



# FCC TEST REPORT

for

**Mobile Internet Device**

**MODEL: MID7055**

**Brand: COBY**

**Test Report Number:**

**C121212Z01-RP1**

**Issued Date: January 7, 2013**

Issued for

**Coby Communications Ltd.**

**Unit C-E, 8/F, PO Shau Centre, 115 How Ming Street, Kwun Tong  
Kowloon, Hong Kong**

Issued by:

**Compliance Certification Services (Shenzhen) Inc.**

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TESTING CERT #2861.01

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Revision History

Rev.	Issue No.	Revisions	Effect Page	Revised By
00	C121212Z01-RP1	Initial Issue	ALL	Amay Tang



TABLE OF CONTENTS

<b>1 TEST CERTIFICATION.....</b>	<b>4</b>
<b>2 TEST RESULT SUMMARY.....</b>	<b>5</b>
<b>3 EUT DESCRIPTION.....</b>	<b>6</b>
<b>4 TEST METHODOLOGY.....</b>	<b>7</b>
4.1. DESCRIPTION OF TEST MODES.....	7
<b>5 SETUP OF EQUIPMENT UNDER TEST.....</b>	<b>8</b>
5.1. DESCRIPTION OF SUPPORT UNITS.....	8
5.2. CONFIGURATION OF SYSTEM UNDER TEST.....	8
<b>6 FACILITIES AND ACCREDITATIONS.....</b>	<b>9</b>
6.1. FACILITIES.....	9
6.2. ACCREDITATIONS.....	9
6.3. MEASUREMENT UNCERTAINTY.....	9
<b>7 FCC PART 15.247 REQUIREMENTS.....</b>	<b>10</b>
7.1. POWER LINE CONDUCTED EMISSIONS MEASUREMENT.....	10
7.2. SPURIOUS EMISSIONS MEASUREMENT.....	14
7.3. 6dB BANDWIDTH MEASUREMENT.....	16
7.4. PEAK OUTPUT POWER.....	16
7.5. BAND EDGES MEASUREMENT.....	16
7.6. PEAK POWER SPECTRAL DENSITY MEASUREMENT.....	16



## 1 TEST CERTIFICATION

<b>Product</b>	Mobile Internet Device
<b>Model</b>	MID7055
<b>Brand</b>	COBY
<b>Tested</b>	December 12, 2012~January 7, 2013
<b>Applicant</b>	<b>Coby Communications Ltd.</b> Unit C-E, 8/F, PO Shau Centre, 115 How Ming Street, Kwun Tong Kowloon, Hong Kong
<b>Manufacturer</b>	<b>ShenZhen COBY Communications LTD.</b> Block 2~3, TaoXia 2nd Industrial Zone, LongHua Town, BaoAn District, ShenZhen City GuangDong Province P.R. China

APPLICABLE STANDARDS			
Standard	Test Type	Standard	Test Type
15.207(a)	Power Line Conducted Emissions	15.247(d) 15.209(a)	● Spurious Emissions ● Conducted Measurement ● Radiated Emissions
15.247(a)(2)	6dB Bandwidth Measurement	15.247(b)(3) 15.247(b)(4)	Peak Power Measurement
15.247(d)	Band Edges Measurement	15.247(e)	Peak Power Spectral Density

### We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in **ANSI C63.4: 2009** and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

**Approved by:**

**Tom Gan**  
Supervisor of EMC Dept.  
Compliance Certification Service Inc.

**Reviewed by:**

**Ruby Zhang**  
Supervisor of Report Dept.  
Compliance Certification Service Inc.

**2 TEST RESULT SUMMARY**

<b>APPLICABLE STANDARDS</b>			
<b>Standard</b>	<b>Test Type</b>	<b>Result</b>	<b>Remark</b>
15.247(a)(2)	6dB Bandwidth Measurement	Pass	Meet the requirement of limit.
15.247(b)(3) 15.247(b)(4)	Peak Power Measurement	Pass	Meet the requirement of limit.
15.247(d)	Band Edges Measurement	Pass	Meet the requirement of limit.
15.247(e)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.247(d) 15.209(a)	● Spurious Emissions ● Conducted Measurement ● Radiated Emissions	Pass	Meet the requirement of limit.
15.207(a)	Power line Conducted Emissions	Pass	Meet the requirement of limit.

Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.

2. The information of measurement uncertainty is available upon the customer's request.



### 3 EUT DESCRIPTION

<b>Product</b>	Mobile Internet Device
<b>Brand</b>	COBY
<b>Model Number</b>	MID7055
<b>Model Discrepancy</b>	N/A
<b>Serial Number</b>	C121212Z01-RP1
<b>Received Date</b>	December 12, 2012
<b>Power Supply</b>	DC5V supplied by the adapter or PC DC3.7V supplied by the battery
<b>Adapter Manufacturer / Model No.</b>	PS12K0502000UE I/P: 100-240Vac, 50-60Hz, 0.35A max O/P: 5Vdc, 2000mA DC Output Cable: Unshielded, 1.80m
<b>Frequency Range</b>	IEEE 802.11b/g: 2412 ~ 2462 MHz IEEE 802.11n HT20 : 2412 ~ 2462 MHz IEEE 802.11n HT40 : 2422MHz~ 2462MHz
<b>Transmit Power</b>	IEEE 802.11b mode: 11.39dBm IEEE 802.11g mode: 7.62dBm IEEE 802.11n HT20 MHz mode: 7.53dBm IEEE 802.11n HT40 MHz mode: 7.14dBm
<b>Modulation Technique</b>	IEEE 802.11b mode: DSSS(CCK,QPSK, BPSK) IEEE 802.11g mode: OFDM (BPSK/QPSK/16QAM/64QsAM) IEEE 802.11n HT20 MHz mode: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE 802.11n HT40 MHz mode: OFDM (BPSK/QPSK/16QAM/64QAM)
<b>Transmit Data Rate</b>	802.11b: 11Mbps(CCK) with fall back rates of 5.5/2/1Mbps 802.11g: 54Mbps with fall back rates of 48/36/24/18/12/9/6Mbps IEEE 802.11n HT20: 135.0Mbps with fall back rates of 121.5/ 108.0/81.0 /65.0/58.5/54.0/52.0/40.5/39.0/27.0/26.0/19.5/13.5/13.0/6.5 Mbps IEEE 802.11n HT40: 135.0Mbps with fall back rates of 121.5/ 108.0/81.0 /65.0/58.5/54.0/52.0/40.5/39.0/27.0/26.0/19.5/13.5 Mbps
<b>Number of Channels</b>	IEEE 802.11b mode: 11 Channels IEEE 802.11g mode: 11 Channels IEEE 802.11n HT20 MHz mode: 11 Channels IEEE 802.11n HT40 MHz mode: 9 Channels
<b>Antenna Specification</b>	2.4G PCB Antenna with 2.64dBi gain (Max)

**Note:** 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.

2. This submittal(s) (test report) is intended for FCC ID: **S7IMID7055** filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.



## 4 TEST METHODOLOGY

### 4.1. DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Test Item	Test mode	Worse mode
Conducted Emission	<b>Mode 1:</b> Copy Data	<input checked="" type="checkbox"/>
	<b>Mode 2:</b> Play Video	<input type="checkbox"/>
Radiated Emission	<b>Mode 1:</b> TX	<input checked="" type="checkbox"/>

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only, and power line conducted emission below 30MHz, which worst case was in normal link mode.

IEEE802.11b mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High(2462MHz) with 1Mbps data rate were chosen for full testing.

IEEE802.11g mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n HT20 MHz mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6.5Mbps data rate were chosen for full testing.

IEEE 802.11n HT40 MHz mode: Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 13.5Mbps data rate were chosen for full testing.

The field strength of spurious radiation emission was measured in the following position: EUT stand-up position (Y mode) and lie-down position (X, Z mode) The following data show only the worst case setup.

The worst case (Y axis) was reported.



## 5 SETUP OF EQUIPMENT UNDER TEST

### 5.1. 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.	Equipment	Model No.	Serial No.	FCC ID	Brand	Data Cable	Power Cord
1	SD Card	N/A	N/A	N/A	N/A	N/A	N/A
2	Notebook	LENOVO	WB04591721	N/A	LENOVO	Unshielded, 1.20m	Unshielded, 2.80m
3	PC	CLRDY2X	F0-4D-A2-24-0 8-28	N/A	DELL	1.8M shielded	N/A
4	Printer	P310B	DLRE217030	N/A	EPSON	Unshielded 1.2M	Unshielded 2.0M
5	Mouse	WB365PA#A B2	2HTJMB101178 -317	N/A	DELL	Unshielded 1.45M	N/A
6	Keyboard	KU-9985	2D4150005SB	N/A	DELL	Unshielded 1.45M	N/A
7	Modem	MODEM1414	9013592	N/A	ACEEX	Unshielded 1.2M	Unshielded 2.0M
8	Monitor	ST2420LB	CN-OVTTD2-74 261-110-2D2U	N/A	DELL	Unshielded 1.5M	Unshielded 1.5M

**Note:**

- 1) All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2) Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

### 5.2. CONFIGURATION OF SYSTEM UNDER TEST

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.





## 6 FACILITIES AND ACCREDITATIONS

### 6.1. FACILITIES

All measurement facilities used to collect the measurement data are located at **No.10-1 Mingkeda Logistics park, No.18, Huanguan South Rd., Guan Lan Town, Baoan District, Shenzhen, China**

The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### 6.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following accreditation body according to ISO/IEC 17025.

<b>USA</b>	<b>A2LA</b>
<b>China</b>	<b>CNAS</b>

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

<b>USA</b>	<b>FCC</b>
<b>Japan</b>	<b>VCCI(C-3478, R-3135, T-652, G-624)</b>
<b>Canada</b>	<b>INDUSTRY CANADA</b>
<b>Taiwan</b>	<b>BSMI</b>
<b>Norway</b>	<b>Nemko</b>

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.ccsrf.com>

### 6.3. 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:

<b>Measurement</b>	<b>Frequency</b>	<b>Uncertainty</b>
Conducted emissions	9kHz~30MHz	+/- 3.18dB
Radiated emissions	30MHz ~ 200MHz	+/- 3.79dB
	200MHz ~1000MHz	+/- 3.62dB
	Above 1000MHz	+/- 5.04dB
Band Edges	+/-0.182 dB	

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

The measured result is above (below) the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliance based on the 95% level of confidence. However, the result indicates that compliance (non-compliance) is more probable than non-compliance) with the specification limit.



## 7 FCC PART 15.247 REQUIREMENTS

### 7.1. POWER LINE CONDUCTED EMISSIONS MEASUREMENT

#### 7.1.1. LIMITS OF CONDUCTED EMISSIONS MEASUREMENT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

**NOTE:**

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

#### 7.1.2. TEST INSTRUMENTS

Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
ESCI EMI TEST RECEIVER.ESCI	ROHDE&SCHWARZ	ESCI	100783	03/17/2012	03/17/2013
LISN(EUT)	ROHDE&SCHWARZ	ENV216	101543	09/20/2012	09/20/2013
LISN	EMCO	3825/2	8901-1459	03/19/2012	03/19/2013
Temp. / Humidity Meter	VICTOR	HTC-1	2	03/20/2012	03/20/2013
Test S/W	FARAD	EZ-EMC/ CCS-3A1-CE			

**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. N.C.R = No Calibration Request.

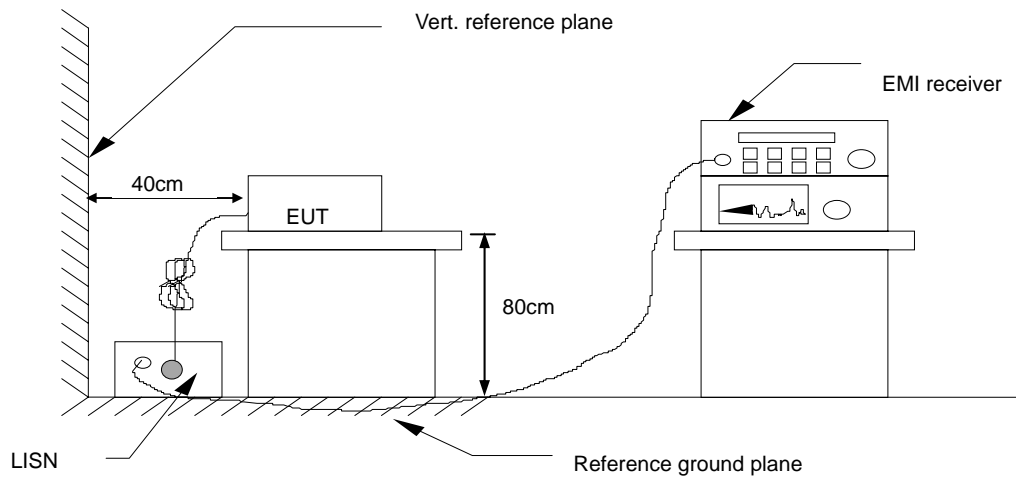


## 7.1.3. TEST PROCEDURES (please refer to measurement standard)

- The EUT and Support equipment, if needed, was placed on a non-conducted table, which is 0.8m above the ground plane and 0.4m away from the conducted wall.
- The test equipment EUT installed received AC main power, through a Line Impedance Stabilization Network (LISN), which supplied power source and was grounded to the ground plane. All support equipment power received from a second LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- The EUT test program was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The frequency range from 150 kHz to 30 MHz was searched. The test data of the worst-case condition(s) was recorded. Emission levels under limit 20dB were not recorded.



#### 7.1.4. TEST SETUP



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

#### 7.1.5. DATA SAMPLE

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

Factor = Insertion loss of LISN + Cable Loss  
Result = Quasi-peak Reading/ Average Reading + Factor  
Limit = Limit stated in standard  
Margin = Result (dBuV) – Limit (dBuV)

**7.1.6. TEST RESULTS**

<b>Model No.</b>	MID7055	<b>RBW,VBW</b>	9 kHz
<b>Environmental Conditions</b>	22°C, 45% RH	<b>Test Mode</b>	Mode 1
<b>Tested by</b>	Leevin Li	<b>Line</b>	L1

(The chart below shows the highest readings taken from the final data.)

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1700	27.05	19.39	9.71	36.76	29.10	64.96	54.96	-28.20	-25.86	Pass
0.1940	28.49	17.47	9.62	38.11	27.09	63.86	53.86	-25.75	-26.77	Pass
0.2220	24.41	10.66	9.59	34.00	20.25	62.74	52.74	-28.74	-32.49	Pass
0.2860	23.66	10.94	9.62	33.28	20.56	60.64	50.64	-27.36	-30.08	Pass
0.3980	29.57	18.19	9.66	39.23	27.85	57.89	47.90	-18.66	-20.05	Pass
0.4660	30.70	18.21	9.68	40.38	27.89	56.58	46.58	-16.20	-18.69	Pass

**REMARKS:** L1 = Line One (Live Line)

<b>Model No.</b>	MID7055	<b>RBW,VBW</b>	9 kHz
<b>Environmental Conditions</b>	22°C, 45% RH	<b>Test Mode</b>	Mode 1
<b>Tested by</b>	Leevin Li	<b>Line</b>	L2

(The chart below shows the highest readings taken from the final data.)

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1700	30.89	15.53	9.71	40.60	25.24	64.96	54.96	-24.36	-29.72	Pass
0.2300	27.59	12.62	9.60	37.19	22.22	62.45	52.45	-25.26	-30.23	Pass
0.3500	27.26	10.76	9.64	36.90	20.40	58.96	48.96	-22.06	-28.56	Pass
0.3860	31.43	5.98	9.66	41.09	15.64	58.15	48.15	-17.06	-32.51	Pass
0.4540	29.07	12.79	9.68	38.75	22.47	56.80	46.80	-18.05	-24.33	Pass
0.7420	26.51	7.04	9.68	36.19	16.72	56.00	46.00	-19.81	-29.28	Pass

**REMARKS:** L2 = Line Two (Neutral Line)



## 7.2. SPURIOUS EMISSIONS MEASUREMENT

### 7.2.1. LIMITS OF CONDUCTED EMISSIONS MEASUREMENT

§15.247(d) specifies that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to 15.247(b)(3) requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to 15.247(b)(3) requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

### 7.2.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	E4446A	US44300399	03/19/2012	03/19/2013

### 7.2.3. TEST PROCEDURE (please refer to measurement standard)

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

Measurements are made over the 30 MHz to 26 GHz range with the transmitter set to the lowest, middle, and highest channels.

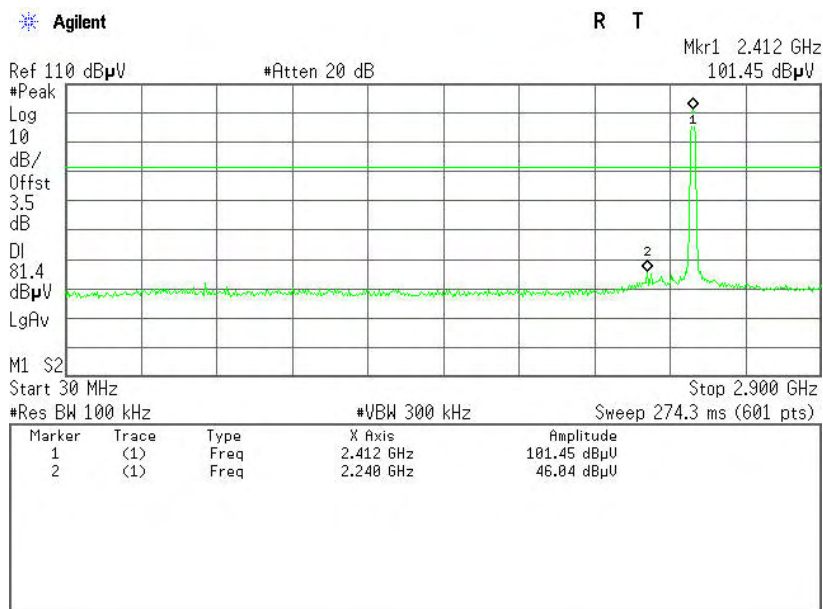


## 7.2.4. TEST RESULTS

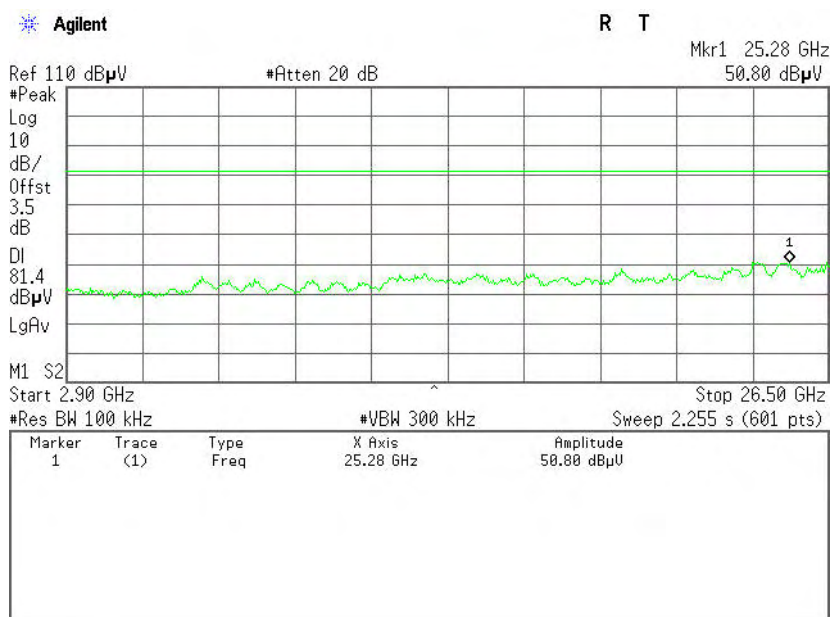
### Test Plot

IEEE 802.11b mode

CH Low (30MHz ~2.9GHz)

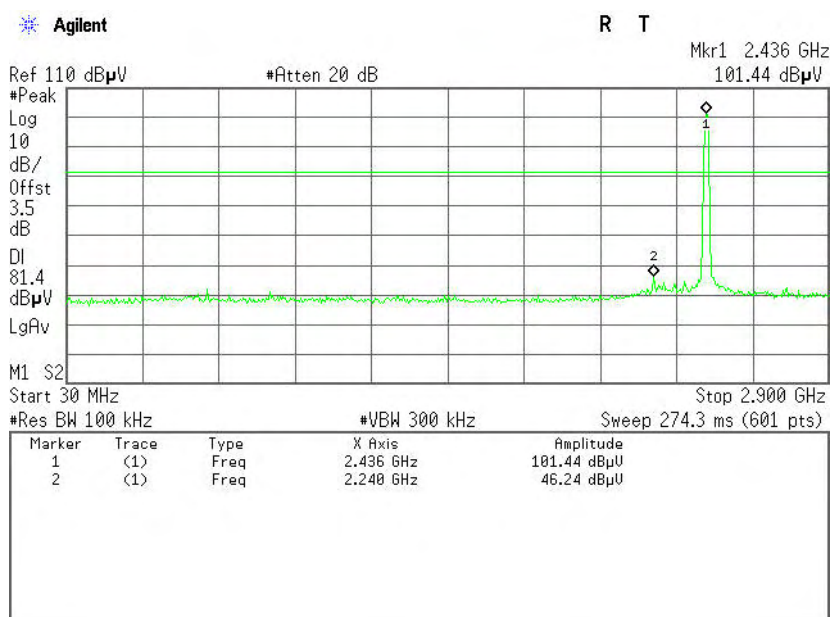


CH Low (2.9GHz ~26.5GHz)

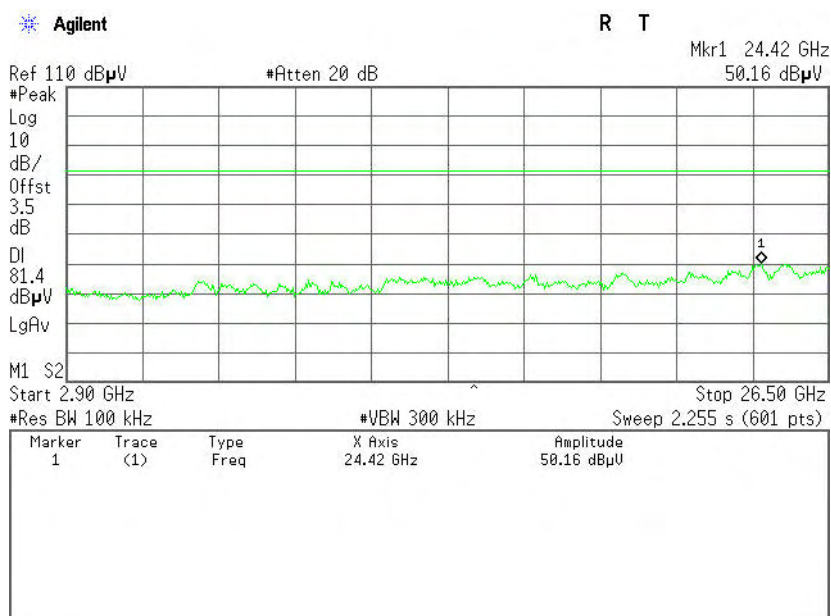




## CH Mid (30MHz ~2.9GHz)



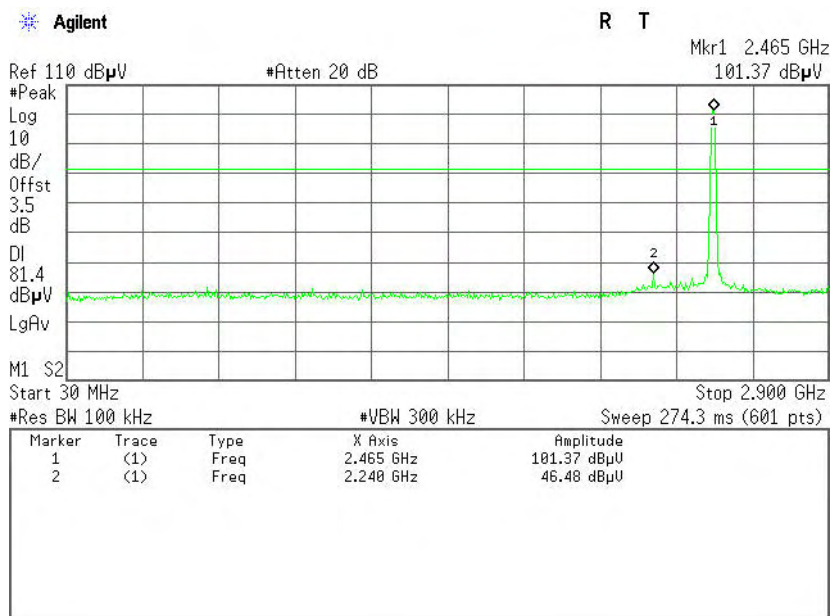
## CH Mid (2.9GHz ~26.5GHz)



