FCC TEST REPORT

REPORT NO.: RF990716E07

MODEL NO.: ARG-1005

FCC ID: VYXWIFI-008

RECEIVED: July 16, 2010

TESTED: Sep. 10 to 27, 2010

ISSUED: Nov. 16, 2010

APPLICANT: Argtek Communication Inc.

ADDRESS: 8F-9, No. 4, Lane 609, Sec. 5, Chung Hsin Rd. San Chung City, Taipei Hsien

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

LAB ADDRESS: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

TEST LOCATION (1): No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

TEST LOCATION (2): No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

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1. CERTIFICATION

PRODUCT:	Diamond
BRAND NAME:	ARGtek
MODEL NO.:	ARG-1005
TEST SAMPLE:	R&D SAMPLE
TESTED:	Sep. 10 to 27, 2010
APPLICANT:	Argtek Communication Inc.
STANDARDS:	FCC Part 15, Subpart C (Section 15.247) ANSI C63.4-2003

The above equipment (Model: ARG-1005) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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:** *Nov. 16, 2010*
(Claire Kuan, Specialist)

TECHNICAL ACCEPTANCE : _____ , **DATE:** *Nov. 16, 2010*
(Hank Chung, Deputy Manager)

APPROVED BY : _____ , **DATE:** *Nov. 16, 2010*
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -7.15dB at 0.154MHz
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 -0.6dB at 4824.00 & 7386.00
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Conducted Out-Band Emission Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is RP-SMA not a standard connector.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

Measurement	Value
Conducted emissions	2.45 dB
Radiated emissions (30MHz-1GHz) – Chamber G	3.30 dB
Radiated emissions (1GHz -18GHz) – Chamber H	2.19 dB
Radiated emissions (18GHz -40GHz) – Chamber H	2.56 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Diamond
MODEL NO.	ARG-1005
FCC ID	VYXWIFI-008
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 802.11n (20MHz, 800ns GI): 65 / 58.5 / 52 / 39 / 26 / 19.5 / 13 / 6.5Mbps 802.11n (40MHz, 800ns GI): 135 / 121.5 / 108 / 81 / 54 / 40.5 / 27 / 13.5Mbps 802.11n (20MHz, 400ns GI): 72.2 / 65 / 57.8 / 43.3 / 28.9 / 21.7 / 14.4 / 7.2Mbps 802.11n (40MHz, 400ns GI): 150 / 135 / 120 / 90 / 60 / 45 / 30 / 15Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz)
MAXIMUM OUTPUT POWER	802.11b: 102.3mW 802.11g: 758.6mW 802.11n (20MHz): 707.9mW 802.11n (40MHz): 660.7mW
ANTENNA TYPE	Please see note 1
DATA CABLE	USB cable (Unshielded, 2.8m)
I/O PORTS	Mini USB port x 1
ASSOCIATED DEVICES	NA

NOTE:

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

Antenna	Gain(dBi)	Antenna Type	Connecter Type	Frequency range (MHz to MHz)
Antenna 1	5	Dipole	RP-SMA	2400~2500
Antenna 2	7	Panel	RP-SMA	2400~2500

2. The EUT incorporates a SISO function with 802.11n. Physically, the EUT provides one completed transmitter and one completed receiver.

3. The EUT is 1 * 1 spatial SISO without beam forming function. The antenna configuration is one transmitter antenna and one receiver antenna, as there is 1 Dipole or Panel antenna. There is one transmitter and one receiver.

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

5. When the EUT operating in 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.

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

Eleven channels are provided for 802.11b, 802.11g, 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 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 ³ 1G	APCM	
A		√	√		Dipole antenna
B	√	√	√	√	Panel antenna

Where **PLC:** Power Line Conducted Emission **RE < 1G:** Radiated Emission below 1GHz

RE ³ 1G: Radiated Emission above 1GHz **APCM:** Antenna Port Conducted Measurement

POWER LINE CONDUCTED EMISSION TEST:

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	CONFIGURE MODE
802.11g	1 to 11	6	OFDM	BPSK	6	B

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	MODULATIO N TYPE	DATA RATE (Mbps)	CONFIGURE MODE
802.11g	1 to 11	6	OFDM	BPSK	6	A / B

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)	CONFIGURE MODE
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1	A / B
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	A / B
802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	A / B
802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	A / B

CONDUCTED OUT-BAND EMISSION 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)	CONFIGURE MODE
802.11b	1 to 11	1, 11	DSSS	DBPSK	1	B
802.11g	1 to 11	1, 11	OFDM	BPSK	6	B
802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	6.5	B
802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	13.5	B

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ 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)	CONFIGURE MODE
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1	B
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	B
802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	B

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (system)	TESTED BY
RE≥1G	25deg. C, 66%RH, 1012 hPa	120Vac, 60Hz	Duke Tseng
RE<1G	27deg. C, 72%RH, 1012 hPa	120Vac, 60Hz	Moris Lin
PLC	27deg. C, 60%RH, 1015 hPa	120Vac, 60Hz	Timmy Hu
APCM	25deg. C, 60%RH, 1015 hPa	120Vac, 60Hz	Rex Huang

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C. (15.247)
ANSI C63.4-2003

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

NOTE: The EUT 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

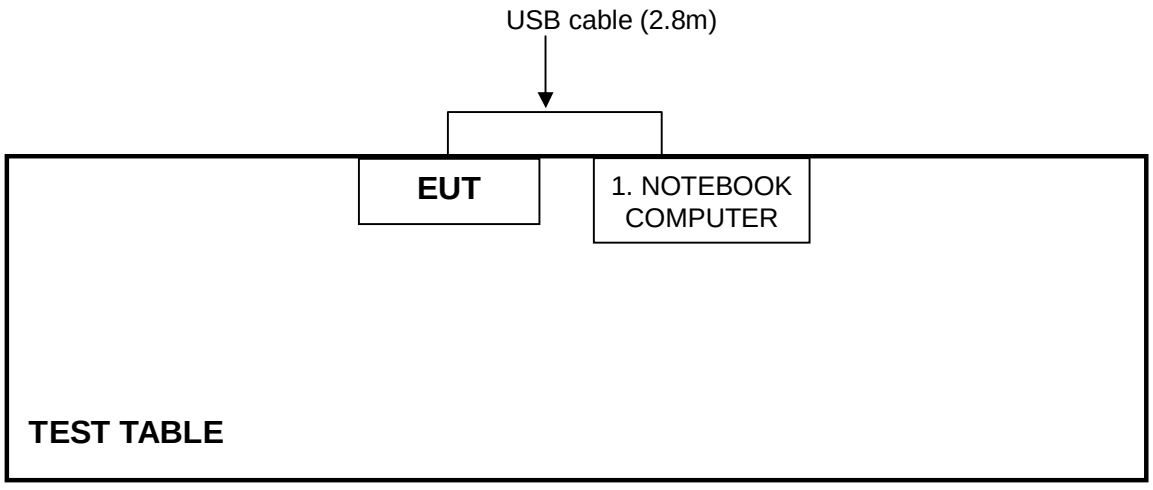
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER (For conducted test)	DELL	PP32LA	DSLB32S	FCC DoC
	NOTEBOOK COMPUTER (For radiated test)	DELL	PP18L	12252644560	FCC DoC

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	2.8 m USB cable.
	2.8 m USB cable.

NOTE: 1. 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

Test date: Sep. 10, 2010

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	100287	Mar. 01, 2010	Feb. 28, 2011
Line-Impedance Stabilization Network (for EUT)	NSLK 8127	8127-523	Sep. 23, 2009	Sep. 22, 2010
Line-Impedance Stabilization Network (for Peripheral)	ENV-216	100072	June 11, 2010	June 10, 2011
RF Cable (JYEBAO)	5DFB	COACAB-001	Dec. 14, 2009	Dec. 13, 2010
50 ohms Terminator	50	3	Oct. 28, 2009	Oct. 27, 2010
Software	BV ADT_Cond_V7.3.7	NA	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 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.

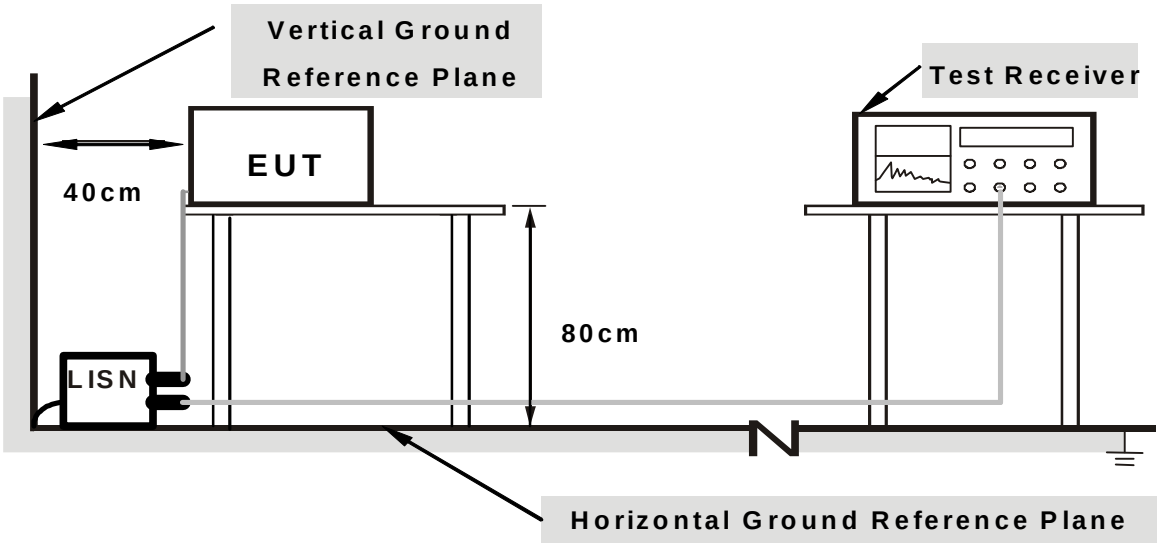
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

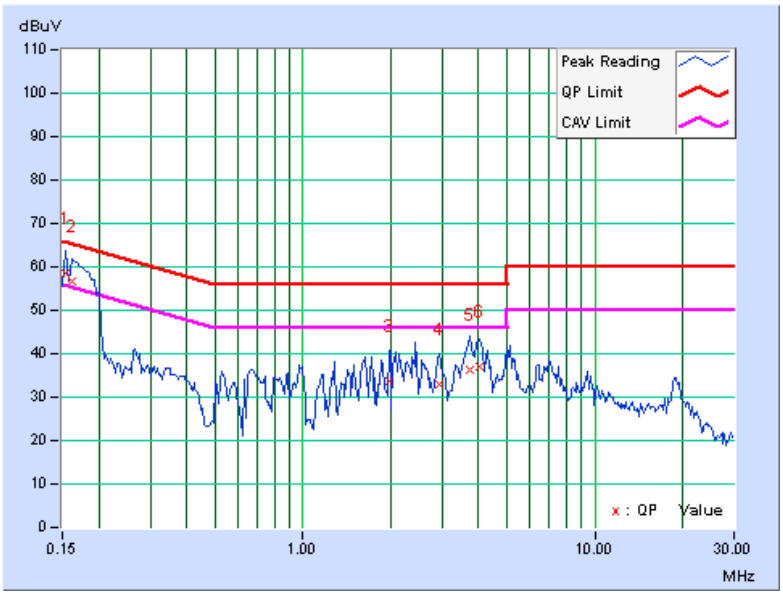
1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on test table.
2. The support unit 1 (Notebook Computer) runs test program “QA_RT3x7x_V1.5.6.4” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

4.1.7 TEST RESULTS

PHASE	Line (L)	6dB BANDWIDTH	9 kHz

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.154**	**0.04**	**58.60**	**44.44**	**58.64**	**44.48**	**65.79**	**55.79**	**-7.15**	**-11.31**
2	0.162	0.04	56.52	40.33	56.56	40.37	65.38	55.38	-8.82	-15.01
3	1.984	0.12	33.42	-	33.54	-	56.00	46.00	-22.46	-
4	2.922	0.12	32.68	-	32.80	-	56.00	46.00	-23.20	-
5	3.711	0.13	36.35	-	36.48	-	56.00	46.00	-19.52	-
6	4.016	0.13	36.73	-	36.86	-	56.00	46.00	-19.14	-

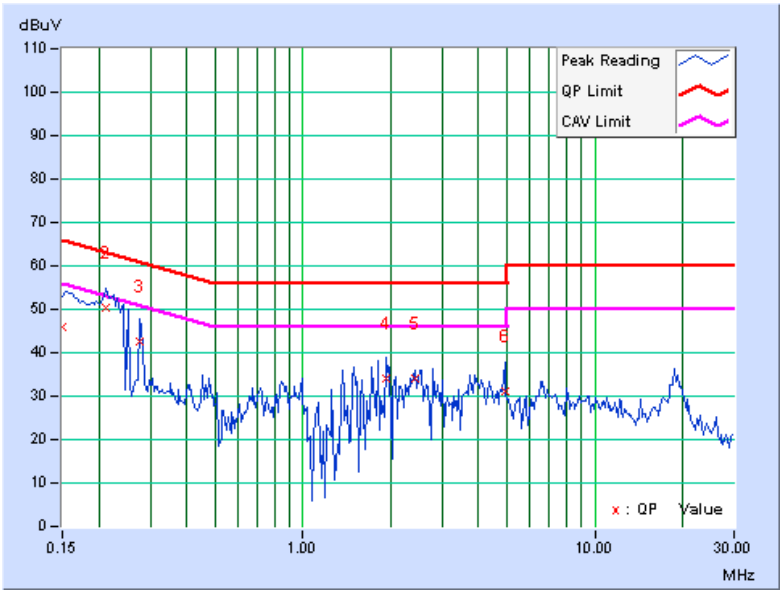
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



PHASE	Neutral (N)	6dB BANDWIDTH	9 kHz

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.05	45.84	-	45.89	-	66.00	56.00	-20.11	-
2	0.213	0.05	50.37	-	50.42	-	63.11	53.11	-12.69	-
3	0.275	0.05	42.39	-	42.44	-	60.97	50.97	-18.52	-
4	1.926	0.13	34.00	-	34.13	-	56.00	46.00	-21.87	-
5	2.410	0.13	33.89	-	34.02	-	56.00	46.00	-21.98	-
6	4.918	0.16	31.07	-	31.23	-	56.00	46.00	-24.77	-

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. Section 15.205 restricted bands of operation shall compliance with the limits in Section 15.209.

4.2.2 TEST INSTRUMENTS

For below 1GHz test: (Test date: Sep. 16, 2010)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Agilent Spectrum Analyzer	E4446A	MY48250254	July 14, 2010	July 13, 2011
Agilent Pre-Selector	N9039A	MY46520311	July 14, 2010	July 13, 2011
Agilent Signal Generator	N5181A	MY49060517	July 14, 2010	July 13, 2011
Mini-Circuits Pre-Amplifier	ZFL-1000VH2B	AMP-ZFL-03	Nov. 18, 2009	Nov. 17, 2010
Agilent Pre-Amplifier	8449B	3008A02578	July 05, 2010	July 04, 2011
Miteq Pre-Amplifier	AFS33-18002650-30-8P-44	881786	NA	NA
SCHWARZBECK Trilog Broadband Antenna	VULB 9168	9168-360	Sep. 30, 2009	Sep. 29, 2010
AISI Horn_Antenna	AIH.8018	0000320091110	Nov. 16, 2009	Nov. 15, 2010
SCHWARZBECK Horn_Antenna	BBHA 9170	9170-424	Sep. 30, 2009	Sep. 29, 2010
RF CABLE	NA	RF104-201 RF104-203 RF104-204	Dec. 24, 2009	Dec. 23, 2010
RF Cable	NA	CHGCAB_001	NA	NA
Software	ADT_Radiated_V8.7.05	NA	NA	NA
CT Antenna Tower & Turn Table	NA	NA	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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
5. The VCCI Site Registration No. is G-137.
6. The CANADA Site Registration No. is IC 7450H-2.

For above 1GHz test: (Test date: Sep. 27, 2010)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Agilent Spectrum Analyzer	E4446A	MY48250253	Aug. 23, 2010	Aug. 22, 2011
Agilent Pre-Selector	N9039A	MY46520310	Aug. 23, 2010	Aug. 22, 2011
Agilent Signal Generator	N5181A	MY49060347	July 30, 2010	July 29, 2011
LIG NEX1 Test Receiver	ER-265	L09068005	Aug. 31, 2010	Aug. 30, 2011
Mini-Circuits Pre-Amplifier	ZFL-1000VH2B	AMP-ZFL-04	Nov. 18, 2009	Nov. 17, 2010
Agilent Pre-Amplifier	8449B	3008A02465	Mar. 01, 2010	Feb. 28, 2011
Miteq Pre-Amplifier	AFS33-18002650-30-8P-44	881786	NA	NA
SCHWARZBECK Trilog Broadband Antenna	VULB 9168	9168-361	Sep. 30, 2009	Sep. 29, 2010
AISI Horn_Antenna	AIH.8018	0000220091110	Nov. 16, 2009	Nov. 15, 2010
SCHWARZBECK Horn_Antenna	BBHA 9170	9170-424	Sep. 30, 2009	Sep. 29, 2010
RF CABLE	NA	RF104-205 RF104-207 RF104-208	Dec. 24, 2009	Dec. 23, 2010
RF Cable	NA	CHHCAB_001	NA	NA
Software	ADT_Radiated_V8.7.05	NA	NA	NA
CT Antenna Tower & Turn Table	NA	NA	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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in 966 Chamber No. H.
4. The FCC Site Registration No. is 797305.
5. The CANADA Site Registration No. is IC 7450H-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 3 meters chamber room. 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

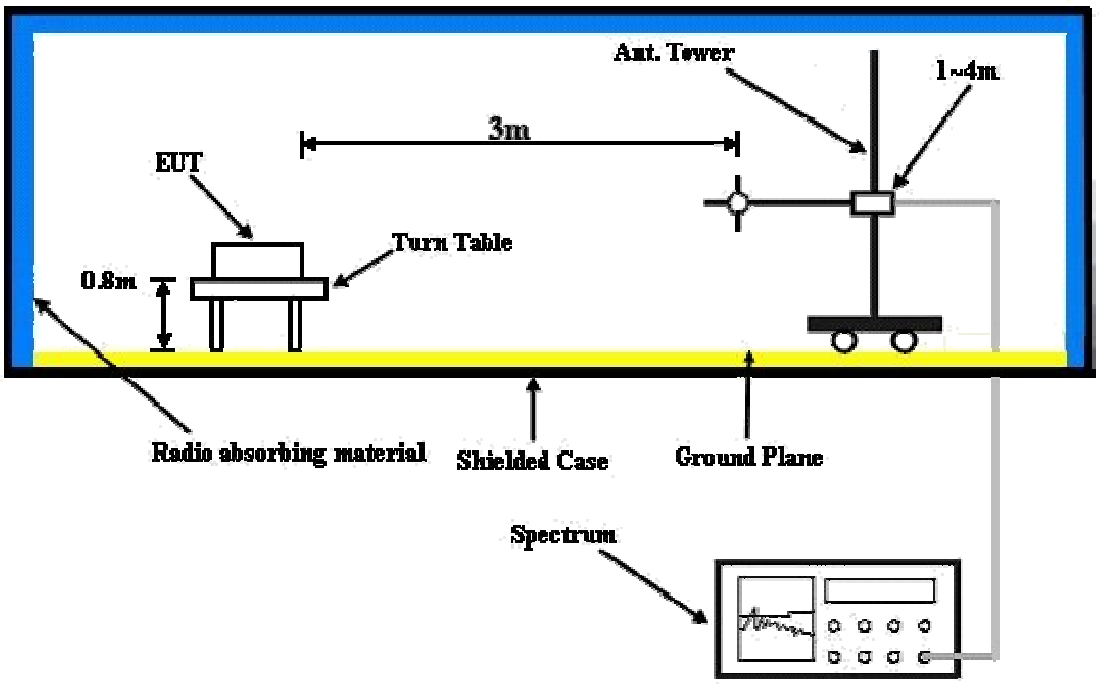
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS (Dipole antenna)

BELOW 1GHz WORST-CASE DATA：802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	28deg. C, 72%RH 1015 hPa	TESTED BY	Chris Liang

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	63.87	24.8 QP	40.00	-15.2	2.25 H	11	12.00	12.84
2	150.44	33.2 QP	43.50	-10.3	1.75 H	341	19.37	13.81
3	321.32	31.9 QP	46.00	-14.1	1.00 H	200	16.22	15.66
4	599.97	33.9 QP	46.00	-12.1	1.50 H	103	11.95	21.97
5	748.47	33.4 QP	46.00	-12.6	1.75 H	310	9.62	23.82
6	840.01	34.6 QP	46.00	-11.4	1.75 H	236	9.40	25.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	64.93	24.5 QP	40.00	-15.5	1.00 V	242	11.86	12.68
2	322.74	35.4 QP	46.00	-10.6	1.50 V	217	19.67	15.69
3	465.91	34.5 QP	46.00	-11.5	1.25 V	65	15.61	18.89
4	599.97	38.5 QP	46.00	-7.5	1.00 V	17	16.53	21.97
5	747.88	31.1 QP	46.00	-14.9	1.50 V	296	7.33	23.81
6	847.35	32.9 QP	46.00	-13.1	1.00 V	308	7.59	25.33

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 WORST-CASE DATA

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	2389.20	56.0 PK	74.00	-18.0	1.17 H	246	24.79	31.21
2	2389.20	43.1 AV	54.00	-10.9	1.17 H	246	11.89	31.21
3	*2412.00	91.8 PK			1.17 H	247	60.53	31.27
4	*2412.00	88.8 AV			1.17 H	247	57.53	31.27
5	4824.00	52.0 PK	74.00	-22.0	1.05 H	152	12.58	39.42
6	4824.00	46.7 AV	54.00	-7.3	1.05 H	152	7.28	39.42
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	56.0 PK	74.00	-18.0	1.13 V	193	24.79	31.21
2	2390.00	43.6 AV	54.00	-10.4	1.13 V	193	12.39	31.21
3	*2412.00	98.5 PK			1.13 V	193	67.23	31.27
4	*2412.00	95.4 AV			1.13 V	193	64.13	31.27
5	4824.00	56.1 PK	74.00	-17.9	1.00 V	295	16.68	39.42
6	**4824.00**	**53.4 AV**	**54.00**	**-0.6**	**1.00 V**	**295**	**13.98**	**39.42**

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	91.4 PK			1.00 H	245	60.06	31.34
2	*2437.00	88.2 AV			1.00 H	245	56.86	31.34
3	4874.00	53.0 PK	74.00	-21.0	1.08 H	200	13.38	39.62
4	4874.00	49.0 AV	54.00	-5.0	1.08 H	200	9.38	39.62
5	7311.00	51.8 PK	74.00	-22.2	1.00 H	247	7.70	44.10
6	7311.00	40.7 AV	54.00	-13.3	1.00 H	247	-3.40	44.10
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	101.5 PK			1.12 V	191	70.16	31.34
2	*2437.00	98.9 AV			1.12 V	191	67.56	31.34
3	4874.00	56.2 PK	74.00	-17.8	1.00 V	292	16.58	39.62
4	4874.00	52.5 AV	54.00	-1.5	1.00 V	292	12.88	39.62
5	7311.00	56.7 PK	74.00	-17.3	1.69 V	210	12.60	44.10
6	7311.00	50.1 AV	54.00	-3.9	1.69 V	210	6.00	44.10

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	90.0 PK			1.08 H	241	58.60	31.40
2	*2462.00	86.8 AV			1.08 H	241	55.40	31.40
3	2496.95	55.4 PK	74.00	-18.6	1.08 H	241	23.91	31.49
4	2496.95	42.7 AV	54.00	-11.3	1.08 H	241	11.21	31.49
5	4924.00	53.4 PK	74.00	-20.6	1.11 H	201	13.58	39.82
6	4924.00	48.9 AV	54.00	-5.1	1.11 H	201	9.08	39.82
7	7386.00	52.0 PK	74.00	-22.0	1.00 H	245	7.82	44.18
8	7386.00	41.4 AV	54.00	-12.6	1.00 H	245	-2.78	44.18
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	99.3 PK			1.10 V	193	67.90	31.40
2	*2462.00	96.2 AV			1.10 V	193	64.80	31.40
3	2493.79	55.7 PK	74.00	-18.3	1.12 V	192	24.22	31.48
4	2493.79	42.7 AV	54.00	-11.3	1.12 V	192	11.22	31.48
5	4924.00	56.3 PK	74.00	-17.7	1.00 V	297	16.48	39.82
6	4924.00	52.5 AV	54.00	-1.5	1.00 V	297	12.68	39.82
7	7386.00	55.8 PK	74.00	-18.2	1.55 V	211	11.62	44.18
8	7386.00	48.8 AV	54.00	-5.2	1.55 V	211	4.62	44.18

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

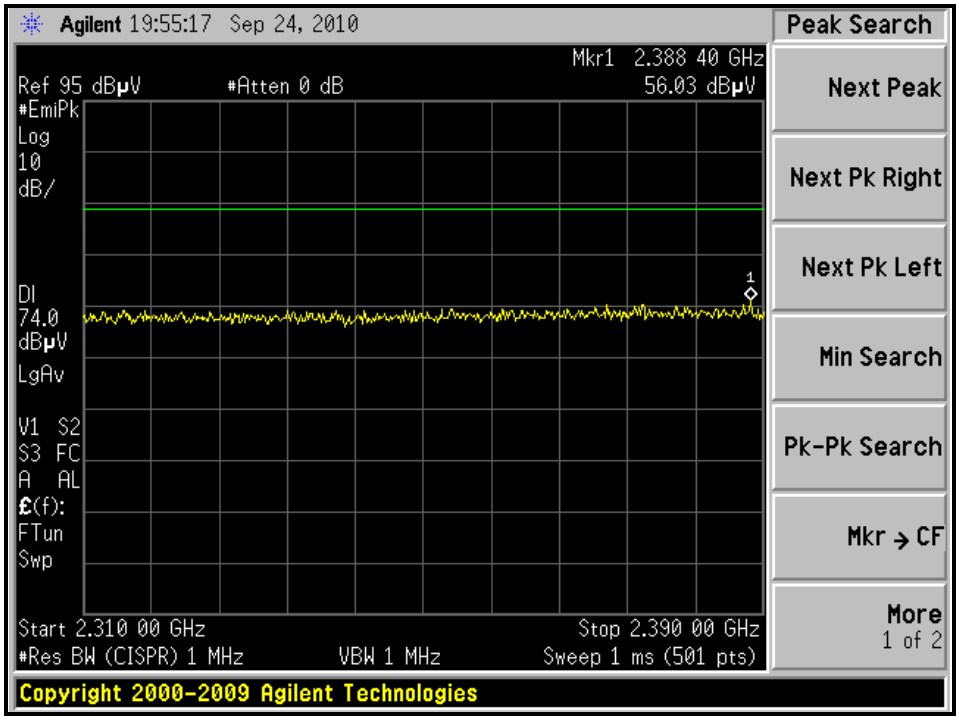
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

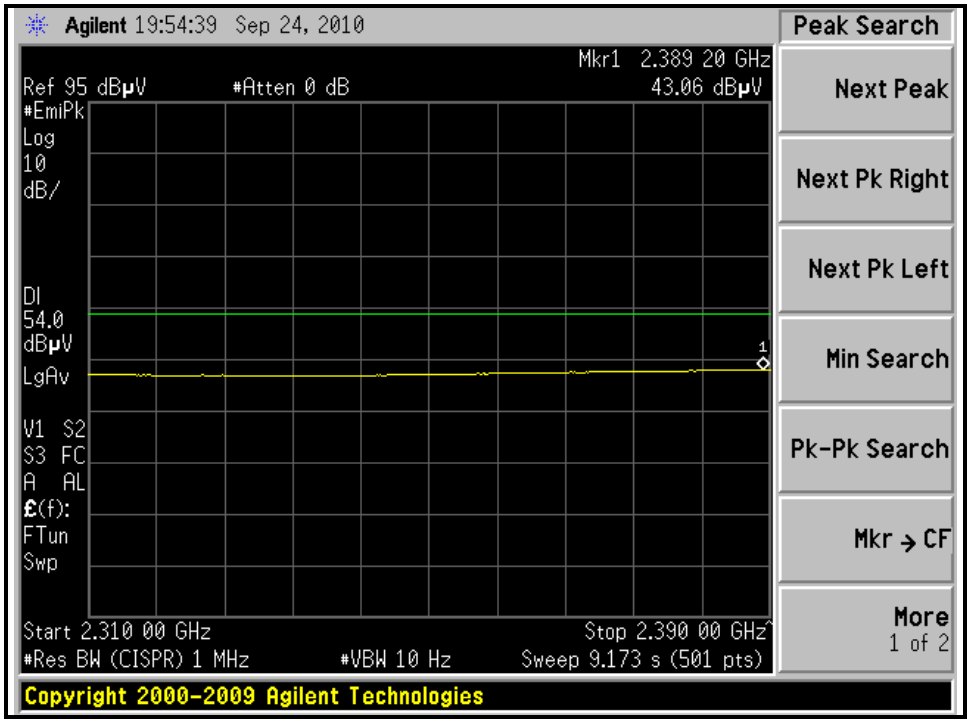
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

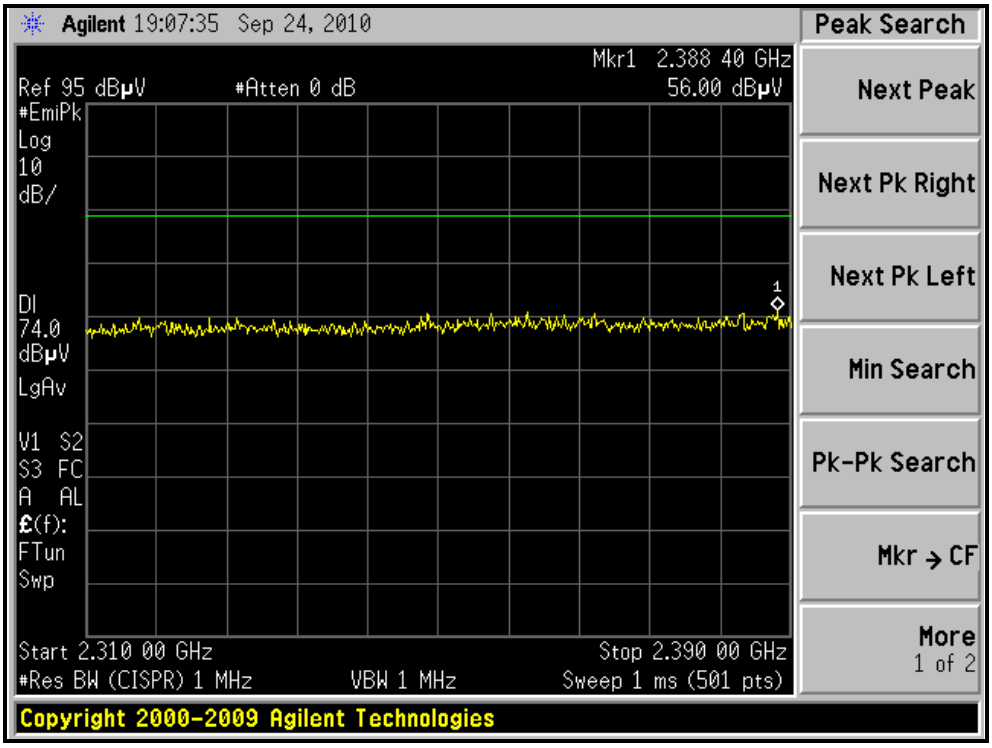
5. " * ": Fundamental frequency.

