FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

LG-Ericsson Co. Ltd.

PCI-1020 WIRELESS 802.11N PCI ADAPTER

Brand Name: LG-Ericsson

Model No.: PCI-1020

FCC ID: TUIPCI1020

Prepared for : LG-Ericsson Co. Ltd.
533, Hogye-1dong,Dongan-gu, Anyang-shi, Kyungki-do,
South Korea

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

Tel: (0755) 26639496

Report Number : ACS-F11108
Date of Test : Jun.08~09, 2011
Date of Report : Jun.29, 2011

TABLE OF CONTENTS

TEST REPORT CERTIFICATION

Applicant	:	LG-Ericsson Co. Ltd.
Manufacturer	:	Alpha Networks Inc.
EUT Description	:	PCI-1020 WIRELESS 802.11N PCI ADAPTER
FCC ID	:	TUIPCI1020

(A) Brand Name	:	LG-Ericsson
(B) MODEL NO.	:	PCI-1020
(C) SERIAL NO.	:	N/A
(D) POWER SUPPLY	:	DC 3.3V From PC Input
(E) TEST VOLTAGE	:	DC 3.3V From PC Input AC 120V/60Hz

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

Test procedure used:
ANSI C63.10:2009

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

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

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

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 : Jun.08~09, 2011 Report of date: Jun.29, 2011

Prepared by : Blove Ye
Blove Ye / Assistant

Reviewer by :
Sunny Lu / Senior Assistant

信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature:

Approved & Authorized Signer :
Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

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

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

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name	:	PCI-1020 WIRELESS 802.11N PCI ADAPTER
Brand Name	:	LG-Ericsson
Model Number	:	PCI-1020
FCC ID	:	TUIPCI1020
Operation Frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz IEEE 802.11n HT40: 2422MHz—2452MHz
Channel Number	:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels IEEE 802.11n HT40: 7Channels
Modulation Technology	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Antenna Assembly Gain	:	MIMO 2X2 Dipole Antenna, 2dBi Gain
Applicant	:	LG-Ericsson Co. Ltd. 533, Hogye-1dong,Dongan-gu, Anyang-shi, Kyungki-do, South Korea
Manufacturer	:	Alpha Networks Inc. NO. 8 Li-shing Rd. VII, Science-based Industrial Park, Hsinchu, Taiwan.
Date of Test	:	Jun.08~09, 2011
Date of Receipt	:	Jun.07, 2011
Sample Type	:	Prototype production

2.2.Test Information

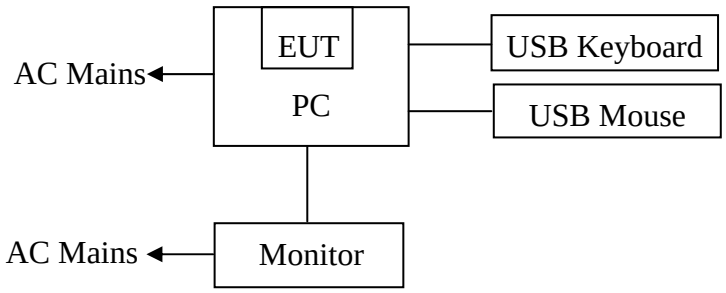
A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mpbs)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low :CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452
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.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Personal Computer	Test PC L	Lenovo	CR6	L38N404	☑FCC DoC ☑BSMI ID: R33B65
		Power Cord: Unshielded, Detachable, 1.8m				
2.	Monitor	ACS-EMC-LM02R	DELL	1907FPt	CN-009759-71618-6CG-BDWW	☑FCC DoC ☑BSMI ID: R3A002
		Power Cord: Unshielded, Detachable, 1.8m VGA Cable: Shielded, Detachable, 2.0m (with two cores) DVI Cable: Shielded, Detachable, 2.0m (with two cores)				
3.	USB Mouse	ACS-EMC-M02R	DELL	M056UO	512024264	☑ FCC DoC ☑BSMI ID: R41108
		Power Cord: shielded, Undetachable, 1.8m				
4.	USB Keyboard	ACS-EMC- K02R	DELL	SK-8115	CN-ORH656-65890-686-007J	☑ FCC DoC ☑BSMI ID: T3A002
		Power Cord: shielded, Undetachable, 2.0m				

2.4. Block diagram of connection between the EUT and simulators



(EUT: PCI-1020 WIRELESS 802.11N PCI ADAPTER)

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	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Mar.31, 2012
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Dec.30, 2012
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: Jul.02, 2011
	:	Accredited by DATech, German Registration Number: DAT-P-091/99-01 Valid Date: Feb.01, 2014
		Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2012

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

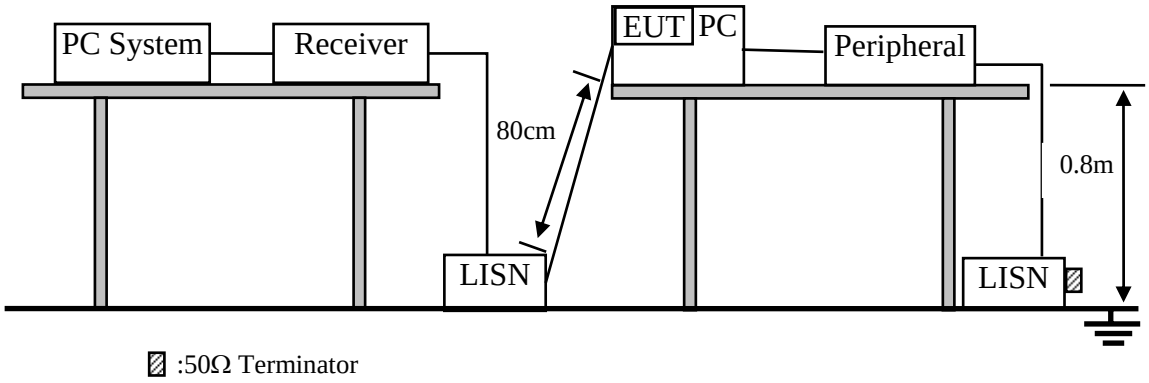
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.2 dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.6 dB(30~200MHz, Polarize: H)
	3.7 dB(30~200MHz, Polarize: V)
	4.0 dB(200M~1GHz, Polarize: H)
	3.7 dB(200M~1GHz, Polarize: V)
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Power density test	2.00 dB
Uncertainty for Frequency range test	$7x10^{-8}$
Uncertainty for Bandwidth test	83 KHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Nov.05, 11	1 Year
3.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 11	1 Year
4.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 11	1Year
5.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 11	1 Year
6.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 11	1 Year
7.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 11	1 Year

3.2.Block Diagram of Test Setup



▨ :50Ω Terminator

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. EZ Connect™ N 11n Wireless PCI Adapter (EUT)

Model Number : PCI-1020
Serial Number : N/A

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

3.5. Operating Condition of EUT

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

3.5.2. Turned on the power of all equipment.

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

3.6. Test Procedure

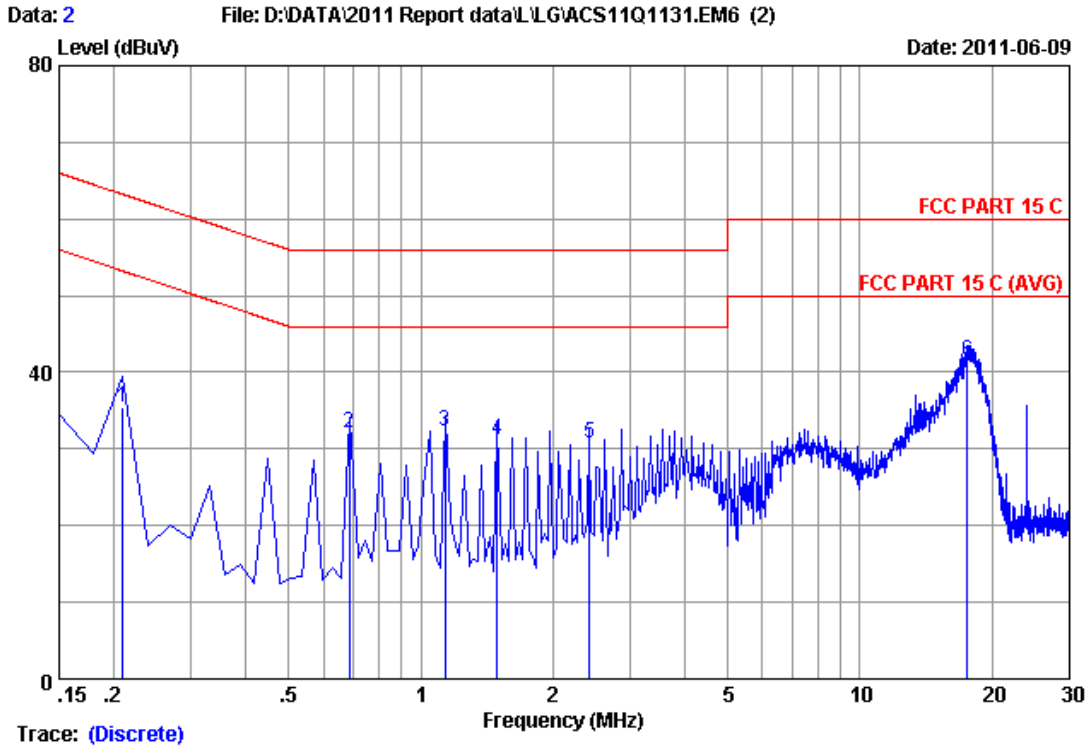
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs).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

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

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

3.7. Power Line Conducted Emission Test Results

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

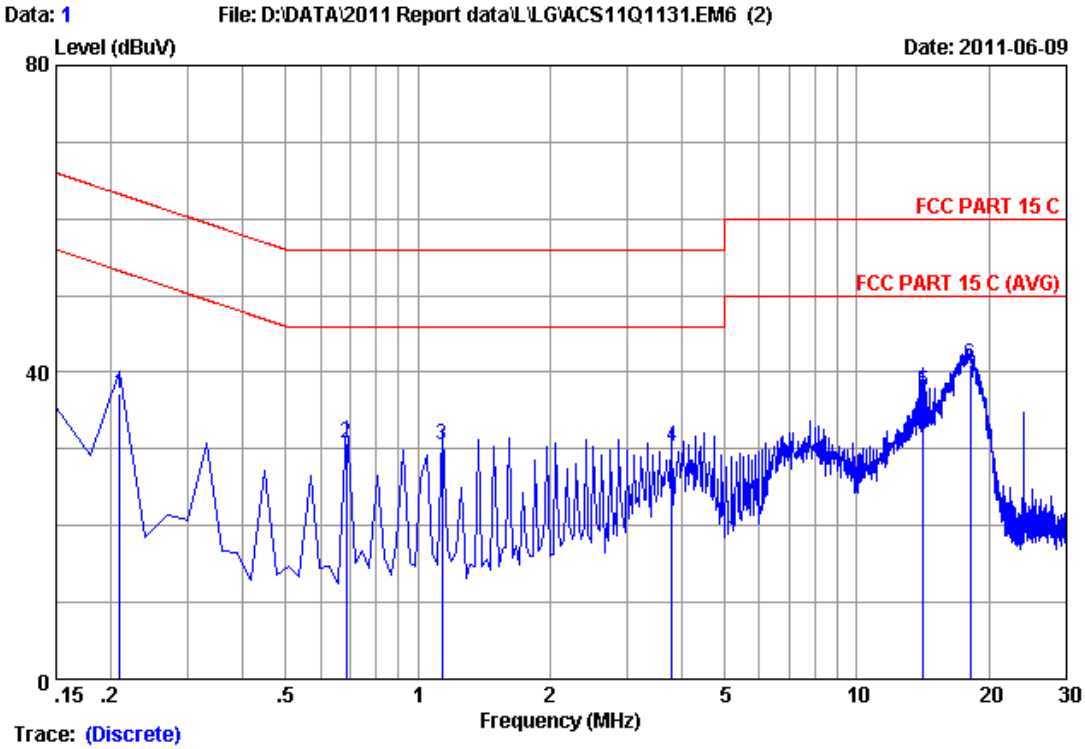


Trace: (Discrete)

Site no :1#conduction Data No :2
Dis./Ant. :** 2011 ESH2-Z5 LINE
Limit :FCC PART 15 C
Env./Ins. :24.5*C/55% Engineer :Leo-Li
EUT :PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power Rating :DC 3.3V PCInput AC 120V/60Hz
Test Mode :Tx Mode
M/N:PCI-1020

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.20970	0.17	9.88	25.40	35.45	63.22	27.77	QP
2	0.68730	0.19	9.89	22.07	32.15	56.00	23.85	QP
3	1.135	0.24	9.89	22.14	32.27	56.00	23.73	QP
4	1.493	0.27	9.90	20.98	31.15	56.00	24.85	QP
5	2.419	0.32	9.92	20.59	30.83	56.00	25.17	QP
6	17.523	0.98	10.06	30.42	41.46	60.00	18.54	QP

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



Trace: (Discrete)

Site no :1#conduction Data No :1
Dis./Ant. :** 2011 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 C
Env./Ins. :24.5*C/55% Engineer :Leo-Li
EUT :PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power Rating :DC 3.3V PCInput AC 120V/60Hz
Test Mode :Tx Mode
M/N:PCI-1020

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.20970	0.21	9.88	27.10	37.19	63.22	26.03	QP
2	0.68730	0.23	9.89	20.59	30.71	56.00	25.29	QP
3	1.135	0.24	9.89	20.30	30.43	56.00	25.57	QP
4	3.792	0.31	9.94	19.99	30.24	56.00	25.76	QP
5	14.150	0.57	10.03	26.87	37.47	60.00	22.53	QP
6	18.150	0.71	10.07	30.29	41.07	60.00	18.93	QP

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

4. RADIATED EMISSION TEST

4.1.Test Equipment

Frequency rang: 30~1000MHz

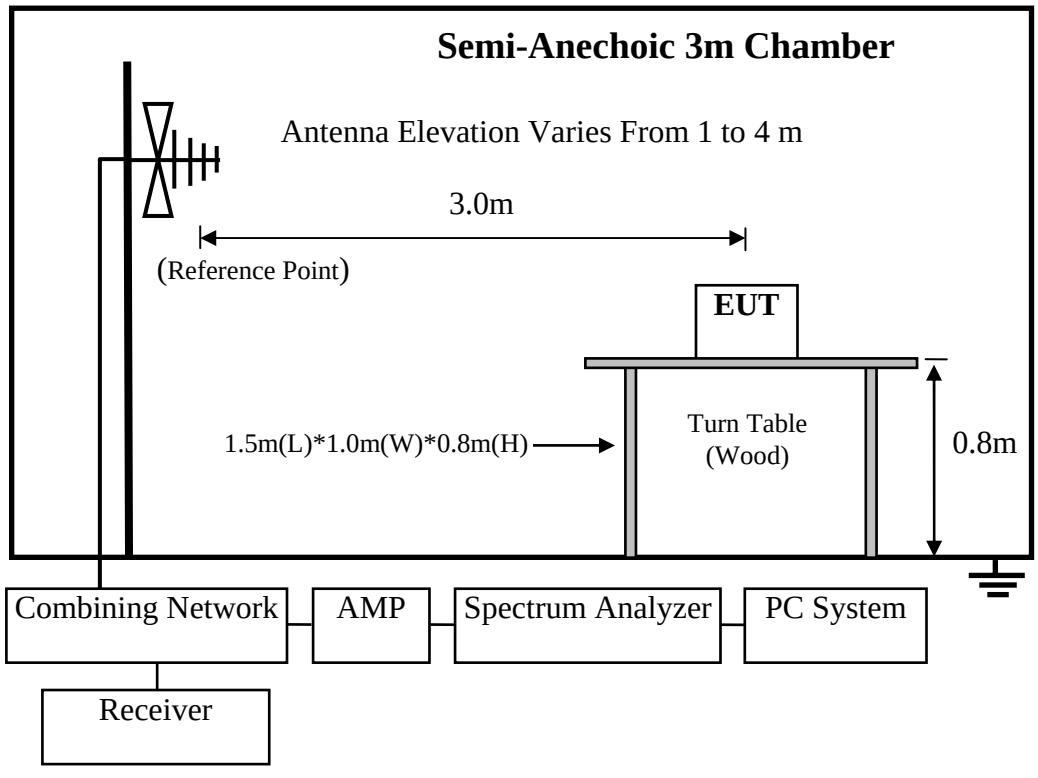
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.06,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 11	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 11	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 11	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 11	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 11	1 Year

Frequency rang: above 1GHz~18GHz

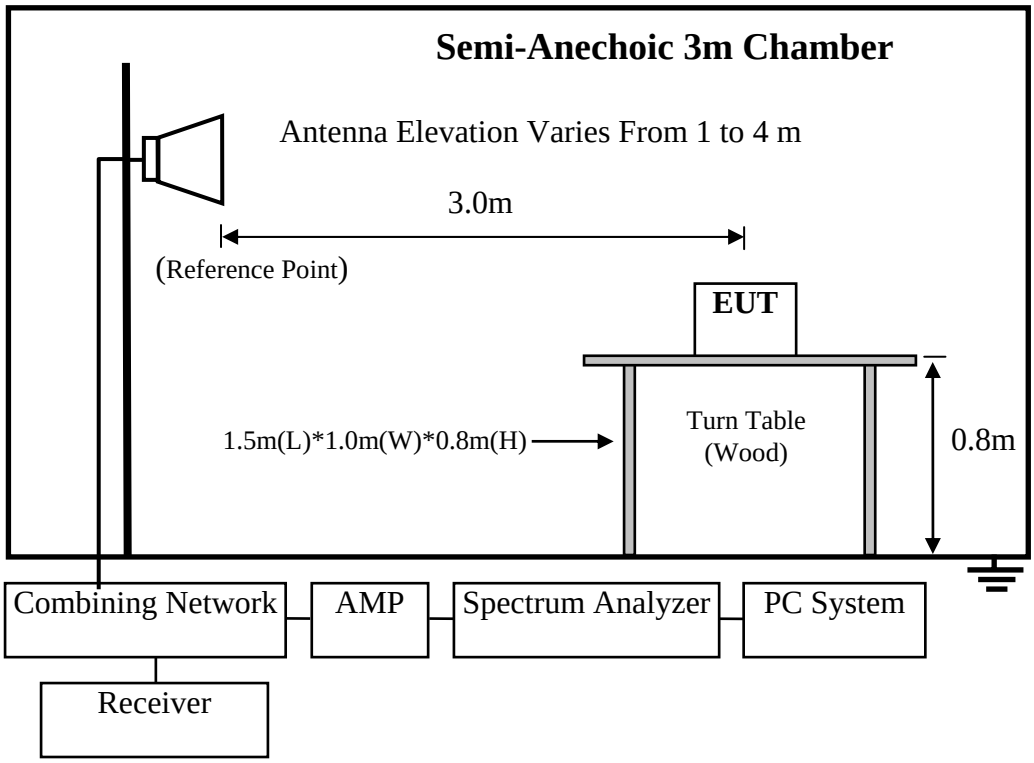
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 11	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May.25, 11	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 11	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28622/2	May.08, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 11	1 Year

4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range above 1GHz~18GHz



4.3.Radiated Emission Limit

4.3.1.15.209 limits

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

Remark： (1) Emission level dBμV = 20 log Emission level μV/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
[1]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	([2])

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

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5.Operating Condition of EUT

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

4.6.Test Procedure

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

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

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

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

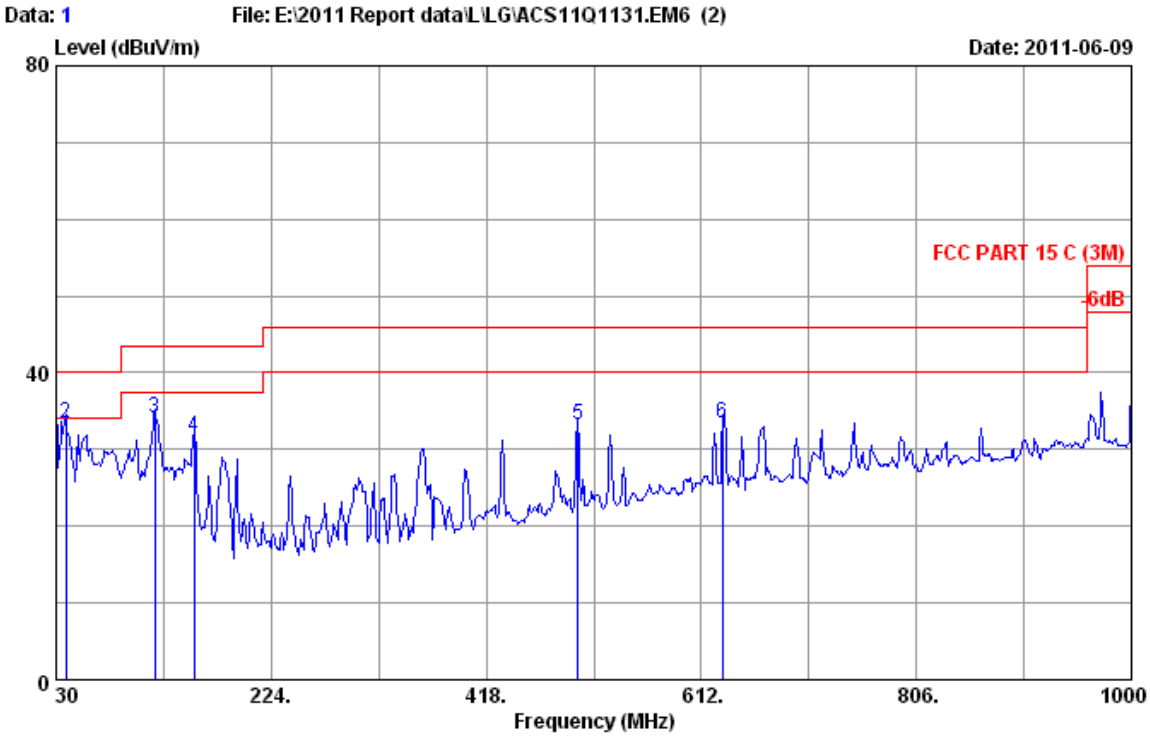
4.7.Radiated Emission Test Results

PASS.

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

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

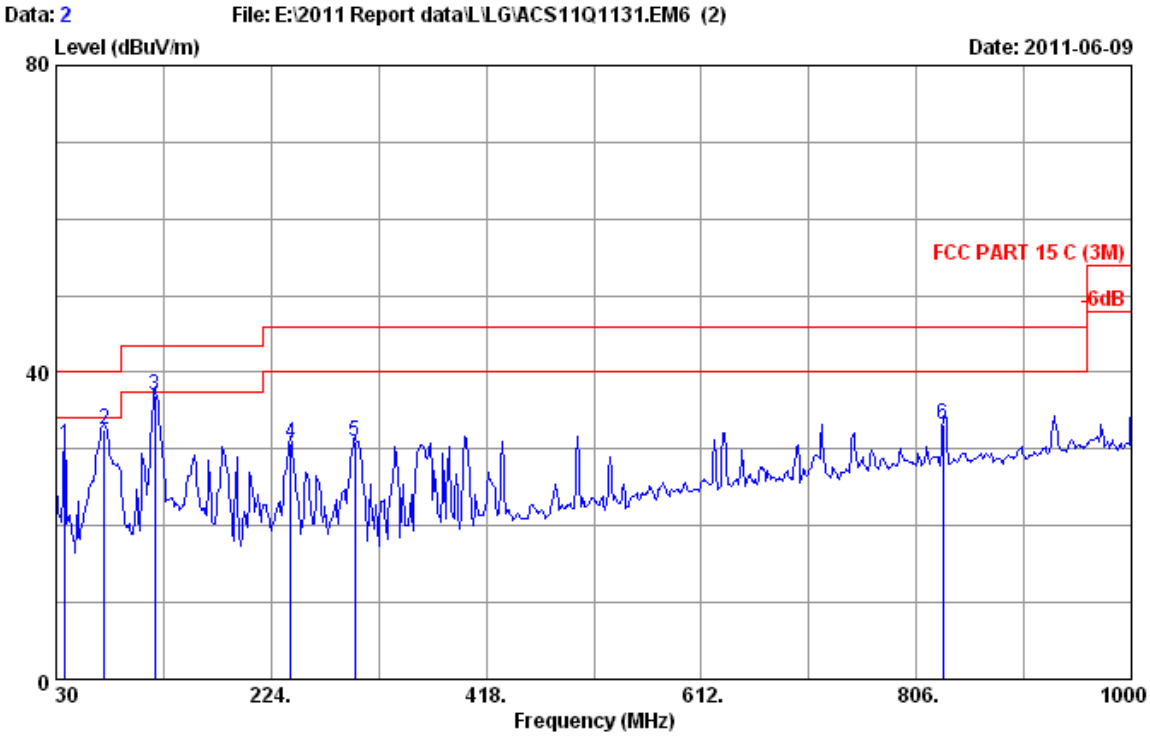
Frequency: 30MHz~1GHz




```
Site no.      : 3m chamber                  Data no.   : 1
Dis. / Ant.   : 3m   2010 CBL6111C          Ant. pol.  : VERTICAL
Limit         : FCC PART 15 C (3M)
Env. / Ins.   : 24*C/56%                    Engineer   : Leo-Li
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power Rating  : DC 3.3V From PC Input AC 120V/50Hz
Test Mode     : Tx Mode
              : M/N:PCI-1020
              :
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.61	13.73	34.34	40.00	5.66	QP
2	38.730	15.04	0.68	17.74	33.46	40.00	6.54	QP
3	119.240	11.86	1.13	21.21	34.20	43.50	9.30	QP
4	154.160	11.36	1.19	19.13	31.68	43.50	11.82	QP
5	500.450	18.30	3.55	11.27	33.12	46.00	12.88	QP
6	631.400	20.23	4.24	9.01	33.48	46.00	12.52	QP

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

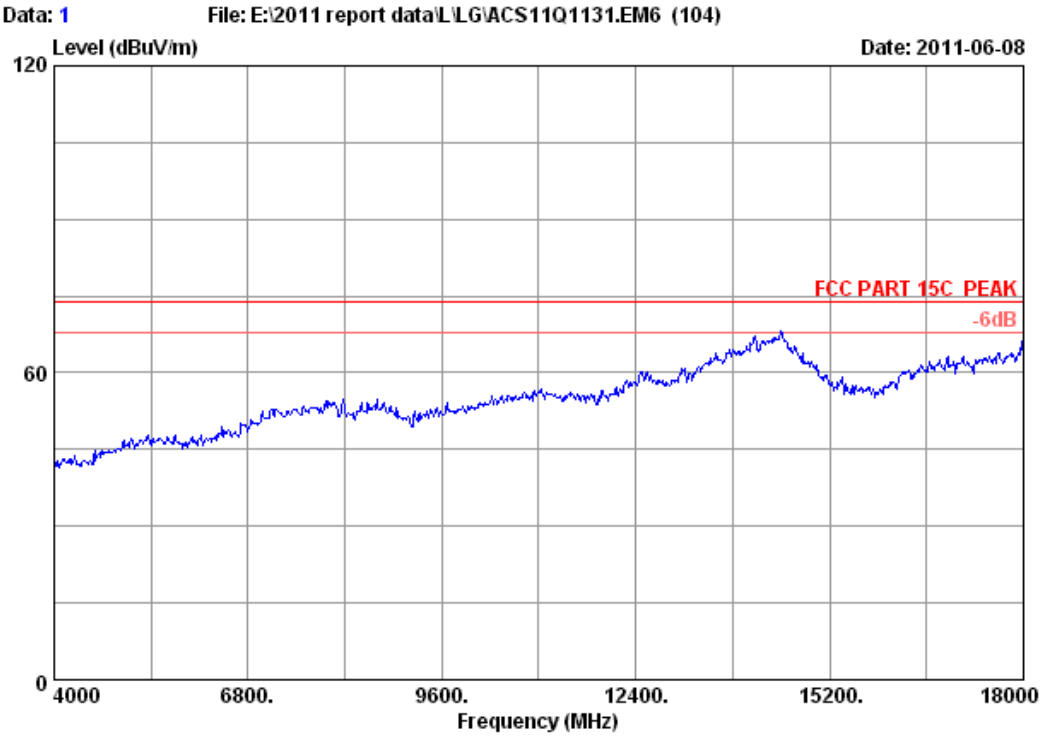



```
Site no.      : 3m chamber                  Data no.   : 2
Dis. / Ant.   : 3m   2010 CBL6111C          Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15 C (3M)
Env. / Ins.   : 24*C/56%                    Engineer   : Leo-Li
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power Rating  : DC 3.3V From PC Input AC 120V/50Hz
Test Mode     : Tx Mode
              : M/N:PCI-1020
              :
```

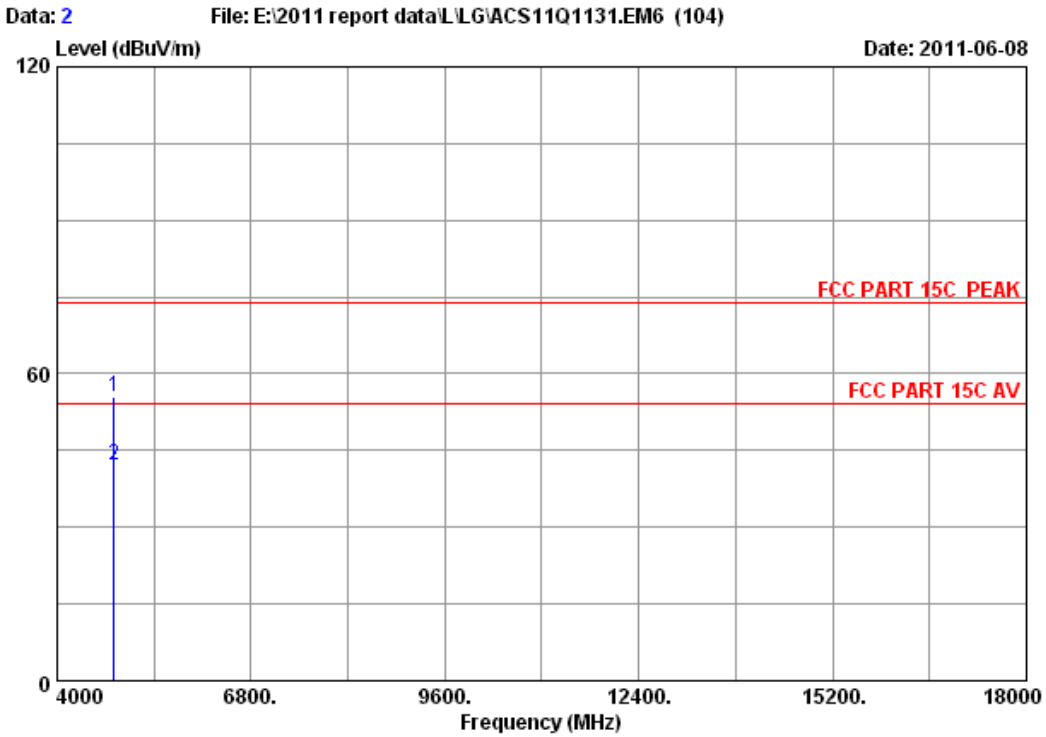
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.760	15.58	0.67	14.35	30.60	40.00	9.40	QP
2	73.650	7.16	0.95	24.40	32.51	40.00	7.49	QP
3	119.240	11.86	1.13	24.08	37.07	43.50	6.43	QP
4	241.460	11.93	2.09	16.64	30.66	46.00	15.34	QP
5	299.660	13.70	2.48	14.77	30.95	46.00	15.05	QP
6	830.250	22.20	4.99	6.10	33.29	46.00	12.71	QP

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

Frequency: 1GHz~18GHz



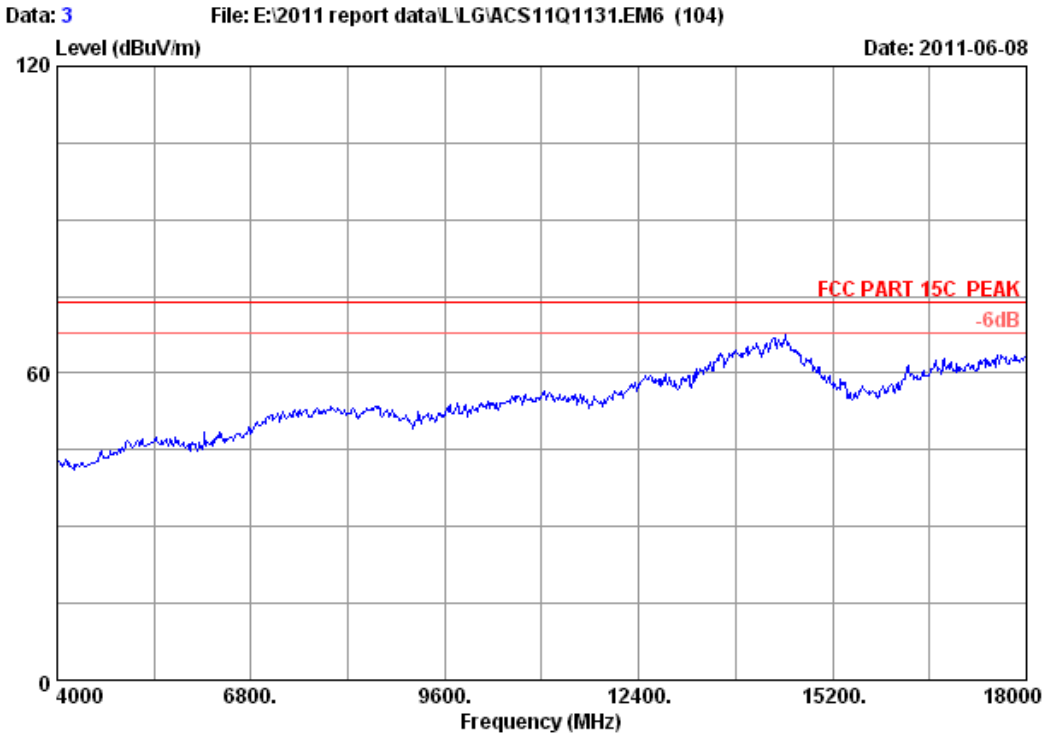

```
Site no.      : 3m Chamber              Data no. :  1
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH1  2412MHz   Tx
M/N           : PCI-1020
```



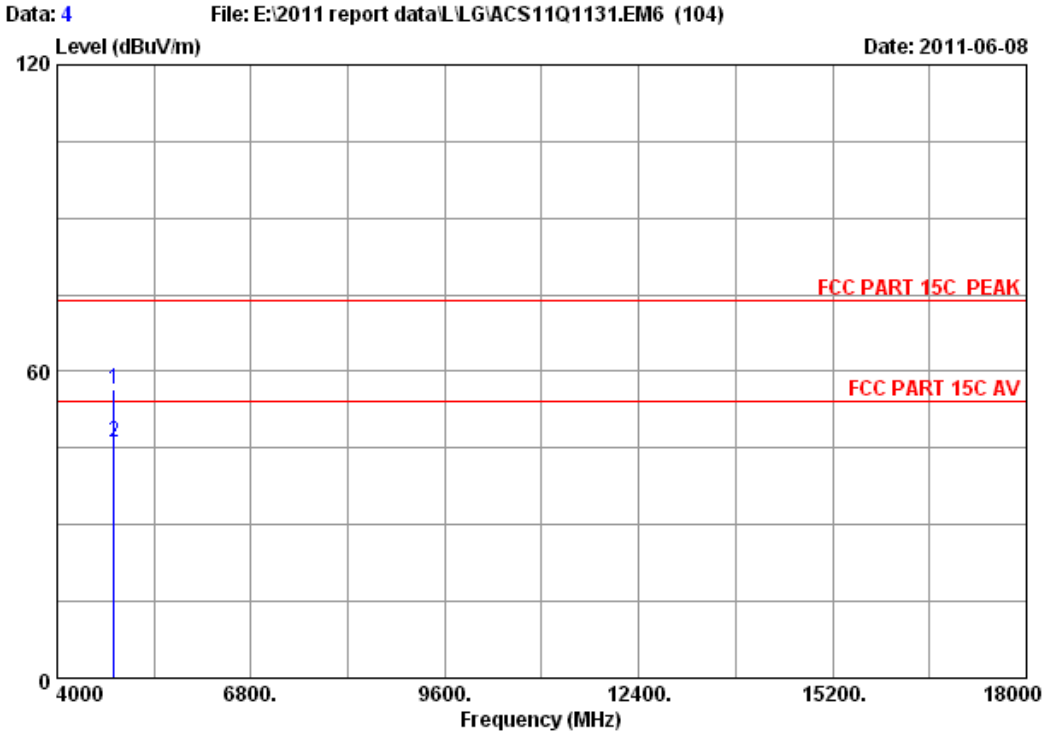
Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH1 2412MHz Tx
M/N : PCI-1020

	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	12.58	35.25	43.55	55.35	74.00	18.65	Peak
2	4824.000	34.47	12.58	35.25	30.35	42.15	54.00	11.85	Average

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



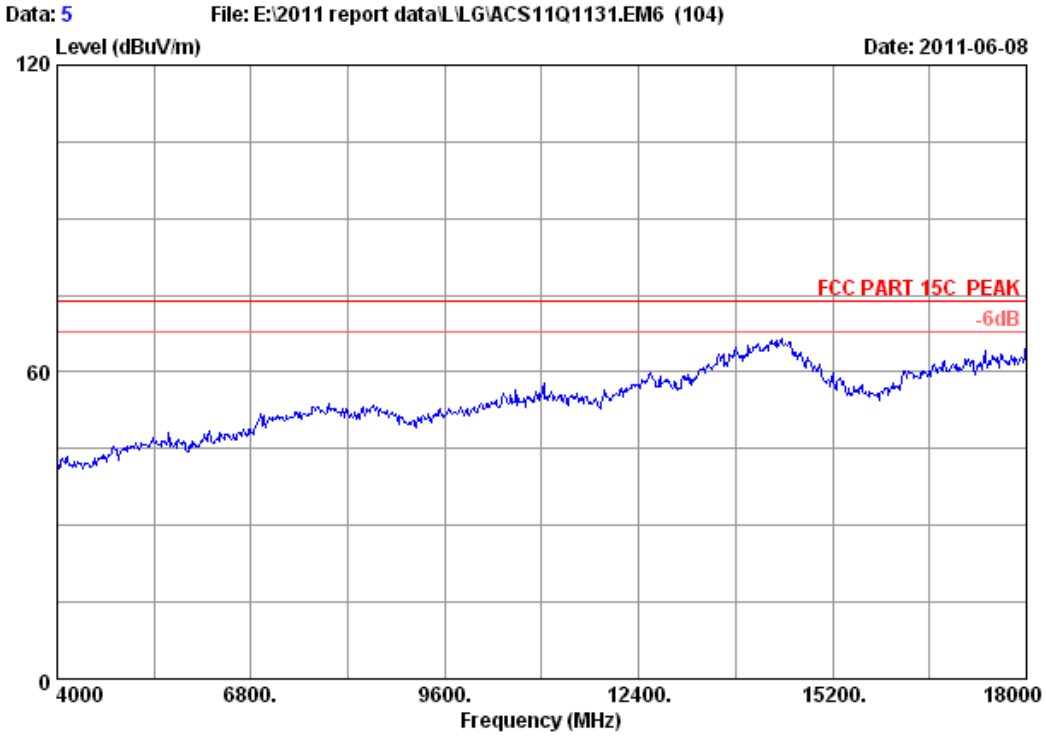

```
Site no.      : 3m Chamber              Data no. :  3
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH1  2412MHz   Tx
M/N           : PCI-1020
```



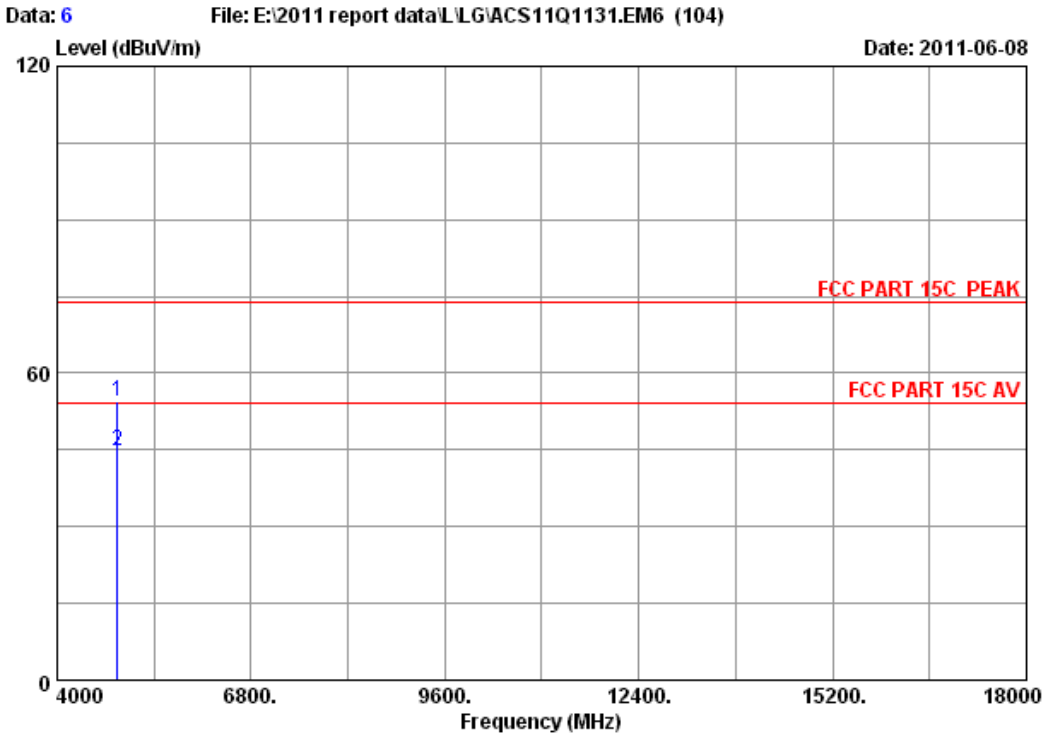
Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH1 2412MHz Tx
M/N : PCI-1020

	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	12.58	35.25	44.68	56.48	74.00	17.52	Peak
2	4824.000	34.47	12.58	35.25	34.49	46.29	54.00	7.71	Average

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




```
Site no.      : 3m Chamber              Data no. :  5
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH6  2437MHz   Tx
M/N           : PCI-1020
```

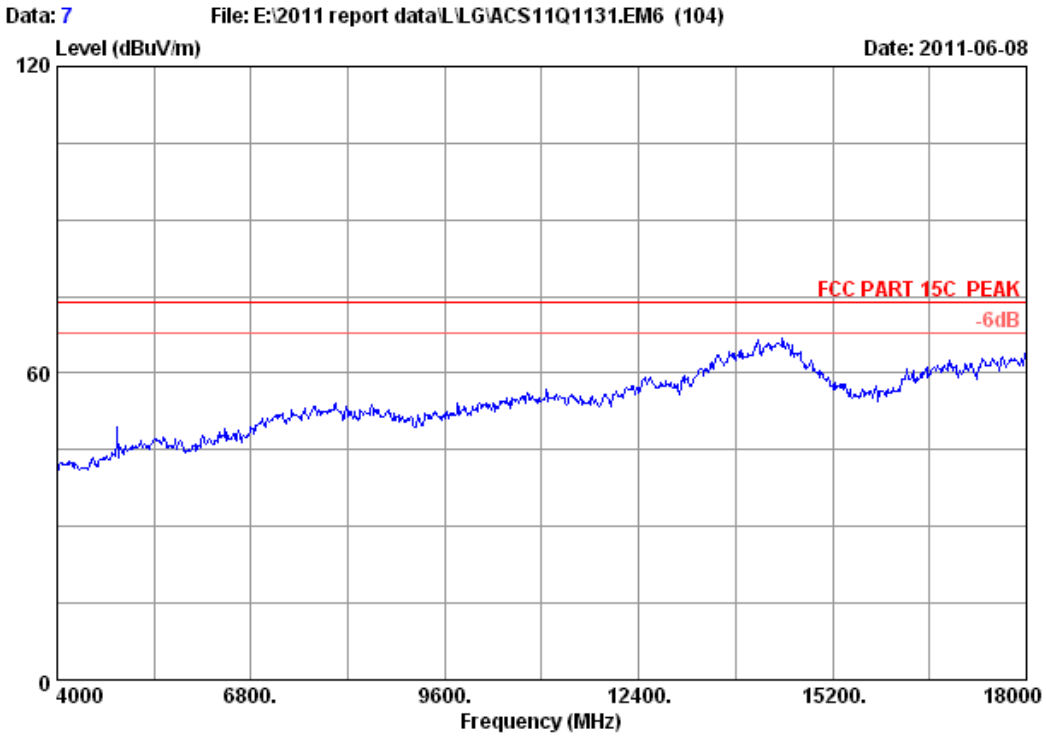



```
Site no.      : 3m Chamber              Data no. :  6
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH6  2437MHz   Tx
M/N           : PCI-1020
```

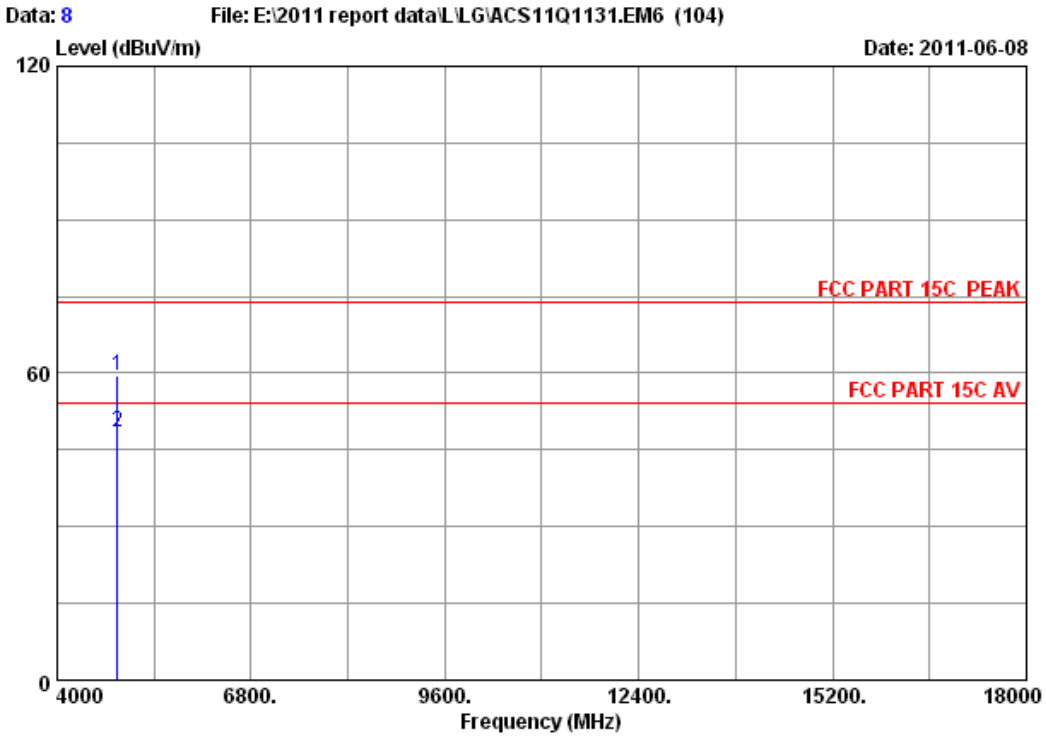
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	12.23	35.36	42.83	54.48	74.00	19.52	Peak
2	4874.000	34.78	12.23	35.36	33.05	44.70	54.00	9.30	Average

Remarks:

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




```
Site no.      : 3m Chamber              Data no. :  7
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH6  2437MHz   Tx
M/N           : PCI-1020
```

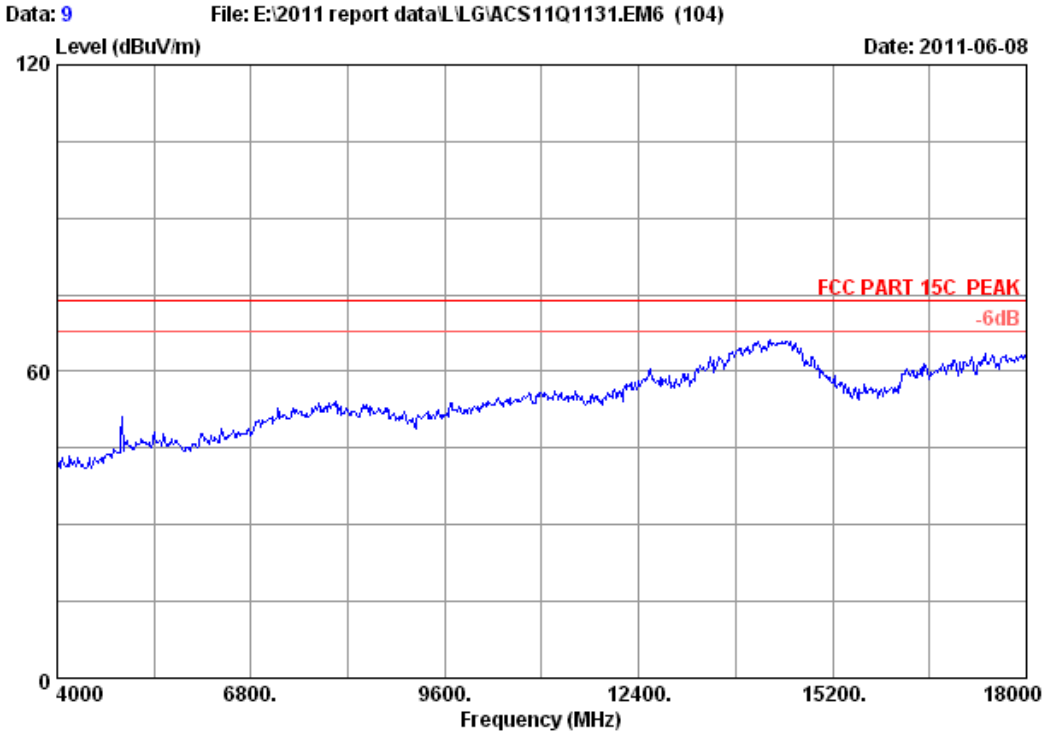



```
Site no.      : 3m Chamber              Data no. :  8
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH6  2437MHz   Tx
M/N           : PCI-1020
```

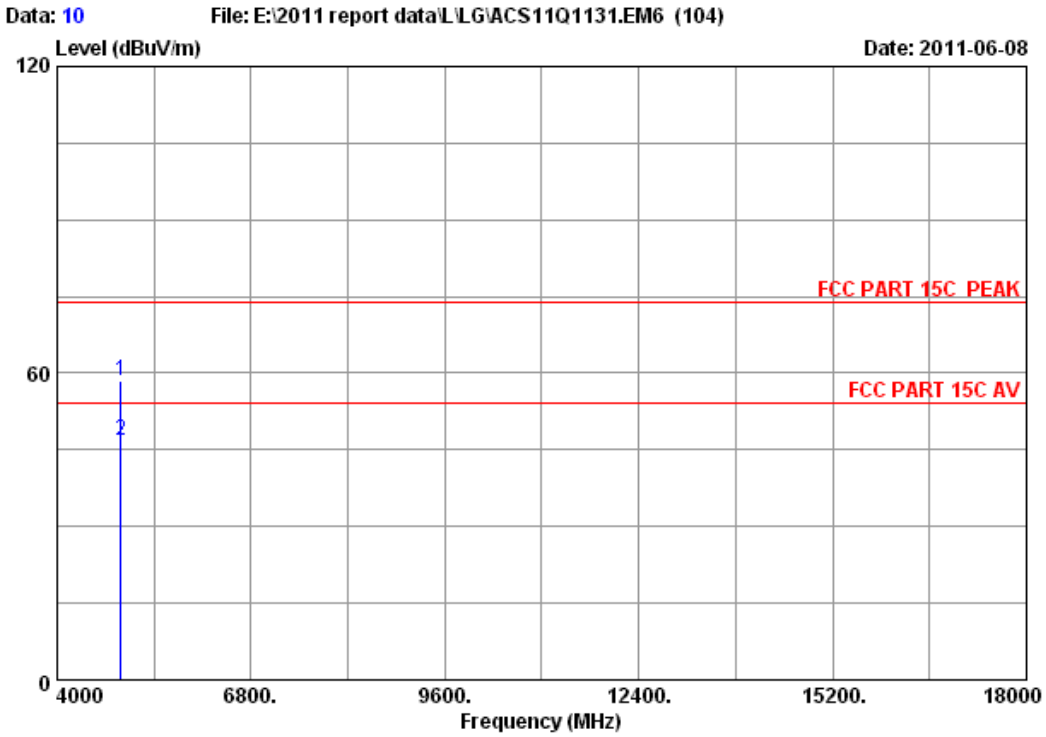
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	12.23	35.36	47.73	59.38	74.00	14.62	Peak
2	4874.000	34.78	12.23	35.36	36.75	48.40	54.00	5.60	Average

Remarks:

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



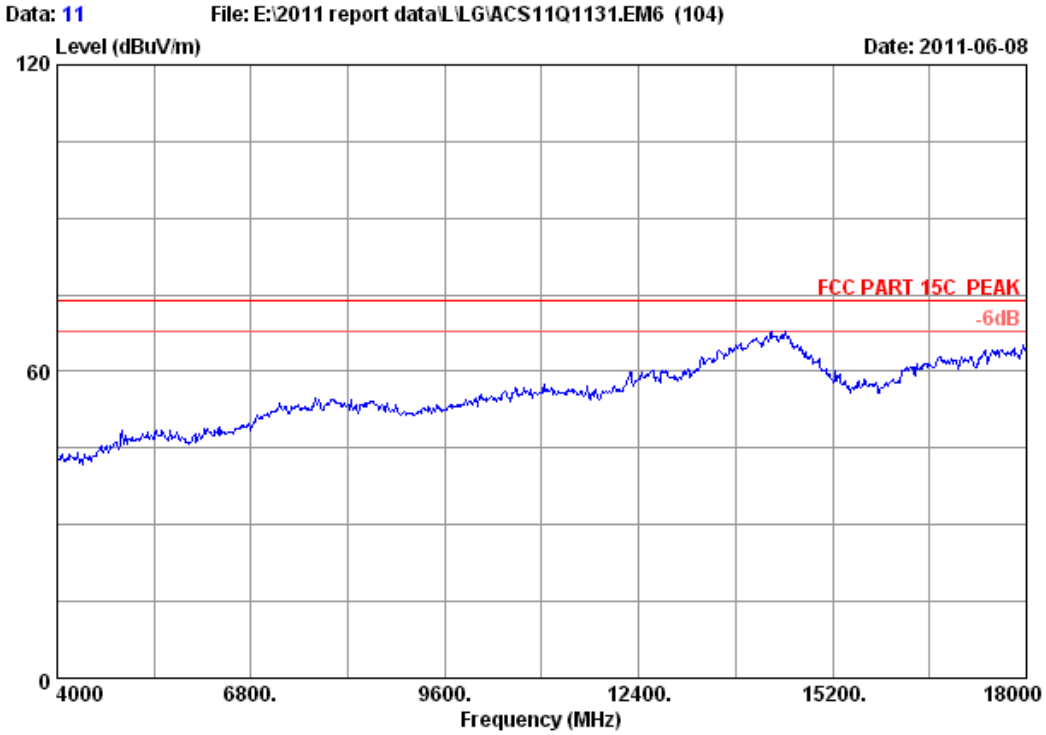

```
Site no.      : 3m Chamber              Data no. :  9
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : s                       Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH11  2462MHz   Tx
M/N           : PCI-1020
```



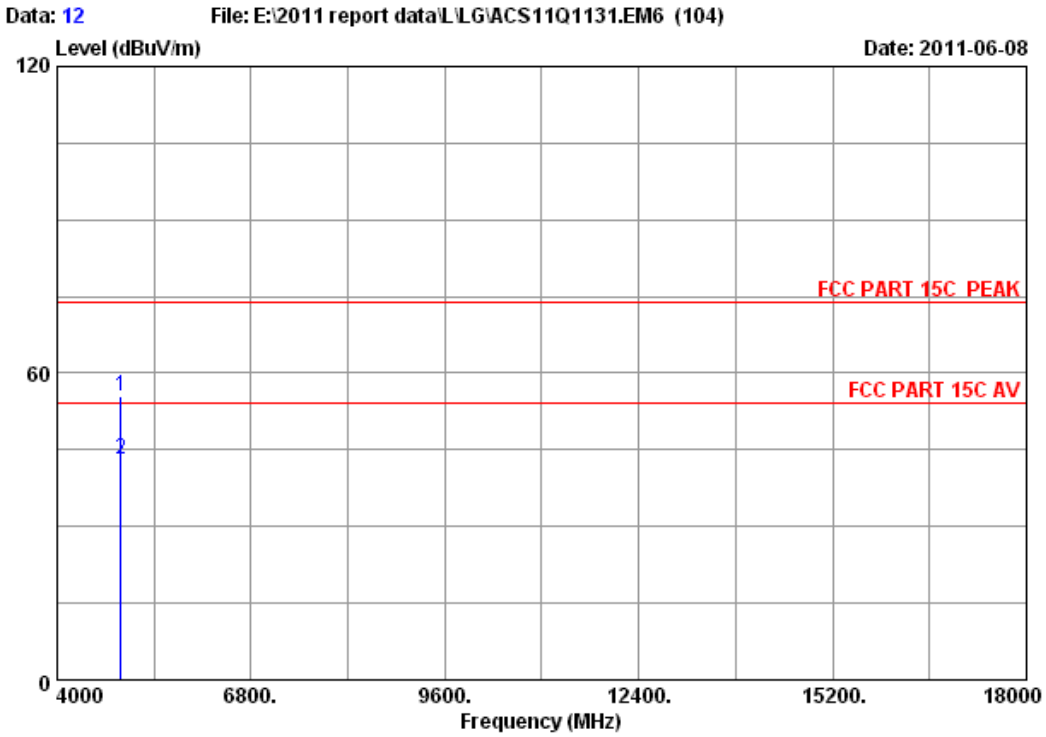
Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH11 2462MHz Tx
M/N : PCI-1020

	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	12.58	35.34	46.02	58.35	74.00	15.65	Peak
2	4924.000	35.09	12.58	35.34	34.48	46.81	54.00	7.19	Average

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



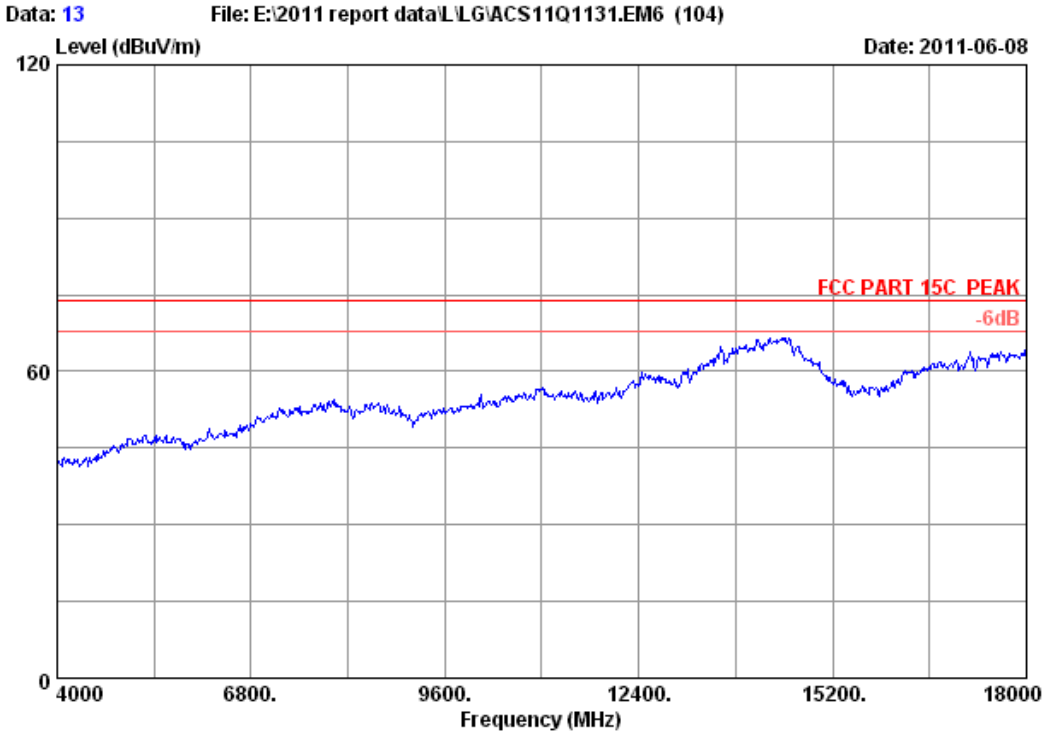

```
Site no.      : 3m Chamber              Data no. :  11
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11b   CH11  2462MHz   Tx
M/N           : PCI-1020
```



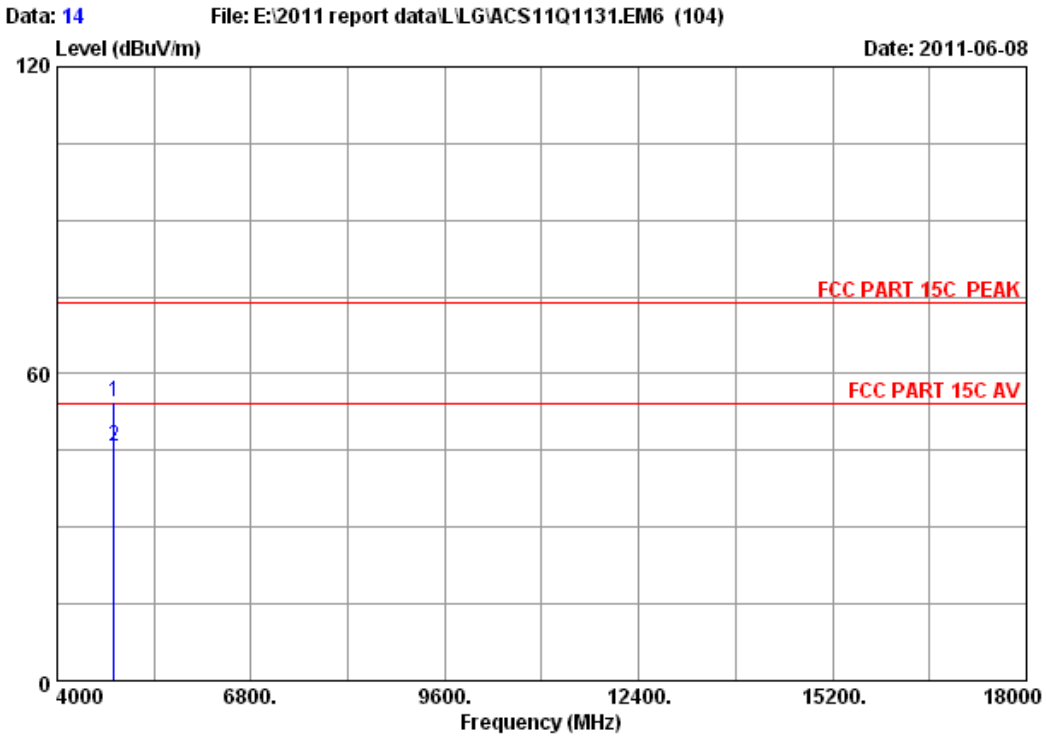
Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH11 2462MHz Tx
M/N : PCI-1020

	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	12.58	35.34	43.29	55.62	74.00	18.38	Peak
2	4924.000	35.09	12.58	35.34	30.71	43.04	54.00	10.96	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.



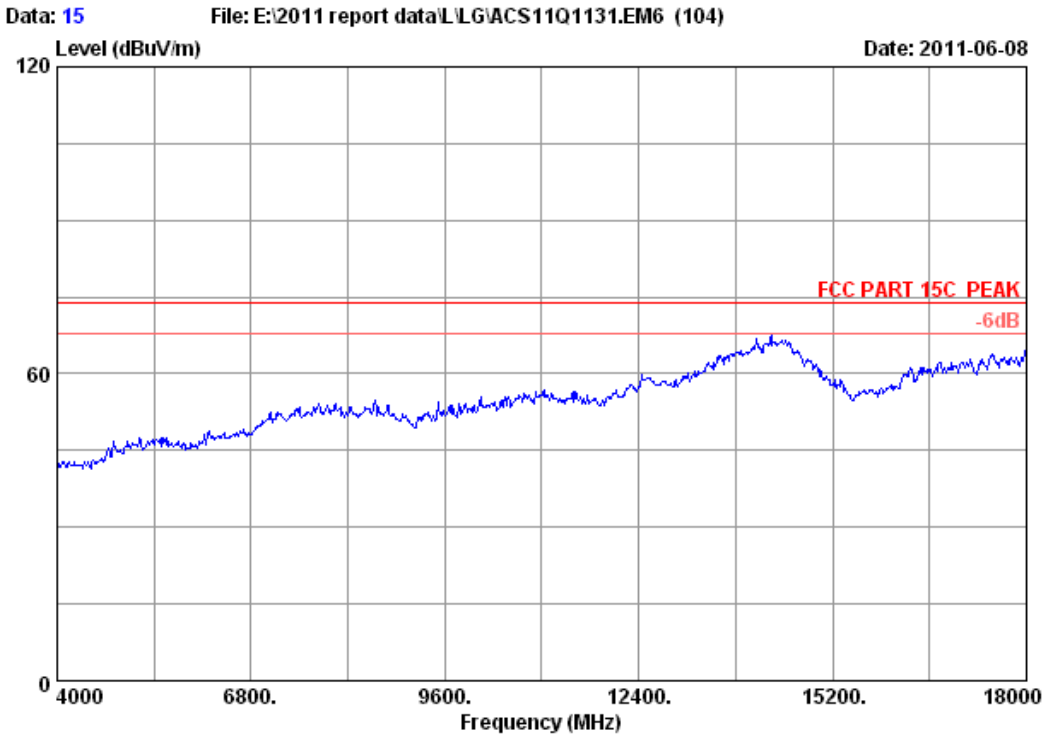

```
Site no.      : 3m Chamber              Data no. :  13
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH1  2412MHz    Tx
M/N           : PCI-1020
```



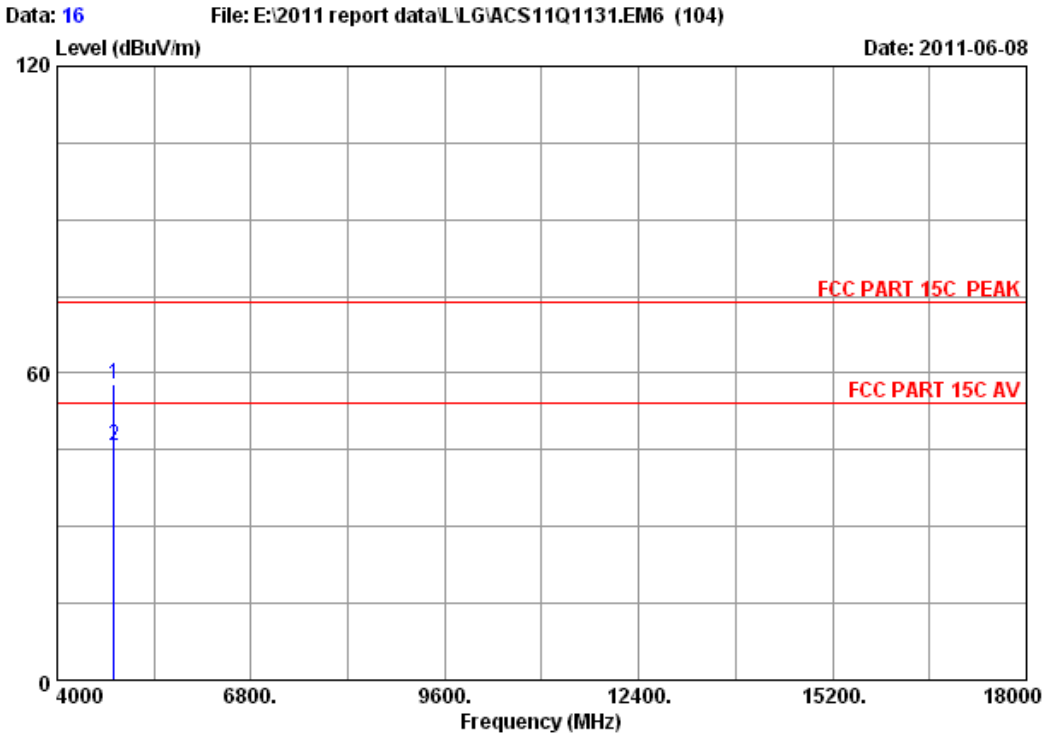
Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH1 2412MHz Tx
M/N : PCI-1020

	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	12.58	35.25	42.81	54.61	74.00	19.39	Peak
2	4824.000	34.47	12.58	35.25	34.01	45.81	54.00	8.19	Average

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




```
Site no.      : 3m Chamber              Data no. :  15
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH1  2412MHz    Tx
M/N           : PCI-1020
```

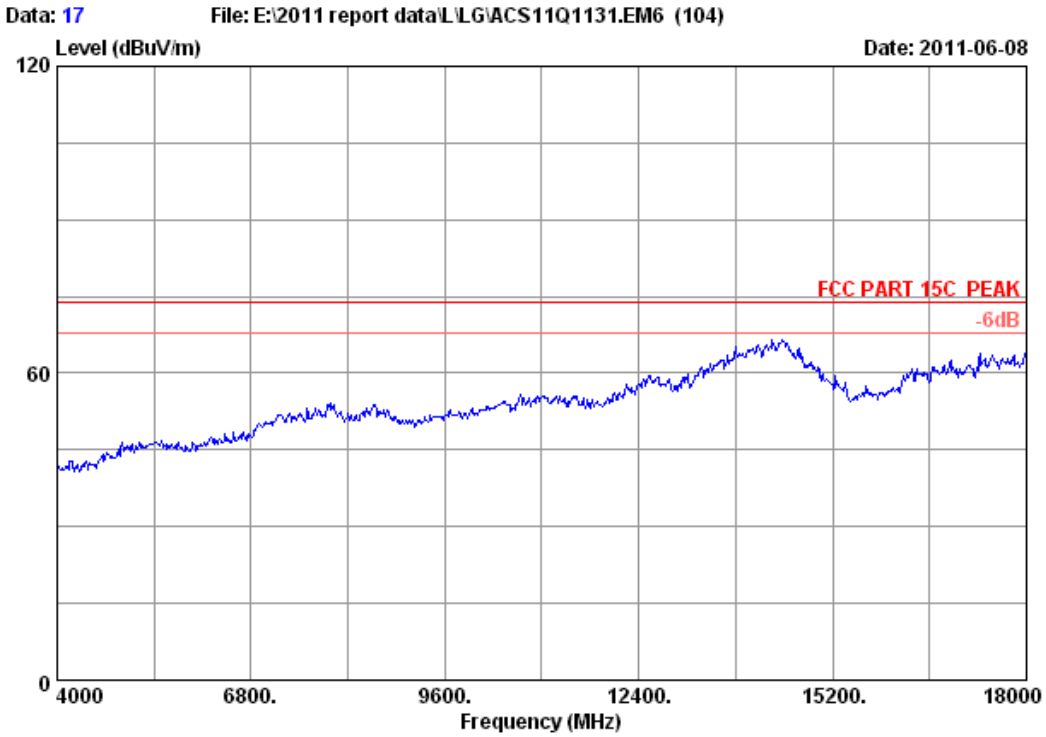



```
Site no.      : 3m Chamber              Data no. :  16
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH1  2412MHz    Tx
M/N           : PCI-1020
```

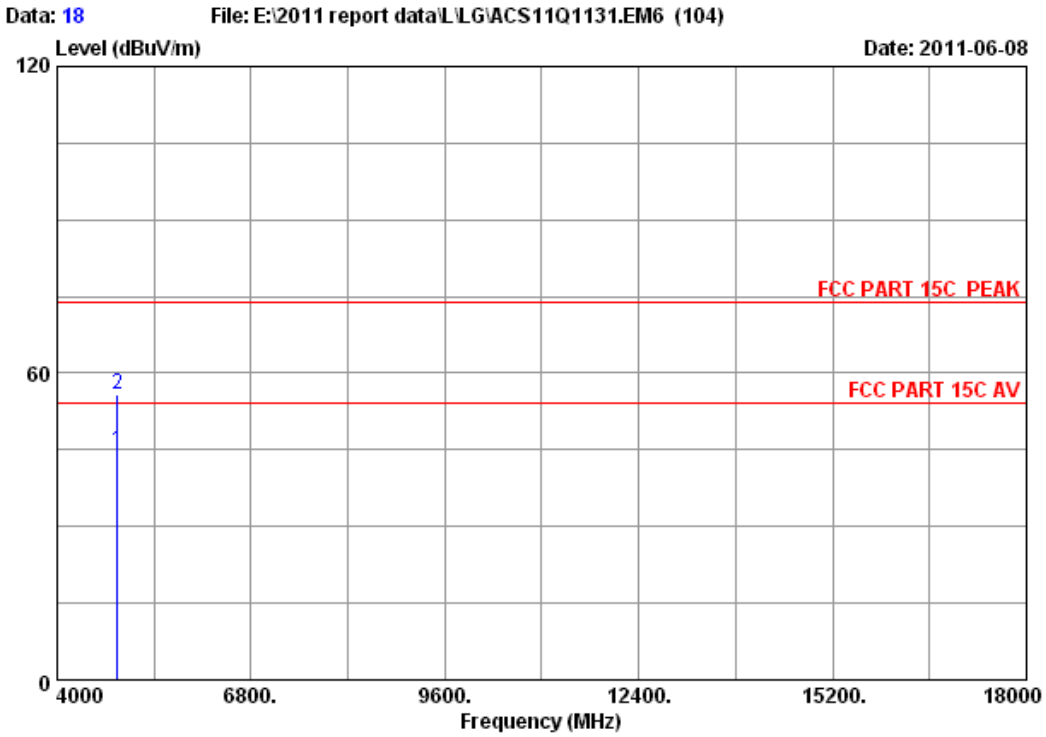
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	34.47	12.58	35.25	46.09	57.89	74.00	16.11	Peak
2	4824.000	34.47	12.58	35.25	34.06	45.86	54.00	8.14	Average

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.



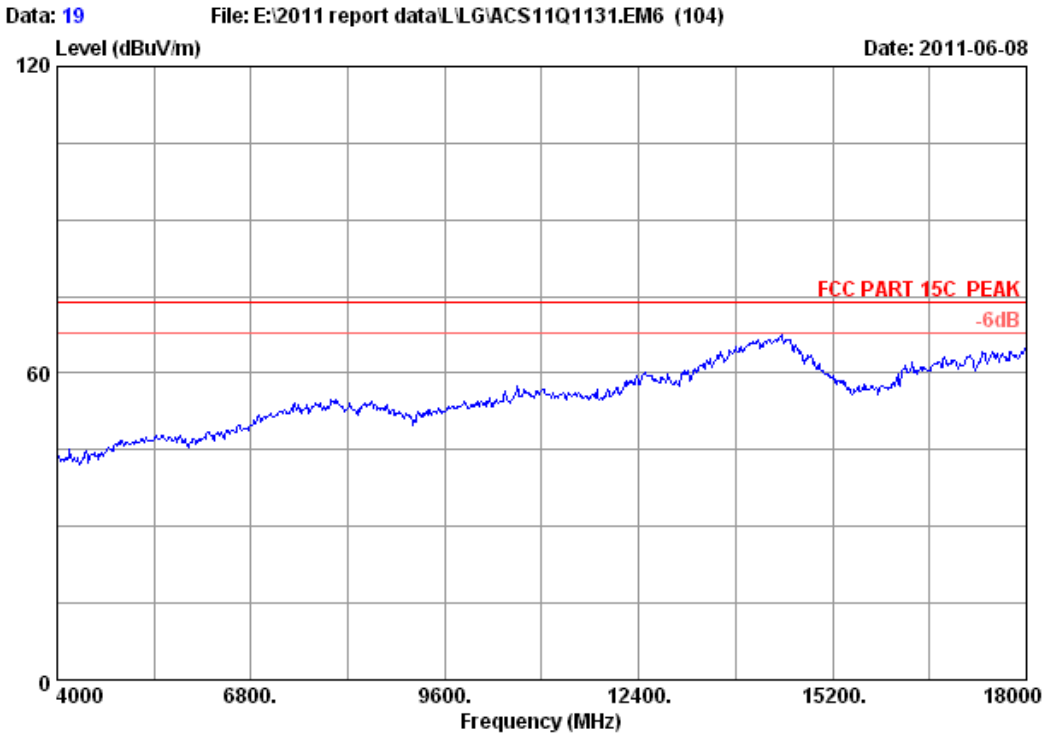

```
Site no.      : 3m Chamber              Data no. :  17
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH6  2437MHz    Tx
M/N           : PCI-1020
```



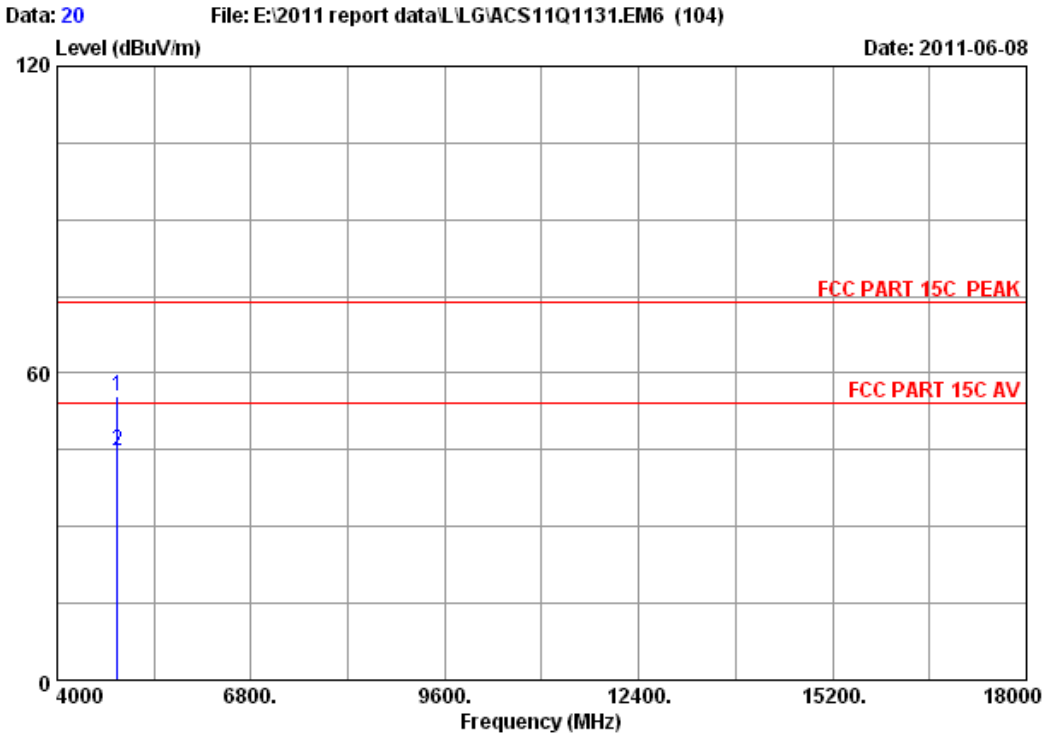
Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH6 2437MHz Tx
M/N : PCI-1020

	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	12.23	35.36	33.07	44.72	54.00	9.28	Average
2	4874.000	34.78	12.23	35.36	44.23	55.88	74.00	18.12	Peak

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



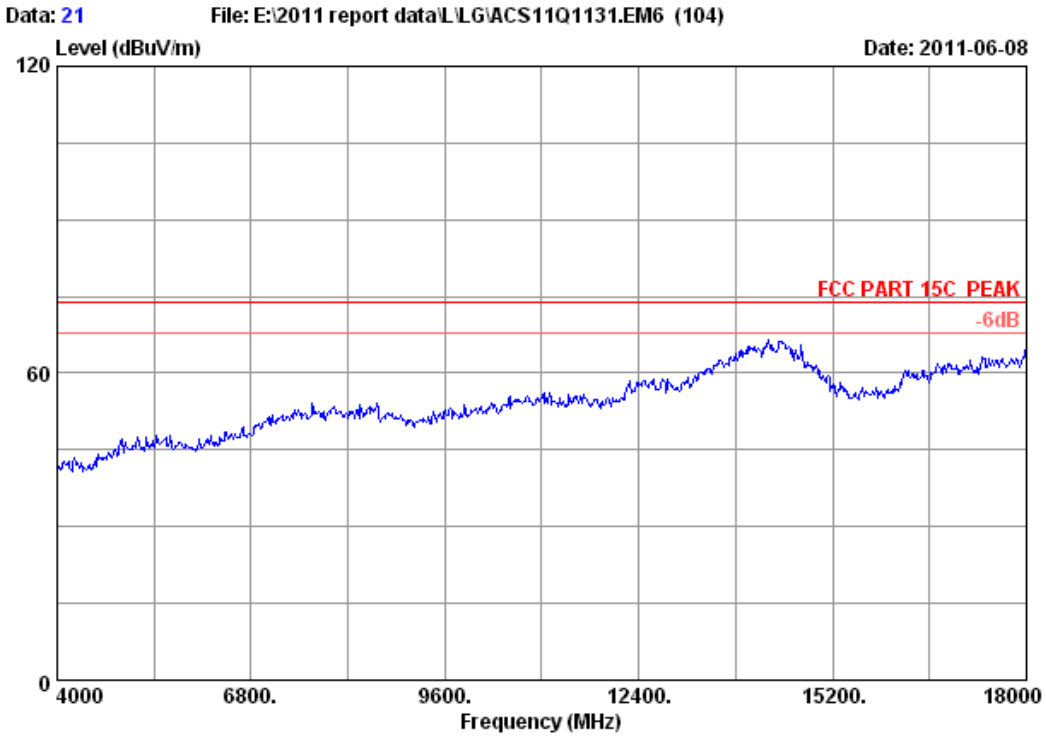

```
Site no.      : 3m Chamber              Data no. :  19
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH6  2437MHz    Tx
M/N           : PCI-1020
```



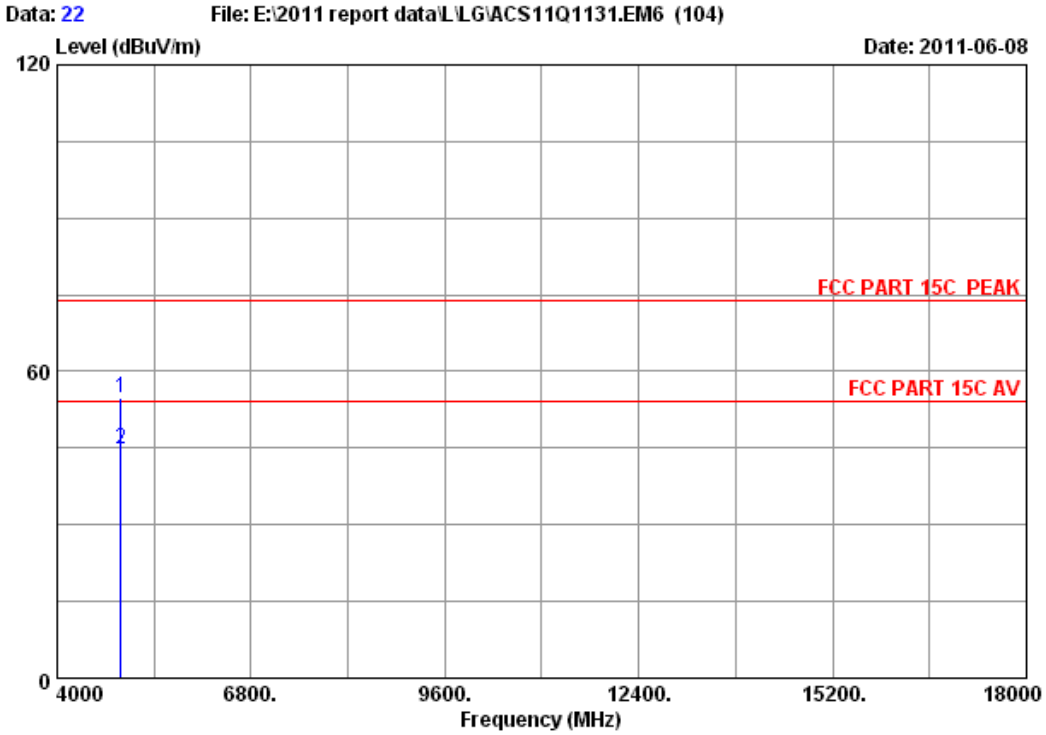
Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH6 2437MHz Tx
M/N : PCI-1020

	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	12.23	35.36	44.00	55.65	74.00	18.35	Peak
2	4874.000	34.78	12.23	35.36	33.06	44.71	54.00	9.29	Average

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




```
Site no.      : 3m Chamber              Data no. :  21
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH11  2462MHz    Tx
M/N           : PCI-1020
```

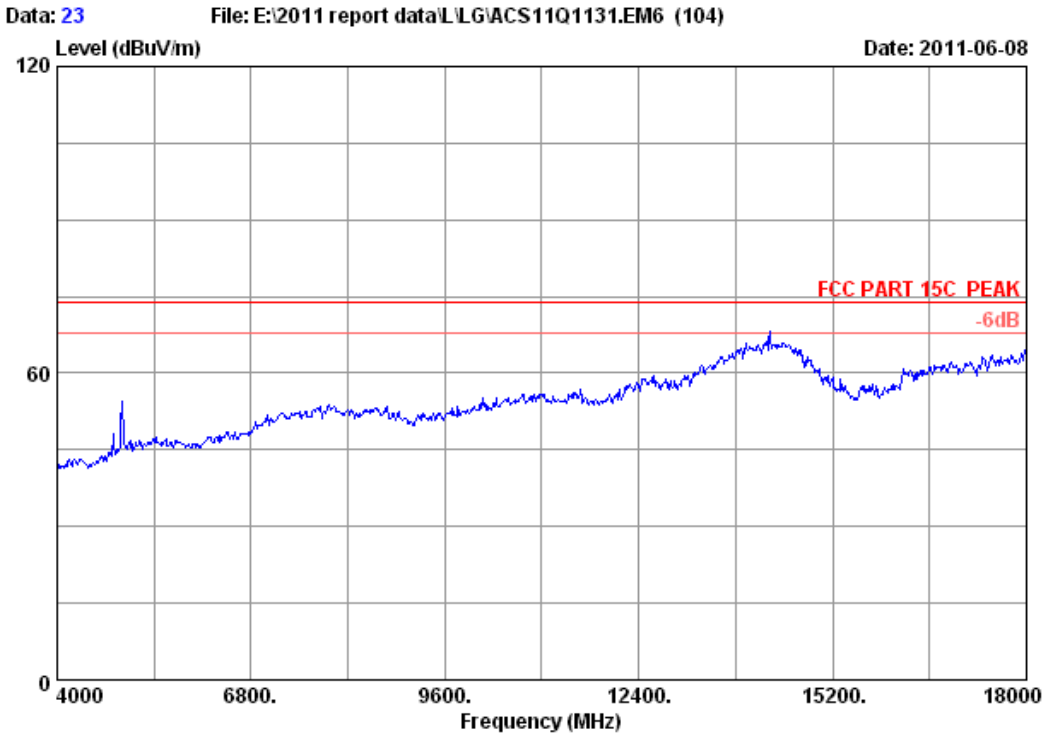



```
Site no.      : 3m Chamber              Data no. :  22
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH11  2462MHz    Tx
M/N           : PCI-1020
```

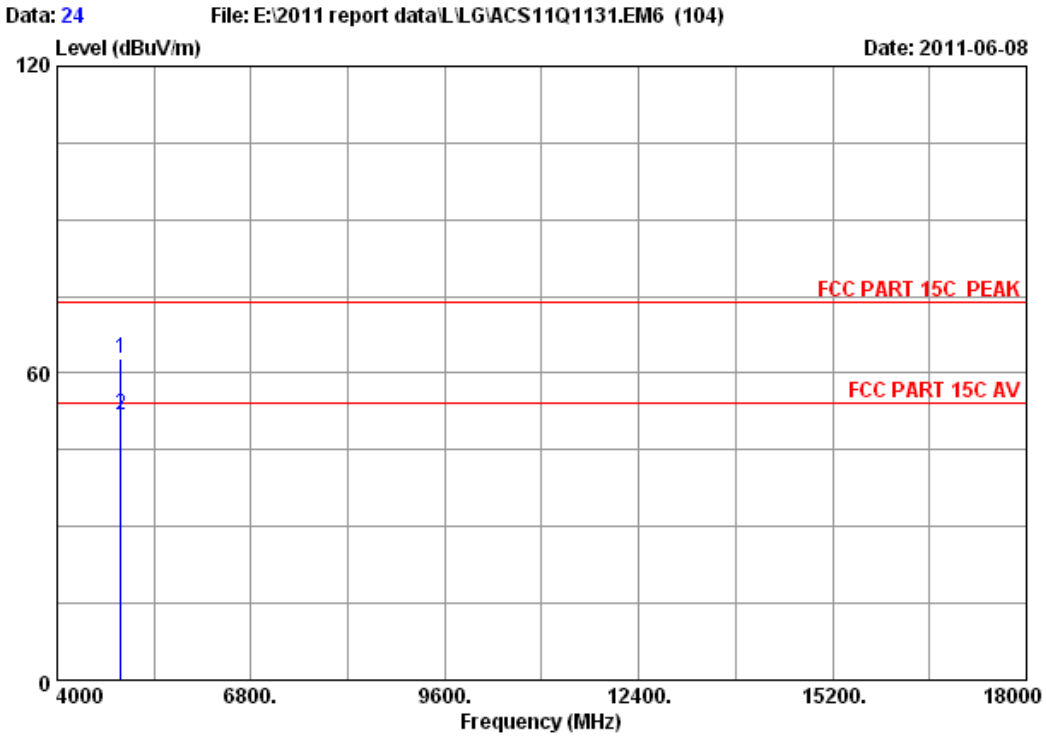
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	12.58	35.34	42.59	54.92	74.00	19.08	Peak
2	4924.000	35.09	12.58	35.34	32.36	44.69	54.00	9.31	Average

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.




