FCC TEST REPORT

REPORT NO.: RF990903E02

MODEL NO.: AR5BUB173

FCC ID: PPD-AR5BUB173

RECEIVED: Sep. 02, 2010

TESTED: Sep. 04 to Oct. 01, 2010

ISSUED: Oct. 11, 2010

APPLICANT: Atheros Communications, Inc.

ADDRESS: 1700 Technology Drive, San Jose, CA 95110

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:	1X1 single band 802.11b/g/n USB module
BRAND NAME:	Atheros
MODEL NO.:	AR5BUB173
TEST SAMPLE:	R&D SAMPLE
TESTED:	Sep. 04 to Oct. 01, 2010
APPLICANT:	Atheros Communications, Inc.
STANDARDS:	FCC Part 15, Subpart C (Section 15.247) ANSI C63.4-2003

The above equipment (Model: AR5BUB173) 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 : Sunny Wen , **DATE:** Oct. 11, 2010
(Sunny Wen, Specialist)

TECHNICAL ACCEPTANCE : , **DATE:** Oct. 11, 2010
(Hank Chung, Deputy Manager)

APPROVED BY : , **DATE:** Oct. 11, 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 -8.76dB at 3.805MHz
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 -0.9dB at 483.50
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 IPEX 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 C	3.94 dB
Radiated emissions (1GHz -18GHz) – Chamber G	2.19 dB
Radiated emissions (18GHz -40GHz) – Chamber G	2.56 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	1X1 single band 802.11b/g/n USB module
MODEL NO.	AR5BUB173
FCC ID	PPD-AR5BUB173
POWER SUPPLY	DC 3.3V from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11 / 5.5 / 2 / 1Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6Mbps HT20 (800ns GI): 65 / 58.5 / 52 / 39 / 26 / 19.5 / 13 / 6.5Mbps. HT40 (800ns GI): 135 / 121.5 / 108 / 81 / 54 / 40.5 / 27 / 13.5Mbps. HT40 (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: 112.2mW 802.11g: 380.2mW 802.11n (20MHz): 380.2mW 802.11n (40MHz): 275.4mW
ANTENNA TYPE	See item 3.2
ANTENNA CONNECTOR	See item 3.2
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT incorporates CDD function with 802.11b, 802.11g and SISO function with 802.11n.

2. The EUT is 1 * 1 spatial SISO without beam forming function. The antenna configuration is one transmitter antenna and one receiver antenna, as there are 2 PCB antennas or 2 PIFA antennas.

3. The EUT complies with 802.11n standards and backwards compatible with 802. 11a, 802.11b, 802.11g products.

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

Test Mode	Data rate
Mode A	400ns GI
Mode B	**800ns GI**

From the above modes, the worst case was found in **Mode B**. Therefore only the test data of the mode was recorded in this report.

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

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

3.2 DESCRIPTION OF ANTENNA

There are four sets of antennas provided to the EUT, please refer to the following table:

Set	Antenna No.	Antenna Type	Gain (dBi)	Antenna Connector	Cable Length
Set 1	Antenna 1	PCB	3.3	IPEX	750mm
	Antenna 1	PCB	3.3	IPEX	750mm
Set 2	Antenna 2	PCB	4.41	IPEX	750mm
	Antenna 2	PCB	4.41	IPEX	750mm
Set 3	Antenna 3	PIFA	2.8	IPEX	350mm
	Antenna 3	PIFA	2.8	IPEX	350mm
Set 4	Antenna 4	PIFA	4.26	IPEX	750mm
	Antenna 4	PIFA	4.26	IPEX	750mm

3.3 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		

3.3.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	PLC	RE < 1G	RE ³ 1G	APCM	
A		√	√	√	Set 1 (Antenna 1): PCB antenna
B	√	√	√	√	Set 2 (Antenna 2): PCB antenna
C		√	√	√	Set 3 (Antenna 3): PIFA antenna
D		√	√	√	Set 4 (Antenna 4): PIFA 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
802.11n (20MHz)	1 to 11	6	OFDM	BPSK	6.5	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
802.11n (20MHz)	1 to 11	6	OFDM	BPSK	6.5	A ~ D

RADIATED EMISSION TEST (ABOVE 1 GHz):

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	CONFIGURE MODE
802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1	A ~ D
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6	A ~ D
802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	A ~ D
802.11n (40MHz)	1 to 7	1, 4, 7	OFDM	BPSK	13.5	A ~ 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)	CONFIGURE MODE
802.11b	1 to 11	1, 11	DSSS	DBPSK	1	A ~ D
802.11g	1 to 11	1, 11	OFDM	BPSK	6	A ~ D
802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	6.5	A ~ D
802.11n (40MHz)	1 to 7	1, 7	OFDM	BPSK	13.5	A ~ D

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, 68%RH, 1012 hPa	120Vac, 60Hz	Duke Tseng
RE<1G	28deg. C, 67%RH, 1012 hPa	120Vac, 60Hz	Wen Yu / Moris Lin
PLC	26deg. C, 70%RH, 1012 hPa	120Vac, 60Hz	Timmy Hu
APCM	25deg. C, 60%RH, 1012 hPa	120Vac, 60Hz	Rex Huang

3.4 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.

3.5 DESCRIPTION OF SUPPORT UNITS

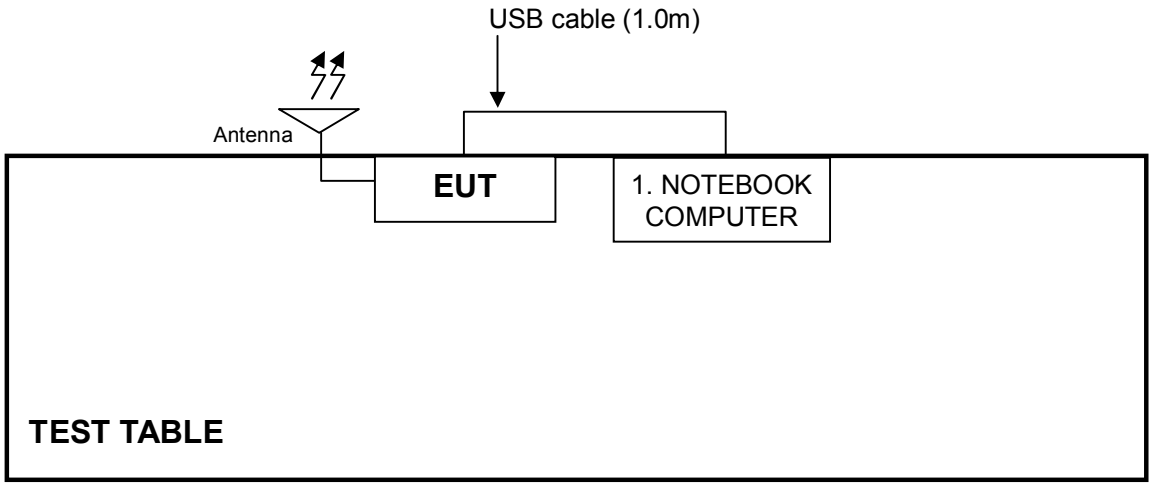
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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	1.0 m shielded, USB cable.

NOTE: 1. All power cords of the above support units are non shielded (1.8m).

3.6 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)	
0.15-0.5 0.5-5 5-30	Quasi-peak	Average
	66 to 56 56 60	56 to 46 46 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
ROHDE & SCHWARZ Test Receiver	ESCS 30	100287	Mar. 01, 2010	Feb. 28, 2011
Line-Impedance Stabilization Network (for EUT)	NSLK 8127	8127-523	Oct. 05, 2009	Oct. 04, 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.

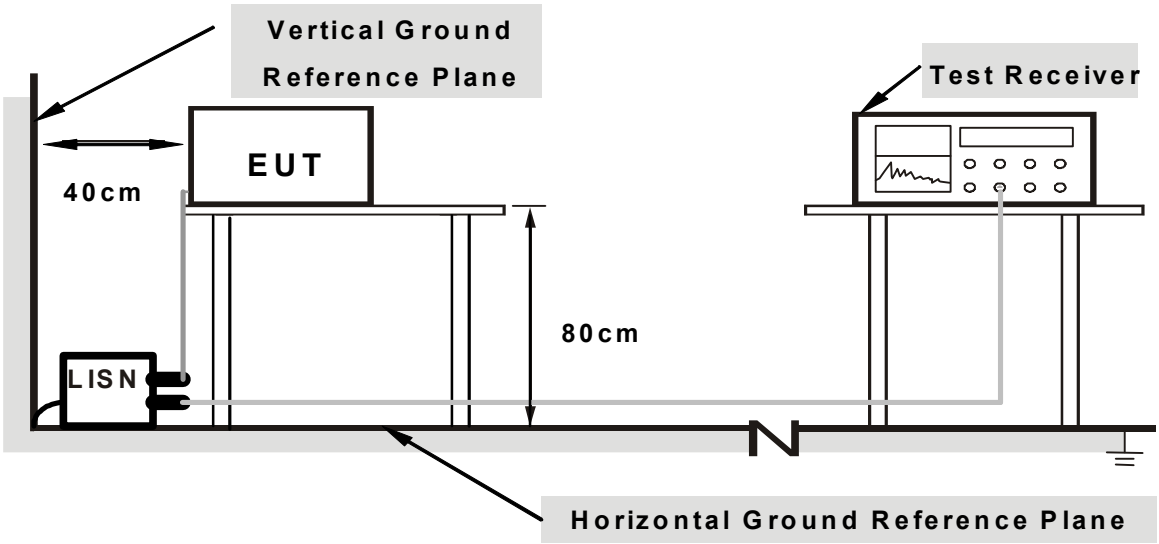
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

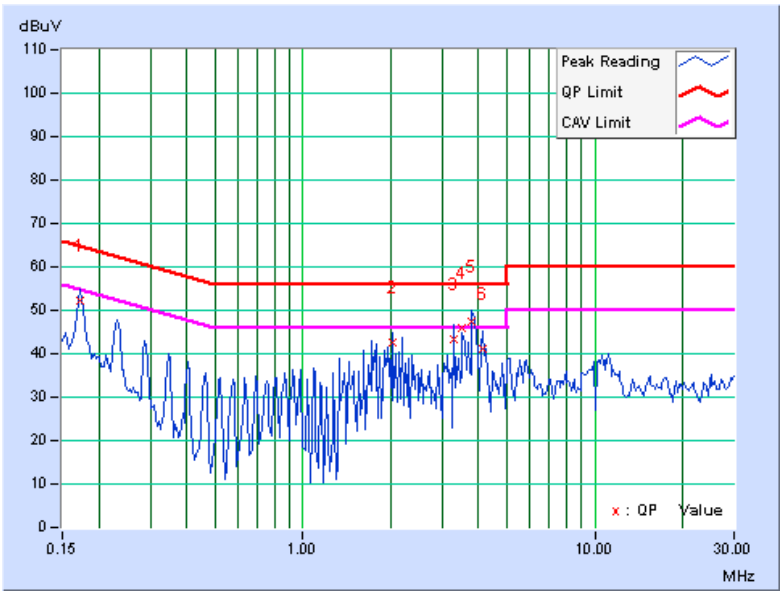
1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on the test table.
2. The support unit 1 (Notebook Computer) runs test program “art_v08_b132” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

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	0.173	0.04	52.06	-	52.10	-	64.79	54.79	-12.69	-
2	2.020	0.12	42.52	-	42.64	-	56.00	46.00	-13.36	-
3	3.289	0.13	43.06	-	43.19	-	56.00	46.00	-12.81	-
4	3.516	0.13	45.94	33.05	46.07	33.18	56.00	46.00	-9.93	-12.82
5	**3.805**	**0.13**	**47.11**	**36.04**	**47.24**	**36.17**	**56.00**	**46.00**	**-8.76**	**-9.83**
6	4.156	0.13	41.05	-	41.18	-	56.00	46.00	-14.82	-

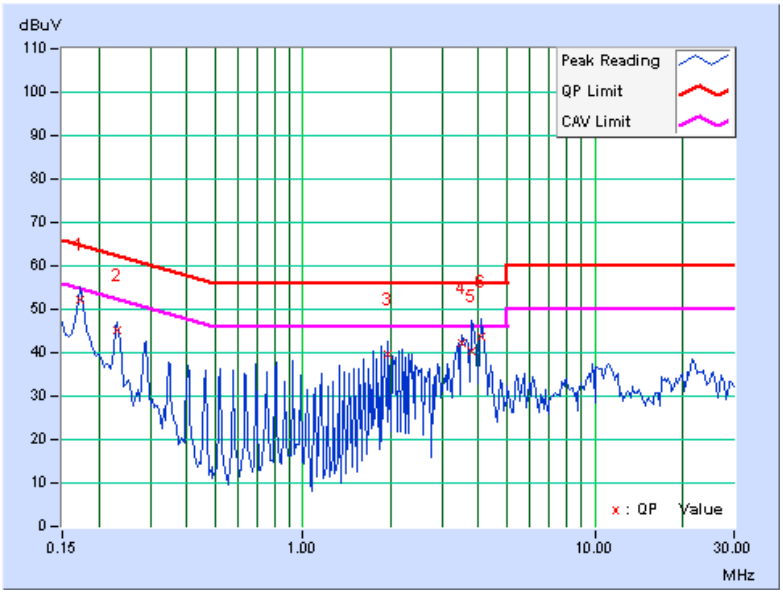
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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	0.173	0.05	52.30	-	52.35	-	64.79	54.79	-12.44	-
2	0.232	0.05	45.19	-	45.24	-	62.38	52.38	-17.14	-
3	1.965	0.13	39.61	-	39.74	-	56.00	46.00	-16.26	-
4	3.523	0.14	42.08	-	42.22	-	56.00	46.00	-13.78	-
5	3.758	0.14	40.07	-	40.21	-	56.00	46.00	-15.79	-
6	4.099	0.14	43.67	-	43.81	-	56.00	46.00	-12.19	-

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:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ROHDE & SCHWARZ Spectrum Analyzer	FSP40	100036	Dec. 18, 2009	Dec. 17, 2010
Agilent PSA Spectrum Analyzer	E4446A	MY46180622	May 12 , 2010	May 11 , 2011
HP Pre_Amplifier	8449B	300801923	Nov. 02, 2009	Nov. 01, 2010
ROHDE & SCHWARZ Test Receiver	ESCS30	847124/029	Sep. 03, 2010	Sep. 02, 2011
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	Apr. 28, 2010	Apr. 27, 2011
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 18, 2009	Dec. 17, 2010
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 22, 2010	Jan. 21, 2011
RF Switches	EMH-011	1001	NA	NA
RF CABLE (Chaintek)	Sucoflex 104+ Sucoflex 106	RF104-101+R F106-101	Aug. 24, 2010	Aug. 23, 2011
RF Cable	8DFB	STCCAB-30M-1GHz	NA	NA
Software	ADT_Radiated_ V7.6.15.9.2	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) and Spectrum Analyzer (model: FSP40) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 7450G-3.

For above 1GHz test, tested date: Sep. 04 to 28

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.

4.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 10 meters open site for below 1GHz test and at 3 meters chamber room for above 1GHz test. 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:

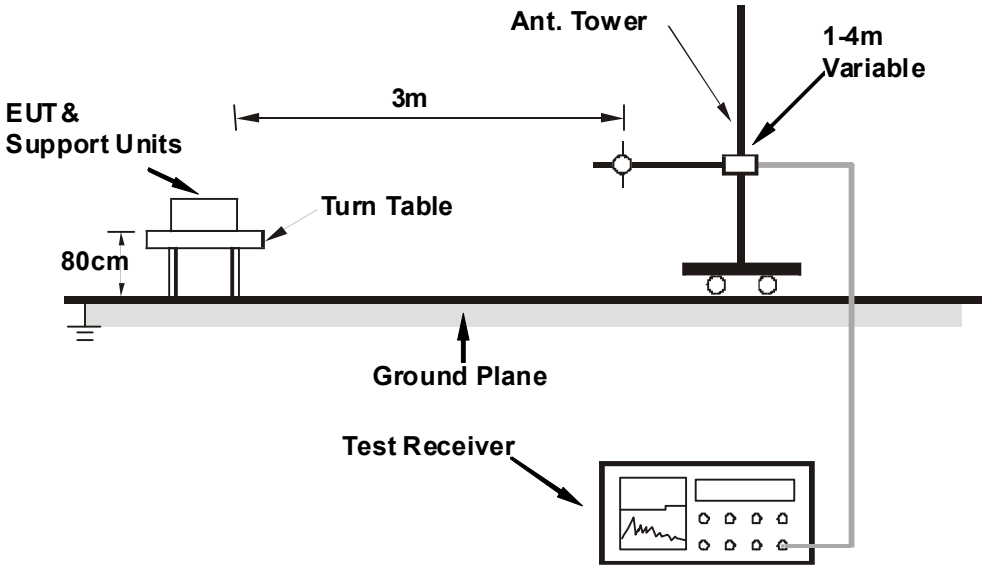
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution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

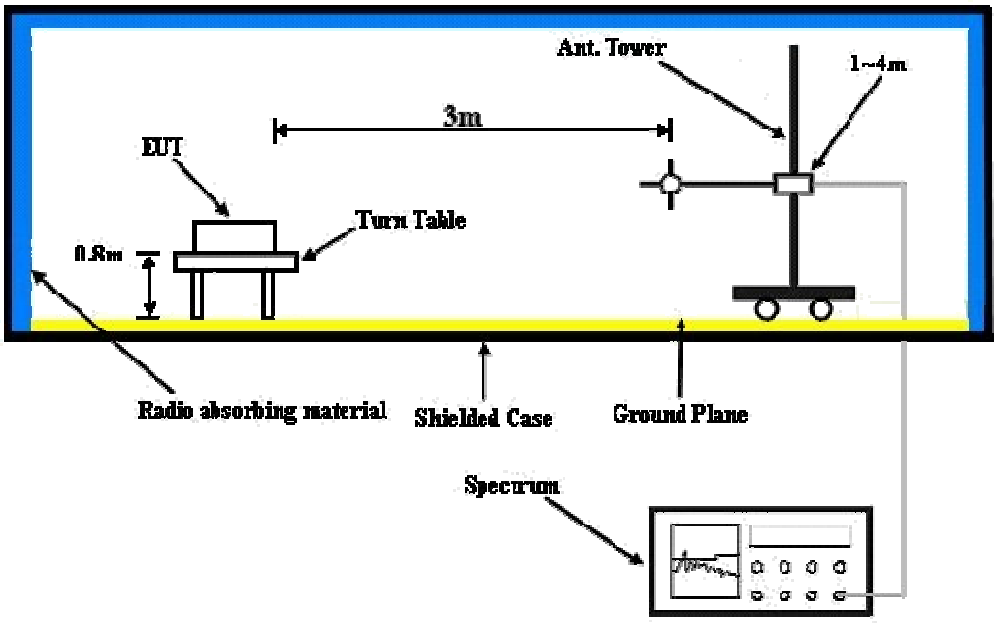
No deviation

4.2.5 TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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 (ANTENNA 1: PCB ANTENNA)

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH 1012 hPa	TESTED BY	Wen Yu
TEST MODE	Antenna 1: PCB 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	76.24	23.5 QP	40.0	-16.5	2.87 H	0	12.95	10.57
2	120.00	28.8 QP	43.5	-14.7	1.52 H	208	16.57	12.20
3	184.46	25.9 QP	43.5	-17.6	1.35 H	287	14.29	11.57
4	240.00	38.9 QP	46.0	-7.1	1.28 H	325	25.86	13.05
5	300.37	37.6 QP	46.0	-8.4	1.00 H	223	21.90	15.67
6	359.00	34.8 QP	46.0	-11.2	1.00 H	227	17.65	17.14
7	720.00	30.1 QP	46.0	-15.9	1.00 H	227	5.37	24.76
8	816.00	29.0 QP	46.0	-17.0	1.00 H	217	3.11	25.88
9	960.00	34.4 QP	46.0	-11.6	1.00 H	164	6.30	28.07
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	65.75	22.6 QP	40.0	-17.4	1.00 V	325	9.96	12.61
2	120.00	23.8 QP	43.5	-19.7	1.00 V	99	11.59	12.20
3	126.11	21.3 QP	43.5	-22.2	1.00 V	166	8.33	13.01
4	240.00	34.9 QP	46.0	-11.1	1.00 V	23	21.88	13.05
5	241.58	32.9 QP	46.0	-13.1	1.00 V	257	19.80	13.13
6	301.84	32.5 QP	46.0	-13.5	1.31 V	58	16.75	15.71
7	476.04	27.6 QP	46.0	-18.4	1.78 V	225	7.44	20.13
8	960.00	29.7 QP	46.0	-16.3	1.71 V	109	1.61	28.07

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	2389.00	57.6 PK	74.0	-16.4	1.18 H	21	25.95	31.65
2	2389.00	44.5 AV	54.0	-9.5	1.18 H	21	12.85	31.65
3	*2412.00	99.1 PK			1.14 H	26	67.37	31.73
4	*2412.00	96.8 AV			1.14 H	26	65.07	31.73
5	4824.00	47.5 PK	74.0	-26.5	1.00 H	22	8.53	38.97
6	4824.00	36.3 AV	54.0	-17.7	1.00 H	22	-2.67	38.97
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	2389.60	60.6 PK	74.0	-13.4	1.53 V	115	28.94	31.66
2	2389.60	49.4 AV	54.0	-4.6	1.53 V	115	17.74	31.66
3	*2412.00	108.4 PK			1.54 V	95	76.67	31.73
4	*2412.00	106.2 AV			1.54 V	95	74.47	31.73
5	4824.00	48.0 PK	74.0	-26.0	1.00 V	178	9.03	38.97
6	4824.00	37.4 AV	54.0	-16.6	1.00 V	178	-1.57	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	97.0 PK			1.00 H	111	65.19	31.81
2	*2437.00	94.5 AV			1.00 H	111	62.69	31.81
3	4874.00	47.1 PK	74.0	-26.9	1.00 H	18	7.96	39.14
4	4874.00	36.2 AV	54.0	-17.8	1.00 H	18	-2.94	39.14
5	7311.00	53.5 PK	74.0	-20.5	1.20 H	28	6.87	46.63
6	7311.00	41.3 AV	54.0	-12.7	1.20 H	28	-5.33	46.63
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	107.3 PK			1.53 V	95	75.49	31.81
2	*2437.00	105.2 AV			1.53 V	95	73.39	31.81
3	4874.00	46.7 PK	74.0	-27.3	1.00 V	131	7.56	39.14
4	4874.00	34.5 AV	54.0	-19.5	1.00 V	131	-4.64	39.14
5	7311.00	53.3 PK	74.0	-20.7	1.00 V	20	6.67	46.63
6	7311.00	41.3 AV	54.0	-12.7	1.00 V	20	-5.33	46.63

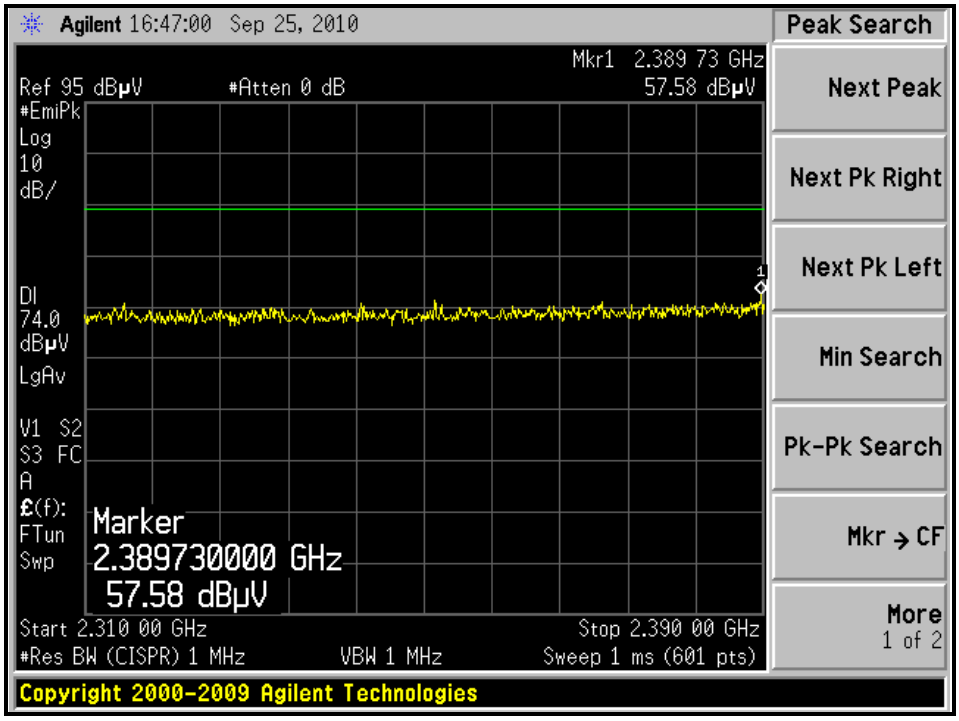
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

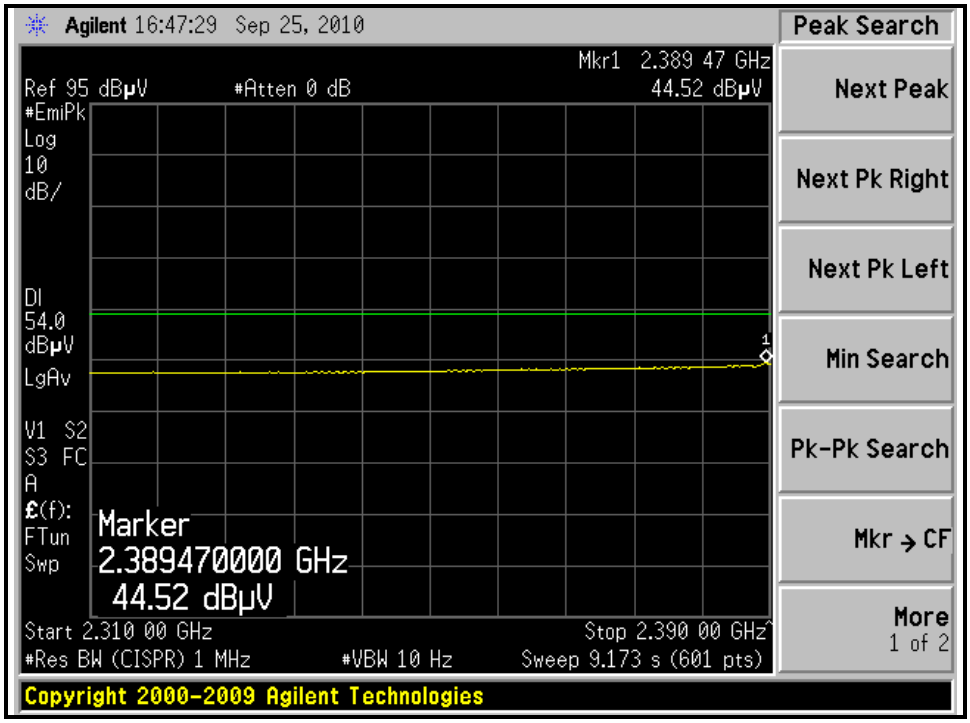
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB antenna		

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	*2462.00	95.2 PK			1.12 H	17	63.31	31.89
2	*2462.00	92.7 AV			1.12 H	17	60.81	31.89
3	2483.50	55.2 PK	74.0	-18.8	1.11 H	18	23.23	31.97
4	2483.50	43.7 AV	54.0	-10.3	1.11 H	18	11.73	31.97
5	4924.00	46.7 PK	74.0	-27.3	1.00 H	11	7.39	39.31
6	4924.00	34.5 AV	54.0	-19.5	1.00 H	11	-4.81	39.31
7	7386.00	53.7 PK	74.0	-20.3	1.20 H	30	7.10	46.60
8	7386.00	41.6 AV	54.0	-12.4	1.20 H	30	-5.00	46.60
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	*2462.00	107.1 PK			1.51 V	95	75.21	31.89
2	*2462.00	104.9 AV			1.51 V	95	73.01	31.89
3	2483.50	59.2 PK	74.0	-14.8	1.50 V	95	27.23	31.97
4	2483.50	47.8 AV	54.0	-6.2	1.50 V	95	15.83	31.97
5	4924.00	46.4 PK	74.0	-27.6	1.00 V	130	7.09	39.31
6	4924.00	34.4 AV	54.0	-19.6	1.00 V	130	-4.91	39.31
7	7386.00	53.6 PK	74.0	-20.4	1.00 V	21	7.00	46.60
8	7386.00	41.6 AV	54.0	-12.4	1.00 V	21	-5.00	46.60

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.

RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)





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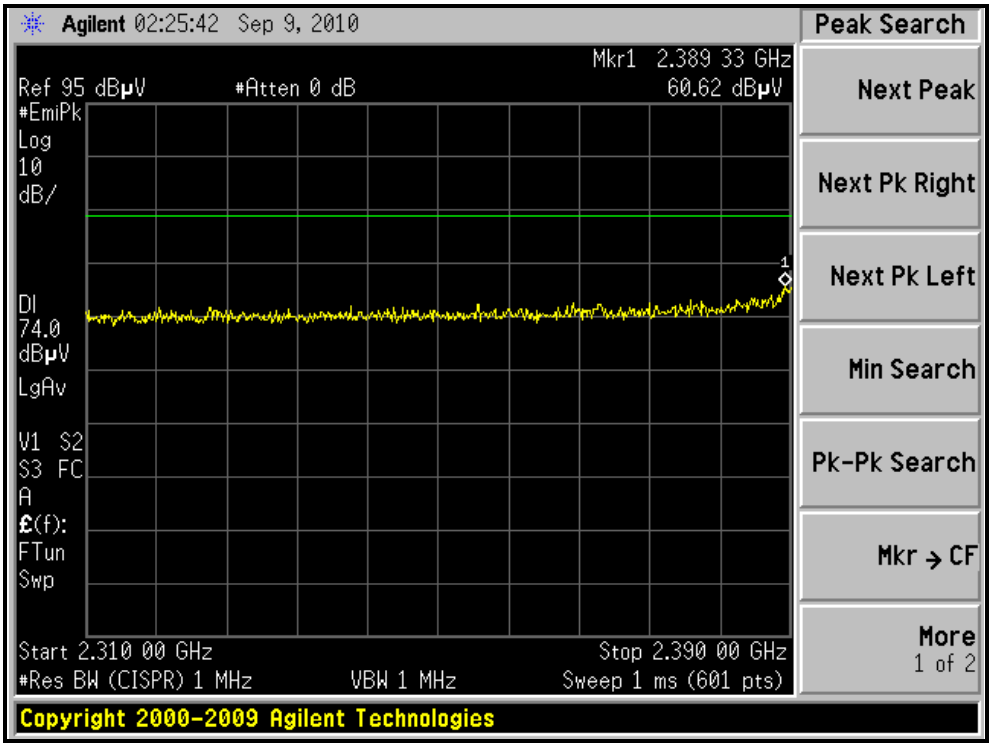

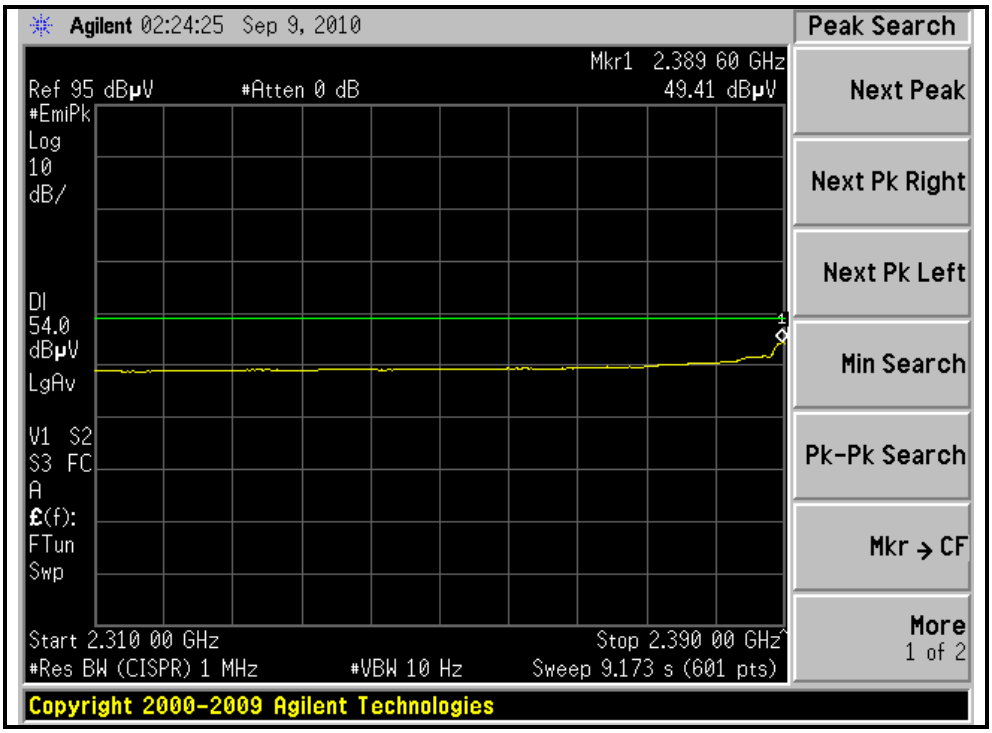

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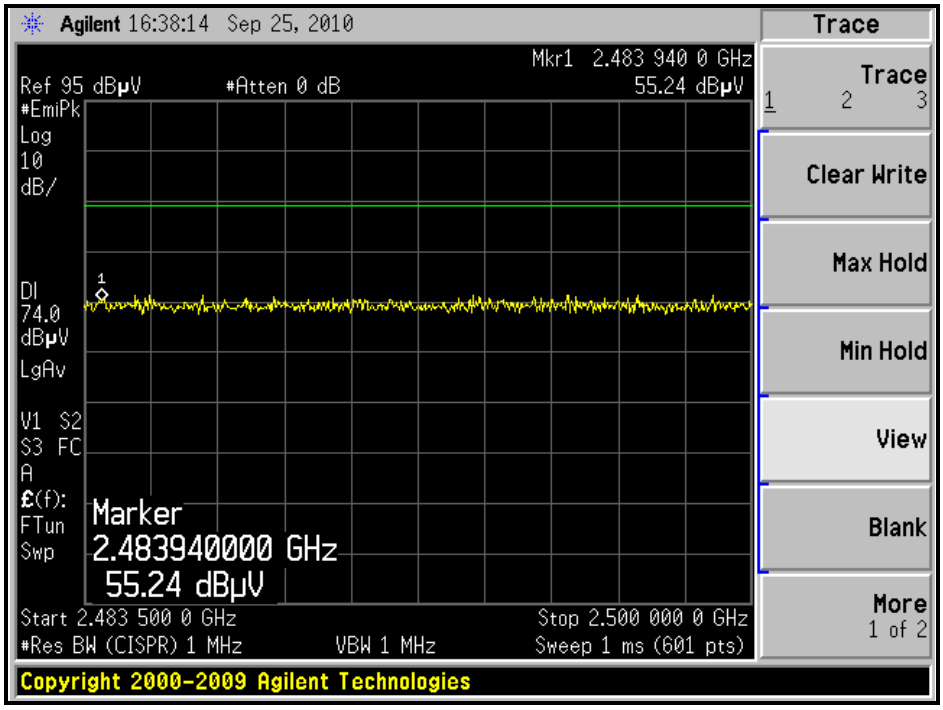
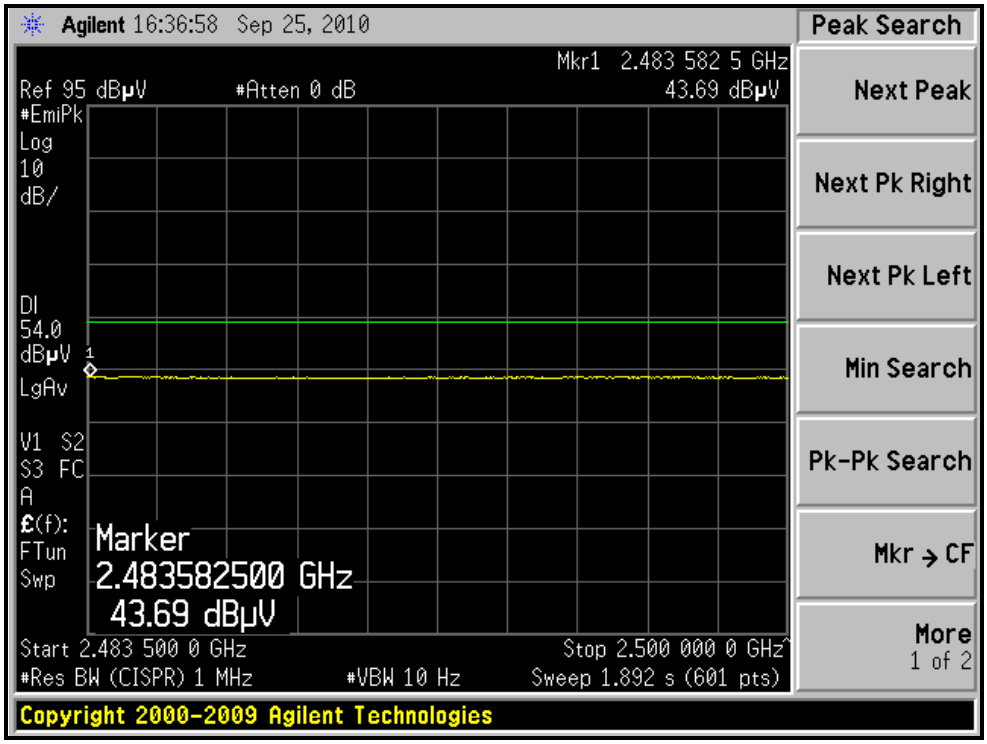
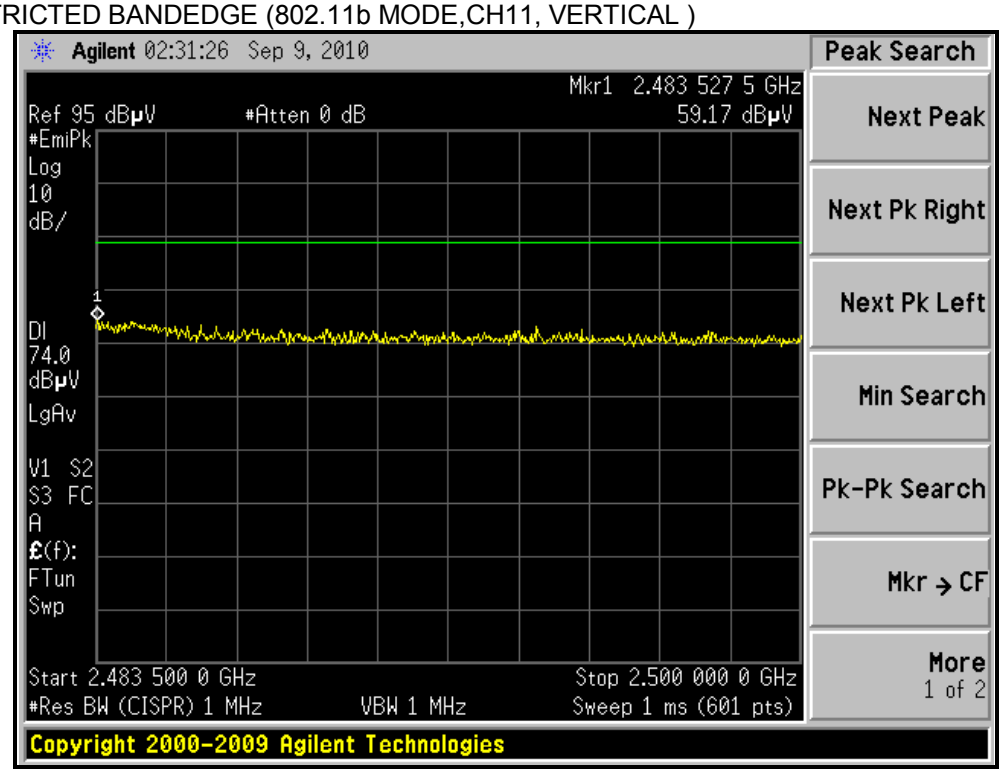
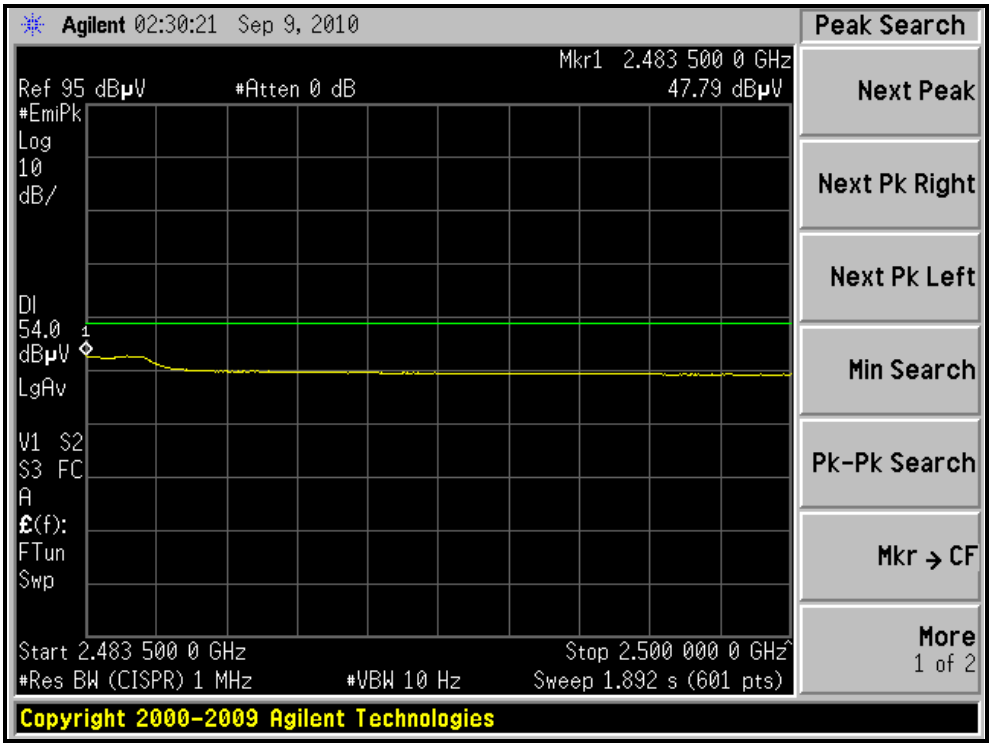




RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	2390.00	57.7 PK	74.0	-16.3	1.00 H	98	26.04	31.66
2	2390.00	45.1 AV	54.0	-8.9	1.00 H	98	13.44	31.66
3	*2412.00	94.3 PK			1.00 H	100	62.57	31.73
4	*2412.00	85.1 AV			1.00 H	100	53.37	31.73
5	4824.00	48.1 PK	74.0	-25.9	1.10 H	20	9.13	38.97
6	4824.00	35.1 AV	54.0	-18.9	1.10 H	20	-3.87	38.97
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	64.4 PK	74.0	-9.6	1.53 V	116	32.74	31.66
2	2390.00	51.6 AV	54.0	-2.4	1.53 V	116	19.94	31.66
3	*2412.00	105.3 PK			1.53 V	95	73.57	31.73
4	*2412.00	95.8 AV			1.53 V	95	64.07	31.73
5	4824.00	48.5 PK	74.0	-25.5	1.03 V	14	9.53	38.97
6	4824.00	35.2 AV	54.0	-18.8	1.03 V	14	-3.77	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	97.9 PK			1.18 H	100	66.09	31.81
2	*2437.00	87.5 AV			1.18 H	100	55.69	31.81
3	4874.00	45.4 PK	74.0	-28.6	1.00 H	21	6.26	39.14
4	4874.00	33.5 AV	54.0	-20.5	1.00 H	21	-5.64	39.14
5	7311.00	53.4 PK	74.0	-20.6	1.00 H	29	6.77	46.63
6	7311.00	41.4 AV	54.0	-12.6	1.00 H	29	-5.23	46.63
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	110.3 PK			1.49 V	66	78.49	31.81
2	*2437.00	100.6 AV			1.49 V	66	68.79	31.81
3	4874.00	45.5 PK	74.0	-28.5	1.00 V	130	6.36	39.14
4	4874.00	33.5 AV	54.0	-20.5	1.00 V	130	-5.64	39.14
5	7311.00	53.5 PK	74.0	-20.5	1.00 V	19	6.87	46.63
6	7311.00	41.4 AV	54.0	-12.6	1.00 V	19	-5.23	46.63

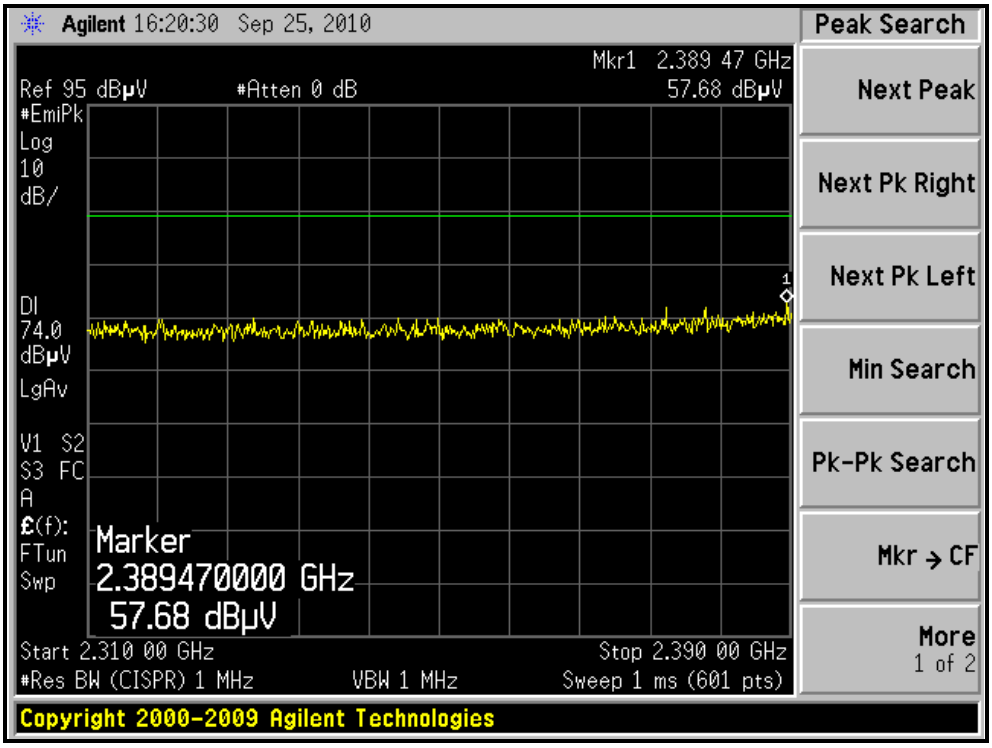
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

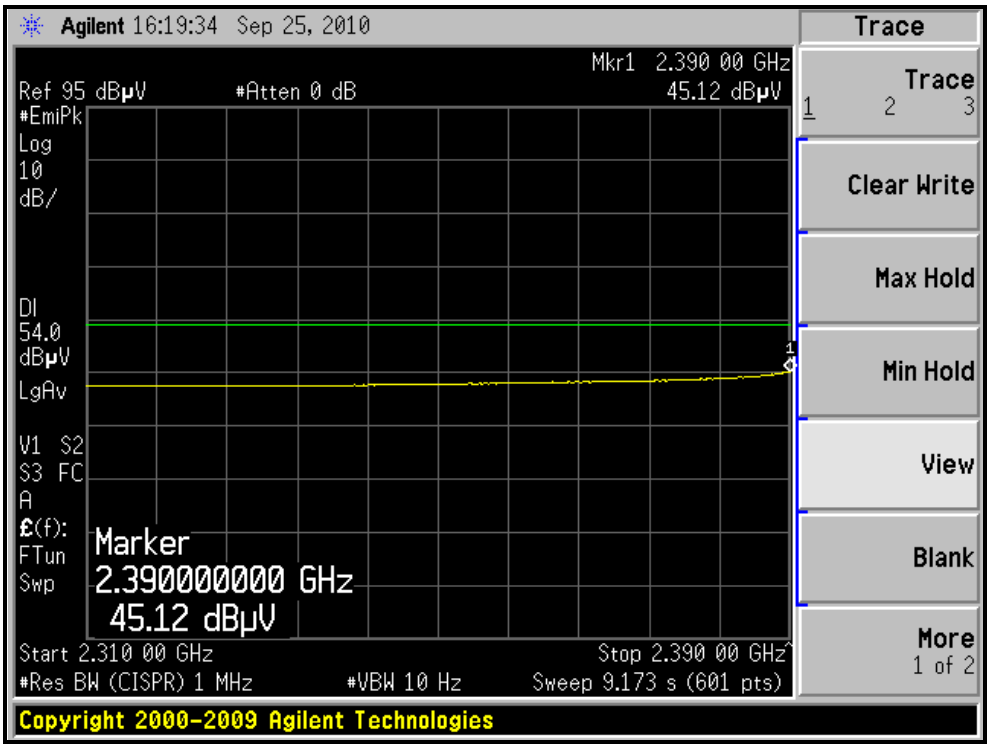
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB antenna		

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	*2462.00	97.6 PK			1.12 H	17	65.71	31.89
2	*2462.00	87.1 AV			1.12 H	17	55.21	31.89
3	2483.50	56.5 PK	74.0	-17.5	1.16 H	23	24.53	31.97
4	2483.50	44.0 AV	54.0	-10.0	1.16 H	23	12.03	31.97
5	4924.00	48.2 PK	74.0	-25.8	1.05 H	115	8.89	39.31
6	4924.00	35.8 AV	54.0	-18.2	1.05 H	115	-3.51	39.31
7	7386.00	56.4 PK	74.0	-17.6	1.00 H	117	9.80	46.60
8	7386.00	43.3 AV	54.0	-10.7	1.00 H	117	-3.30	46.60
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	*2462.00	108.3 PK			1.50 V	95	76.41	31.89
2	*2462.00	98.7 AV			1.50 V	95	66.81	31.89
3	2483.50	70.9 PK	74.0	-3.1	1.50 V	95	38.93	31.97
4	2483.50	51.8 AV	54.0	-2.2	1.50 V	95	19.83	31.97
5	4924.00	48.6 PK	74.0	-25.4	1.13 V	113	9.29	39.31
6	4924.00	35.9 AV	54.0	-18.1	1.13 V	113	-3.41	39.31
7	7386.00	57.1 PK	74.0	-16.9	1.12 V	120	10.50	46.60
8	7386.00	43.4 AV	54.0	-10.6	1.12 V	120	-3.20	46.60

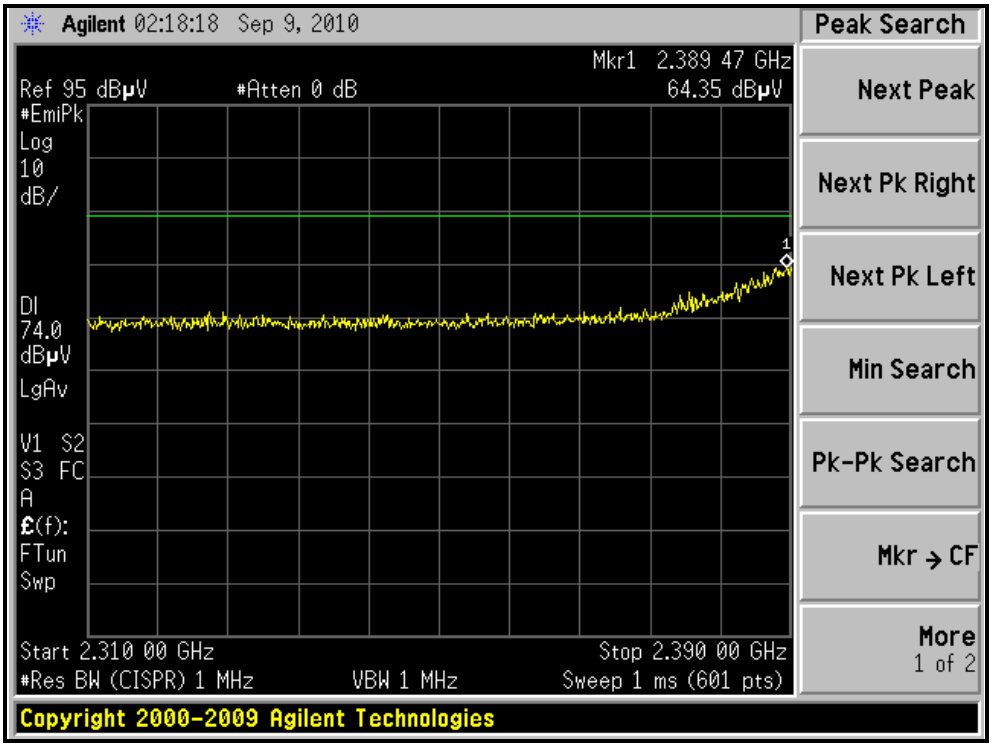
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

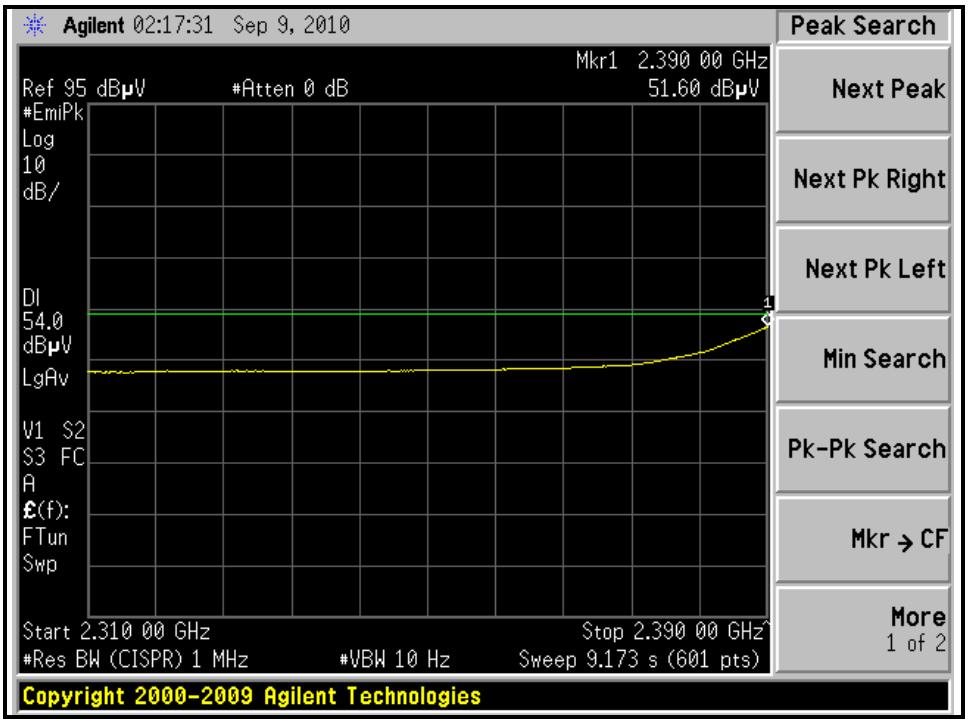
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



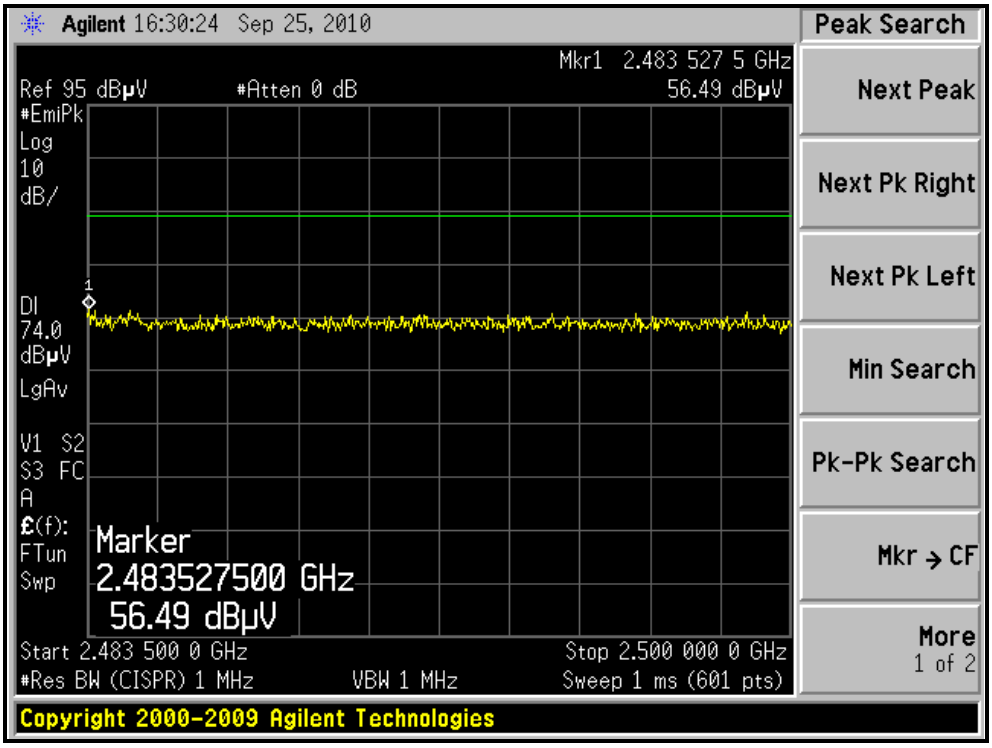


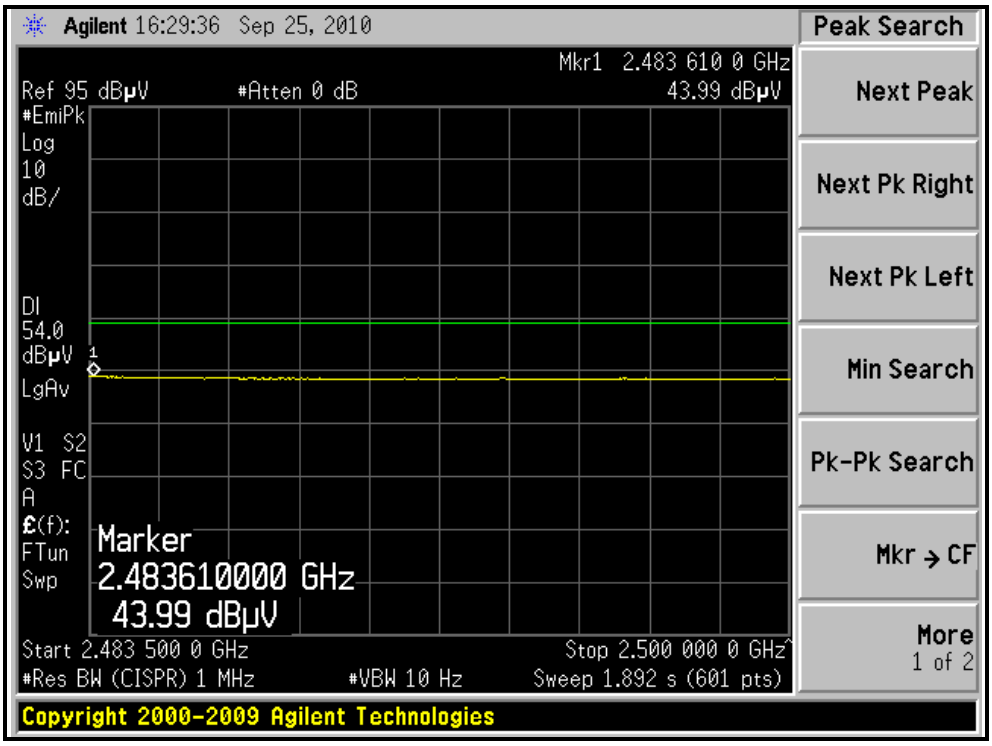
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



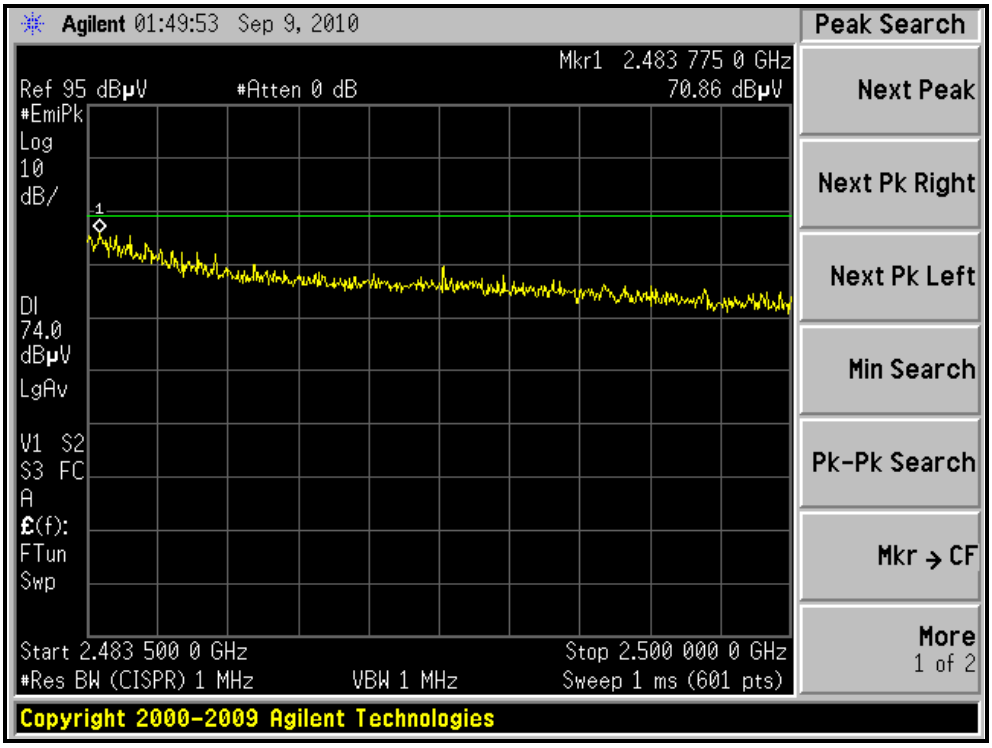


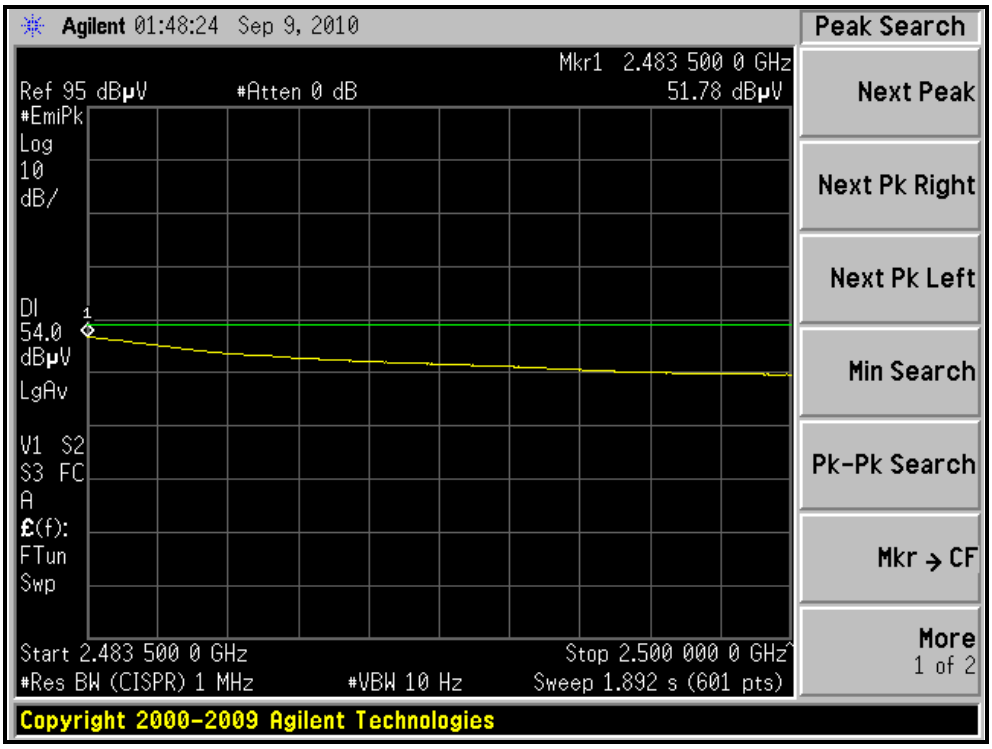
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	2390.00	56.8 PK	74.0	-17.2	1.19 H	23	25.14	31.66
2	2390.00	45.7 AV	54.0	-8.3	1.19 H	23	14.04	31.66
3	*2412.00	95.1 PK			1.15 H	24	63.37	31.73
4	*2412.00	84.5 AV			1.15 H	24	52.77	31.73
5	4824.00	48.1 PK	74.0	-25.9	1.05 H	205	9.13	38.97
6	4824.00	34.1 AV	54.0	-19.9	1.05 H	205	-4.87	38.97
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	66.2 PK	74.0	-7.8	1.54 V	116	34.54	31.66
2	2390.00	51.9 AV	54.0	-2.1	1.54 V	116	20.24	31.66
3	*2412.00	104.5 PK			1.56 V	96	72.77	31.73
4	*2412.00	94.3 AV			1.56 V	96	62.57	31.73
5	4824.00	48.4 PK	74.0	-25.6	1.00 V	23	9.43	38.97
6	4824.00	34.9 AV	54.0	-19.1	1.00 V	23	-4.07	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	100.5 PK			1.17 H	16	68.69	31.81
2	*2437.00	90.3 AV			1.17 H	16	58.49	31.81
3	4874.00	48.1 PK	74.0	-25.9	1.03 H	28	8.96	39.14
4	4874.00	35.5 AV	54.0	-18.5	1.03 H	28	-3.64	39.14
5	7311.00	56.4 PK	74.0	-17.6	1.00 H	30	9.77	46.63
6	7311.00	43.2 AV	54.0	-10.8	1.00 H	30	-3.43	46.63
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			1.50 V	67	78.19	31.81
2	*2437.00	100.3 AV			1.50 V	67	68.49	31.81
3	4874.00	47.8 PK	74.0	-26.2	1.10 V	350	8.66	39.14
4	4874.00	35.4 AV	54.0	-18.6	1.10 V	350	-3.74	39.14
5	7311.00	55.0 PK	74.0	-19.0	1.06 V	354	8.37	46.63
6	7311.00	43.1 AV	54.0	-10.9	1.06 V	354	-3.53	46.63

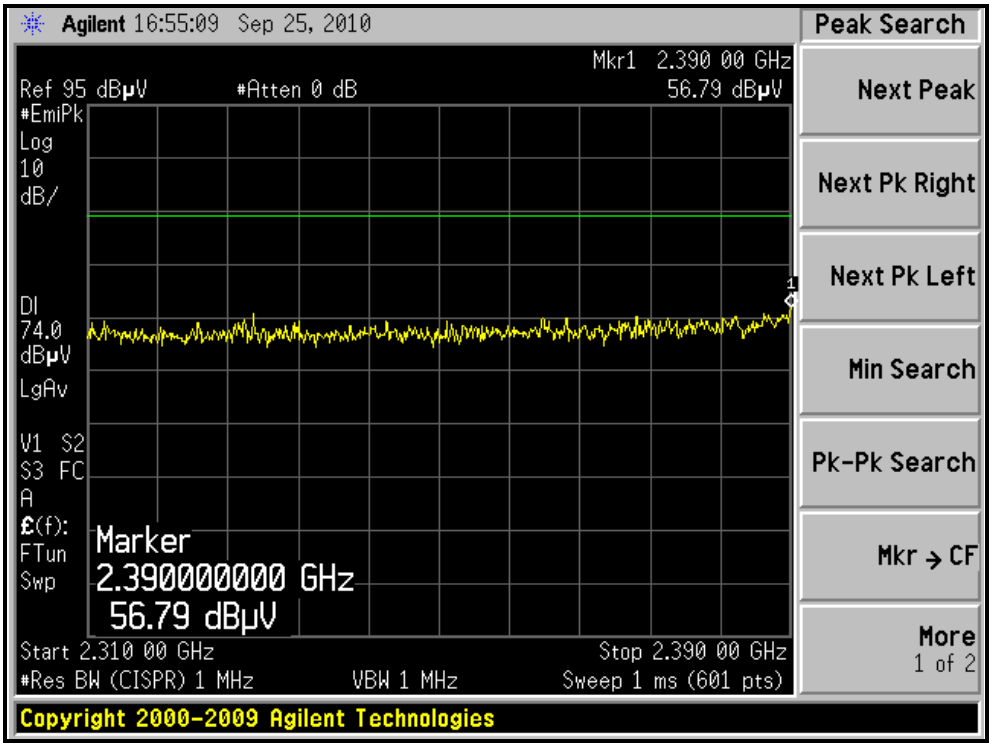
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

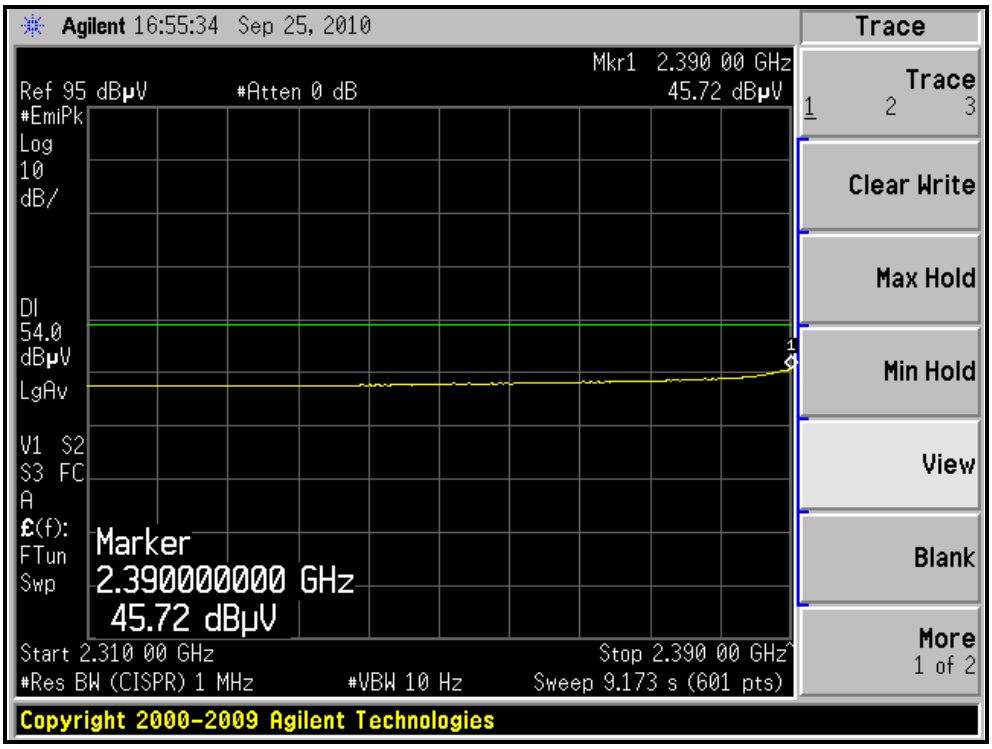
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB antenna		

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	*2462.00	97.2 PK			1.12 H	17	65.31	31.89
2	*2462.00	86.9 AV			1.12 H	17	55.01	31.89
3	2483.50	58.2 PK	74.0	-15.8	1.16 H	16	26.23	31.97
4	2483.50	44.5 AV	54.0	-9.5	1.16 H	16	12.53	31.97
5	4924.00	48.5 PK	74.0	-25.5	1.11 H	208	9.19	39.31
6	4924.00	34.9 AV	54.0	-19.1	1.11 H	208	-4.41	39.31
7	7386.00	55.7 PK	74.0	-18.3	1.12 H	210	9.10	46.60
8	7386.00	43.3 AV	54.0	-10.7	1.12 H	210	-3.30	46.60
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	*2462.00	107.4 PK			1.50 V	94	75.51	31.89
2	*2462.00	97.7 AV			1.50 V	94	65.81	31.89
3	2483.50	70.9 PK	74.0	-3.1	1.49 V	95	38.93	31.97
4	2483.50	50.9 AV	54.0	-3.1	1.49 V	95	18.93	31.97
5	4924.00	48.6 PK	74.0	-25.4	1.12 V	30	9.29	39.31
6	4924.00	35.0 AV	54.0	-19.0	1.12 V	30	-4.31	39.31
7	7386.00	55.9 PK	74.0	-18.1	1.11 V	27	9.30	46.60
8	7386.00	43.3 AV	54.0	-10.7	1.11 V	27	-3.30	46.60

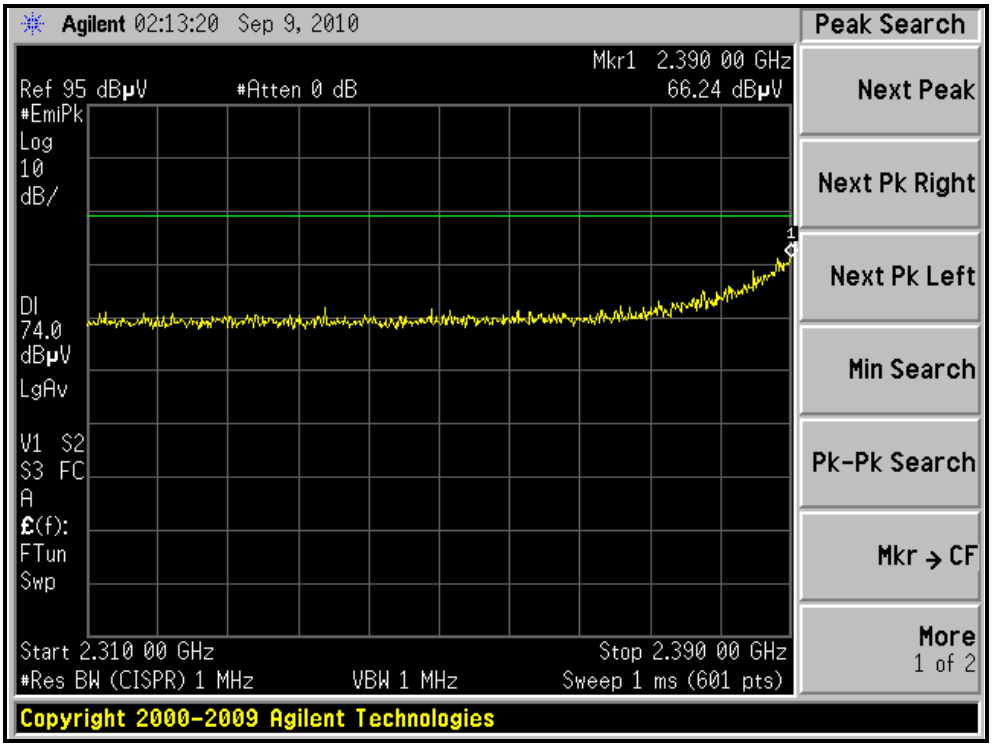
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

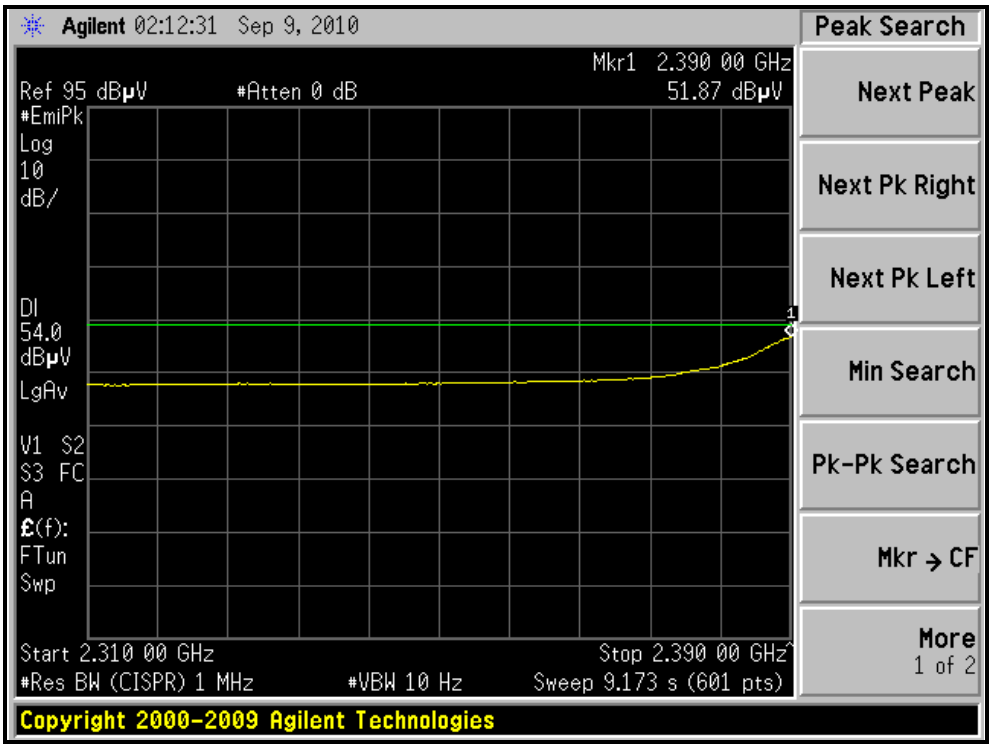
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, HORIZONTAL)





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





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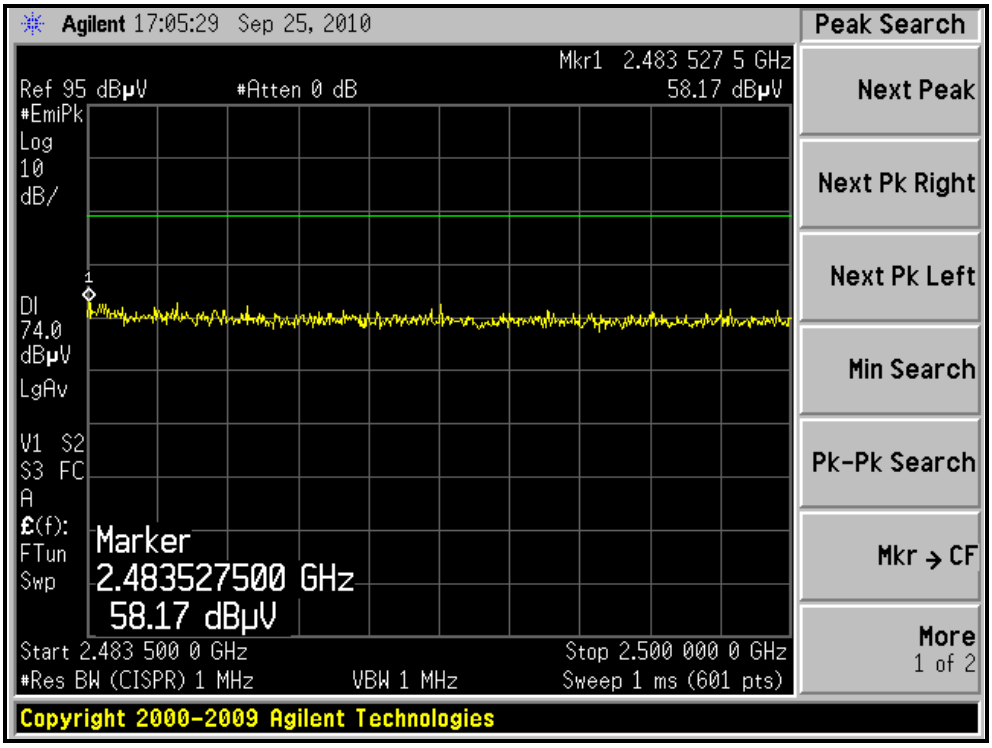
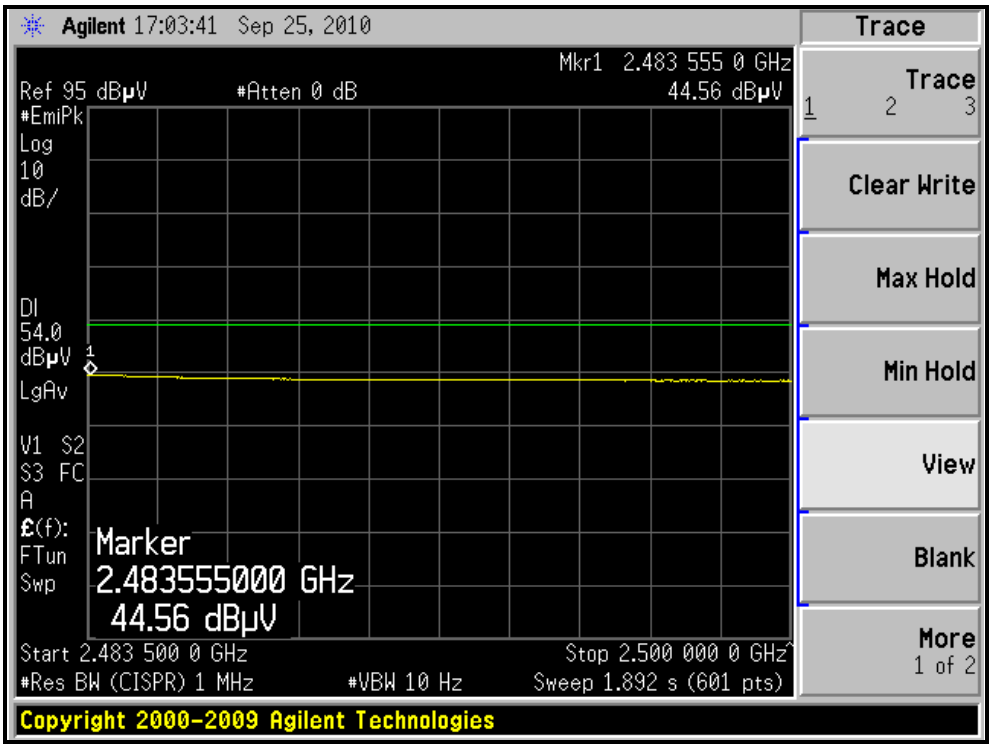
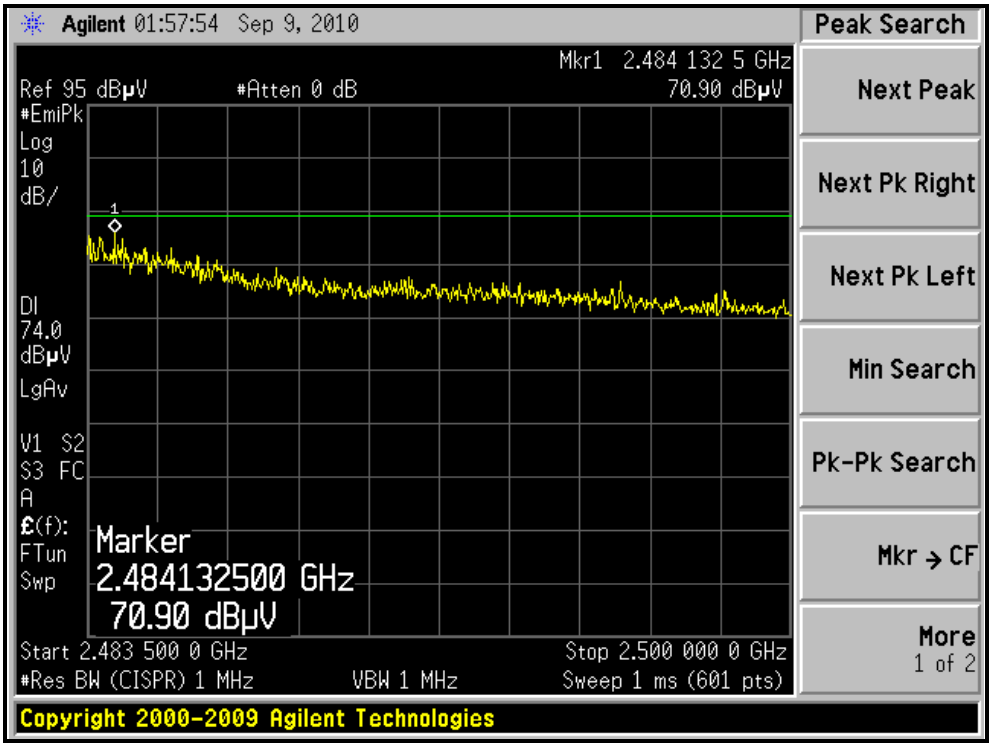
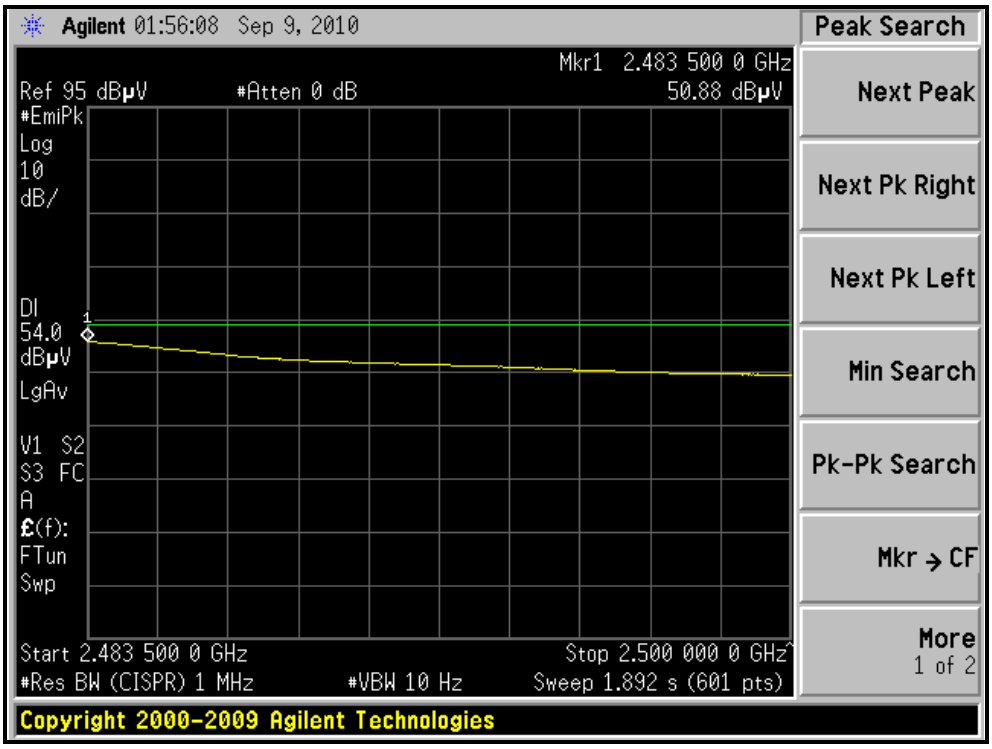




RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, VERTICAL)





802.11n (40MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	2390.00	60.8 PK	74.0	-13.2	1.16 H	22	29.14	31.66
2	2390.00	47.4 AV	54.0	-6.6	1.16 H	22	15.74	31.66
3	*2422.00	89.9 PK			1.18 H	20	58.14	31.76
4	*2422.00	79.9 AV			1.18 H	20	48.14	31.76
5	4844.00	45.7 PK	74.0	-28.3	1.15 H	25	6.66	39.04
6	4844.00	33.6 AV	54.0	-20.4	1.15 H	25	-5.44	39.04
7	7266.00	55.1 PK	74.0	-18.9	1.14 H	24	8.43	46.67
8	7266.00	41.3 AV	54.0	-12.7	1.14 H	24	-5.37	46.67
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	2389.47	68.0 PK	74.0	-6.0	1.53 V	113	36.34	31.66
2	2389.47	53.0 AV	54.0	-1.0	1.53 V	113	21.34	31.66
3	*2422.00	98.5 PK			1.52 V	113	66.74	31.76
4	*2422.00	88.9 AV			1.52 V	113	57.14	31.76
5	4844.00	46.1 PK	74.0	-27.9	1.19 V	13	7.06	39.04
6	4844.00	33.6 AV	54.0	-20.4	1.19 V	13	-5.44	39.04
7	7266.00	54.2 PK	74.0	-19.8	1.20 V	15	7.53	46.67
8	7266.00	41.3 AV	54.0	-12.7	1.20 V	15	-5.37	46.67

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB 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	93.2 PK			1.12 H	20	61.39	31.81
2	*2437.00	82.5 AV			1.12 H	20	50.69	31.81
3	4874.00	47.7 PK	74.0	-26.3	1.14 H	20	8.56	39.14
4	4874.00	33.8 AV	54.0	-20.2	1.14 H	20	-5.34	39.14
5	7311.00	53.6 PK	74.0	-20.4	1.10 H	25	6.97	46.63
6	7311.00	41.5 AV	54.0	-12.5	1.10 H	25	-5.13	46.63
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	66.3 PK	74.0	-7.7	1.51 V	115	34.64	31.66
2	2390.00	50.4 AV	54.0	-3.6	1.51 V	115	18.74	31.66
3	*2437.00	101.7 PK			1.50 V	66	69.89	31.81
4	*2437.00	92.1 AV			1.50 V	66	60.29	31.81
5	2483.50	67.2 PK	74.0	-6.8	1.49 V	95	35.23	31.97
6	2483.50	51.2 AV	54.0	-2.8	1.49 V	95	19.23	31.97
7	4874.00	48.1 PK	74.0	-25.9	1.13 V	15	8.96	39.14
8	4874.00	33.2 AV	54.0	-20.8	1.13 V	15	-5.94	39.14
9	7311.00	52.5 PK	74.0	-21.5	1.10 V	20	5.87	46.63
10	7311.00	41.2 AV	54.0	-12.8	1.10 V	20	-5.43	46.63

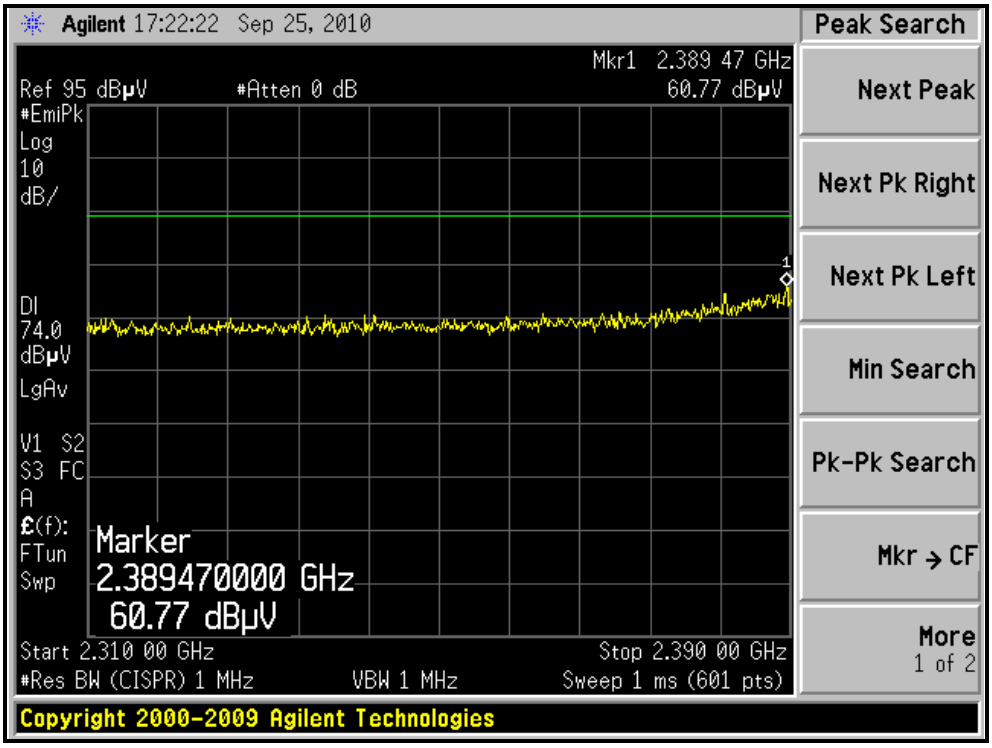
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

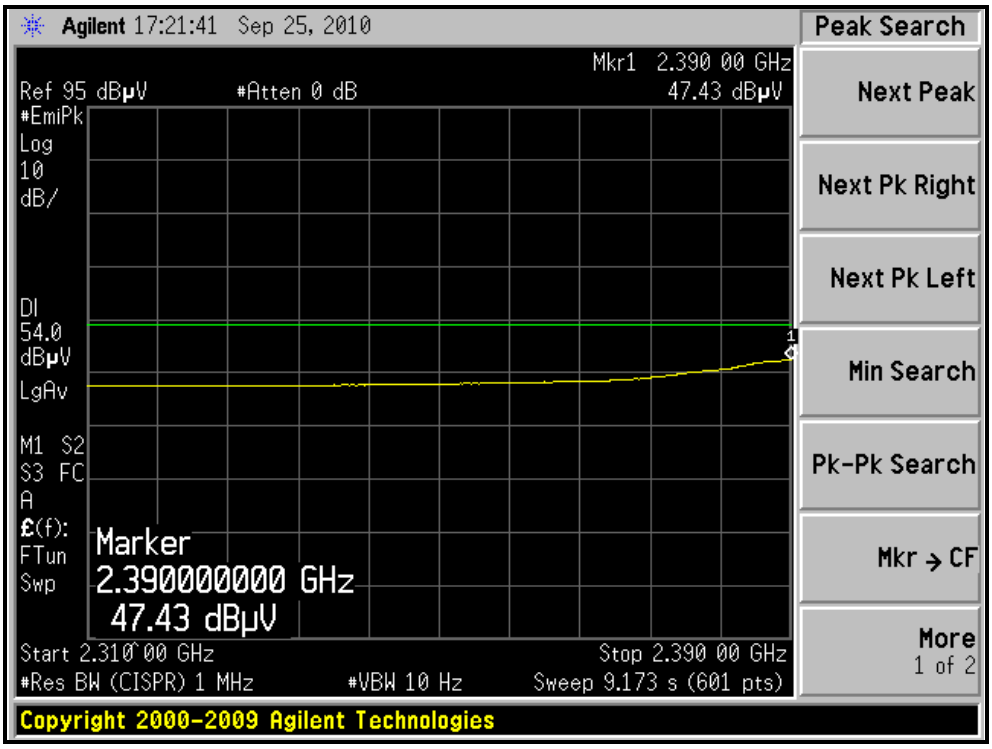
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 1: PCB antenna		

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	*2452.00	91.5 PK			1.14 H	18	59.64	31.86
2	*2452.00	81.3 AV			1.14 H	18	49.44	31.86
3	2483.50	61.7 PK	74.0	-12.3	1.11 H	17	29.73	31.97
4	2483.50	48.4 AV	54.0	-5.6	1.11 H	17	16.43	31.97
5	4904.00	45.8 PK	74.0	-28.2	1.04 H	31	6.56	39.24
6	4904.00	33.4 AV	54.0	-20.6	1.04 H	31	-5.84	39.24
7	7356.00	53.6 PK	74.0	-20.4	1.06 H	33	6.99	46.61
8	7356.00	41.3 AV	54.0	-12.7	1.06 H	33	-5.31	46.61
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	101.0 PK			1.50 V	115	69.14	31.86
2	*2452.00	91.1 AV			1.50 V	115	59.24	31.86
3	2483.53	67.9 PK	74.0	-6.1	1.48 V	117	35.93	31.97
4	2483.53	51.3 AV	54.0	-2.7	1.48 V	117	19.33	31.97
5	4904.00	46.3 PK	74.0	-27.7	1.04 V	35	7.06	39.24
6	4904.00	33.7 AV	54.0	-20.3	1.04 V	35	-5.54	39.24
7	7356.00	54.8 PK	74.0	-19.2	1.00 V	30	8.19	46.61
8	7356.00	42.1 AV	54.0	-11.9	1.00 V	30	-4.51	46.61

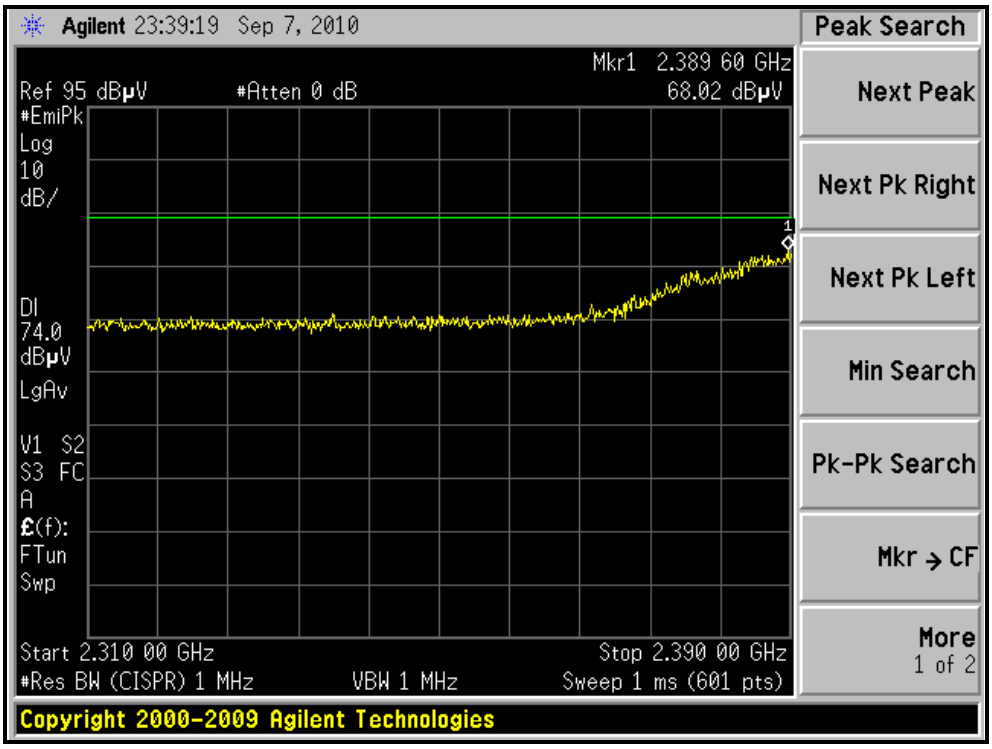
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

