

APPLICATION FOR CERTIFICATION  
On Behalf of

Proware Technologies Co Ltd.

Wireless N Cardbus Adapter

Model Number: M-WN910N

FCC ID: WWMWN910NV1

Prepared for : Proware Technologies Co Ltd.  
4/F, Building 7, Section 2, Honghualing Industrial Park,  
Xili, Nanshan District, Shenzhen, P.R.C.

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

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# TEST REPORT CERTIFICATION

Applicant : Proware Technologies Co Ltd.  
 Manufacturer : Proware Technologies Co Ltd.  
 EUT Description : Wireless N Cardbus Adapter  
 FCC ID : WWMWN910NV1  
 (A) MODEL NO. : M-WN910N  
 (B) SERIAL NO. : N/A  
 (C) POWER SUPPLY : DC 3.3V From PC  
 (D) TEST VOLTAGE : DC 3.3V From PC Input AC 120V/60Hz

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C 2008

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions.

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 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 : Jan.10~ Mar.03, 2009

Prepared by : Edie Huang  
 Edie Huang / Assistant

Reviewer : Jamy Yu  
 Jamy Yu / Senior Engineer



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 Test	FCC Part 15: 15.207 ANSI C63.4: 2003 KDB558074	PASS
Radiated Emission Test	FCC Part 15: 15.209 ANSI C63.4: 2003 KDB558074	PASS
Band Edge Compliance Test	FCC Part 15: 15.247 KDB558074	PASS
Conducted spurious emissions test	FCC Part 15: 15.247 KDB558074	PASS
6dB Bandwidth Test	FCC Part 15: 15.247 KDB558074	PASS
Output Power Test	FCC Part 15: 15.247 KDB558074	PASS
Power Spectral Density Test	FCC Part 15: 15.247 KDB558074	PASS
MPE ESTIMATION	FCC Part 2: 2.1093	PASS
Antenna requirement	FCC Part 15: 15.203	PASS
N/A is an abbreviation for Not Applicable.		

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

Product Name	: Wireless N Cardbus Adapter
Model Number	: M-WN910N
FCC ID	: WWMWN910NV1
Operation Frequency	: IEEE 802.11b/g, 802.11n HT20: 2412MHz---2462MHz IEEE802.11n HT40: 2422MHz---2452MHz
Channel Number	: IEEE 802.11b/g, 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)
Data Rate	: IEEE 802.11b: 11/5.5/2/1Mbps. IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps. IEEE 802.11n HT20 : 130, 117 ,104, 78, 65, 58.5, 52, 39, 26,19.5,13, 6.5 Mbps IEEE 802.11n HT40 : 270, 243 ,216, 162, 135, 121.5, 108, 81,54,40.5, 27, 13.5Mbps
Output Power	: IEEE 802.11b: 22.74dBm IEEE 802.11g: 28.56dBm IEEE 802.11n HT20: 28.73dBm IEEE 802.11n HT40: 28.43dBm
Antenna Assembly Gain	: 0.59dBi (maximum)
Applicant	: Proware Technologies Co Ltd. 4/F, Building 7, Section 2, Honghualing Industrial Park, Xili, Nanshan District, Shenzhen, P.R.C.
Manufacturer	: Proware Technologies Co Ltd. 4/F, Building 7, Section 2, Honghualing Industrial Park, Xili, Nanshan District, Shenzhen, P.R.C.
Date of Test	: Mar.03~04, 2009
Date of Receipt	: Jan.08, 2009
Sample Type	: Prototype production

## 2.2. Test information

The test software “WN910N.bat” was used to control EUT work in Continuous TX mode, 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	1	Low :CH1	2412
	1	Middle: CH7	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH7	2437
	6	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH7	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
Note: According exploratory test, EUT will have maximum output power in those data rate. so those data rate were used for all test.			

## 2.3.Date rate VS power

Mode	Data rate(Mbps)	CH	Level (dBm)	Limit (dBm)
11b	1	CH6	22.74	<b>30</b>
	2	CH6	22.45	<b>30</b>
	5.5	CH6	22.56	<b>30</b>
	11	CH6	22.14	<b>30</b>
11g	6	CH6	28.56	<b>30</b>
	9	CH6	28.32	<b>30</b>
	12	CH6	28.11	<b>30</b>
	18	CH6	28.24	<b>30</b>
	24	CH6	28.32	<b>30</b>
	36	CH6	27.98	<b>30</b>
	48	CH6	27.45	<b>30</b>
	54	CH6	28.03	<b>30</b>
11n HT20	6.5	CH6	28.73	<b>30</b>
	13	CH6	28.56	<b>30</b>
	19.5	CH6	28.21	<b>30</b>
	26	CH6	28.31	<b>30</b>
	39	CH6	28.51	<b>30</b>
	52	CH6	28.23	<b>30</b>
	58.5	CH6	28.12	<b>30</b>
	65	CH6	28.43	<b>30</b>
	78	CH6	28.32	<b>30</b>
	104	CH6	28.11	<b>30</b>
	117	CH6	28.23	<b>30</b>
	130	CH6	28.24	<b>30</b>
11n HT40	13.5	CH4	28.43	<b>30</b>
	27	CH4	28.11	<b>30</b>
	40.5	CH4	28.09	<b>30</b>
	54	CH4	28.21	<b>30</b>
	81	CH4	28.16	<b>30</b>
	108	CH4	28.17	<b>30</b>
	121.5	CH4	28.21	<b>30</b>
	135	CH4	27.98	<b>30</b>
	162	CH4	27.67	<b>30</b>
	216	CH4	28.01	<b>30</b>
	243	CH4	28.11	<b>30</b>
	270	CH4	28.09	<b>30</b>

When IEEE 802.11b's data rate was 1Mbps ; IEEE 802.11g's data rate was 6Mbps, IEEE 802.11n HT20's data rate was 6.5 Mbps; IEEE802.11n HT40's data rate was 13.5Mbps the EUT have maximum output power and all the test was performed in this data rate set.



## 2.4. Tested Supporting System Details

### 2.4.1. NOTEBOOK

M/N	:	PP09S
S/N	:	N/A
Manufacturer	:	DELL
Power Adaptor	:	Manufacturer: DELL, M/N: LA65NS1-00 Cable: Unshielded, Detachable, 4.0m (Bond one ferrite core)

## 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 : Jun. 13, 2006 File on Federal  
Communication Commission  
Registration Number: 90454
- 3m & 10m Anechoic Chamber : Jan. 31, 2007 File on Federal  
Communication Commission  
Registration Number: 794232
- EMC Lab. : Accredited by DATech, German  
Registration Number: DAT-P-091/99-01  
Feb. 02, 2009
- Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Apr. 01, 2008

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

No.	Item	MU	Remark
1.	Uncertainty for Conducted Emission Test	2.02dB	
2	Uncertainty for Radiation Emission test in 3m chamber	3.44 dB	Polarize: V
		3.96 dB	Polarize: H
3	Uncertainty for Radiation Emission test in 10m chamber	3.86dB	Distance: 10m Polarize: V
		4.18dB	Distance: 10m Polarize: H
		4.02dB	Distance: 3m Polarize: V
		4.36dB	Distance: 3m Polarize: H
4.	Uncertainty for Frequency measure	$1 \times 10^{-9}$	
5.	Uncertainty for conducted power measure	0.34dB	

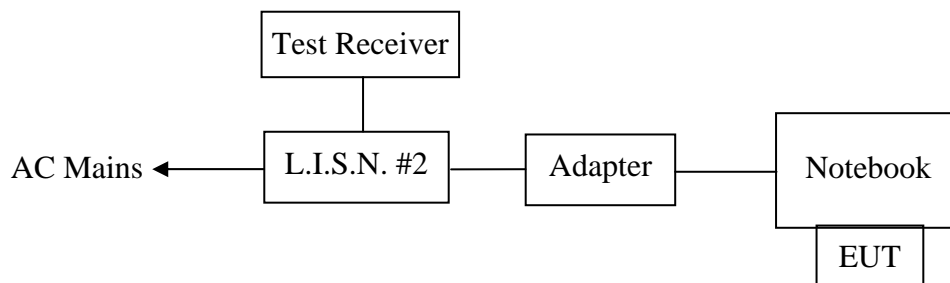
### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100842	Oct.24, 08	1 Year
2.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	May 10,08	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May 10,08	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	Nov.10, 08	1/2 Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	Nov.01, 08	1/2 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	Nov.10, 08	1/2 Year

#### 3.2. Block Diagram of Test Setup

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



*(EUT: Wireless N Cardbus Adapter)*

#### 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. Wireless N Cardbus Adapter (EUT)

Model Number : M-WN910N  
Serial Number : N/A

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

### 3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software to control the EUT worked in test mode (Tx Mode) and measured it.

### 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#). Power on the PC and let it work normally, we use a keyboard test software, let EUT working in test mode, then test it. Both sides of 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 C63.4: 2003 on Conducted Emission Test.

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

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

The test result are reported on Section 3.7.,

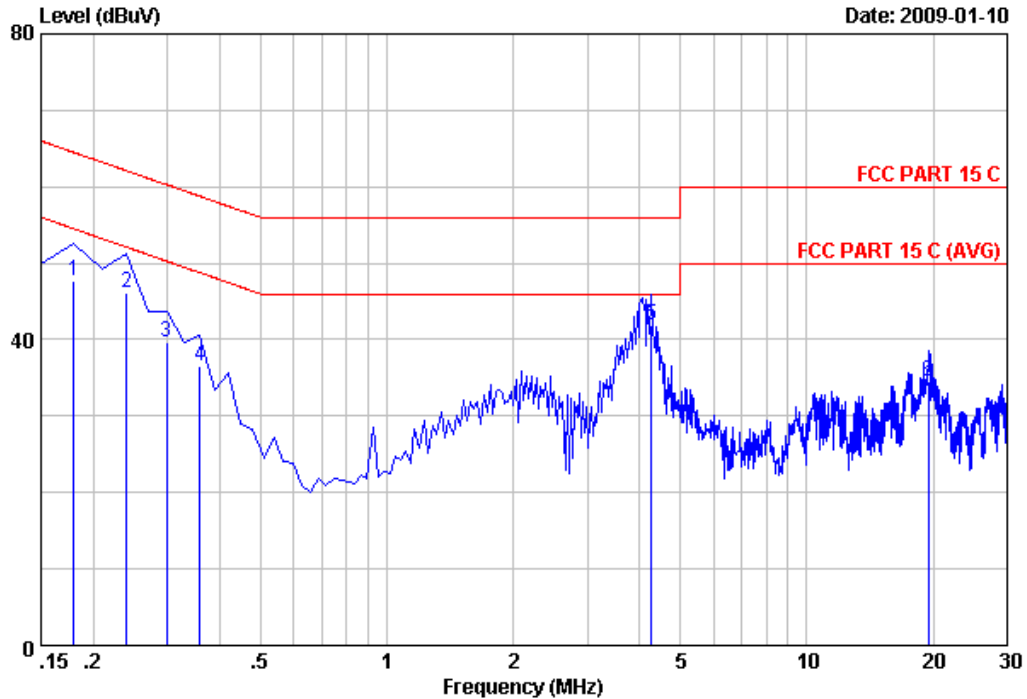
### 3.7. Power Line Conducted Emission Test Results

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



NO.6 Ke Feng Road,Block 52,  
Shenzhen Science&Industry Park  
Nantou, Shenzhen,Guang dong, China.  
Tel:+86-755-26639495  
Fax:+86-755-26632877  
Postcode:518057

Data: 1 File: D:\DATA\2008 Report\PI\Proware\ACS8Q2013.EM6 (2)



Site no :Audix No.1 Conduction Data no :1  
 Dis./Ant. \*\*: KNW407 1# VA  
 Limit :FCC PART 15 C  
 Env./Ins. :Temp:23'C Humi:54% Engineer :Sunny  
 EUT :Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating :DC 3.3V From PC input AC 120V/60Hz  
 Test Mode :Tx Mode  
 :

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17985	0.29	9.82	37.58	47.69	64.49	16.80	QP
2	0.23955	0.28	9.90	35.99	46.17	62.11	15.94	QP
3	0.29925	0.26	9.89	29.62	39.77	60.26	20.49	QP
4	0.35895	0.24	9.88	26.43	36.55	58.75	22.20	QP
5	4.269	0.10	9.92	31.79	41.81	56.00	14.19	QP
6	19.493	0.41	10.08	23.96	34.45	60.00	25.55	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.

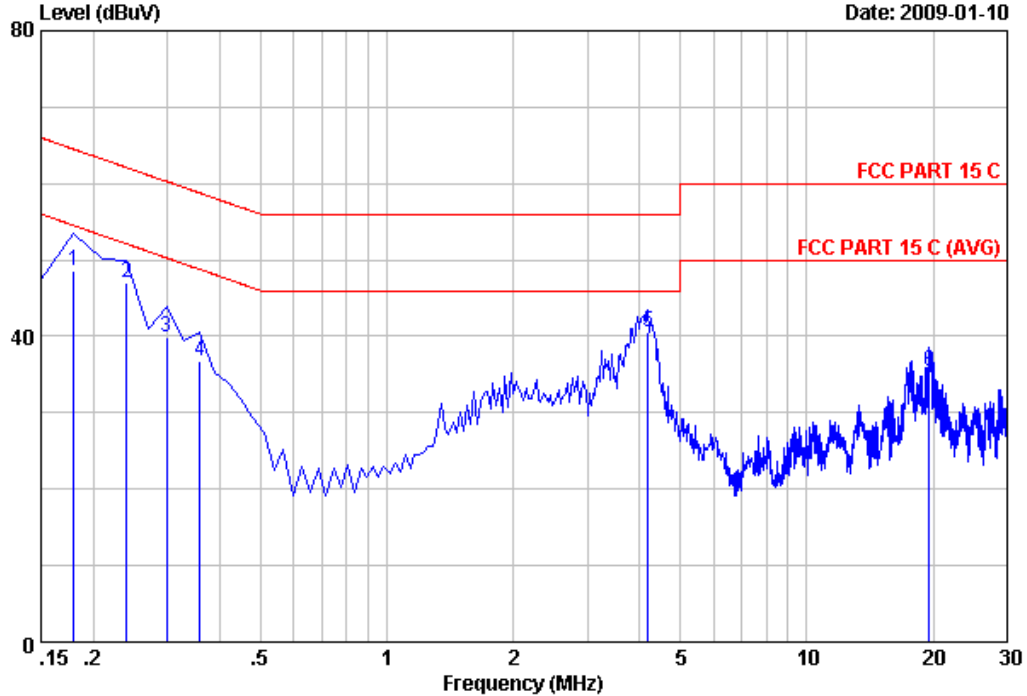


NO.6 Ke Feng Road,Block 52,  
Shenzhen Science&Industry Park  
Nantou, Shenzhen,Guang dong, China.  
Tel:+86-755-26639495  
Fax:+86-755-26632877  
Postcode:518057

Data: 2

File: D:\DATA\2008 Report\PI\Proware\ACS8Q2013.EM6 (2)

Date: 2009-01-10



Site no :Audix No.1 Conduction Data no :2  
 Dis./Ant. \*\*: KNW407 1# VA  
 Limit :FCC PART 15 C  
 Env./Ins. :Temp:23'C Humi:54% Engineer :Sunny  
 EUT :Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating :DC 3.3V From PC input AC 120V/60Hz  
 Test Mode :Tx Mode  
 :

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.17985	0.29	9.82	38.53	48.64	64.49	15.85	QP
2	0.23955	0.28	9.90	36.88	47.06	62.11	15.05	QP
3	0.29925	0.26	9.89	29.80	39.95	60.26	20.31	QP
4	0.35895	0.24	9.88	26.57	36.69	58.75	22.06	QP
5	4.180	0.10	9.92	30.44	40.46	56.00	15.54	QP
6	19.553	0.41	10.08	24.99	35.48	60.00	24.52	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

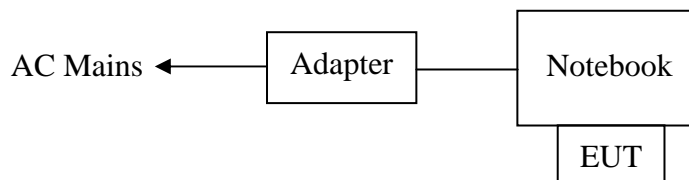
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Dec.05,08	1/2 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	May 10, 08	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May 10, 08	1 Year
4.	Amplifier	HP	8447D	2648A04738	Nov.04, 08	1/2 Year
5.	Bilog Antenna	Schaffner	CBL6111C	2598	Nov.10, 08	1 Year
6.	RF Cable	JINGCHENG	JB Y400	3# Chamber No.1	Nov.01, 08	1/2 Year
7.	RF Cable	JINGCHENG	JB Y400	3# Chamber No.2	Nov.01, 08	1/2 Year
8.	RF Cable	JINGCHENG	JB Y400	3# Chamber No.3	Nov.01, 08	1/2 Year
9.	RF Cable	JINGCHENG	JB Y400	3# Chamber No.4	Nov.01, 08	1/2 Year
10.	Coaxial Switch	Anritsu	MP59B	M73989	Nov.01, 08	1/2 Year

Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May 10, 08	1 Year
2.	Amp	HP	8449B	3008A08495	Oct.24, 08	1 Year
3.	Antenna	EMCO	3115	9607-4877	May 27, 08	1.5 Year
4.	Antenna	EMCO	3116	6088	May.27,08	1.5 Year
5.	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May,28, 08	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May,28, 08	1 Year
7.	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May,28, 08	1 Year

### 4.2. Block Diagram of Test Setup

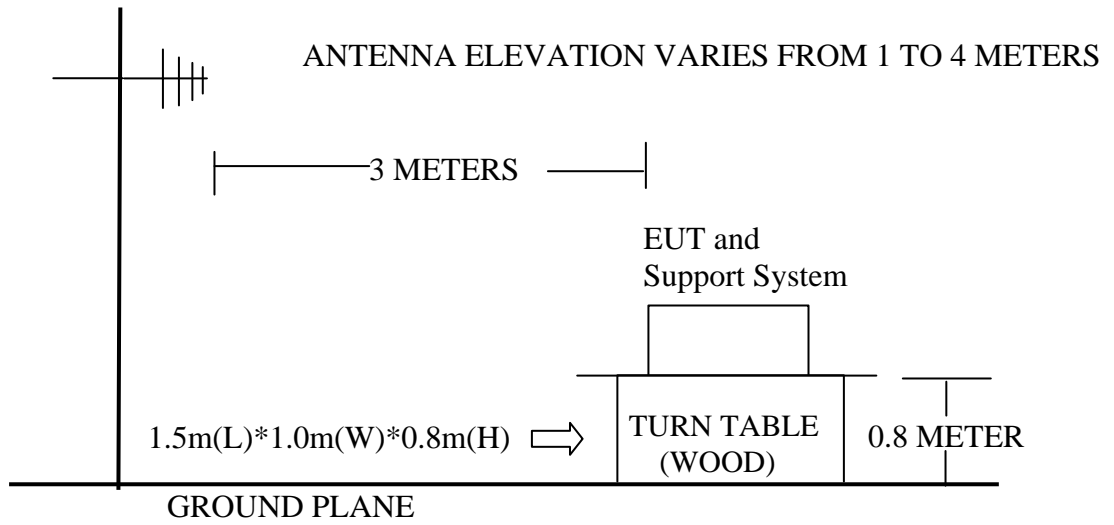
4.2.1. Block diagram of connection between the EUT and simulators



**(EUT: Wireless N Cardbus Adapter)**

4.2.2. In Anechoic Chamber

ANTENNA TOWER



4.3. Radiated Emission Limit

4.3.1. 15.209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
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 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

- Remark :
- (1) Emission level  $\text{dB}\mu\text{V} = 20 \log$  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 following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

## 4.4.1. Wireless N Cardbus Adapter (EUT)

Model Number : M-WN910N  
Serial Number : N/A

4.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.3.

## 4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turned on the power of all equipment.

4.5.3. Notebook run test software to control the EUT worked in test mode (Tx Mode) and measured it.

## 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 1MHz 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.**

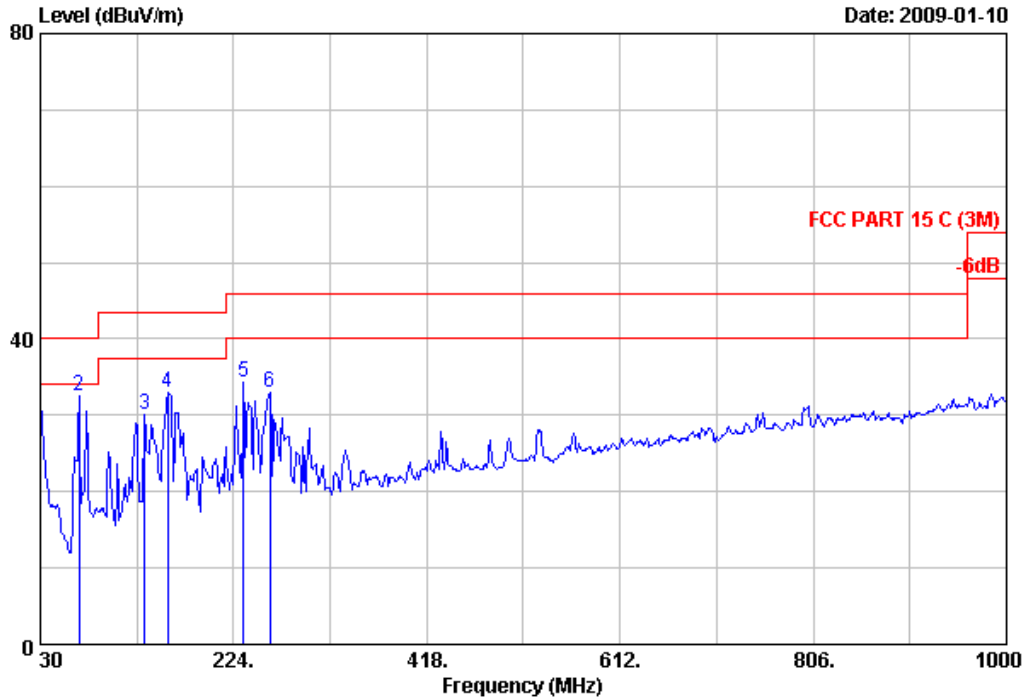
All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Frequency: 30MHz~1GHz



No.6, Ke Feng Road, Block 52,  
Shenzhen Science & Industry Park  
Nantou Shenzhen, Guangdong, China  
Tel: +86-755-26639495  
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Postcode: 518057

Data: 2 File: D:\2008 Report Data\PI\Proware\ACS8Q2013.EM6 (4)



Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m CBL6111C Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 24°C/47% Engineer : Sunny  
 EUT : Wireless N Cardbus Adapter M/N: M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test Mode : Tx Mode

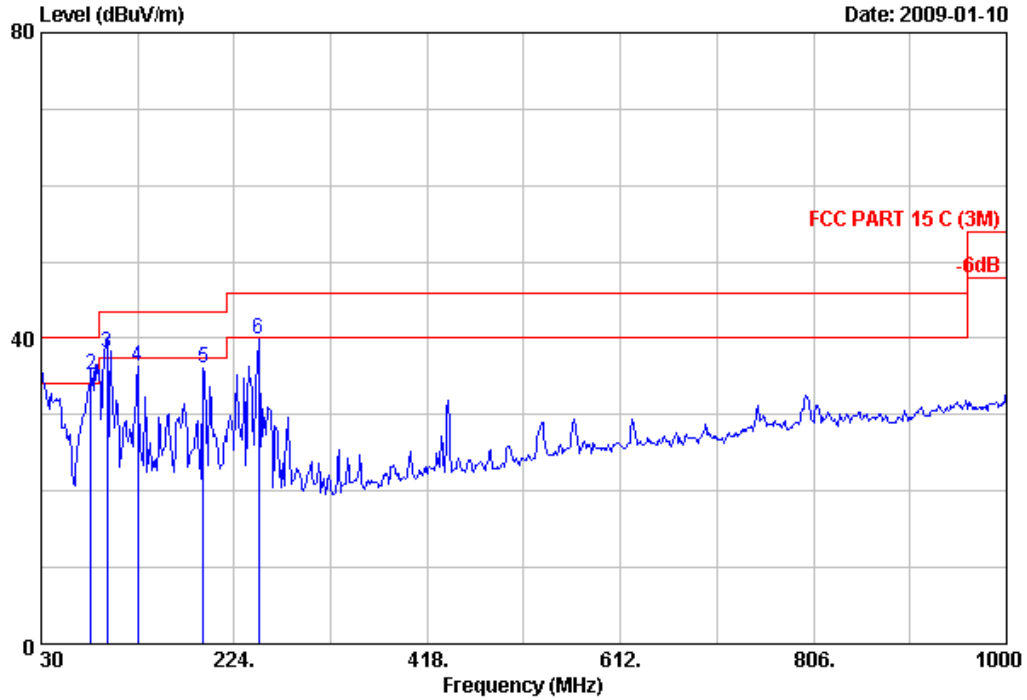
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	19.86	0.47	11.22	31.55	40.00	8.45	QP
2	68.800	6.45	0.74	25.45	32.64	40.00	7.36	QP
3	134.760	12.05	1.10	17.04	30.19	43.50	13.31	QP
4	158.040	11.07	1.21	20.76	33.04	43.50	10.46	QP
5	233.700	11.14	1.54	21.73	34.41	46.00	11.59	QP
6	260.860	13.74	1.66	17.57	32.97	46.00	13.03	QP

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



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 Shenzhen Science&Industry Park  
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Data: 1 File: D:\2008 Report Data\PI\Proware\ACS8Q2013.EM6 (4)



Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m CBL6111C Ant. pol. : VERTICAL  
 Limit : FCC PART 15 C (3M)  
 Env. / Ins. : 24°C/47% Engineer : Sunny  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test Mode : Tx Mode

	Ant. Cable			Emission				Remark
	Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	30.000	19.86	0.47	14.69	35.02	40.00	4.98	QP
2	80.440	7.74	0.81	26.65	35.20	40.00	4.80	QP
3	95.960	9.74	0.91	27.46	38.11	43.50	5.39	QP
4	127.000	12.02	1.06	23.24	36.32	43.50	7.18	QP
5	192.960	9.63	1.36	25.04	36.03	43.50	7.47	QP
6	248.250	12.44	1.60	25.83	39.87	46.00	6.13	QP

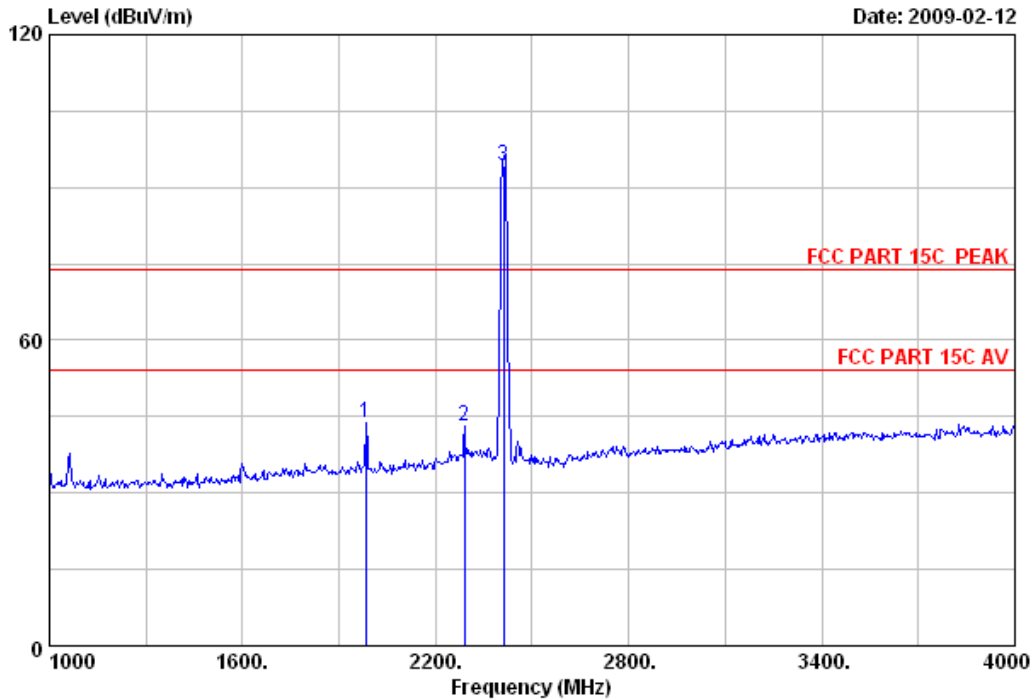
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz



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Data: 1 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 1  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

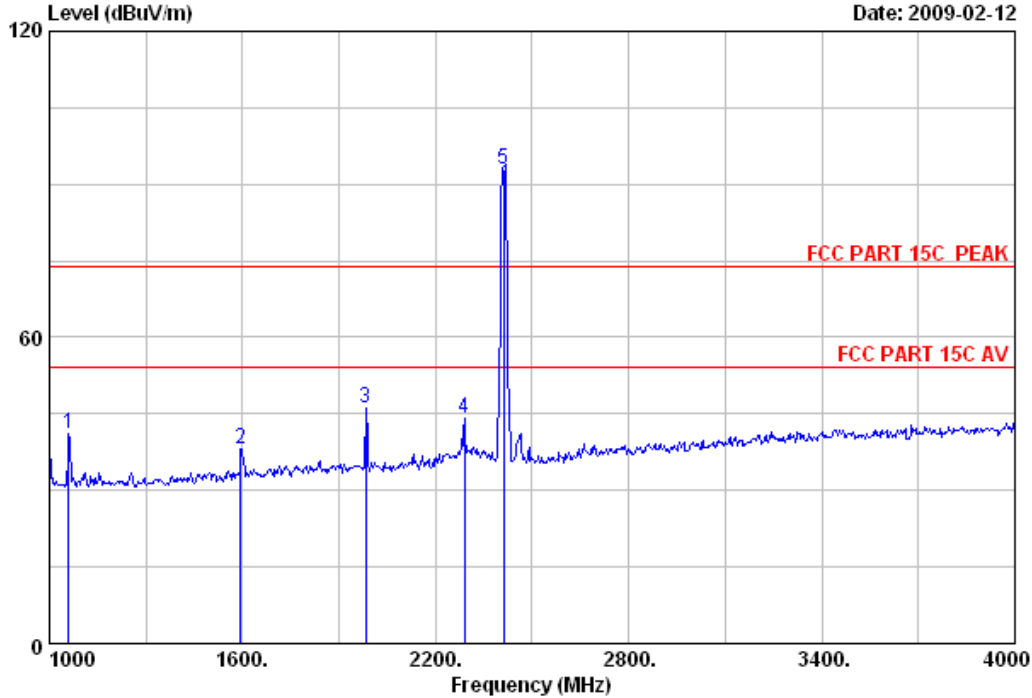
	Ant.	Cable	Amp	Emission		Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	(dB)
1 1984.000	27.83	6.16	35.20	44.95	43.74	74.00	30.26 Peak
2 2290.000	28.31	6.61	35.14	43.24	43.02	74.00	30.98 Peak
3 2412.000	28.48	6.73	35.12	94.27	94.36	74.00	-20.36 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.



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
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Fax:+86-755-26632877  
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Data: 2 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 2  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

	Ant.	Cable	Amp	Emission			Margin	Remark	
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limits (dBUV/m)	(dB)		
1	1060.000	25.30	4.48	36.24	47.50	41.04	74.00	32.96	Peak
2	1594.000	26.30	5.43	35.65	42.04	38.12	74.00	35.88	Peak
3	1984.000	27.83	6.16	35.20	47.40	46.19	74.00	27.81	Peak
4	2290.000	28.31	6.61	35.14	44.34	44.12	74.00	29.88	Peak
5	2412.000	28.48	6.73	35.12	92.96	93.05	74.00	-19.05	Peak

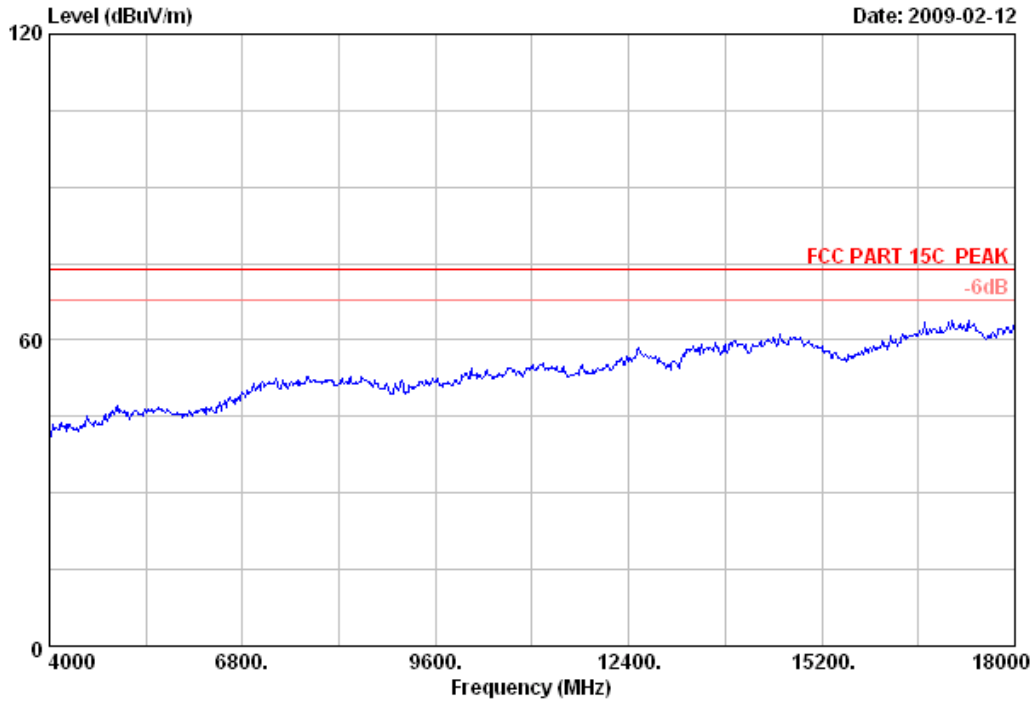
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Data: 3 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)

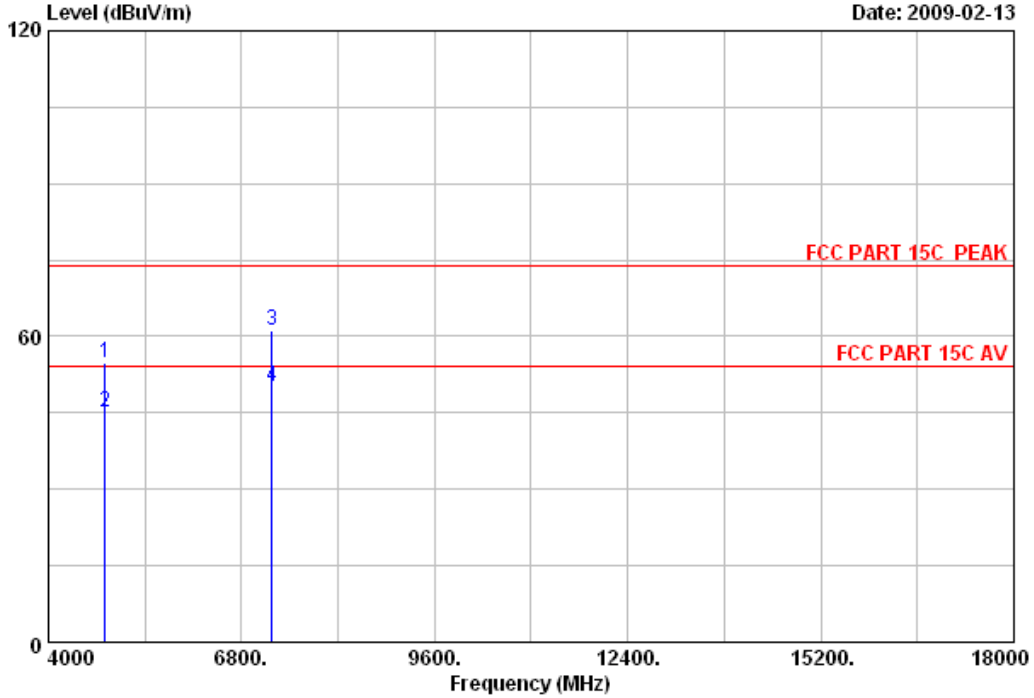


Site no.	: 3# Chamber	Data no.	: 3
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11b CH1 2412MHz		
M/N	:		



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Data: 4 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 4  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	34.59	44.51	54.94	74.00	19.06	Peak
2	4824.000	34.47	10.55	34.59	34.73	45.16	54.00	8.84	Average
3	7236.000	38.43	12.16	34.49	45.20	61.30	74.00	12.70	Peak
4	7236.000	38.43	12.16	34.49	33.93	50.03	54.00	3.97	Average

Remarks:

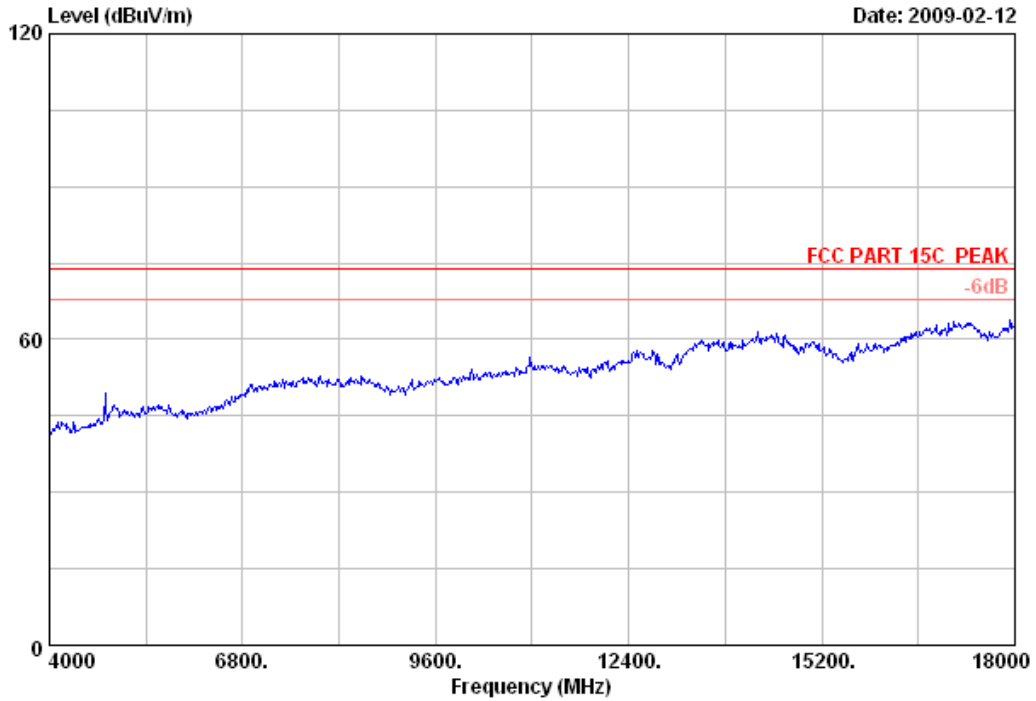
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Data: 5 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

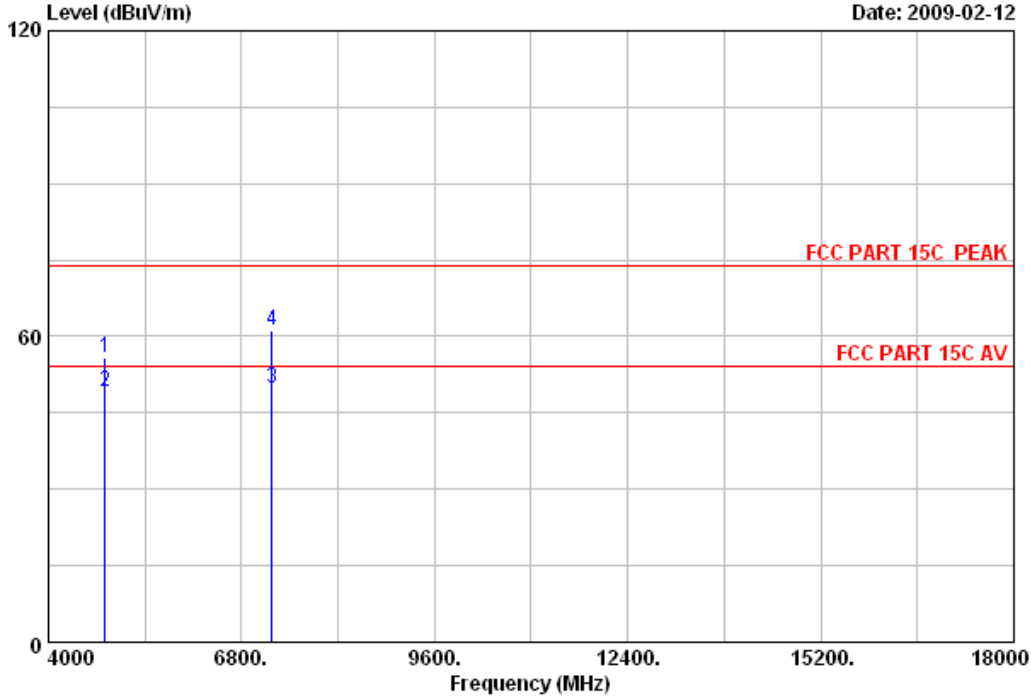


Site no.	: 3# Chamber	Data no.	: 5
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11b CH1 2412MHz		
M/N	:		



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 Noutou, ShenZhen, GuangDong, China  
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Data: 6 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 6  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

	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	34.47	10.55	34.59	45.45	55.88	74.00	18.12	Peak
2	4824.000	34.47	10.55	34.59	38.57	49.00	54.00	5.00	Average
3	7236.000	38.43	12.16	34.49	33.75	49.85	54.00	4.15	Average
4	7236.000	38.43	12.16	34.49	44.94	61.04	74.00	12.96	Peak

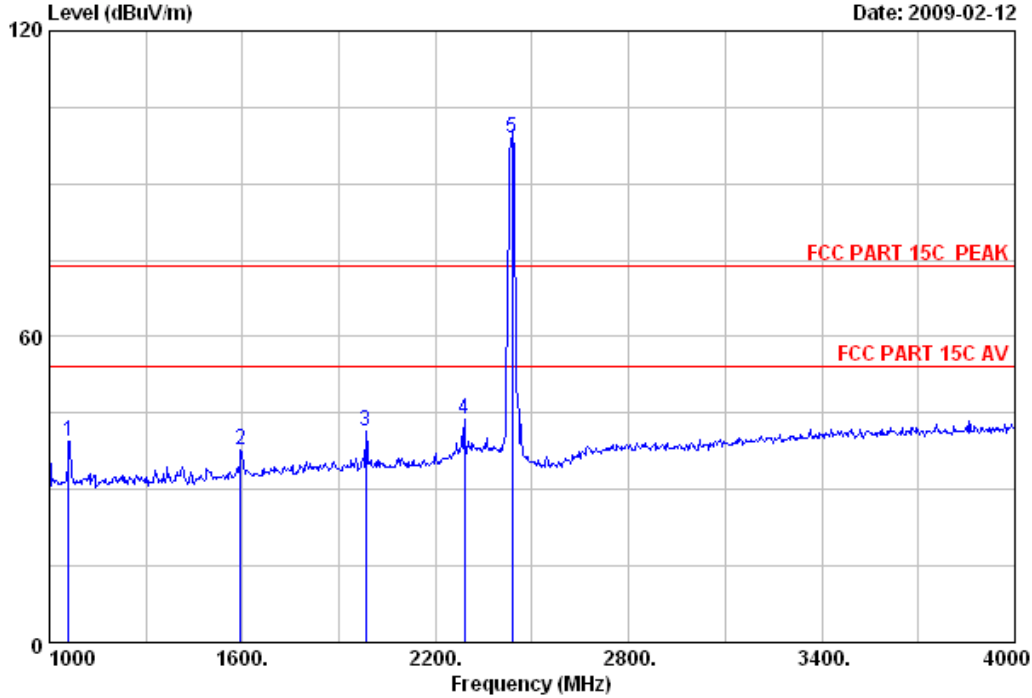
Remarks:

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



No.6 Ke Feng Road,Block 52,  
ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Data: 7 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 7  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1060.000	25.30	4.48	36.24	45.95	39.49	74.00	34.51	Peak
2	1594.000	26.30	5.43	35.65	41.62	37.70	74.00	36.30	Peak
3	1984.000	27.83	6.16	35.20	42.55	41.34	74.00	32.66	Peak
4	2290.000	28.31	6.61	35.14	44.04	43.82	74.00	30.18	Peak
5	2437.000	28.53	6.80	35.11	98.57	98.79	74.00	-24.79	Peak

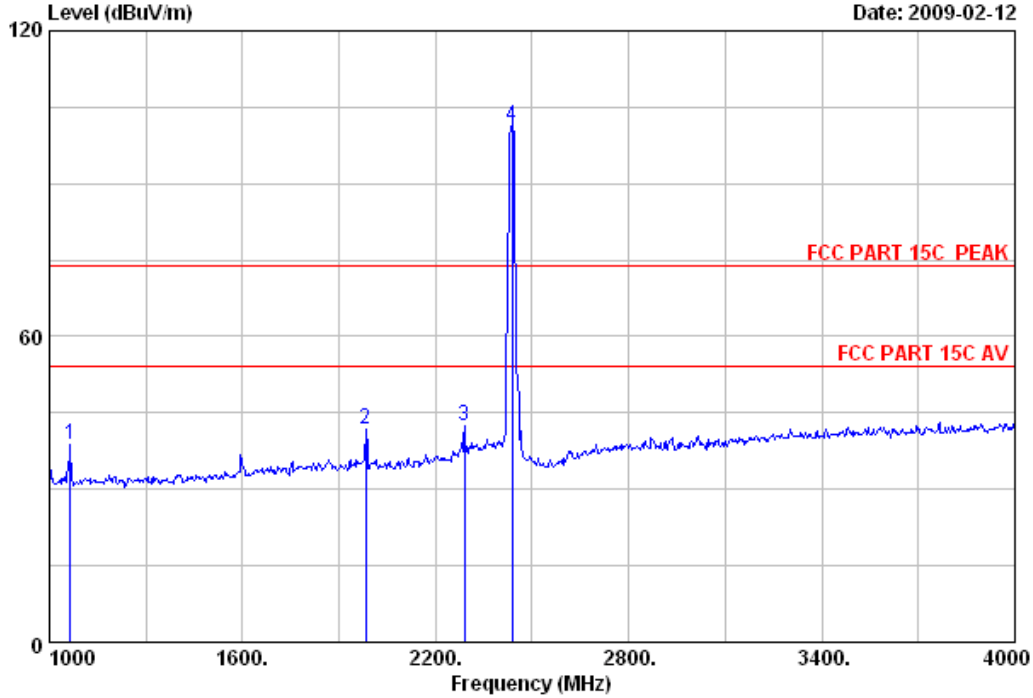
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Data: 8 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 8  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	Factor	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1066.000	25.30	4.52	36.22	45.18	38.78	74.00	35.22	Peak
2	1984.000	27.83	6.16	35.20	43.00	41.79	74.00	32.21	Peak
3	2290.000	28.31	6.61	35.14	42.77	42.55	74.00	31.45	Peak
4	2437.000	28.53	6.80	35.11	100.93	101.15	74.00	-27.15	Peak

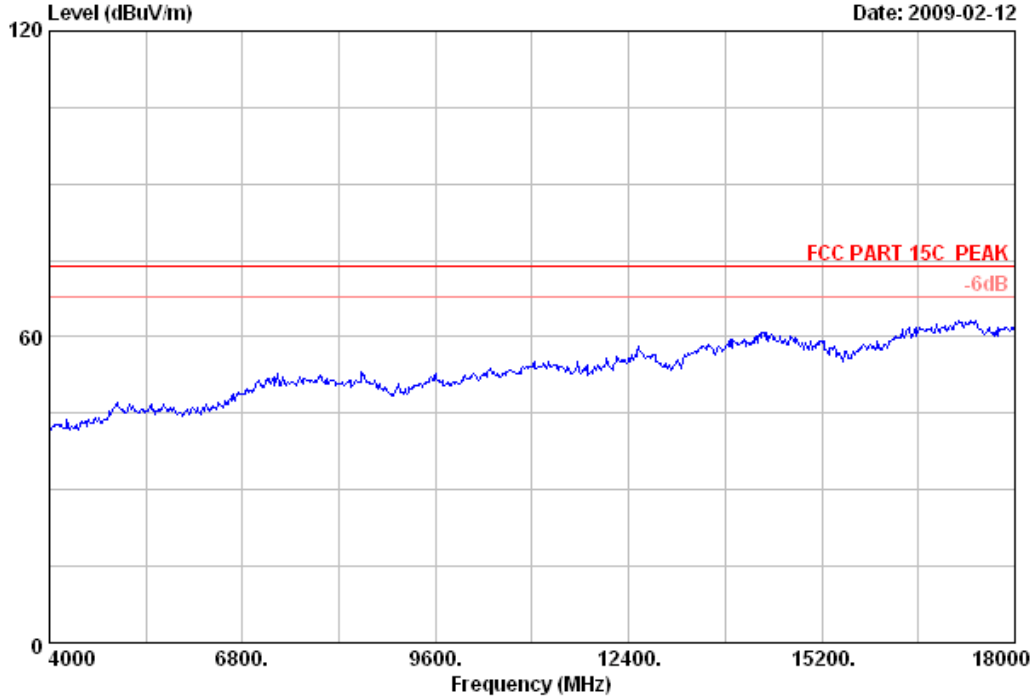
Remarks:

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



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 Noutou, ShenZhen, GuangDong, China  
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Data: 9 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

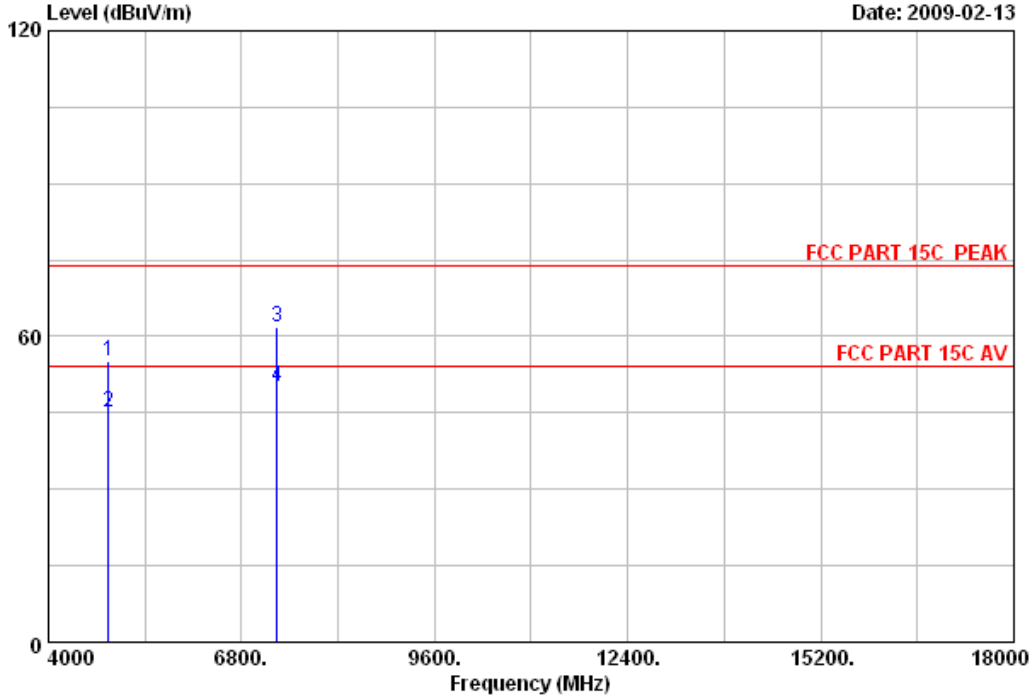


Site no.	: 3# Chamber	Data no.	: 9
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11b CH6 2437MHz		
M/N	:		



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
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Data: 10 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 10  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	10.56	34.58	44.24	55.00	74.00	19.00	Peak
2	4874.000	34.78	10.56	34.58	34.42	45.18	54.00	8.82	Average
3	7311.000	38.58	12.17	34.49	45.48	61.74	74.00	12.26	Peak
4	7311.000	38.58	12.17	34.49	33.96	50.22	54.00	3.78	Average

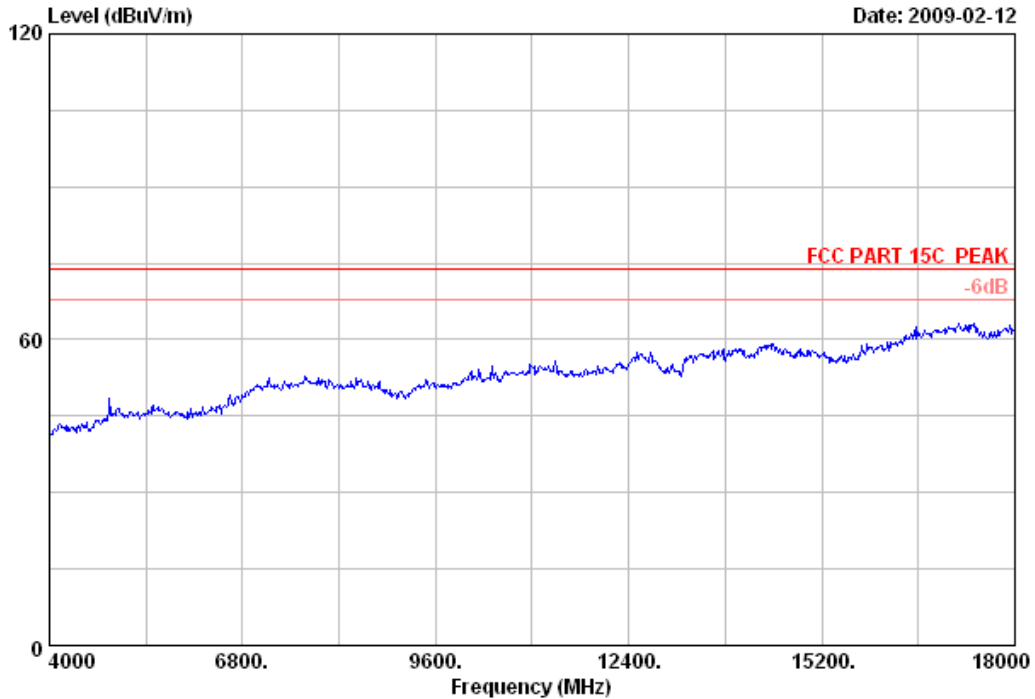
Remarks:

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



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Data: 11 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

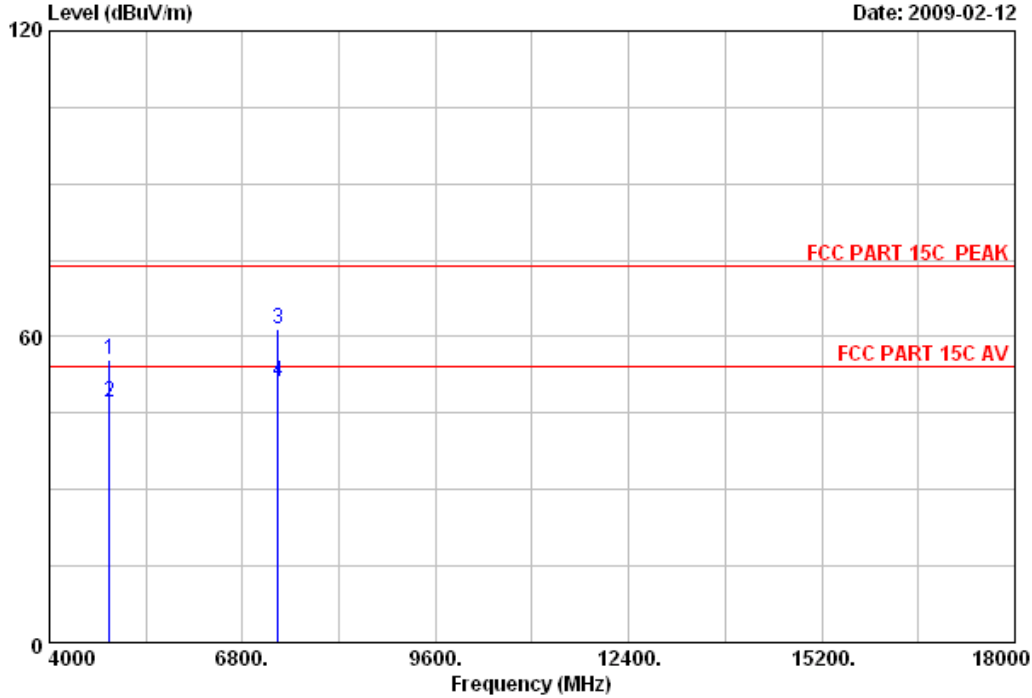


Site no.	: 3# Chamber	Data no.	: 11
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11b CH6 2437MHz		
M/N	:		



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Data: 12 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 12  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH6 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Margin	Remark	
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits		
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	34.78	10.56	34.58	44.64	55.40	74.00	18.60	Peak
2	4874.000	34.78	10.56	34.58	36.38	47.14	54.00	6.86	Average
3	7311.000	38.58	12.17	34.49	45.34	61.60	74.00	12.40	Peak
4	7311.000	38.58	12.17	34.49	34.74	51.00	54.00	3.00	Average

Remarks:

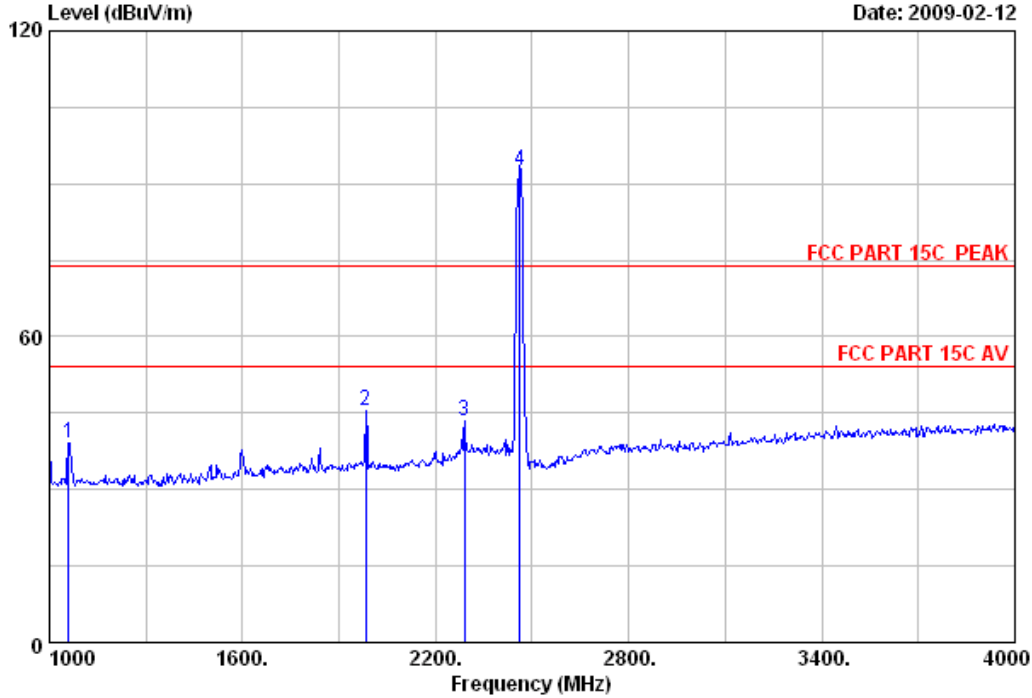
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Data: 13 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 13  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
			(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)		
1	1060.000	25.30	4.48	36.24	45.67	39.21	74.00	34.79	Peak
2	1984.000	27.83	6.16	35.20	46.75	45.54	74.00	28.46	Peak
3	2290.000	28.31	6.61	35.14	43.82	43.60	74.00	30.40	Peak
4	2462.000	28.55	6.84	35.11	92.23	92.51	74.00	-18.51	Peak

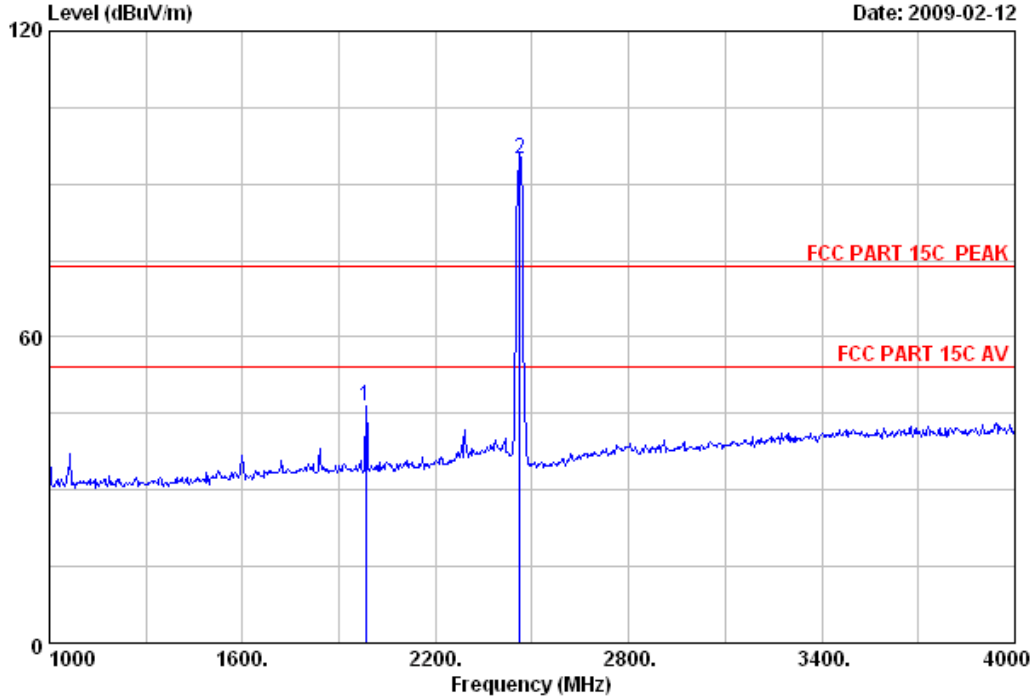
Remarks:

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



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 Noutou, ShenZhen, GuangDong, China  
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Site no. : 3# Chamber Data no. : 14  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading Level (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1984.000	27.83	6.16	35.20	47.71	46.50	74.00	27.50	Peak
2	2462.000	28.55	6.84	35.11	94.64	94.92	74.00	-20.92	Peak

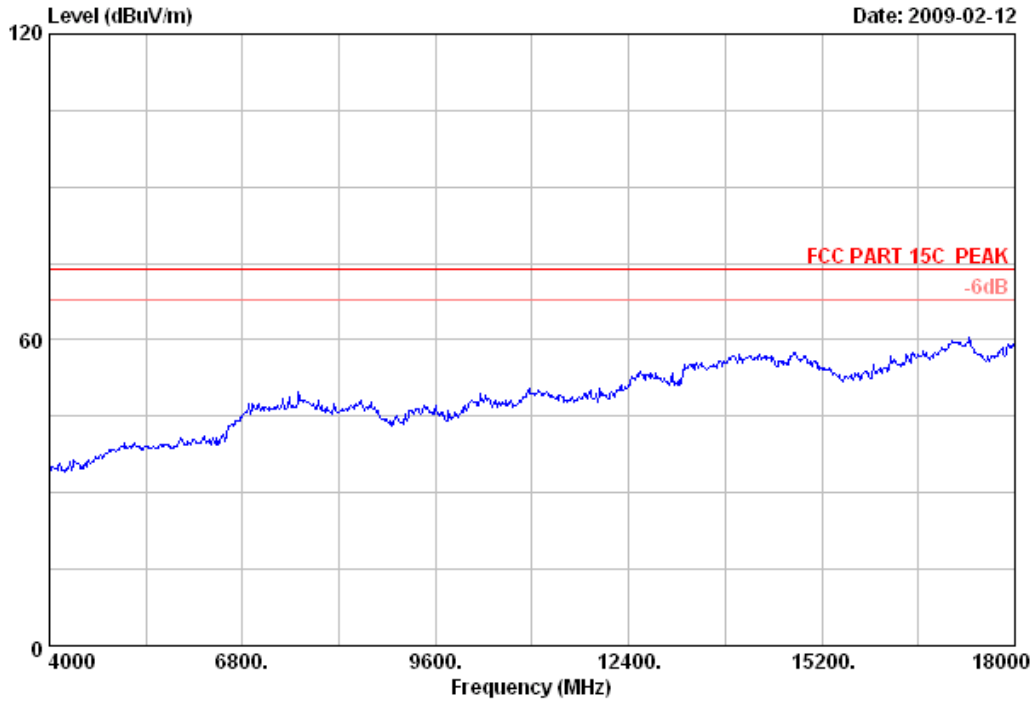
Remarks:

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



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Data: 15 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

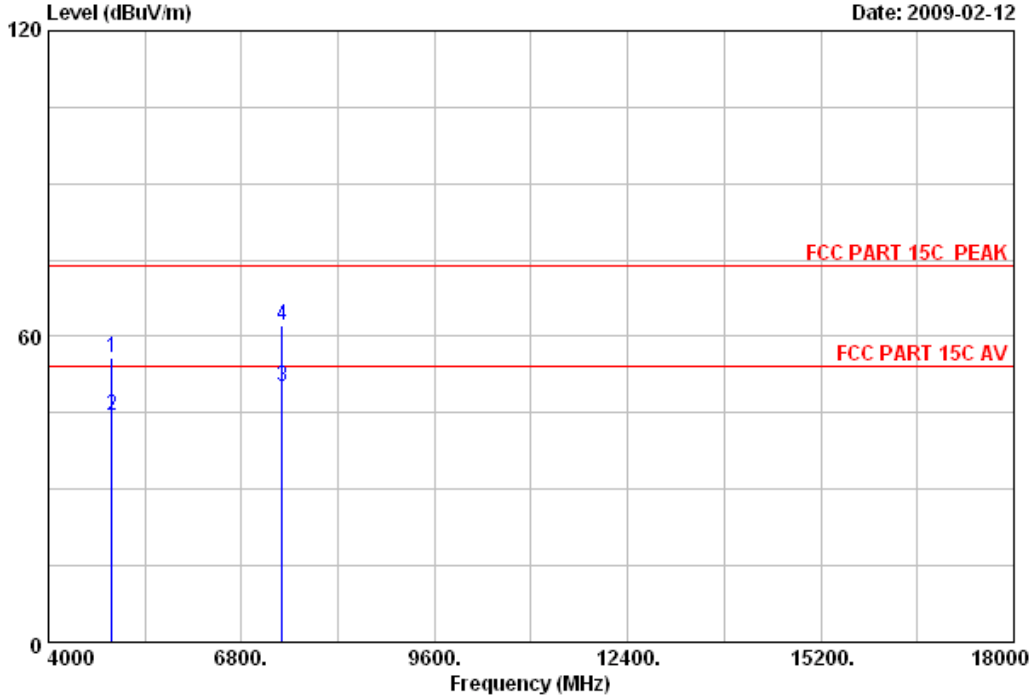


Site no.	: 3# Chamber	Data no.	: 15
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11b CH11 2462MHz		
M/N	:		



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Data: 16 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 16  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	34.57	44.56	55.66	74.00	18.34	Peak
2	4924.000	35.09	10.58	34.57	33.29	44.39	54.00	9.61	Average
3	7386.000	38.77	12.31	34.51	33.57	50.14	54.00	3.86	Average
4	7386.000	38.77	12.31	34.51	45.44	62.01	74.00	11.99	Peak

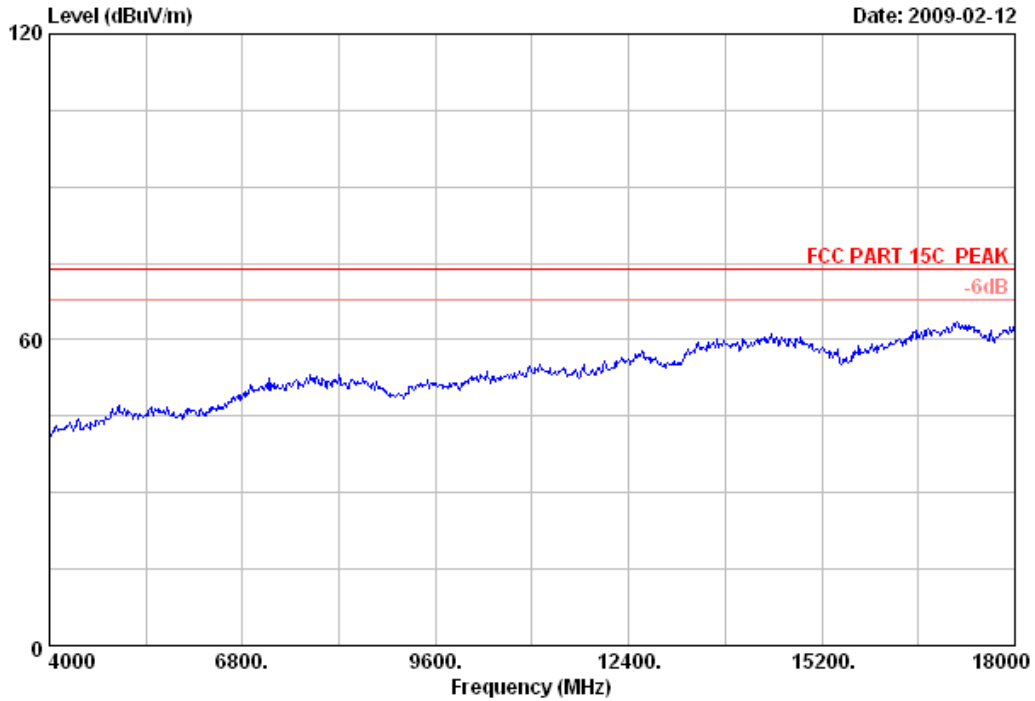
Remarks:

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



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Data: 17 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

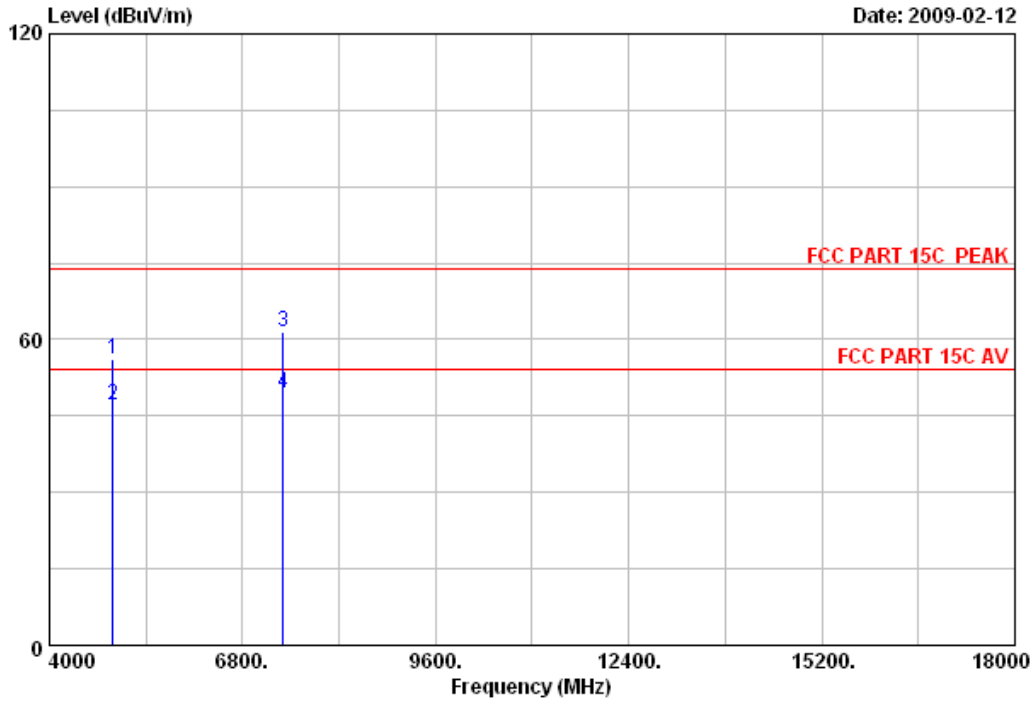


Site no.	: 3# Chamber	Data no.	: 17
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11b CH11 2462MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 18  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	34.57	44.93	56.03	74.00	17.97	Peak
2	4924.000	35.09	10.58	34.57	35.96	47.06	54.00	6.94	Average
3	7386.000	38.77	12.31	34.51	44.92	61.49	74.00	12.51	Peak
4	7386.000	38.77	12.31	34.51	32.89	49.46	54.00	4.54	Average

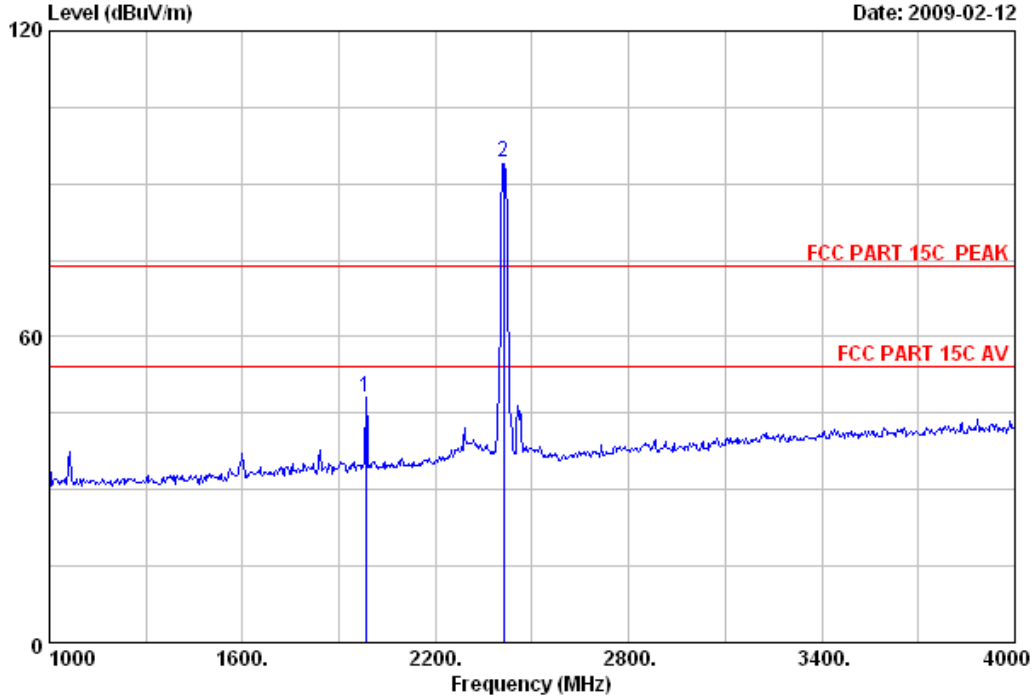
Remarks:

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



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Site no. : 3# Chamber Data no. : 19  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1984.000	27.83	6.16	35.20	49.50	48.29	74.00	25.71	Peak
2	2412.000	28.48	6.73	35.12	94.07	94.16	74.00	-20.16	Peak

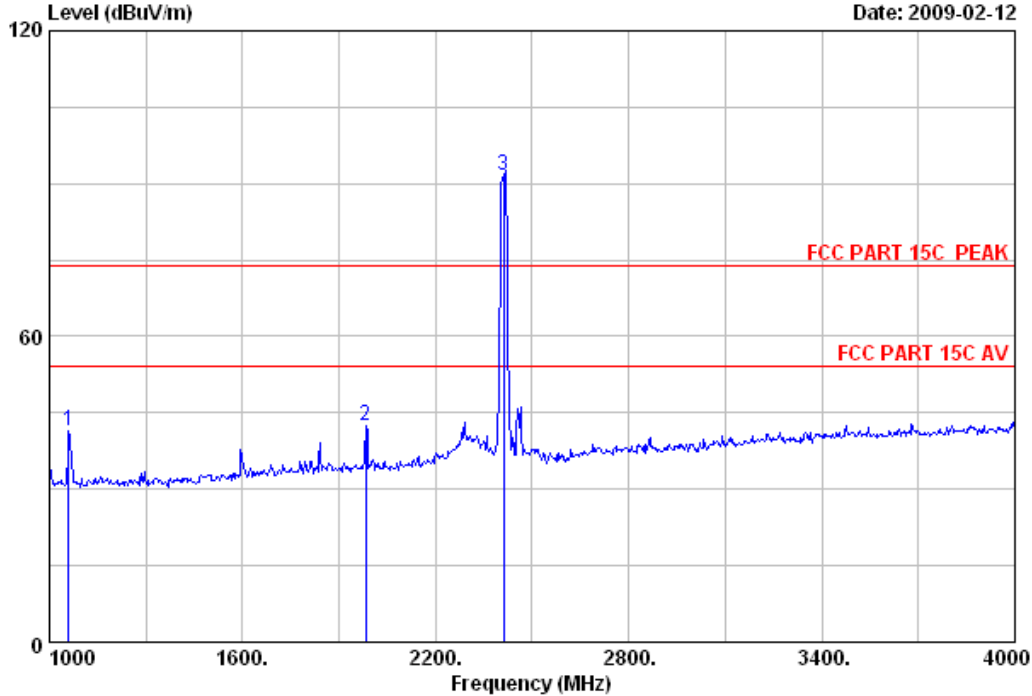
Remarks:

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



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Site no. : 3# Chamber Data no. : 20  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1060.000	25.30	4.48	36.24	47.87	41.41	74.00	32.59	Peak
2	1984.000	27.83	6.16	35.20	43.75	42.54	74.00	31.46	Peak
3	2412.000	28.48	6.73	35.12	91.58	91.67	74.00	-17.67	Peak

Remarks:

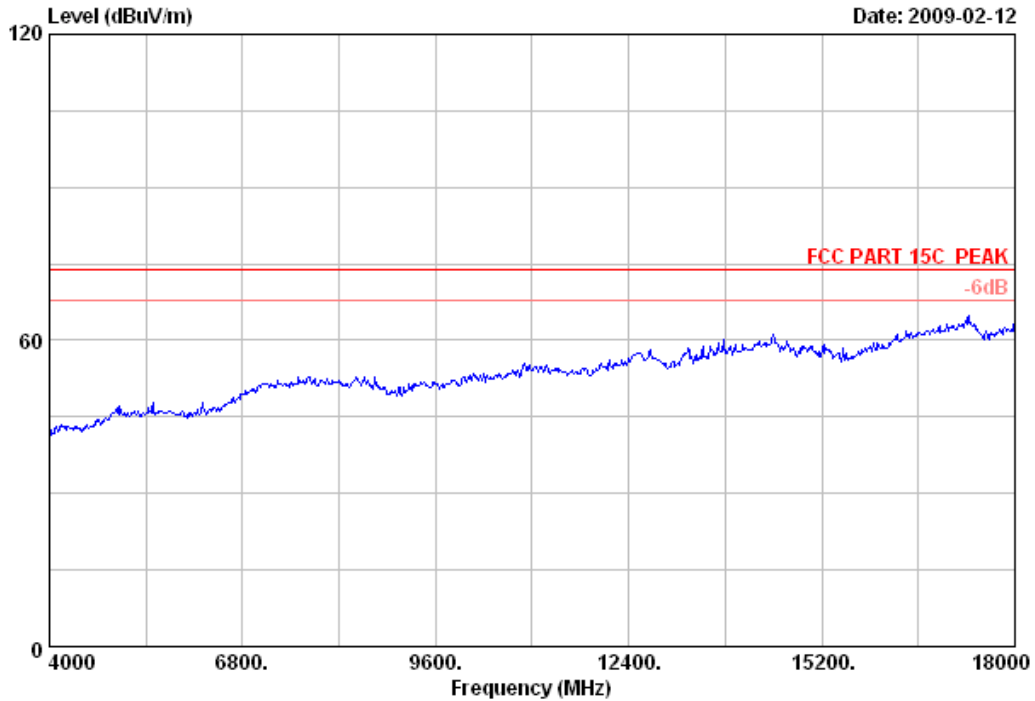
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Data: 21 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

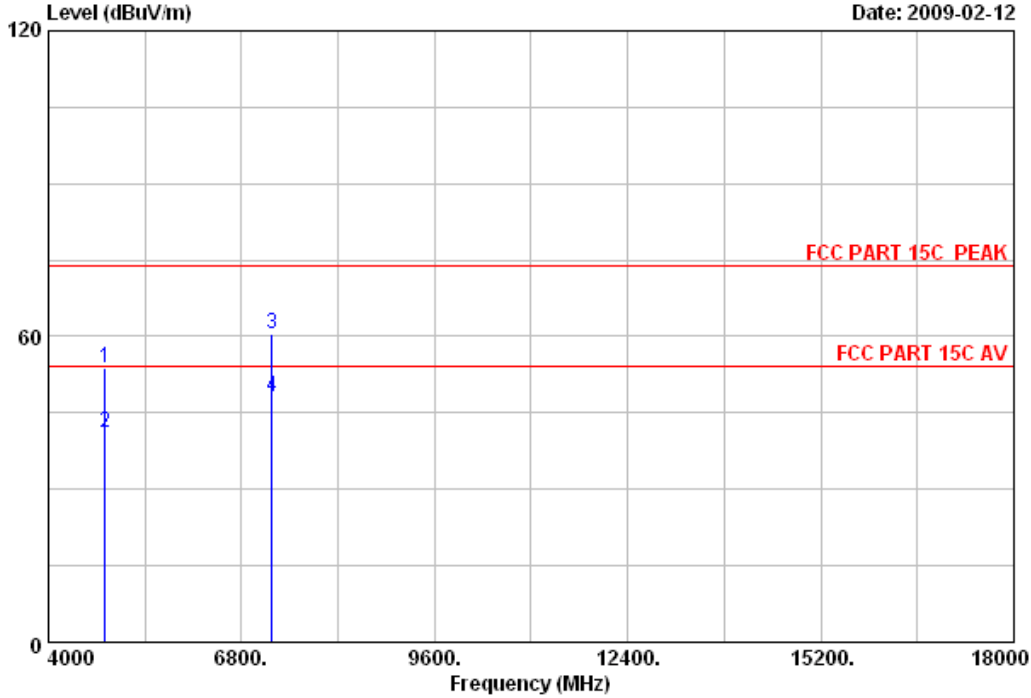


Site no.	: 3# Chamber	Data no.	: 21
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11g CH1 2412MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 22  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	34.59	43.43	53.86	74.00	20.14	Peak
2	4824.000	34.47	10.55	34.59	30.62	41.05	54.00	12.95	Average
3	7236.000	38.43	12.16	34.49	44.42	60.52	74.00	13.48	Peak
4	7236.000	38.43	12.16	34.49	31.94	48.04	54.00	5.96	Average

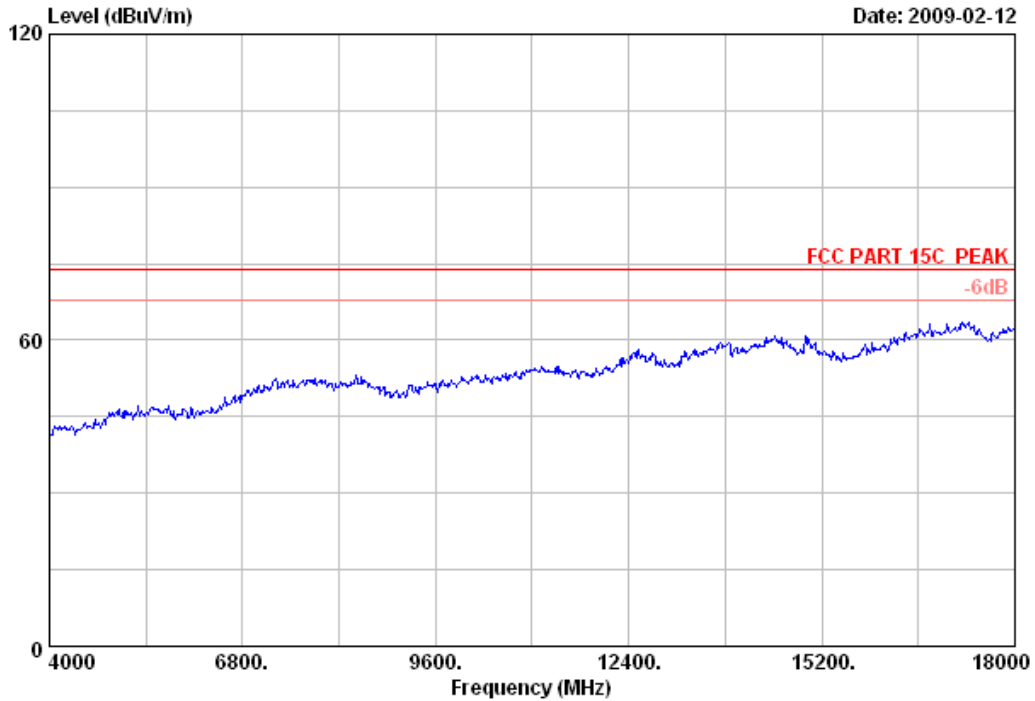
Remarks:

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



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Data: 23 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