```
Site no.      : 3m Chamber              Data no. :  23
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH11  2462MHz    Tx
M/N           : PCI-1020
```

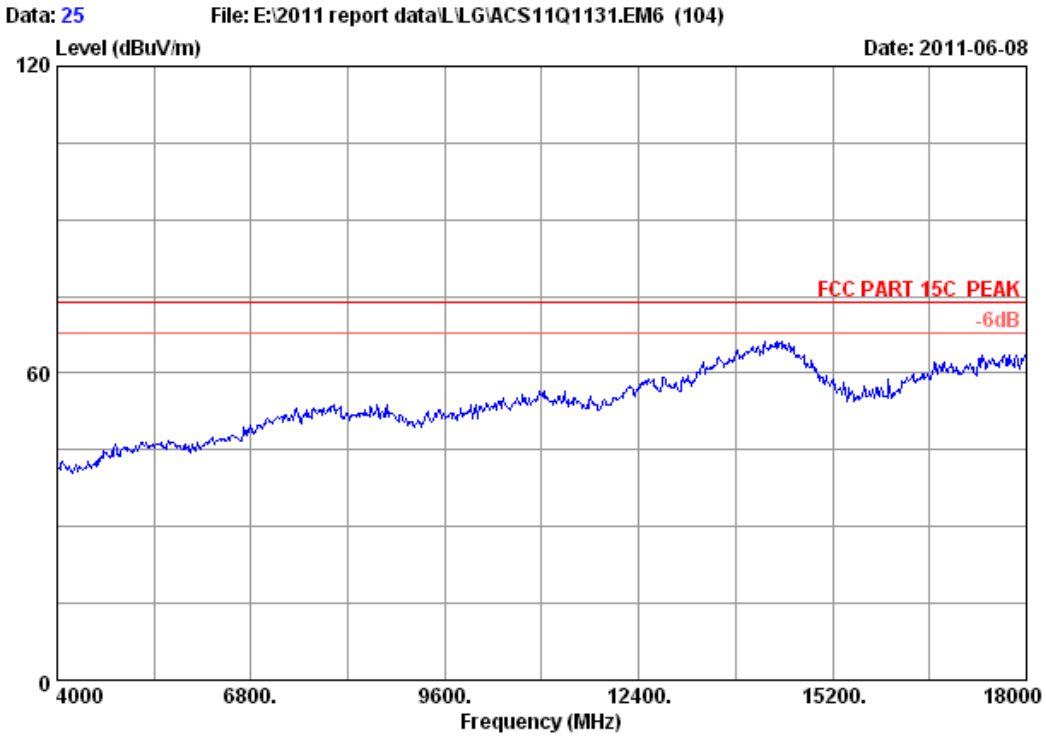



```
Site no.      : 3m Chamber              Data no. :  24
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11g   CH11  2462MHz    Tx
M/N           : PCI-1020
```

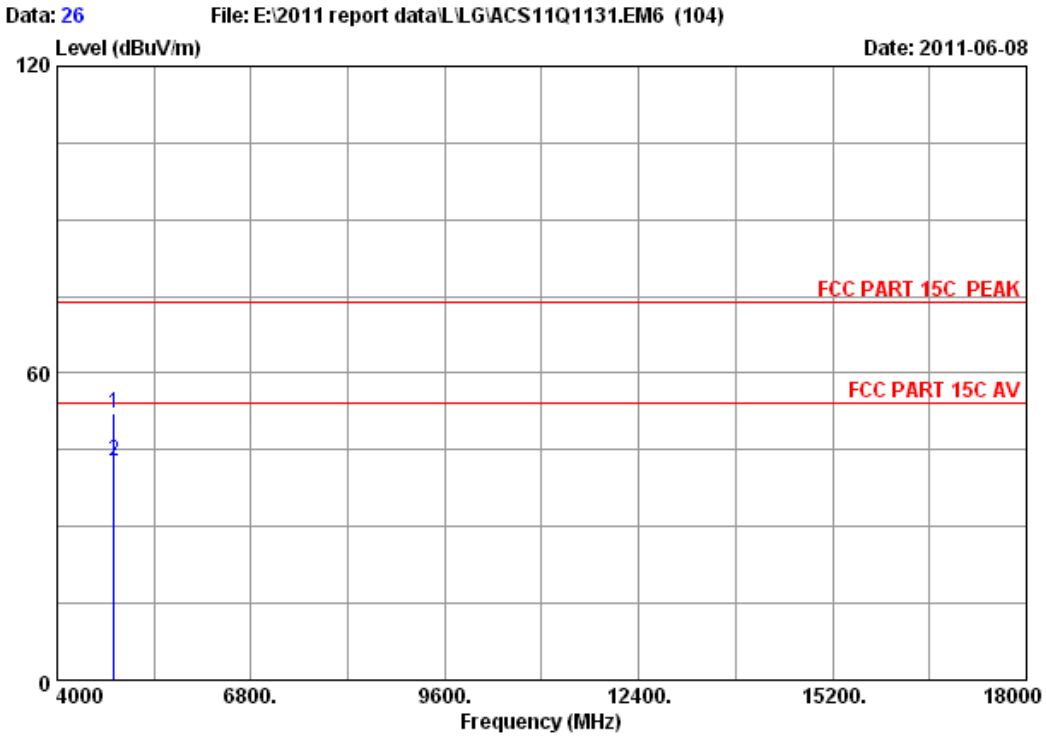
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	12.58	35.34	50.62	62.95	74.00	11.05	Peak
2	4924.000	35.09	12.58	35.34	39.41	51.74	54.00	2.26	Average

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.



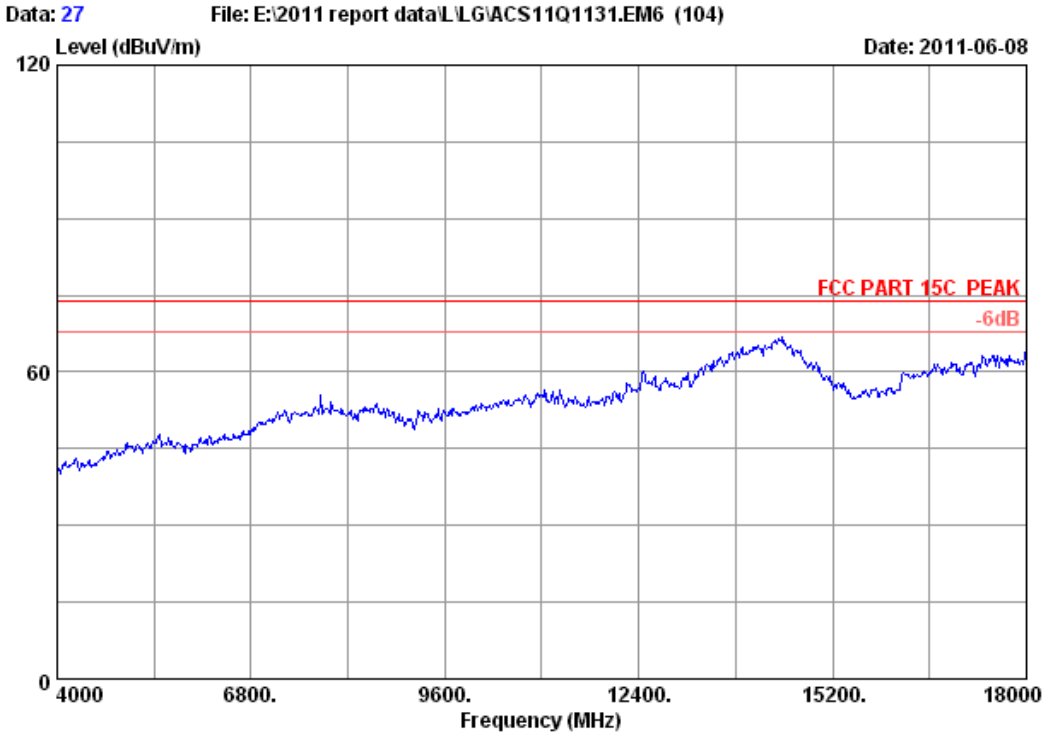

```
Site no.      : 3m Chamber              Data no. :  25
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH1  2412MHz    Tx
M/N           : PCI-1020
```



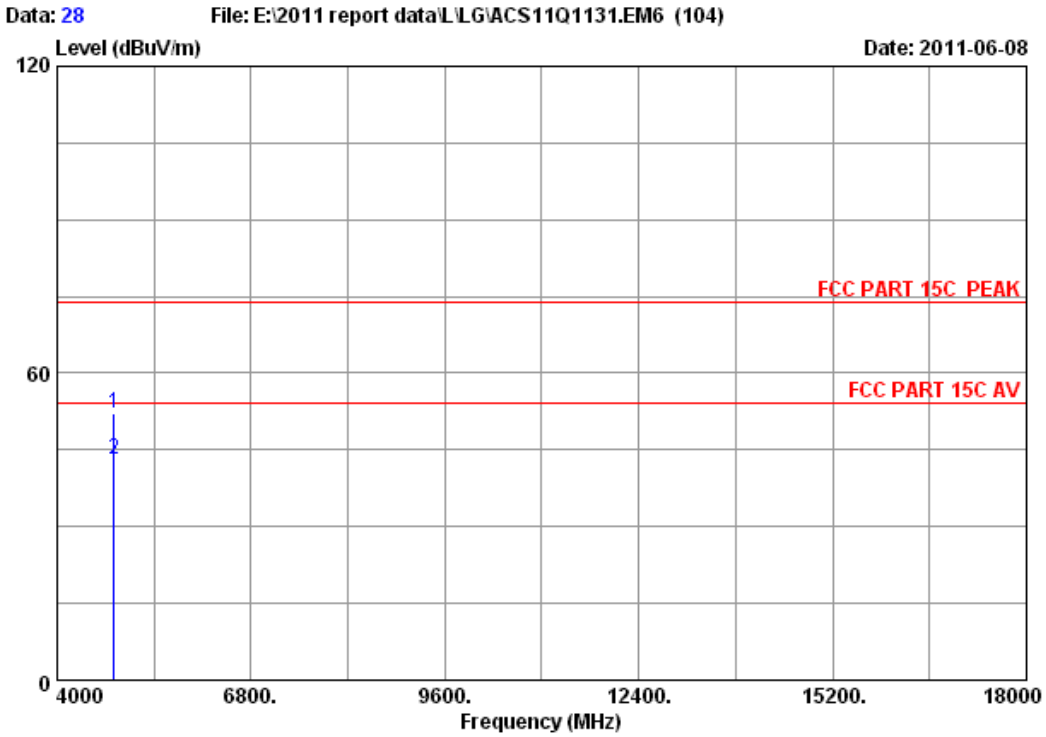
Site no. : 3m Chamber Data no. : 26
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz Tx
M/N : PCI-1020

	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	12.58	35.25	40.24	52.04	74.00	21.96	Peak
2	4824.000	34.47	12.58	35.25	31.07	42.87	54.00	11.13	Average

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



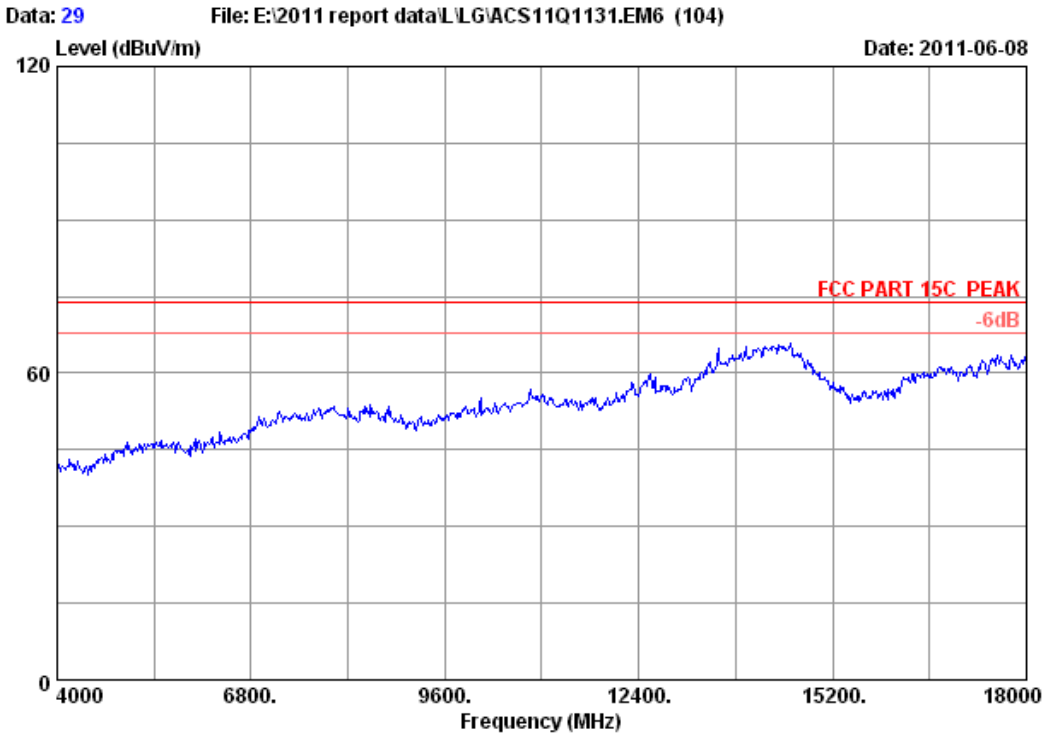

```
Site no.      : 3m Chamber              Data no. :  27
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH1  2412MHz    Tx
M/N           : PCI-1020
```



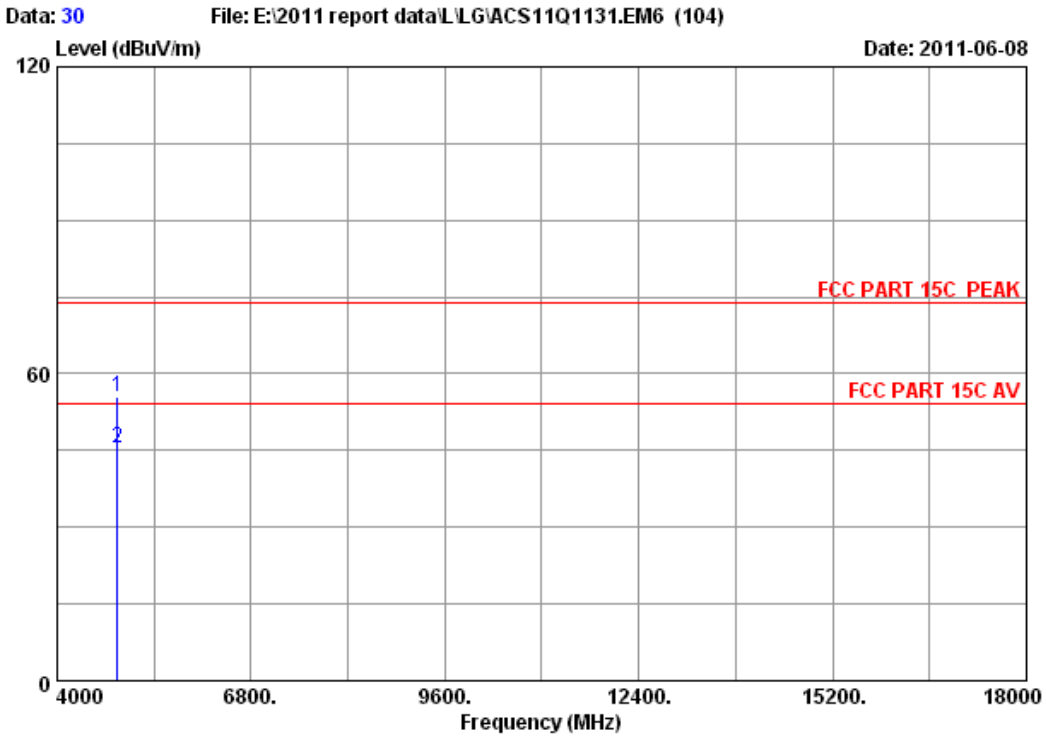
Site no. : 3m Chamber Data no. : 28
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz Tx
M/N : PCI-1020

	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	12.58	35.25	40.28	52.08	74.00	21.92	Peak
2	4824.000	34.47	12.58	35.25	31.41	43.21	54.00	10.79	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.



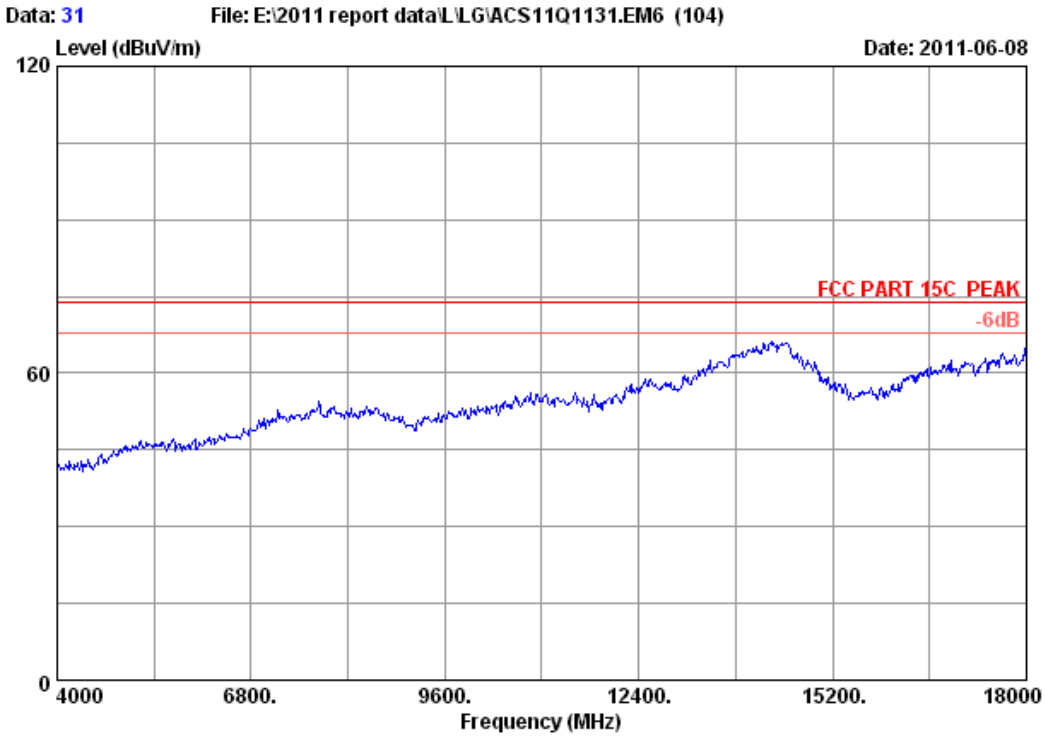

```
Site no.      : 3m Chamber              Data no. :  29
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH6  2437MHz    Tx
M/N           : PCI-1020
```



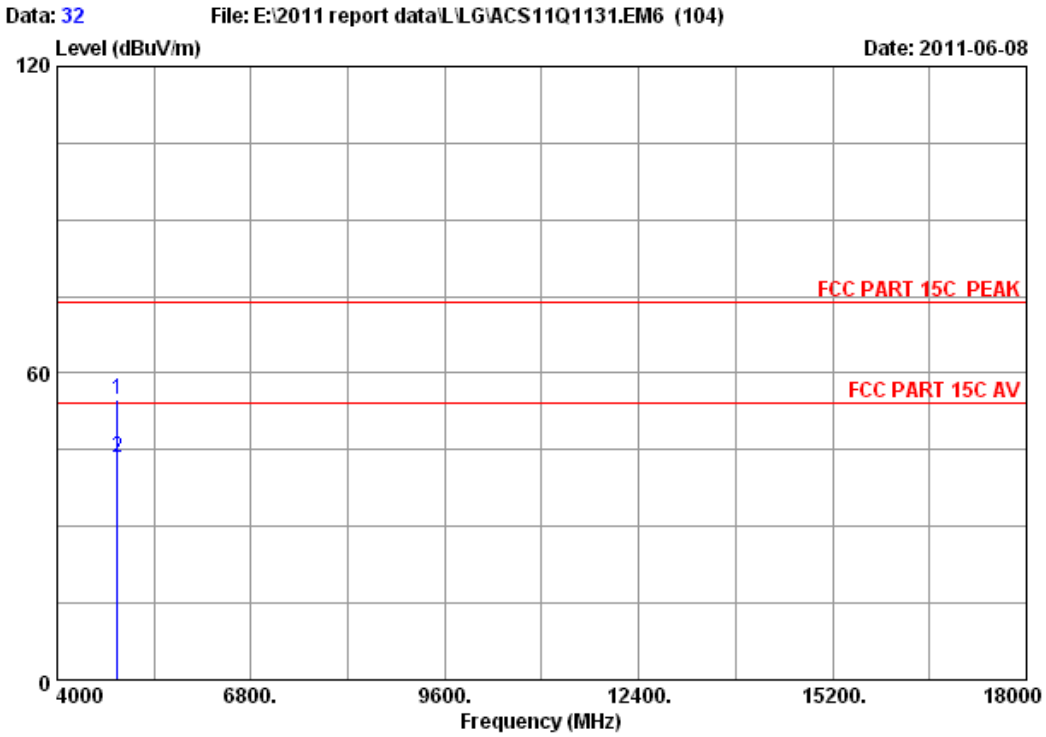
Site no. : 3m Chamber Data no. : 30
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH6 2437MHz Tx
M/N : PCI-1020

	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	12.23	35.36	43.93	55.58	74.00	18.42	Peak
2	4874.000	34.78	12.23	35.36	33.68	45.33	54.00	8.67	Average

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



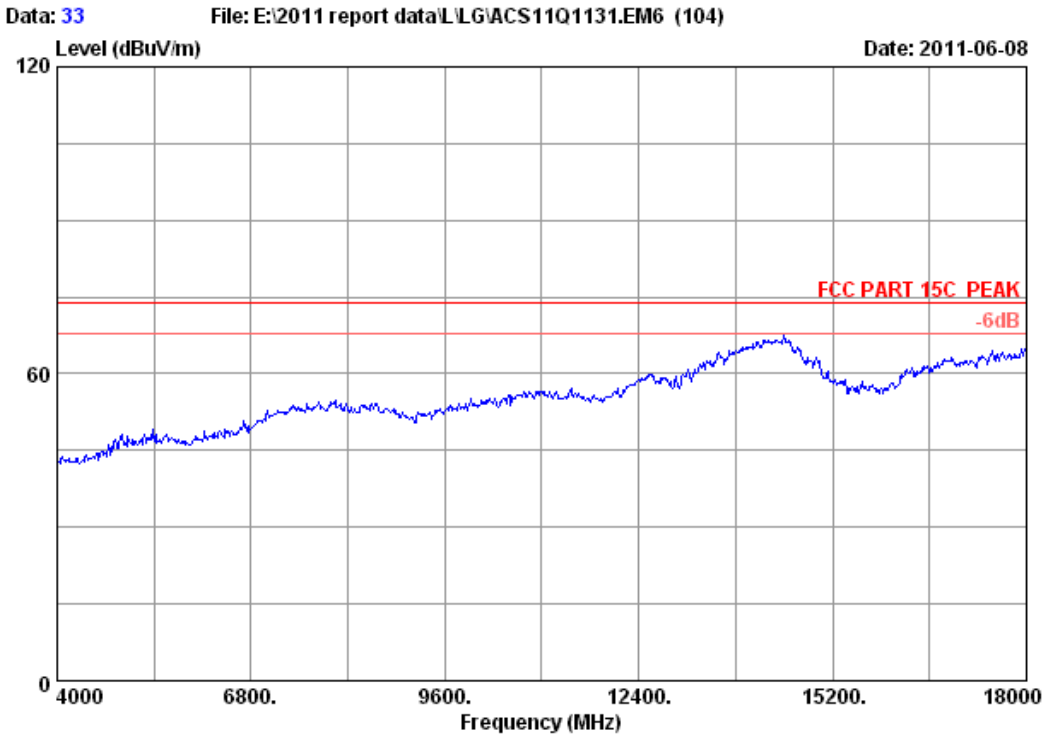

```
Site no.      : 3m Chamber              Data no. :  31
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH6  2437MHz    Tx
M/N           : PCI-1020
```



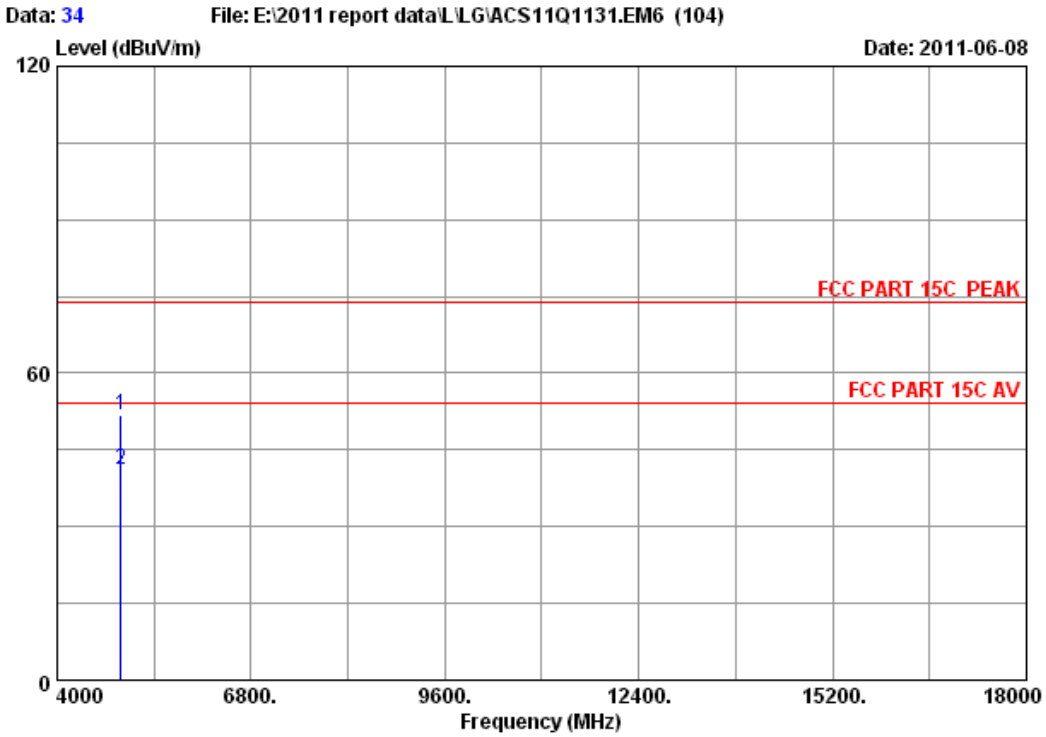
Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH6 2437MHz Tx
M/N : PCI-1020

	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	12.23	35.36	43.20	54.85	74.00	19.15	Peak
2	4874.000	34.78	12.23	35.36	31.74	43.39	54.00	10.61	Average

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



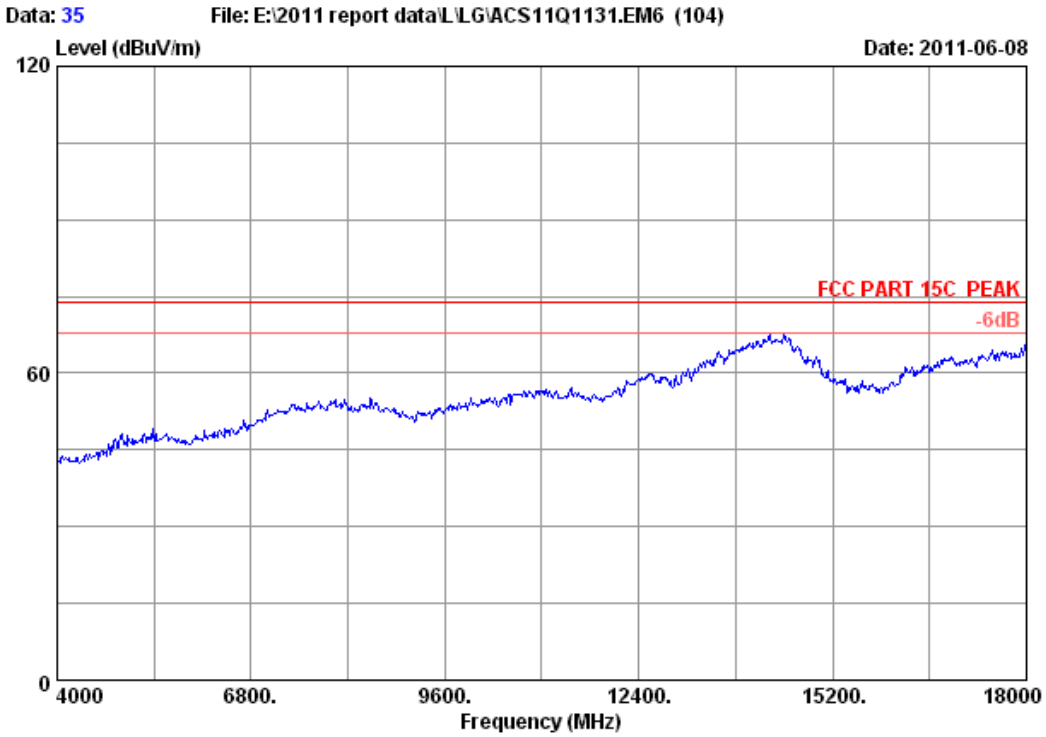

```
Site no.      : 3m Chamber              Data no. :  33
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH11  2462MHz    Tx
M/N           : PCI-1020
```



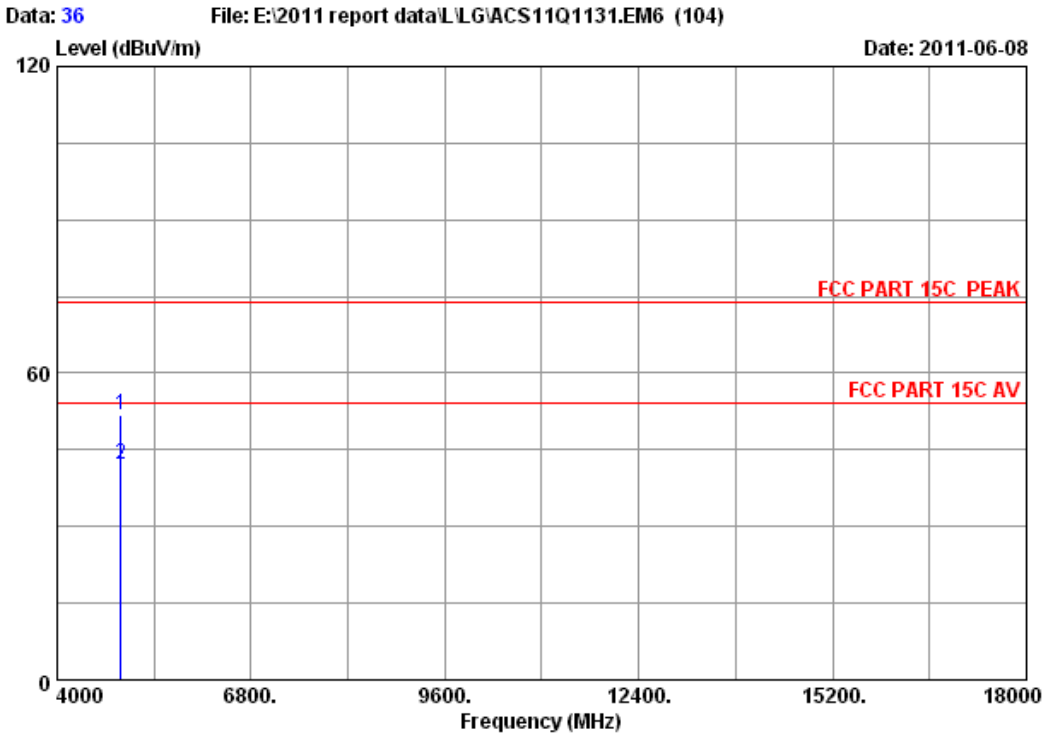
Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH11 2462MHz Tx
M/N : PCI-1020

	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	12.58	35.34	39.45	51.78	74.00	22.22	Peak
2	4924.000	35.09	12.58	35.34	28.68	41.01	54.00	12.99	Average

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




```
Site no.      : 3m Chamber              Data no. :  35
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH11  2462MHz    Tx
M/N           : PCI-1020
```

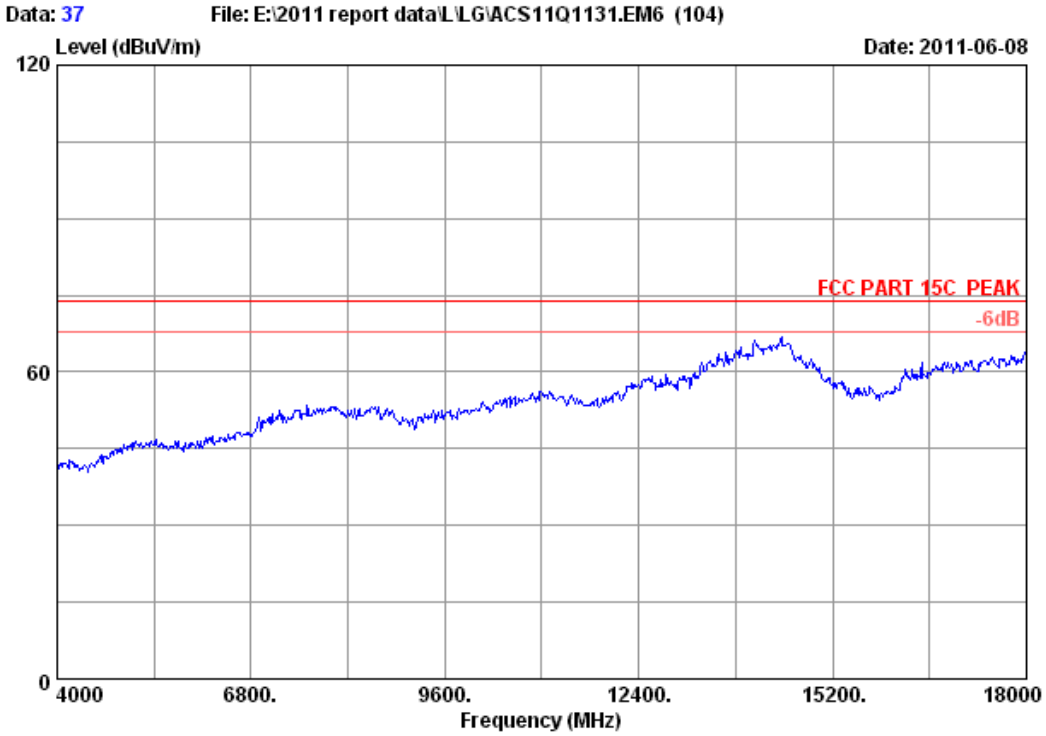



```
Site no.      : 3m Chamber              Data no. :  36
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH11  2462MHz    Tx
M/N           : PCI-1020
```

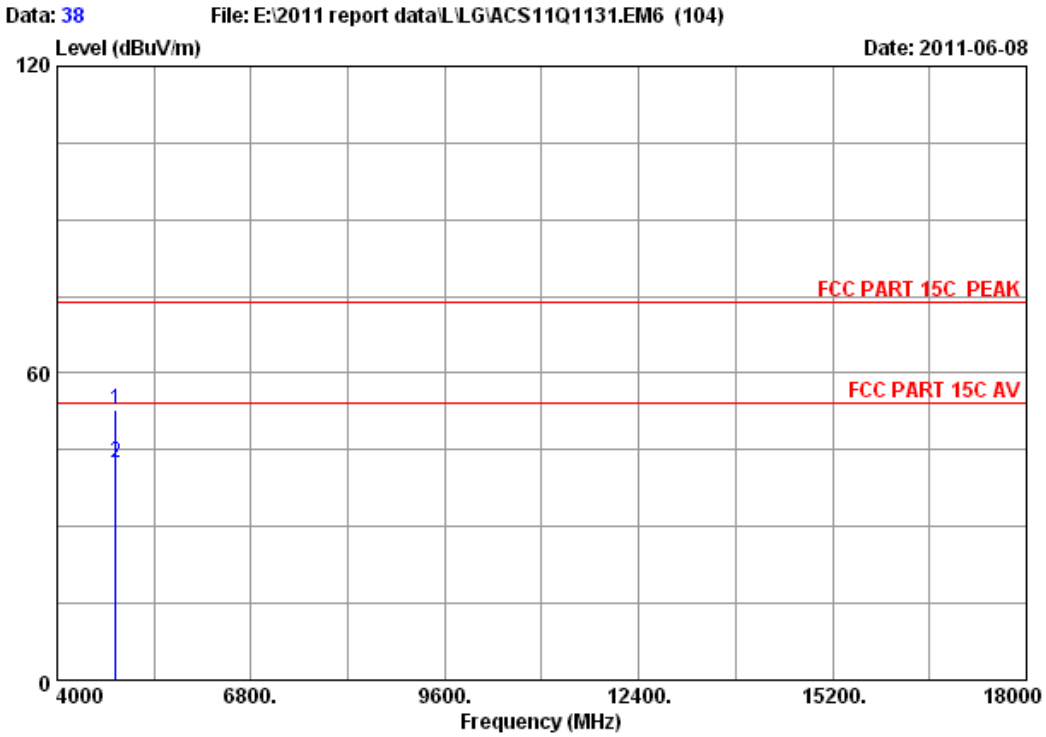
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	35.09	12.58	35.34	39.59	51.92	74.00	22.08	Peak
2	4924.000	35.09	12.58	35.34	29.82	42.15	54.00	11.85	Average

Remarks:

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



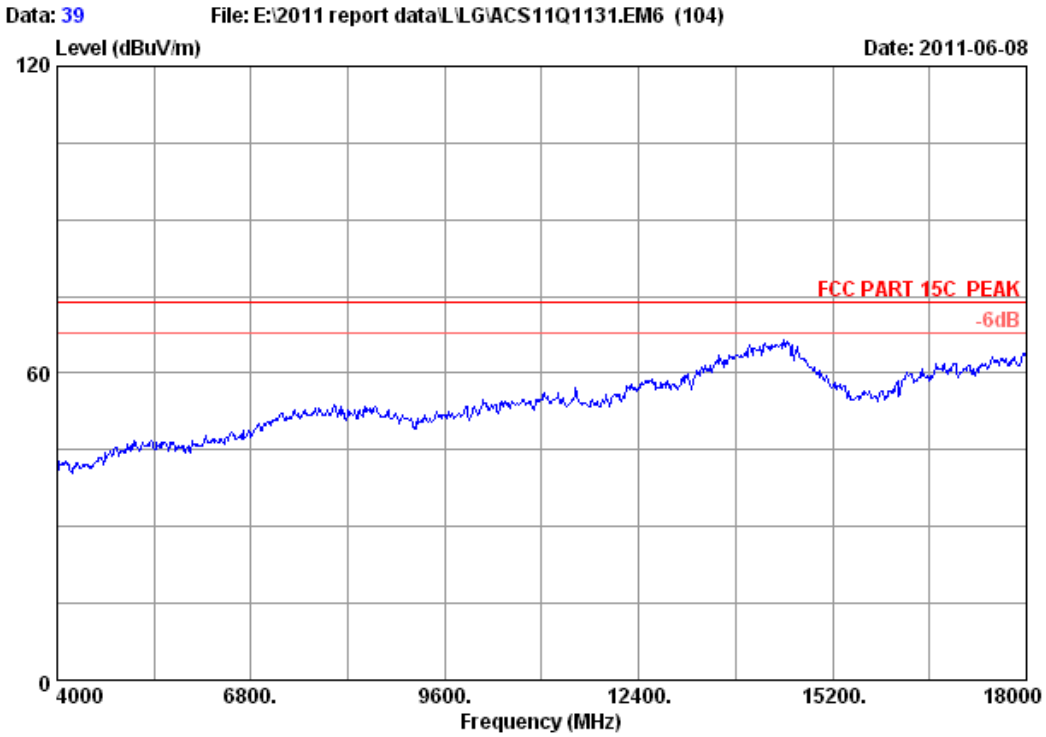

```
Site no.      : 3m Chamber              Data no. :  37
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH1  2422MHz    Tx
M/N           : PCI-1020
```



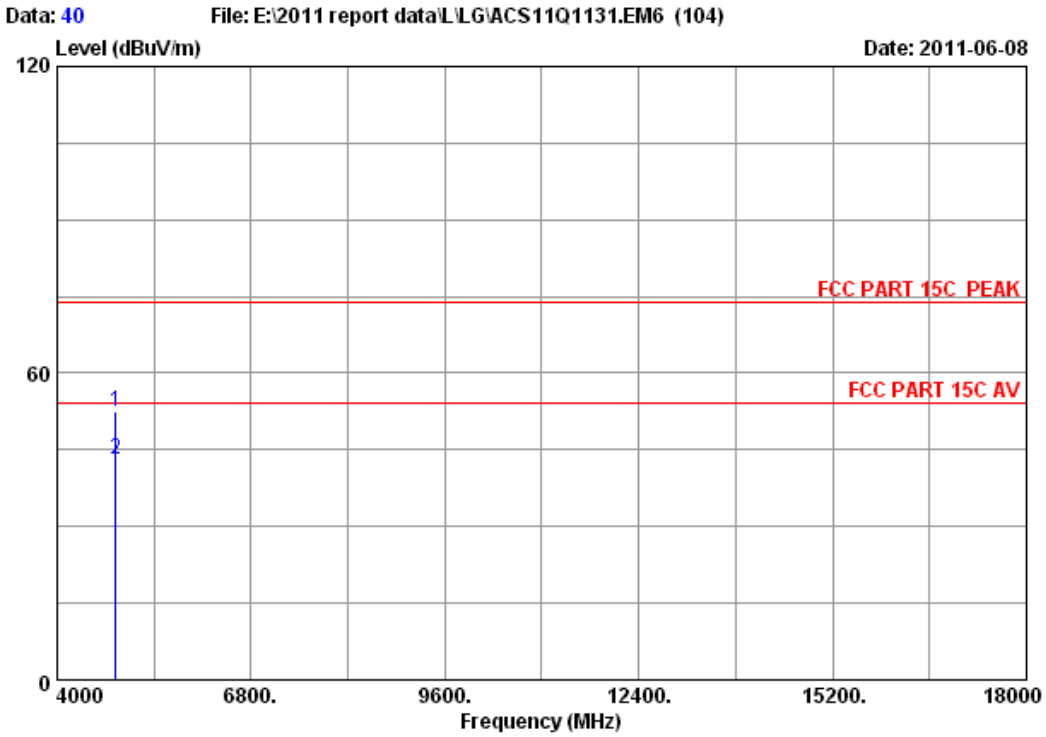
Site no. : 3m Chamber Data no. : 38
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH1 2422MHz Tx
M/N : PCI-1020

	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	12.45	35.25	41.12	52.89	74.00	21.11	Peak
2	4844.000	34.57	12.45	35.25	30.68	42.45	54.00	11.55	Average

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




```
Site no.      : 3m Chamber              Data no. :  39
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH1  2422MHz    Tx
M/N           : PCI-1020
```

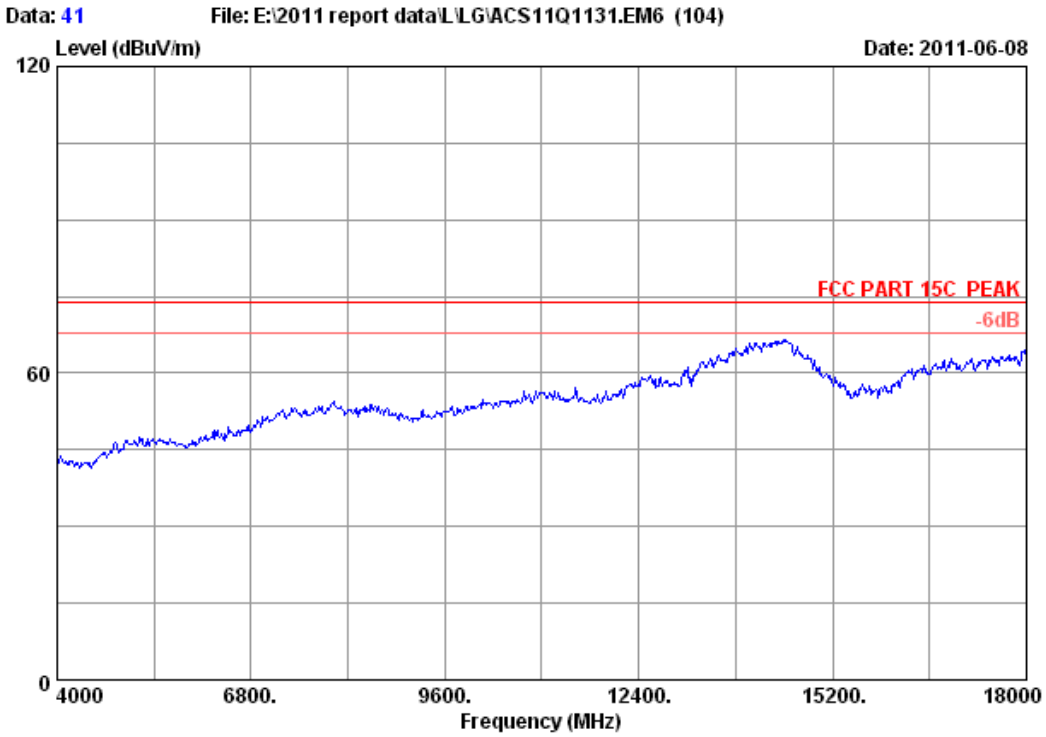



```
Site no.      : 3m Chamber              Data no. :  40
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH1  2422MHz    Tx
M/N           : PCI-1020
```

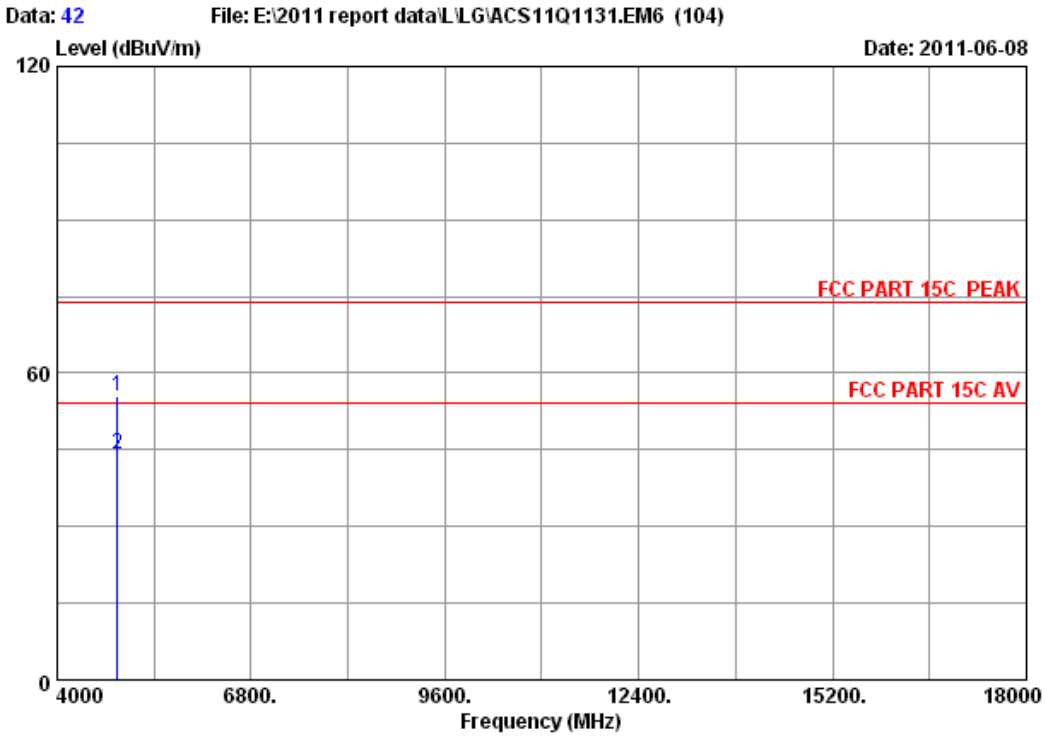
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	34.57	12.45	35.25	40.85	52.62	74.00	21.38	Peak
2	4844.000	34.57	12.45	35.25	31.19	42.96	54.00	11.04	Average

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.



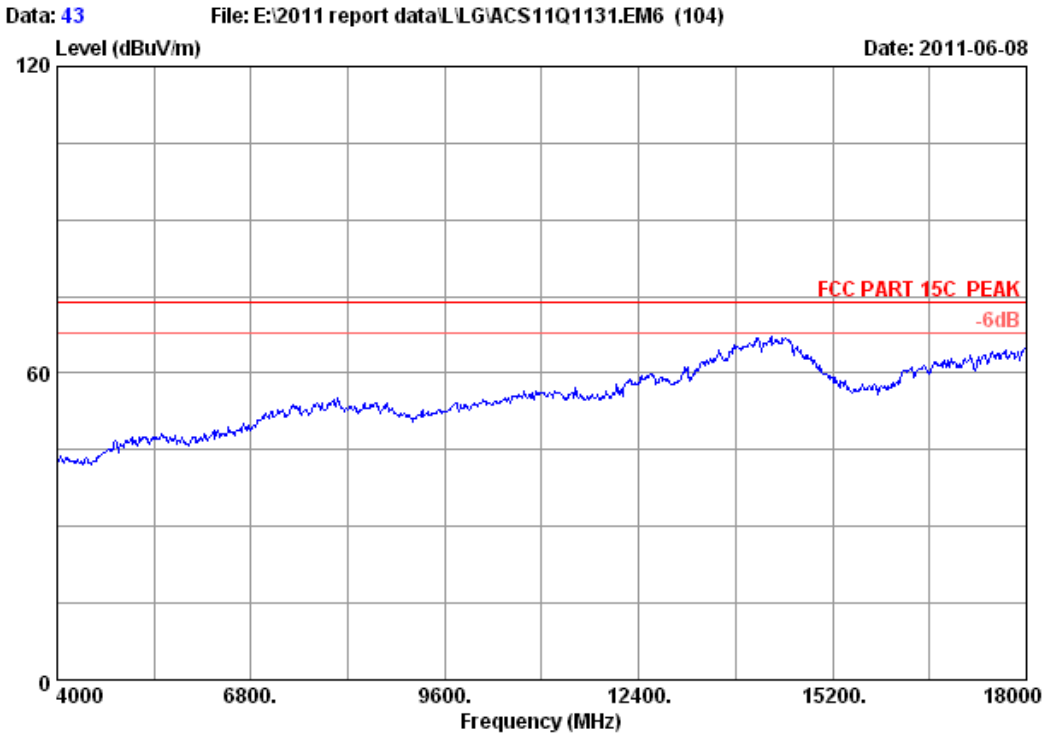

```
Site no.      : 3m Chamber              Data no. :  41
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH4  2437MHz    Tx
M/N           : PCI-1020
```



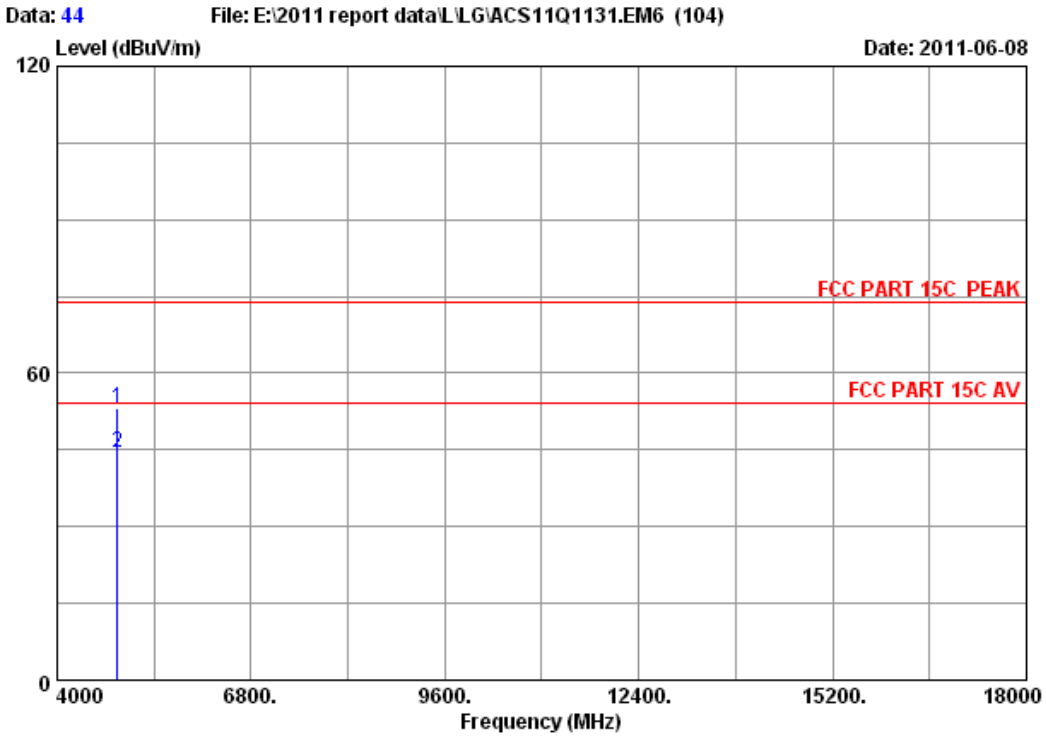
Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH4 2437MHz Tx
M/N : PCI-1020

	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	12.23	35.36	43.68	55.33	74.00	18.67	Peak
2	4874.000	34.78	12.23	35.36	32.57	44.22	54.00	9.78	Average

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




```
Site no.      : 3m Chamber              Data no. :  43
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH4  2437MHz    Tx
M/N           : PCI-1020
```

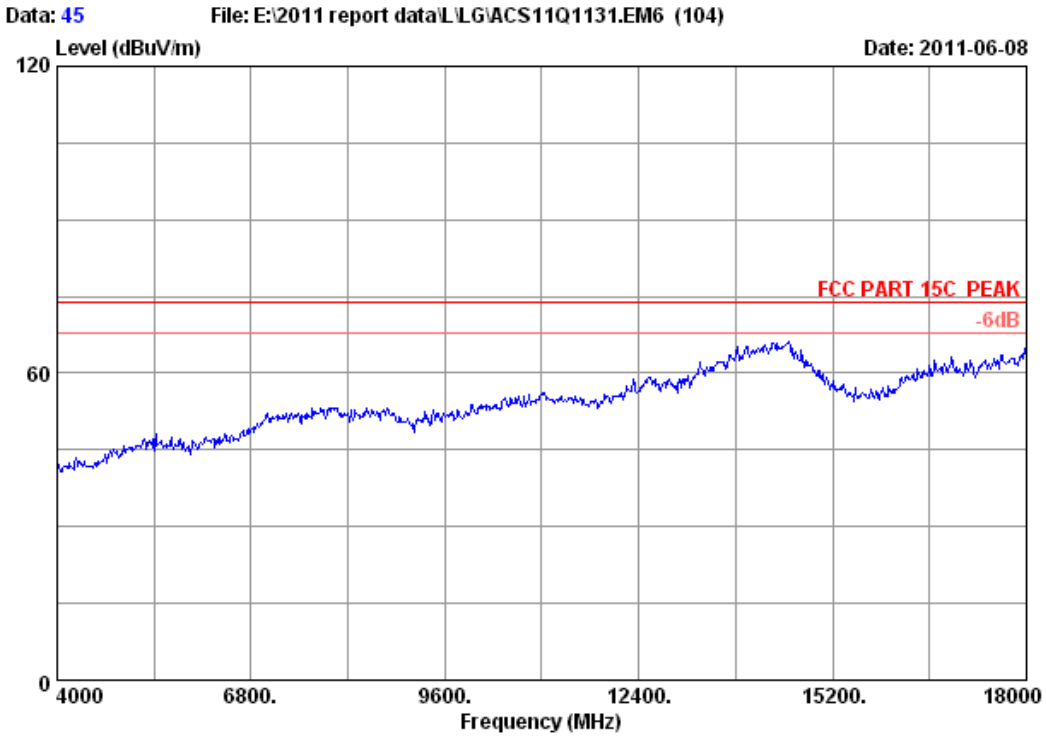



```
Site no.      : 3m Chamber              Data no. :  44
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH4  2437MHz    Tx
M/N           : PCI-1020
```

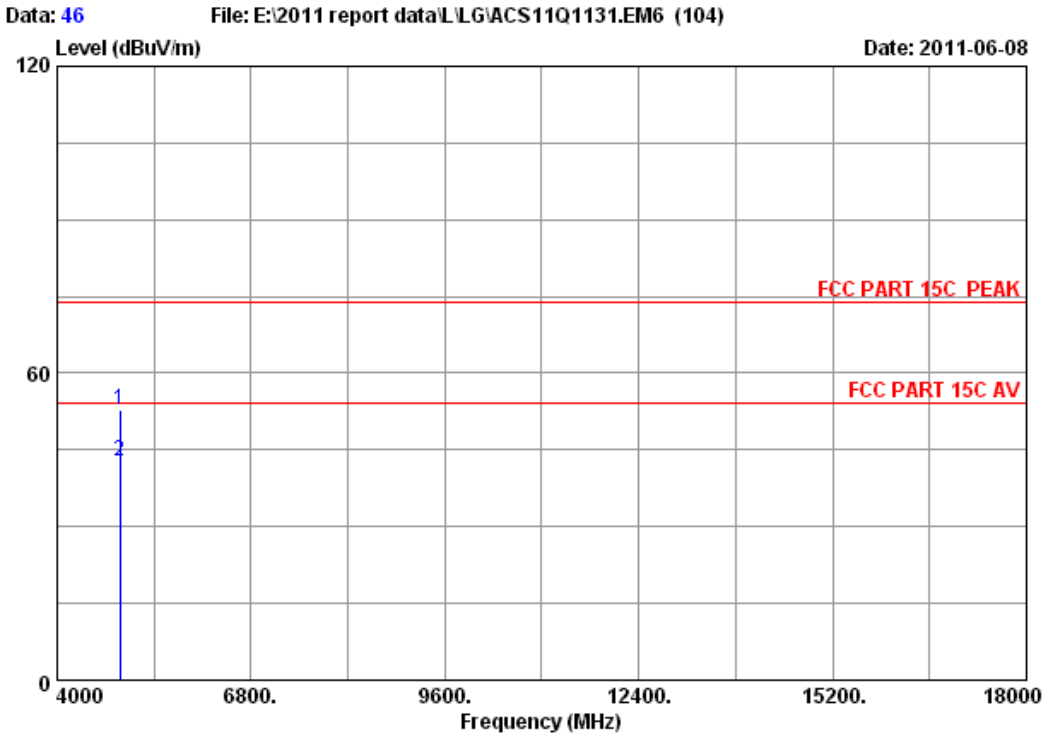
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	34.78	12.23	35.36	41.66	53.31	74.00	20.69	Peak
2	4874.000	34.78	12.23	35.36	32.71	44.36	54.00	9.64	Average

Remarks:

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



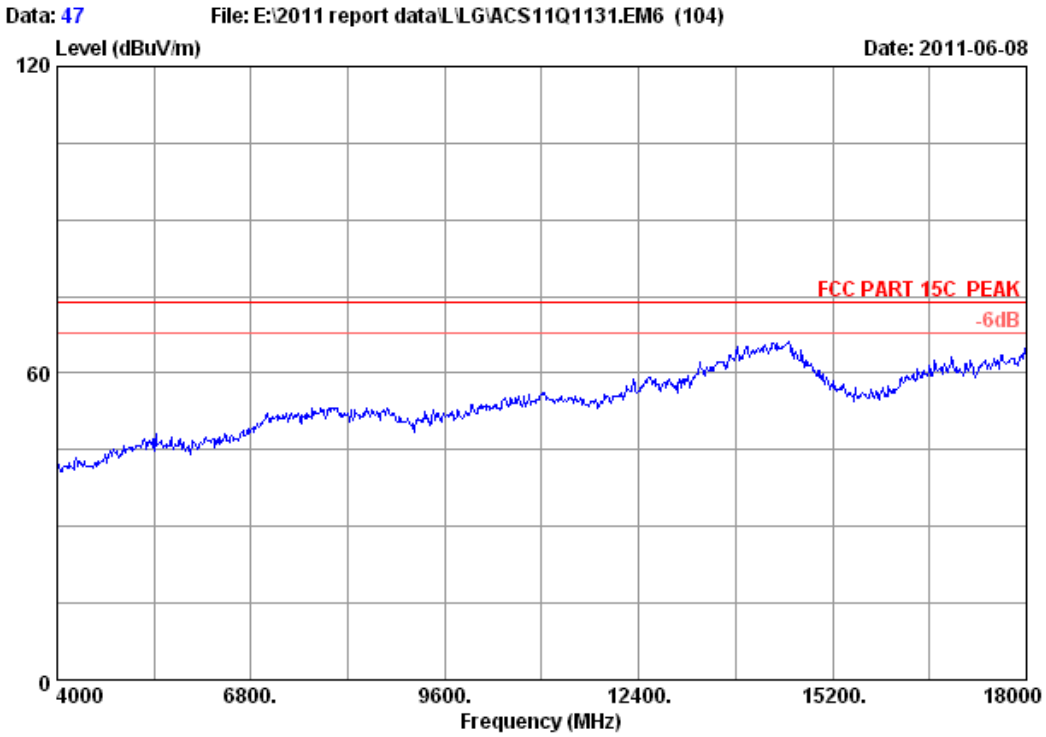

```
Site no.      : 3m Chamber              Data no. :  45
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH7  2452MHz    Tx
M/N           : PCI-1020
```



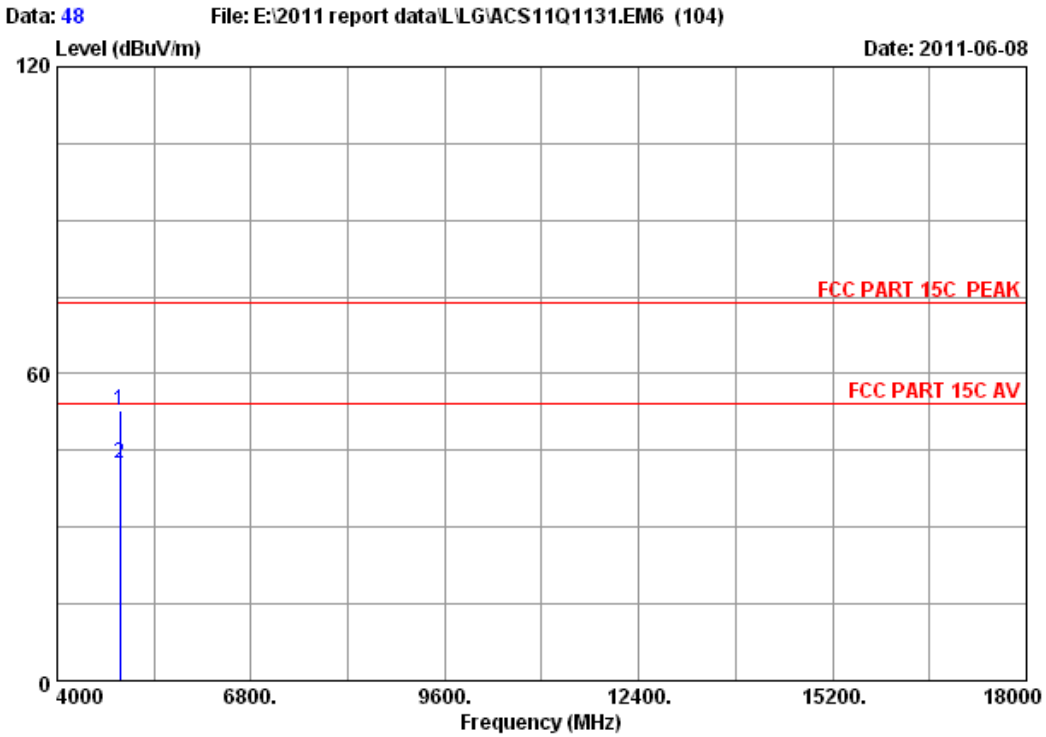
Site no. : 3m Chamber Data no. : 46
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH7 2452MHz Tx
M/N : PCI-1020

	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	12.43	35.27	40.77	52.91	74.00	21.09	Peak
2	4904.000	34.98	12.43	35.27	30.75	42.89	54.00	11.11	Average

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



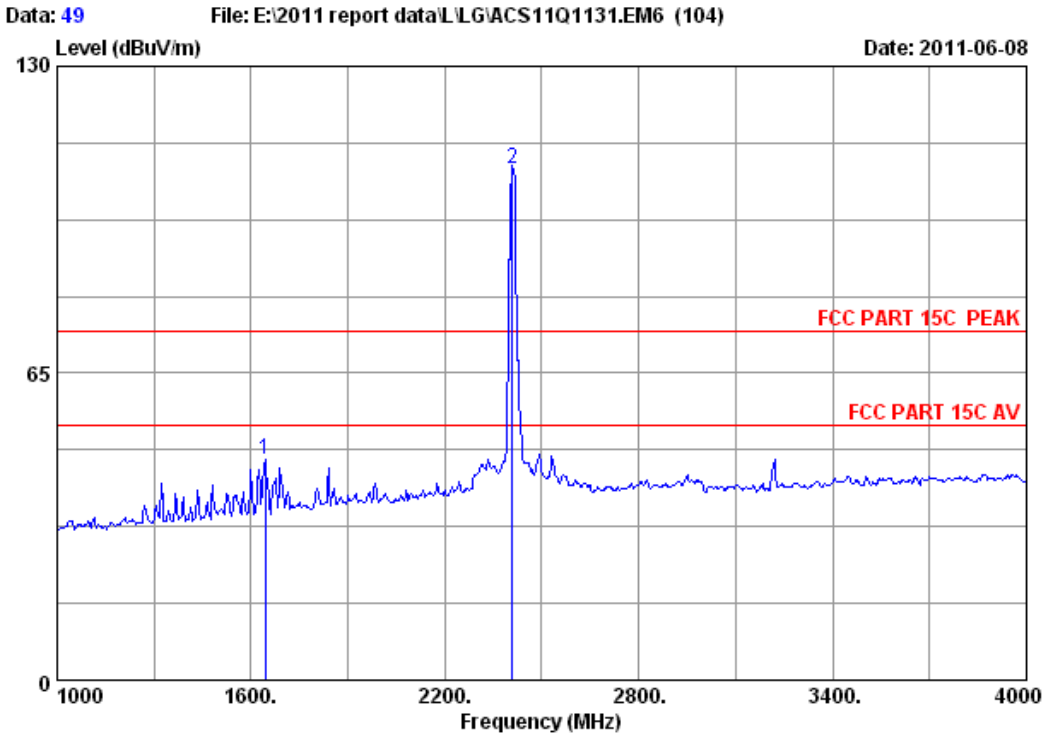

