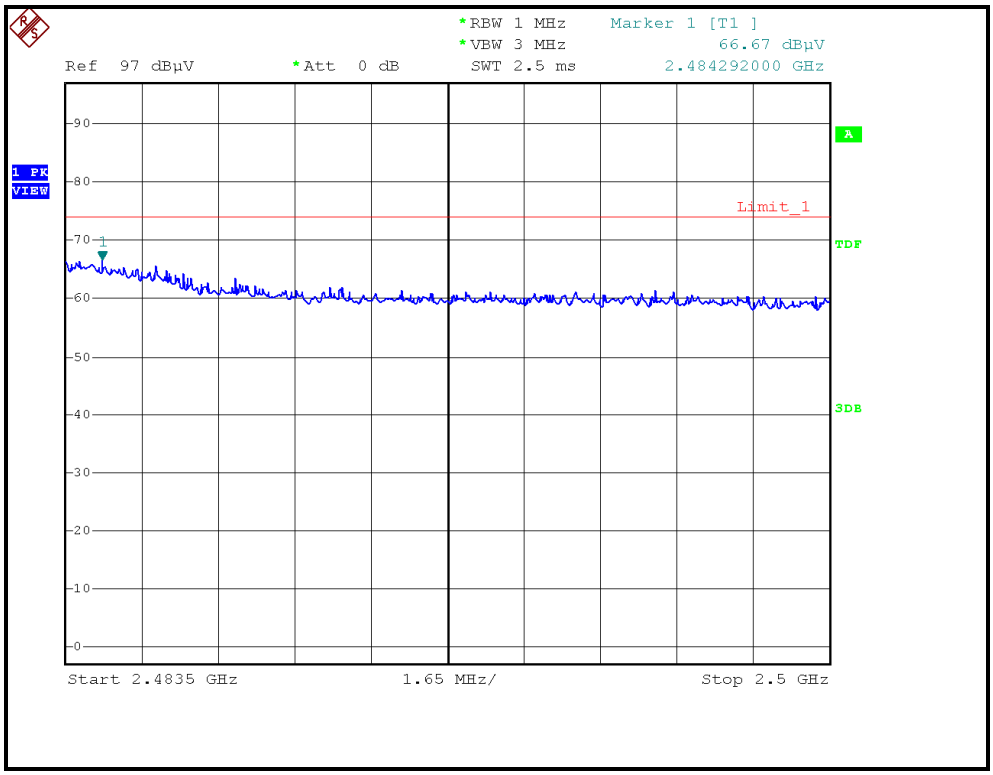
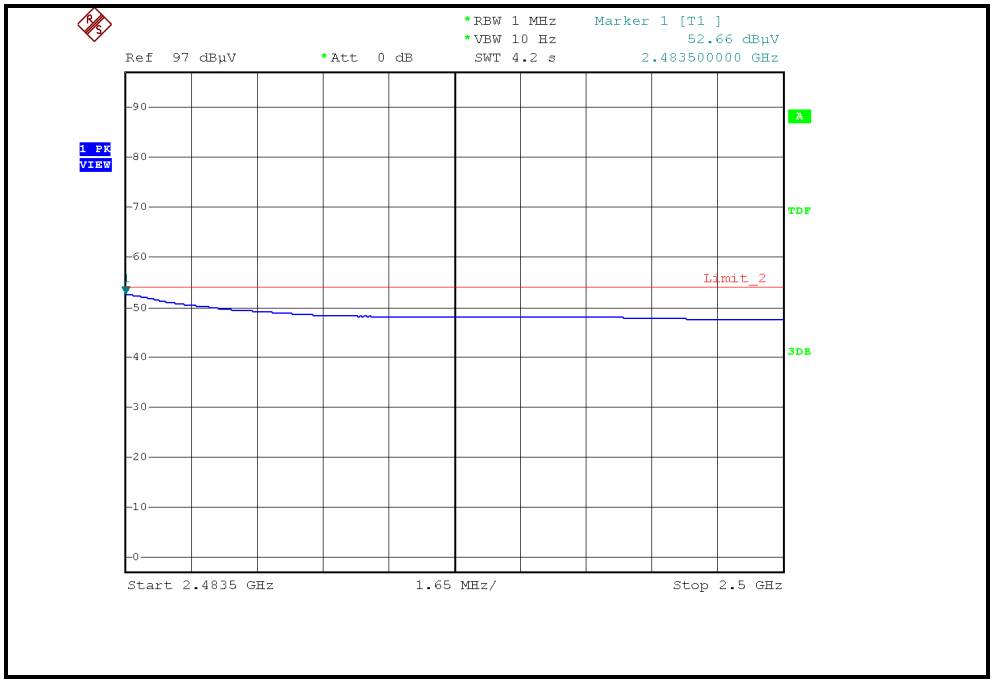




RESTRICTED BANDEDGE (DRAFT 802.11n (20MHz) MODE,CH11, VERTICAL)





DRAFT 802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 999hPa	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	57.28 PK	74.00	-16.72	1.34 H	95	26.88	30.40
2	2390.00	46.04 AV	54.00	-7.96	1.34 H	95	15.64	30.40
3	*2422.00	99.80 PK			1.34 H	96	69.26	30.54
4	*2422.00	87.70 AV			1.34 H	96	57.16	30.54
5	4844.00	45.20 PK	74.00	-28.80	1.27 H	81	9.46	35.74
6	4844.00	31.50 AV	54.00	-22.50	1.27 H	81	-4.24	35.74
7	7266.00	52.50 PK	74.00	-21.50	1.15 H	103	10.15	42.35
8	7266.00	37.31 AV	54.00	-16.69	1.15 H	103	-5.04	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	64.64 PK	74.00	-9.36	1.66 V	282	34.58	30.06
2	2390.00	52.91 AV	54.00	-1.09	1.66 V	282	22.85	30.06
3	*2422.00	110.21 PK			1.64 V	283	80.02	30.19
4	*2422.00	98.54 AV			1.64 V	283	68.35	30.19
5	4844.00	45.80 PK	74.00	-28.20	1.24 V	72	10.30	35.50
6	4844.00	31.90 AV	54.00	-22.10	1.24 V	72	-3.60	35.50
7	7266.00	52.60 PK	74.00	-21.40	1.12 V	105	10.67	41.93
8	7266.00	37.90 AV	54.00	-16.10	1.12 V	105	-4.03	41.93

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	26deg. C, 65%RH 999hPa	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	98.24 PK			1.34 H	96	67.63	30.61
2	*2437.00	86.82 AV			1.34 H	96	56.21	30.61
3	4874.00	46.00 PK	74.00	-28.00	1.22 H	301	10.20	35.80
4	4874.00	31.60 AV	54.00	-22.40	1.22 H	301	-4.20	35.80
5	7311.00	52.50 PK	74.00	-21.50	1.42 H	173	9.98	42.52
6	7311.00	37.13 AV	54.00	-16.87	1.42 H	173	-5.39	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	112.23 PK			1.66 V	285	81.99	30.24
2	*2437.00	100.12 AV			1.66 V	285	69.88	30.24
3	4874.00	46.20 PK	74.00	-27.80	1.18 V	74	10.65	35.55
4	4874.00	32.00 AV	54.00	-22.00	1.18 V	74	-3.55	35.55
5	7311.00	52.70 PK	74.00	-21.30	1.14 V	103	10.66	42.04
6	7311.00	38.00 AV	54.00	-16.00	1.14 V	103	-4.04	42.04

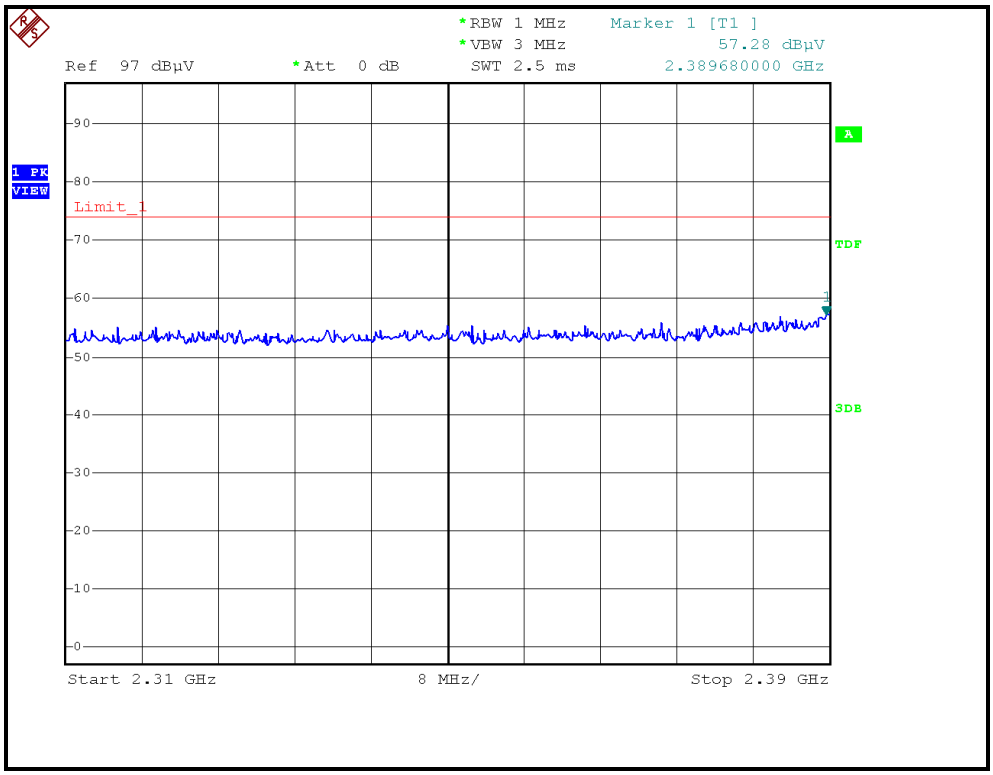
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

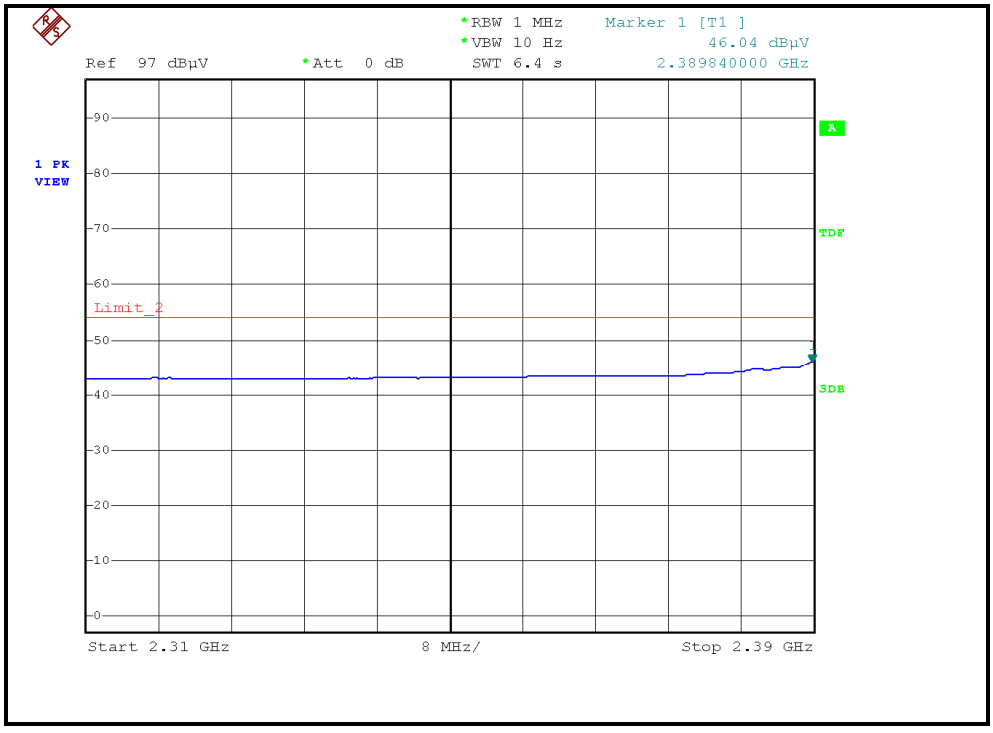
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH 999hPa	TESTED BY	Phoenix Huang

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	*2452.00	95.86 PK			1.33 H	111	65.19	30.67
2	*2452.00	84.40 AV			1.33 H	111	53.73	30.67
3	2483.83	58.69 PK	74.00	-15.31	1.31 H	113	27.87	30.82
4	2483.83	44.75 AV	54.00	-9.25	1.31 H	113	13.93	30.82
5	4904.00	45.34 PK	74.00	-28.66	1.27 H	313	9.48	35.86
6	4904.00	31.50 AV	54.00	-22.50	1.27 H	313	-4.36	35.86
7	7356.00	52.30 PK	74.00	-21.70	1.41 H	170	9.62	42.68
8	7356.00	37.53 AV	54.00	-16.47	1.41 H	170	-5.15	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	107.76 PK			1.63 V	291	77.46	30.30
2	*2452.00	96.41 AV			1.63 V	291	66.11	30.30
3	2483.90	67.24 PK	74.00	-6.76	1.60 V	273	36.81	30.43
4	2483.90	52.64 AV	54.00	-1.36	1.60 V	273	22.21	30.43
5	4904.00	46.40 PK	74.00	-27.60	1.19 V	87	10.80	35.60
6	4904.00	32.30 AV	54.00	-21.70	1.19 V	87	-3.30	35.60
7	7356.00	52.50 PK	74.00	-21.50	1.29 V	102	10.34	42.16
8	7356.00	38.00 AV	54.00	-16.00	1.29 V	102	-4.16	42.16

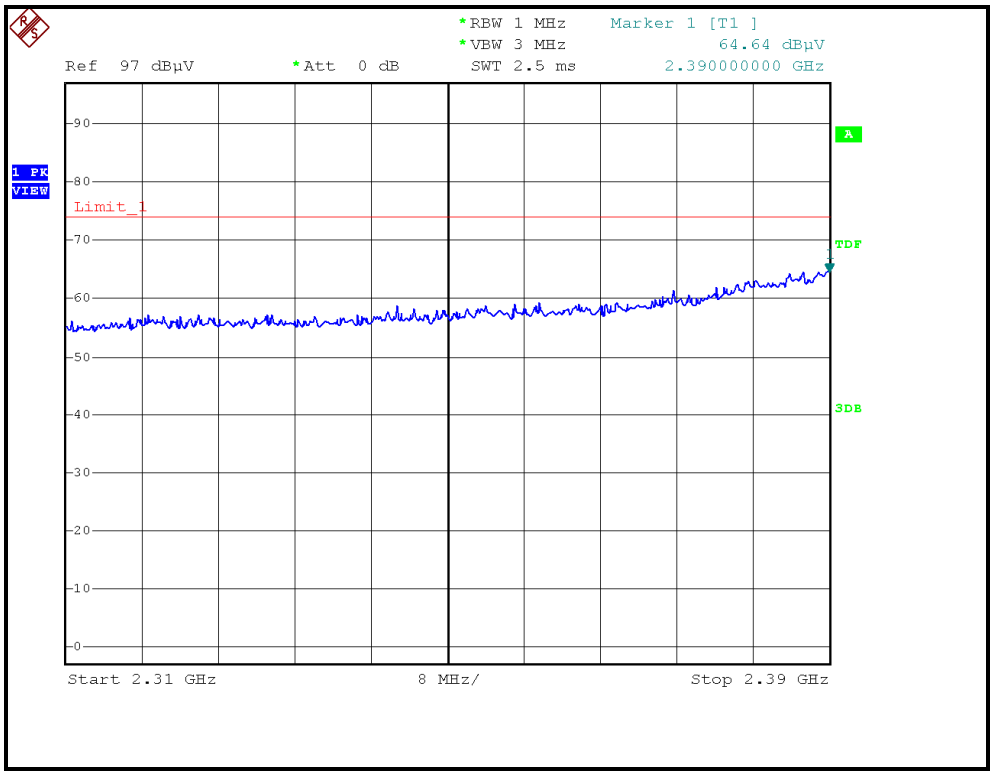
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

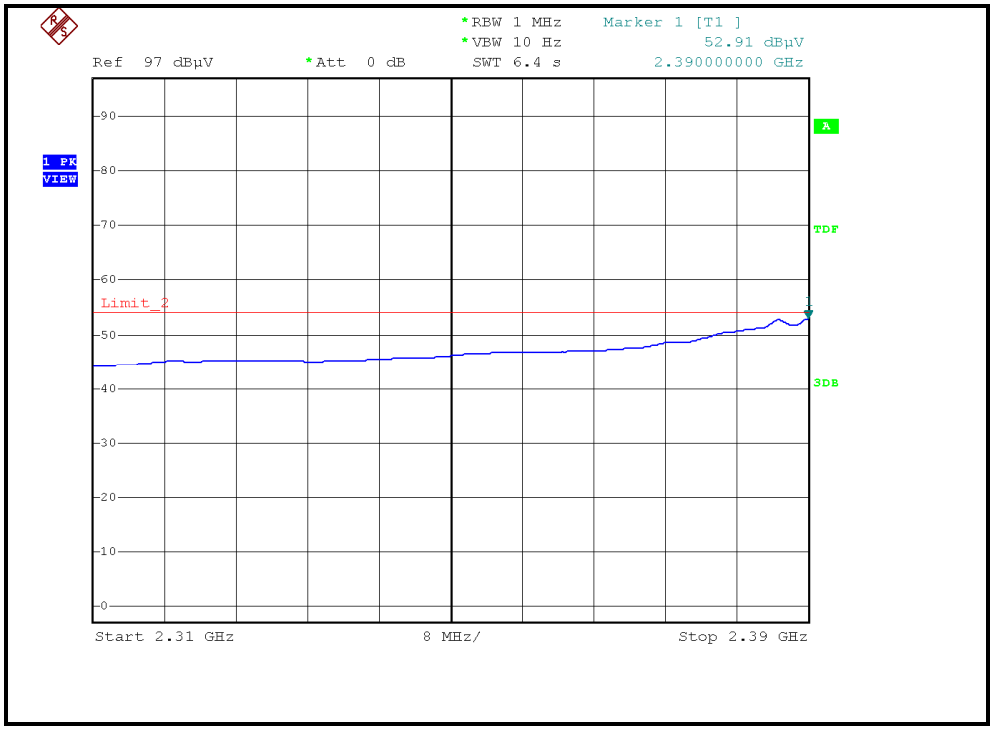
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, HORIZONTAL)