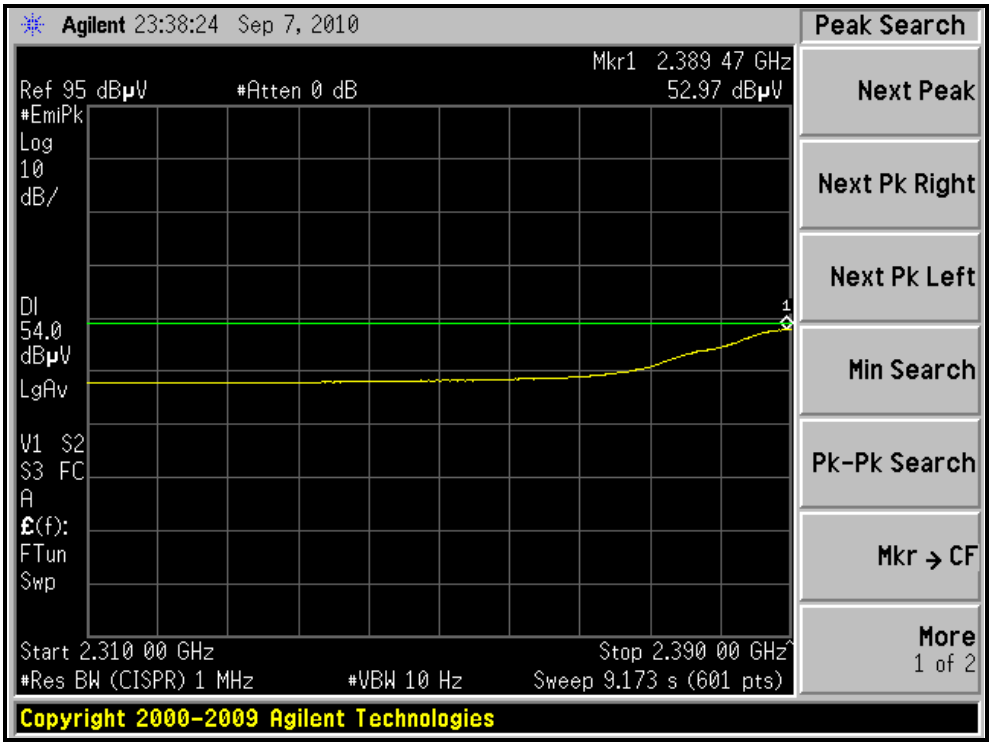
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)



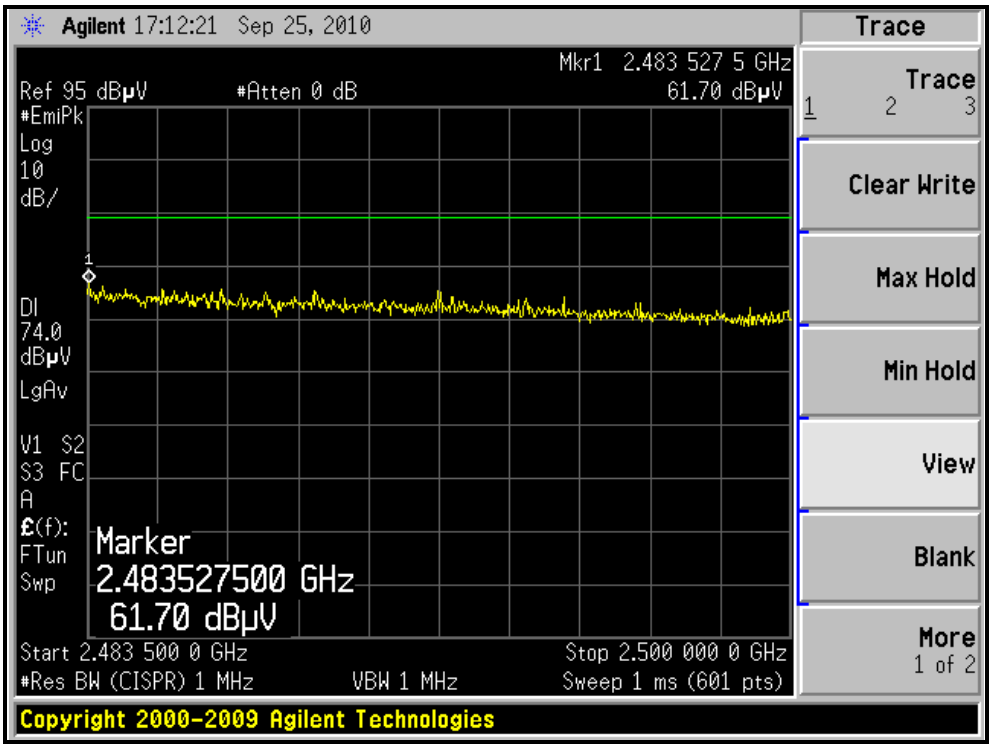


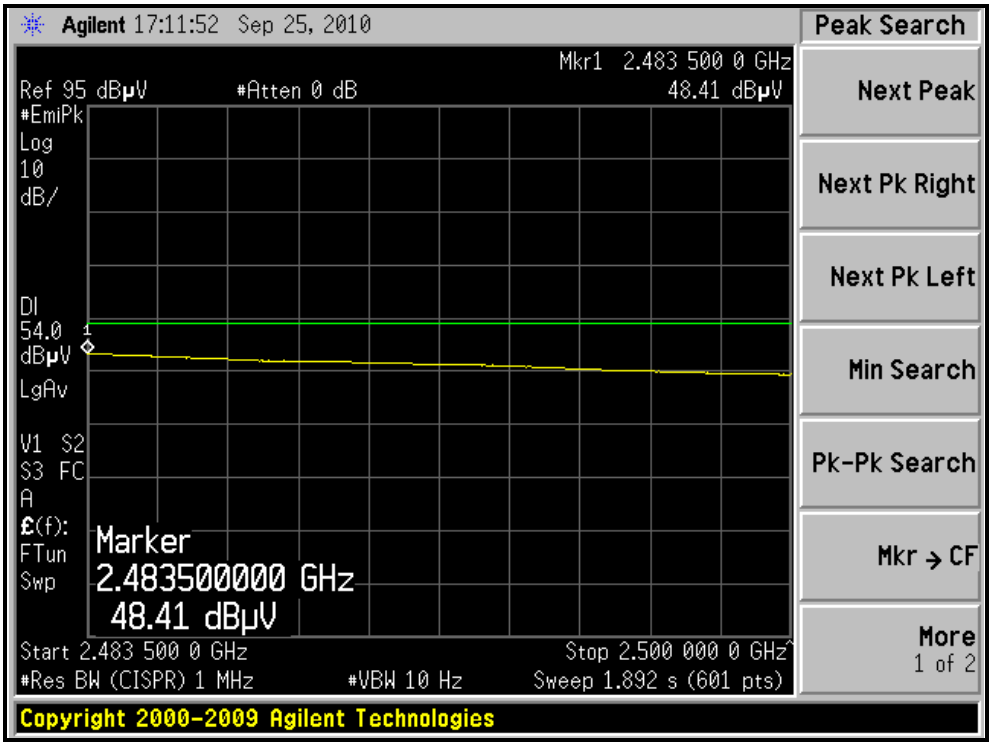
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, VERTICAL)



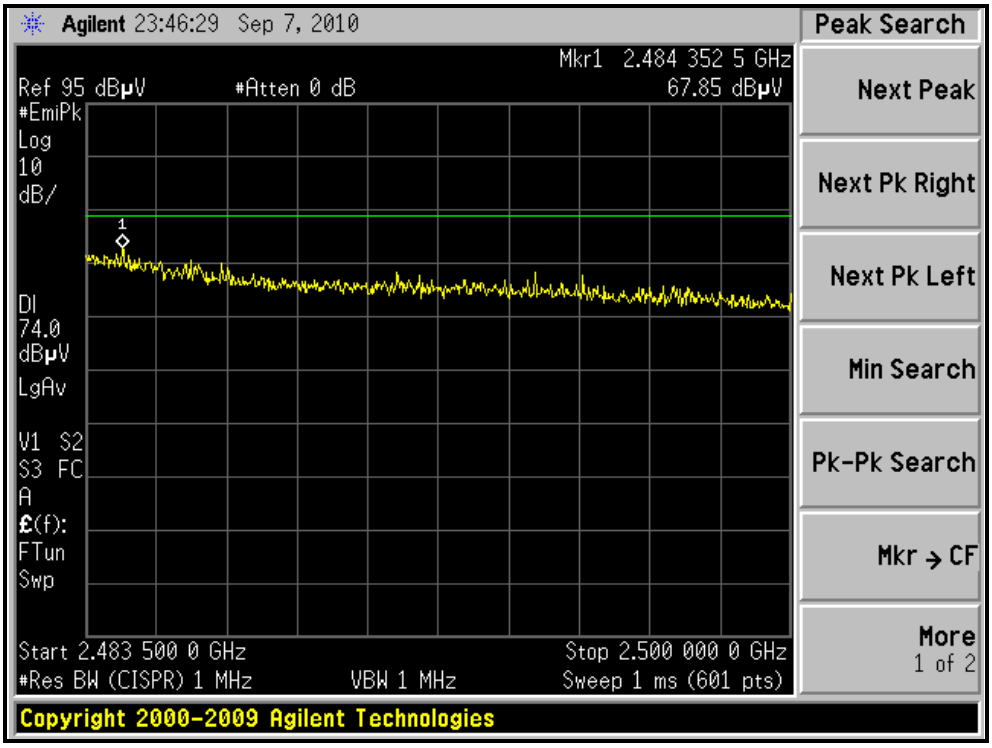


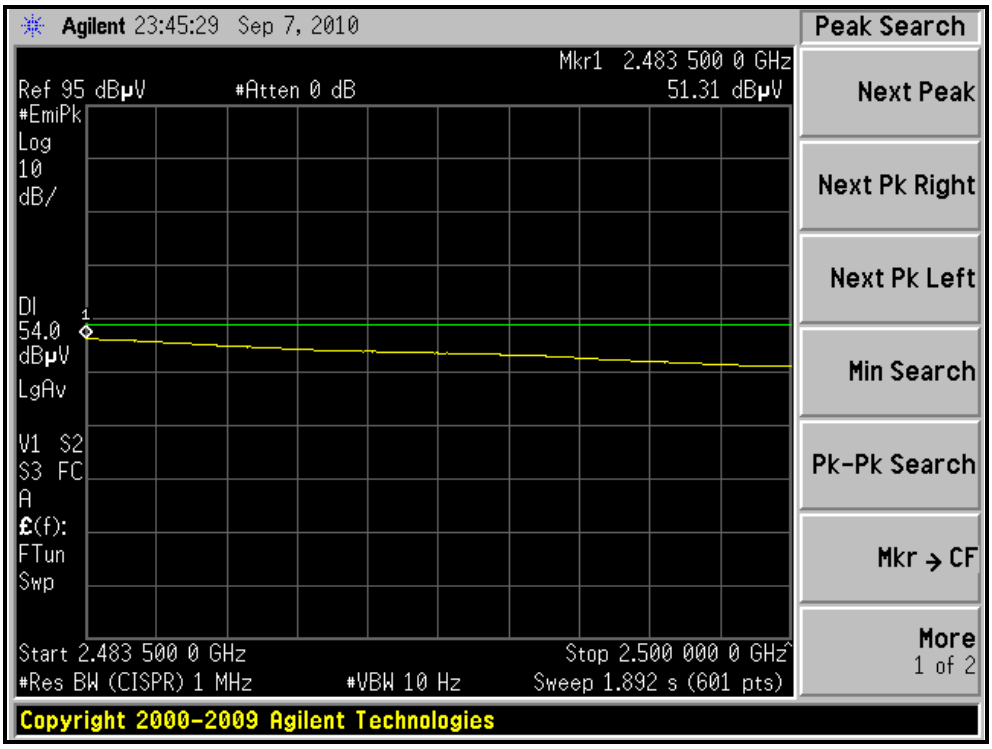
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, HORIZONTAL)





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





4.2.8 TEST RESULTS (ANTENNA 2: PCB ANTENNA)

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH 1012 hPa	TESTED BY	Moris Lin
TEST MODE	Antenna 2: PCB 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	68.55	25.3 QP	40.0	-14.7	2.54 H	17	13.17	12.16
2	120.00	29.5 QP	43.5	-14.0	1.65 H	181	17.26	12.20
3	186.66	27.8 QP	43.5	-15.8	1.47 H	296	16.27	11.48
4	240.00	39.3 QP	46.0	-6.7	1.22 H	261	26.26	13.05
5	300.52	37.0 QP	46.0	-9.0	1.00 H	165	21.30	15.67
6	359.00	35.3 QP	46.0	-10.7	1.00 H	269	18.14	17.14
7	720.00	30.9 QP	46.0	-15.2	1.00 H	137	6.09	24.76
8	816.00	30.0 QP	46.0	-16.0	1.00 H	268	4.10	25.88
9	960.00	35.8 QP	46.0	-10.2	1.00 H	137	7.70	28.07
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	66.59	24.1 QP	40.0	-15.9	1.00 V	64	11.65	12.48
2	120.00	25.3 QP	43.5	-18.2	1.00 V	127	13.14	12.20
3	126.57	22.8 QP	43.5	-20.7	1.00 V	246	9.72	13.07
4	240.00	33.5 QP	46.0	-12.5	1.01 V	59	20.42	13.05
5	241.95	33.8 QP	46.0	-12.2	1.00 V	13	20.62	13.15
6	301.91	33.4 QP	46.0	-12.6	1.42 V	76	17.66	15.71
7	476.09	28.2 QP	46.0	-17.9	1.81 V	28	8.02	20.13
8	960.00	30.3 QP	46.0	-15.7	1.91 V	23	2.22	28.07

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	2390.00	57.0 PK	74.0	-17.0	1.05 H	264	25.34	31.66
2	2390.00	46.1 AV	54.0	-7.9	1.05 H	264	14.44	31.66
3	*2412.00	103.7 PK			1.00 H	266	71.97	31.73
4	*2412.00	100.7 AV			1.00 H	266	68.97	31.73
5	4824.00	48.6 PK	74.0	-25.4	1.10 H	25	9.63	38.97
6	4824.00	39.0 AV	54.0	-15.0	1.10 H	25	0.03	38.97
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	2389.60	61.7 PK	74.0	-12.3	1.15 V	16	30.04	31.66
2	2389.60	51.5 AV	54.0	-2.5	1.15 V	16	19.84	31.66
3	*2412.00	111.0 PK			1.12 V	15	79.27	31.73
4	*2412.00	108.3 AV			1.12 V	15	76.57	31.73
5	4824.00	48.1 PK	74.0	-25.9	1.05 V	30	9.13	38.97
6	4824.00	36.2 AV	54.0	-17.8	1.05 V	30	-2.77	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	104.2 PK			1.20 H	21	72.39	31.81
2	*2437.00	102.0 AV			1.20 H	21	70.19	31.81
3	4874.00	48.3 PK	74.0	-25.7	1.02 H	28	9.16	39.14
4	4874.00	37.2 AV	54.0	-16.8	1.02 H	28	-1.94	39.14
5	7311.00	54.8 PK	74.0	-19.2	1.00 H	30	8.17	46.63
6	7311.00	43.1 AV	54.0	-10.9	1.00 H	30	-3.53	46.63
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	112.2 PK			1.13 V	16	80.39	31.81
2	*2437.00	109.6 AV			1.13 V	16	77.79	31.81
3	4874.00	49.1 PK	74.0	-24.9	1.03 V	35	9.96	39.14
4	4874.00	37.7 AV	54.0	-16.3	1.03 V	35	-1.44	39.14
5	7311.00	55.0 PK	74.0	-19.0	1.00 V	21	8.37	46.63
6	7311.00	43.2 AV	54.0	-10.8	1.00 V	21	-3.43	46.63

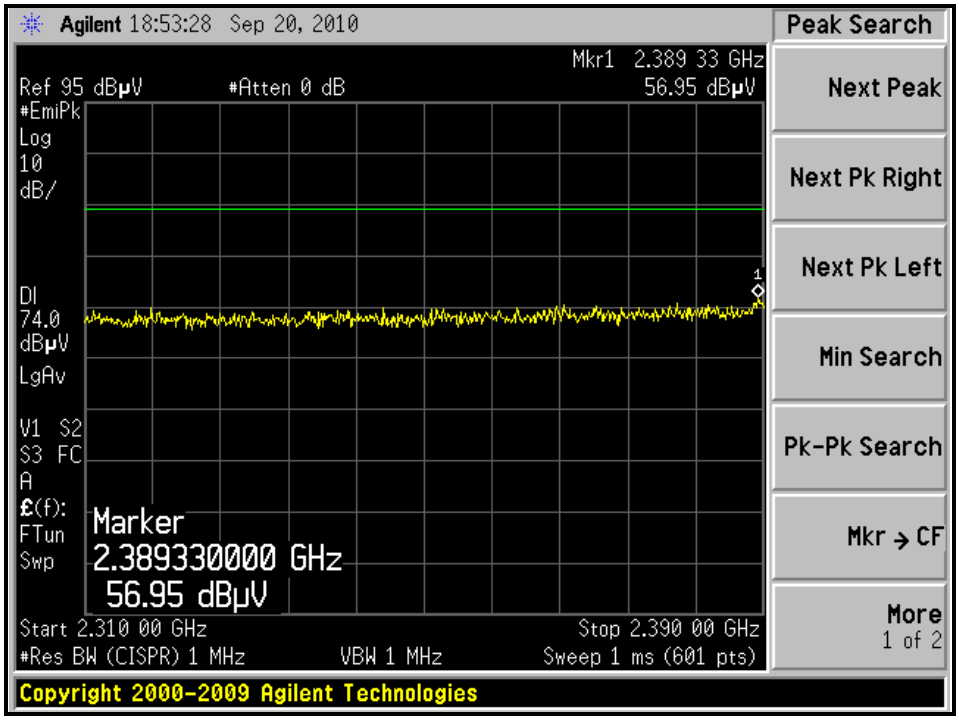
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

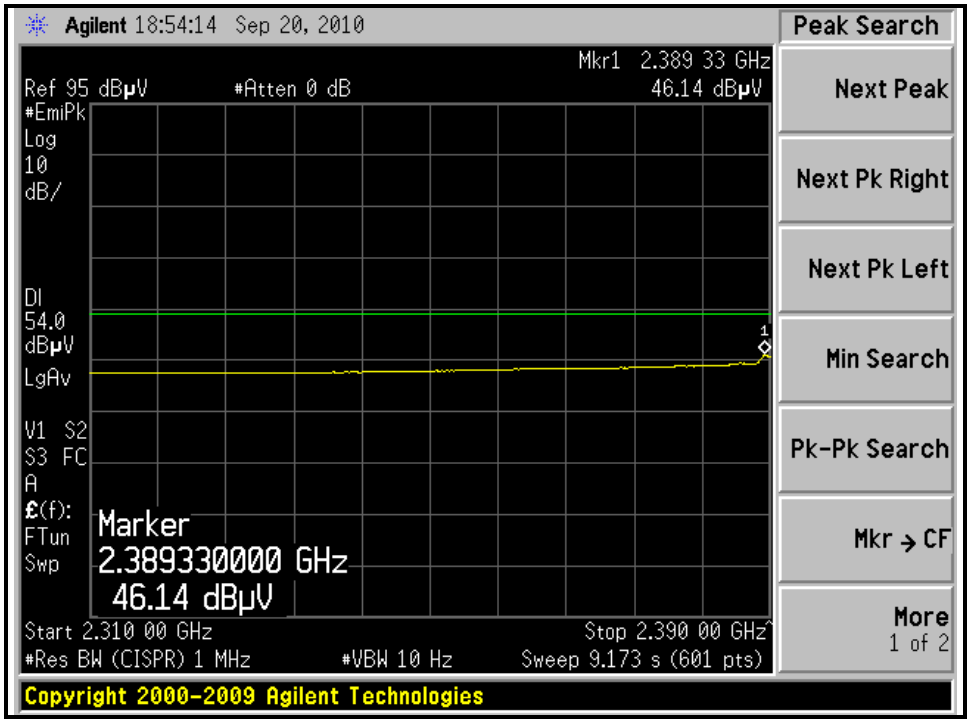
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB antenna		

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	*2462.00	101.0 PK			1.01 H	239	69.11	31.89
2	*2462.00	98.7 AV			1.01 H	239	66.81	31.89
3	2483.50	56.6 PK	74.0	-17.4	1.05 H	240	24.63	31.97
4	2483.50	44.2 AV	54.0	-9.8	1.05 H	240	12.23	31.97
5	4924.00	48.2 PK	74.0	-25.8	1.19 H	15	8.89	39.31
6	4924.00	36.0 AV	54.0	-18.0	1.19 H	15	-3.31	39.31
7	7386.00	56.0 PK	74.0	-18.0	1.20 H	20	9.40	46.60
8	7386.00	43.0 AV	54.0	-11.0	1.20 H	20	-3.60	46.60
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	*2462.00	111.4 PK			1.12 V	16	79.51	31.89
2	*2462.00	108.7 AV			1.12 V	16	76.81	31.89
3	2484.30	63.1 PK	74.0	-10.9	1.11 V	17	31.13	31.97
4	2484.30	51.8 AV	54.0	-2.2	1.11 V	17	19.83	31.97
5	4924.00	49.0 PK	74.0	-25.0	1.10 V	33	9.69	39.31
6	4924.00	37.5 AV	54.0	-16.5	1.10 V	33	-1.81	39.31
7	7386.00	53.0 PK	74.0	-21.0	1.00 V	20	6.40	46.60
8	7386.00	41.4 AV	54.0	-12.6	1.00 V	20	-5.20	46.60

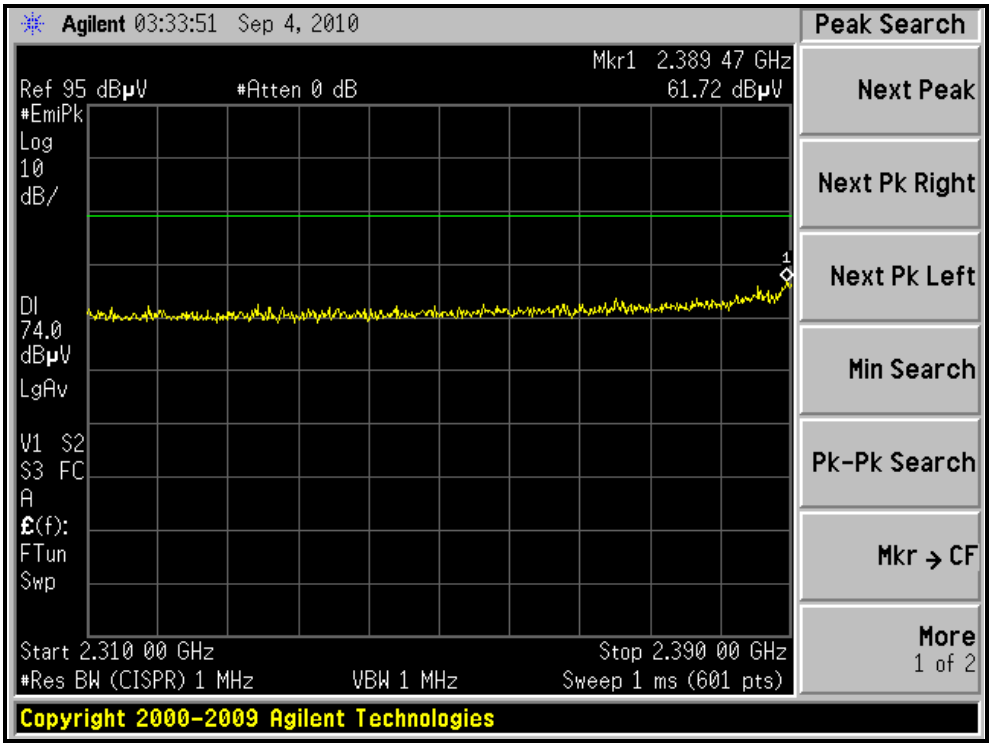
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

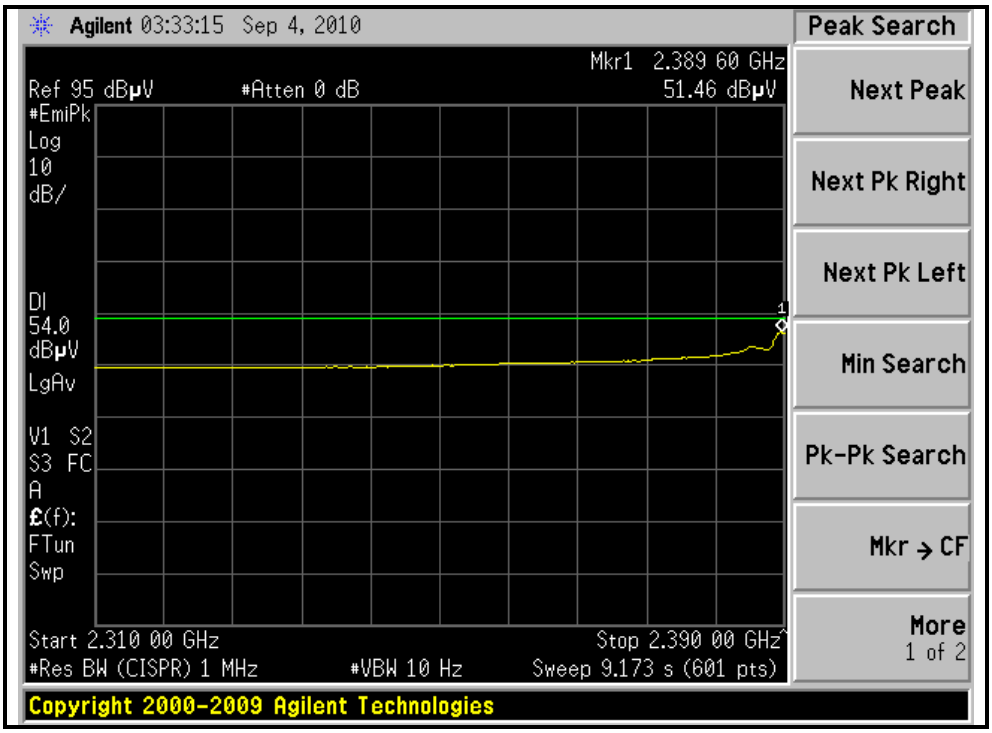
RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)



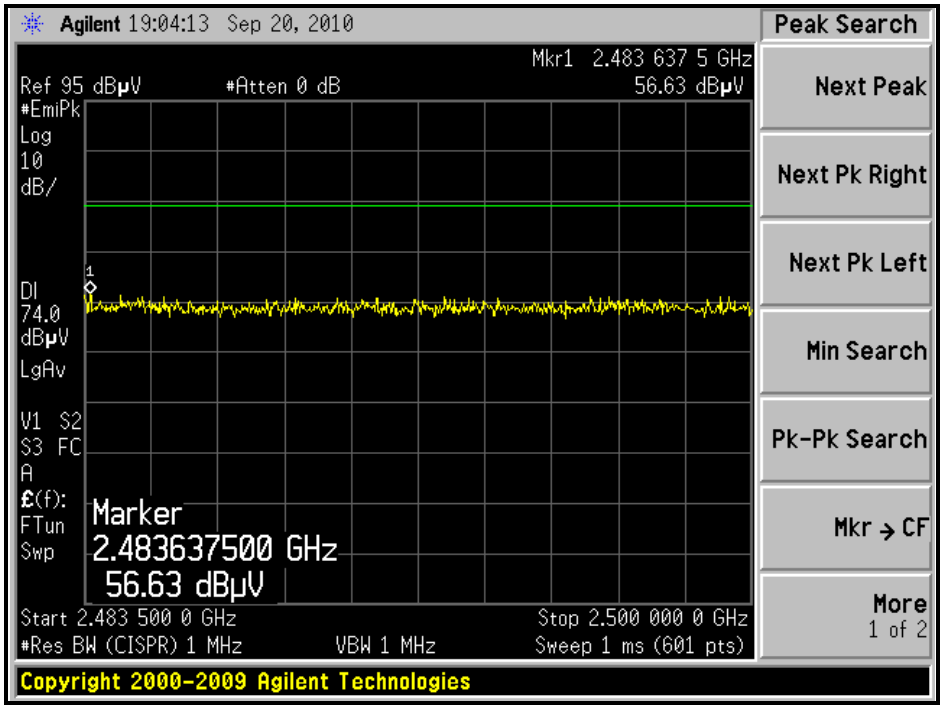


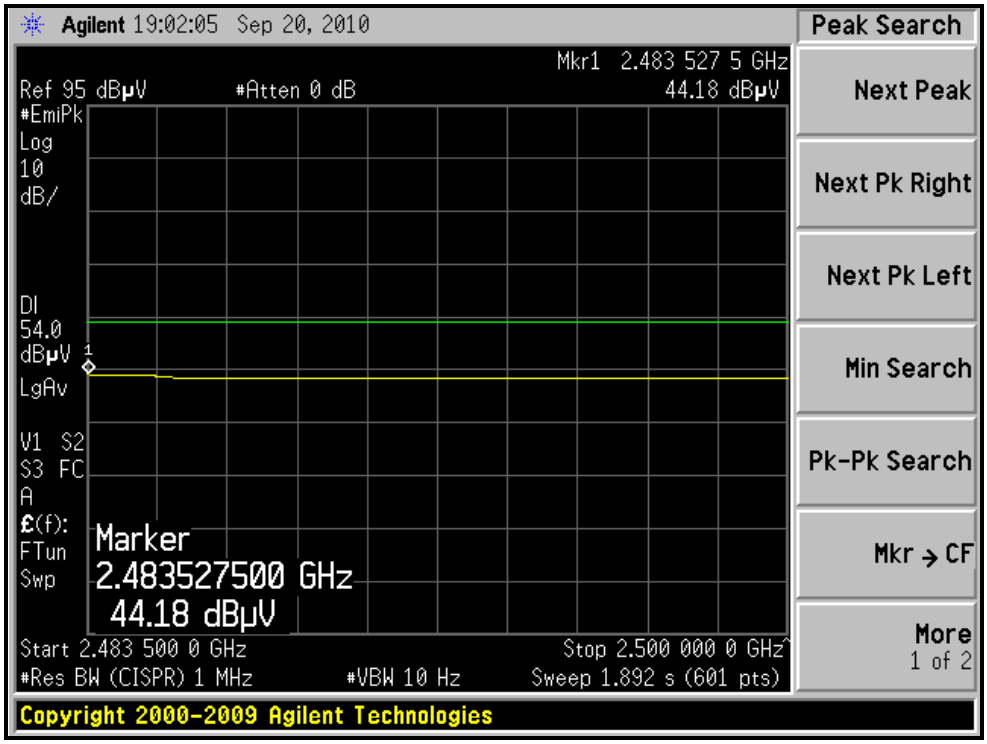
RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)



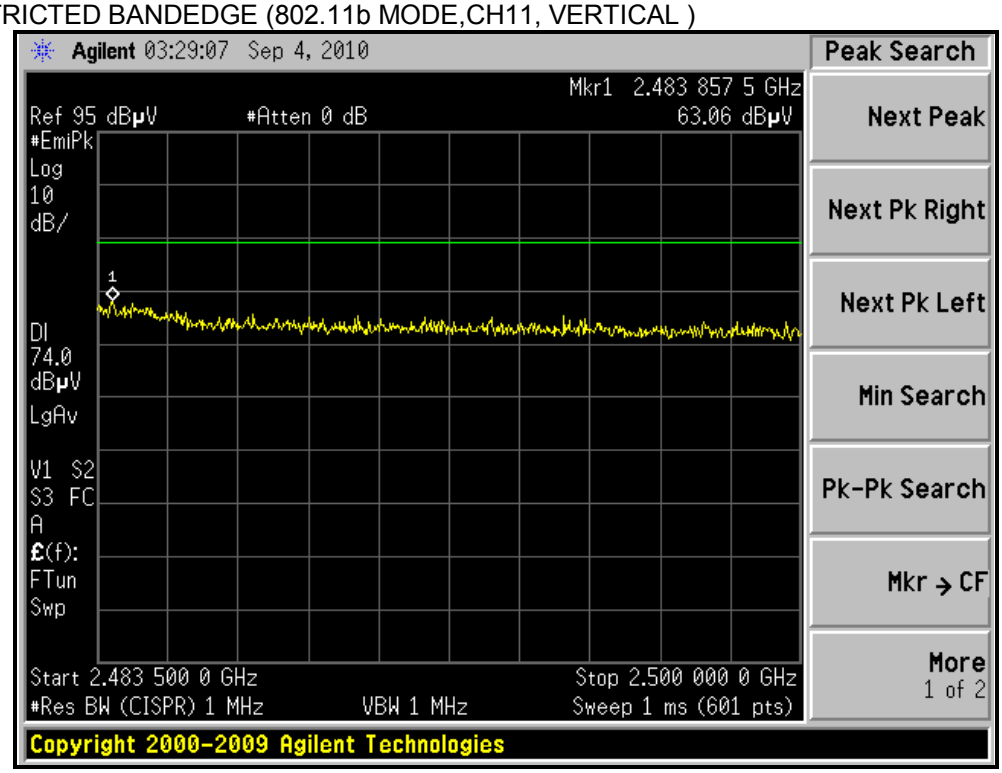


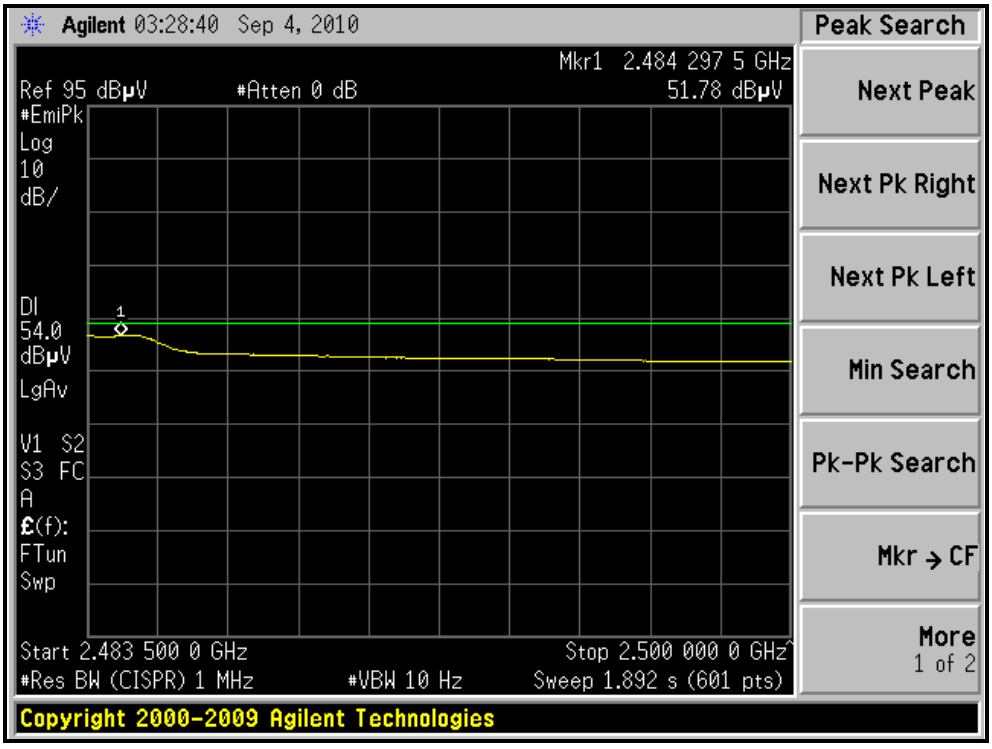
RESTRICTED BANDEDGE (802.11b MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	2390.00	59.1 PK	74.0	-14.9	1.02 H	266	27.44	31.66
2	2390.00	46.7 AV	54.0	-7.3	1.02 H	266	15.04	31.66
3	*2412.00	99.8 PK			1.01 H	267	68.07	31.73
4	*2412.00	90.1 AV			1.01 H	267	58.37	31.73
5	4824.00	44.3 PK	74.0	-29.7	1.10 H	17	5.33	38.97
6	4824.00	35.2 AV	54.0	-18.8	1.10 H	17	-3.77	38.97
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	65.6 PK	74.0	-8.4	1.13 V	339	33.94	31.66
2	2390.00	51.4 AV	54.0	-2.6	1.13 V	339	19.74	31.66
3	*2412.00	107.0 PK			1.12 V	16	75.27	31.73
4	*2412.00	97.3 AV			1.12 V	16	65.57	31.73
5	4824.00	43.6 PK	74.0	-30.4	1.17 V	20	4.63	38.97
6	4824.00	38.6 AV	54.0	-15.4	1.17 V	20	-0.37	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	104.8 PK			1.00 H	266	72.99	31.81
2	*2437.00	94.3 AV			1.00 H	266	62.49	31.81
3	4874.00	46.3 PK	74.0	-27.7	1.12 H	19	7.16	39.14
4	4874.00	34.2 AV	54.0	-19.8	1.12 H	19	-4.94	39.14
5	7311.00	53.2 PK	74.0	-20.8	1.15 H	29	6.57	46.63
6	7311.00	41.6 AV	54.0	-12.4	1.15 H	29	-5.03	46.63
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	113.4 PK			1.12 V	17	81.59	31.81
2	*2437.00	103.6 AV			1.12 V	17	71.79	31.81
3	4874.00	47.6 PK	74.0	-26.4	1.10 V	37	8.46	39.14
4	4874.00	35.8 AV	54.0	-18.2	1.10 V	37	-3.34	39.14
5	7311.00	53.3 PK	74.0	-20.7	1.14 V	40	6.67	46.63
6	7311.00	41.6 AV	54.0	-12.4	1.14 V	40	-5.03	46.63

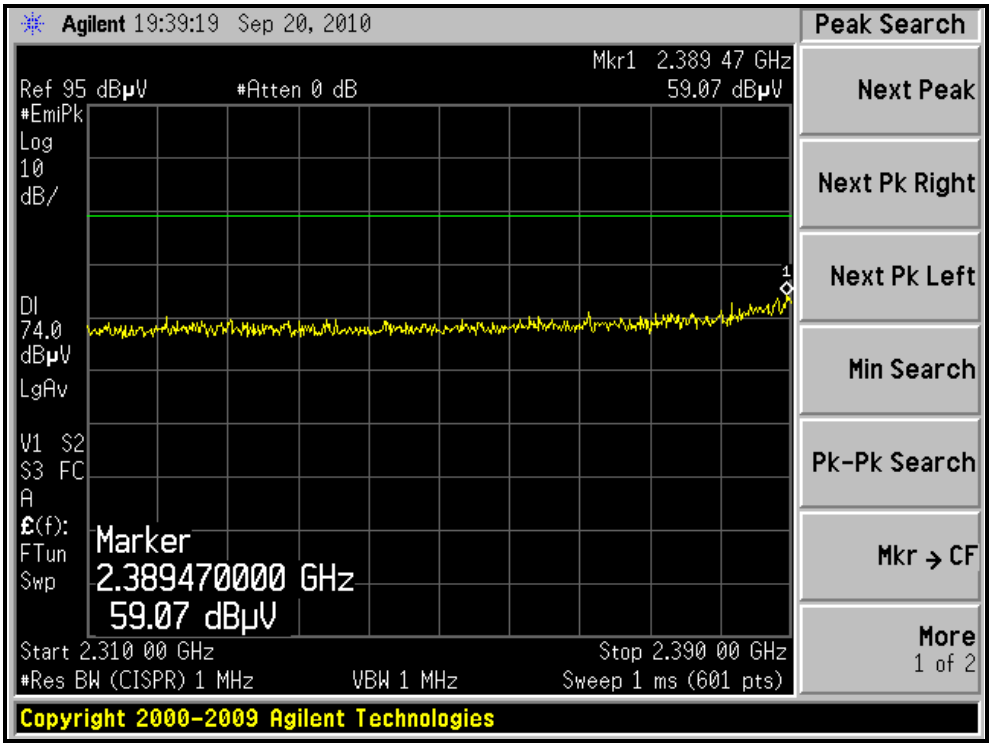
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

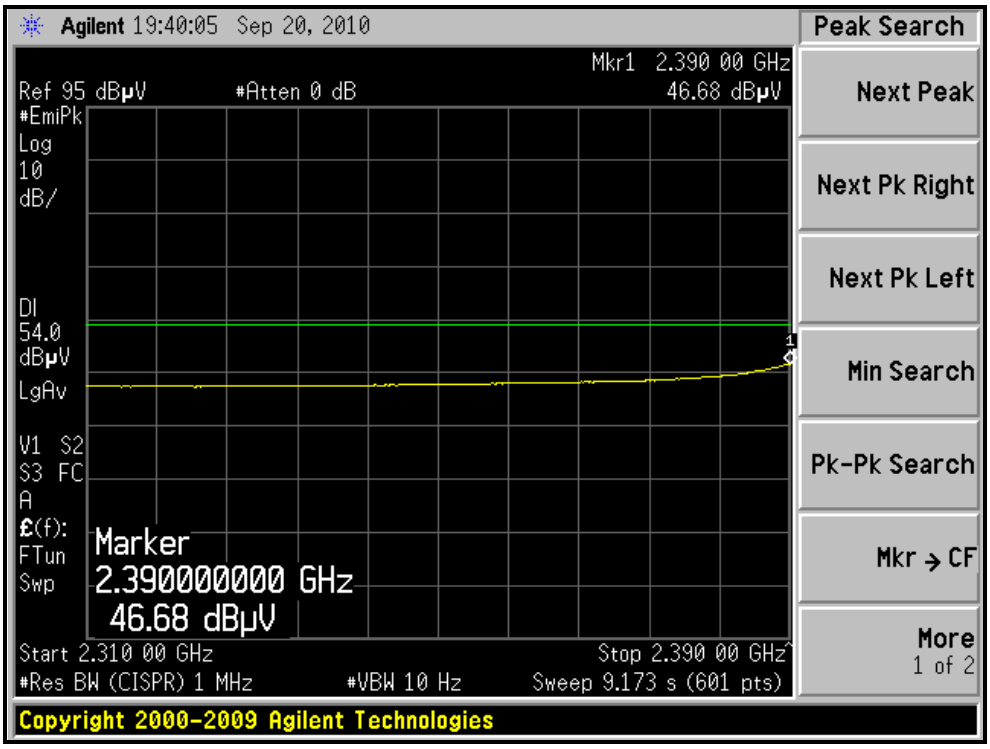
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB antenna		

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	*2462.00	98.2 PK			1.00 H	238	66.31	31.89
2	*2462.00	88.2 AV			1.00 H	238	56.31	31.89
3	2483.50	57.4 PK	74.0	-16.6	1.06 H	240	25.44	31.97
4	2483.50	44.5 AV	54.0	-9.5	1.06 H	240	12.53	31.97
5	4924.00	48.5 PK	74.0	-25.5	1.07 H	17	9.19	39.31
6	4924.00	35.3 AV	54.0	-18.7	1.07 H	17	-4.01	39.31
7	7386.00	55.4 PK	74.0	-18.6	1.10 H	25	8.80	46.60
8	7386.00	43.0 AV	54.0	-11.0	1.10 H	25	-3.60	46.60
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	*2462.00	107.8 PK			1.13 V	15	75.91	31.89
2	*2462.00	98.3 AV			1.13 V	15	66.41	31.89
3	2483.50	67.5 PK	74.0	-6.5	1.12 V	346	35.53	31.97
4	2483.50	50.8 AV	54.0	-3.2	1.12 V	346	18.83	31.97
5	4924.00	49.0 PK	74.0	-25.0	1.04 V	15	9.69	39.31
6	4924.00	35.4 AV	54.0	-18.6	1.04 V	15	-3.91	39.31
7	7386.00	54.2 PK	74.0	-19.8	1.06 V	20	7.60	46.60
8	7386.00	42.0 AV	54.0	-12.0	1.06 V	20	-4.60	46.60

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.

RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)





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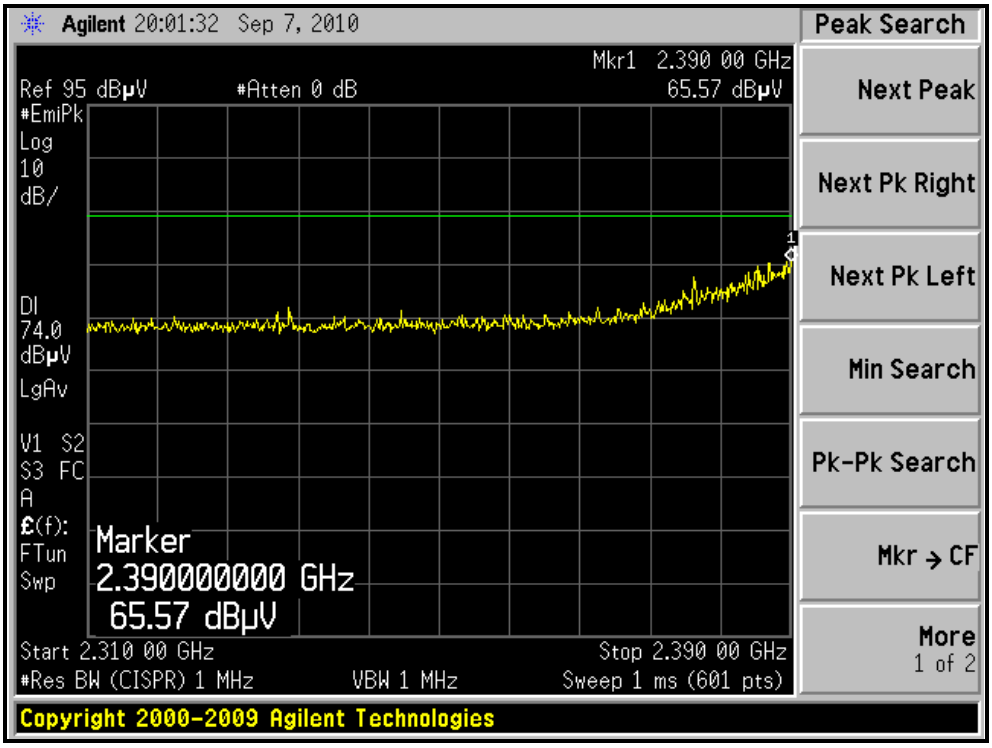

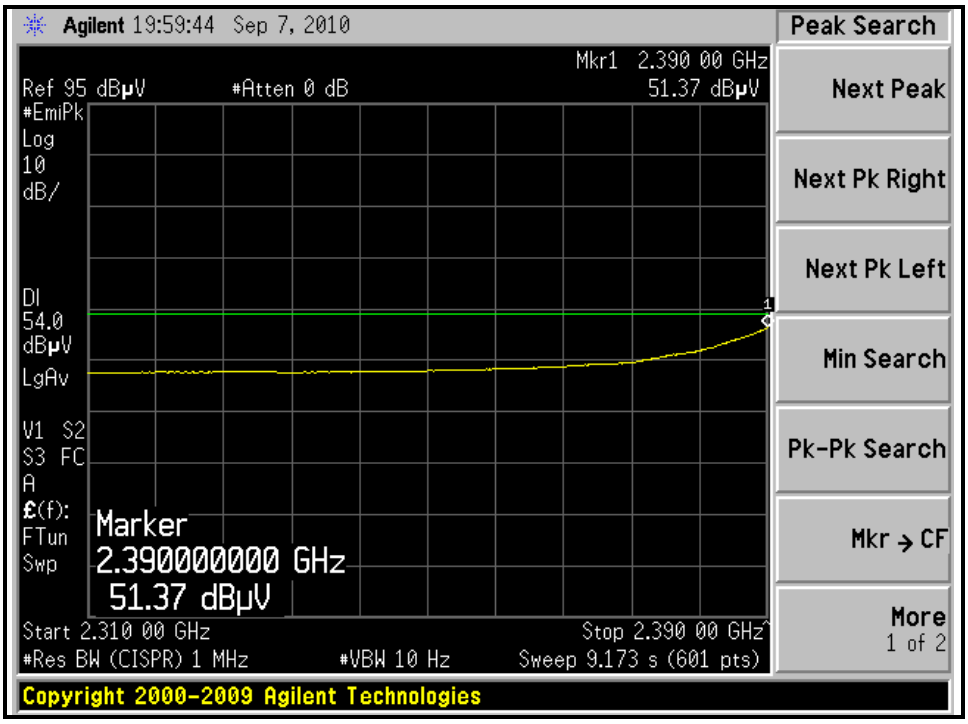

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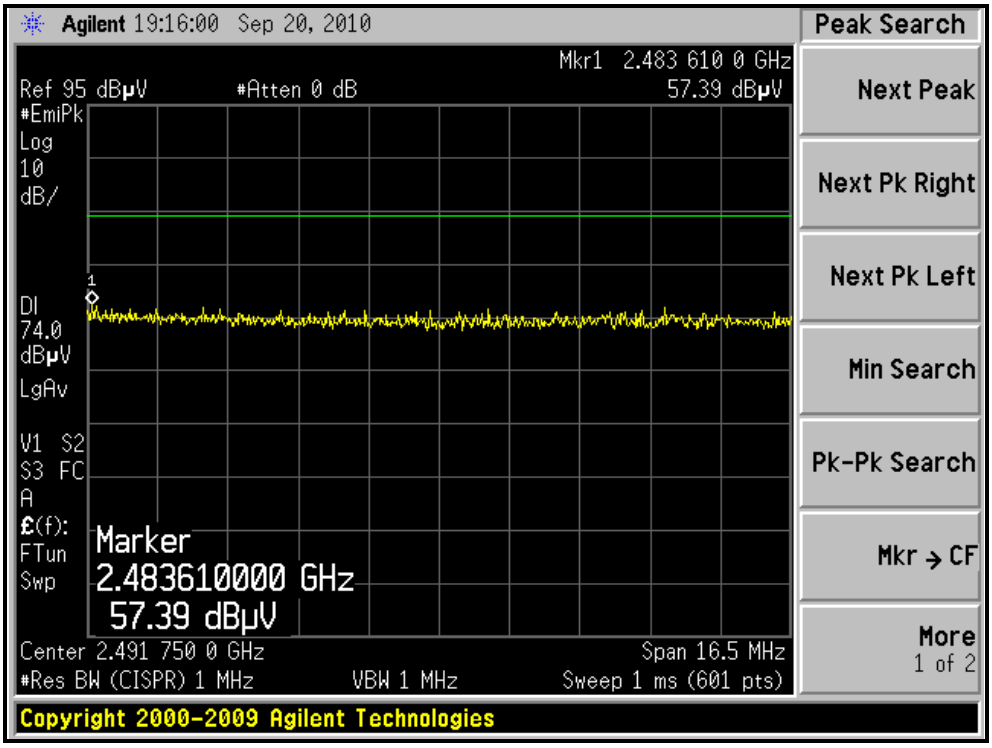
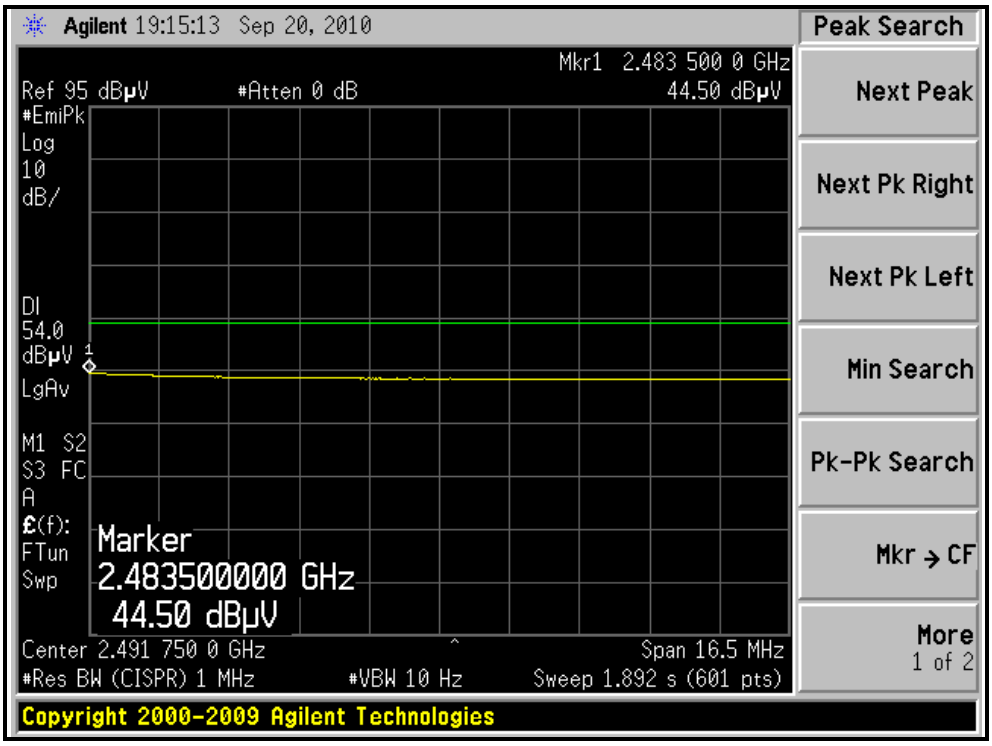
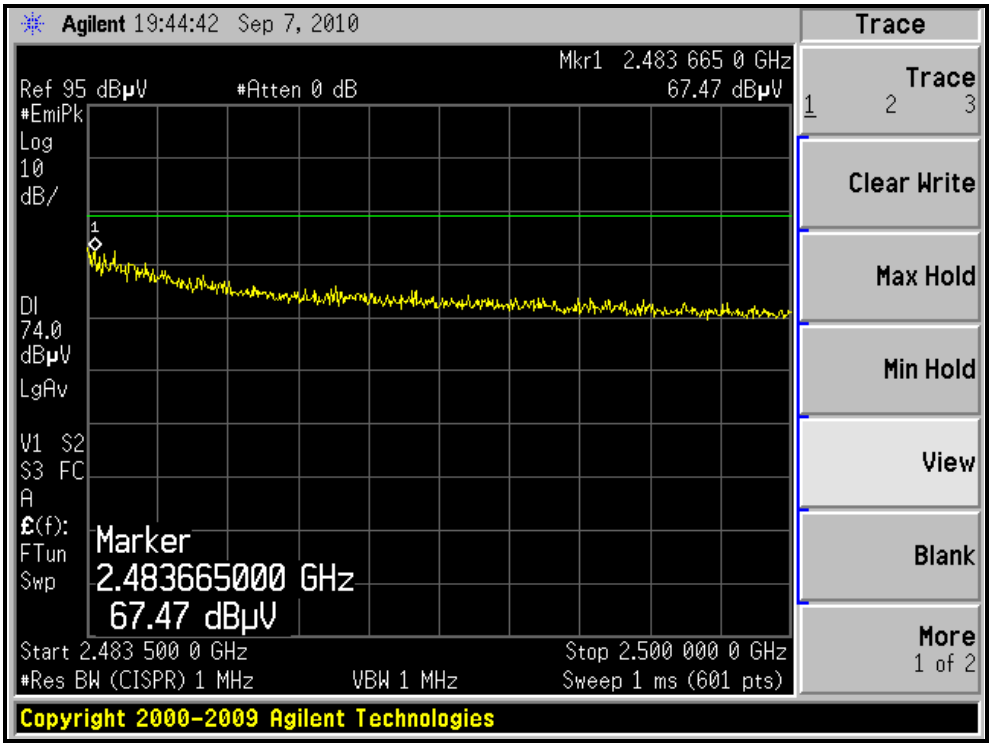
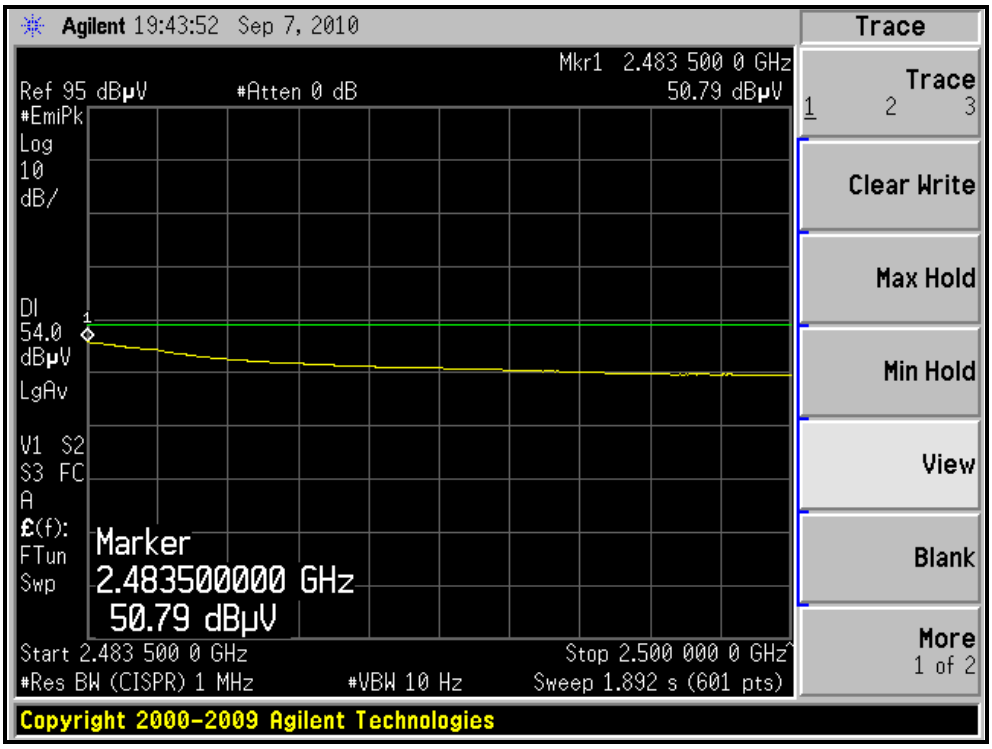




RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)





802.11n (20MHz) OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	2390.00	59.7 PK	74.0	-14.3	1.04 H	265	28.04	31.66
2	2390.00	46.8 AV	54.0	-7.2	1.04 H	265	15.14	31.66
3	*2412.00	98.9 PK			1.00 H	266	67.17	31.73
4	*2412.00	89.0 AV			1.00 H	266	57.27	31.73
5	4824.00	47.2 PK	74.0	-26.8	1.05 H	17	8.23	38.97
6	4824.00	36.1 AV	54.0	-17.9	1.05 H	17	-2.87	38.97
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	66.9 PK	74.0	-7.1	1.14 V	339	35.24	31.66
2	2390.00	50.7 AV	54.0	-3.3	1.14 V	339	19.04	31.66
3	*2412.00	106.0 PK			1.13 V	18	74.27	31.73
4	*2412.00	96.2 AV			1.13 V	18	64.47	31.73
5	4824.00	46.3 PK	74.0	-27.7	1.13 V	15	7.33	38.97
6	4824.00	37.7 AV	54.0	-16.3	1.13 V	15	-1.27	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	104.0 PK			1.00 H	267	72.19	31.81
2	*2437.00	94.1 AV			1.00 H	267	62.29	31.81
3	4874.00	48.4 PK	74.0	-25.6	1.06 H	20	9.26	39.14
4	4874.00	35.8 AV	54.0	-18.2	1.06 H	20	-3.34	39.14
5	7311.00	55.7 PK	74.0	-18.3	1.08 H	25	9.07	46.63
6	7311.00	43.2 AV	54.0	-10.8	1.08 H	25	-3.43	46.63
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	113.2 PK			1.13 V	17	81.39	31.81
2	*2437.00	103.3 AV			1.13 V	17	71.49	31.81
3	4874.00	47.0 PK	74.0	-27.0	1.00 V	20	7.86	39.14
4	4874.00	35.1 AV	54.0	-18.9	1.00 V	20	-4.04	39.14
5	7311.00	55.4 PK	74.0	-18.6	1.05 V	16	8.77	46.63
6	7311.00	43.0 AV	54.0	-11.0	1.05 V	16	-3.63	46.63

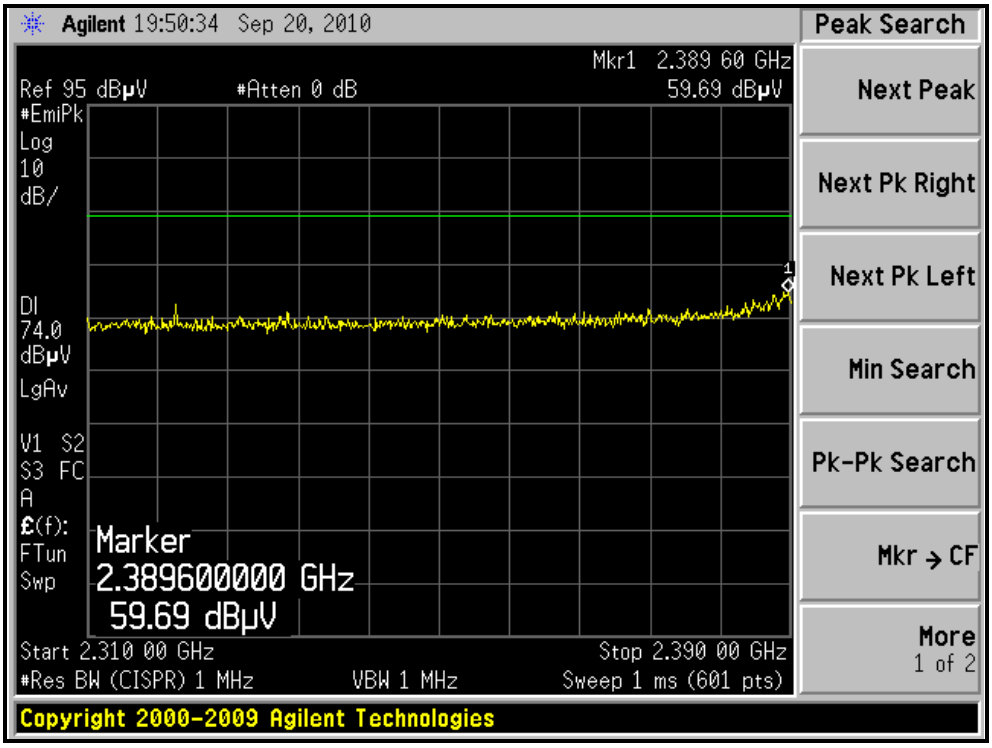
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

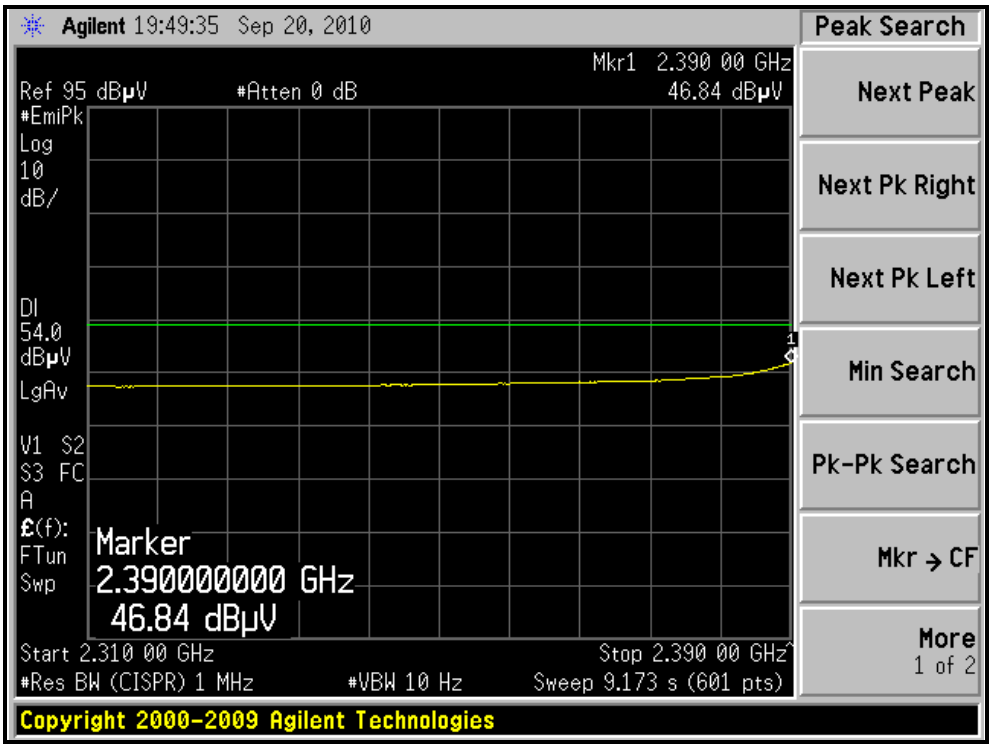
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB antenna		

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	*2462.00	97.2 PK			1.22 H	240	65.31	31.89
2	*2462.00	87.4 AV			1.22 H	240	55.51	31.89
3	2483.50	58.4 PK	74.0	-15.6	1.17 H	242	26.43	31.97
4	2483.50	44.9 AV	54.0	-9.1	1.17 H	242	12.93	31.97
5	4924.00	46.2 PK	74.0	-27.8	1.05 H	22	6.89	39.31
6	4924.00	34.9 AV	54.0	-19.1	1.05 H	22	-4.41	39.31
7	7386.00	57.6 PK	74.0	-16.4	1.10 H	28	11.00	46.60
8	7386.00	44.2 AV	54.0	-9.8	1.10 H	28	-2.40	46.60
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	*2462.00	106.8 PK			1.14 V	16	74.91	31.89
2	*2462.00	96.5 AV			1.14 V	16	64.61	31.89
3	2483.50	66.7 PK	74.0	-7.3	1.10 V	346	34.73	31.97
4	2483.50	51.4 AV	54.0	-2.6	1.10 V	346	19.43	31.97
5	4924.00	47.5 PK	74.0	-26.5	1.10 V	61	8.19	39.31
6	4924.00	36.6 AV	54.0	-17.4	1.10 V	61	-2.71	39.31
7	7386.00	55.4 PK	74.0	-18.6	1.11 V	60	8.80	46.60
8	7386.00	43.1 AV	54.0	-10.9	1.11 V	60	-3.50	46.60

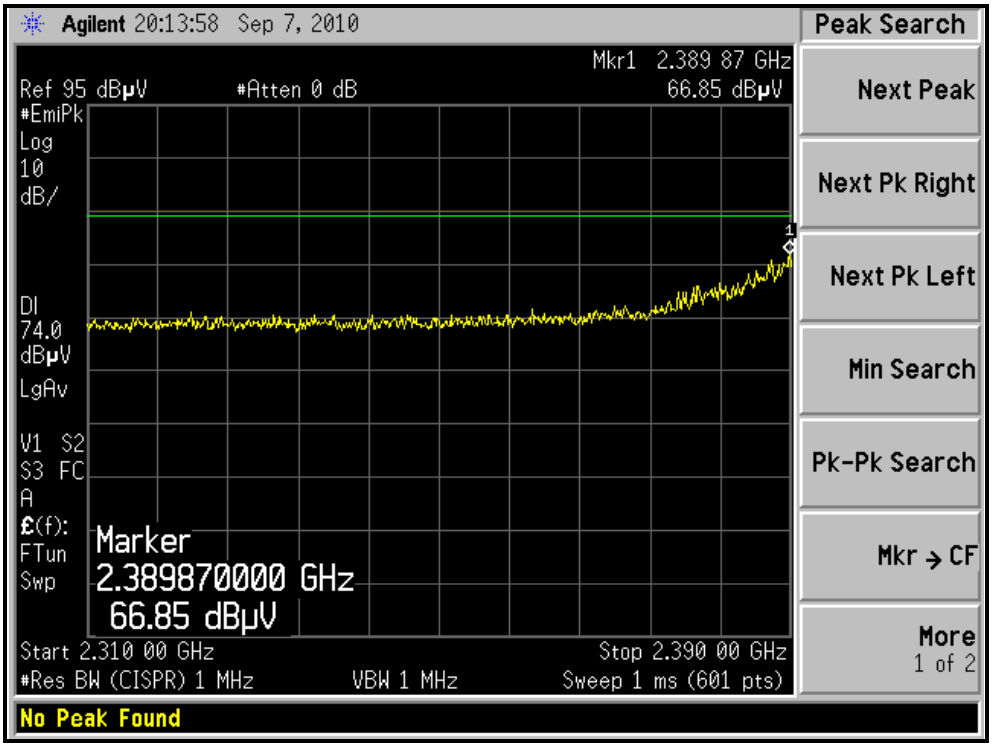
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

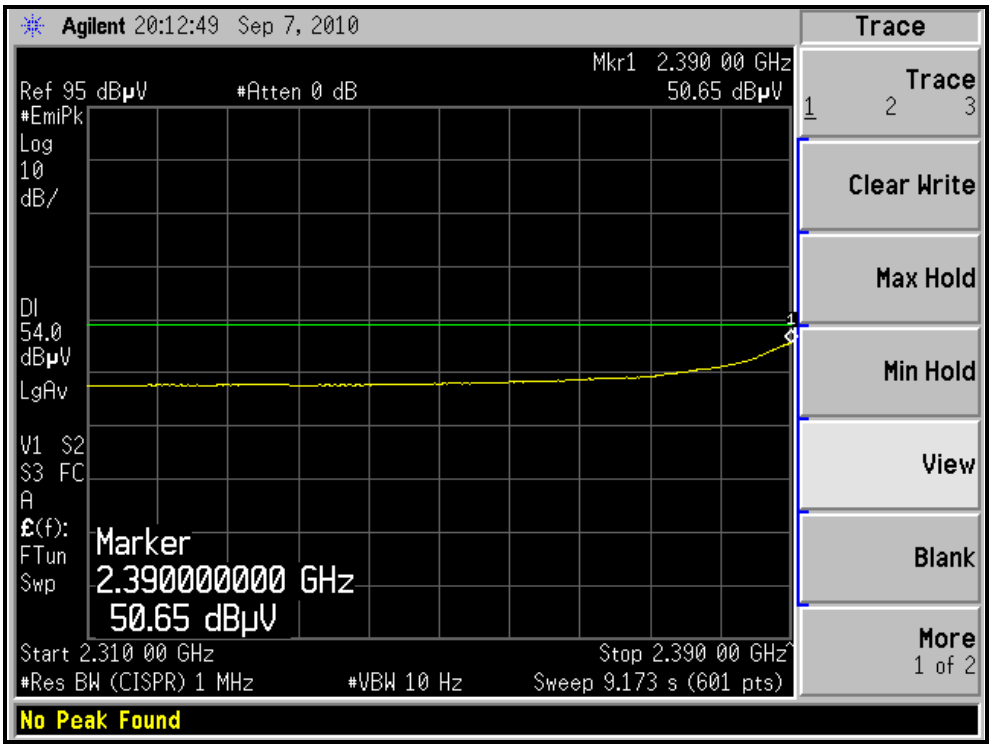
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, HORIZONTAL)



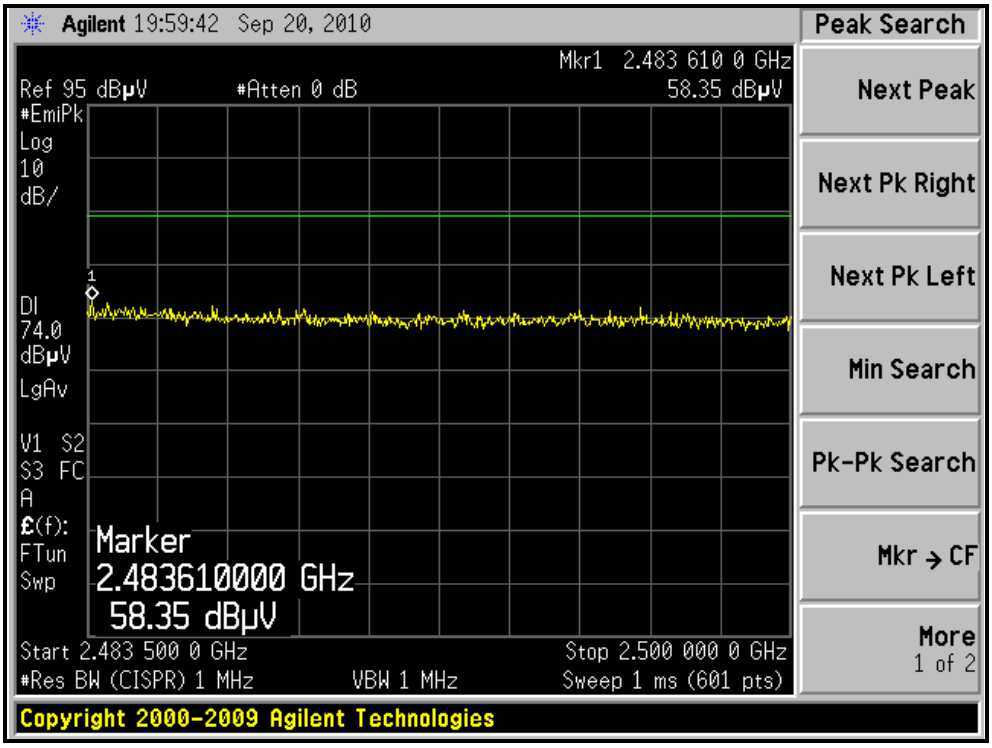


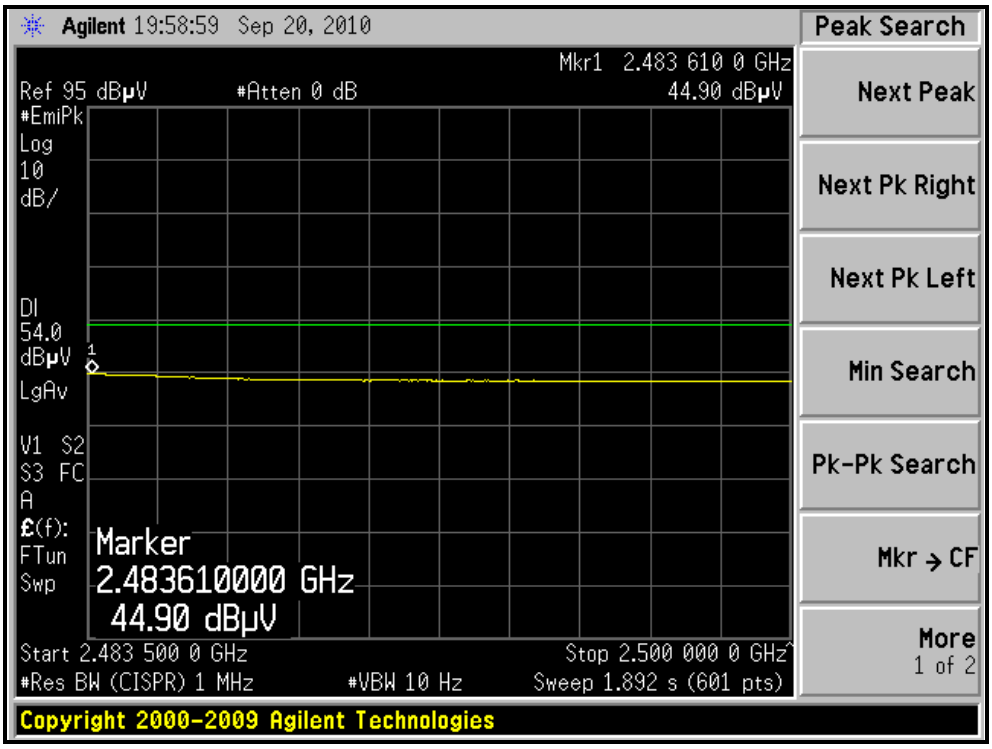
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, VERTICAL)



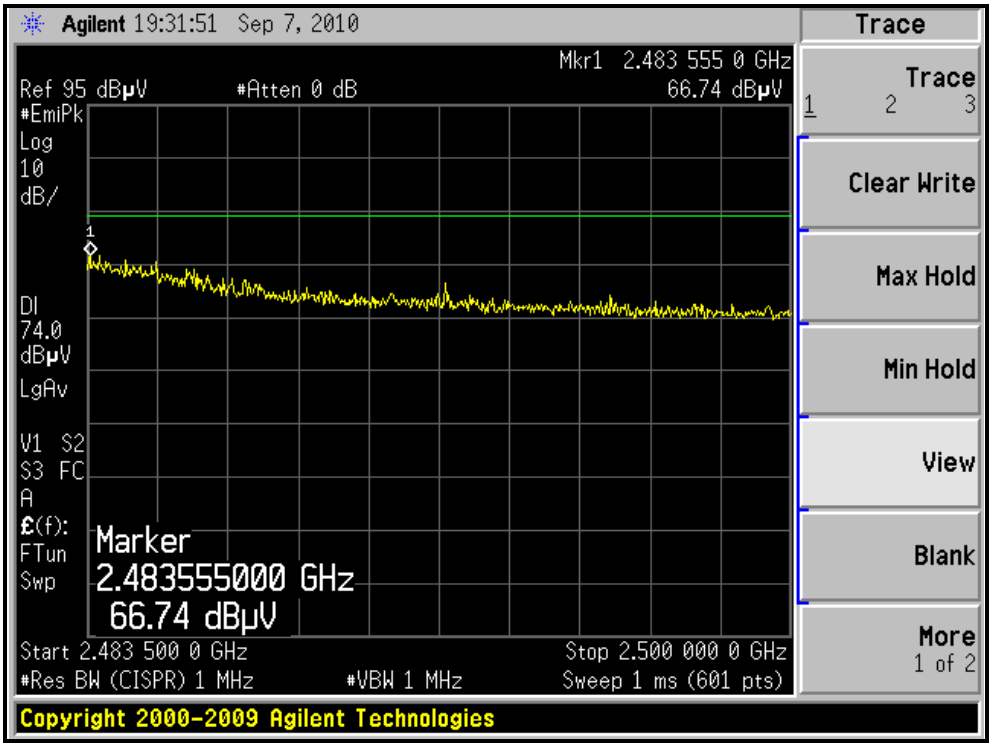


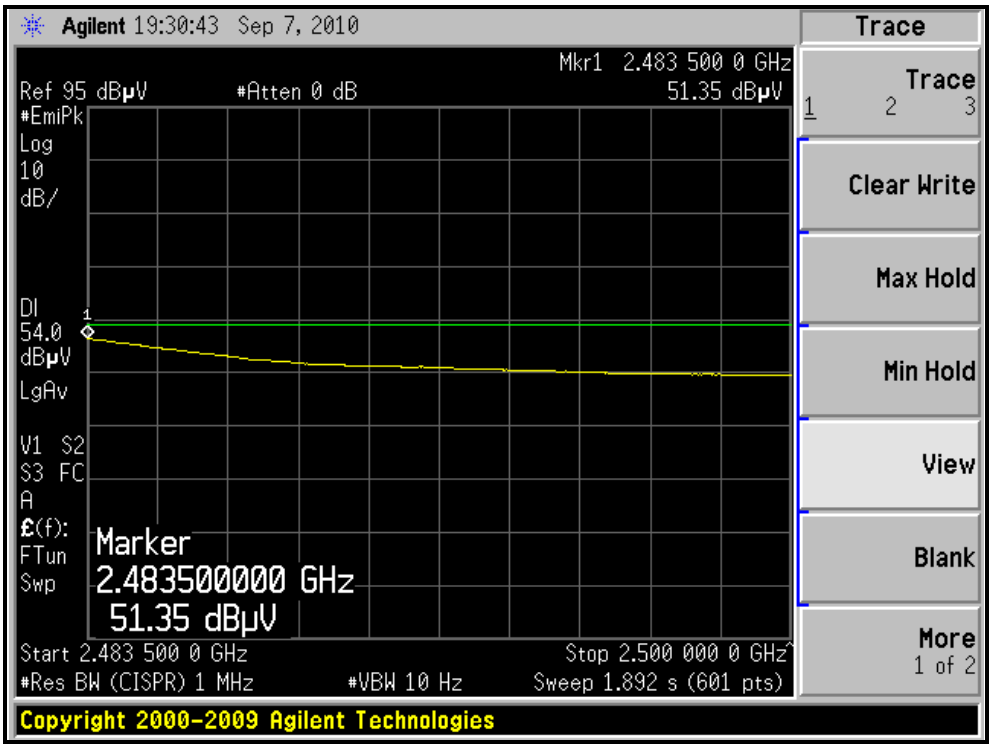
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	2390.00	61.0 PK	74.0	-13.0	1.00 H	201	29.35	31.66
2	2390.00	47.0 AV	54.0	-7.0	1.00 H	201	15.33	31.66
3	*2422.00	98.3 PK			1.20 H	20	66.54	31.76
4	*2422.00	88.8 AV			1.20 H	20	57.04	31.76
5	4844.00	46.6 PK	74.0	-27.4	1.03 H	236	7.56	39.04
6	4844.00	33.7 AV	54.0	-20.3	1.03 H	236	-5.34	39.04
7	7266.00	54.6 PK	74.0	-19.4	1.05 H	240	7.93	46.67
8	7266.00	41.7 AV	54.0	-12.3	1.05 H	240	-4.97	46.67
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	68.5 PK	74.0	-5.5	1.00 V	14	36.84	31.66
2	2390.00	51.6 AV	54.0	-2.4	1.00 V	14	19.94	31.66
3	*2422.00	100.8 PK			1.13 V	16	69.04	31.76
4	*2422.00	90.9 AV			1.13 V	16	59.14	31.76
5	4844.00	48.6 PK	74.0	-25.4	1.16 V	18	9.56	39.04
6	4844.00	35.9 AV	54.0	-18.1	1.16 V	18	-3.14	39.04
7	7266.00	55.7 PK	74.0	-18.3	1.19 V	22	9.03	46.67
8	7266.00	43.9 AV	54.0	-10.1	1.19 V	22	-2.77	46.67

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB 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	96.5 PK			1.00 H	267	64.69	31.81
2	*2437.00	86.5 AV			1.00 H	267	54.69	31.81
3	4874.00	47.2 PK	74.0	-26.8	1.14 H	253	8.06	39.14
4	4874.00	33.8 AV	54.0	-20.2	1.14 H	253	-5.34	39.14
5	7311.00	54.3 PK	74.0	-19.7	1.11 H	250	7.67	46.63
6	7311.00	41.6 AV	54.0	-12.4	1.11 H	250	-5.03	46.63
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	104.1 PK			1.12 V	15	72.29	31.81
2	*2437.00	95.2 AV			1.12 V	15	63.39	31.81
3	2483.50	67.0 PK	74.0	-7.0	1.09 V	14	35.03	31.97
4	2483.50	50.8 AV	54.0	-3.2	1.09 V	14	18.83	31.97
5	4874.00	46.3 PK	74.0	-27.7	1.15 V	19	7.16	39.14
6	4874.00	31.6 AV	54.0	-22.4	1.15 V	19	-7.54	39.14
7	7311.00	58.6 PK	74.0	-15.4	1.12 V	21	11.97	46.63
8	7311.00	47.2 AV	54.0	-6.8	1.12 V	21	0.57	46.63

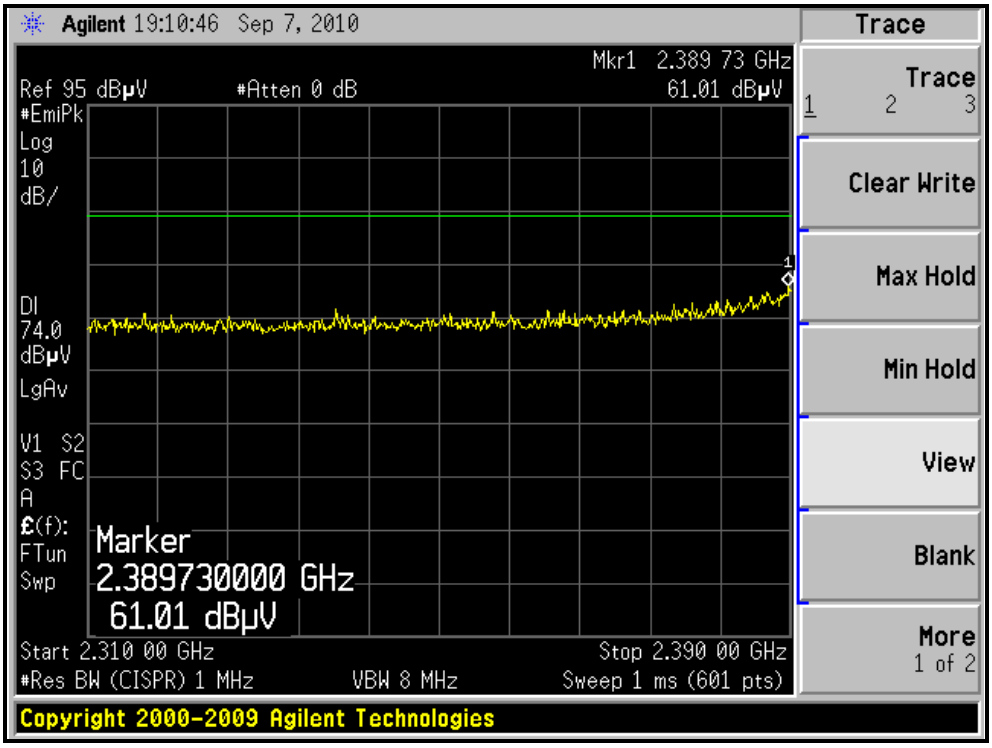
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

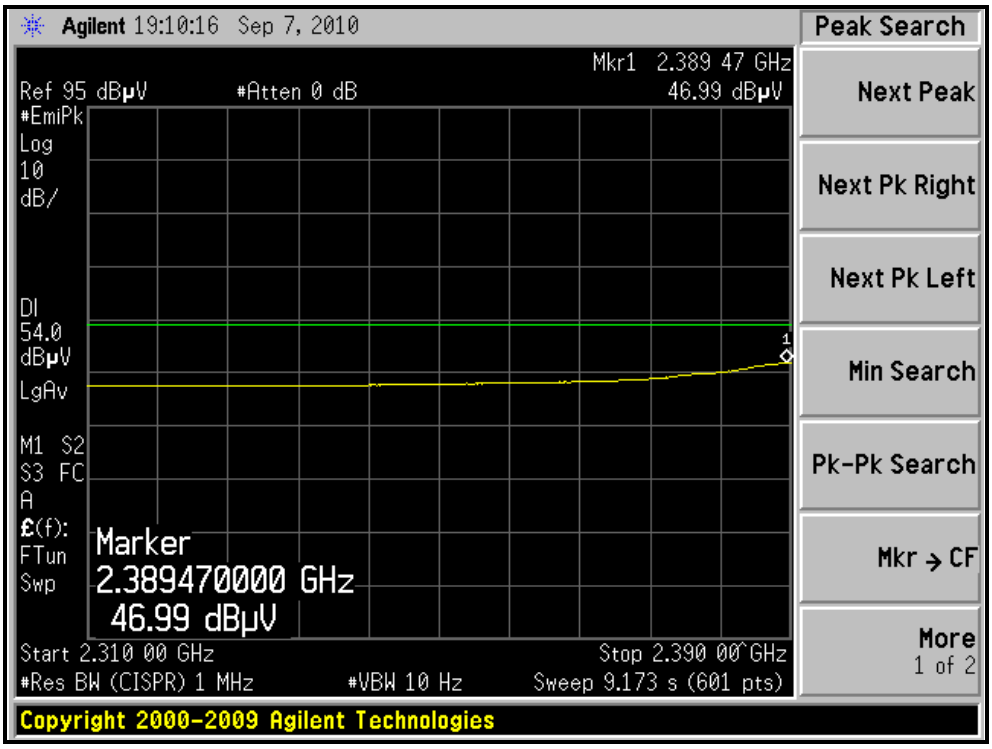
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 2: PCB antenna		

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	*2452.00	97.5 PK			1.03 H	238	65.64	31.86
2	*2452.00	86.2 AV			1.03 H	238	54.34	31.86
3	2484.30	57.4 PK	74.0	-16.6	1.04 H	240	25.43	31.97
4	2484.30	43.3 AV	54.0	-10.7	1.04 H	240	11.33	31.97
5	4904.00	46.5 PK	74.0	-27.5	1.02 H	162	7.26	39.24
6	4904.00	33.4 AV	54.0	-20.6	1.02 H	162	-5.84	39.24
7	7356.00	53.7 PK	74.0	-20.3	1.07 H	168	7.09	46.61
8	7356.00	41.0 AV	54.0	-13.0	1.07 H	168	-5.61	46.61
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	103.0 PK			1.11 V	16	71.14	31.86
2	*2452.00	93.3 AV			1.11 V	16	61.44	31.86
3	2483.50	67.8 PK	74.0	-6.2	1.00 V	342	35.83	31.97
4	2483.50	51.2 AV	54.0	-2.8	1.00 V	342	19.23	31.97
5	4904.00	42.3 PK	74.0	-31.7	1.10 V	12	3.06	39.24
6	4904.00	33.7 AV	54.0	-20.3	1.10 V	12	-5.54	39.24
7	7356.00	56.2 PK	74.0	-17.8	1.13 V	16	9.59	46.61
8	7356.00	46.3 AV	54.0	-7.7	1.13 V	16	-0.31	46.61

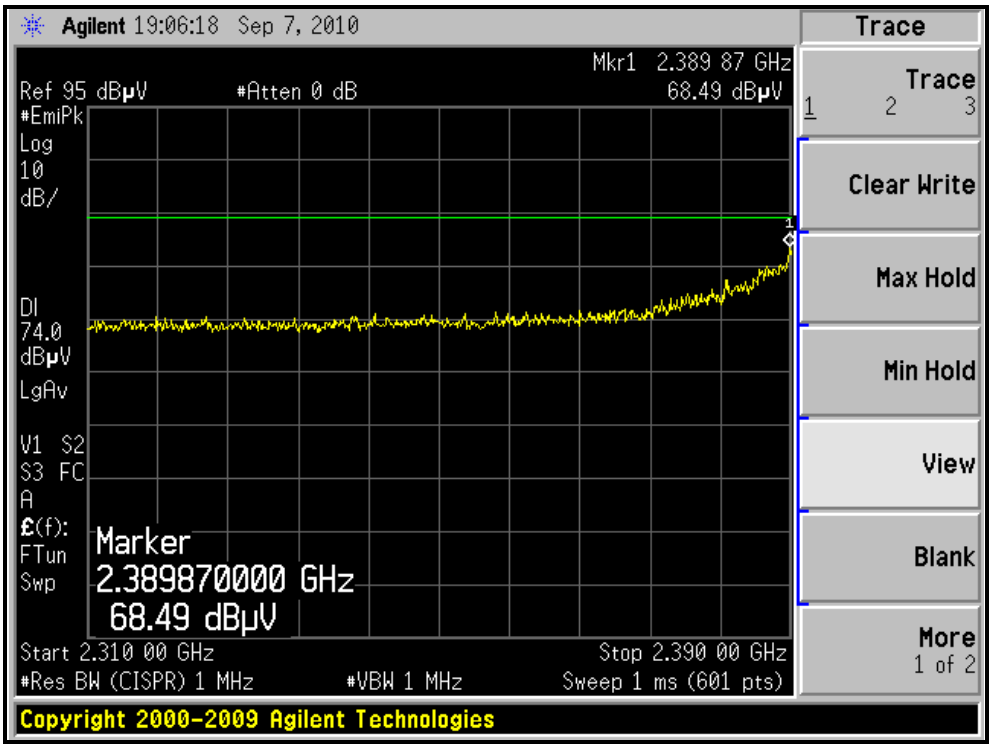
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

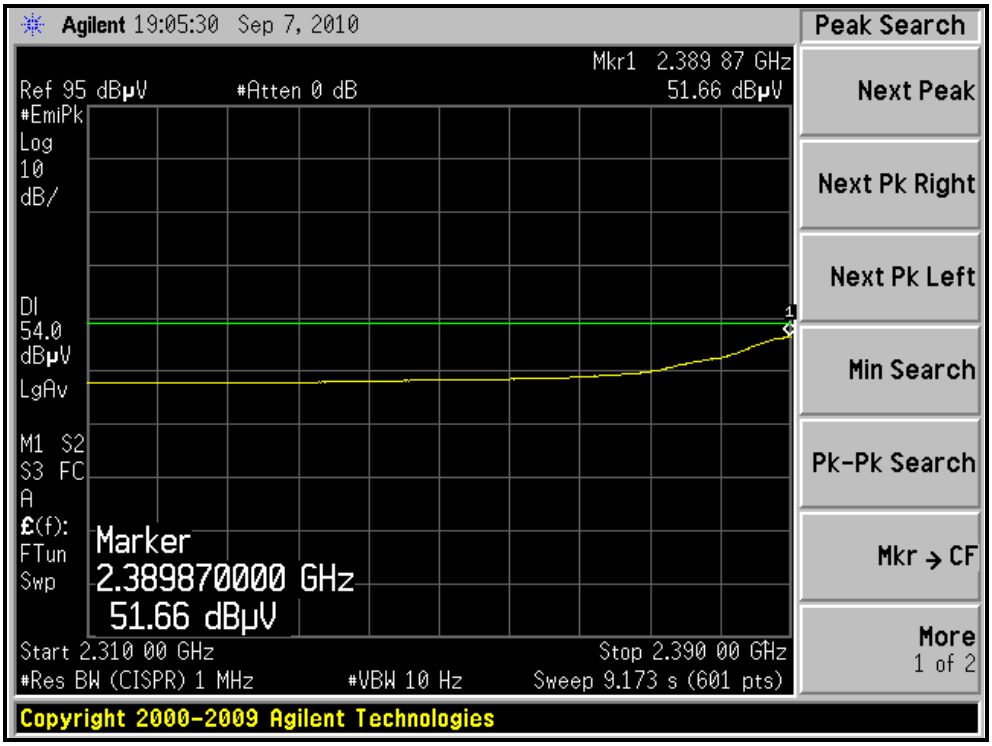
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)



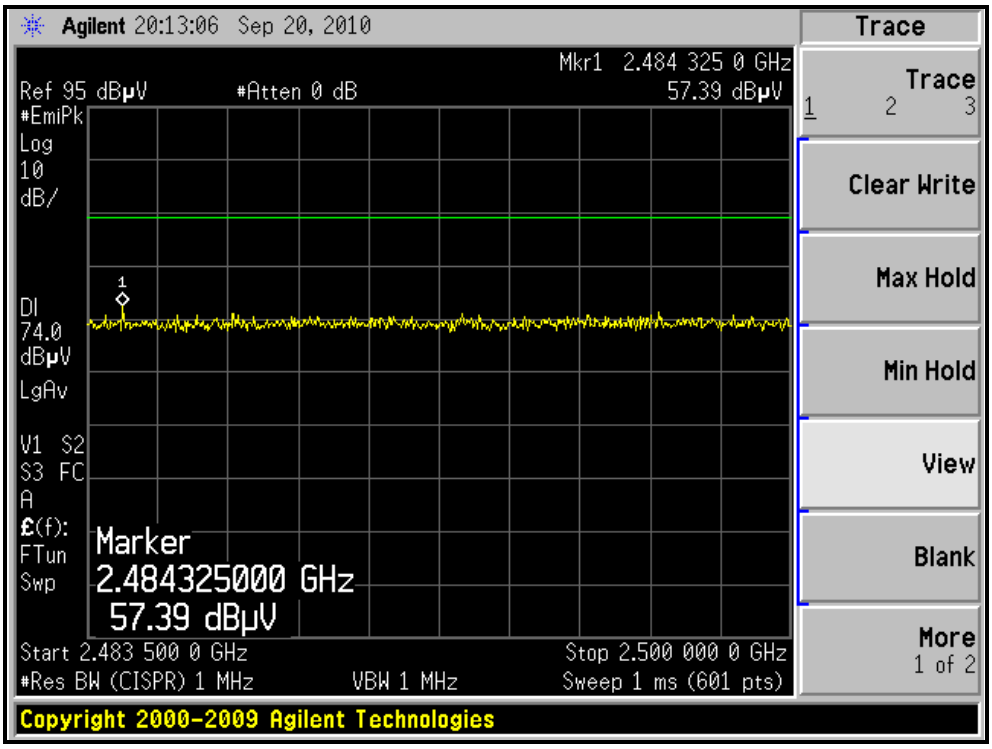


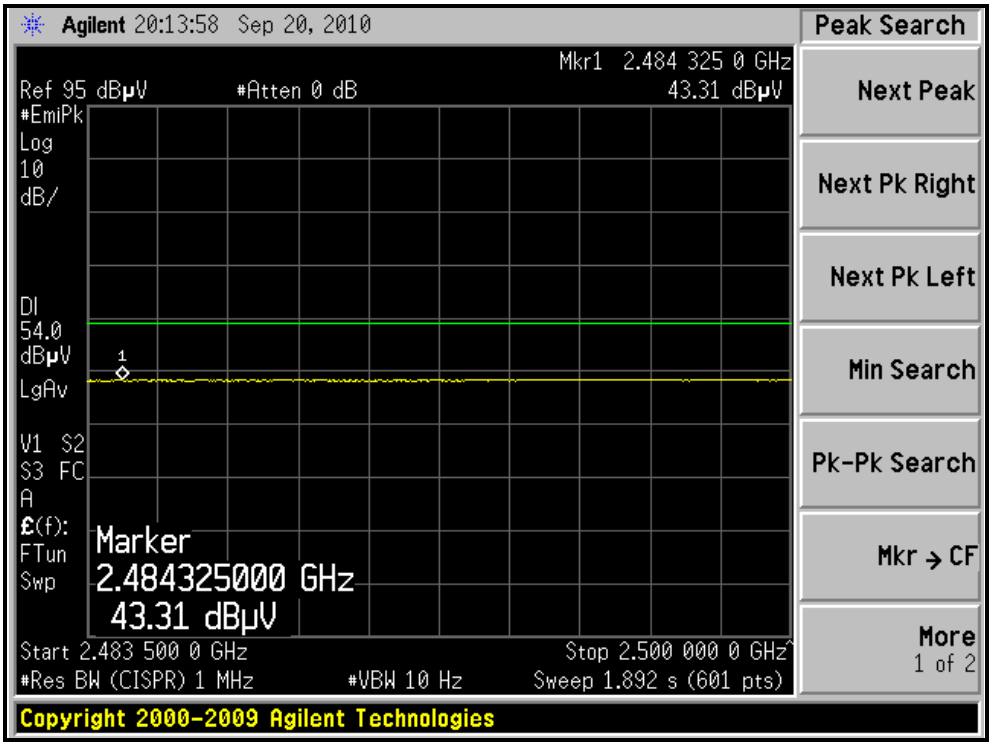
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, VERTICAL)



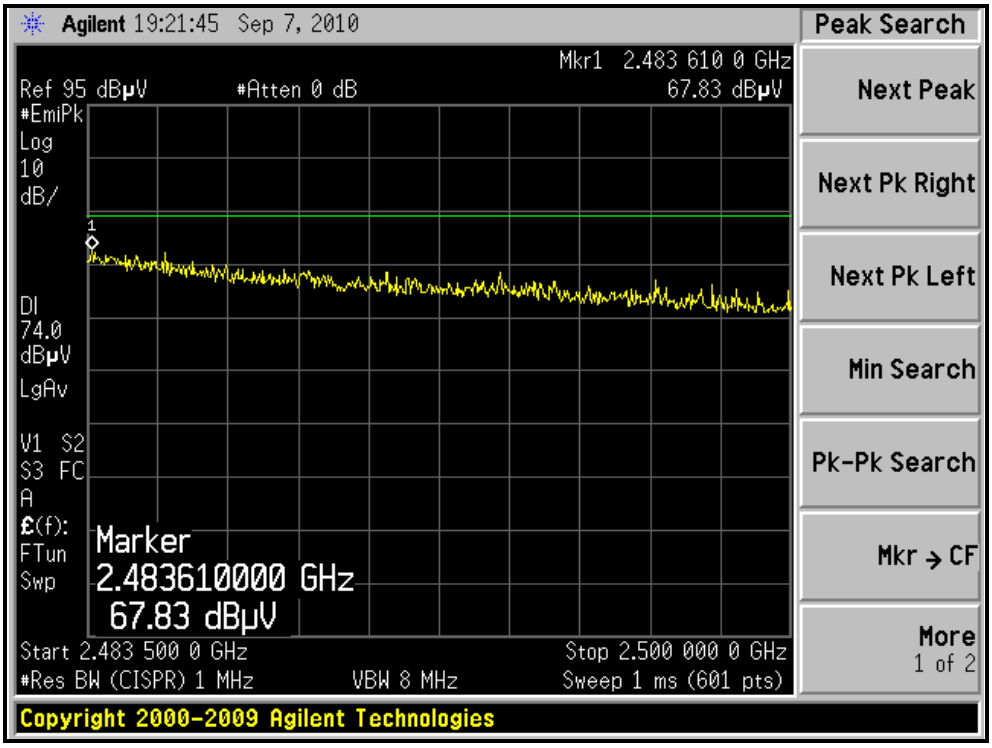


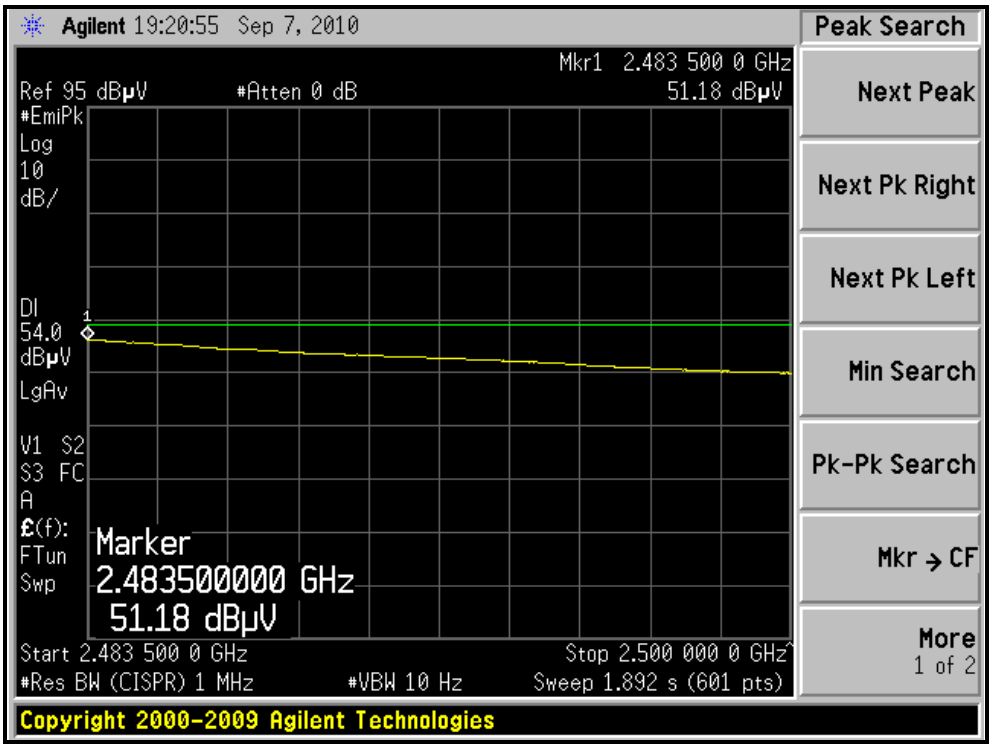
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, HORIZONTAL)





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





4.2.9 TEST RESULTS (ANTENNA 3: PIFA ANTENNA)

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH 1012 hPa	TESTED BY	Moris Lin
TEST MODE	Antenna 3: PIFA 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	69.88	27.5 QP	40.0	-12.5	2.70 H	51	15.53	11.94
2	120.00	29.6 QP	43.5	-13.9	1.51 H	115	17.43	12.20
3	187.32	28.7 QP	43.5	-14.8	1.85 H	217	17.26	11.46
4	240.00	38.4 QP	46.0	-7.6	1.22 H	261	25.33	13.05
5	300.42	37.4 QP	46.0	-8.6	1.00 H	152	21.70	15.67
6	359.00	35.0 QP	46.0	-11.0	1.00 H	263	17.85	17.14
7	720.00	31.4 QP	46.0	-14.6	1.00 H	142	6.61	24.76
8	816.00	28.8 QP	46.0	-17.2	1.00 H	263	2.96	25.88
9	960.00	34.9 QP	46.0	-11.1	1.00 H	127	6.82	28.07
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	66.88	23.9 QP	40.0	-16.1	1.00 V	58	11.43	12.43
2	120.00	24.9 QP	43.5	-18.6	1.00 V	177	12.69	12.20
3	126.84	24.4 QP	43.5	-19.2	1.00 V	168	11.24	13.11
4	240.00	34.7 QP	46.0	-11.3	1.00 V	22	21.62	13.05
5	241.56	33.9 QP	46.0	-12.1	1.00 V	147	20.76	13.13
6	301.45	35.4 QP	46.0	-10.6	1.51 V	49	19.68	15.70
7	476.44	28.5 QP	46.0	-17.5	1.53 V	46	8.33	20.14
8	960.00	31.7 QP	46.0	-14.3	1.47 V	172	3.61	28.07

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.