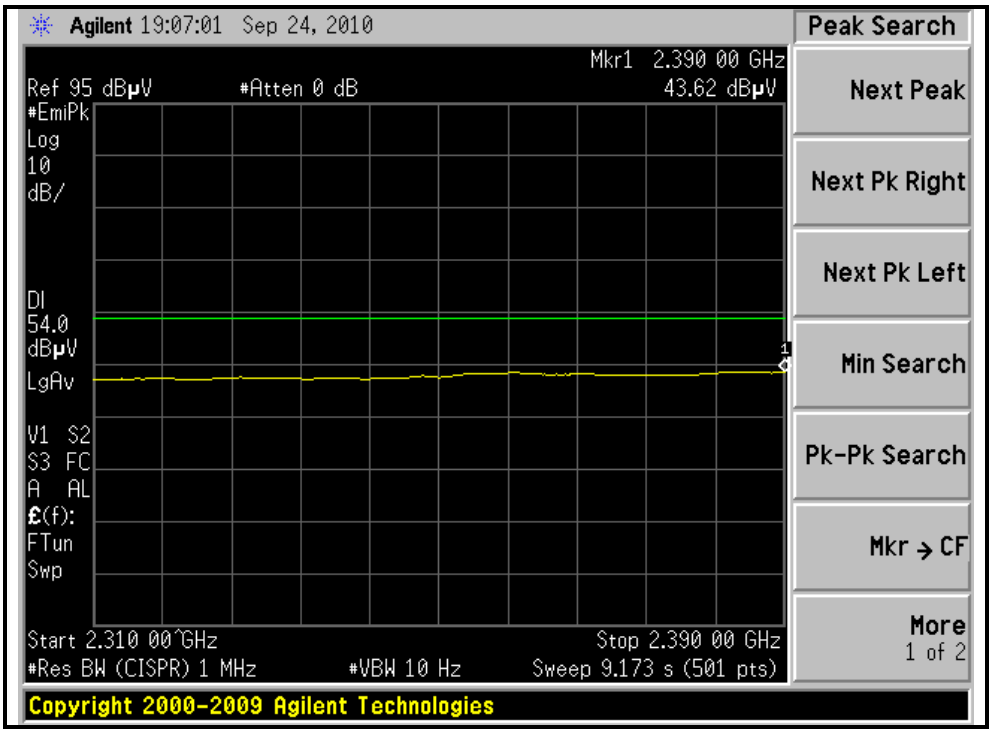
RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)



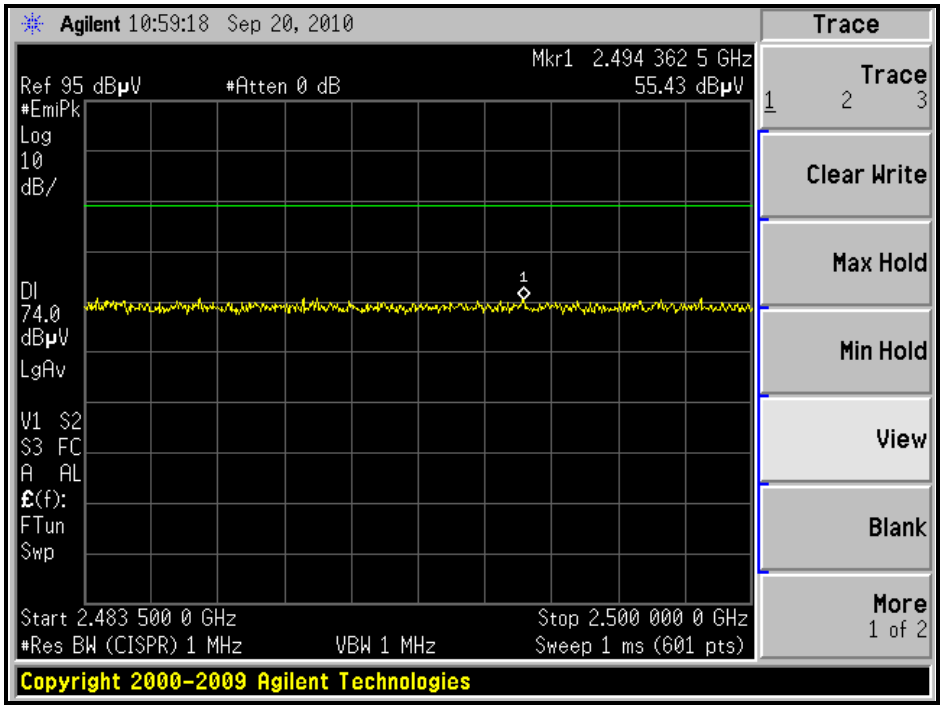


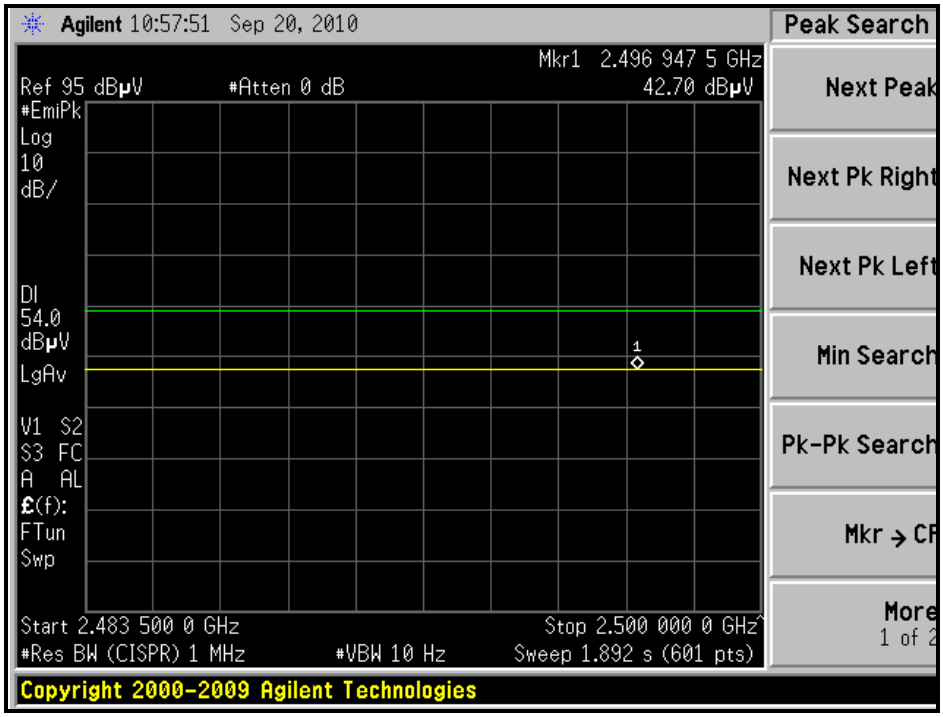
RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)



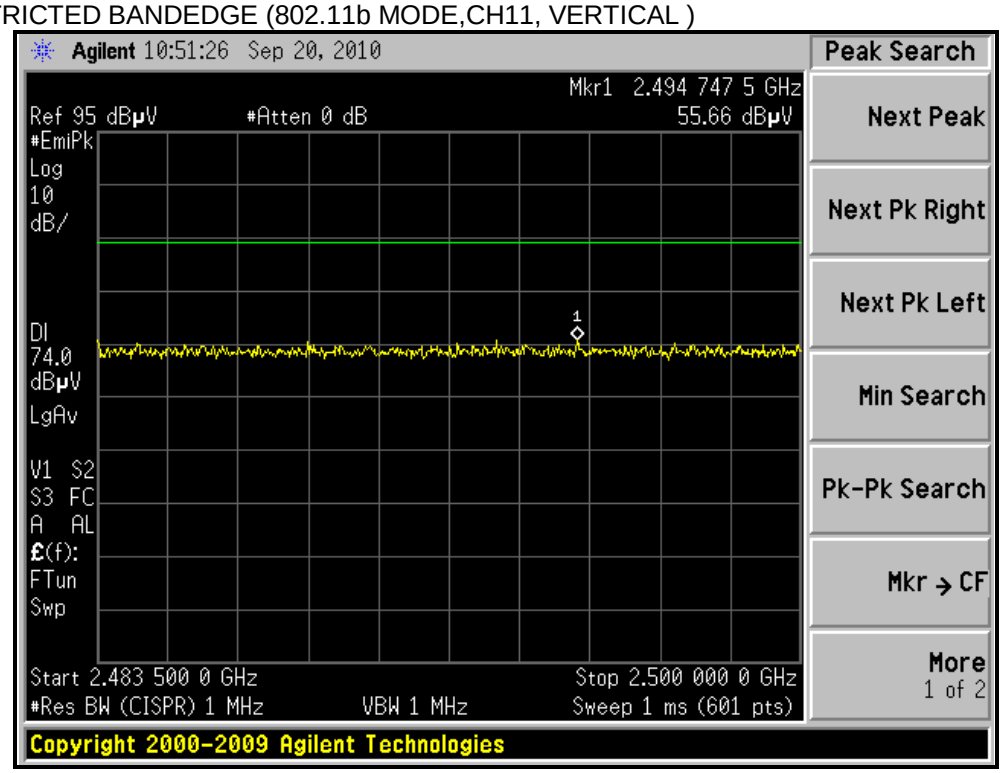


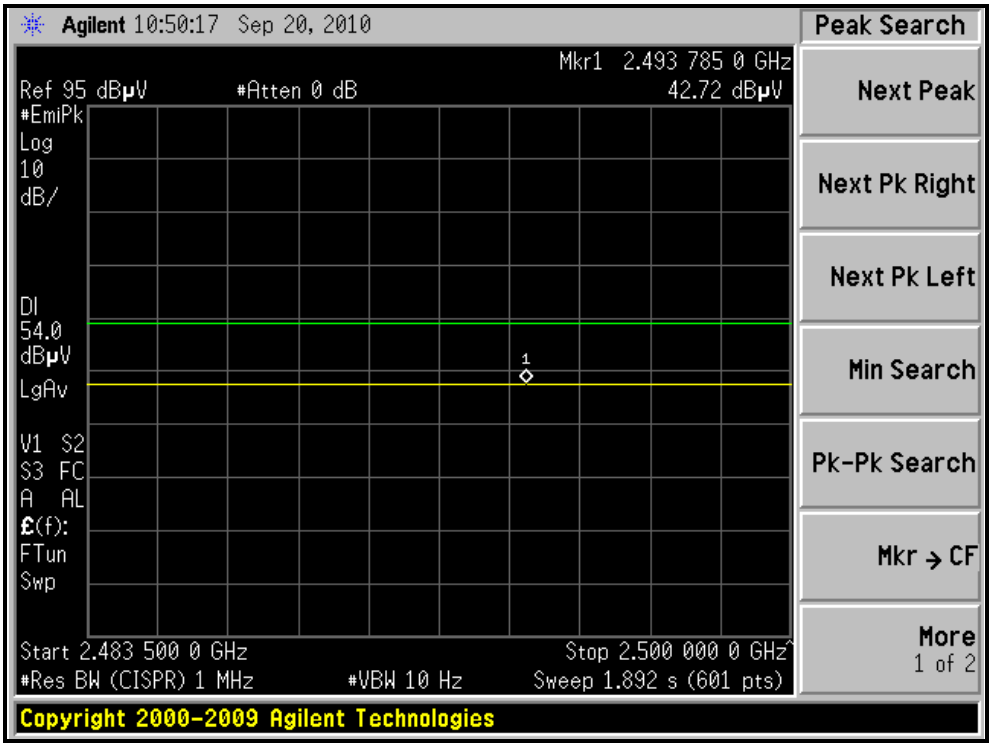
RESTRICTED BANDEDGE (802.11b MODE,CH11, HORIZONTAL)





RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	2389.84	55.9 PK	74.00	-18.1	1.24 H	214	24.69	31.21
2	2389.84	43.3 AV	54.00	-10.7	1.24 H	214	12.09	31.21
3	*2412.00	96.8 PK			1.24 H	214	65.53	31.27
4	*2412.00	84.9 AV			1.24 H	214	53.63	31.27
5	4824.00	52.8 PK	74.00	-21.2	1.06 H	199	13.38	39.42
6	4824.00	38.7 AV	54.00	-15.3	1.06 H	199	-0.72	39.42
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	65.2 PK	74.00	-8.8	1.15 V	181	33.99	31.21
2	2390.00	48.9 AV	54.00	-5.1	1.15 V	181	17.69	31.21
3	*2412.00	104.5 PK			1.15 V	194	73.23	31.27
4	*2412.00	92.0 AV			1.15 V	194	60.73	31.27
5	4824.00	59.0 PK	74.00	-15.0	1.00 V	297	19.58	39.42
6	4824.00	43.7 AV	54.00	-10.3	1.00 V	297	4.28	39.42

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	96.5 PK			1.16 H	215	65.16	31.34
2	*2437.00	84.2 AV			1.16 H	215	52.86	31.34
3	4874.00	59.0 PK	74.00	-15.0	1.08 H	200	19.38	39.62
4	4874.00	44.3 AV	54.00	-9.7	1.08 H	200	4.68	39.62
5	7311.00	64.0 PK	74.00	-10.0	1.25 H	171	19.90	44.10
6	7311.00	48.4 AV	54.00	-5.6	1.25 H	171	4.30	44.10
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	107.6 PK			1.16 V	192	76.26	31.34
2	*2437.00	94.3 AV			1.16 V	192	62.96	31.34
3	4874.00	62.7 PK	74.00	-11.3	1.00 V	299	23.08	39.62
4	4874.00	49.0 AV	54.00	-5.0	1.00 V	299	9.38	39.62
5	7311.00	68.9 PK	74.00	-5.1	1.70 V	209	24.80	44.10
6	7311.00	52.8 AV	54.00	-1.2	1.70 V	209	8.70	44.10

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	96.2 PK			1.10 H	249	64.80	31.40
2	*2462.00	83.4 AV			1.10 H	249	52.00	31.40
3	2483.50	55.7 PK	74.00	-18.3	1.10 H	248	24.24	31.46
4	2483.50	43.3 AV	54.00	-10.7	1.10 H	248	11.84	31.46
5	4924.00	53.5 PK	74.00	-20.5	1.05 H	196	13.68	39.82
6	4924.00	39.8 AV	54.00	-14.2	1.05 H	196	-0.02	39.82
7	7386.00	58.0 PK	74.00	-16.0	1.02 H	247	13.82	44.18
8	7386.00	44.0 AV	54.00	-10.0	1.02 H	247	-0.18	44.18
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	106.0 PK			1.10 V	191	74.60	31.40
2	*2462.00	92.9 AV			1.10 V	191	61.50	31.40
3	2483.50	63.2 PK	74.00	-10.8	1.14 V	190	31.74	31.46
4	2483.50	48.0 AV	54.00	-6.0	1.14 V	190	16.54	31.46
5	4924.00	55.0 PK	74.00	-19.0	1.00 V	297	15.18	39.82
6	4924.00	42.2 AV	54.00	-11.8	1.00 V	297	2.38	39.82
7	7386.00	66.0 PK	74.00	-8.0	1.57 V	210	21.82	44.18
8	7386.00	49.8 AV	54.00	-4.2	1.57 V	210	5.62	44.18

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

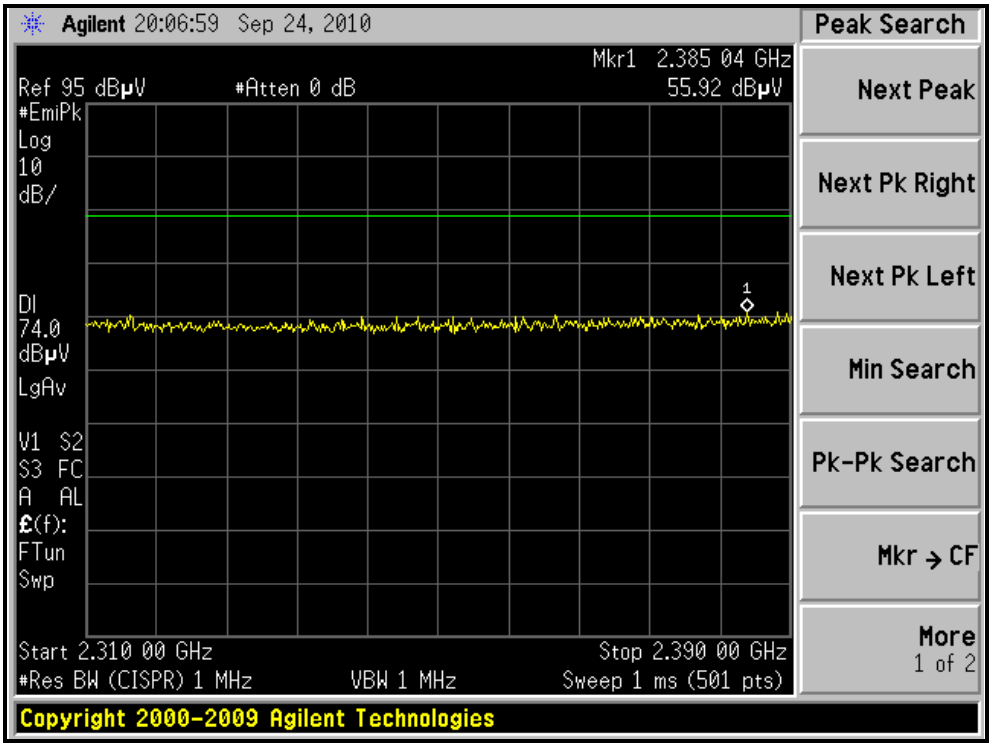
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

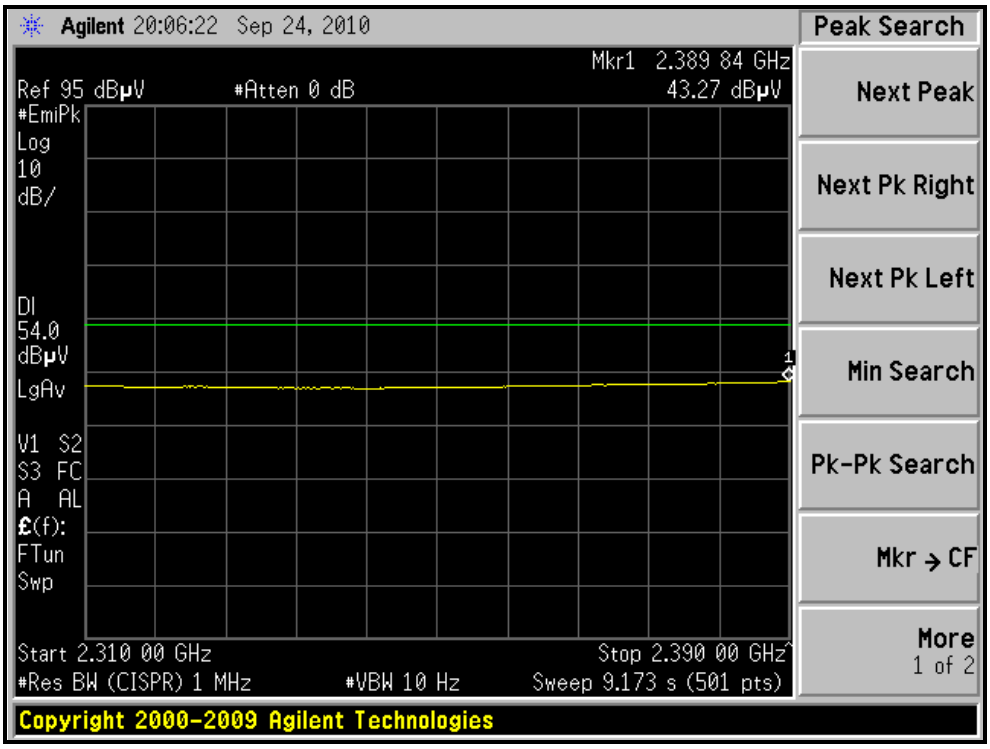
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

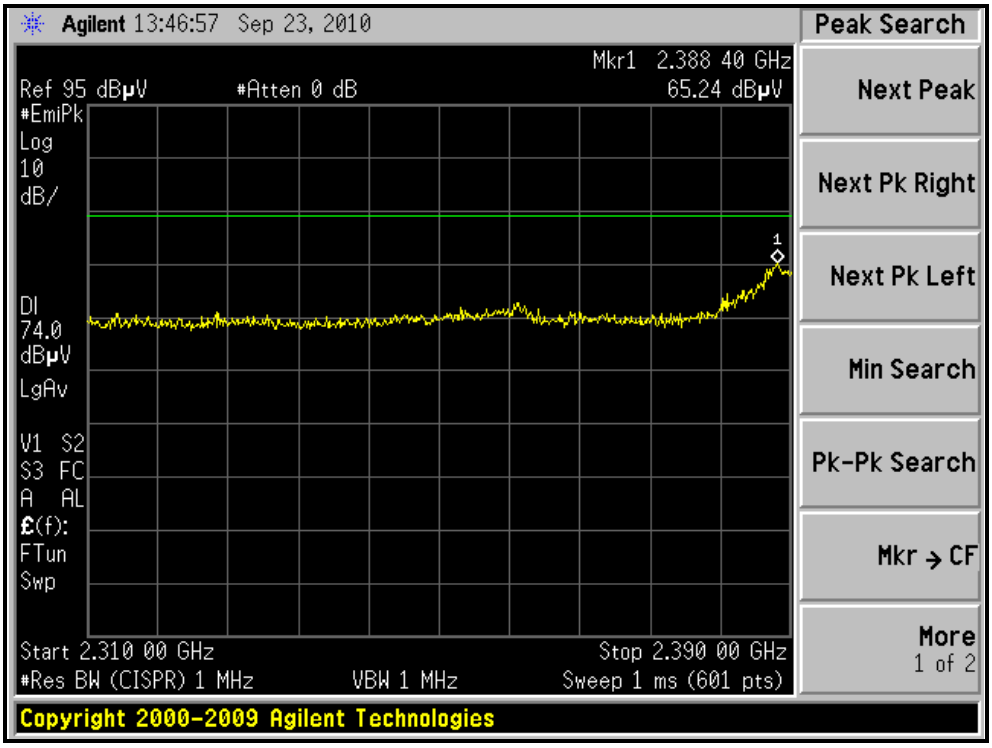
5. " * ": Fundamental frequency.

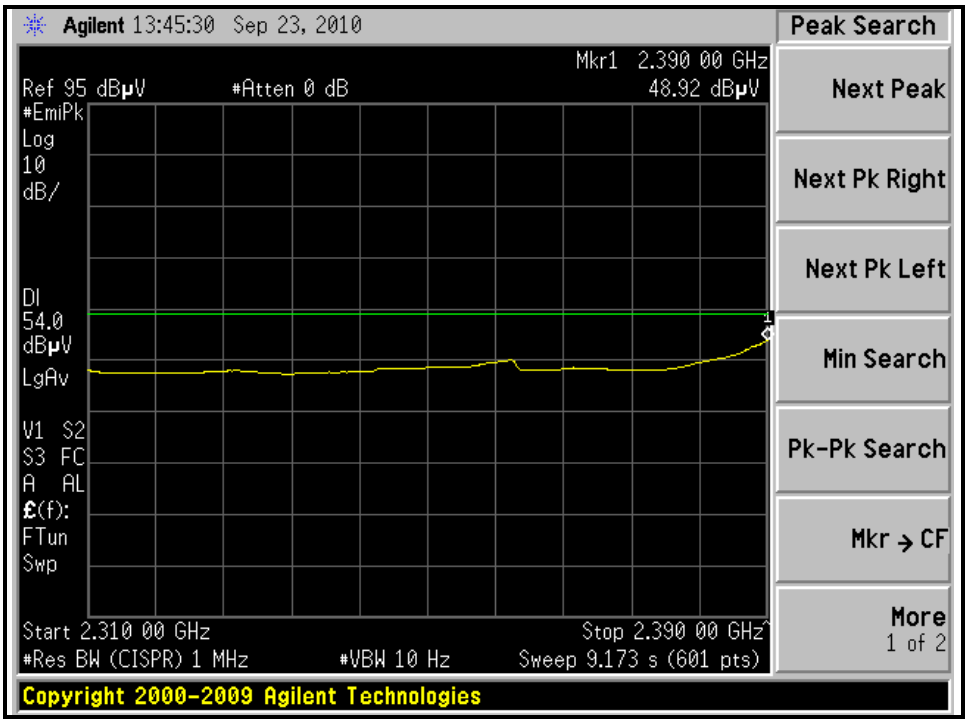
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



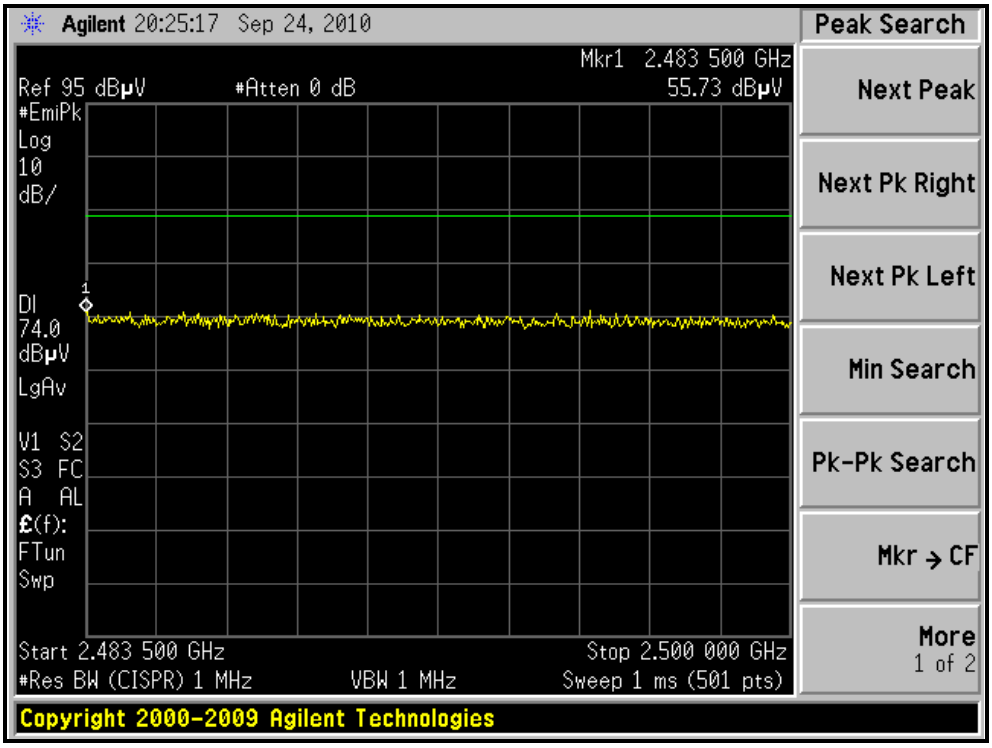


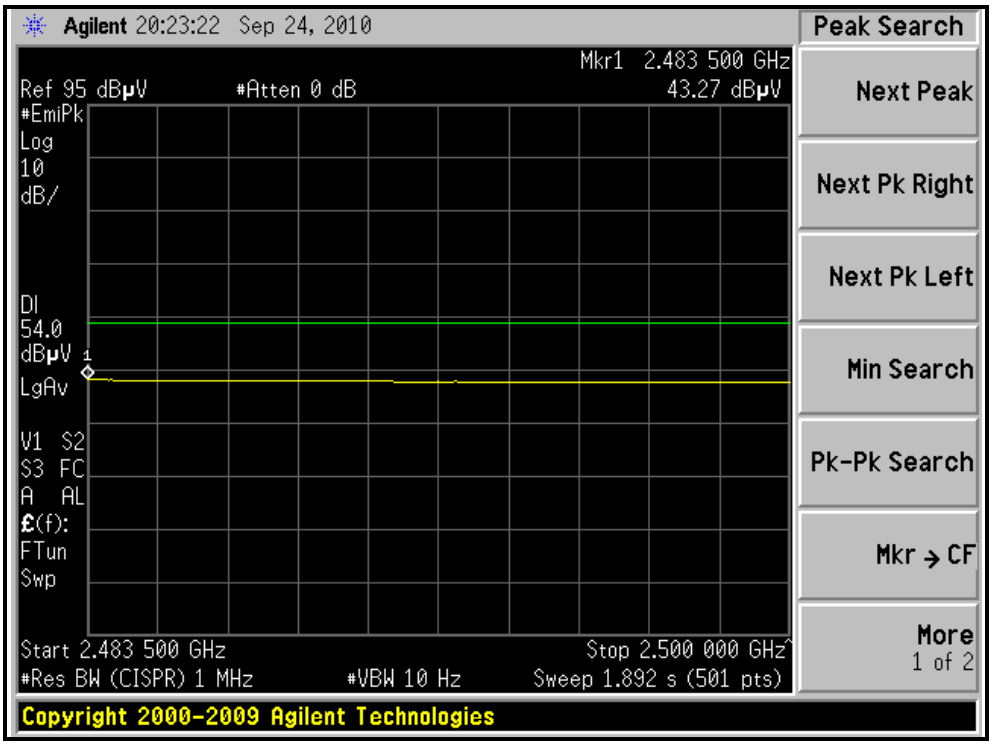
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



