

FCC PART 15C TEST REPORT FOR CERTIFICATION  
On Behalf of

Proware Technologies Co., Ltd.

3G Wireless Lite-N Router

Model No.: PW-3G401D

FCC ID: WWM3G401XV1

Prepared for : Proware Technologies Co., Ltd.  
2nd F1 East Wing, South Section, Factory Building 24,  
Science & Technology Park, Shennan Rd, Nanshan  
District, Shenzhen

Prepared By : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Ke Feng Rd., 52 Block,  
Shenzhen Science & Industrial Park,  
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F11061  
Date of Test : Mar.04~09, 2011  
Date of Report : Mar.15, 2011

**TABLE OF CONTENTS**

<u>Description</u>	<u>Page</u>
<b>1. SUMMARY OF STANDARDS AND RESULTS.....</b>	<b>1-1</b>
1.1. Description of Standards and Results .....	1-1
<b>2. GENERAL INFORMATION .....</b>	<b>2-1</b>
2.1. Description of Device (EUT) .....	2-1
2.2. Test Information.....	2-2
2.3. Tested Supporting System Details .....	2-3
2.4. Block diagram of connection between the EUT and simulators .....	2-3
2.5. Test Facility .....	2-4
2.6. Measurement Uncertainty (95% confidence levels, k=2) .....	2-4
<b>3. POWER LINE CONDUCTED EMISSION TEST .....</b>	<b>3-1</b>
3.1. Test Equipments.....	3-1
3.2. Block Diagram of Test Setup.....	3-1
3.3. Power Line Conducted Emission Test Limits.....	3-1
3.4. Configuration of EUT on Test .....	3-2
3.5. Operating Condition of EUT.....	3-2
3.6. Test Procedure.....	3-2
3.7. Power Line Conducted Emission Test Results .....	3-2
<b>4. RADIATED EMISSION TEST .....</b>	<b>4-1</b>
4.1. Test Equipment .....	4-1
4.2. Block Diagram of Test Setup.....	4-1
4.3. Radiated Emission Limit.....	4-2
4.4. EUT Configuration on Test.....	4-3
4.5. Operating Condition of EUT.....	4-3
4.6. Test Procedure.....	4-3
4.7. Radiated Emission Test Results .....	4-4
<b>5. CONDUCTED SPURIOUS EMISSIONS.....</b>	<b>5-79</b>
5.1. Test Equipment .....	5-79
5.2. Limit.....	5-79
5.3. Test Procedure.....	5-79
5.4. Test result.....	5-79
<b>6. BAND EDGE COMPLIANCE TEST .....</b>	<b>6-108</b>
6.1. Test Equipment .....	6-108
6.2. Limit.....	6-108
6.3. Test Produce .....	6-108
6.4. Test Results .....	6-108
<b>7. 6dB Bandwidth Test.....</b>	<b>7-141</b>
7.1. Test Equipment .....	7-141
7.2. Limit.....	7-141
7.3. Test Procedure.....	7-141
7.4. Test Results .....	7-141
<b>8. OUTPUT POWER TEST.....</b>	<b>8-148</b>
8.1. Test Equipment .....	8-148
8.2. Limit (FCC Part 15C 15.247 b(3)).....	8-148
8.3. Test Procedure.....	8-148
8.4. Test Results .....	8-149
<b>9. POWER SPECTRAL DENSITY TEST .....</b>	<b>9-3</b>
9.1. Test Equipment .....	9-3

FCC ID:WWM3G40LXV1

9.2.	Limit.....	9-3
9.3.	Test Procedure.....	9-3
9.4.	Test Results .....	9-4
<b>10.</b>	<b>ANTENNA REQUIREMENT .....</b>	<b>10-11</b>
10.1.	STANDARD APPLICABLE.....	10-11
10.2.	ANTENNA CONNECTED CONSTRUCTION .....	10-11
<b>11.</b>	<b>MPE ESTIMATION .....</b>	<b>11-12</b>
11.1.	Limit for General Population/ Uncontrolled Exposures .....	11-12
11.2.	2, Estimation Result .....	11-12
<b>12.</b>	<b>DEVIATION TO TEST SPECIFICATIONS.....</b>	<b>12-1</b>
<b>13.</b>	<b>PHOTOGRAPH OF TEST .....</b>	<b>13-1</b>
13.1.	Photos of Power Line Conducted Emission Test.....	13-1
13.2.	Photos of Radiated Emission Test.....	13-2
<b>14.</b>	<b>PHOTOS OF THE EUT.....</b>	<b>14-1</b>

FCC ID: WWM3G401XV1

**TEST REPORT CERTIFICATION**

Applicant : Proware Technologies Co., Ltd.  
Manufacturer : Proware Technologies Co., Ltd.  
EUT Description : 3G Wireless Lite-N Router  
FCC ID : WWM3G401XV1  
(A) MODEL NO. : PW-3G401D  
(B) SERIAL NO. : N/A  
(C) POWER SUPPLY : DC 12V From Adapter Input  
AC 230V/50Hz  
(D) TEST VOLTAGE : DC 12V from adapter input AC 230V/50Hz

Tested for comply with:  
FCC Rules and Regulations Part 15 Subpart C: 2008

Test procedure used:  
ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test : Mar.04~09, 2011 Report of date: Mar.15, 2011

Prepared by : Blove Ye Reviewer by : Jamy Yu  
Blove Ye / Assistant Jamy Yu / Supervisor



Approved & Authorized Signer : Ken Lu  
Ken Lu / Manager

## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Power Line Conducted Emission	FCC Part 15: 15.207 ANSI C63.10: 2009	PASS
Radiated Emission	FCC Part 15: 15.209 ANSI C63.10: 2009	PASS
Band Edge Compliance	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Conducted spurious emissions	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
6dB Bandwidth	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Peak Output Power	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Power Spectral Density	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Antenna requirement	FCC Part 15: 15.203	PASS



## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

Product Name	:	3G Wireless Lite-N Router
Model Number	:	PW-3G401D
FCC ID	:	WWM3G401XV1
Operation Frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE802.11n HT20: 2412MHz—2462MHz IEEE802.11n HT40: 2422MHz—2452MHz
Channel Number	:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels IEEE 802.11n HT40: 7Channels
Modulation Technology	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Antenna Assembly Gain	:	One Dipole Antenna, One integrated PCB antenna, SIMO 1Tx2R, 5dBi Peak gain for dipole antenna Note: The integrated PCB antenna only used for receive.
Applicant	:	Proware Technologies Co., Ltd. 2nd F1 East Wing, South Section, Factory Building 24, Science & Technology Park, Shennan Rd, Nanshan District, Shenzhen
Manufacturer	:	Proware Technologies Co., Ltd. 2nd F1 East Wing, South Section, Factory Building 24, Science & Technology Park, Shennan Rd, Nanshan District, Shenzhen
Adapter	:	Manufacture: LEADER ELECTRONICS INC. M/N: MU12-S120100-A1 Unshielded, Undetachable,1.5m
Date of Test	:	Mar.04~09, 2011
Date of Receipt	:	Feb.27, 2011
Sample Type	:	Prototype production

## 2.2. Test Information

A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

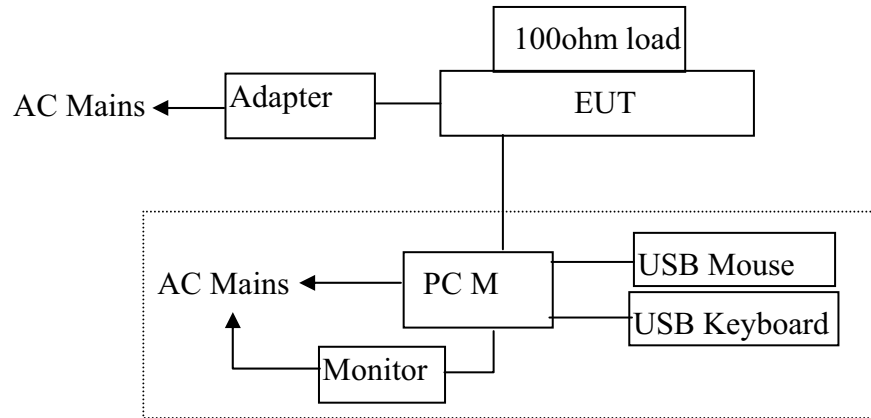
Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	11	Low :CH1	2412
	11	Middle: CH6	2437
	11	High: CH11	2462
IEEE 802.11g	54	Low :CH1	2412
	54	Middle: CH6	2437
	54	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low :CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452

Note1: According exploratory test, EUT will have maximum PK output power in those data rate, so those data rate were used for all test.

### 2.3. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1	Personal Computer	Test PC M	DELL	Studio 540	224XK2X	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID:R33002
		Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)				

### 2.4. Block diagram of connection between the EUT and simulators



PC M run test software to control EUT work in Tx mode



## 2.5. Test Facility

### Site Description

- Name of Firm : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Ke Feng Rd., 52 Block, Shenzhen  
Science & Industrial Park, Nantou,  
Shenzhen, Guangdong, China
- 3m Anechoic Chamber : Mar.31, 2009 File on Federal  
Communication Commission  
Registration Number: 90454
- 3m & 10m Anechoic Chamber : Dec. 30, 2009 File on Federal  
Communication Commission  
Registration Number: 794232
- EMC Lab. : Certificated by Industry Canada  
Registration Number: IC 5183A-1  
Jul. 03, 2009
- : Accredited by DATech, German  
Registration Number: DAT-P-091/99-01  
Feb. 02, 2009
- Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Apr. 01, 2010

## 2.6. Measurement Uncertainty (95% confidence levels, k=2)

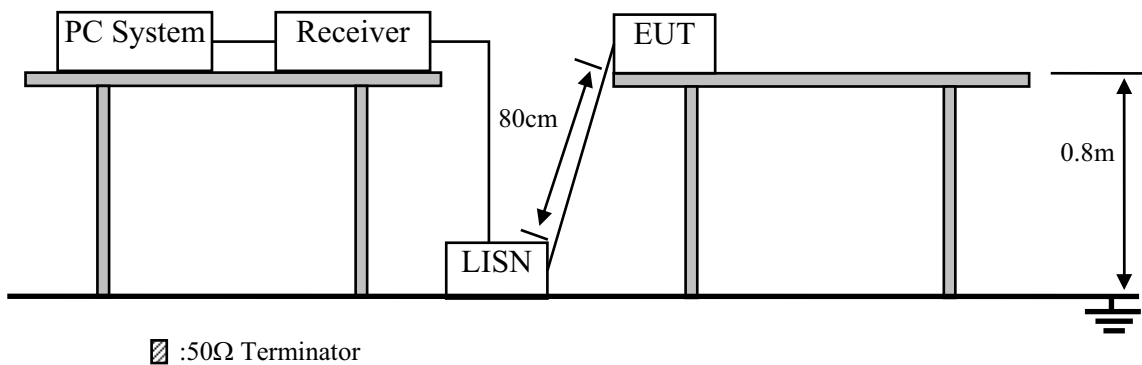
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.64 dB (9kHz to 150kHz)
	3.22 dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	4.20 dB (Polarize: V)
	4.66 dB (Polarize: H)
Uncertainty for Radiated Spurious Emission test in RF chamber	2.70 dB(Bilog antenna 30M~1000MHz)
	2.27 dB(Horn antenna 1000M~12750MHz)
Uncertainty for Conduction Spurious emission test	2.12 dB
Uncertainty for Output power test	0.97 dB
Uncertainty for Power density test	2.21 dB
Uncertainty for Frequency range test	$1 \times 10^{-9}$
Uncertainty for Bandwidth test	$1 \times 10^{-9}$
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.3 °C
	2%

### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Mar.30, 10	1 Year
3.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 10	1 Year
4.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 10	1Year
5.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 10	1 Year
6.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 10	1 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 10	1 Year

#### 3.2. Block Diagram of Test Setup



#### 3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

### 3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 3.4.1. 3G Wireless Lite-N Router (EUT)

Model Number : PW-3G401D  
Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.3.

### 3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 2.4.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software to control EUT work in Tx mode.

### 3.6. Test Procedure

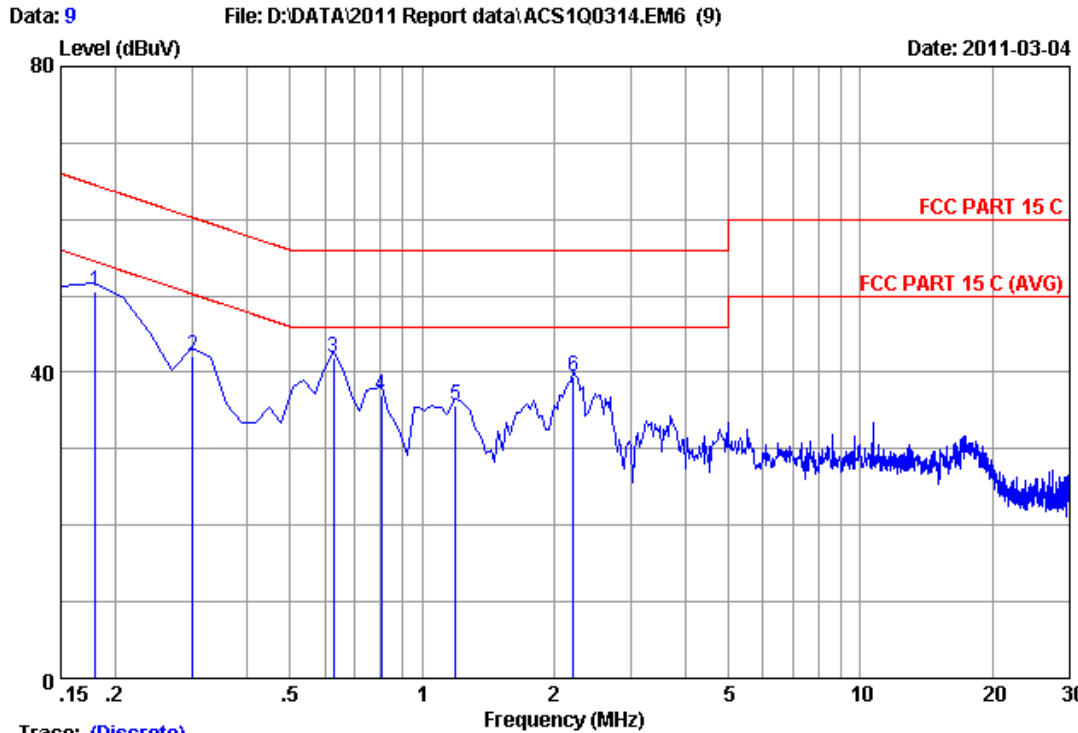
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

### 3.7. Power Line Conducted Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

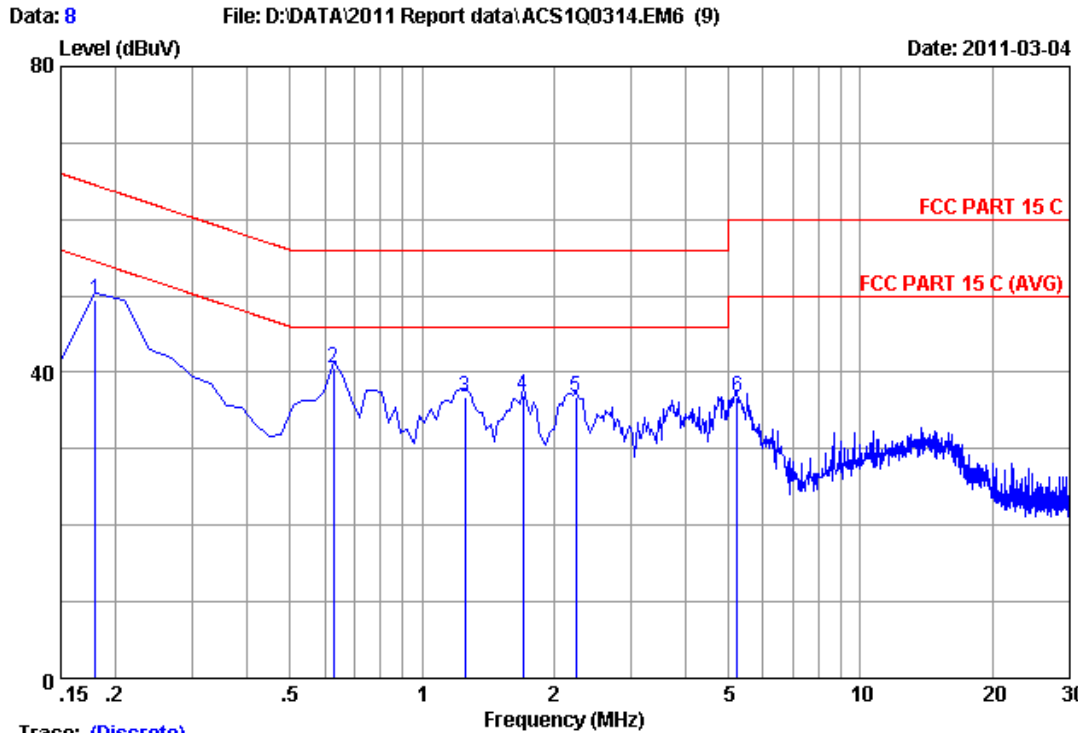


Trace: (Discrete)

Site no :1#conduction Data No :9  
 Dis./Ant. :\*\* 2011 ESH2-Z5 LINE  
 Limit :FCC PART 15 C  
 Env./Ins. :29.5°C/55% Engineer :Restar  
 EUT :3G Wireless Lite-N Router  
 Power Rating :DC 12V From Adapter Input AC 120V/60Hz  
 Test Mode :TX Mode  
 M/N:PW-3G401D

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17985	0.17	9.88	40.59	50.64	64.49	13.85	QP
2	0.29925	0.18	9.88	32.07	42.13	60.26	18.13	QP
3	0.62760	0.19	9.88	31.74	41.81	56.00	14.19	QP
4	0.80670	0.21	9.89	26.99	37.09	56.00	18.91	QP
5	1.195	0.25	9.89	25.42	35.56	56.00	20.44	QP
6	2.210	0.31	9.91	29.18	39.40	56.00	16.60	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Trace: (Discrete)

Site no :1#conduction Data No :8  
 Dis./Ant. \*\*: 2011 ESH2-Z5 NEUTRAL  
 Limit :FCC PART 15 C  
 Env./Ins. :29.5°C/55% Engineer :Restar  
 EUT :3G Wireless Lite-N Router  
 Power Rating :DC 12V From Adapter Input AC 120V/60Hz  
 Test Mode :TX Mode  
 M/N:PW-3G401D

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17985	0.21	9.88	39.32	49.41	64.49	15.08	QP
2	0.62760	0.23	9.88	30.40	40.51	56.00	15.49	QP
3	1.254	0.25	9.89	26.71	36.85	56.00	19.15	QP
4	1.702	0.26	9.90	26.88	37.04	56.00	18.96	QP
5	2.240	0.27	9.91	26.53	36.71	56.00	19.29	QP
6	5.225	0.34	9.94	26.49	36.77	60.00	23.23	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.  
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

## 4. RADIATED EMISSION TEST

### 4.1. Test Equipment

Frequency rang: 30~1000MHz

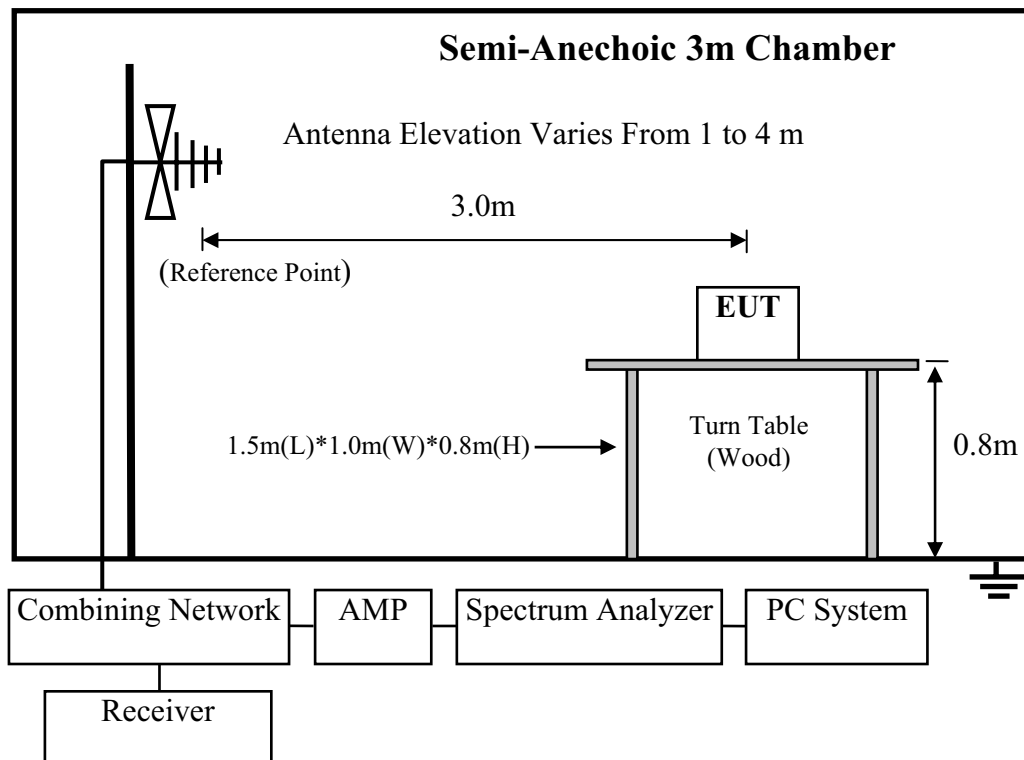
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.06,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 10	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 10	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 10	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 10	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 10	1 Year

Frequency rang: above 1000MHz

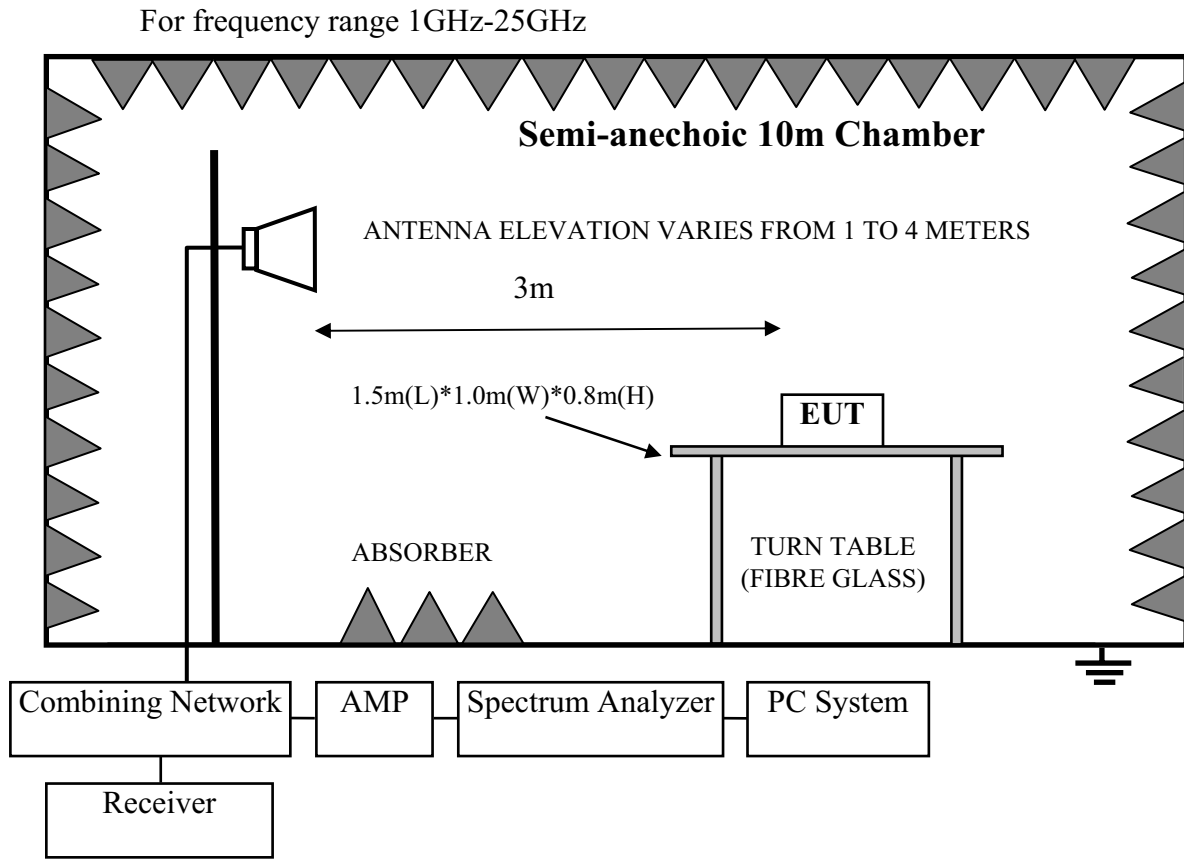
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3	Horn Antenna	EMCO	3116	00060089	Nov.25, 09	1.5 Year
4	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 10	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 10	1 Year

### 4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz







### 4.3. Radiated Emission Limit

#### 4.3.1.15.209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

- Remark :
- (1) Emission level  $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V}/\text{m}$
  - (2) The smaller limit shall apply at the cross point between two frequency bands.
  - (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3.2.15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	( <sup>2</sup> )

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5.Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 4.2.

4.6.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

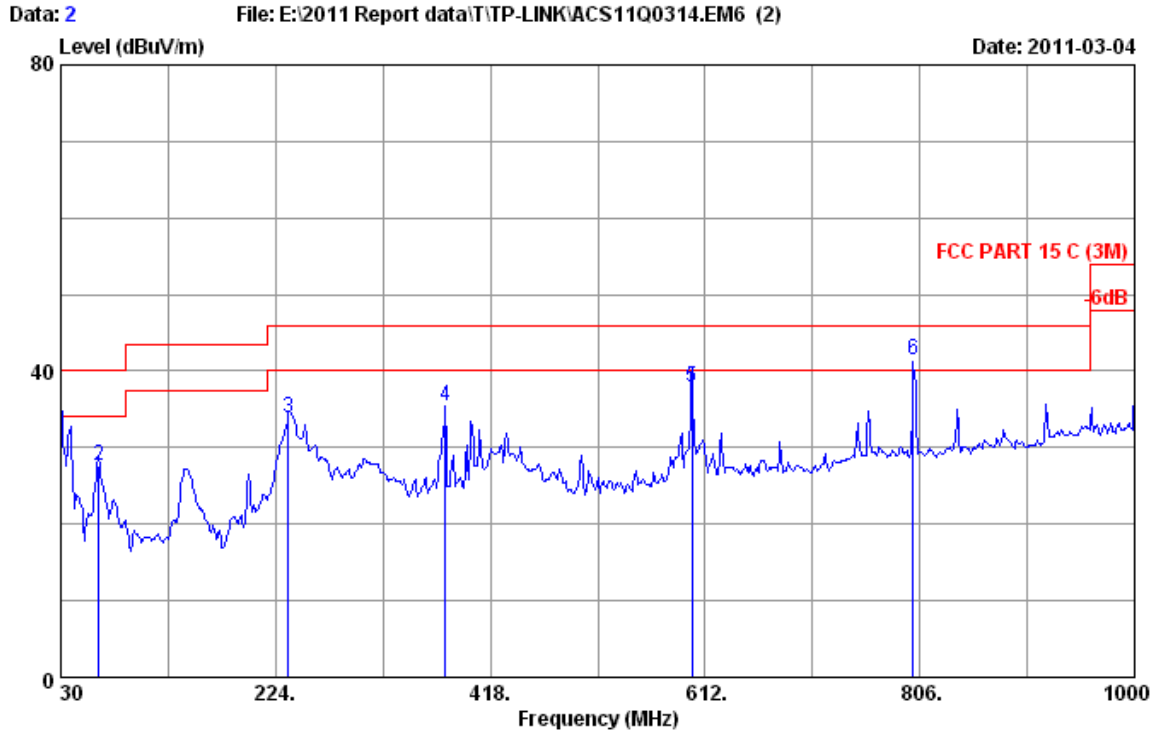
#### 4.7. Radiated Emission Test Results

**PASS.**

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

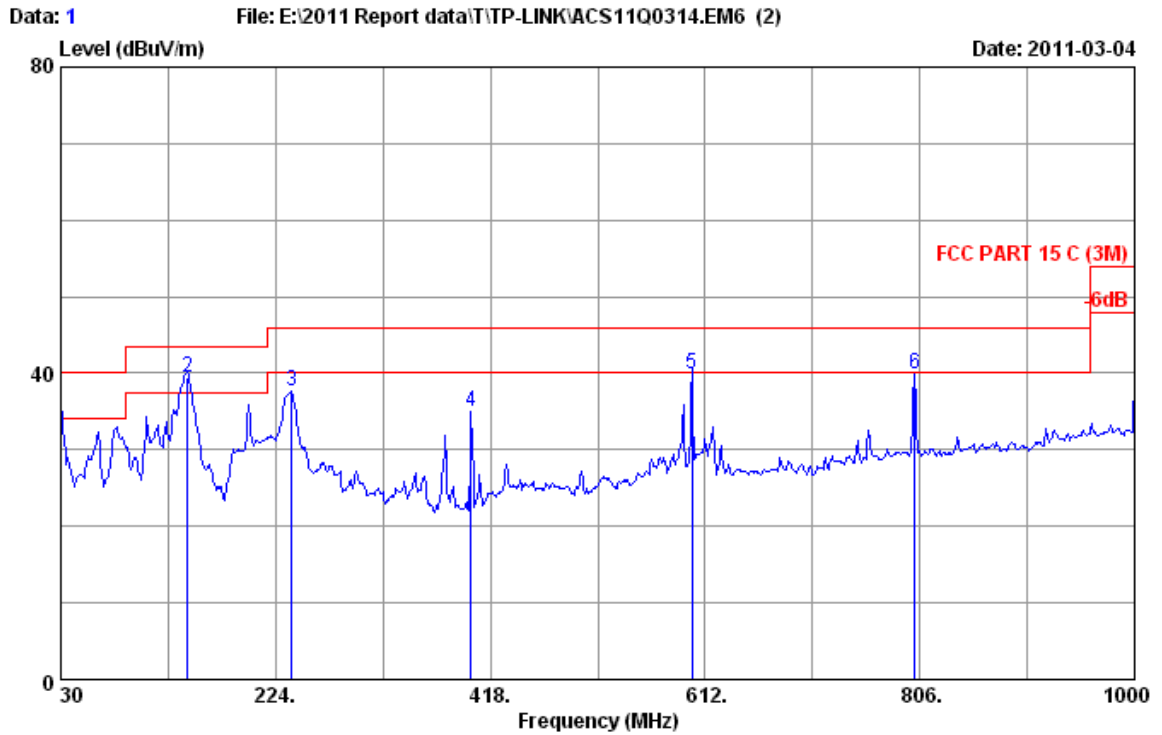
Frequency: 30MHz~1GHz



Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 24°C/56% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power rating : DC 12V From Adapter input AC 120V/60Hz  
 Test Mode : Tx Mode  
 PW-3G401D

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.61	14.82	35.43	40.00	4.57	QP
2	63.950	6.00	0.88	20.85	27.73	40.00	12.27	QP
3	235.640	11.40	2.04	20.35	33.79	46.00	12.21	QP
4	377.260	15.64	2.81	17.06	35.51	46.00	10.49	QP
5	599.955	19.90	4.12	13.90	37.92	46.00	8.08	QP
6	800.003	22.00	4.90	14.50	41.40	46.00	4.60	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

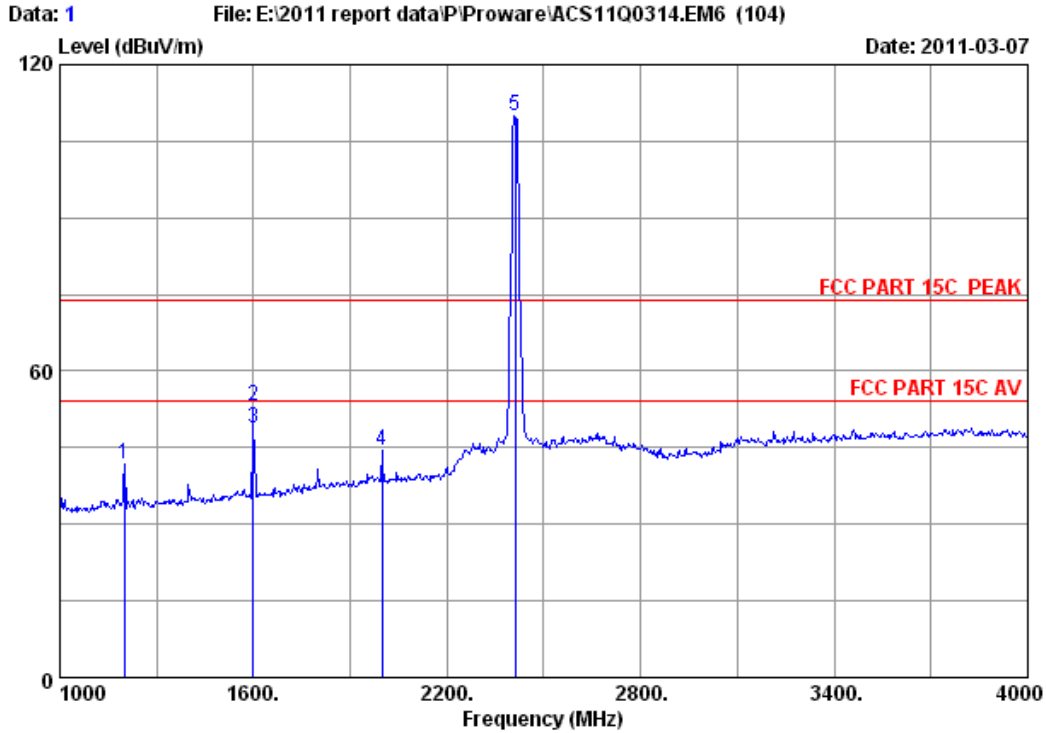


Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 24°C/56% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power rating : DC 12V From Adapter input AC 120V/60Hz  
 Test Mode : Tx Mode  
 PW-3G401D

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.61	15.23	35.84	40.00	4.16	QP
2	144.460	11.92	1.14	26.36	39.42	43.50	4.08	QP
3	238.550	11.70	2.07	23.88	37.65	46.00	8.35	QP
4	400.540	16.41	2.92	15.66	34.99	46.00	11.01	QP
5	600.360	19.90	4.12	15.82	39.84	46.00	6.16	QP
6	801.150	22.00	4.90	12.95	39.85	46.00	6.15	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

**Frequency: 1GHz~18GHz**

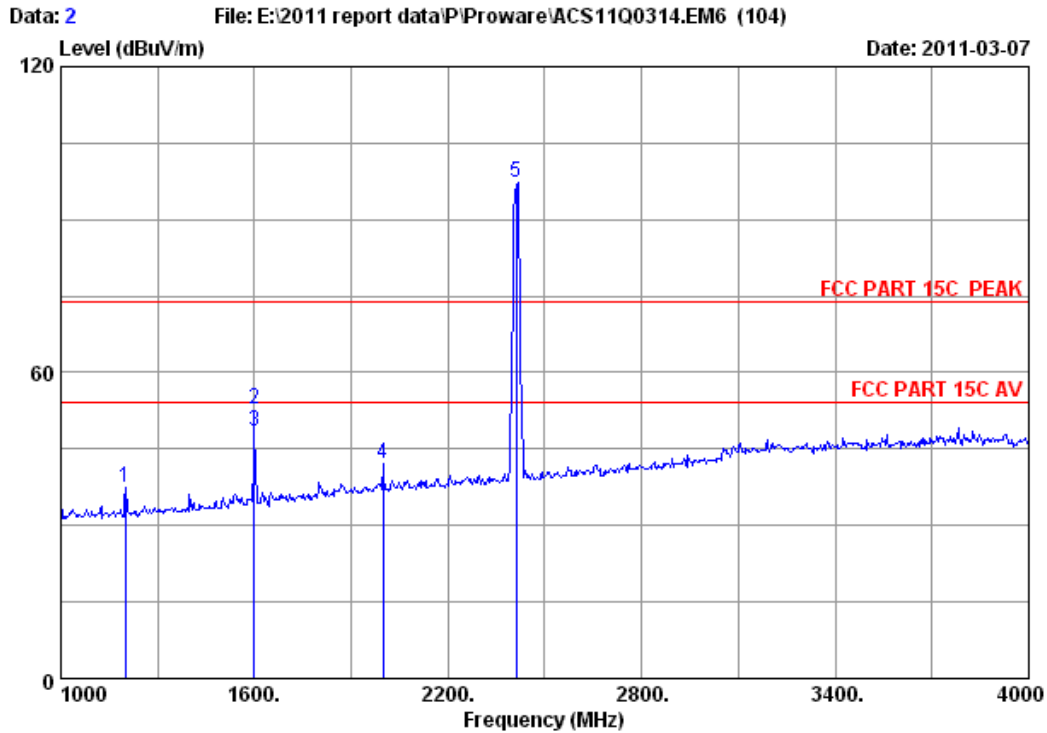


Site no. : RF Chamber Data no. : 1  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	48.41	41.84	74.00	32.16	Peak
2	1600.000	26.96	5.91	36.94	57.35	53.28	74.00	20.72	Peak
3	1600.000	26.96	5.91	36.94	52.75	48.68	54.00	5.32	Average
4	1999.000	29.20	6.63	36.70	45.44	44.57	74.00	29.43	Peak
5	2412.000	29.45	7.43	36.62	109.64	109.90	74.00	-35.90	Peak

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



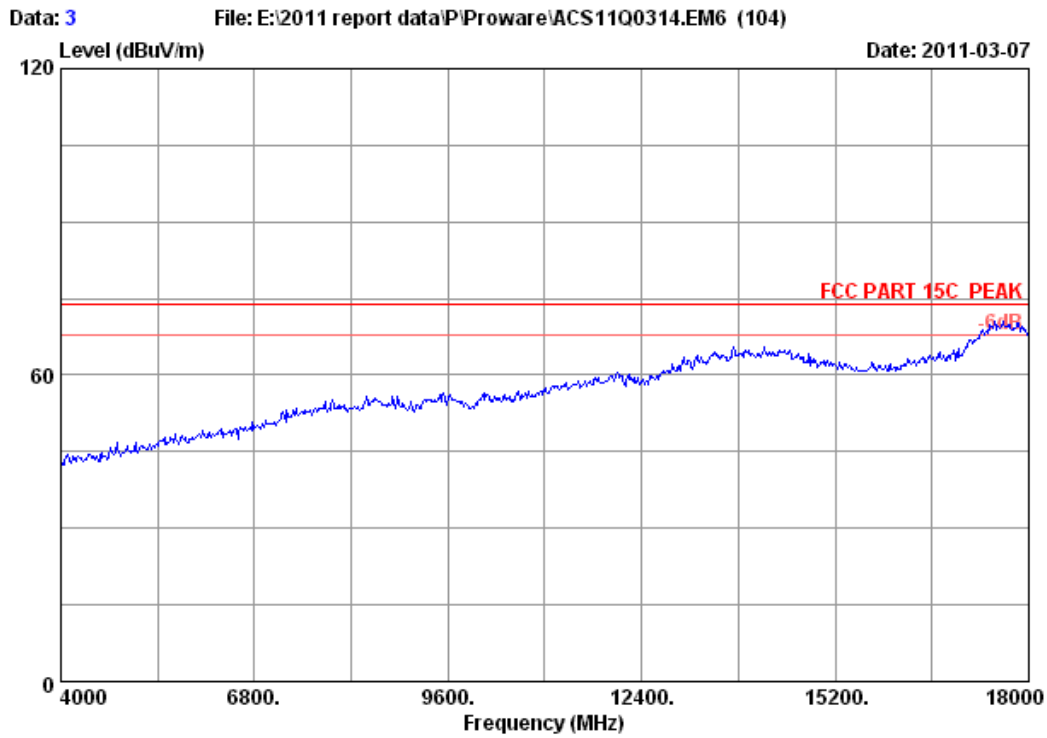


Site no. : RF Chamber Data no. : 2  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

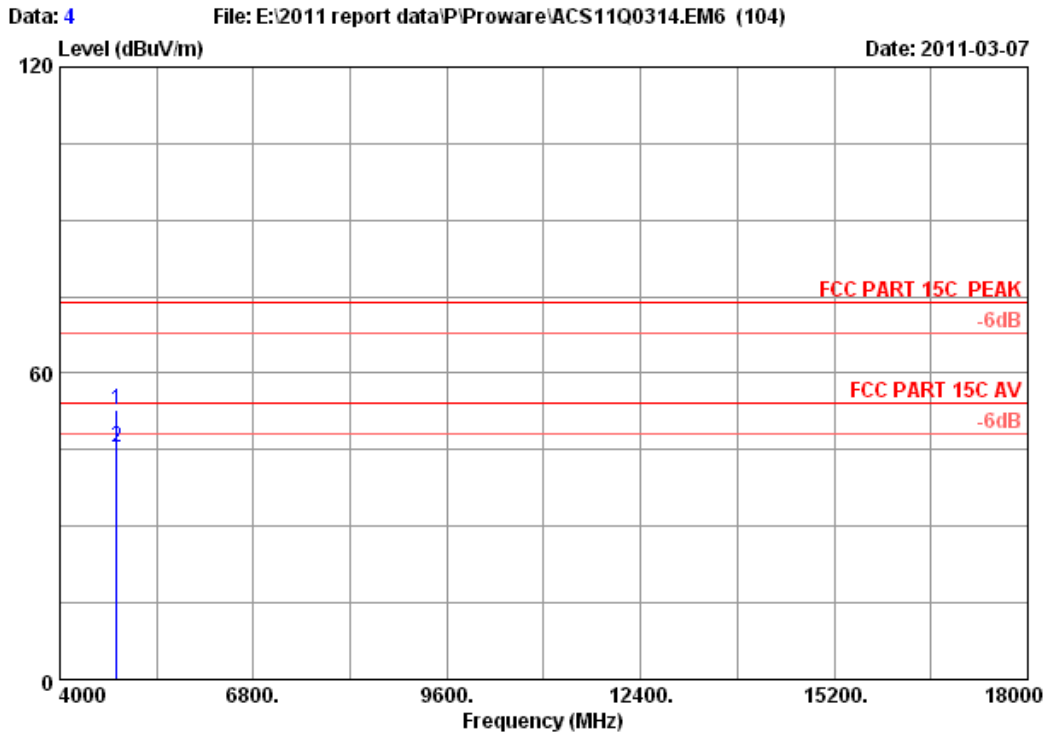
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	44.17	37.60	74.00	36.40	Peak
2	1600.000	26.96	5.91	36.94	56.75	52.68	74.00	21.32	Peak
3	1600.000	26.96	5.91	36.94	52.42	48.35	54.00	5.65	Average
4	1999.000	29.20	6.63	36.70	42.82	41.95	74.00	32.05	Peak
5	2412.000	29.45	7.43	36.62	96.92	97.18	74.00	-23.18	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 3  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH1 2412MHz Tx  
M/N : PW-3G401D

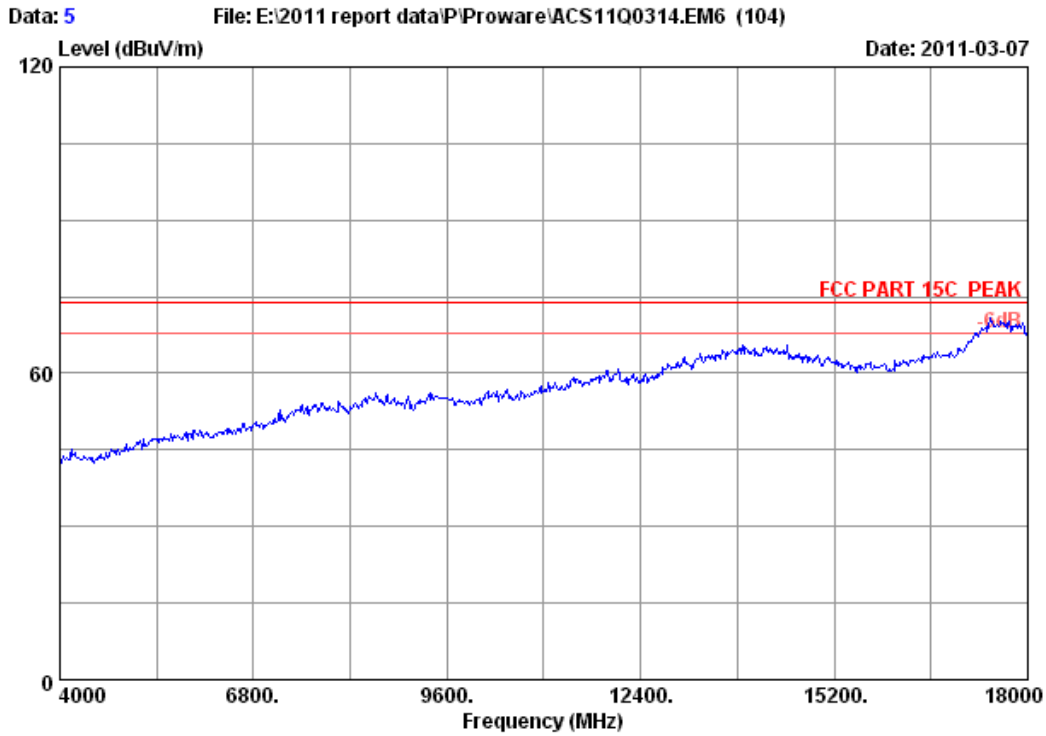


Site no. : RF Chamber Data no. : 4  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

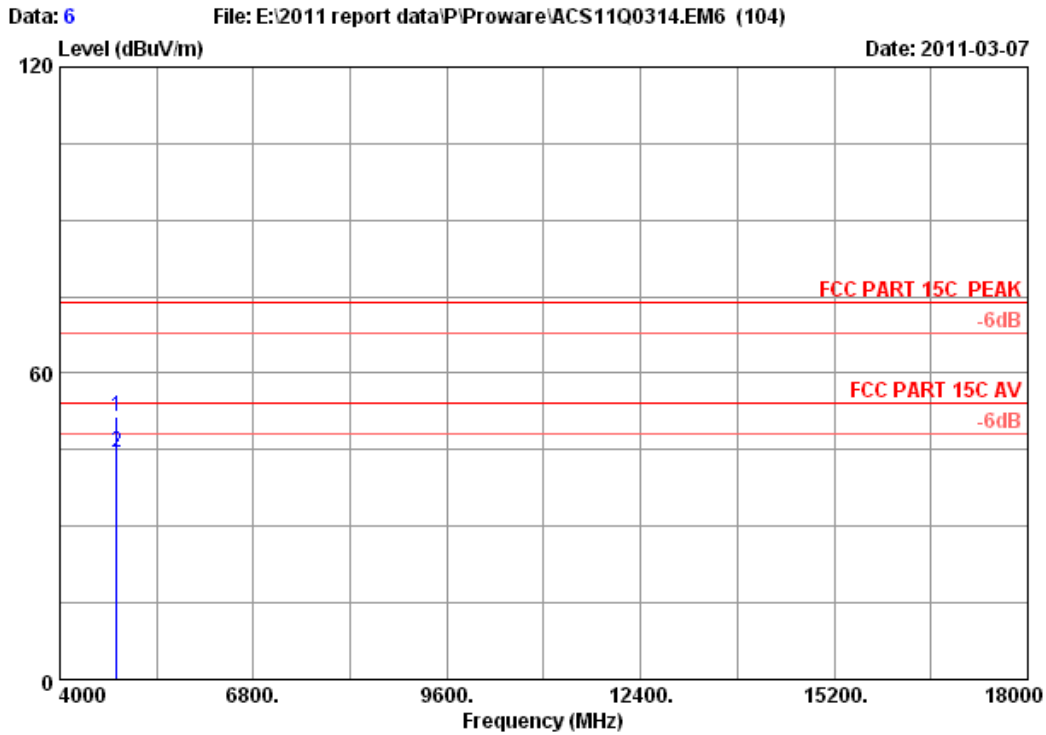
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.32	10.64	35.08	42.88	52.76	74.00	21.24	Peak
2	4824.000	34.32	10.64	35.08	35.66	45.54	54.00	8.46	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: RF Chamber	Data no. :	5
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer :	Sunny-lu
EUT	: 3G Wireless Lite-N Router		
Power	: DC 12V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11b CH1 2412MHz Tx		
M/N	: PW-3G401D		

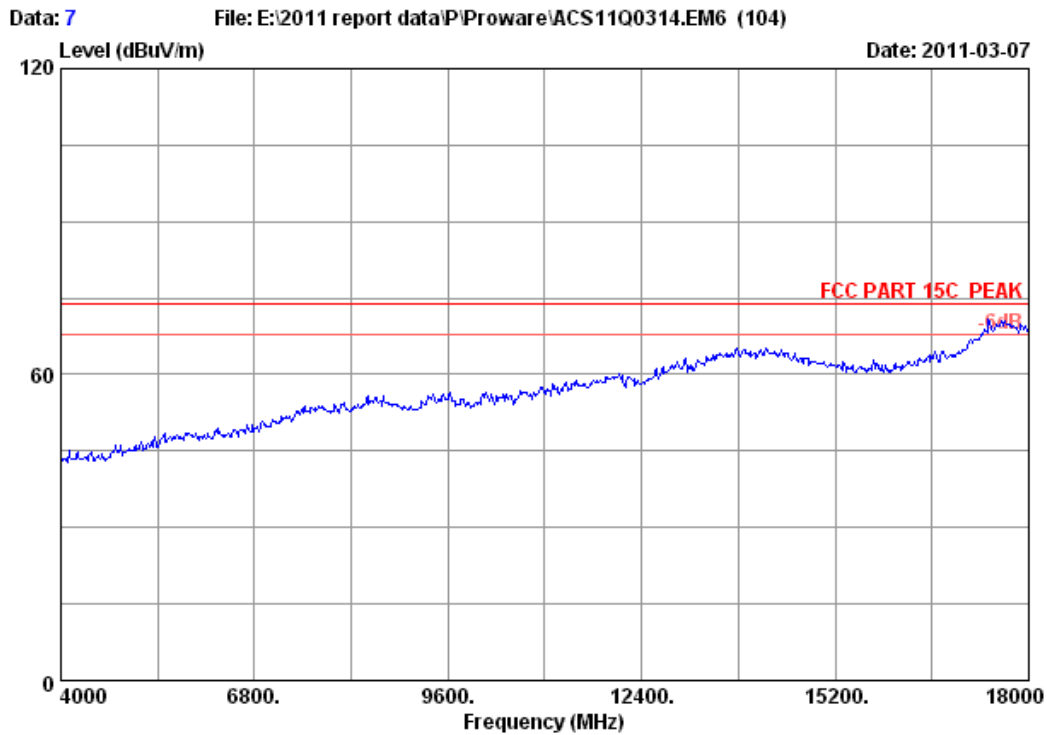


Site no. : RF Chamber Data no. : 6  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.32	10.64	35.08	41.65	51.53	74.00	22.47	Peak
2	4824.000	34.32	10.64	35.08	34.68	44.56	54.00	9.44	Average

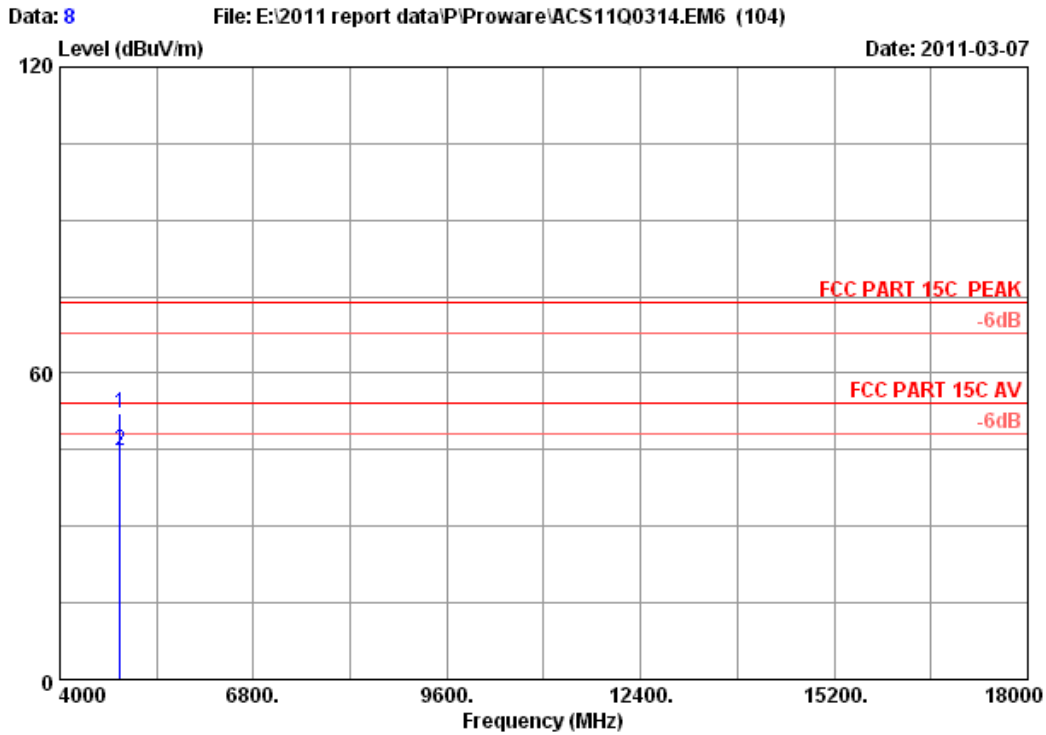
Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 7  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH6 2437MHz Tx  
M/N : PW-3G401D



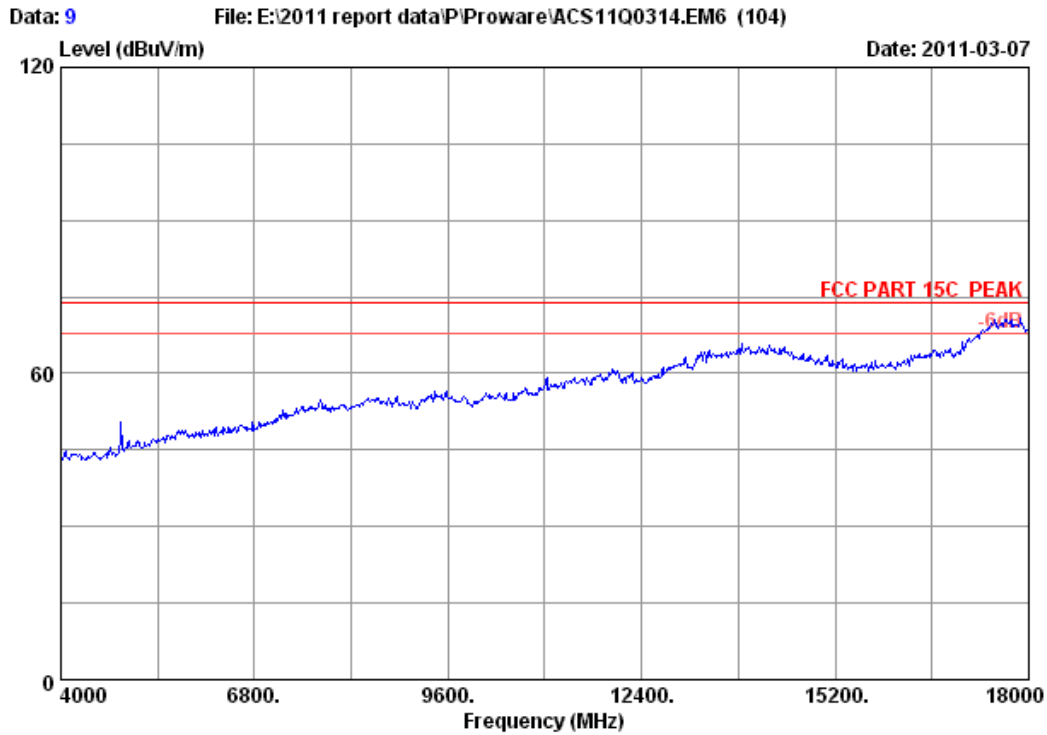


Site no. : RF Chamber Data no. : 8  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 M/N : PW-3G401D

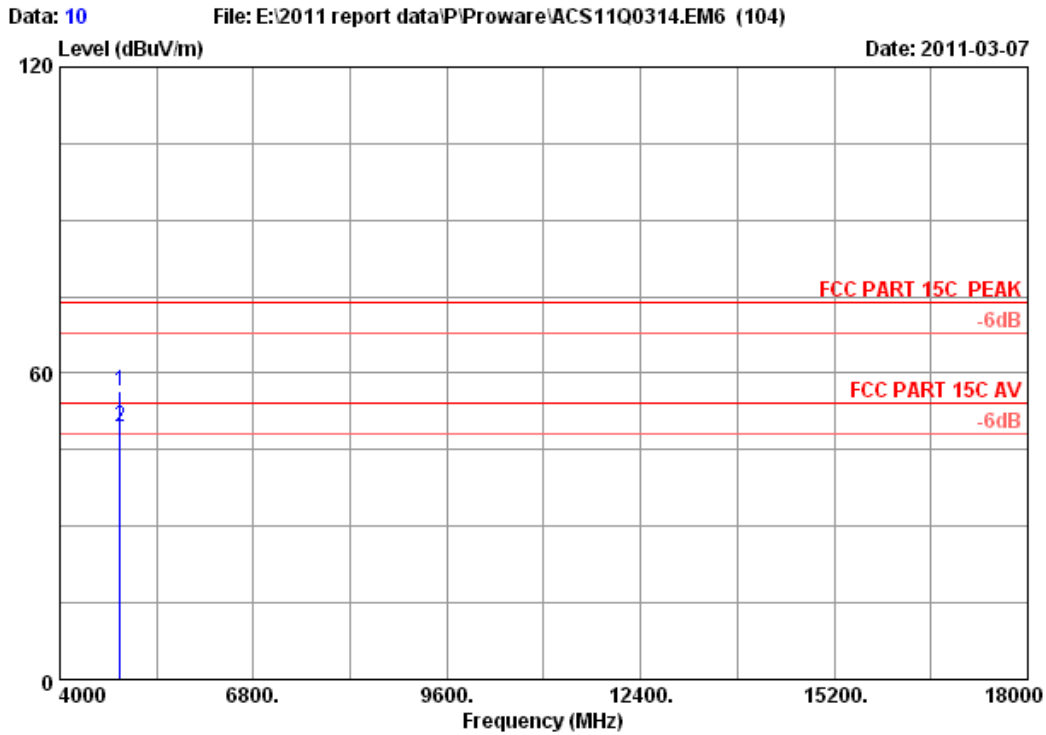
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	41.96	52.03	74.00	21.97	Peak
2	4874.000	34.41	10.69	35.03	34.86	44.93	54.00	9.07	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 9  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH6 2437MHz Tx  
M/N : PW-3G401D

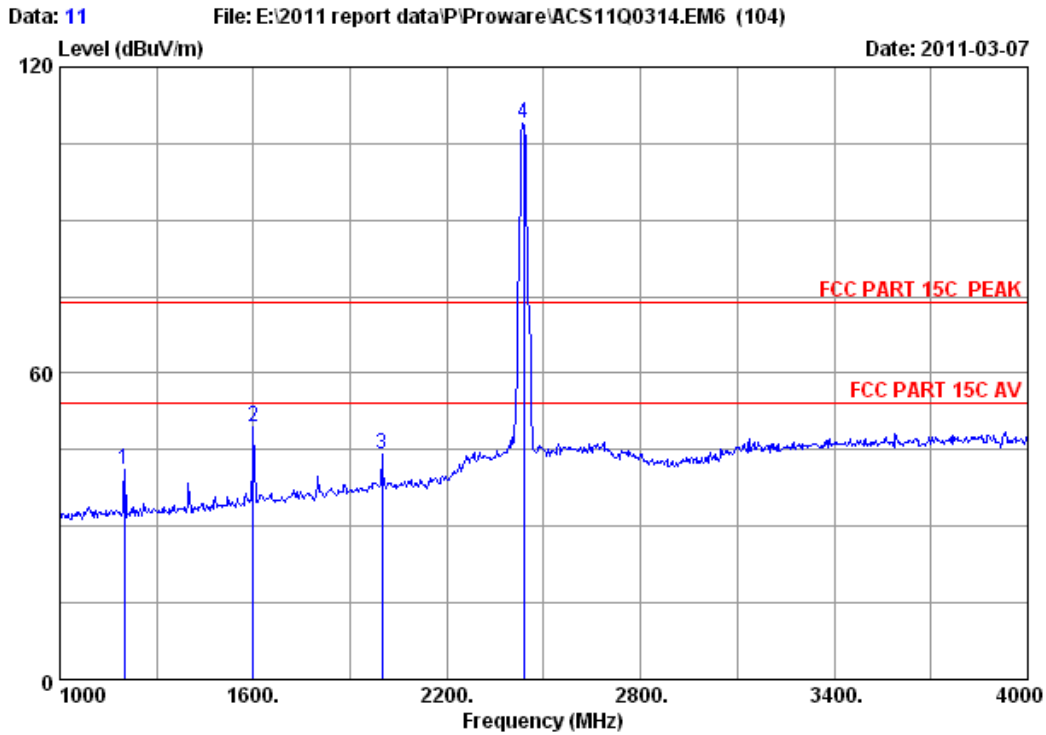


Site no. : RF Chamber Data no. : 10  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	46.53	56.60	74.00	17.40	Peak
2	4874.000	34.41	10.69	35.03	39.35	49.42	54.00	4.58	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

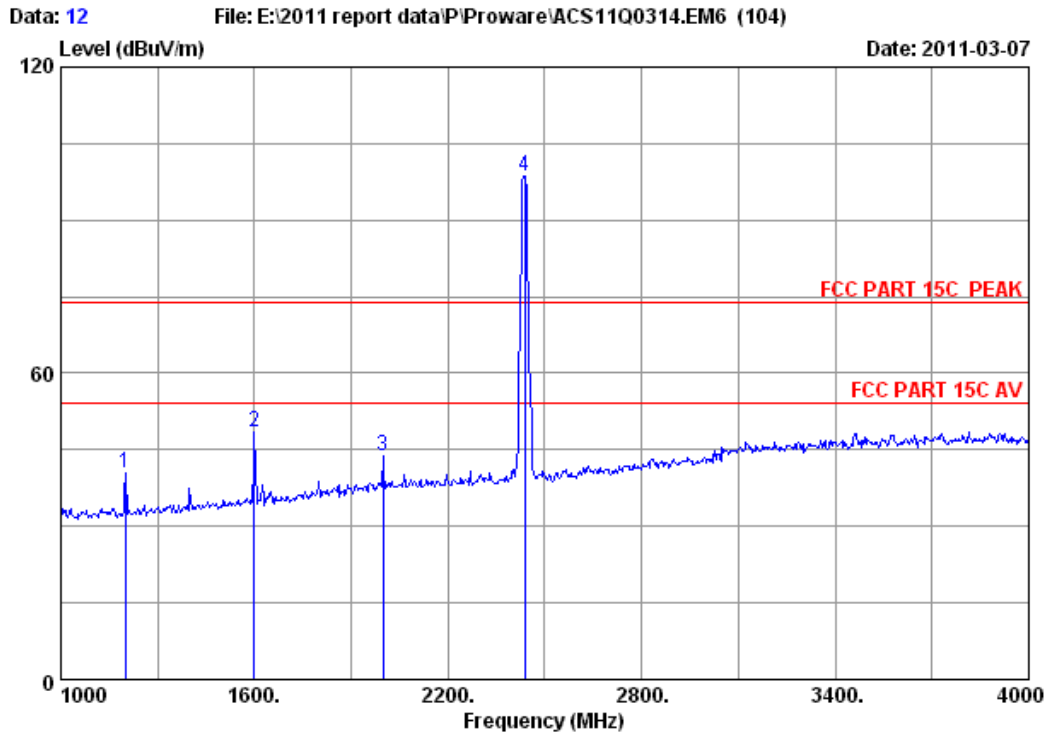


Site no. : RF Chamber Data no. : 11  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	47.58	41.01	74.00	32.99	Peak
2	1600.000	26.96	5.91	36.94	53.51	49.44	74.00	24.56	Peak
3	1999.000	29.20	6.63	36.70	44.90	44.03	74.00	29.97	Peak
4	2437.000	29.47	7.46	36.61	108.66	108.98	74.00	-34.98	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

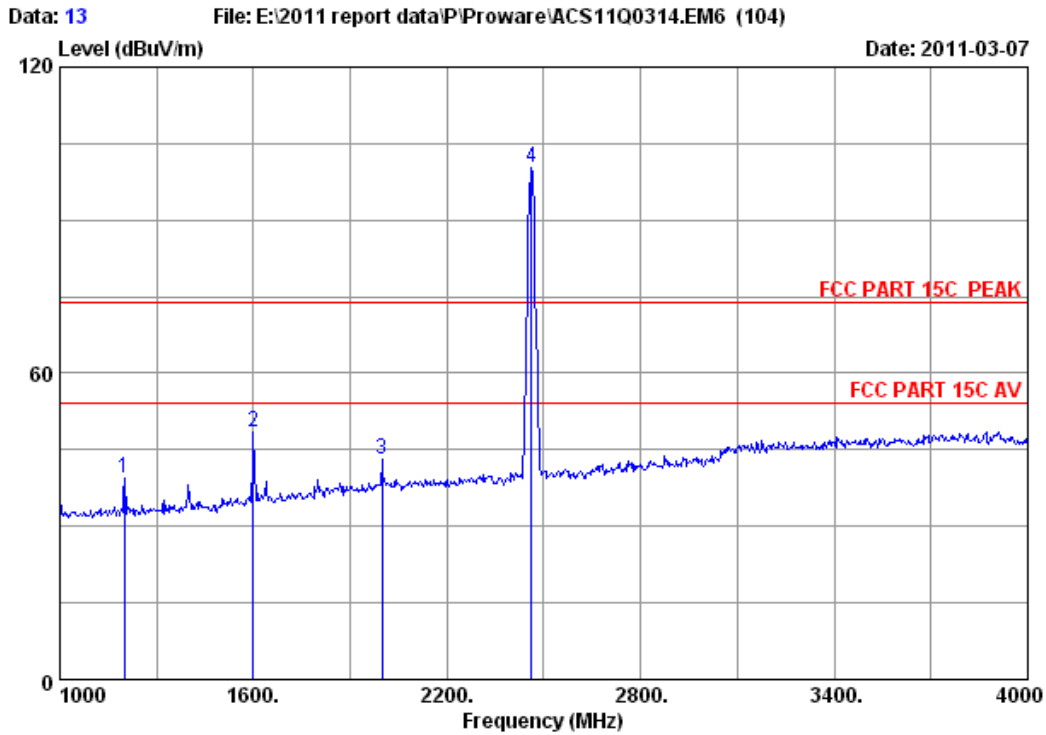


Site no. : RF Chamber Data no. : 12  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	47.00	40.43	74.00	33.57	Peak
2	1600.000	26.96	5.91	36.94	52.62	48.55	74.00	25.45	Peak
3	1999.000	29.20	6.63	36.70	44.59	43.72	74.00	30.28	Peak
4	2437.000	29.47	7.46	36.61	98.37	98.69	74.00	-24.69	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

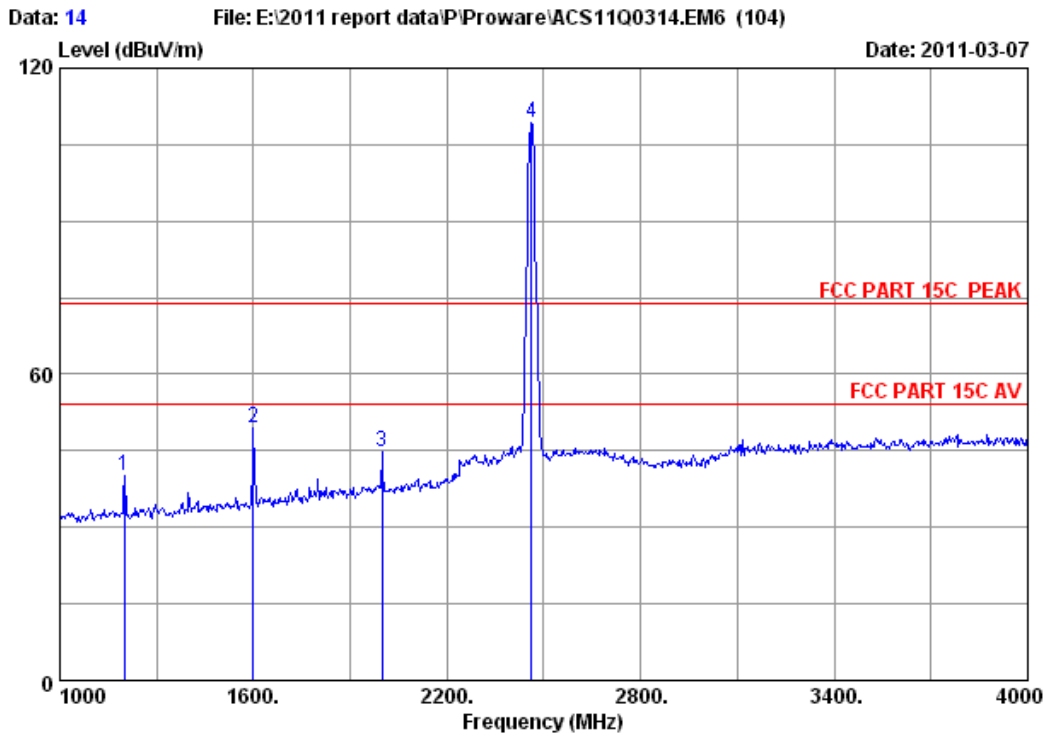


Site no. : RF Chamber Data no. : 13  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	46.01	39.44	74.00	34.56	Peak
2	1600.000	26.96	5.91	36.94	52.70	48.63	74.00	25.37	Peak
3	1999.000	29.20	6.63	36.70	43.96	43.09	74.00	30.91	Peak
4	2462.000	29.48	7.54	36.61	99.93	100.34	74.00	-26.34	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