```
Site no.      : 3m Chamber              Data no. :  47
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH7  2452MHz    Tx
M/N           : PCI-1020
```



Site no. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH7 2452MHz Tx
M/N : PCI-1020

	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	12.43	35.27	40.77	52.91	74.00	21.09	Peak
2	4904.000	34.98	12.43	35.27	30.47	42.61	54.00	11.39	Average

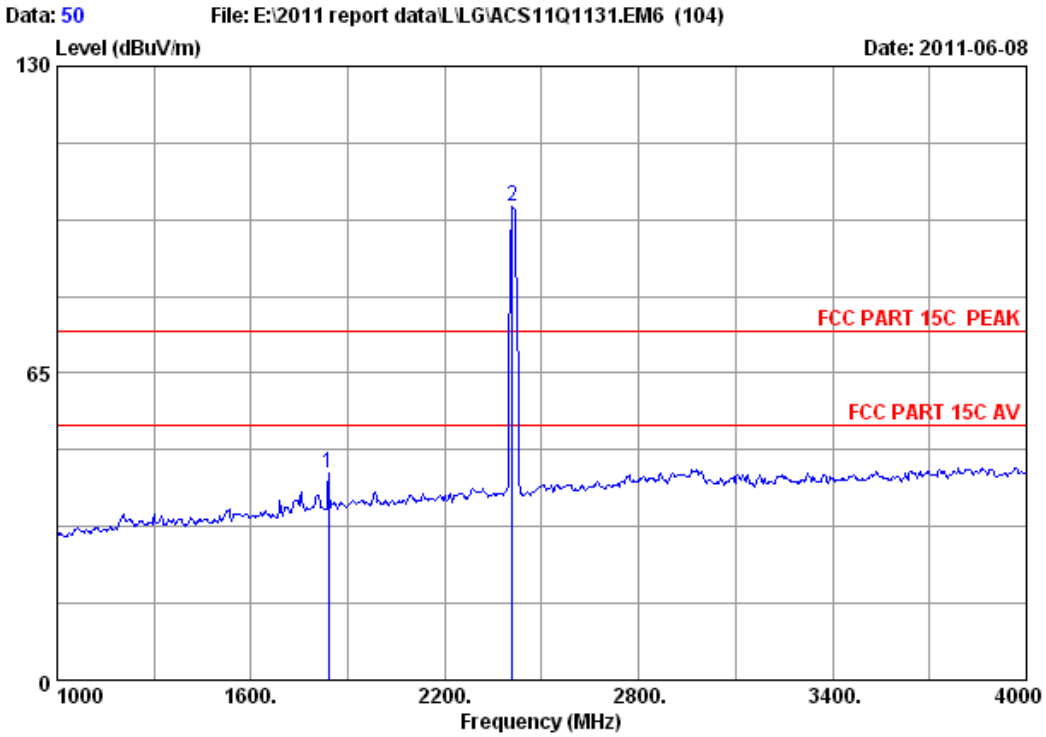
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 49
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH1 TX
M/N : PCI-1020

	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	1645.000	26.50	7.10	36.33	49.51	46.78	74.00	27.22	Peak
2	2410.000	28.48	8.60	35.95	107.00	108.13	74.00	-34.13	Peak

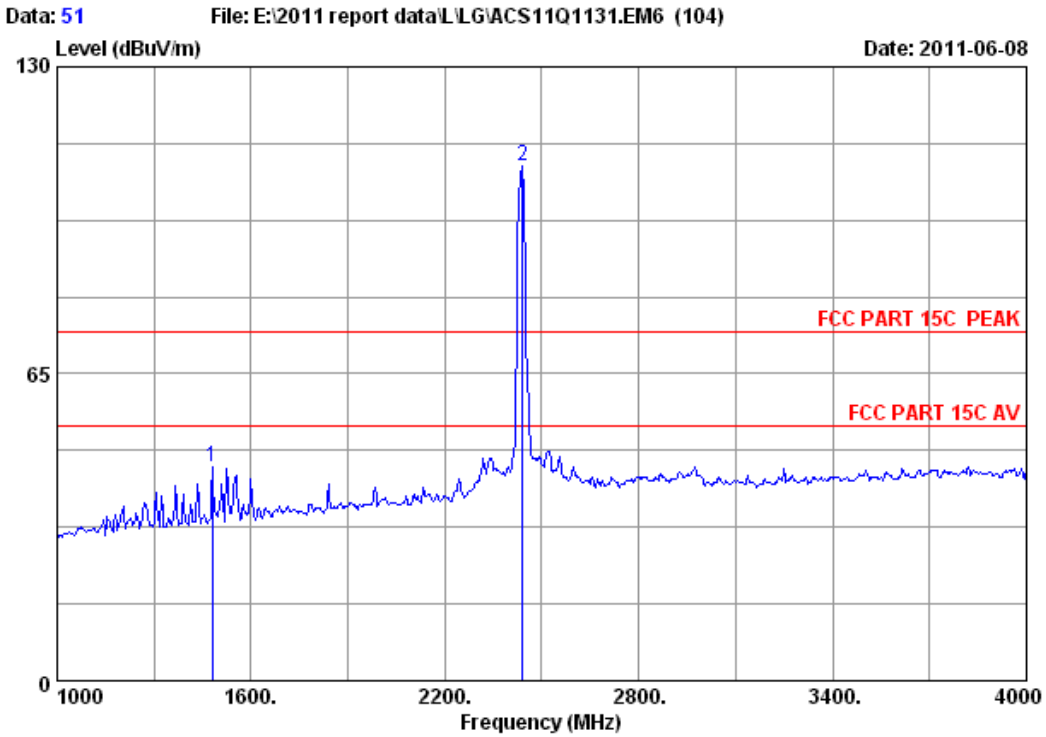
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 50
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH1 TX
M/N : PCI-1020

	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	1840.000	27.23	7.52	36.28	45.50	43.97	74.00	30.03	Peak
2	2410.000	28.48	8.60	35.95	99.23	100.36	74.00	-26.36	Peak

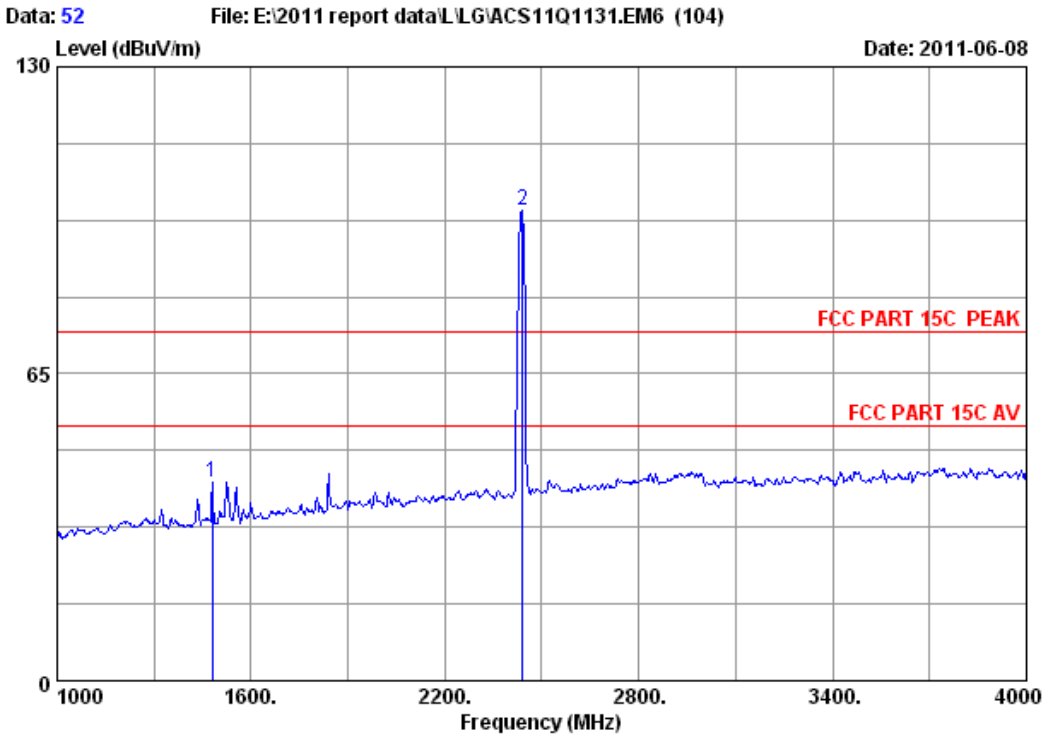
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 51
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH6 TX
M/N : PCI-1020

	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	1480.000	25.88	6.78	36.53	49.02	45.15	74.00	28.85	Peak
2	2440.000	28.53	8.48	36.06	107.95	108.90	74.00	-34.90	Peak

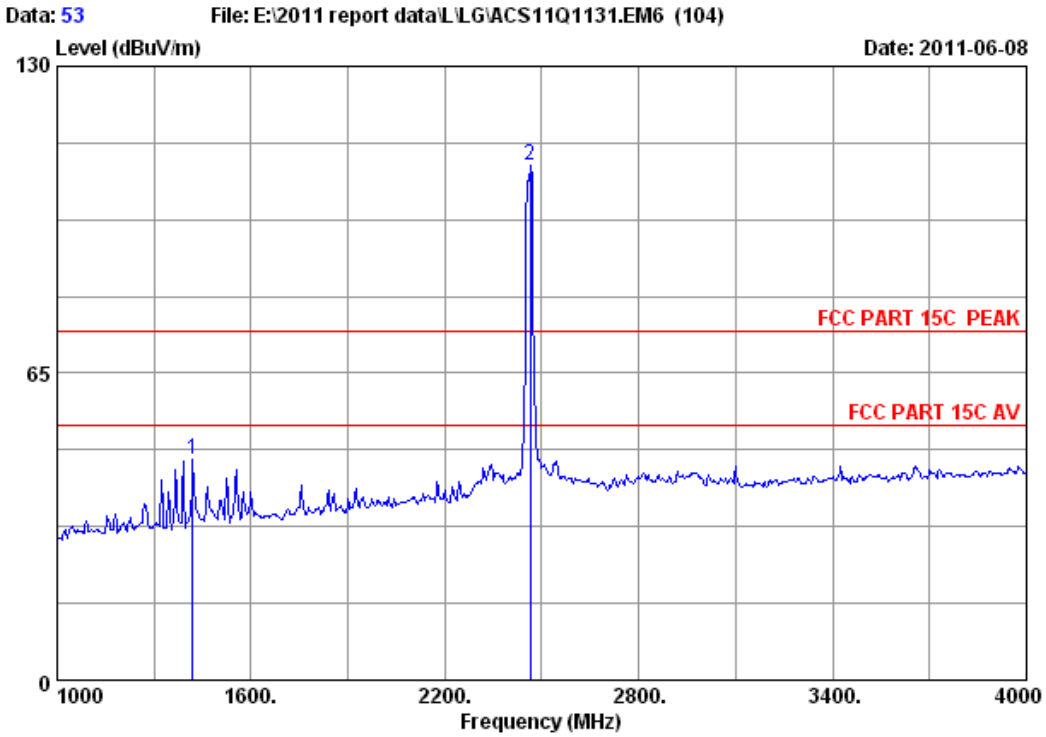
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 52
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH6 TX
M/N : PCI-1020

	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	1480.000	25.88	6.78	36.53	45.84	41.97	74.00	32.03	Peak
2	2440.000	28.53	8.48	36.06	98.50	99.45	74.00	-25.45	Peak

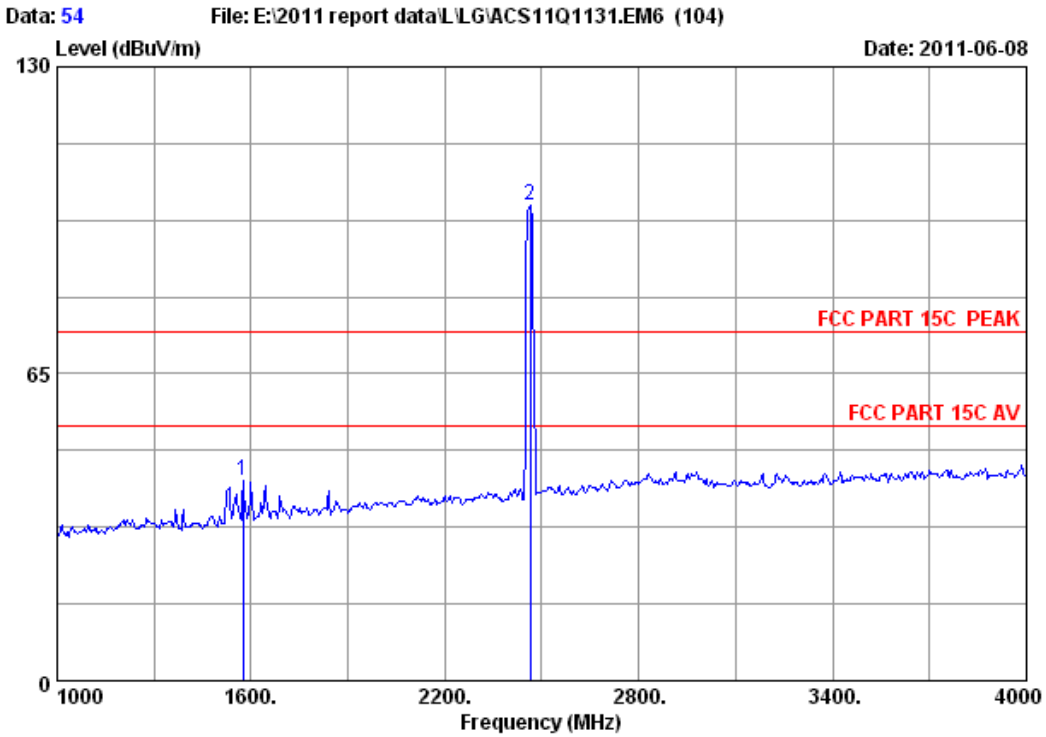
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 53
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH11 TX
M/N : PCI-1020

	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	1420.000	25.80	6.55	36.63	50.91	46.63	74.00	27.37	Peak
2	2464.000	28.55	8.76	36.02	107.57	108.86	74.00	-34.86	Peak

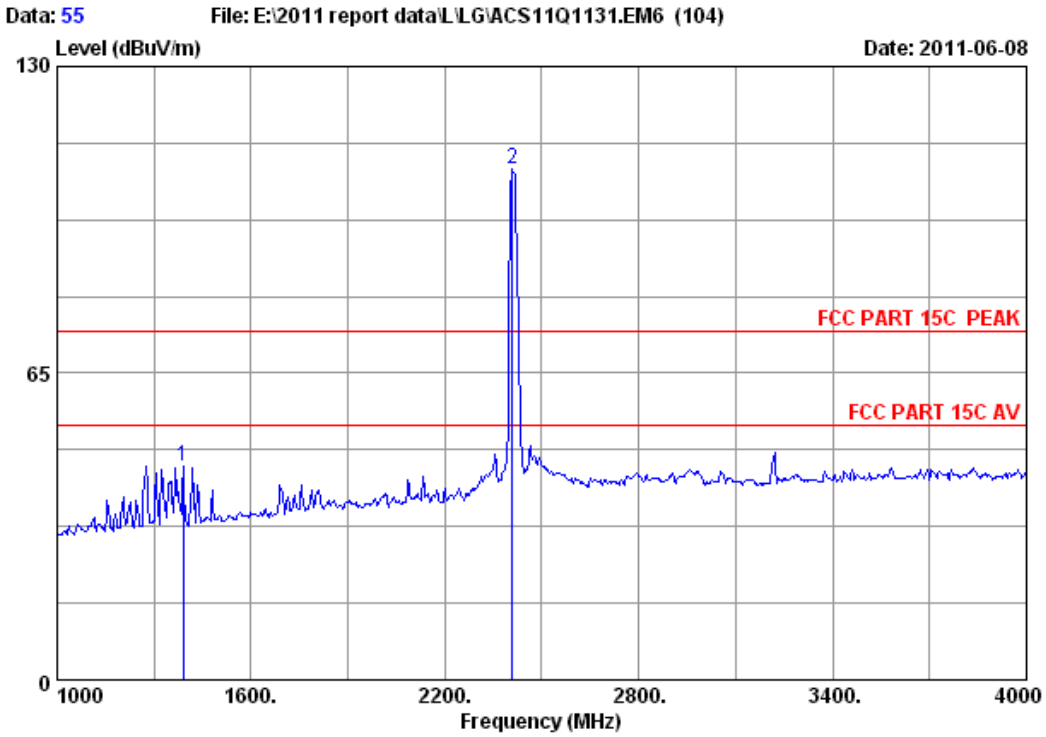
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11b CH11 TX
M/N : PCI-1020

	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	1576.000	26.23	6.97	36.43	45.74	42.51	74.00	31.49	Peak
2	2464.000	28.55	8.76	36.02	99.47	100.76	74.00	-26.76	Peak

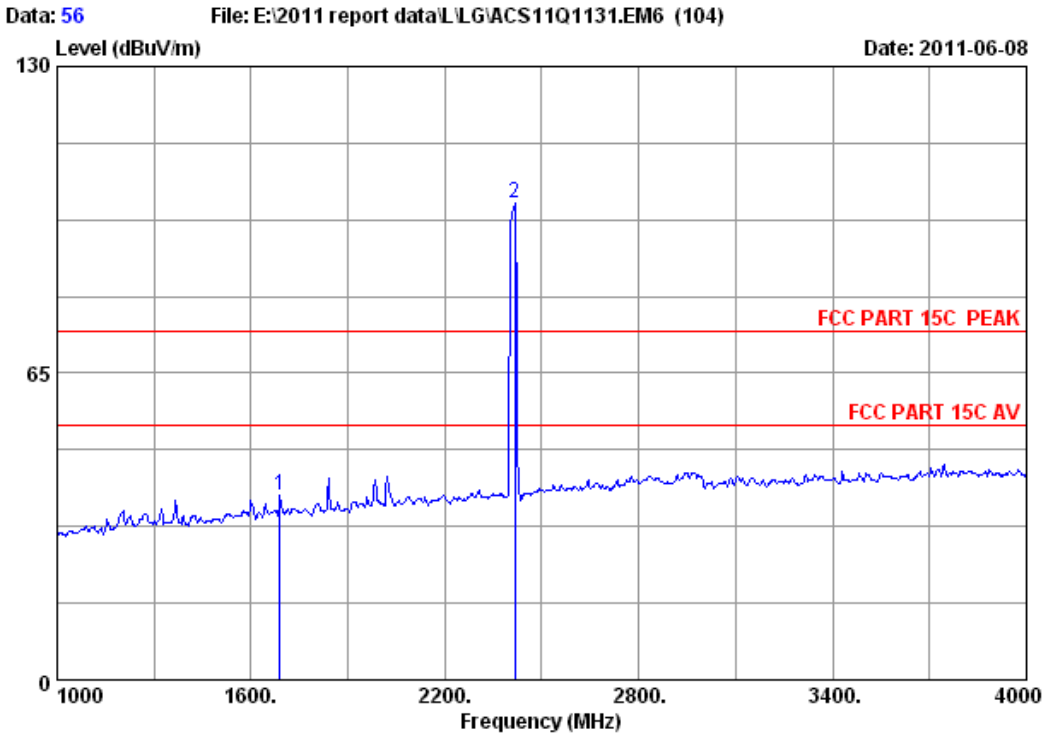
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 55
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH1 TX
M/N : PCI-1020

	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	1390.000	25.76	6.59	36.69	49.56	45.22	74.00	28.78	Peak
2	2410.000	28.48	8.60	35.95	107.22	108.35	74.00	-34.35	Peak

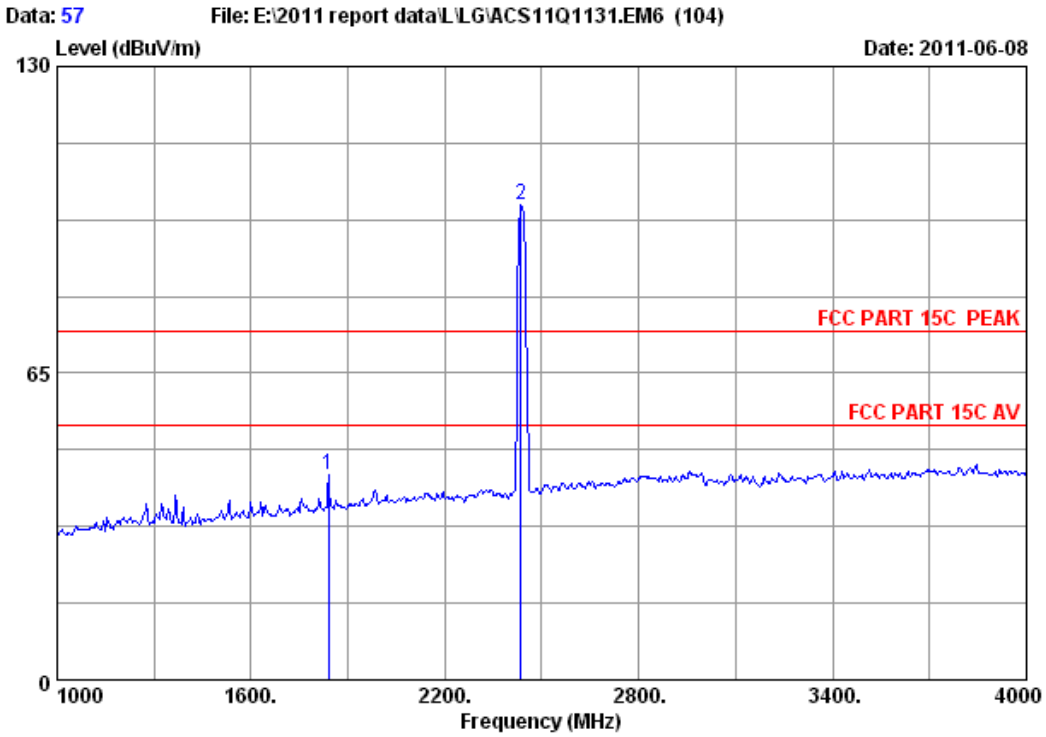
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 56
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH1 TX
M/N : PCI-1020

	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	1690.000	26.70	7.24	36.26	41.46	39.14	74.00	34.86	Peak
2	2416.000	28.48	8.60	35.95	99.99	101.12	74.00	-27.12	Peak

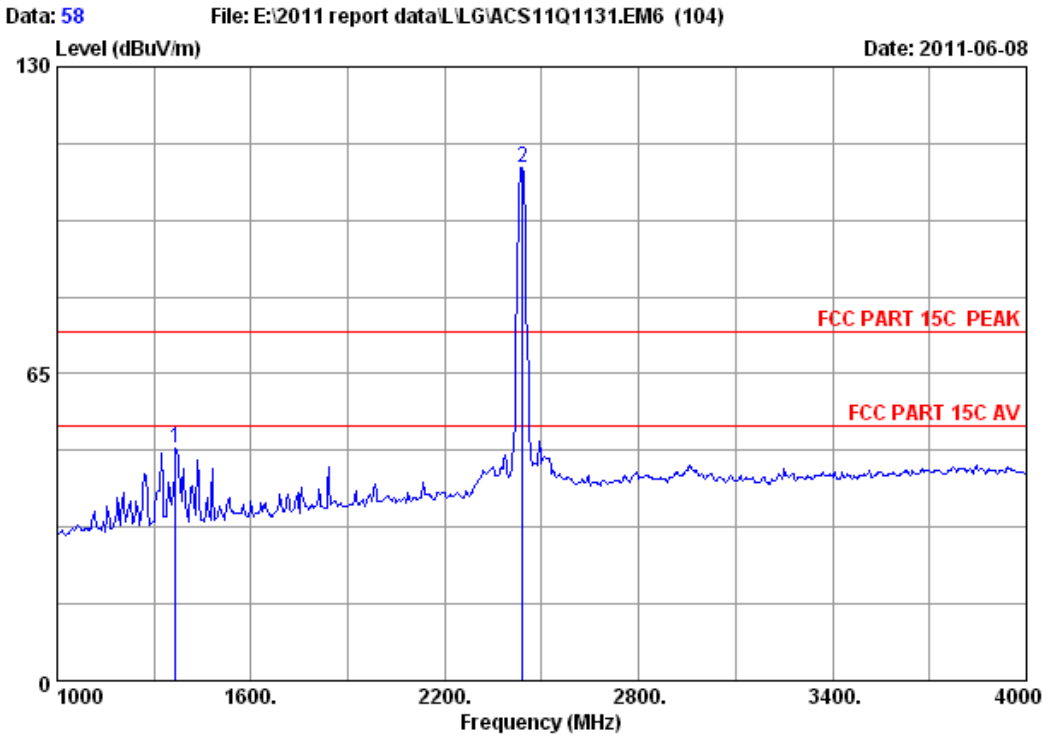
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 57
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH6 TX
M/N : PCI-1020

	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	1840.000	27.23	7.52	36.28	44.89	43.36	74.00	30.64	Peak
2	2434.000	28.50	8.60	36.01	99.40	100.49	74.00	-26.49	Peak

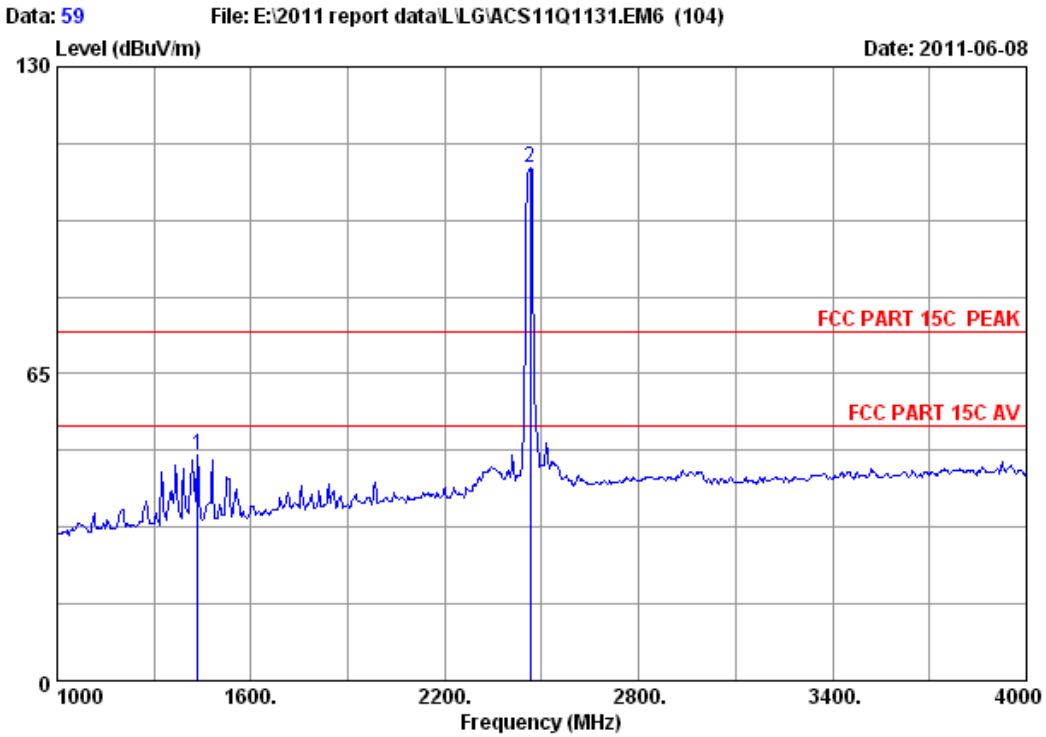
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 58
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH6 TX
M/N : PCI-1020

	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	1366.000	25.73	6.43	36.40	53.60	49.36	74.00	24.64	Peak
2	2440.000	28.53	8.48	36.06	107.74	108.69	74.00	-34.69	Peak

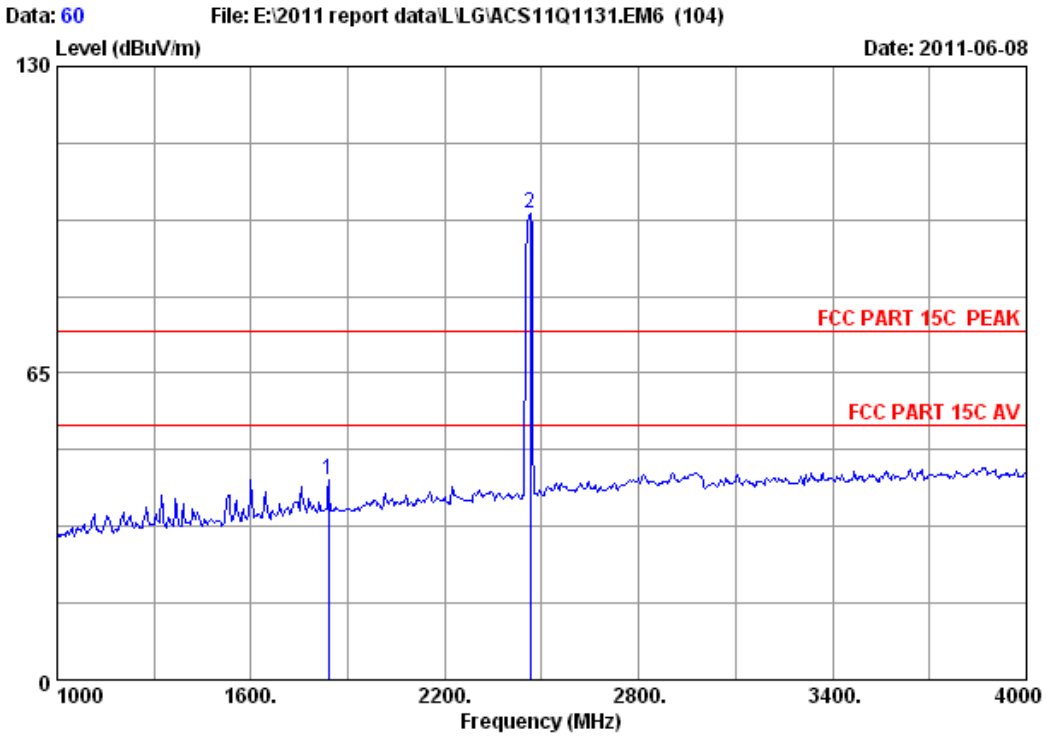
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 59
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH11 TX
M/N : PCI-1020

	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	1435.000	25.83	6.55	36.53	52.03	47.88	74.00	26.12	Peak
2	2464.000	28.55	8.76	36.02	107.22	108.51	74.00	-34.51	Peak

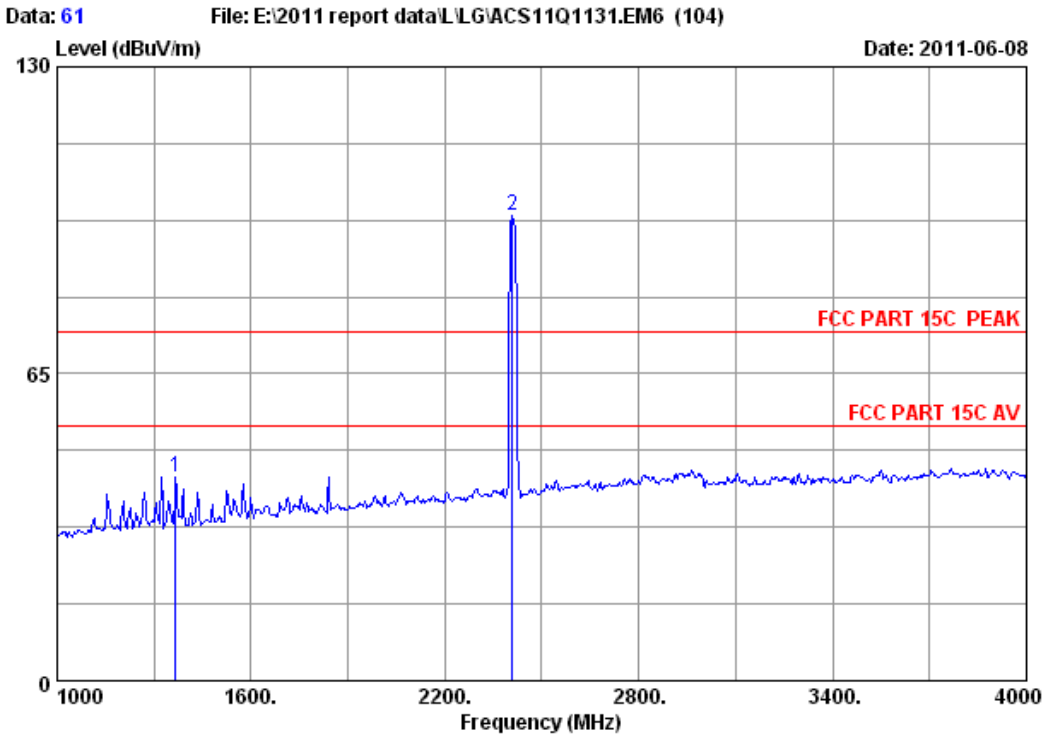
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11g CH11 TX
M/N : PCI-1020

	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	1840.000	27.23	7.52	36.28	44.00	42.47	74.00	31.53	Peak
2	2464.000	28.55	8.76	36.02	97.43	98.72	74.00	-24.72	Peak

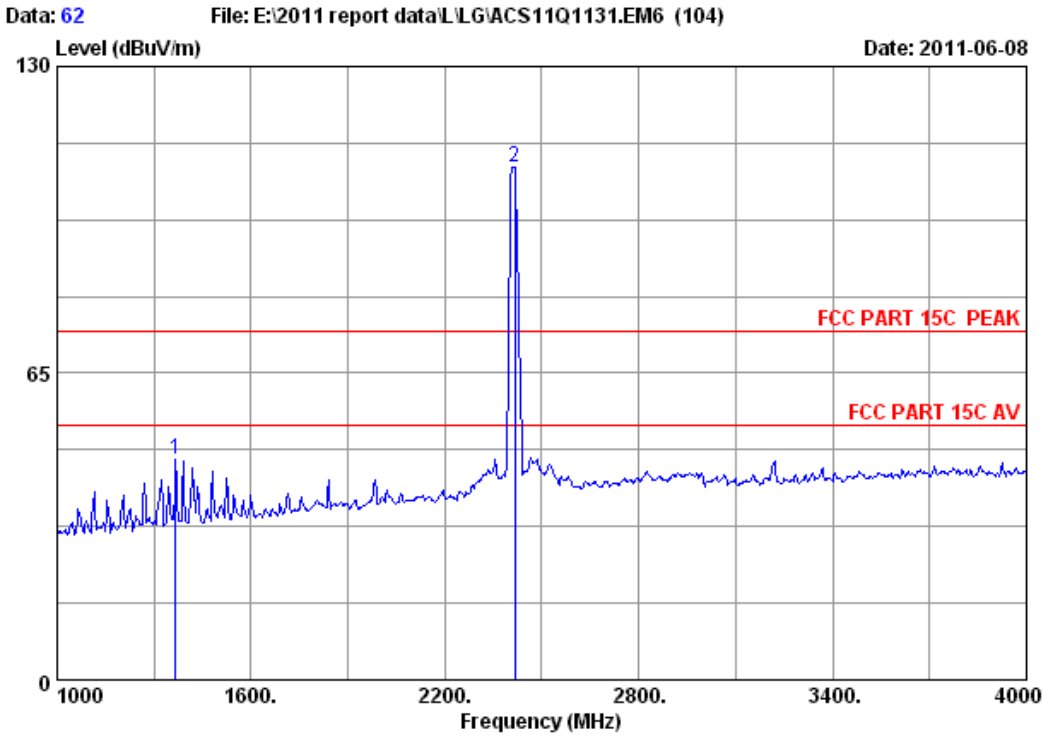
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 61
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH1 TX
M/N : PCI-1020

	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	1366.000	25.73	6.43	36.40	47.47	43.23	74.00	30.77	Peak
2	2410.000	28.48	8.60	35.95	97.39	98.52	74.00	-24.52	Peak

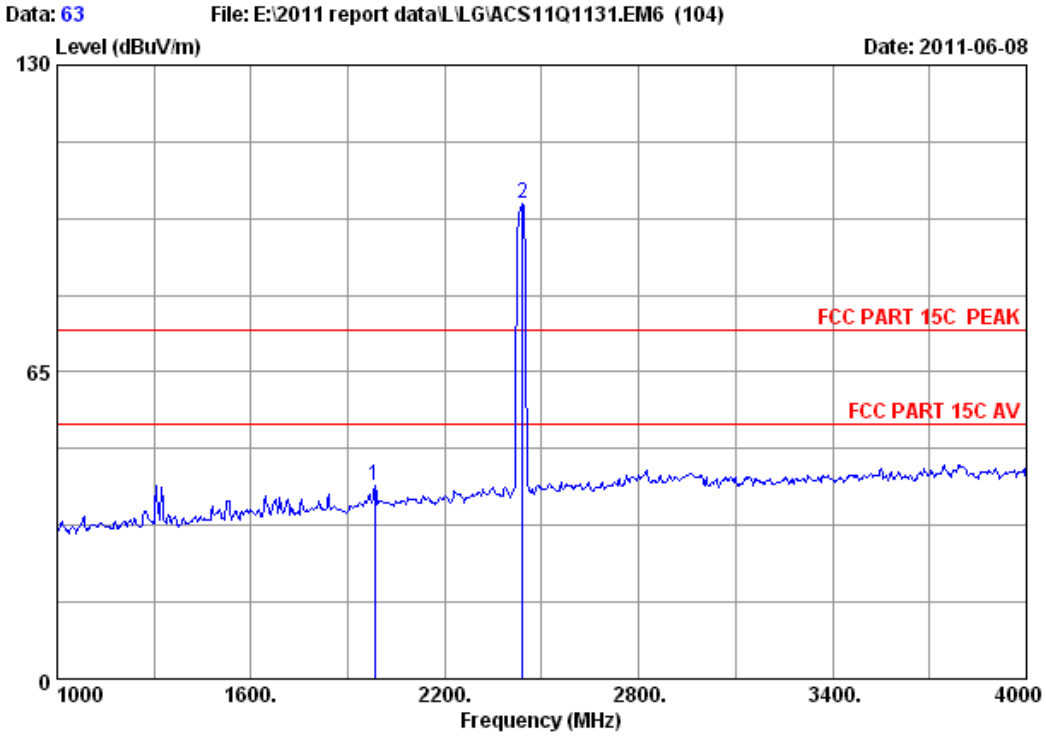
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 62
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH1 TX
M/N : PCI-1020

	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	1366.000	25.73	6.43	36.40	50.84	46.60	74.00	27.40	Peak
2	2416.000	28.48	8.60	35.95	107.61	108.74	74.00	-34.74	Peak

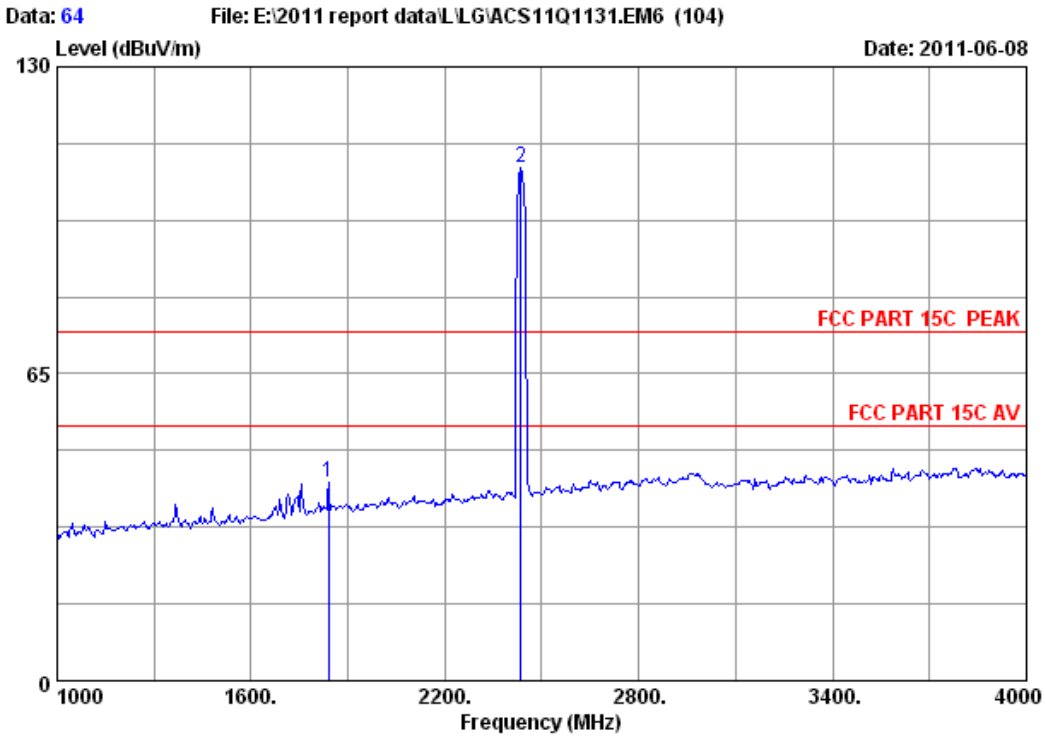
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH6 TX
M/N : PCI-1020

	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	1984.000	27.83	7.76	36.06	41.52	41.05	74.00	32.95	Peak
2	2440.000	28.53	8.48	36.06	99.85	100.80	74.00	-26.80	Peak

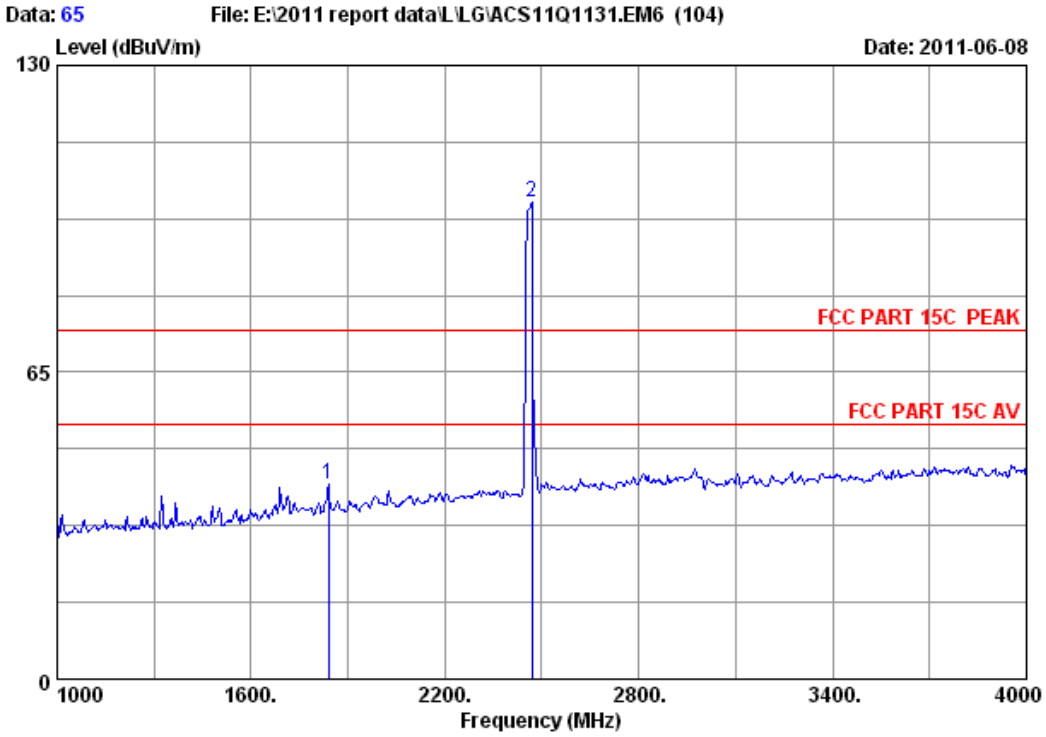
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH6 TX
M/N : PCI-1020

	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	1840.000	27.23	7.52	36.28	43.55	42.02	74.00	31.98	Peak
2	2434.000	28.50	8.60	36.01	107.67	108.76	74.00	-34.76	Peak

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

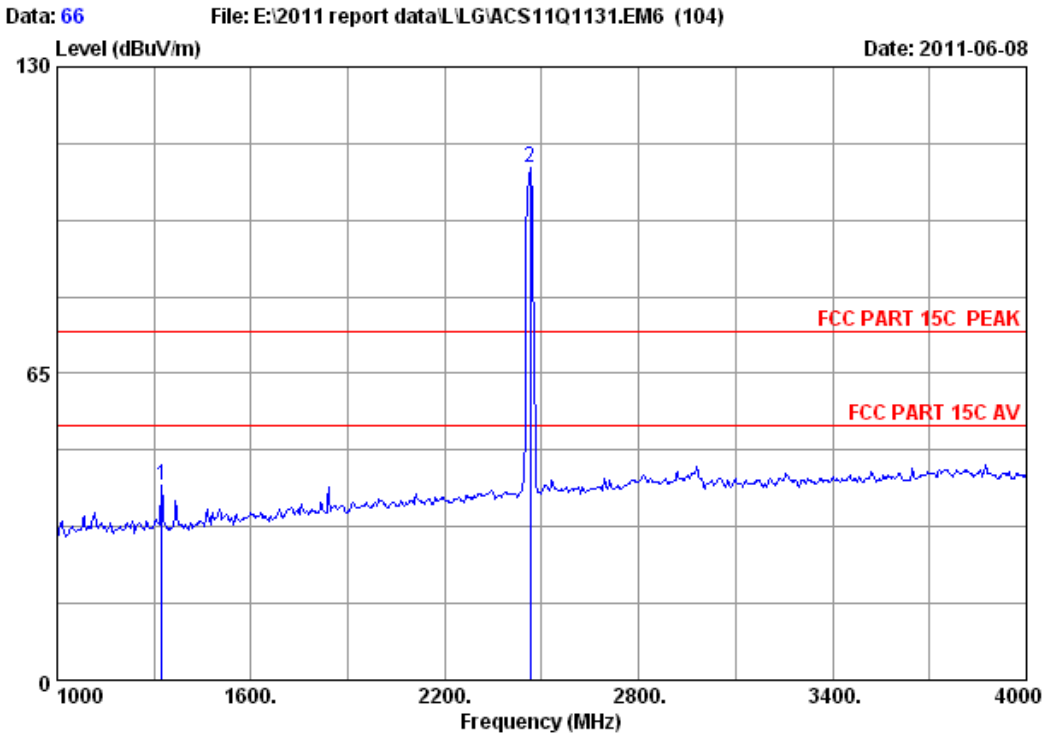



```
Site no.      : 3m Chamber              Data no. :  65
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT20   CH11  TX
M/N           : PCI-1020
```

	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	1840.000	27.23	7.52	36.28	42.71	41.18	74.00	32.82	Peak
2	2470.000	28.55	8.76	36.02	99.78	101.07	74.00	-27.07	Peak

Remarks:

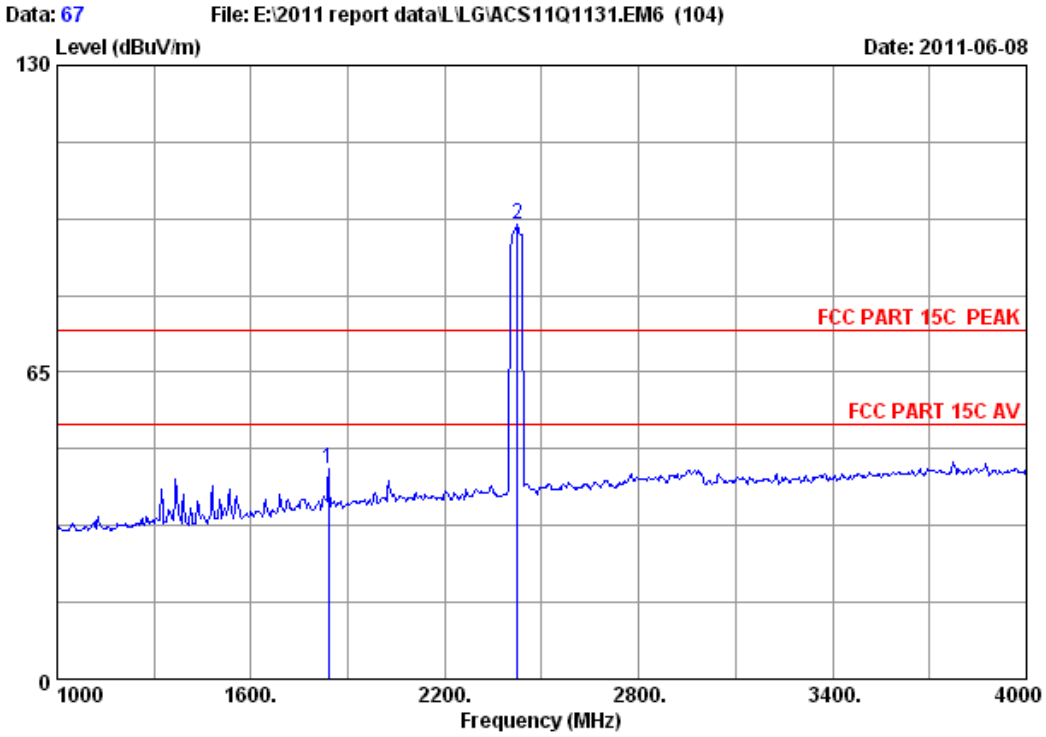
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT20 CH11 TX
M/N : PCI-1020

	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	1324.000	25.66	6.48	36.58	45.64	41.20	74.00	32.80	Peak
2	2464.000	28.55	8.76	36.02	107.19	108.48	74.00	-34.48	Peak

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

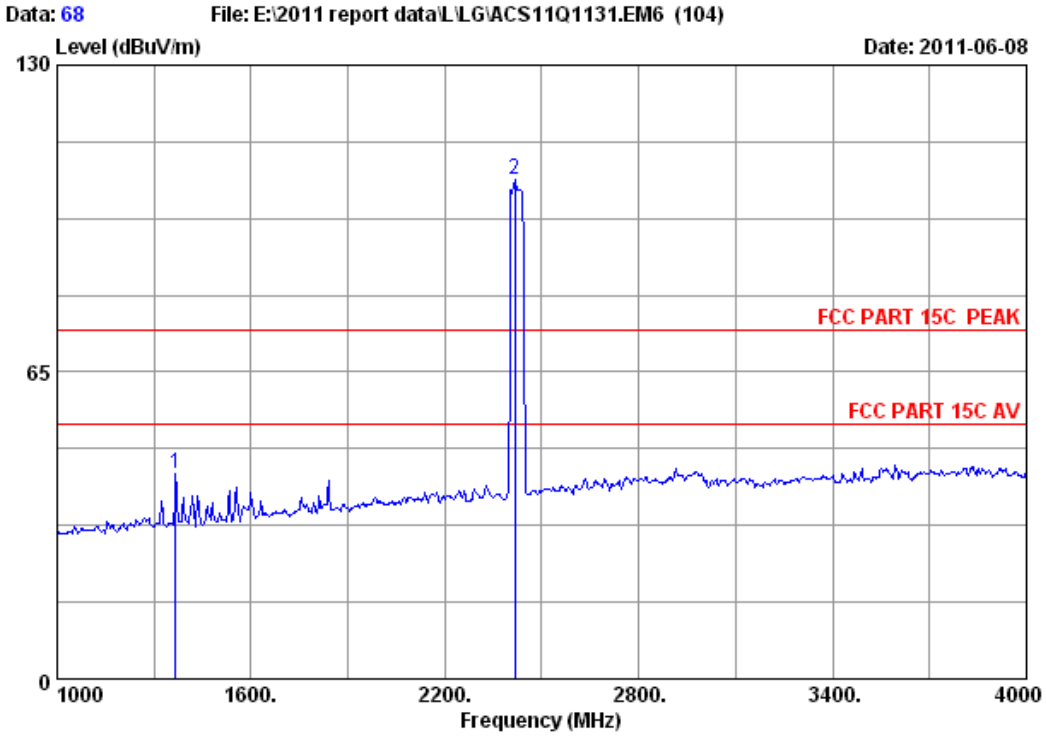



```
Site no.      : 3m Chamber              Data no. :  67
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH1  TX
M/N           : PCI-1020
```

	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	1840.000	27.23	7.52	36.28	46.01	44.48	74.00	29.52	Peak
2	2425.000	28.50	8.60	36.01	95.40	96.49	74.00	-22.49	Peak

Remarks:

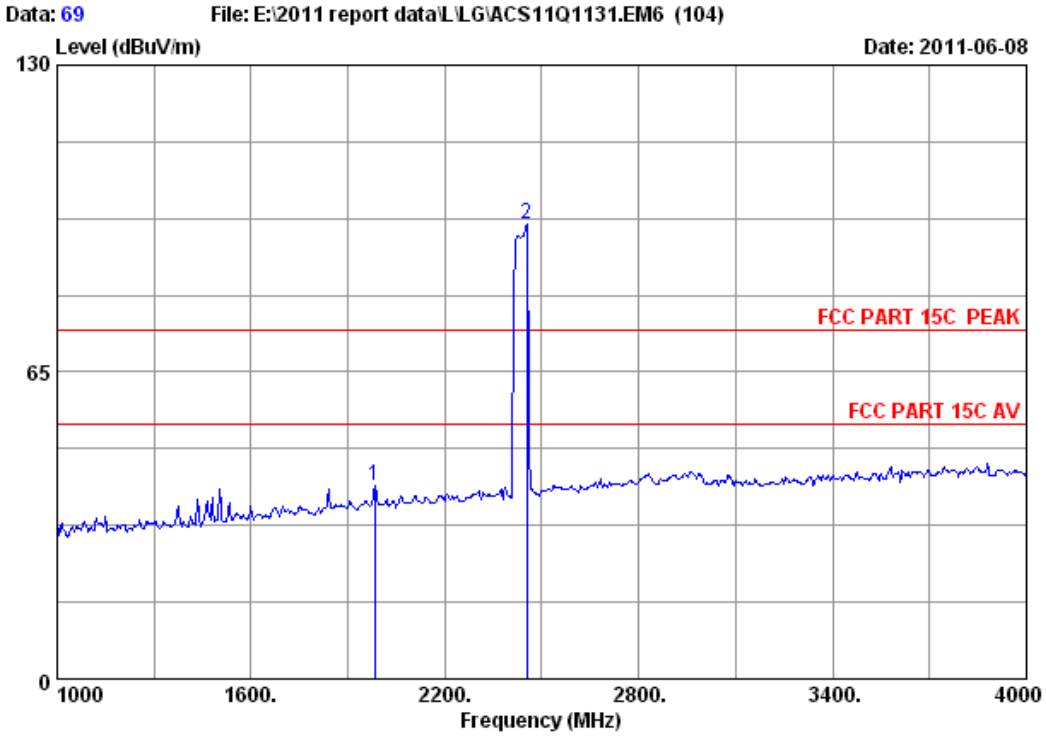
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 68
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH1 TX
M/N : PCI-1020

	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	1366.000	25.73	6.43	36.40	47.63	43.39	74.00	30.61	Peak
2	2416.000	28.48	8.60	35.95	104.67	105.80	74.00	-31.80	Peak

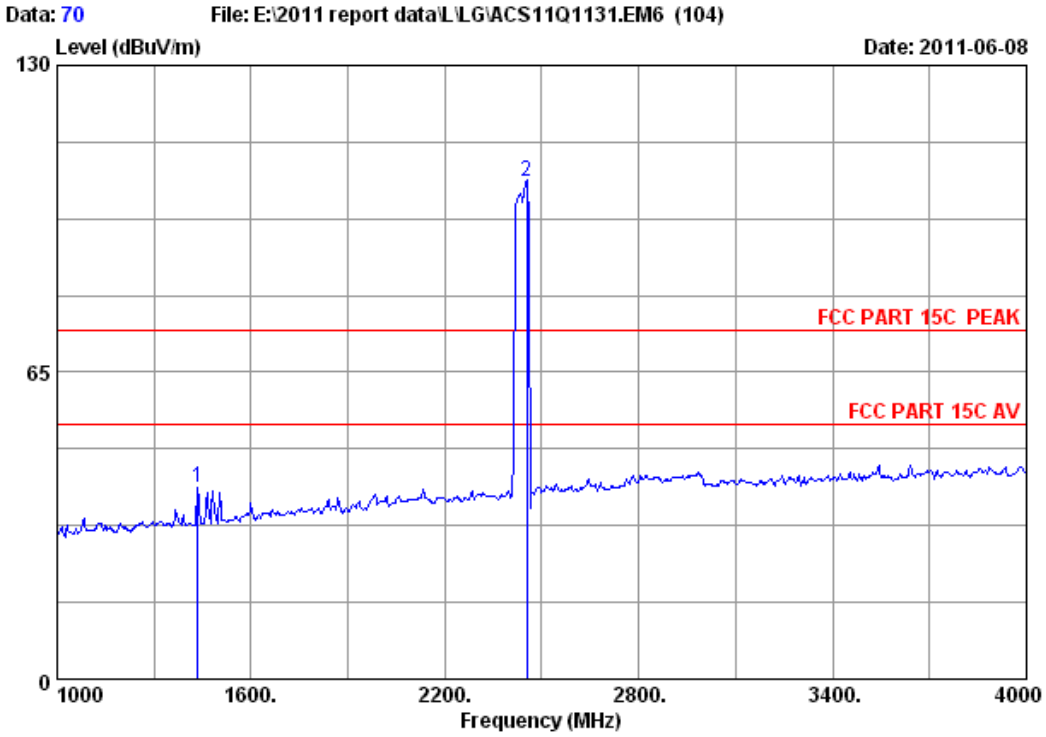
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.




```
Site no.      : 3m Chamber              Data no. :  69
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH4  TX
M/N           : PCI-1020
```

	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	1984.000	27.83	7.76	36.06	41.32	40.85	74.00	33.15	Peak
2	2455.000	28.55	8.48	36.02	95.31	96.32	74.00	-22.32	Peak

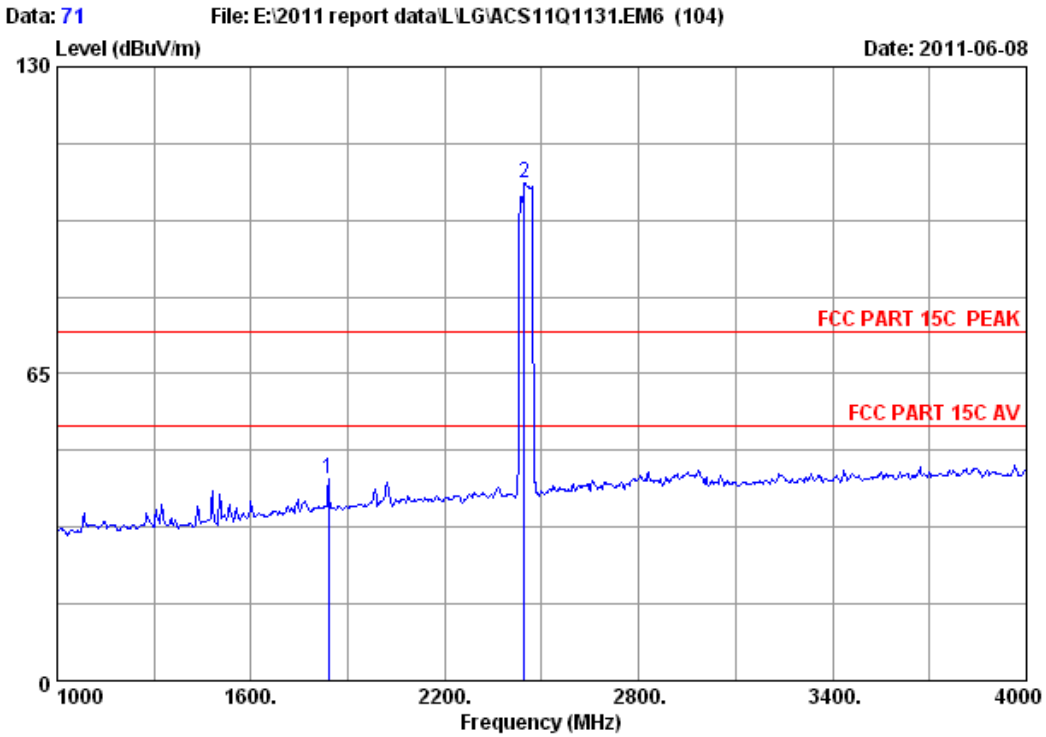
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 70
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH4 TX
M/N : PCI-1020

	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	1435.000	25.83	6.55	36.53	44.75	40.60	74.00	33.40	Peak
2	2455.000	28.55	8.48	36.02	104.29	105.30	74.00	-31.30	Peak

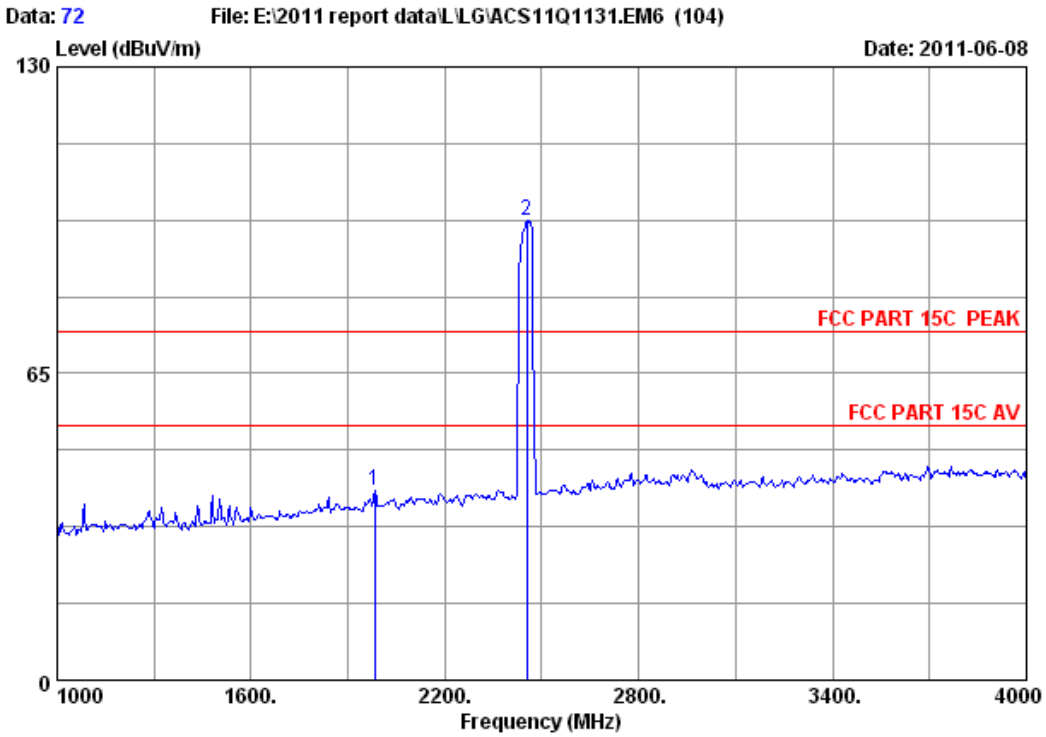
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC 120V/60Hz
Test mode : 11nHT40 CH7 TX
M/N : PCI-1020

	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	1840.000	27.23	7.52	36.28	44.10	42.57	74.00	31.43	Peak
2	2446.000	28.53	8.48	36.06	104.55	105.50	74.00	-31.50	Peak

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