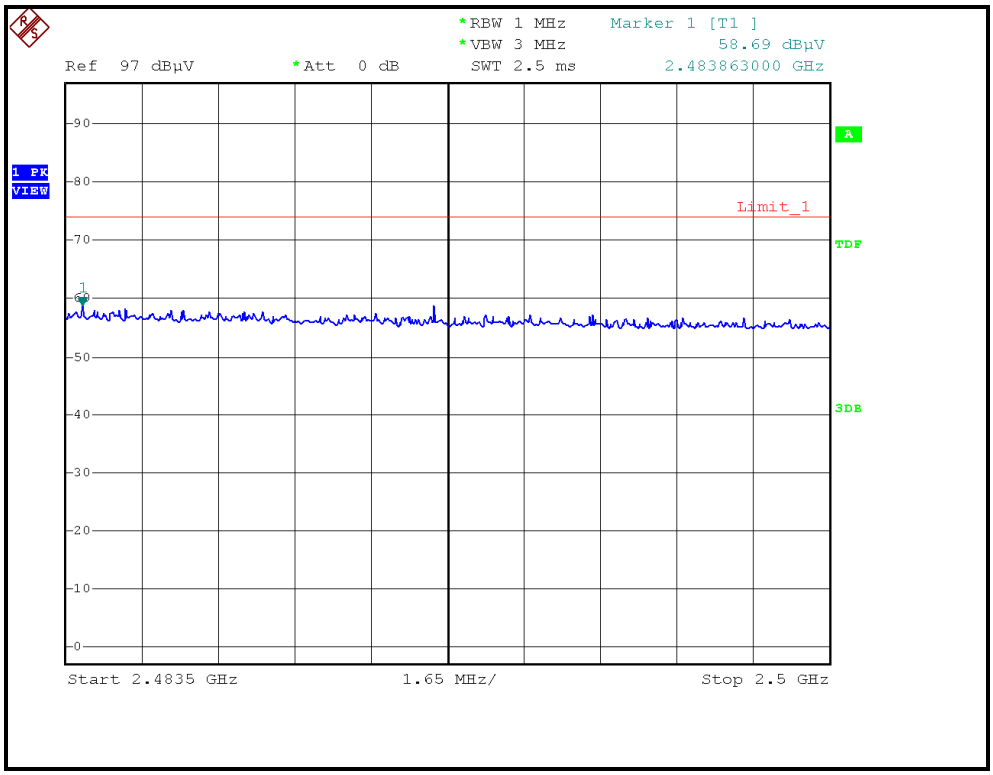


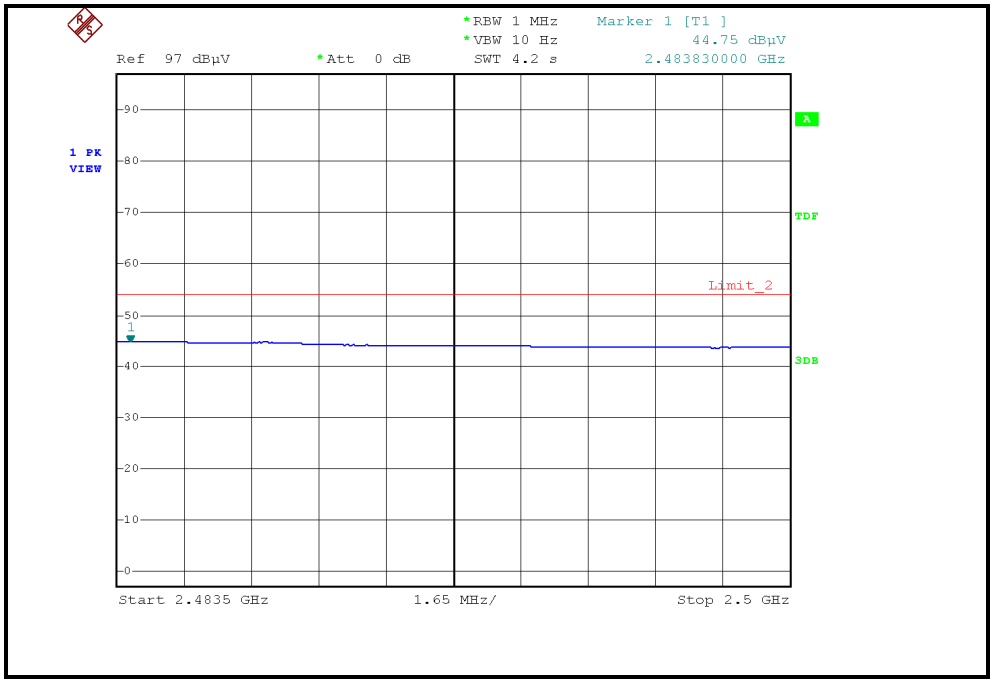
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH1, VERTICAL)



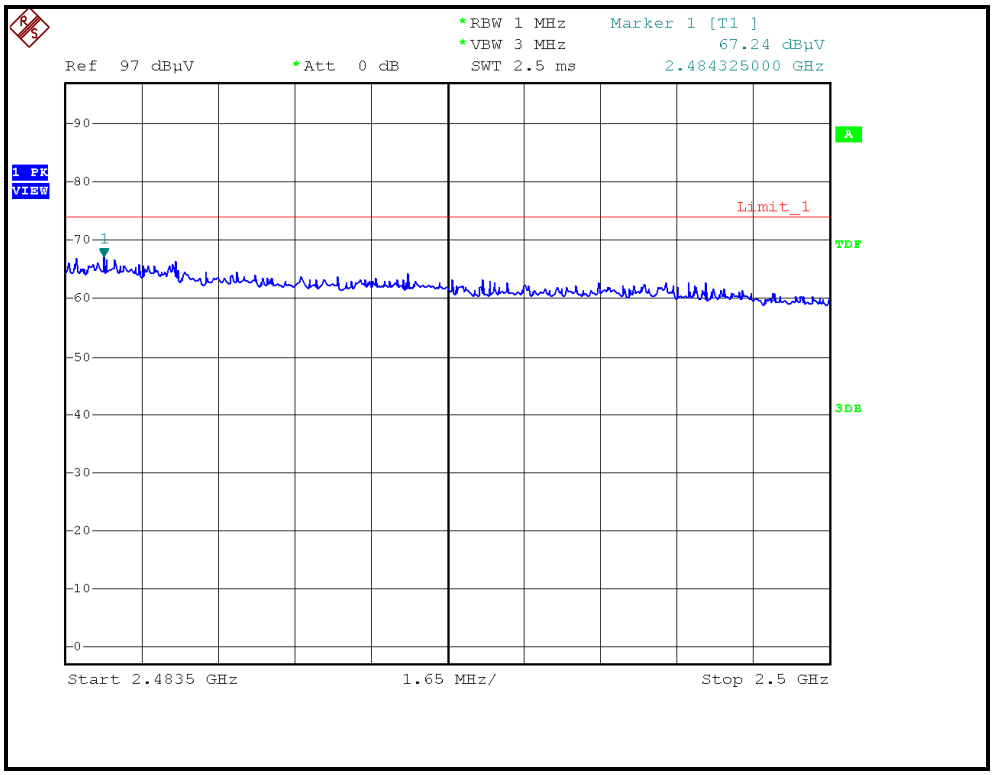


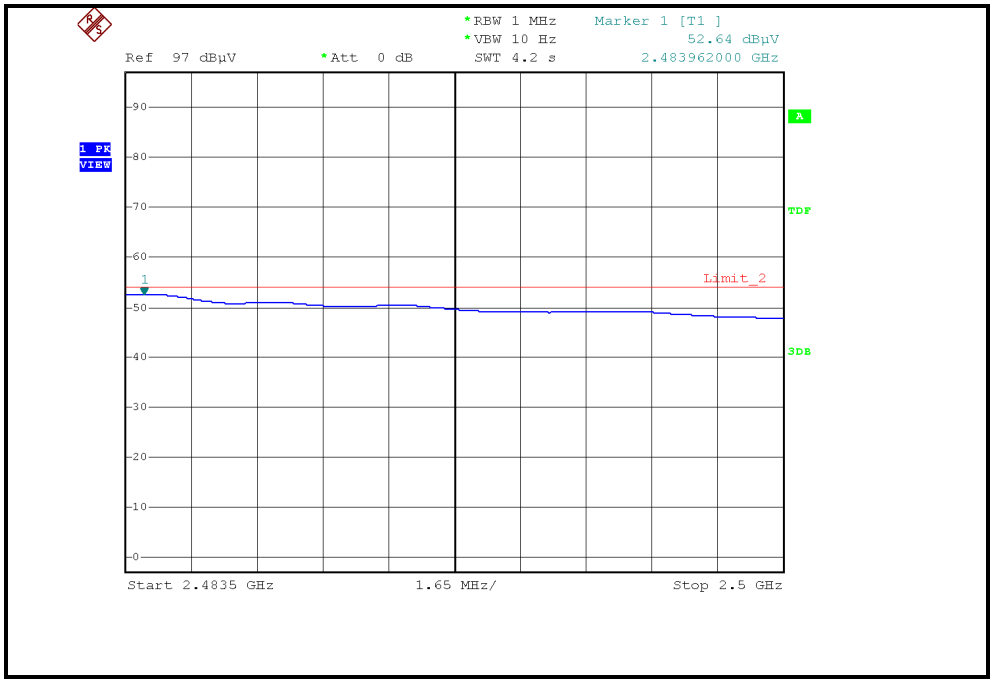
RESTRICTED BANDEDGE (DRAFT 802.11n (40MHz) MODE,CH7, HORIZONTAL)





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





4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	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.

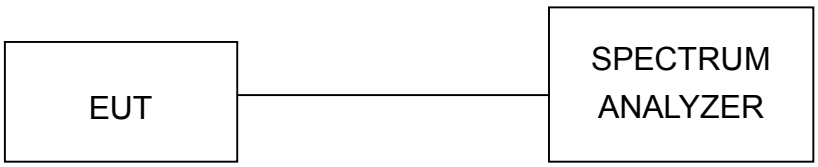
4.3.3 TEST PROCEDURE

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.

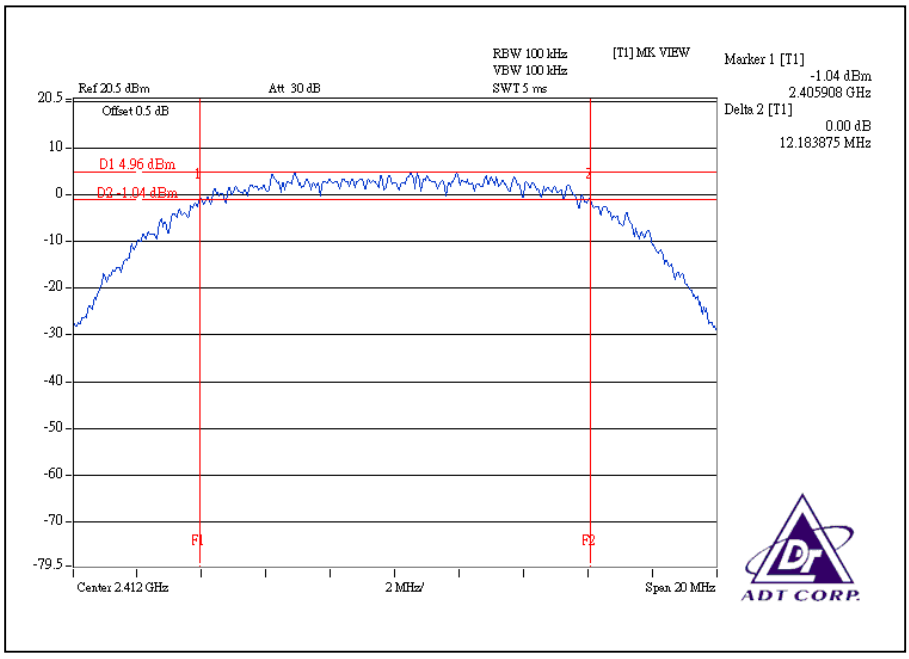
4.3.7 TEST RESULTS

802.11b DSSS MODULATION:

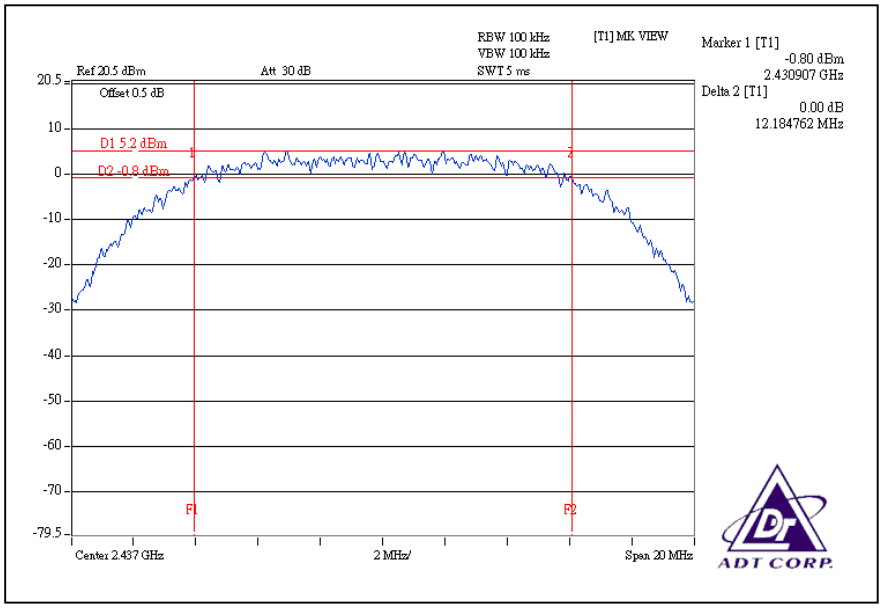
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.18	0.5	PASS
6	2437	12.18	0.5	PASS
11	2462	12.19	0.5	PASS

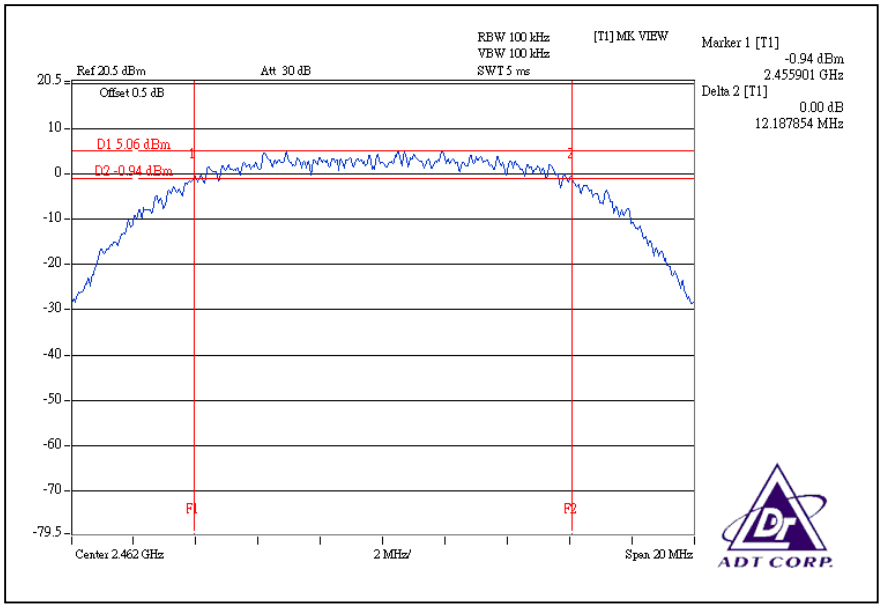
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-0.80 dBm
2.430907 GHz
Delta 2 [T1]
0.00 dB
12.184762 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.2 dBm
D2 -0.8 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
ADT CORP.

CH11

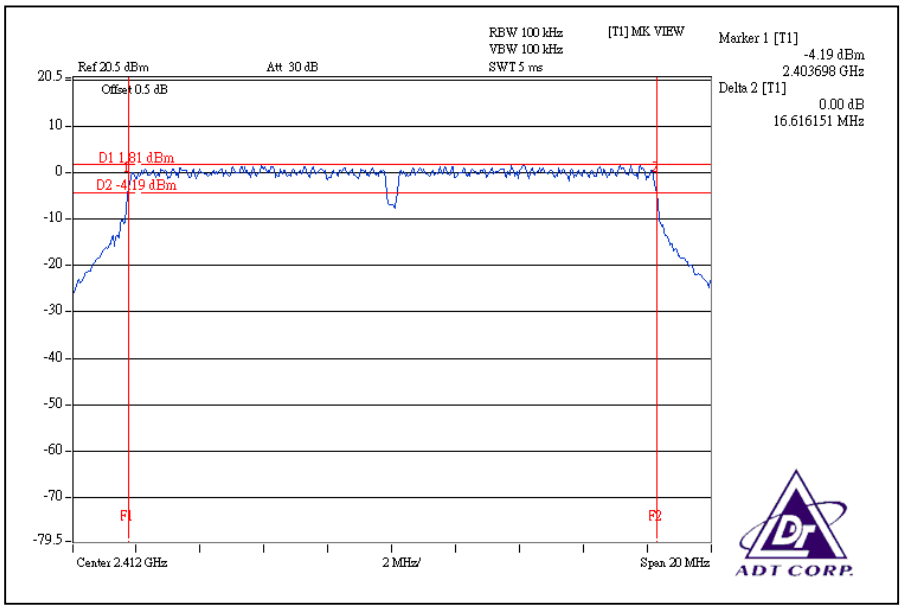

RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-0.94 dBm
2.455901 GHz
Delta 2 [T1]
0.00 dB
12.187854 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 5.06 dBm
D2 -0.94 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
ADT CORP.