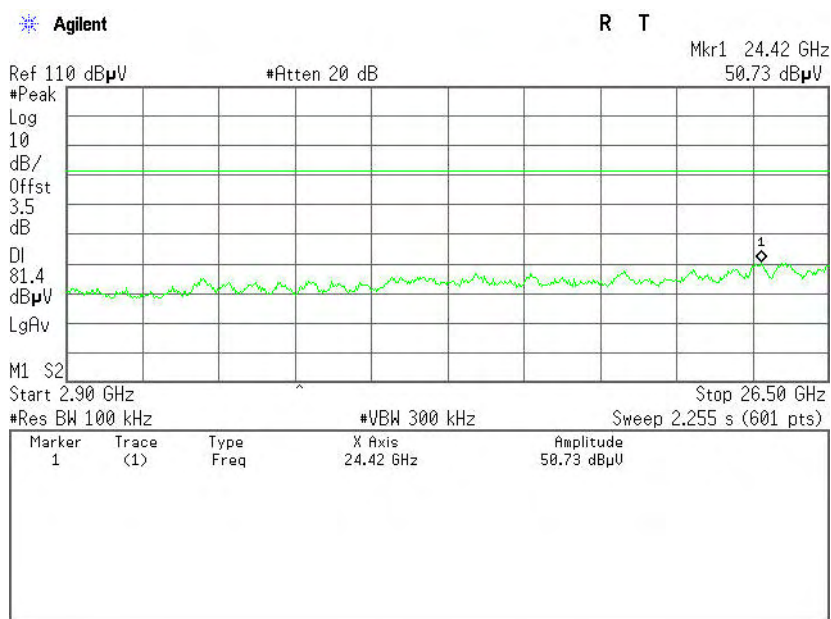




## CH High (30MHz ~2.9GHz)



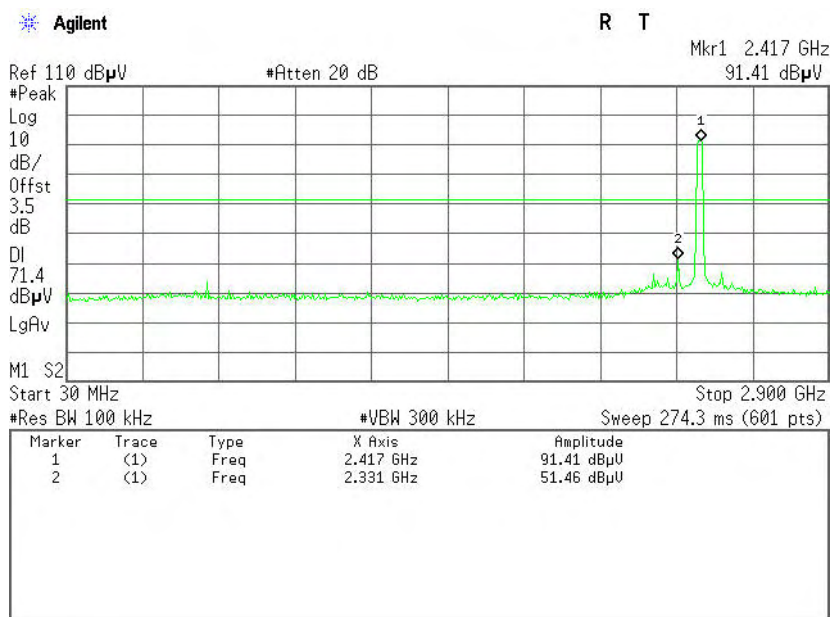
## CH High (2.9GHz ~26.5GHz)



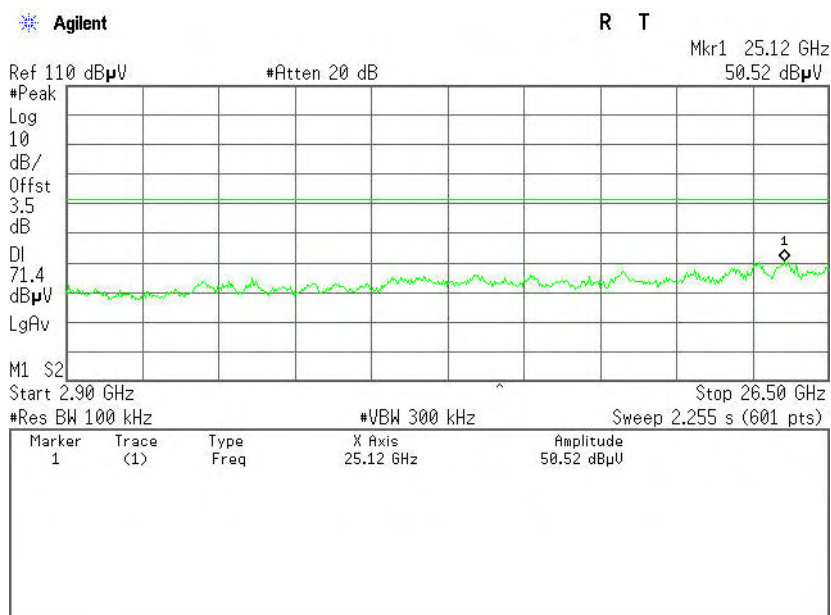


## IEEE 802.11g mode

### CH Low (30MHz ~2.9GHz)

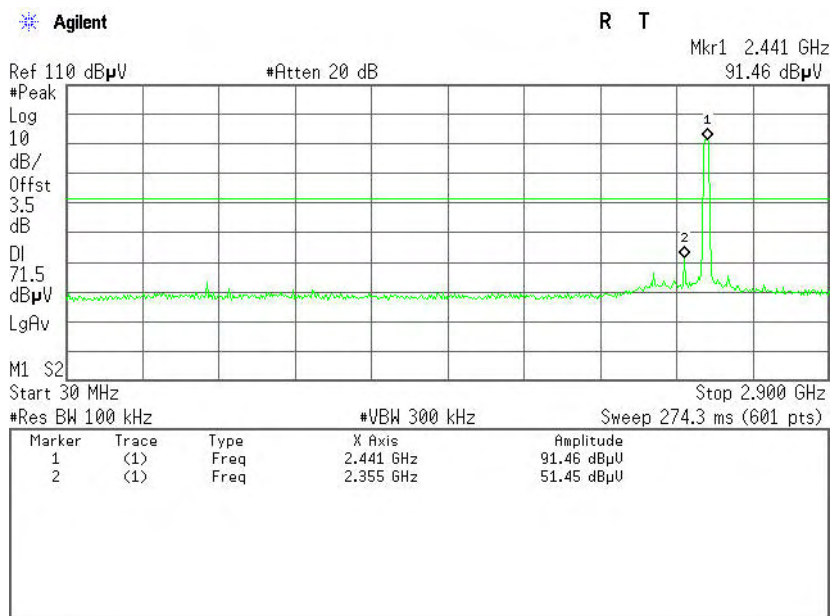


### CH Low (2.9GHz ~26.5GHz)

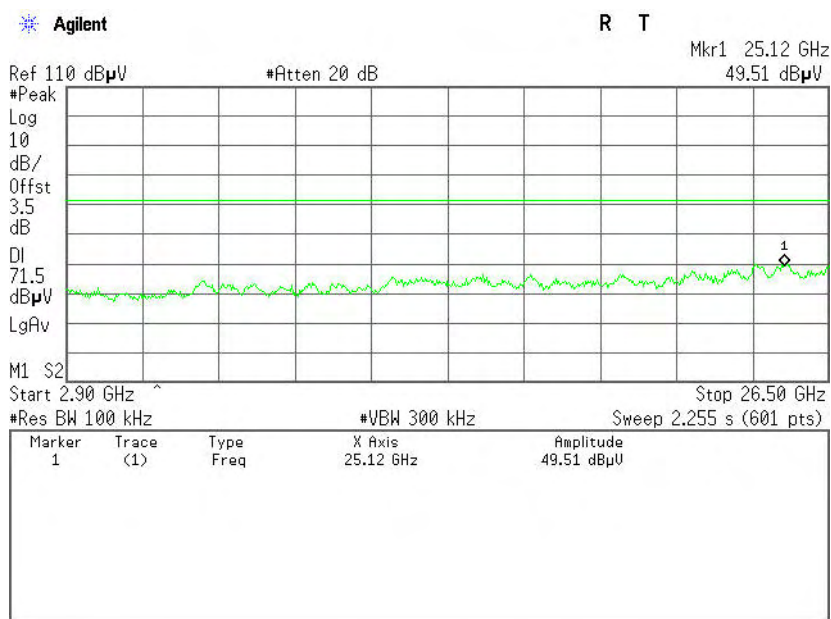




## CH Mid (30MHz ~2.9GHz)

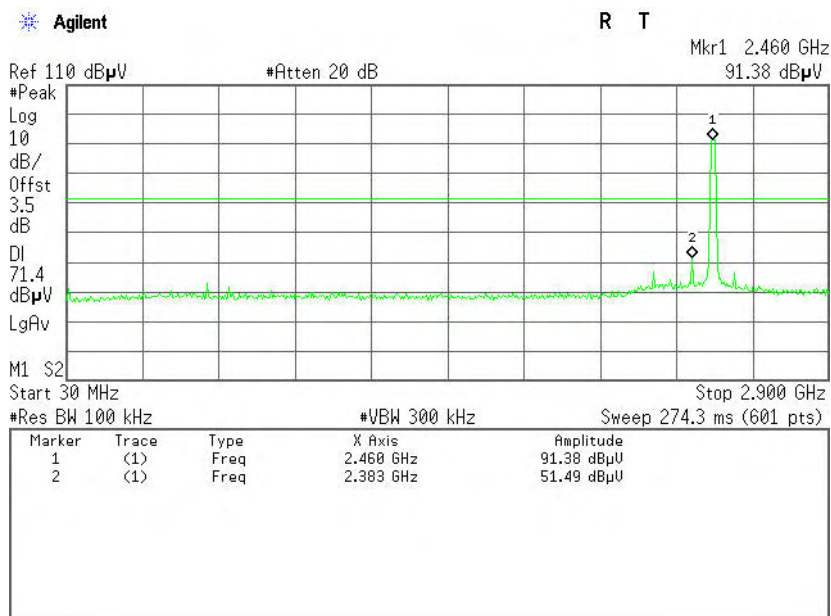


## CH Mid (2.9GHz ~26.5GHz)

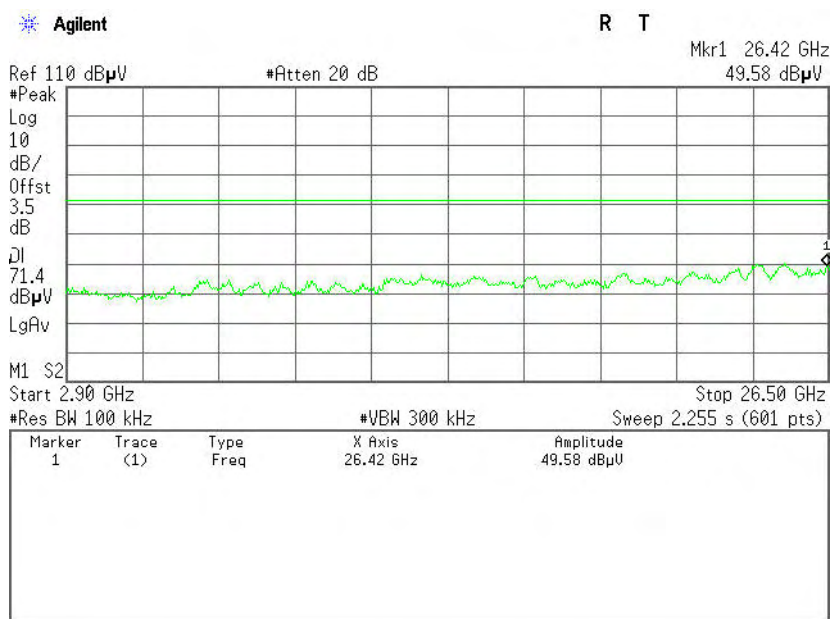




## CH High (30MHz ~2.9GHz)



## CH High (2.9GHz ~26.5GHz)

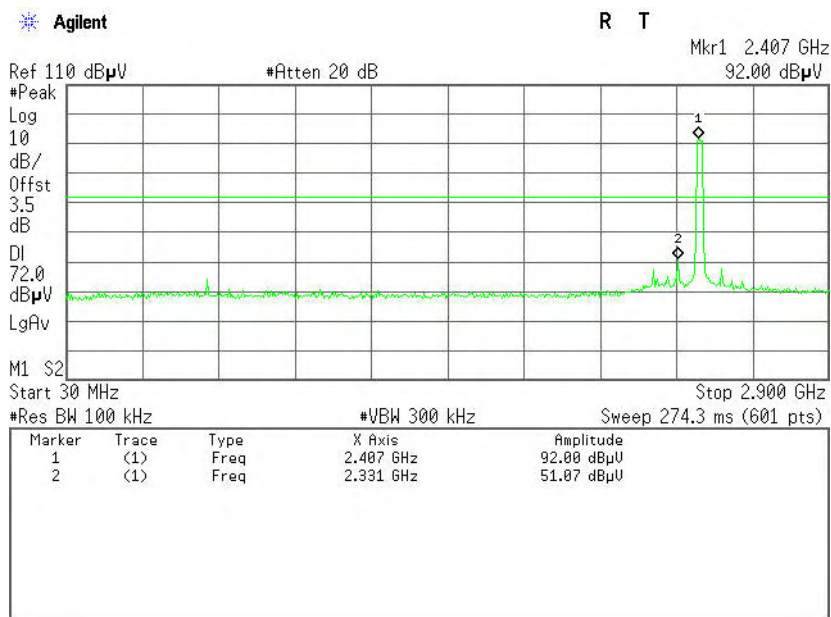




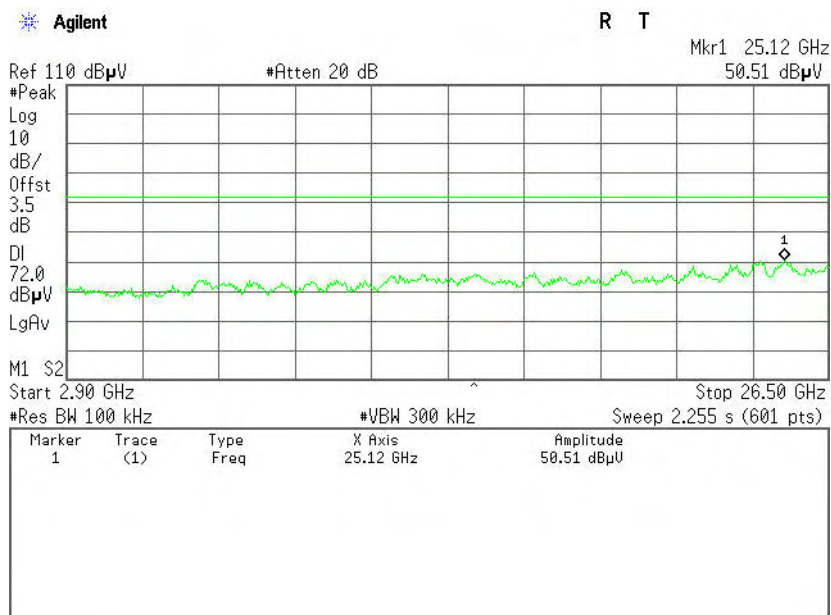
## Test Plot

IEEE 802.11n HT20 MHz mode

CH Low (30MHz ~2.9GHz)

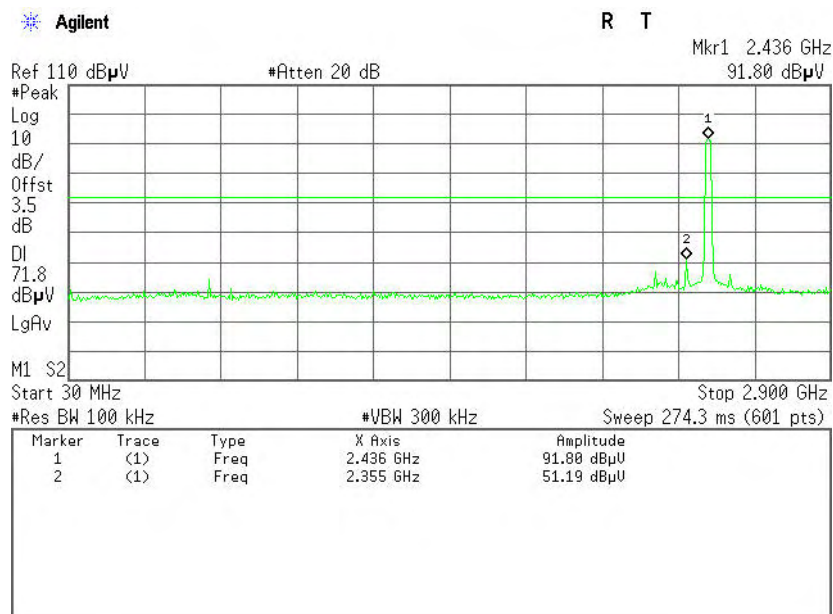


CH Low (2.9GHz ~26.5GHz)

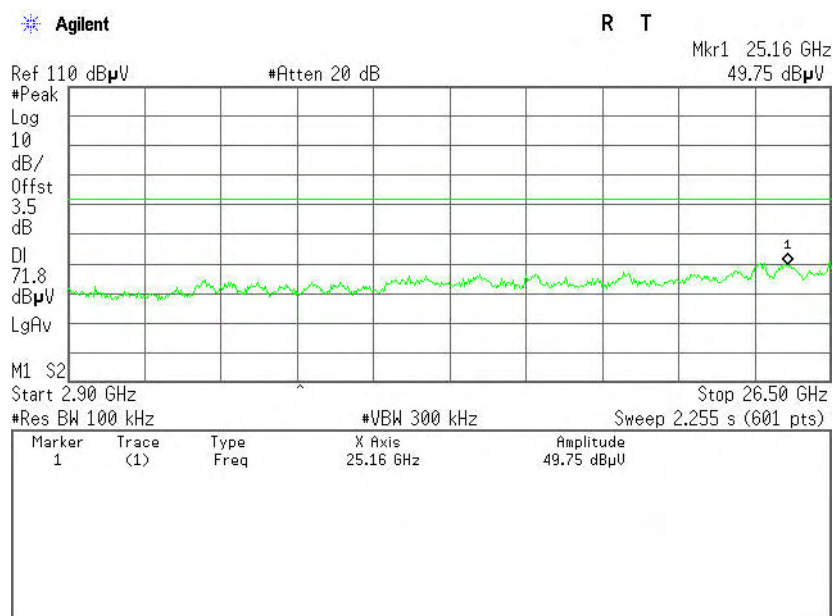




## CH Mid (30MHz ~2.9GHz)



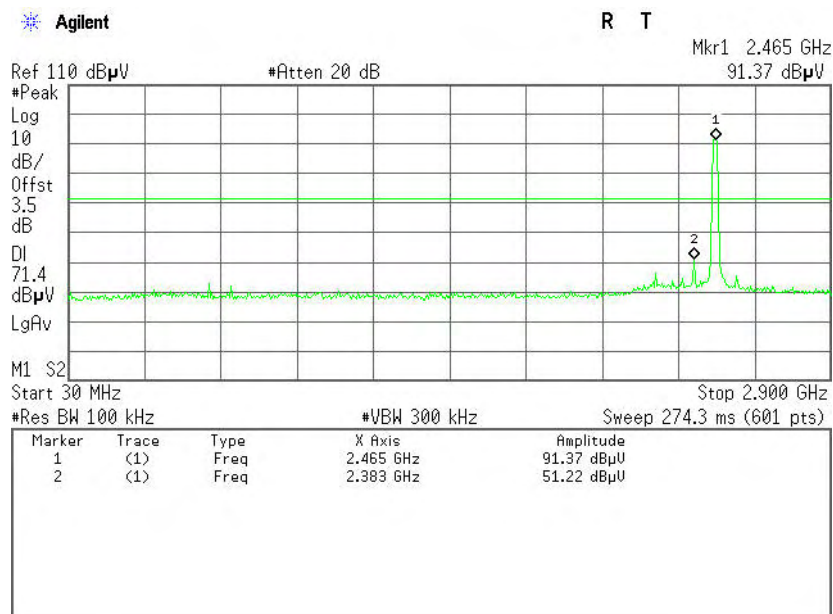
## CH Mid (2.9GHz ~26.5GHz)



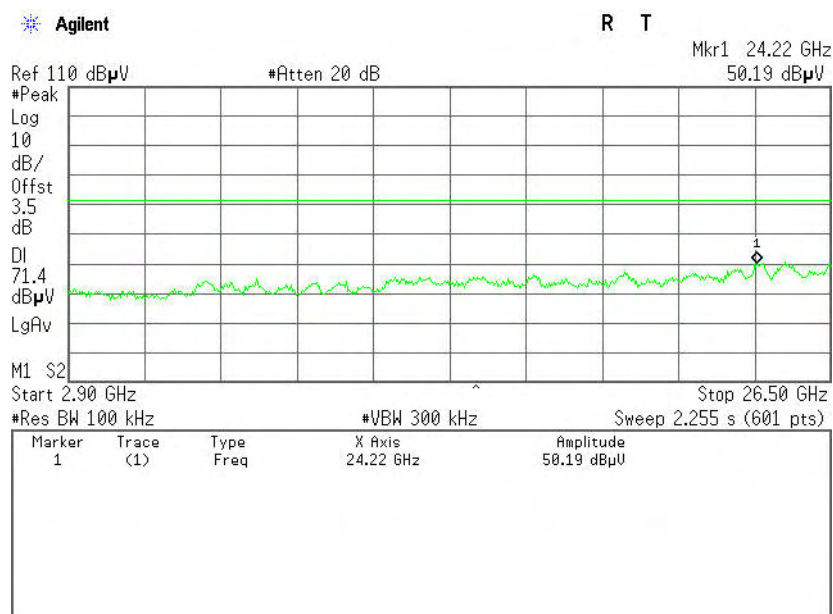




## CH High (30MHz ~2.9GHz)



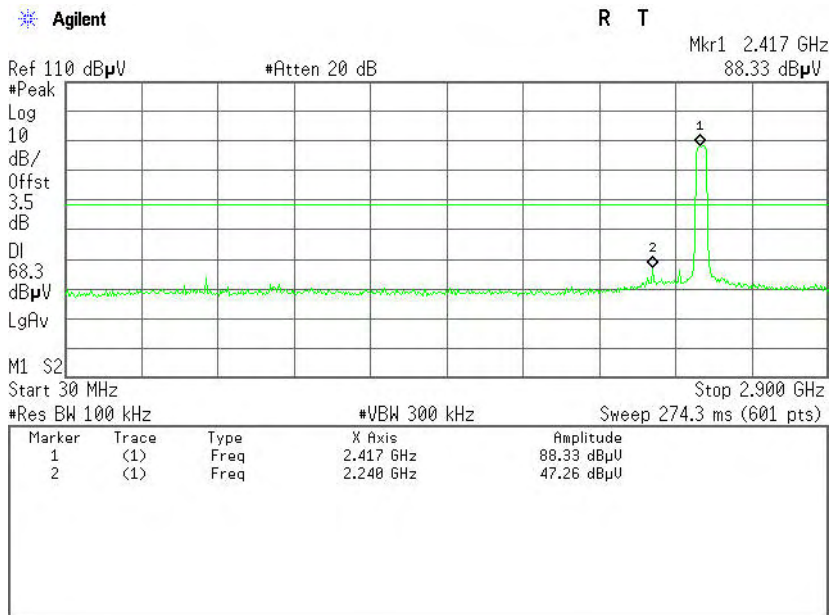
## CH High (2.9GHz ~26.5GHz)