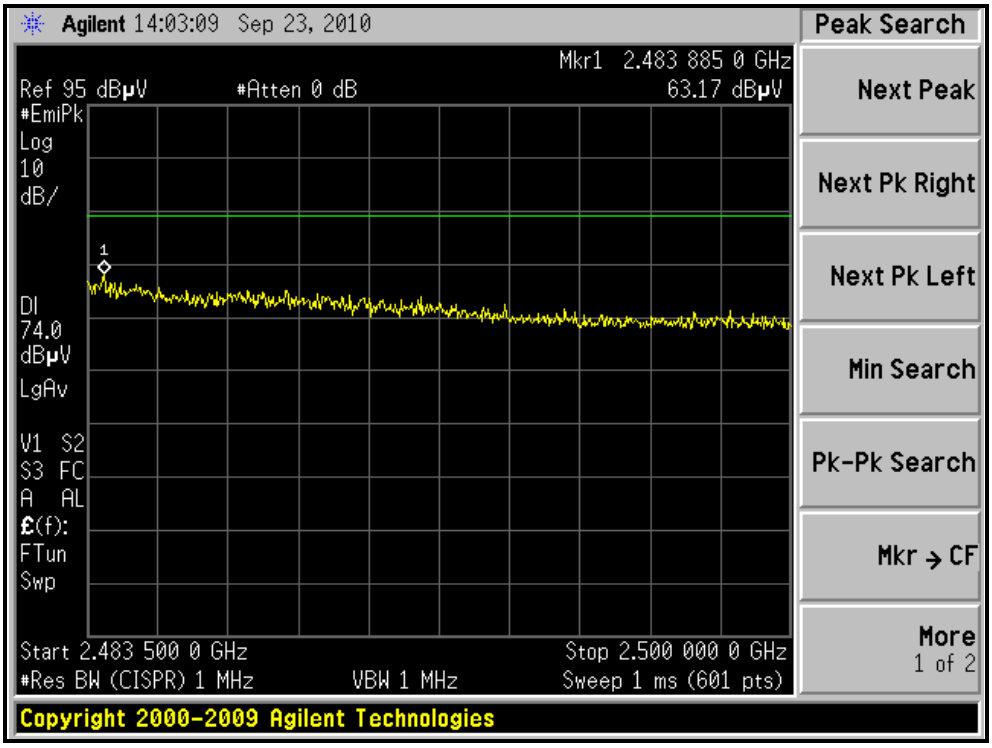


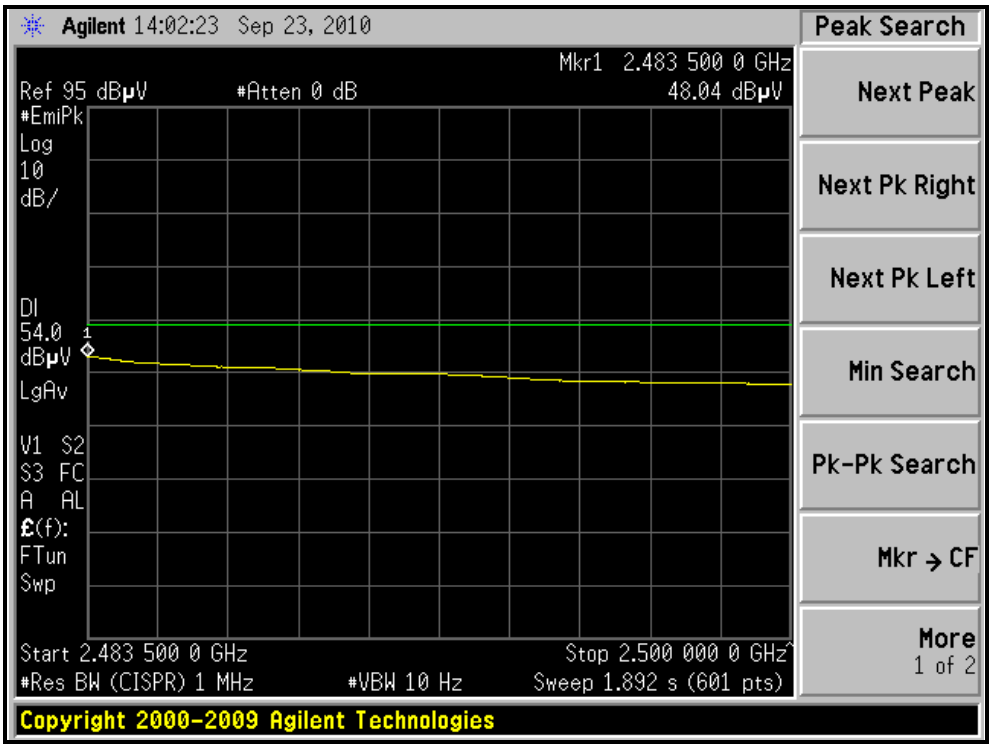
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)





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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	56.1 PK	74.00	-17.9	1.24 H	215	24.89	31.21
2	2390.00	43.3 AV	54.00	-10.7	1.24 H	215	12.09	31.21
3	*2412.00	96.1 PK			1.24 H	214	64.83	31.27
4	*2412.00	83.5 AV			1.24 H	214	52.23	31.27
5	4824.00	52.6 PK	74.00	-21.4	1.06 H	200	13.18	39.42
6	4824.00	38.5 AV	54.00	-15.5	1.06 H	200	-0.92	39.42
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	63.8 PK	74.00	-10.2	1.14 V	195	32.59	31.21
2	2390.00	49.2 AV	54.00	-4.8	1.14 V	195	17.99	31.21
3	*2412.00	102.3 PK			1.12 V	192	71.03	31.27
4	*2412.00	89.3 AV			1.12 V	192	58.03	31.27
5	4824.00	57.0 PK	74.00	-17.0	1.02 V	299	17.58	39.42
6	4824.00	42.4 AV	54.00	-11.6	1.02 V	299	2.98	39.42

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	96.2 PK			1.15 H	240	64.86	31.34
2	*2437.00	84.0 AV			1.15 H	240	52.66	31.34
3	4874.00	56.3 PK	74.00	-17.7	1.08 H	198	16.68	39.62
4	4874.00	41.2 AV	54.00	-12.8	1.08 H	198	1.58	39.62
5	7311.00	59.4 PK	74.00	-14.6	1.07 H	163	15.30	44.10
6	7311.00	44.0 AV	54.00	-10.0	1.07 H	163	-0.10	44.10
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	106.8 PK			1.15 V	193	75.46	31.34
2	*2437.00	93.4 AV			1.15 V	193	62.06	31.34
3	4874.00	61.7 PK	74.00	-12.3	1.00 V	297	22.08	39.62
4	4874.00	45.1 AV	54.00	-8.9	1.00 V	297	5.48	39.62
5	7311.00	66.4 PK	74.00	-7.6	1.51 V	212	22.30	44.10
6	7311.00	48.9 AV	54.00	-5.1	1.51 V	212	4.80	44.10

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	96.0 PK			1.09 H	246	64.60	31.40
2	*2462.00	83.2 AV			1.09 H	246	51.80	31.40
3	2483.57	56.1 PK	74.00	-17.9	1.09 H	247	24.64	31.46
4	2483.57	43.4 AV	54.00	-10.6	1.09 H	247	11.94	31.46
5	4924.00	53.1 PK	74.00	-20.9	1.05 H	198	13.28	39.82
6	4924.00	39.6 AV	54.00	-14.4	1.05 H	198	-0.24	39.82
7	7386.00	57.1 PK	74.00	-16.9	1.03 H	250	12.92	44.18
8	7386.00	43.2 AV	54.00	-10.8	1.03 H	250	-0.98	44.18
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	104.6 PK			1.10 V	193	73.20	31.40
2	*2462.00	91.3 AV			1.10 V	193	59.90	31.40
3	2483.50	61.7 PK	74.00	-12.3	1.13 V	191	30.24	31.46
4	2483.50	46.9 AV	54.00	-7.1	1.13 V	191	15.44	31.46
5	4924.00	54.8 PK	74.00	-19.2	1.01 V	295	14.98	39.82
6	4924.00	42.0 AV	54.00	-12.0	1.01 V	295	2.18	39.82
7	7386.00	64.9 PK	74.00	-9.1	1.56 V	212	20.72	44.18
8	7386.00	49.0 AV	54.00	-5.0	1.56 V	212	4.82	44.18

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

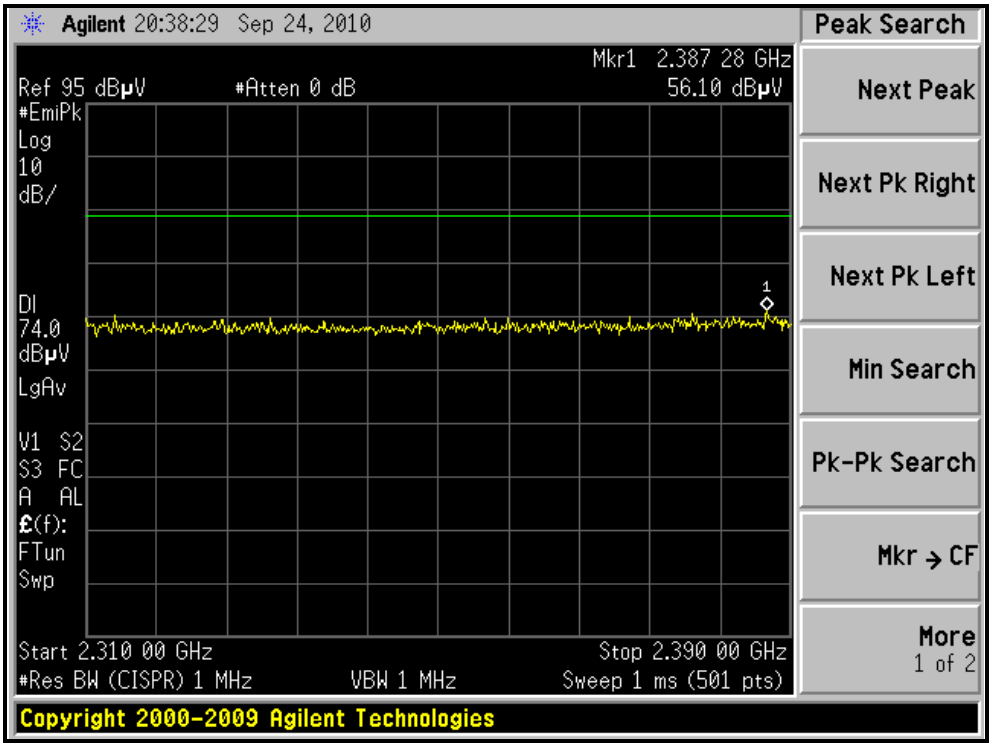
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

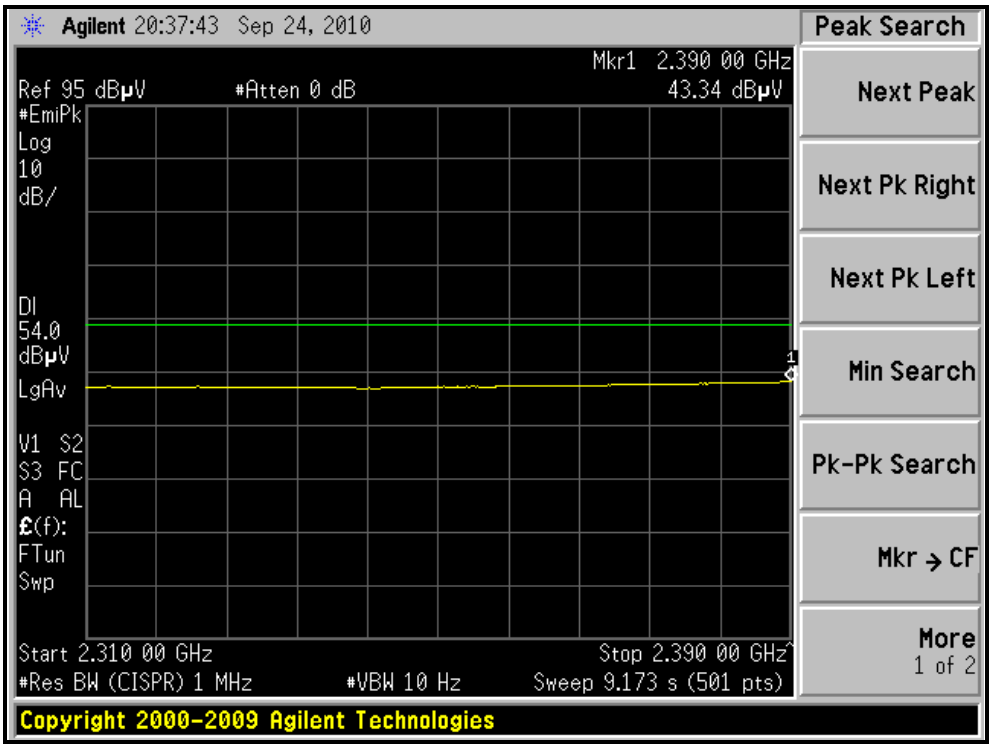
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

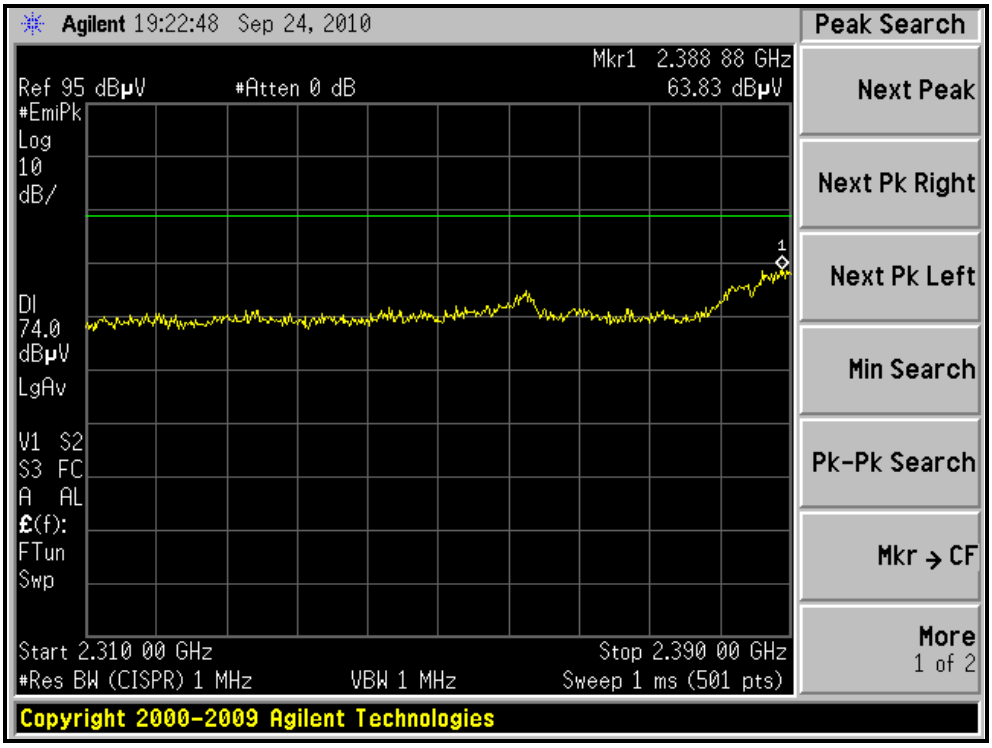
5. " * ": Fundamental frequency.

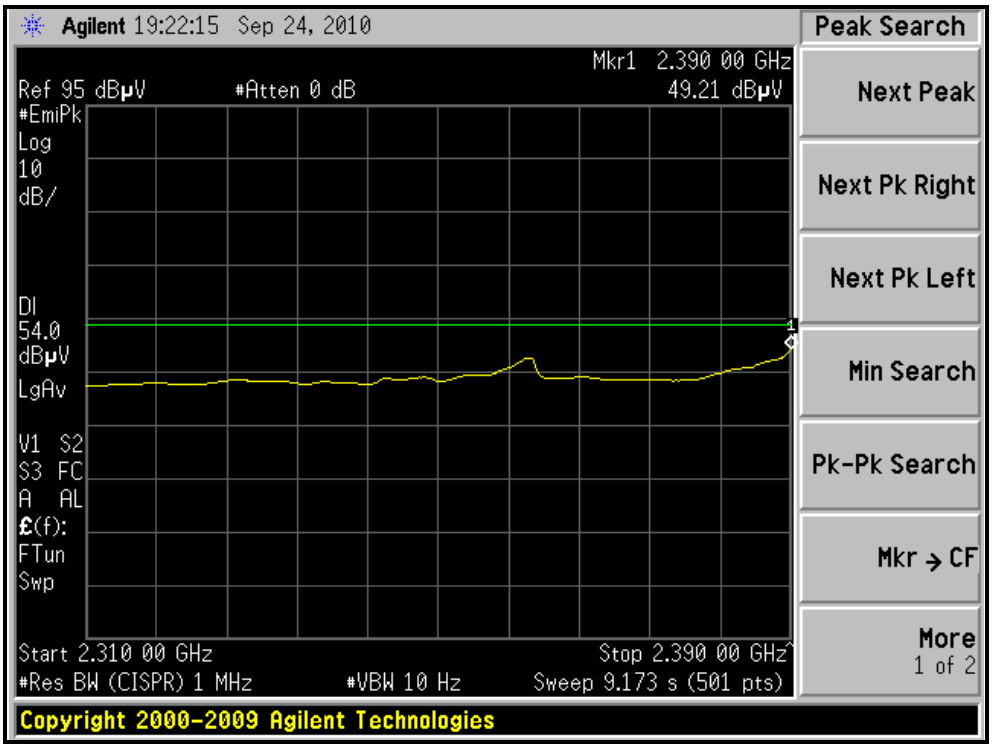
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, HORIZONTAL)



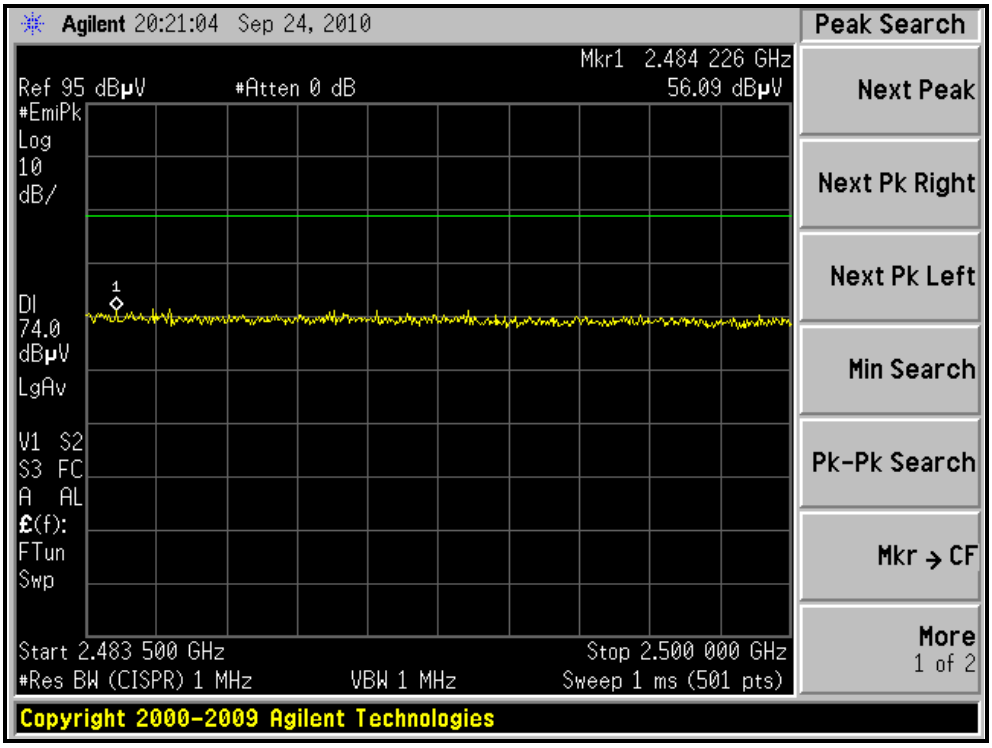


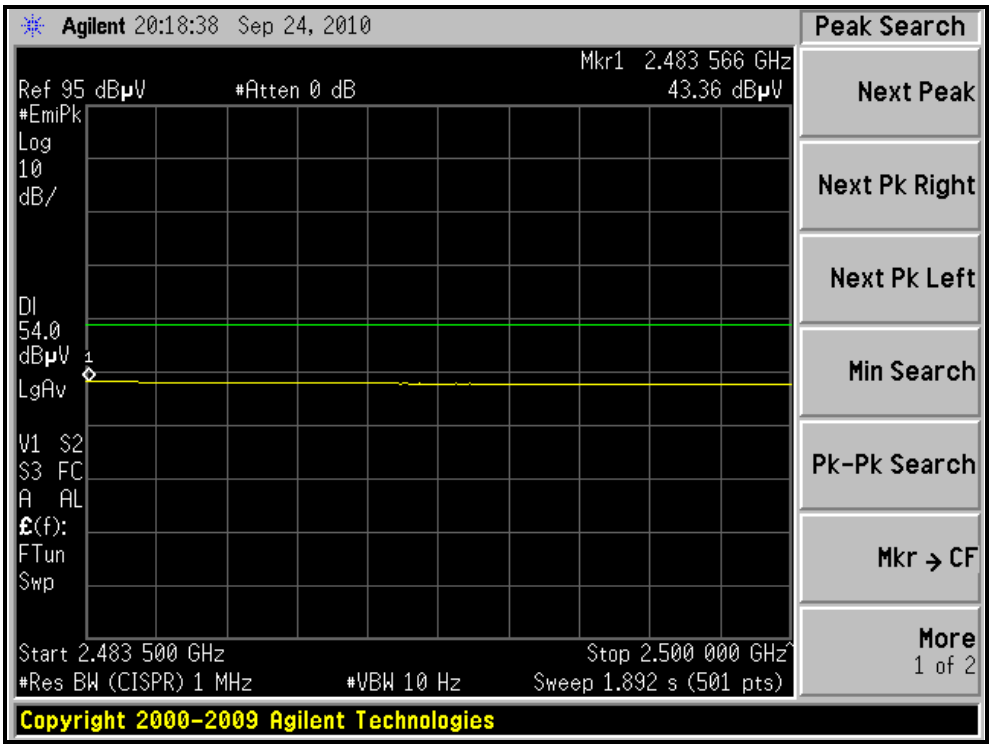
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, VERTICAL)



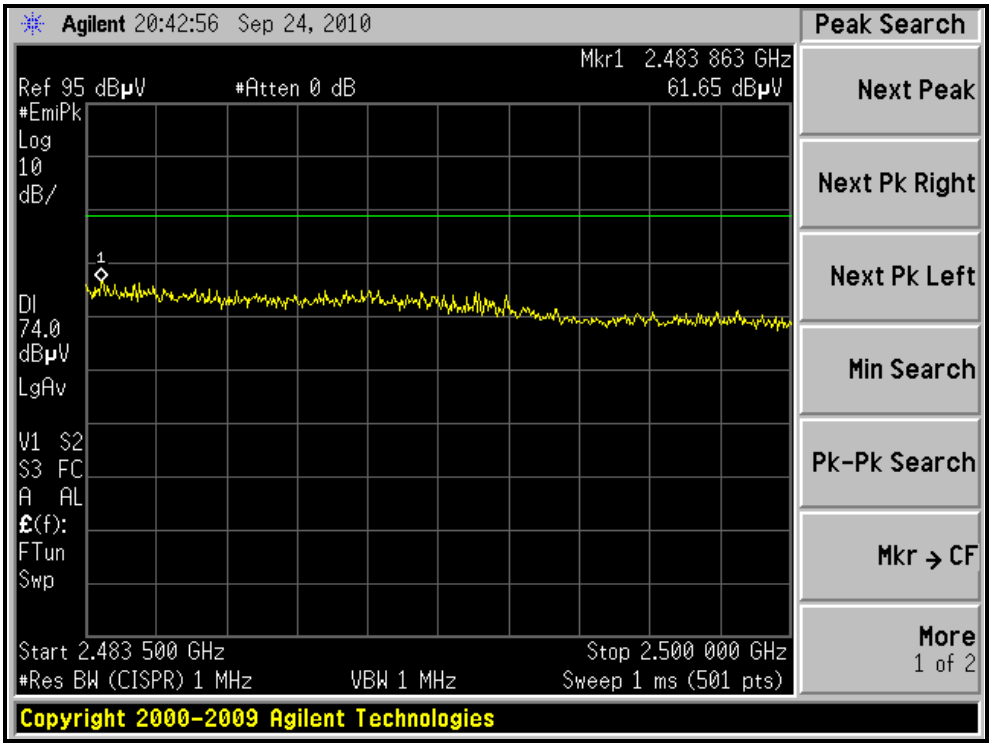


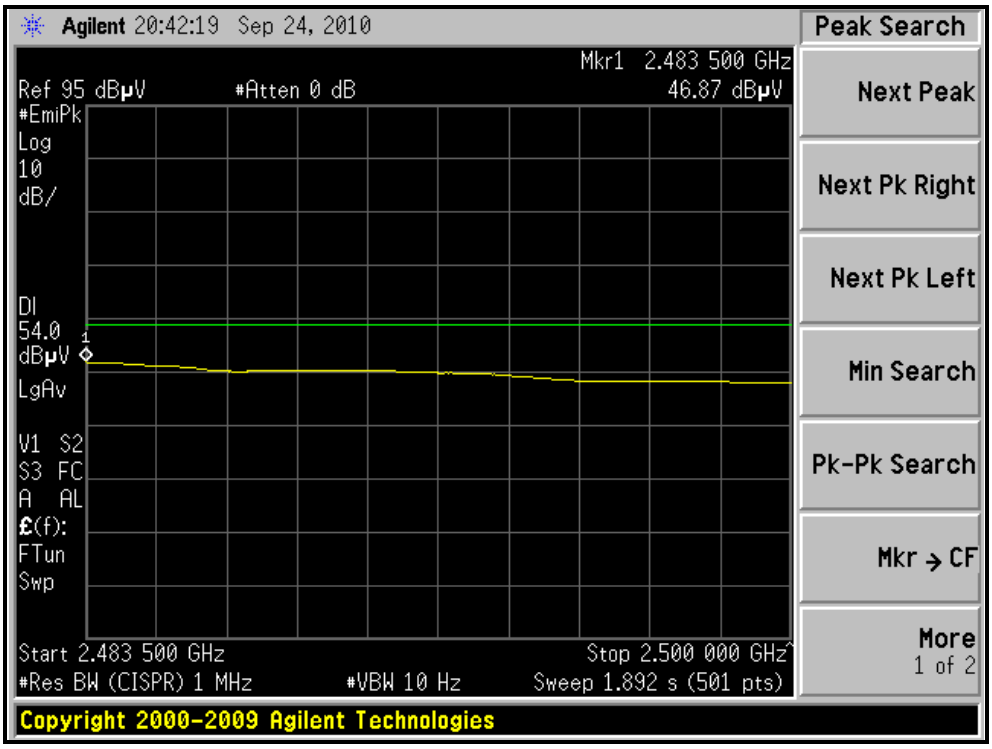
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, HORIZONTAL)





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





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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	55.8 PK	74.00	-18.2	1.24 H	216	24.59	31.21
2	2390.00	43.7 AV	54.00	-10.3	1.24 H	216	12.49	31.21
3	*2422.00	93.3 PK			1.24 H	215	62.00	31.30
4	*2422.00	79.1 AV			1.24 H	215	47.80	31.30
5	4844.00	49.2 PK	74.00	-24.8	1.08 H	199	9.70	39.50
6	4844.00	36.9 AV	54.00	-17.1	1.08 H	199	-2.60	39.50
7	7266.00	52.6 PK	74.00	-21.4	1.05 H	246	8.54	44.06
8	7266.00	39.6 AV	54.00	-14.4	1.05 H	246	-4.46	44.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	67.5 PK	74.00	-6.5	1.14 V	195	36.29	31.21
2	2390.00	51.4 AV	54.00	-2.6	1.14 V	195	20.19	31.21
3	*2422.00	100.0 PK			1.13 V	192	68.70	31.30
4	*2422.00	85.0 AV			1.13 V	192	53.70	31.30
5	4844.00	53.7 PK	74.00	-20.3	1.00 V	299	14.20	39.50
6	4844.00	39.9 AV	54.00	-14.1	1.00 V	299	0.40	39.50
7	7266.00	58.2 PK	74.00	-15.8	1.70 V	210	14.14	44.06
8	7266.00	44.0 AV	54.00	-10.0	1.70 V	210	-0.06	44.06

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng
TEST MODE	DIPOLE ANTENNA		

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	93.8 PK			1.16 H	246	62.46	31.34
2	*2437.00	80.6 AV			1.16 H	246	49.26	31.34
3	4874.00	54.4 PK	74.00	-19.6	1.07 H	200	14.78	39.62
4	4874.00	40.0 AV	54.00	-14.0	1.07 H	200	0.38	39.62
5	7311.00	55.7 PK	74.00	-18.3	1.08 H	164	11.60	44.10
6	7311.00	42.4 AV	54.00	-11.6	1.08 H	164	-1.70	44.10
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	102.0 PK			1.14 V	193	70.66	31.34
2	*2437.00	86.8 AV			1.14 V	193	55.46	31.34
3	4874.00	58.0 PK	74.00	-16.0	1.00 V	300	18.38	39.62
4	4874.00	43.0 AV	54.00	-11.0	1.00 V	300	3.38	39.62
5	7311.00	63.4 PK	74.00	-10.6	1.60 V	211	19.30	44.10
6	7311.00	47.0 AV	54.00	-7.0	1.60 V	211	2.90	44.10

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	25deg. C, 66%RH 1015 hPa	TESTED BY	Duke Tseng

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	92.6 PK			1.17 H	247	61.22	31.38
2	*2452.00	79.3 AV			1.17 H	247	47.92	31.38
3	2483.76	55.8 PK	74.00	-18.2	1.16 H	245	24.34	31.46
4	2483.76	43.4 AV	54.00	-10.6	1.16 H	245	11.94	31.46
5	4904.00	49.1 PK	74.00	-24.9	1.07 H	201	9.36	39.74
6	4904.00	36.8 AV	54.00	-17.2	1.07 H	201	-2.94	39.74
7	7356.00	51.9 PK	74.00	-22.1	1.02 H	248	7.75	44.15
8	7356.00	39.4 AV	54.00	-14.6	1.02 H	248	-4.75	44.15
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	101.8 PK			1.13 V	193	70.42	31.38
2	*2452.00	86.0 AV			1.13 V	193	54.62	31.38
3	2483.53	64.0 PK	74.00	-10.0	1.12 V	191	32.54	31.46
4	2483.53	48.6 AV	54.00	-5.4	1.12 V	191	17.14	31.46
5	4904.00	53.5 PK	74.00	-20.5	1.00 V	297	13.76	39.74
6	4904.00	39.6 AV	54.00	-14.4	1.00 V	297	-0.14	39.74
7	7356.00	59.8 PK	74.00	-14.2	1.58 V	212	15.65	44.15
8	7356.00	46.9 AV	54.00	-7.1	1.58 V	212	10.22	44.15

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

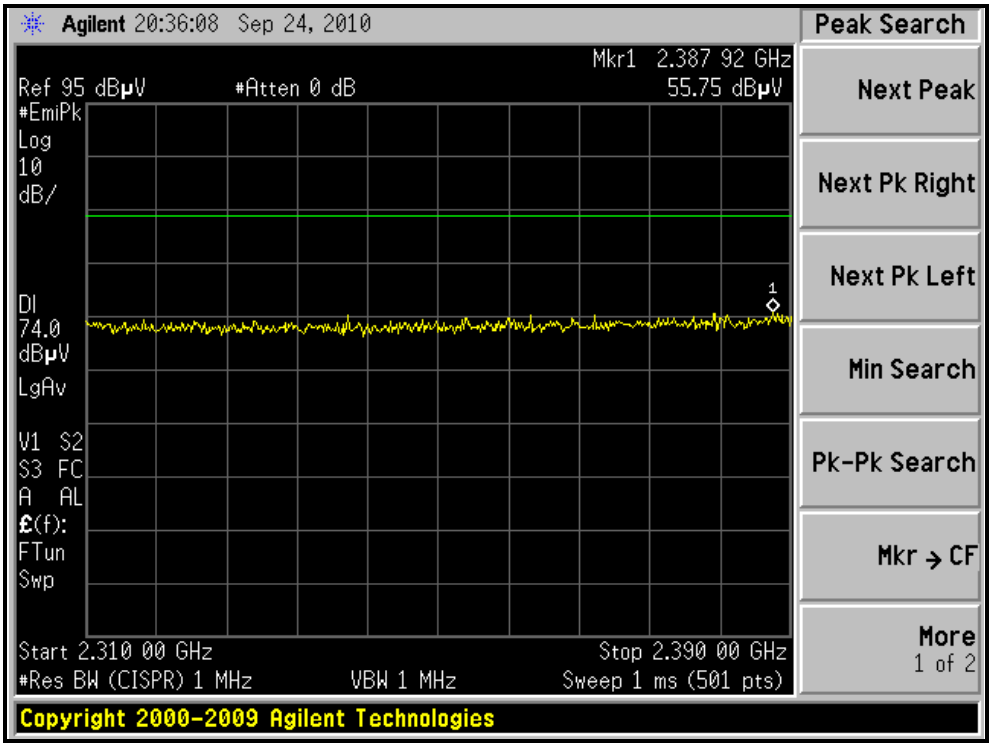
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