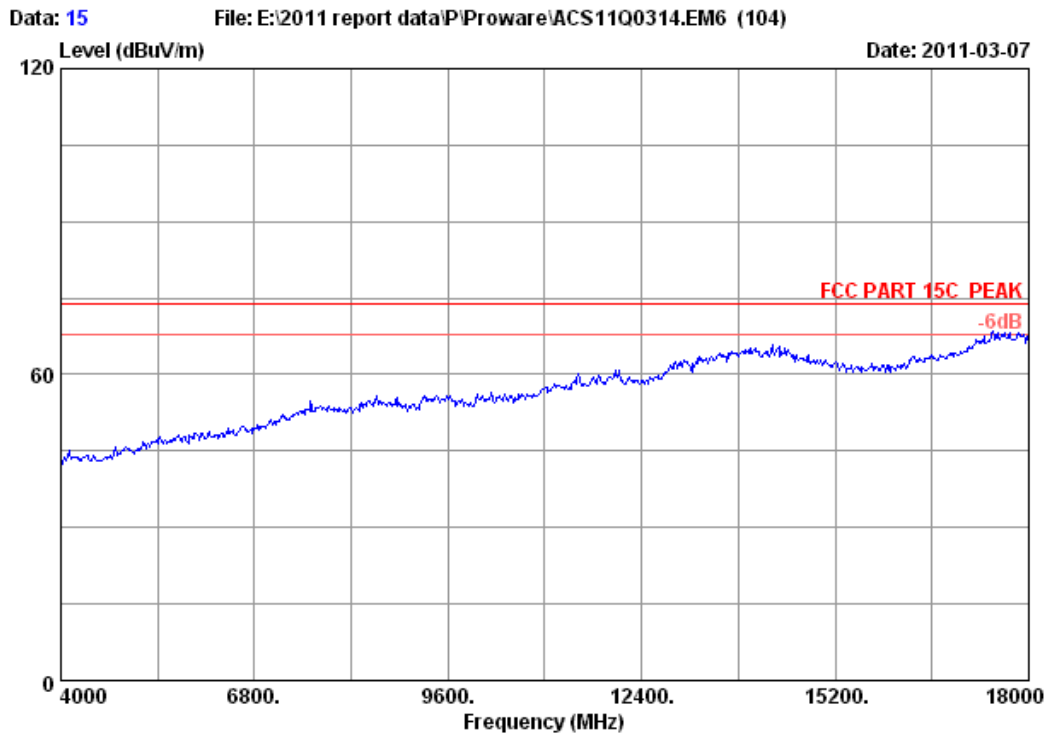


Site no. : RF Chamber Data no. : 14  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	46.64	40.07	74.00	33.93	Peak
2	1600.000	26.96	5.91	36.94	53.51	49.44	74.00	24.56	Peak
3	1999.000	29.20	6.63	36.70	45.53	44.66	74.00	29.34	Peak
4	2462.000	29.48	7.54	36.61	108.94	109.35	74.00	-35.35	Peak

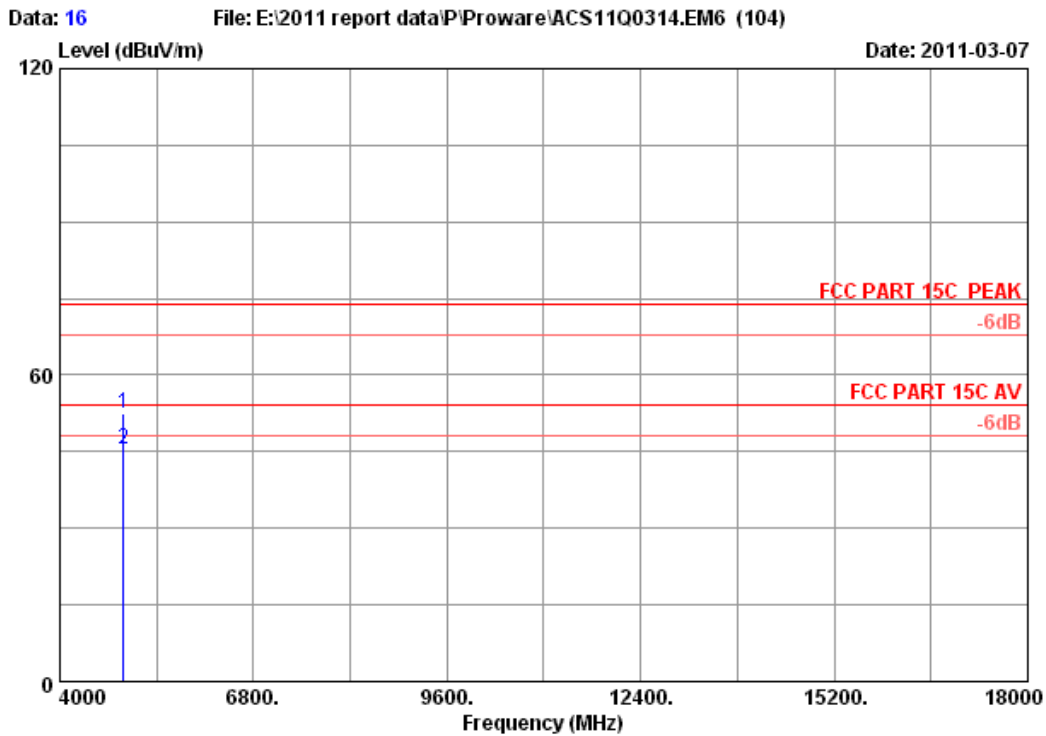
Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 15  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH11 2462MHz Tx  
M/N : PW-3G401D

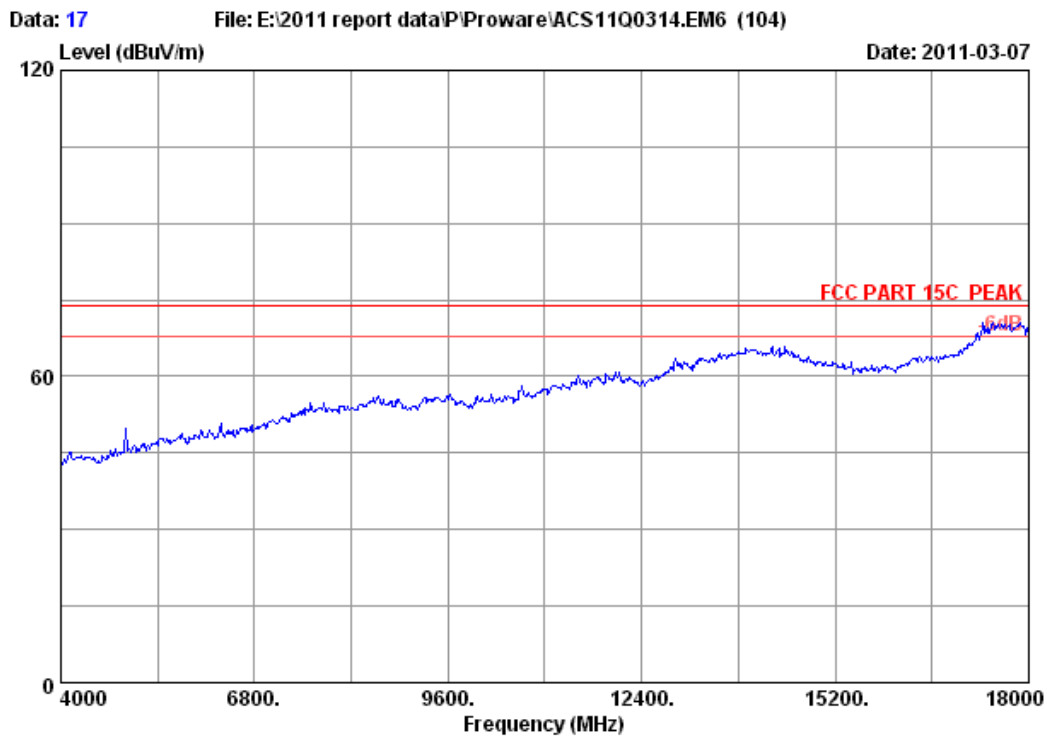




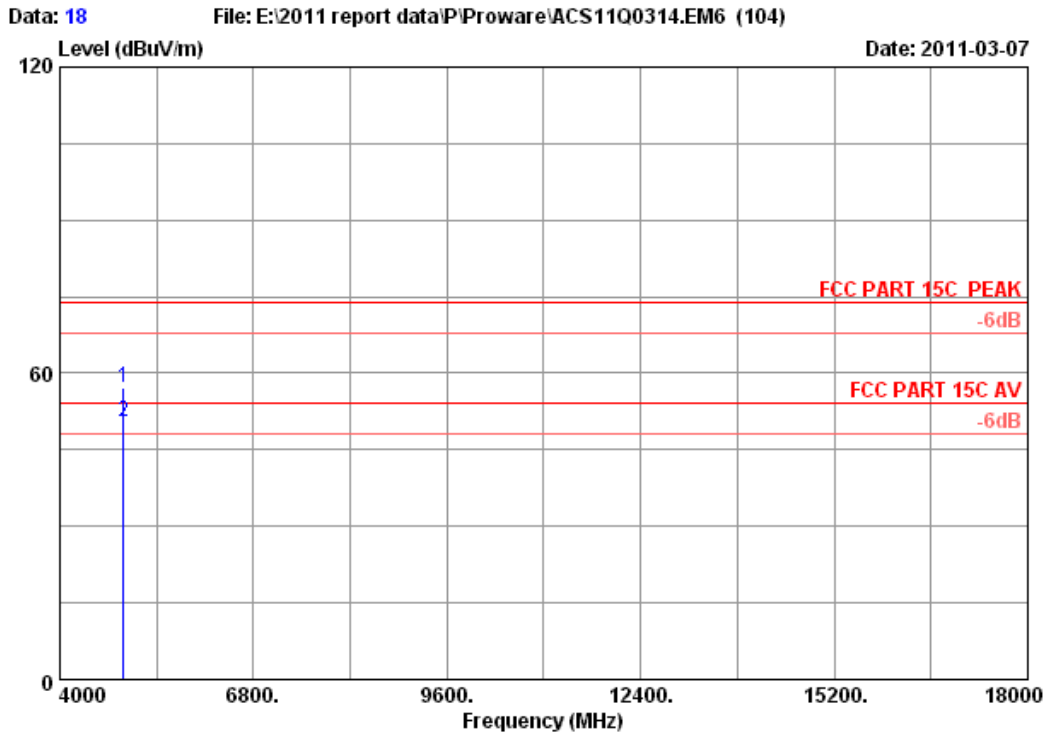
Site no. : RF Chamber Data no. : 16  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	34.49	10.76	34.98	42.35	52.62	74.00	21.38	Peak
2	4924.000	34.49	10.76	34.98	35.12	45.39	54.00	8.61	Average

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 17  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11b CH11 2462MHz Tx  
M/N : PW-3G401D

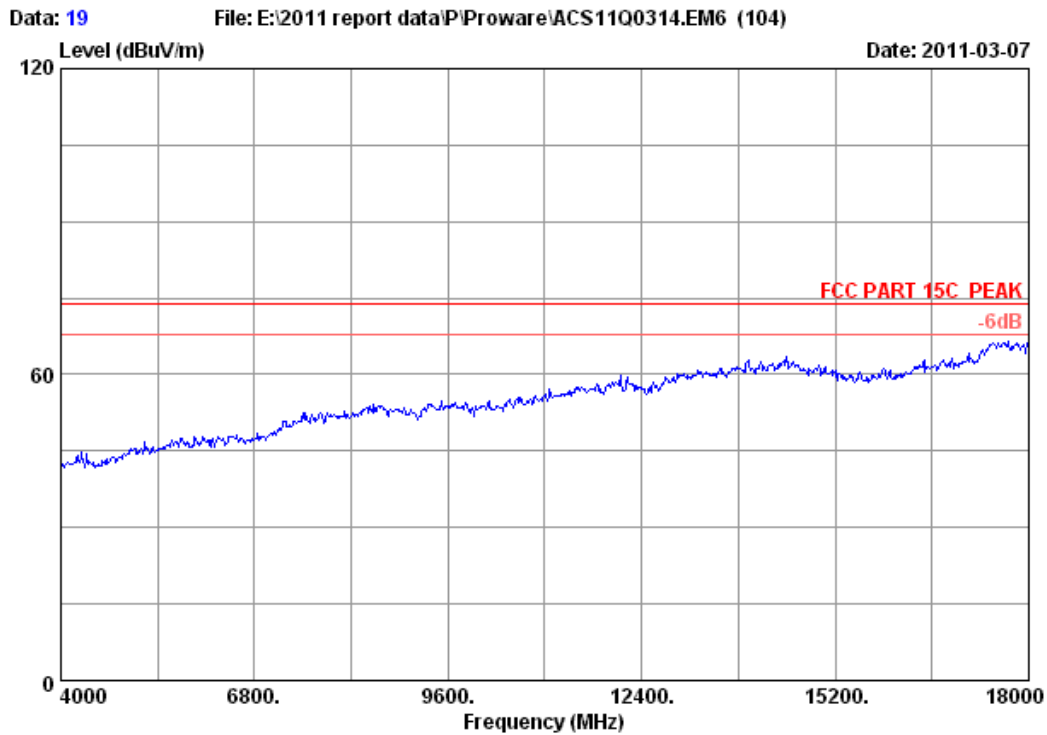


Site no. : RF Chamber Data no. : 18  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

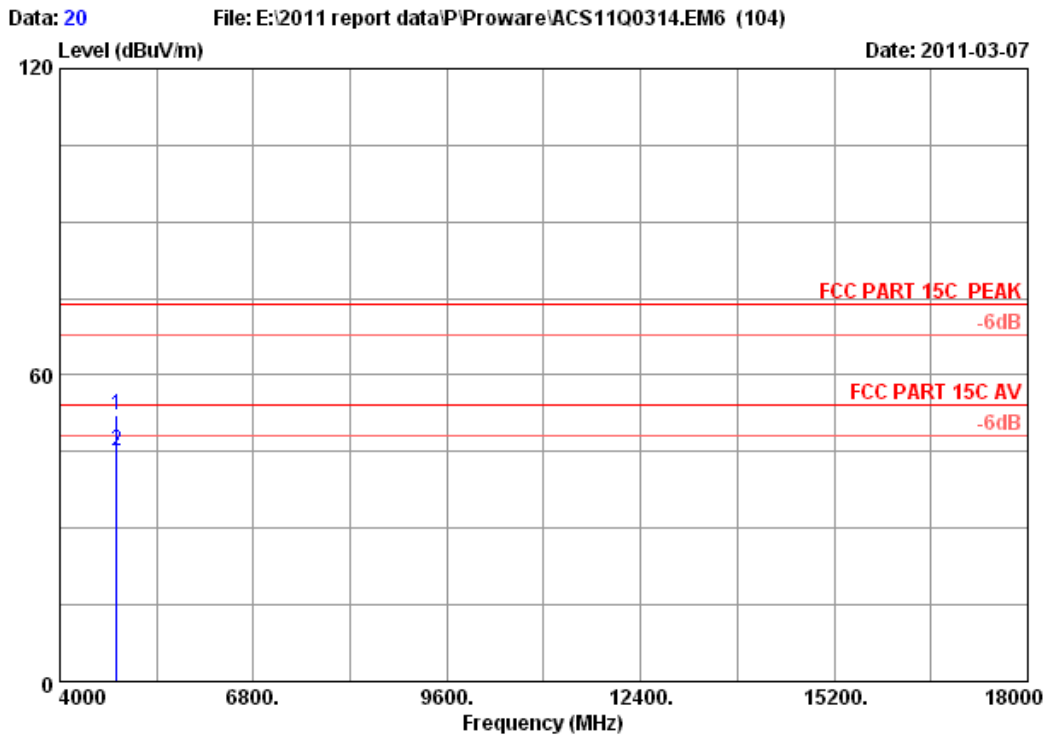
	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	34.49	10.76	34.98	46.86	57.13	74.00	16.87	Peak
2	4924.000	34.49	10.76	34.98	40.30	50.57	54.00	3.43	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 19  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH1 2412MHz Tx  
M/N : PW-3G401D

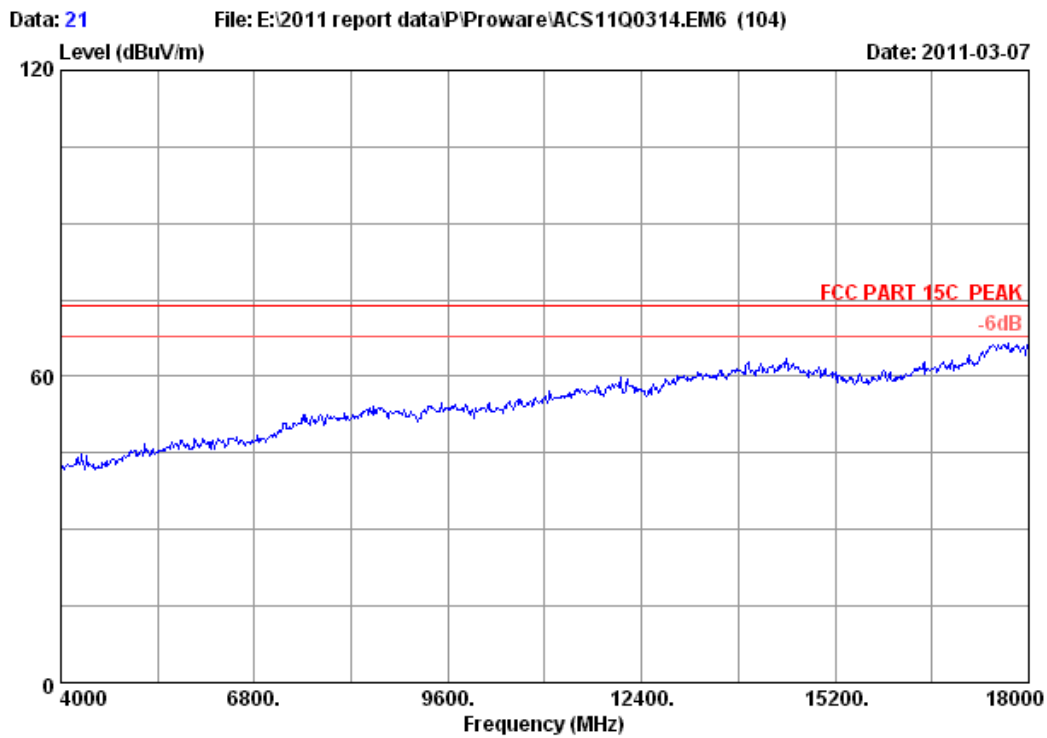


Site no. : RF Chamber Data no. : 20  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

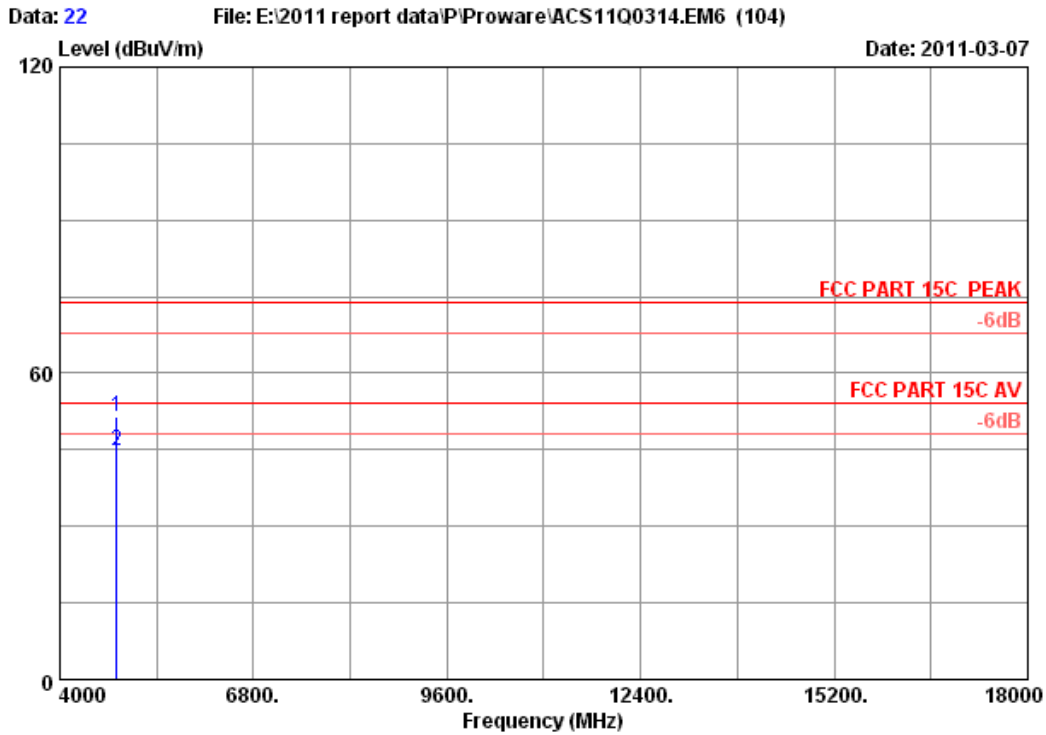
	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.32	10.64	35.08	42.37	52.25	74.00	21.75	Peak
2	4824.000	34.32	10.64	35.08	35.19	45.07	54.00	8.93	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 21  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH1 2412MHz Tx  
M/N : PW-3G401D

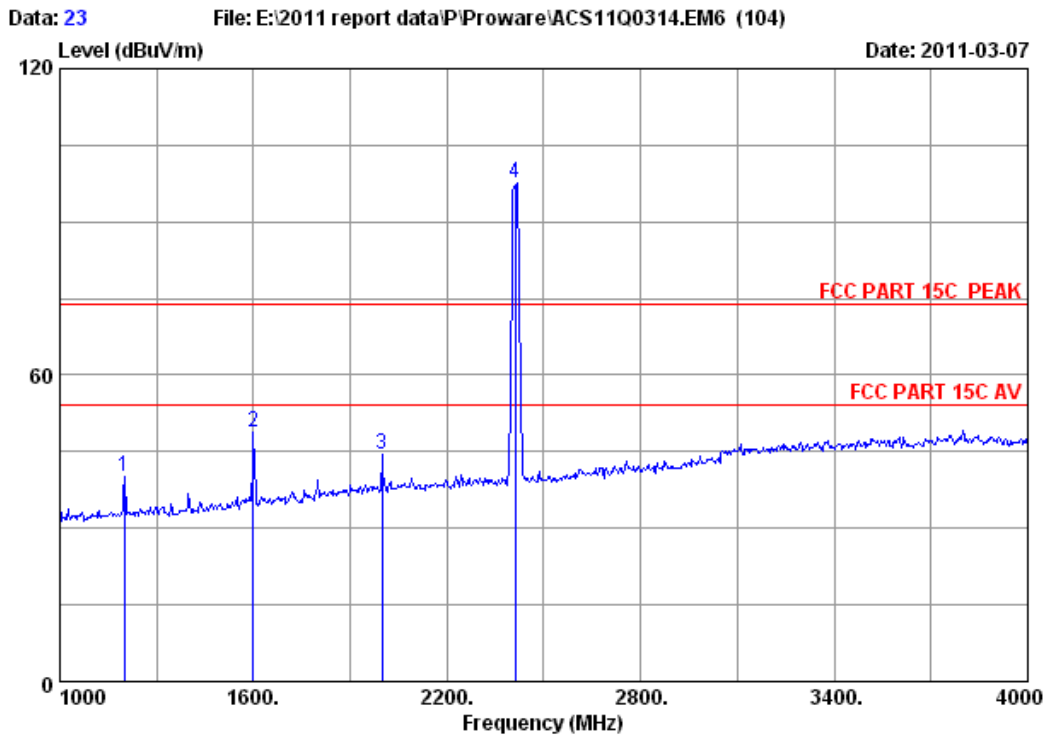


Site no. : RF Chamber Data no. : 22  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.32	10.64	35.08	41.70	51.58	74.00	22.42	Peak
2	4824.000	34.32	10.64	35.08	34.88	44.76	54.00	9.24	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



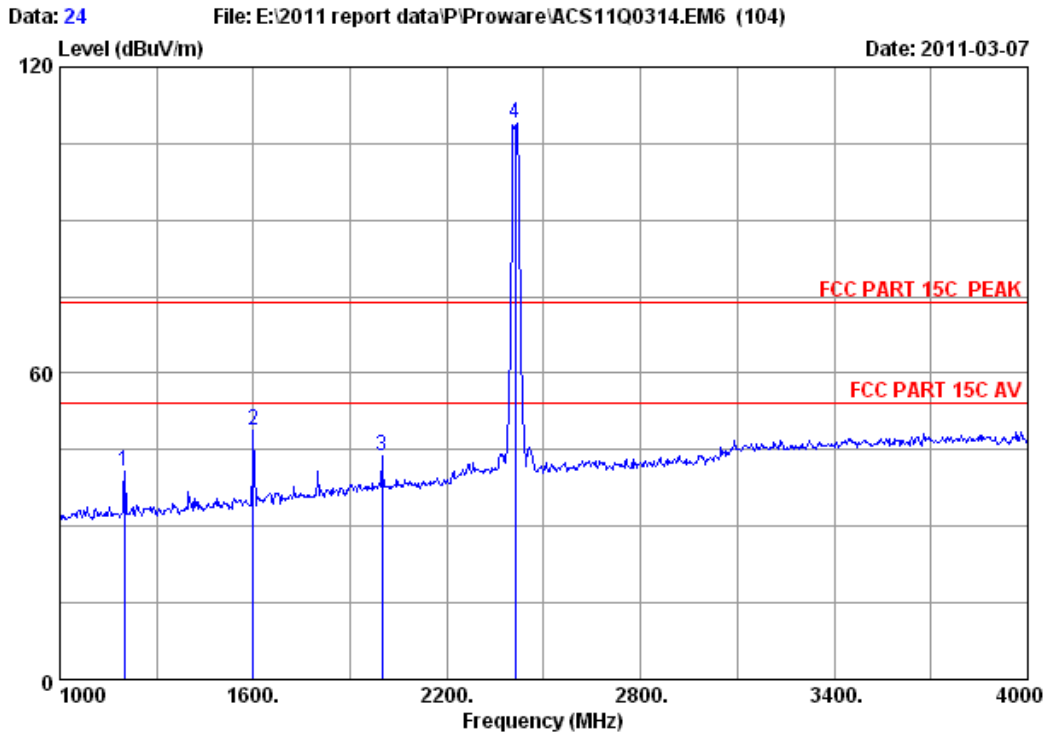
Site no. : RF Chamber Data no. : 23  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	46.73	40.16	74.00	33.84	Peak
2	1600.000	26.96	5.91	36.94	52.85	48.78	74.00	25.22	Peak
3	1999.000	29.20	6.63	36.70	45.30	44.43	74.00	29.57	Peak
4	2412.000	29.45	7.43	36.62	97.21	97.47	74.00	-23.47	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



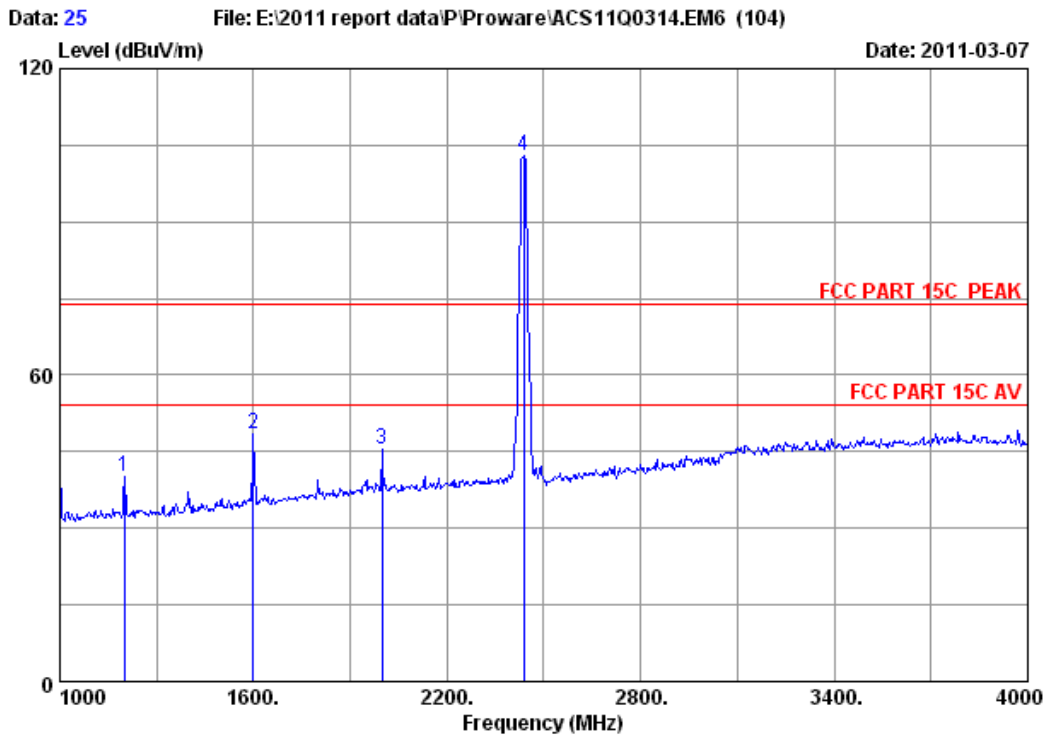


Site no. : RF Chamber Data no. : 24  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	47.36	40.79	74.00	33.21	Peak
2	1600.000	26.96	5.91	36.94	52.77	48.70	74.00	25.30	Peak
3	1999.000	29.20	6.63	36.70	44.59	43.72	74.00	30.28	Peak
4	2412.000	29.45	7.43	36.62	108.69	108.95	74.00	-34.95	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

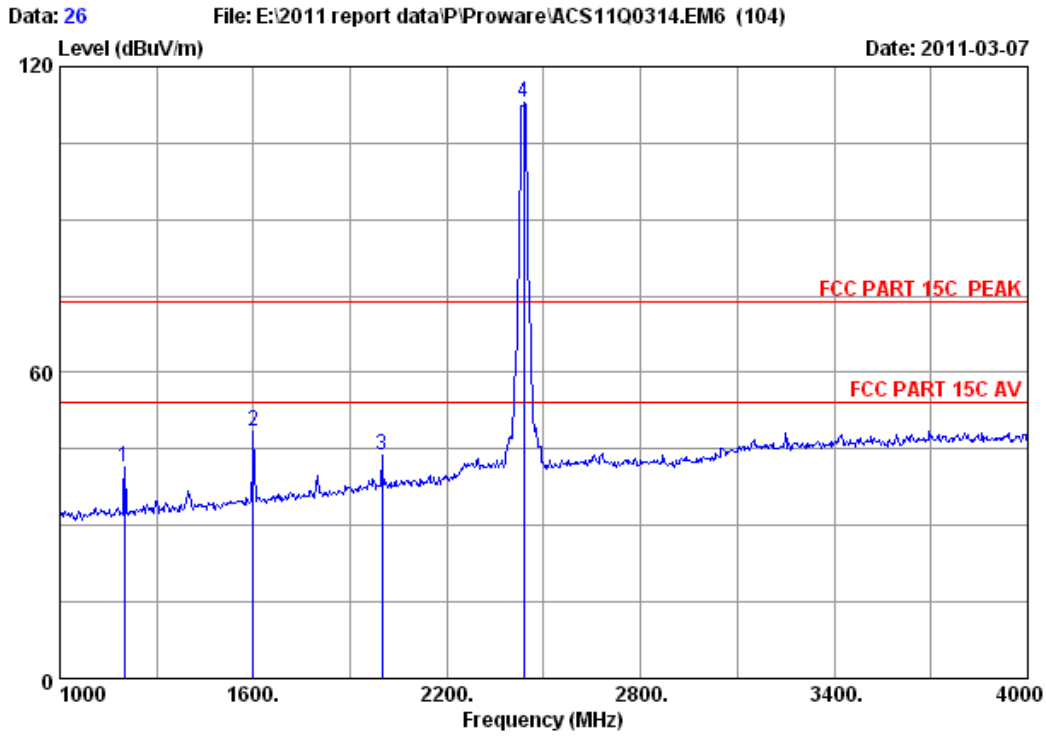


Site no. : RF Chamber Data no. : 25  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	46.55	39.98	74.00	34.02	Peak
2	1600.000	26.96	5.91	36.94	52.44	48.37	74.00	25.63	Peak
3	1999.000	29.20	6.63	36.70	46.19	45.32	74.00	28.68	Peak
4	2437.000	29.47	7.46	36.61	102.64	102.96	74.00	-28.96	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

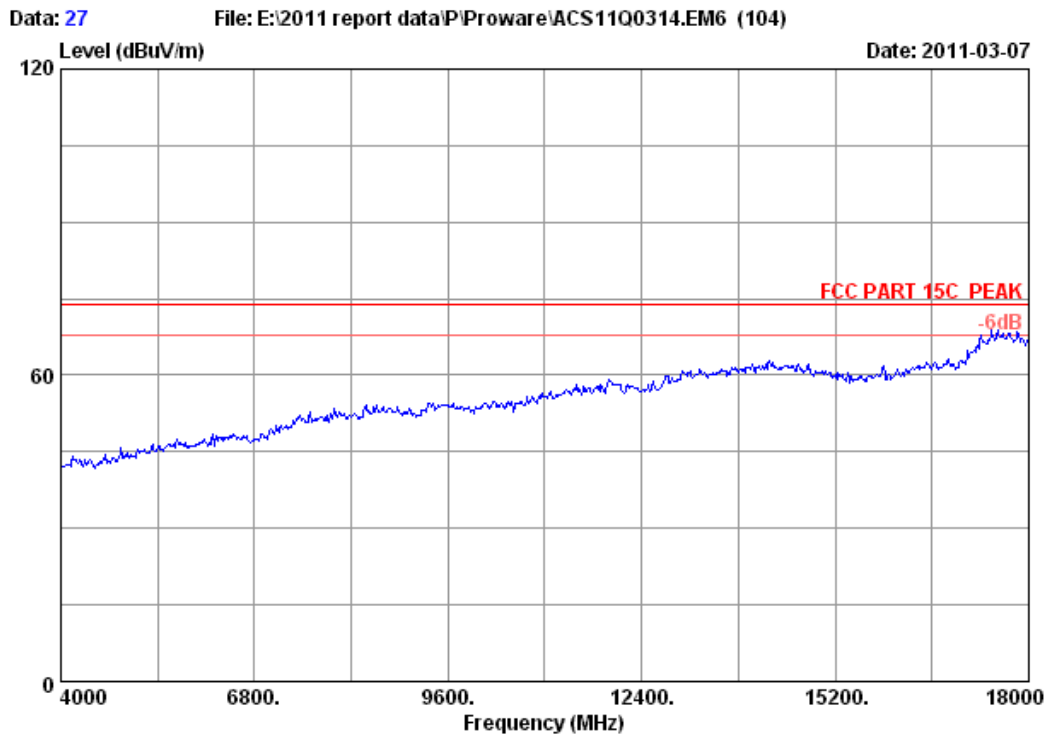


Site no. : RF Chamber Data no. : 26  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 M/N : PW-3G401D

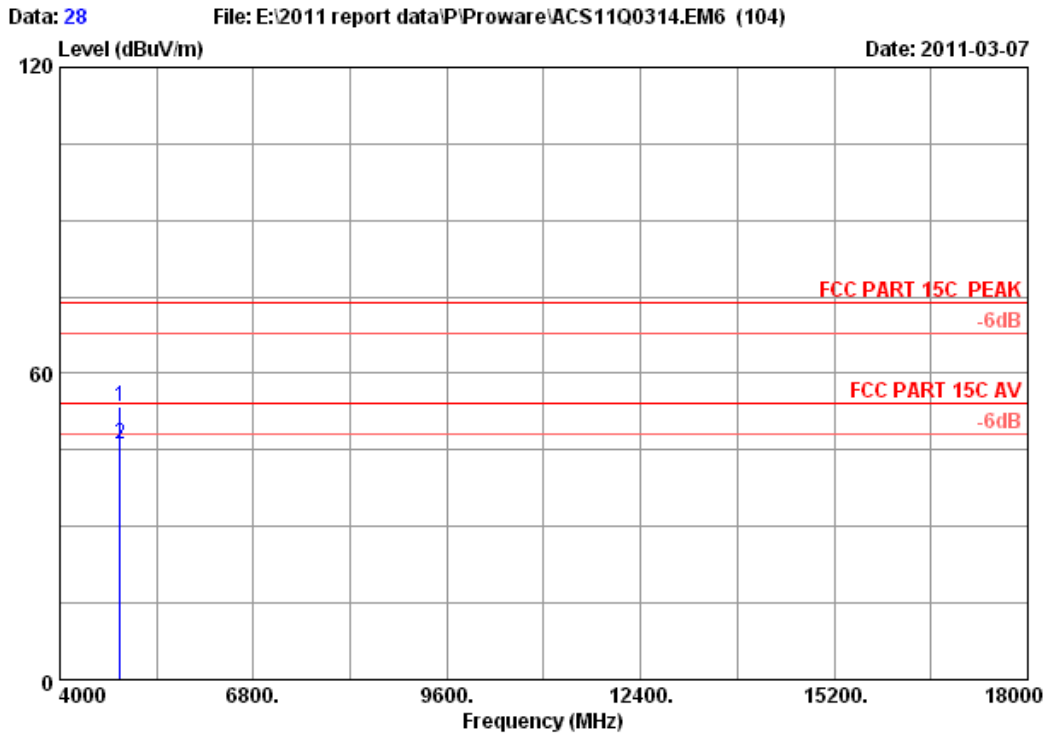
	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	47.97	41.40	74.00	32.60	Peak
2	1600.000	26.96	5.91	36.94	52.37	48.30	74.00	25.70	Peak
3	1999.000	29.20	6.63	36.70	44.54	43.67	74.00	30.33	Peak
4	2437.000	29.47	7.46	36.61	112.72	113.04	74.00	-39.04	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 27  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH6 2437MHz Tx  
M/N : PW-3G401D

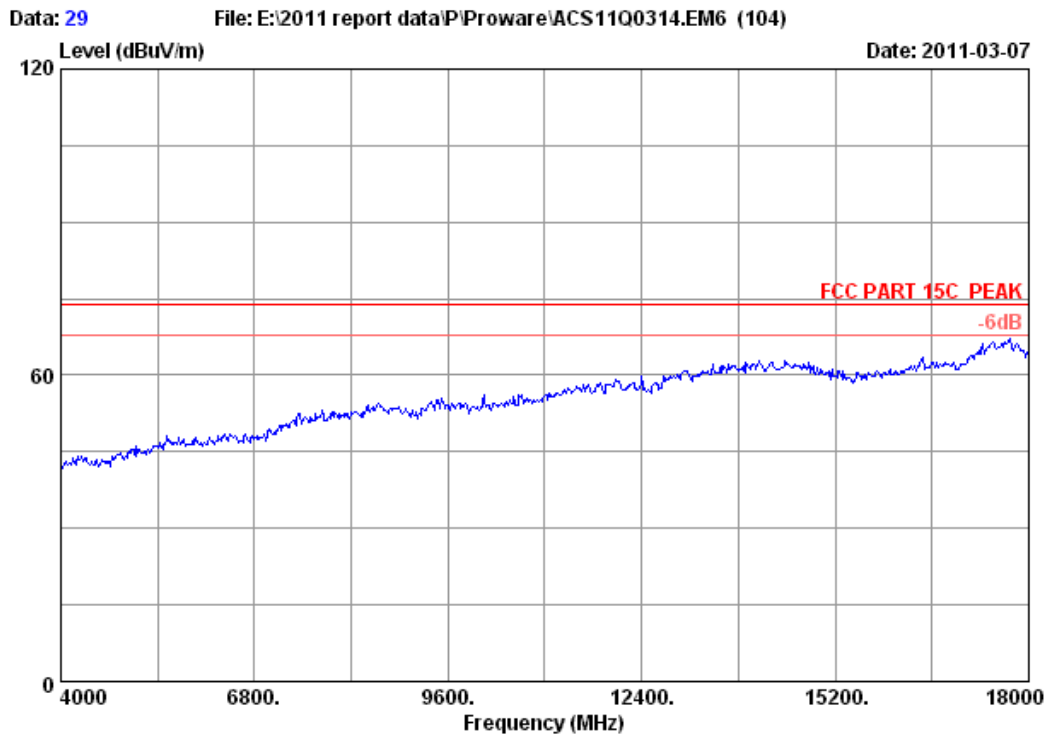


Site no. : RF Chamber Data no. : 28  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 M/N : PW-3G401D

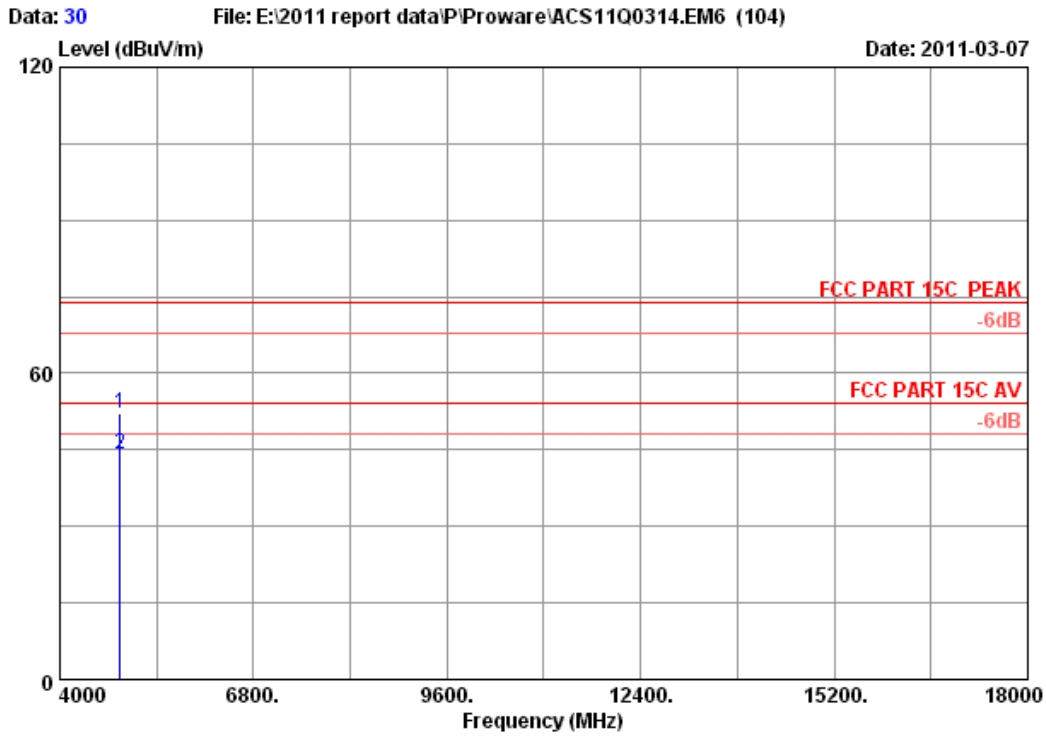
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	43.26	53.33	74.00	20.67	Peak
2	4874.000	34.41	10.69	35.03	36.18	46.25	54.00	7.75	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



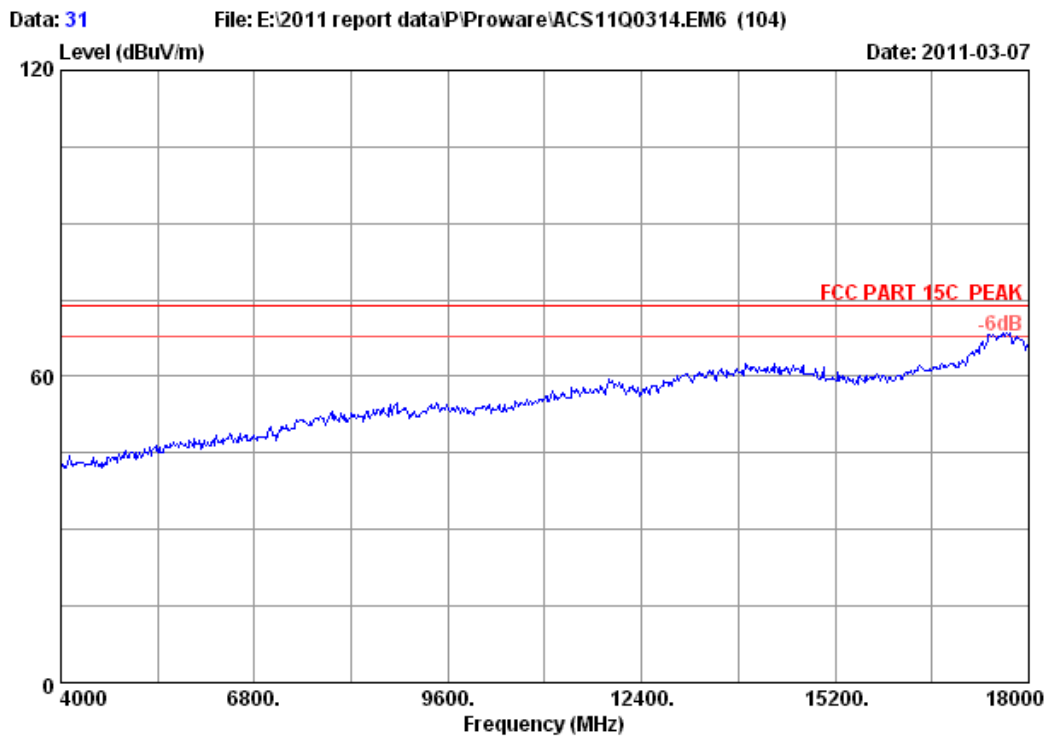
Site no. : RF Chamber Data no. : 29  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH6 2437MHz Tx  
M/N : PW-3G401D



Site no. : RF Chamber Data no. : 30  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz Tx  
 M/N : PW-3G401D

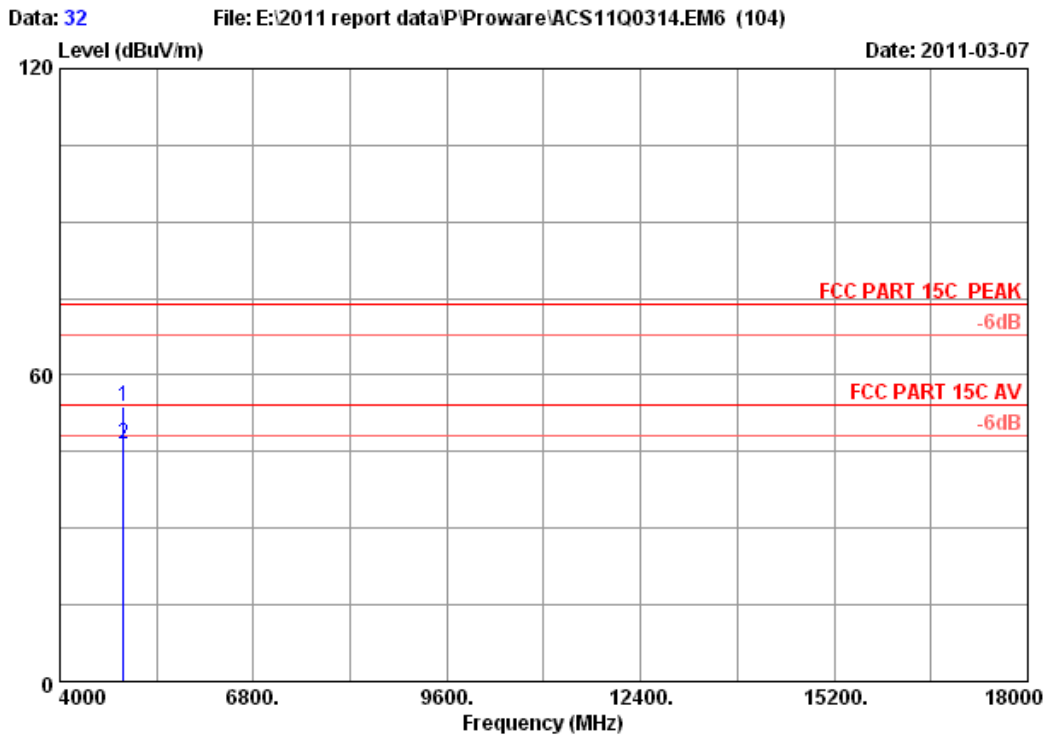
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	41.96	52.03	74.00	21.97	Peak
2	4874.000	34.41	10.69	35.03	34.12	44.19	54.00	9.81	Average

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 31  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH11 2462MHz Tx  
M/N : PW-3G401D



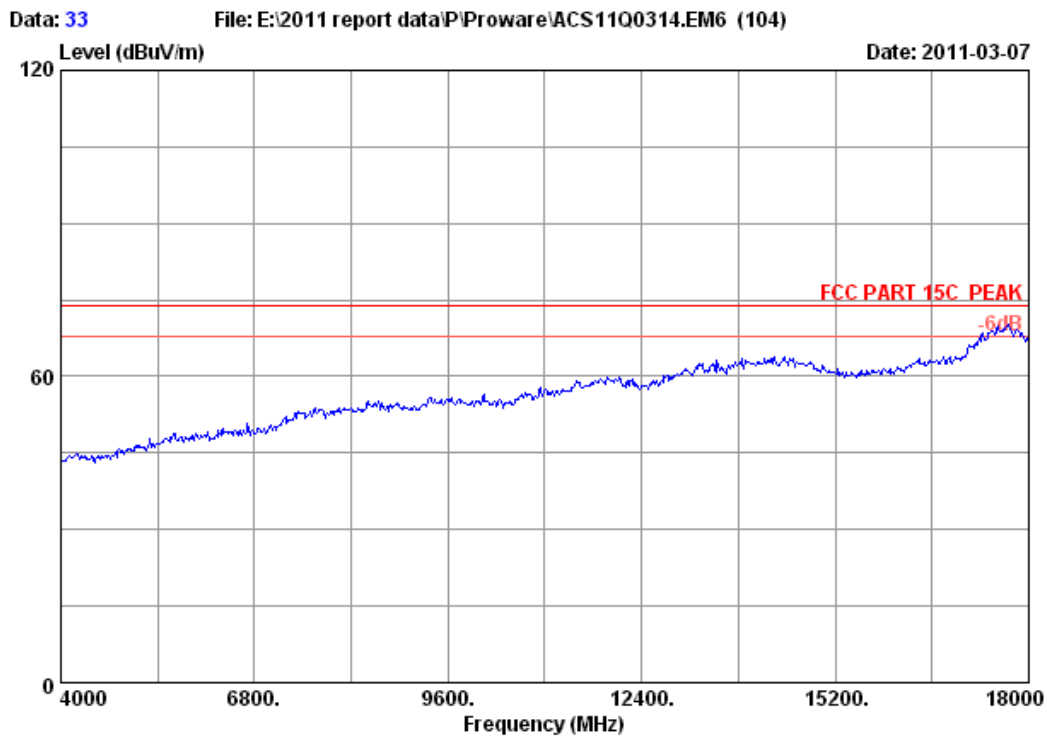


Site no. : RF Chamber Data no. : 32  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

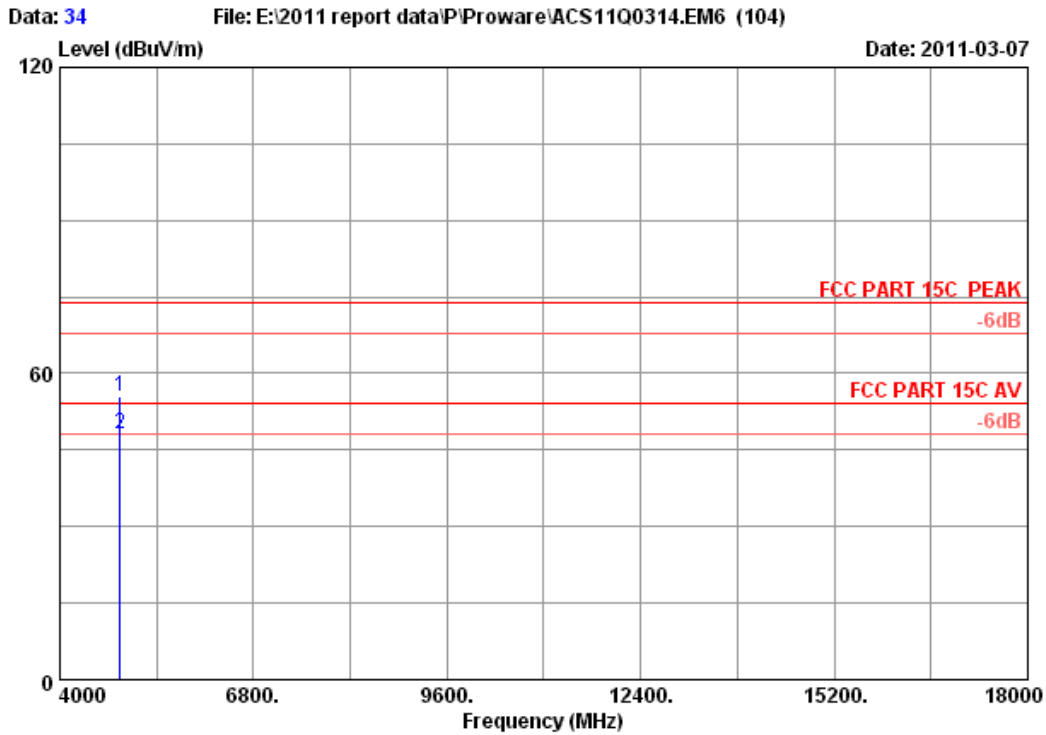
	Freq.	Ant. Factor	Cable loss	Amp. Factor	Reading	Emission Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	34.49	10.76	34.98	43.69	53.96	74.00	20.04	Peak
2	4924.000	34.49	10.76	34.98	36.17	46.44	54.00	7.56	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



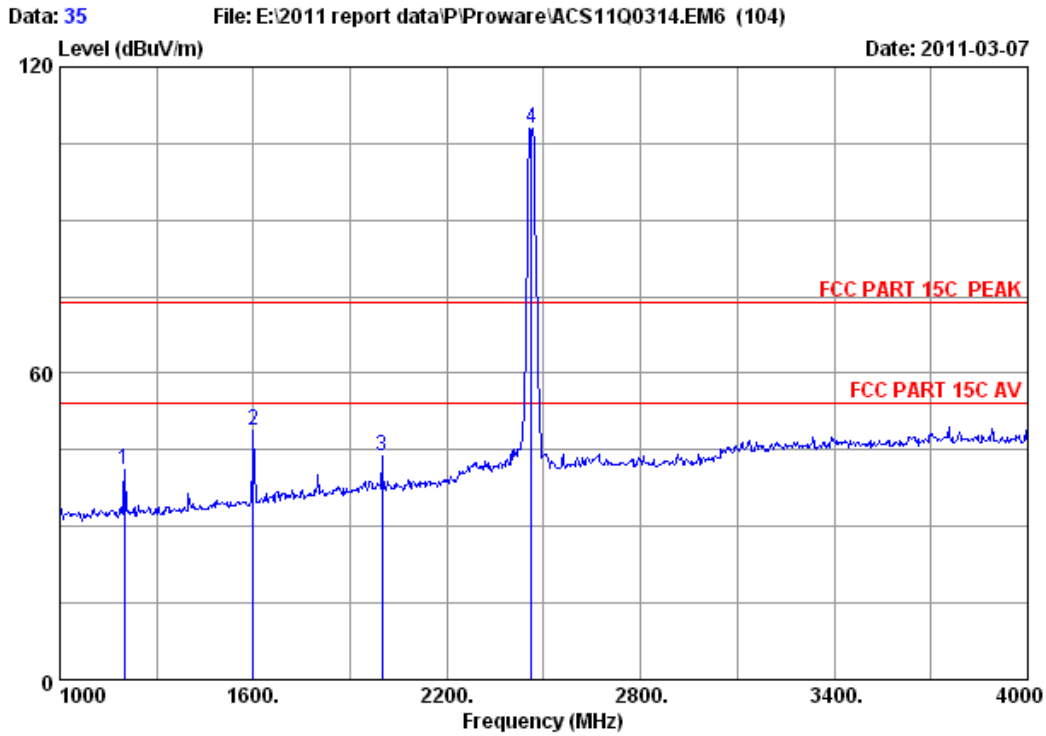
Site no. : RF Chamber Data no. : 33  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11g CH11 2462MHz Tx  
M/N : PW-3G401D



Site no. : RF Chamber Data no. : 34  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	45.28	55.35	74.00	18.65	Peak
2	4874.000	34.41	10.69	35.03	37.94	48.01	54.00	5.99	Average

- Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
  2. The emission levels that are 20dB below the official limit are not reported.

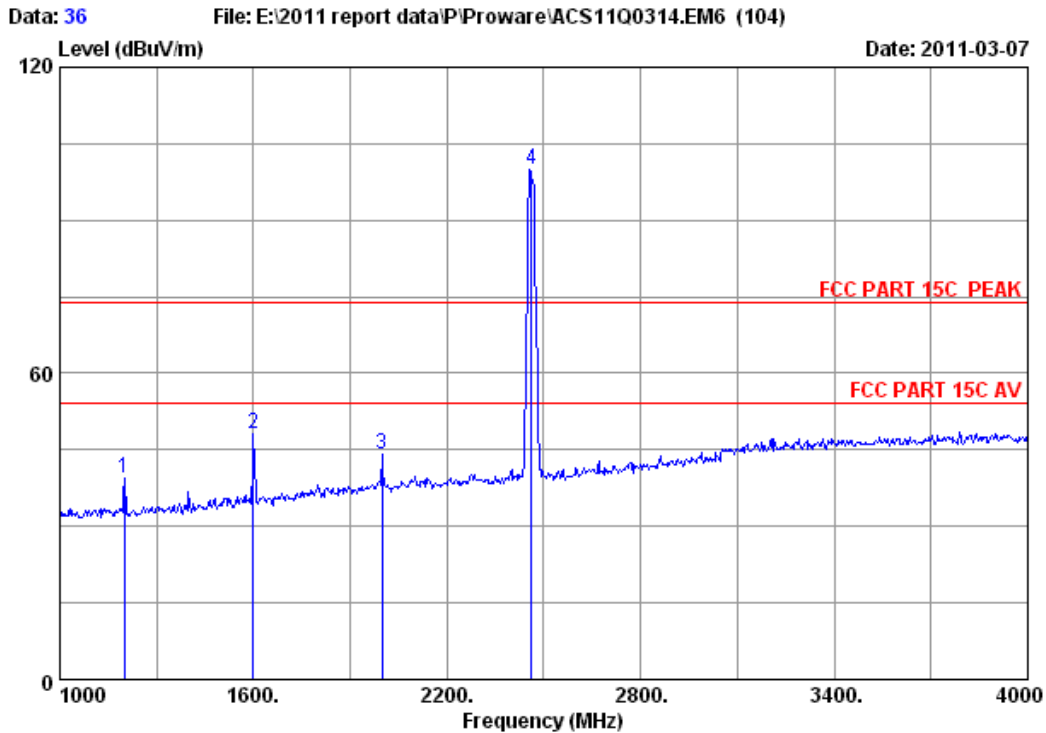


Site no. : RF Chamber Data no. : 35  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	47.80	41.23	74.00	32.77	Peak
2	1600.000	26.96	5.91	36.94	52.82	48.75	74.00	25.25	Peak
3	1999.000	29.20	6.63	36.70	44.59	43.72	74.00	30.28	Peak
4	2462.000	29.48	7.54	36.61	107.60	108.01	74.00	-34.01	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

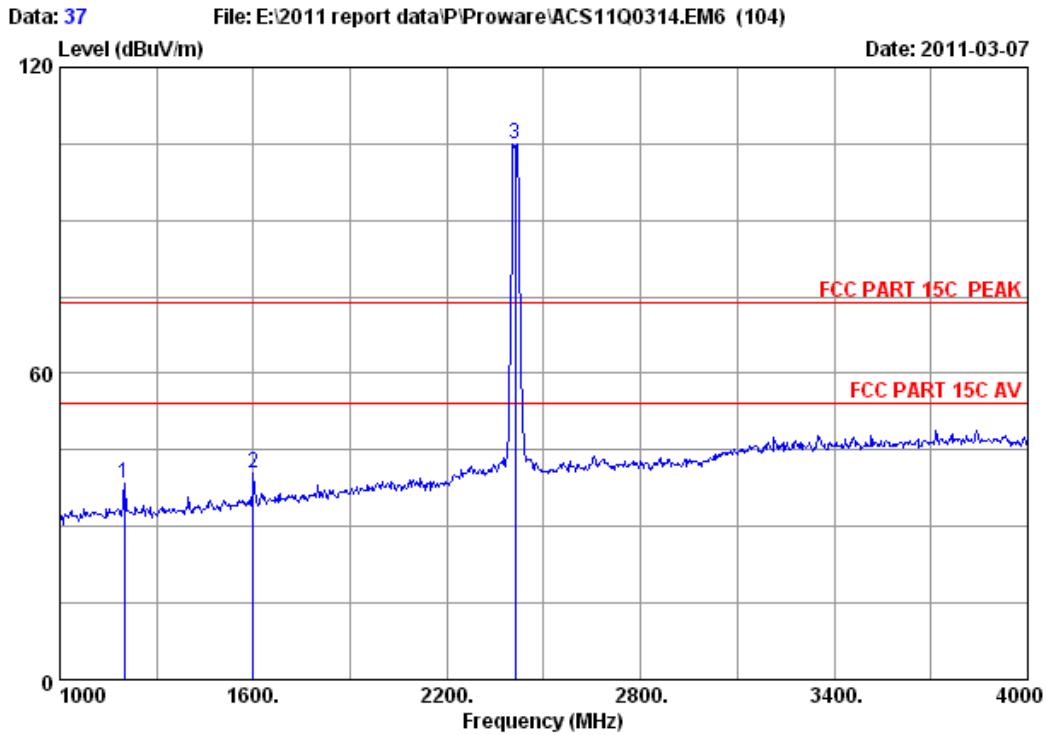


Site no. : RF Chamber Data no. : 36  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	46.13	39.56	74.00	34.44	Peak
2	1600.000	26.96	5.91	36.94	52.22	48.15	74.00	25.85	Peak
3	1999.000	29.20	6.63	36.70	44.84	43.97	74.00	30.03	Peak
4	2462.000	29.48	7.54	36.61	99.57	99.98	74.00	-25.98	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

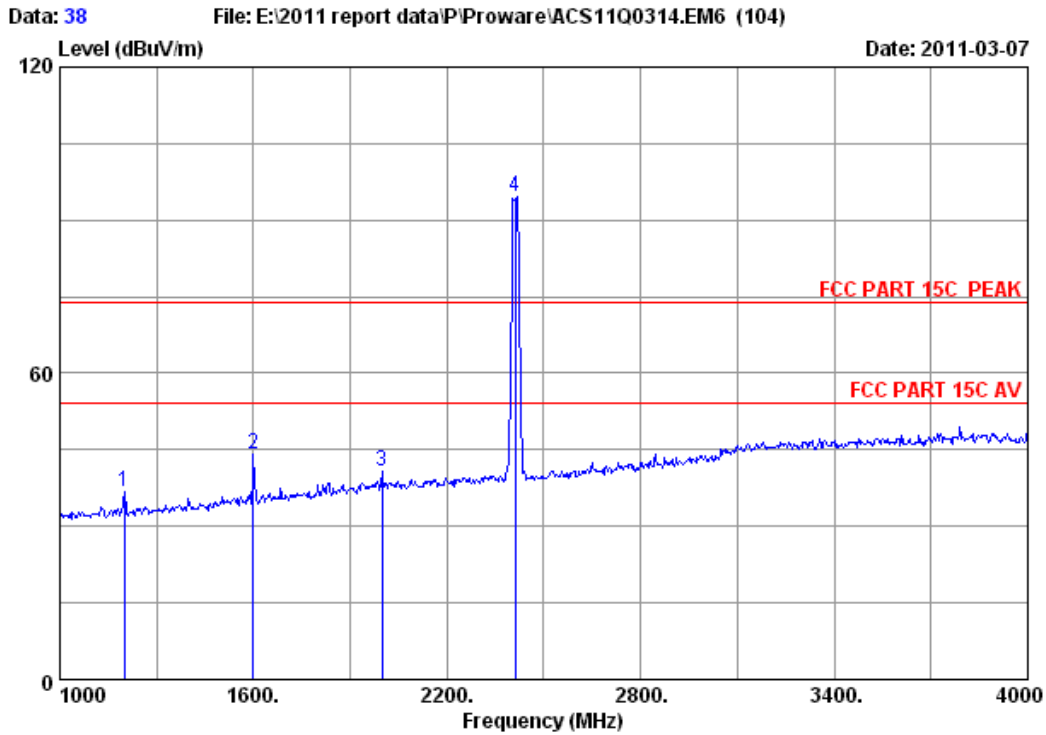


Site no. : RF Chamber Data no. : 37  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	45.00	38.43	74.00	35.57	Peak
2	1600.000	26.96	5.91	36.94	44.68	40.61	74.00	33.39	Peak
3	2412.000	29.45	7.43	36.62	104.76	105.02	74.00	-31.02	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

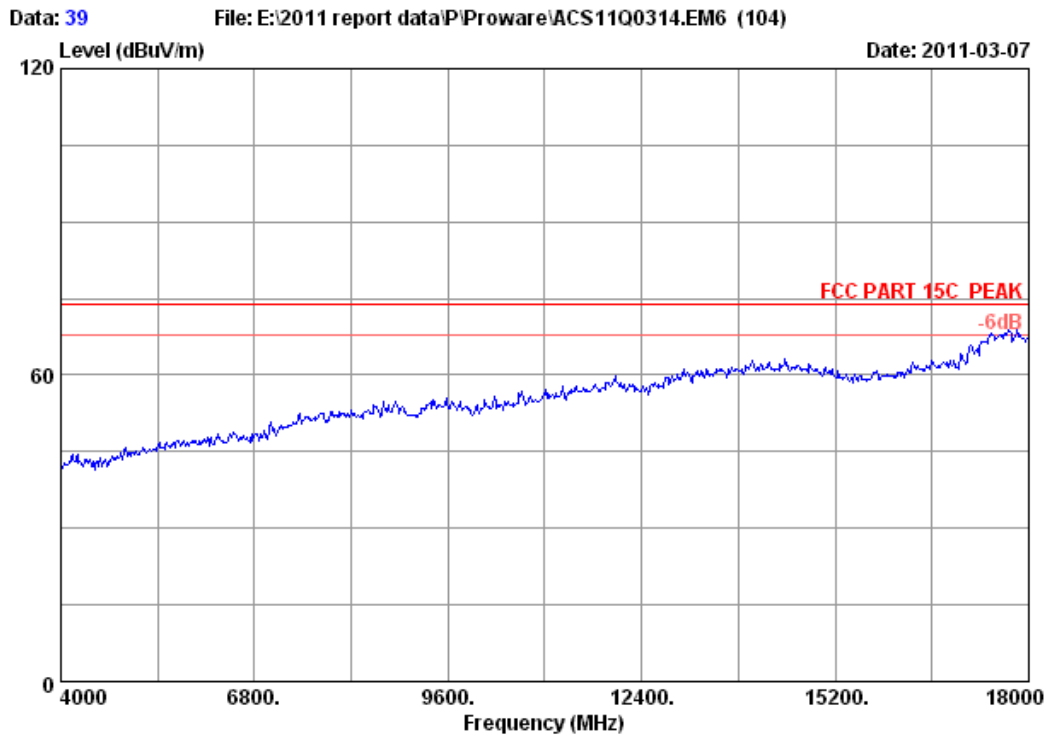


Site no. : RF Chamber Data no. : 38  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	43.29	36.72	74.00	37.28	Peak
2	1600.000	26.96	5.91	36.94	48.23	44.16	74.00	29.84	Peak
3	1999.000	29.20	6.63	36.70	41.78	40.91	74.00	33.09	Peak
4	2412.000	29.45	7.43	36.62	94.28	94.54	74.00	-20.54	Peak

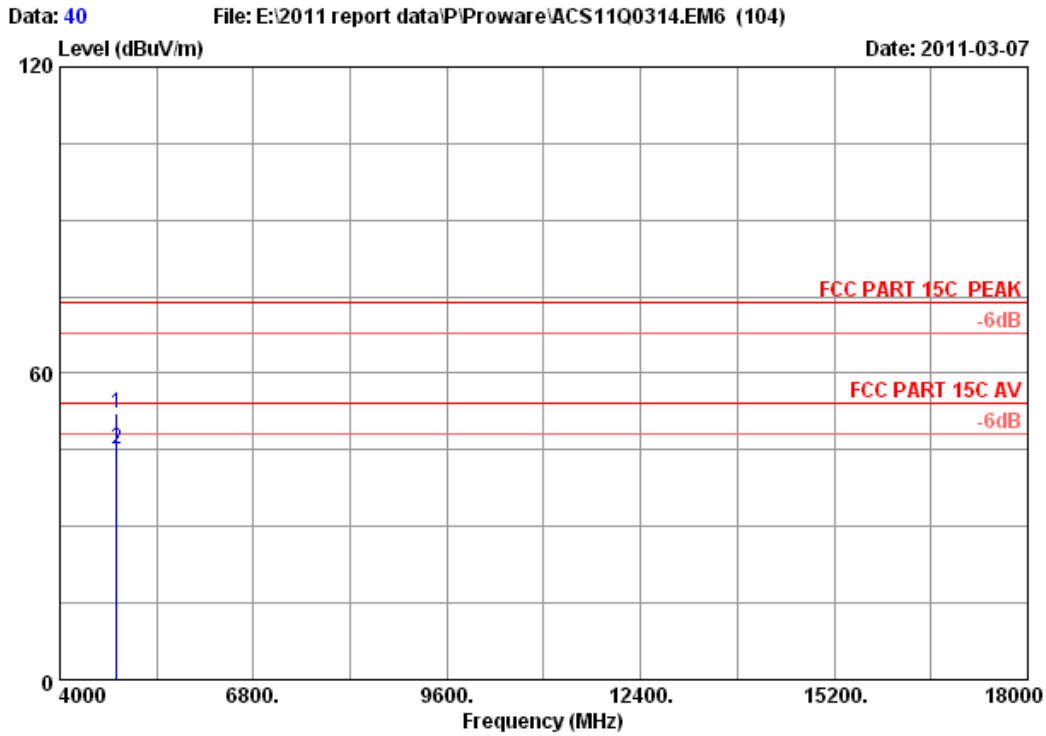
Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 39  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
M/N : PW-3G401D



