



FCC TEST REPORT

REPORT NO.: RF991115C12

MODEL NO.: TEW-690AP

FCC ID: XU8TEW690AP

RECEIVED: Nov. 15, 2010

TESTED: Nov. 20 to 29, 2010

ISSUED: Dec. 02, 2010

APPLICANT: TRENDnet,Inc.

ADDRESS: 20675 Manhattan Place, Torrance, CA 90501

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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Table of Contents

1.	CERTIFICATION	4
2.	SUMMARY OF TEST RESULTS	5
2.1	MEASUREMENT UNCERTAINTY	6
3.	GENERAL INFORMATION	7
3.1	GENERAL DESCRIPTION OF EUT	7
3.2	DESCRIPTION OF TEST MODES	9
3.2.1	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	10
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	13
3.4	DESCRIPTION OF SUPPORT UNITS.....	14
3.5	CONFIGURATION OF SYSTEM UNDER TEST	15
4.	TEST TYPES AND RESULTS	16
4.1	CONDUCTED EMISSION MEASUREMENT	16
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	16
4.1.2	TEST INSTRUMENTS.....	16
4.1.3	TEST PROCEDURES	17
4.1.4	DEVIATION FROM TEST STANDARD	17
4.1.5	TEST SETUP	18
4.1.6	EUT OPERATING CONDITIONS	18
4.1.7	TEST RESULTS	19
4.2	RADIATED EMISSION MEASUREMENT	21
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	21
4.2.2	TEST INSTRUMENTS.....	22
4.2.3	TEST PROCEDURES	24
4.2.4	DEVIATION FROM TEST STANDARD	24
4.2.5	TEST SETUP	25
4.2.6	EUT OPERATING CONDITIONS	25
4.2.7	TEST RESULTS	26
4.3	6dB BANDWIDTH MEASUREMENT	55
4.3.1	LIMITS OF 6dB BANDWIDTH MEASUREMENT	55
4.3.2	TEST INSTRUMENTS.....	55
4.3.3	TEST PROCEDURE.....	55
4.3.4	DEVIATION FROM TEST STANDARD	55
4.3.5	TEST SETUP	55
4.3.6	EUT OPERATING CONDITIONS	55
4.3.7	TEST RESULTS	56
4.4	MAXIMUM PEAK OUTPUT POWER.....	60
4.4.1	LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT	60
4.4.2	INSTRUMENTS.....	60
4.4.3	TEST PROCEDURES	60
4.4.4	DEVIATION FROM TEST STANDARD	60



A D T

4.4.5	TEST SETUP	60
4.4.6	EUT OPERATING CONDITIONS	60
4.4.7	TEST RESULTS	61
4.5	POWER SPECTRAL DENSITY MEASUREMENT	63
4.5.1	LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	63
4.5.2	TEST INSTRUMENTS.....	63
4.5.3	TEST PROCEDURE.....	63
4.5.4	DEVIATION FROM TEST STANDARD	63
4.5.5	TEST SETUP	63
4.5.6	EUT OPERATING CONDITION.....	63
4.5.7	TEST RESULTS	64
4.6	CONDUCTED OUT-BAND EMISSION MEASUREMENT	68
4.6.1	LIMITS OF CONDUCTED OUT-BAND EMISSION MEASUREMENT.....	68
4.6.2	TEST INSTRUMENTS.....	68
4.6.3	TEST PROCEDURE.....	68
4.6.4	DEVIATION FROM TEST STANDARD	68
4.6.5	EUT OPERATING CONDITION.....	68
4.6.6	TEST RESULTS	68
5.	INFORMATION ON THE TESTING LABORATORIES	77
6.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.....	78



1. CERTIFICATION

PRODUCT: 450Mbps Wireless N Access Point
BRAND NAME: TRENDnet
MODEL NO.: TEW-690AP
TEST SAMPLE: ENGINEERING SAMPLE
TESTED: Nov. 20 to 29, 2010
APPLICANT: TRENDnet, Inc.
STANDARDS: FCC Part 15, Subpart C (Section 15.247)
ANSI C63.4-2003

The above equipment (Model: TEW-690AP) 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 : Midoli Peng , **DATE:** Dec. 02, 2010
(Midoli Peng, Specialist)

TECHNICAL ACCEPTANCE : Hank Chung , **DATE:** Dec. 02, 2010
(Hank Chung, Deputy Manager)

APPROVED BY : May Chen , **DATE:** Dec. 02, 2010
(May Chen, Deputy Manager)



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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 -7.00dB at 0.168MHz
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 4874.00MHz , 2390.0MHz and 2389.87MHz
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 R-SMA not a standard connector.



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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)	3.76 dB
Radiated emissions (1GHz -18GHz)	2.19 dB
Radiated emissions (18GHz -40GHz)	2.56 dB



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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	450Mbps Wireless N Access Point
MODEL NO.	TEW-690AP
FCC ID	XU8TEW690AP
POWER SUPPLY	DC 12V from power adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11 / 5.5 / 2 / 1Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps 802.11n (20MHz): up to 216.7Mbps 802.11n (40MHz): up to 450Mbps
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: 28.2mW 802.11g: 281.8mW 802.11n (20MHz): 509.6mW 802.11n (40MHz): 402.0mW
ANTENNA TYPE	Please see note 1
DATA CABLE	NA
I/O PORTS	RJ-45 port x 1
ASSOCIATED DEVICES	NA

NOTE:

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

Transmitter Circuit	Antenna Type	Antenna Connector	Antenna Gain (dBi)
Chain (0)	External Dipole	R-SMA	2
Chain (1)	External Dipole	R-SMA	2
Chain (2)	External Dipole	R-SMA	2

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

Brand:	BesTec
Model No.:	EA0121WAA
Input power :	AC100/240V 0.5A 50/60Hz
Output power :	DC 12V 1A 12W DC output cable (1.9m)

3. The EUT was pre-tested under the following modes:

Test Mode	Description
Mode A	Level-set
Mode B	Tower-set

For radiated test, the worst case was found in **Mode B**. Therefore only the test data of the modes were recorded in this report.

4. The EUT incorporates a MIMO function with 802.11n.
5. The EUT is 3 * 3 spatial MIMO (3Tx & 3Rx) without beam forming function. The 11b/g legacy mode is limited to single transmitter only.
6. The EUT complies with 802.11n standards and backwards compatible with 802. 11a, 802.11b, 802.11g products.
7. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.



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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		



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3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

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

Where **PLC**: Power Line Conducted Emission **RE < 1G**: Radiated Emission below 1GHz
RE ≥ 1G: Radiated Emission above 1GHz **APCM**: Antenna Port Conducted Measurement

ANTENNA COMBINATION MODE:

COMBINATION MODE	OPERATION MODE	TX CHAIN(0)	TX CHAIN(1)	TX CHAIN(2)
A	802.11 b	√		
B	802.11 g	√		
C	802.11n (20MHz)	√	√	√
D	802.11n (40MHz)	√	√	√

Note:
1. The above information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

POWER LINE CONDUCTED EMISSION TEST:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11n (20MHz)	1 to 11	6	OFDM	BPSK	7.2	C



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RADIATED EMISSION TEST (BELOW 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11n (20MHz)	1 to 11	6	OFDM	BPSK	7.2	C

RADIATED EMISSION TEST (ABOVE 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX COMBINATION
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	C
802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15	D

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)	TX COMBINATION
802.11b	1 to 11	1, 11	DSSS	DBPSK	1	A
802.11g	1 to 11	1, 11	OFDM	BPSK	6	B
802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	7.2	C
802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	15	D

※ After verification, conducted out band emission as show worst chain in report by investigations.



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ANTENNA PORT CONDUCTED MEASUREMENT:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- The EUT have MIMO power save mode, one transmitter may be active (chain 0) while other is inactive (chain 1). Output power is no different compared to operation when both transmitter chains are active. Transmitter power is not increased or decreased for chain 0 when in single chain mode, compared to dual chain active 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)	TX COMBINATION
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1	A
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	B
802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2	C
802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	15	D

※ After verification, bandwidth as show worst chain in report by investigations.

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE \geq 1G	22deg. C, 64%RH, 1013 hPa	120Vac, 60Hz	Kent Liu
RE $<$ 1G	21deg. C, 70%RH, 1013 hPa	120Vac, 60Hz	Eric Lee
PLC	25deg. C, 61%RH, 1013 hPa	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH, 1013 hPa	120Vac, 60Hz	Kent Liu



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.



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3.4 DESCRIPTION OF SUPPORT UNITS

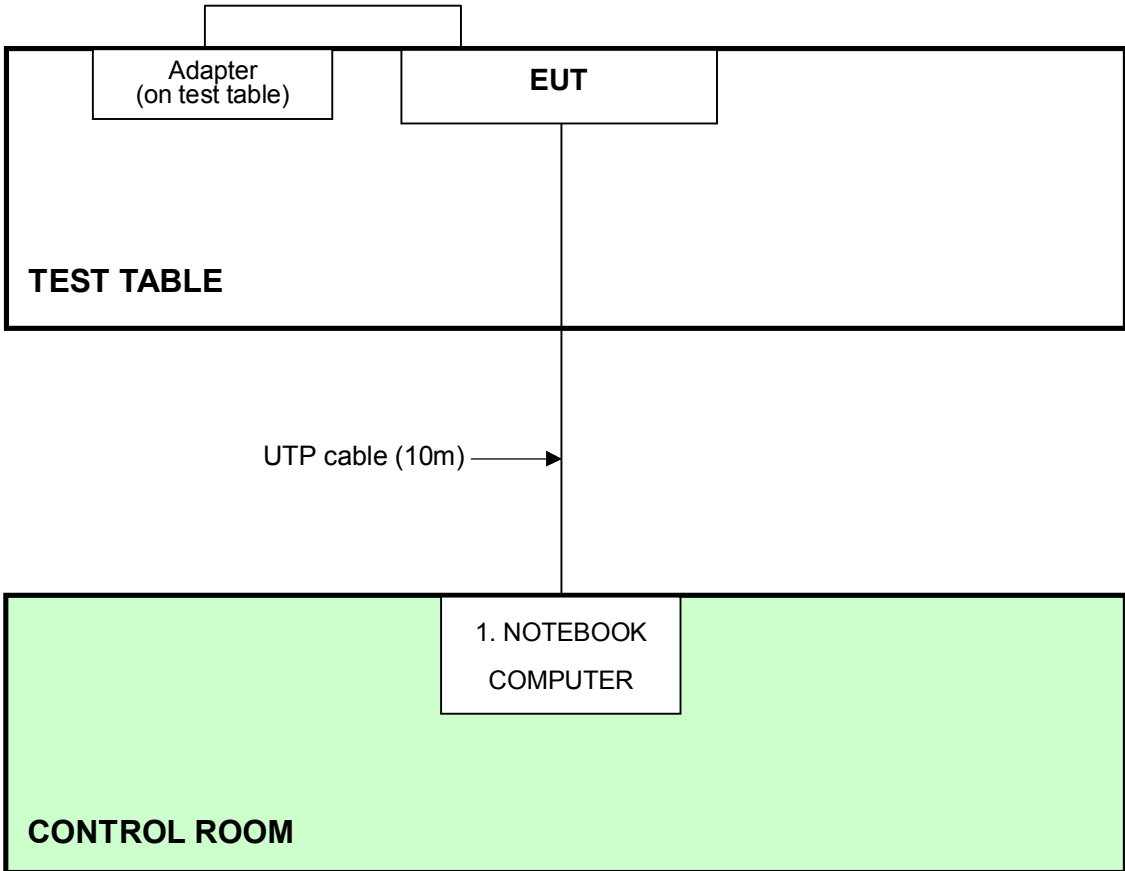
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP32LA	FSLB32S	FCC DoC

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m UTP 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 (dB μ V)	
0.15-0.5	Quasi-peak	Average
0.5-5	66 to 56	56 to 46
5-30	56	46
	60	50

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver	ESCS 30	100375	Mar. 09, 2010	Mar. 08, 2011
Line-Impedance Stabilization Network (for EUT)	NSLK 8127	8127-522	Sep. 08, 2010	Sep. 07, 2011
Line-Impedance Stabilization Network (for Peripheral)	ESH3-Z5	848773/004	Nov. 03, 2010	Nov. 02, 2011
RF Cable (JYBAO)	5DFB	COCCAB-002	Aug. 30, 2010	Aug. 29, 2011
50 ohms Terminator	50	3	Nov. 03, 2010	Nov. 02, 2011
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. C.
3. The VCCI Con C Registration No. is C-3611.

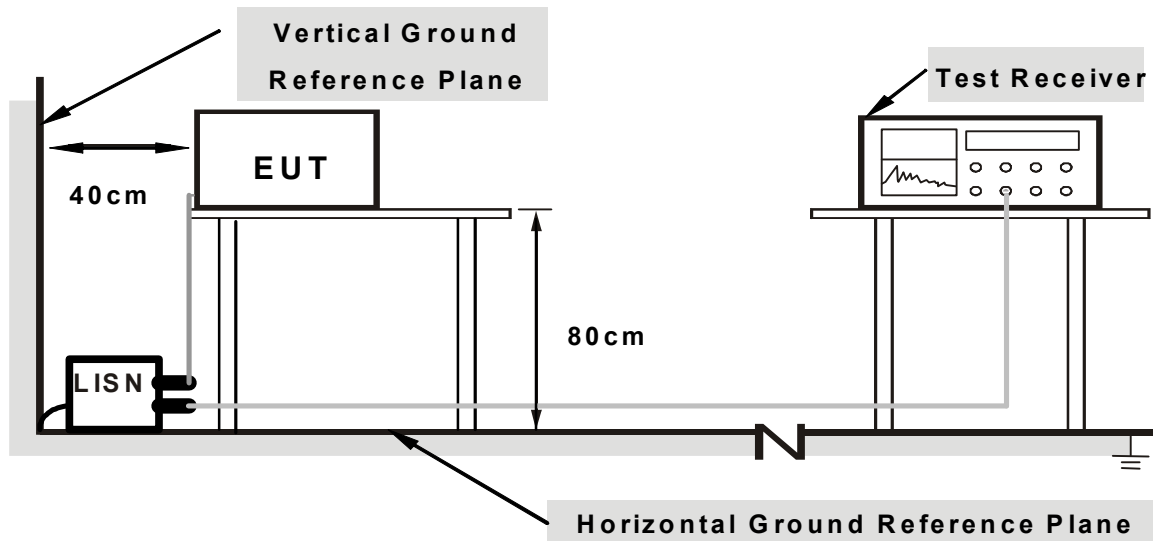
4.1.3 TEST PROCEDURES

- 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. Placed the EUT on testing table.
2. Prepared other computer system (support unit 1) to act as communication partners and placed them outside of testing area.
3. The communication partners ran test program “QA_RT3883-AP-V1.0.3.0” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

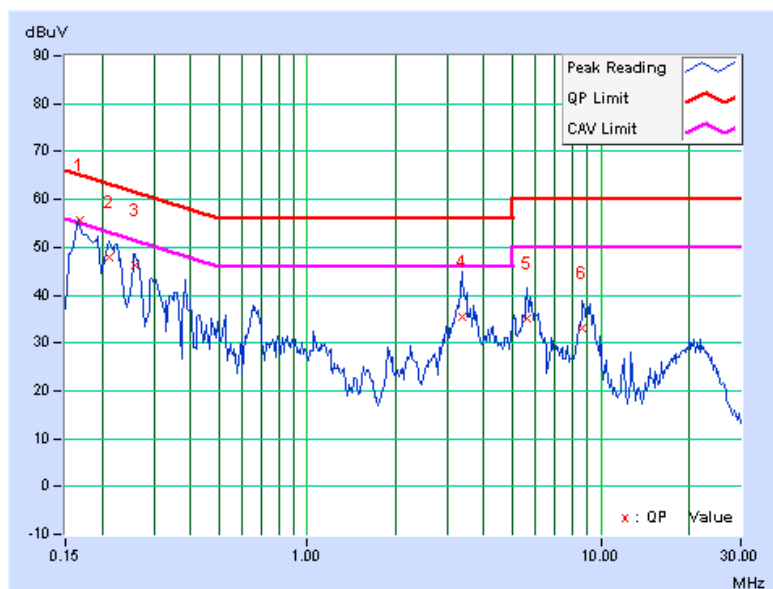
4.1.7 TEST RESULTS

802.11n (20MHz) OFDM MODULATION:

PHASE	Line (L)	6dB BANDWIDTH	9 kHz
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.168	0.11	55.44	47.95	55.55	48.06	65.07	55.07	-9.51	-7.00
2	0.211	0.13	47.90	-	48.03	-	63.17	53.17	-15.14	-
3	0.258	0.13	46.17	-	46.30	-	61.50	51.50	-15.20	-
4	3.352	0.19	35.29	-	35.48	-	56.00	46.00	-20.52	-
5	5.628	0.28	34.70	-	34.98	-	60.00	50.00	-25.02	-
6	8.686	0.42	32.60	-	33.02	-	60.00	50.00	-26.98	-

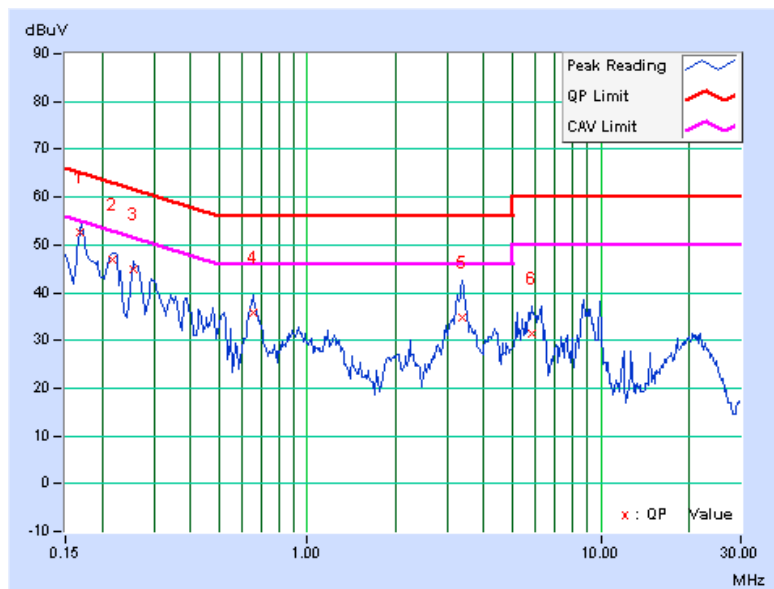
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = 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
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.167	0.12	52.66	-	52.78	-	65.09	55.09	-12.31	-
2	0.216	0.14	46.74	-	46.88	-	62.95	52.95	-16.07	-
3	0.256	0.14	44.61	-	44.75	-	61.57	51.57	-16.82	-
4	0.652	0.15	35.59	-	35.74	-	56.00	46.00	-20.26	-
5	3.368	0.25	34.59	-	34.84	-	56.00	46.00	-21.16	-
6	5.820	0.45	30.98	-	31.43	-	60.00	50.00	-28.57	-

- 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.



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4.2.2 TEST INSTRUMENTS

Below 1GHz test

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	Oct. 25, 2010	Oct. 24, 2011
Mini-Circuits Pre-Amplifier	ZFL-1000VH2B	AMP-ZFL-04	Nov. 16, 2010	Nov. 15, 2011
Agilent Pre-Amplifier	8449B	3008A02465	Mar. 01, 2010	Feb. 28, 2011
Miteq Pre-Amplifier	AFS33-1800265 0-30-8P-44	881786	NA	NA
SCHWARZBECK Trilog Broadband Antenna	VULB 9168	9168-361	Apr. 28, 2010	Apr. 27, 2011
AISI Horn_Antenna	AIH.8018	0000220091110	Nov. 22, 2010	Nov. 21, 2011
SCHWARZBECK Horn_Antenna	BBHA 9170	9170-424	Oct. 08, 2010	Oct. 07, 2011
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.