```
Site no.      : 3m Chamber              Data no. :  72
Dis. / Ant.   : 3m   3115(0905)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC 120V/60Hz
Test mode     : 11nHT40   CH7  TX
M/N           : PCI-1020
```

	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	1984.000	27.83	7.76	36.06	40.52	40.05	74.00	33.95	Peak
2	2455.000	28.55	8.48	36.02	96.28	97.29	74.00	-23.29	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.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

5.3.Test Procedure

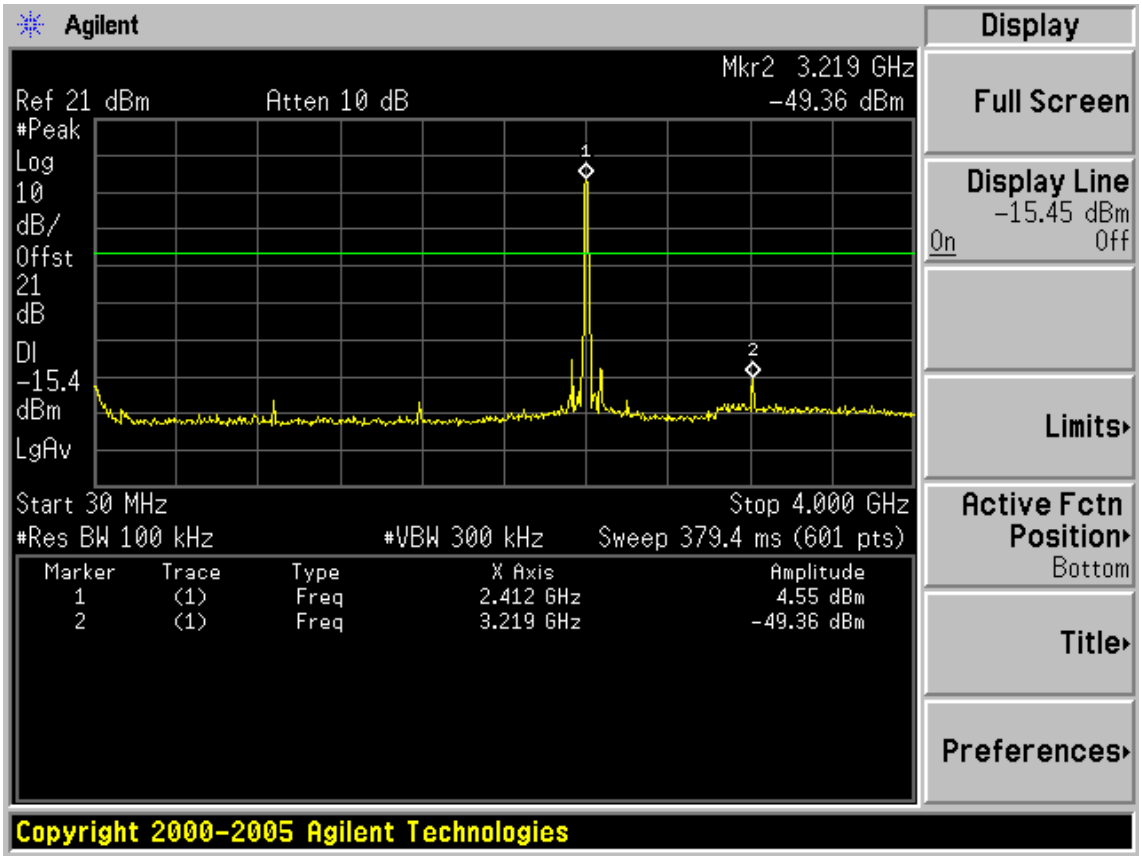
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

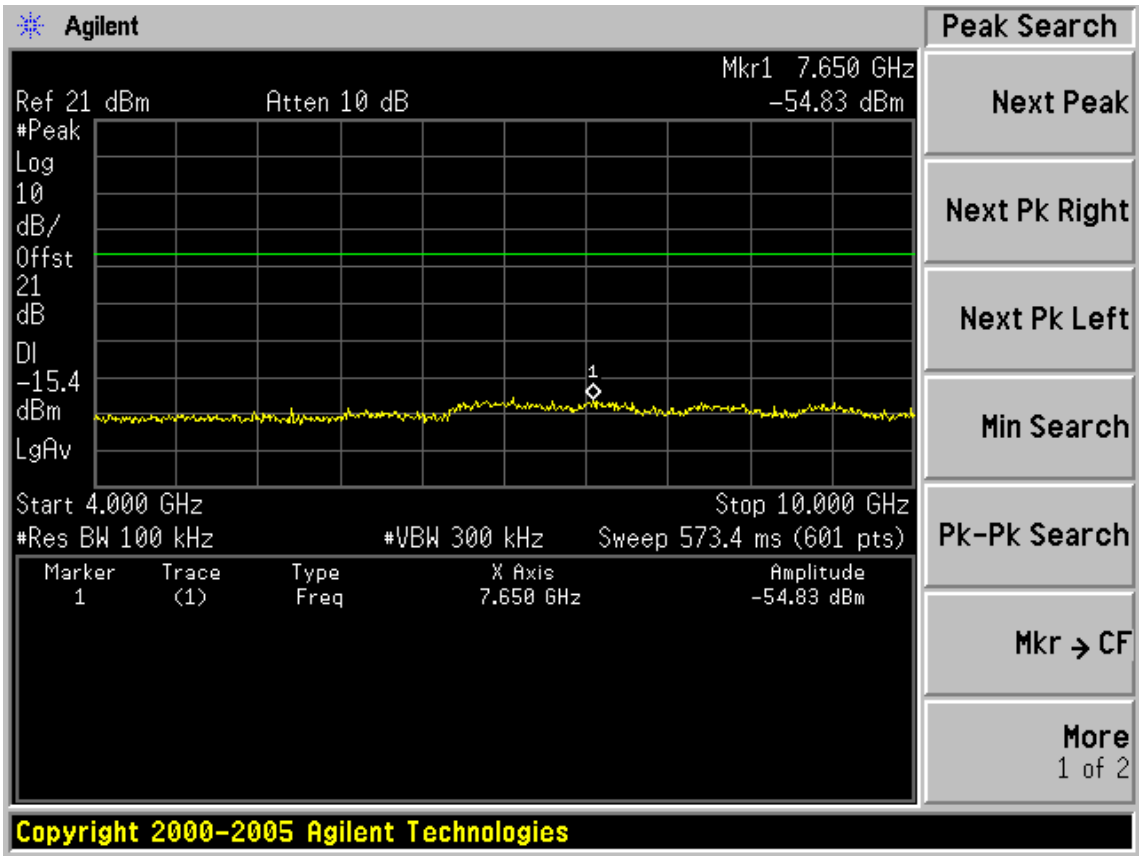
Conducted emission test data:

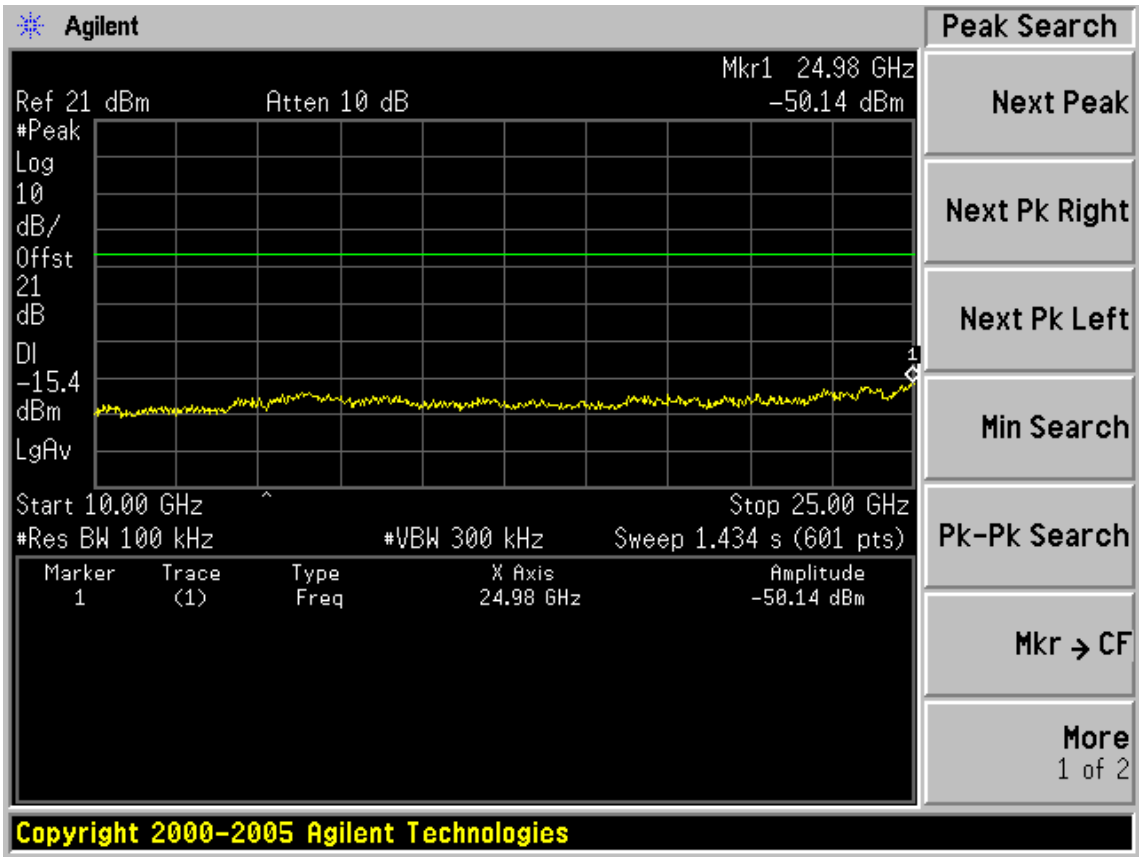
Chain 0:

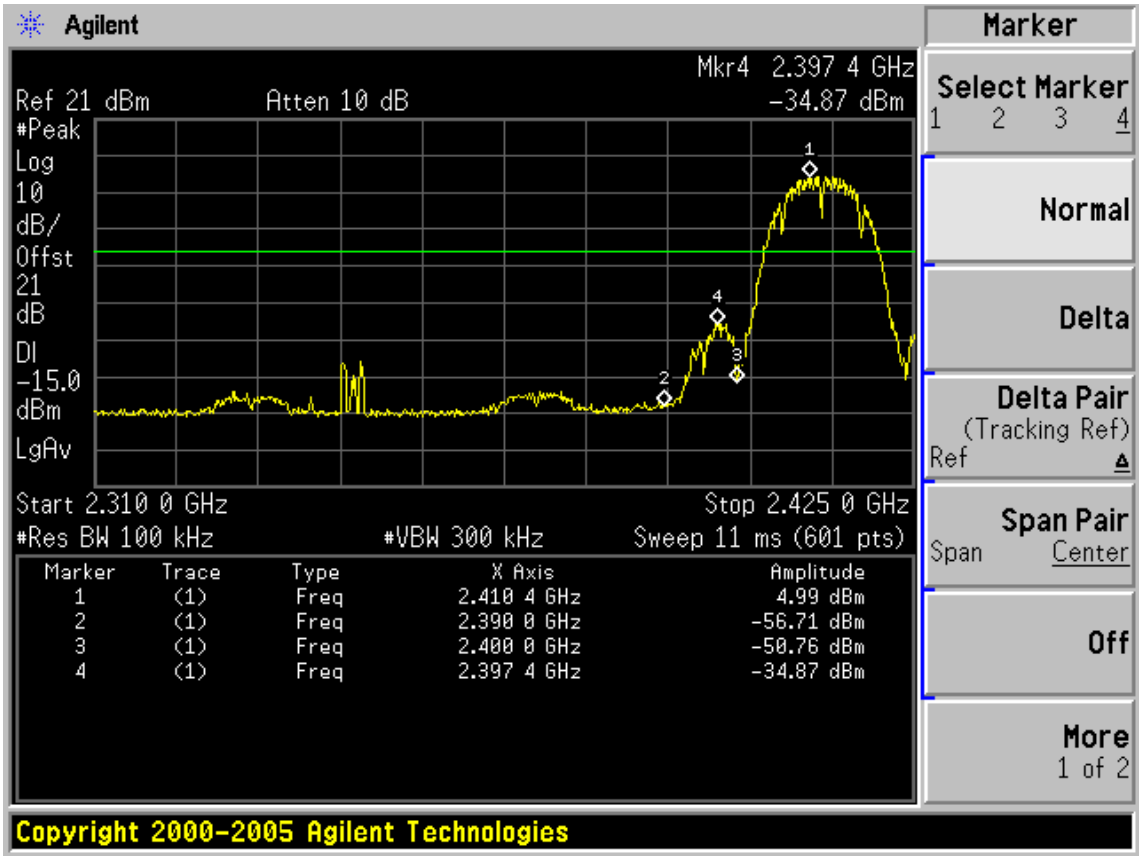
Test Mode: IEEE 802.11b TX

Test CH1: 2412MHz

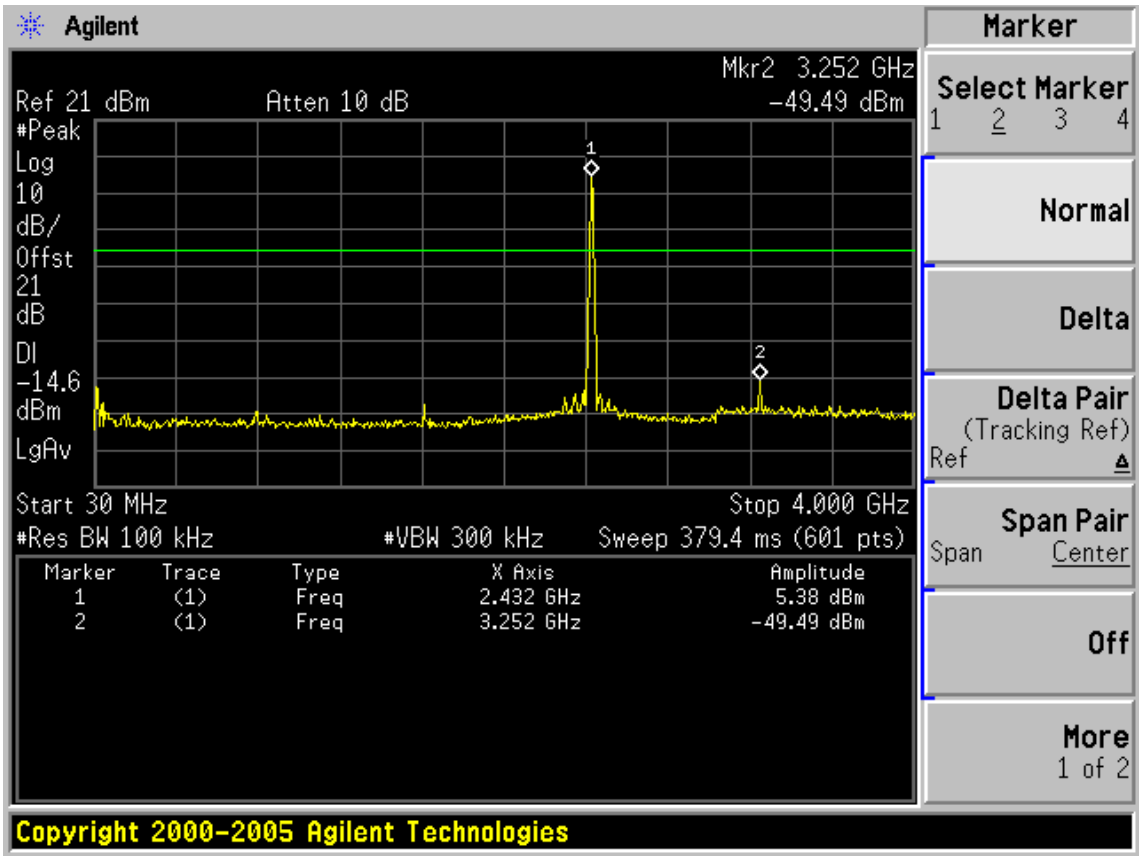


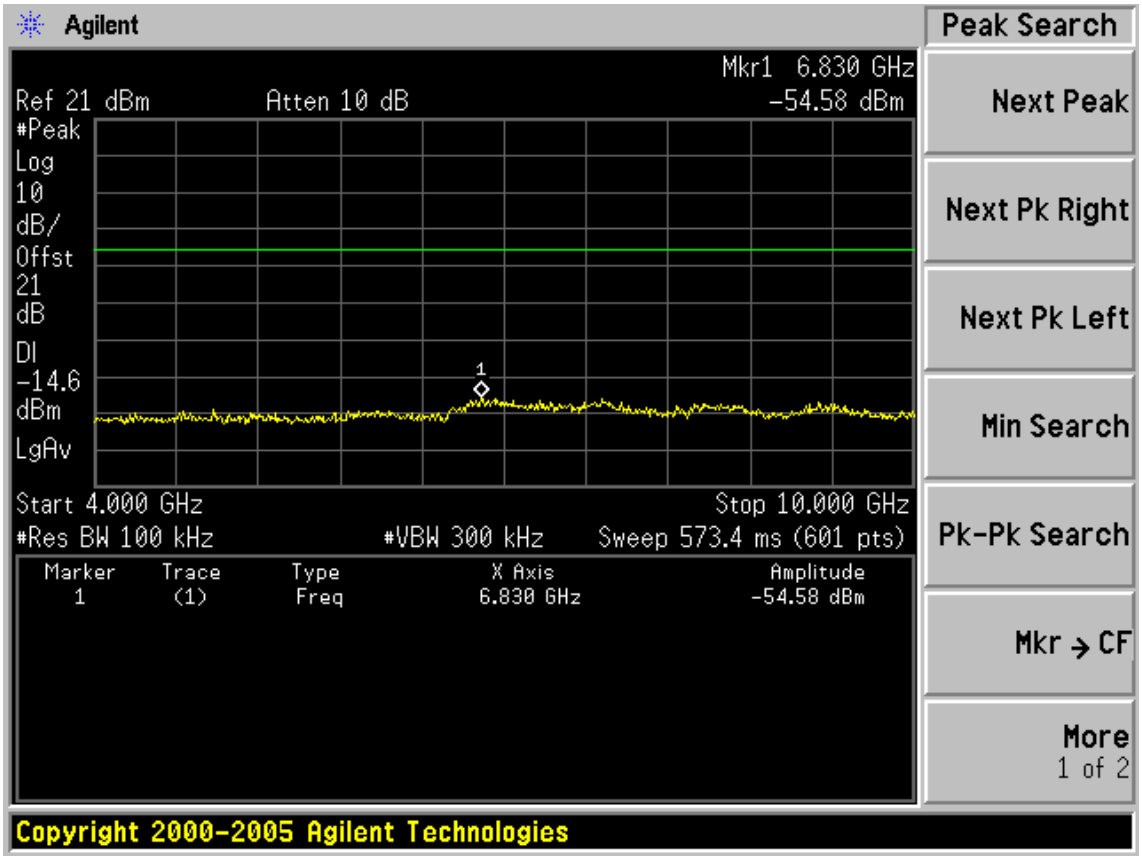


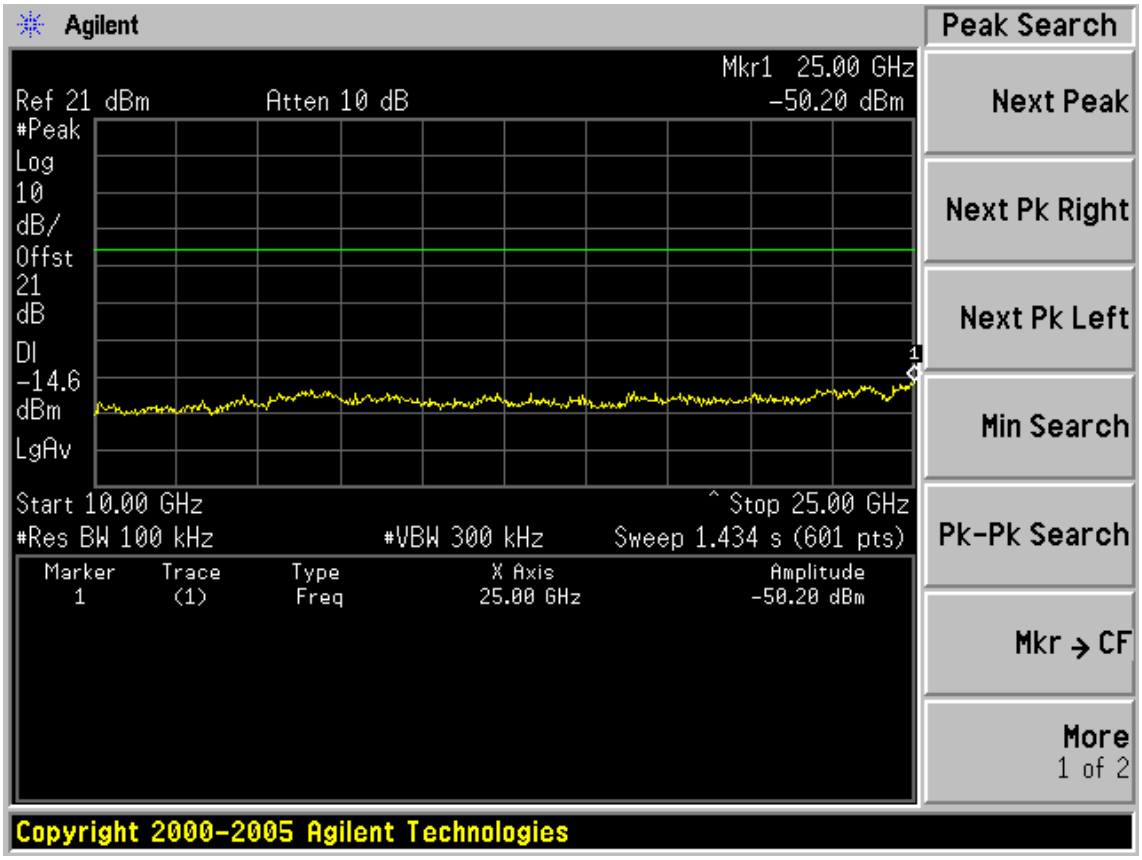

Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-50.14 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.4
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -50.14 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Marker
Mkr4 2.397 4 GHz
Ref 21 dBm
Atten 10 dB
-34.87 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.0
dBm
LgAv
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Start 2.310 0 GHz
Stop 2.425 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 11 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.410 4 GHz 4.99 dBm
2 (1) Freq 2.390 0 GHz -56.71 dBm
3 (1) Freq 2.400 0 GHz -50.76 dBm
4 (1) Freq 2.397 4 GHz -34.87 dBm
Copyright 2000-2005 Agilent Technologies

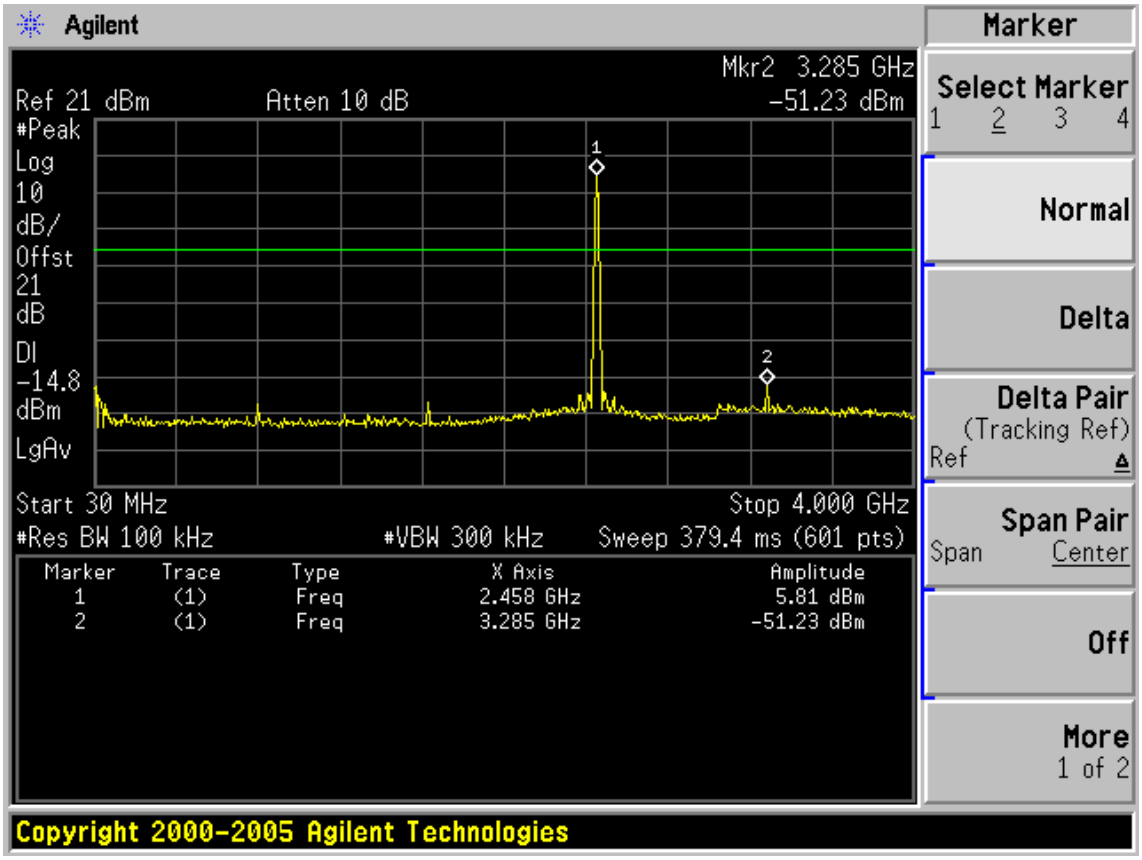
Test CH6: 2437MHz

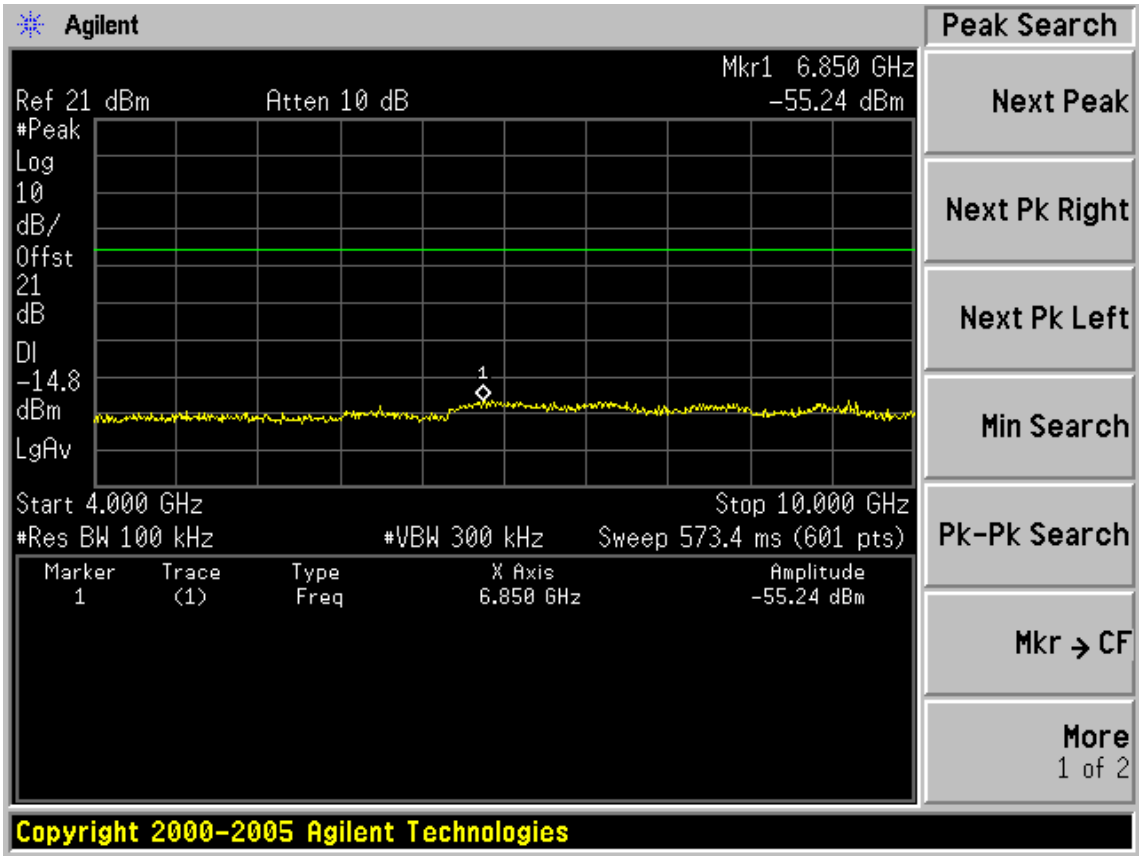


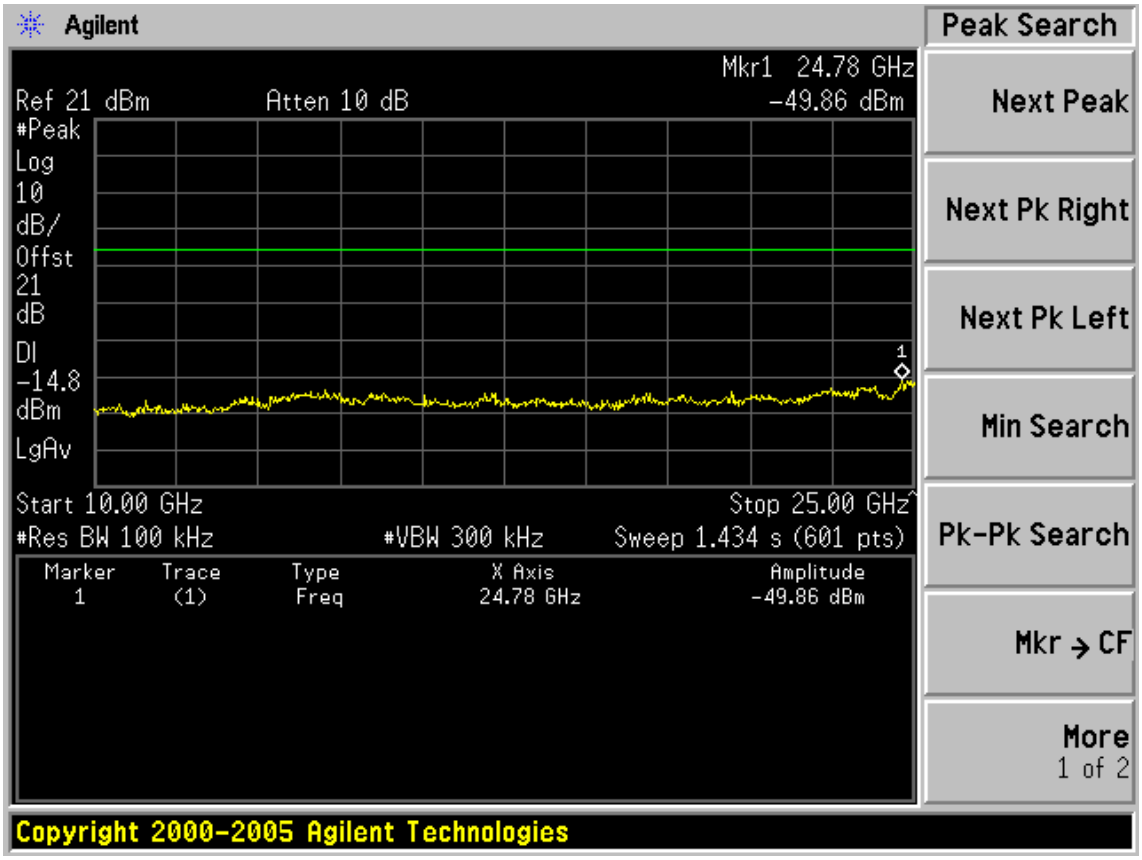


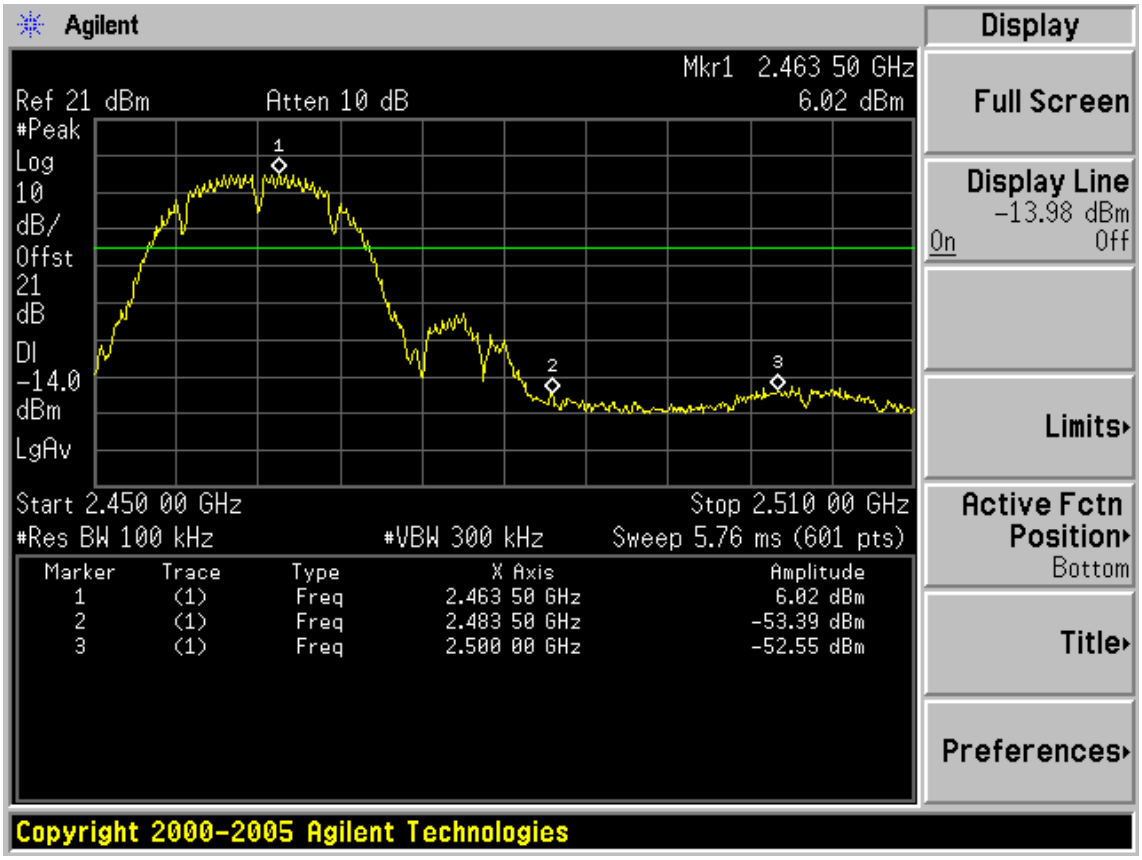


Test CH11: 2462MHz

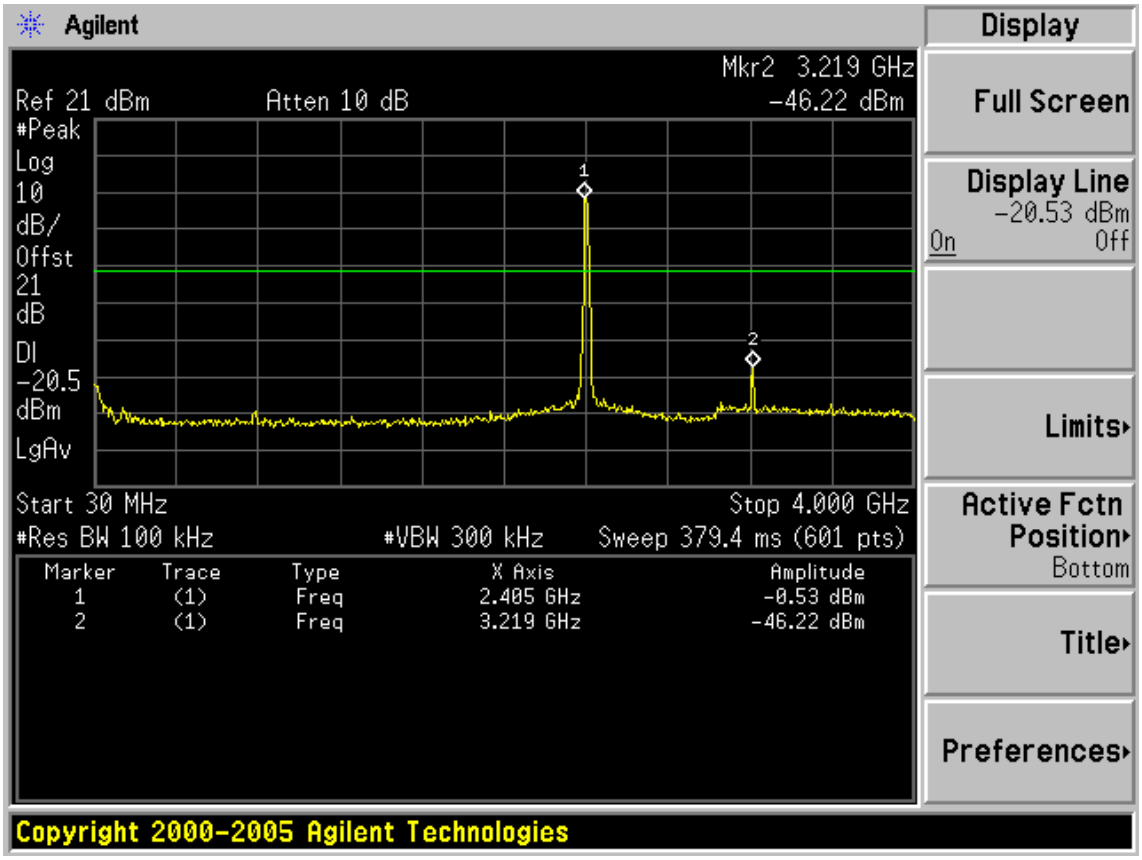


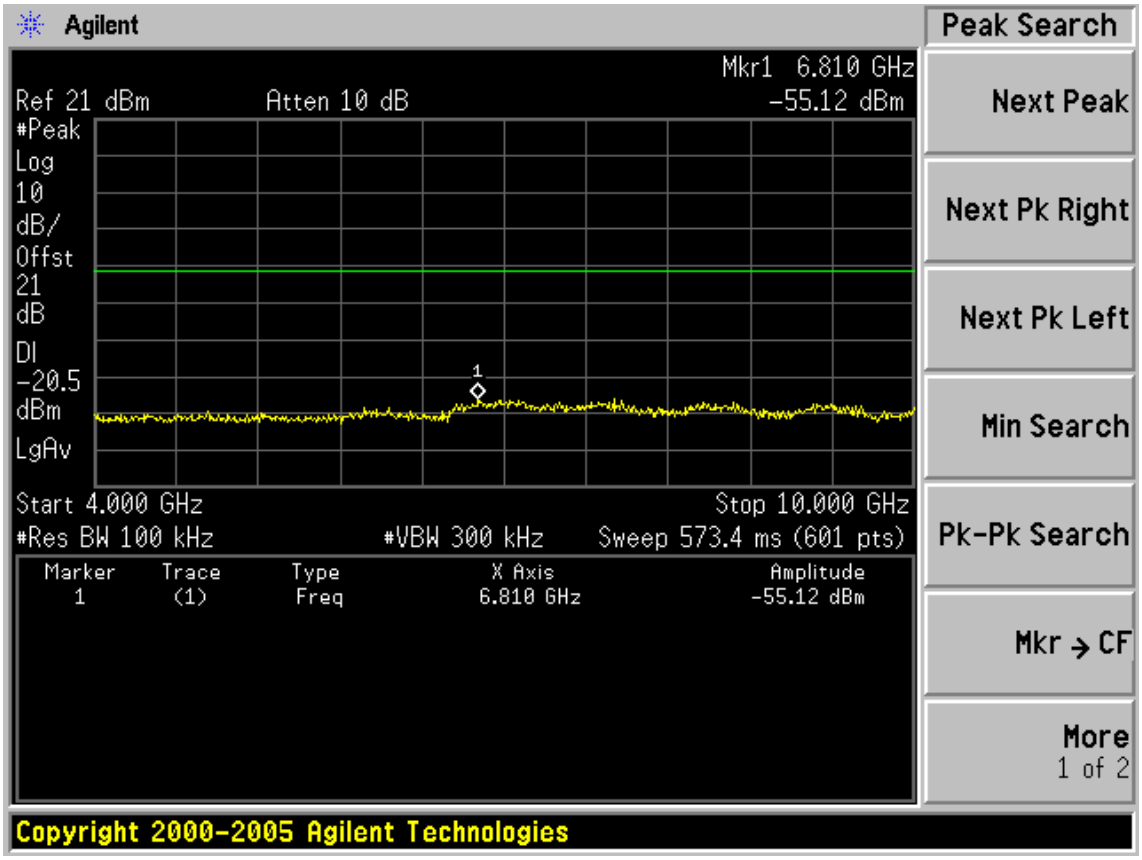

Agilent
Peak Search
Mkr1 6.850 GHz
Ref 21 dBm
Atten 10 dB
-55.24 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.8
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.850 GHz -55.24 dBm
Copyright 2000-2005 Agilent Technologies

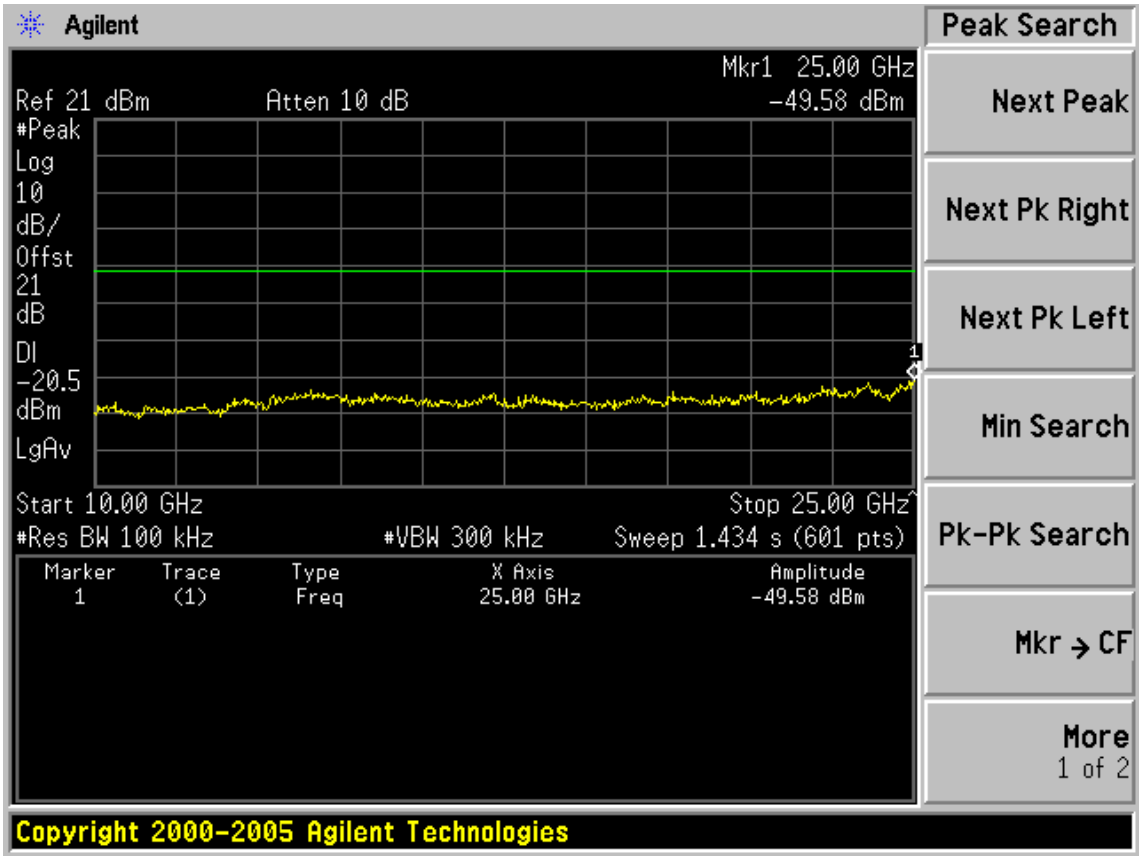

Agilent
Peak Search
Mkr1 24.78 GHz
Ref 21 dBm
Atten 10 dB
-49.86 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.8
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.78 GHz -49.86 dBm
Copyright 2000-2005 Agilent Technologies

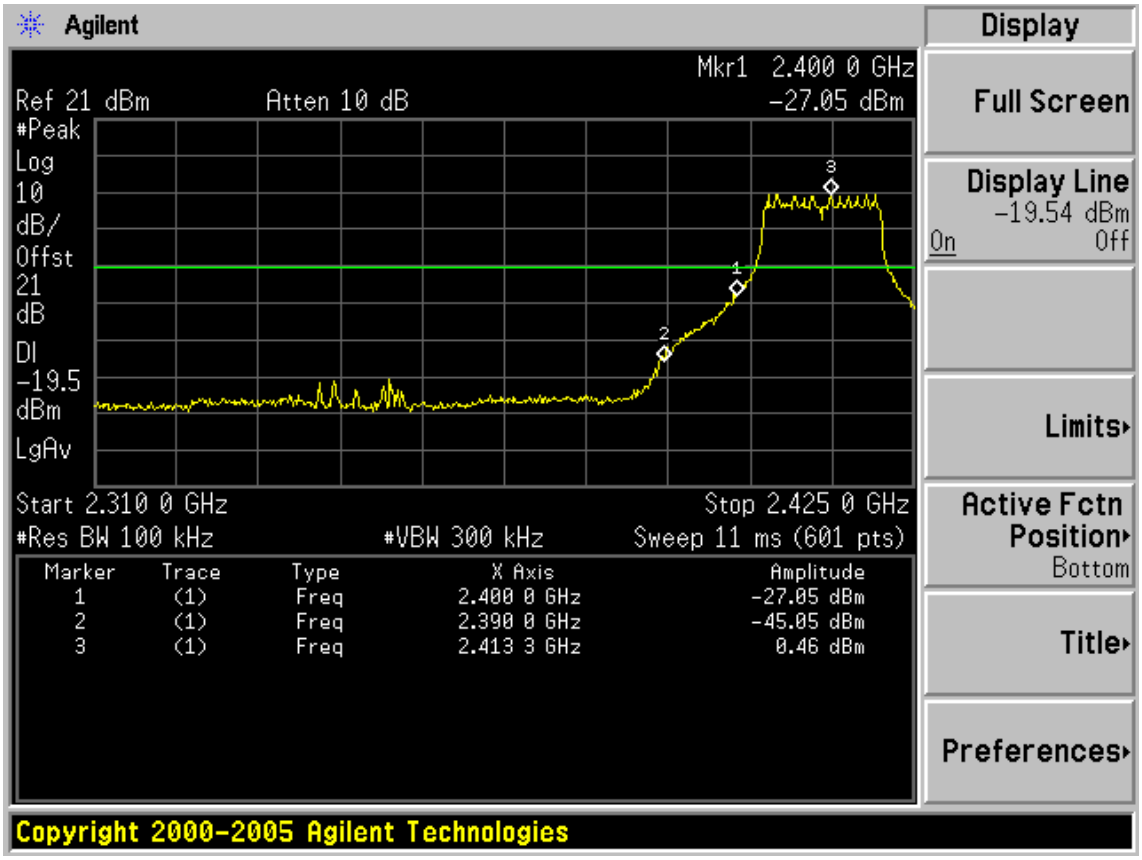


Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

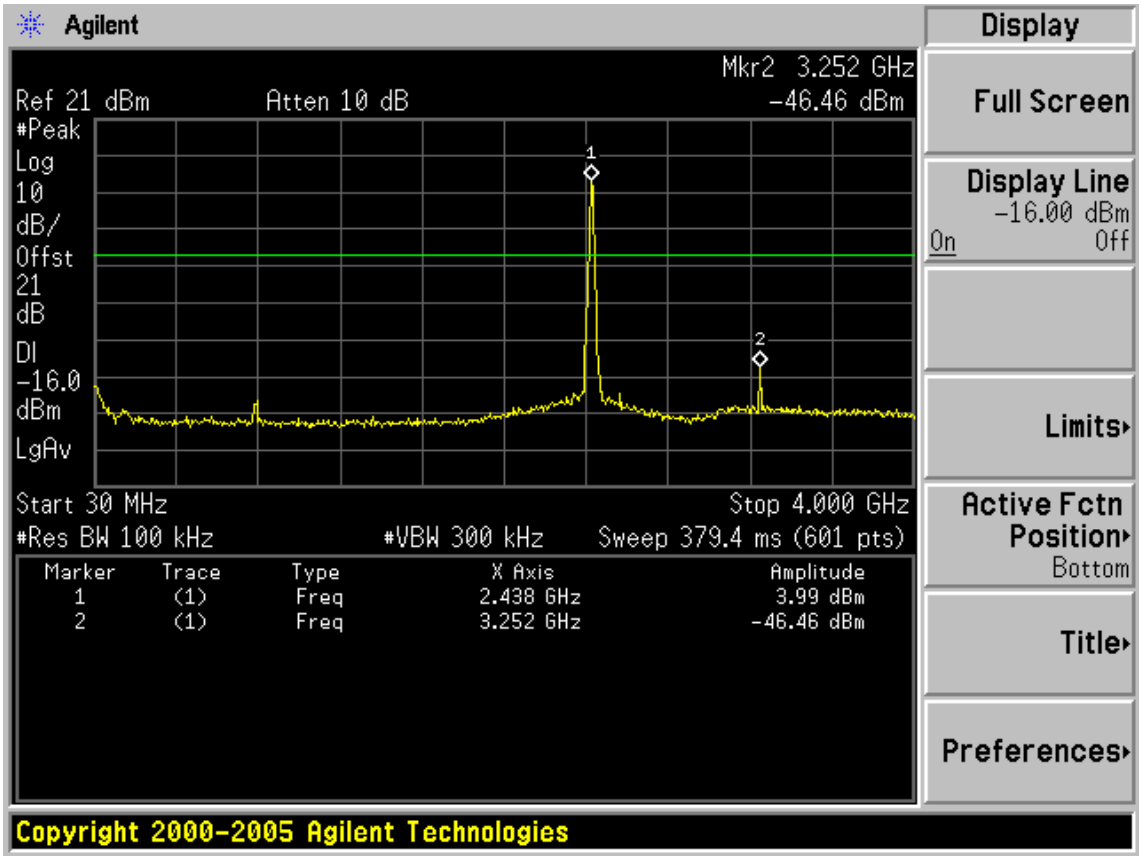


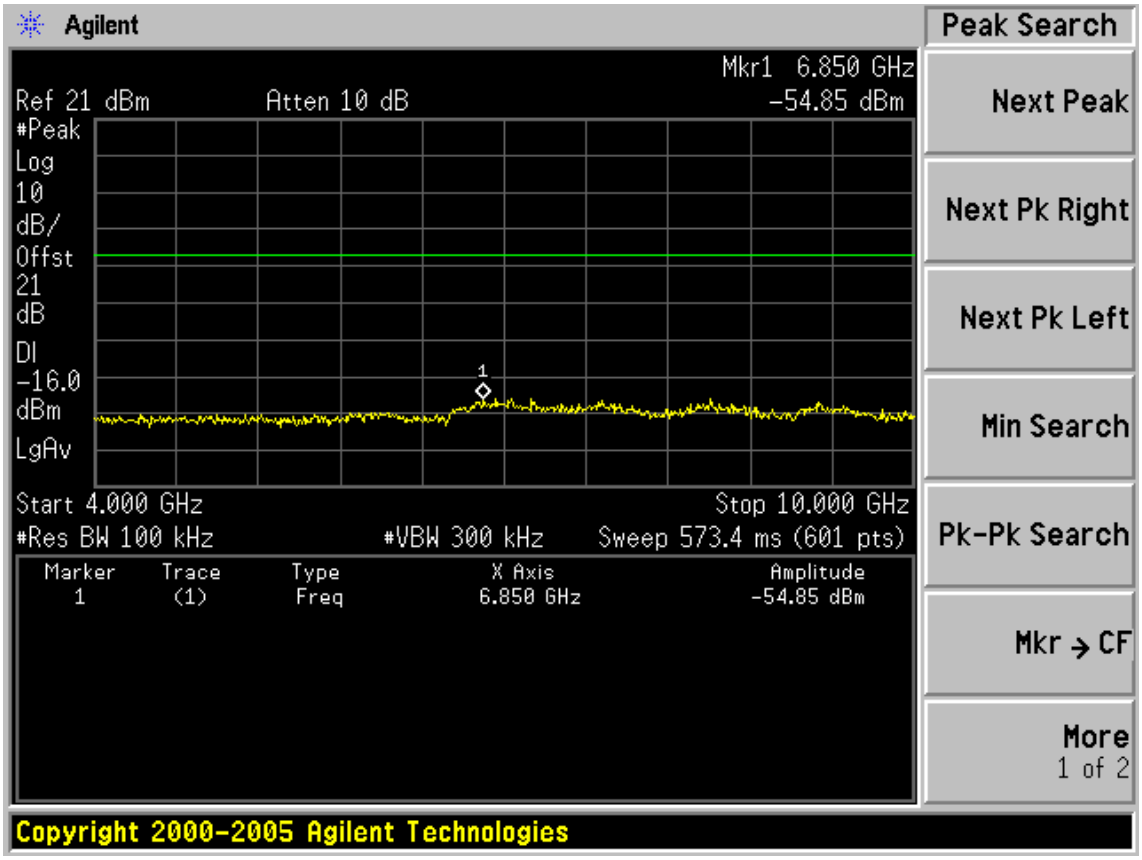

Agilent
Peak Search
Mkr1 6.810 GHz
Ref 21 dBm
Atten 10 dB
-55.12 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-20.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.810 GHz -55.12 dBm
Copyright 2000-2005 Agilent Technologies

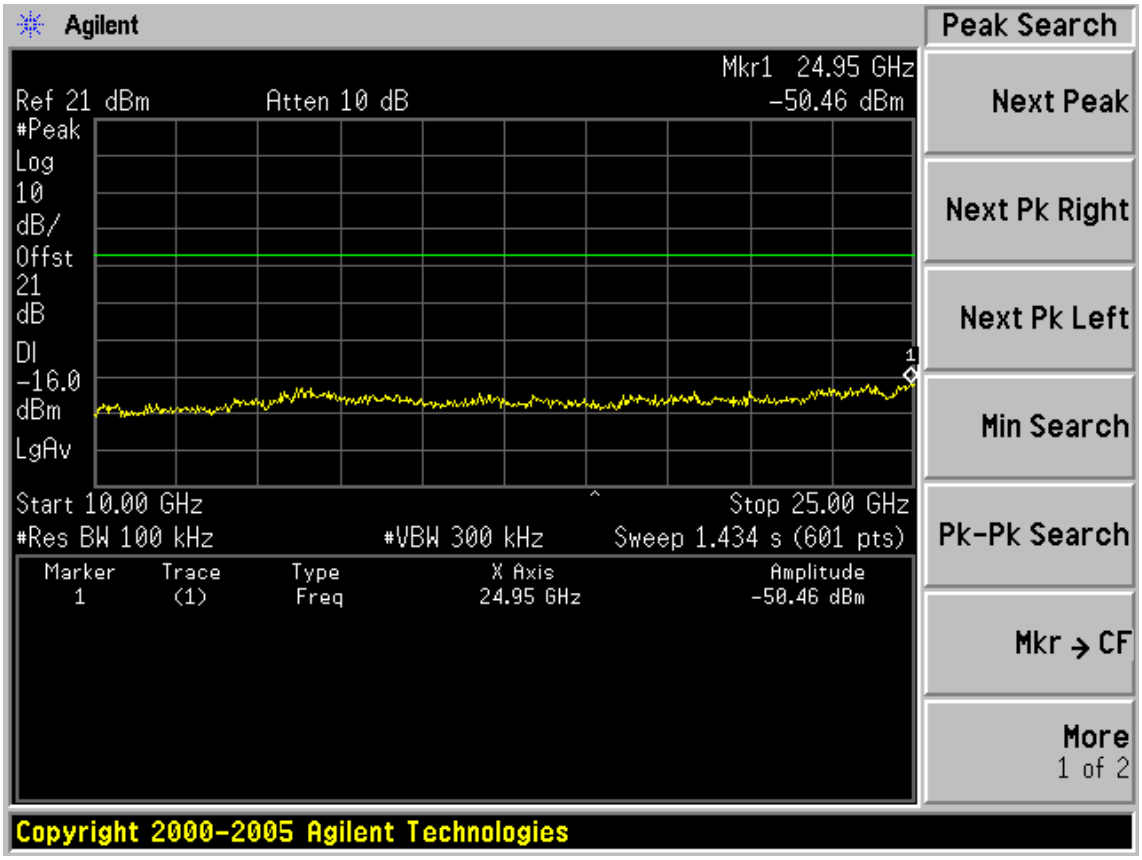

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-49.58 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-20.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -49.58 dBm
Copyright 2000-2005 Agilent Technologies



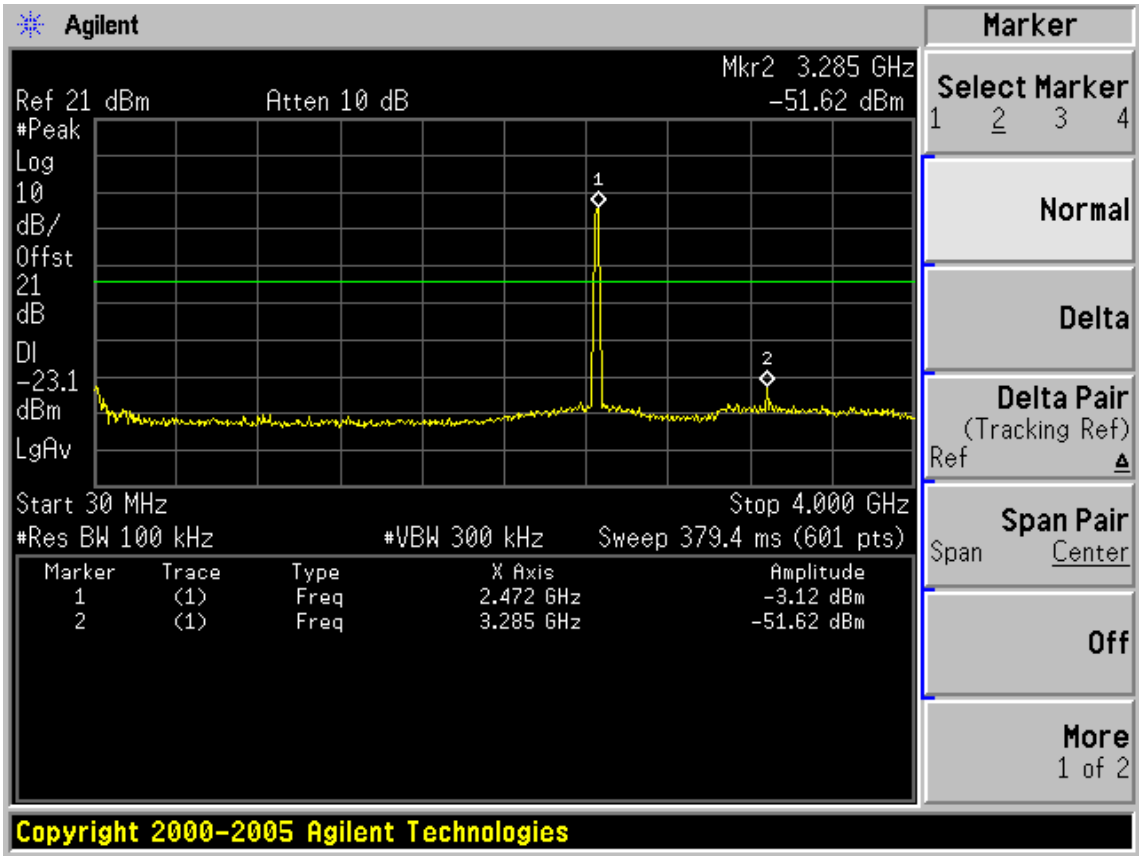
Test CH6: 2437MHz

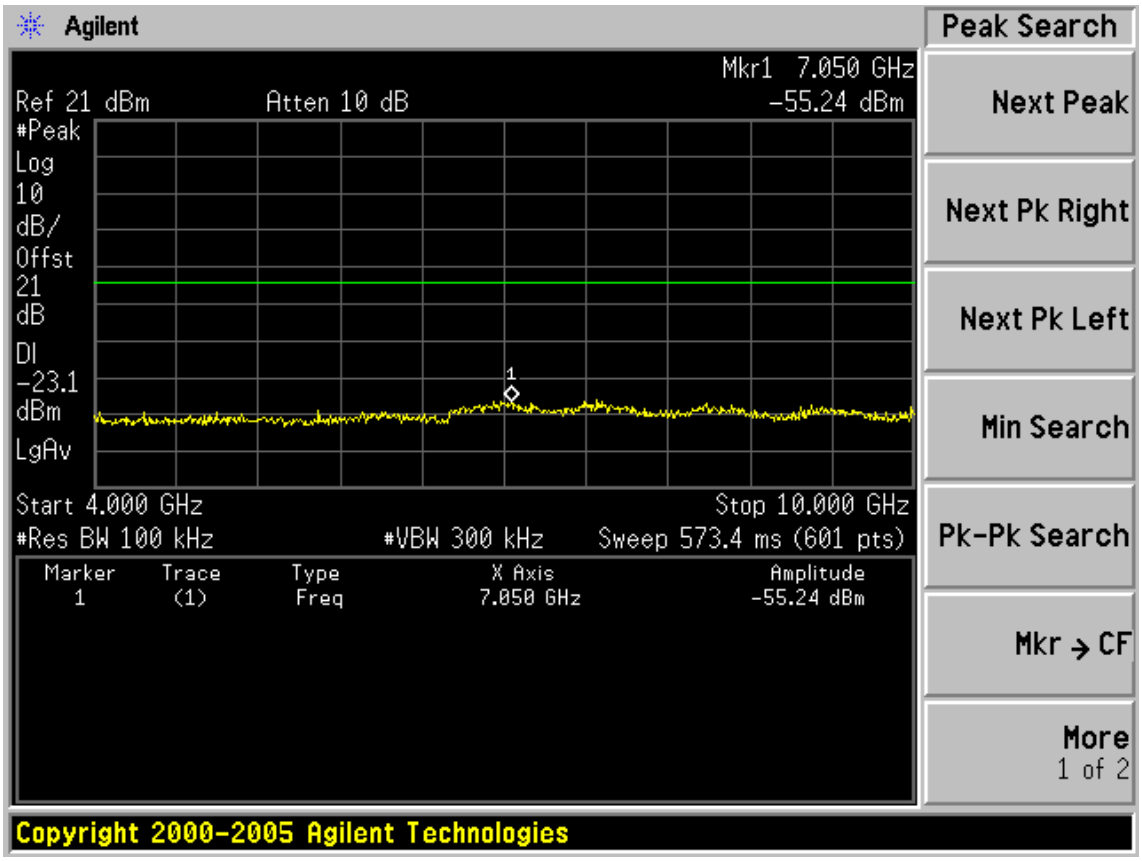


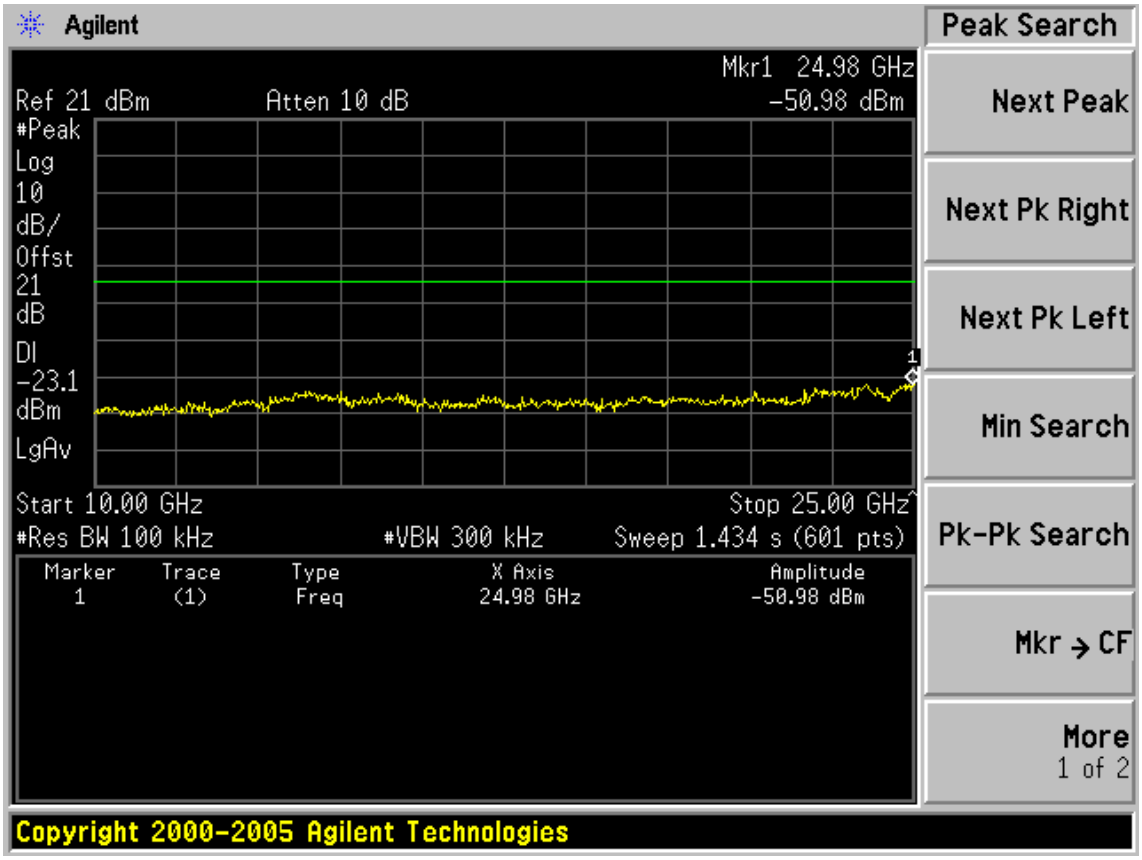

Agilent
Peak Search
Mkr1 6.850 GHz
Ref 21 dBm
Atten 10 dB
-54.85 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-16.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.850 GHz -54.85 dBm
Copyright 2000-2005 Agilent Technologies

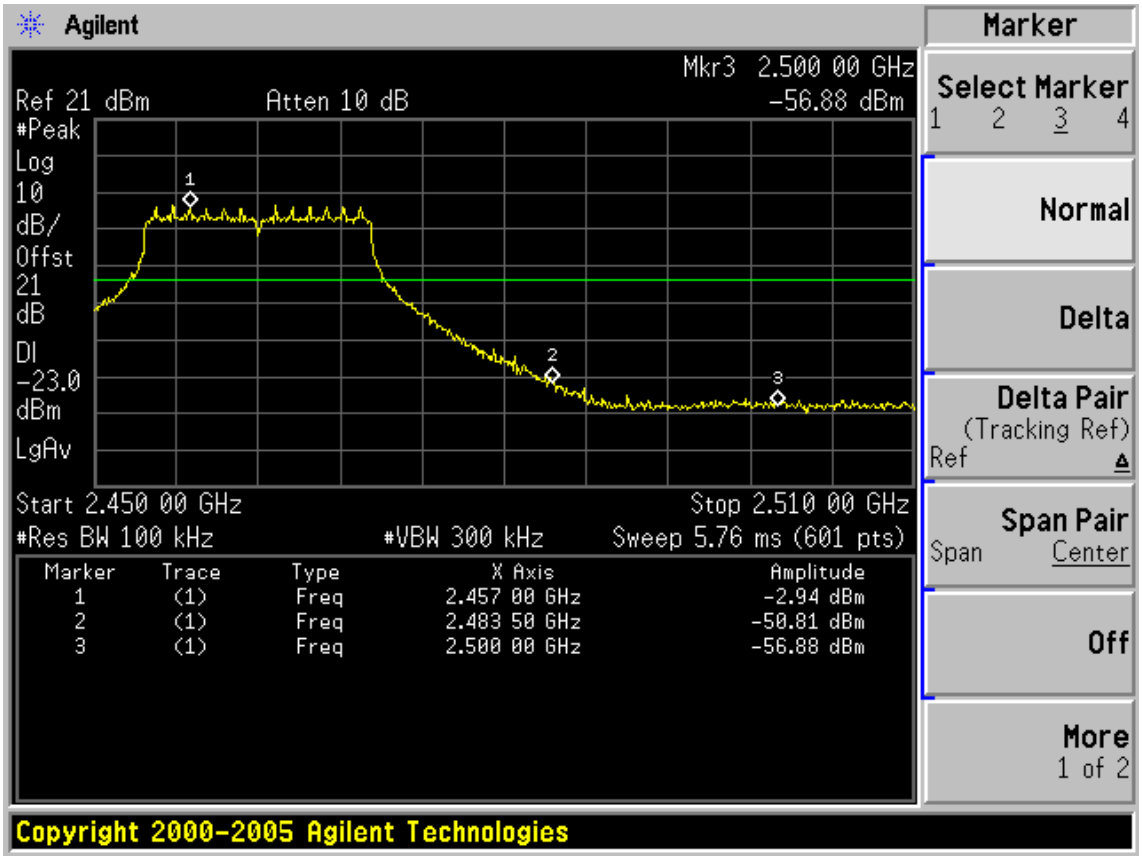

Agilent
Peak Search
Mkr1 24.95 GHz
Ref 21 dBm
Atten 10 dB
-50.46 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-16.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.95 GHz -50.46 dBm
Copyright 2000-2005 Agilent Technologies

Test CH11: 2462MHz

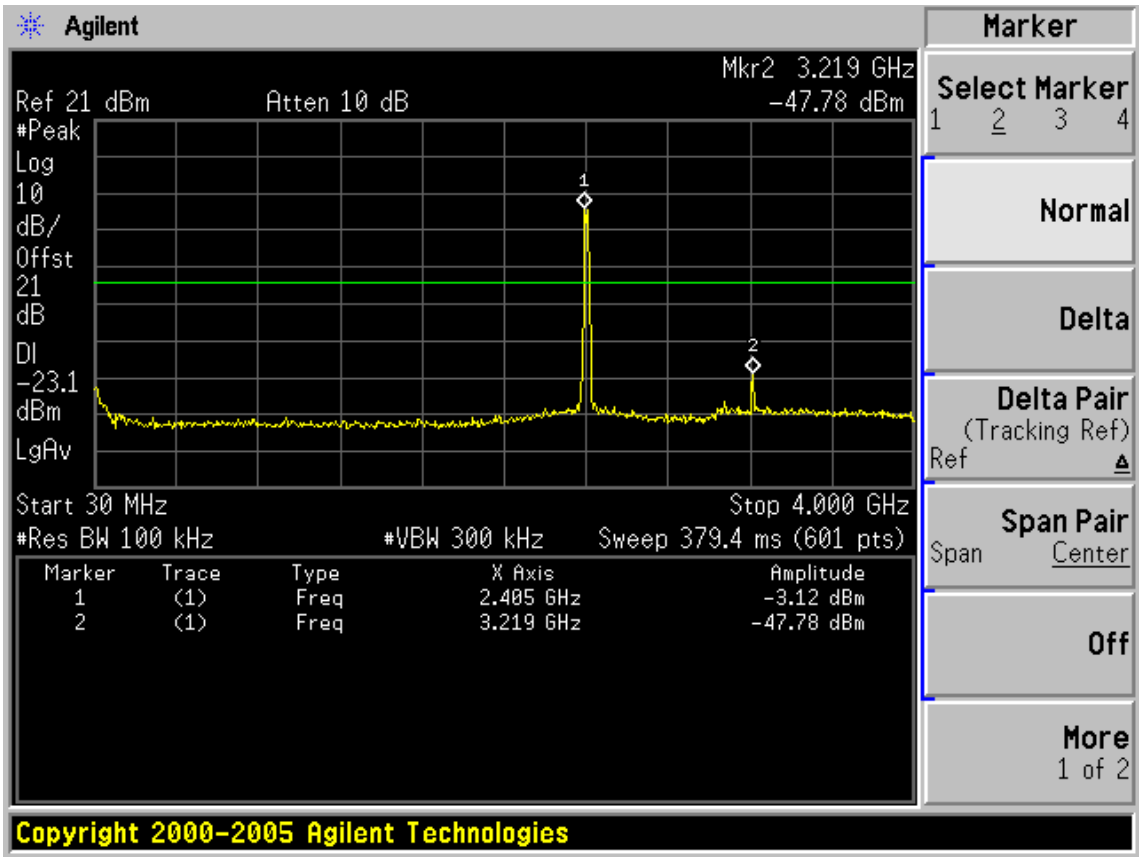


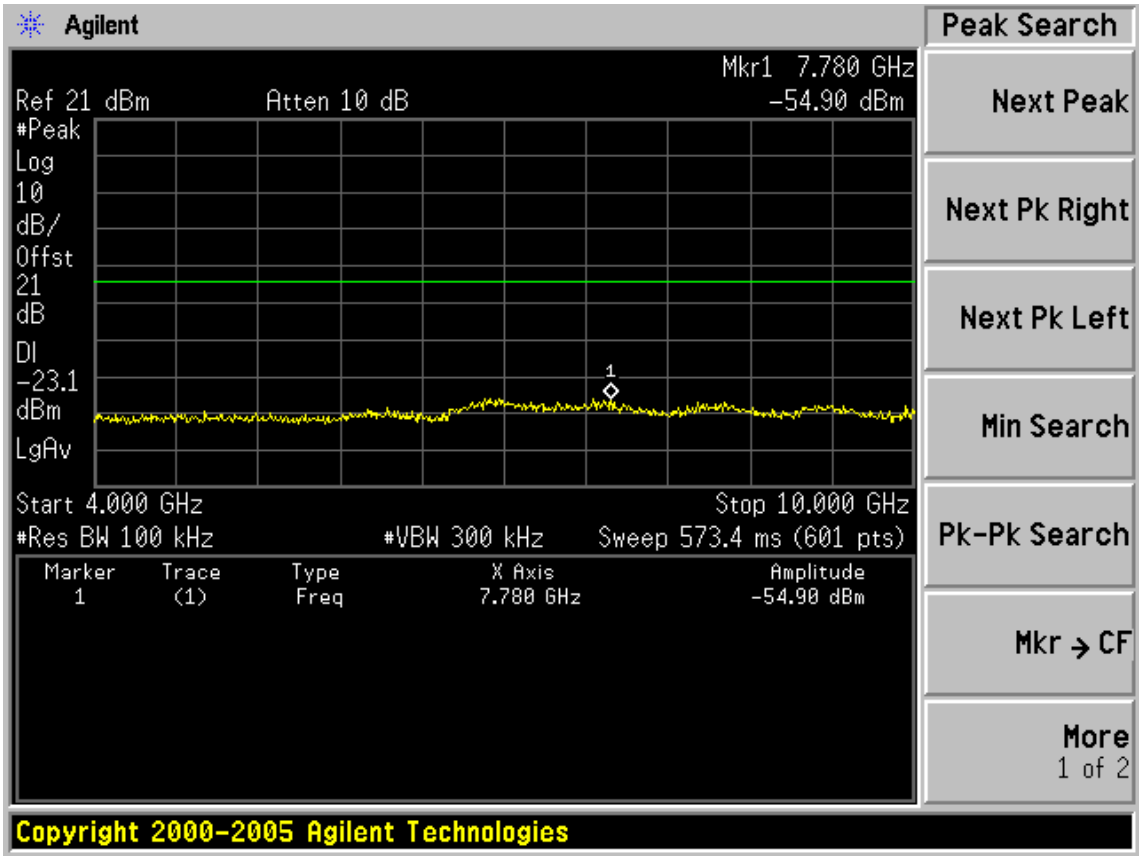


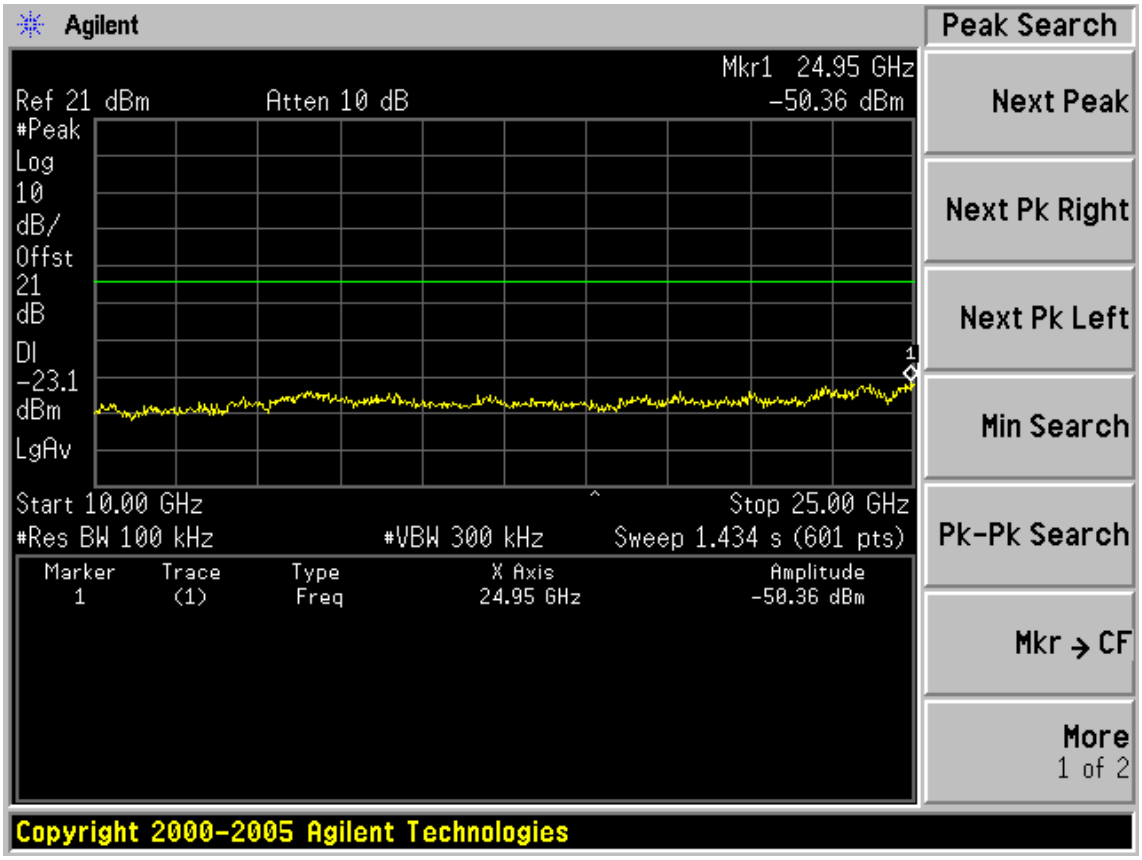

Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-50.98 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -50.98 dBm
Copyright 2000-2005 Agilent Technologies

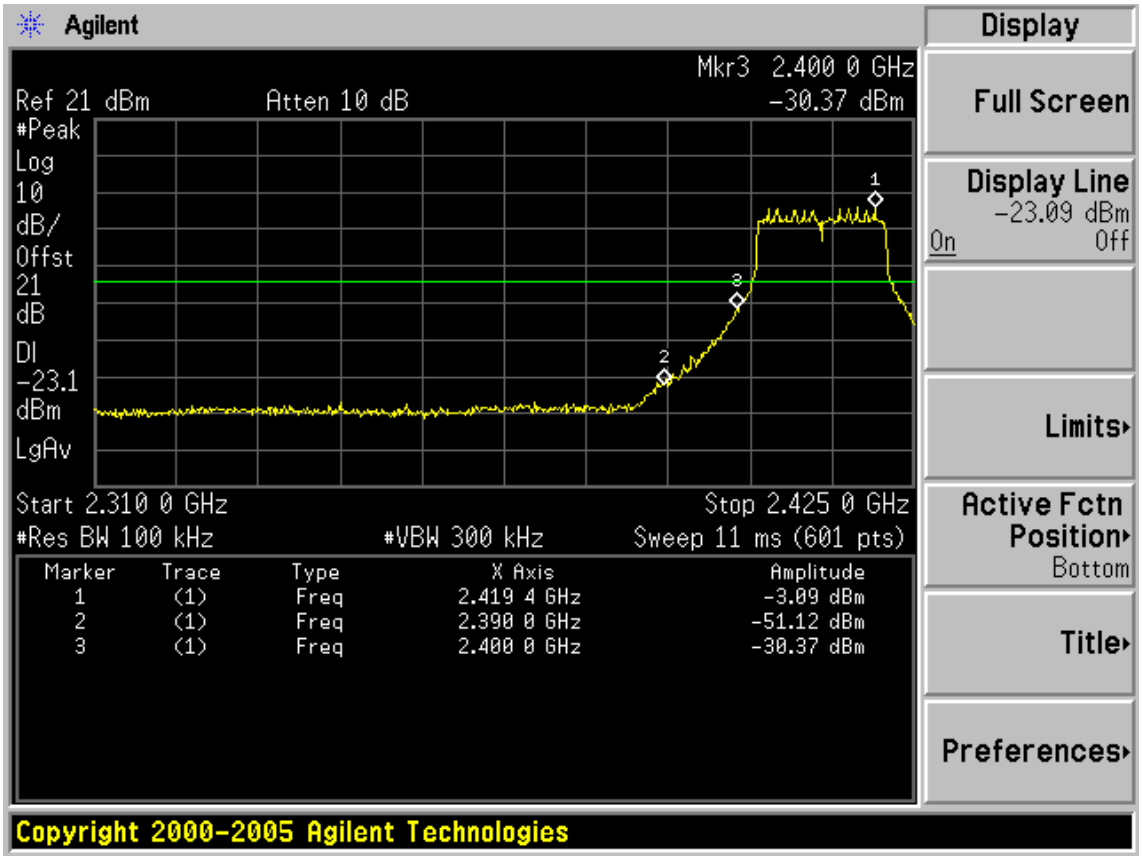

Agilent
Marker
Mkr3 2.500 00 GHz
Ref 21 dBm
Atten 10 dB
-56.88 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.0
dBm
LgAv
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Start 2.450 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.76 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.457 00 GHz -2.94 dBm
2 (1) Freq 2.483 50 GHz -50.81 dBm
3 (1) Freq 2.500 00 GHz -56.88 dBm
Copyright 2000-2005 Agilent Technologies

Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

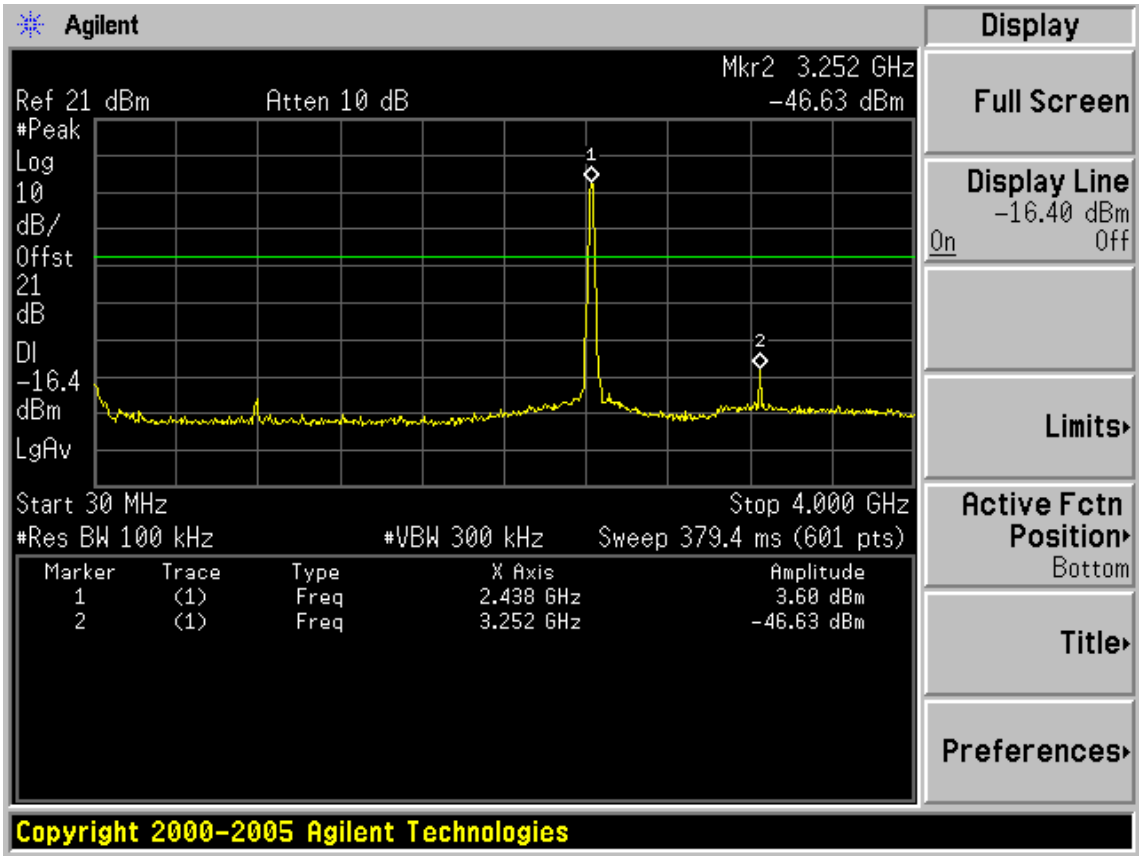


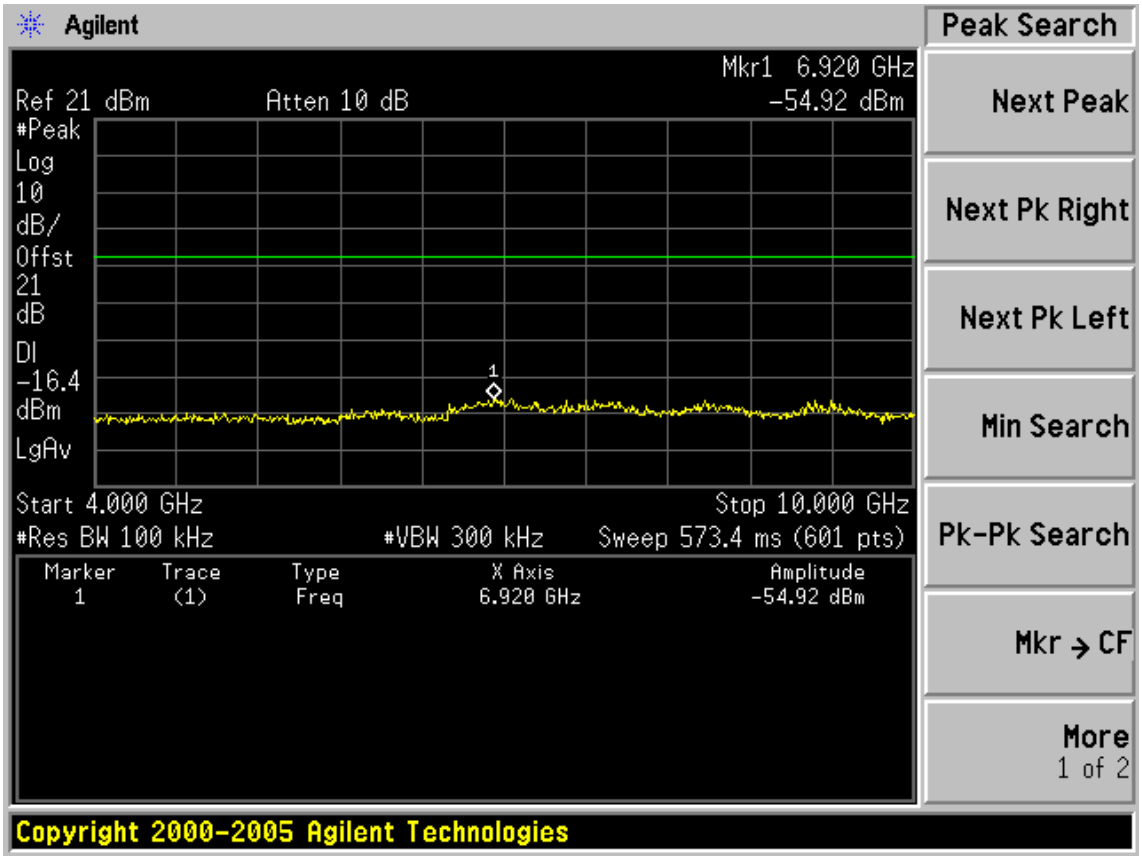


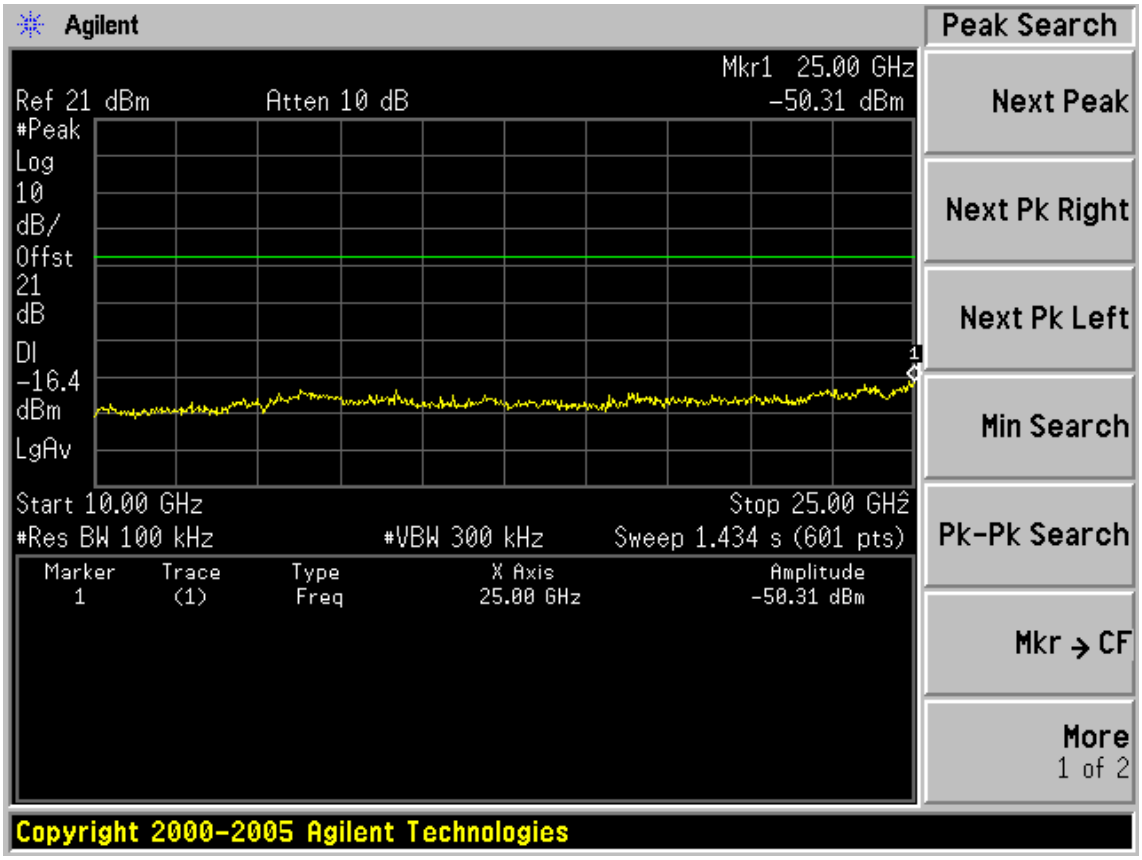

Agilent
Peak Search
Mkr1 24.95 GHz
Ref 21 dBm
Atten 10 dB
-50.36 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.95 GHz -50.36 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Display
Mkr3 2.400 0 GHz
Ref 21 dBm
Atten 10 dB
-30.37 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.1
dBm
LgAv
Full Screen
Display Line
-23.09 dBm
On
Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 2.310 0 GHz
Stop 2.425 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 11 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.419 4 GHz -3.09 dBm
2 (1) Freq 2.390 0 GHz -51.12 dBm
3 (1) Freq 2.400 0 GHz -30.37 dBm
Copyright 2000-2005 Agilent Technologies

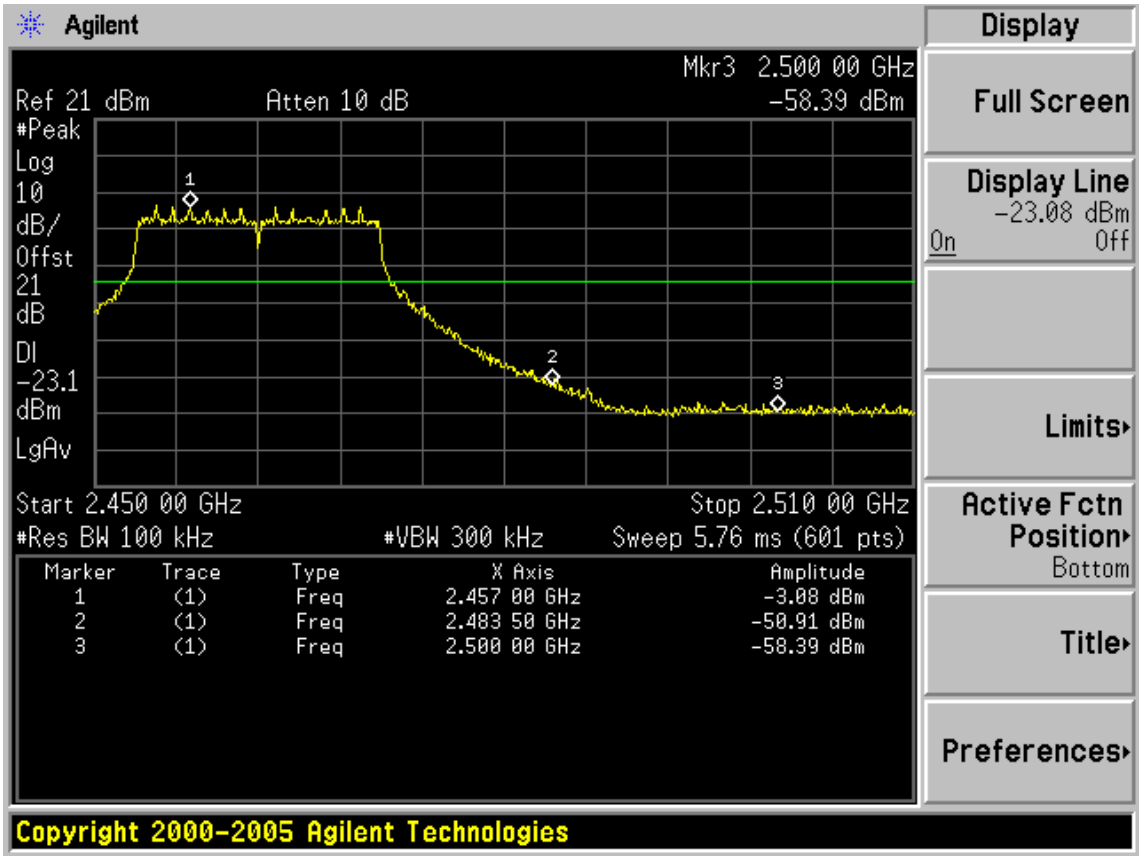
Test CH6: 2437MHz

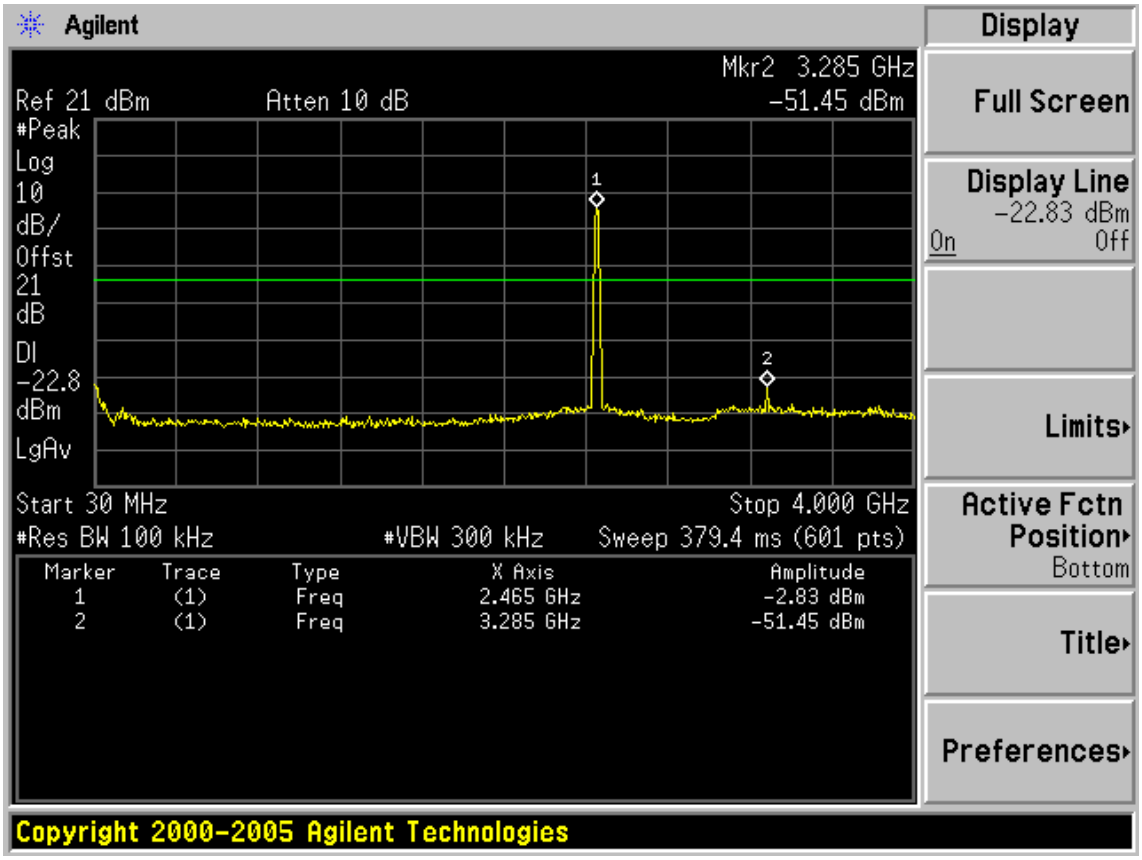


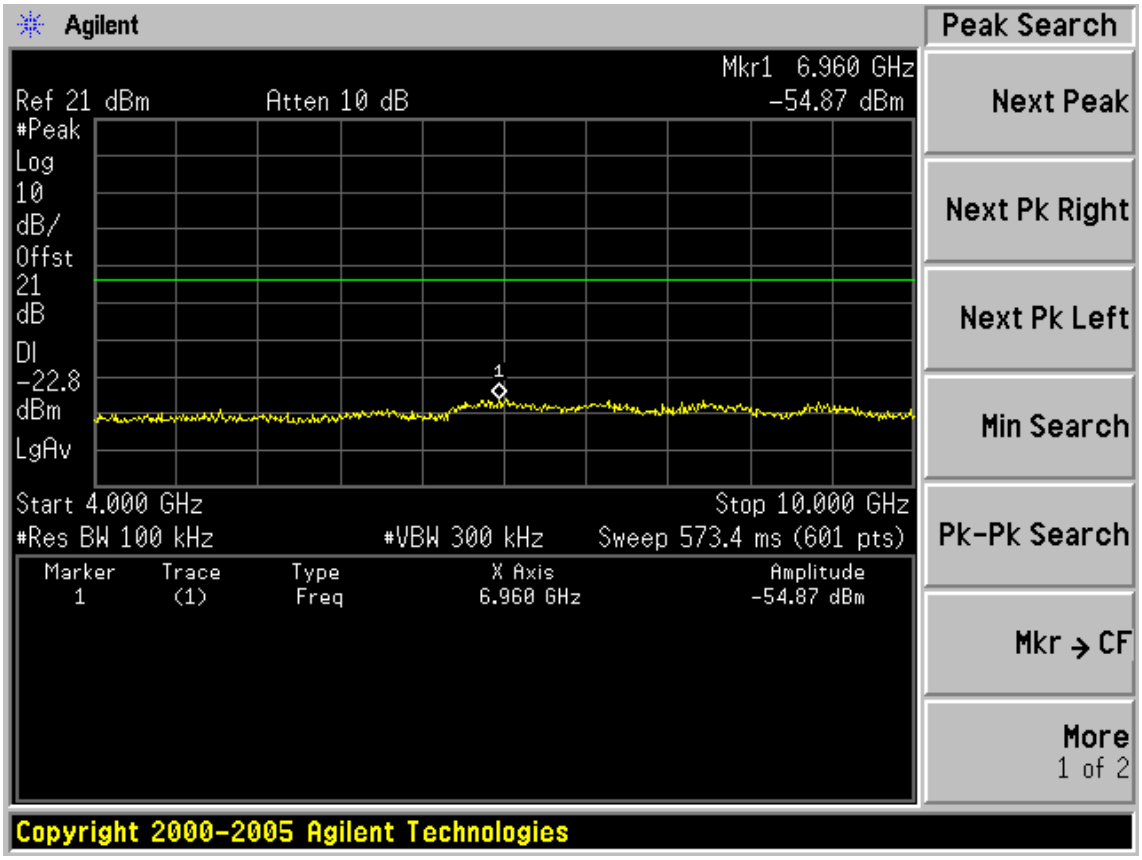


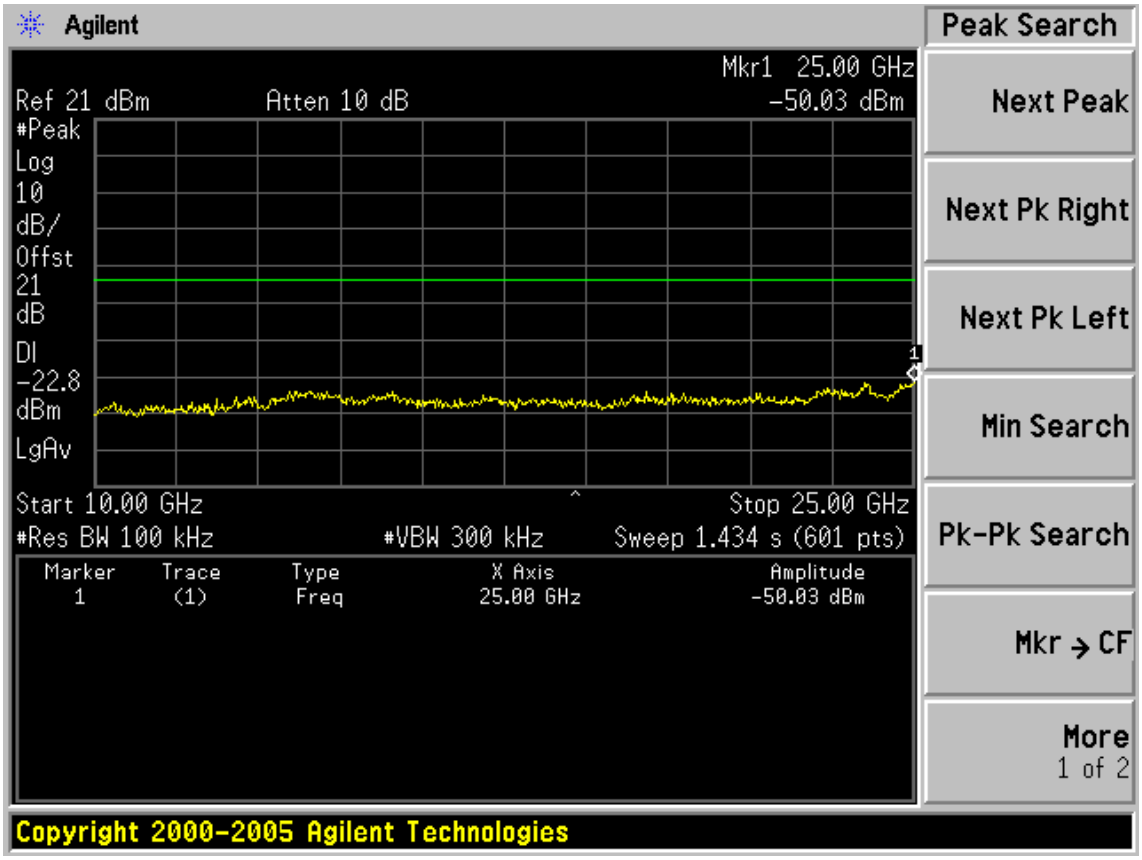


Test CH11: 2462MHz

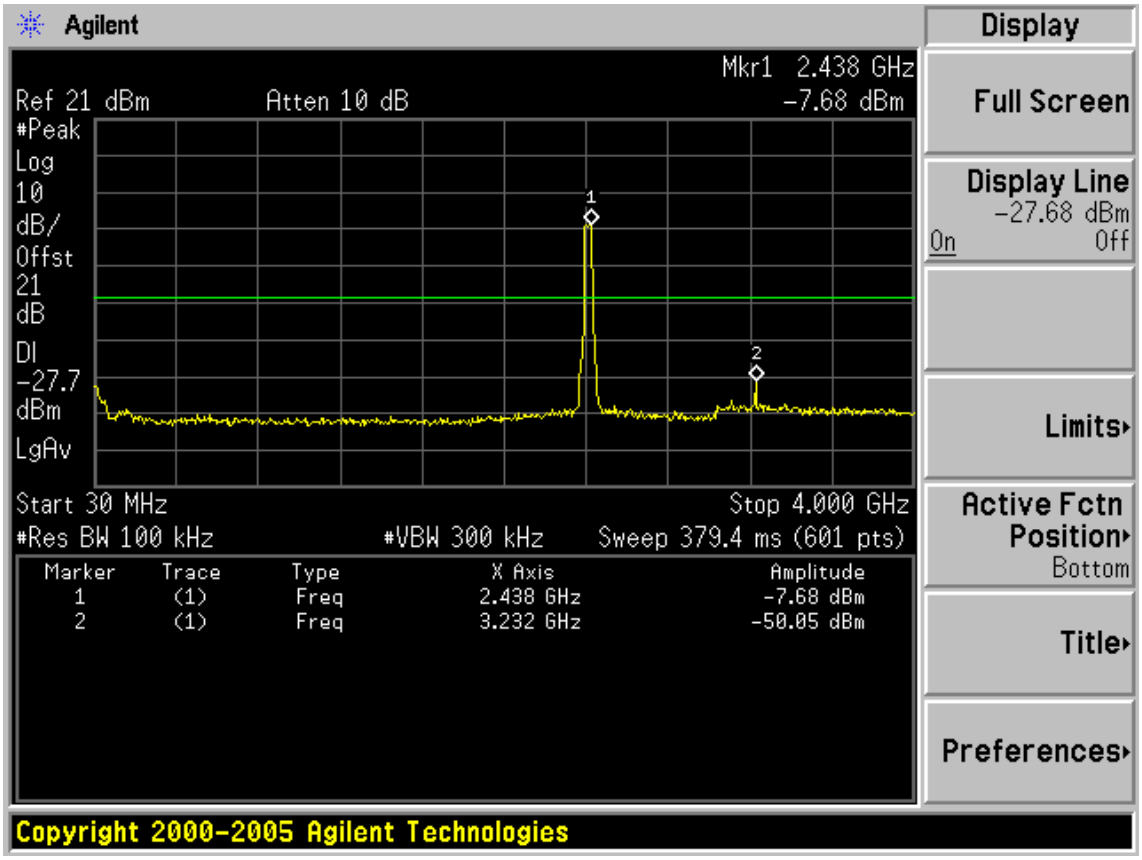


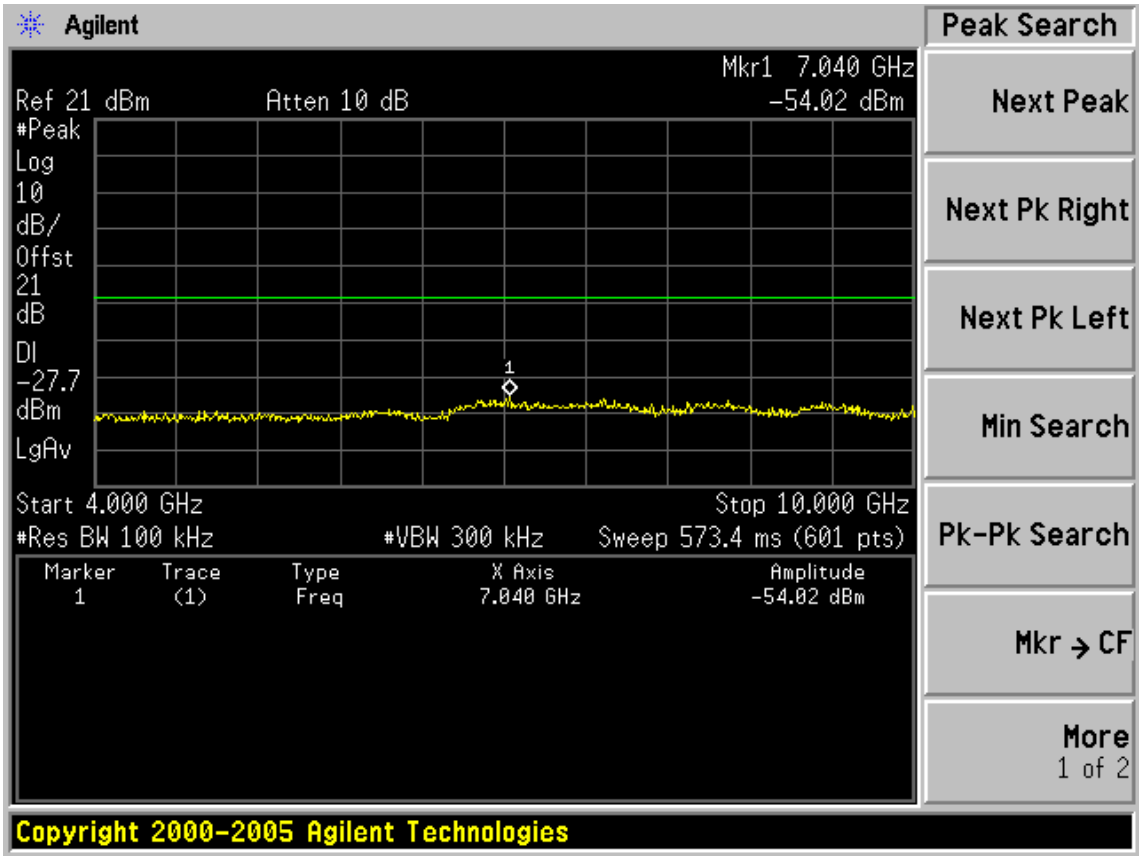

Agilent
Display
Mkr2 3.285 GHz
Ref 21 dBm
Atten 10 dB
-51.45 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-22.8
dBm
LgAv
Full Screen
Display Line
-22.83 dBm
On
Off
Limits
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Active Fctn
Position
Bottom
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.465 GHz -2.83 dBm
2 (1) Freq 3.285 GHz -51.45 dBm
Title
Preferences
Copyright 2000-2005 Agilent Technologies

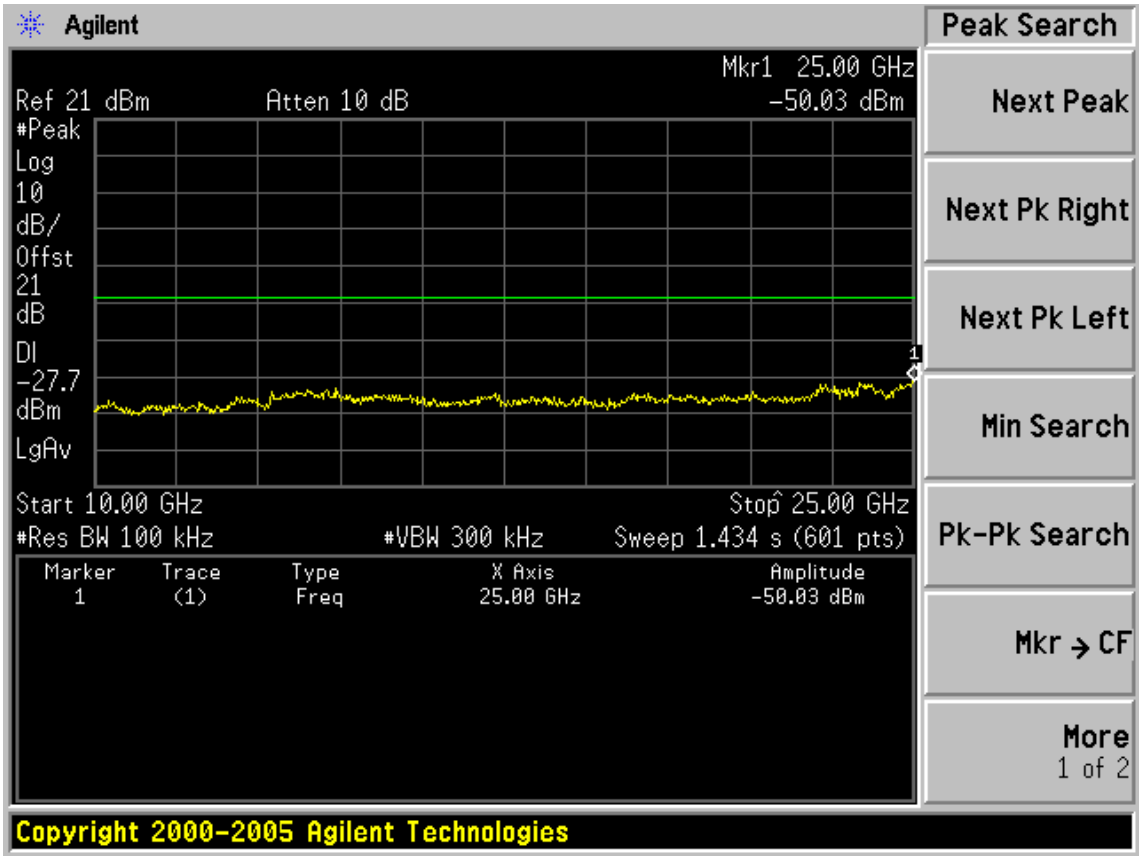

Agilent
Peak Search
Mkr1 6.960 GHz
Ref 21 dBm
Atten 10 dB
-54.87 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-22.8
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.960 GHz -54.87 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies

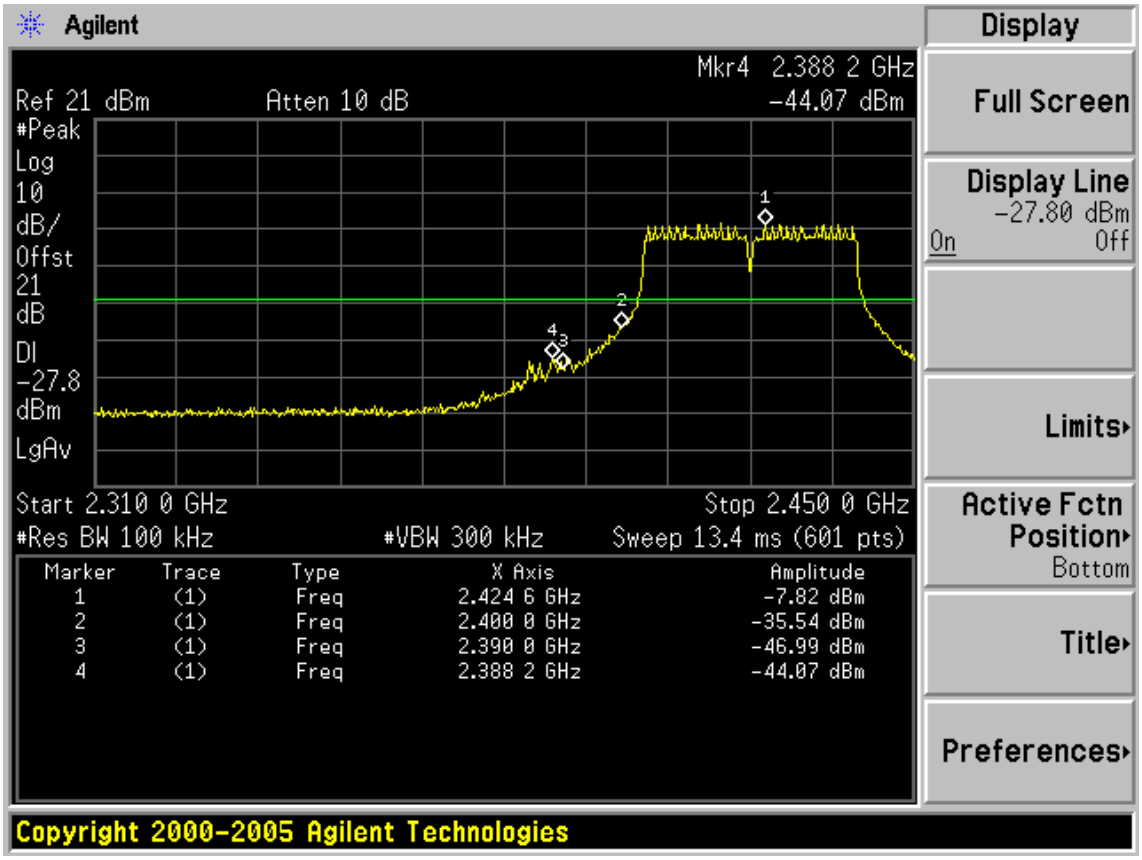


Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

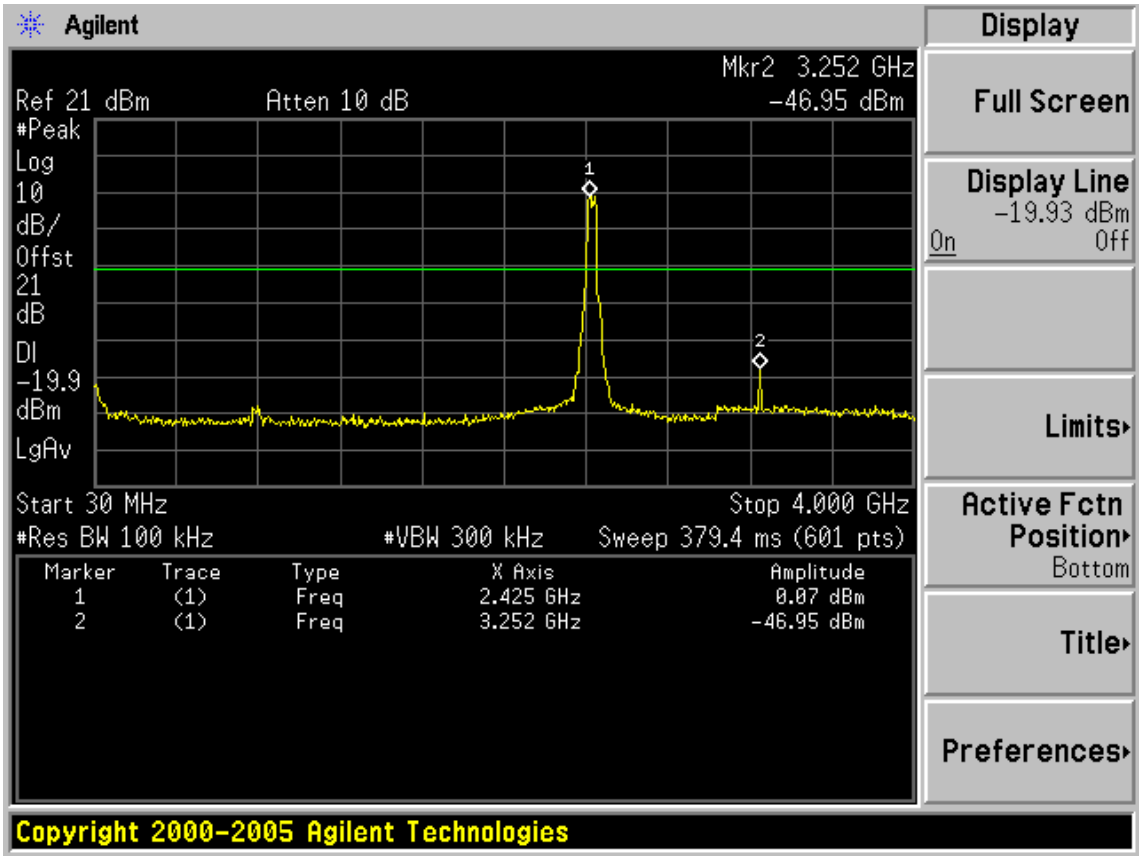


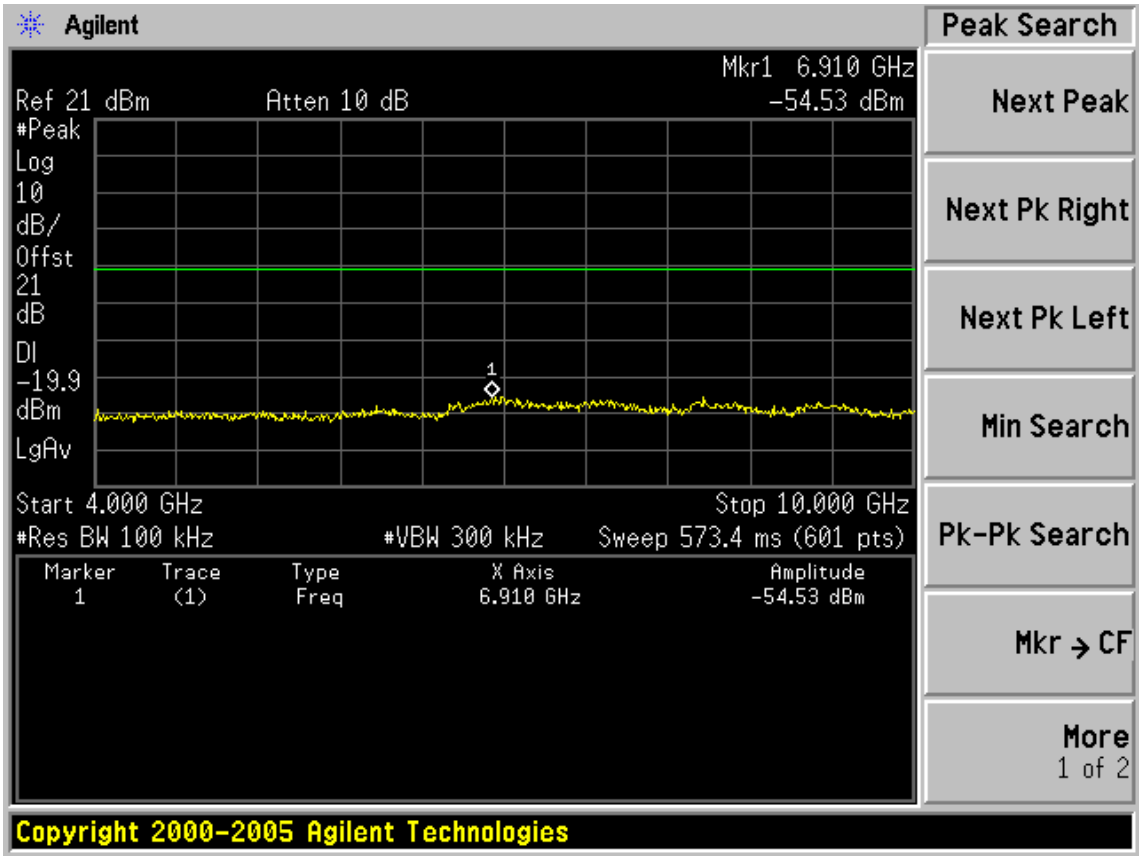

Agilent
Peak Search
Mkr1 7.040 GHz
Ref 21 dBm
Atten 10 dB
-54.02 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-27.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.040 GHz -54.02 dBm
Copyright 2000-2005 Agilent Technologies

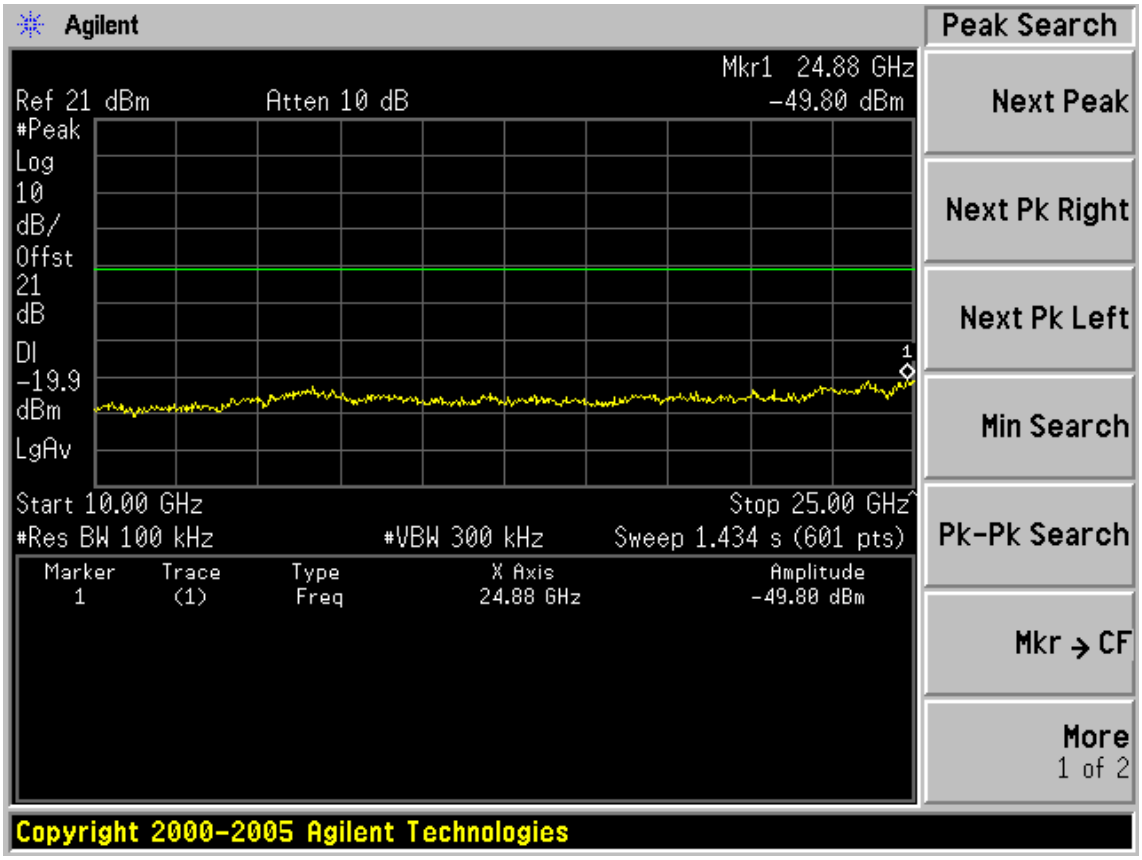

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-50.03 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-27.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -50.03 dBm
Copyright 2000-2005 Agilent Technologies



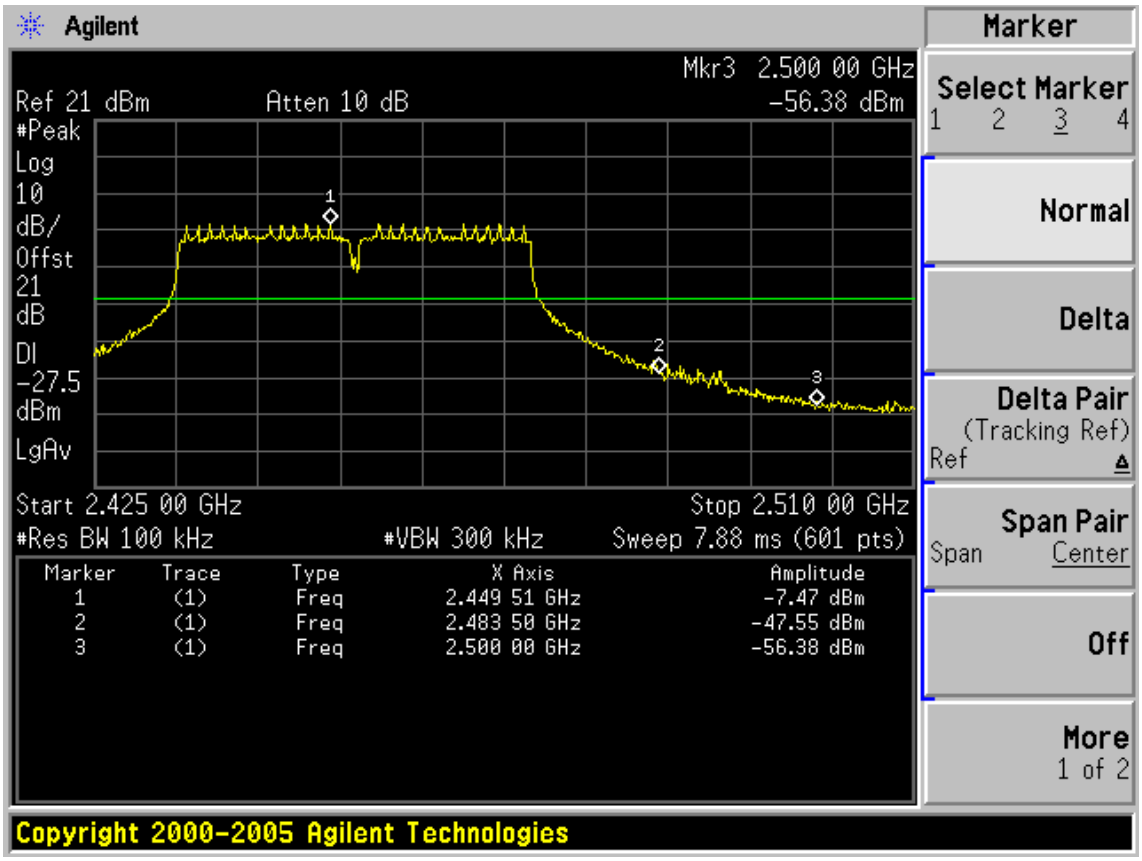
Test CH4: 2437MHz

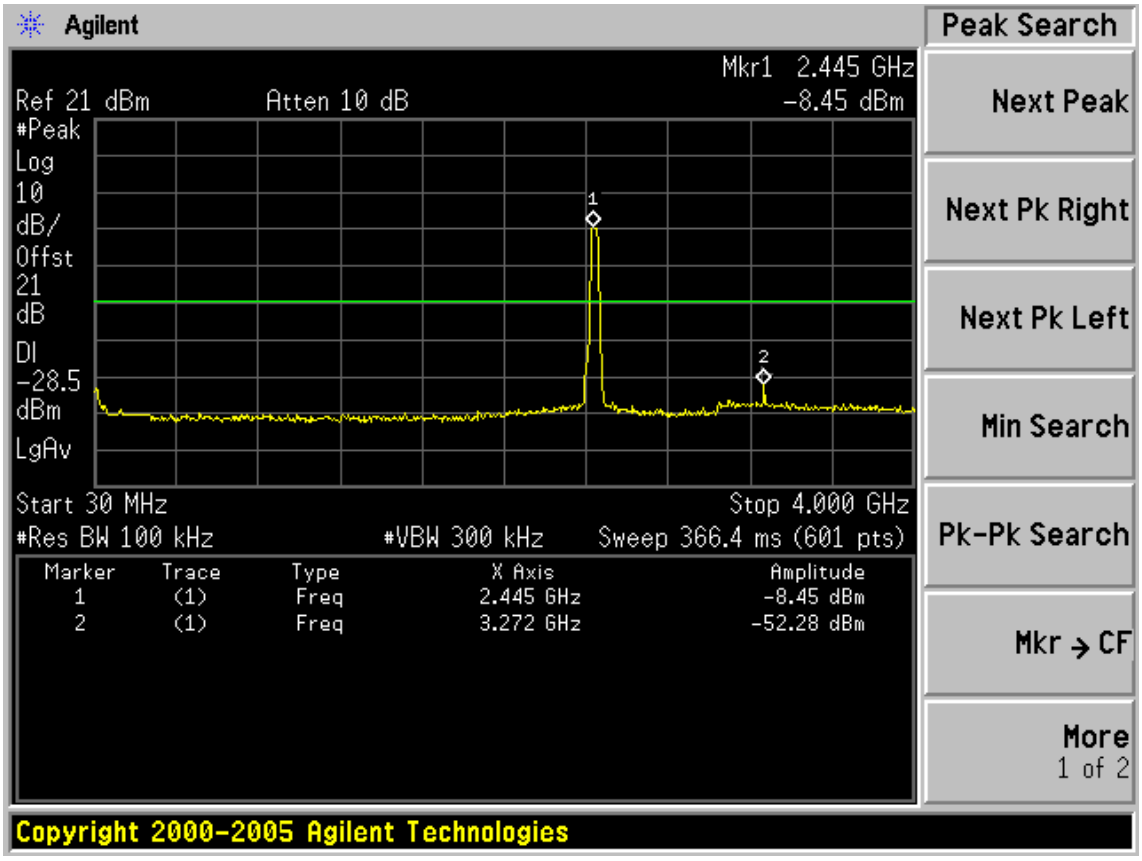


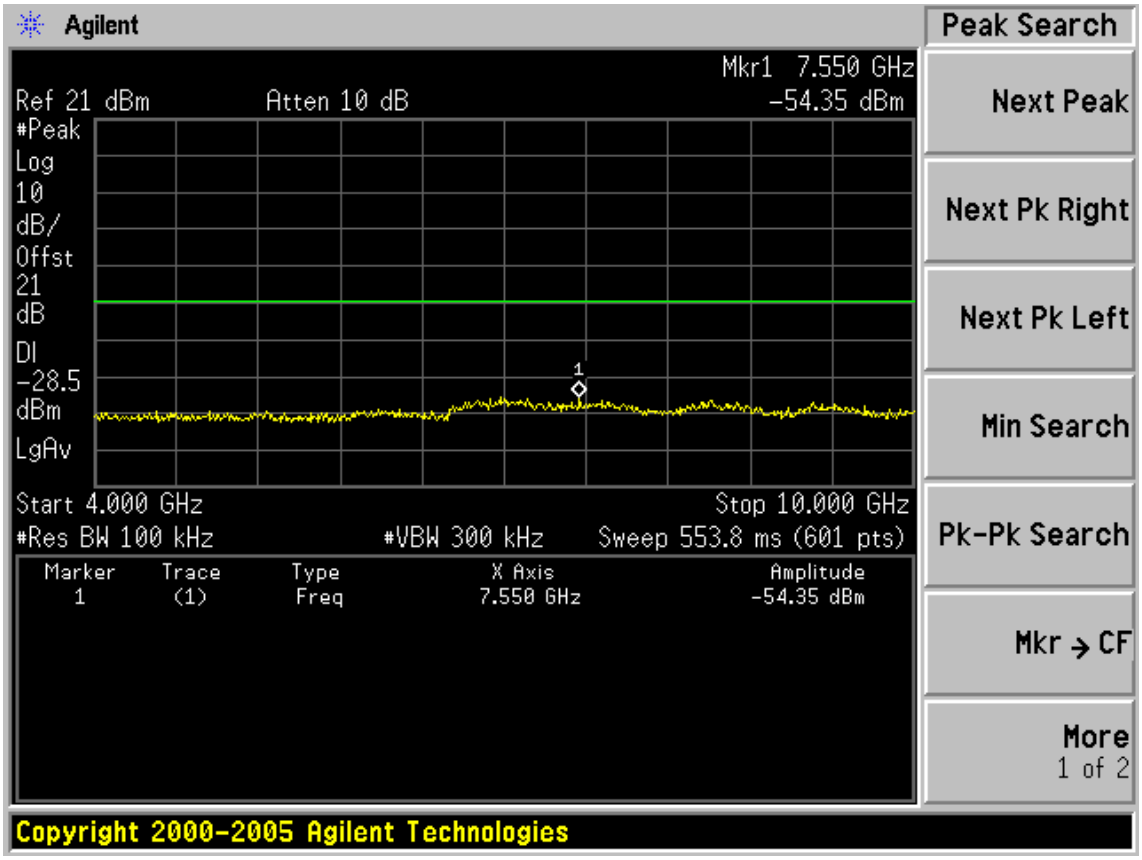

Agilent
Peak Search
Mkr1 6.910 GHz
Ref 21 dBm
Atten 10 dB
-54.53 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.9
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.910 GHz -54.53 dBm
Copyright 2000-2005 Agilent Technologies

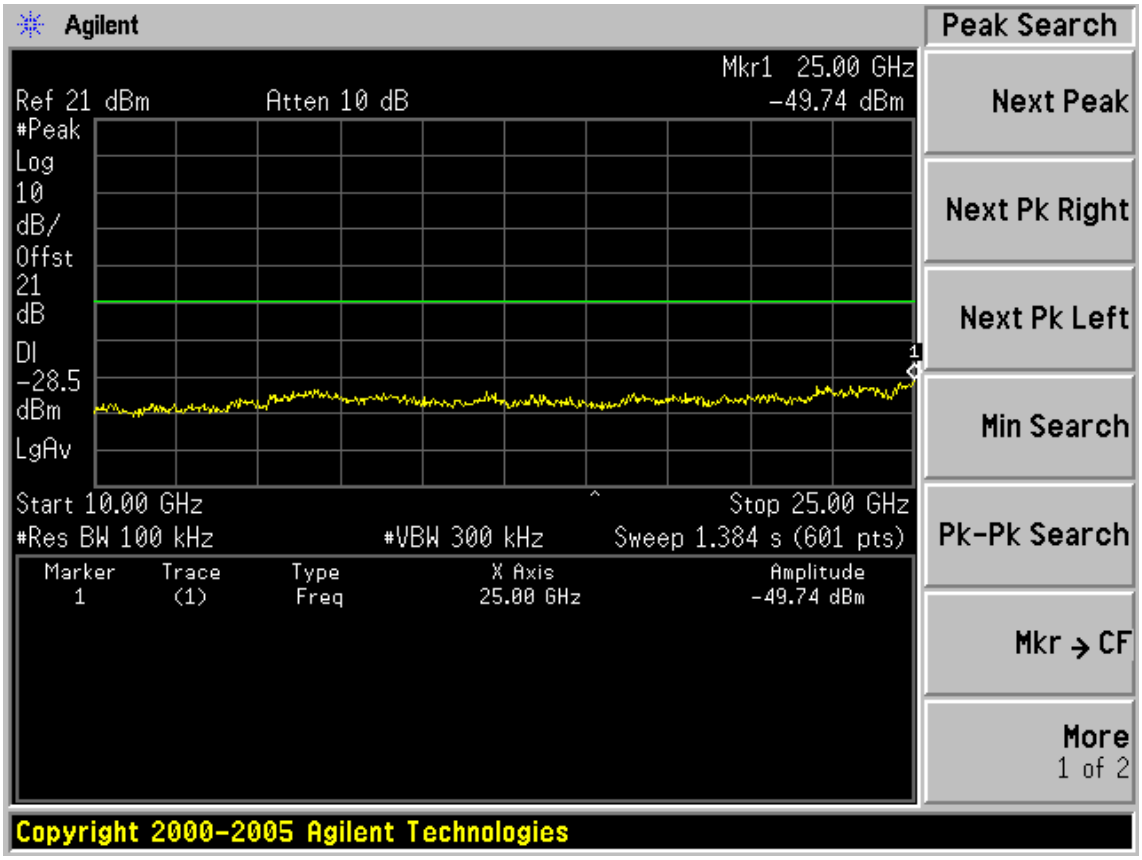

Agilent
Peak Search
Mkr1 24.88 GHz
Ref 21 dBm
Atten 10 dB
-49.80 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.9
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.88 GHz -49.80 dBm
Copyright 2000-2005 Agilent Technologies

Test CH7: 2452MHz

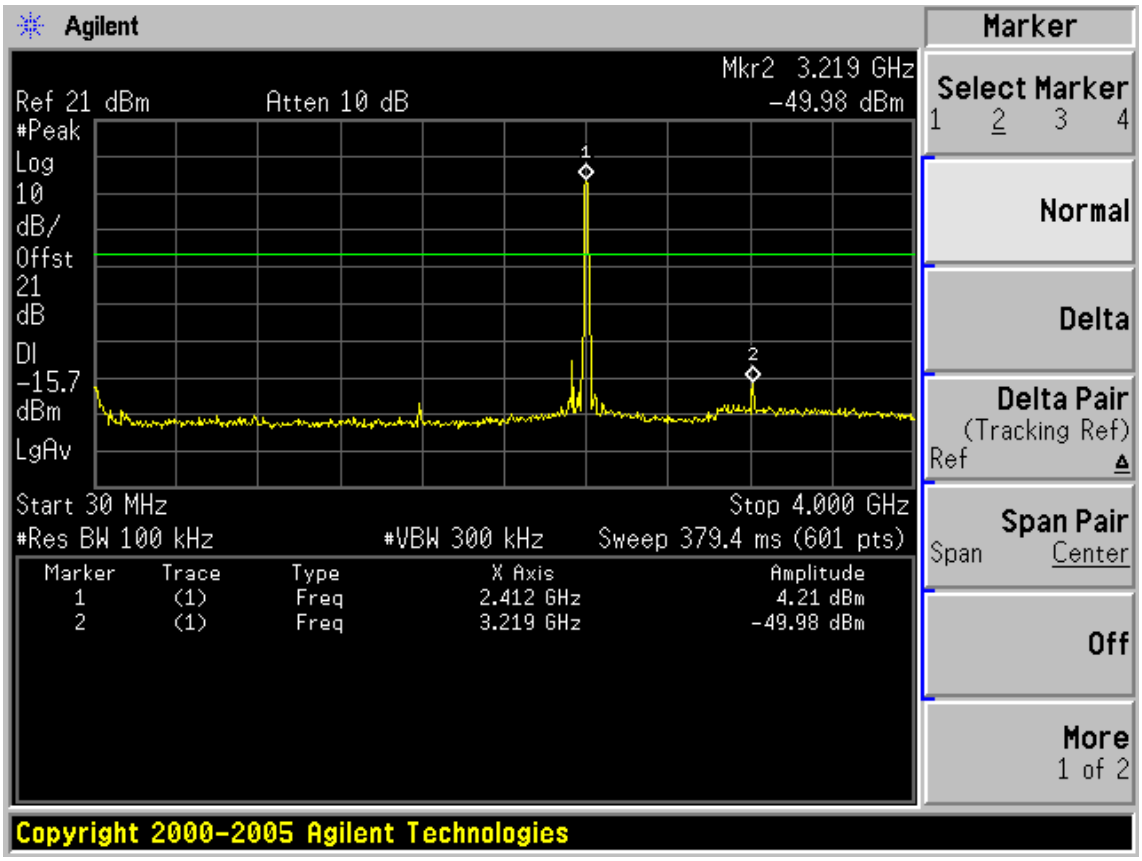


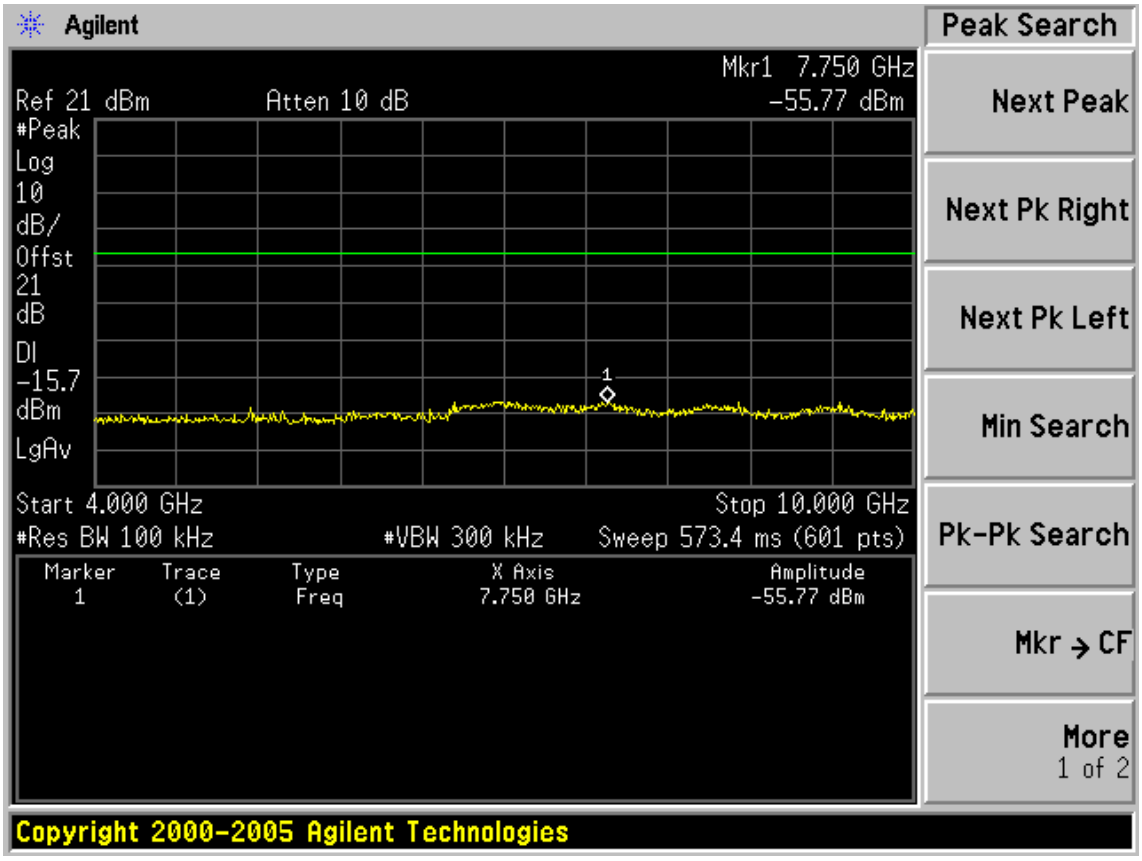


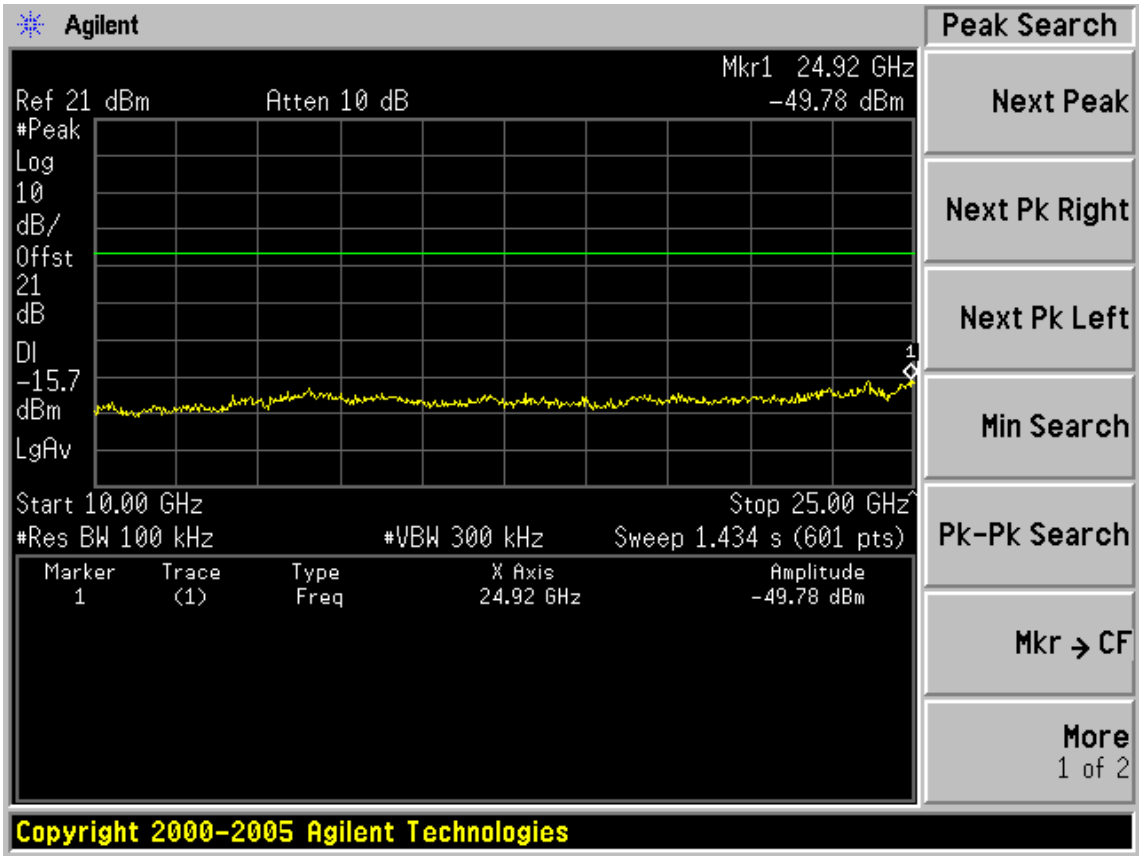

Agilent
Peak Search
Mkr1 7.550 GHz
Ref 21 dBm
Atten 10 dB
-54.35 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 553.8 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.550 GHz -54.35 dBm
Copyright 2000-2005 Agilent Technologies

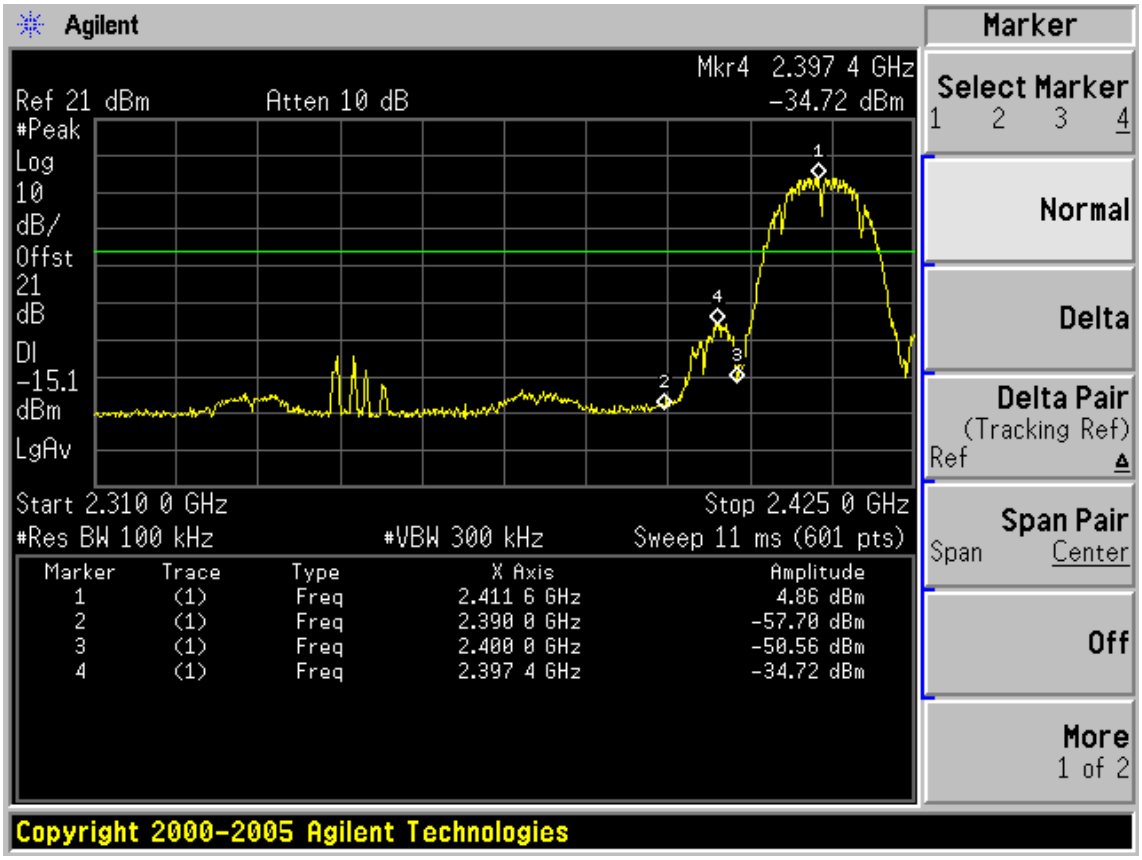

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-49.74 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.5
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.384 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -49.74 dBm
Copyright 2000-2005 Agilent Technologies

Chain 1:
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz

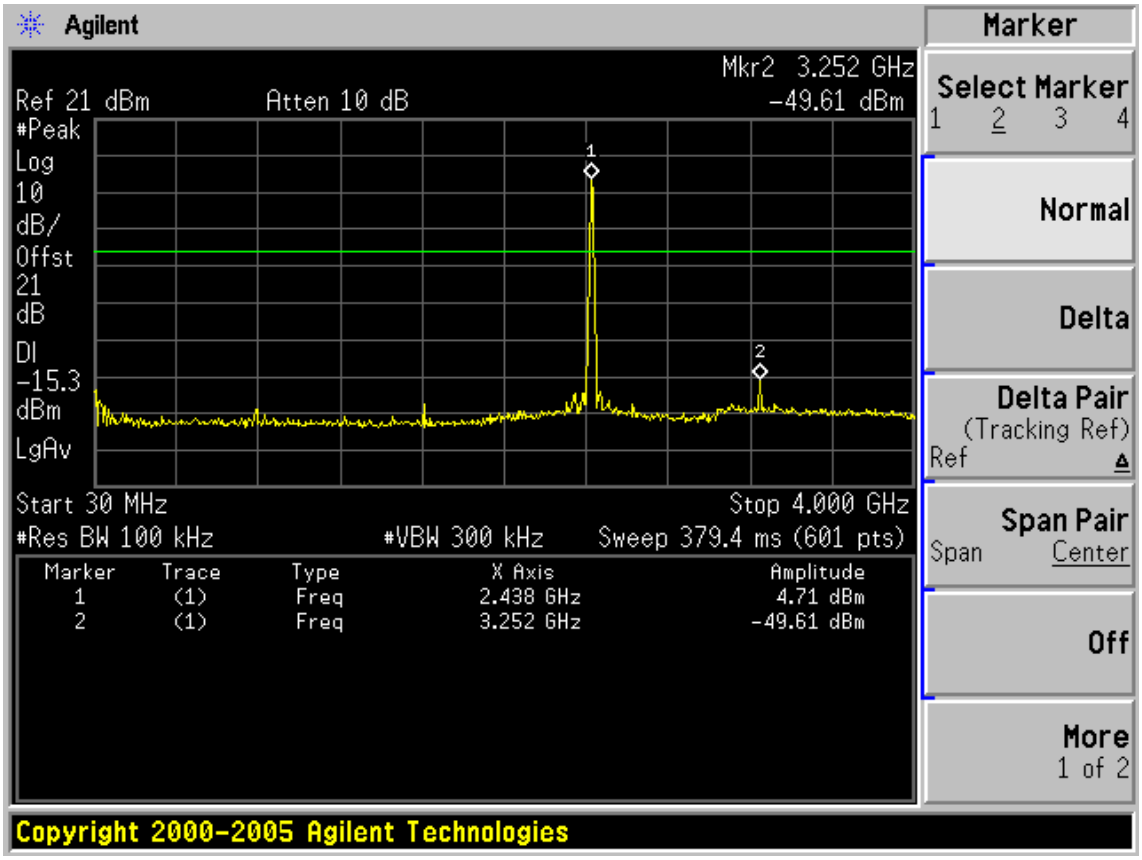


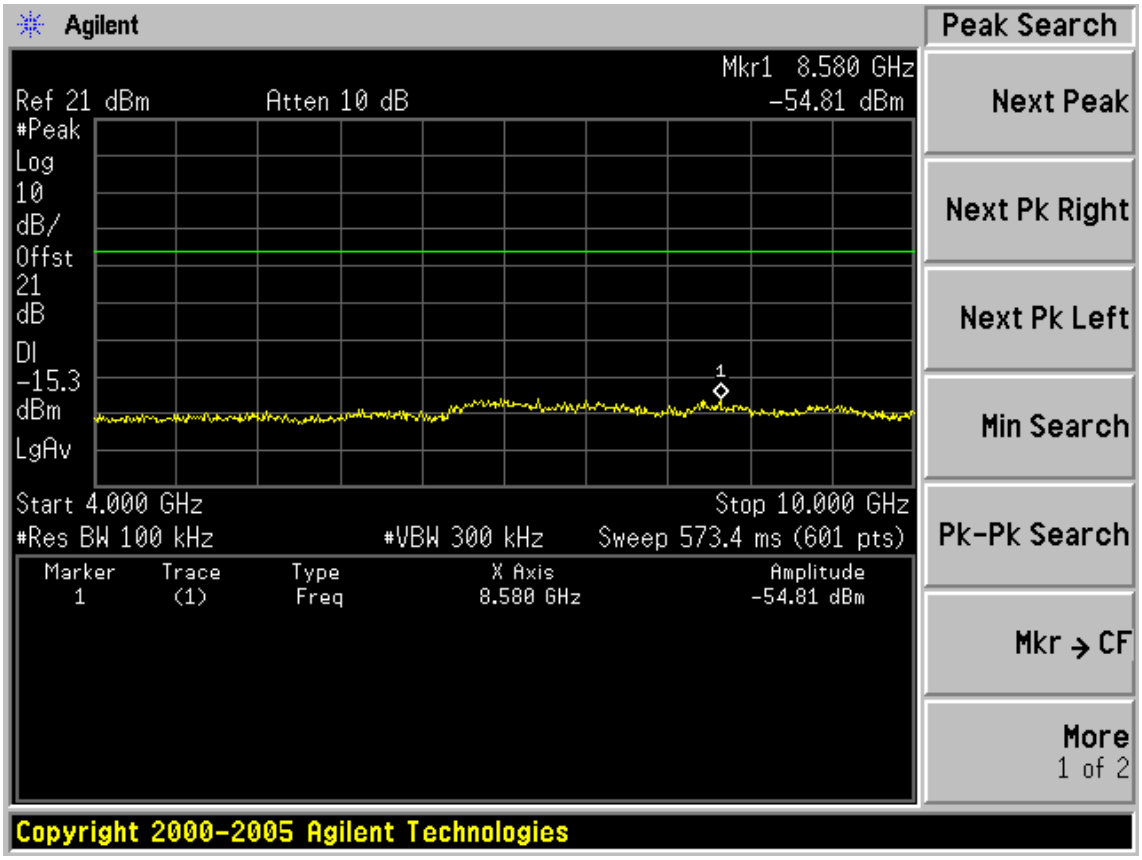


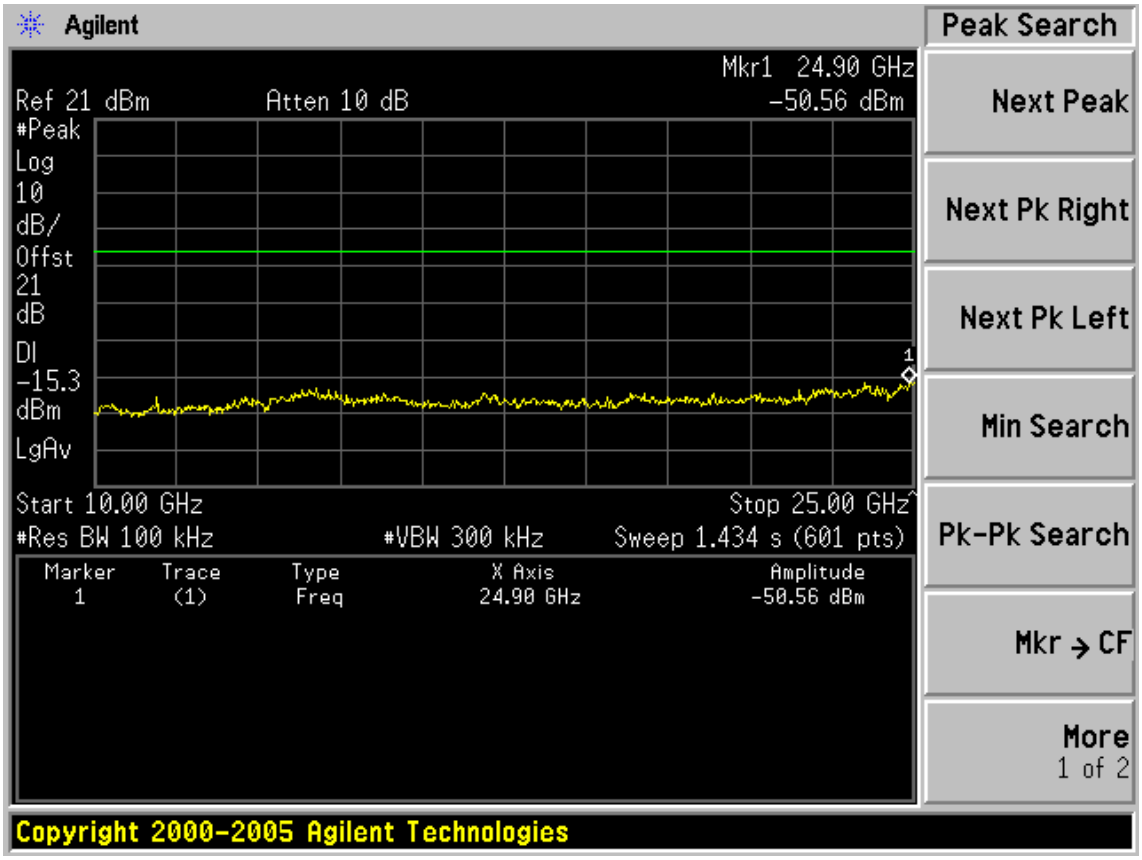

Agilent
Peak Search
Mkr1 24.92 GHz
Ref 21 dBm
Atten 10 dB
-49.78 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.92 GHz -49.78 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Marker
Mkr4 2.397 4 GHz
Ref 21 dBm
Atten 10 dB
-34.72 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-15.1
dBm
LgAv
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Start 2.310 0 GHz
Stop 2.425 0 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 11 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.411 6 GHz 4.86 dBm
2 (1) Freq 2.390 0 GHz -57.70 dBm
3 (1) Freq 2.400 0 GHz -50.56 dBm
4 (1) Freq 2.397 4 GHz -34.72 dBm
Copyright 2000-2005 Agilent Technologies

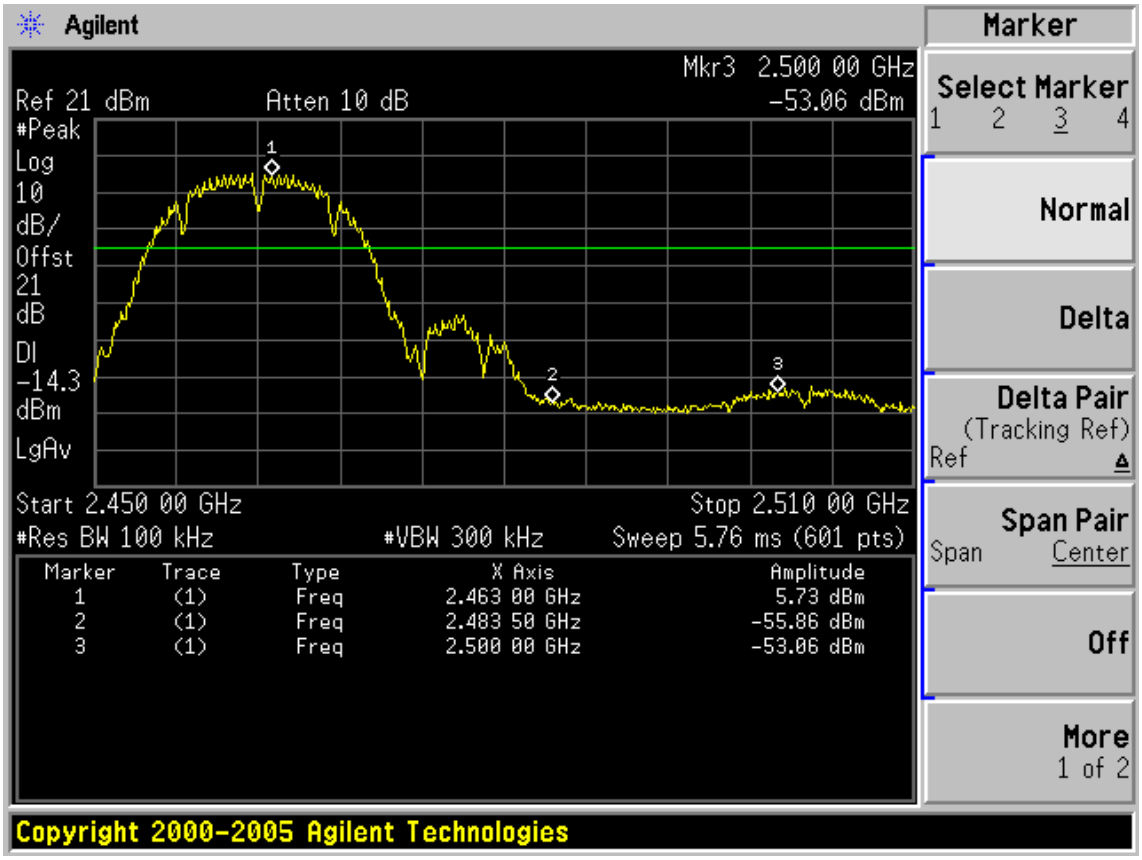
Test CH6: 2437MHz

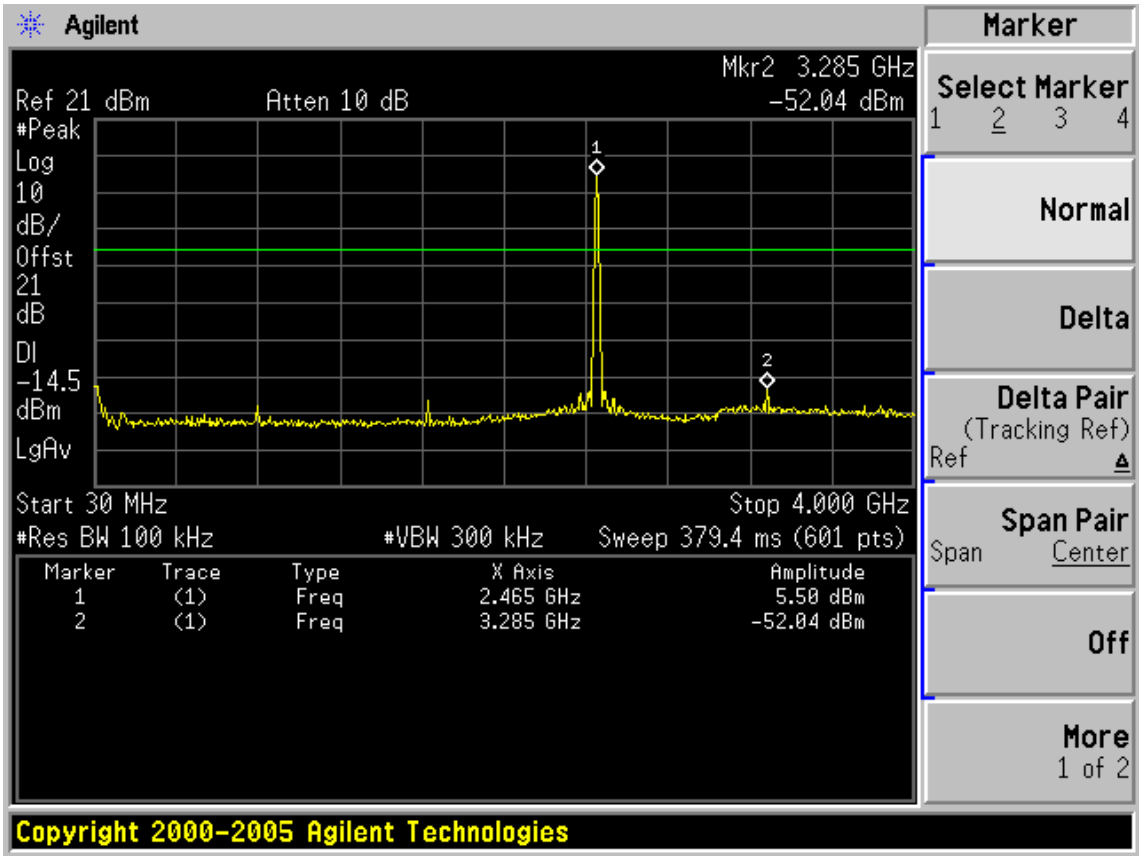


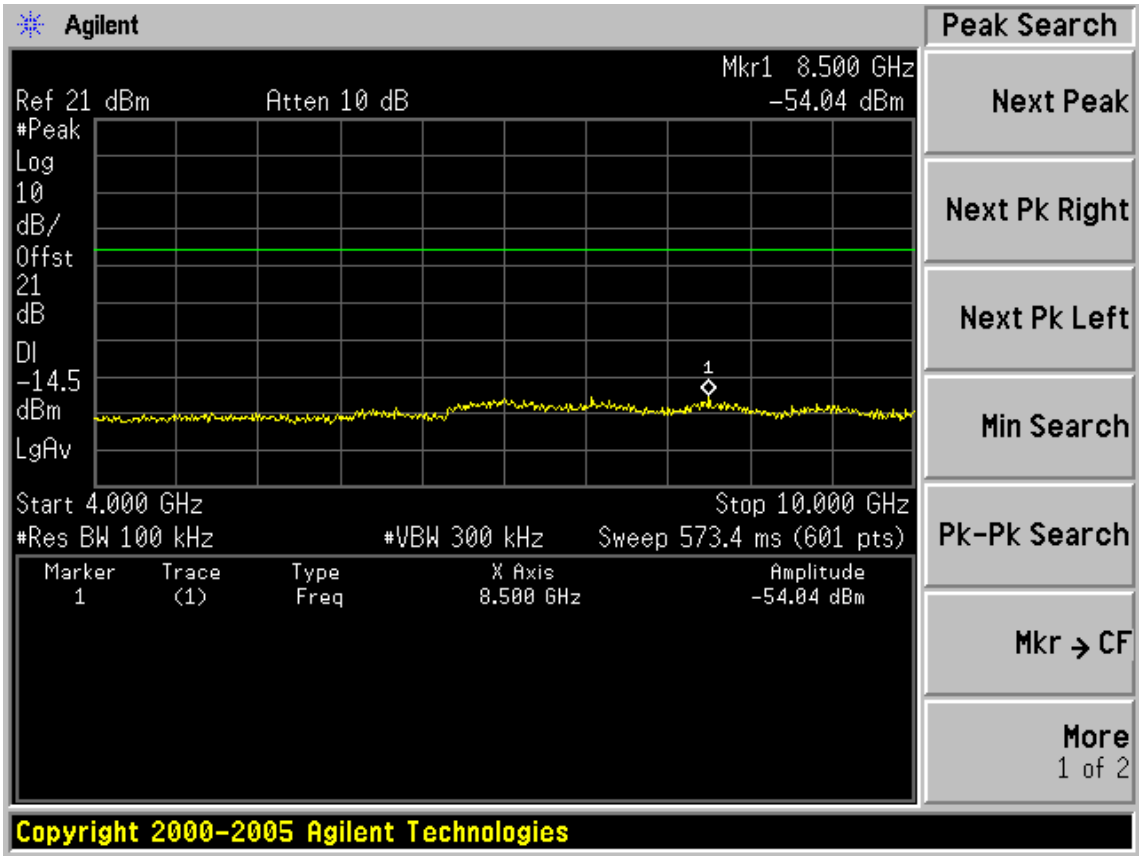


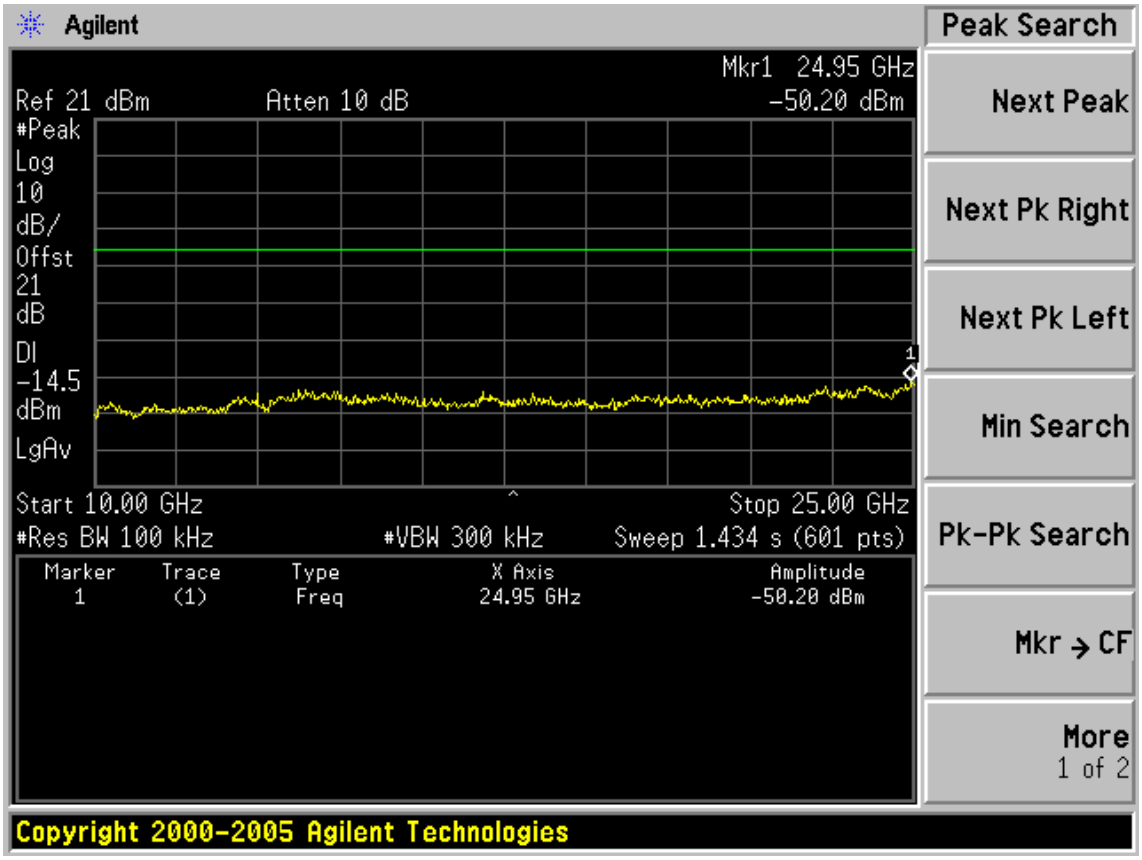


Test CH11: 2462MHz

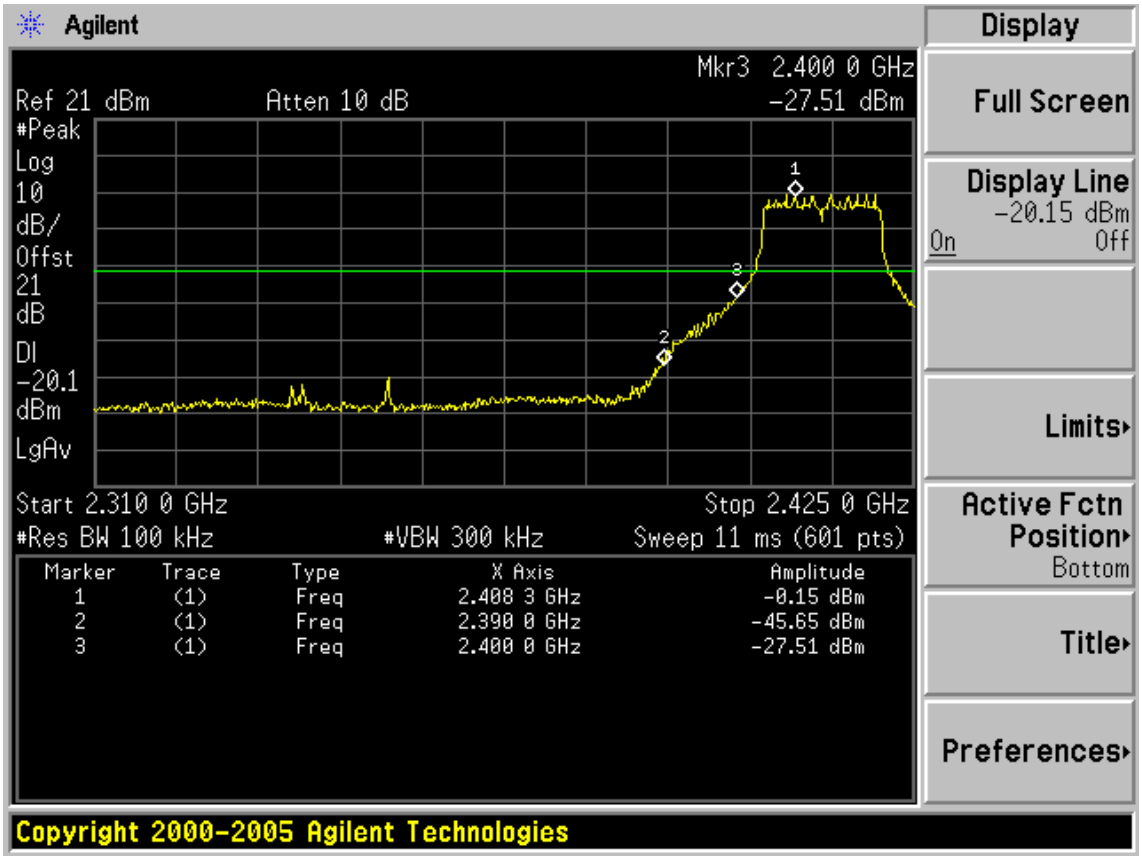


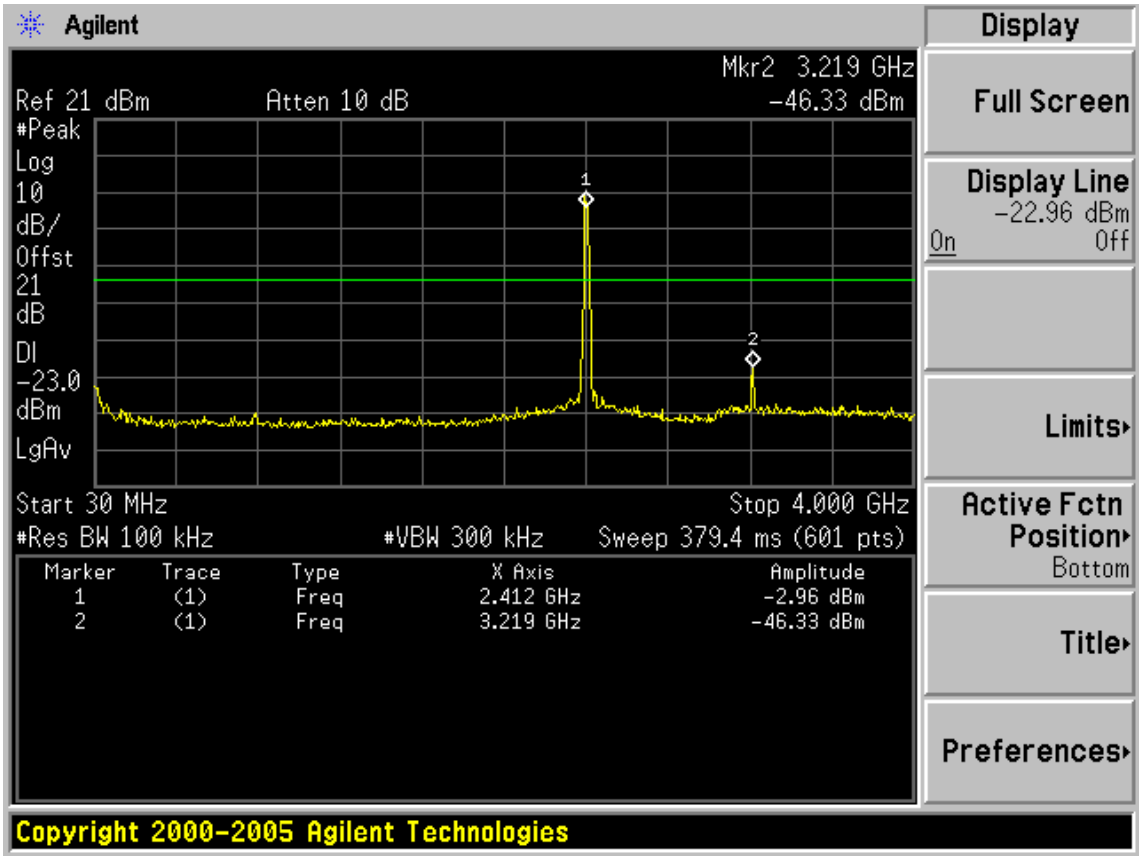

Agilent
Marker
Mkr2 3.285 GHz
Ref 21 dBm
Atten 10 dB
-52.04 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.5
dBm
LgAv
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.465 GHz 5.50 dBm
2 (1) Freq 3.285 GHz -52.04 dBm
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref
Span Pair
Span Center
Off
More
1 of 2
Copyright 2000-2005 Agilent Technologies

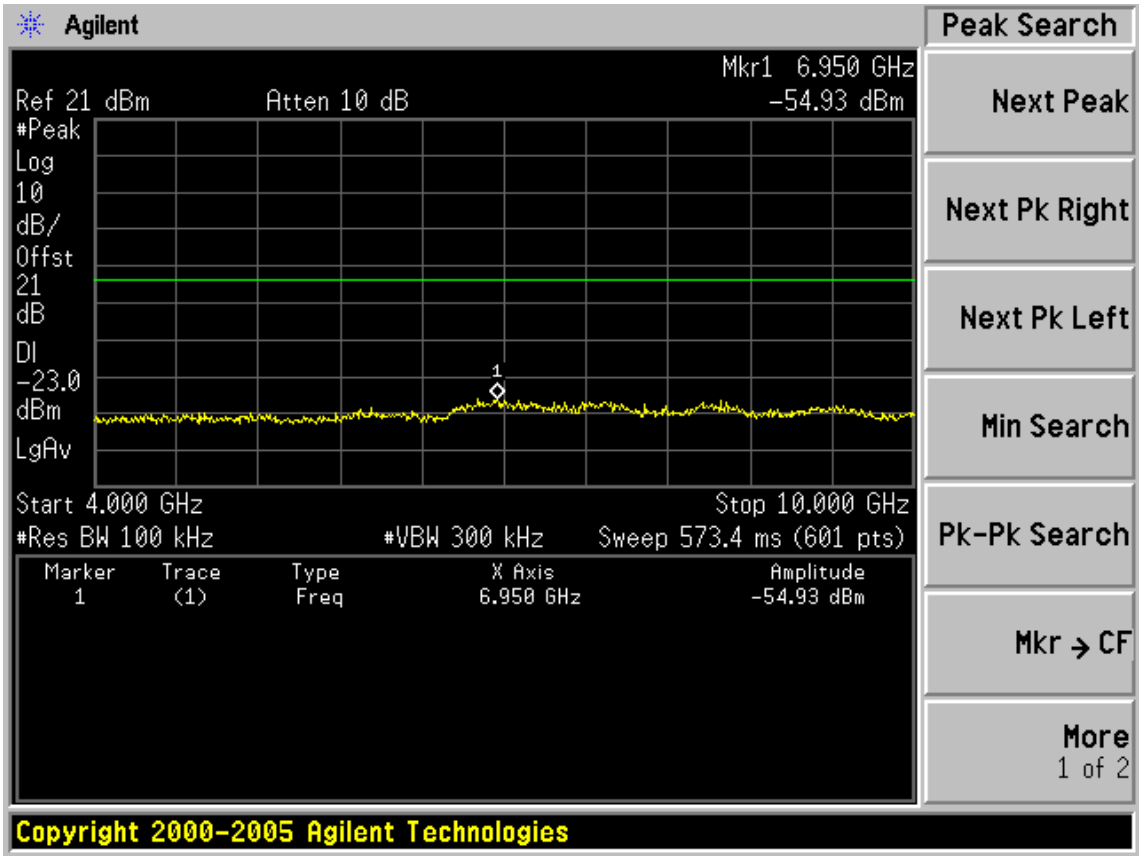

Agilent
Peak Search
Mkr1 8.500 GHz