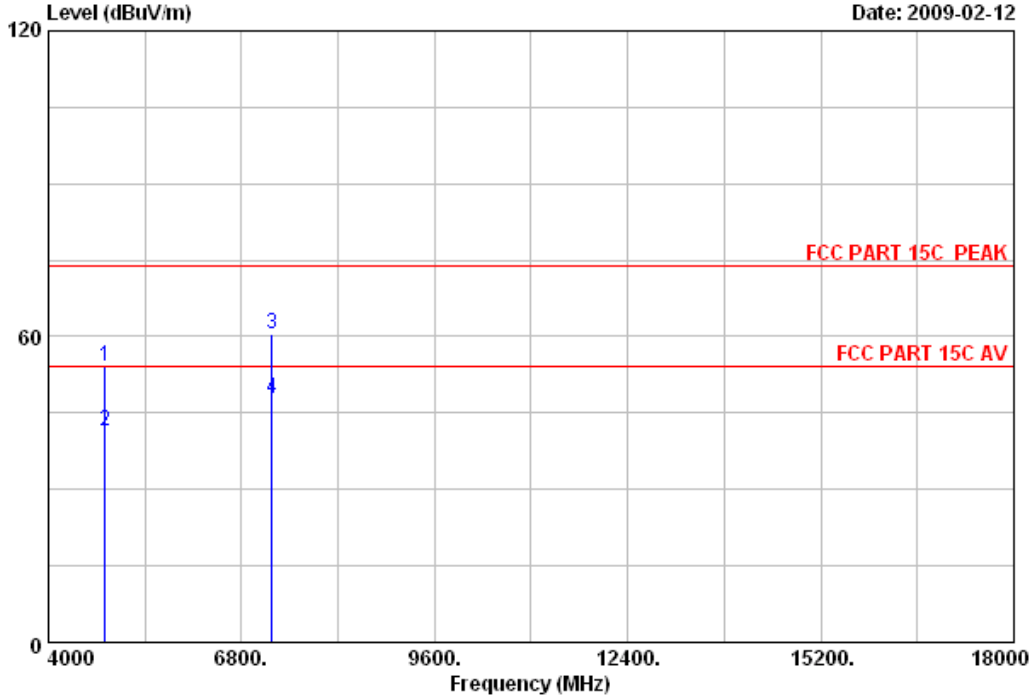


Site no.	: 3# Chamber	Data no.	: 23
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11g CH1 2412MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 24  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Margin	Remark	
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits		
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	34.47	10.55	34.59	43.62	54.05	74.00	19.95	Peak
2	4824.000	34.47	10.55	34.59	31.13	41.56	54.00	12.44	Average
3	7236.000	38.43	12.16	34.49	44.24	60.34	74.00	13.66	Peak
4	7236.000	38.43	12.16	34.49	31.76	47.86	54.00	6.14	Average

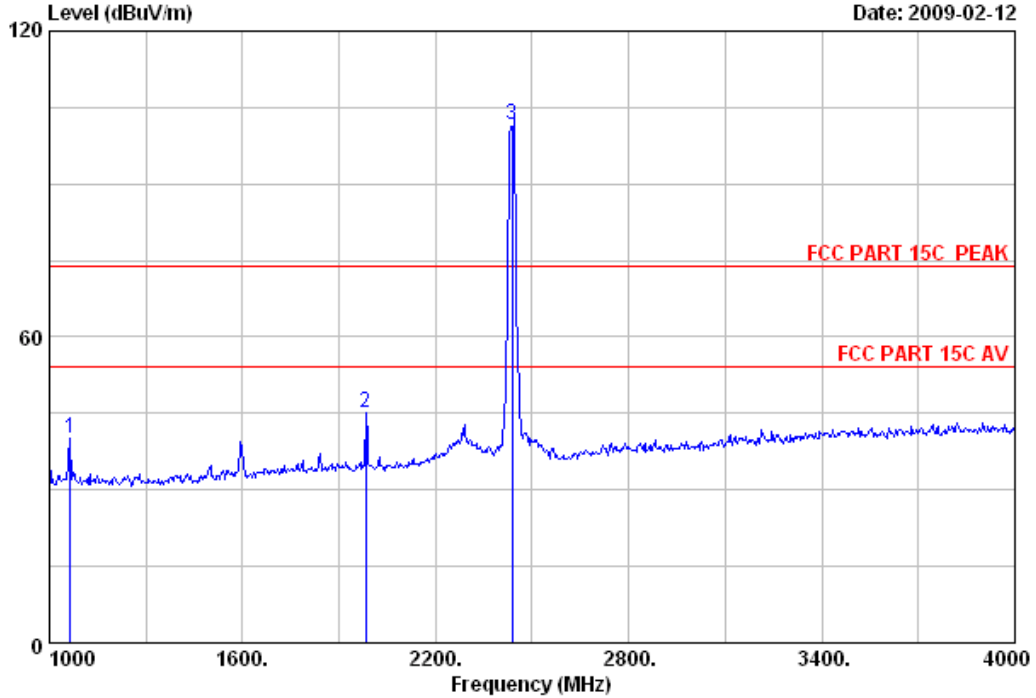
Remarks:

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



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Site no. : 3# Chamber Data no. : 25  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1066.000	25.30	4.52	36.22	46.59	40.19	74.00	33.81	Peak
2	1984.000	27.83	6.16	35.20	46.22	45.01	74.00	28.99	Peak
3	2437.000	28.53	6.80	35.11	101.44	101.66	74.00	-27.66	Peak

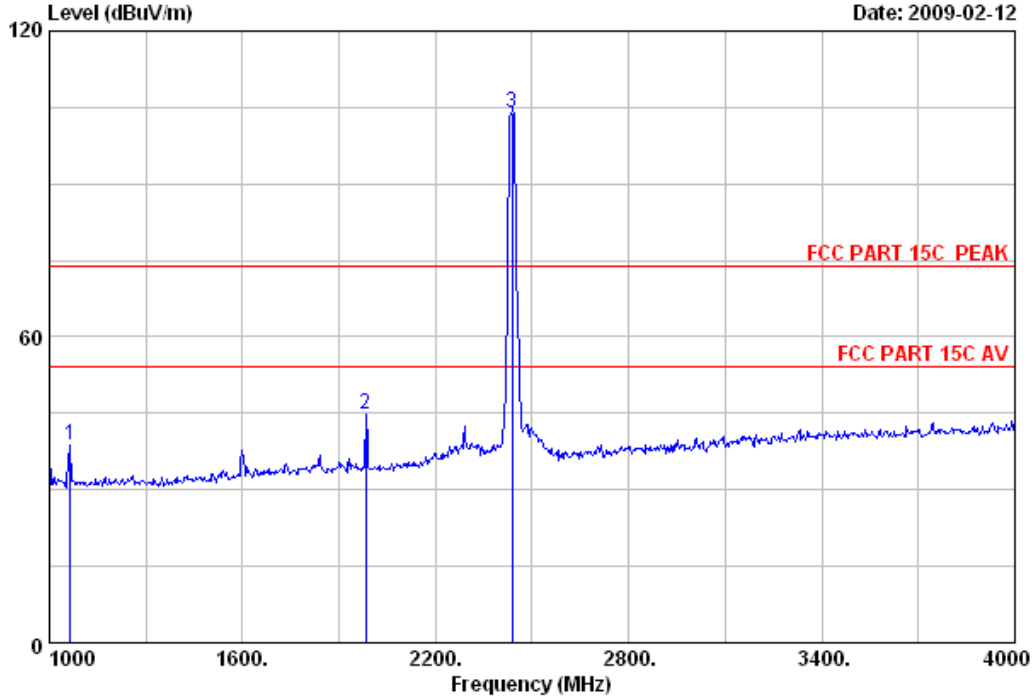
Remarks:

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



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Site no. : 3# Chamber Data no. : 26  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
			(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)		
1	1066.000	25.30	4.52	36.22	45.23	38.83	74.00	35.17	Peak
2	1984.000	27.83	6.16	35.20	45.87	44.66	74.00	29.34	Peak
3	2437.000	28.53	6.80	35.11	103.68	103.90	74.00	-29.90	Peak

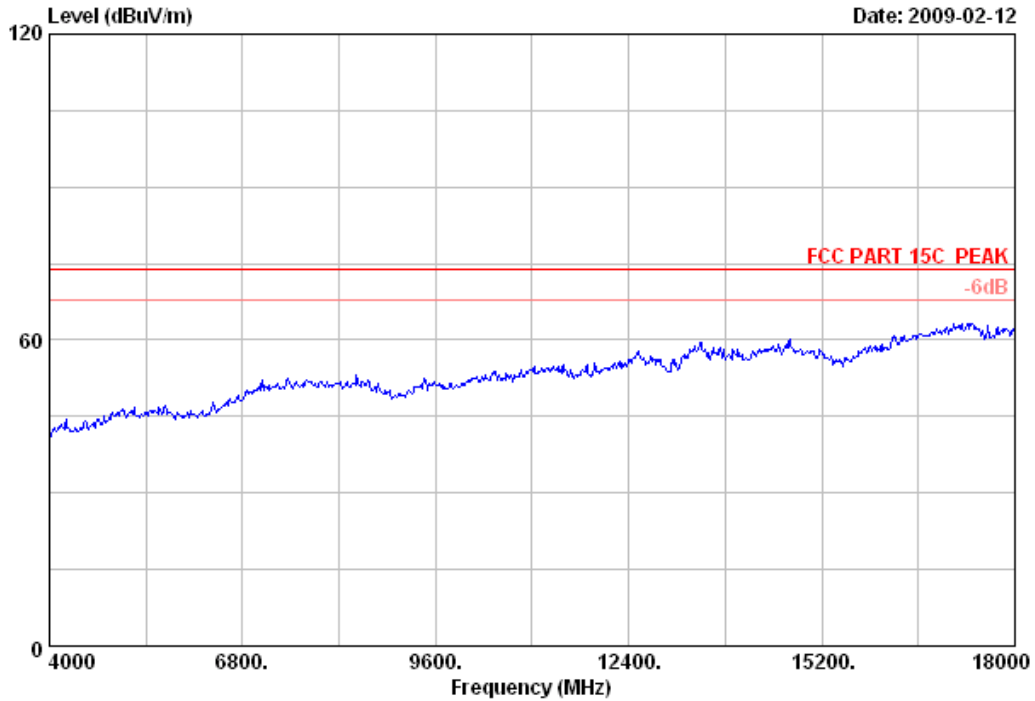
Remarks:

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



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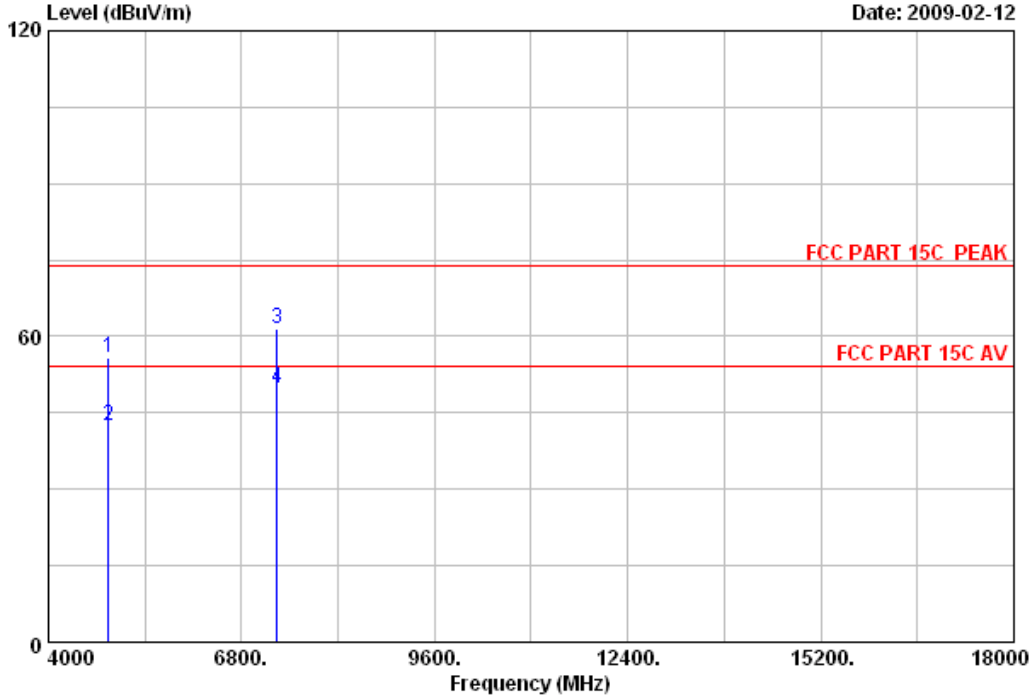


Site no.	: 3# Chamber	Data no.	: 27
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11g CH6 2437MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 28  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz  
 M/N :

	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	34.78	10.56	34.58	45.06	55.82	74.00	18.18	Peak
2	4874.000	34.78	10.56	34.58	31.78	42.54	54.00	11.46	Average
3	7311.000	38.58	12.17	34.49	45.08	61.34	74.00	12.66	Peak
4	7311.000	38.58	12.17	34.49	33.55	49.81	54.00	4.19	Average

Remarks:

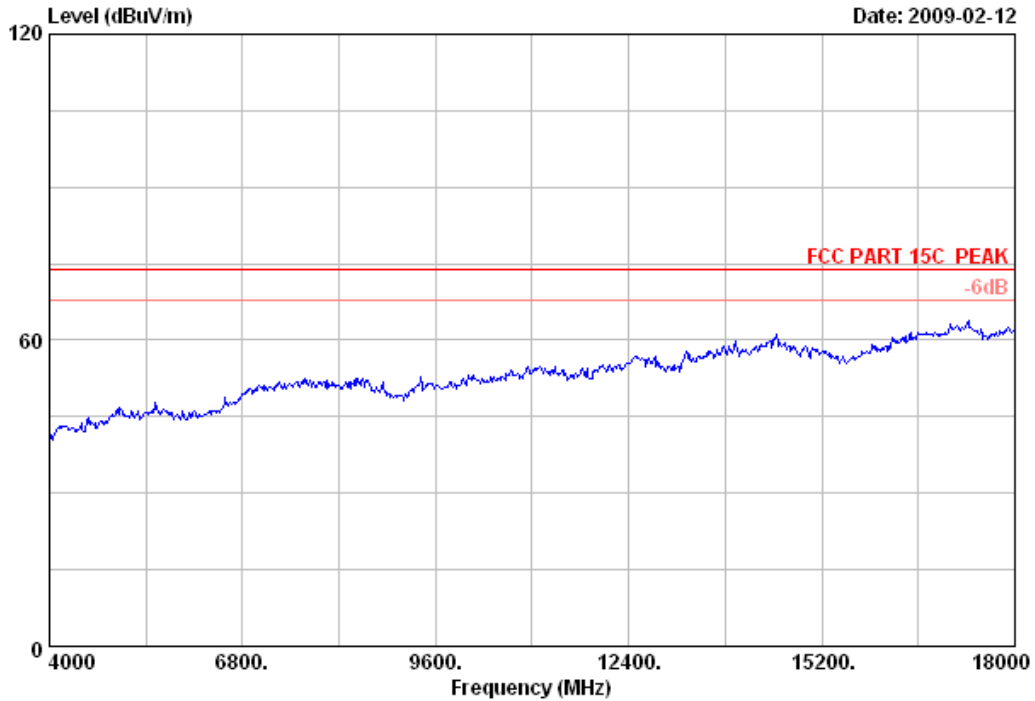
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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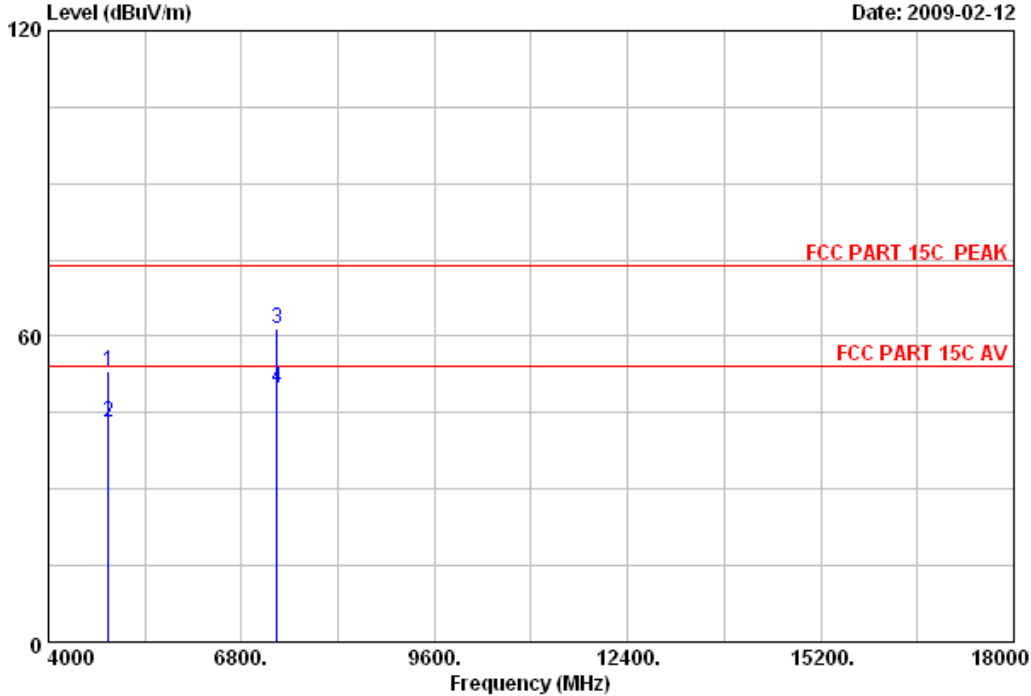


Site no.	: 3# Chamber	Data no.	: 29
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11g CH6 2437MHz		
M/N	:		



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Data: 30 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 30  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH6 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Margin	Remark	
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits		
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	34.78	10.56	34.58	42.44	53.20	74.00	20.80	Peak
2	4874.000	34.78	10.56	34.58	32.29	43.05	54.00	10.95	Average
3	7311.000	38.58	12.17	34.49	45.28	61.54	74.00	12.46	Peak
4	7311.000	38.58	12.17	34.49	33.48	49.74	54.00	4.26	Average

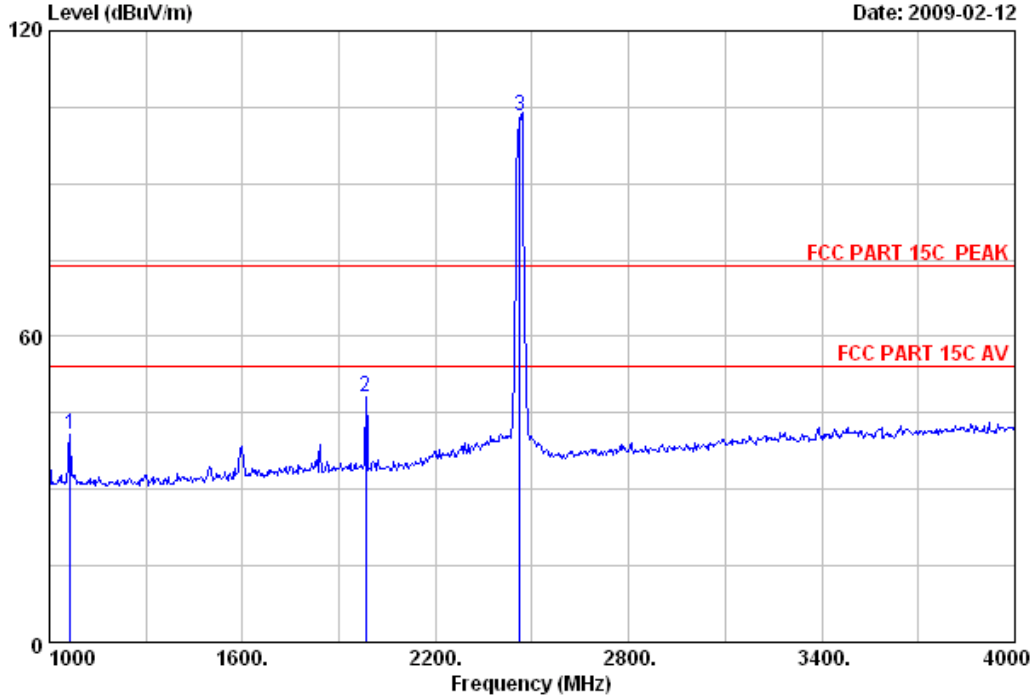
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Data: 31 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 31  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1066.000	25.30	4.52	36.22	47.06	40.66	74.00	33.34	Peak
2	1984.000	27.83	6.16	35.20	49.22	48.01	74.00	25.99	Peak
3	2462.000	28.55	6.84	35.11	102.85	103.13	74.00	-29.13	Peak

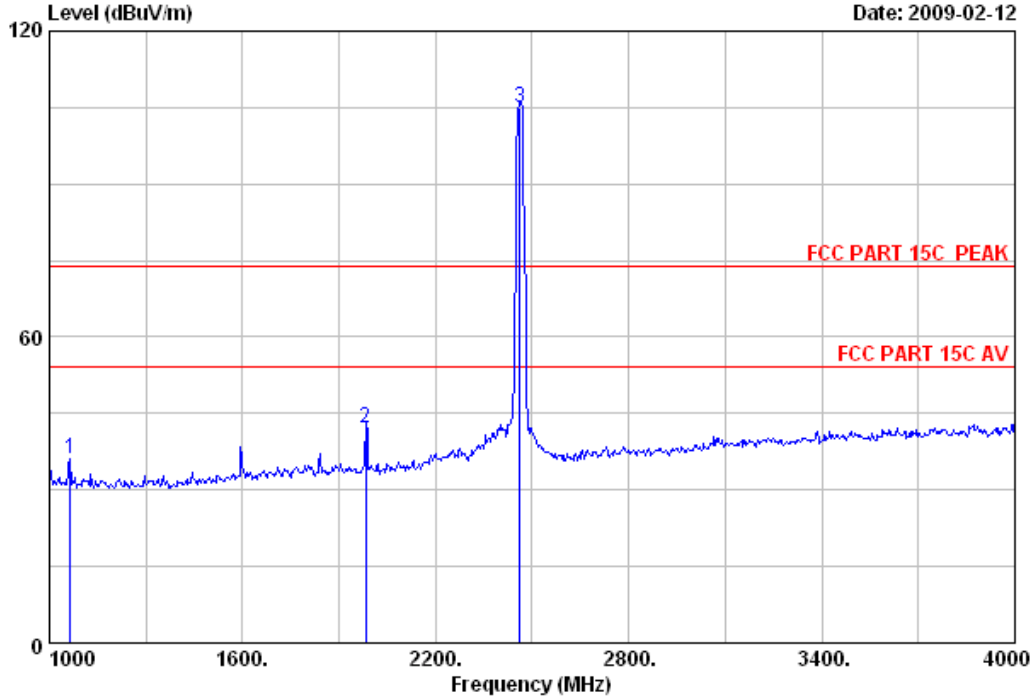
Remarks:

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



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Noutou, ShenZhen, GuangDong, China  
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Data: 32 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 32  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1066.000	25.30	4.52	36.22	42.40	36.00	74.00	38.00	Peak
2	1984.000	27.83	6.16	35.20	43.45	42.24	74.00	31.76	Peak
3	2462.000	28.55	6.84	35.11	104.77	105.05	74.00	-31.05	Peak

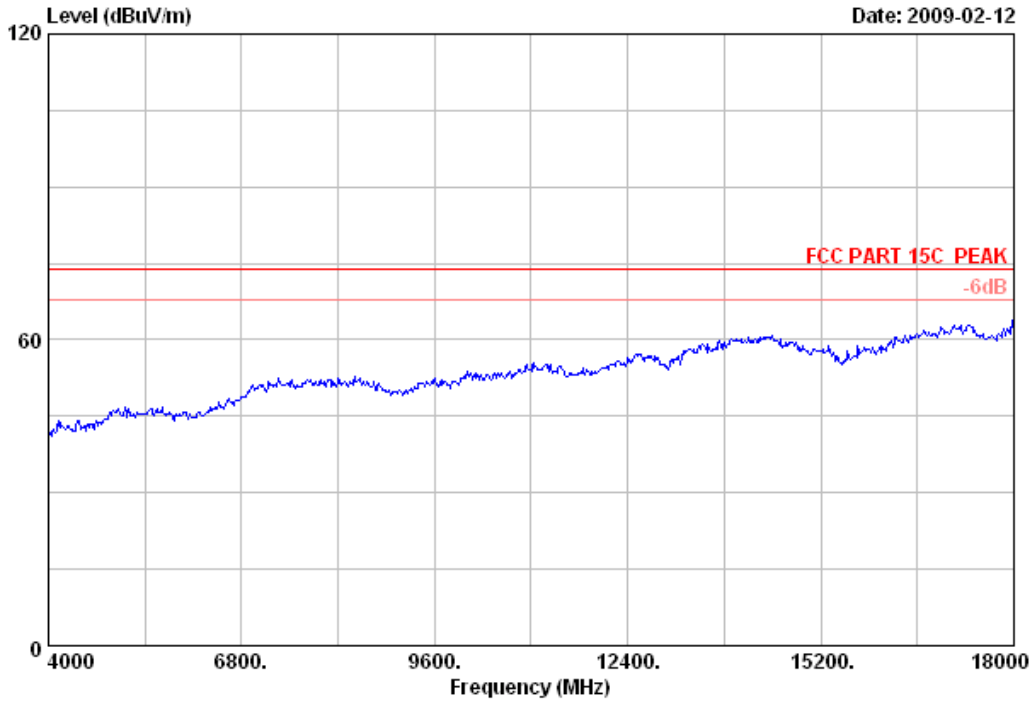
Remarks:

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



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 Tel:+86-755-26639495-7  
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Data: 33 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

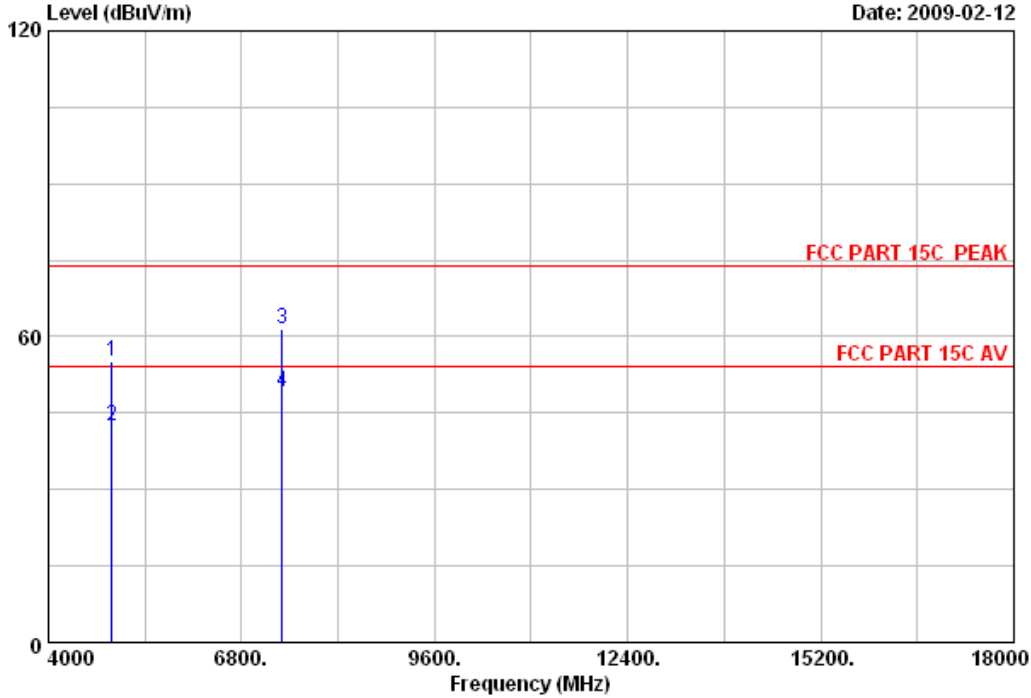


Site no.	: 3# Chamber	Data no.	: 33
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11g CH11 2462MHz		
M/N	:		



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Data: 34 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 34  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	10.58	34.57	43.94	55.04	74.00	18.96	Peak
2	4924.000	35.09	10.58	34.57	31.46	42.56	54.00	11.44	Average
3	7386.000	38.77	12.31	34.51	44.96	61.53	74.00	12.47	Peak
4	7386.000	38.77	12.31	34.51	32.50	49.07	54.00	4.93	Average

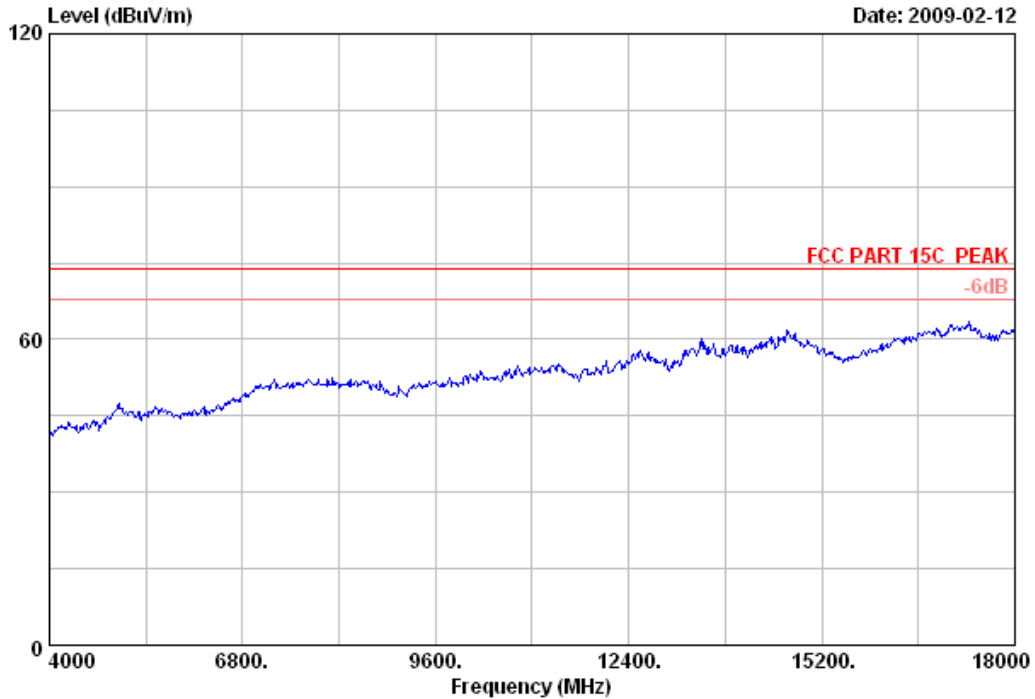
Remarks:

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



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Data: 35 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

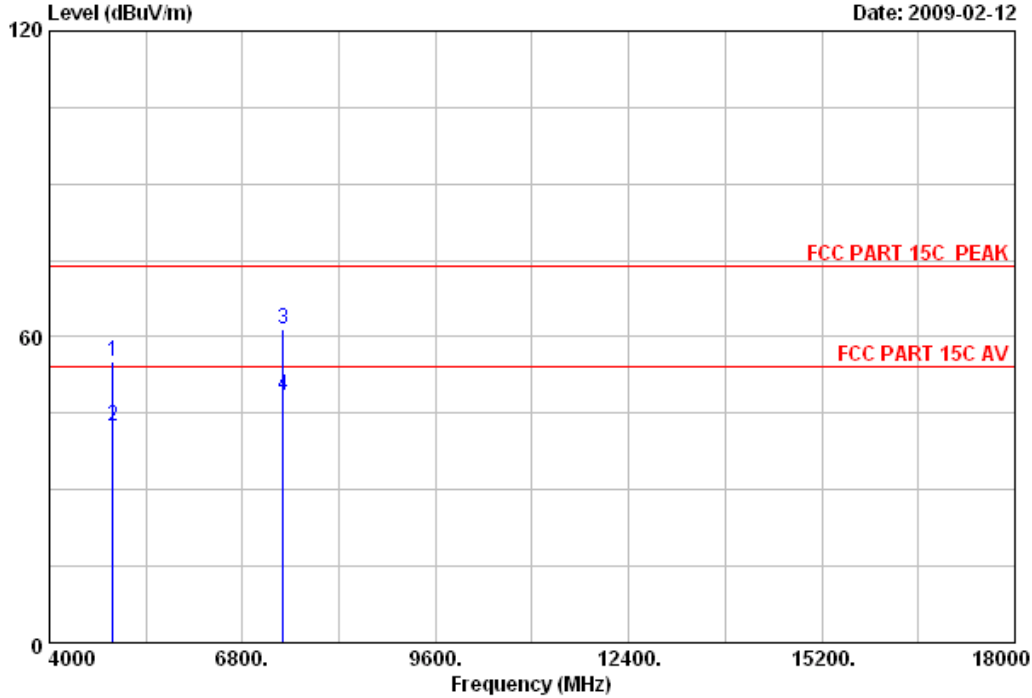


Site no.	: 3# Chamber	Data no.	: 35
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11g CH11 2462MHz		
M/N	:		



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Data: 36 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 36  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	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	35.09	10.58	34.57	43.95	55.05	74.00	18.95	Peak
2	4924.000	35.09	10.58	34.57	31.39	42.49	54.00	11.51	Average
3	7386.000	38.77	12.31	34.51	44.80	61.37	74.00	12.63	Peak
4	7386.000	38.77	12.31	34.51	32.06	48.63	54.00	5.37	Average

Remarks:

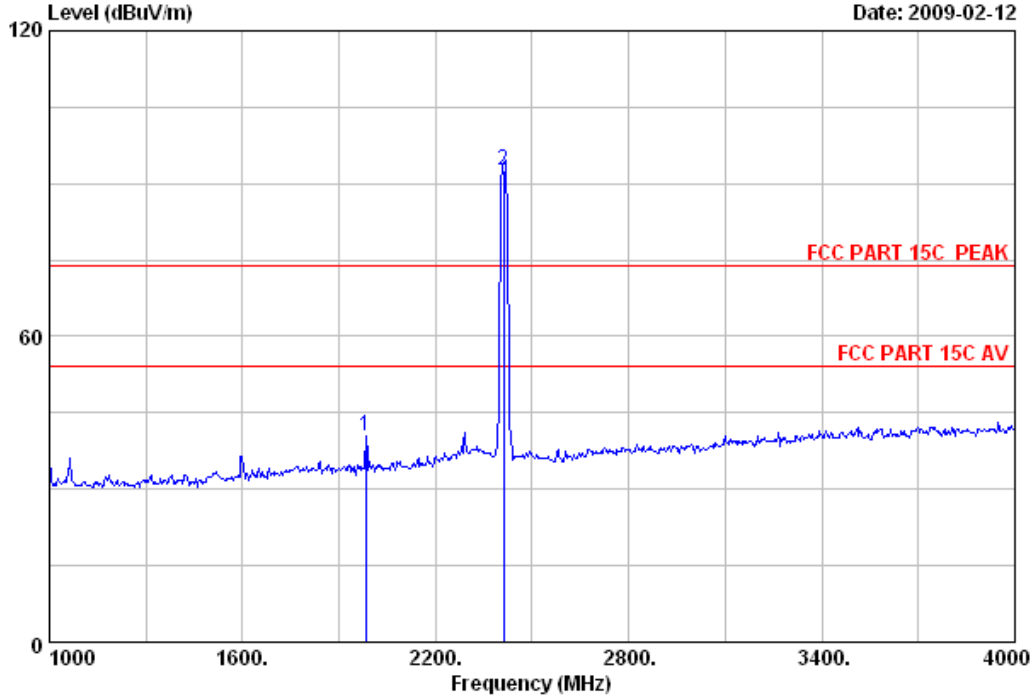
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Site no. : 3# Chamber Data no. : 37  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1984.000	27.83	6.16	35.20	41.63	40.42	74.00	33.58	Peak
2	2412.000	28.48	6.73	35.12	92.51	92.60	74.00	-18.60	Peak

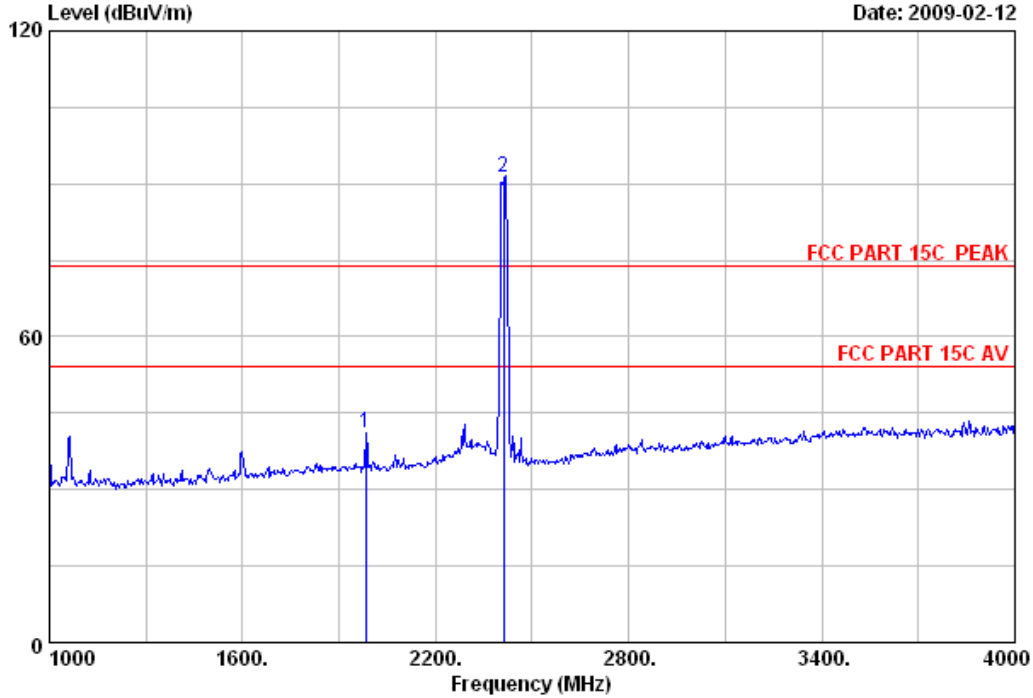
Remarks:

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



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Site no. : 3# Chamber Data no. : 38  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1984.000	27.83	6.16	35.20	42.46	41.25	74.00	32.75	Peak
2	2412.000	28.48	6.73	35.12	91.01	91.10	74.00	-17.10	Peak

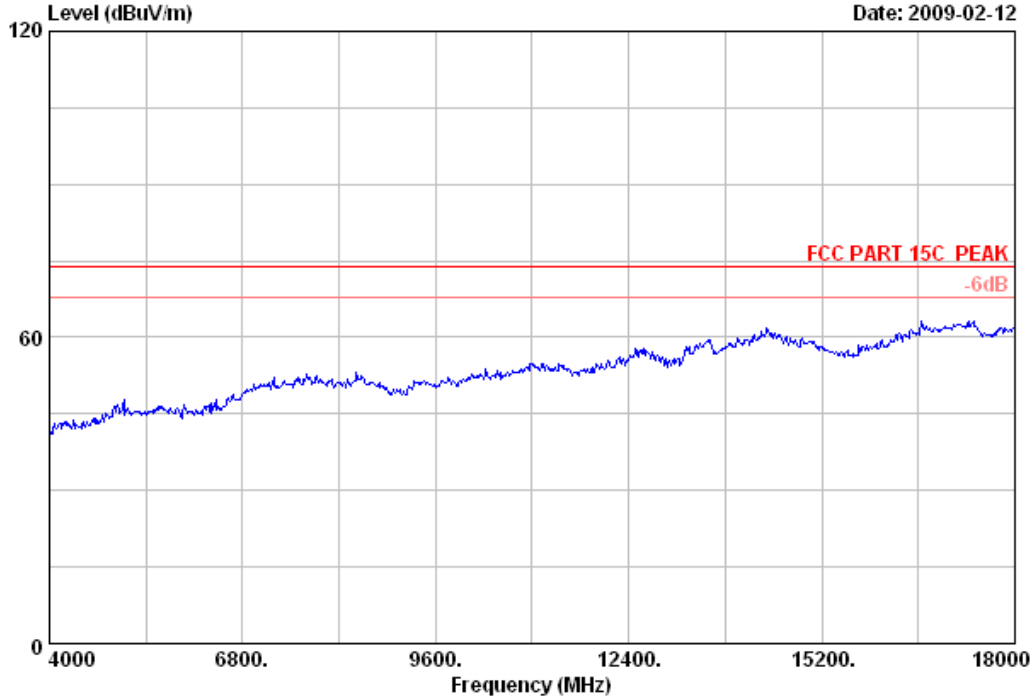
Remarks:

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



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 Noutou, ShenZhen, GuangDong, China  
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Data: 39 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

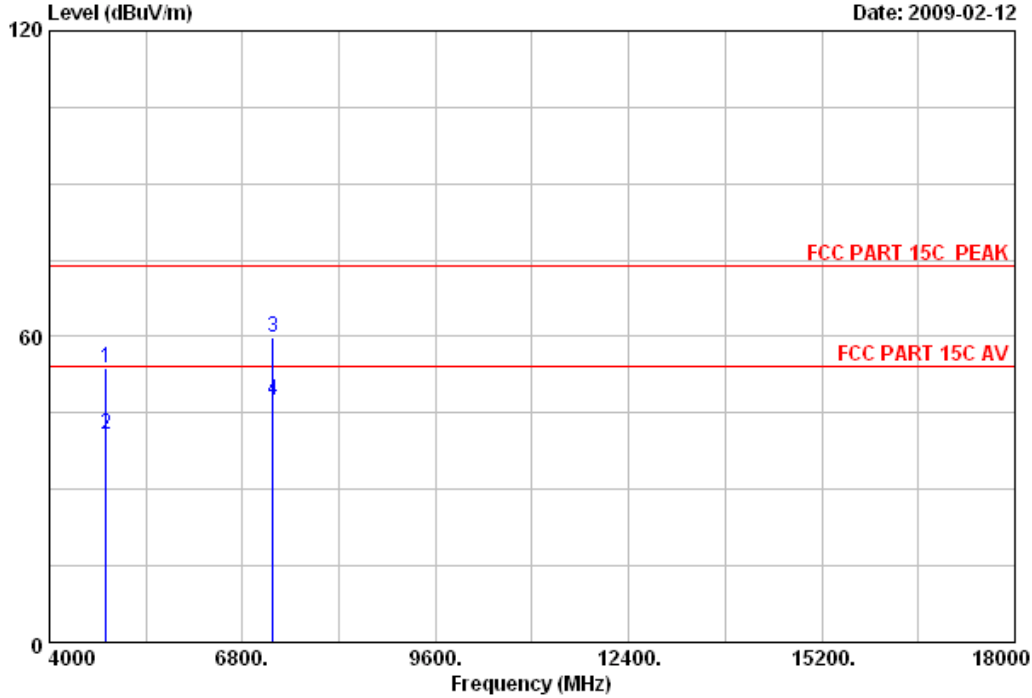


Site no.	: 3# Chamber	Data no.	: 39
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT20 CH1 2412MHz		
M/N	:		



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Data: 40 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 40  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	10.55	34.59	43.35	53.78	74.00	20.22	Peak
2	4824.000	34.47	10.55	34.59	30.49	40.92	54.00	13.08	Average
3	7236.000	38.43	12.16	34.49	43.80	59.90	74.00	14.10	Peak
4	7236.000	38.43	12.16	34.49	31.44	47.54	54.00	6.46	Average

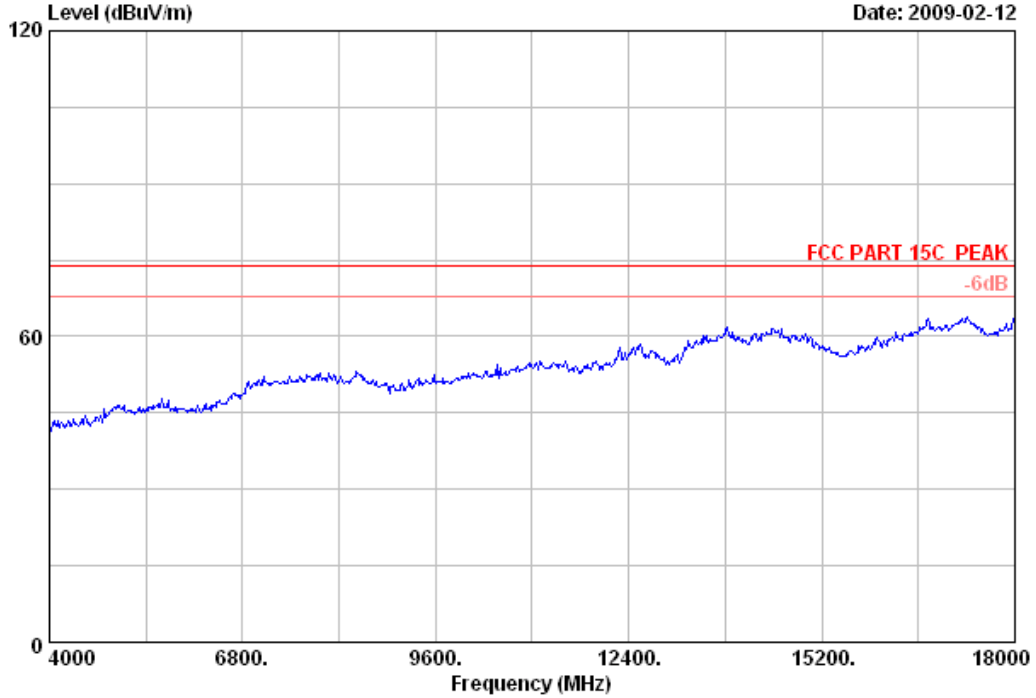
Remarks:

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



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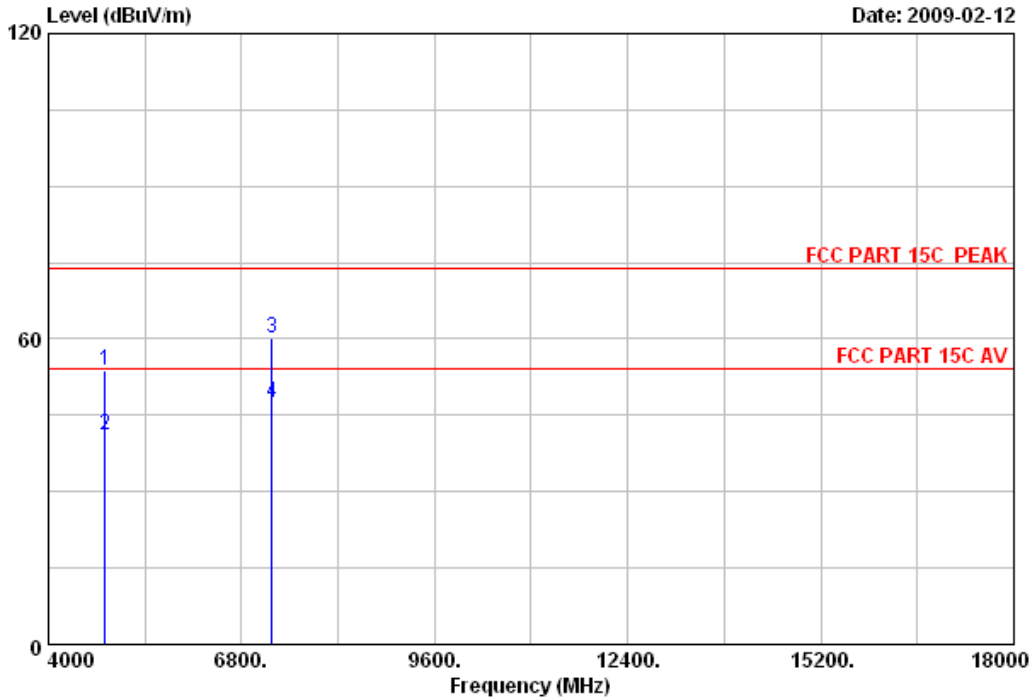


Site no.	: 3# Chamber	Data no.	: 41
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT20 CH1 2412MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 42  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

	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	34.47	10.55	34.59	43.31	53.74	74.00	20.26	Peak
2	4824.000	34.47	10.55	34.59	30.63	41.06	54.00	12.94	Average
3	7236.000	38.43	12.16	34.49	44.19	60.29	74.00	13.71	Peak
4	7236.000	38.43	12.16	34.49	31.40	47.50	54.00	6.50	Average

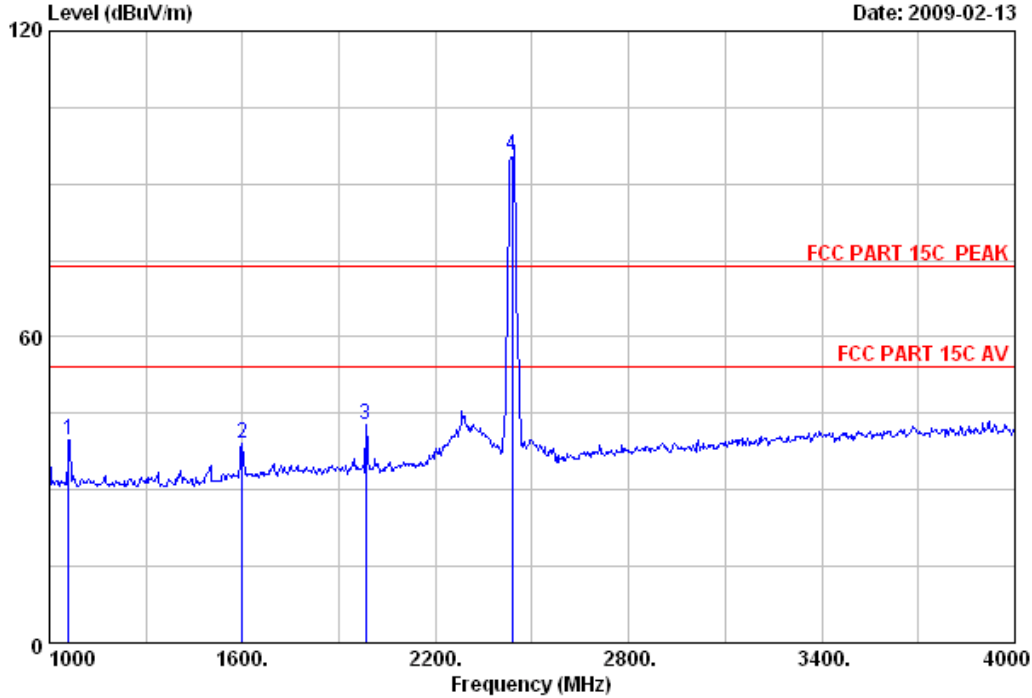
Remarks:

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



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 Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 43  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz  
 M/N :

	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	1060.000	25.30	4.48	36.24	46.37	39.91	74.00	34.09	Peak
2	1600.000	26.30	5.46	35.62	43.02	39.16	74.00	34.84	Peak
3	1984.000	27.83	6.16	35.20	43.93	42.72	74.00	31.28	Peak
4	2437.000	28.53	6.80	35.11	95.37	95.59	74.00	-21.59	Peak

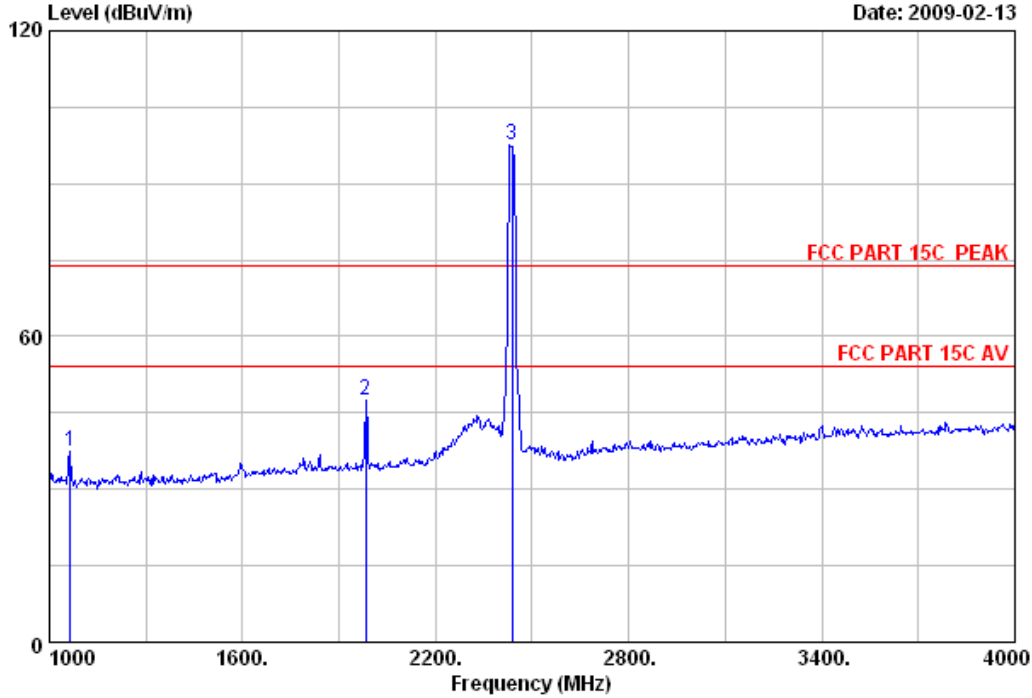
Remarks:

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



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Site no. : 3# Chamber Data no. : 44  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz  
 M/N :

	Ant.	Cable	Amp	Emission		Limits	Margin	Remark	
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)		
1	1066.000	25.30	4.52	36.22	43.82	37.42	74.00	36.58	Peak
2	1984.000	27.83	6.16	35.20	48.83	47.62	74.00	26.38	Peak
3	2437.000	28.53	6.80	35.11	97.23	97.45	74.00	-23.45	Peak

Remarks:

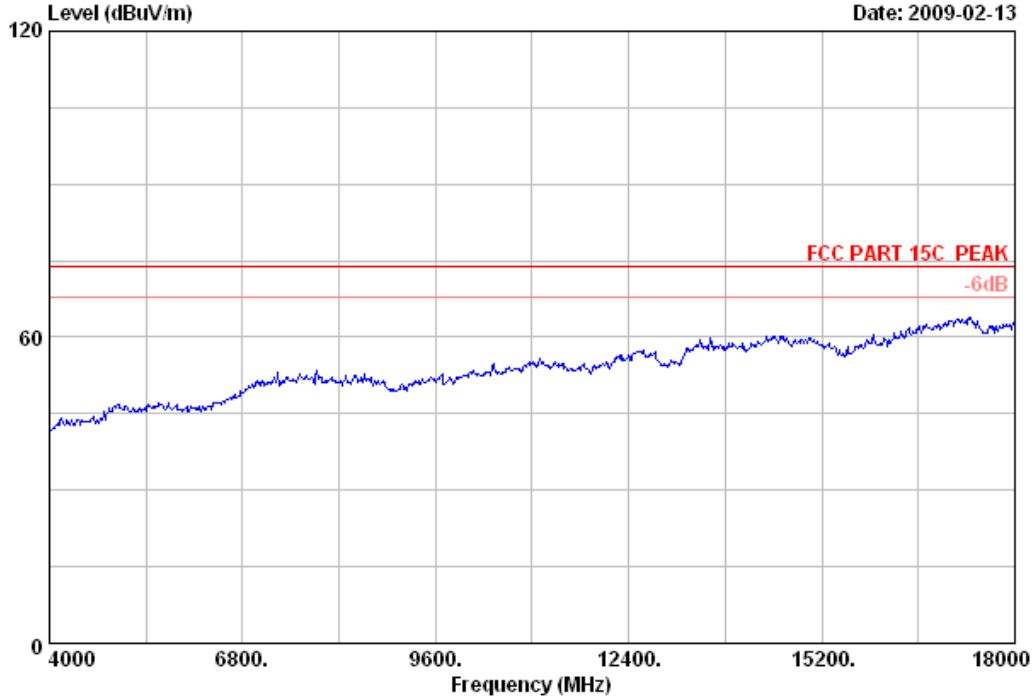
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Data: 45 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

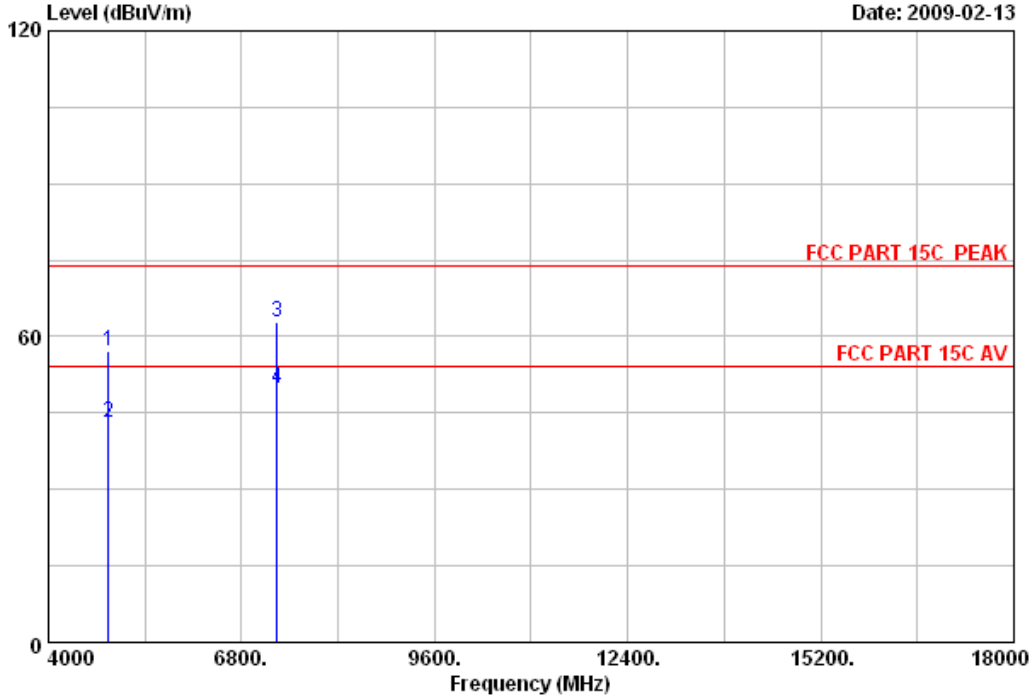


Site no.	: 3# Chamber	Data no.	: 45
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT20 CH6 2437MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 46  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
			(dB)	(dB)	(dBuV)	(dBuV/m)			
1	4874.000	34.78	10.56	34.58	46.34	57.10	74.00	16.90	Peak
2	4874.000	34.78	10.56	34.58	32.29	43.05	54.00	10.95	Average
3	7311.000	38.58	12.17	34.49	46.57	62.83	74.00	11.17	Peak
4	7311.000	38.58	12.17	34.49	33.70	49.96	54.00	4.04	Average

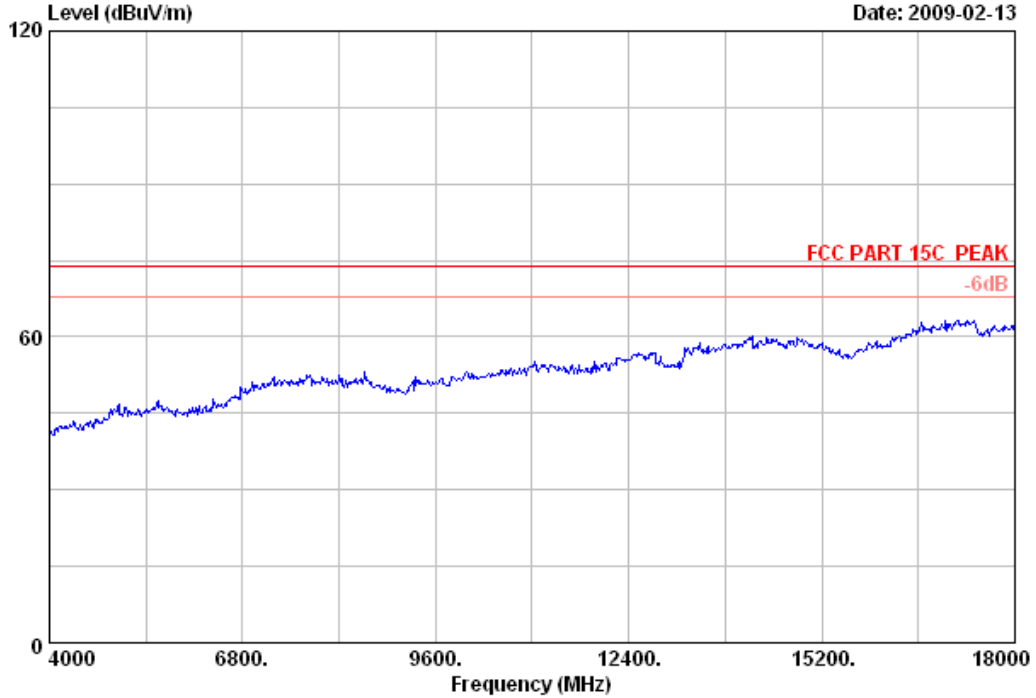
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
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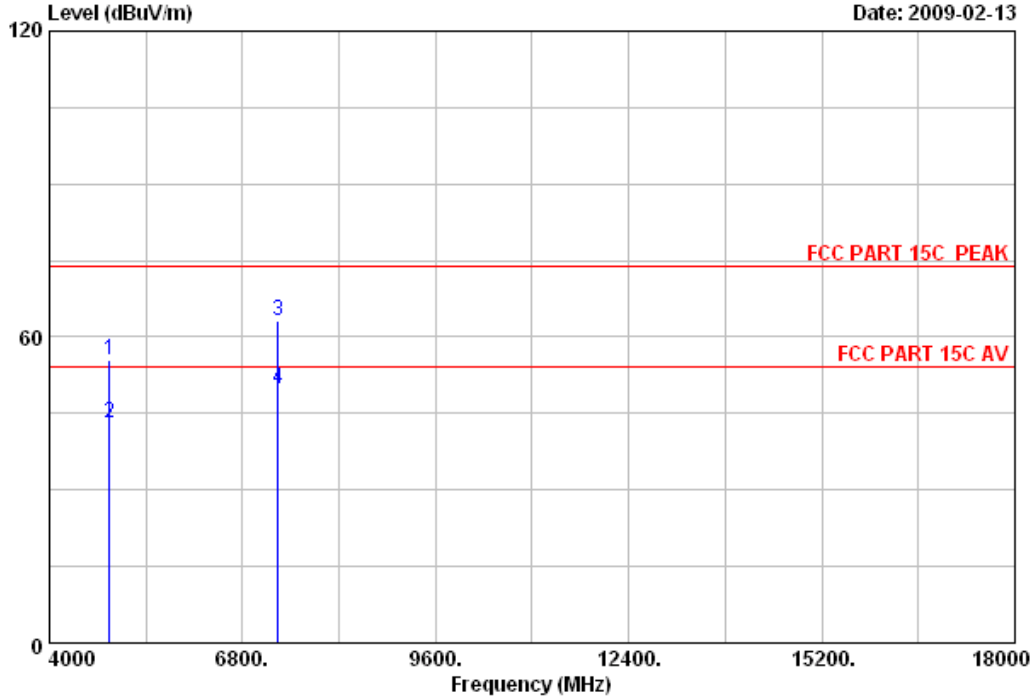


Site no.	: 3# Chamber	Data no.	: 47
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT20 CH6 2437MHz		
M/N	:		



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Noutou, ShenZhen, GuangDong, China  
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Site no. : 3# Chamber Data no. : 48  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH6 2437MHz  
 M/N :

	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	34.78	10.56	34.58	44.67	55.43	74.00	18.57	Peak
2	4874.000	34.78	10.56	34.58	32.23	42.99	54.00	11.01	Average
3	7311.000	38.58	12.17	34.49	46.90	63.16	74.00	10.84	Peak
4	7311.000	38.58	12.17	34.49	33.56	49.82	54.00	4.18	Average

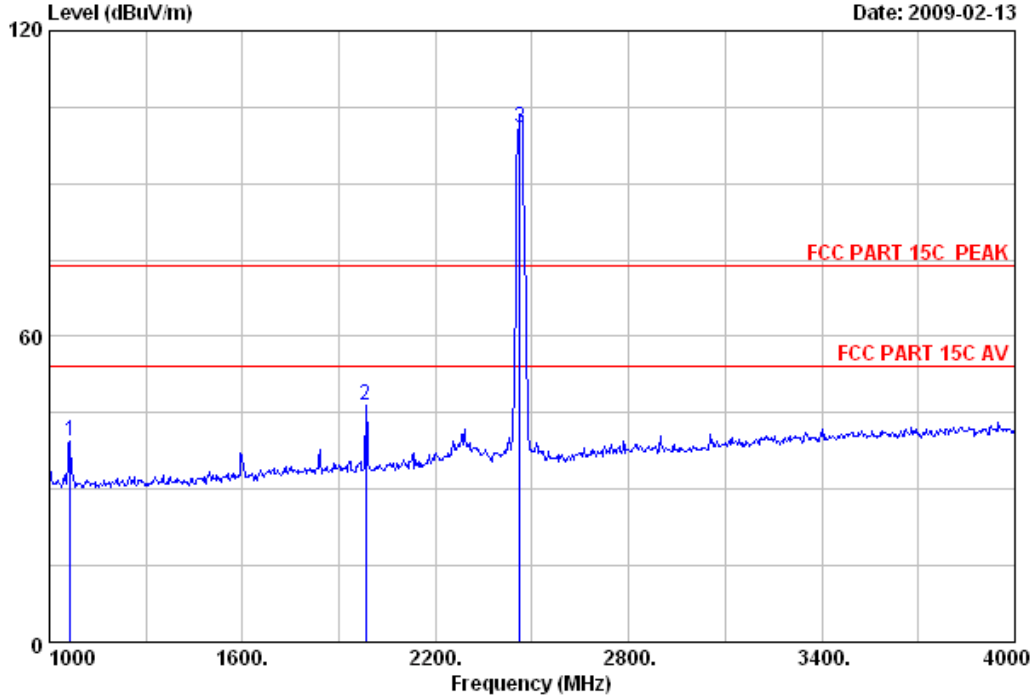
Remarks:

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



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Site no. : 3# Chamber Data no. : 49  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBUV)	(dBUV/m)	(dBUV/m)	(dB)	
1	1066.000	25.30	4.52	36.22	45.79	39.39	74.00	34.61	Peak
2	1984.000	27.83	6.16	35.20	47.53	46.32	74.00	27.68	Peak
3	2462.000	28.55	6.84	35.11	100.72	101.00	74.00	-27.00	Peak

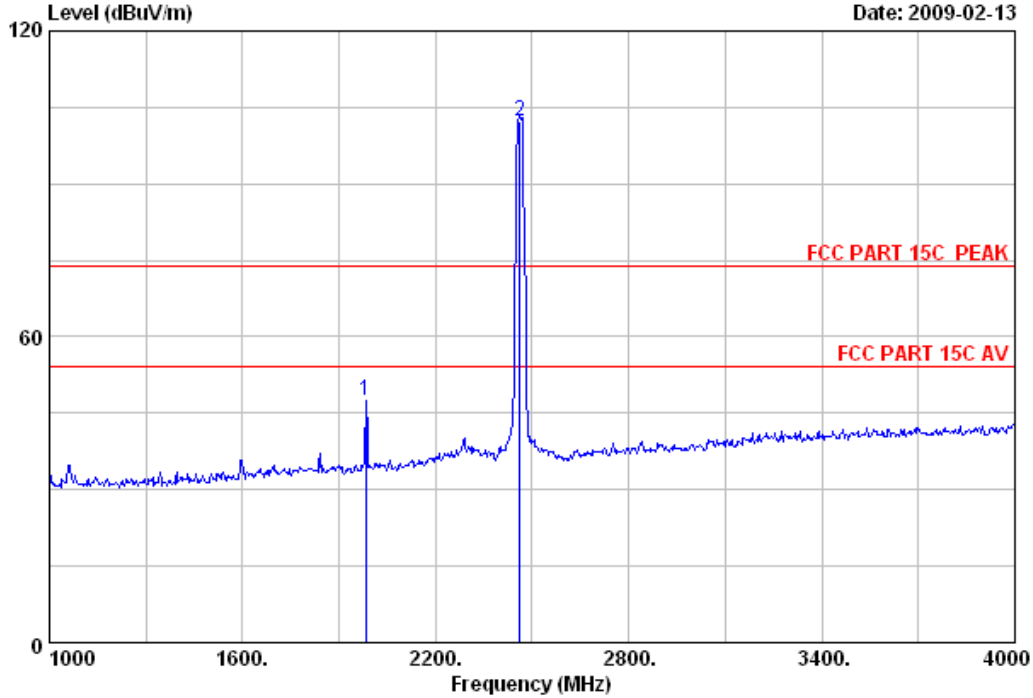
Remarks:

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



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Noutou, ShenZhen, GuangDong, China  
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Site no. : 3# Chamber Data no. : 50  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	Reading	Level	(dBuV/m)	(dB)	
1	1984.000	27.83	6.16	35.20	48.81	47.60	74.00	26.40	Peak
2	2462.000	28.55	6.84	35.11	101.96	102.24	74.00	-28.24	Peak

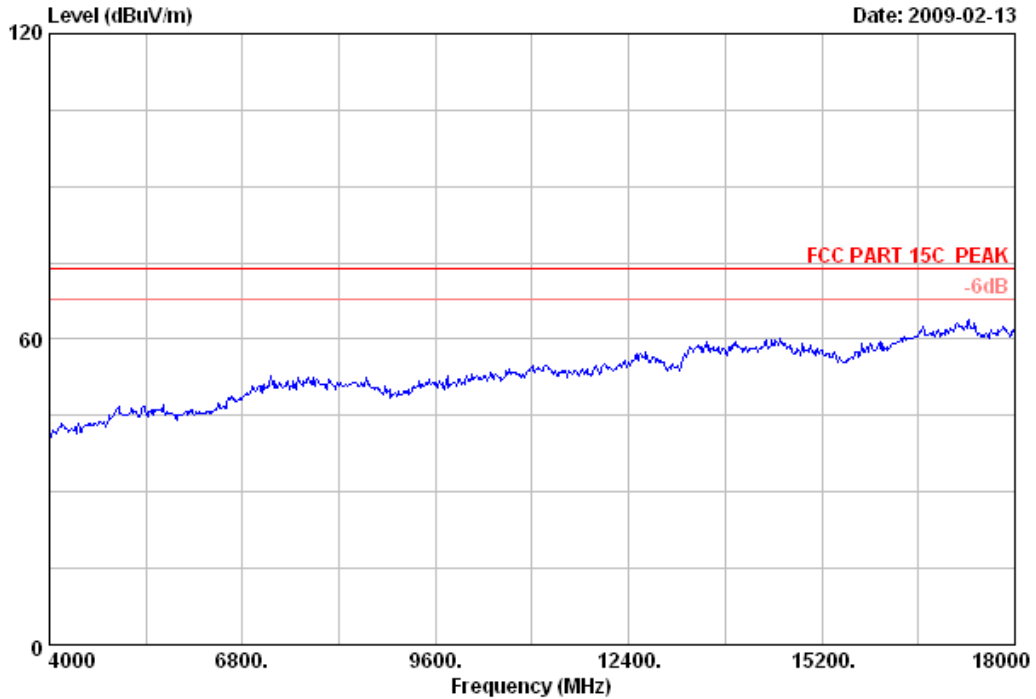
Remarks:

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



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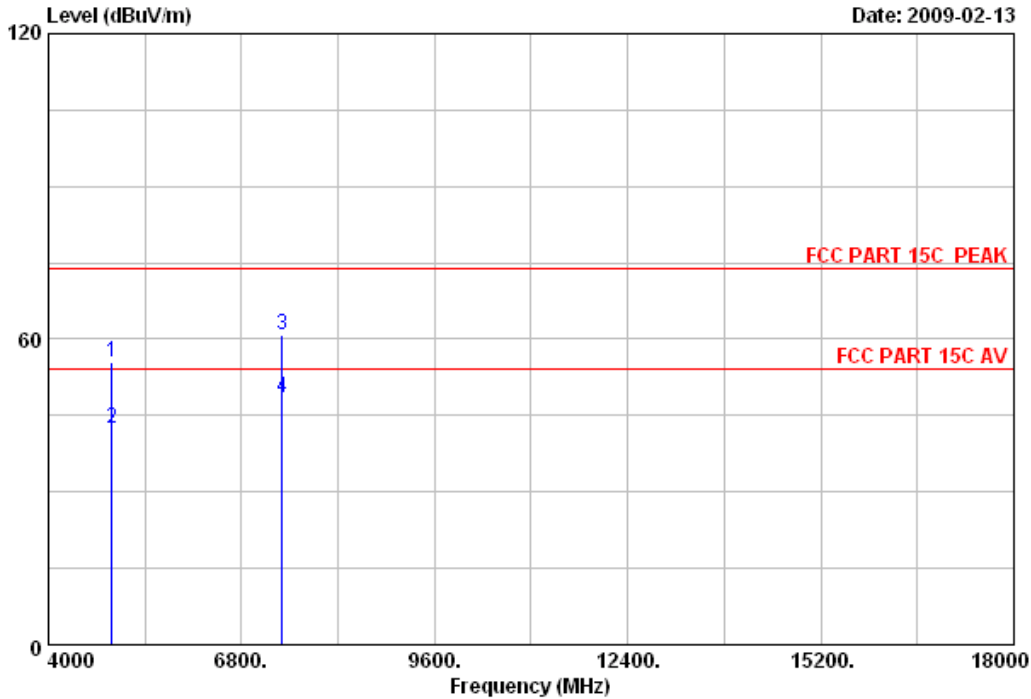


Site no.	: 3# Chamber	Data no.	: 51
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT20 CH11 2462MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 52  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	Ant.	Cable	Amp	Emission			Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	(dB)	
1 4924.000	35.09	10.58	34.57	44.36	55.46	74.00	18.54	Peak
2 4924.000	35.09	10.58	34.57	31.27	42.37	54.00	11.63	Average
3 7386.000	38.77	12.31	34.51	44.14	60.71	74.00	13.29	Peak
4 7386.000	38.77	12.31	34.51	31.99	48.56	54.00	5.44	Average

Remarks:

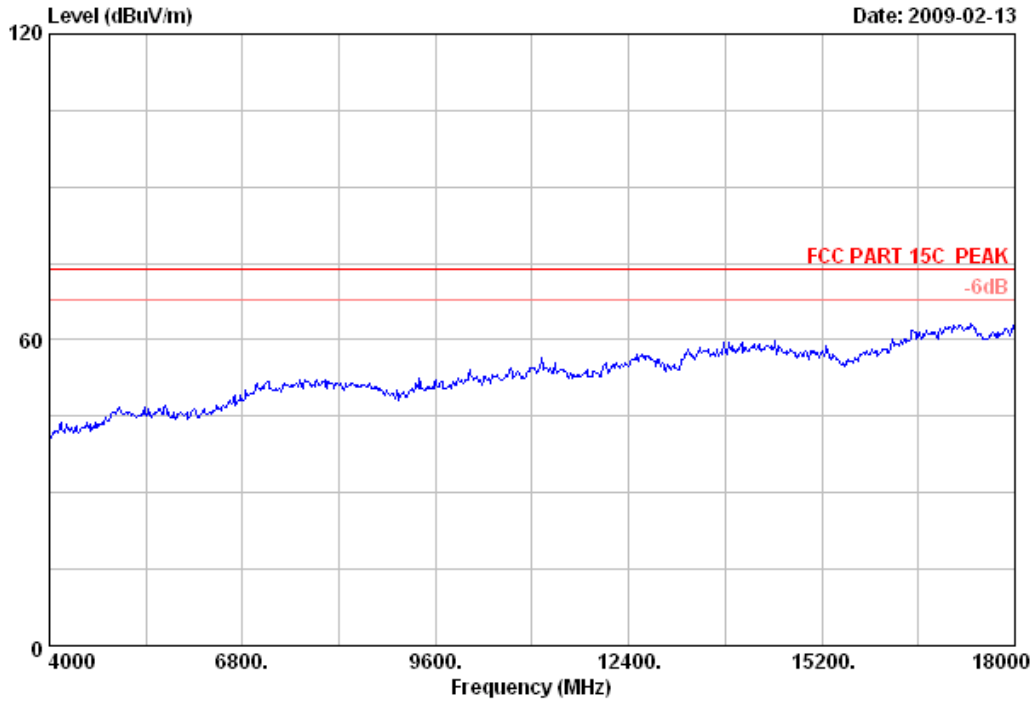
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Data: 53 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

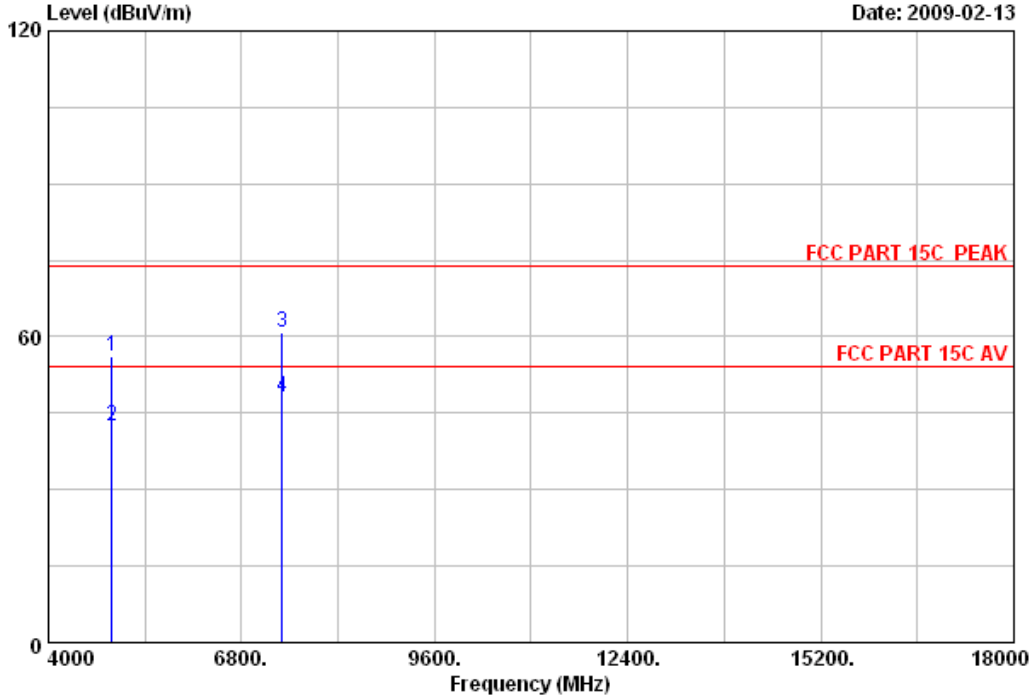


Site no.	: 3# Chamber	Data no.	: 53
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT20 CH11 2462MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 54  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	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	35.09	10.58	34.57	45.01	56.11	74.00	17.89	Peak
2	4924.000	35.09	10.58	34.57	31.28	42.38	54.00	11.62	Average
3	7386.000	38.77	12.31	34.51	44.21	60.78	74.00	13.22	Peak
4	7386.000	38.77	12.31	34.51	31.53	48.10	54.00	5.90	Average

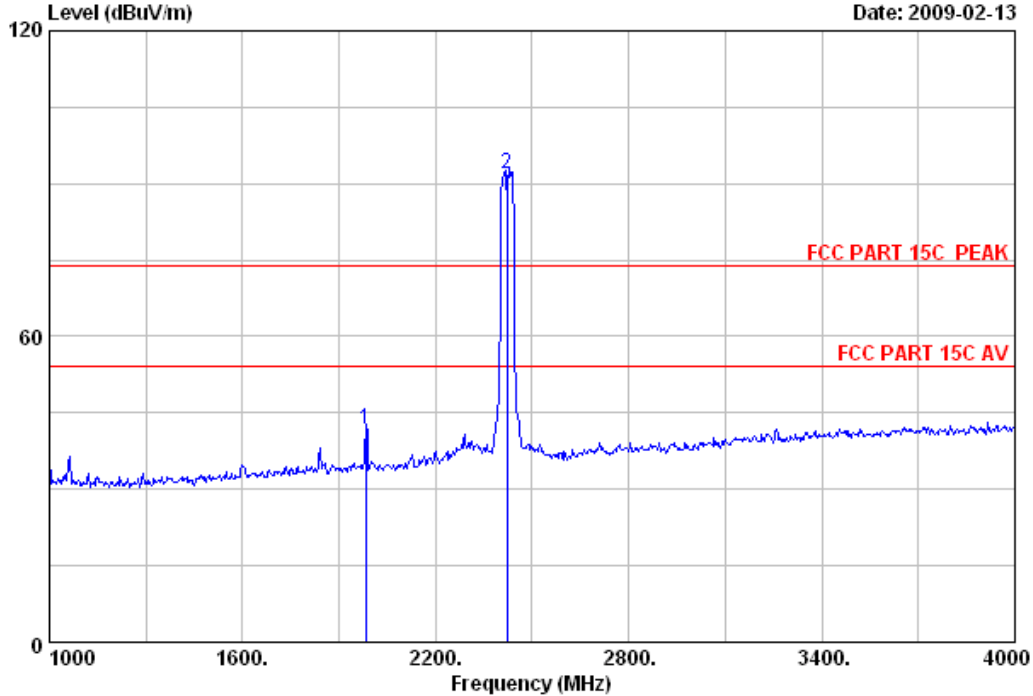
Remarks:

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



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Site no. : 3# Chamber Data no. : 55  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	1984.000	27.83	6.16	35.20	43.02	41.81	74.00	32.19	Peak
2	2422.000	28.50	6.77	35.11	91.92	92.08	74.00	-18.08	Peak

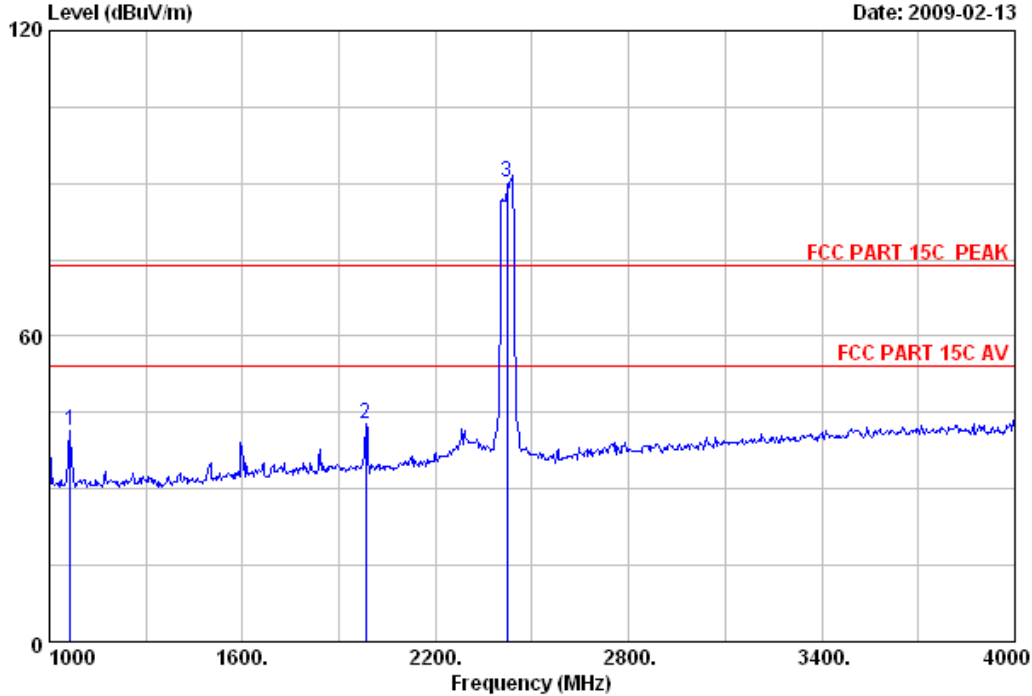
Remarks:

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



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 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Site no. : 3# Chamber Data no. : 56  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	Ant.	Cable	Amp	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	1066.000	25.30	4.52	36.22	47.79	41.39	74.00	32.61	Peak
2	1984.000	27.83	6.16	35.20	44.08	42.87	74.00	31.13	Peak
3	2422.000	28.50	6.77	35.11	89.97	90.13	74.00	-16.13	Peak

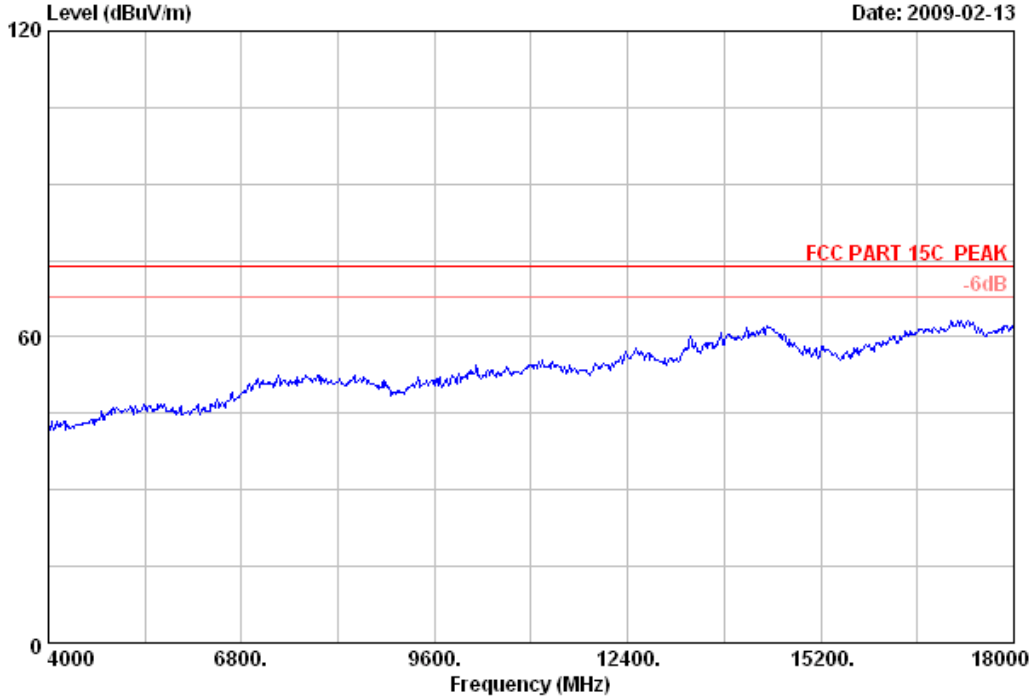
Remarks:

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



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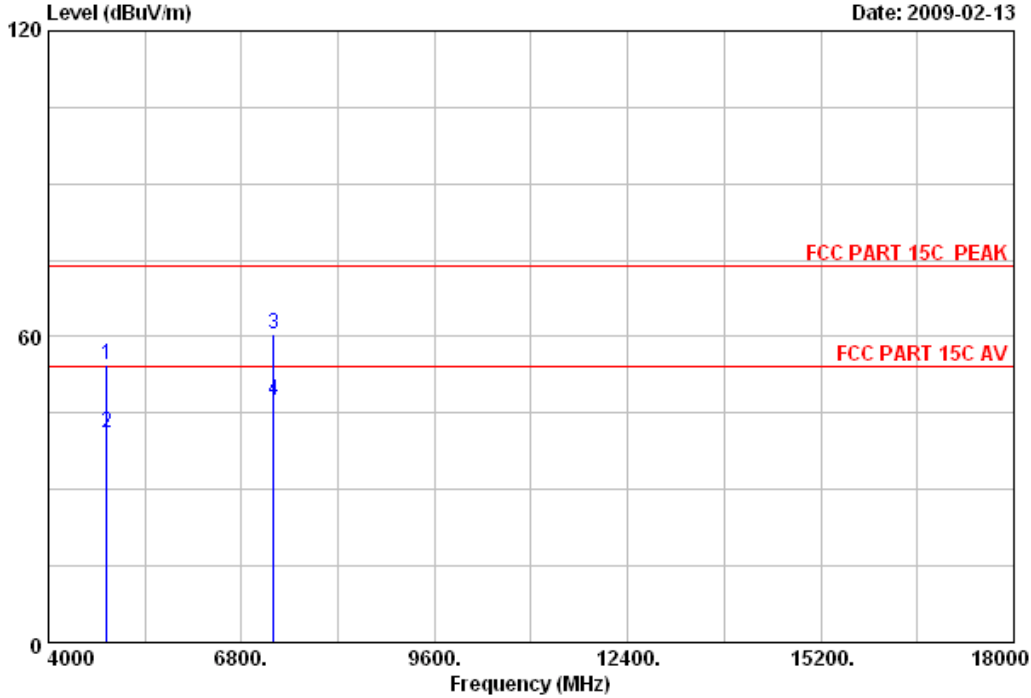


Site no.	: 3# Chamber	Data no.	: 57
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT40 CH1 2422MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 58  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	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	34.57	10.56	34.59	43.93	54.47	74.00	19.53	Peak
2	4844.000	34.57	10.56	34.59	30.69	41.23	54.00	12.77	Average
3	7266.000	38.51	12.17	34.49	44.47	60.66	74.00	13.34	Peak
4	7266.000	38.51	12.17	34.49	31.34	47.53	54.00	6.47	Average

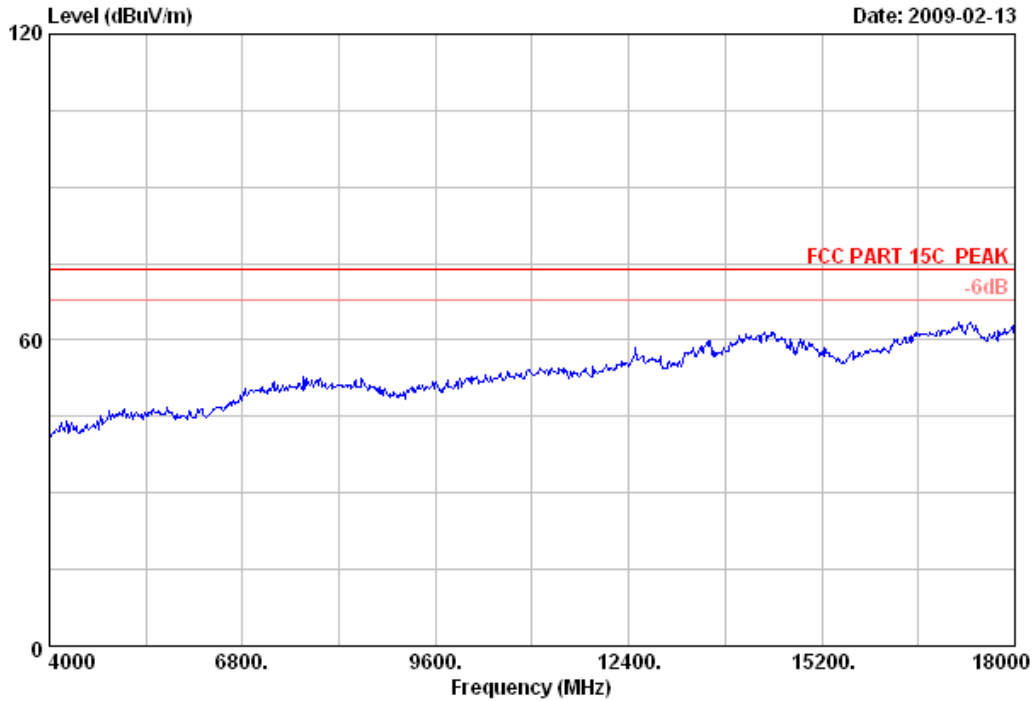
Remarks:

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



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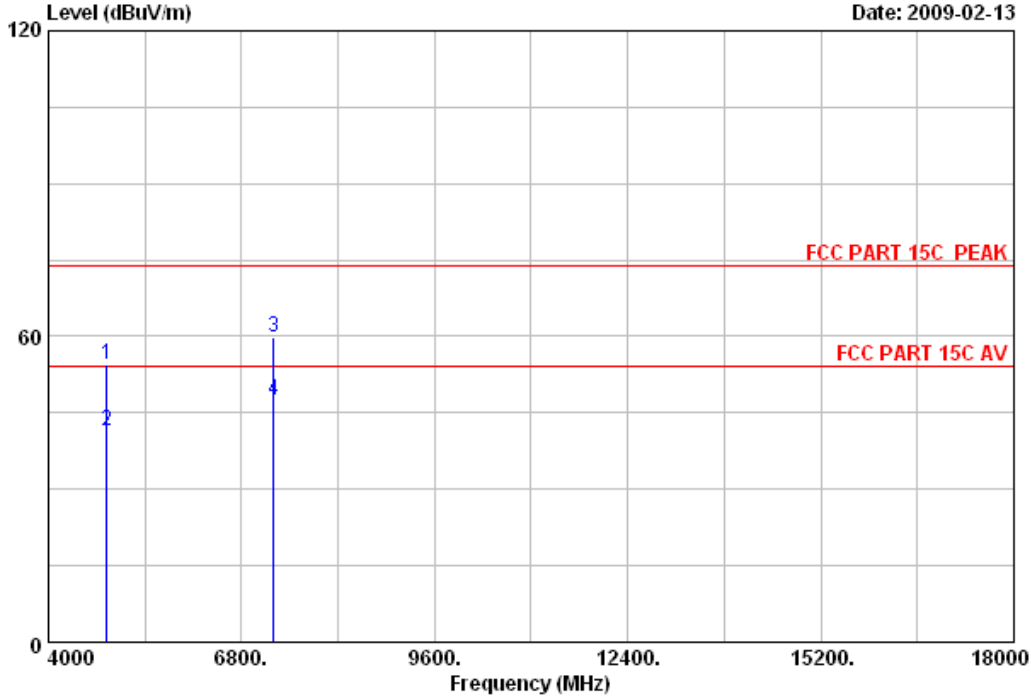


Site no.	: 3# Chamber	Data no.	: 59
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT40 CH1 2422MHz		
M/N	:		



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Site no. : 3# Chamber Data no. : 60  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	34.57	10.56	34.59	43.82	54.36	74.00	19.64	Peak
2	4844.000	34.57	10.56	34.59	30.76	41.30	54.00	12.70	Average
3	7266.000	38.51	12.17	34.49	43.77	59.96	74.00	14.04	Peak
4	7266.000	38.51	12.17	34.49	31.31	47.50	54.00	6.50	Average

Remarks:

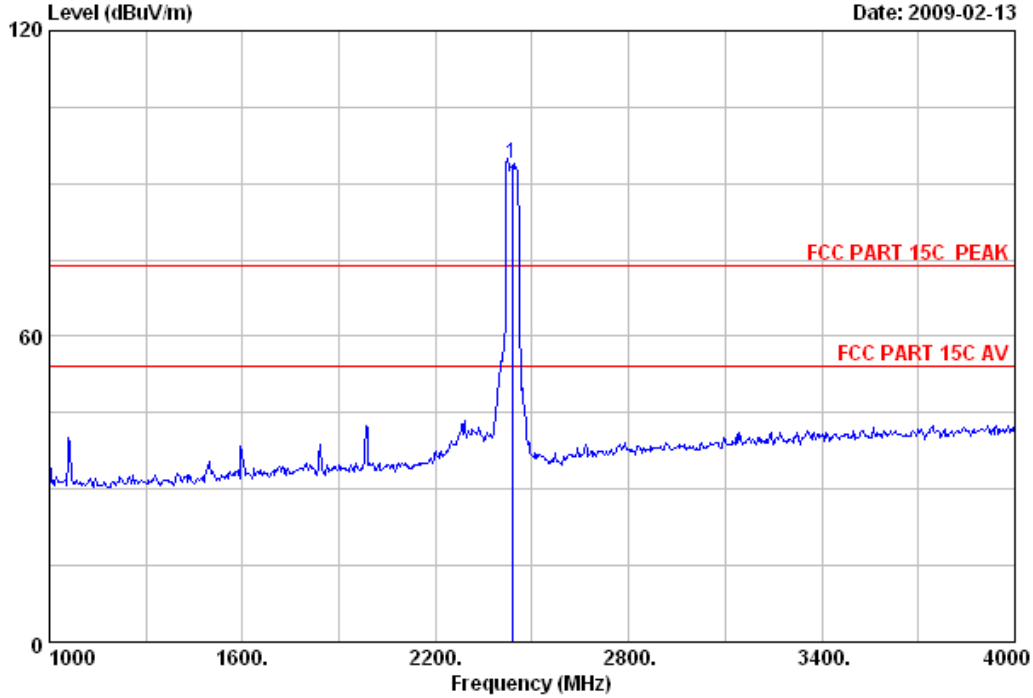
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Site no. : 3# Chamber Data no. : 61  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission					
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark	
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
-----	1	2437.000	28.53	6.80	35.11	93.87	94.09	74.00	-20.09	Peak

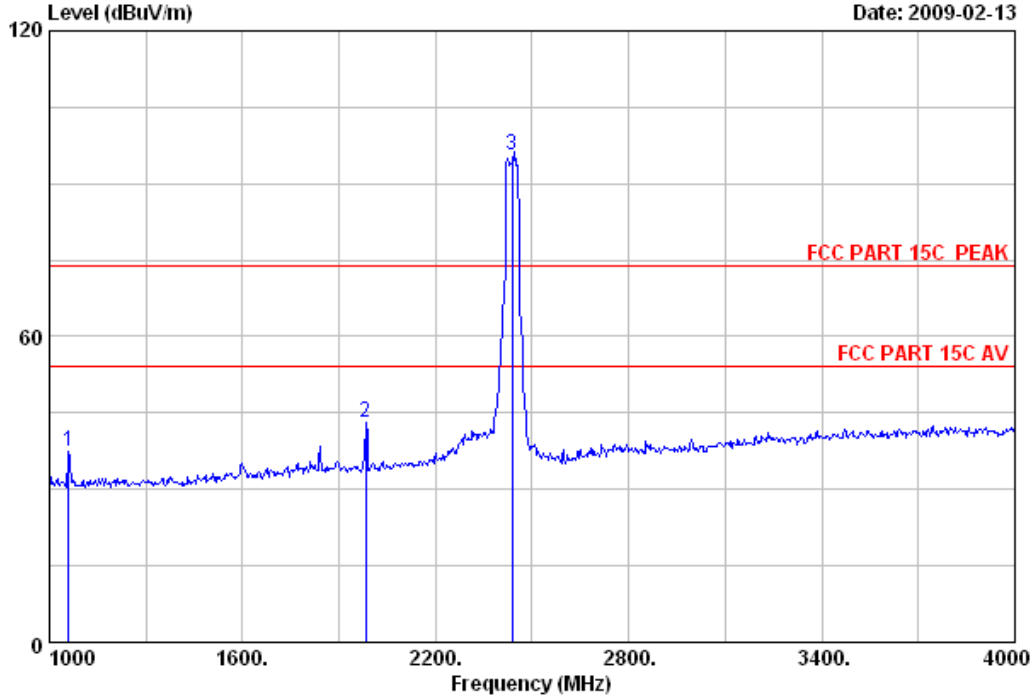
Remarks:

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



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Site no. : 3# Chamber Data no. : 62  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBUV/m)	(dB)	
			(dB)	(dB)	(dBUV)	(dBUV/m)	(dBUV/m)		
1	1060.000	25.30	4.48	36.24	43.87	37.41	74.00	36.59	Peak
2	1984.000	27.83	6.16	35.20	44.45	43.24	74.00	30.76	Peak
3	2437.000	28.53	6.80	35.11	95.25	95.47	74.00	-21.47	Peak

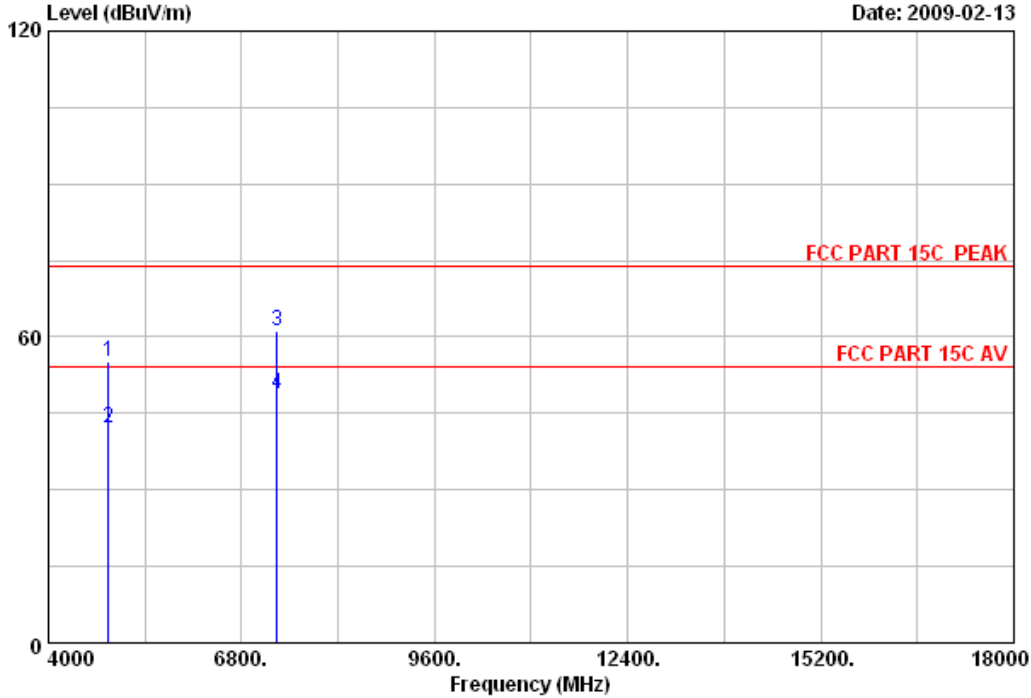
Remarks:

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



No.6 Ke Feng Road,Block 52,  
 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
 Postcode:518057

Data: 63 File: E:\2009 report data\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 63  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz  
 M/N :

	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	34.78	10.56	34.58	44.34	55.10	74.00	18.90	Peak
2	4874.000	34.78	10.56	34.58	31.21	41.97	54.00	12.03	Average
3	7311.000	38.58	12.17	34.49	44.81	61.07	74.00	12.93	Peak
4	7311.000	38.58	12.17	34.49	32.47	48.73	54.00	5.27	Average

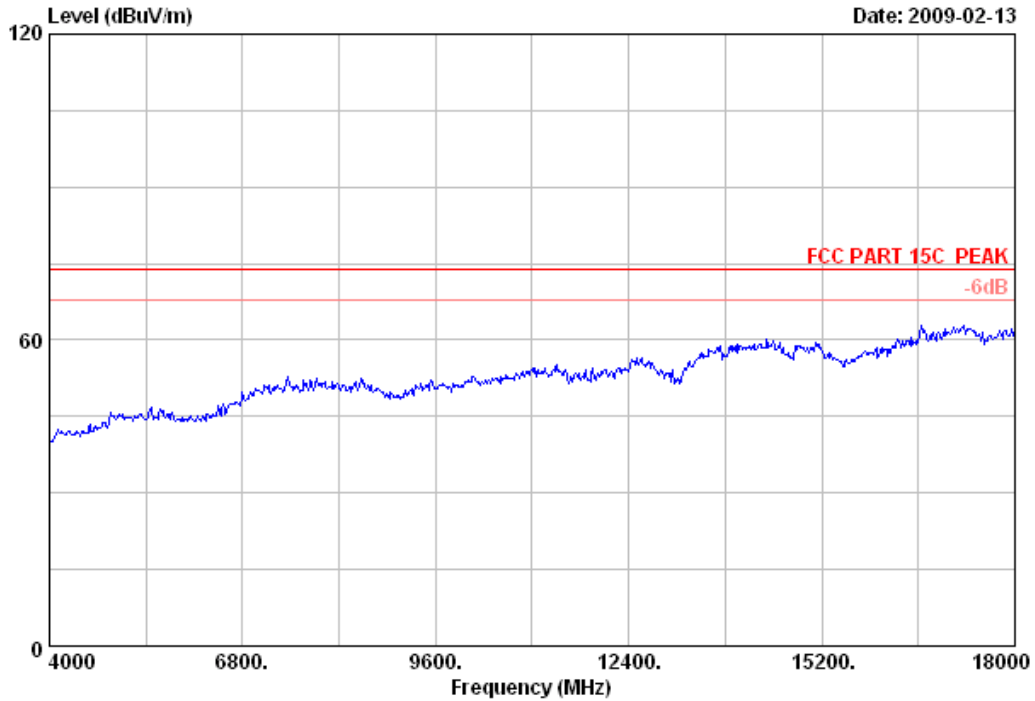
Remarks:

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



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Postcode:518057

Data: 64 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

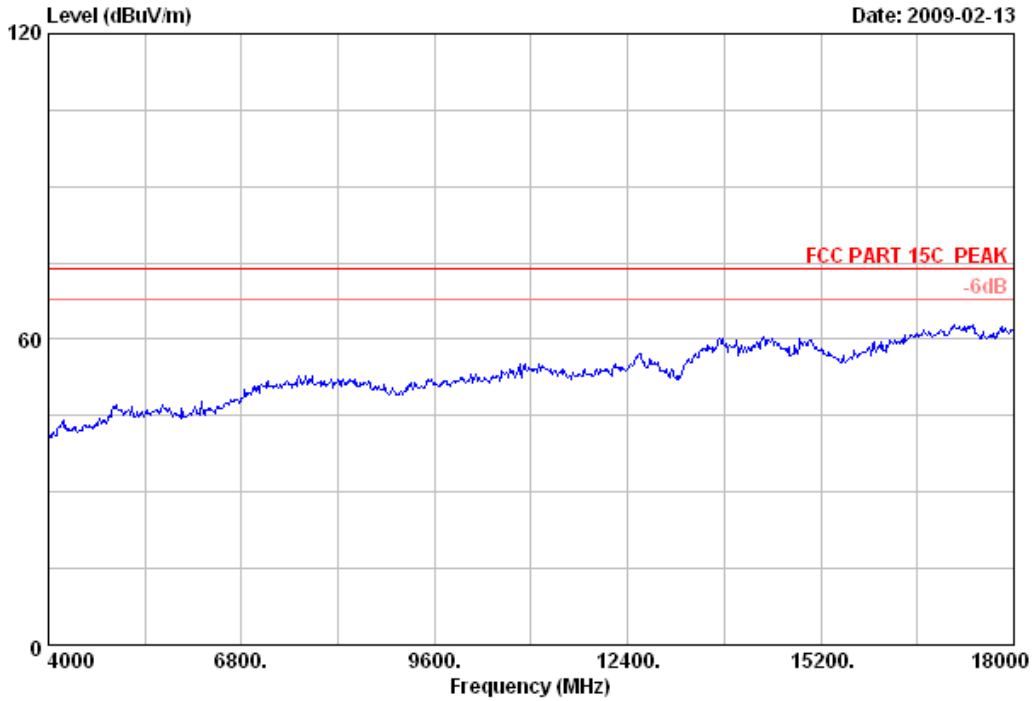


Site no.	: 3# Chamber	Data no.	: 64
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT40 CH4 2437MHz		
M/N	:		



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 Tel:+86-755-26639495-7  
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Data: 65 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

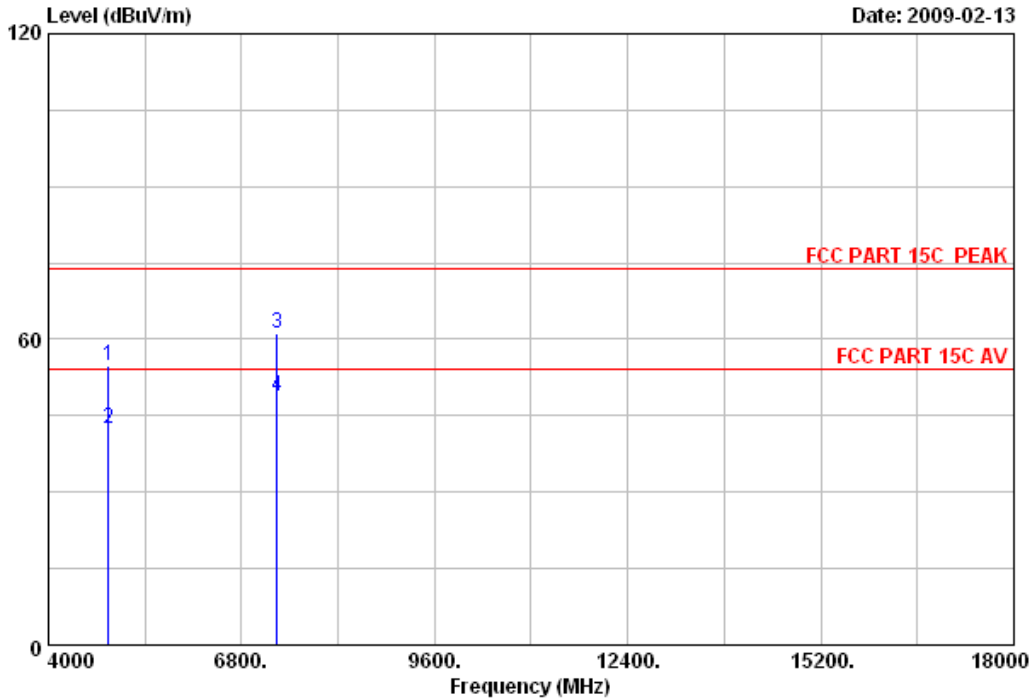


Site no.	: 3# Chamber	Data no.	: 65
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT40 CH4 2437MHz		
M/N	:		



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Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 66 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 66  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH4 2437MHz  
 M/N :

	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	34.78	10.56	34.58	44.07	54.83	74.00	19.17	Peak
2	4874.000	34.78	10.56	34.58	31.55	42.31	54.00	11.69	Average
3	7311.000	38.58	12.17	34.49	44.89	61.15	74.00	12.85	Peak
4	7311.000	38.58	12.17	34.49	32.43	48.69	54.00	5.31	Average

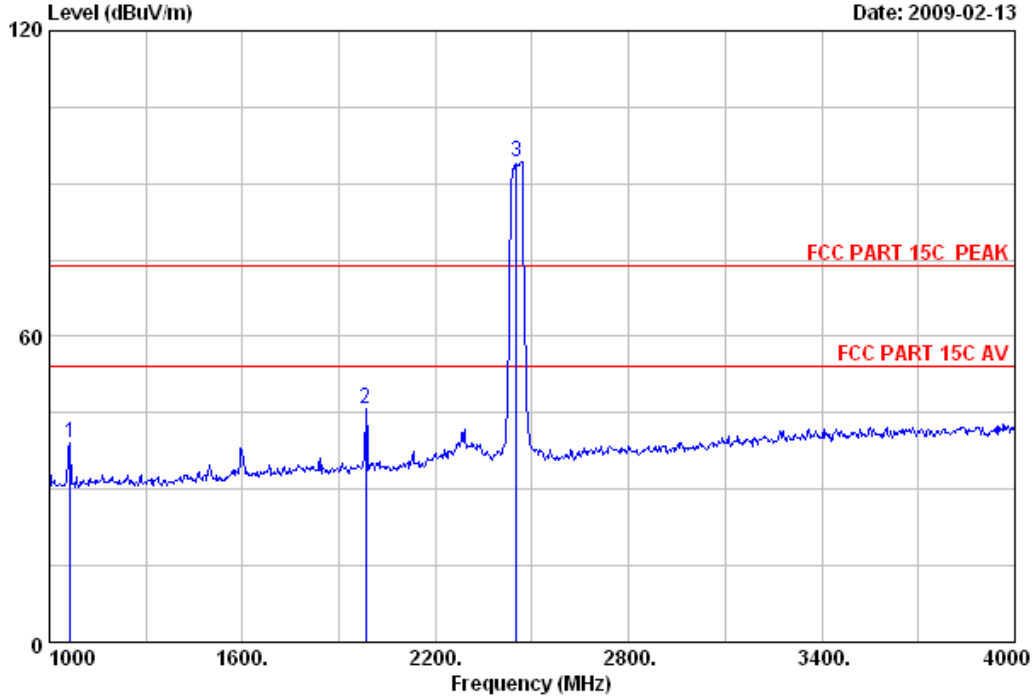
Remarks:

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



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 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Data: 67 File: E:\2009 report data\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 67  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
			(dB)	(dB)	(dBuV)	(dBuV/m)			
1	1066.000	25.30	4.52	36.22	45.39	38.99	74.00	35.01	Peak
2	1984.000	27.83	6.16	35.20	47.10	45.89	74.00	28.11	Peak
3	2452.000	28.53	6.84	35.11	93.91	94.17	74.00	-20.17	Peak

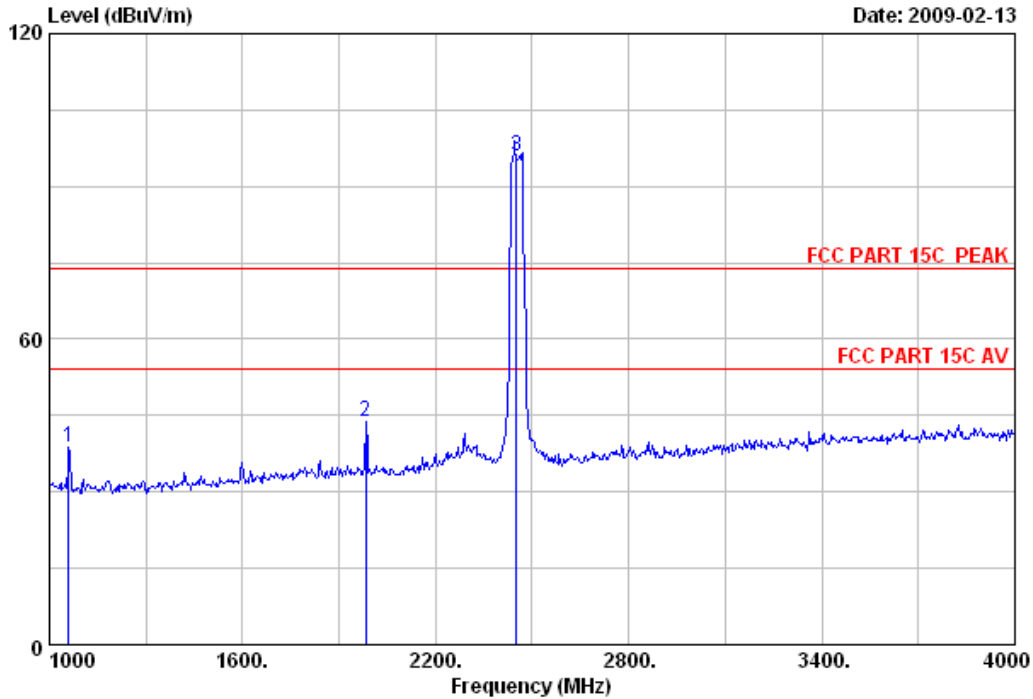
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Data: 68 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 68  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	Ant.	Cable	Amp	Emission			Margin	Remark	
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	(dB)		
1	1060.000	25.30	4.48	36.24	45.11	38.65	74.00	35.35	Peak
2	1984.000	27.83	6.16	35.20	44.95	43.74	74.00	30.26	Peak
3	2452.000	28.53	6.84	35.11	95.58	95.84	74.00	-21.84	Peak

Remarks:

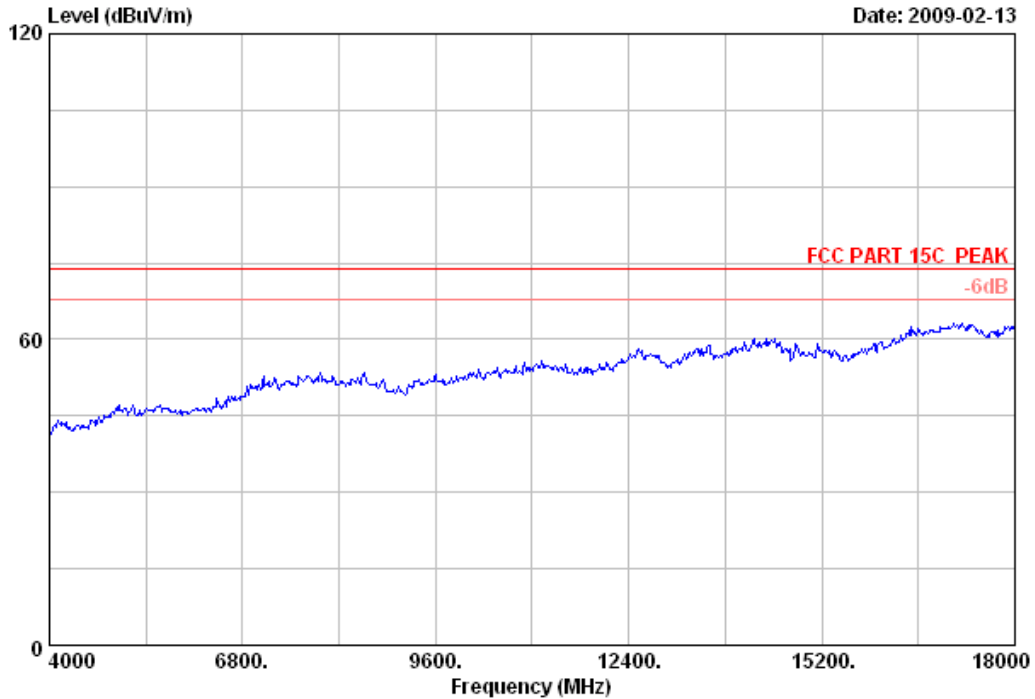
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Data: 69 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

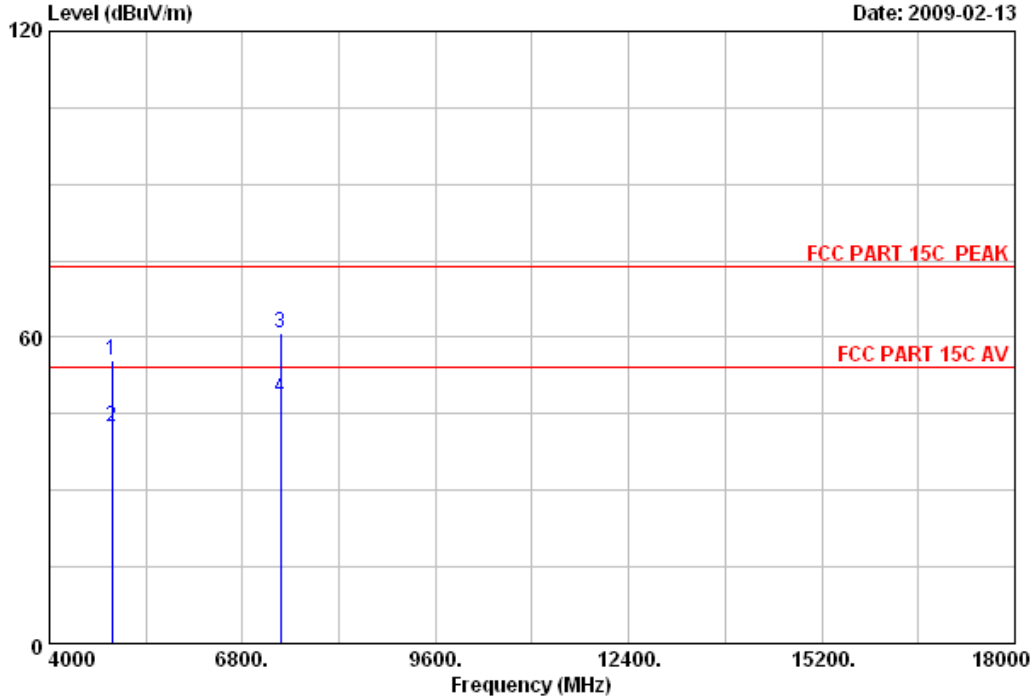


Site no.	: 3# Chamber	Data no.	: 69
Dis. / Ant.	: 3m 3115	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT40 CH7 2452MHz		
M/N	:		



No.6 Ke Feng Road,Block 52,  
ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Data: 70 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 70  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	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	34.98	10.58	34.58	44.62	55.60	74.00	18.40	Peak
2	4904.000	34.98	10.58	34.58	31.63	42.61	54.00	11.39	Average
3	7356.000	38.70	12.27	34.50	44.47	60.94	74.00	13.06	Peak
4	7356.000	38.70	12.27	34.50	31.78	48.25	54.00	5.75	Average

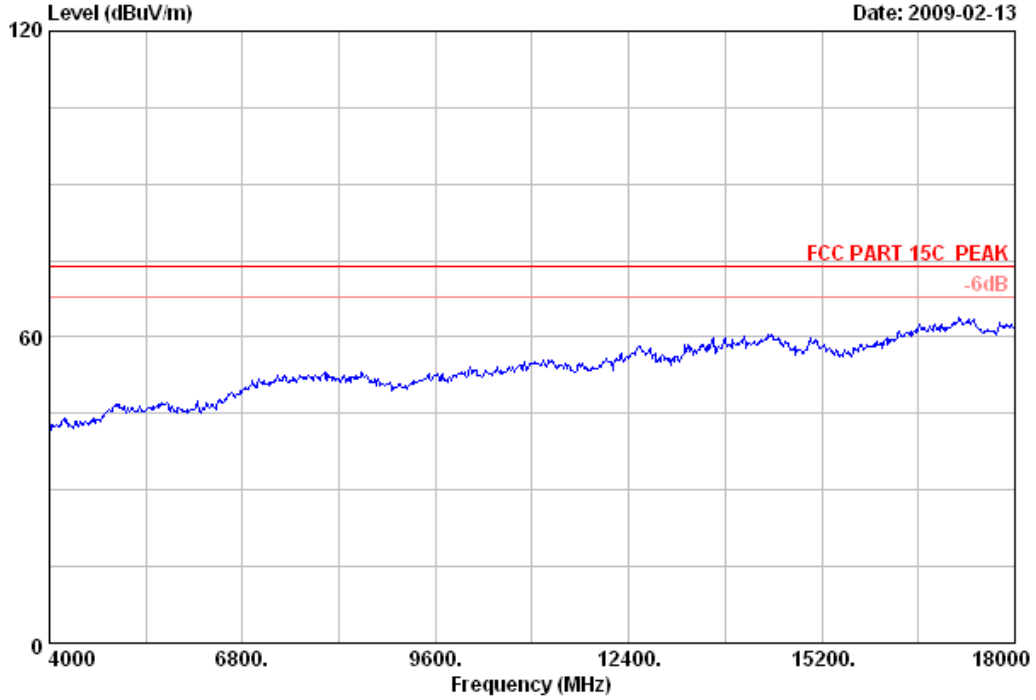
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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 Postcode:518057

Data: 71 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)

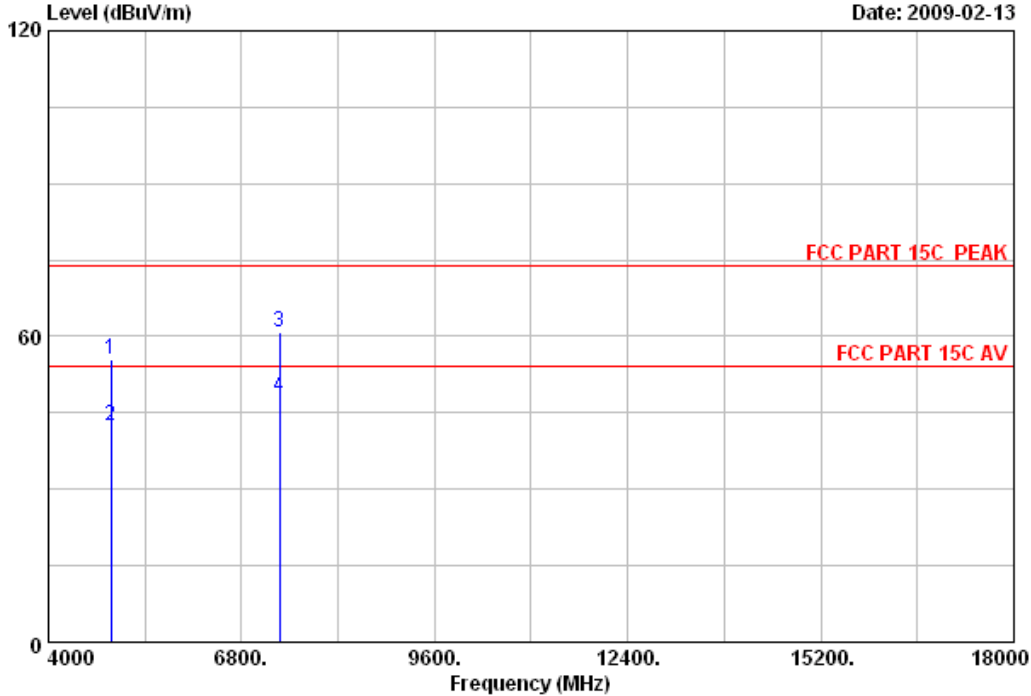


Site no.	: 3# Chamber	Data no.	: 71
Dis. / Ant.	: 3m 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23°C/54%	Engineer	: Paul
EUT	: Wireless N Cardbus Adapter M/N:M-WN910N		
Power Rating	: DC 3.3V From PC input AC 120V/60Hz		
Test mode	: IEEE802.11nHT40 CH7 2452MHz		
M/N	:		



No.6 Ke Feng Road,Block 52,  
 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
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Data: 72 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 72  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	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	34.98	10.58	34.58	44.62	55.60	74.00	18.40	Peak
2	4904.000	34.98	10.58	34.58	31.58	42.56	54.00	11.44	Average
3	7356.000	38.70	12.27	34.50	44.47	60.94	74.00	13.06	Peak
4	7356.000	38.70	12.27	34.50	31.70	48.17	54.00	5.83	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,10, 08	1 Year
2	RF Cable	Hubersuhner	SUCOFLEX	182768/4	May,28, 08	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, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

### 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.

### 5.4. Test result

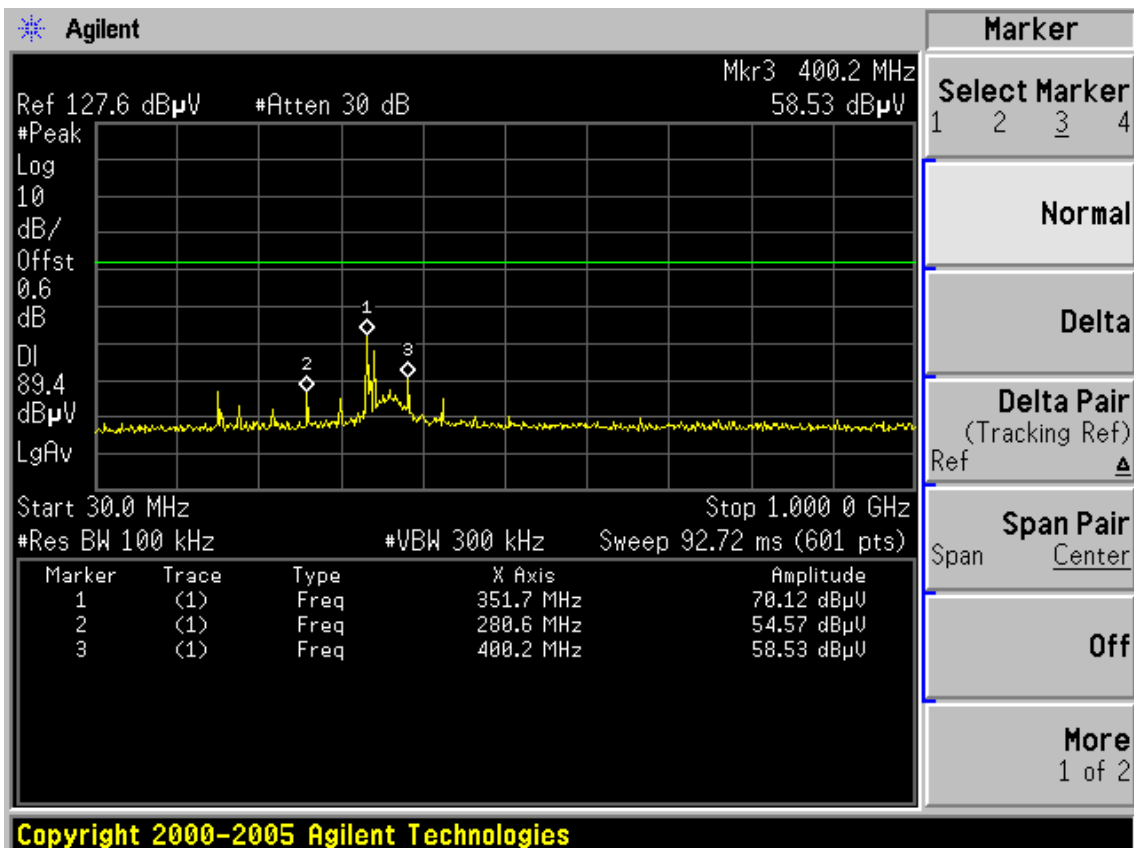
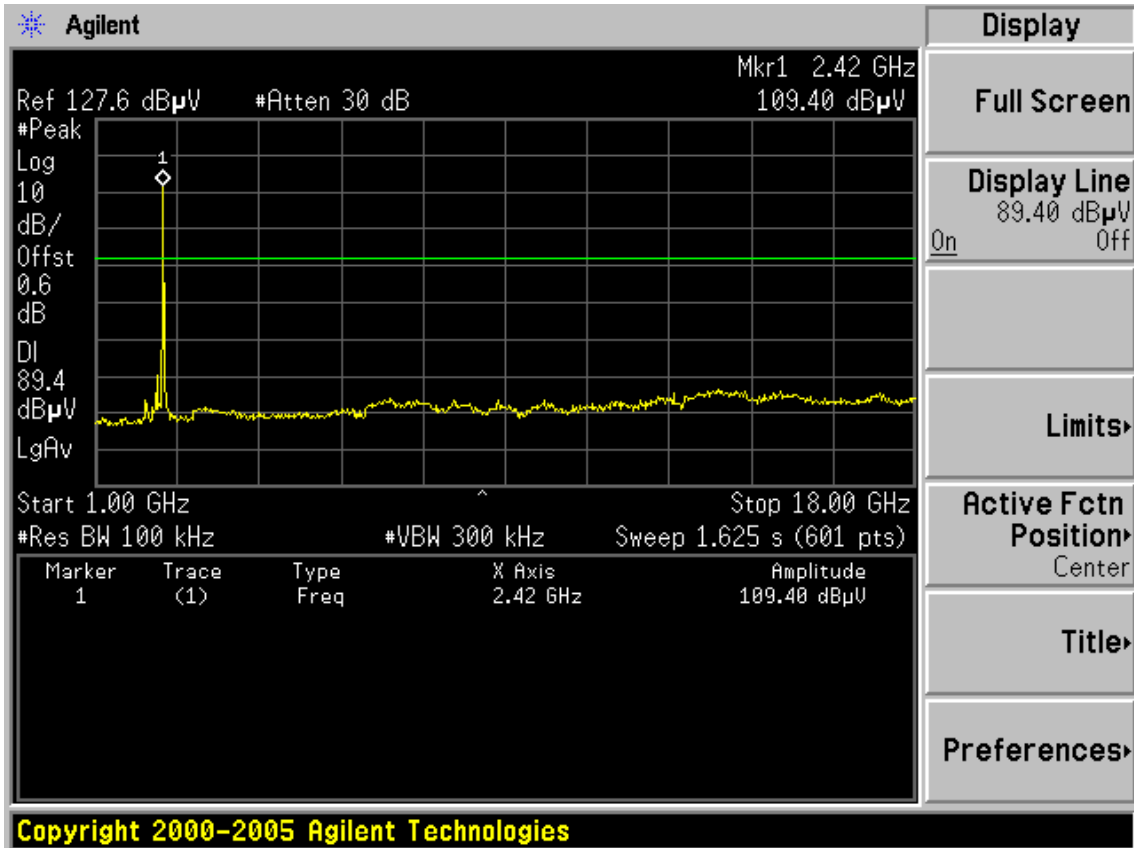
**PASS** (The testing data was attached in the next pages.)

**Conducted emission test data:**

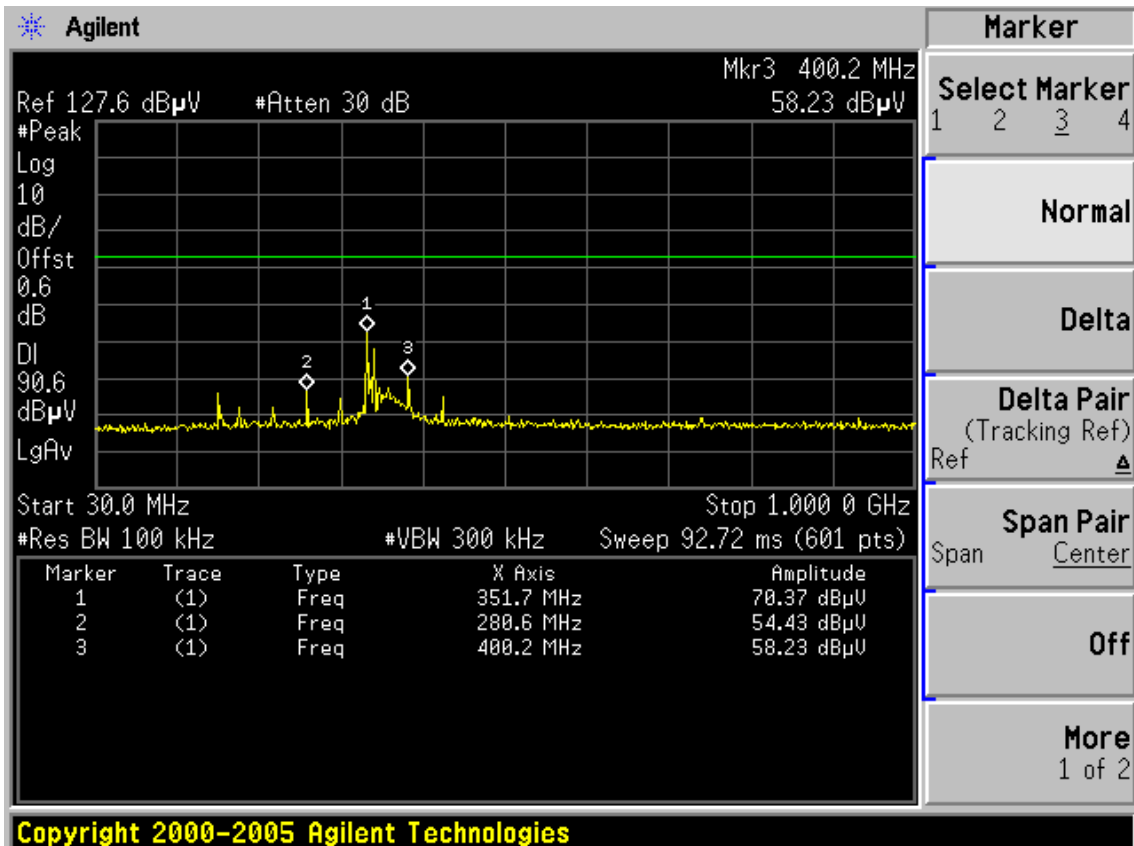
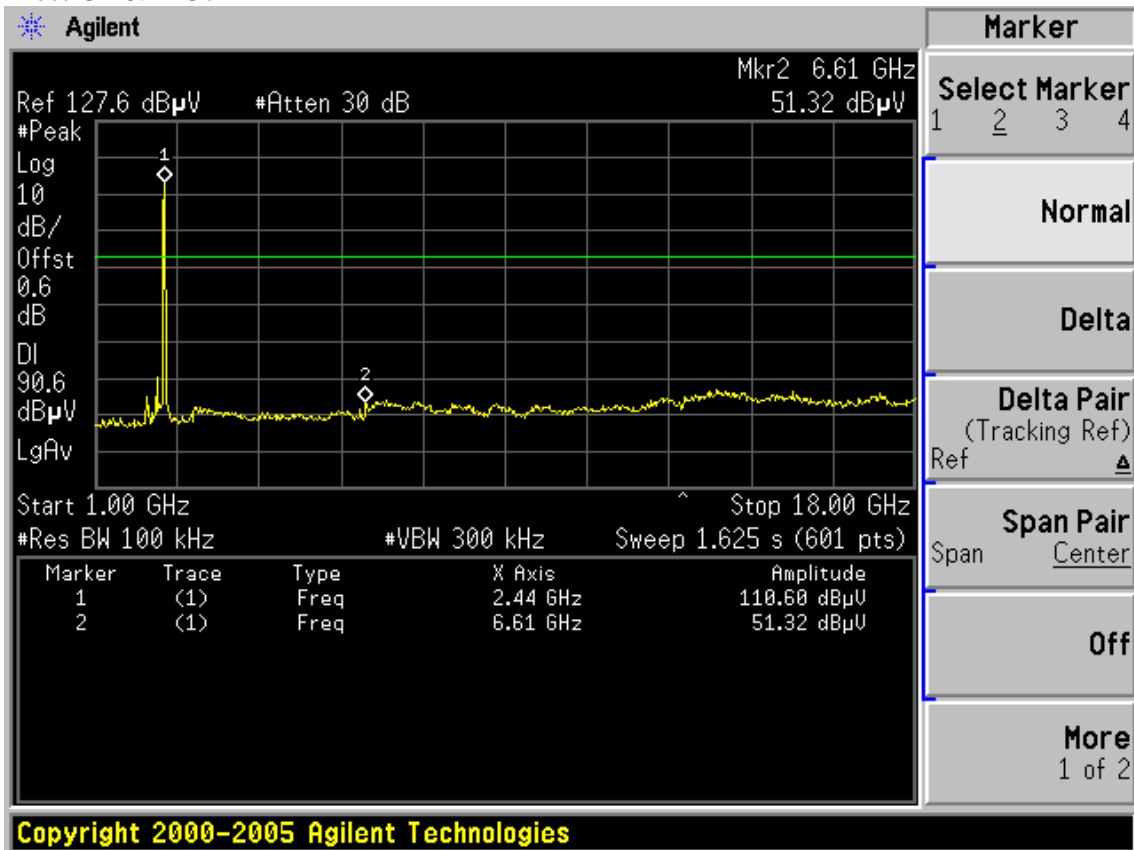
**Chain 1:**

Test Mode: IEEE 802.11b TX

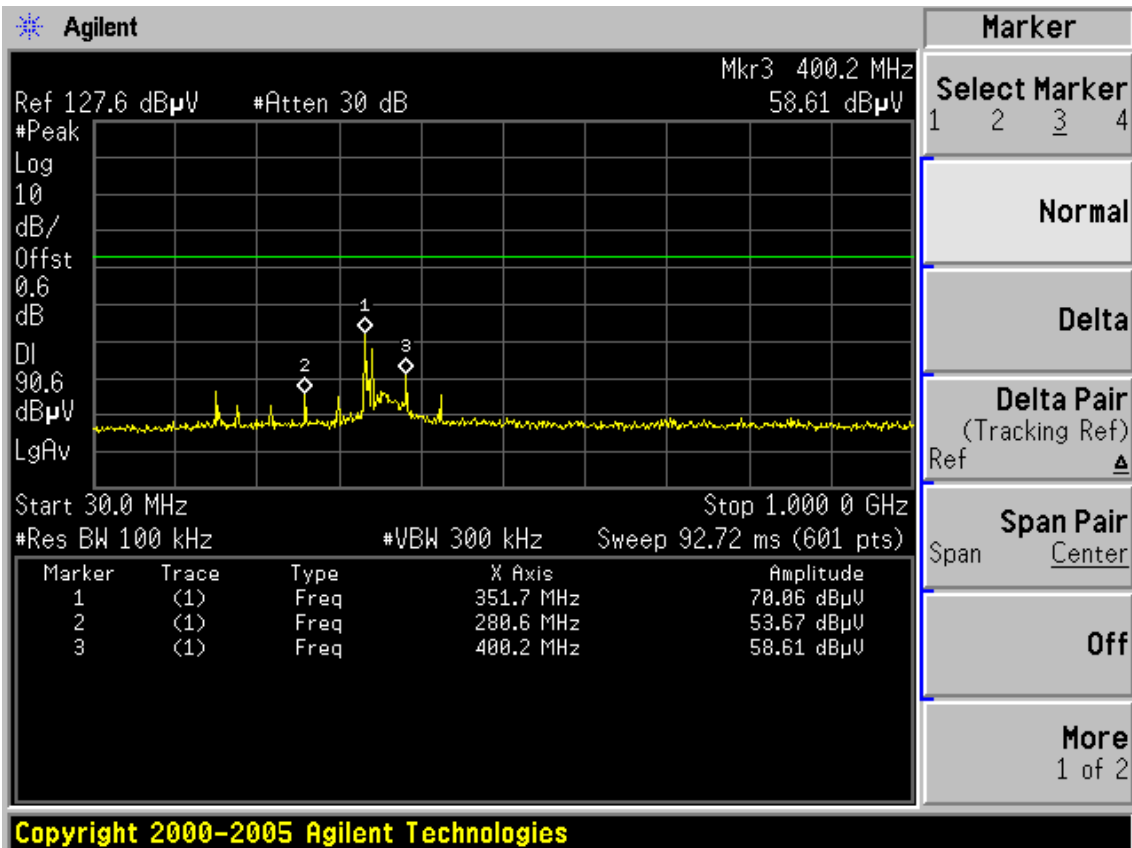
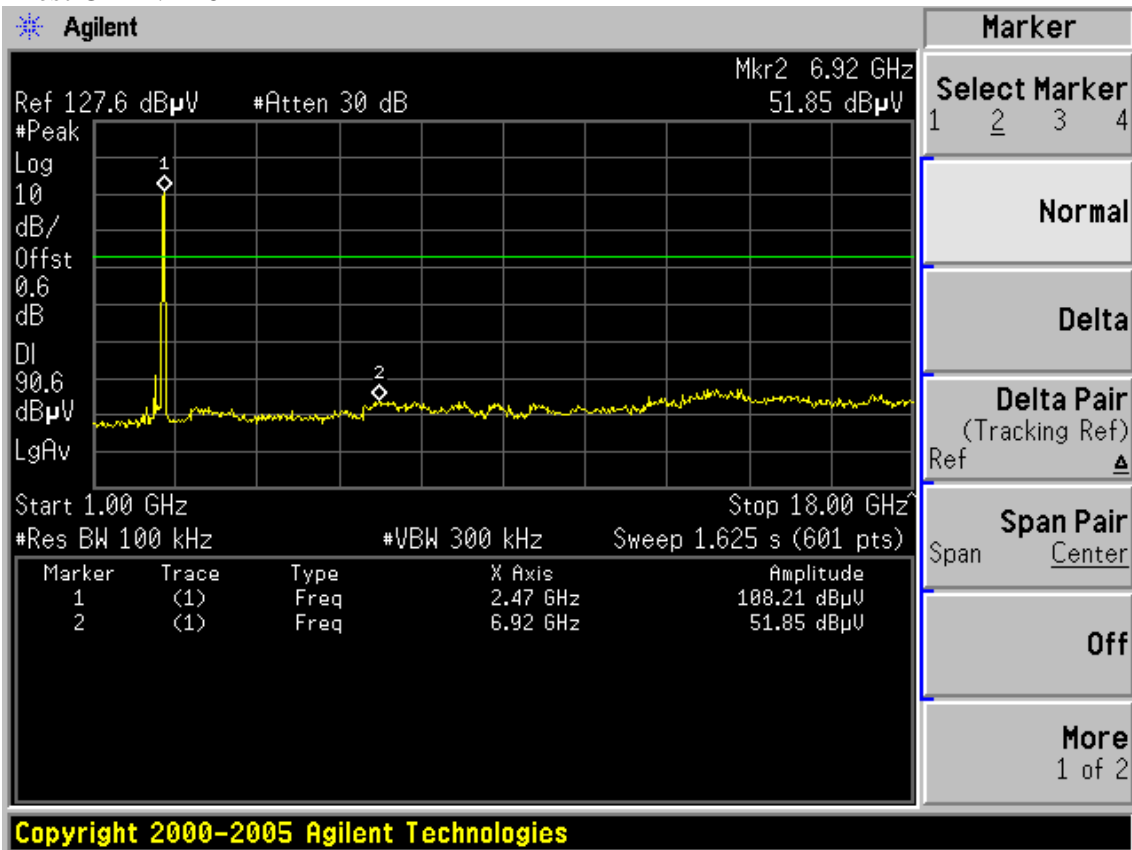
Test CH1: 2412MHz



Test CH6: 2437MHz



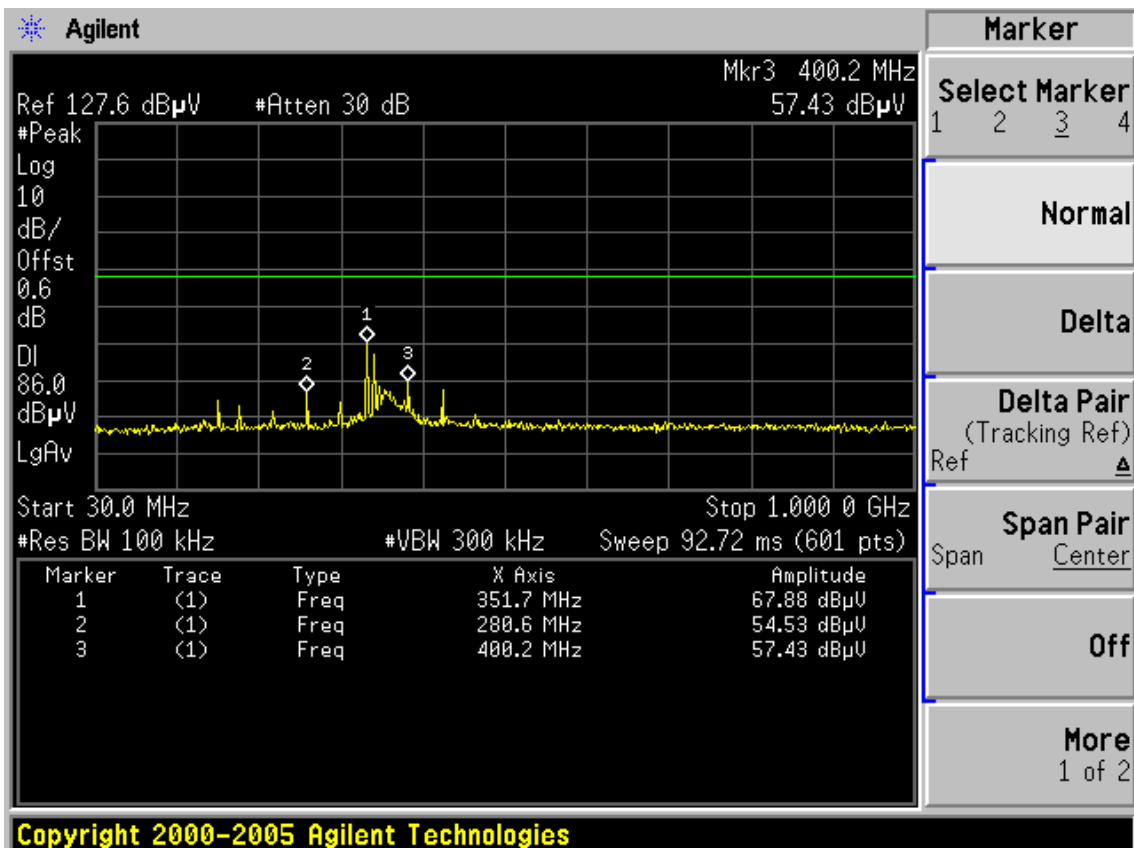
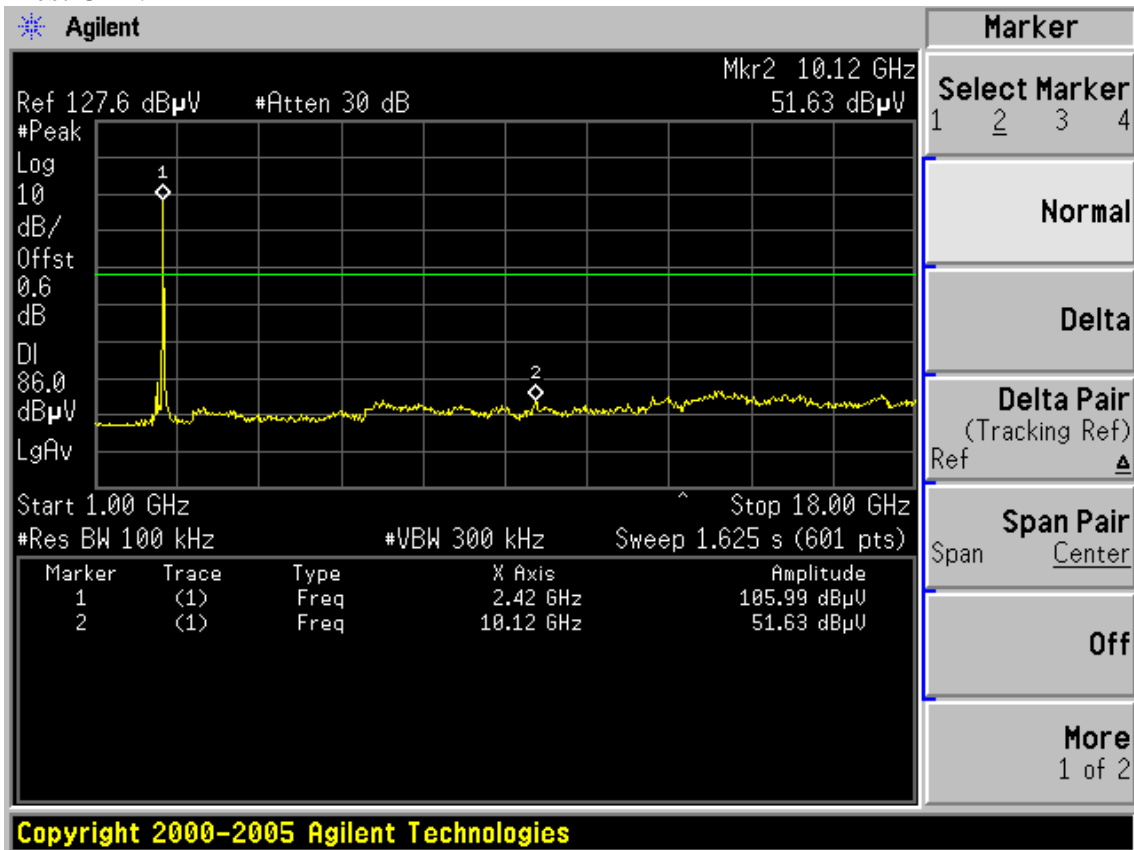
Test CH11: 2462MHz



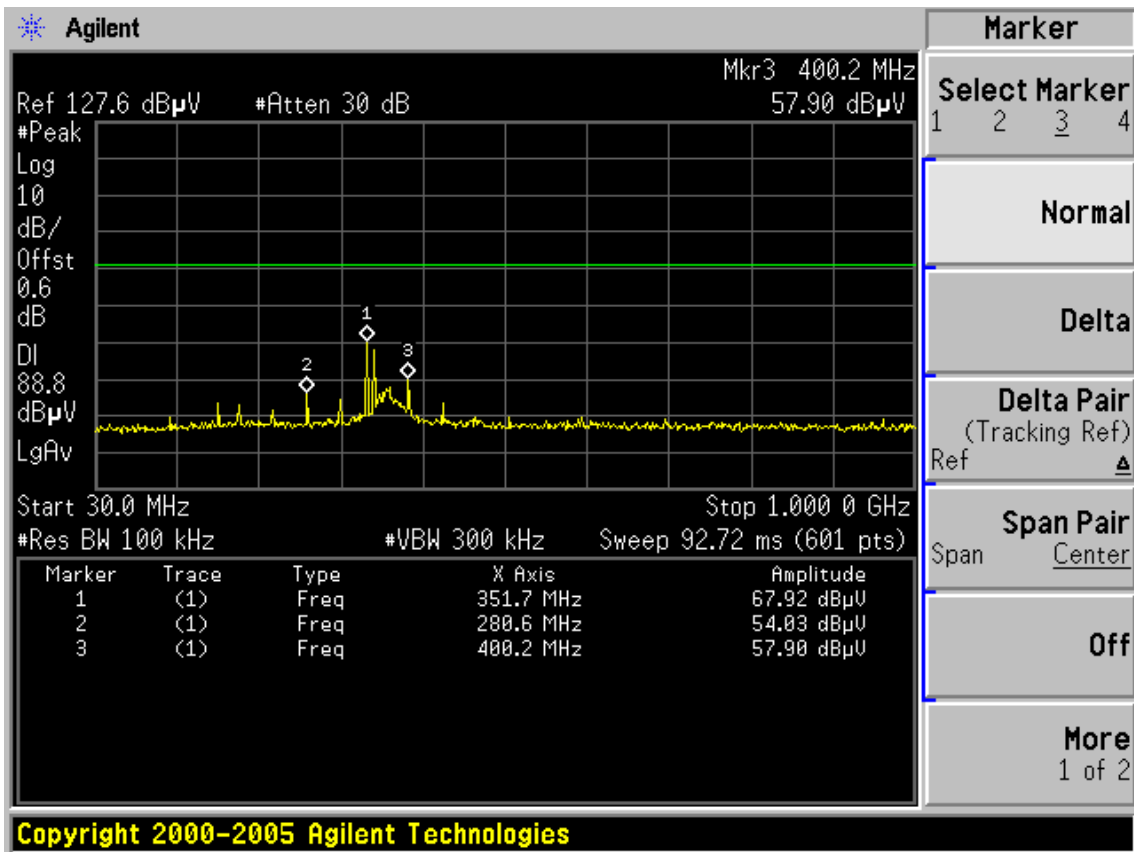
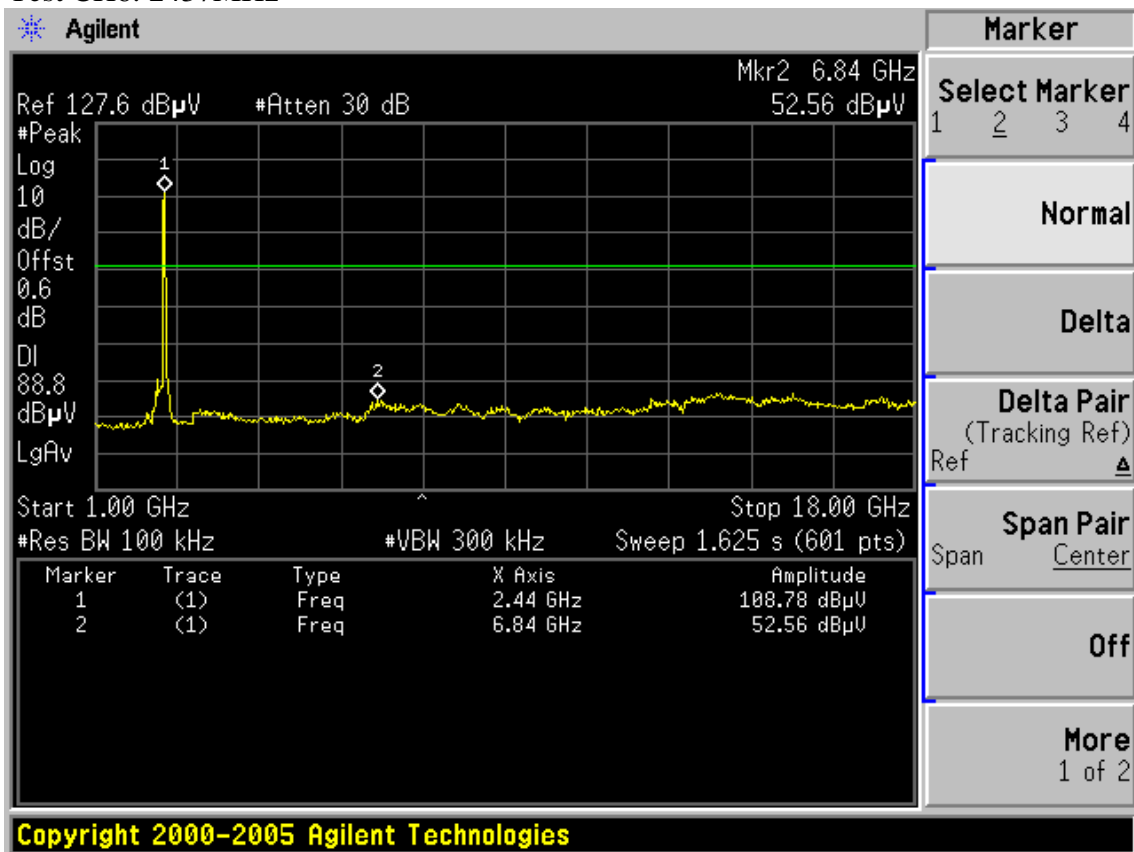


Test Mode: IEEE 802.11g TX

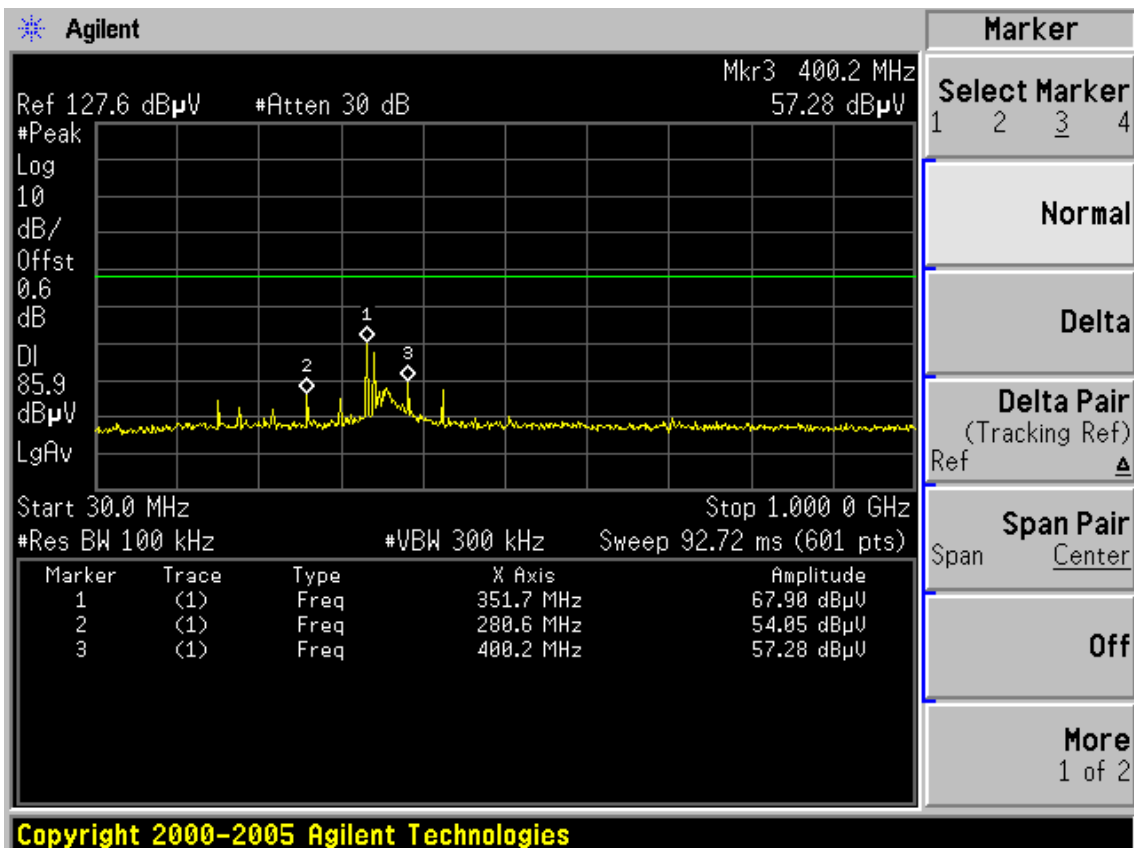
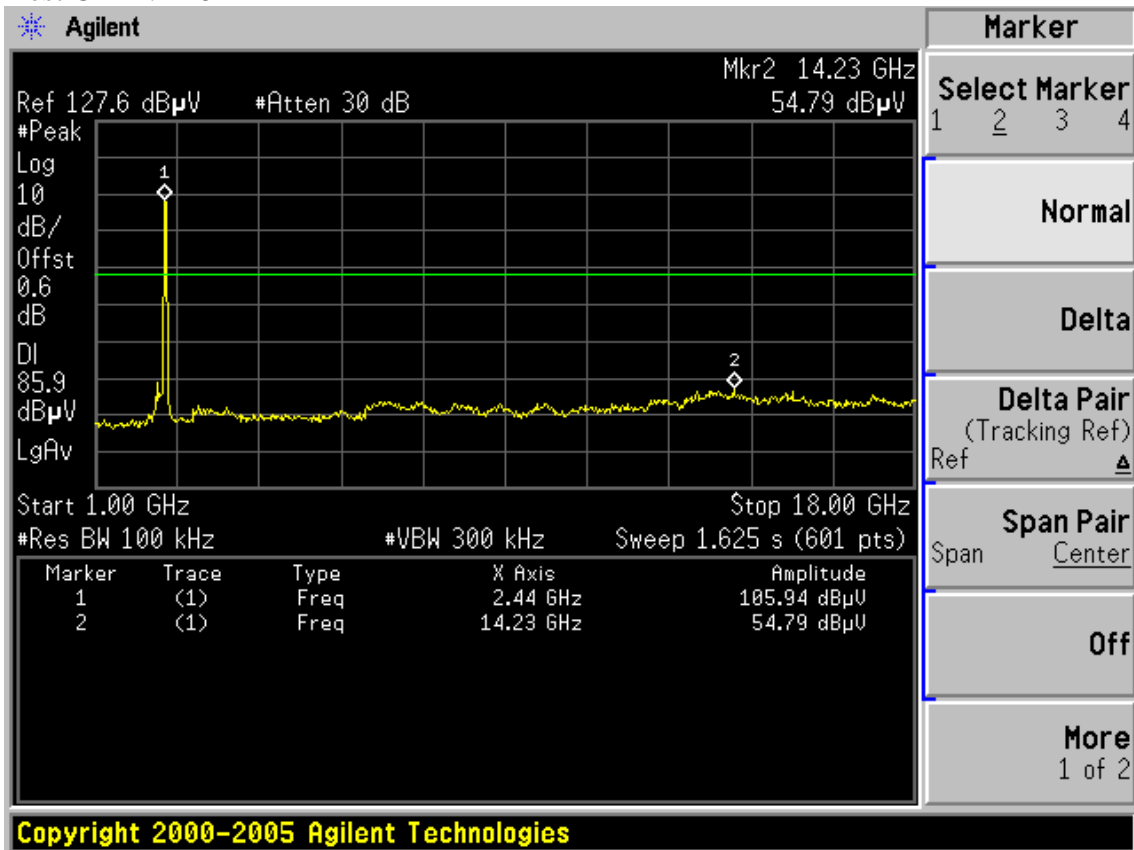
Test CH1: 2412MHz



Test CH6: 2437MHz

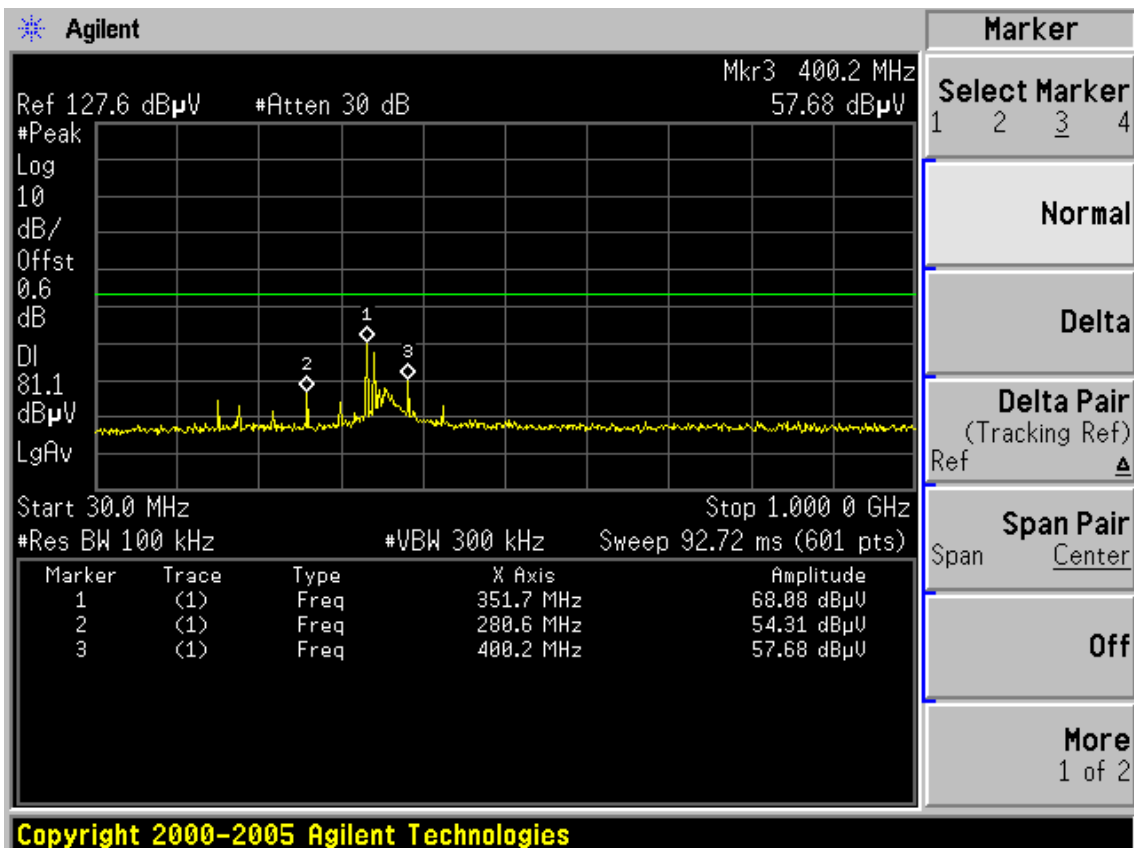
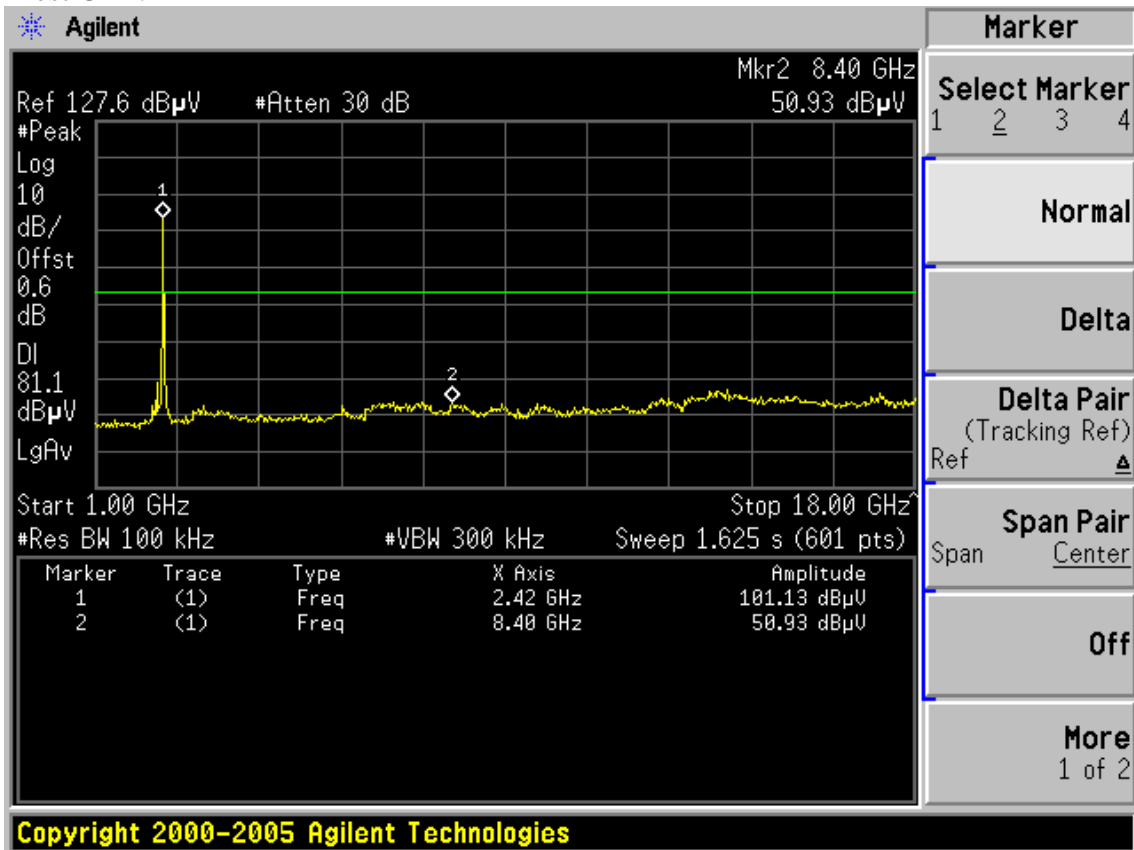