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Above 1GHz test

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. 16, 2010	Nov. 15, 2011
Agilent Pre-Amplifier	8449B	3008A02578	July 05, 2010	July 04, 2011
Miteq Pre-Amplifier	AFS33-1800265 0-30-8P-44	881786	NA	NA
SCHWARZBECK Trilog Broadband Antenna	VULB 9168	9168-360	Apr. 29, 2010	Apr. 28, 2011
AISI Horn_Antenna	AIH.8018	0000320091110	Nov. 12, 2010	Nov. 11, 2011
SCHWARZBECK Horn_Antenna	BBHA 9170	9170-424	Oct. 08, 2010	Oct. 07, 2011
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.

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 Semi-anechoic 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.

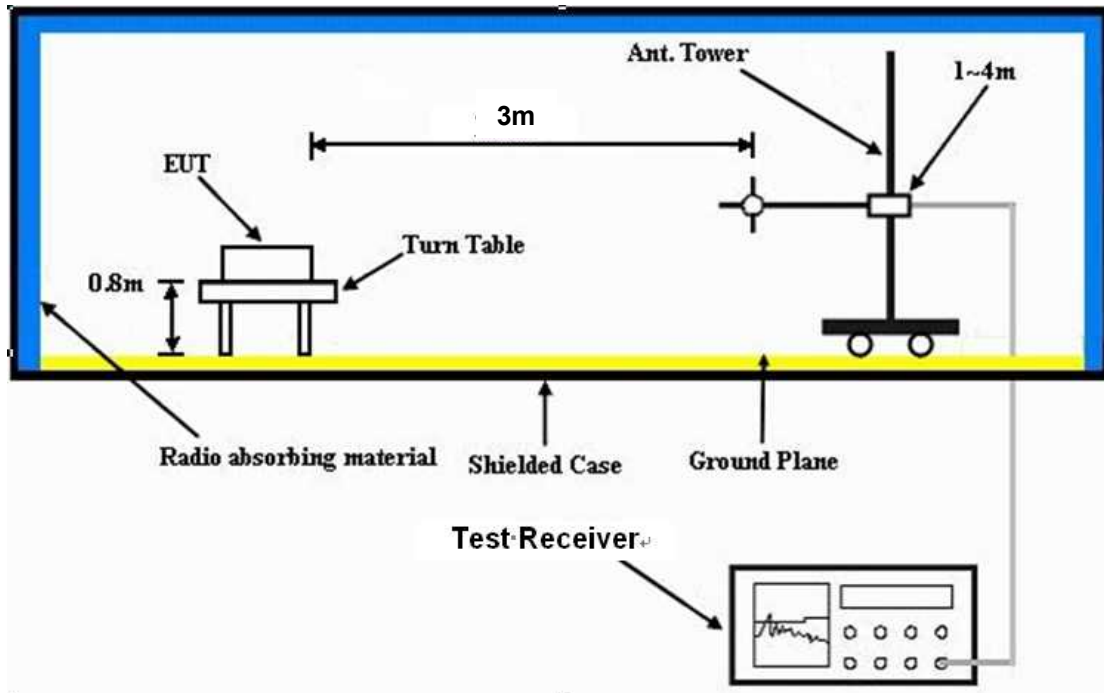
NOTE:

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

BELOW 1GHz WORST-CASE DATA : 802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 70%RH 1012 hPa	TESTED BY	Eric Lee

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	73.70	33.3 QP	40.0	-6.7	1.50 H	360	21.80	11.46
2	95.13	36.0 QP	43.5	-7.5	1.75 H	77	26.18	9.80
3	124.97	38.8 QP	43.5	-4.7	1.50 H	77	25.71	13.13
4	151.15	36.7 QP	43.5	-6.8	2.00 H	256	22.43	14.30
5	250.03	39.7 QP	46.0	-6.4	1.25 H	1	26.70	12.95
6	499.90	38.3 QP	46.0	-7.7	1.50 H	133	18.22	20.11
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	41.84	37.0 QP	40.0	-3.0	1.00 V	305	22.22	14.78
2	124.97	38.4 QP	43.5	-5.1	1.00 V	174	25.23	13.13
3	250.03	39.6 QP	46.0	-6.5	1.75 V	340	26.60	12.95
4	500.02	38.2 QP	46.0	-7.8	1.00 V	125	18.07	20.11
5	624.96	39.4 QP	46.0	-6.6	1.00 V	57	16.67	22.76
6	750.01	41.9 QP	46.0	-4.1	1.50 V	104	17.63	24.28
7	875.06	43.7 QP	46.0	-2.3	1.25 V	74	17.38	26.29

- 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	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	54.7 PK	74.0	-19.3	1.49 H	297	22.50	32.20
2	2390.00	41.5 AV	54.0	-12.5	1.49 H	297	9.30	32.20
3	*2412.00	91.3 PK			1.47 H	293	59.00	32.30
4	*2412.00	88.1 AV			1.47 H	293	55.80	32.30
5	4824.00	50.8 PK	74.0	-23.2	1.45 H	331	11.10	39.70
6	4824.00	44.8 AV	54.0	-9.2	1.45 H	331	5.10	39.70

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	55.7 PK	74.0	-18.3	1.49 V	248	23.50	32.20
2	2390.00	43.4 AV	54.0	-10.6	1.49 V	248	11.20	32.20
3	*2412.00	102.8 PK			1.49 V	246	70.50	32.30
4	*2412.00	99.8 AV			1.49 V	246	67.50	32.30
5	4824.00	56.2 PK	74.0	-17.8	1.02 V	80	16.50	39.70
6	4824.00	53.3 AV	54.0	-0.7	1.02 V	80	13.60	39.70

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	90.6 PK			1.49 H	295	58.30	32.30
2	*2437.00	87.7 AV			1.49 H	295	55.40	32.30
3	4874.00	52.1 PK	74.0	-21.9	1.24 H	109	12.20	39.90
4	4874.00	45.4 AV	54.0	-8.6	1.24 H	109	5.50	39.90
5	7311.00	53.9 PK	74.0	-20.1	1.29 H	38	6.30	47.60
6	7311.00	40.5 AV	54.0	-13.5	1.29 H	38	-7.10	47.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.6 PK			1.49 V	244	69.30	32.30
2	*2437.00	99.3 AV			1.49 V	244	67.00	32.30
3	4874.00	55.7 PK	74.0	-18.3	1.12 V	111	15.80	39.90
4	4874.00	53.4 AV	54.0	-0.6	1.12 V	111	13.50	39.90
5	7311.00	53.6 PK	74.0	-20.4	1.44 V	63	6.00	47.60
6	7311.00	40.3 AV	54.0	-13.7	1.44 V	63	-7.30	47.60

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	90.4 PK			1.49 H	297	58.00	32.40
2	*2462.00	87.2 AV			1.49 H	297	54.80	32.40
3	2483.50	54.7 PK	74.0	-19.3	1.49 H	297	22.20	32.50
4	2483.50	40.8 AV	54.0	-13.2	1.49 H	297	8.30	32.50
5	4924.00	51.7 PK	74.0	-22.3	1.22 H	107	11.60	40.10
6	4924.00	44.6 AV	54.0	-9.4	1.22 H	107	4.50	40.10
7	7386.00	53.3 PK	74.0	-20.7	1.22 H	33	5.80	47.50
8	7386.00	40.6 AV	54.0	-13.4	1.22 H	33	-6.90	47.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

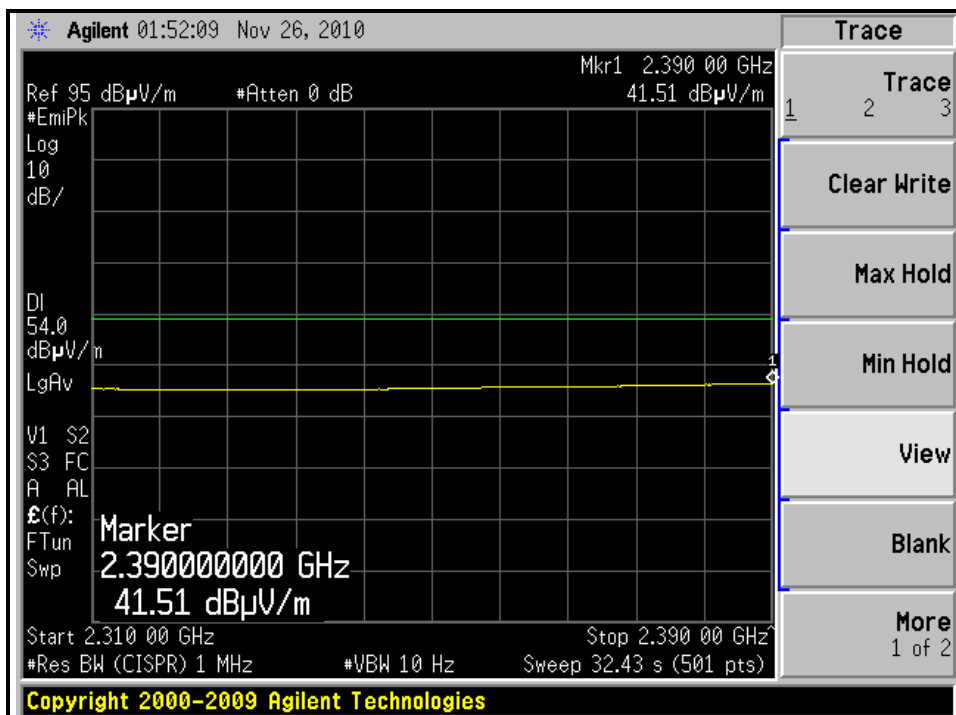
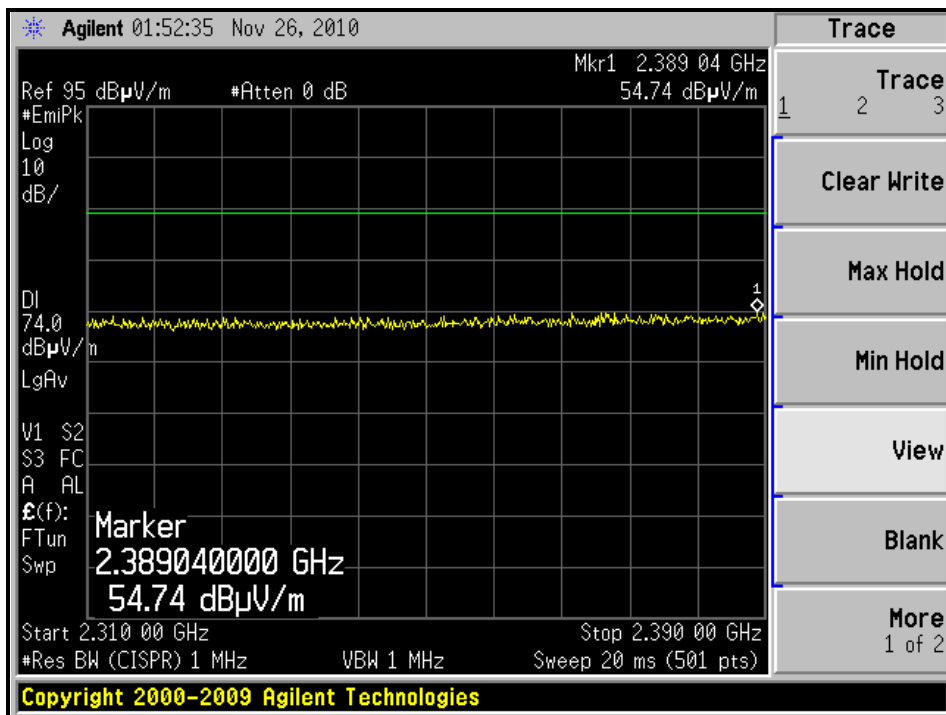
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	101.2 PK			1.42 V	247	68.80	32.40
2	*2462.00	98.8 AV			1.42 V	247	66.40	32.40
3	2483.92	55.6 PK	74.0	-18.4	1.42 V	247	23.10	32.50
4	2483.92	42.8 AV	54.0	-11.2	1.42 V	247	10.30	32.50
5	4924.00	56.5 PK	74.0	-17.5	1.00 V	75	16.40	40.10
6	4924.00	53.5 AV	54.0	-0.5	1.00 V	75	13.40	40.10
7	7386.00	53.5 PK	74.0	-20.5	1.42 V	68	6.00	47.50
8	7386.00	40.5 AV	54.0	-13.5	1.42 V	68	-7.00	47.50

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



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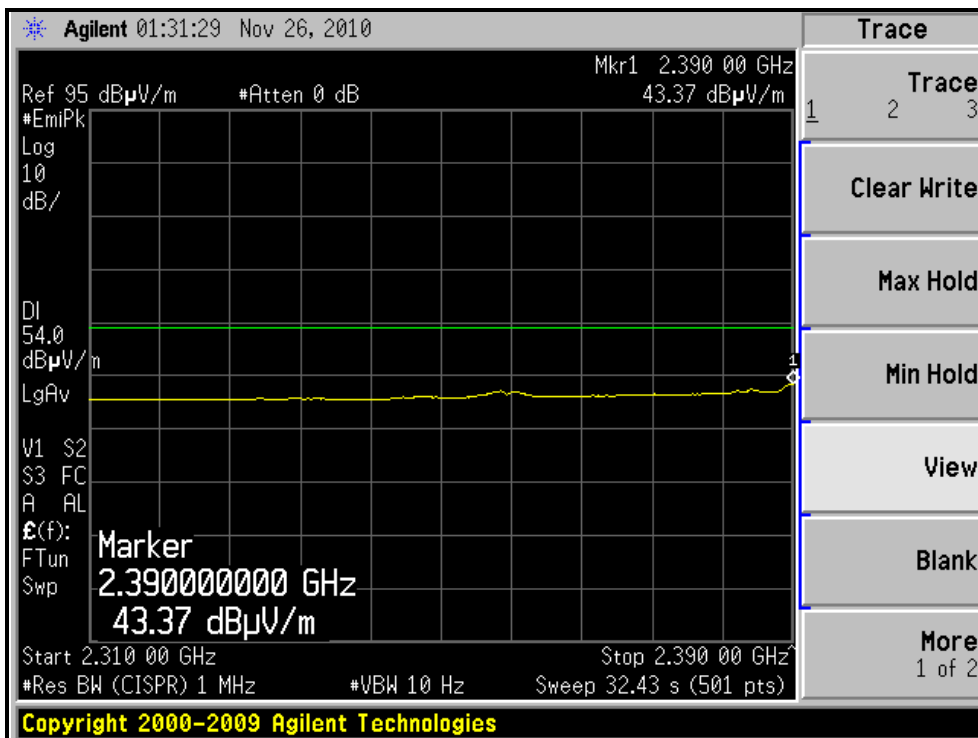
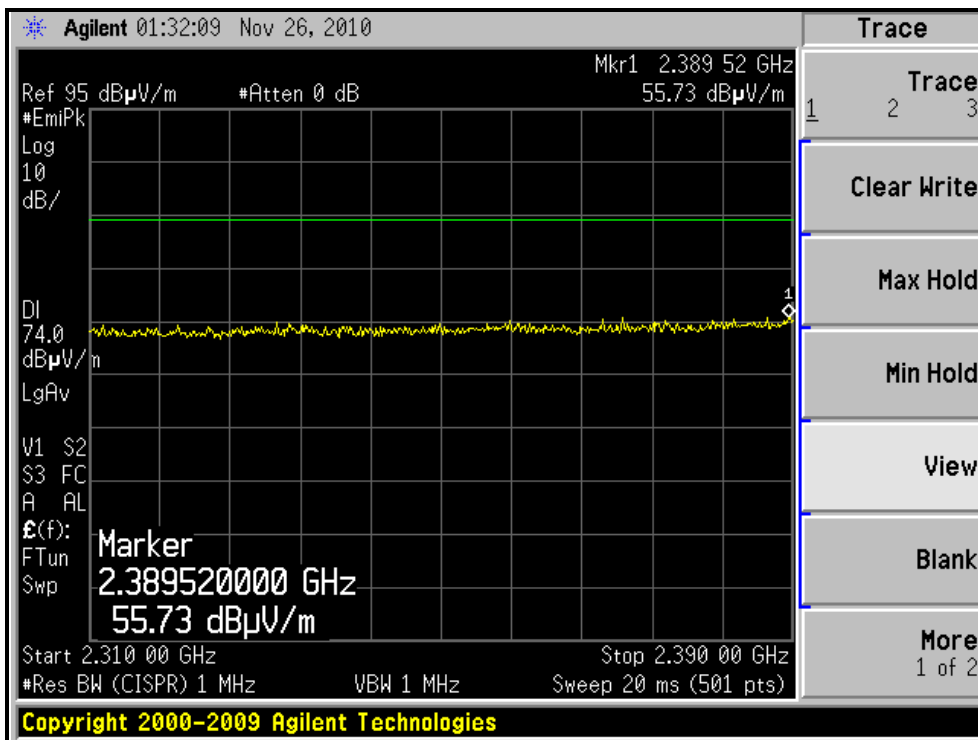
RESTRICTED BANDEDGE (802.11b MODE, CH1, HORIZONTAL)