Ref 21 dBm
Atten 10 dB
-54.04 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-14.5
dBm
LgAv
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 8.500 GHz -54.04 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies

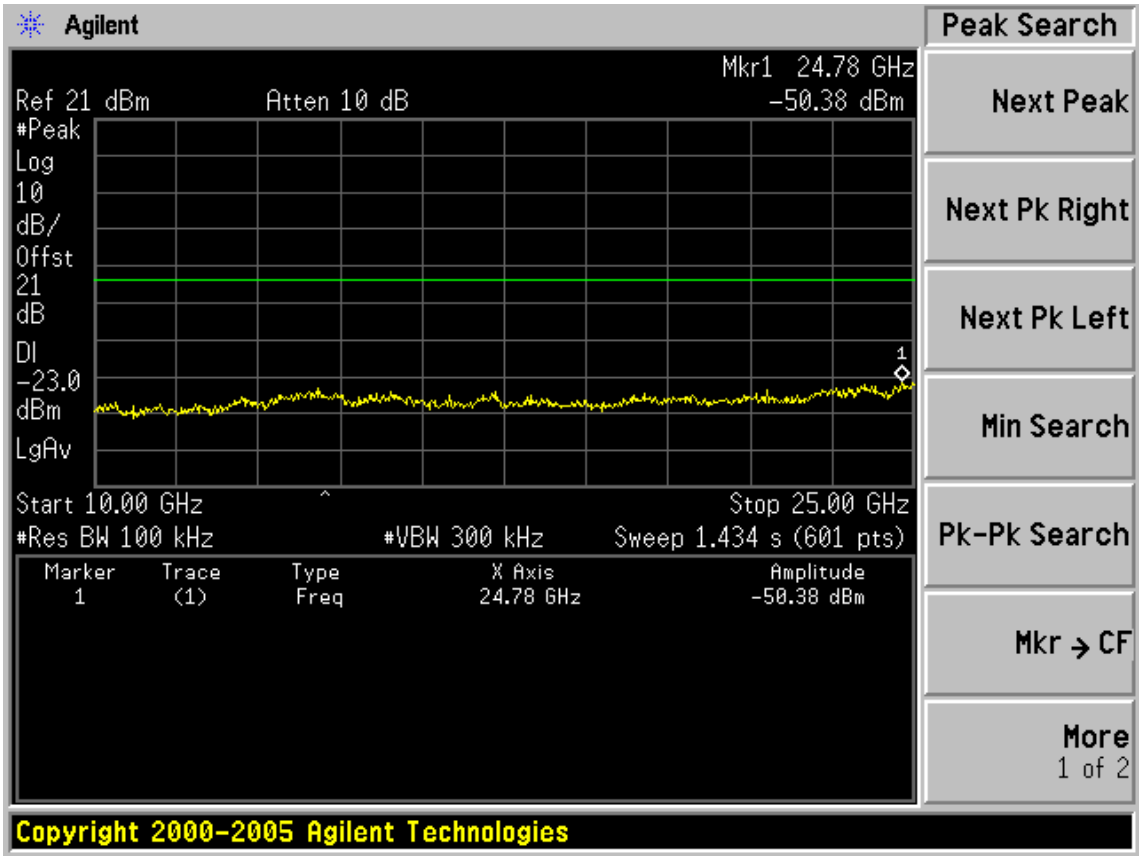


Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

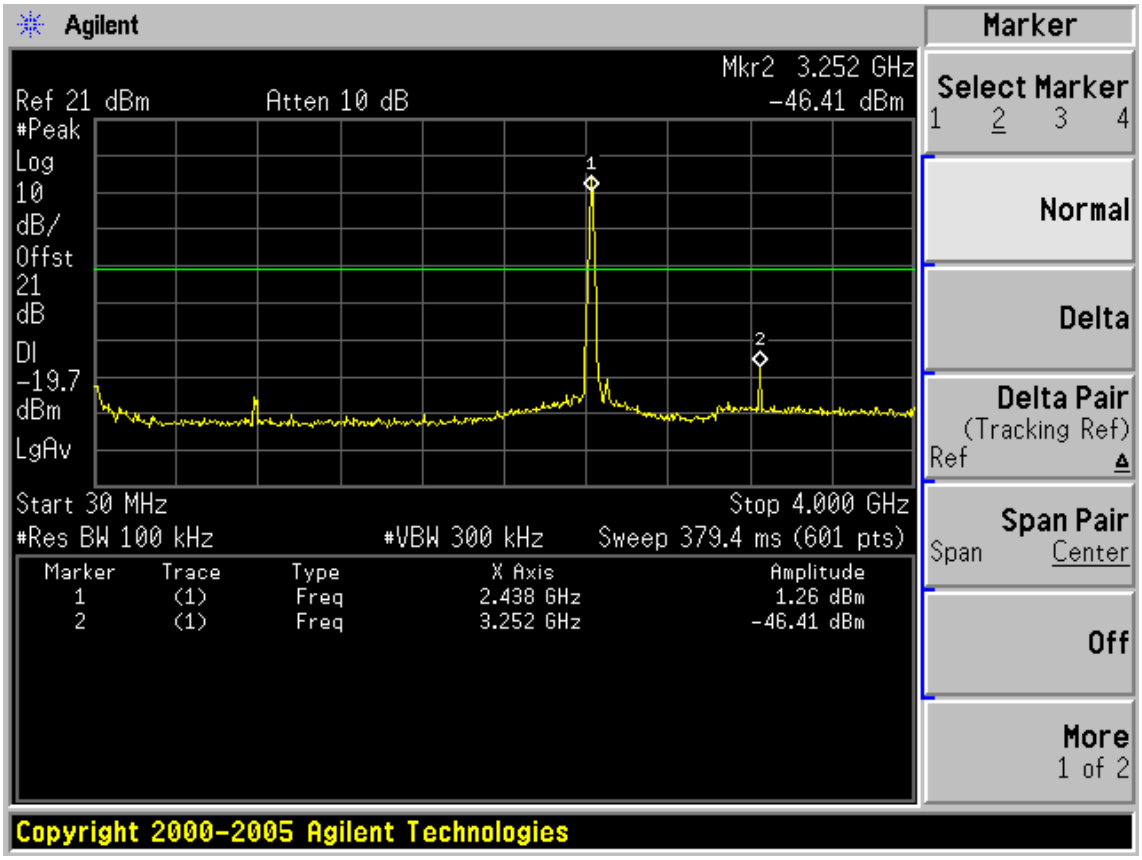


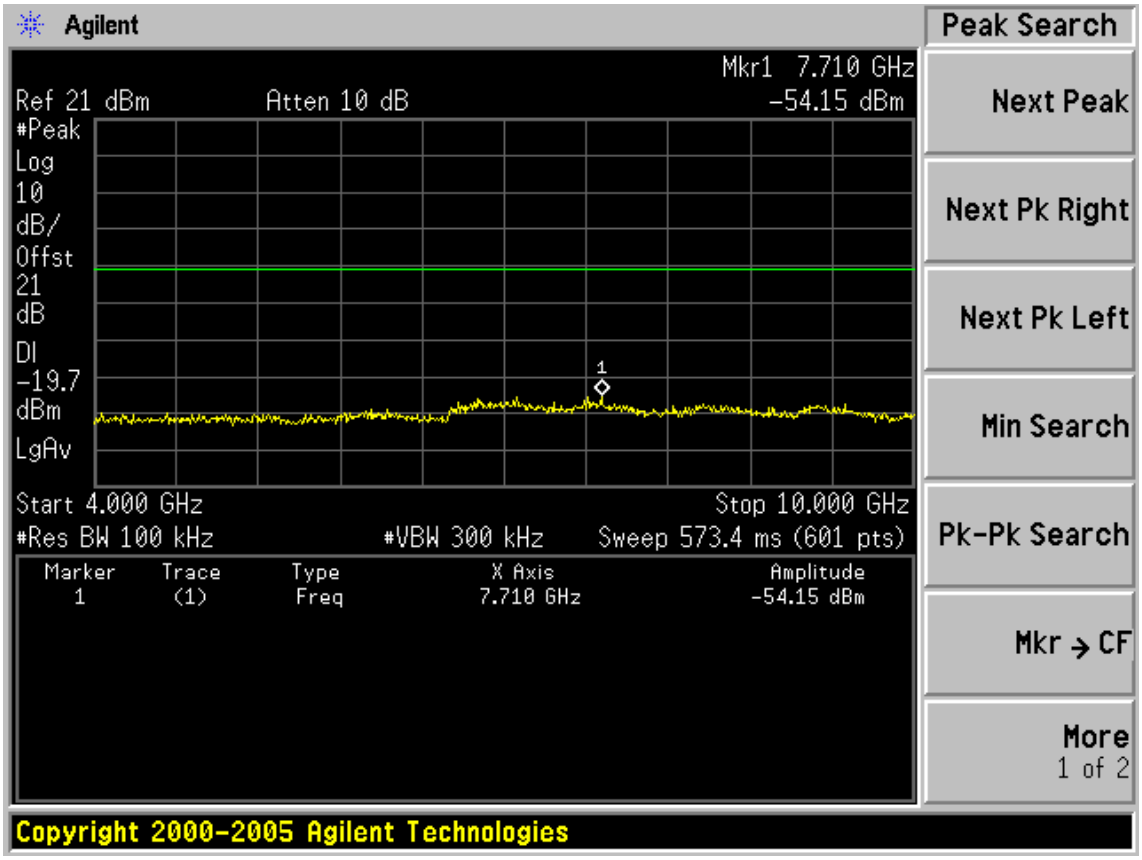

Agilent
Display
Mkr2 3.219 GHz
Ref 21 dBm
Atten 10 dB
-46.33 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.0
dBm
LgAv
1
2
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.412 GHz -2.96 dBm
2 (1) Freq 3.219 GHz -46.33 dBm
Full Screen
Display Line
-22.96 dBm
On Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Copyright 2000-2005 Agilent Technologies

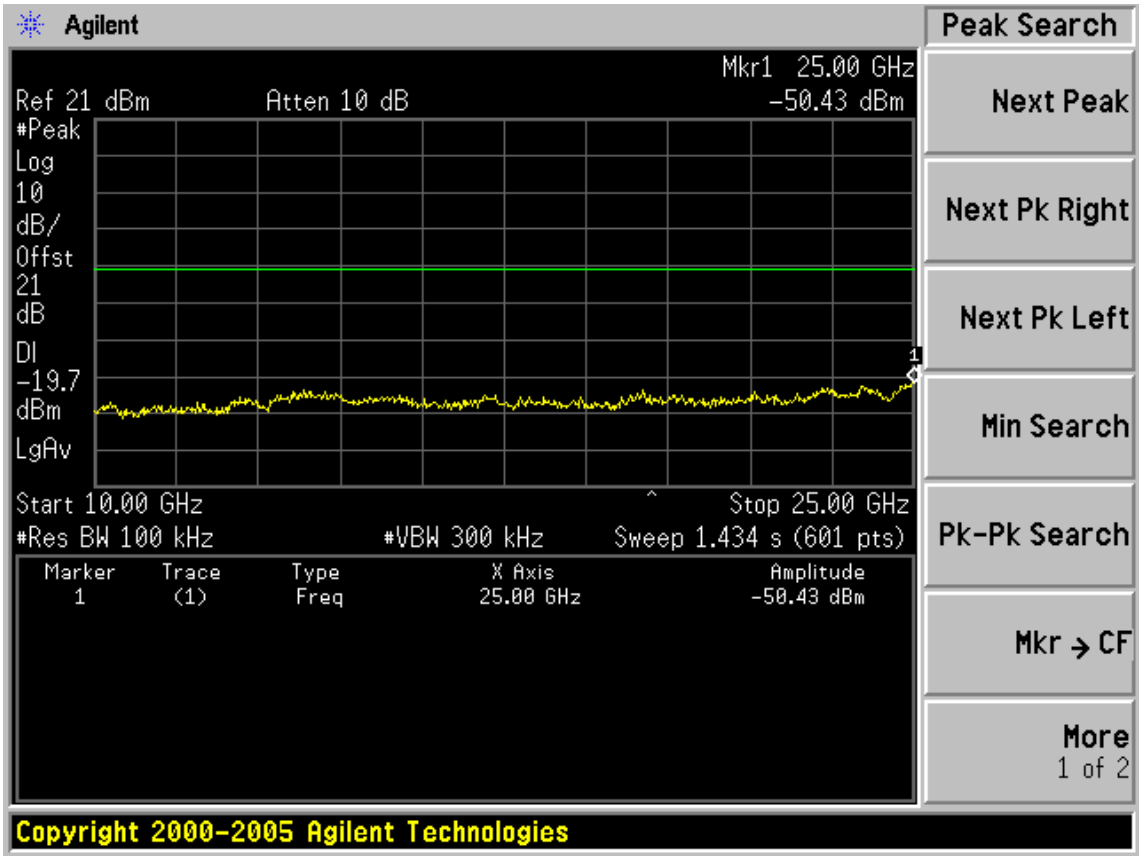

Agilent
Peak Search
Mkr1 6.950 GHz
Ref 21 dBm
Atten 10 dB
-54.93 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.0
dBm
LgAv
1
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.950 GHz -54.93 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies



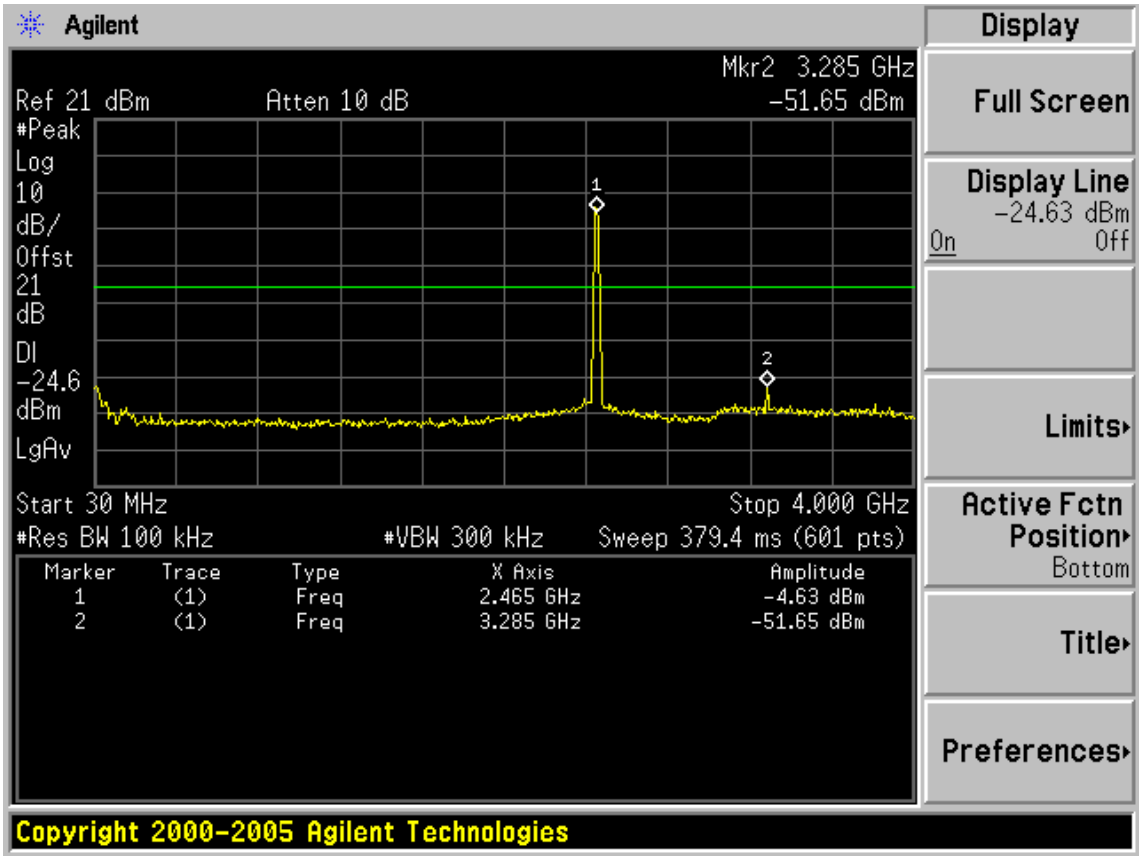
Test CH6: 2437MHz

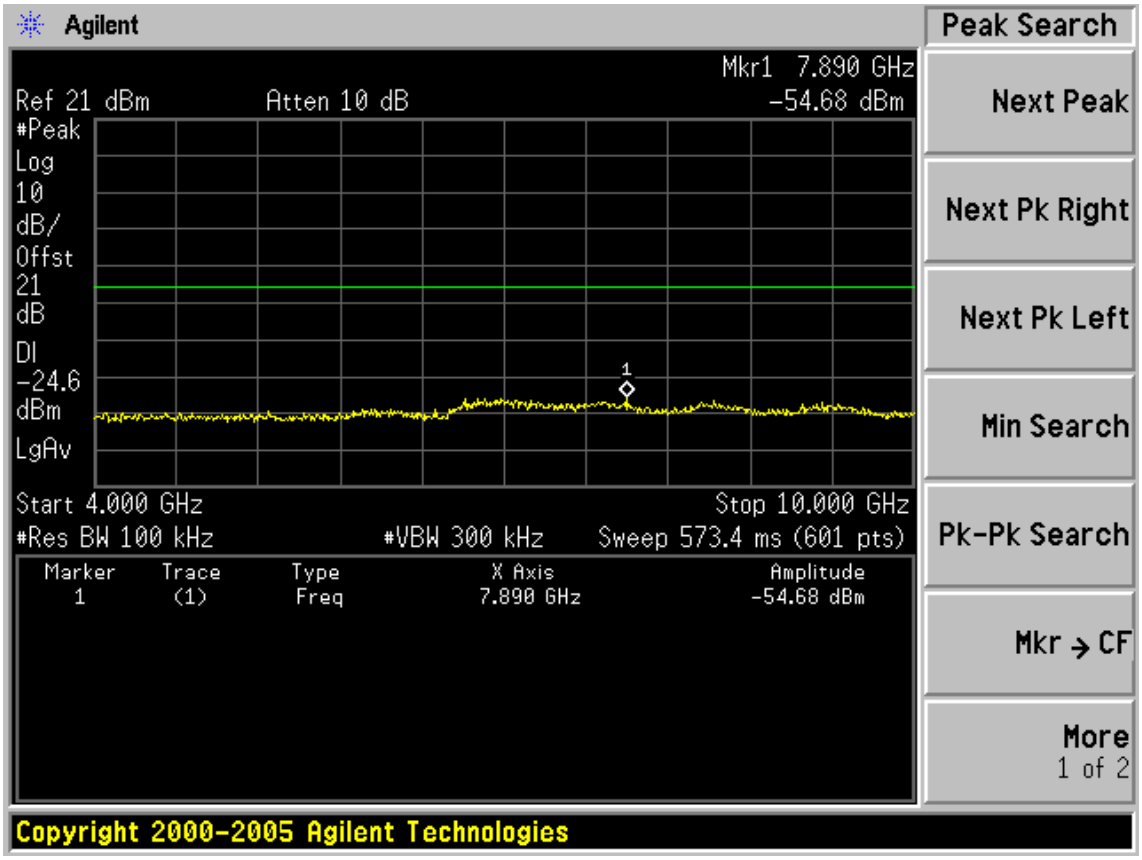


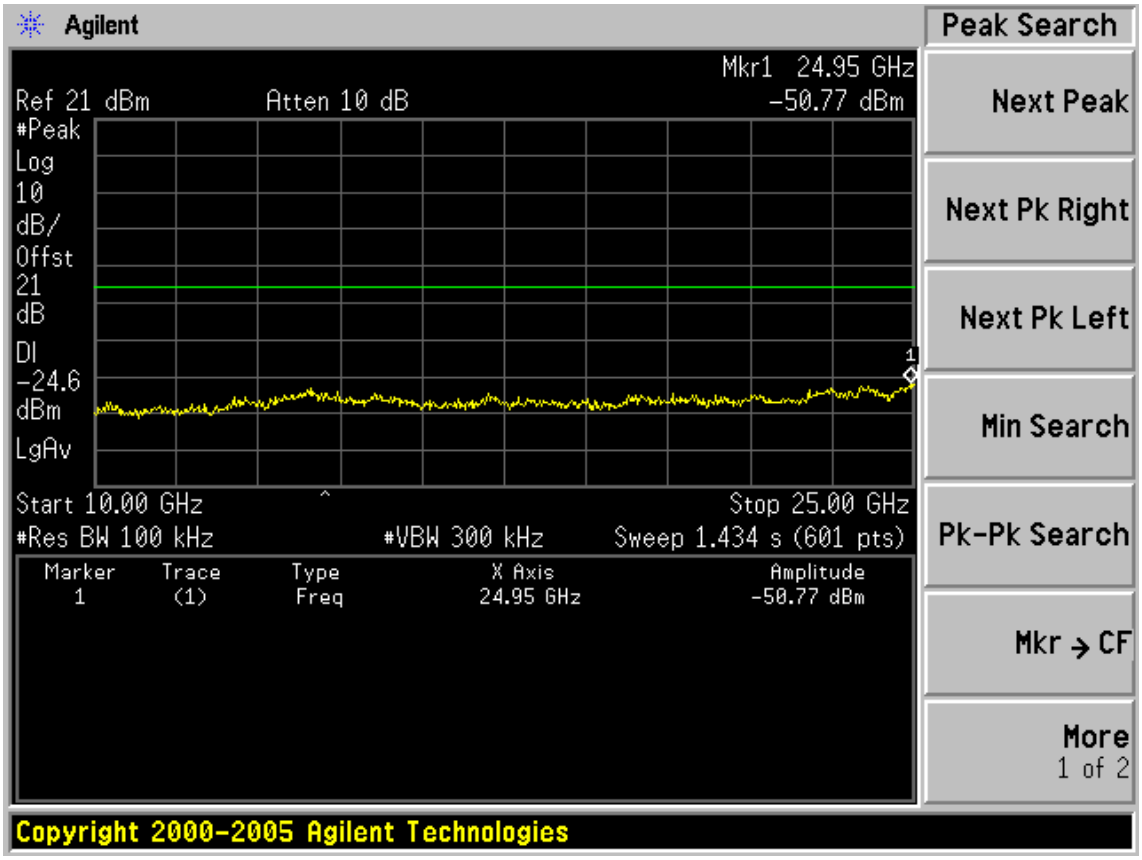

Agilent
Peak Search
Mkr1 7.710 GHz
Ref 21 dBm
Atten 10 dB
-54.15 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.710 GHz -54.15 dBm
Copyright 2000-2005 Agilent Technologies

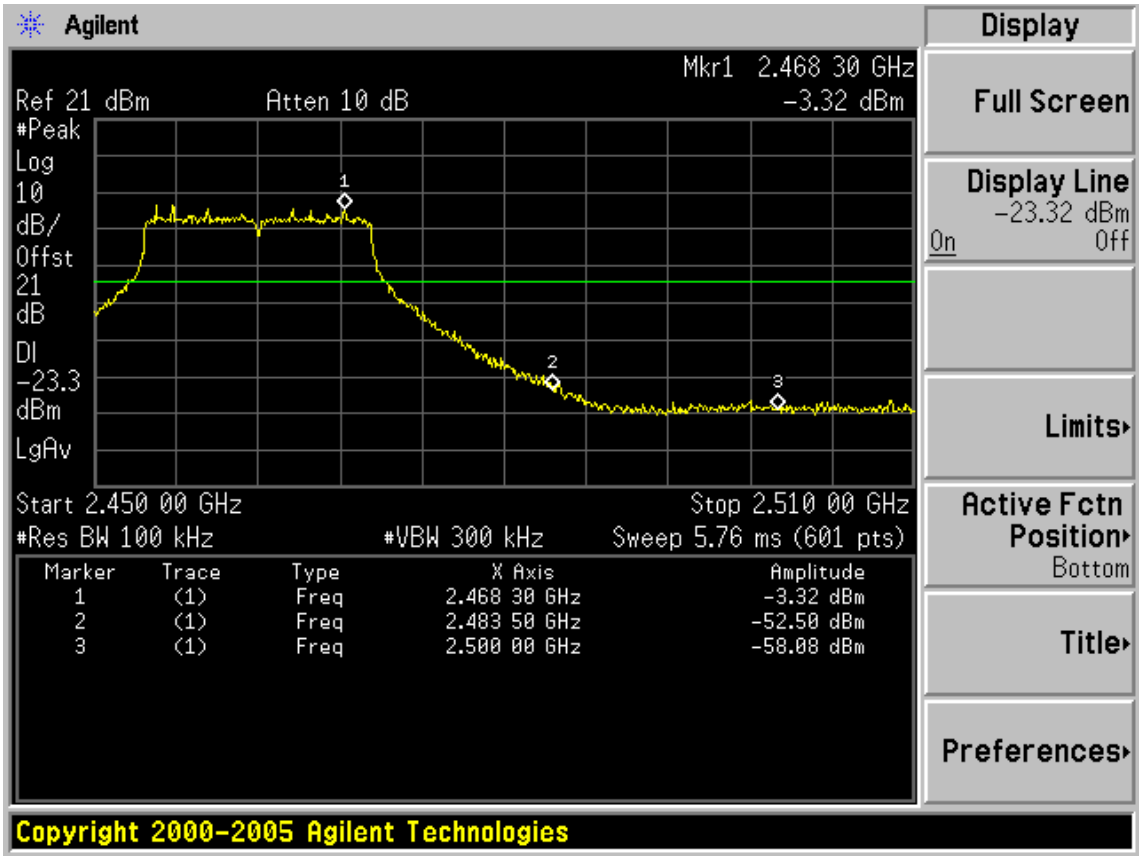

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-50.43 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -50.43 dBm
Copyright 2000-2005 Agilent Technologies

Test CH11: 2462MHz

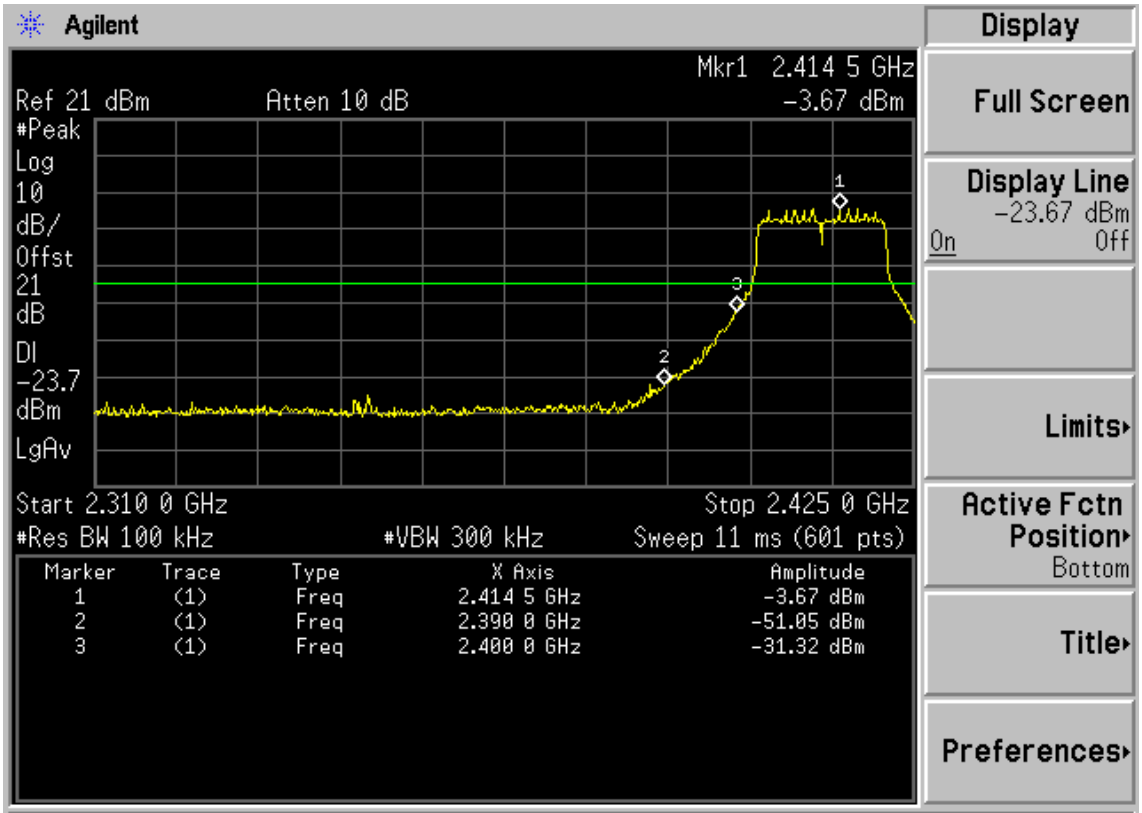


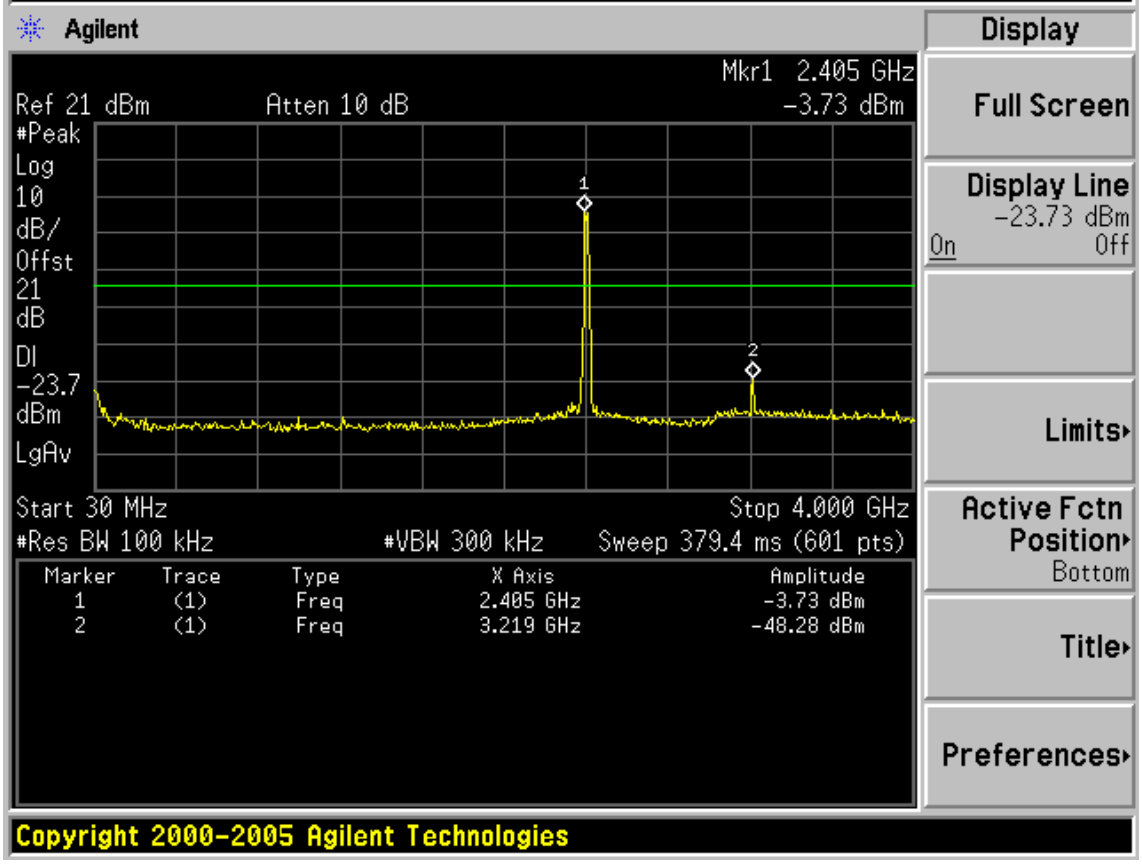


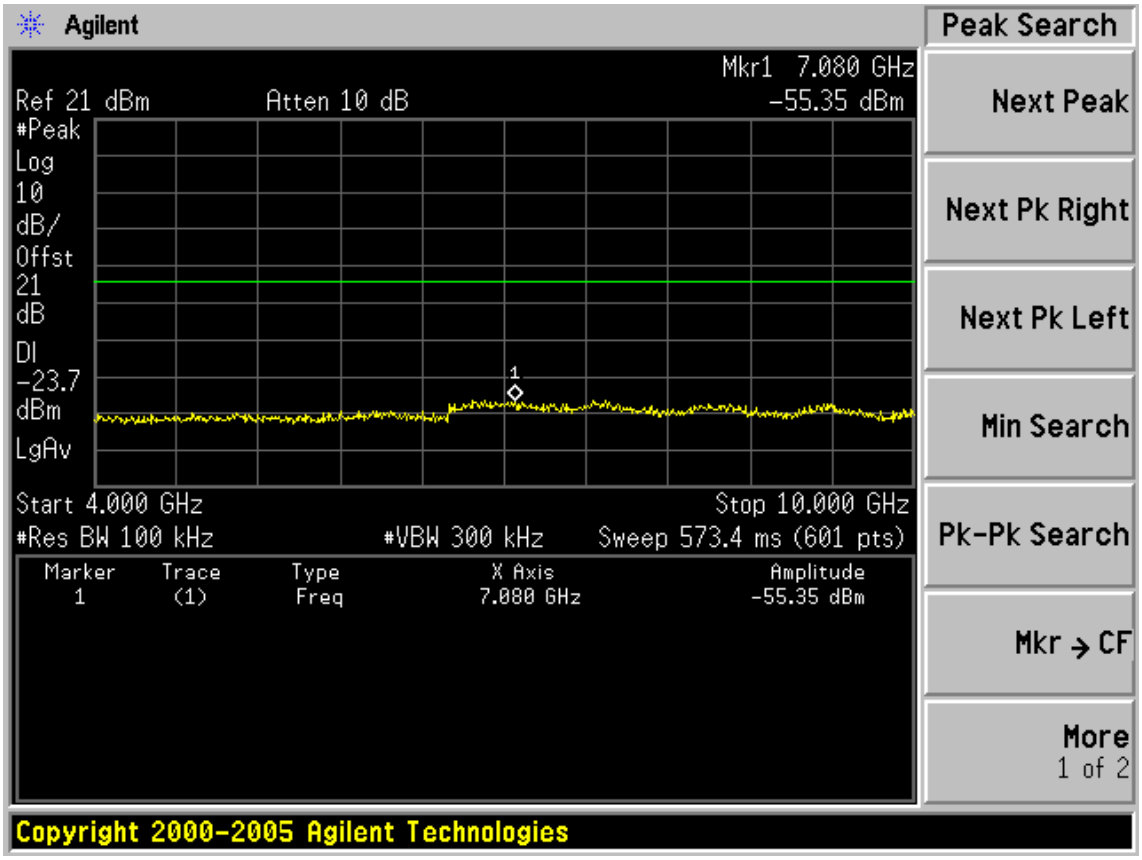

Agilent
Peak Search
Mkr1 24.95 GHz
Ref 21 dBm
Atten 10 dB
-50.77 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-24.6
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.95 GHz -50.77 dBm
Copyright 2000-2005 Agilent Technologies

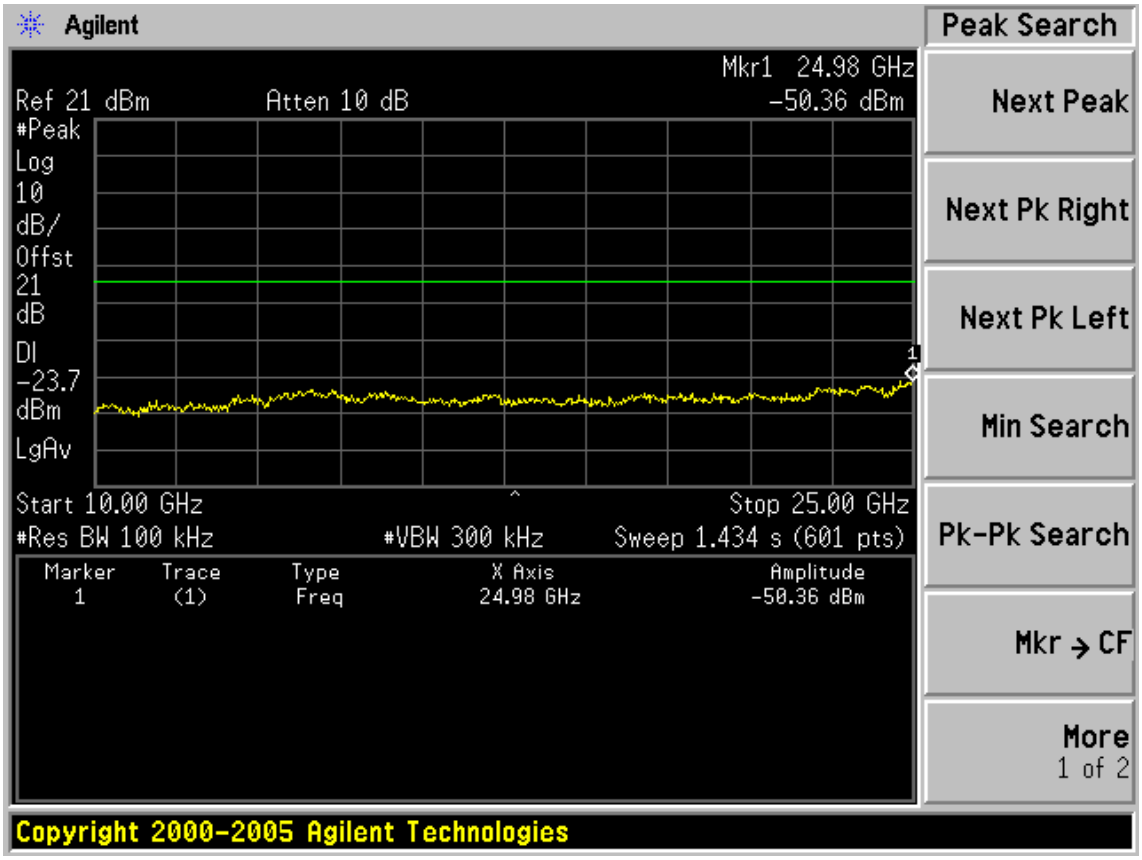

Agilent
Display
Mkr1 2.468 30 GHz
Ref 21 dBm
Atten 10 dB
-3.32 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.3
dBm
LgAv
Full Screen
Display Line
-23.32 dBm
On Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 2.450 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 5.76 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.468 30 GHz -3.32 dBm
2 (1) Freq 2.483 50 GHz -52.50 dBm
3 (1) Freq 2.500 00 GHz -58.08 dBm
Copyright 2000-2005 Agilent Technologies

Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

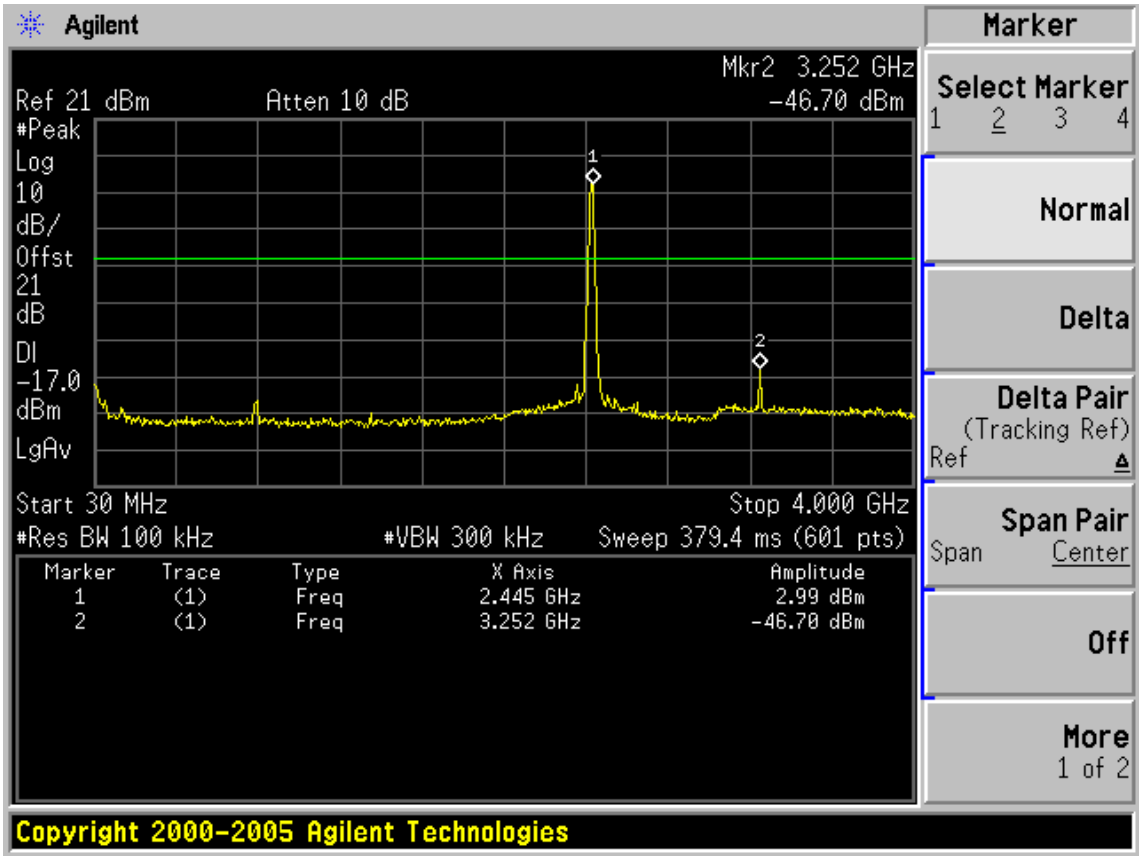


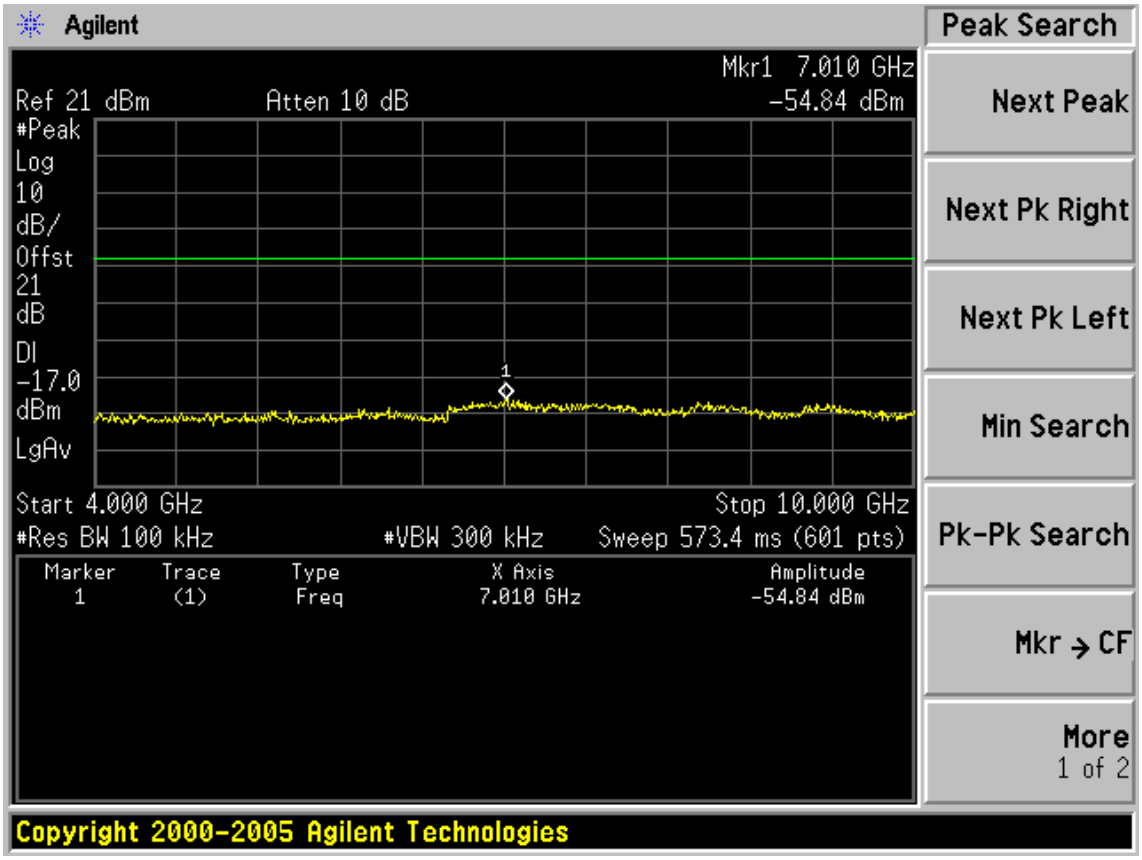


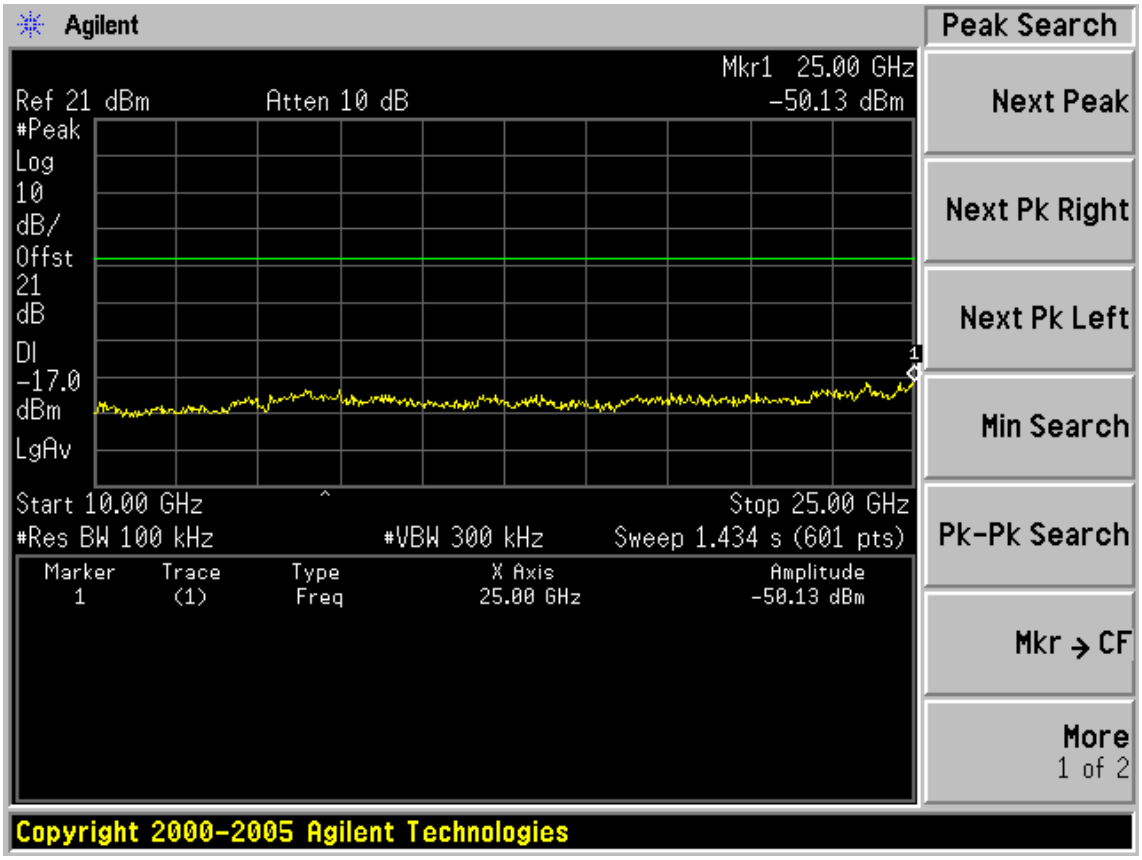

Agilent
Peak Search
Mkr1 7.080 GHz
Ref 21 dBm
Atten 10 dB
-55.35 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.080 GHz -55.35 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-50.36 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.7
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -50.36 dBm
Copyright 2000-2005 Agilent Technologies

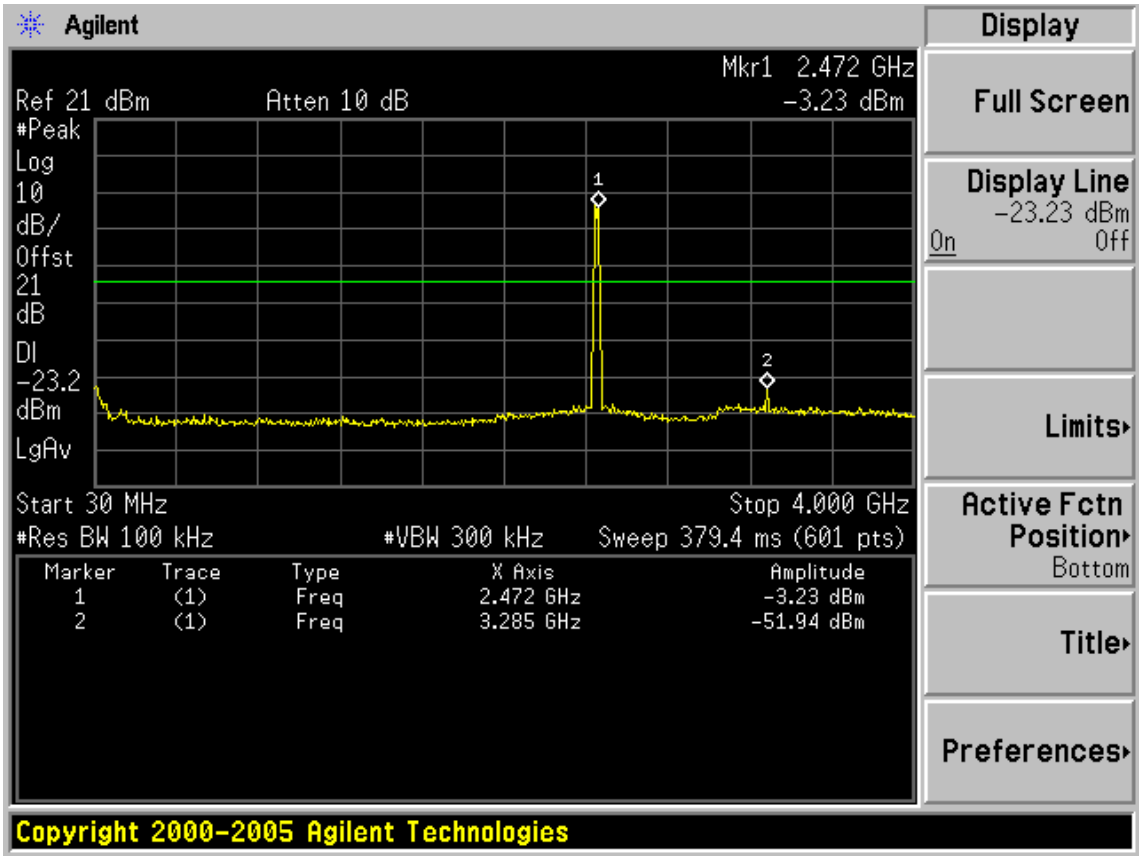
Test CH6: 2437MHz

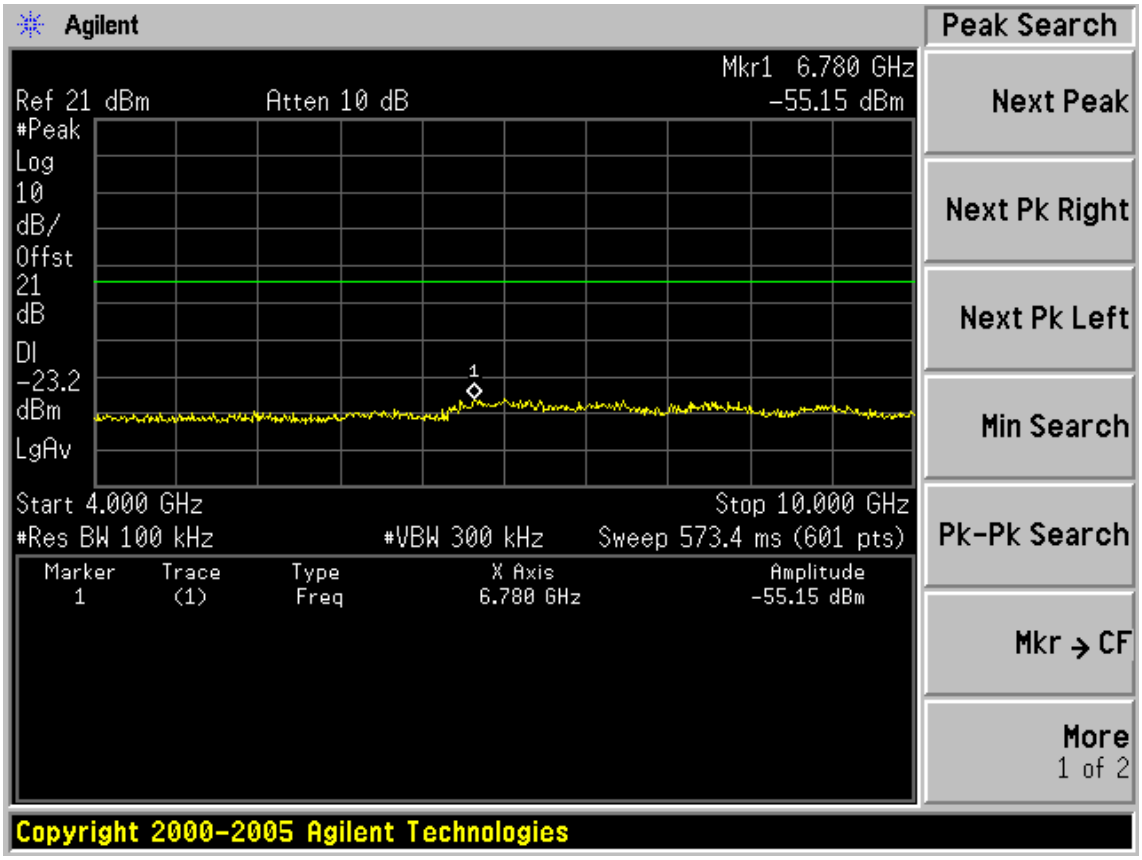


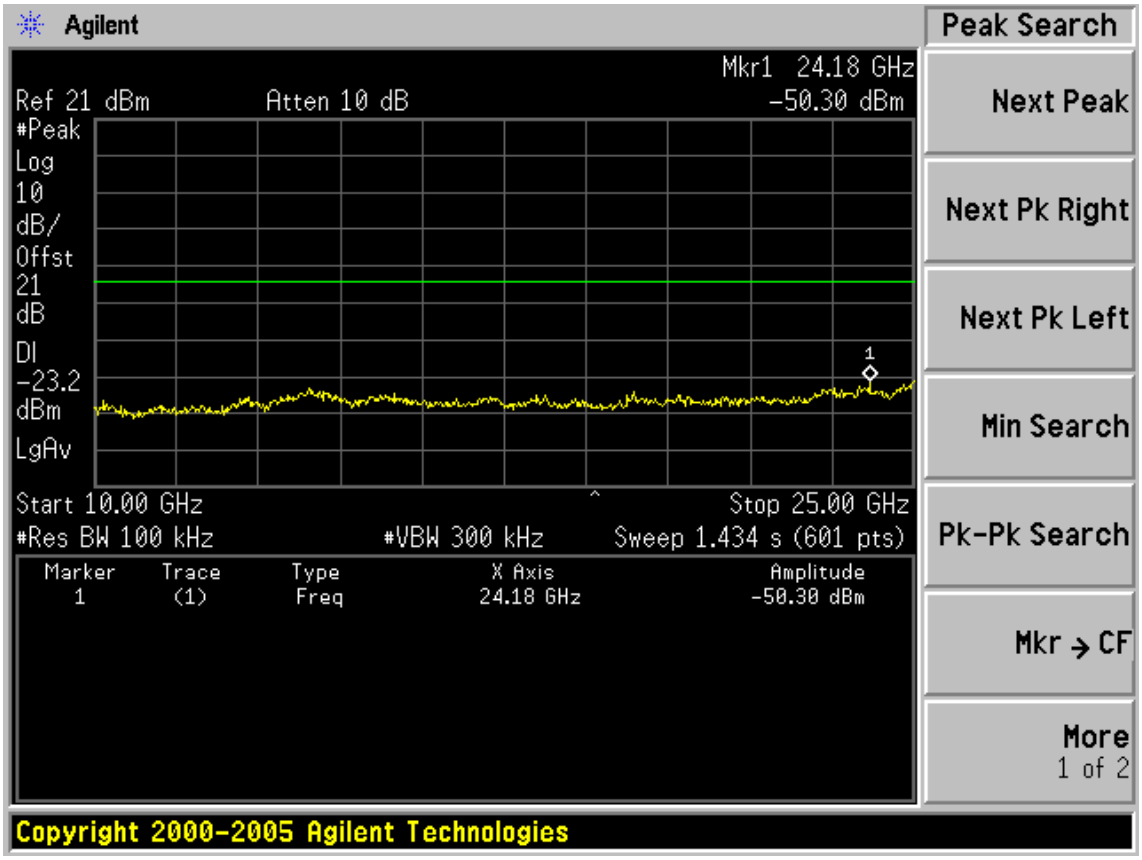


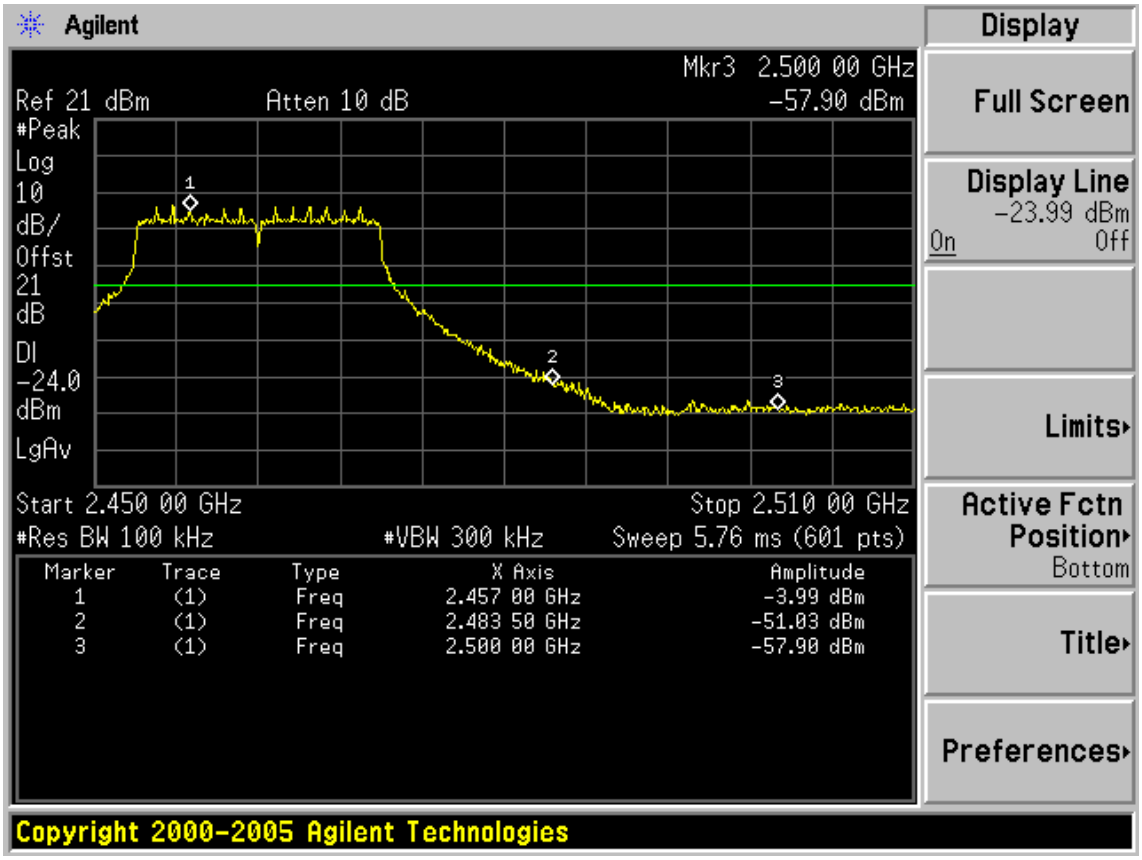


Test CH11: 2462MHz

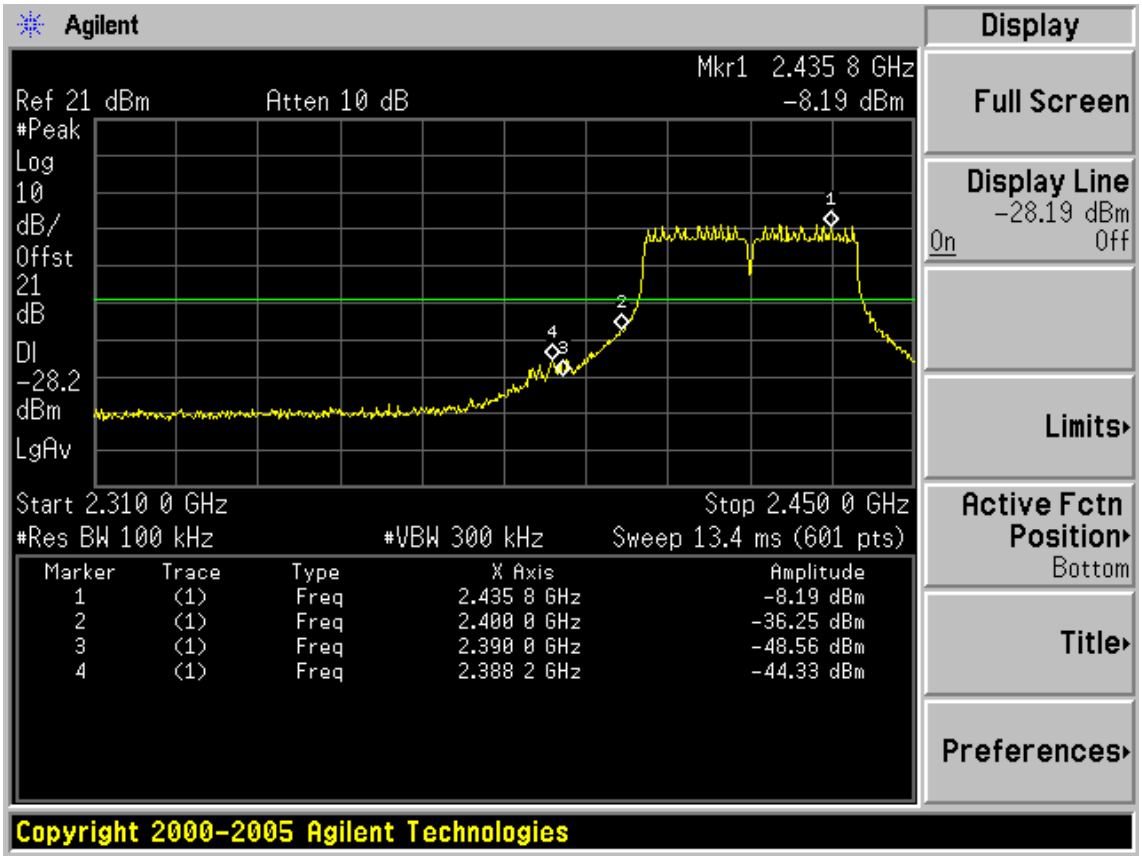


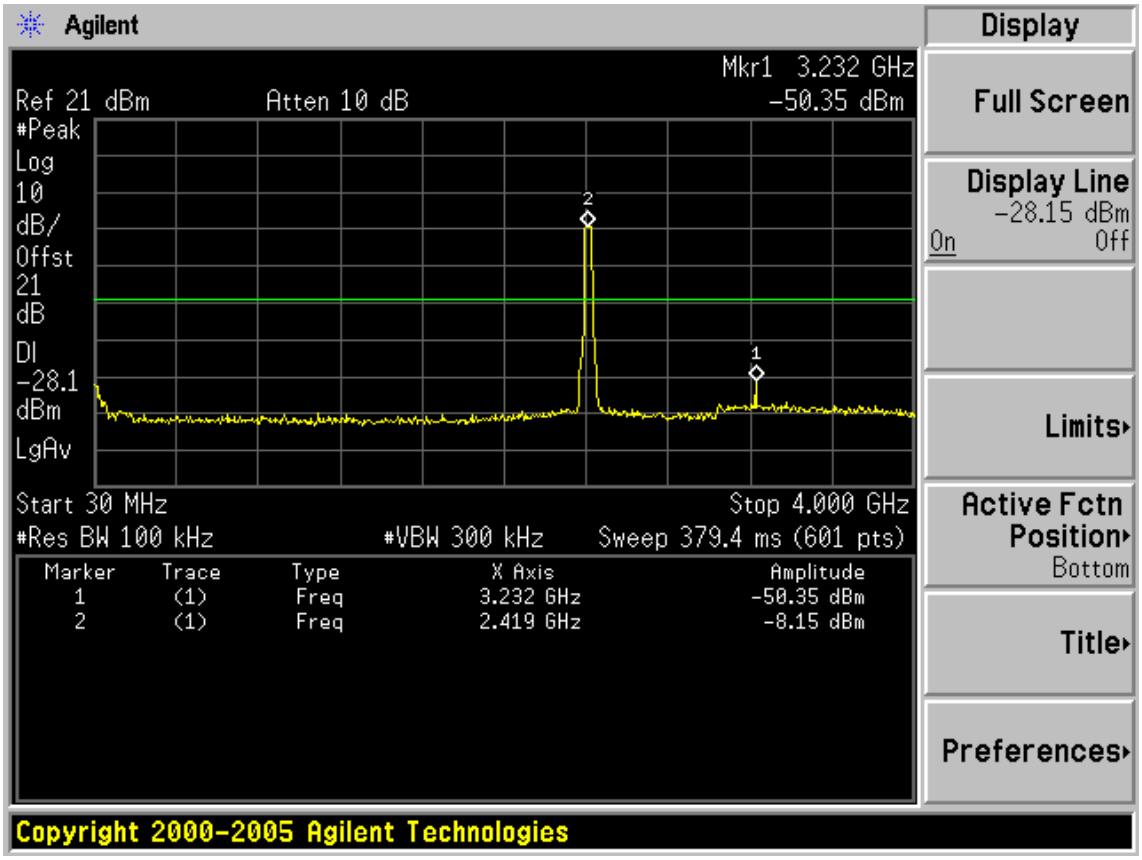

Agilent
Peak Search
Mkr1 6.780 GHz
Ref 21 dBm
Atten 10 dB
-55.15 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.2
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.780 GHz -55.15 dBm
Copyright 2000-2005 Agilent Technologies

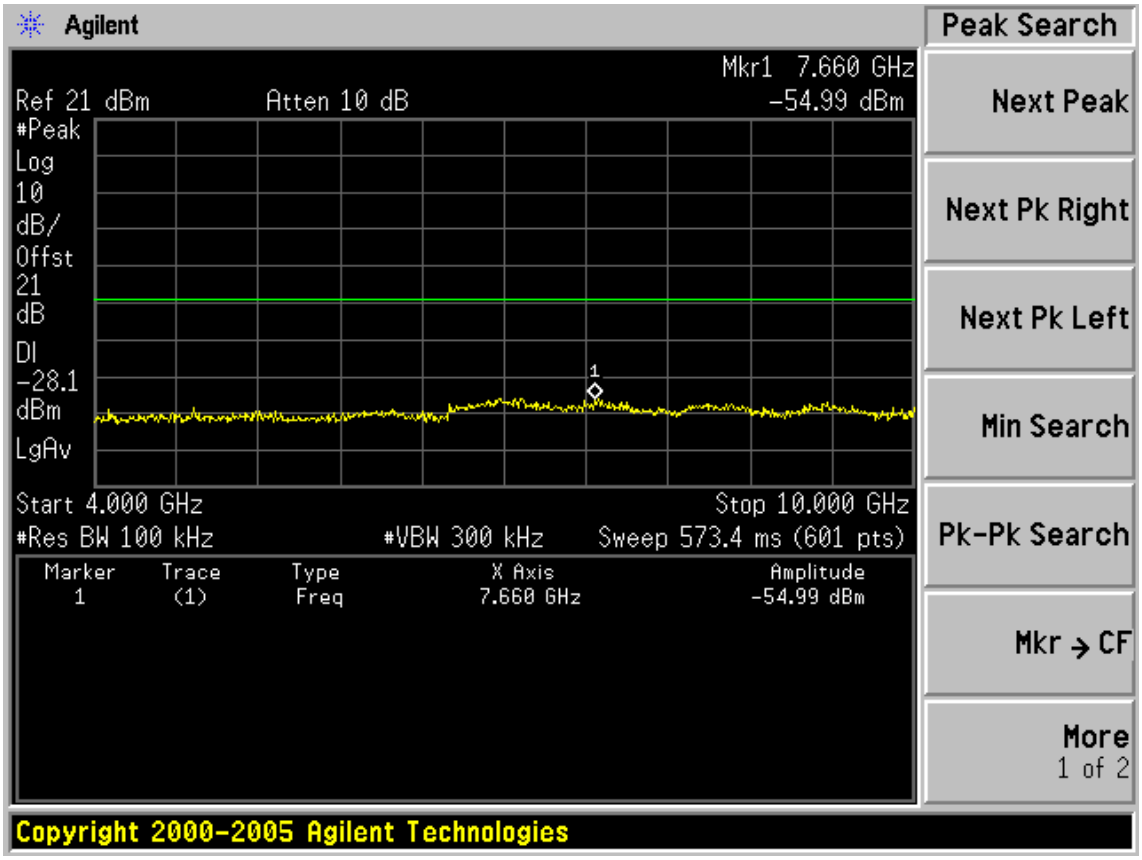

Agilent
Peak Search
Mkr1 24.18 GHz
Ref 21 dBm
Atten 10 dB
-50.30 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-23.2
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.18 GHz -50.30 dBm
Copyright 2000-2005 Agilent Technologies

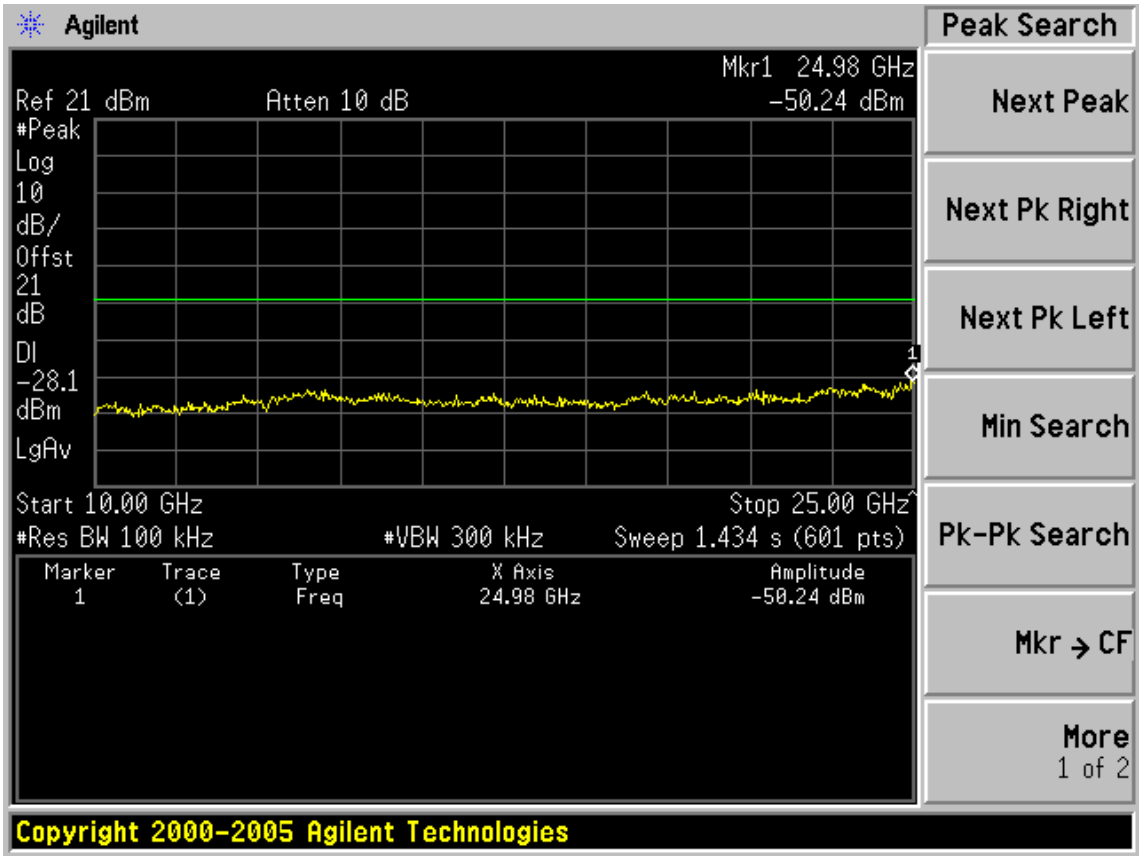


Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

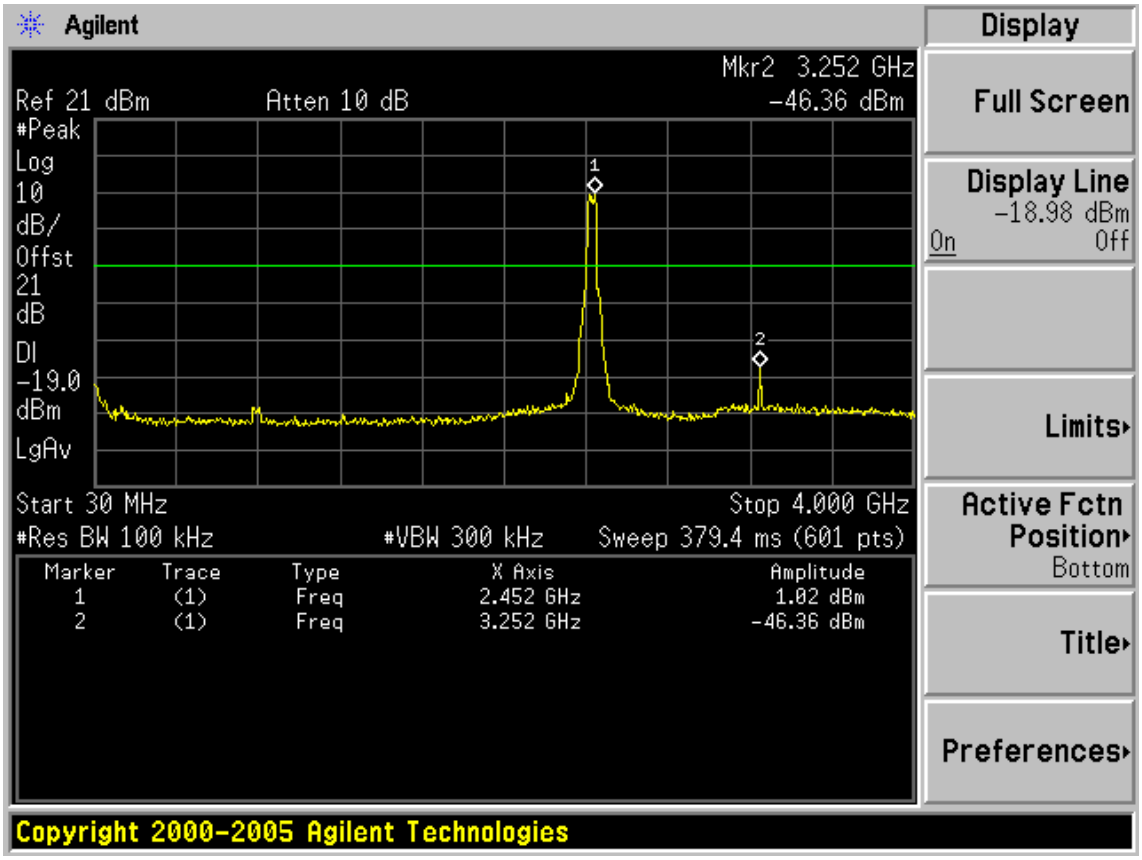


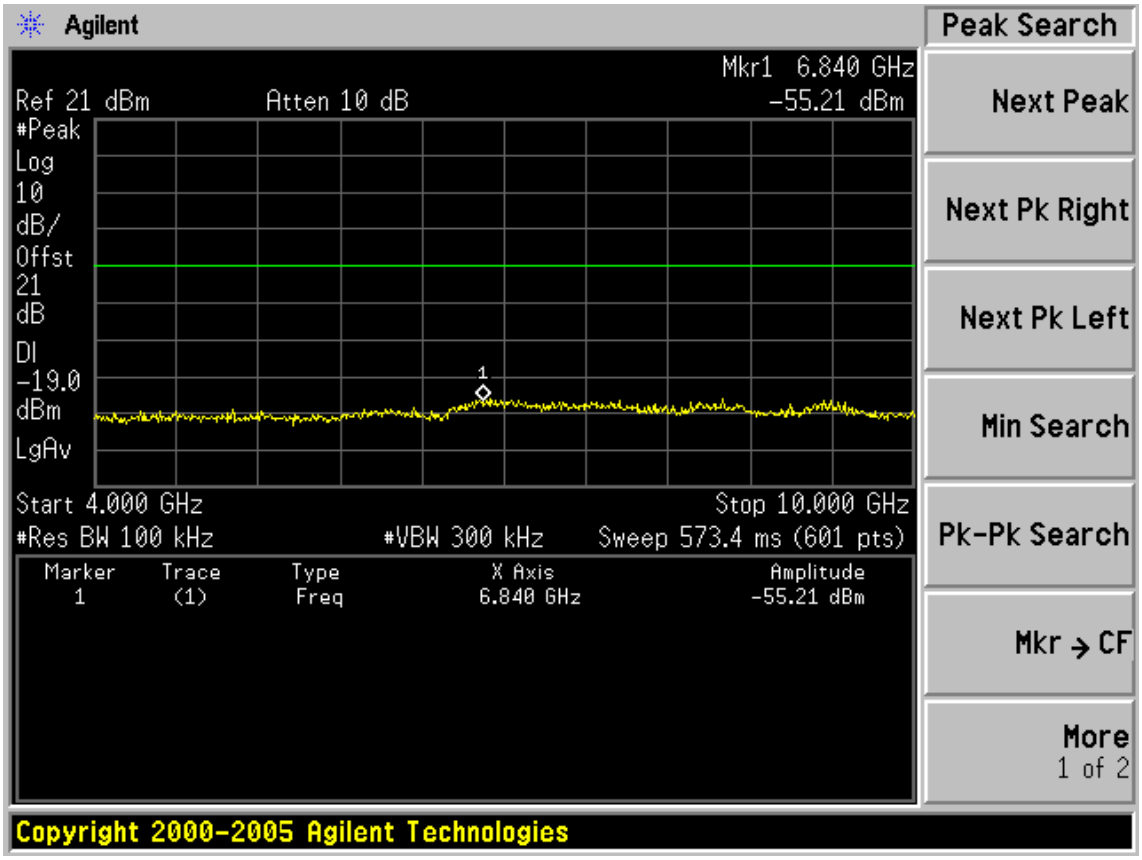

Agilent
Display
Mkr1 3.232 GHz
Ref 21 dBm
Atten 10 dB
-50.35 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.1
dBm
LgAv
Full Screen
Display Line
-28.15 dBm
On
Off
Limits
Start 30 MHz
Stop 4.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 379.4 ms (601 pts)
Active Fctn
Position
Bottom
Marker Trace Type X Axis Amplitude
1 (1) Freq 3.232 GHz -50.35 dBm
2 (1) Freq 2.419 GHz -8.15 dBm
Title
Preferences
Copyright 2000-2005 Agilent Technologies

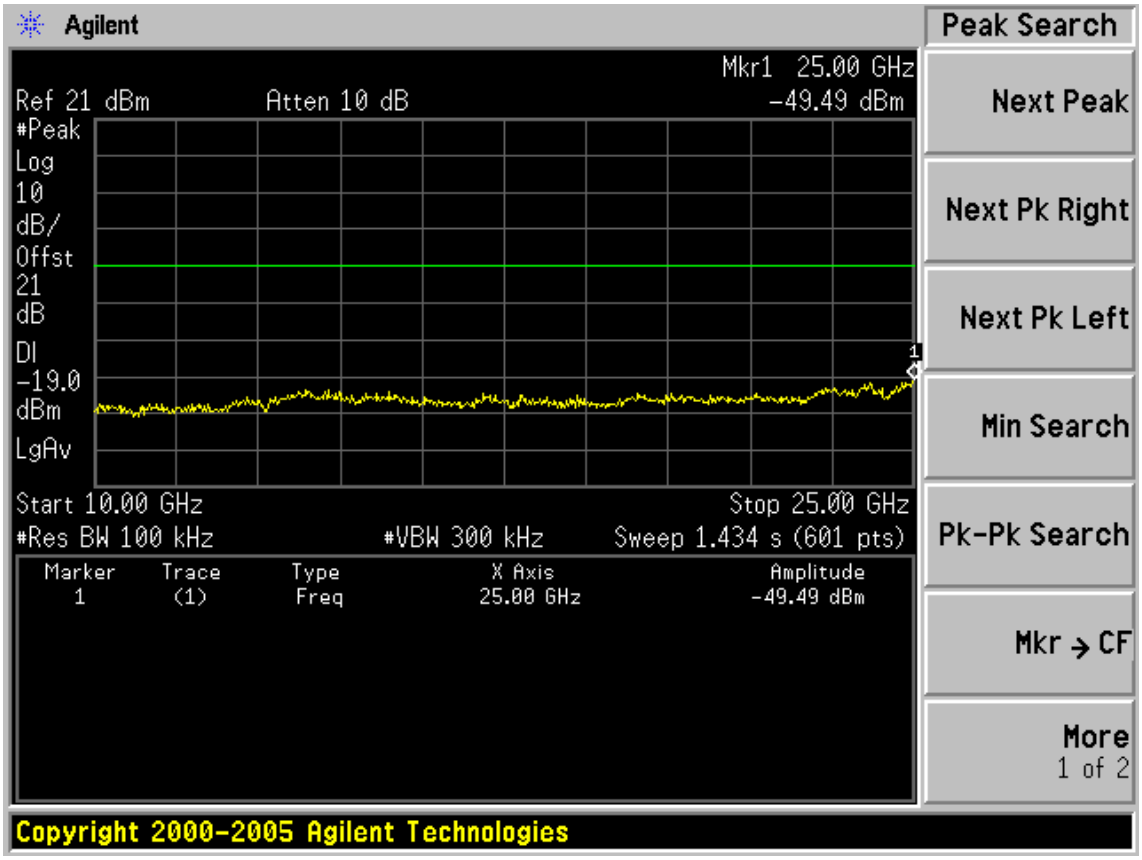

Agilent
Peak Search
Mkr1 7.660 GHz
Ref 21 dBm
Atten 10 dB
-54.99 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.1
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Pk-Pk Search
Marker Trace Type X Axis Amplitude
1 (1) Freq 7.660 GHz -54.99 dBm
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies



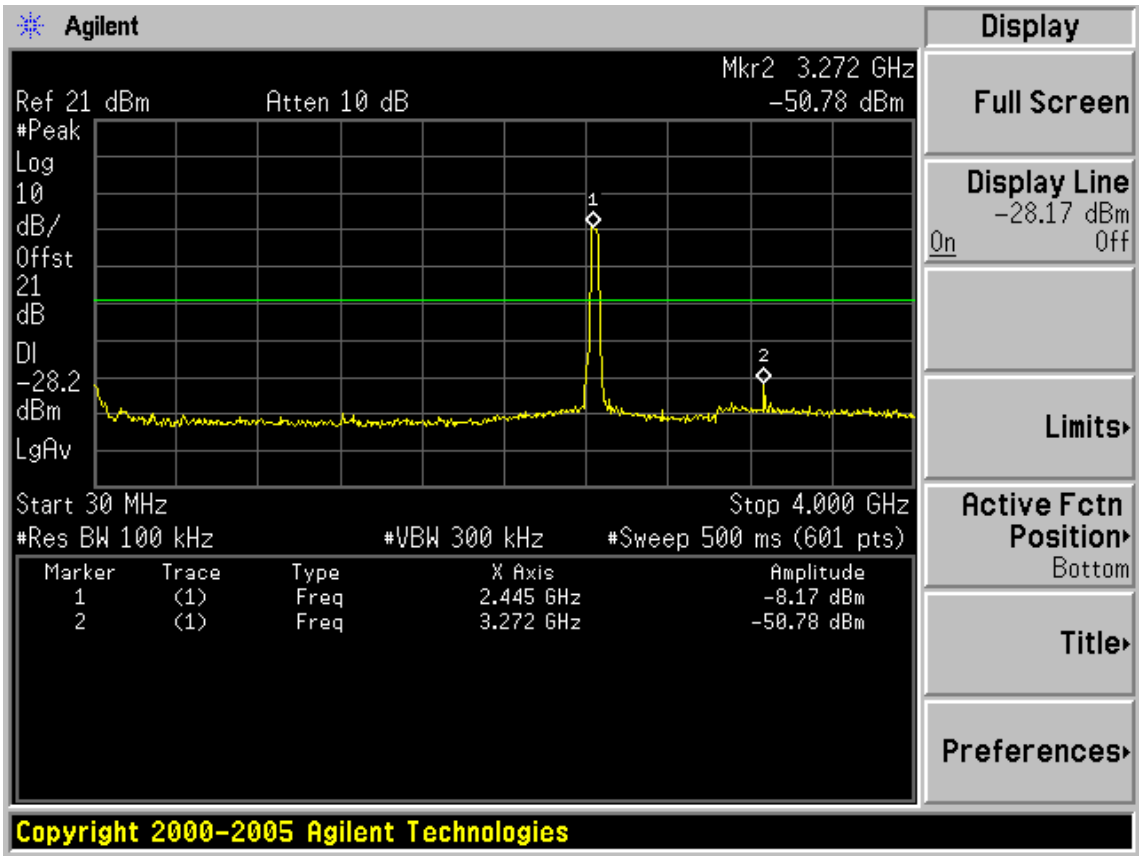
Test CH4: 2437MHz

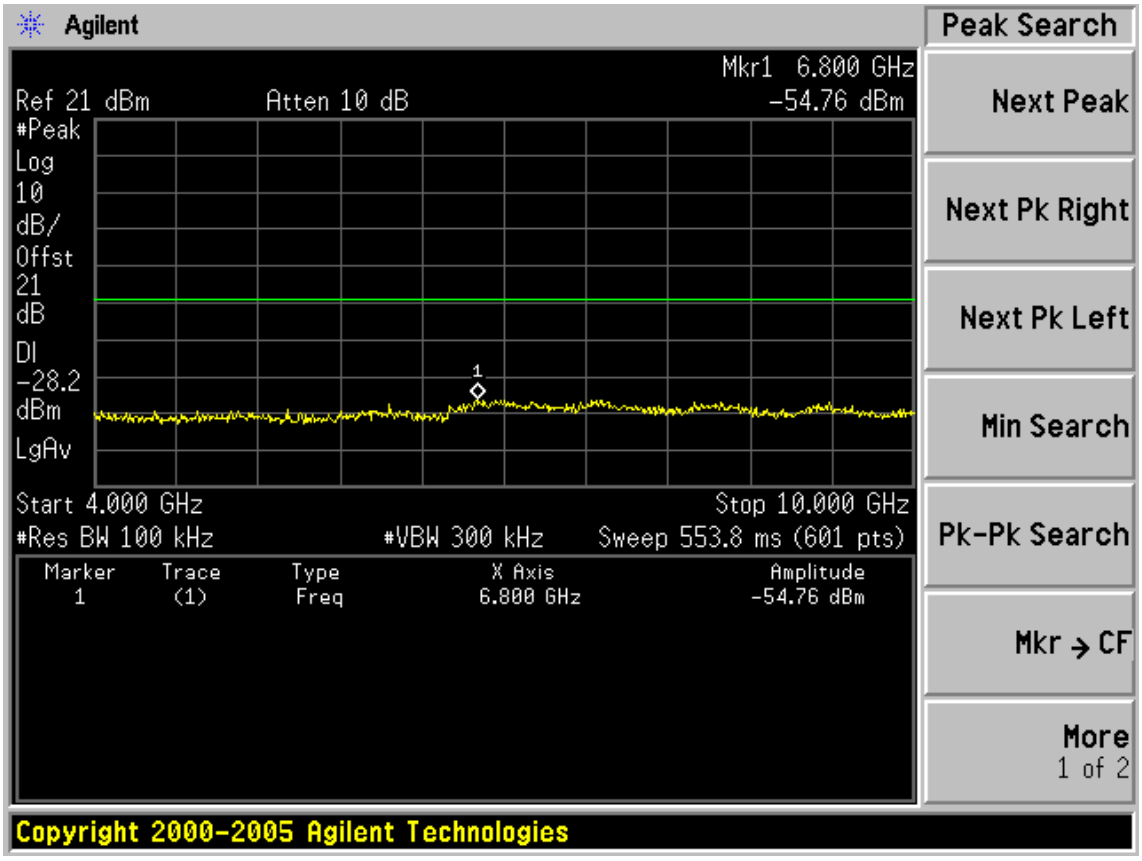


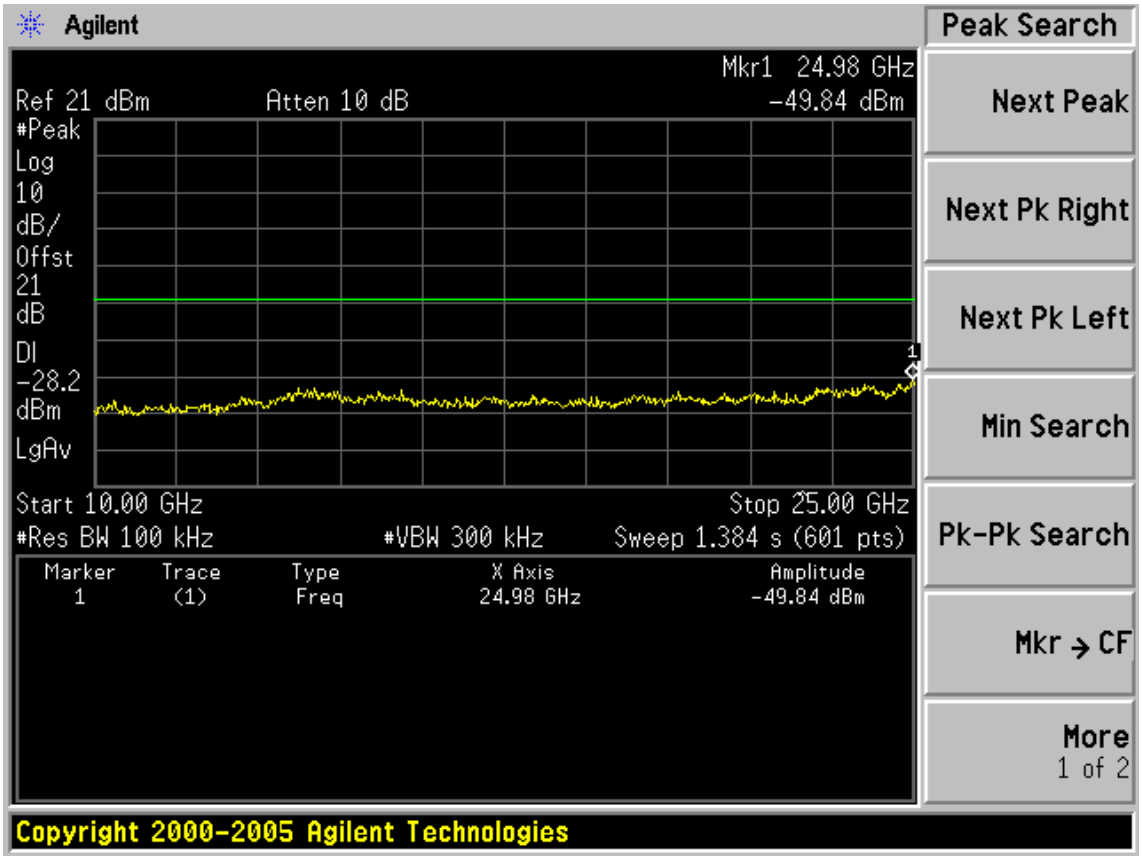

Agilent
Peak Search
Mkr1 6.840 GHz
Ref 21 dBm
Atten 10 dB
-55.21 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 4.000 GHz
Stop 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 573.4 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 6.840 GHz -55.21 dBm
Copyright 2000-2005 Agilent Technologies

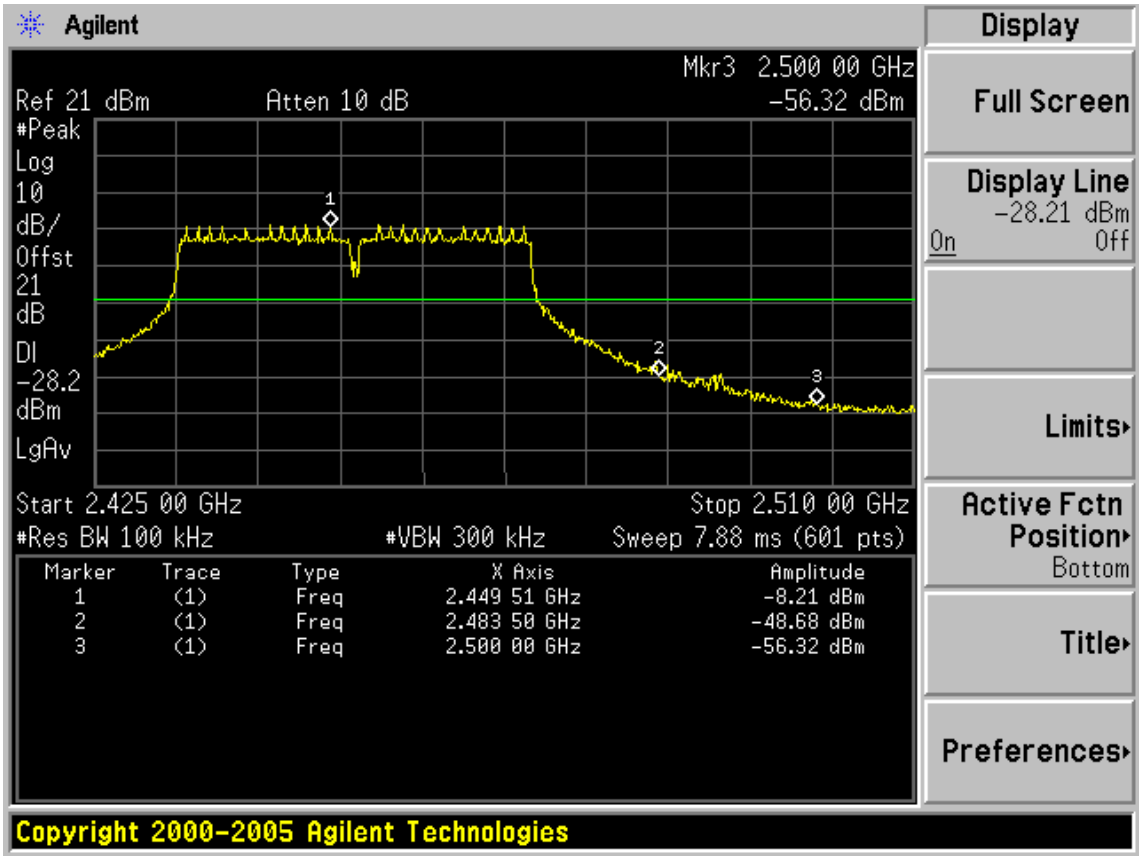

Agilent
Peak Search
Mkr1 25.00 GHz
Ref 21 dBm
Atten 10 dB
-49.49 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-19.0
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.434 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 25.00 GHz -49.49 dBm
Copyright 2000-2005 Agilent Technologies

Test CH7: 2452MHz






Agilent
Peak Search
Mkr1 24.98 GHz
Ref 21 dBm
Atten 10 dB
-49.84 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.2
dBm
LgAv
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 10.00 GHz
Stop 25.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 1.384 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 24.98 GHz -49.84 dBm
Copyright 2000-2005 Agilent Technologies


Agilent
Display
Mkr3 2.500 00 GHz
Ref 21 dBm
Atten 10 dB
-56.32 dBm
#Peak
Log
10
dB/
Offst
21
dB
Dl
-28.2
dBm
LgAv
Full Screen
Display Line
-28.21 dBm
On Off
Limits
Active Fctn
Position
Bottom
Title
Preferences
Start 2.425 00 GHz
Stop 2.510 00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 7.88 ms (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.449 51 GHz -8.21 dBm
2 (1) Freq 2.483 50 GHz -48.68 dBm
3 (1) Freq 2.500 00 GHz -56.32 dBm
Copyright 2000-2005 Agilent Technologies

6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 10	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year

6.2.Limit

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

6.3.Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

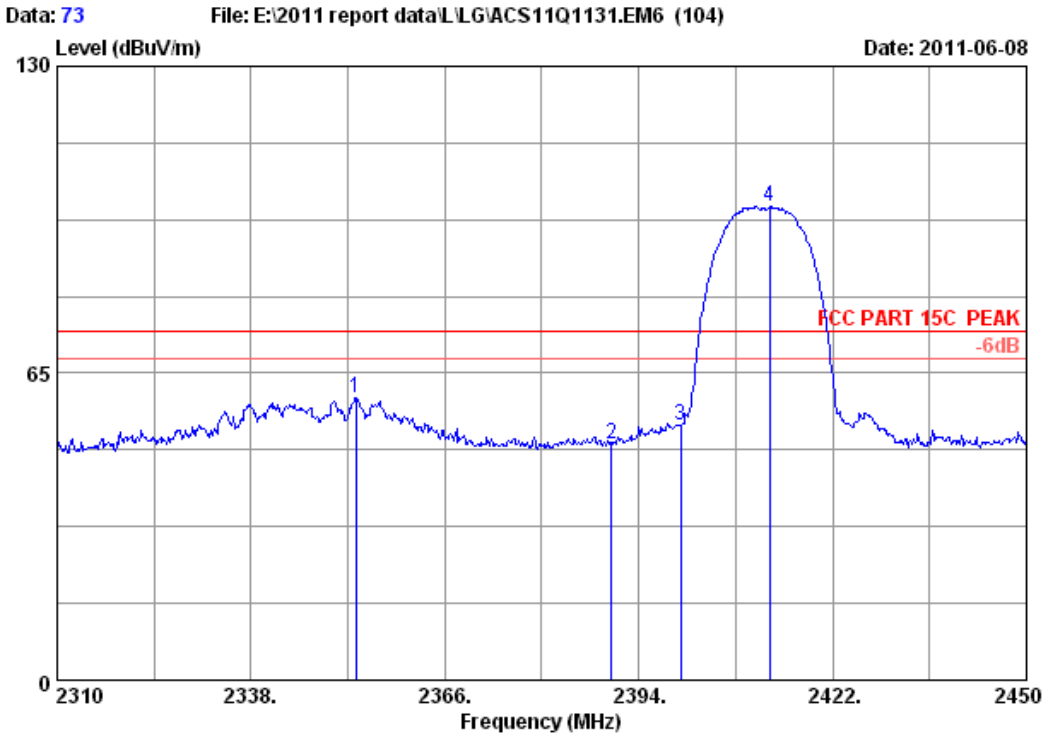
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

(a) PEAK: RBW=1MHz; VBW=3MHz ;Sweep=AUTO
(b) AVERAGE: RBW=1MHz ;VBW=10Hz ; Sweep=AUTO

6.4.Test Results

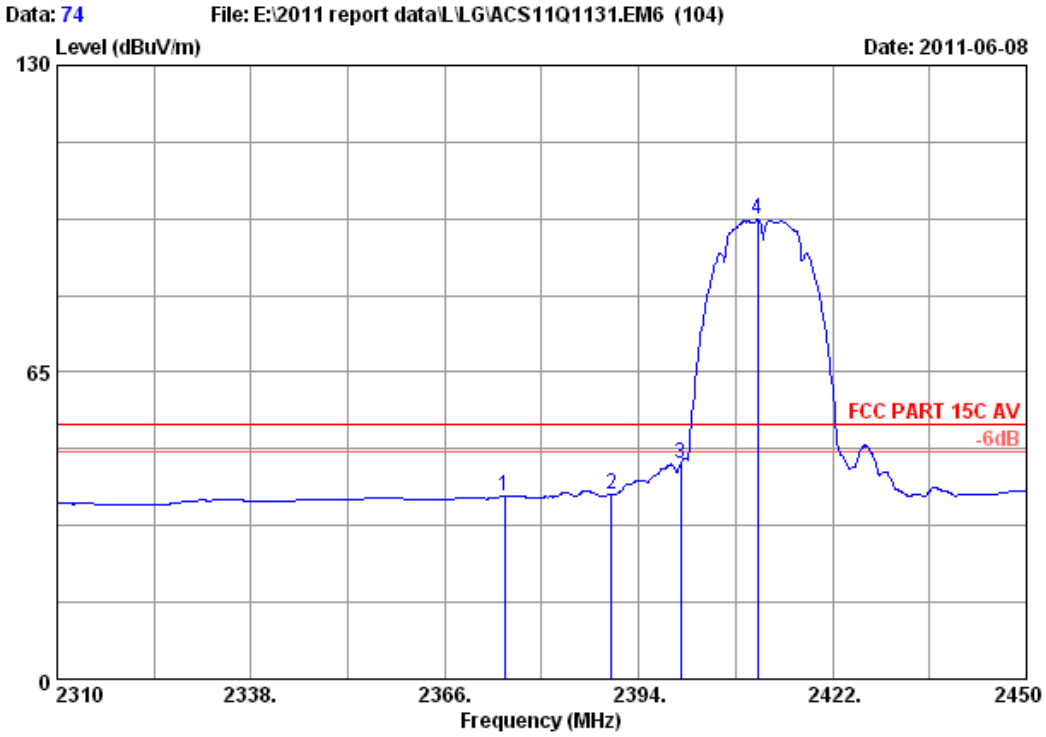
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 73
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH1 2412MHz TX
M/N : PCI-1020

	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	2353.120	29.42	7.61	35.91	58.69	59.81	74.00	14.19	Peak
2	2390.000	29.44	7.66	36.09	49.14	50.15	74.00	23.85	Peak
3	2400.000	29.44	7.66	36.09	52.83	53.84	74.00	20.16	Peak
4	2412.900	29.45	7.66	35.95	99.08	100.24	74.00	-26.24	Peak

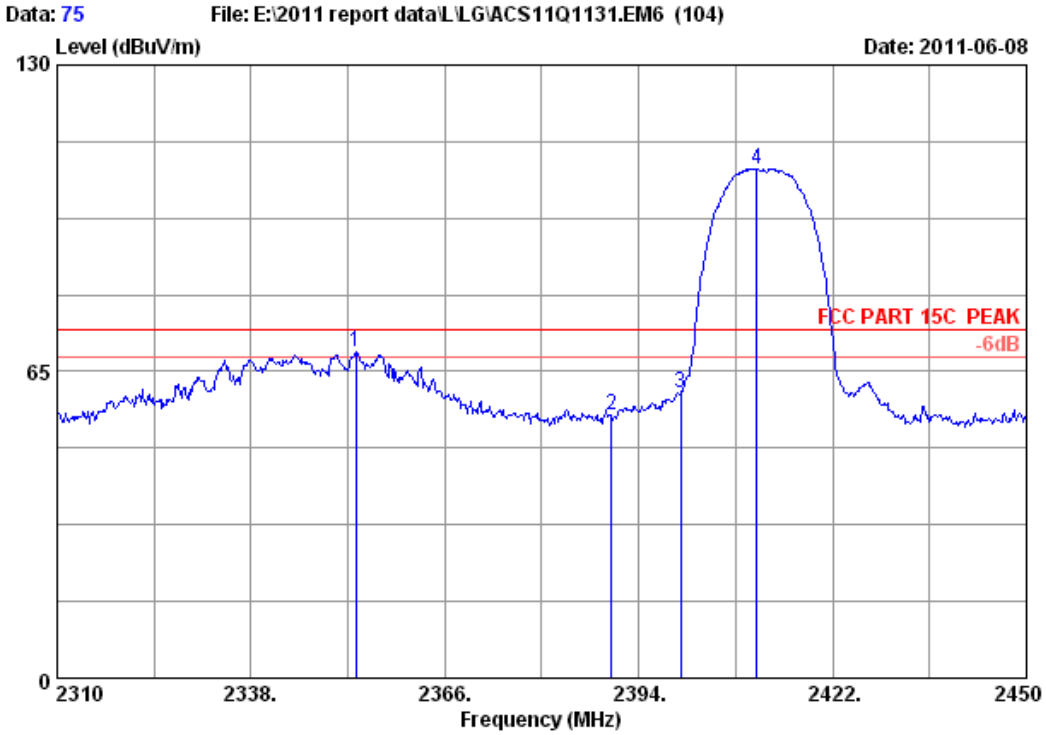
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH1 2412MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2374.680	29.43	7.61	36.00	37.83	38.87	54.00	15.13	Average
2	2390.000	29.44	7.66	36.09	37.97	38.98	54.00	15.02	Average
3	2400.000	29.44	7.66	36.09	44.78	45.79	54.00	8.21	Average
4	2411.220	29.45	7.66	35.95	96.14	97.30	54.00	-43.30	Average

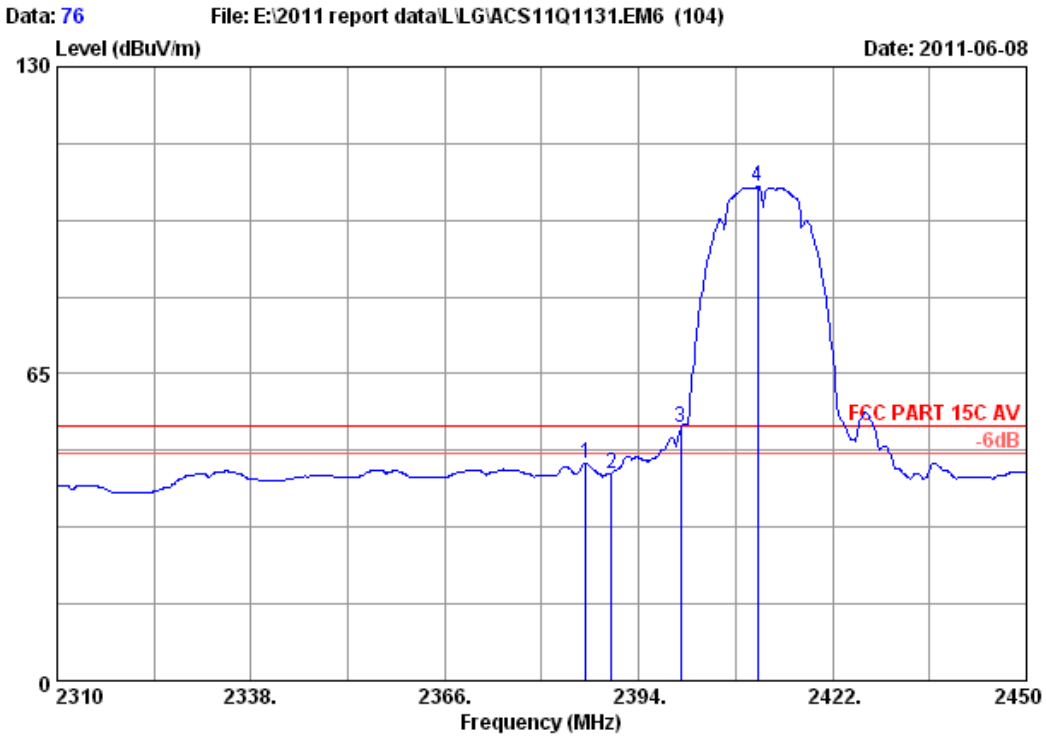
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 75
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH1 2412MHz TX
M/N : PCI-1020

	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	2353.120	29.42	7.61	35.91	68.02	69.14	74.00	4.86	Peak
2	2390.000	29.44	7.66	36.09	54.68	55.69	74.00	18.31	Peak
3	2400.000	29.44	7.66	36.09	59.48	60.49	74.00	13.51	Peak
4	2411.080	29.45	7.66	35.95	106.88	108.04	74.00	-34.04	Peak

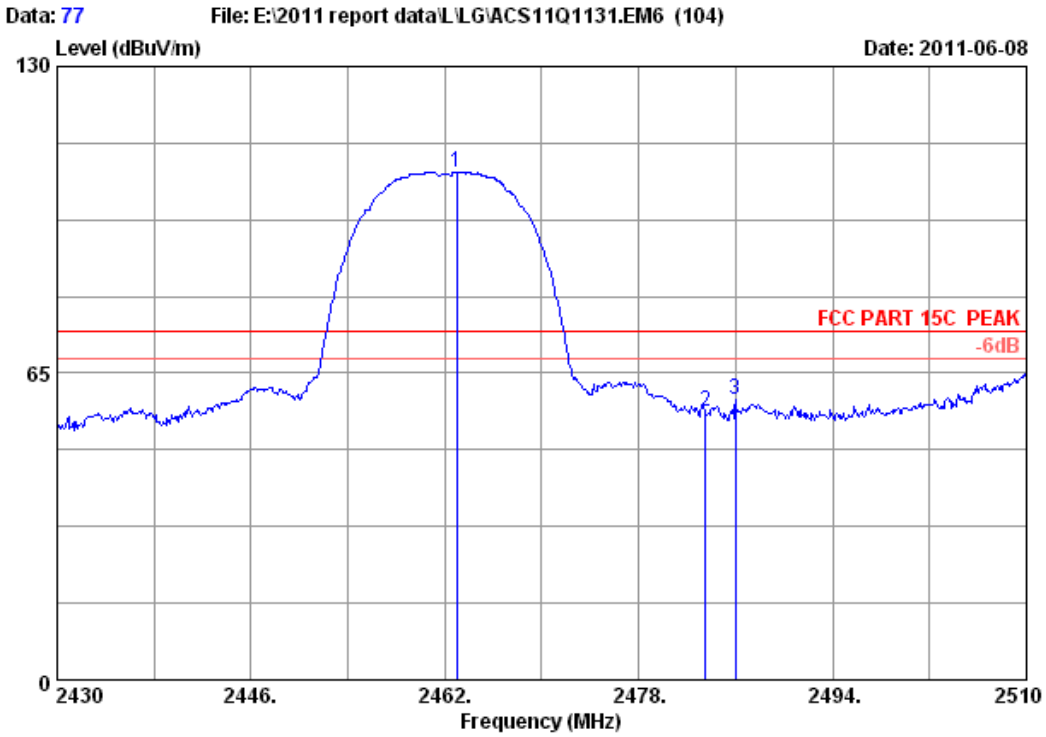
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 76
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH1 2412MHz TX
M/N : PCI-1020

	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	2386.300	29.44	7.66	36.09	44.97	45.98	54.00	8.02	Average
2	2390.000	29.44	7.66	36.09	42.82	43.83	54.00	10.17	Average
3	2400.000	29.44	7.66	36.09	52.47	53.48	54.00	0.52	Average
4	2411.220	29.45	7.66	35.95	103.46	104.62	54.00	-50.62	Average

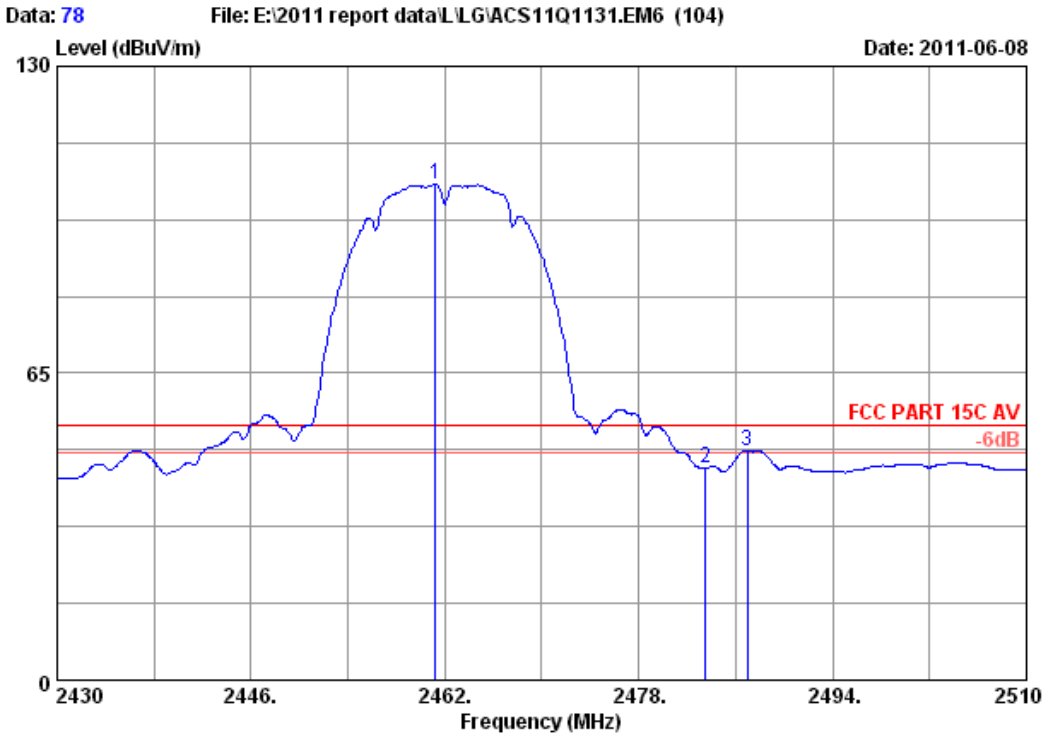
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 77
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH11 2462MHz TX
M/N : PCI-1020

	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	2462.960	29.48	7.72	36.02	106.52	107.70	74.00	-33.70	Peak
2	2483.500	29.49	7.77	35.97	55.41	56.70	74.00	17.30	Peak
3	2486.000	29.49	7.77	35.97	57.95	59.24	74.00	14.76	Peak

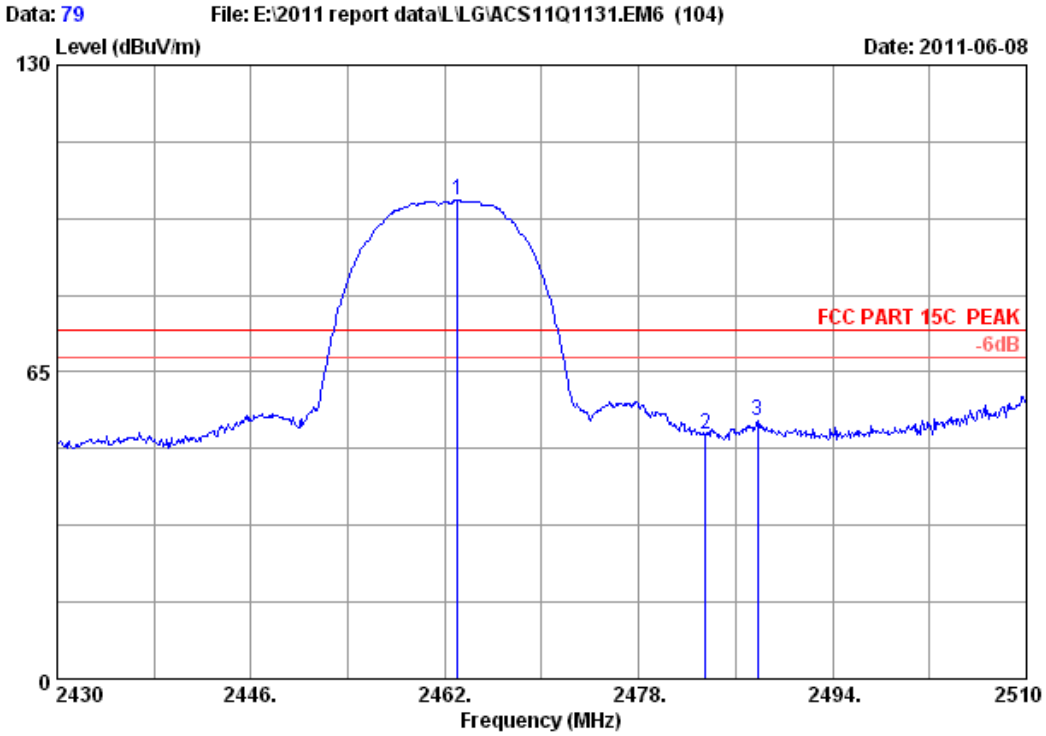
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 78
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH11 2462MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.200	29.48	7.72	36.02	103.81	104.99	54.00	-50.99	Average
2	2483.500	29.49	7.77	35.97	43.63	44.92	54.00	9.08	Average
3	2486.960	29.49	7.77	35.97	47.41	48.70	54.00	5.30	Average

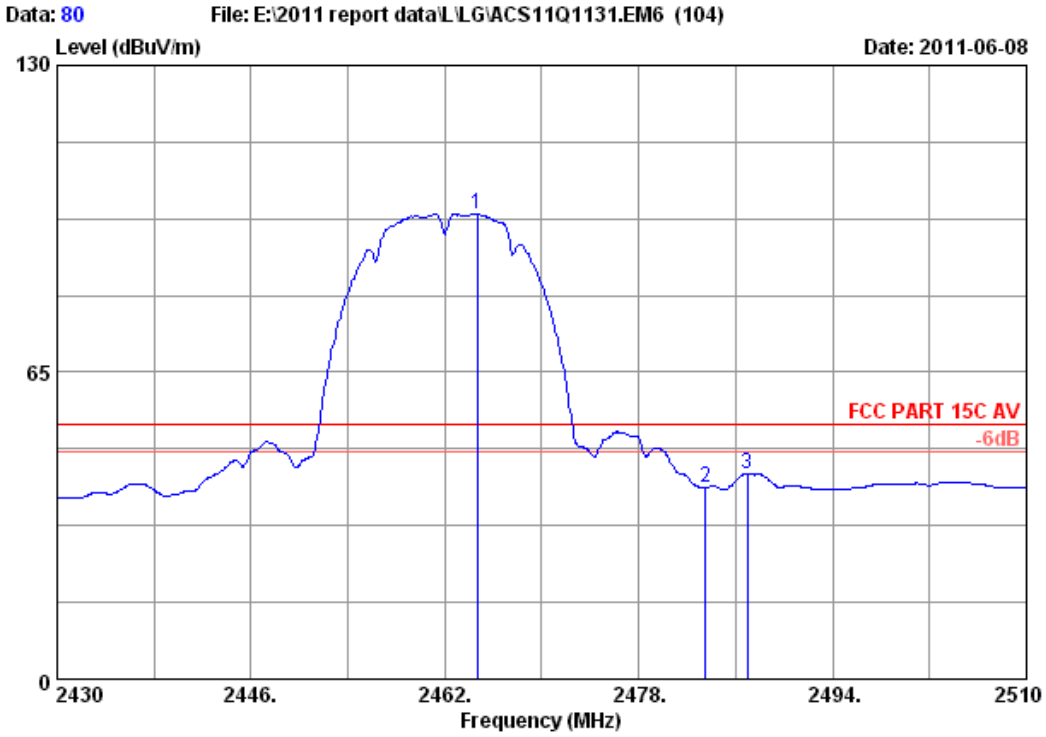
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 79
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11b CH11 2462MHz TX
M/N : PCI-1020

	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	2463.040	29.48	7.72	36.02	100.20	101.38	74.00	-27.38	Peak
2	2483.500	29.49	7.77	35.97	50.44	51.73	74.00	22.27	Peak
3	2487.840	29.50	7.77	36.00	53.23	54.50	74.00	19.50	Peak

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

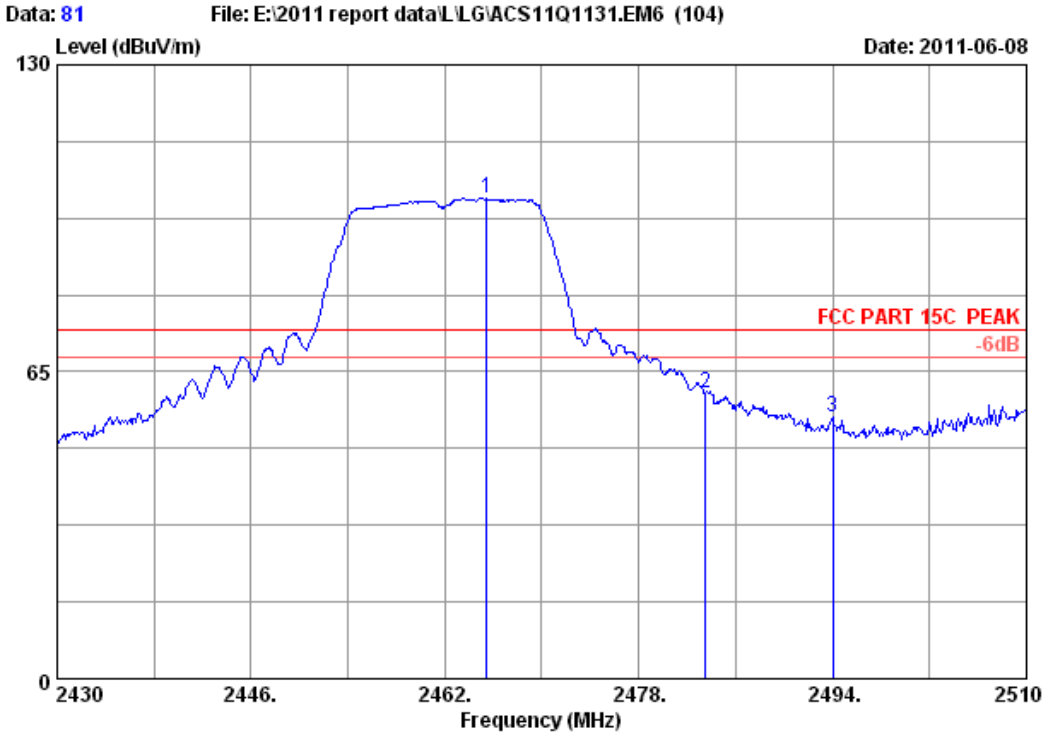