Test CH11: 2462MHz

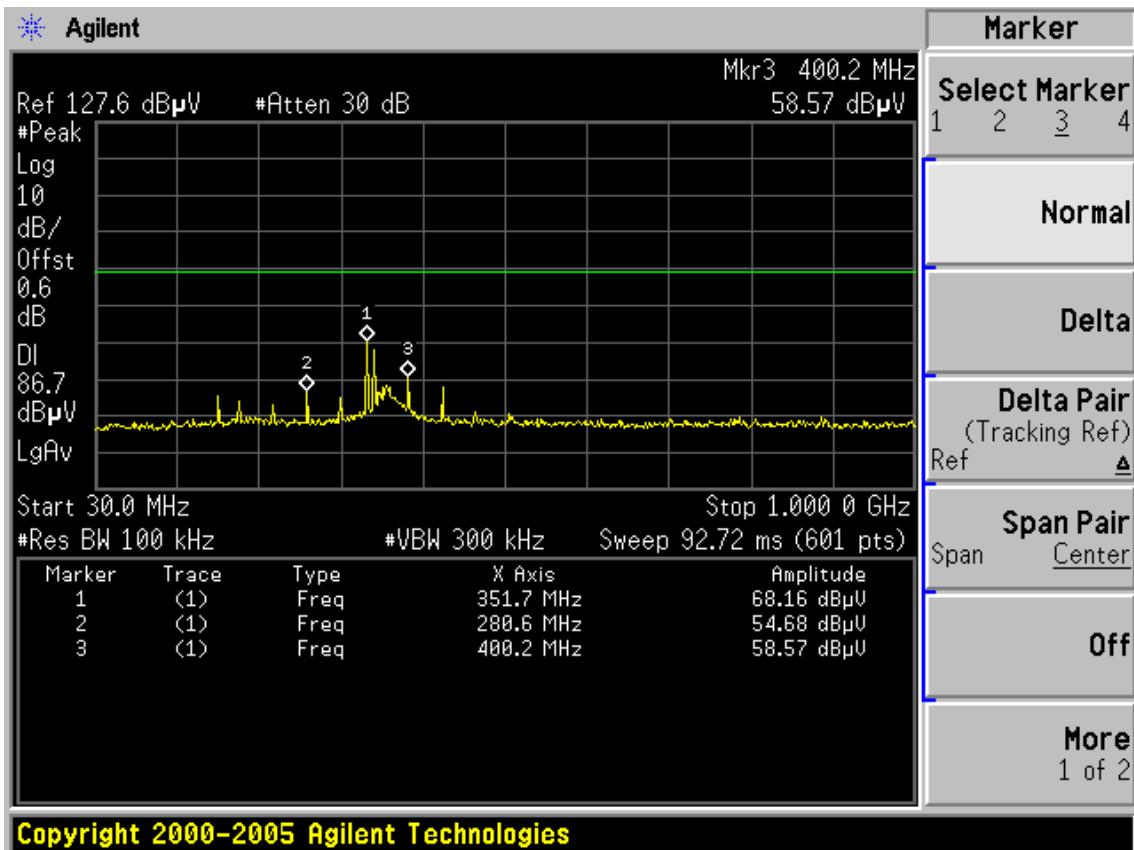
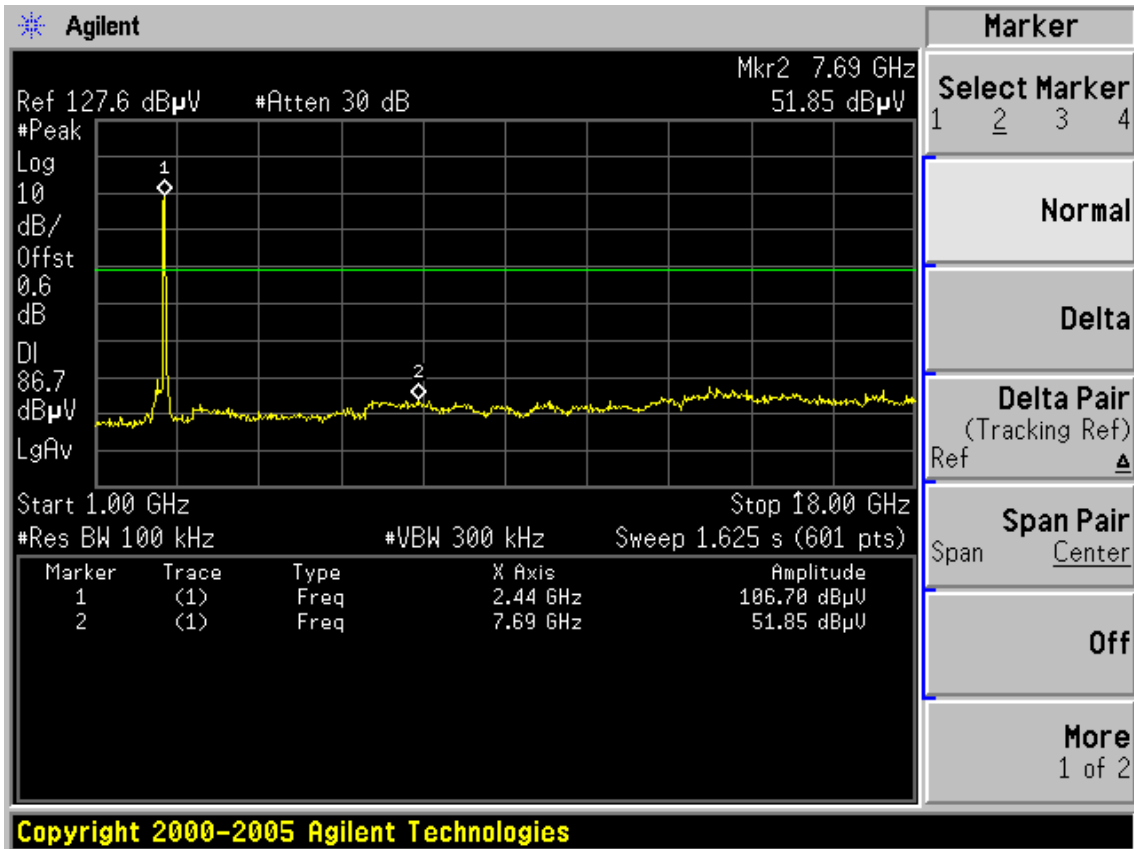


Test Mode: IEEE 802.11n HT20 TX

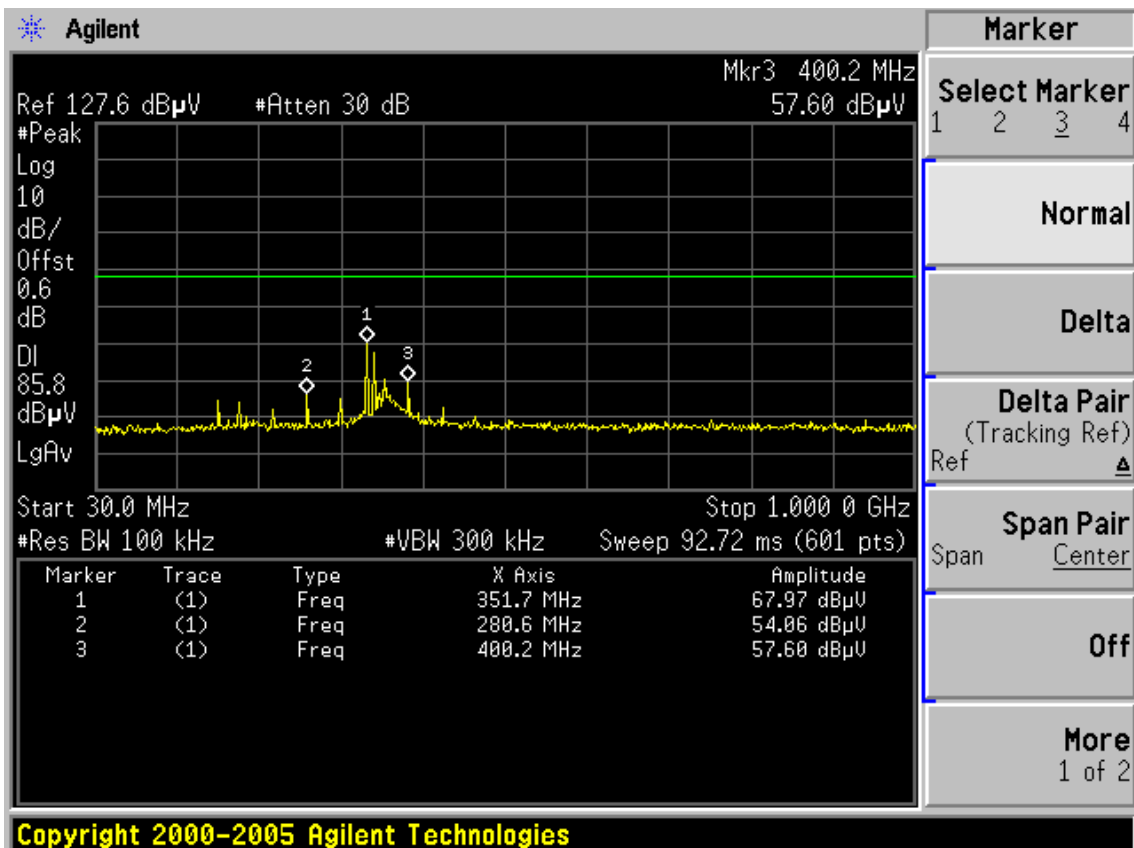
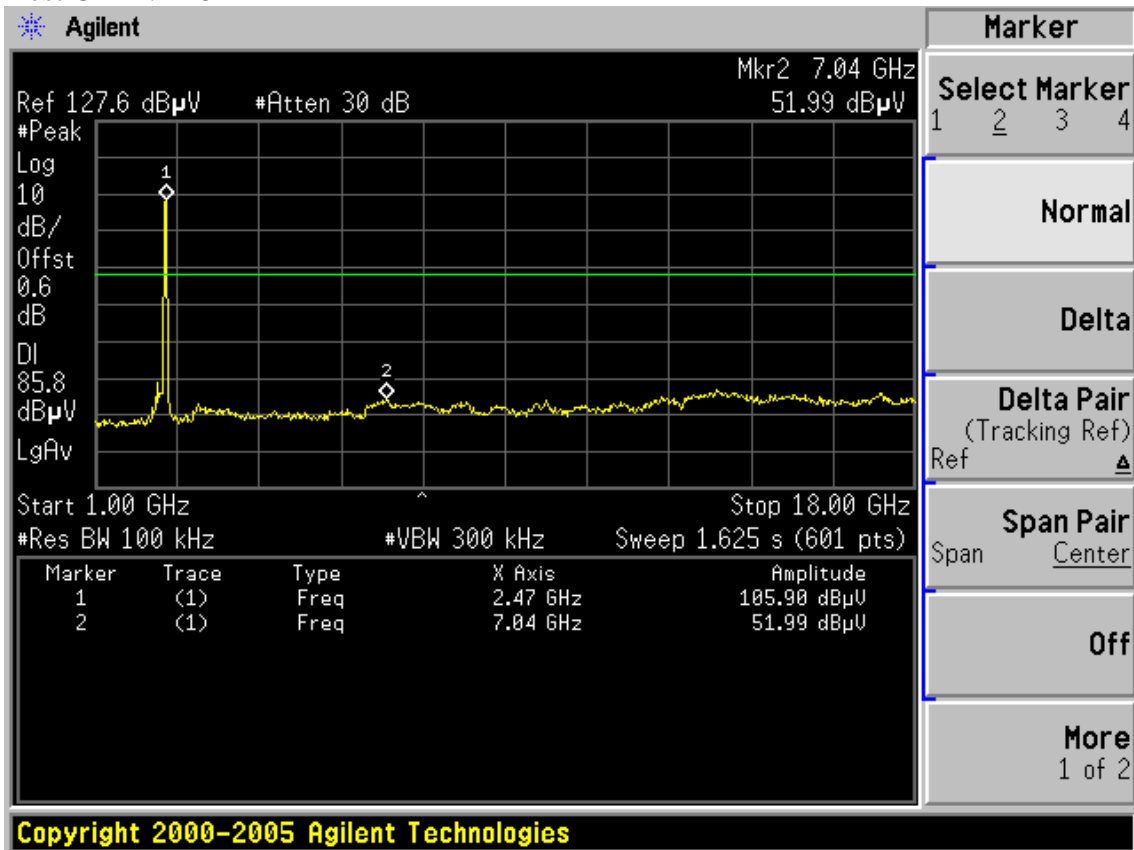
Test CH1: 2412MHz



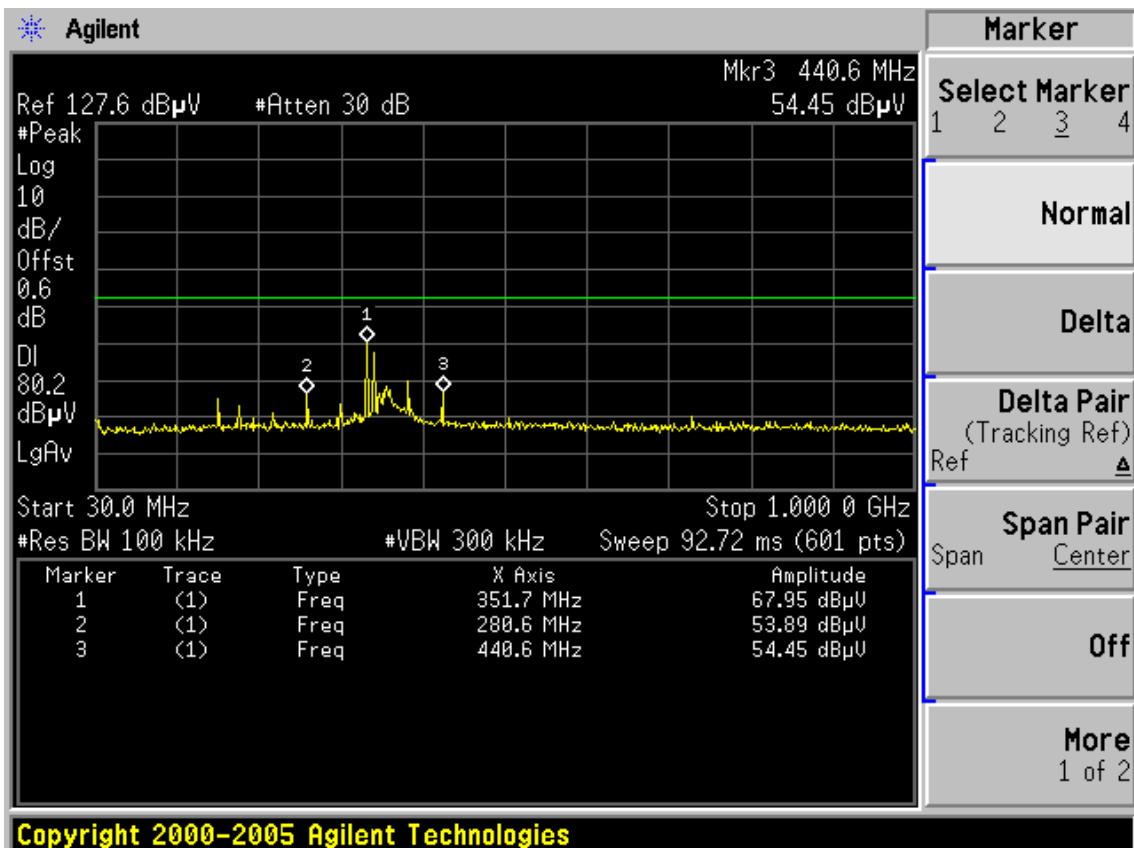
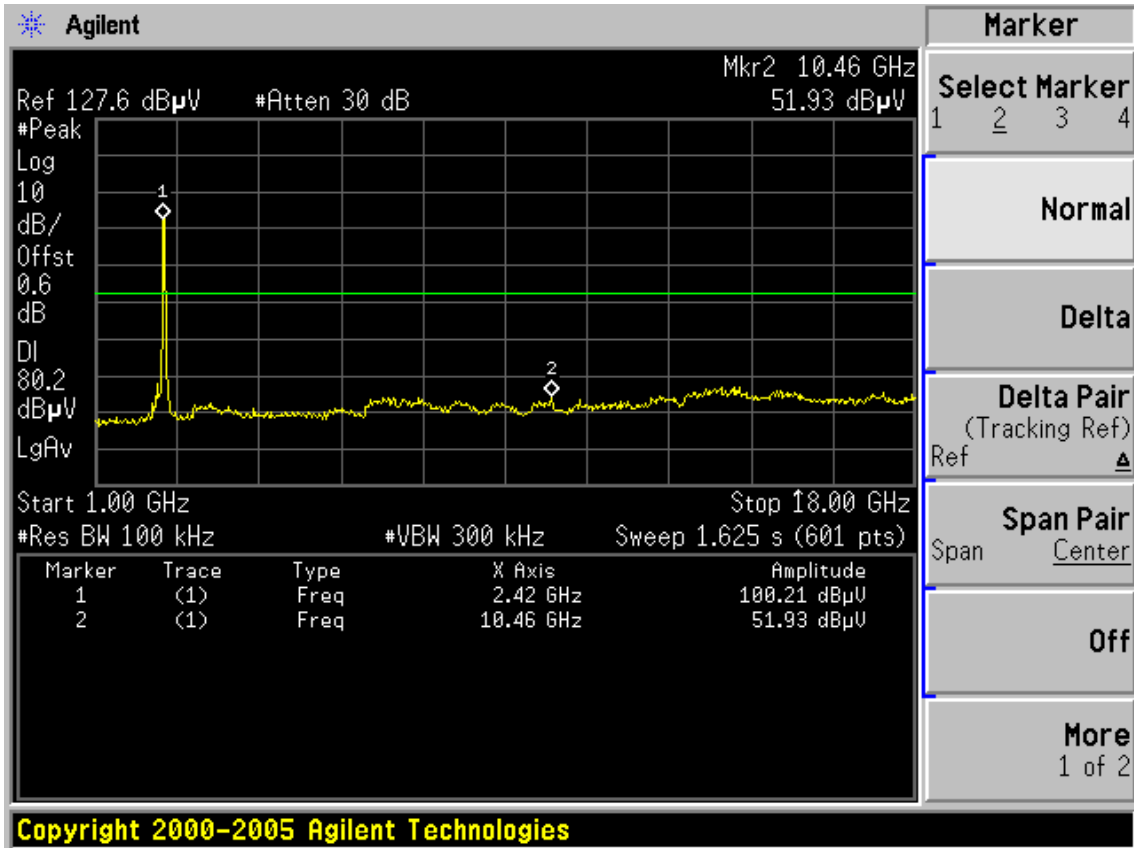
Test CH6: 2437MHz



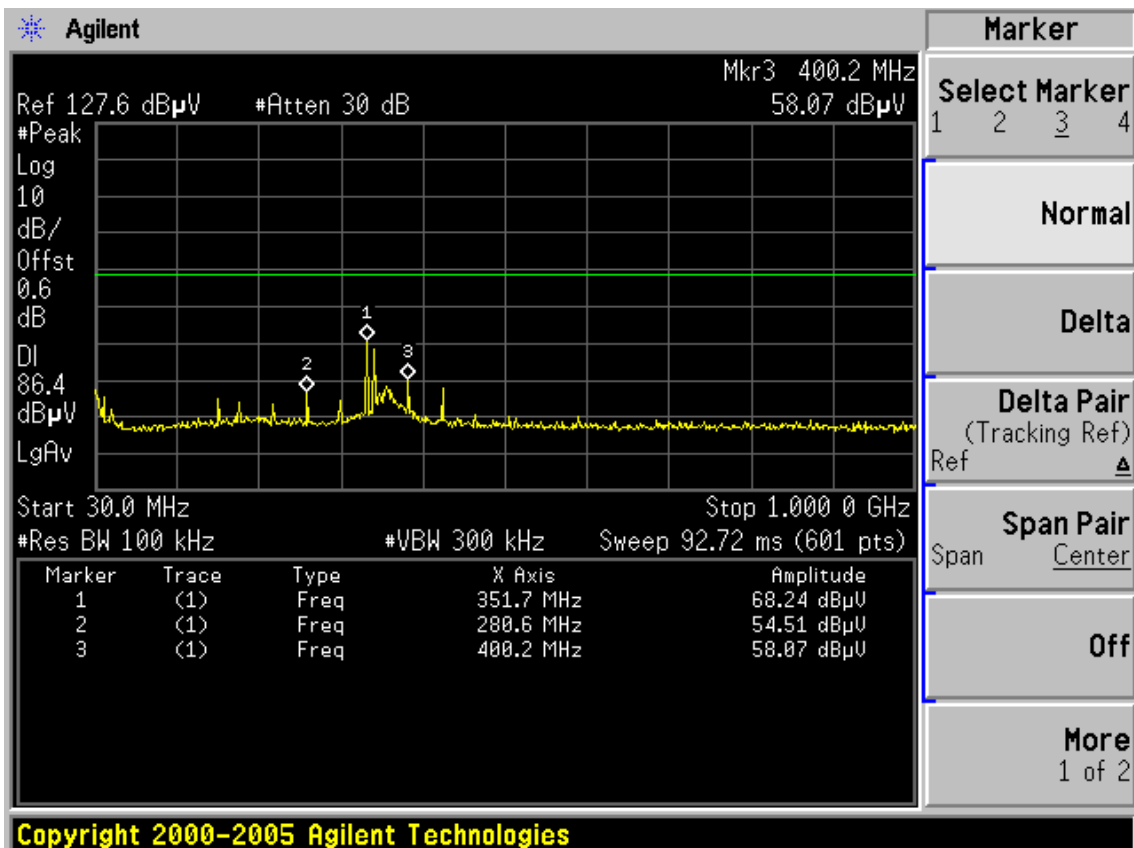
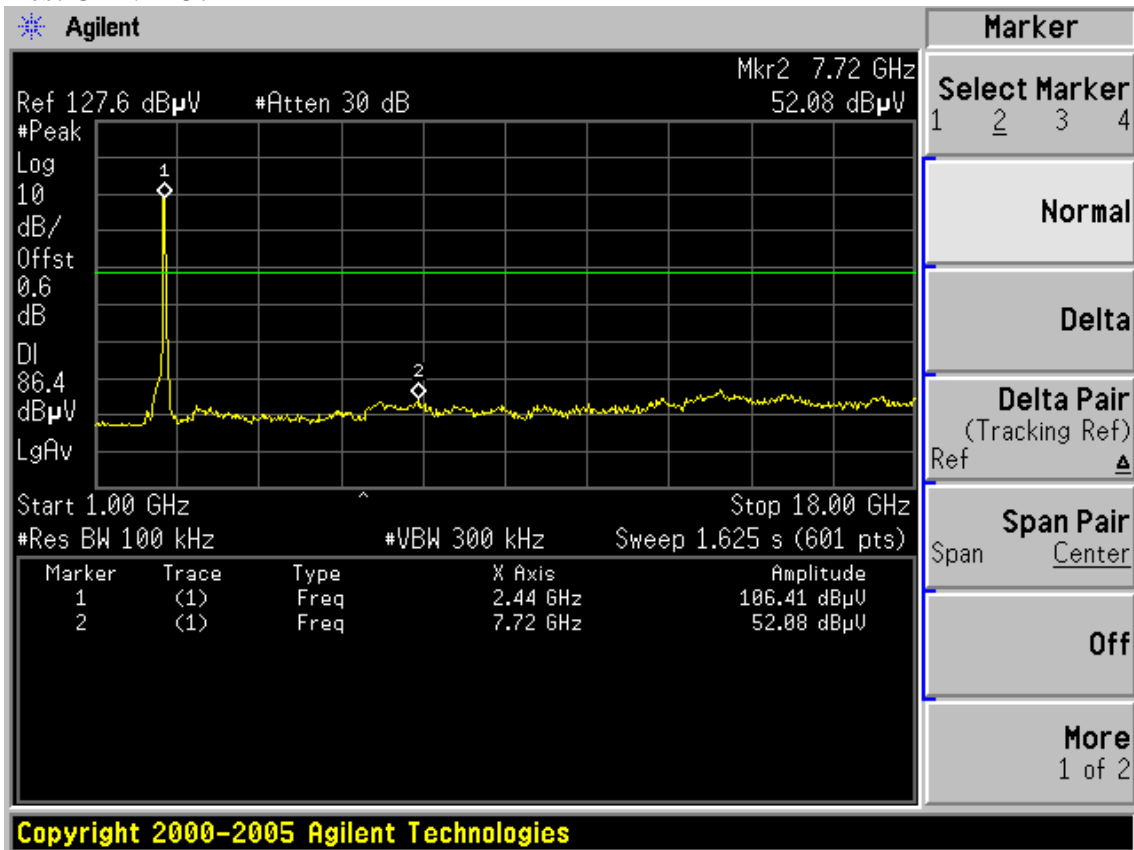
Test CH11: 2462MHz



Test Mode: IEEE 802.11n HT40 TX  
 Test CH1: 2422MHz

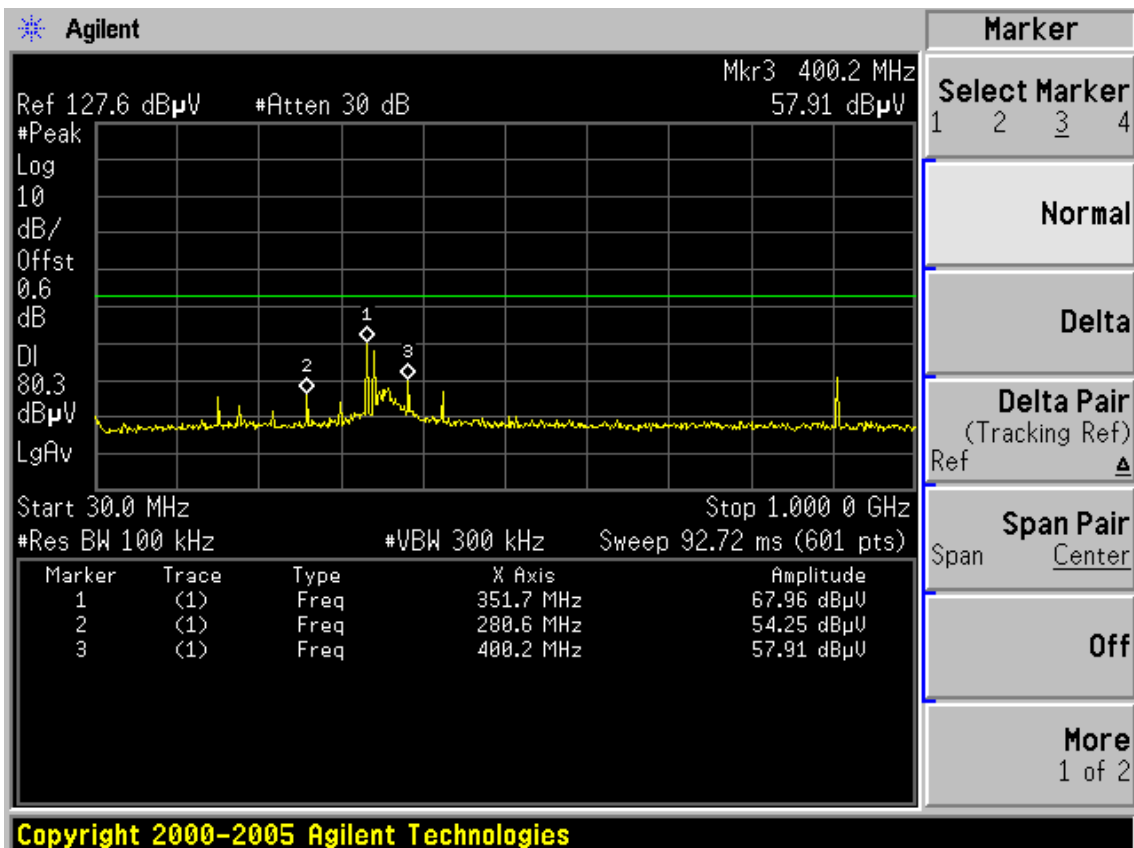
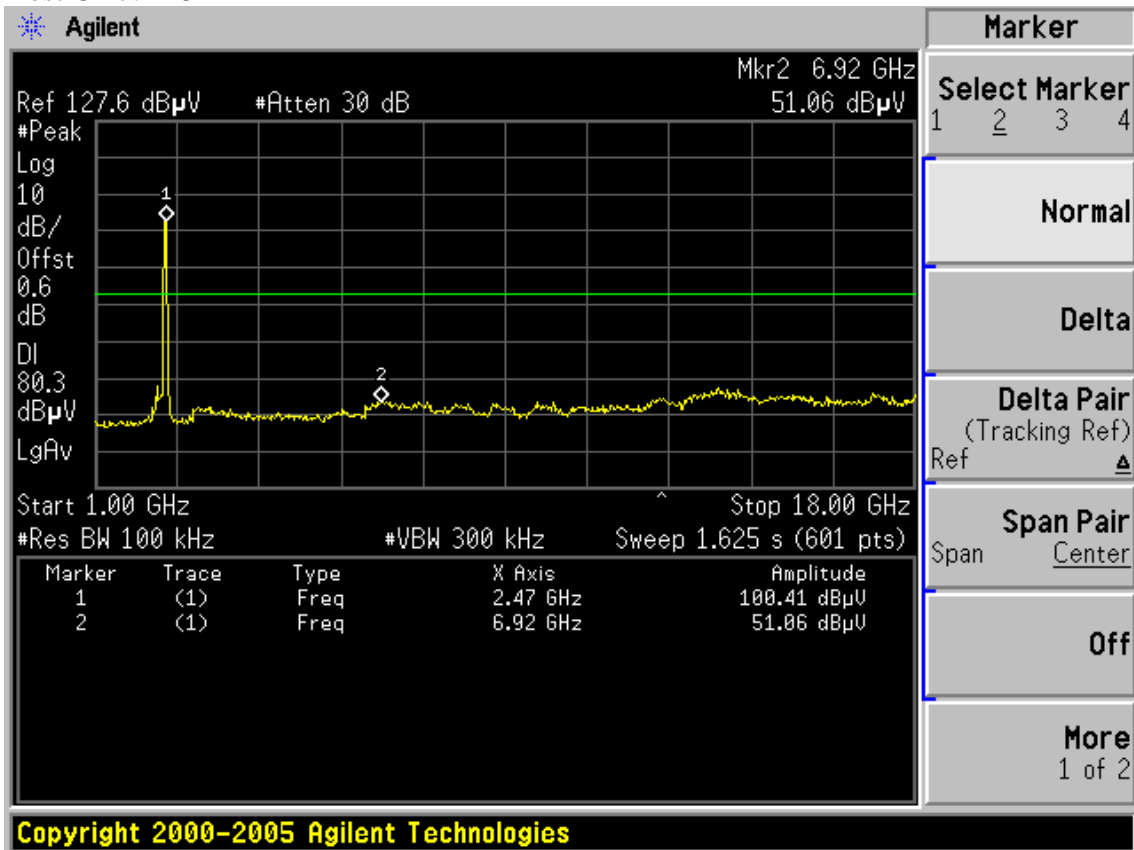


Test CH4: 2437MHz





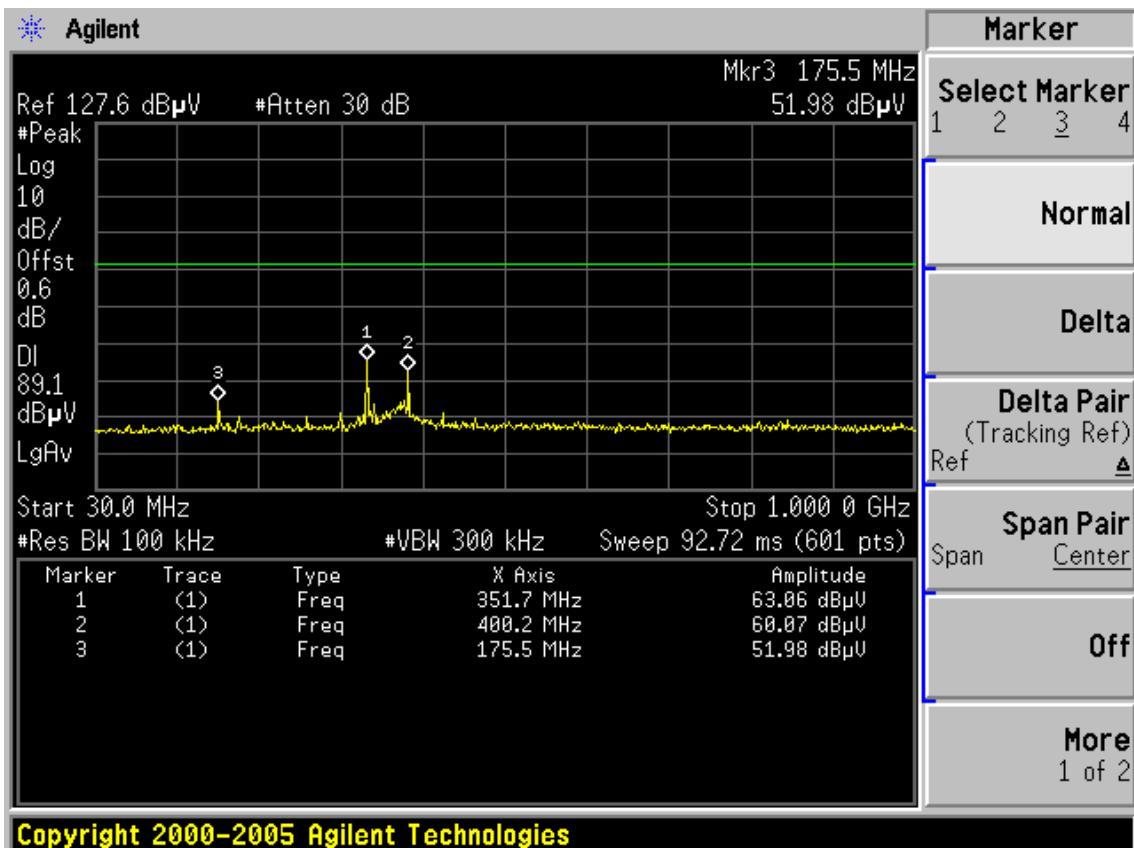
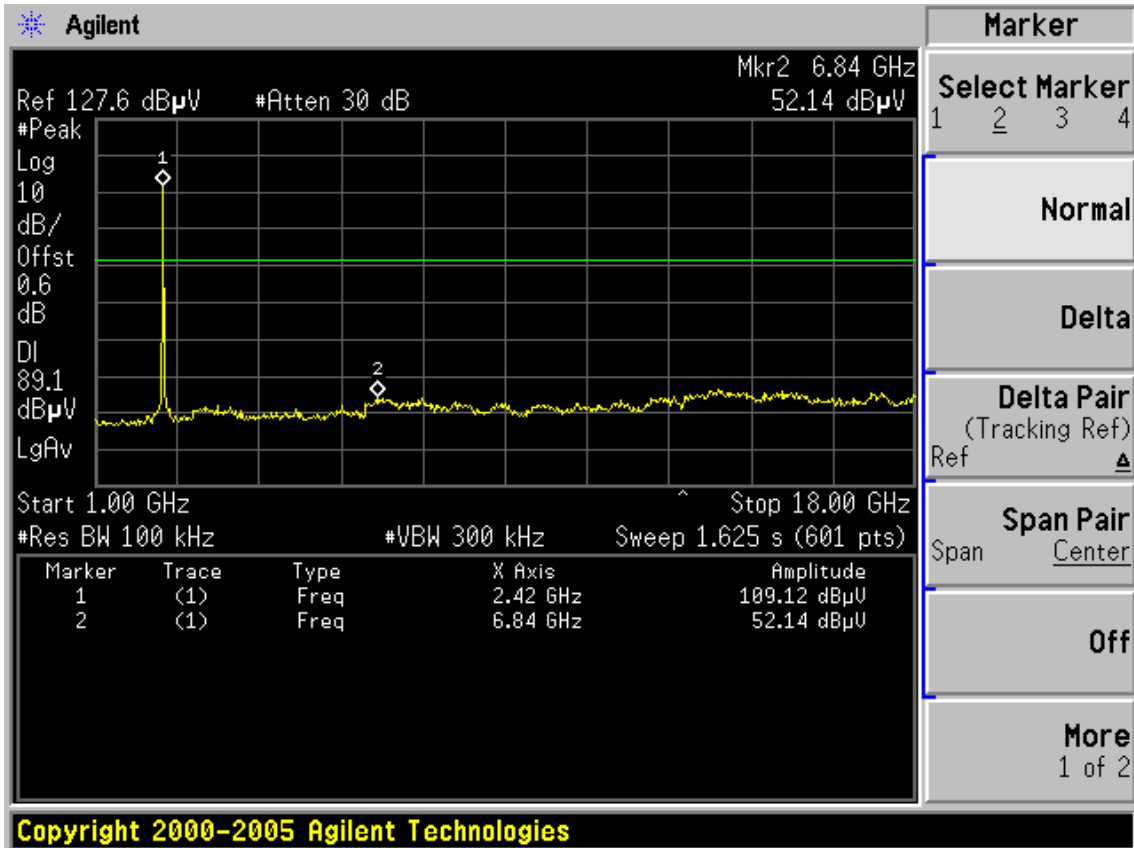
Test CH7: 2452MHz



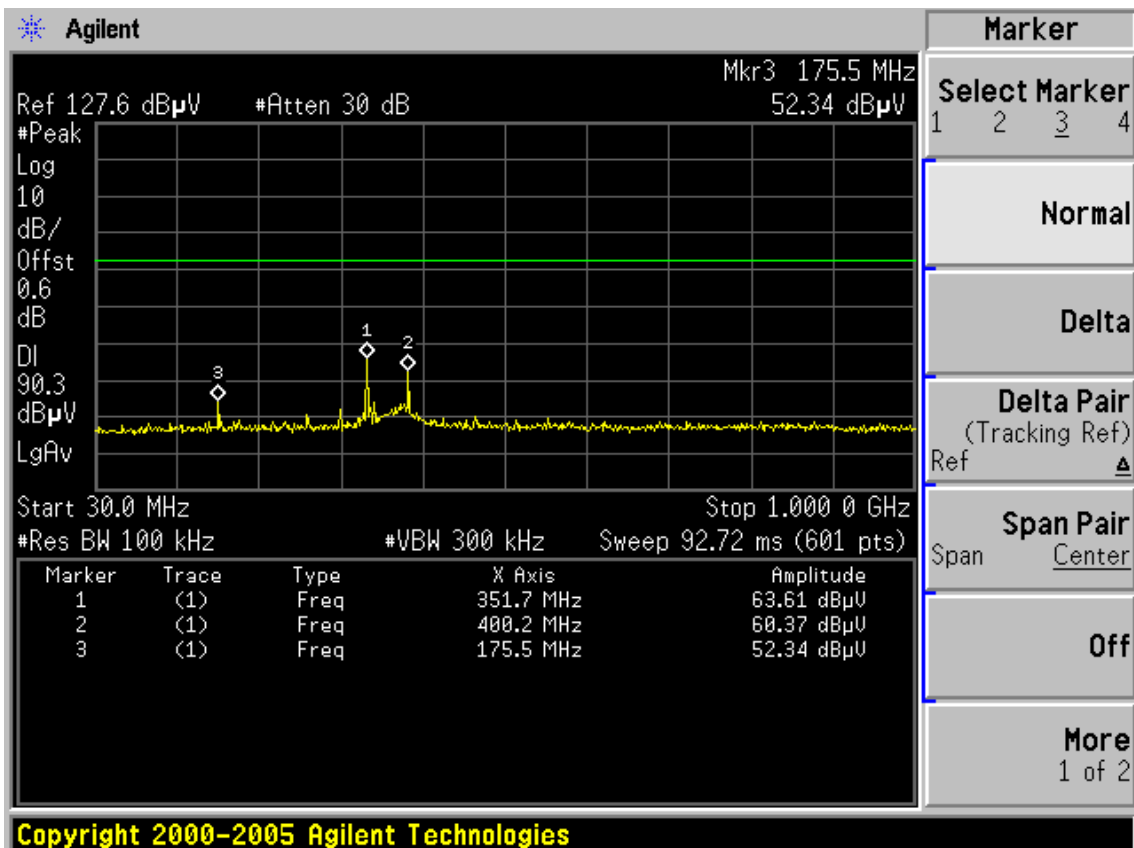
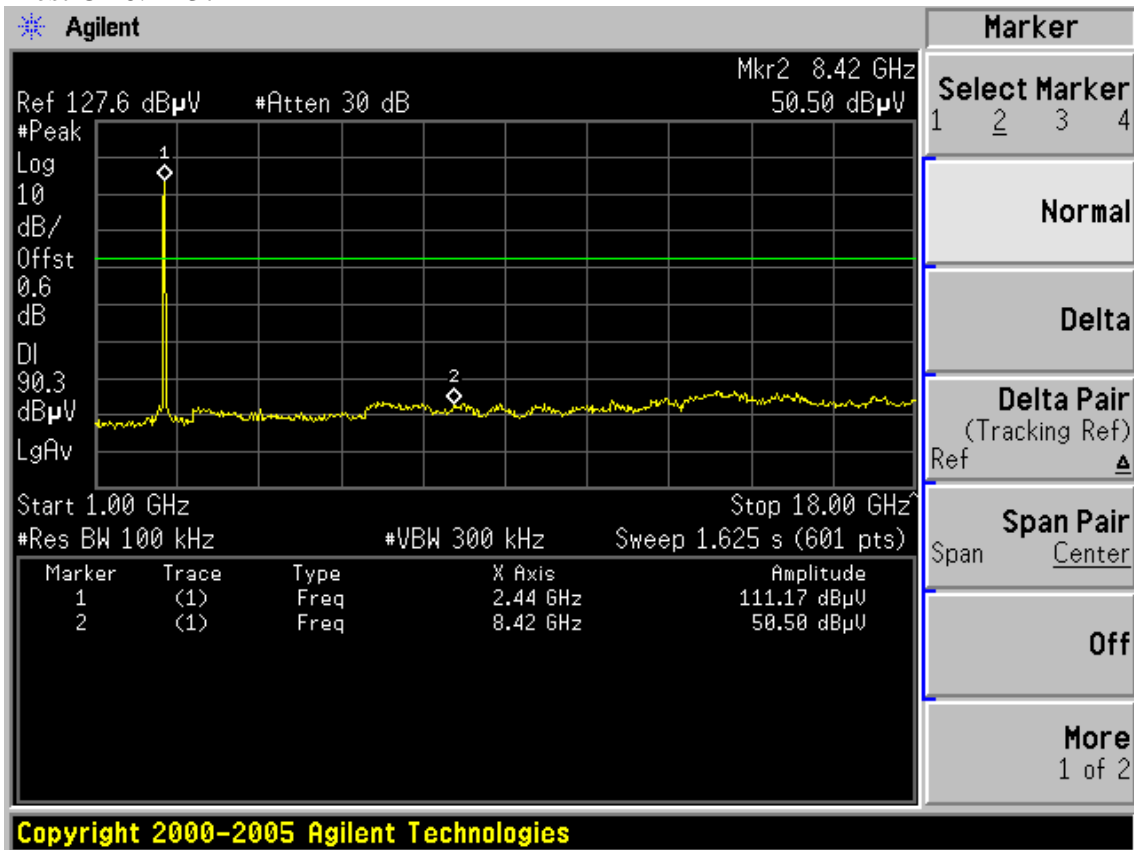
**Chain 2:**

Test Mode: IEEE 802.11b TX

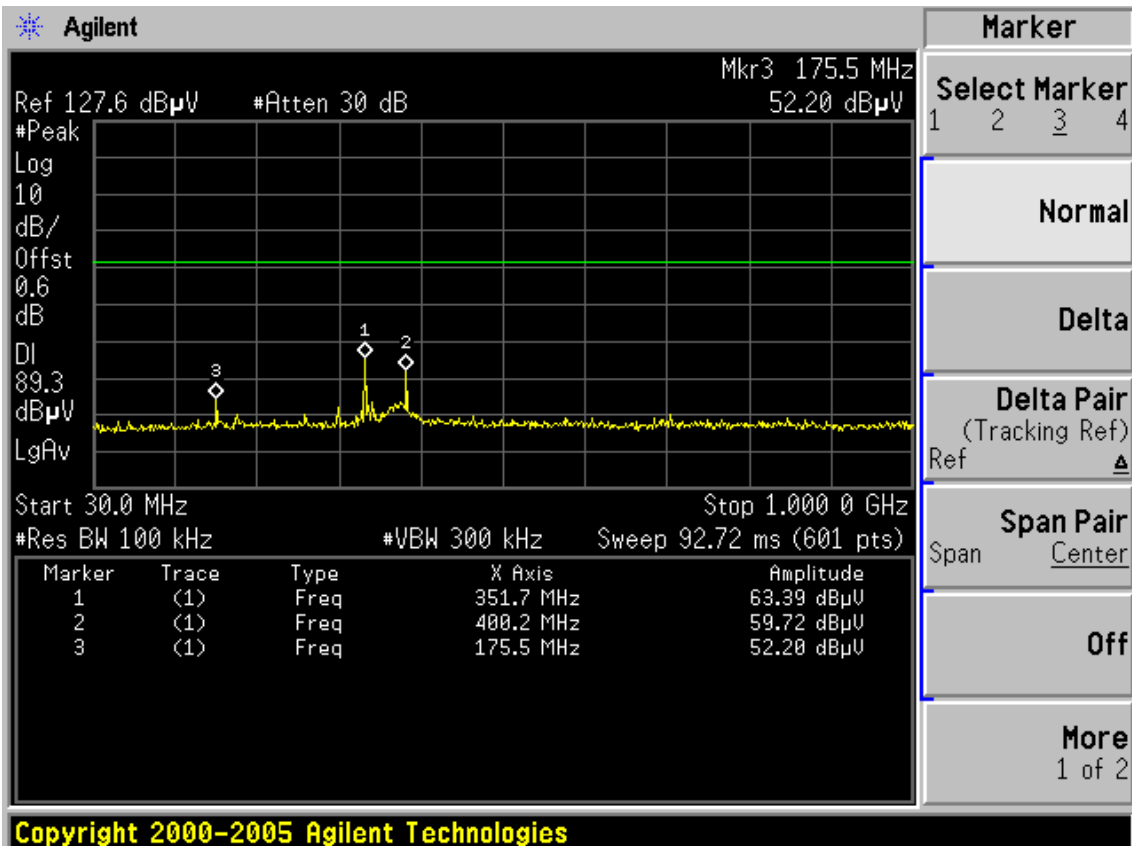
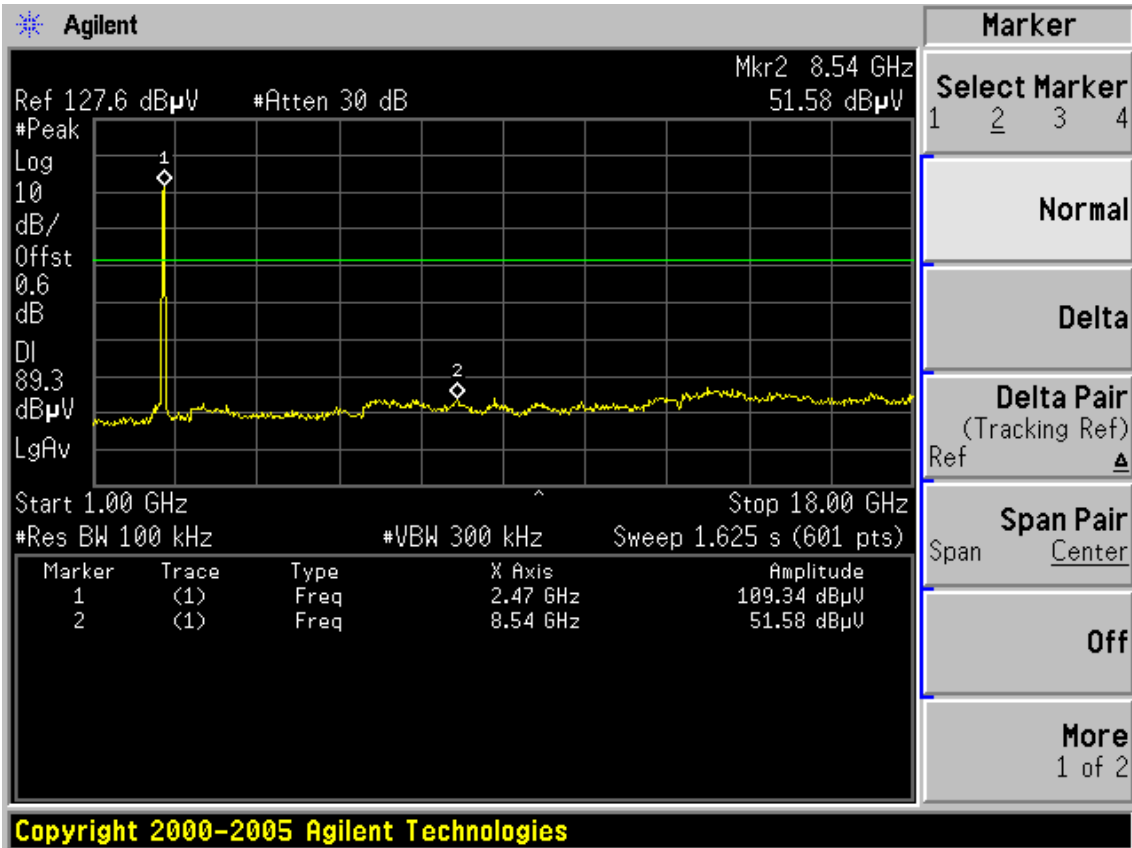
Test CH1: 2412MHz



Test CH6: 2437MHz

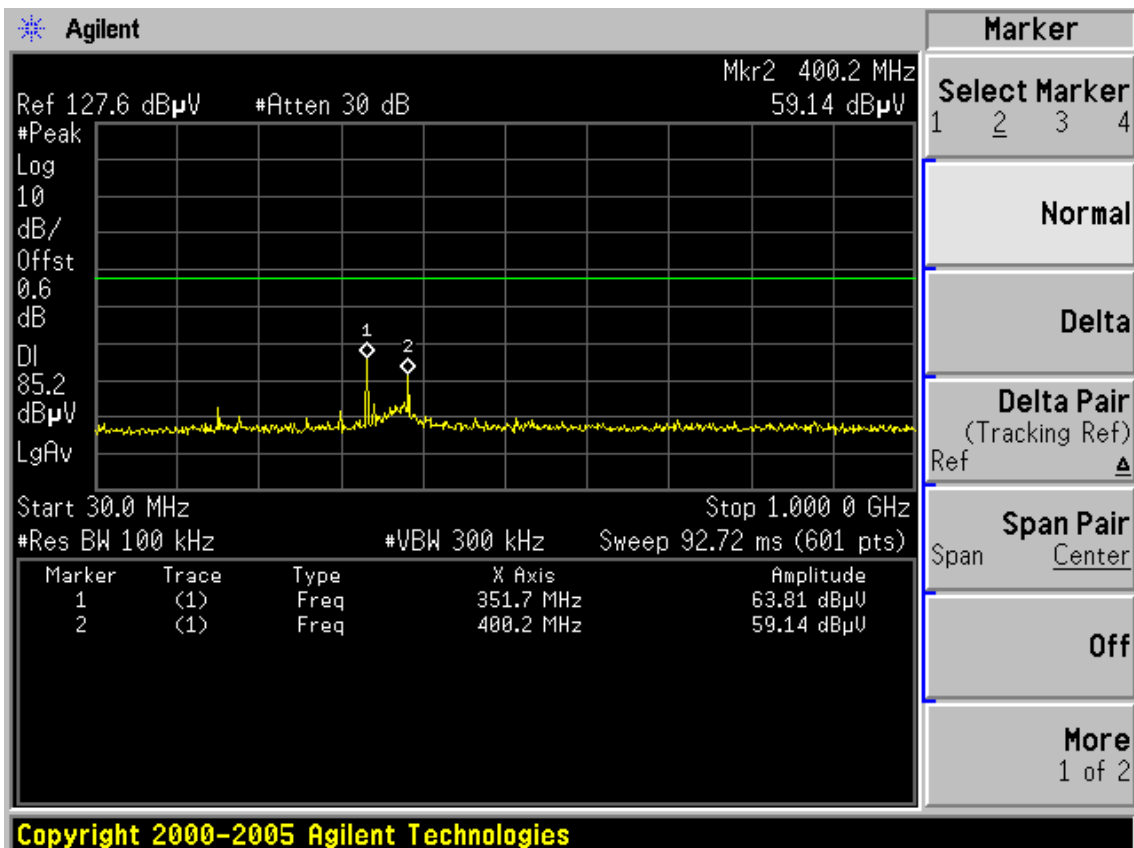
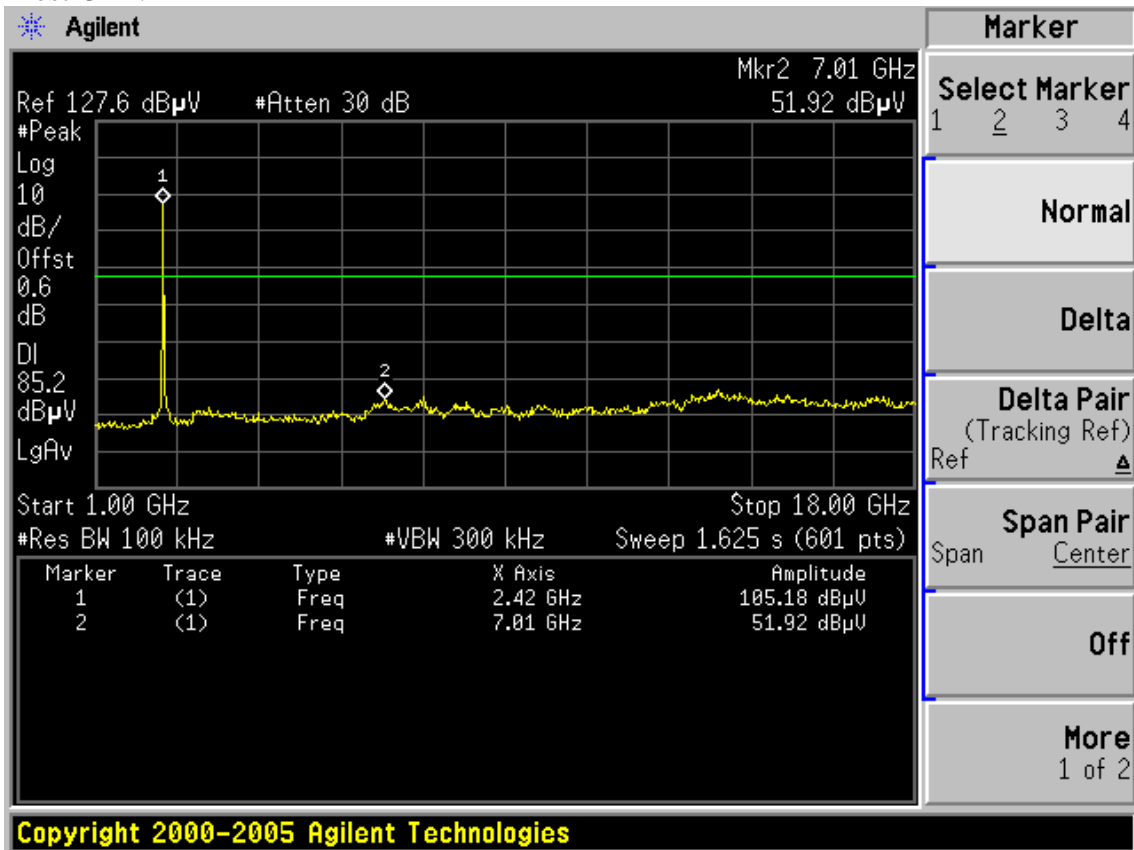


Test CH11: 2462MHz

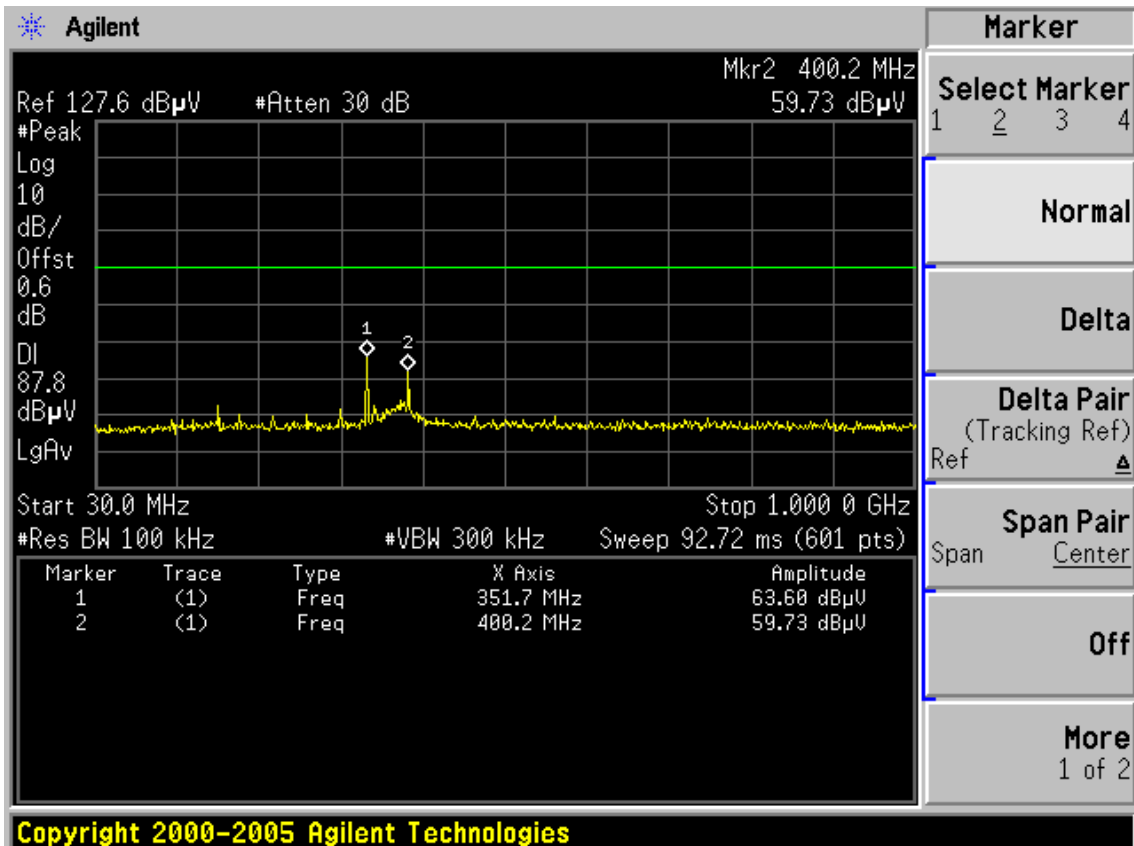
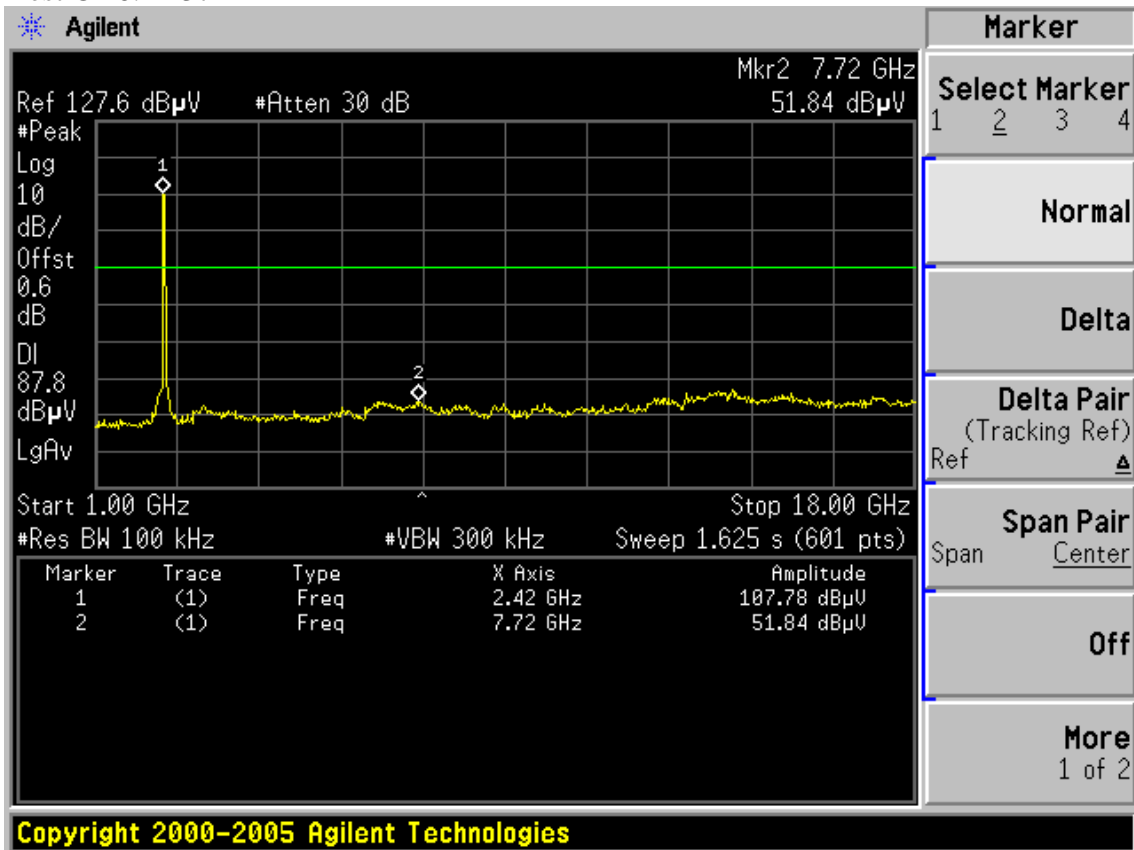


Test Mode: IEEE 802.11g TX

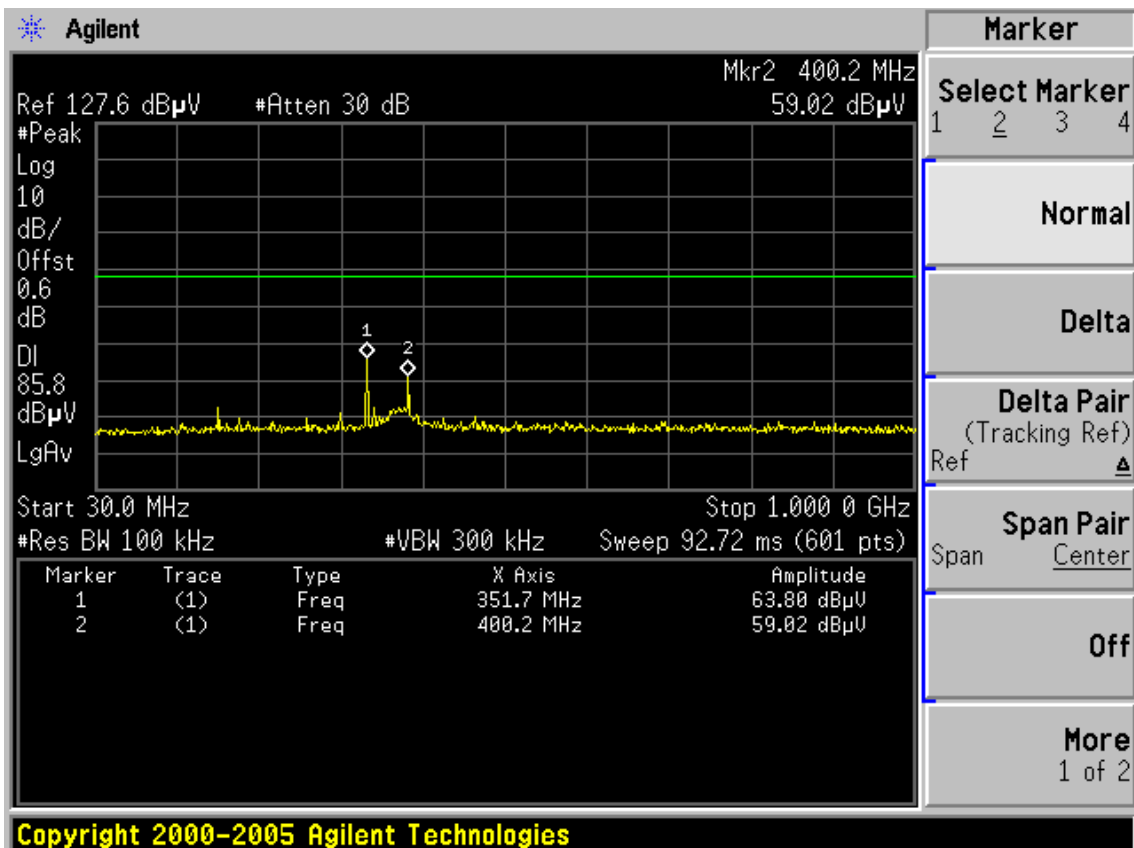
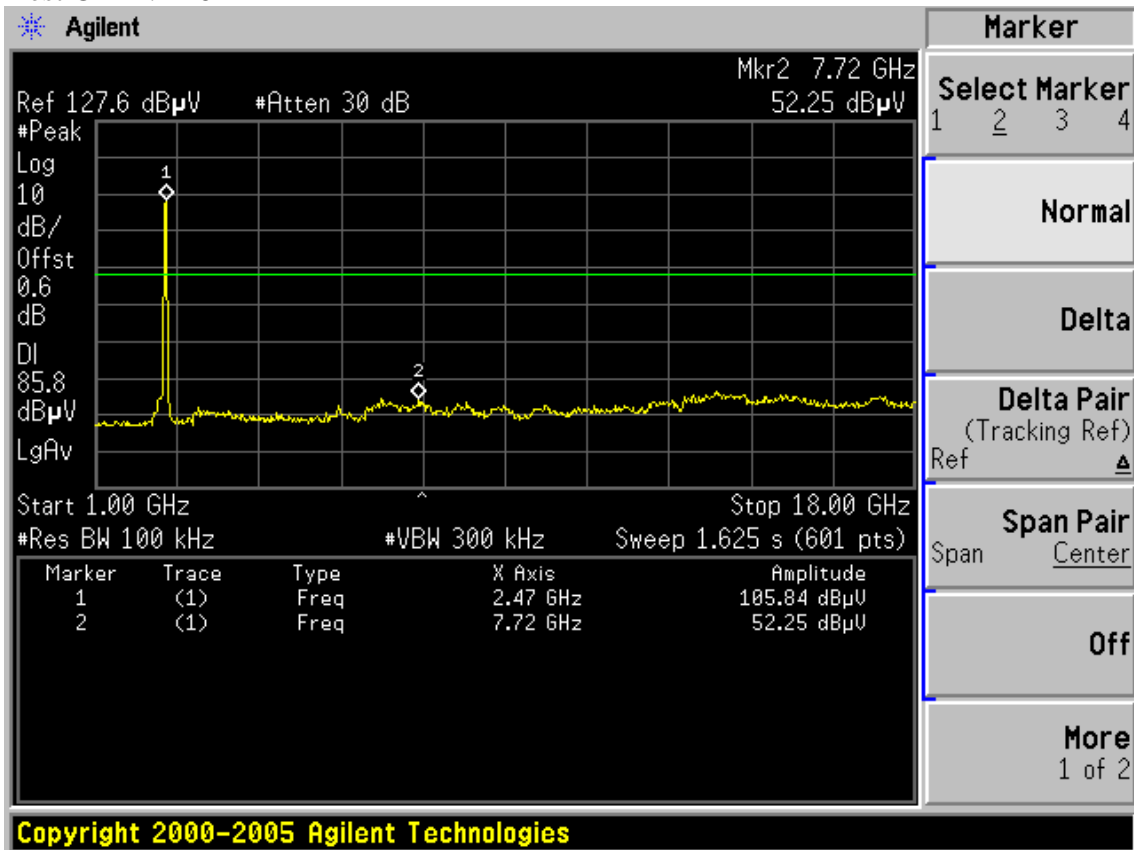
Test CH1: 2412MHz



Test CH6: 2437MHz

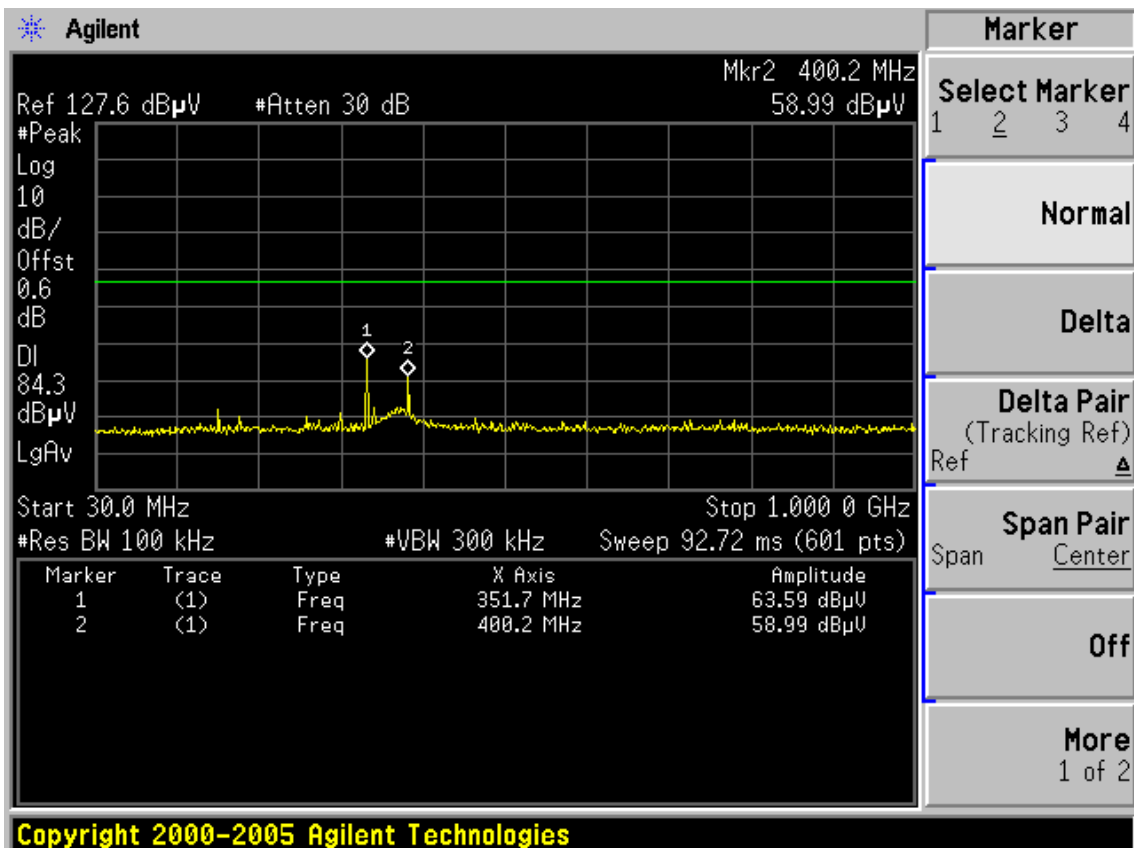
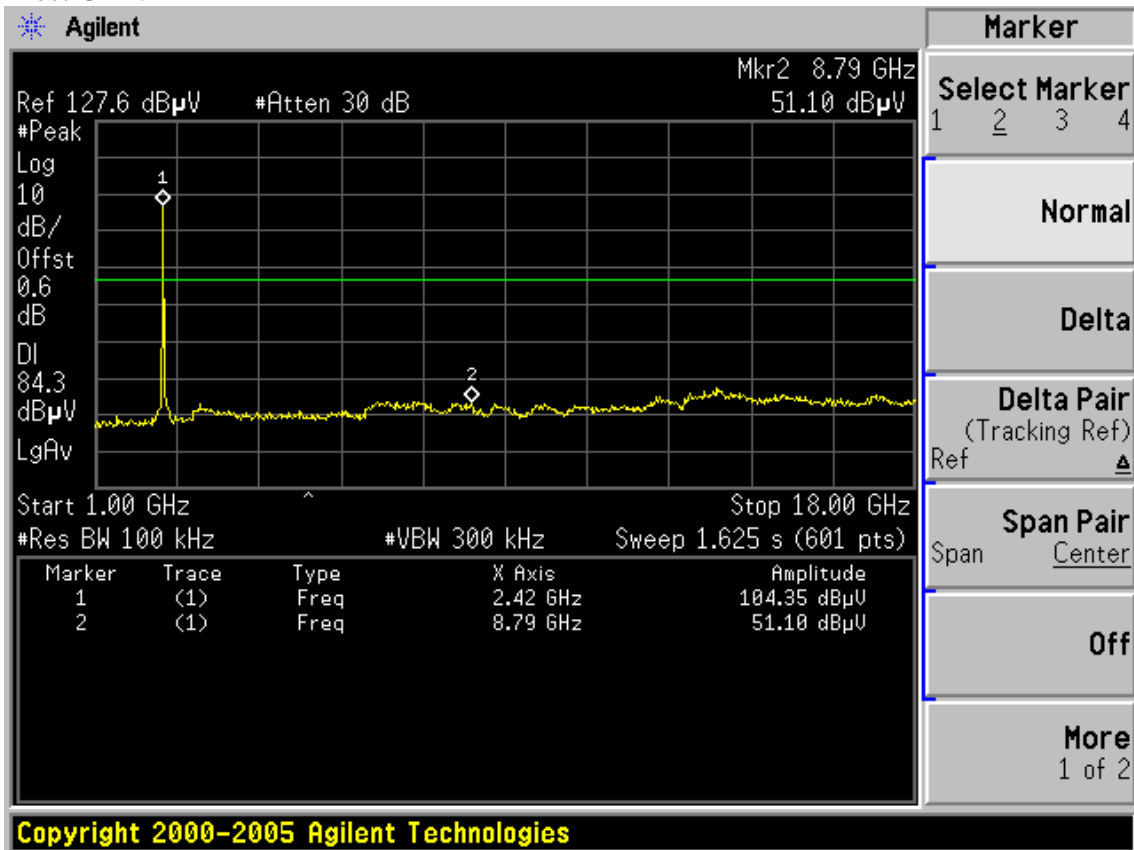


Test CH11: 2462MHz



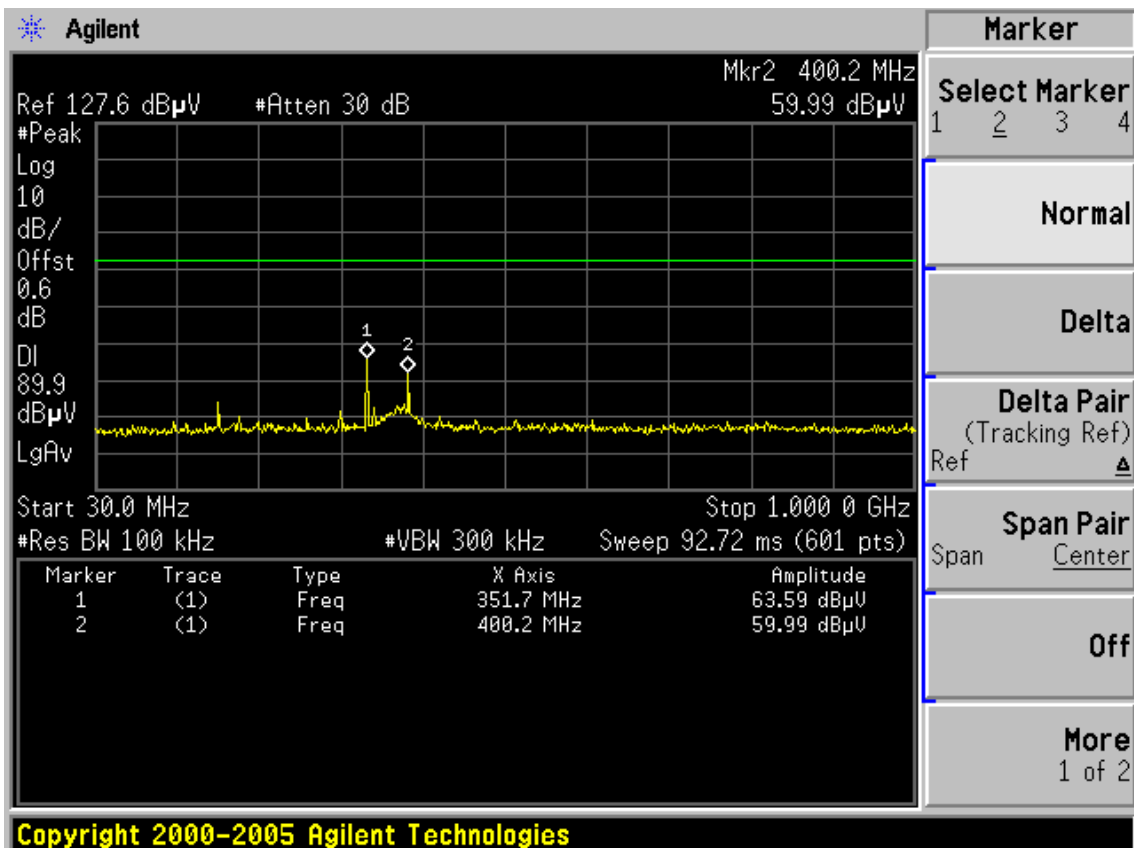
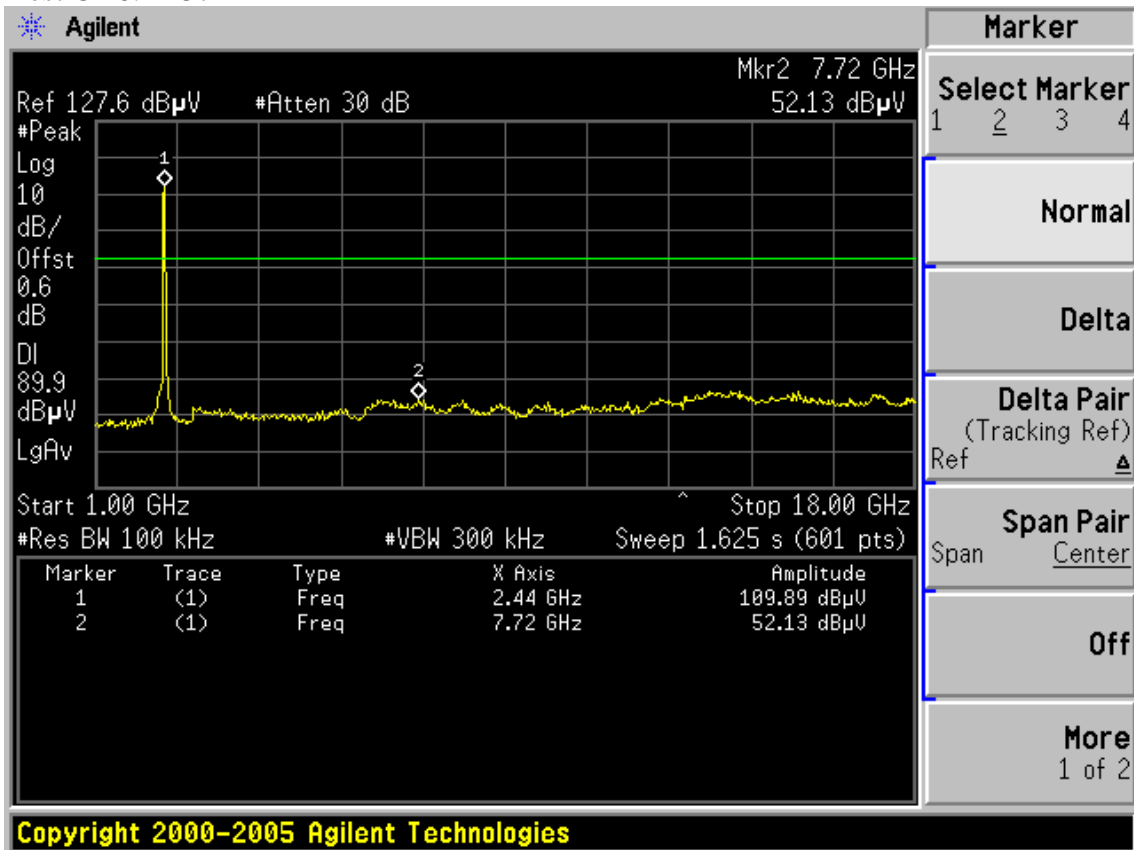
Test Mode: IEEE 802.11n HT20 TX

Test CH1: 2412MHz

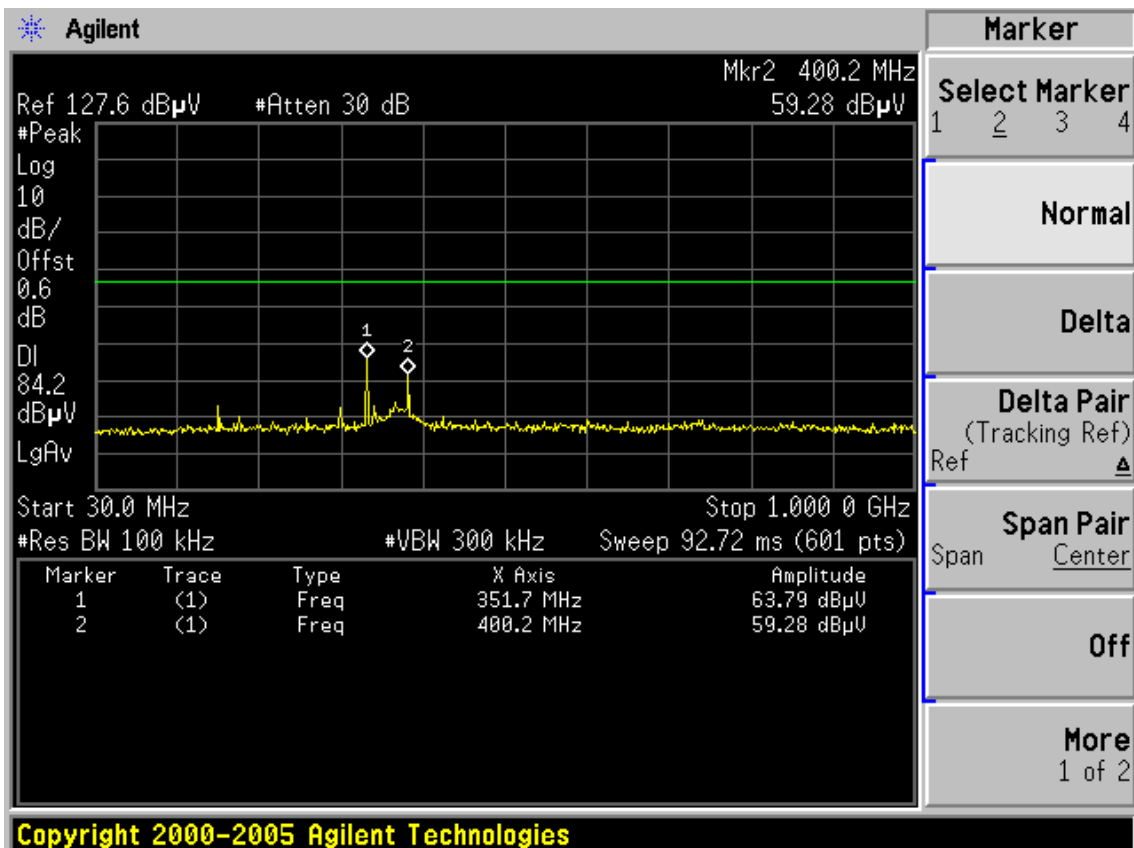
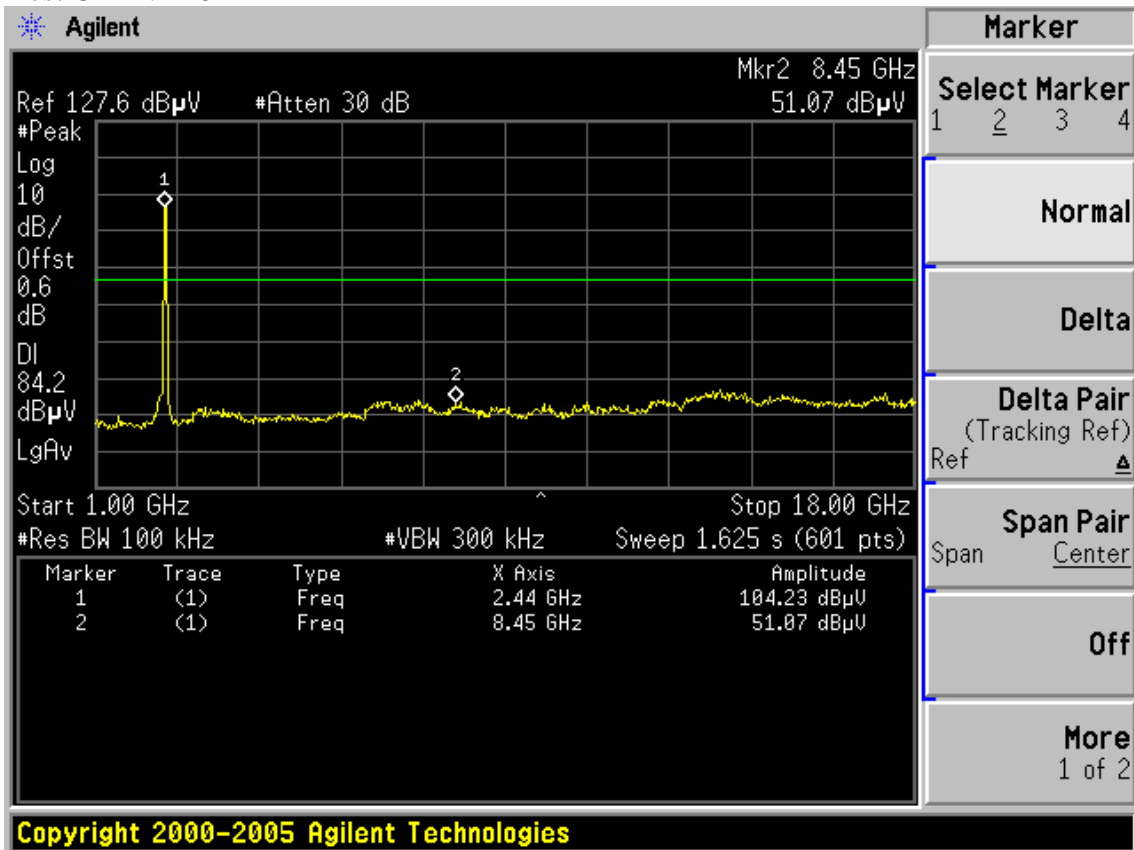