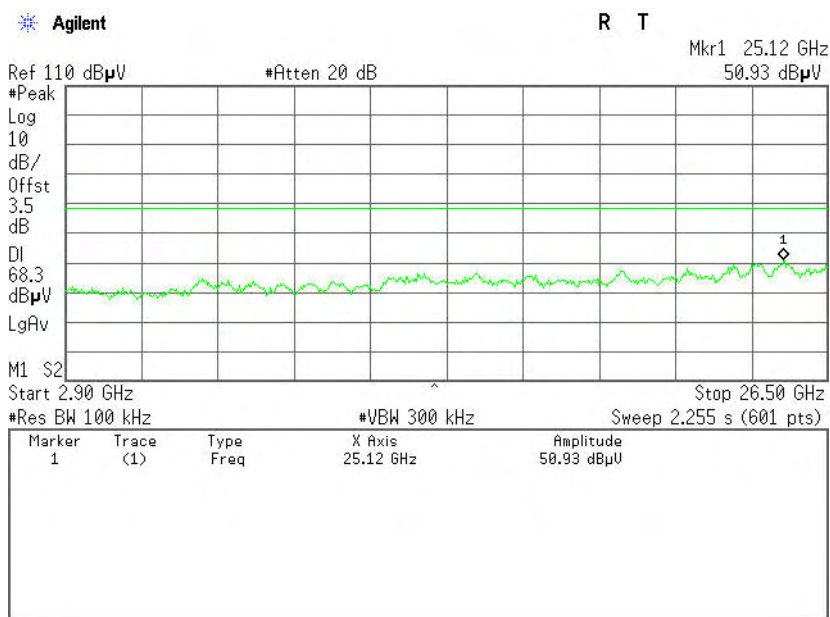


## IEEE 802.11n HT40 MHz mode

### CH Low (30MHz ~2.9GHz)



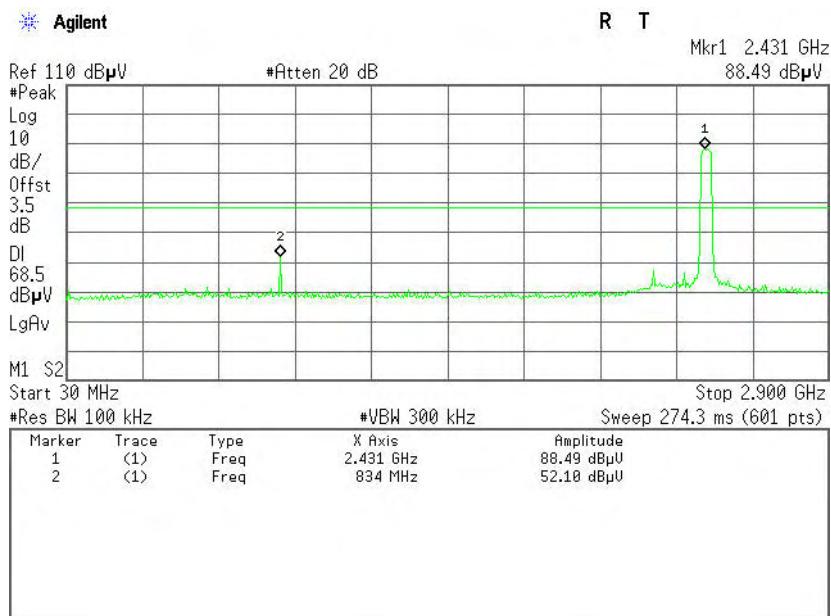
### CH Low (2.9GHz ~26.5GHz)



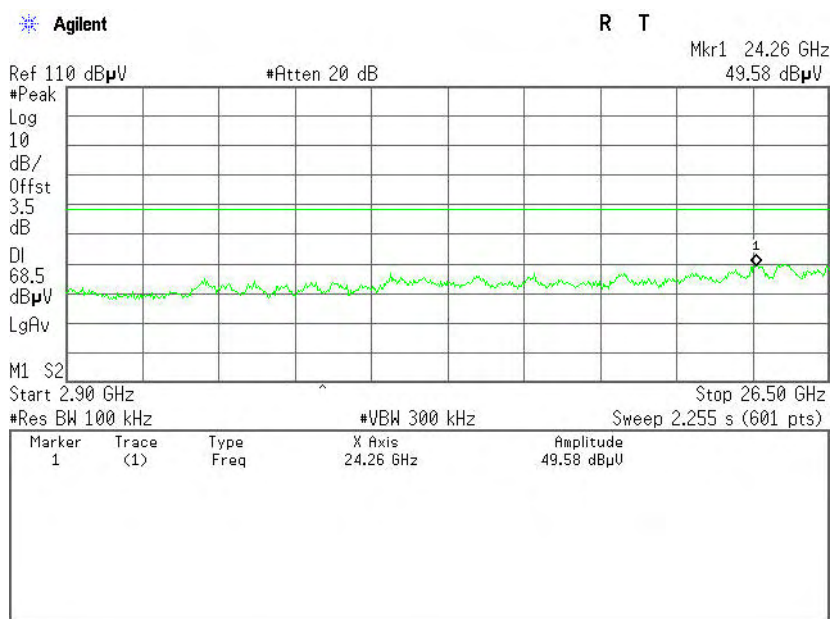




## CH Mid (30MHz ~2.9GHz)

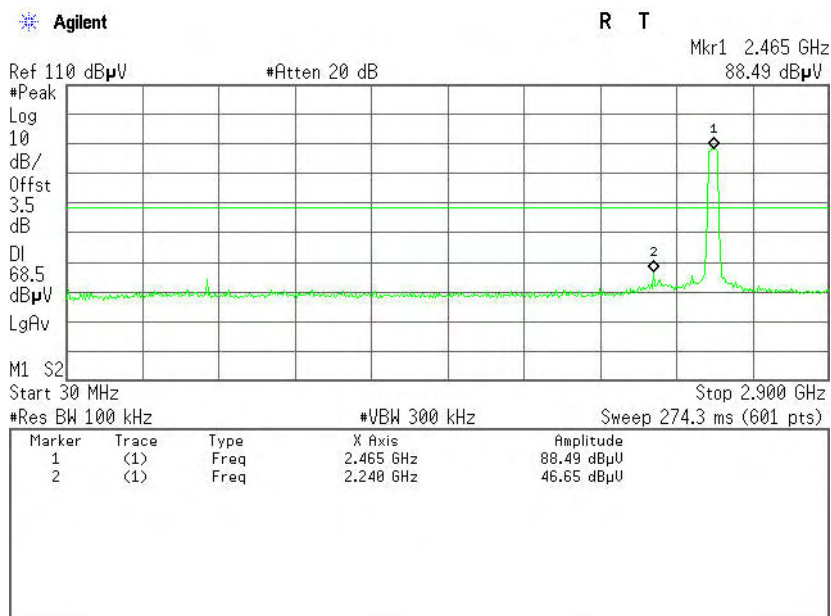


## CH Mid (2.9GHz ~26.5GHz)

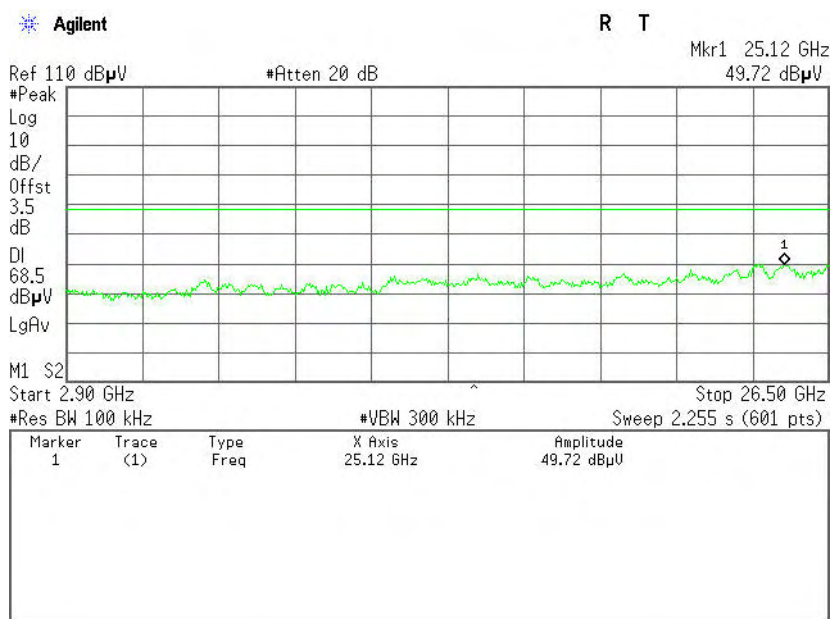




## CH High (30MHz ~2.9GHz)



## CH High (2.9GHz ~26.5GHz)



**7.2.4.1. LIMITS OF RADIATED EMISSIONS MEASUREMENT**

According to §15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (mV/m)	Measurement Distance (m)
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

**Remark:** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

1. In the emission table above, the tighter limit applies at the band edges.

Frequency (MHz)	Field Strength ( $\mu\text{V/m}$ at 3-meter)	Field Strength (dB $\mu\text{V/m}$ at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

**NOTE:**(1) The lower limit shall apply at the transition frequencies.

(2) Emission level (dB $\mu\text{V/m}$ ) = 20 log Emission level ( $\mu\text{V/m}$ ).

**7.2.4.2. TEST INSTRUMENTS**

Radiated Emission Test Site 966(2)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	03/19/2012	03/19/2013
ESCI EMI TEST RECEIVER.ESCI	ROHDE&SCHWARZ	ESCI	100783	03/17/2012	03/17/2013
Amplifier	MITEQ	AM-1604-3000	1123808	03/18/2012	03/18/2013
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
High Noise Amplifier	Agilent	8449B	3008A01838	03/18/2012	03/18/2013
Bilog Antenna	SCHAFFNER	CBL6143	5082	03/17/2012	03/17/2013
Horn Antenna	SCHWARZBECK	BBHA9120	D286	03/17/2012	03/17/2013
Loop Antenna	A、R、A	PLA-1030/B	1029	03/23/2012	03/23/2013
Temp. / Humidity Meter	VICTOR	VC230	N/A	03/19/2012	03/19/2013
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

**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 FCC Site Registration number is 101879.

3. N.C.R = No Calibration Required.

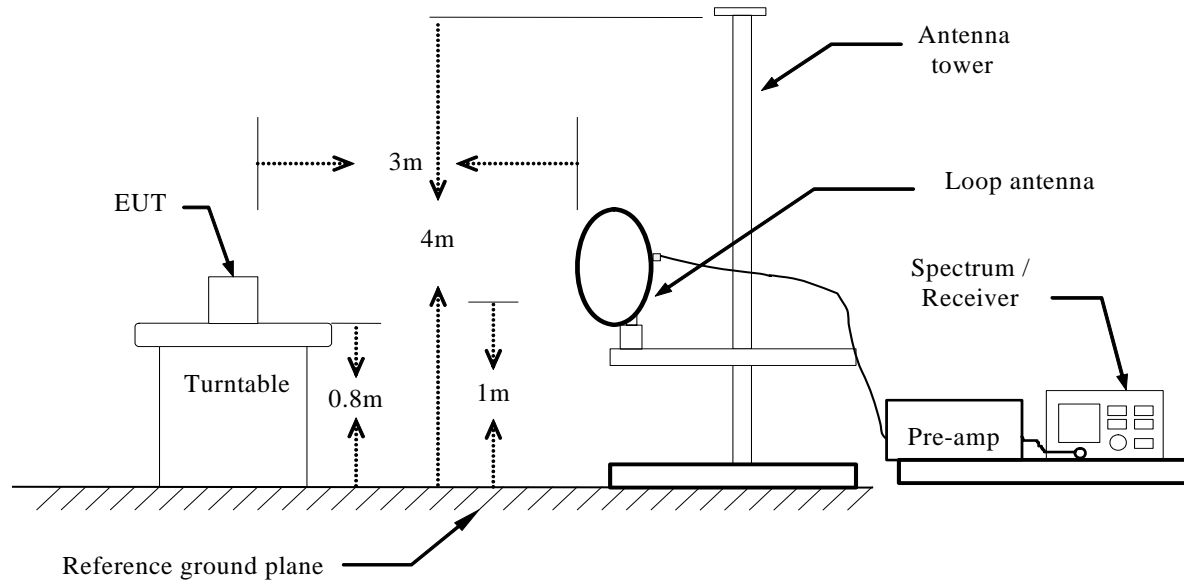
**7.2.4.3. TEST PROCEDURE** (please refer to measurement standard)

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:  
Below 1GHz:  
RBW=100kHz / VBW=300kHz / Sweep=AUTO  
Above 1GHz:  
(a) PEAK: RBW=1MHz,VBW=3MHz / Sweep=AUTO  
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.

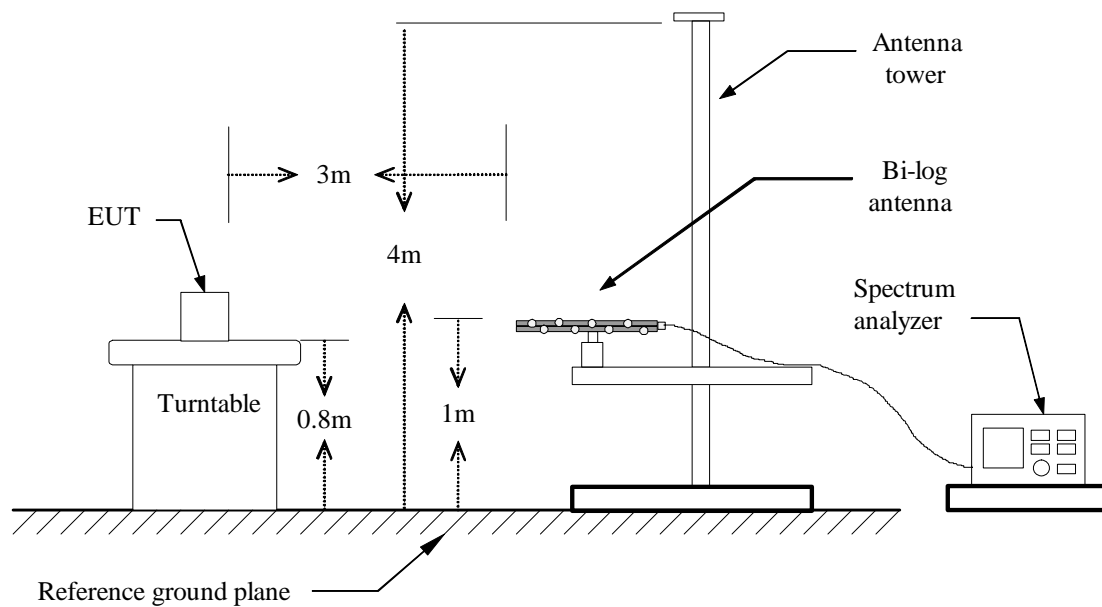


#### 7.2.4.4. TEST SETUP

##### Below 30MHz

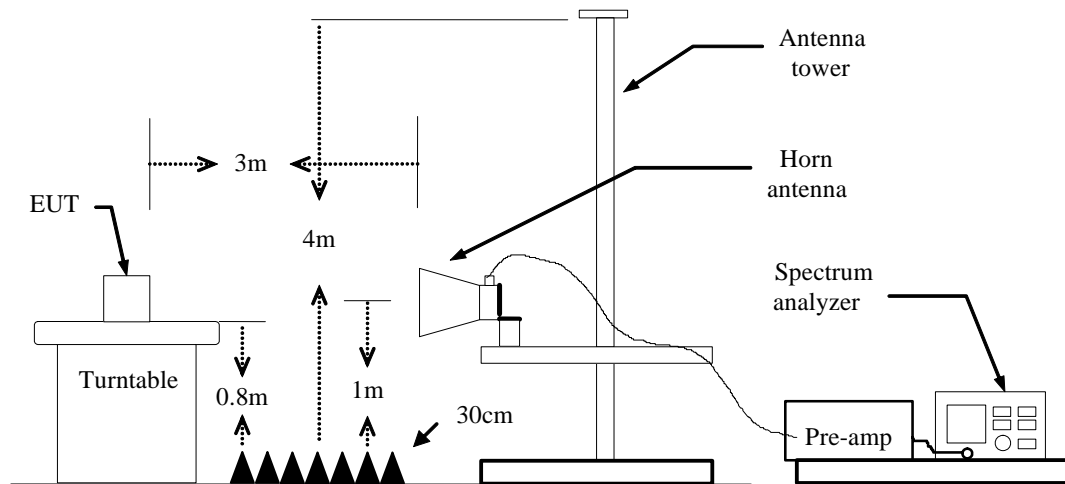


##### Below 1 GHz





Above 1 GHz



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

**7.2.4.5. DATA SAPLE****Below 1GHz**

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXX.XXXX	36.37	-12.20	24.17	40.00	-15.83	V	QP

Frequency (MHz) = Emission frequency in MHz  
 Reading (dBuV) = Uncorrected Analyzer / Receiver reading  
 Correct Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
 Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)  
 Limit (dBuV/m) = Limit stated in standard  
 Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)  
 Q.P. = Quasi-peak Reading

**Above 1GHz**

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXXX.XXXX	62.09	-11.42	50.67	74.00	-23.33	V	Peak
XXXX.XXXX	49.78	-11.42	38.36	54.00	-15.64	V	AVG

Frequency (MHz) = Emission frequency in MHz  
 Reading (dBuV) = Uncorrected Analyzer / Receiver reading  
 Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
 Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)  
 Limit (dBuV/m) = Limit stated in standard  
 Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)  
 Peak = Peak Reading  
 AVG = Average Reading

**Calculation Formula**

Margin (dB) = Result (dBuV/m) – Limits (dBuV/m)  
 Result (dBuV/m) = Reading (dBuV) + Correction Factor

**7.2.4.6. TEST RESULTS****Below 1 GHz****Operation Mode:** TX**Test Date:** January 6, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

(The chart below shows the highest readings taken from the final data.)

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
304.8333	51.47	-18.29	33.18	46.00	-12.82	V	QP
595.8333	38.23	-12.82	25.41	46.00	-20.59	V	QP
831.8667	40.73	-10.34	30.39	46.00	-15.61	V	QP
860.9667	42.25	-9.32	32.93	46.00	-13.07	V	QP
915.9333	40.54	-9.35	31.19	46.00	-14.81	V	QP
970.9000	38.89	-8.42	30.47	54.00	-23.53	V	QP
304.8333	58.78	-18.29	40.49	46.00	-5.51	H	QP
332.3167	54.35	-17.49	36.86	46.00	-9.14	H	QP
416.3833	46.25	-15.23	31.02	46.00	-14.98	H	QP
485.9000	46.64	-14.69	31.95	46.00	-14.05	H	QP
679.9000	43.79	-10.94	32.85	46.00	-13.15	H	QP
791.4500	44.55	-10.78	33.77	46.00	-12.23	H	QP

**\*\*Remark:** No emission found between lowest internal used/generated frequency to 30MHz.**Notes:**

1. Radiated emissions measured in frequency range from 9kHz to 1GHz were made with an instrument using Quasi-peak detector mode.
2. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
3. The IF bandwidth of Receiver between 30MHz to 1GHz was 120kHz.
4. Frequency (MHz). = Emission frequency in MHz  
 Reading (dBuV/m) = Receiver reading  
 Correction Factor (dB) = Antenna factor + Cable loss – Amplifier gain  
 Limit (dBuV/m) = Limit stated in standard  
 Margin (dB) = Measured (dBuV/m) – Limits (dBuV/m)  
 Antenna Pol e(H/V) = Current carrying line of reading





## Above 1 GHz

**Operation Mode:** TX / IEEE 802.11b / CH Low**Test Date:** January 6, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1225.0000	49.82	-10.27	39.55	74.00	-34.45	V	Peak
1795.0000	48.17	-8.34	39.83	74.00	-34.17	V	Peak
2680.0000	47.80	-6.79	41.01	74.00	-32.99	V	Peak
3445.0000	45.96	-1.56	44.40	74.00	-29.60	V	Peak
3985.0000	46.48	-0.55	45.93	74.00	-28.07	V	Peak
5110.0000	45.60	4.02	49.62	74.00	-24.38	V	Peak
1210.0000	49.00	-10.22	38.78	74.00	-35.22	H	Peak
1960.0000	47.38	-6.95	40.43	74.00	-33.57	H	Peak
3445.0000	46.33	-1.56	44.77	74.00	-29.23	H	Peak
3880.0000	46.33	-0.65	45.68	74.00	-28.32	H	Peak
4300.0000	45.66	0.32	45.98	74.00	-28.02	H	Peak
4825.0000	51.67	2.86	54.53	74.00	-19.47	H	Peak
4825.0000	45.63	2.86	48.49	54.00	-5.51	H	AVG

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b / CH Mid**Test Date:** January 6, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1360.0000	50.24	-8.01	42.23	74.00	-31.77	V	Peak
2005.0000	58.91	-11.22	47.69	74.00	-26.31	V	Peak
3235.0000	48.22	-4.07	44.15	74.00	-29.85	V	Peak
4255.0000	46.95	-1.37	45.58	74.00	-28.42	V	Peak
4870.0000	55.09	0.73	55.82	74.00	-18.18	V	Peak
4870.0000	51.96	0.73	52.69	54.00	-1.31	V	AVG
5605.0000	45.26	1.95	47.21	74.00	-26.79	V	Peak
1105.0000	52.91	-9.49	43.42	74.00	-30.58	H	Peak
1360.0000	50.62	-8.01	42.61	74.00	-31.39	H	Peak
1990.0000	53.01	-11.21	41.80	74.00	-32.20	H	Peak
3205.0000	47.21	-4.09	43.12	74.00	-30.88	H	Peak
4420.0000	45.34	-0.78	44.56	74.00	-29.44	H	Peak
4870.0000	55.13	0.73	55.86	74.00	-18.14	H	Peak
4870.0000	52.23	0.73	52.96	54.00	-1.04	H	AVG

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b / CH High**Test Date:** December 11, 2012**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1165.0000	49.08	-10.45	38.63	74.00	-35.37	V	Peak
1720.0000	48.60	-8.36	40.24	74.00	-33.76	V	Peak
3565.0000	47.29	-0.97	46.32	74.00	-27.68	V	Peak
4375.0000	45.68	0.53	46.21	74.00	-27.79	V	Peak
4915.0000	45.72	3.40	49.12	74.00	-24.88	V	Peak
5215.0000	45.32	4.11	49.43	74.00	-24.57	V	Peak
1045.0000	50.20	-11.38	38.82	74.00	-35.18	H	Peak
1660.0000	48.30	-8.37	39.93	74.00	-34.07	H	Peak
3310.0000	47.27	-2.86	44.41	74.00	-29.59	H	Peak
4330.0000	46.61	0.40	47.01	74.00	-26.99	H	Peak
4480.0000	46.58	0.82	47.40	74.00	-26.60	H	Peak
4930.0000	52.99	3.49	56.48	74.00	-17.52	H	Peak
4930.0000	48.72	3.49	52.21	54.00	-1.79	H	AVG

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Low**Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2005.0000	58.54	-11.22	47.32	74.00	-26.68	V	Peak
3370.0000	46.47	-4.01	42.46	74.00	-31.54	V	Peak
4180.0000	45.69	-1.67	44.02	74.00	-29.98	V	Peak
4675.0000	44.92	-0.13	44.79	74.00	-29.21	V	Peak
5380.0000	45.09	1.52	46.61	74.00	-27.39	V	Peak
6400.0000	44.42	4.26	48.68	74.00	-25.32	V	Peak
1495.0000	50.26	-8.23	42.03	74.00	-31.97	H	Peak
3010.0000	46.86	-4.23	42.63	74.00	-31.37	H	Peak
3685.0000	46.60	-2.79	43.81	74.00	-30.19	H	Peak
5200.0000	45.30	1.55	46.85	74.00	-27.15	H	Peak
5815.0000	45.42	2.80	48.22	74.00	-25.78	H	Peak
7195.0000	44.77	7.34	52.11	74.00	-21.89	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Mid**Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBUV)	Correction Factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1990.0000	57.04	-11.21	45.83	74.00	-28.17	V	Peak
3580.0000	46.81	-3.11	43.70	74.00	-30.30	V	Peak
4795.0000	45.25	0.39	45.64	74.00	-28.36	V	Peak
5200.0000	45.14	1.55	46.69	74.00	-27.31	V	Peak
5920.0000	45.05	2.97	48.02	74.00	-25.98	V	Peak
6640.0000	44.71	4.96	49.67	74.00	-24.33	V	Peak
1495.0000	53.10	-8.23	44.87	74.00	-29.13	H	Peak
3580.0000	46.93	-3.11	43.82	74.00	-30.18	H	Peak
4240.0000	46.21	-1.43	44.78	74.00	-29.22	H	Peak
4870.0000	46.20	0.73	46.93	74.00	-27.07	H	Peak
5455.0000	46.55	1.63	48.18	74.00	-25.82	H	Peak
6580.0000	45.01	4.76	49.77	74.00	-24.23	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBUV/m) – Average limit (dBUV/m).