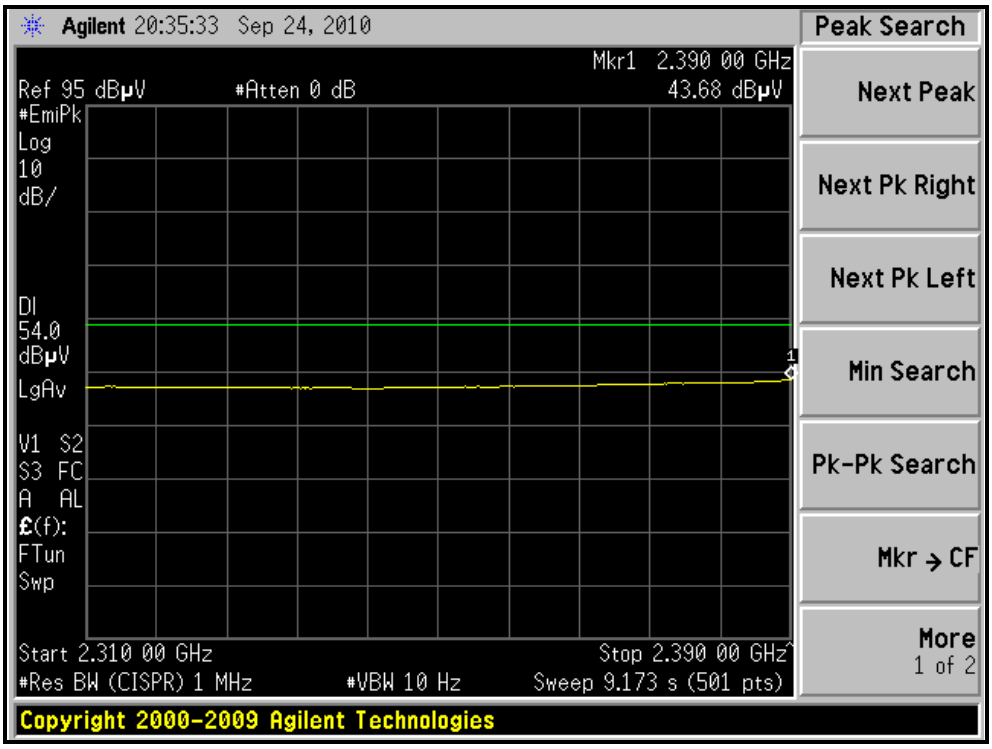
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

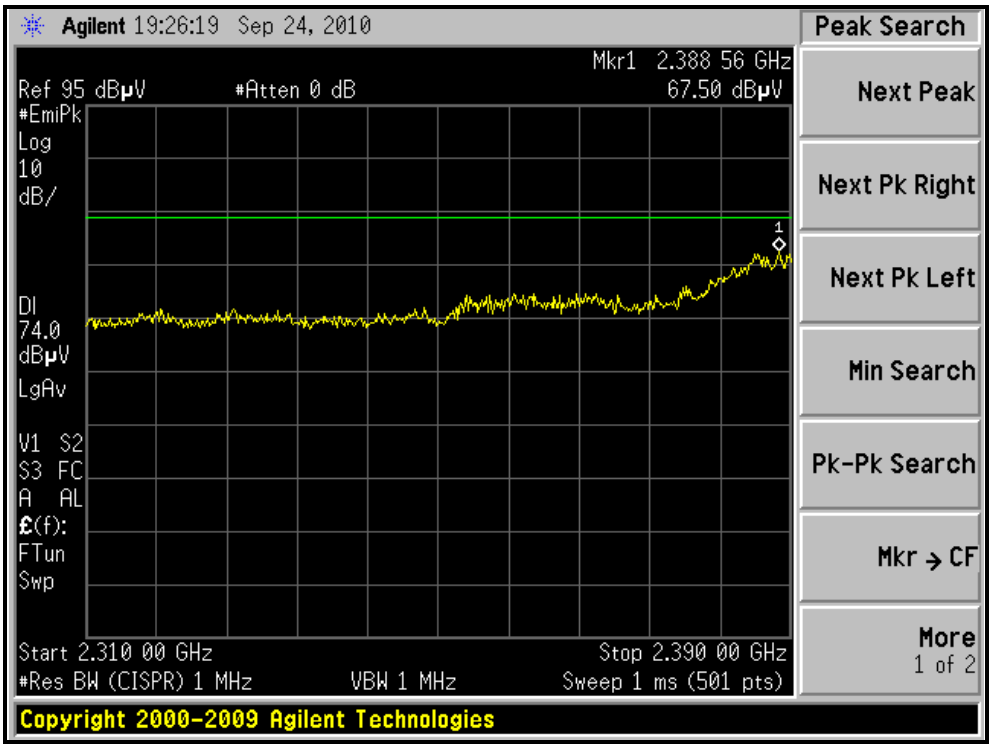
5. " * ": Fundamental frequency.

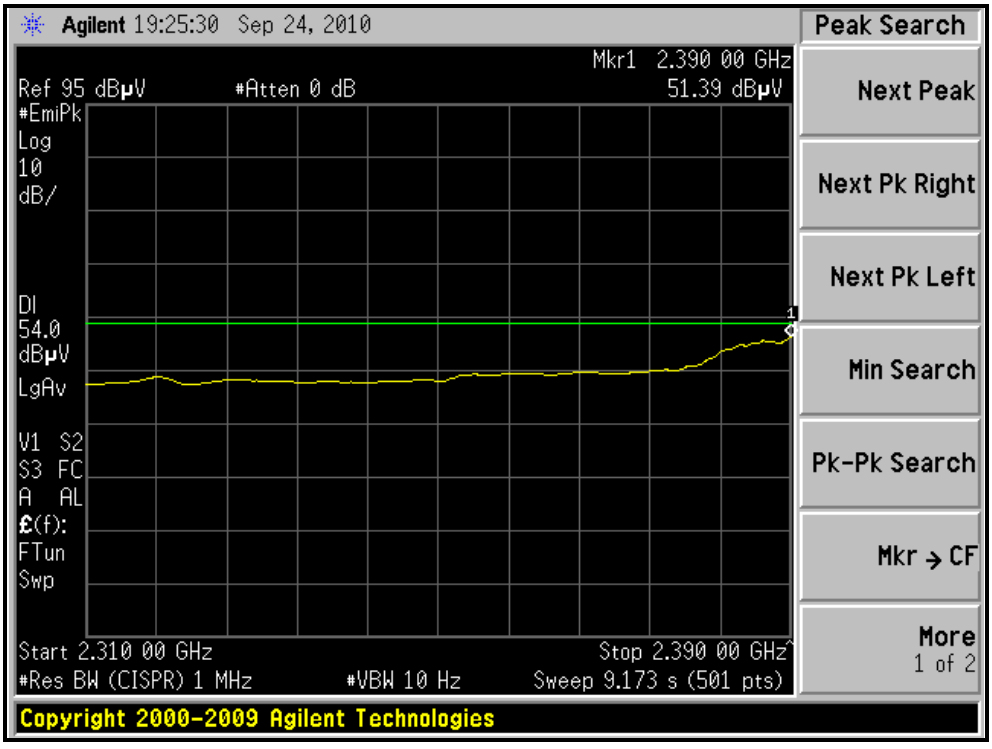
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)



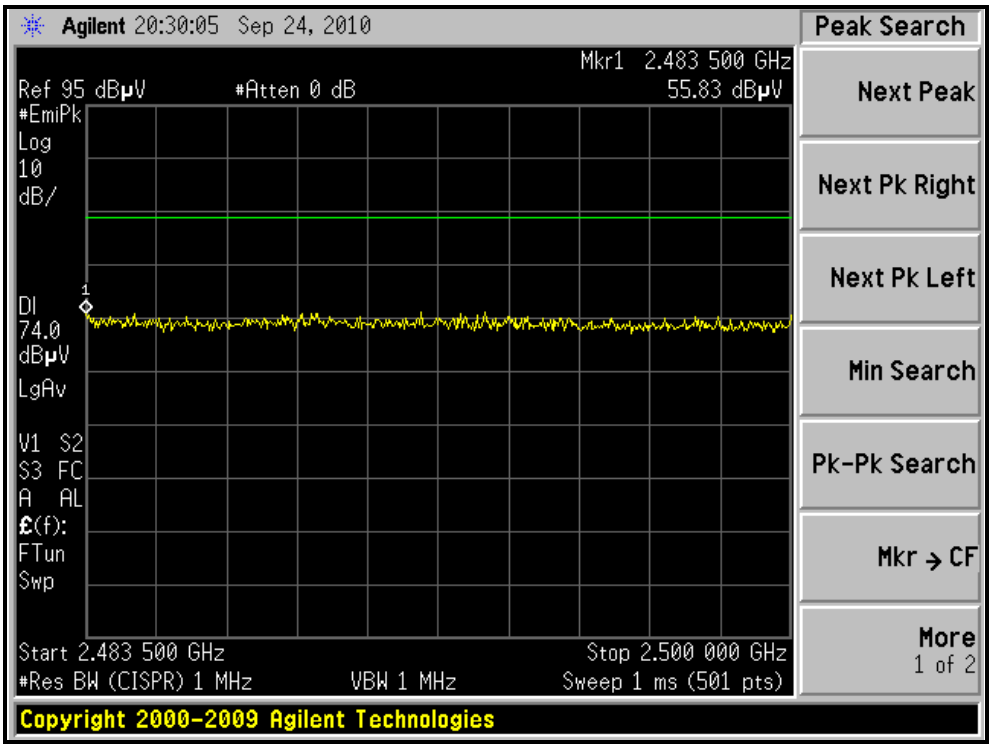


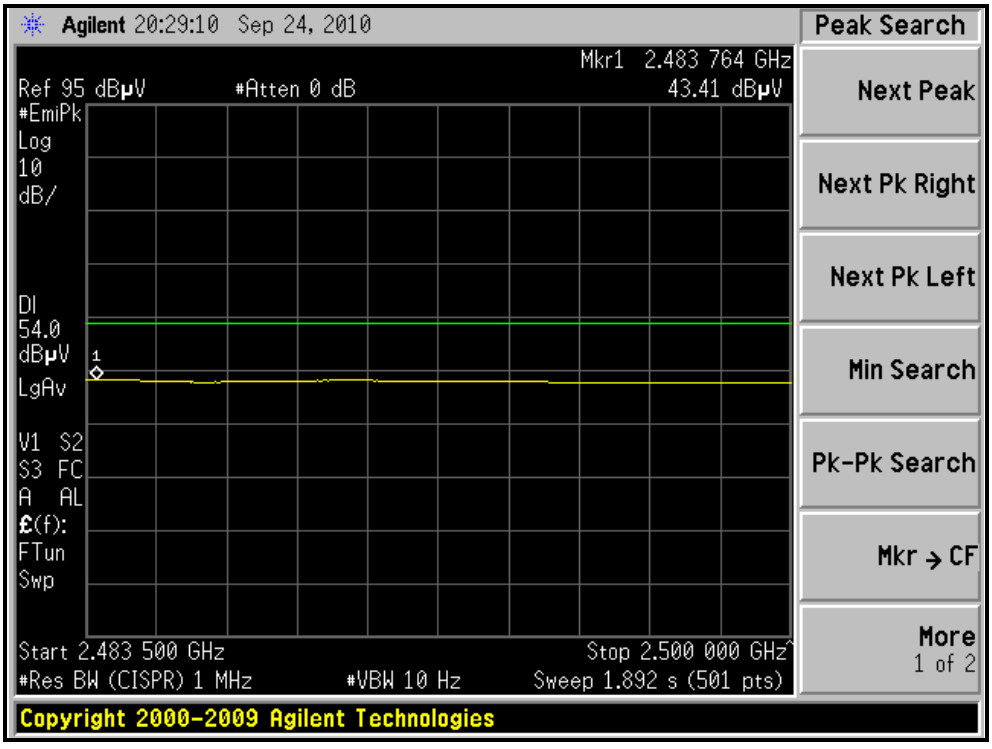
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, VERTICAL)



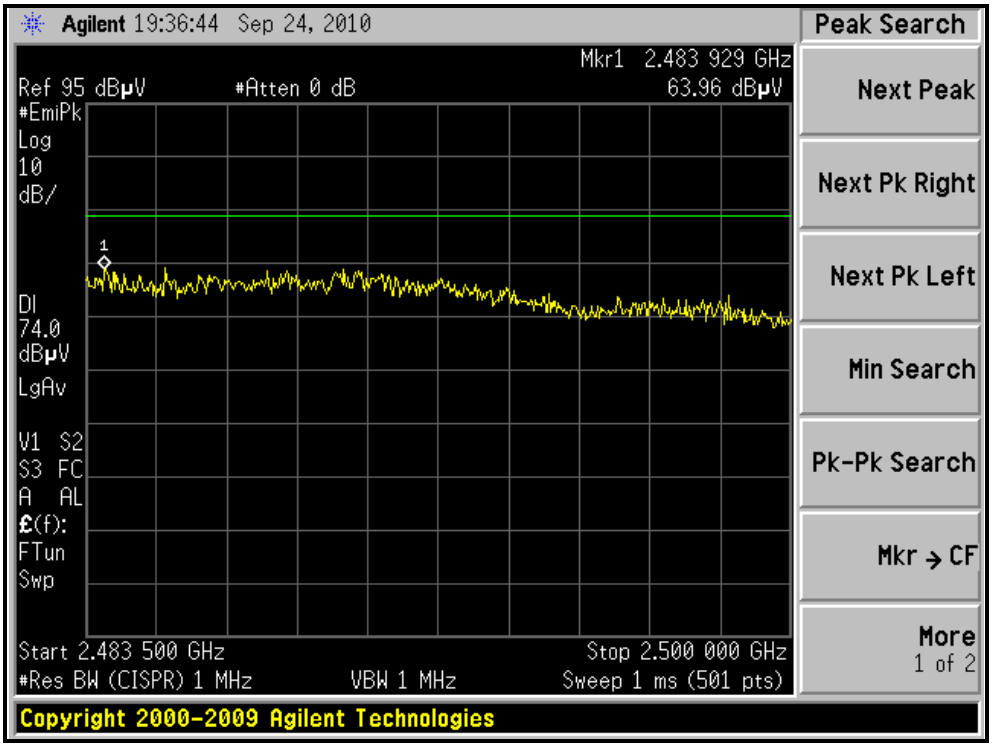


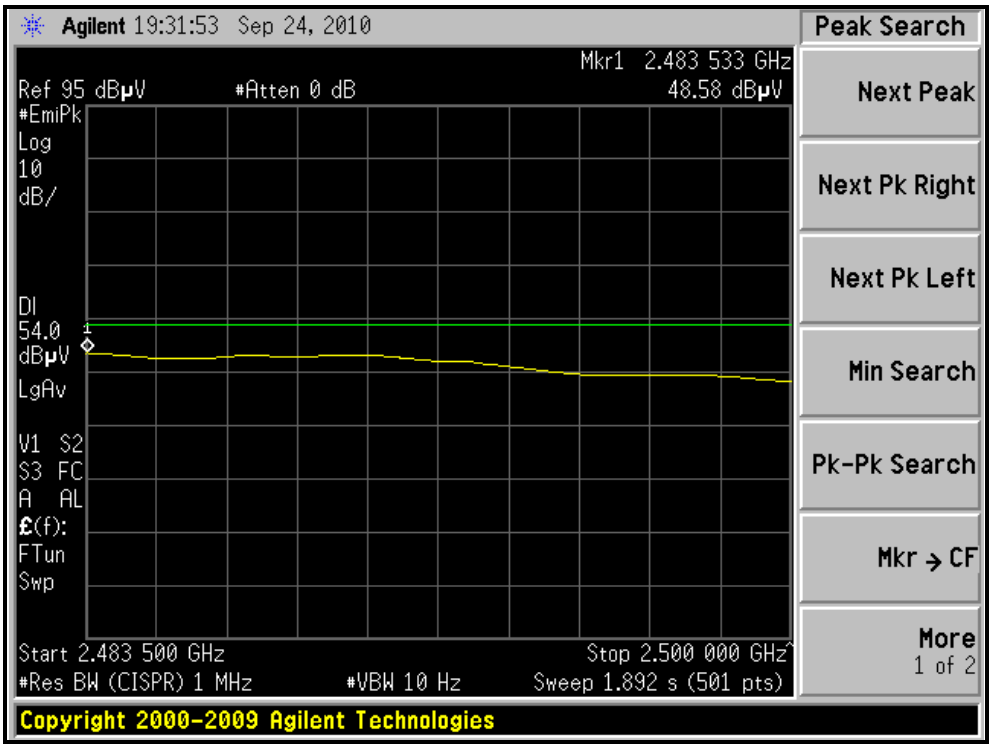
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, HORIZONTAL)





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





4.2.8 TEST RESULTS (Panel antenna)

BELOW 1GHz WORST-CASE DATA：802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	28deg. C, 72%RH 1015 hPa	**TESTED BY**	Chris Liang

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	64.58	25.1 QP	40.00	-14.9	2.00 H	1	12.40	12.74
2	147.71	32.8 QP	43.50	-10.8	1.25 H	320	18.97	13.78
3	239.96	29.9 QP	46.00	-16.1	1.25 H	224	17.20	12.66
4	599.97	35.0 QP	46.00	-11.0	1.50 H	81	13.00	21.97
5	649.35	33.6 QP	46.00	-12.4	1.25 H	5	11.09	22.52
6	747.40	32.7 QP	46.00	-13.3	1.00 H	2	8.88	23.80
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	65.29	27.3 QP	40.00	-12.7	1.00 V	260	14.63	12.63
2	325.70	36.4 QP	46.00	-9.7	1.75 V	193	20.59	15.76
3	465.56	34.6 QP	46.00	-11.5	1.25 V	66	15.67	18.88
4	599.97	35.1 QP	46.00	-10.9	1.00 V	360	13.09	21.97
5	811.00	31.7 QP	46.00	-14.3	1.25 V	228	7.06	24.68
6	891.29	30.9 QP	46.00	-15.1	1.00 V	314	4.83	26.09

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

ABOVE 1GHz WORST-CASE DATA

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	2389.10	56.3 PK	74.00	-17.7	1.10 H	150	25.09	31.21
2	2389.10	44.7 AV	54.00	-9.3	1.10 H	150	13.49	31.21
3	*2412.00	98.3 PK			1.12 H	146	67.03	31.27
4	*2412.00	93.9 AV			1.12 H	146	62.63	31.27
5	4824.00	53.3 PK	74.00	-20.7	1.48 H	100	13.88	39.42
6	4824.00	50.8 AV	54.00	-3.2	1.48 H	100	11.38	39.42
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	2389.90	56.8 PK	74.00	-17.2	1.15 V	174	25.59	31.21
2	2389.90	46.6 AV	54.00	-7.4	1.15 V	174	15.39	31.21
3	*2412.00	104.2 PK			1.15 V	179	72.93	31.27
4	*2412.00	100.8 AV			1.15 V	179	69.53	31.27
5	4824.00	56.4 PK	74.00	-17.6	1.09 V	281	16.98	39.42
6	4824.00	53.2 AV	54.00	-0.8	1.09 V	281	13.78	39.42

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	98.8 PK			1.13 H	150	67.46	31.34
2	*2437.00	94.8 AV			1.13 H	150	63.46	31.34
3	4874.00	54.4 PK	74.00	-19.6	1.09 H	278	14.78	39.62
4	4874.00	51.1 AV	54.00	-2.9	1.09 H	278	11.48	39.62
5	7311.00	55.8 PK	74.00	-18.2	1.21 H	108	11.70	44.10
6	7311.00	48.8 AV	54.00	-5.2	1.21 H	108	4.70	44.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	105.9 PK			1.22 V	181	74.56	31.34
2	*2437.00	101.9 AV			1.22 V	181	70.56	31.34
3	4874.00	54.6 PK	74.00	-19.4	1.00 V	84	14.98	39.62
4	4874.00	51.2 AV	54.00	-2.8	1.00 V	84	11.58	39.62
5	7311.00	57.9 PK	74.00	-16.1	1.82 V	34	13.80	44.10
6	7311.00	53.1 AV	54.00	-0.9	1.82 V	34	9.00	44.10

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	98.2 PK			1.15 H	200	66.80	31.40
2	*2462.00	94.7 AV			1.15 H	200	63.30	31.40
3	2487.60	55.2 PK	74.00	-18.8	1.39 H	317	23.73	31.47
4	2487.60	43.3 AV	54.00	-10.7	1.39 H	317	11.83	31.47
5	4924.00	54.4 PK	74.00	-19.6	1.48 H	20	14.58	39.82
6	4924.00	51.2 AV	54.00	-2.8	1.48 H	20	11.38	39.82
7	7386.00	56.1 PK	74.00	-17.9	1.22 H	111	11.92	44.18
8	7386.00	49.2 AV	54.00	-4.8	1.22 H	111	5.02	44.18
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	103.4 PK			1.11 V	188	72.00	31.40
2	*2462.00	99.7 AV			1.11 V	188	68.30	31.40
3	2483.50	55.5 PK	74.00	-18.5	1.12 V	190	24.04	31.46
4	2483.50	44.1 AV	54.00	-9.9	1.12 V	190	12.64	31.46
5	4924.00	54.9 PK	74.00	-19.1	1.08 V	266	15.08	39.82
6	4924.00	52.6 AV	54.00	-1.4	1.08 V	266	12.78	39.82
7	7386.00	58.5 PK	74.00	-15.5	1.80 V	86	14.32	44.18
8	**7386.00**	**53.4 AV**	**54.00**	**-0.6**	**1.80 V**	**86**	**9.22**	**44.18**

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

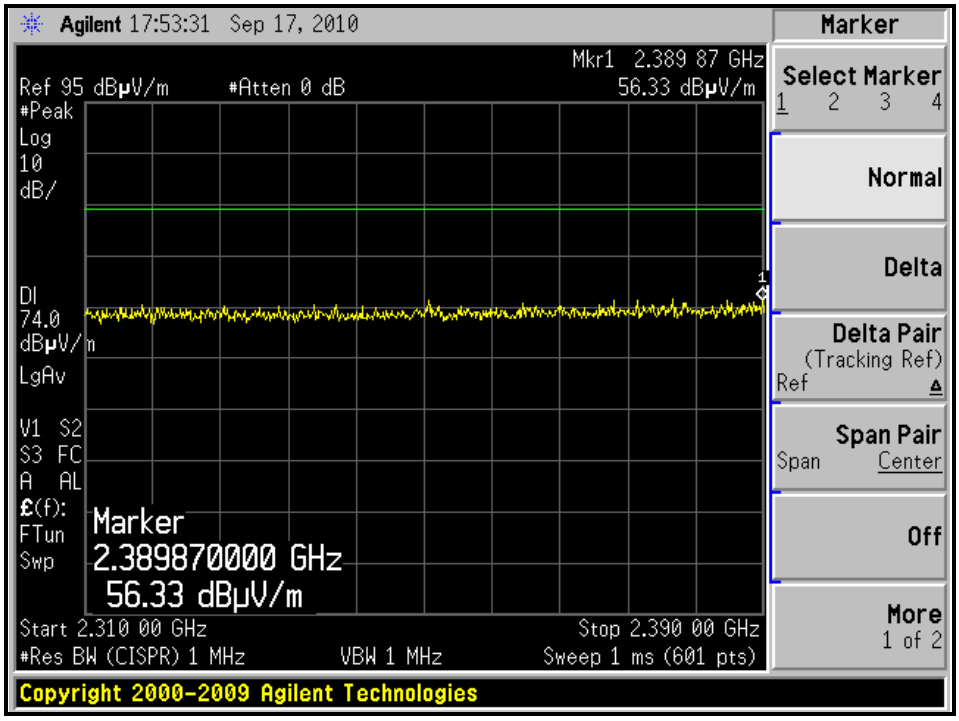
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

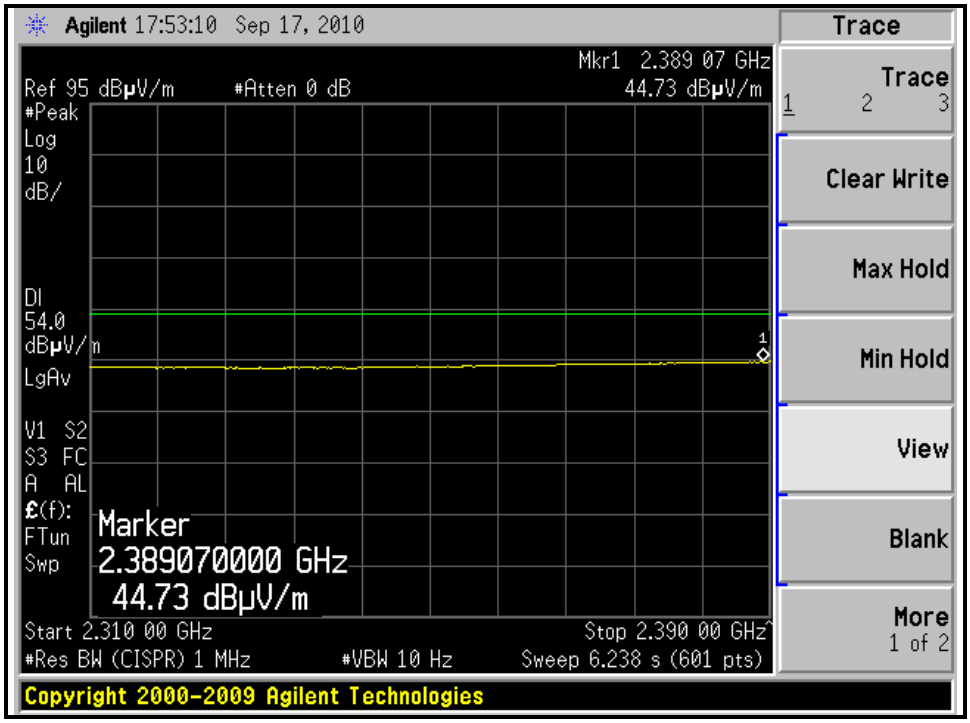
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)





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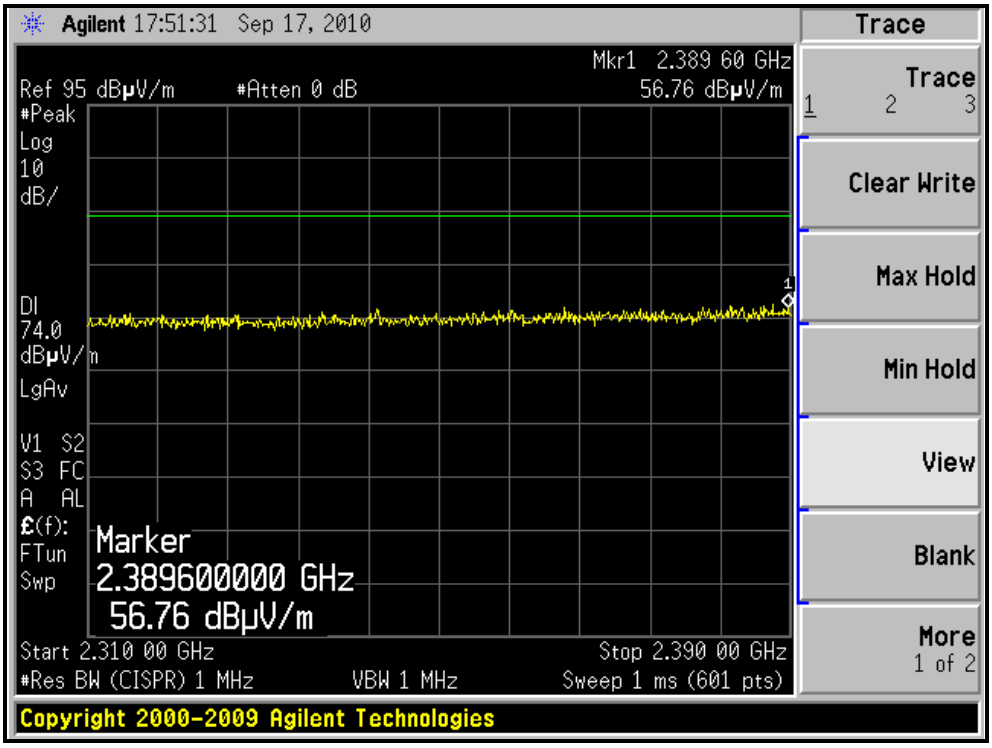