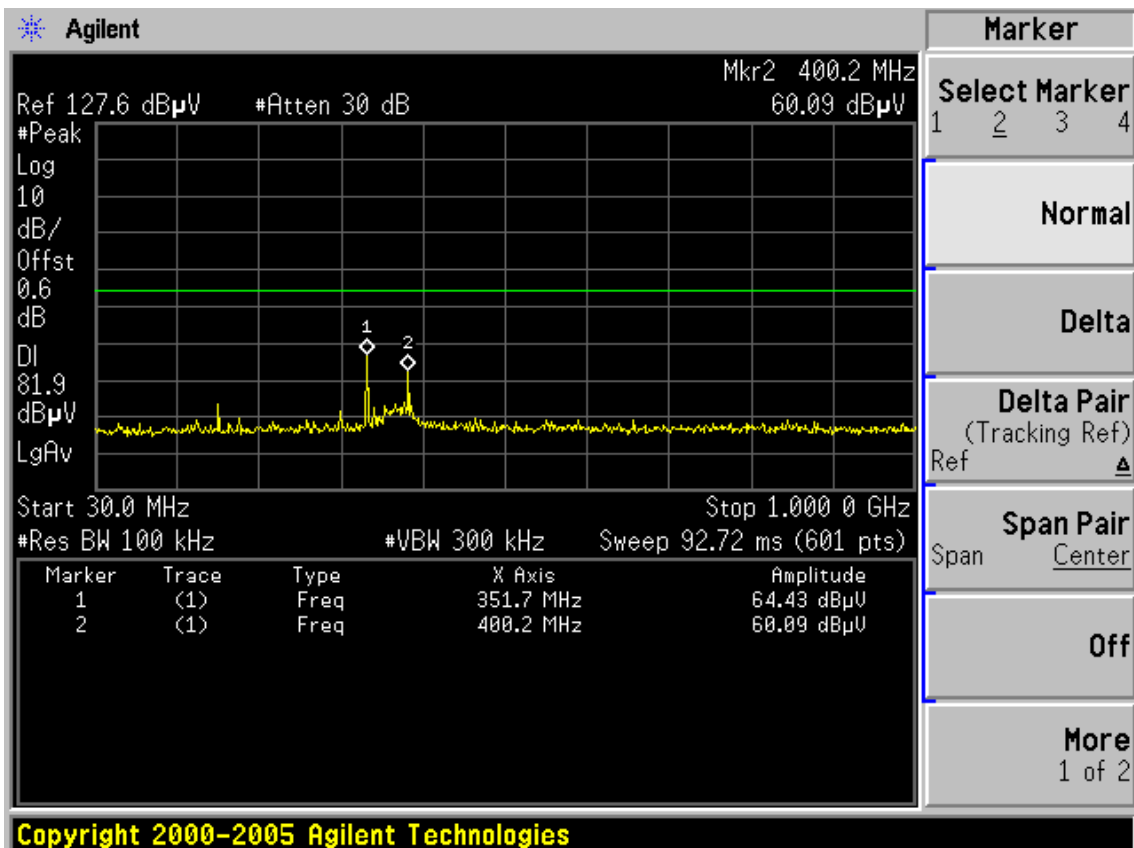
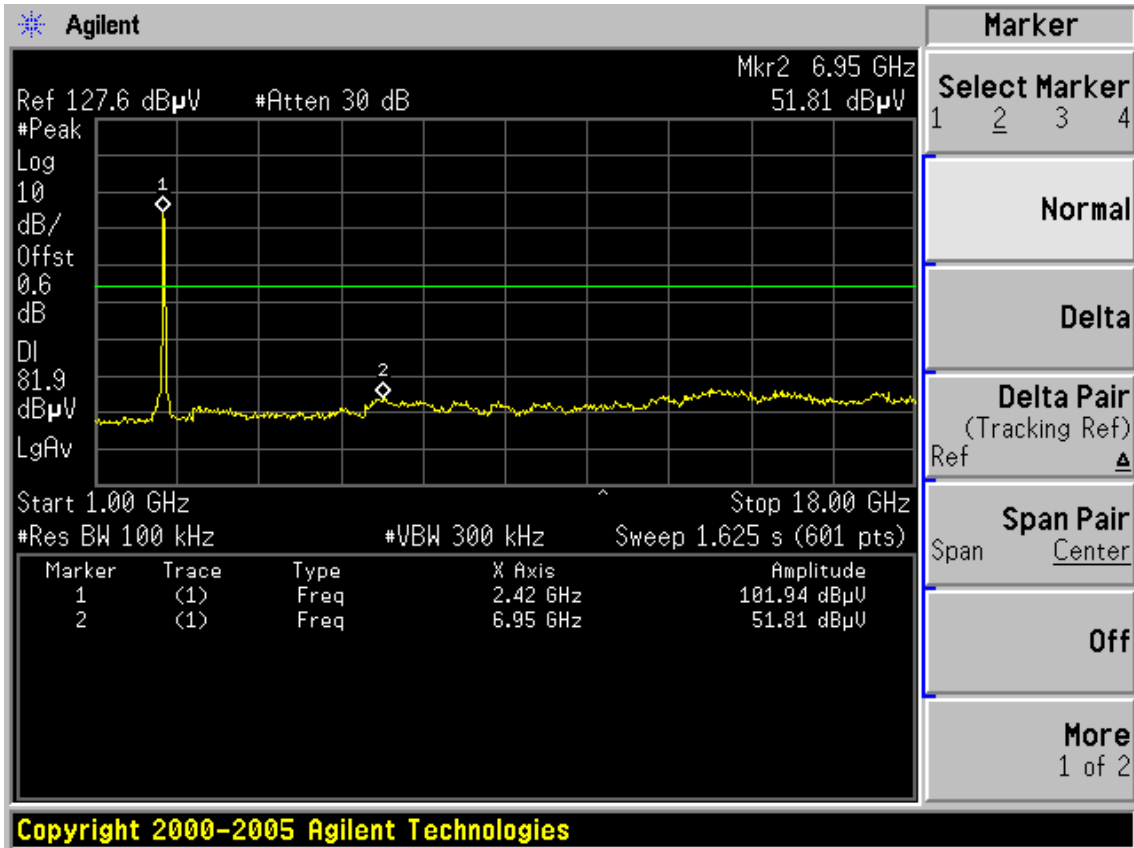
Test CH6: 2437MHz



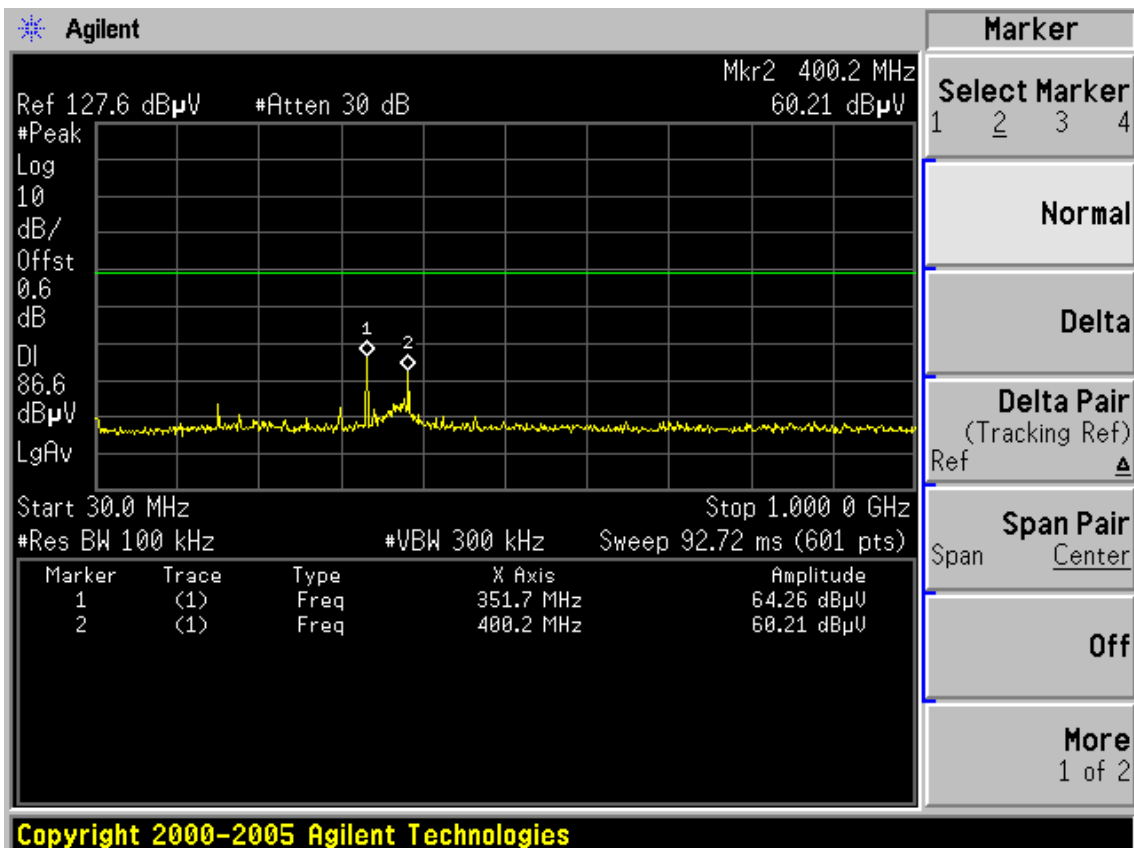
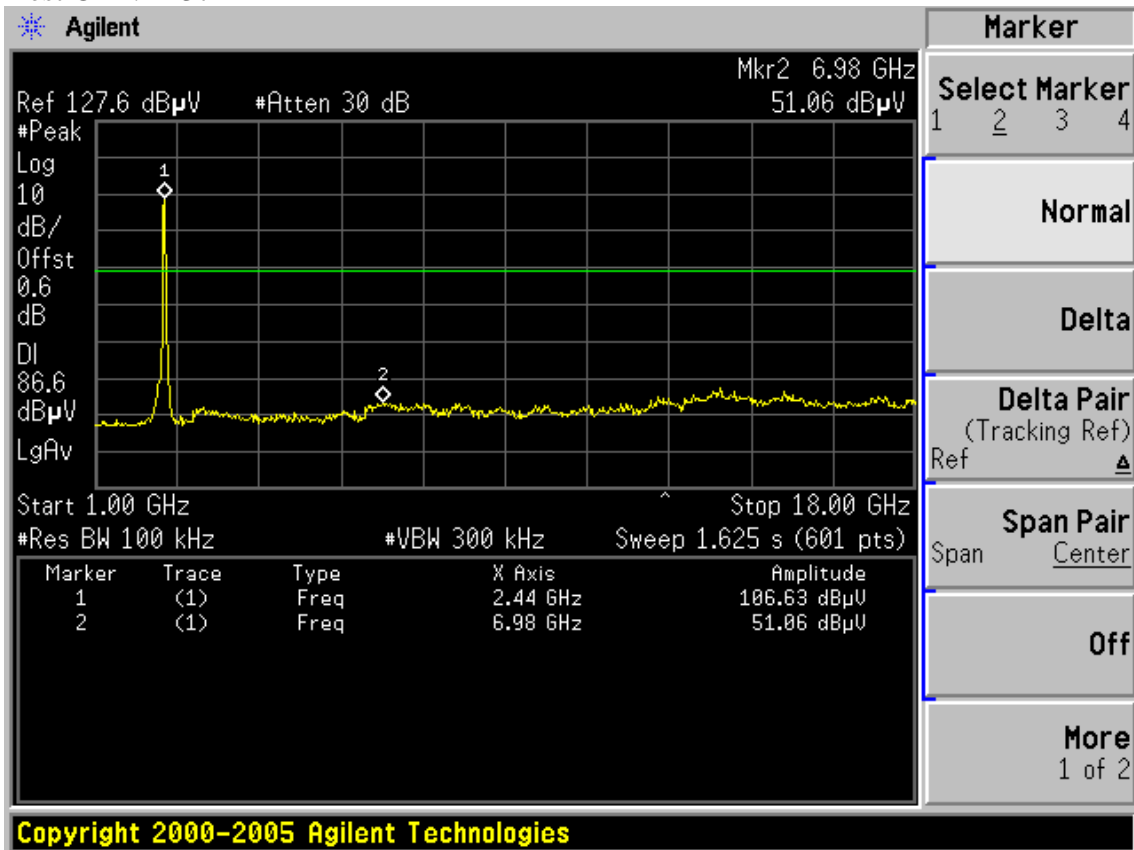
Test CH11: 2462MHz



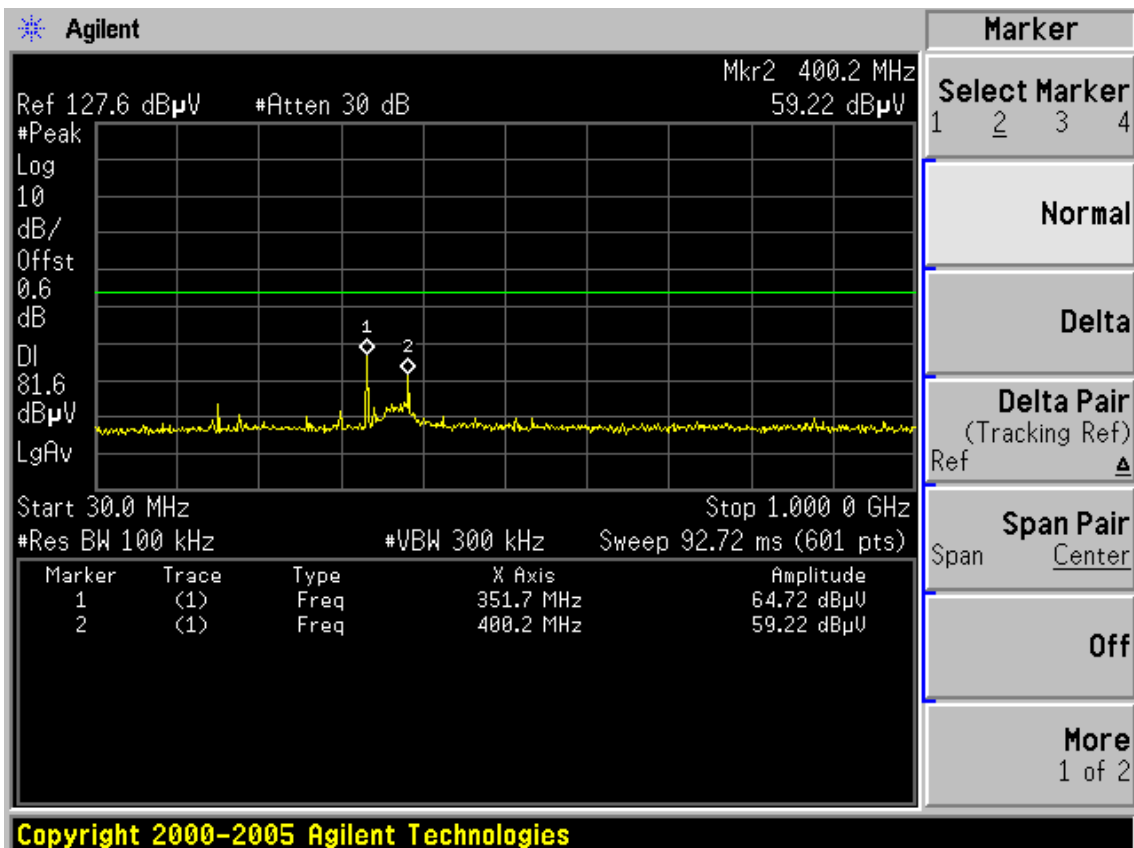
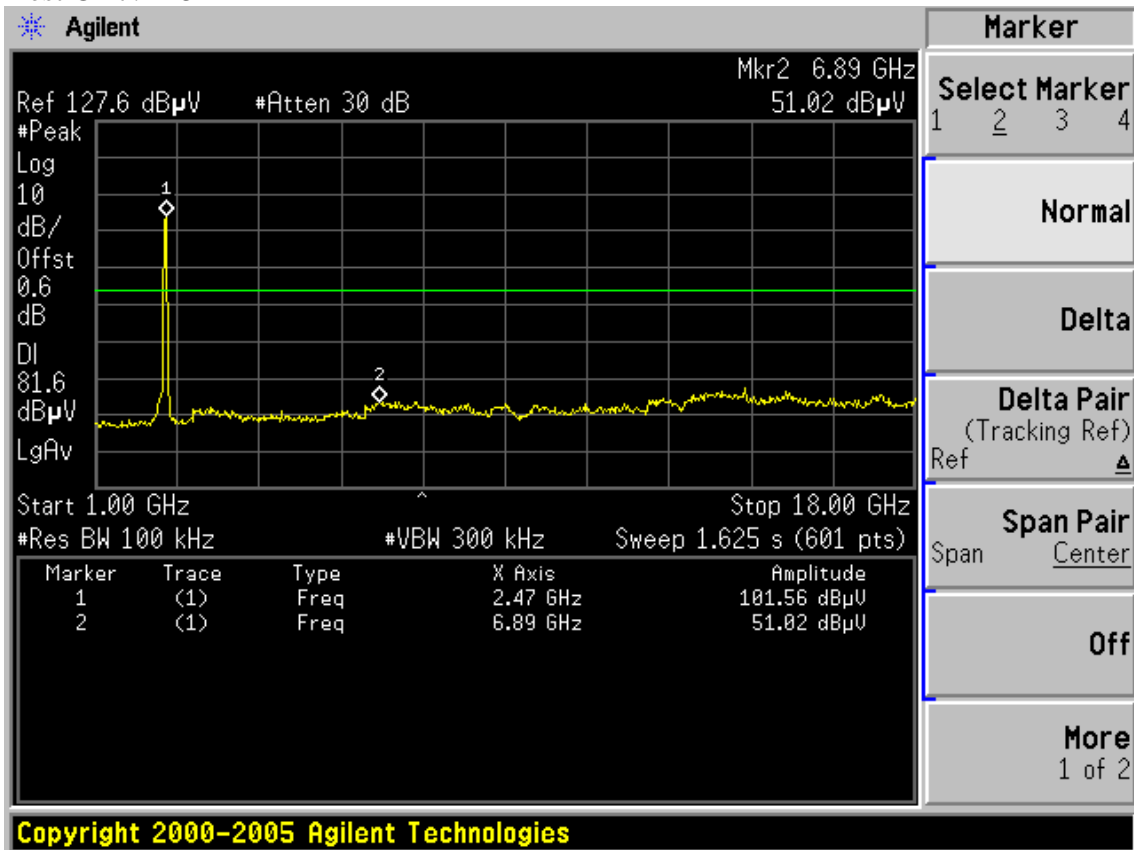
Test Mode: IEEE 802.11n HT40 TX  
 Test CH1: 2422MHz



Test CH4: 2437MHz



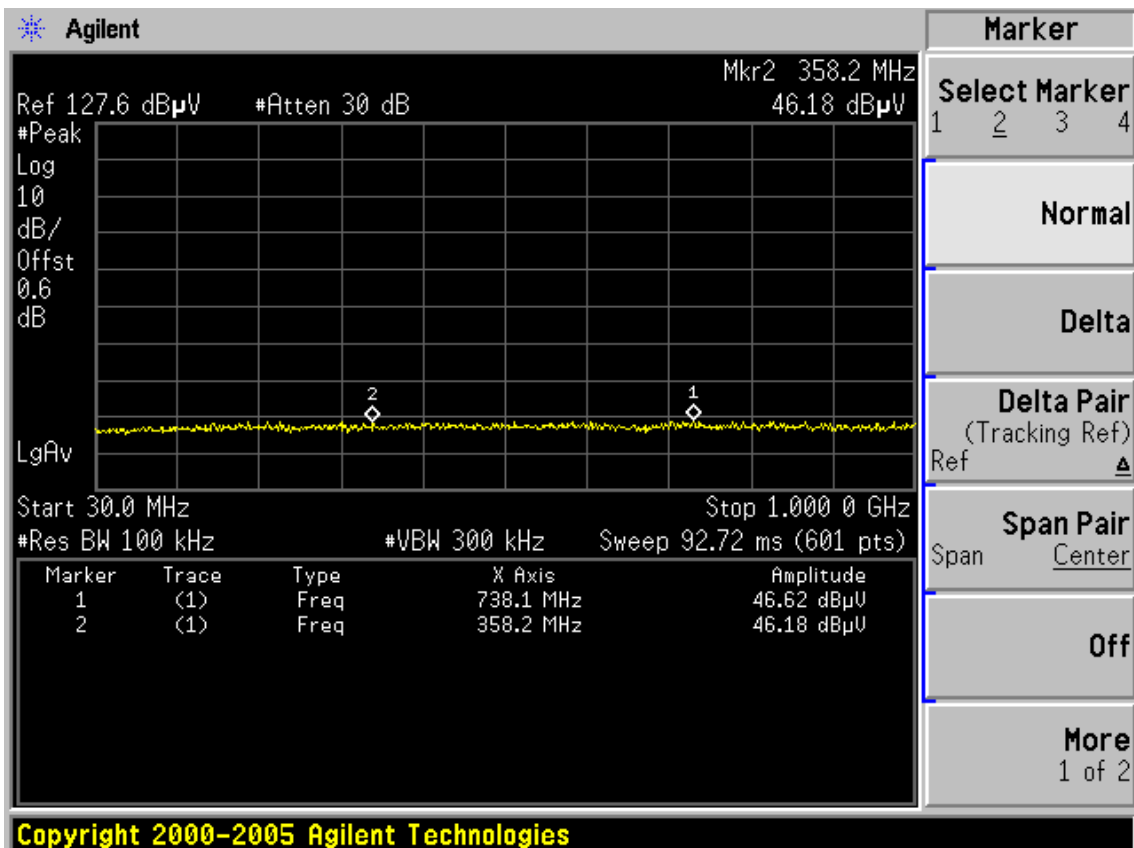
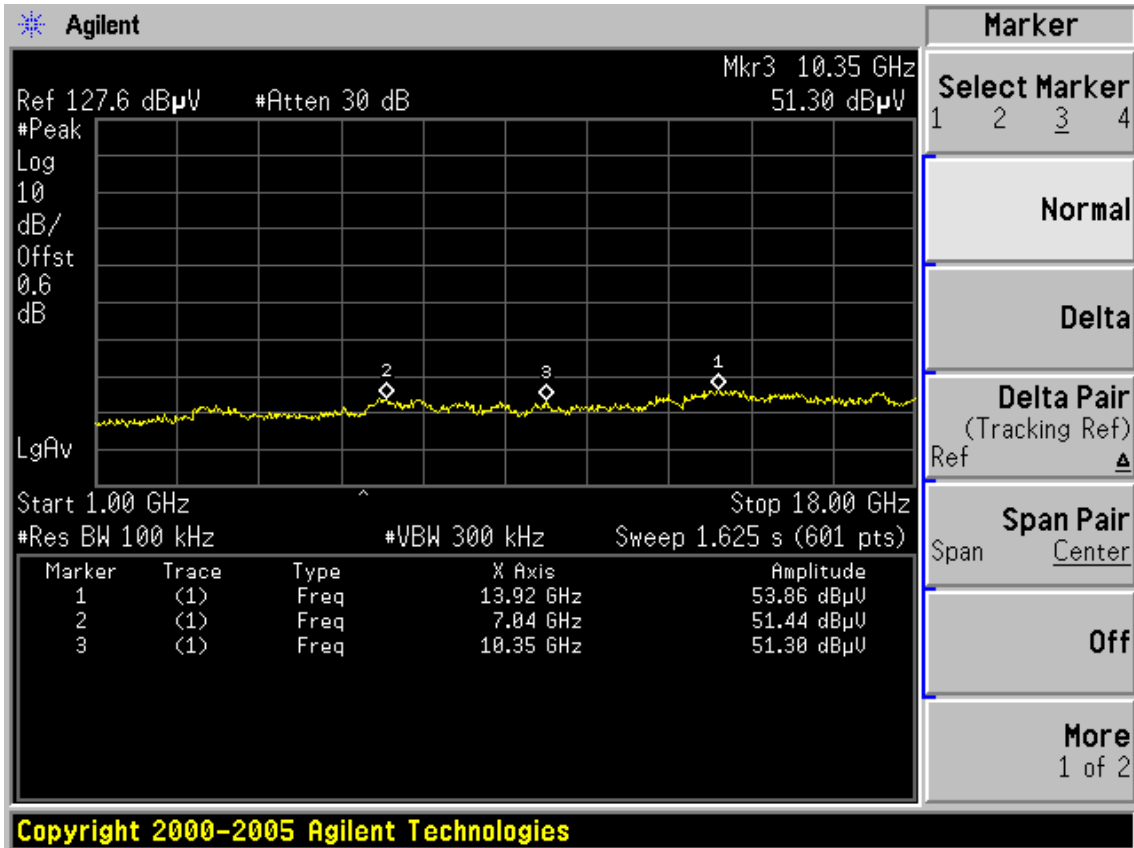
Test CH7: 2452MHz



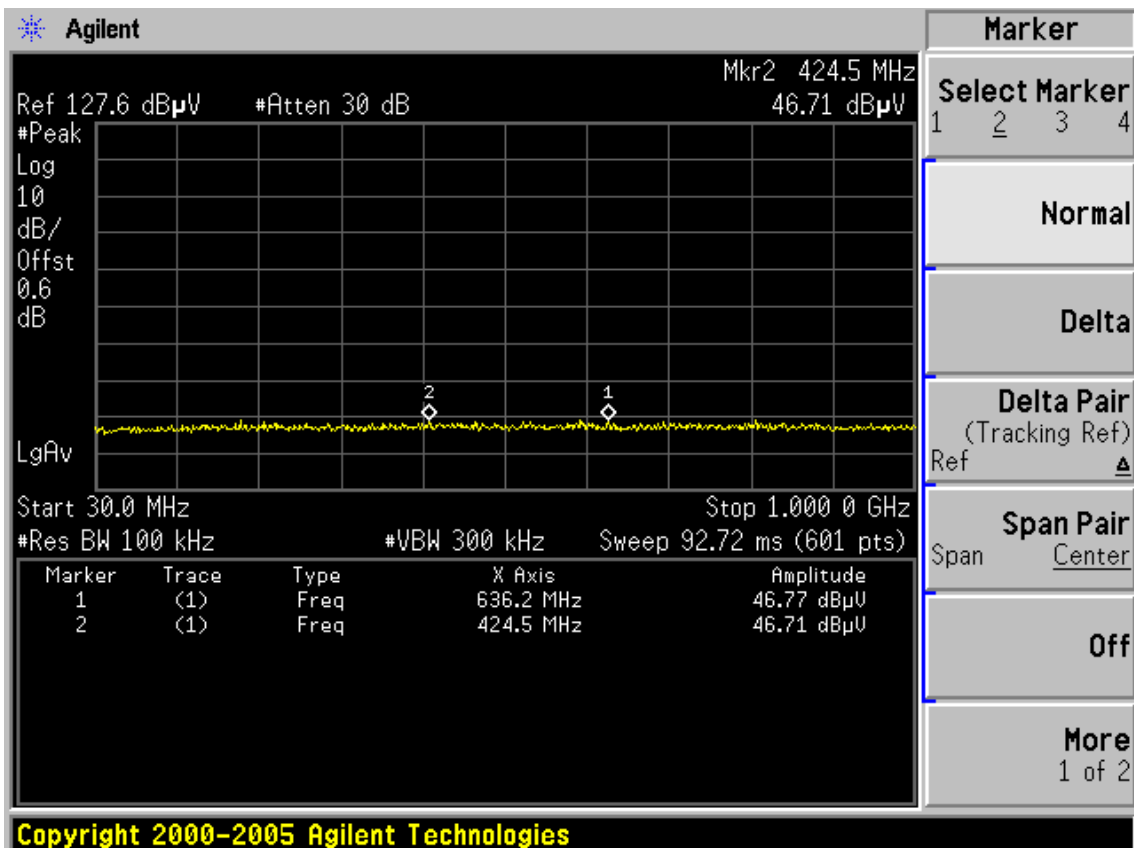
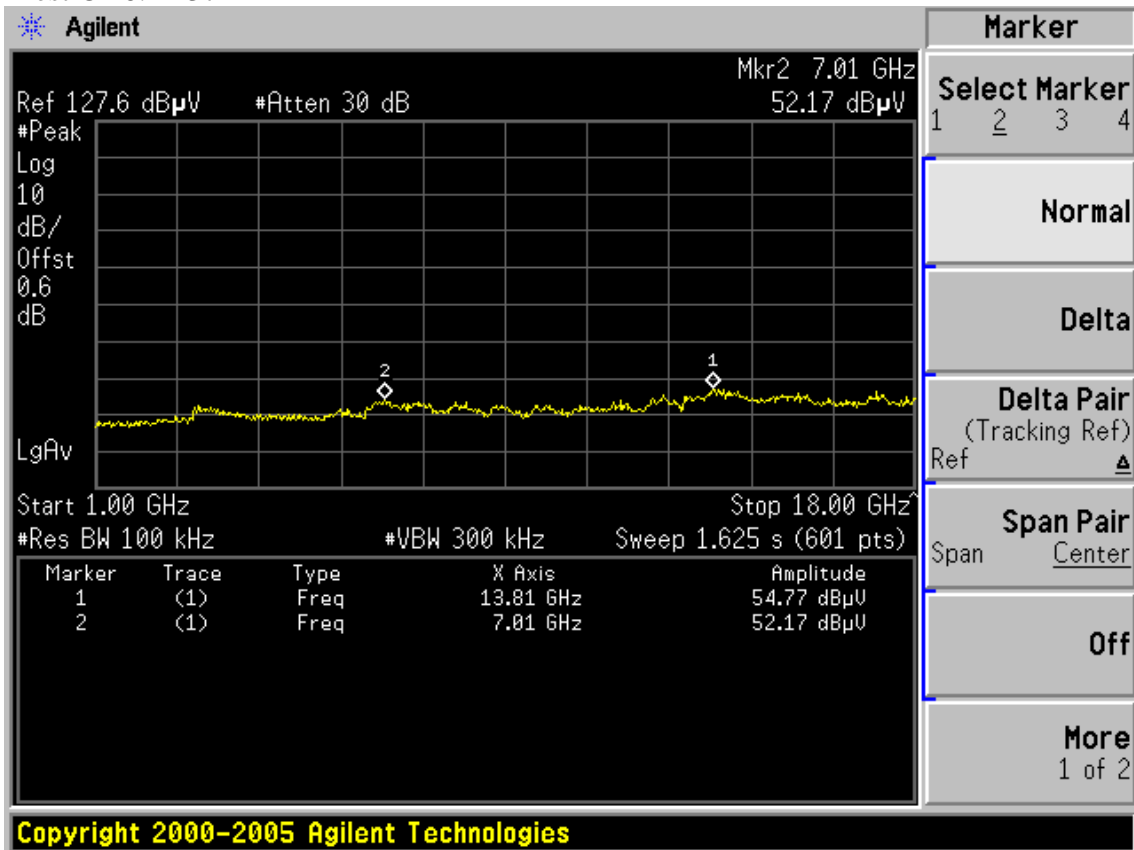
**Chain 3:**

Test Mode: IEEE 802.11b / IEEE 802.11g / IEEE 802.11n HT20 TX

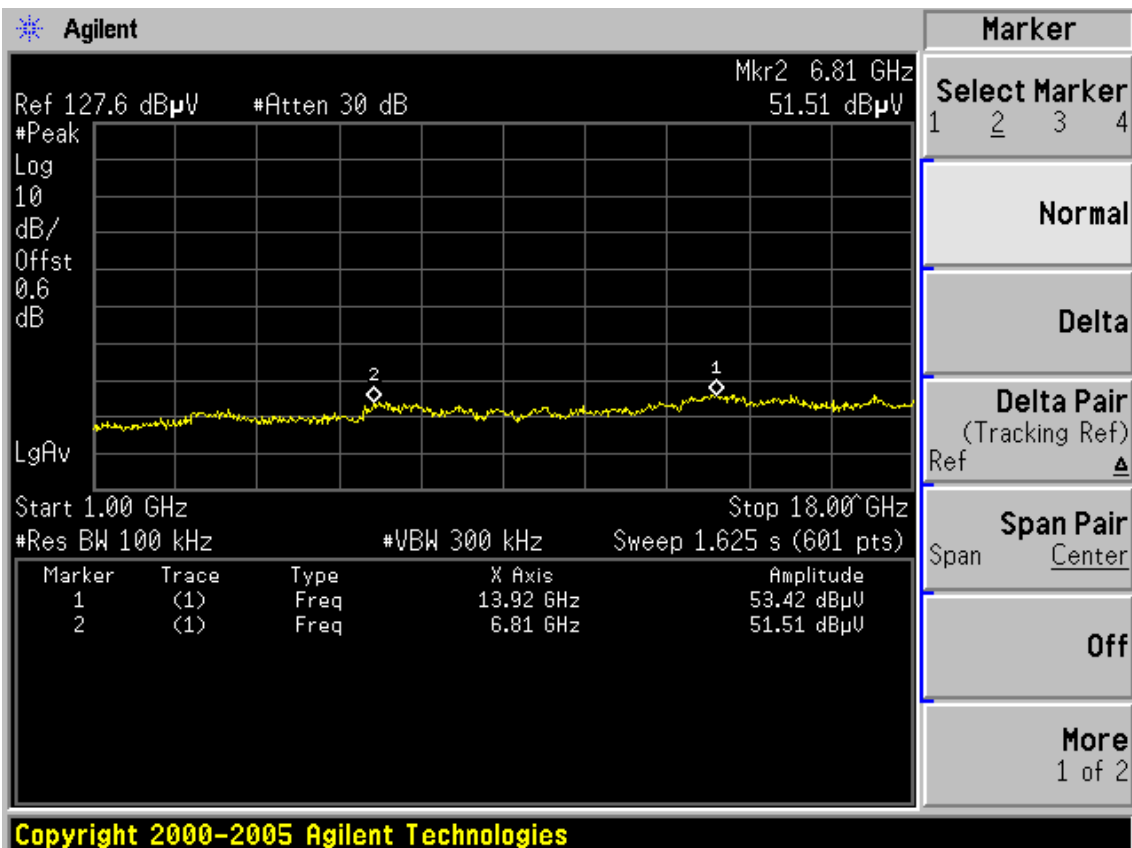
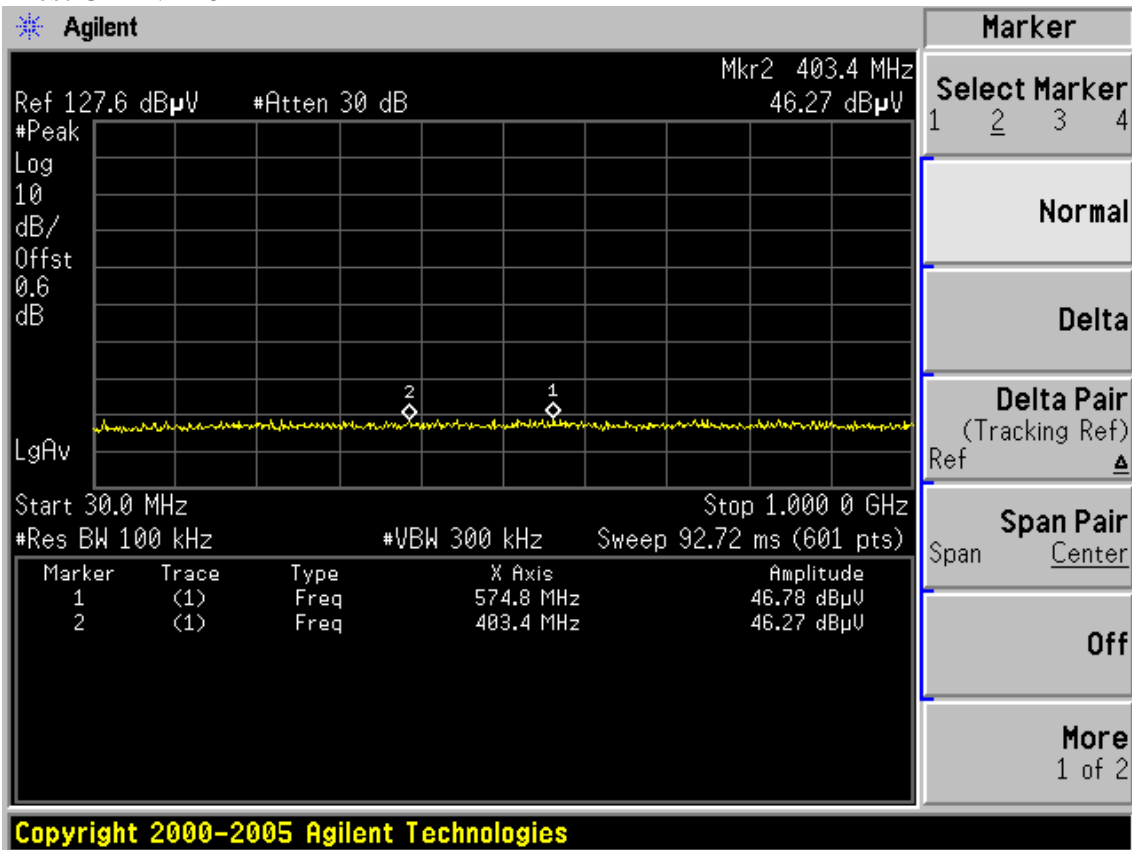
Test CH1: 2412MHz



Test CH6: 2437MHz

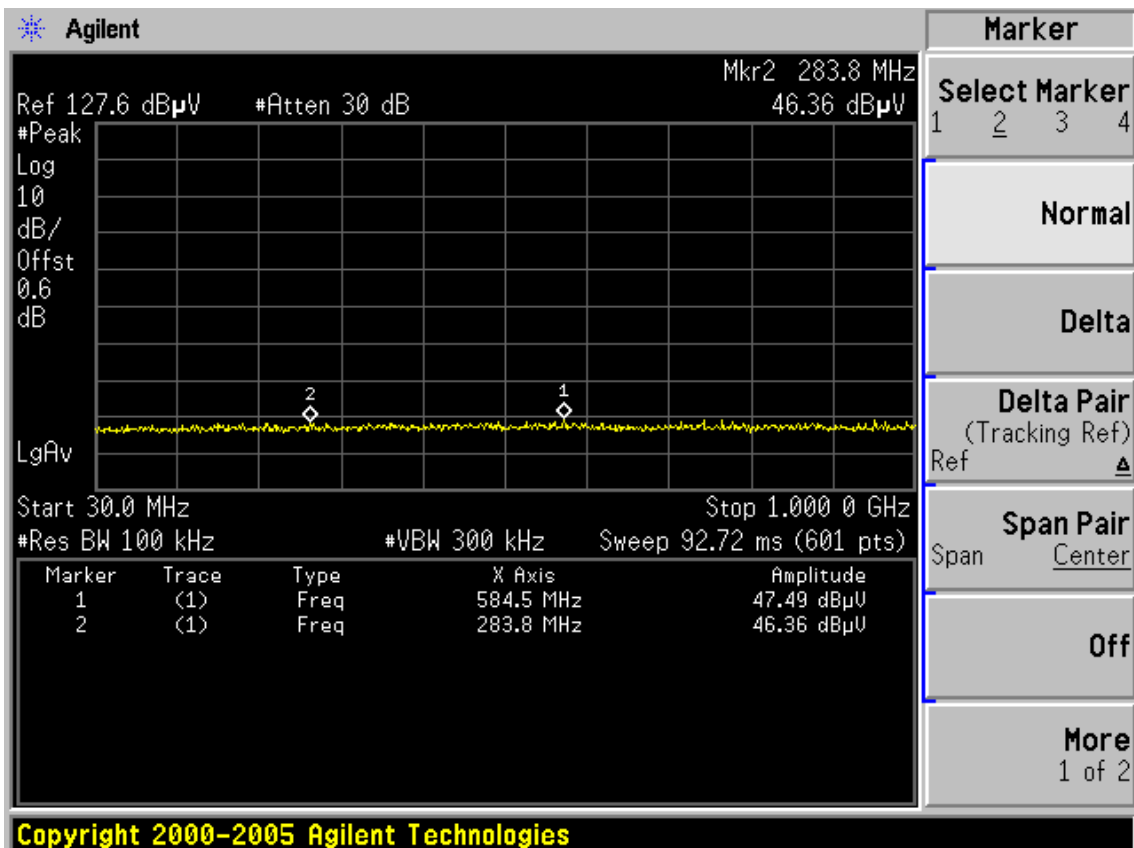
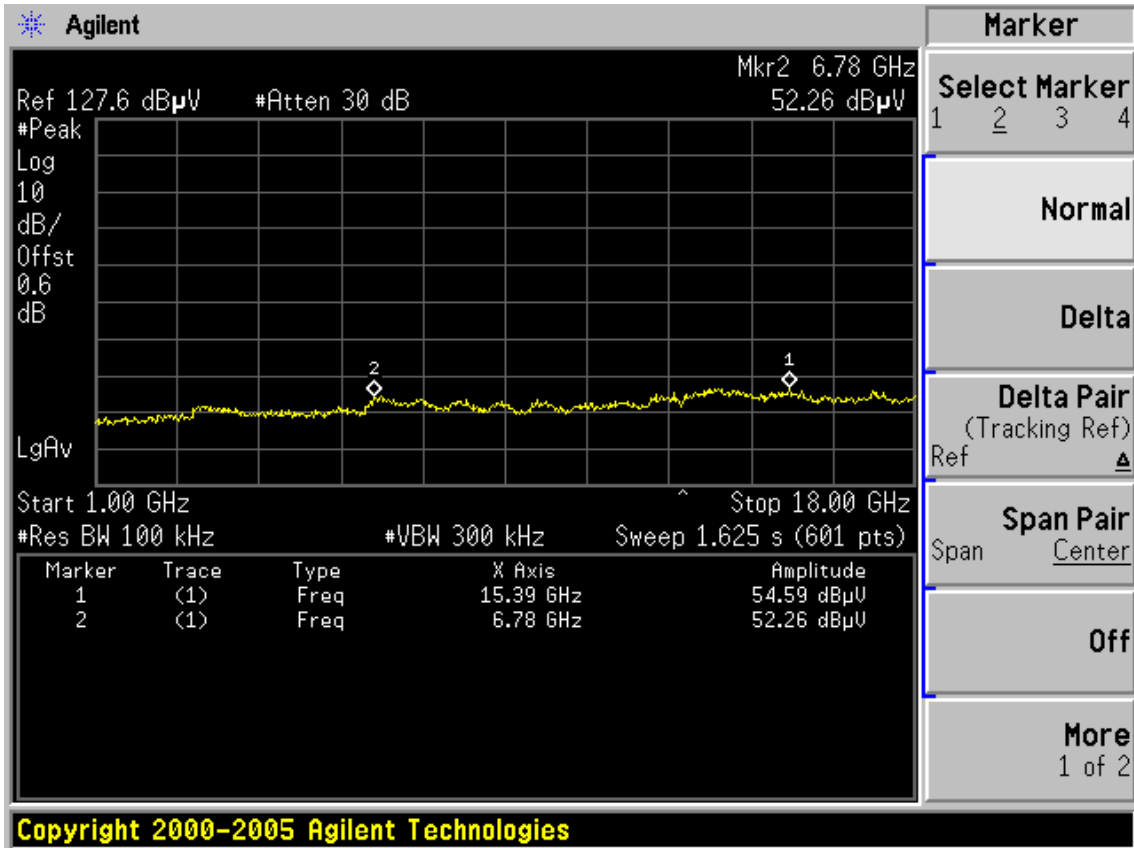


Test CH11: 2462MHz

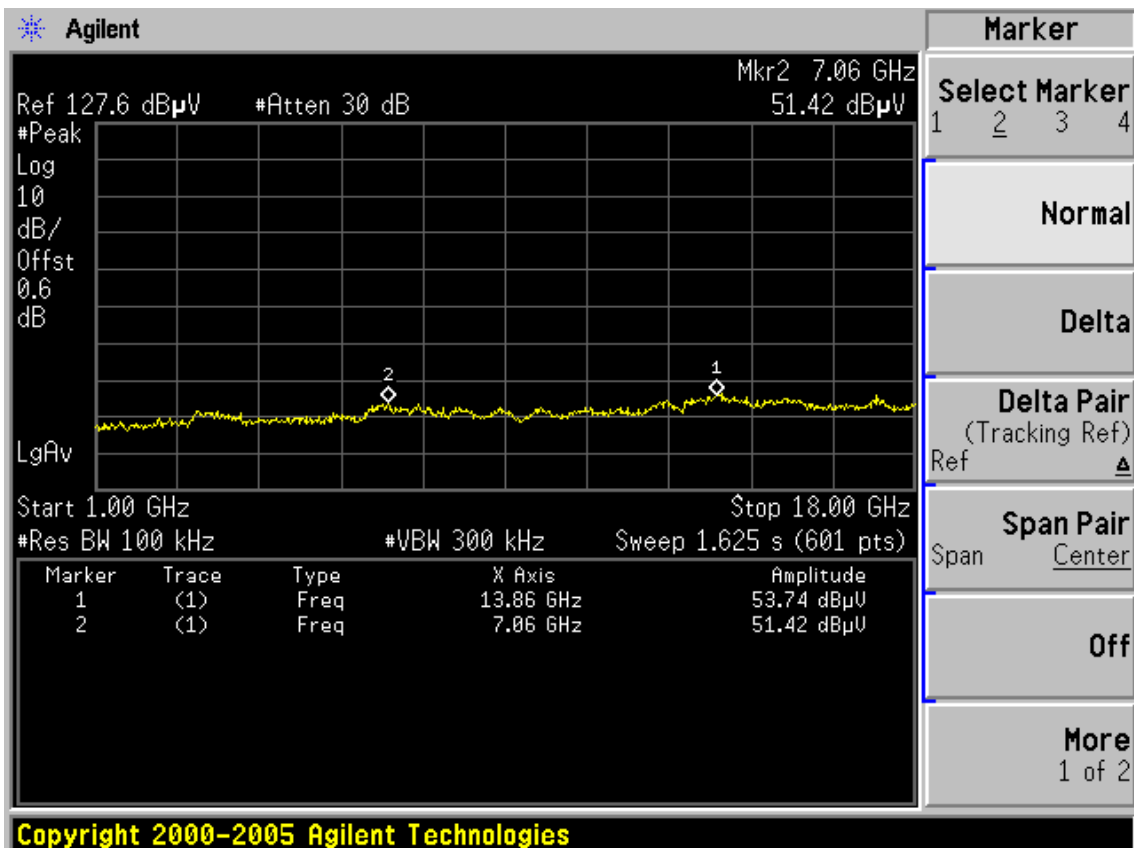
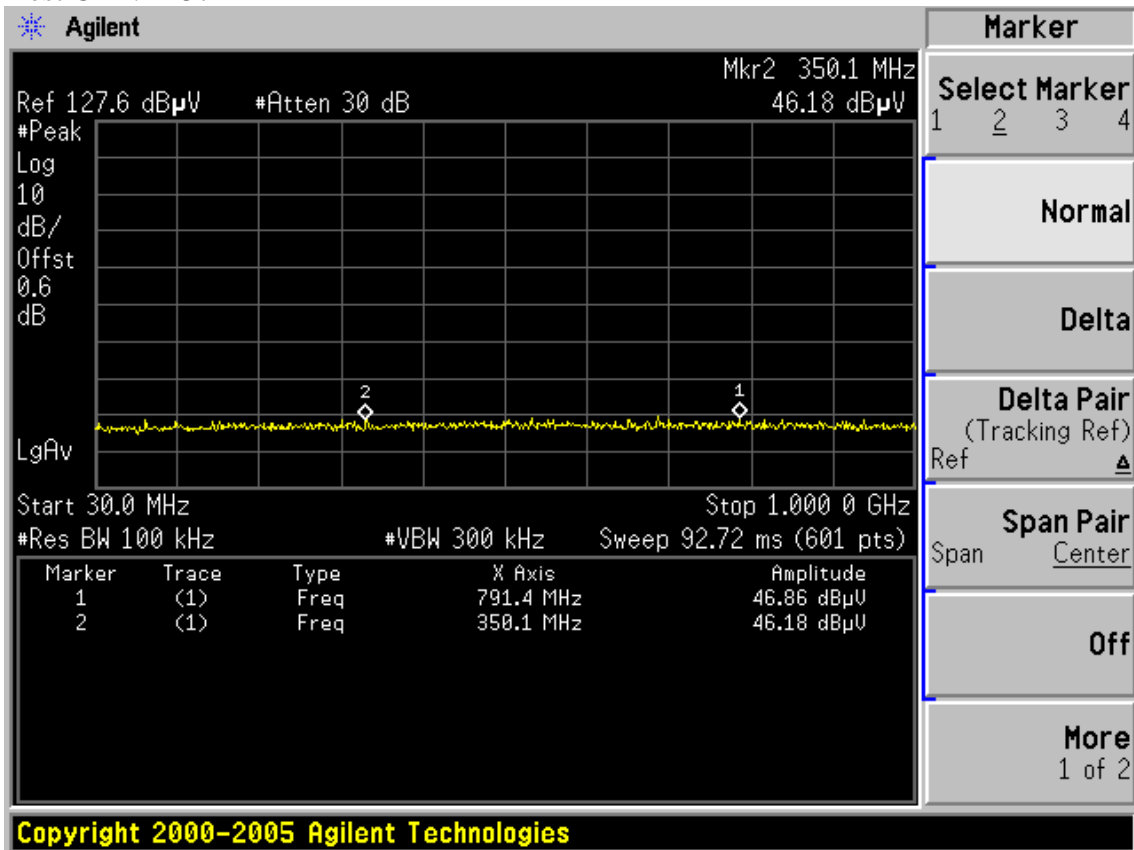




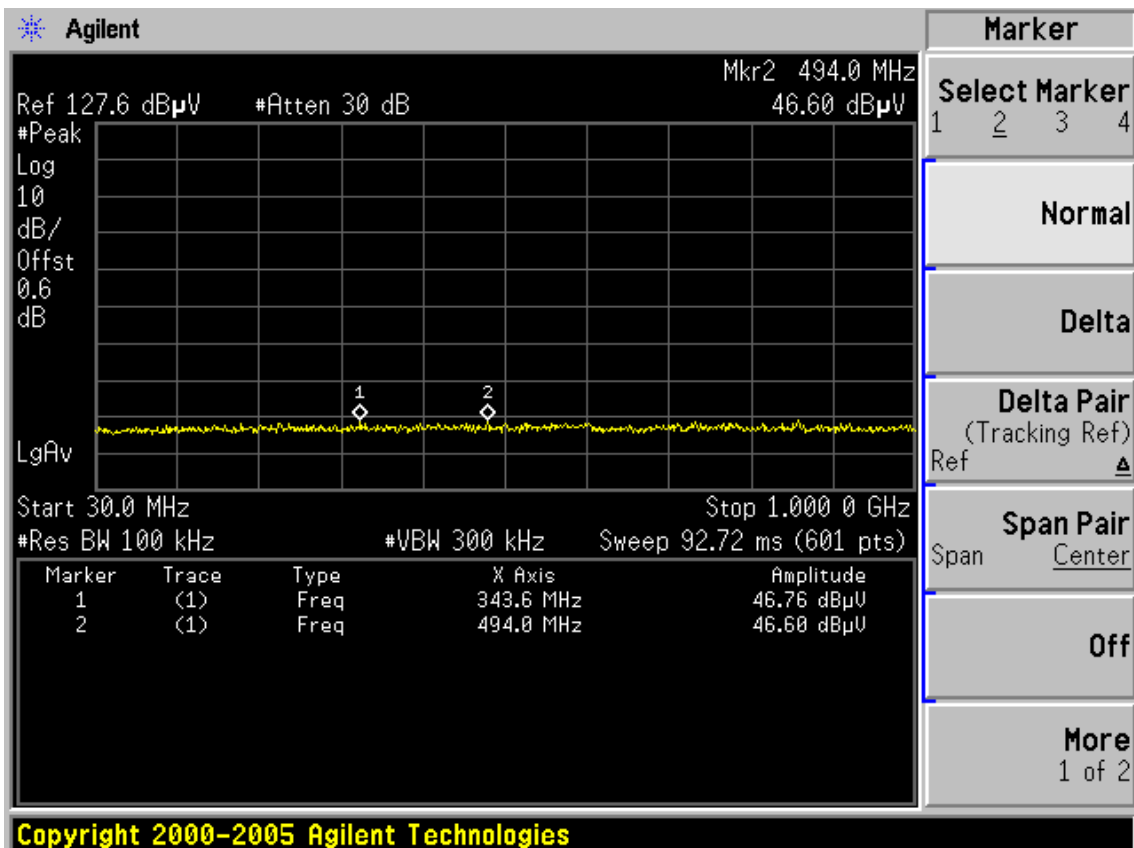
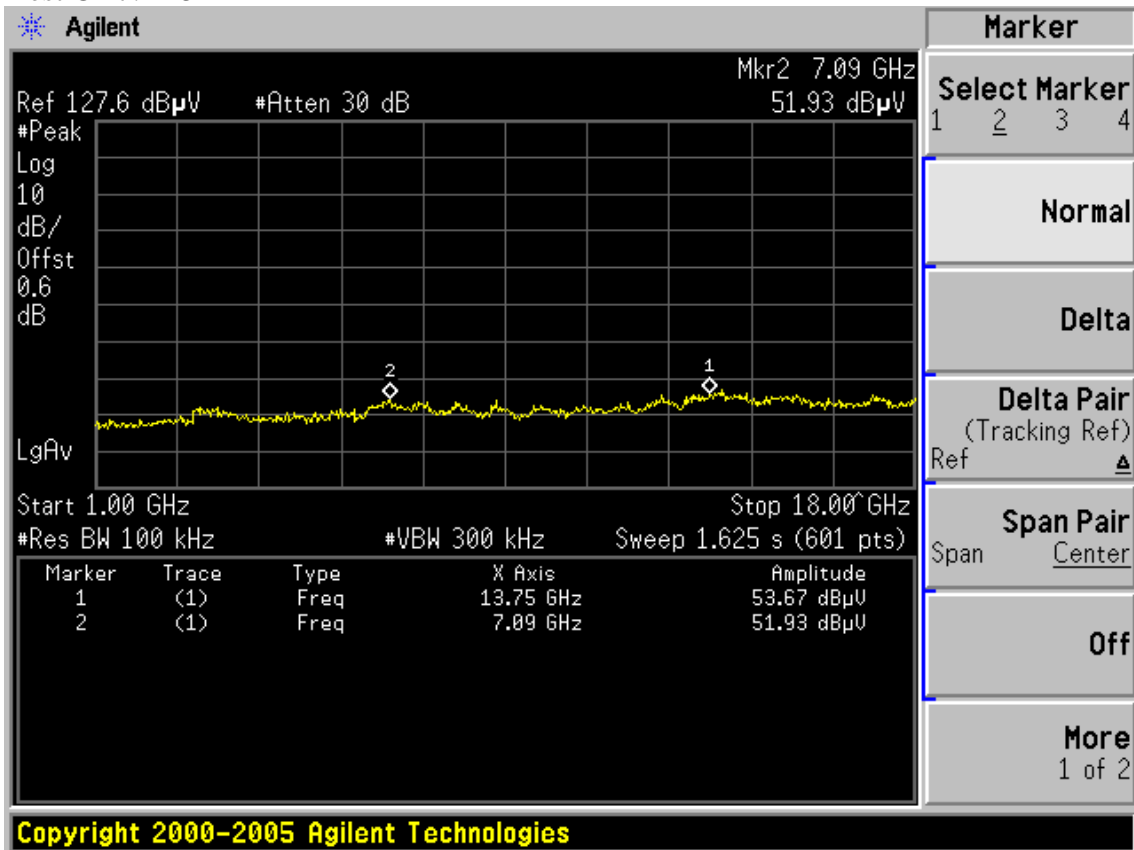
Test Mode: IEEE 802.11n HT40 TX  
 Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz

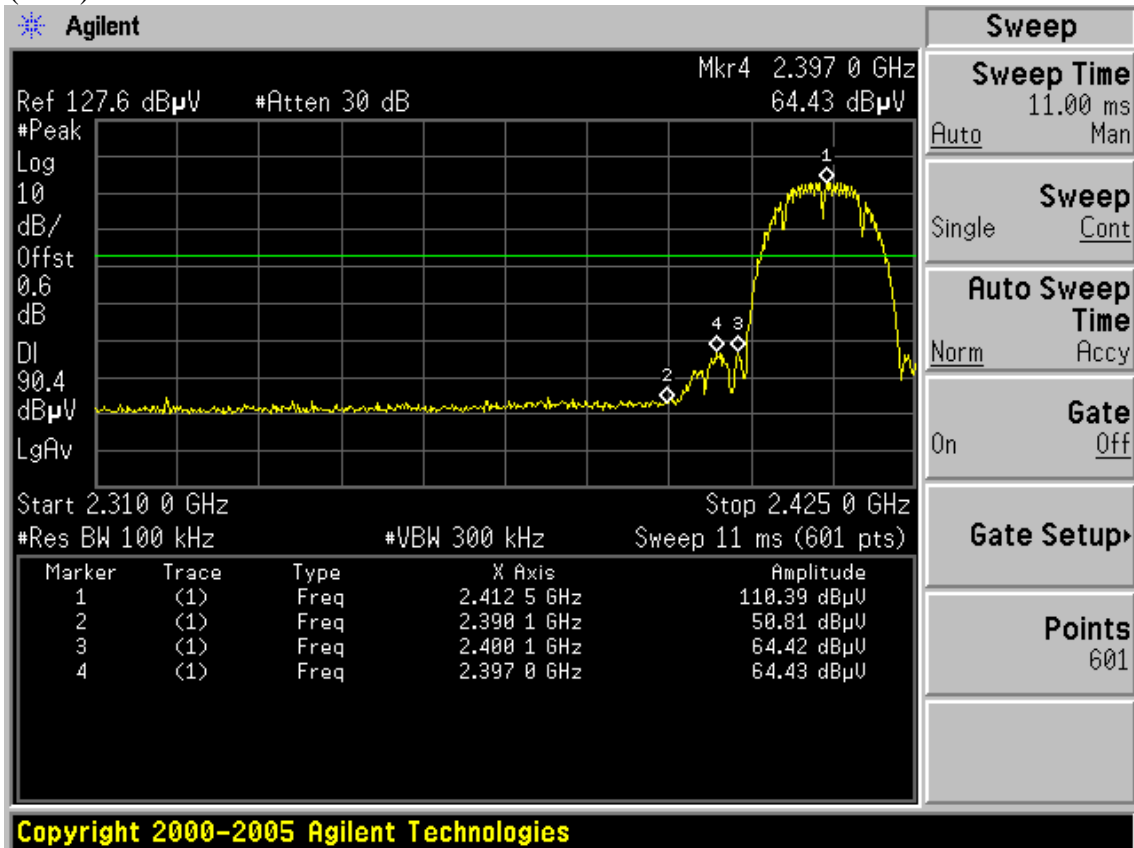


**Conducted emission test data:**

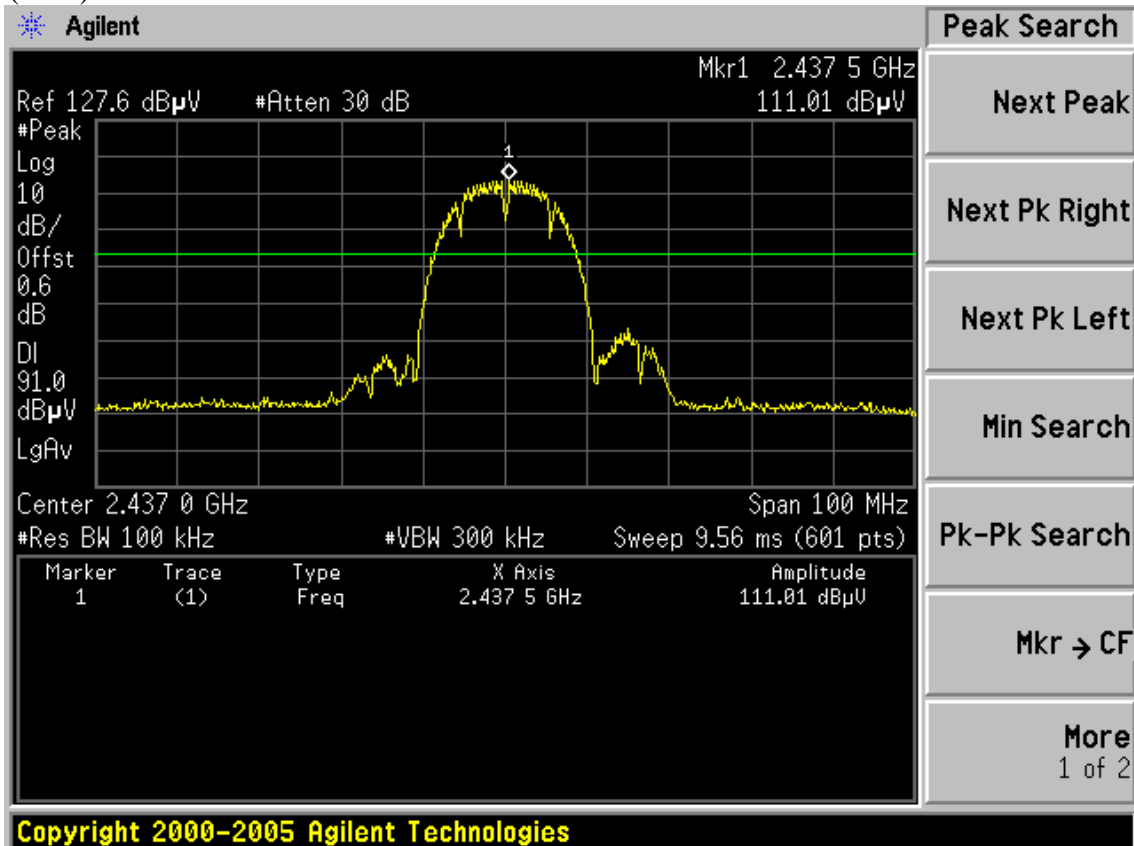
**Chain 1:**

Test mode: IEEE 802.11b TX

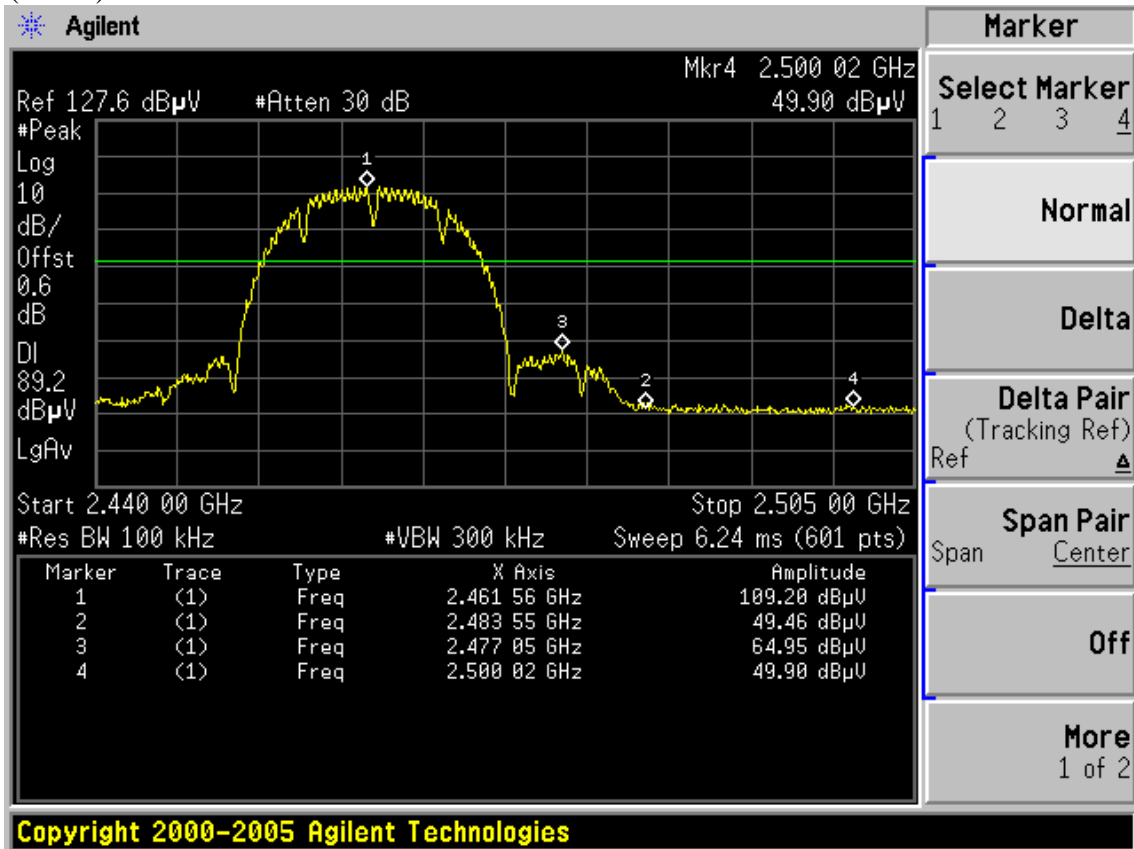
(CH1)



(CH6)

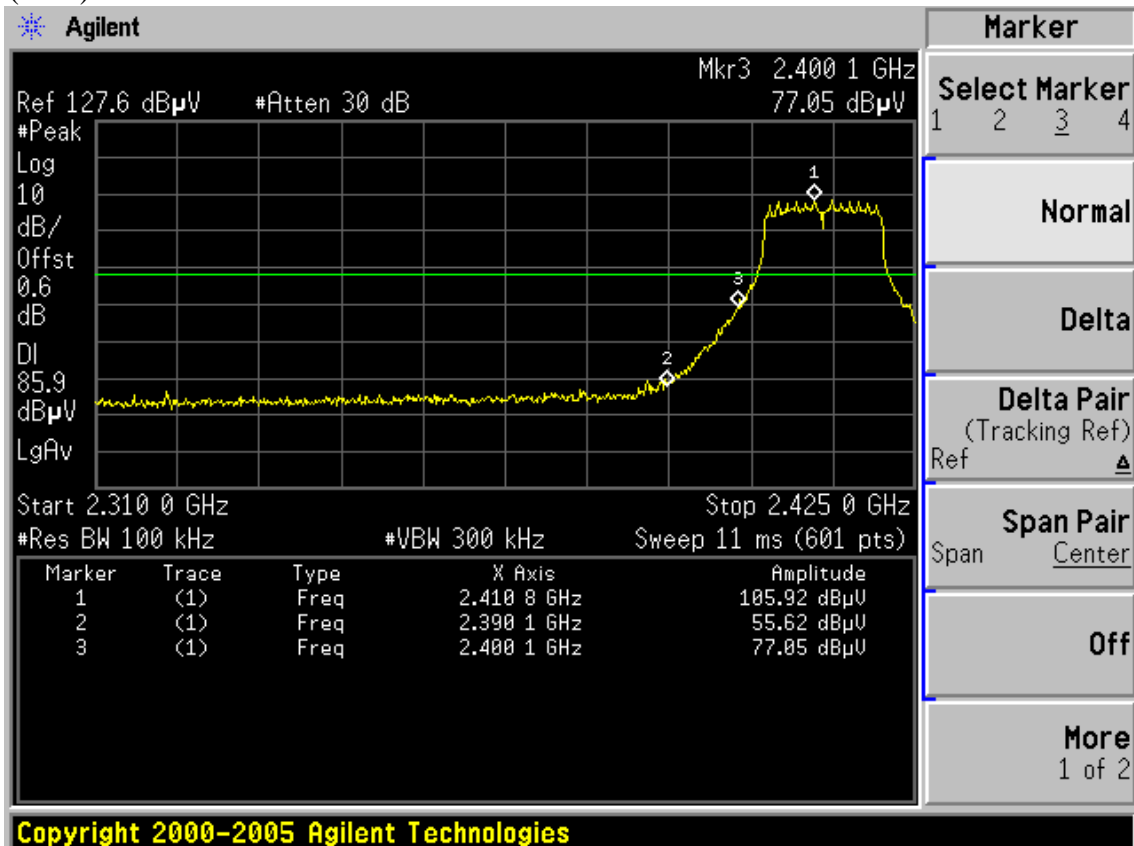


(CH11)

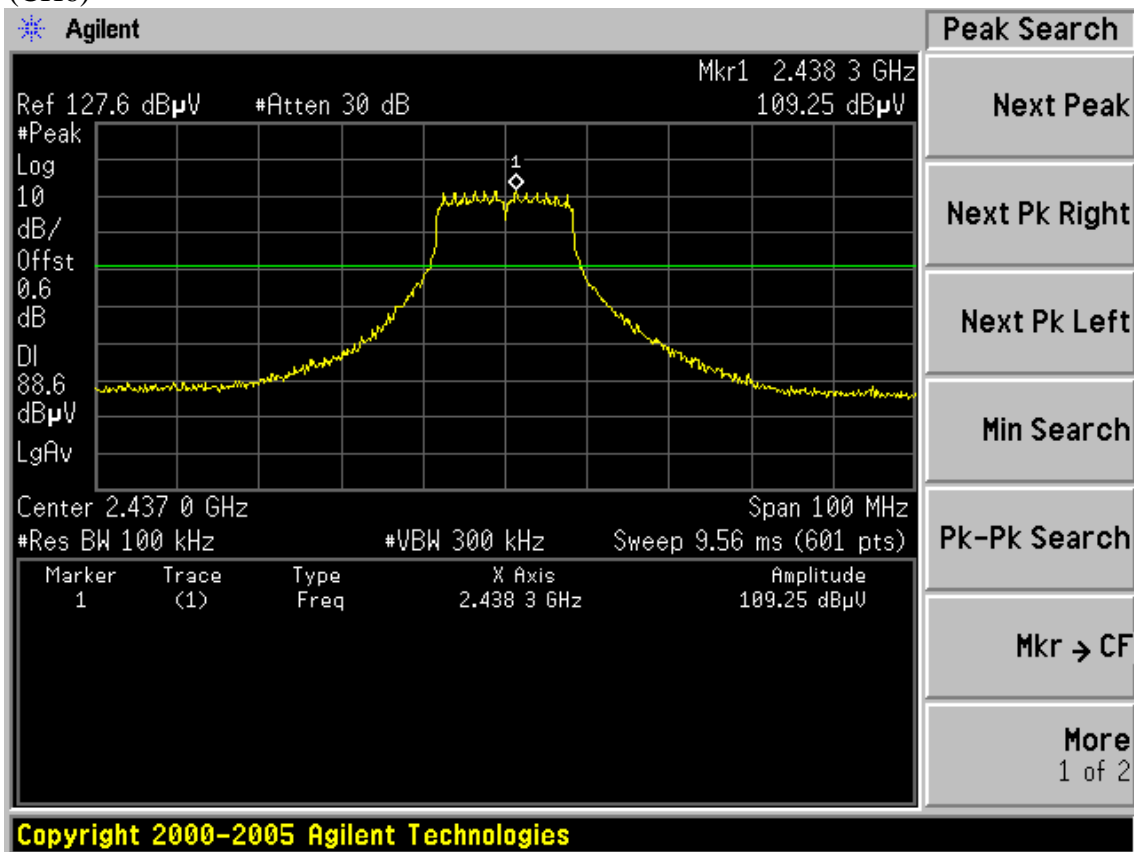


Test mode: IEEE 802.11g TX

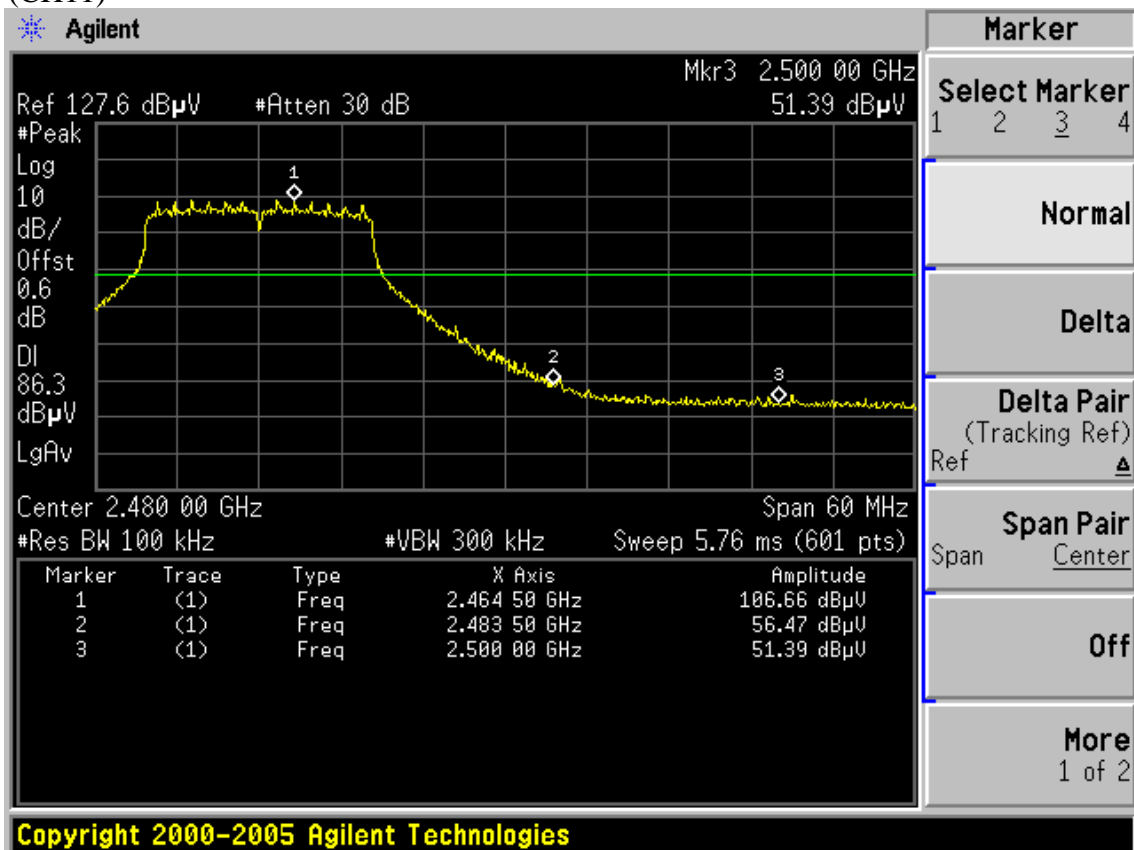
(CH1)



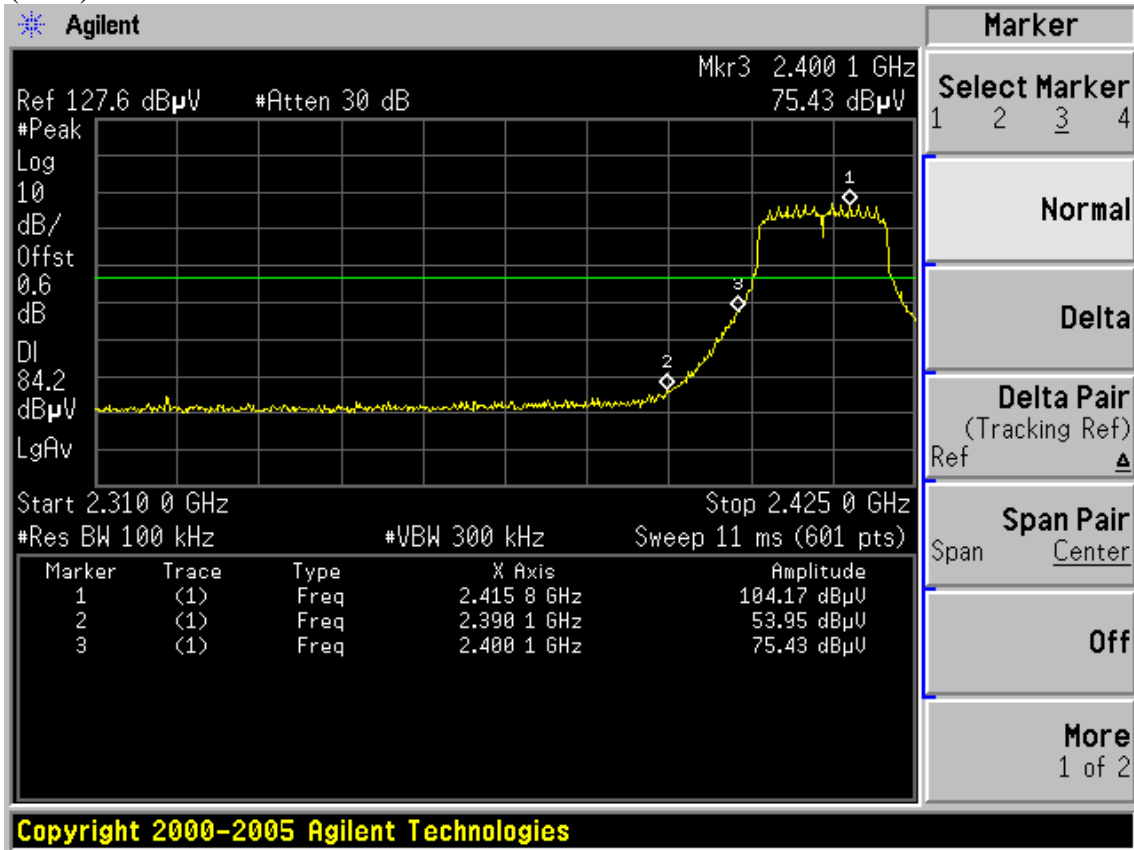
(CH6)



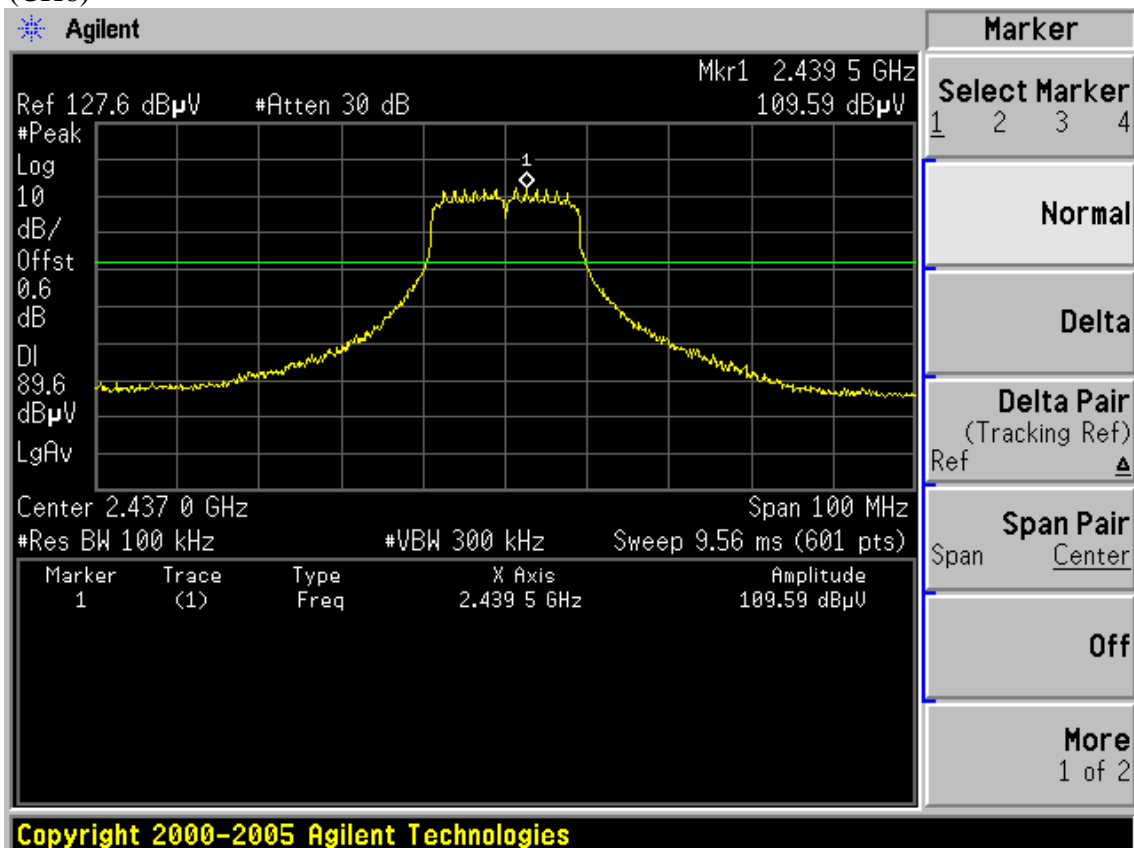
(CH11)



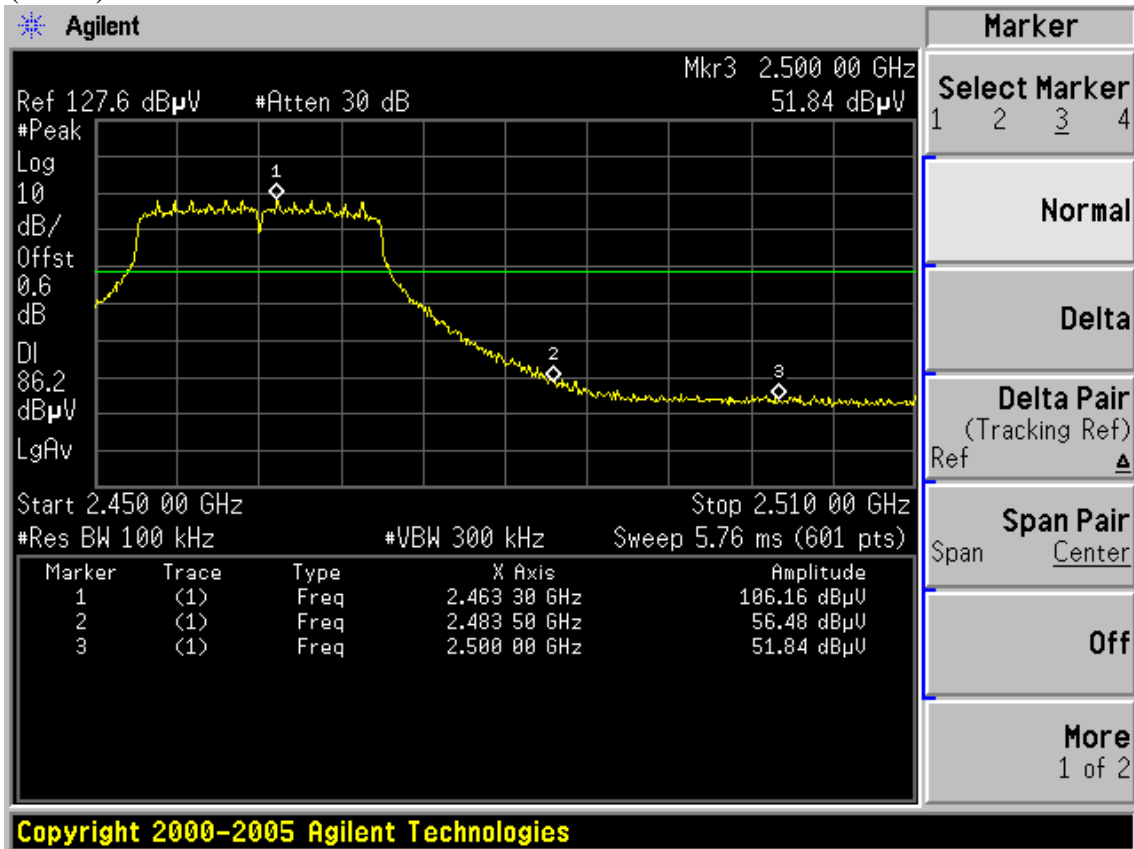
Test mode: IEEE 802.11n HT20 TX  
(CH1)



(CH6)

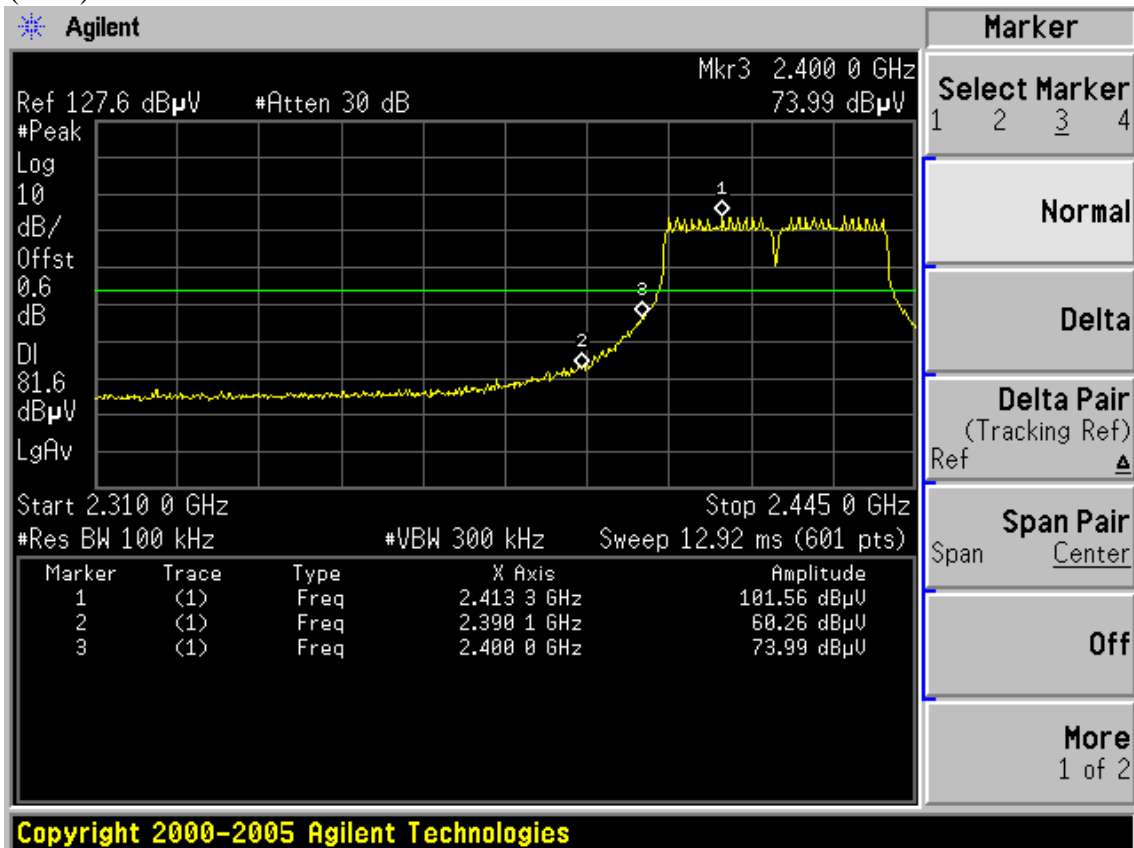


(CH11)