802.11g OFDM MODULATION:

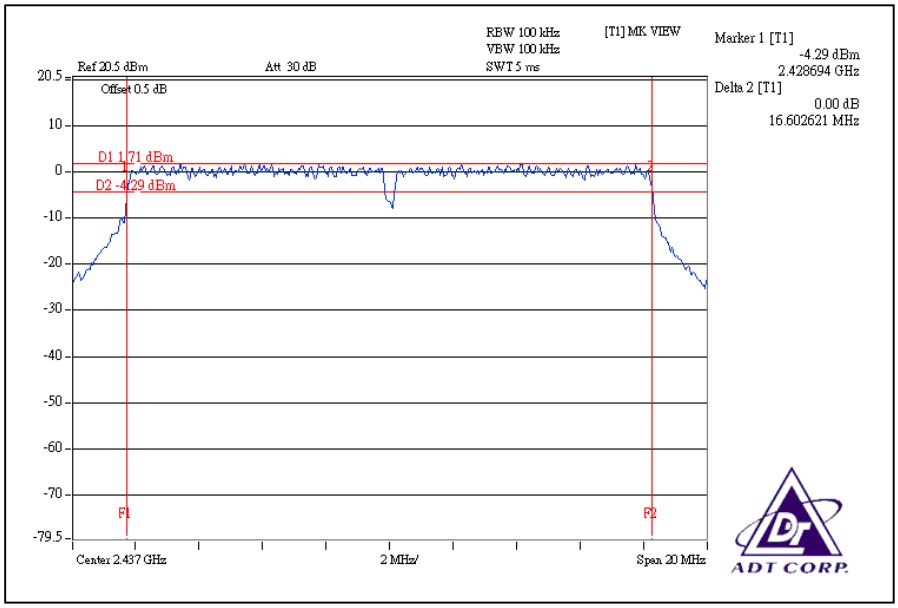
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.62	0.5	PASS
6	2437	16.60	0.5	PASS
11	2462	16.61	0.5	PASS

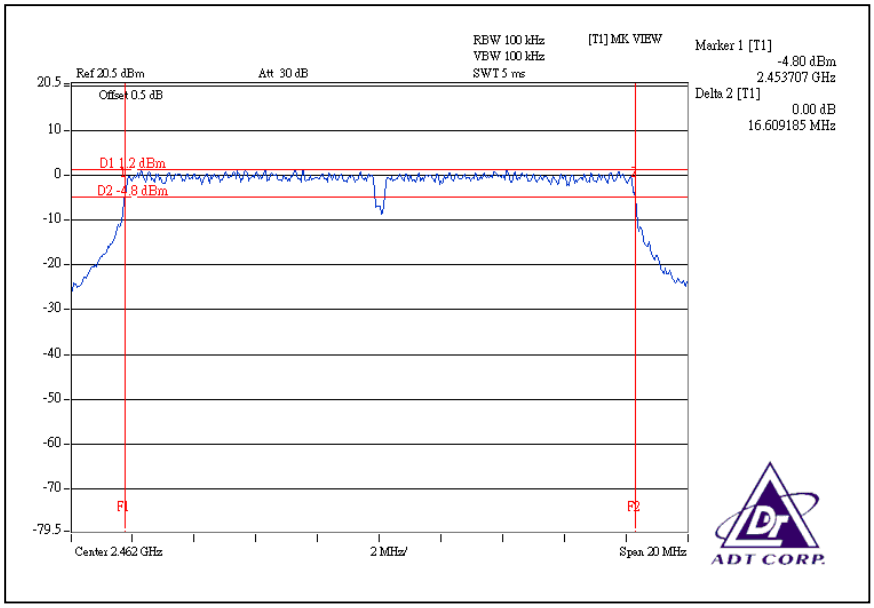
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-4.29 dBm
2.428694 GHz
Delta 2 [T1]
0.00 dB
16.602621 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.71 dBm
D2 -4.29 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
ADT CORP.

CH11

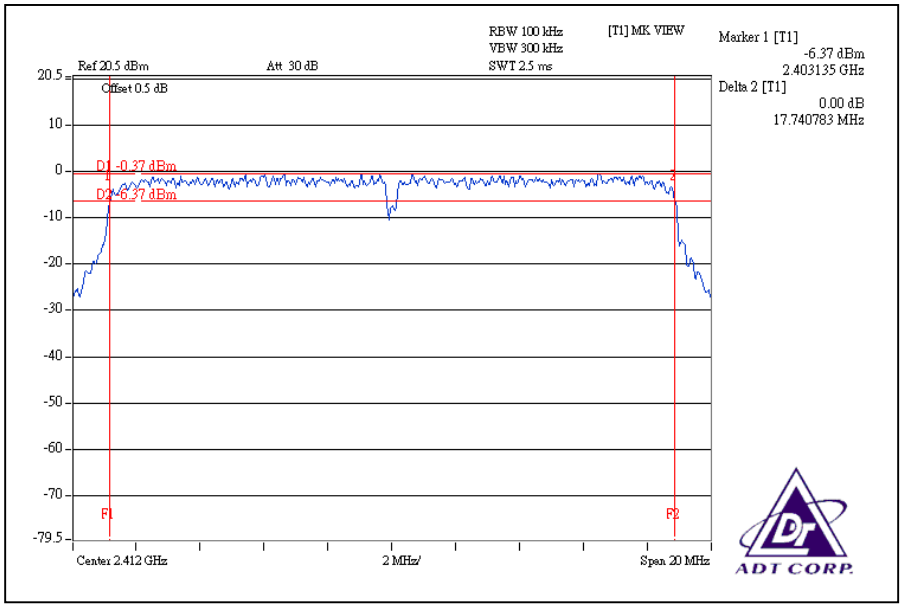

RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-4.80 dBm
2.453707 GHz
Delta 2 [T1]
0.00 dB
16.609185 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.2 dBm
D2 -4.8 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
ADT CORP.

DRAFT 802.11n (20MHz) OFDM MODULATION:

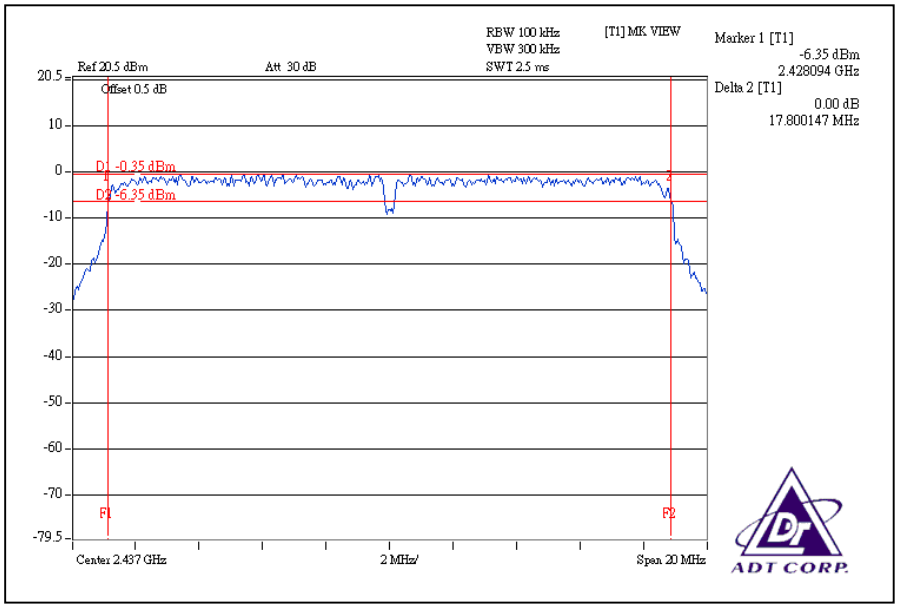
MODULATION TYPE	BPSK	**TRANSFER RATE**	13Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN(0)	CHAIN(1)		
1	2412	17.74	17.71	0.5	PASS
6	2437	17.80	17.69	0.5	PASS
11	2462	17.76	17.71	0.5	PASS

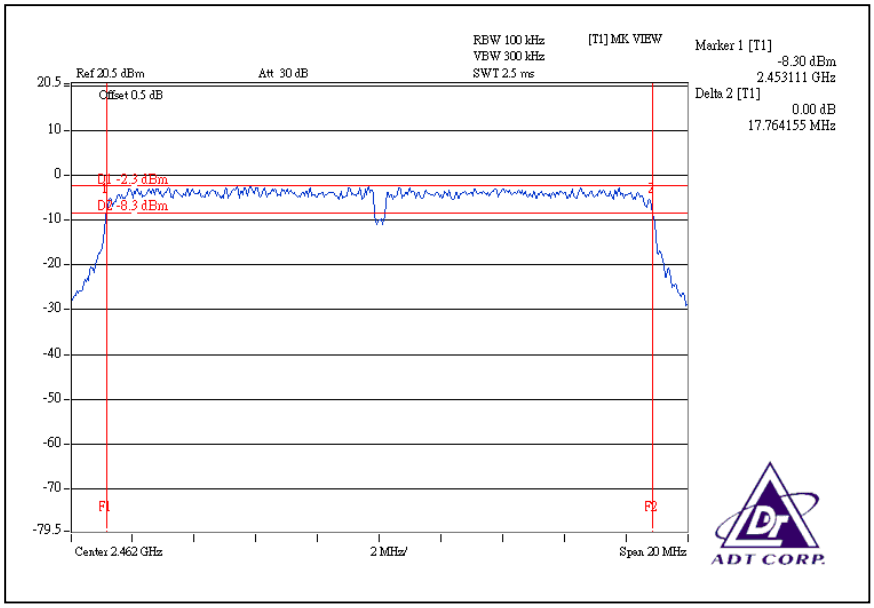
For Chain(0): CH1



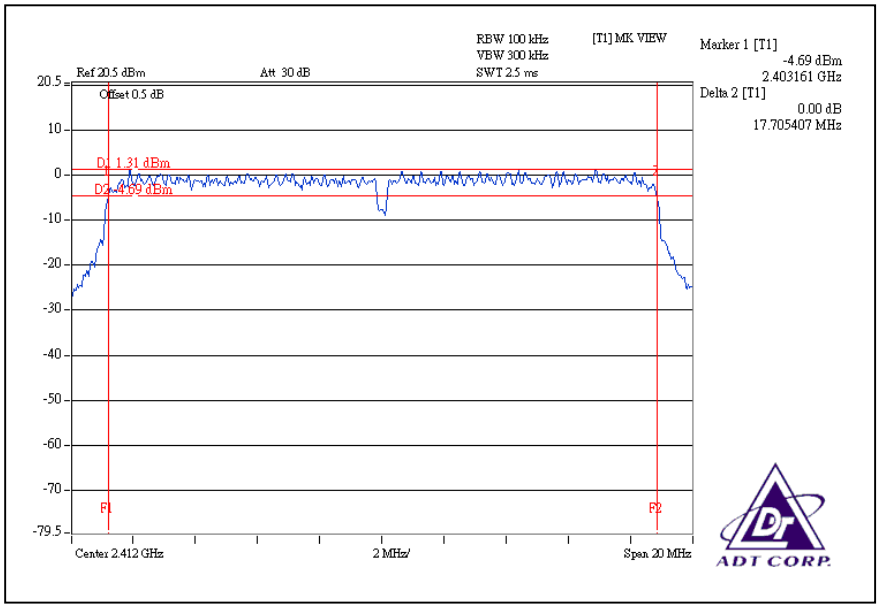
CH6


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-6.35 dBm
2.428094 GHz
Delta 2 [T1]
0.00 dB
17.800147 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -0.35 dBm
D2 -6.35 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
ADT CORP.

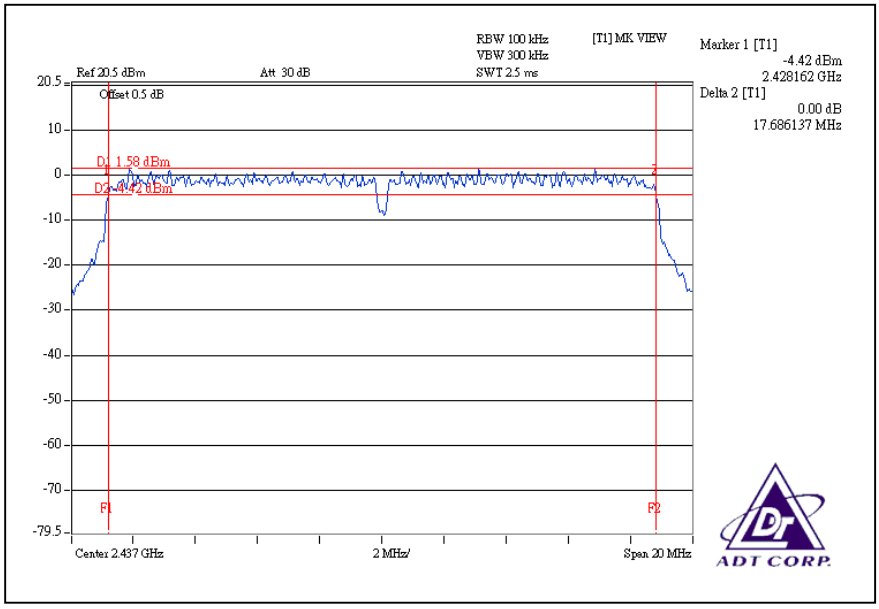
CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-8.30 dBm
2.453111 GHz
Delta 2 [T1]
0.00 dB
17.764155 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -2.3 dBm
D2 -8.3 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
ADT CORP.

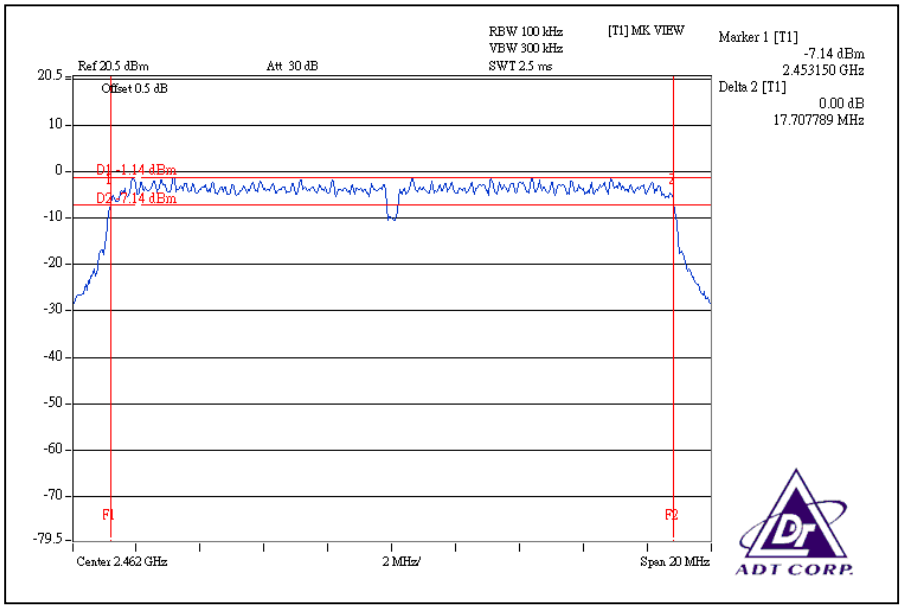
For CHAIN(1): CH1



CH6



CH11

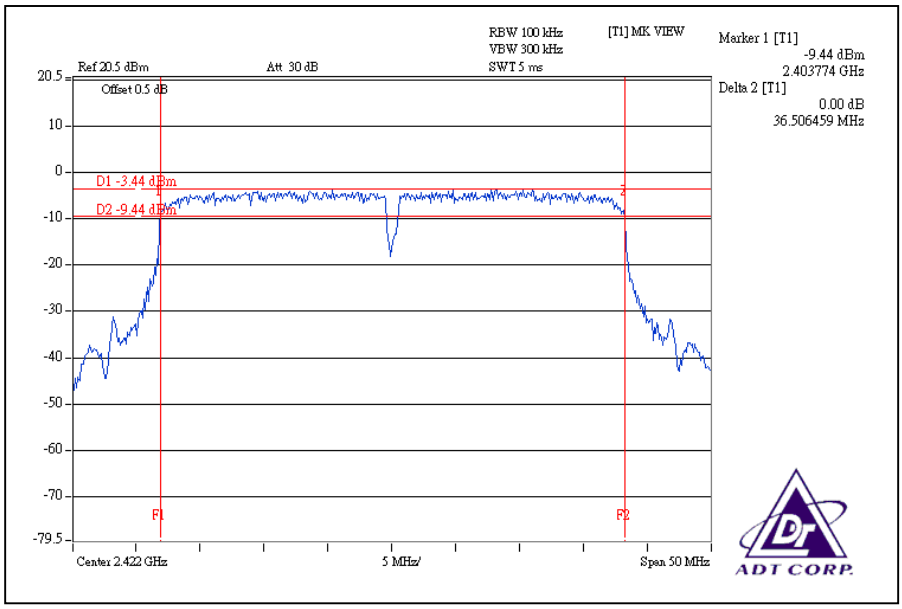

RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-7.14 dBm
2.453150 GHz
Delta 2 [T1]
0.00 dB
17.707789 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.14 dBm
D2 -7.14 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
ADT CORP.