802.11b DSSS MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	2389.47	57.7 PK	74.0	-16.3	1.00 H	99	26.04	31.66
2	2389.47	47.0 AV	54.0	-7.0	1.00 H	99	15.34	31.66
3	*2412.00	104.1 PK			1.00 H	99	72.37	31.73
4	*2412.00	102.0 AV			1.00 H	99	70.27	31.73
5	4824.00	46.8 PK	74.0	-27.2	1.03 H	20	7.83	38.97
6	4824.00	33.3 AV	54.0	-20.7	1.03 H	20	-5.67	38.97
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	2389.33	58.3 PK	74.0	-15.7	1.57 V	55	26.65	31.65
2	2389.33	48.6 AV	54.0	-5.4	1.57 V	55	16.95	31.65
3	*2412.00	107.8 PK			1.58 V	63	76.07	31.73
4	*2412.00	105.7 AV			1.58 V	63	73.97	31.73
5	4824.00	46.5 PK	74.0	-27.5	1.05 V	21	7.53	38.97
6	4824.00	33.2 AV	54.0	-20.8	1.05 V	21	-5.77	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	103.9 PK			1.00 H	97	72.09	31.81
2	*2437.00	101.8 AV			1.00 H	97	69.99	31.81
3	4874.00	46.3 PK	74.0	-27.7	1.00 H	9	7.16	39.14
4	4874.00	34.7 AV	54.0	-19.3	1.00 H	9	-4.44	39.14
5	7311.00	53.0 PK	74.0	-21.0	1.00 H	20	6.37	46.63
6	7311.00	41.0 AV	54.0	-13.0	1.00 H	20	-5.63	46.63
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	108.0 PK			1.56 V	56	76.19	31.81
2	*2437.00	105.7 AV			1.56 V	56	73.89	31.81
3	4874.00	46.3 PK	74.0	-27.7	1.00 V	197	7.16	39.14
4	4874.00	34.7 AV	54.0	-19.3	1.00 V	197	-4.44	39.14
5	7311.00	52.9 PK	74.0	-21.1	1.00 V	0	6.27	46.63
6	7311.00	40.9 AV	54.0	-13.1	1.00 V	0	-5.73	46.63

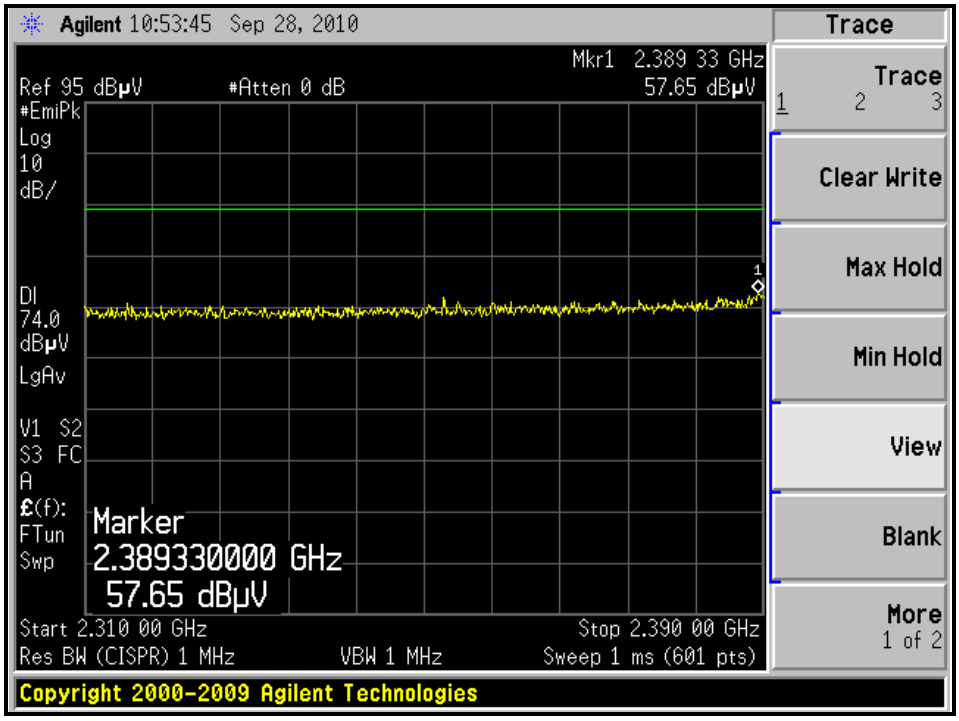
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

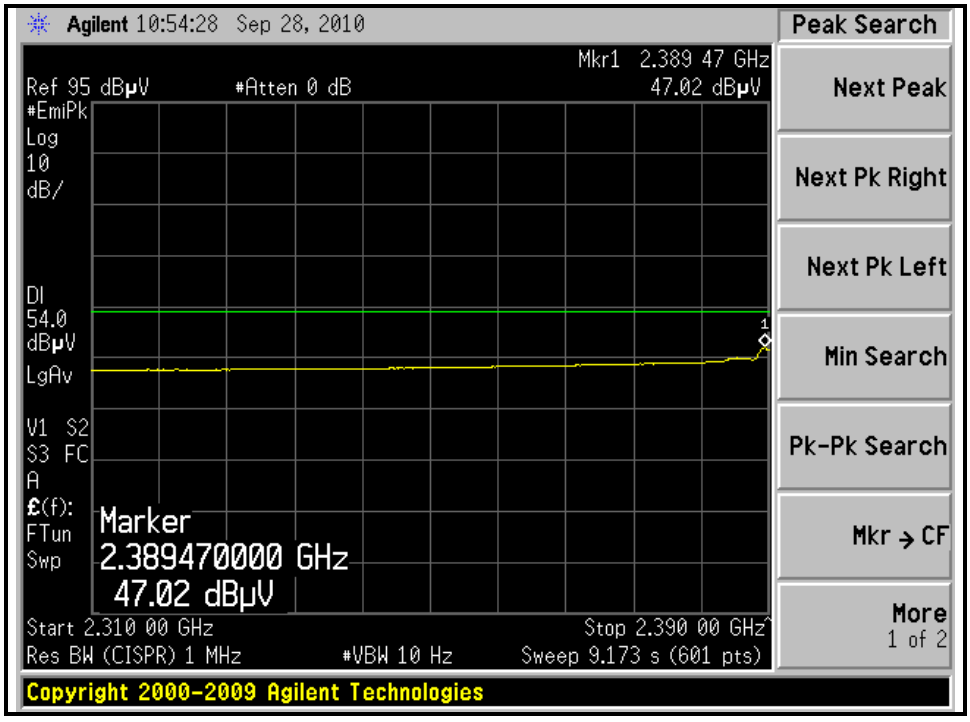
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA antenna		

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	*2462.00	101.5 PK			1.00 H	97	69.61	31.89
2	*2462.00	99.0 AV			1.00 H	97	67.11	31.89
3	2484.49	57.7 PK	74.0	-16.3	1.00 H	97	25.73	31.97
4	2484.49	44.8 AV	54.0	-9.2	1.00 H	97	12.83	31.97
5	4924.00	47.0 PK	74.0	-27.0	1.04 H	25	7.69	39.31
6	4924.00	34.1 AV	54.0	-19.9	1.04 H	25	-5.21	39.31
7	7386.00	53.4 PK	74.0	-20.6	1.05 H	351	6.80	46.60
8	7386.00	41.3 AV	54.0	-12.7	1.05 H	351	-5.30	46.60
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	*2462.00	107.7 PK			1.55 V	56	75.81	31.89
2	*2462.00	105.5 AV			1.55 V	56	73.61	31.89
3	2483.56	59.5 PK	74.0	-14.5	1.57 V	46	27.53	31.97
4	2483.56	48.3 AV	54.0	-5.7	1.57 V	46	16.33	31.97
5	4924.00	46.1 PK	74.0	-27.9	1.00 V	220	6.79	39.31
6	4924.00	33.9 AV	54.0	-20.1	1.00 V	220	-5.41	39.31
7	7386.00	52.1 PK	74.0	-21.9	1.00 V	82	5.50	46.60
8	7386.00	40.7 AV	54.0	-13.3	1.00 V	82	-5.90	46.60

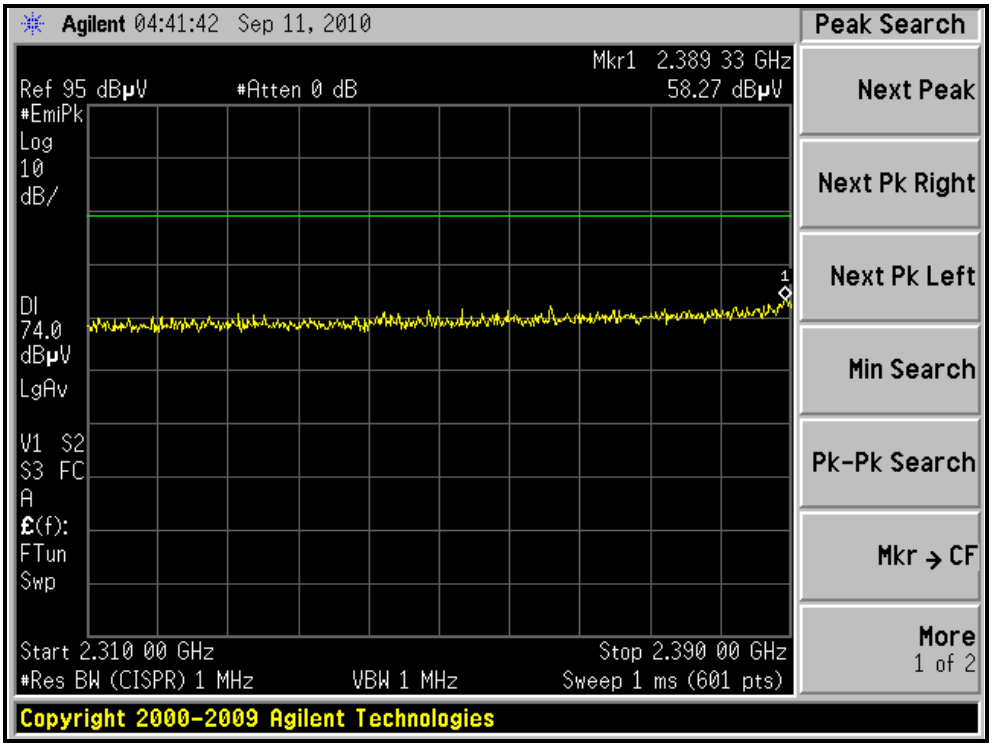
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

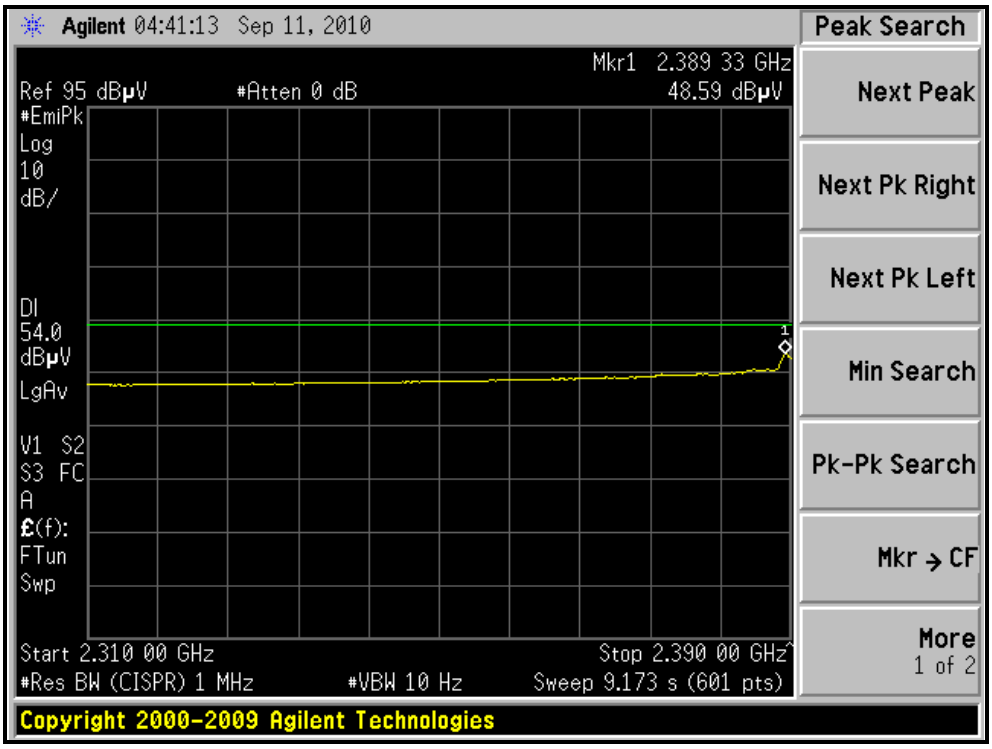
RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)



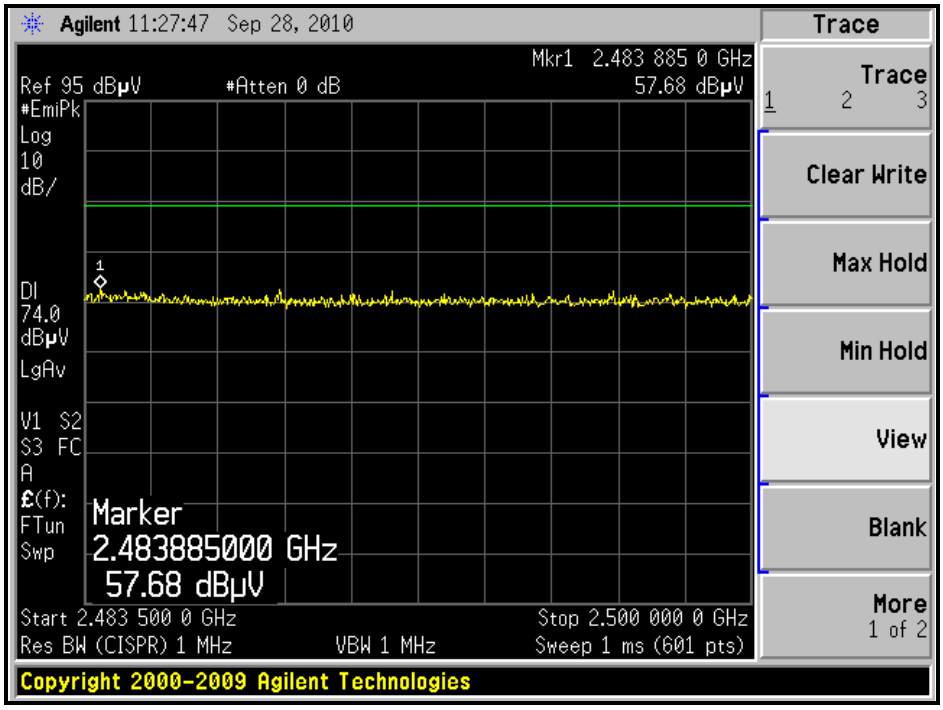


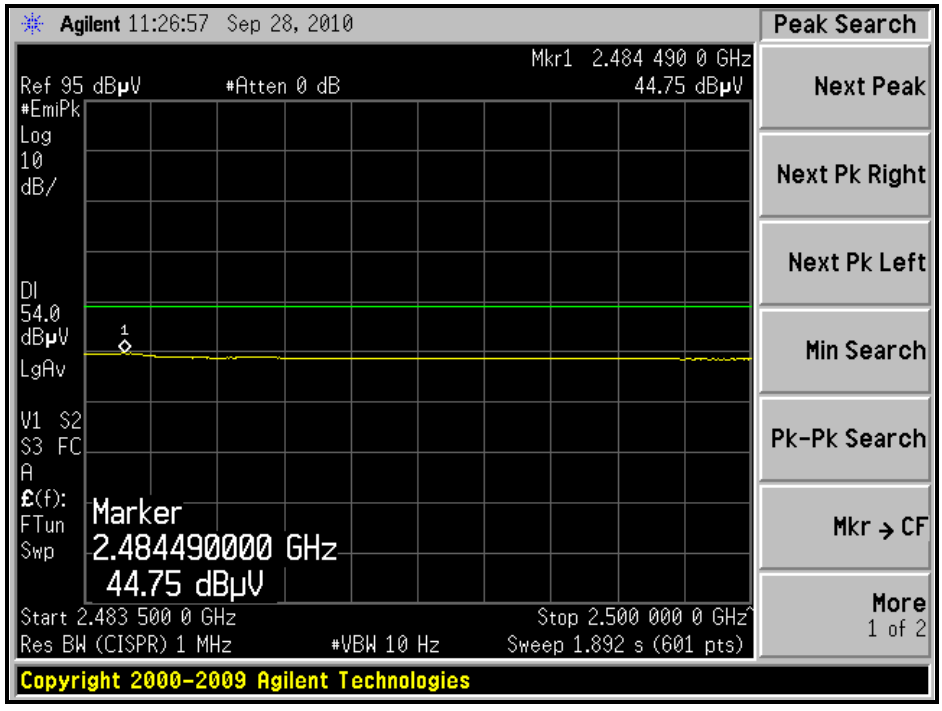
RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)



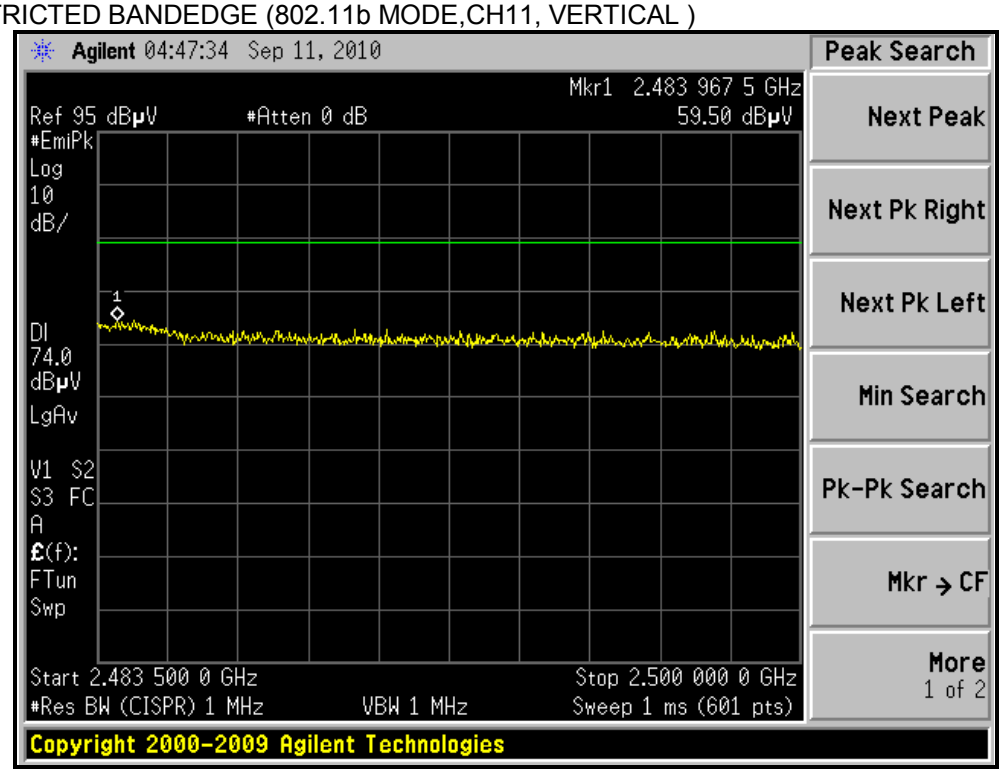


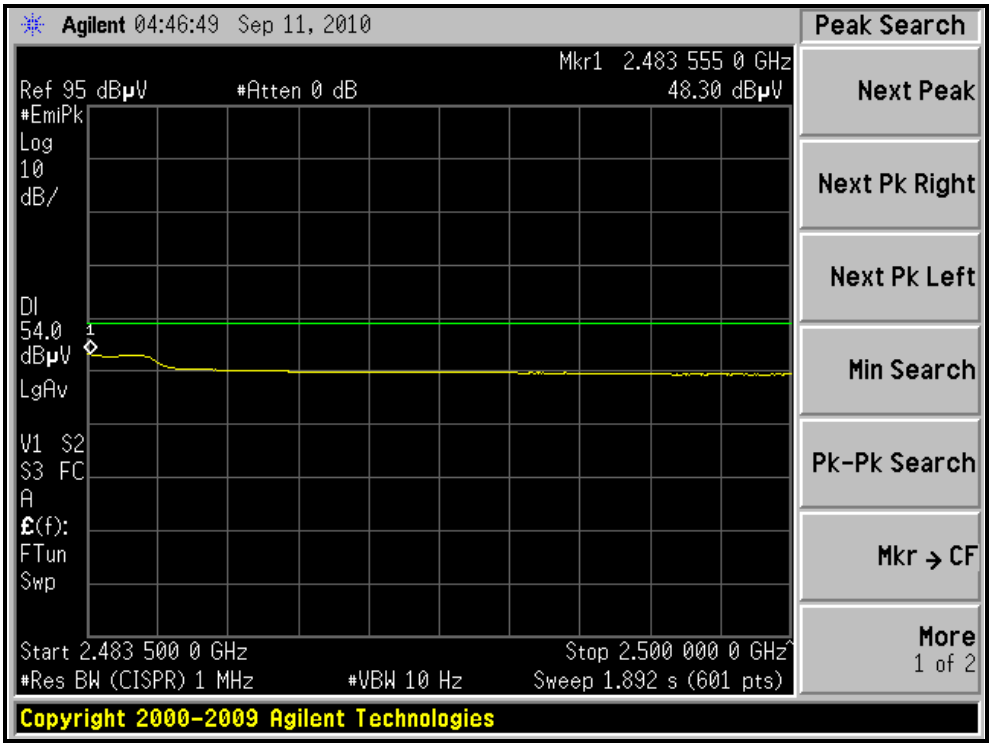
RESTRICTED BANDEDGE (802.11b MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	2390.00	63.3 PK	74.0	-10.7	1.00 H	98	31.64	31.66
2	2390.00	47.3 AV	54.0	-6.7	1.00 H	98	15.64	31.66
3	*2412.00	105.2 PK			1.00 H	98	73.47	31.73
4	*2412.00	95.3 AV			1.00 H	98	63.57	31.73
5	4824.00	46.9 PK	74.0	-27.1	1.03 H	78	7.93	38.97
6	4824.00	34.1 AV	54.0	-19.9	1.03 H	78	-4.87	38.97
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	65.7 PK	74.0	-8.3	1.58 V	62	34.04	31.66
2	2390.00	51.2 AV	54.0	-2.8	1.58 V	62	19.54	31.66
3	*2412.00	107.9 PK			1.57 V	56	76.17	31.73
4	*2412.00	98.6 AV			1.57 V	56	66.87	31.73
5	4824.00	46.5 PK	74.0	-27.5	1.00 V	85	7.53	38.97
6	4824.00	34.2 AV	54.0	-19.8	1.00 V	85	-4.77	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	107.3 PK			1.00 H	97	75.49	31.81
2	*2437.00	96.8 AV			1.00 H	97	64.99	31.81
3	4874.00	45.2 PK	74.0	-28.8	1.00 H	10	6.06	39.14
4	4874.00	33.6 AV	54.0	-20.4	1.00 H	10	-5.54	39.14
5	7311.00	52.9 PK	74.0	-21.1	1.00 H	81	6.27	46.63
6	7311.00	41.1 AV	54.0	-12.9	1.00 H	81	-5.53	46.63
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	110.1 PK			1.55 V	56	78.29	31.81
2	*2437.00	100.8 AV			1.55 V	56	68.99	31.81
3	4874.00	45.2 PK	74.0	-28.8	1.00 V	341	6.06	39.14
4	4874.00	33.7 AV	54.0	-20.3	1.00 V	341	-5.44	39.14
5	7311.00	53.1 PK	74.0	-20.9	1.00 V	20	6.47	46.63
6	7311.00	41.1 AV	54.0	-12.9	1.00 V	20	-5.53	46.63

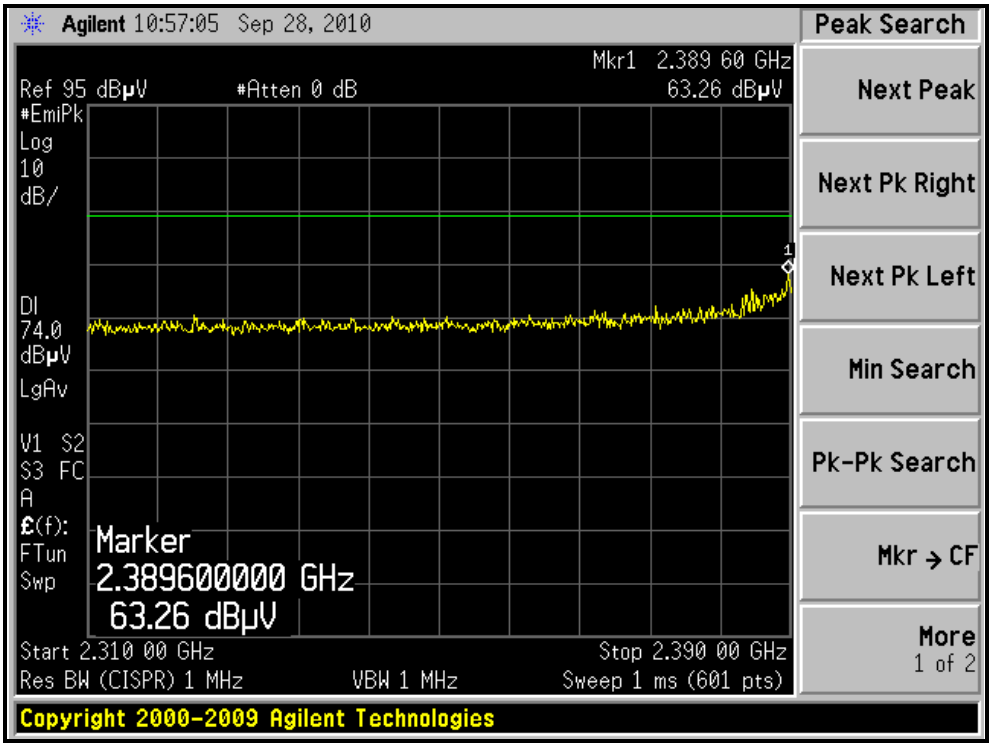
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

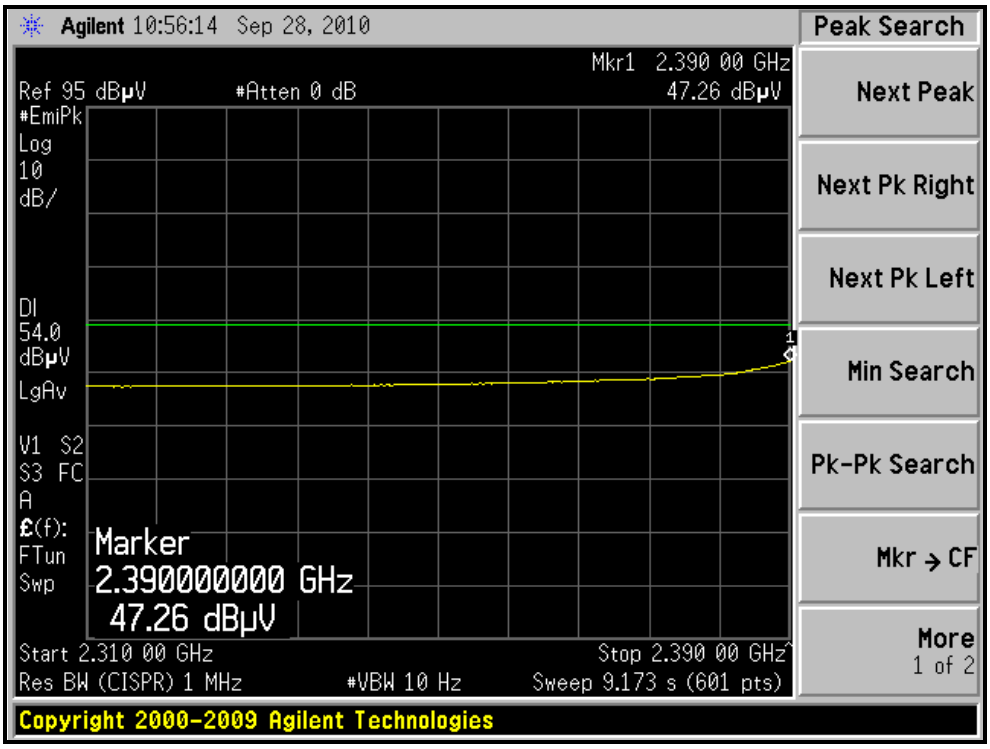
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA antenna		

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	*2462.00	102.1 PK			1.00 H	97	70.21	31.89
2	*2462.00	92.6 AV			1.00 H	97	60.71	31.89
3	2483.50	65.0 PK	74.0	-9.0	1.00 H	97	33.03	31.97
4	2483.50	50.4 AV	54.0	-3.6	1.00 H	97	18.43	31.97
5	4924.00	46.7 PK	74.0	-27.3	1.00 H	15	7.39	39.31
6	4924.00	34.1 AV	54.0	-19.9	1.00 H	15	-5.21	39.31
7	7386.00	54.6 PK	74.0	-19.4	1.08 H	20	8.00	46.60
8	7386.00	41.5 AV	54.0	-12.5	1.08 H	20	-5.10	46.60
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	*2462.00	108.9 PK			1.58 V	34	77.01	31.89
2	*2462.00	99.1 AV			1.58 V	34	67.21	31.89
3	2483.50	69.3 PK	74.0	-4.7	1.56 V	33	37.33	31.97
4	2483.50	51.6 AV	54.0	-2.4	1.56 V	33	19.63	31.97
5	4924.00	46.5 PK	74.0	-27.5	1.00 V	351	7.19	39.31
6	4924.00	34.2 AV	54.0	-19.8	1.00 V	351	-5.11	39.31
7	7386.00	55.3 PK	74.0	-18.7	1.02 V	80	8.70	46.60
8	7386.00	41.1 AV	54.0	-12.9	1.02 V	80	-5.50	46.60

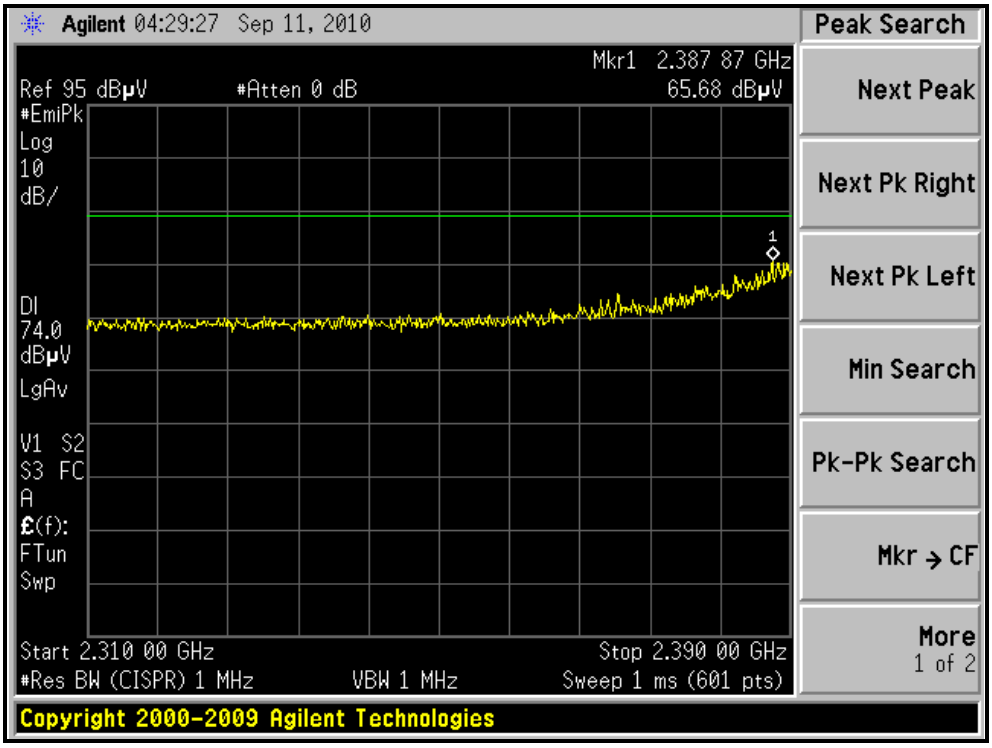
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

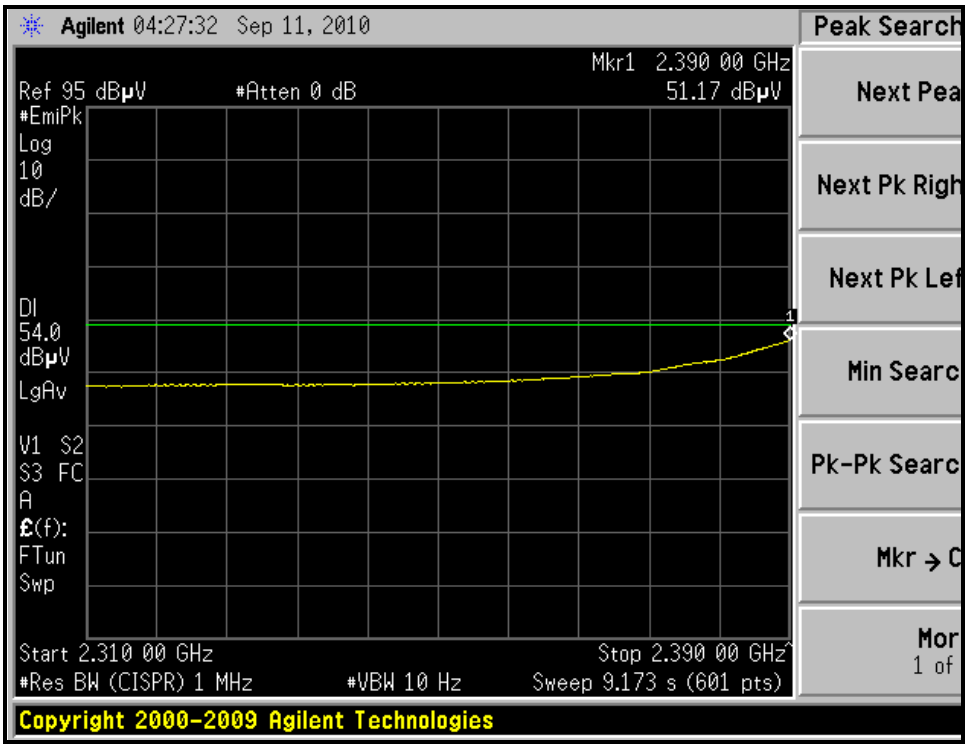
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



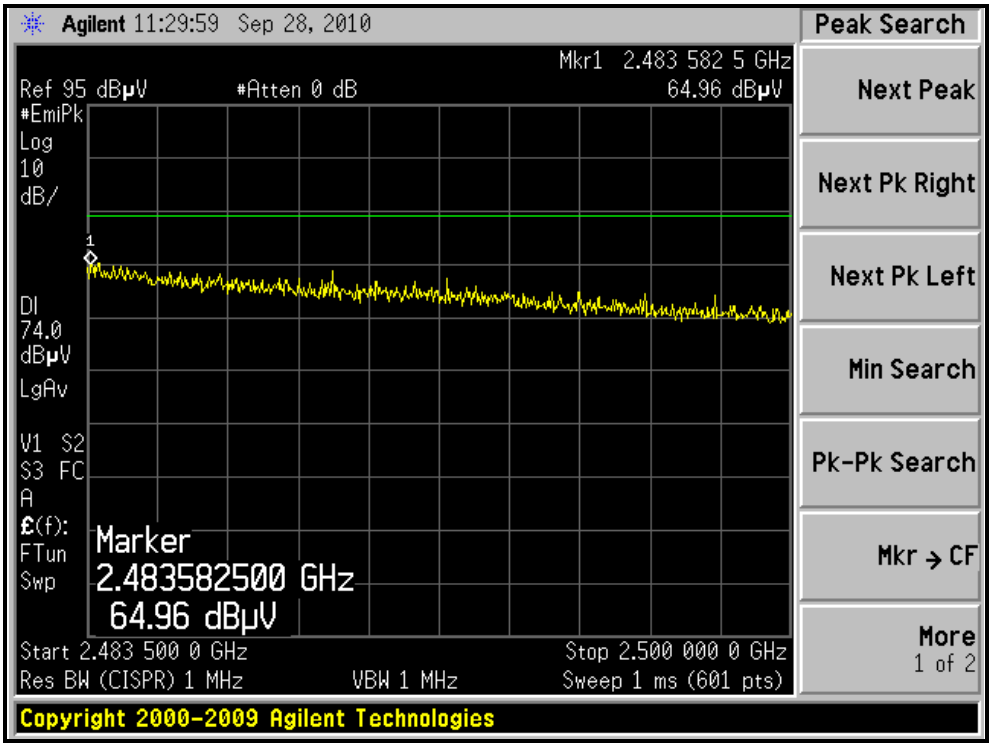


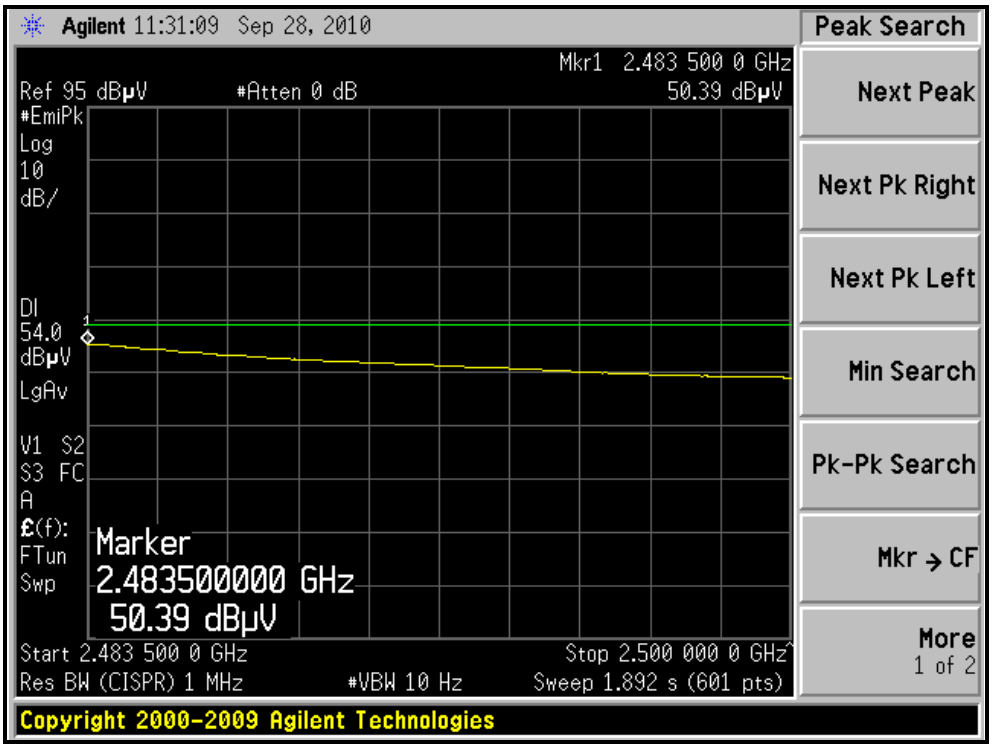
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



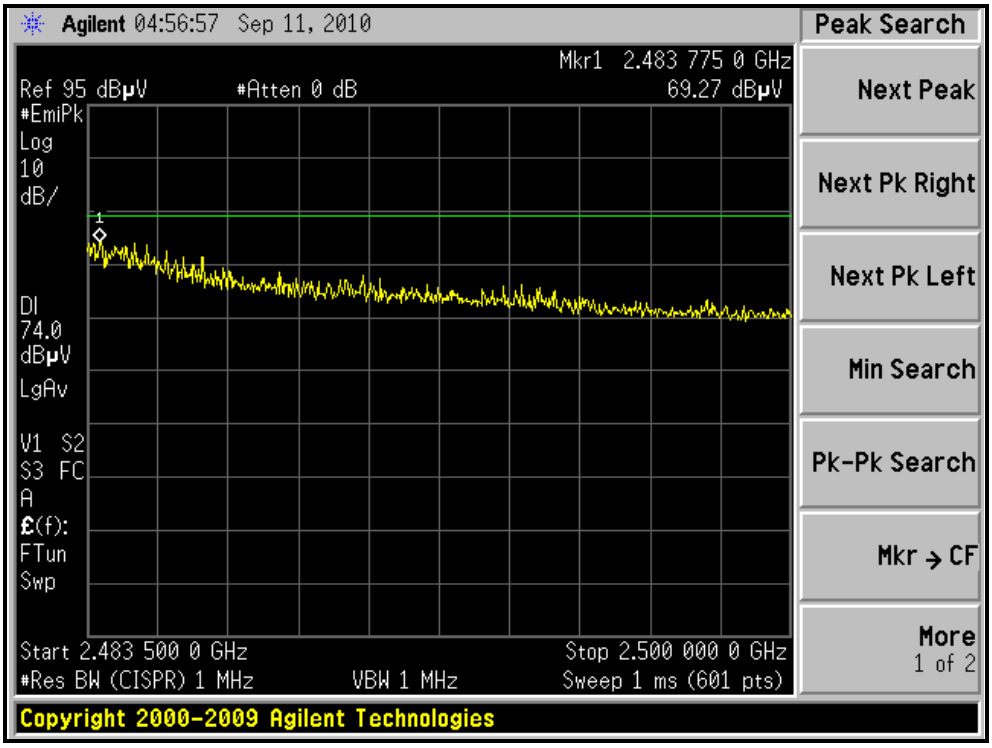


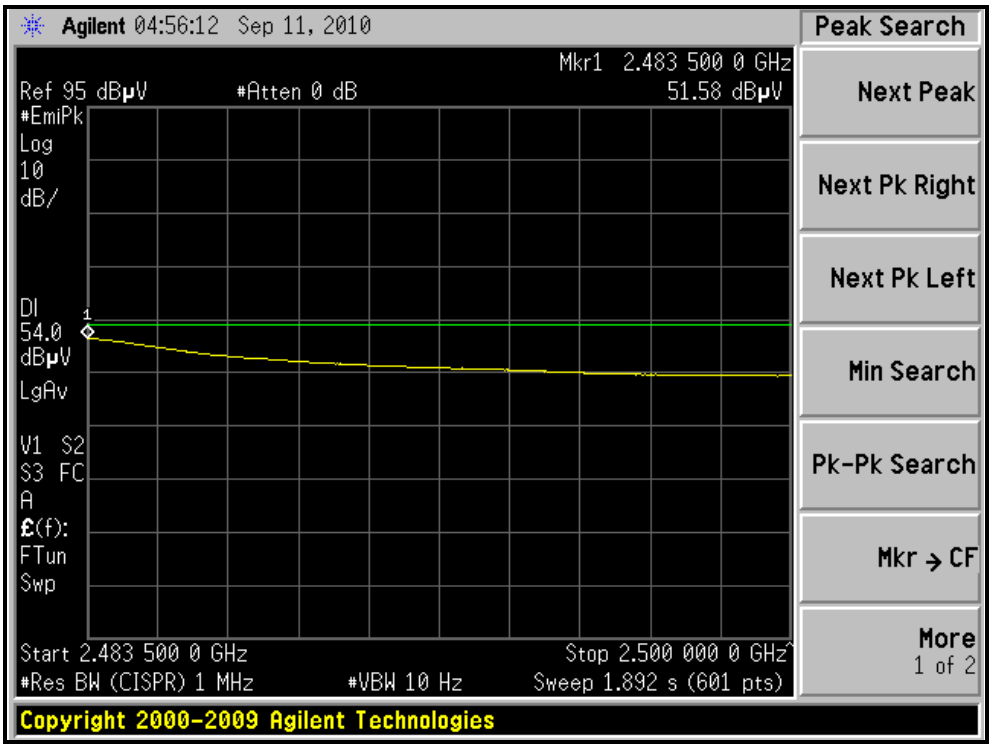
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	2390.00	65.0 PK	74.0	-9.0	1.00 H	98	33.34	31.66
2	2390.00	48.0 AV	54.0	-6.0	1.00 H	98	16.34	31.66
3	*2412.00	104.4 PK			1.00 H	98	72.67	31.73
4	*2412.00	94.5 AV			1.00 H	98	62.77	31.73
5	4824.00	45.5 PK	74.0	-28.5	1.00 H	27	6.53	38.97
6	4824.00	33.3 AV	54.0	-20.7	1.00 H	27	-5.67	38.97
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	67.2 PK	74.0	-6.8	1.58 V	51	35.54	31.66
2	2390.00	51.7 AV	54.0	-2.3	1.58 V	51	20.04	31.66
3	*2412.00	108.2 PK			1.57 V	58	76.47	31.73
4	*2412.00	98.1 AV			1.57 V	58	66.37	31.73
5	4824.00	46.1 PK	74.0	-27.9	1.00 V	25	7.13	38.97
6	4824.00	34.8 AV	54.0	-19.2	1.00 V	25	-4.17	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	106.3 PK			1.00 H	99	74.49	31.81
2	*2437.00	96.5 AV			1.00 H	99	64.69	31.81
3	4874.00	46.2 PK	74.0	-27.8	1.00 H	30	7.06	39.14
4	4874.00	32.6 AV	54.0	-21.4	1.00 H	30	-6.54	39.14
5	7311.00	53.1 PK	74.0	-20.9	1.09 H	21	6.47	46.63
6	7311.00	41.2 AV	54.0	-12.8	1.09 H	21	-5.43	46.63
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			1.56 V	55	78.19	31.81
2	*2437.00	100.4 AV			1.56 V	55	68.59	31.81
3	4874.00	46.6 PK	74.0	-27.4	1.08 V	20	7.46	39.14
4	4874.00	33.7 AV	54.0	-20.3	1.08 V	20	-5.44	39.14
5	7311.00	54.0 PK	74.0	-20.0	1.10 V	25	7.37	46.63
6	7311.00	41.5 AV	54.0	-12.5	1.10 V	25	-5.13	46.63

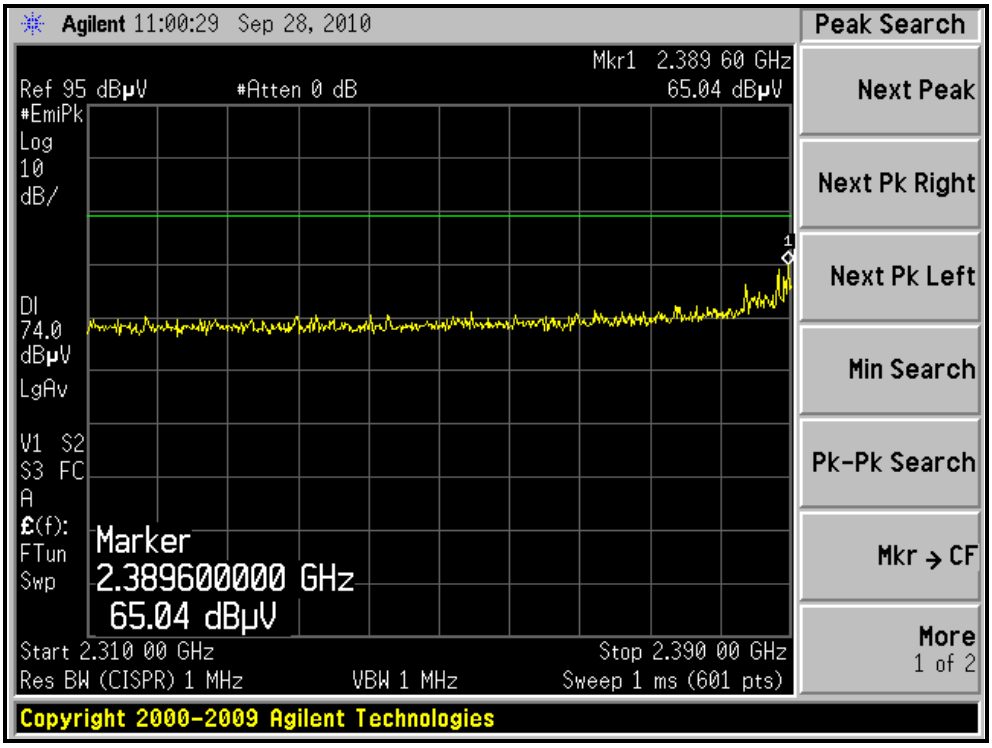
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

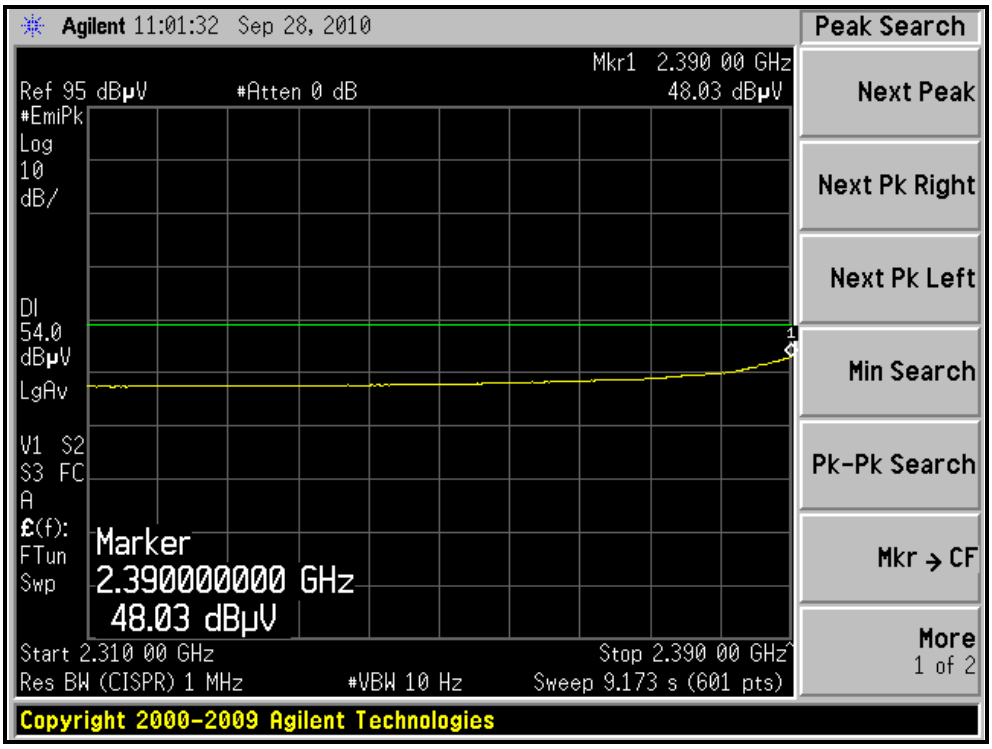
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA antenna		

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	*2462.00	102.5 PK			1.00 H	98	70.61	31.89
2	*2462.00	92.4 AV			1.00 H	98	60.51	31.89
3	2483.50	67.2 PK	74.0	-6.8	1.00 H	98	35.23	31.97
4	2483.50	52.0 AV	54.0	-2.0	1.00 H	98	20.03	31.97
5	4924.00	46.1 PK	74.0	-27.9	1.00 H	30	6.79	39.31
6	4924.00	32.5 AV	54.0	-21.5	1.00 H	30	-6.81	39.31
7	7386.00	55.2 PK	74.0	-18.8	1.01 H	21	8.60	46.60
8	7386.00	41.5 AV	54.0	-12.5	1.01 H	21	-5.10	46.60
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	*2462.00	108.6 PK			1.59 V	33	76.71	31.89
2	*2462.00	98.5 AV			1.59 V	33	66.61	31.89
3	2483.50	71.6 PK	74.0	-2.4	1.57 V	33	39.63	31.97
4	2483.50	51.6 AV	54.0	-2.4	1.57 V	33	19.63	31.97
5	4924.00	46.2 PK	74.0	-27.8	1.07 V	55	6.89	39.31
6	4924.00	34.2 AV	54.0	-19.8	1.07 V	55	-5.11	39.31
7	7386.00	54.3 PK	74.0	-19.7	1.02 V	22	7.70	46.60
8	7386.00	41.4 AV	54.0	-12.6	1.02 V	22	-5.20	46.60

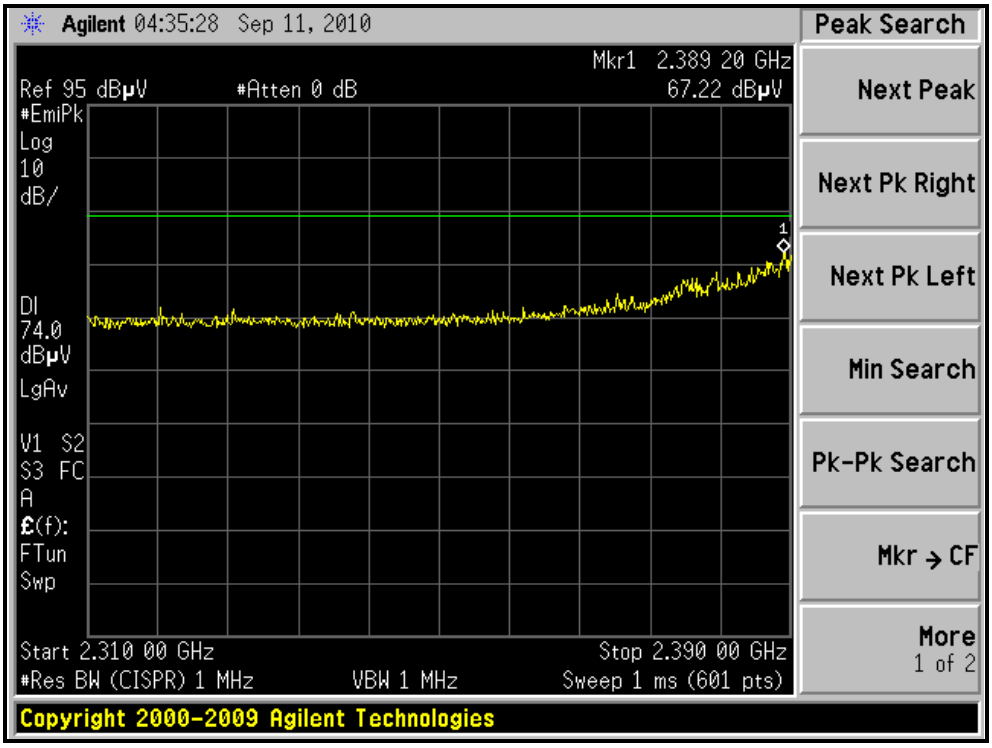
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

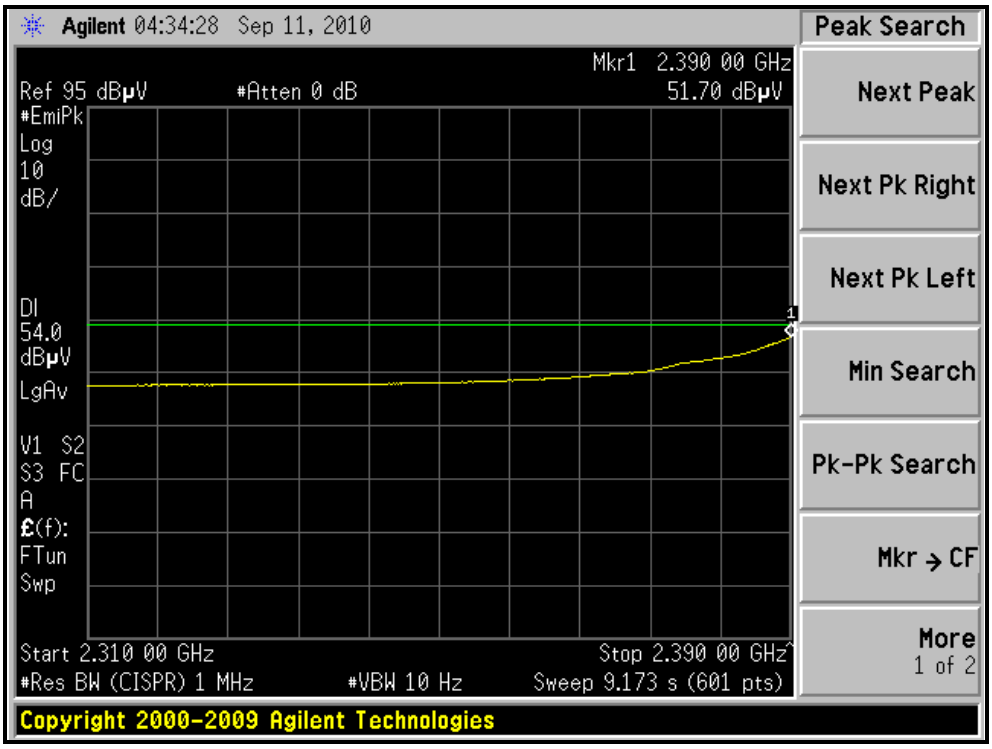
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, HORIZONTAL)



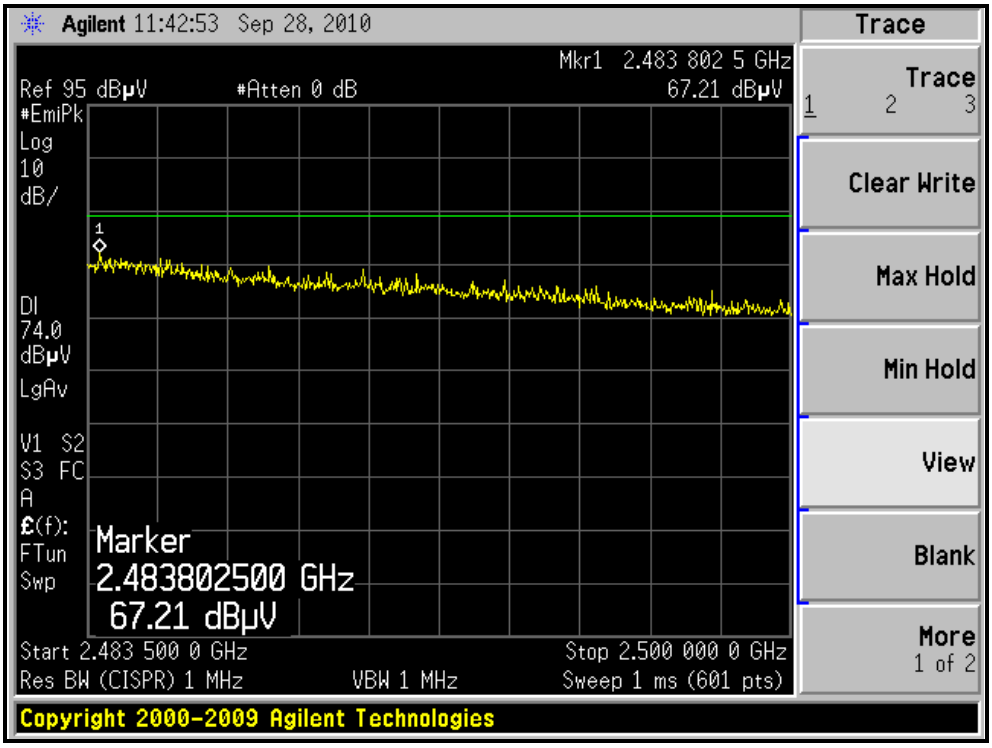


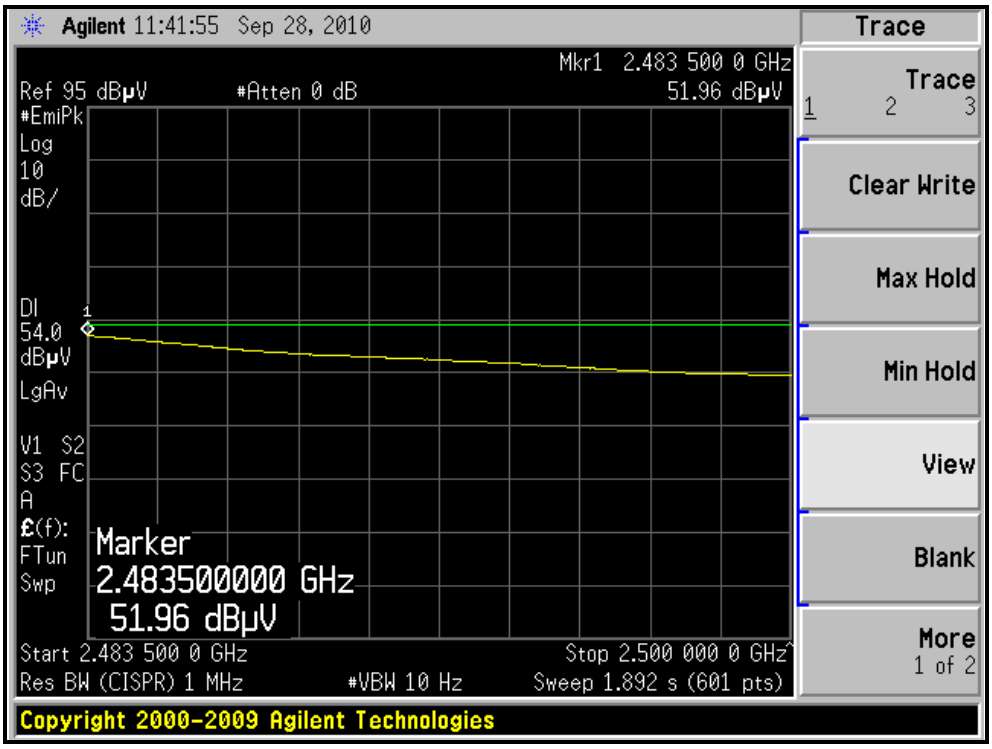
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, VERTICAL)



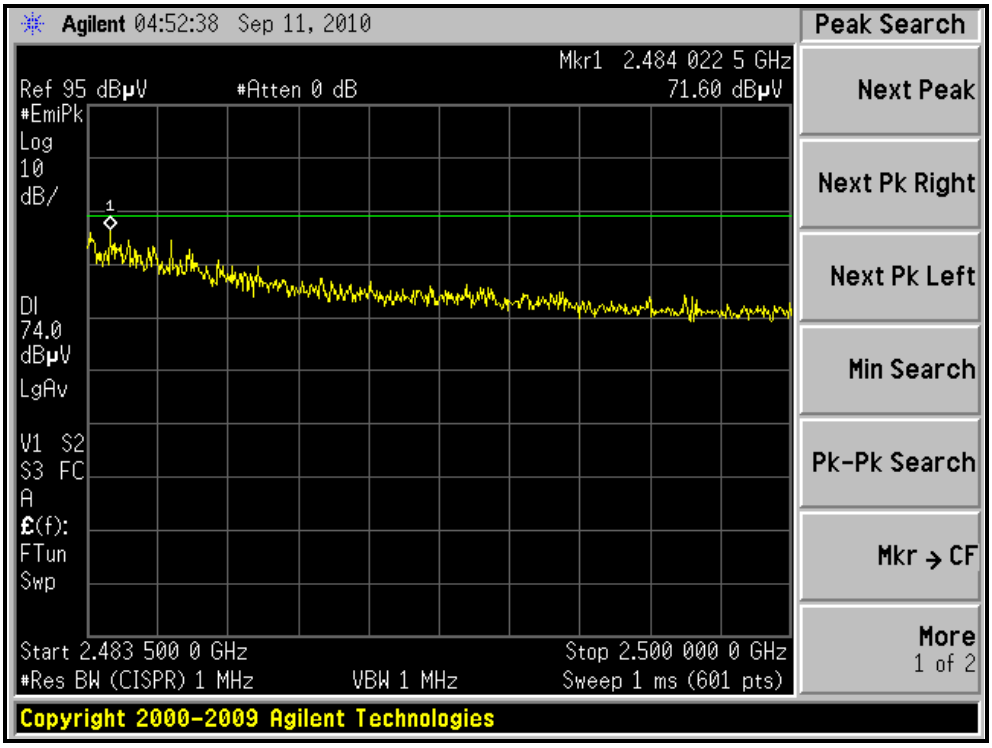


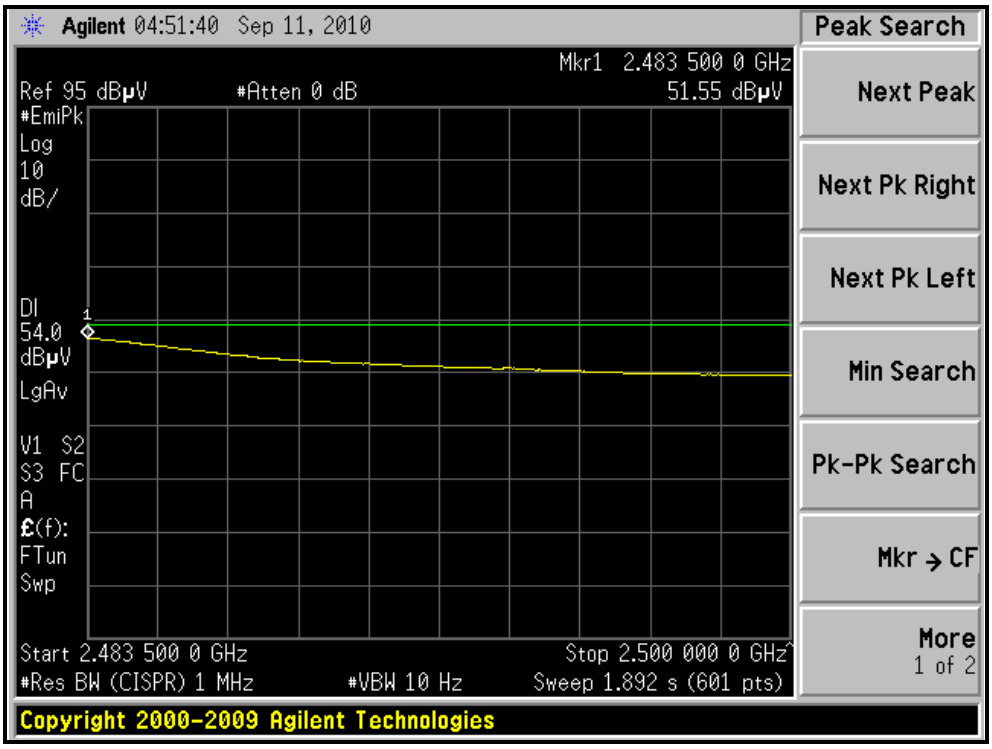
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	2390.00	65.1 PK	74.0	-8.9	1.00 H	99	33.44	31.66
2	2390.00	49.1 AV	54.0	-4.9	1.00 H	99	17.44	31.66
3	*2422.00	98.3 PK			1.00 H	99	66.54	31.76
4	*2422.00	88.6 AV			1.00 H	99	56.84	31.76
5	4844.00	45.1 PK	74.0	-28.9	1.02 H	29	6.06	39.04
6	4844.00	33.5 AV	54.0	-20.5	1.02 H	29	-5.54	39.04
7	7266.00	53.6 PK	74.0	-20.4	1.00 H	25	6.93	46.67
8	7266.00	41.1 AV	54.0	-12.9	1.00 H	25	-5.57	46.67
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	2389.93	67.9 PK	74.0	-6.1	1.59 V	63	36.24	31.66
2	2389.93	51.8 AV	54.0	-2.2	1.59 V	63	20.14	31.66
3	*2422.00	102.8 PK			1.57 V	63	71.04	31.76
4	*2422.00	93.2 AV			1.57 V	63	61.44	31.76
5	4844.00	46.4 PK	74.0	-27.6	1.04 V	31	7.36	39.04
6	4844.00	33.6 AV	54.0	-20.4	1.04 V	31	-5.44	39.04
7	7266.00	54.5 PK	74.0	-19.5	1.10 V	27	7.83	46.67
8	7266.00	41.2 AV	54.0	-12.8	1.10 V	27	-5.47	46.67

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 3: PIFA 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	100.3 PK			1.00 H	97	68.49	31.81
2	*2437.00	90.4 AV			1.00 H	97	58.59	31.81
3	4874.00	46.7 PK	74.0	-27.3	1.12 H	30	7.56	39.14
4	4874.00	33.6 AV	54.0	-20.4	1.12 H	30	-5.54	39.14
5	7311.00	53.2 PK	74.0	-20.8	1.06 H	21	6.57	46.63
6	7311.00	41.3 AV	54.0	-12.7	1.06 H	21	-5.33	46.63
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	105.0 PK			1.58 V	34	73.19	31.81
2	*2437.00	95.0 AV			1.58 V	34	63.19	31.81
3	2483.50	67.8 PK	74.0	-6.2	1.58 V	36	35.83	31.97
4	2483.50	51.0 AV	54.0	-3.0	1.58 V	36	19.03	31.97
5	4874.00	47.0 PK	74.0	-27.0	1.08 V	27	7.86	39.14
6	4874.00	33.7 AV	54.0	-20.3	1.08 V	27	-5.44	39.14
7	7311.00	54.0 PK	74.0	-20.0	1.10 V	29	7.37	46.63
8	7311.00	41.4 AV	54.0	-12.6	1.10 V	29	-5.23	46.63

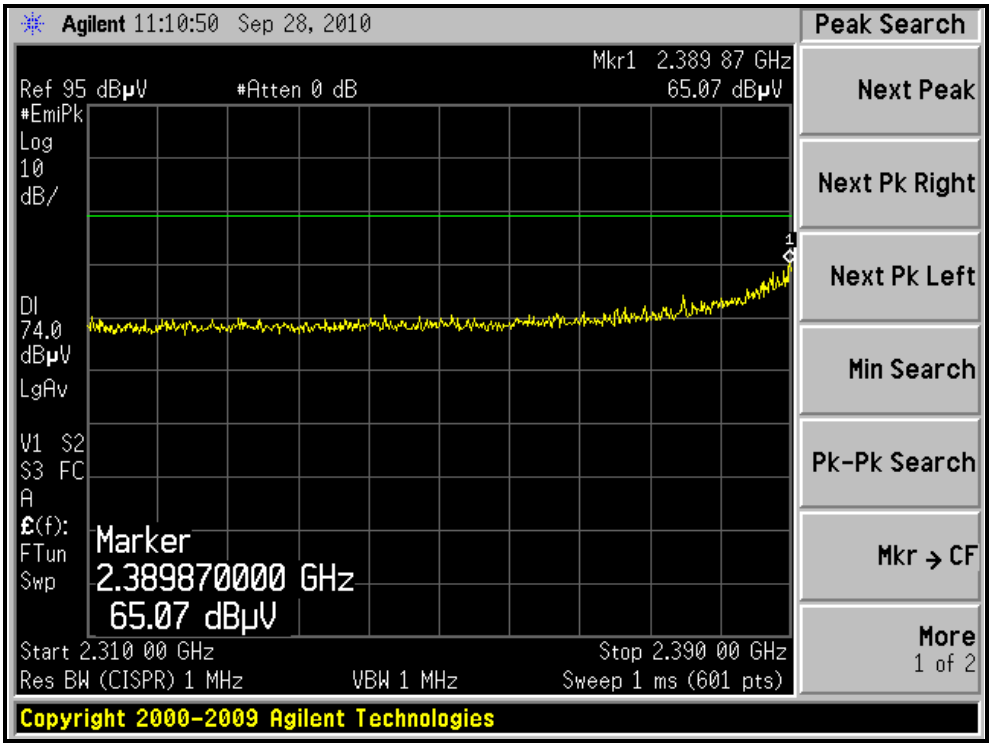
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

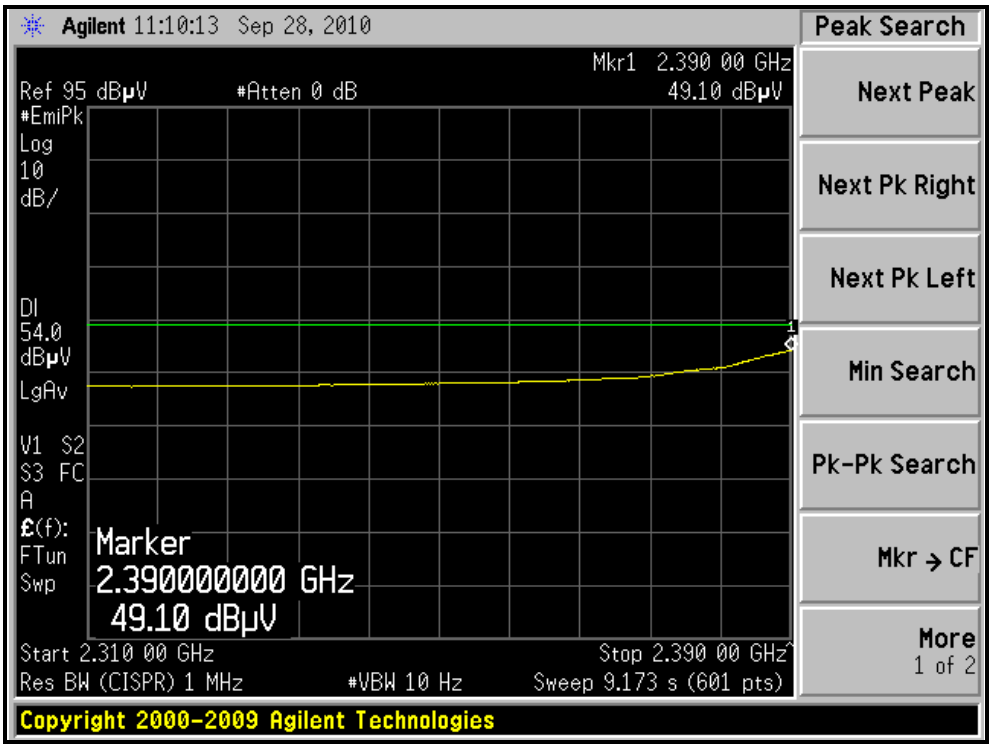
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	**Antenna 3: PIFA antenna**		

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	*2452.00	98.4 PK			1.00 H	97	66.54	31.86
2	*2452.00	88.4 AV			1.00 H	97	56.54	31.86
3	2483.50	68.2 PK	74.0	-5.8	1.00 H	97	36.23	31.97
4	**2483.50**	**53.1 AV**	**54.0**	**-0.9**	**1.00 H**	**97**	**21.13**	**31.97**
5	4904.00	45.7 PK	74.0	-28.3	1.00 H	20	6.46	39.24
6	4904.00	33.5 AV	54.0	-20.5	1.00 H	20	-5.74	39.24
7	7356.00	53.6 PK	74.0	-20.4	1.02 H	25	6.99	46.61
8	7356.00	41.2 AV	54.0	-12.8	1.02 H	25	-5.41	46.61
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	102.5 PK			1.56 V	62	70.64	31.86
2	*2452.00	93.0 AV			1.56 V	62	61.14	31.86
3	2483.50	71.0 PK	74.0	-3.0	1.56 V	85	39.03	31.97
4	2483.50	51.9 AV	54.0	-2.1	1.56 V	85	19.93	31.97
5	4904.00	45.8 PK	74.0	-28.2	1.01 V	20	6.56	39.24
6	4904.00	33.5 AV	54.0	-20.5	1.01 V	20	-5.74	39.24
7	7356.00	53.7 PK	74.0	-20.3	1.02 V	22	7.09	46.61
8	7356.00	41.3 AV	54.0	-12.7	1.02 V	22	-5.31	46.61

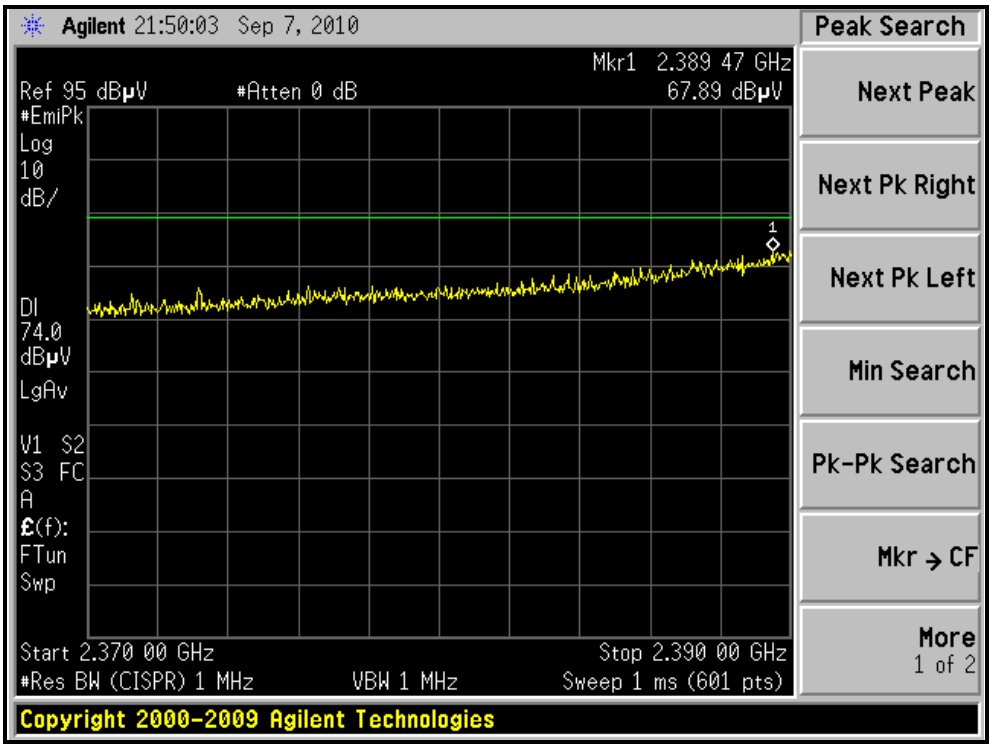
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

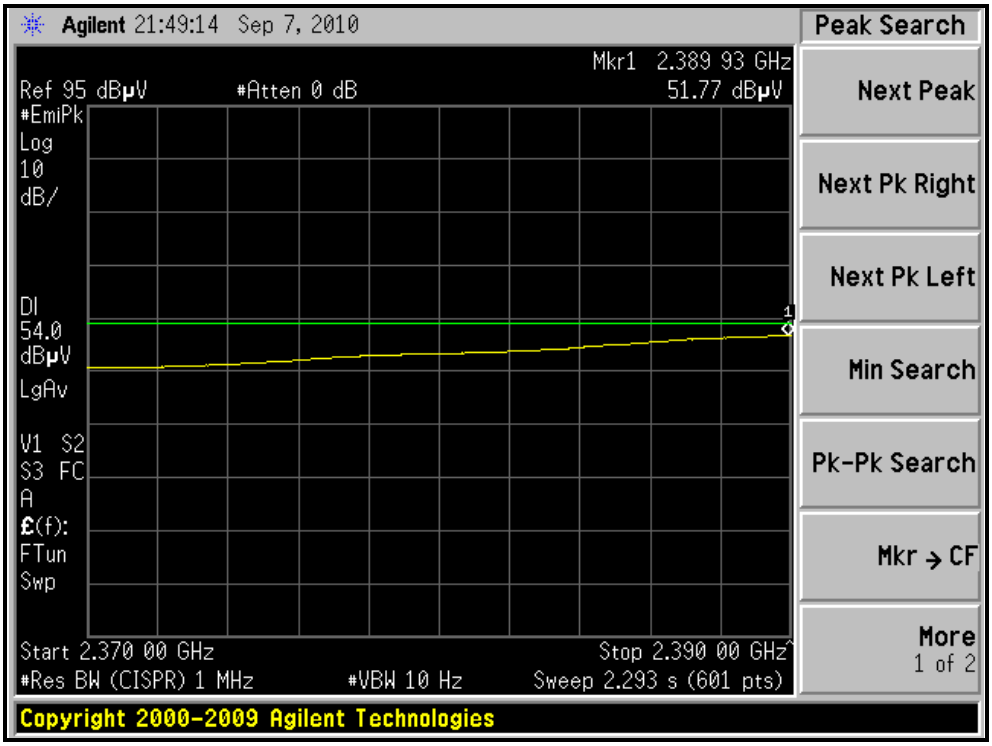
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)



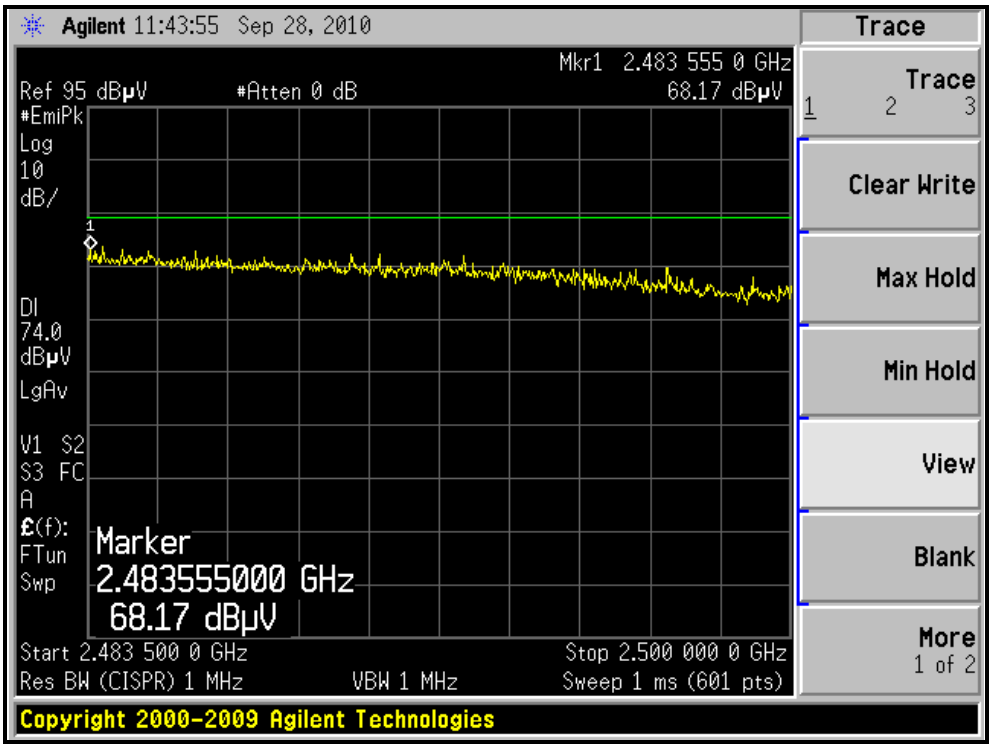


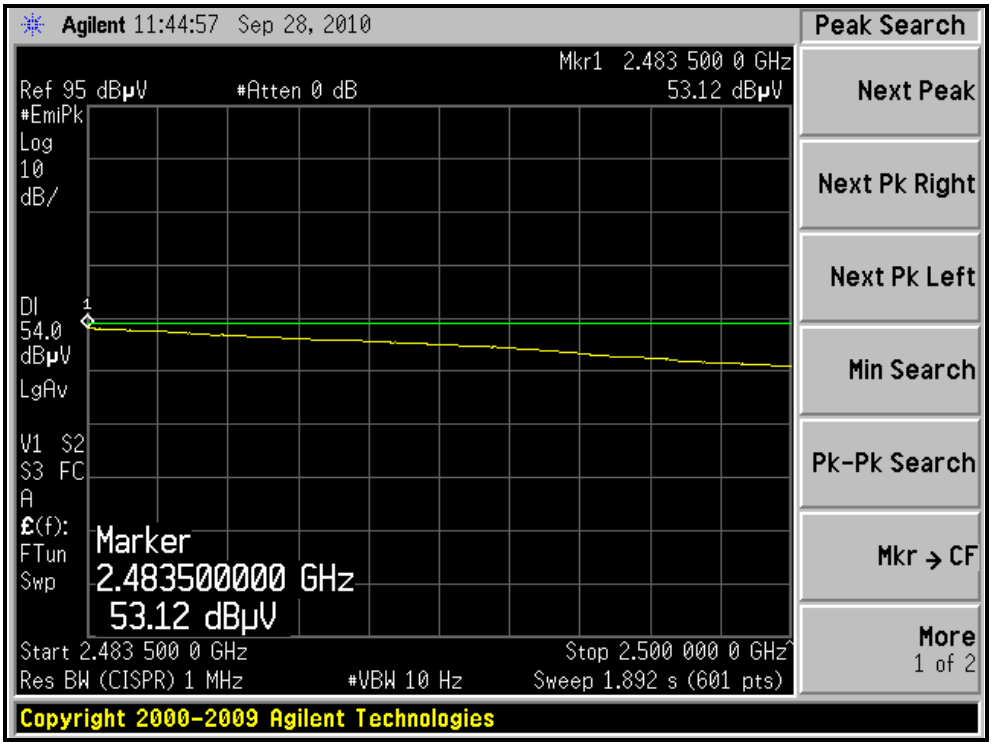
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, VERTICAL)



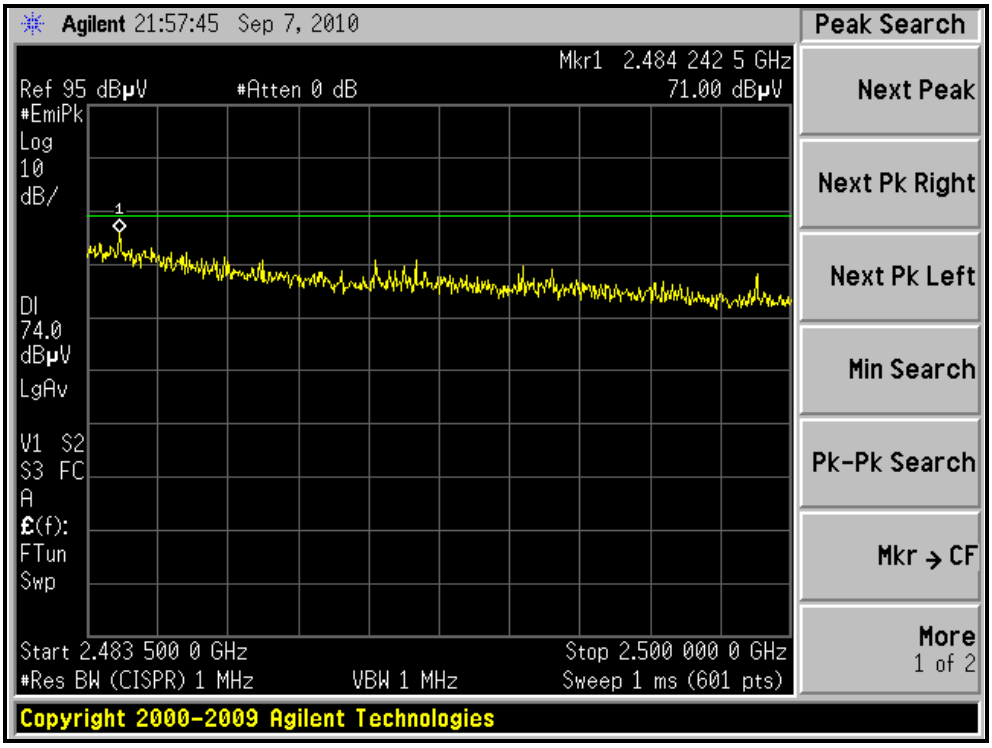


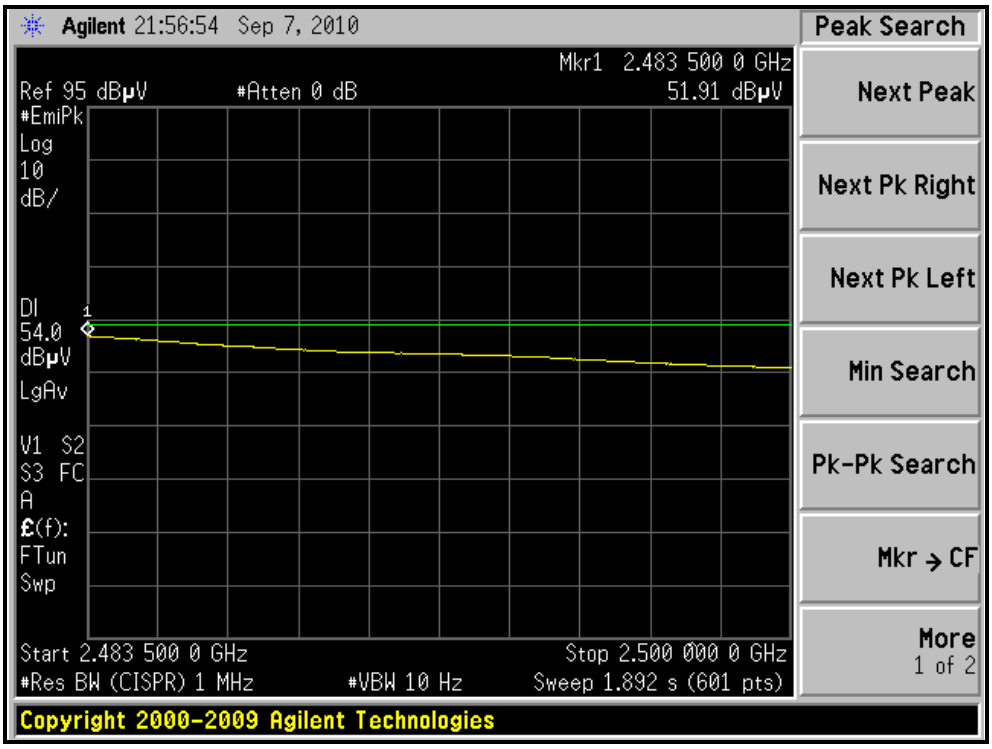
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, HORIZONTAL)





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





4.2.10 TEST RESULTS (ANTENNA 4: PIFA ANTENNA)

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH 1012 hPa	TESTED BY	Moris Lin
TEST MODE	Antenna 4: PIFA 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	67.16	28.4 QP	40.0	-11.6	2.01 H	75	16.00	12.38
2	120.00	28.9 QP	43.5	-14.6	1.66 H	147	16.74	12.20
3	188.29	28.2 QP	43.5	-15.4	1.70 H	301	16.73	11.42
4	240.00	38.5 QP	46.0	-7.5	1.28 H	272	25.42	13.05
5	300.32	37.7 QP	46.0	-8.3	1.00 H	154	22.01	15.67
6	359.00	34.0 QP	46.0	-12.0	1.00 H	245	16.83	17.14
7	720.00	32.5 QP	46.0	-13.5	1.00 H	286	7.71	24.76
8	816.00	29.3 QP	46.0	-16.7	1.00 H	122	3.43	25.88
9	960.00	33.7 QP	46.0	-12.3	1.00 H	171	5.60	28.07
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	65.64	24.4 QP	40.0	-15.6	1.00 V	66	11.78	12.63
2	120.00	26.2 QP	43.5	-17.3	1.00 V	163	14.02	12.20
3	126.84	24.8 QP	43.5	-18.8	1.00 V	182	11.64	13.11
4	240.00	34.0 QP	46.0	-12.0	1.00 V	56	20.92	13.05
5	241.96	33.4 QP	46.0	-12.6	1.00 V	103	20.22	13.15
6	301.79	34.4 QP	46.0	-11.6	1.52 V	67	18.71	15.70
7	476.39	29.6 QP	46.0	-16.4	1.58 V	227	9.46	20.13
8	960.00	32.5 QP	46.0	-13.5	1.77 V	96	4.41	28.07

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.