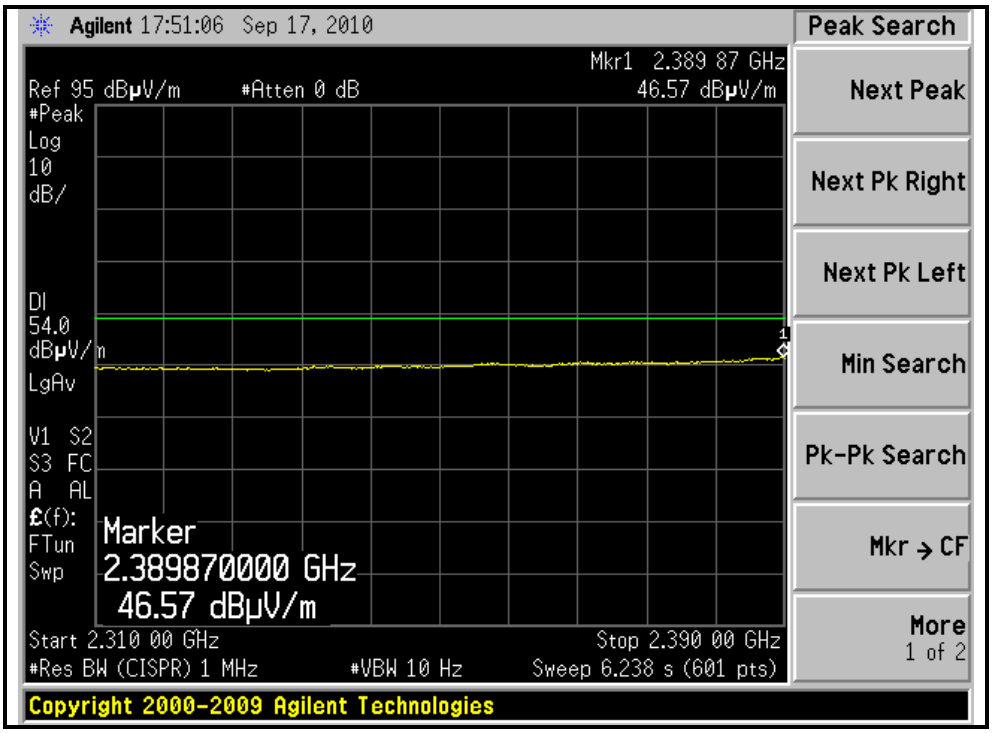

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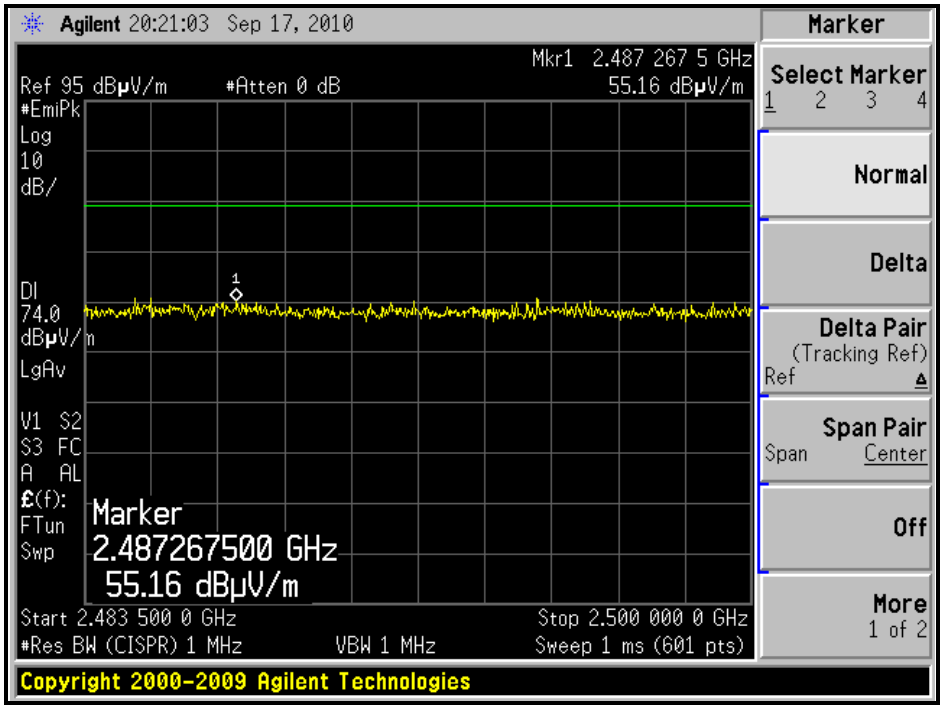
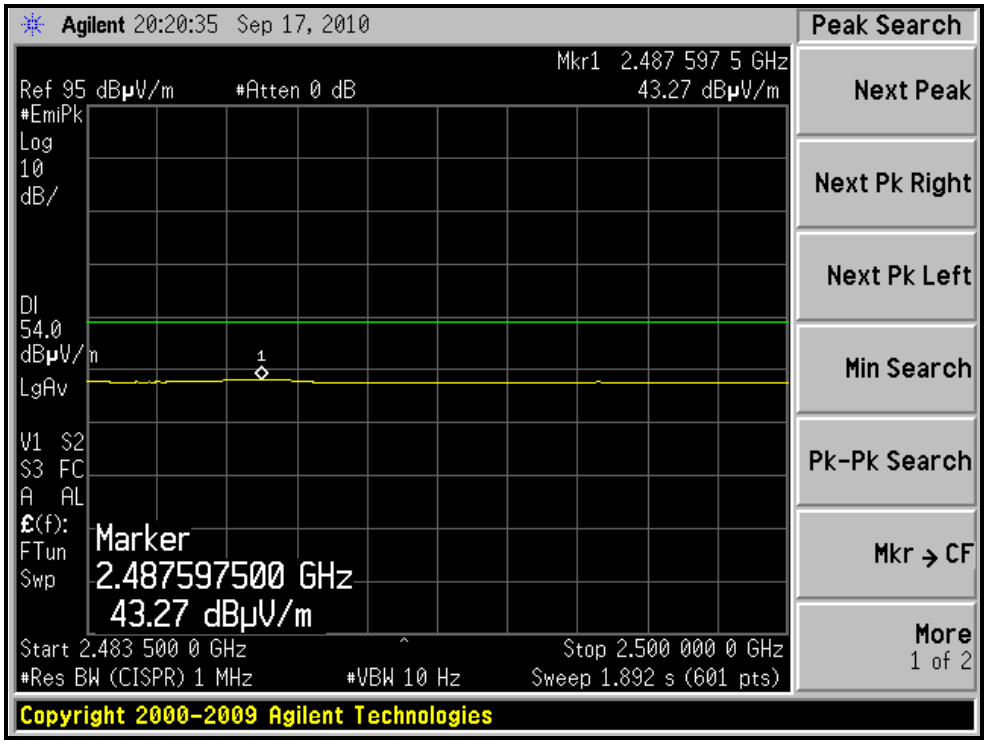
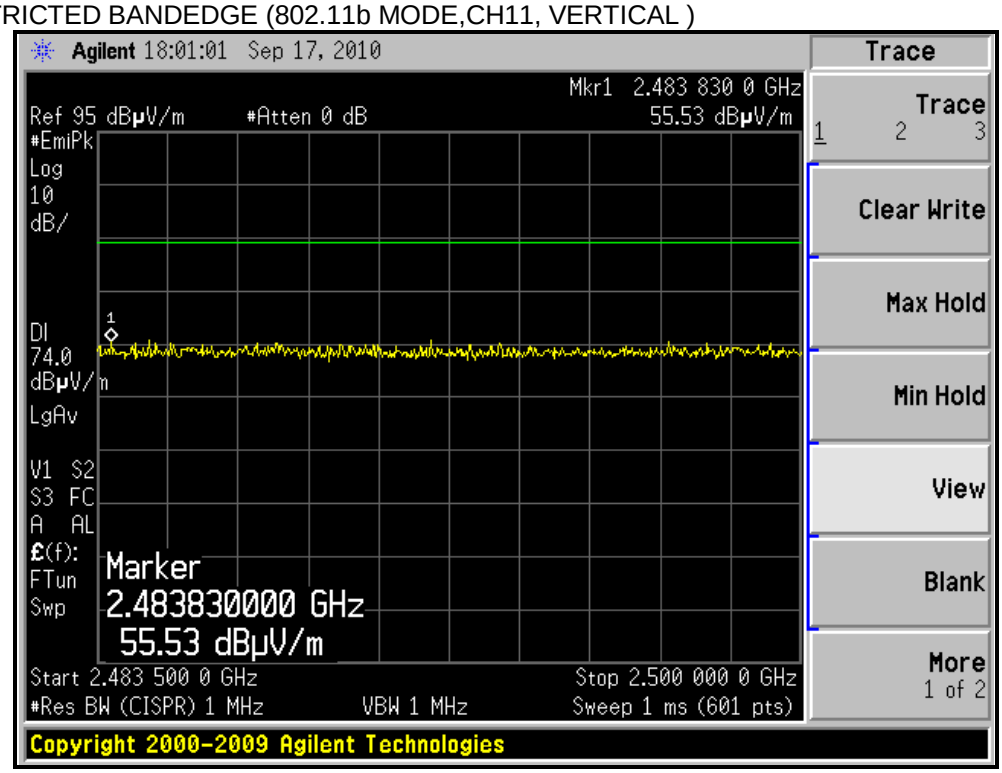
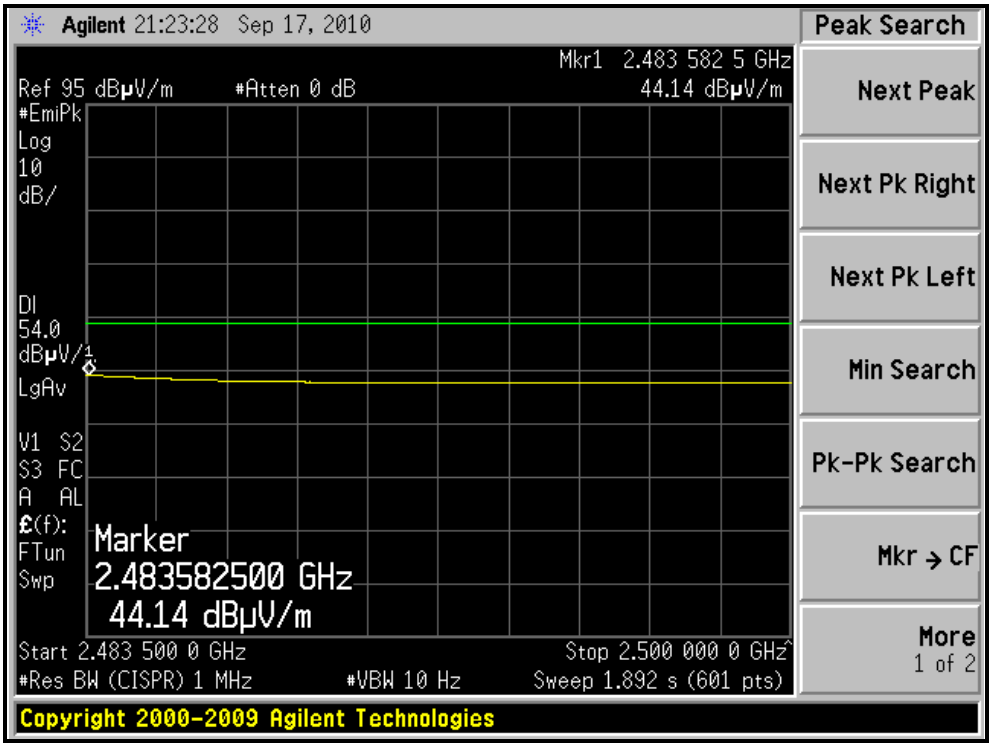




RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.3 PK	74.00	-13.7	1.15 H	311	29.09	31.21
2	2390.00	45.9 AV	54.00	-8.1	1.15 H	311	14.69	31.21
3	*2412.00	101.7 PK			1.16 H	318	70.43	31.27
4	*2412.00	89.5 AV			1.16 H	318	58.23	31.27
5	4824.00	56.3 PK	74.00	-17.7	1.50 H	100	16.88	39.42
6	4824.00	42.9 AV	54.00	-11.1	1.50 H	100	3.48	39.42
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	70.2 PK	74.00	-3.8	1.16 V	12	38.99	31.21
2	2390.00	53.0 AV	54.00	-1.0	1.16 V	12	21.79	31.21
3	*2412.00	111.0 PK			1.15 V	0	79.73	31.27
4	*2412.00	96.9 AV			1.15 V	0	65.63	31.27
5	4824.00	58.1 PK	74.00	-15.9	1.92 V	188	18.68	39.42
6	4824.00	44.1 AV	54.00	-9.9	1.92 V	188	4.68	39.42

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	99.5 PK			1.20 H	322	68.16	31.34
2	*2437.00	87.1 AV			1.20 H	322	55.76	31.34
3	4874.00	55.8 PK	74.00	-18.2	1.42 H	101	16.18	39.62
4	4874.00	41.4 AV	54.00	-12.6	1.42 H	101	1.78	39.62
5	7311.00	59.1 PK	74.00	-14.9	1.11 H	49	15.00	44.10
6	7311.00	45.2 AV	54.00	-8.8	1.11 H	49	1.10	44.10
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	110.0 PK			1.14 V	179	78.66	31.34
2	*2437.00	96.0 AV			1.14 V	179	64.66	31.34
3	4874.00	57.8 PK	74.00	-16.2	1.91 V	183	18.18	39.62
4	4874.00	43.9 AV	54.00	-10.1	1.91 V	183	4.28	39.62
5	7311.00	64.9 PK	74.00	-9.1	1.92 V	48	20.80	44.10
6	7311.00	50.7 AV	54.00	-3.3	1.92 V	48	6.60	44.10

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	99.1 PK			1.18 H	311	67.70	31.40
2	*2462.00	88.4 AV			1.18 H	311	57.00	31.40
3	2489.10	57.7 PK	74.00	-16.3	1.20 H	312	26.23	31.47
4	2489.10	44.1 AV	54.00	-9.9	1.20 H	312	12.63	31.47
5	4924.00	55.1 PK	74.00	-18.9	1.31 H	169	15.28	39.82
6	4924.00	41.8 AV	54.00	-12.2	1.31 H	169	1.98	39.82
7	7386.00	58.2 PK	74.00	-15.8	1.20 H	58	14.02	44.18
8	7386.00	44.2 AV	54.00	-9.8	1.20 H	58	0.02	44.18
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	109.4 PK			1.13 V	180	78.00	31.40
2	*2462.00	95.4 AV			1.13 V	180	64.00	31.40
3	2483.50	66.4 PK	74.00	-7.6	1.12 V	177	34.94	31.46
4	2483.50	51.0 AV	54.00	-3.0	1.12 V	177	19.54	31.46
5	4924.00	57.9 PK	74.00	-16.1	1.93 V	188	18.08	39.82
6	4924.00	43.8 AV	54.00	-10.2	1.93 V	188	3.98	39.82
7	7386.00	65.2 PK	74.00	-8.8	1.91 V	50	21.02	44.18
8	7386.00	51.3 AV	54.00	-2.7	1.91 V	50	7.12	44.18

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

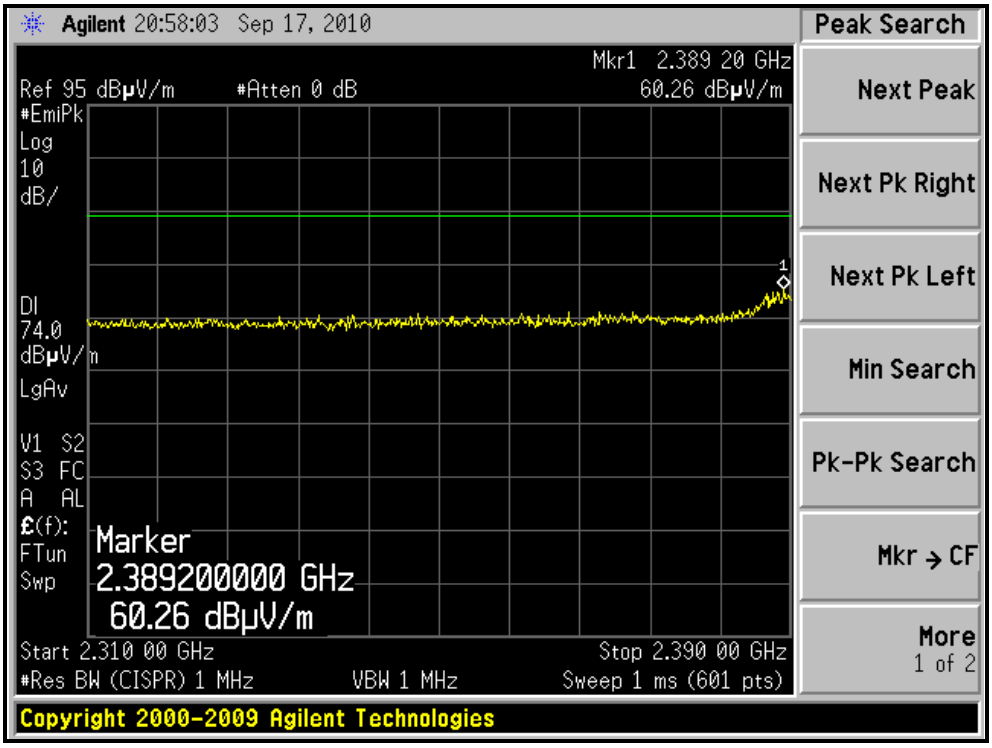
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

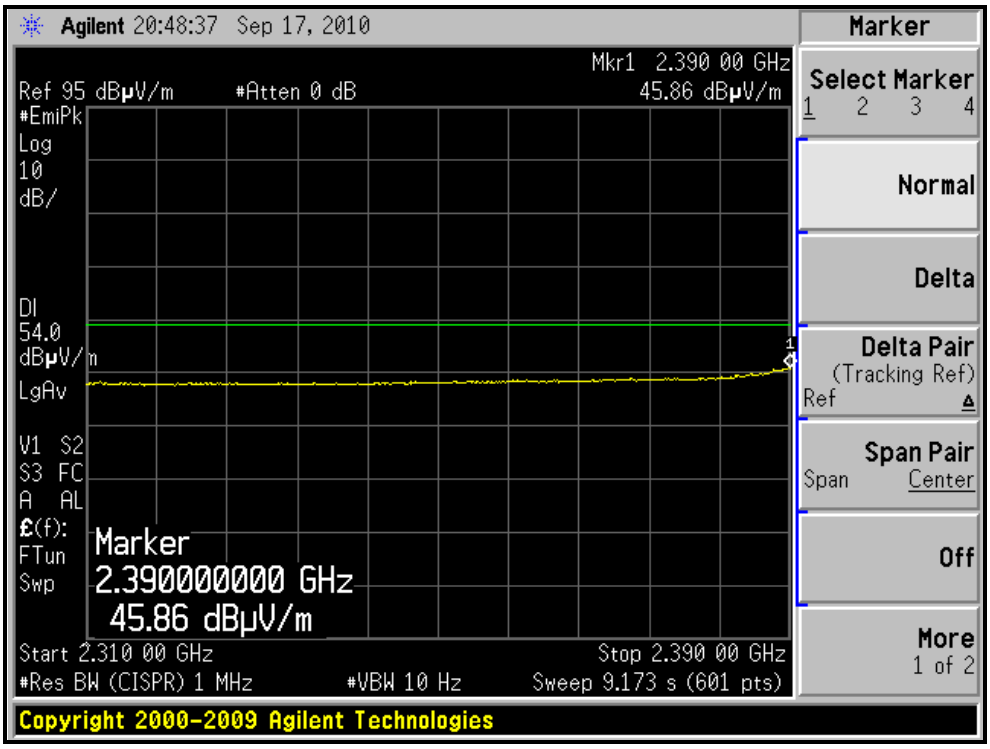
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

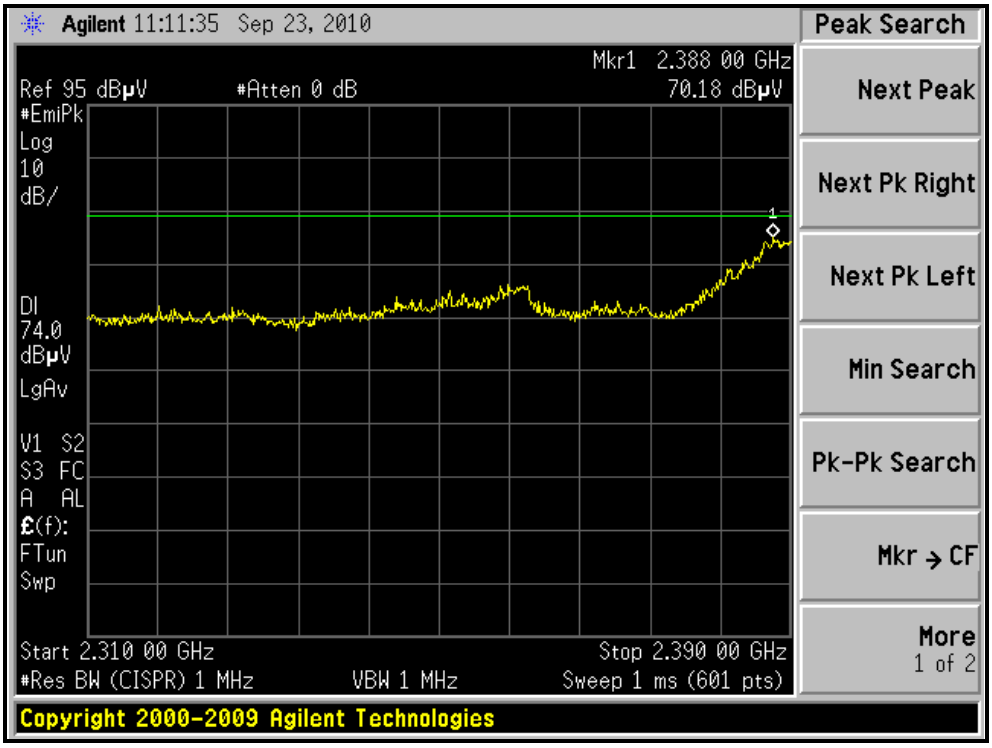
5. " * ": Fundamental frequency.

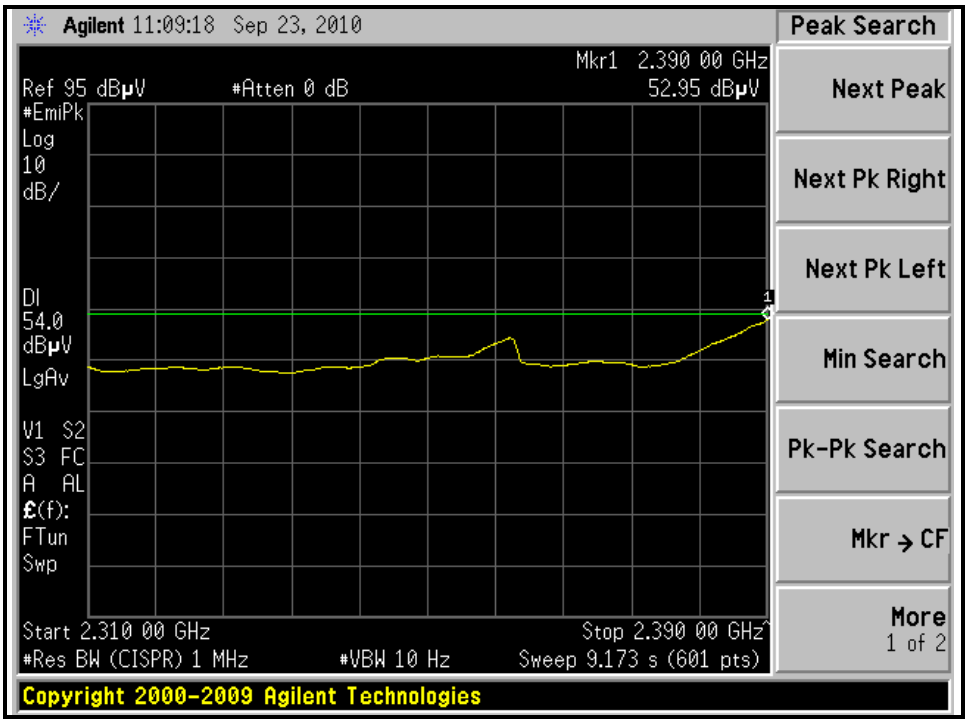
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



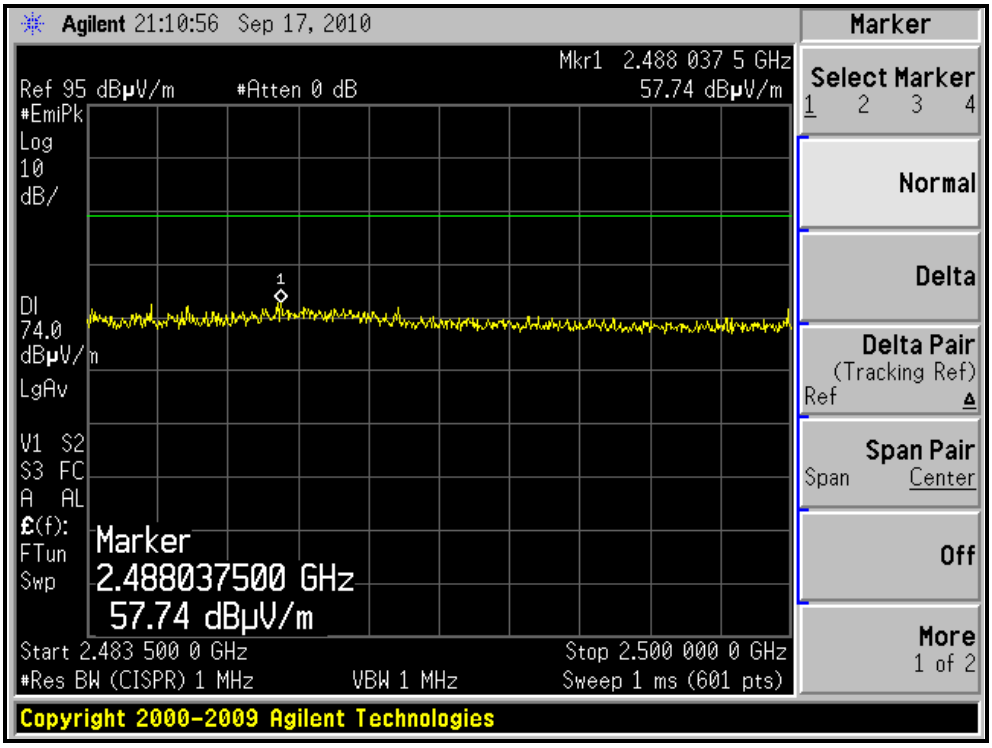


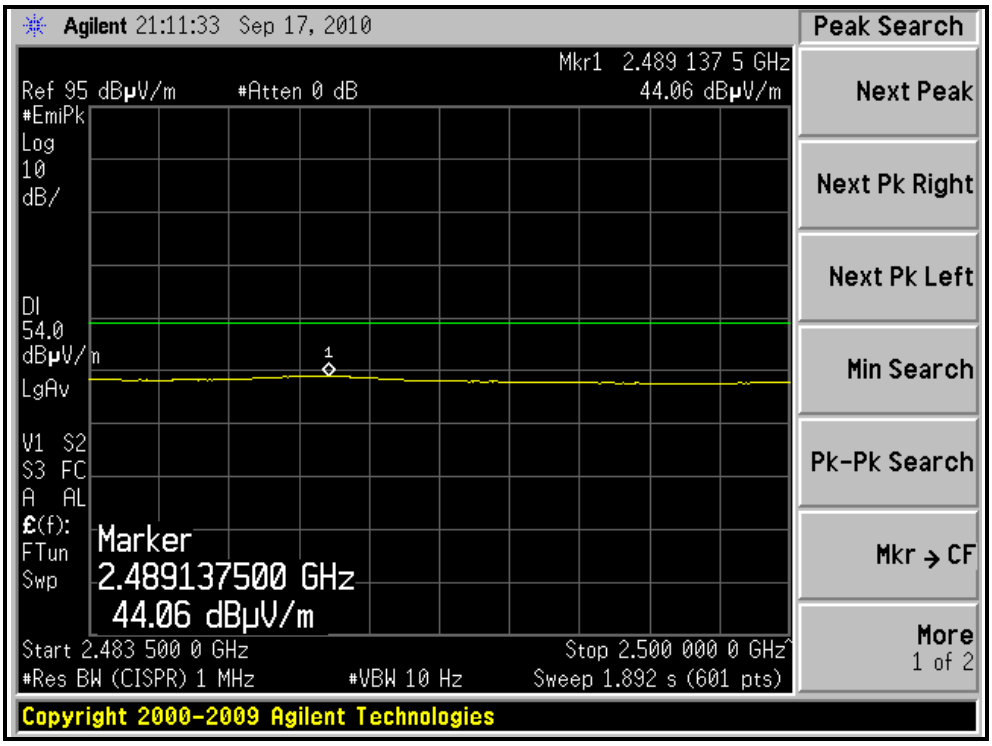
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



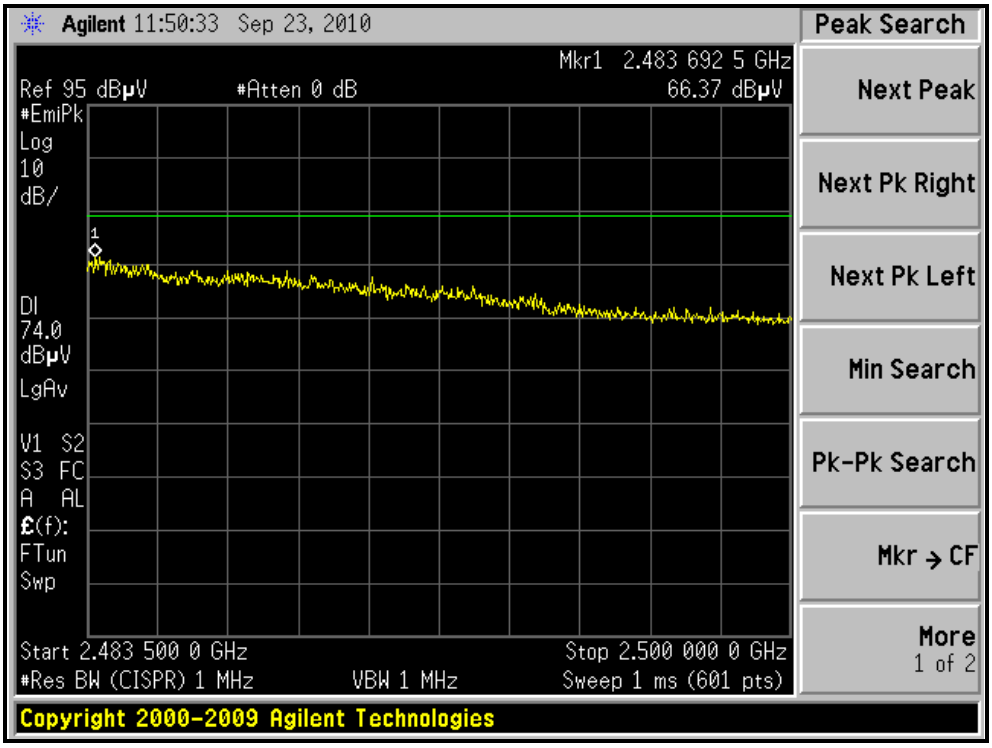


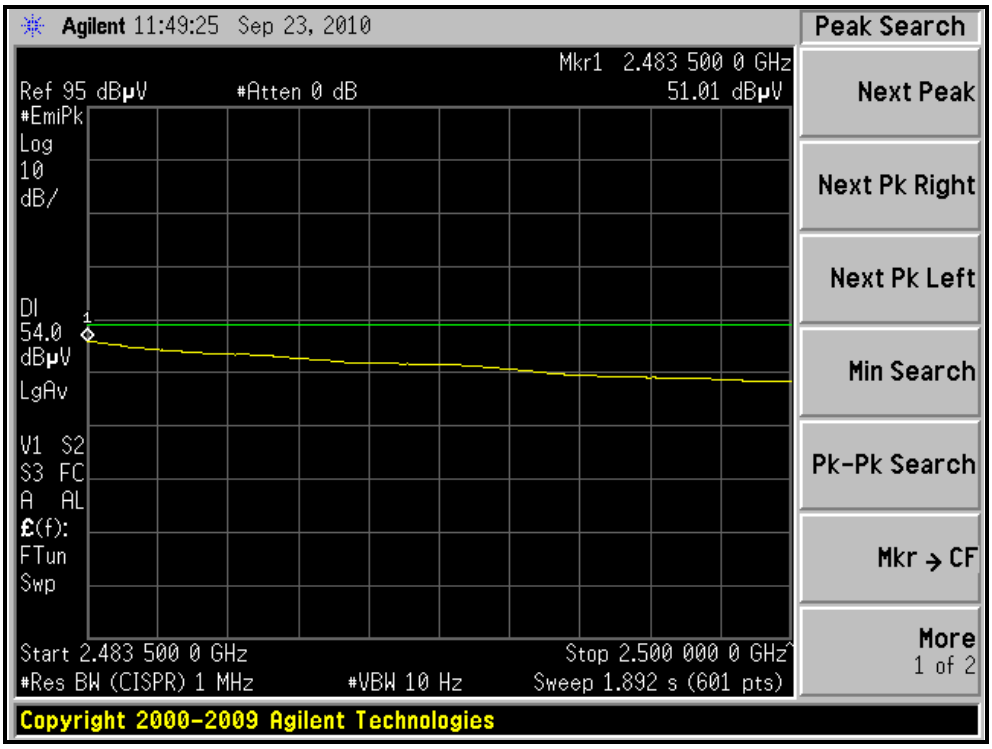
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)