DRAFT 802.11n (40MHz) OFDM MODULATION:

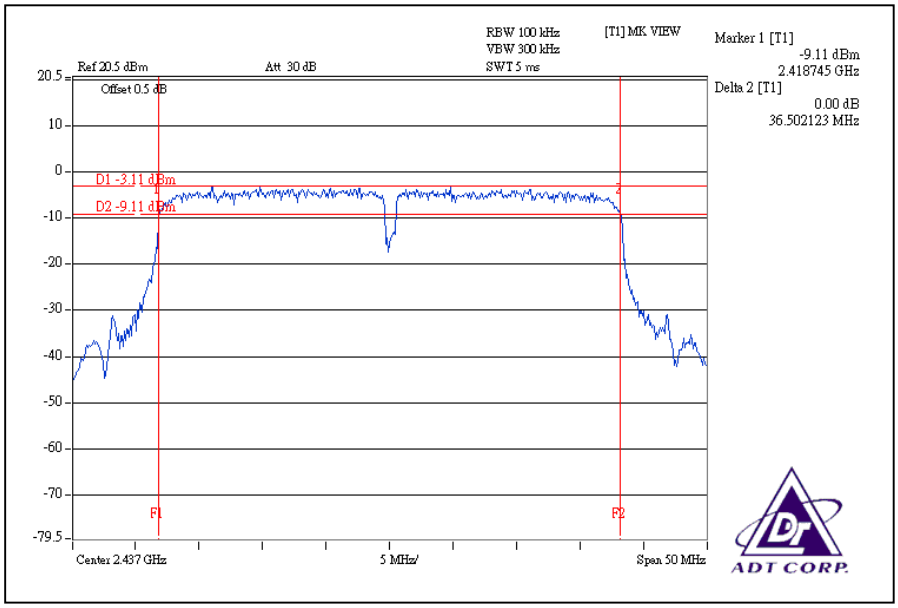
MODULATION TYPE	BPSK	TRANSFER RATE	27Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN(0)	CHAIN(1)		
1	2422	36.51	36.51	0.5	PASS
4	2437	36.50	36.47	0.5	PASS
7	2452	36.53	36.46	0.5	PASS

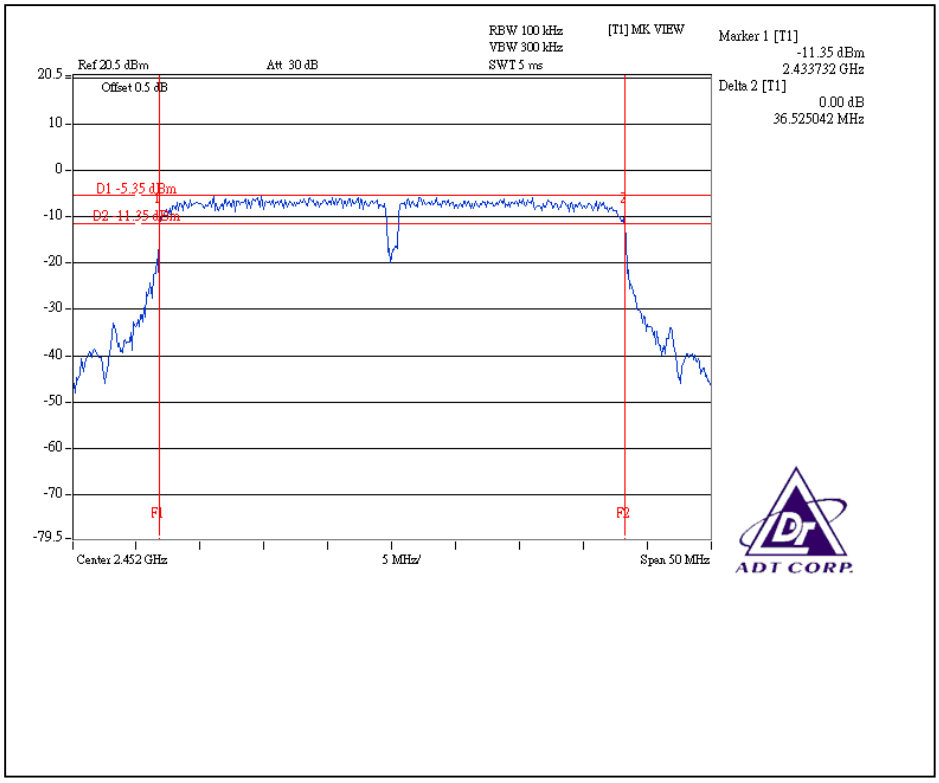
For Chain (0): CH1



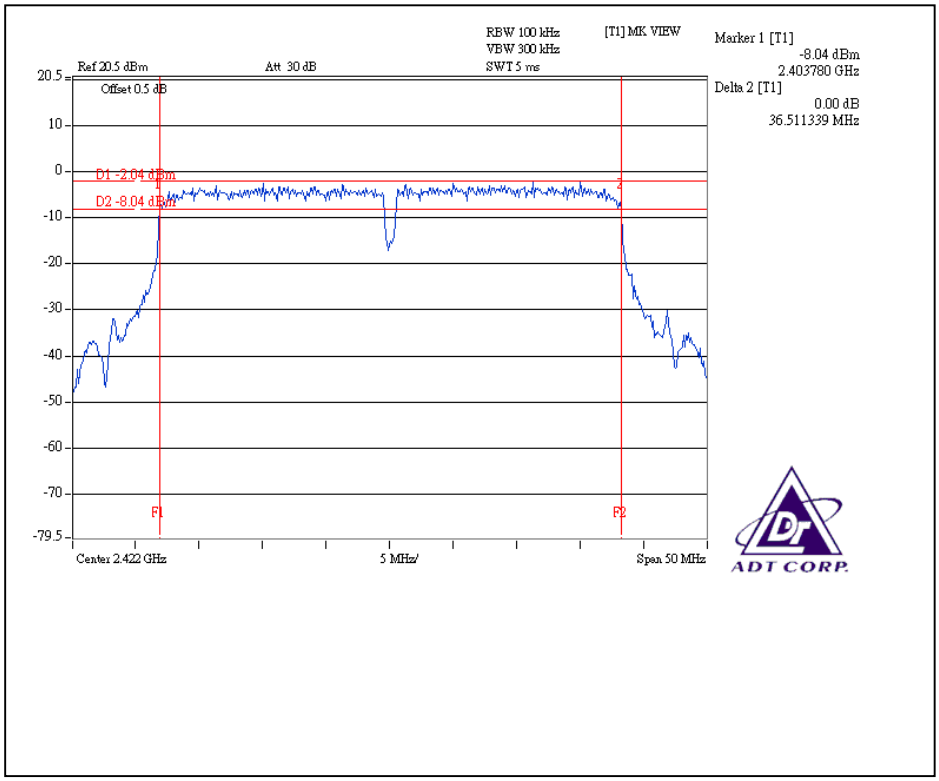
CH4


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-9.11 dBm
2.418745 GHz
Delta 2 [T1]
0.00 dB
36.502123 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -3.11 dBm
D2 -9.11 dBm
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz
ADT CORP.

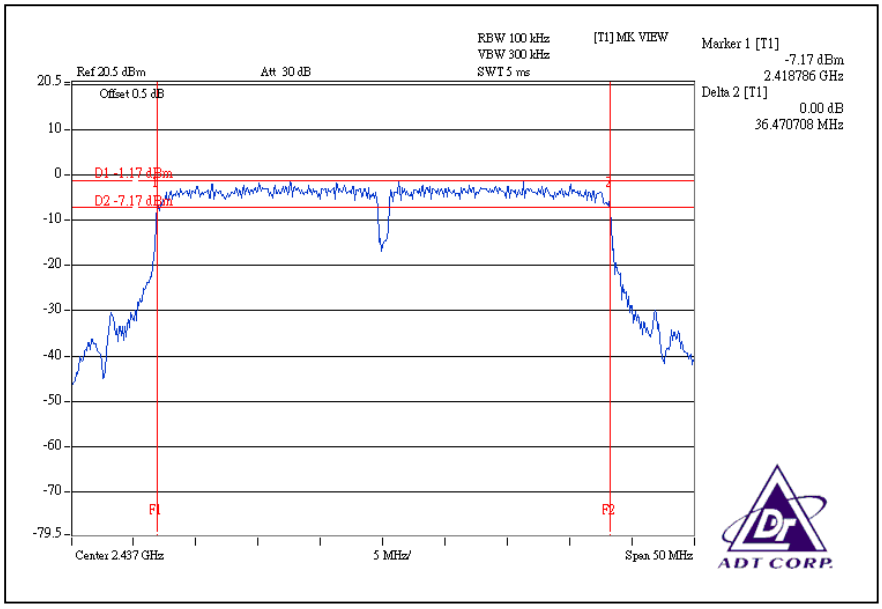
CH7


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-11.35 dBm
2.433732 GHz
Delta 2 [T1]
0.00 dB
36.525042 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.35 dBm
F1
F2
Center 2.452 GHz
5 MHz/
Span 50 MHz
ADT CORP.

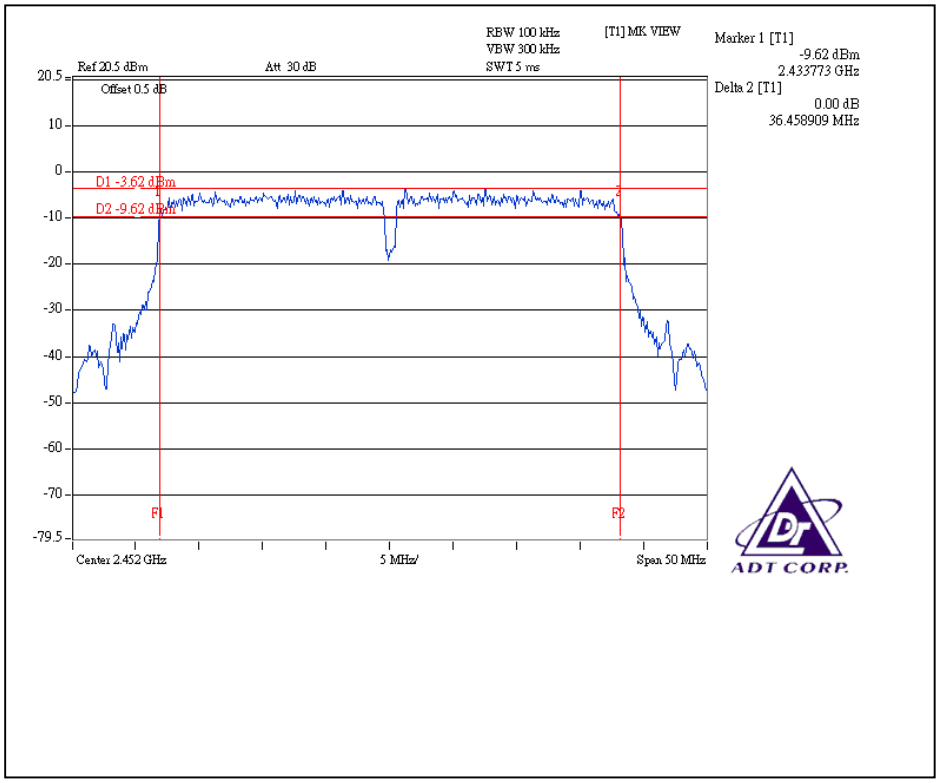
For Chain (1): CH1



CH4



CH7


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-9.62 dBm
2.433773 GHz
Delta 2 [T1]
0.00 dB
36.458909 MHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
D1 -3.62 dBm
D2 -9.62 dBm
F1
F2
Center 2.452 GHz
5 MHz/
Span 50 MHz
ADT CORP.

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
TEKTRONIX OSCILLOSCOPE	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	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	83.176	19.20	30	PASS
6	2437	87.297	19.41	30	PASS
11	2462	86.099	19.35	30	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	125.026	20.97	30	PASS
6	2437	131.826	21.20	30	PASS
11	2462	115.345	20.62	30	PASS

DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
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(0)	CHAIN(1)				
1	2412	76.033	83.753	18.81	19.23	159.786	22.04	30	PASS
6	2437	65.615	83.946	18.17	19.24	149.561	21.75	30	PASS
11	2462	54.325	53.580	17.35	17.29	107.905	20.33	30	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	27Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
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(0)	CHAIN(1)				
1	2422	75.336	74.131	18.77	18.70	149.467	21.75	30	PASS
4	2437	77.983	79.799	18.92	19.02	157.782	21.98	30	PASS
7	2452	49.774	48.306	16.97	16.84	98.080	19.92	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

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

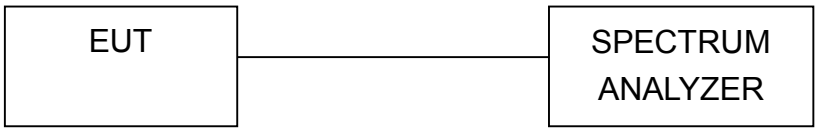
4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

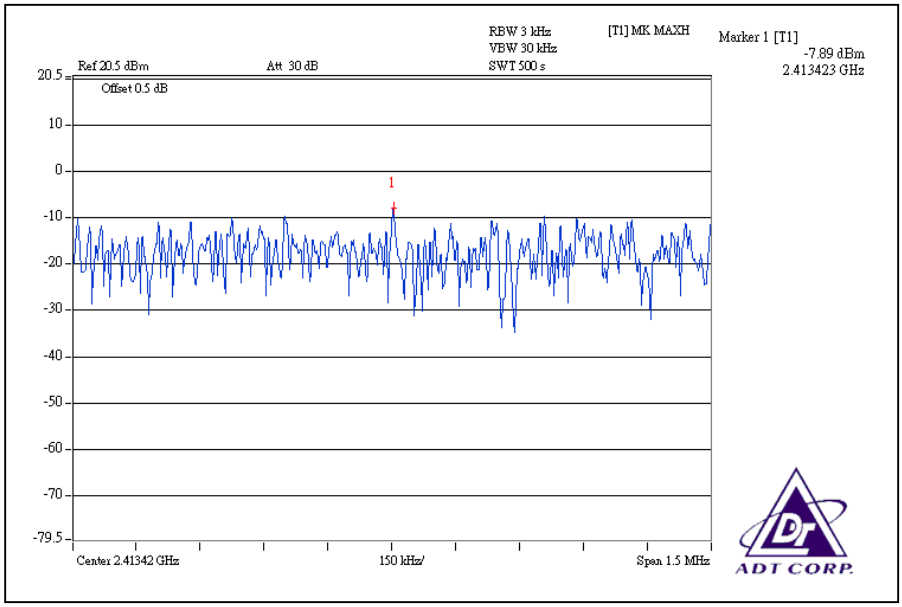
4.5.7 TEST RESULTS

802.11b DSSS MODULATION:

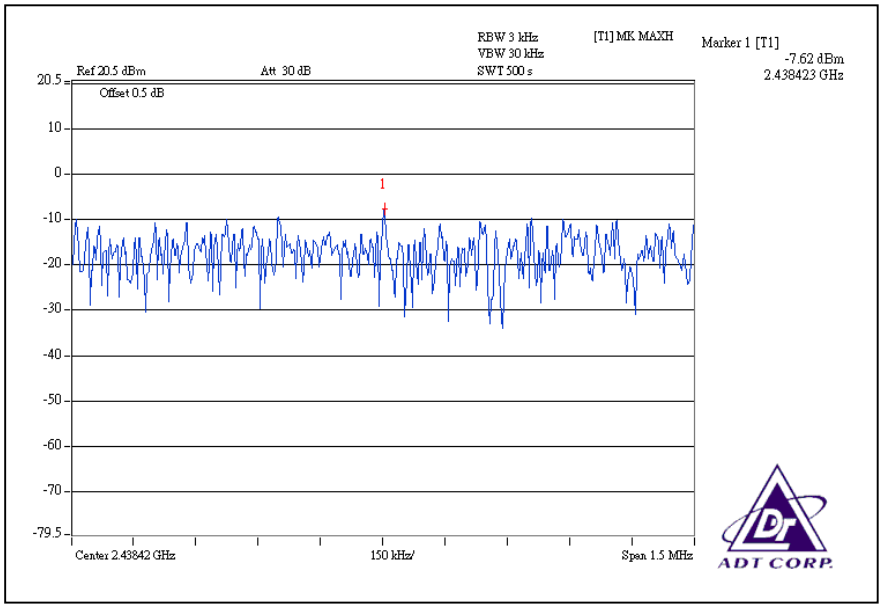
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-7.89	8	PASS
6	2437	-7.62	8	PASS
11	2462	-7.82	8	PASS

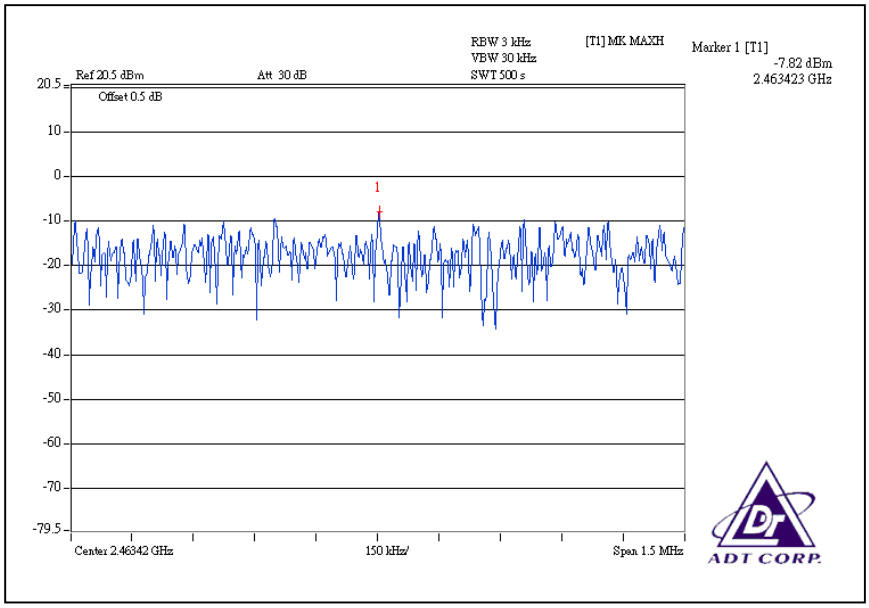
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-7.62 dBm
2.438423 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43842 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

CH11

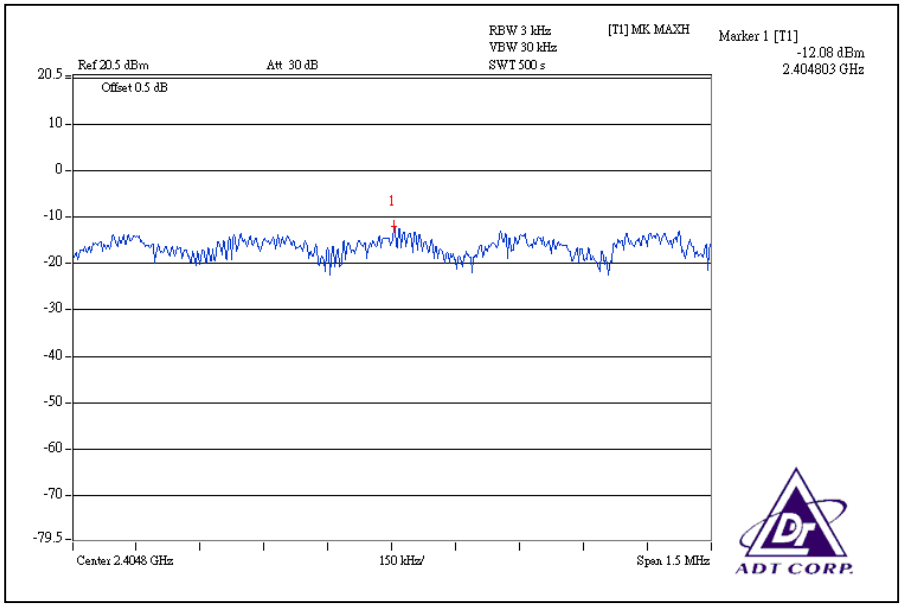

RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-7.82 dBm
2.463423 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46342 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