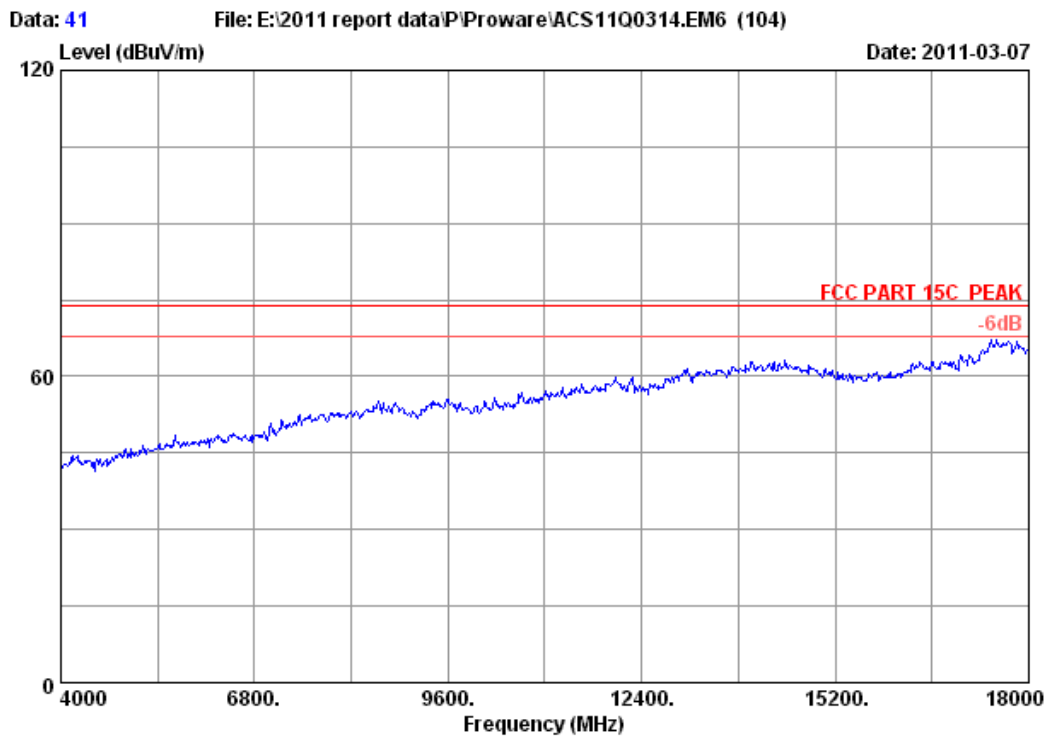


Site no. : RF Chamber Data no. : 40  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

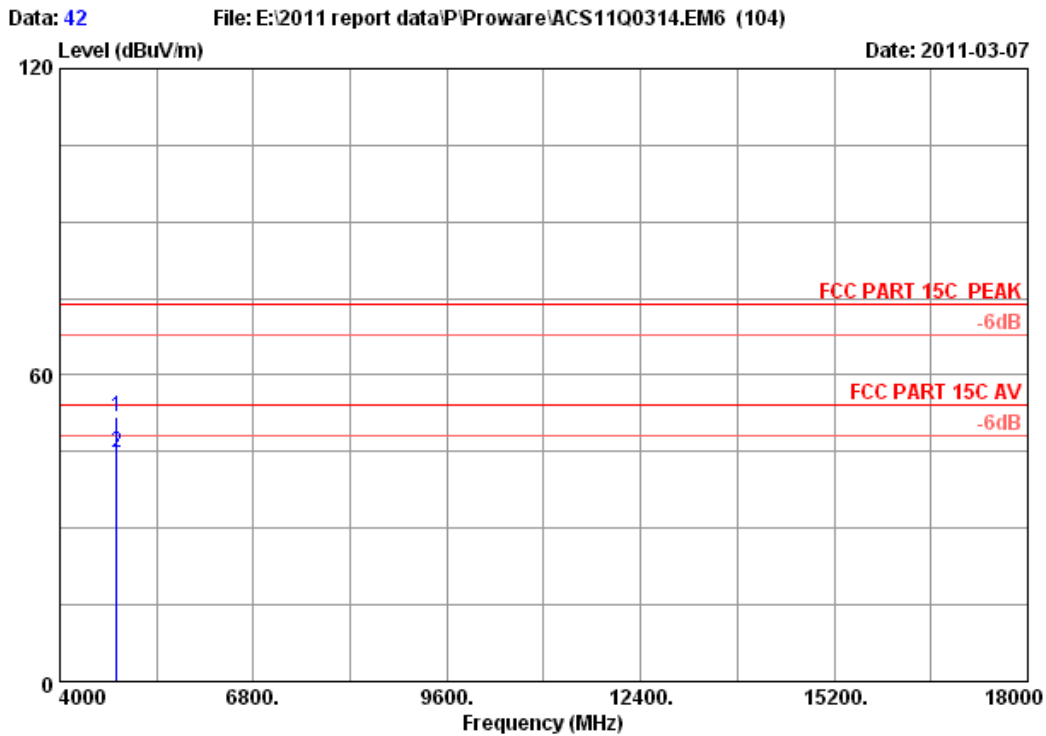
	Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.32	10.64	35.08	42.27	52.15	74.00	21.85	Peak
2	4824.000	34.32	10.64	35.08	35.19	45.07	54.00	8.93	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



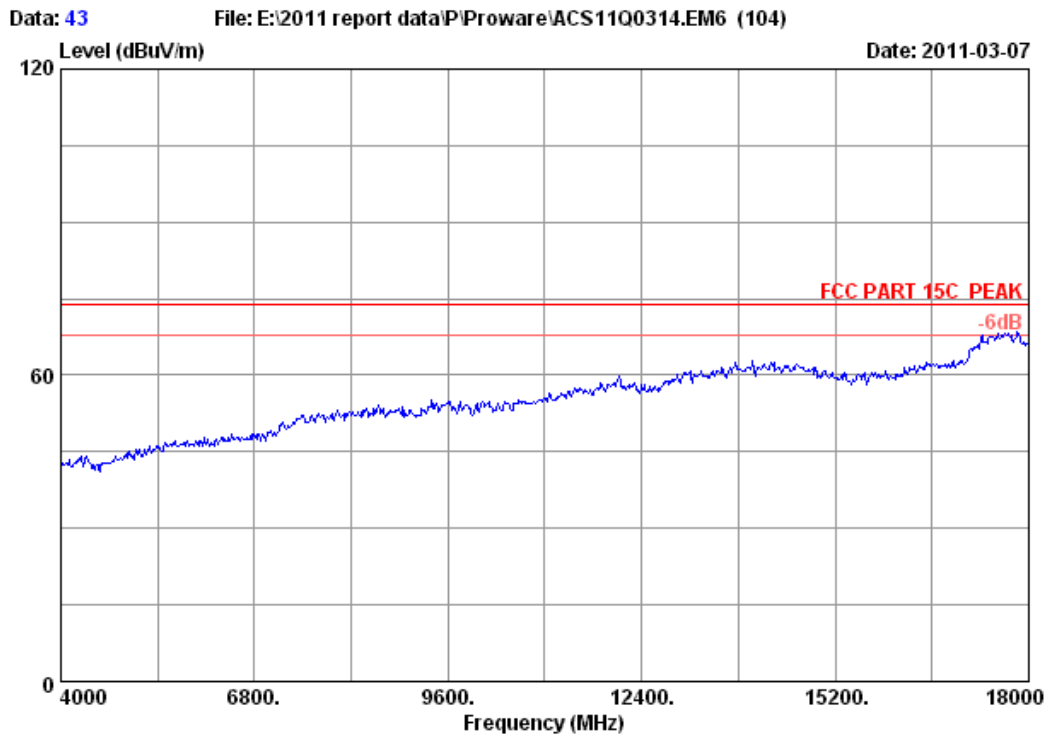
Site no. : RF Chamber Data no. : 41  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
M/N : PW-3G401D



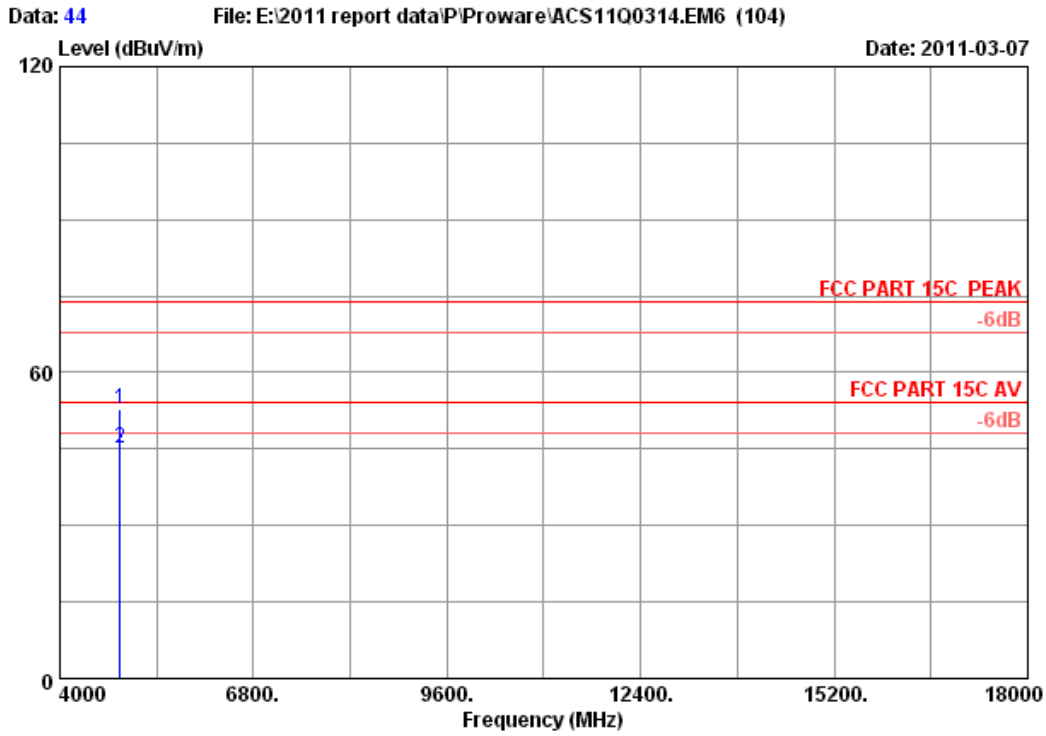
Site no. : RF Chamber Data no. : 42  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.32	10.64	35.08	41.97	51.85	74.00	22.15	Peak
2	4824.000	34.32	10.64	35.08	34.88	44.76	54.00	9.24	Average

- Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
  2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 43  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT20 CH6 2437MHz Tx  
M/N : PW-3G401D

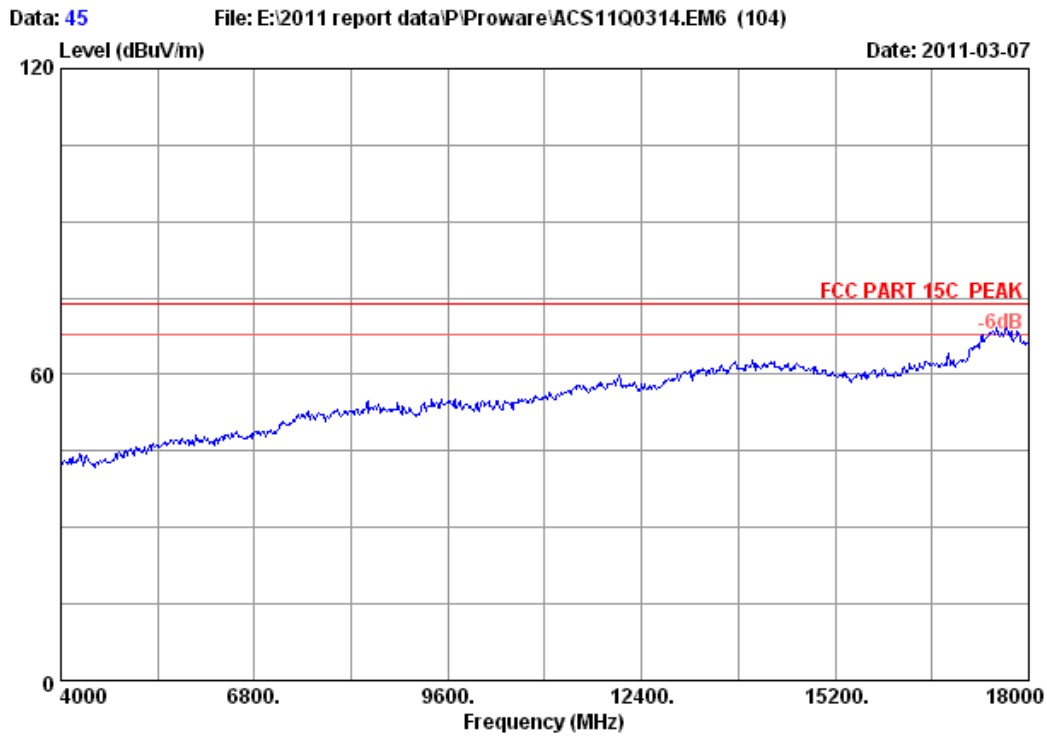


Site no. : RF Chamber Data no. : 44  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH6 2437MHz Tx  
 M/N : PW-3G401D

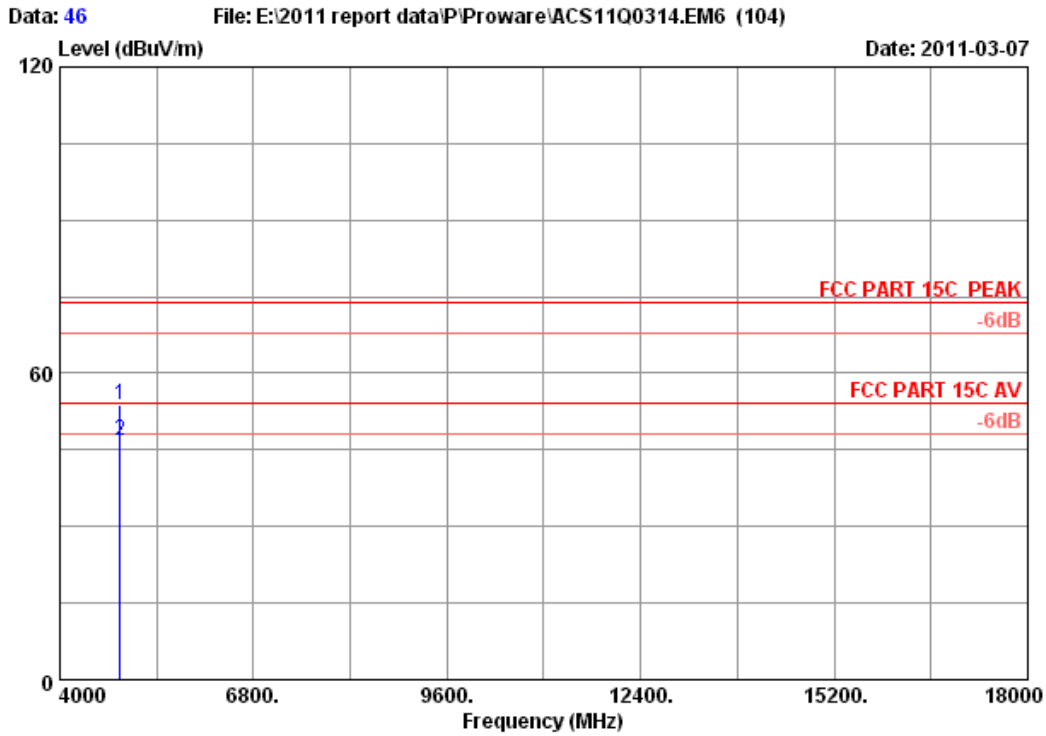
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	42.65	52.72	74.00	21.28	Peak
2	4874.000	34.41	10.69	35.03	35.17	45.24	54.00	8.76	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 45  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH6 2437MHz Tx  
 M/N : PW-3G401D

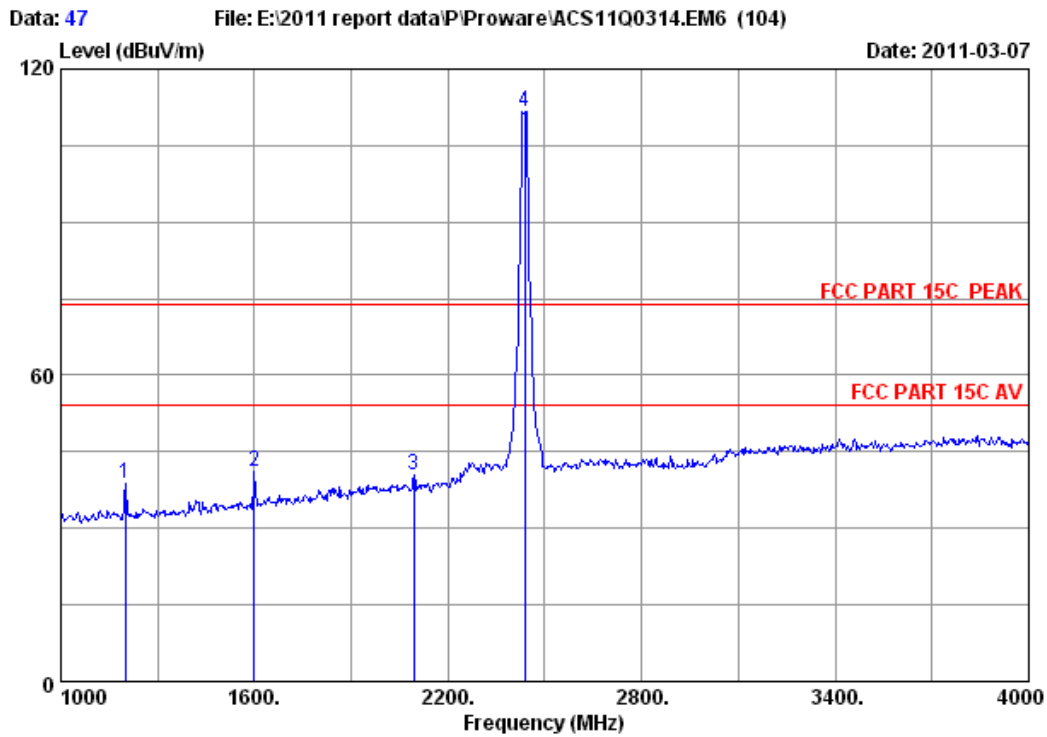


Site no. : RF Chamber Data no. : 46  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH6 2437MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	43.68	53.75	74.00	20.25	Peak
2	4874.000	34.41	10.69	35.03	36.74	46.81	54.00	7.19	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



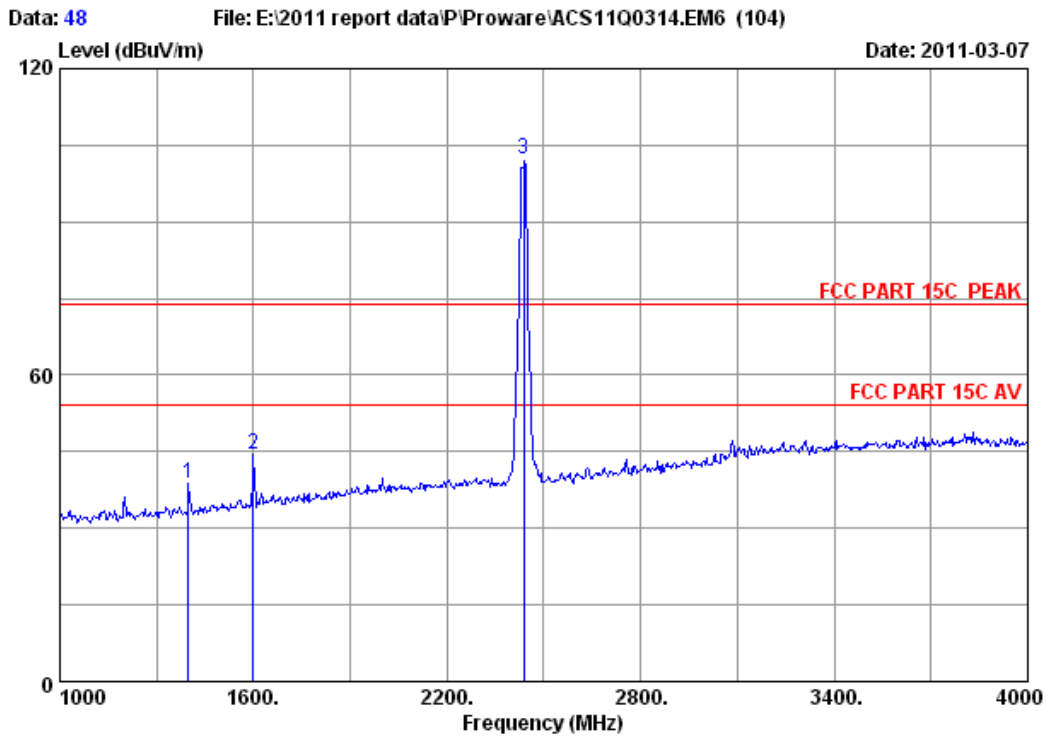
Site no. : RF Chamber Data no. : 47  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH6 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	45.46	38.89	74.00	35.11	Peak
2	1600.000	26.96	5.91	36.94	45.35	41.28	74.00	32.72	Peak
3	2095.000	29.25	6.82	36.68	40.93	40.32	74.00	33.68	Peak
4	2437.000	29.47	7.46	36.61	111.45	111.77	74.00	-37.77	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



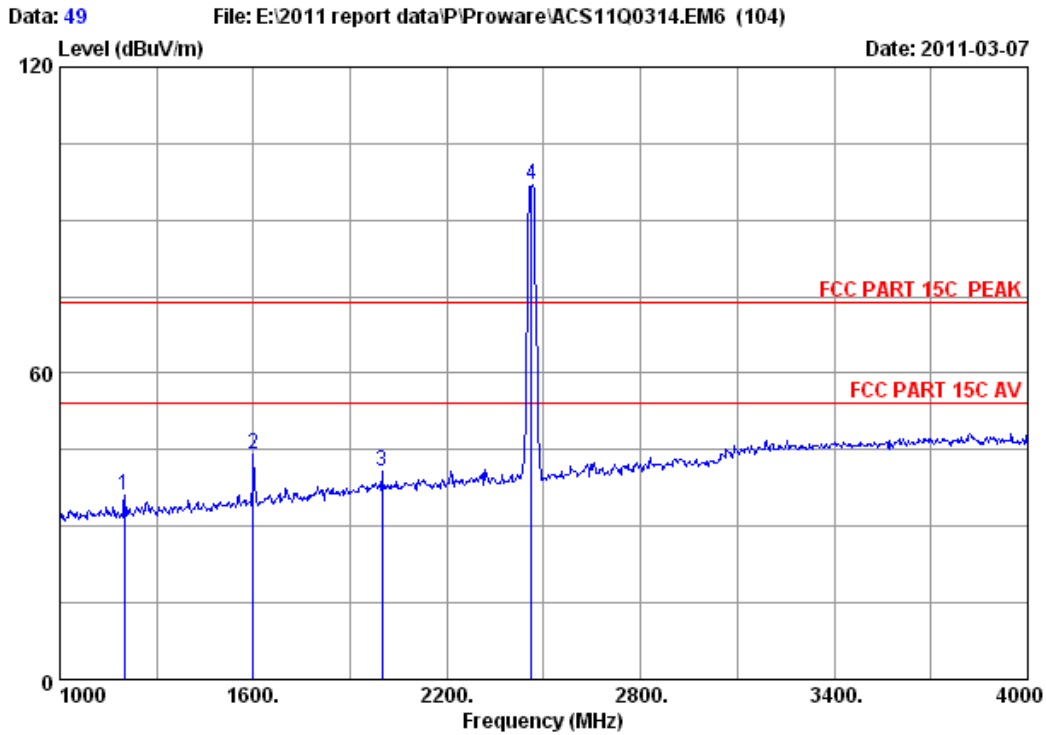


Site no. : RF Chamber Data no. : 48  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH6 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1399.000	26.19	5.50	37.18	44.19	38.70	74.00	35.30	Peak
2	1600.000	26.96	5.91	36.94	48.37	44.30	74.00	29.70	Peak
3	2437.000	29.47	7.46	36.61	101.88	102.20	74.00	-28.20	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

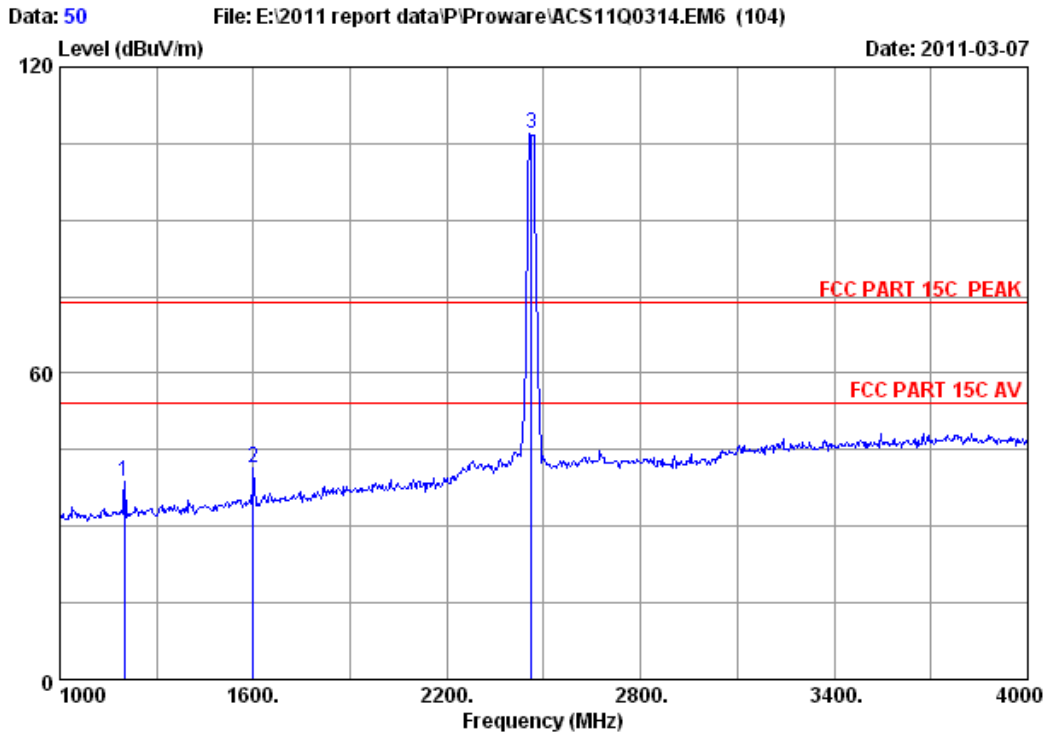


Site no. : RF Chamber Data no. : 49  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	42.80	36.23	74.00	37.77	Peak
2	1600.000	26.96	5.91	36.94	48.19	44.12	74.00	29.88	Peak
3	1999.000	29.20	6.63	36.70	41.59	40.72	74.00	33.28	Peak
4	2462.000	29.48	7.54	36.61	96.52	96.93	74.00	-22.93	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

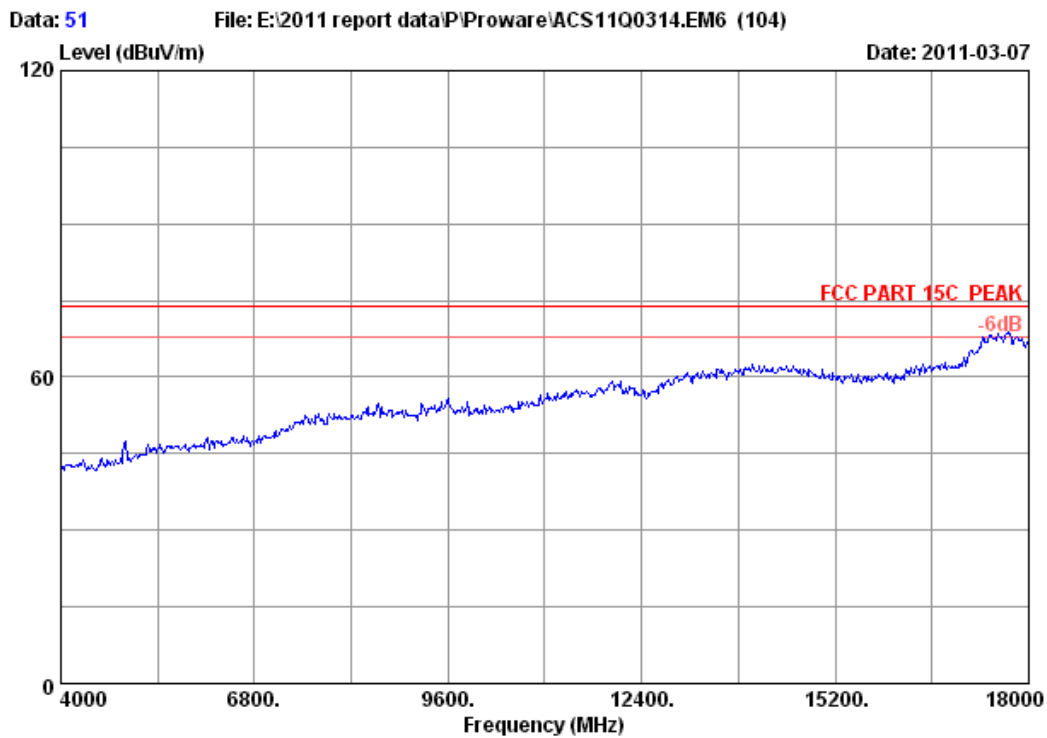


Site no. : RF Chamber Data no. : 50  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

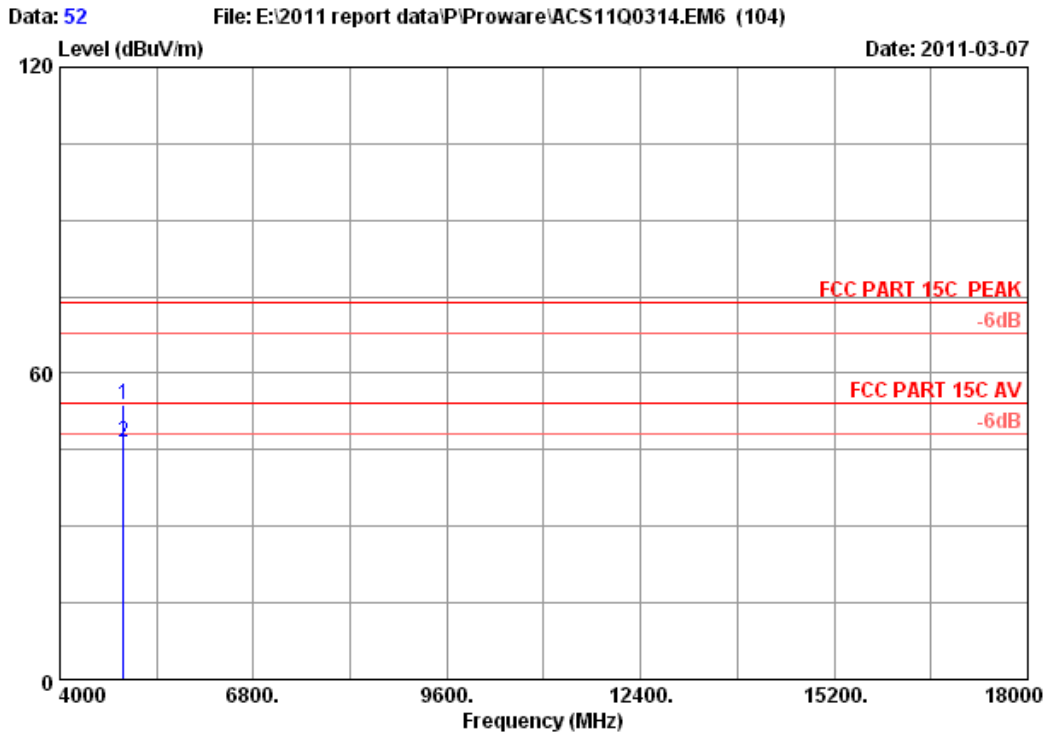
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	45.35	38.78	74.00	35.22	Peak
2	1600.000	26.96	5.91	36.94	45.40	41.33	74.00	32.67	Peak
3	2462.000	29.48	7.54	36.61	106.53	106.94	74.00	-32.94	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 51  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
M/N : PW-3G401D

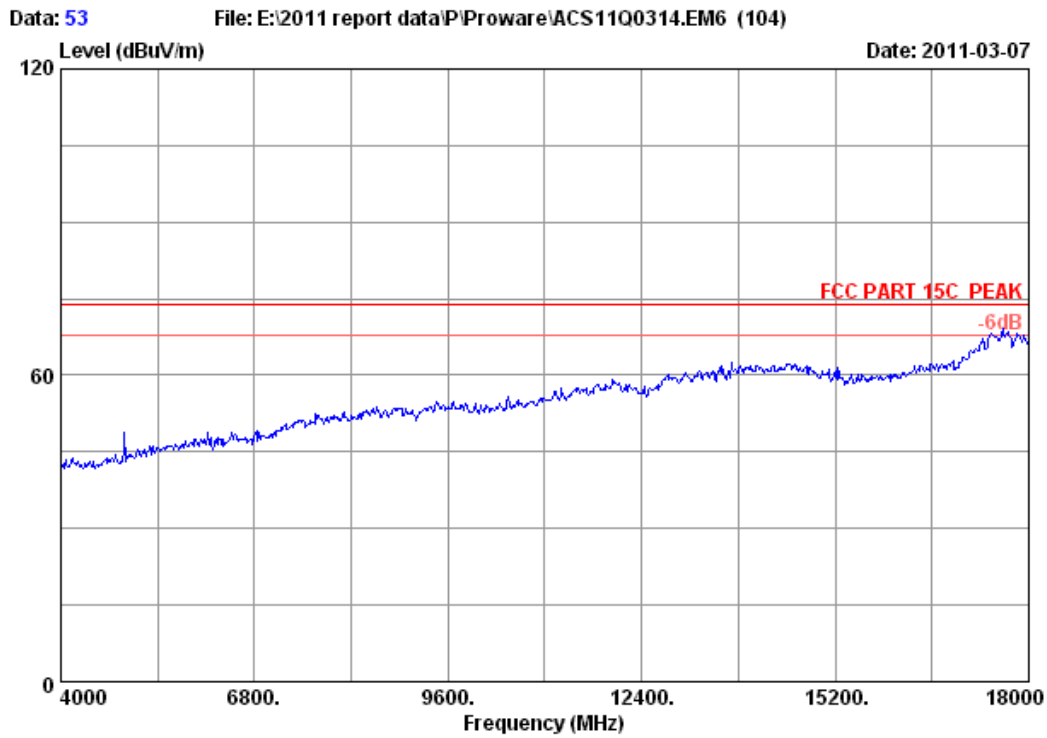


Site no. : RF Chamber Data no. : 52  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

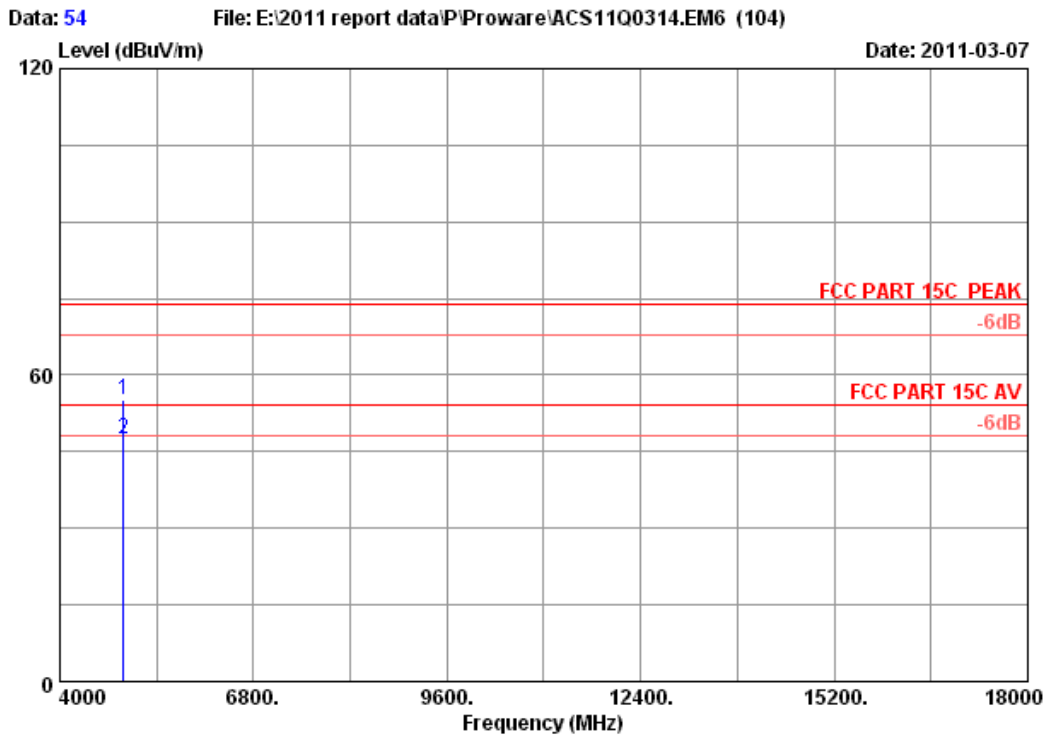
	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	4924.000	34.49	10.76	34.98	43.65	53.92	74.00	20.08	Peak
2	4924.000	34.49	10.76	34.98	36.18	46.45	54.00	7.55	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: RF Chamber	Data no. :	53
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer :	Sunny-lu
EUT	: 3G Wireless Lite-N Router		
Power	: DC 12V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 CH11 2462MHz Tx		
M/N	: PW-3G401D		

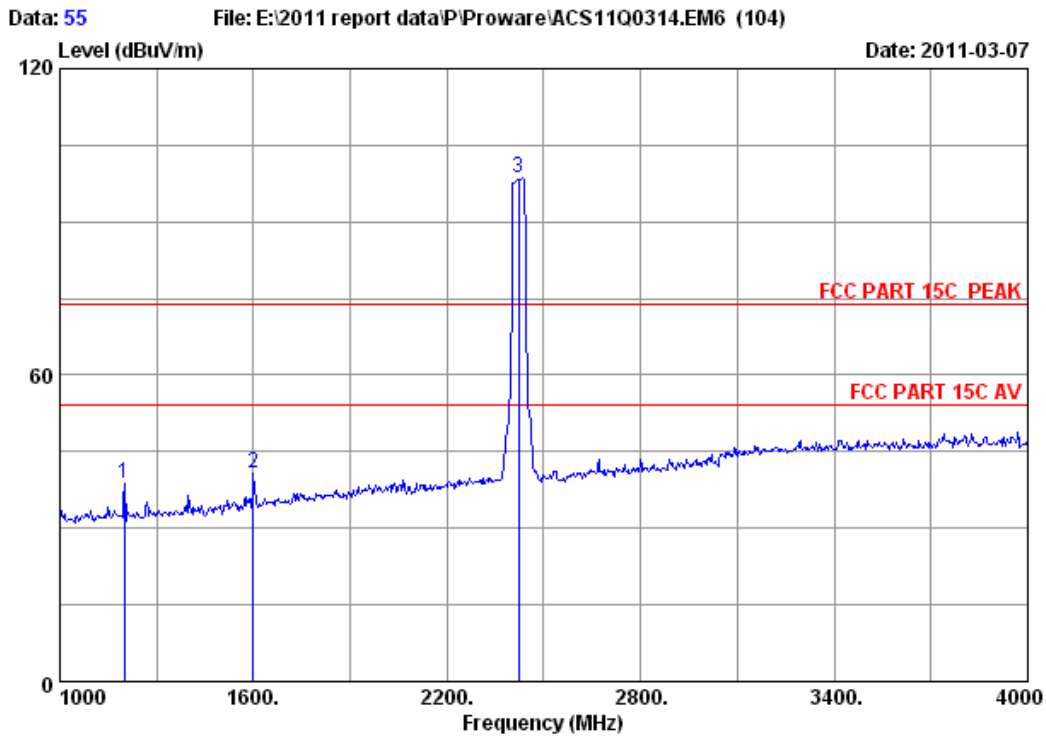


Site no. : RF Chamber Data no. : 54  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

	Freq.	Ant. Factor	Cable loss	Amp. Factor	Reading	Emission Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4924.000	34.49	10.76	34.98	44.91	55.18	74.00	18.82	Peak
2	4924.000	34.49	10.76	34.98	37.15	47.42	54.00	6.58	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



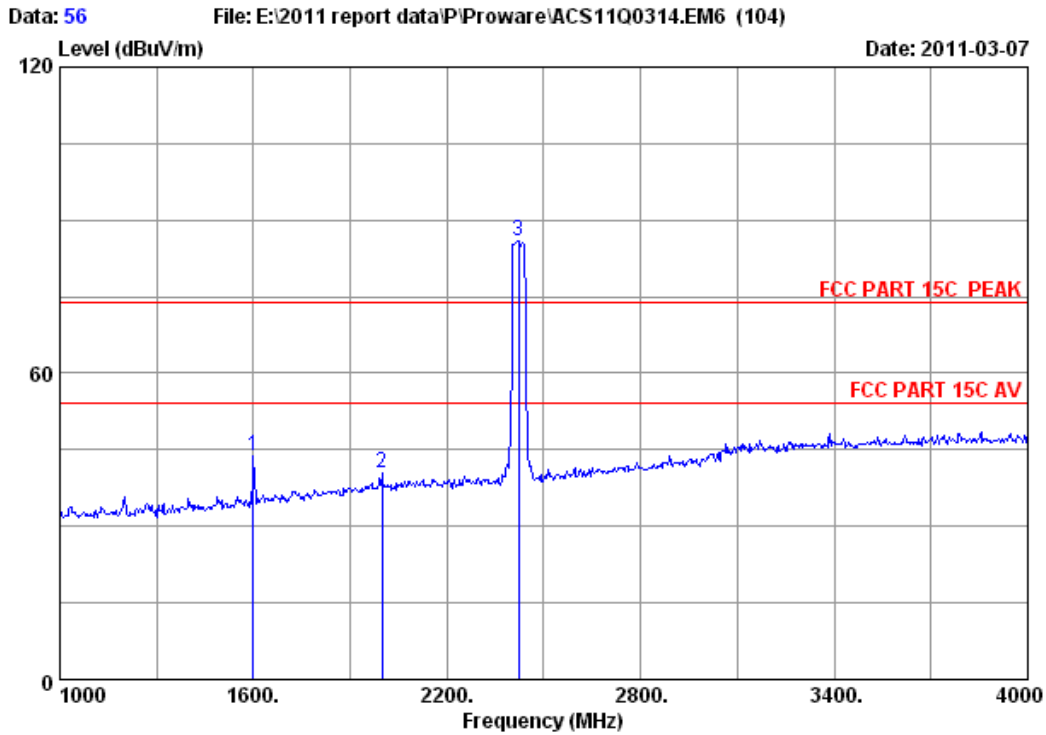
Site no. : RF Chamber Data no. : 55  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	45.34	38.77	74.00	35.23	Peak
2	1600.000	26.96	5.91	36.94	44.97	40.90	74.00	33.10	Peak
3	2422.000	29.46	7.46	36.61	98.16	98.47	74.00	-24.47	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.



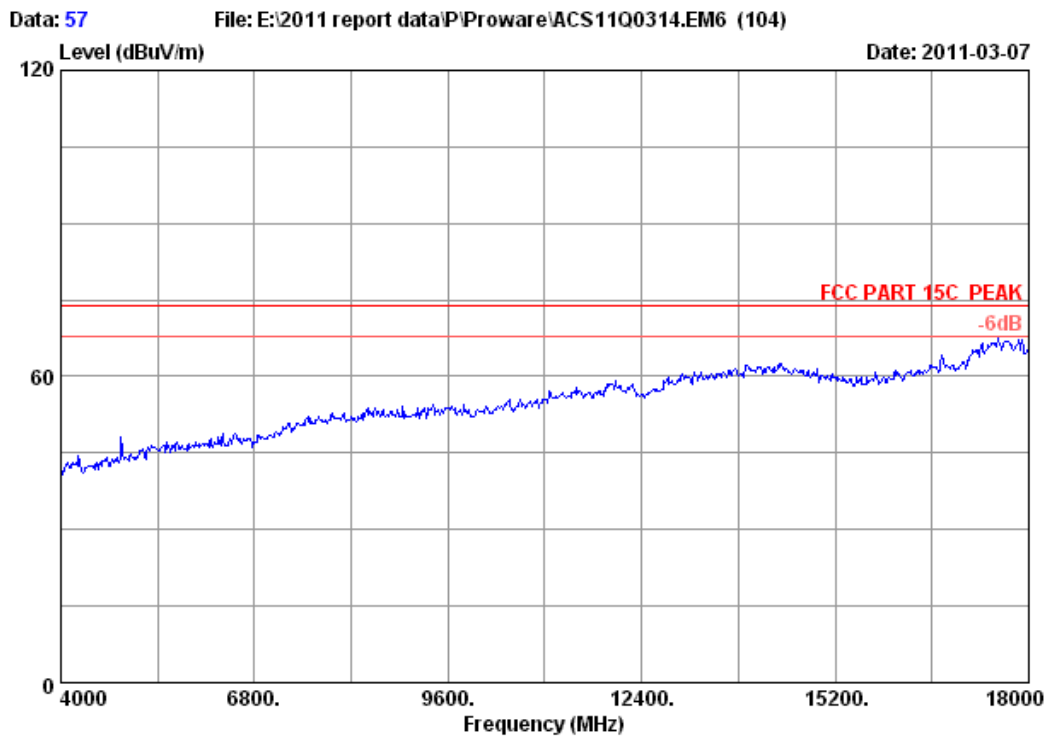


Site no. : RF Chamber Data no. : 56  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

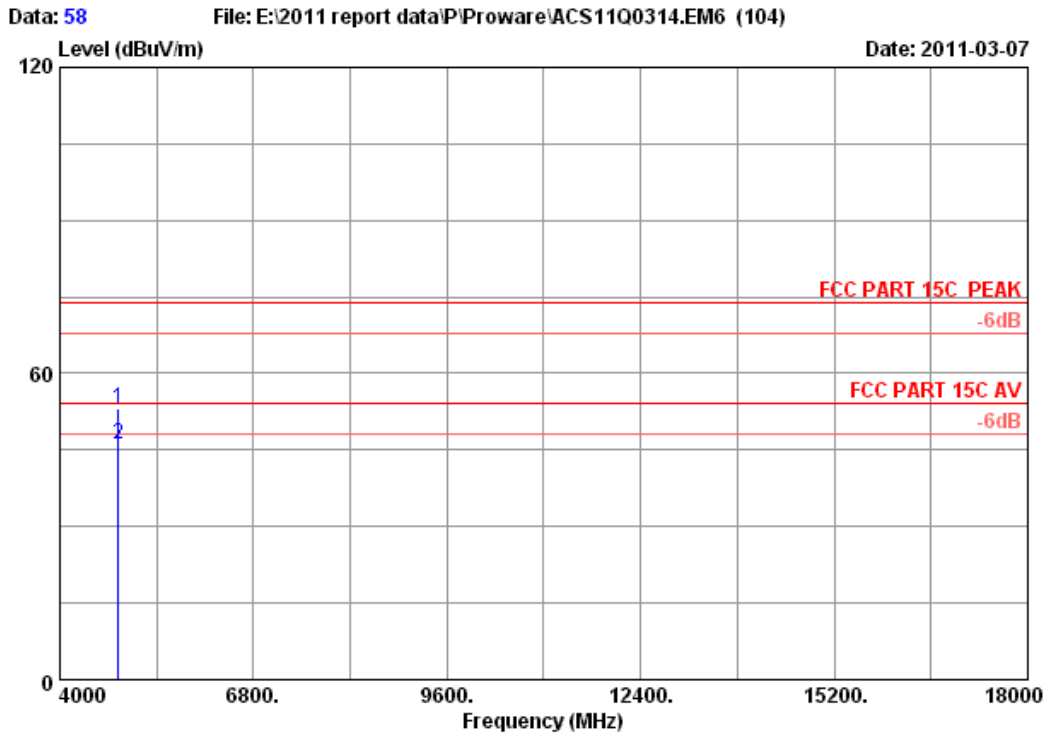
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1600.000	26.96	5.91	36.94	47.82	43.75	74.00	30.25	Peak
2	1999.000	29.20	6.63	36.70	41.21	40.34	74.00	33.66	Peak
3	2422.000	29.46	7.46	36.61	85.73	86.04	74.00	-12.04	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 57  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
M/N : PW-3G401D

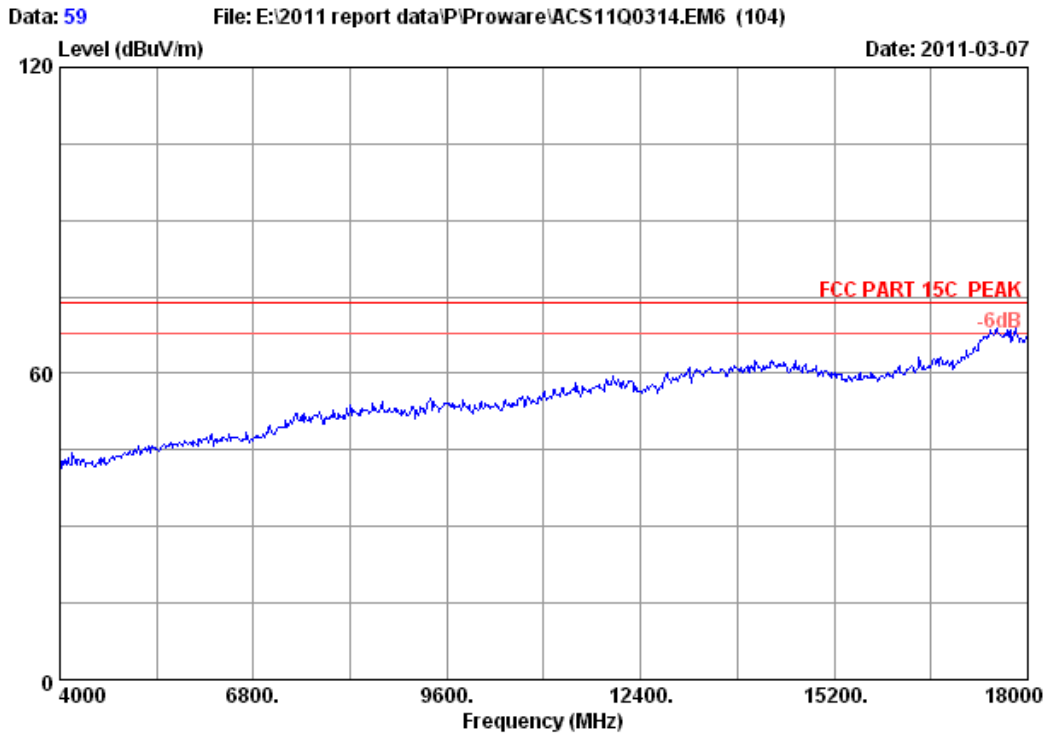


Site no. : RF Chamber Data no. : 58  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

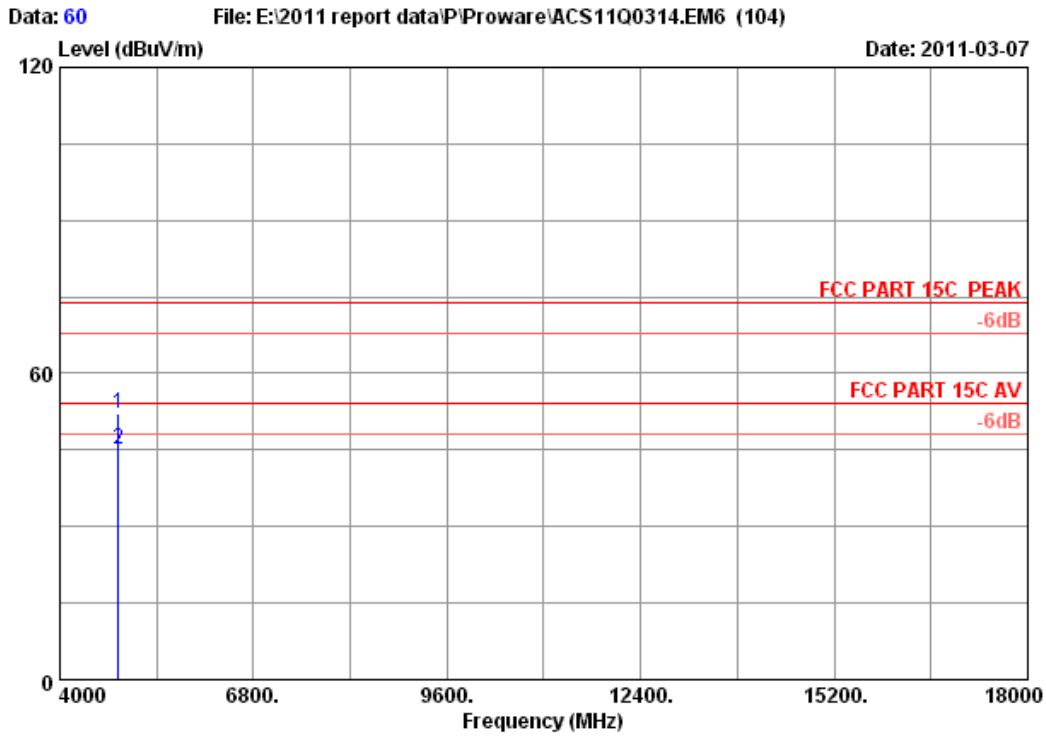
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	34.35	10.67	35.05	43.26	53.23	74.00	20.77	Peak
2	4844.000	34.35	10.67	35.05	36.18	46.15	54.00	7.85	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 59  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
M/N : PW-3G401D

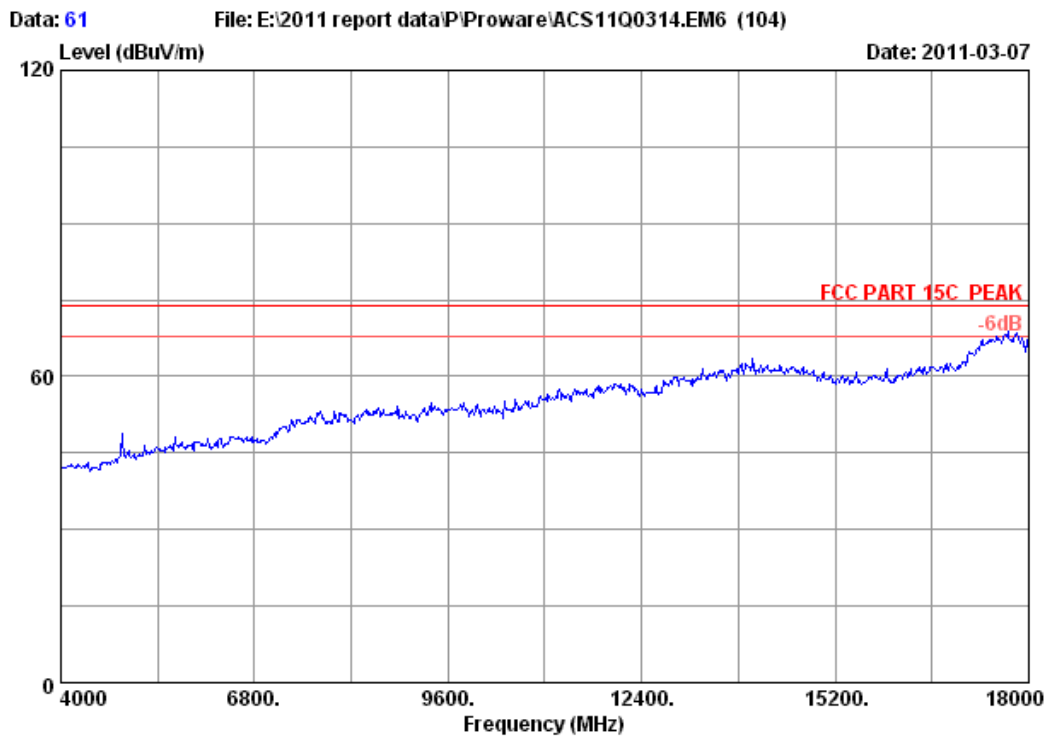


Site no. : RF Chamber Data no. : 60  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

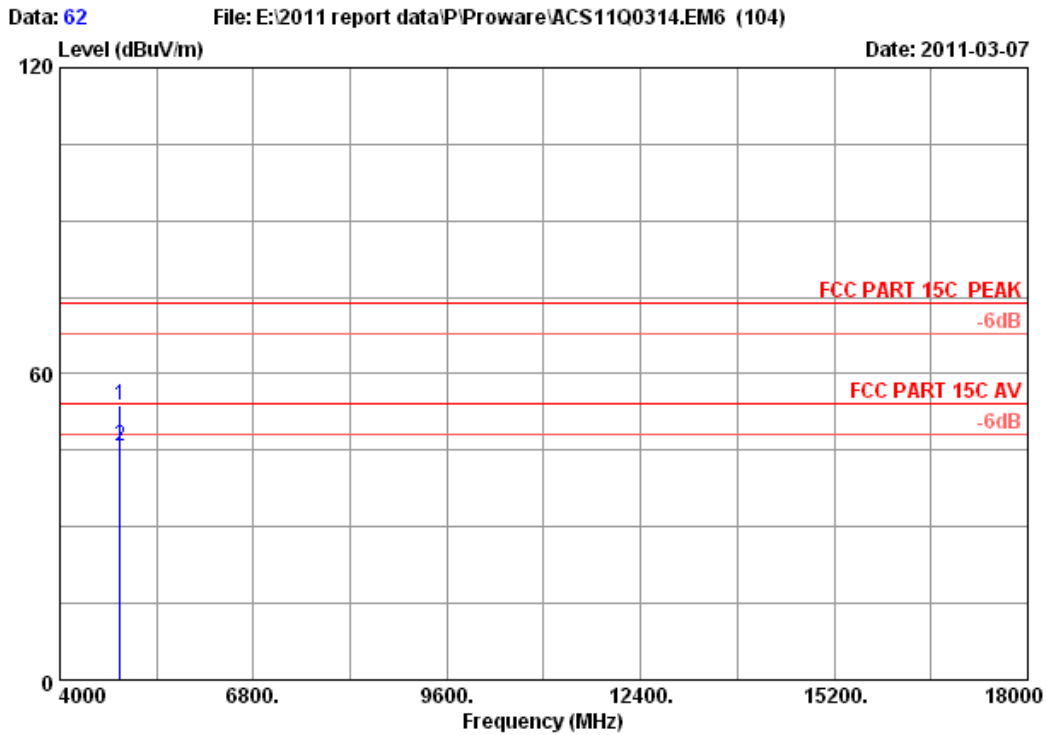
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	34.35	10.67	35.05	42.16	52.13	74.00	21.87	Peak
2	4844.000	34.35	10.67	35.05	35.10	45.07	54.00	8.93	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 61  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx  
M/N : PW-3G401D

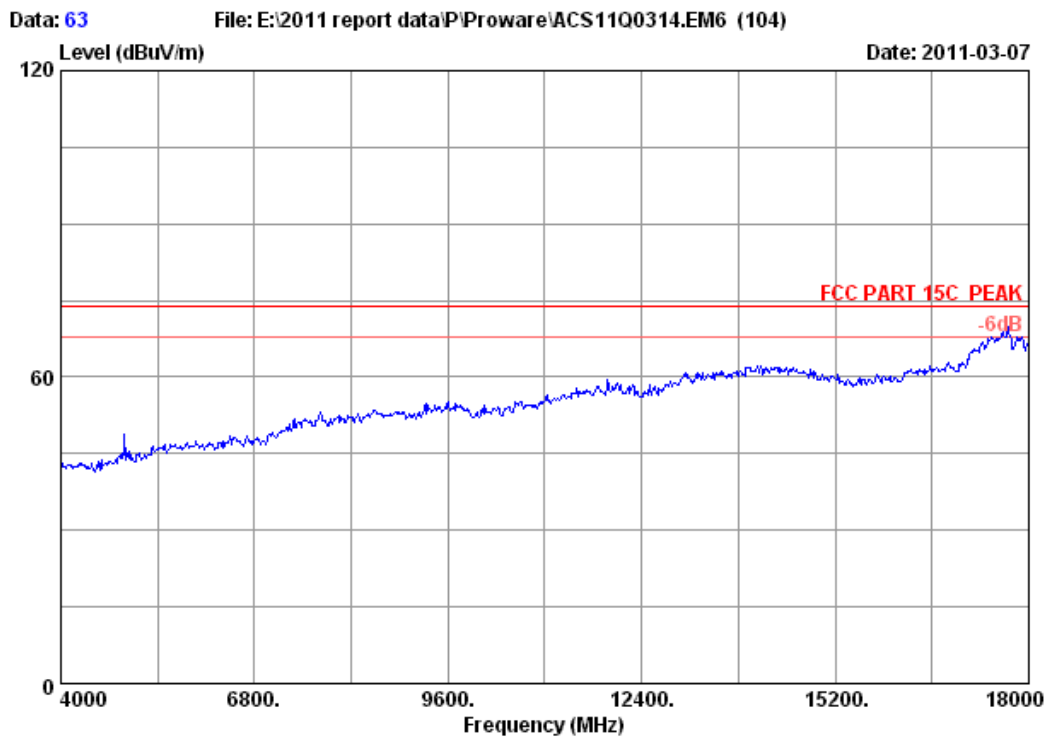


Site no. : RF Chamber Data no. : 62  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH4 2437MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	43.64	53.71	74.00	20.29	Peak
2	4874.000	34.41	10.69	35.03	35.68	45.75	54.00	8.25	Average

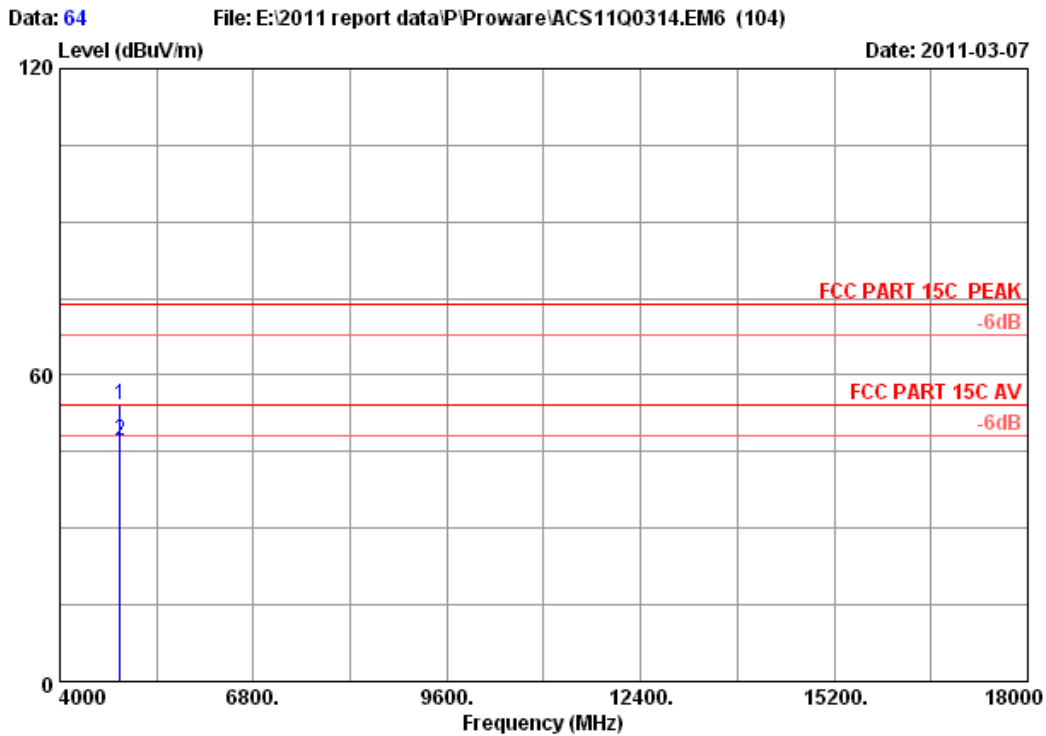
Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 63  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH4 2437MHz Tx  
M/N : PW-3G401D

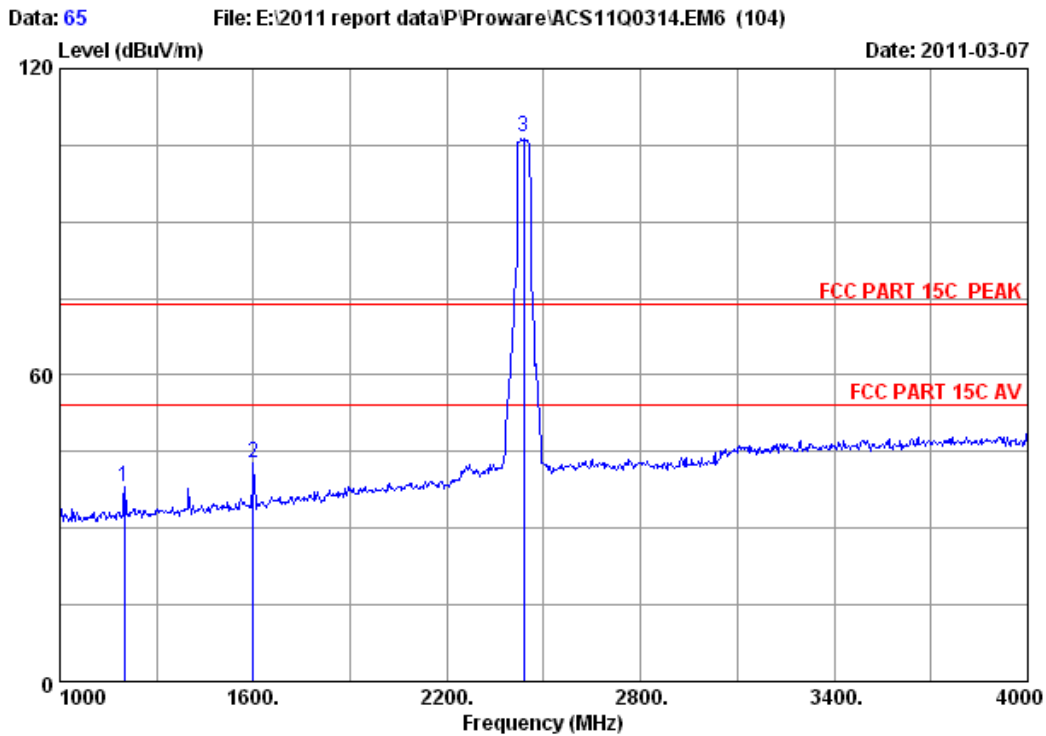




Site no. : RF Chamber Data no. : 64  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH4 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.41	10.69	35.03	44.01	54.08	74.00	19.92	Peak
2	4874.000	34.41	10.69	35.03	37.15	47.22	54.00	6.78	Average

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



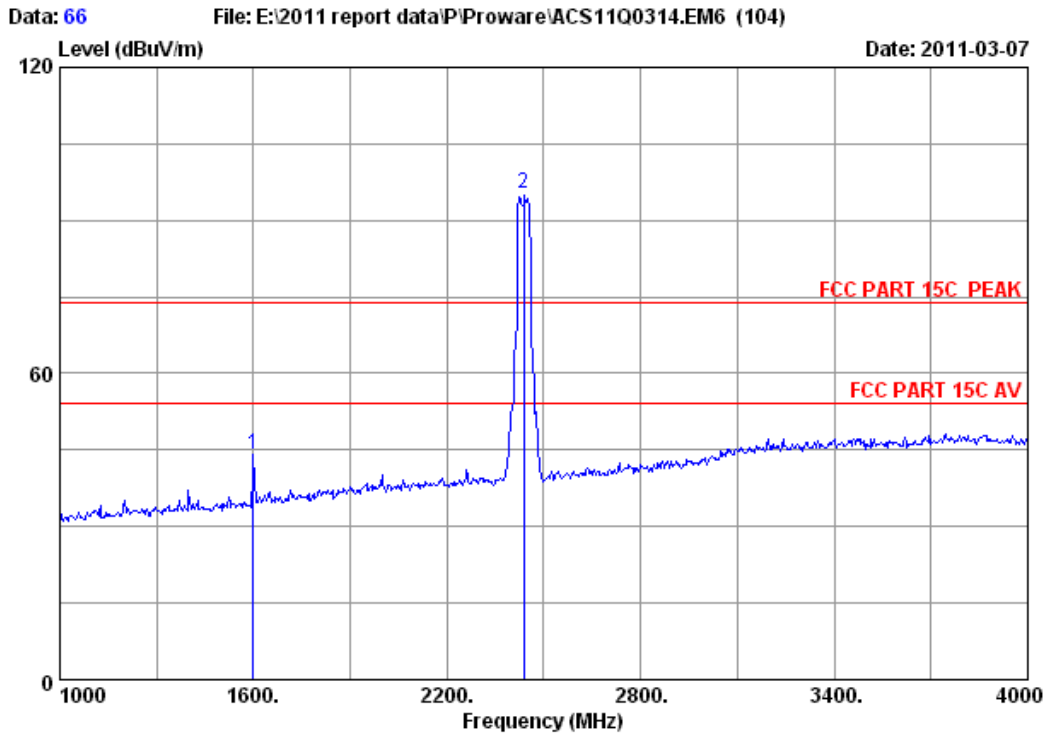
```

Site no.      : RF Chamber           Data no. : 65
Dis. / Ant.   : 3m 3115(0911)        Ant. pol. : VERTICAL
Limit        : FCC PART 15C PEAK
Env. / Ins.   : 23*C/54%            Engineer  : Sunny-lu
EUT          : 3G Wireless Lite-N Router
Power        : DC 12V From Adapter Input AC 120V/60Hz
Test mode    : IEEE802.11n HT40 CH4 2437MHz Tx
M/N         : PW-3G401D
    
```

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	44.70	38.13	74.00	35.87	Peak
2	1600.000	26.96	5.91	36.94	46.91	42.84	74.00	31.16	Peak
3	2437.000	29.47	7.46	36.61	106.18	106.50	74.00	-32.50	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

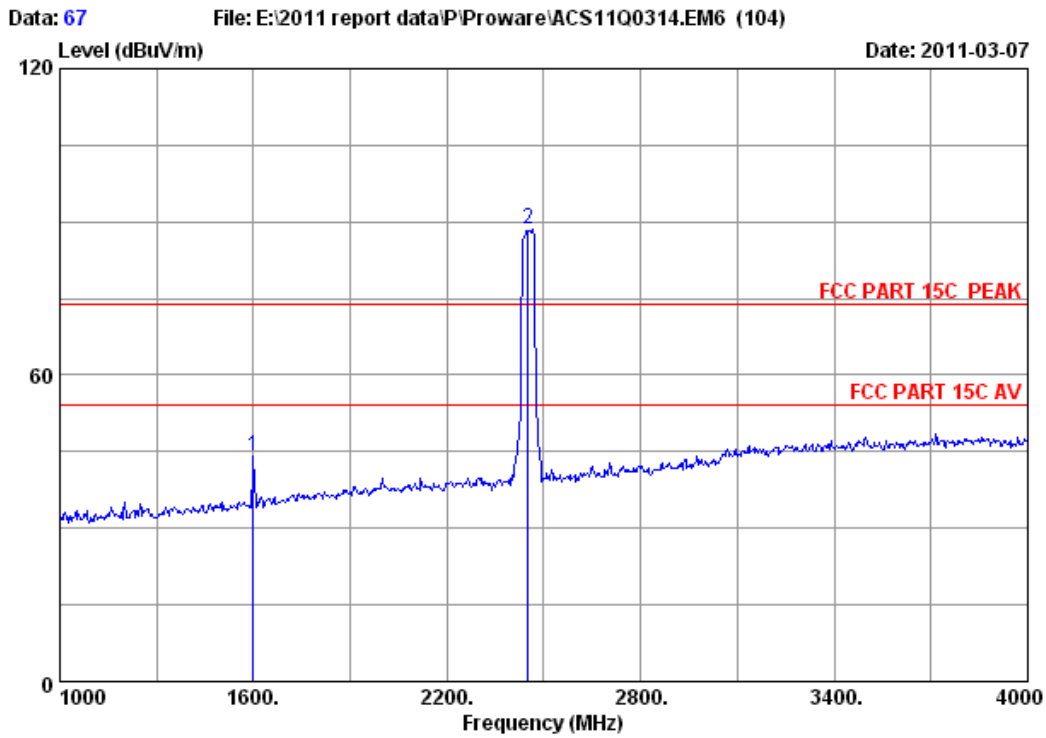


Site no. : RF Chamber Data no. : 66  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH4 2437MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1600.000	26.96	5.91	36.94	48.08	44.01	74.00	29.99	Peak
2	2437.000	29.47	7.46	36.61	94.78	95.10	74.00	-21.10	Peak