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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.2 PK	74.00	-13.8	1.14 H	251	28.99	31.21
2	2390.00	44.9 AV	54.00	-9.1	1.14 H	251	13.69	31.21
3	*2412.00	101.0 PK			1.16 H	247	69.73	31.27
4	*2412.00	89.0 AV			1.16 H	247	57.73	31.27
5	4824.00	53.8 PK	74.00	-20.2	1.20 H	44	14.38	39.42
6	4824.00	41.8 AV	54.00	-12.2	1.20 H	44	2.38	39.42
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	70.2 PK	74.00	-3.8	1.12 V	178	38.99	31.21
2	2390.00	52.9 AV	54.00	-1.1	1.12 V	178	21.69	31.21
3	*2412.00	109.5 PK			1.10 V	182	78.23	31.27
4	*2412.00	95.0 AV			1.10 V	182	63.73	31.27
5	4824.00	56.7 PK	74.00	-17.3	1.92 V	211	17.28	39.42
6	4824.00	43.1 AV	54.00	-10.9	1.92 V	211	3.68	39.42

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	99.3 PK			1.20 H	250	67.96	31.34
2	*2437.00	86.1 AV			1.20 H	250	54.76	31.34
3	4874.00	53.0 PK	74.00	-21.0	1.30 H	50	13.38	39.62
4	4874.00	40.0 AV	54.00	-14.0	1.30 H	50	0.38	39.62
5	7311.00	59.5 PK	74.00	-14.5	1.12 H	50	15.40	44.10
6	7311.00	45.3 AV	54.00	-8.7	1.12 H	50	1.20	44.10
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	106.2 PK			1.12 V	167	74.86	31.34
2	*2437.00	93.5 AV			1.12 V	167	62.16	31.34
3	4874.00	56.1 PK	74.00	-17.9	1.86 V	207	16.48	39.62
4	4874.00	42.3 AV	54.00	-11.7	1.86 V	207	2.68	39.62
5	7311.00	69.9 PK	74.00	-4.1	1.64 V	38	25.80	44.10
6	7311.00	51.3 AV	54.00	-2.7	1.64 V	38	7.20	44.10

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	98.4 PK			1.18 H	261	67.00	31.40
2	*2462.00	85.8 AV			1.18 H	261	54.40	31.40
3	2483.50	60.8 PK	74.00	-13.2	1.19 H	260	29.34	31.46
4	2483.50	46.6 AV	54.00	-7.4	1.19 H	260	15.14	31.46
5	4924.00	52.7 PK	74.00	-21.3	1.29 H	71	12.88	39.82
6	4924.00	39.9 AV	54.00	-14.1	1.29 H	71	0.08	39.82
7	7386.00	59.9 PK	74.00	-14.1	1.13 H	60	15.72	44.18
8	7386.00	46.3 AV	54.00	-7.7	1.13 H	60	2.12	44.18
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	108.3 PK			1.12 V	180	76.90	31.40
2	*2462.00	94.8 AV			1.12 V	180	63.40	31.40
3	2483.50	67.0 PK	74.00	-7.0	1.13 V	176	35.54	31.46
4	2483.50	51.4 AV	54.00	-2.6	1.13 V	176	19.94	31.46
5	4924.00	56.2 PK	74.00	-17.8	1.91 V	222	16.38	39.82
6	4924.00	42.6 AV	54.00	-11.4	1.91 V	222	2.78	39.82
7	7386.00	69.6 PK	74.00	-4.4	1.65 V	40	25.42	44.18
8	7386.00	51.5 AV	54.00	-2.5	1.65 V	40	7.32	44.18

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

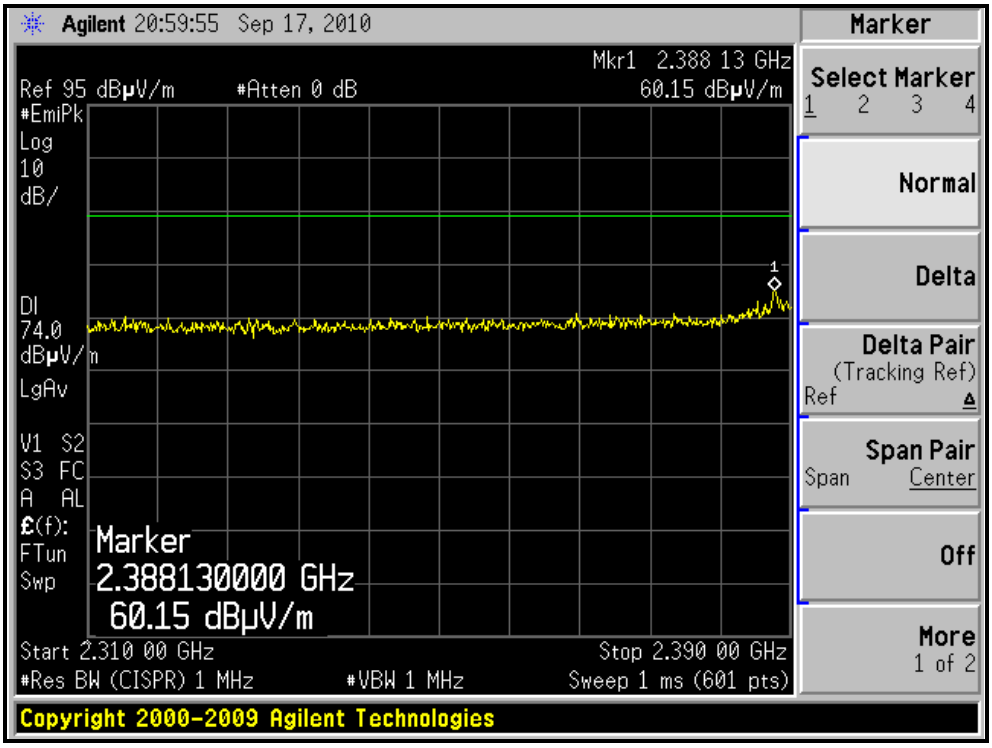
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

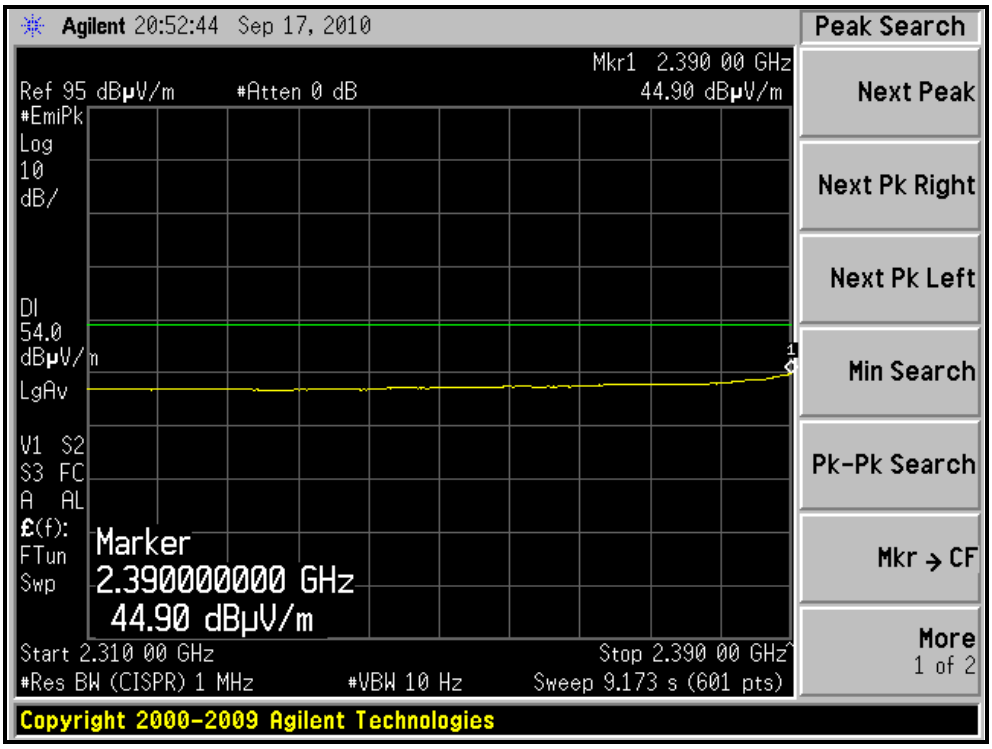
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

5. " * ": Fundamental frequency.

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





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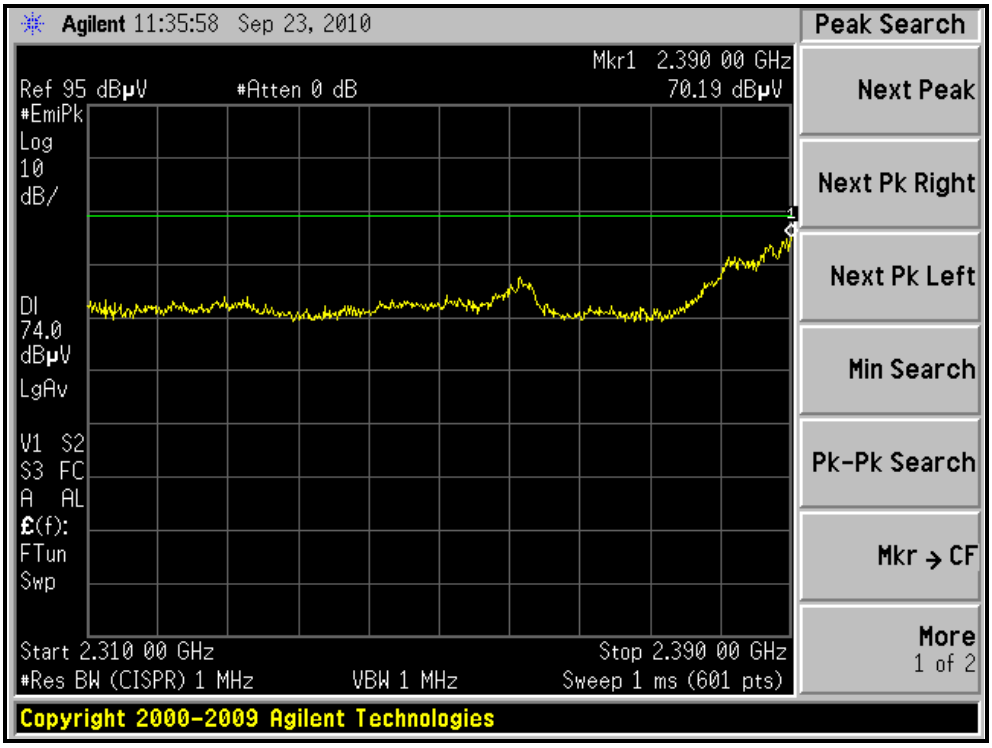

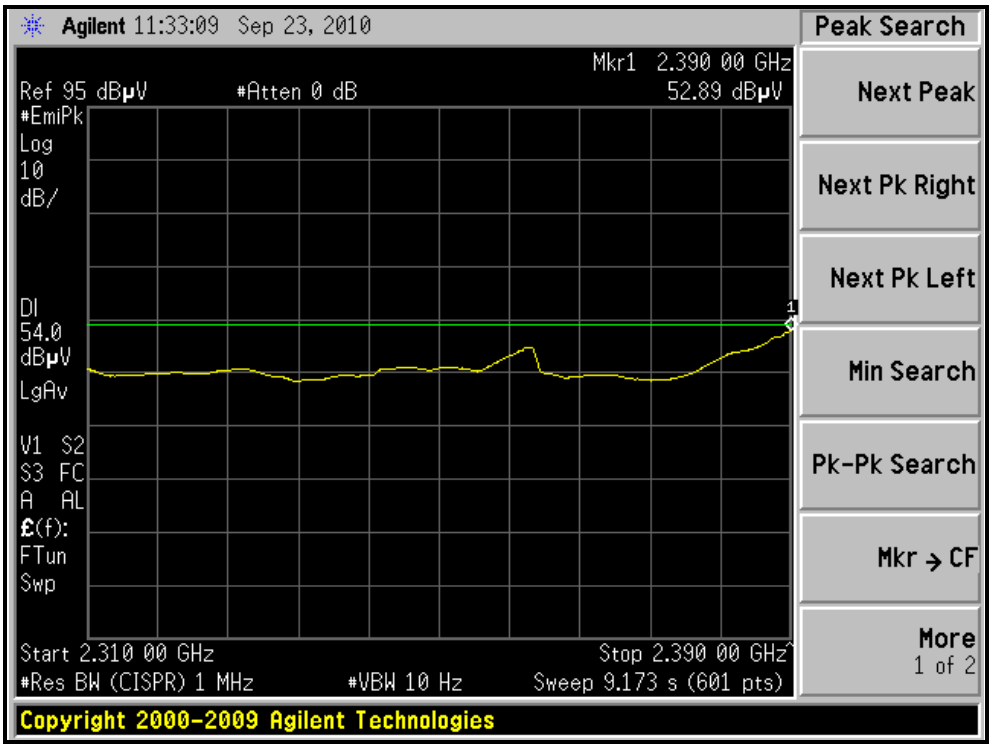

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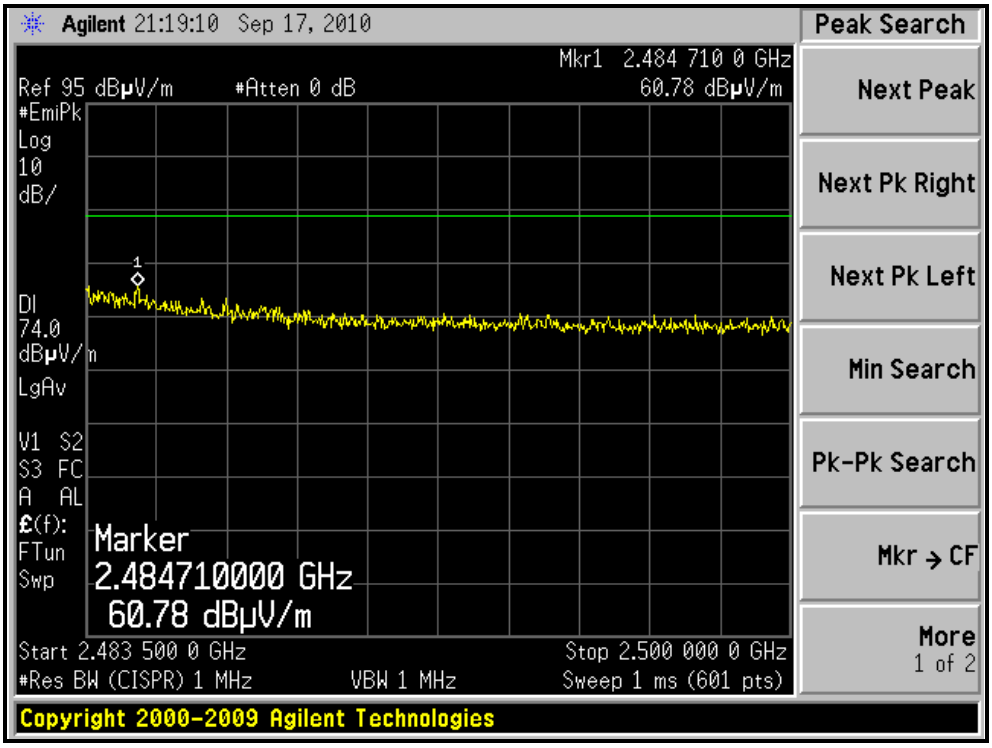
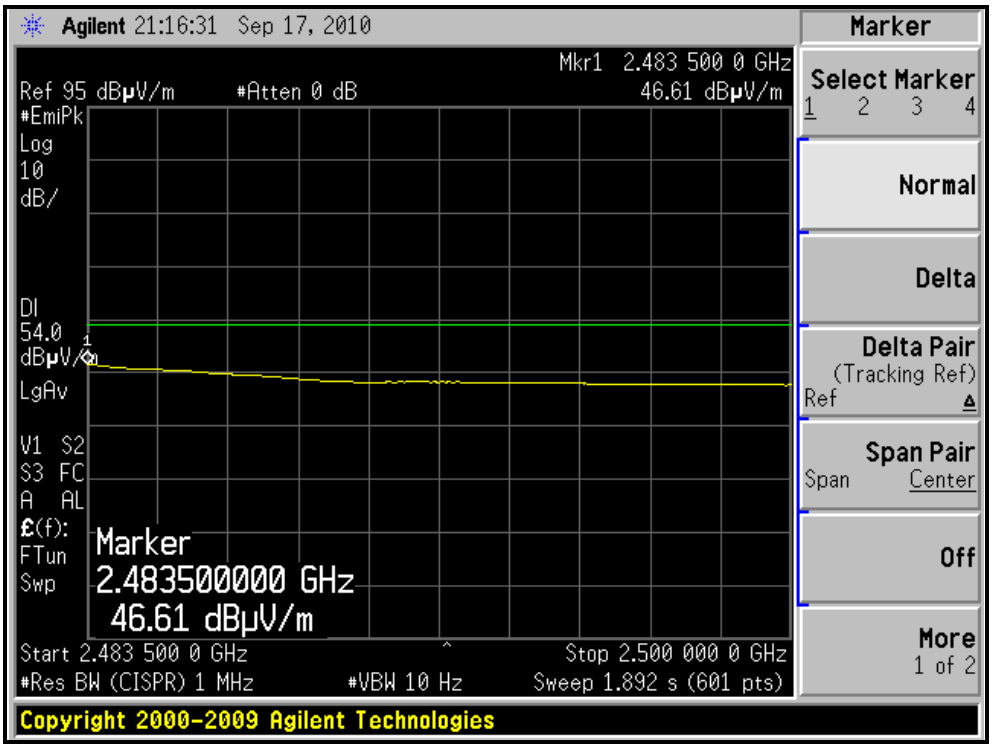
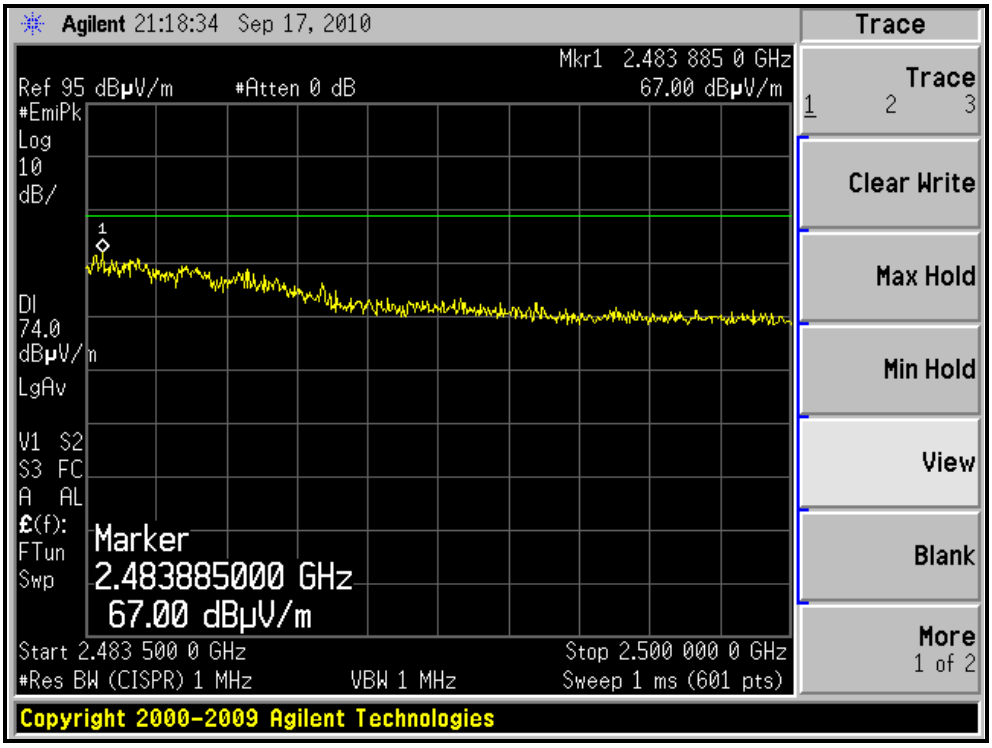
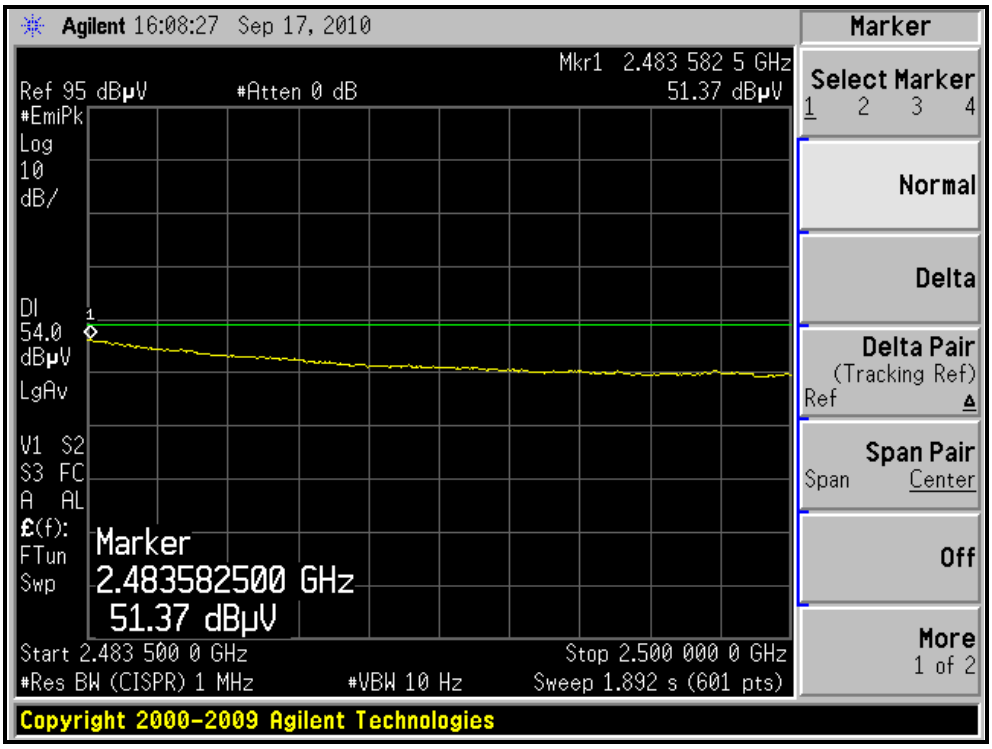




RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, VERTICAL)





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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	63.9 PK	74.00	-10.1	1.26 H	301	32.69	31.21
2	2390.00	46.9 AV	54.00	-7.1	1.26 H	301	15.69	31.21
3	*2422.00	96.9 PK			1.20 H	300	65.60	31.30
4	*2422.00	82.4 AV			1.20 H	300	51.10	31.30
5	4844.00	46.9 PK	74.00	-27.1	1.50 H	77	7.40	39.50
6	4844.00	38.2 AV	54.00	-15.8	1.50 H	77	-1.30	39.50
7	7266.00	51.6 PK	74.00	-22.4	1.73 H	228	7.54	44.06
8	7266.00	40.9 AV	54.00	-13.1	1.73 H	228	-3.16	44.06
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	2389.90	70.2 PK	74.00	-3.8	1.15 V	178	38.99	31.21
2	2389.90	53.3 AV	54.00	-0.7	1.15 V	178	22.09	31.21
3	*2422.00	104.0 PK			1.16 V	180	72.70	31.30
4	*2422.00	88.8 AV			1.16 V	180	57.50	31.30
5	4844.00	54.3 PK	74.00	-19.7	1.65 V	192	14.80	39.50
6	4844.00	41.4 AV	54.00	-12.6	1.65 V	192	1.90	39.50
7	7266.00	60.3 PK	74.00	-13.7	1.92 V	70	16.24	44.06
8	7266.00	50.1 AV	54.00	-3.9	1.92 V	70	6.04	44.06

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	96.2 PK			1.16 H	216	64.86	31.34
2	*2437.00	83.5 AV			1.16 H	216	52.16	31.34
3	4874.00	48.6 PK	74.00	-25.4	1.46 H	59	8.98	39.62
4	4874.00	37.2 AV	54.00	-16.8	1.46 H	59	-2.42	39.62
5	7311.00	52.6 PK	74.00	-21.4	1.71 H	22	8.50	44.10
6	7311.00	41.8 AV	54.00	-12.2	1.71 H	22	-2.30	44.10
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	102.1 PK			1.10 V	181	70.76	31.34
2	*2437.00	88.9 AV			1.10 V	181	57.56	31.34
3	4874.00	54.1 PK	74.00	-19.9	1.65 V	200	14.48	39.62
4	4874.00	40.9 AV	54.00	-13.1	1.65 V	200	1.28	39.62
5	7311.00	59.9 PK	74.00	-14.1	1.82 V	67	15.80	44.10
6	7311.00	49.4 AV	54.00	-4.6	1.82 V	67	5.30	44.10

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	28deg. C, 67%RH 1015 hPa	TESTED BY	Duke Tseng

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	95.2 PK			1.38 H	211	63.82	31.38
2	*2452.00	81.2 AV			1.38 H	211	49.82	31.38
3	2483.50	60.2 PK	74.00	-13.8	1.38 H	214	28.74	31.46
4	2483.50	47.4 AV	54.00	-6.6	1.38 H	214	15.94	31.46
5	4904.00	49.2 PK	74.00	-24.8	1.33 H	69	9.46	39.74
6	4904.00	38.6 AV	54.00	-15.4	1.33 H	69	-1.14	39.74
7	7356.00	52.1 PK	74.00	-21.9	1.69 H	224	7.95	44.15
8	7356.00	42.1 AV	54.00	-11.9	1.69 H	224	-2.05	44.15
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	105.3 PK			1.15 V	180	73.92	31.38
2	*2452.00	88.7 AV			1.15 V	180	57.32	31.38
3	2483.50	69.9 PK	74.00	-4.1	1.16 V	178	38.44	31.46
4	2483.50	53.5 AV	54.00	-0.5	1.16 V	178	22.04	31.46
5	4924.00	54.9 PK	74.00	-19.1	1.71 V	205	15.08	39.82
6	4924.00	41.2 AV	54.00	-12.8	1.71 V	205	1.38	39.82
7	7356.00	60.5 PK	74.00	-13.5	1.99 V	88	16.35	44.15
8	7356.00	50.9 AV	54.00	-3.1	1.99 V	88	6.75	44.15

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

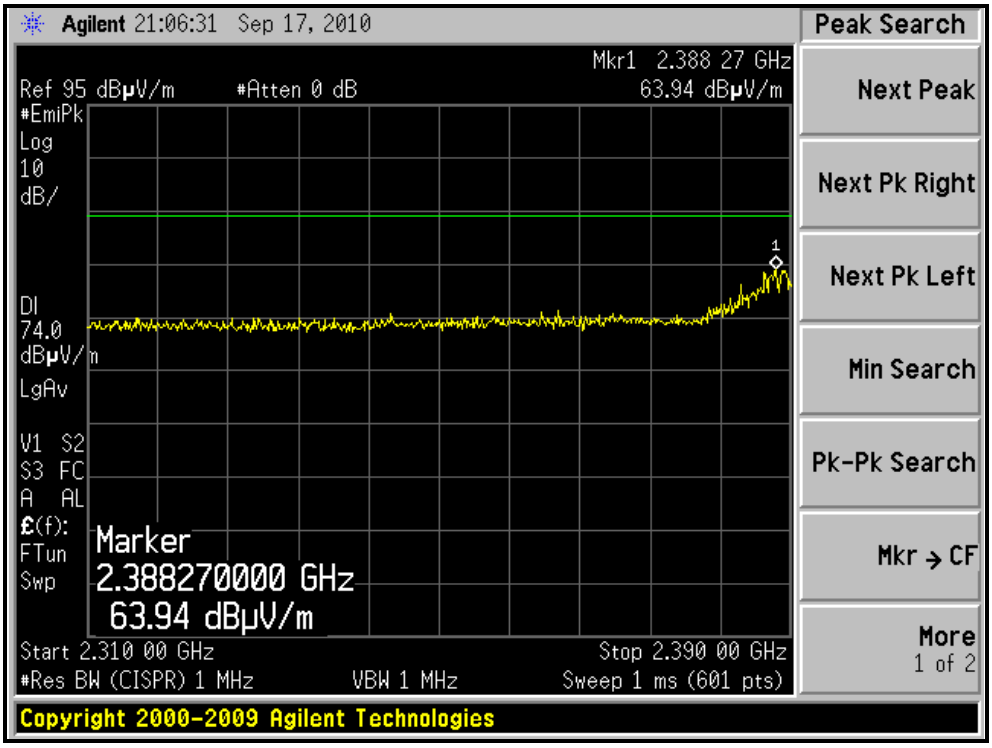
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

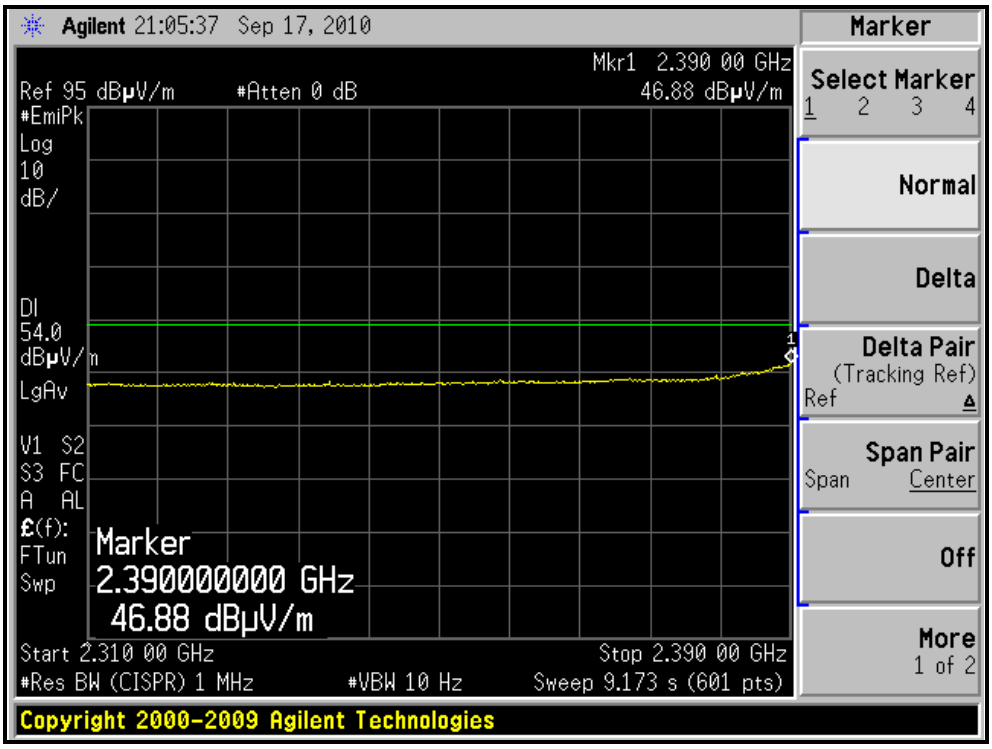
3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

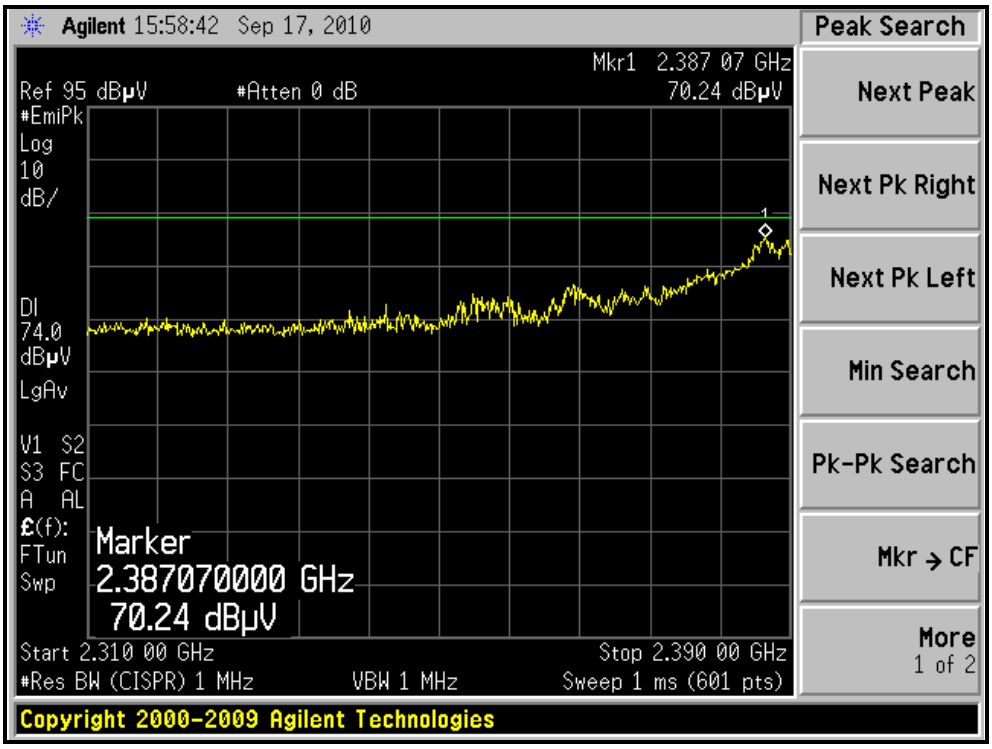
5. " * ": Fundamental frequency.