**Operation Mode:** TX / IEEE 802.11g / CH High**Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1435.0000	51.86	-7.98	43.88	74.00	-30.12	V	Peak
2005.0000	58.18	-11.22	46.96	74.00	-27.04	V	Peak
3580.0000	46.46	-3.11	43.35	74.00	-30.65	V	Peak
4990.0000	45.32	1.27	46.59	74.00	-27.41	V	Peak
5980.0000	44.90	3.06	47.96	74.00	-26.04	V	Peak
6865.0000	45.14	5.72	50.86	74.00	-23.14	V	Peak
1105.0000	53.15	-9.49	43.66	74.00	-30.34	H	Peak
1990.0000	51.91	-11.21	40.70	74.00	-33.30	H	Peak
3760.0000	46.28	-2.59	43.69	74.00	-30.31	H	Peak
4525.0000	44.98	-0.59	44.39	74.00	-29.61	H	Peak
5365.0000	45.30	1.53	46.83	74.00	-27.17	H	Peak
6250.0000	45.94	3.83	49.77	74.00	-24.23	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



**Operation Mode:** TX / IEEE 802.11n HT20 MHz / CH Low **Test Date:** January 5, 2013

**Temperature:** 24°C

**Tested by:** Leevin Li

**Humidity:** 52% RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1720.0000	55.97	-9.14	46.83	74.00	-27.17	V	Peak
1990.0000	57.83	-11.21	46.62	74.00	-27.38	V	Peak
3760.0000	46.26	-2.59	43.67	74.00	-30.33	V	Peak
4405.0000	46.63	-0.81	45.82	74.00	-28.18	V	Peak
5770.0000	45.97	2.65	48.62	74.00	-25.38	V	Peak
6520.0000	44.34	4.60	48.94	74.00	-25.06	V	Peak
1495.0000	50.46	-8.23	42.23	74.00	-31.77	H	Peak
2005.0000	53.03	-11.22	41.81	74.00	-32.19	H	Peak
2965.0000	47.26	-4.38	42.88	74.00	-31.12	H	Peak
4150.0000	46.05	-1.82	44.23	74.00	-29.77	H	Peak
5215.0000	44.60	1.55	46.15	74.00	-27.85	H	Peak
6145.0000	44.99	3.52	48.51	74.00	-25.49	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



**Operation Mode:** TX / IEEE 802.11n HT20 MHz / CH Mid **Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1495.0000	51.33	-8.23	43.10	74.00	-30.90	V	Peak
1990.0000	59.08	-11.21	47.87	74.00	-26.13	V	Peak
3430.0000	47.00	-3.85	43.15	74.00	-30.85	V	Peak
4405.0000	44.81	-0.81	44.00	74.00	-30.00	V	Peak
6100.0000	45.21	3.39	48.60	74.00	-25.40	V	Peak
7045.0000	44.63	6.58	51.21	74.00	-22.79	V	Peak
1495.0000	49.70	-8.23	41.47	74.00	-32.53	H	Peak
2005.0000	53.49	-11.22	42.27	74.00	-31.73	H	Peak
3580.0000	46.91	-3.11	43.80	74.00	-30.20	H	Peak
4255.0000	46.08	-1.37	44.71	74.00	-29.29	H	Peak
4870.0000	46.44	0.73	47.17	74.00	-26.83	H	Peak
6220.0000	45.13	3.74	48.87	74.00	-25.13	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).





**Operation Mode:** TX / IEEE 802.11n HT20 MHz / CH High **Test Date:** January 5, 2013

**Temperature:** 24°C

**Tested by:** Leevin Li

**Humidity:** 52% RH

**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2005.0000	58.71	-11.22	47.49	74.00	-26.51	V	Peak
3025.0000	47.30	-4.22	43.08	74.00	-30.92	V	Peak
3580.0000	48.04	-3.11	44.93	74.00	-29.07	V	Peak
4600.0000	45.28	-0.46	44.82	74.00	-29.18	V	Peak
5395.0000	45.85	1.52	47.37	74.00	-26.63	V	Peak
5890.0000	45.36	2.92	48.28	74.00	-25.72	V	Peak
2005.0000	53.43	-11.22	42.21	74.00	-31.79	H	Peak
3580.0000	46.73	-3.11	43.62	74.00	-30.38	H	Peak
4300.0000	45.57	-1.20	44.37	74.00	-29.63	H	Peak
4750.0000	44.93	0.19	45.12	74.00	-28.88	H	Peak
5800.0000	44.28	2.78	47.06	74.00	-26.94	H	Peak
6970.0000	45.14	6.20	51.34	74.00	-22.66	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT40 MHz / CH Low**Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1495.0000	51.73	-8.23	43.50	74.00	-30.50	V	Peak
1990.0000	57.80	-11.21	46.59	74.00	-27.41	V	Peak
3325.0000	47.69	-4.03	43.66	74.00	-30.34	V	Peak
4225.0000	45.51	-1.48	44.03	74.00	-29.97	V	Peak
4630.0000	44.98	-0.33	44.65	74.00	-29.35	V	Peak
5890.0000	44.65	2.92	47.57	74.00	-26.43	V	Peak
1105.0000	51.96	-9.49	42.47	74.00	-31.53	H	Peak
1990.0000	52.44	-11.21	41.23	74.00	-32.77	H	Peak
3580.0000	46.52	-3.11	43.41	74.00	-30.59	H	Peak
4285.0000	45.85	-1.26	44.59	74.00	-29.41	H	Peak
5275.0000	44.68	1.54	46.22	74.00	-27.78	H	Peak
5800.0000	44.25	2.78	47.03	74.00	-26.97	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT40 MHz / CH Mid **Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1300.0000	50.31	-8.28	42.03	74.00	-31.97	V	Peak
1990.0000	58.18	-11.21	46.97	74.00	-27.03	V	Peak
3715.0000	46.01	-2.71	43.30	74.00	-30.70	V	Peak
4825.0000	45.24	0.52	45.76	74.00	-28.24	V	Peak
5710.0000	44.81	2.40	47.21	74.00	-26.79	V	Peak
6040.0000	44.57	3.21	47.78	74.00	-26.22	V	Peak
1090.0000	52.78	-9.61	43.17	74.00	-30.83	H	Peak
1990.0000	53.56	-11.21	42.35	74.00	-31.65	H	Peak
3325.0000	47.08	-4.03	43.05	74.00	-30.95	H	Peak
4225.0000	45.57	-1.48	44.09	74.00	-29.91	H	Peak
4795.0000	44.28	0.39	44.67	74.00	-29.33	H	Peak
5710.0000	44.53	2.40	46.93	74.00	-27.07	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11n HT40 MHz / CH High **Test Date:** January 5, 2013**Temperature:** 24°C**Tested by:** Leevin Li**Humidity:** 52% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1495.0000	52.07	-8.23	43.84	74.00	-30.16	V	Peak
2005.0000	58.88	-11.22	47.66	74.00	-26.34	V	Peak
3580.0000	46.96	-3.11	43.85	74.00	-30.15	V	Peak
4375.0000	45.66	-0.91	44.75	74.00	-29.25	V	Peak
5095.0000	44.66	1.43	46.09	74.00	-27.91	V	Peak
6490.0000	44.59	4.51	49.10	74.00	-24.90	V	Peak
1105.0000	52.14	-9.49	42.65	74.00	-31.35	H	Peak
2005.0000	53.69	-11.22	42.47	74.00	-31.53	H	Peak
3190.0000	47.78	-4.10	43.68	74.00	-30.32	H	Peak
4405.0000	45.83	-0.81	45.02	74.00	-28.98	H	Peak
4960.0000	45.38	1.14	46.52	74.00	-27.48	H	Peak
6475.0000	44.47	4.47	48.94	74.00	-25.06	H	Peak

**REMARKS:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



### 7.3. 6dB BANDWIDTH MEASUREMENT

#### 7.3.1. LIMITS

According to §15.247(a)(2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

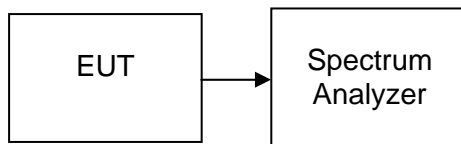
#### 7.3.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	03/19/2012	03/19/2013

#### 7.3.3. TEST PROCEDURES (please refer to measurement standard)

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW = 1-5 % of the emission bandwidth (EBW), VBW =  $\geq 3 \times$  RBW, Sweep = auto.
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

#### 7.3.4. TEST SETUP



**7.3.5. TEST RESULTS***No non-compliance noted***Test Data****Test mode: IEEE 802.11b**

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	10179	>500	PASS
Mid	2437	10178		PASS
High	2462	10182		PASS

**Test mode: IEEE 802.11g**

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	16487	>500	PASS
Mid	2437	16477		PASS
High	2462	16498		PASS

**Test mode: IEEE 802.11n HT20 MHz**

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	17716	>500	PASS
Mid	2437	17696		PASS
High	2462	17692		PASS

**Test mode: IEEE 802.11n HT40 MHz**

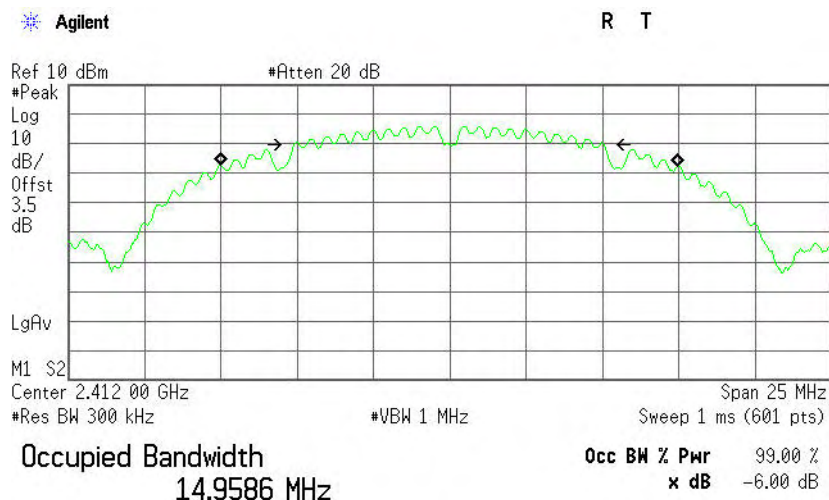
Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2422	36115	>500	PASS
Mid	2437	36134		PASS
High	2462	36134		PASS



## Test Plot

### IEEE 802.11b mode

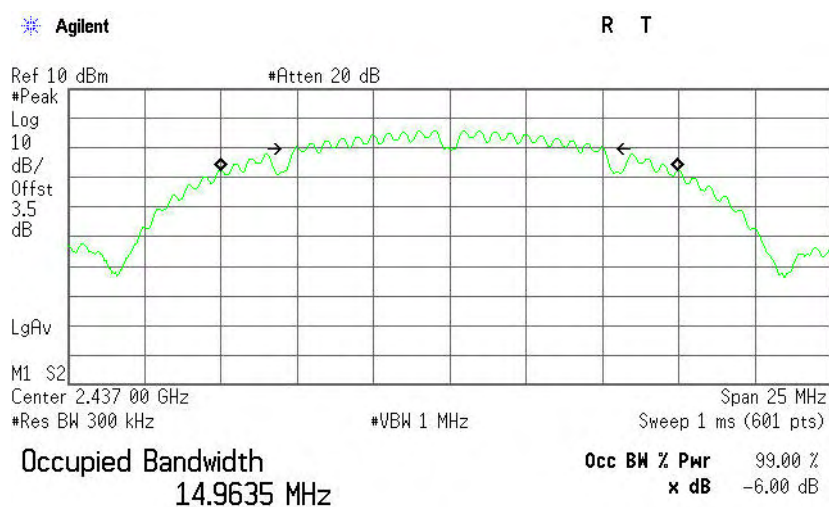
### 6dB Bandwidth (CH Low)



Transmit Freq Error -38.899 kHz

x dB Bandwidth 10.179 MHz

### 6dB Bandwidth (CH Mid)



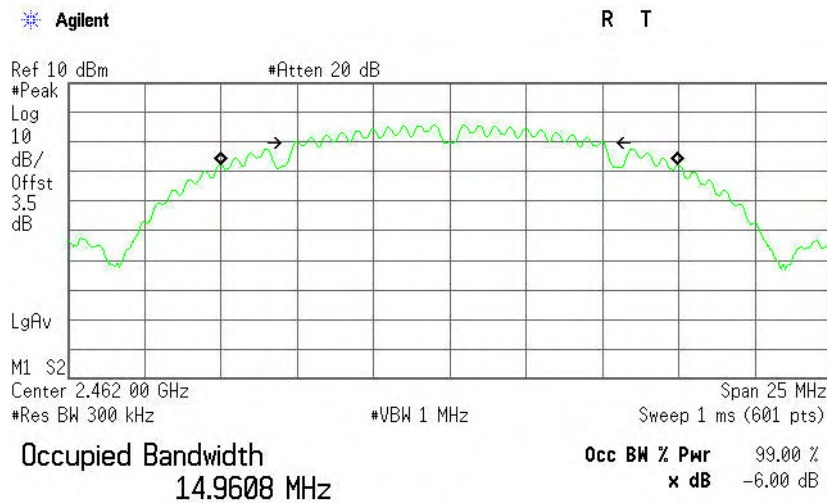
Transmit Freq Error -37.460 kHz

x dB Bandwidth 10.178 MHz





### 6dB Bandwidth (CH High)

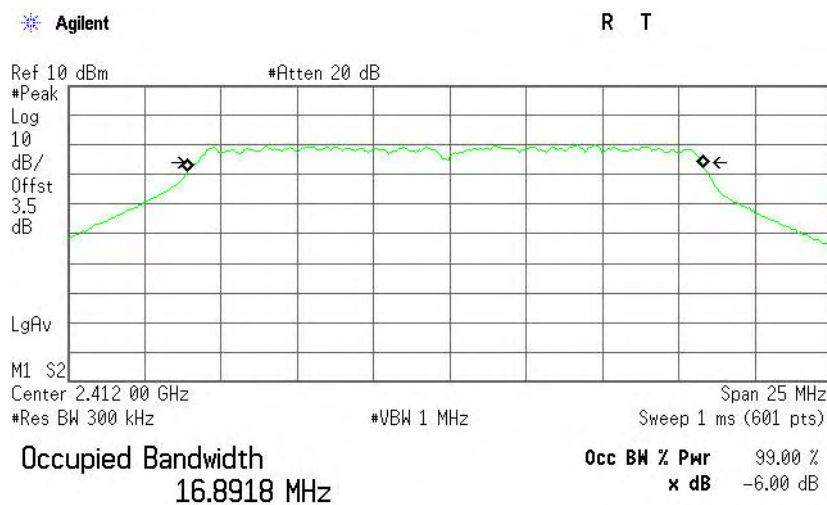


Transmit Freq Error -30.261 kHz

x dB Bandwidth 10.182 MHz

### IEEE 802.11g mode

### 6dB Bandwidth (CH Low)



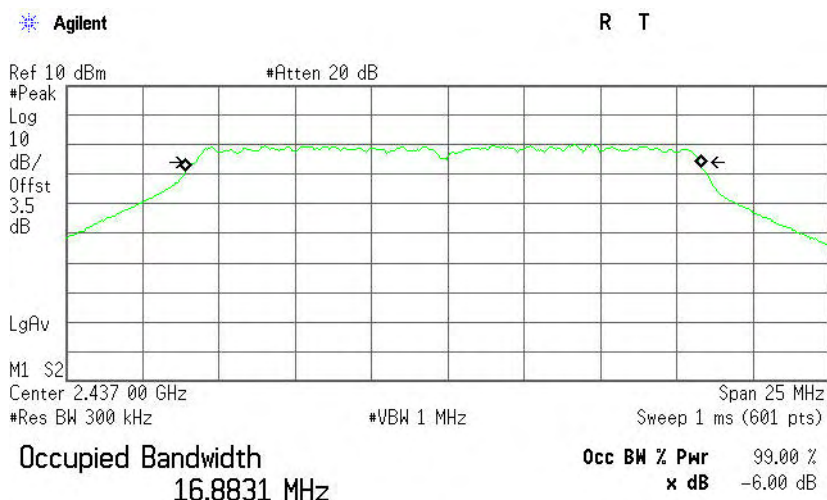
Transmit Freq Error -144.063 kHz

x dB Bandwidth 16.487 MHz



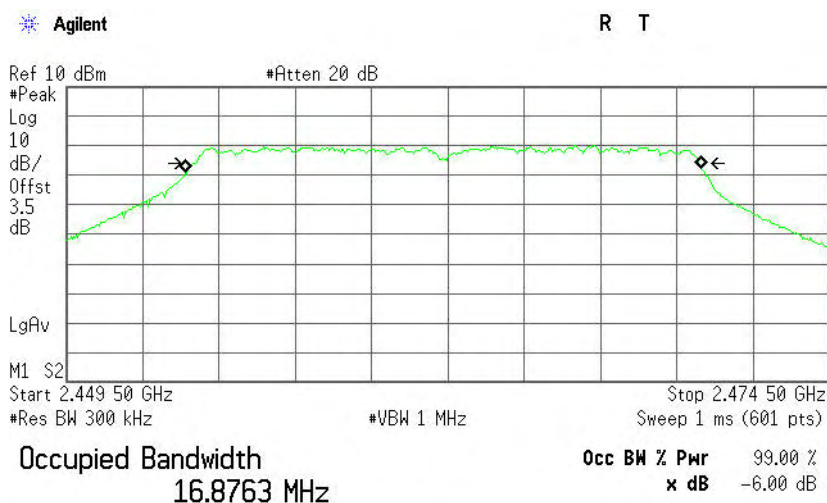


### 6dB Bandwidth (CH Mid)



Transmit Freq Error -143.541 kHz  
x dB Bandwidth 16.477 MHz

### 6dB Bandwidth (CH High)

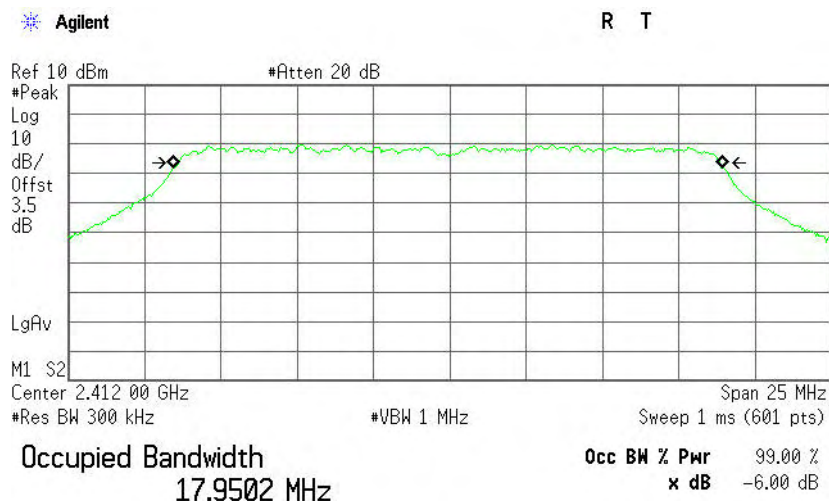


Transmit Freq Error -143.578 kHz  
x dB Bandwidth 16.498 MHz



## IEEE 802.11n HT20 MHz mode

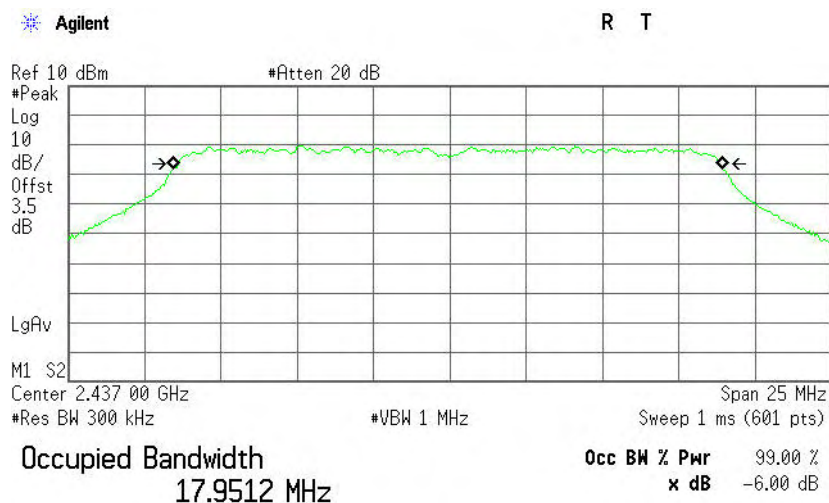
### 6dB Bandwidth (CH Low)



Transmit Freq Error -49.825 kHz

x dB Bandwidth 17.716 MHz

### 6dB Bandwidth (CH Mid)

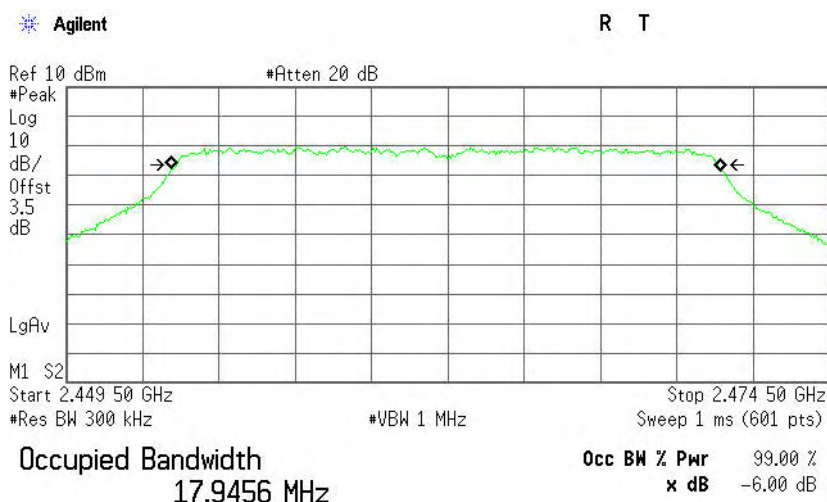


Transmit Freq Error -56.934 kHz

x dB Bandwidth 17.696 MHz



### 6dB Bandwidth (CH High)

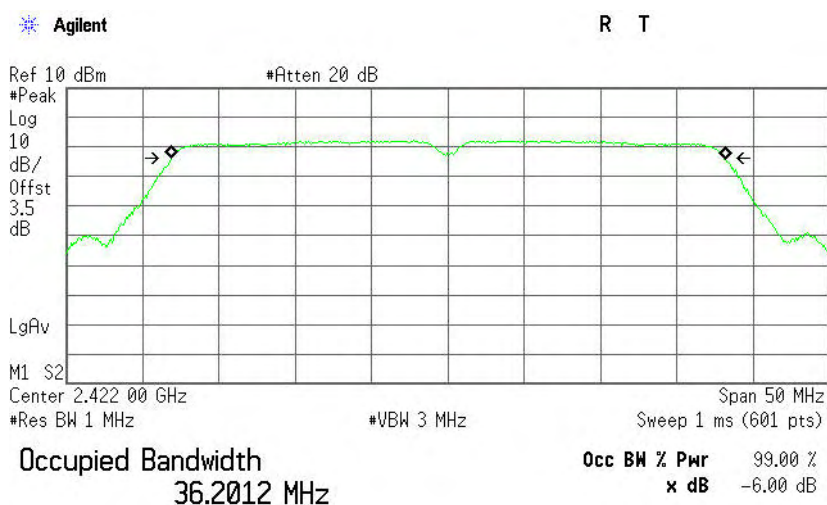


Transmit Freq Error -55.326 kHz

x dB Bandwidth 17.692 MHz

### IEEE 802.11n HT40 MHz mode

#### 6dB Bandwidth (CH Low)



Transmit Freq Error 46.830 kHz

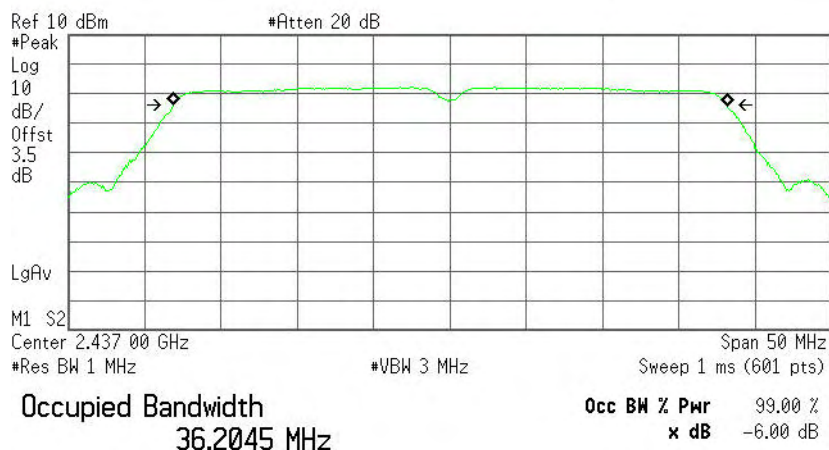
x dB Bandwidth 36.115 MHz



### 6dB Bandwidth (CH Mid)

Agilent

R T

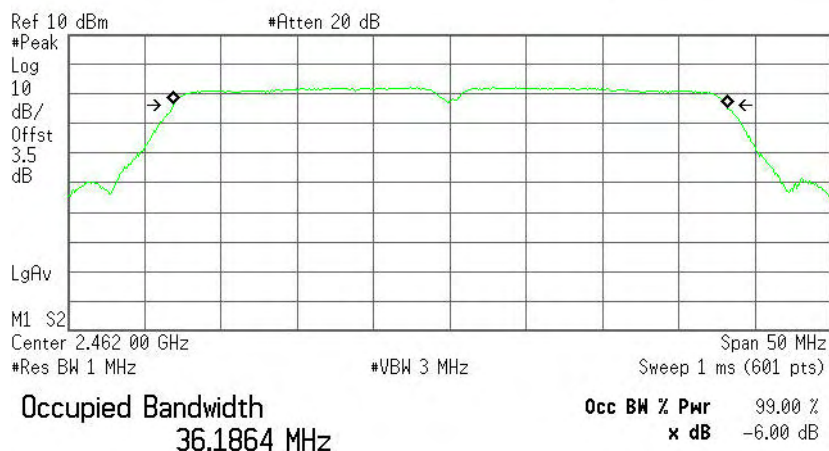


Transmit Freq Error 39.181 kHz  
x dB Bandwidth 36.134 MHz

### 6dB Bandwidth (CH High)

Agilent

R T



Transmit Freq Error 35.435 kHz  
x dB Bandwidth 36.134 MHz



## 7.4. PEAK OUTPUT POWER

### 7.4.1. LIMITS

The maximum peak output power of the intentional radiator shall not exceed the following:

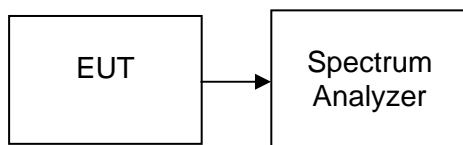
1. According to §15.247(b)(3), for systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 Watt.
2. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 7.4.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	03/19/2012	03/19/2013

### 7.4.3. TEST PROCEDURES (please refer to measurement standard)

1. This procedure provides an integrated measurement alternative when the maximum available RBW < EBW.
2. Set the RBW = 1 MHz.
3. Set the VBW = 3 MHz.
4. Set the span to a value that is 5-30 % greater than the EBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the spectrum analyzer's integrated band power measurement function with band limits set equal to the EBW band edges (for some analyzers, this may require a manual override to ensure use of peak detector). If the spectrum analyzer does not have a band power function, sum the spectrum levels (in linear power units) at 1 MHz intervals extending across the EBW of the spectrum.

**7.4.4. TEST SETUP****7.4.5. TEST RESULTS***No non-compliance noted***Test Data****Test mode: IEEE 802.11b**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	6.63	0.00460	1	PASS
Mid	2437	6.81	0.00480		PASS
High	2462	6.93	0.00493		PASS

**Test mode: IEEE 802.11g**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	2.26	0.00168	1	PASS
Mid	2437	2.36	0.00172		PASS
High	2462	2.35	0.00172		PASS

**Test mode: IEEE 802.11n HT20 MHz**

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	2.26	0.00168	1	PASS
Mid	2437	2.44	0.00175		PASS
High	2462	2.30	0.00170		PASS

**Test mode: IEEE 802.11n HT40 MHz**

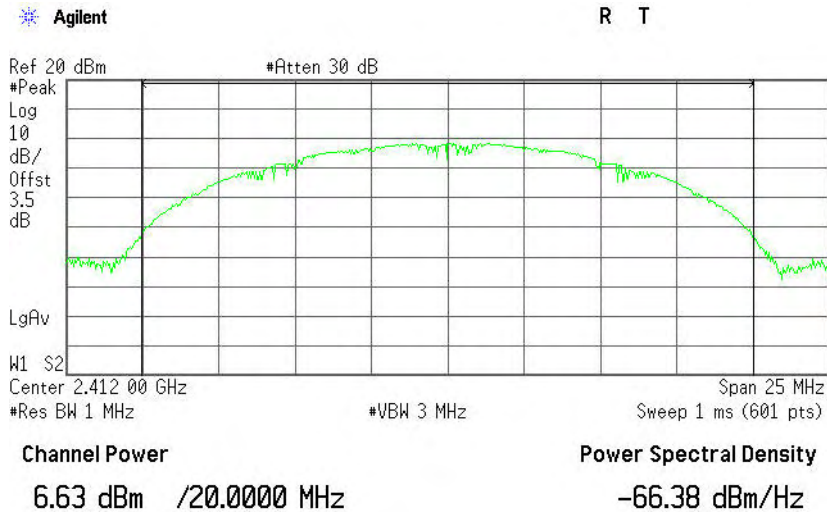
Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	2.07	0.00161	1	PASS
Mid	2437	2.03	0.00160		PASS
High	2462	2.44	0.00175		PASS



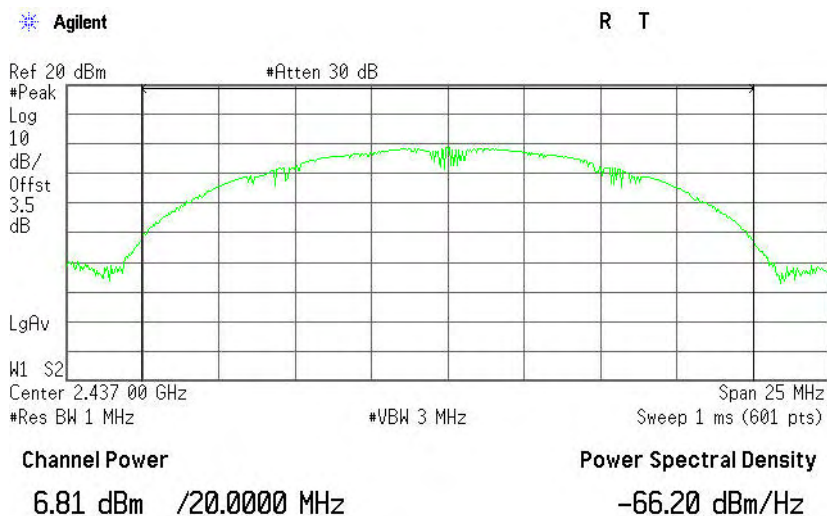
## Test Plot

### IEEE 802.11b mode

#### Peak power (CH Low)



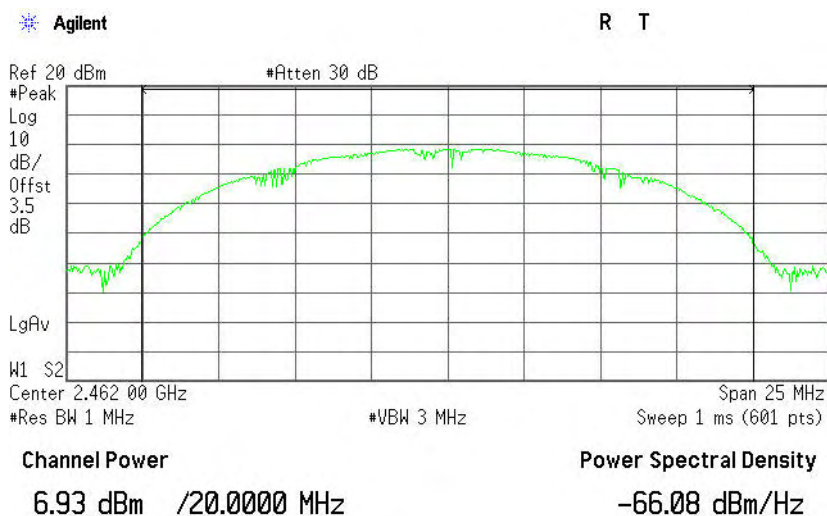
#### Peak power (CH Mid)





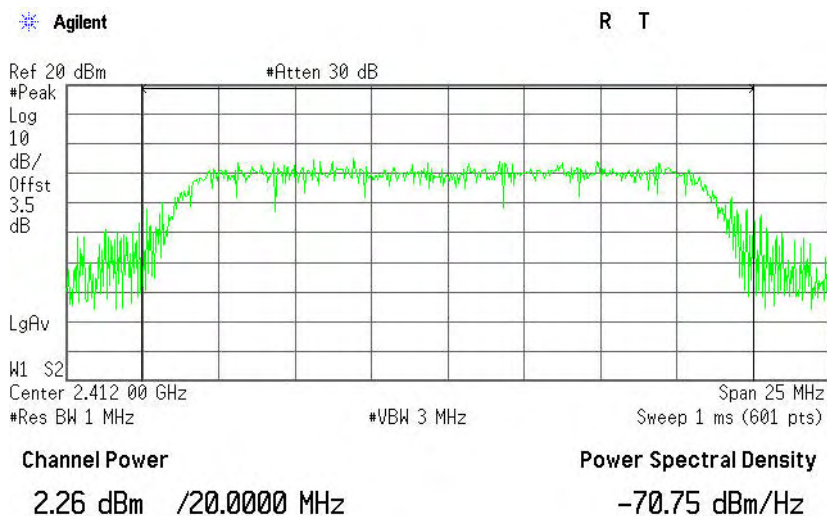


### Peak power (CH High)



### IEEE 802.11g mode

#### Peak power (CH Low)



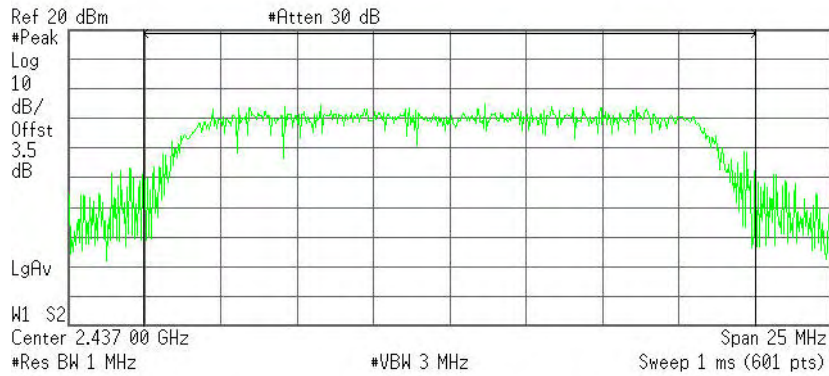




### Peak power (CH Mid)

Agilent

R T



Channel Power

2.36 dBm /20.0000 MHz

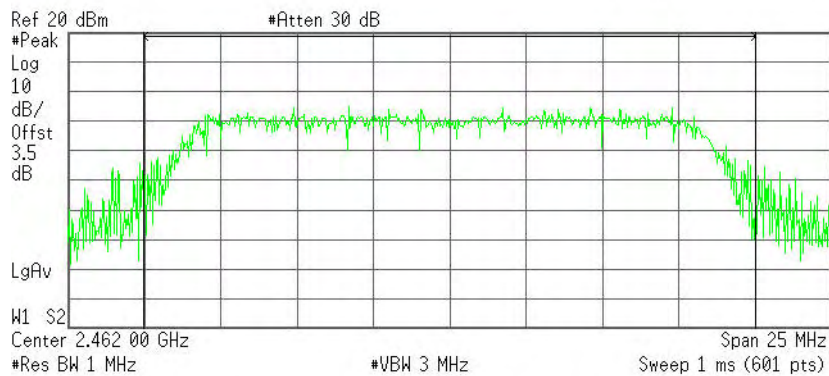
Power Spectral Density

-70.65 dBm/Hz

### Peak power (CH High)

Agilent

R T



Channel Power

2.35 dBm /20.0000 MHz

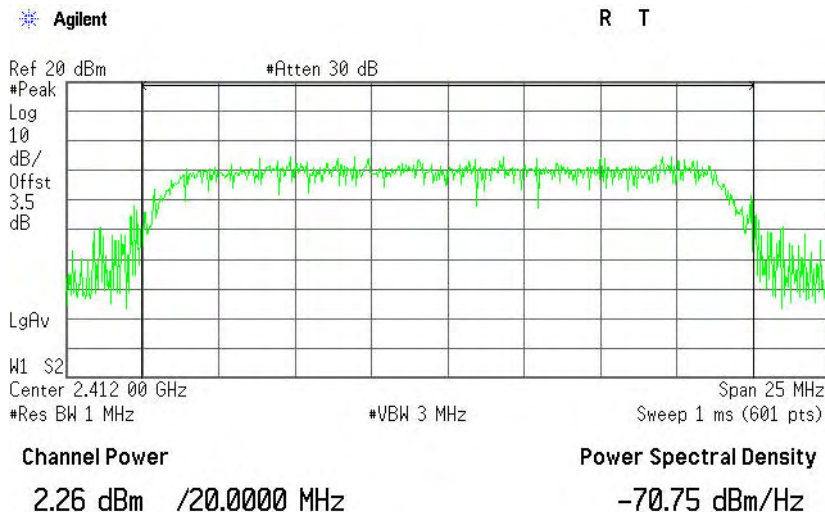
Power Spectral Density

-70.66 dBm/Hz

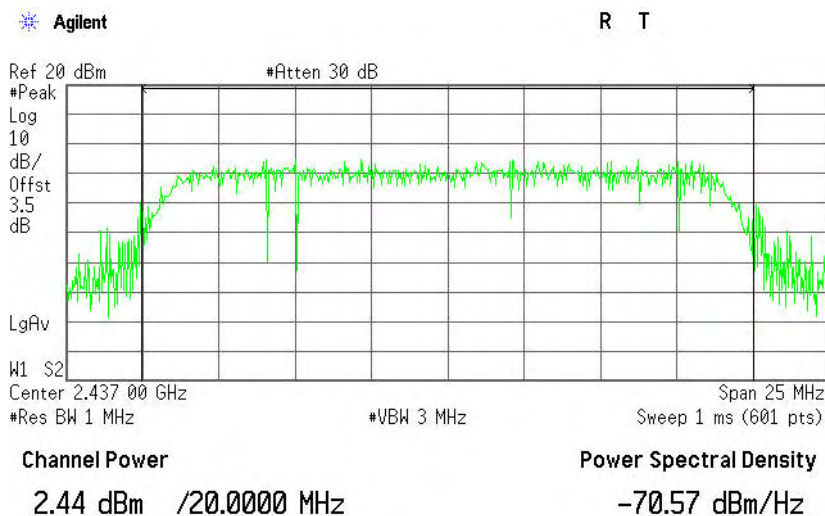


## IEEE 802.11n HT20 MHz mode

### Peak power (CH Low)

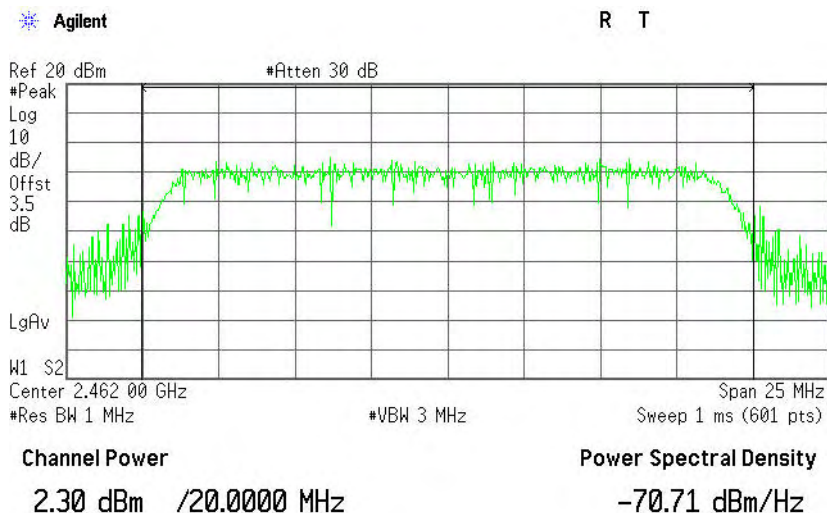


### Peak power (CH Mid)



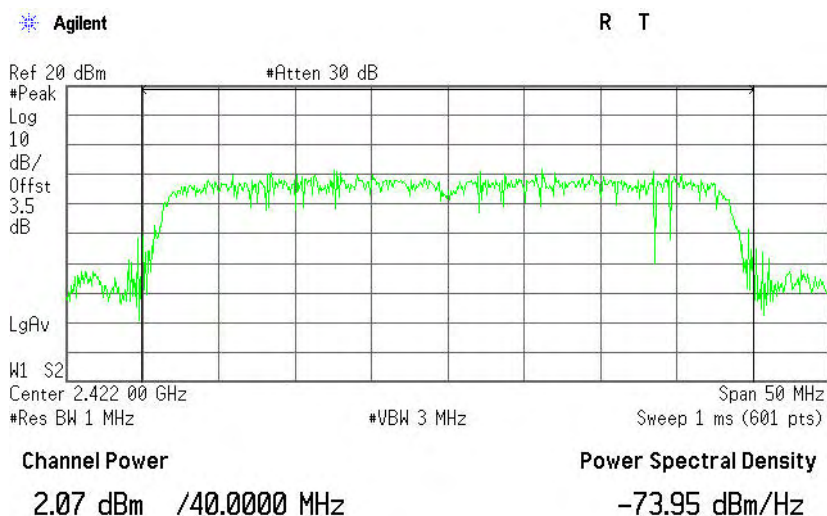


### Peak power (CH High)



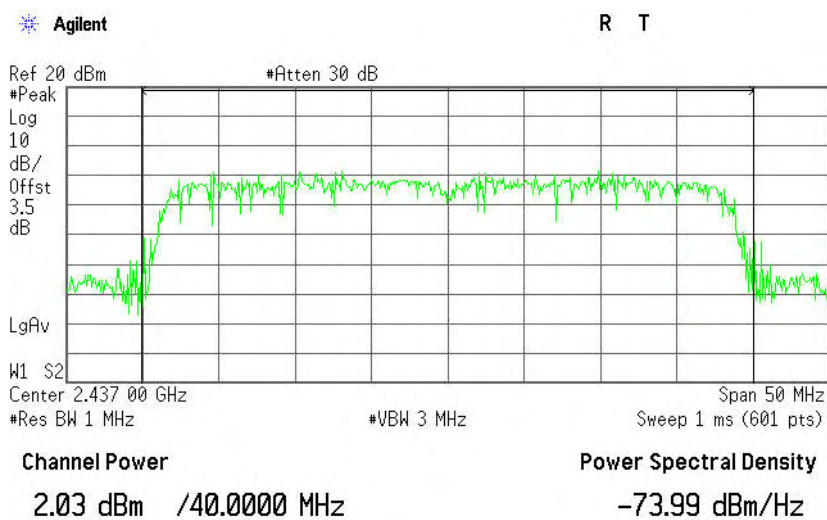
### IEEE 802.11n HT40 MHz mode

#### Peak power (CH Low)

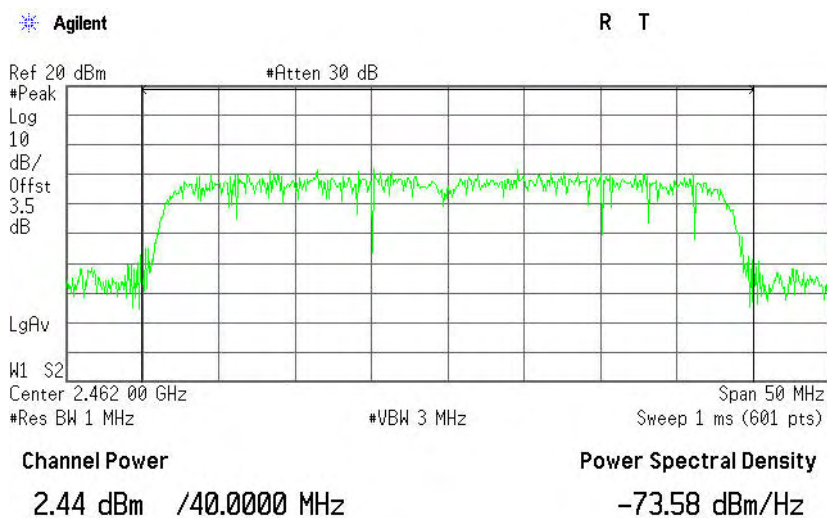




### Peak power (CH Mid)



### Peak power (CH High)





## 7.5. BAND EDGES MEASUREMENT

### 7.5.1. LIMITS

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

### 7.5.2. TEST INSTRUMENTS

Radiated Emission Test Site 966(2)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	03/19/2012	03/19/2013
ESCI EMI TEST RECEIVER.ESCI	ROHDE&SCHWARZ	ESCI	100783	03/17/2012	03/17/2013
Amplifier	MITEQ	AM-1604-3000	1123808	03/18/2012	03/18/2013
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
High Noise Amplifier	Agilent	8449B	3008A01838	03/18/2012	03/18/2013
Bilog Antenna	SCHAFFNER	CBL6143	5082	03/17/2012	03/17/2013
Horn Antenna	SCHWARZBECK	BBHA9120	D286	03/17/2012	03/17/2013
Loop Antenna	A、R、A	PLA-1030/B	1029	03/23/2012	03/23/2013
Temp. / Humidity Meter	VICTOR	VC230	N/A	03/19/2012	03/19/2013
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

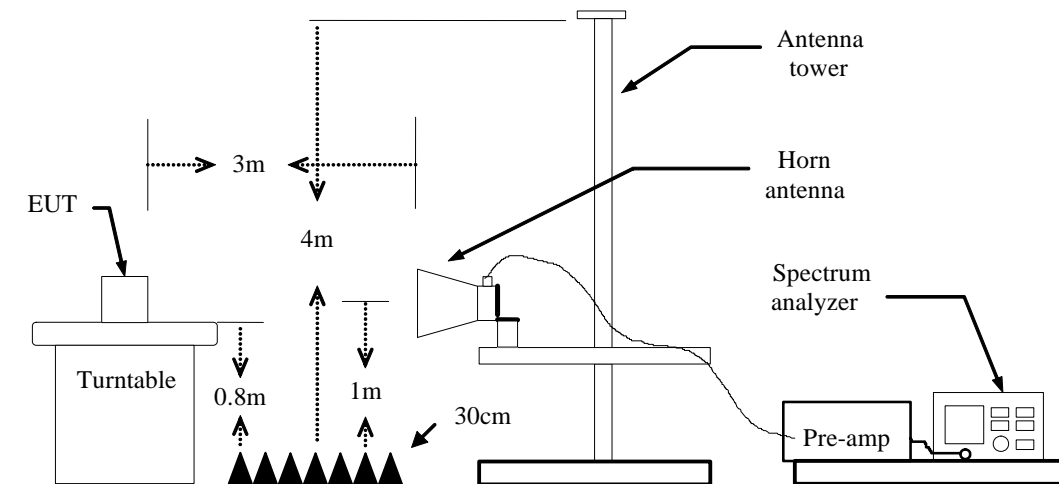
- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
2. The FCC Site Registration number is 101879.  
3. N.C.R = No Calibration Required.