802.11b DSSS MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	2389.33	61.8 PK	74.0	-12.2	1.05 H	7	30.15	31.65
2	2389.33	51.8 AV	54.0	-2.2	1.05 H	7	20.15	31.65
3	*2412.00	111.6 PK			1.04 H	6	79.87	31.73
4	*2412.00	109.3 AV			1.04 H	6	77.57	31.73
5	4824.00	45.0 PK	74.0	-29.0	1.10 H	34	6.03	38.97
6	4824.00	32.7 AV	54.0	-21.3	1.10 H	34	-6.27	38.97
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	57.6 PK	74.0	-16.4	1.00 V	38	25.94	31.66
2	2390.00	46.0 AV	54.0	-8.0	1.00 V	38	14.34	31.66
3	*2412.00	106.2 PK			1.00 V	30	74.47	31.73
4	*2412.00	103.6 AV			1.00 V	30	71.87	31.73
5	4824.00	45.4 PK	74.0	-28.6	1.11 V	36	6.43	38.97
6	4824.00	36.4 AV	54.0	-17.6	1.11 V	36	-2.57	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	112.0 PK			1.04 H	5	80.19	31.81
2	*2437.00	109.9 AV			1.04 H	5	78.09	31.81
3	4874.00	45.8 PK	74.0	-28.2	1.00 H	18	6.66	39.14
4	4874.00	33.5 AV	54.0	-20.5	1.00 H	18	-5.64	39.14
5	7311.00	53.0 PK	74.0	-21.0	1.00 H	35	6.37	46.63
6	7311.00	41.0 AV	54.0	-13.0	1.00 H	35	-5.63	46.63
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	106.6 PK			1.28 V	52	74.79	31.81
2	*2437.00	104.5 AV			1.28 V	52	72.69	31.81
3	4874.00	46.6 PK	74.0	-27.4	1.00 V	15	7.46	39.14
4	4874.00	35.4 AV	54.0	-18.6	1.00 V	15	-3.74	39.14
5	7311.00	52.9 PK	74.0	-21.1	1.00 V	20	6.27	46.63
6	7311.00	41.0 AV	54.0	-13.0	1.00 V	20	-5.63	46.63

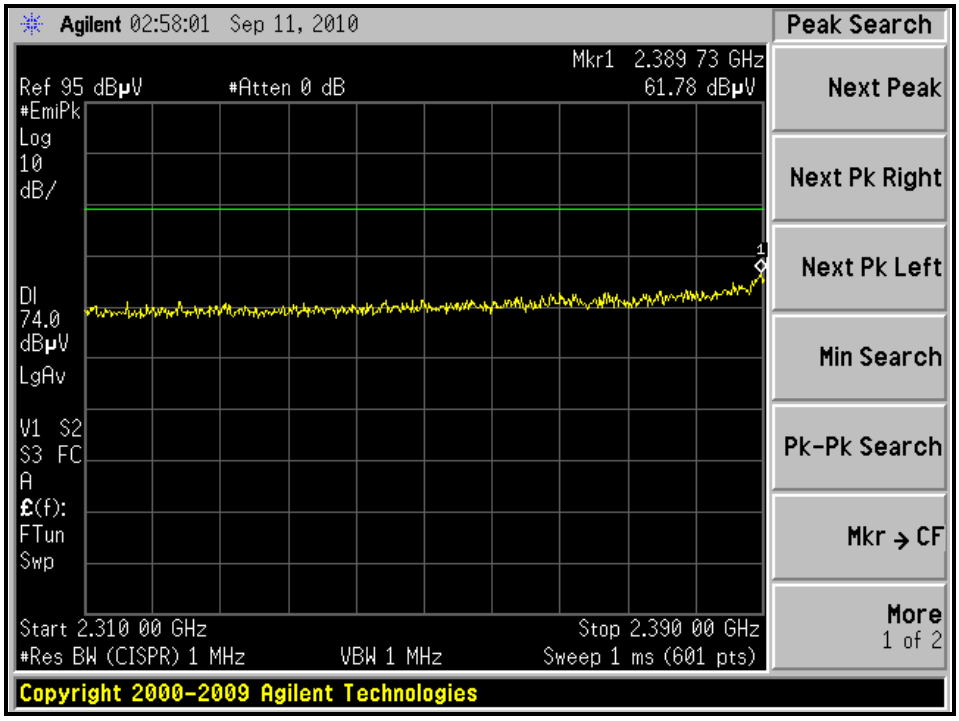
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

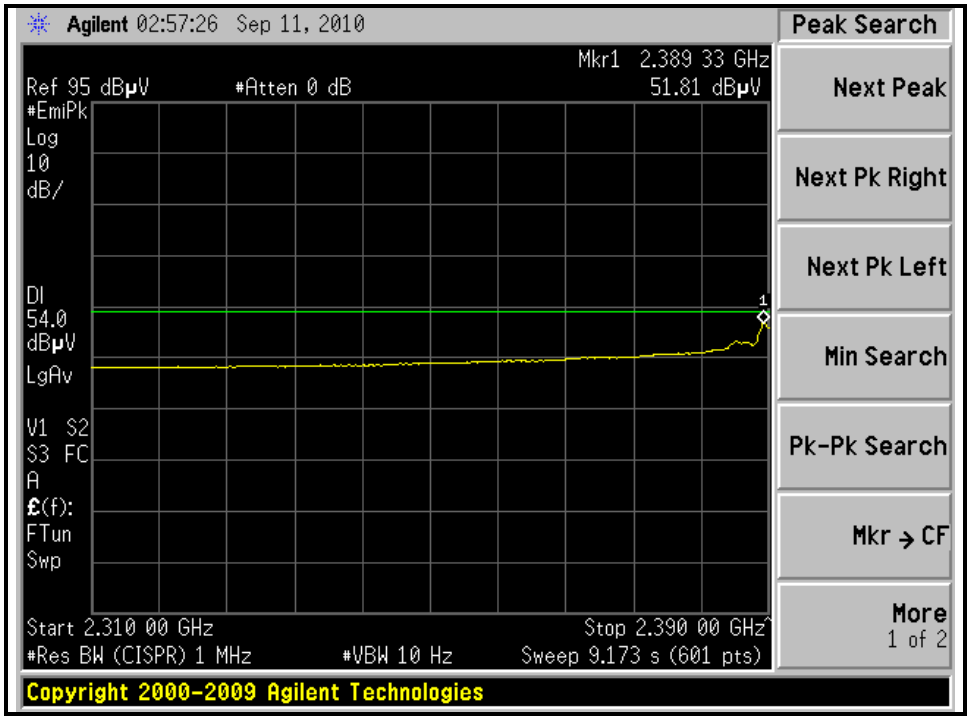
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA antenna		

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	*2462.00	110.4 PK			1.02 H	3	78.51	31.89
2	*2462.00	108.3 AV			1.02 H	3	76.41	31.89
3	2484.57	61.7 PK	74.0	-12.3	1.01 H	7	29.73	31.97
4	2484.57	50.4 AV	54.0	-3.6	1.01 H	7	18.43	31.97
5	4924.00	46.7 PK	74.0	-27.3	1.00 H	20	7.39	39.31
6	4924.00	34.4 AV	54.0	-19.6	1.00 H	20	-4.91	39.31
7	7386.00	53.5 PK	74.0	-20.5	1.00 H	37	6.90	46.60
8	7386.00	41.4 AV	54.0	-12.6	1.00 H	37	-5.20	46.60
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	*2462.00	106.2 PK			1.06 V	65	74.31	31.89
2	*2462.00	104.0 AV			1.06 V	65	72.11	31.89
3	2484.40	59.7 PK	74.0	-14.3	1.05 V	64	27.73	31.97
4	2484.40	48.2 AV	54.0	-5.8	1.05 V	64	16.23	31.97
5	4924.00	45.1 PK	74.0	-28.9	1.21 V	336	5.79	39.31
6	4924.00	32.9 AV	54.0	-21.1	1.21 V	336	-6.41	39.31
7	7386.00	51.1 PK	74.0	-22.9	1.20 V	340	4.50	46.60
8	7386.00	40.5 AV	54.0	-13.5	1.20 V	340	-6.10	46.60

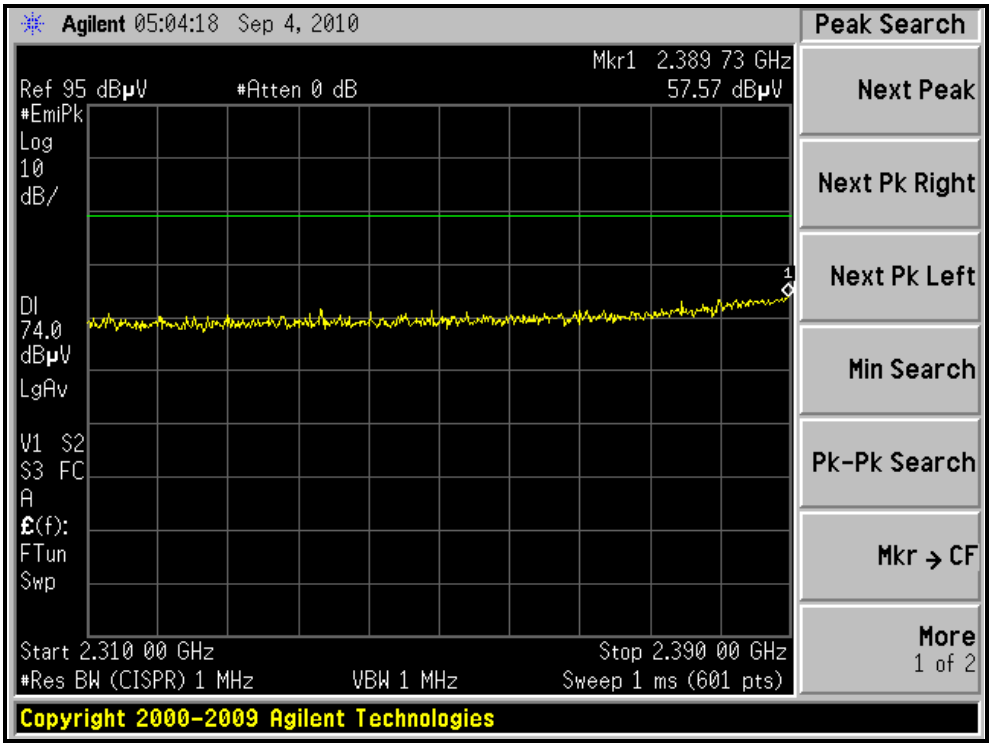
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

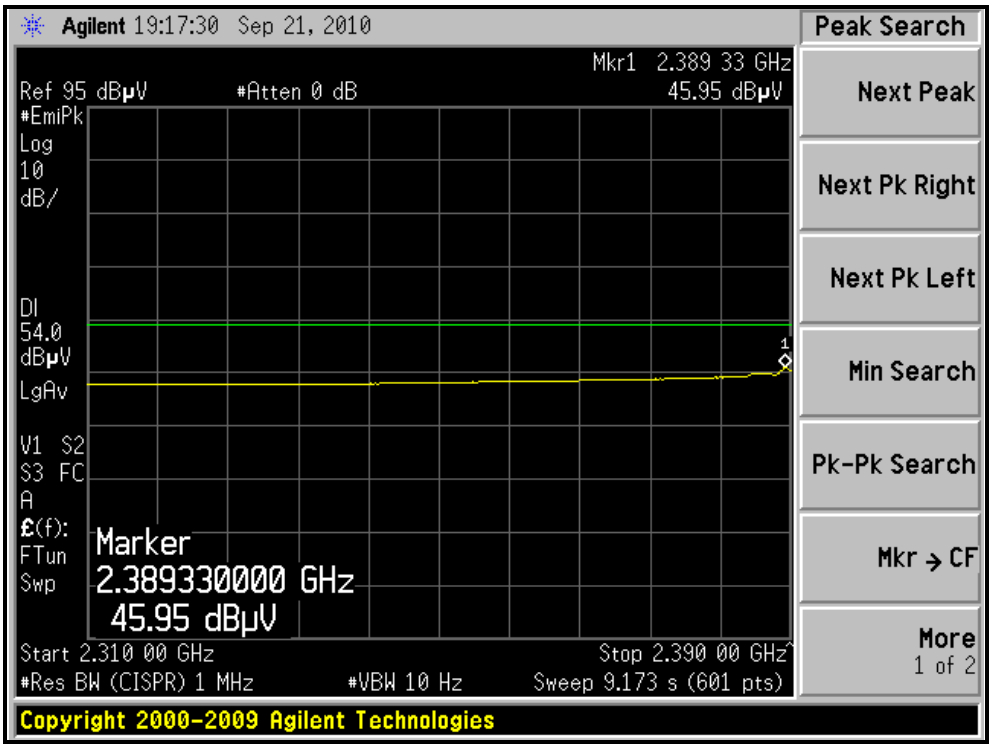
RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)





RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)





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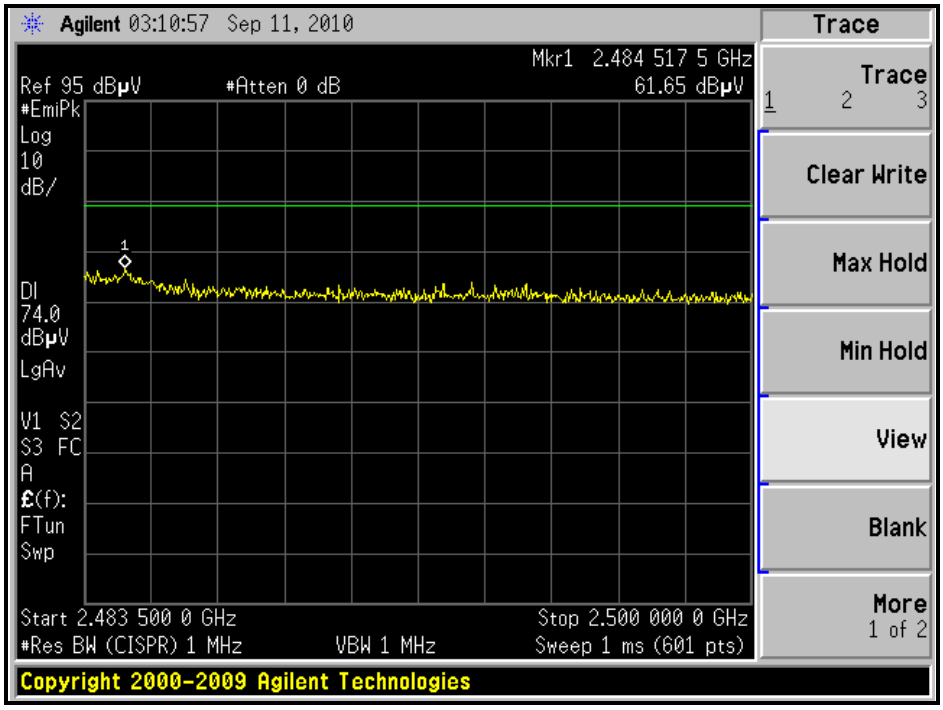
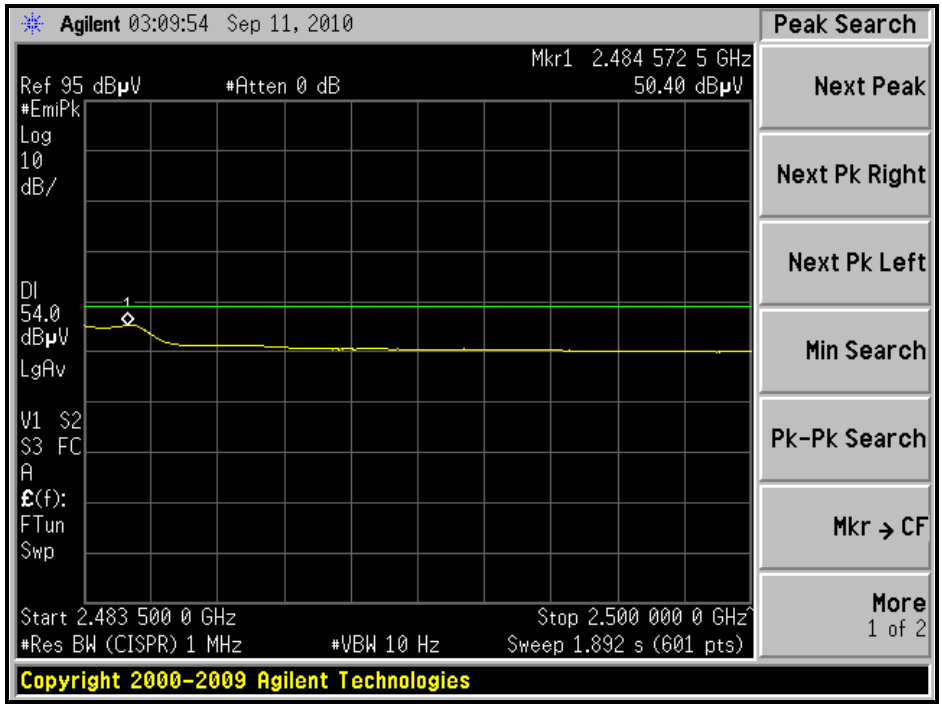
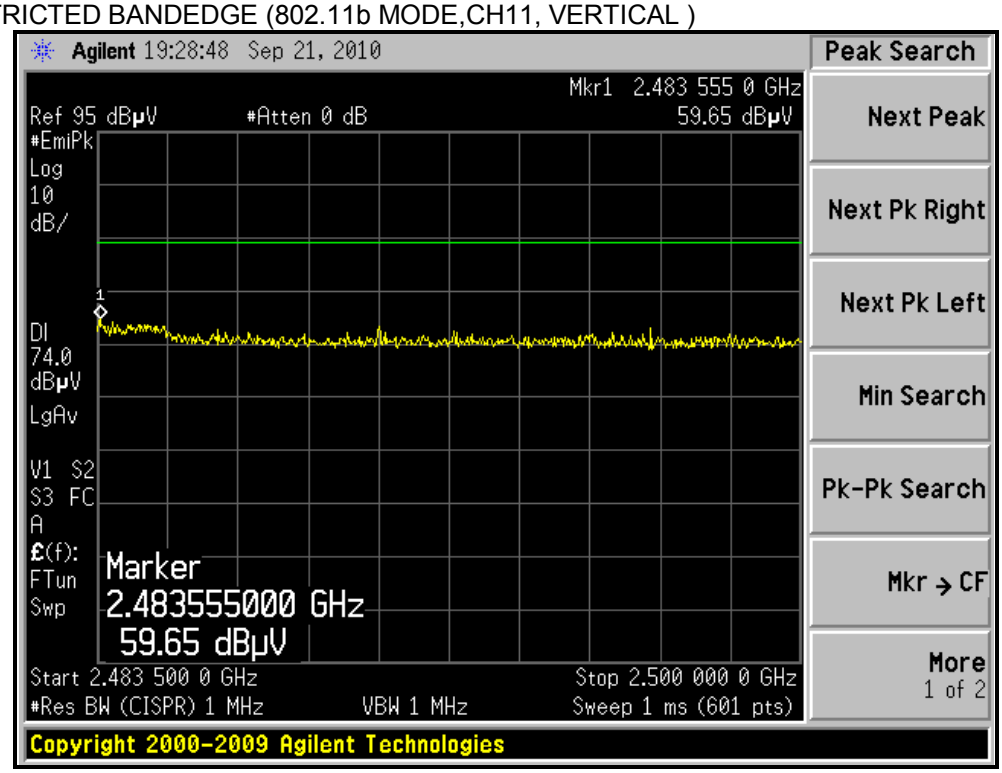
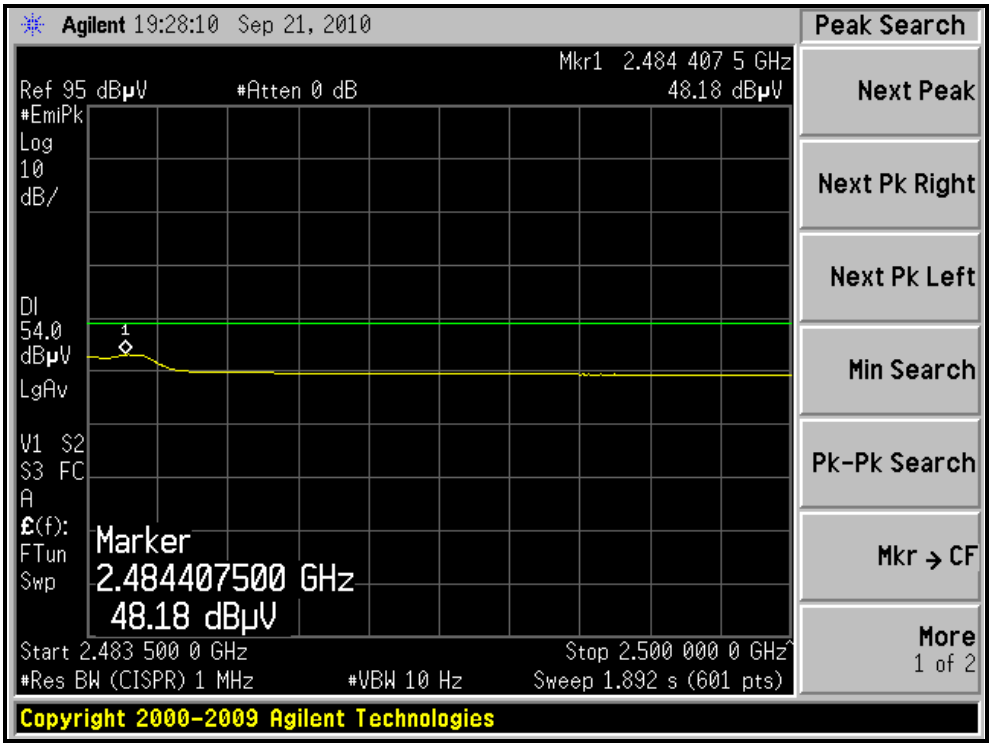




RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





802.11g OFDM MODULATION

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	2390.00	66.3 PK	74.0	-7.7	1.04 H	355	34.64	31.66
2	2390.00	51.8 AV	54.0	-2.2	1.04 H	355	20.14	31.66
3	*2412.00	108.4 PK			1.05 H	354	76.67	31.73
4	*2412.00	98.9 AV			1.05 H	354	67.17	31.73
5	4824.00	46.1 PK	74.0	-27.9	1.00 H	33	7.13	38.97
6	4824.00	33.5 AV	54.0	-20.5	1.00 H	33	-5.47	38.97
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	63.3 PK	74.0	-10.7	1.01 V	295	31.64	31.66
2	2390.00	48.6 AV	54.0	-5.4	1.01 V	295	16.94	31.66
3	*2412.00	103.0 PK			1.00 V	312	71.27	31.73
4	*2412.00	93.5 AV			1.00 V	312	61.77	31.73
5	4824.00	46.7 PK	74.0	-27.3	1.06 V	40	7.73	38.97
6	4824.00	34.5 AV	54.0	-19.5	1.06 V	40	-4.47	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	113.4 PK			1.03 H	355	81.59	31.81
2	*2437.00	104.0 AV			1.03 H	355	72.19	31.81
3	4874.00	45.6 PK	74.0	-28.4	1.00 H	10	6.46	39.14
4	4874.00	33.6 AV	54.0	-20.4	1.00 H	10	-5.54	39.14
5	7311.00	53.0 PK	74.0	-21.0	1.00 H	30	6.37	46.63
6	7311.00	41.1 AV	54.0	-12.9	1.00 H	30	-5.53	46.63
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	109.2 PK			1.00 V	340	77.39	31.81
2	*2437.00	97.9 AV			1.00 V	340	66.09	31.81
3	4874.00	45.9 PK	74.0	-28.1	1.00 V	22	6.76	39.14
4	4874.00	33.7 AV	54.0	-20.3	1.00 V	22	-5.44	39.14
5	7311.00	53.1 PK	74.0	-20.9	1.00 V	18	6.47	46.63
6	7311.00	41.2 AV	54.0	-12.8	1.00 V	18	-5.43	46.63

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

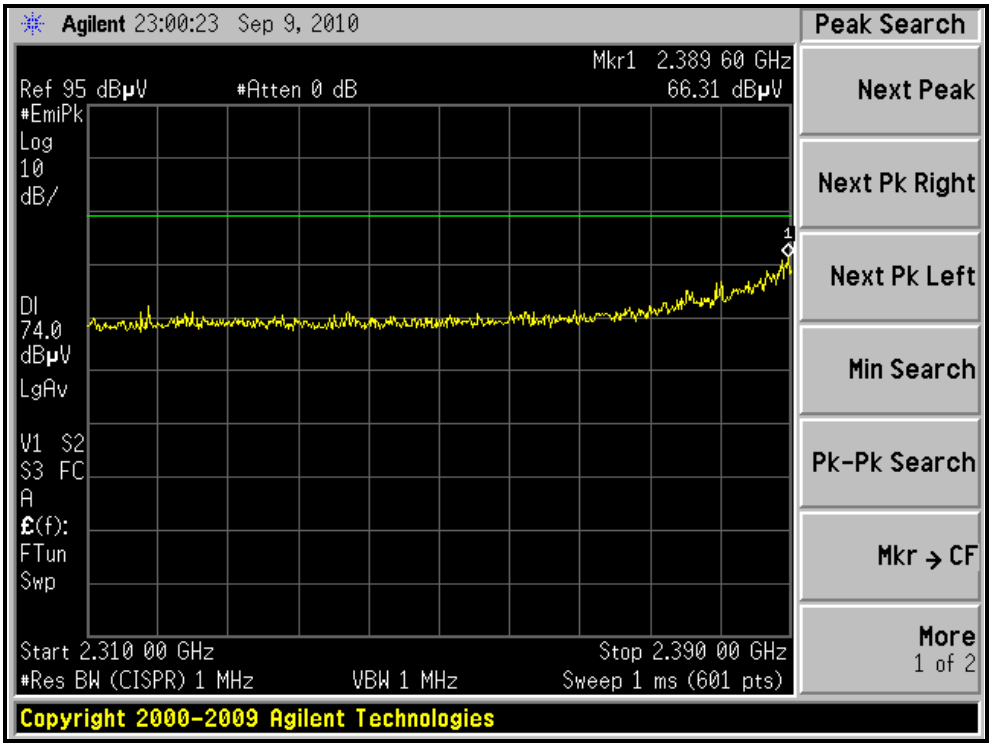
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

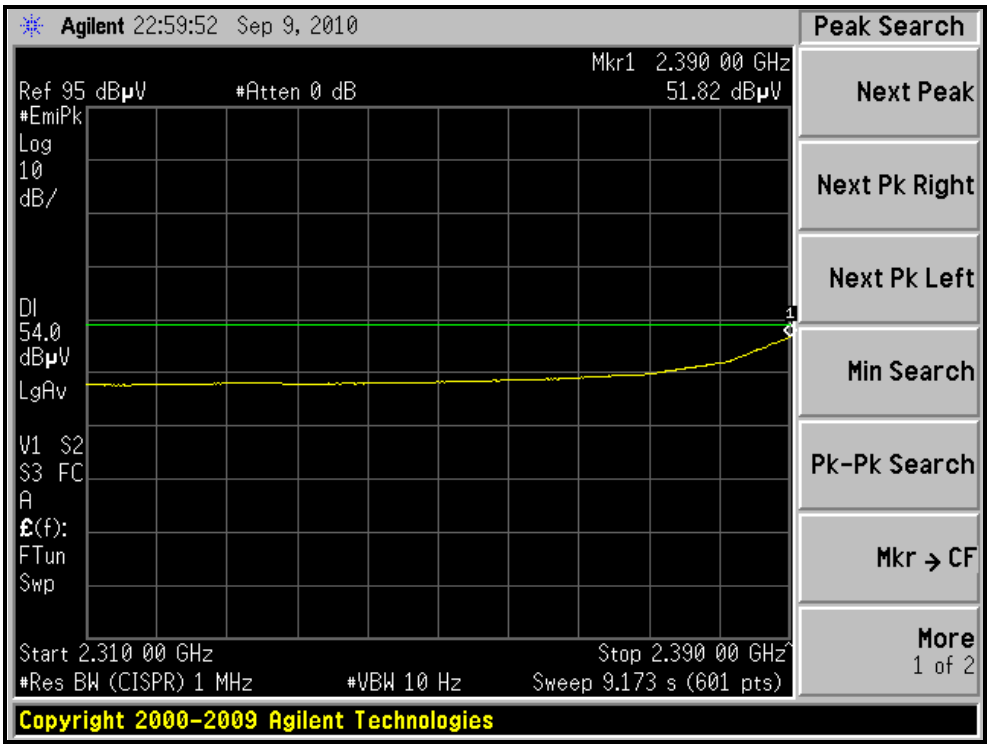
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA antenna		

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	*2462.00	108.7 PK			1.02 H	352	76.81	31.89
2	*2462.00	99.2 AV			1.02 H	352	67.31	31.89
3	2483.50	68.1 PK	74.0	-5.9	1.00 H	353	36.13	31.97
4	2483.50	51.9 AV	54.0	-2.1	1.00 H	353	19.93	31.97
5	4924.00	43.4 PK	74.0	-30.6	1.00 H	25	4.09	39.31
6	4924.00	30.5 AV	54.0	-23.5	1.00 H	25	-8.81	39.31
7	7386.00	51.3 PK	74.0	-22.7	1.02 H	29	4.70	46.60
8	7386.00	39.2 AV	54.0	-14.8	1.02 H	29	-7.40	46.60
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	*2462.00	102.9 PK			1.00 V	332	71.01	31.89
2	*2462.00	93.2 AV			1.00 V	332	61.31	31.89
3	2483.50	61.1 PK	74.0	-12.9	1.00 V	337	29.13	31.97
4	2483.50	45.9 AV	54.0	-8.1	1.00 V	337	13.93	31.97
5	4924.00	47.2 PK	74.0	-26.8	1.06 V	31	7.89	39.31
6	4924.00	34.1 AV	54.0	-19.9	1.06 V	31	-5.21	39.31
7	7386.00	54.6 PK	74.0	-19.4	1.03 V	30	8.00	46.60
8	7386.00	41.6 AV	54.0	-12.4	1.03 V	30	-5.00	46.60

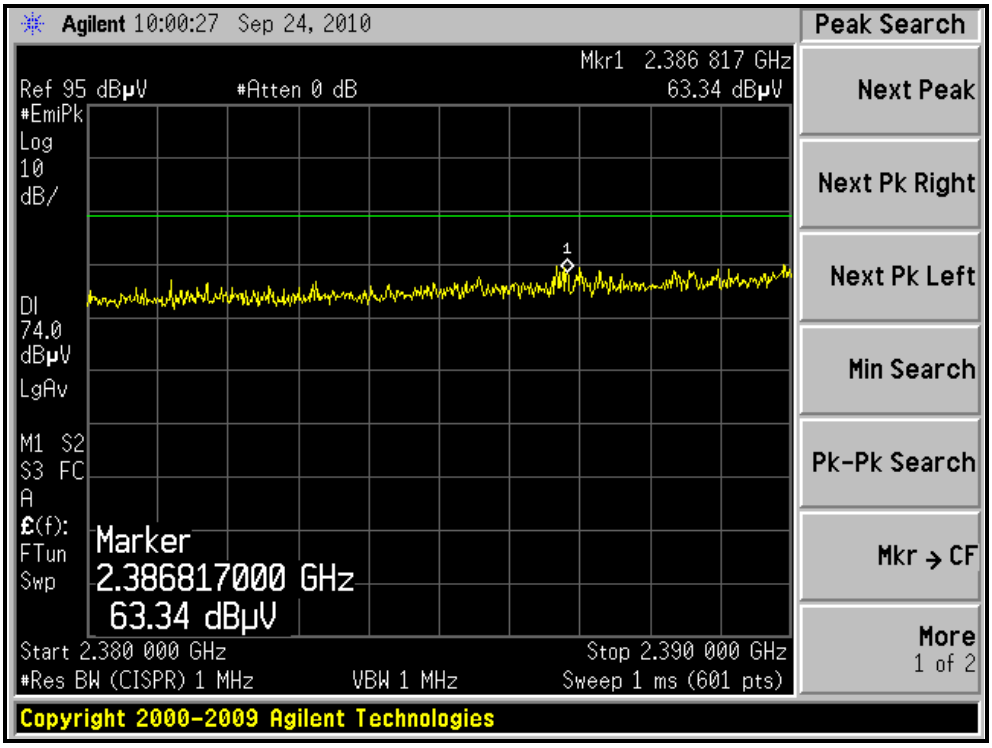
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

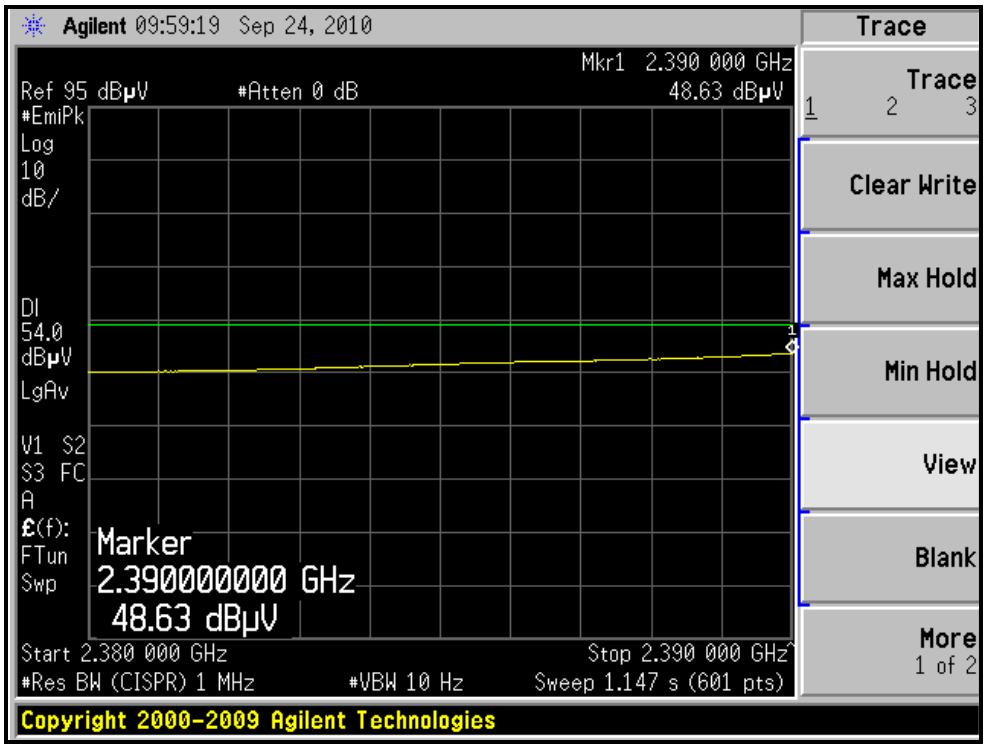
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



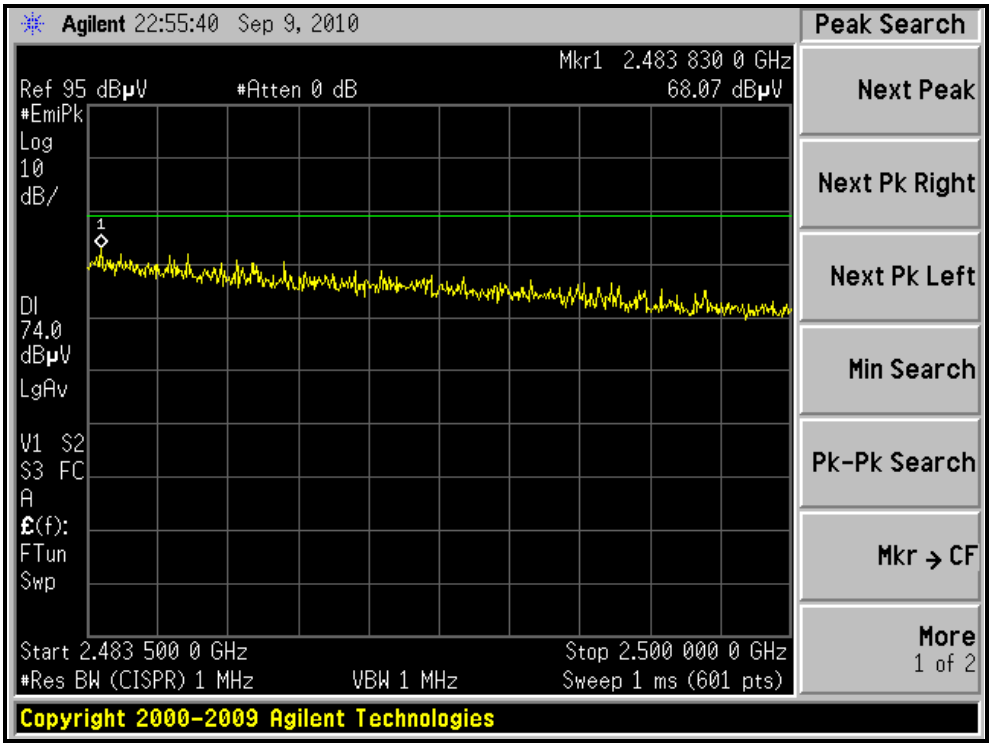


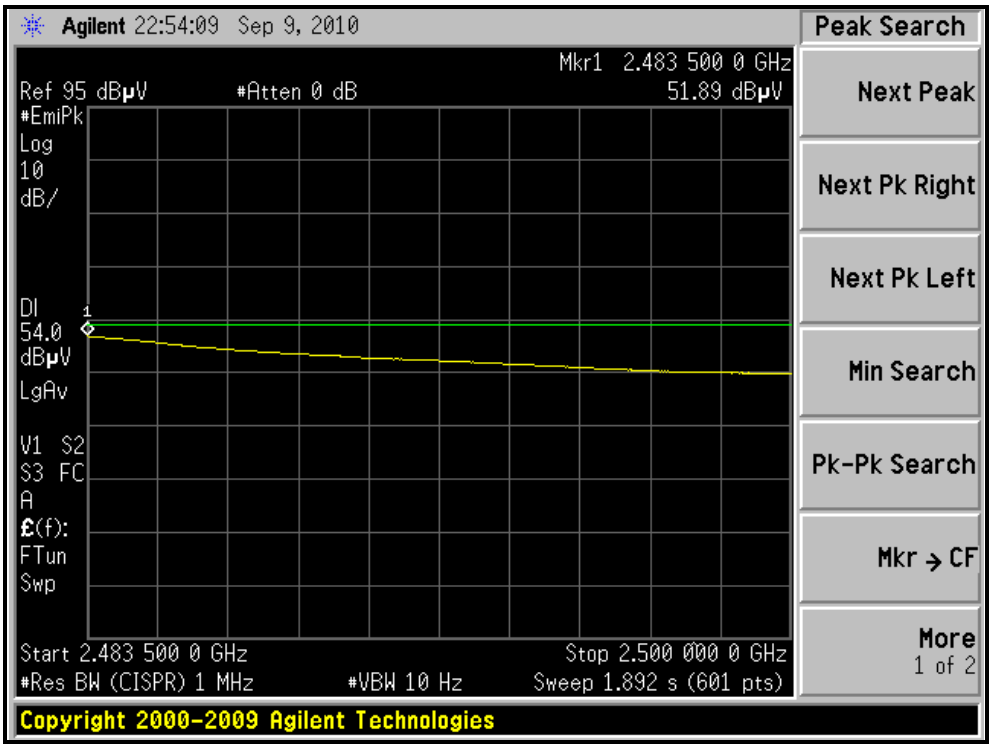
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



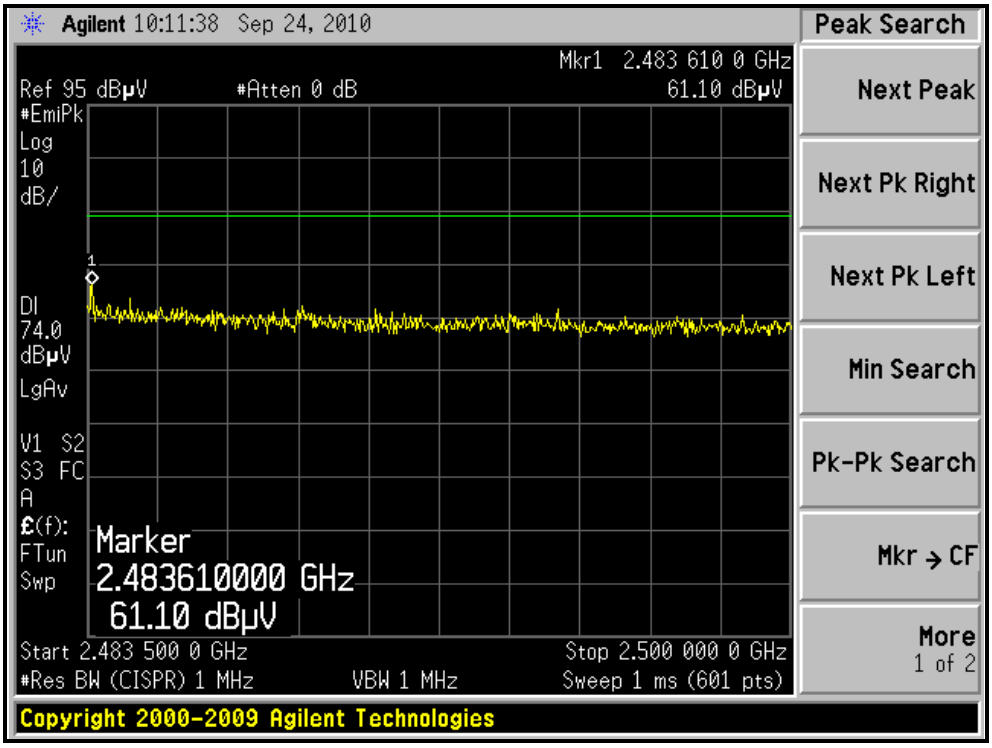


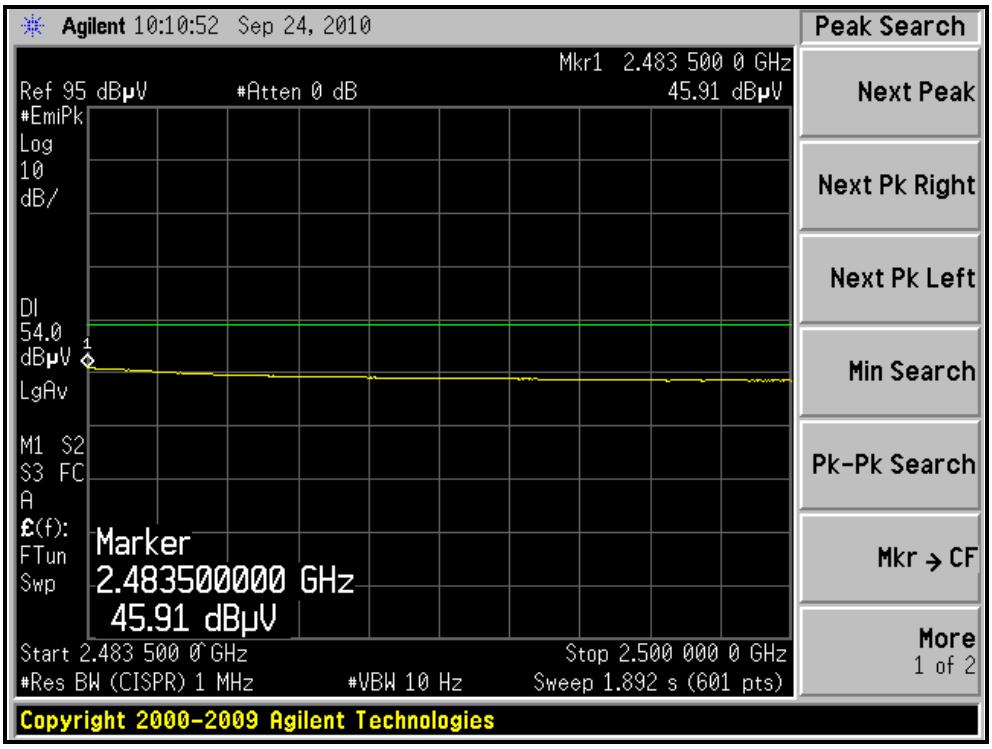
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	2390.00	65.5 PK	74.0	-8.5	1.05 H	355	33.84	31.66
2	2390.00	51.5 AV	54.0	-2.5	1.05 H	355	19.84	31.66
3	*2412.00	107.7 PK			1.04 H	355	75.97	31.73
4	*2412.00	98.1 AV			1.04 H	355	66.37	31.73
5	4824.00	44.3 PK	74.0	-29.7	1.02 H	32	5.33	38.97
6	4824.00	35.3 AV	54.0	-18.7	1.02 H	32	-3.67	38.97
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	61.0 PK	74.0	-13.0	1.00 V	314	29.34	31.66
2	2390.00	47.1 AV	54.0	-6.9	1.00 V	314	15.44	31.66
3	*2412.00	100.1 PK			1.00 V	314	68.37	31.73
4	*2412.00	90.3 AV			1.00 V	314	58.57	31.73
5	4824.00	43.1 PK	74.0	-30.9	1.00 V	21	4.13	38.97
6	4824.00	34.6 AV	54.0	-19.4	1.00 V	21	-4.37	38.97

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	113.1 PK			1.03 H	354	81.29	31.81
2	*2437.00	103.6 AV			1.03 H	354	71.79	31.81
3	4874.00	45.6 PK	74.0	-28.4	1.08 H	30	6.46	39.14
4	4874.00	34.6 AV	54.0	-19.4	1.08 H	30	-4.54	39.14
5	7311.00	53.9 PK	74.0	-20.1	1.05 H	25	7.27	46.63
6	7311.00	41.4 AV	54.0	-12.6	1.05 H	25	-5.23	46.63
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	110.5 PK			1.00 V	333	78.69	31.81
2	*2437.00	99.8 AV			1.00 V	333	67.99	31.81
3	4874.00	45.2 PK	74.0	-28.8	1.08 V	25	6.06	39.14
4	4874.00	33.2 AV	54.0	-20.8	1.08 V	25	-5.94	39.14
5	7311.00	53.0 PK	74.0	-21.0	1.04 V	30	6.37	46.63
6	7311.00	41.2 AV	54.0	-12.8	1.04 V	30	-5.43	46.63

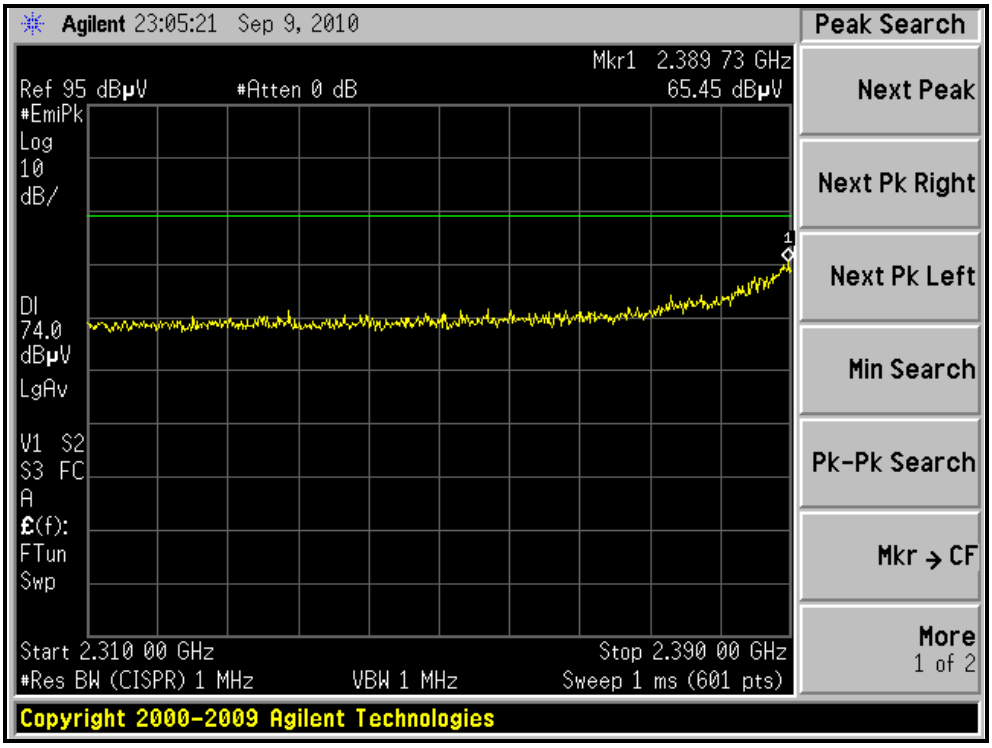
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

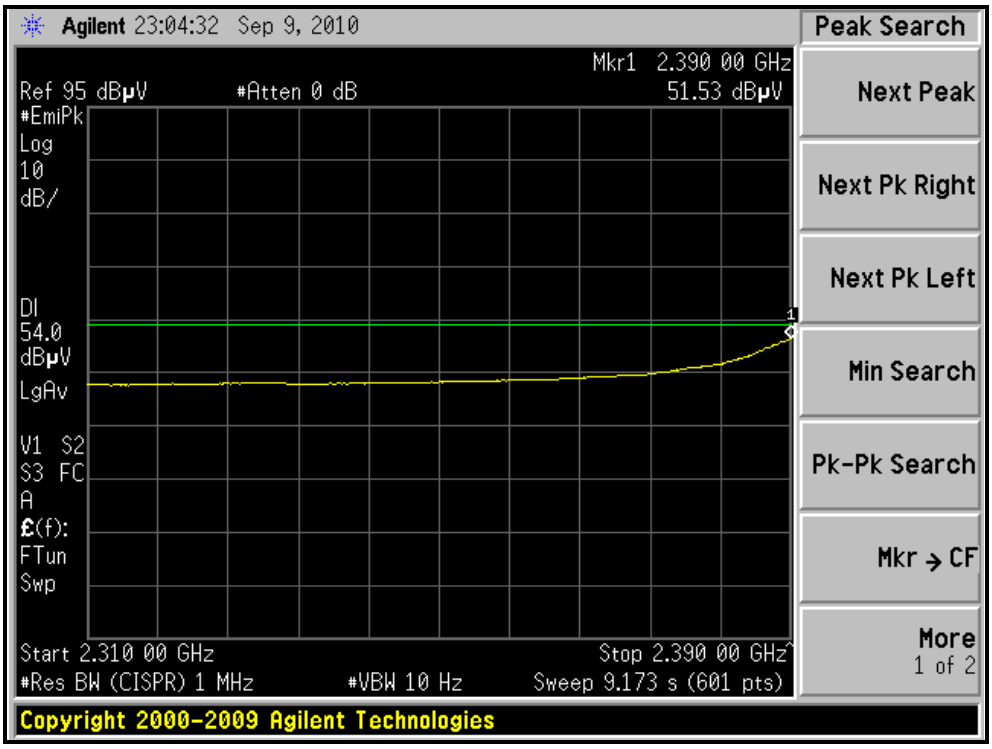
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA antenna		

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	*2462.00	107.2 PK			1.02 H	355	75.31	31.89
2	*2462.00	97.5 AV			1.02 H	355	65.61	31.89
3	2483.50	67.5 PK	74.0	-6.5	1.01 H	353	35.53	31.97
4	2483.50	51.4 AV	54.0	-2.6	1.01 H	353	19.43	31.97
5	4924.00	47.0 PK	74.0	-27.0	1.04 H	34	7.69	39.31
6	4924.00	34.1 AV	54.0	-19.9	1.04 H	34	-5.21	39.31
7	7386.00	54.4 PK	74.0	-19.6	1.03 H	35	7.80	46.60
8	7386.00	41.5 AV	54.0	-12.5	1.03 H	35	-5.10	46.60
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	*2462.00	103.0 PK			1.00 V	334	71.11	31.89
2	*2462.00	93.2 AV			1.00 V	334	61.31	31.89
3	2483.50	59.2 PK	74.0	-14.8	1.00 V	334	27.23	31.97
4	2483.50	45.3 AV	54.0	-8.7	1.00 V	334	13.33	31.97
5	4924.00	46.6 PK	74.0	-27.4	1.00 V	39	7.29	39.31
6	4924.00	34.2 AV	54.0	-19.8	1.00 V	39	-5.11	39.31
7	7386.00	54.8 PK	74.0	-19.2	1.02 V	45	8.20	46.60
8	7386.00	41.6 AV	54.0	-12.4	1.02 V	45	-5.00	46.60

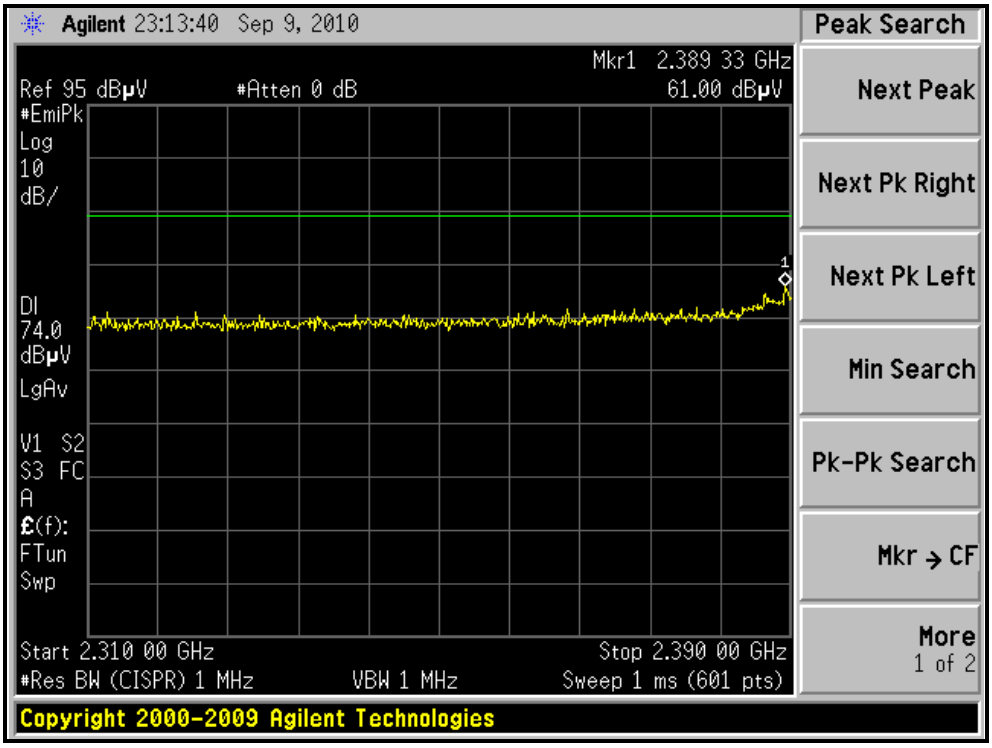
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

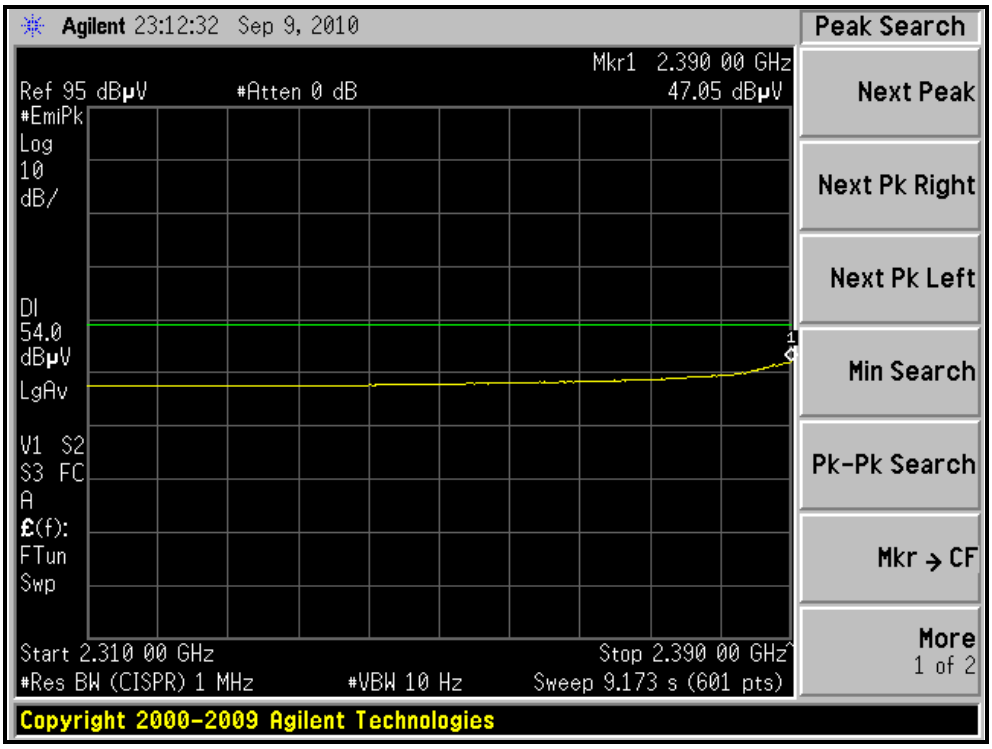
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, HORIZONTAL)



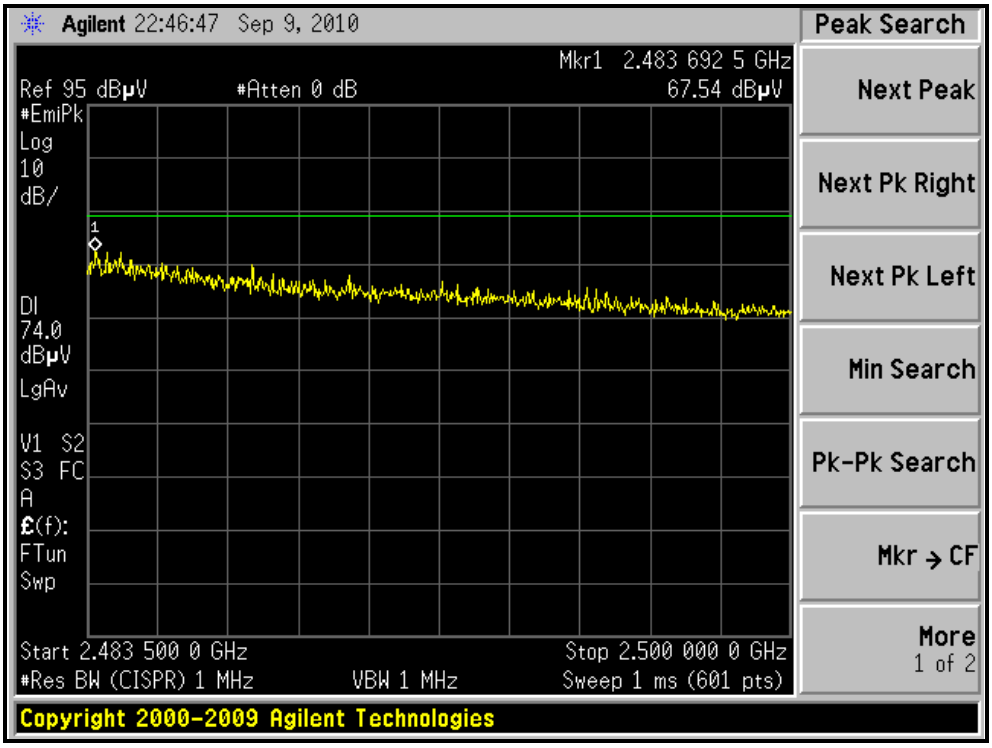


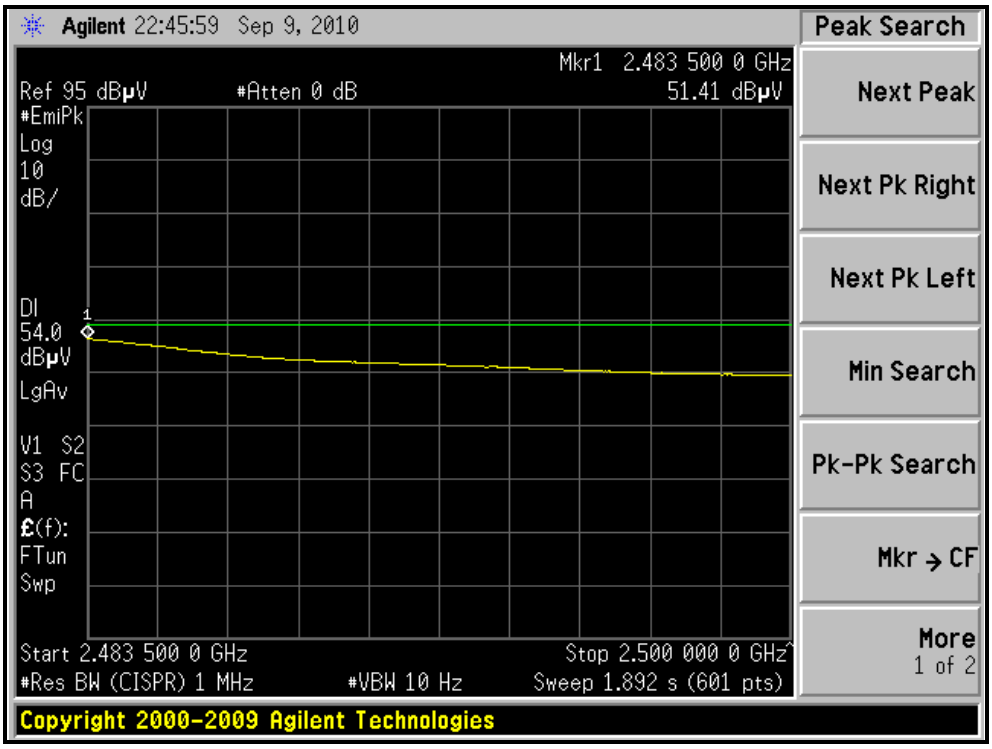
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH1, VERTICAL)



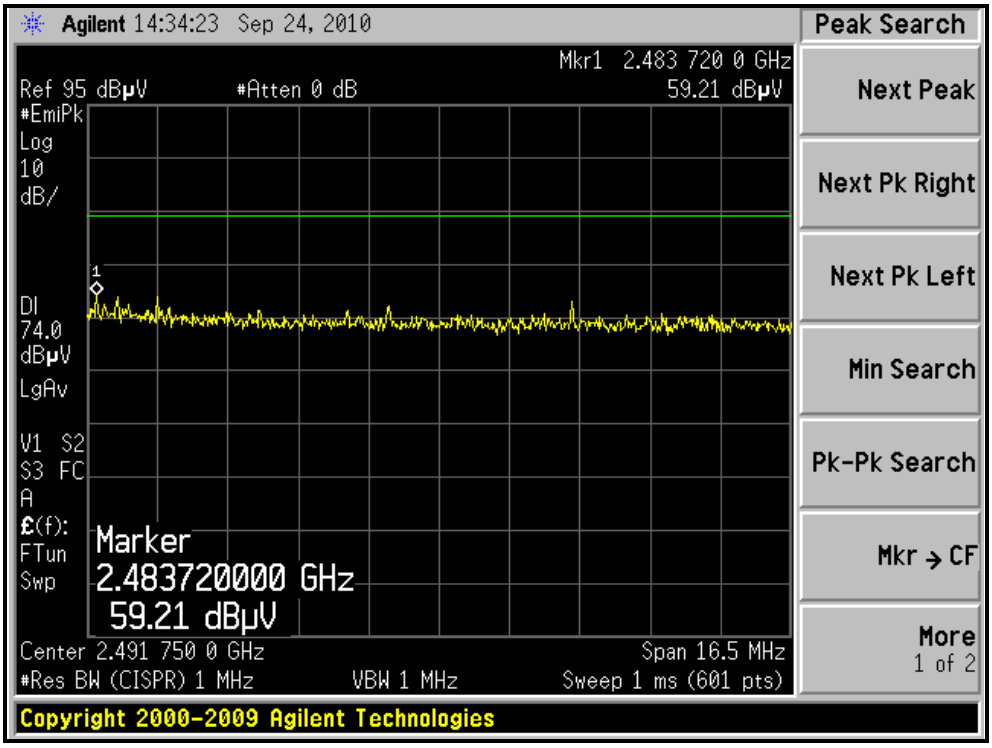


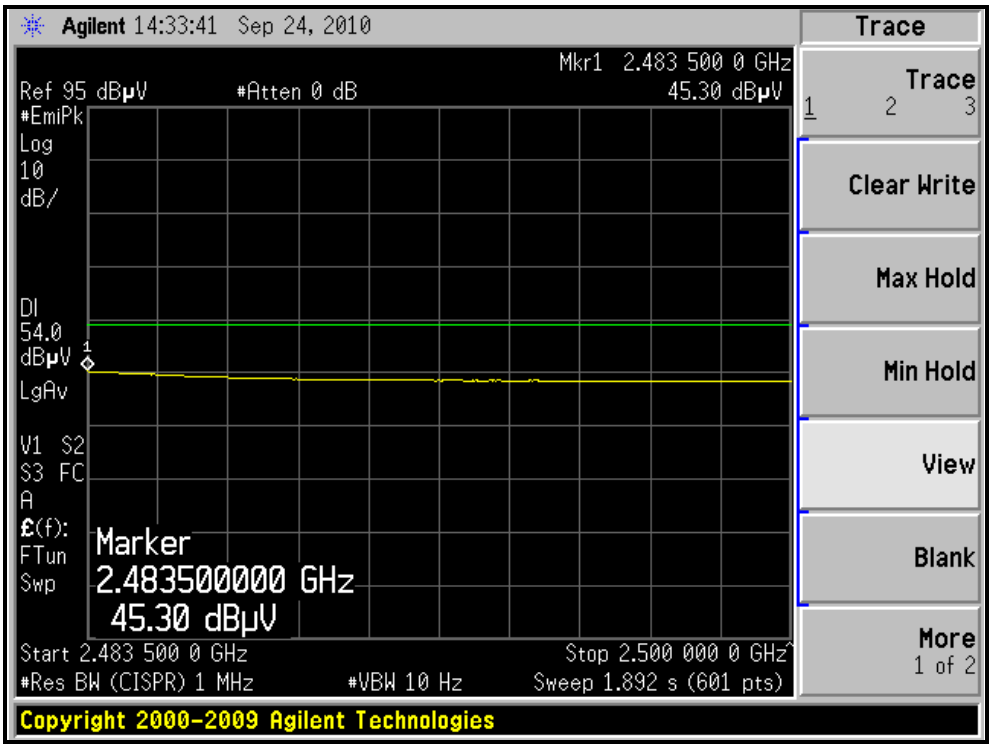
RESTRICTED BANDEDGE (802.11n (20MHz) MODE,CH11, HORIZONTAL)





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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	2389.87	67.5 PK	74.0	-6.5	1.05 H	354	35.84	31.66
2	2389.87	52.9 AV	54.0	-1.1	1.05 H	354	21.24	31.66
3	*2422.00	101.8 PK			1.04 H	353	70.04	31.76
4	*2422.00	92.0 AV			1.04 H	353	60.24	31.76
5	4844.00	46.3 PK	74.0	-27.7	1.06 H	20	7.26	39.04
6	4844.00	34.9 AV	54.0	-19.1	1.06 H	20	-4.14	39.04
7	7266.00	55.2 PK	74.0	-18.8	1.12 H	30	8.53	46.67
8	7266.00	41.7 AV	54.0	-12.3	1.12 H	30	-4.97	46.67
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	64.0 PK	74.0	-10.0	1.00 V	31	32.34	31.66
2	2390.00	50.5 AV	54.0	-3.5	1.00 V	31	18.84	31.66
3	*2422.00	98.8 PK			1.00 V	34	67.04	31.76
4	*2422.00	88.5 AV			1.00 V	34	56.74	31.76
5	4844.00	46.8 PK	74.0	-27.2	1.00 V	36	7.76	39.04
6	4844.00	33.8 AV	54.0	-20.2	1.00 V	36	-5.24	39.04
7	7266.00	54.0 PK	74.0	-20.0	1.02 V	40	7.33	46.67
8	7266.00	41.6 AV	54.0	-12.4	1.02 V	40	-5.07	46.67

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, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA 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	104.9 PK			1.03 H	356	73.09	31.81
2	*2437.00	95.8 AV			1.03 H	356	63.99	31.81
3	2483.50	67.2 PK	74.0	-6.8	1.00 H	355	35.23	31.97
4	2483.50	51.6 AV	54.0	-2.4	1.00 H	355	19.63	31.97
5	4874.00	46.6 PK	74.0	-27.4	1.06 H	15	7.46	39.14
6	4874.00	33.6 AV	54.0	-20.4	1.06 H	15	-5.54	39.14
7	7311.00	55.2 PK	74.0	-18.8	1.05 H	23	8.57	46.63
8	7311.00	41.5 AV	54.0	-12.5	1.05 H	23	-5.13	46.63
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	99.1 PK			1.16 V	315	67.29	31.81
2	*2437.00	89.5 AV			1.16 V	315	57.69	31.81
3	4874.00	46.6 PK	74.0	-27.4	1.00 V	20	7.46	39.14
4	4874.00	33.8 AV	54.0	-20.2	1.00 V	20	-5.34	39.14
5	7311.00	54.2 PK	74.0	-19.8	1.02 V	10	7.57	46.63
6	7311.00	41.7 AV	54.0	-12.3	1.02 V	10	-4.93	46.63

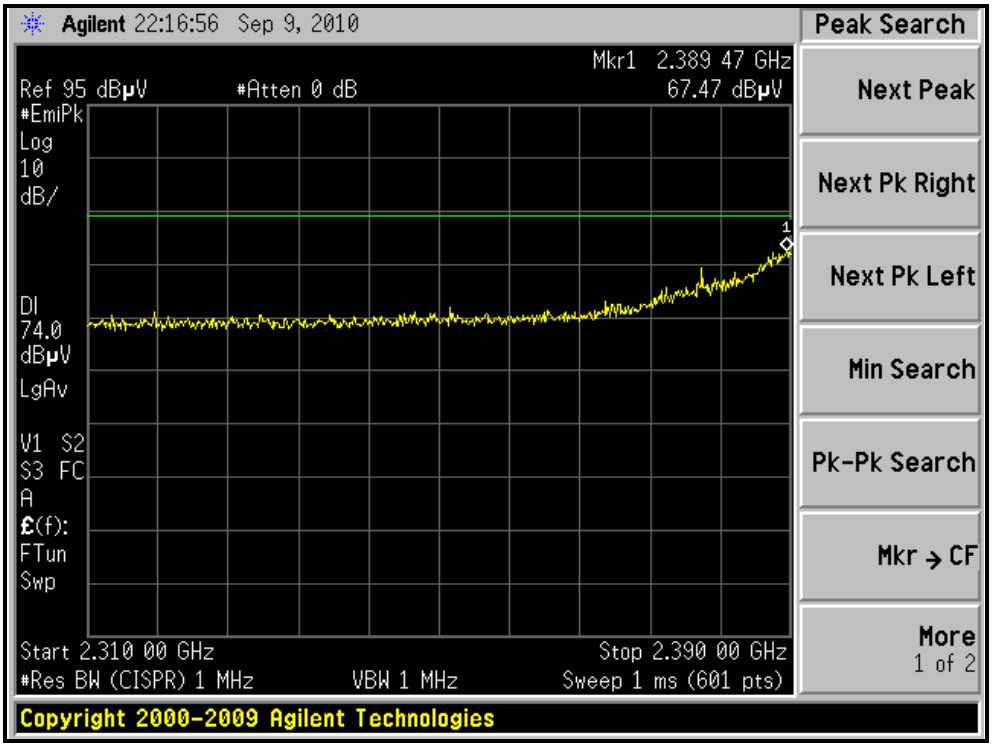
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

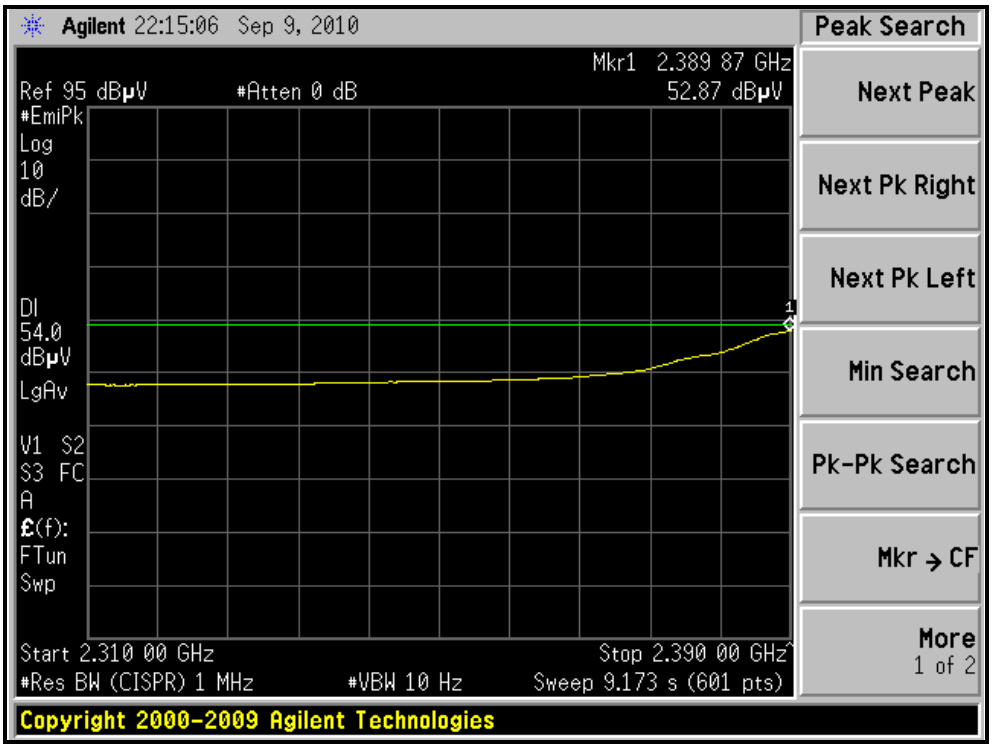
EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 7	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH 1012 hPa	TESTED BY	Duke Tseng
TEST MODE	Antenna 4: PIFA antenna		

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	*2452.00	102.2 PK			1.04 H	355	70.34	31.86
2	*2452.00	92.5 AV			1.04 H	355	60.64	31.86
3	2483.53	68.1 PK	74.0	-5.9	1.00 H	355	36.13	31.97
4	2483.53	52.9 AV	54.0	-1.1	1.00 H	355	20.93	31.97
5	4904.00	46.5 PK	74.0	-27.5	1.11 H	77	7.26	39.24
6	4904.00	34.1 AV	54.0	-19.9	1.11 H	77	-5.14	39.24
7	7356.00	53.7 PK	74.0	-20.3	1.12 H	75	7.09	46.61
8	7356.00	41.6 AV	54.0	-12.4	1.12 H	75	-5.01	46.61
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	98.1 PK			1.00 V	331	66.24	31.86
2	*2452.00	87.1 AV			1.00 V	331	55.24	31.86
3	2483.50	60.0 PK	74.0	-14.0	1.00 V	333	28.03	31.97
4	2483.50	46.1 AV	54.0	-7.9	1.00 V	333	14.13	31.97
5	4904.00	46.2 PK	74.0	-27.8	1.00 V	32	6.96	39.24
6	4904.00	33.6 AV	54.0	-20.4	1.00 V	32	-5.64	39.24
7	7356.00	54.7 PK	74.0	-19.3	1.03 V	35	8.09	46.61
8	7356.00	41.5 AV	54.0	-12.5	1.03 V	35	-5.11	46.61

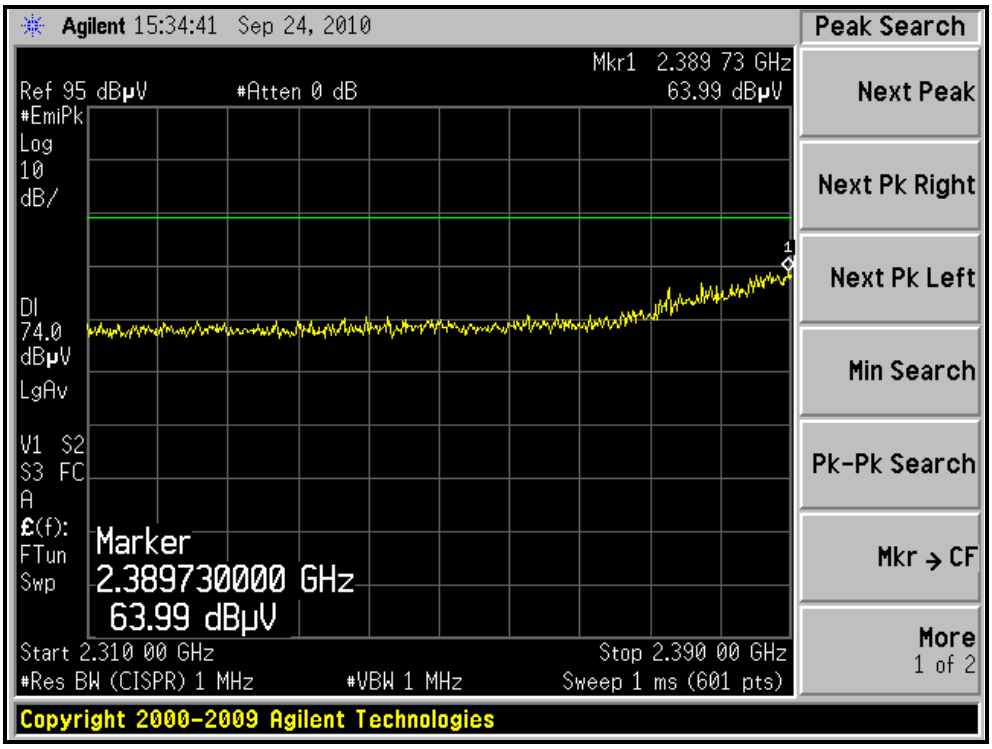
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.

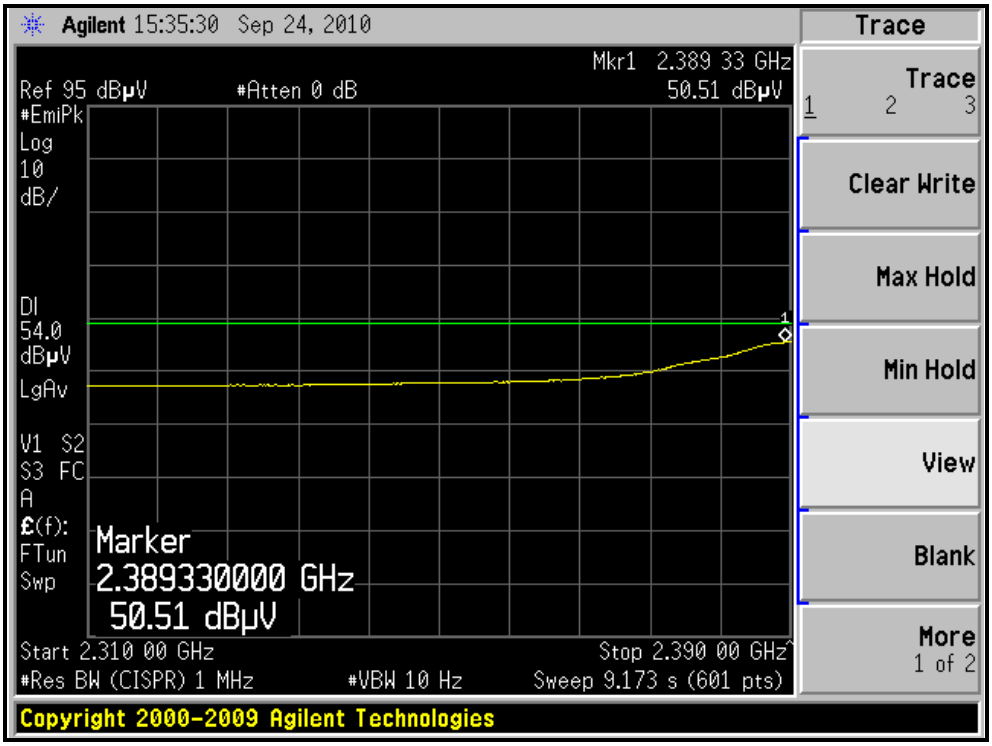
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, HORIZONTAL)



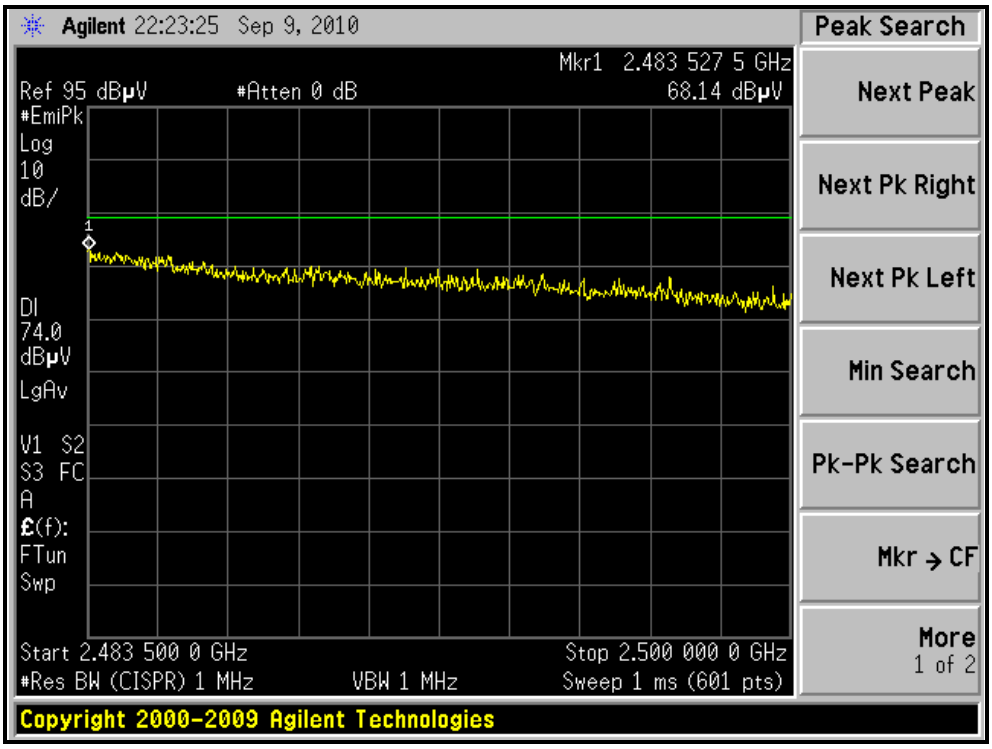


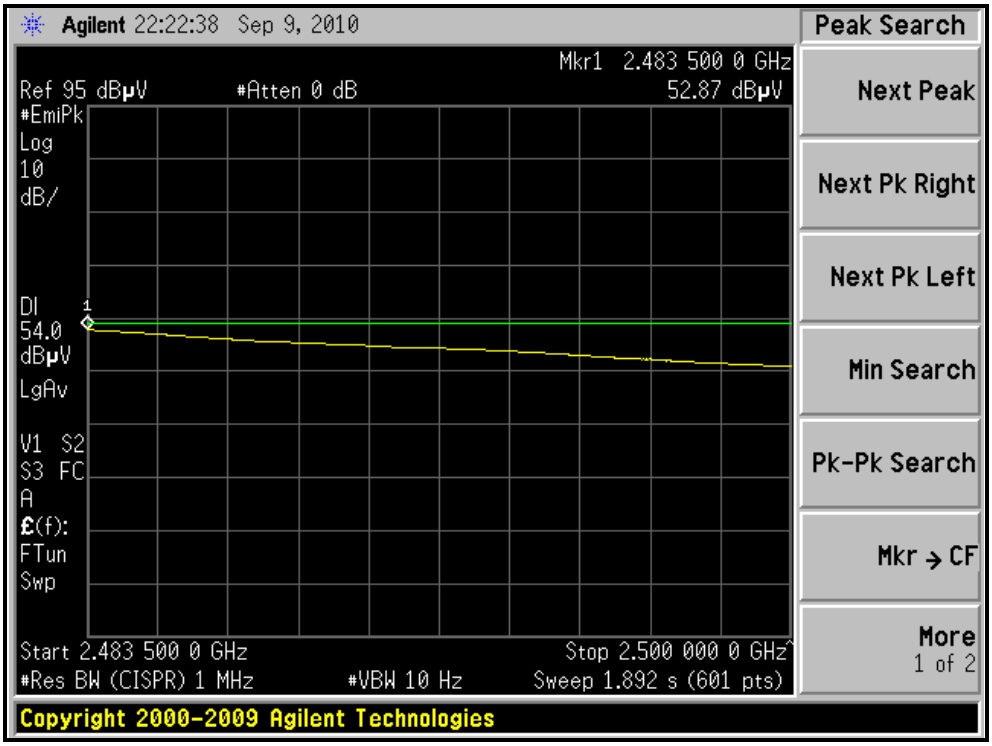
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH1, VERTICAL)



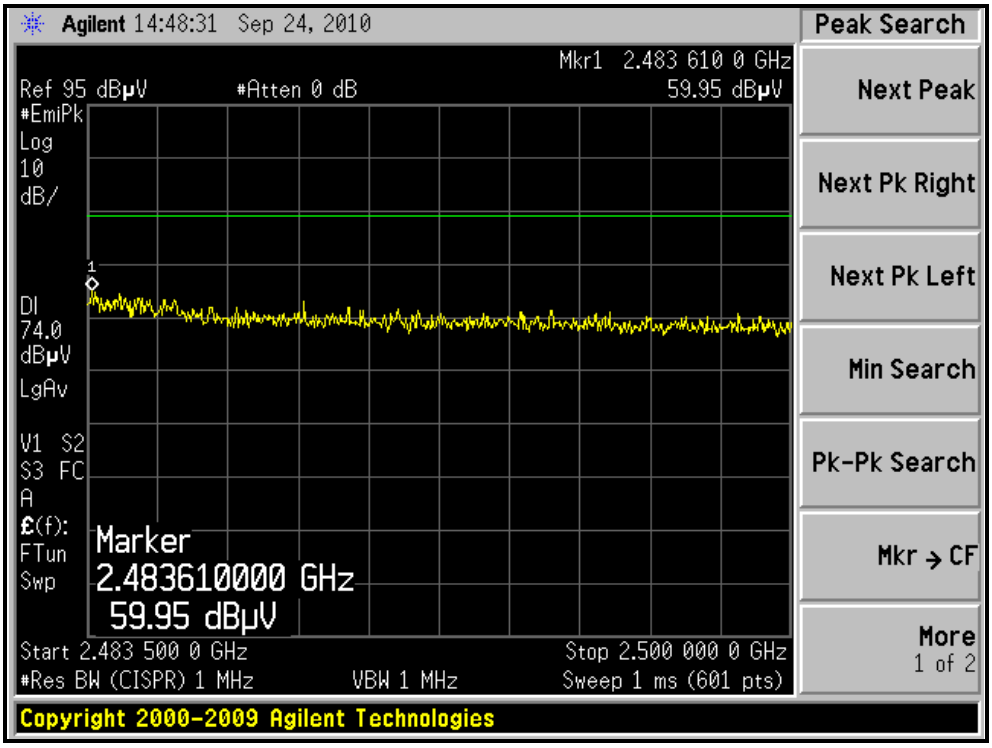


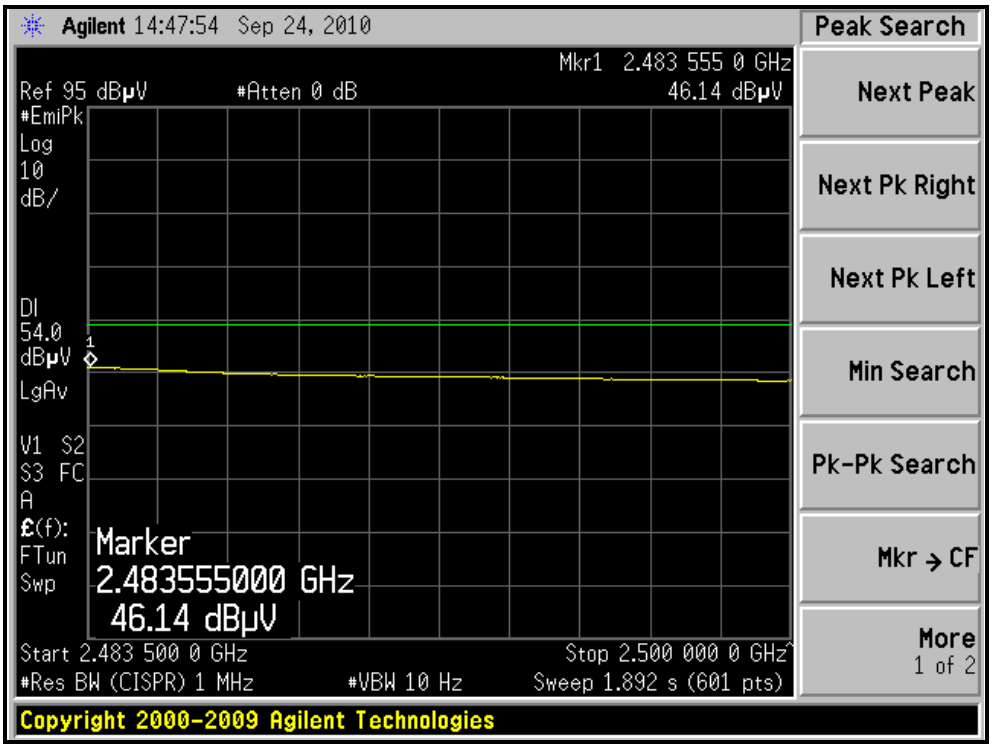
RESTRICTED BANDEDGE (802.11n (40MHz) MODE,CH7, HORIZONTAL)





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





4.3 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

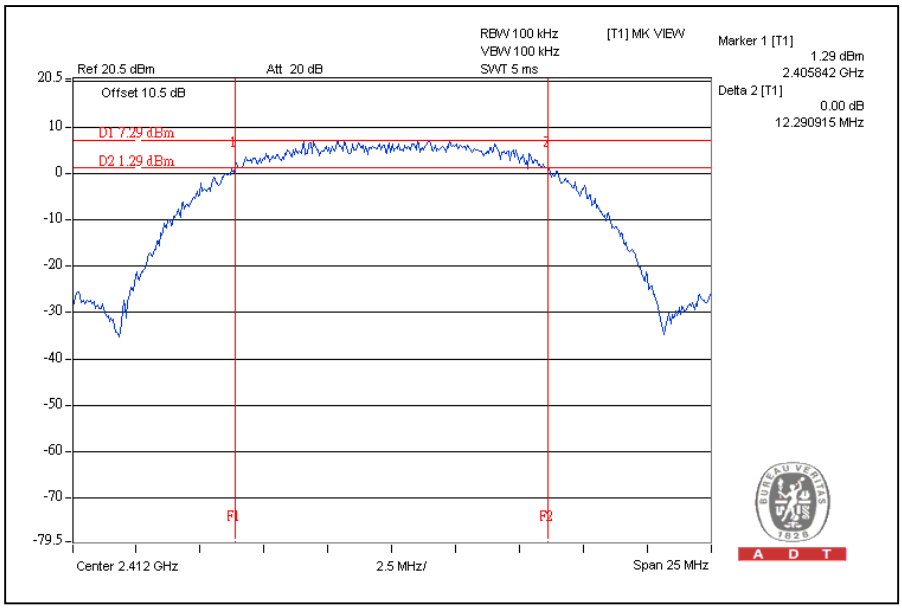
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS (ANTENNA 1: PCB ANTENNA)

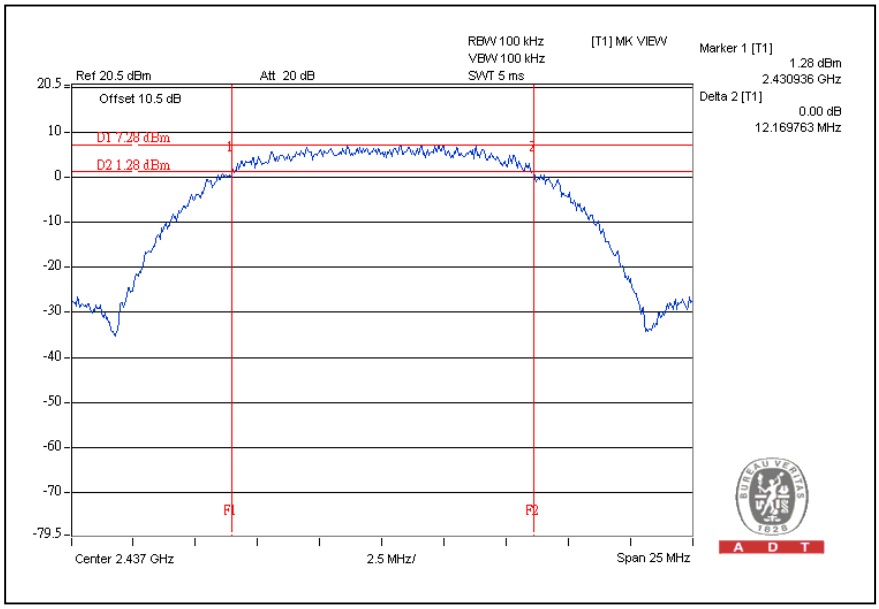
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.29	0.5	PASS
6	2437	12.16	0.5	PASS
11	2462	12.30	0.5	PASS

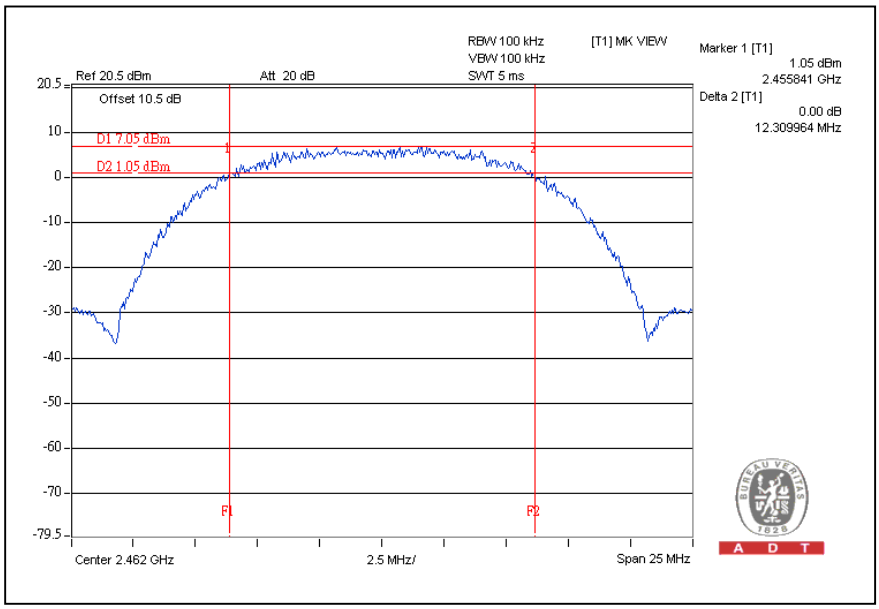
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.28 dBm
2.430936 GHz
Delta 2 [T1]
0.00 dB
12.169763 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.28 dBm
D2 1.28 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

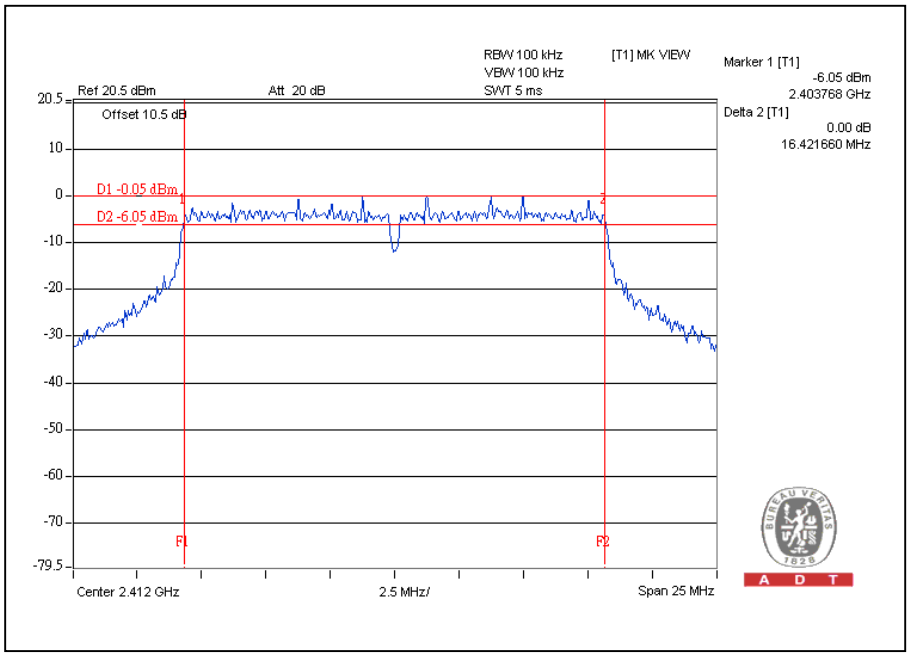
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.05 dBm
2.455841 GHz
Delta 2 [T1]
0.00 dB
12.309964 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.05 dBm
D2 1.05 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

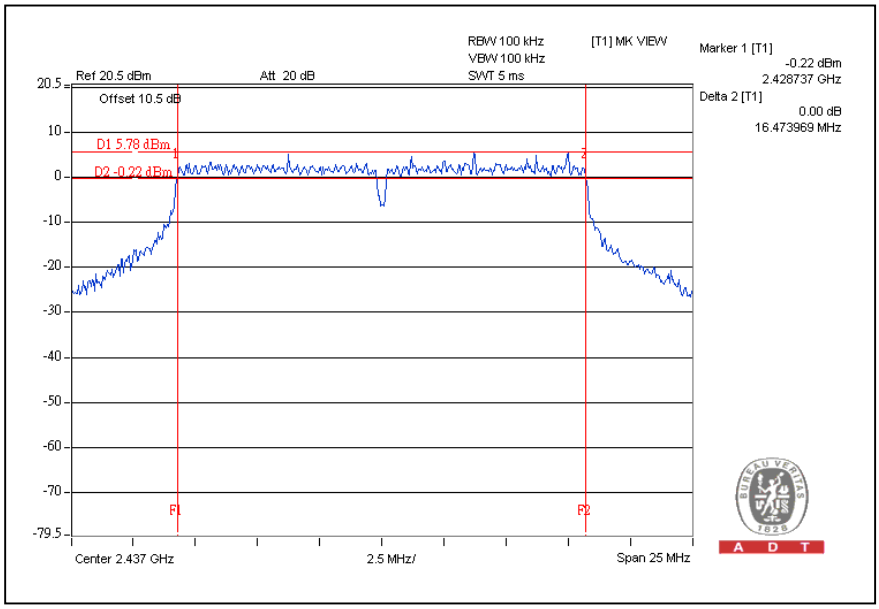
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.42	0.5	PASS
6	2437	16.47	0.5	PASS
11	2462	16.43	0.5	PASS

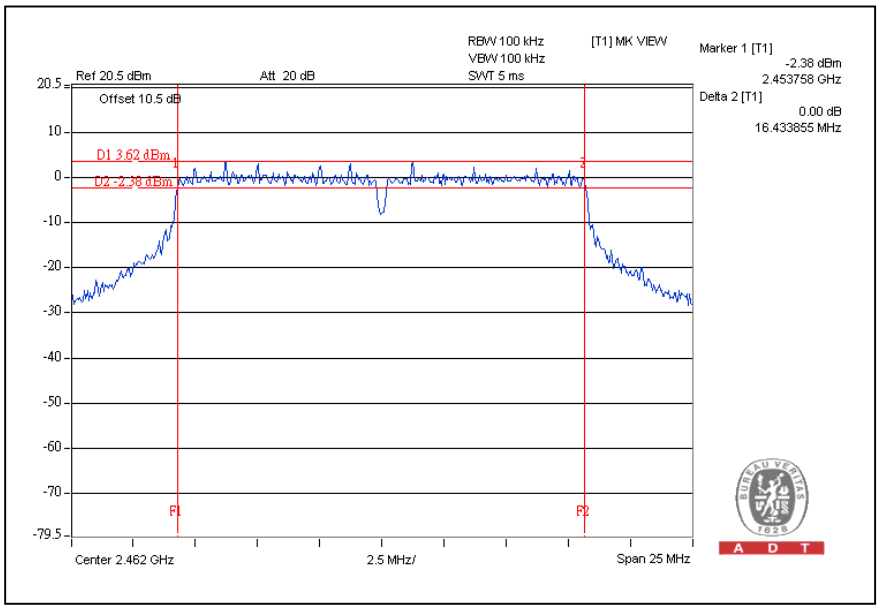
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-0.22 dBm
2.428737 GHz
Delta 2 [T1]
0.00 dB
16.473969 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 5.78 dBm
D2 -0.22 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

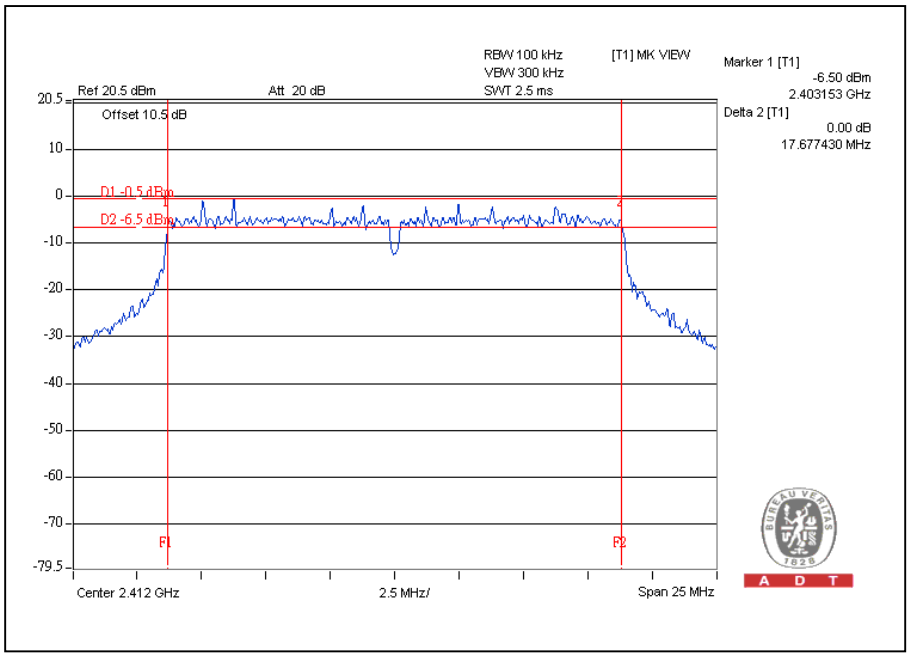
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-2.38 dBm
2.453758 GHz
Delta 2 [T1]
0.00 dB
16.433855 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.62 dBm
D2 -2.38 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