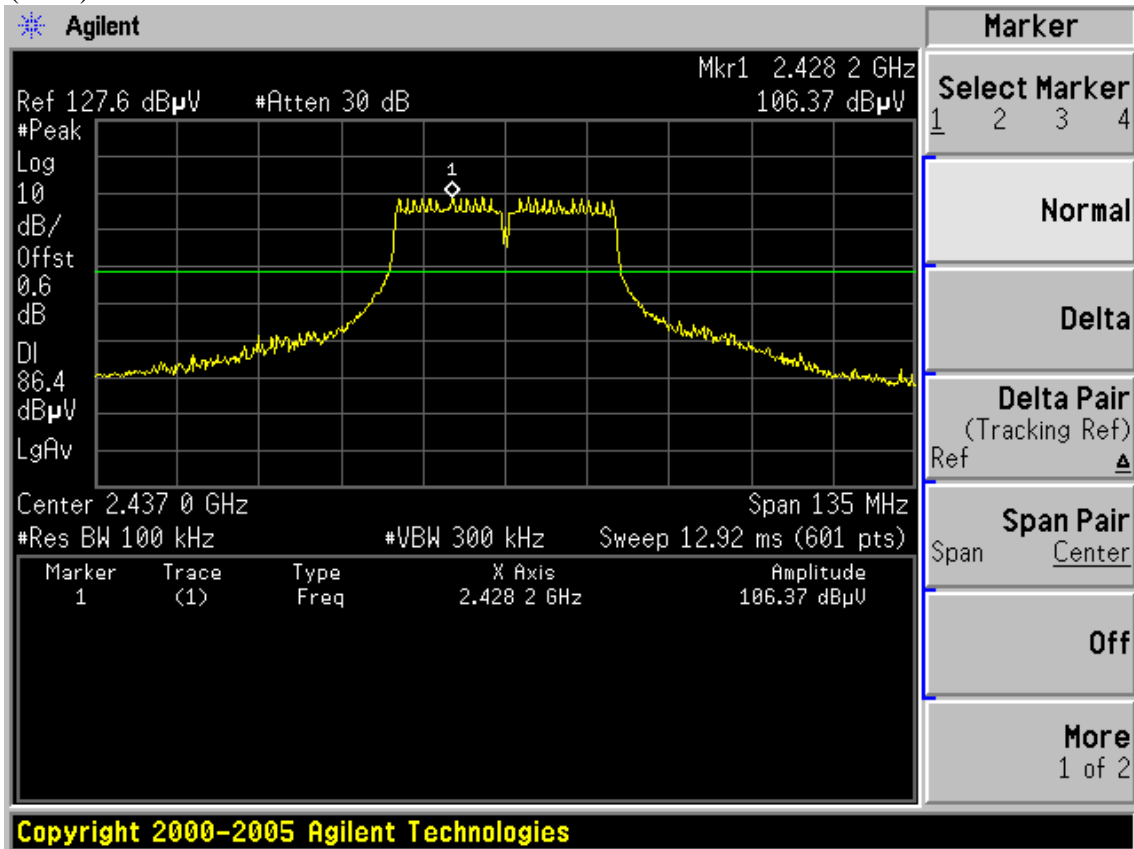
Test mode: IEEE 802.11n HT40 TX

(CH1)

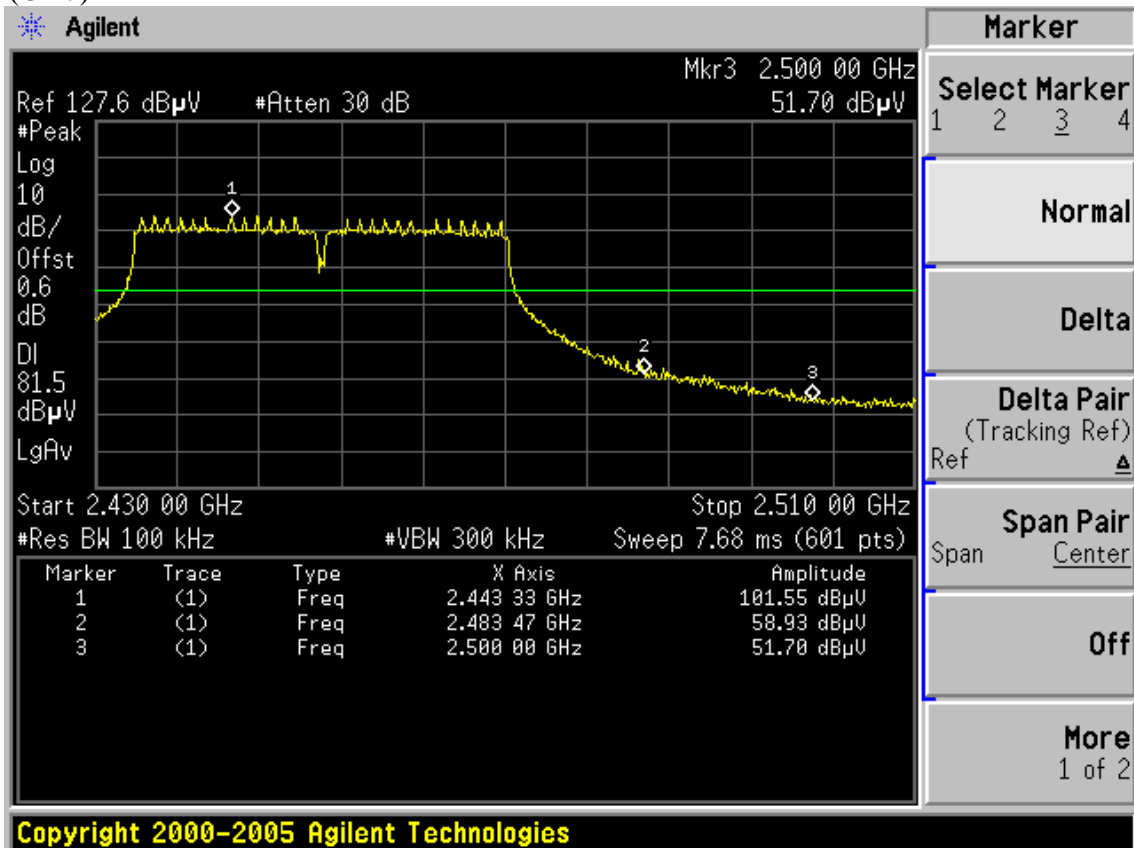




(CH4)

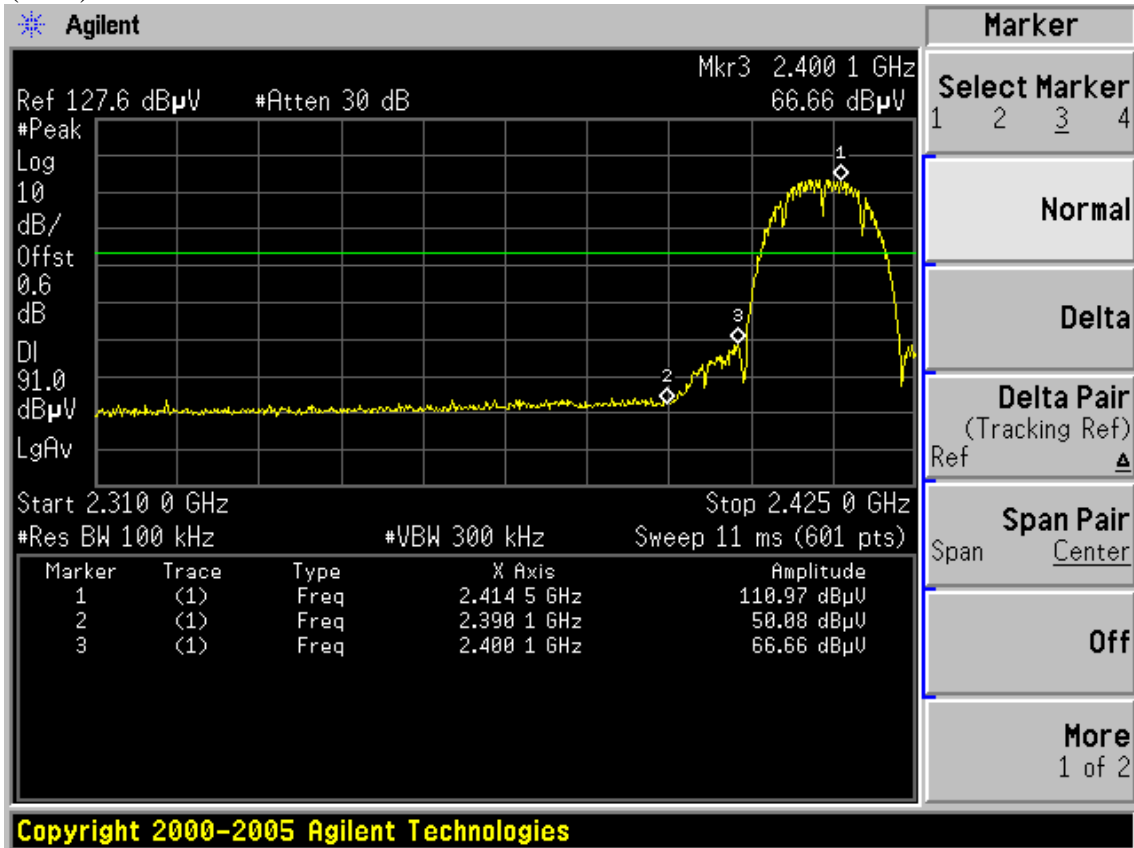


(CH7)

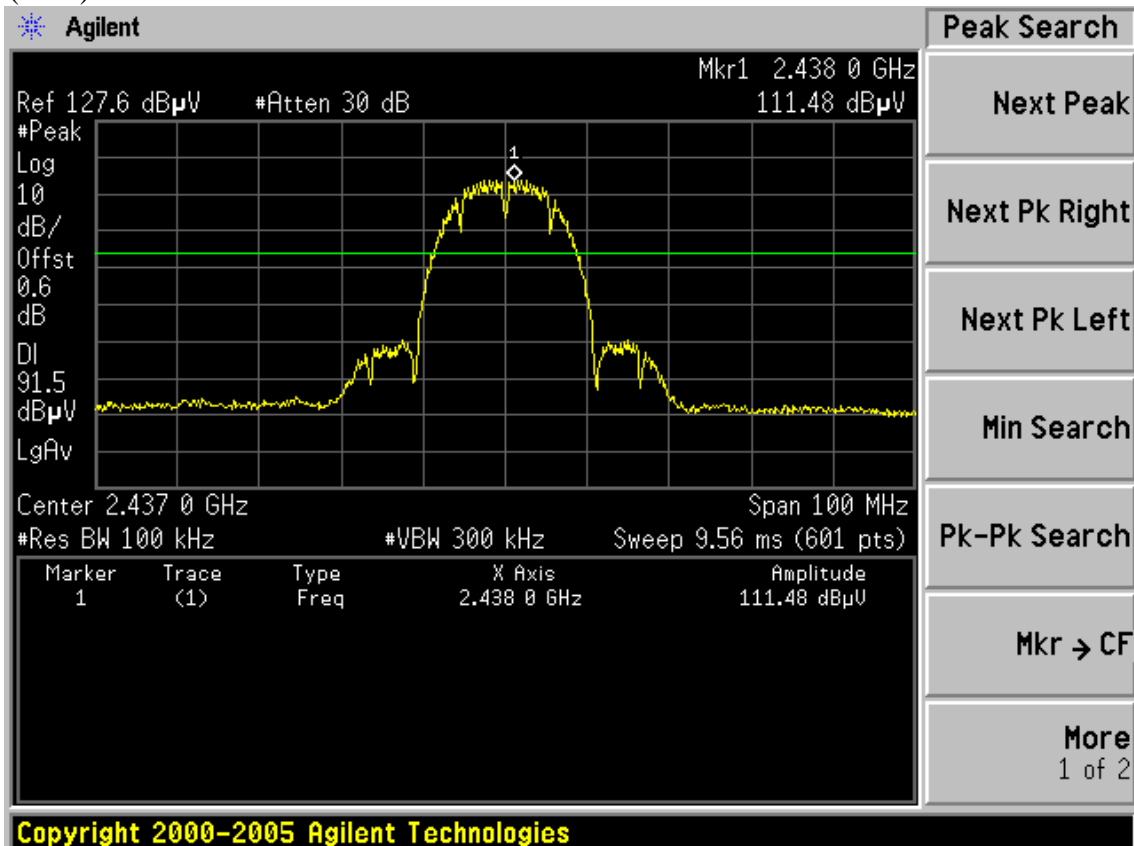


**Chain 2:**

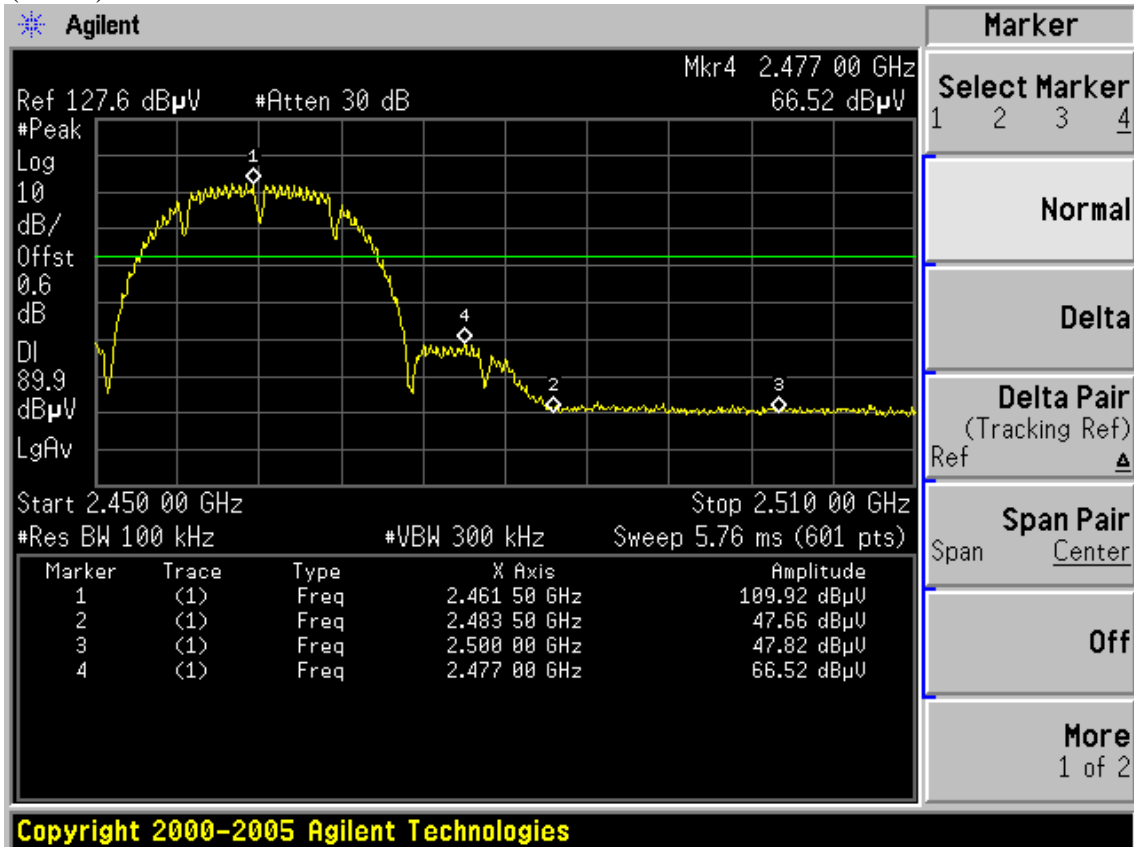
Test mode: IEEE 802.11b TX  
(CH1)



(CH6)

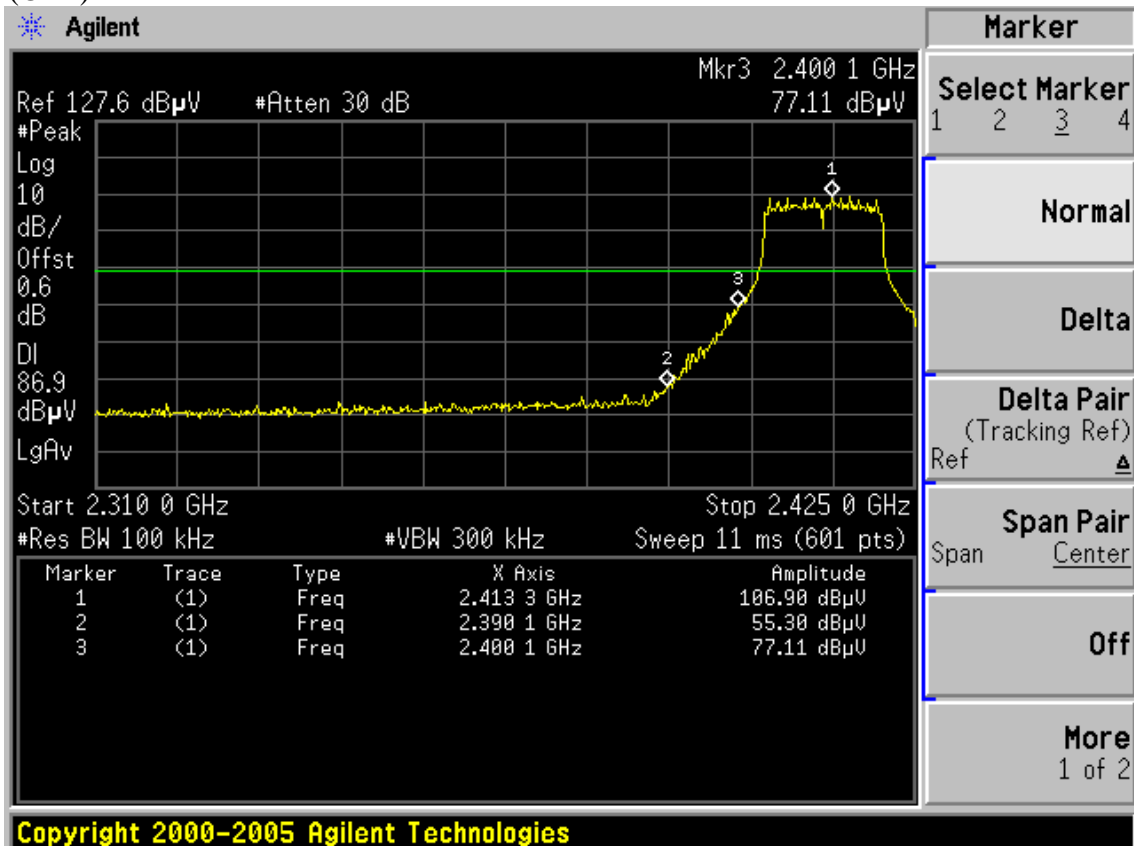


(CH11)

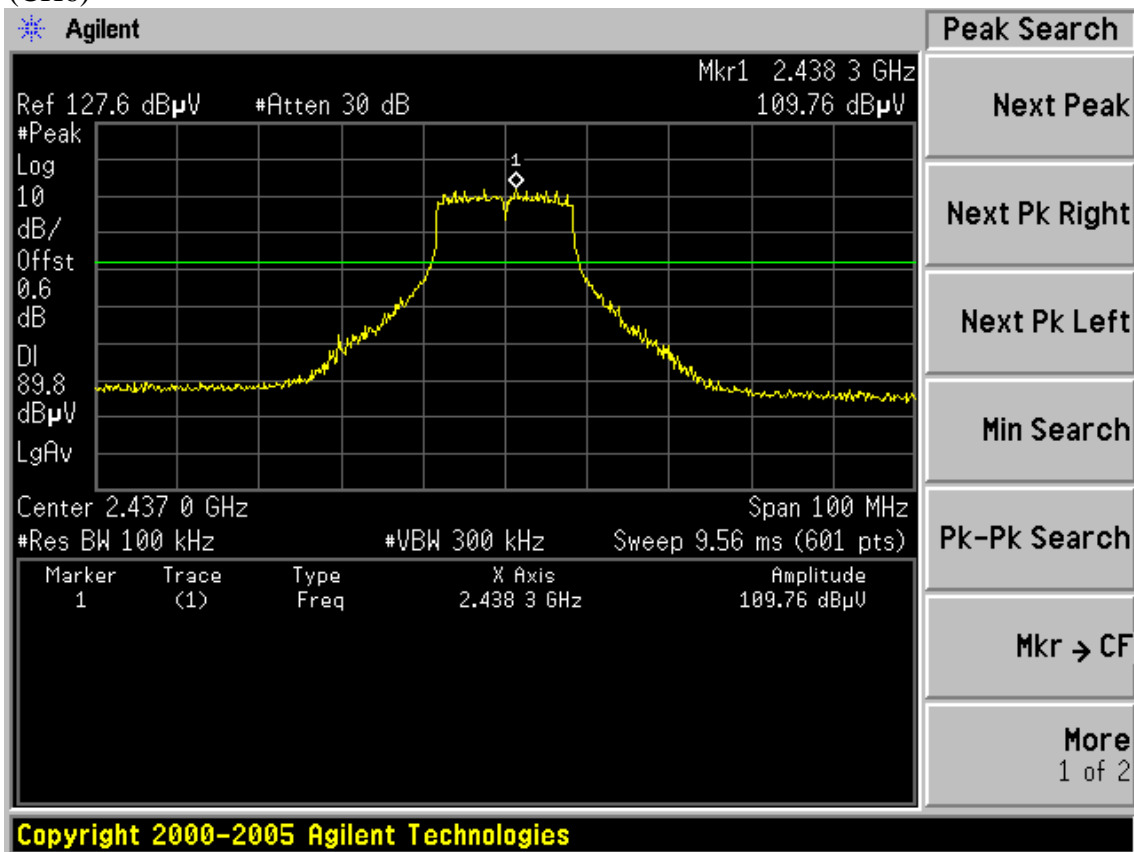


Test mode: IEEE 802.11g TX

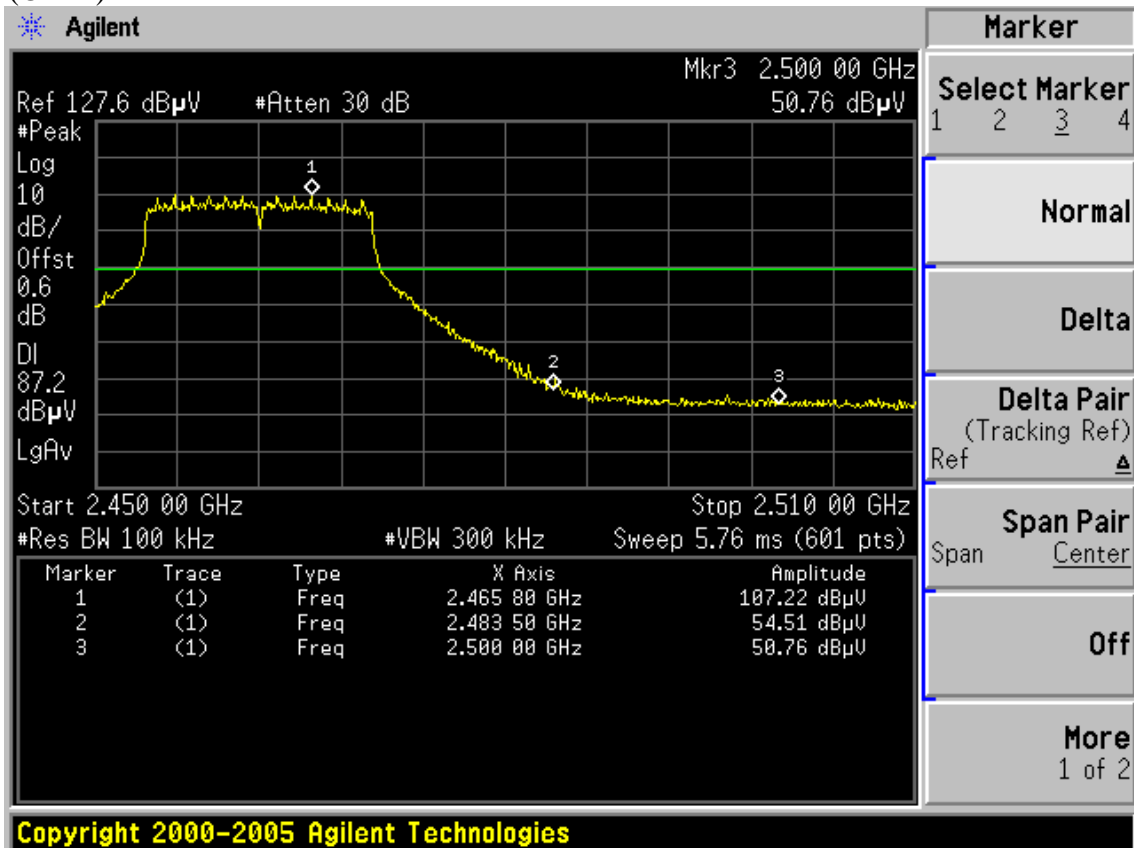
(CH1)



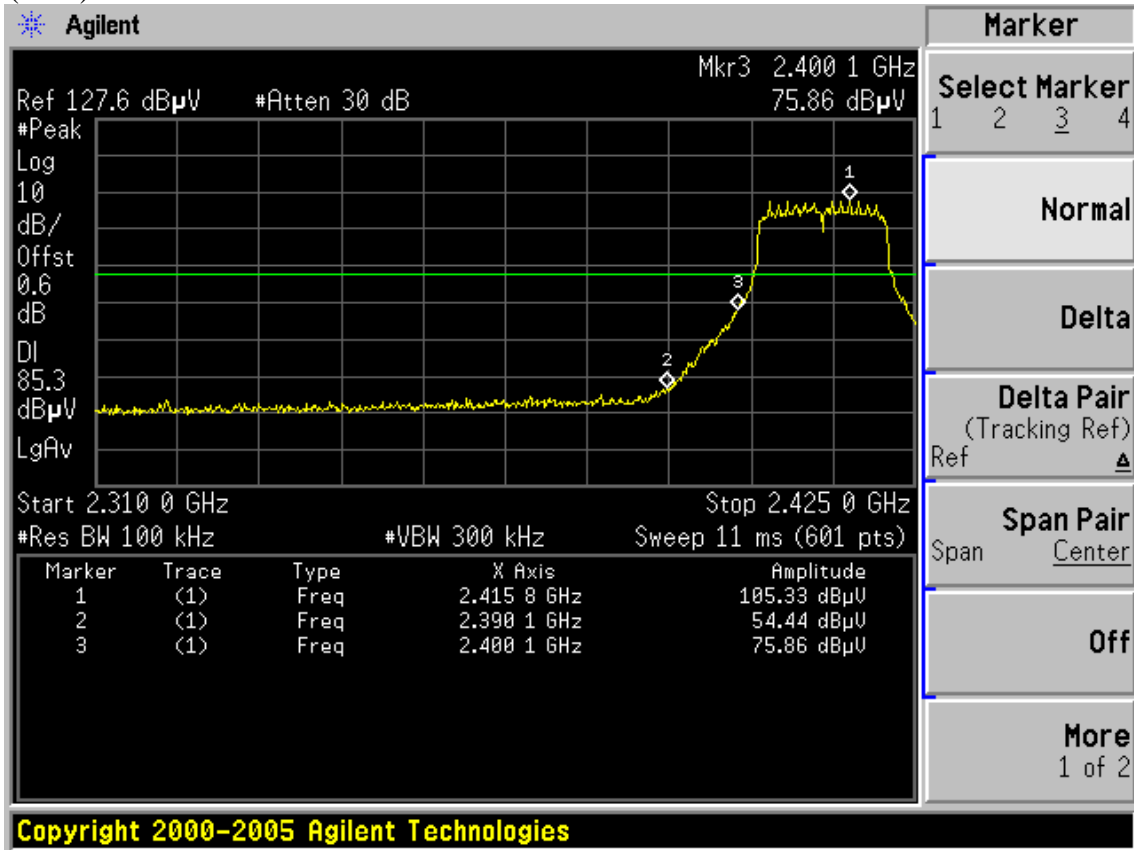
(CH6)



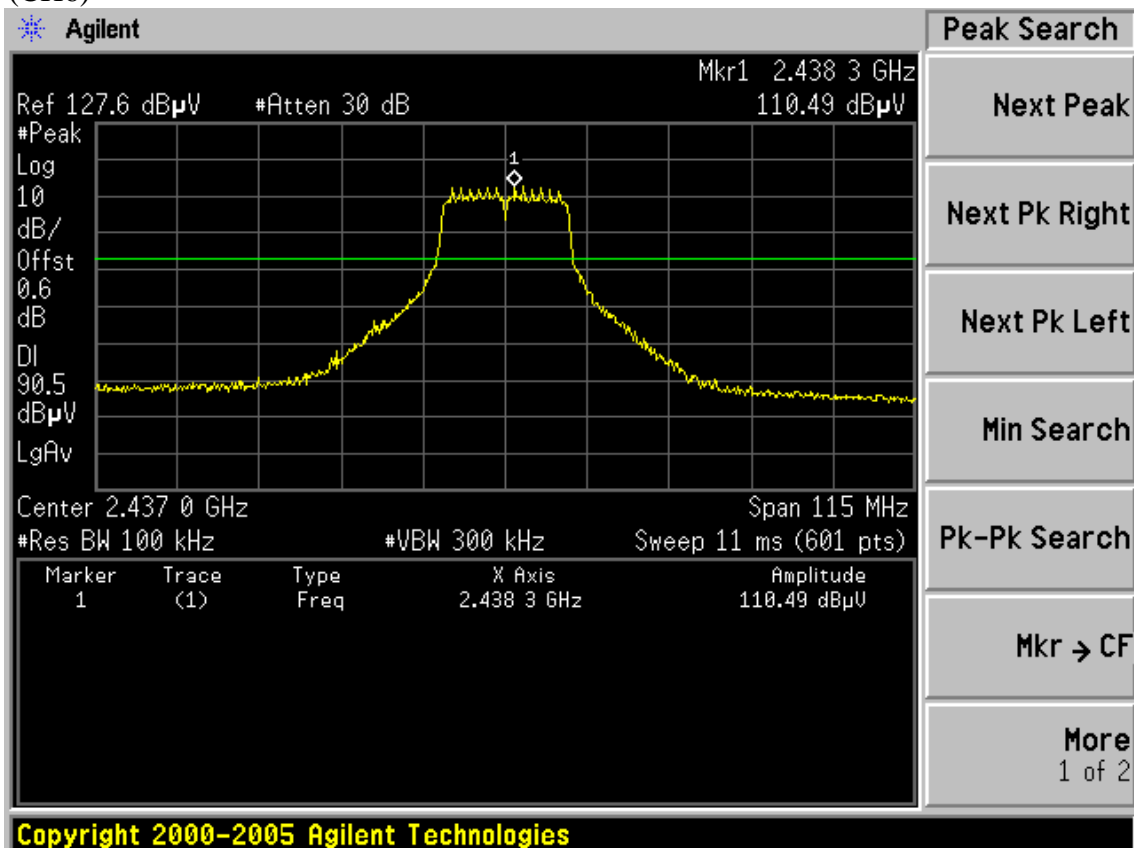
(CH11)



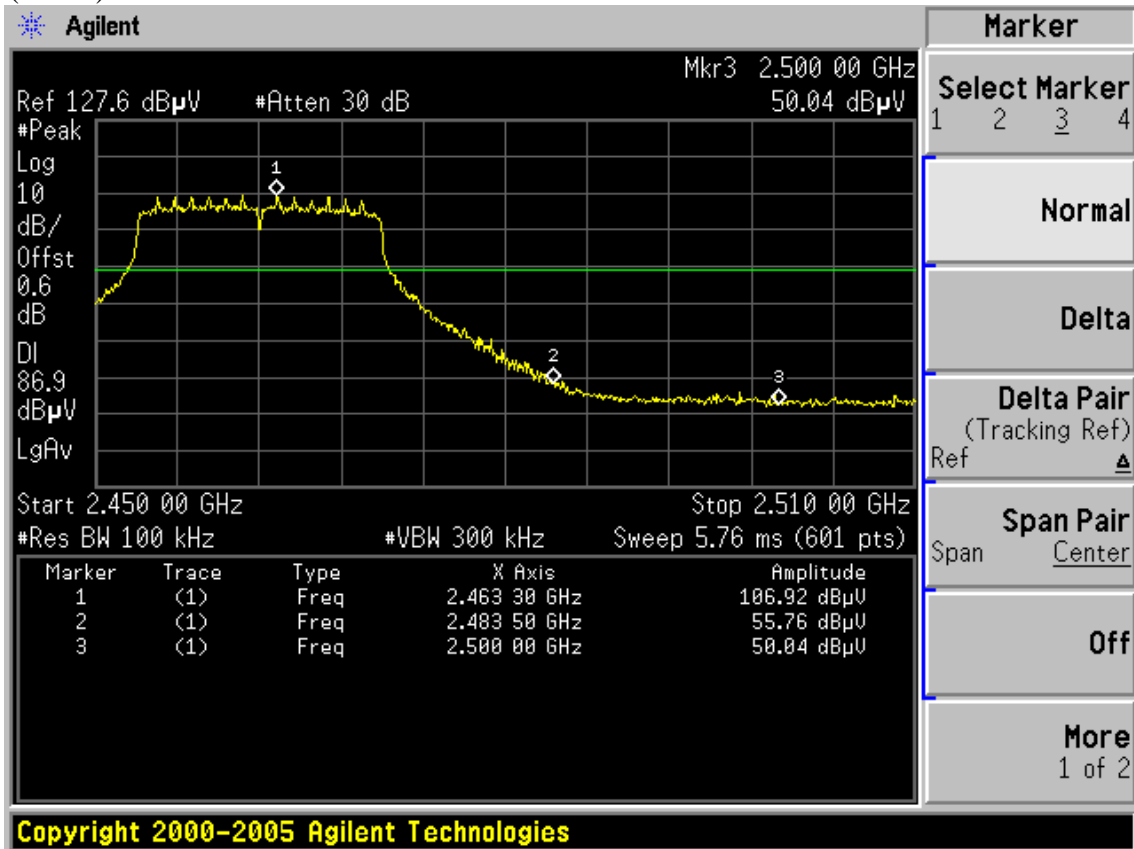
Test mode: IEEE 802.11n HT20 TX  
(CH1)



(CH6)

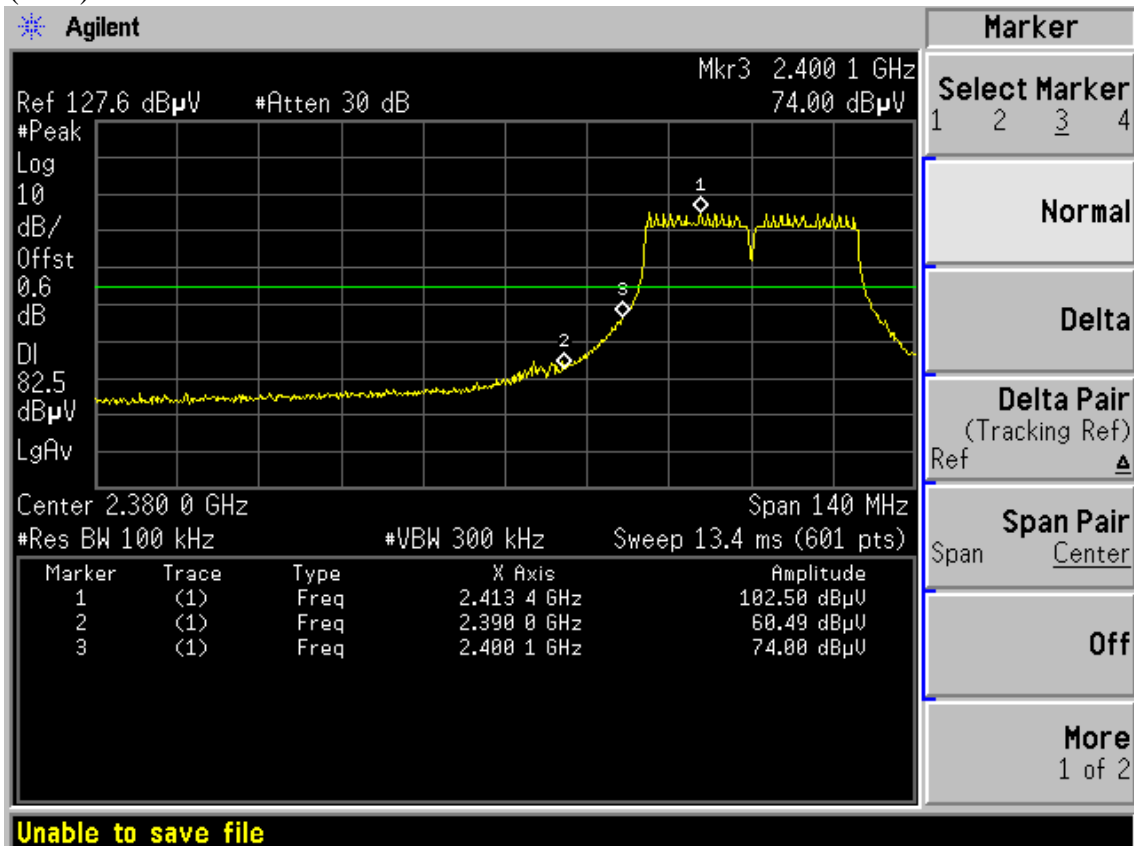


(CH11)

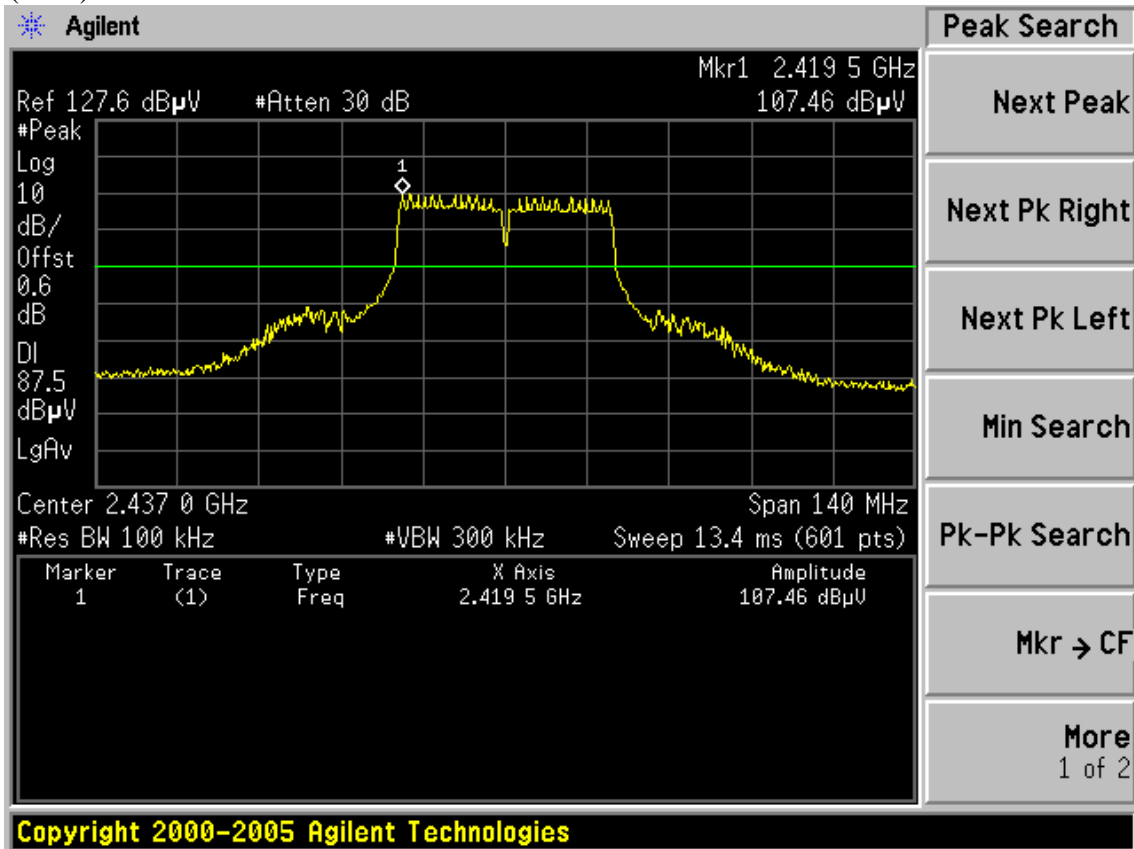


Test mode: IEEE 802.11n HT40 TX

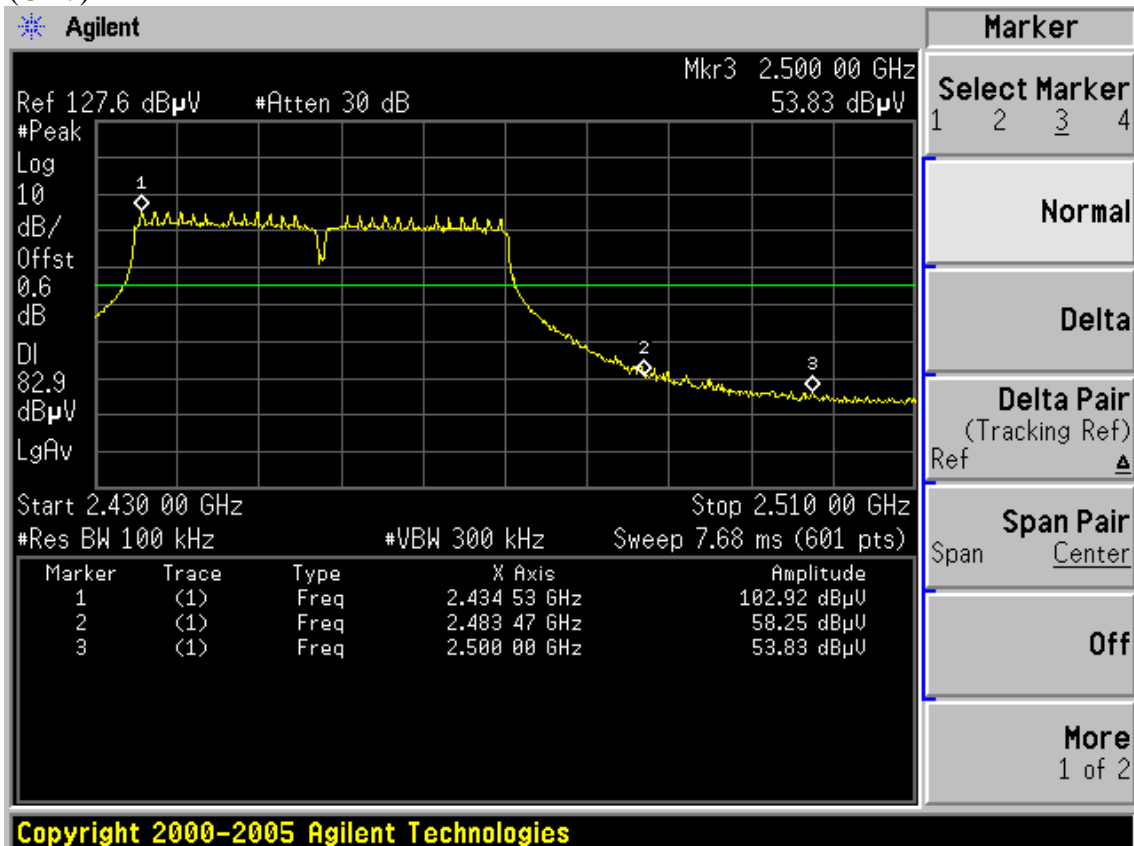
(CH1)



(CH4)



(CH7)



## 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,10, 08	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May, 27, 08	1.5 Year
3	Amplifier	Agilent	8449B	3008A02495	Nov, 06.08	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May,28, 08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May,28, 08	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May,28, 08	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 upperband-edges of the emission:
  - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

### 6.4. Test Results

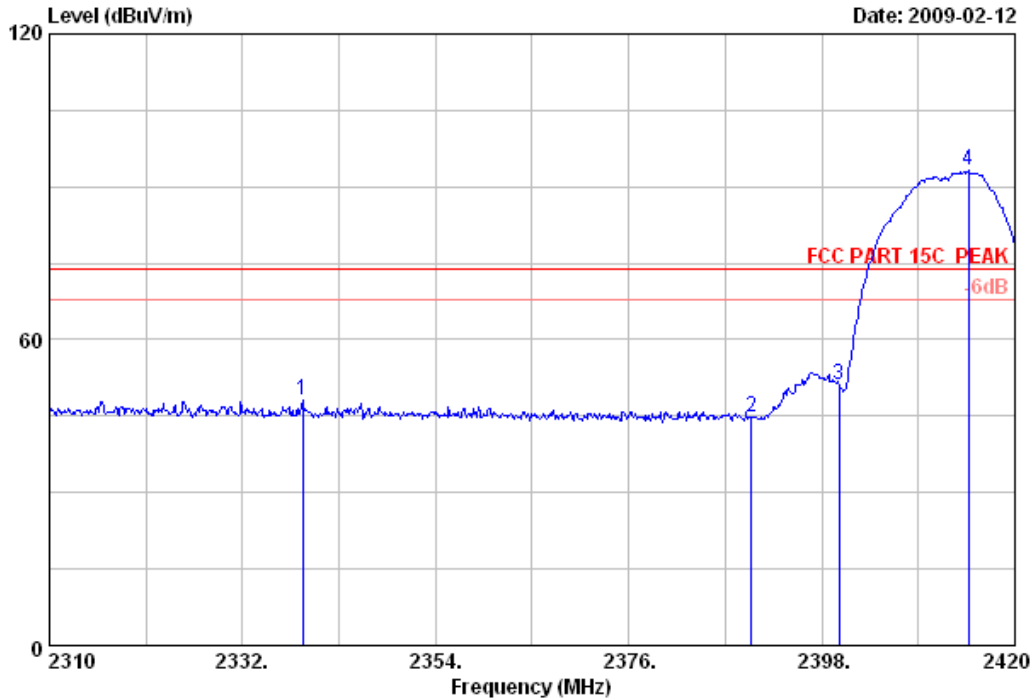
Pass (The testing data was attached in the next pages.)





No.6 Ke Feng Road,Block 52,  
 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
 Postcode:518057

Data: 73 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 73  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

	Ant.		Cable		Emission		Limits		Margin		Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Amp (dB)	Reading (dBuV)	Level (dBuV/m)	Level (dBuV/m)	Level (dBuV/m)	Level (dB)	Level (dB)	
1	2338.820	28.38	6.67	35.13	48.23	48.15	74.00	25.85	Peak		
2	2390.000	28.46	6.71	35.12	44.74	44.79	74.00	29.21	Peak		
3	2400.000	28.46	6.73	35.12	51.14	51.21	74.00	22.79	Peak		
4	2414.720	28.48	6.77	35.12	92.98	93.11	74.00	-19.11	Peak		

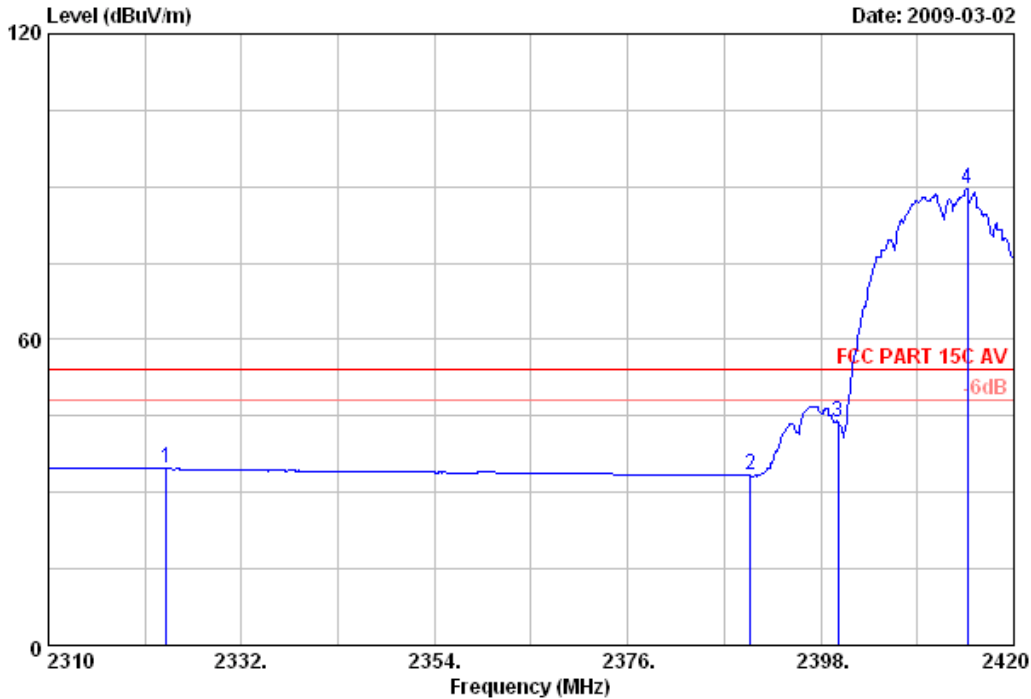
Remarks:

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



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 Postcode:518057

Data: 74 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 74  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
			(dB)	(dB)	(dBuV)	(dBuV/m)			
1	2323.420	28.36	6.65	35.13	34.78	34.66	54.00	19.34	Average
2	2390.000	28.46	6.71	35.12	33.22	33.27	54.00	20.73	Average
3	2400.000	28.46	6.73	35.12	43.77	43.84	54.00	10.16	Average
4	2414.720	28.48	6.77	35.12	89.44	89.57	54.00	-35.57	Average

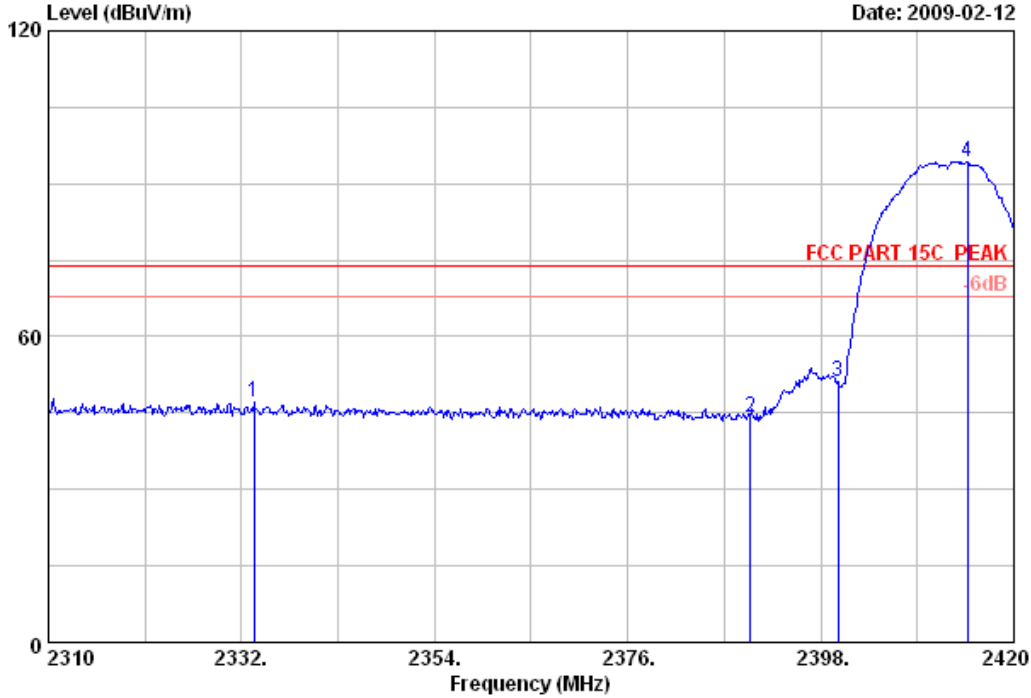
Remarks:

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



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Postcode:518057

Data: 75 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 75  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.430	28.36	6.65	35.13	47.26	47.14	74.00	26.86	Peak
2	2390.000	28.46	6.71	35.12	43.93	43.98	74.00	30.02	Peak
3	2400.000	28.46	6.73	35.12	51.02	51.09	74.00	22.91	Peak
4	2414.720	28.48	6.77	35.12	94.13	94.26	74.00	-20.26	Peak

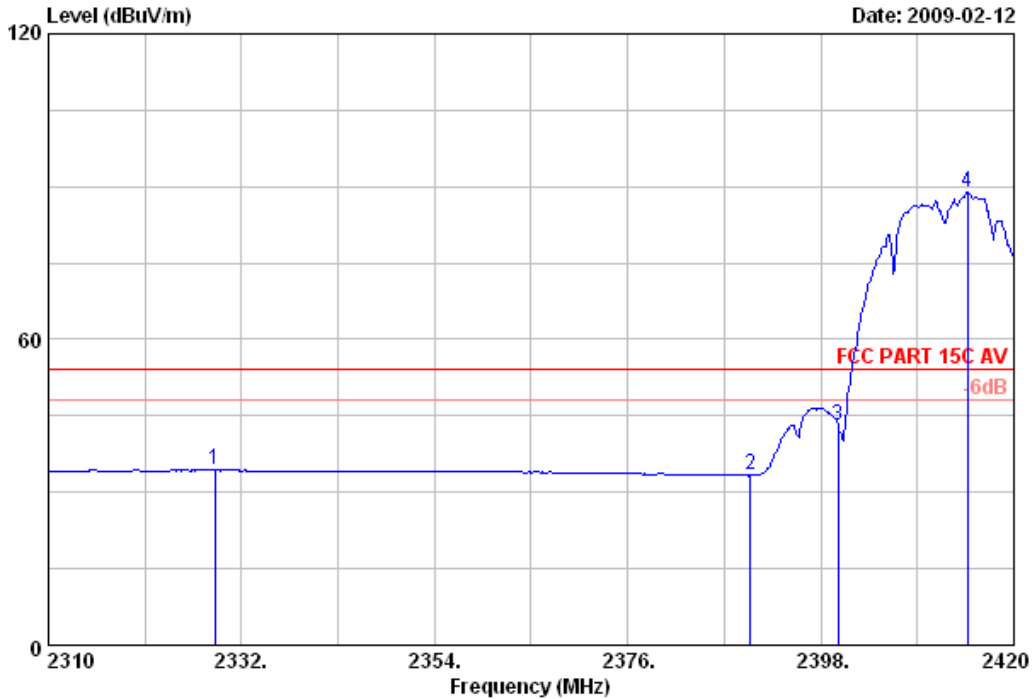
Remarks:

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



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Postcode:518057

Data: 76 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 76  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH1 2412MHz  
 M/N :

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)			
1 2328.920	28.36	6.65	35.13	34.46	34.34	54.00	19.66	Average
2 2390.000	28.46	6.71	35.12	33.21	33.26	54.00	20.74	Average
3 2400.000	28.46	6.73	35.12	43.03	43.10	54.00	10.90	Average
4 2414.720	28.48	6.77	35.12	88.75	88.88	54.00	-34.88	Average

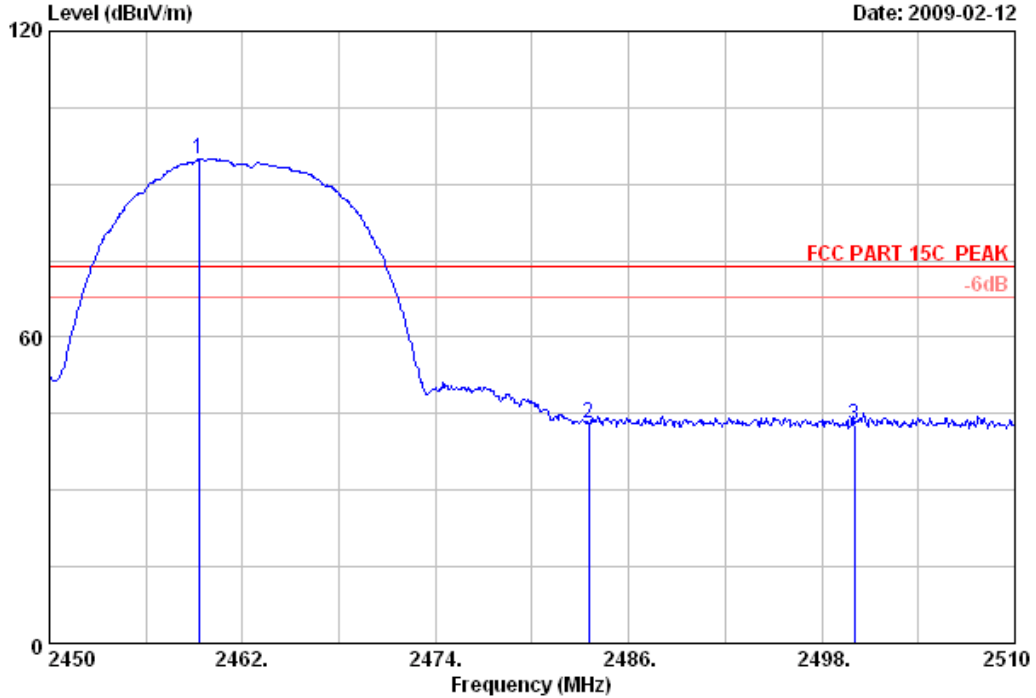
Remarks:

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



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Data: 77 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 77  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	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	2459.300	28.55	6.84	35.11	94.70	94.98	74.00	-20.98	Peak
2	2483.500	28.58	6.87	35.10	42.92	43.27	74.00	30.73	Peak
3	2500.000	28.60	6.91	35.10	42.46	42.87	74.00	31.13	Peak

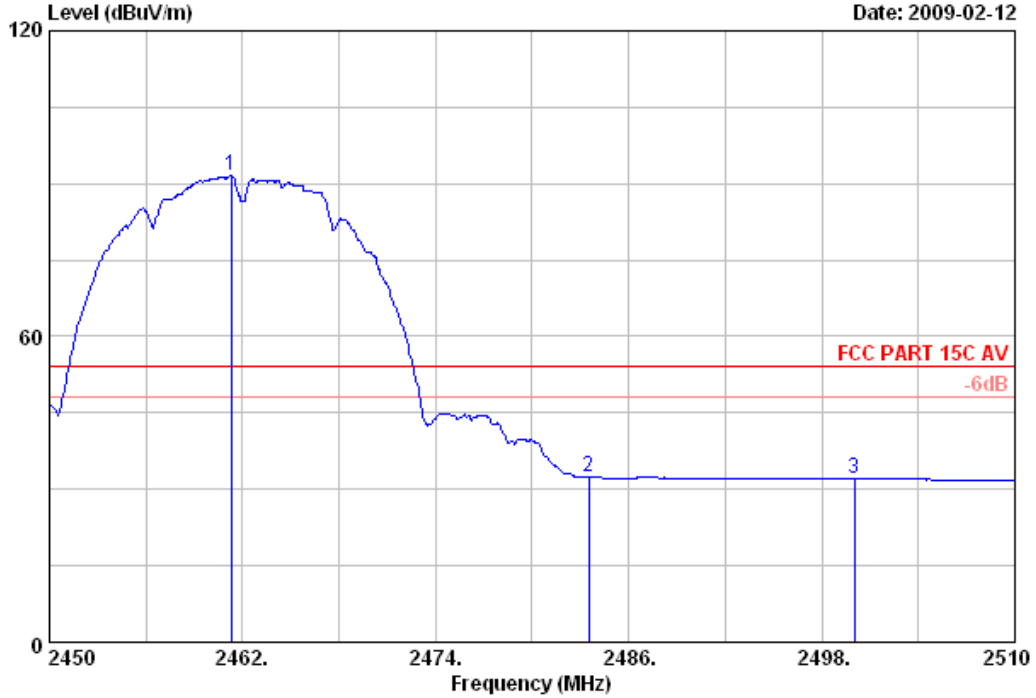
Remarks:

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



No.6 Ke Feng Road,Block 52,  
ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Data: 78 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 78  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.280	28.55	6.84	35.11	91.17	91.45	54.00	-37.45	Average
2	2483.500	28.58	6.87	35.10	32.05	32.40	54.00	21.60	Average
3	2500.000	28.60	6.91	35.10	31.54	31.95	54.00	22.05	Average

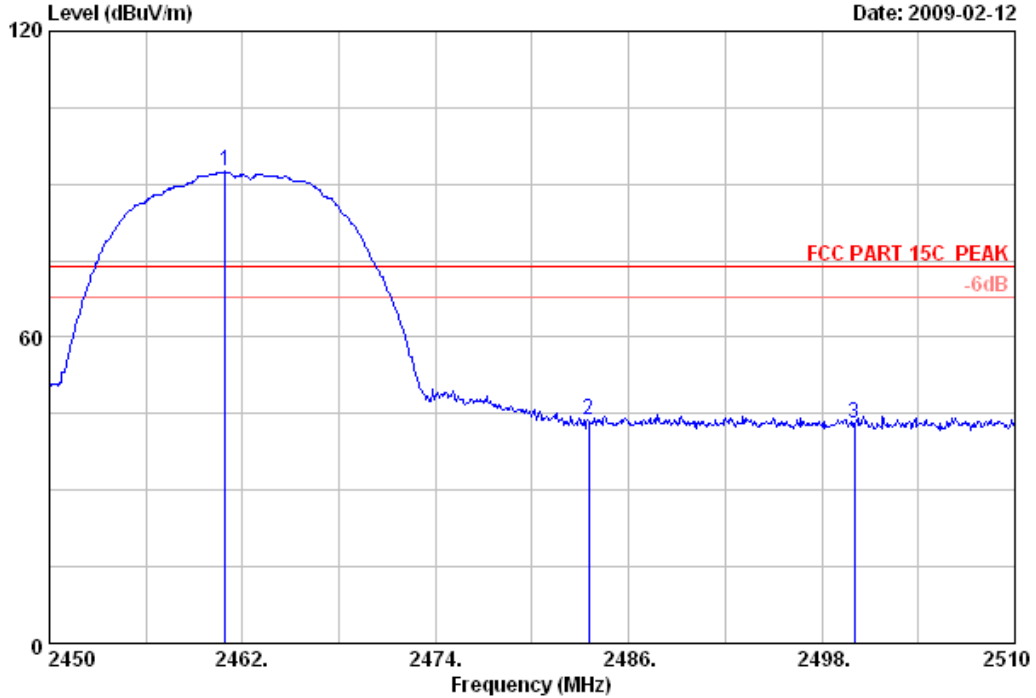
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Data: 79 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 79  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.920	28.55	6.84	35.11	92.15	92.43	74.00	-18.43	Peak
2	2483.500	28.58	6.87	35.10	43.51	43.86	74.00	30.14	Peak
3	2500.000	28.60	6.91	35.10	42.73	43.14	74.00	30.86	Peak

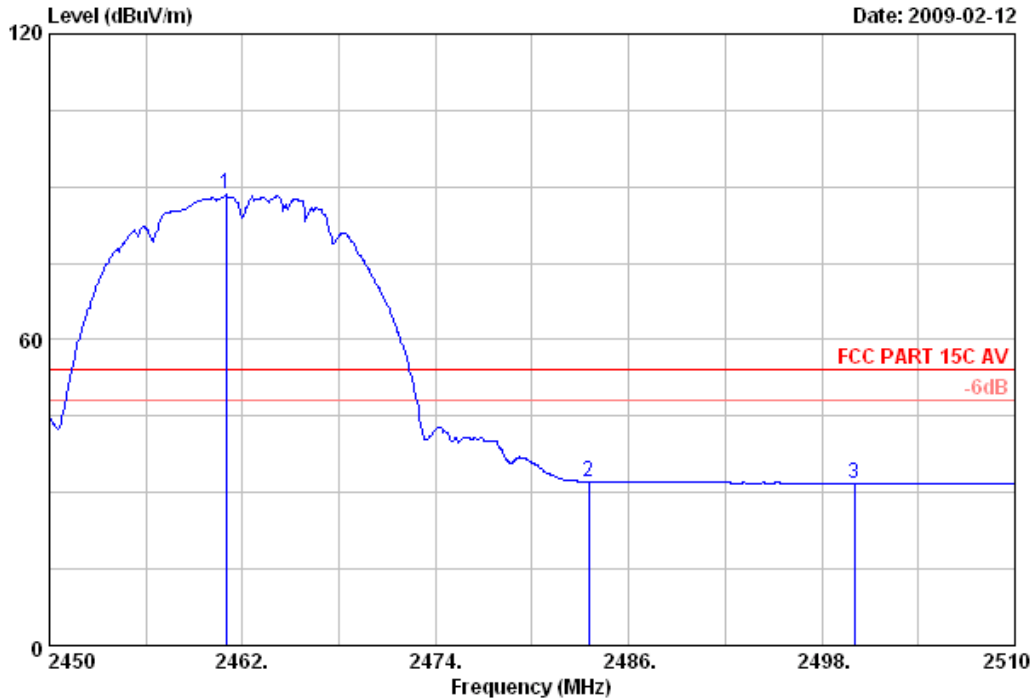
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 80  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11b CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.980	28.55	6.84	35.11	88.14	88.42	54.00	-34.42	Average
2	2483.500	28.58	6.87	35.10	31.80	32.15	54.00	21.85	Average
3	2500.000	28.60	6.91	35.10	31.44	31.85	54.00	22.15	Average

Remarks:

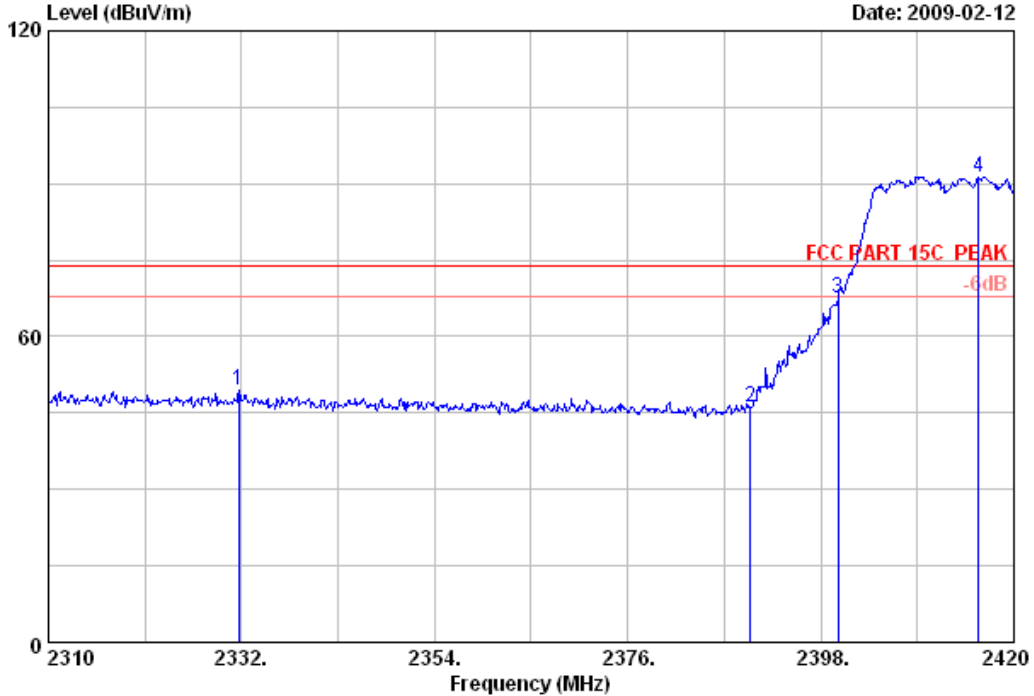
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 81  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2331.670	28.36	6.65	35.13	49.49	49.37	74.00	24.63	Peak
2	2390.000	28.46	6.71	35.12	45.95	46.00	74.00	28.00	Peak
3	2400.000	28.46	6.73	35.12	67.37	67.44	74.00	6.56	Peak
4	2415.930	28.48	6.77	35.11	91.13	91.27	74.00	-17.27	Peak

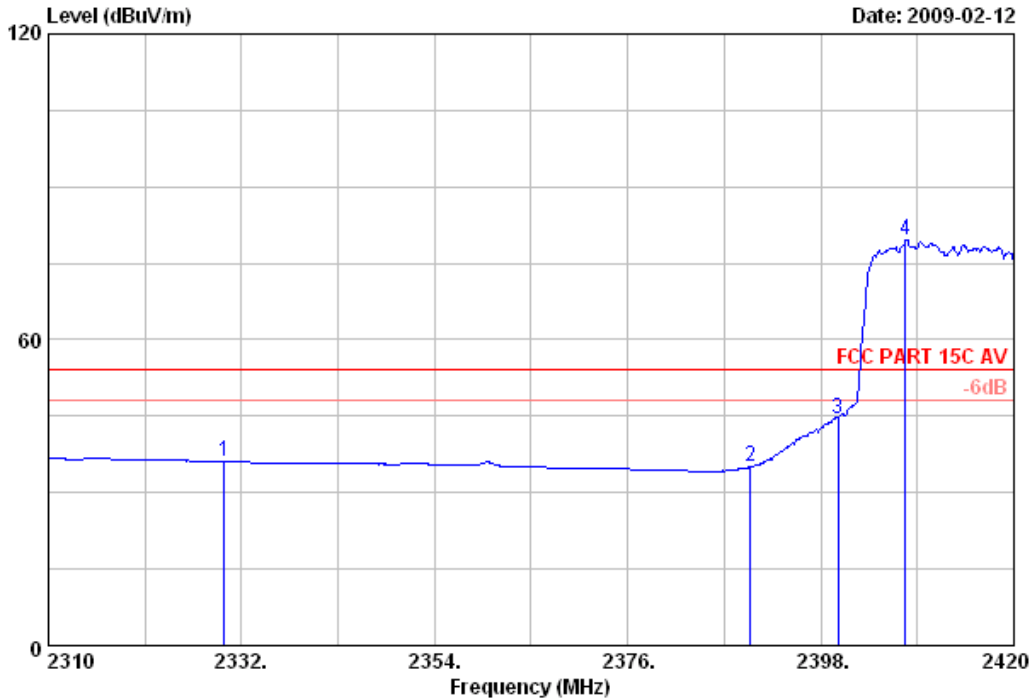
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 82  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2330.020	28.36	6.65	35.13	36.34	36.22	54.00	17.78	Average
2	2390.000	28.46	6.71	35.12	34.95	35.00	54.00	19.00	Average
3	2400.000	28.46	6.73	35.12	44.37	44.44	54.00	9.56	Average
4	2407.680	28.48	6.73	35.12	79.41	79.50	54.00	-25.50	Average

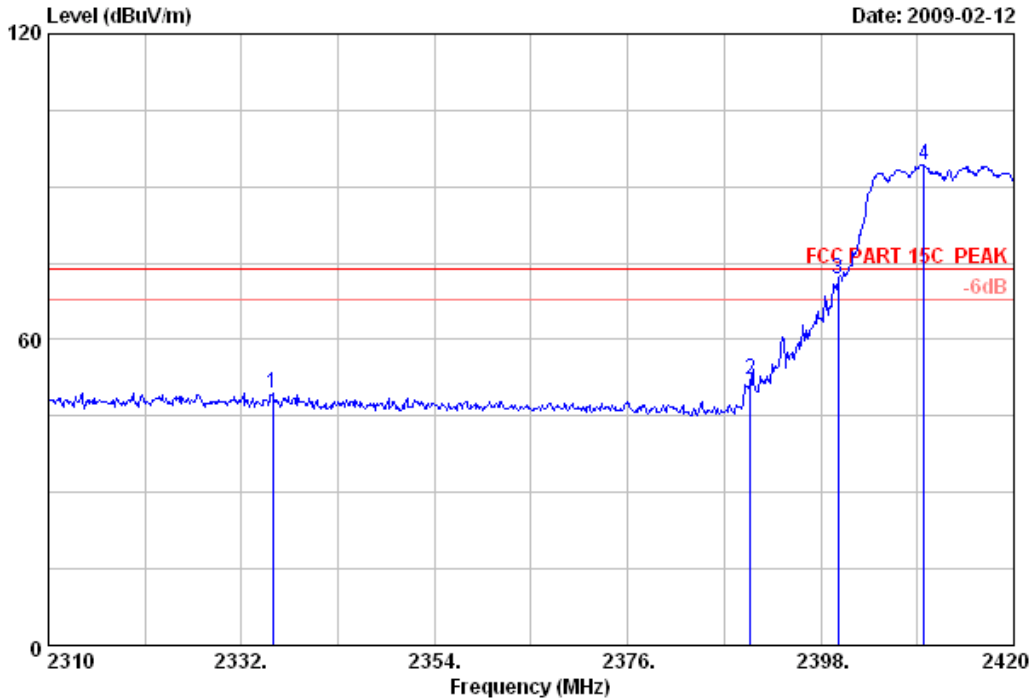
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 83  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	Factor	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2335.520	28.38	6.65	35.13	49.46	49.36	74.00	24.64	Peak
2	2390.000	28.46	6.71	35.12	52.19	52.24	74.00	21.76	Peak
3	2400.000	28.46	6.73	35.12	71.65	71.72	74.00	2.28	Peak
4	2409.770	28.48	6.73	35.12	94.14	94.23	74.00	-20.23	Peak

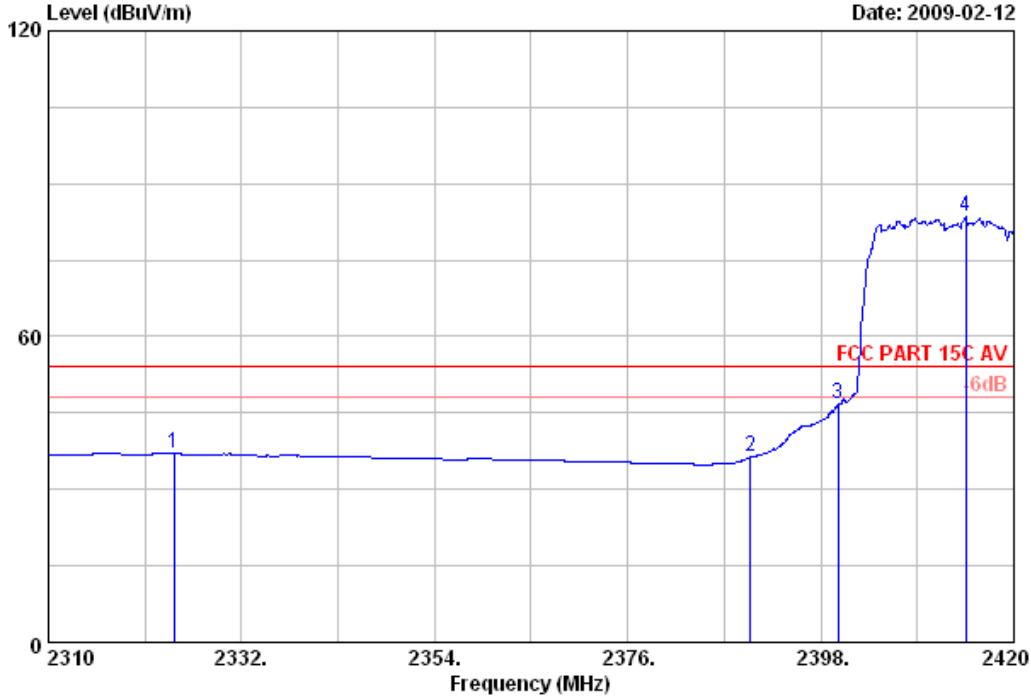
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 84  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	(dB/m)	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
			(dB)	(dB)	(dBuV)	(dBuV/m)			
1	2324.300	28.36	6.65	35.13	37.09	36.97	54.00	17.03	Average
2	2390.000	28.46	6.71	35.12	36.37	36.42	54.00	17.58	Average
3	2400.000	28.46	6.73	35.12	46.57	46.64	54.00	7.36	Average
4	2414.500	28.48	6.77	35.12	83.35	83.48	54.00	-29.48	Average

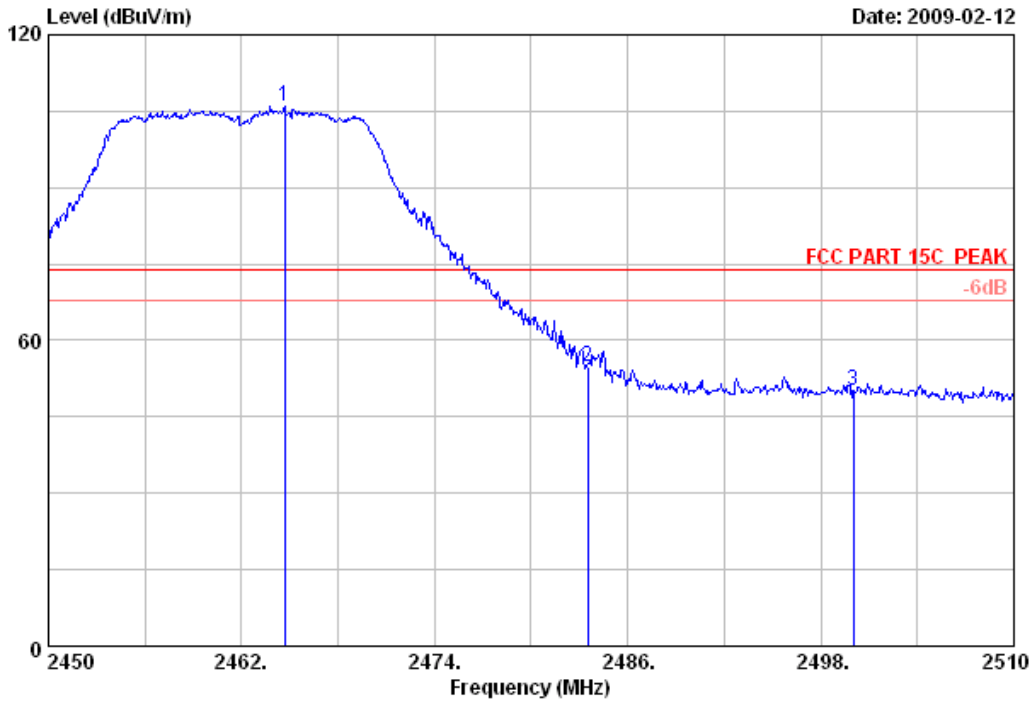
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 85  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	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	2464.700	28.55	6.84	35.11	105.58	105.86	74.00	-31.86	Peak
2	2483.500	28.58	6.87	35.10	54.62	54.97	74.00	19.03	Peak
3	2500.000	28.60	6.91	35.10	49.78	50.19	74.00	23.81	Peak

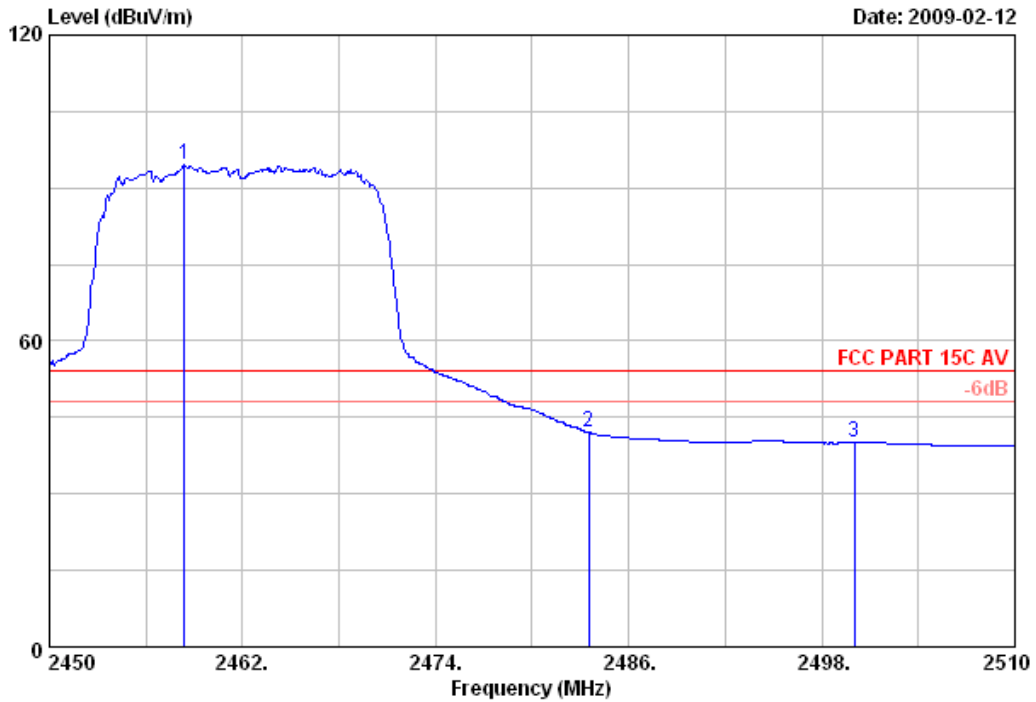
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 86  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.400	28.55	6.84	35.11	94.26	94.54	54.00	-40.54	Average
2	2483.500	28.58	6.87	35.10	41.70	42.05	54.00	11.95	Average
3	2500.000	28.60	6.91	35.10	39.65	40.06	54.00	13.94	Average

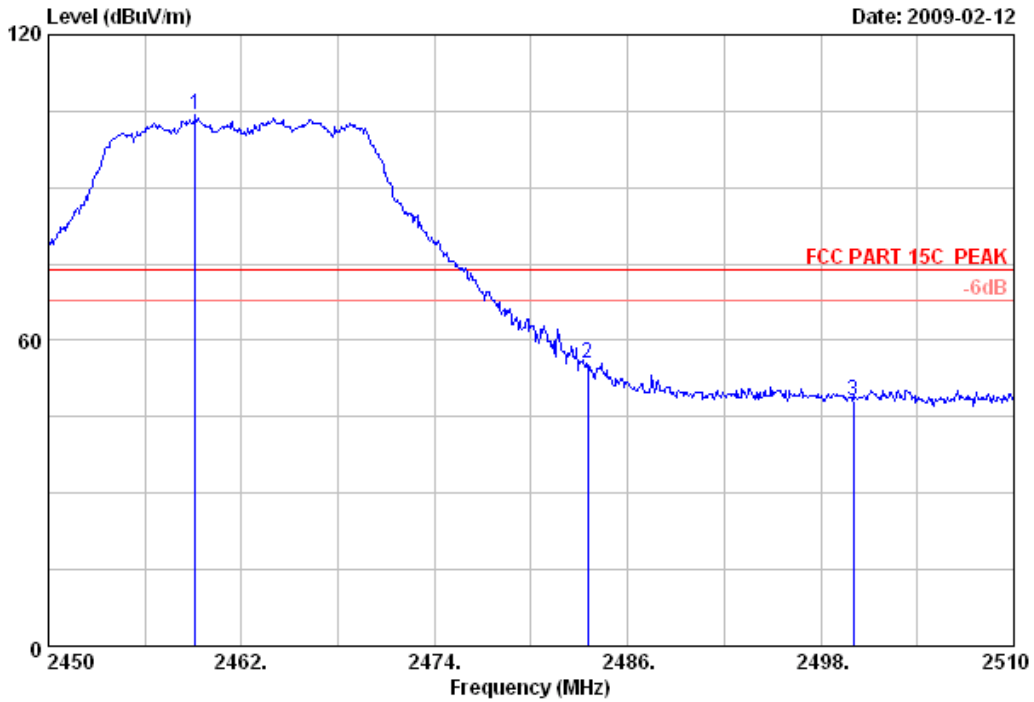
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
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Site no. : 3# Chamber Data no. : 87  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	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	2459.120	28.55	6.84	35.11	103.99	104.27	74.00	-30.27	Peak
2	2483.500	28.58	6.87	35.10	55.00	55.35	74.00	18.65	Peak
3	2500.000	28.60	6.91	35.10	47.79	48.20	74.00	25.80	Peak

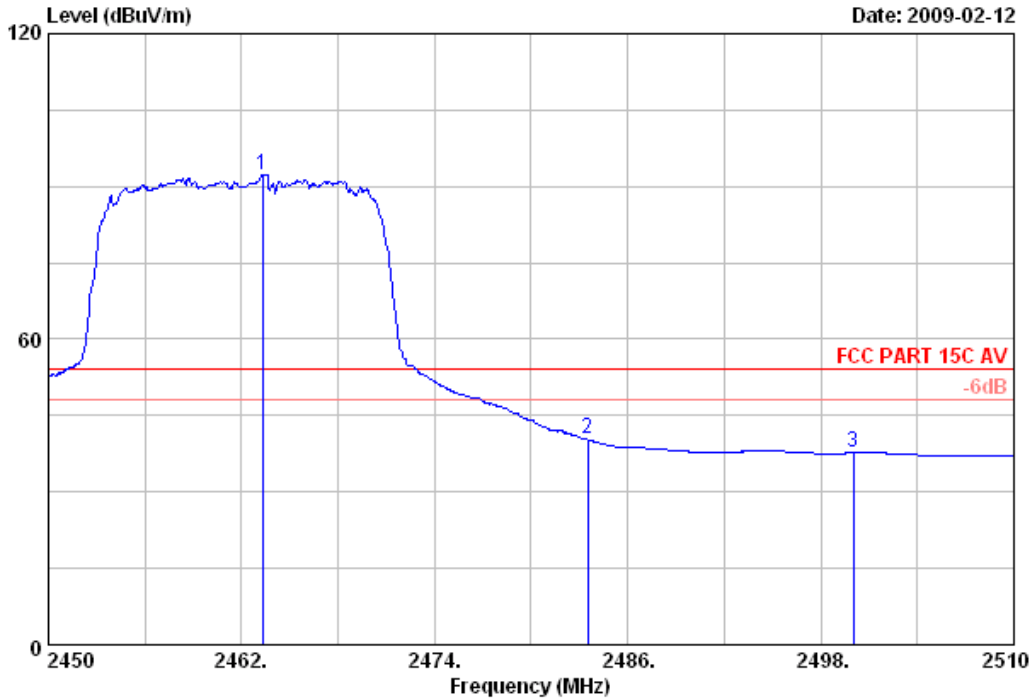
Remarks:

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



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 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 88  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11g CH11 2462MHz  
 M/N :

	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	2463.320	28.55	6.84	35.11	92.07	92.35	54.00	-38.35	Average
2	2483.500	28.58	6.87	35.10	39.97	40.32	54.00	13.68	Average
3	2500.000	28.60	6.91	35.10	37.27	37.68	54.00	16.32	Average

Remarks:

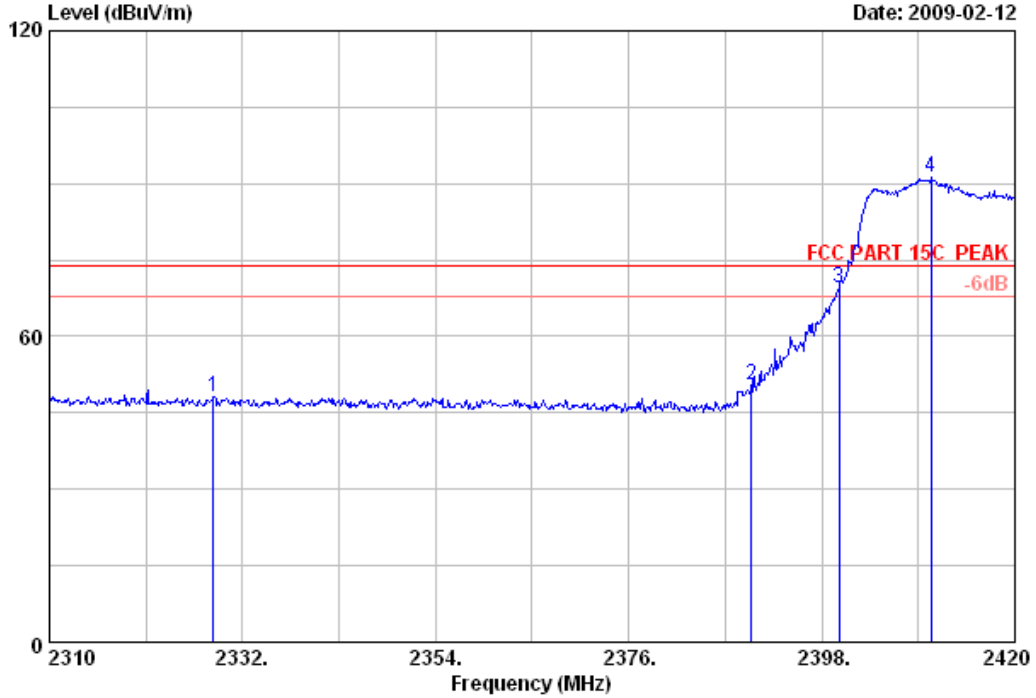
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
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Site no. : 3# Chamber Data no. : 89  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)			
1 2328.700	28.36	6.65	35.13	48.36	48.24	74.00	25.76	Peak
2 2390.000	28.46	6.71	35.12	50.43	50.48	74.00	23.52	Peak
3 2400.000	28.46	6.73	35.12	69.59	69.66	74.00	4.34	Peak
4 2410.430	28.48	6.73	35.12	91.33	91.42	74.00	-17.42	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.