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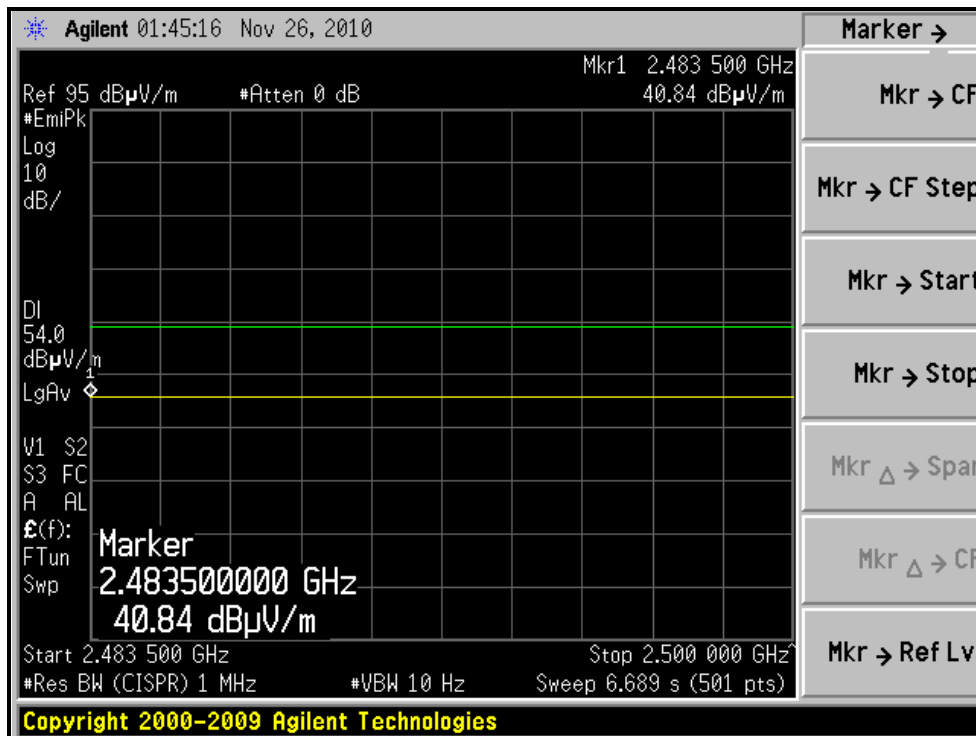
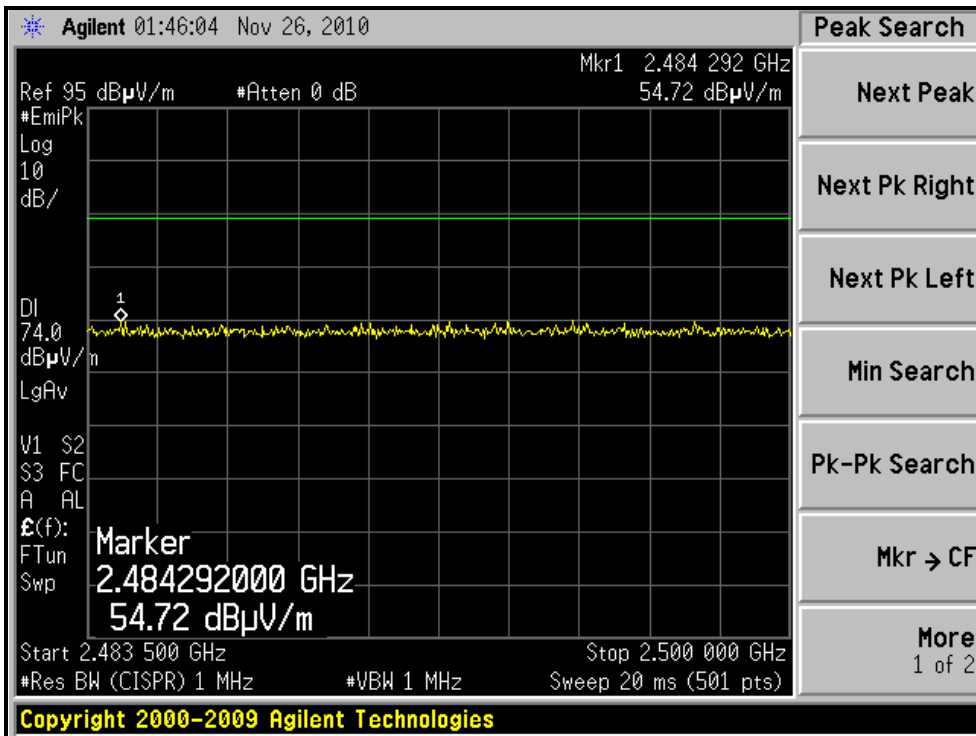
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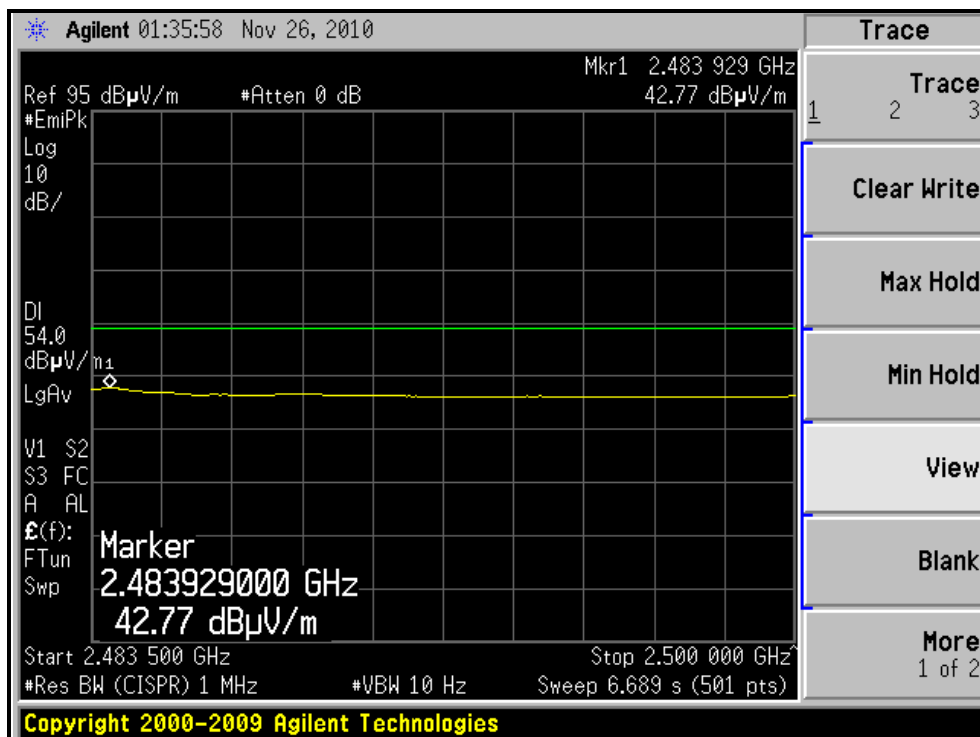
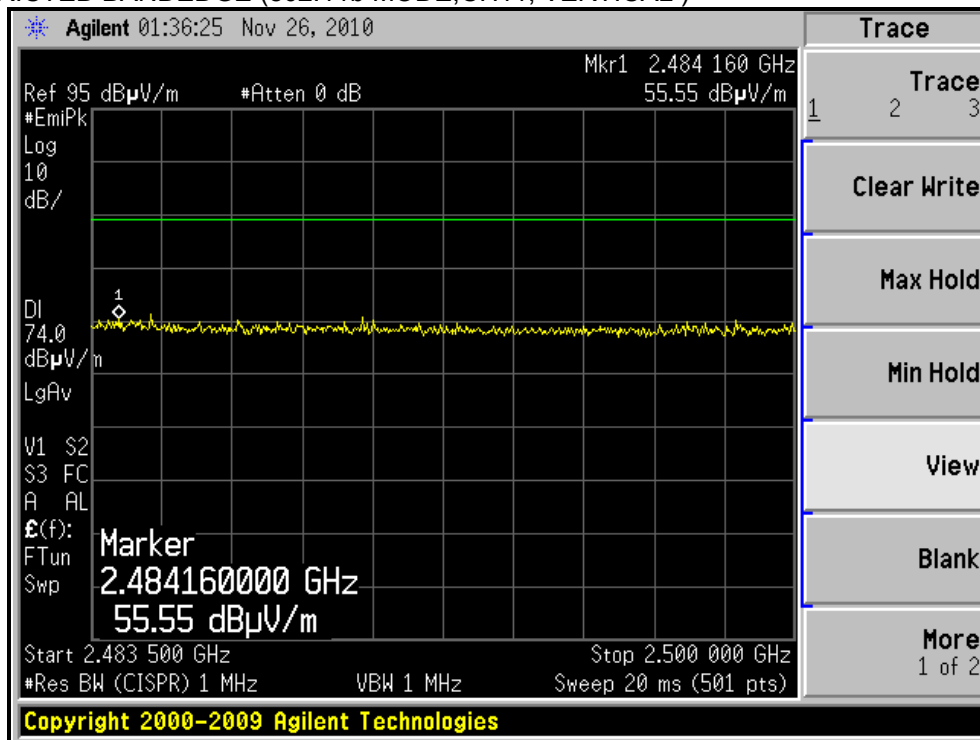
RESTRICTED BANDEDGE (802.11b MODE,CH11, HORIZONTAL)





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RESTRICTED BANDEDGE (802.11b MODE, CH11, VERTICAL)





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802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	57.5 PK	74.0	-16.5	1.53 H	303	25.30	32.20
2	2390.00	43.5 AV	54.0	-10.5	1.53 H	303	11.30	32.20
3	*2412.00	97.0 PK			1.53 H	303	64.70	32.30
4	*2412.00	87.8 AV			1.53 H	303	55.50	32.30
5	4824.00	53.2 PK	74.0	-20.8	1.49 H	326	13.50	39.70
6	4824.00	39.6 AV	54.0	-14.4	1.49 H	326	-0.10	39.70

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	67.7 PK	74.0	-6.3	1.54 V	253	35.50	32.20
2	2390.00	53.4 AV	54.0	-0.6	1.54 V	253	21.20	32.20
3	*2412.00	108.9 PK			1.57 V	249	76.60	32.30
4	*2412.00	99.9 AV			1.57 V	249	67.60	32.30
5	4824.00	55.5 PK	74.0	-18.5	1.41 V	166	15.80	39.70
6	4824.00	41.7 AV	54.0	-12.3	1.41 V	166	2.00	39.70

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	101.7 PK			1.55 H	307	69.40	32.30
2	*2437.00	91.2 AV			1.55 H	307	58.90	32.30
3	4874.00	56.2 PK	74.0	-17.8	1.49 H	329	16.30	39.90
4	4874.00	41.6 AV	54.0	-12.4	1.49 H	329	1.70	39.90
5	7311.00	53.6 PK	74.0	-20.4	1.25 H	35	6.00	47.60
6	7311.00	40.4 AV	54.0	-13.6	1.25 H	35	-7.20	47.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	113.8 PK			1.46 V	249	81.50	32.30
2	*2437.00	104.4 AV			1.46 V	249	72.10	32.30
3	4874.00	61.6 PK	74.0	-12.4	1.09 V	15	21.70	39.90
4	4874.00	47.5 AV	54.0	-6.5	1.09 V	15	7.60	39.90
5	7311.00	57.3 PK	74.0	-16.7	1.42 V	166	9.70	47.60
6	7311.00	43.1 AV	54.0	-10.9	1.42 V	166	-4.50	47.60

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	97.3 PK			1.52 H	301	64.90	32.40
2	*2462.00	87.4 AV			1.52 H	301	55.00	32.40
3	2483.50	55.7 PK	74.0	-18.3	1.53 H	303	23.20	32.50
4	2483.50	41.8 AV	54.0	-12.2	1.53 H	303	9.30	32.50
5	4924.00	52.6 PK	74.0	-21.4	1.44 H	317	12.50	40.10
6	4924.00	38.9 AV	54.0	-15.1	1.44 H	317	-1.20	40.10
7	7386.00	52.9 PK	74.0	-21.1	1.25 H	37	5.40	47.50
8	7386.00	39.8 AV	54.0	-14.2	1.25 H	37	-7.70	47.50

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

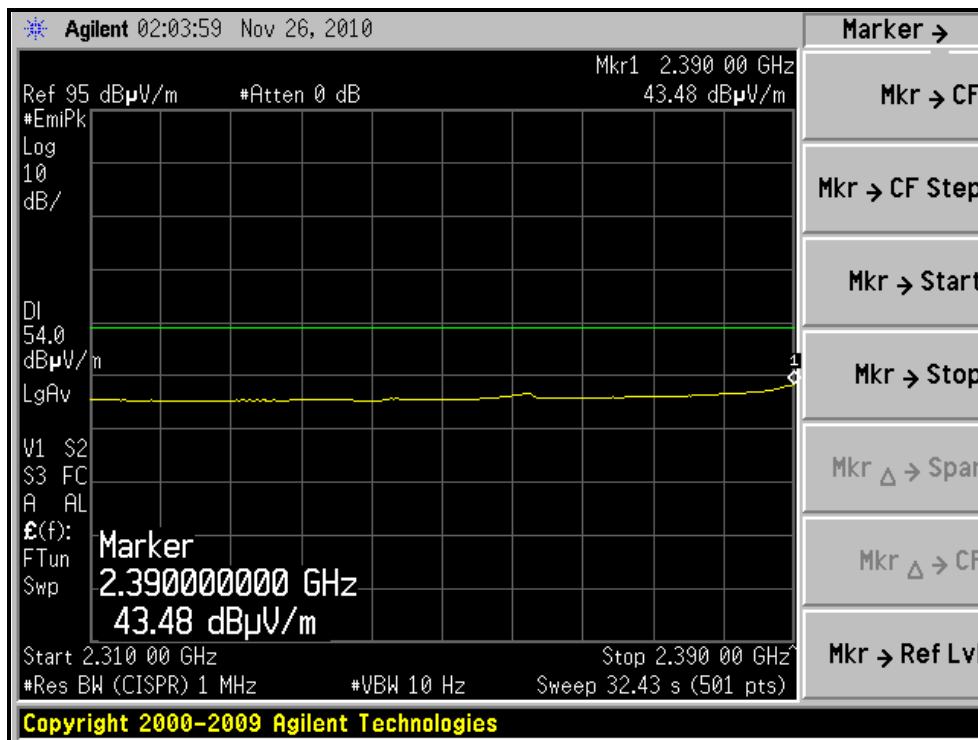
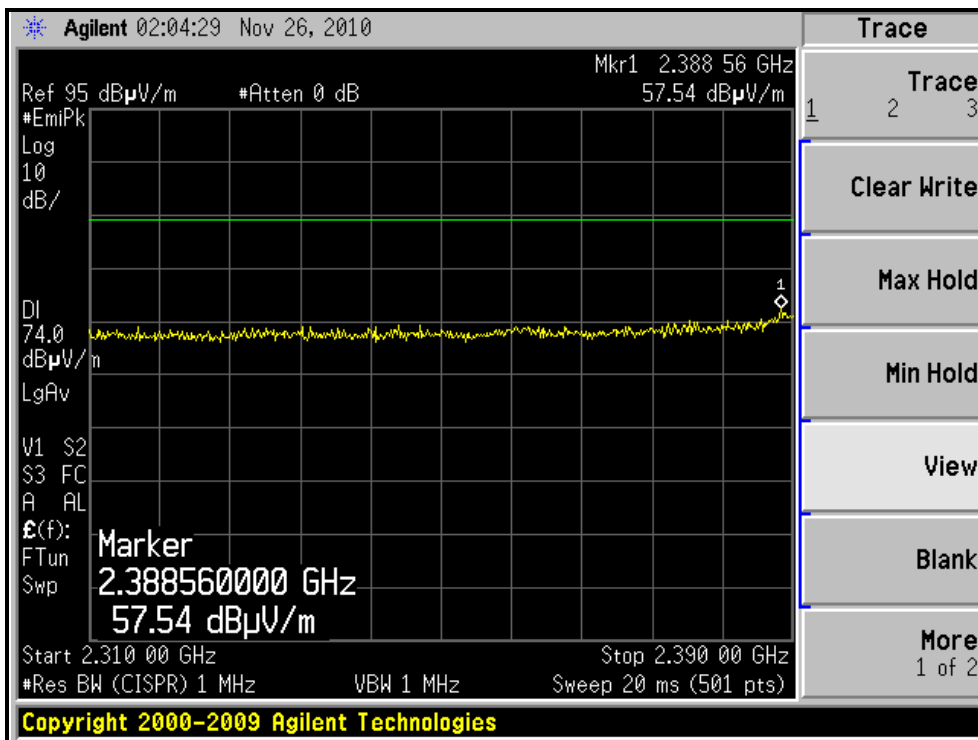
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1	*2462.00	108.8 PK			1.49 V	252	76.40	32.40
2	*2462.00	100.1 AV			1.49 V	252	67.70	32.40
3	2483.50	68.4 PK	74.0	-5.6	1.47 V	250	35.90	32.50
4	2483.50	52.7 AV	54.0	-1.3	1.47 V	250	20.20	32.50
5	4924.00	54.6 PK	74.0	-19.4	1.44 V	169	14.50	40.10
6	4924.00	41.2 AV	54.0	-12.8	1.44 V	169	1.10	40.10
7	7386.00	53.4 PK	74.0	-20.6	1.44 V	168	5.90	47.50
8	7386.00	40.6 AV	54.0	-13.4	1.44 V	168	-6.90	47.50

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



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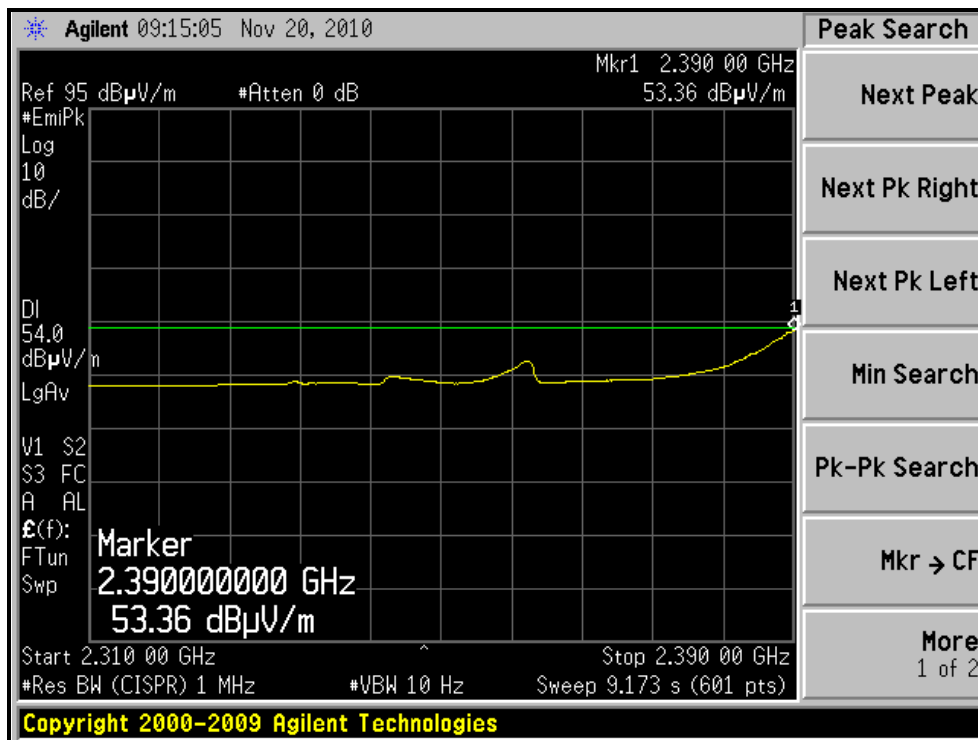
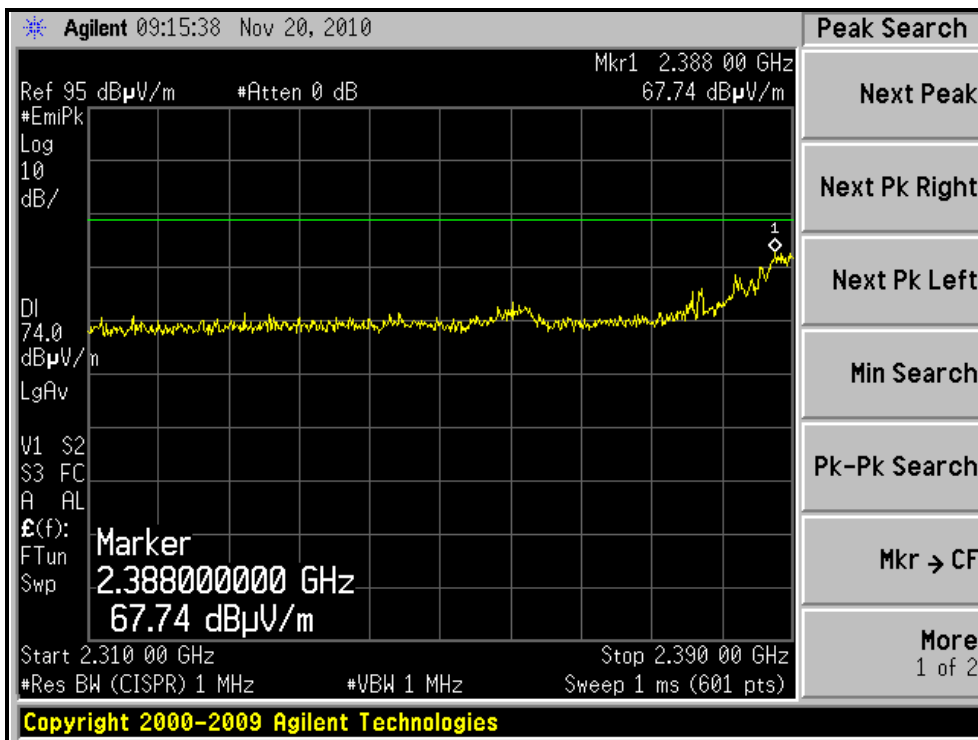
RESTRICTED BANDEDGE (802.11g MODE, CH1, HORIZONTAL)