802.11g OFDM MODULATION:

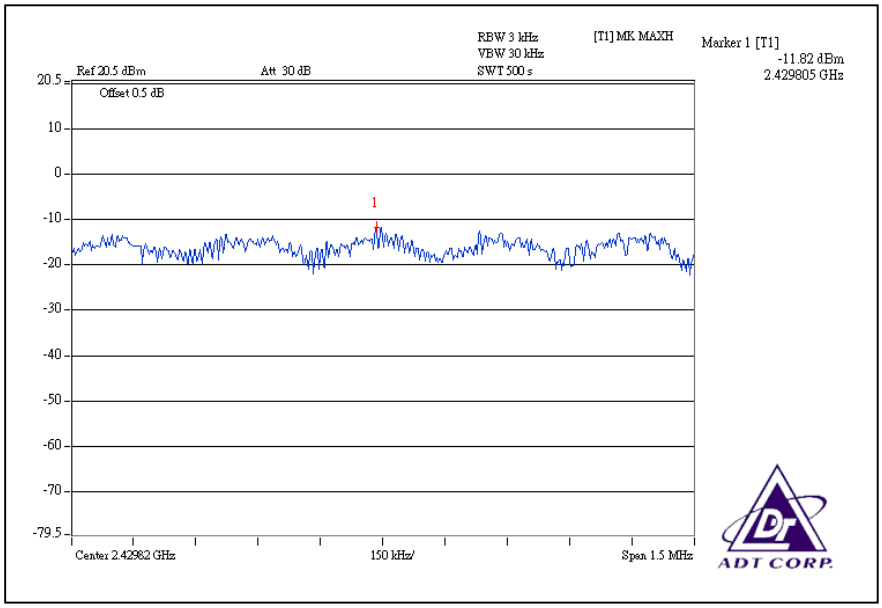
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-12.08	8	PASS
6	2437	-11.82	8	PASS
11	2462	-11.99	8	PASS

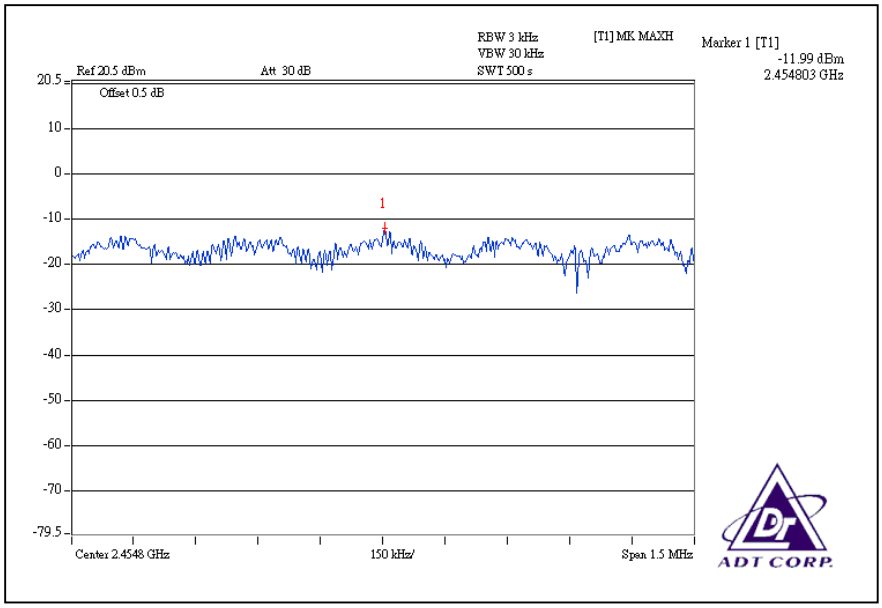
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-11.82 dBm
2.429805 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.42982 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

CH11

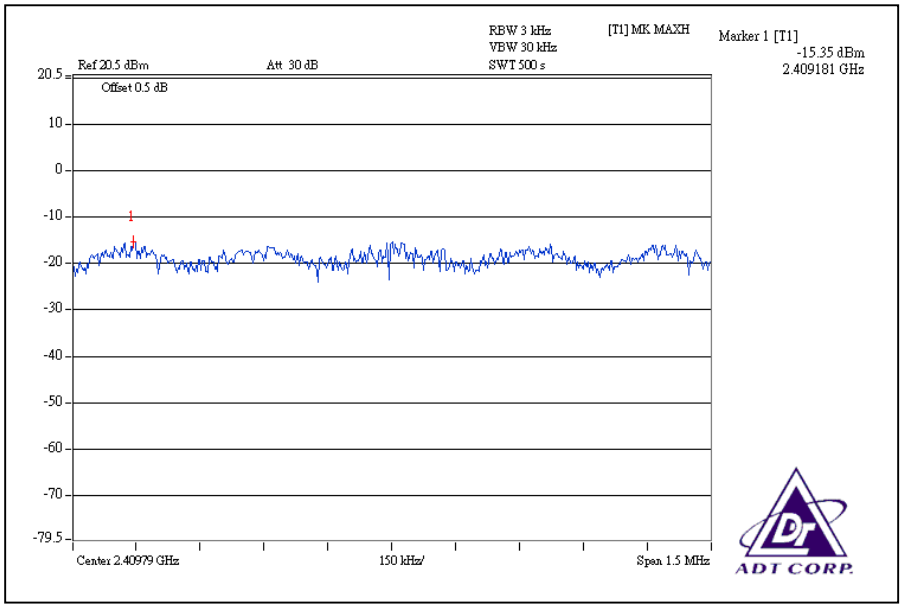

RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-11.99 dBm
2.454803 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.4548 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

DRAFT 802.11n (20MHz) OFDM MODULATION:

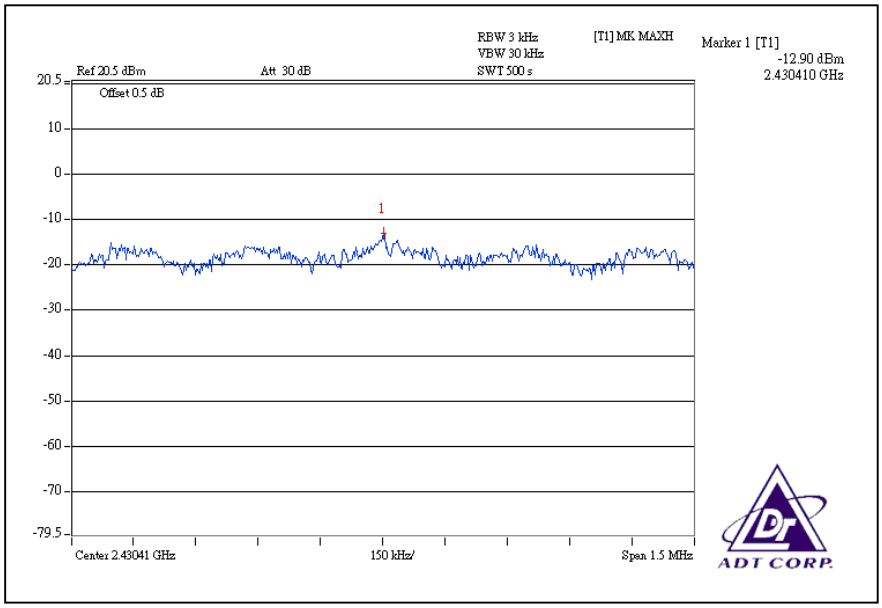
MODULATION TYPE	BPSK	TRANSFER RATE	13Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25 deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (mW)		RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
		CHAIN(0)	CHAIN(1)	CHAIN(0)	CHAIN(1)				
1	2412	0.029	0.044	-15.35	-13.52	0.073	-11.37	8	PASS
6	2437	0.051	0.049	-12.90	-13.11	0.100	-10.00	8	PASS
11	2462	0.027	0.030	-15.64	-15.29	0.057	-12.44	8	PASS

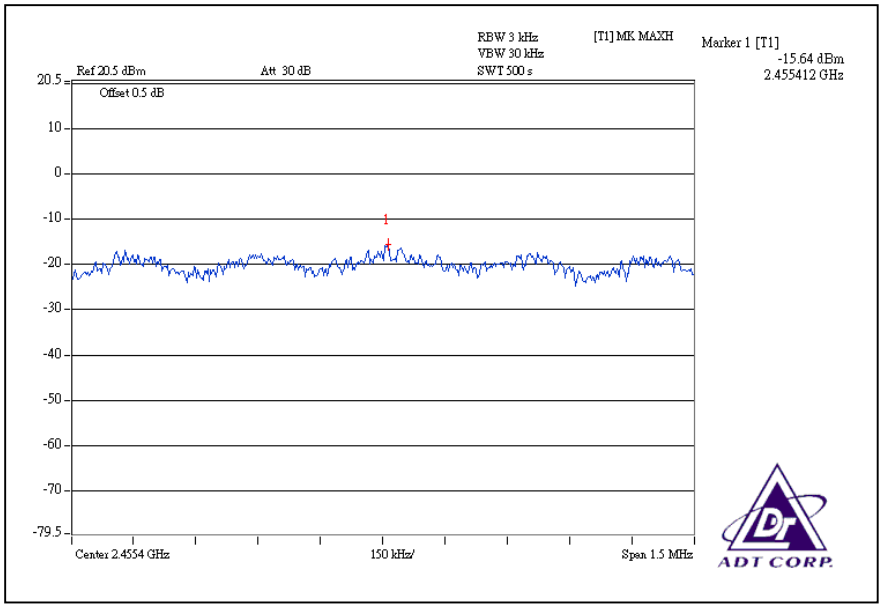
For Chain(0): CH1



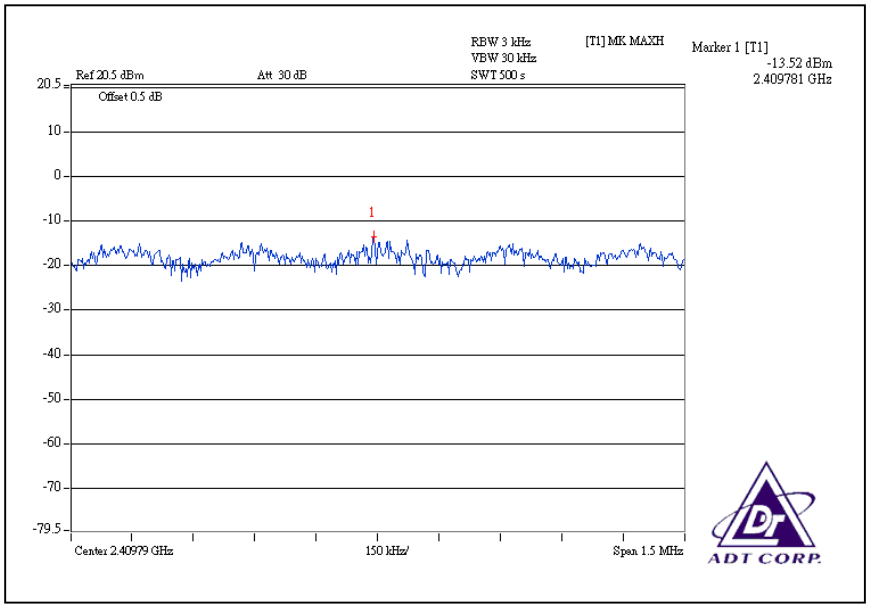
CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-12.90 dBm
2.430410 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43041 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

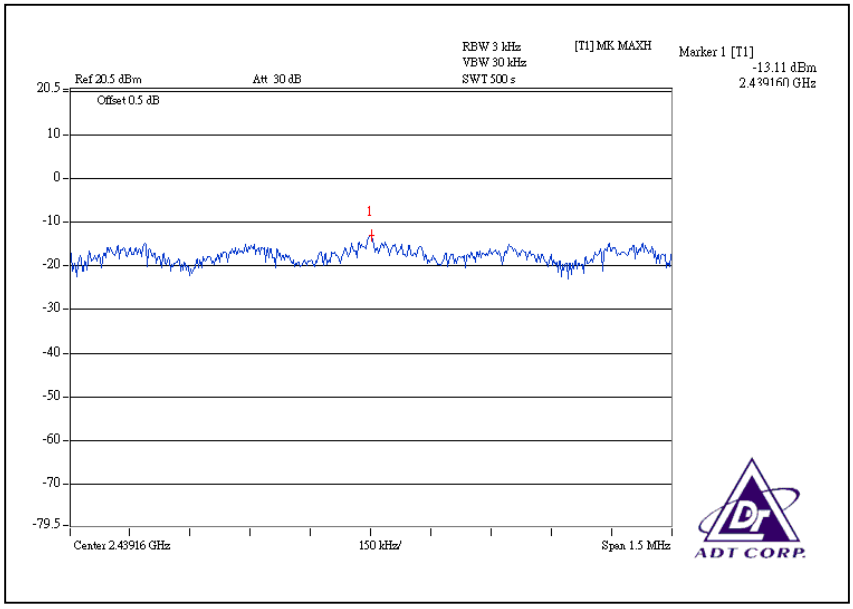
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-15.64 dBm
2.455412 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.4554 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

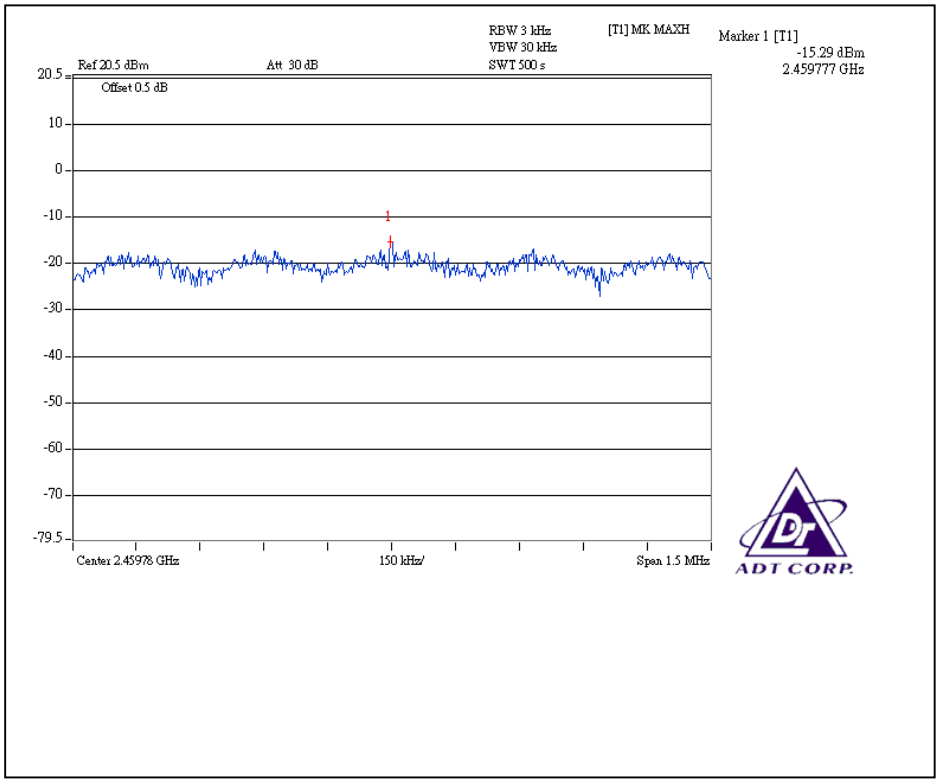
For Chain (1): CH1



CH6



CH11

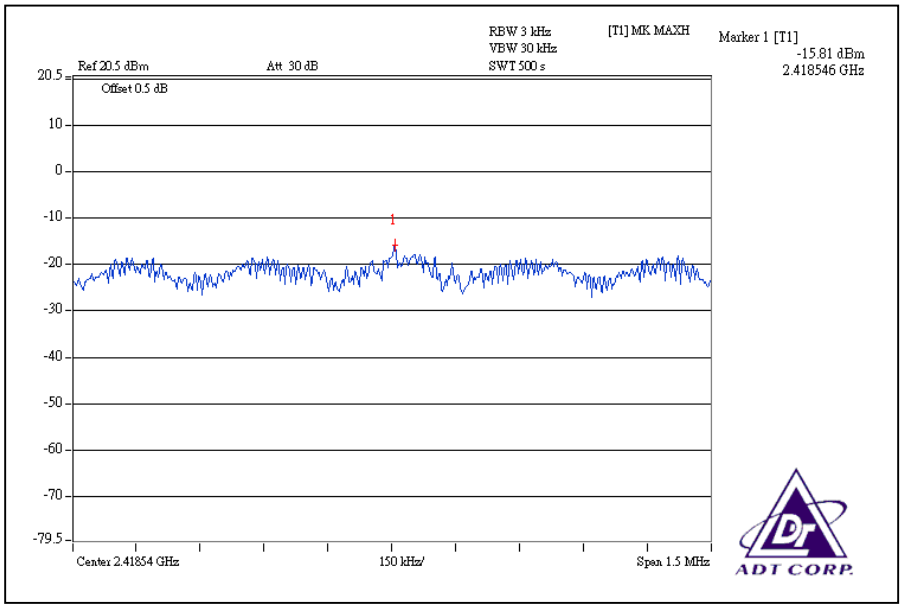

RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-15.29 dBm
2.459777 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.45978 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

DRAFT 802.11n (40MHz) OFDM MODULATION:

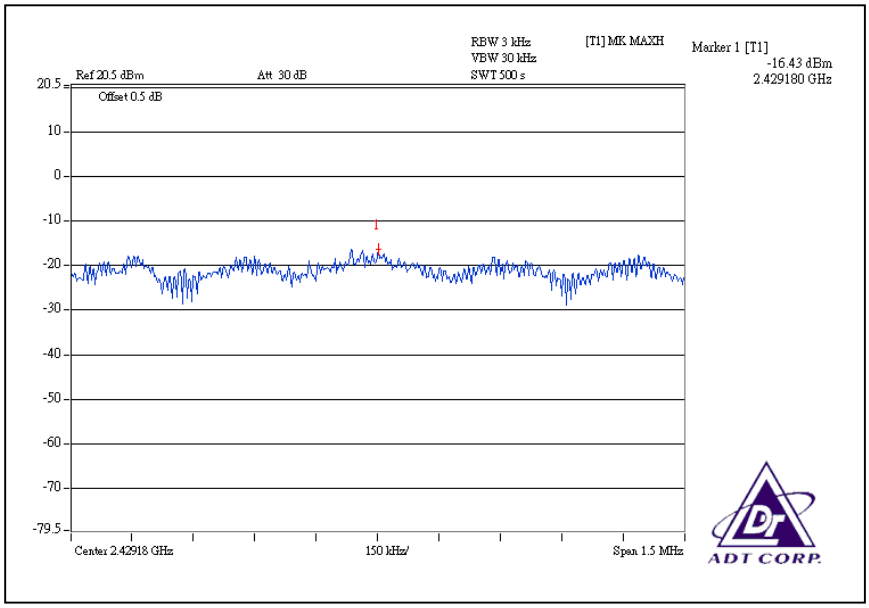
MODULATION TYPE	BPSK	TRANSFER RATE	27Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 60%RH, 971hPa
TESTED BY	Rex Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (mW)		RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
		CHAIN(0)	CHAIN(1)	CHAIN(0)	CHAIN(1)				
1	2422	0.026	0.026	-15.81	-15.88	0.052	-12.84	8	PASS
4	2437	0.023	0.024	-16.43	-16.19	0.047	-13.28	8	PASS
7	2452	0.019	0.015	-17.12	-18.28	0.034	-14.69	8	PASS

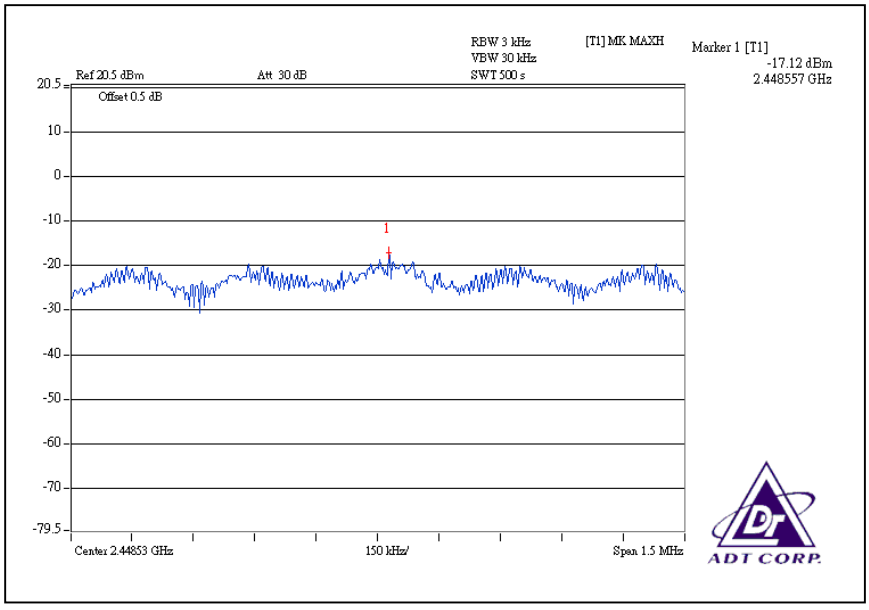
For Chain (0): CH1



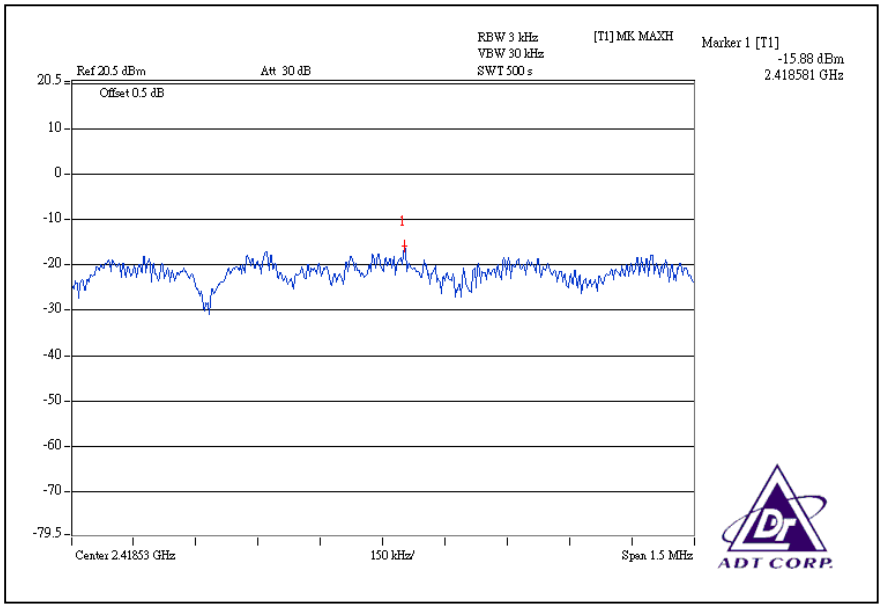
CH4


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-16.43 dBm
2.429180 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.42918 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

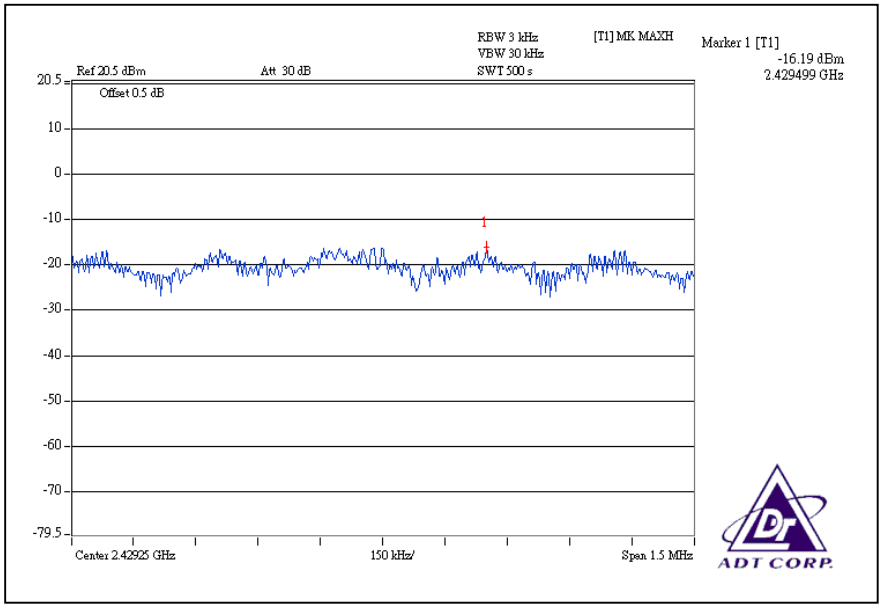
CH7


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-17.12 dBm
2.448557 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44853 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

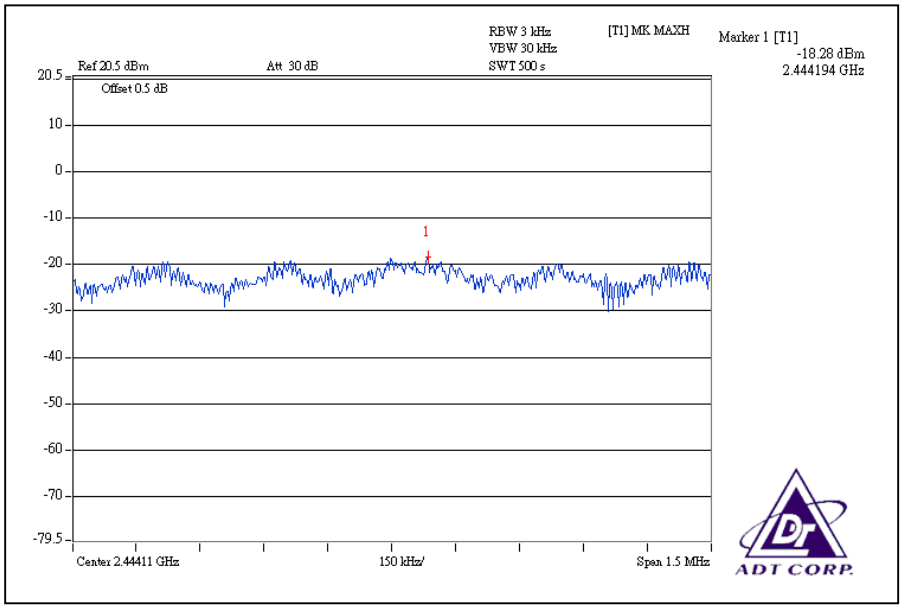
For Chain (1): CH1



CH4



CH7


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-18.28 dBm
2.444194 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
1
Center 2.44411 GHz
150 kHz/
Span 1.5 MHz
ADT CORP.

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

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

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set RBW of spectrum analyzer to 100kHz and VBW of spectrum analyzer to 300kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (RBW = 100kHz, VBW = 300kHz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

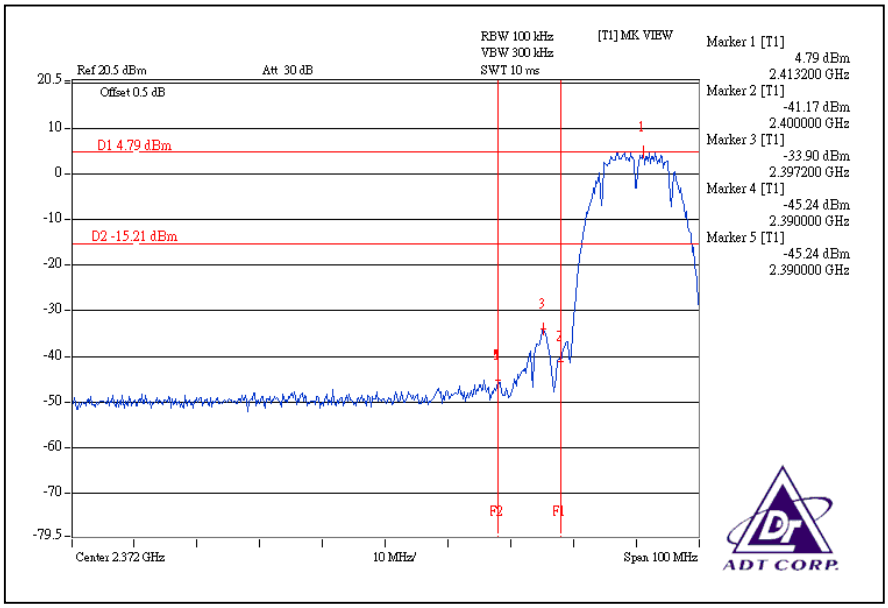
Same as Item 4.3.6

4.6.6 TEST RESULTS

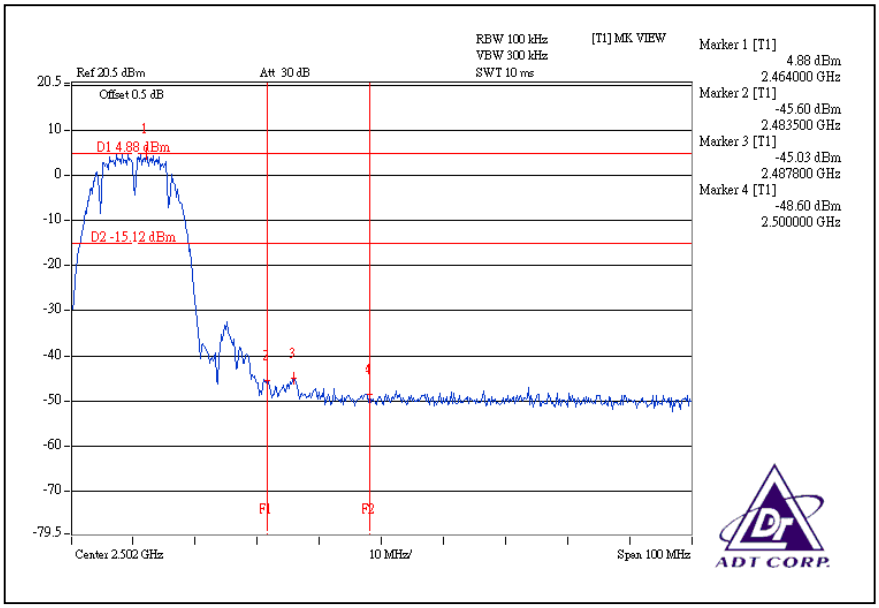
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

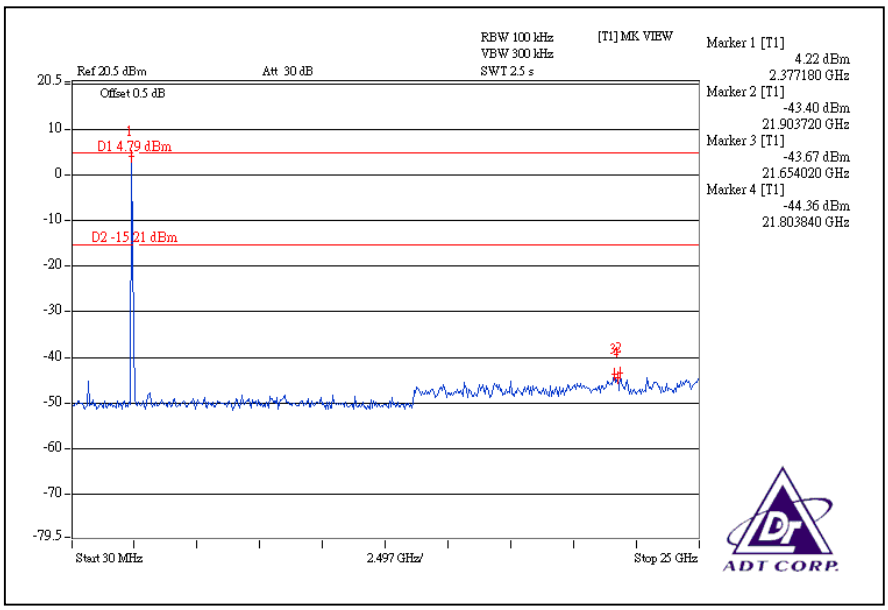
CH1



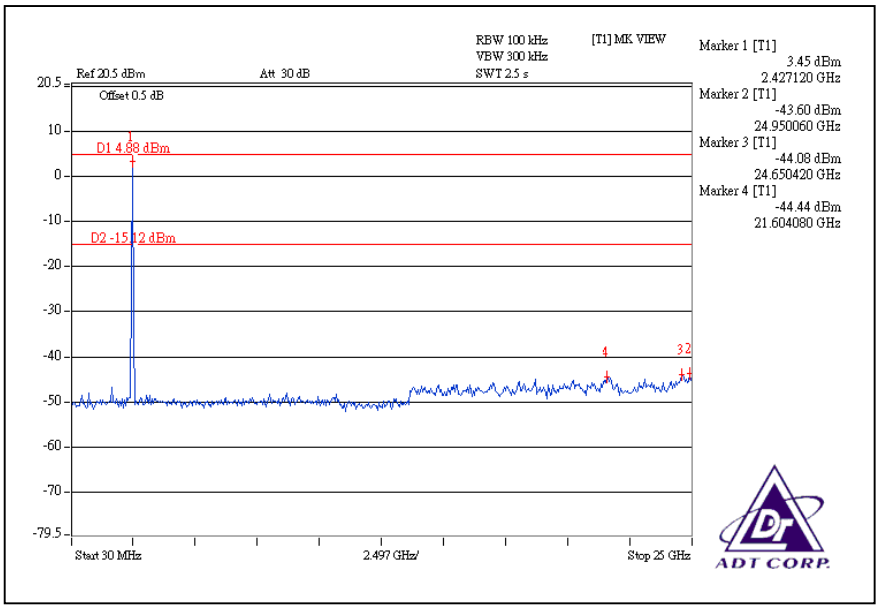
CH11



CH1

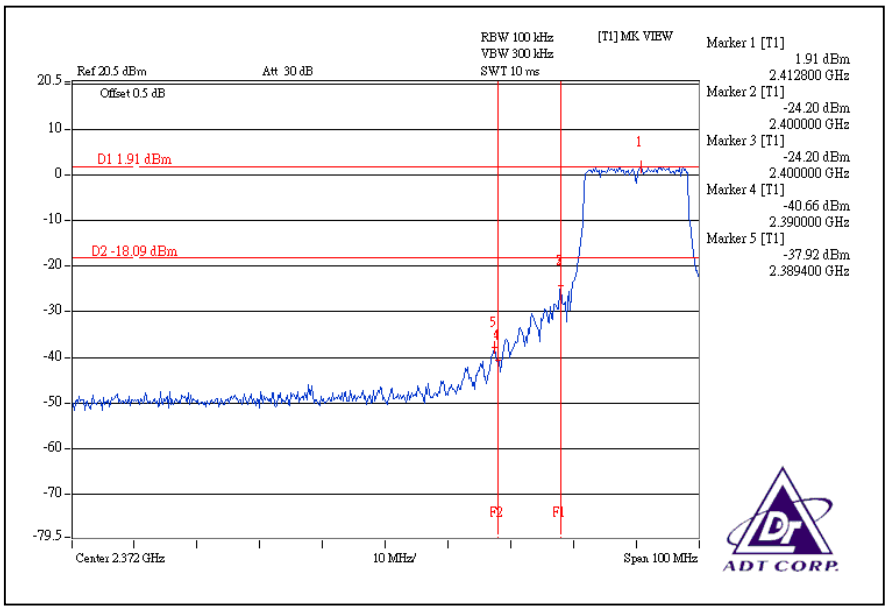

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
4.22 dBm
2.377180 GHz
Marker 2 [T1]
-43.40 dBm
21.903720 GHz
Marker 3 [T1]
-43.67 dBm
21.654020 GHz
Marker 4 [T1]
-44.36 dBm
21.803840 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.79 dBm
D2 -15.21 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