### 7.5.3. TEST PROCEDURES (please refer to measurement standard)

1. The EUT is placed on a turntable, which is 0.8m above the ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
  - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are

### 7.5.4. TEST SETUP







## 7.5.5. TEST RESULTS

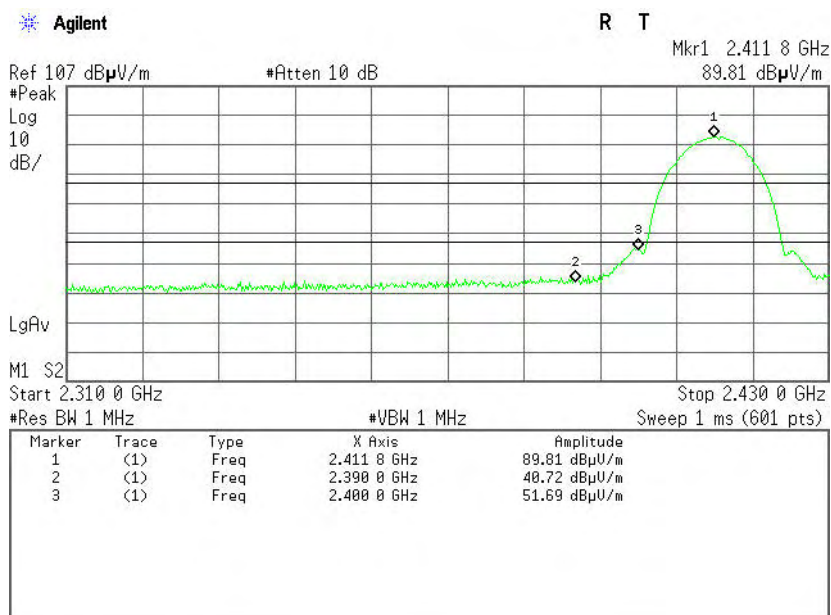
### Test Plot

IEEE 802.11b mode

Band Edges (CH Low)

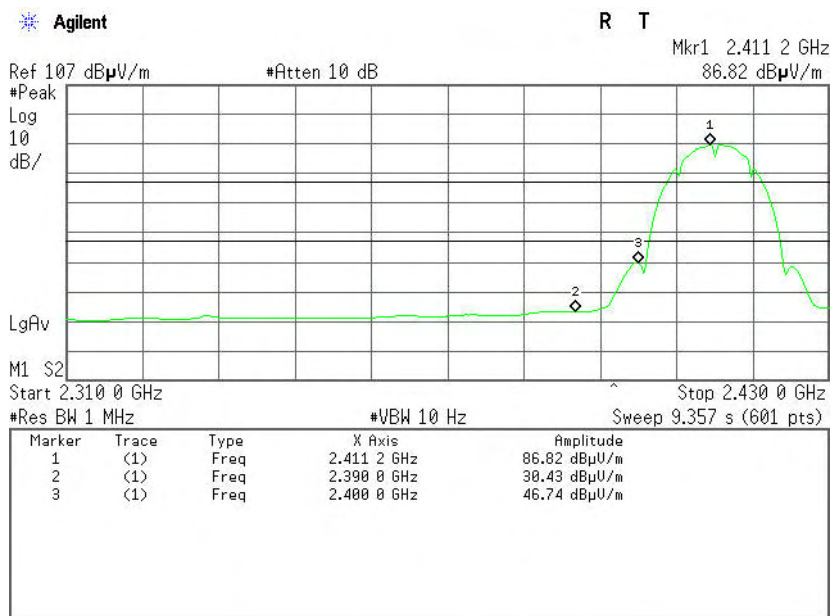
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

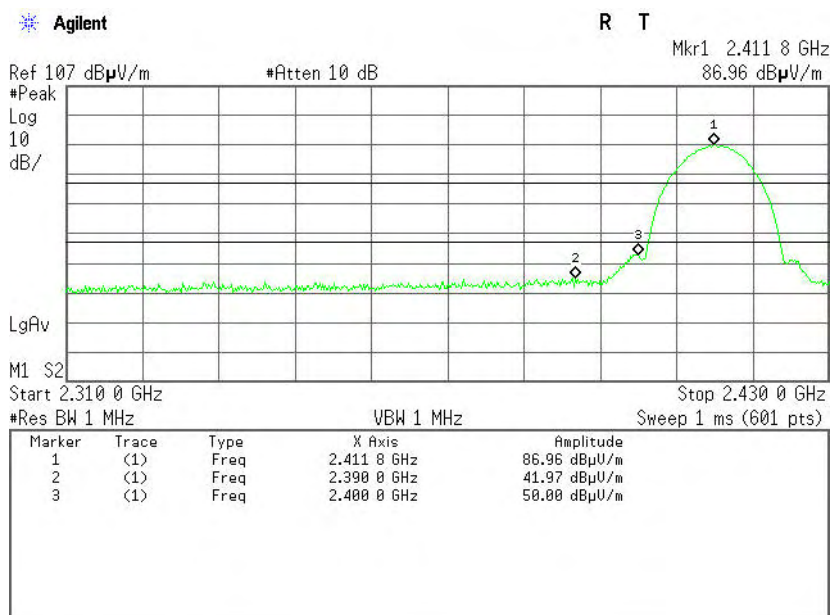
Polarity: Vertical





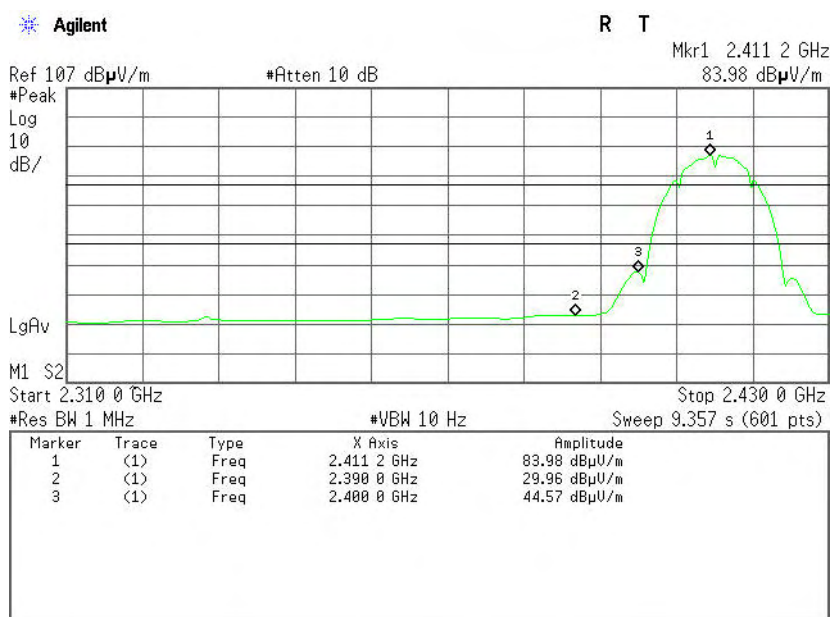
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal



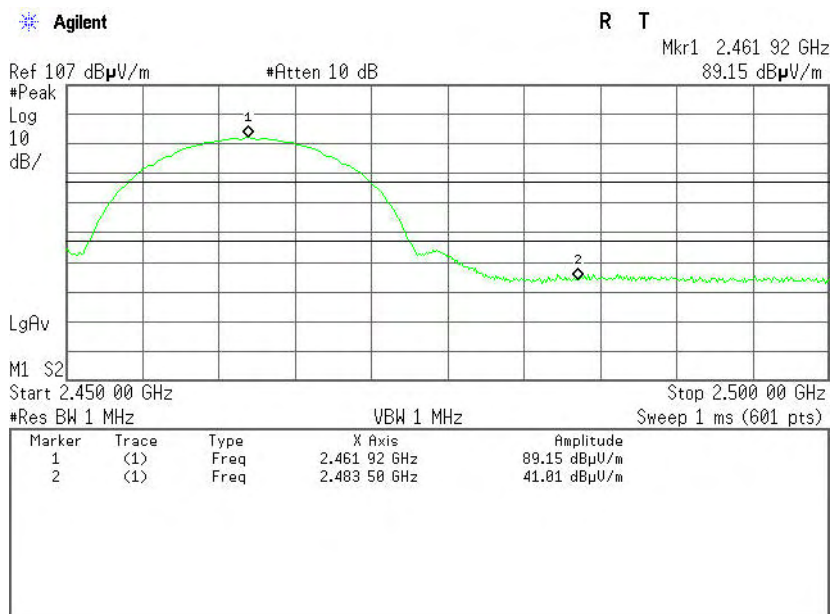




## Band Edges (CH High)

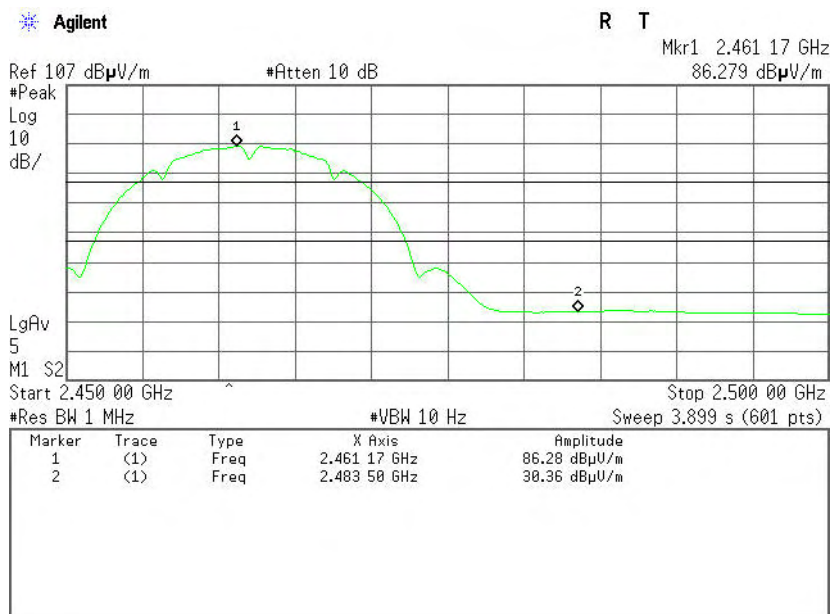
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

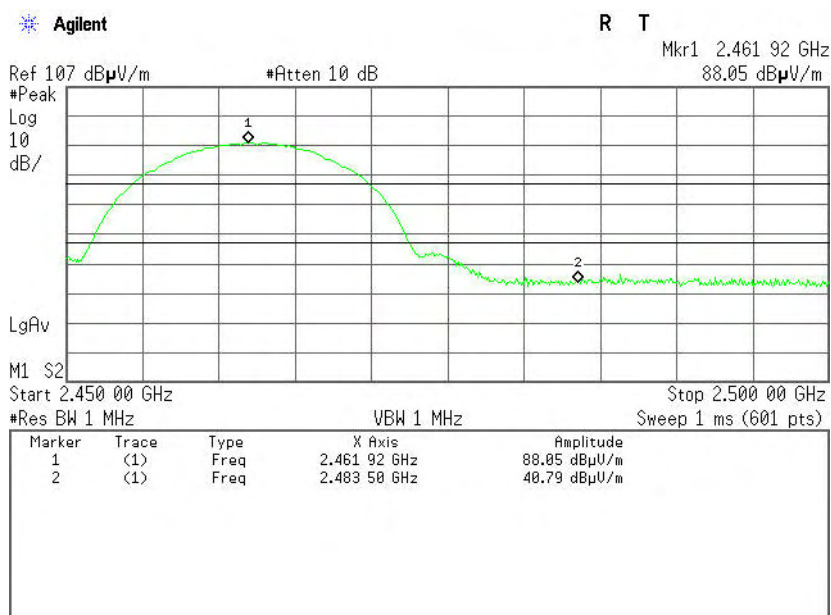
Polarity: Vertical





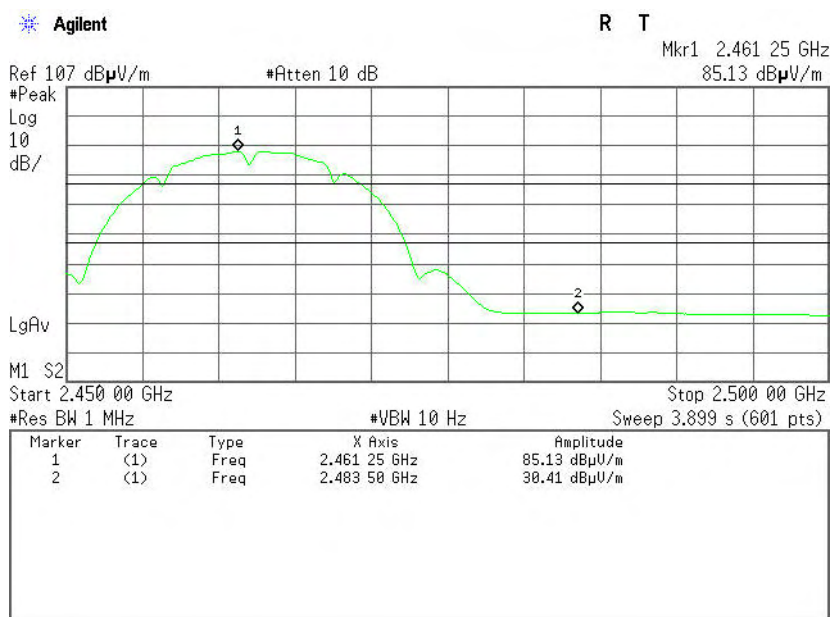
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal



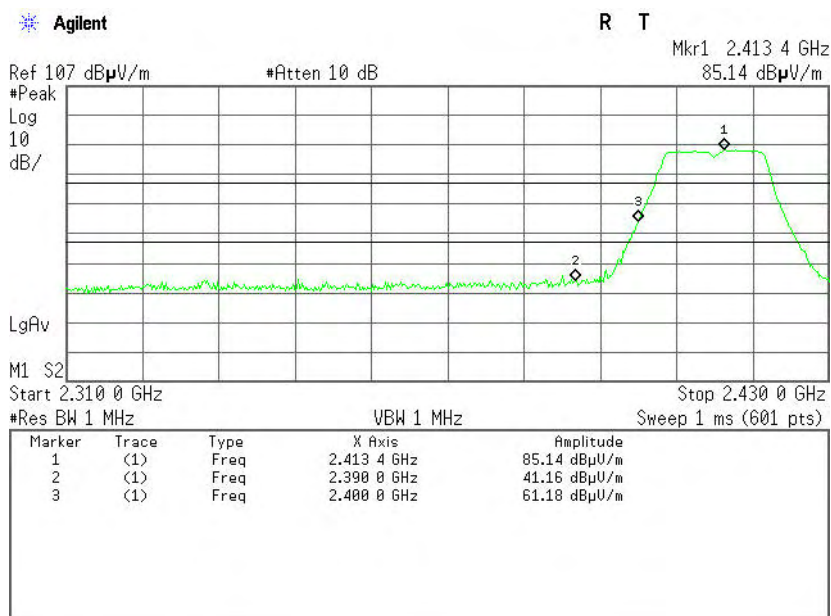


IEEE 802.11g mode

Band Edges (CH Low)

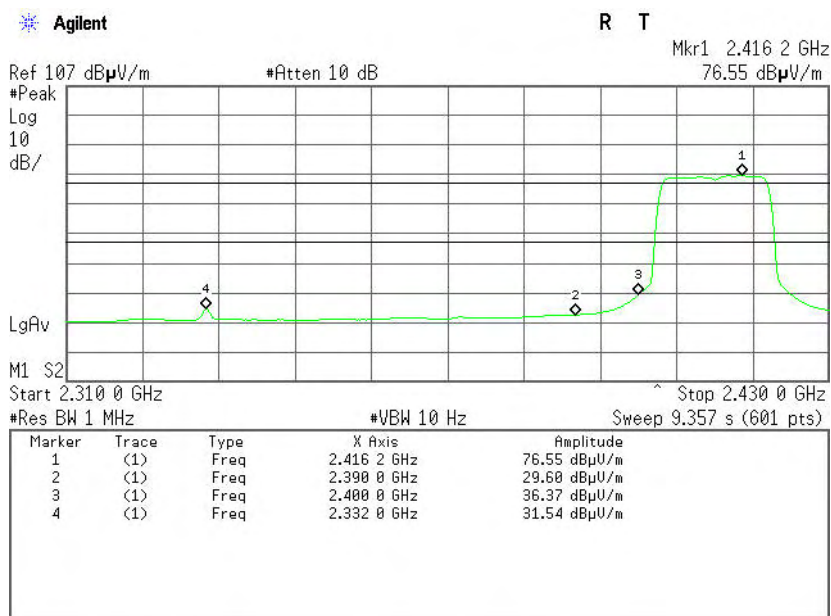
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

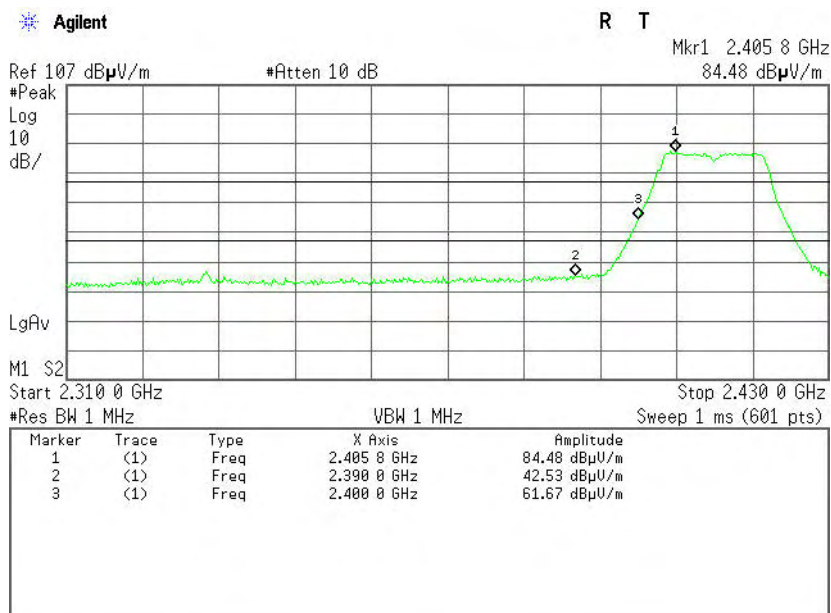
Polarity: Vertical





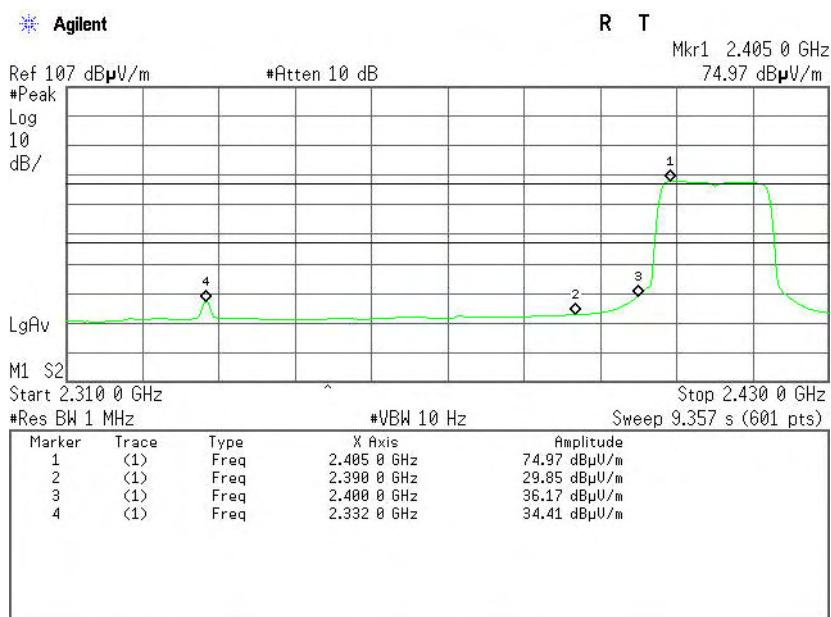
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal

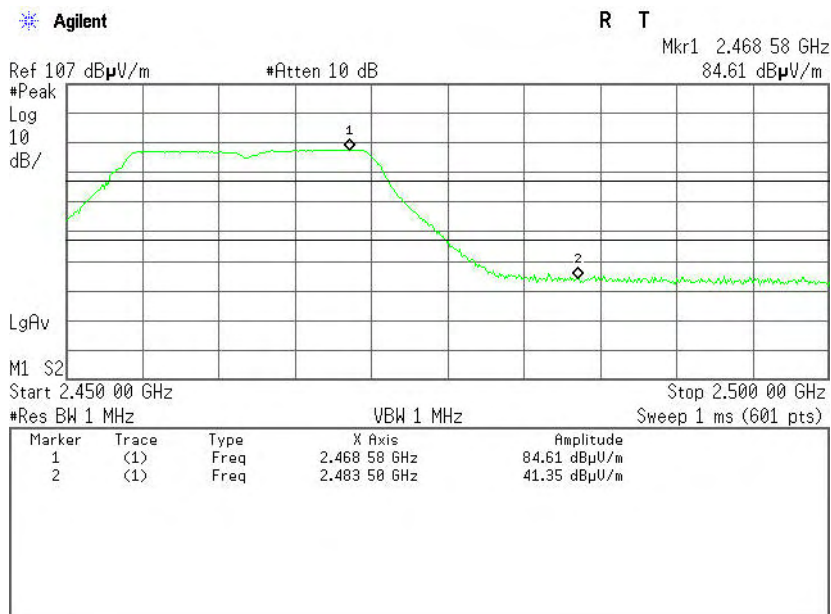




## Band Edges (CH High)

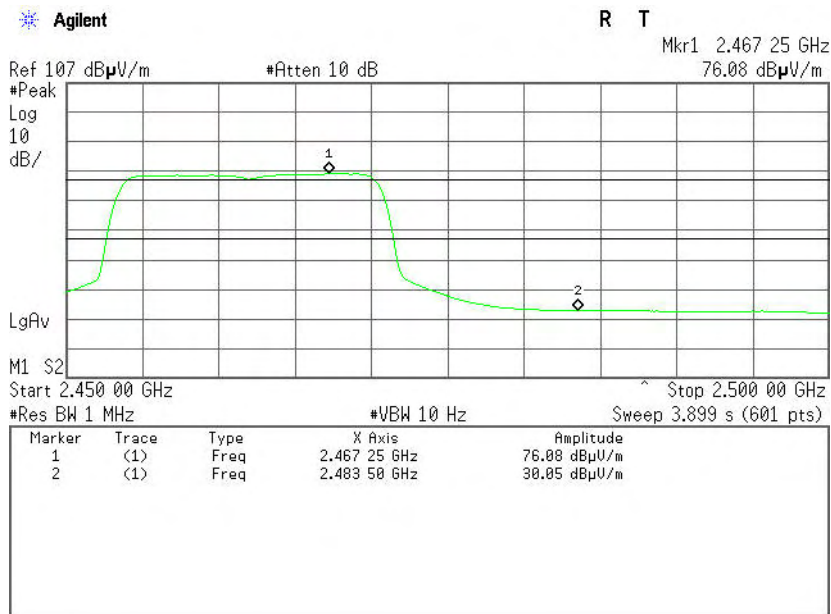
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