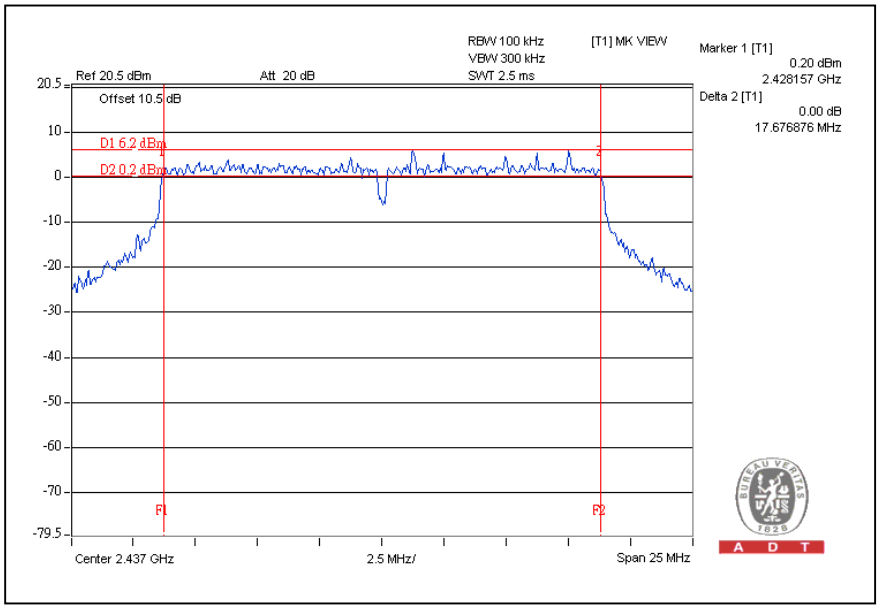
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.67	0.5	PASS
6	2437	17.67	0.5	PASS
11	2462	17.70	0.5	PASS

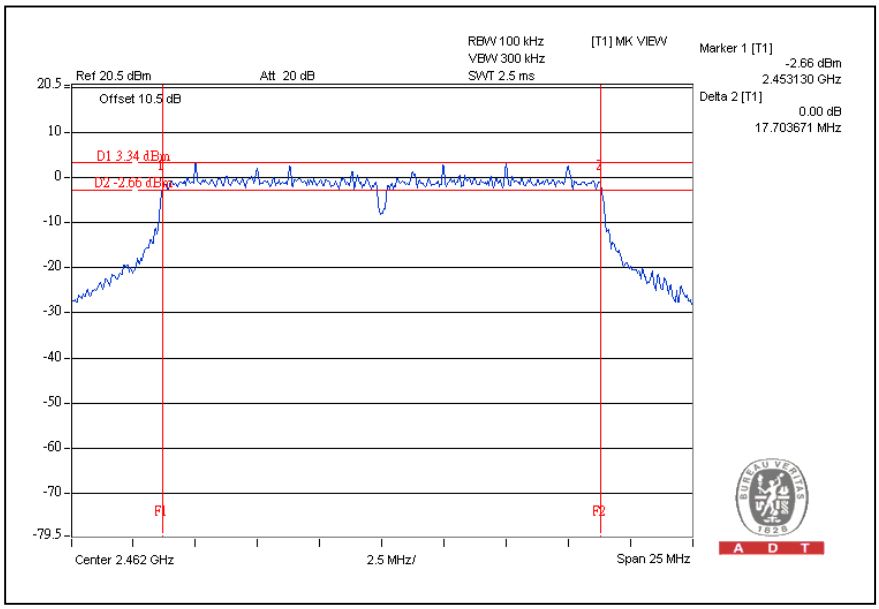
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
0.20 dBm
2.428157 GHz
Delta 2 [T1]
0.00 dB
17.676876 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 6.2 dBm
D2 0.2 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

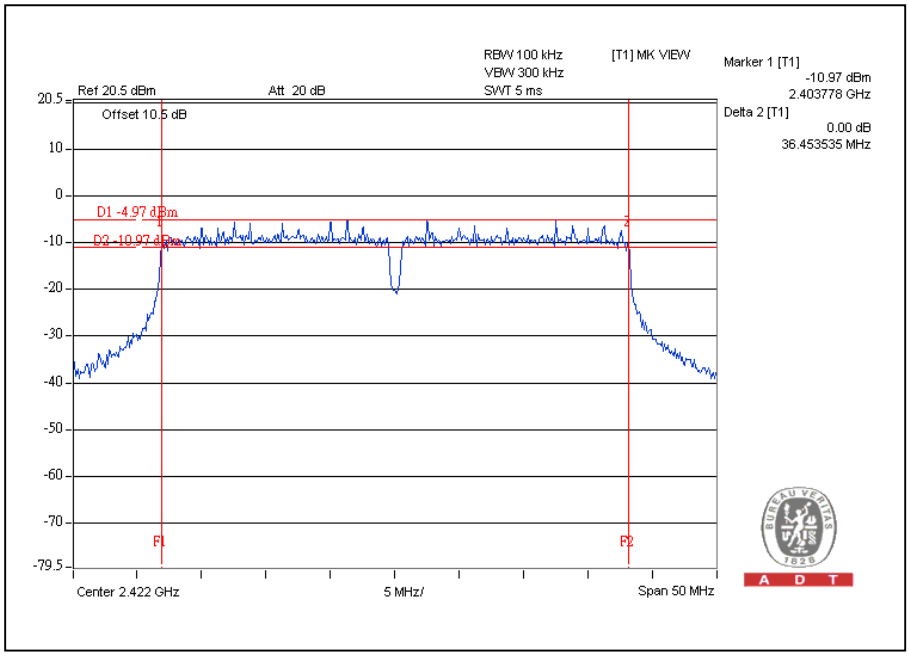
CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-2.66 dBm
2.453130 GHz
Delta 2 [T1]
0.00 dB
17.703671 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.34 dBm
D2 -2.66 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

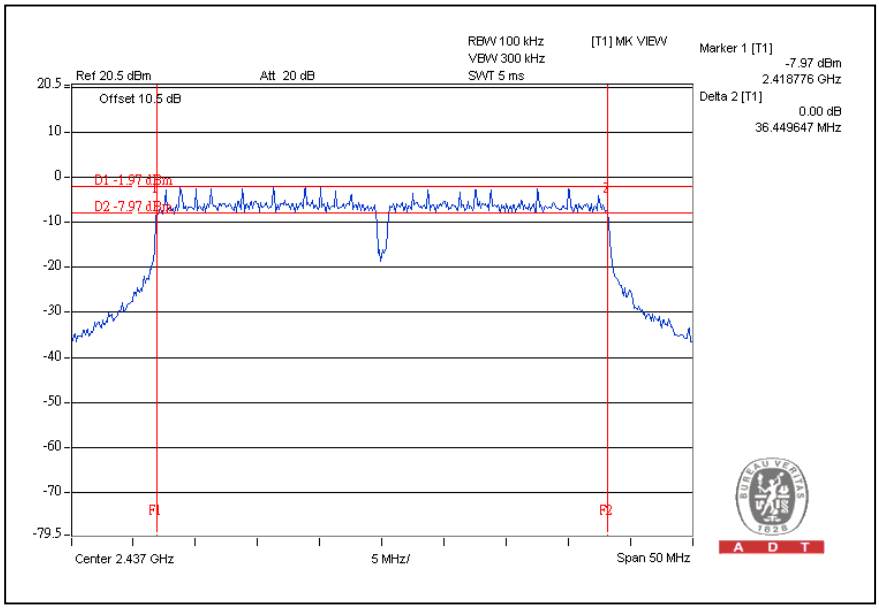
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.45	0.5	PASS
4	2437	36.44	0.5	PASS
7	2452	36.46	0.5	PASS

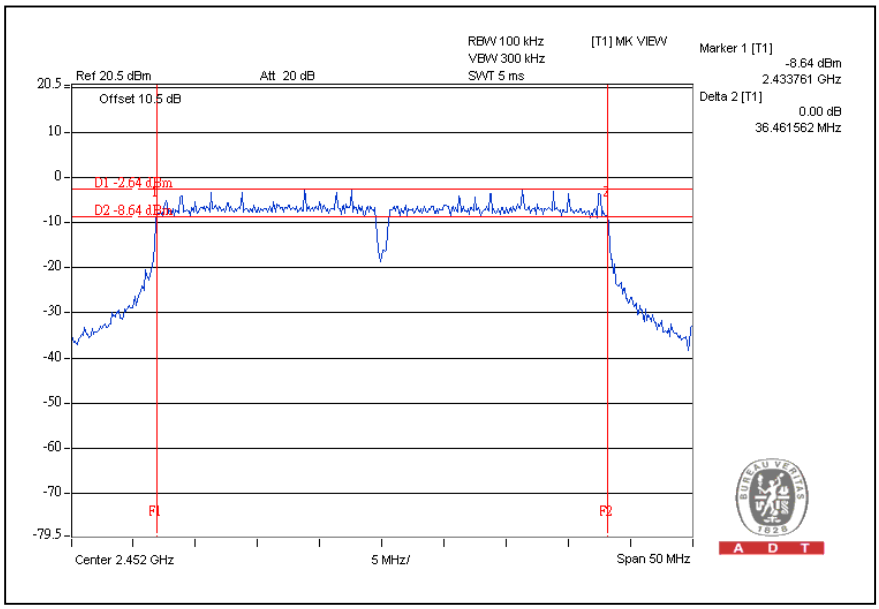
CH1



CH4


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-7.97 dBm
2.418776 GHz
Delta 2 [T1]
0.00 dB
36.449647 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.97 dBm
D2 -7.97 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz

CH7

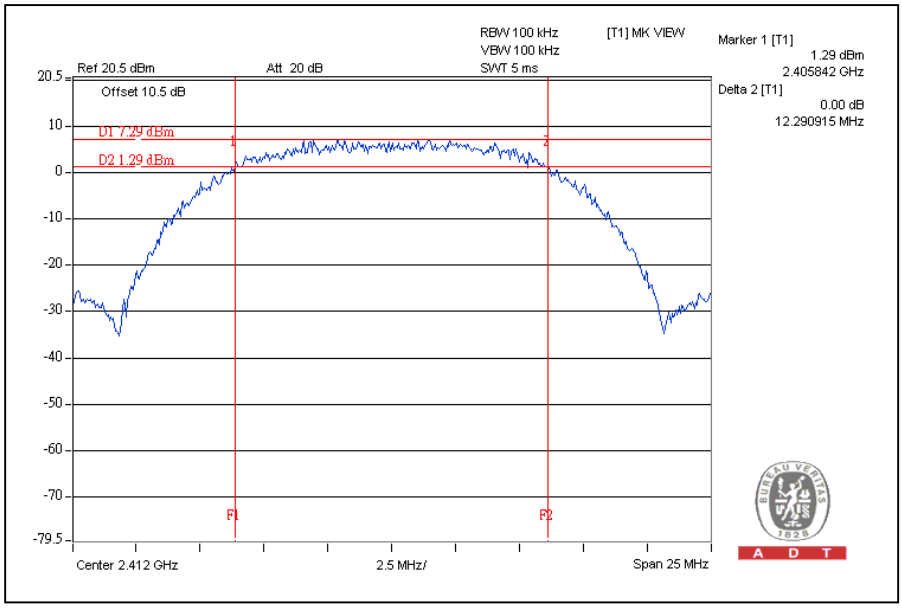

RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-8.64 dBm
2.433761 GHz
Delta 2 [T1]
0.00 dB
36.461562 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -2.64 dBm
D2 -8.64 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.452 GHz
5 MHz/
Span 50 MHz

4.3.8 TEST RESULTS (ANTENNA 2: PCB ANTENNA)

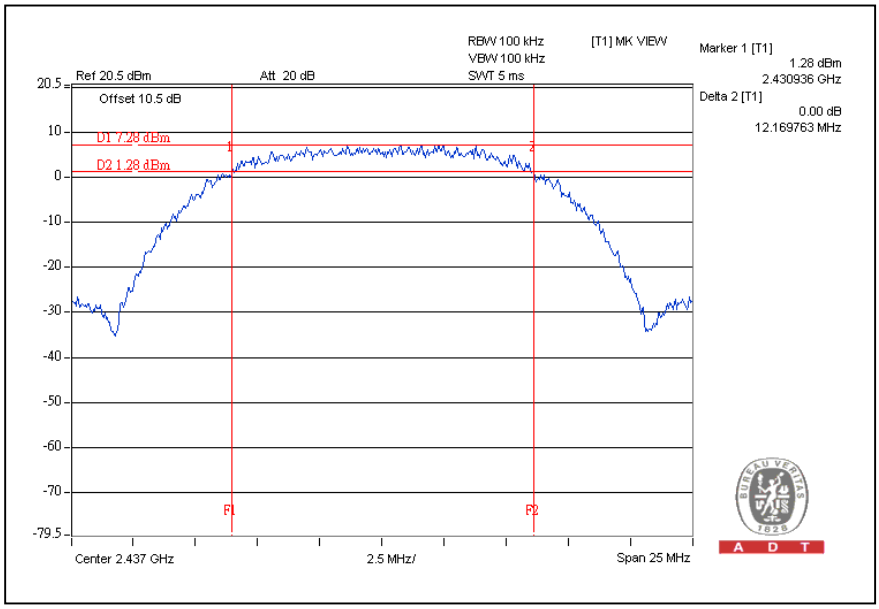
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.29	0.5	PASS
6	2437	12.16	0.5	PASS
11	2462	12.30	0.5	PASS

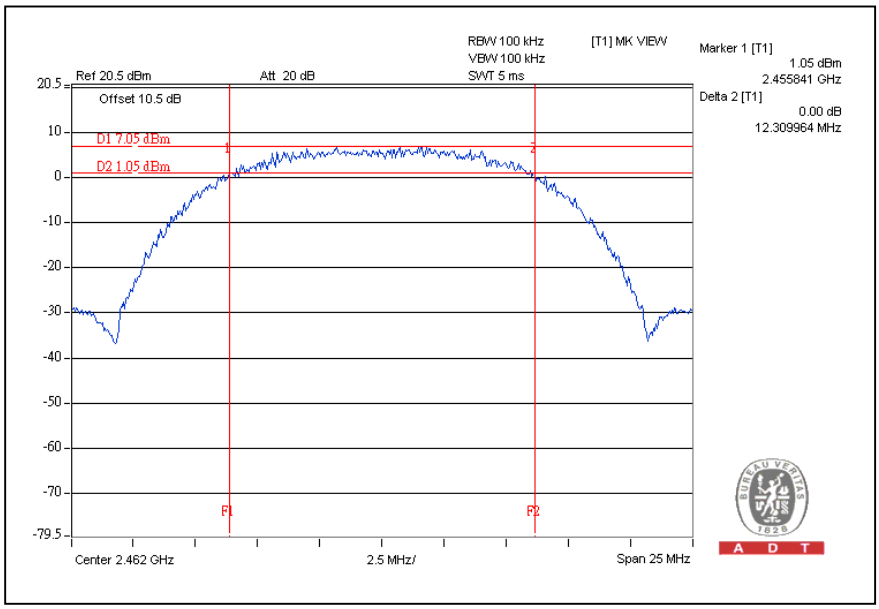
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.28 dBm
2.430936 GHz
Delta 2 [T1]
0.00 dB
12.169763 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.28 dBm
D2 1.28 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

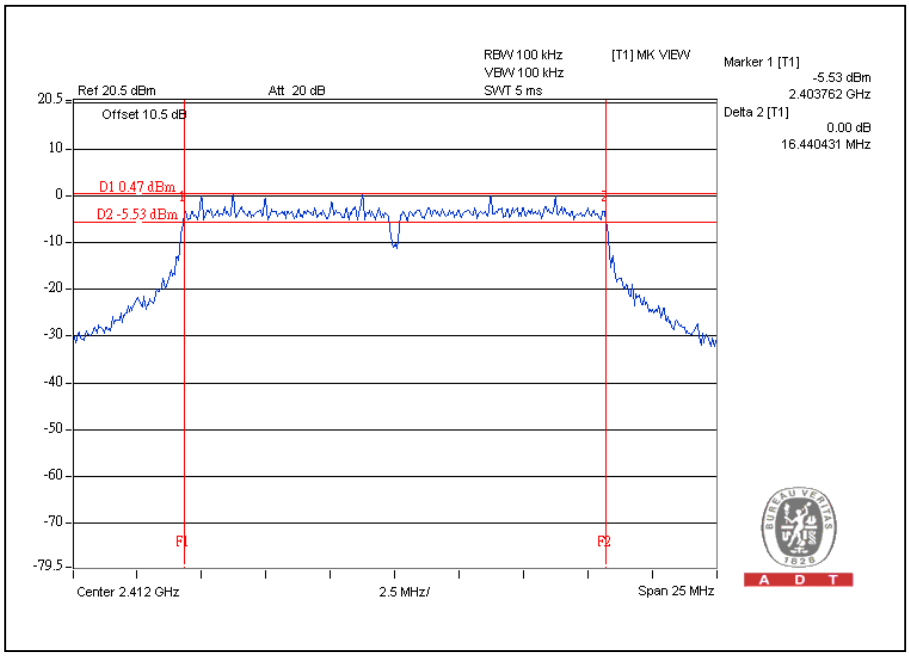
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.05 dBm
2.455841 GHz
Delta 2 [T1]
0.00 dB
12.309964 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.05 dBm
D2 1.05 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

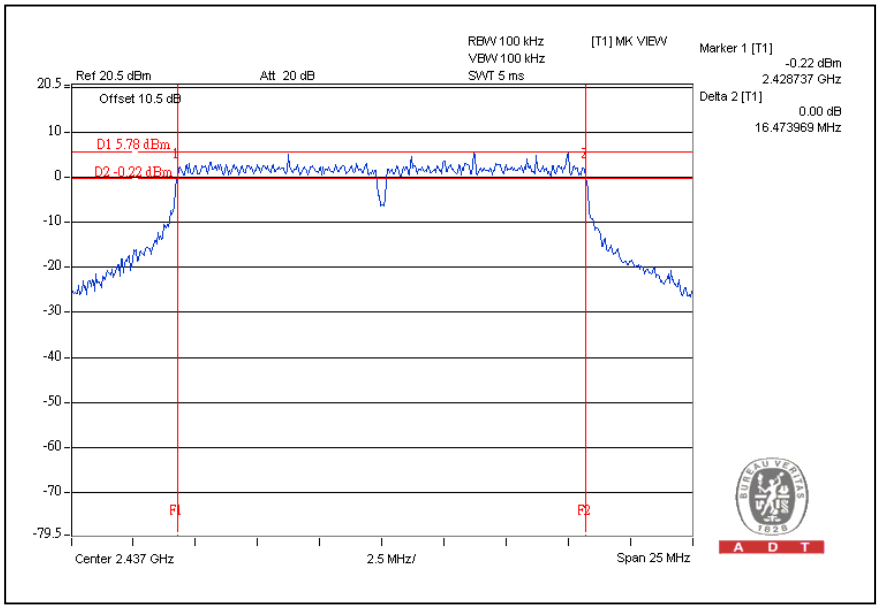
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.44	0.5	PASS
6	2437	16.47	0.5	PASS
11	2462	16.43	0.5	PASS

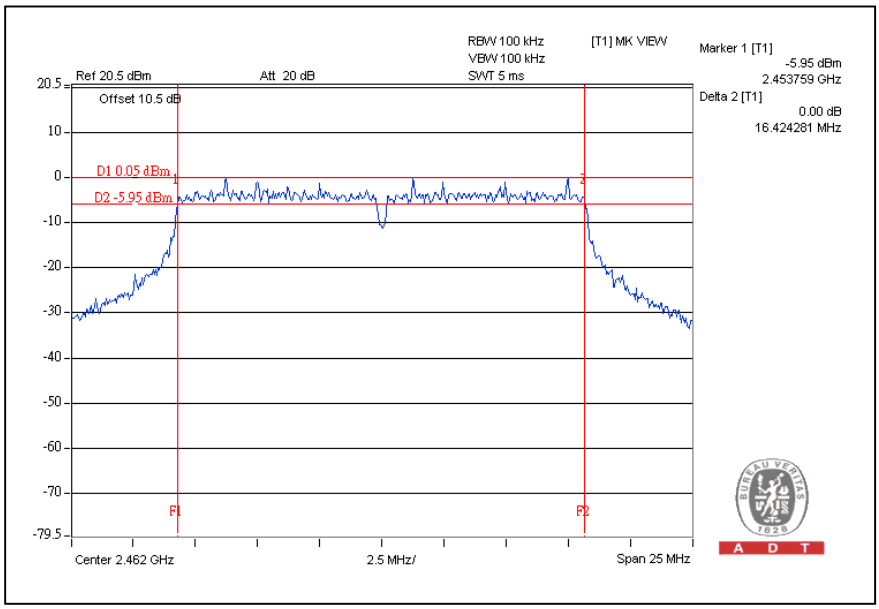
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-0.22 dBm
2.428737 GHz
Delta 2 [T1]
0.00 dB
16.473969 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 5.78 dBm
D2 -0.22 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

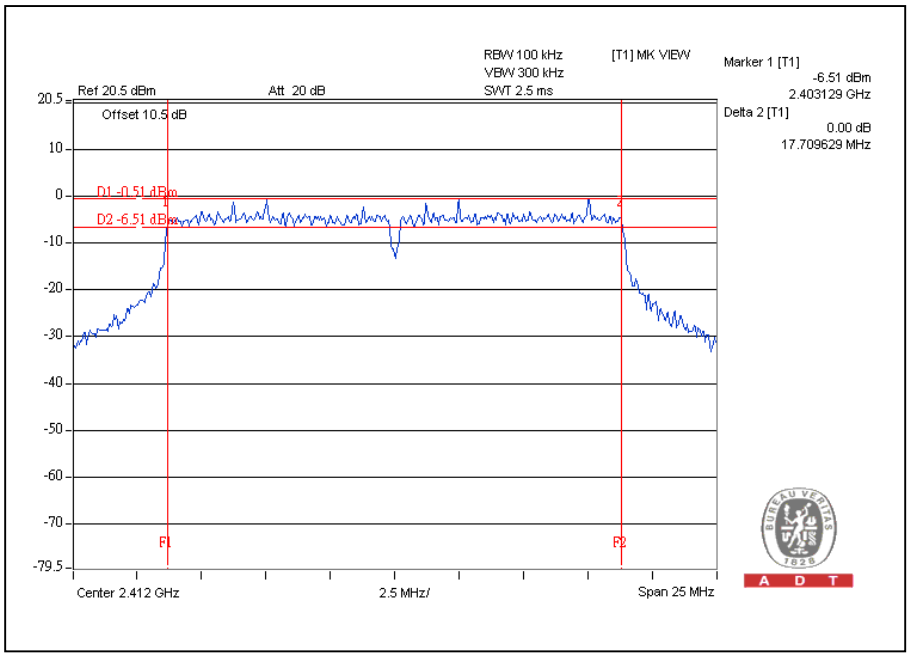
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-5.95 dBm
2.453759 GHz
Delta 2 [T1]
0.00 dB
16.424281 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 0.05 dBm
D2 -5.95 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

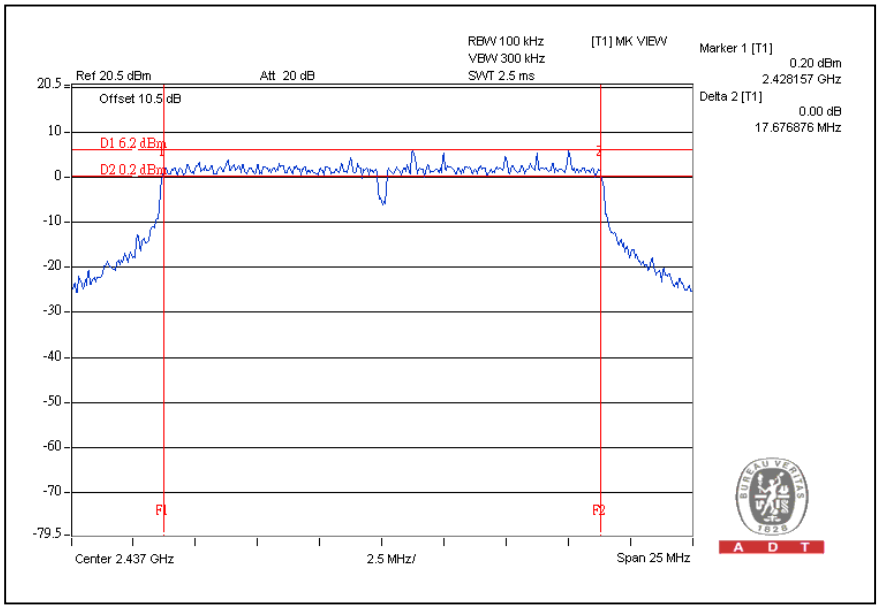
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.70	0.5	PASS
6	2437	17.67	0.5	PASS
11	2462	17.67	0.5	PASS

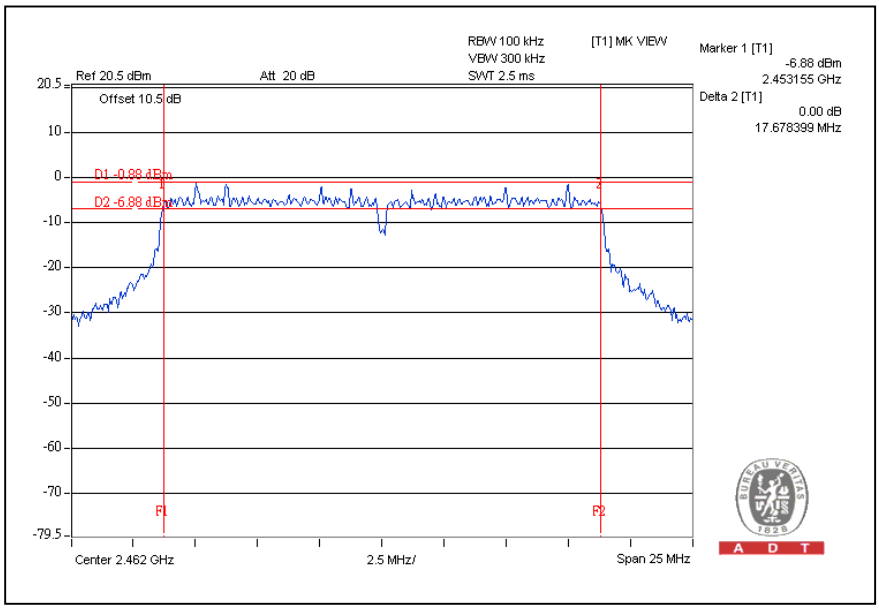
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
0.20 dBm
2.428157 GHz
Delta 2 [T1]
0.00 dB
17.676876 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 6.2 dBm
D2 0.2 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

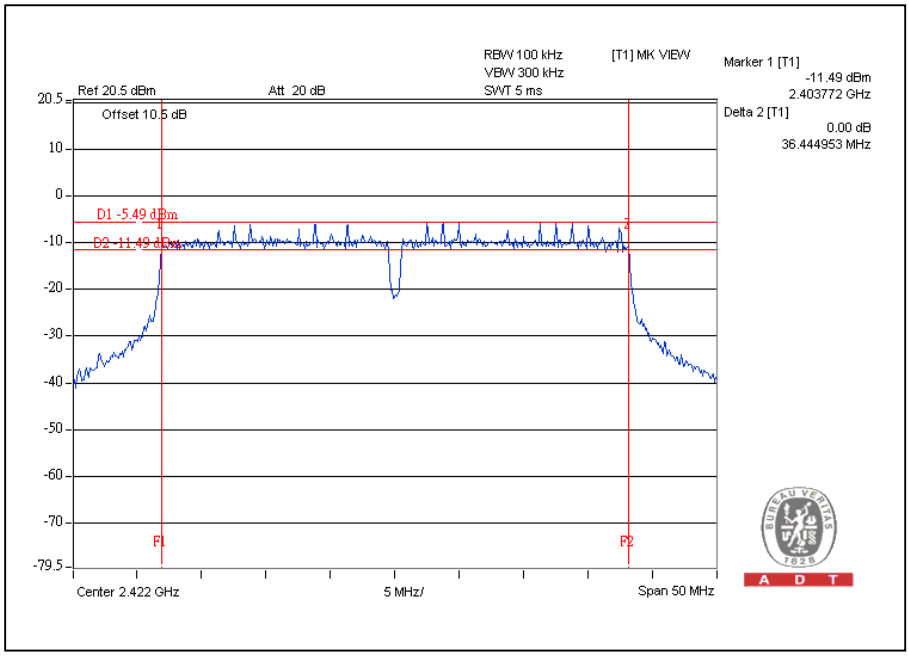
CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-6.88 dBm
2.453155 GHz
Delta 2 [T1]
0.00 dB
17.678399 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -0.98 dBm
D2 -6.98 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

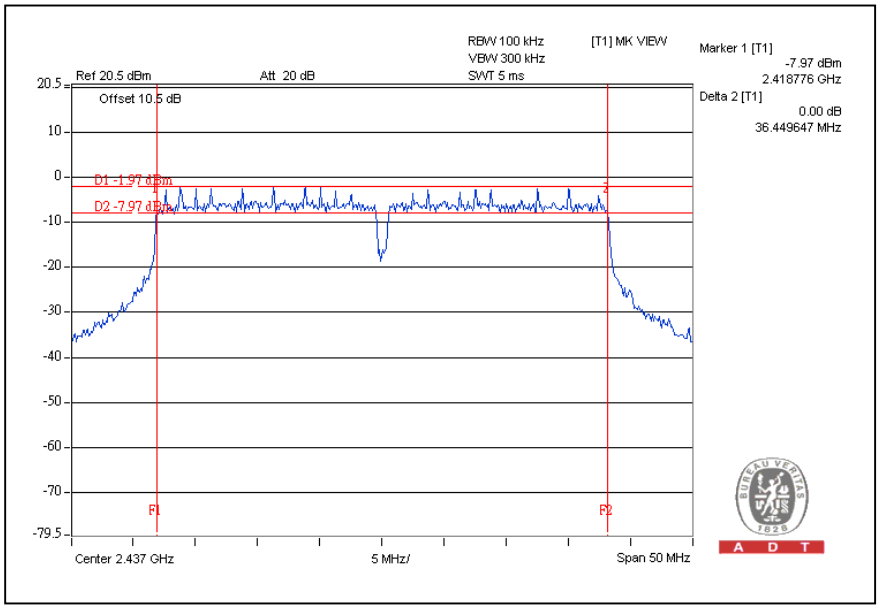
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.44	0.5	PASS
4	2437	36.44	0.5	PASS
7	2452	36.45	0.5	PASS

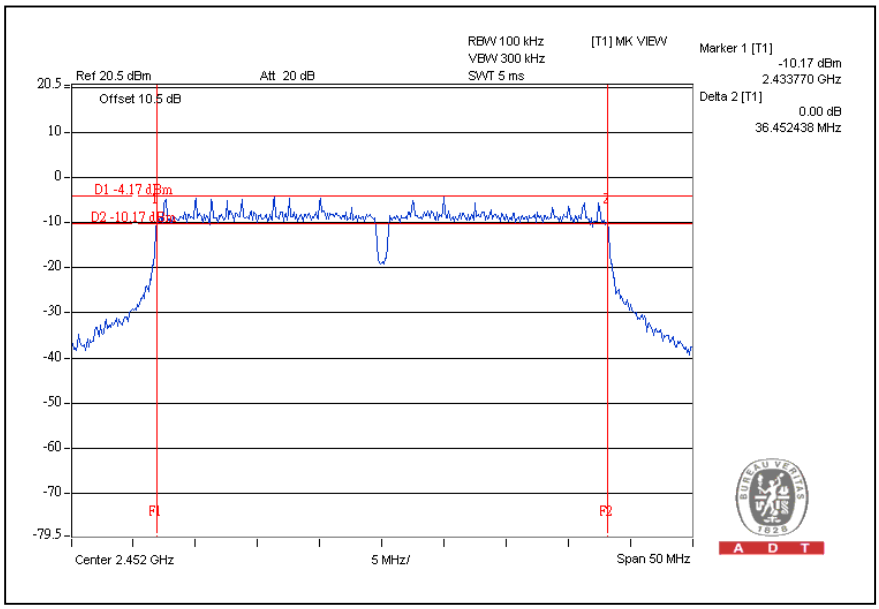
CH1



CH4


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-7.97 dBm
2.418776 GHz
Delta 2 [T1]
0.00 dB
36.449647 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.97 dBm
D2 -7.97 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz

CH7

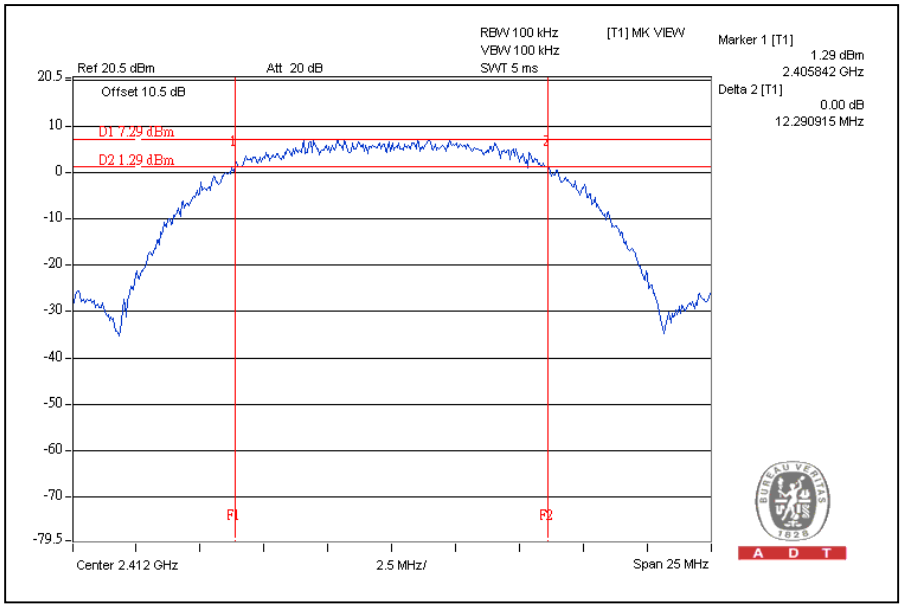

RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-10.17 dBm
2.433770 GHz
Delta 2 [T1]
0.00 dB
36.452438 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -4.17 dBm
D2 -10.17 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.452 GHz
5 MHz/
Span 50 MHz

4.3.9 TEST RESULTS (ANTENNA 3: PIFA ANTENNA)

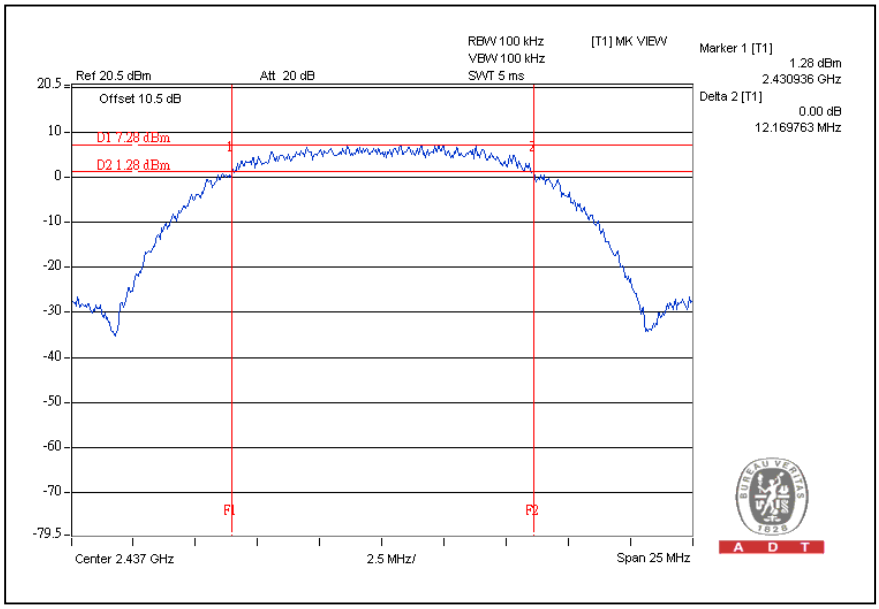
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.29	0.5	PASS
6	2437	12.16	0.5	PASS
11	2462	12.30	0.5	PASS

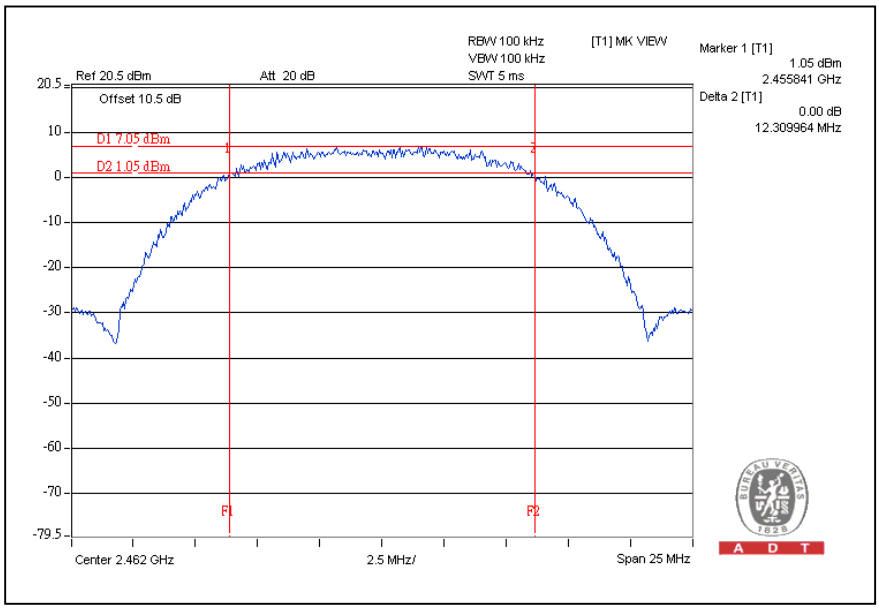
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.28 dBm
2.430936 GHz
Delta 2 [T1]
0.00 dB
12.169763 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.28 dBm
D2 1.28 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

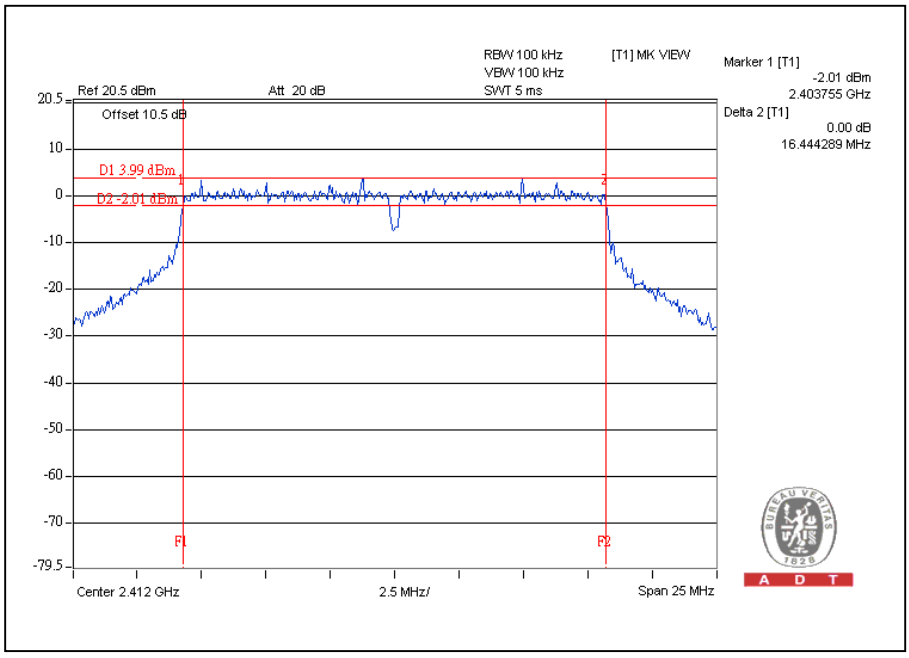
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.05 dBm
2.455841 GHz
Delta 2 [T1]
0.00 dB
12.309964 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.05 dBm
D2 1.05 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

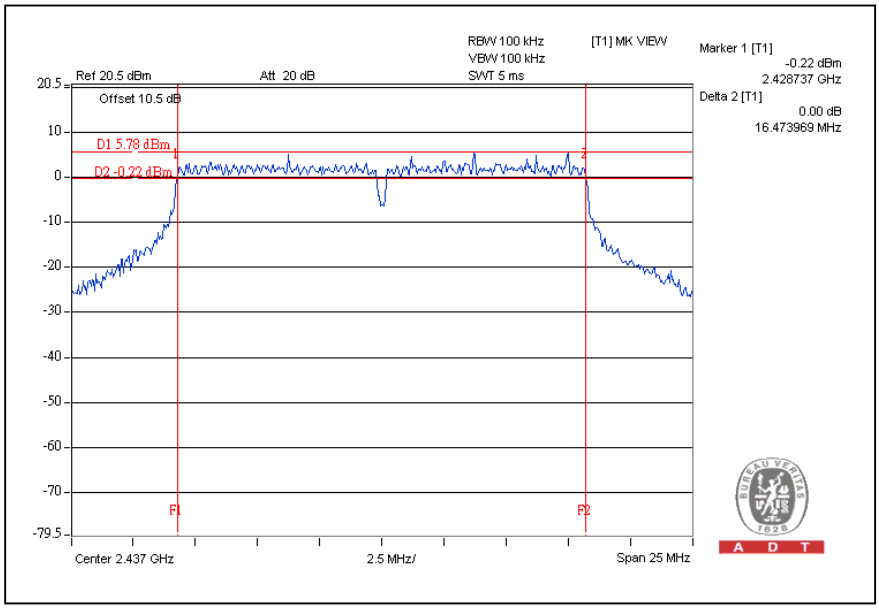
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.44	0.5	PASS
6	2437	16.47	0.5	PASS
11	2462	16.44	0.5	PASS

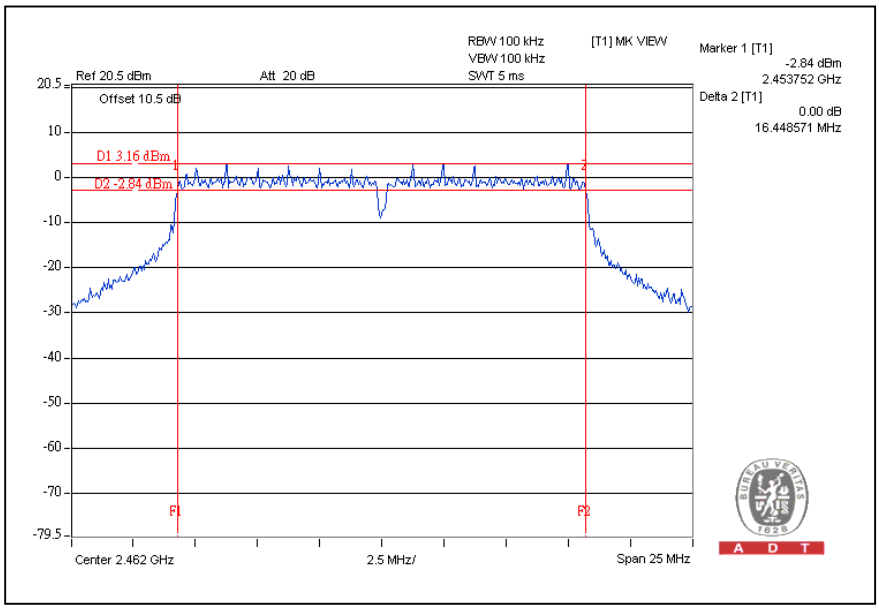
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-0.22 dBm
2.428737 GHz
Delta 2 [T1]
0.00 dB
16.473969 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 5.78 dBm
D2 -0.22 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

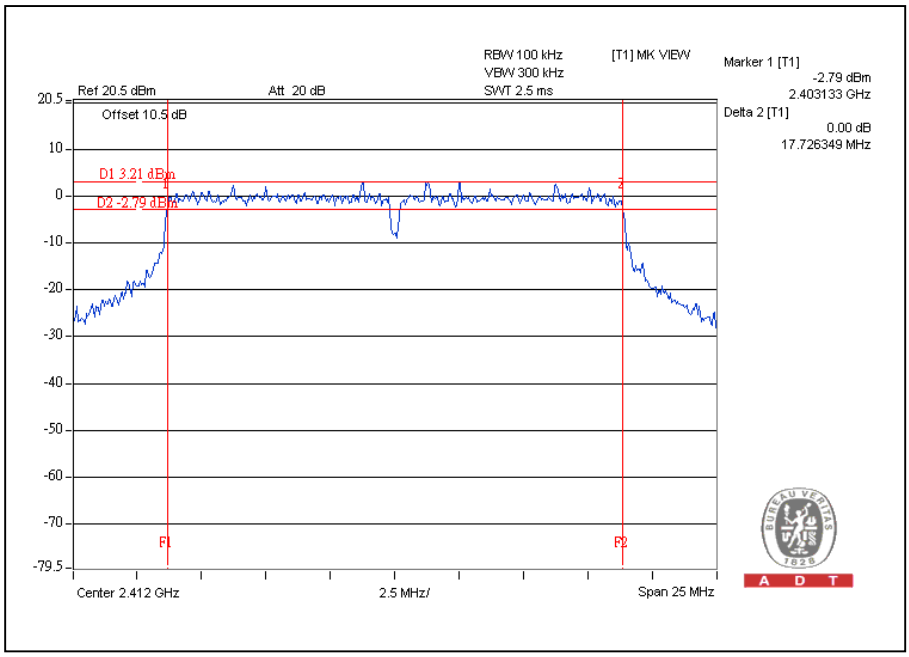
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-2.84 dBm
2.453752 GHz
Delta 2 [T1]
0.00 dB
16.448571 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.16 dBm
D2 -2.84 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

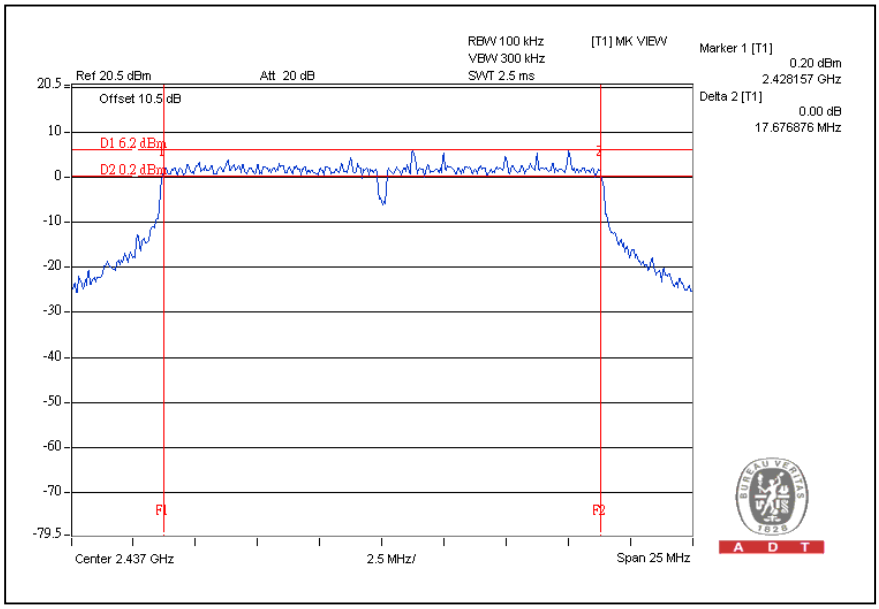
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.72	0.5	PASS
6	2437	17.67	0.5	PASS
11	2462	17.66	0.5	PASS

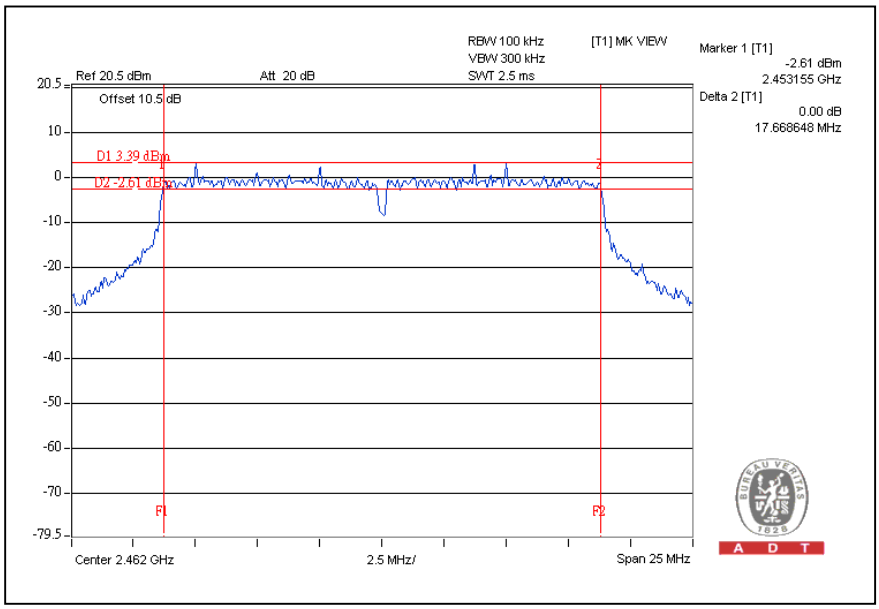
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
0.20 dBm
2.428157 GHz
Delta 2 [T1]
0.00 dB
17.676876 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 6.2 dBm
D2 0.2 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

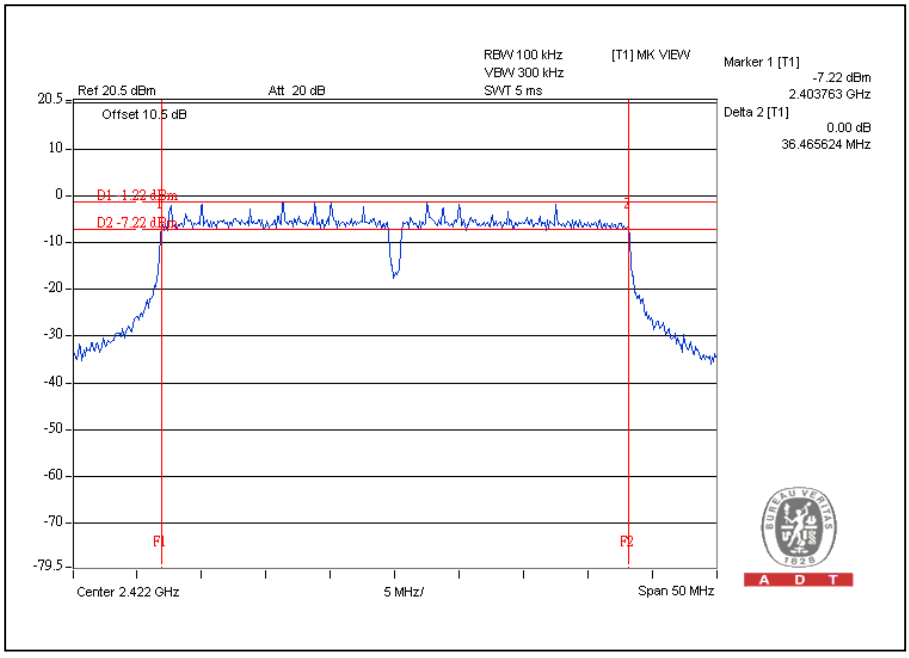
CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-2.61 dBm
2.453155 GHz
Delta 2 [T1]
0.00 dB
17.668648 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.39 dBm
D2 -2.61 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

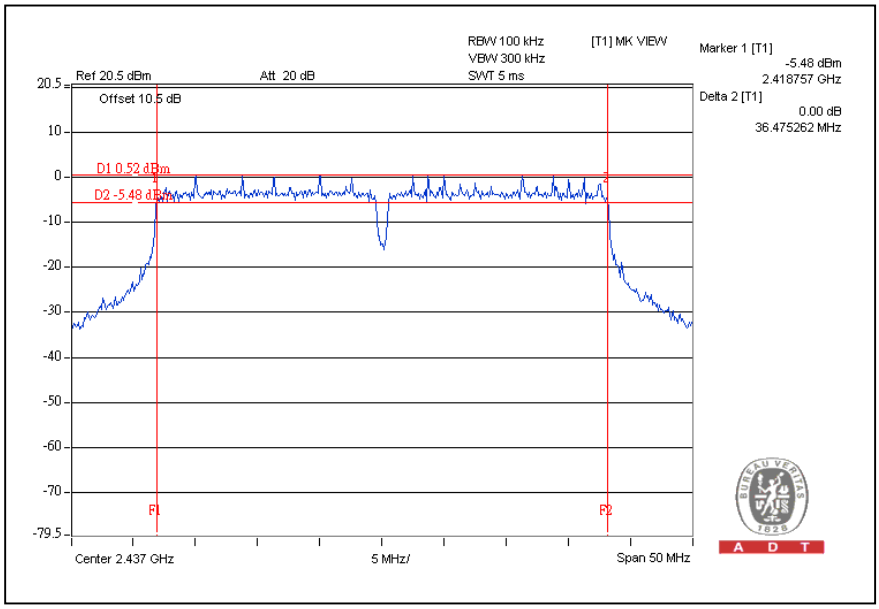
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.46	0.5	PASS
4	2437	36.47	0.5	PASS
7	2452	36.45	0.5	PASS

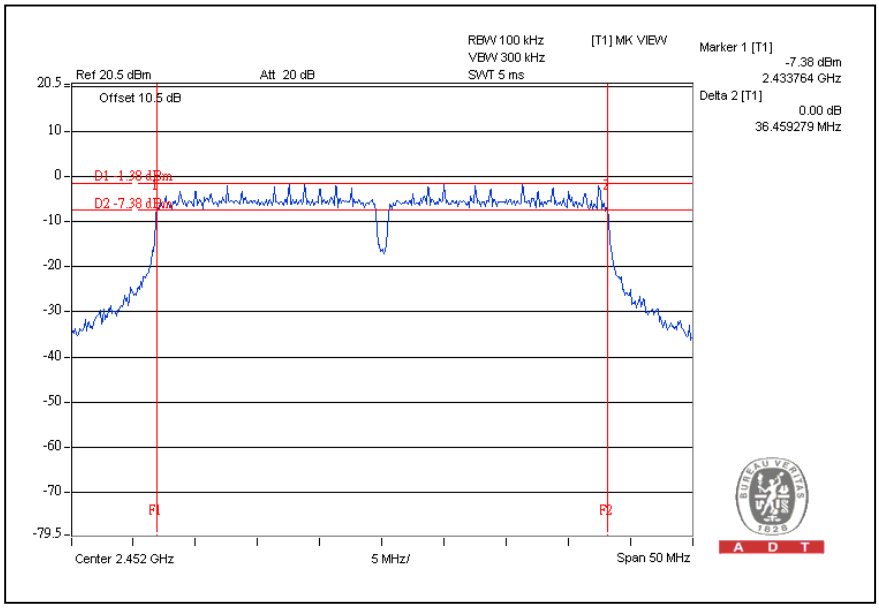
CH1



CH4


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-5.48 dBm
2.418757 GHz
Delta 2 [T1]
0.00 dB
36.475262 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 0.52 dBm
D2 -5.48 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz

CH7

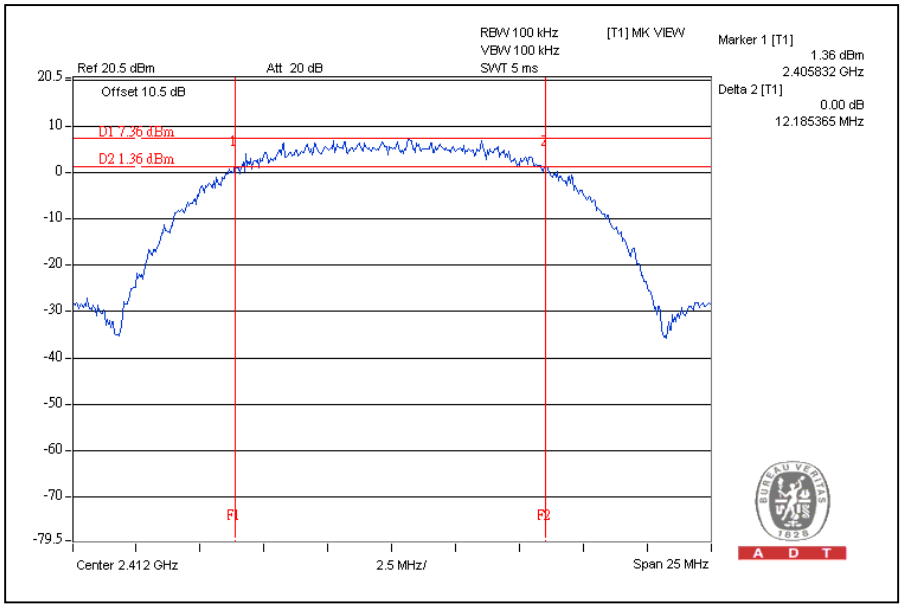

RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-7.38 dBm
2.433764 GHz
Delta 2 [T1]
0.00 dB
36.459279 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.38 dBm
D2 -7.38 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.452 GHz
5 MHz/
Span 50 MHz

4.3.10 TEST RESULTS (ANTENNA 4: PIFA ANTENNA)

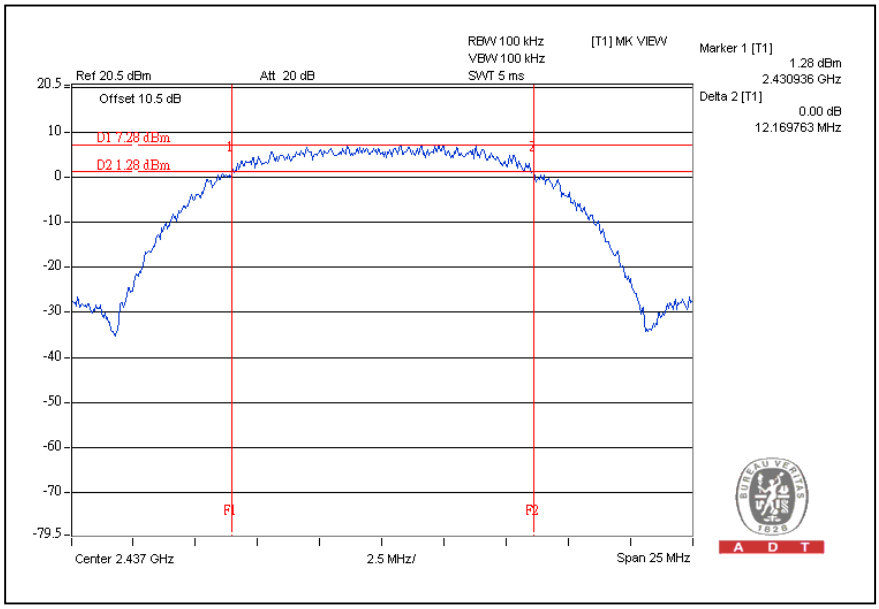
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.18	0.5	PASS
6	2437	12.16	0.5	PASS
11	2462	12.30	0.5	PASS

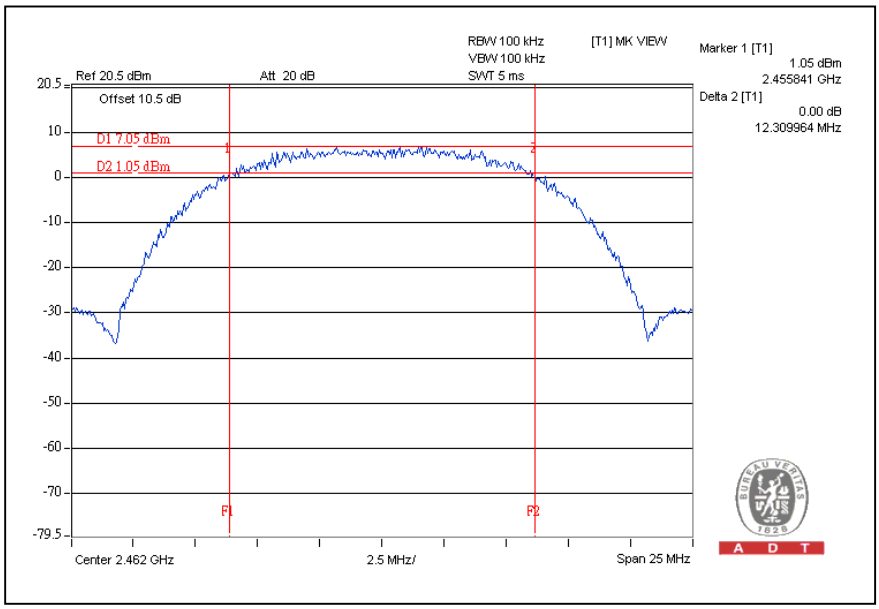
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.28 dBm
2.430936 GHz
Delta 2 [T1]
0.00 dB
12.169763 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.28 dBm
D2 1.28 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

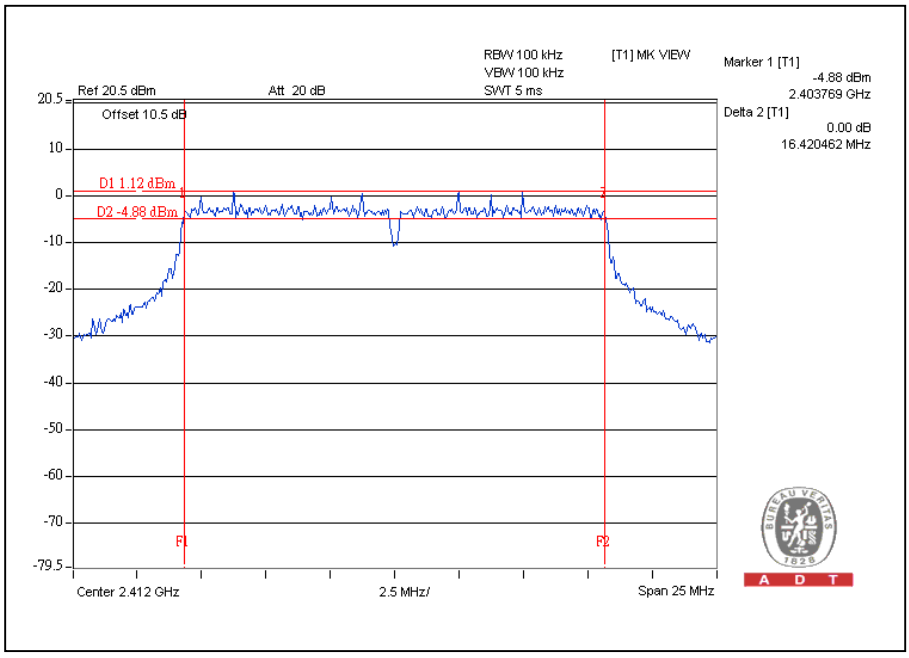
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
1.05 dBm
2.455841 GHz
Delta 2 [T1]
0.00 dB
12.309964 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.05 dBm
D2 1.05 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

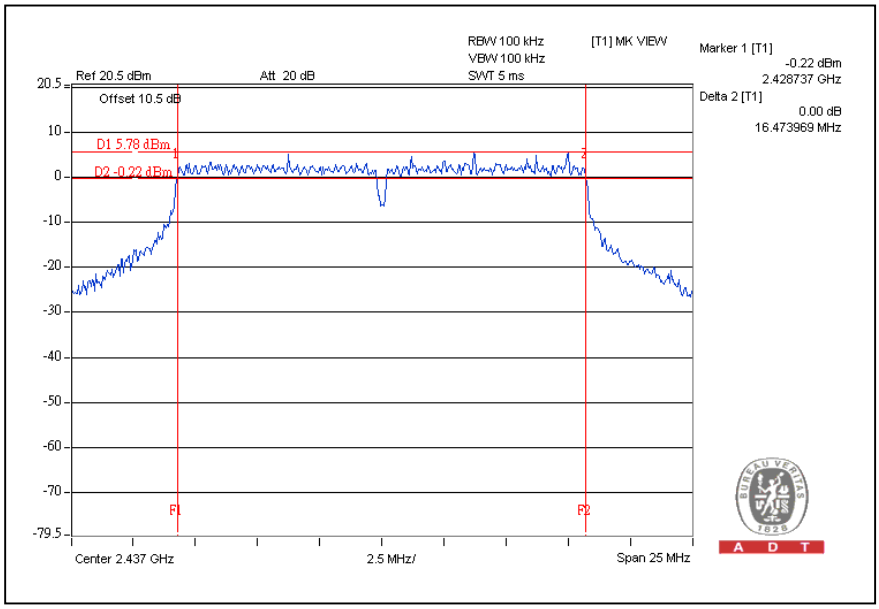
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.42	0.5	PASS
6	2437	16.47	0.5	PASS
11	2462	16.43	0.5	PASS

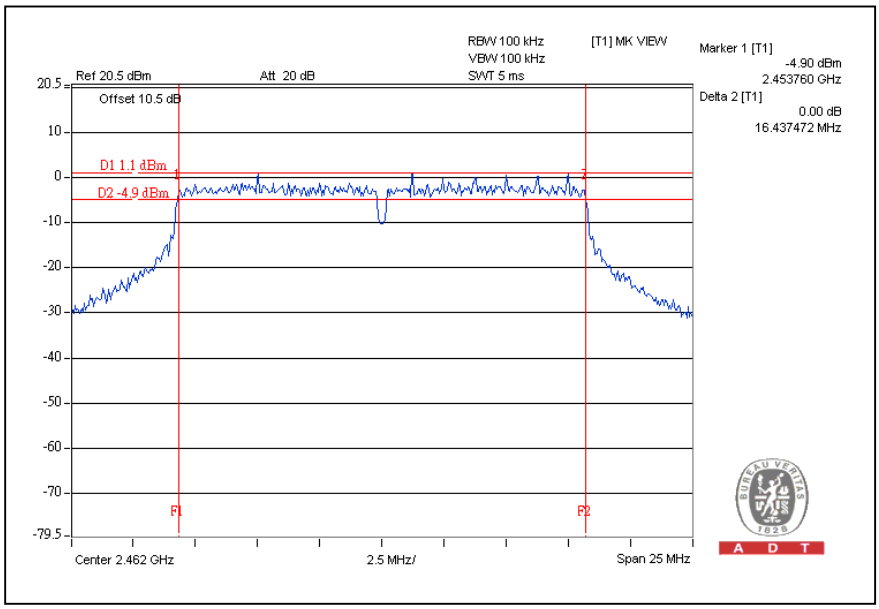
CH1



CH6


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-0.22 dBm
2.428737 GHz
Delta 2 [T1]
0.00 dB
16.473969 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 5.78 dBm
D2 -0.22 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

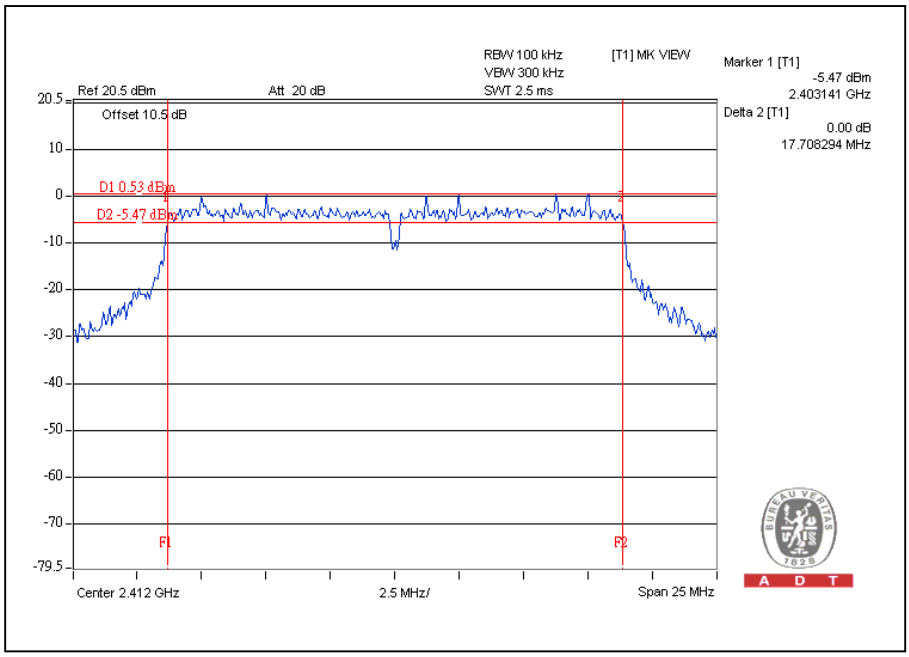
CH11


RBW 100 kHz
VBW 100 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-4.90 dBm
2.453760 GHz
Delta 2 [T1]
0.00 dB
16.437472 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.1 dBm
D2 -4.9 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

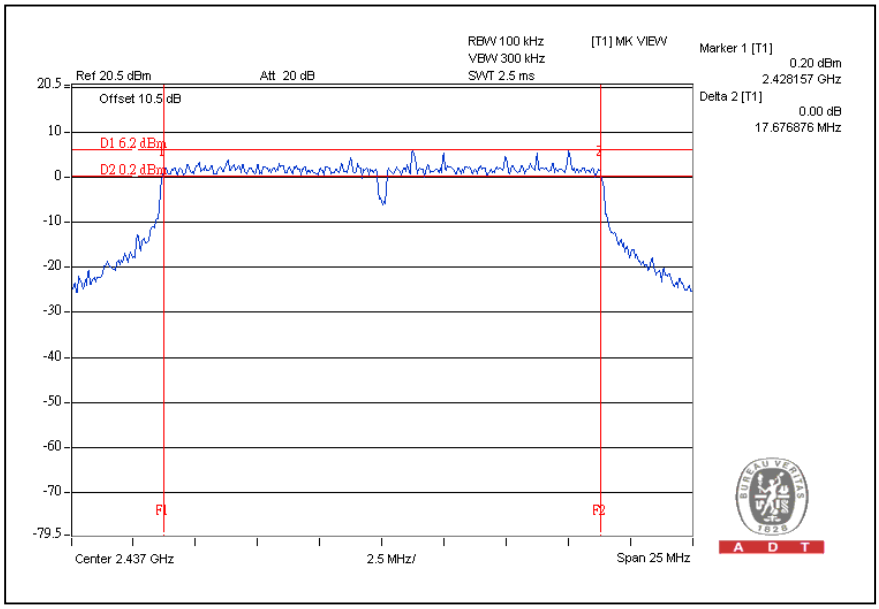
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.70	0.5	PASS
6	2437	17.67	0.5	PASS
11	2462	17.65	0.5	PASS

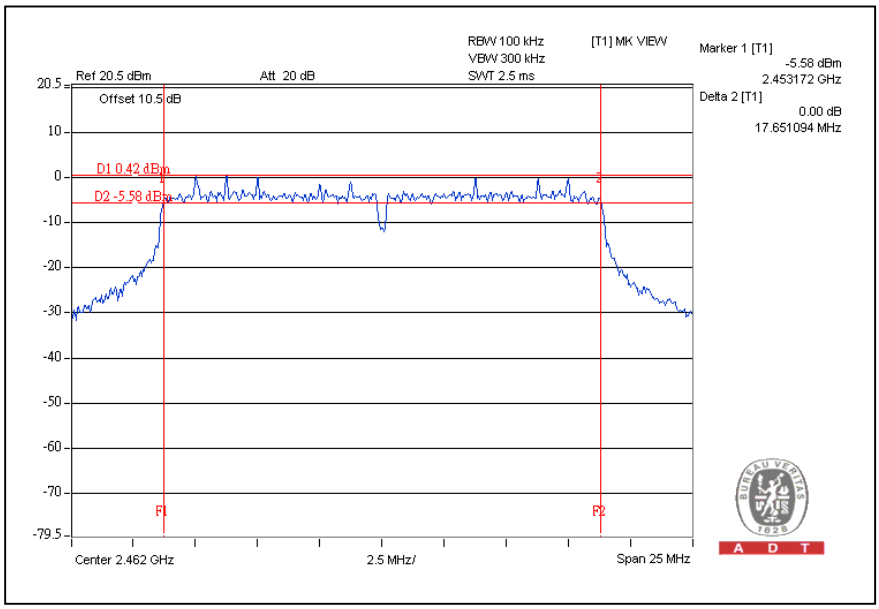
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
0.20 dBm
2.428157 GHz
Delta 2 [T1]
0.00 dB
17.676876 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 6.2 dBm
D2 0.2 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
2.5 MHz/
Span 25 MHz

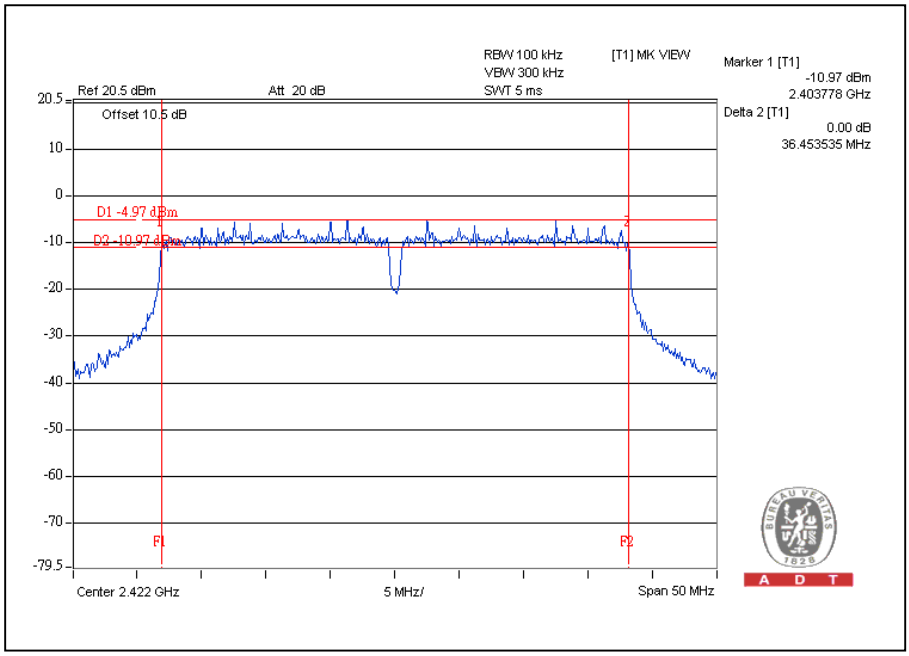
CH11


RBW 100 kHz
VBW 300 kHz
SWT 2.5 ms
[T1] MK VIEW
Marker 1 [T1]
-5.58 dBm
2.453172 GHz
Delta 2 [T1]
0.00 dB
17.651094 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 0.42 dBm
D2 -5.58 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.462 GHz
2.5 MHz/
Span 25 MHz

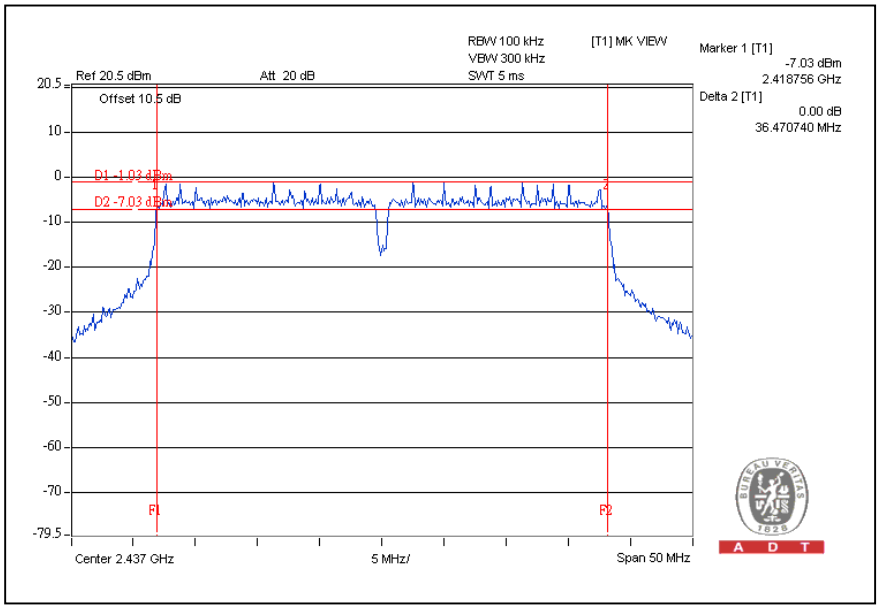
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.45	0.5	PASS
4	2437	36.47	0.5	PASS
7	2452	36.44	0.5	PASS

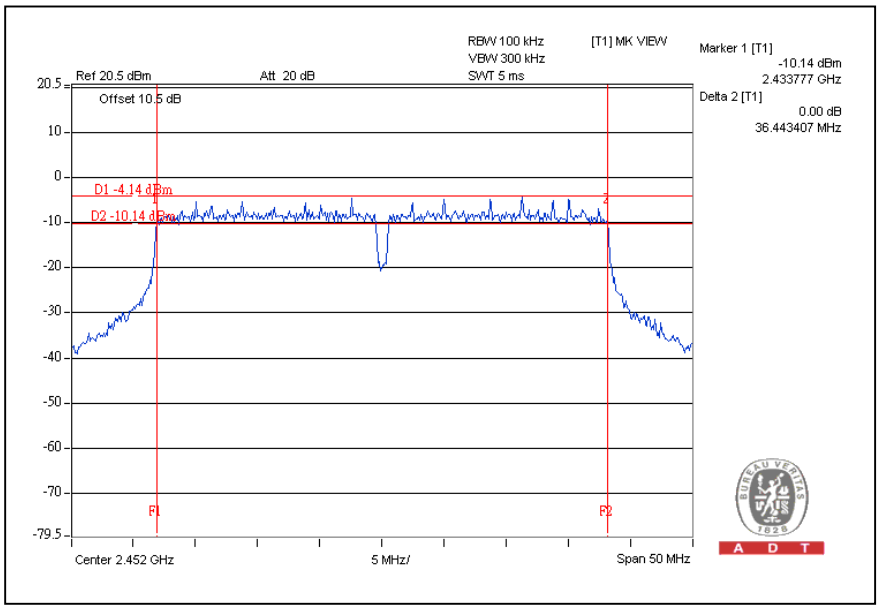
CH1



CH4


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-7.03 dBm
2.418756 GHz
Delta 2 [T1]
0.00 dB
36.470740 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.03 dBm
D2 -7.03 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz

CH7


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] MK VIEW
Marker 1 [T1]
-10.14 dBm
2.433777 GHz
Delta 2 [T1]
0.00 dB
36.443407 MHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -4.14 dBm
D2 -10.14 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.452 GHz
5 MHz/
Span 50 MHz

4.4 99% BANDWIDTH MEASUREMENT

4.4.1 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer	FSP 40	100036	Dec. 18, 2009	Dec. 17, 2010

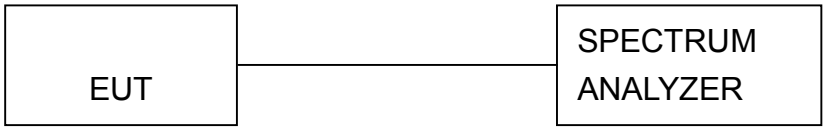
NOTE:

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

4.4.2 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. RBW: Set to 1% to 3% of the approximate emission width .VBW:3 times the Resolution BW.

4.4.3 TEST SETUP



4.4.4 EUT OPERATING CONDITIONS

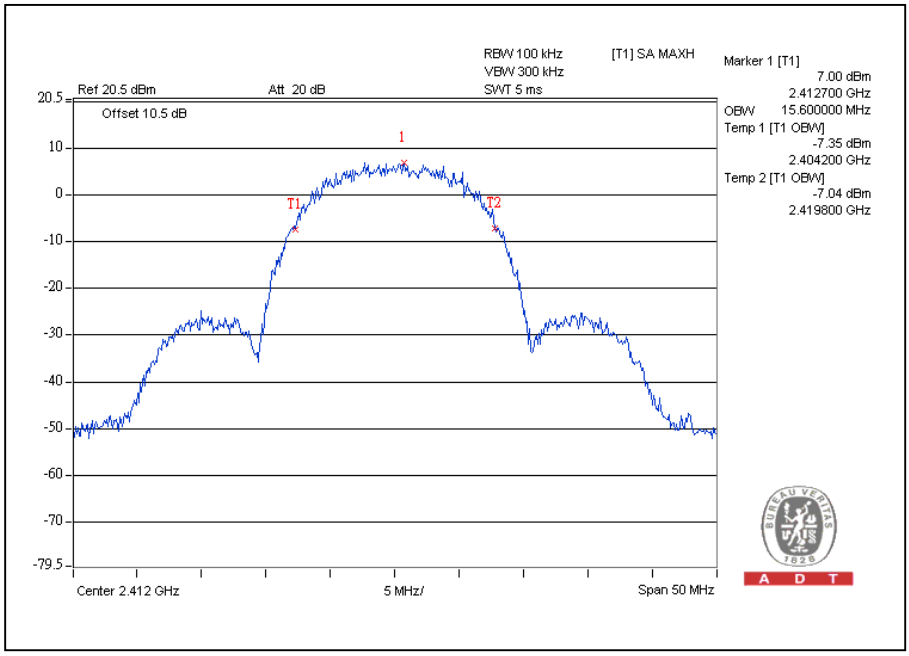
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.4.5 TEST RESULTS (ANTENNA 1: PCB ANTENNA)

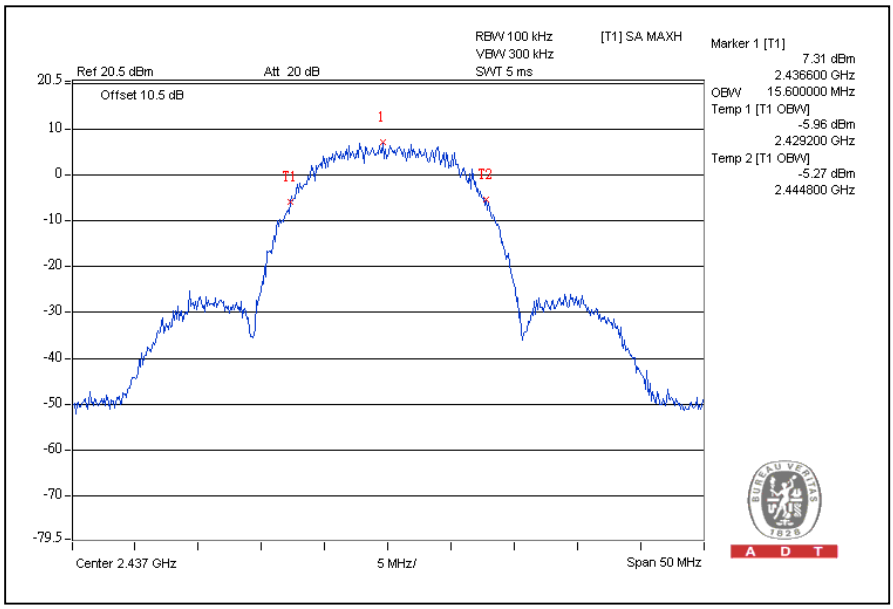
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	15.6
6	2437	15.6
11	2462	15.5

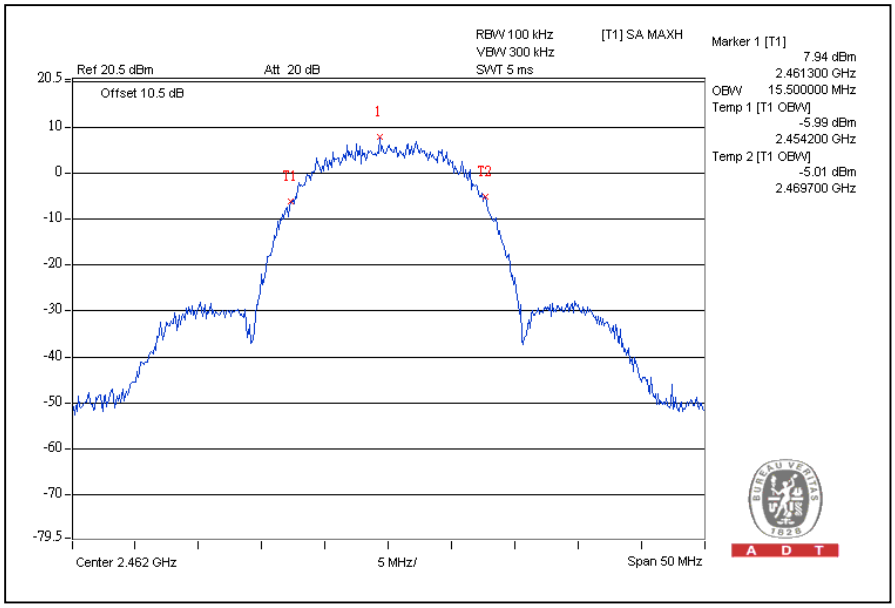
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.31 dBm
2.436600 GHz
OBW 15.600000 MHz
Temp 1 [T1 OBW]
-5.96 dBm
2.429200 GHz
Temp 2 [T1 OBW]
-5.27 dBm
2.444800 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

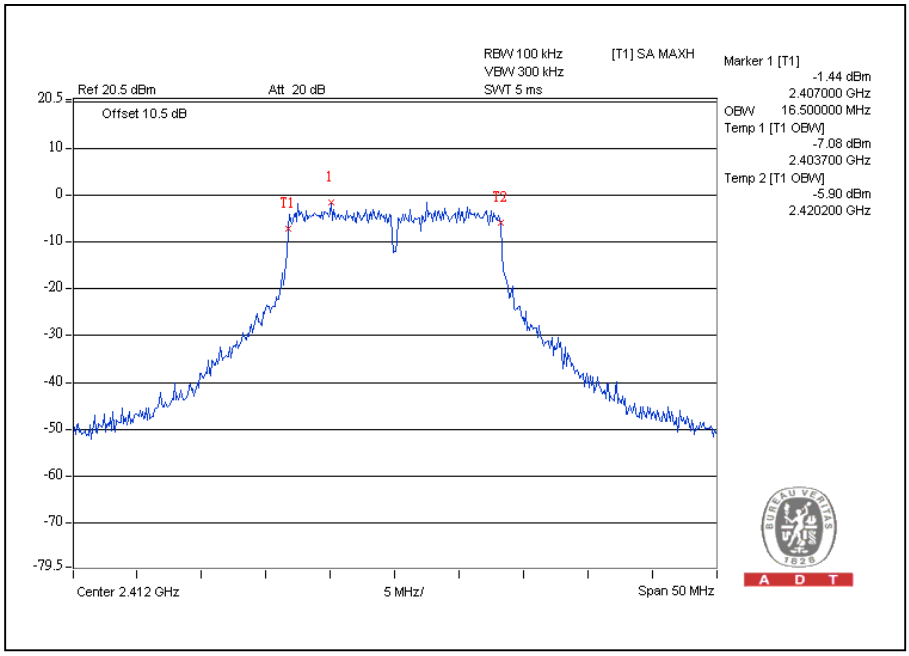
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.94 dBm
2.461300 GHz
OBW 15.500000 MHz
Temp 1 [T1 OBW]
-5.99 dBm
2.454200 GHz
Temp 2 [T1 OBW]
-5.01 dBm
2.469700 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

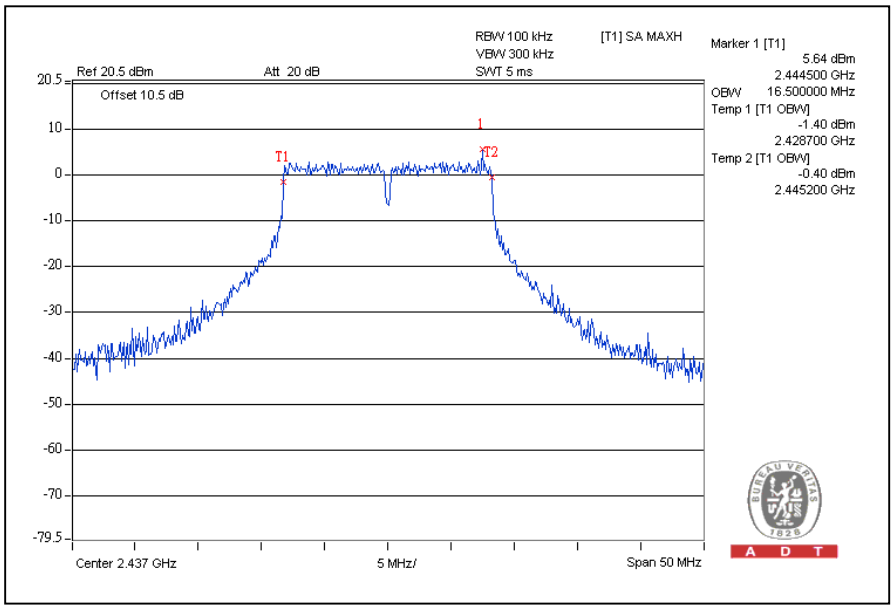
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	16.5
6	2437	16.5
11	2462	16.5

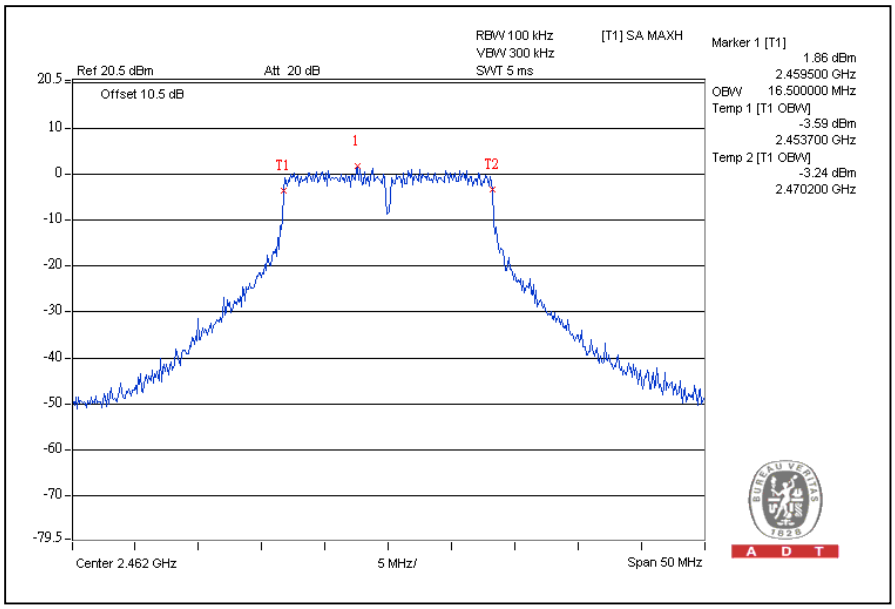
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
5.64 dBm
2.444500 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-1.40 dBm
2.428700 GHz
Temp 2 [T1 OBW]
-0.40 dBm
2.445200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.437 GHz
5 MHz/
Span 50 MHz

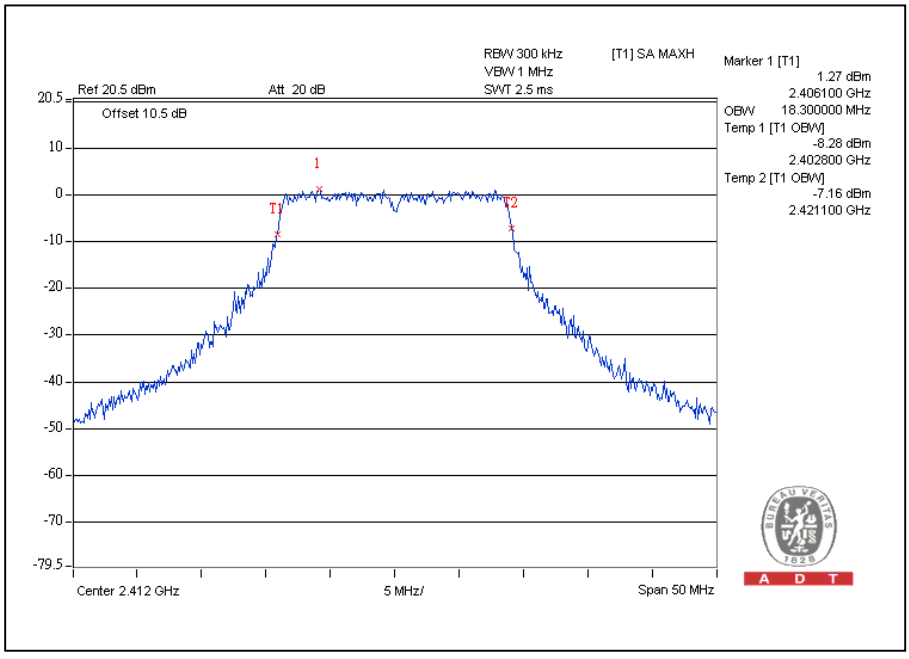
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
1.86 dBm
2.459500 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-3.59 dBm
2.453700 GHz
Temp 2 [T1 OBW]
-3.24 dBm
2.470200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.462 GHz
5 MHz/
Span 50 MHz

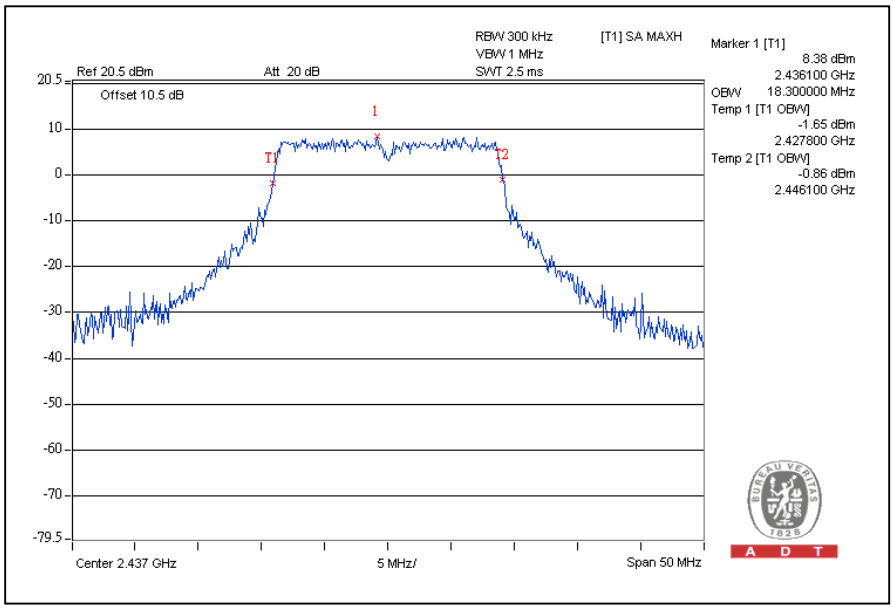
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	18.3
6	2437	18.3
11	2462	18.3

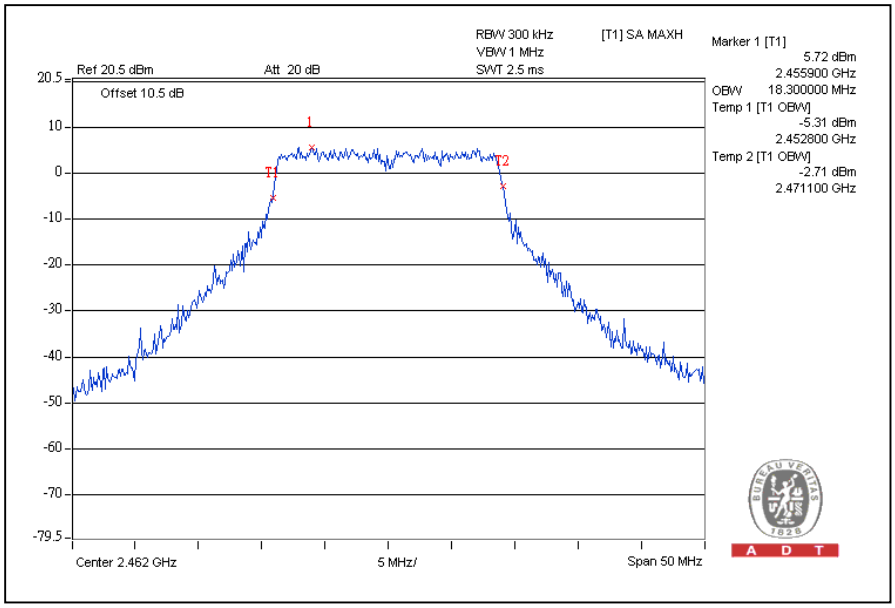
CH1



CH6


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
8.38 dBm
2.436100 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-1.65 dBm
2.427800 GHz
Temp 2 [T1 OBW]
-0.86 dBm
2.446100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

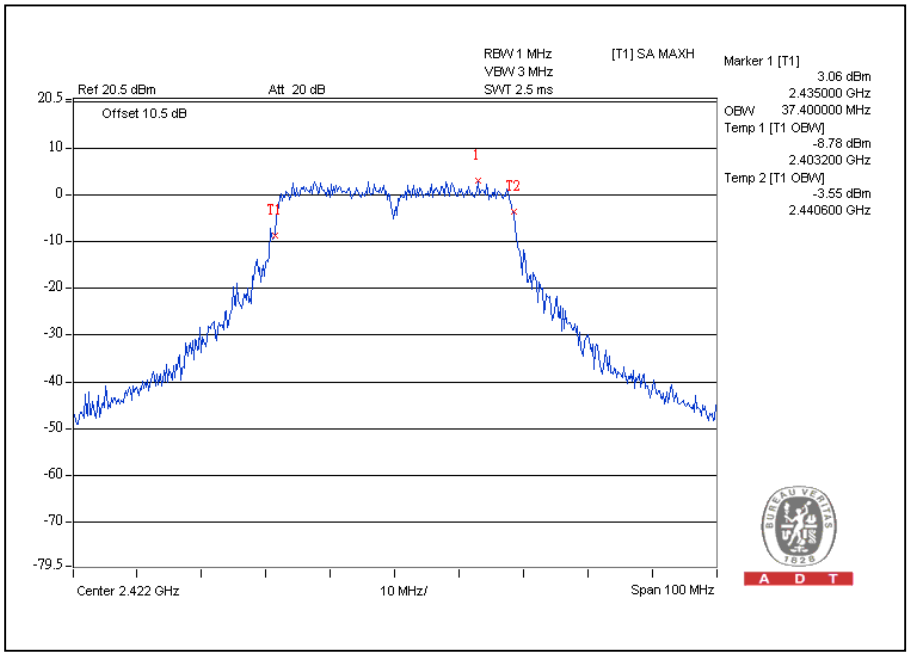
CH11


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
5.72 dBm
2.455900 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-5.31 dBm
2.452800 GHz
Temp 2 [T1 OBW]
-2.71 dBm
2.471100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