```
Site no.      : 3m Chamber              Data no. :  80
Dis. / Ant.   : 3m   3115(0911)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C AV
Env. / Ins.   : 23*C/54%                 Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC input AC 120V/60Hz
Test mode     : 11b      CH11 2462MHz TX
M/N           : PCI-1020
```

	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	2464.640	29.48	7.72	36.02	97.37	98.55	54.00	-44.55	Average
2	2483.500	29.49	7.77	35.97	39.30	40.59	54.00	13.41	Average
3	2486.960	29.49	7.77	35.97	42.20	43.49	54.00	10.51	Average

Remarks:

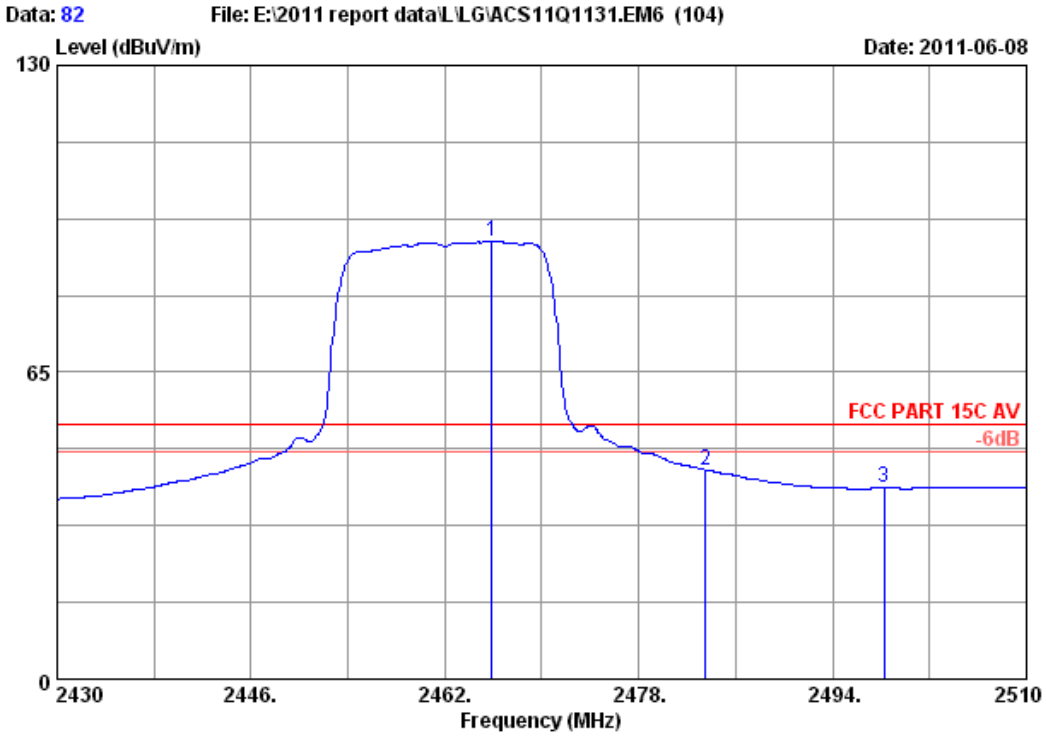
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 81
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH11 2462MHz TX
M/N : PCI-1020

	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	2465.440	29.48	7.72	36.02	100.52	101.70	74.00	-27.70	Peak
2	2483.500	29.49	7.77	35.97	59.22	60.51	74.00	13.49	Peak
3	2494.000	29.50	7.77	36.00	53.96	55.23	74.00	18.77	Peak

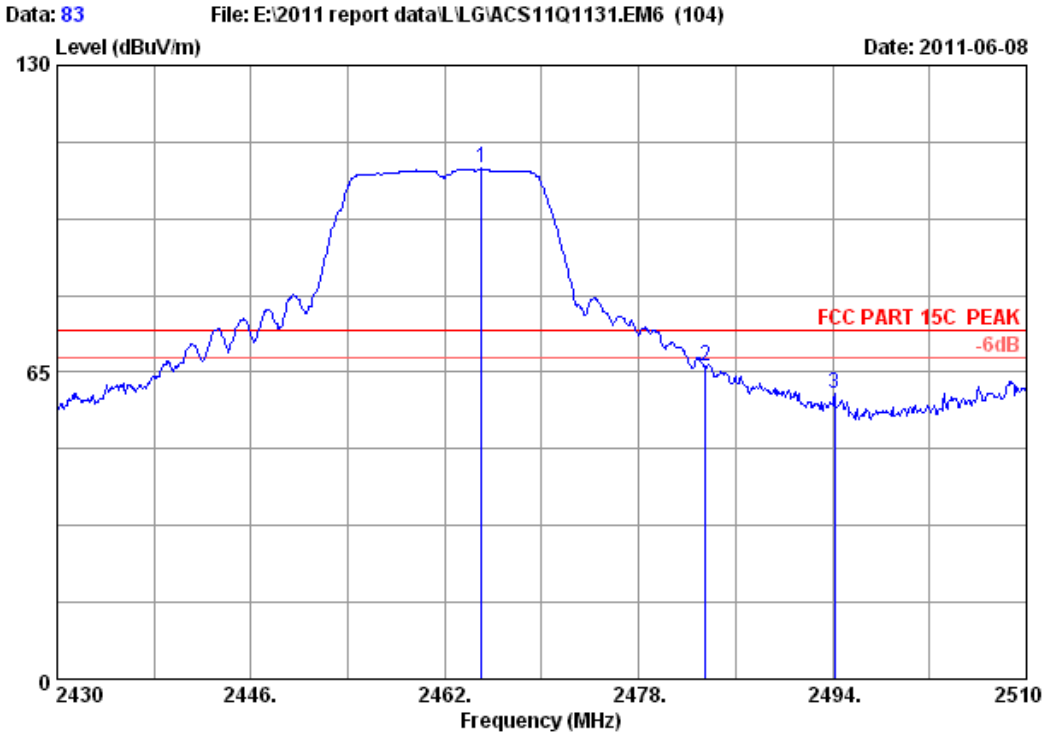
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 82
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH11 2462MHz TX
M/N : PCI-1020

	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	2465.840	29.48	7.72	36.02	91.49	92.67	54.00	-38.67	Average
2	2483.500	29.49	7.77	35.97	43.05	44.34	54.00	9.66	Average
3	2498.240	29.50	7.77	36.00	39.35	40.62	54.00	13.38	Average

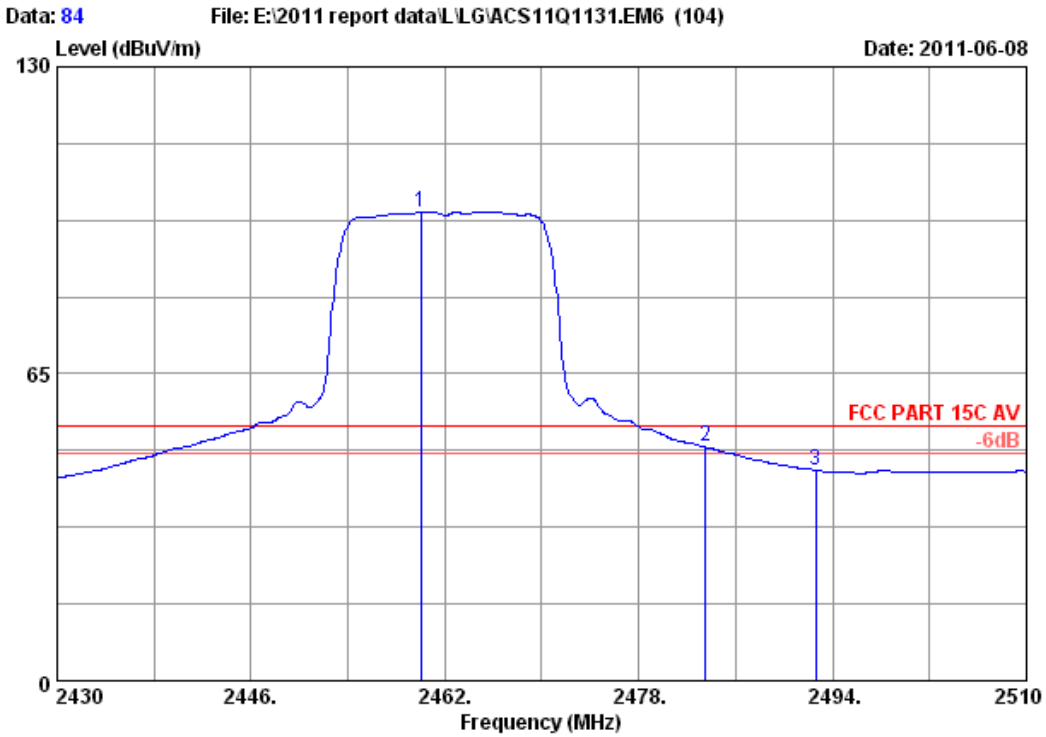
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 83
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH11 2462MHz TX
M/N : PCI-1020

	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	2465.040	29.48	7.72	36.02	106.92	108.10	74.00	-34.10	Peak
2	2483.500	29.49	7.77	35.97	64.80	66.09	74.00	7.91	Peak
3	2494.160	29.50	7.77	36.00	59.28	60.55	74.00	13.45	Peak

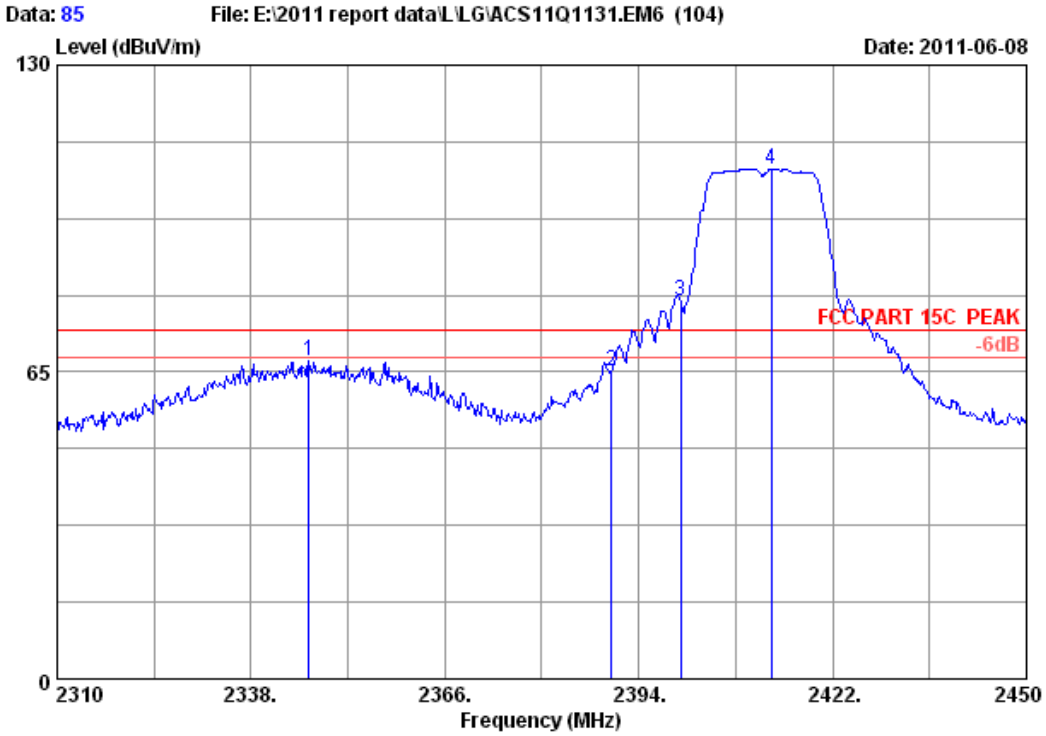
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH11 2462MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.000	29.48	7.72	36.02	98.06	99.24	54.00	-45.24	Average
2	2483.500	29.49	7.77	35.97	48.14	49.43	54.00	4.57	Average
3	2492.640	29.50	7.77	36.00	43.29	44.56	54.00	9.44	Average

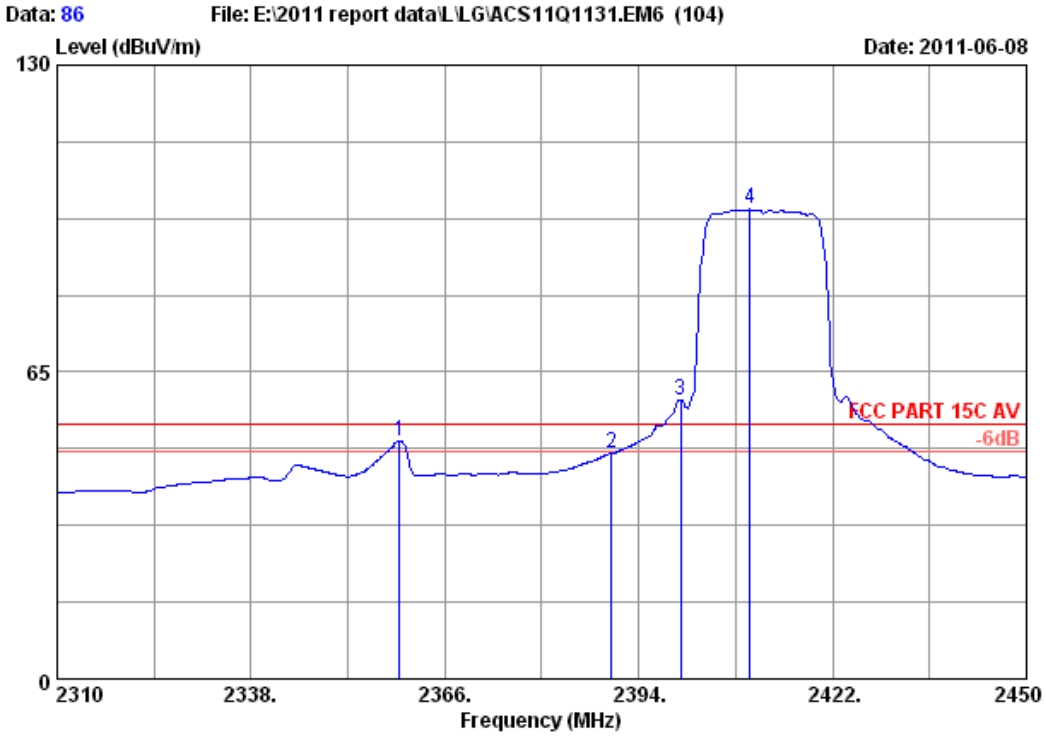
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 85
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH1 2412MHz TX
M/N : PCI-1020

	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	2346.400	29.41	7.61	35.99	66.23	67.26	74.00	6.74	Peak
2	2390.000	29.44	7.66	36.09	64.06	65.07	74.00	8.93	Peak
3	2400.000	29.44	7.66	36.09	79.05	80.06	74.00	-6.06	Peak
4	2413.180	29.45	7.66	35.95	106.89	108.05	74.00	-34.05	Peak

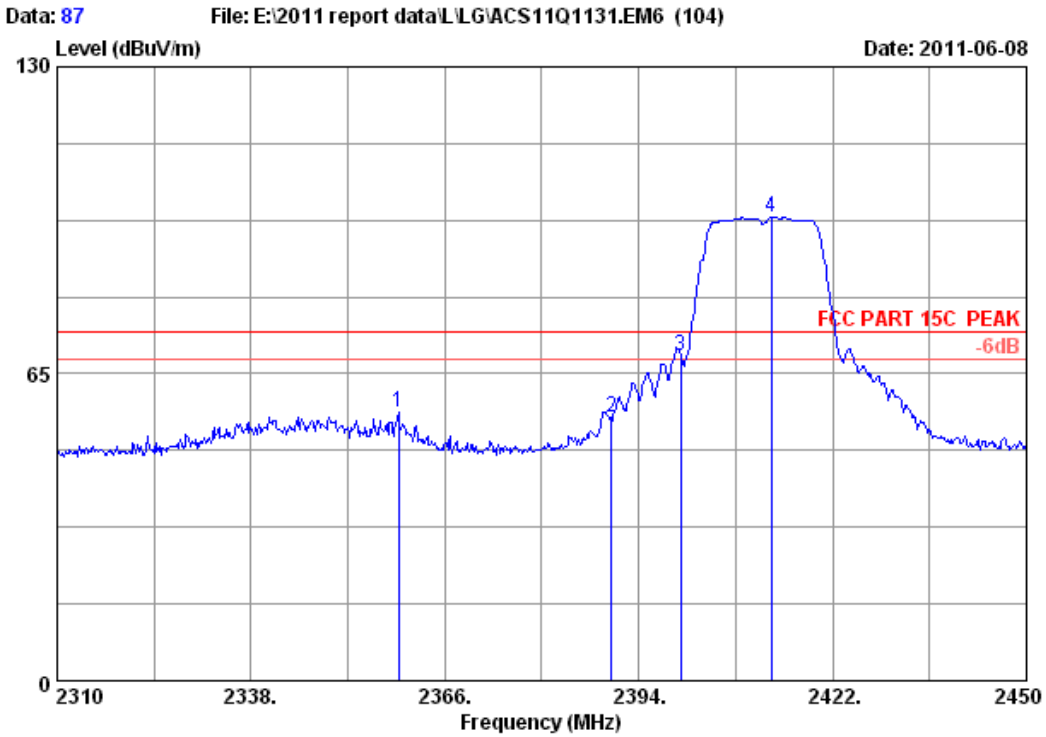
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 86
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH1 2412MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2359.420	29.42	7.61	35.91	49.24	50.36	54.00	3.64	Average
2	2390.000	29.44	7.66	36.09	46.75	47.76	54.00	6.24	Average
3	2400.000	29.44	7.66	36.09	58.18	59.19	54.00	-5.19	Average
4	2410.100	29.45	7.66	35.95	98.24	99.40	54.00	-45.40	Average

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

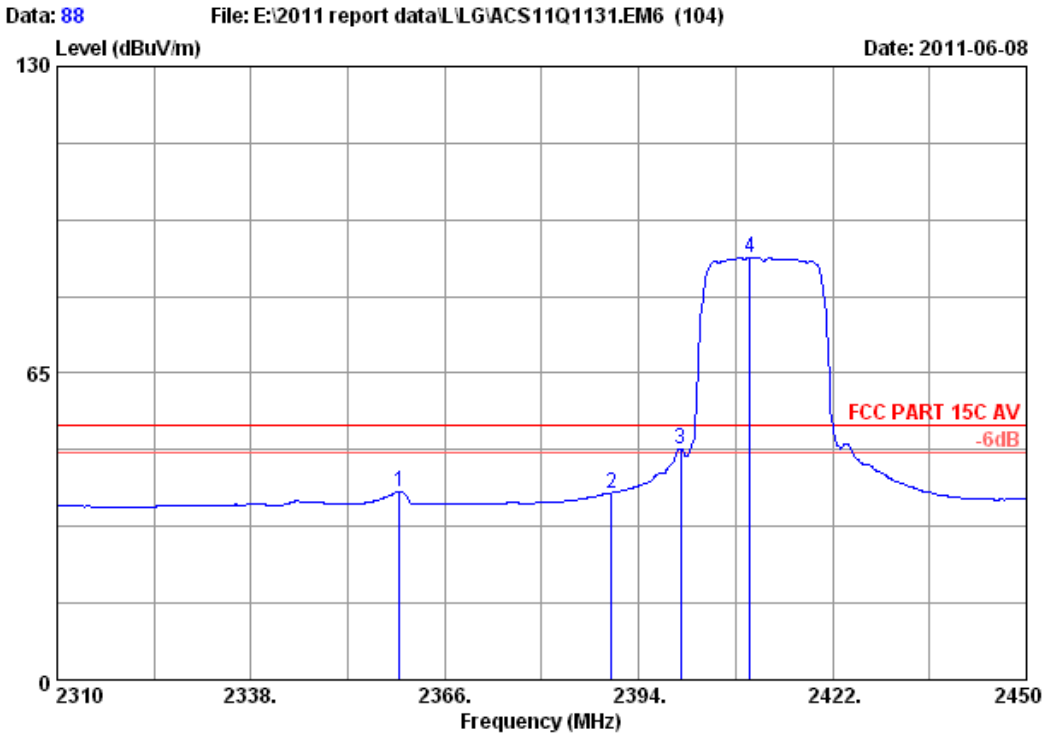