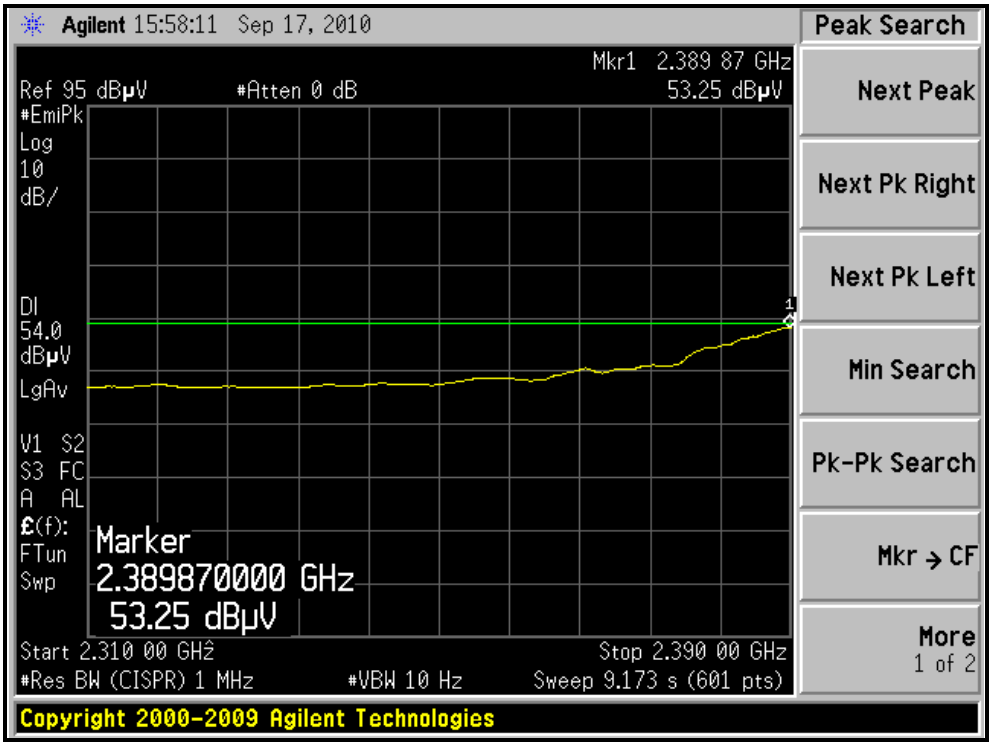
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)





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





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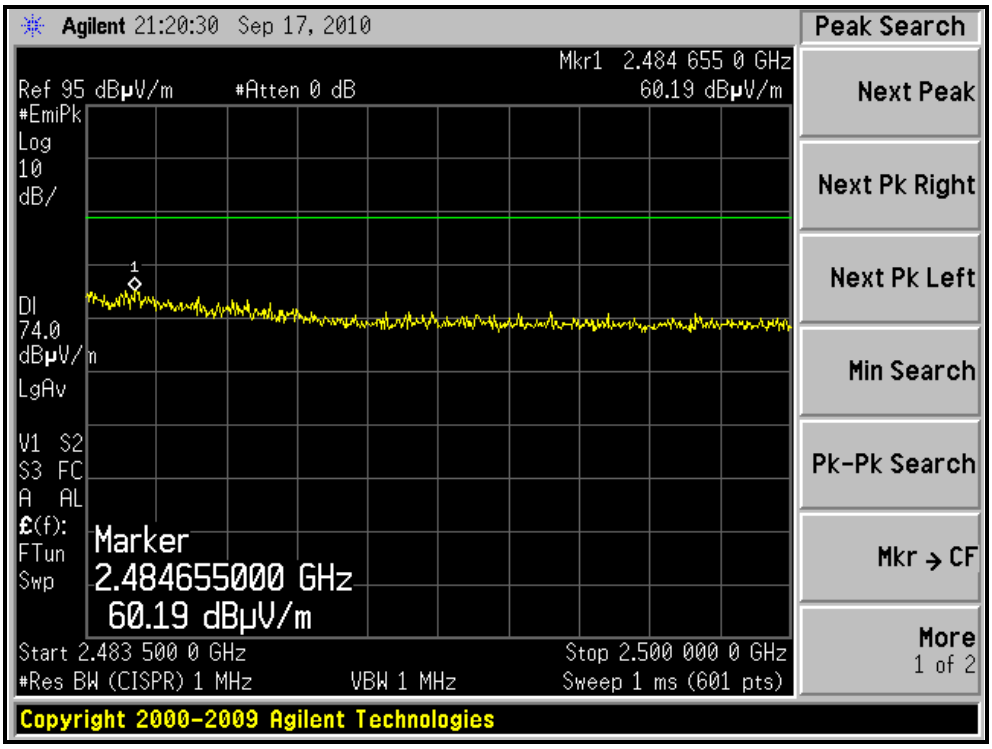
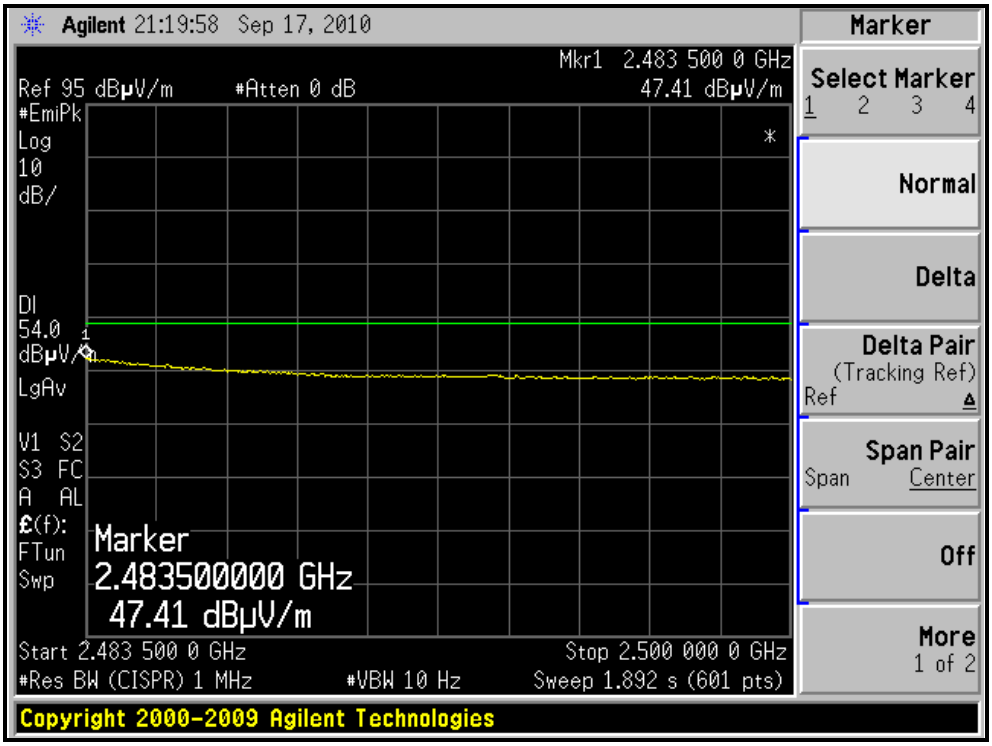
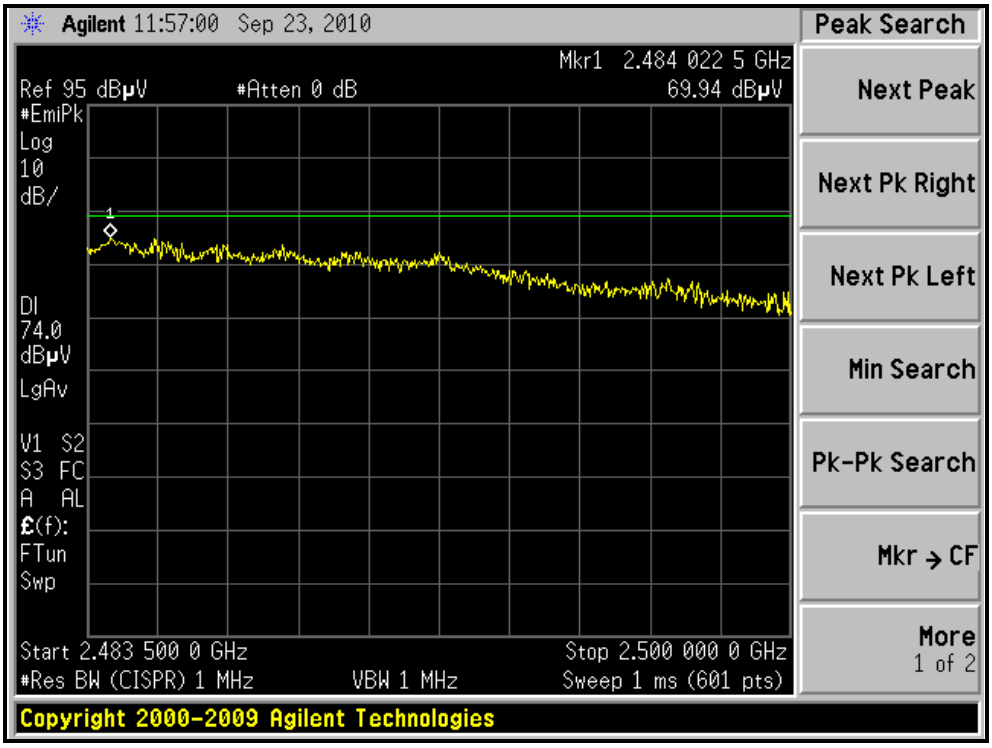
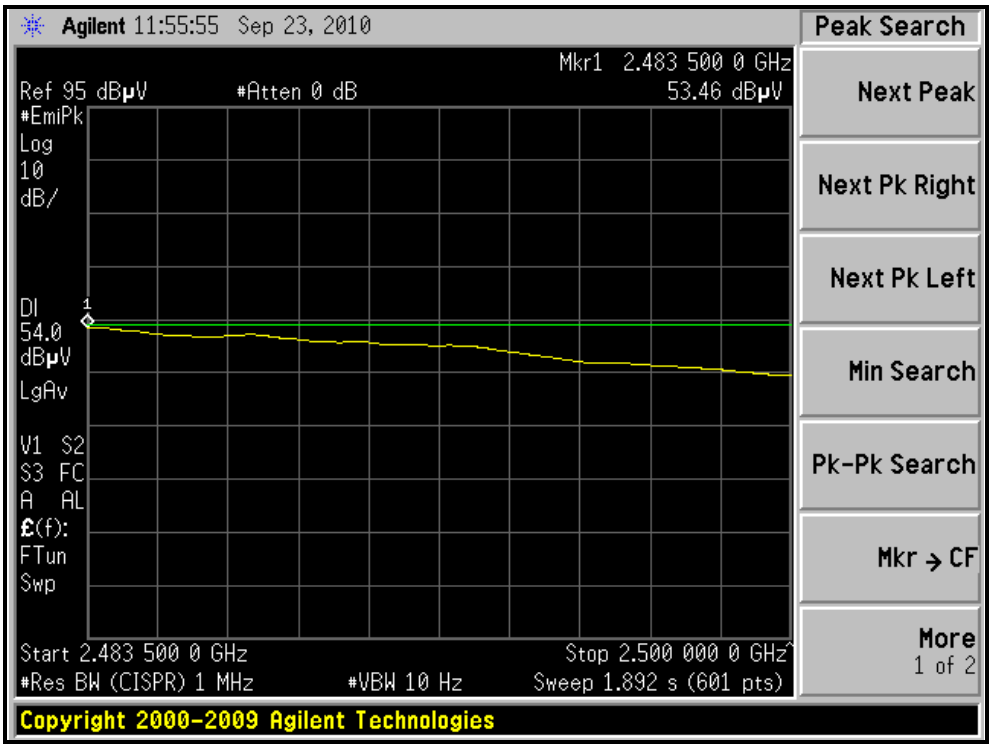




RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, VERTICAL)





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 DATE	CALIBRATED UNTIL
Spectrum Analyzer	FSP 40	100036	Dec. 18, 2009	Dec. 17, 2010

NOTE:

1. 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 or 300kHz 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

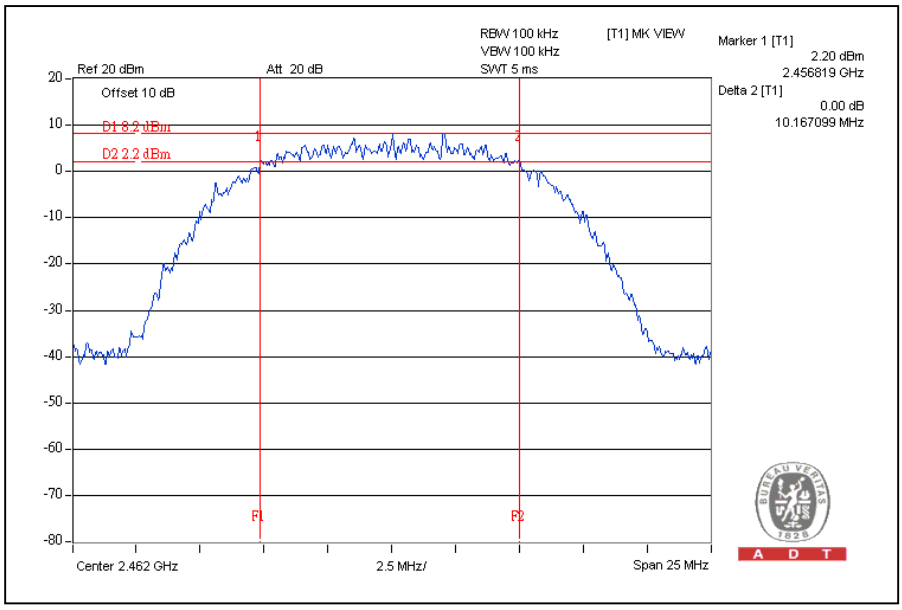
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	8.57	0.5	PASS
6	2437	9.57	0.5	PASS
11	2462	10.16	0.5	PASS

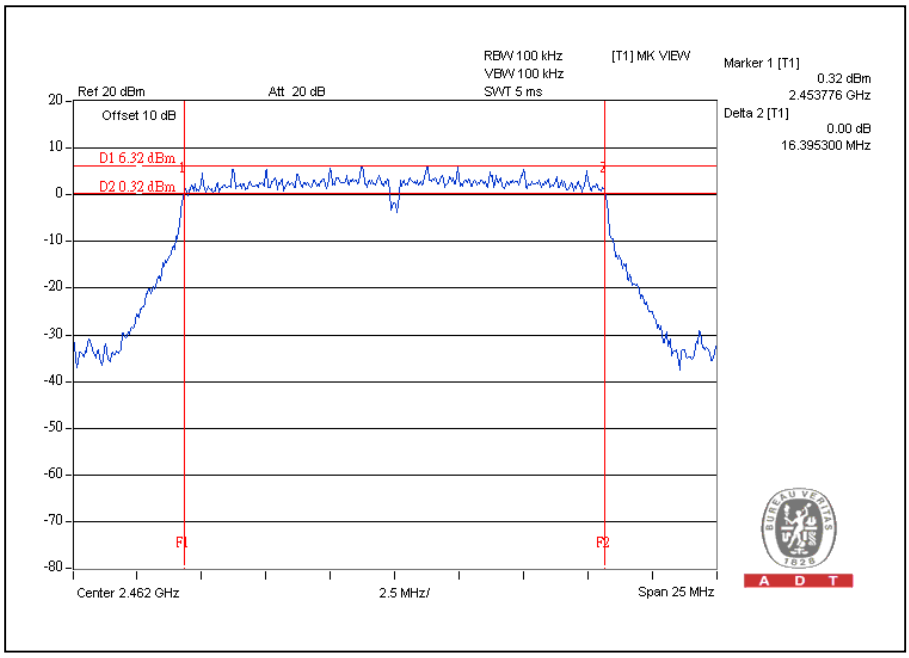
CH11



802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.38	0.5	PASS
6	2437	16.39	0.5	PASS
11	2462	16.39	0.5	PASS

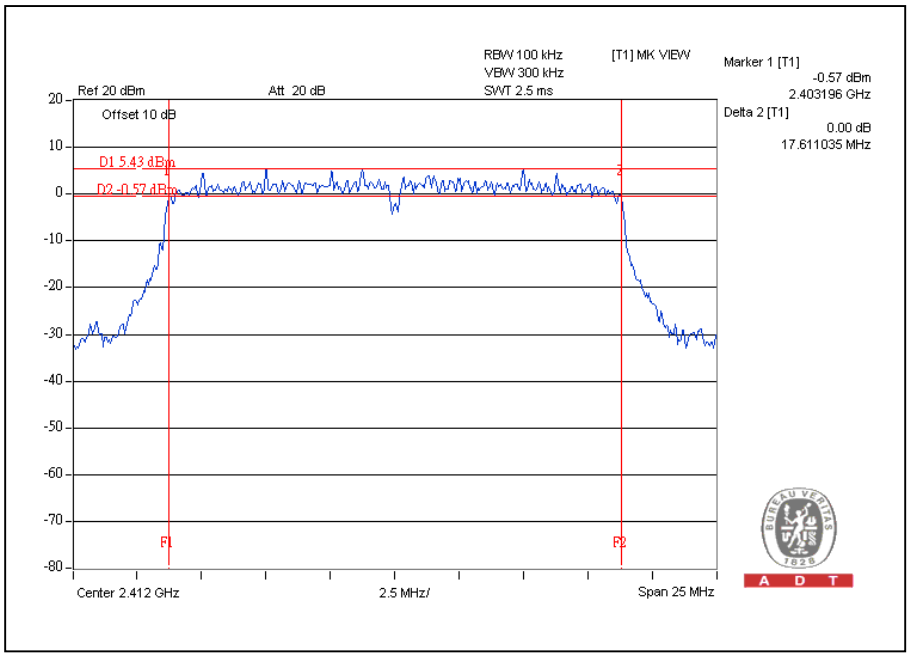
CH11



802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.61	0.5	PASS
6	2437	16.73	0.5	PASS
11	2462	17.12	0.5	PASS

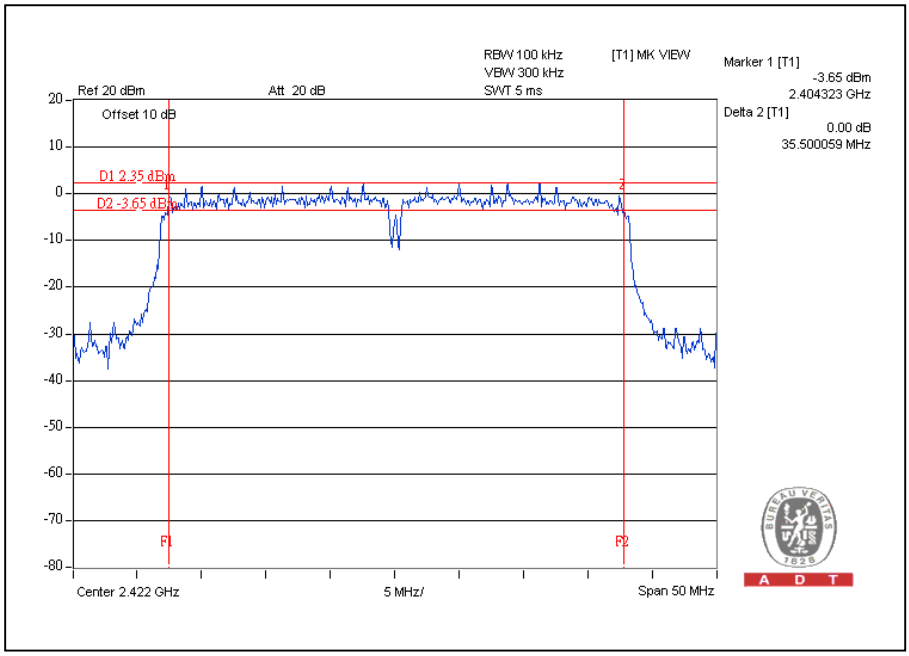
CH1



802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	35.50	0.5	PASS
4	2437	35.26	0.5	PASS
7	2452	35.25	0.5	PASS

CH1



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 DATE	CALIBRATED UNTIL
Anritsu Power Meter	ML2495A	0824006	May 04, 2010	May 03, 2011
Pulse Power Sensor	MA2411B	0738172	May 04, 2010	May 03, 2011

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

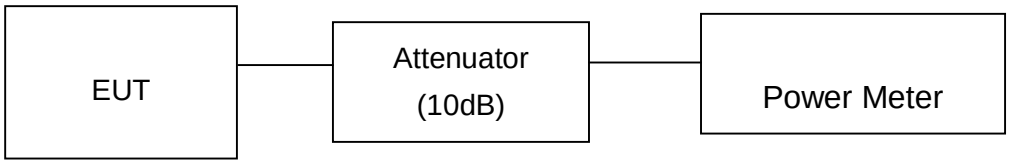
4.4.3 TEST PROCEDURES

1. The transmitter output was connected to the power meter through an attenuator; the bandwidth of the fundamental frequency was measured with the power meter.
2. 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:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	74.1	18.7	29	PASS
6	2437	95.5	19.8	29	PASS
11	2462	102.3	20.1	29	PASS

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	691.8	28.4	29	PASS
6	2437	758.6	28.8	29	PASS
11	2462	758.6	28.8	29	PASS

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	631.0	28.0	29	PASS
6	2437	660.7	28.2	29	PASS
11	2462	707.9	28.5	29	PASS

802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2422	524.8	27.2	29	PASS
4	2437	660.7	28.2	29	PASS
7	2452	562.3	27.5	29	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 DATE	CALIBRATED UNTIL
Spectrum Analyzer	FSP 40	100036	Dec. 18, 2009	Dec. 17, 2010

NOTE:

1. 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

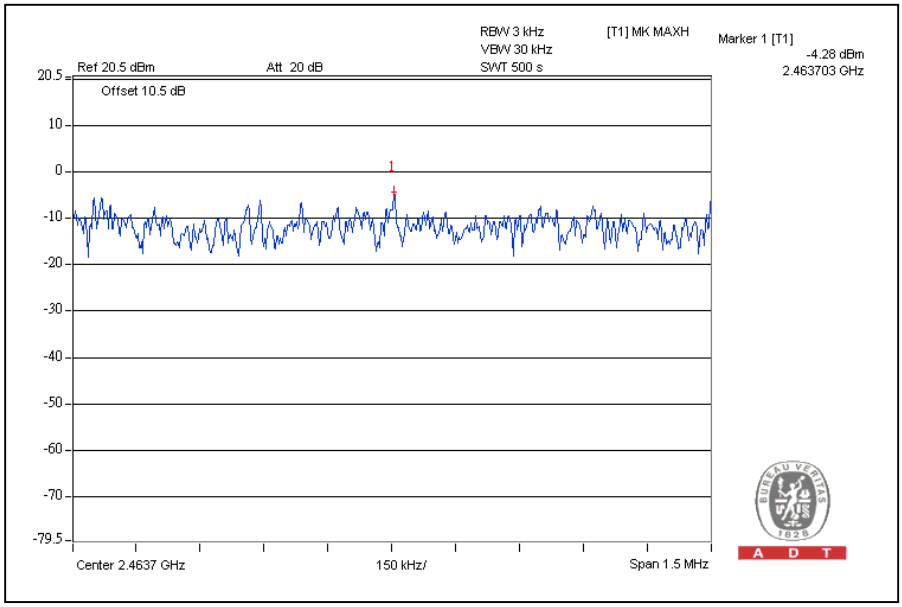
Same as Item 4.3.6

4.5.7 TEST RESULTS

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-5.5	8	PASS
6	2437	-5.7	8	PASS
11	2462	-4.3	8	PASS

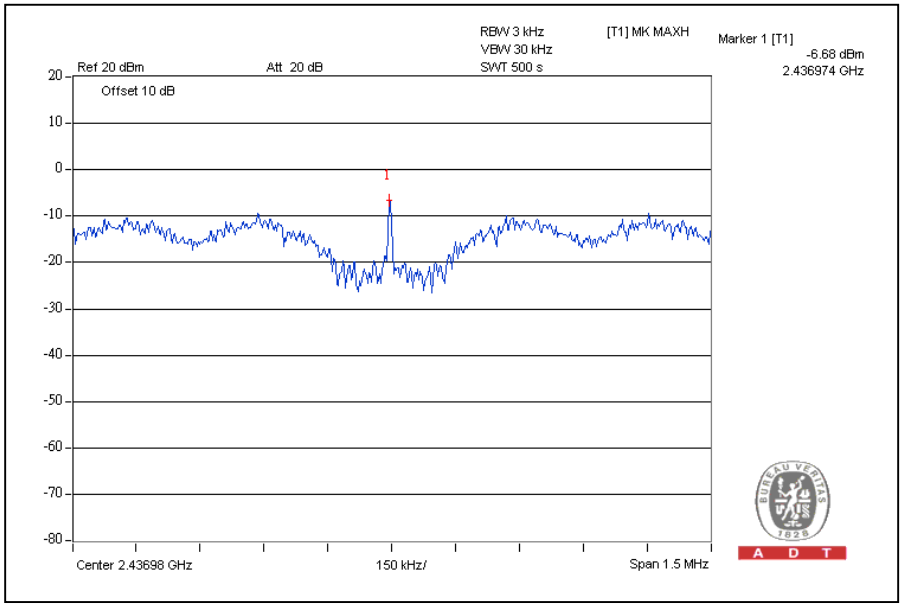
CH11



802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-7.0	8	PASS
6	2437	-6.7	8	PASS
11	2462	-6.8	8	PASS

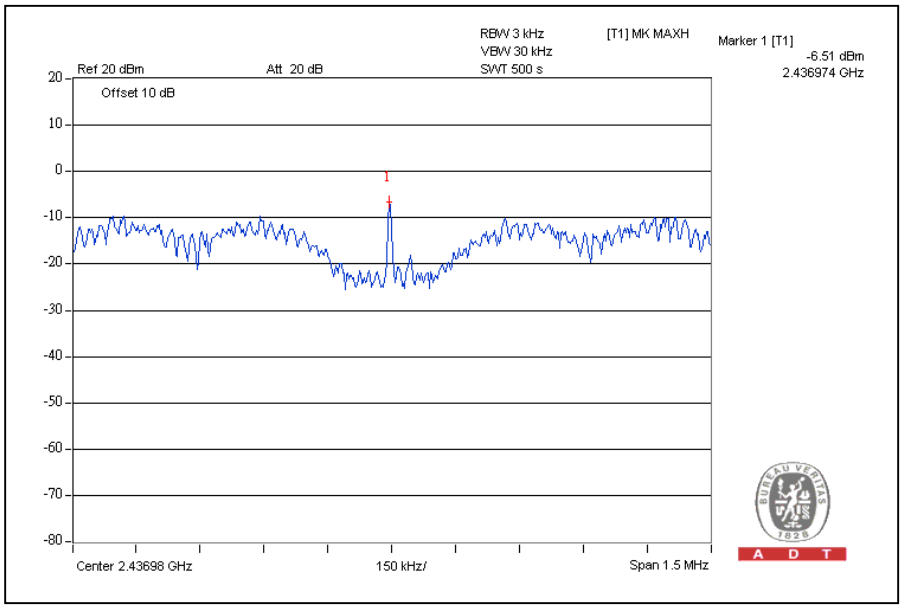
CH6



802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-6.9	8	PASS
6	2437	-6.5	8	PASS
11	2462	-6.7	8	PASS

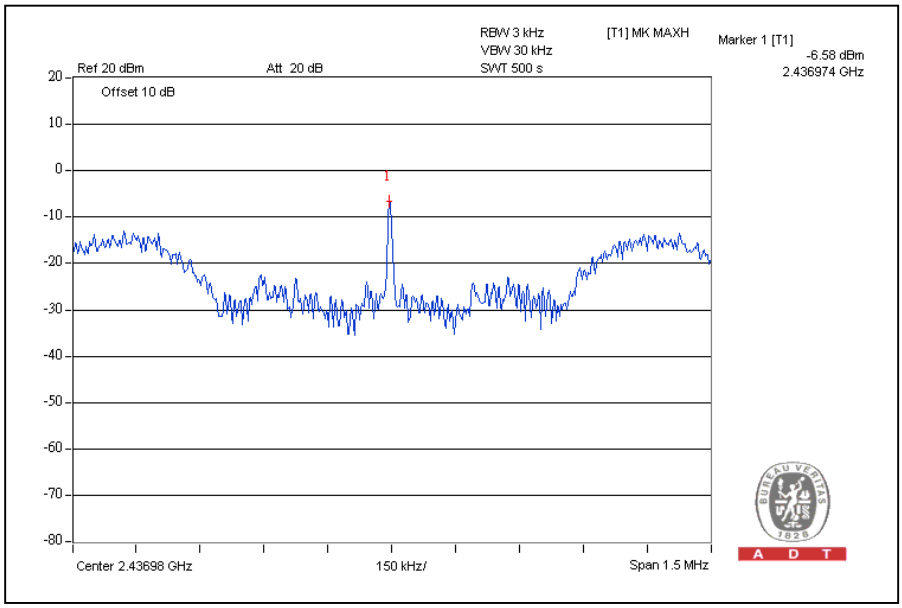
CH6



802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2422	-7.4	8	PASS
4	2437	-6.6	8	PASS
7	2452	-7.2	8	PASS