Remarks:

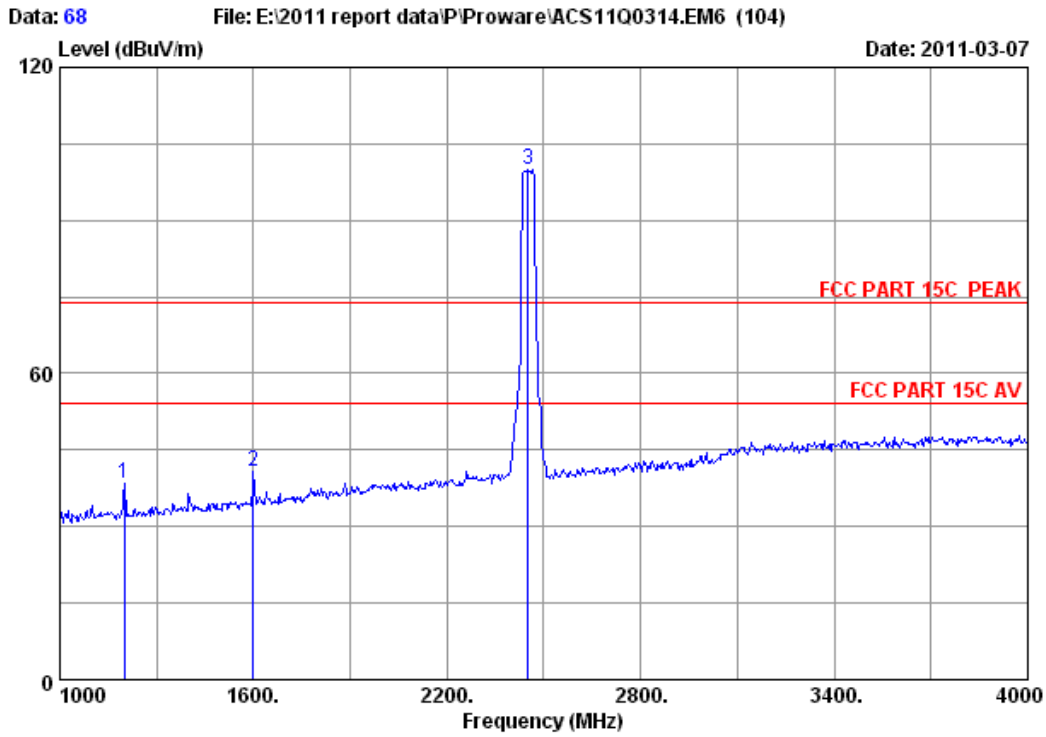
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 67  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1600.000	26.96	5.91	36.94	48.16	44.09	74.00	29.91	Peak
2	2452.000	29.47	7.50	36.61	88.21	88.57	74.00	-14.57	Peak

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

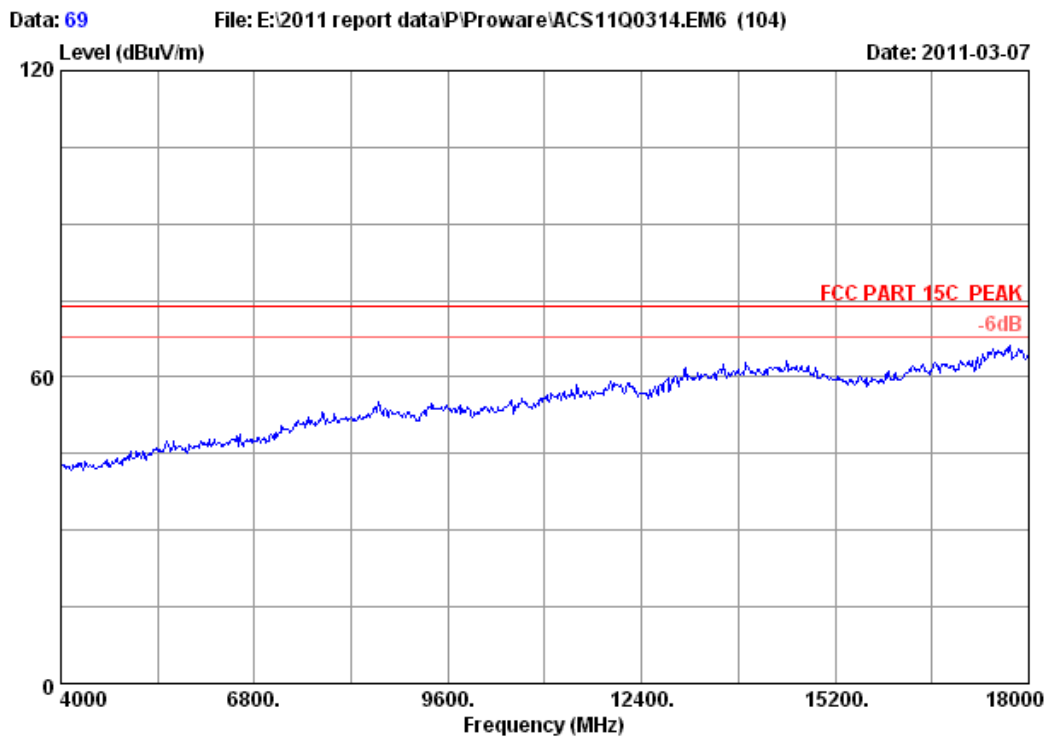


Site no. : RF Chamber Data no. : 68  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

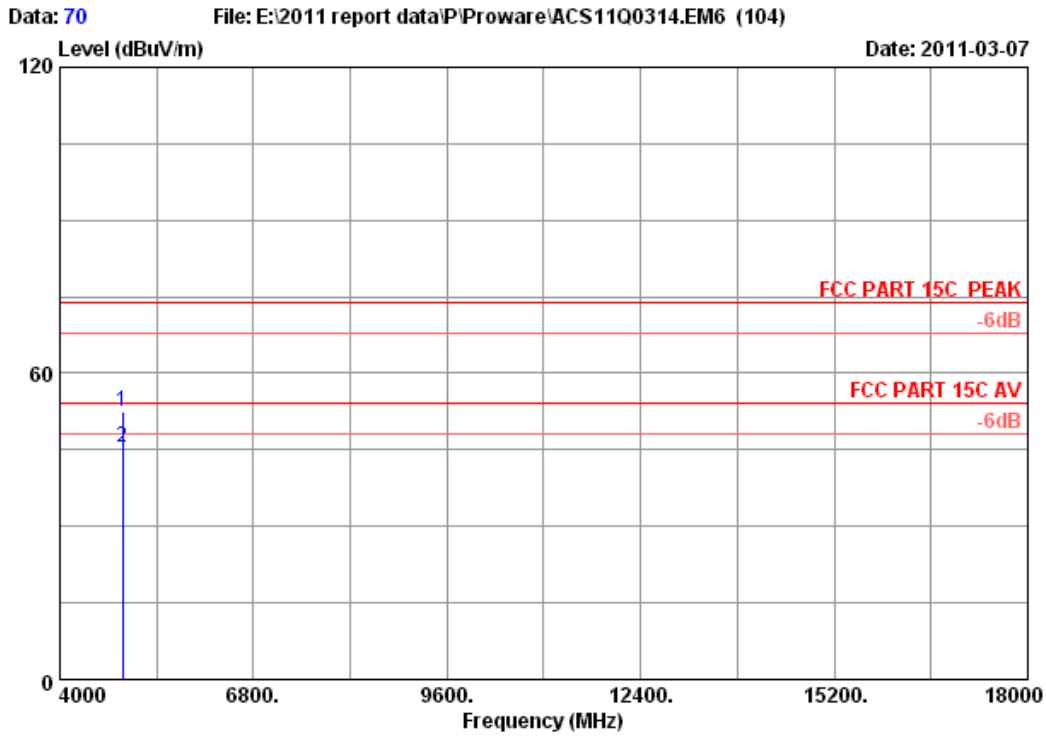
	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1201.000	25.81	5.16	37.54	44.99	38.42	74.00	35.58	Peak
2	1600.000	26.96	5.91	36.94	44.97	40.90	74.00	33.10	Peak
3	2452.000	29.47	7.50	36.61	99.49	99.85	74.00	-25.85	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 69  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
M/N : PW-3G401D

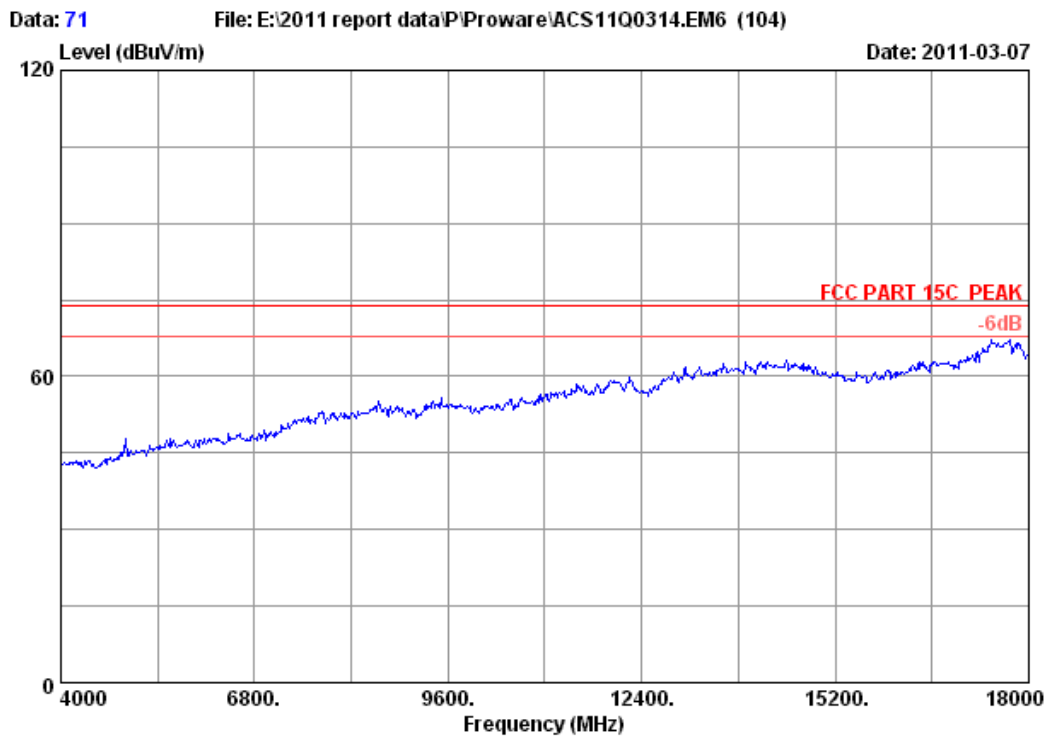


Site no. : RF Chamber Data no. : 70  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	4904.000	34.46	10.74	35.00	42.16	52.36	74.00	21.64	Peak
2	4904.000	34.46	10.74	35.00	35.19	45.39	54.00	8.61	Average

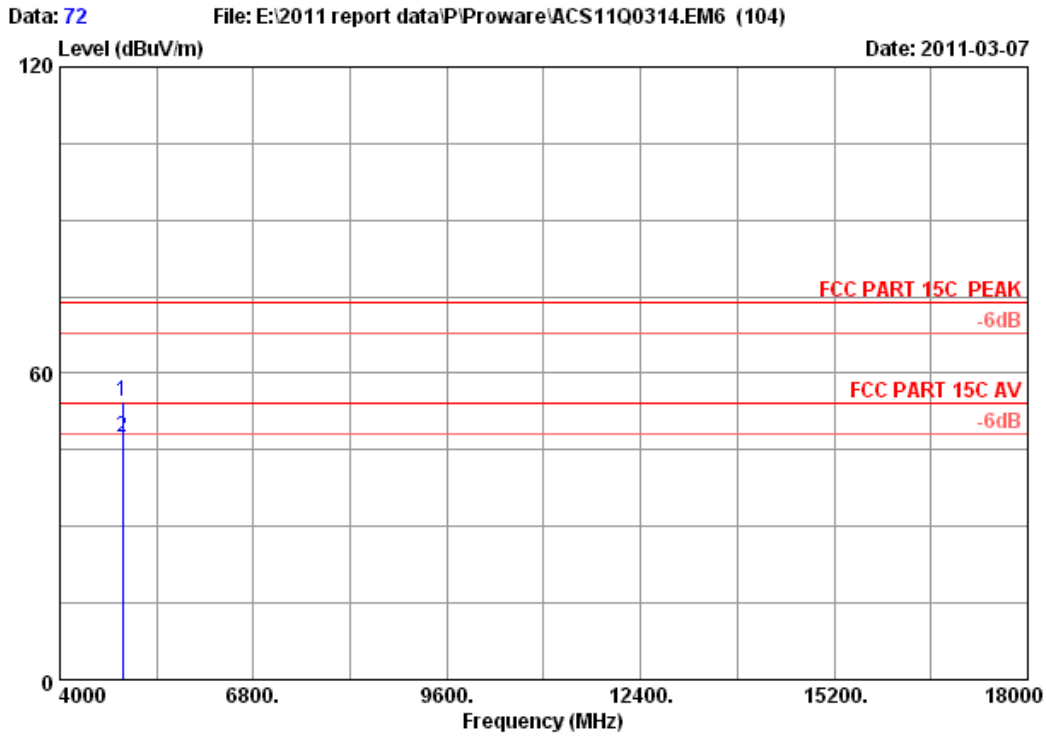
Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 71  
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
EUT : 3G Wireless Lite-N Router  
Power : DC 12V From Adapter Input AC 120V/60Hz  
Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
M/N : PW-3G401D





Site no. : RF Chamber Data no. : 72  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.000	34.46	10.74	35.00	44.23	54.43	74.00	19.57	Peak
2	4904.000	34.46	10.74	35.00	37.12	47.32	54.00	6.68	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

## 5. CONDUCTED SPURIOUS EMISSIONS

### 5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year

### 5.2. Limit

In any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

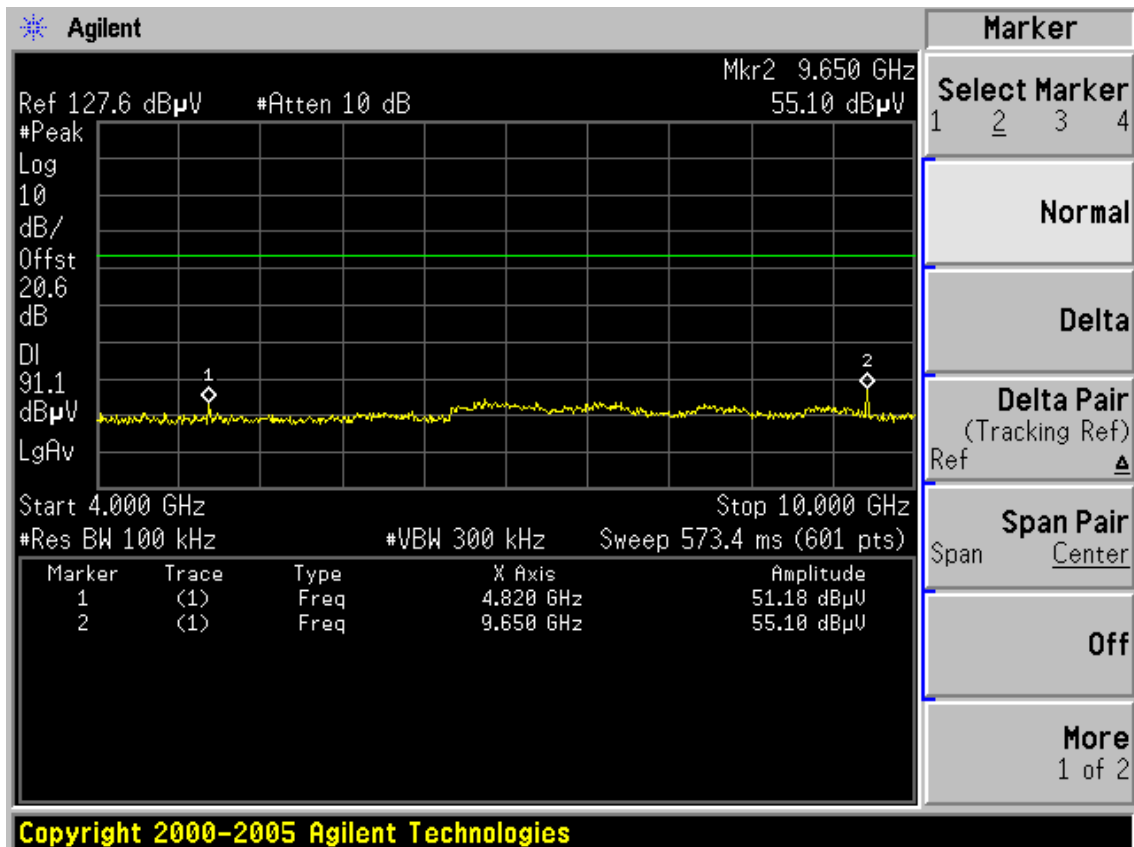
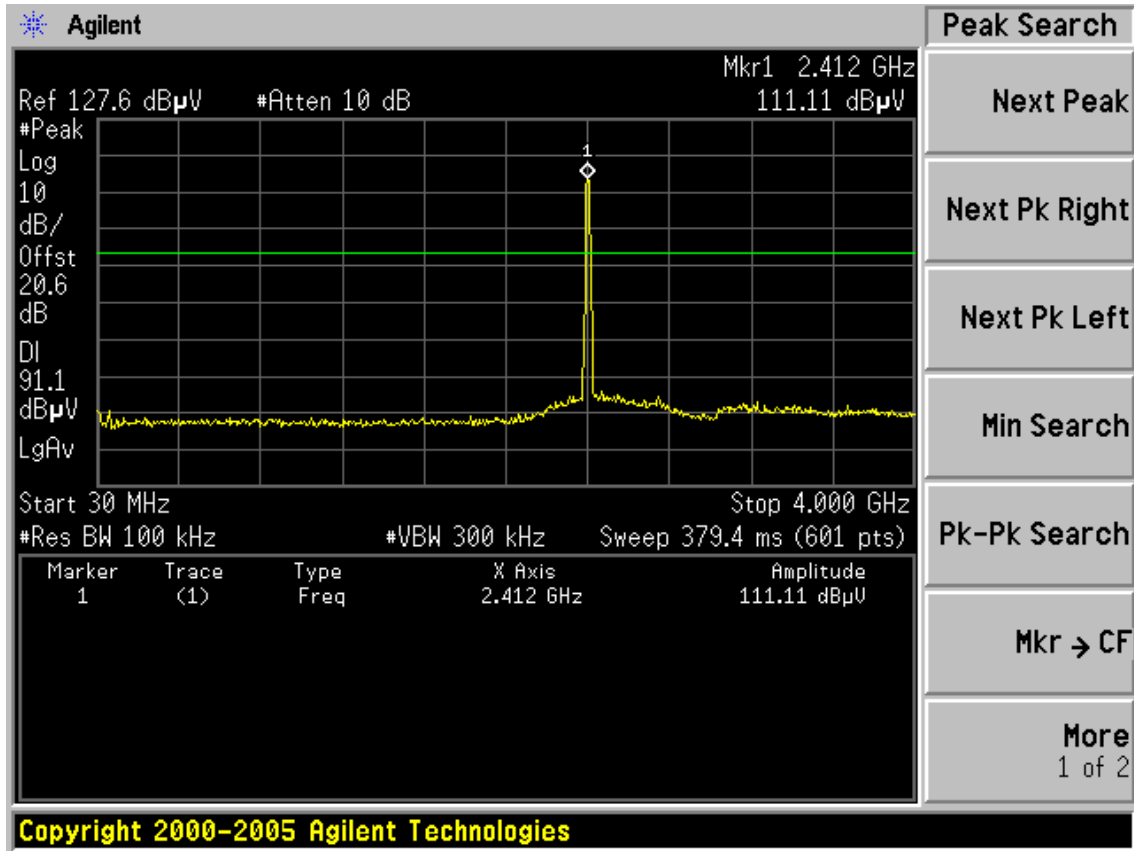
### 5.3. Test Procedure

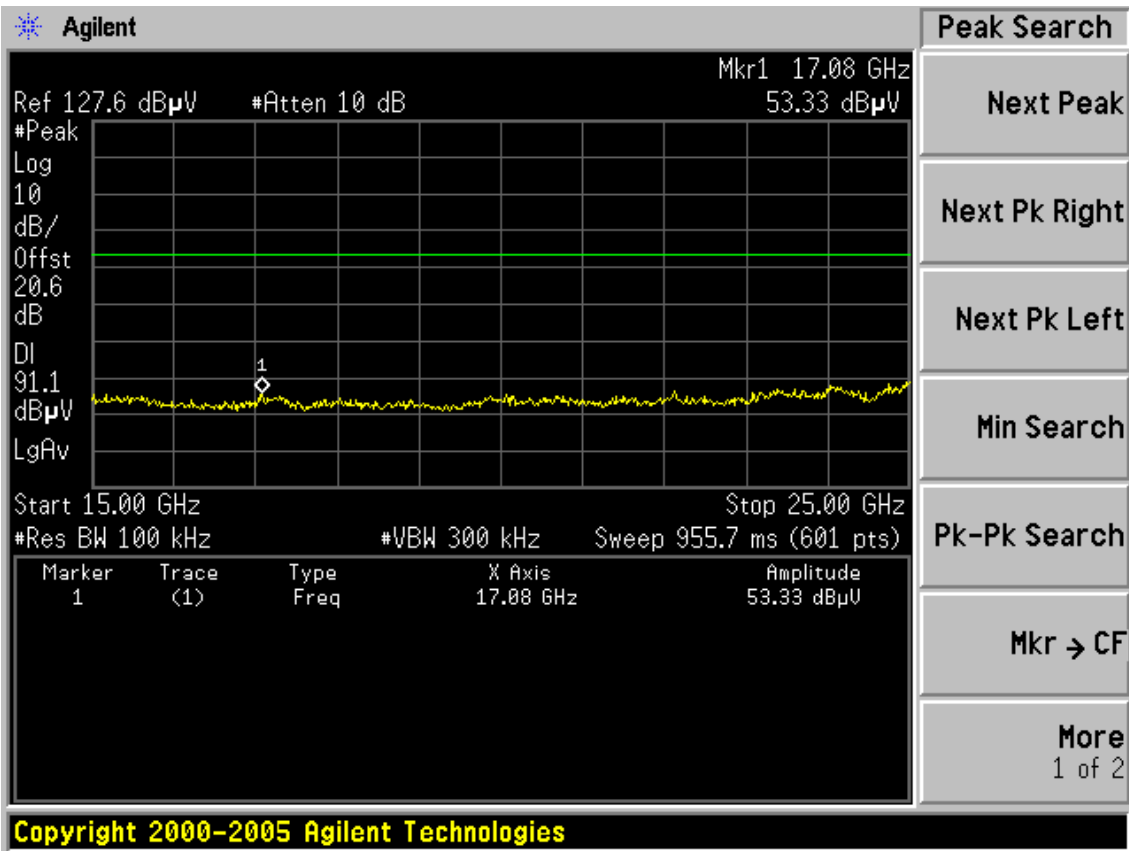
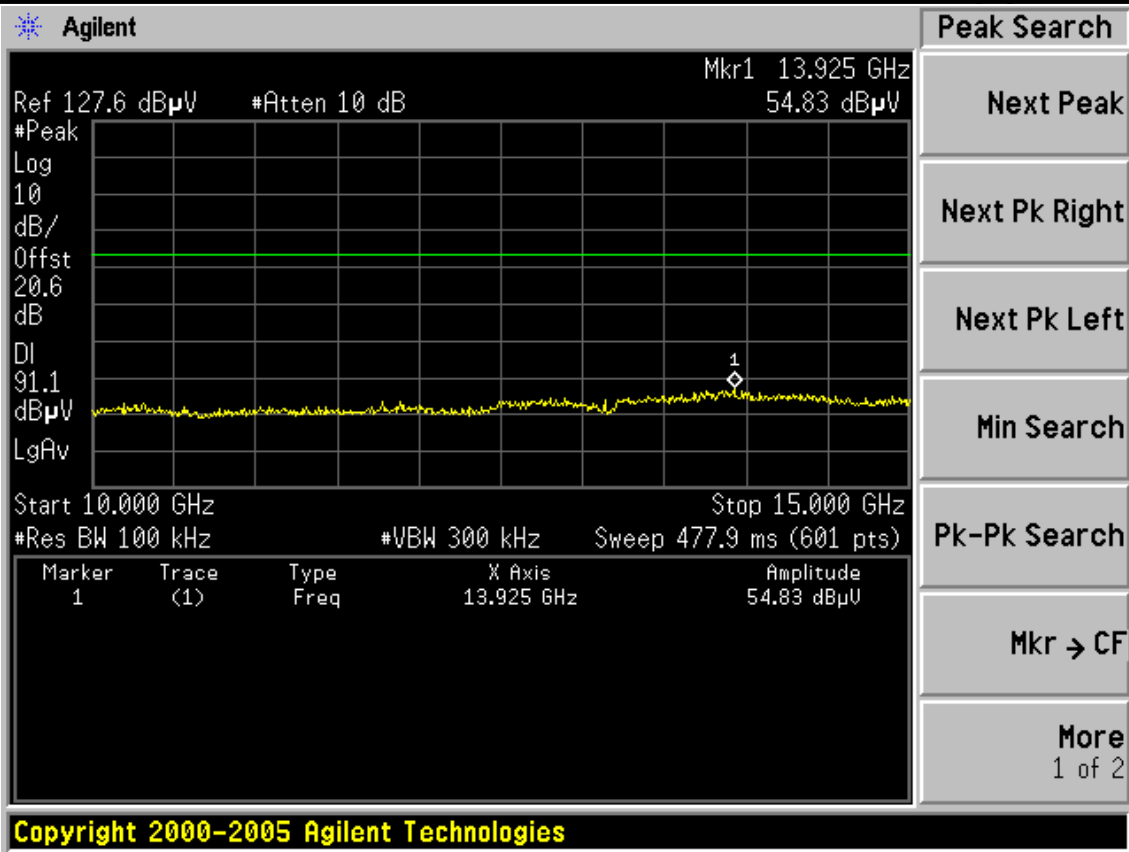
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

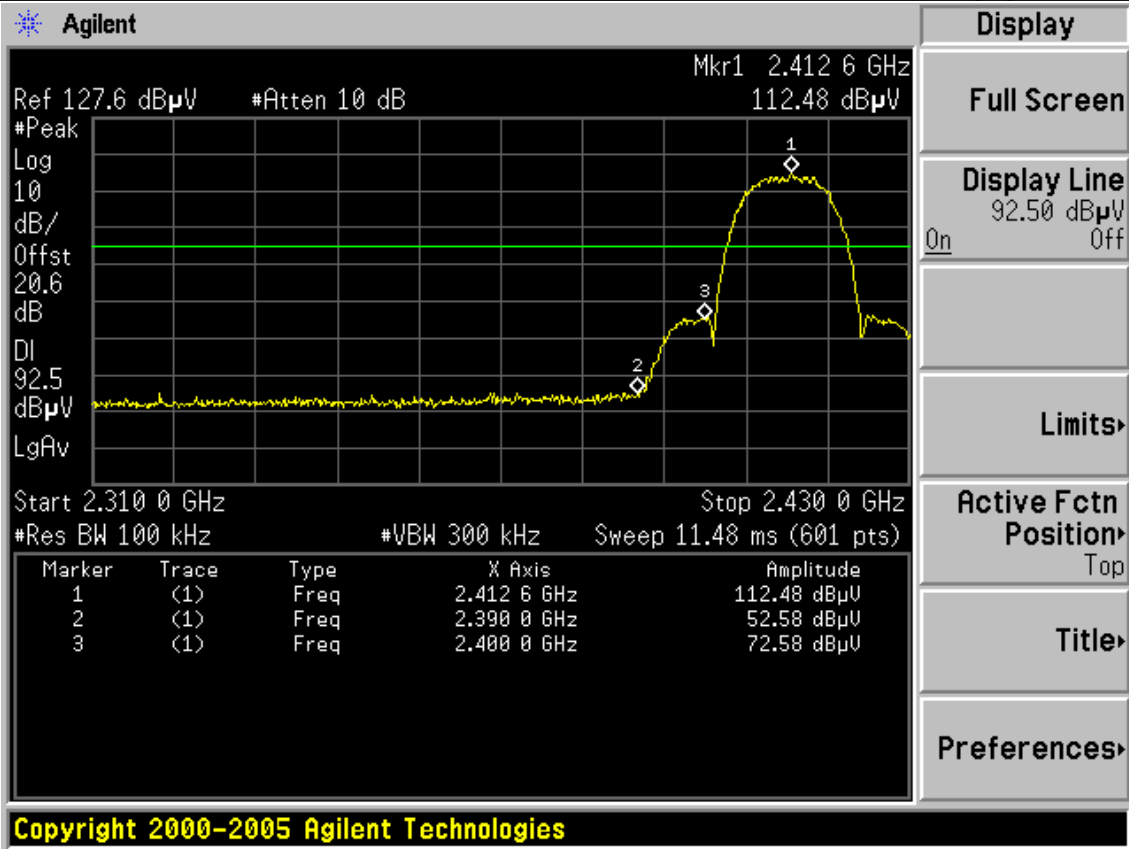
### 5.4. Test result

**PASS** (The testing data was attached in the next pages.)

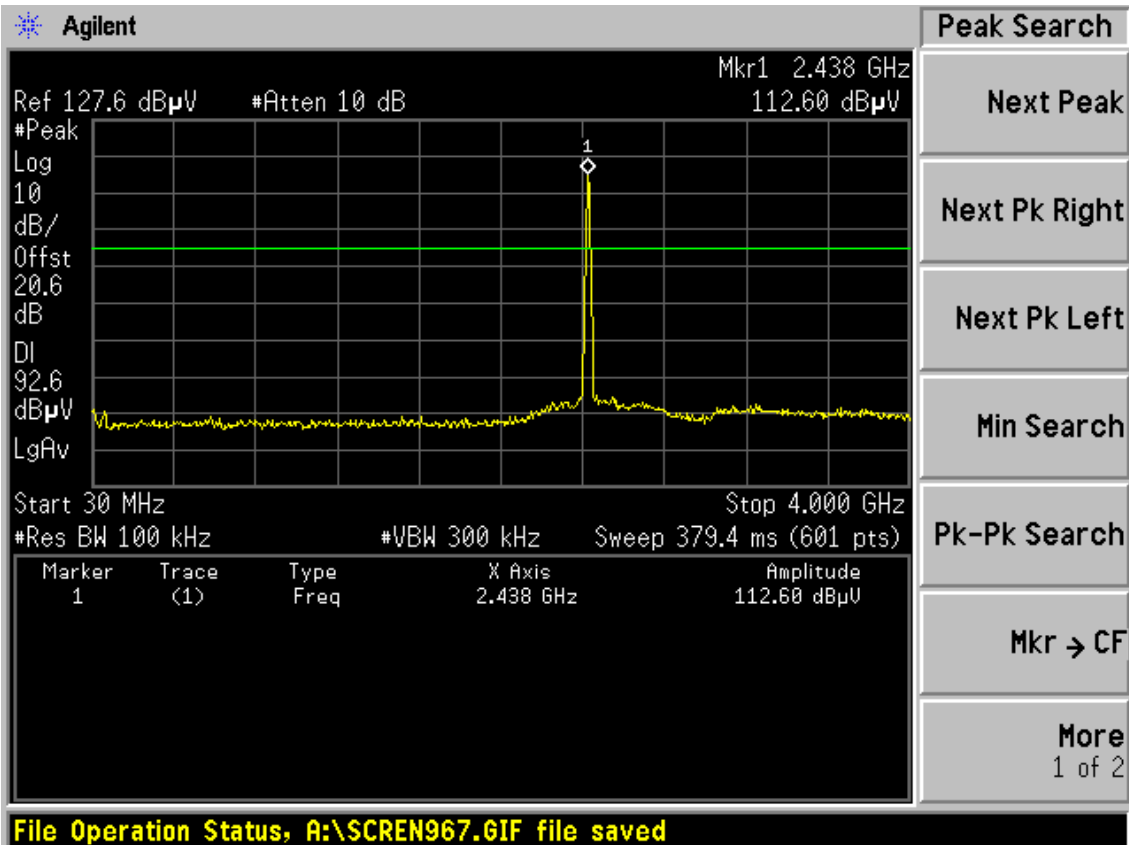
Test Mode: IEEE 802.11b TX  
CH1

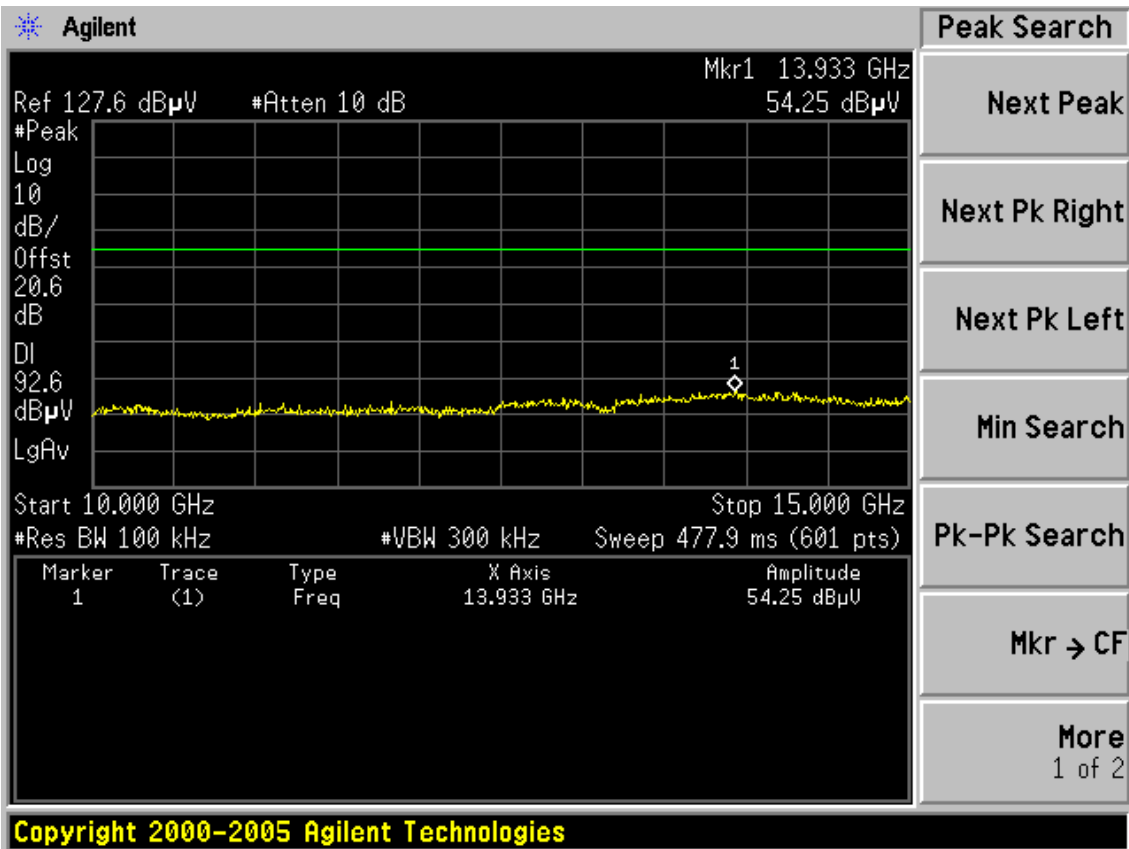
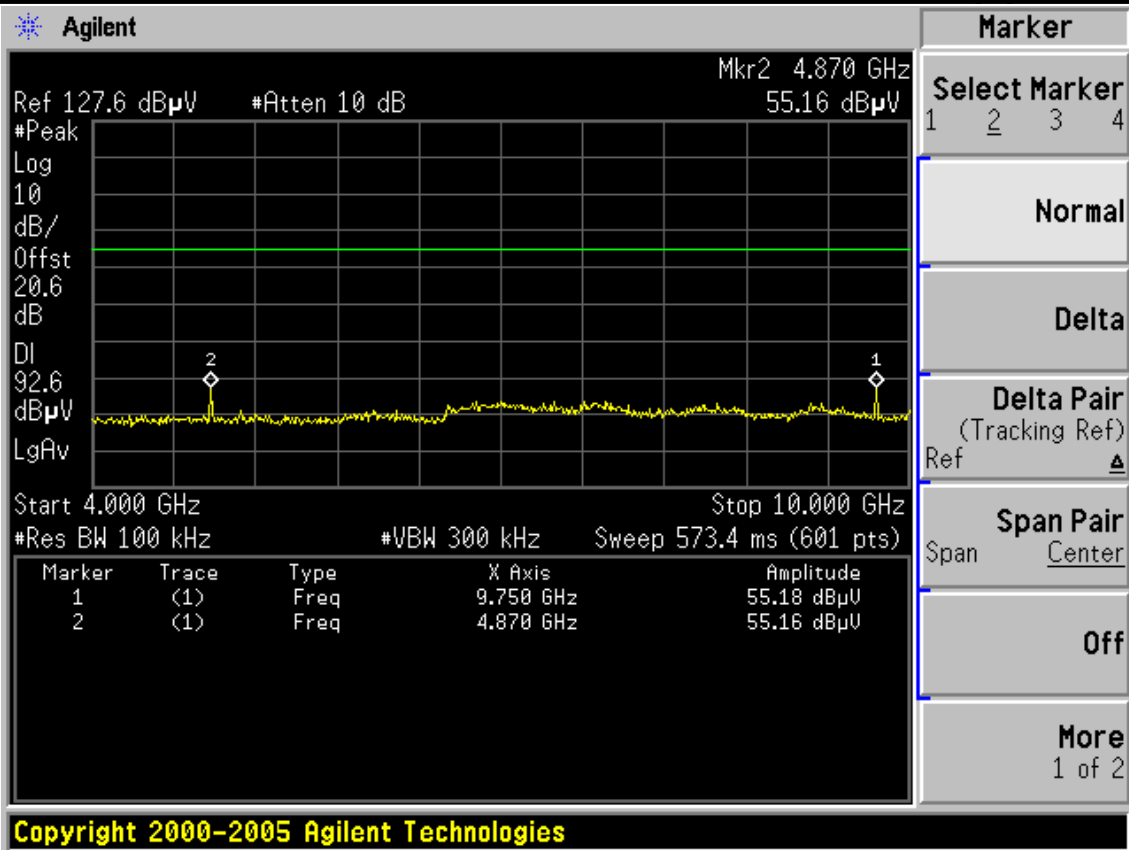


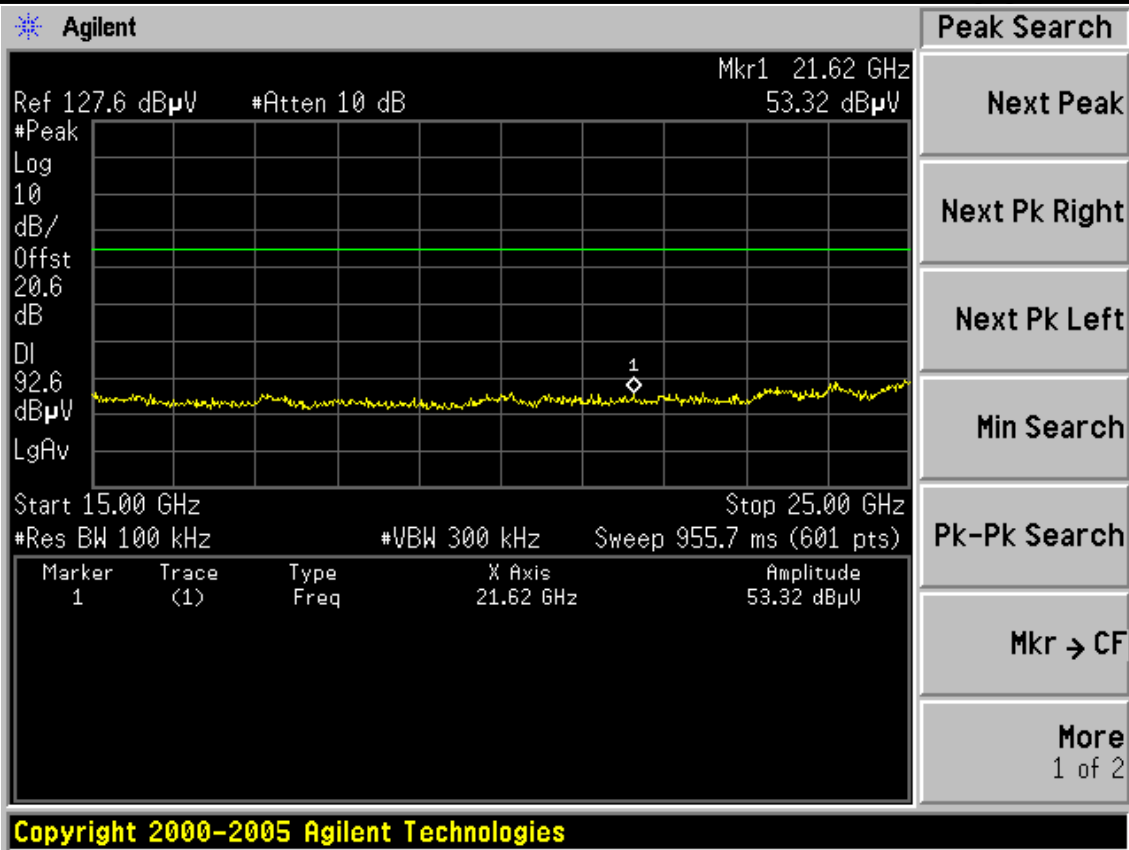




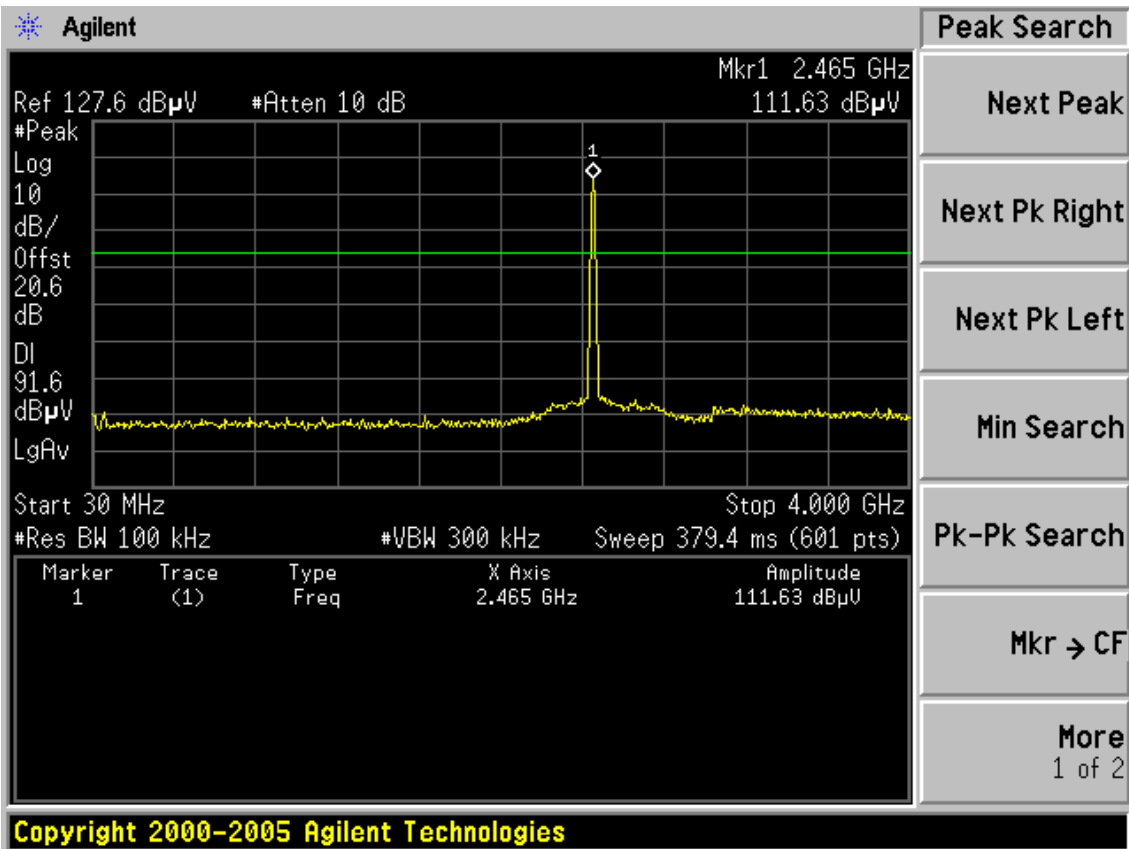
CH6

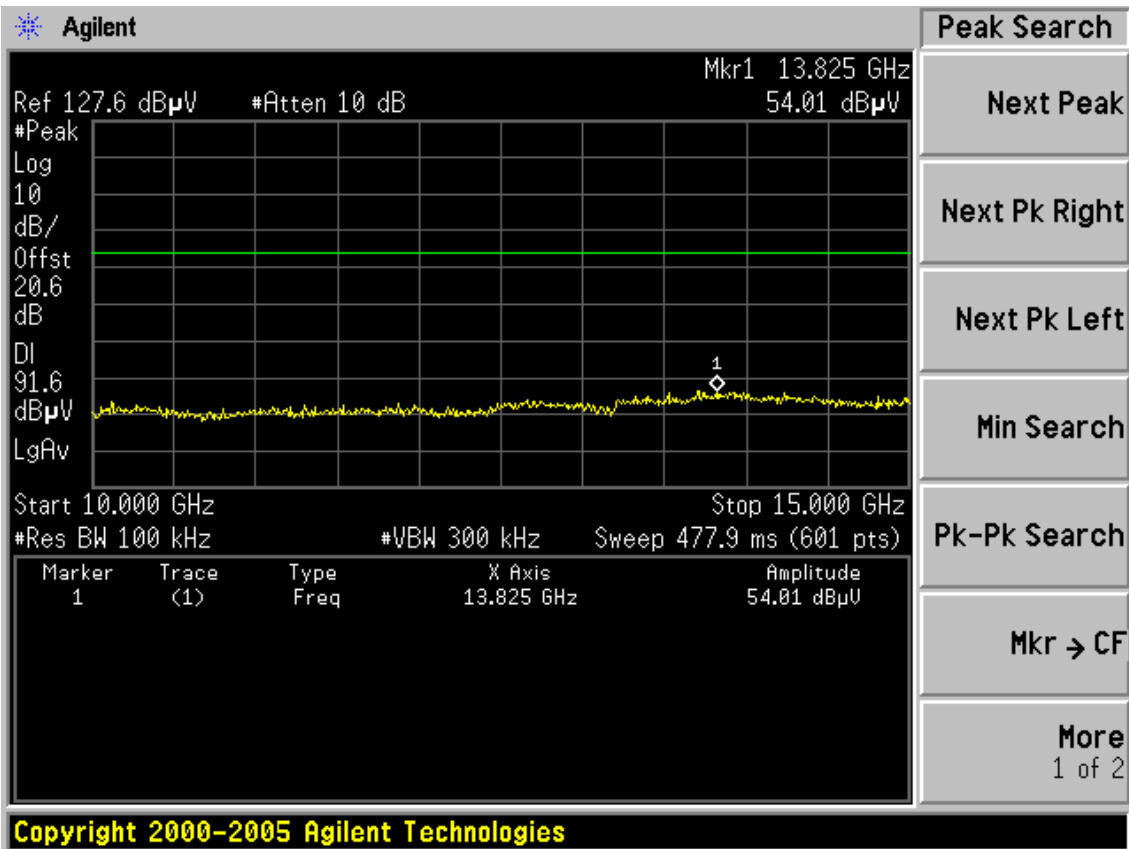
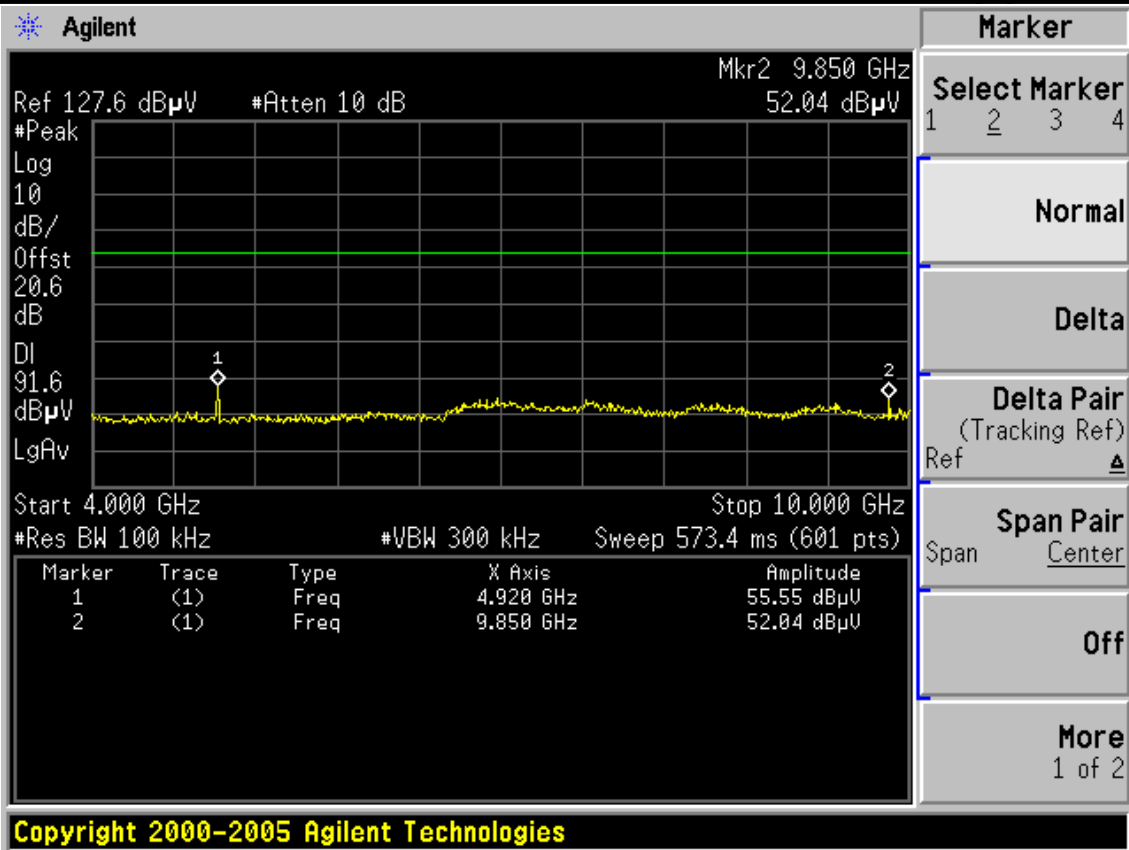






CH11







Agilent

Ref 127.6 dBµV #Atten 10 dB Mkr1 20.83 GHz 53.17 dBµV

#Peak Log 10 dB/ Offst 20.6 dB DI 91.6 dBµV LgAv

Start 15.00 GHz Stop 25.00 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 955.7 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	20.83 GHz	53.17 dBµV

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Min Search

Pk-Pk Search

Mkr → CF

More  
1 of 2

Copyright 2000-2005 Agilent Technologies

Agilent

Ref 127.6 dBµV #Atten 10 dB Mkr3 2.500 00 GHz 50.81 dBµV

#Peak Log 10 dB/ Offst 20.6 dB DI 92.1 dBµV LgAv

Start 2.450 00 GHz Stop 2.505 00 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.28 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.462 74 GHz	112.05 dBµV
2	(1)	Freq	2.483 50 GHz	53.07 dBµV
3	(1)	Freq	2.500 00 GHz	50.81 dBµV

Marker

Select Marker  
1 2 3 4

Normal

Delta

Delta Pair  
(Tracking Ref)  
Ref ▲

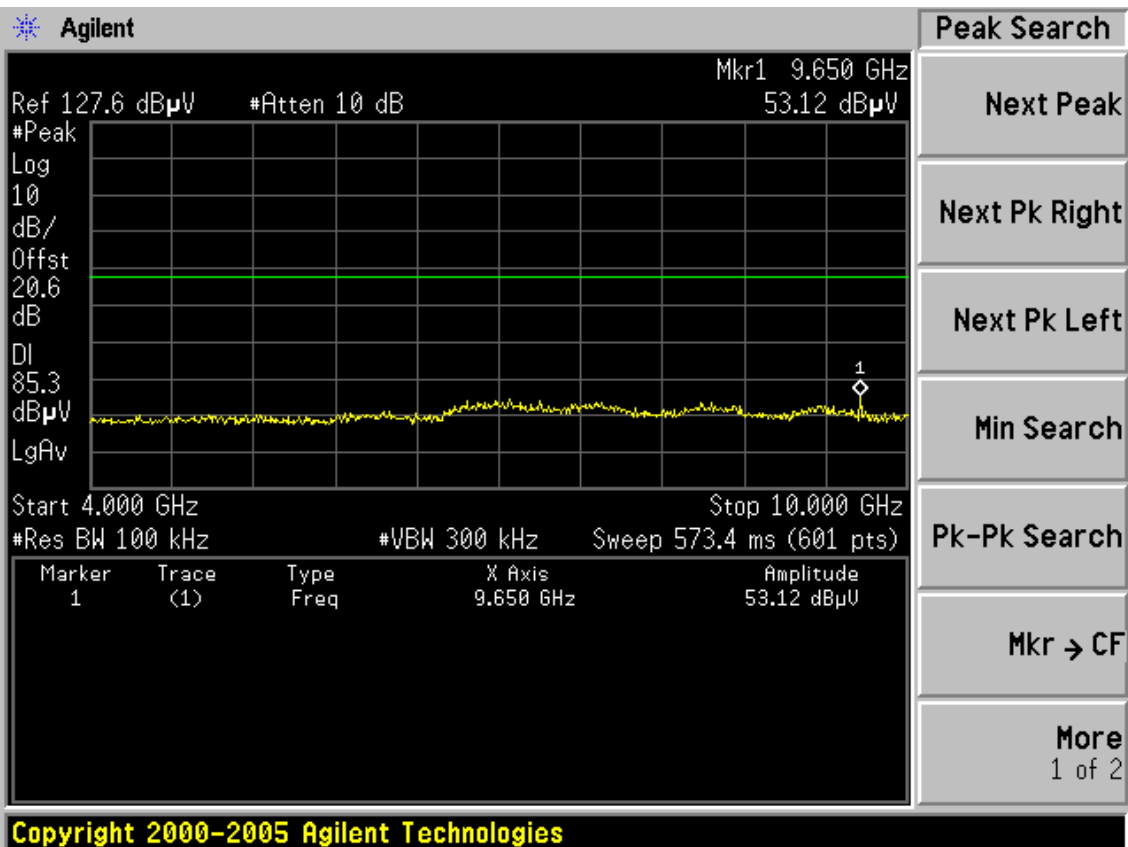
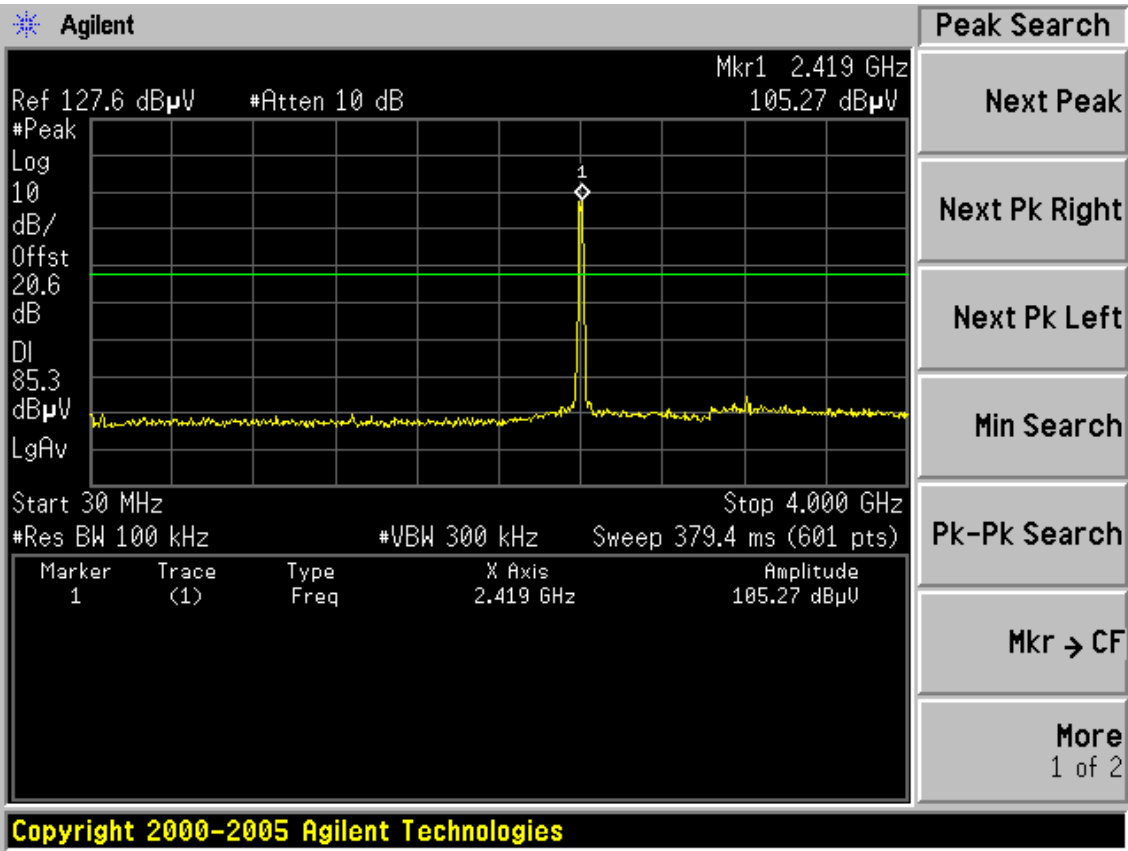
Span Pair  
Span Center

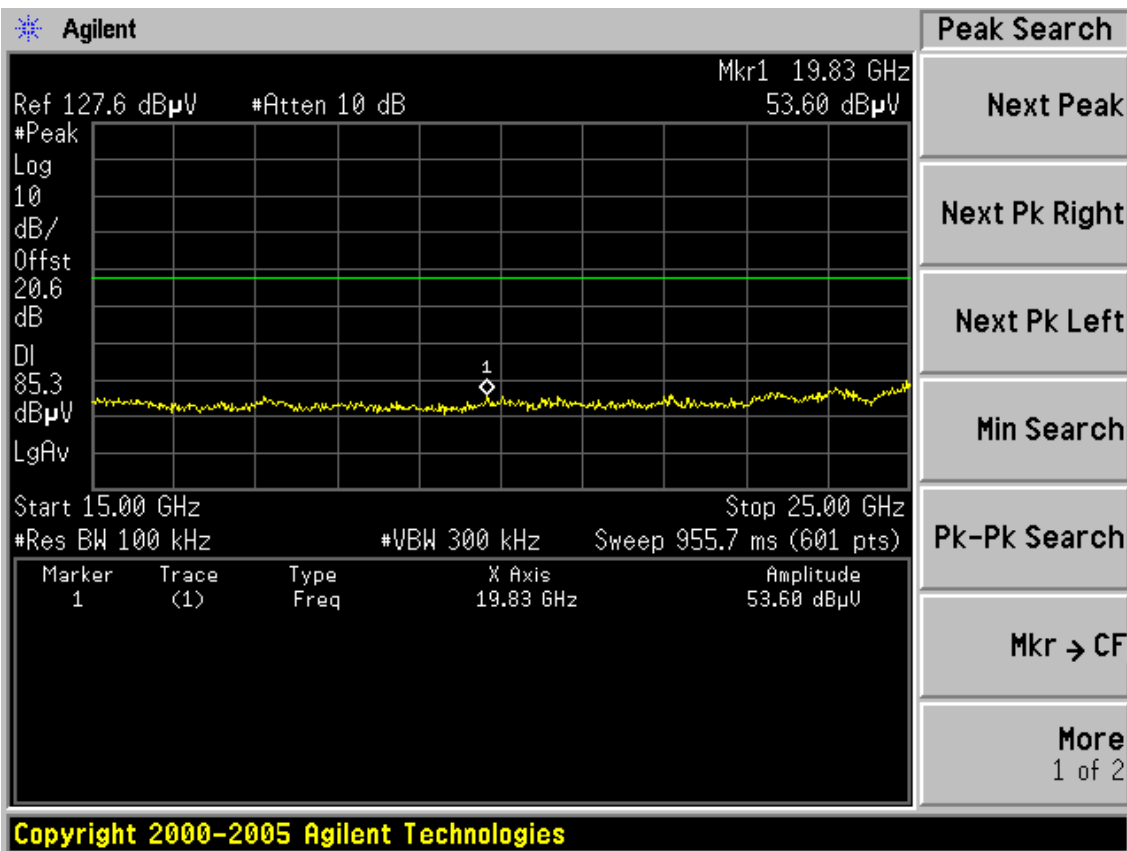
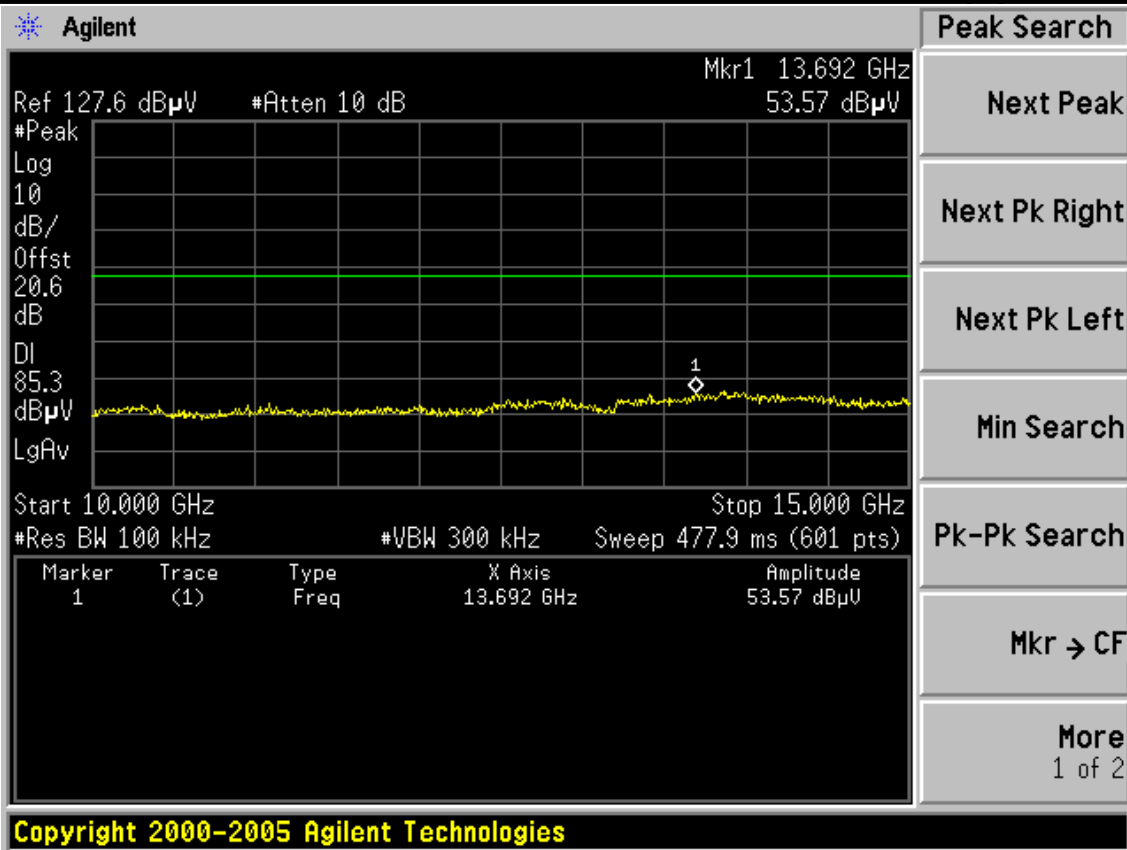
Off