No.6 Ke Feng Road,Block 52,  
 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 90  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

	Ant.	Cable	Amp	Emission		Limits	Margin	Remark	
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)		
1	2323.750	28.36	6.65	35.13	35.88	35.76	54.00	18.24	Average
2	2390.000	28.46	6.71	35.12	34.83	34.88	54.00	19.12	Average
3	2400.000	28.46	6.73	35.12	42.71	42.78	54.00	11.22	Average
4	2407.350	28.48	6.73	35.12	78.18	78.27	54.00	-24.27	Average

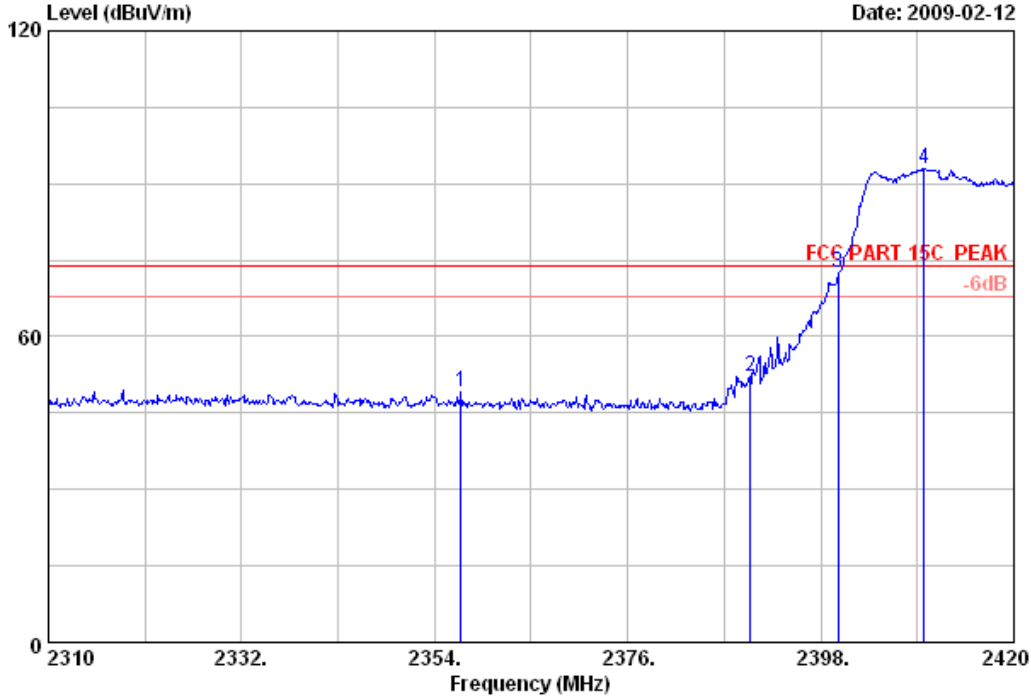
Remarks:

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



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Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 91  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)			
1	28.41	6.69	35.13	49.31	49.28	74.00	24.72	Peak
2	28.46	6.71	35.12	52.13	52.18	74.00	21.82	Peak
3	28.46	6.73	35.12	72.42	72.49	74.00	1.51	Peak
4	28.48	6.73	35.12	92.70	92.79	74.00	-18.79	Peak

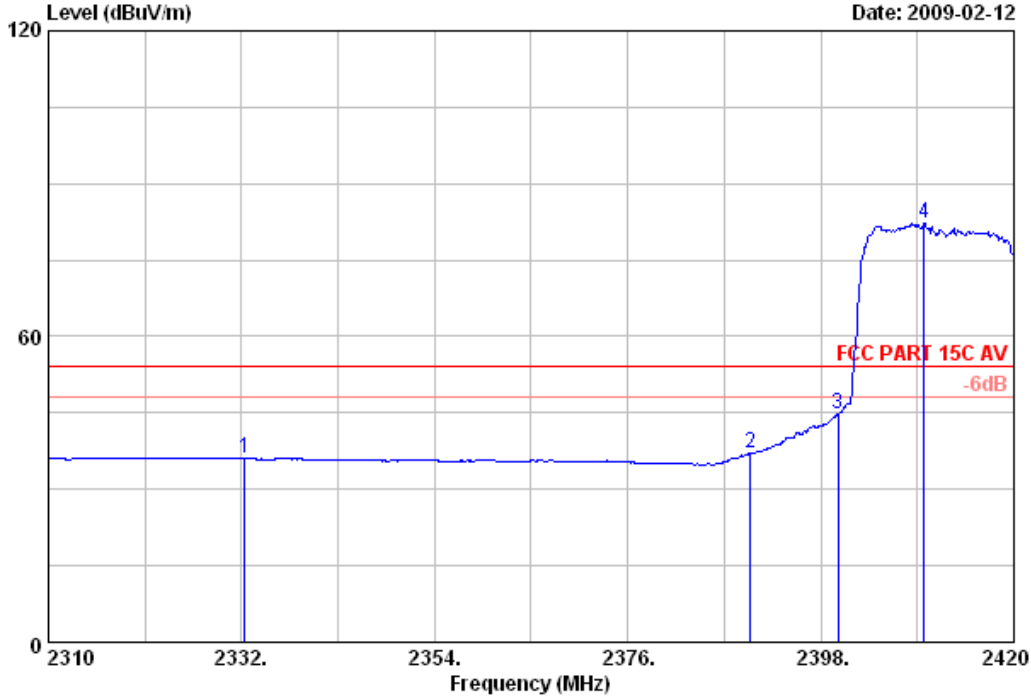
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 92 File: E:\2009 report data\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 92  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH1 2412MHz  
 M/N :

	Freq.	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
	(MHz)	Factor	Loss	Factor	Reading	Level	(dBuV/m)	(dB)	
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)			
1	2332.330	28.36	6.65	35.13	36.36	36.24	54.00	17.76	Average
2	2390.000	28.46	6.71	35.12	37.07	37.12	54.00	16.88	Average
3	2400.000	28.46	6.73	35.12	44.74	44.81	54.00	9.19	Average
4	2409.770	28.48	6.73	35.12	82.30	82.39	54.00	-28.39	Average

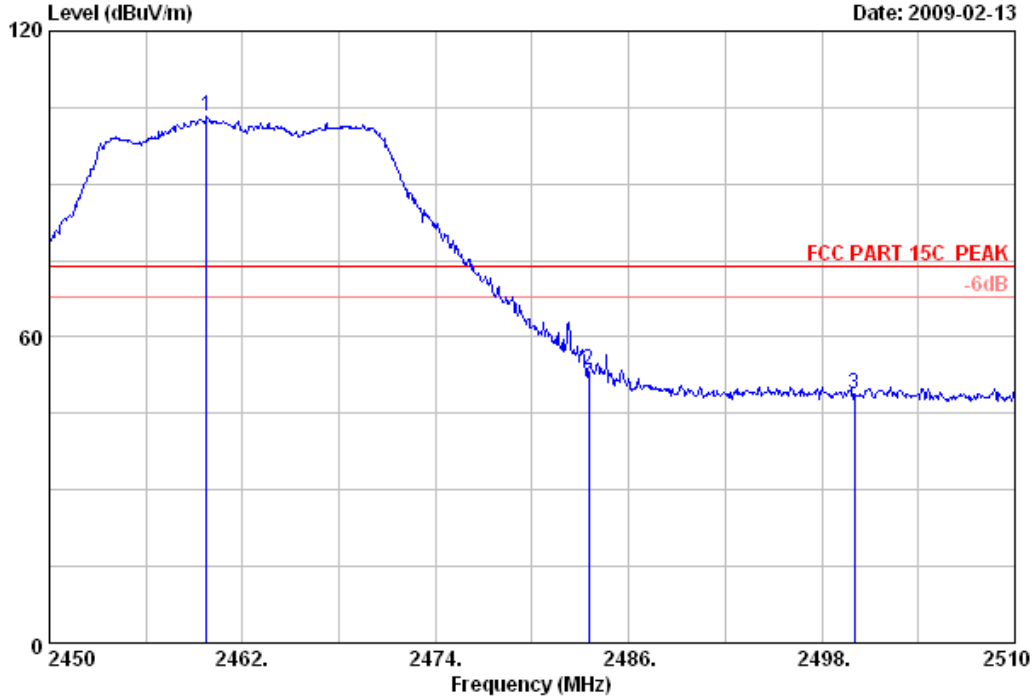
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
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Data: 93 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 93  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	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	2459.780	28.55	6.84	35.11	102.90	103.18	74.00	-29.18	Peak
2	2483.500	28.58	6.87	35.10	53.25	53.60	74.00	20.40	Peak
3	2500.000	28.60	6.91	35.10	48.36	48.77	74.00	25.23	Peak

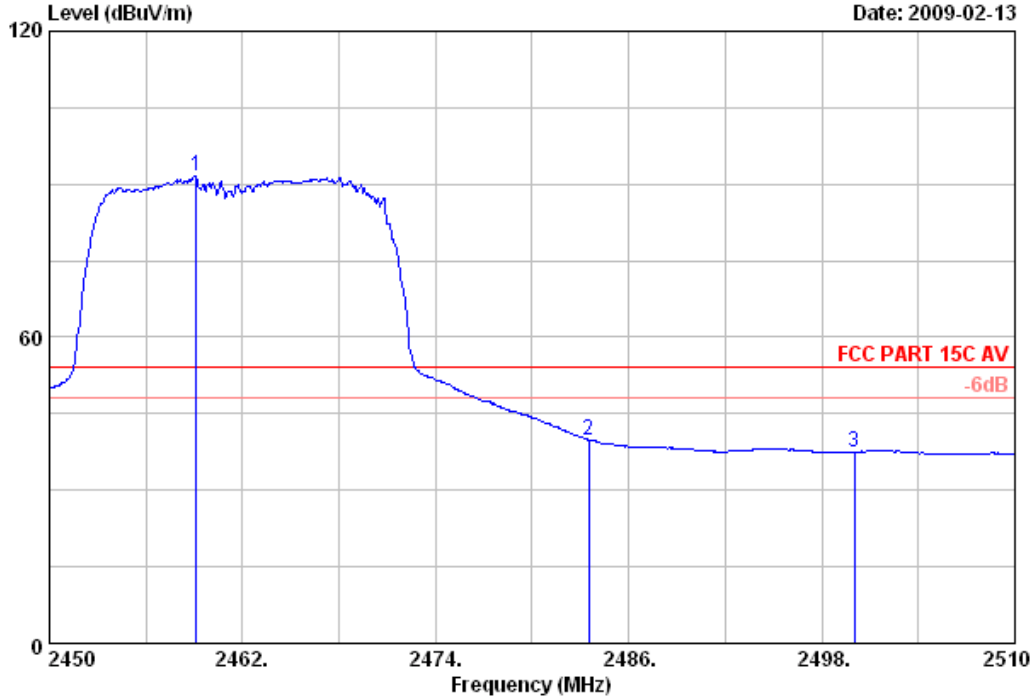
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 94  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	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	2459.120	28.55	6.84	35.11	91.44	91.72	54.00	-37.72	Average
2	2483.500	28.58	6.87	35.10	39.56	39.91	54.00	14.09	Average
3	2500.000	28.60	6.91	35.10	37.10	37.51	54.00	16.49	Average

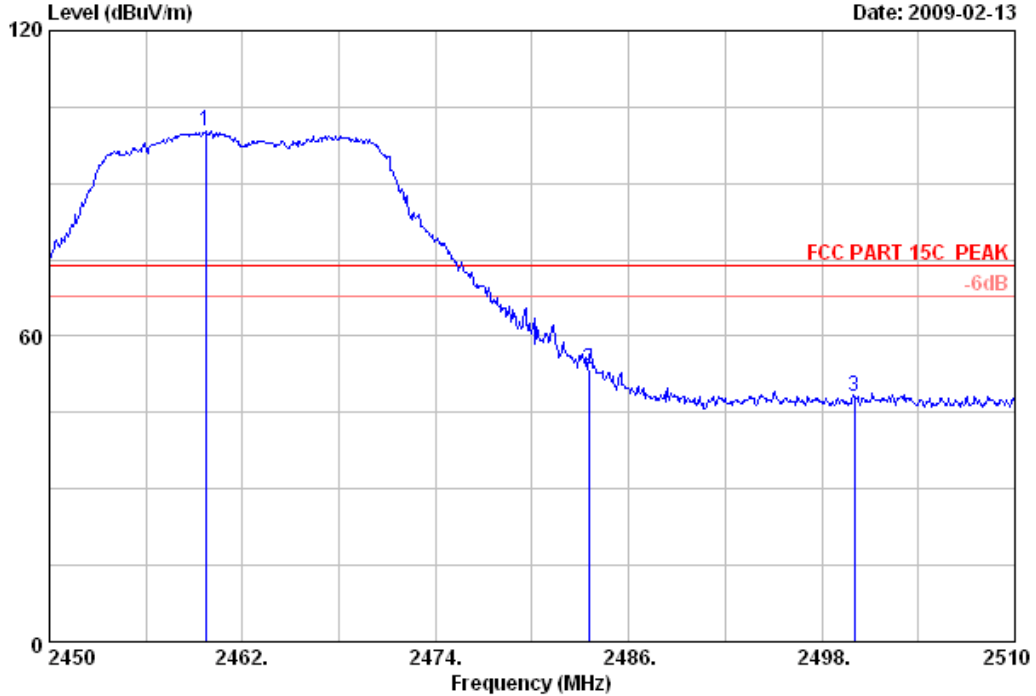
Remarks:

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



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Data: 95 File: E:\2009 report data\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 95  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	Ant.	Cable	Amp	Emission					
Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1 2459.720	28.55	6.84	35.11	99.96	100.24	74.00	-26.24	Peak	
2 2483.500	28.58	6.87	35.10	53.09	53.44	74.00	20.56	Peak	
3 2500.000	28.60	6.91	35.10	47.88	48.29	74.00	25.71	Peak	

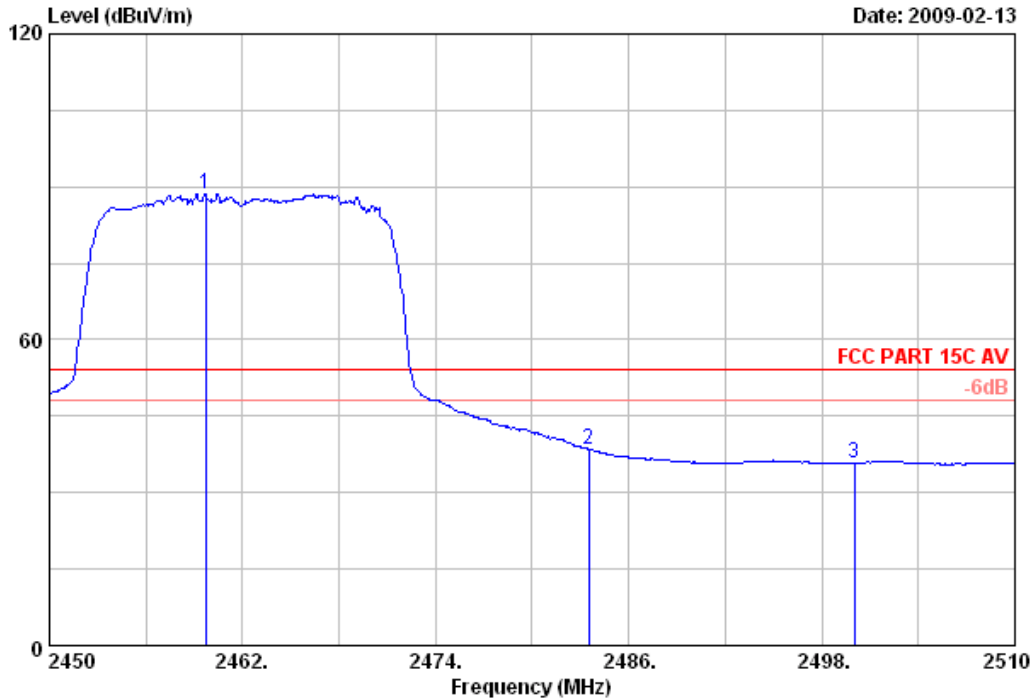
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
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Data: 96 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 96  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT20 CH11 2462MHz  
 M/N :

	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	2459.720	28.55	6.84	35.11	88.31	88.59	54.00	-34.59	Average
2	2483.500	28.58	6.87	35.10	38.09	38.44	54.00	15.56	Average
3	2500.000	28.60	6.91	35.10	35.43	35.84	54.00	18.16	Average

Remarks:

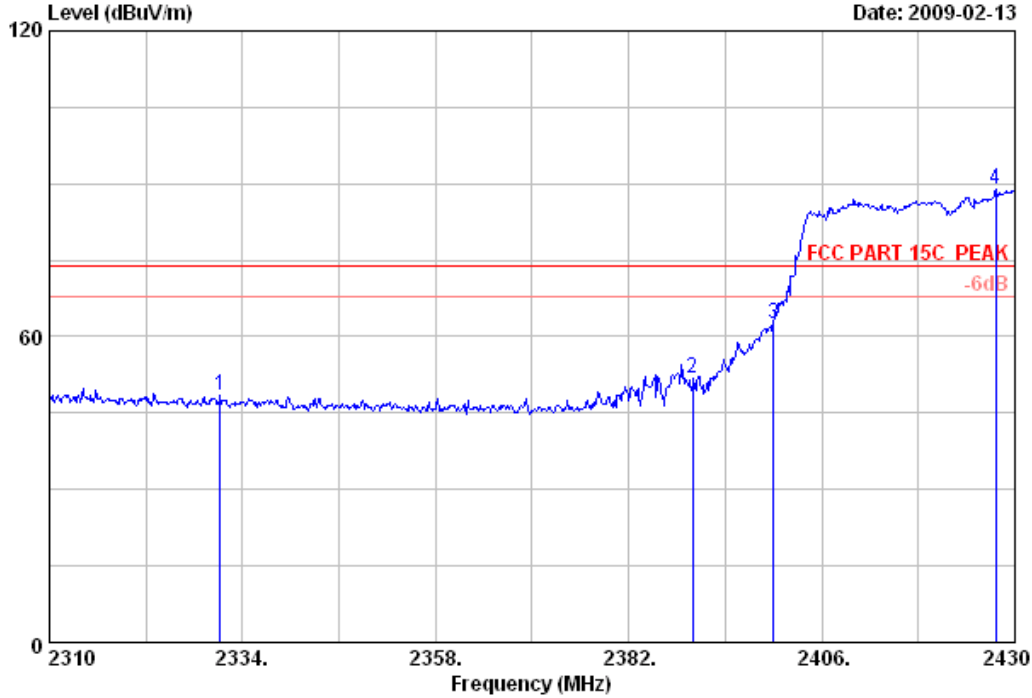
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.





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ShenZhen Science & Industry Park  
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Postcode:518057

Data: 97 File: E:\2009 report data\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 97  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	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	2331.240	28.36	6.65	35.13	48.55	48.43	74.00	25.57	Peak
2	2390.000	28.46	6.71	35.12	51.85	51.90	74.00	22.10	Peak
3	2400.000	28.46	6.73	35.12	62.37	62.44	74.00	11.56	Peak
4	2427.600	28.50	6.77	35.11	88.63	88.79	74.00	-14.79	Peak

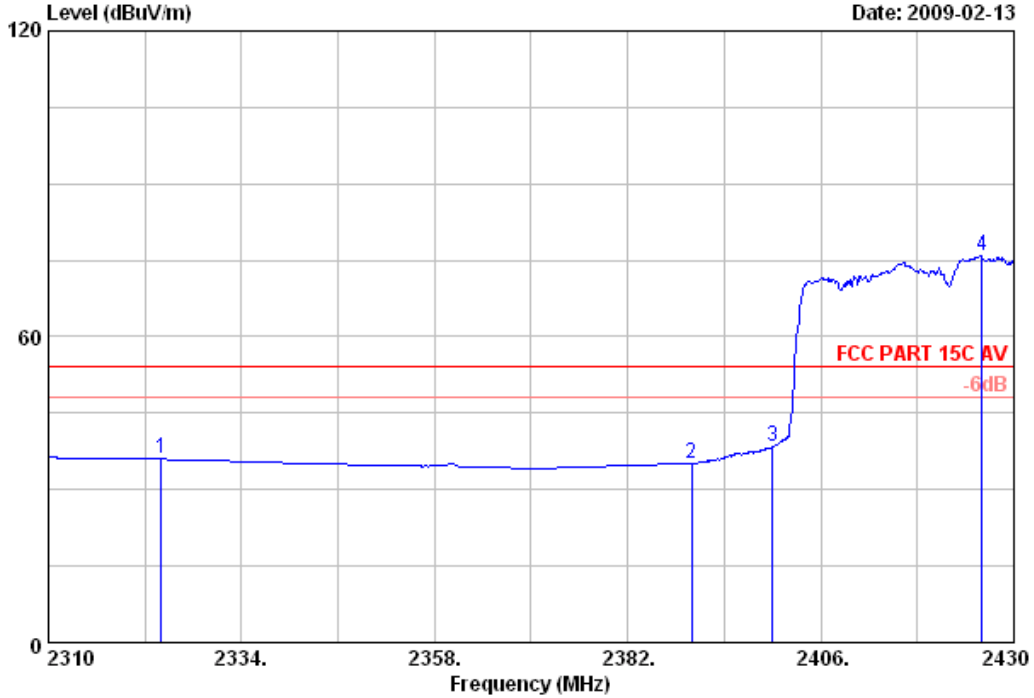
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
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Postcode:518057

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Site no. : 3# Chamber Data no. : 98  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23°C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2324.040	28.36	6.65	35.13	36.15	36.03	54.00	17.97	Average
2	2390.000	28.46	6.71	35.12	35.08	35.13	54.00	18.87	Average
3	2400.000	28.46	6.73	35.12	38.38	38.45	54.00	15.55	Average
4	2426.040	28.50	6.77	35.11	75.63	75.79	54.00	-21.79	Average

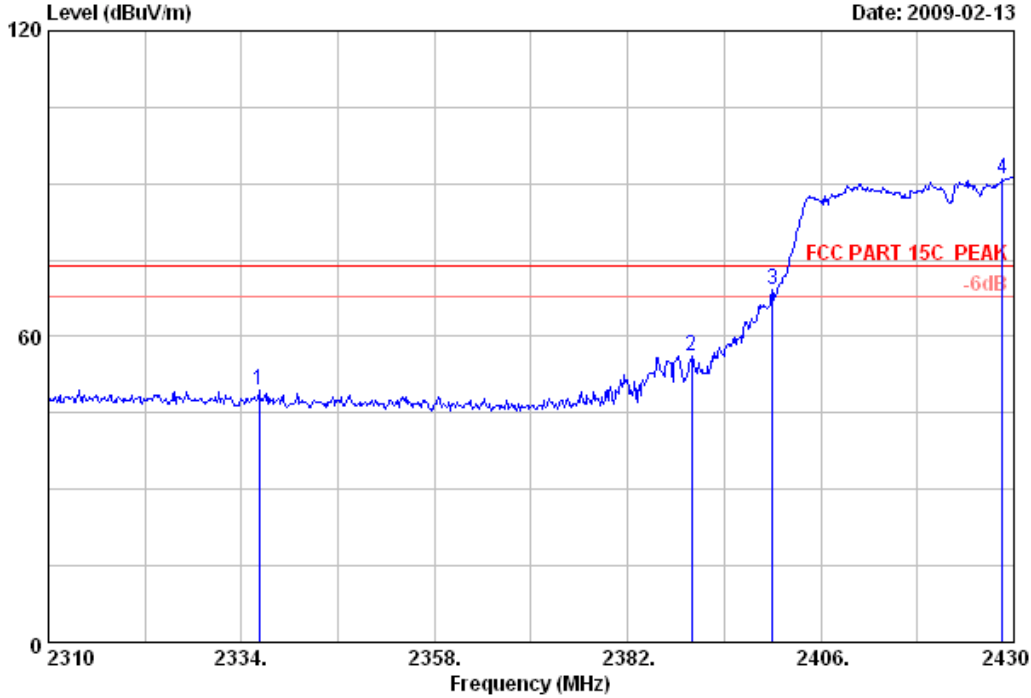
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
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Postcode:518057

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Site no. : 3# Chamber Data no. : 99  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	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	2336.160	28.38	6.65	35.13	49.53	49.43	74.00	24.57	Peak
2	2390.000	28.46	6.71	35.12	56.16	56.21	74.00	17.79	Peak
3	2400.000	28.46	6.73	35.12	69.06	69.13	74.00	4.87	Peak
4	2428.560	28.50	6.77	35.11	90.62	90.78	74.00	-16.78	Peak

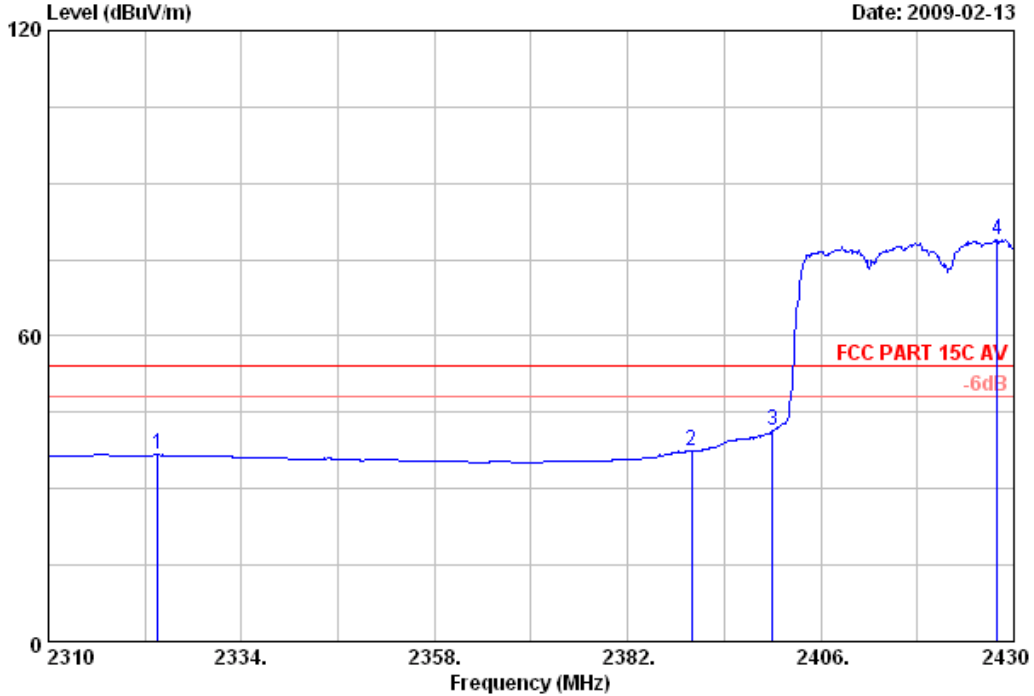
Remarks:

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



No.6 Ke Feng Road,Block 52,  
ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
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Site no. : 3# Chamber Data no. : 100  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH1 2422MHz  
 M/N :

	Ant.	Cable	Amp	Emission		Limits	Margin	Remark
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	(dBuV/m)	(dB)	
1 2323.560	28.36	6.65	35.13	36.76	36.64	54.00	17.36	Average
2 2390.000	28.46	6.71	35.12	37.27	37.32	54.00	16.68	Average
3 2400.000	28.46	6.73	35.12	41.28	41.35	54.00	12.65	Average
4 2427.960	28.50	6.77	35.11	78.87	79.03	54.00	-25.03	Average

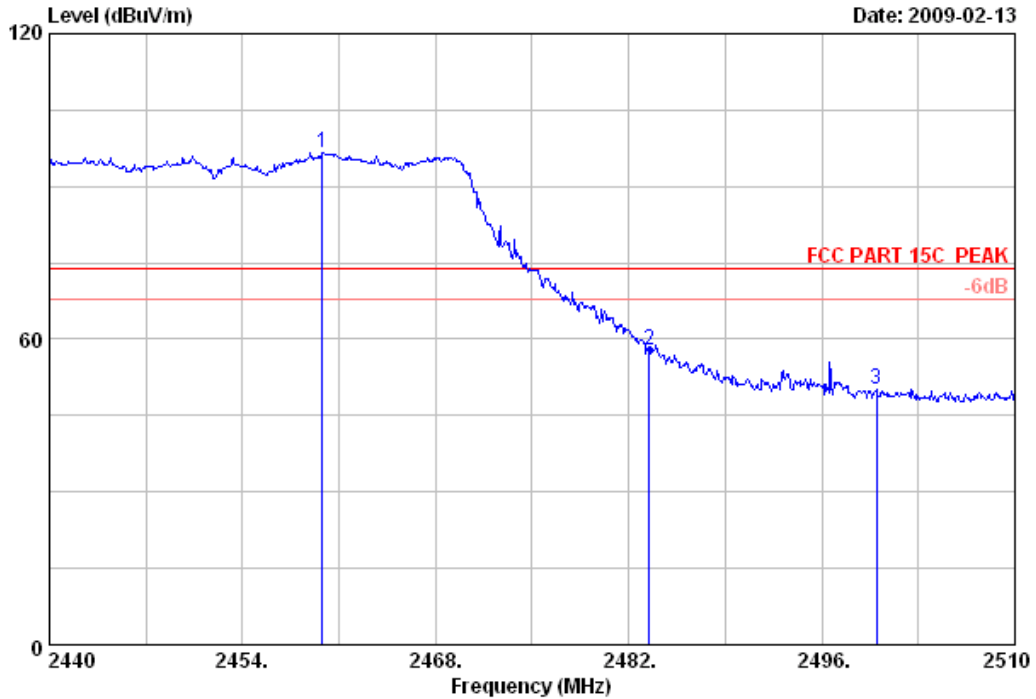
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
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Site no. : 3# Chamber Data no. : 101  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	Ant.	Cable	Amp	Emission					
Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	2459.810	28.55	6.84	35.11	96.32	96.60	74.00	-22.60	Peak
2	2483.500	28.58	6.87	35.10	57.45	57.80	74.00	16.20	Peak
3	2500.000	28.60	6.91	35.10	49.65	50.06	74.00	23.94	Peak

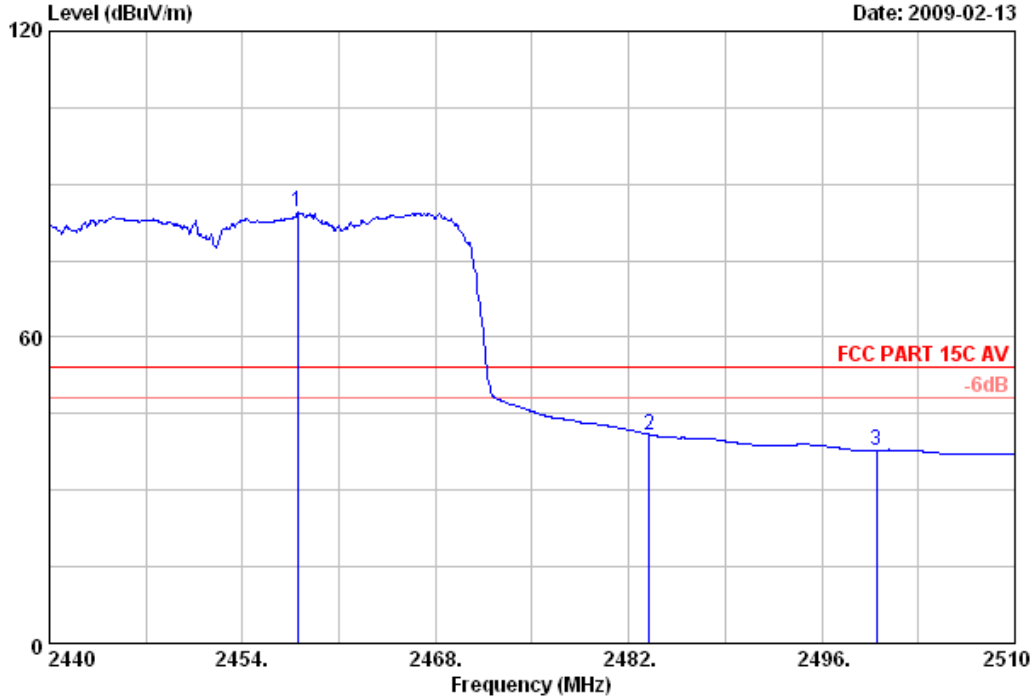
Remarks:

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



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 ShenZhen Science & Industry Park  
 Noutou, ShenZhen, GuangDong, China  
 Tel:+86-755-26639495-7  
 Fax:+86-755-26632877  
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Data: 102 File: E:\2009 report data\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 102  
 Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2457.990	28.55	6.84	35.11	84.14	84.42	54.00	-30.42	Average
2	2483.500	28.58	6.87	35.10	40.56	40.91	54.00	13.09	Average
3	2500.000	28.60	6.91	35.10	37.47	37.88	54.00	16.12	Average

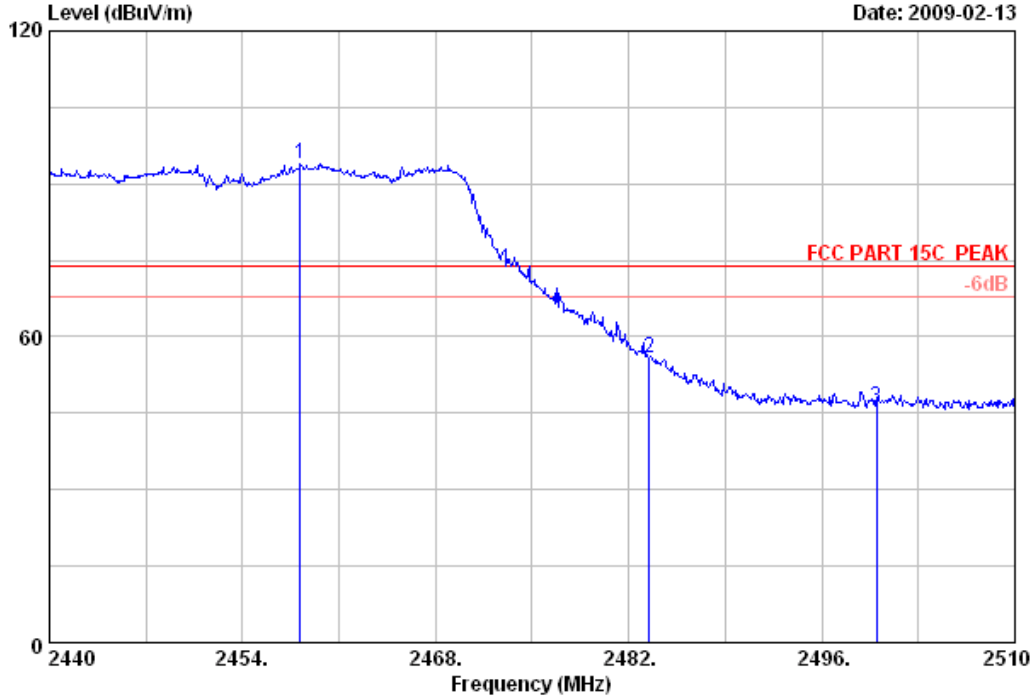
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
Fax:+86-755-26632877  
Postcode:518057

Data: 103 File: E:\2009 report data\P\Proware\ACS8Q2013.EM6 (104)



Site no. : 3# Chamber Data no. : 103  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	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	2458.200	28.55	6.84	35.11	93.52	93.80	74.00	-19.80	Peak
2	2483.500	28.58	6.87	35.10	55.64	55.99	74.00	18.01	Peak
3	2500.000	28.60	6.91	35.10	45.86	46.27	74.00	27.73	Peak

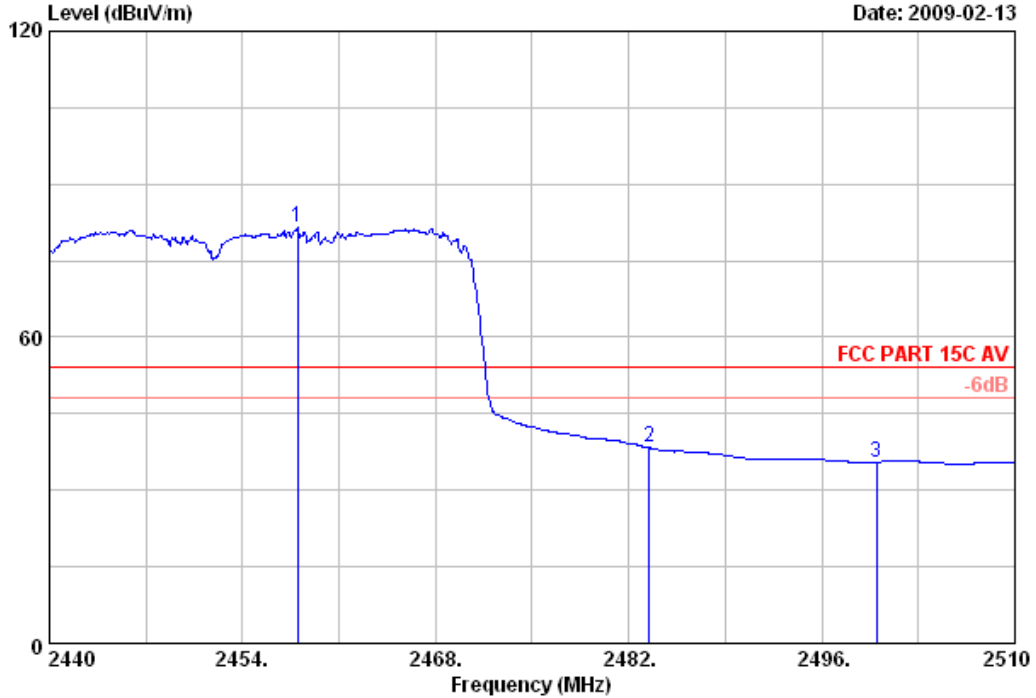
Remarks:

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



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ShenZhen Science & Industry Park  
Noutou, ShenZhen, GuangDong, China  
Tel:+86-755-26639495-7  
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Data: 104 File: E:\2009 report data\P\Proware\ACS802013.EM6 (104)



Site no. : 3# Chamber Data no. : 104  
 Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23\*C/54% Engineer : Paul  
 EUT : Wireless N Cardbus Adapter M/N:M-WN910N  
 Power Rating : DC 3.3V From PC input AC 120V/60Hz  
 Test mode : IEEE802.11nHT40 CH7 2452MHz  
 M/N :

	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	2457.990	28.55	6.84	35.11	81.27	81.55	54.00	-27.55	Average
2	2483.500	28.58	6.87	35.10	38.06	38.41	54.00	15.59	Average
3	2500.000	28.60	6.91	35.10	35.13	35.54	54.00	18.46	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.



## 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,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	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 100 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

Test Mode: IEEE 802.11b TX

CH	6dB Bandwidth (MHz)	Limit	Conclusion
1	12.00	>500	<b>PASS</b>
6	12.00	>500	<b>PASS</b>
11	12.00	>500	<b>PASS</b>

Test Mode: IEEE 802.11g TX

CH	6dB Bandwidth (MHz)	Limit	Conclusion
1	16.40	>500	<b>PASS</b>
6	16.40	>500	<b>PASS</b>
11	16.40	>500	<b>PASS</b>

Test Mode: IEEE 802.11n HT20 TX

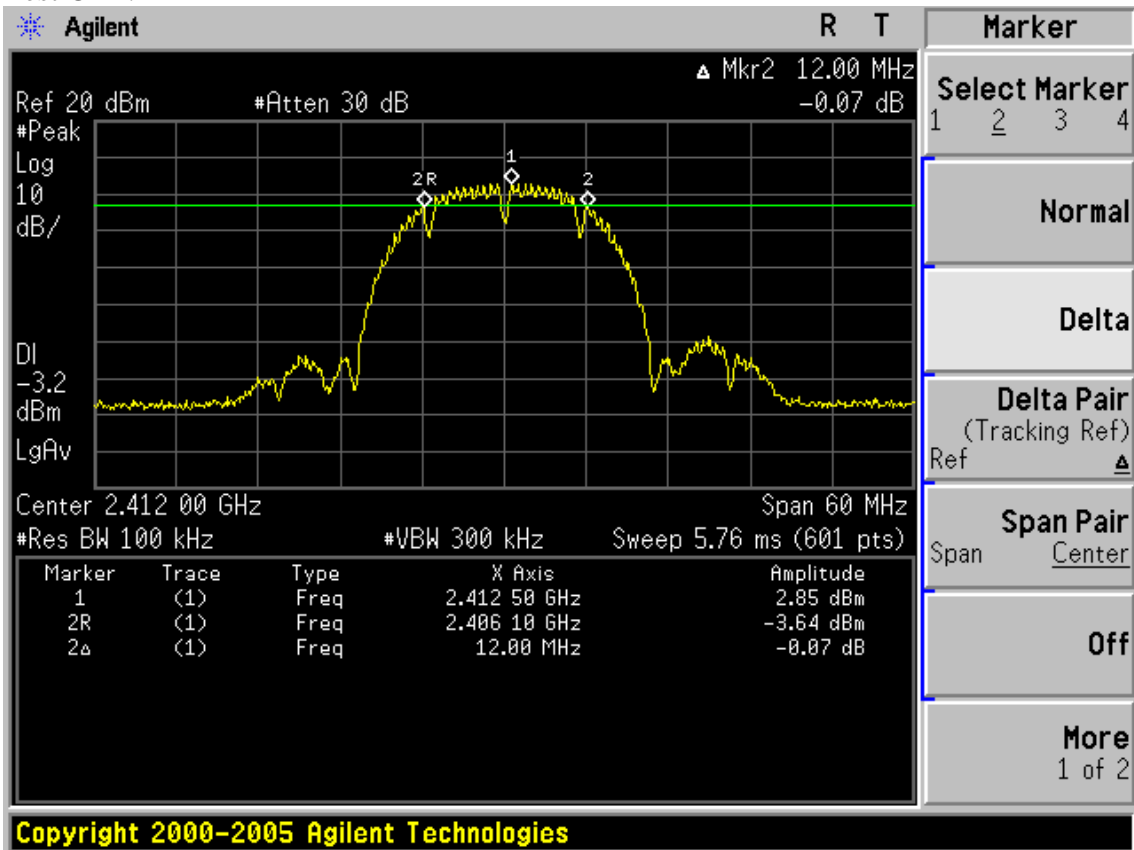
CH	6dB Bandwidth (MHz)	Limit	Conclusion
1	17.87	>500	<b>PASS</b>
6	17.87	>500	<b>PASS</b>
11	17.73	>500	<b>PASS</b>

Test Mode: IEEE 802.11n HT40 TX

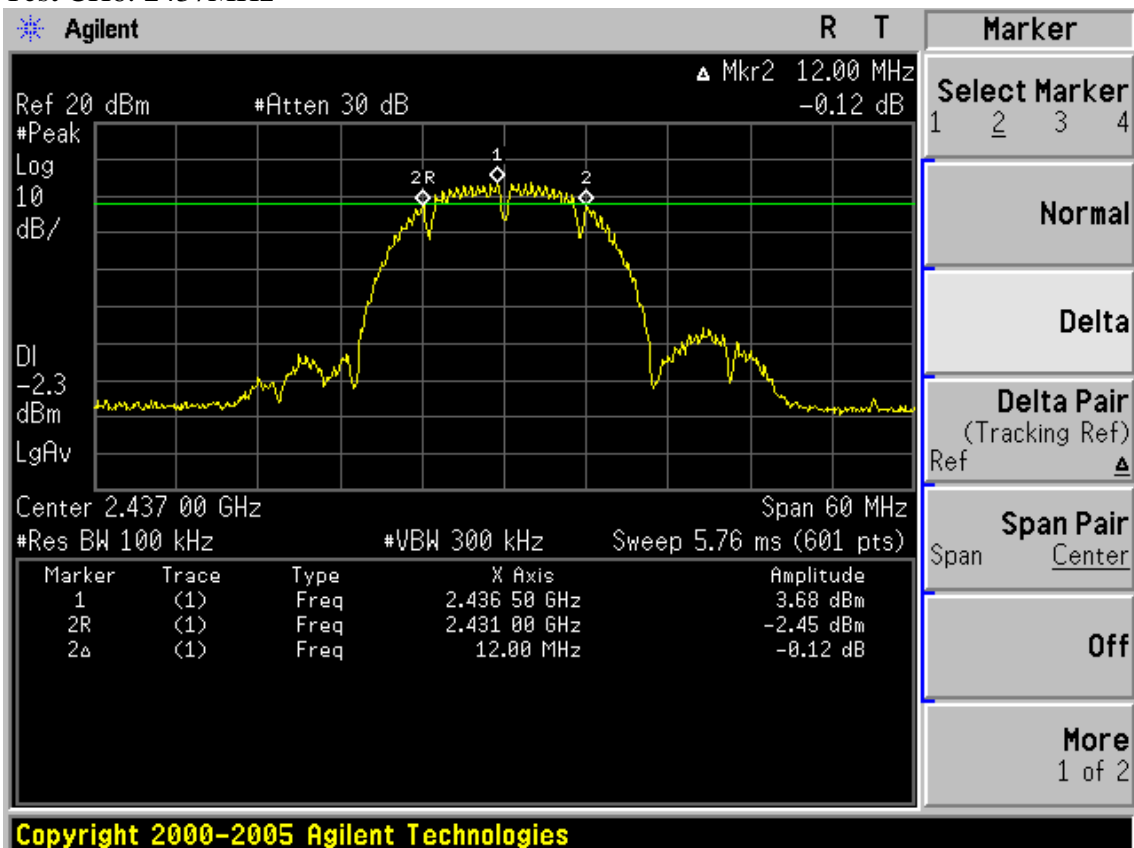
CH	6dB Bandwidth (MHz)	Limit	Conclusion
1	36.40	>500	<b>PASS</b>
4	36.40	>500	<b>PASS</b>
7	36.40	>500	<b>PASS</b>

Test Mode: IEEE 802.11b TX

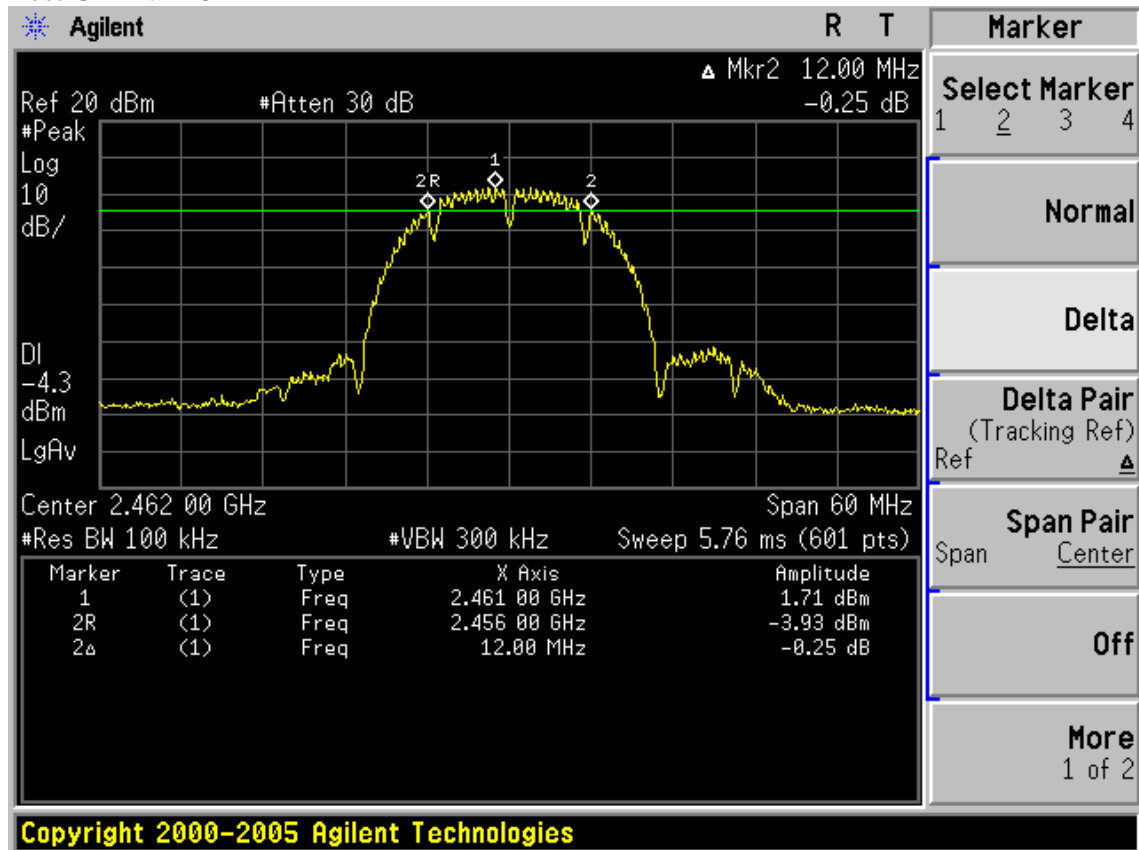
Test CH1: 2412MHz



Test CH6: 2437MHz

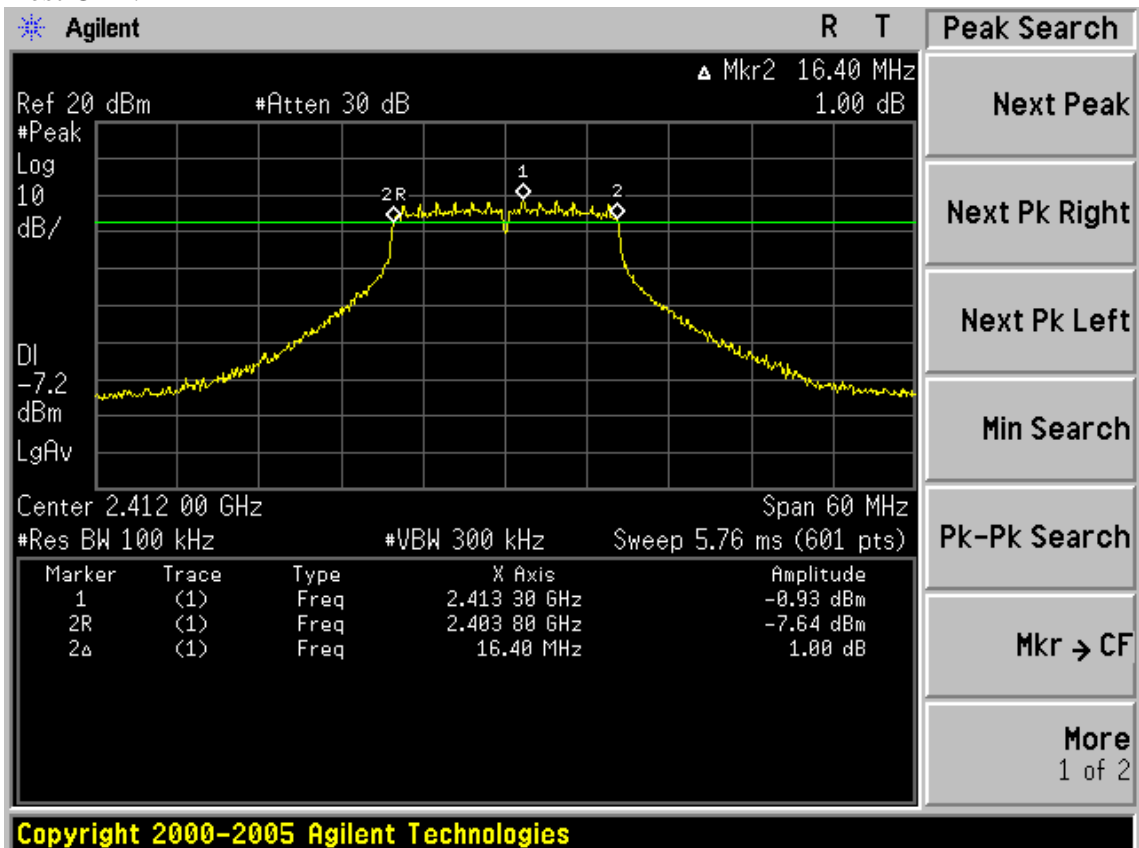


Test CH1: 2462MHz

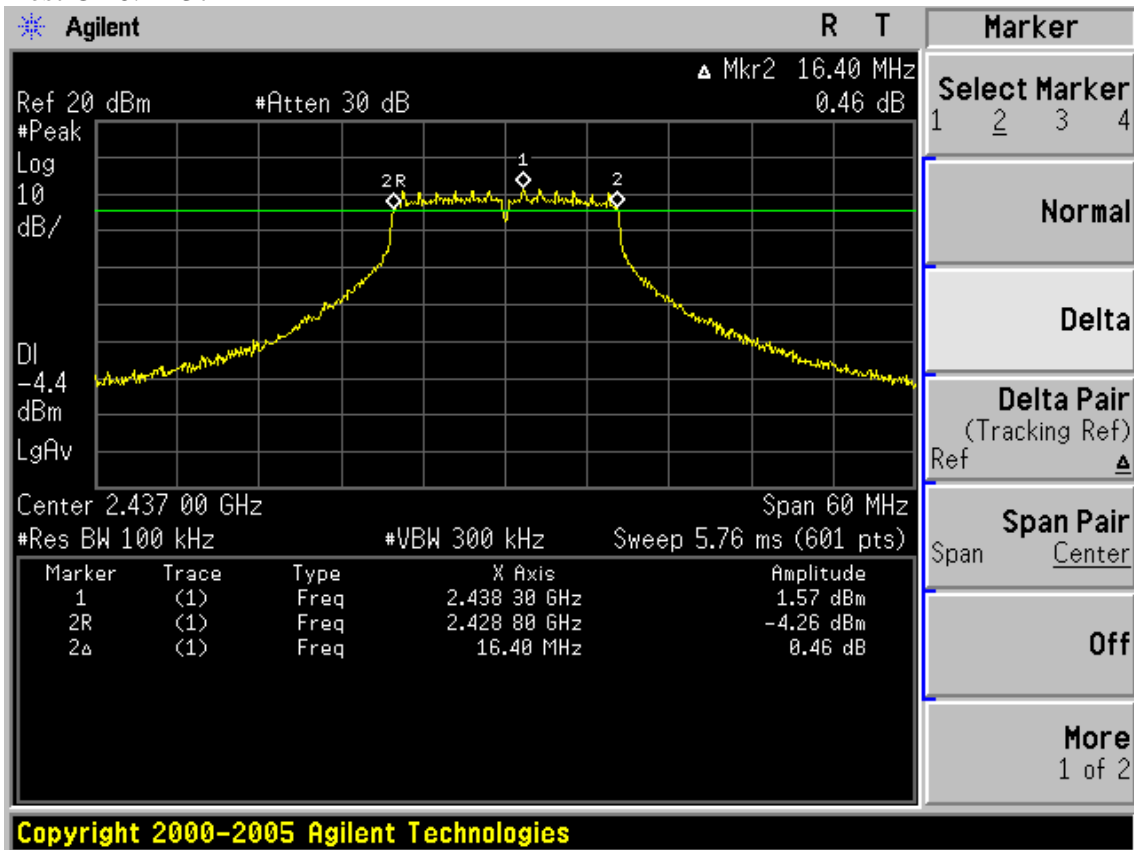


Test Mode: IEEE 802.11g TX

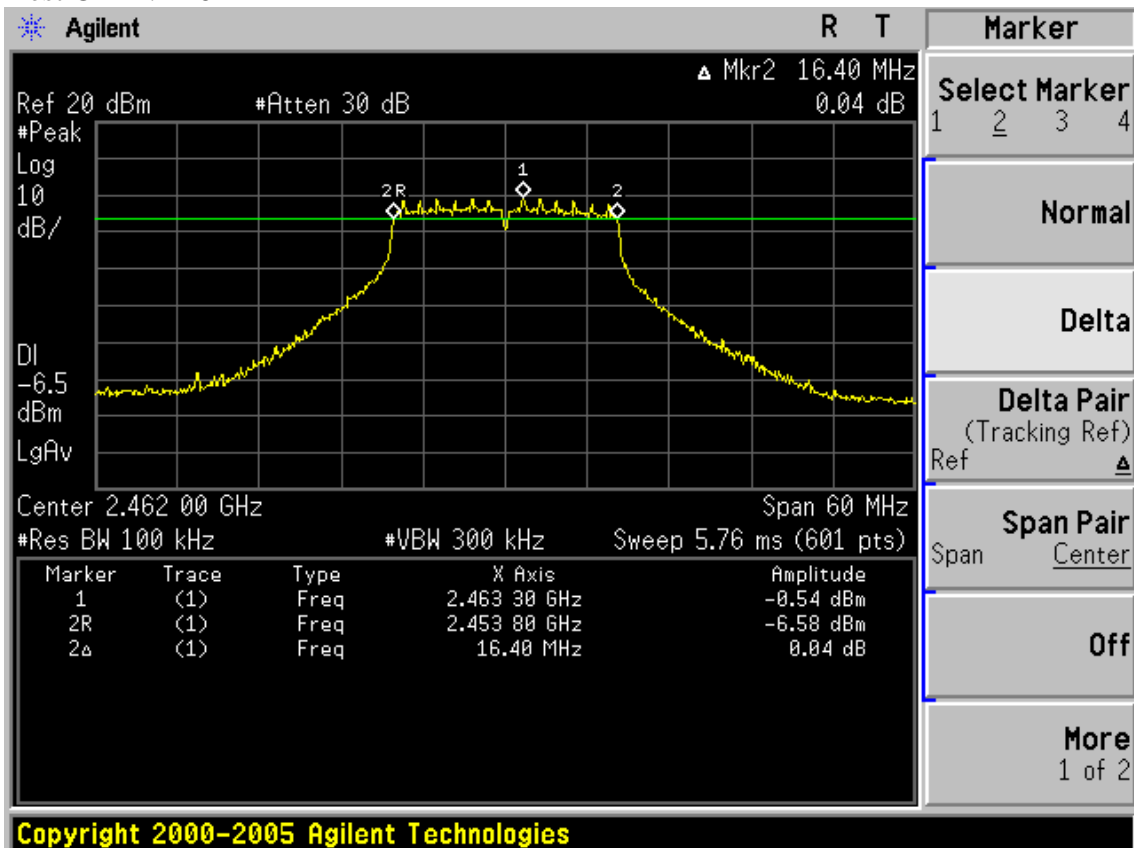
Test CH1: 2412MHz



Test CH6: 2437MHz

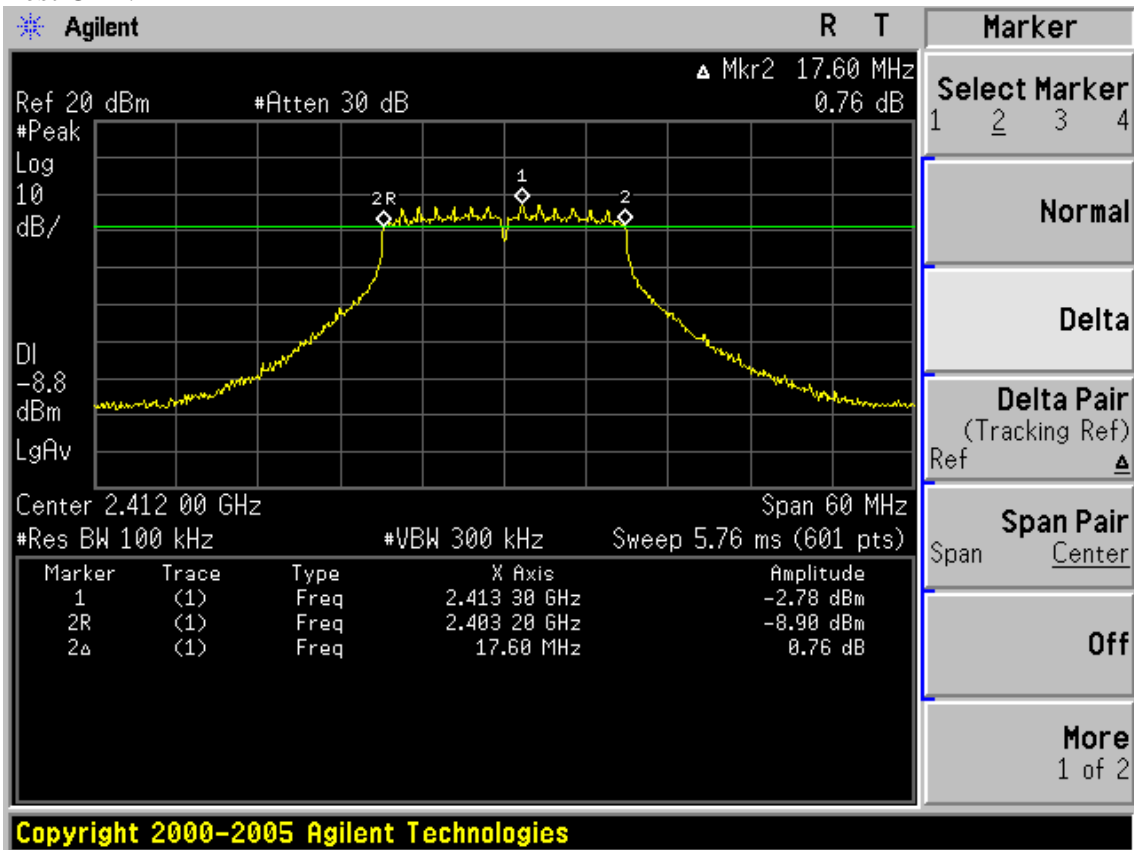


Test CH11: 2462MHz

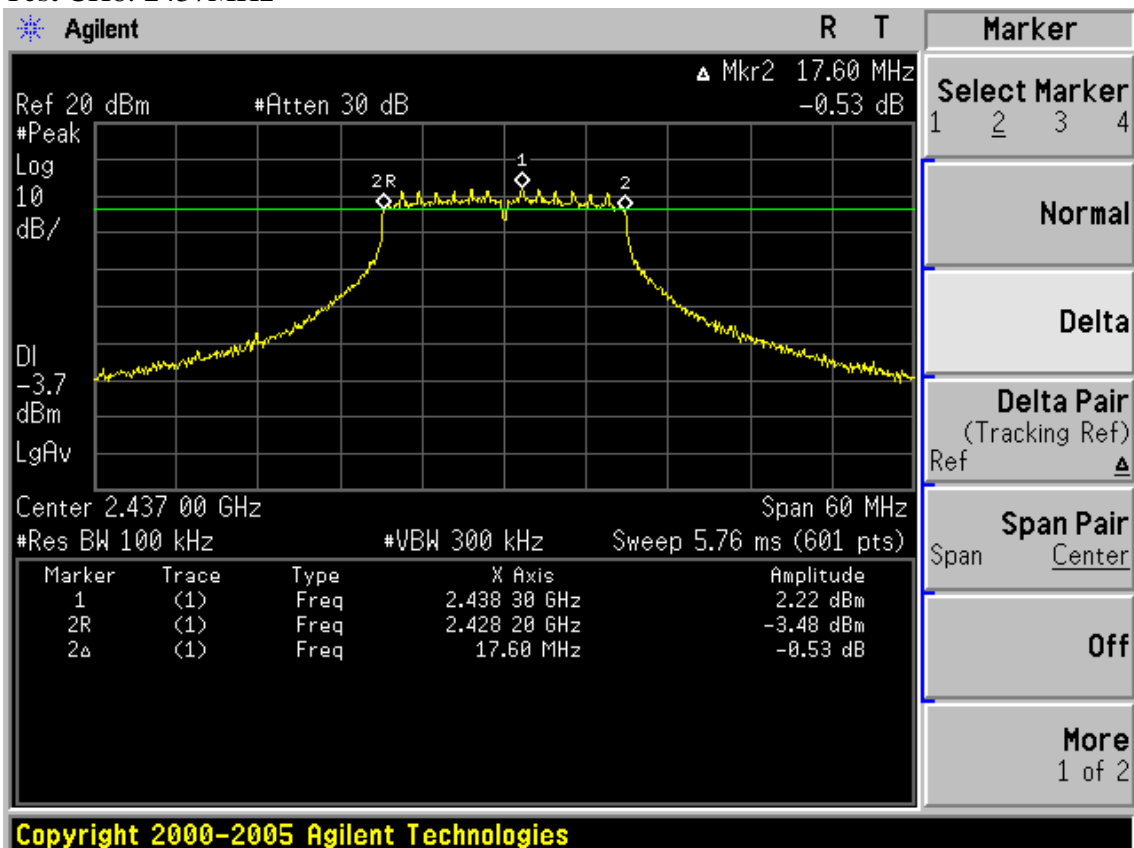


Test Mode: IEEE 802.11n HT20 TX

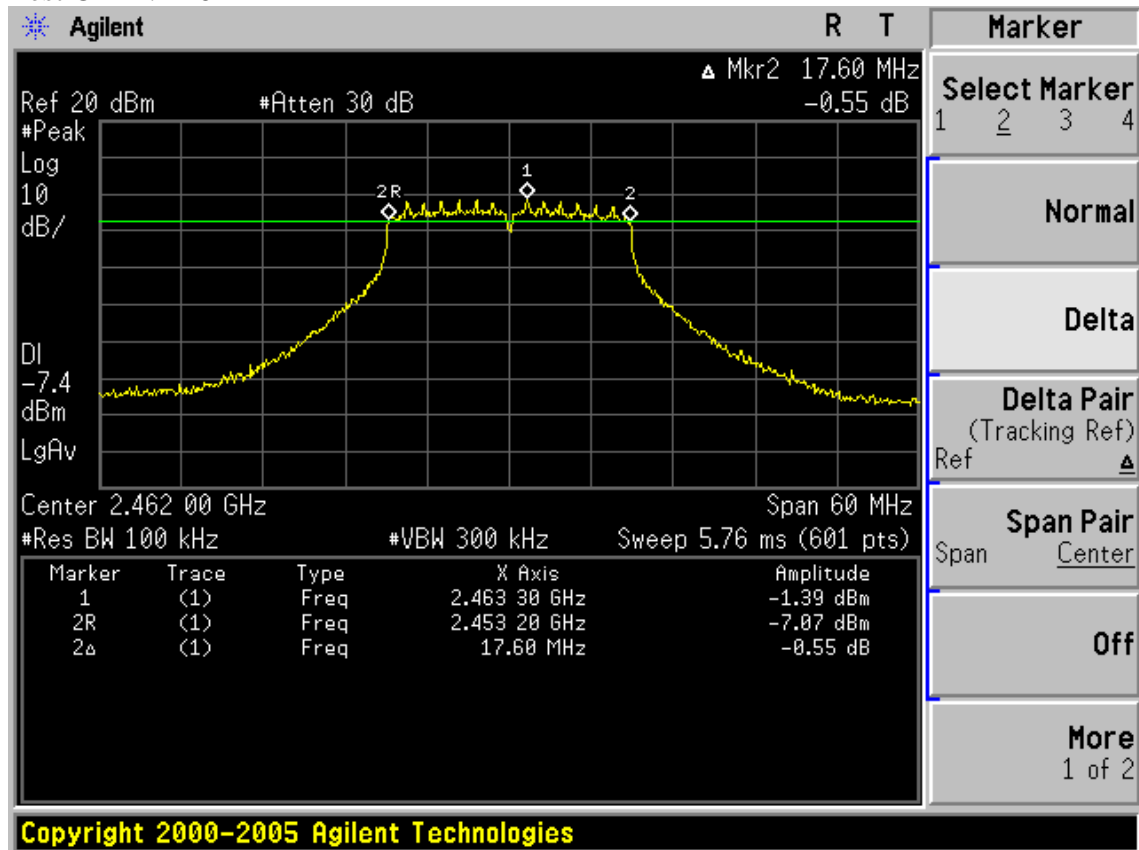
Test CH1: 2412MHz



Test CH6: 2437MHz

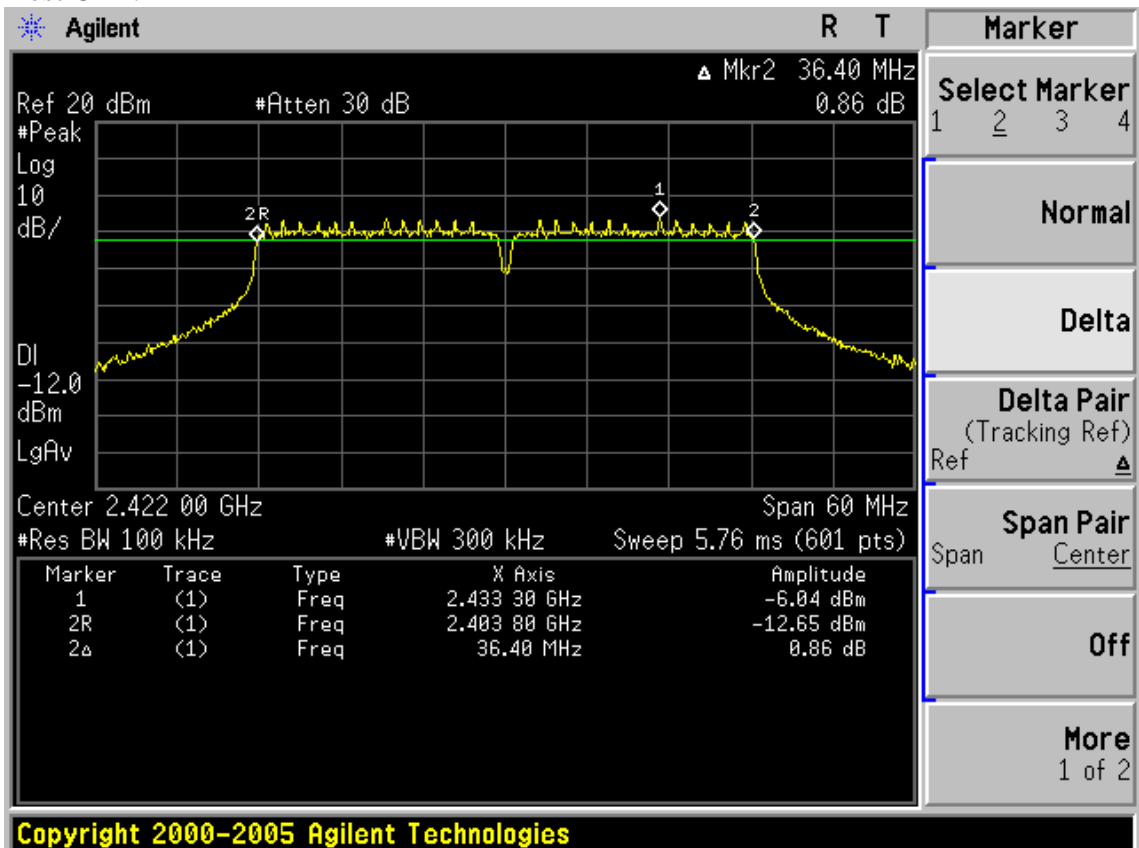


Test CH1: 2462MHz

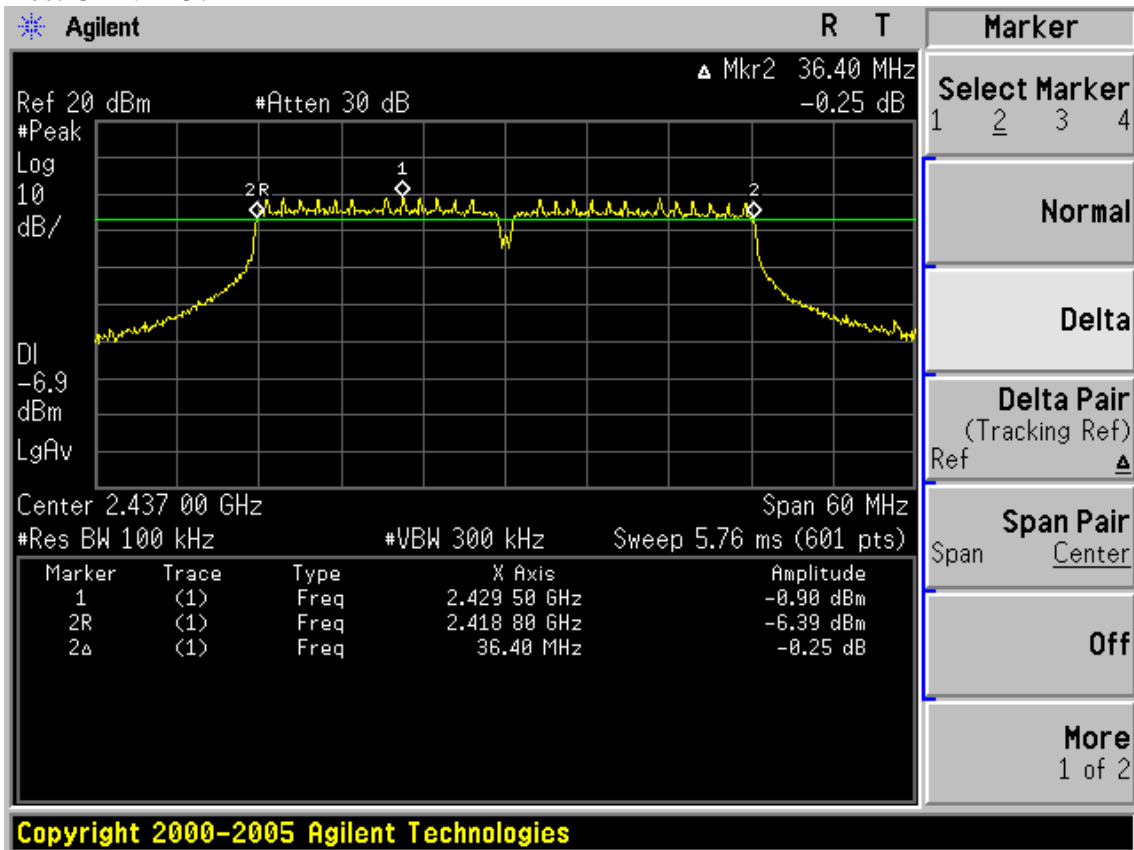


Test Mode: IEEE 802.11n HT40 TX

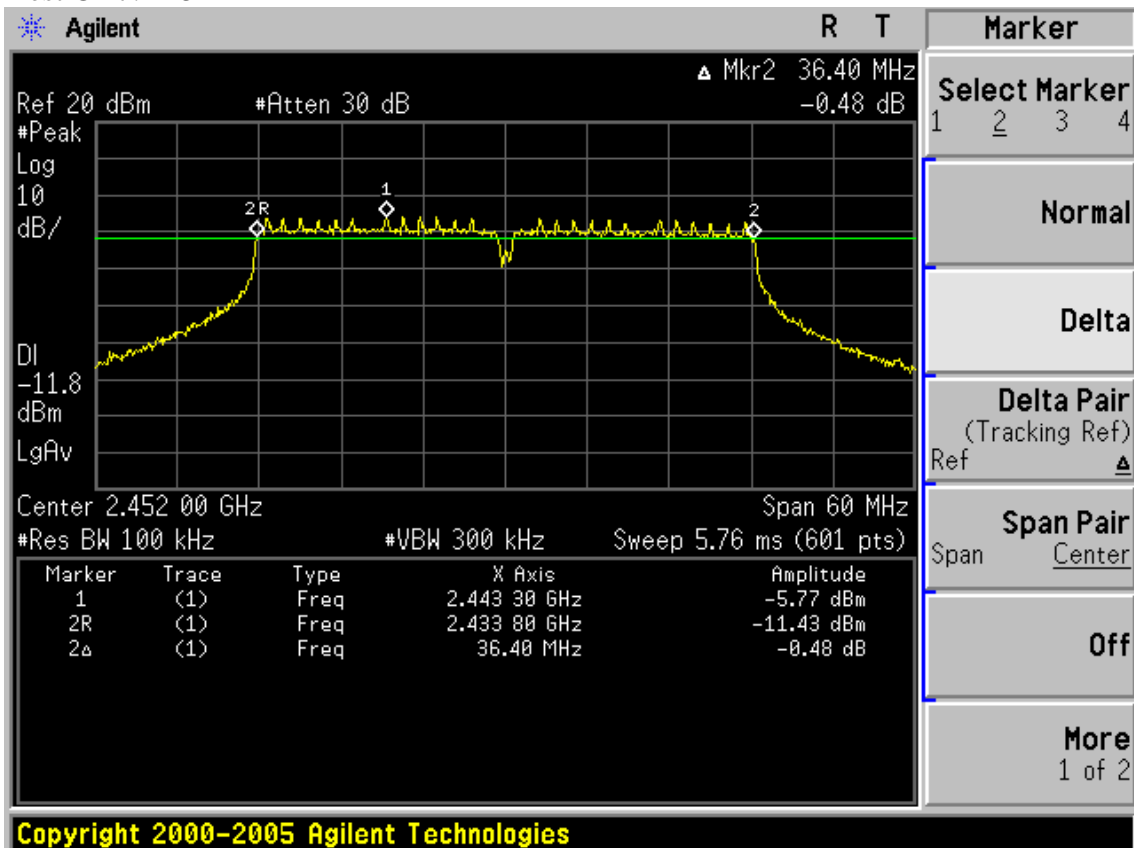
Test CH1: 2422MHz



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	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY3926216 5	May,28, 08	1 Year
3	Power meter	Anritsu	ML2487A	6K00002472	May,10, 08	1 Year
4	Power sensor	Anritsu	ML2491A	032516	May,10, 08	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	1Year

### 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, For IEEE 802.11b/g and IEEE802.11n HT20 mode, the transmitter output was connected to a power meter, use the power meter to read out the peak out put power of each chain's
- 2, For IEEE802.11n HT40 mode the transmitter output was connected to a Spectrum Analyzer through a 20dB Attenuator, and use the channel power measure function of Spectrum Analyzer to read out the peak output power of each chain's
- 3, Getting total PK out put power by adding chain 1 and chain 2's measured PK out put power.



## 8.4. Test Results

EUT: Wireless N Cardbus Adapter M/N: M-WN910N					
Power: DC 3.3V From PC Input AC 120V/60Hz					
Data Rate:11b 1Mbps ; 11g : 6Mbps ; 11n HT20 : 6.5Mbps ; 11n HT40 : 13.5Mbps(Note 1)					
Ambient Temperature:23°C			Relative Humidity: 60%		
Test date:2009-03-03		Test site: RF site		Tested By: Jamy	
Cable Loss: 0.6dB Antenna Gain:0.59dBi					
Test CH	11b,11g,11n HT20	CH1:2412MHz CH6:2437MHz CH11:2462MHz			
Test CH	11n HT40	CH1:2422MHz CH4:2437MHz CH7:2452MHz			
Mode	CH	Chain1	Chain2	Result	
		Level(dBm)	Level(dBm)	Total PK Power(dBm)	Limit (dBm)
11b	CH1	19.56	18.85	22.23	30.00
	CH6	20.23	19.17	22.74	30.00
	CH11	18.51	17.83	21.19	30.00
11g	CH1	21.69	21.20	24.46	30.00
	CH6	25.45	25.65	28.56	30.00
	CH11	24.06	21.59	26.01	30.00
11n HT20	CH1	21.25	20.86	24.07	30.00
	CH6	25.56	25.87	28.73	30.00
	CH11	21.43	21.32	24.39	30.00
11n HT40	CH1	21.43	19.88	23.73	30.00
	CH4	26.00	24.76	28.43	30.00
	CH7	21.11	20.37	23.77	30.00
Note1:According Exploratory test, These data rate have the maximum output power					
Note 2: Total power=Chain1 Level +Chain2 Level (Linear)					

## 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,10, 08	1 Year
2	Attenuator	Agilent	8491B	MY39262165	May,28, 08	1 Year
3	RF Cable	Hubersuhner	SUCOFLEX 102	28618/2	May,28, 08	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

The transmitter output was connected to a spectrum analyzer . Each chain's power density was measured by spectrum analyzer with 3kHz RBW and 30kHz VBW, sweep time=span/3kHz.

Getting total power density by adding chain 1 and chain 2's measured power density.