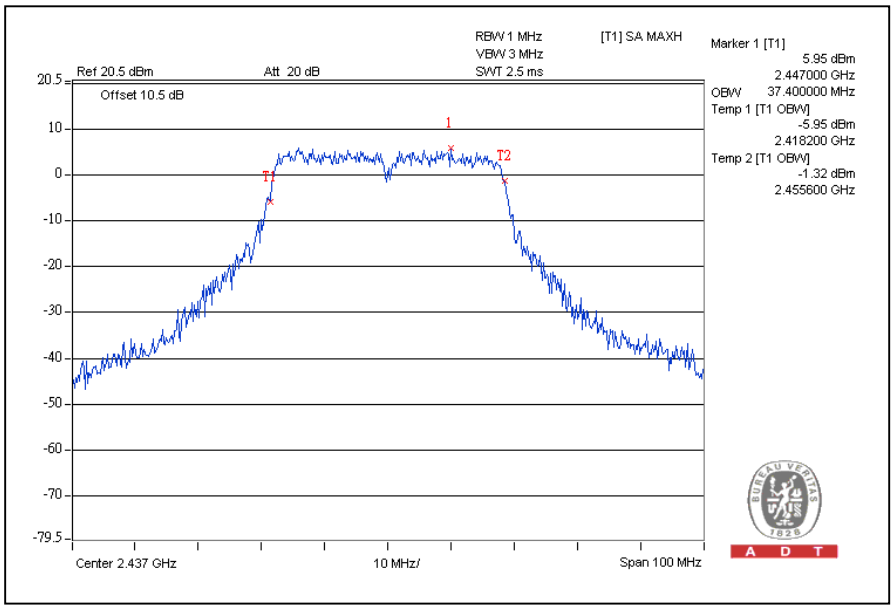
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2422	37.4
4	2437	37.4
7	2452	37.8

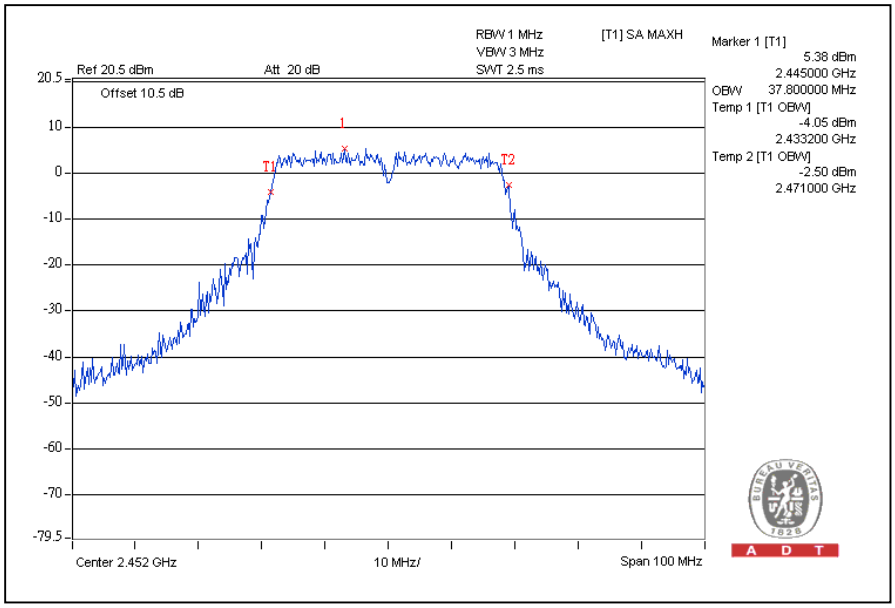
CH1



CH4


RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
5.95 dBm
2.447000 GHz
OBW 37.400000 MHz
Temp 1 [T1 OBW]
-5.95 dBm
2.418200 GHz
Temp 2 [T1 OBW]
-1.32 dBm
2.455600 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
10 MHz/
Span 100 MHz

CH7

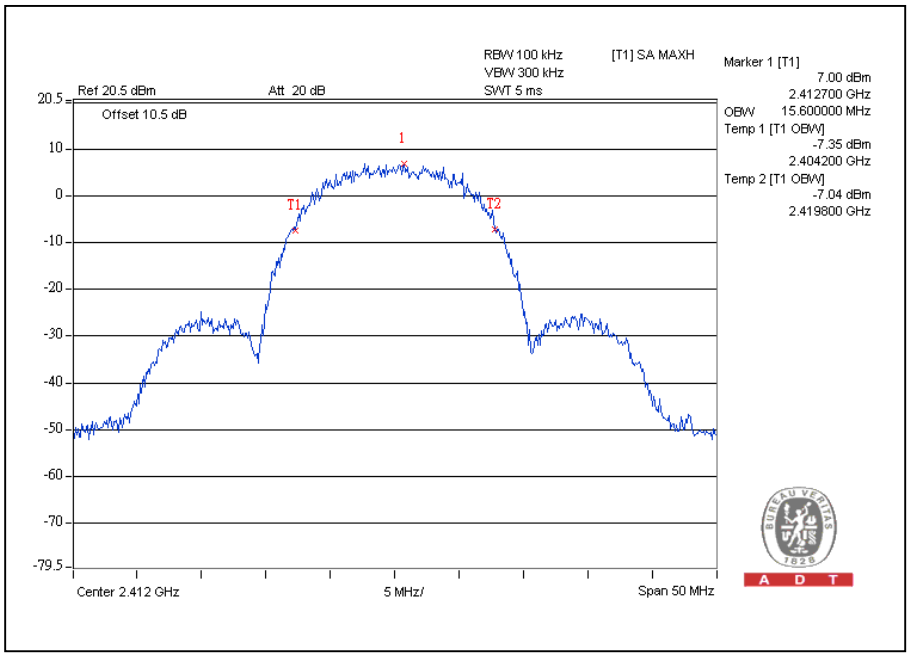

RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
5.38 dBm
2.445000 GHz
OBW 37.800000 MHz
Temp 1 [T1 OBW]
-4.05 dBm
2.433200 GHz
Temp 2 [T1 OBW]
-2.50 dBm
2.471000 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.452 GHz
10 MHz/
Span 100 MHz

4.4.6 TEST RESULTS (ANTENNA 2: PCB ANTENNA)

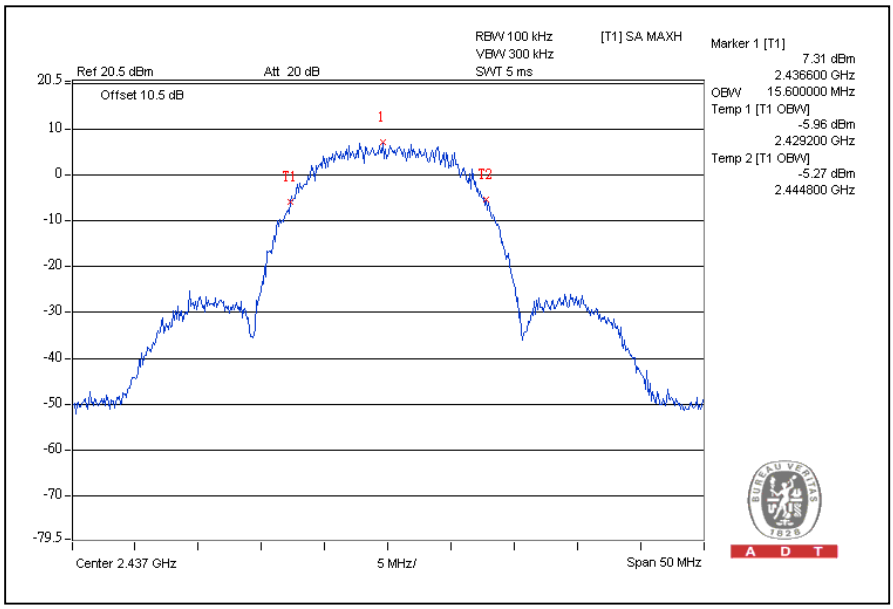
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	15.6
6	2437	15.6
11	2462	15.5

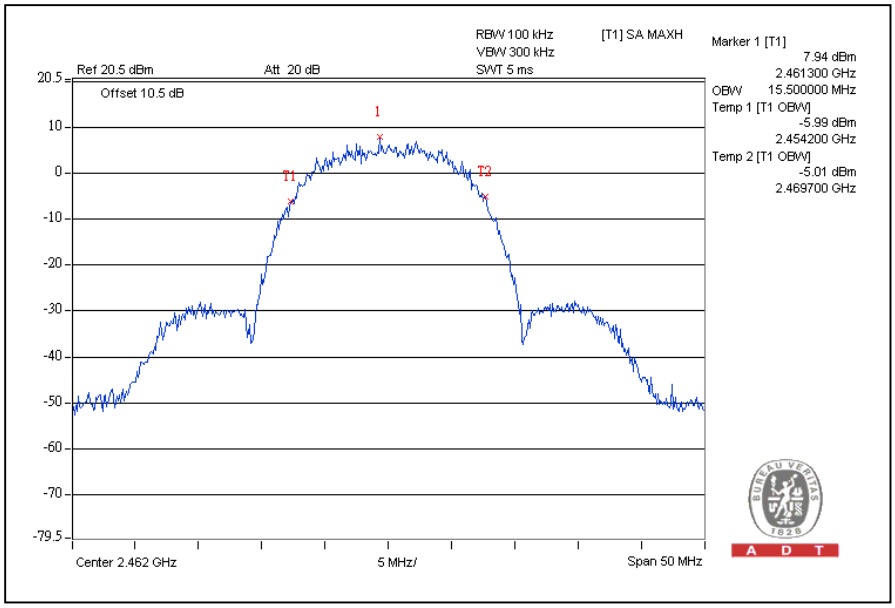
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.31 dBm
2.436600 GHz
OBW 15.600000 MHz
Temp 1 [T1 OBW]
-5.96 dBm
2.429200 GHz
Temp 2 [T1 OBW]
-5.27 dBm
2.444800 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

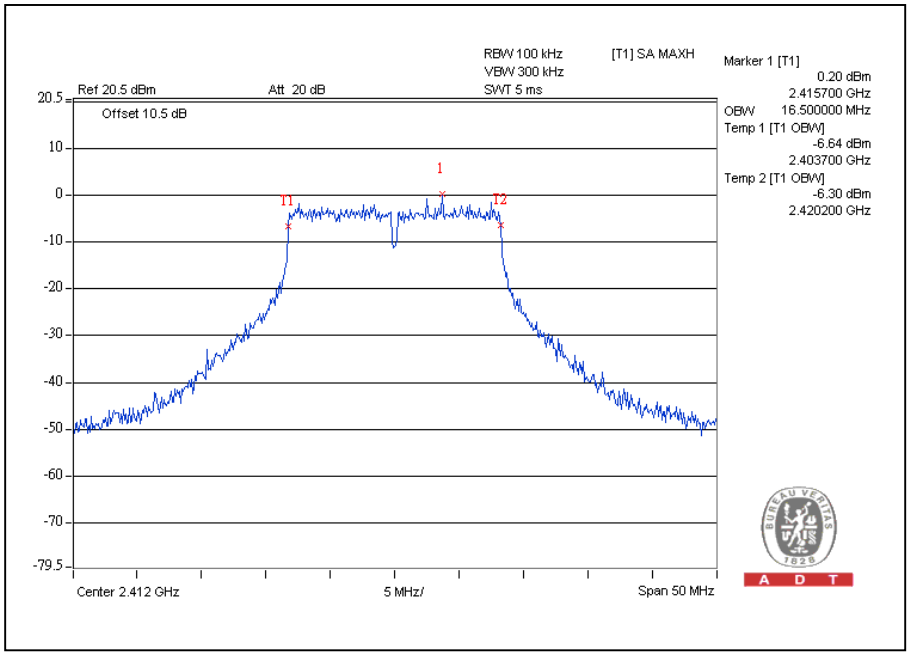
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.94 dBm
2.461300 GHz
OBW 15.500000 MHz
Temp 1 [T1 OBW]
-5.99 dBm
2.454200 GHz
Temp 2 [T1 OBW]
-5.01 dBm
2.469700 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

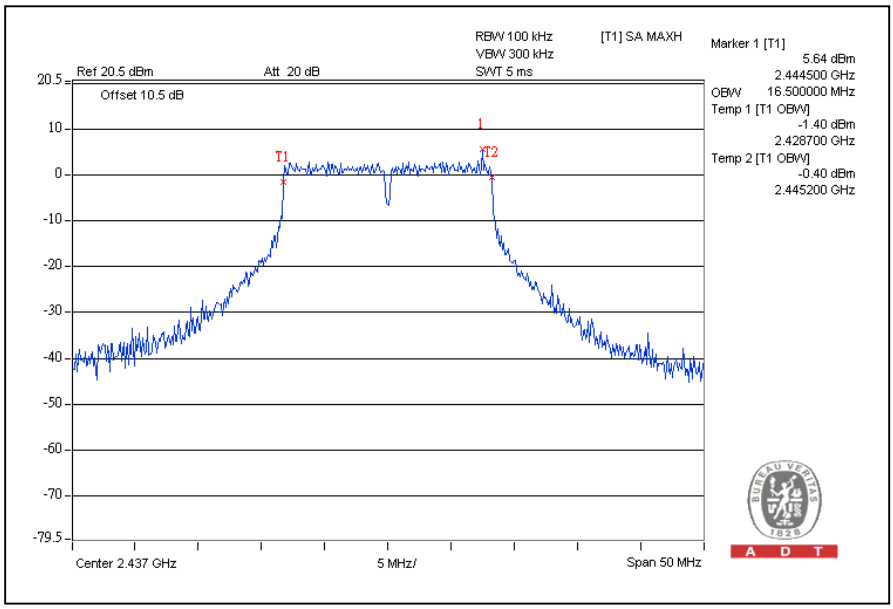
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	16.5
6	2437	16.5
11	2462	16.5

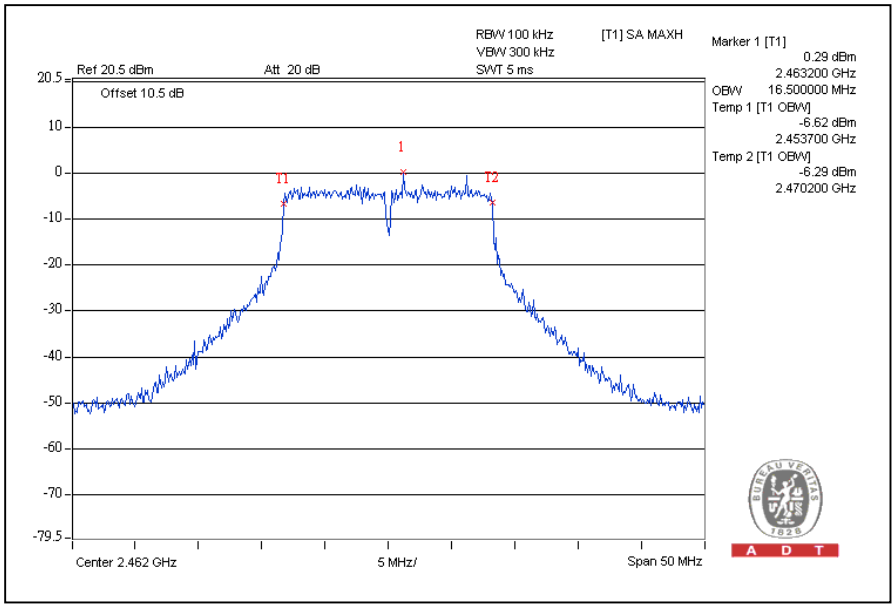
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
5.64 dBm
2.444500 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-1.40 dBm
2.428700 GHz
Temp 2 [T1 OBW]
-0.40 dBm
2.445200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.437 GHz
5 MHz/
Span 50 MHz

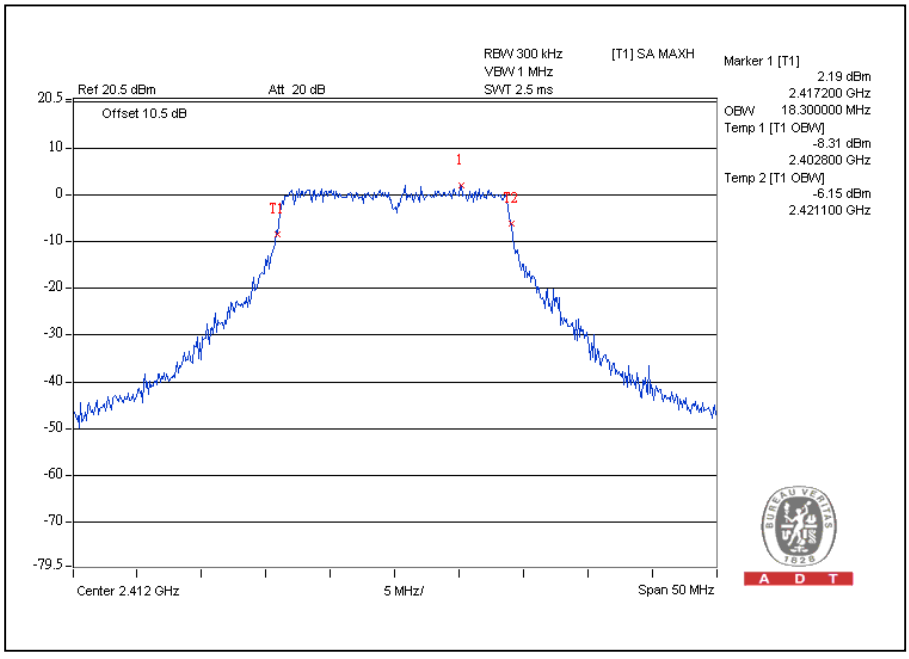
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
0.29 dBm
2.463200 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-6.62 dBm
2.453700 GHz
Temp 2 [T1 OBW]
-6.29 dBm
2.470200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.462 GHz
5 MHz/
Span 50 MHz

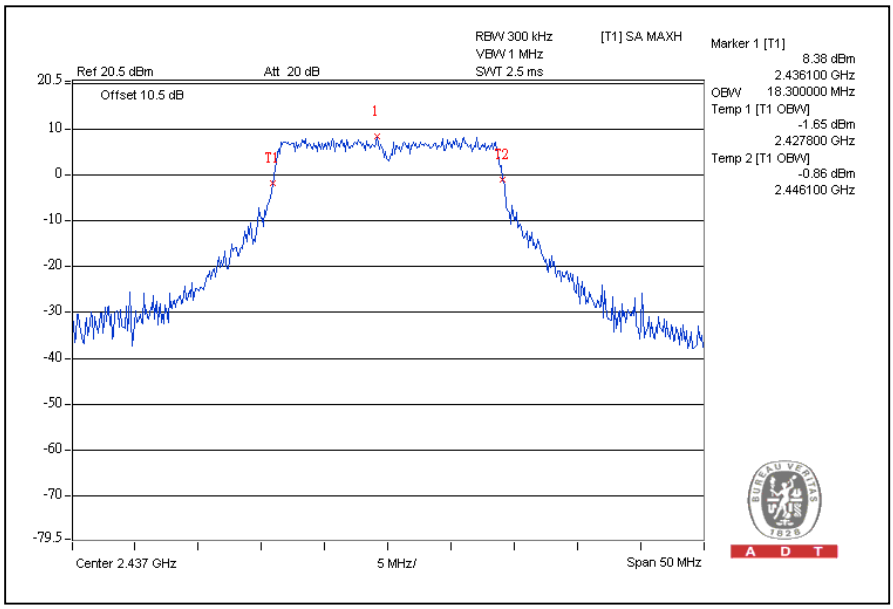
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	18.3
6	2437	18.3
11	2462	18.3

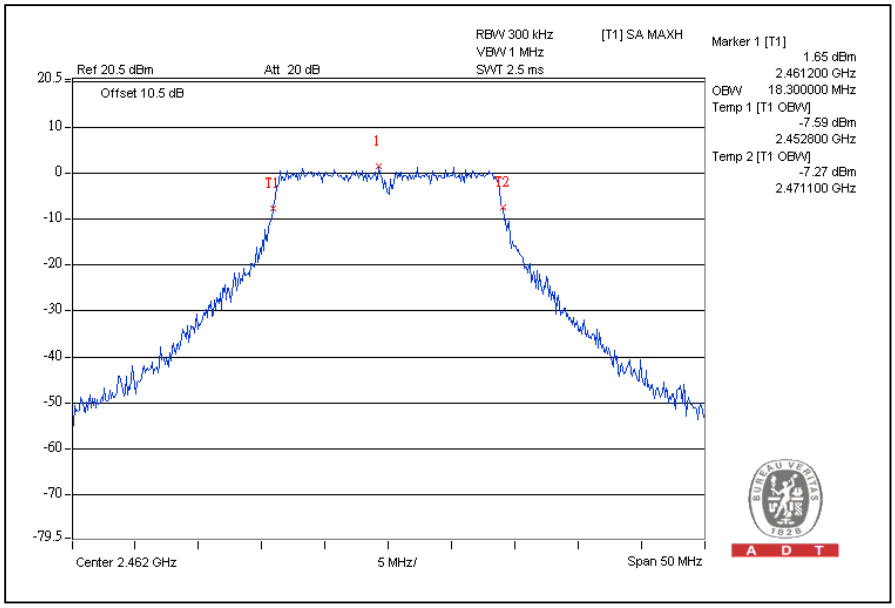
CH1



CH6


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
8.38 dBm
2.436100 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-1.65 dBm
2.427800 GHz
Temp 2 [T1 OBW]
-0.86 dBm
2.446100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

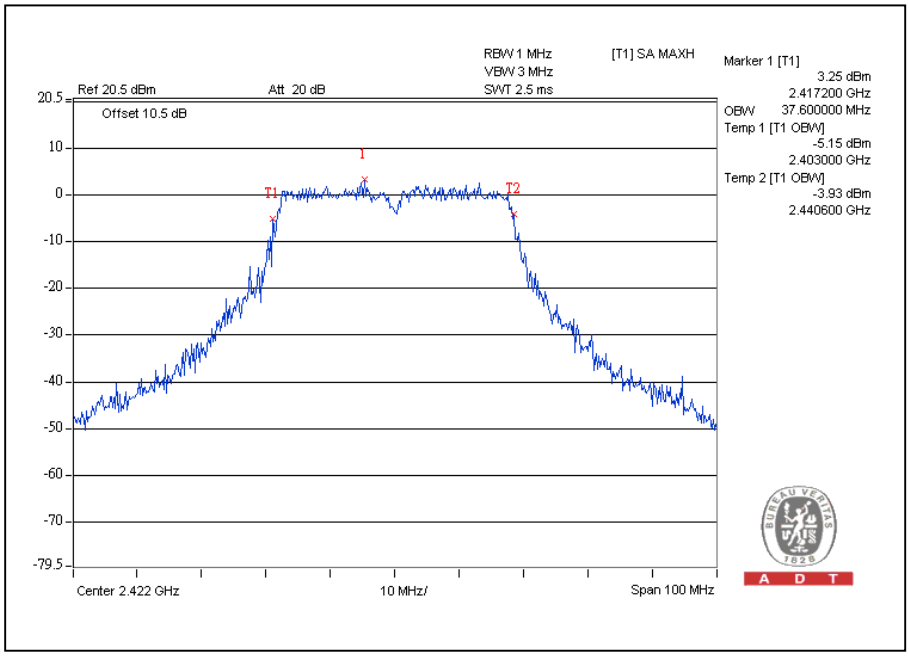
CH11


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
1.65 dBm
2.461200 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-7.59 dBm
2.452800 GHz
Temp 2 [T1 OBW]
-7.27 dBm
2.471100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

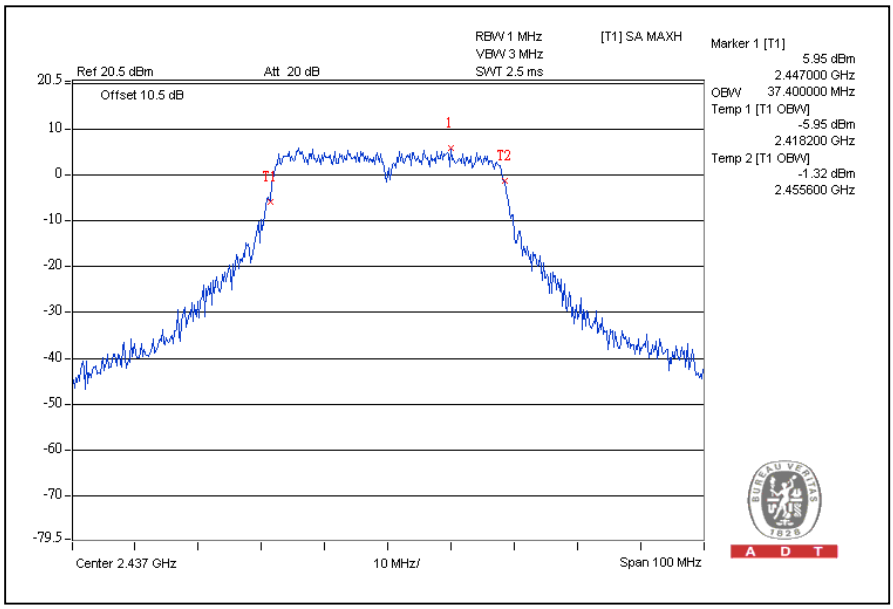
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2422	37.6
4	2437	37.4
7	2452	37.4

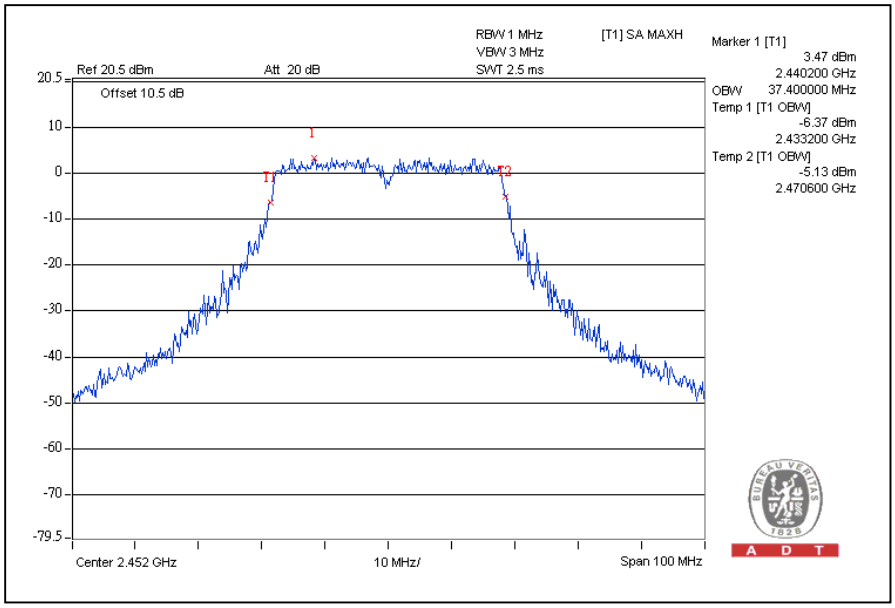
CH1



CH4


RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
5.95 dBm
2.447000 GHz
OBW 37.400000 MHz
Temp 1 [T1 OBW]
-5.95 dBm
2.418200 GHz
Temp 2 [T1 OBW]
-1.32 dBm
2.455600 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
10 MHz/
Span 100 MHz

CH7

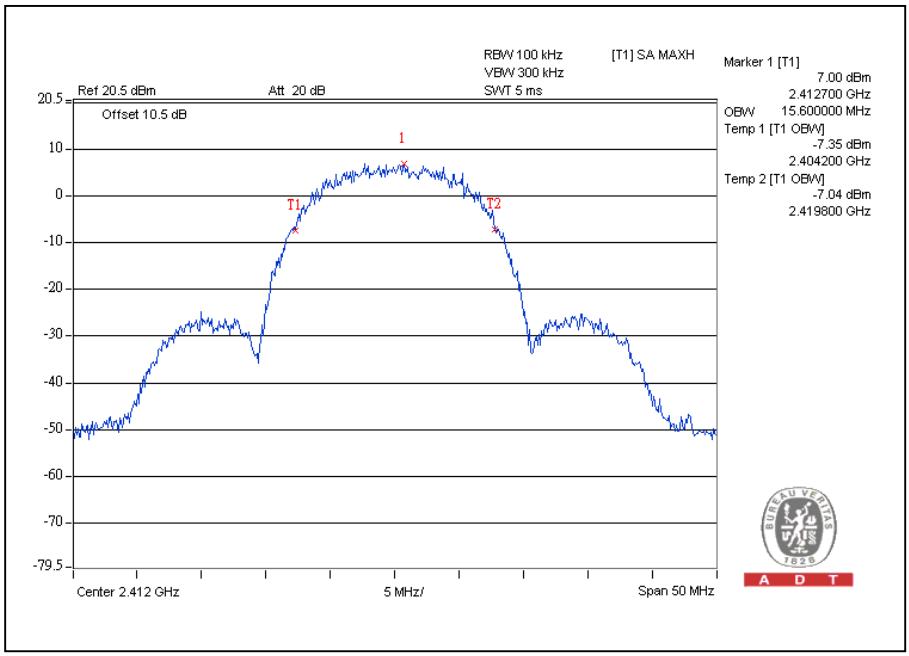

RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
3.47 dBm
2.440200 GHz
OBW 37.400000 MHz
Temp 1 [T1 OBW]
-6.37 dBm
2.433200 GHz
Temp 2 [T1 OBW]
-5.13 dBm
2.470600 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.452 GHz
10 MHz/
Span 100 MHz

4.4.7 TEST RESULTS (ANTENNA 3: PIFA ANTENNA)

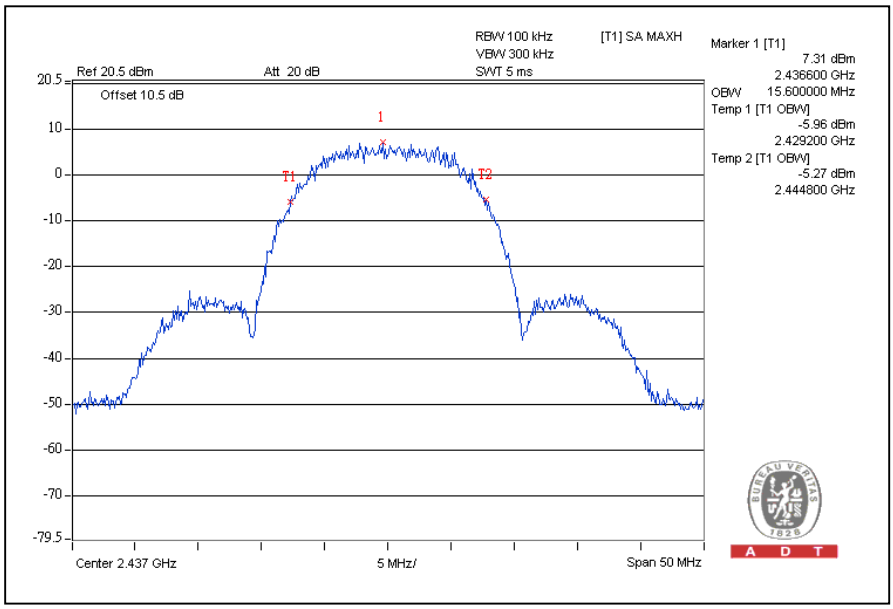
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	15.6
6	2437	15.6
11	2462	15.5

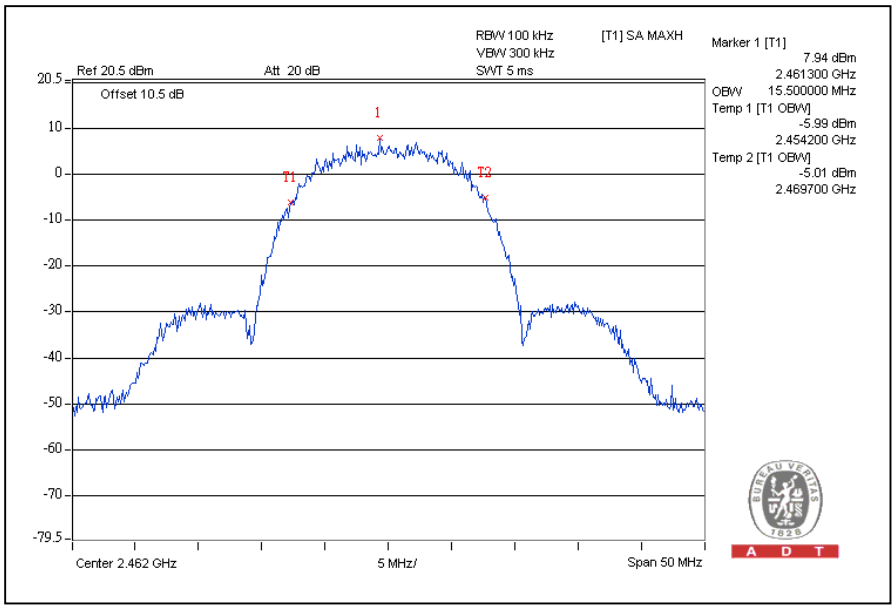
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.31 dBm
2.436600 GHz
OBW 15.600000 MHz
Temp 1 [T1 OBW]
-5.96 dBm
2.429200 GHz
Temp 2 [T1 OBW]
-5.27 dBm
2.444800 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

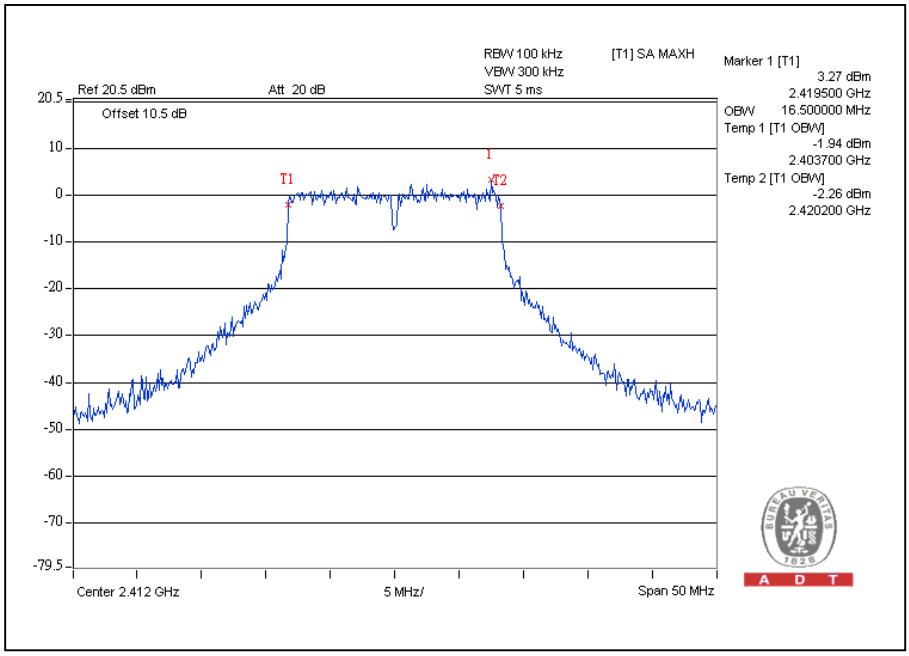
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.94 dBm
2.461300 GHz
OBW 15.500000 MHz
Temp 1 [T1 OBW]
-5.99 dBm
2.454200 GHz
Temp 2 [T1 OBW]
-5.01 dBm
2.469700 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

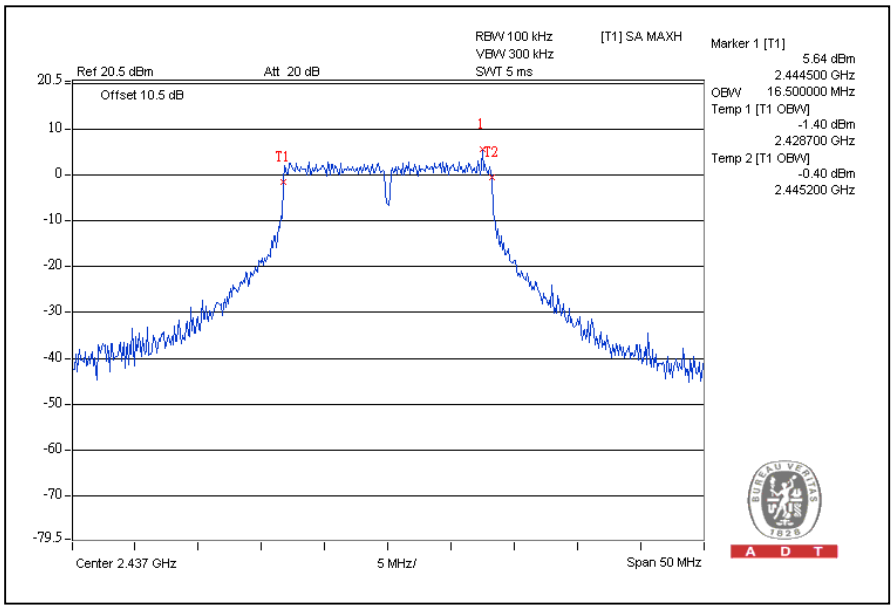
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	16.5
6	2437	16.5
11	2462	16.5

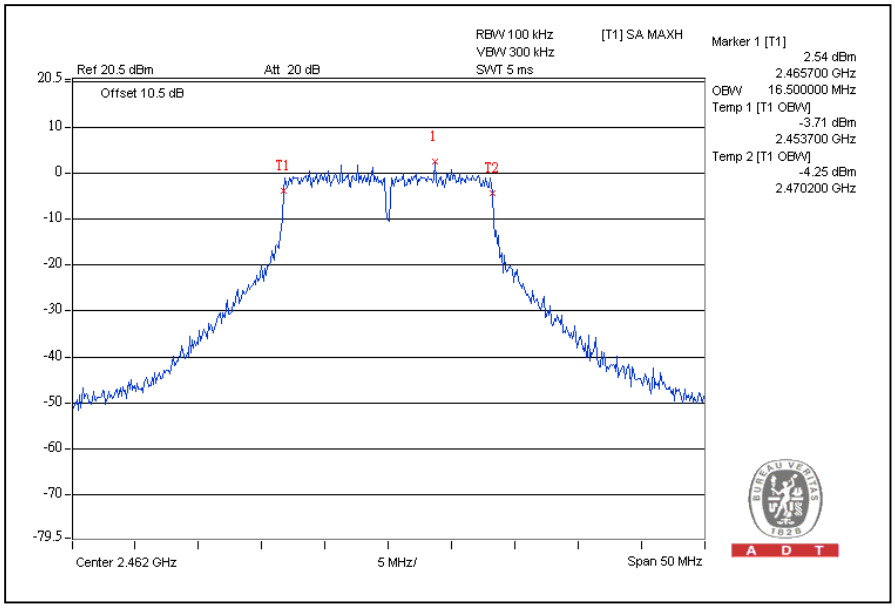
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
5.64 dBm
2.444500 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-1.40 dBm
2.428700 GHz
Temp 2 [T1 OBW]
-0.40 dBm
2.445200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.437 GHz
5 MHz/
Span 50 MHz

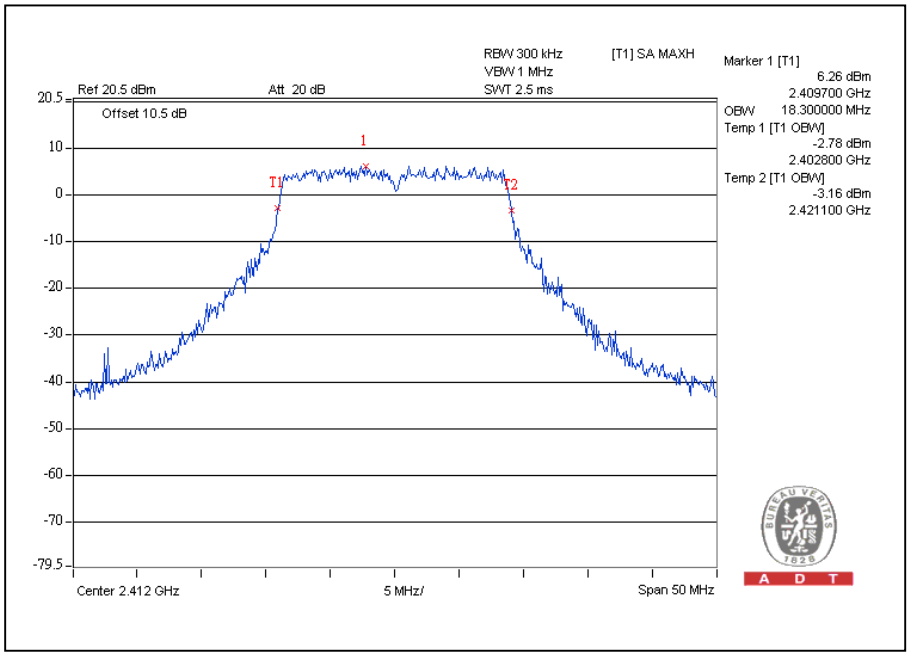
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
2.54 dBm
2.465700 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-3.71 dBm
2.453700 GHz
Temp 2 [T1 OBW]
-4.25 dBm
2.470200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.462 GHz
5 MHz/
Span 50 MHz

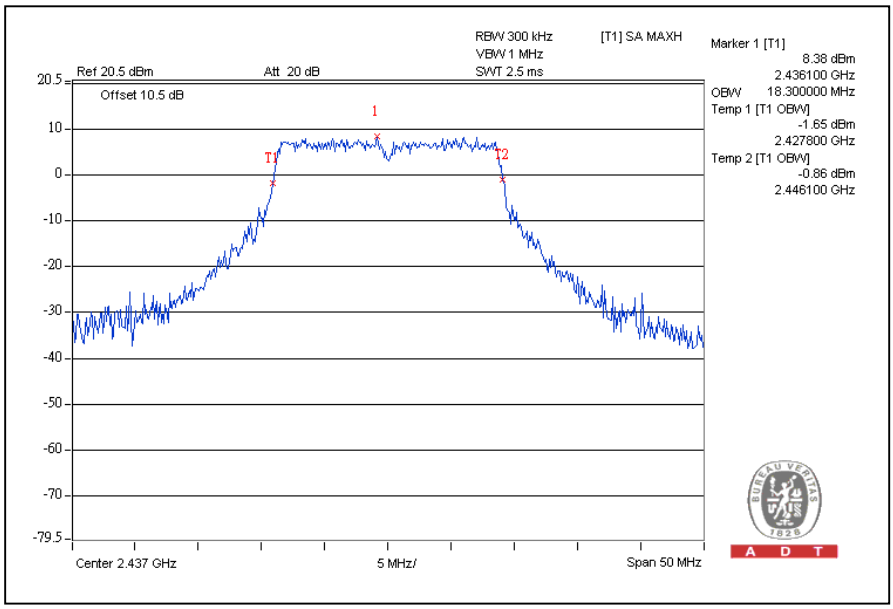
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	18.3
6	2437	18.3
11	2462	18.3

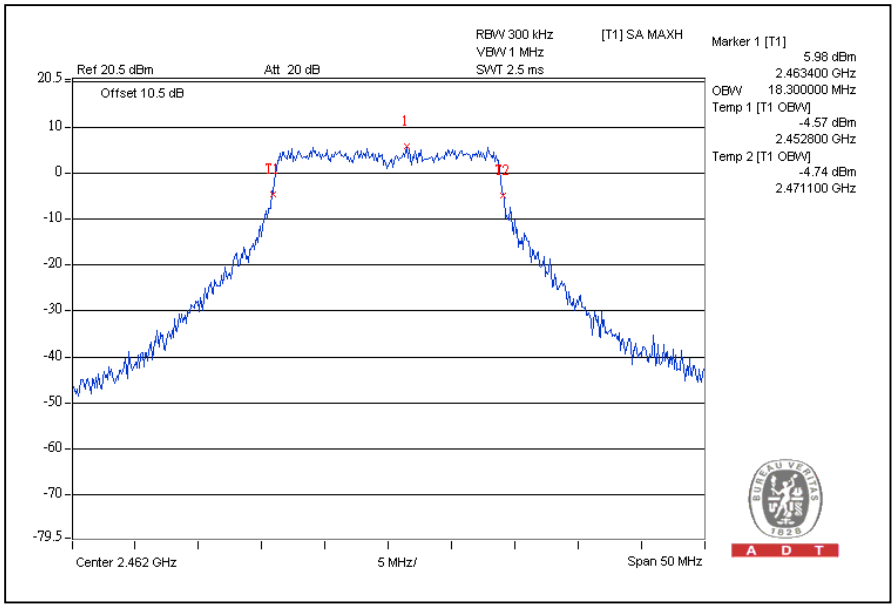
CH1



CH6


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
8.38 dBm
2.436100 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-1.65 dBm
2.427800 GHz
Temp 2 [T1 OBW]
-0.86 dBm
2.446100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

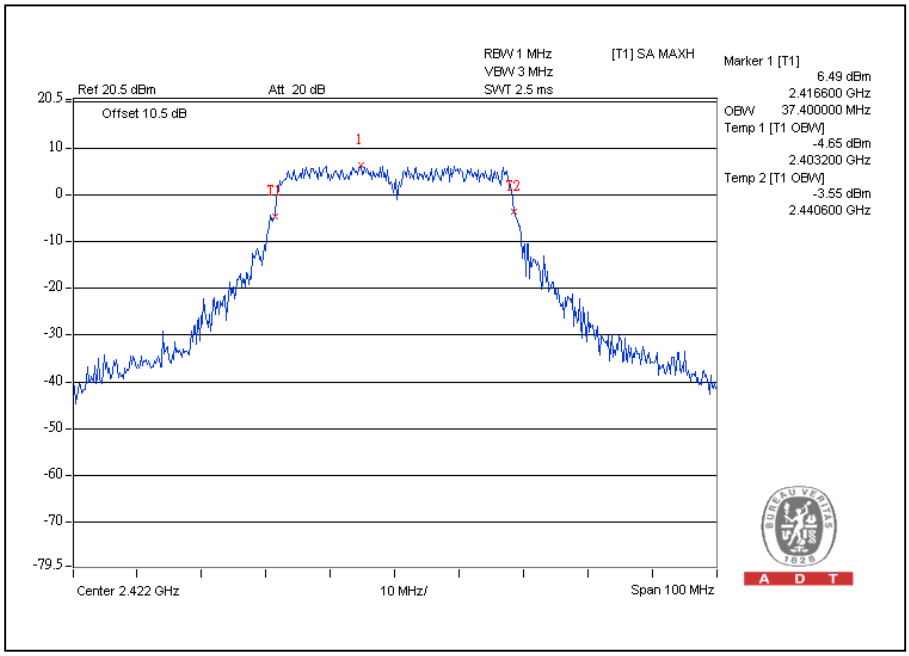
CH11


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
5.98 dBm
2.463400 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-4.57 dBm
2.452800 GHz
Temp 2 [T1 OBW]
-4.74 dBm
2.471100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

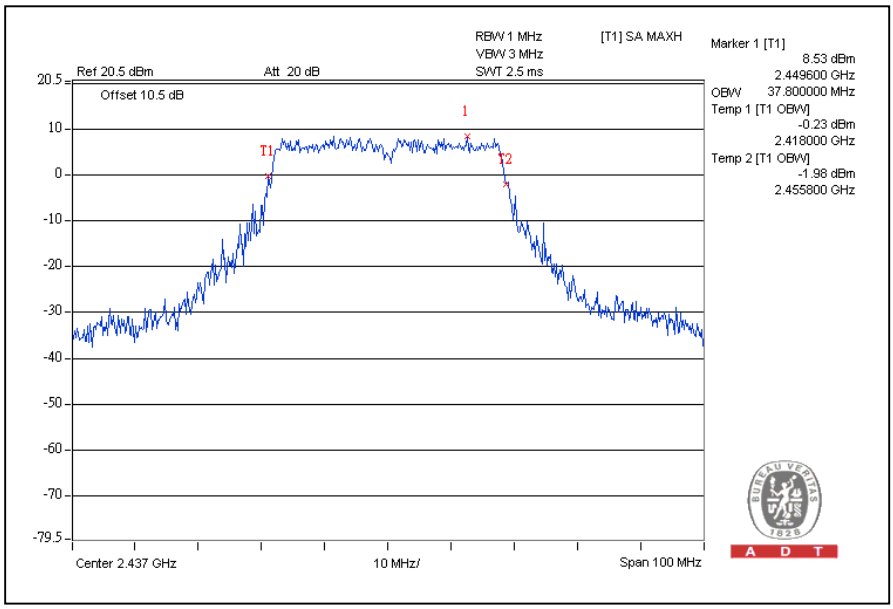
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2422	37.4
4	2437	37.8
7	2452	37.4

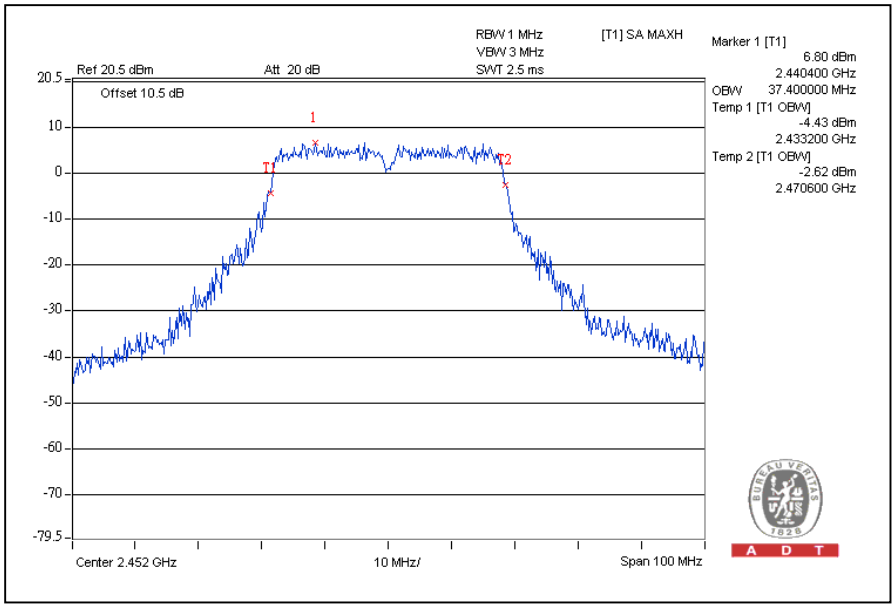
CH1



CH4


RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
8.53 dBm
2.449600 GHz
OBW 37.800000 MHz
Temp 1 [T1 OBW]
-0.23 dBm
2.418000 GHz
Temp 2 [T1 OBW]
-1.98 dBm
2.455800 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
10 MHz/
Span 100 MHz

CH7

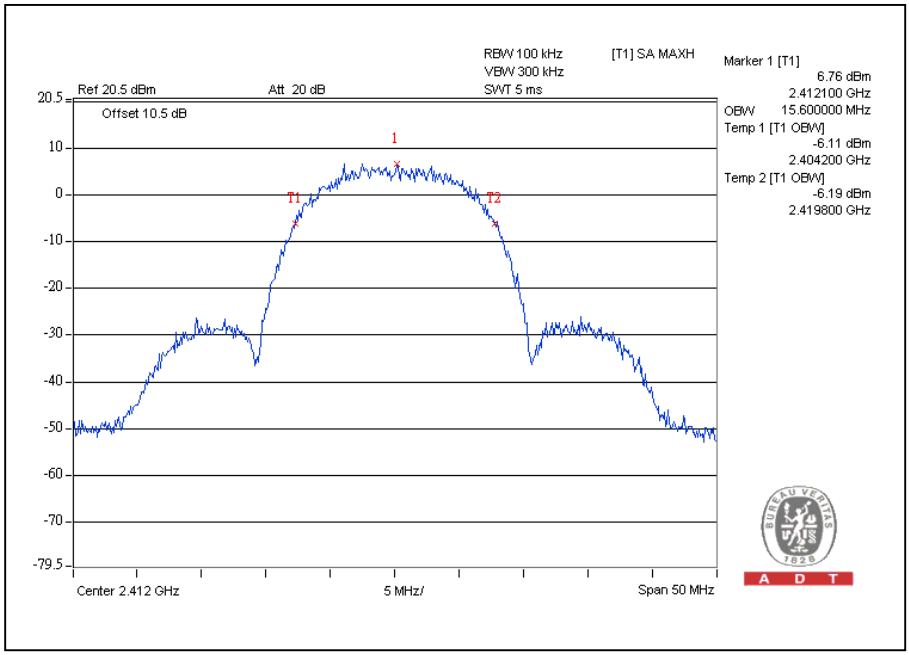

RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
6.80 dBm
2.440400 GHz
OBW 37.400000 MHz
Temp 1 [T1 OBW]
-4.43 dBm
2.433200 GHz
Temp 2 [T1 OBW]
-2.62 dBm
2.470600 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.452 GHz
10 MHz/
Span 100 MHz

4.4.8 TEST RESULTS (ANTENNA 4: PIFA ANTENNA)

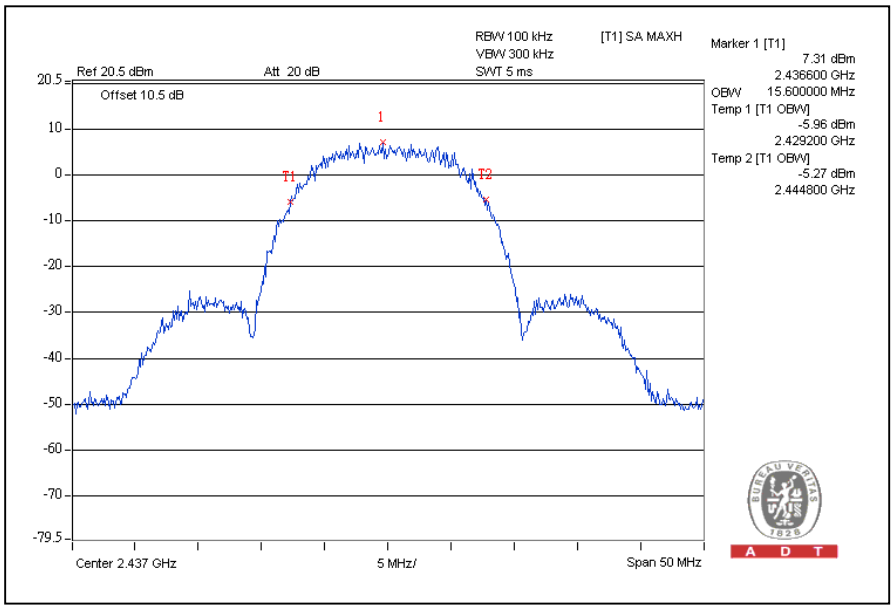
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	15.6
6	2437	15.6
11	2462	15.5

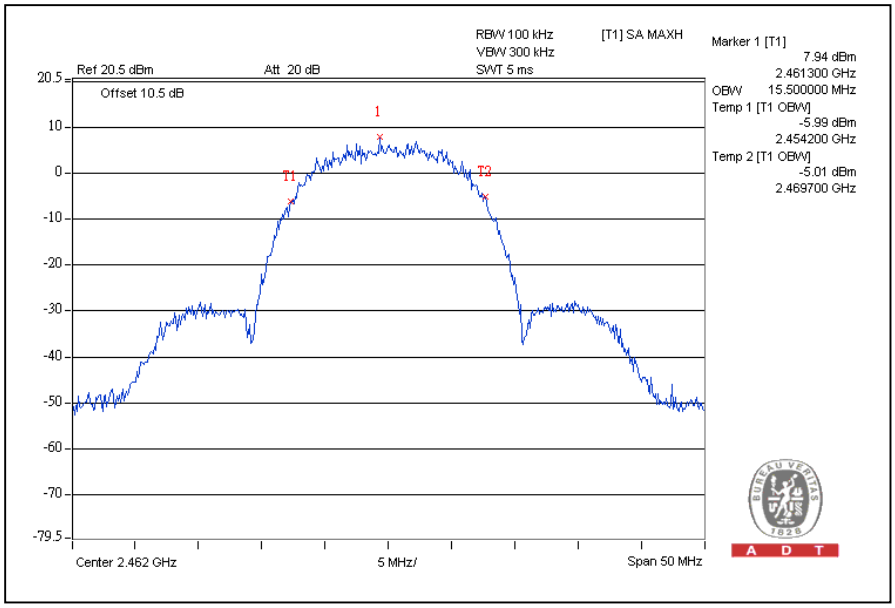
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.31 dBm
2.436600 GHz
OBW 15.600000 MHz
Temp 1 [T1 OBW]
-5.96 dBm
2.429200 GHz
Temp 2 [T1 OBW]
-5.27 dBm
2.444800 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

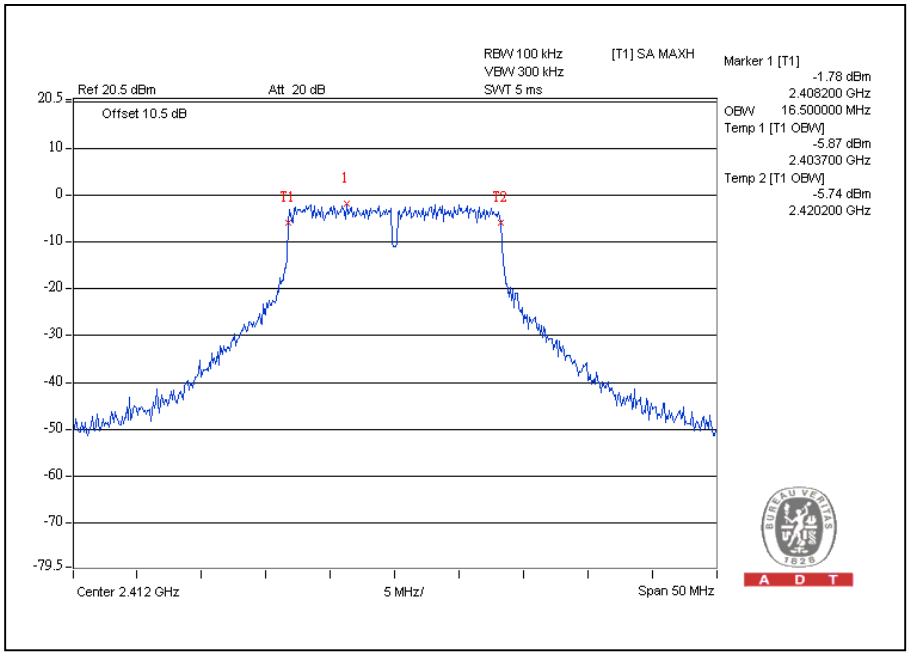
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
7.94 dBm
2.461300 GHz
OBW 15.500000 MHz
Temp 1 [T1 OBW]
-5.99 dBm
2.454200 GHz
Temp 2 [T1 OBW]
-5.01 dBm
2.469700 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

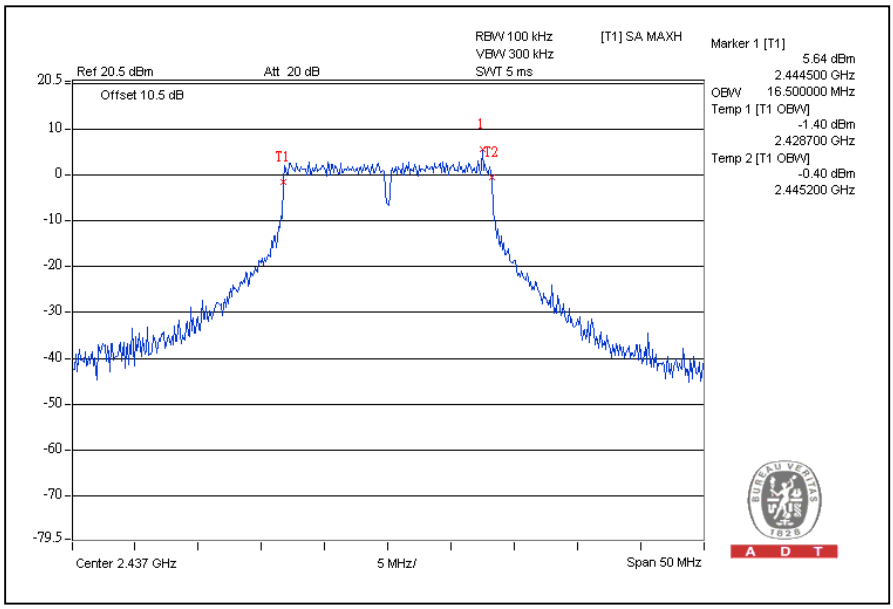
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	16.5
6	2437	16.5
11	2462	16.5

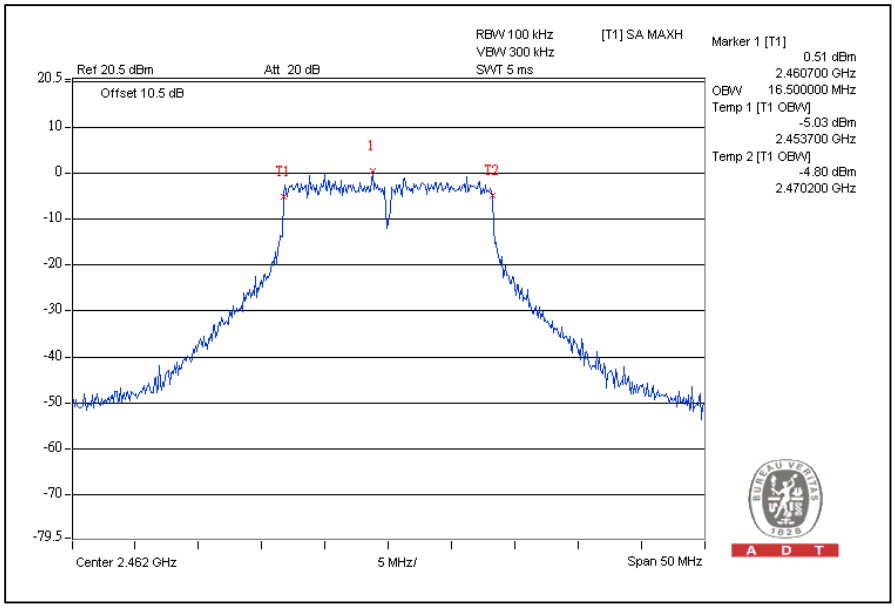
CH1



CH6


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
5.64 dBm
2.444500 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-1.40 dBm
2.428700 GHz
Temp 2 [T1 OBW]
-0.40 dBm
2.445200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.437 GHz
5 MHz/
Span 50 MHz

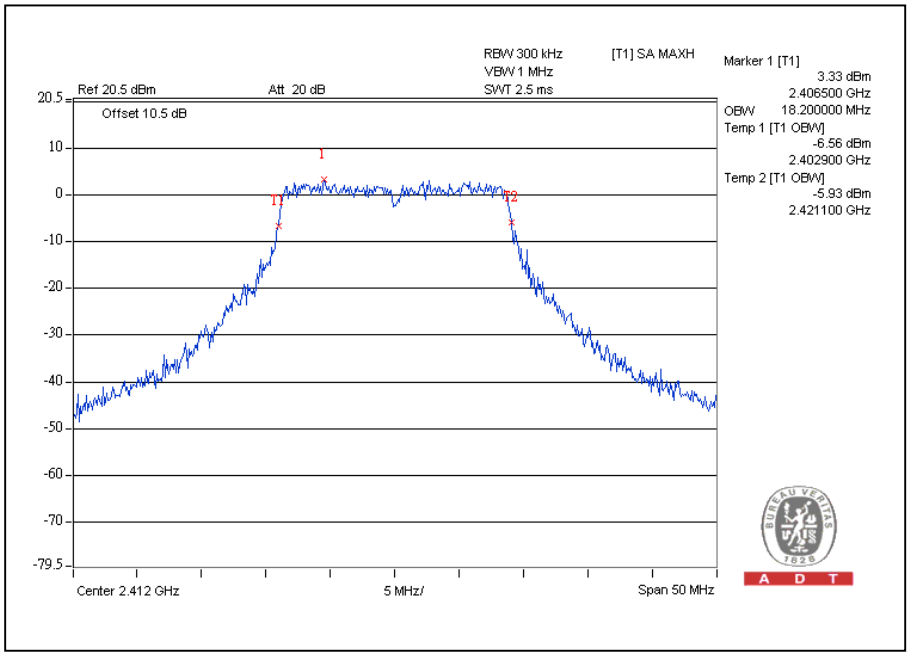
CH11


RBW 100 kHz
VBW 300 kHz
SWT 5 ms
[T1] SA MAXH
Marker 1 [T1]
0.51 dBm
2.460700 GHz
OBW 16.500000 MHz
Temp 1 [T1 OBW]
-5.03 dBm
2.453700 GHz
Temp 2 [T1 OBW]
-4.80 dBm
2.470200 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
T1
T2
1
Center 2.462 GHz
5 MHz/
Span 50 MHz

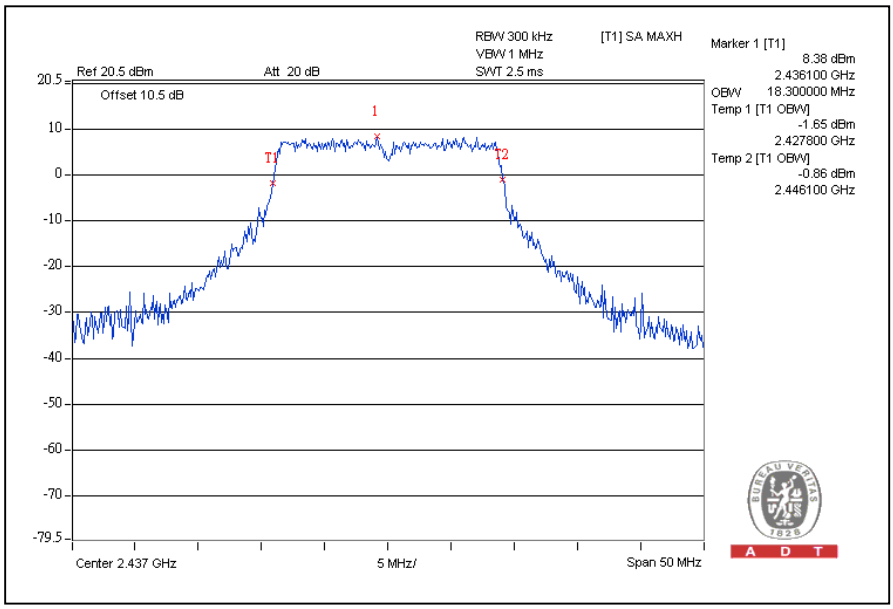
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2412	18.2
6	2437	18.3
11	2462	18.3

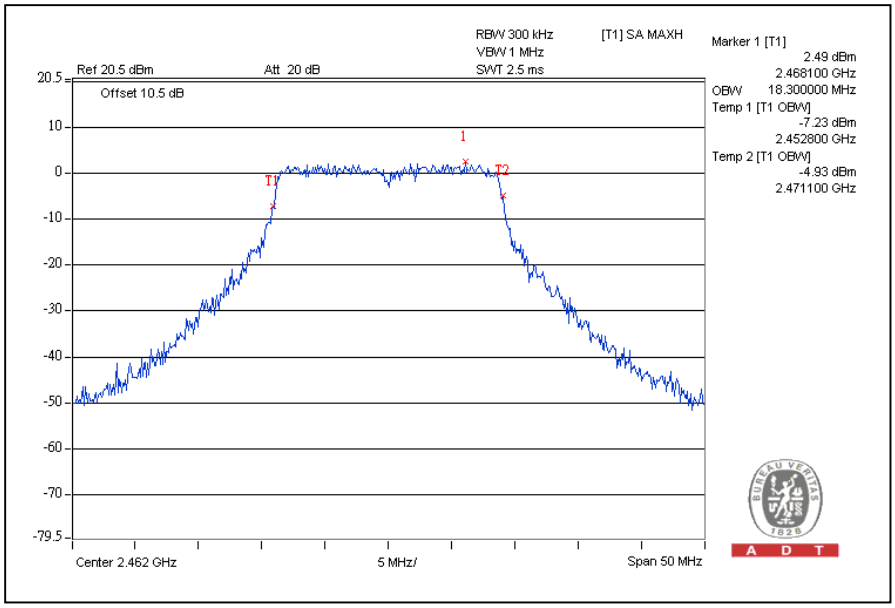
CH1



CH6


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
8.38 dBm
2.436100 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-1.65 dBm
2.427800 GHz
Temp 2 [T1 OBW]
-0.86 dBm
2.446100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
5 MHz/
Span 50 MHz

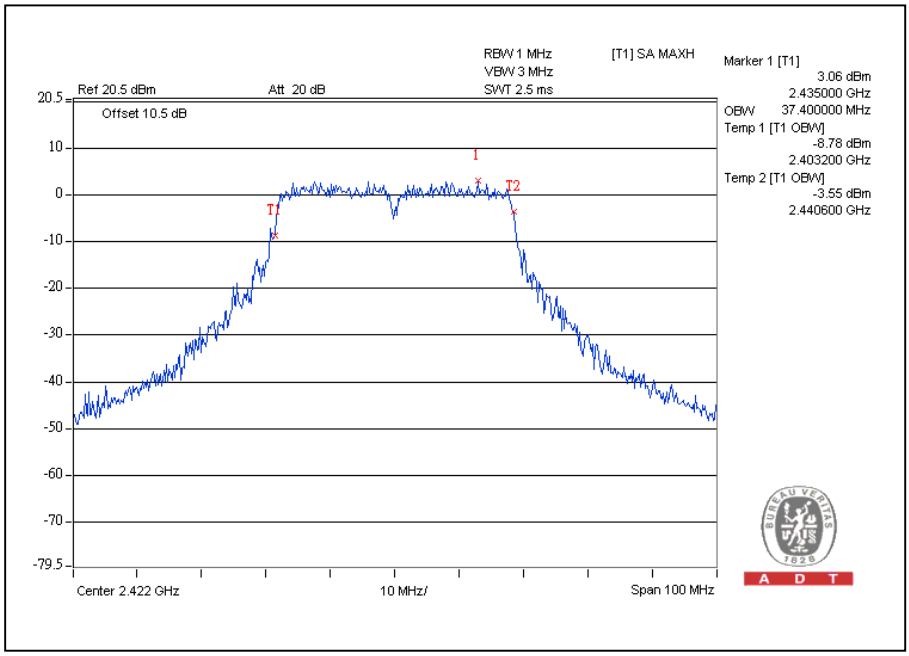
CH11


RBW 300 kHz
VBW 1 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
2.49 dBm
2.468100 GHz
OBW 18.300000 MHz
Temp 1 [T1 OBW]
-7.23 dBm
2.452800 GHz
Temp 2 [T1 OBW]
-4.93 dBm
2.471100 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.462 GHz
5 MHz/
Span 50 MHz

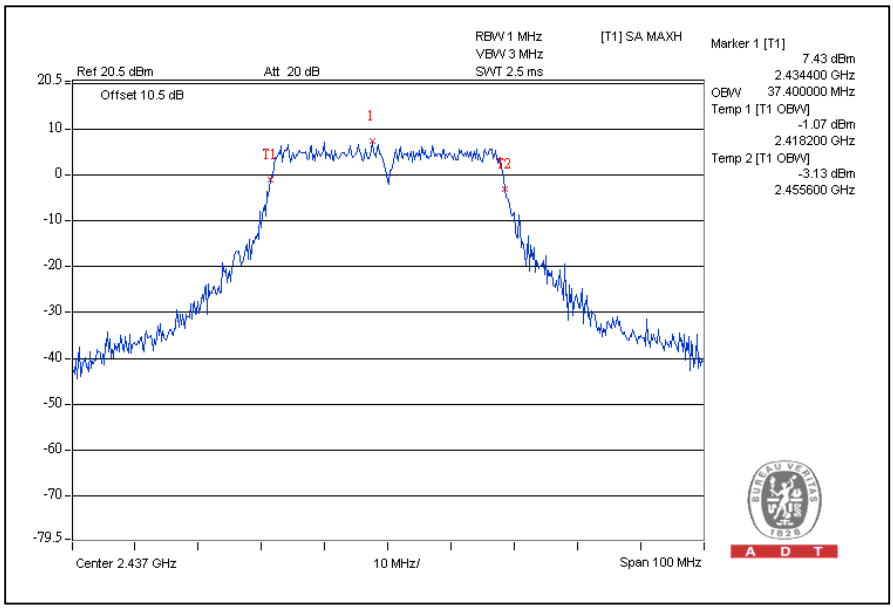
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	99% BANDWIDTH (MHz)
1	2422	37.4
4	2437	37.4
7	2452	37.4

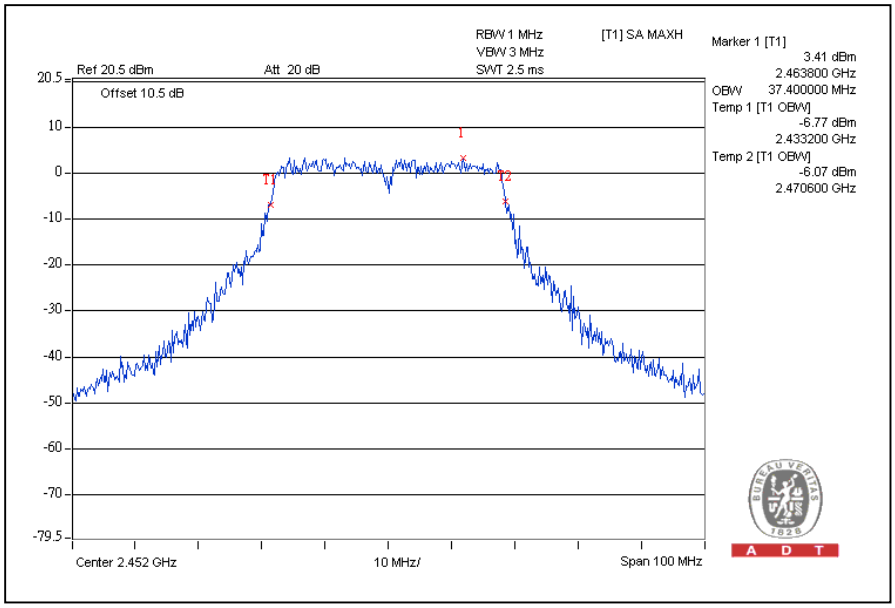
CH1



CH4


RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
7.43 dBm
2.434400 GHz
OBW 37.400000 MHz
Temp 1 [T1 OBW]
-1.07 dBm
2.418200 GHz
Temp 2 [T1 OBW]
-3.13 dBm
2.455600 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.437 GHz
10 MHz/
Span 100 MHz

CH7


RBW 1 MHz
VBW 3 MHz
SWT 2.5 ms
[T1] SA MAXH
Marker 1 [T1]
3.41 dBm
2.463800 GHz
OBW 37.400000 MHz
Temp 1 [T1 OBW]
-6.77 dBm
2.433200 GHz
Temp 2 [T1 OBW]
-6.07 dBm
2.470600 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.452 GHz
10 MHz/
Span 100 MHz

4.5 MAXIMUM PEAK OUTPUT POWER

4.5.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.5.2 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.

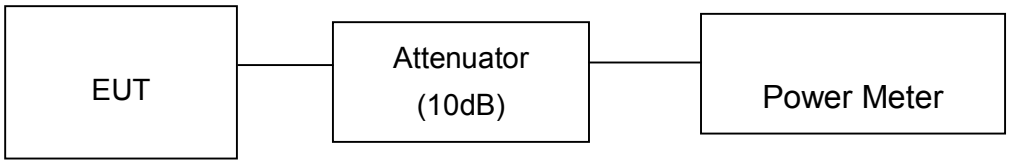
4.5.3 TEST PROCEDURES

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.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.5.7 TEST RESULTS (ANTENNA 1: PCB ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	112.2	20.5	30	PASS
6	2437	107.2	20.3	30	PASS
11	2462	107.2	20.3	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	109.6	20.4	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	229.1	23.6	30	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	85.1	19.3	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	213.8	23.3	30	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	64.6	18.1	30	PASS
4	2437	134.9	21.3	30	PASS
7	2452	117.5	20.7	30	PASS

4.5.8 TEST RESULTS (ANTENNA 2: PCB ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	112.2	20.5	30	PASS
6	2437	107.2	20.3	30	PASS
11	2462	107.2	20.3	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	120.2	20.8	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	114.8	20.6	30	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	97.7	19.9	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	83.2	19.2	30	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	56.2	17.5	30	PASS
4	2437	134.9	21.3	30	PASS
7	2452	74.1	18.7	30	PASS

4.5.9 TEST RESULTS (ANTENNA 3: PIFA ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	112.2	20.5	30	PASS
6	2437	107.2	20.3	30	PASS
11	2462	107.2	20.3	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	295.1	24.7	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	251.2	24.0	30	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	275.4	24.4	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	229.1	23.6	30	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	208.9	23.2	30	PASS
4	2437	275.4	24.4	30	PASS
7	2452	204.2	23.1	30	PASS

4.5.10 TEST RESULTS (ANTENNA 4: PIFA ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	102.3	20.1	30	PASS
6	2437	107.2	20.3	30	PASS
11	2462	107.2	20.3	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	162.2	22.1	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	158.5	22.0	30	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	151.4	21.8	30	PASS
6	2437	380.2	25.8	30	PASS
11	2462	141.3	21.5	30	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	64.6	18.1	30	PASS
4	2437	208.9	23.2	30	PASS
7	2452	70.8	18.5	30	PASS

4.6 AVERAGE OUTPUT POWER

4.6.1 FOR REFERENCE

4.6.2 TEST INSTRUMENTS

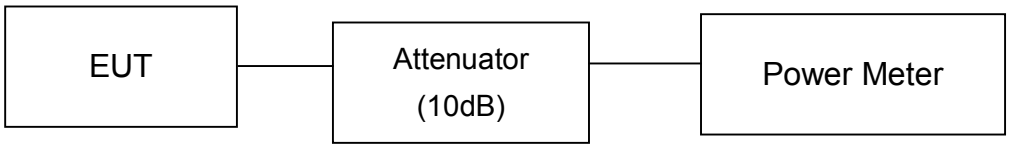
DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Anritsu Power Meter	ML2495A	0824006	May 04, 2010	May 03, 2011
Pulse Power Sensor	MA2411B	0738172	May 04, 2010	May 03, 2011

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

4.6.3 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 average power level.

4.6.4 TEST SETUP



4.6.5 EUT OPERATING CONDITIONS

Same as Item 4.3.5

4.6.6 TEST RESULTS (ANTENNA 1 : PCB ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	18.3
6	2437	18.0
11	2462	18.0

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	12.0
6	2437	18.2
11	2462	15.5

802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	10.8
6	2437	18.1
11	2462	15.1

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2422	9.6
4	2437	12.9
7	2452	12.1

4.6.7 TEST RESULTS (ANTENNA 2 : PCB ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	18.3
6	2437	18.0
11	2462	18.0

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	12.4
6	2437	18.2
11	2462	12.2

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	11.3
6	2437	18.1
11	2462	10.8

802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2422	9.0
4	2437	12.9
7	2452	10.2

4.6.8 TEST RESULTS (ANTENNA 3 : PIFA ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	18.3
6	2437	18.0
11	2462	18.0

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	15.9
6	2437	18.2
11	2462	15.2

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	15.3
6	2437	18.1
11	2462	14.7

802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2422	13.1
4	2437	15.2
7	2452	13.2

4.6.9 TEST RESULTS (ANTENNA 4 : PIFA ANTENNA)

802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	17.8
6	2437	18.0
11	2462	18.0

802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	13.0
6	2437	18.2
11	2462	12.9

802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	12.5
6	2437	18.1
11	2462	11.9

802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2422	9.6
4	2437	13.3
7	2452	9.6

4.7 POWER SPECTRAL DENSITY MEASUREMENT

4.7.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.7.2 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.

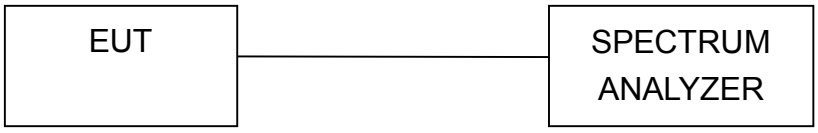
4.7.3 TEST PROCEDURE

1. 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.
2. The measurement include through a combiner with both chain and each chain when operate simultaneously.

4.7.4 DEVIATION FROM TEST STANDARD

No deviation

4.7.5 TEST SETUP



4.7.6 EUT OPERATING CONDITION

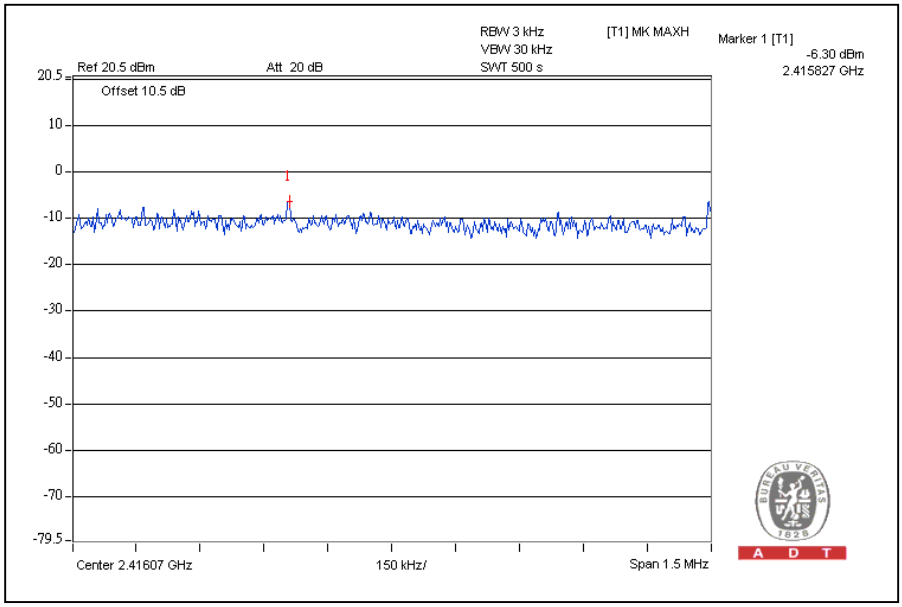
Same as Item 4.3.6

4.7.7 TEST RESULTS (ANTENNA 1: PCB ANTENNA)

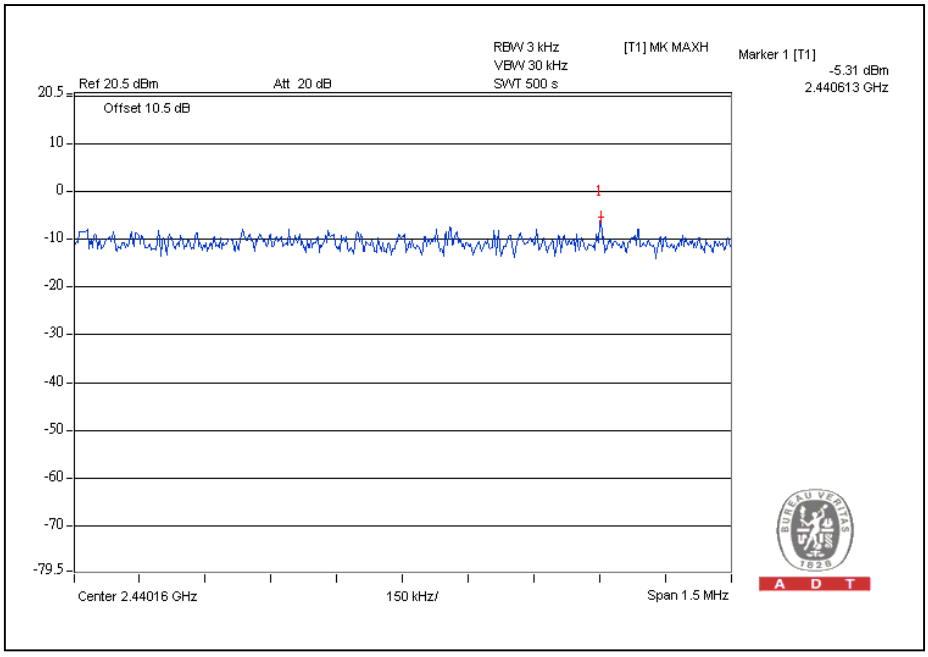
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-6.3	8	PASS
6	2437	-5.3	8	PASS
11	2462	-6.2	8	PASS

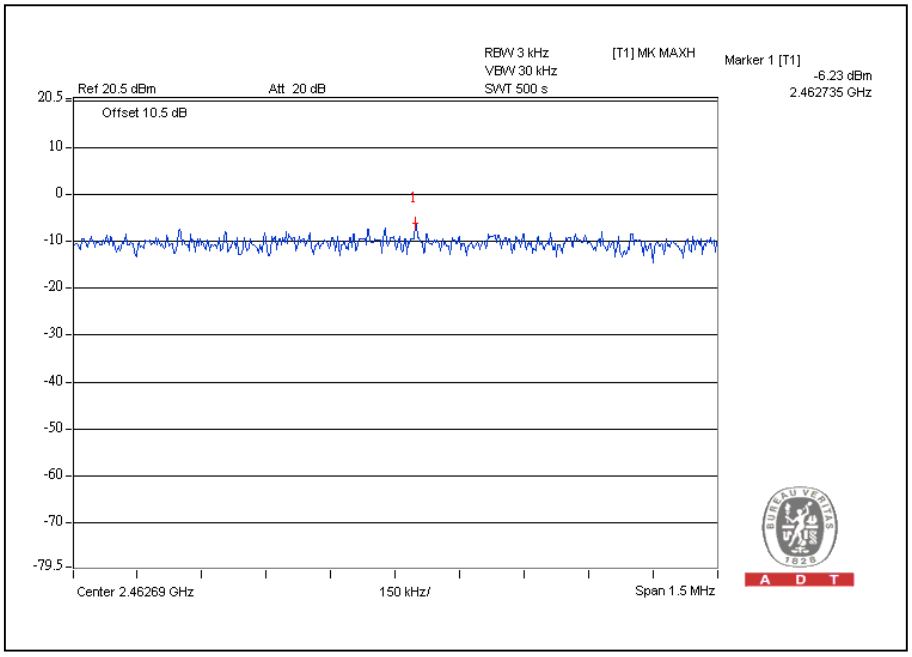
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-5.31 dBm
2.440613 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44016 GHz
150 kHz/
Span 1.5 MHz

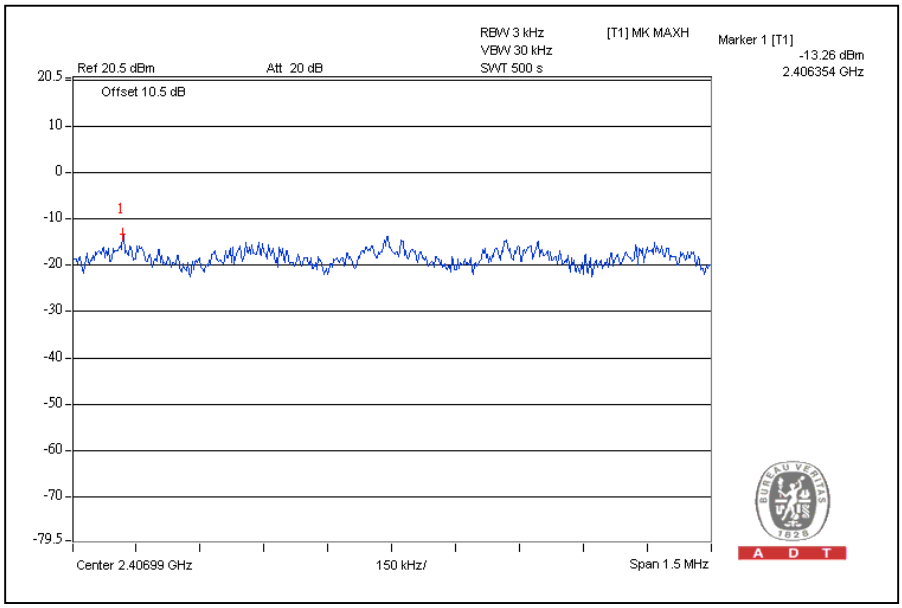
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-6.23 dBm
2.462735 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46269 GHz
150 kHz/
Span 1.5 MHz

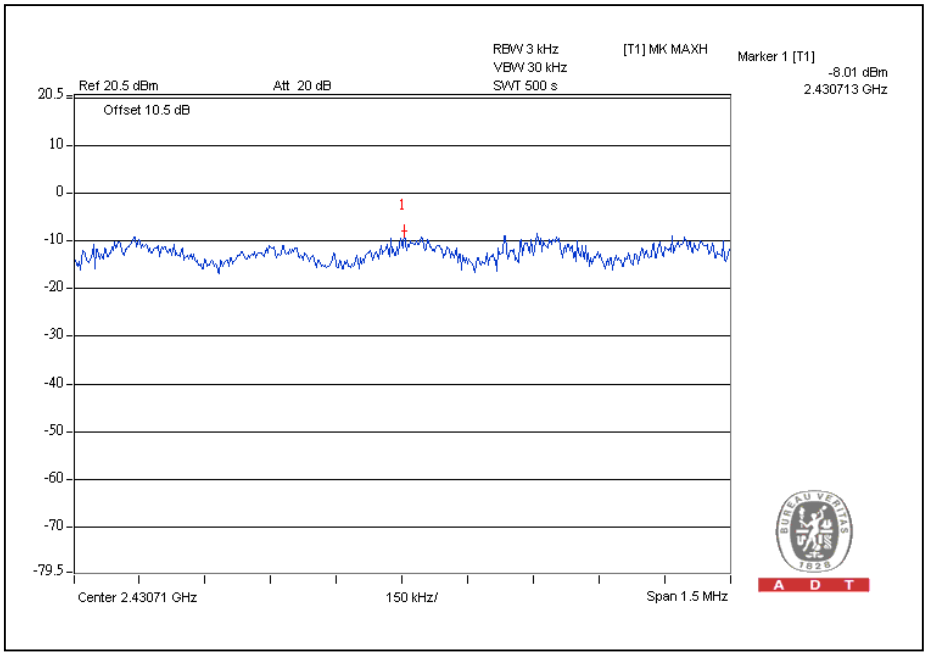
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-13.3	8	PASS
6	2437	-8.0	8	PASS
11	2462	-10.0	8	PASS

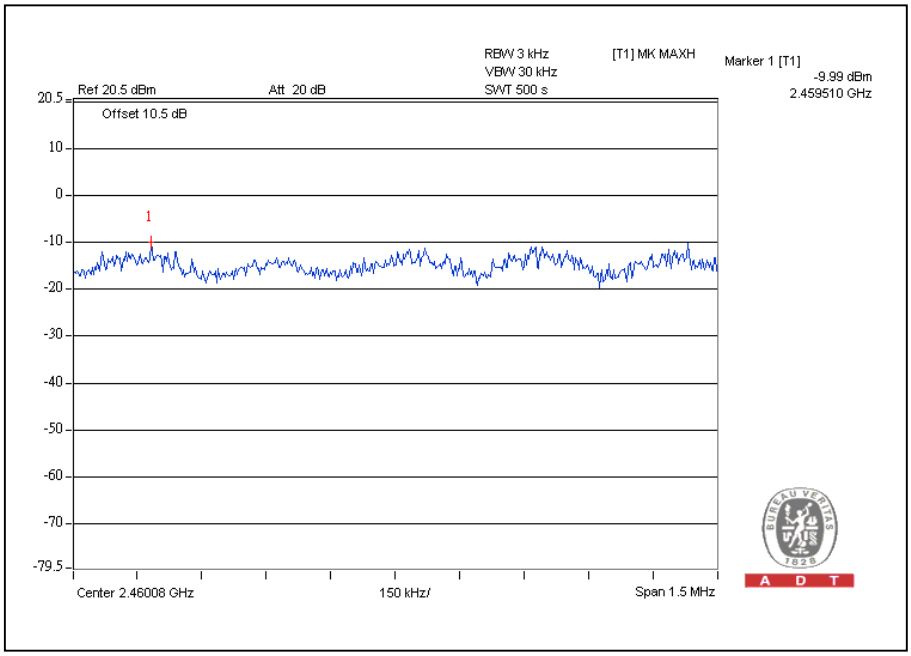
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.01 dBm
2.430713 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43071 GHz
150 kHz/
Span 1.5 MHz

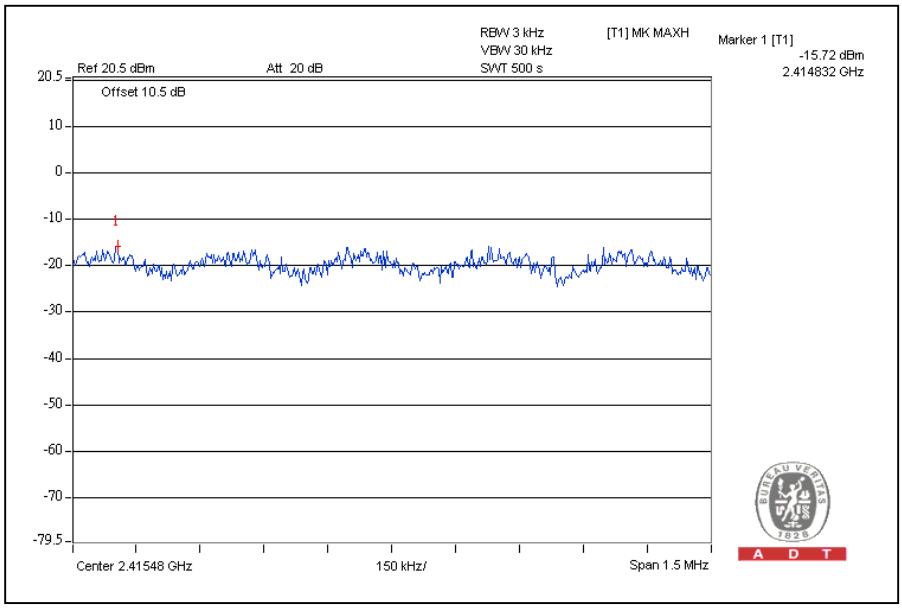
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-9.99 dBm
2.459510 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46008 GHz
150 kHz/
Span 1.5 MHz

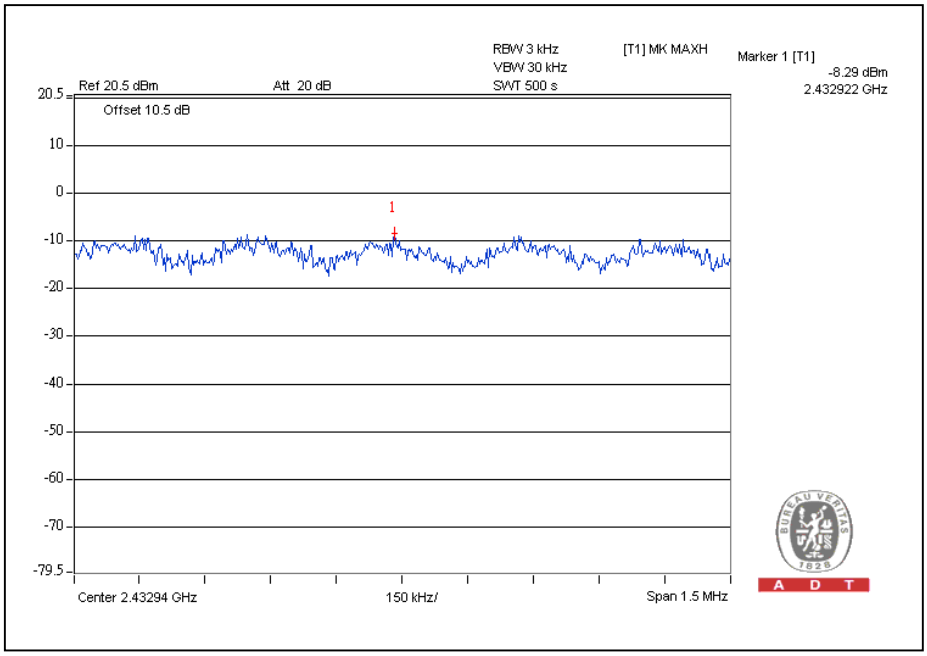
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-15.7	8	PASS
6	2437	-8.3	8	PASS
11	2462	-11.8	8	PASS

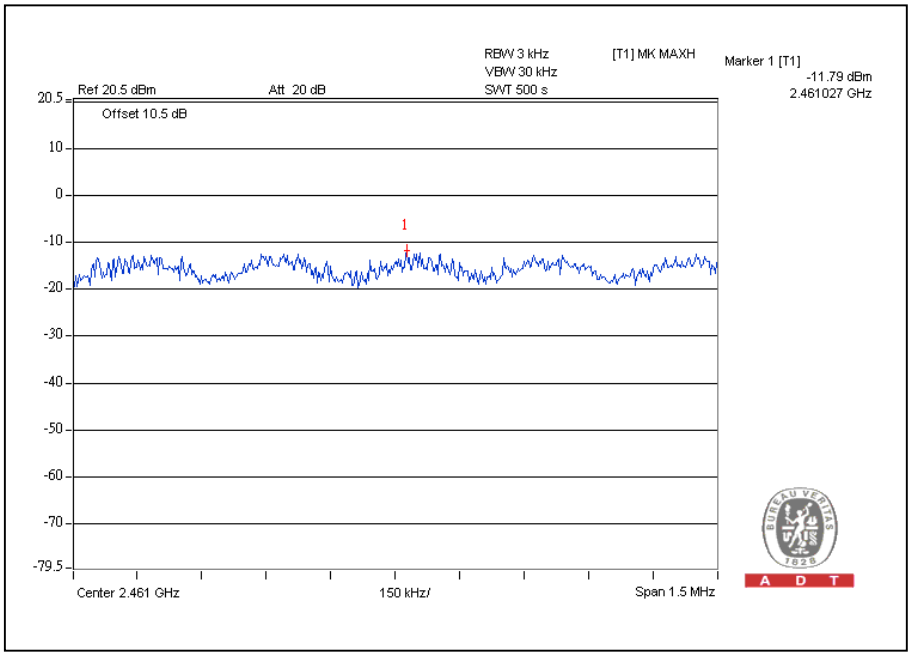
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.29 dBm
2.432922 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43294 GHz
150 kHz/
Span 1.5 MHz