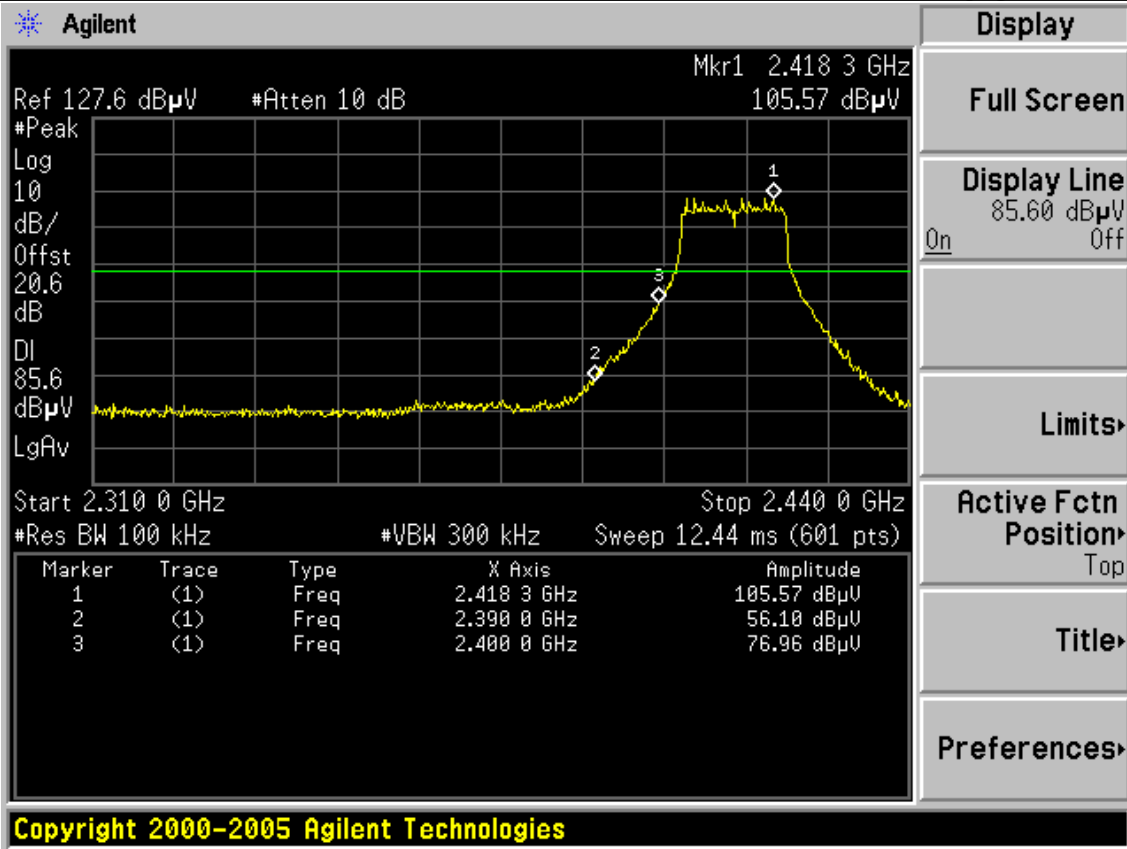
More  
1 of 2

Copyright 2000-2005 Agilent Technologies

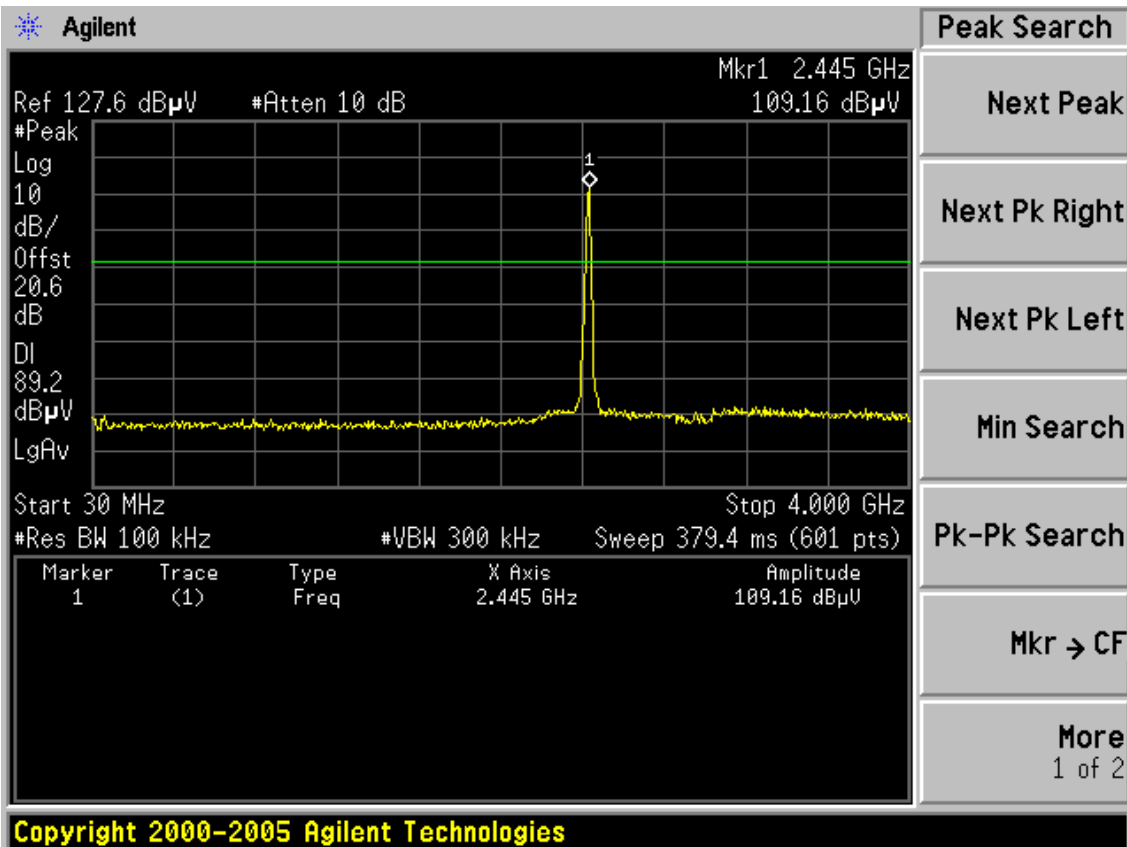
Test Mode: IEEE 802.11g TX  
CH1

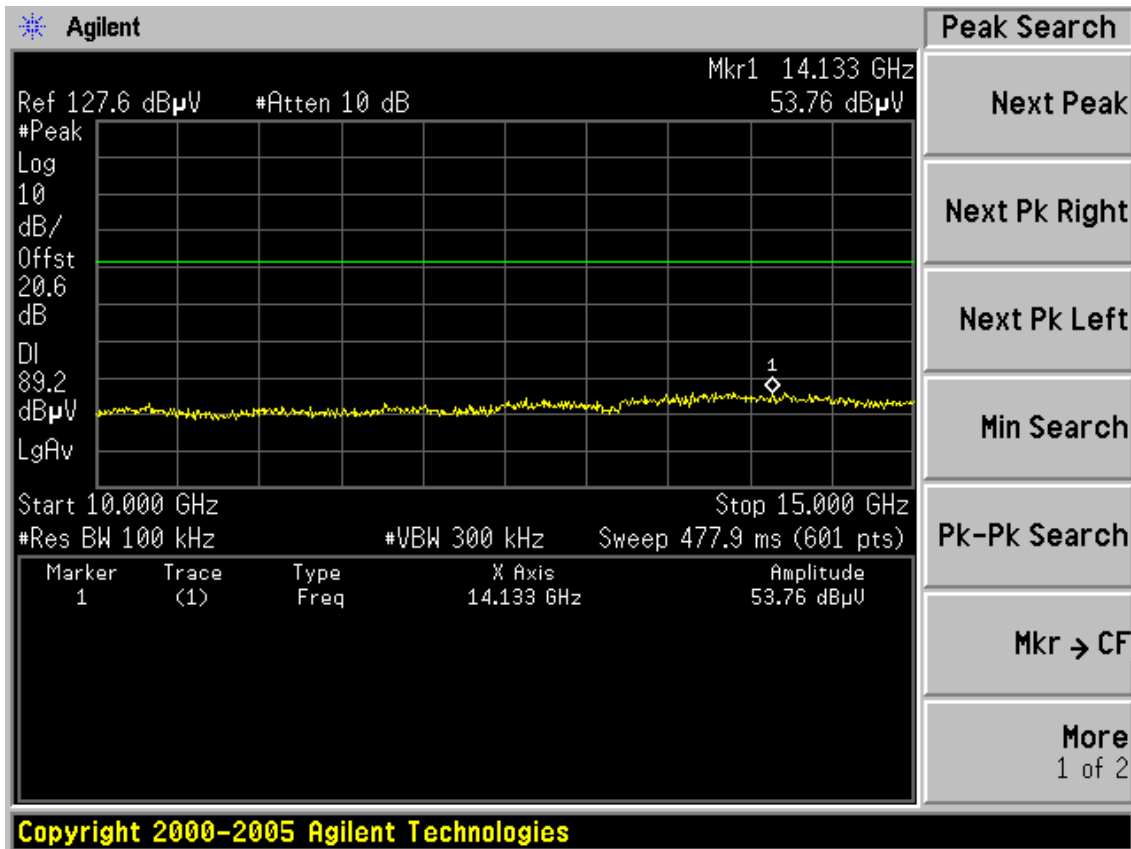
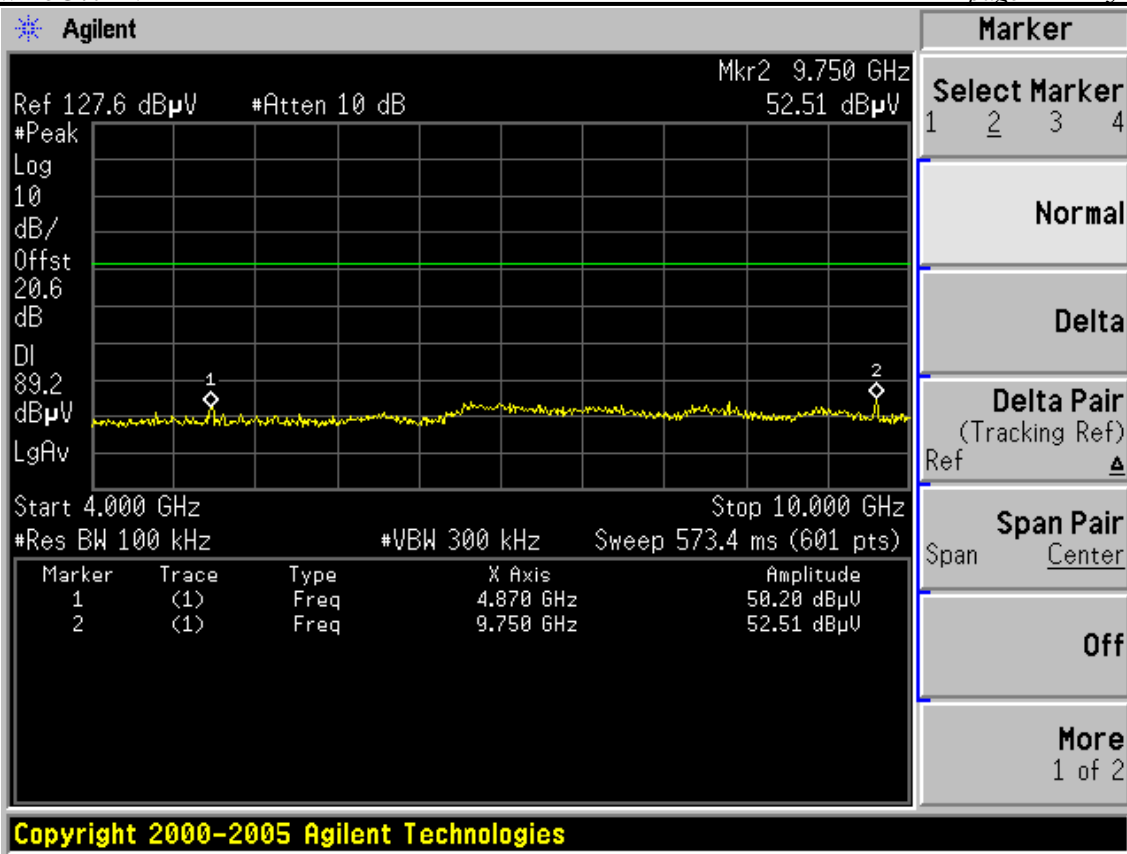


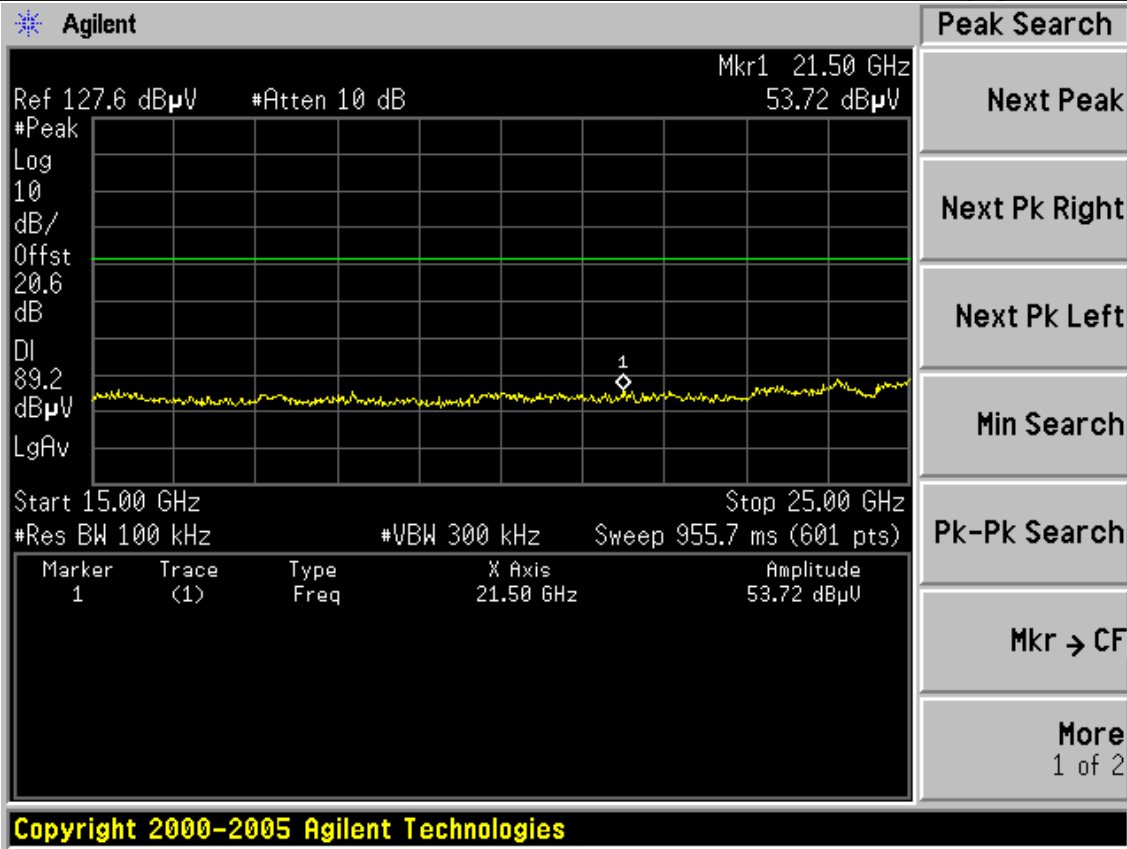




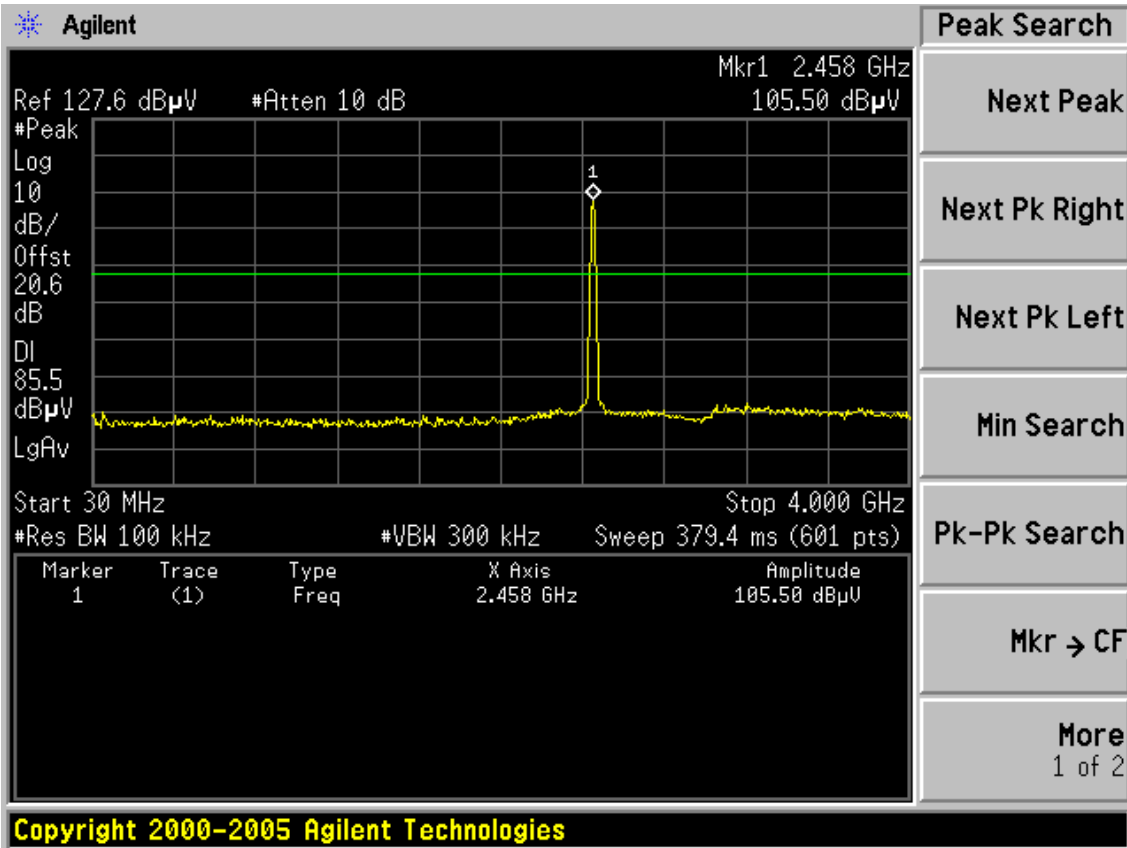
CH6

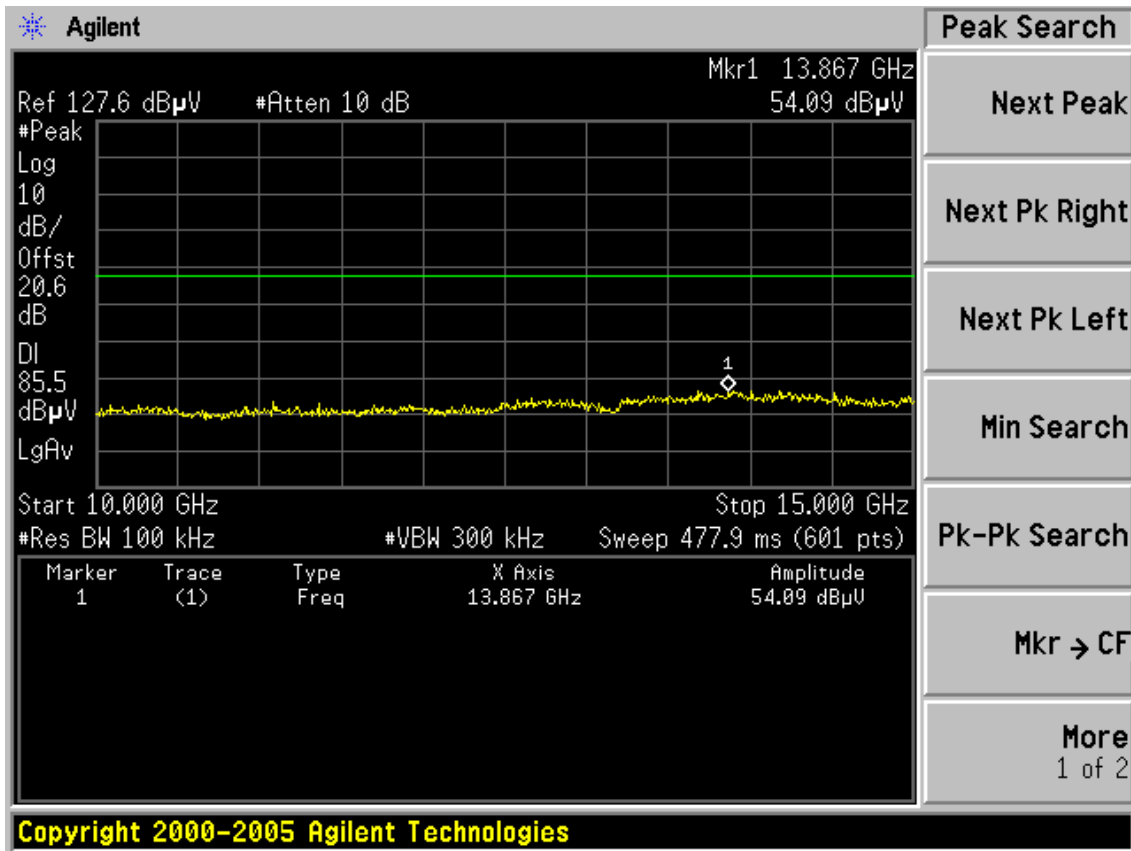
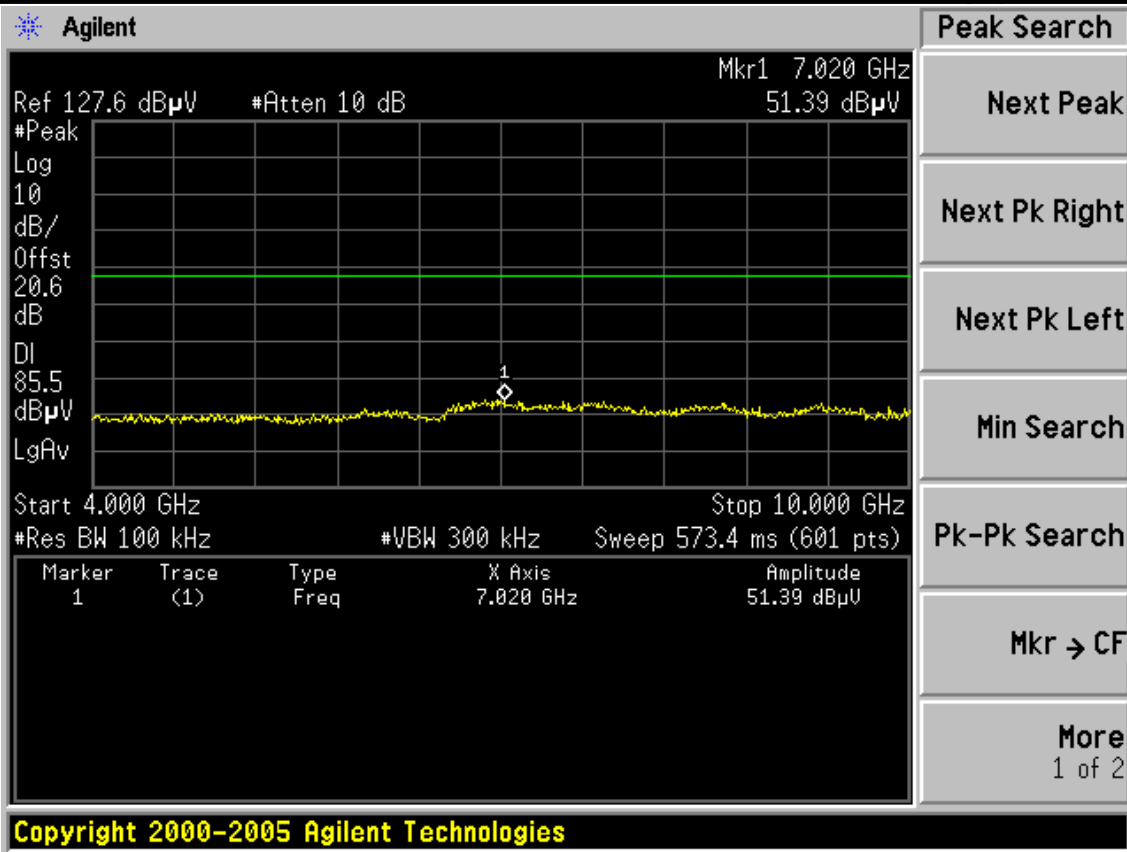


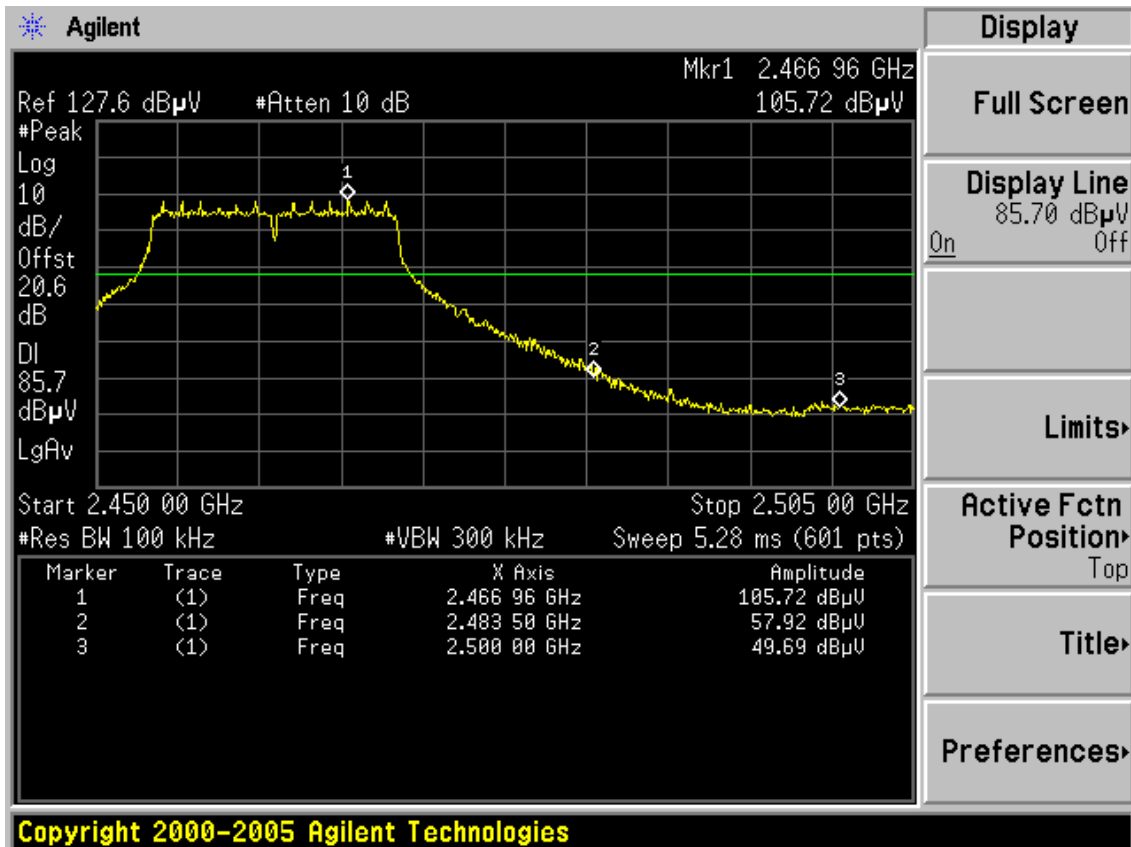
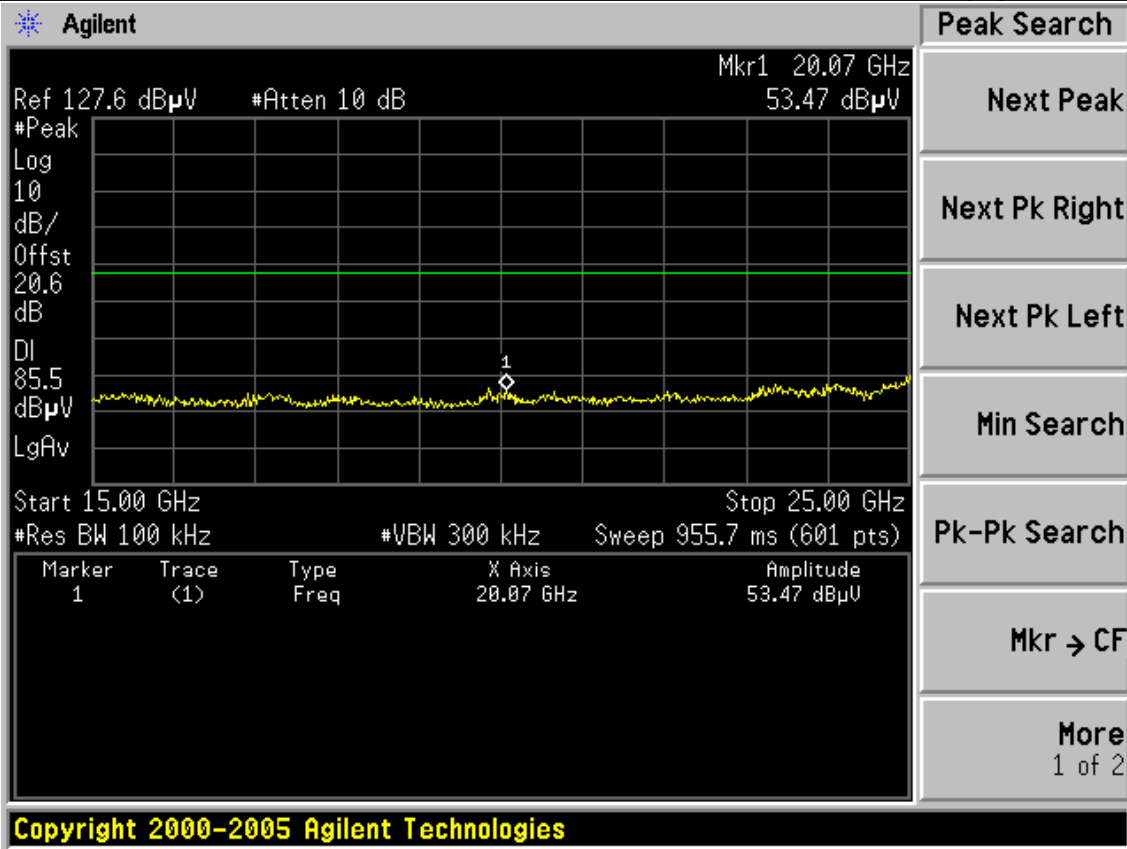




CH11

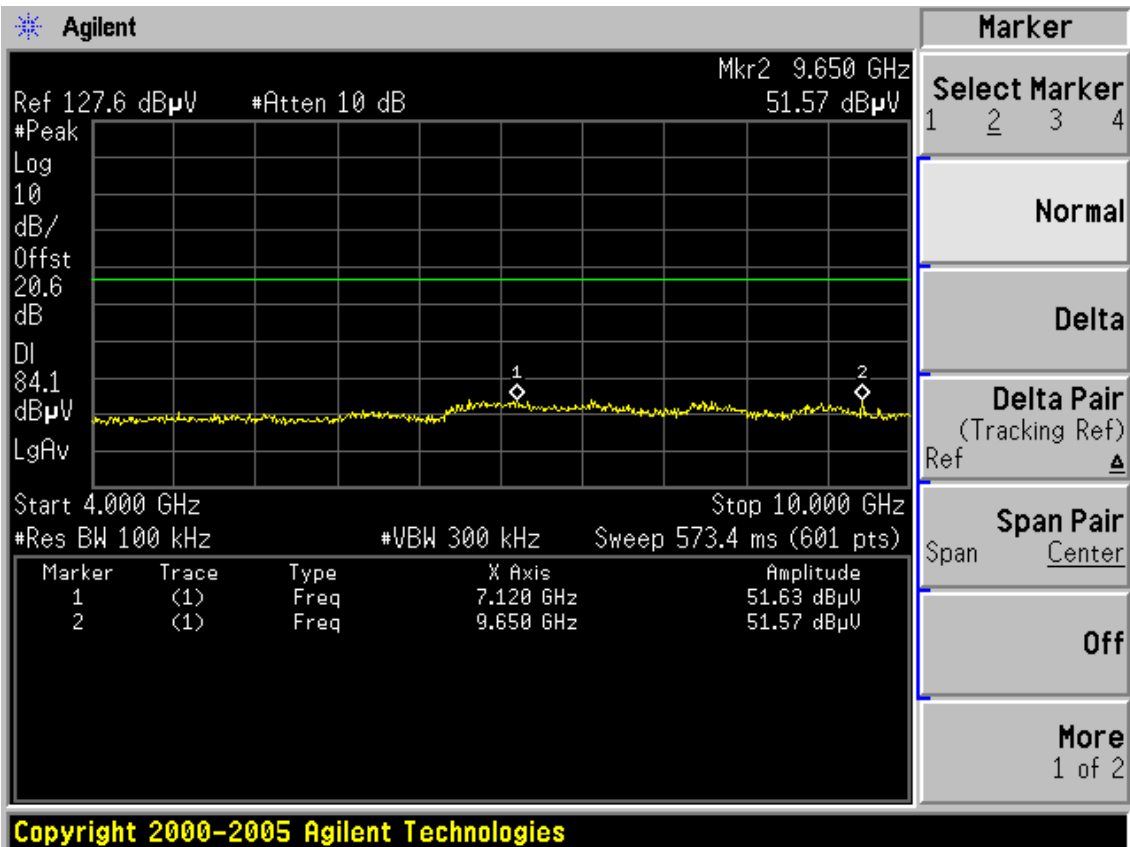
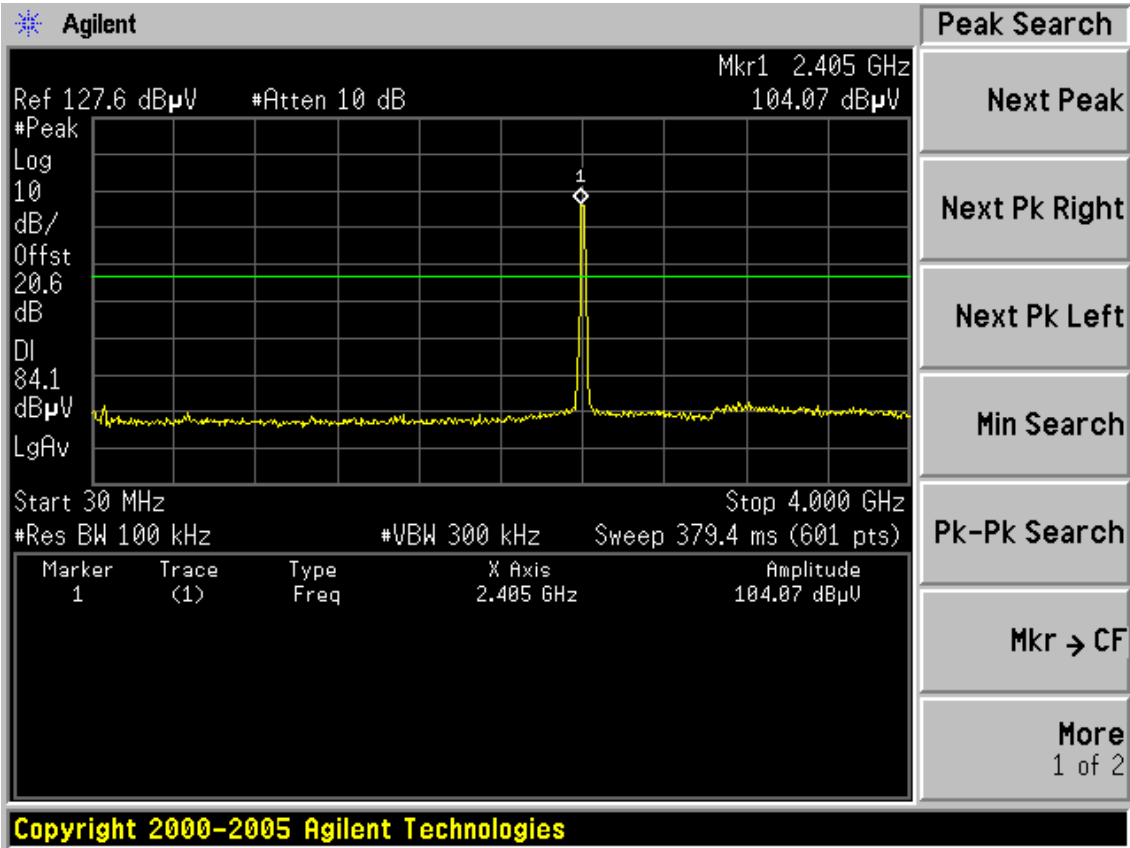


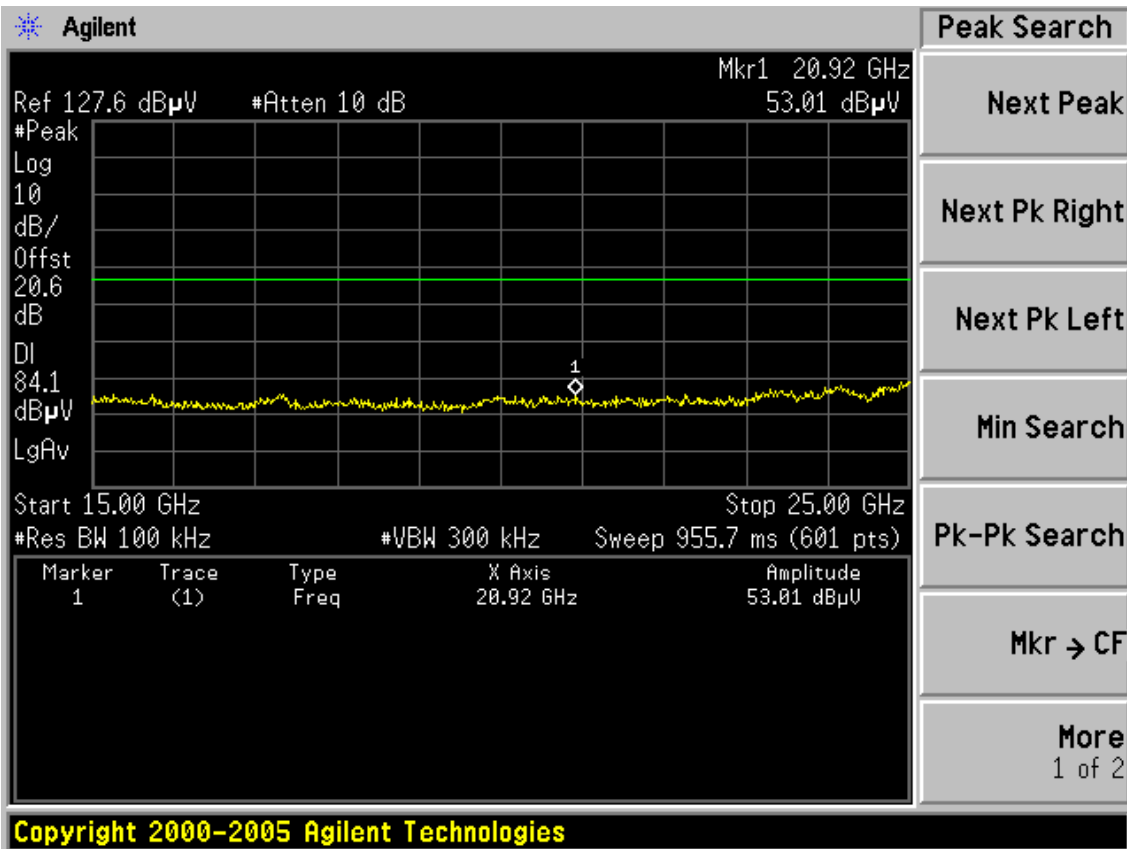
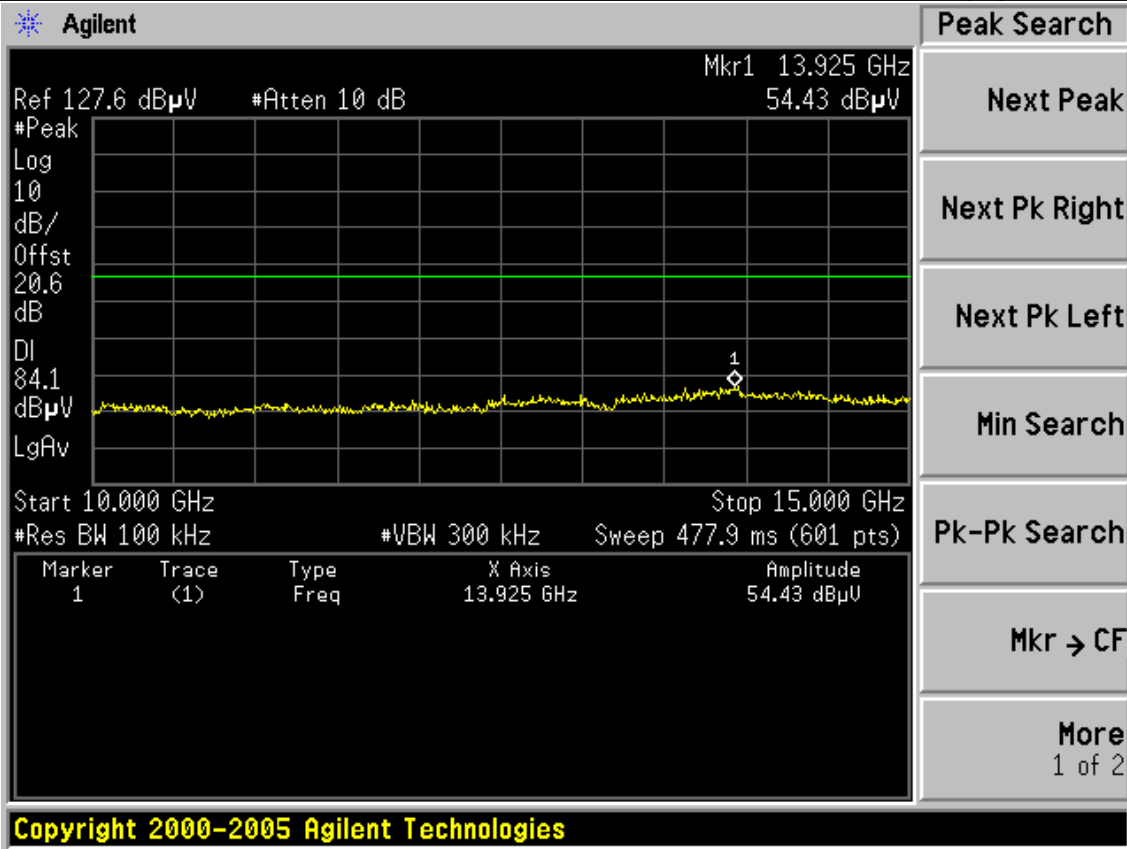


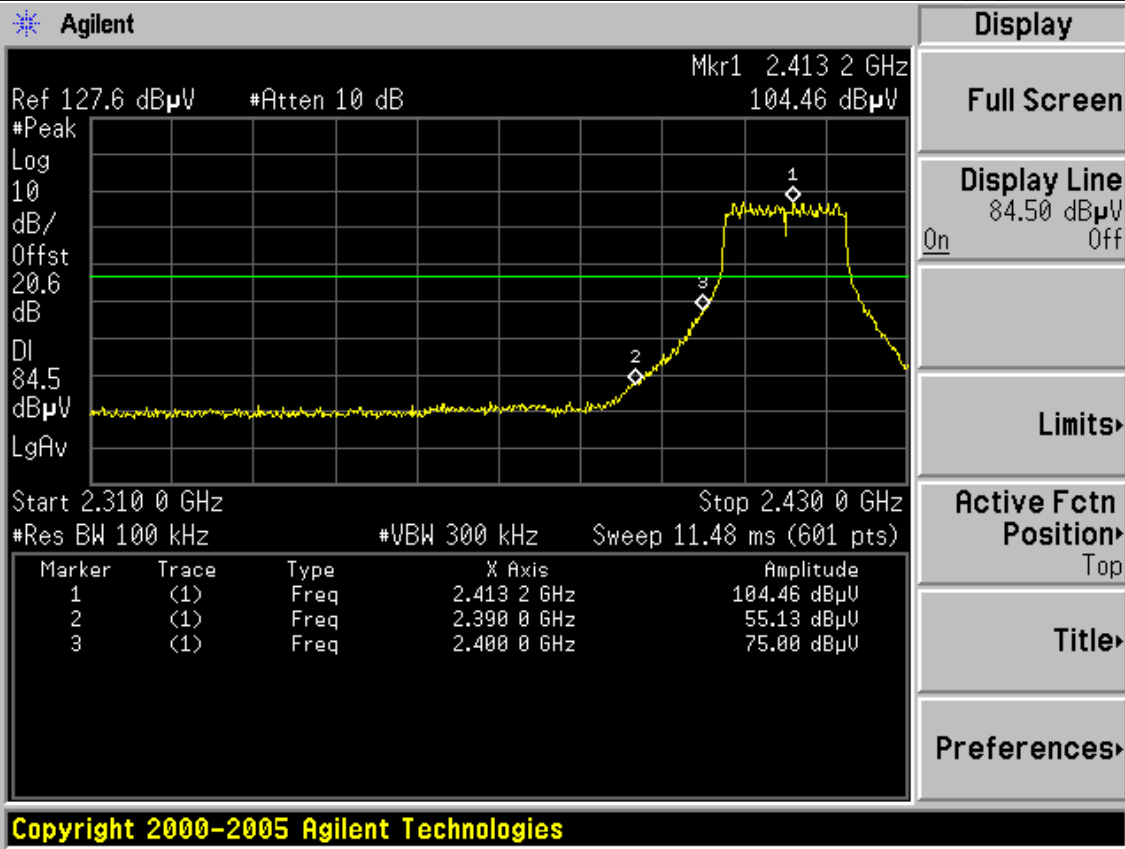




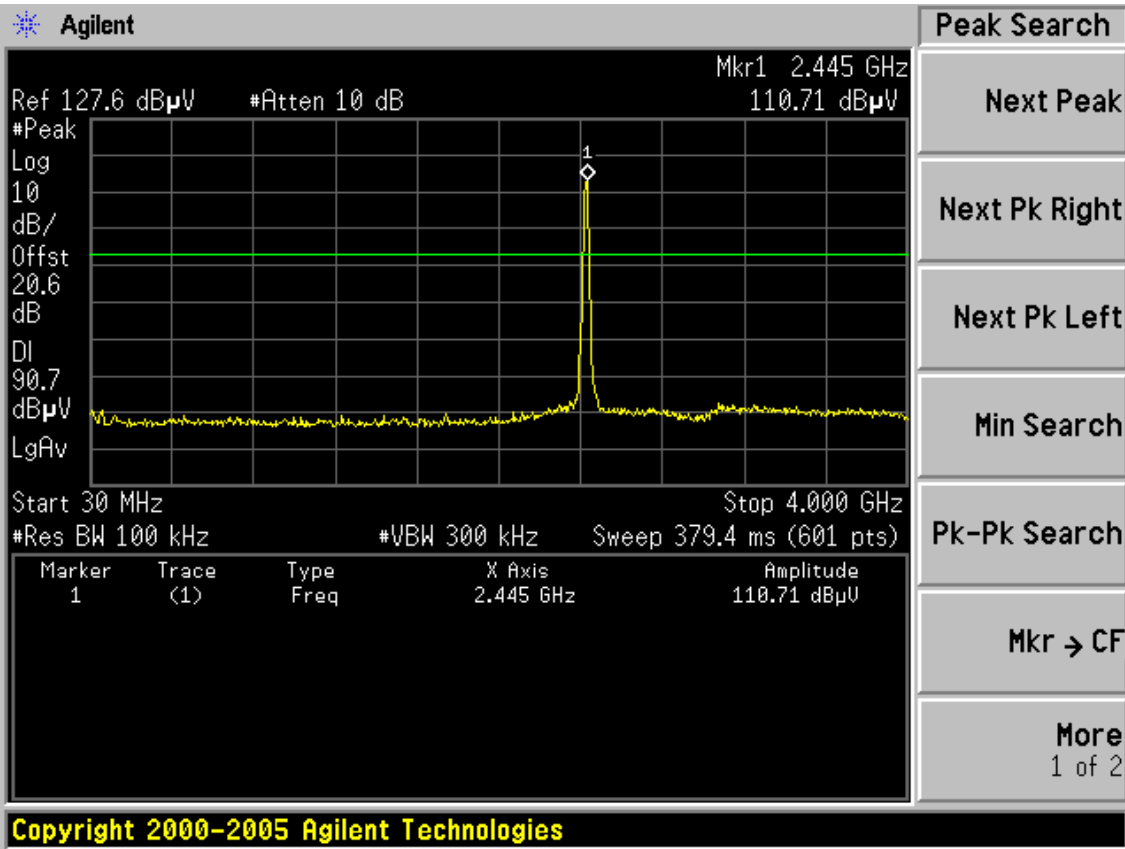
Test Mode: IEEE 802.11n HT20 TX  
CH1

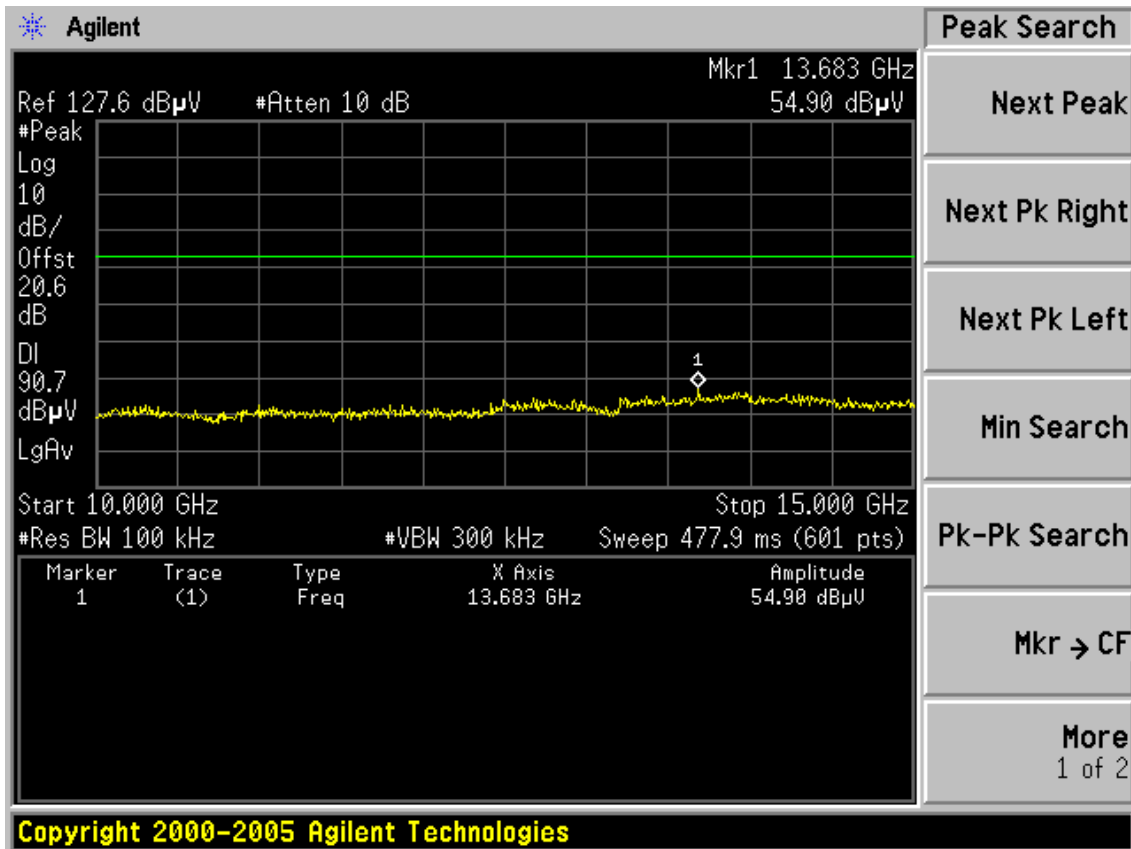
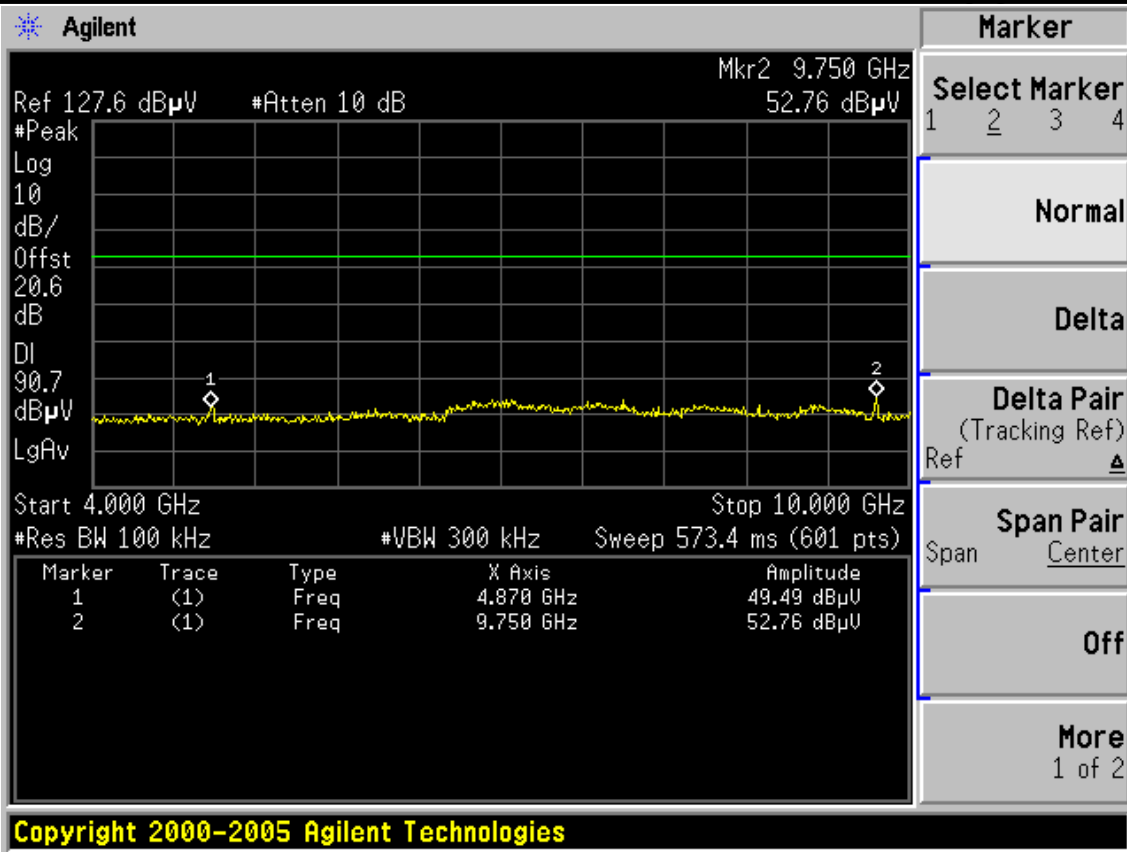


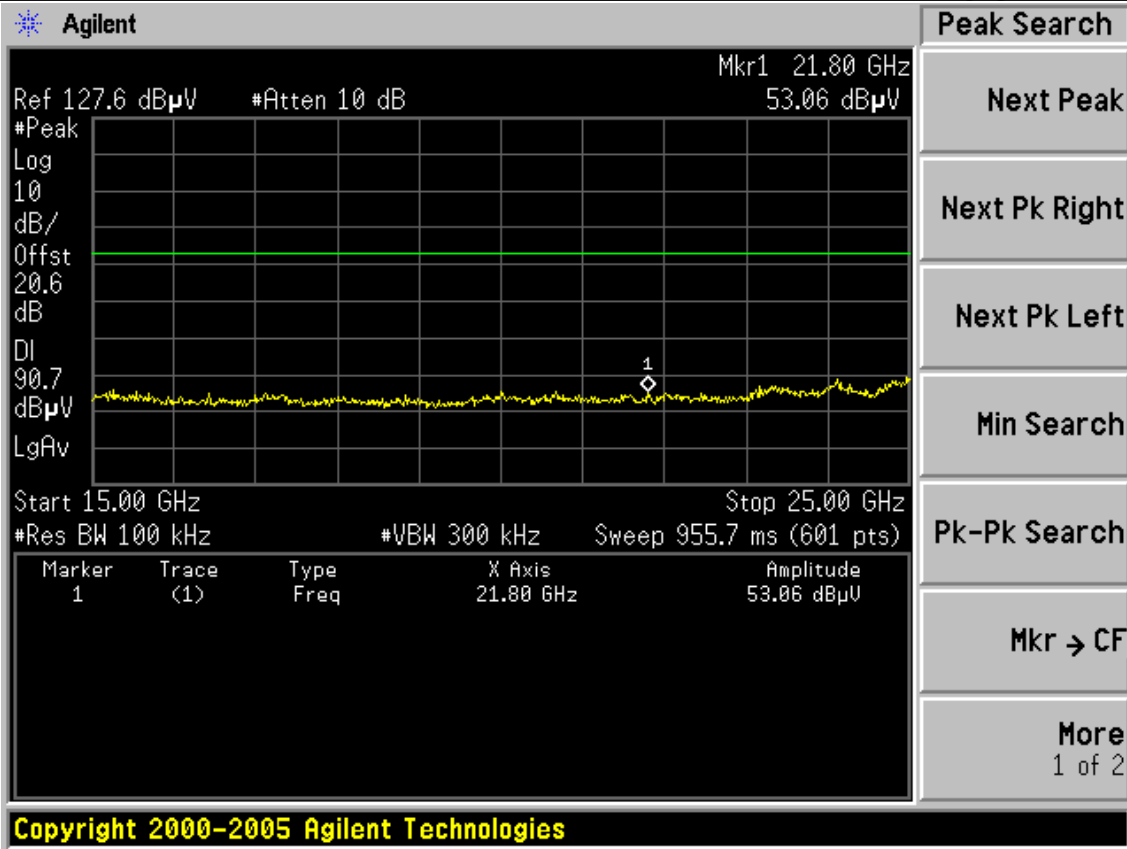




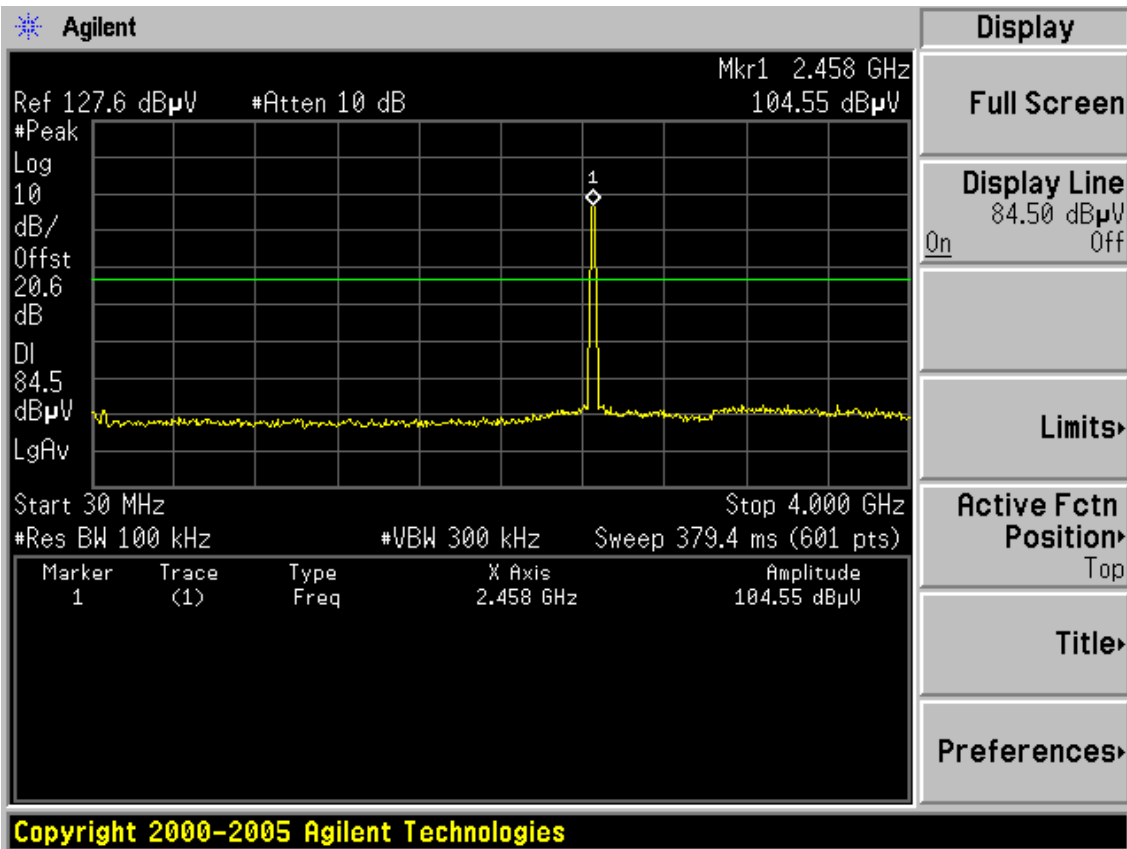
CH6







CH11



**Agilent**

Ref 127.6 dB $\mu$ V #Atten 10 dB Mkr2 9.850 GHz 51.37 dB $\mu$ V

#Peak  
Log  
10  
dB/  
Offst  
20.6  
dB  
DI  
84.5  
dB $\mu$ V  
LgAv

Start 4.000 GHz Stop 10.000 GHz  
#Res BW 100 kHz #VBW 300 kHz Sweep 573.4 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	4.760 GHz	48.13 dB $\mu$ V
2	(1)	Freq	9.850 GHz	51.37 dB $\mu$ V

**Copyright 2000-2005 Agilent Technologies**

**Marker**

Select Marker  
1 2 3 4

Normal

Delta

Delta Pair  
(Tracking Ref)  
Ref  $\Delta$

Span Pair  
Span Center

Off

More  
1 of 2

**Agilent**

Ref 127.6 dB $\mu$ V #Atten 10 dB Mkr1 13.817 GHz 54.67 dB $\mu$ V

#Peak  
Log  
10  
dB/  
Offst  
20.6  
dB  
DI  
84.5  
dB $\mu$ V  
LgAv

Start 10.000 GHz Stop 15.000 GHz  
#Res BW 100 kHz #VBW 300 kHz Sweep 477.9 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	13.817 GHz	54.67 dB $\mu$ V

**Copyright 2000-2005 Agilent Technologies**

**Peak Search**

Next Peak

Next Pk Right

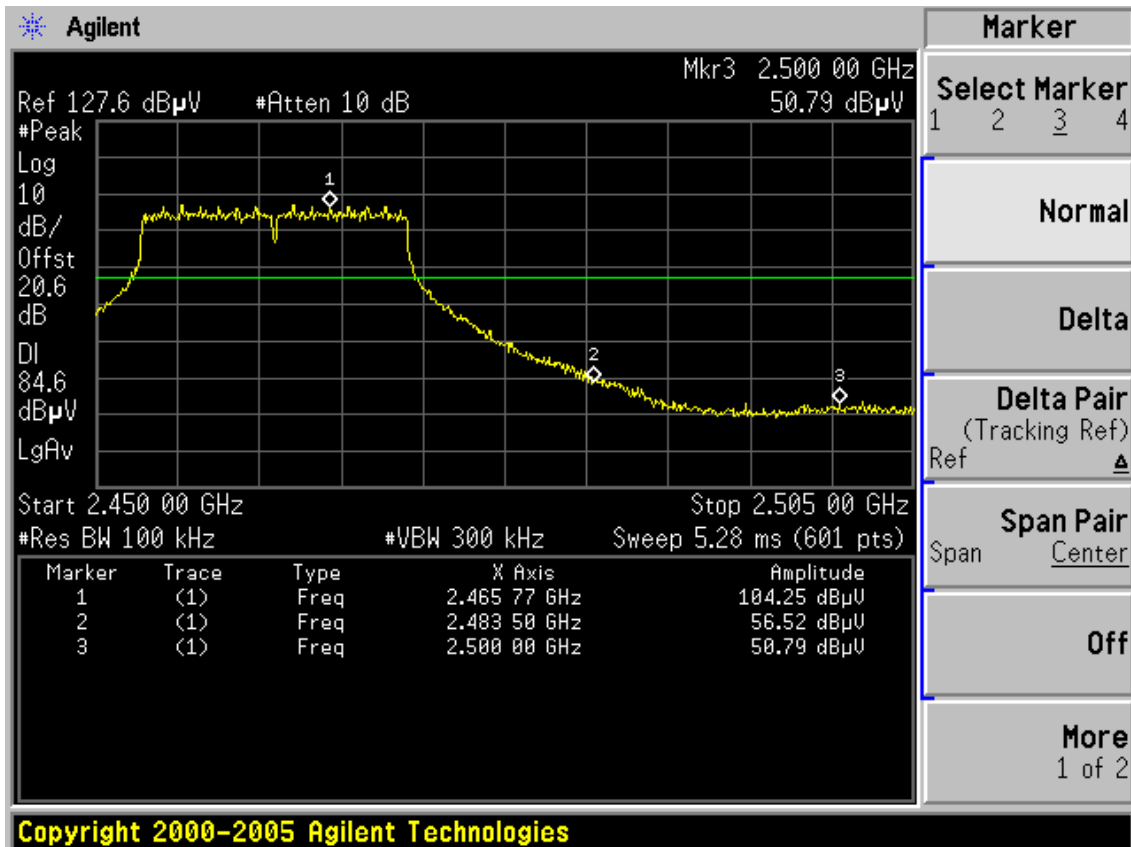
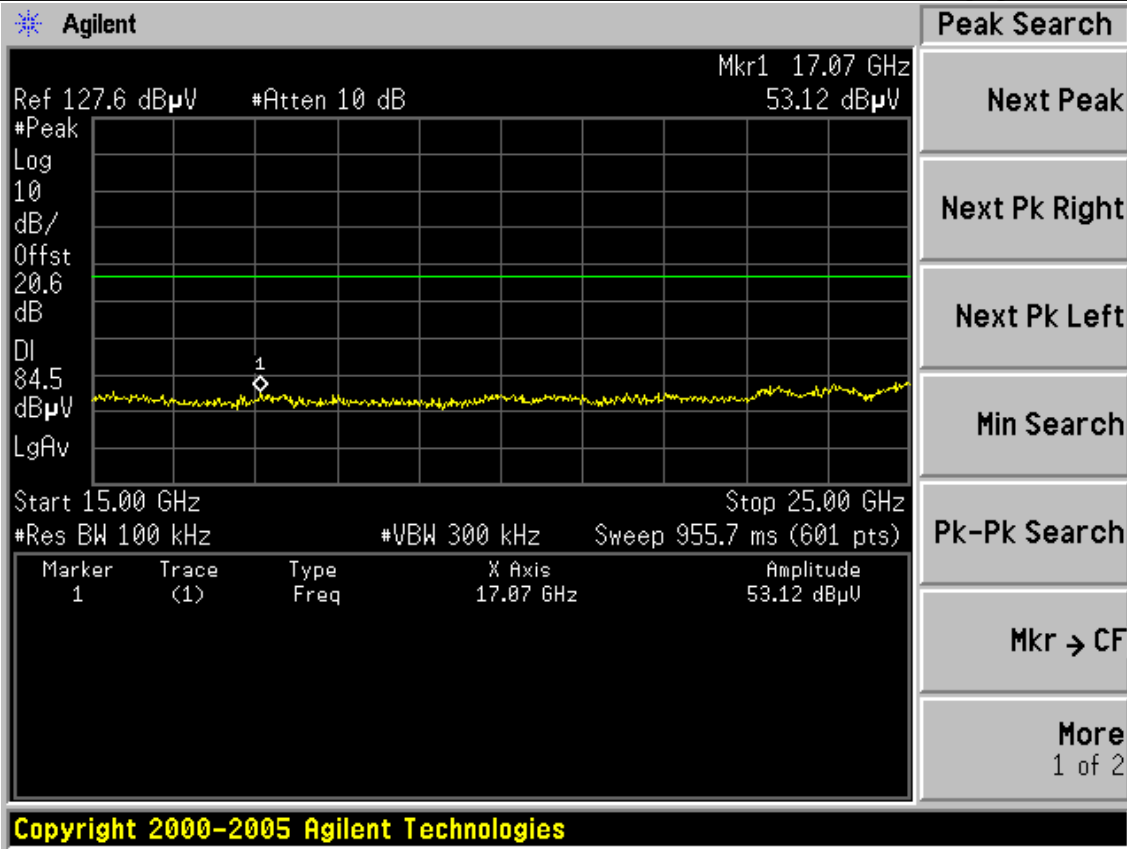
Next Pk Left

Min Search

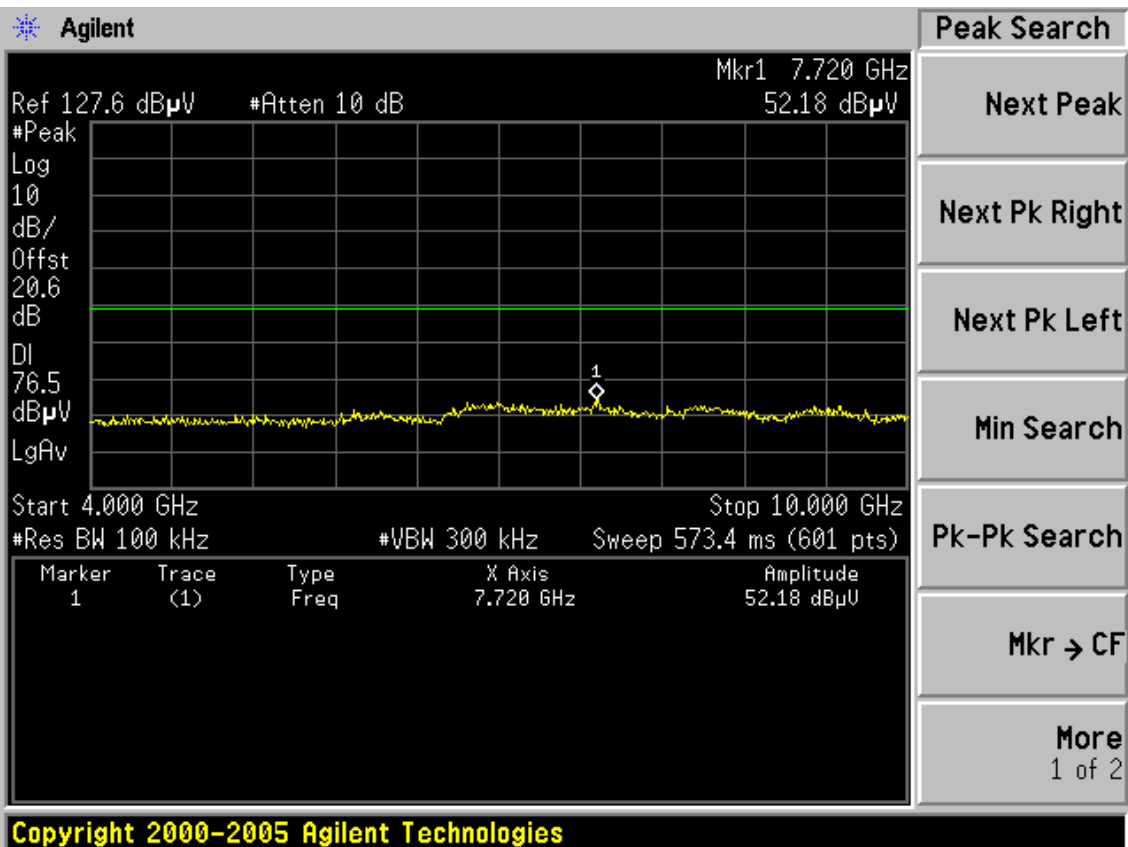
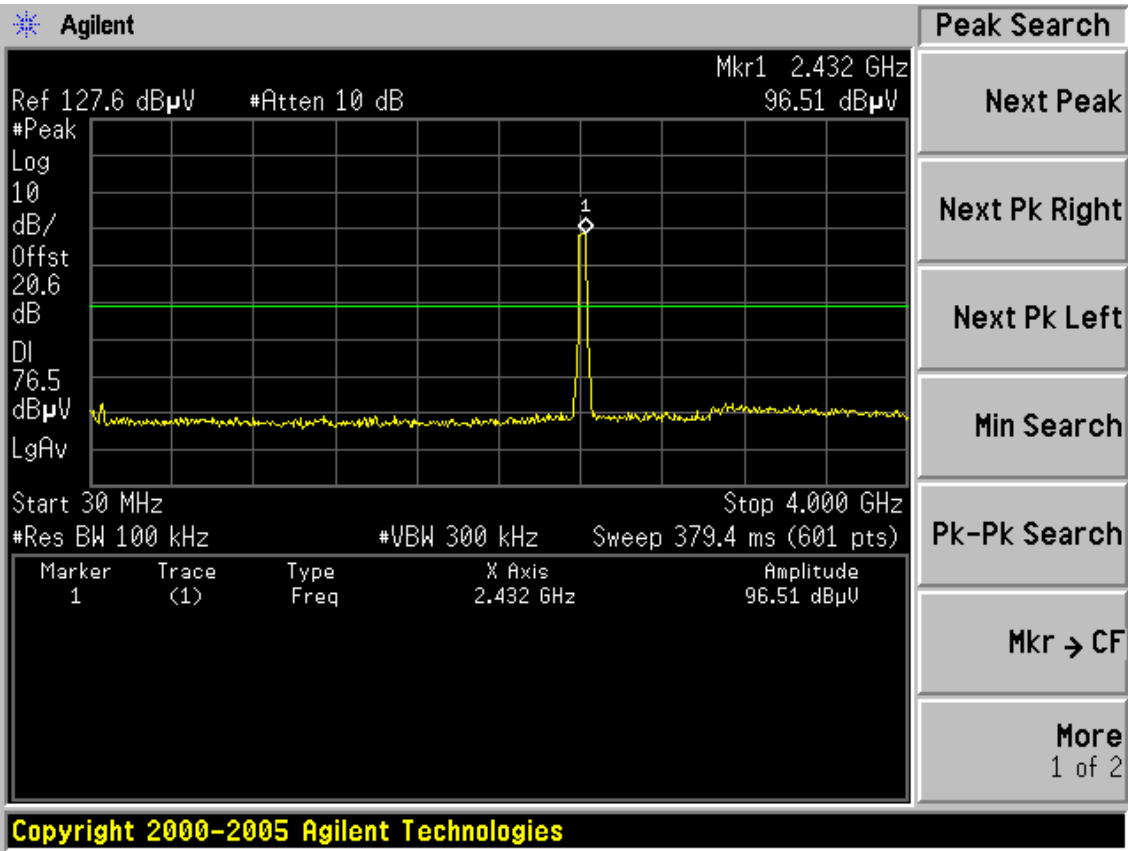
Pk-Pk Search