```
Site no.      : 3m Chamber              Data no. :  87
Dis. / Ant.   : 3m   3115(0911)          Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC input AC 120V/60Hz
Test mode     : 11g      CH1  2412MHz TX
M/N           : PCI-1020
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2359.280	29.42	7.61	35.91	55.66	56.78	74.00	17.22	Peak
2	2390.000	29.44	7.66	36.09	54.62	55.63	74.00	18.37	Peak
3	2400.000	29.44	7.66	36.09	67.82	68.83	74.00	5.17	Peak
4	2413.180	29.45	7.66	35.95	97.06	98.22	74.00	-24.22	Peak

Remarks:

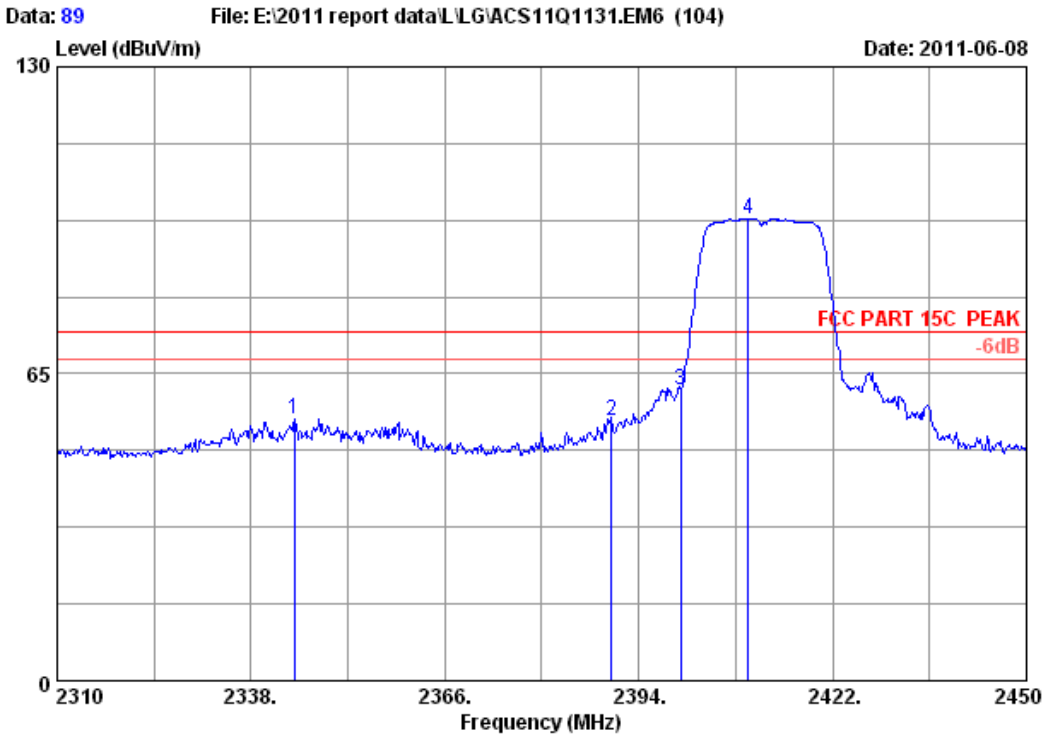
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 88
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11g CH1 2412MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2359.420	29.42	7.61	35.91	38.83	39.95	54.00	14.05	Average
2	2390.000	29.44	7.66	36.09	38.61	39.62	54.00	14.38	Average
3	2400.000	29.44	7.66	36.09	48.00	49.01	54.00	4.99	Average
4	2410.100	29.45	7.66	35.95	88.35	89.51	54.00	-35.51	Average

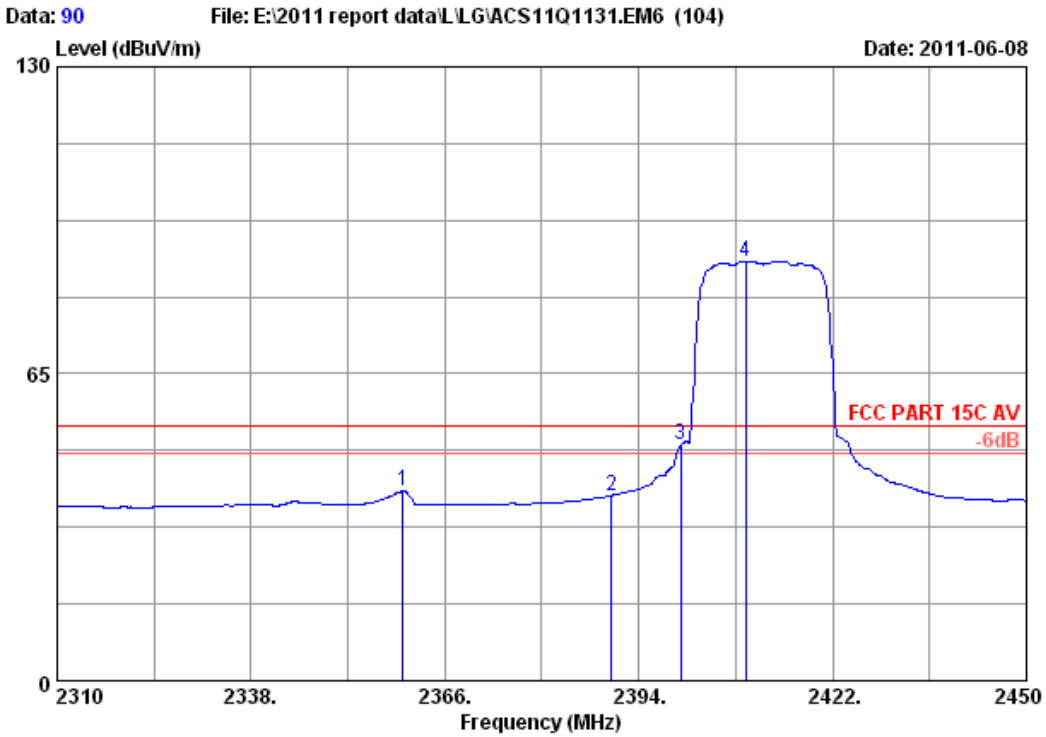
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz TX
M/N : PCI-1020

	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	2344.300	29.41	7.61	35.99	54.47	55.50	74.00	18.50	Peak
2	2390.000	29.44	7.66	36.09	54.11	55.12	74.00	18.88	Peak
3	2400.000	29.44	7.66	36.09	60.57	61.58	74.00	12.42	Peak
4	2409.820	29.45	7.66	35.95	96.67	97.83	74.00	-23.83	Peak

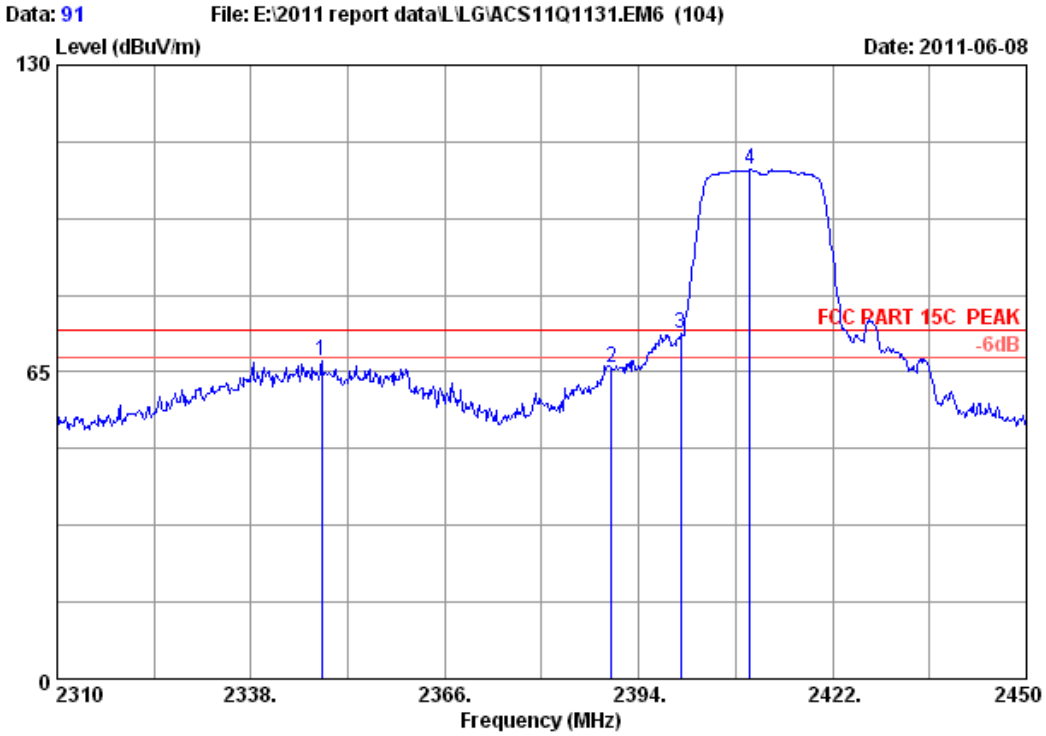
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2359.980	29.42	7.61	35.91	38.95	40.07	54.00	13.93	Peak
2	2390.000	29.44	7.66	36.09	38.17	39.18	54.00	14.82	Peak
3	2400.000	29.44	7.66	36.09	48.89	49.90	54.00	4.10	Peak
4	2409.400	29.45	7.66	35.95	87.71	88.87	54.00	-34.87	Peak

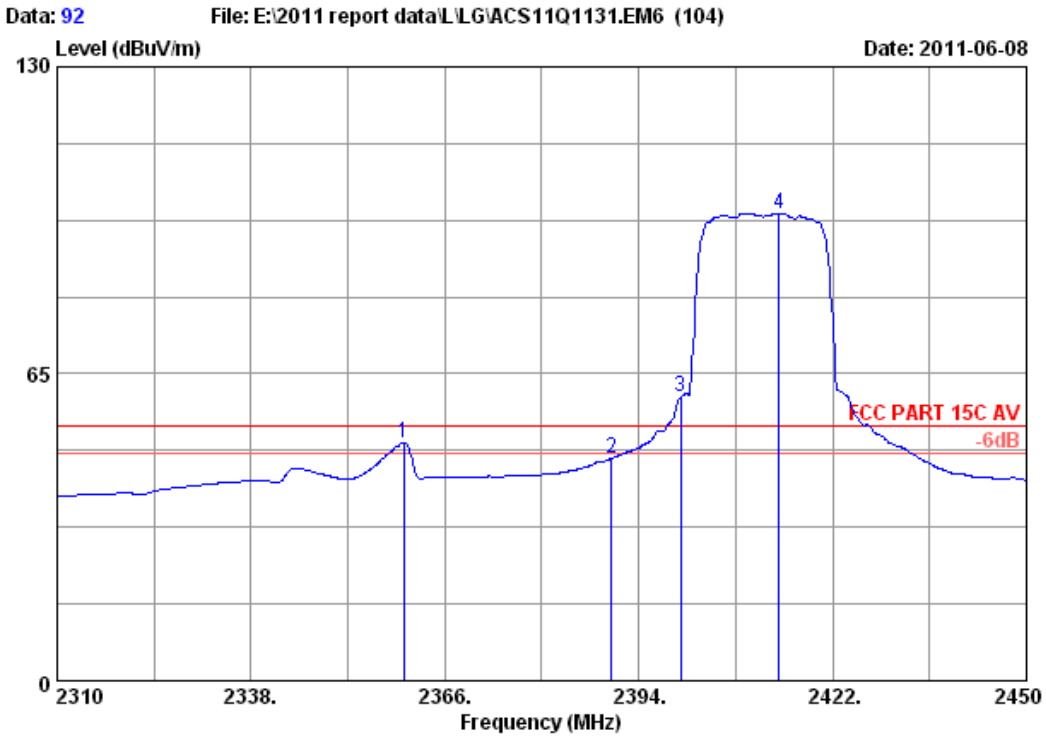
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 91
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz TX
M/N : PCI-1020

	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	2348.220	29.41	7.61	35.99	66.22	67.25	74.00	6.75	Peak
2	2390.000	29.44	7.66	36.09	64.86	65.87	74.00	8.13	Peak
3	2400.000	29.44	7.66	36.09	72.14	73.15	74.00	0.85	Peak
4	2410.100	29.45	7.66	35.95	106.60	107.76	74.00	-33.76	Peak

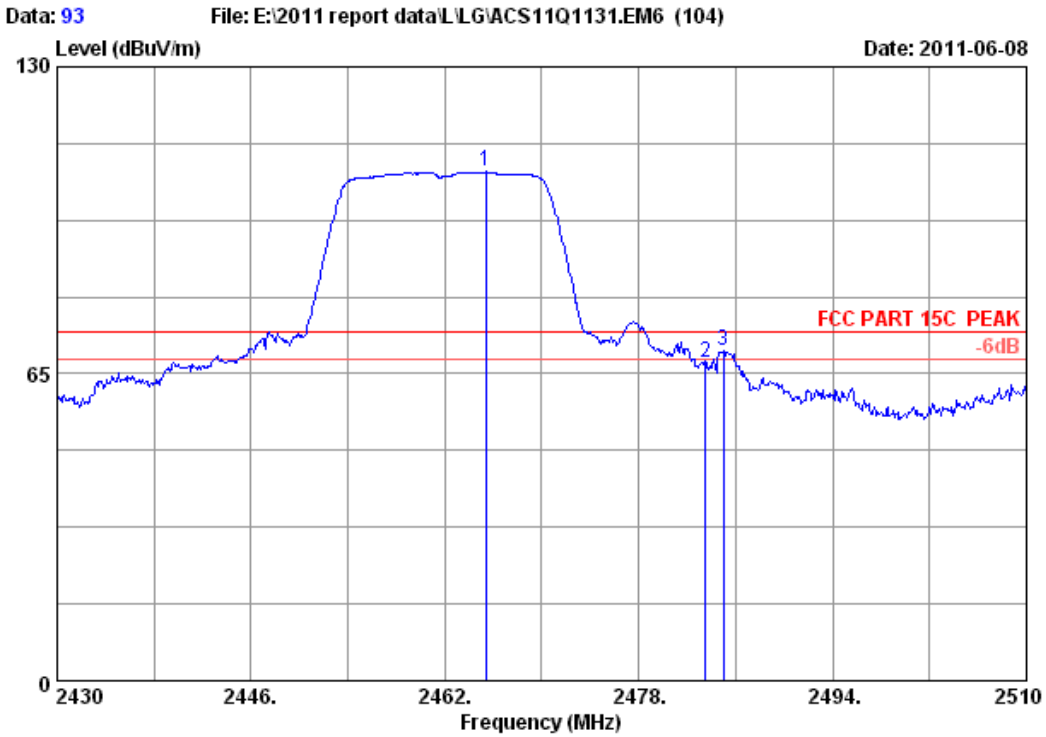
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz TX
M/N : PCI-1020

	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	2360.120	29.42	7.61	35.91	49.36	50.48	54.00	3.52	Average
2	2390.000	29.44	7.66	36.09	45.98	46.99	54.00	7.01	Average
3	2400.000	29.44	7.66	36.09	59.12	60.13	54.00	-6.13	Average
4	2414.300	29.45	7.66	35.95	97.72	98.88	54.00	-44.88	Average

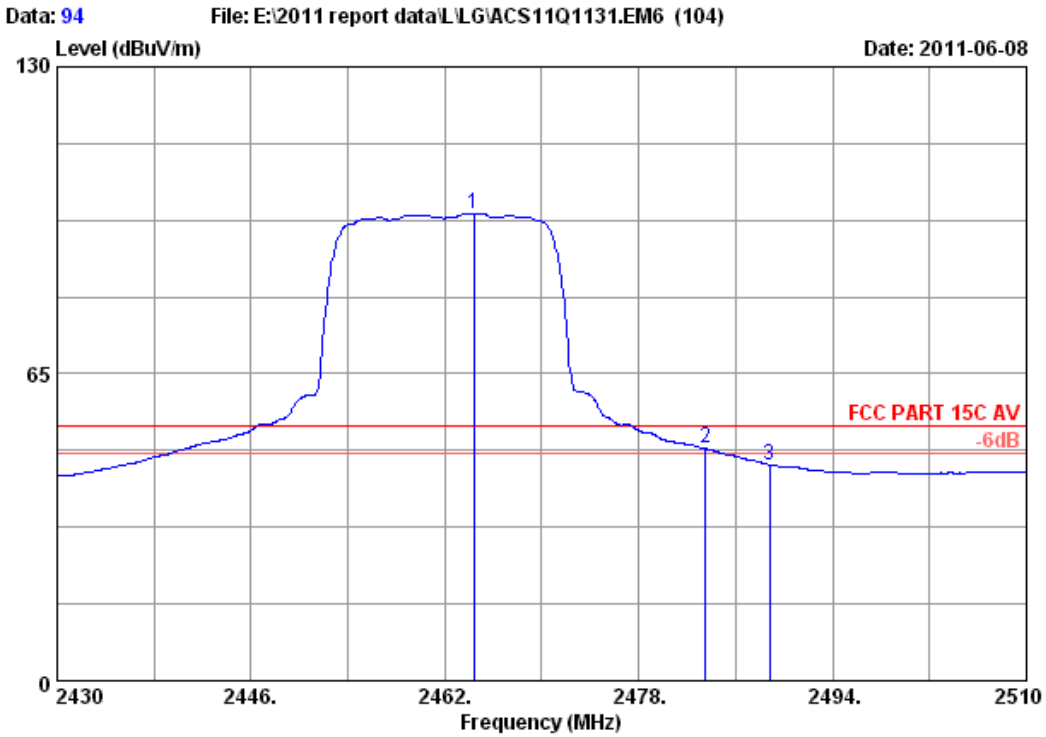
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 93
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH11 2462MHz TX
M/N : PCI-1020

	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	2465.360	29.48	7.72	36.02	106.58	107.76	74.00	-33.76	Peak
2	2483.500	29.49	7.77	35.97	66.23	67.52	74.00	6.48	Peak
3	2484.960	29.49	7.77	35.97	68.49	69.78	74.00	4.22	Peak

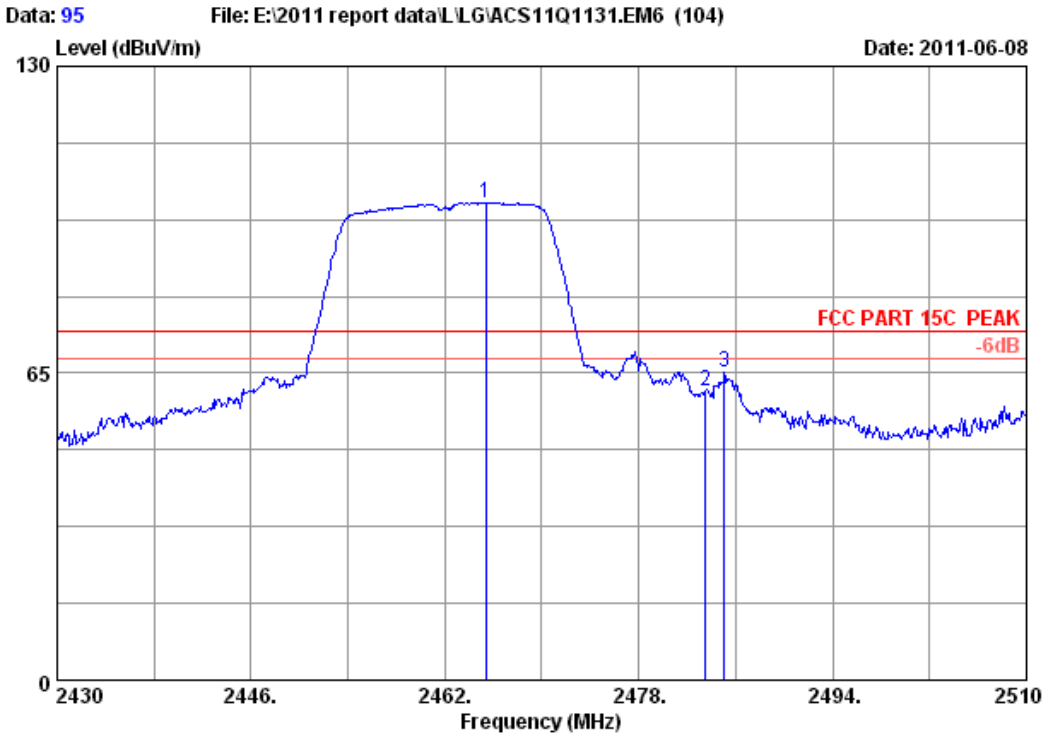
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 94
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH11 2462MHz TX
M/N : PCI-1020

	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	2464.400	29.48	7.72	36.02	97.66	98.84	54.00	-44.84	Average
2	2483.500	29.49	7.77	35.97	47.80	49.09	54.00	4.91	Average
3	2488.800	29.50	7.77	36.00	44.45	45.72	54.00	8.28	Average

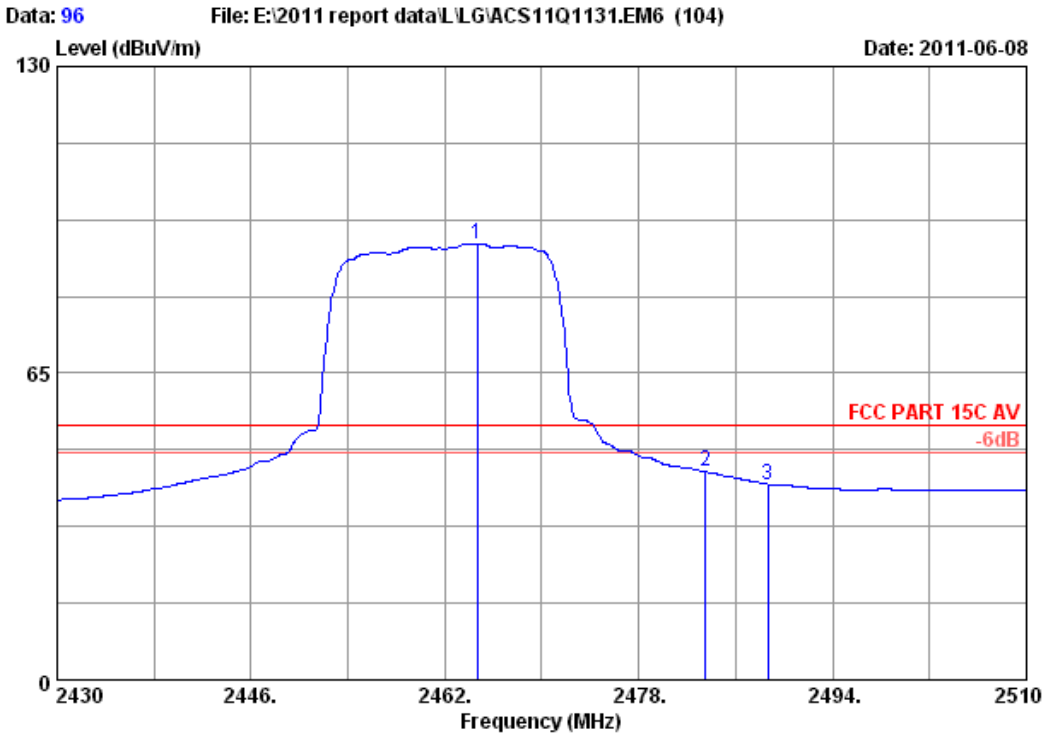
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 95
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH11 2462MHz TX
M/N : PCI-1020

	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	2465.360	29.48	7.72	36.02	99.97	101.15	74.00	-27.15	Peak
2	2483.500	29.49	7.77	35.97	59.76	61.05	74.00	12.95	Peak
3	2485.040	29.49	7.77	35.97	63.71	65.00	74.00	9.00	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.

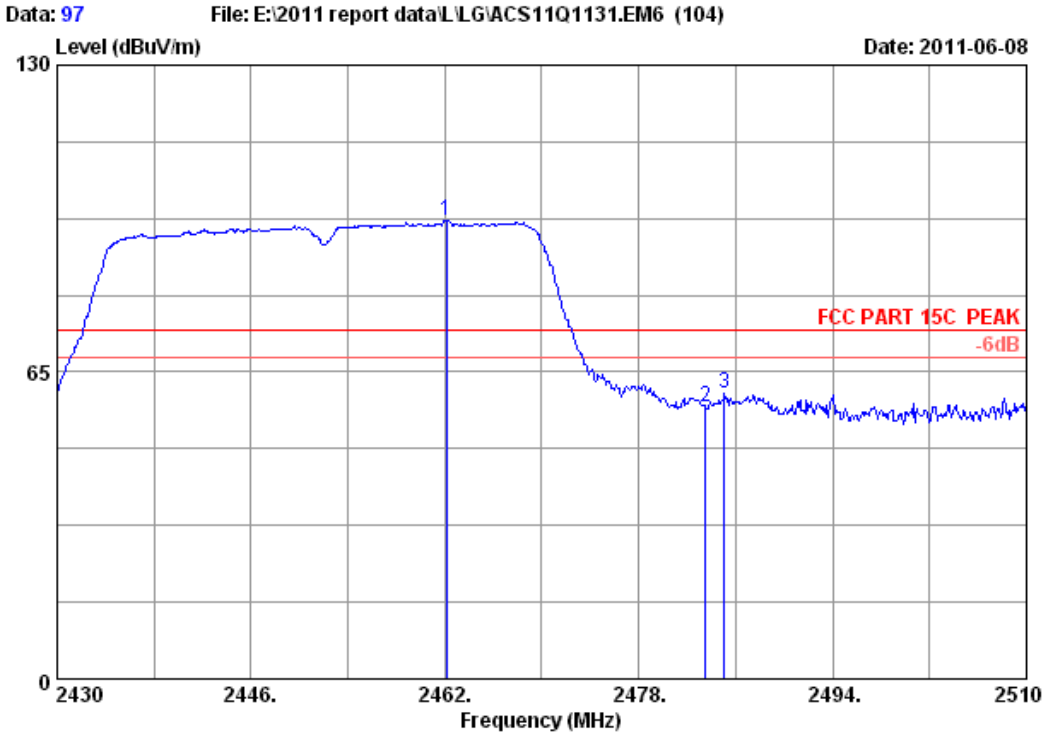



```
Site no.      : 3m Chamber                Data no. :  96
Dis. / Ant.   : 3m   3115(0911)            Ant. pol. : HORIZONTAL
Limit         : FCC PART 15C AV
Env. / Ins.   : 23*C/54%                  Engineer  : Paul
EUT           : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power         : DC 3.3V From PC input AC 120V/60Hz
Test mode     : 11nHT20      CH11  2462MHz TX
M/N           : PCI-1020
```

	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	2464.640	29.48	7.72	36.02	91.12	92.30	54.00	-38.30	Average
2	2483.500	29.49	7.77	35.97	42.78	44.07	54.00	9.93	Average
3	2488.640	29.50	7.77	36.00	40.18	41.45	54.00	12.55	Average

Remarks:

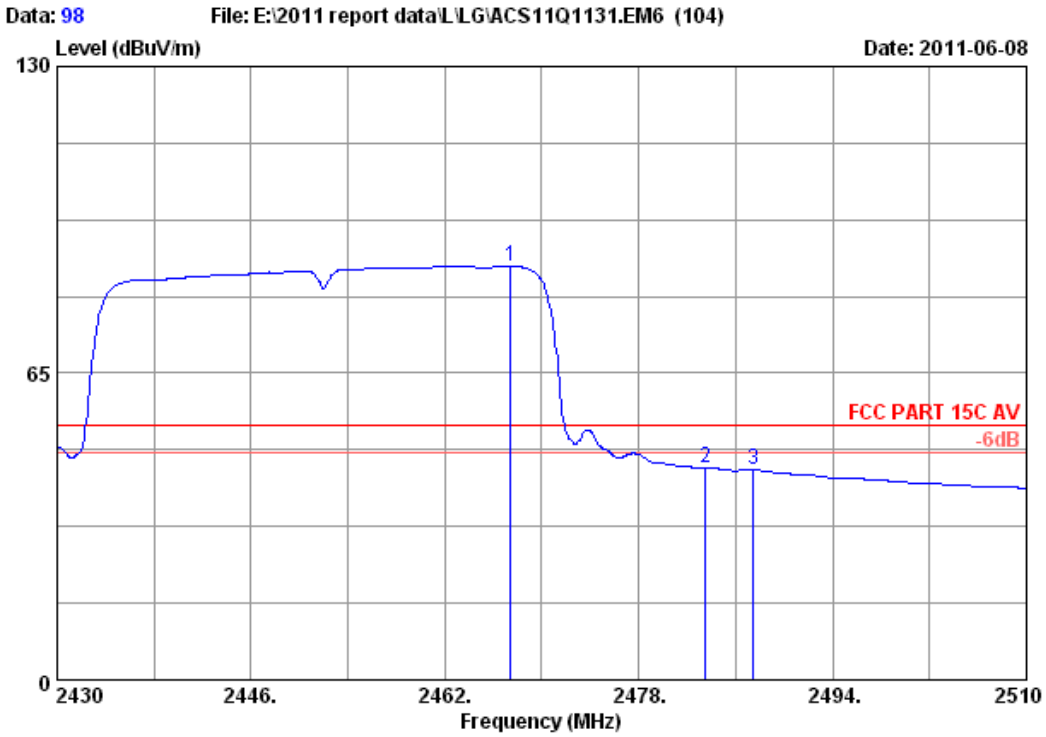
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 97
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH9 2452MHz TX
M/N : PCI-1020

	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	2462.160	29.48	7.72	36.02	95.98	97.16	74.00	-23.16	Peak
2	2483.500	29.49	7.77	35.97	56.36	57.65	74.00	16.35	Peak
3	2485.040	29.49	7.77	35.97	59.02	60.31	74.00	13.69	Peak

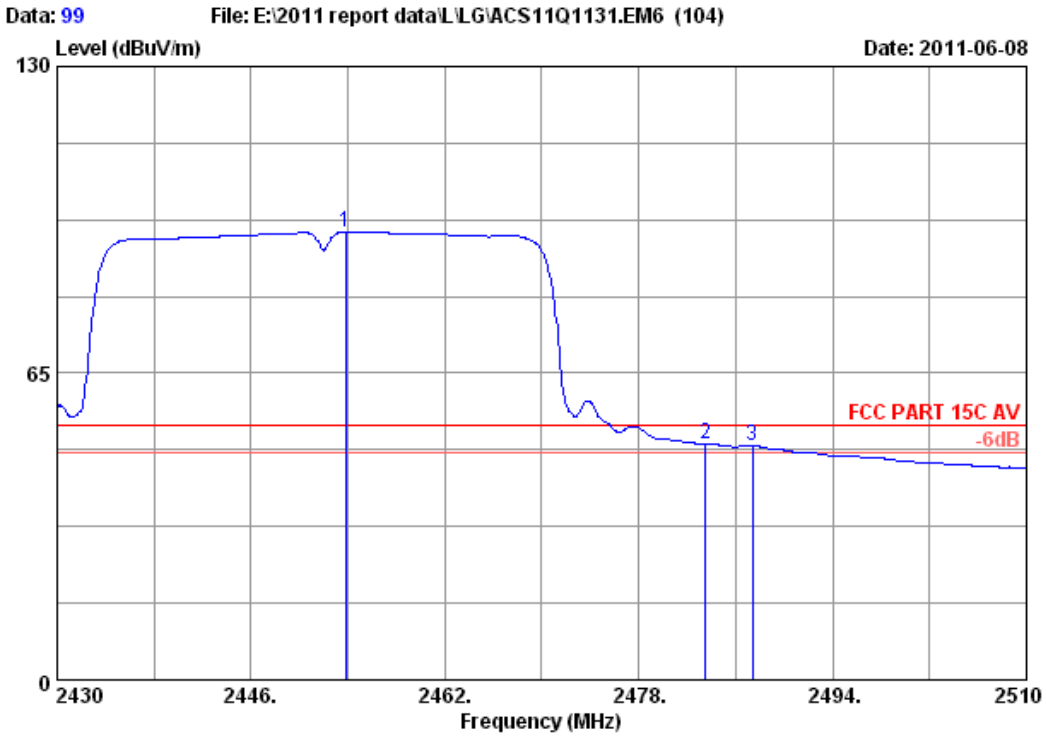
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH9 2452MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2467.440	29.48	7.72	36.02	86.49	87.67	54.00	-33.67	Average
2	2483.500	29.49	7.77	35.97	43.59	44.88	54.00	9.12	Average
3	2487.440	29.49	7.77	35.97	43.23	44.52	54.00	9.48	Average

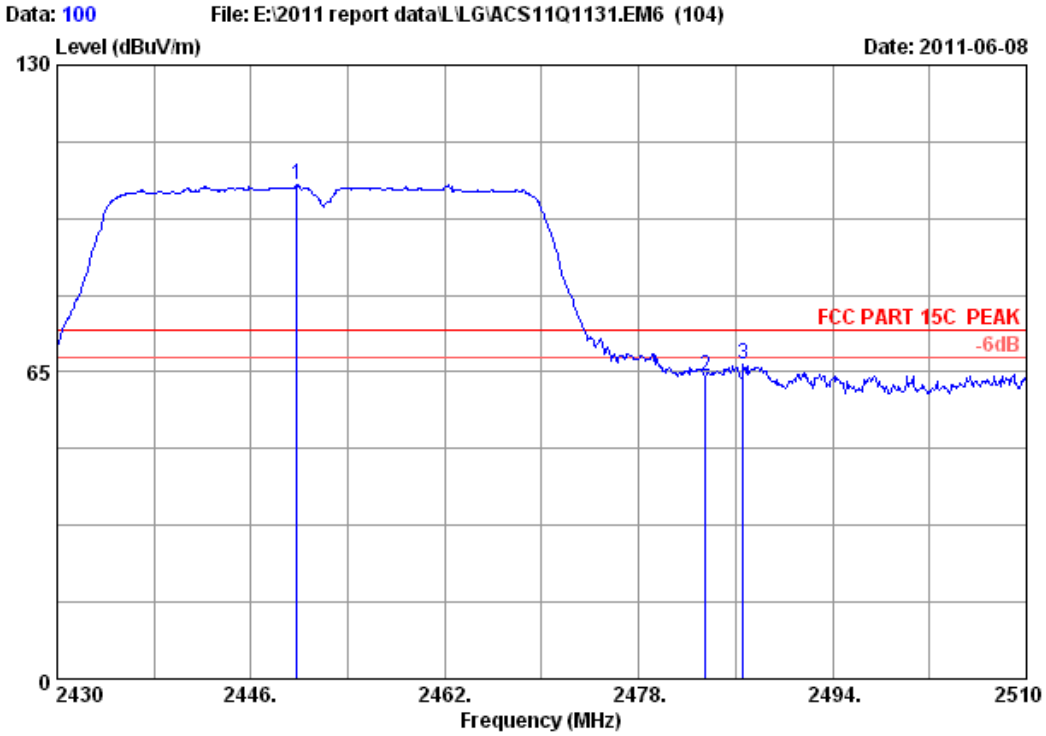
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH9 2452MHz TX
M/N : PCI-1020

	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	2453.840	29.48	7.72	36.02	93.73	94.91	54.00	-40.91	Average
2	2483.500	29.49	7.77	35.97	48.70	49.99	54.00	4.01	Average
3	2487.360	29.49	7.77	35.97	48.30	49.59	54.00	4.41	Average

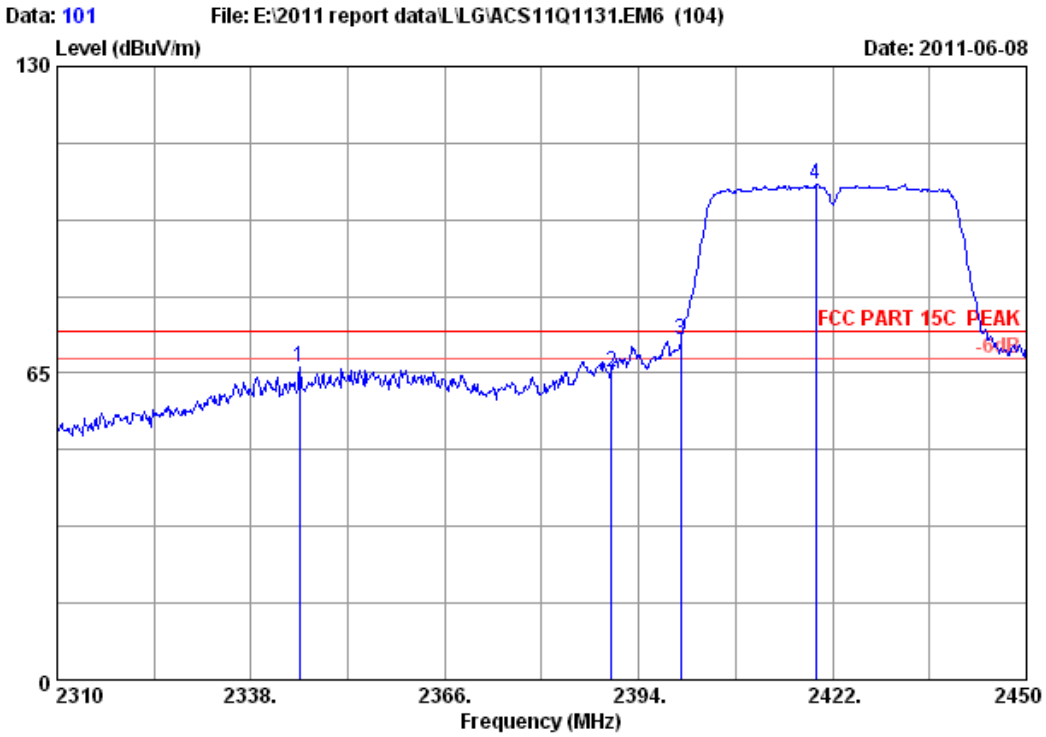
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH9 2452MHz TX
M/N : PCI-1020

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.760	29.47	7.72	36.06	103.47	104.60	74.00	-30.60	Peak
2	2483.500	29.49	7.77	35.97	62.94	64.23	74.00	9.77	Peak
3	2486.640	29.49	7.77	35.97	65.43	66.72	74.00	7.28	Peak

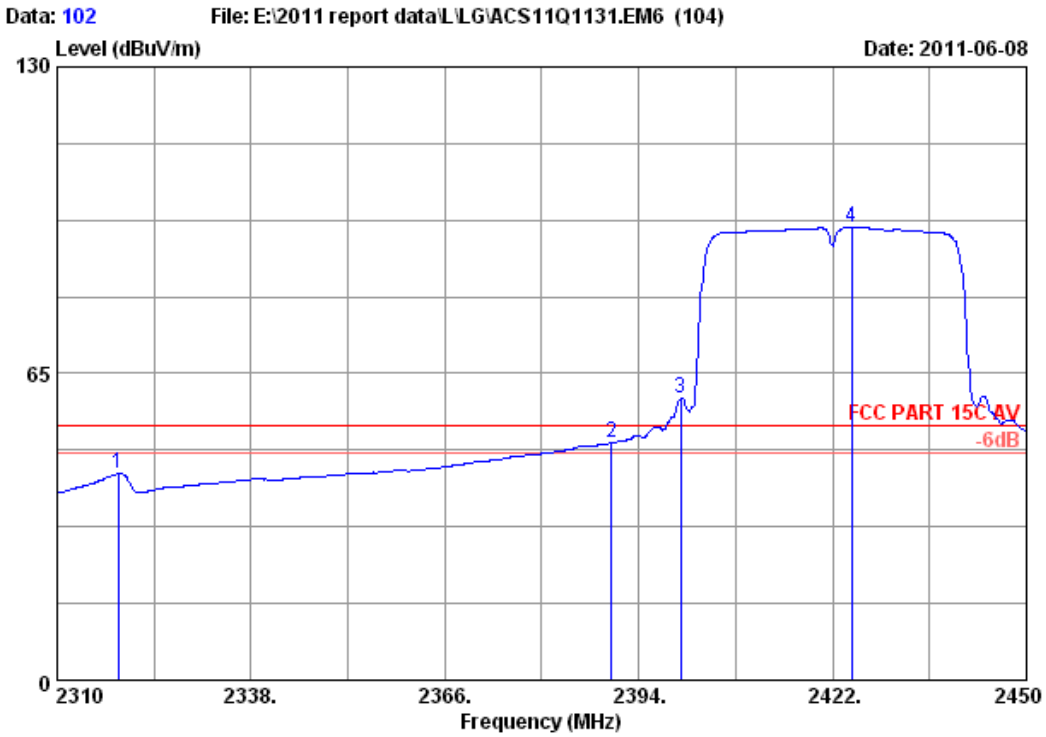
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 101
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH3 2422MHz TX
M/N : PCI-1020

	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	2345.000	29.41	7.61	35.99	65.25	66.28	74.00	7.72	Peak
2	2390.000	29.44	7.66	36.09	64.32	65.33	74.00	8.67	Peak
3	2400.000	29.44	7.66	36.09	70.88	71.89	74.00	2.11	Peak
4	2419.620	29.46	7.66	36.01	103.94	105.05	74.00	-31.05	Peak

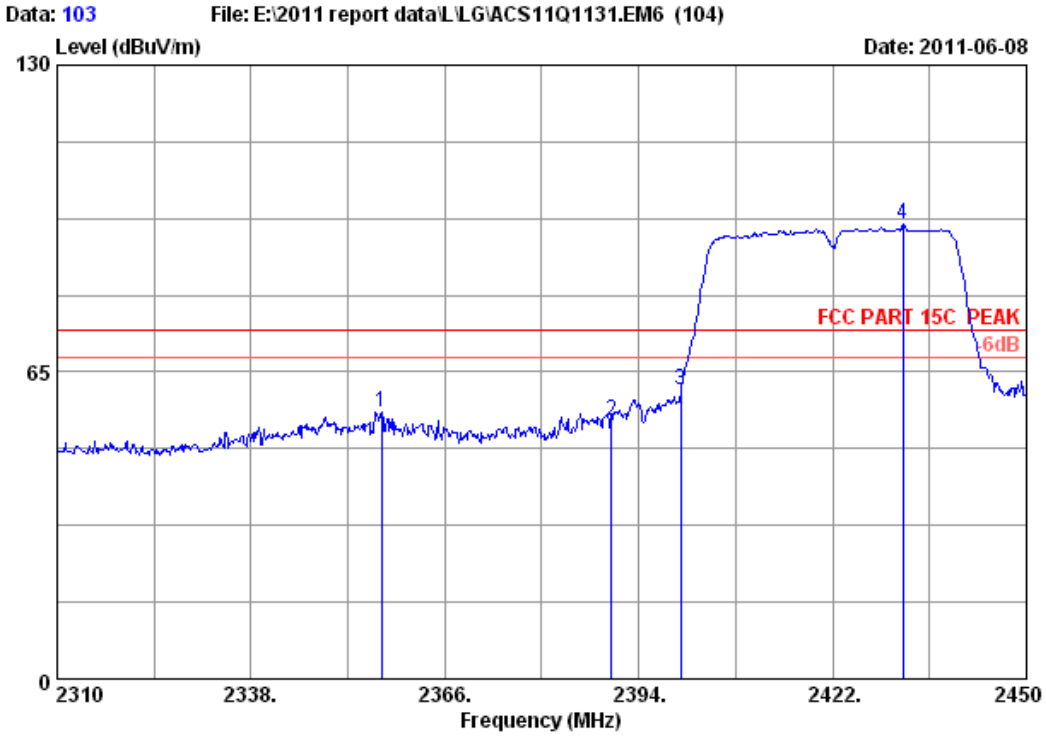
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 102
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH3 2422MHz TX
M/N : PCI-1020

	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	2318.820	29.40	7.55	36.06	42.84	43.73	54.00	10.27	Average
2	2390.000	29.44	7.66	36.09	49.21	50.22	54.00	3.78	Average
3	2400.000	29.44	7.66	36.09	58.75	59.76	54.00	-5.76	Average
4	2424.800	29.46	7.66	36.01	94.74	95.85	54.00	-41.85	Average

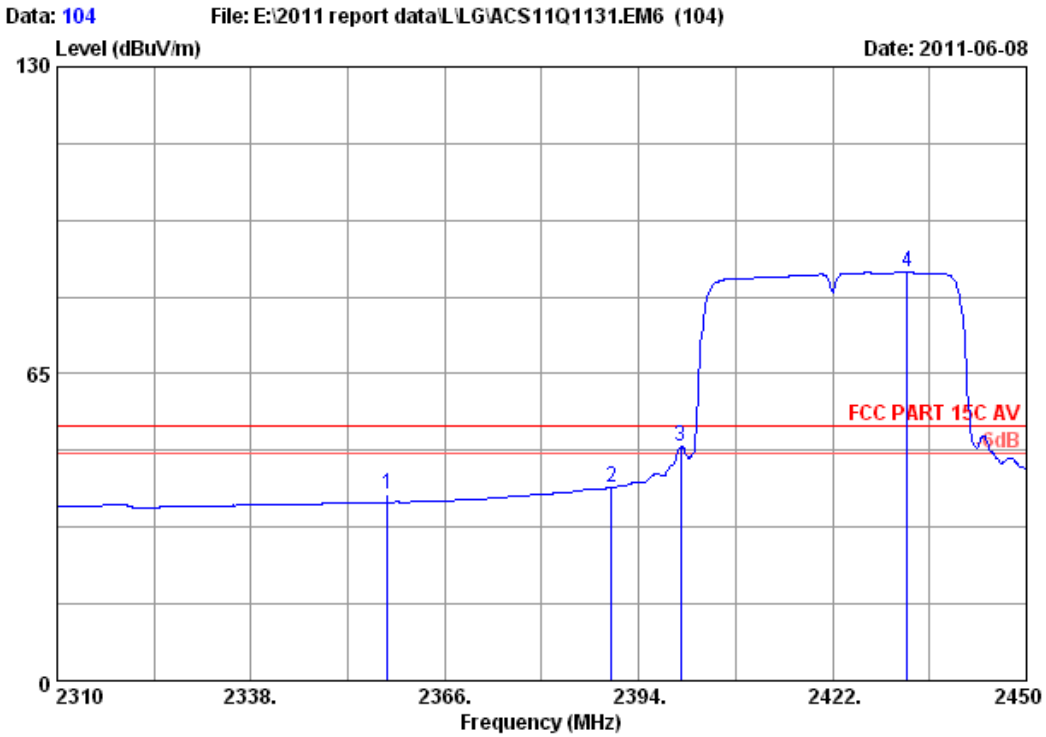
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 103
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH3 2422MHz TX
M/N : PCI-1020

	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	2356.900	29.42	7.61	35.91	55.49	56.61	74.00	17.39	Peak
2	2390.000	29.44	7.66	36.09	53.69	54.70	74.00	19.30	Peak
3	2400.000	29.44	7.66	36.09	60.24	61.25	74.00	12.75	Peak
4	2432.220	29.46	7.72	36.01	95.01	96.18	74.00	-22.18	Peak

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



Site no. : 3m Chamber Data no. : 104
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Paul
EUT : PCI-1020 WIRELESS 802.11N PCI ADAPTER
Power : DC 3.3V From PC input AC 120V/60Hz
Test mode : 11nHT40 CH3 2422MHz TX
M/N : PCI-1020

	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	2357.740	29.42	7.61	35.91	38.21	39.33	54.00	14.67	Average
2	2390.000	29.44	7.66	36.09	39.89	40.90	54.00	13.10	Average
3	2400.000	29.44	7.66	36.09	48.53	49.54	54.00	4.46	Average
4	2432.780	29.46	7.72	36.01	85.26	86.43	54.00	-32.43	Average

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

7. 6dB Bandwidth Test

7.1.Test Equipment

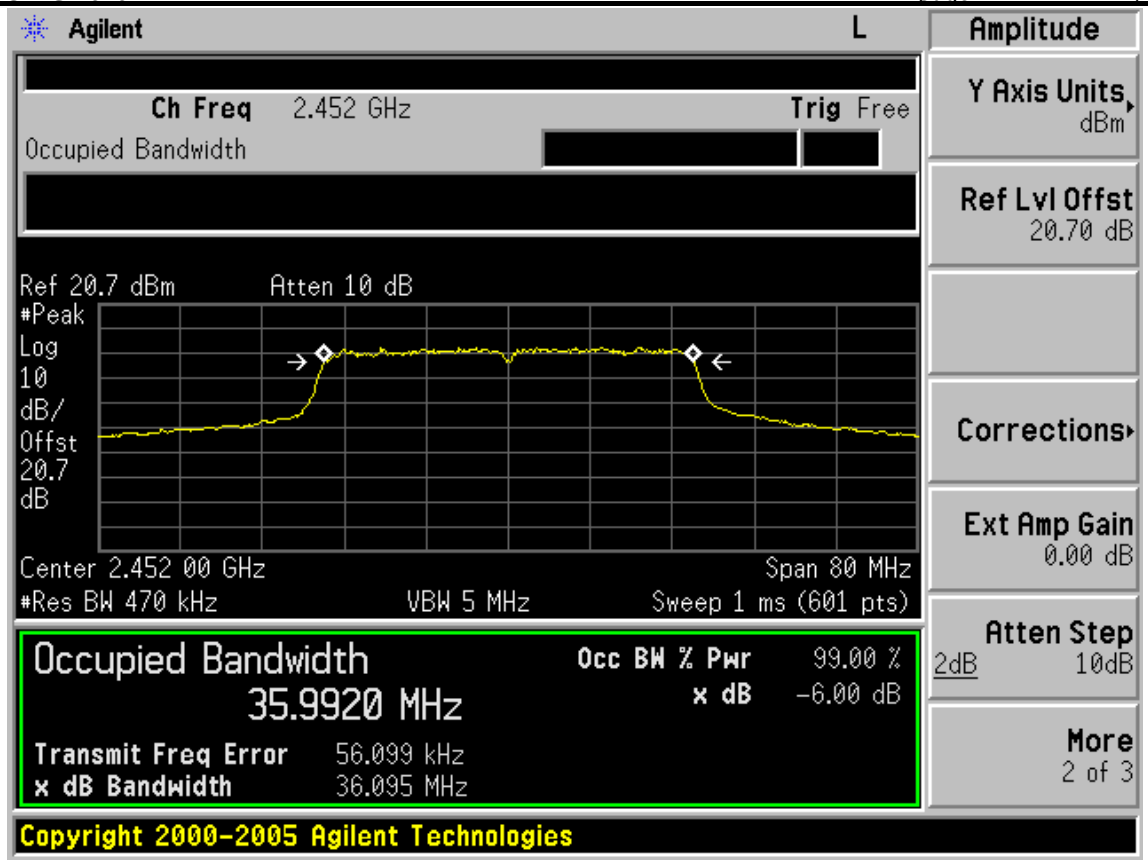
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

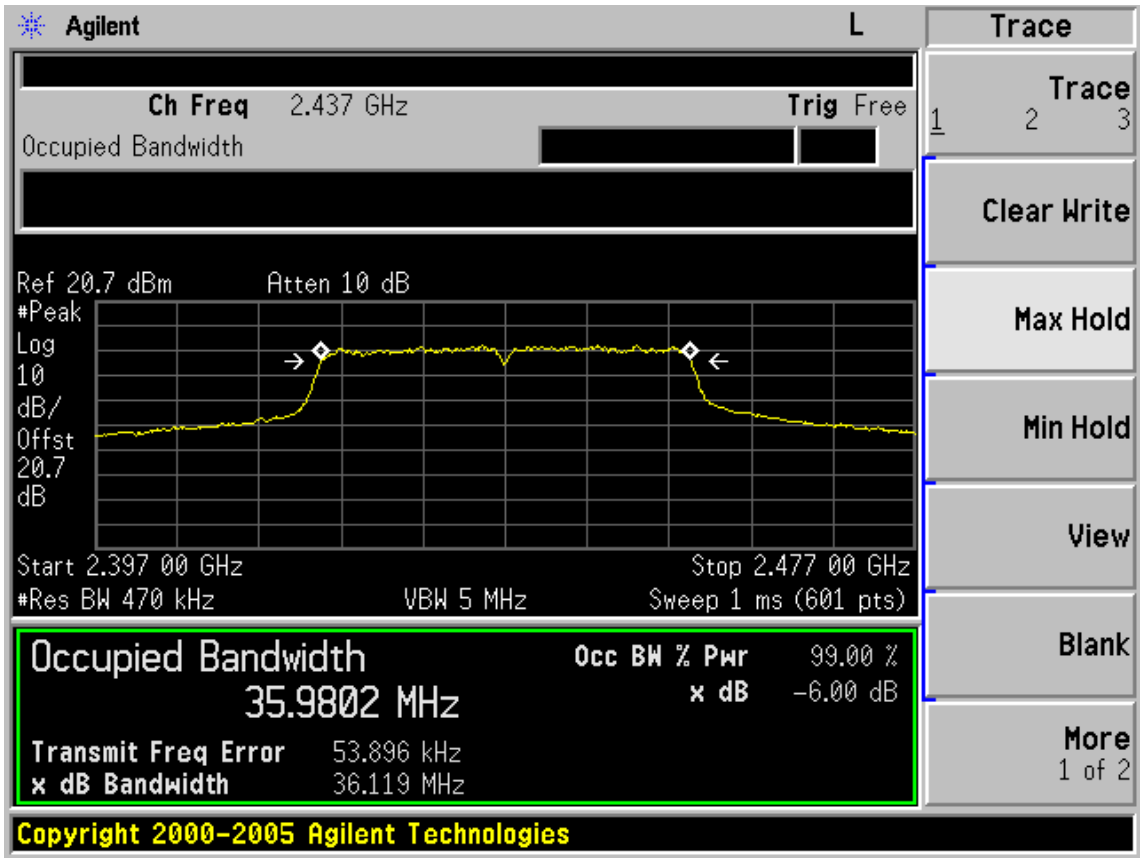
7.2.Limit

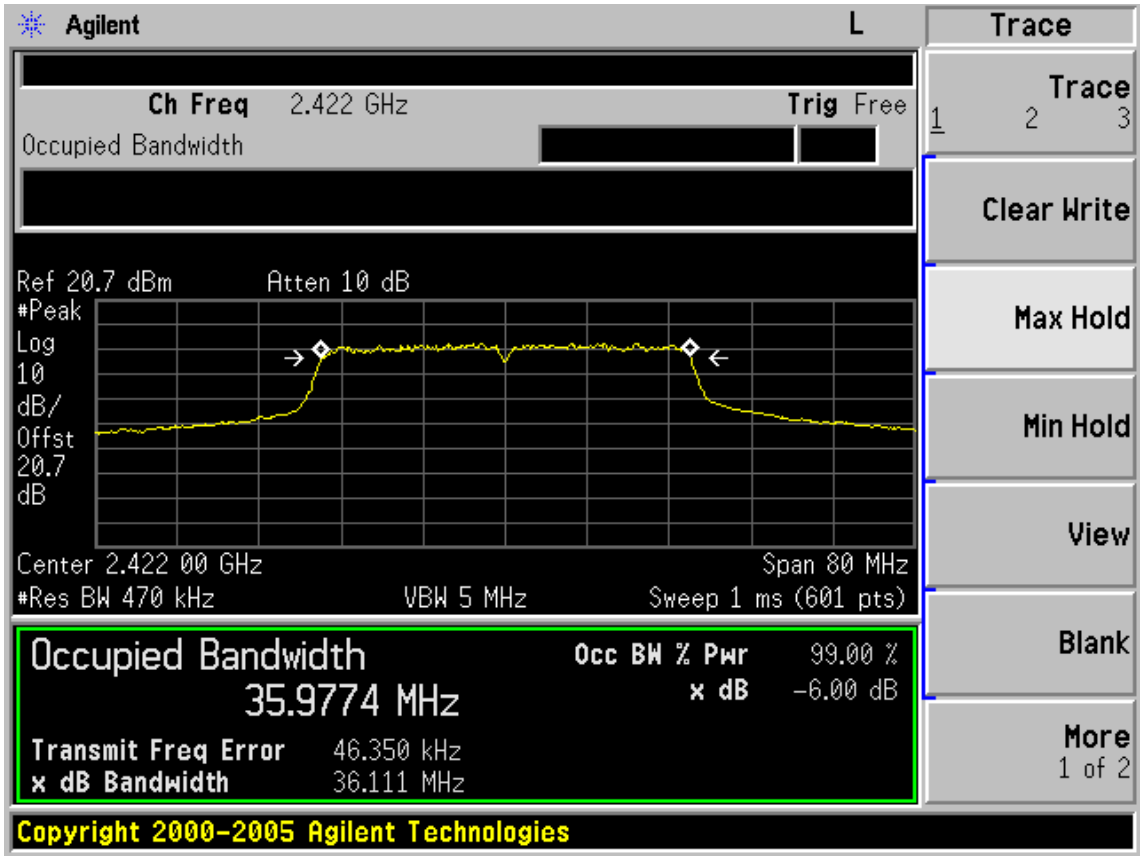
For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

7.3.Test Procedure

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


Agilent
L
Amplitude
Ch Freq 2.452 GHz
Trig Free
Occupied Bandwidth
Y Axis Units
dBm
Ref Lvl Offst
20.70 dB
Ref 20.7 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
20.7
dB
Corrections
Ext Amp Gain
0.00 dB
Center 2.452 00 GHz
Span 80 MHz
#Res BW 470 kHz
VBW 5 MHz
Sweep 1 ms (601 pts)
Occupied Bandwidth
35.9920 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error 56.099 kHz
x dB Bandwidth 36.095 MHz
Atten Step
2dB 10dB
More
2 of 3
Copyright 2000-2005 Agilent Technologies


Agilent
L
Trace
Ch Freq 2.437 GHz
Trig Free
Occupied Bandwidth
Trace
1 2 3
Clear Write
Ref 20.7 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
20.7
dB
Max Hold
Min Hold
View
Start 2.397 00 GHz
Stop 2.477 00 GHz
#Res BW 470 kHz
VBW 5 MHz
Sweep 1 ms (601 pts)
Blank
Occupied Bandwidth
35.9802 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error 53.896 kHz
x dB Bandwidth 36.119 MHz
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Trace
Ch Freq 2.422 GHz
Trig Free
Occupied Bandwidth
Trace
1 2 3
Clear Write
Ref 20.7 dBm
Atten 10 dB
#Peak
Log
10
dB/
Offst
20.7
dB
Max Hold
Min Hold
View
Center 2.422 00 GHz
Span 80 MHz
#Res BW 470 kHz
VBW 5 MHz
Sweep 1 ms (601 pts)
Occupied Bandwidth
35.9774 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Blank
Transmit Freq Error 46.350 kHz
x dB Bandwidth 36.111 MHz
More
1 of 2
Copyright 2000-2005 Agilent Technologies

8. OUTPUT POWER TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power meter	Anritsu	ML2487A	6K00002472	May.08,11	1Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,11	1Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,11	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	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, Connected the EUT's antenna port to measure device by 20dB attenuator.

2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is above 6dB bandwidth of signal to measure out each test modes' PK output power.

3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So the channel power measure function of Spectrum Analyzer was used to measure out the PK output power of each test modes'

Note: For IEEE802.11n mode, it's MIMO system, so calculate total e.i.r.p power by add each chain's measured power.

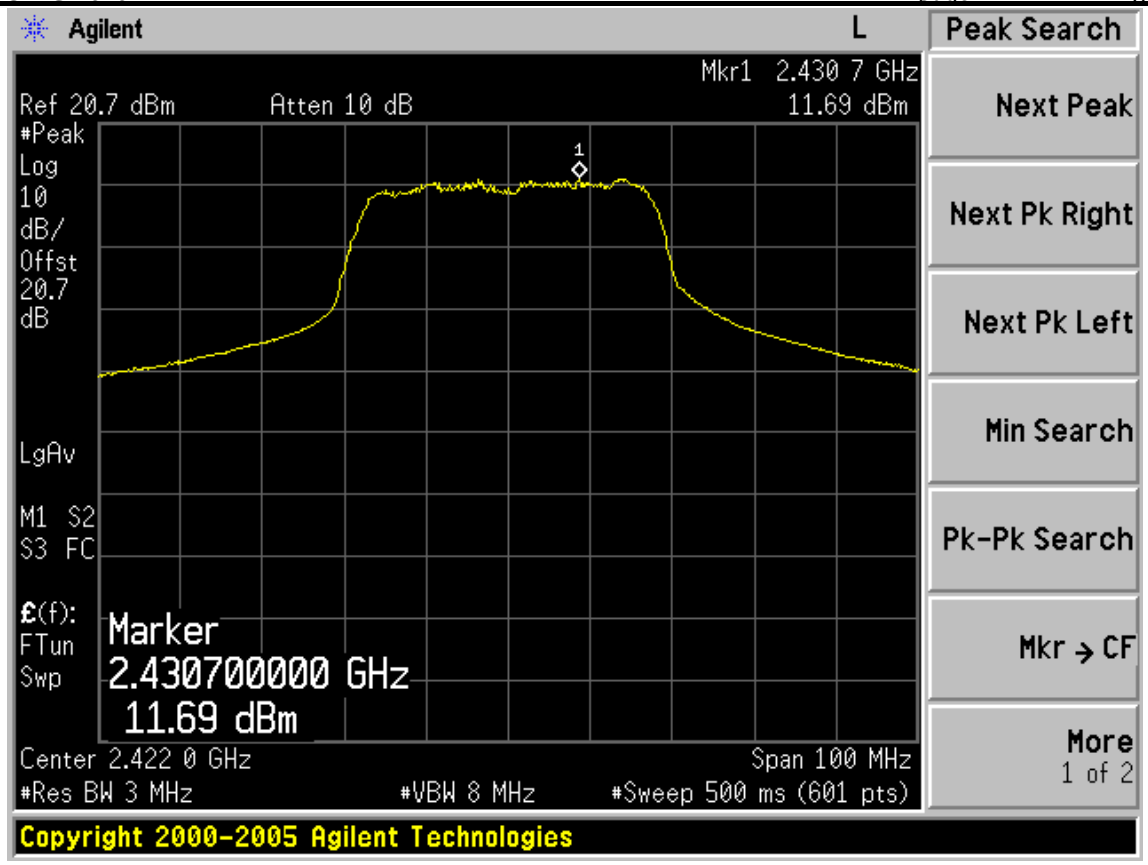
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

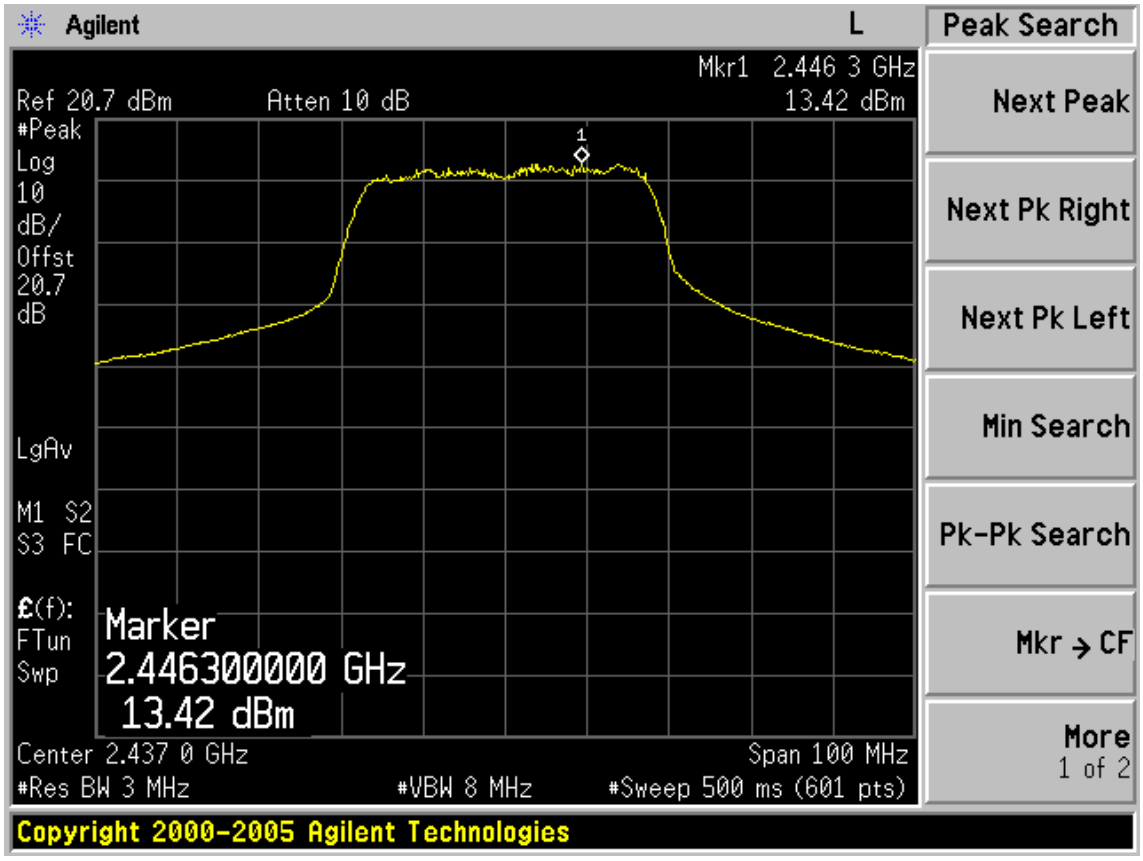
8.4.Test Results

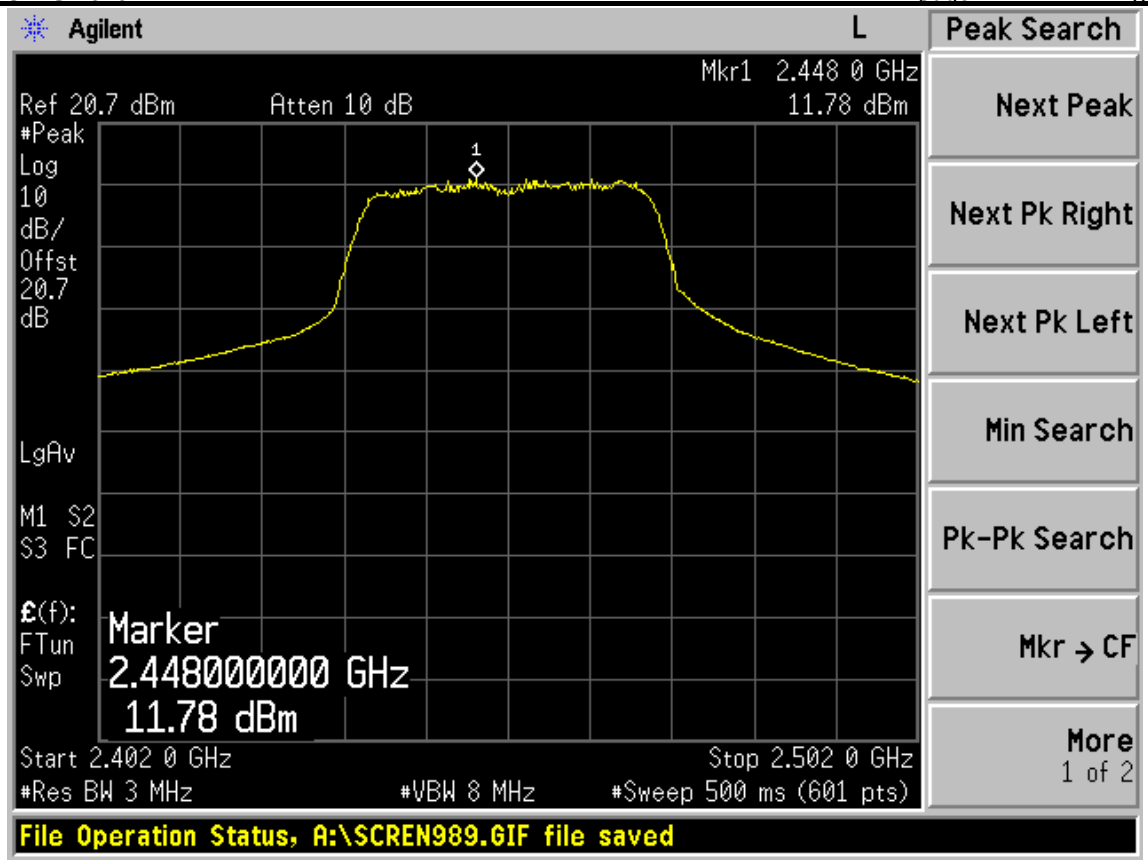
EUT: PCI-1020 WIRELESS 802.11N PCI ADAPTER		
M/N: PCI-1020		
Test date: 2011-06-09	Pressure: 101.6 kpa	Humidity: 52 %
Tested by: Leo-Li	Test site: RF site	Temperature: 25 ℃

Cable loss: 0.7 dB		Attenuator loss: 20 dB	Antenna Gain: 1.8 dBi
Test Mode	CH (MHz)	Peak output Power （dBm）	Limit (dBm)
11b	CH1	19.56	30
	CH6	22.26	30
	CH11	20.52	30
11g	CH1	24.39	30
	CH6	25.37	30
	CH11	24.77	30
11n HT20	CH1	23.61	30
	CH6	25.66	30
	CH11	24.25	30

Test Mode	CH	Result		Limit
		Measured power(dBm)/3MHz	PK Output power (dBm)	(dBm)
11n HT40	CH1	11.69	22.50	30
	CH4	13.42	24.23	30
	CH7	11.78	22.59	30
6dB Bandwidth for 11n HT40: 36.119MHz				
BW correction factor = 10log[(36.119MHz)/(3MHz)] = 10.81dB				
Conclusion: PASS				


Agilent
L
Peak Search
Mkr1 2.430 7 GHz
Ref 20.7 dBm
Atten 10 dB
11.69 dBm
#Peak
Log
10
dB/
Offst
20.7
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.430700000 GHz
11.69 dBm
Center 2.422 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 2.446 3 GHz
Ref 20.7 dBm
Atten 10 dB
13.42 dBm
#Peak
Log
10
dB/
Offst
20.7
dB
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.446300000 GHz
13.42 dBm
Center 2.437 0 GHz
Span 100 MHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Copyright 2000-2005 Agilent Technologies


Agilent
L
Peak Search
Mkr1 2.448 0 GHz
Ref 20.7 dBm
Atten 10 dB
11.78 dBm
#Peak
Log
10
dB/
Offst
20.7
dB
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Marker
2.448000000 GHz
11.78 dBm
Start 2.402 0 GHz
Stop 2.502 0 GHz
#Res BW 3 MHz
#VBW 8 MHz
#Sweep 500 ms (601 pts)
File Operation Status, A:\SCREN989.GIF file saved

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 11	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 11	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 11	1Year

9.2.Limit

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

9.3.Test Procedure

1, Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.