CH4



4.6 CONDUCTED OUT-BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT-BAND EMISSION 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 DATE	CALIBRATED UNTIL
Spectrum Analyzer	FSP 40	100036	Dec. 18, 2009	Dec. 17, 2010

NOTE:

1. 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 100MHz or 200MHz 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

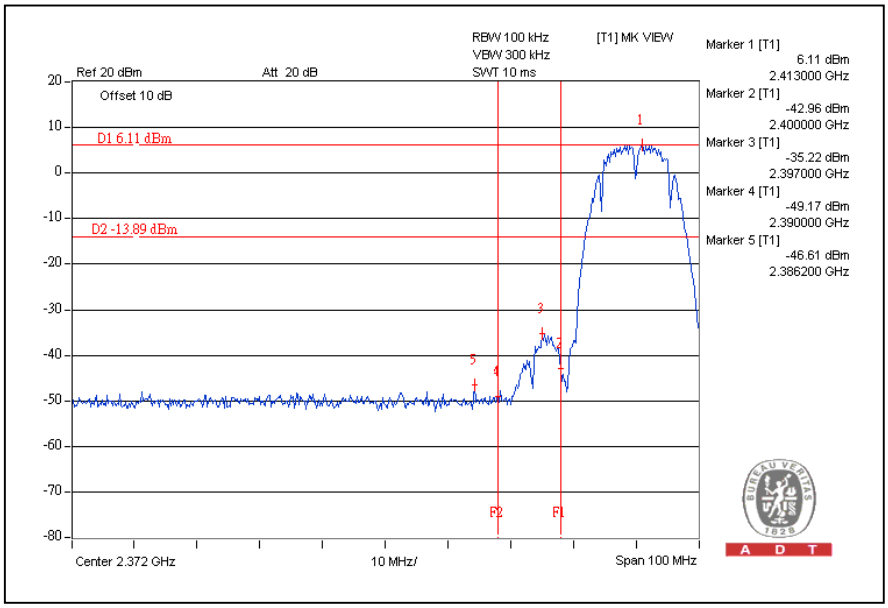
Same as Item 4.3.6

4.6.6 TEST RESULTS

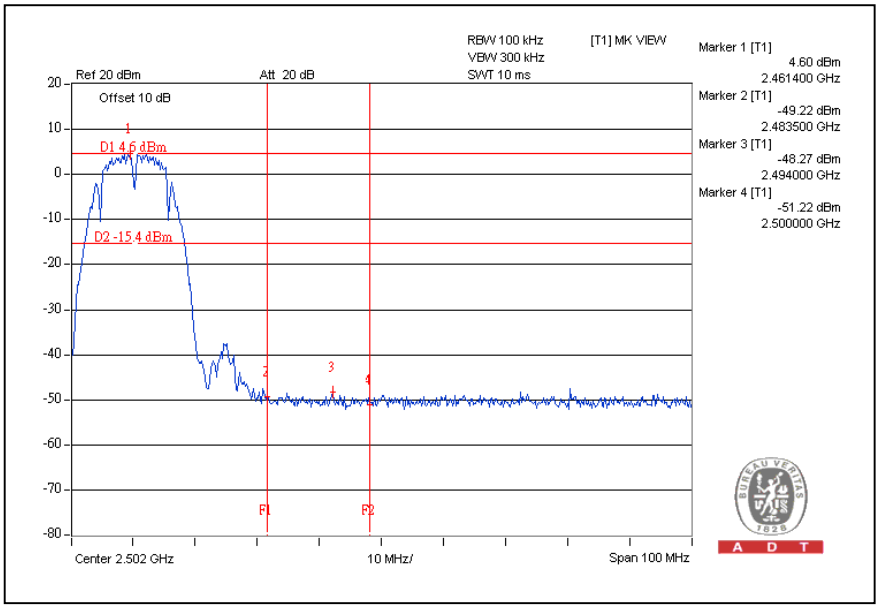
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

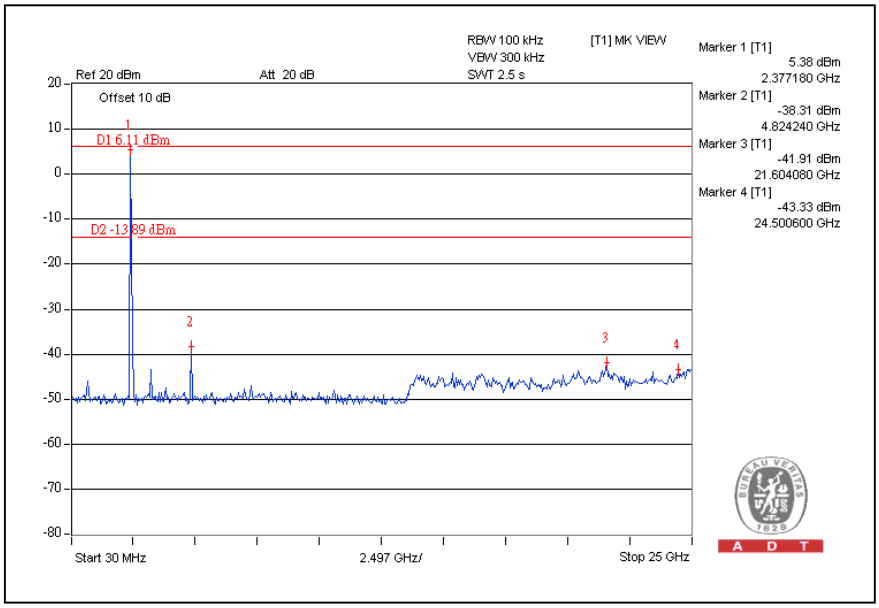
CH1



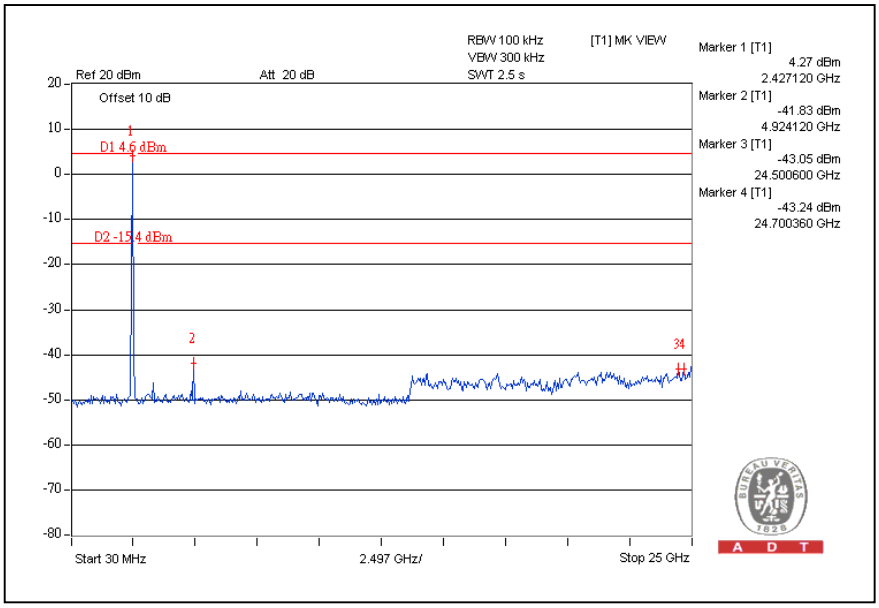
CH11



CH1

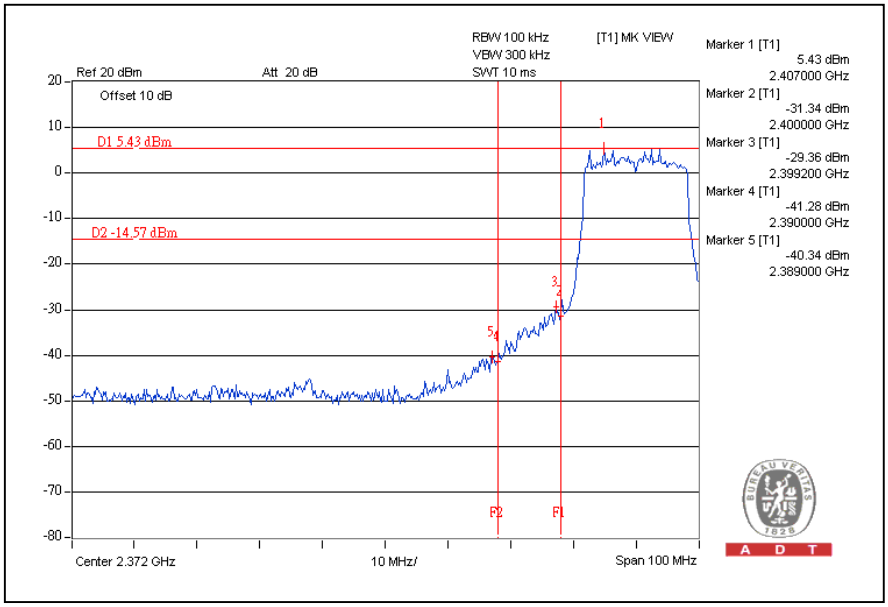

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 6.11 dBm
D2 -13.89 dBm
Marker 1 [T1]
5.38 dBm
2.377180 GHz
Marker 2 [T1]
-38.31 dBm
4.824240 GHz
Marker 3 [T1]
-41.91 dBm
21.604080 GHz
Marker 4 [T1]
-43.33 dBm
24.500600 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

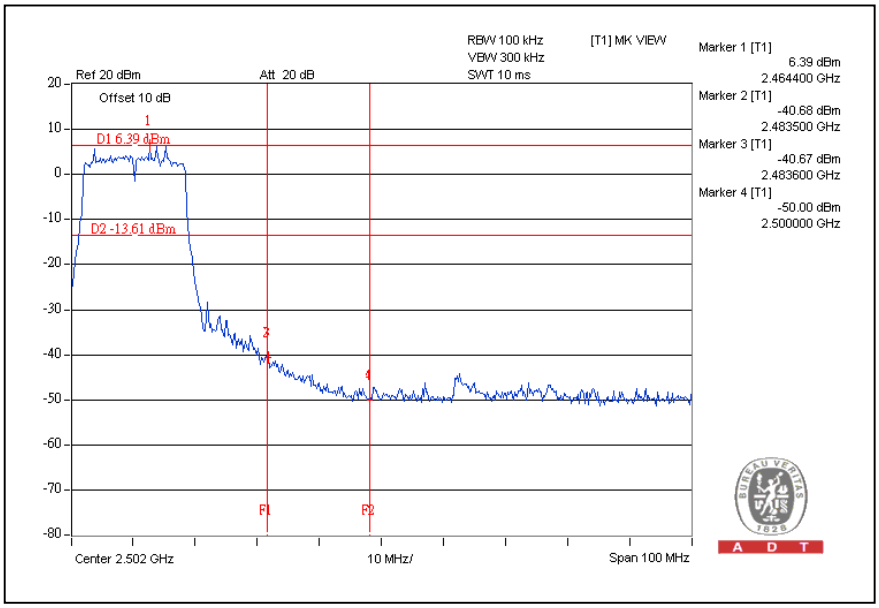

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 4.6 dBm
D2 -15.4 dBm
Marker 1 [T1]
4.27 dBm
2.427120 GHz
Marker 2 [T1]
-41.83 dBm
4.924120 GHz
Marker 3 [T1]
-43.05 dBm
24.500600 GHz
Marker 4 [T1]
-43.24 dBm
24.700360 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION:

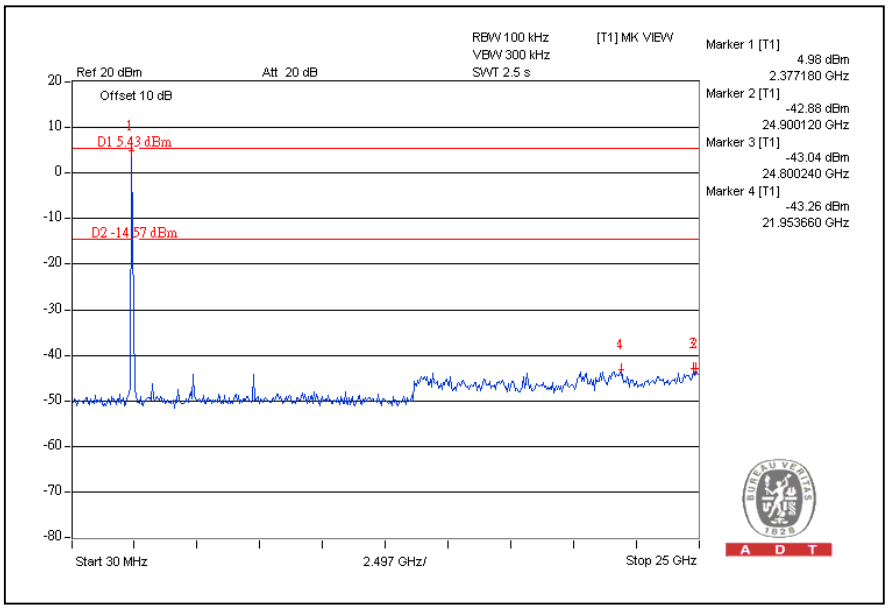
CH1



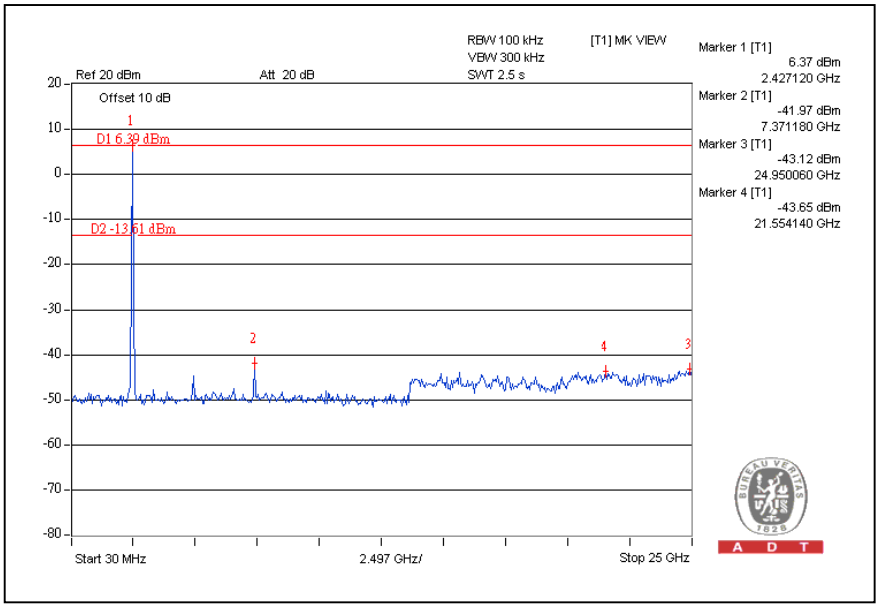
CH11



CH1

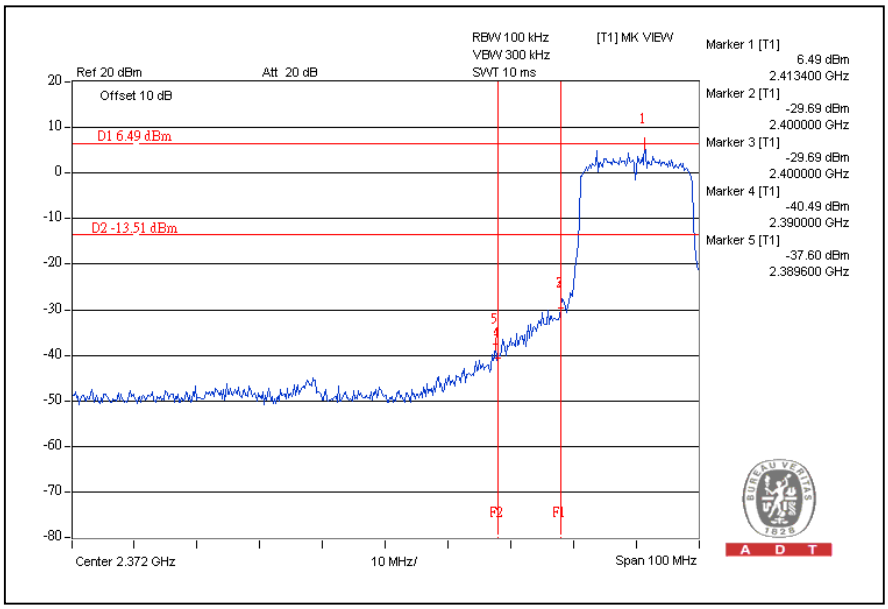

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 5.43 dBm
D2 -14.57 dBm
Marker 1 [T1]
4.98 dBm
2.377180 GHz
Marker 2 [T1]
-42.88 dBm
24.900120 GHz
Marker 3 [T1]
-43.04 dBm
24.800240 GHz
Marker 4 [T1]
-43.26 dBm
21.953660 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

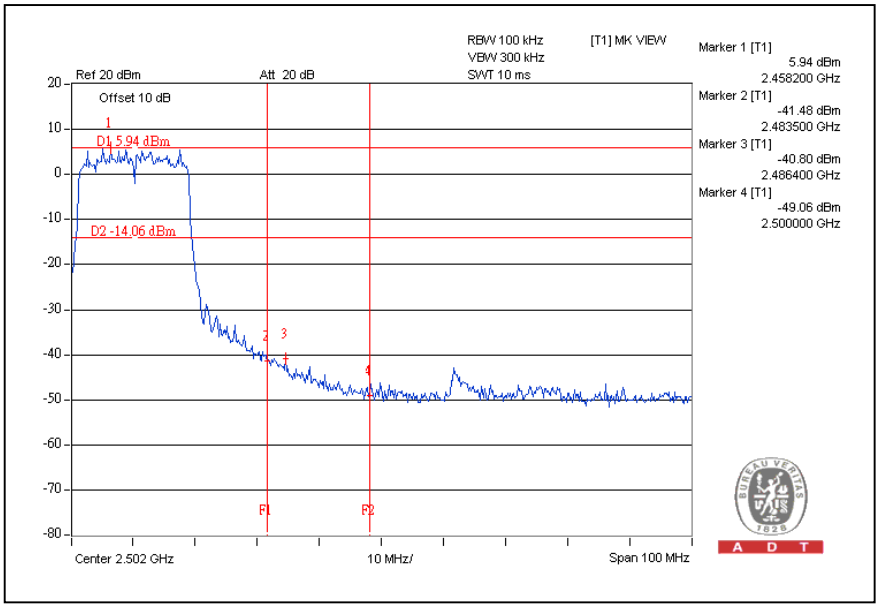

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 6.39 dBm
D2 -13.61 dBm
Marker 1 [T1]
6.37 dBm
2.427120 GHz
Marker 2 [T1]
-41.97 dBm
7.371180 GHz
Marker 3 [T1]
-43.12 dBm
24.950060 GHz
Marker 4 [T1]
-43.65 dBm
21.554140 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz) OFDM MODULATION:

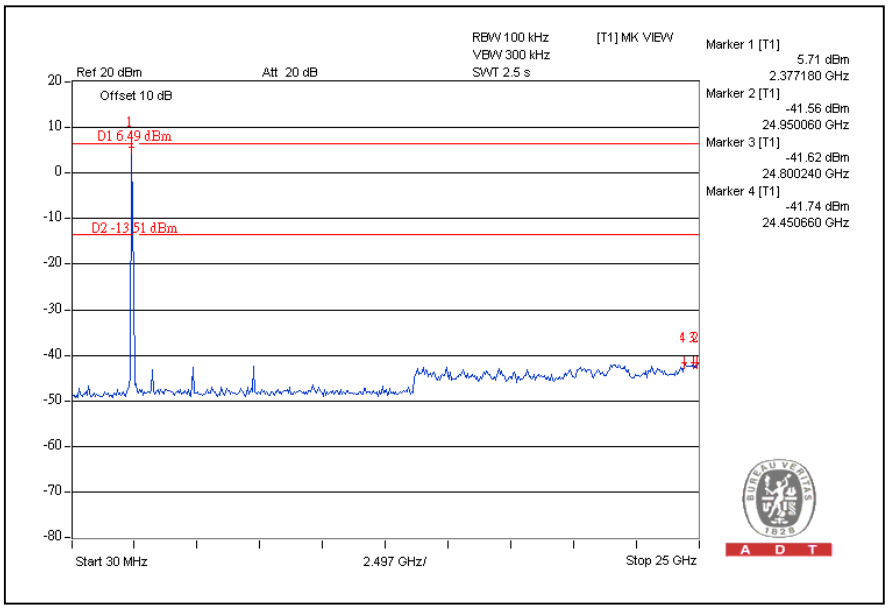
CH1



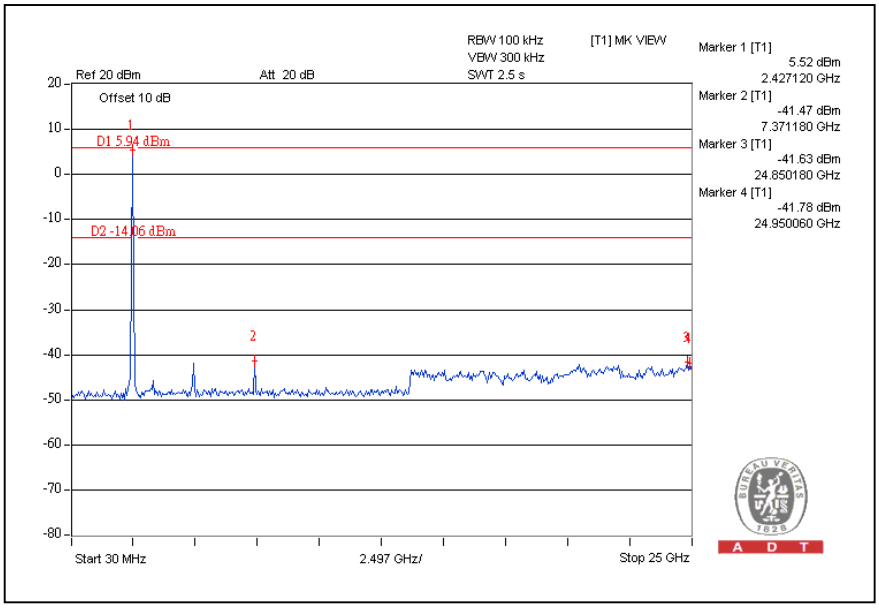
CH11



CH1

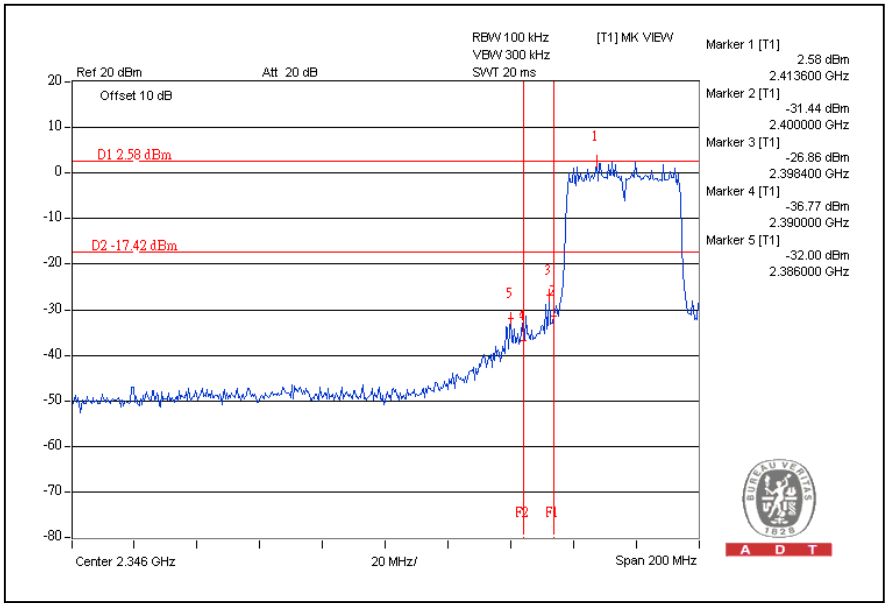

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 6.49 dBm
D2 -13.51 dBm
Marker 1 [T1]
5.71 dBm
2.377180 GHz
Marker 2 [T1]
-41.56 dBm
24.950060 GHz
Marker 3 [T1]
-41.62 dBm
24.800240 GHz
Marker 4 [T1]
-41.74 dBm
24.450660 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

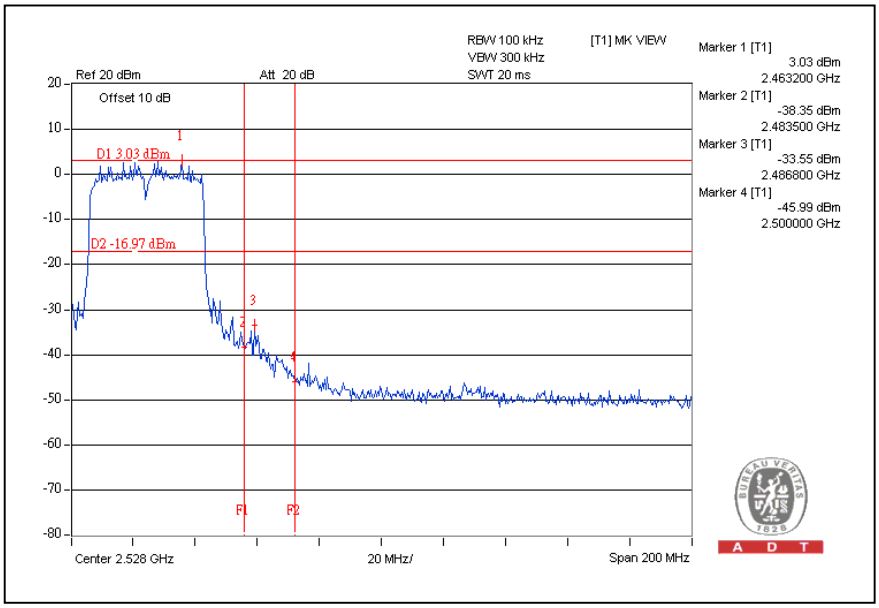

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 5.94 dBm
D2 -14.06 dBm
Marker 1 [T1]
5.52 dBm
2.427120 GHz
Marker 2 [T1]
-41.47 dBm
7.371180 GHz
Marker 3 [T1]
-41.63 dBm
24.850180 GHz
Marker 4 [T1]
-41.78 dBm
24.950060 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (40MHz) OFDM MODULATION:

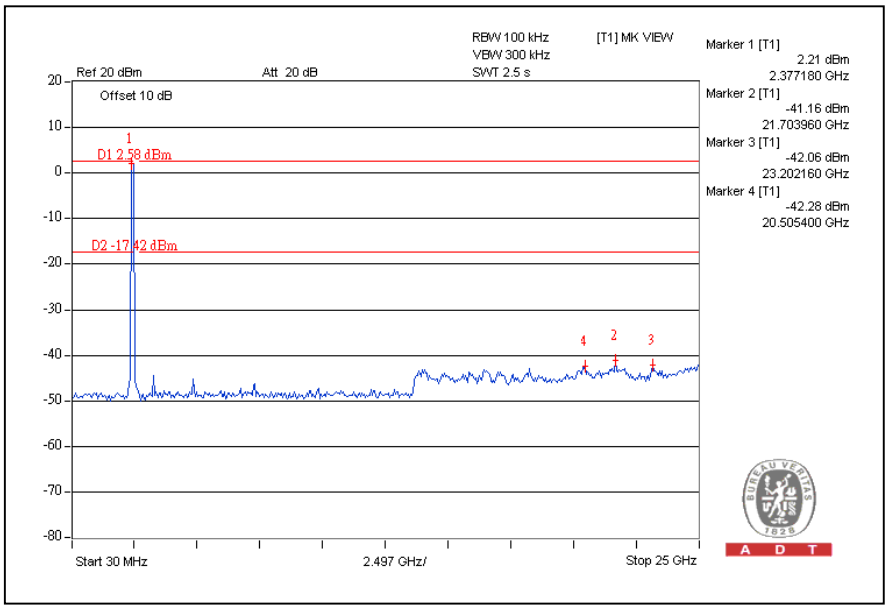
CH1



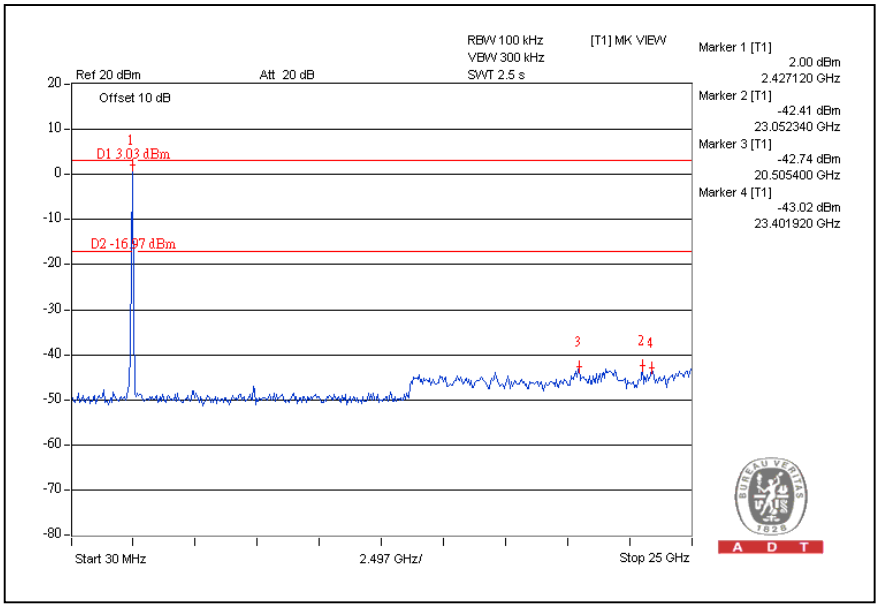
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 2.58 dBm
D2 -17.42 dBm
Marker 1 [T1]
2.21 dBm
2.377180 GHz
Marker 2 [T1]
-41.16 dBm
21.703960 GHz
Marker 3 [T1]
-42.06 dBm
23.202160 GHz
Marker 4 [T1]
-42.28 dBm
20.505400 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20 dBm
Att 20 dB
Offset 10 dB
D1 3.03 dBm
D2 -16.97 dBm
Marker 1 [T1]
2.00 dBm
2.427120 GHz
Marker 2 [T1]
-42.41 dBm
23.052340 GHz
Marker 3 [T1]
-42.74 dBm
20.505400 GHz
Marker 4 [T1]
-43.02 dBm
23.401920 GHz
Start 30 MHz
2.497 GHz/
Stop 25 GHz

5.INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025:

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

Email: service@adt.com.tw
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.

--- END ---