Mkr  $\rightarrow$  CF

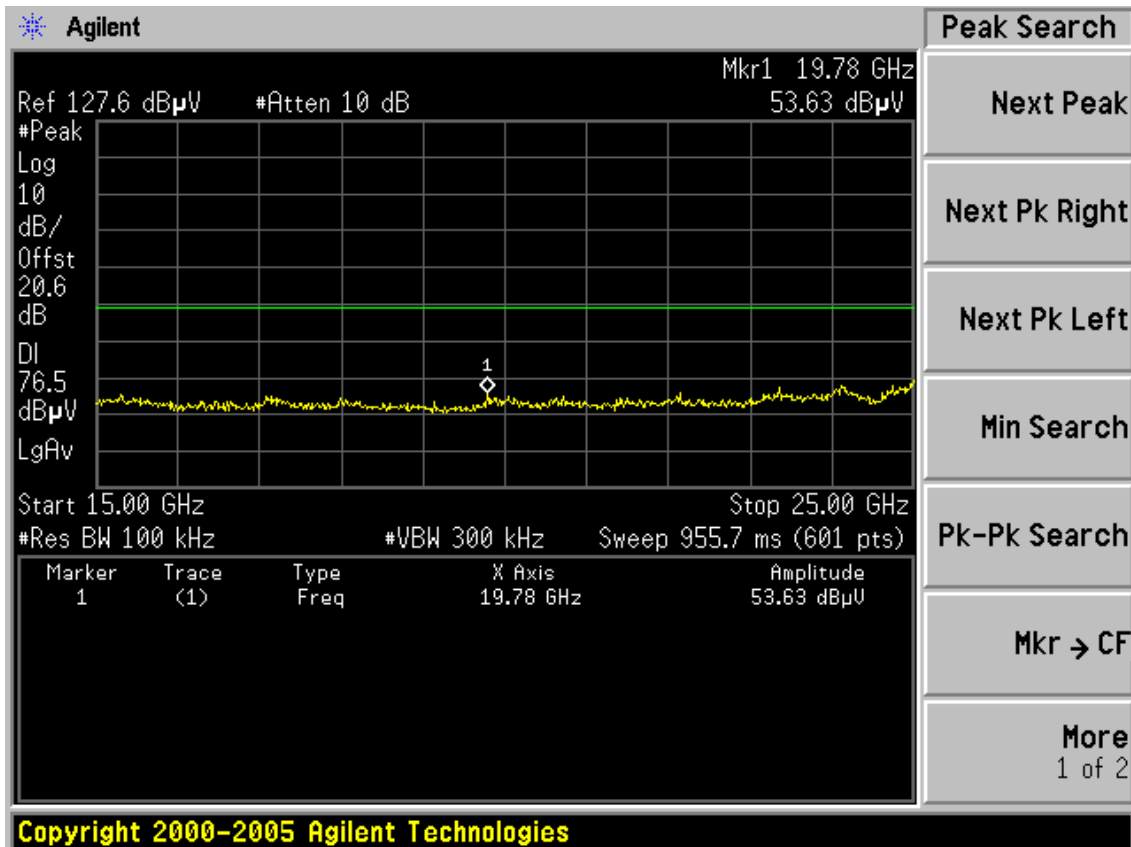
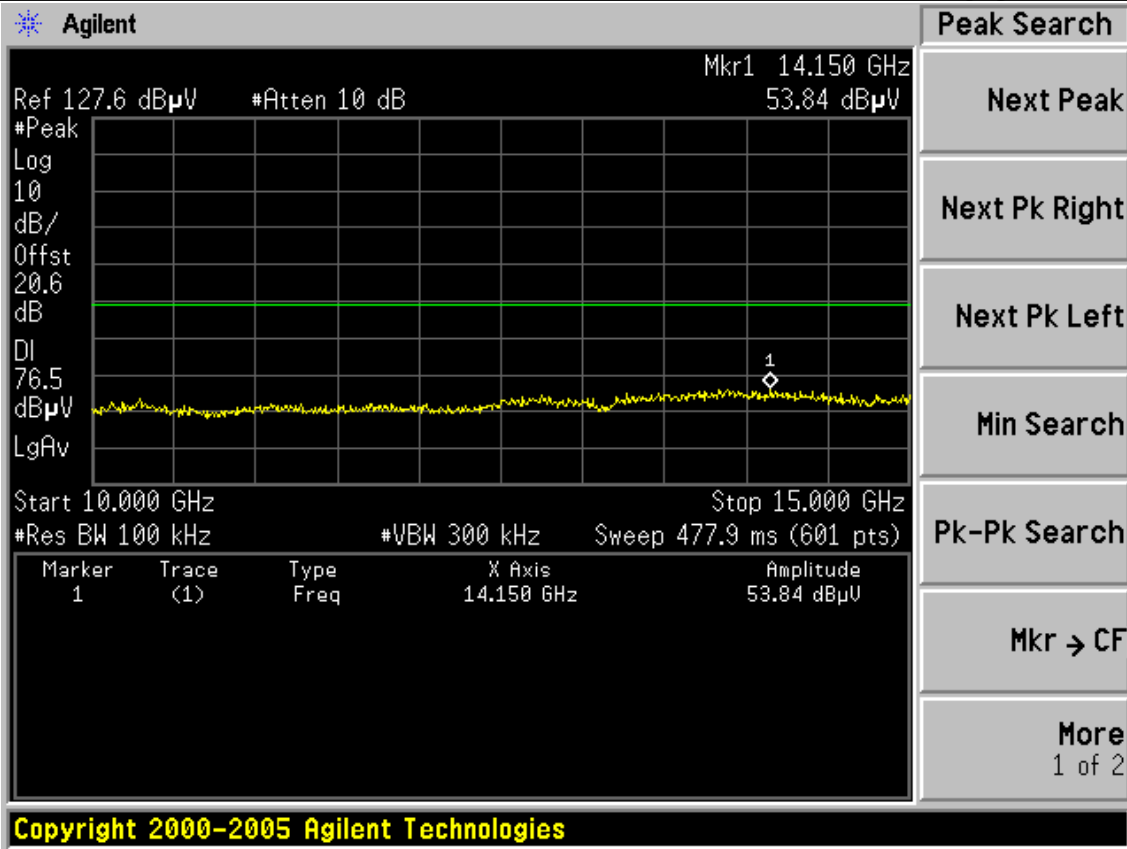
More  
1 of 2

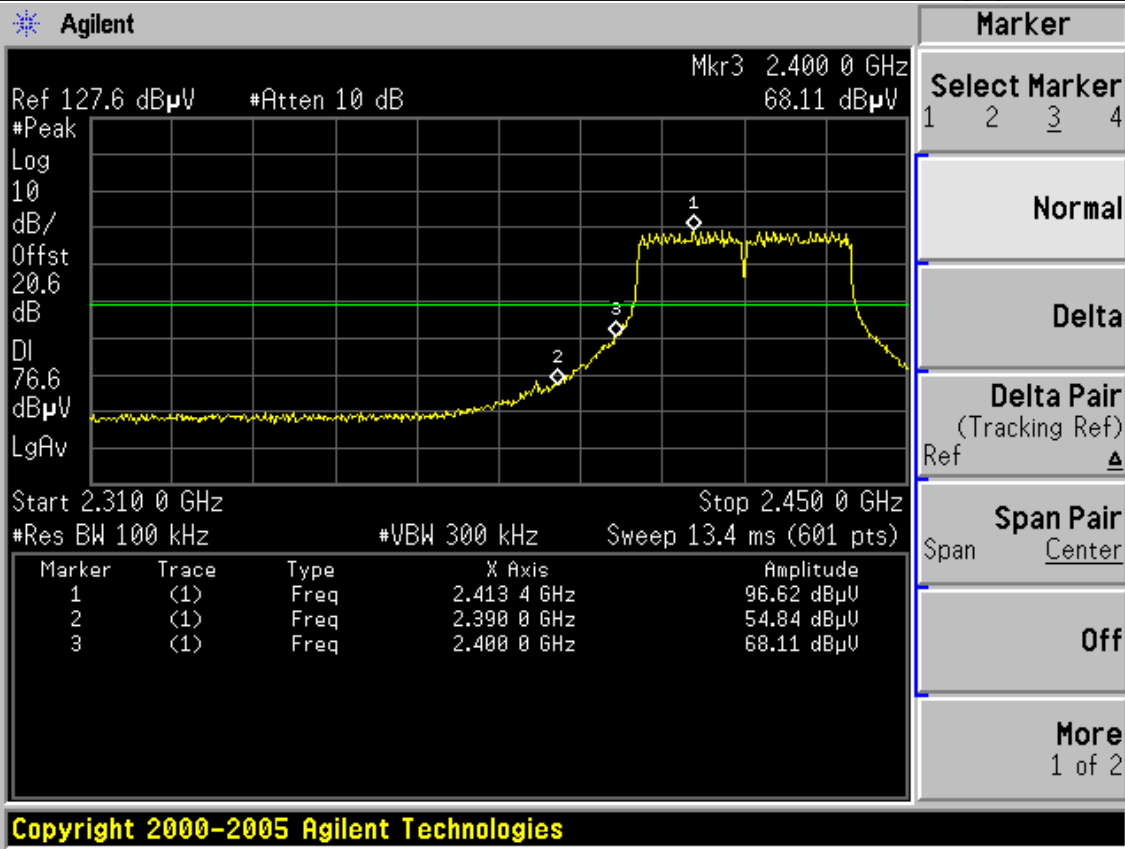


Test Mode: IEEE 802.11n HT40TX  
CH1

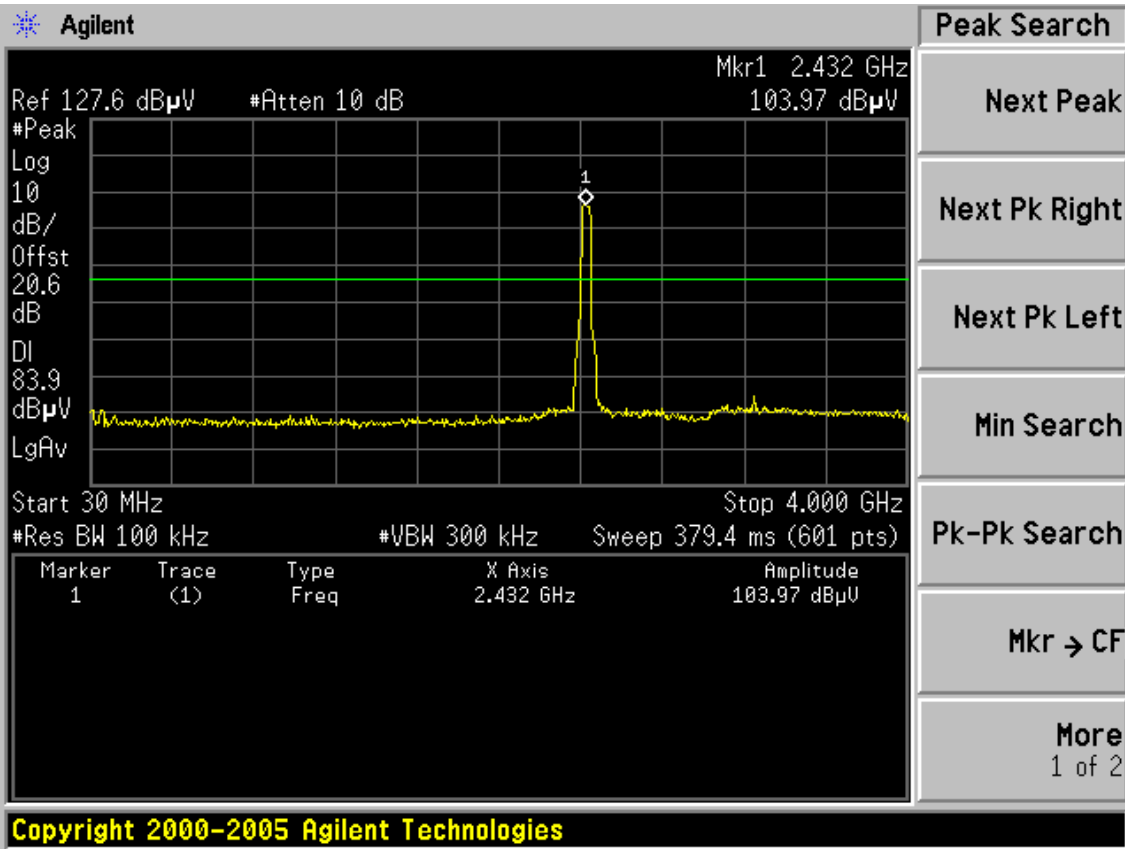


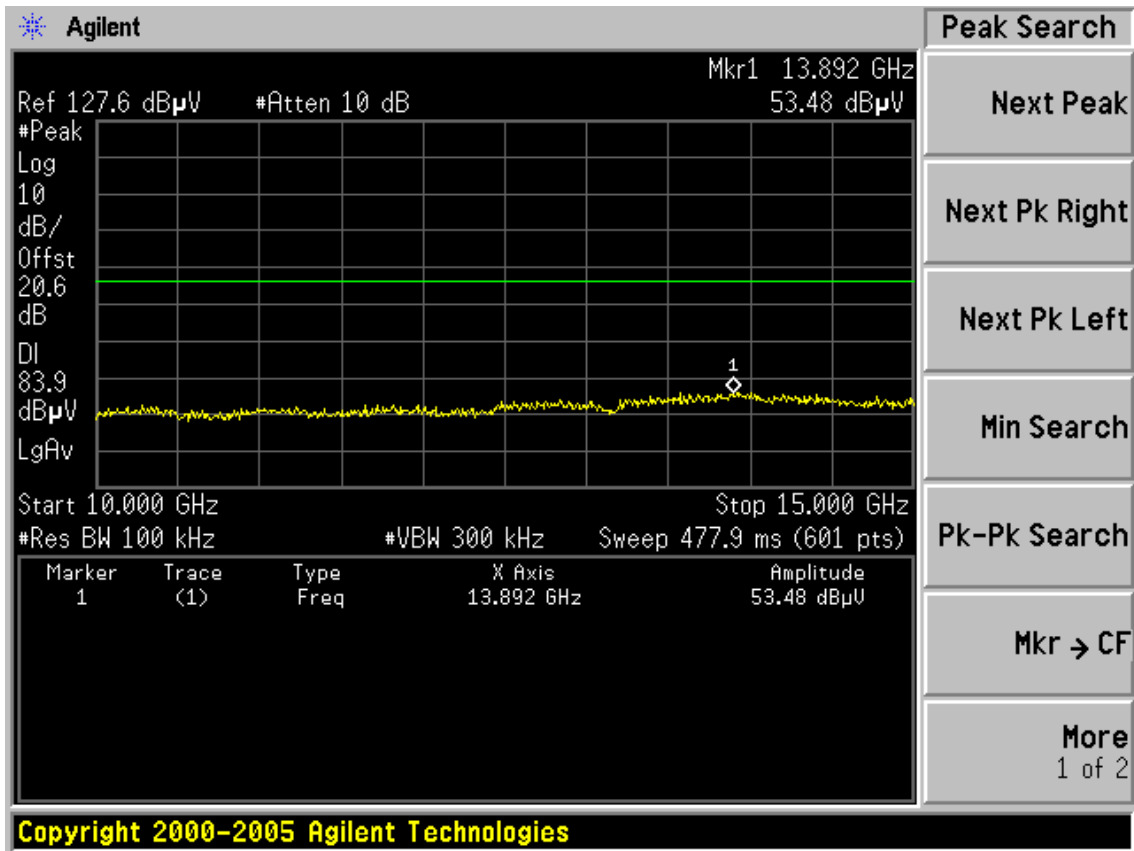
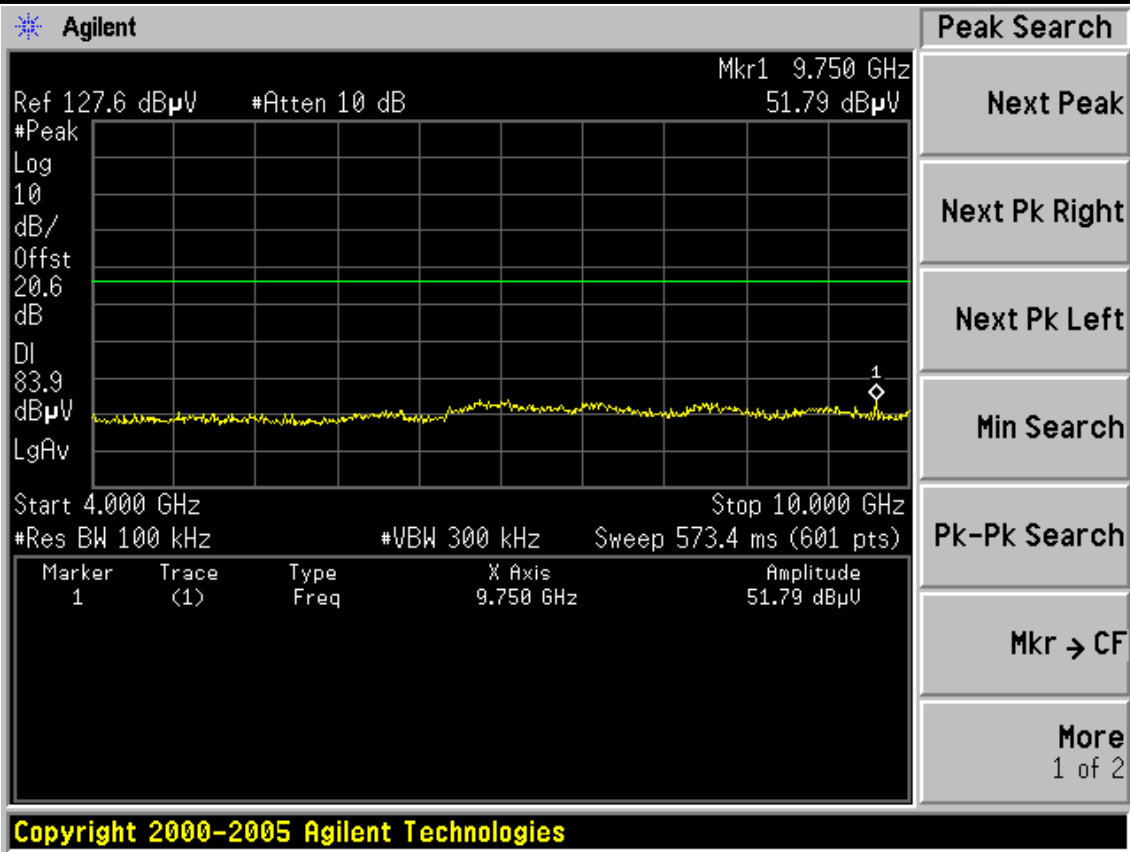


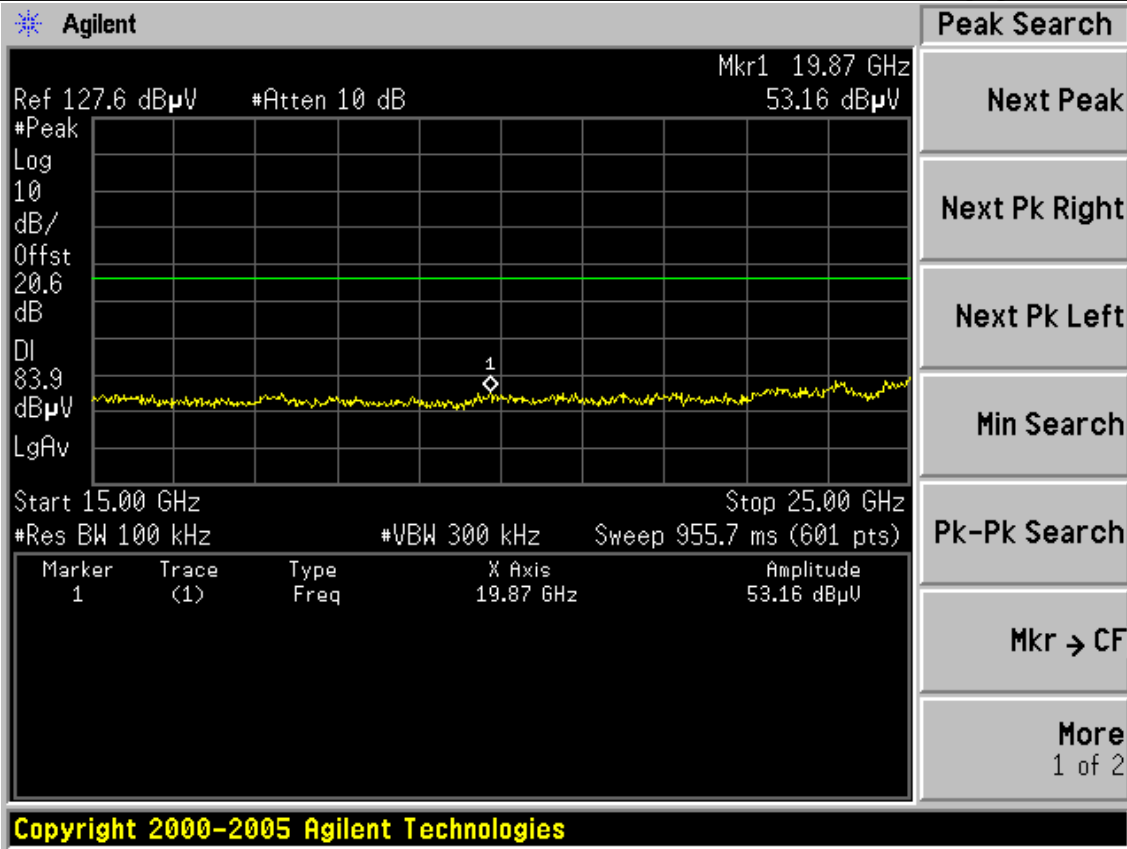




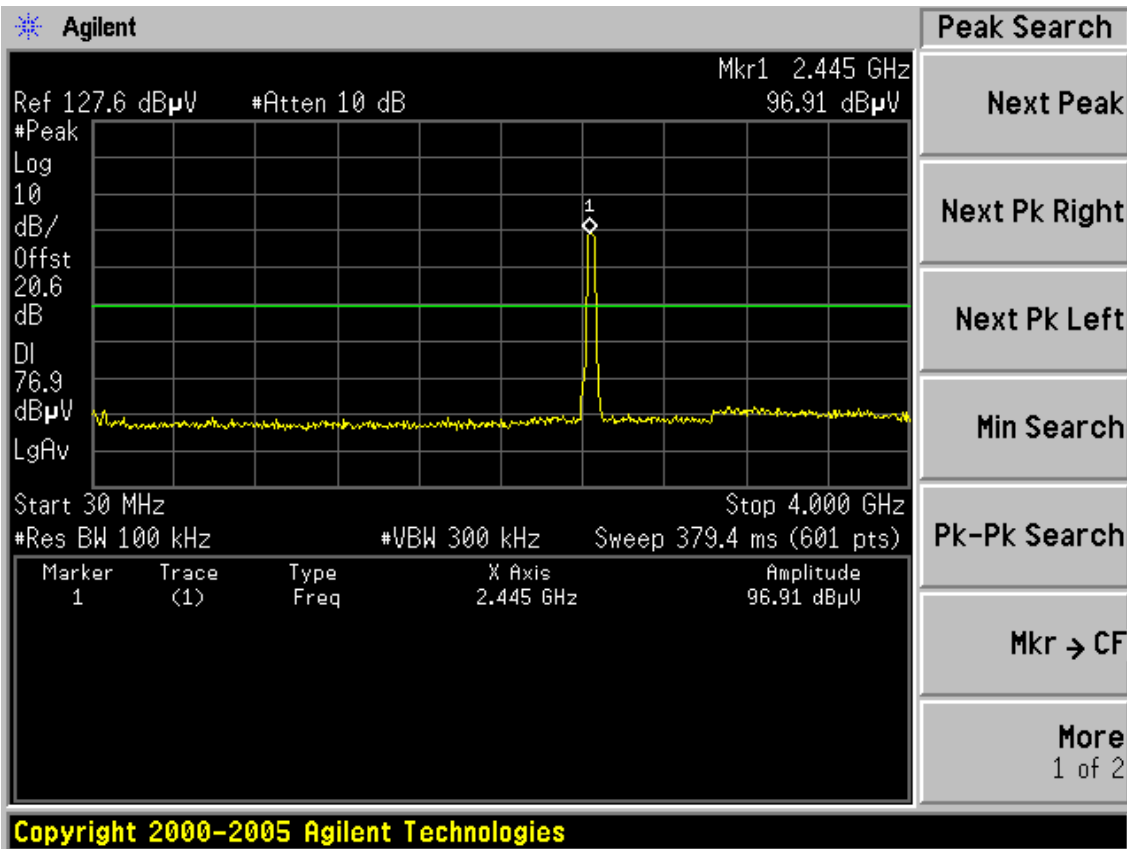
CH6

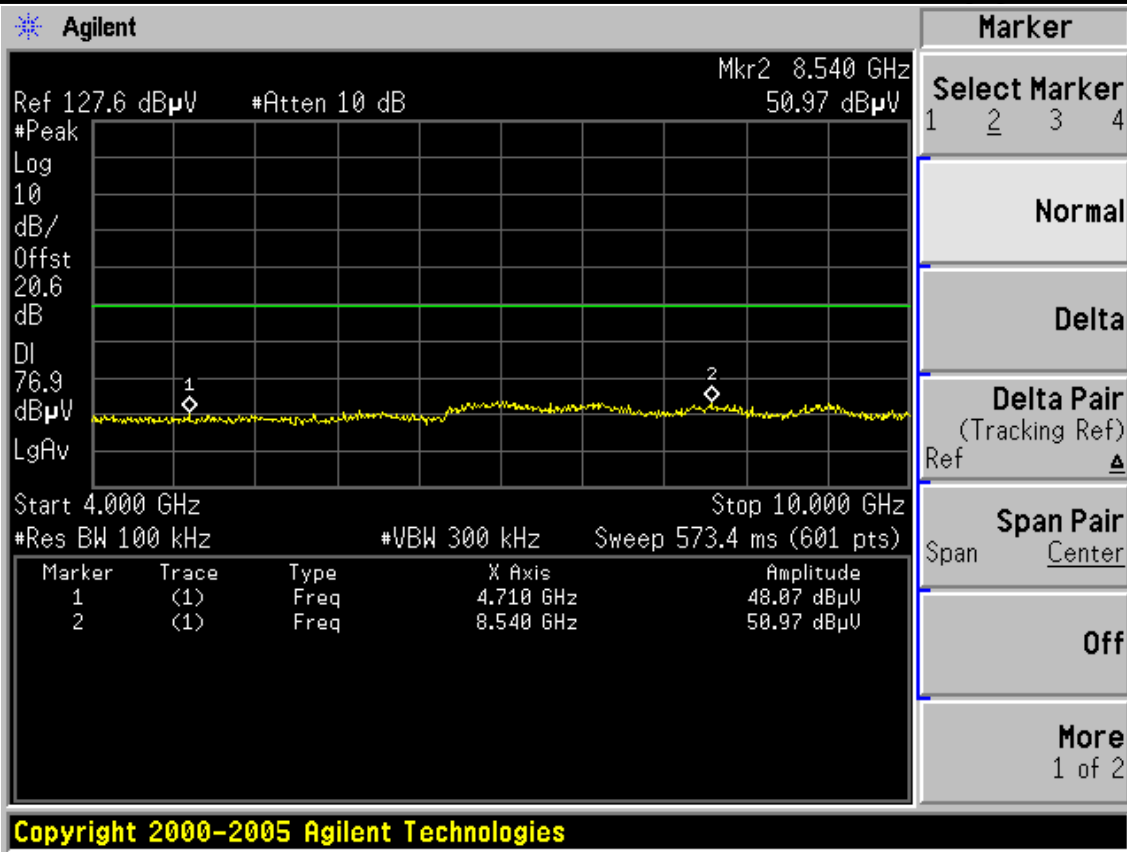






CH11





Marker

Select Marker  
1 2 3 4

Normal

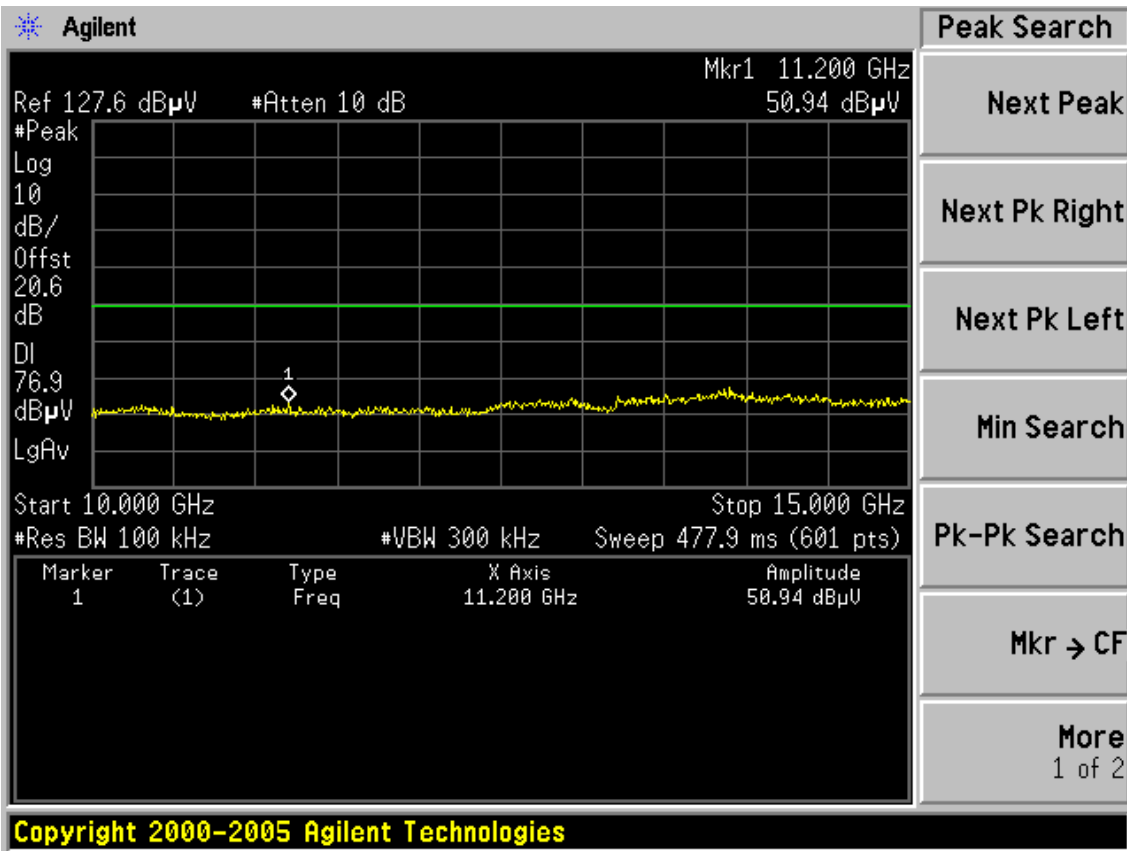
Delta

Delta Pair  
(Tracking Ref)  
Ref  $\Delta$

Span Pair  
Span Center

Off

More  
1 of 2



Peak Search

Next Peak

Next Pk Right

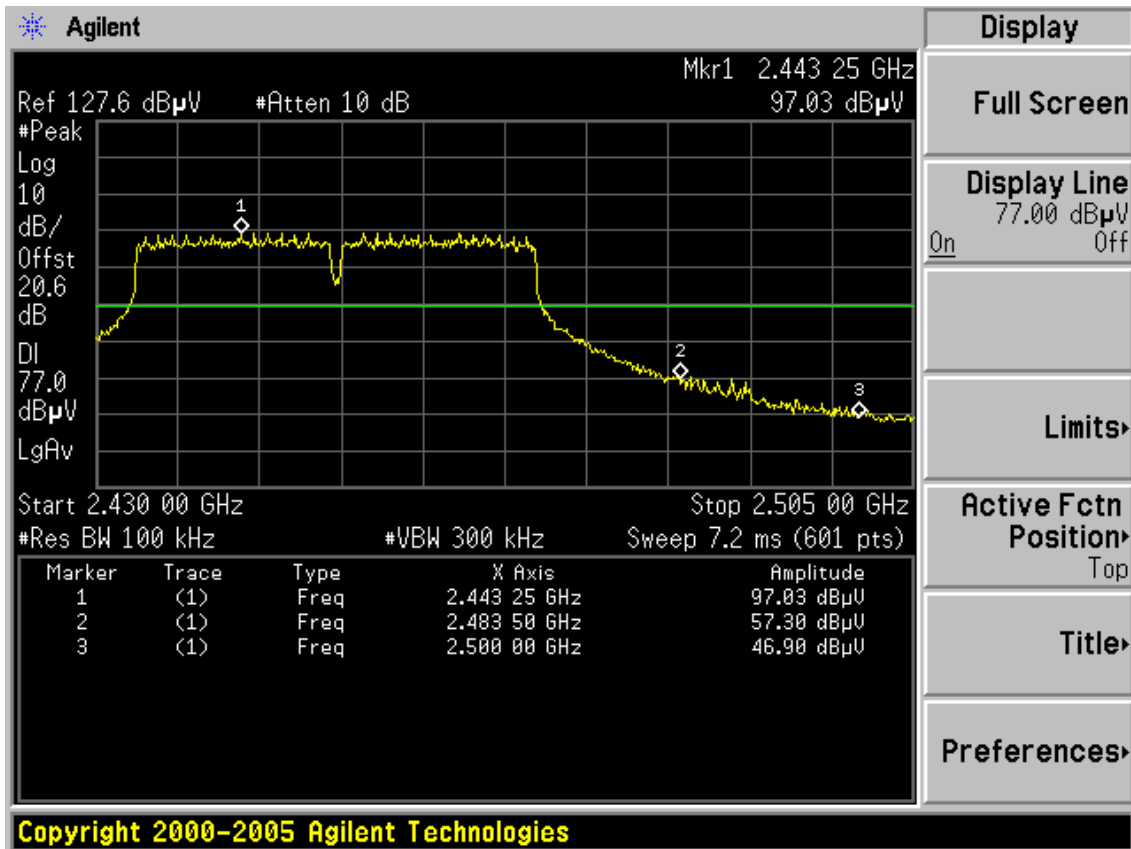
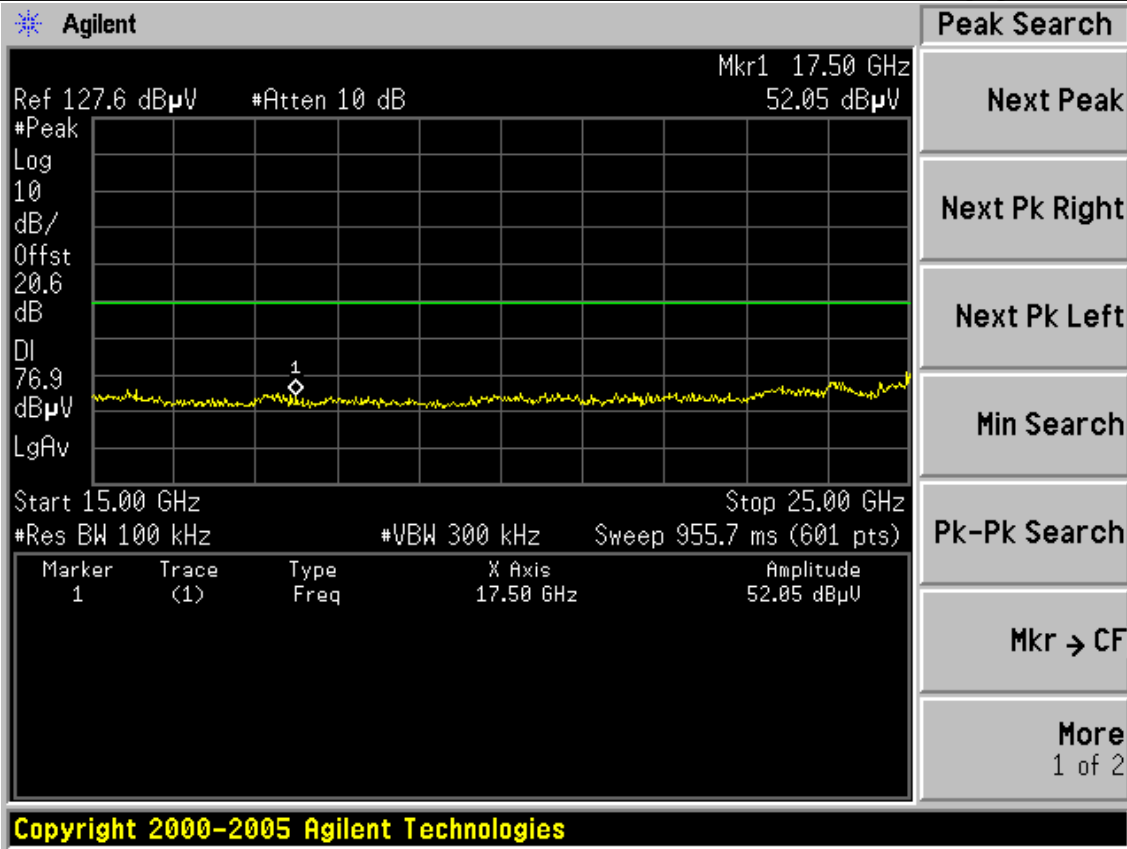
Next Pk Left

Min Search

Pk-Pk Search

Mkr  $\rightarrow$  CF

More  
1 of 2



## 6. BAND EDGE COMPLIANCE TEST

### 6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,10	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 10	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,10	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,10	1 Year

### 6.2. Limit

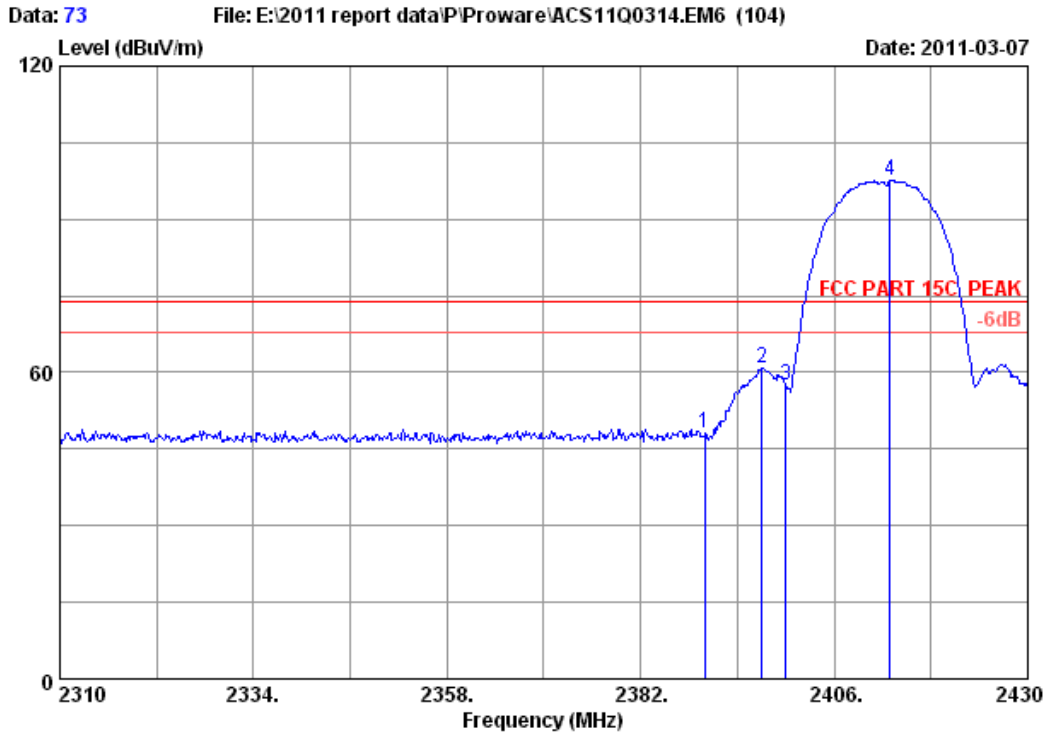
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

### 6.3. Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was 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=1MHz; VBW=3MHz; Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

### 6.4. Test Results

Pass (The testing data was attached in the next pages.)

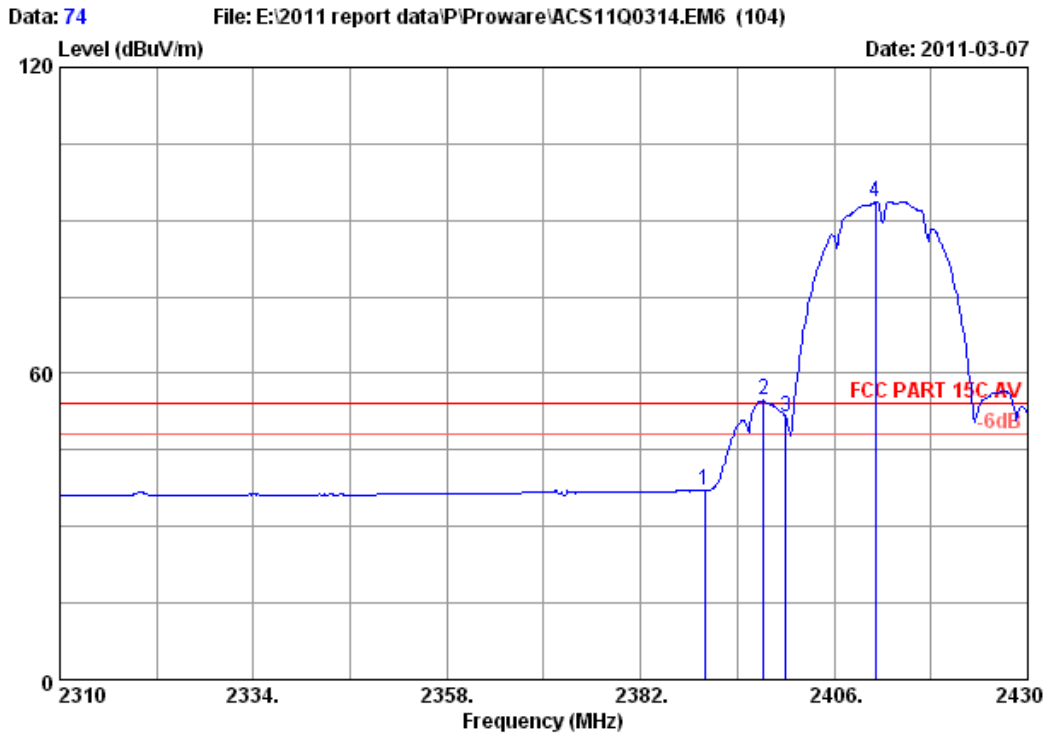


Site no. : RF Chamber Data no. : 73  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	48.06	48.27	74.00	25.73	Peak
2	2397.000	29.44	7.39	36.62	60.64	60.85	74.00	13.15	Peak
3	2400.000	29.44	7.43	36.62	57.31	57.56	74.00	16.44	Peak
4	2412.960	29.45	7.43	36.62	97.34	97.60	74.00	-23.60	Peak

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

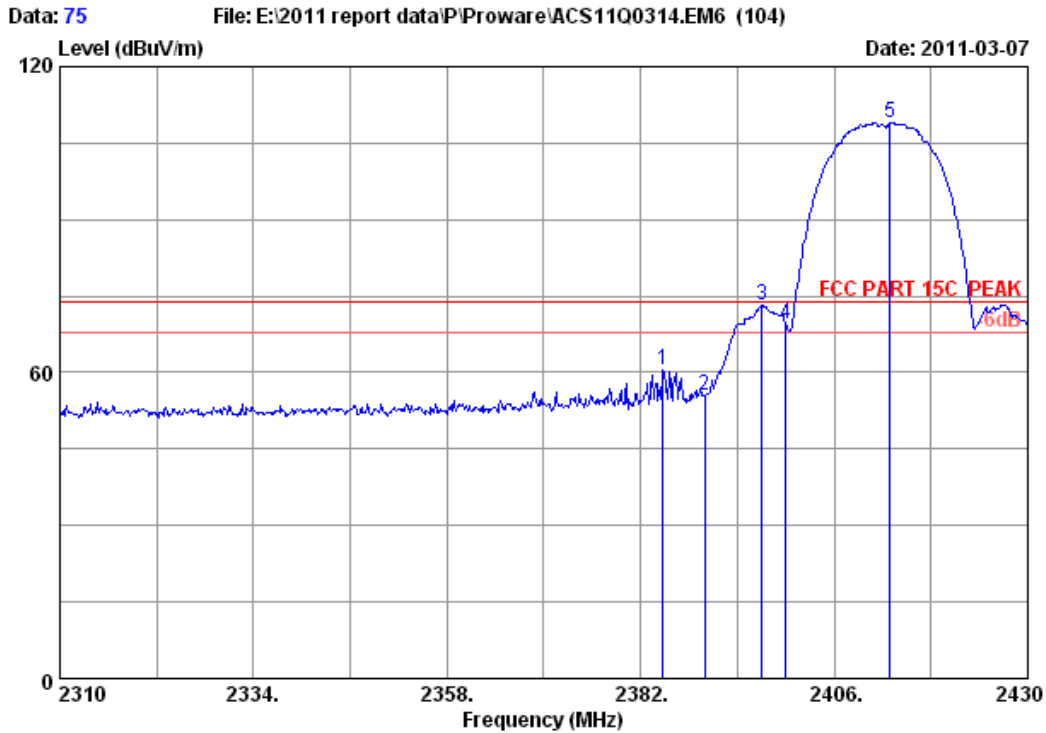




Site no. : RF Chamber Data no. : 74  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	36.94	37.15	54.00	16.85	Average
2	2397.240	29.44	7.39	36.62	54.47	54.68	54.00	-0.68	Average
3	2400.000	29.44	7.43	36.62	51.31	51.56	54.00	2.44	Average
4	2411.160	29.45	7.43	36.62	93.38	93.64	54.00	-39.64	Average

Remarks:  
 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

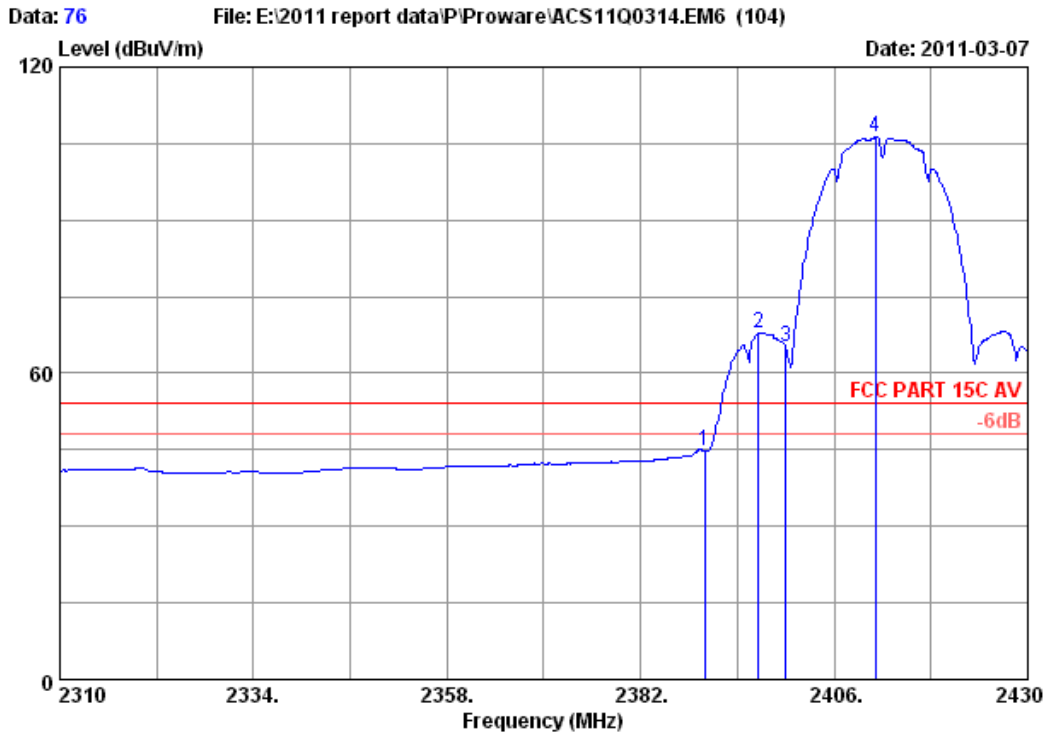


Site no. : RF Chamber Data no. : 75  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2384.760	29.43	7.39	36.62	60.27	60.47	74.00	13.53	Peak
2	2390.000	29.44	7.39	36.62	55.34	55.55	74.00	18.45	Peak
3	2397.000	29.44	7.39	36.62	72.99	73.20	74.00	0.80	Peak
4	2400.000	29.44	7.43	36.62	69.35	69.60	74.00	4.40	Peak
5	2412.960	29.45	7.43	36.62	108.75	109.01	74.00	-35.01	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

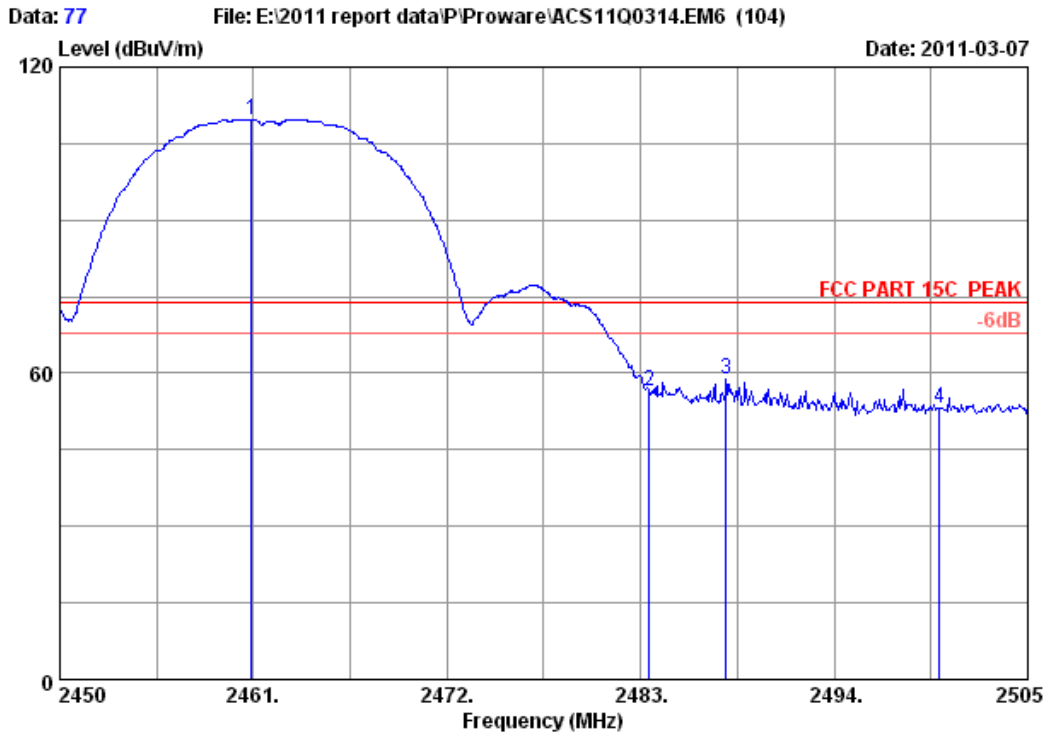


Site no. : RF Chamber Data no. : 76  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	44.56	44.77	54.00	9.23	Average
2	2396.640	29.44	7.39	36.62	67.73	67.94	54.00	-13.94	Average
3	2400.000	29.44	7.43	36.62	64.84	65.09	54.00	-11.09	Average
4	2411.160	29.45	7.43	36.62	105.99	106.25	54.00	-52.25	Average

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

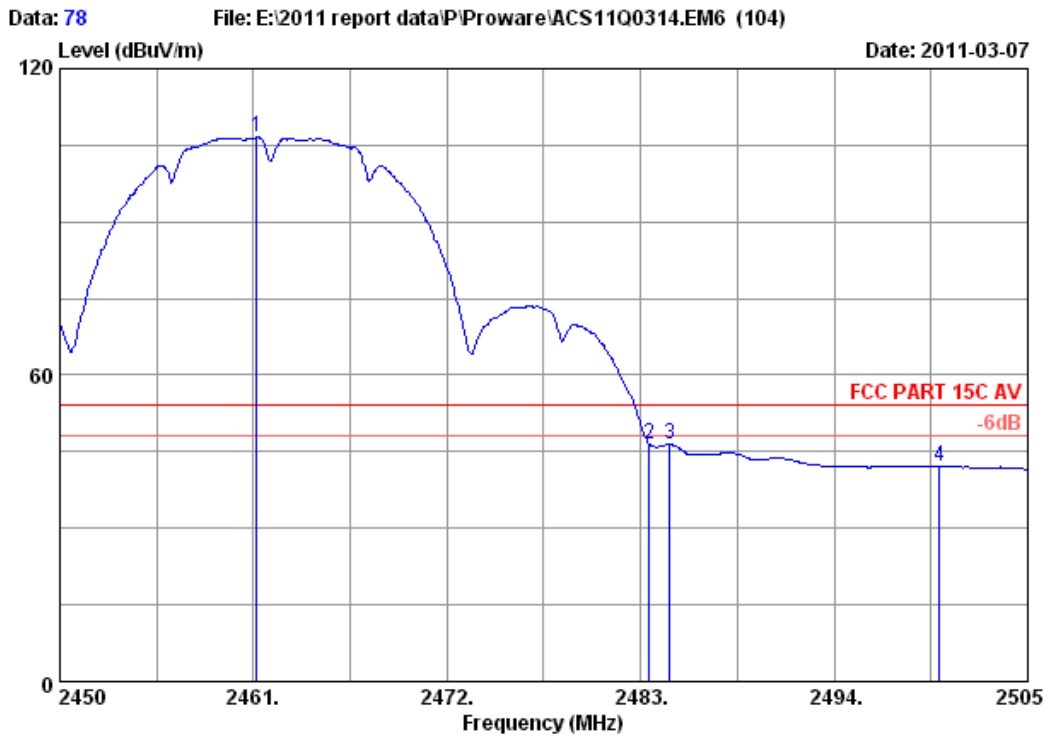


Site no. : RF Chamber Data no. : 77  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.890	29.48	7.54	36.61	109.38	109.79	74.00	-35.79	Peak
2	2483.500	29.49	7.58	36.60	55.86	56.33	74.00	17.67	Peak
3	2487.840	29.50	7.58	36.60	58.25	58.73	74.00	15.27	Peak
4	2500.000	29.50	7.62	36.60	52.57	53.09	74.00	20.91	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

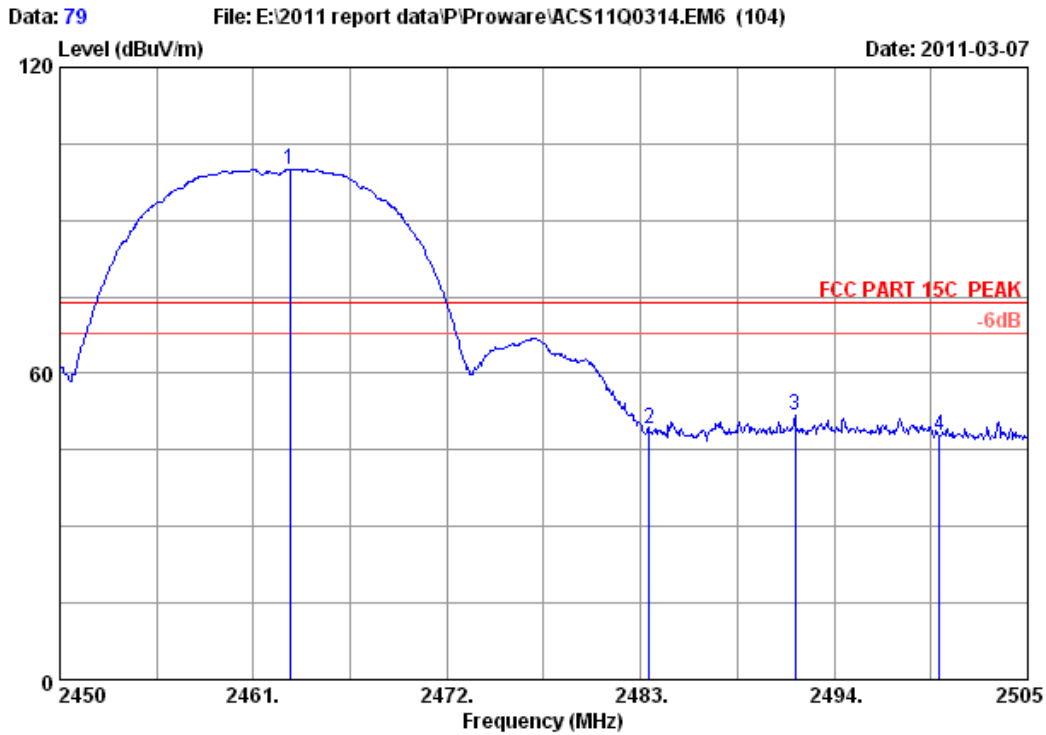


Site no. : RF Chamber Data no. : 78  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2461.165	29.48	7.54	36.61	106.16	106.57	54.00	-52.57	Average
2	2483.500	29.49	7.58	36.60	46.01	46.48	54.00	7.52	Average
3	2484.650	29.49	7.58	36.60	46.11	46.58	54.00	7.42	Average
4	2500.000	29.50	7.62	36.60	41.51	42.03	54.00	11.97	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

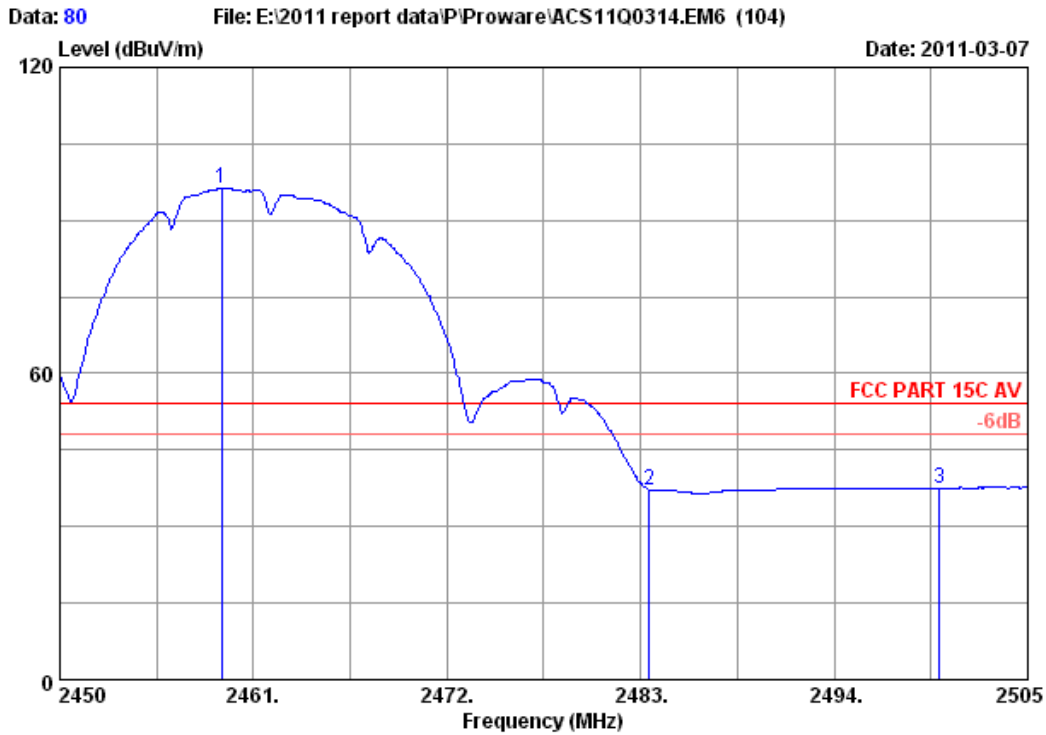


Site no. : RF Chamber Data no. : 79  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2463.090	29.48	7.54	36.61	99.64	100.05	74.00	-26.05	Peak
2	2483.500	29.49	7.58	36.60	48.56	49.03	74.00	24.97	Peak
3	2491.800	29.50	7.58	36.60	51.18	51.66	74.00	22.34	Peak
4	2500.000	29.50	7.62	36.60	47.38	47.90	74.00	26.10	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

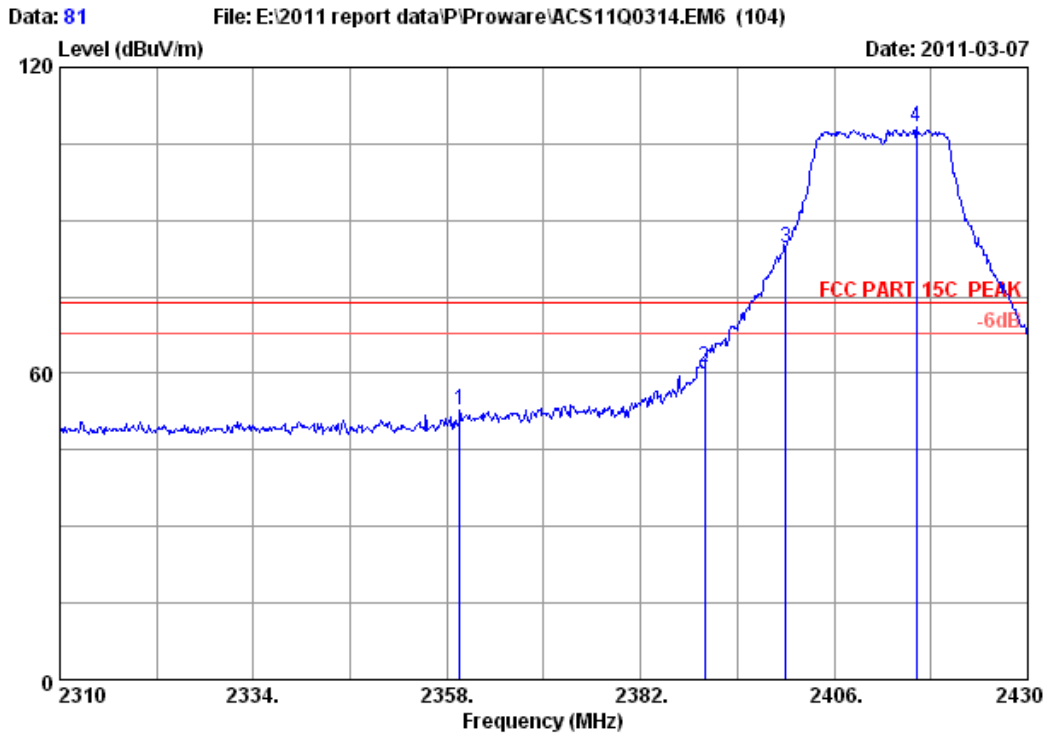


Site no. : RF Chamber Data no. : 80  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.185	29.48	7.54	36.61	95.94	96.35	54.00	-42.35	Average
2	2483.500	29.49	7.58	36.60	36.71	37.18	54.00	16.82	Average
3	2500.000	29.50	7.62	36.60	37.01	37.53	54.00	16.47	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



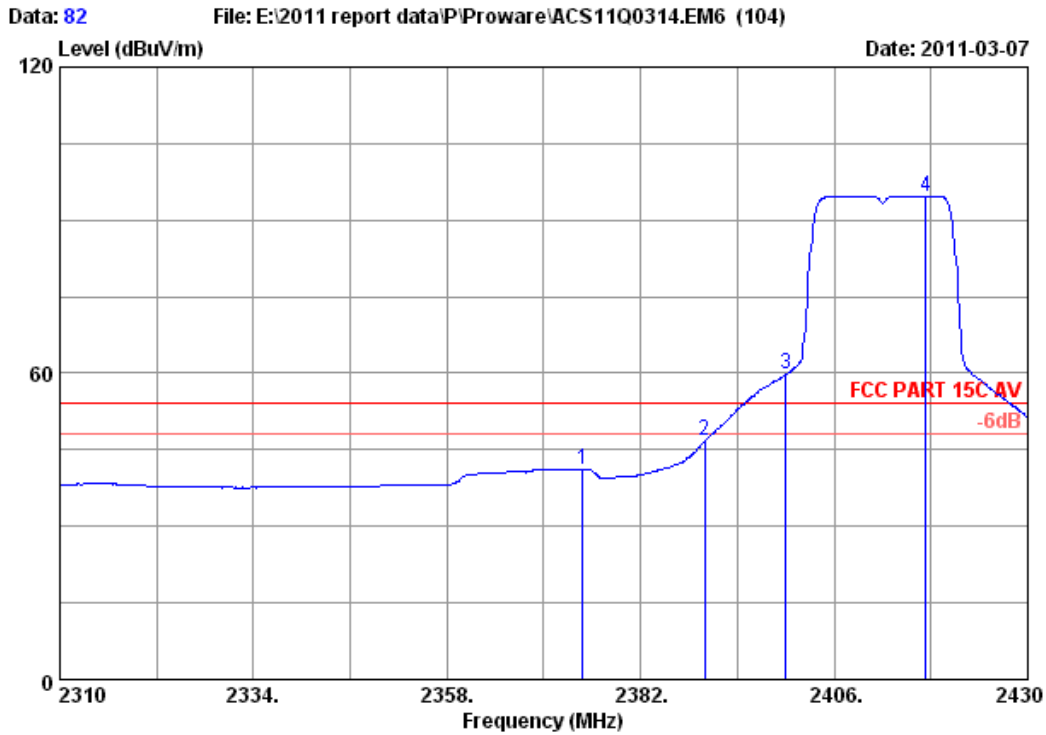
Site no. : RF Chamber Data no. : 81  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2359.560	29.42	7.35	36.63	52.68	52.82	74.00	21.18	Peak
2	2390.000	29.44	7.39	36.62	60.85	61.06	74.00	12.94	Peak
3	2400.000	29.44	7.43	36.62	84.18	84.43	74.00	-10.43	Peak
4	2416.200	29.45	7.43	36.61	108.05	108.32	74.00	-34.32	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



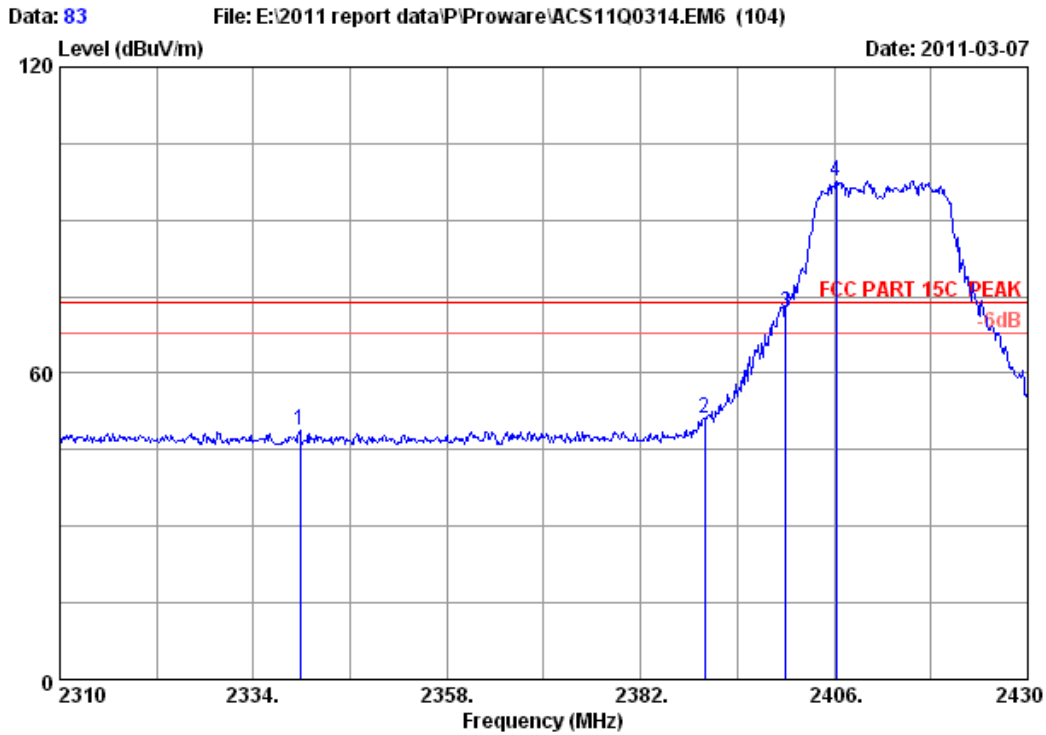


Site no. : RF Chamber Data no. : 82  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2374.800	29.43	7.35	36.62	41.08	41.24	54.00	12.76	Average
2	2390.000	29.44	7.39	36.62	46.54	46.75	54.00	7.25	Average
3	2400.000	29.44	7.43	36.62	59.45	59.70	54.00	-5.70	Average
4	2417.400	29.45	7.43	36.61	94.38	94.65	54.00	-40.65	Average

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

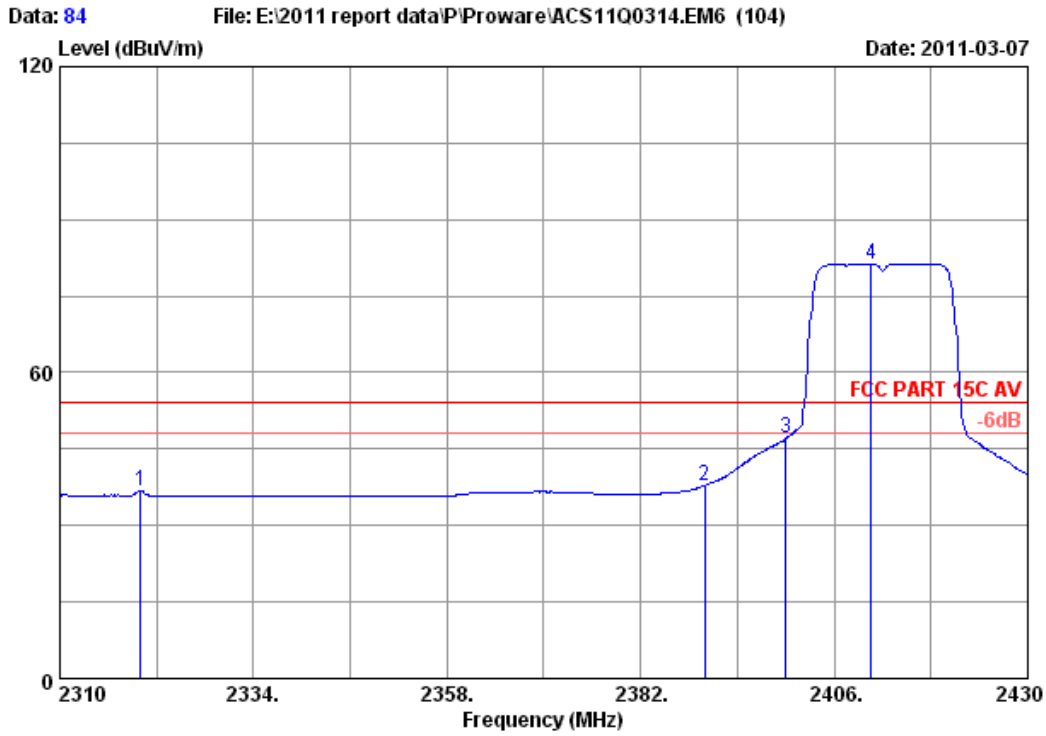


Site no. : RF Chamber Data no. : 83  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2339.760	29.41	7.31	36.63	48.68	48.77	74.00	25.23	Peak
2	2390.000	29.44	7.39	36.62	51.09	51.30	74.00	22.70	Peak
3	2400.000	29.44	7.43	36.62	71.67	71.92	74.00	2.08	Peak
4	2406.240	29.45	7.43	36.62	97.46	97.72	74.00	-23.72	Peak