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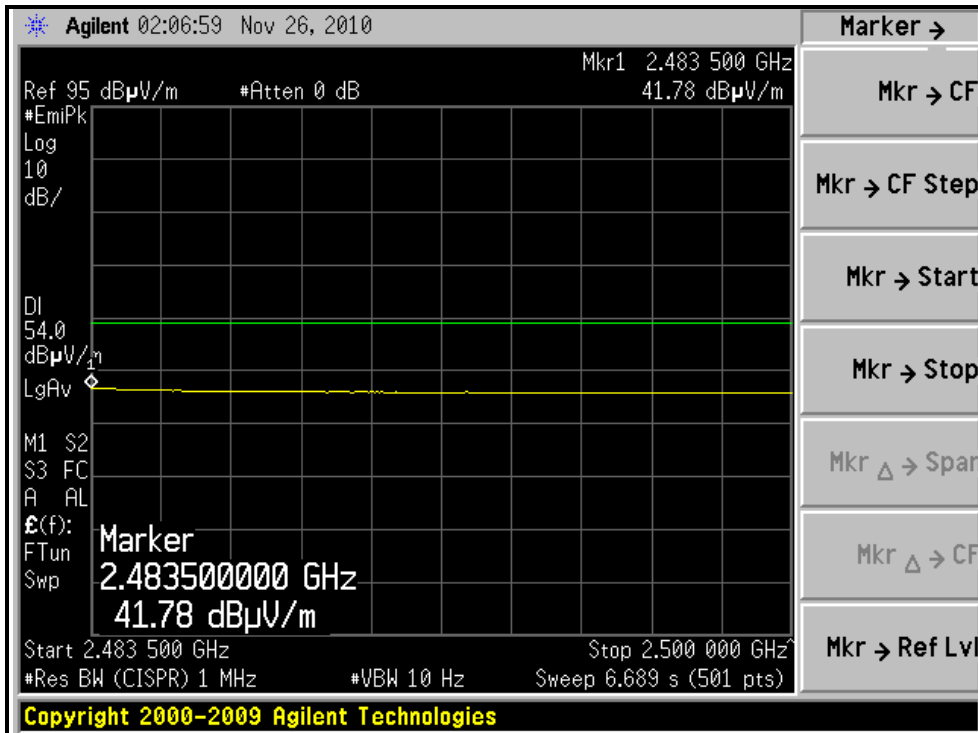
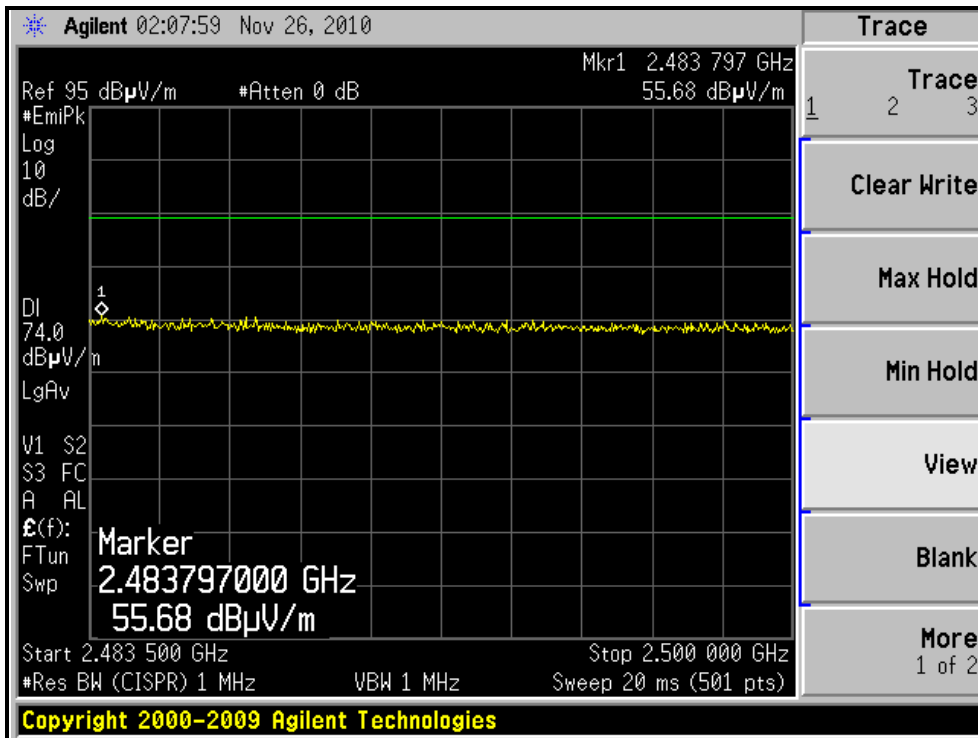
RESTRICTED BANDEDGE (802.11g MODE, CH1, VERTICAL)





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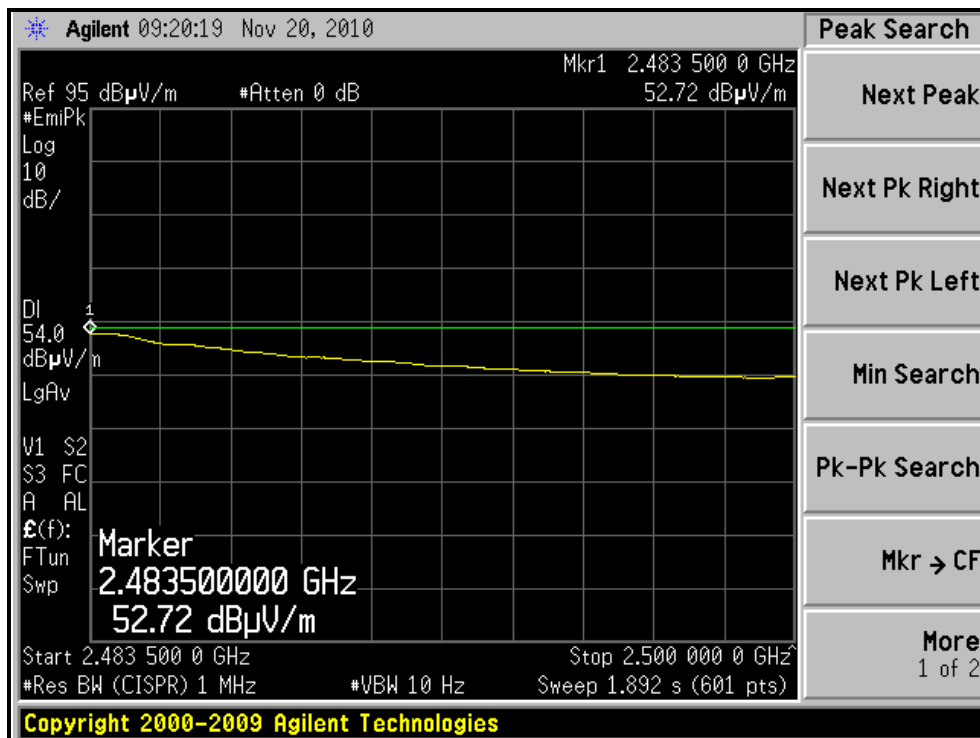
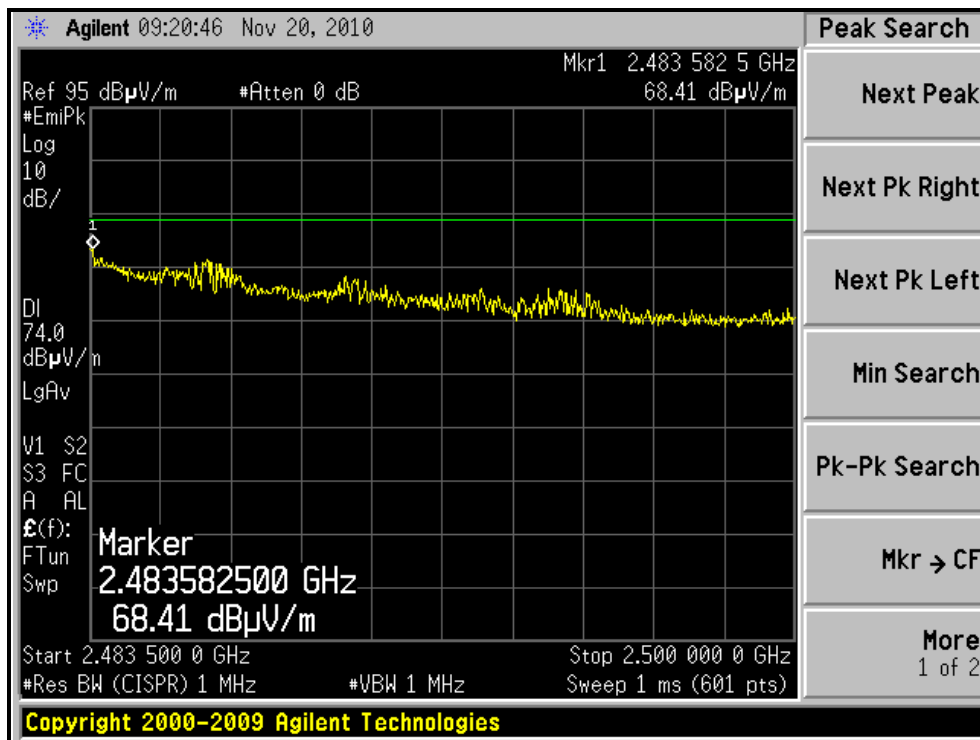
RESTRICTED BANDEDGE (802.11g MODE, CH11, HORIZONTAL)





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RESTRICTED BANDEDGE (802.11g MODE, CH11, VERTICAL)





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802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	55.2 PK	74.0	-18.8	1.53 H	252	23.00	32.20
2	2390.00	42.2 AV	54.0	-11.8	1.53 H	252	10.00	32.20
3	*2412.00	99.6 PK			1.54 H	253	67.30	32.30
4	*2412.00	90.3 AV			1.54 H	253	58.00	32.30
5	4824.00	51.2 PK	74.0	-22.8	1.22 H	308	11.50	39.70
6	4824.00	37.9 AV	54.0	-16.1	1.22 H	308	-1.80	39.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	69.1 PK	74.0	-4.9	1.60 V	261	36.90	32.20
2	2390.00	52.5 AV	54.0	-1.5	1.60 V	261	20.30	32.20
3	*2412.00	112.9 PK			1.54 V	69	80.60	32.30
4	*2412.00	101.3 AV			1.54 V	69	69.00	32.30
5	4824.00	62.1 PK	74.0	-11.9	1.08 V	53	22.40	39.70
6	4824.00	43.9 AV	54.0	-10.1	1.08 V	53	4.20	39.70

- 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.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	107.7 PK			1.53 H	255	75.40	32.30
2	*2437.00	97.3 AV			1.53 H	255	65.00	32.30
3	4874.00	53.7 PK	74.0	-20.3	1.24 H	299	13.80	39.90
4	4874.00	39.2 AV	54.0	-14.8	1.24 H	299	-0.70	39.90
5	7311.00	53.3 PK	74.0	-20.7	1.22 H	38	5.70	47.60
6	7311.00	39.6 AV	54.0	-14.4	1.22 H	38	-8.00	47.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2385.30	62.5 PK	74.0	-11.5	1.63 V	257	30.30	32.20
2	2385.30	52.5 AV	54.0	-1.5	1.63 V	257	20.30	32.20
3	*2437.00	116.6 PK			1.46 V	249	84.30	32.30
4	*2437.00	105.2 AV			1.46 V	249	72.90	32.30
5	4874.00	65.7 PK	74.0	-8.3	1.06 V	50	25.80	39.90
6	4874.00	48.8 AV	54.0	-5.2	1.06 V	50	8.90	39.90
7	7311.00	58.1 PK	74.0	-15.9	1.55 V	236	10.50	47.60
8	7311.00	43.3 AV	54.0	-10.7	1.55 V	236	-4.30	47.60

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

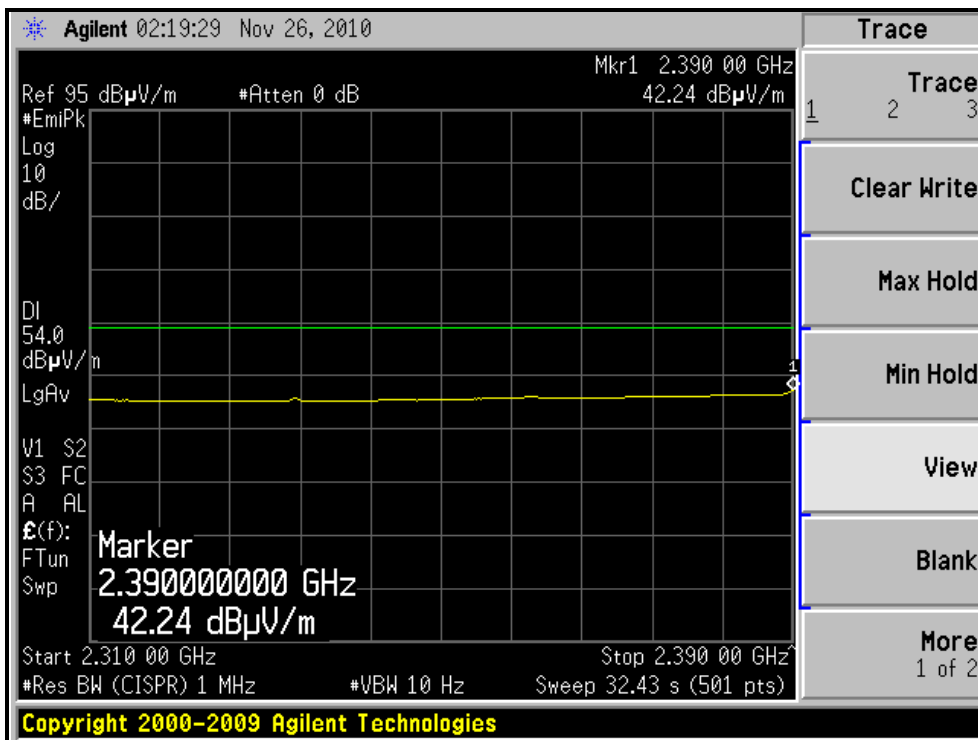
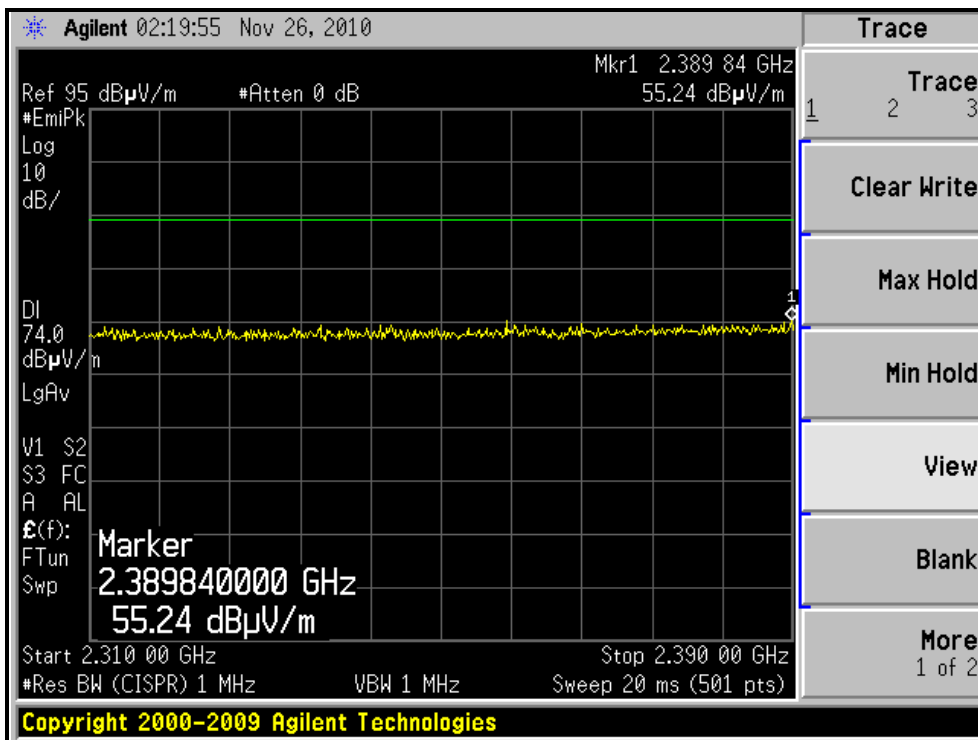
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	100.1 PK			1.60 H	259	67.70	32.40
2	*2462.00	90.1 AV			1.60 H	259	57.70	32.40
3	2484.25	56.9 PK	74.0	-17.1	1.60 H	259	24.40	32.50
4	2484.25	42.5 AV	54.0	-11.5	1.60 H	259	10.00	32.50
5	4924.00	50.3 PK	74.0	-23.7	1.21 H	310	10.20	40.10
6	4924.00	37.1 AV	54.0	-16.9	1.21 H	310	-3.00	40.10
7	7386.00	53.6 PK	74.0	-20.4	1.29 H	39	6.10	47.50
8	7386.00	39.7 AV	54.0	-14.3	1.29 H	39	-7.80	47.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	115.9 PK			1.50 V	70	83.50	32.40
2	*2462.00	103.8 AV			1.50 V	70	71.40	32.40
3	2483.50	69.8 PK	74.0	-4.2	1.55 V	253	37.30	32.50
4	2483.50	52.9 AV	54.0	-1.1	1.55 V	253	20.40	32.50
5	4924.00	60.1 PK	74.0	-13.9	1.08 V	53	20.00	40.10
6	4924.00	42.5 AV	54.0	-11.5	1.08 V	53	2.40	40.10
7	7386.00	52.2 PK	74.0	-21.8	1.25 V	24	4.70	47.50
8	7386.00	40.9 AV	54.0	-13.1	1.25 V	24	-6.60	47.50

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



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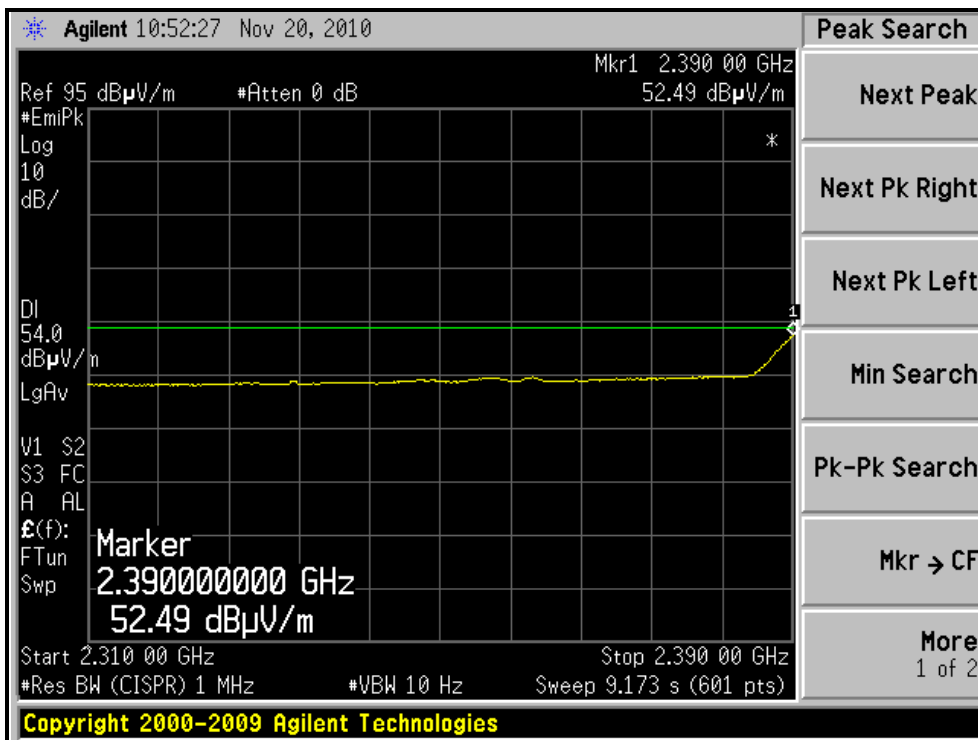
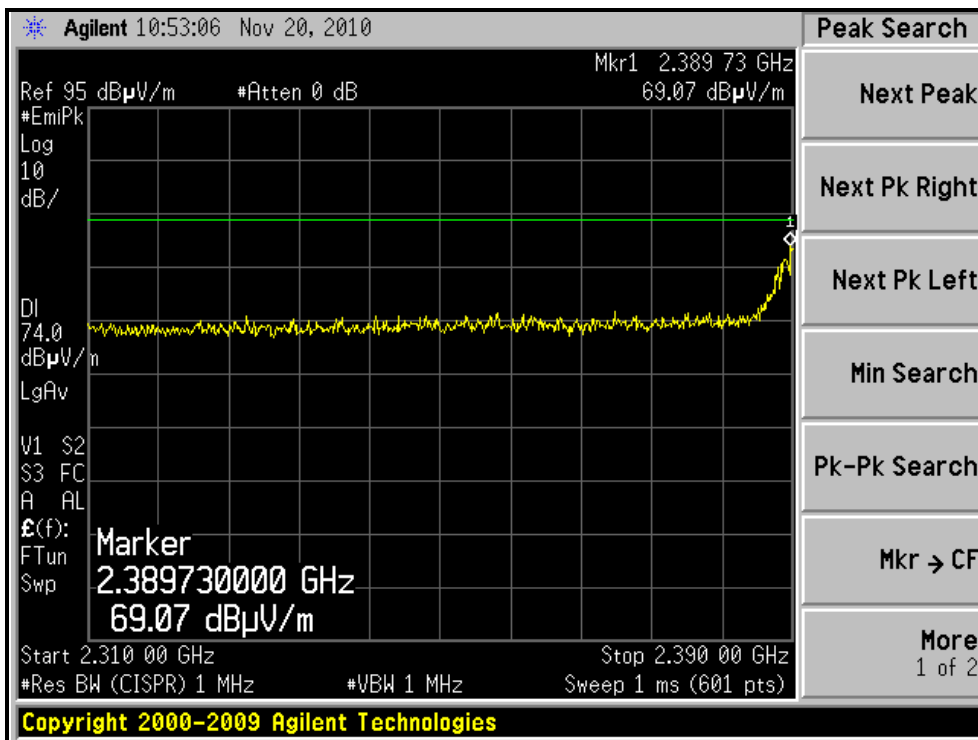
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, HORIZONTAL)