2, Follow the test procedure as described in ANSI C.10: 2009 Clause 6.11.2.3 to measure out each test modes and chain's power density with 3KHz.

3, For IEEE802.11n mode, it's MIMO technology, so account total power density by add each chain's power density.

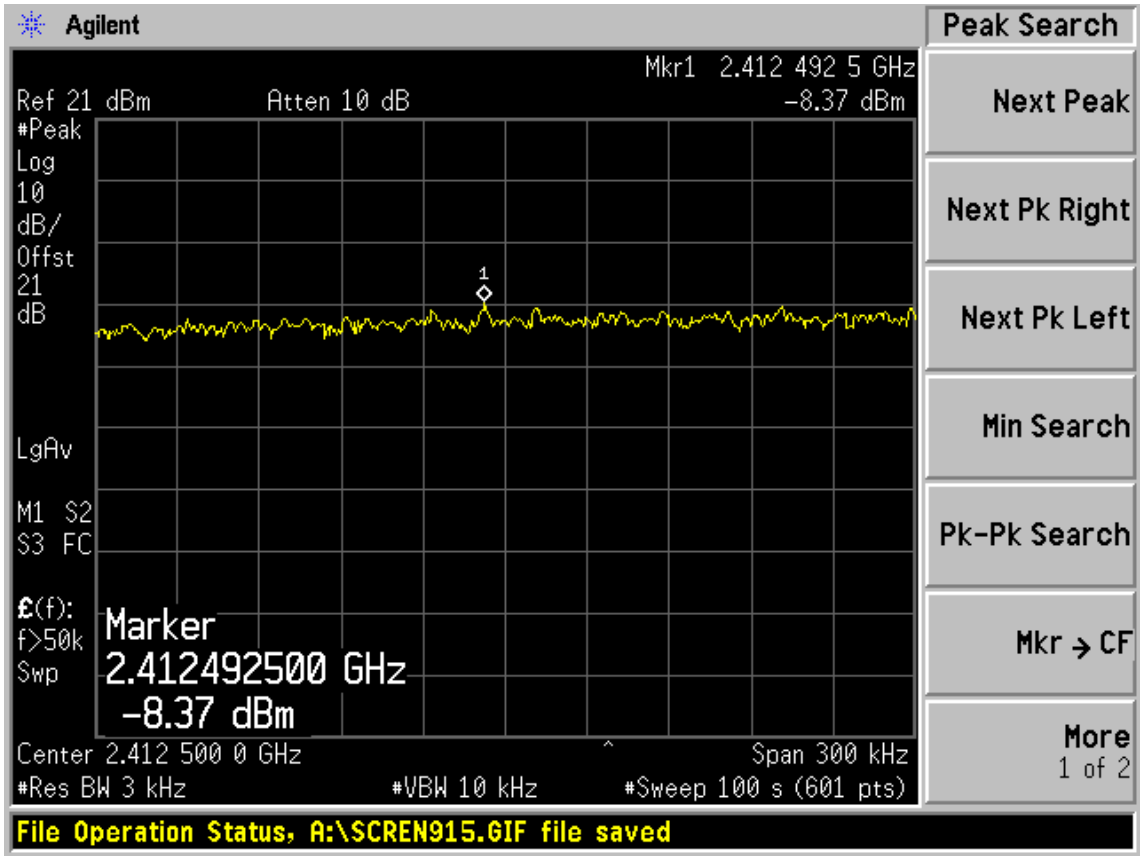
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

9.4.Test Results

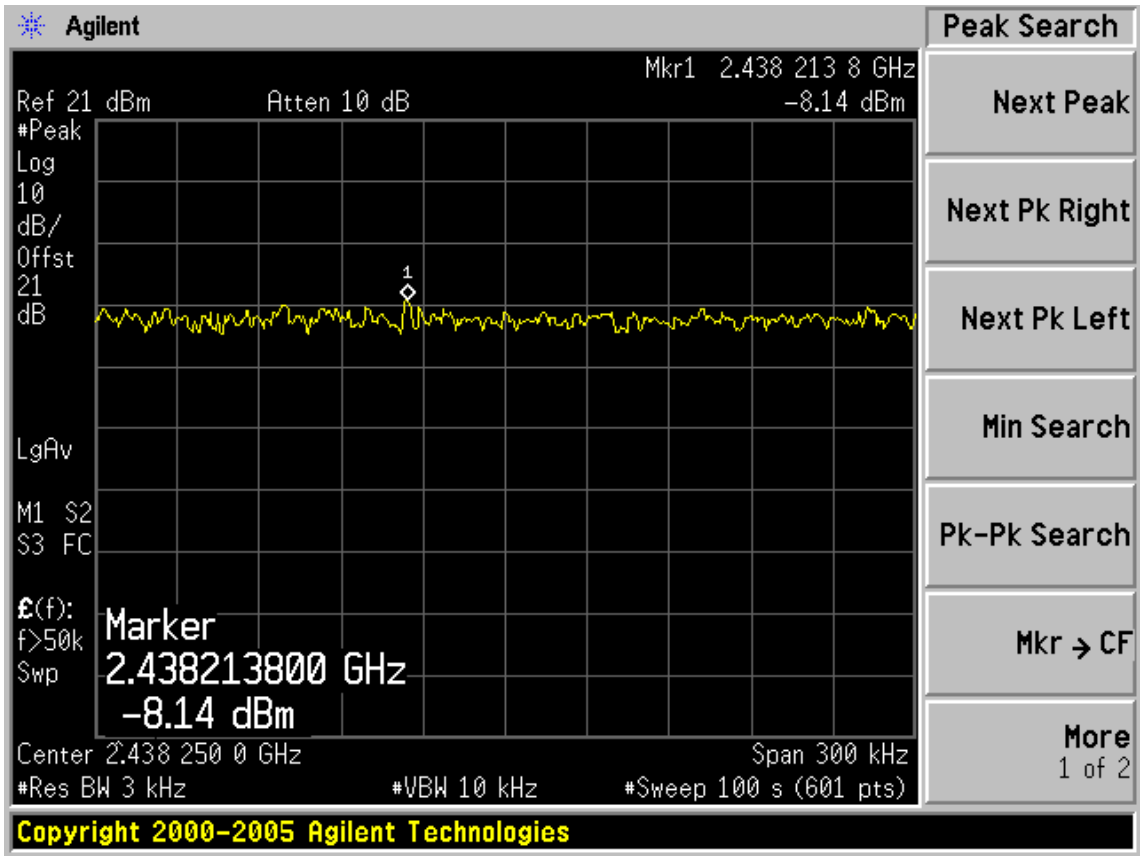
EUT: PCI-1020 WIRELESS 802.11N PCI ADAPTER		
M/N: PCI-1020		
Test date:2011-06-09	Pressure: 100.9 kpa	Humidity: 51 %
Tested by: Leo-Li	Test site: RF Site	Temperature：25℃

Cable loss: 1 dB		Attenuator loss: 20 dB			Antenna Gain: 2 dBi
Test Mode	CH	Power density（dBm/3KHz）			Limit (dBm/3KHz)
		Chain0	Chain1	Total	
11b	CH1	-8.37	-9.28	N/A	8
	CH6	-8.14	-9.41	N/A	8
	CH11	-9.30	-9.44	N/A	8
11g	CH1	-13.28	-13.53	N/A	8
	CH6	-9.81	-10.26	N/A	8
	CH11	-15.00	-15.70	N/A	8
11n HT20	CH1	-17.30	-17.79	0.15	8
	CH6	-10.59	-10.66	0.69	8
	CH11	-17.03	-17.16	0.17	8
11n HT40	CH3	-21.57	-20.58	0.07	8
	CH6	-13.40	-11.89	0.45	8
	CH9	-21.71	-21.10	0.06	8
Conclusion：PASS					

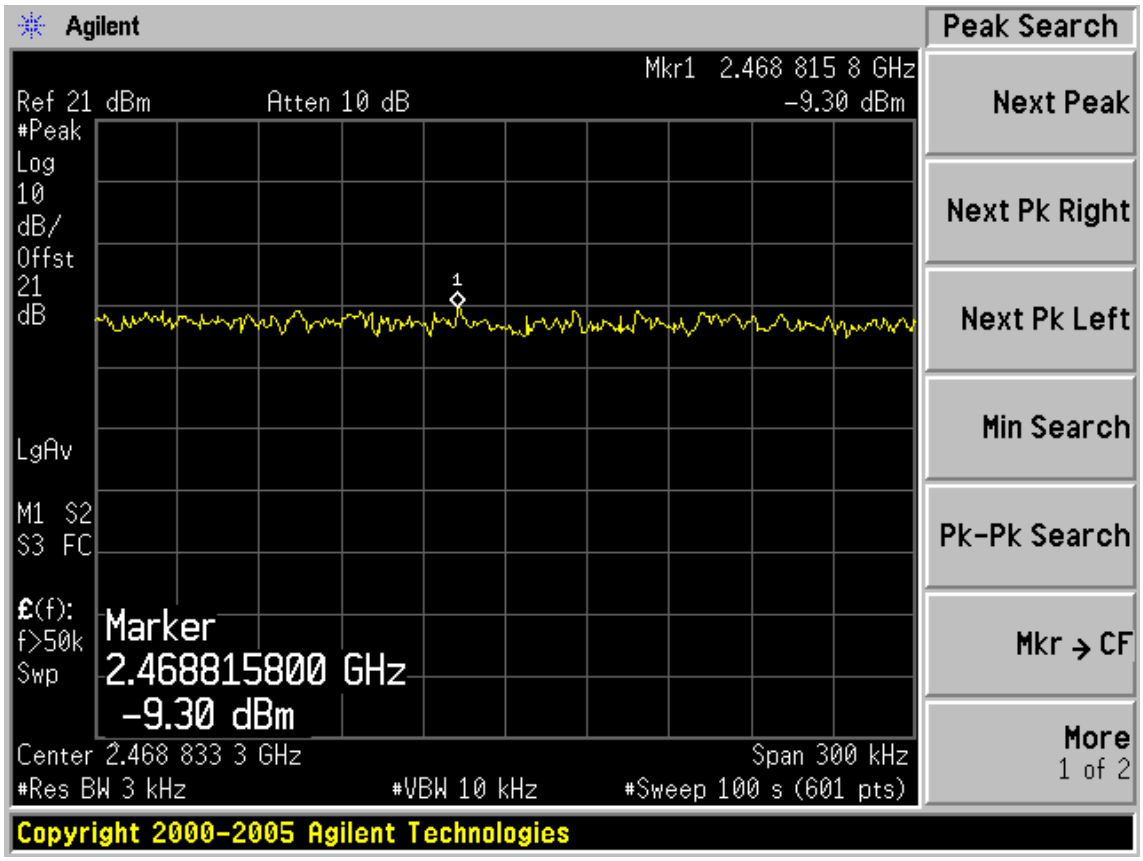
Chain 0
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



Test CH6: 2437MHz

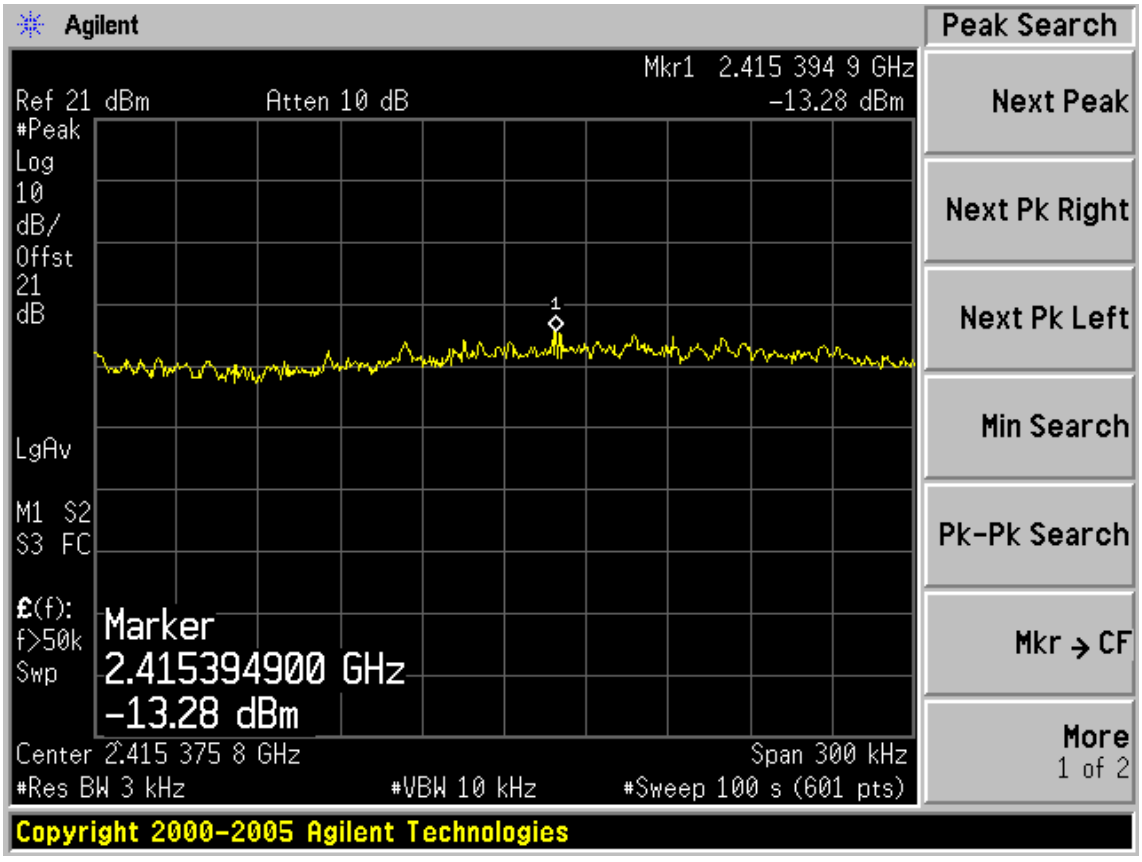


Test CH11: 2462MHz

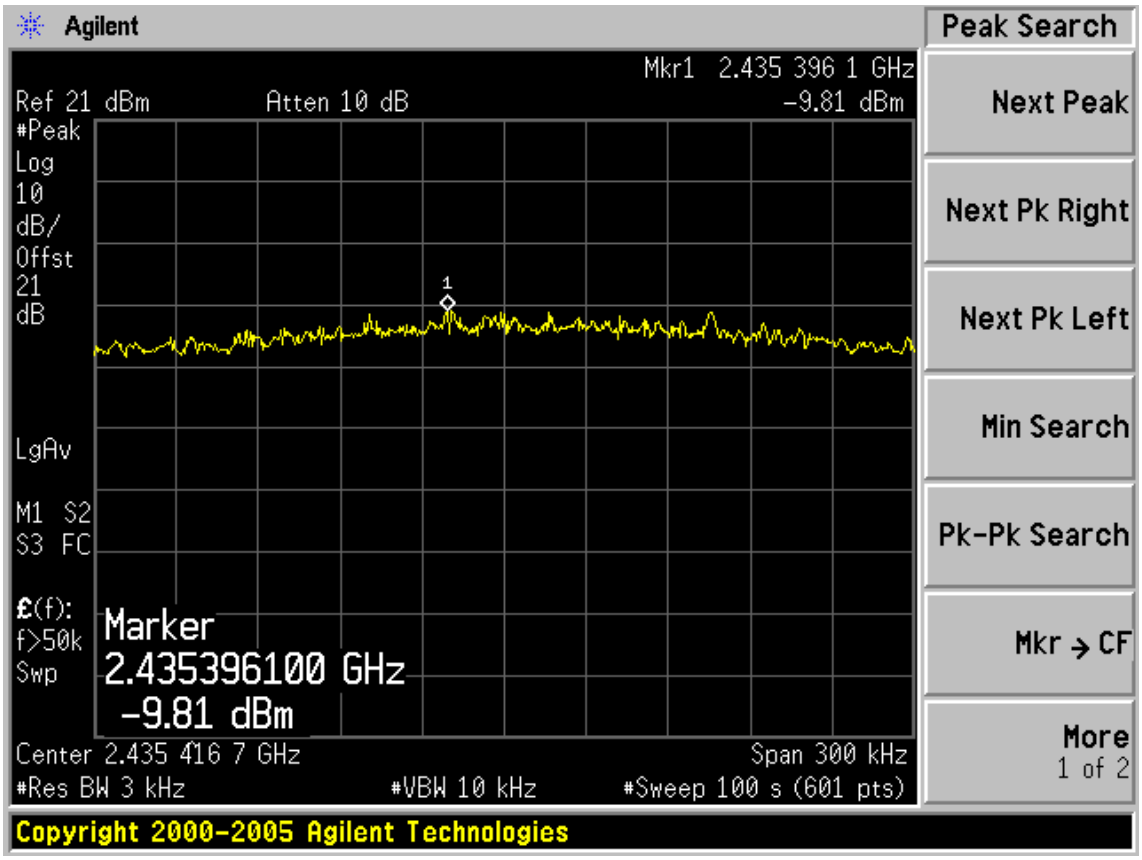


Test Mode: IEEE 802.11g TX

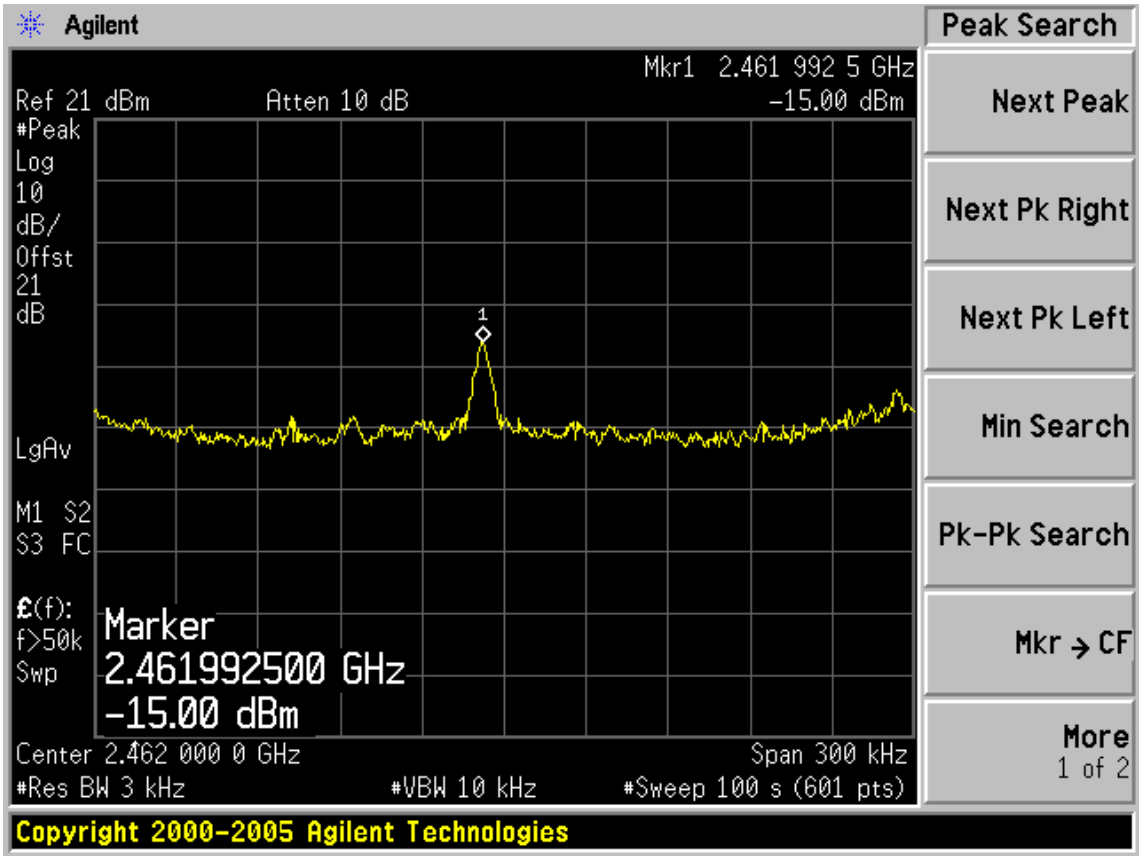
Test CH1: 2412MHz



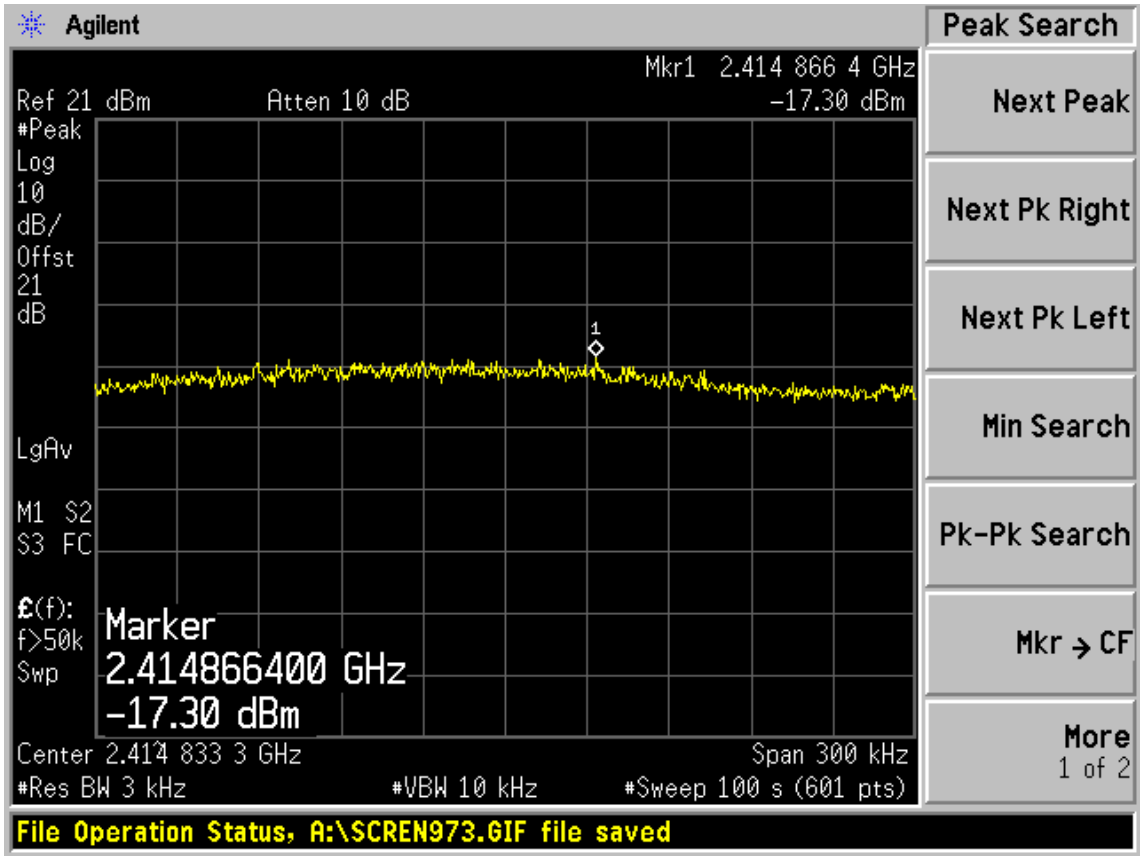
Test CH6: 2437MHz



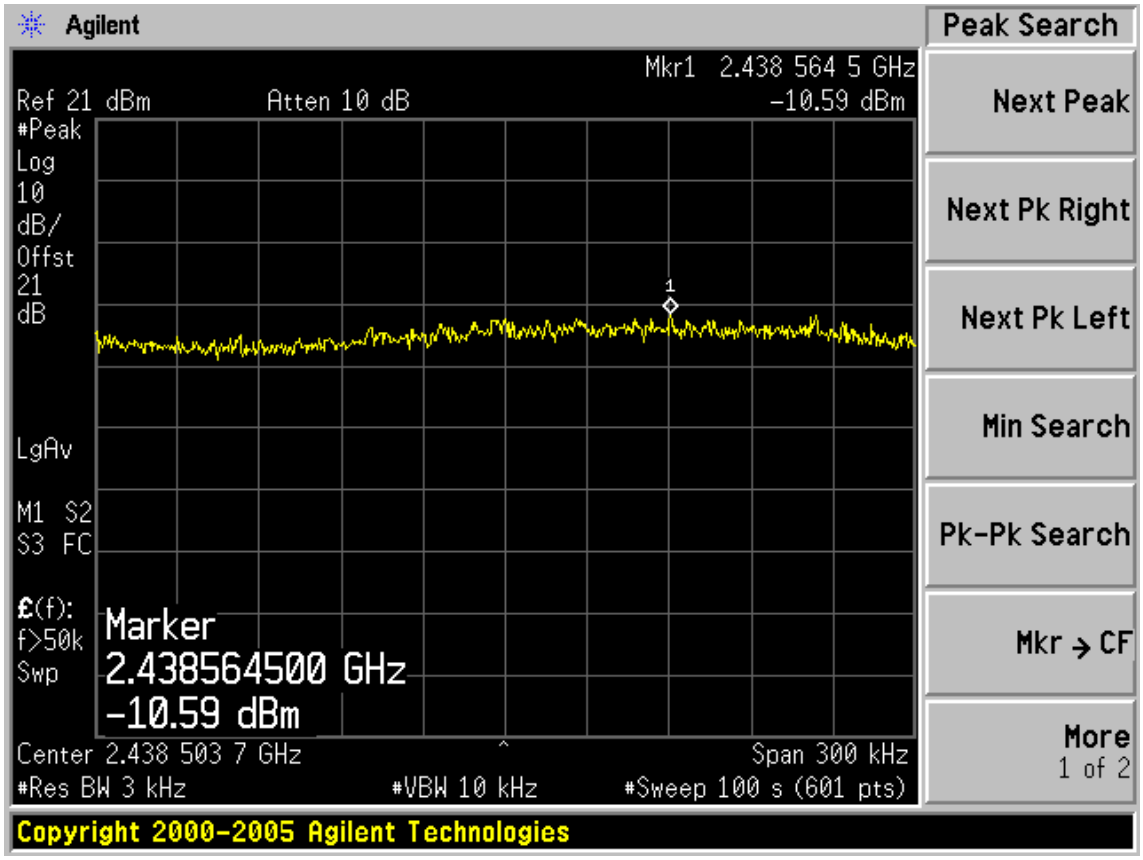
Test CH11: 2462MHz



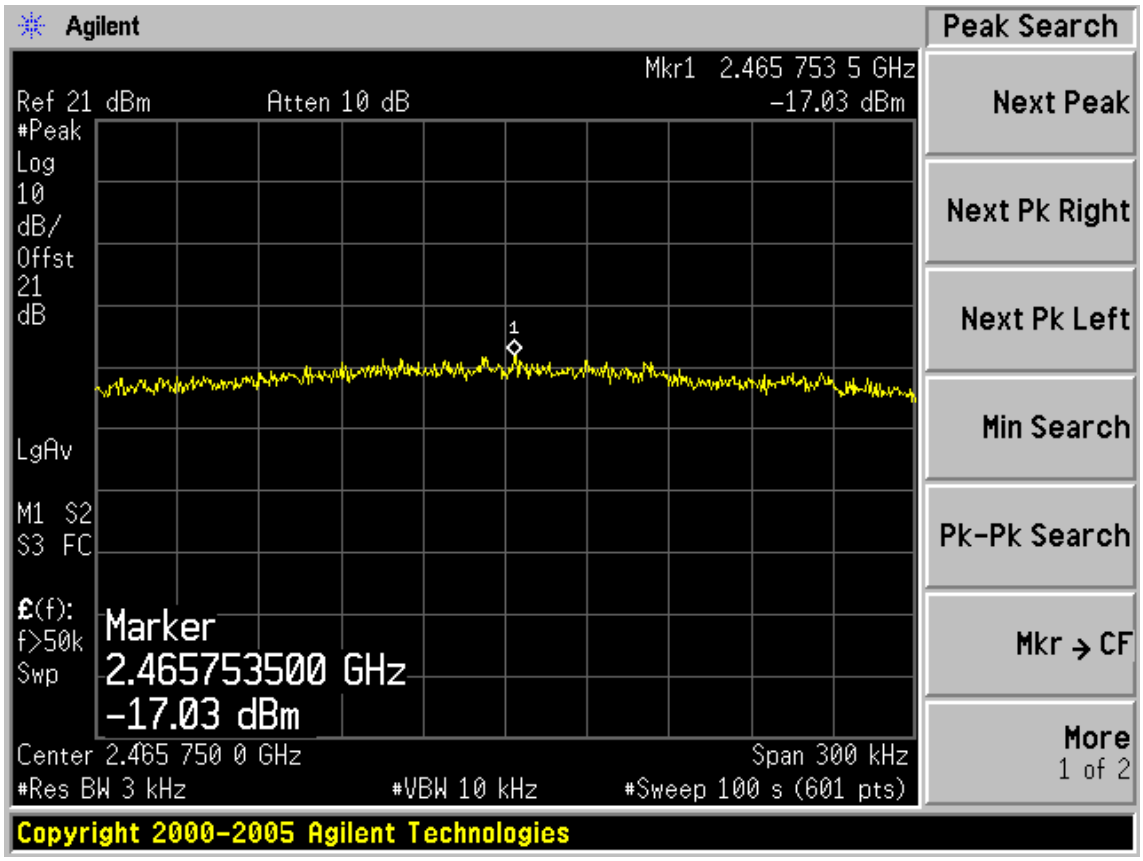
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



Test CH6: 2437MHz

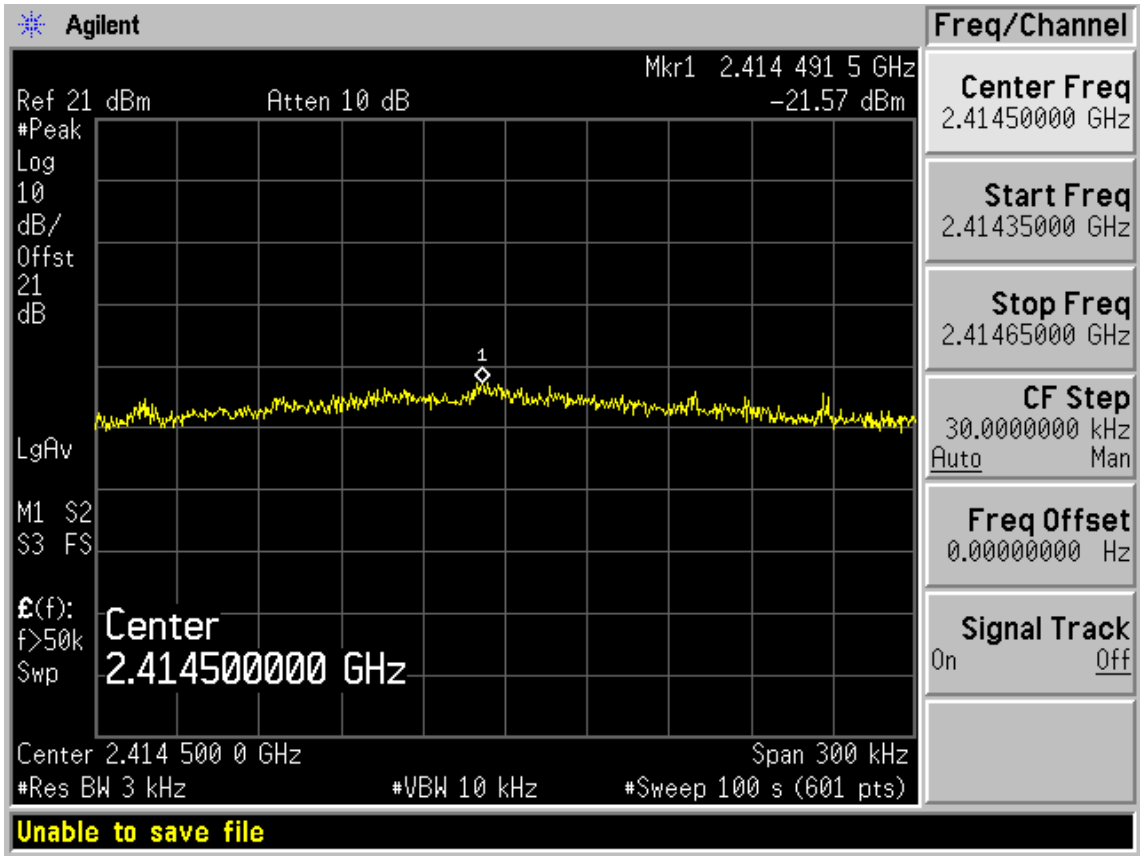


Test CH11: 2462MHz

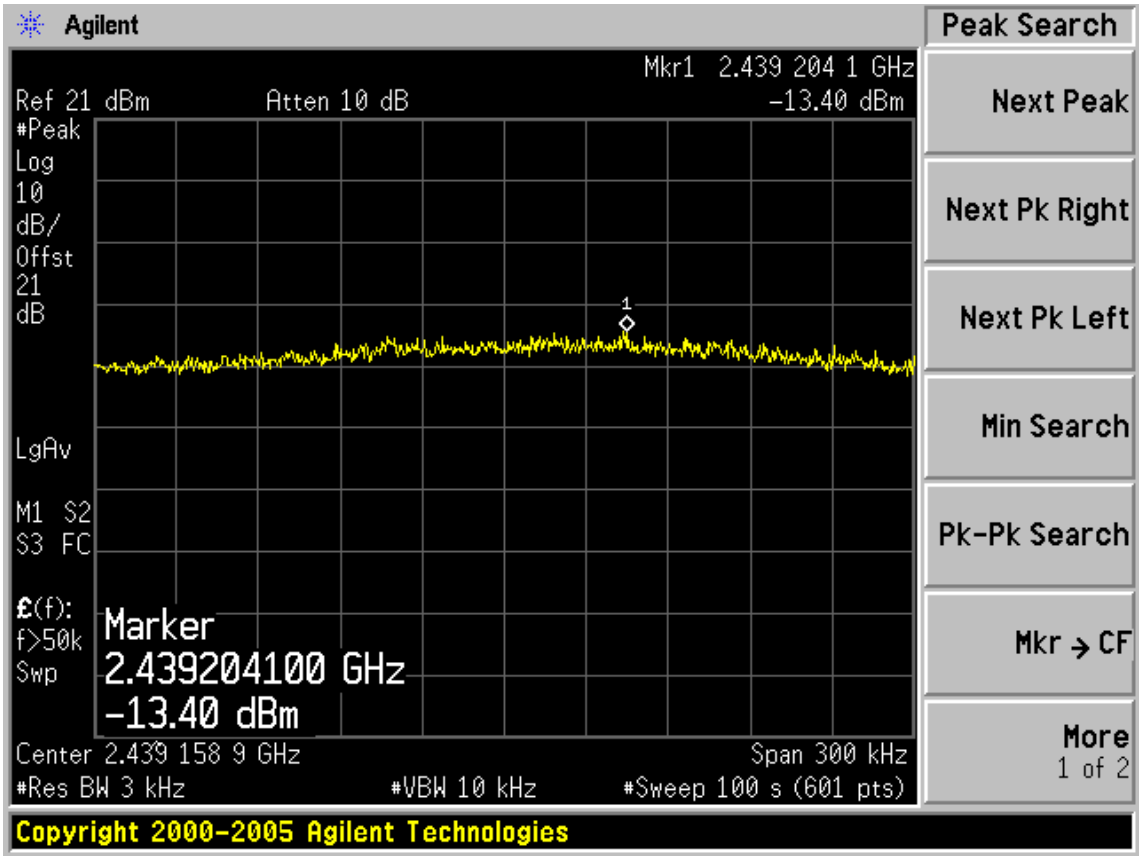


Test Mode: IEEE 802.11n HT40 TX

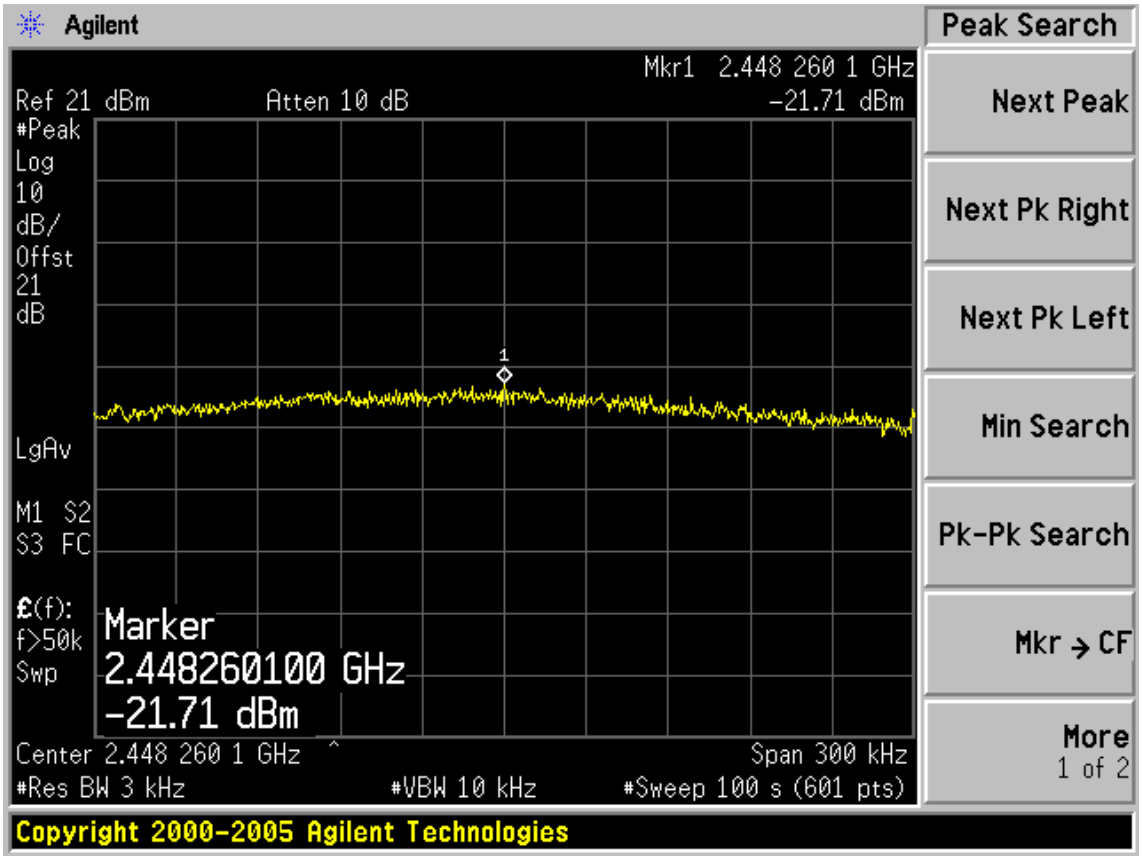
Test CH1: 2422MHz



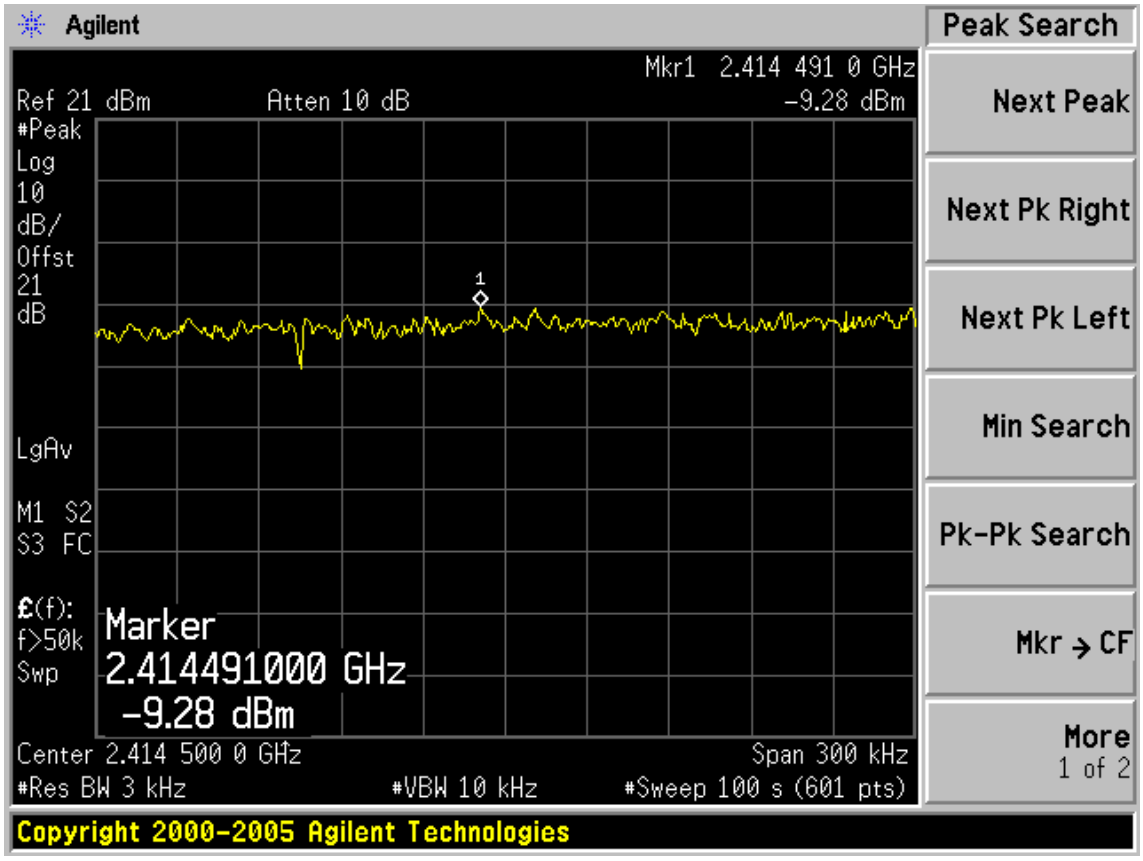
Test CH4: 2437MHz



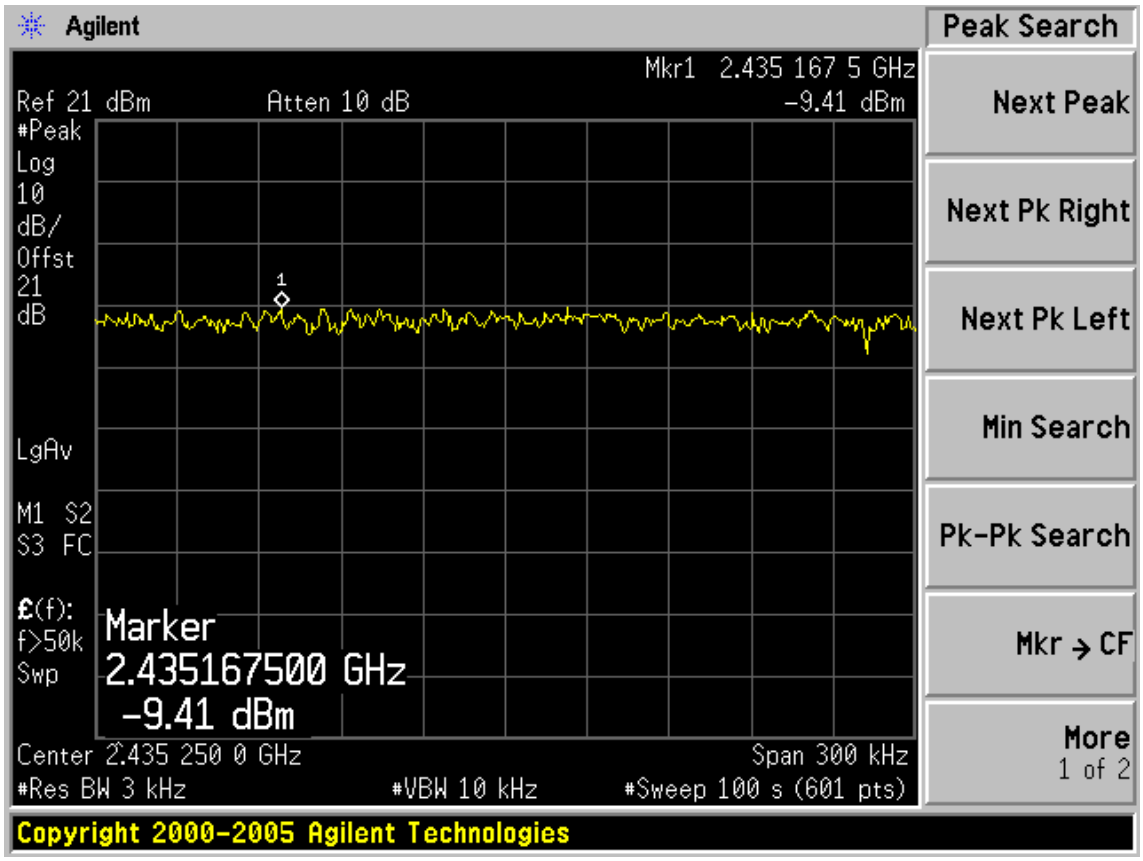
Test CH7: 2452MHz



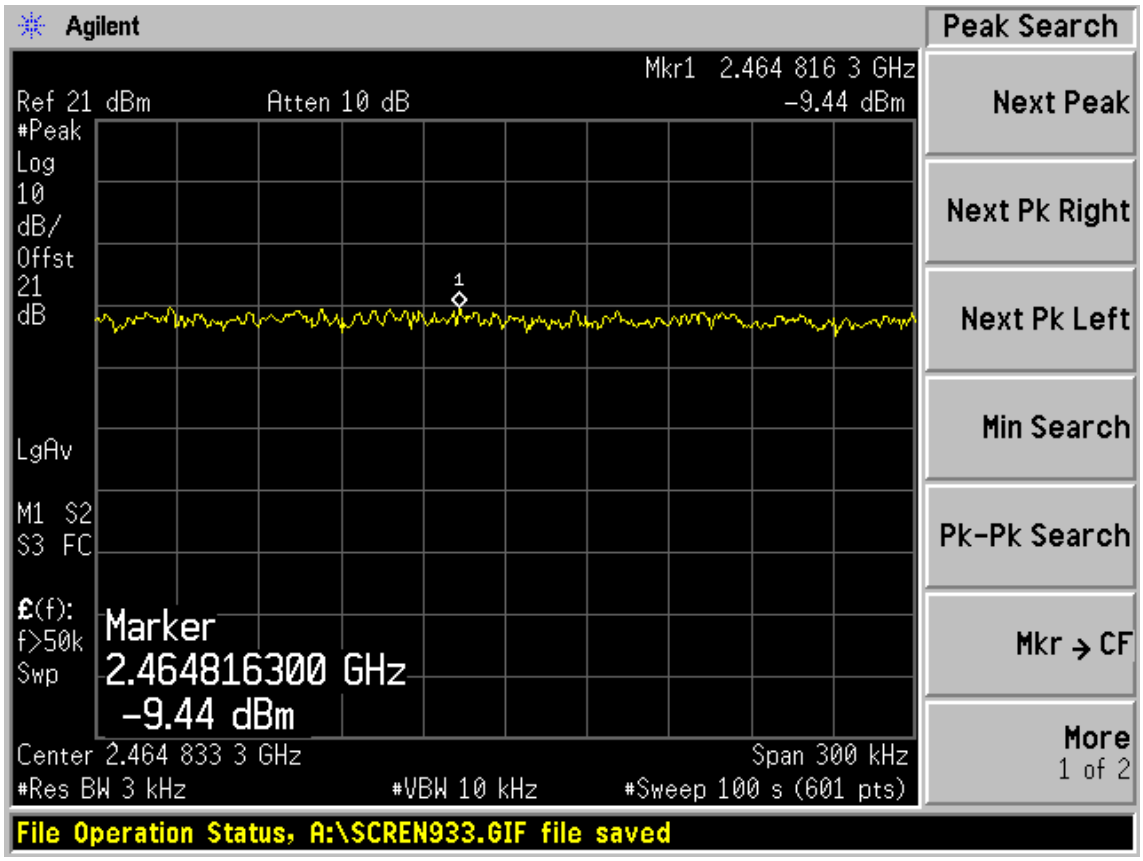
Chain 1
Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz



Test CH6: 2437MHz

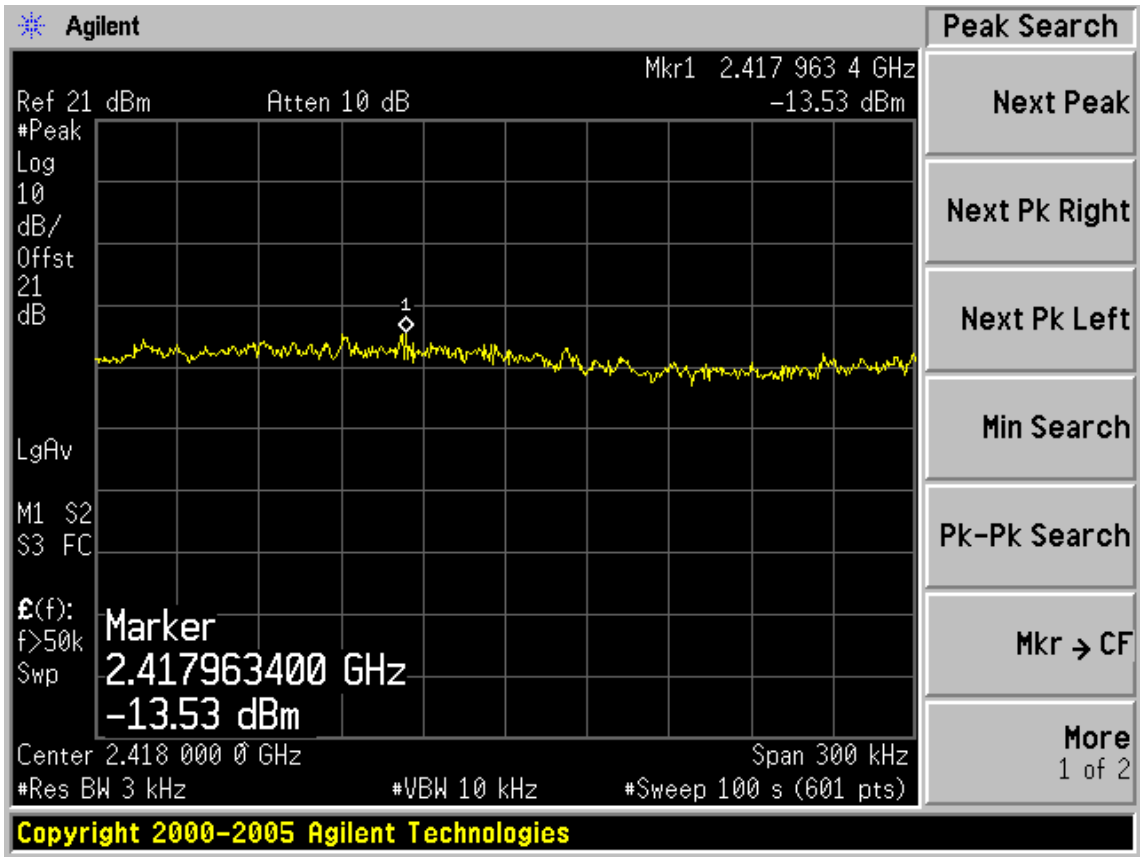


Test CH11: 2462MHz

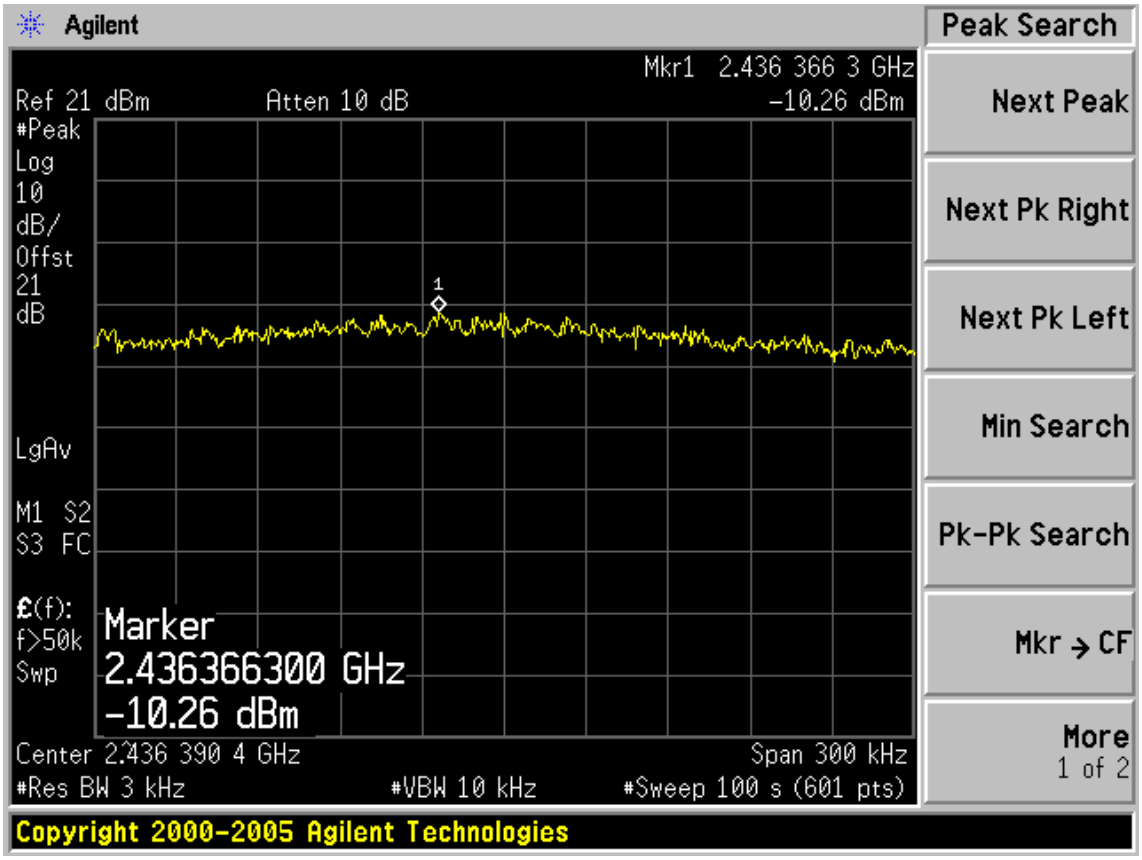


Test Mode: IEEE 802.11g TX

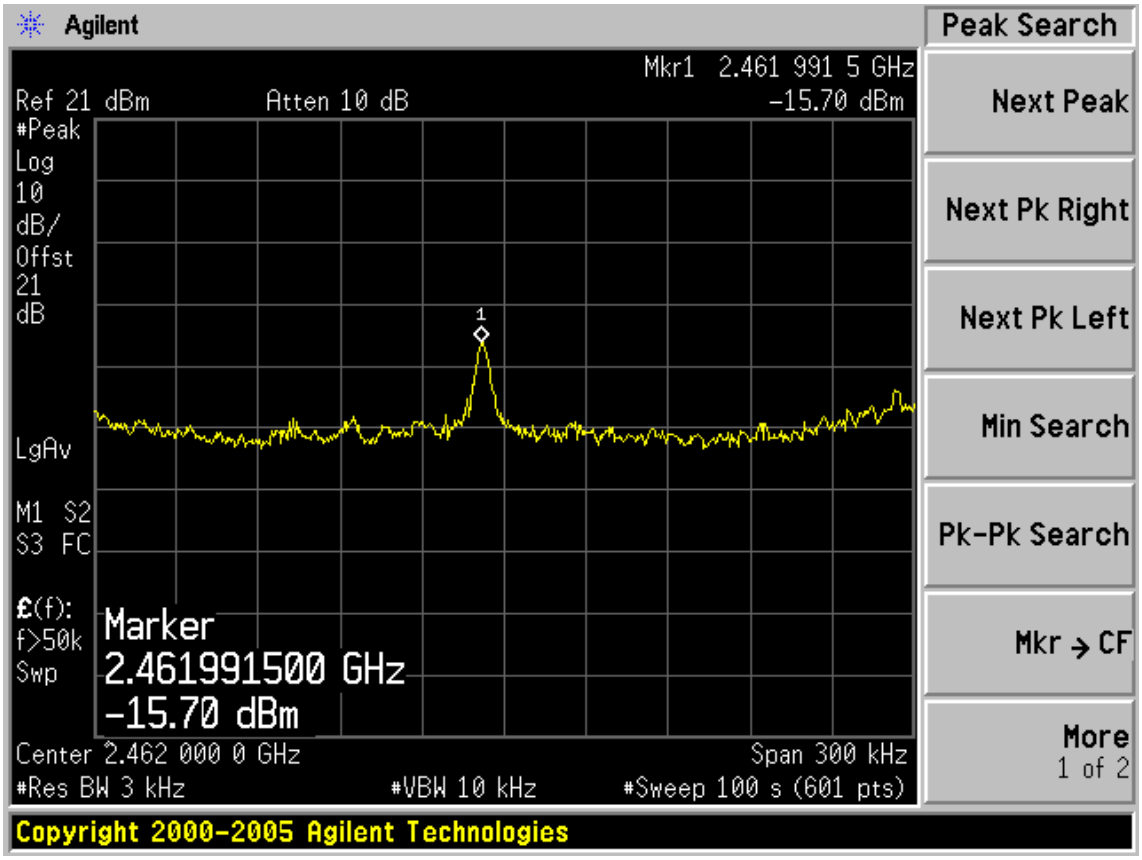
Test CH1: 2412MHz



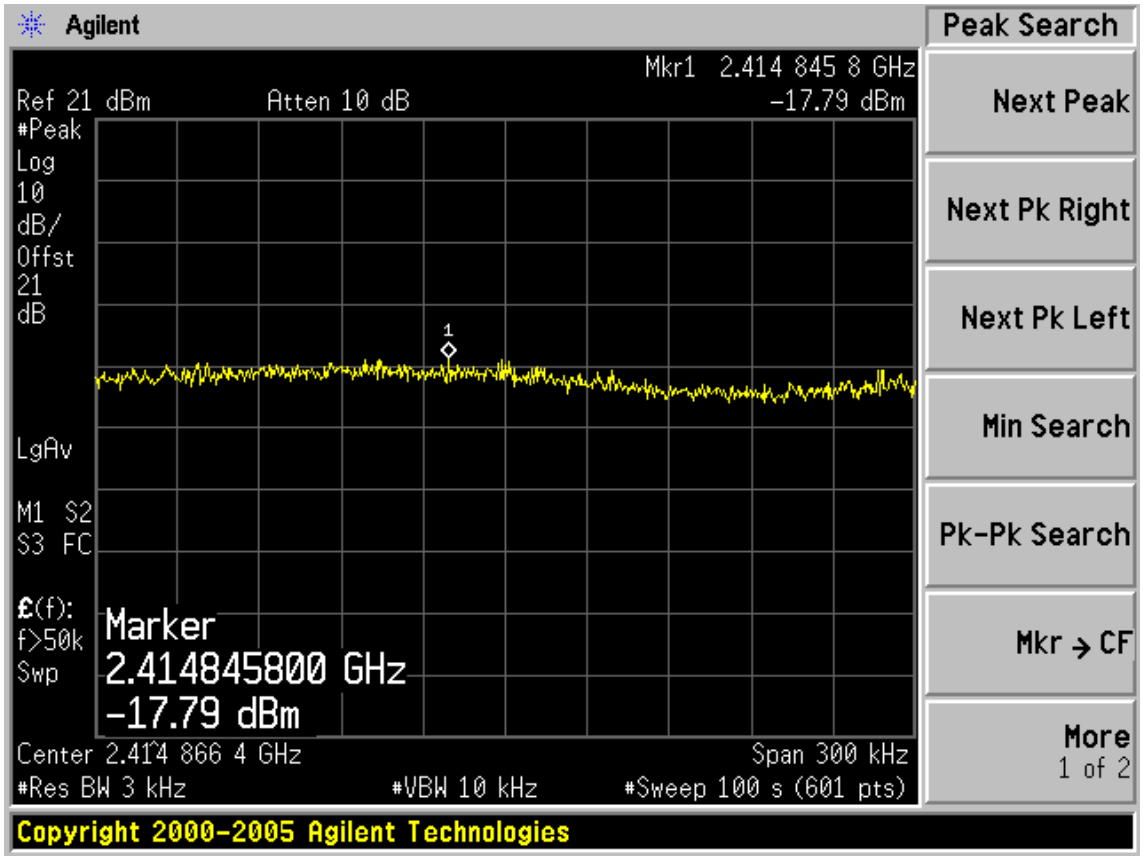
Test CH6: 2437MHz



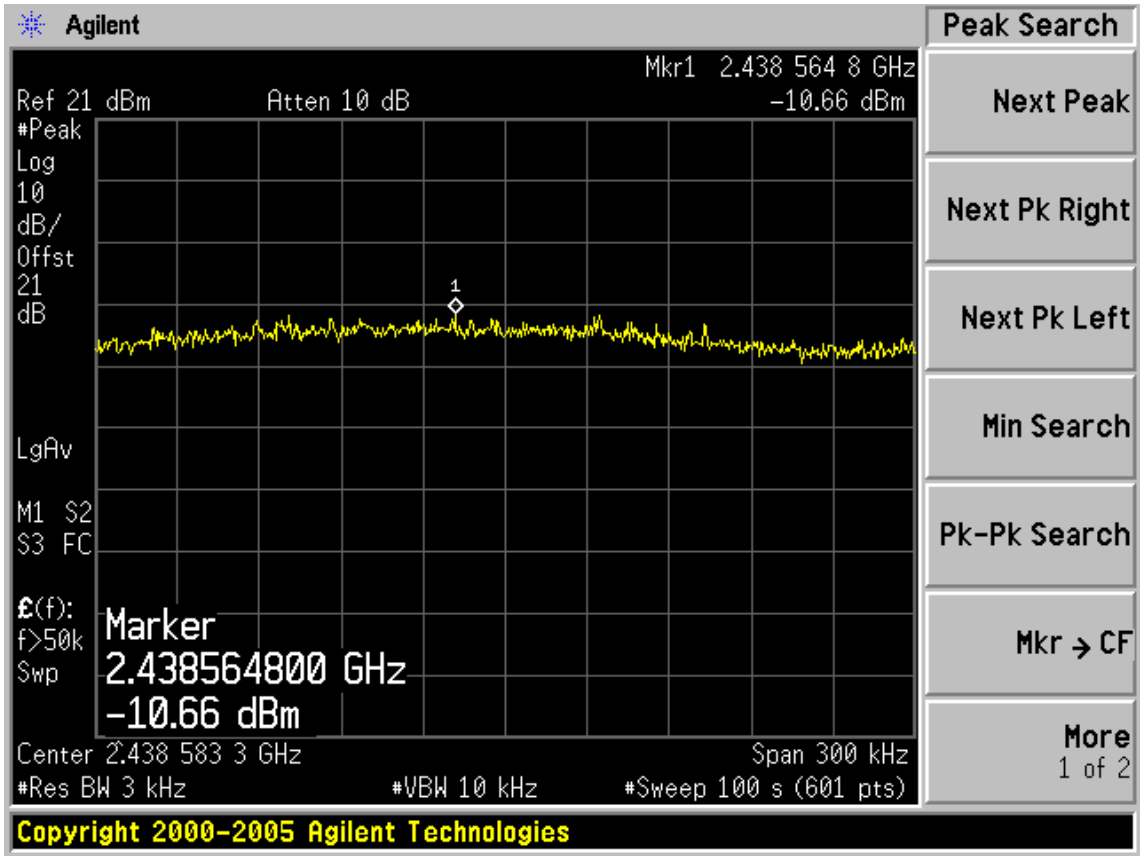
Test CH11: 2462MHz



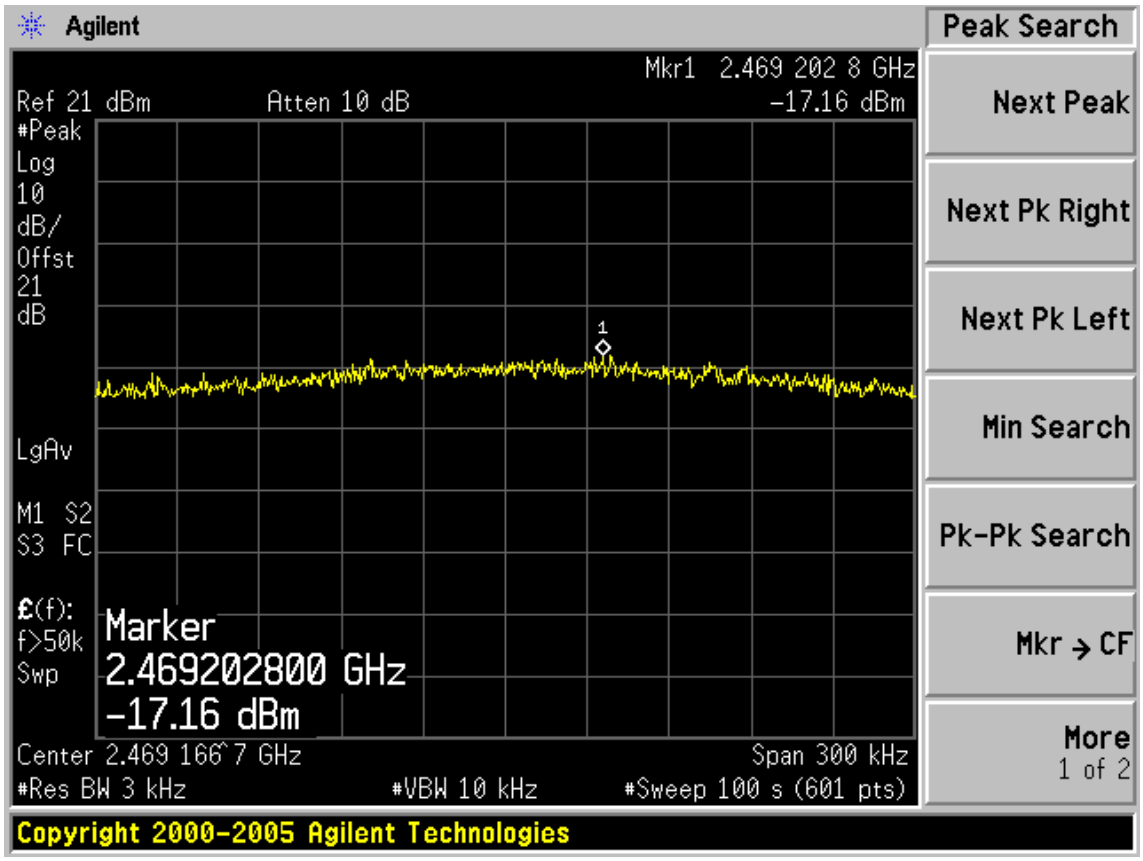
Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz



Test CH6: 2437MHz

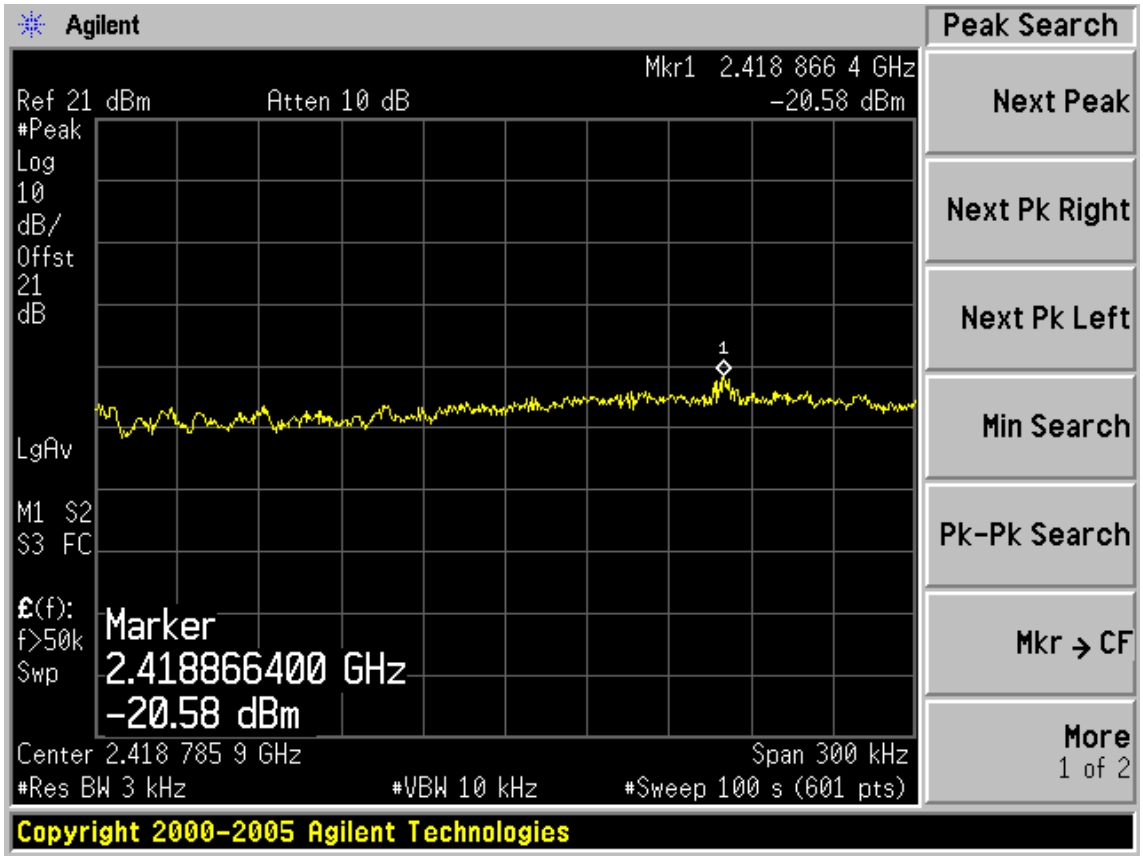


Test CH11: 2462MHz

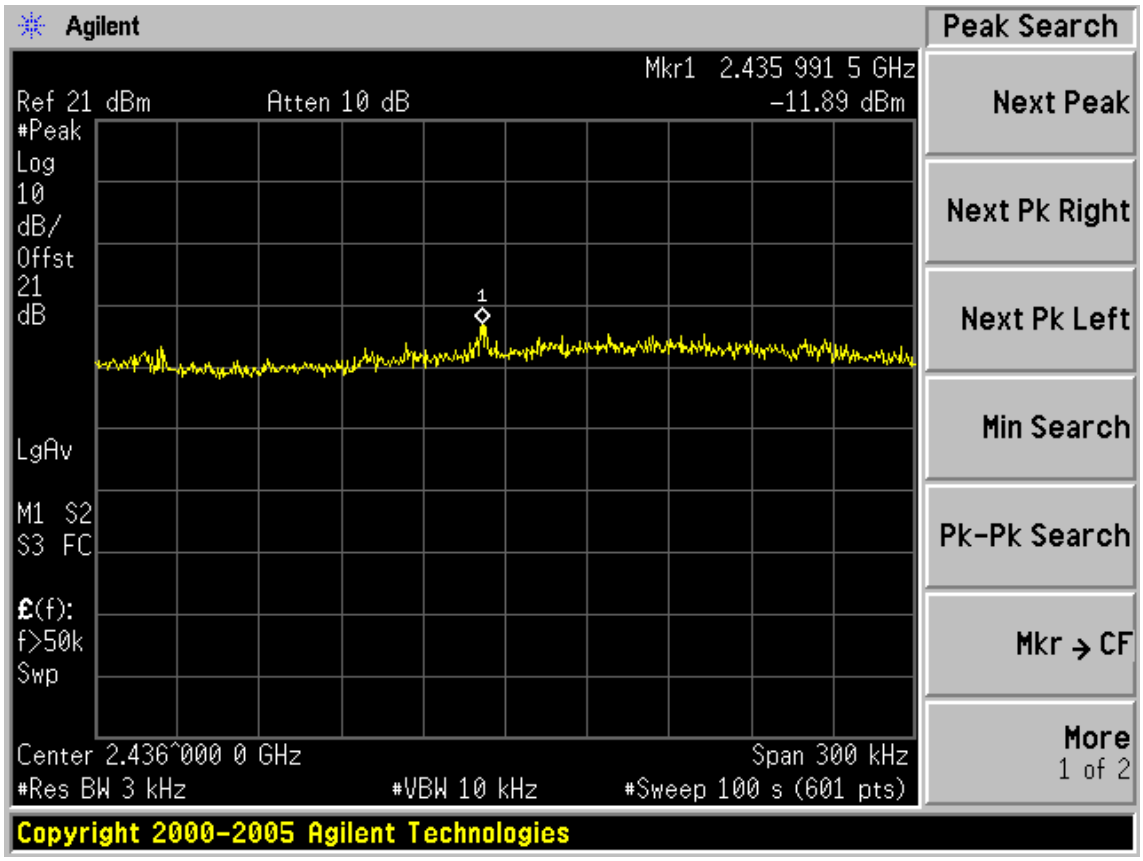


Test Mode: IEEE 802.11n HT40 TX

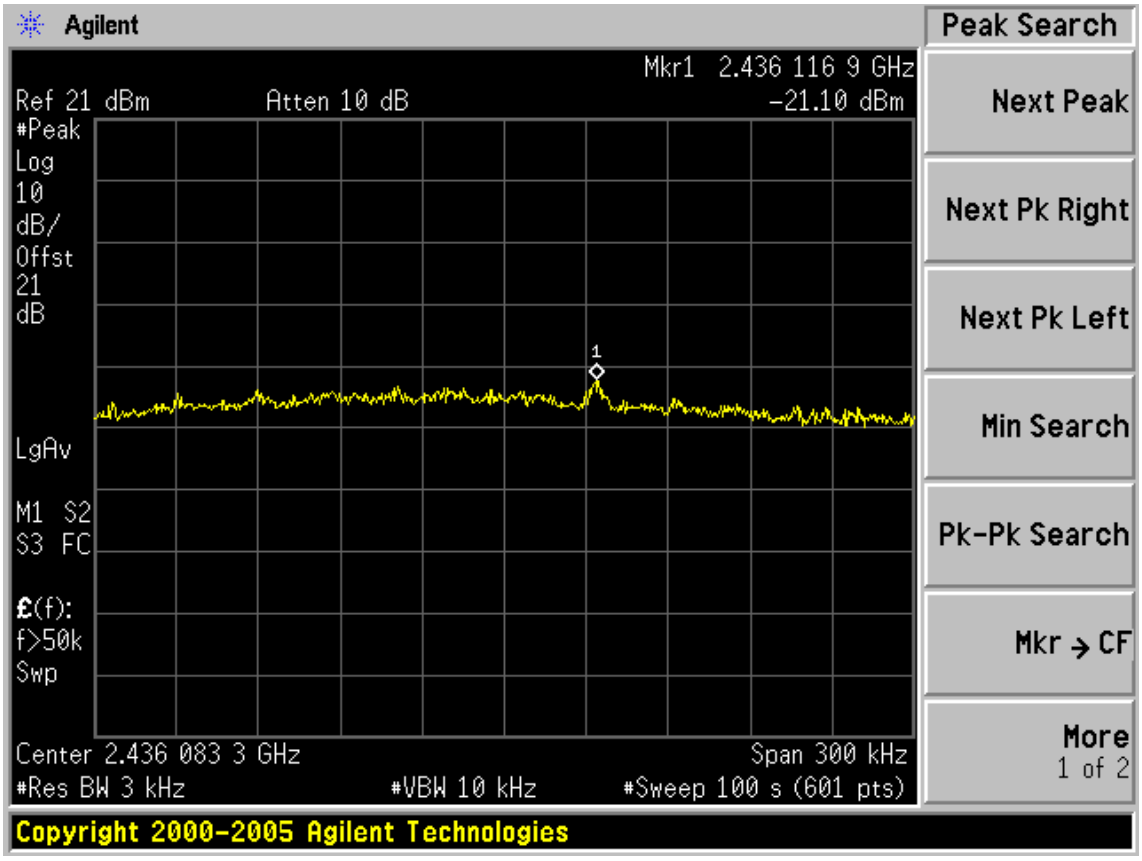
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



10. ANTENNA REQUIREMENT

10.1. STANDARD APPLICABLE

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

10.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product are MIMO 2X2 dipole antenna with SMA-B connector 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 2dBi.

11.MPE ESTIMATION

11.1.Limit for General Population/ Uncontrolled Exposures

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

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

11.2.Estimation Result

EUT: PCI-1020 WIRELESS 802.11N PCI ADAPTER							
M/N: PCI-1020							
Test date:2011-06-09		Pressure: 100.6 kpa			Humidity: 49 %		
Tested by: Leo-Li		Test site: RF Site			Temperature：25℃		
Cable loss: 0.7 dB		Attenuator loss: 20 dB			Antenna Gain: 1.8 dBi		
Test Mode	CH	Frequency（MHz）	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	19.56	90.36	1.8	1.51	0.0272
	CH6	2437	22.26	168.27	1.8	1.51	0.0507
	CH11	2462	20.52	112.72	1.8	1.51	0.0340
11g	CH1	2412	24.39	274.79	1.8	1.51	0.0828
	CH6	2437	25.37	344.35	1.8	1.51	0.1037
	CH11	2462	24.77	299.92	1.8	1.51	0.0904
11n HT20	CH1	2412	23.61	229.61	1.8	1.51	0.0692
	CH6	2437	25.66	368.13	1.8	1.51	0.1109
	CH11	2462	24.25	266.07	1.8	1.51	0.0802
11n HT40	CH1	2412	22.5	177.83	1.8	1.51	0.0536
	CH4	2437	24.23	264.85	1.8	1.51	0.0798
	CH7	2462	22.59	181.55	1.8	1.51	0.0547

Note: The estimation distance is 20cm

12. DEVIATION TO TEST SPECIFICATIONS

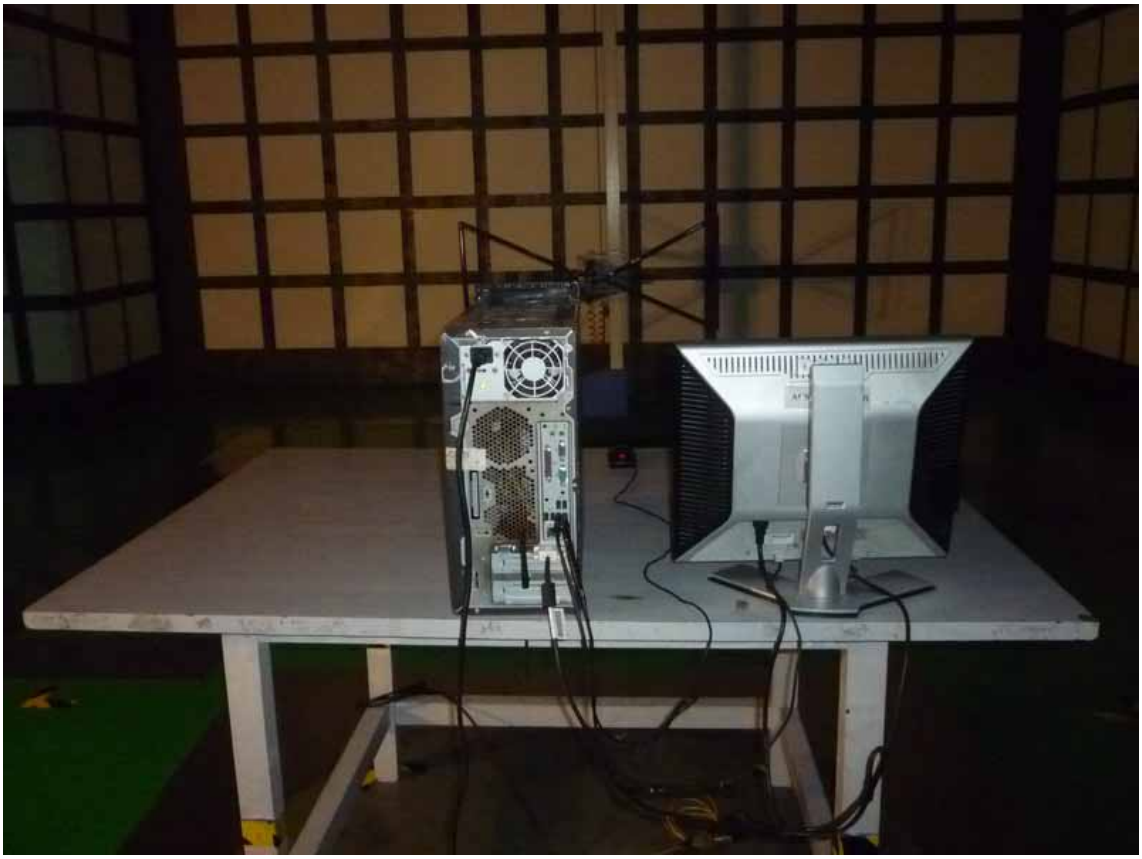
[NONE]

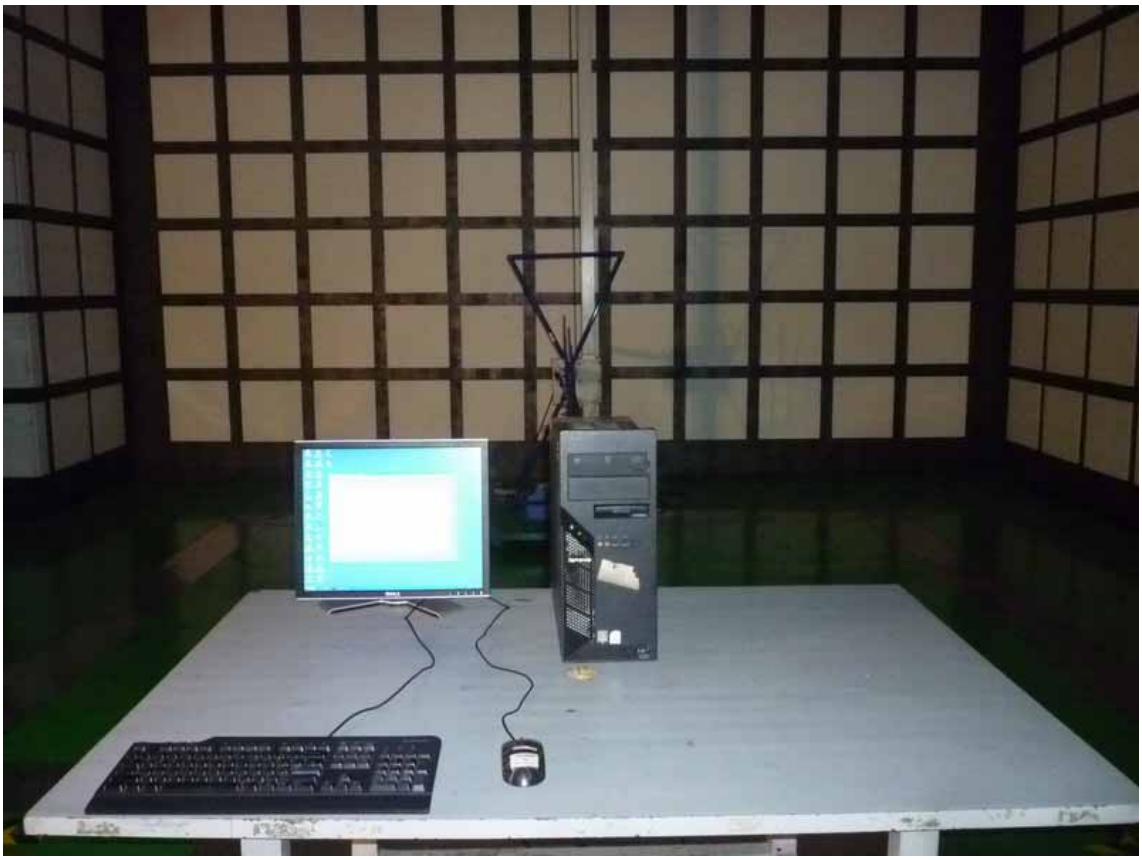
13.PHOTOGRAPH OF TEST

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

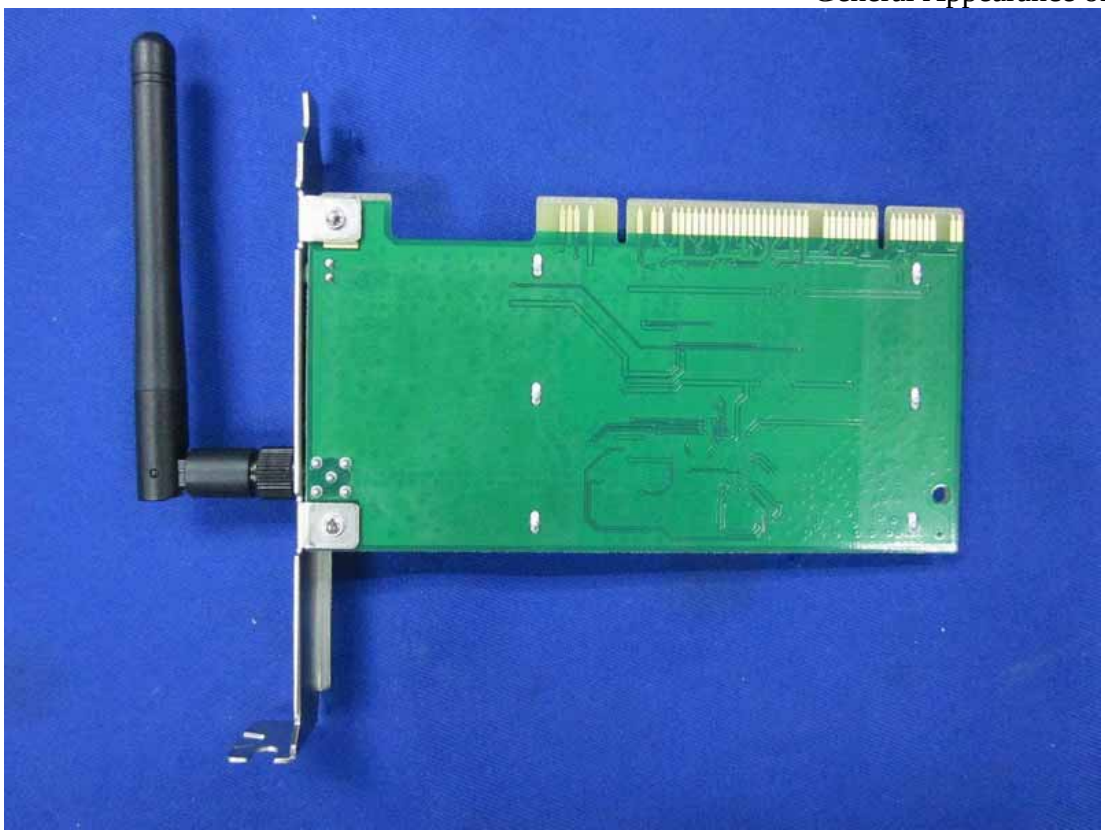


Figure 3
General Appearance of the EUT

Figure 4
General Appearance of the EUT

Figure 5
General Appearance of the EUT

Figure 6
General Appearance of the EUT

Figure 7
General Appearance of the EUT