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

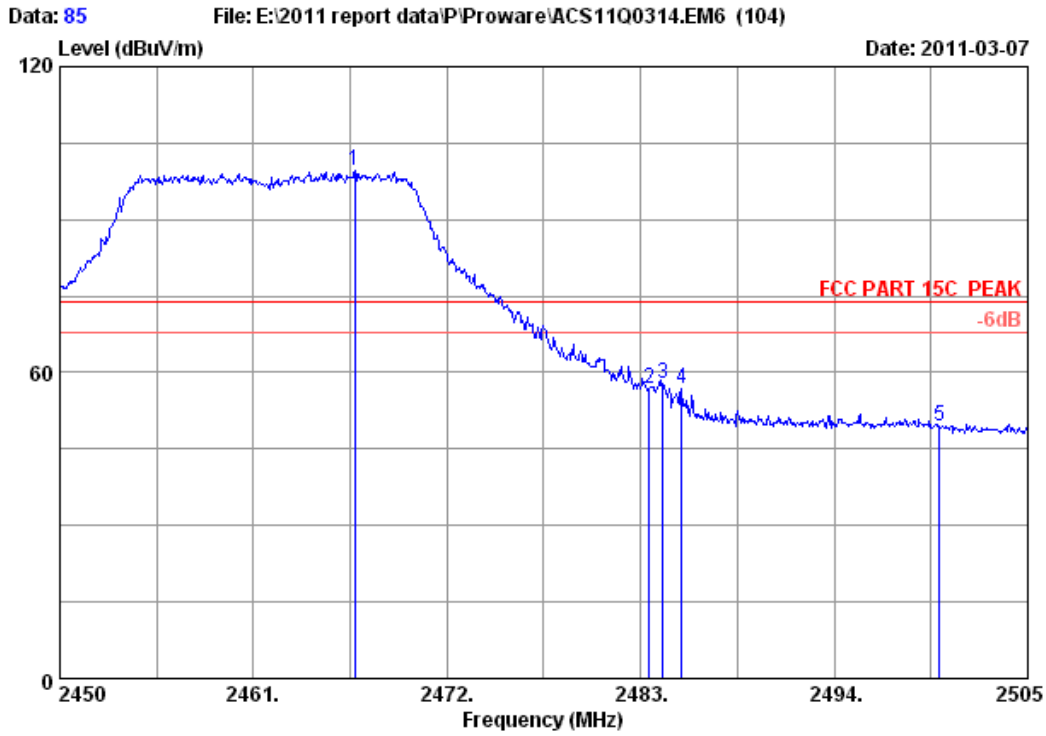


Site no. : RF Chamber Data no. : 84  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2319.960	29.40	7.27	36.63	36.72	36.76	54.00	17.24	Average
2	2390.000	29.44	7.39	36.62	37.66	37.87	54.00	16.13	Average
3	2400.000	29.44	7.43	36.62	46.82	47.07	54.00	6.93	Average
4	2410.560	29.45	7.43	36.62	81.01	81.27	54.00	-27.27	Average

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

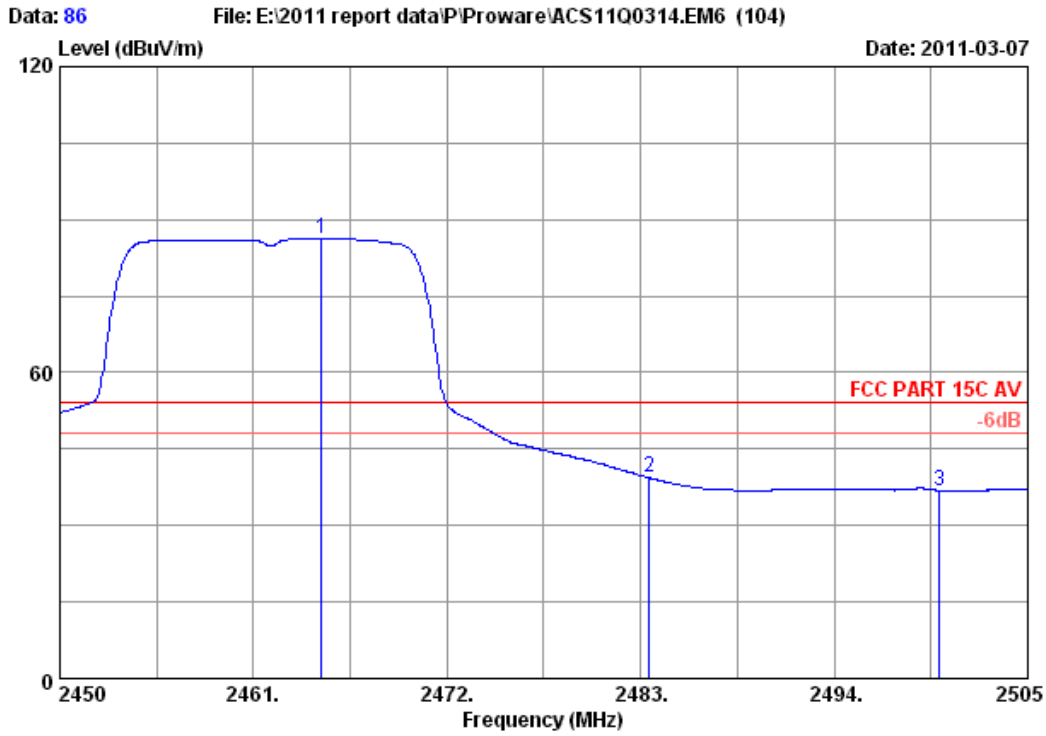


Site no. : RF Chamber Data no. : 85  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2466.775	29.48	7.54	36.60	99.18	99.60	74.00	-25.60	Peak
2	2483.500	29.49	7.58	36.60	56.50	56.97	74.00	17.03	Peak
3	2484.265	29.49	7.58	36.60	57.45	57.92	74.00	16.08	Peak
4	2485.310	29.49	7.58	36.60	56.51	56.98	74.00	17.02	Peak
5	2500.000	29.50	7.62	36.60	48.86	49.38	74.00	24.62	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

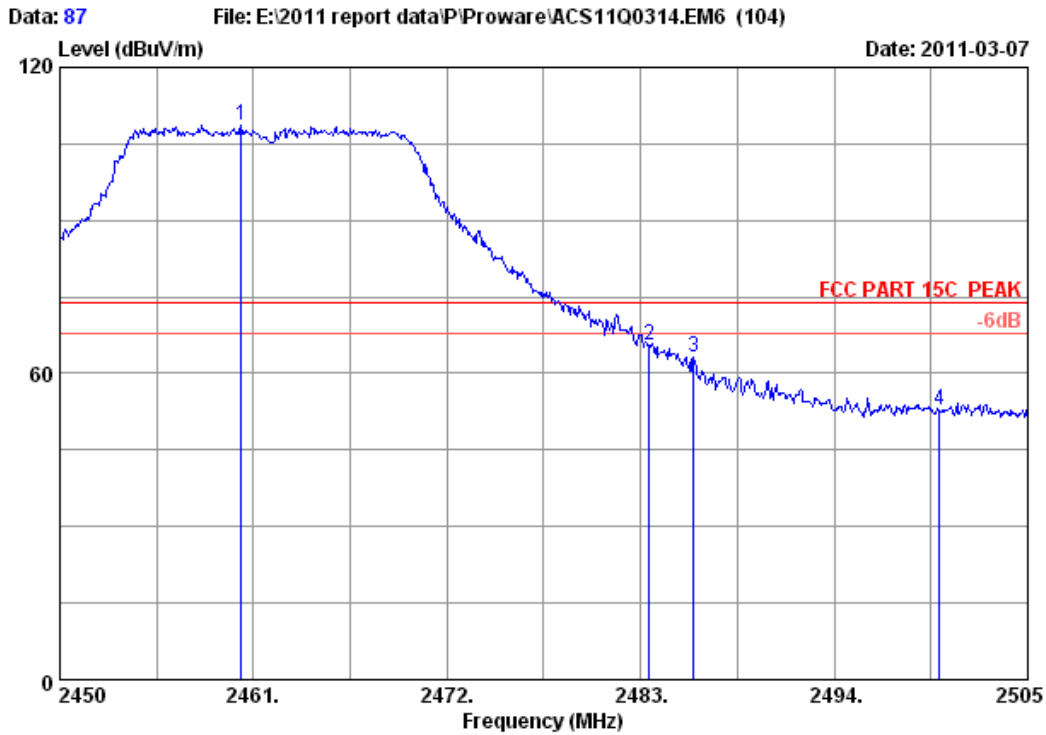


Site no. : RF Chamber Data no. : 86  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2464.850	29.48	7.54	36.61	85.87	86.28	54.00	-32.28	Average
2	2483.500	29.49	7.58	36.60	38.85	39.32	54.00	14.68	Average
3	2500.000	29.50	7.62	36.60	36.32	36.84	54.00	17.16	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

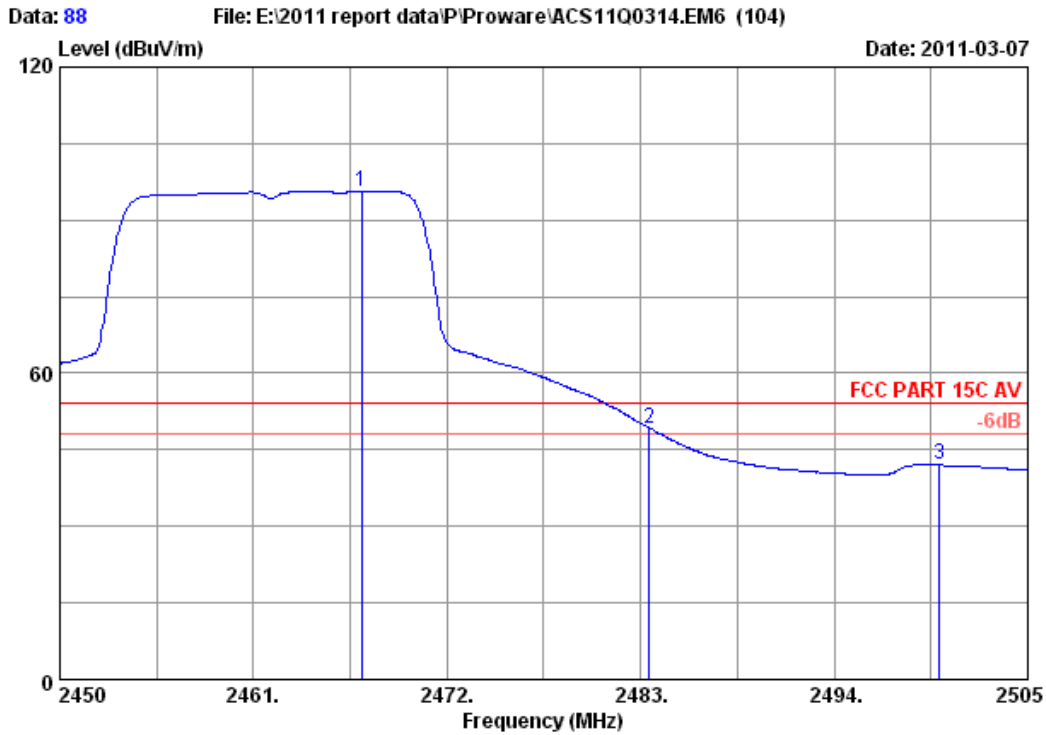


Site no. : RF Chamber Data no. : 87  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.285	29.48	7.54	36.61	108.11	108.52	74.00	-34.52	Peak
2	2483.500	29.49	7.58	36.60	64.93	65.40	74.00	8.60	Peak
3	2486.025	29.49	7.58	36.60	62.81	63.28	74.00	10.72	Peak
4	2500.000	29.50	7.62	36.60	52.16	52.68	74.00	21.32	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

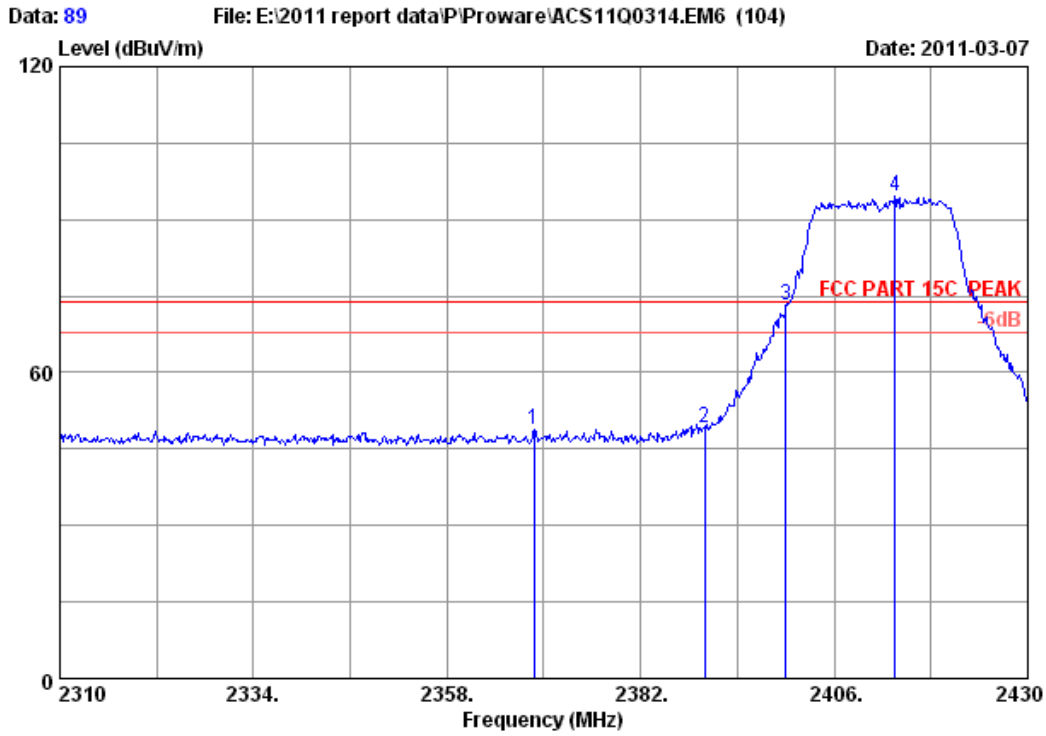


Site no. : RF Chamber Data no. : 88  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2467.160	29.48	7.54	36.60	95.13	95.55	54.00	-41.55	Average
2	2483.500	29.49	7.58	36.60	48.78	49.25	54.00	4.75	Average
3	2500.000	29.50	7.62	36.60	41.50	42.02	54.00	11.98	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



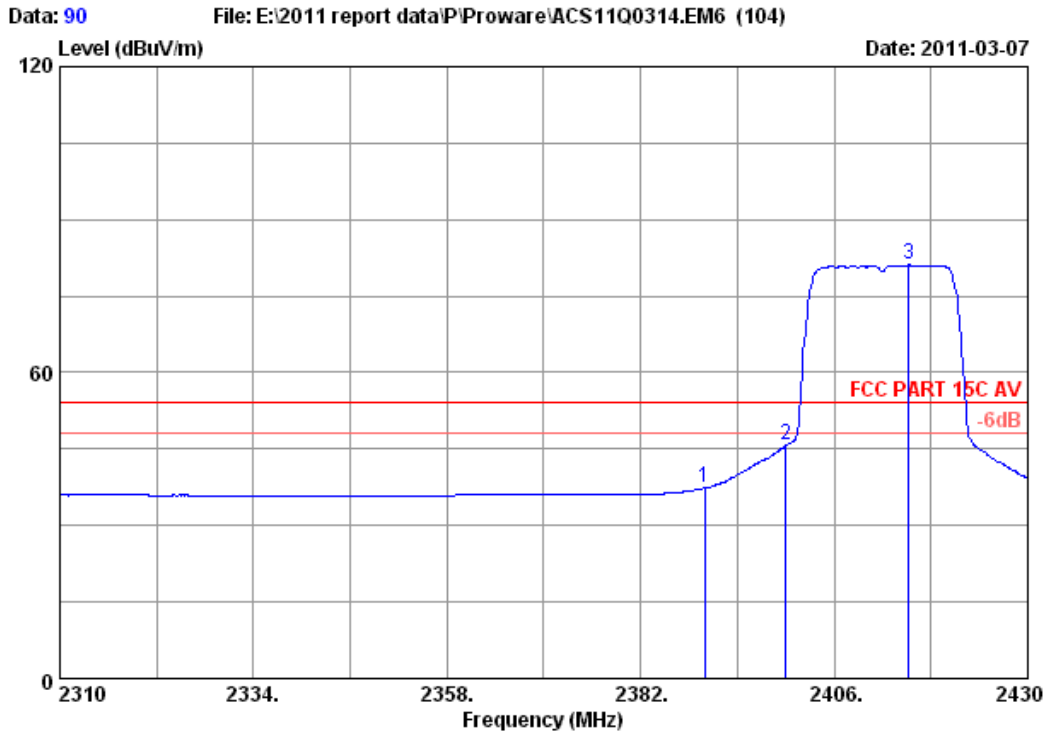
Site no. : RF Chamber Data no. : 89  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2368.800	29.43	7.35	36.62	48.67	48.83	74.00	25.17	Peak
2	2390.000	29.44	7.39	36.62	48.93	49.14	74.00	24.86	Peak
3	2400.000	29.44	7.43	36.62	72.88	73.13	74.00	0.87	Peak
4	2413.560	29.45	7.43	36.62	94.17	94.43	74.00	-20.43	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



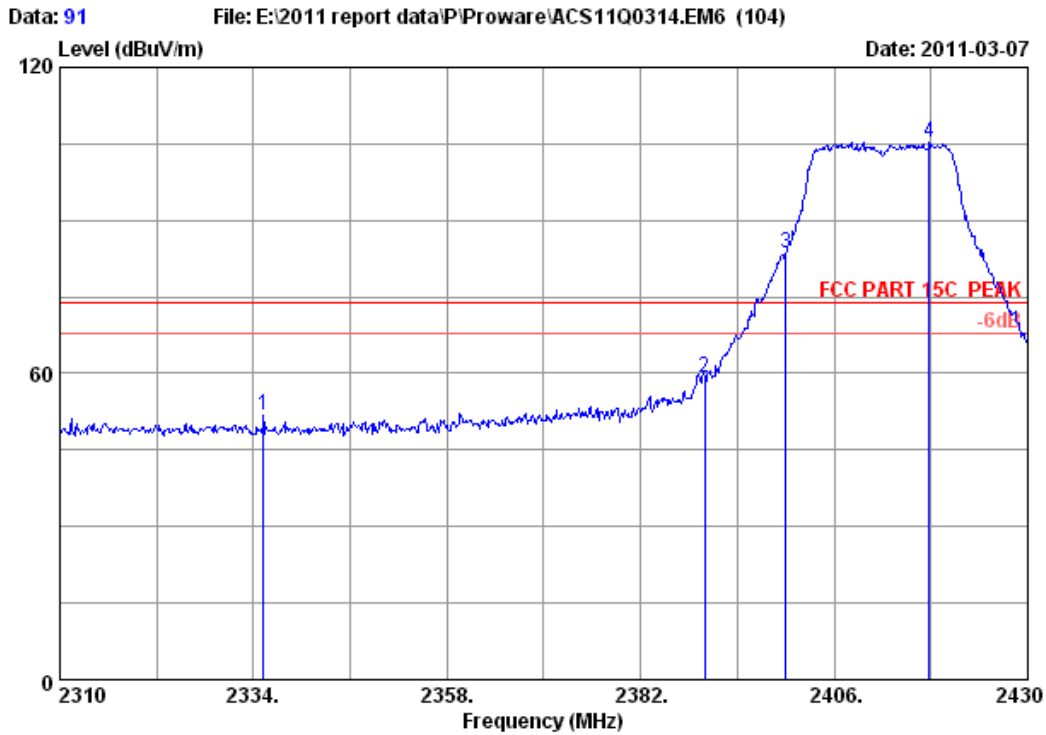


Site no. : RF Chamber Data no. : 90  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	37.12	37.33	54.00	16.67	Average
2	2400.000	29.44	7.43	36.62	45.51	45.76	54.00	8.24	Average
3	2415.240	29.45	7.43	36.62	80.82	81.08	54.00	-27.08	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

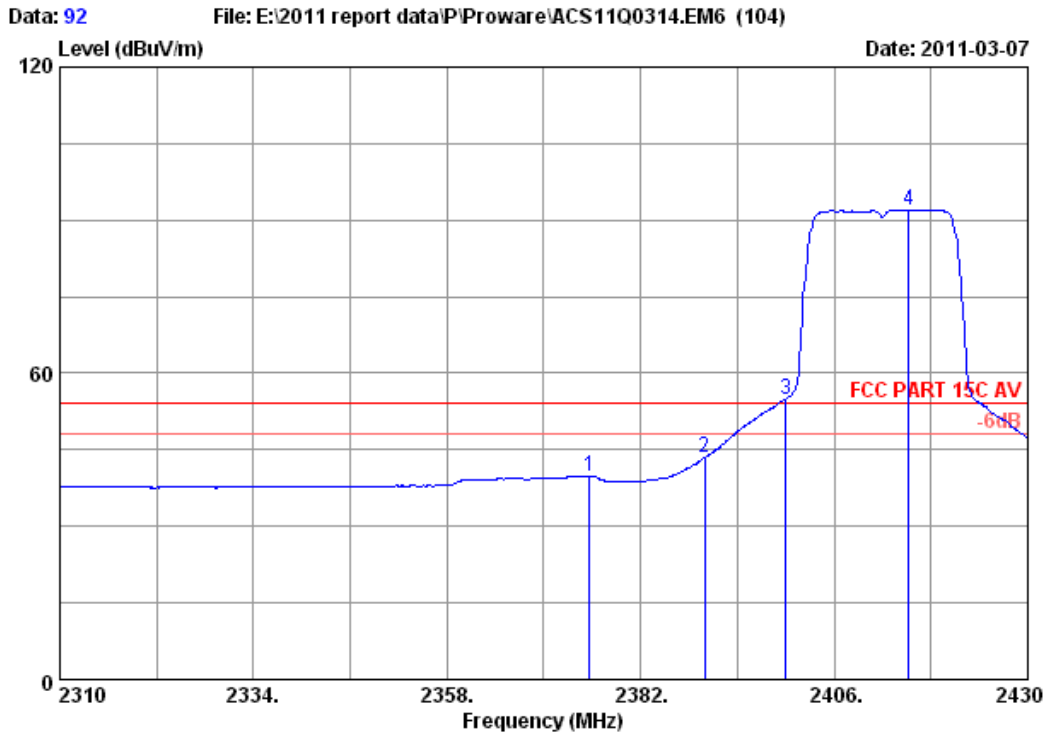


Site no. : RF Chamber Data no. : 91  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2335.200	29.41	7.27	36.63	51.60	51.65	74.00	22.35	Peak
2	2390.000	29.44	7.39	36.62	58.87	59.08	74.00	14.92	Peak
3	2400.000	29.44	7.43	36.62	83.22	83.47	74.00	-9.47	Peak
4	2417.760	29.45	7.43	36.61	105.17	105.44	74.00	-31.44	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

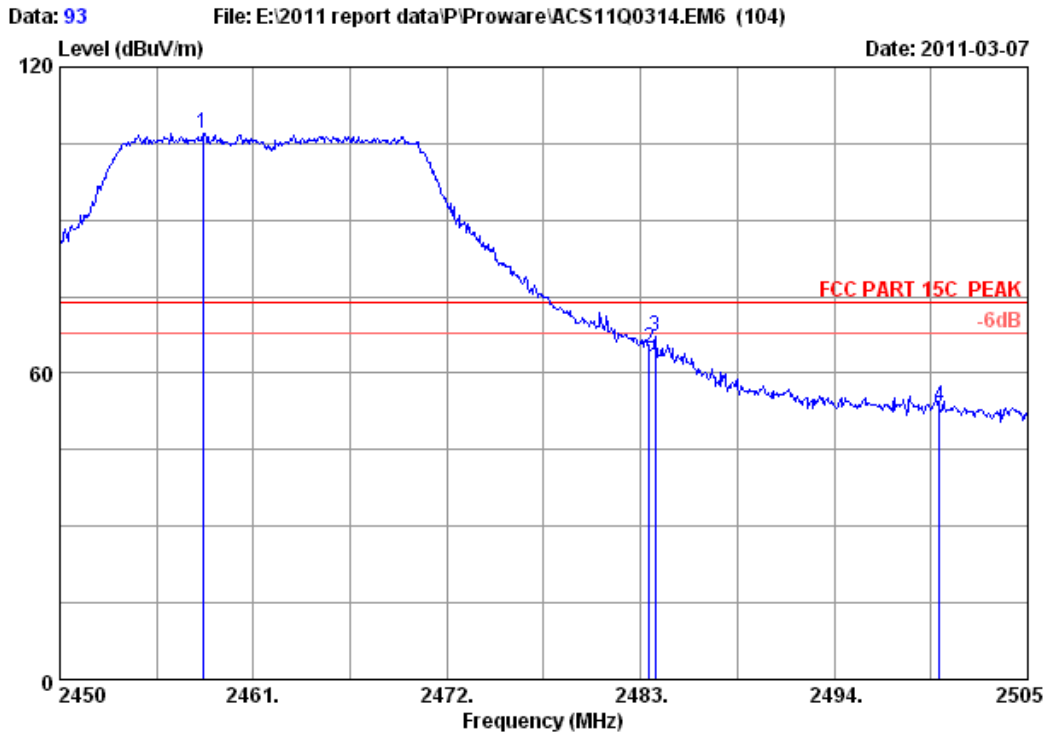


Site no. : RF Chamber Data no. : 92  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH1 2412MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2375.640	29.43	7.35	36.62	39.71	39.87	54.00	14.13	Average
2	2390.000	29.44	7.39	36.62	43.31	43.52	54.00	10.48	Average
3	2400.000	29.44	7.43	36.62	54.72	54.97	54.00	-0.97	Average
4	2415.240	29.45	7.43	36.62	91.64	91.90	54.00	-37.90	Average

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

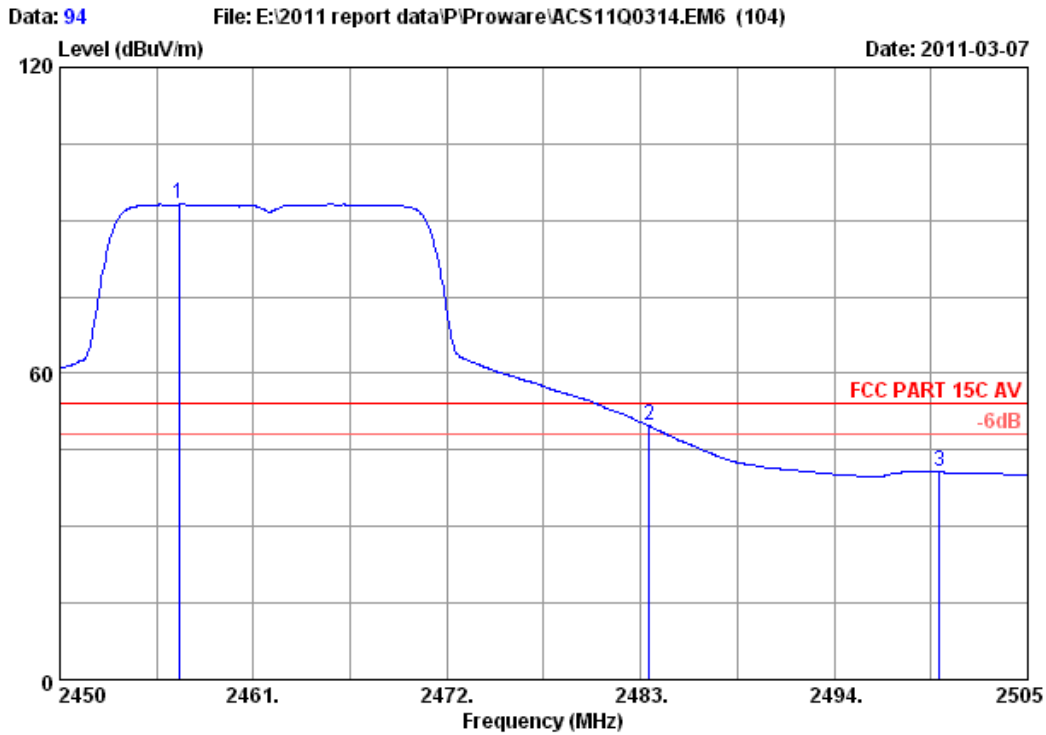


Site no. : RF Chamber Data no. : 93  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.140	29.48	7.50	36.61	106.60	106.97	74.00	-32.97	Peak
2	2483.500	29.49	7.58	36.60	64.46	64.93	74.00	9.07	Peak
3	2483.825	29.49	7.58	36.60	66.77	67.24	74.00	6.76	Peak
4	2500.000	29.50	7.62	36.60	53.05	53.57	74.00	20.43	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

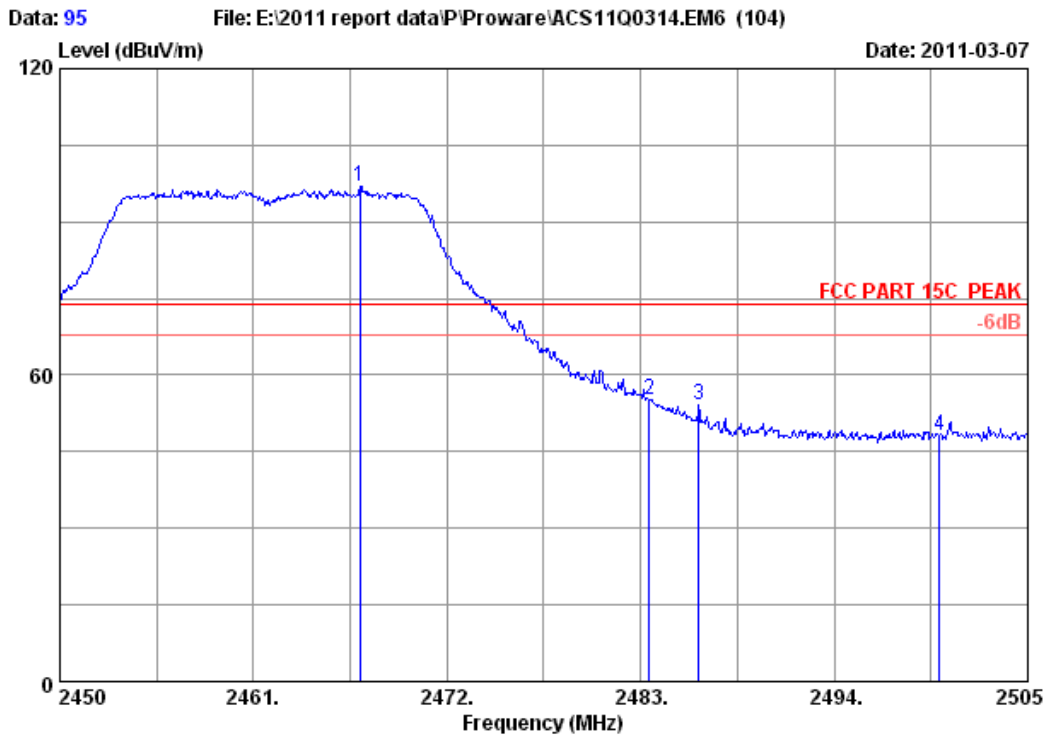


Site no. : RF Chamber Data no. : 94  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2456.765	29.48	7.50	36.61	92.74	93.11	54.00	-39.11	Average
2	2483.500	29.49	7.58	36.60	49.22	49.69	54.00	4.31	Average
3	2500.000	29.50	7.62	36.60	40.14	40.66	54.00	13.34	Average

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

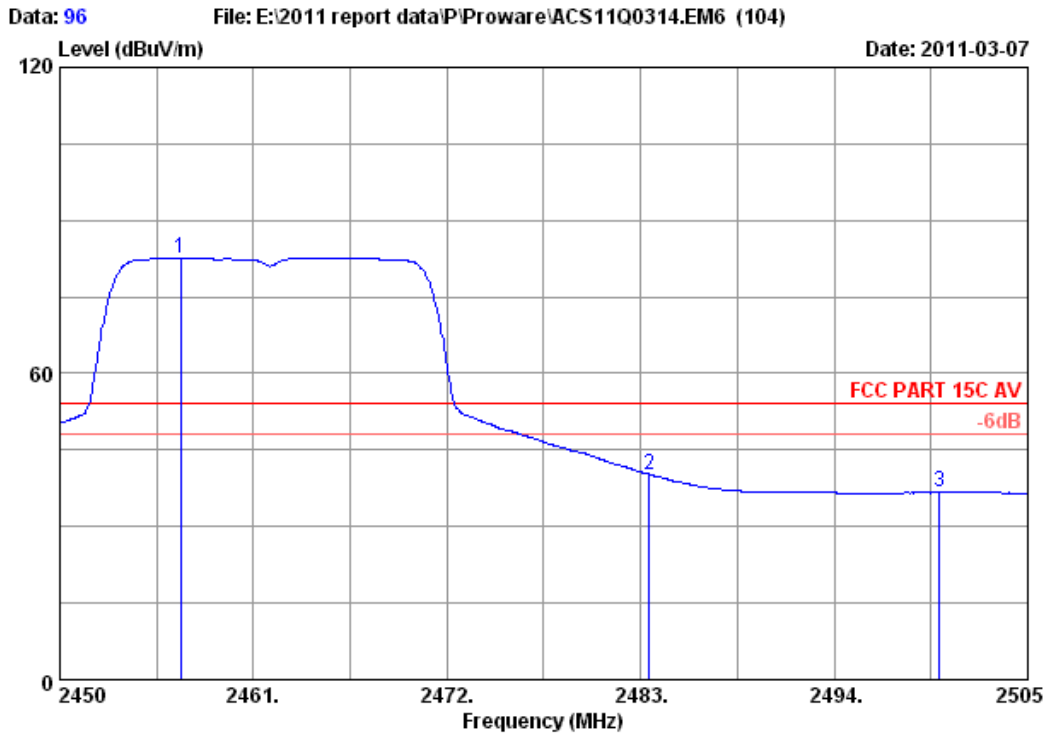


Site no. : RF Chamber Data no. : 95  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2467.050	29.48	7.54	36.60	96.53	96.95	74.00	-22.95	Peak
2	2483.500	29.49	7.58	36.60	54.68	55.15	74.00	18.85	Peak
3	2486.300	29.49	7.58	36.60	53.56	54.03	74.00	19.97	Peak
4	2500.000	29.50	7.62	36.60	47.73	48.25	74.00	25.75	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

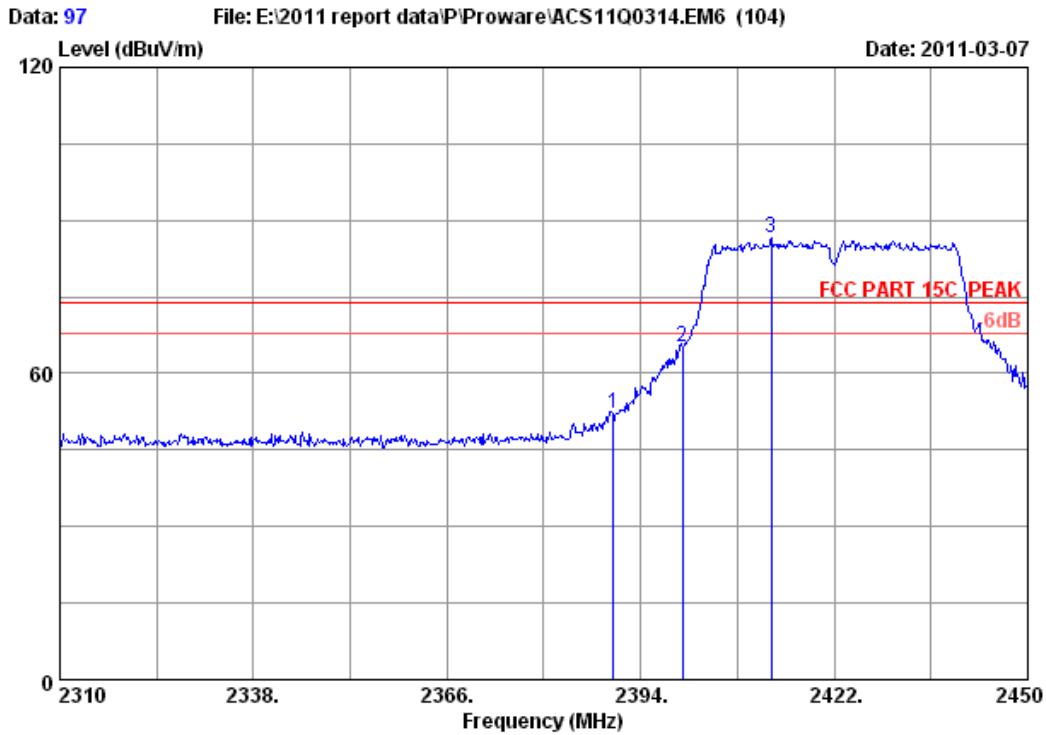


Site no. : RF Chamber Data no. : 96  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT20 CH11 2462MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2456.875	29.48	7.50	36.61	82.26	82.63	54.00	-28.63	Average
2	2483.500	29.49	7.58	36.60	39.75	40.22	54.00	13.78	Average
3	2500.000	29.50	7.62	36.60	36.13	36.65	54.00	17.35	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



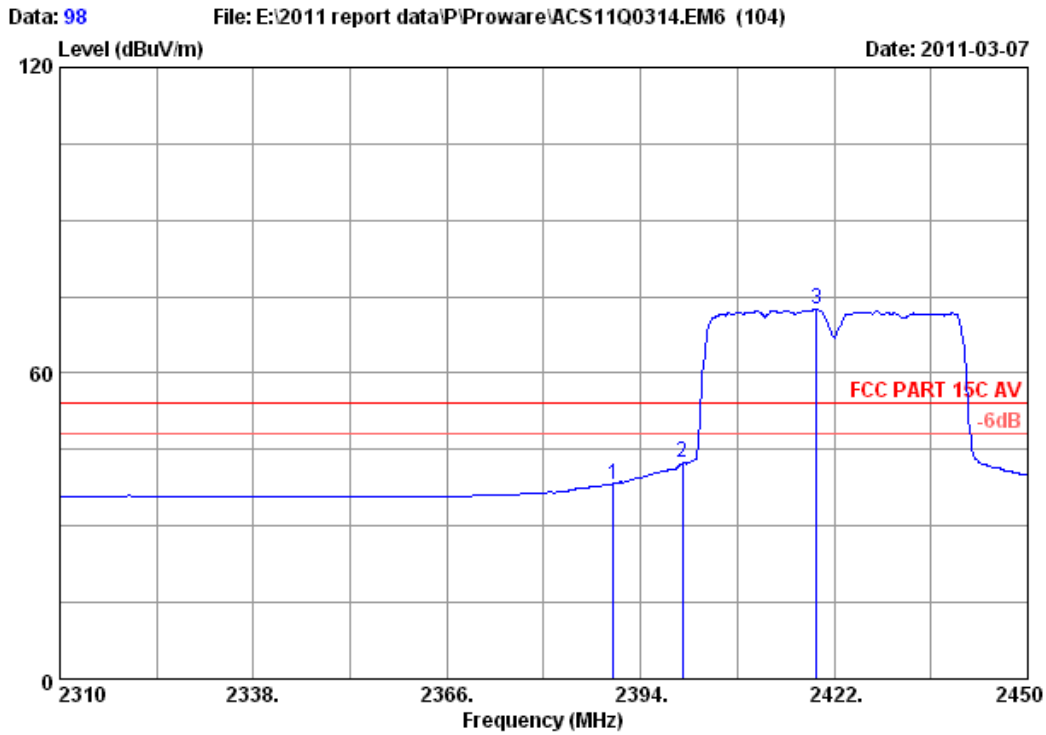
Site no. : RF Chamber Data no. : 97  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	52.00	52.21	74.00	21.79	Peak
2	2400.000	29.44	7.43	36.62	64.87	65.12	74.00	8.88	Peak
3	2412.900	29.45	7.43	36.62	86.26	86.52	74.00	-12.52	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



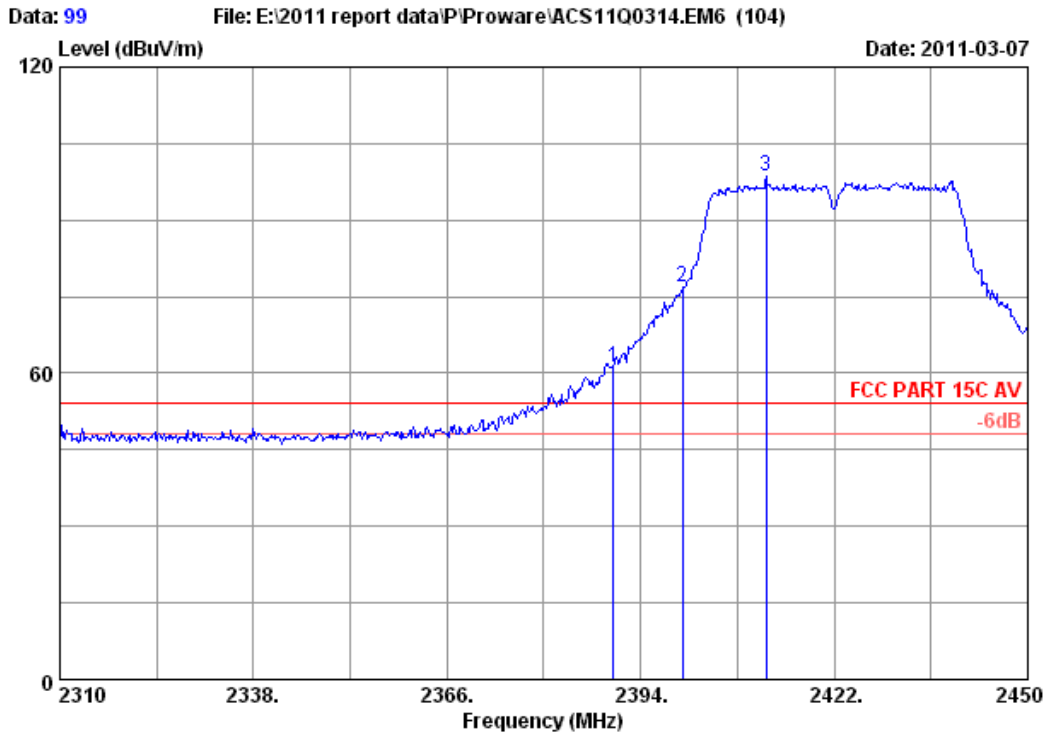


Site no. : RF Chamber Data no. : 98  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	38.04	38.25	54.00	15.75	Average
2	2400.000	29.44	7.43	36.62	42.04	42.29	54.00	11.71	Average
3	2419.480	29.45	7.46	36.61	72.21	72.51	54.00	-18.51	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

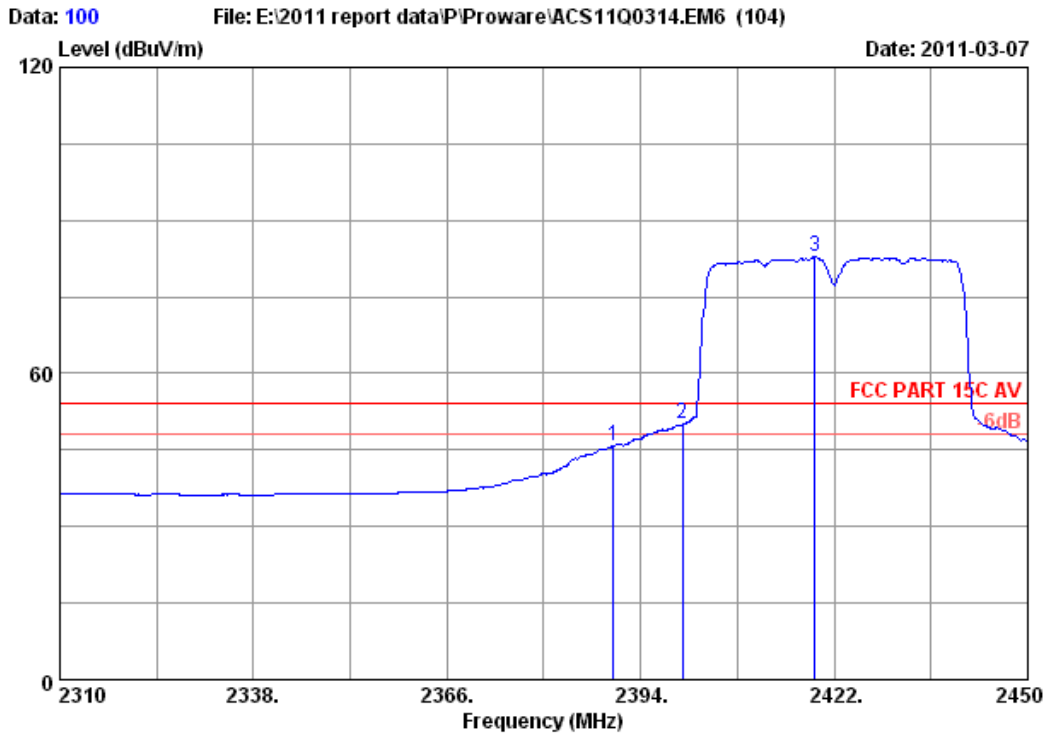


Site no. : RF Chamber Data no. : 99  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	61.01	61.22	74.00	12.78	Peak
2	2400.000	29.44	7.43	36.62	76.63	76.88	74.00	-2.88	Peak
3	2412.200	29.45	7.43	36.62	98.35	98.61	74.00	-24.61	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

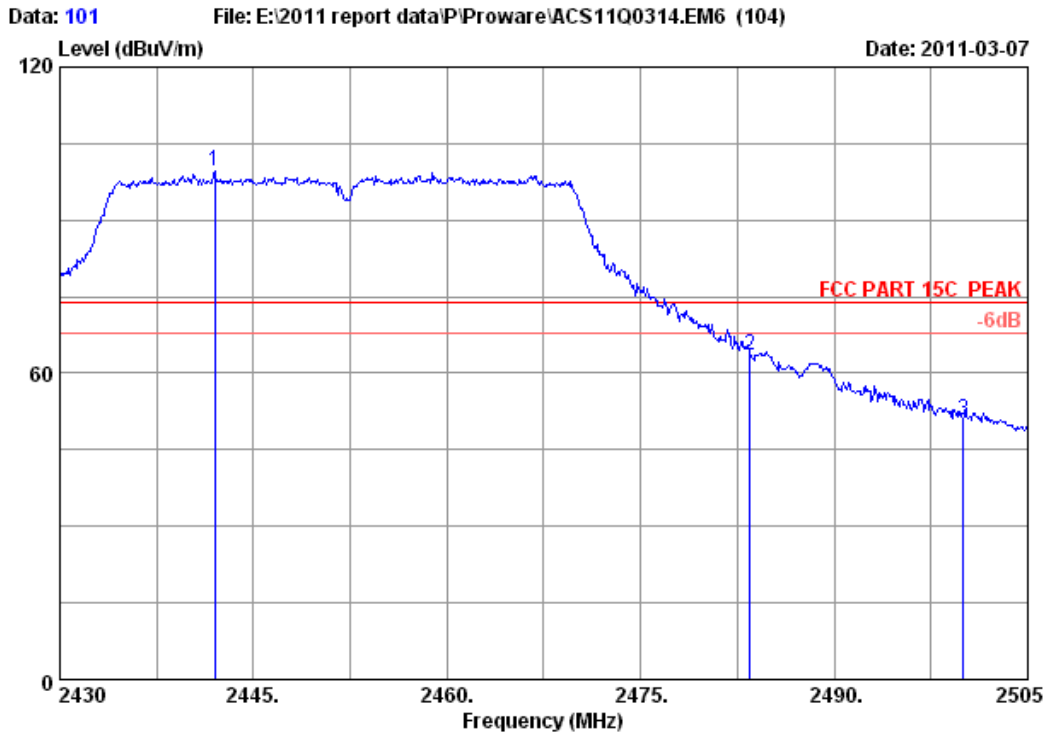


Site no. : RF Chamber Data no. : 100  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH1 2422MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	29.44	7.39	36.62	45.47	45.68	54.00	8.32	Average
2	2400.000	29.44	7.43	36.62	49.76	50.01	54.00	3.99	Average
3	2419.200	29.45	7.46	36.61	82.52	82.82	54.00	-28.82	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

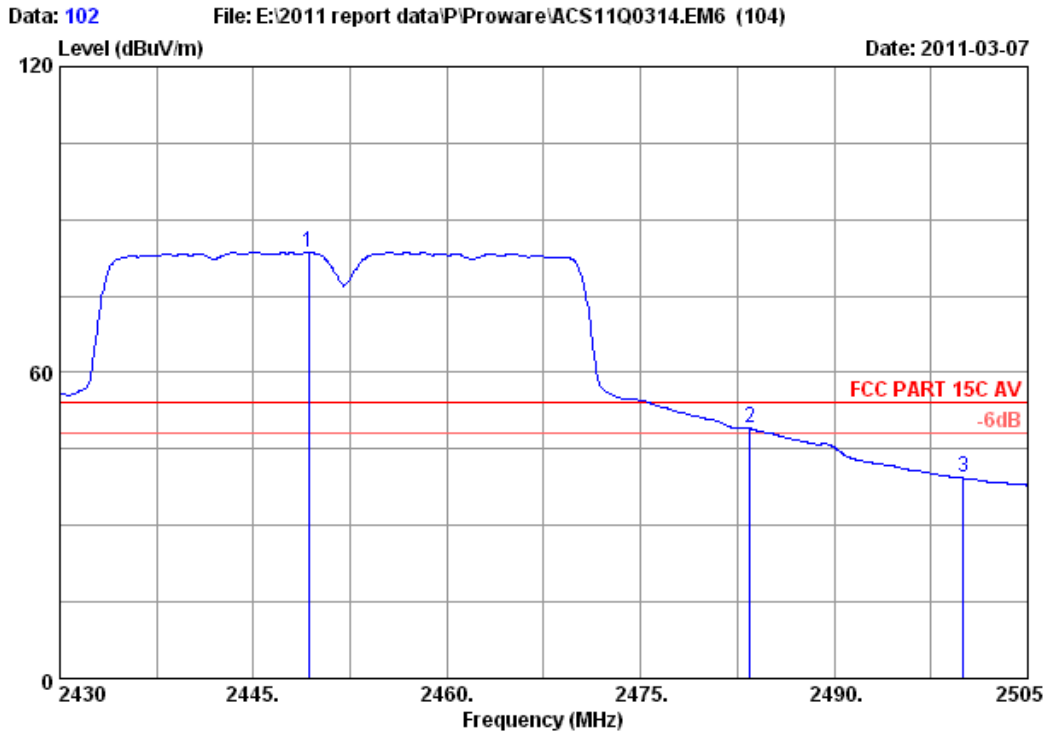


Site no. : RF Chamber Data no. : 101  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2442.000	29.47	7.50	36.61	99.23	99.59	74.00	-25.59	Peak
2	2483.500	29.49	7.58	36.60	63.00	63.47	74.00	10.53	Peak
3	2500.000	29.50	7.62	36.60	50.31	50.83	74.00	23.17	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

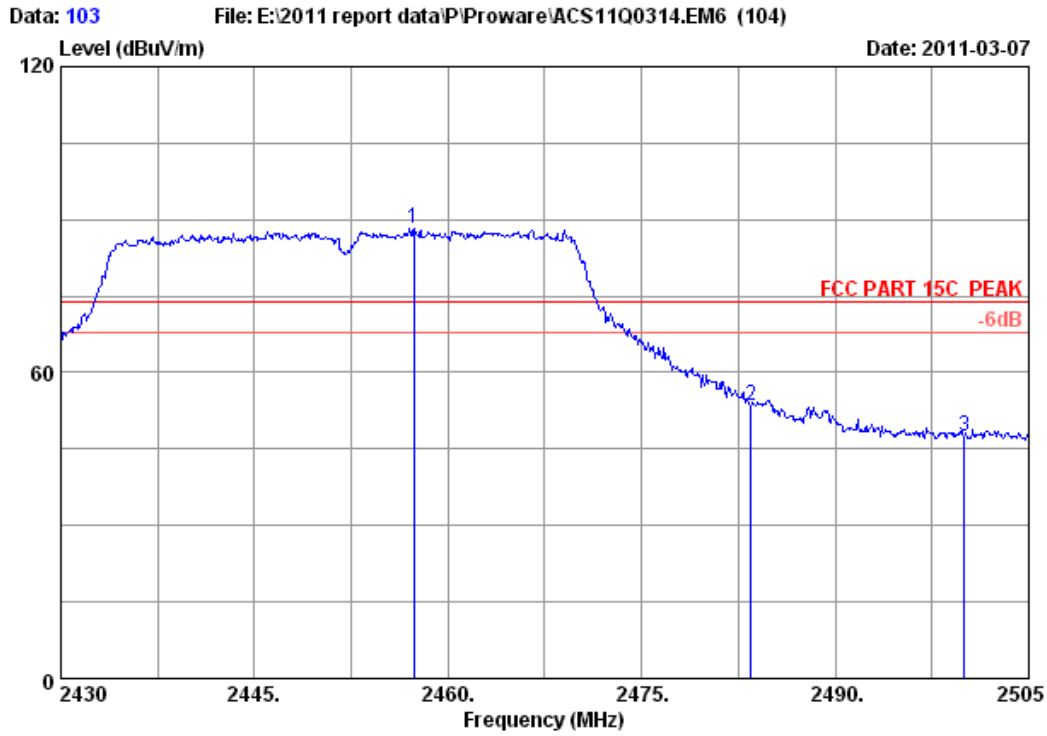


Site no. : RF Chamber Data no. : 102  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.275	29.47	7.50	36.61	83.25	83.61	54.00	-29.61	Average
2	2483.500	29.49	7.58	36.60	48.59	49.06	54.00	4.94	Average
3	2500.000	29.50	7.62	36.60	38.76	39.28	54.00	14.72	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

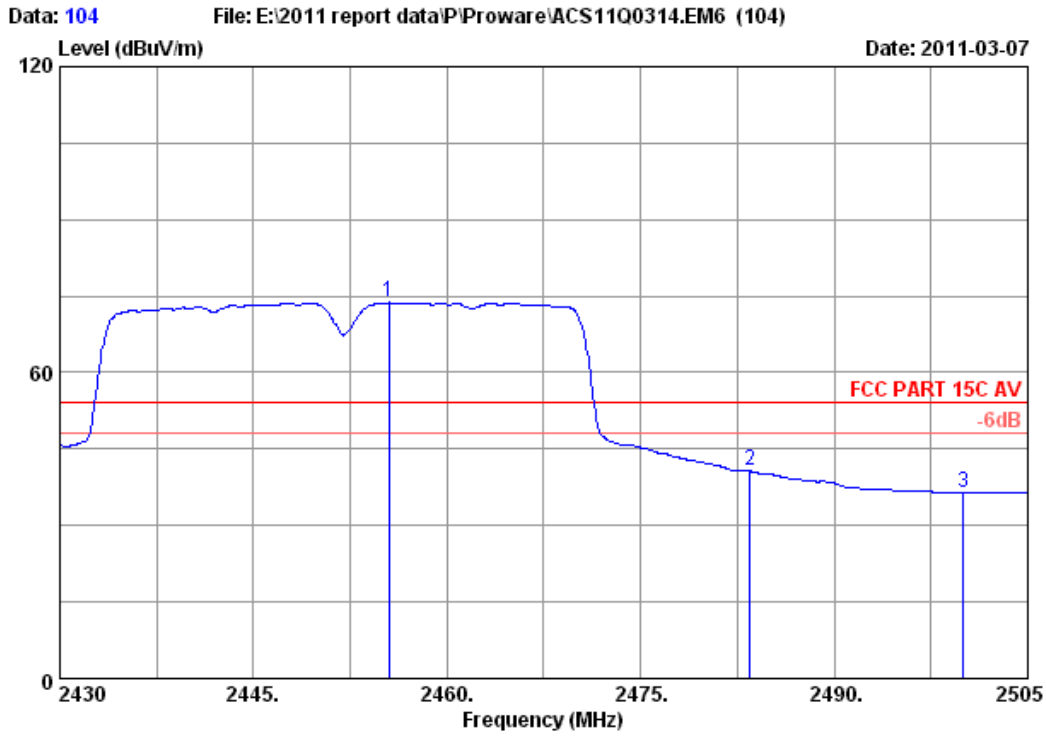


Site no. : RF Chamber Data no. : 103  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2457.375	29.48	7.50	36.61	87.93	88.30	74.00	-14.30	Peak
2	2483.500	29.49	7.58	36.60	53.18	53.65	74.00	20.35	Peak
3	2500.000	29.50	7.62	36.60	46.98	47.50	74.00	26.50	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 104  
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Sunny-lu  
 EUT : 3G Wireless Lite-N Router  
 Power : DC 12V From Adapter Input AC 120V/60Hz  
 Test mode : IEEE802.11n HT40 CH7 2452MHz Tx  
 M/N : PW-3G401D

	Ant. Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2455.500	29.48	7.50	36.61	73.34	73.71	54.00	-19.71	Average
2	2483.500	29.49	7.58	36.60	40.24	40.71	54.00	13.29	Average
3	2500.000	29.50	7.62	36.60	36.01	36.53	54.00	17.47	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

## 7. 6dB Bandwidth Test

### 7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year

### 7.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 7.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

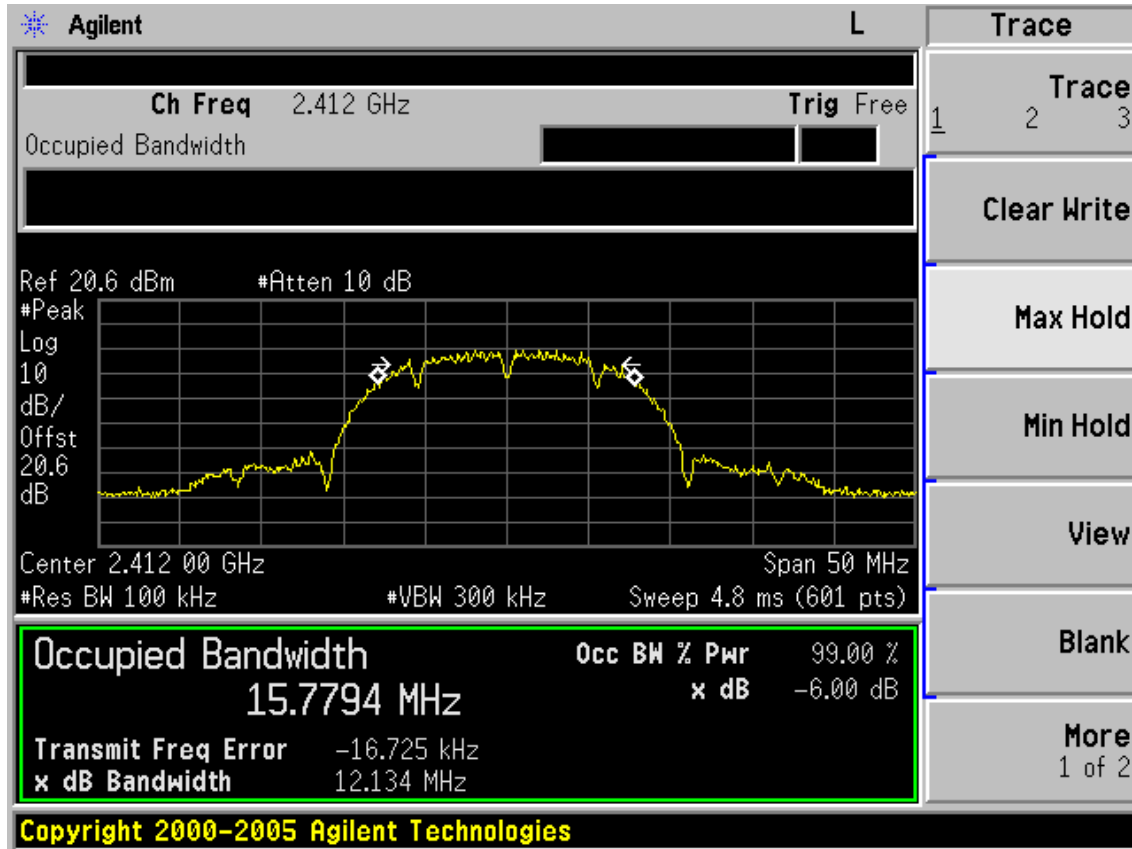
### 7.4. Test Results

EUT:3G Wireless Lite-N Router		
M/N:PW-3G401D		
Test date:2011-03-07	Pressure: 100.6 kpa	Humidity: 60 %
Tested by:Sunny-lu	Test site: RF Site	Temperature: 25 °C

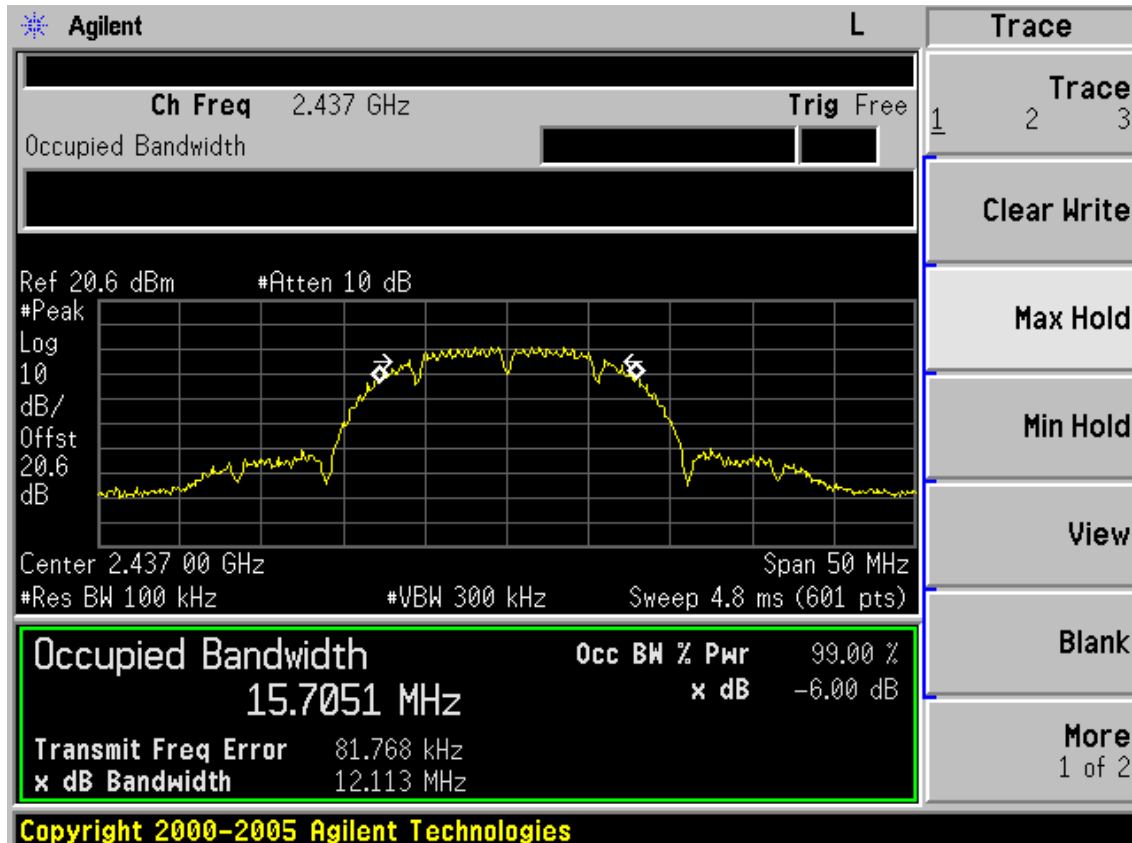
Cable loss: 0.6 dB		Attenuator loss: 20 dB	Antenna Gain: 5 dBi
Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11b	CH1	12.134	>500
	CH6	12.113	>500
	CH11	12.607	>500
11g	CH1	16.605	>500
	CH6	16.550	>500
	CH11	16.601	>500
11n HT20	CH1	17.780	>500
	CH6	17.751	>500
	CH11	17.752	>500
11n HT40	CH1	36.403	>500
	CH4	36.125	>500
	CH7	36.184	>500
Conclusion : PASS			



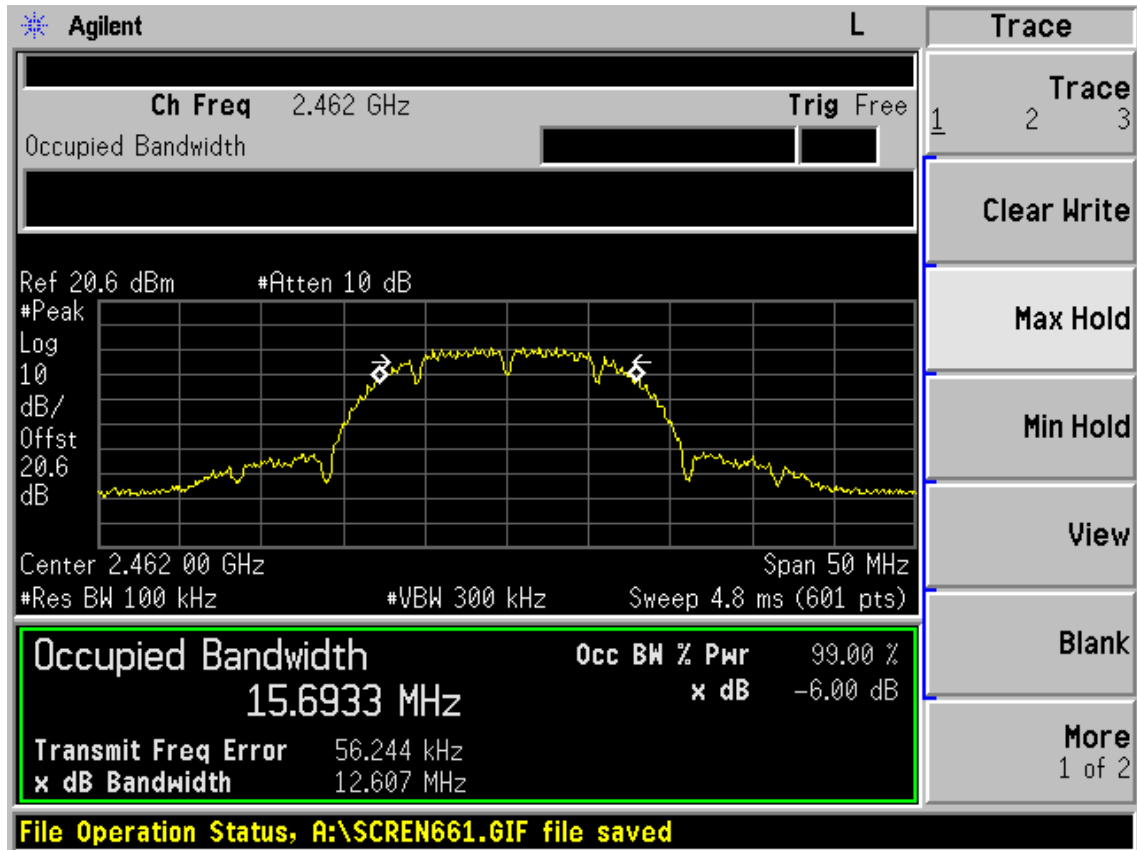
Test Mode: IEEE 802.11b TX  
 Test CH1: 2412MHz