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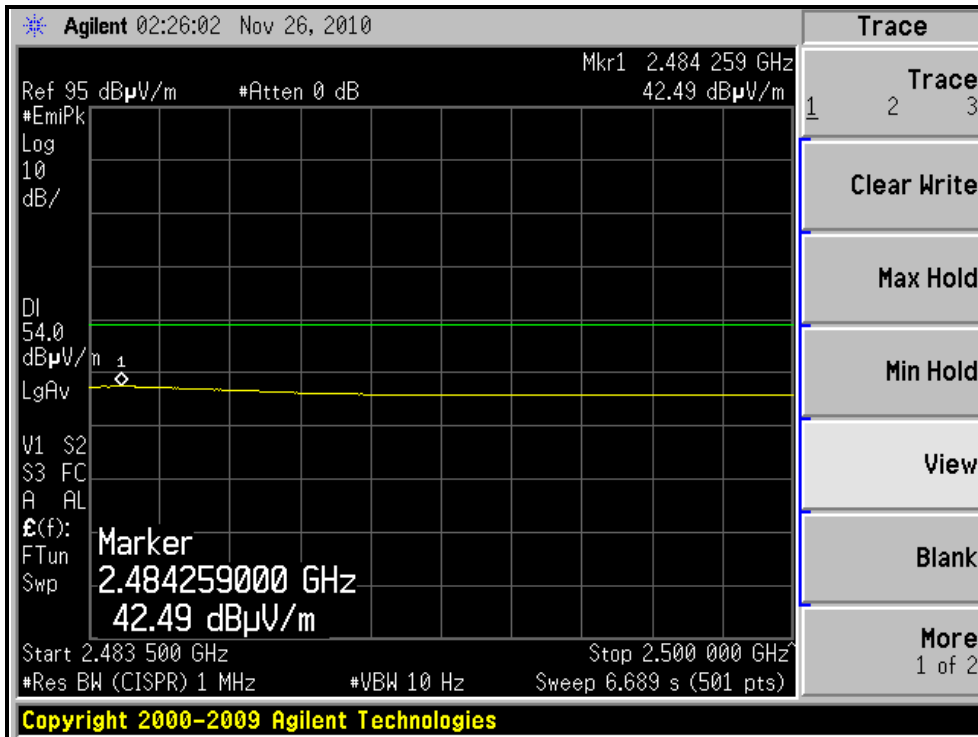
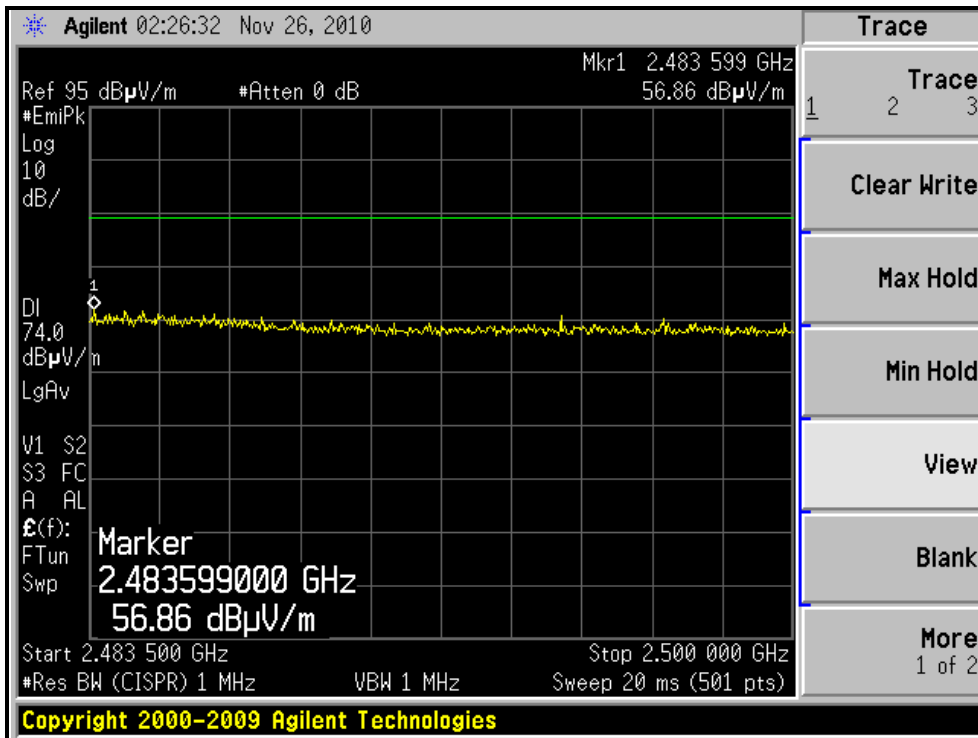
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, VERTICAL)





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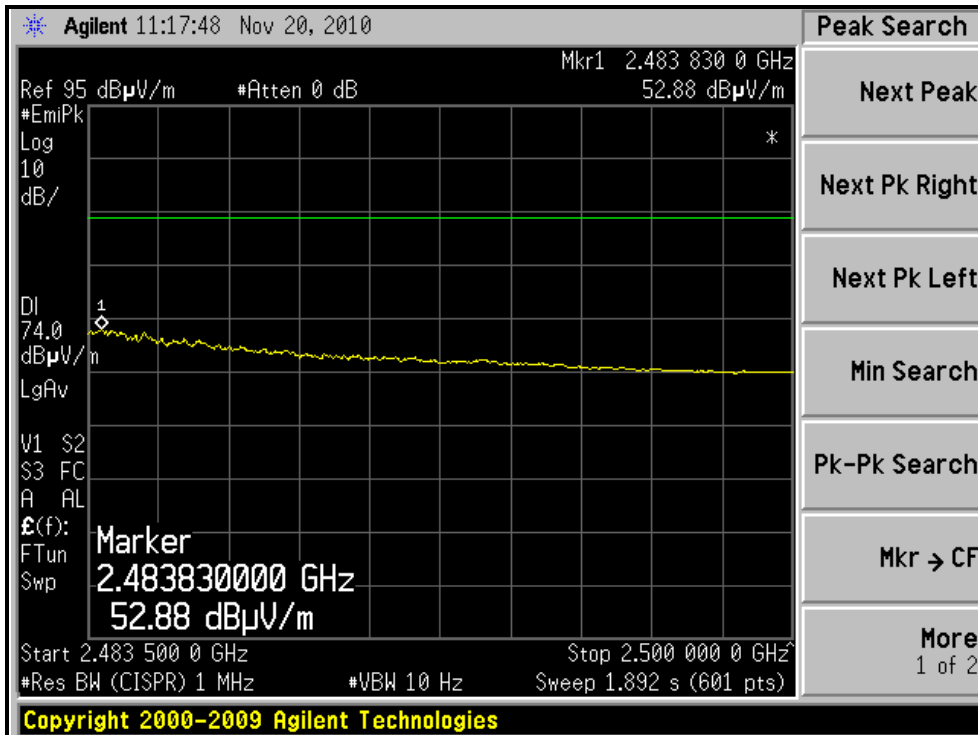
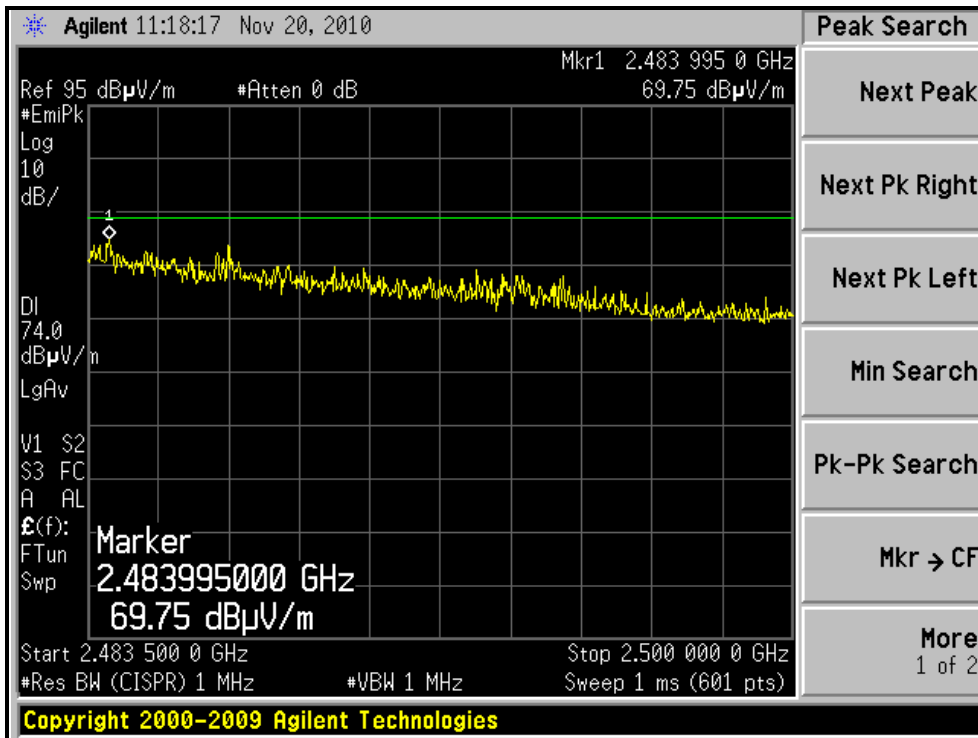
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, HORIZONTAL)





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





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802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	56.8 PK	74.0	-17.2	1.54 H	312	24.62	32.18
2	2390.00	41.9 AV	54.0	-12.1	1.54 H	312	9.72	32.18
3	*2422.00	93.2 PK			1.54 H	312	60.92	32.28
4	*2422.00	83.4 AV			1.54 H	312	51.12	32.28
5	4844.00	48.3 PK	74.0	-25.7	1.29 H	311	8.51	39.79
6	4844.00	35.2 AV	54.0	-18.8	1.29 H	311	-4.59	39.79
7	7266.00	53.7 PK	74.0	-20.3	1.22 H	37	6.10	47.60
8	7266.00	39.3 AV	54.0	-14.7	1.22 H	37	-8.30	47.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2389.87	73.4 PK	74.0	-0.6	1.56 V	293	41.22	32.18
2	2389.87	52.5 AV	54.0	-1.5	1.56 V	293	20.32	32.18
3	*2422.00	109.7 PK			1.63 V	293	77.42	32.28
4	*2422.00	99.7 AV			1.63 V	293	67.42	32.28
5	4844.00	55.6 PK	74.0	-18.4	1.15 V	125	15.81	39.79
6	4844.00	39.0 AV	54.0	-15.0	1.15 V	125	-0.79	39.79
7	7266.00	53.3 PK	74.0	-20.7	1.52 V	226	5.70	47.60
8	7266.00	39.5 AV	54.0	-14.5	1.52 V	226	-8.10	47.60

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 4	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	99.4 PK			1.50 H	313	67.06	32.34
2	*2437.00	89.6 AV			1.50 H	313	57.26	32.34
3	4874.00	50.2 PK	74.0	-23.8	1.22 H	303	10.30	39.90
4	4874.00	36.4 AV	54.0	-17.6	1.22 H	303	-3.50	39.90
5	7311.00	53.5 PK	74.0	-20.5	1.25 H	29	5.94	47.56
6	7311.00	39.6 AV	54.0	-14.4	1.25 H	29	-7.96	47.56
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	111.6 PK			1.50 V	266	79.26	32.34
2	*2437.00	103.1 AV			1.50 V	266	70.76	32.34
3	2483.50	71.7 PK	74.0	-2.3	1.50 V	265	39.21	32.49
4	2483.50	53.2 AV	54.0	-0.8	1.50 V	265	20.71	32.49
5	4874.00	62.8 PK	74.0	-11.2	1.19 V	123	22.90	39.90
6	4874.00	44.5 AV	54.0	-9.5	1.19 V	123	4.60	39.90
7	7311.00	54.8 PK	74.0	-19.2	1.51 V	233	7.24	47.56
8	7311.00	42.7 AV	54.0	-11.3	1.51 V	233	-4.86	47.56

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH 1012 hPa	TESTED BY	Kent Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	92.7 PK			1.55 H	317	60.31	32.39
2	*2452.00	82.8 AV			1.55 H	317	50.41	32.39
3	2483.50	55.3 PK	74.0	-18.7	1.54 H	312	22.81	32.49
4	2483.50	41.4 AV	54.0	-12.6	1.54 H	312	8.91	32.49
5	4904.00	48.8 PK	74.0	-25.2	1.29 H	305	8.80	40.00
6	4904.00	35.4 AV	54.0	-18.6	1.29 H	305	-4.60	40.00
7	7356.00	53.2 PK	74.0	-20.8	1.24 H	27	5.66	47.54
8	7356.00	39.7 AV	54.0	-14.3	1.24 H	27	-7.84	47.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

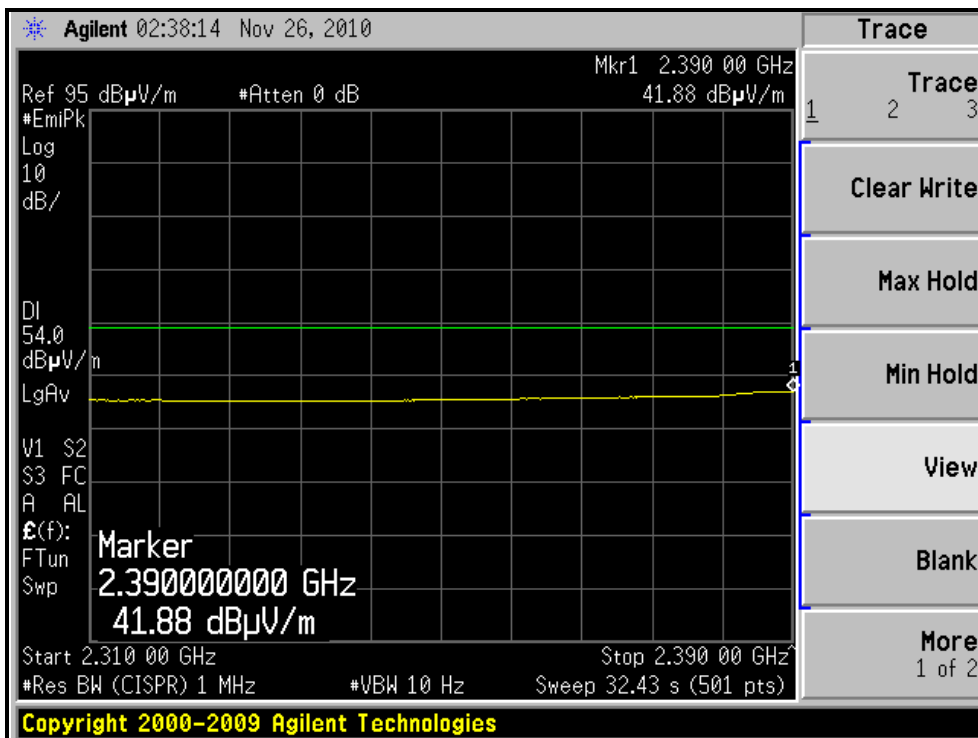
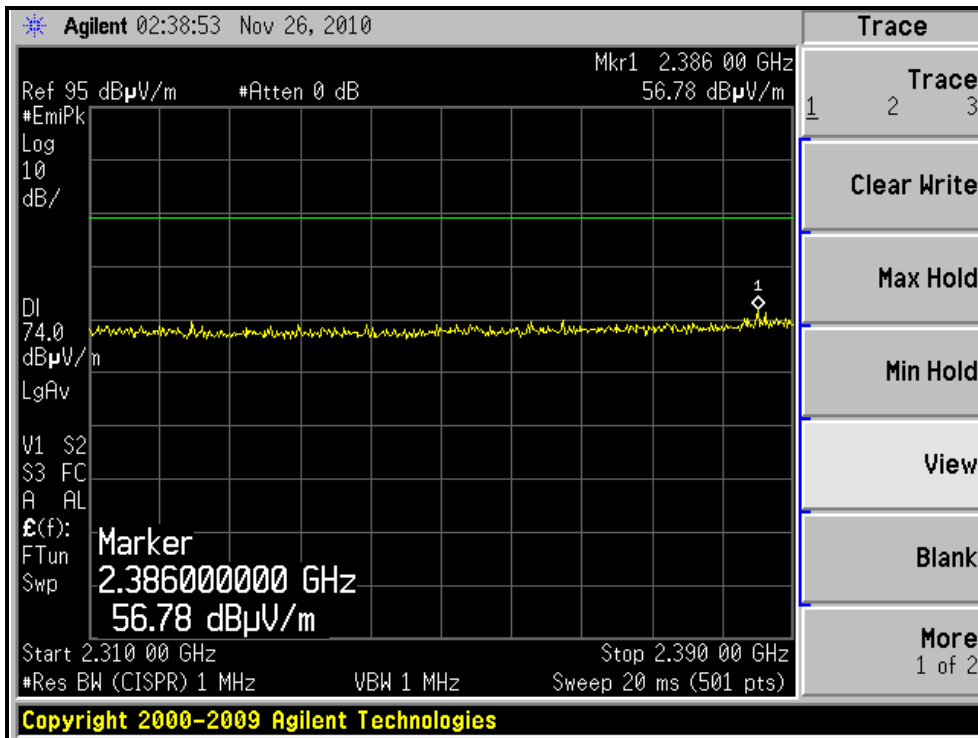
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1	*2452.00	109.6 PK			1.64 V	291	77.21	32.39
2	*2452.00	99.4 AV			1.64 V	291	67.01	32.39
3	2483.50	73.0 PK	74.0	-1.0	1.49 V	286	40.51	32.49
4	2483.50	50.8 AV	54.0	-3.2	1.49 V	286	18.30	32.49
5	4904.00	54.7 PK	74.0	-19.3	1.10 V	129	14.70	40.00
6	4904.00	38.7 AV	54.0	-15.3	1.10 V	129	-1.30	40.00
7	7356.00	53.5 PK	74.0	-20.5	1.57 V	201	5.96	47.54
8	7356.00	39.6 AV	54.0	-14.4	1.57 V	201	-7.94	47.54

- 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.