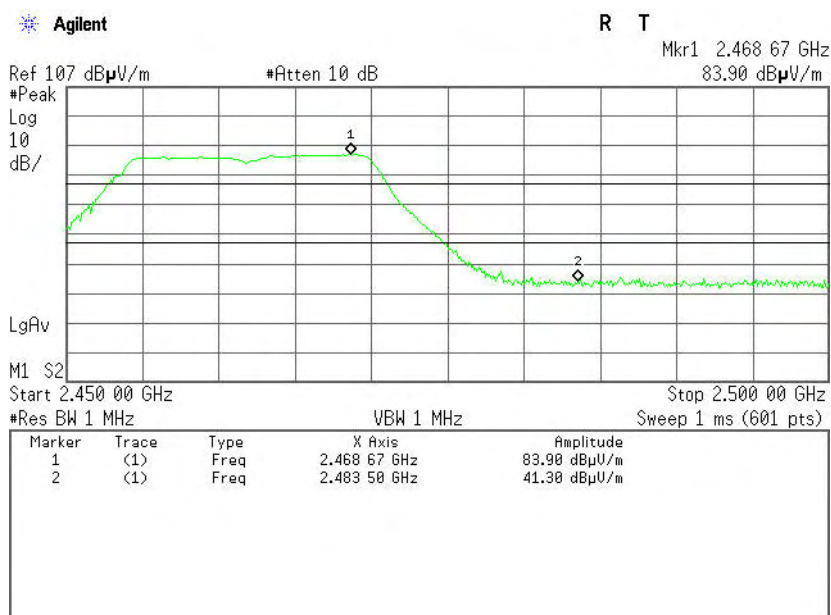
Polarity: Vertical





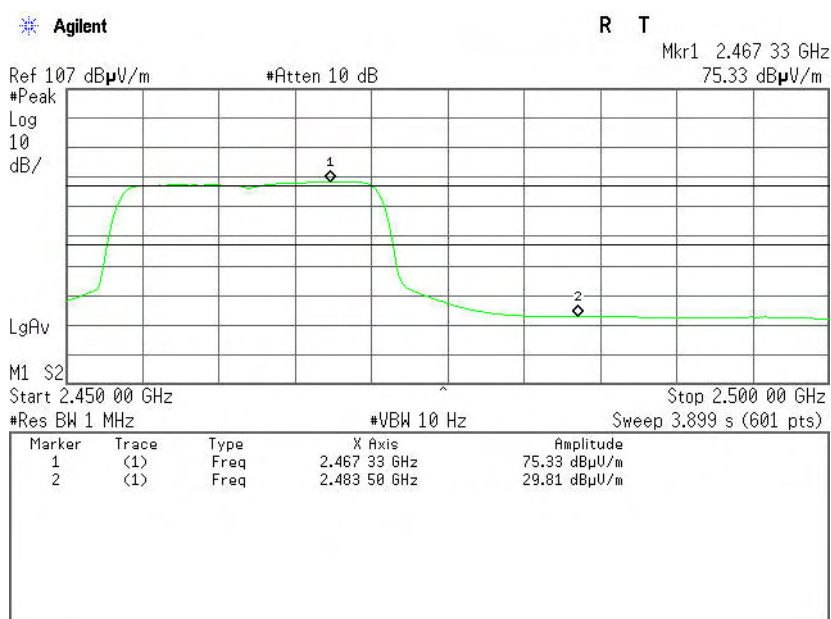
Detector mode: Peak

Polarity: Horizontal



Detector mode: Average

Polarity: Horizontal





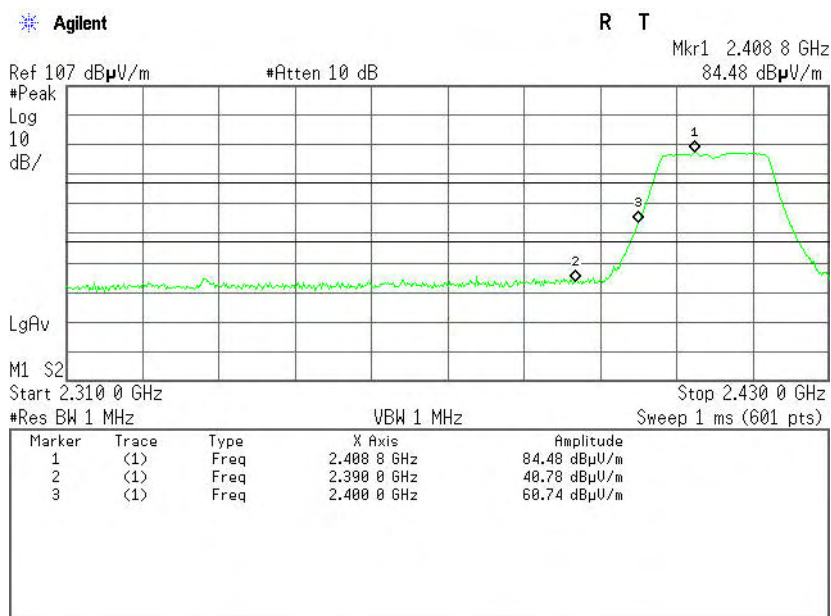


## IEEE 802.11n HT20 MHz mode

### Band Edges (CH Low)

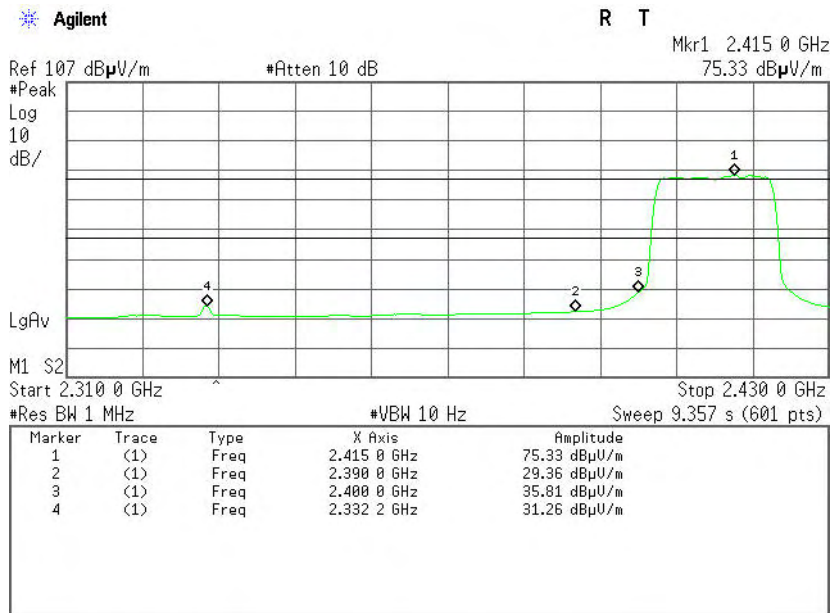
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

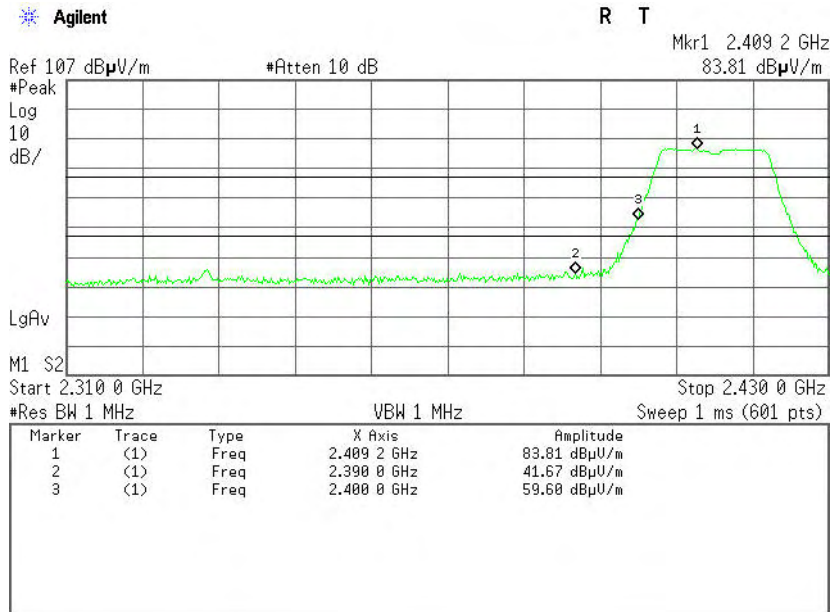
Polarity: Vertical





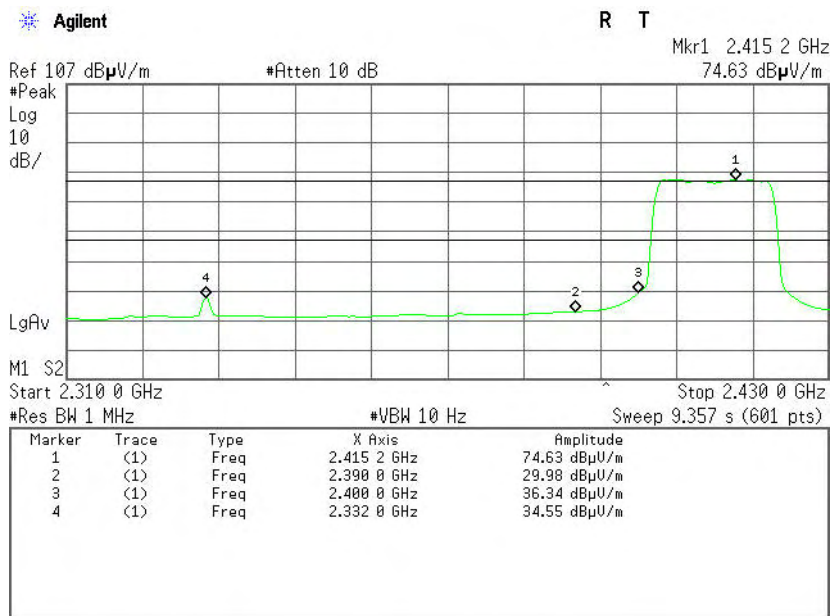
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal



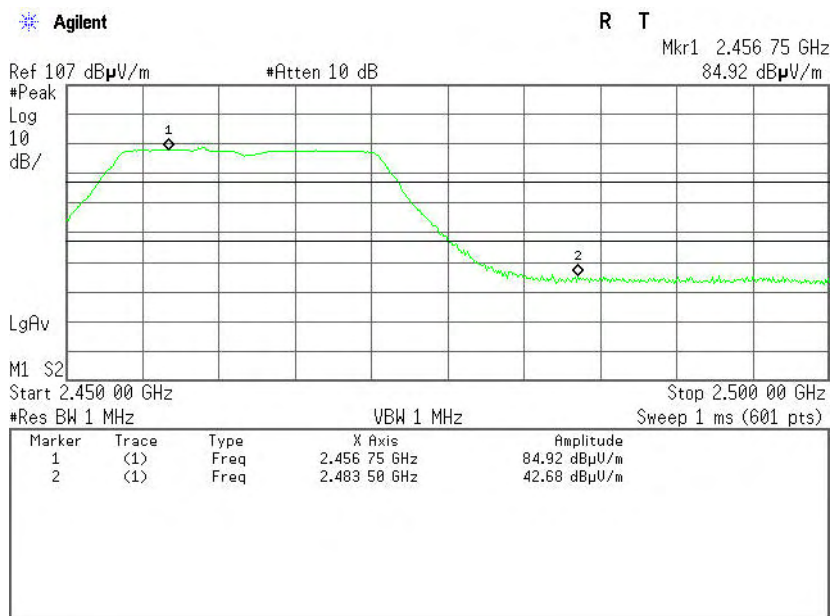




## Band Edges (CH High)

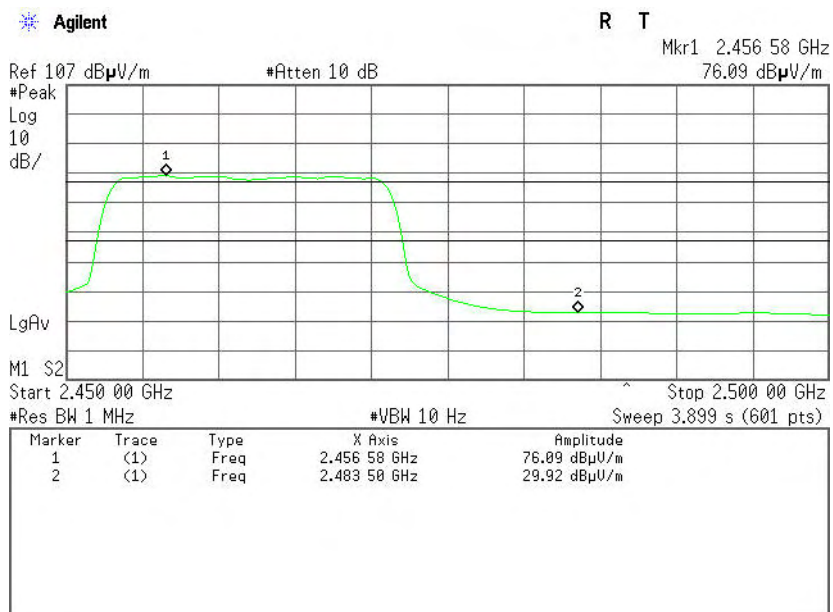
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

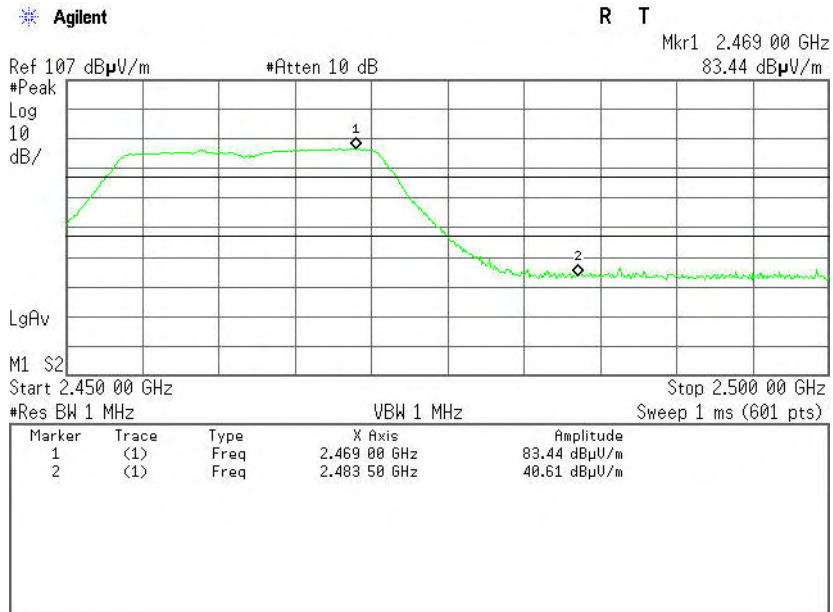
Polarity: Vertical





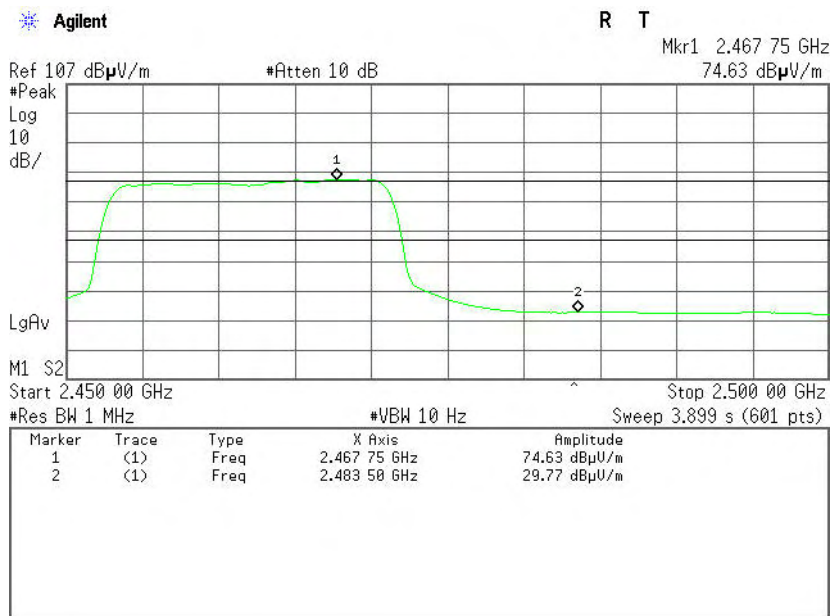
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal



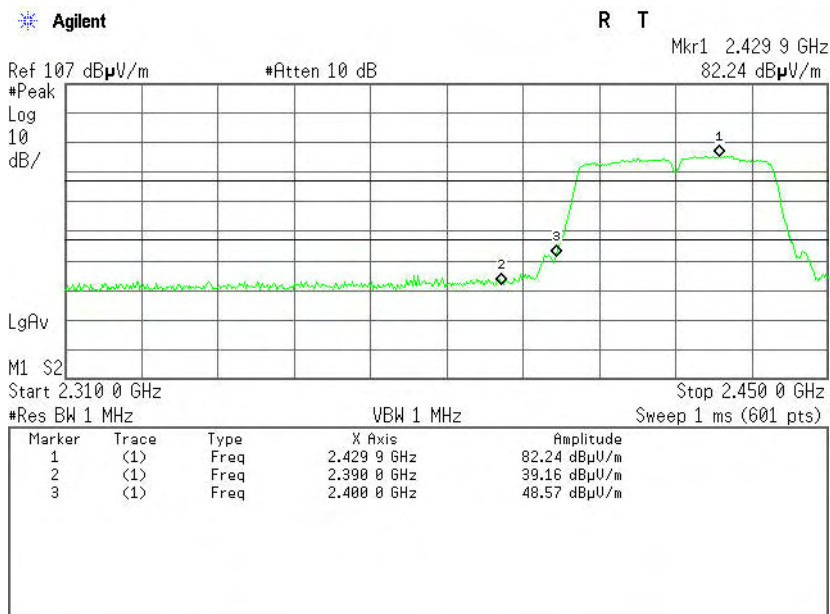


IEEE 802.11n HT40 MHz mode

Band Edges (CH Low)

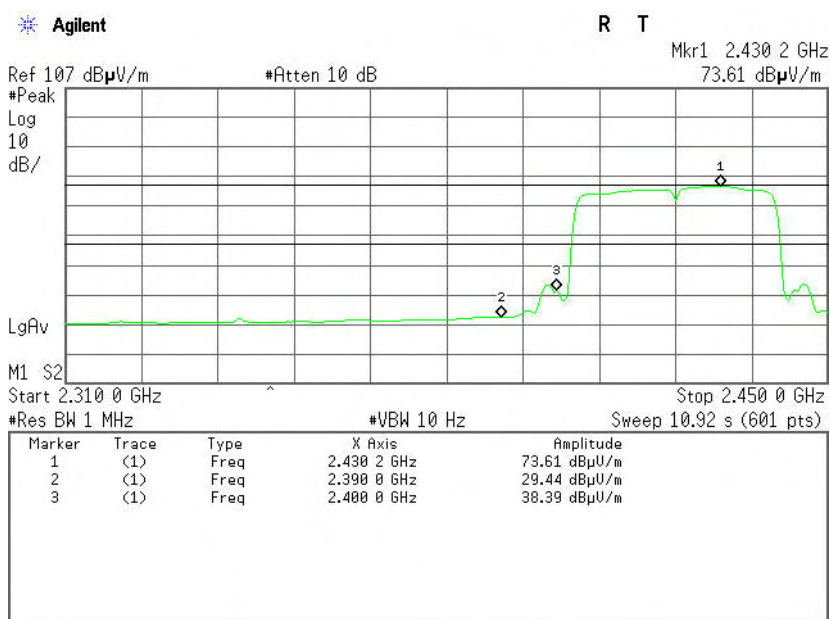
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

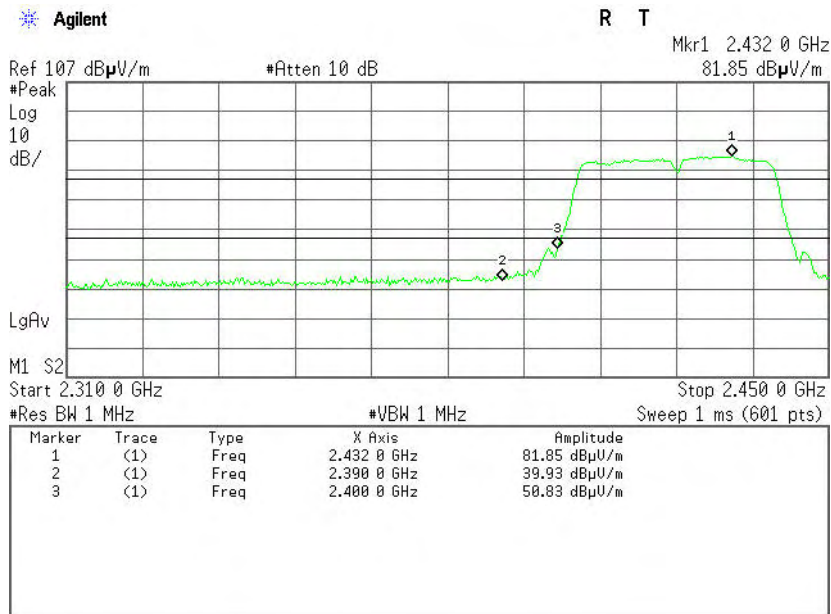
Polarity: Vertical





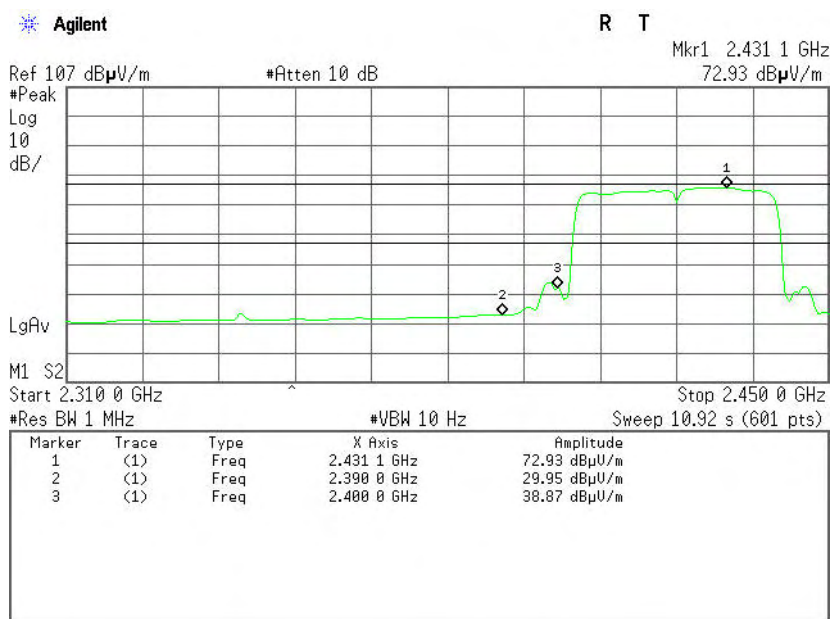
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal

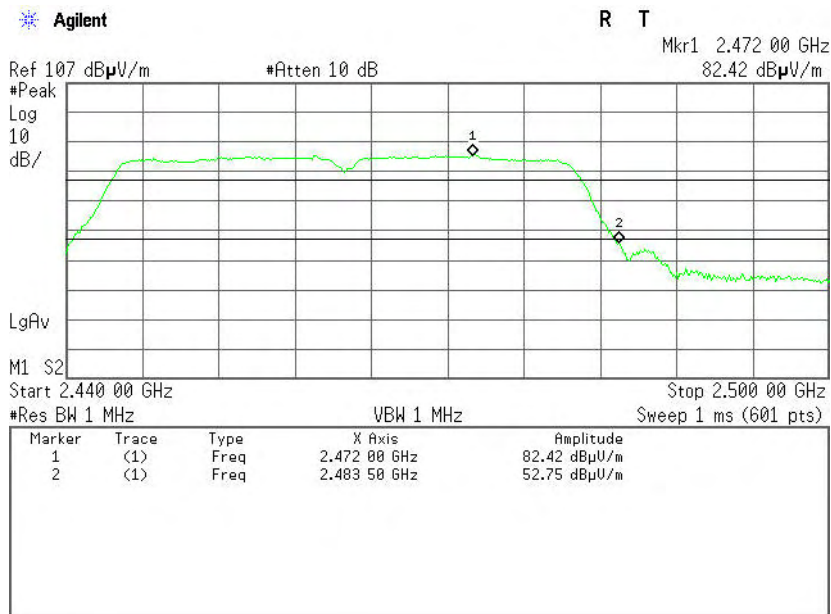




## Band Edges (CH High)

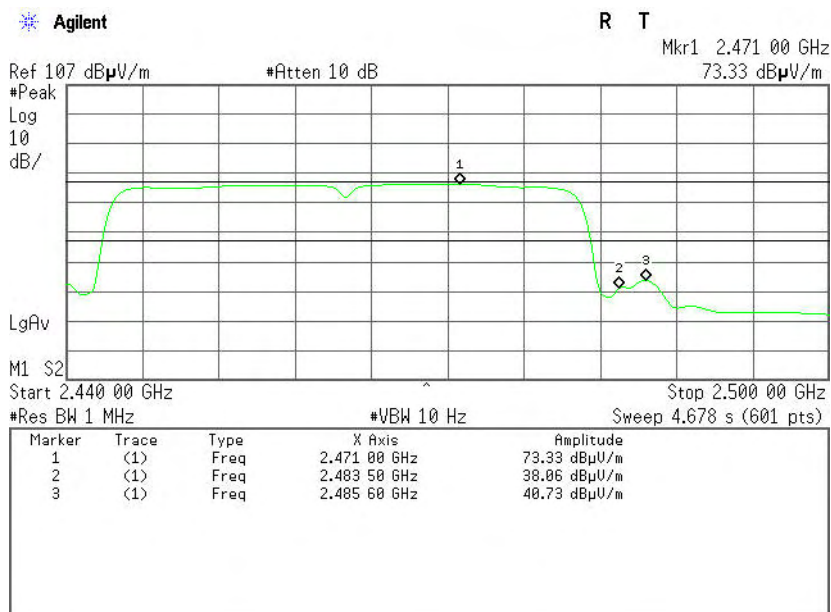
Detector mode: Peak

Polarity: Vertical



Detector mode: Average

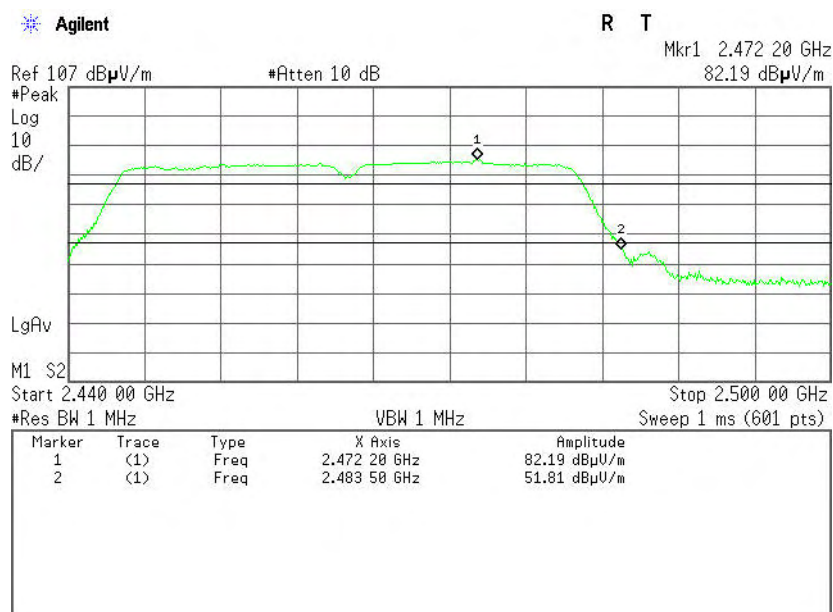
Polarity: Vertical





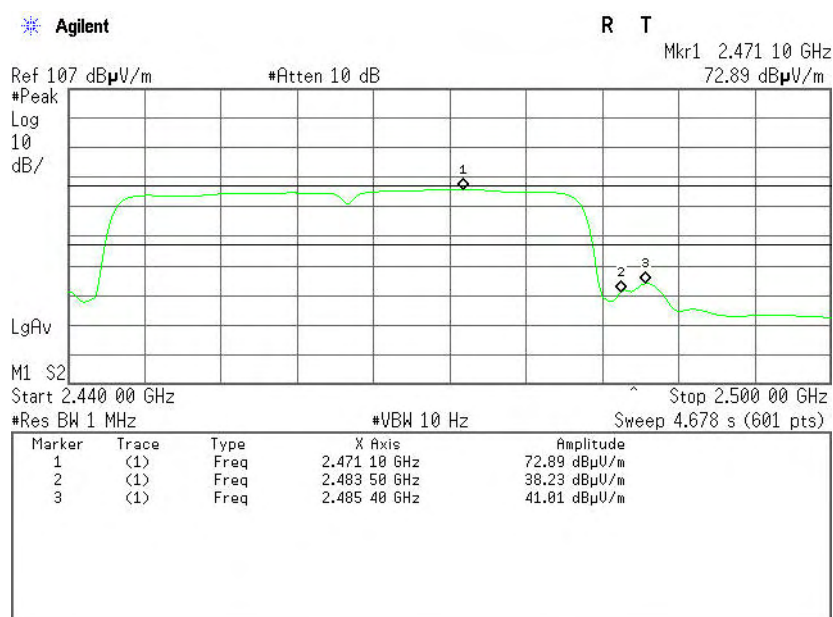
## Detector mode: Peak

## Polarity: Horizontal



## Detector mode: Average

## Polarity: Horizontal







## 7.6. PEAK POWER SPECTRAL DENSITY MEASUREMENT

### 7.6.1. LIMITS

According to §15.247(e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

According to §15.247(f), the digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

### 7.6.2. TEST INSTRUMENTS

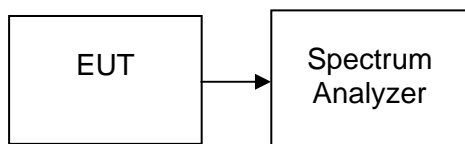
Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	03/19/2012	03/19/2013

### 7.6.3. TEST PROCEDURES (please refer to measurement standard)

§15.247(e) specifies a conducted power spectral density (PSD) limit of 8 dBm in any 3 kHz band segment within the fundamental EBW during any time interval of continuous transmission. The same method as used to determine the conducted output power shall be used to determine the power spectral density (i.e., if peak-detected fundamental power was measured then use the peak PSD procedure and if average fundamental power was measured then use the average PSD procedure).

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW  $\geq$  3 kHz.
4. Set the VBW  $\geq$  3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

### 7.6.4. TEST SETUP





**7.6.5. TEST RESULTS***No non-compliance noted***Test Data****Test mode: IEEE 802.11b**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-25.58	8	PASS
Mid	2437	-25.50		PASS
High	2462	-25.52		PASS

**Test mode: IEEE 802.11g**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-28.23	8	PASS
Mid	2437	-27.97		PASS
High	2462	-27.85		PASS

**Test mode: IEEE 802.11n HT20 MHz**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2412	-28.03	8	PASS
Mid	2437	-27.99		PASS
High	2462	-27.81		PASS

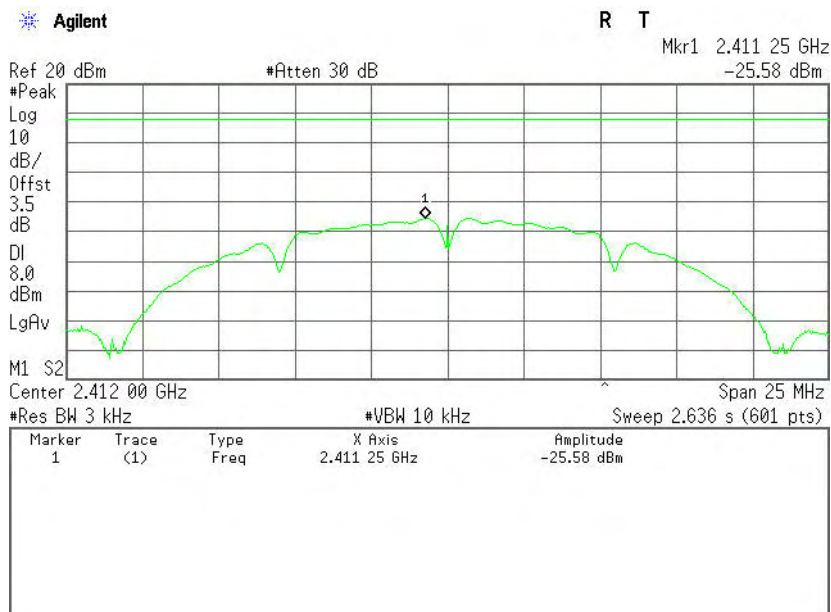
**Test mode: IEEE 802.11n HT40 MHz**

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Test Result
Low	2422	-31.32	8	PASS
Mid	2437	-29.42		PASS
High	2452	-29.69		PASS

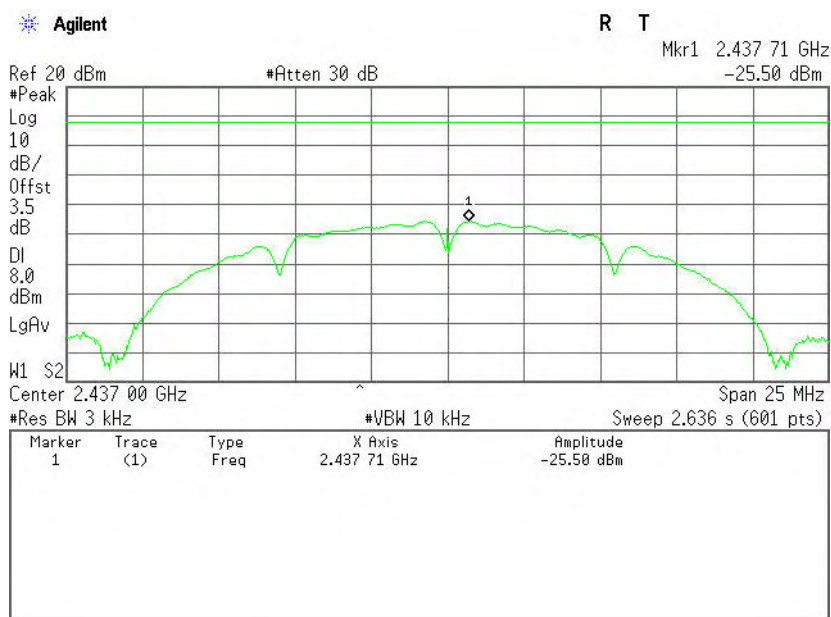


## Test Plot IEEE 802.11b mode

### PPSD (CH Low)

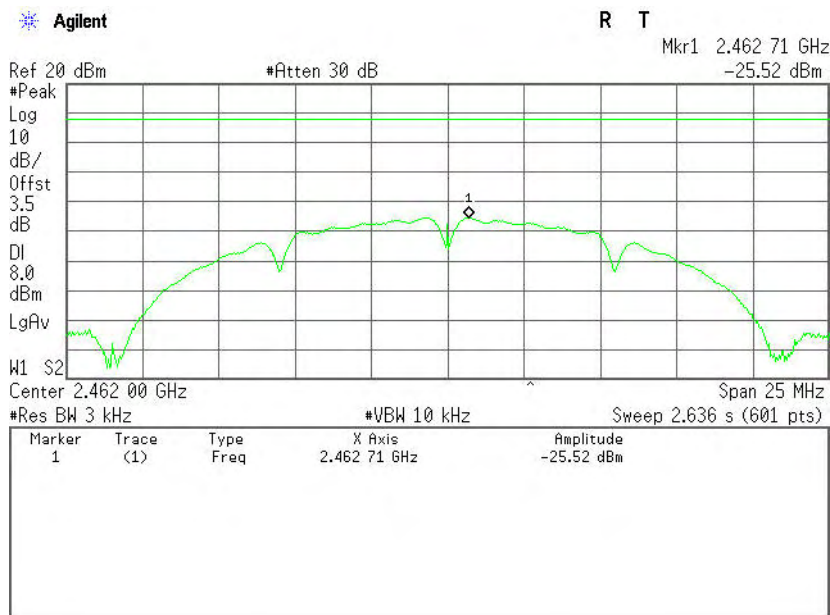


### PPSD (CH Mid)



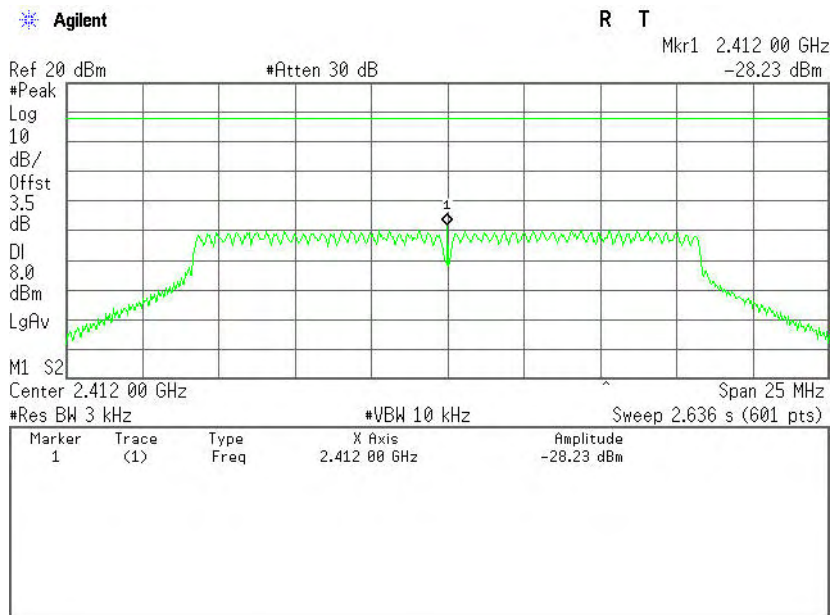


## PPSD (CH High)



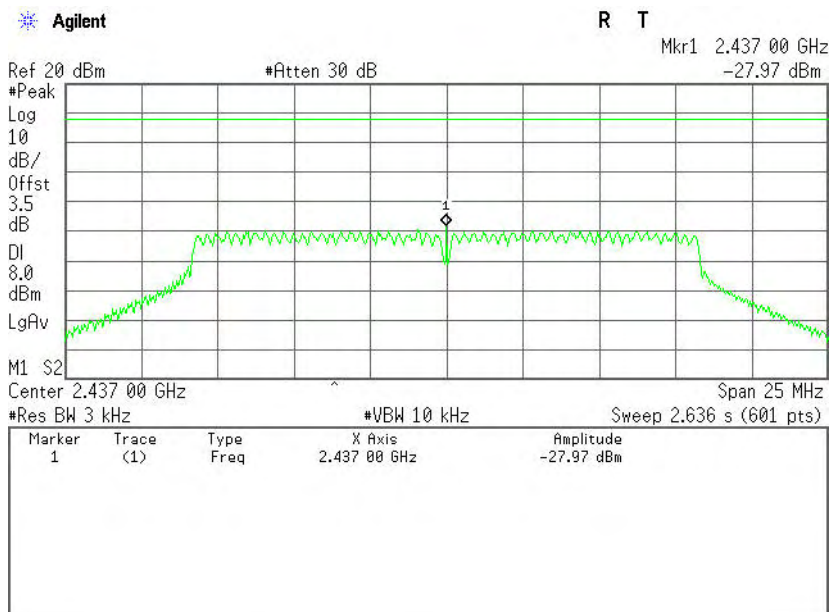
## IEEE 802.11g mode

## PPSD (CH Low)

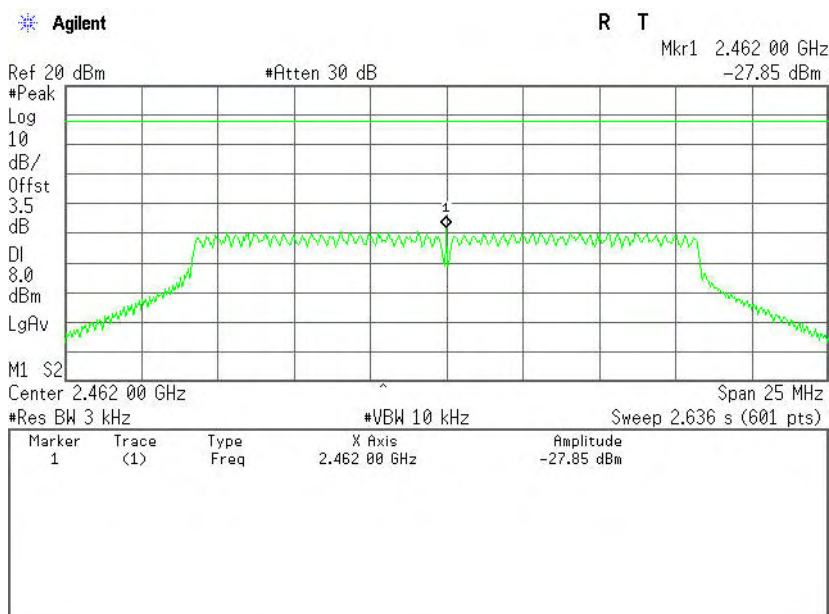




## PPSD (CH Mid)



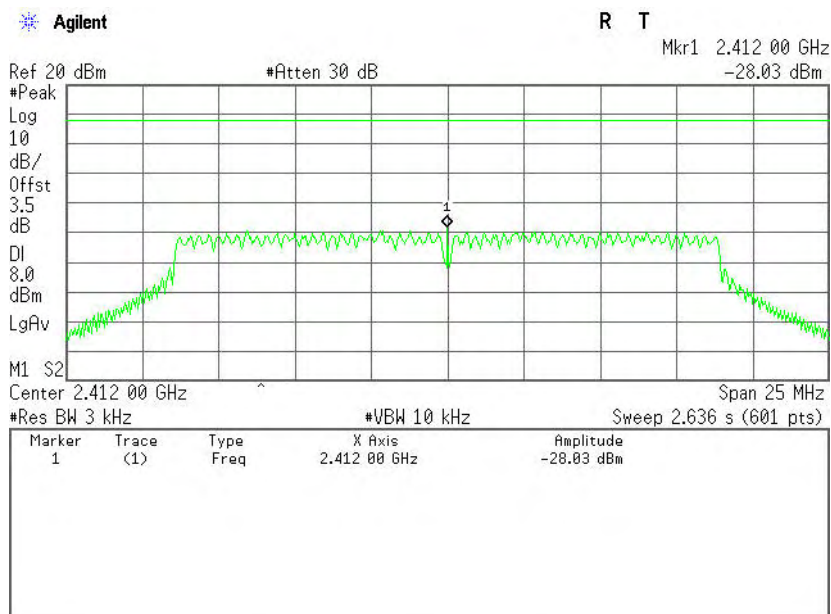
## PPSD (CH High)



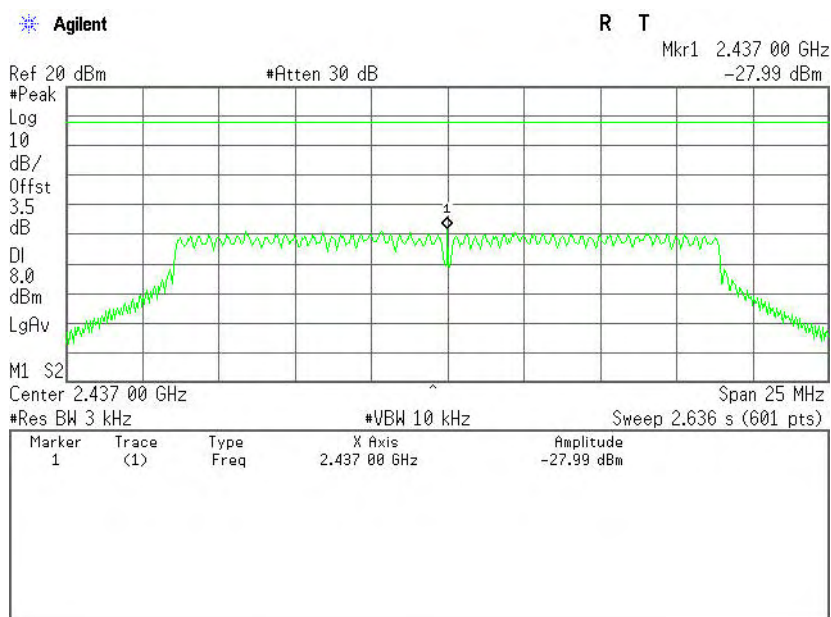


## IEEE 802.11n HT20 MHz mode

### PPSD (CH Low)

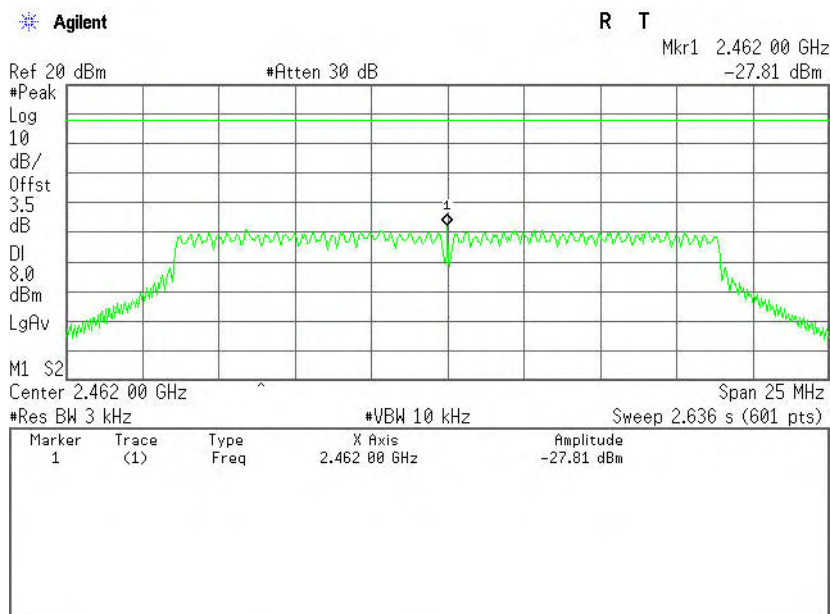


### PPSD (CH Mid)



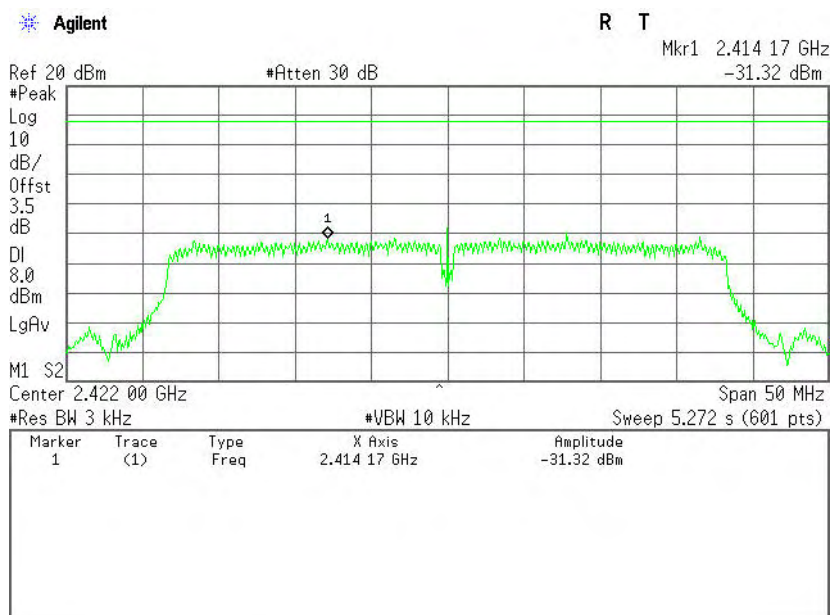


## PPSD (CH High)



## IEEE 802.11n HT40 MHz mode

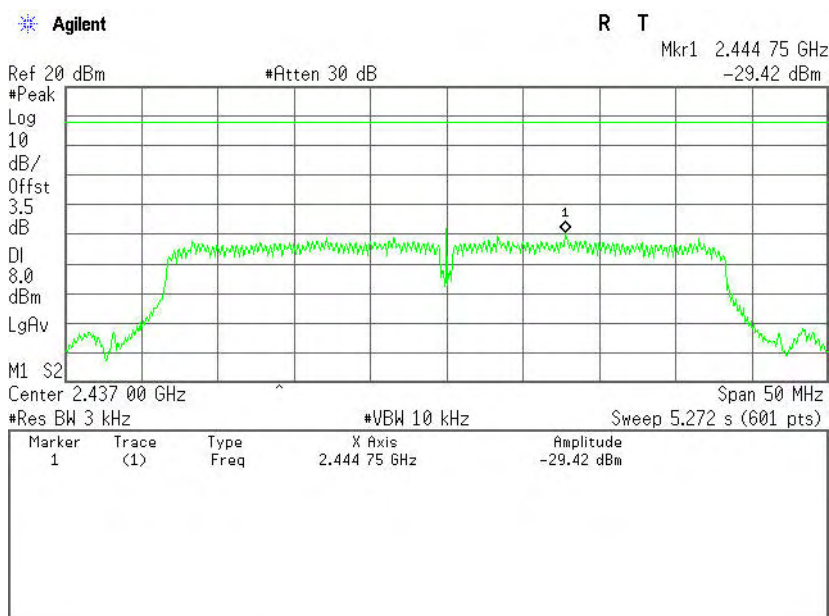
### PPSD (CH Low)







## PPSD (CH Mid)



## PPSD (CH High)