CH11

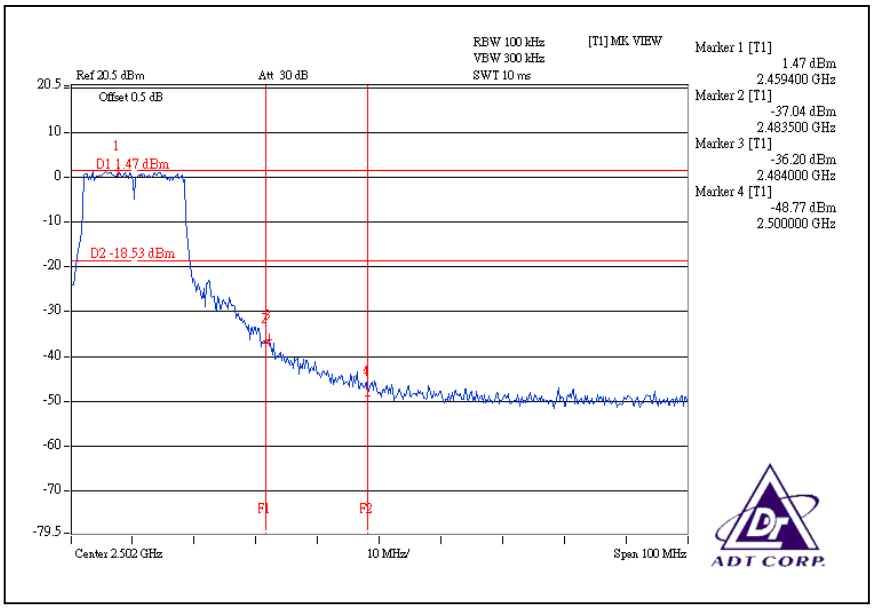

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
3.45 dBm
2.427120 GHz
Marker 2 [T1]
-43.60 dBm
24.950060 GHz
Marker 3 [T1]
-44.08 dBm
24.650420 GHz
Marker 4 [T1]
-44.44 dBm
21.604080 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 4.88 dBm
D2 -15.12 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

802.11g OFDM MODULATION:

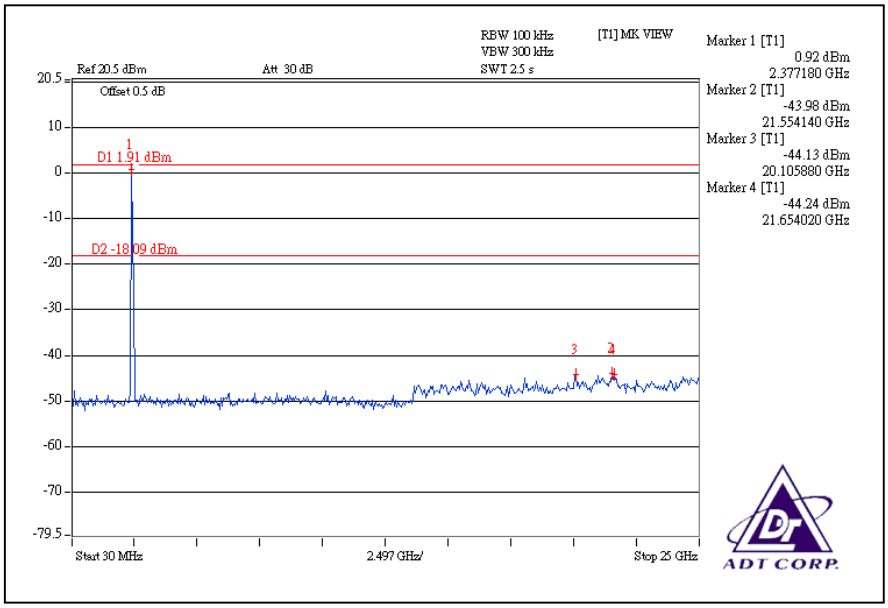
CH1



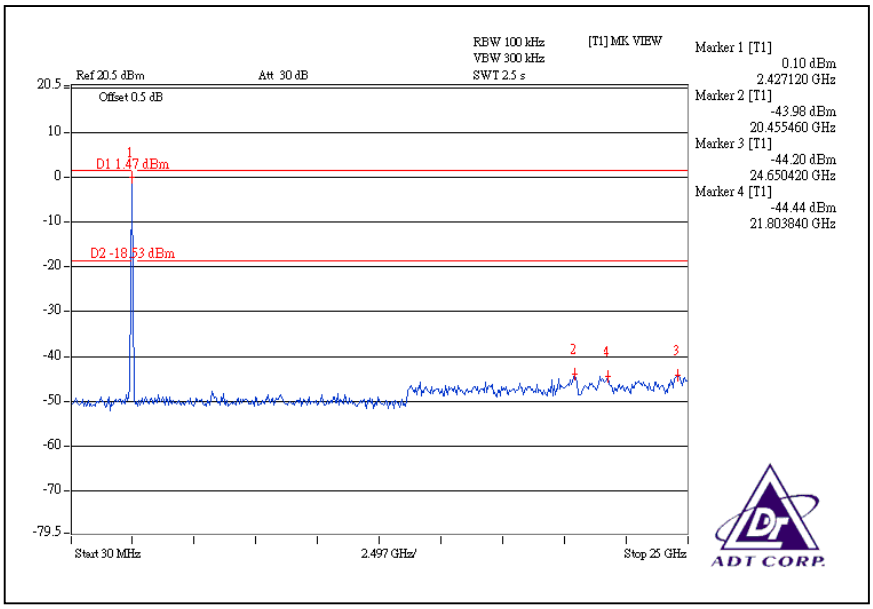
CH11



CH1

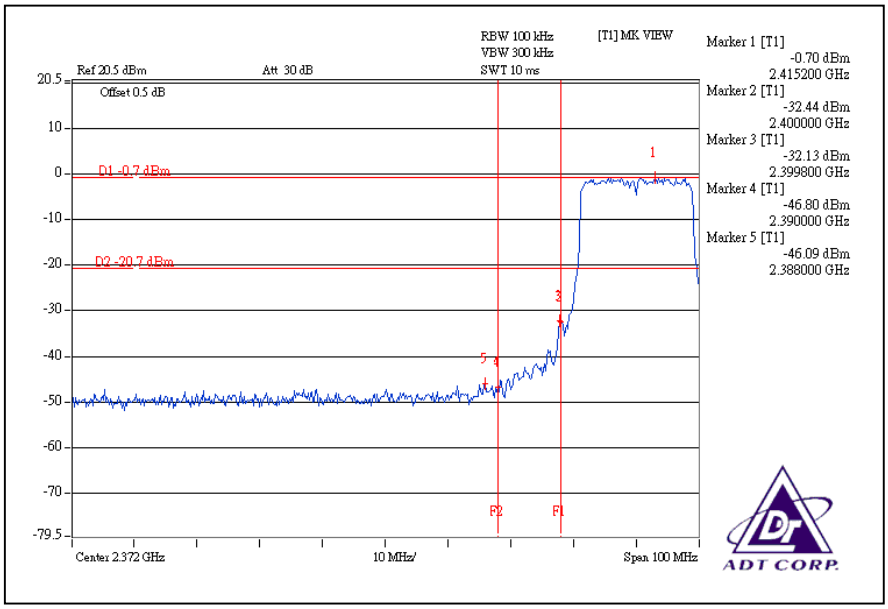

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
0.92 dBm
2.377180 GHz
Marker 2 [T1]
-43.98 dBm
21.554140 GHz
Marker 3 [T1]
-44.13 dBm
20.105880 GHz
Marker 4 [T1]
-44.24 dBm
21.654020 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.91 dBm
D2 -18.09 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

CH11

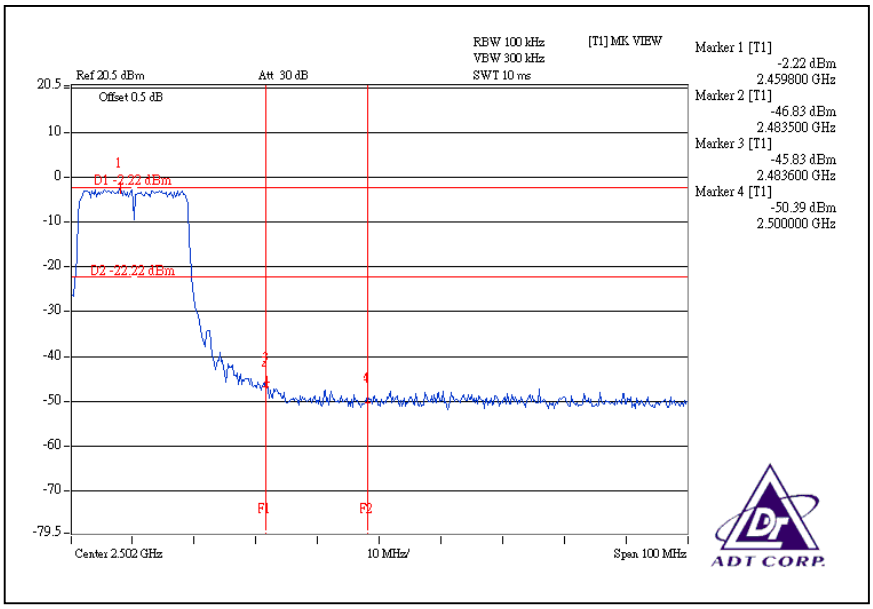

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
0.10 dBm
2.427120 GHz
Marker 2 [T1]
-43.98 dBm
20.455460 GHz
Marker 3 [T1]
-44.20 dBm
24.650420 GHz
Marker 4 [T1]
-44.44 dBm
21.803840 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 1.47 dBm
D2 -18.53 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

DRAFT 802.11n (20MHz) OFDM MODULATION:

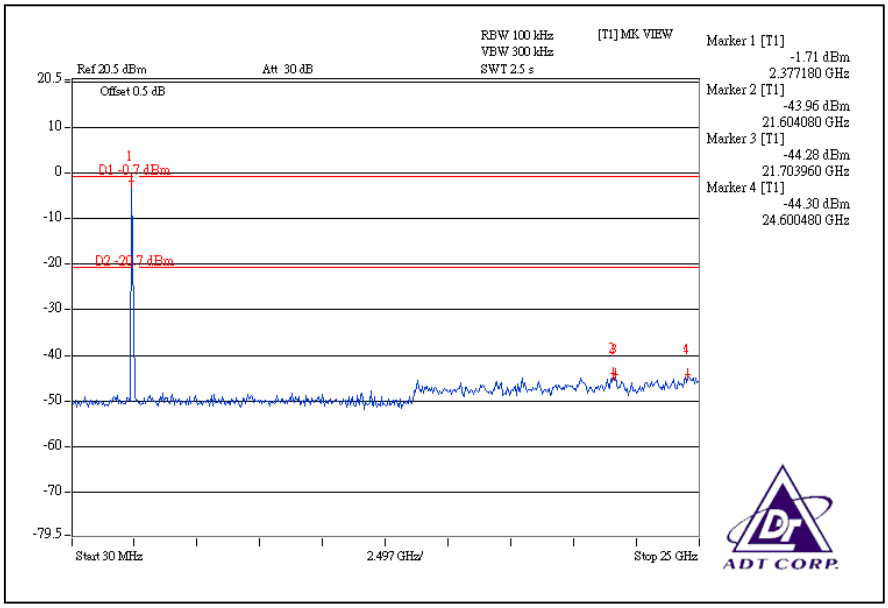
For Chain (0):CH1



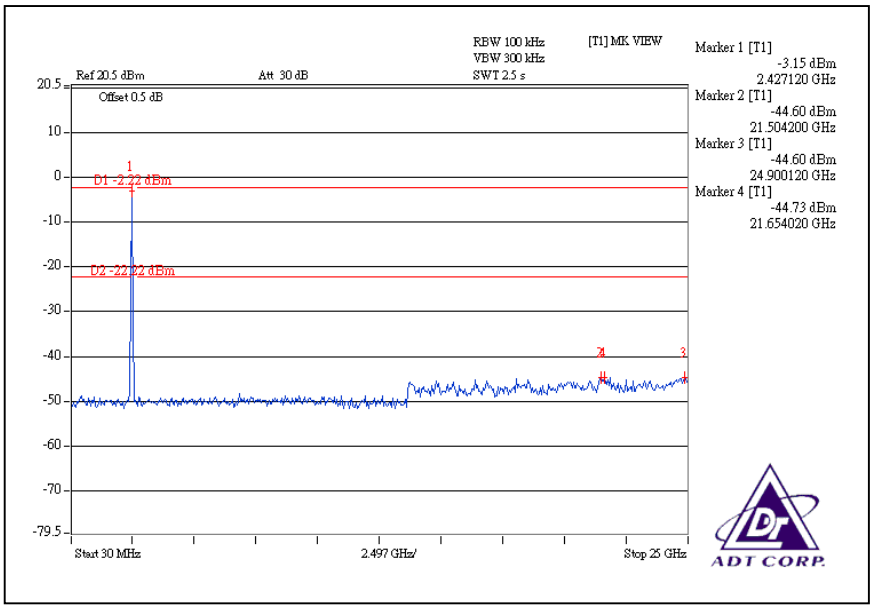
CH11



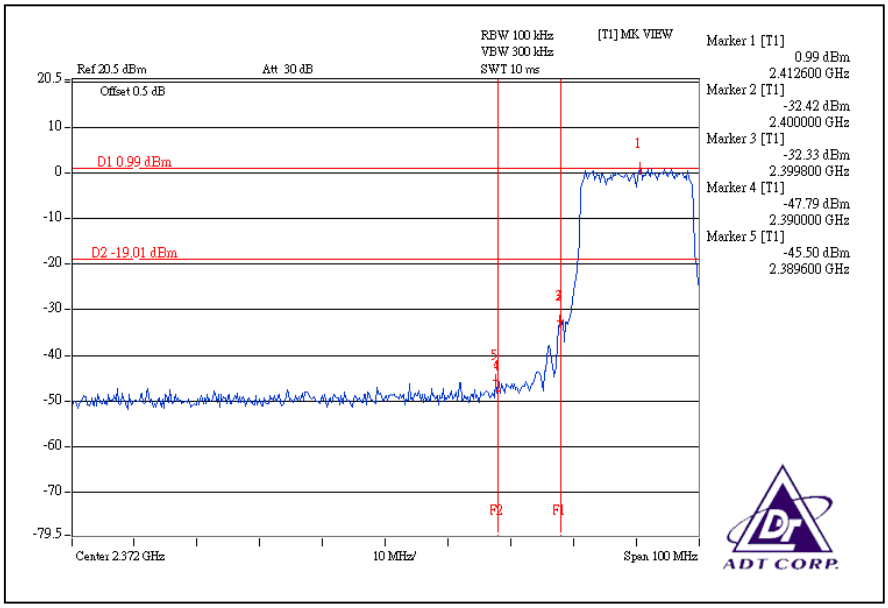
CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-1.71 dBm
2.377180 GHz
Marker 2 [T1]
-43.96 dBm
21.604080 GHz
Marker 3 [T1]
-44.28 dBm
21.703960 GHz
Marker 4 [T1]
-44.30 dBm
24.600480 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -0.7 dBm
D2 -20.7 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

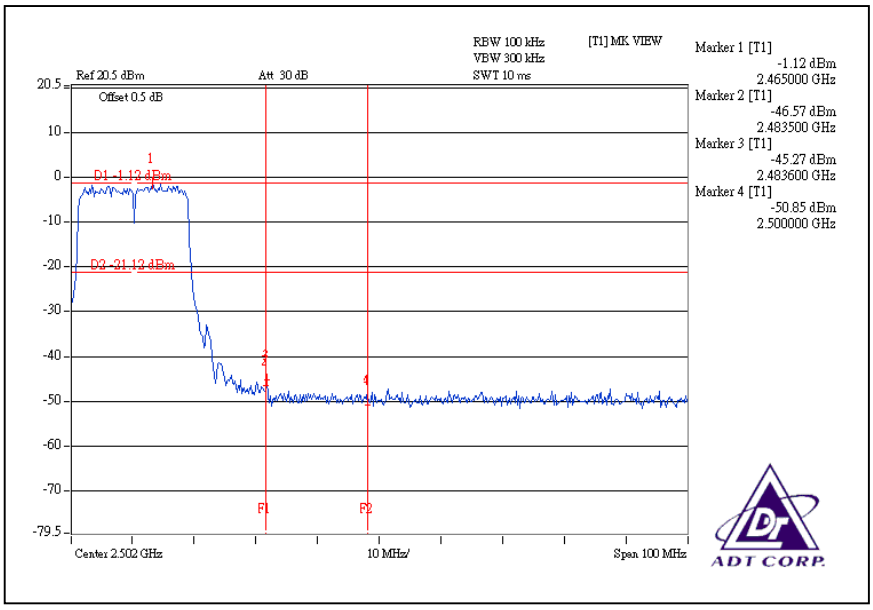
CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-3.15 dBm
2.427120 GHz
Marker 2 [T1]
-44.60 dBm
21.504200 GHz
Marker 3 [T1]
-44.60 dBm
24.900120 GHz
Marker 4 [T1]
-44.73 dBm
21.654020 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -2.22 dBm
D2 -22.22 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