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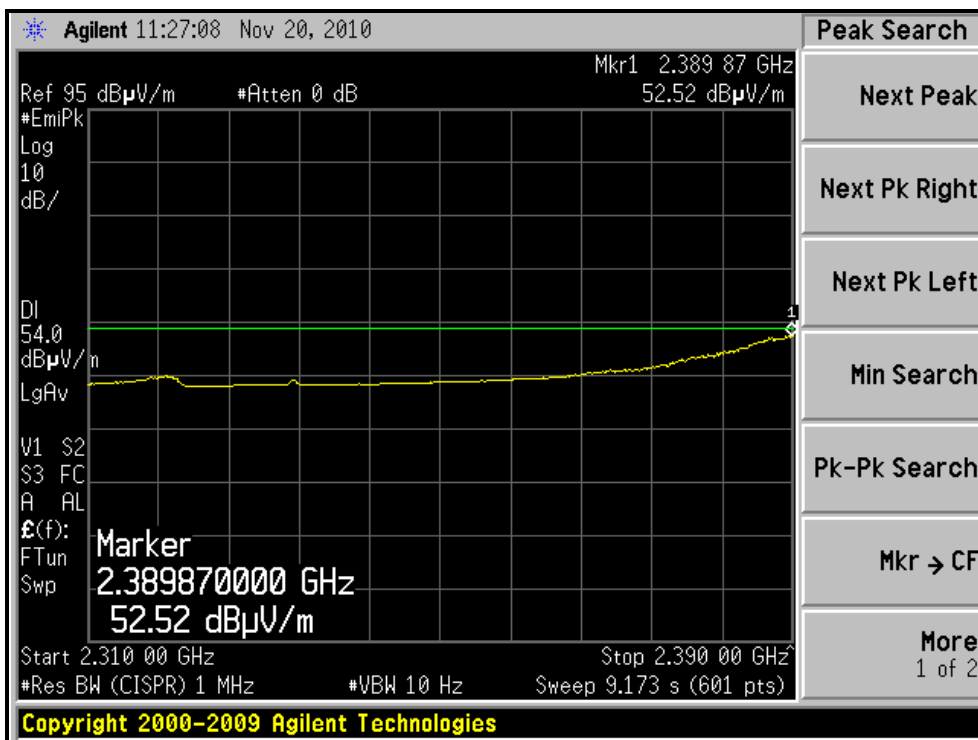
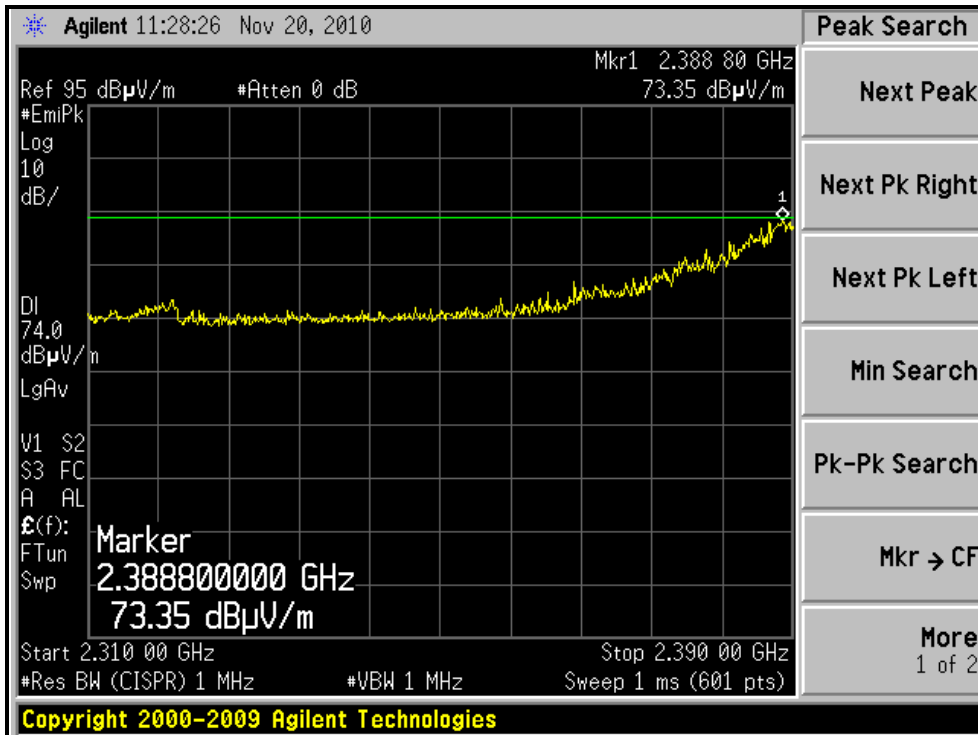
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)





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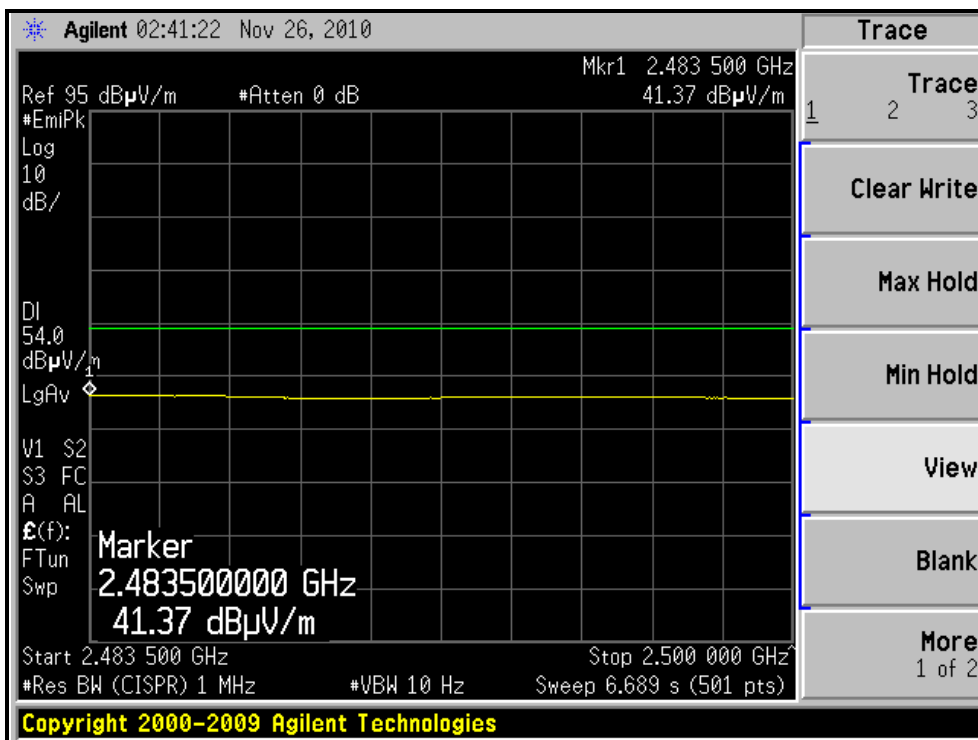
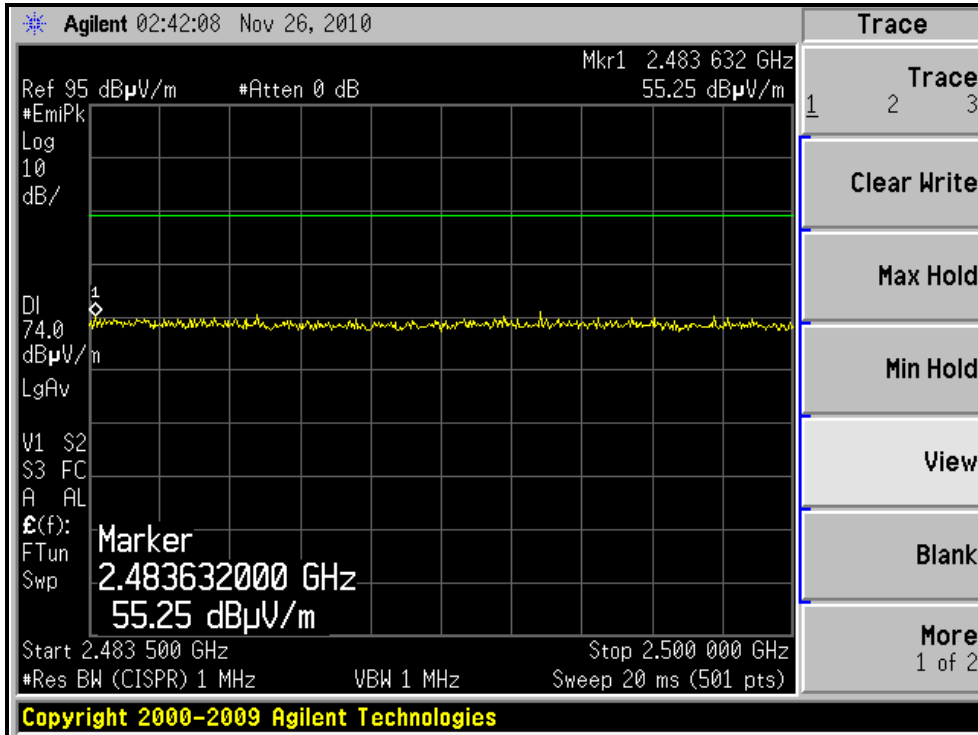
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, VERTICAL)





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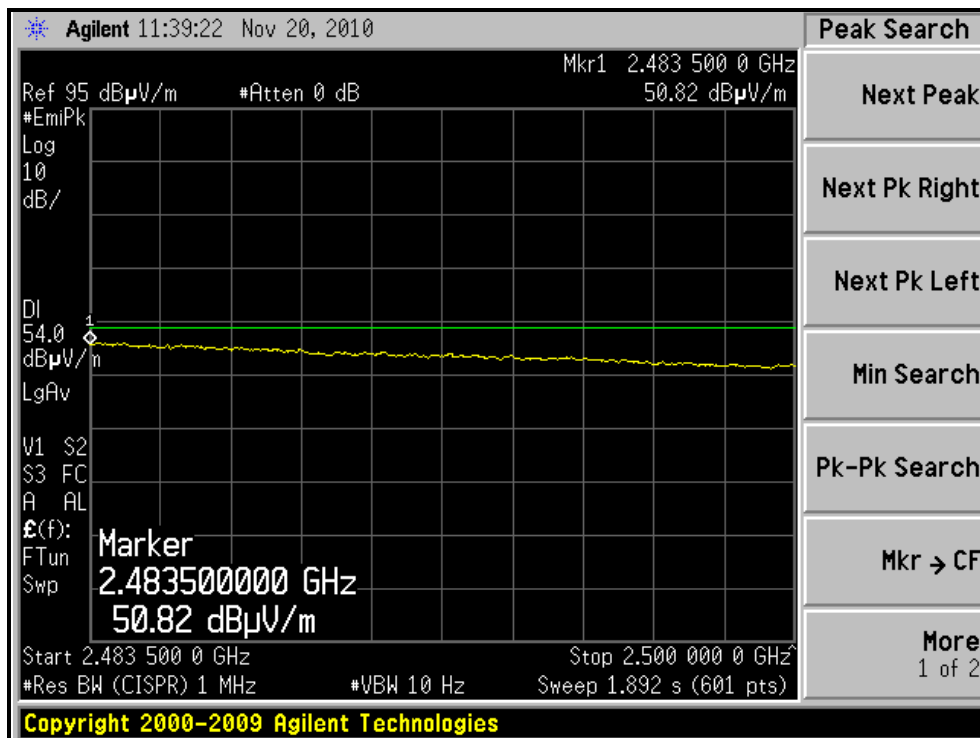
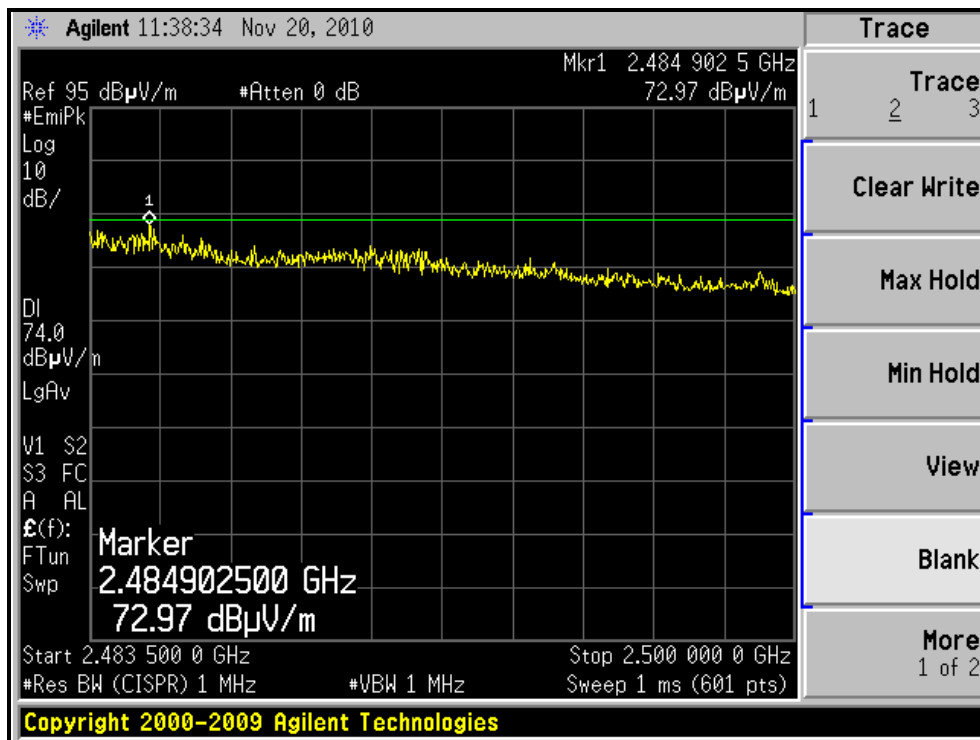
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, HORIZONTAL)





A D T

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
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 18, 2009	Dec. 17, 2010

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

4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

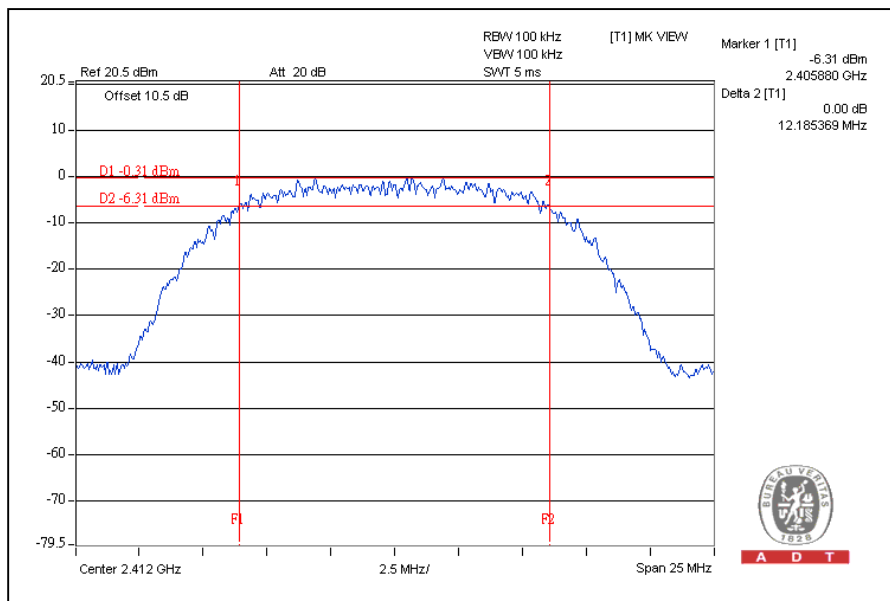
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.18	0.5	PASS
6	2437	12.17	0.5	PASS
11	2462	12.17	0.5	PASS

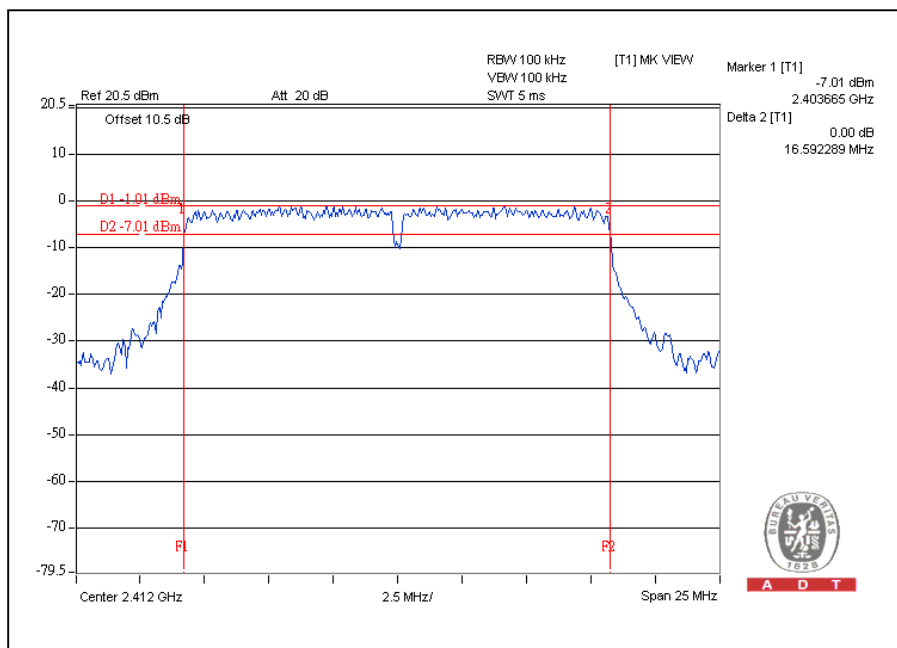
CH1



802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.59	0.5	PASS
6	2437	16.58	0.5	PASS
11	2462	16.58	0.5	PASS

CH1



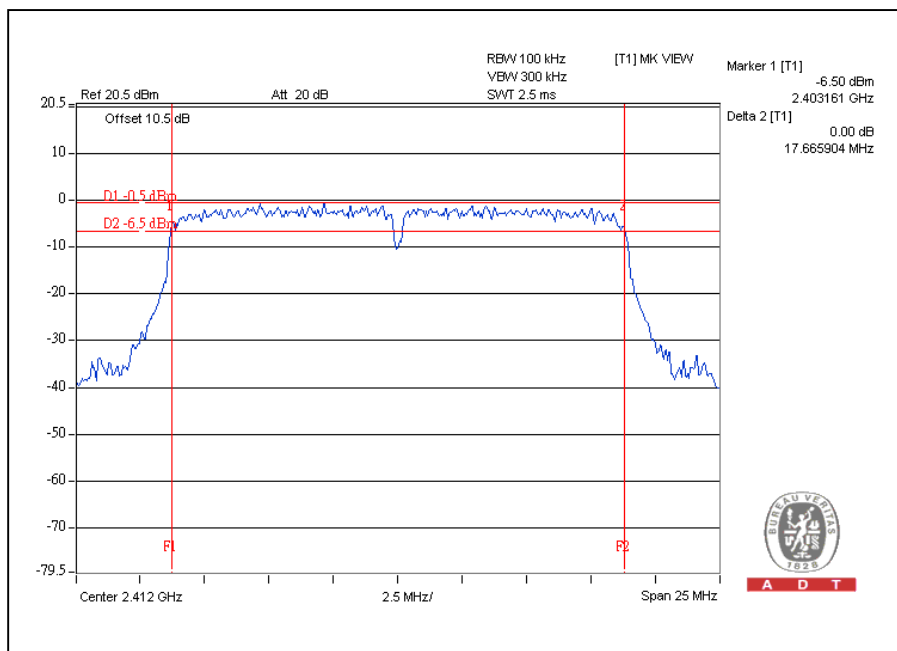


A D T

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.66	0.5	PASS
6	2437	17.66	0.5	PASS
11	2462	17.66	0.5	PASS

CH6



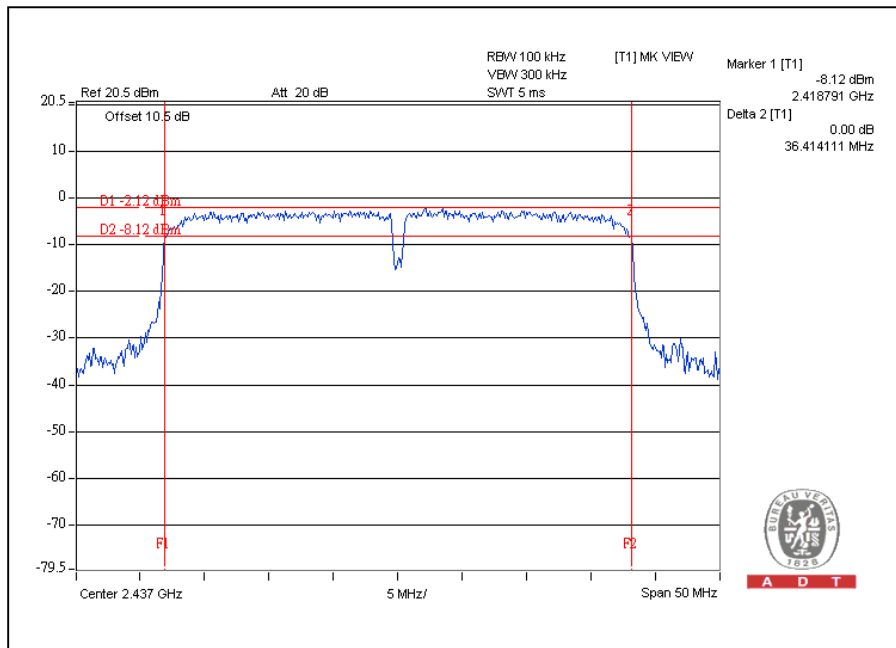


A D T

802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.12	0.5	PASS
4	2437	36.41	0.5	PASS
7	2452	35.86	0.5	PASS

CH4



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
Peak Power Meter	ML2495A	0824006	May 04, 2010	May 03, 2011
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.