Test CH6: 2437MHz

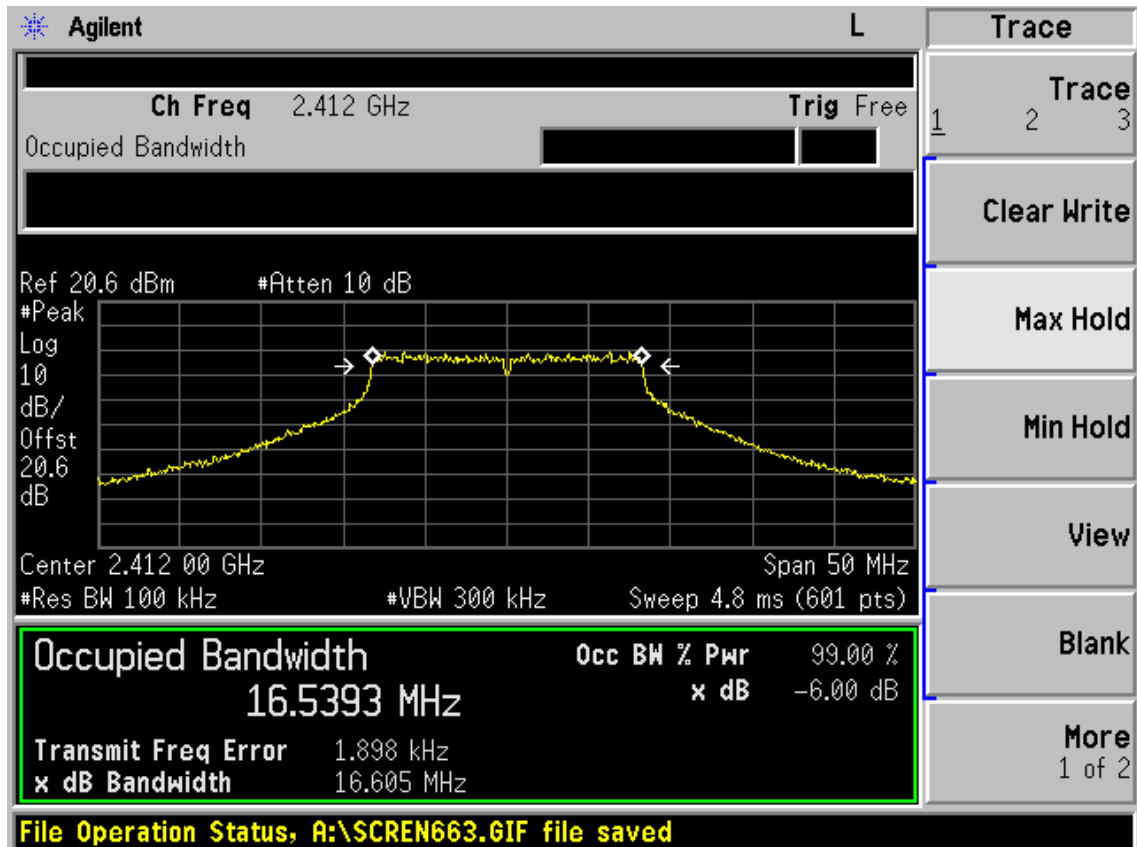


Test CH11: 2462MHz



Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz



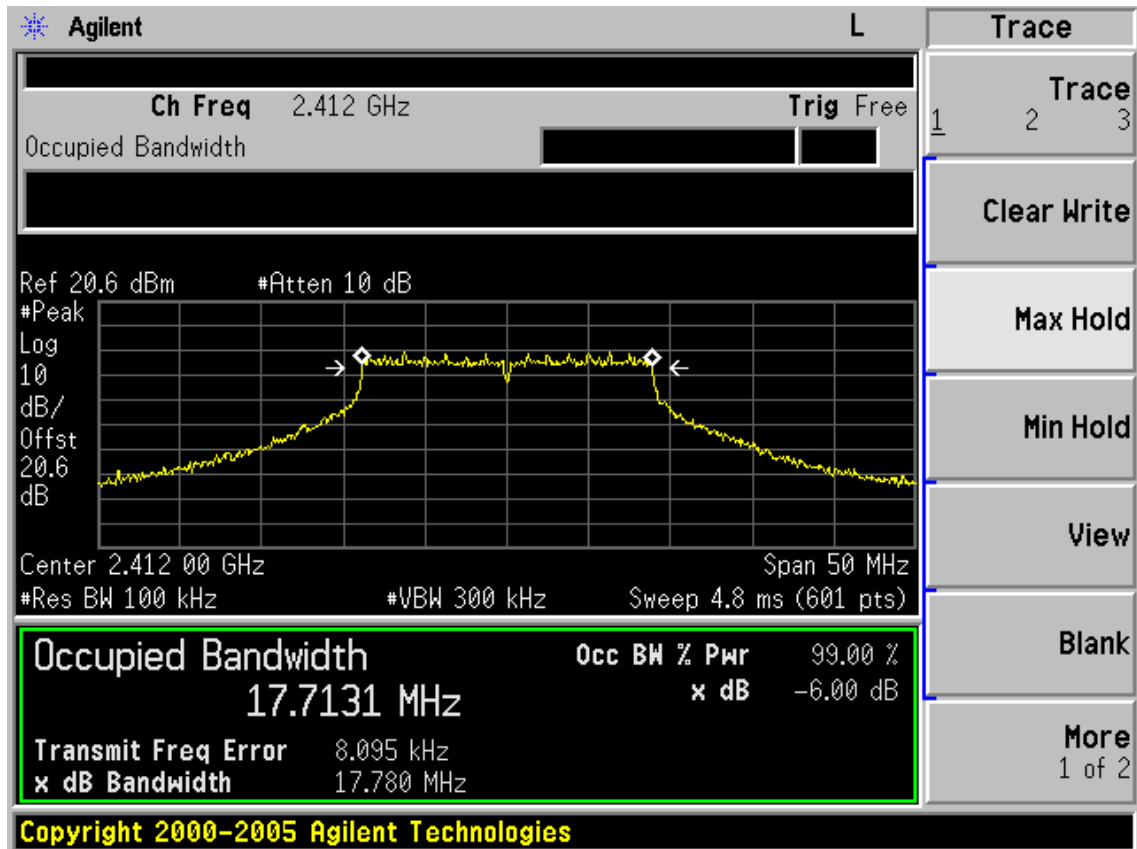
Test CH6: 2437MHz

		L	Trace
<b>Ch Freq</b> 2.437 GHz		<b>Trig</b> Free	1 Trace 2 3
Occupied Bandwidth			Clear Write
Ref 20.6 dBm #Atten 10 dB			Max Hold
#Peak Log 10 dB/ Offst 20.6 dB			Min Hold
Center 2.437 00 GHz		Span 50 MHz	View
#Res BW 100 kHz		#VBW 300 kHz	Blank
Sweep 4.8 ms (601 pts)			More 1 of 2
<b>Occupied Bandwidth</b>		<b>Occ BW % Pwr</b> 99.00 %	
16.4956 MHz		x dB -6.00 dB	
<b>Transmit Freq Error</b> 2.768 kHz			
<b>x dB Bandwidth</b> 16.550 MHz			
Copyright 2000-2005 Agilent Technologies			

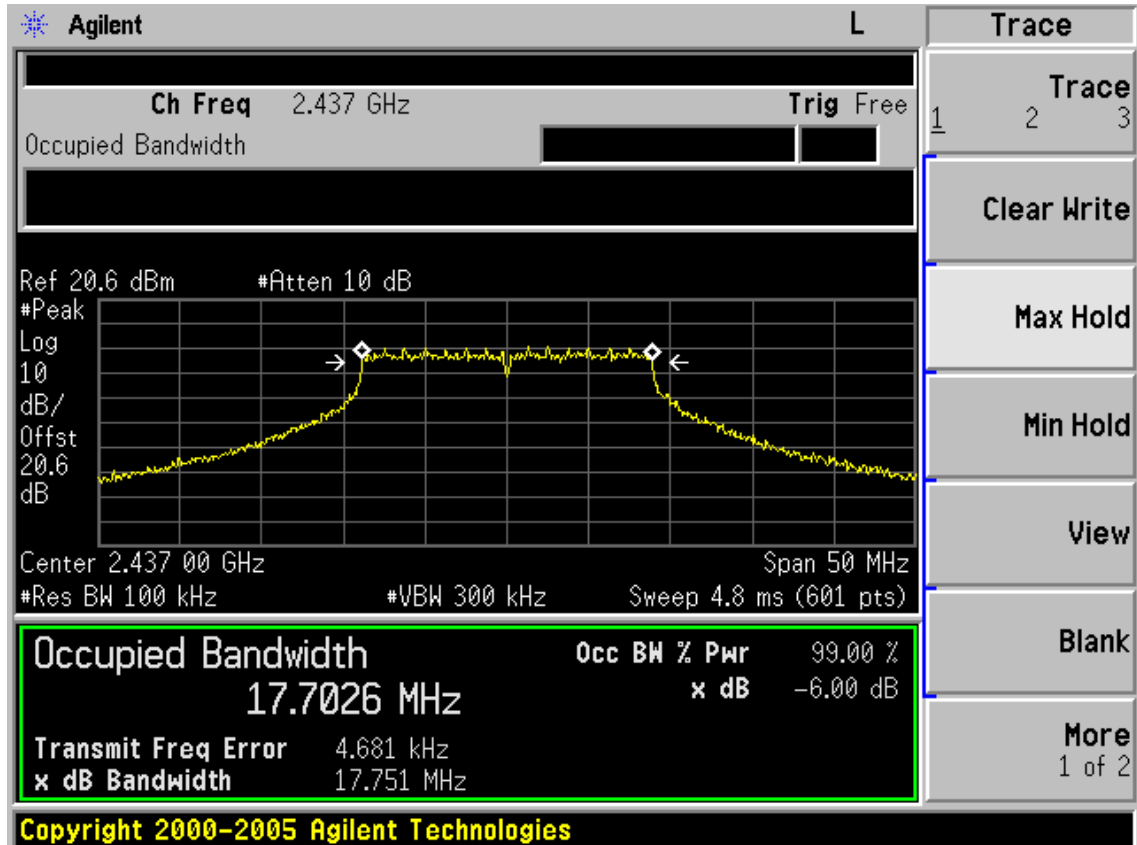
Test CH11: 2462MHz

		L	Trace
<b>Ch Freq</b> 2.462 GHz		<b>Trig</b> Free	1 Trace 2 3
Occupied Bandwidth			Clear Write
Ref 20.6 dBm #Atten 10 dB			Max Hold
#Peak Log 10 dB/ Offst 20.6 dB			Min Hold
Center 2.462 00 GHz		Span 50 MHz	View
#Res BW 100 kHz		#VBW 300 kHz	Blank
Sweep 4.8 ms (601 pts)			More 1 of 2
<b>Occupied Bandwidth</b>		<b>Occ BW % Pwr</b> 99.00 %	
16.5244 MHz		x dB -6.00 dB	
<b>Transmit Freq Error</b> 11.003 kHz			
<b>x dB Bandwidth</b> 16.601 MHz			
File Operation Status, A:\SCREN667.GIF file saved			

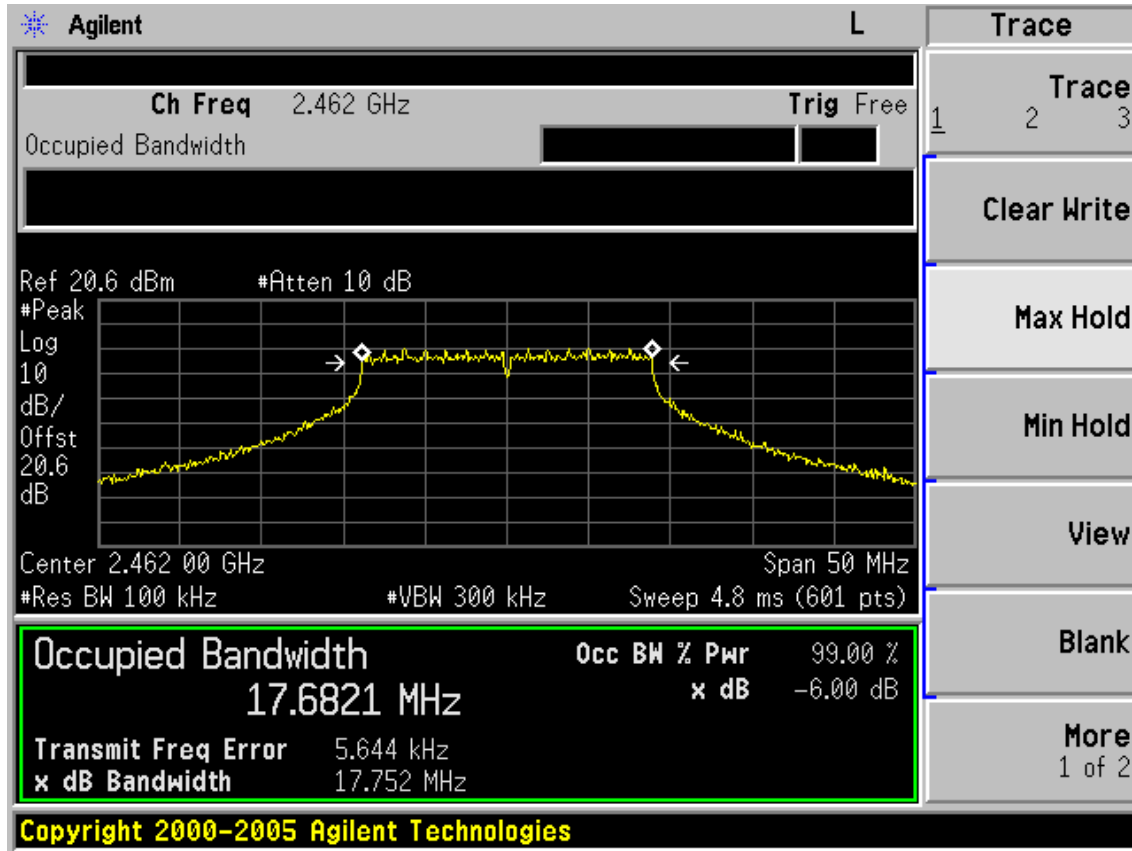
Test Mode: IEEE 802.11n HT20TX  
 Test CH1: 2412MHz



Test CH6: 2437MHz

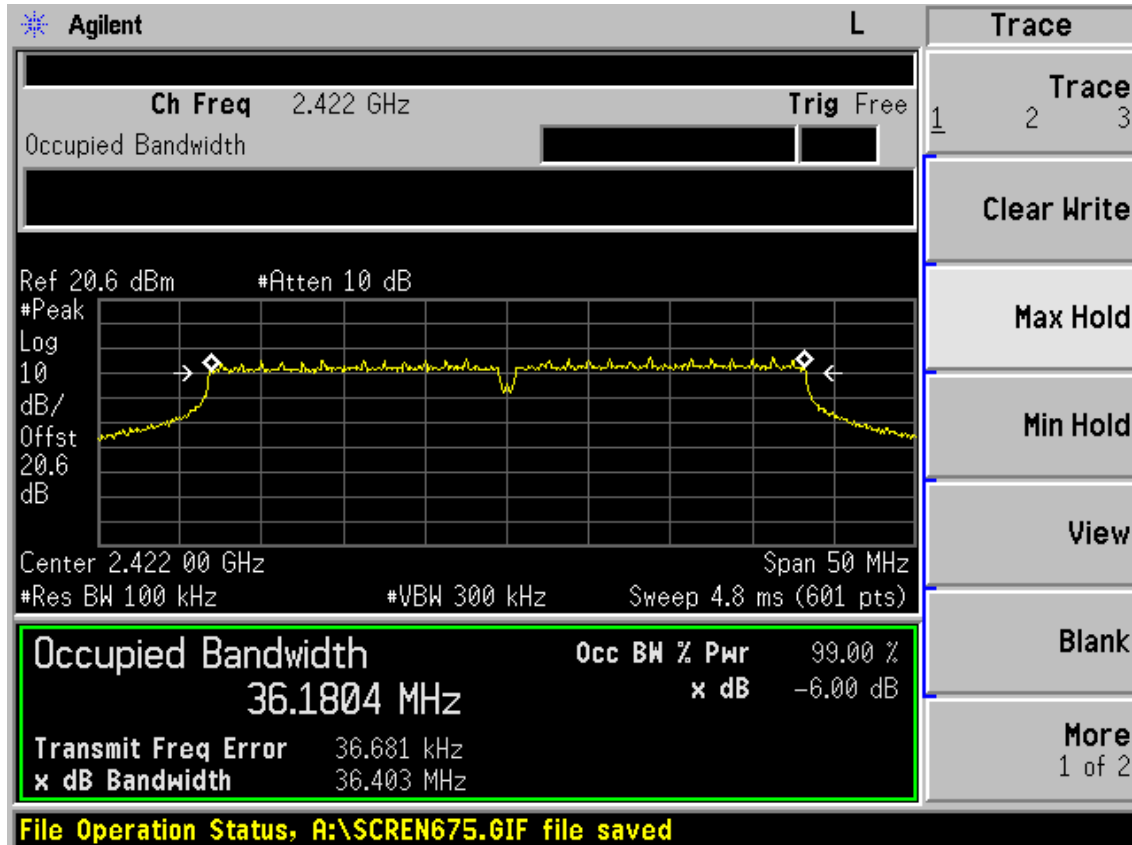


Test CH1: 2462MHz

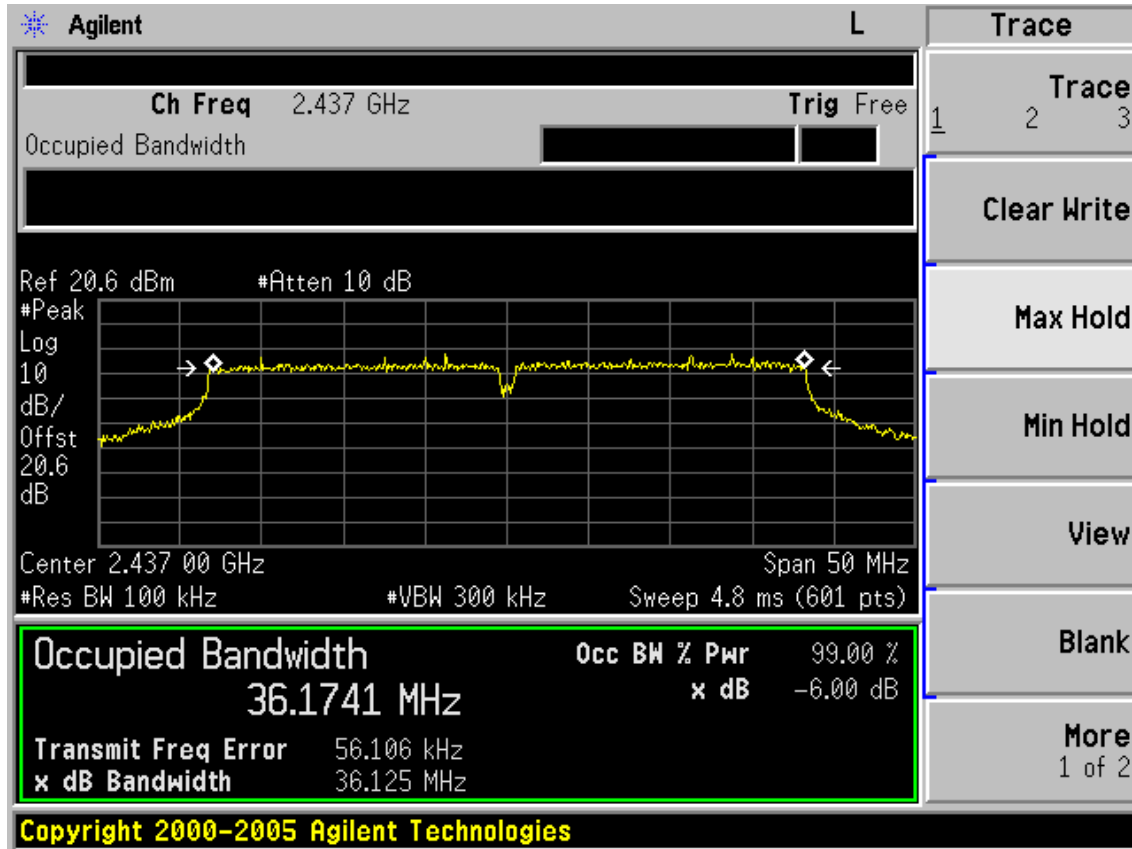


Test Mode: IEEE 802. 11n HT40TX

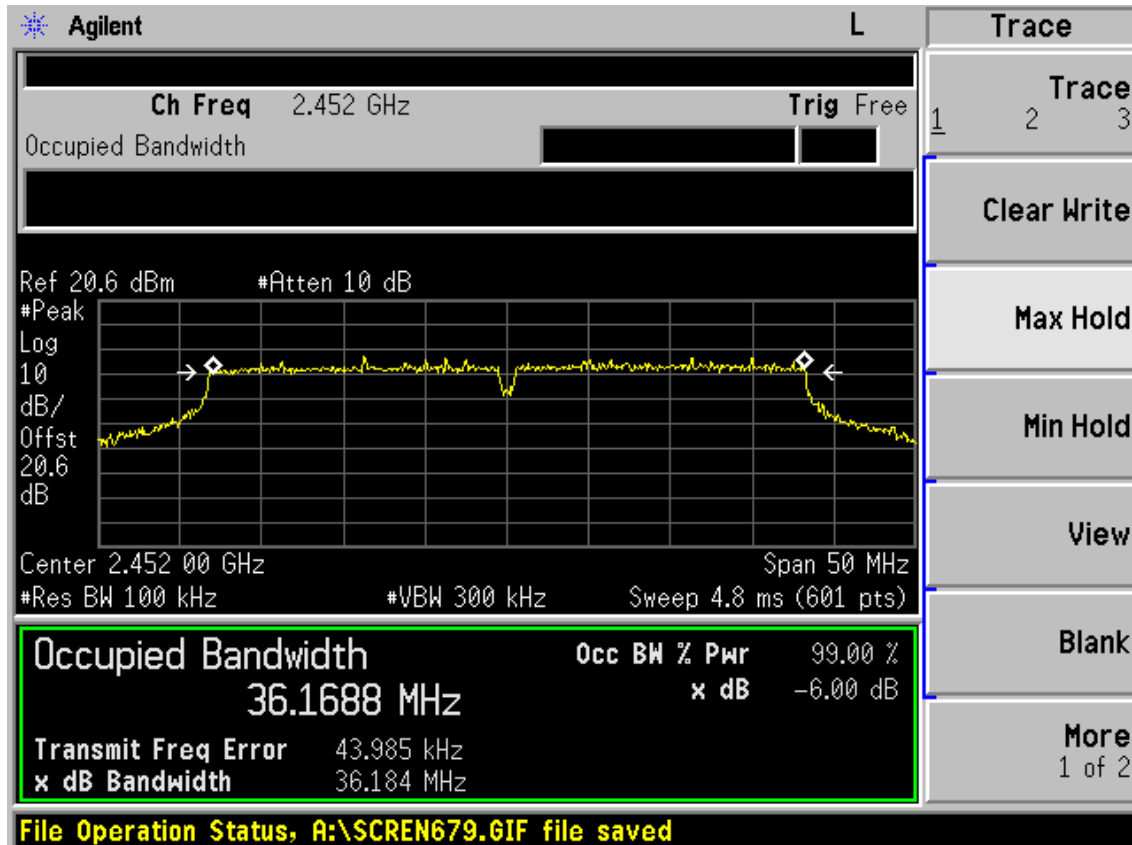
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



## 8. OUTPUT POWER TEST

### 8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power meter	Anritsu	ML2487A	6K00002472	May.08,10	1 Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,10	1 Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1 Year

### 8.2. Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

### 8.3. Test Procedure

- 1, Connected the EUT's antenna port to measure device by 20dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 6dB bandwidth of signal to measure out each test modes' PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
  - 1) Set the RBW=3MHz and VBW =8MHz
  - 2) Turn averaging off
  - 3) Set sweep to automatic
  - 4) Set the span just large enough to capture the emission
  - 5) Use a peak detector on max hold
  - 6) Record the measured power
  - 7) Calculate Output power of EUT use the formula:

$$\text{Peak output power} = \text{measured power} + 10\log[(6\text{dB bandwidth of emission})/(\text{analyzer RBW})]$$

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

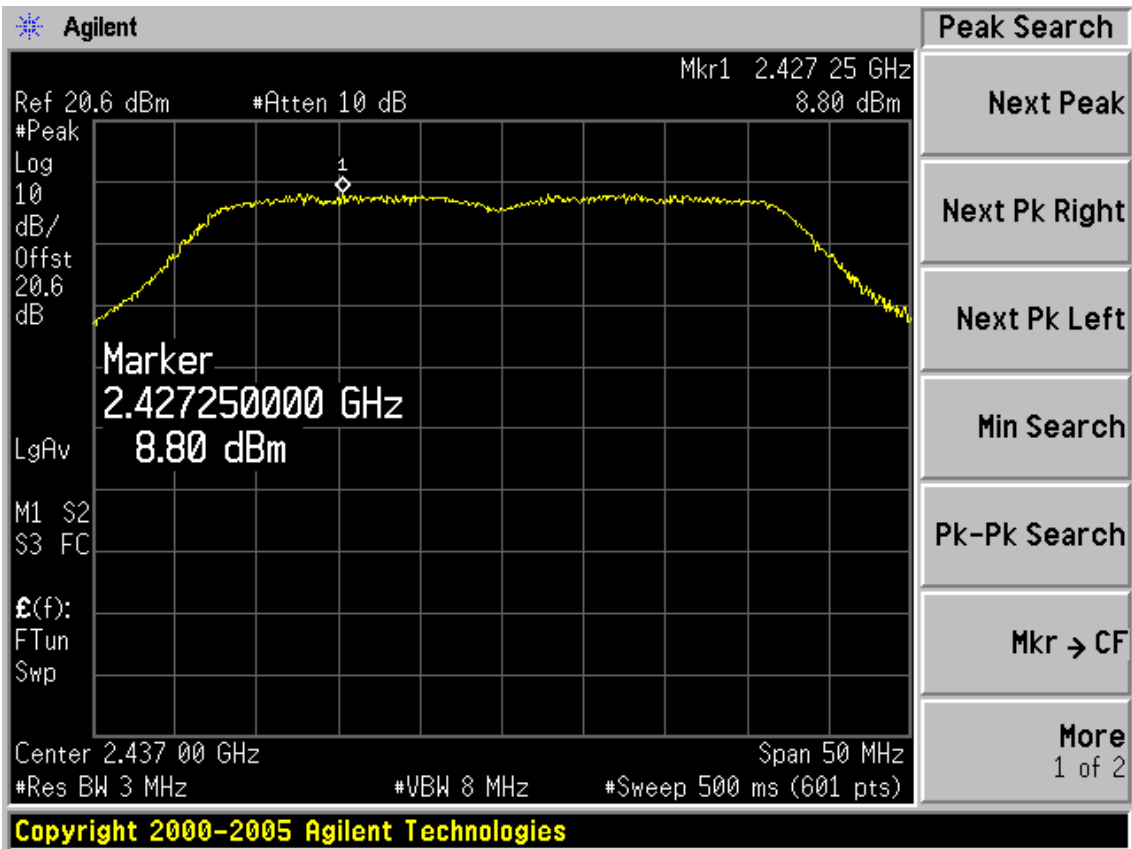
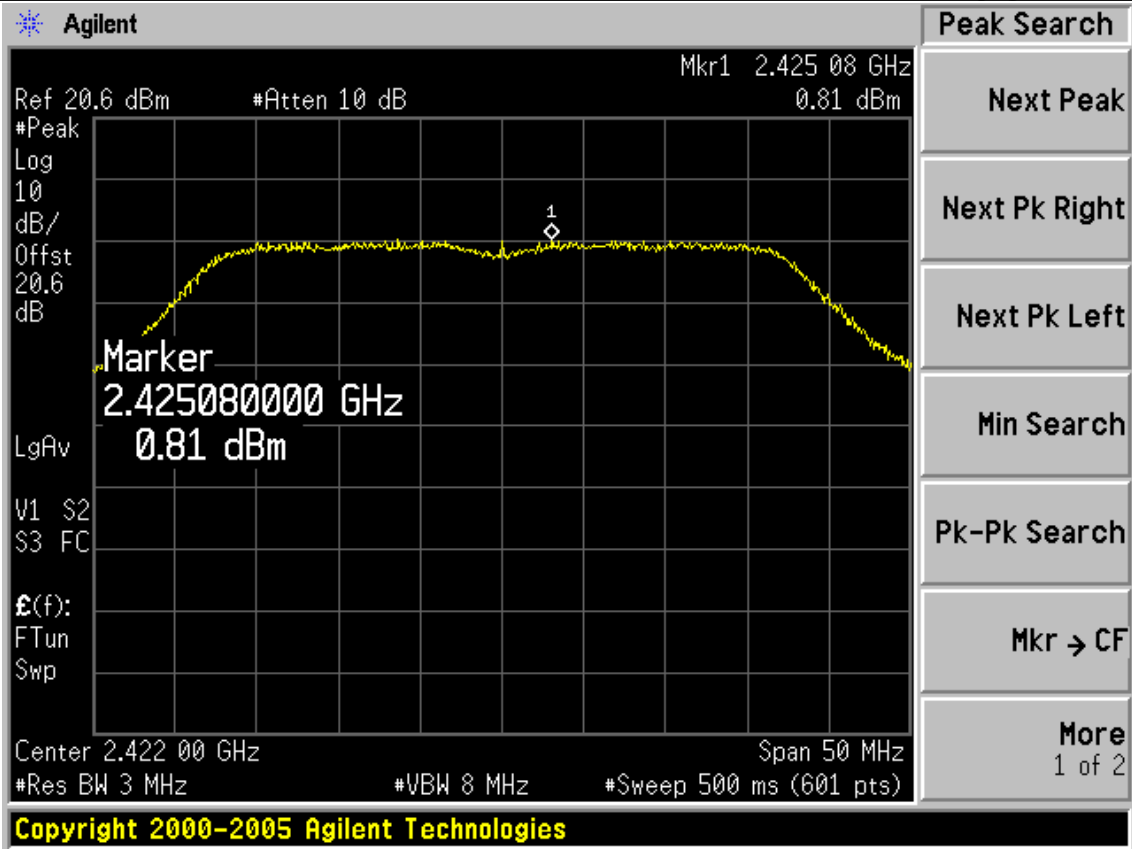
### 8.4. Test Results

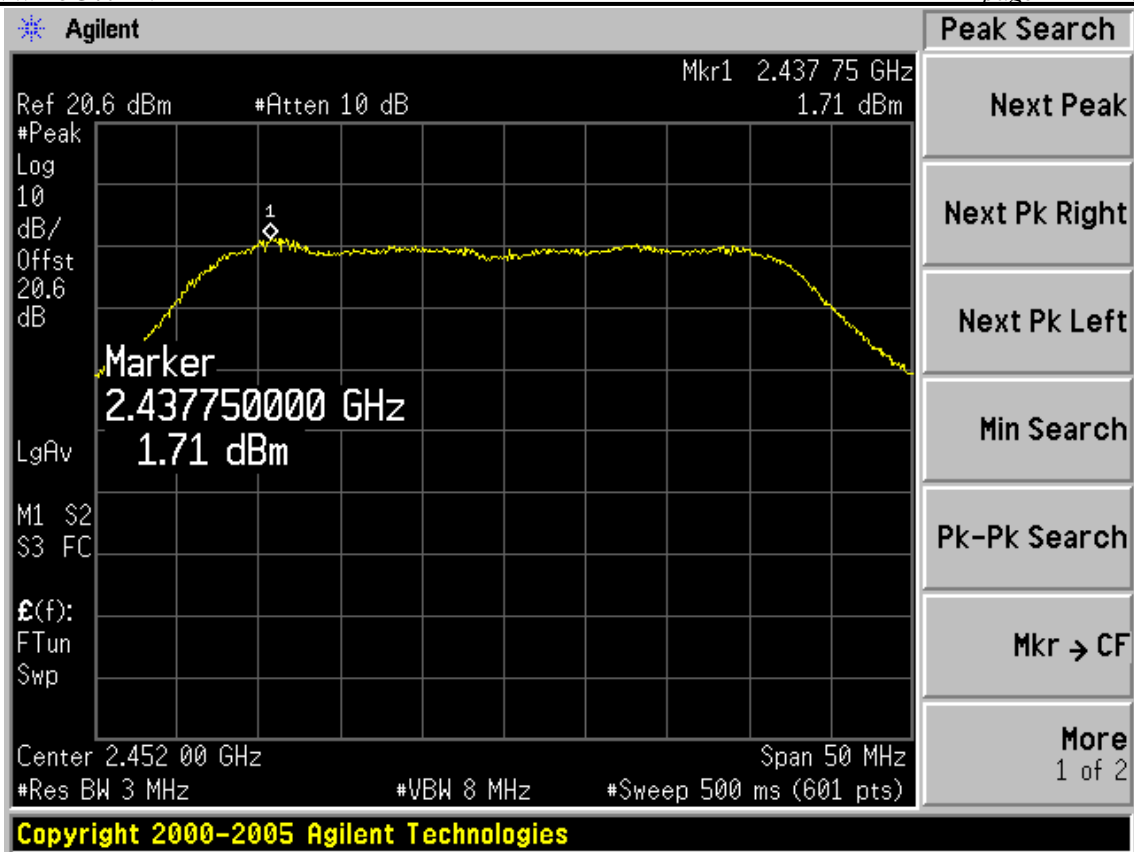
EUT: 3G Wireless Lite-N Router		
M/N: PW-3G401D		
Test date: 2011-03-06	Pressure: 100.2 kpa	Humidity: 58%
Tested by: Sunny-lu	Test site: RF Site	Temperature : 24°C

Cable loss: 0.6 dB		Attenuator loss: 20 dB	Antenna Gain: 5 dBi
Test Mode	CH	Peak output Power (dBm)	Limit (dBm)
11b	CH1	21.36	30
	CH6	22.09	30
	CH11	21.91	30
11g	CH1	18.24	30
	CH6	22.96	30
	CH11	18.90	30
11n HT20	CH1	16.34	30
	CH6	23.06	30
	CH11	16.77	30

Mode	CH	Result		Limit (dBm)
		Measured power(dBm)/3MHz	PK Output power (dBm)	
11n HT40	CH1	0.81	11.65	30
	CH4	8.80	19.64	30
	CH7	1.71	12.52	30
6dB Bandwidth for 11n HT40: 36.40MHz				
BW correction factor = $10\log[(36.40\text{MHz})/(3\text{MHz})] = 10.84\text{dB}$				
Conclusion: PASS				







## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 10	1Year

### 9.2. Limit

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

### 9.3. Test Procedure

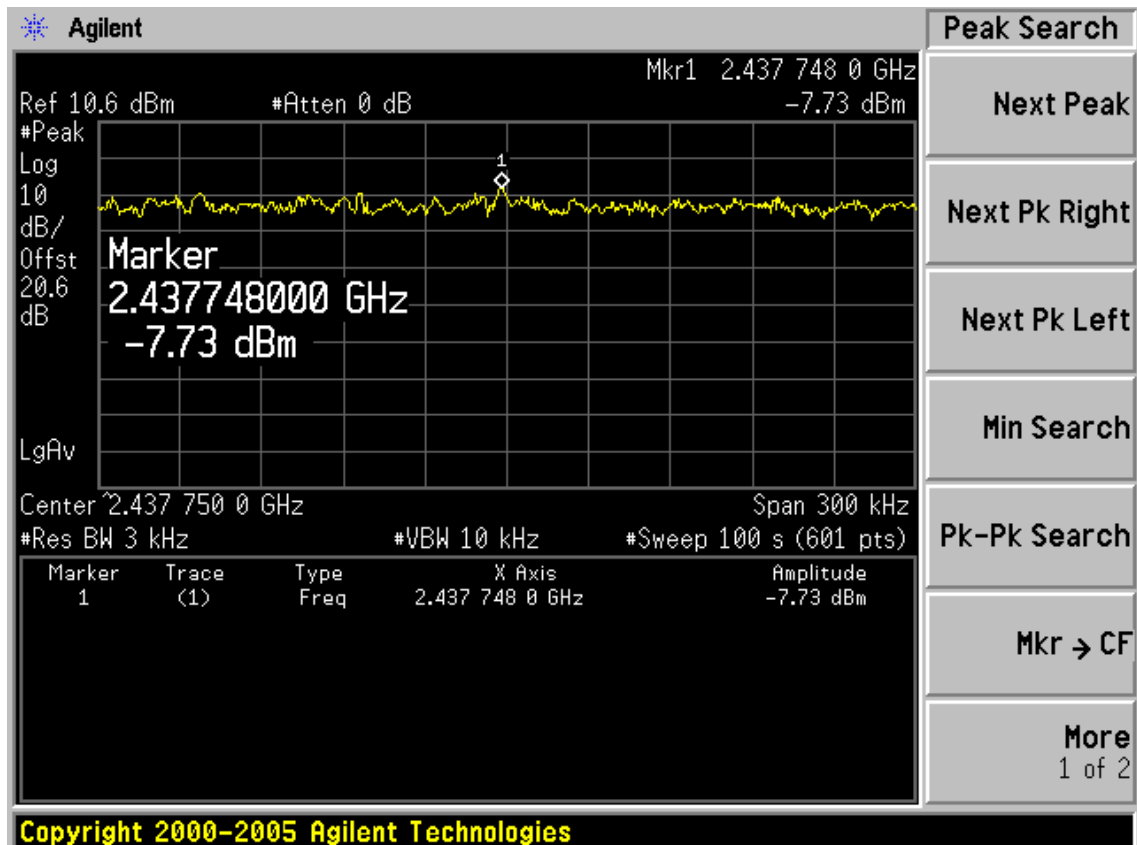
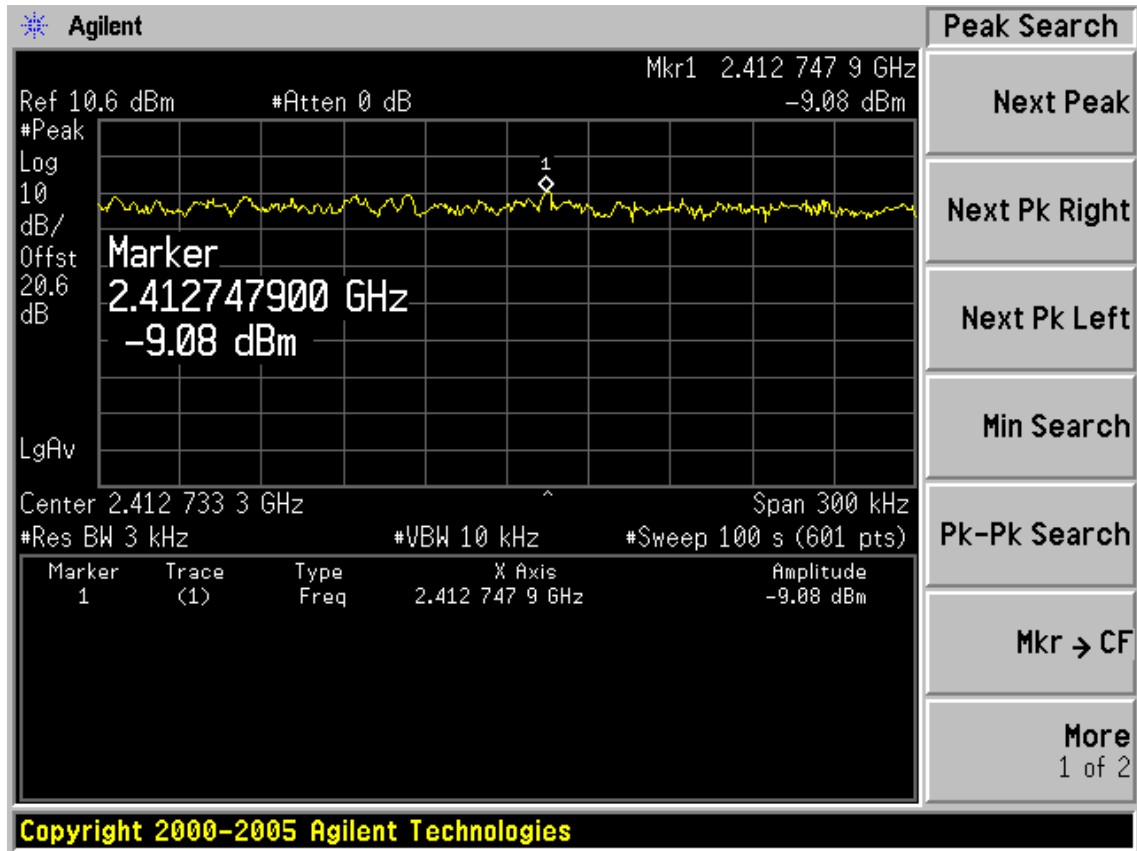
- 1, Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
- 2, Follow the test procedure as described in ANSI C.10: 2009 Clause 6.11.2.3 to measure out each test modes and chain's power density with 3KHz.

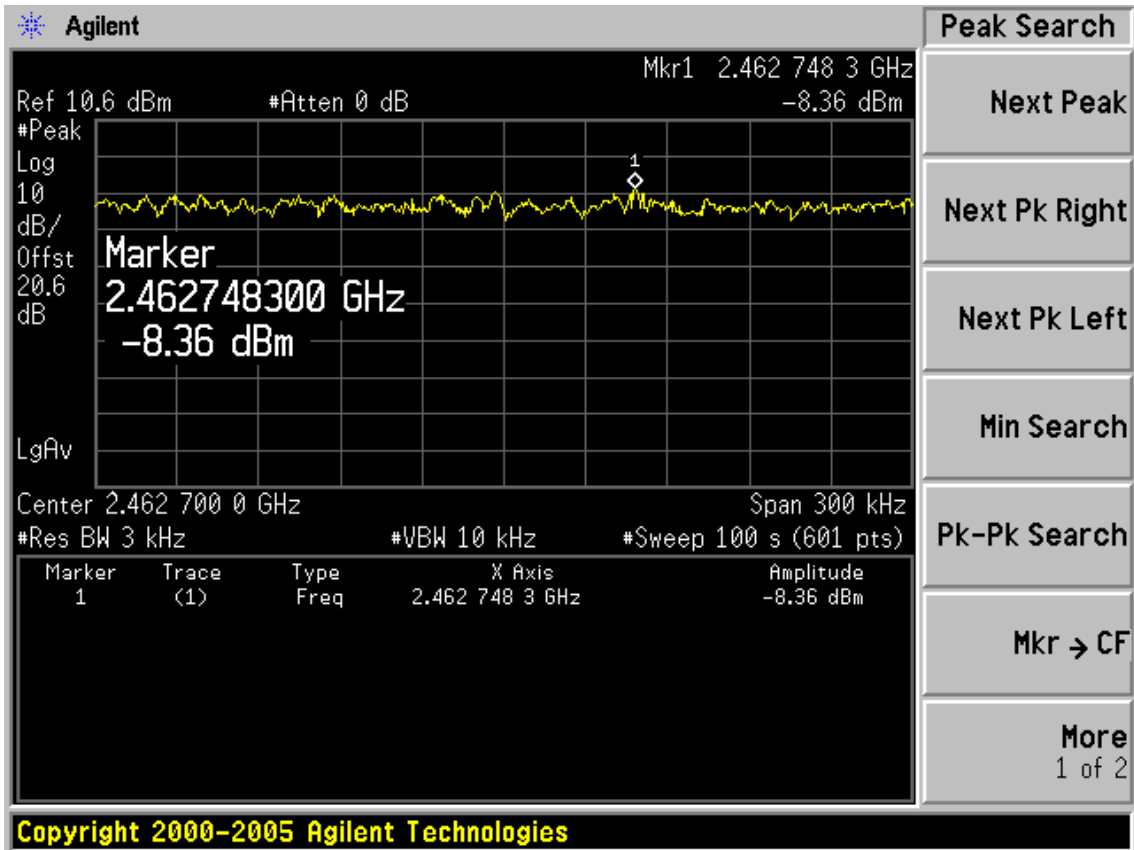
9.4. Test Results

EUT: 3G Wireless Lite-N Router		
M/N: PW-3G401D		
Test date: 2011-03-09	Pressure:100.6 kpa	Humidity:58%
Tested by: Sunny-lu	Test site: RF site	Temperature:23.5°C

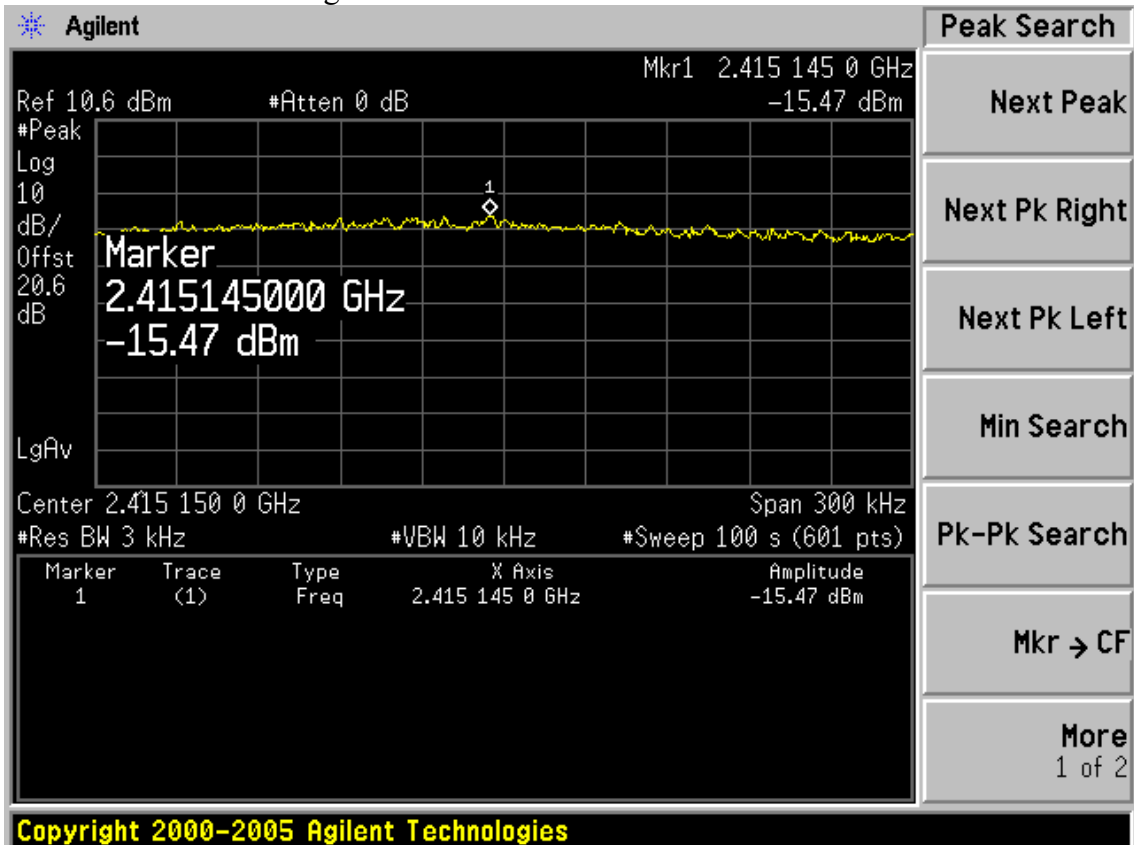
Cable loss: 0.6 dB		Attenuator loss: 20 dB	Antenna Gain: 5 dBi
Test Mode	CH	Power density ( dBm/3KHz )	Limit (dBm/3KHz)
11b	CH1	-9.08	8
	CH6	-7.73	8
	CH11	-8.36	8
11g	CH1	-15.47	8
	CH6	-10.80	8
	CH11	-15.57	8
11n HT20	CH1	-16.96	8
	CH6	-10.20	8
	CH11	-16.69	8
11n HT40	CH1	-22.97	8
	CH4	-15.12	8
	CH7	-23.54	8
Conclusion : PASS			

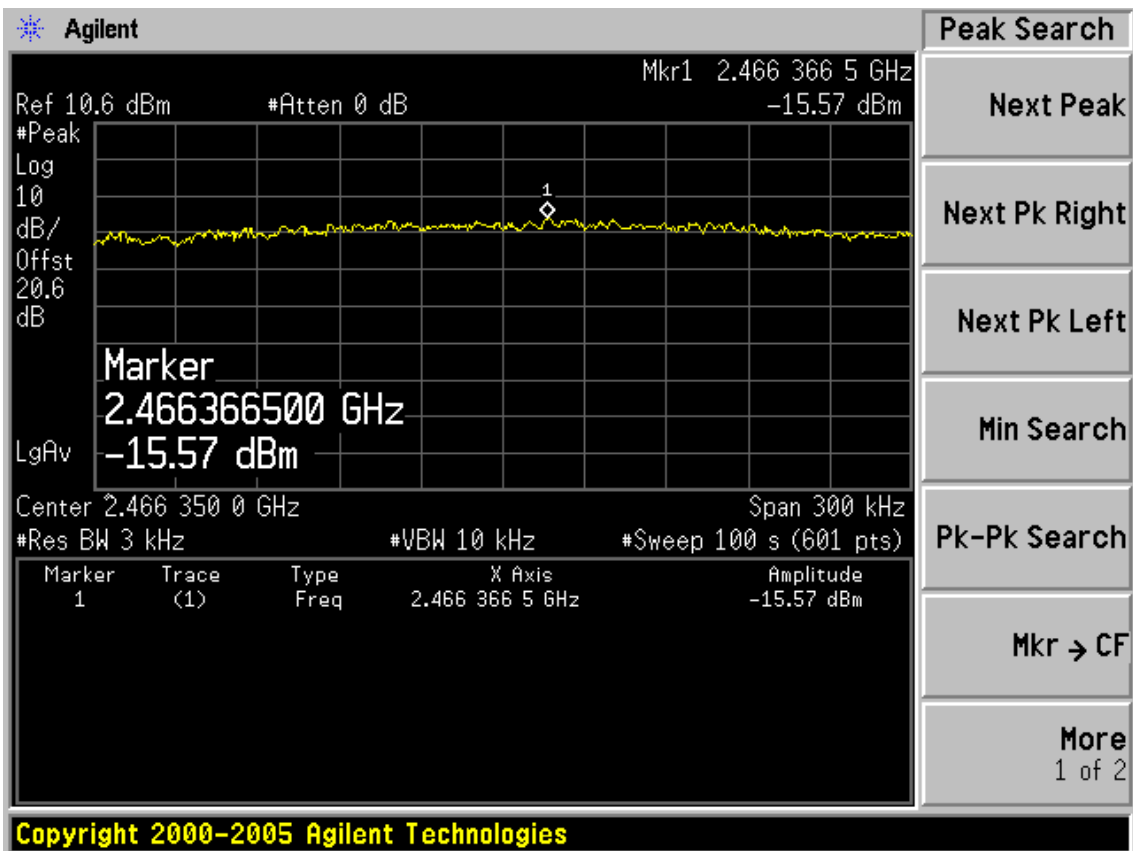
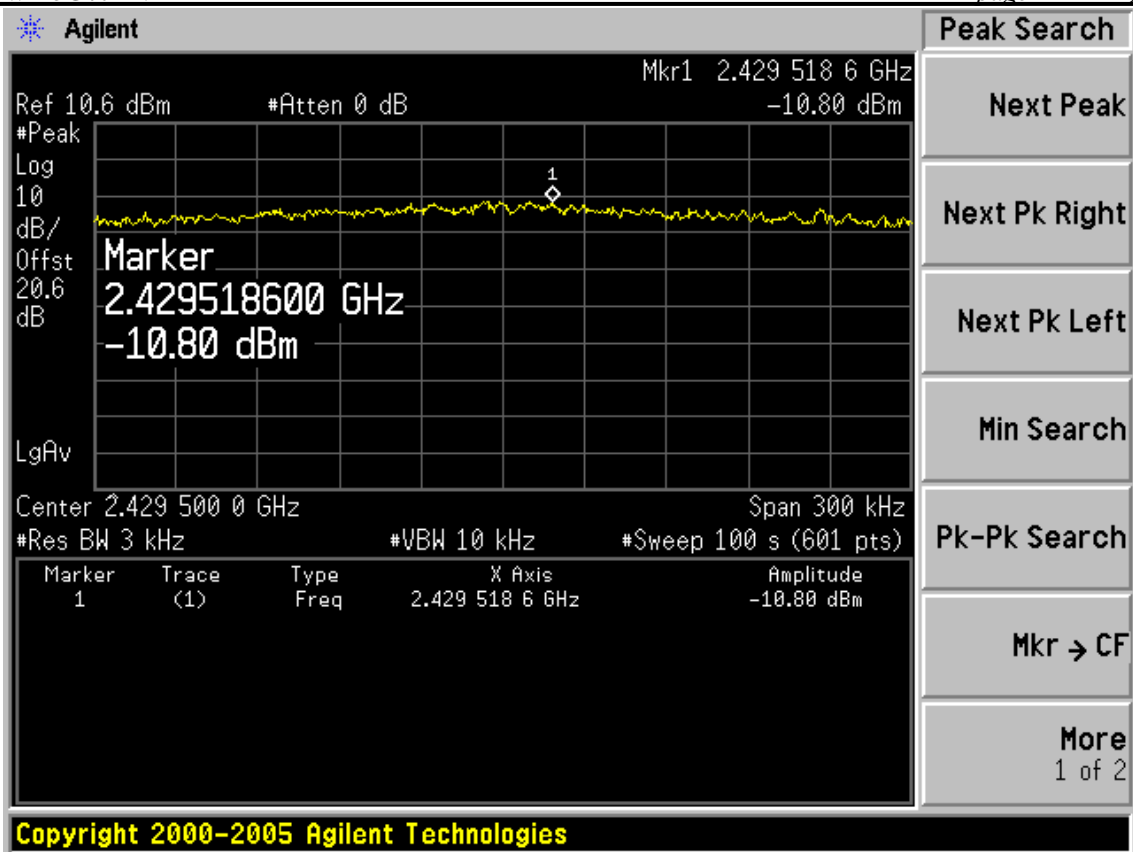
Test Mode: IEEE 802.11b TX



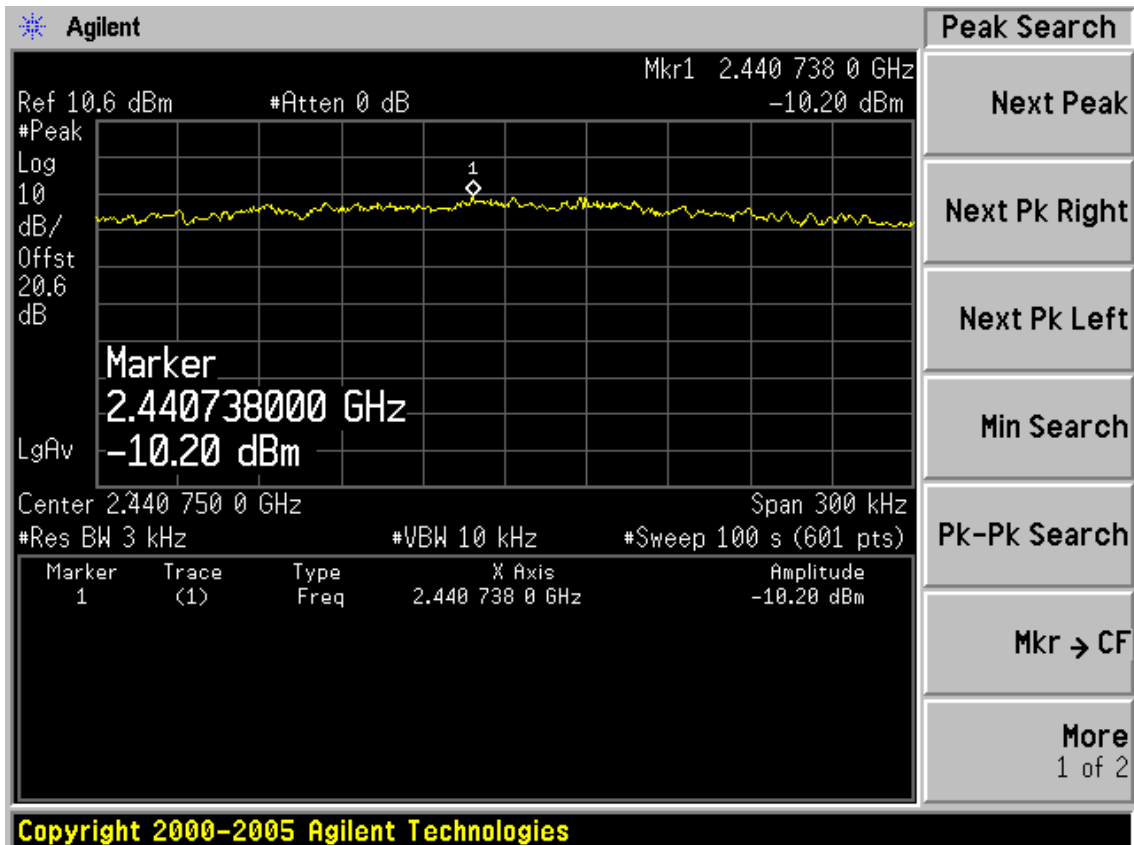
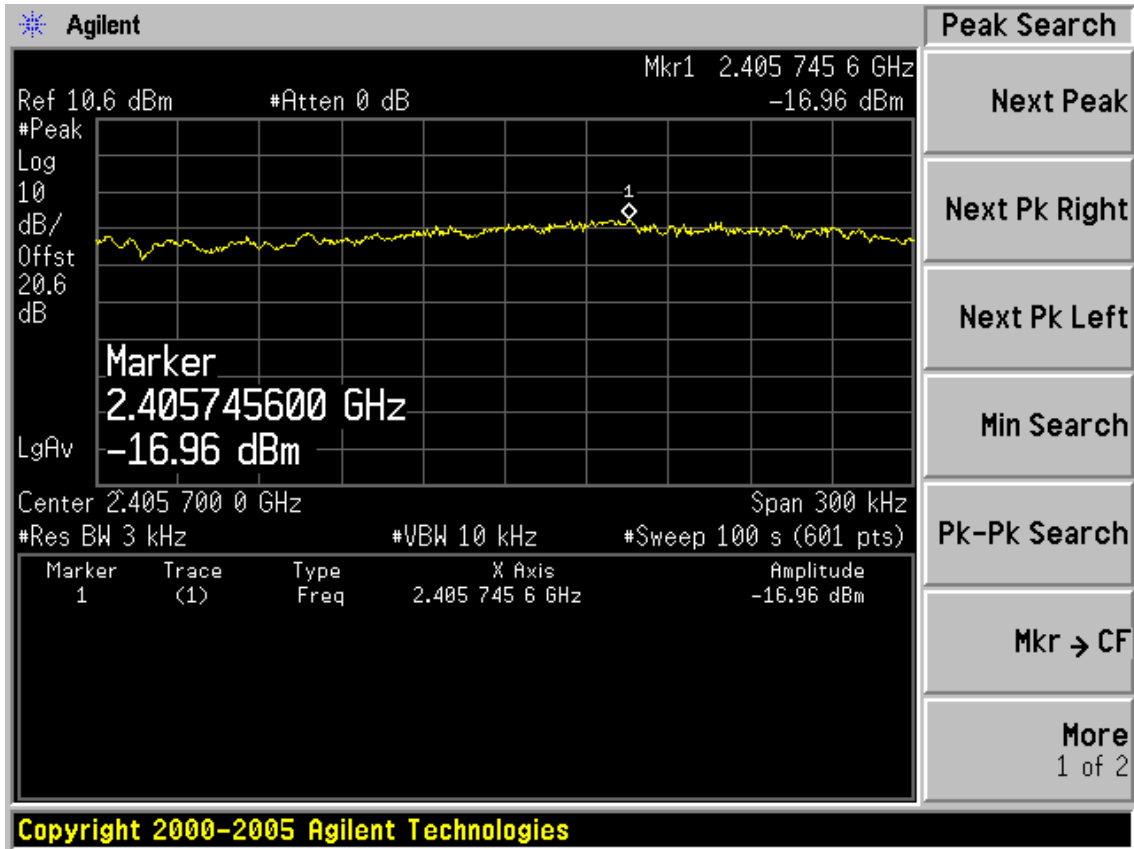


Test Mode: IEEE 802.11g TX

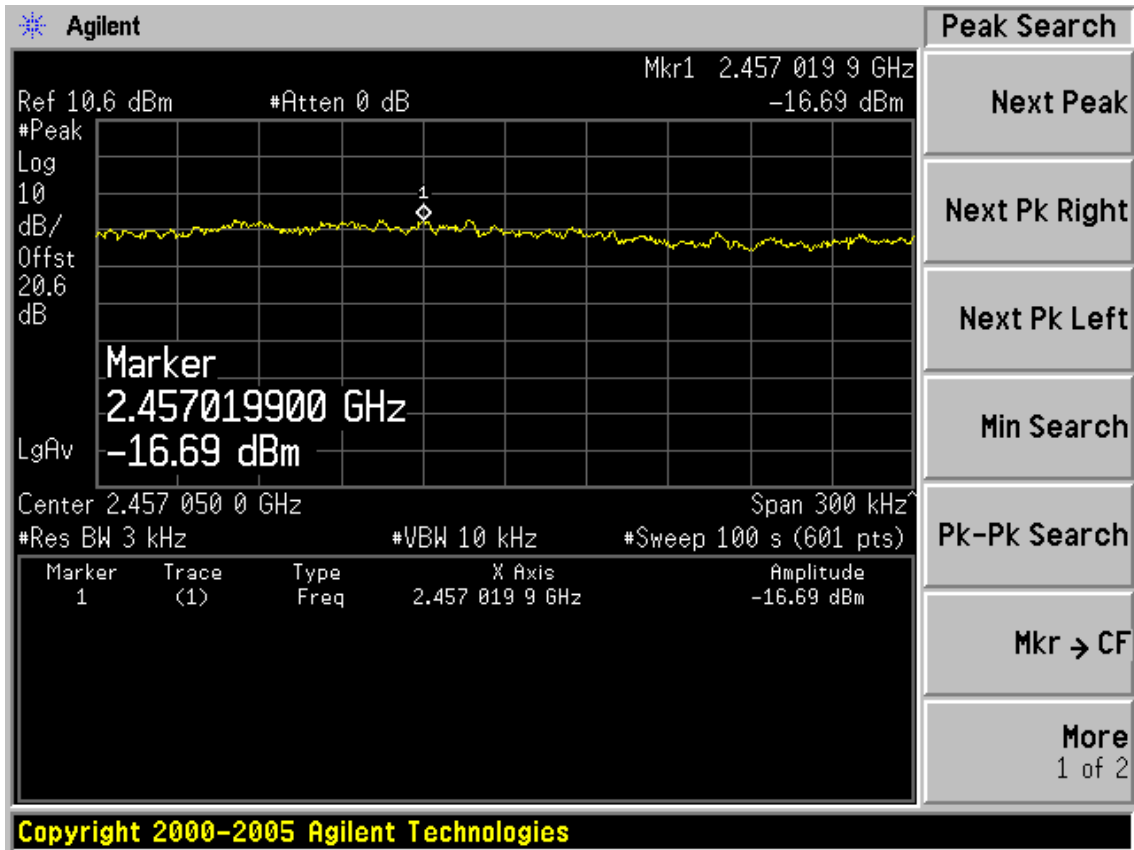




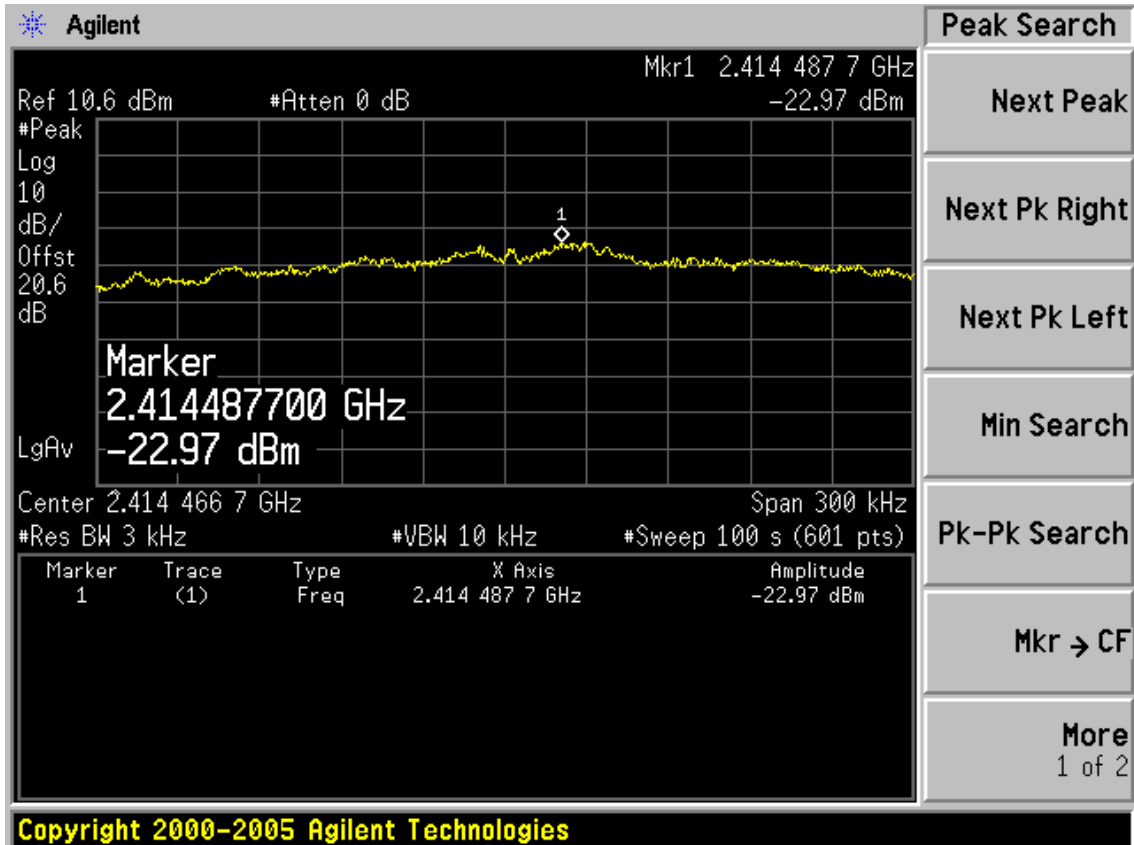
Test Mode: IEEE 802.11n HT20 TX

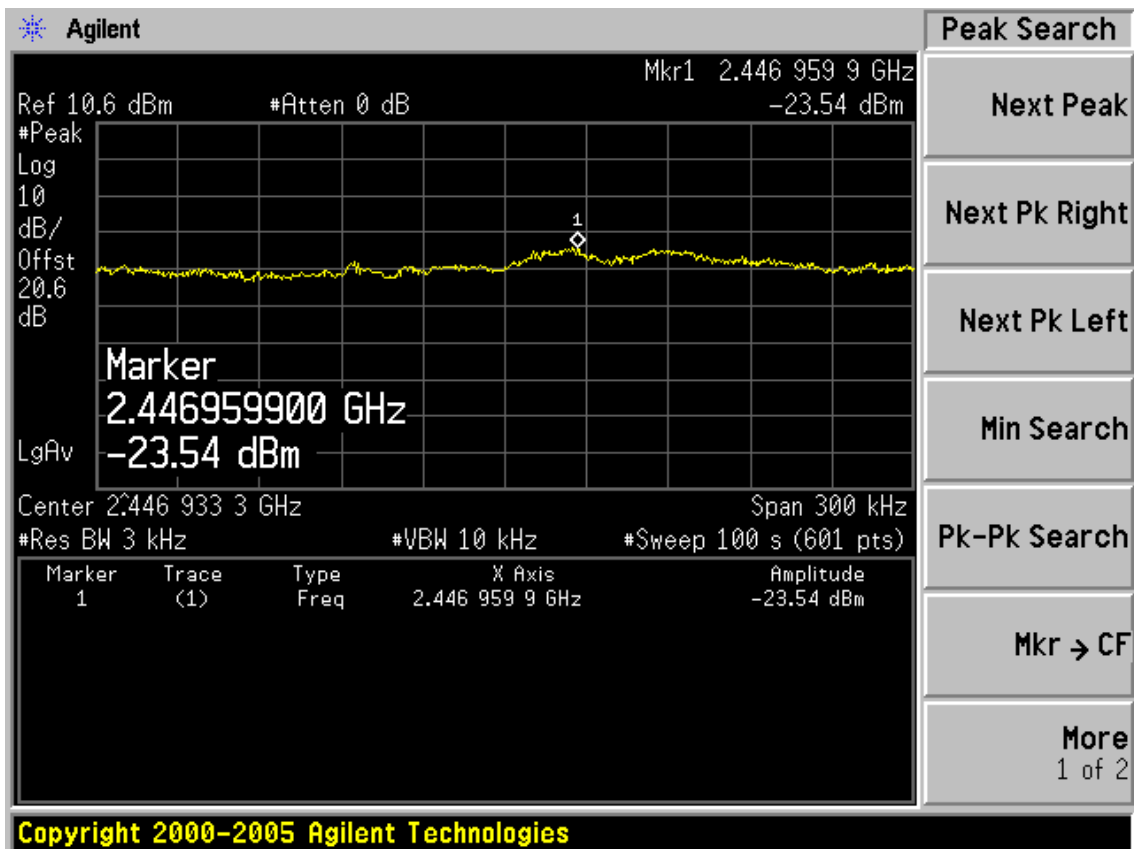
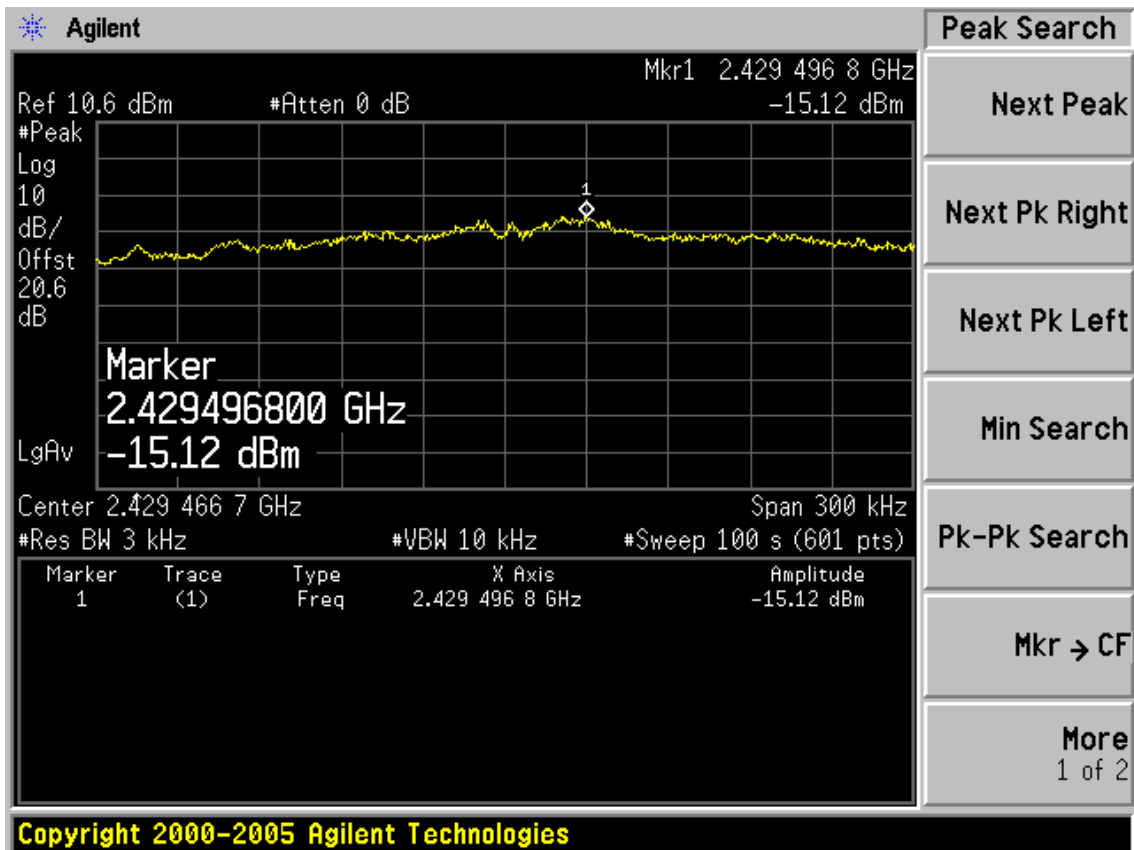






Test Mode: IEEE 802. 11n HT40 TX





## **10. ANTENNA REQUIREMENT**

### **10.1. STANDARD APPLICABLE**

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

### **10.2. ANTENNA CONNECTED CONSTRUCTION**

The antennas used for this product are one integrated PCB antenna and one dipole antenna with SMA-B connector that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 5dBi.

## 11.MPE ESTIMATION

### 11.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Frequency(MHz)	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

### 11.2.2, Estimation Result

Mode	CH	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain(linear)	MPE
11b	1	2412	21.36	136.77	5	3.16	0.0861
	6	2437	22.09	161.81	5	3.16	0.1018
	11	2462	21.91	155.24	5	3.16	0.0977
11g	1	2412	18.24	66.68	5	3.16	0.0420
	6	2437	22.96	197.70	5	3.16	0.1244
	11	2462	18.90	77.62	5	3.16	0.0489
11n HT20	1	2412	16.34	43.05	5	3.16	0.0271
	6	2437	23.06	202.30	5	3.16	0.1273
	11	2462	16.77	47.53	5	3.16	0.0299
11n HT40	1	2422	11.65	14.62	5	3.16	0.0092
	4	2437	19.64	91.20	5	3.16	0.0574
	7	2452	12.52	17.86	5	3.16	0.0112

Note: The estimation distance is 20cm

## 12. DEVIATION TO TEST SPECIFICATIONS

[ NONE ]