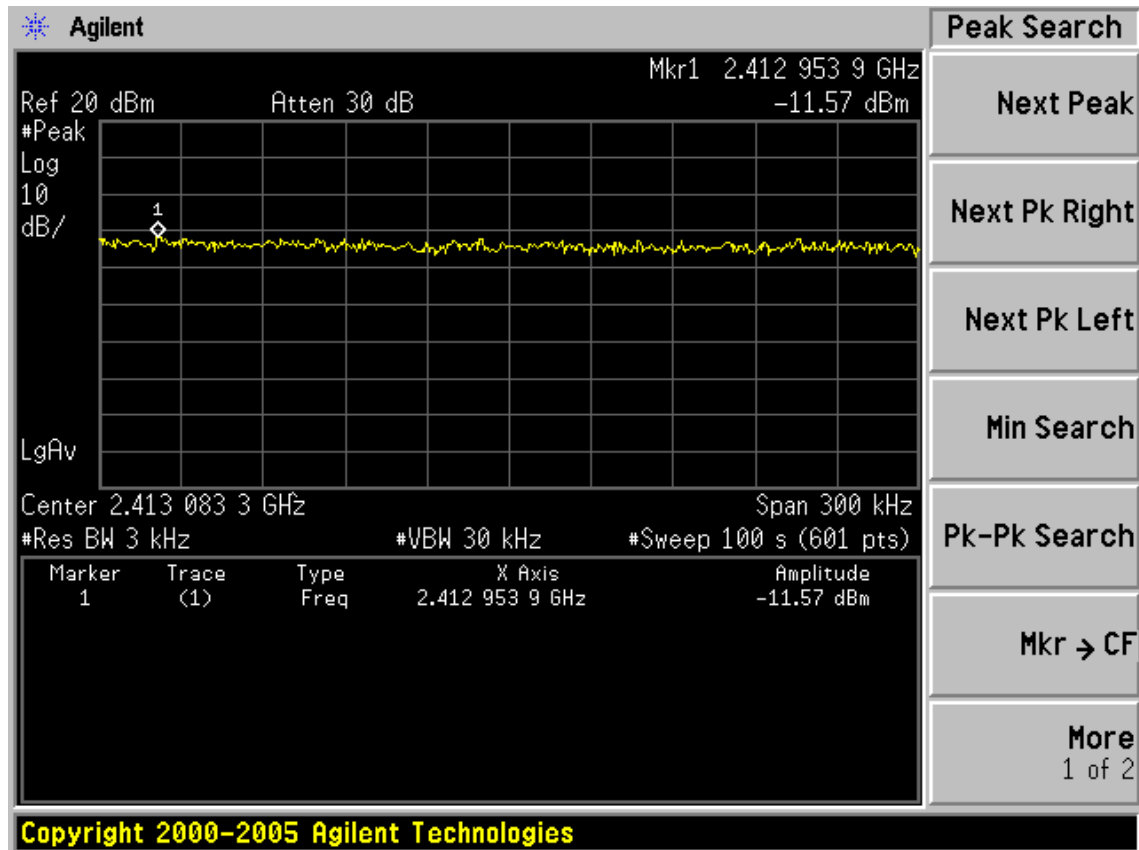
### 9.4. Test Results

EUT: Wireless N Cardbus Adapter M/N:M-WN910N							
Power: DC 3.3V From PC Input AC 120V/60Hz							
Data Rate:11b 1Mbps ; 11g : 6Mbps ; 11n HT20 : 6.5Mbps ; 11n HT40 : 13.5Mbps(Note 1)							
Ambient Temperature:23°C				Relative Humidity: 60%			
Test date:2009/03/03			Test site: RF site		Tested By: Sunny		
Cable Loss: 0.6dB Antenna Gain:0.59dBi							
Test CH	11b,11g, 11n HT20		CH1:2412MHz CH6:2437MHz CH11:2462MHz				
Test CH	11n HT40		CH1:2422MHz CH4:2437MHz CH7:2452MHz				
Mode	CH	Chain1		Chain2		Result	
		Read (dBm/3KHz)	Level (dBm/3KHz)	Read (dBm/3KHz)	Level (dBm/3KHz)	Total Power (dBm/3KHz)	Limit (dBm/3KHz)
11b	CH1	-11.57	-10.97	-11.61	-11.01	<b>-7.98</b>	8
	CH6	-11.20	-10.60	-9.99	-9.39	<b>-6.94</b>	8
	CH11	-12.89	-12.29	-12.65	-12.05	<b>-9.16</b>	8
11g	CH1	-17.47	-16.87	-16.79	-16.19	<b>-13.51</b>	8
	CH6	-12.33	-11.73	-11.76	-11.16	<b>-8.43</b>	8
	CH11	-17.27	-16.67	-14.23	-13.63	<b>-11.88</b>	8
11n HT20	CH1	-17.44	-16.84	-17.35	-16.75	<b>-13.78</b>	8
	CH6	-12.38	-11.78	-10.57	-9.97	<b>-7.77</b>	8
	CH11	-15.62	-15.02	-14.36	-13.76	<b>-11.33</b>	8
11n HT40	CH1	-19.54	-18.94	-19.28	-18.68	<b>-15.80</b>	8
	CH4	-14.93	-14.33	-11.71	-11.11	<b>-9.42</b>	8
	CH7	-19.08	-18.48	-15.04	-14.41	<b>-13.00</b>	8
Note1:According Exploratory test, These data rate have the maximum output power							
Note2:Level=Read+ cable loss Total power=Chain1 Level +Chain2 Level (Linear)							

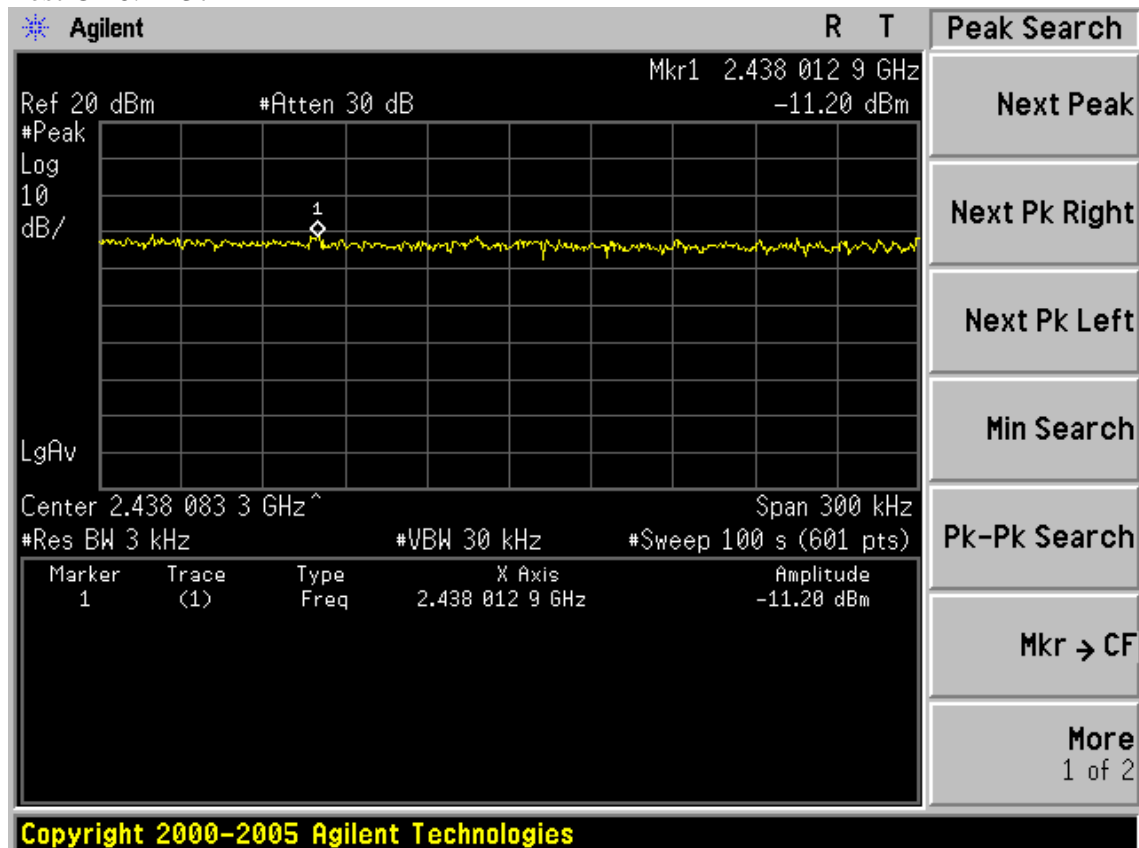
**Chain 1:**

Test Mode: IEEE 802.11b TX

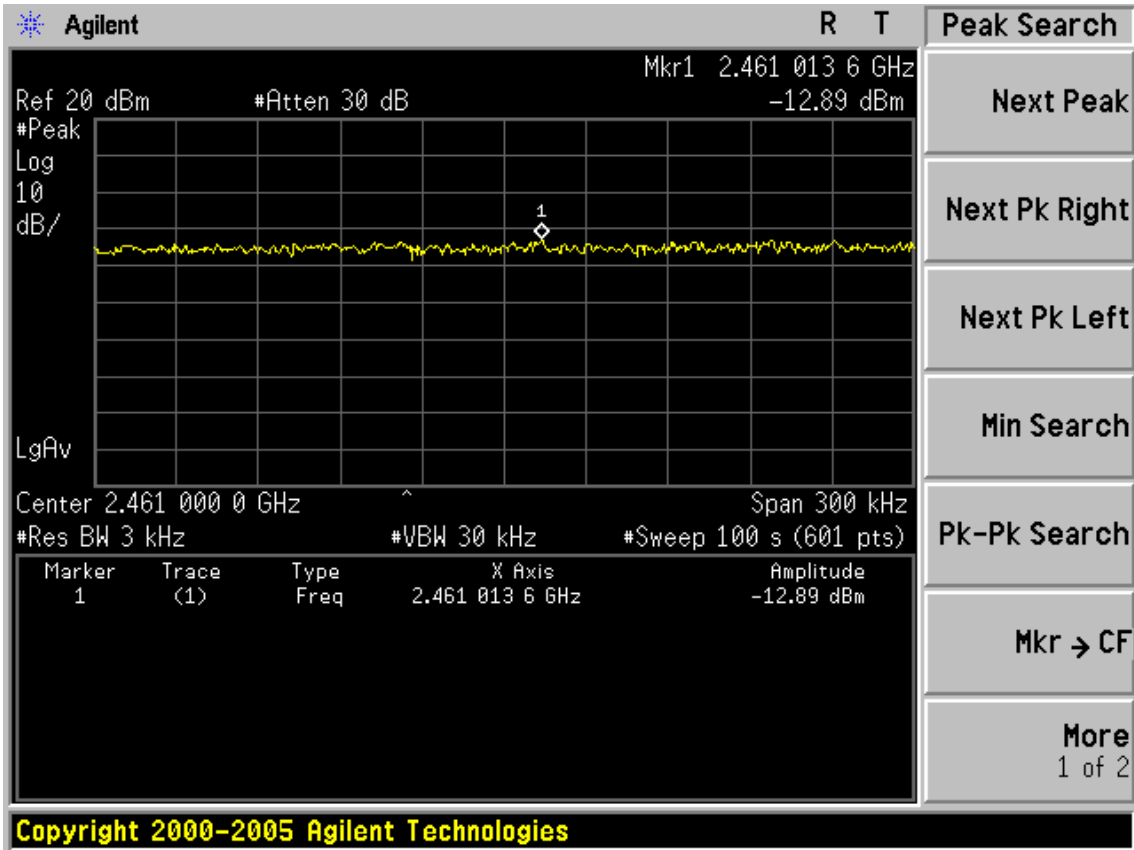
Test CH1: 2412MHz



Test CH6: 2437MHz

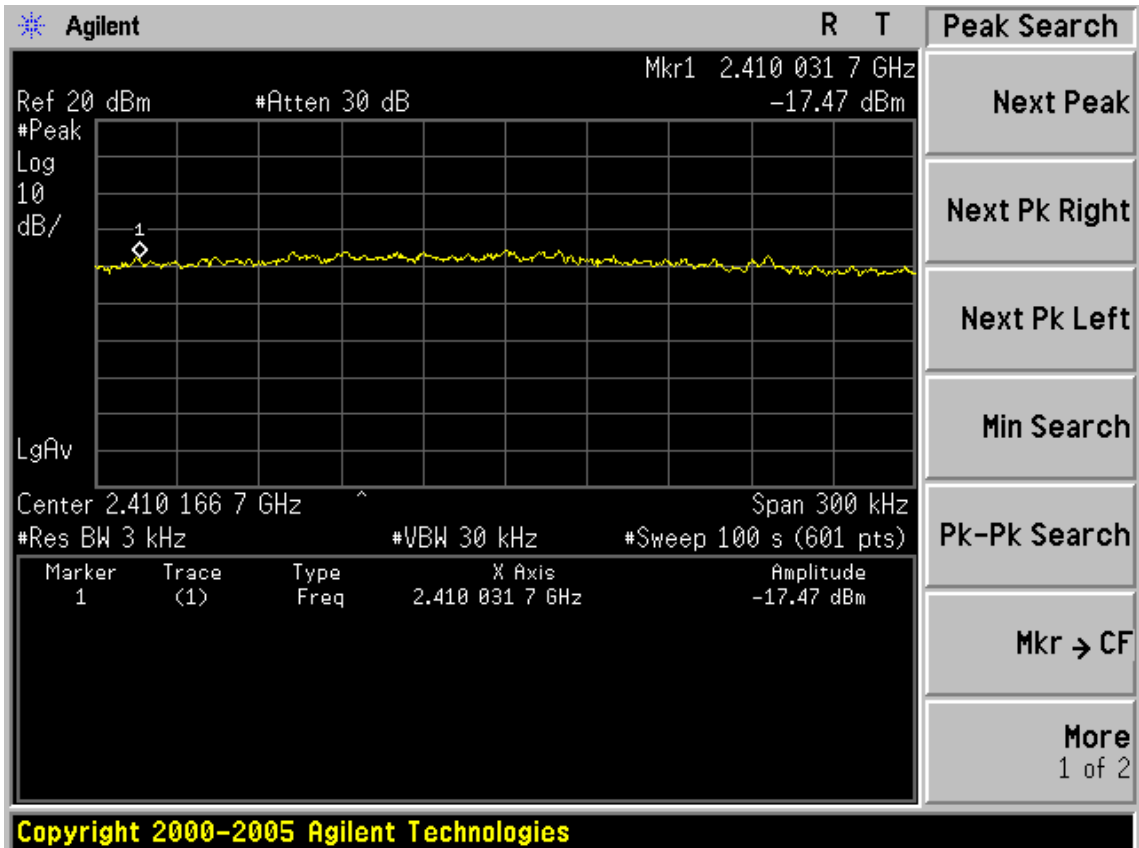


Test CH1: 2462MHz

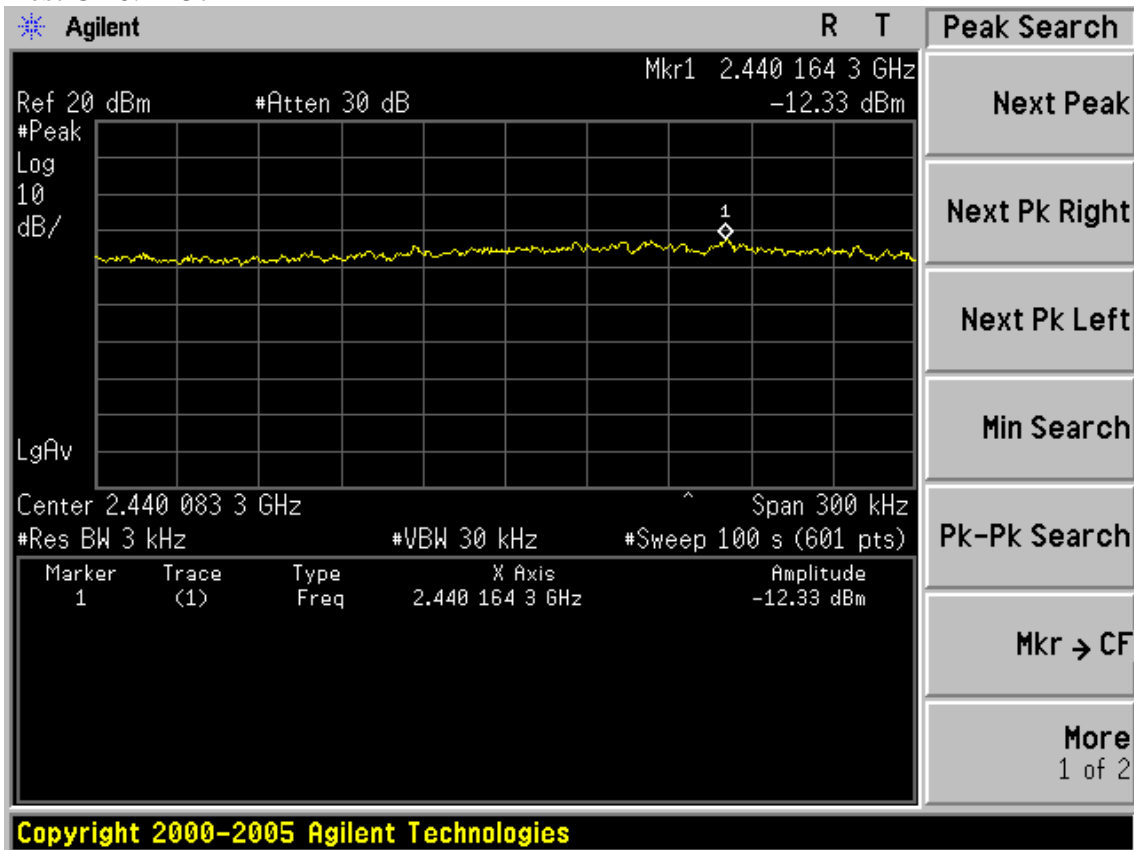


Test Mode: IEEE 802.11g TX

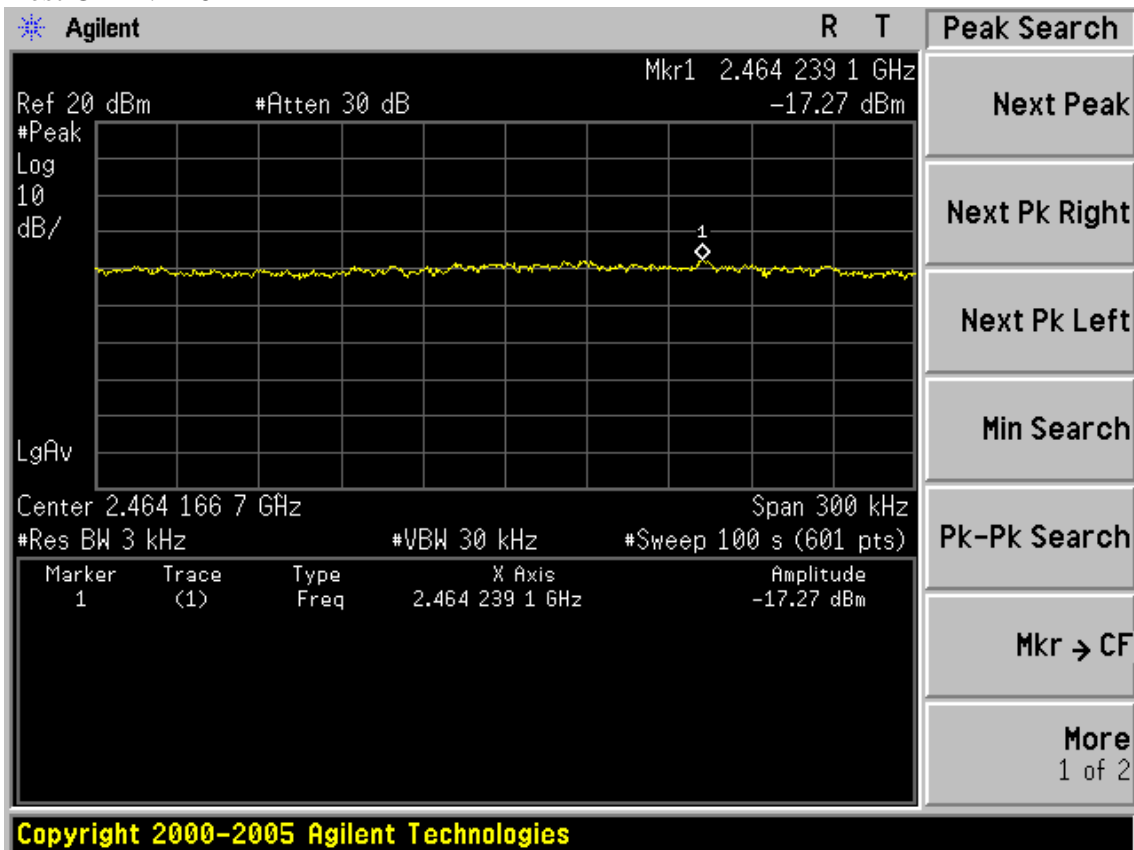
Test CH1: 2412MHz



Test CH6: 2437MHz

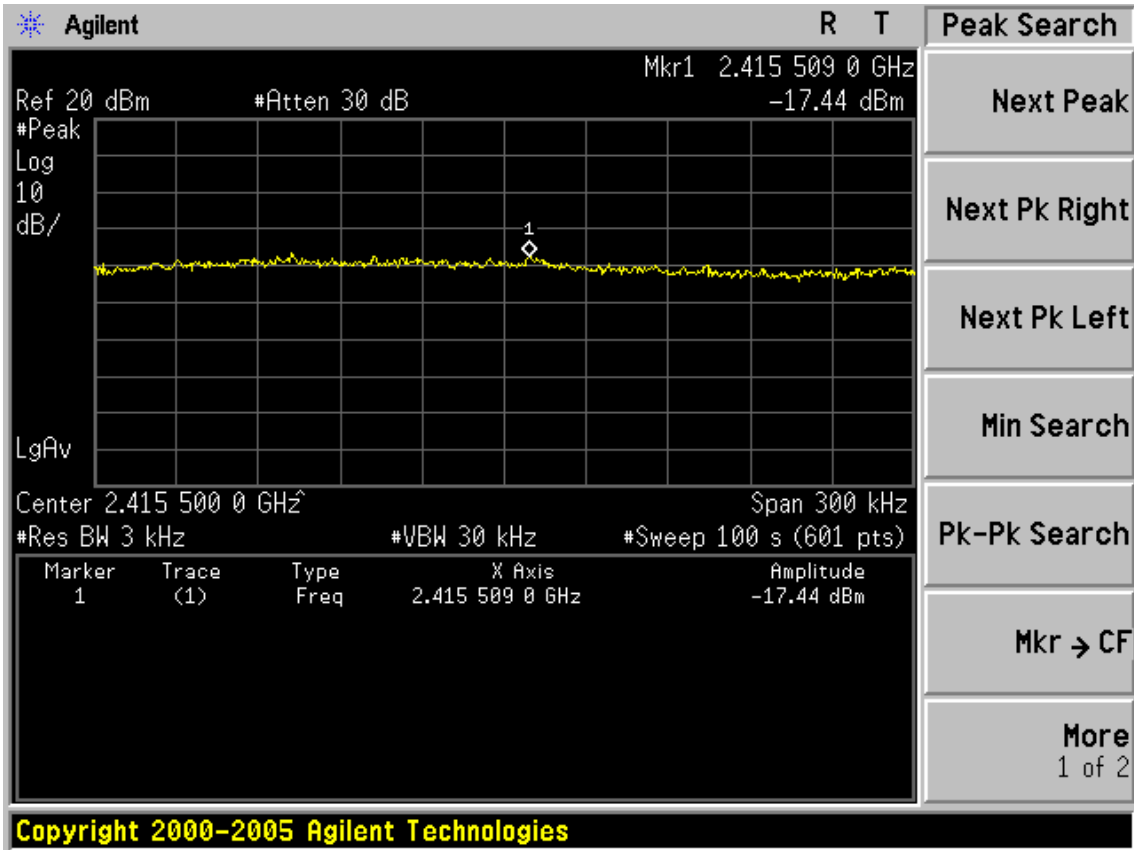


Test CH11: 2462MHz

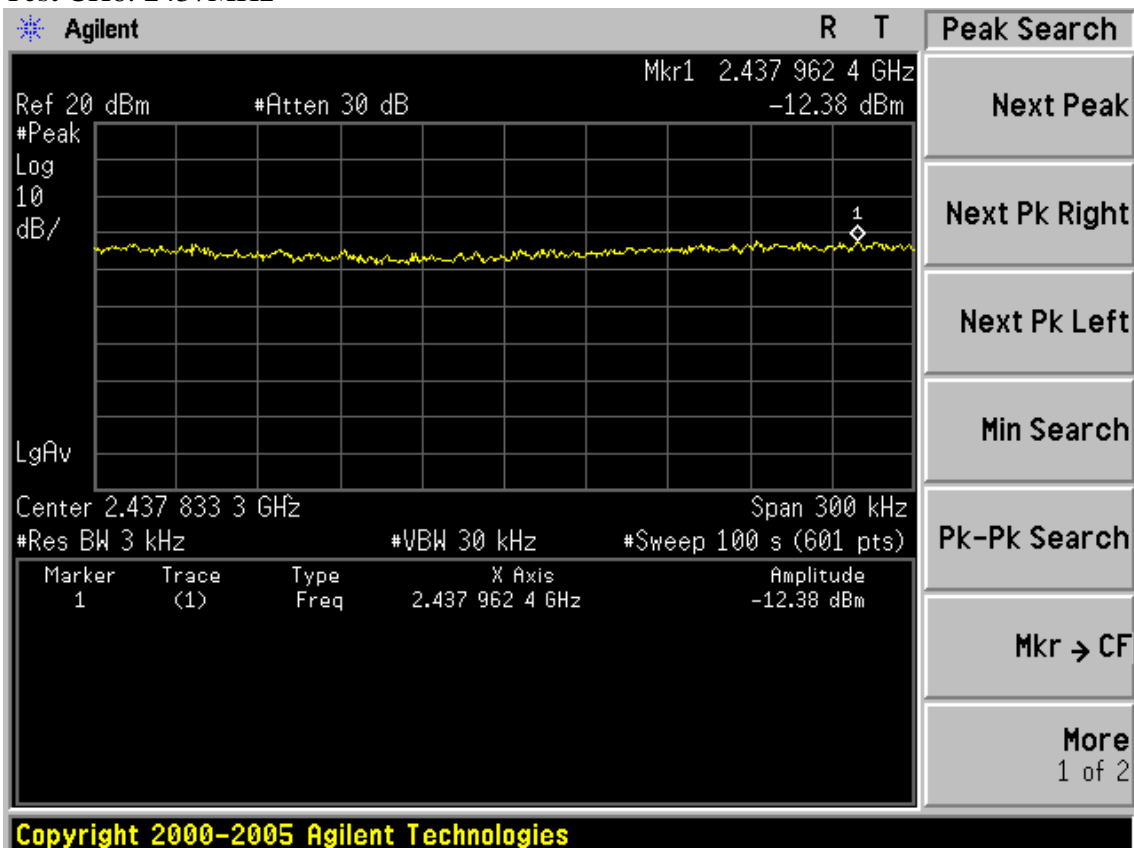


Test Mode: IEEE 802.11n HT20 TX

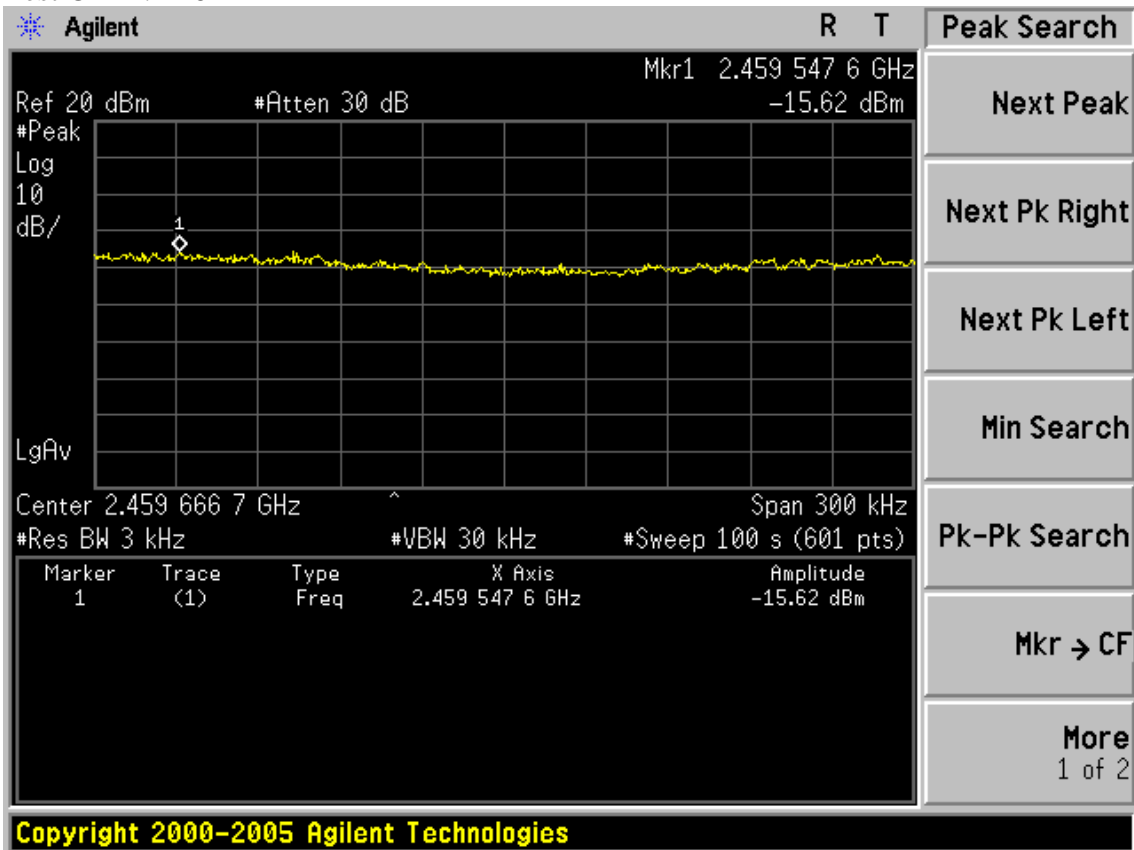
Test CH1: 2412MHz



Test CH6: 2437MHz

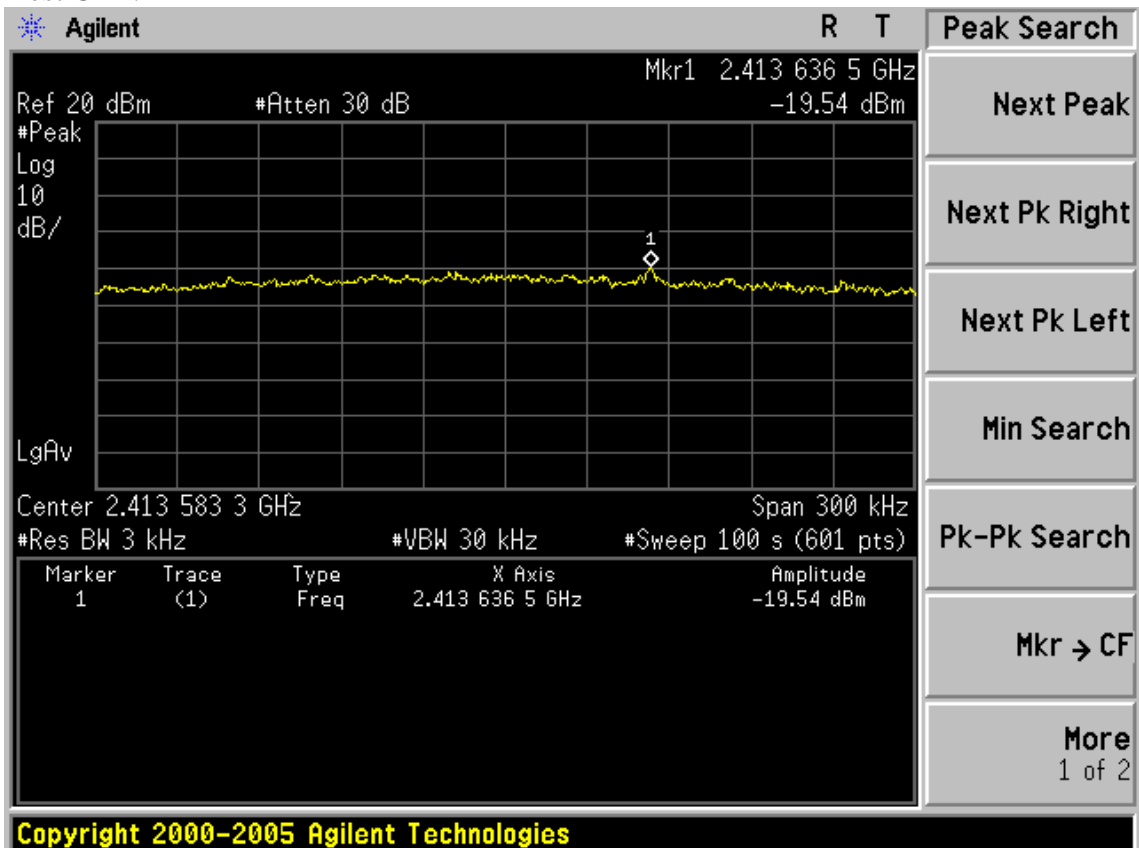


Test CH1: 2462MHz



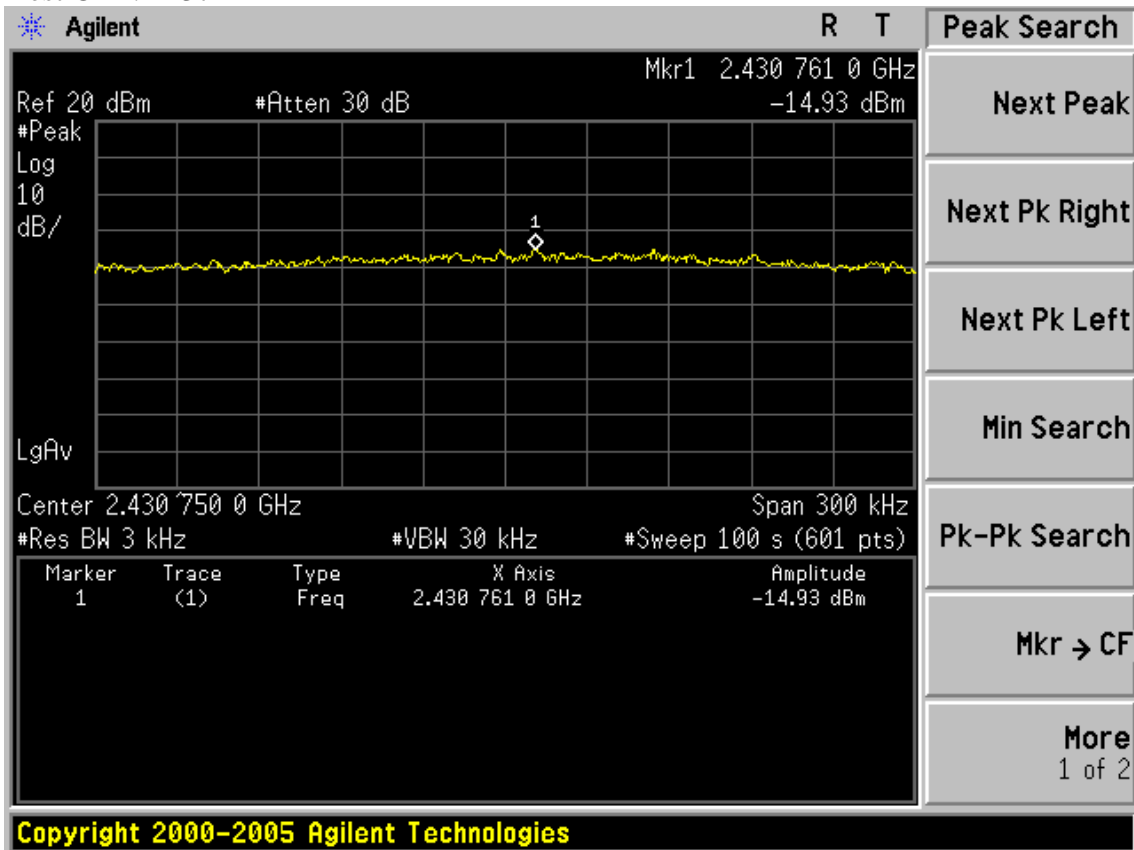
Test Mode: IEEE 802.11n HT40 TX

Test CH1: 2422MHz

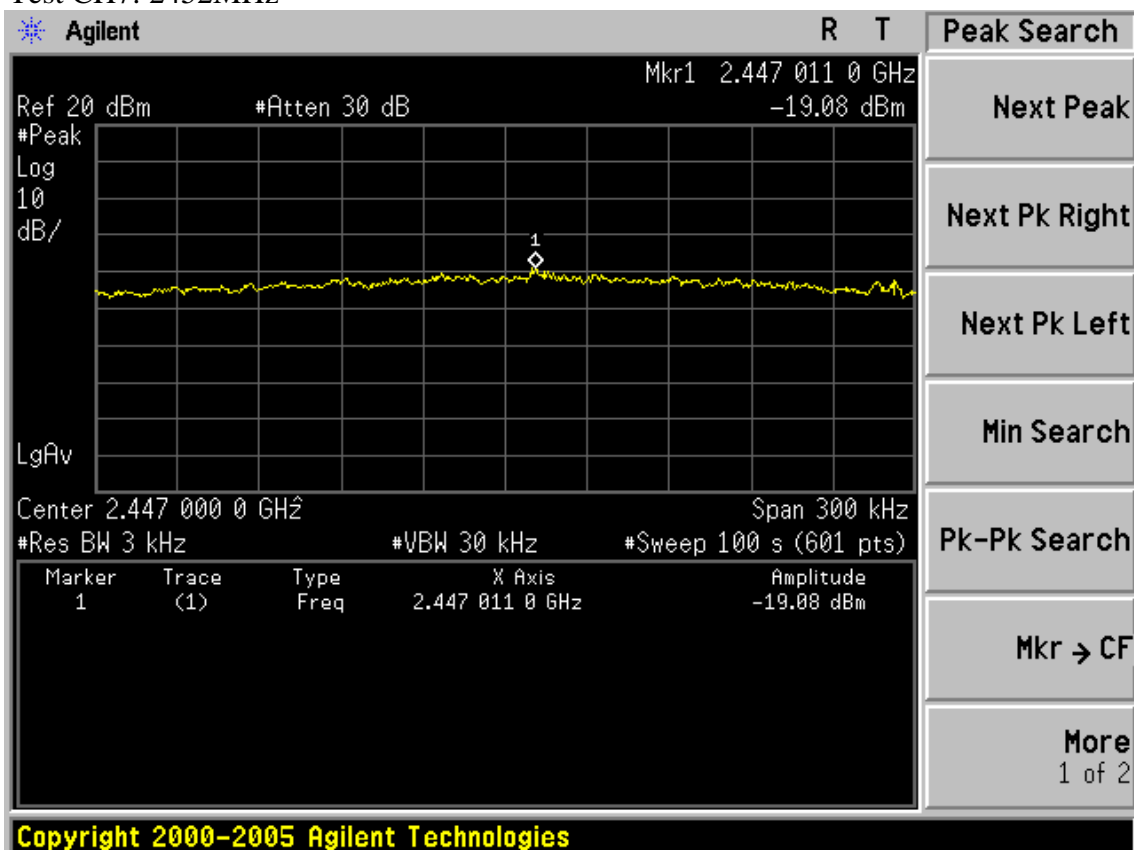




Test CH4: 2437MHz



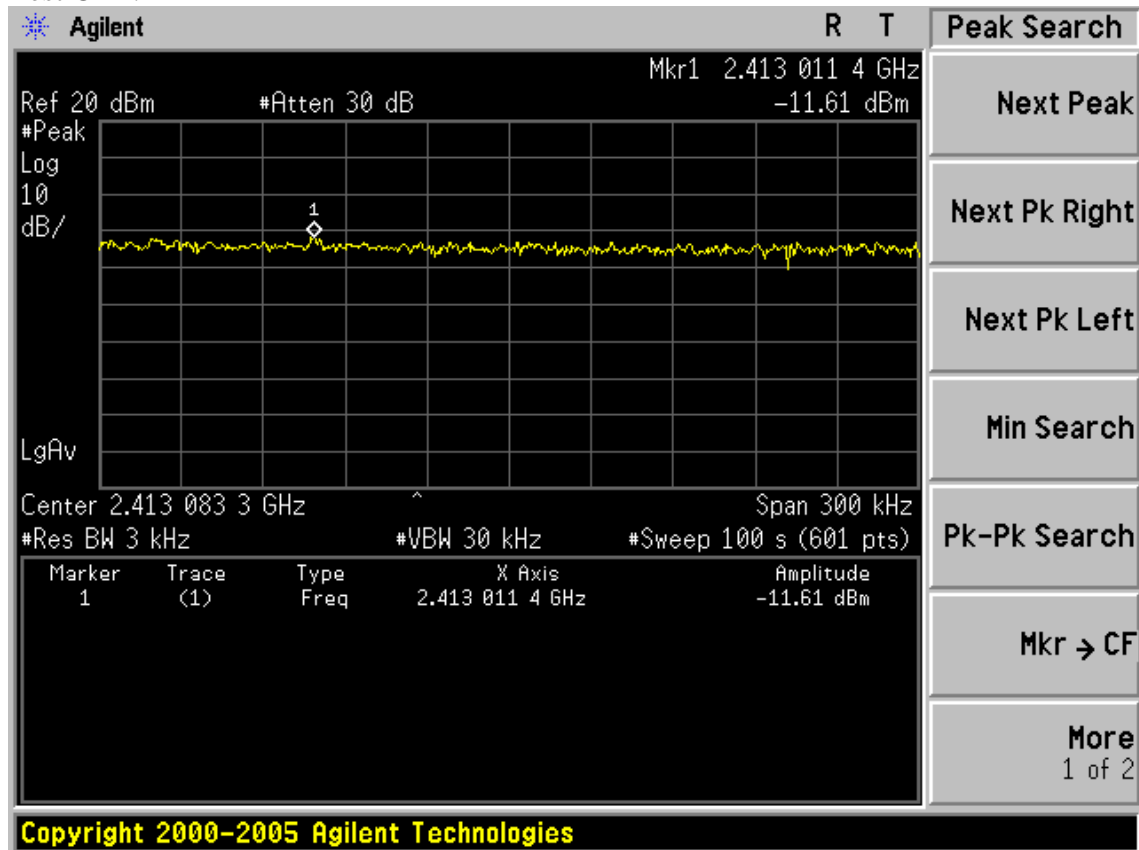
Test CH7: 2452MHz



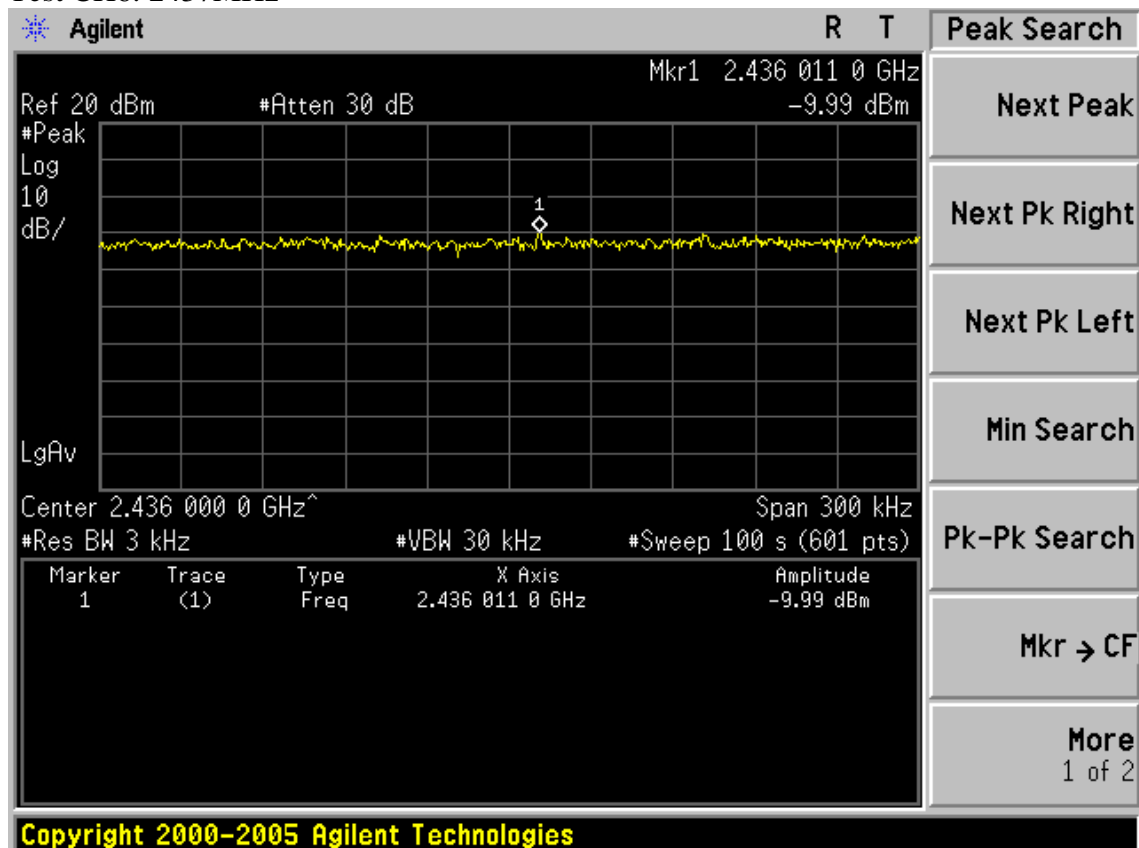
**Chain 2:**

Test Mode: IEEE 802.11b TX

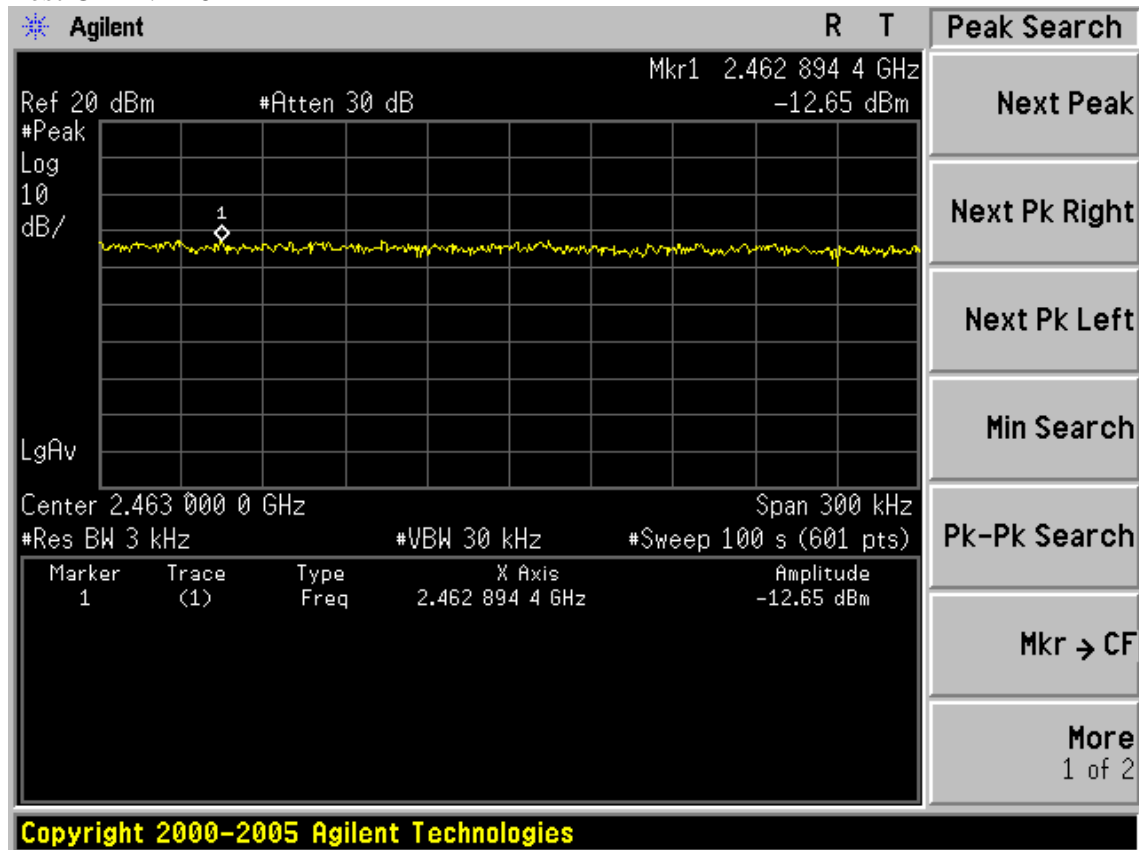
Test CH1: 2412MHz



Test CH6: 2437MHz

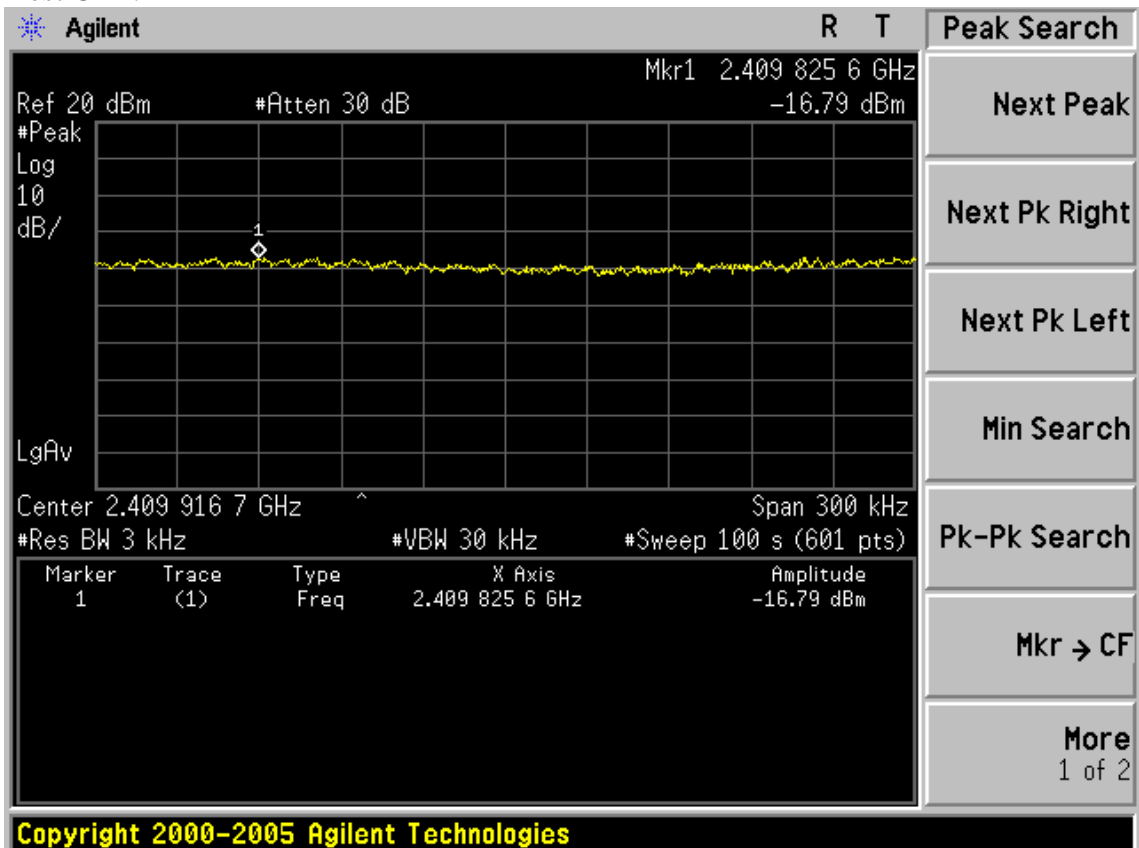


Test CH1: 2462MHz

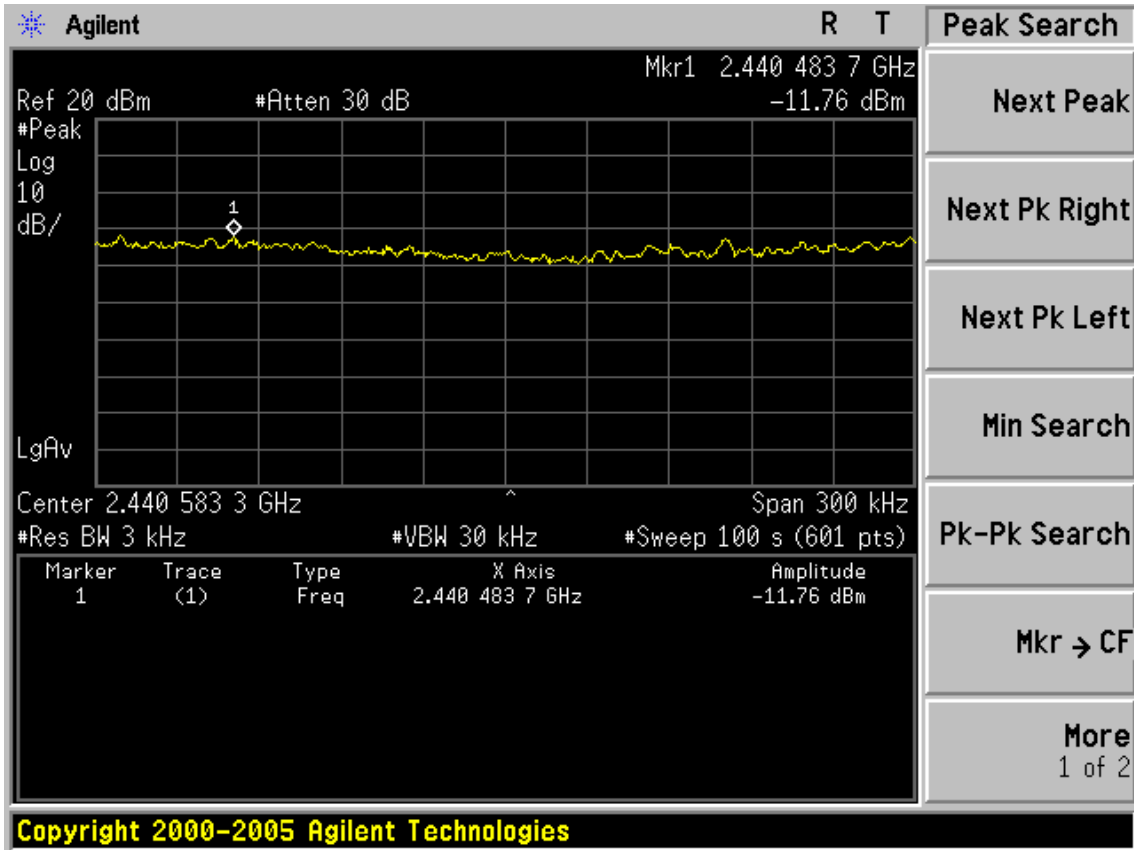


Test Mode: IEEE 802.11g TX

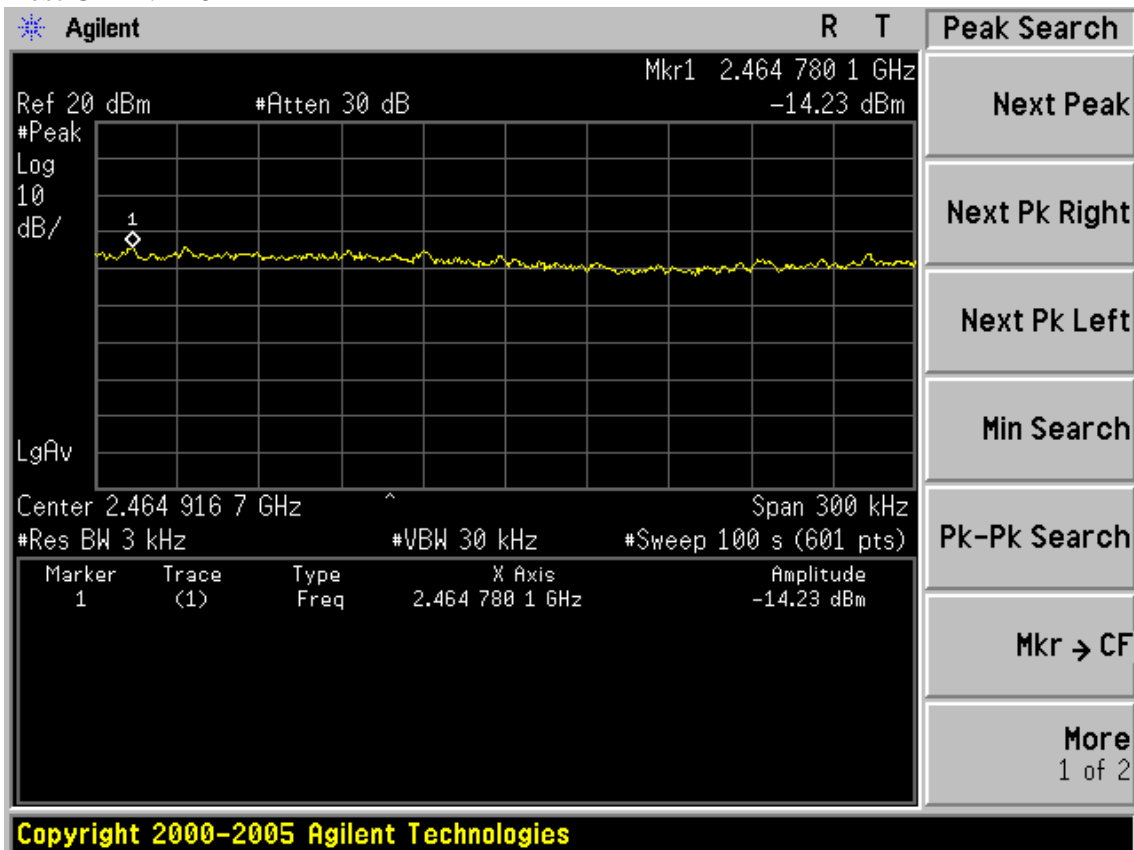
Test CH1: 2412MHz



Test CH6: 2437MHz

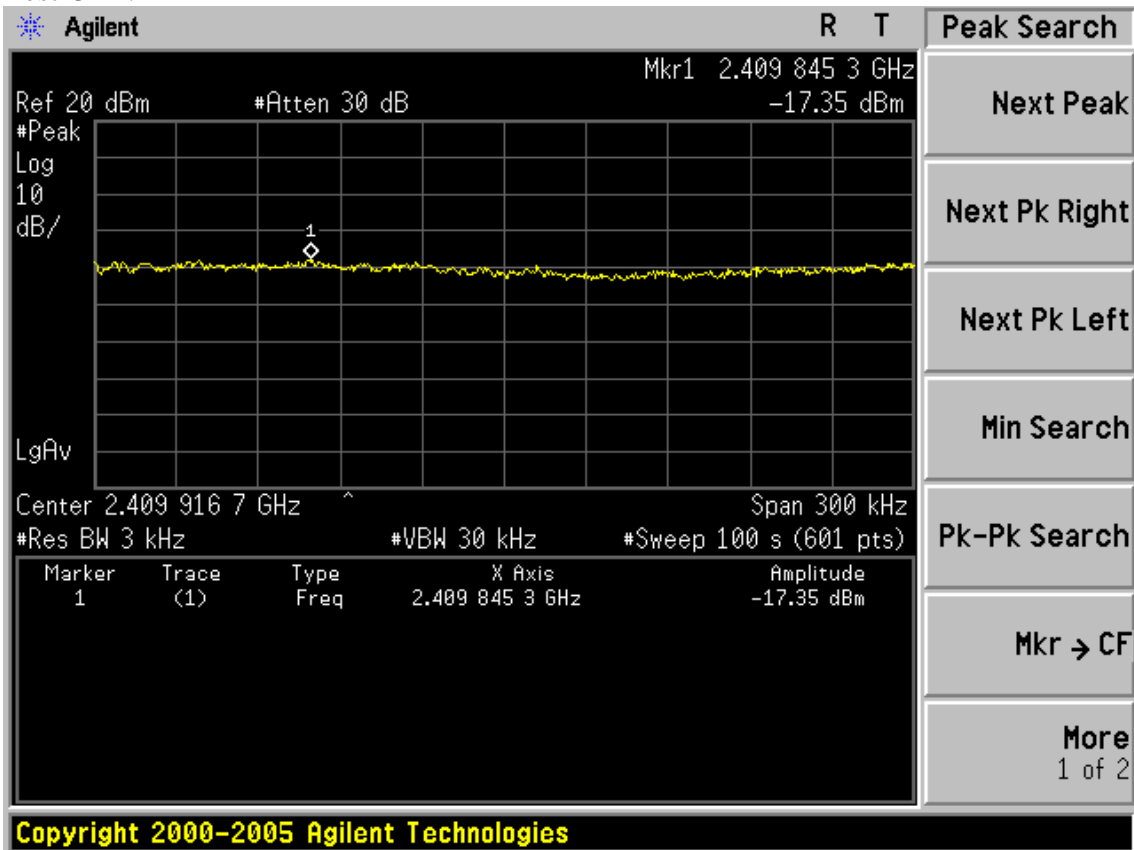


Test CH11: 2462MHz

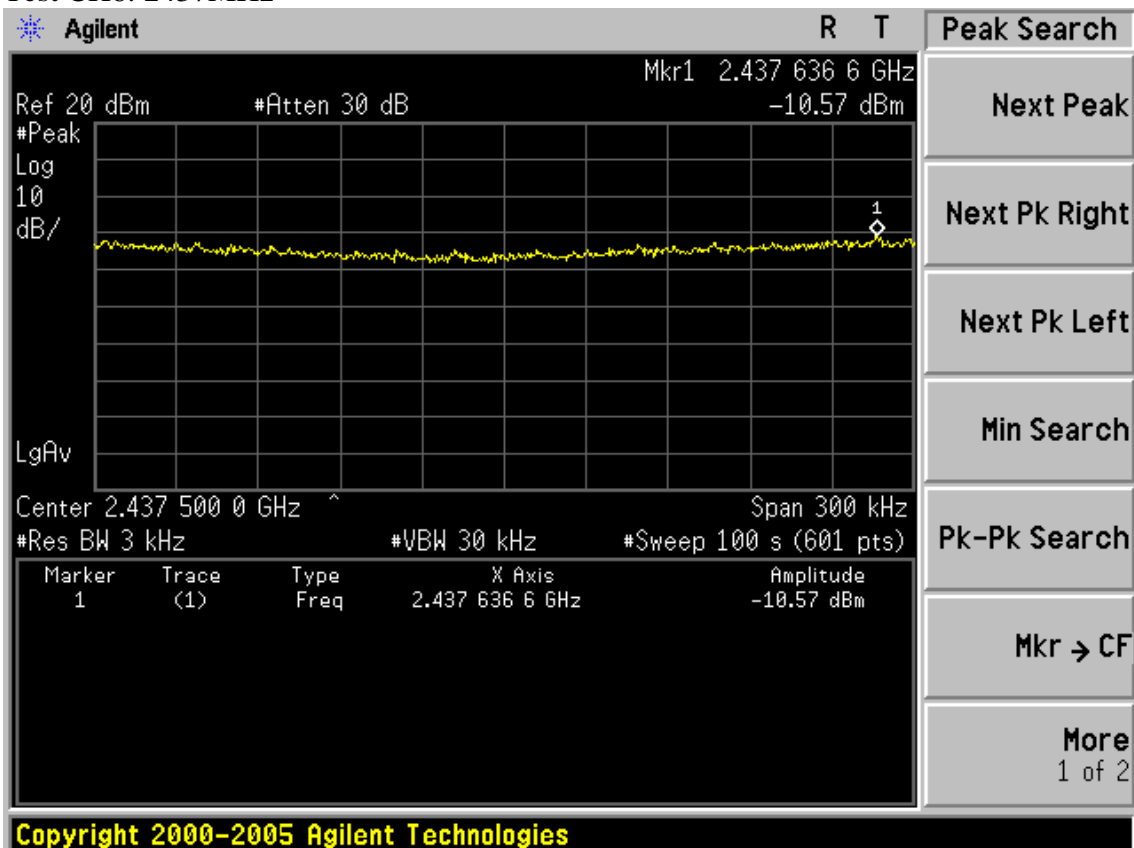


Test Mode: IEEE 802.11n HT20 TX

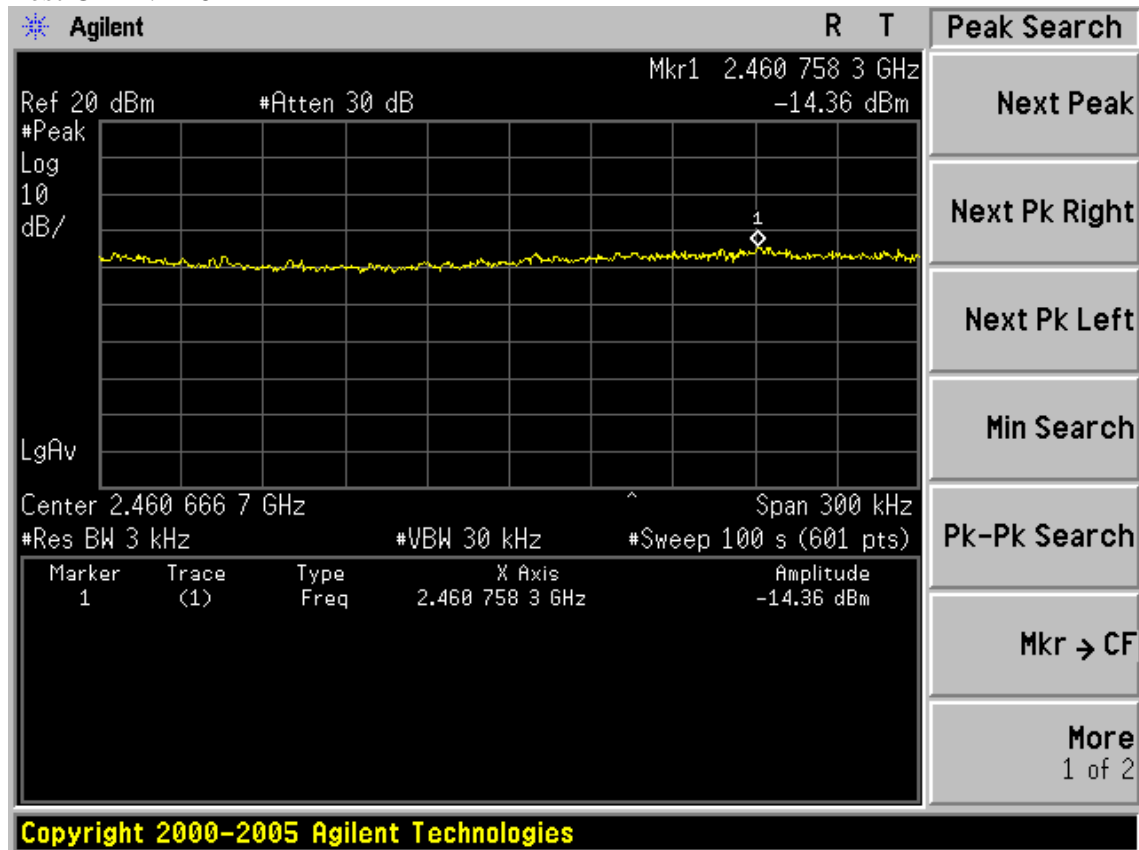
Test CH1: 2412MHz



Test CH6: 2437MHz

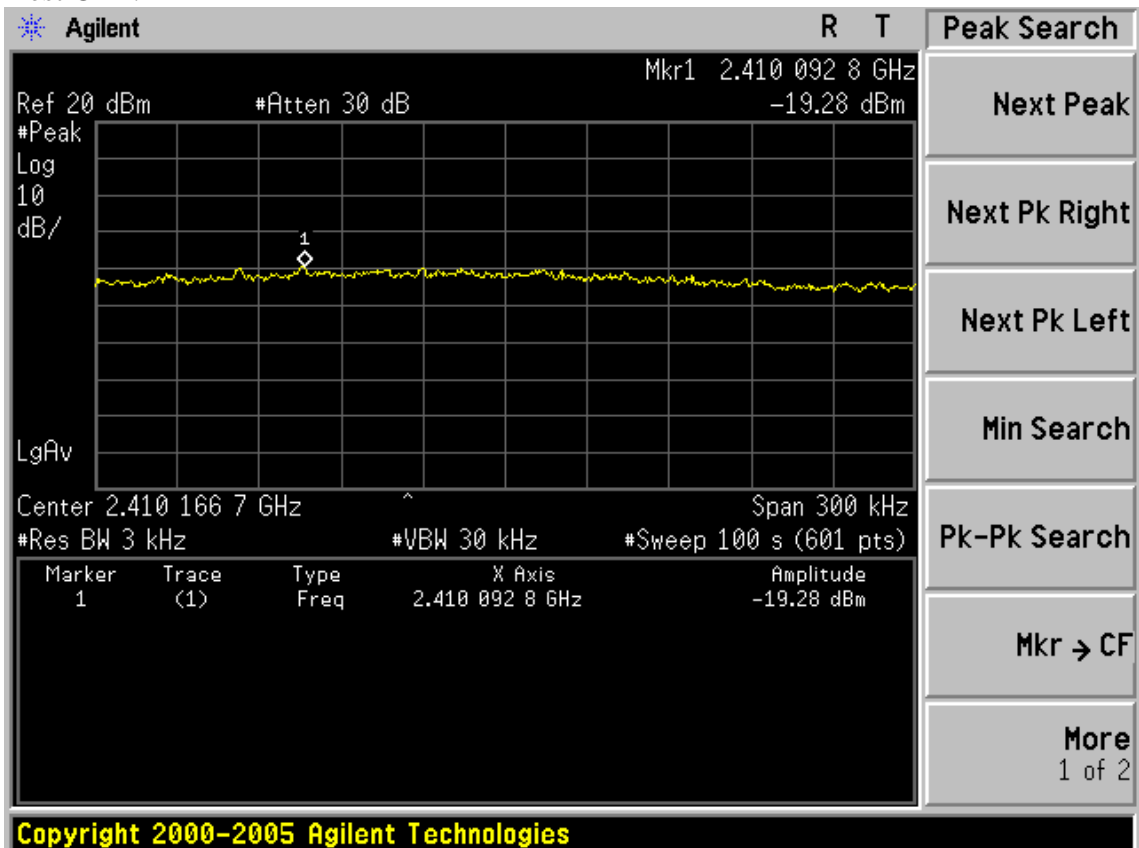


Test CH1: 2462MHz

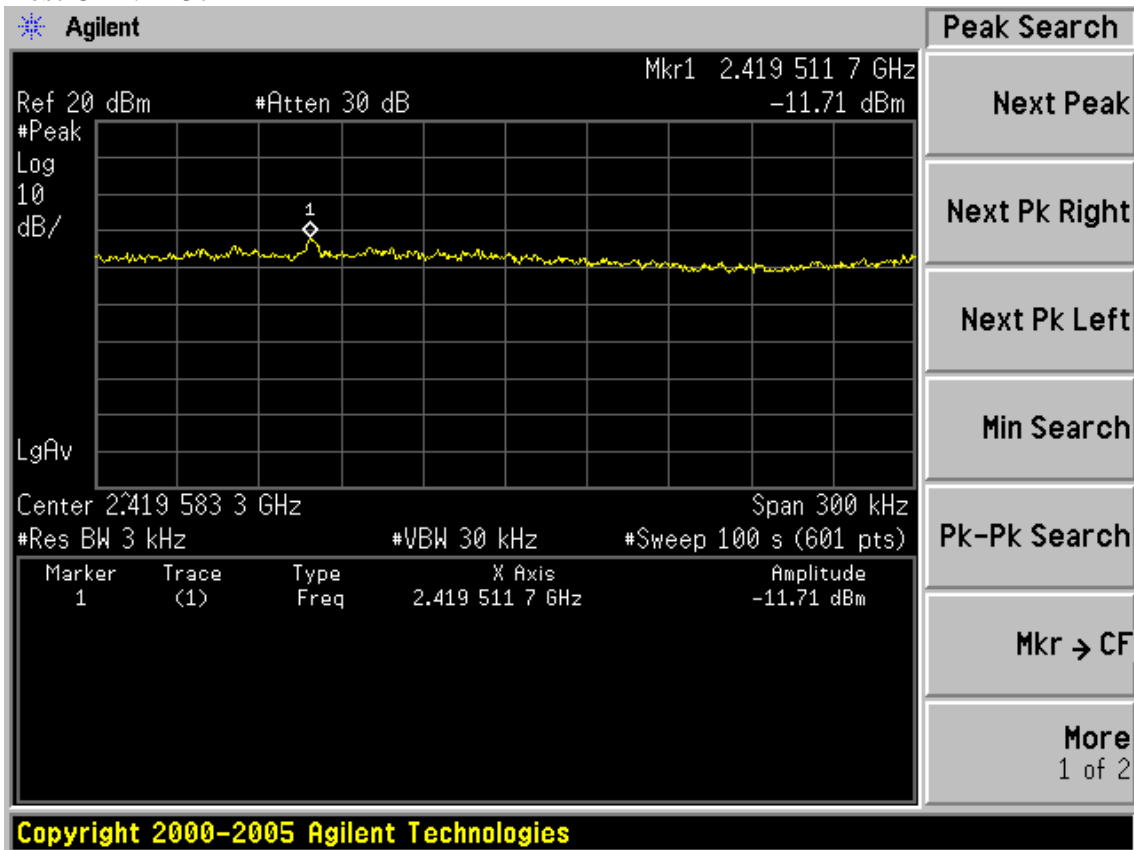


Test Mode: IEEE 802.11n HT40 TX

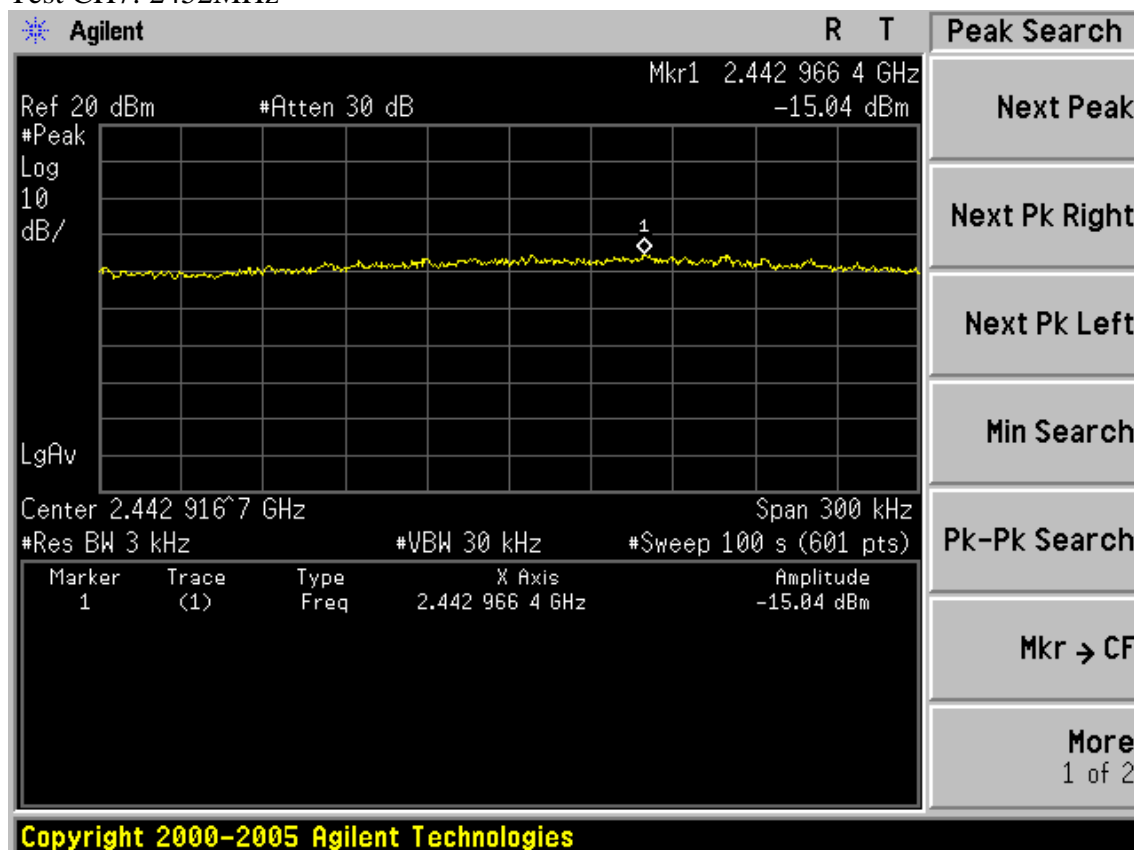
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



## 10.MPE ESTIMATION

### 10.1.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

### 10.2.Estimation Result

Mode	CH	Frequency (MHz)	PK Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (linear)	MPE
11b	1	2412	22.23	167.11	0.59	1.15	0.0381
	6	2437	22.74	187.93	0.59	1.15	0.0428
	11	2462	21.19	131.52	0.59	1.15	0.0300
11g	1	2412	24.46	279.25	0.59	1.15	0.0637
	6	2437	28.56	717.79	0.59	1.15	0.1637
	11	2462	26.01	399.02	0.59	1.15	0.0910
11n HT20	1	2412	24.07	255.27	0.59	1.15	0.0582
	6	2437	28.73	746.45	0.59	1.15	0.1702
	11	2462	24.39	274.79	0.59	1.15	0.0627
11n HT40	1	2422	23.73	236.05	0.59	1.15	0.0538
	4	2437	28.43	696.63	0.59	1.15	0.1588
	7	2452	23.77	238.23	0.59	1.15	0.0543



## **11. 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 integral three MIMO antennas and the middle one is only used for receive and 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 only 0.59dBi.

## **12.DEVIATION TO TEST SPECIFICATIONS**

[ NONE]

## 13. PHOTOGRAPH OF TEST

### 13.1. Photos of Power Line Conducted Emission Test



### 13.2. Photos of Radiated Emission Test

30-1000MHz



Above 1000MHz

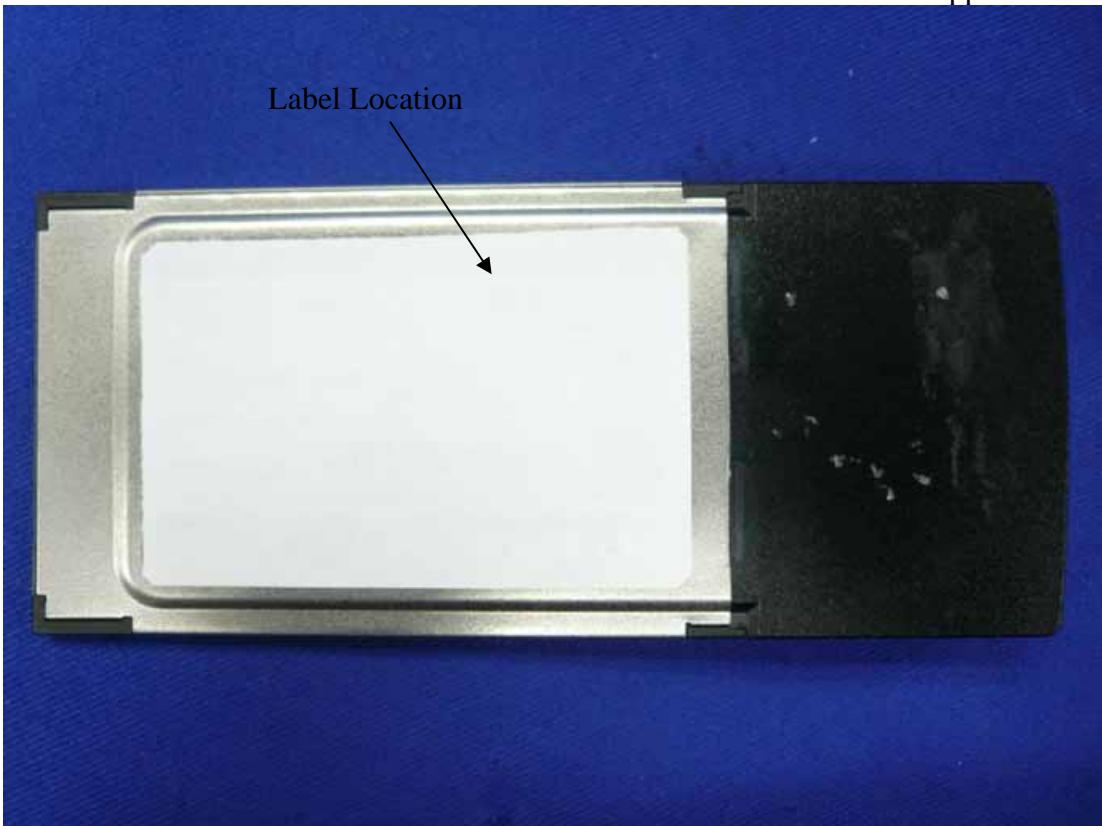


## 14. PHOTOGRAPH OF EUT

**Figure 1**  
General Appearance of the EUT



**Figure 2**  
General Appearance of the EUT

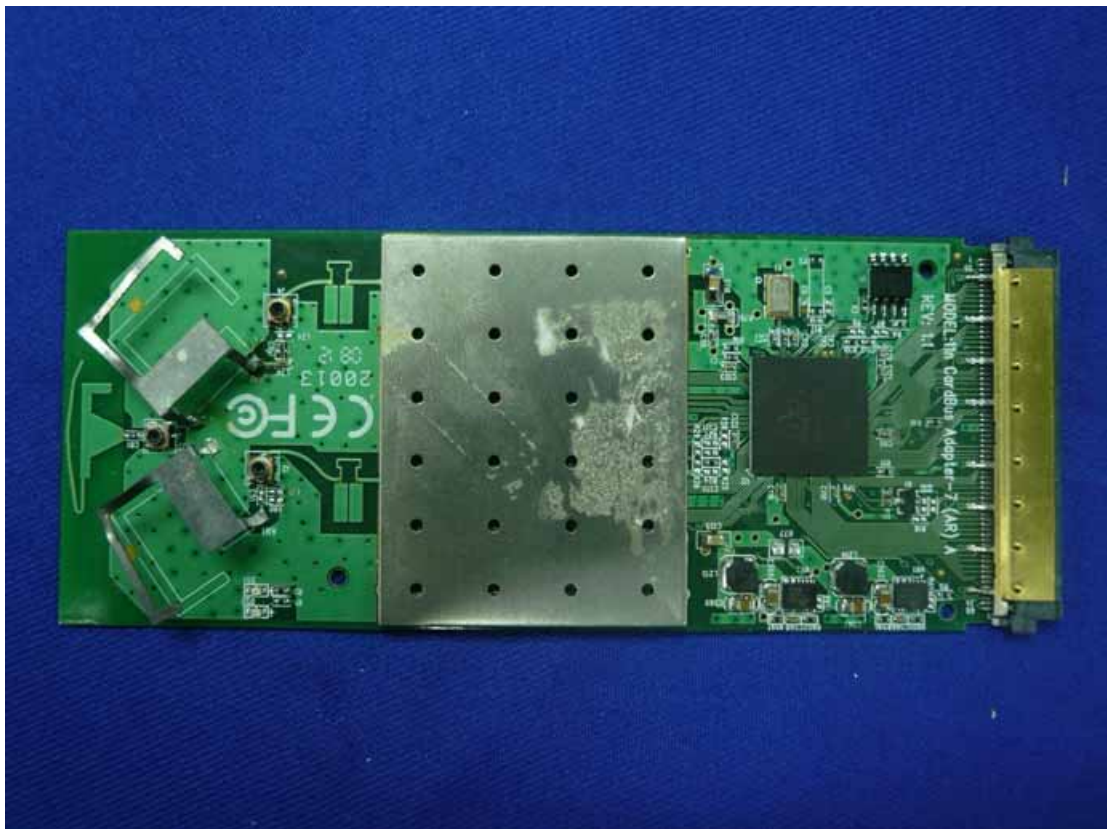




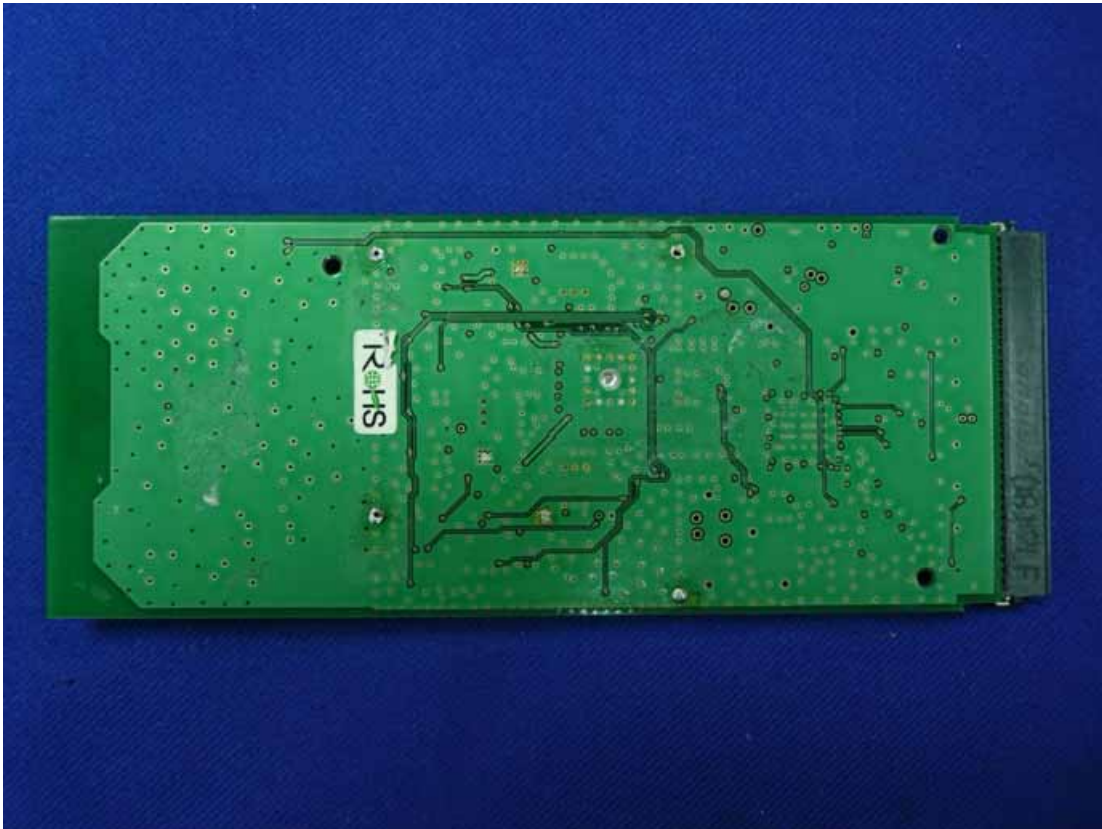
**Figure 3**  
Inside of the EUT



**Figure 4**  
Inside of the EUT



**Figure 5**  
Inside of the EUT



**Figure 6**  
Inside of the EUT





**Figure 7**  
Inside of the EUT