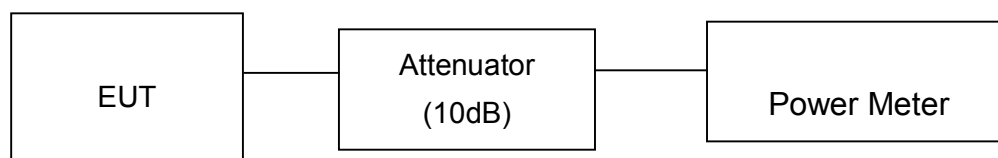
4.4.3 TEST PROCEDURES

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



A D T

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	28.2	14.5	30	PASS
6	2437	28.2	14.5	30	PASS
11	2462	28.2	14.5	30	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	125.9	21.0	30	PASS
6	2437	281.8	24.5	30	PASS
11	2462	125.9	21.0	30	PASS

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)			TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		CHAIN(0)	CHAIN(1)	CHAIN(2)				
1	2412	18.6	18.7	18.9	224.2	23.5	30	PASS
6	2437	22.4	22.3	22.2	509.6	27.1	30	PASS
11	2462	21.1	21.3	21.4	401.8	26.0	30	PASS



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802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)			TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		CHAIN(0)	CHAIN(1)	CHAIN(2)				
1	2422	16.3	16.5	16.7	134.1	21.3	30	PASS
4	2437	21.4	21.4	21.0	402.0	26.0	30	PASS
7	2452	19.4	19.3	19.2	255.4	24.1	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 18, 2009	Dec. 17, 2010

NOTE: 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

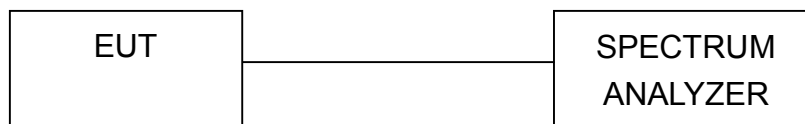
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

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



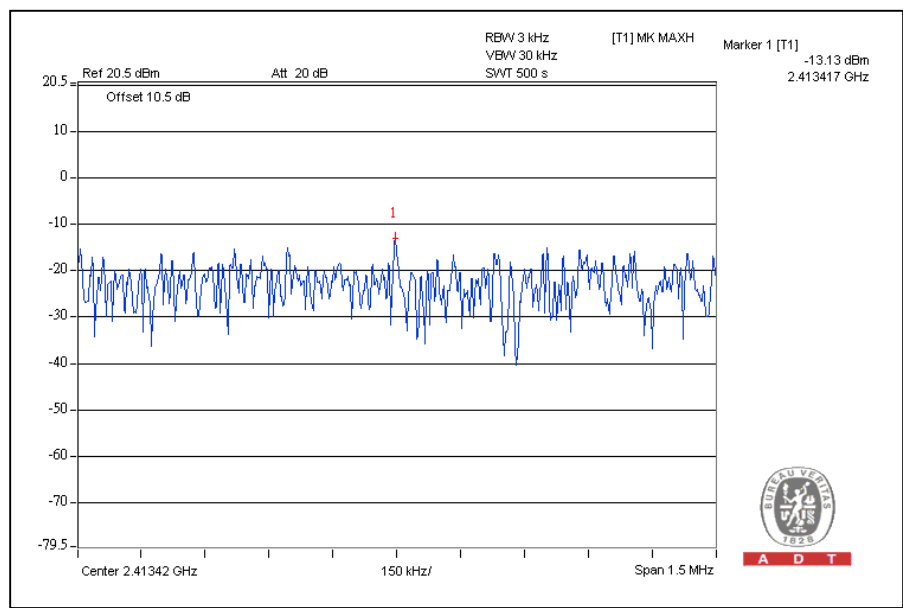
A D T

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	-13.1	8	PASS
6	2437	-13.5	8	PASS
11	2462	-13.8	8	PASS

CH1



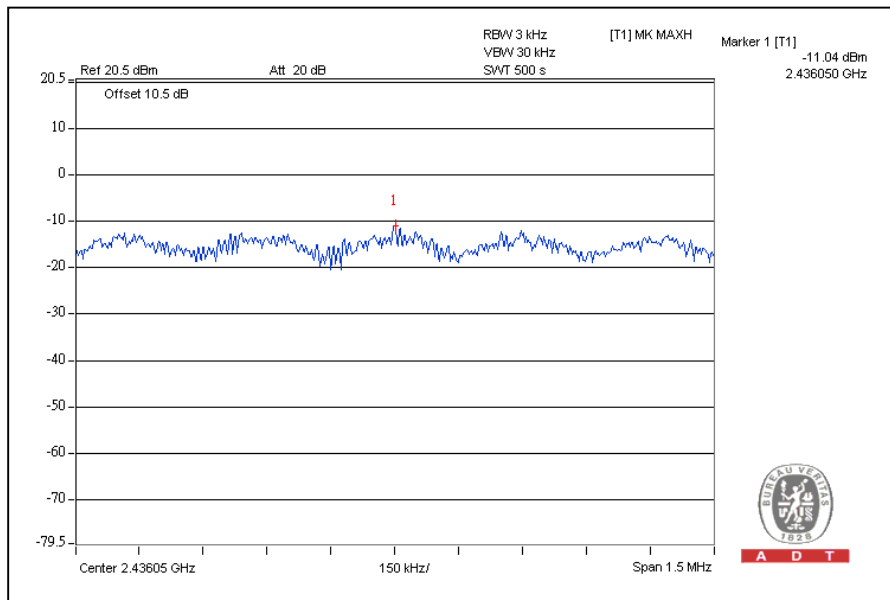


A D T

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-14.8	8	PASS
6	2437	-11.0	8	PASS
11	2462	-15.2	8	PASS

CH6



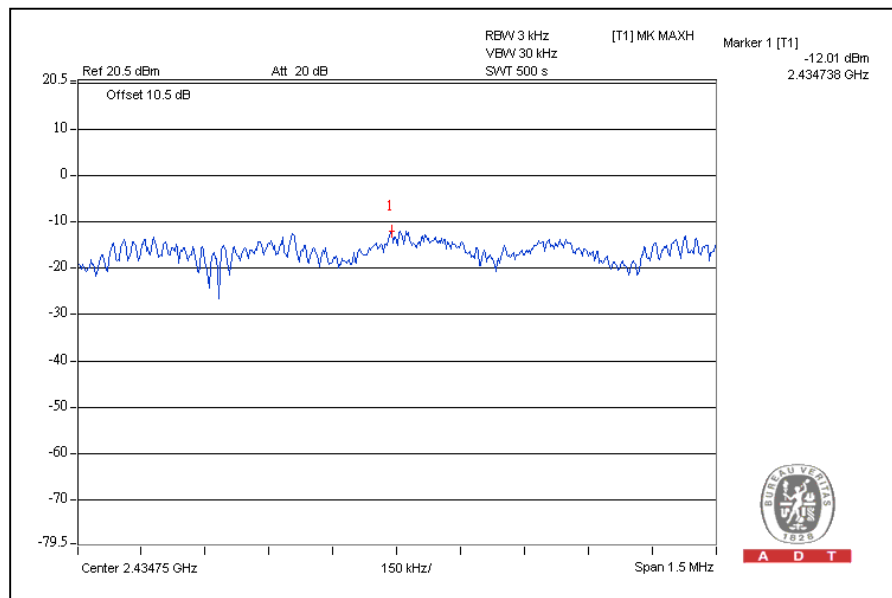


A D T

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
		CHAIN(0)	CHAIN(1)	CHAIN(2)			
1	2412	-14.5	-14.7	-15.9	-10.2	8	PASS
6	2437	-12.3	-12.0	-13.2	-7.7	8	PASS
11	2462	-15.4	-15.0	-16.2	-10.7	8	PASS

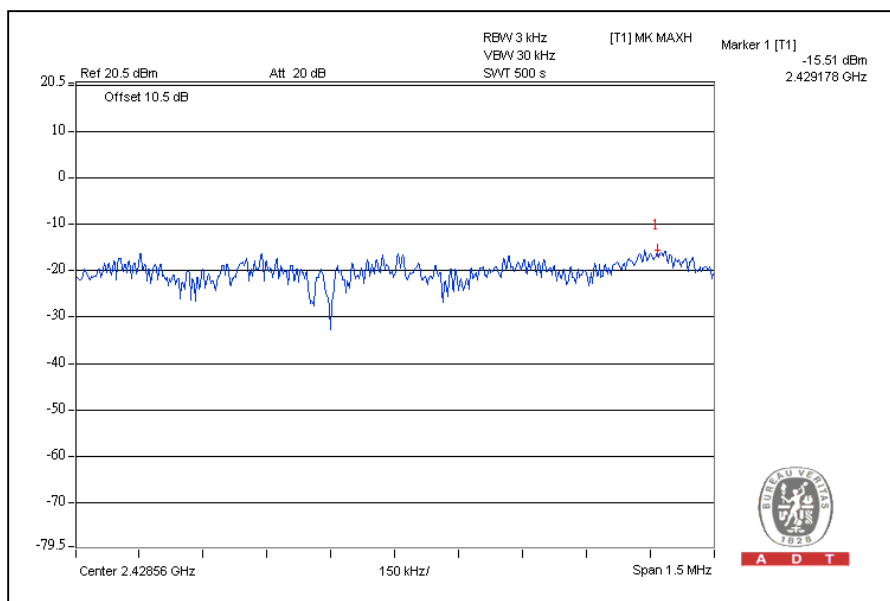
For Chain(1): CH6



802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
		CHAIN(0)	CHAIN(1)	CHAIN(2)			
1	2422	-18.0	-20.8	-18.3	-14.1	8	PASS
4	2437	-16.1	-15.5	-15.5	-10.9	8	PASS
7	2452	-16.1	-16.4	-16.6	-11.6	8	PASS

For Chain (1): 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
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 18, 2009	Dec. 17, 2010

NOTE: 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 loss cable. Set RBW of spectrum analyzer to 100kHz and VBW of spectrum analyzer to 300kHz with suitable frequency span including 100 MHz or 200 MHz bandwidth from band edge. The band edges was measured and recorded.

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

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

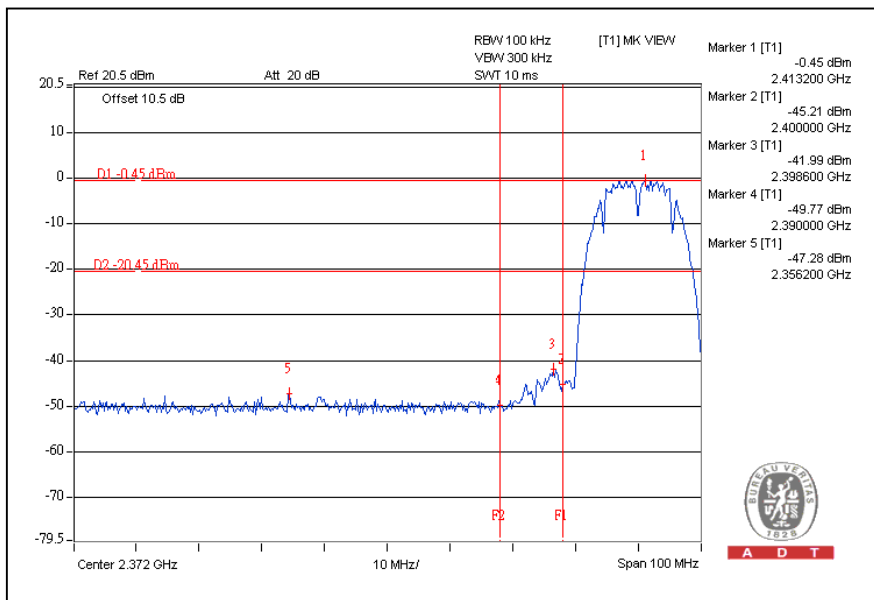
Same as Item 4.3.6

4.6.6 TEST RESULTS

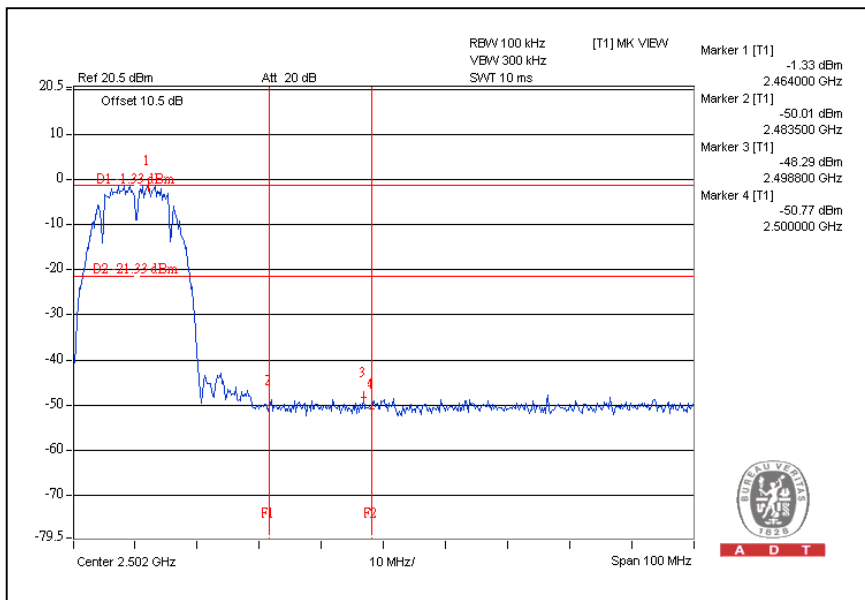
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

CH1



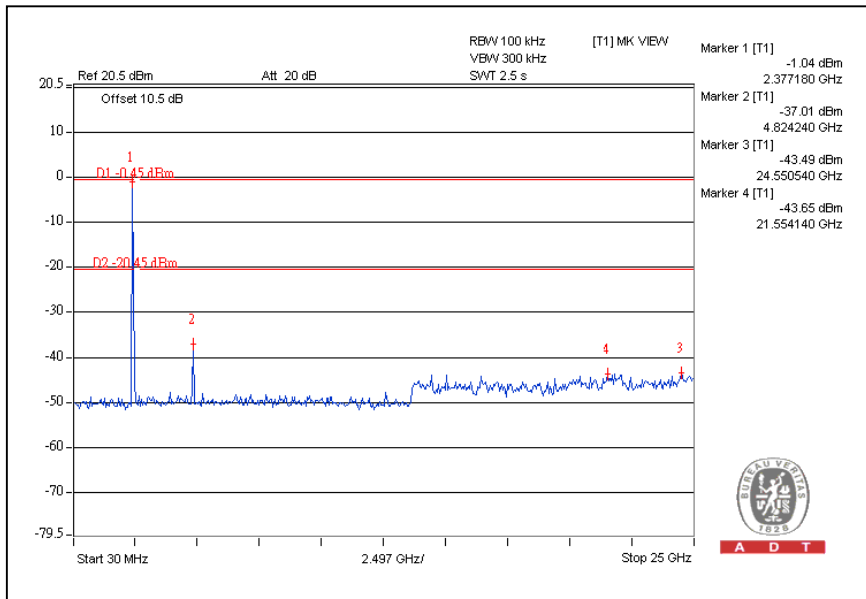
CH11



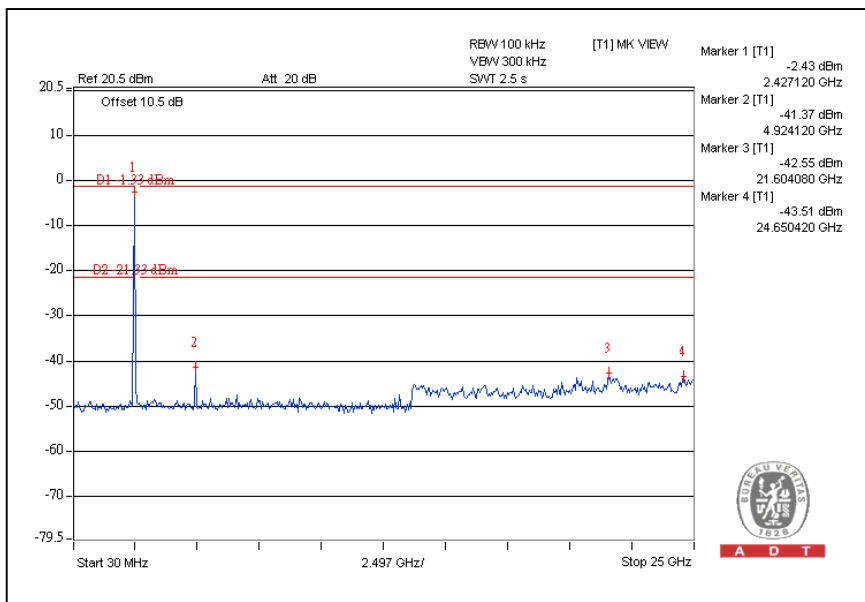


A D T

CH1

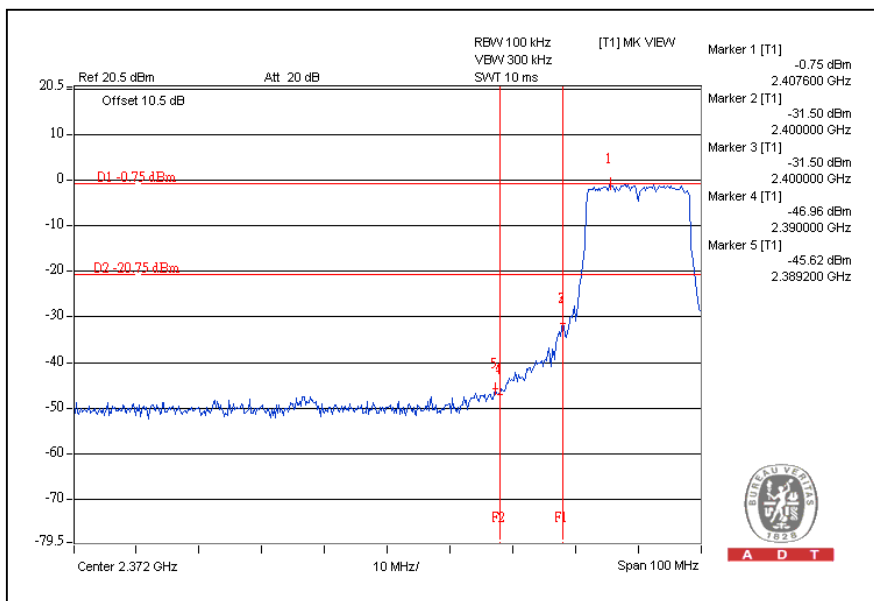


CH11

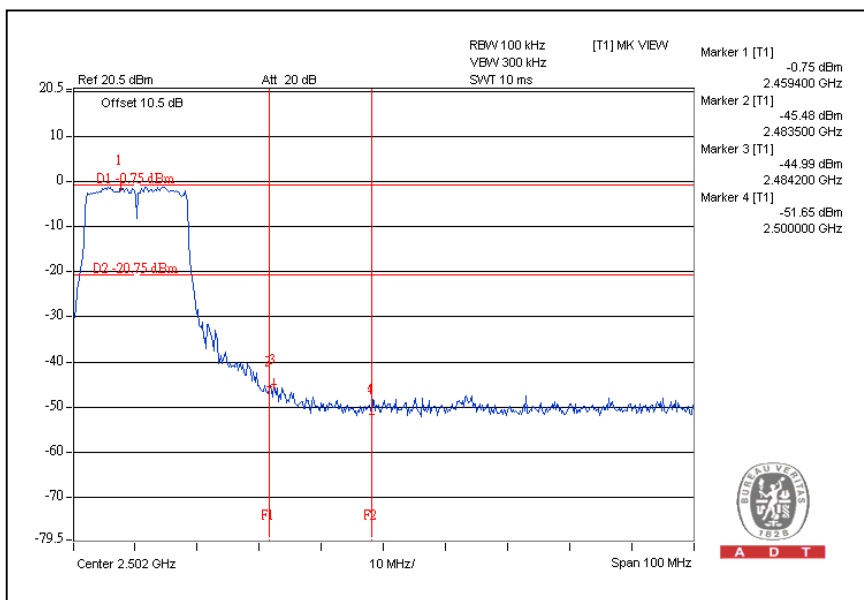


802.11g OFDM MODULATION:

CH1



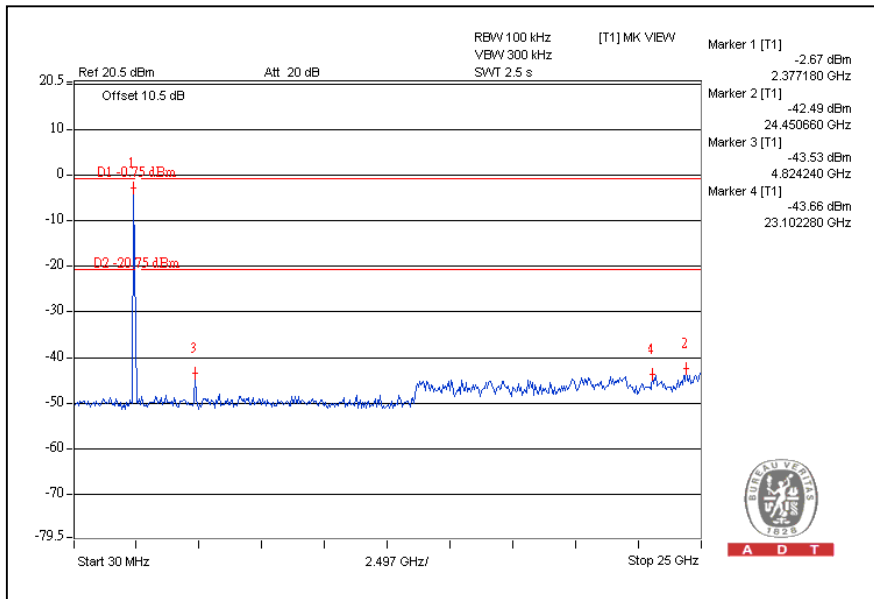
CH11



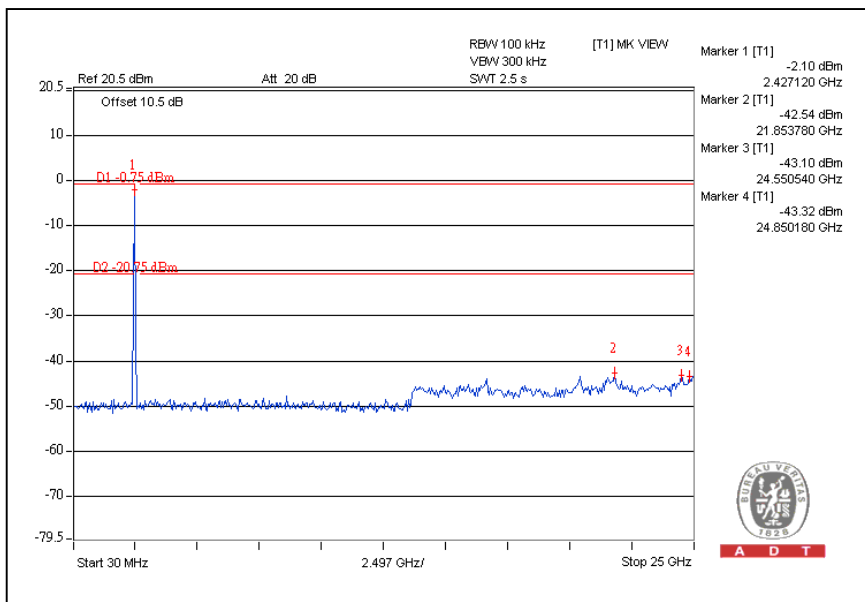


A D T

CH1

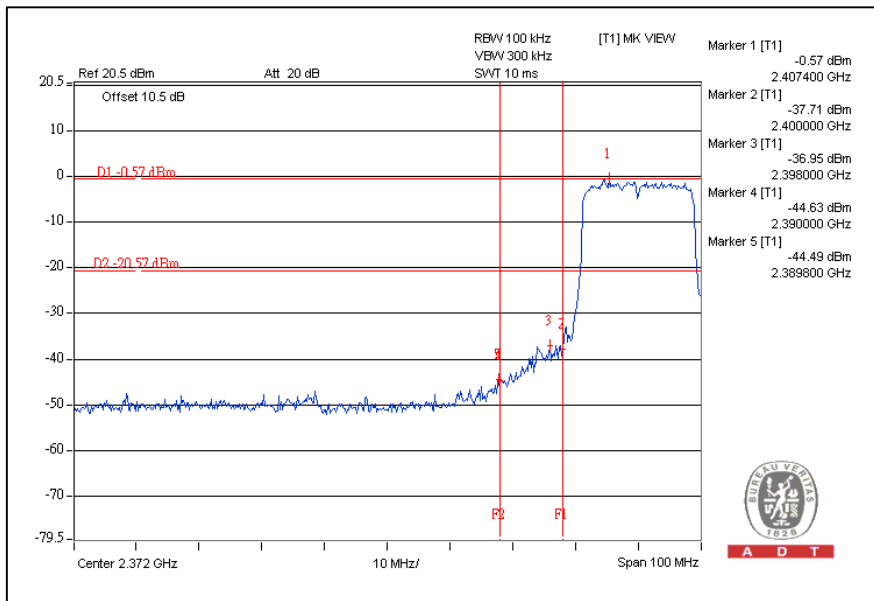


CH11

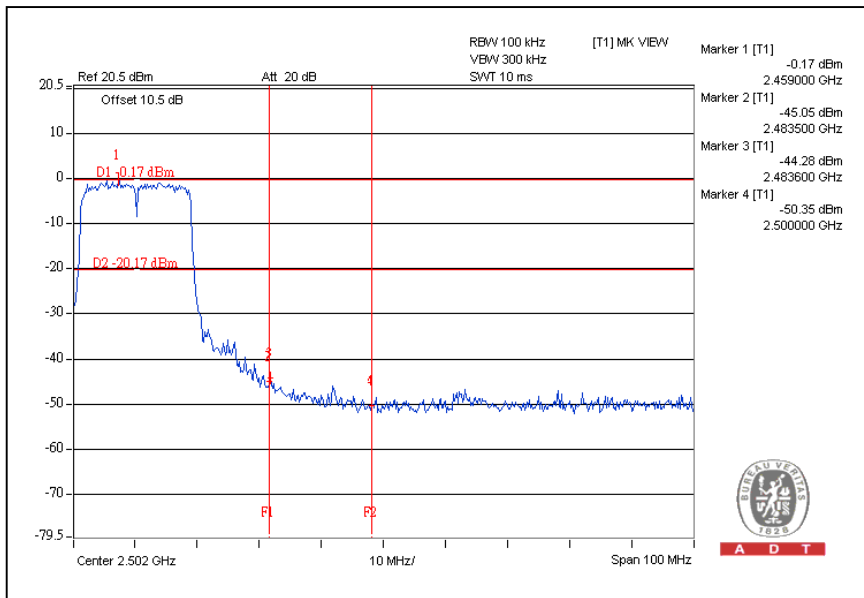


802.11n (20MHz) OFDM MODULATION:

CH1



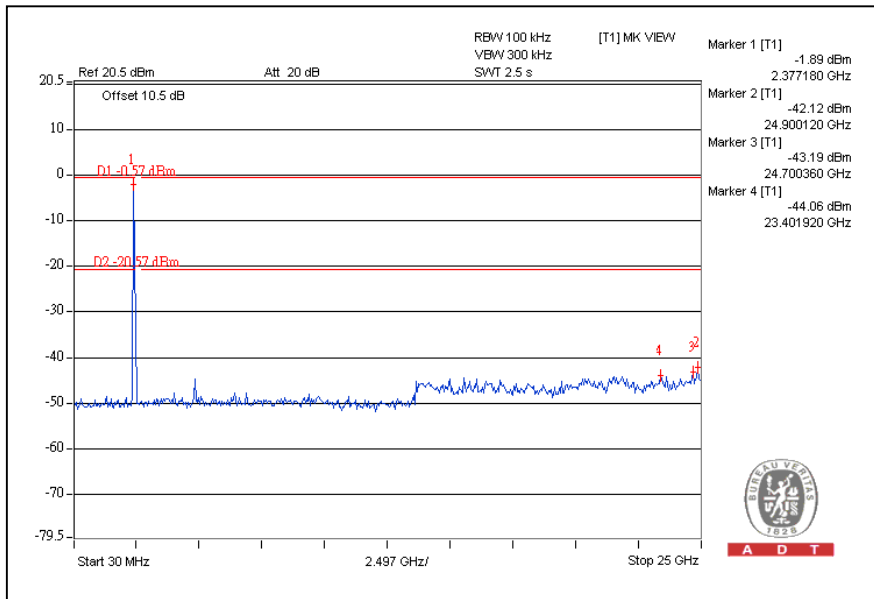
CH11



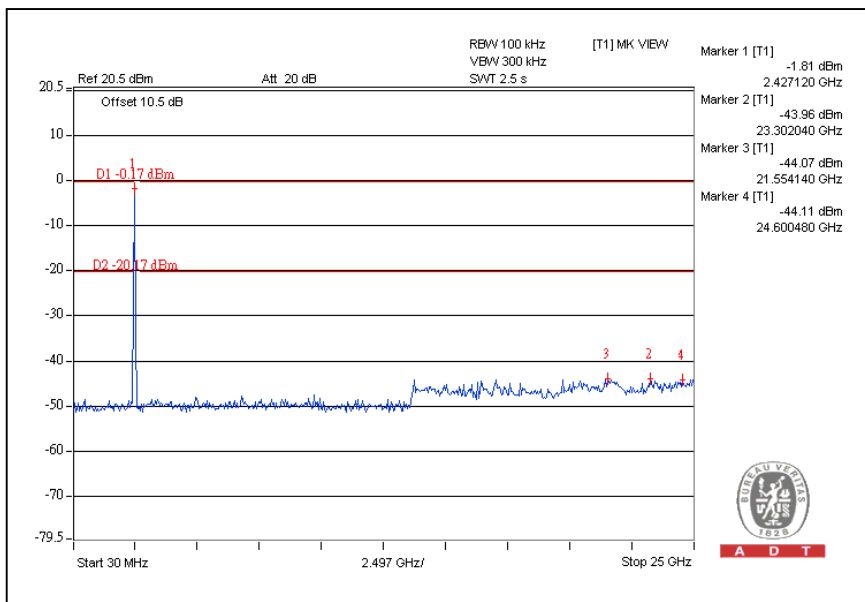


A D T

CH1

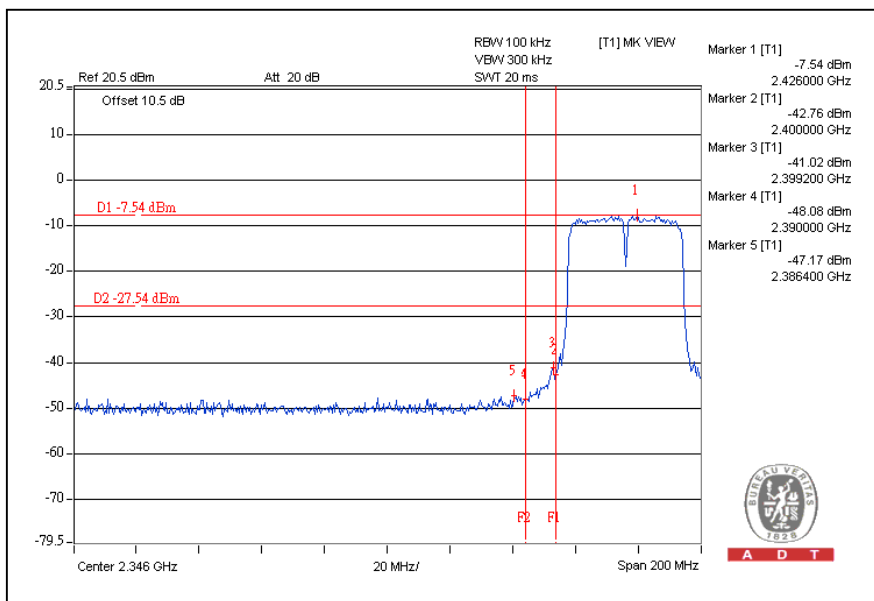


CH11

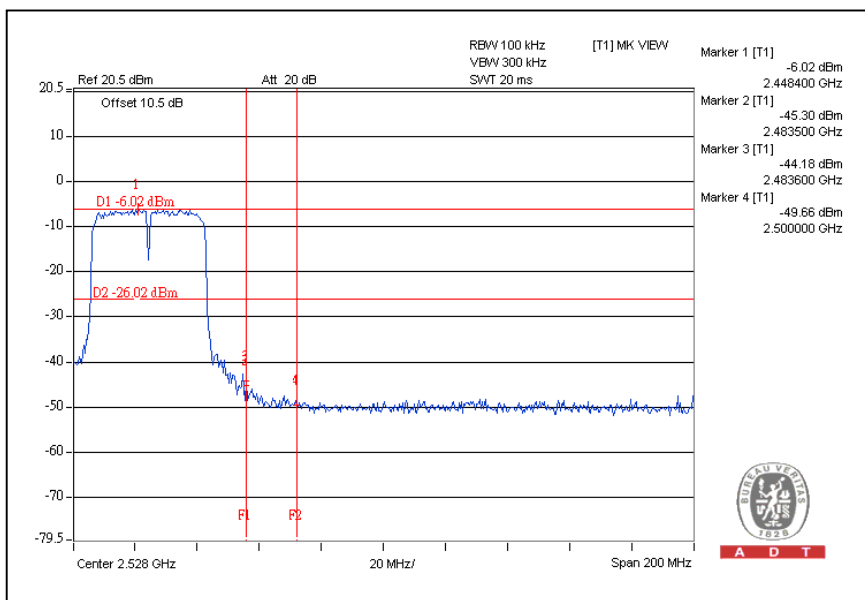


802.11n (40MHz) OFDM MODULATION:

CH1



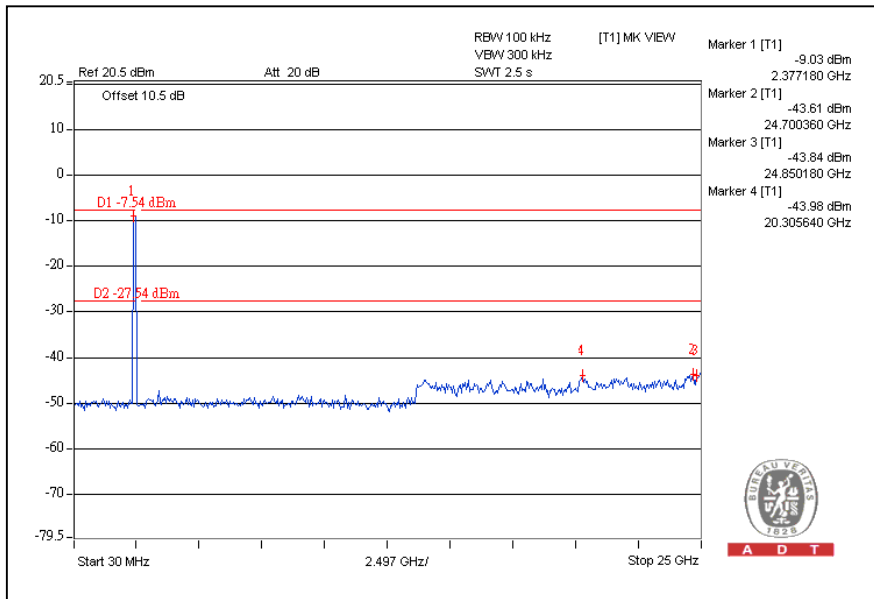
CH7



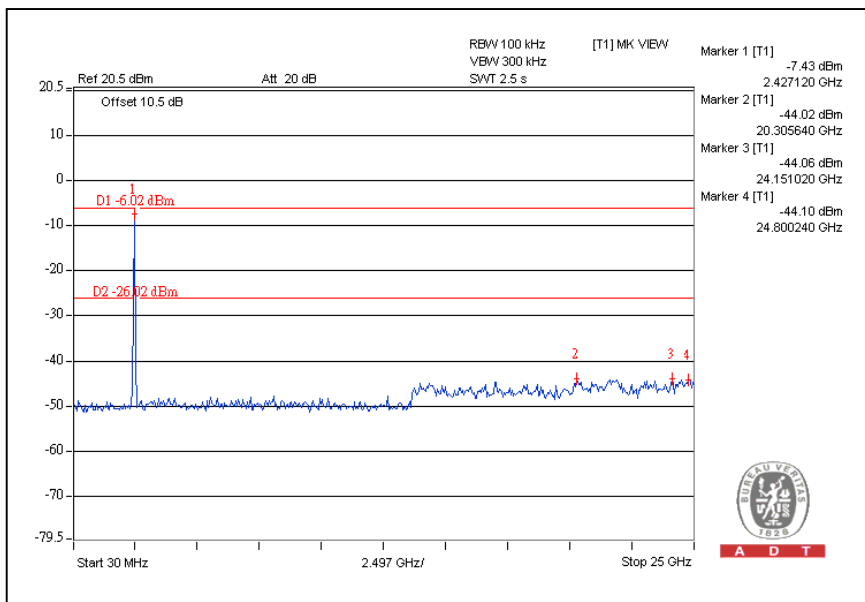


A D T

CH1



CH7





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.



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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 ---