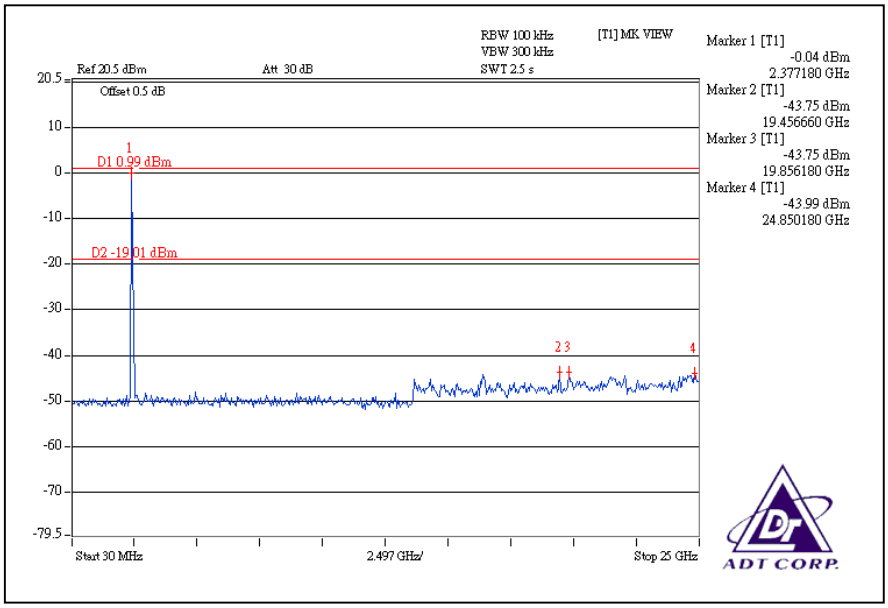
For Chain (1):CH1



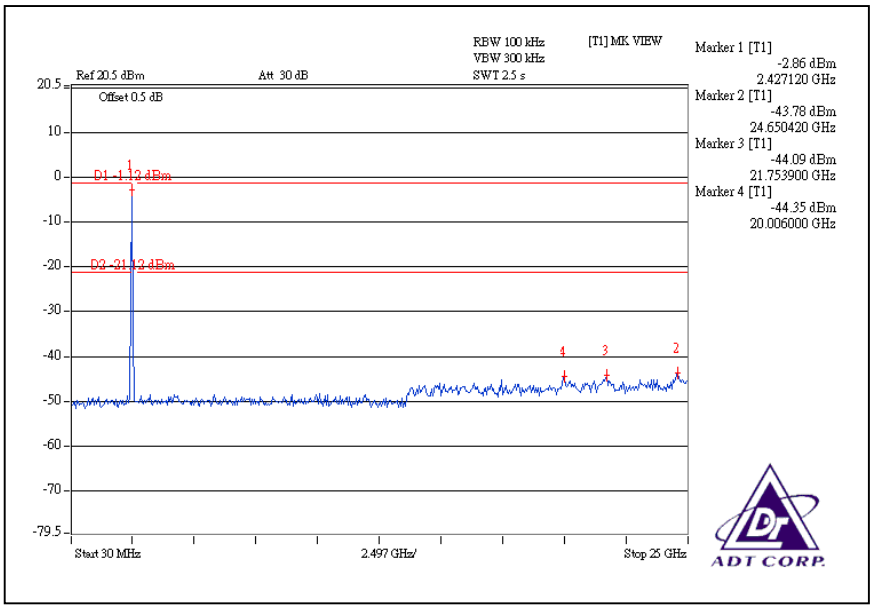
CH11



CH1

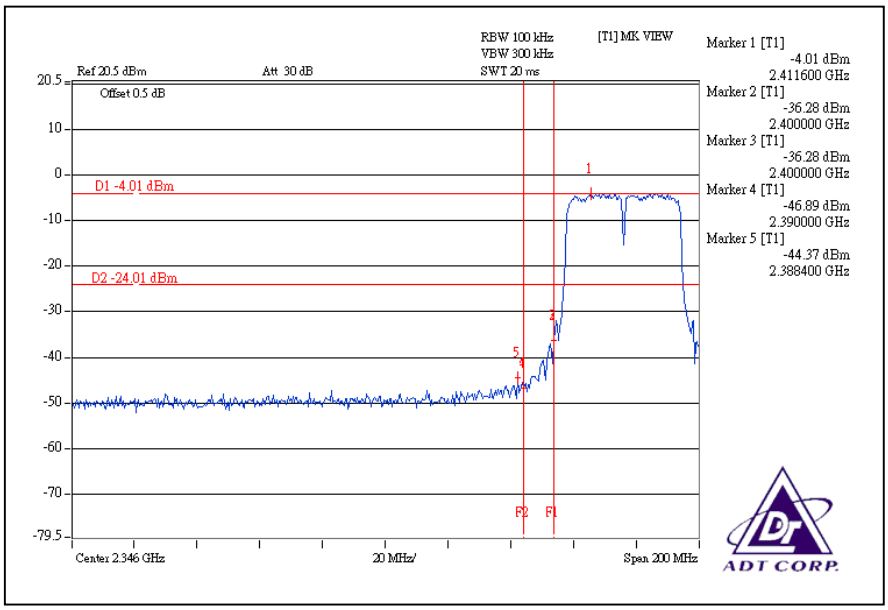

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-0.04 dBm
2.377180 GHz
Marker 2 [T1]
-43.75 dBm
19.456660 GHz
Marker 3 [T1]
-43.75 dBm
19.856180 GHz
Marker 4 [T1]
-43.99 dBm
24.850180 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.99 dBm
D2 -19.01 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

CH11

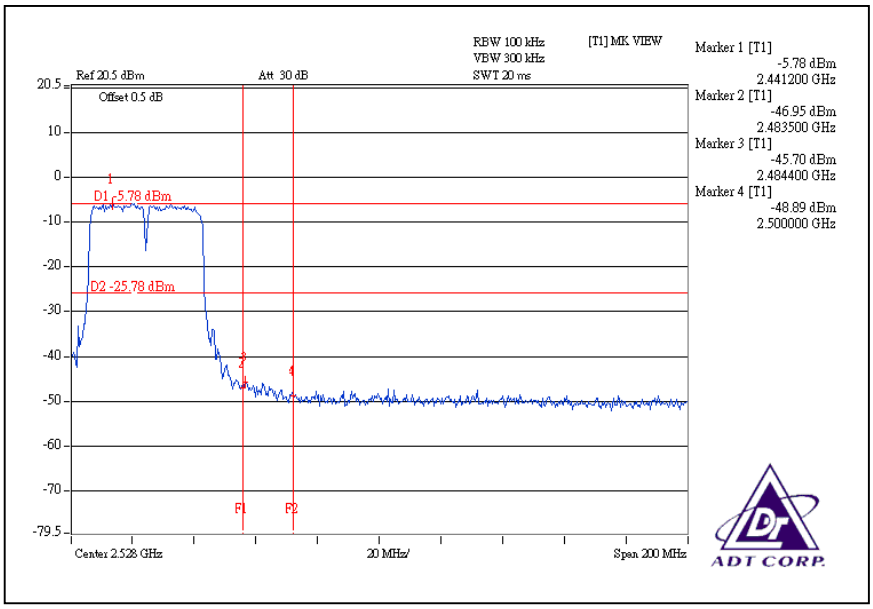

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-2.86 dBm
2.427120 GHz
Marker 2 [T1]
-43.78 dBm
24.650420 GHz
Marker 3 [T1]
-44.09 dBm
21.753900 GHz
Marker 4 [T1]
-44.35 dBm
20.006000 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -1.13 dBm
D2 -21.13 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

DRAFT 802.11n (40MHz) OFDM MODULATION:

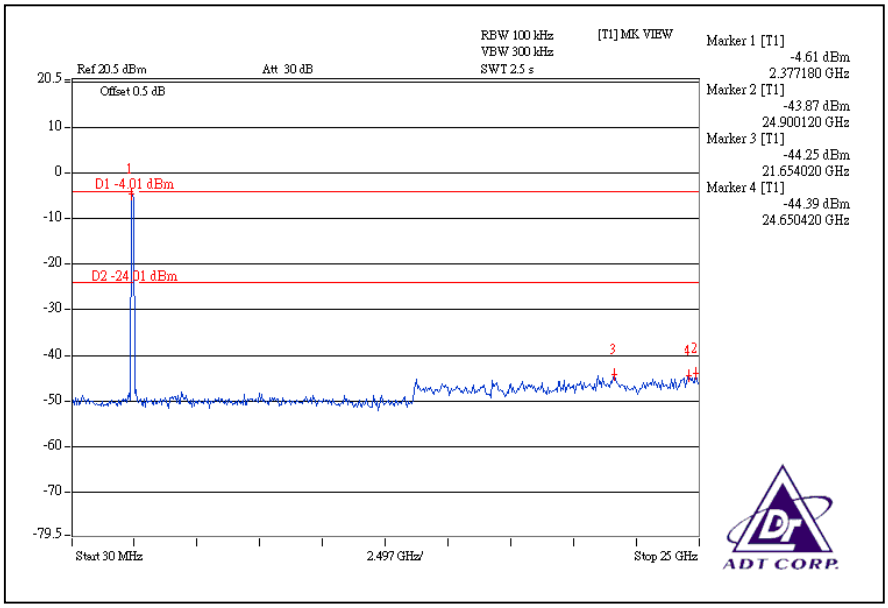
For Chain (0):CH1



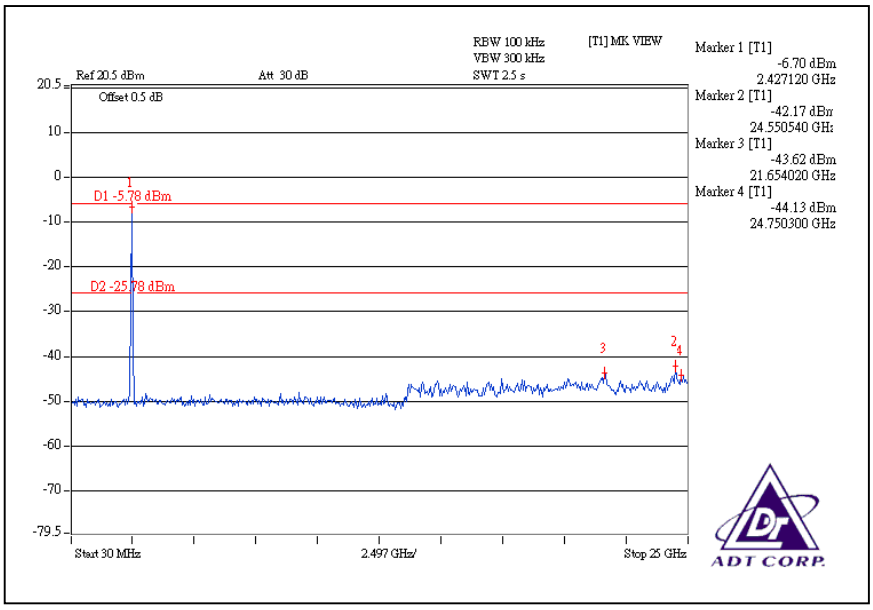
CH7



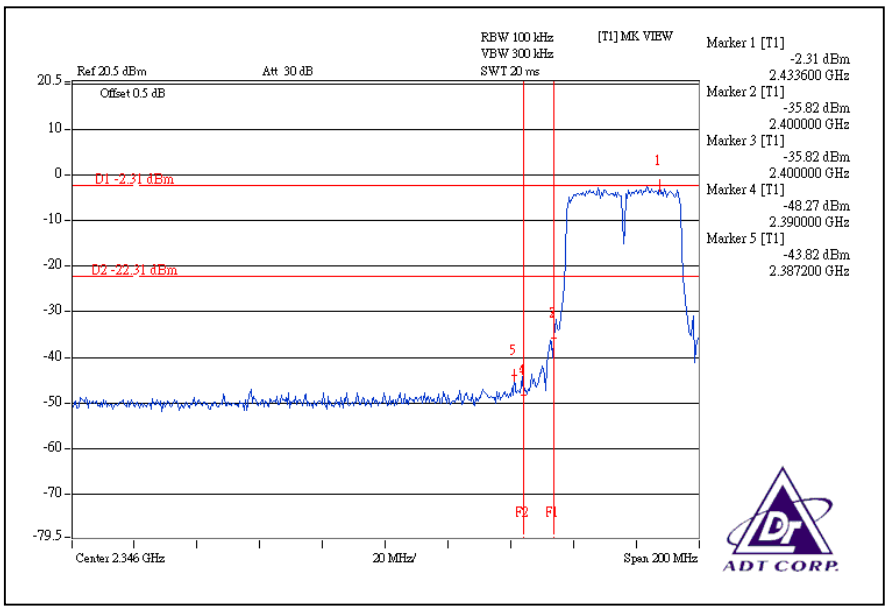
CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -4.01 dBm
D2 -24.01 dBm
Marker 1 [T1]
-4.61 dBm
2.377180 GHz
Marker 2 [T1]
-43.87 dBm
24.900120 GHz
Marker 3 [T1]
-44.25 dBm
21.654020 GHz
Marker 4 [T1]
-44.39 dBm
24.650420 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

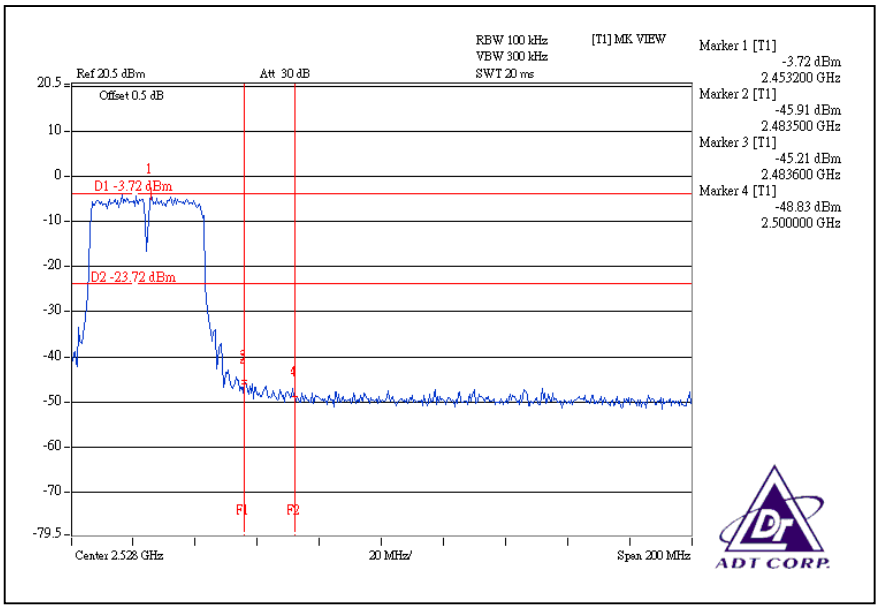
CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -5.78 dBm
D2 -25.78 dBm
Marker 1 [T1]
-6.70 dBm
2.427120 GHz
Marker 2 [T1]
-42.17 dBm
24.550540 GHz
Marker 3 [T1]
-43.62 dBm
21.654020 GHz
Marker 4 [T1]
-44.13 dBm
24.750300 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

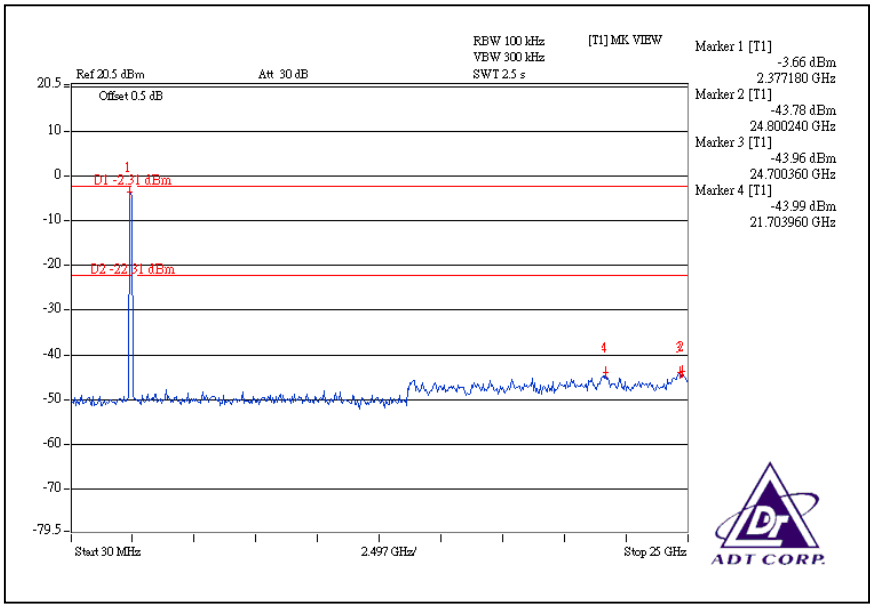
For Chain (1):CH1



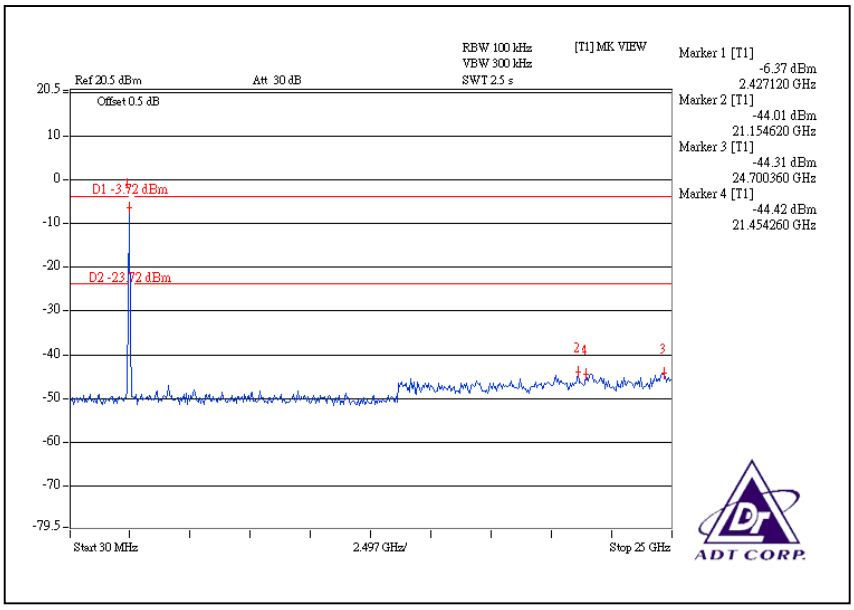
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -23.31 dBm
D2 -22.31 dBm
Marker 1 [T1]
-3.66 dBm
2.377180 GHz
Marker 2 [T1]
-43.78 dBm
24.800240 GHz
Marker 3 [T1]
-43.96 dBm
24.700360 GHz
Marker 4 [T1]
-43.99 dBm
21.703960 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -23.72 dBm
D2 -23.72 dBm
Marker 1 [T1]
-6.37 dBm
2.427120 GHz
Marker 2 [T1]
-44.01 dBm
21.154620 GHz
Marker 3 [T1]
-44.31 dBm
24.700360 GHz
Marker 4 [T1]
-44.42 dBm
21.454260 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz
ADT CORP.

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

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

Transmitter Circuit	Antenna Type	Gain (dBi)	Antenna Connector	Note
Chain(0)	Dipole	2	NA	TX & RX function
Chain(1)	Dipole	2	NA	TX & RX function
Chain(2)	PIFA	2	NA	Only RX function

5.INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also

6.APPENDIX-A- MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.