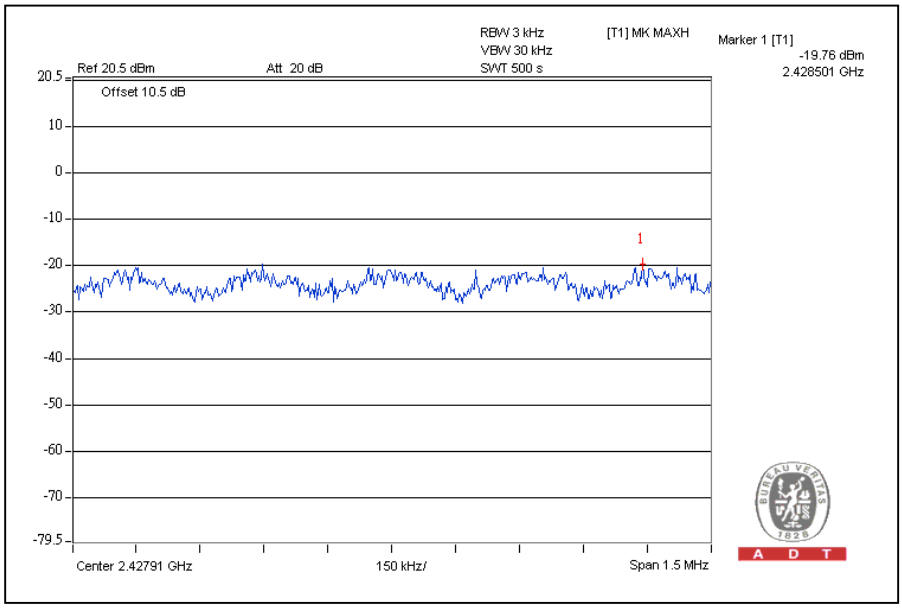
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-11.79 dBm
2.461027 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.461 GHz
150 kHz/
Span 1.5 MHz

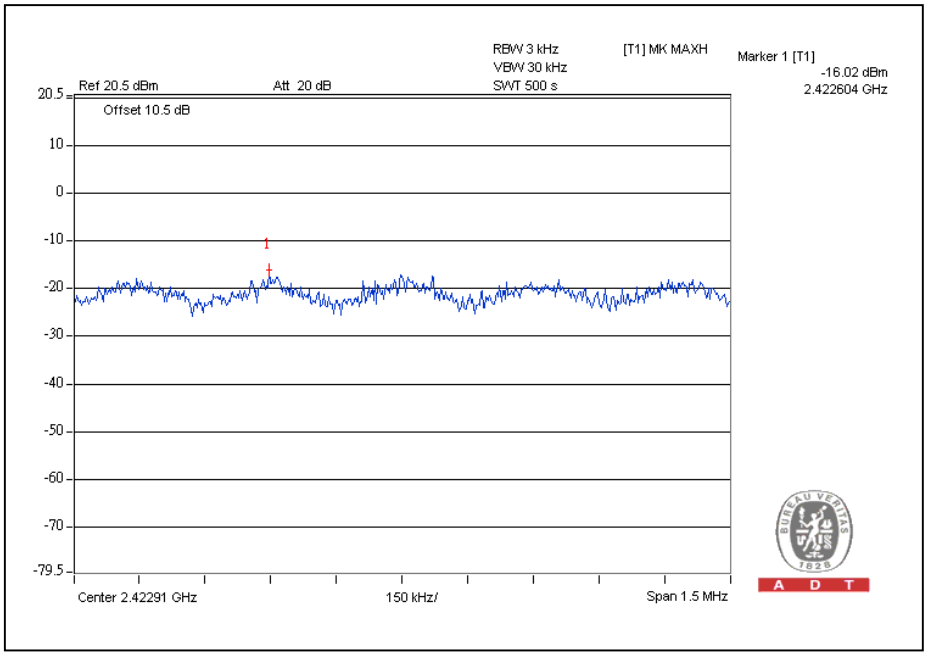
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2422	-19.8	8	PASS
4	2437	-16.0	8	PASS
7	2452	-16.6	8	PASS

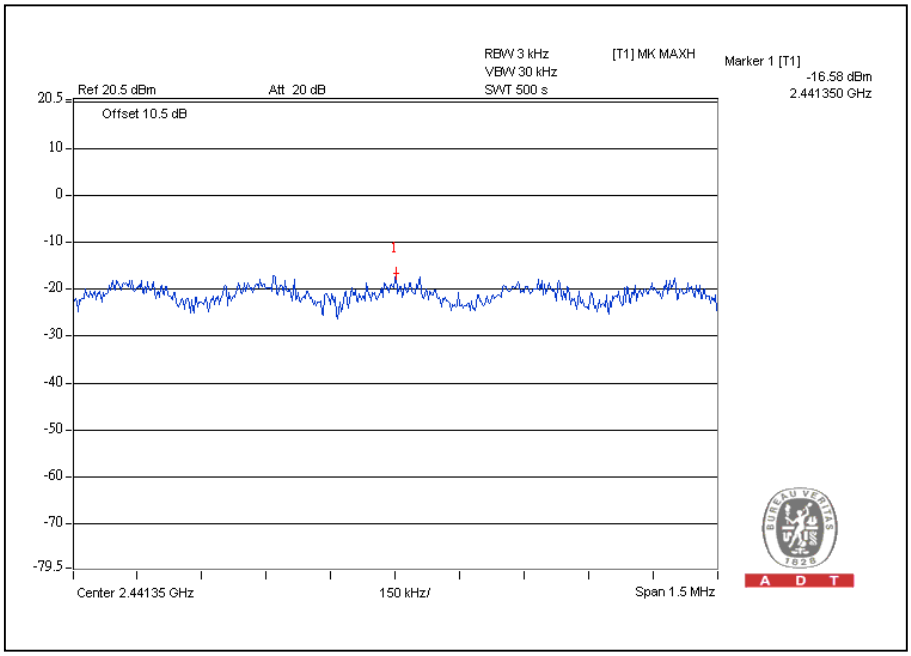
CH1



CH4


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-16.02 dBm
2.422604 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.42291 GHz
150 kHz/
Span 1.5 MHz

CH7

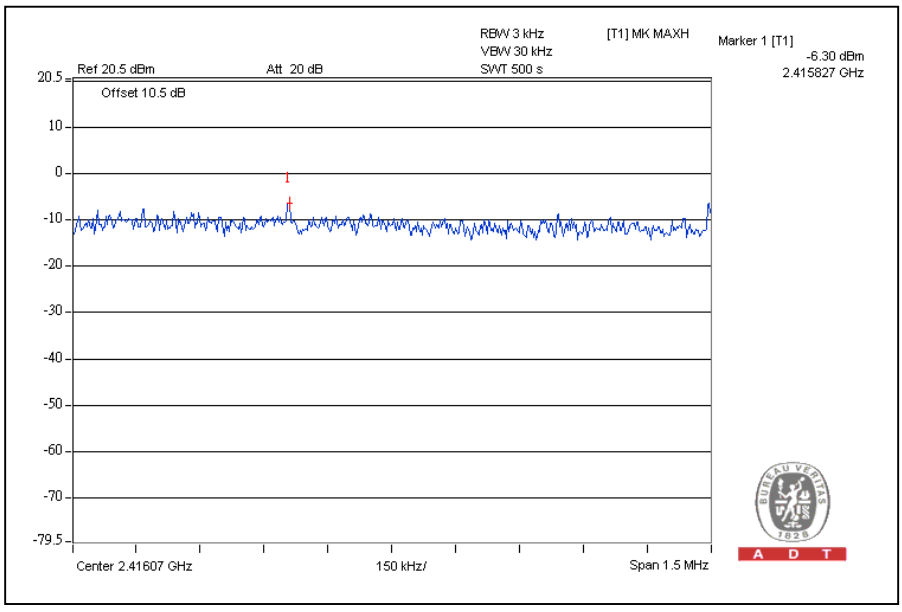

RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-16.58 dBm
2.441350 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44135 GHz
150 kHz/
Span 1.5 MHz

4.7.8 TEST RESULTS (ANTENNA 2: PCB ANTENNA)

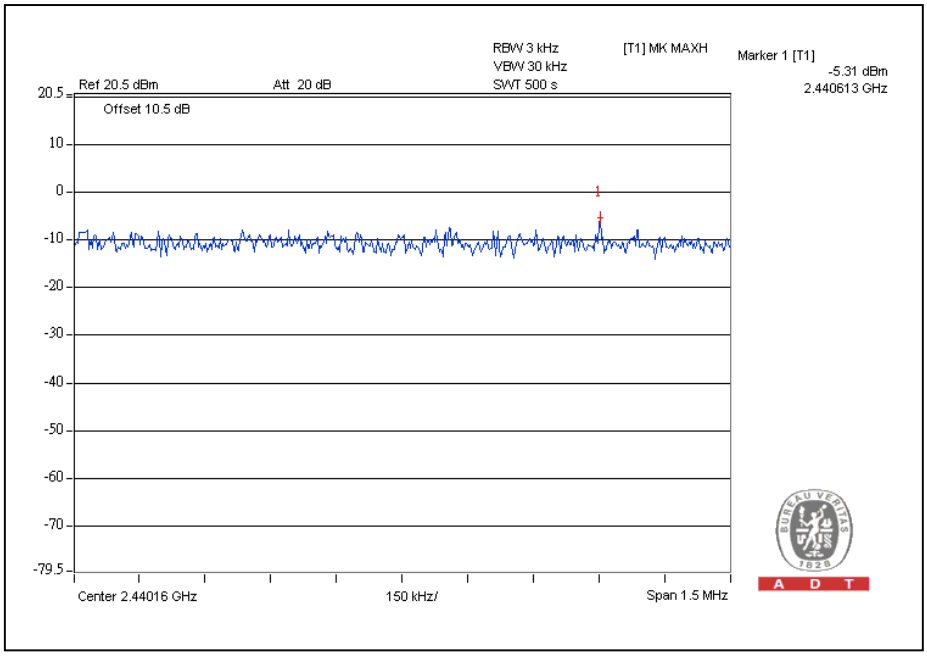
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-6.3	8	PASS
6	2437	-5.3	8	PASS
11	2462	-6.2	8	PASS

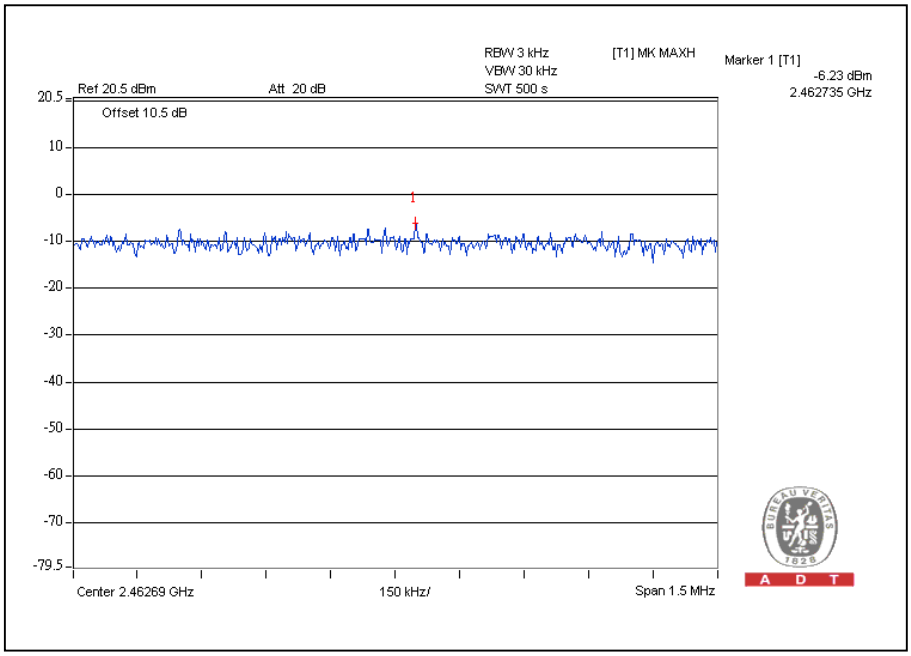
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-5.31 dBm
2.440613 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44016 GHz
150 kHz/
Span 1.5 MHz

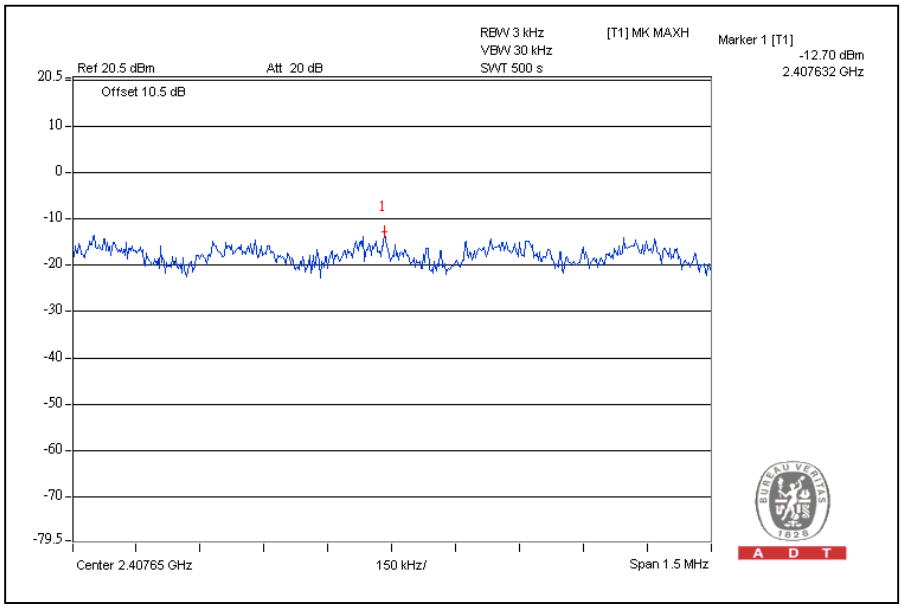
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-6.23 dBm
2.462735 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46269 GHz
150 kHz/
Span 1.5 MHz

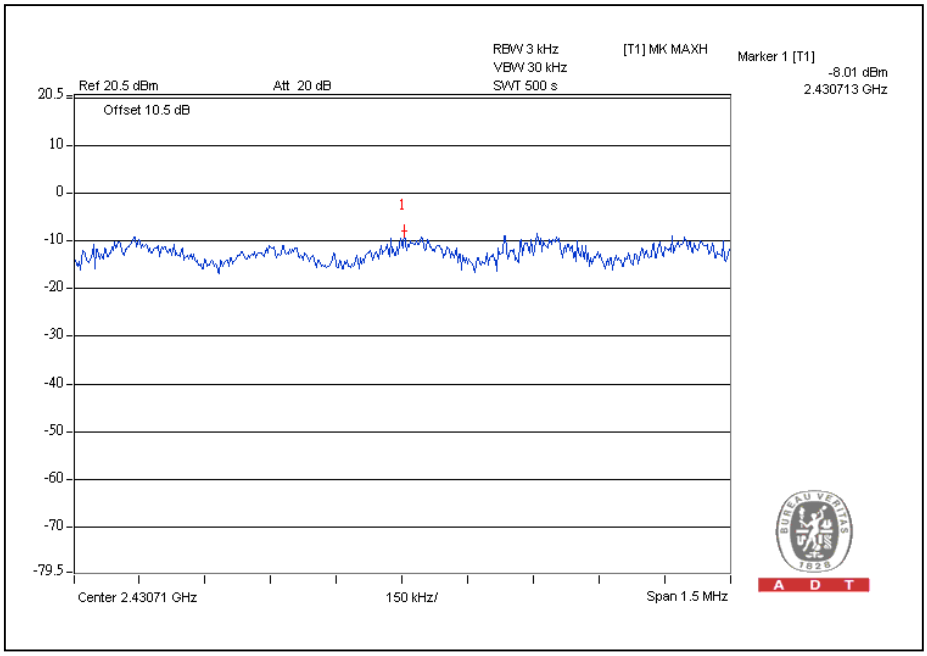
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-12.7	8	PASS
6	2437	-8.0	8	PASS
11	2462	-14.1	8	PASS

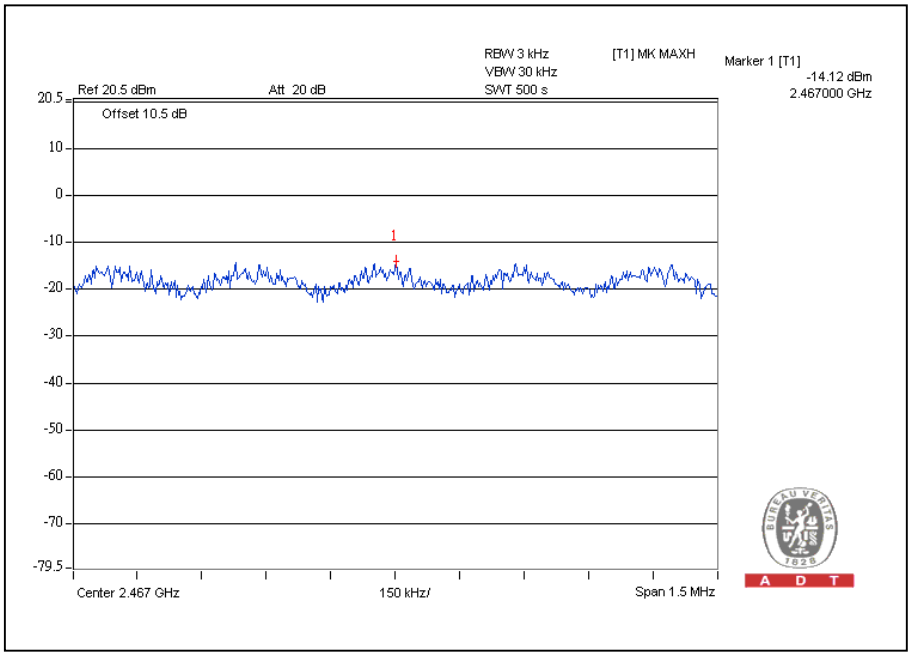
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.01 dBm
2.430713 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43071 GHz
150 kHz/
Span 1.5 MHz

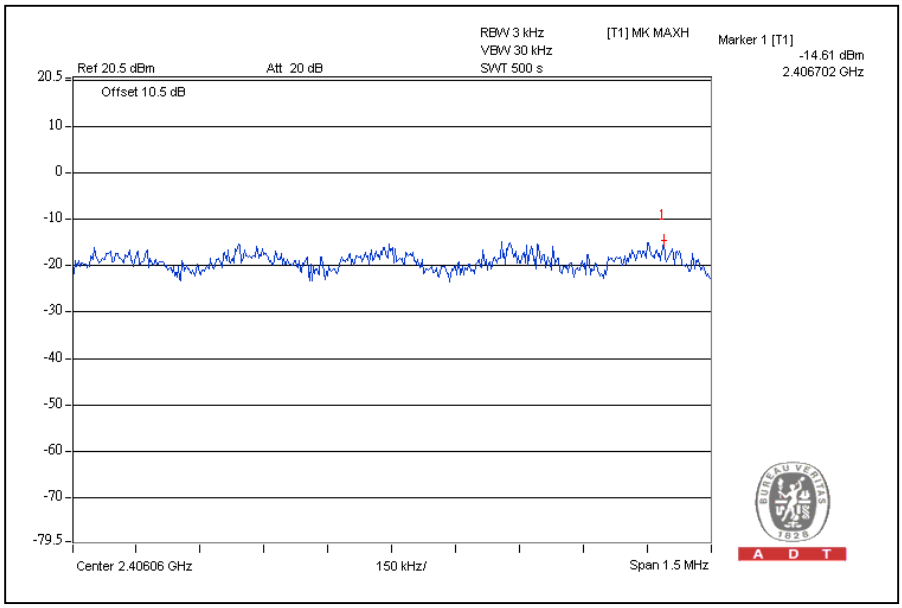
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-14.12 dBm
2.467000 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.467 GHz
150 kHz/
Span 1.5 MHz

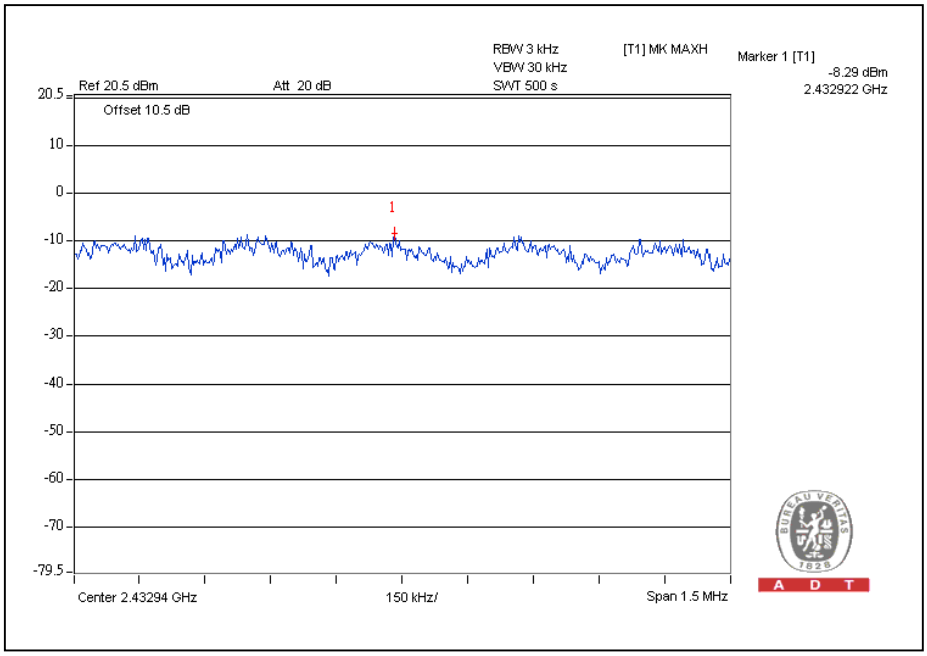
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-14.6	8	PASS
6	2437	-8.3	8	PASS
11	2462	-14.2	8	PASS

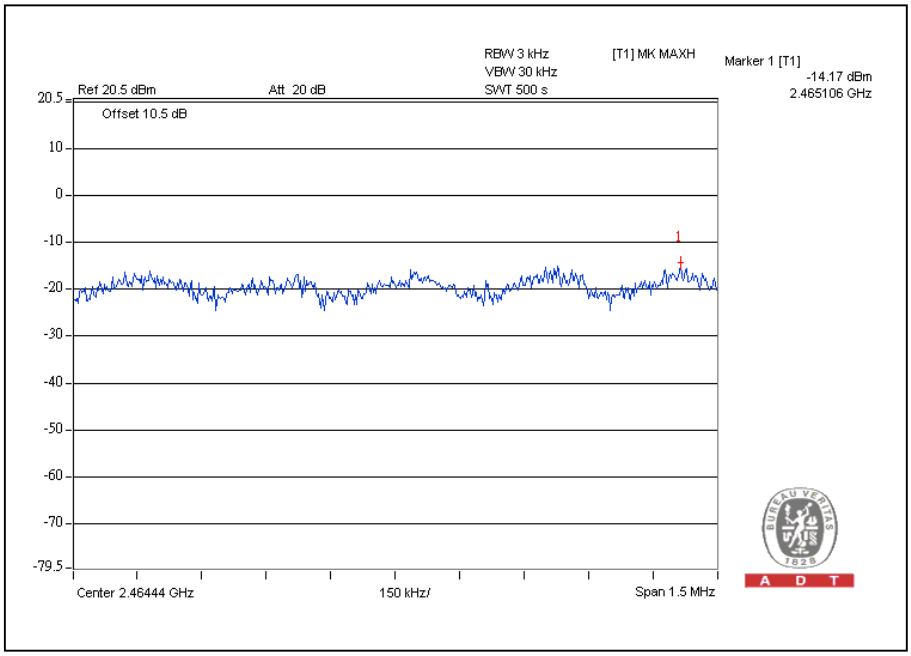
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.29 dBm
2.432922 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43294 GHz
150 kHz/
Span 1.5 MHz

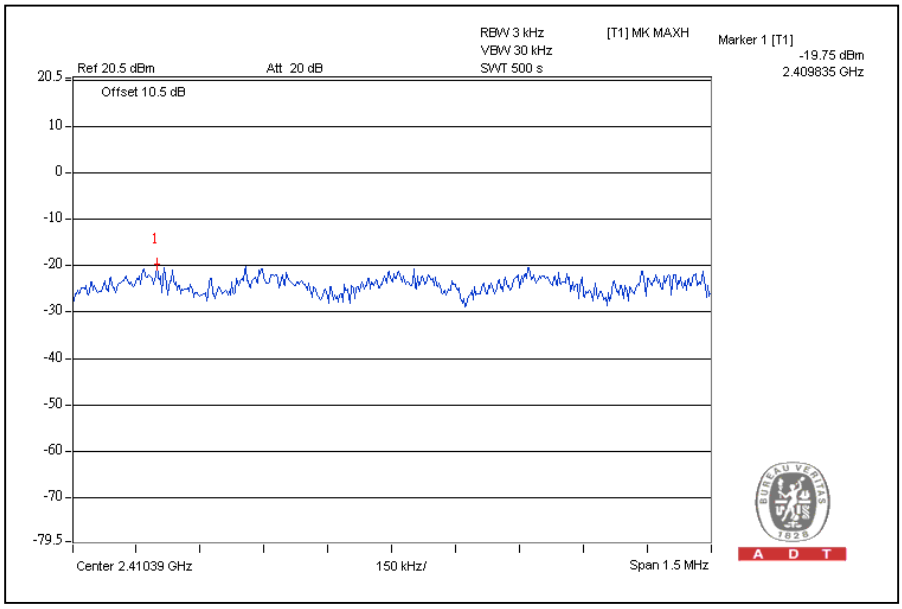
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-14.17 dBm
2.465106 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46444 GHz
150 kHz/
Span 1.5 MHz

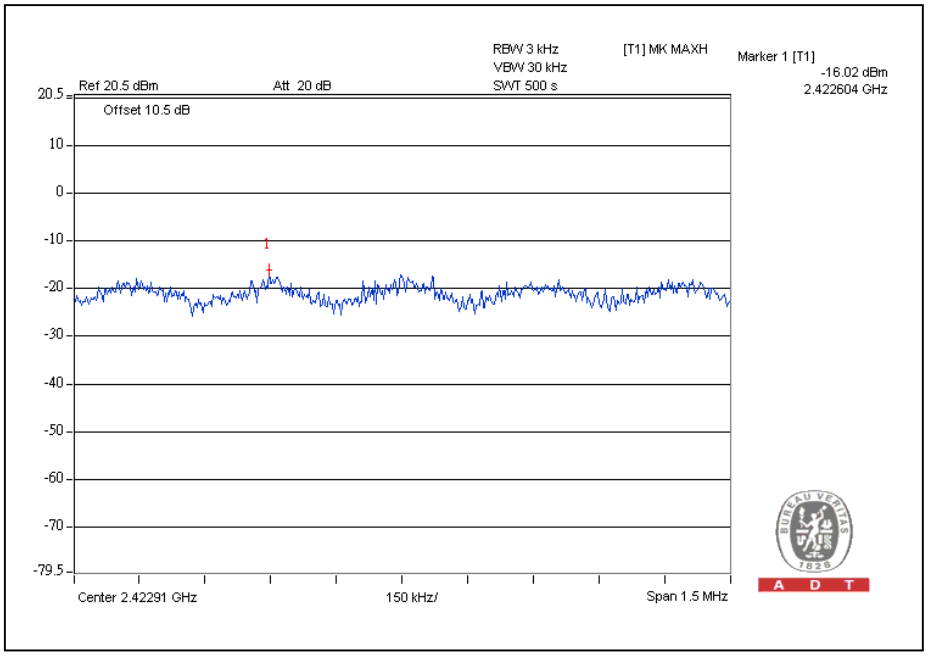
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2422	-19.8	8	PASS
4	2437	-16.0	8	PASS
7	2452	-18.6	8	PASS

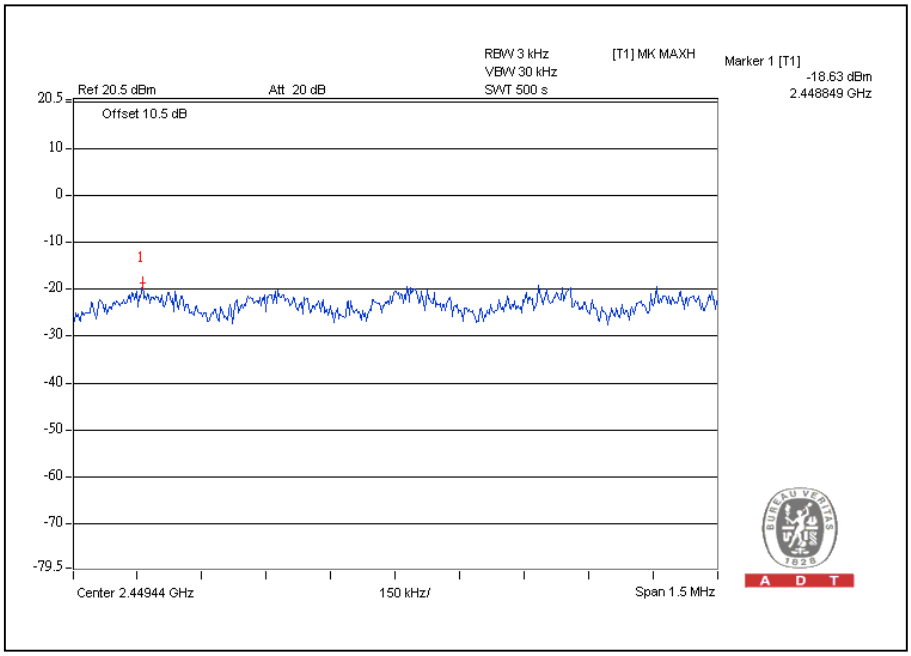
CH1



CH4


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-16.02 dBm
2.422604 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.42291 GHz
150 kHz/
Span 1.5 MHz

CH7

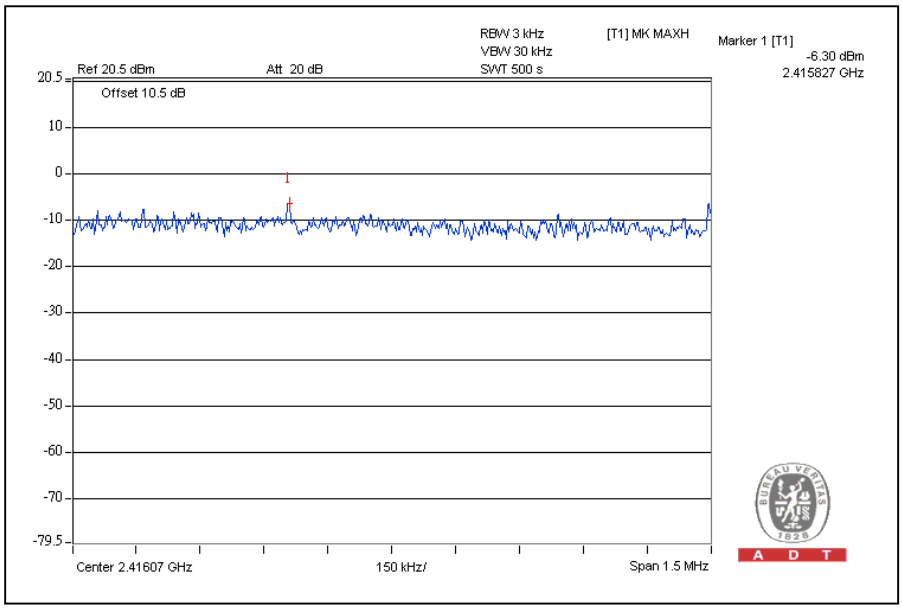

RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-18.63 dBm
2.448849 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44944 GHz
150 kHz/
Span 1.5 MHz

4.7.9 TEST RESULTS (ANTENNA 3: PIFA ANTENNA)

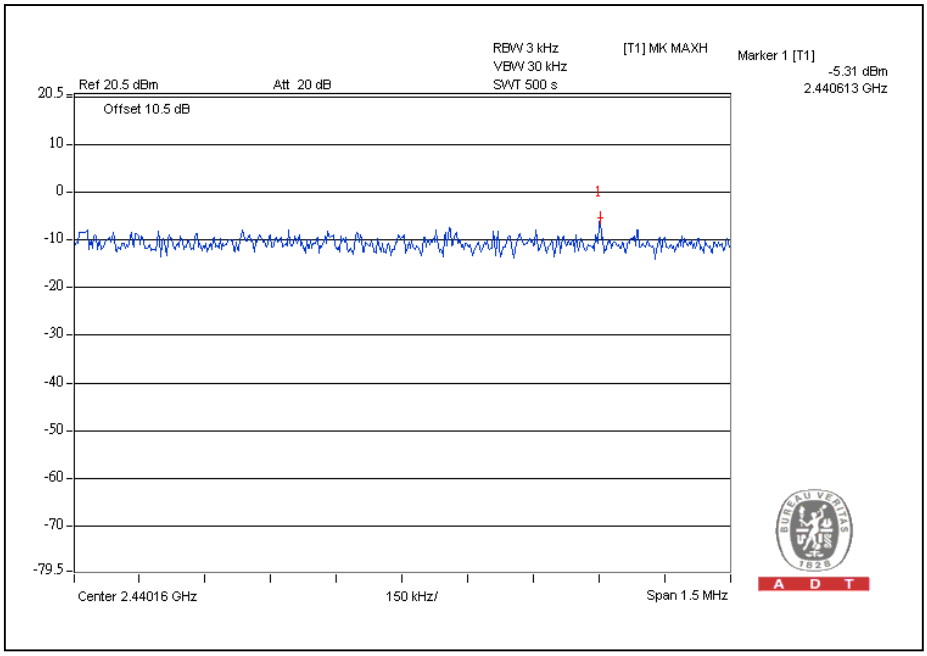
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-6.3	8	PASS
6	2437	-5.3	8	PASS
11	2462	-6.2	8	PASS

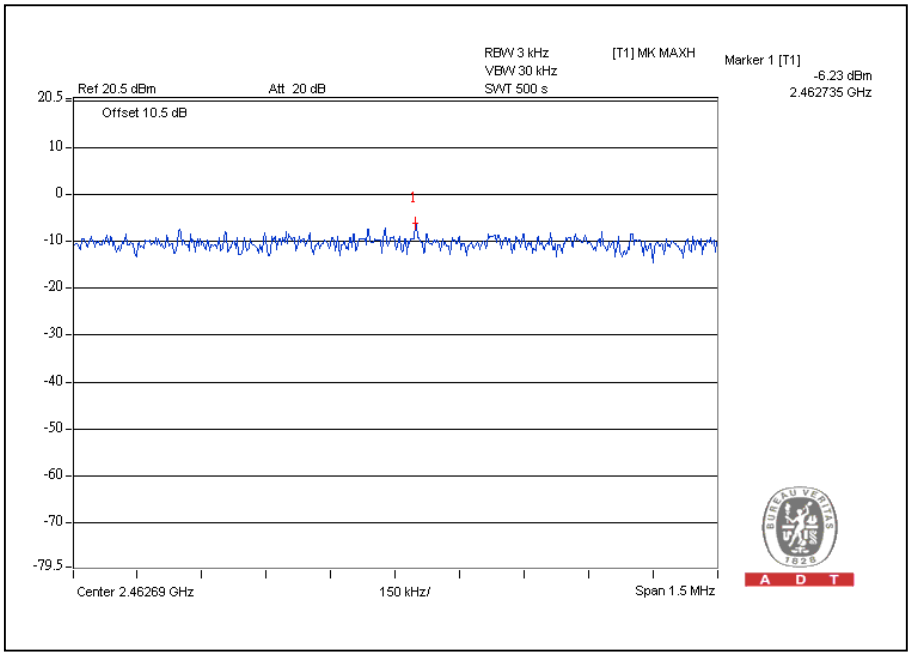
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-5.31 dBm
2.440613 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44016 GHz
150 kHz/
Span 1.5 MHz

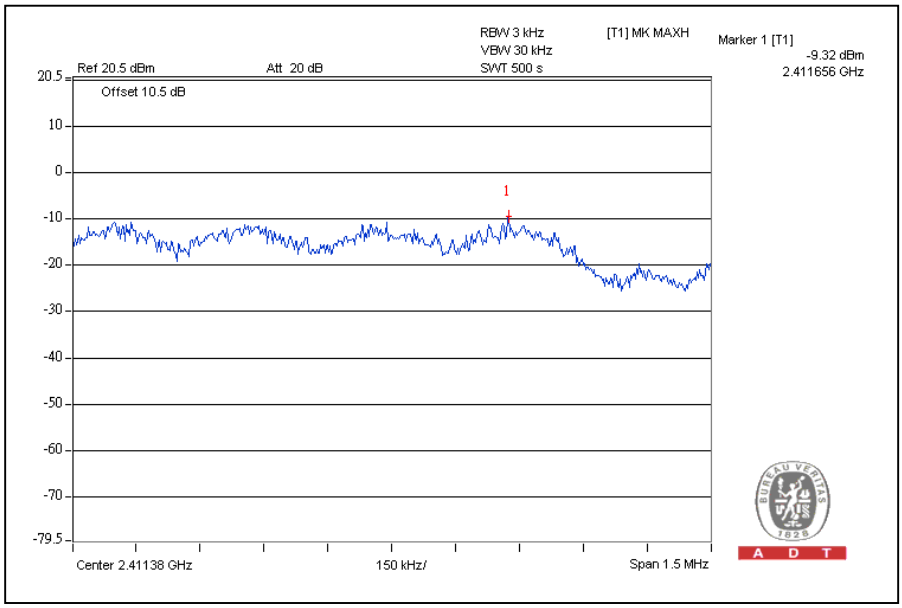
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-6.23 dBm
2.462735 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46269 GHz
150 kHz/
Span 1.5 MHz

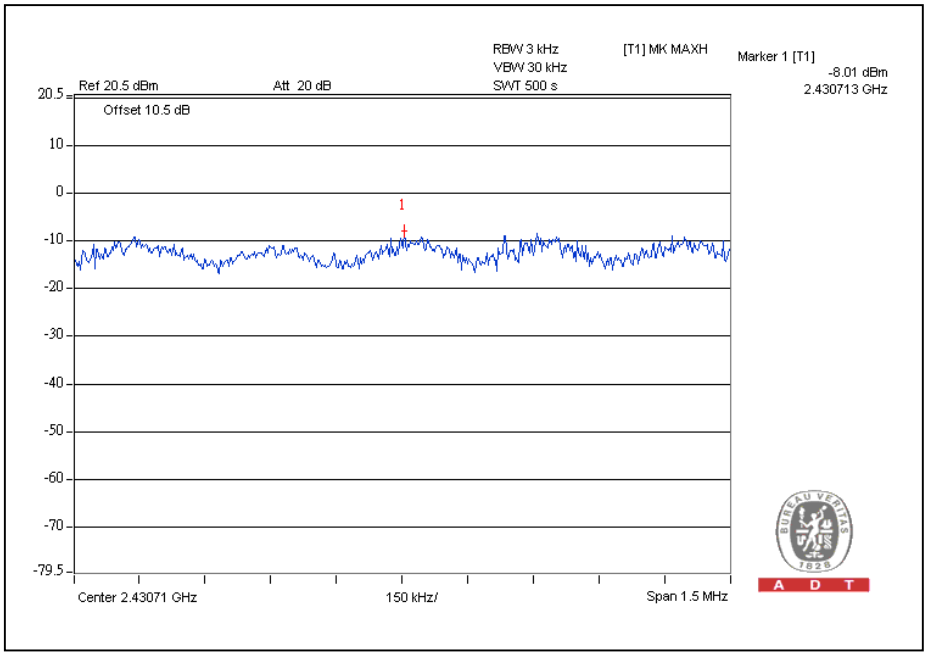
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-9.3	8	PASS
6	2437	-8.0	8	PASS
11	2462	-9.7	8	PASS

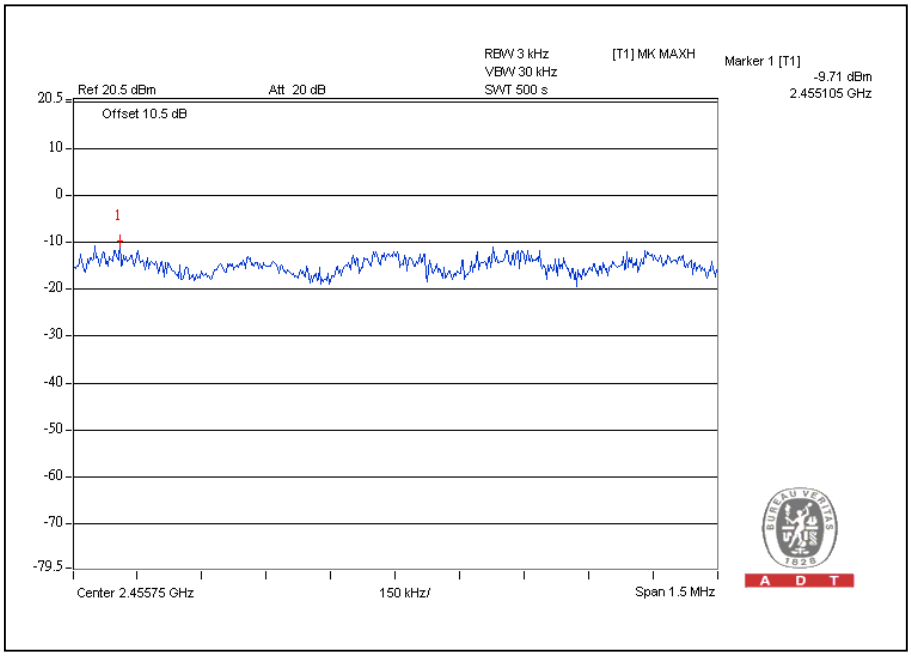
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.01 dBm
2.430713 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43071 GHz
150 kHz/
Span 1.5 MHz

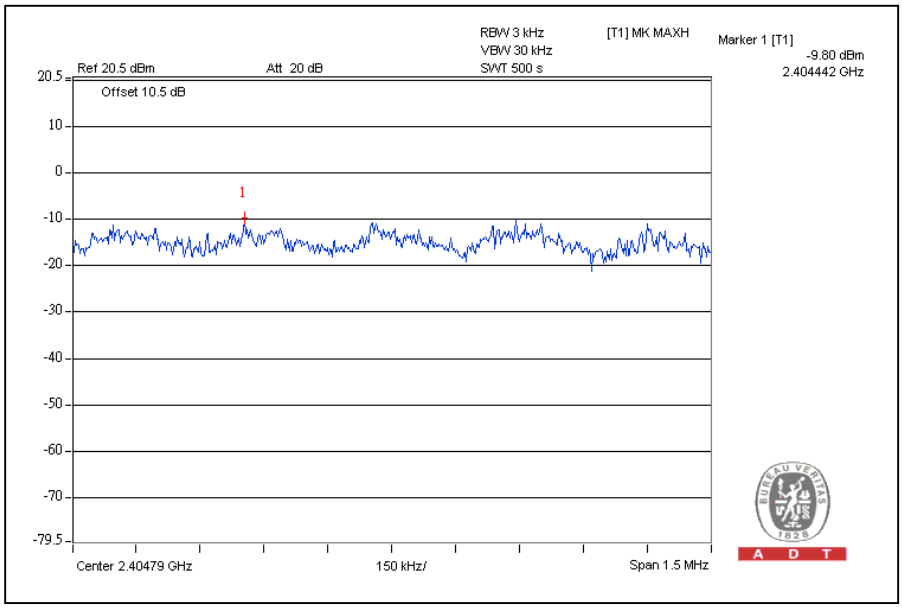
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-9.71 dBm
2.455105 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.45575 GHz
150 kHz/
Span 1.5 MHz

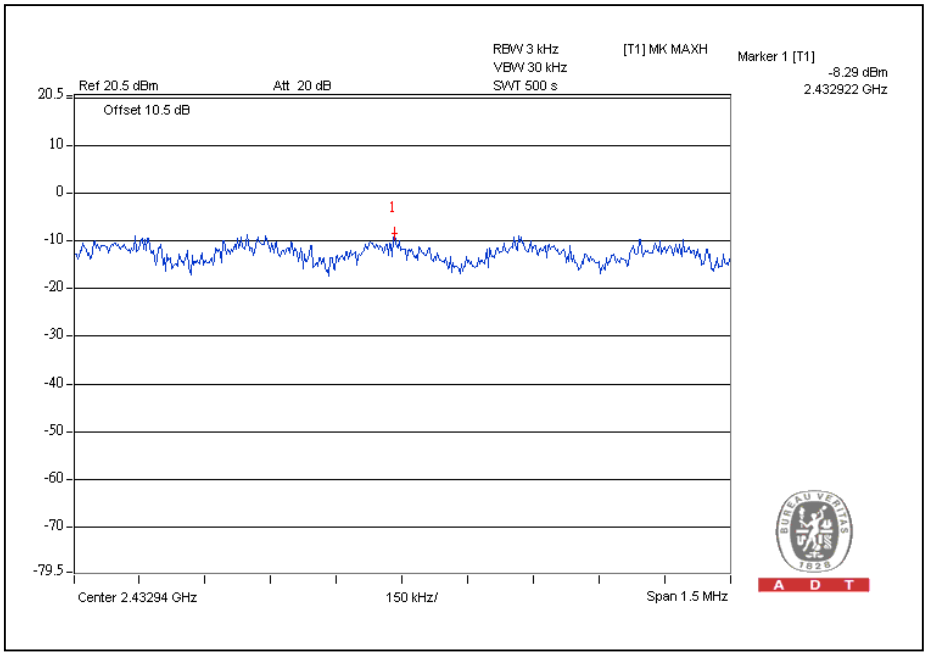
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-9.8	8	PASS
6	2437	-8.3	8	PASS
11	2462	-11.0	8	PASS

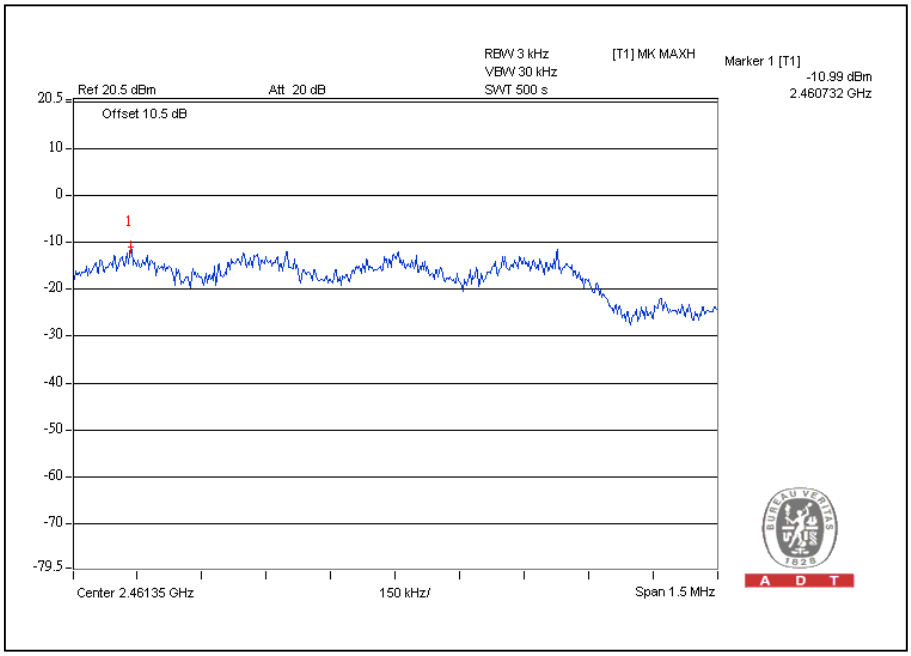
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.29 dBm
2.432922 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43294 GHz
150 kHz/
Span 1.5 MHz

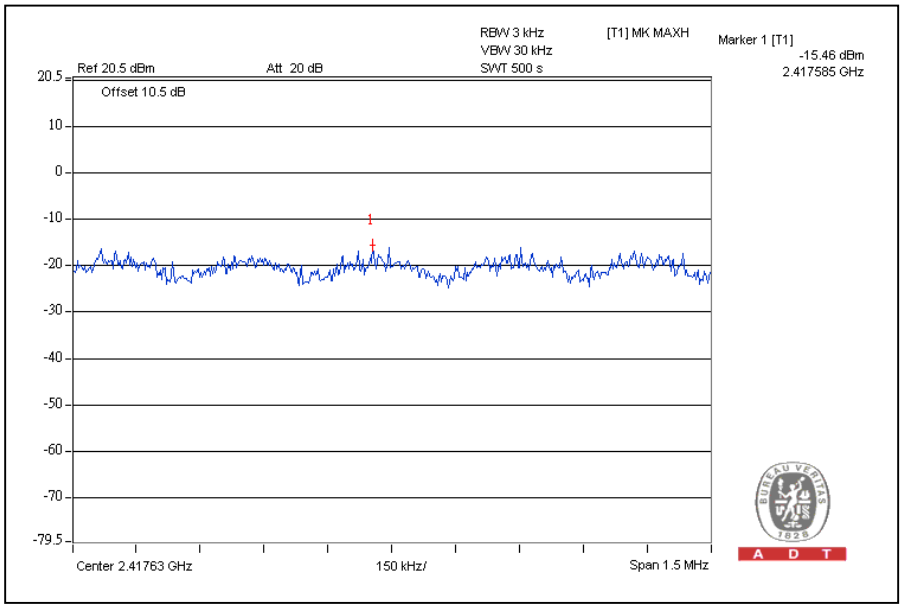
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-10.99 dBm
2.460732 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46135 GHz
150 kHz/
Span 1.5 MHz

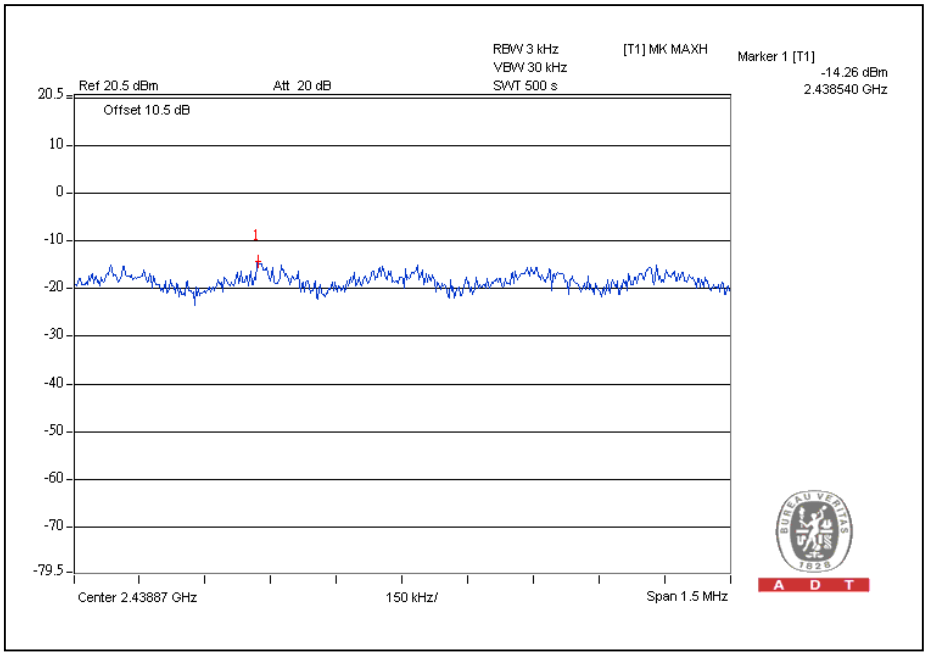
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2422	-15.5	8	PASS
4	2437	-14.3	8	PASS
7	2452	-15.9	8	PASS

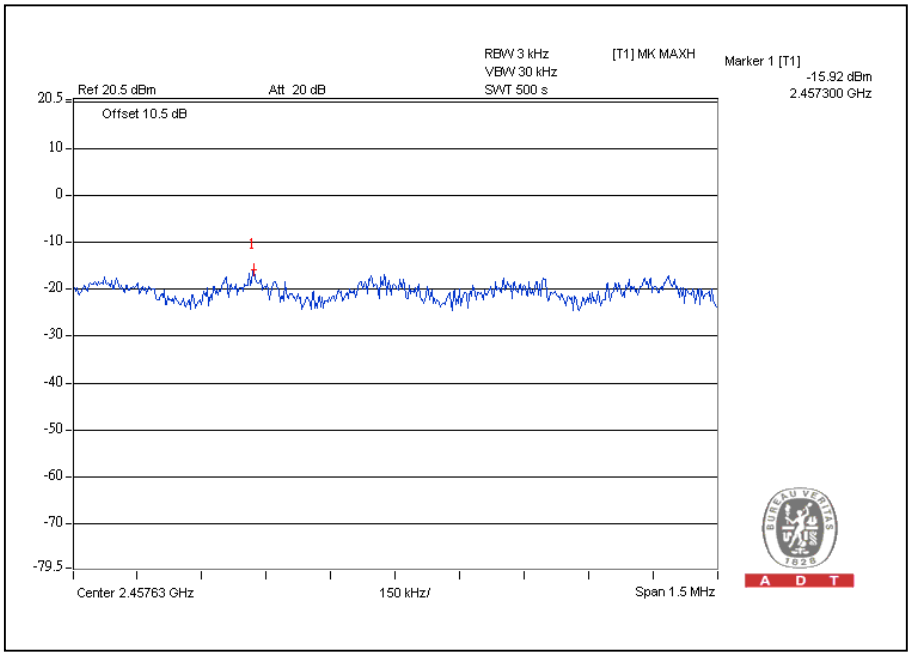
CH1



CH4


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-14.26 dBm
2.438540 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43887 GHz
150 kHz/
Span 1.5 MHz

CH7

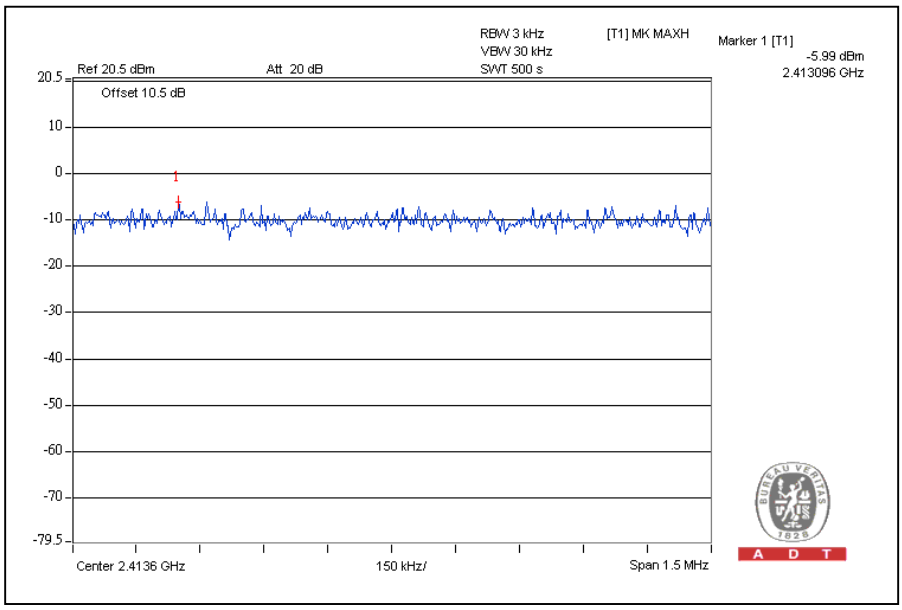

RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-15.92 dBm
2.457300 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.45763 GHz
150 kHz/
Span 1.5 MHz

4.7.10 TEST RESULTS (ANTENNA 4: PIFA ANTENNA)

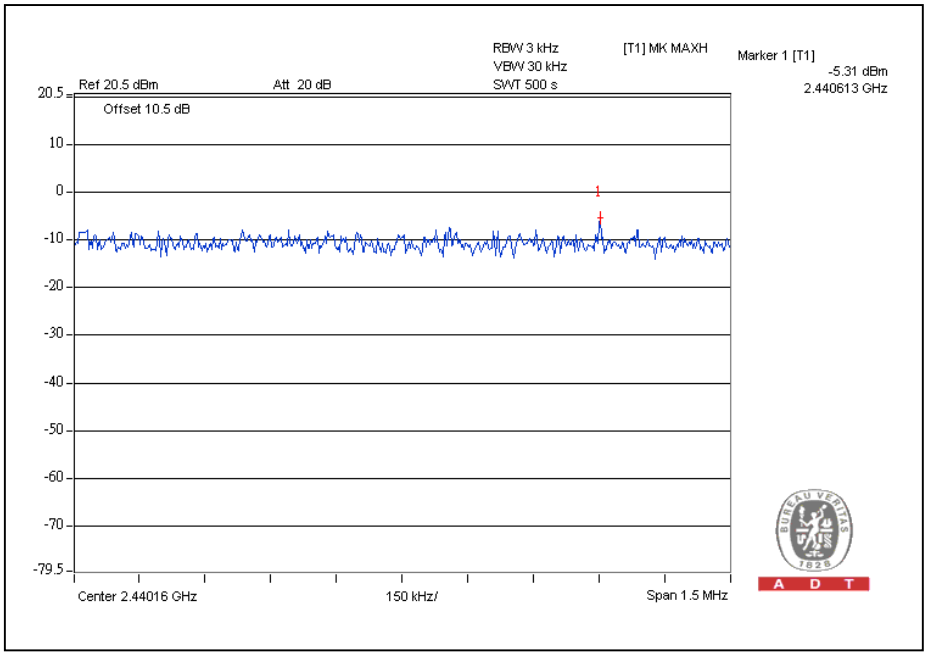
802.11b DSSS MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-6.0	8	PASS
6	2437	-5.3	8	PASS
11	2462	-6.2	8	PASS

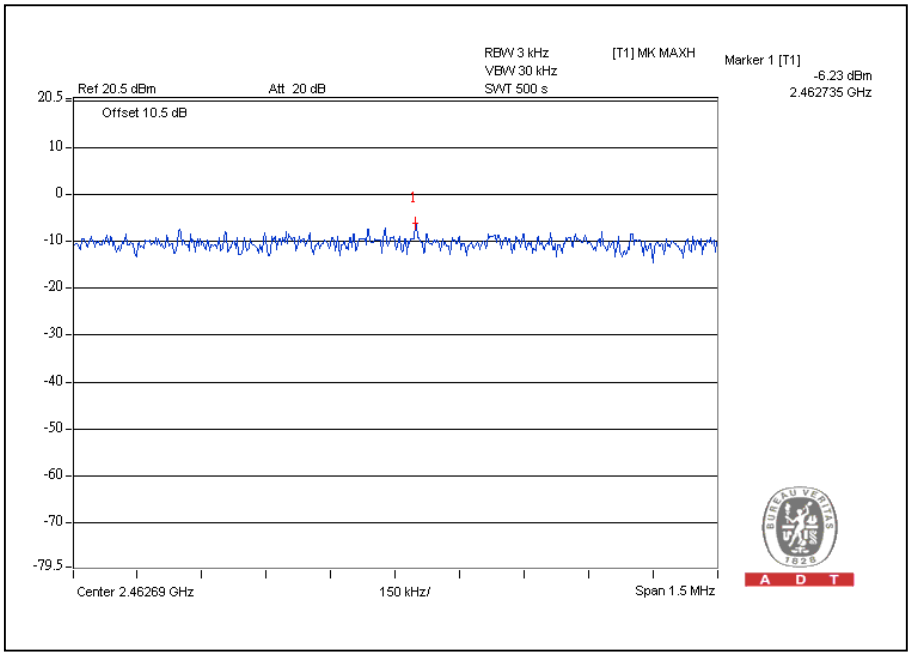
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-5.31 dBm
2.440613 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.44016 GHz
150 kHz/
Span 1.5 MHz

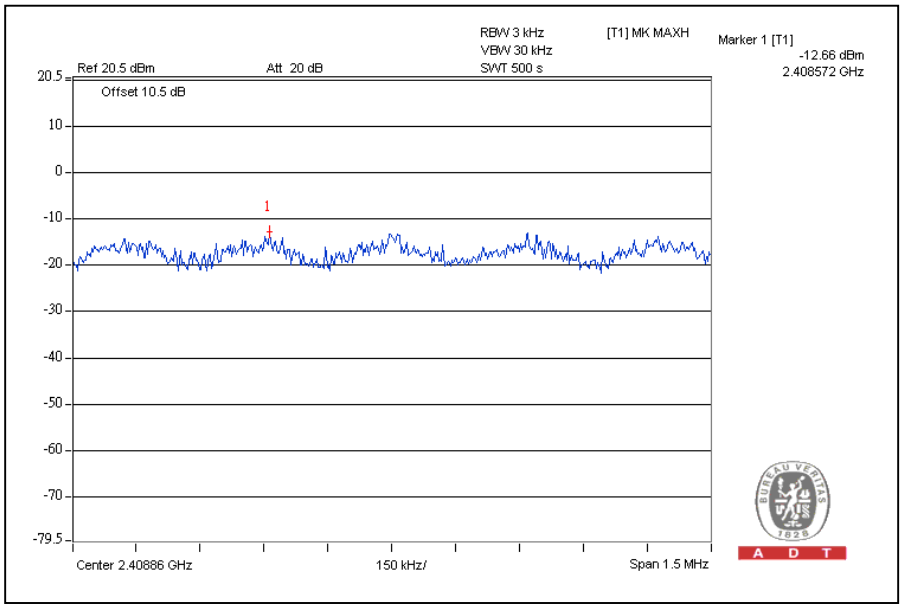
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-6.23 dBm
2.462735 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46269 GHz
150 kHz/
Span 1.5 MHz

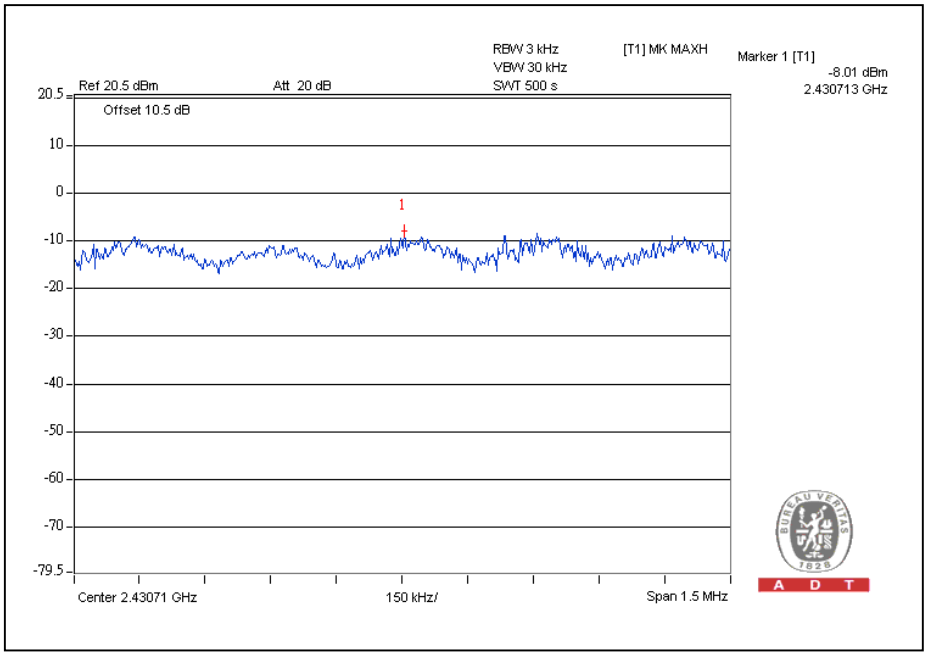
802.11g OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-12.7	8	PASS
6	2437	-8.0	8	PASS
11	2462	-12.4	8	PASS

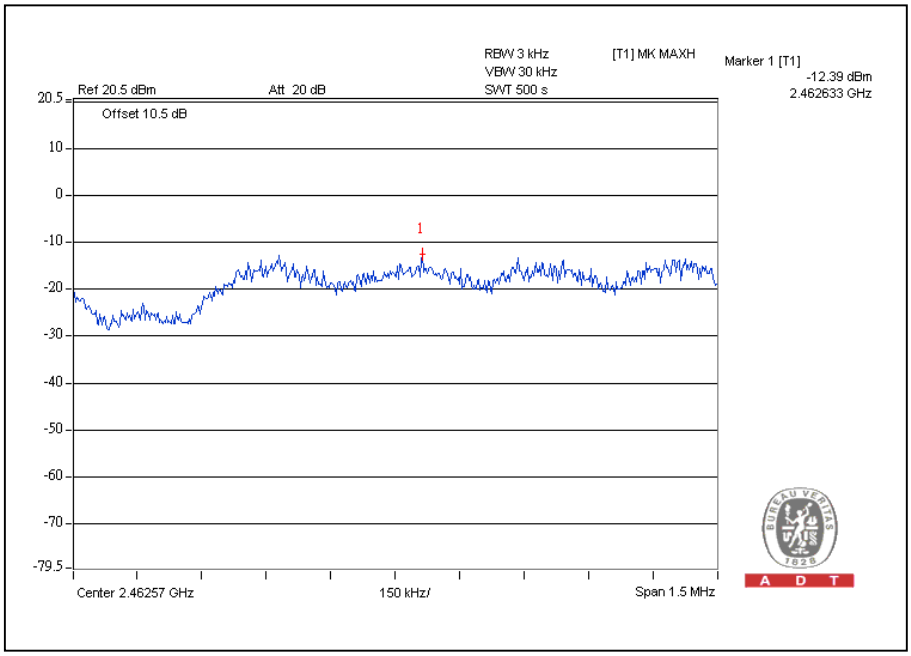
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.01 dBm
2.430713 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43071 GHz
150 kHz/
Span 1.5 MHz

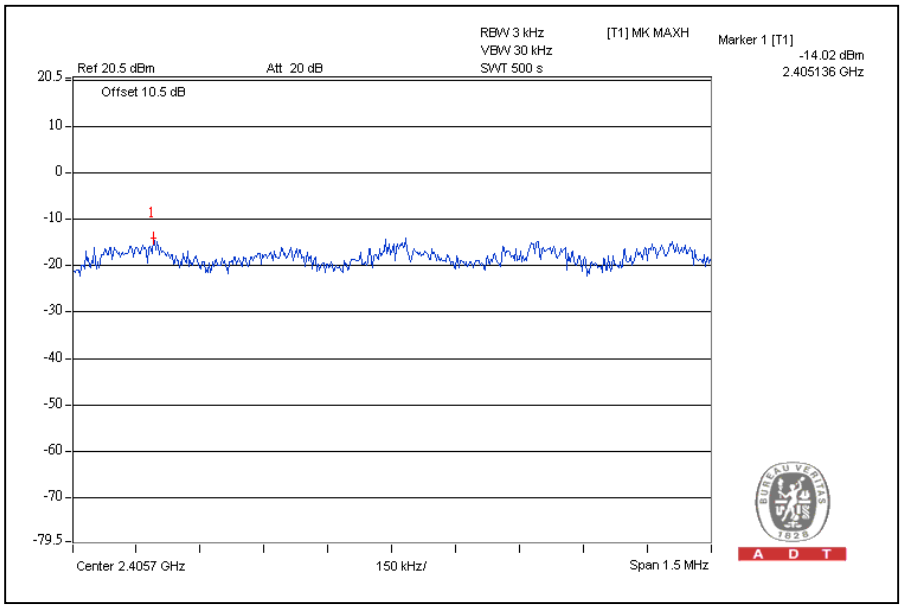
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-12.39 dBm
2.462633 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46257 GHz
150 kHz/
Span 1.5 MHz

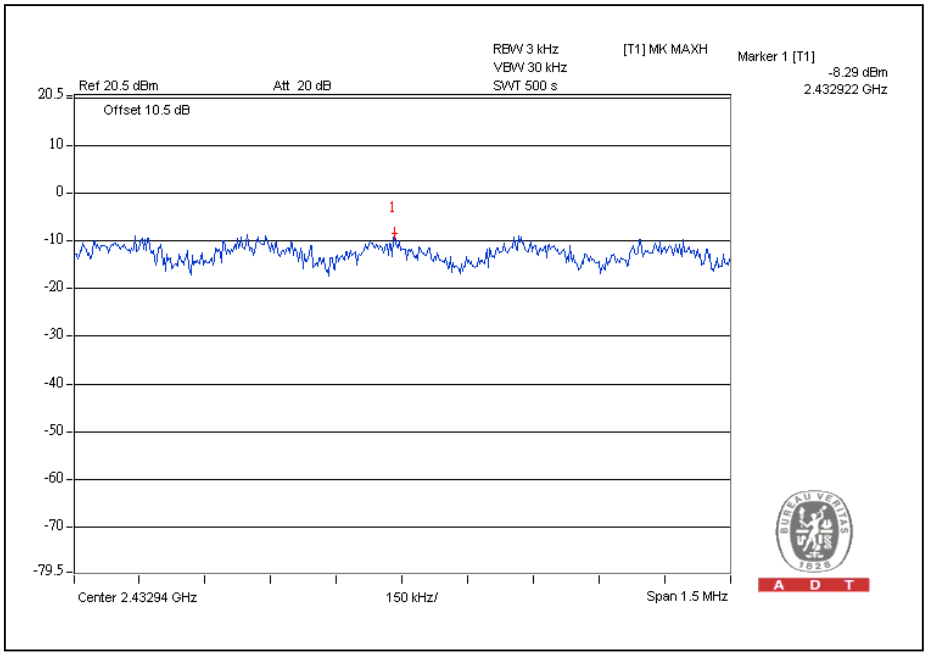
802.11n (20MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-14.0	8	PASS
6	2437	-8.3	8	PASS
11	2462	-14.7	8	PASS

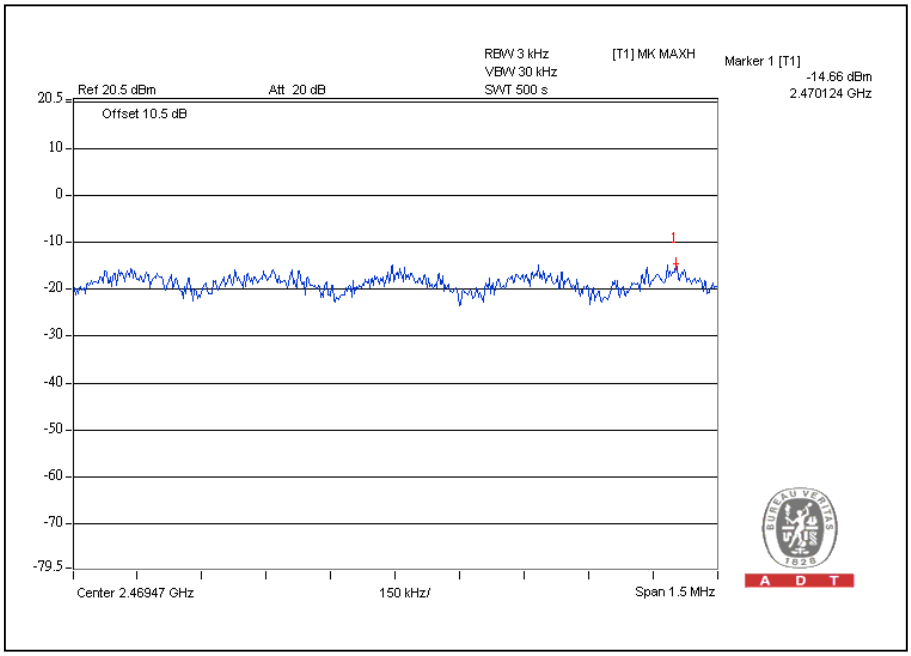
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-8.29 dBm
2.432922 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.43294 GHz
150 kHz/
Span 1.5 MHz

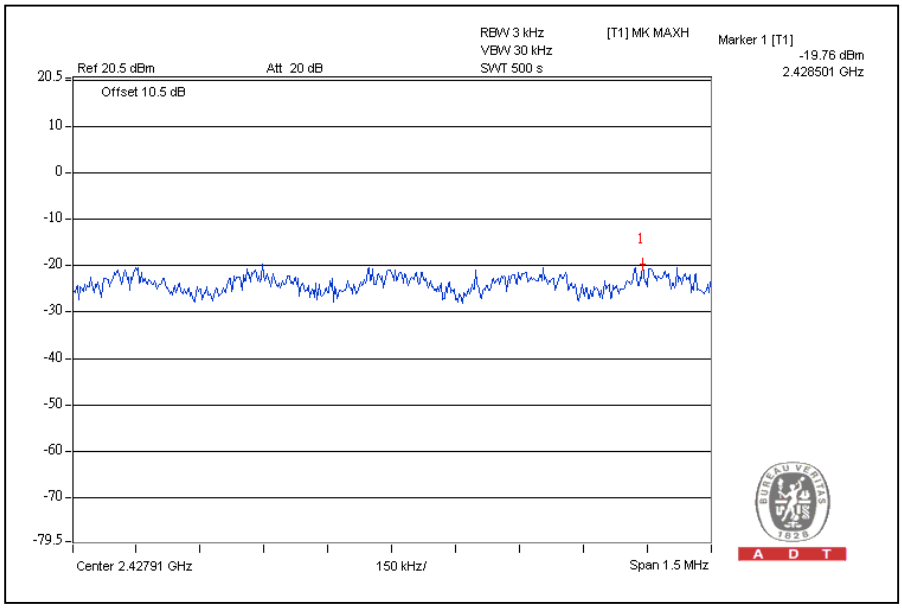
CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-14.66 dBm
2.470124 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46947 GHz
150 kHz/
Span 1.5 MHz

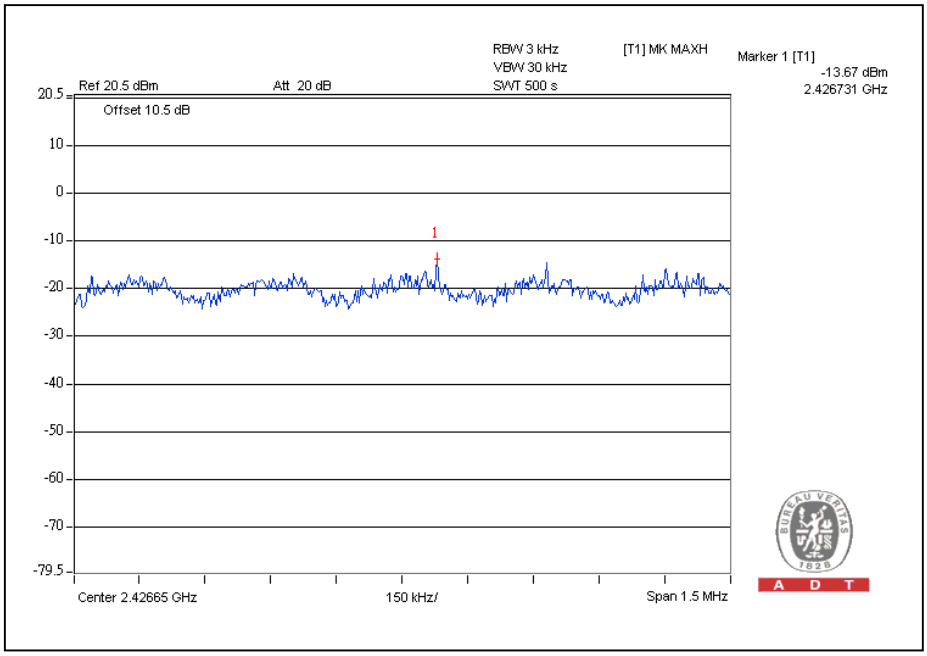
802.11n (40MHz) OFDM MODULATION:

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2422	-19.8	8	PASS
4	2437	-13.7	8	PASS
7	2452	-19.4	8	PASS

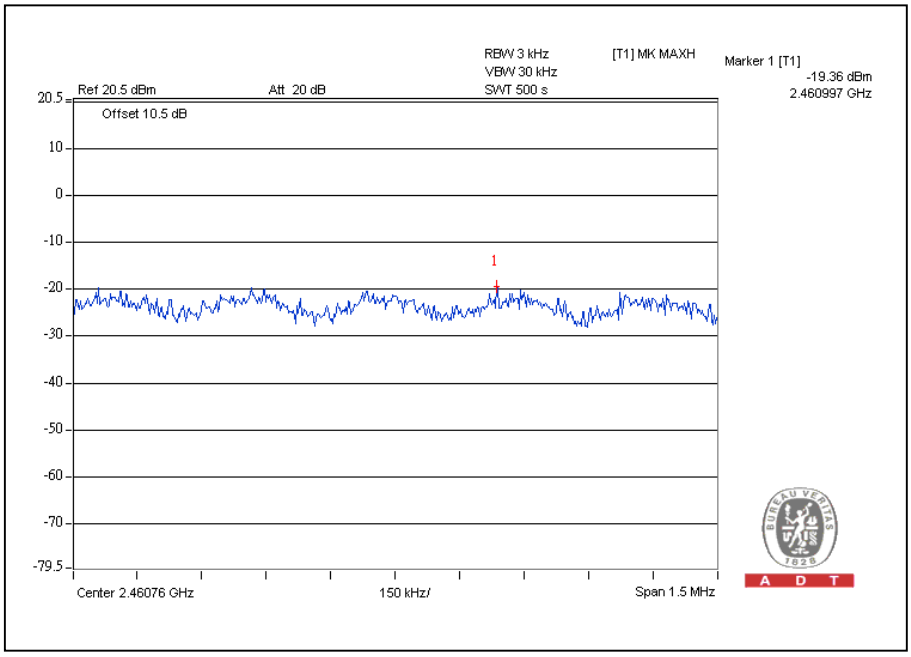
CH1



CH4


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-13.67 dBm
2.426731 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.42665 GHz
150 kHz/
Span 1.5 MHz

CH7


RBW 3 kHz
VBW 30 kHz
SWT 500 s
[T1] MK MAXH
Marker 1 [T1]
-19.36 dBm
2.460997 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Center 2.46076 GHz
150 kHz/
Span 1.5 MHz

4.8 CONDUCTED OUT-BAND EMISSION MEASUREMENT

4.8.1 LIMITS OF CONDUCTED OUT-BAND EMISSION MEASUREMENT

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

4.8.2 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.

4.8.3 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.

4.8.4 DEVIATION FROM TEST STANDARD

No deviation

4.8.5 EUT OPERATING CONDITION

Same as Item 4.3.6

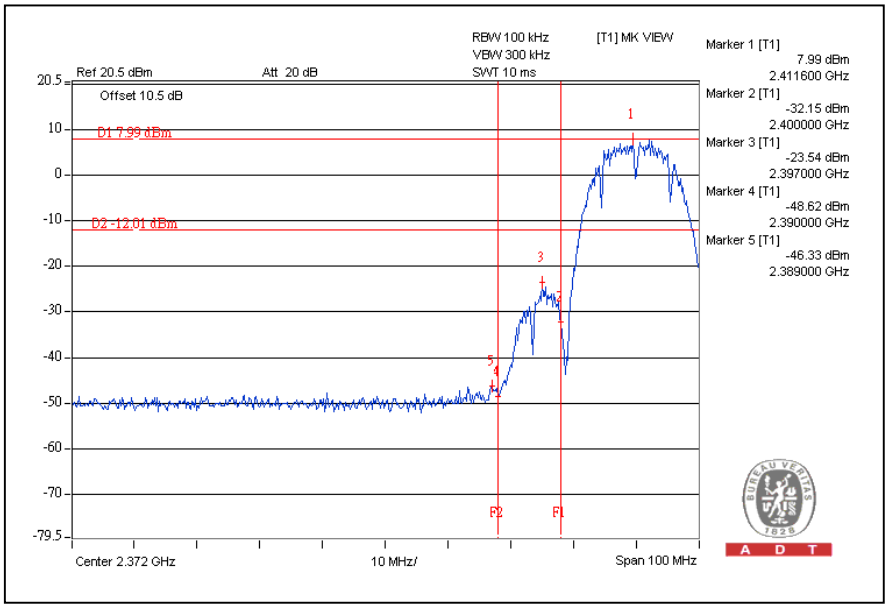
4.8.6 TEST RESULTS

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).

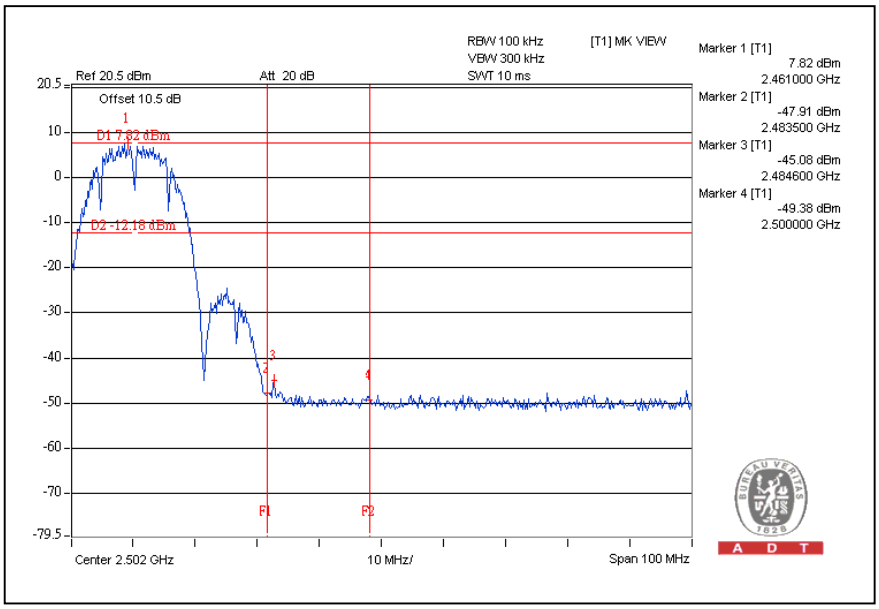
Antenna 1: PCB antenna

802.11b DSSS MODULATION:

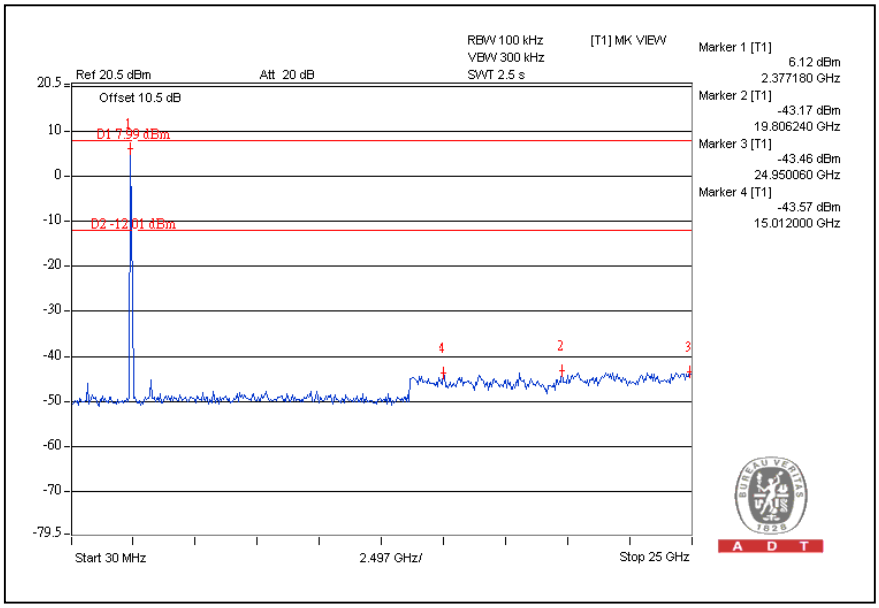
CH1



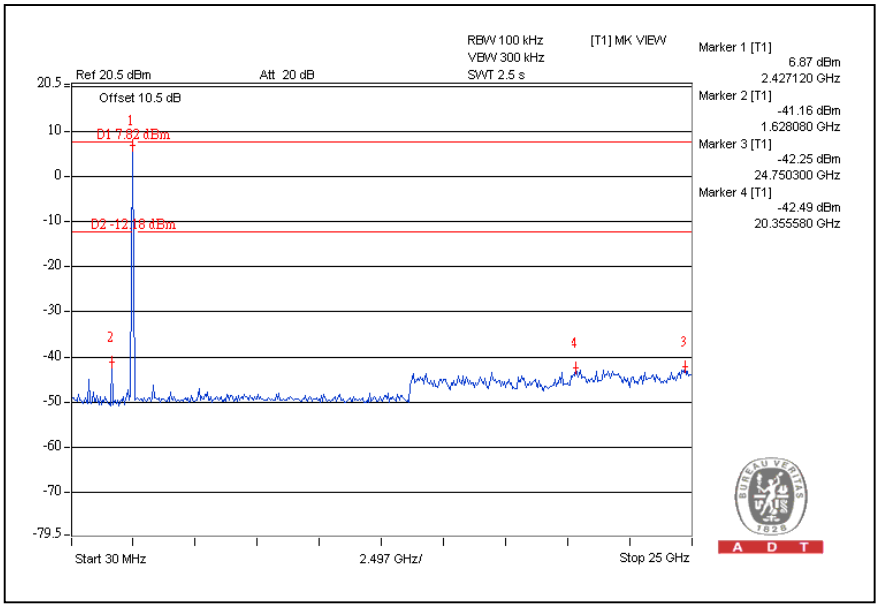
CH11



CH1

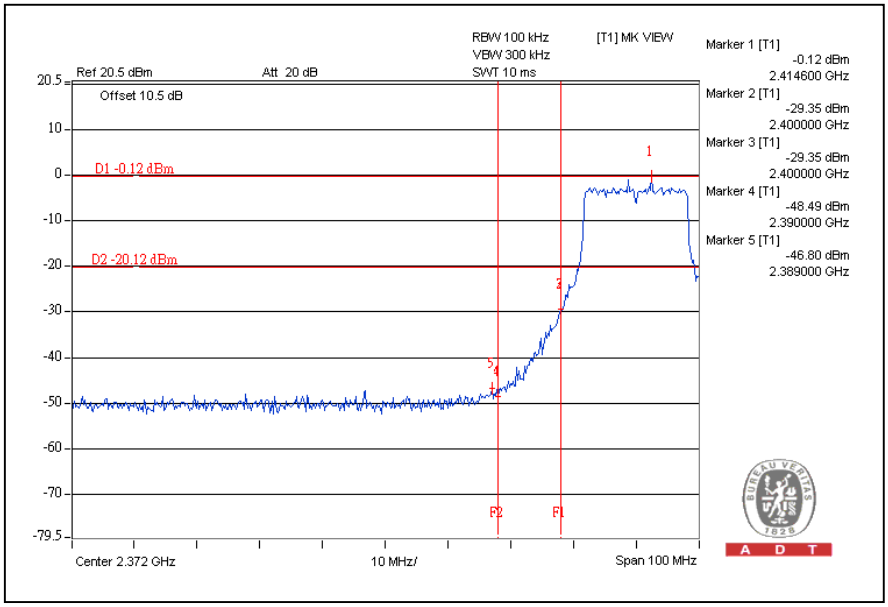

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.99 dBm
D2 -12.01 dBm
Marker 1 [T1]
6.12 dBm
2.377180 GHz
Marker 2 [T1]
-43.17 dBm
19.806240 GHz
Marker 3 [T1]
-43.46 dBm
24.950060 GHz
Marker 4 [T1]
-43.57 dBm
15.012000 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

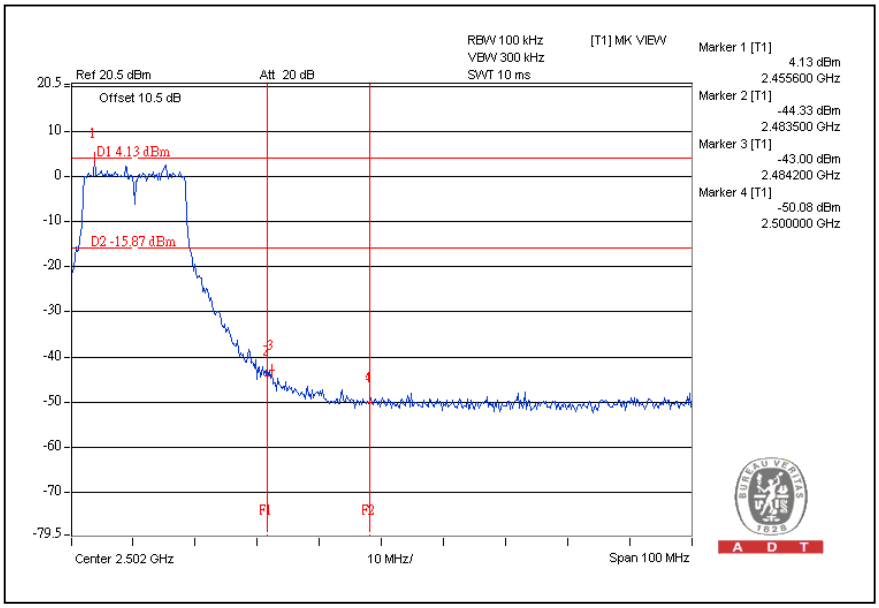

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.82 dBm
D2 -12.18 dBm
Marker 1 [T1]
6.87 dBm
2.427120 GHz
Marker 2 [T1]
-41.16 dBm
1.628080 GHz
Marker 3 [T1]
-42.25 dBm
24.750300 GHz
Marker 4 [T1]
-42.49 dBm
20.355580 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION:

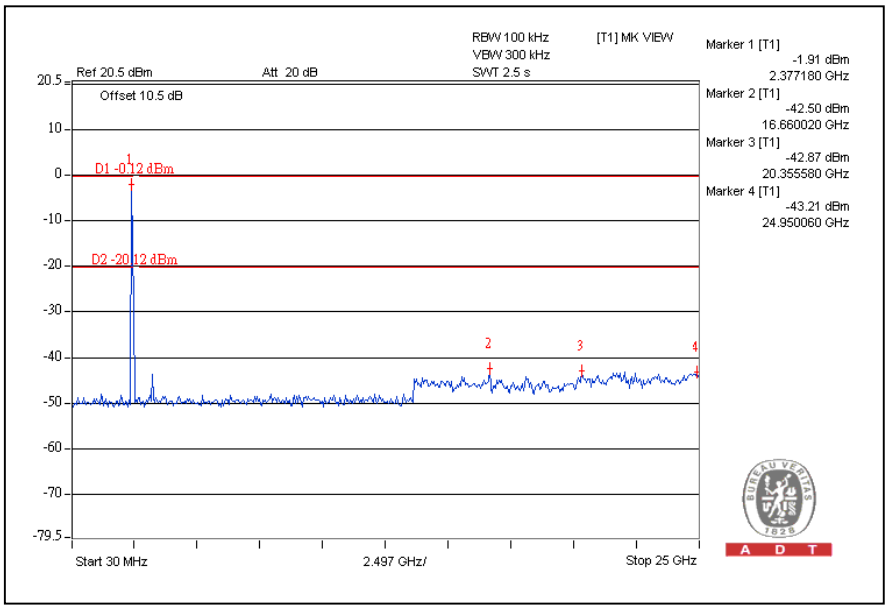
CH1



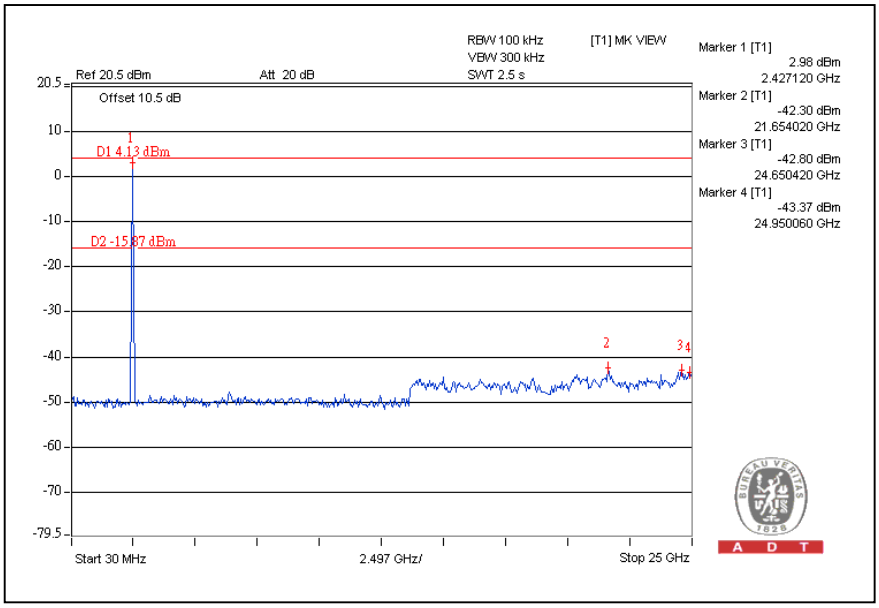
CH11



CH1

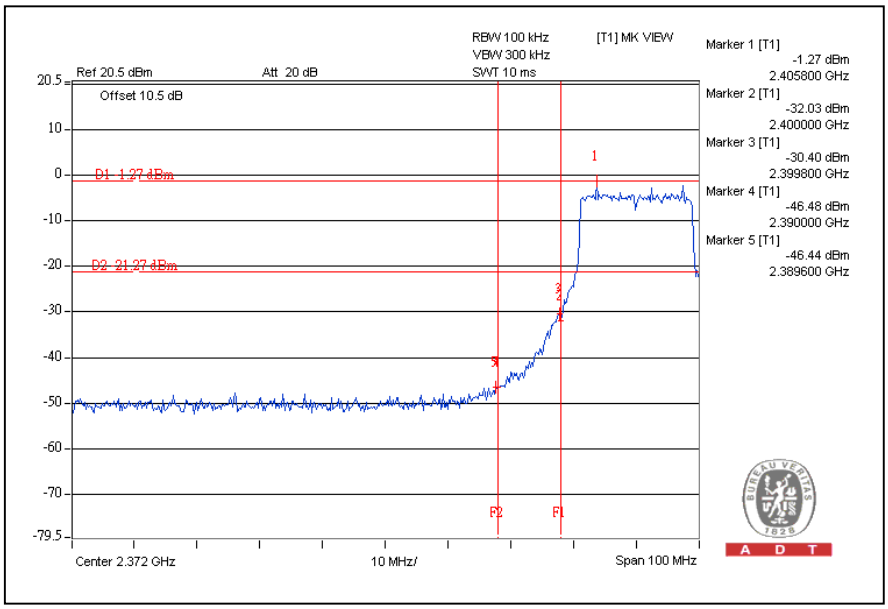

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -0.12 dBm
D2 -20.12 dBm
Marker 1 [T1]
-1.91 dBm
2.377180 GHz
Marker 2 [T1]
-42.50 dBm
16.660020 GHz
Marker 3 [T1]
-42.87 dBm
20.355580 GHz
Marker 4 [T1]
-43.21 dBm
24.950060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

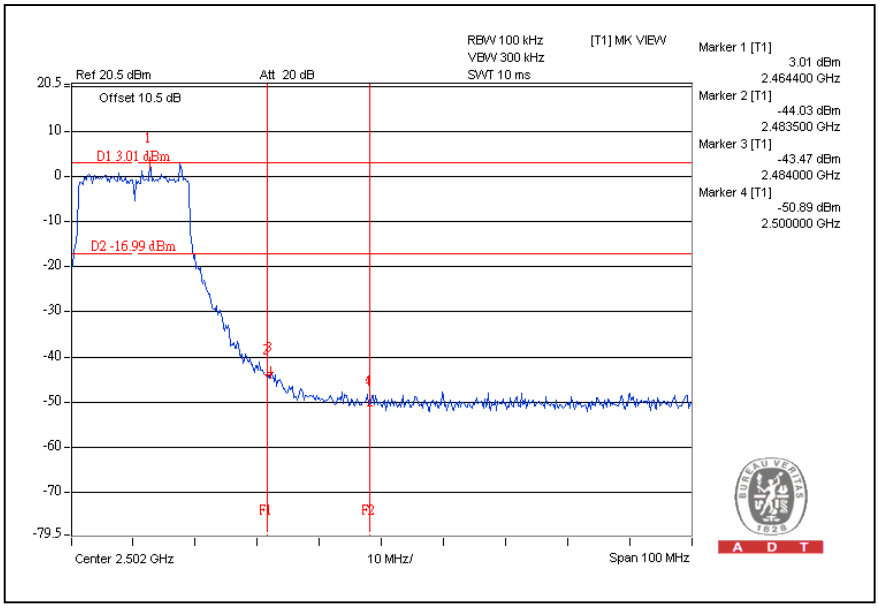

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 4.13 dBm
D2 -15.87 dBm
Marker 1 [T1]
2.98 dBm
2.427120 GHz
Marker 2 [T1]
-42.30 dBm
21.654020 GHz
Marker 3 [T1]
-42.80 dBm
24.650420 GHz
Marker 4 [T1]
-43.37 dBm
24.950060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz) OFDM MODULATION:

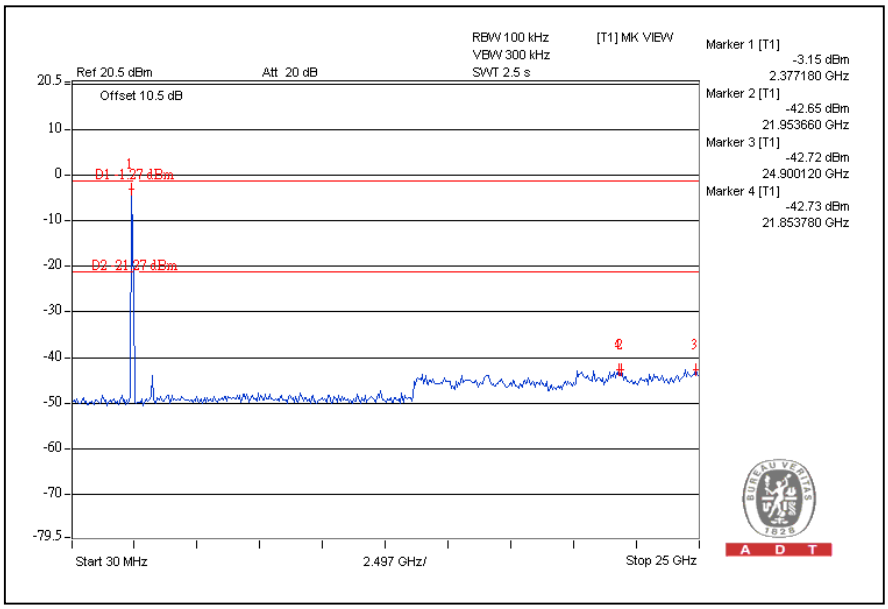
CH1



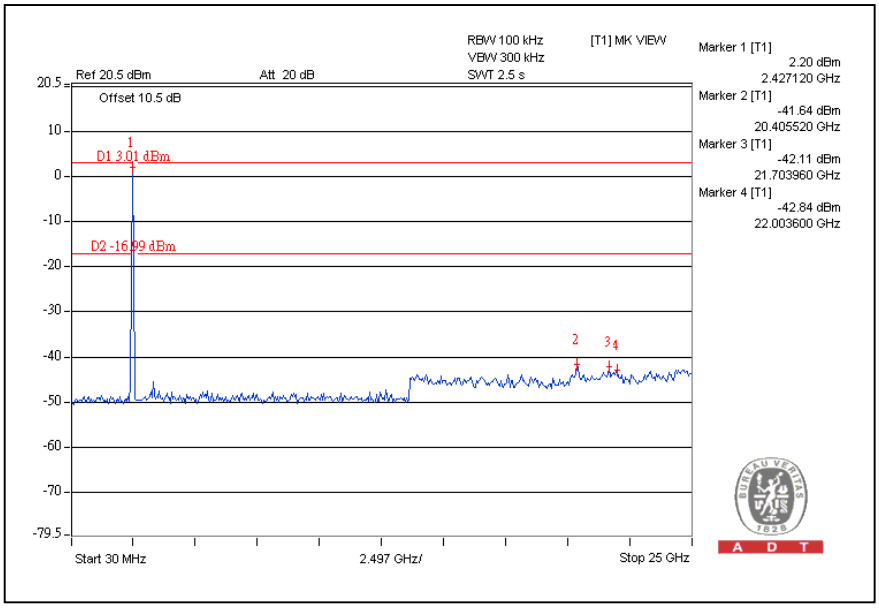
CH11



CH1

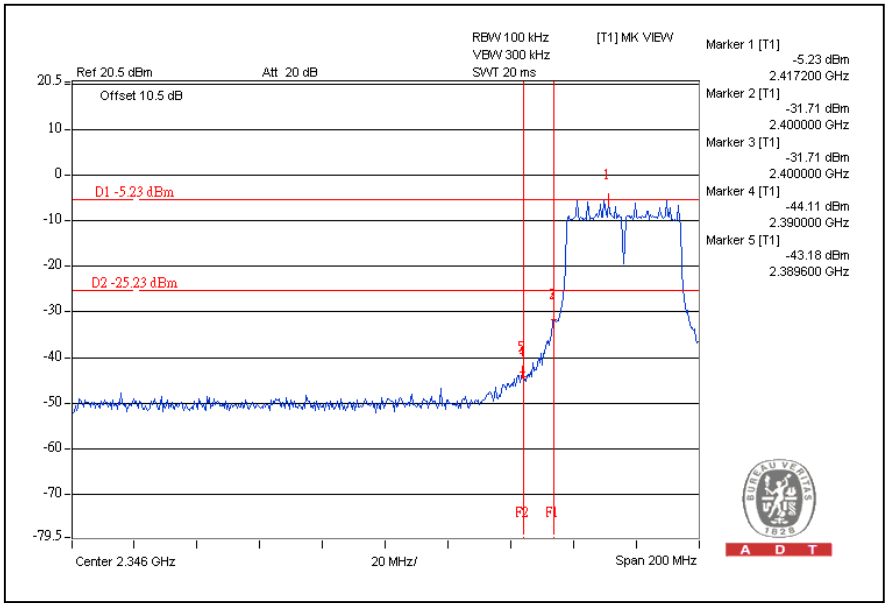

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.27 dBm
D2 -21.27 dBm
Marker 1 [T1]
-3.15 dBm
2.377180 GHz
Marker 2 [T1]
-42.65 dBm
21.953660 GHz
Marker 3 [T1]
-42.72 dBm
24.900120 GHz
Marker 4 [T1]
-42.73 dBm
21.853780 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

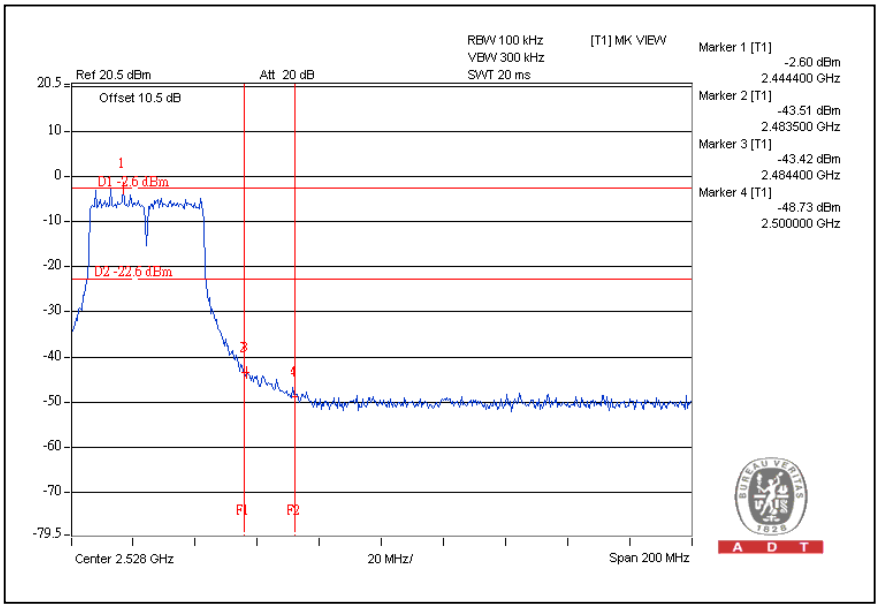

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.01 dBm
D2 -16.99 dBm
Marker 1 [T1]
2.20 dBm
2.427120 GHz
Marker 2 [T1]
-41.64 dBm
20.405520 GHz
Marker 3 [T1]
-42.11 dBm
21.703960 GHz
Marker 4 [T1]
-42.84 dBm
22.003600 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (40MHz) OFDM MODULATION:

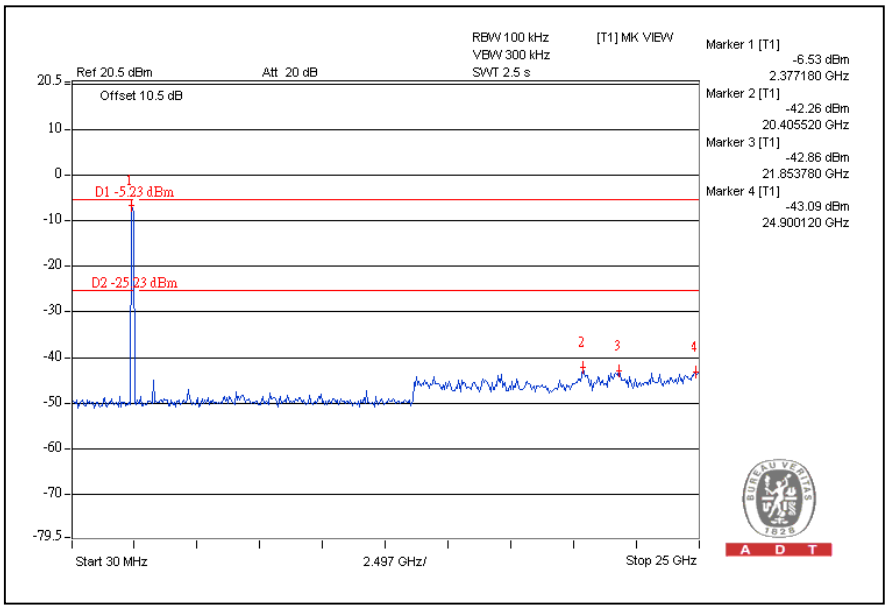
CH1



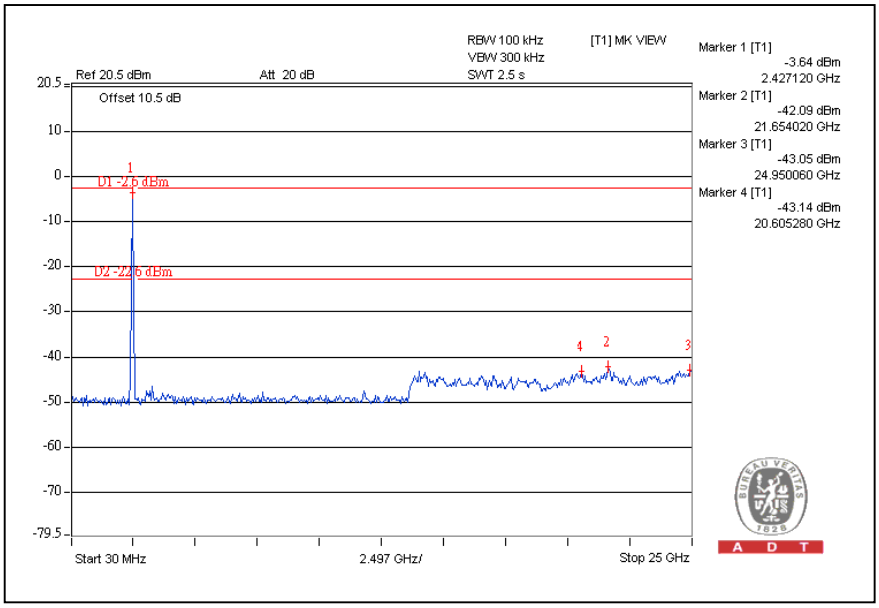
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-6.53 dBm
2.377180 GHz
Marker 2 [T1]
-42.26 dBm
20.405520 GHz
Marker 3 [T1]
-42.86 dBm
21.853780 GHz
Marker 4 [T1]
-43.09 dBm
24.900120 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -5.23 dBm
D2 -25.23 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

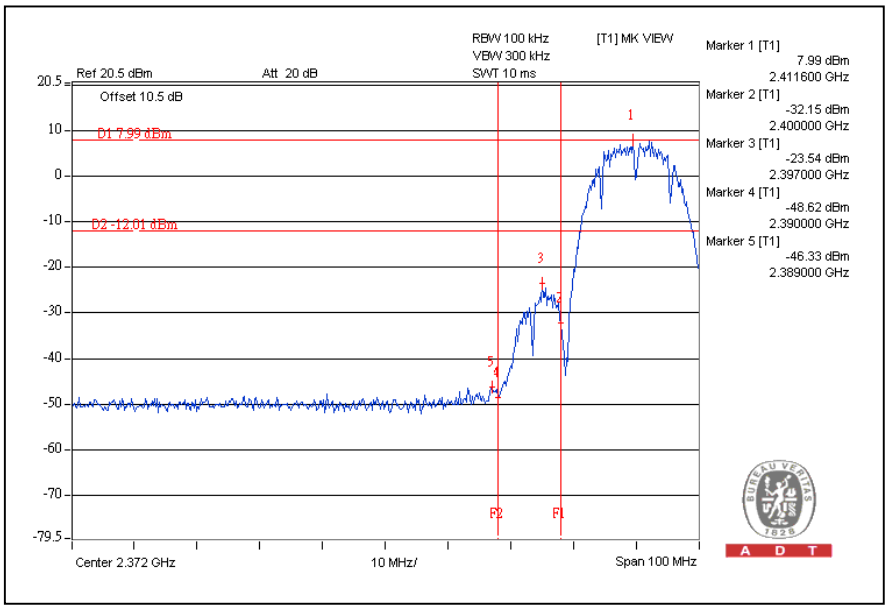
CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
-3.64 dBm
2.427120 GHz
Marker 2 [T1]
-42.09 dBm
21.654020 GHz
Marker 3 [T1]
-43.05 dBm
24.950060 GHz
Marker 4 [T1]
-43.14 dBm
20.605280 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -2.5 dBm
D2 -22.5 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

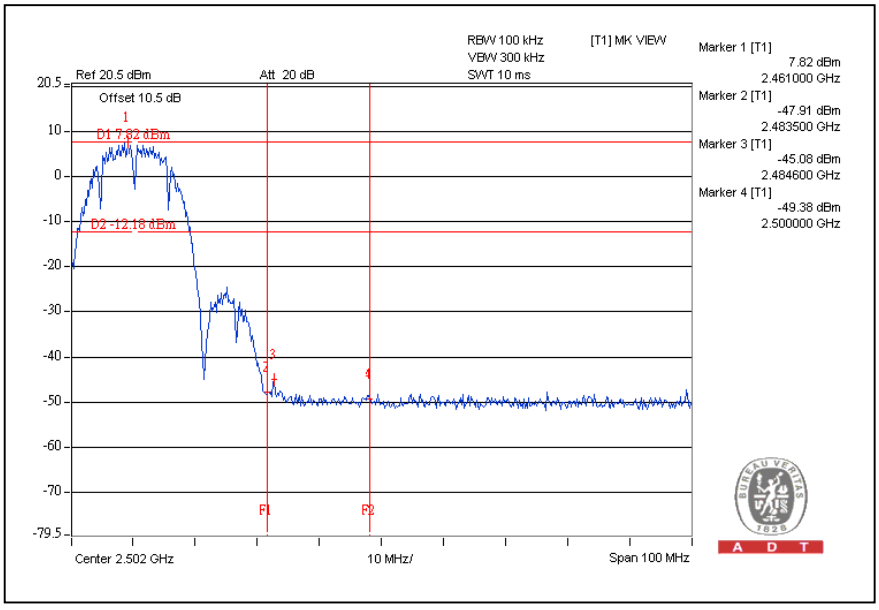
Antenna 2: PCB antenna

802.11b DSSS MODULATION:

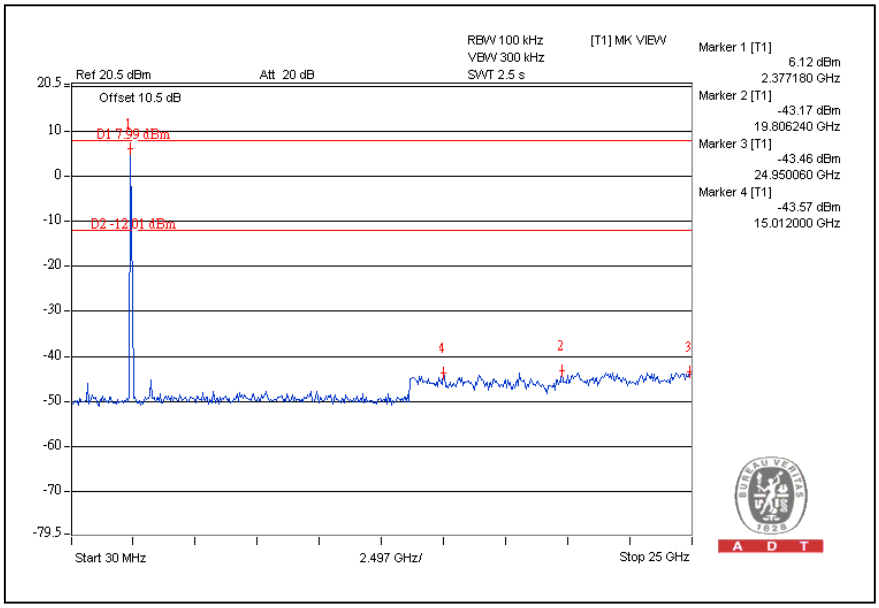
CH1



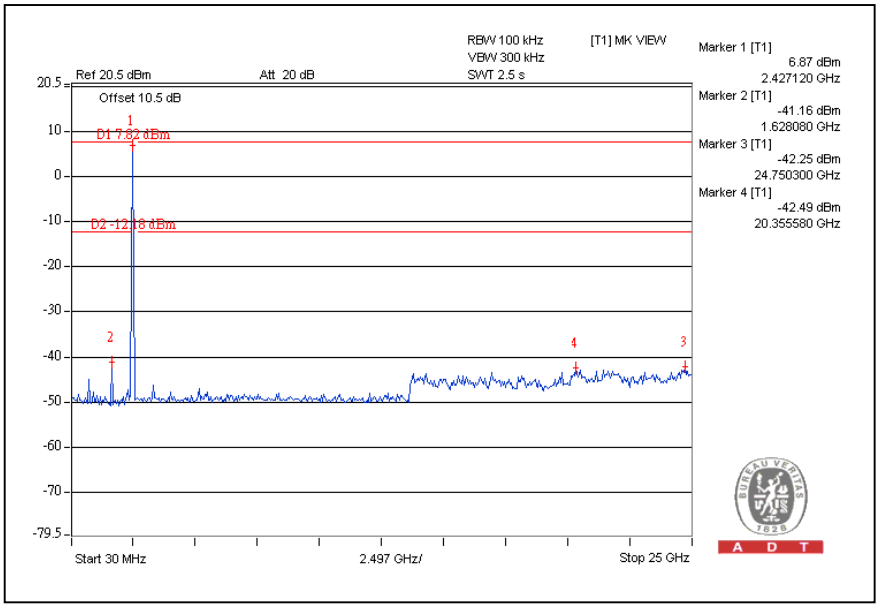
CH11



CH1

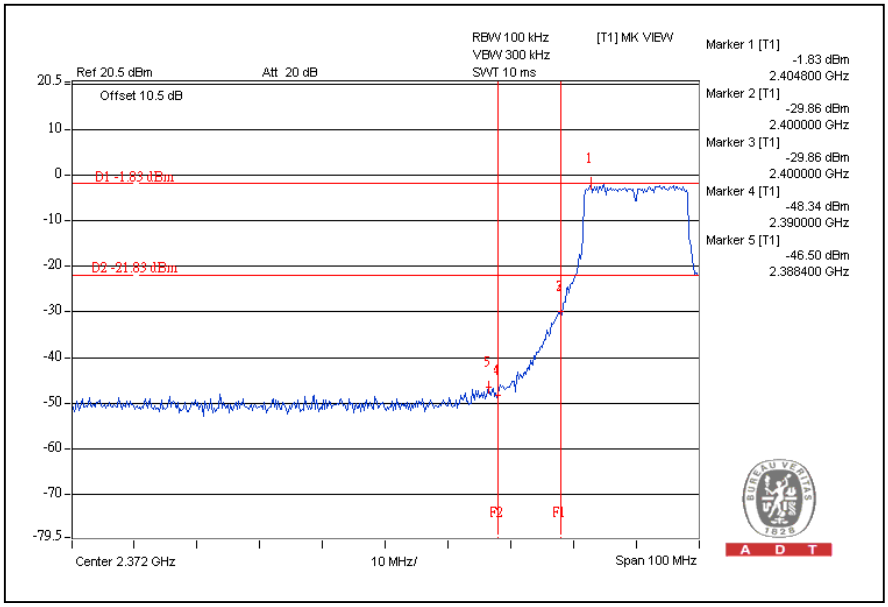

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.99 dBm
D2 -12.01 dBm
Marker 1 [T1]
6.12 dBm
2.377180 GHz
Marker 2 [T1]
-43.17 dBm
19.806240 GHz
Marker 3 [T1]
-43.46 dBm
24.950060 GHz
Marker 4 [T1]
-43.57 dBm
15.012000 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

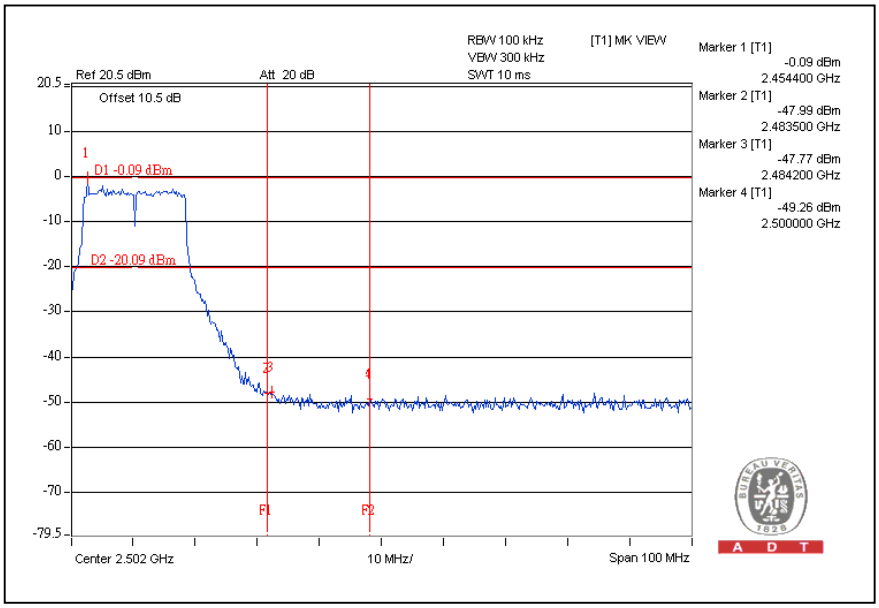

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.82 dBm
D2 -12.18 dBm
Marker 1 [T1]
6.87 dBm
2.427120 GHz
Marker 2 [T1]
-41.16 dBm
1.628080 GHz
Marker 3 [T1]
-42.25 dBm
24.750300 GHz
Marker 4 [T1]
-42.49 dBm
20.355580 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION:

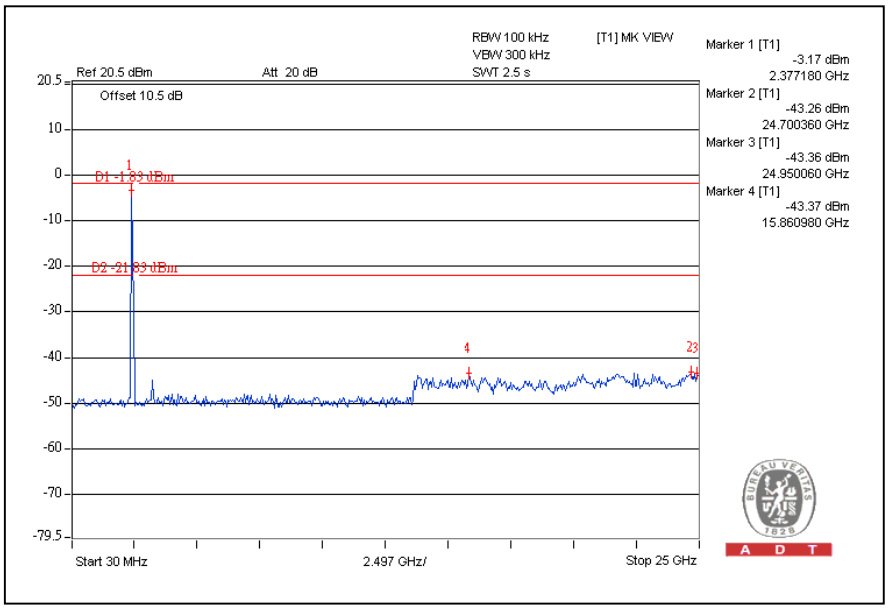
CH1



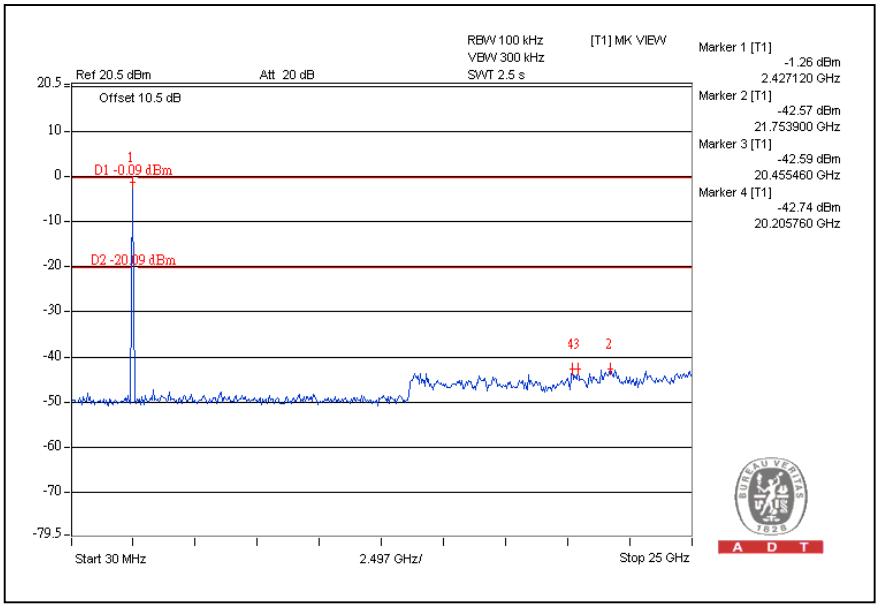
CH11



CH1

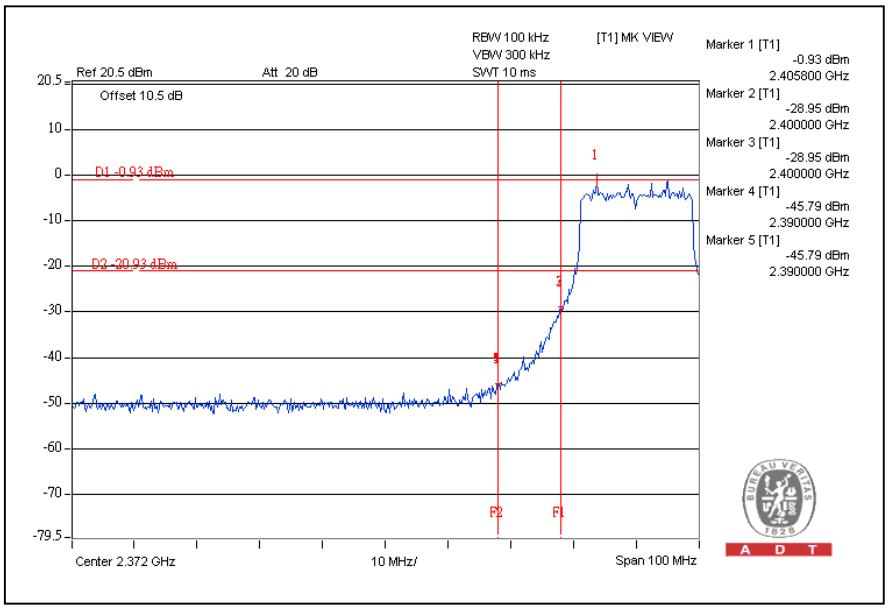

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.83 dBm
D2 -21.83 dBm
Marker 1 [T1]
-3.17 dBm
2.377180 GHz
Marker 2 [T1]
-43.26 dBm
24.700360 GHz
Marker 3 [T1]
-43.36 dBm
24.950060 GHz
Marker 4 [T1]
-43.37 dBm
15.860980 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

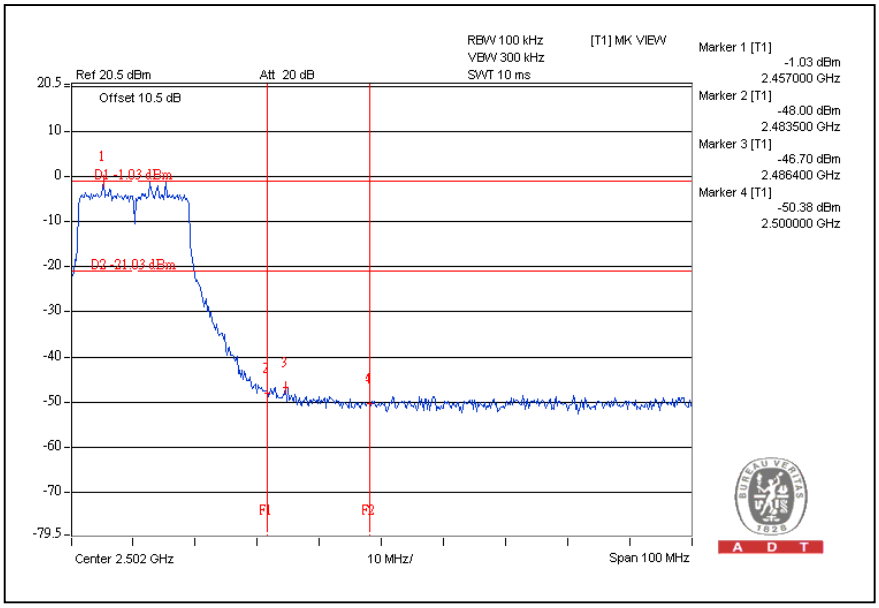

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -0.09 dBm
D2 -20.09 dBm
Marker 1 [T1]
-1.26 dBm
2.427120 GHz
Marker 2 [T1]
-42.57 dBm
21.753900 GHz
Marker 3 [T1]
-42.59 dBm
20.455460 GHz
Marker 4 [T1]
-42.74 dBm
20.205760 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz) OFDM MODULATION:

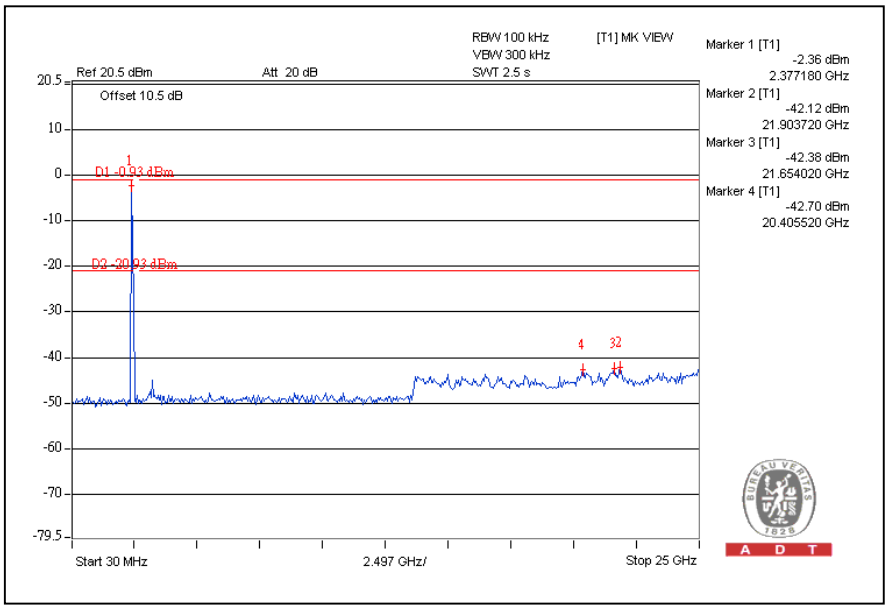
CH1



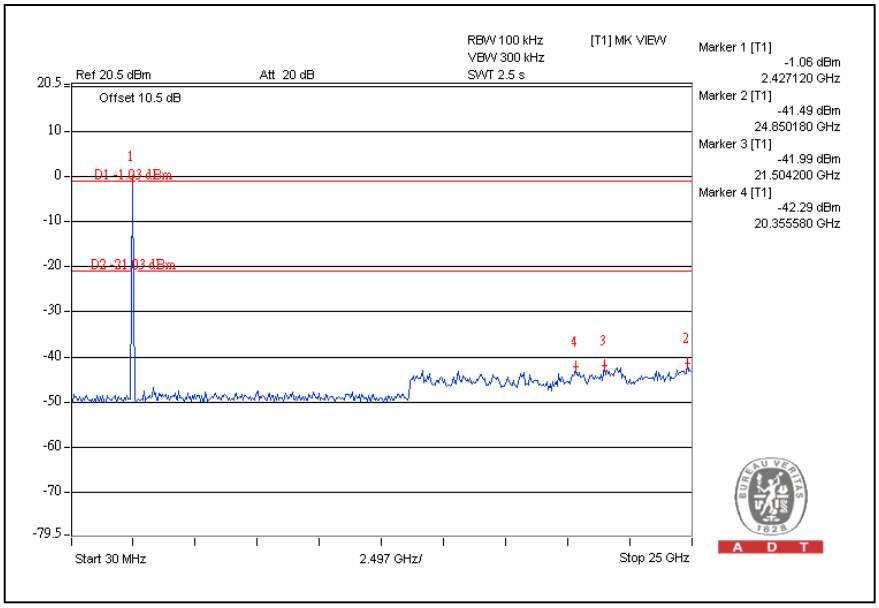
CH11



CH1

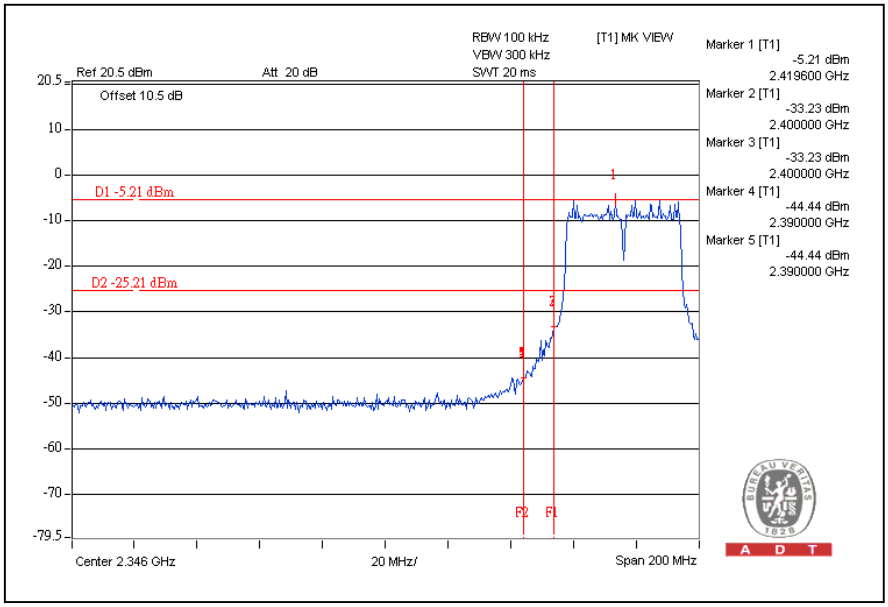

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -0.93 dBm
D2 -20.93 dBm
Marker 1 [T1]
-2.36 dBm
2.377180 GHz
Marker 2 [T1]
-42.12 dBm
21.903720 GHz
Marker 3 [T1]
-42.38 dBm
21.654020 GHz
Marker 4 [T1]
-42.70 dBm
20.405520 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

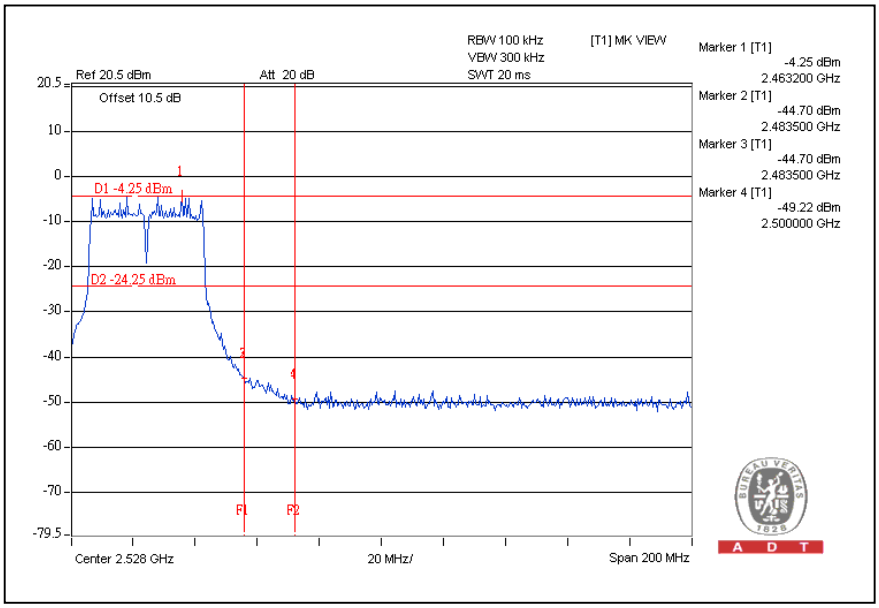

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.03 dBm
D2 -21.03 dBm
Marker 1 [T1]
-1.06 dBm
2.427120 GHz
Marker 2 [T1]
-41.49 dBm
24.850180 GHz
Marker 3 [T1]
-41.99 dBm
21.504200 GHz
Marker 4 [T1]
-42.29 dBm
20.355580 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (40MHz) OFDM MODULATION:

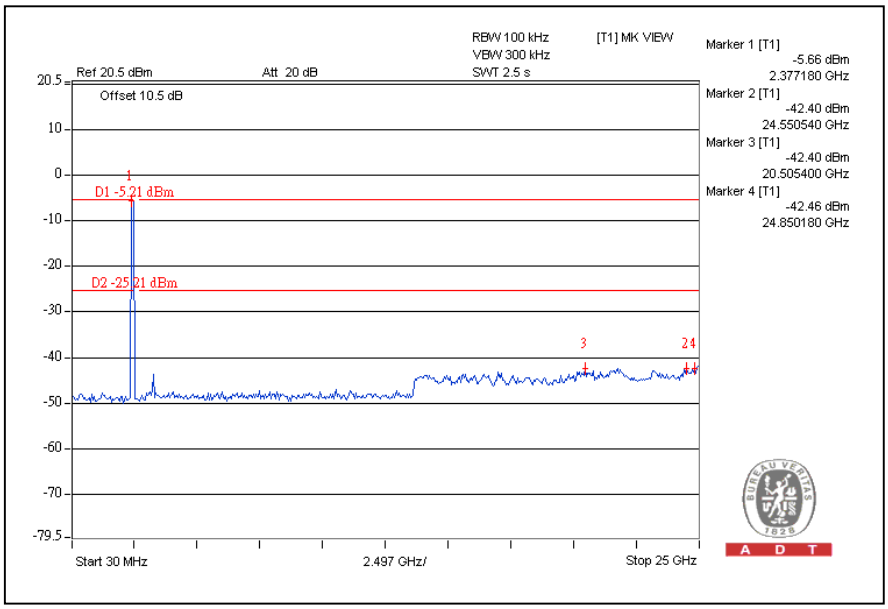
CH1



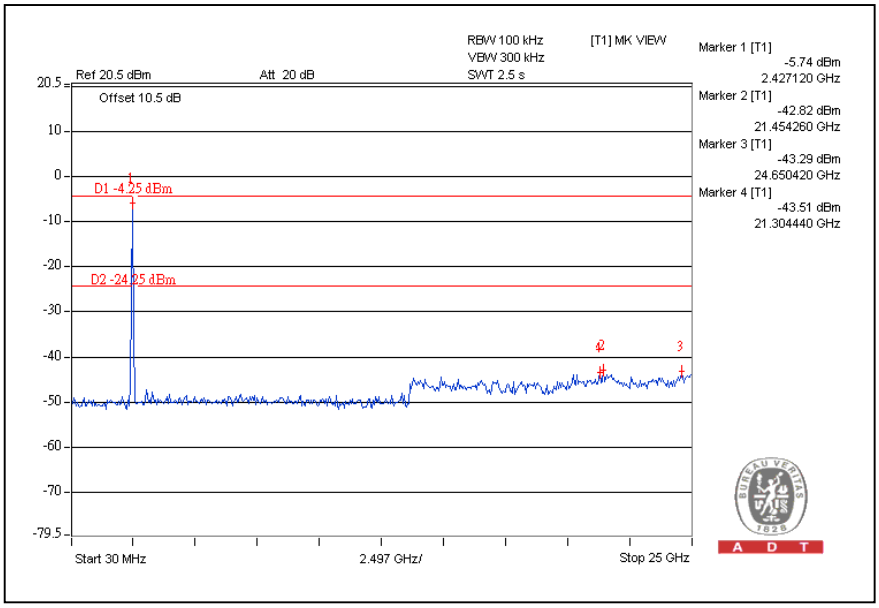
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -5.21 dBm
D2 -25.21 dBm
Marker 1 [T1]
-5.66 dBm
2.377180 GHz
Marker 2 [T1]
-42.40 dBm
24.550540 GHz
Marker 3 [T1]
-42.40 dBm
20.505400 GHz
Marker 4 [T1]
-42.46 dBm
24.850180 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

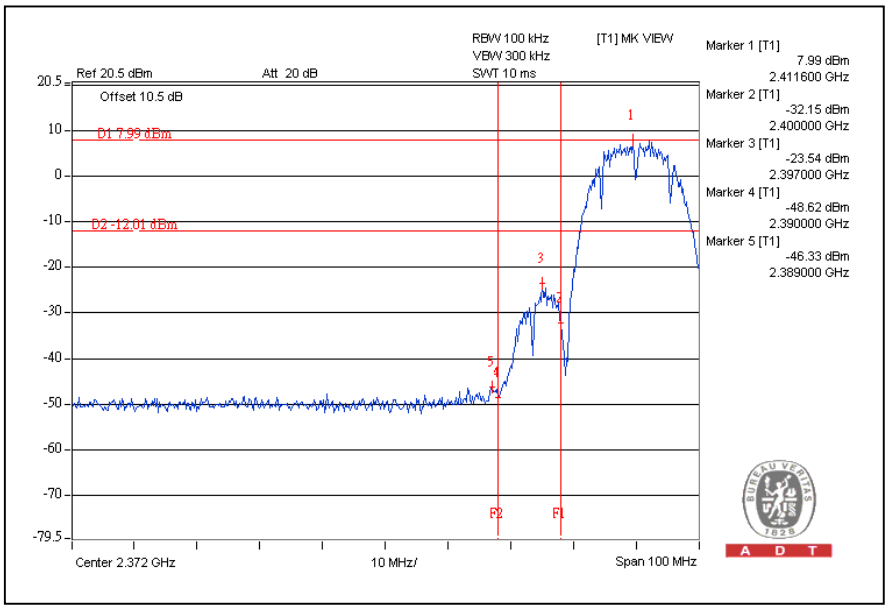
CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -4.25 dBm
D2 -24.25 dBm
Marker 1 [T1]
-5.74 dBm
2.427120 GHz
Marker 2 [T1]
-42.82 dBm
21.454260 GHz
Marker 3 [T1]
-43.29 dBm
24.650420 GHz
Marker 4 [T1]
-43.51 dBm
21.304440 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

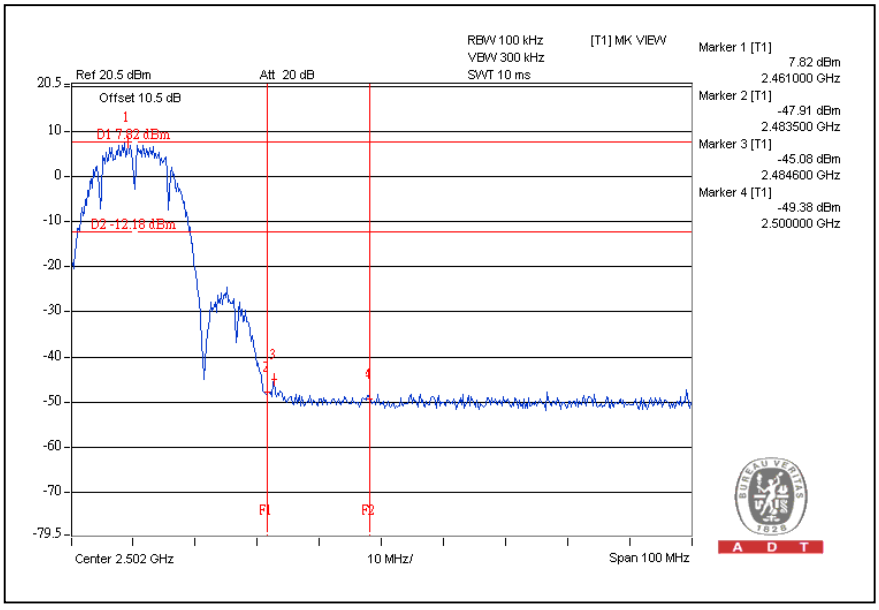
Antenna 3: PIFA antenna

802.11b DSSS MODULATION:

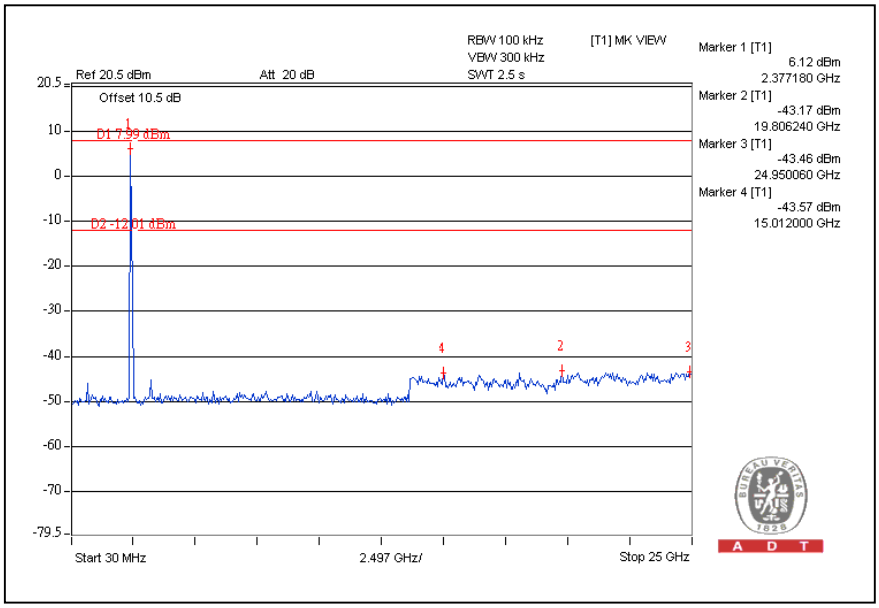
CH1



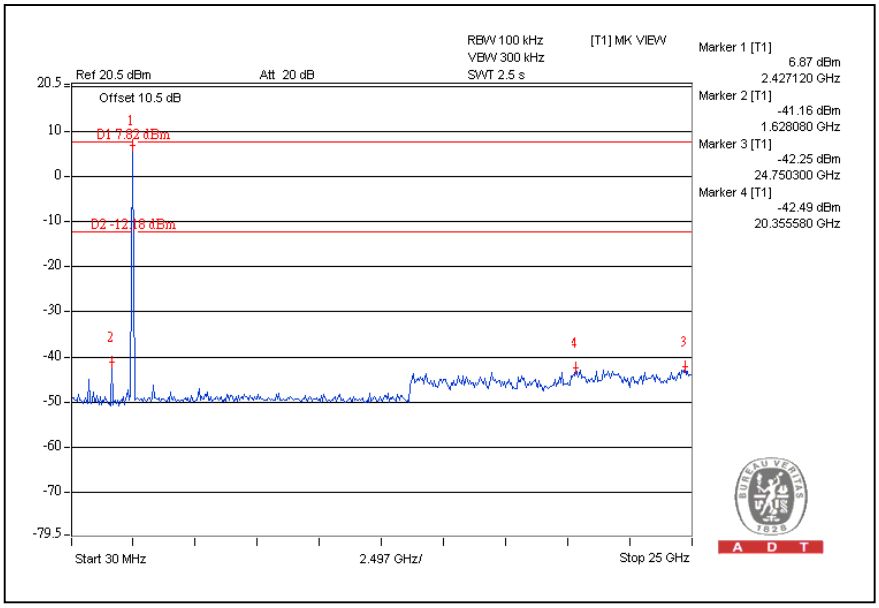
CH11



CH1

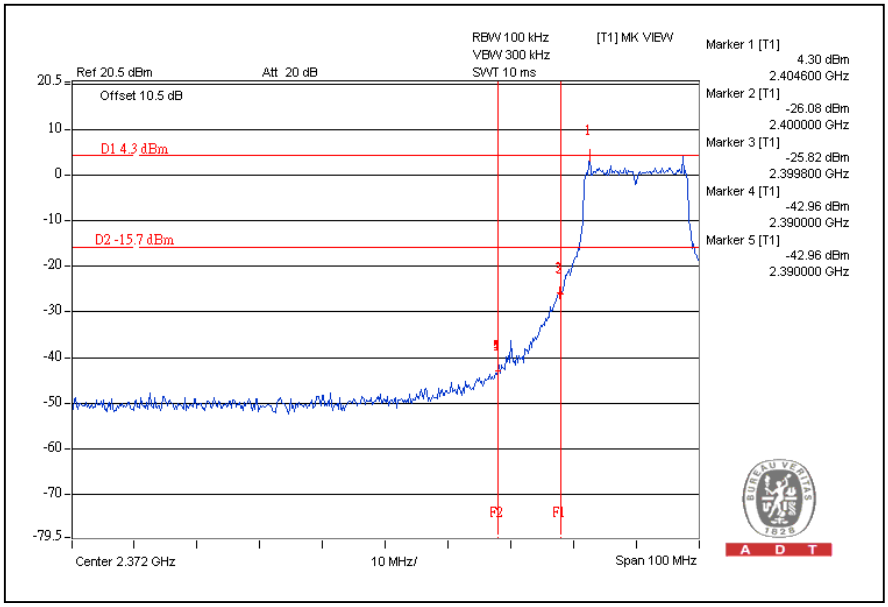

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.99 dBm
D2 -12.01 dBm
Marker 1 [T1]
6.12 dBm
2.377180 GHz
Marker 2 [T1]
-43.17 dBm
19.806240 GHz
Marker 3 [T1]
-43.46 dBm
24.950060 GHz
Marker 4 [T1]
-43.57 dBm
15.012000 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

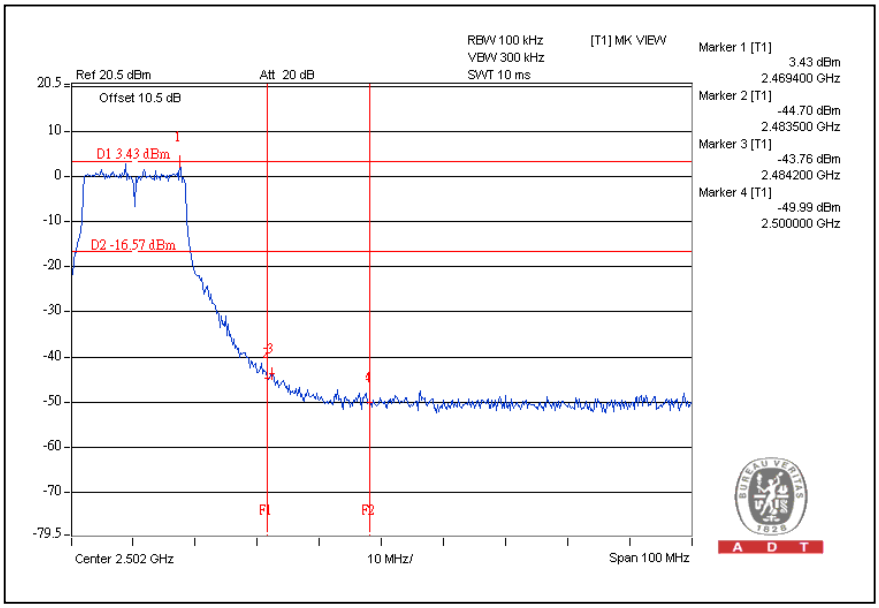

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.82 dBm
D2 -12.18 dBm
Marker 1 [T1]
6.87 dBm
2.427120 GHz
Marker 2 [T1]
-41.16 dBm
1.628080 GHz
Marker 3 [T1]
-42.25 dBm
24.750300 GHz
Marker 4 [T1]
-42.49 dBm
20.355580 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION:

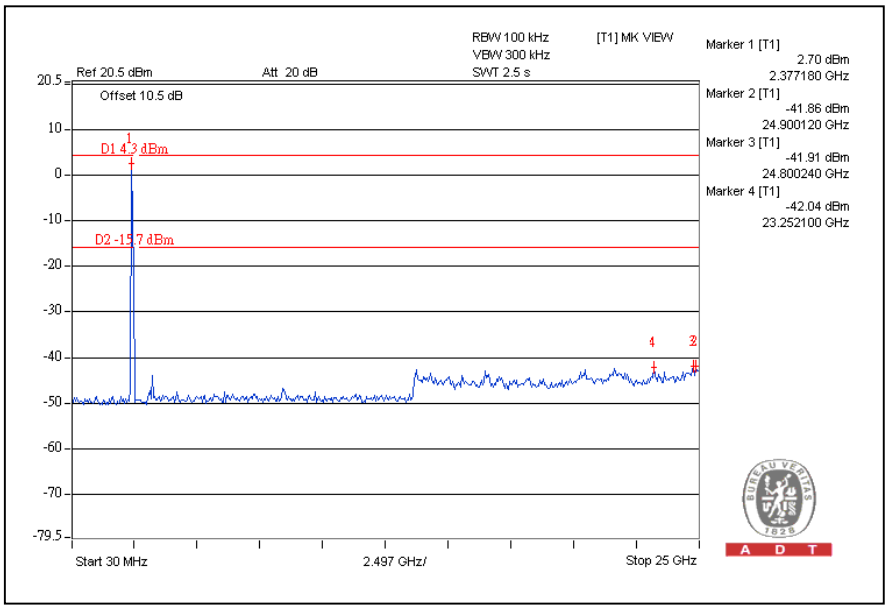
CH1



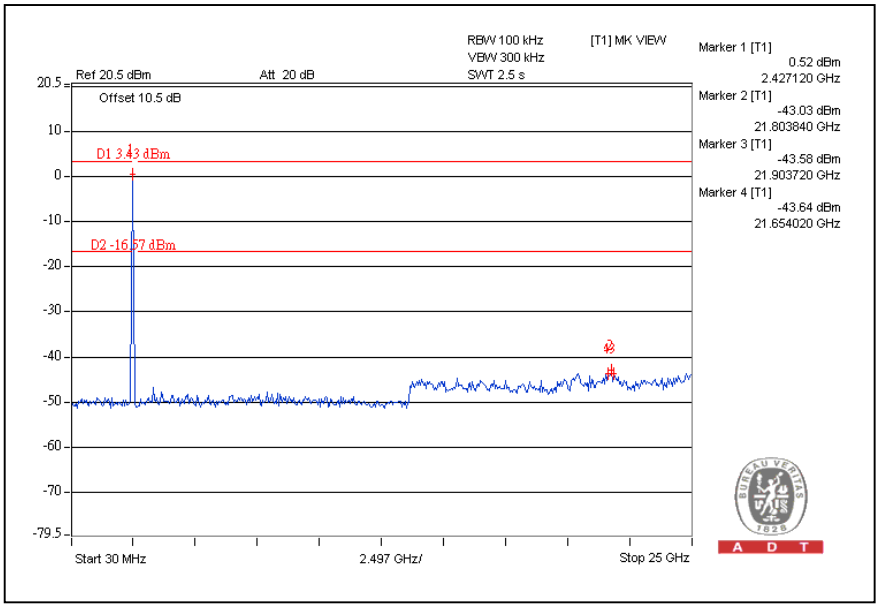
CH11



CH1

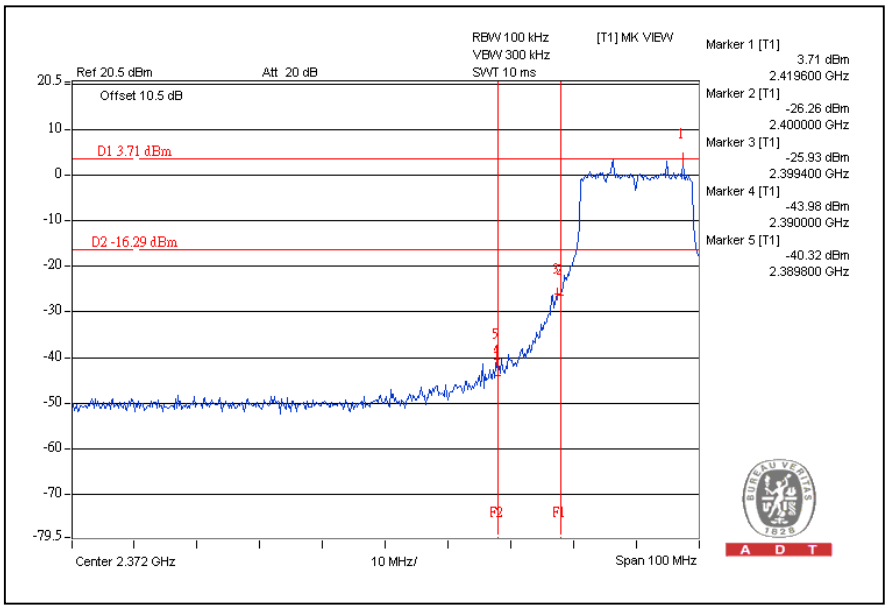

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 4.3 dBm
D2 -15.7 dBm
Marker 1 [T1]
2.70 dBm
2.377180 GHz
Marker 2 [T1]
-41.86 dBm
24.900120 GHz
Marker 3 [T1]
-41.91 dBm
24.800240 GHz
Marker 4 [T1]
-42.04 dBm
23.252100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

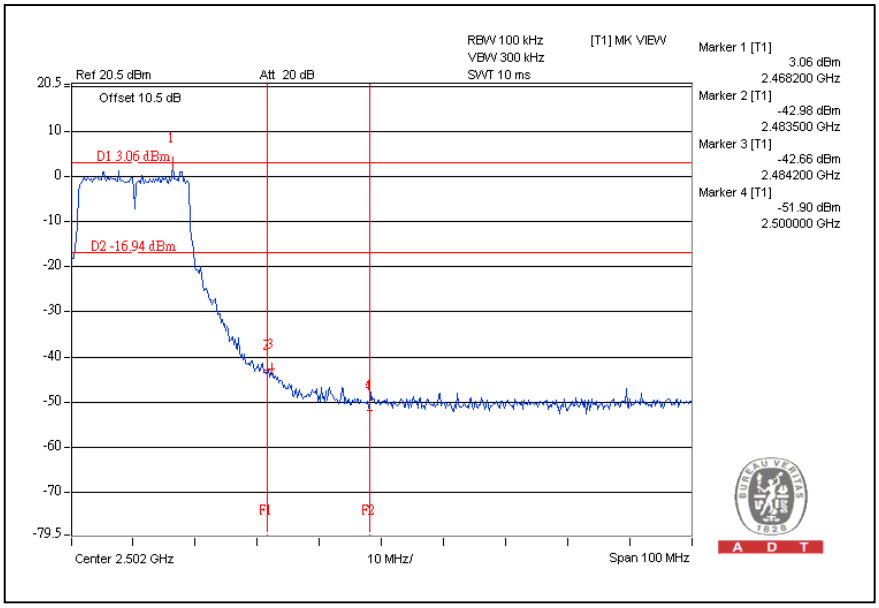

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.43 dBm
D2 -16.57 dBm
Marker 1 [T1]
0.52 dBm
2.427120 GHz
Marker 2 [T1]
-43.03 dBm
21.803840 GHz
Marker 3 [T1]
-43.58 dBm
21.903720 GHz
Marker 4 [T1]
-43.64 dBm
21.654020 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz) OFDM MODULATION:

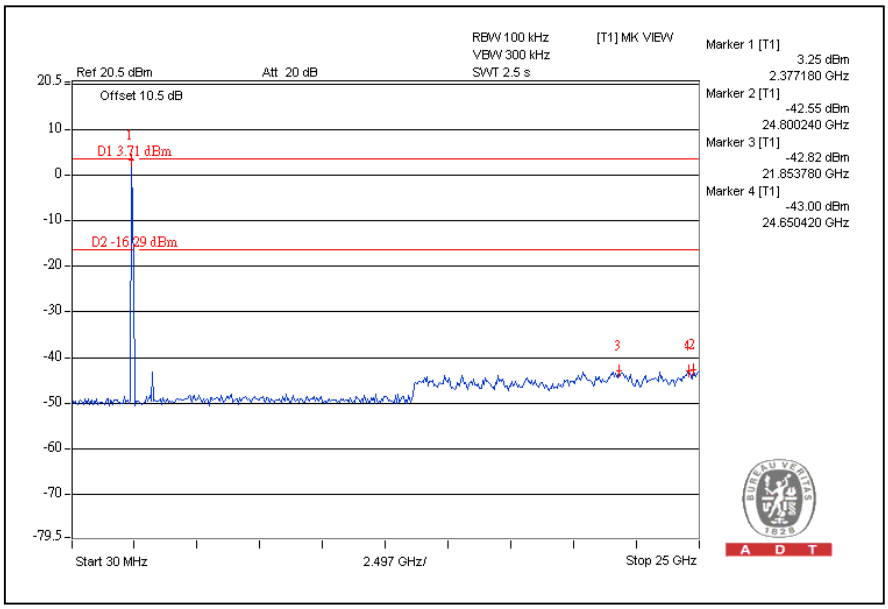
CH1



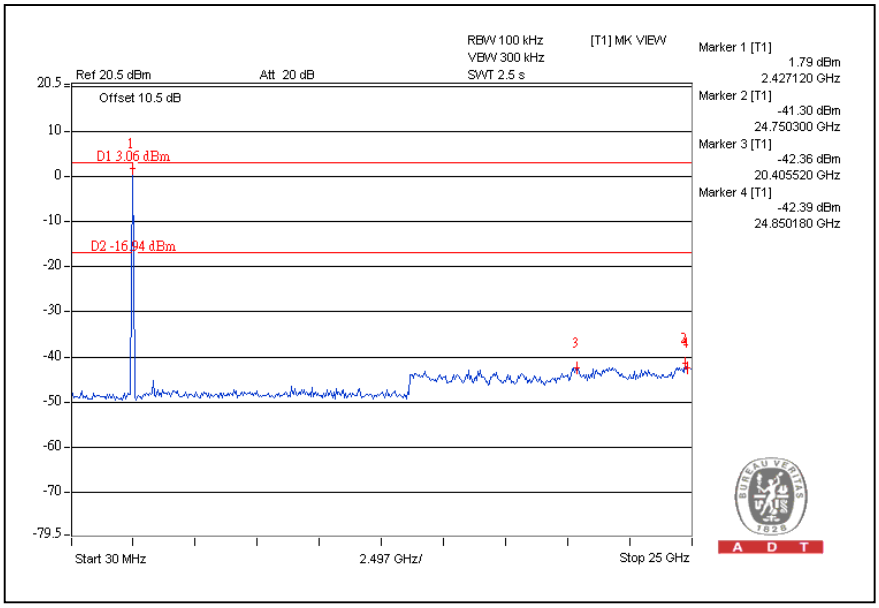
CH11



CH1

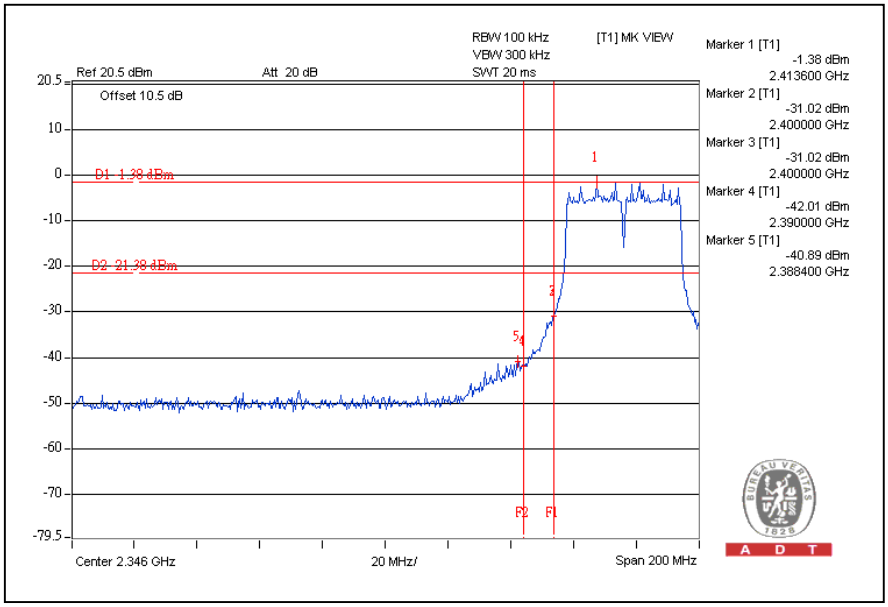

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
3.25 dBm
2.377180 GHz
Marker 2 [T1]
-42.55 dBm
24.800240 GHz
Marker 3 [T1]
-42.82 dBm
21.853780 GHz
Marker 4 [T1]
-43.00 dBm
24.650420 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.71 dBm
D2 -16.29 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

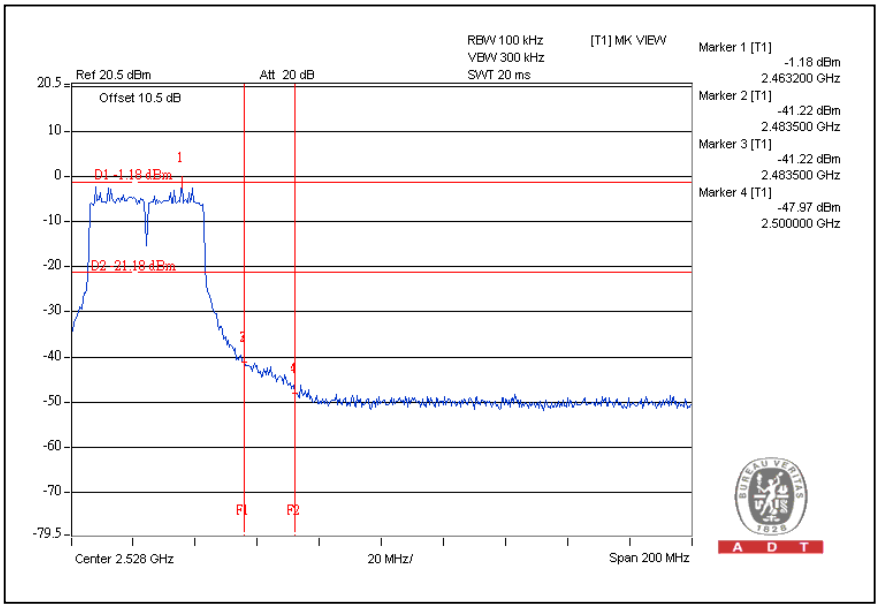

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
1.79 dBm
2.427120 GHz
Marker 2 [T1]
-41.30 dBm
24.750300 GHz
Marker 3 [T1]
-42.36 dBm
20.405520 GHz
Marker 4 [T1]
-42.39 dBm
24.850180 GHz
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 3.06 dBm
D2 -16.94 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (40MHz) OFDM MODULATION:

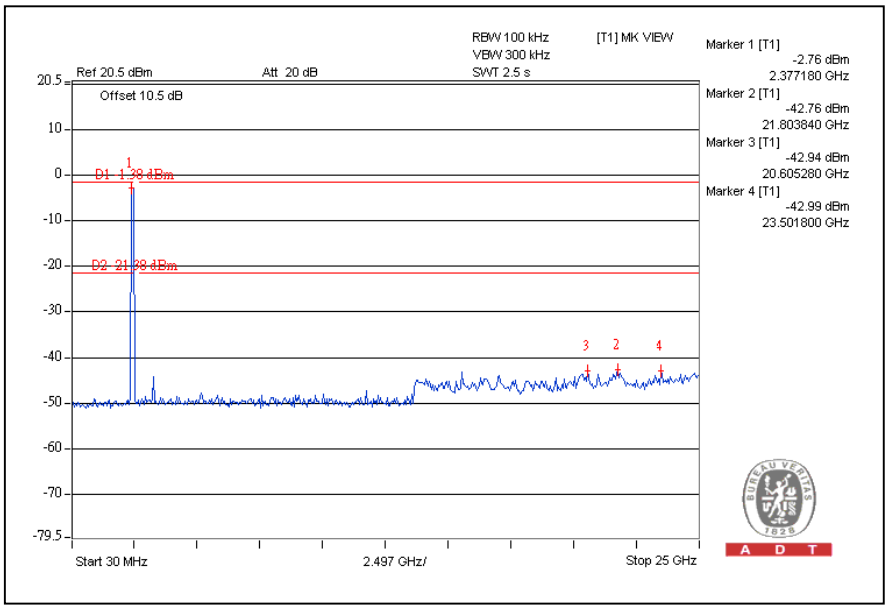
CH1



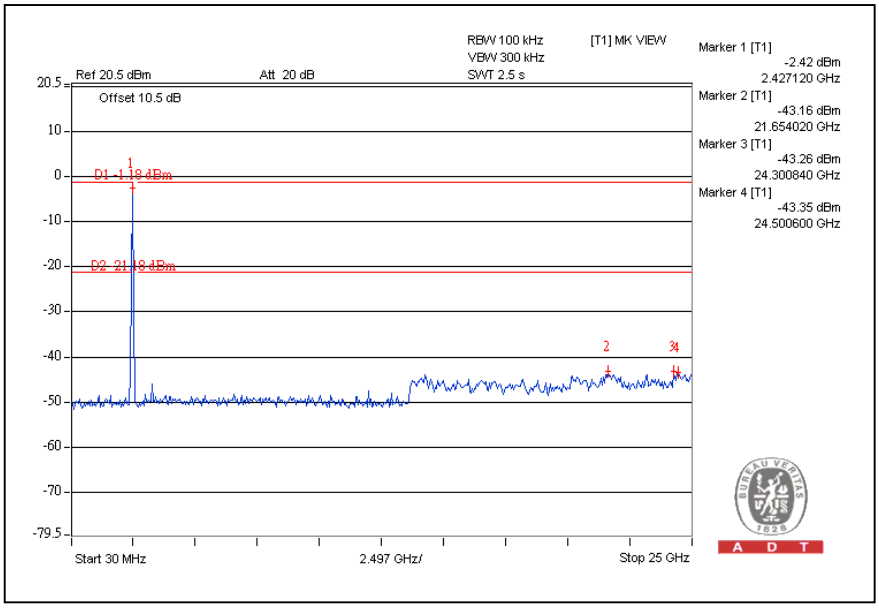
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.38 dBm
D2 21.38 dBm
Marker 1 [T1]
-2.76 dBm
2.377180 GHz
Marker 2 [T1]
-42.76 dBm
21.803840 GHz
Marker 3 [T1]
-42.94 dBm
20.605280 GHz
Marker 4 [T1]
-42.99 dBm
23.501800 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

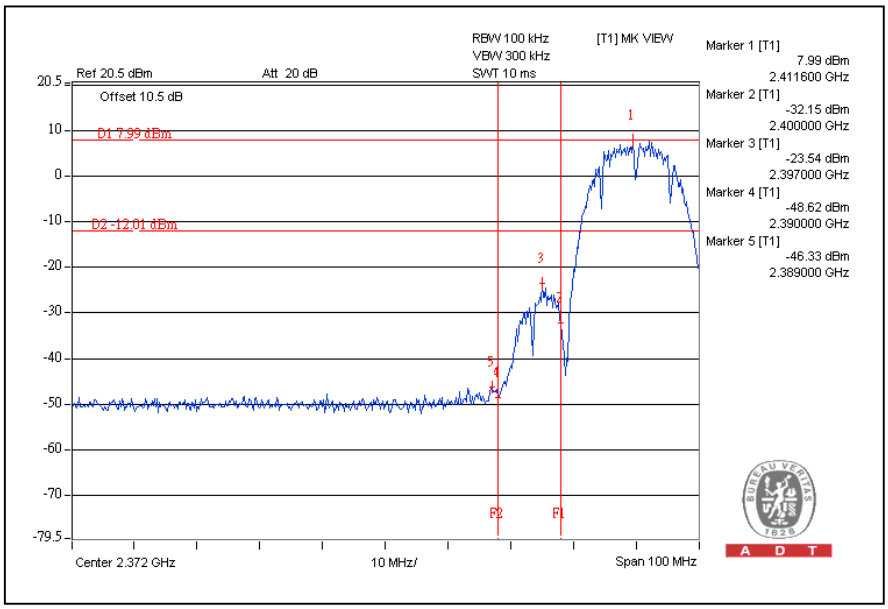
CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.18 dBm
D2 21.18 dBm
Marker 1 [T1]
-2.42 dBm
2.427120 GHz
Marker 2 [T1]
-43.16 dBm
21.654020 GHz
Marker 3 [T1]
-43.26 dBm
24.300840 GHz
Marker 4 [T1]
-43.35 dBm
24.500600 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

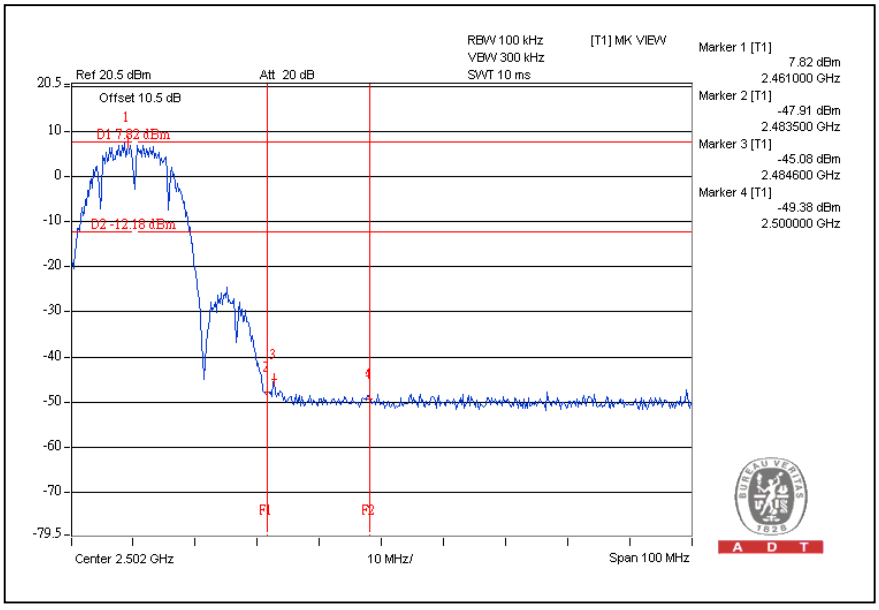
Antenna 4: PIFA antenna

802.11b DSSS MODULATION:

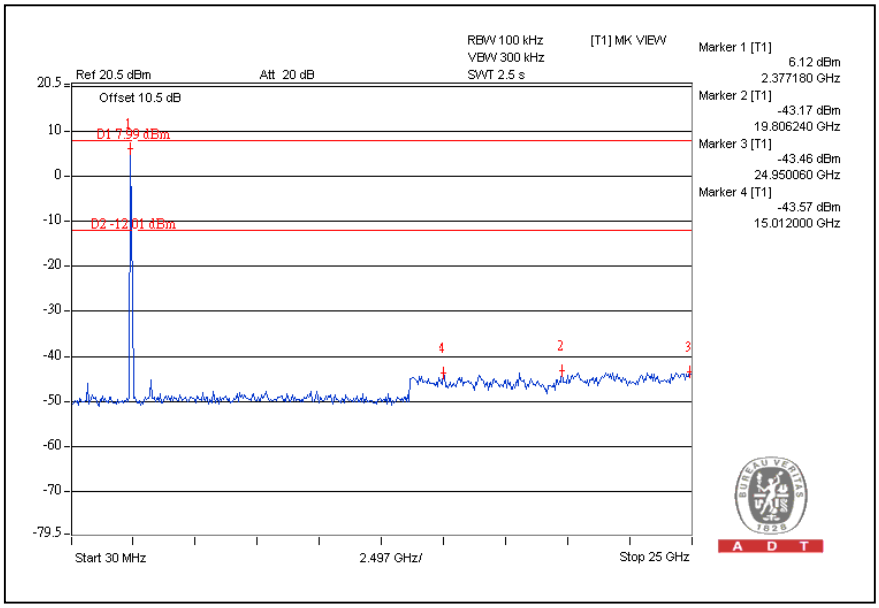
CH1



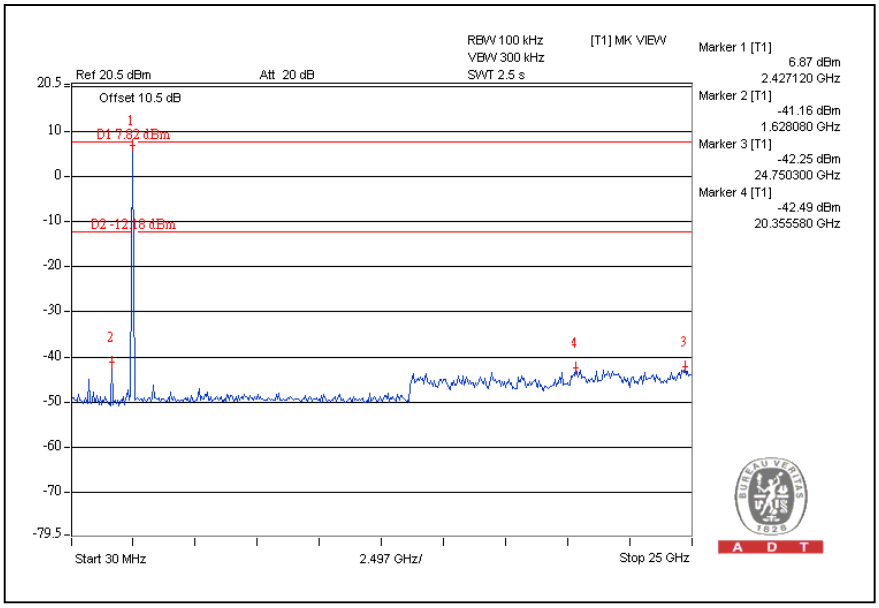
CH11



CH1

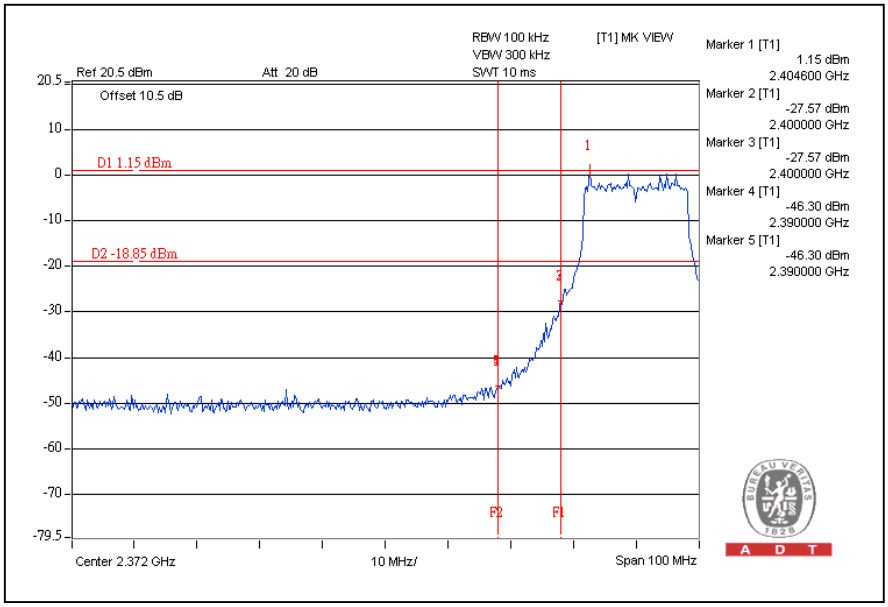

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.99 dBm
D2 -12.01 dBm
Marker 1 [T1]
6.12 dBm
2.377180 GHz
Marker 2 [T1]
-43.17 dBm
19.806240 GHz
Marker 3 [T1]
-43.46 dBm
24.950060 GHz
Marker 4 [T1]
-43.57 dBm
15.012000 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

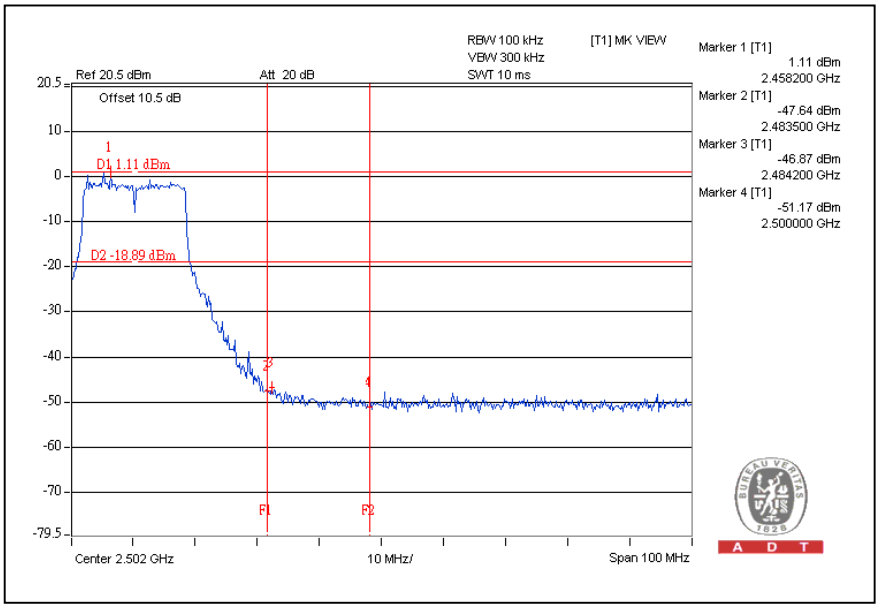

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 7.82 dBm
D2 -12.18 dBm
Marker 1 [T1]
6.87 dBm
2.427120 GHz
Marker 2 [T1]
-41.16 dBm
1.628080 GHz
Marker 3 [T1]
-42.25 dBm
24.750300 GHz
Marker 4 [T1]
-42.49 dBm
20.355580 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION:

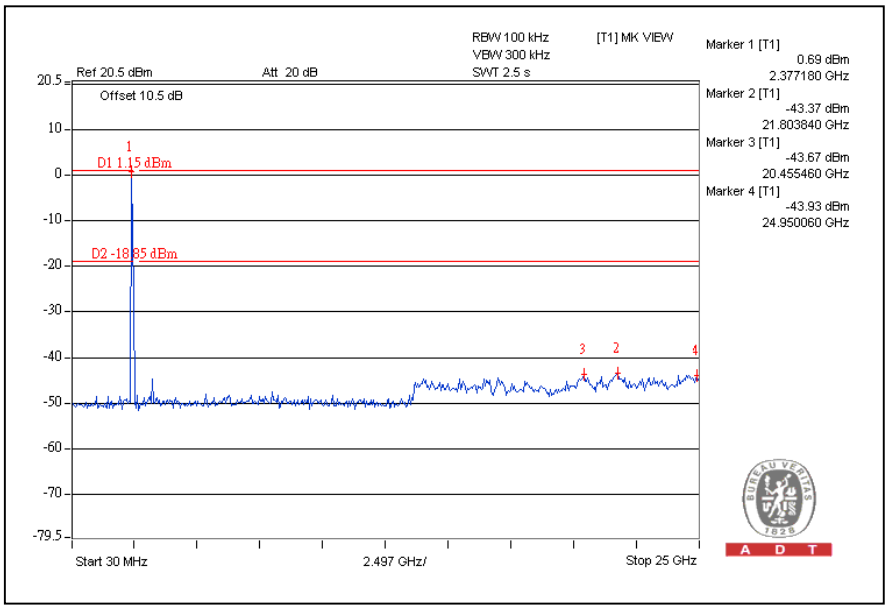
CH1



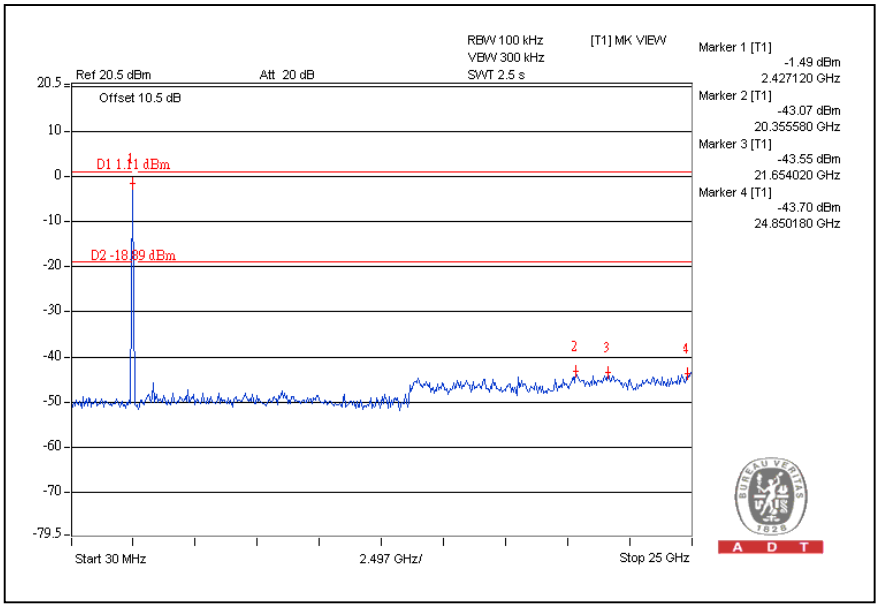
CH11



CH1

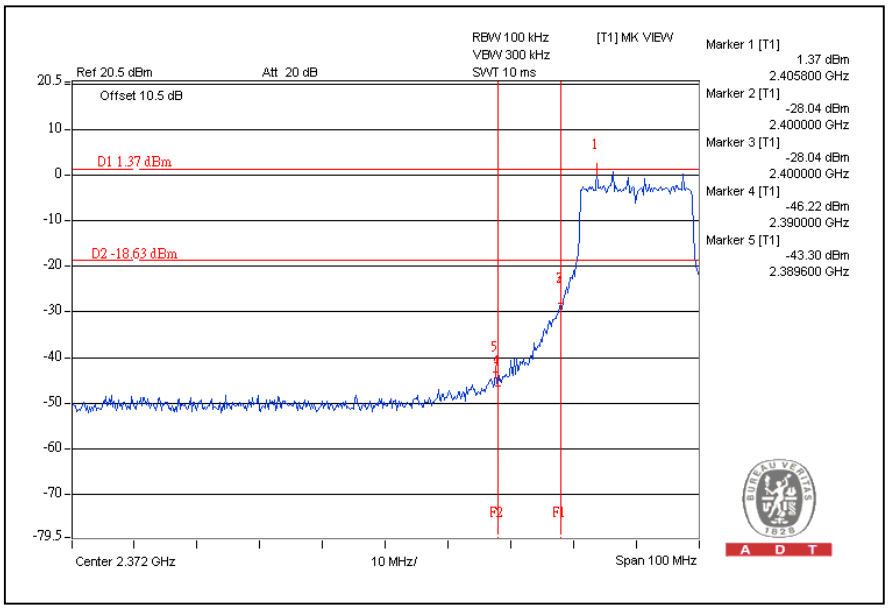

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.15 dBm
D2 -18.85 dBm
Marker 1 [T1]
0.69 dBm
2.377180 GHz
Marker 2 [T1]
-43.37 dBm
21.803840 GHz
Marker 3 [T1]
-43.67 dBm
20.455460 GHz
Marker 4 [T1]
-43.93 dBm
24.950060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

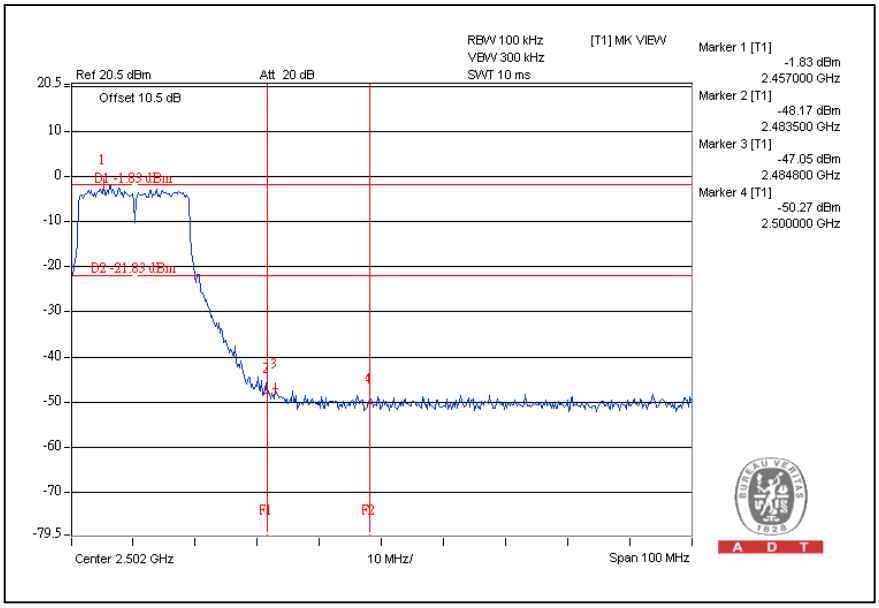

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.11 dBm
D2 -18.89 dBm
Marker 1 [T1]
-1.49 dBm
2.427120 GHz
Marker 2 [T1]
-43.07 dBm
20.355580 GHz
Marker 3 [T1]
-43.55 dBm
21.654020 GHz
Marker 4 [T1]
-43.70 dBm
24.850180 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (20MHz) OFDM MODULATION:

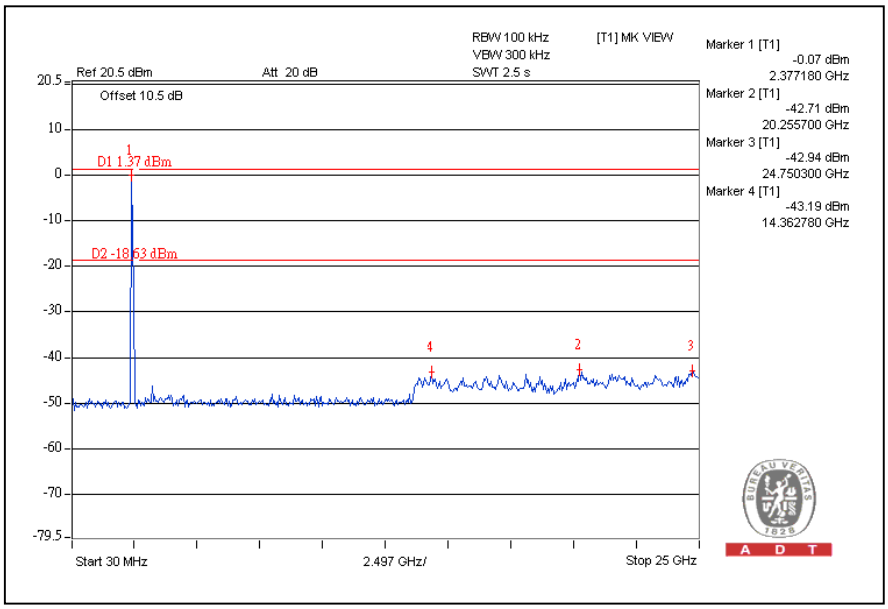
CH1



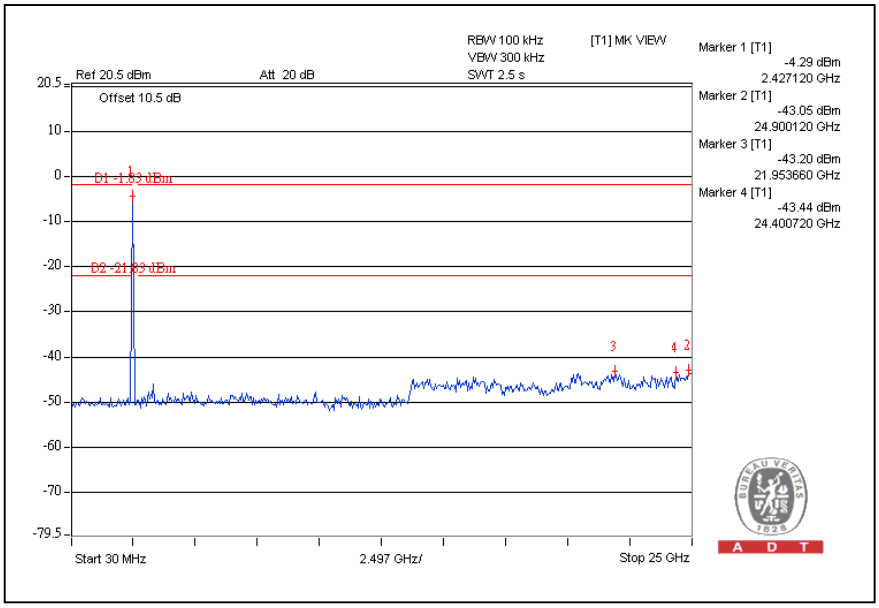
CH11



CH1

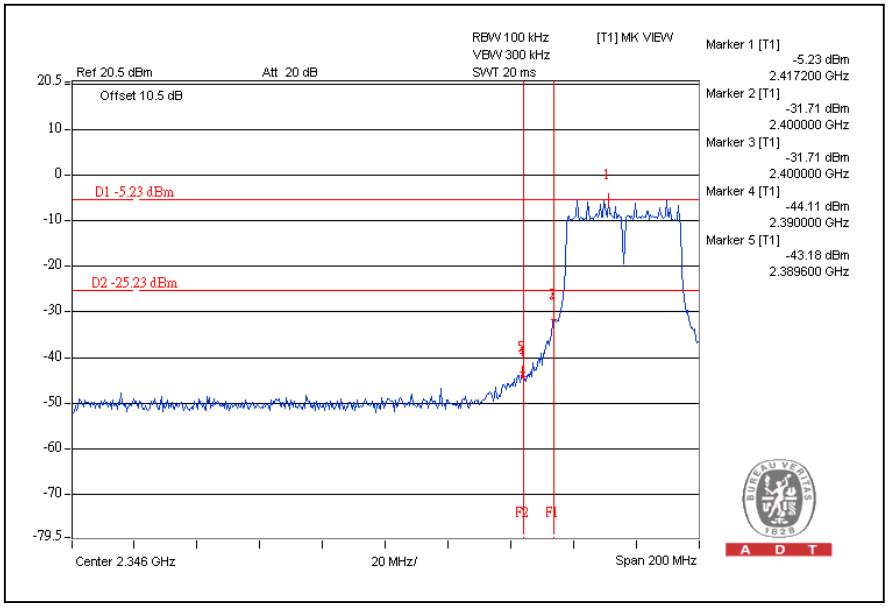

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 1.37 dBm
D2 -18.63 dBm
Marker 1 [T1]
-0.07 dBm
2.377180 GHz
Marker 2 [T1]
-42.71 dBm
20.255700 GHz
Marker 3 [T1]
-42.94 dBm
24.750300 GHz
Marker 4 [T1]
-43.19 dBm
14.362780 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH11

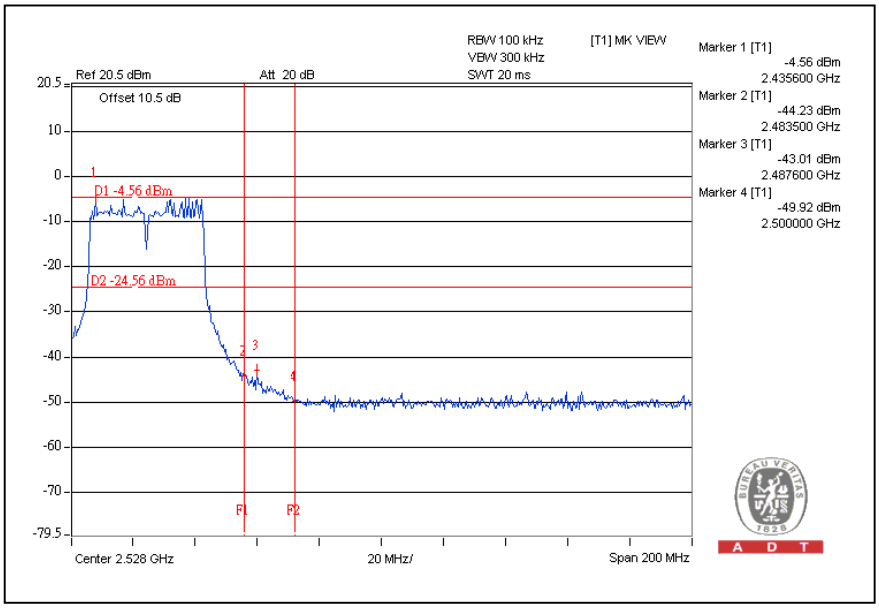

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -1.63 dBm
D2 -21.63 dBm
Marker 1 [T1]
-4.29 dBm
2.427120 GHz
Marker 2 [T1]
-43.05 dBm
24.900120 GHz
Marker 3 [T1]
-43.20 dBm
21.953660 GHz
Marker 4 [T1]
-43.44 dBm
24.400720 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11n (40MHz) OFDM MODULATION:

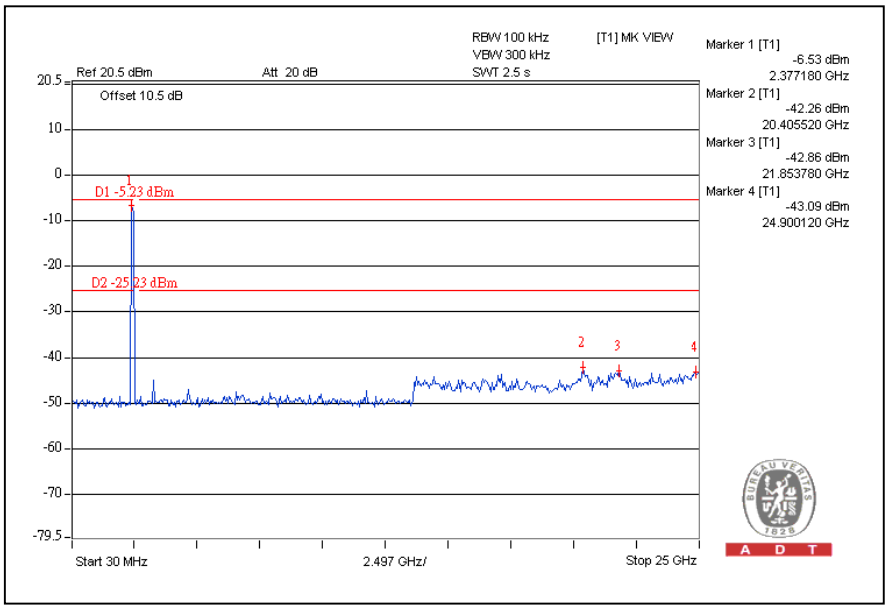
CH1



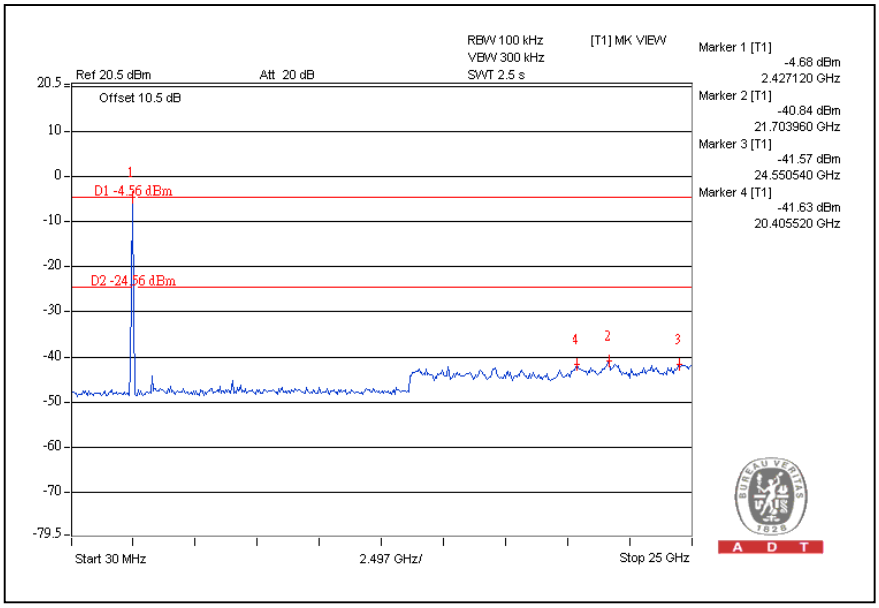
CH7



CH1


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -5.23 dBm
D2 -25.23 dBm
Marker 1 [T1]
-6.53 dBm
2.377180 GHz
Marker 2 [T1]
-42.26 dBm
20.405520 GHz
Marker 3 [T1]
-42.86 dBm
21.853780 GHz
Marker 4 [T1]
-43.09 dBm
24.900120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

CH7


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 10.5 dB
D1 -4.56 dBm
D2 -24.56 dBm
Marker 1 [T1]
-4.68 dBm
2.427120 GHz
Marker 2 [T1]
-40.84 dBm
21.703960 GHz
Marker 3 [T1]
-41.57 dBm
24.550540 GHz
Marker 4 [T1]
-41.63 dBm
20.405520 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
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 ---