



FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

802.11a/b/g/n access point

Model: HiveAP 320

Trade Name: Aerohive

Issued to

Aerohive Networks, Inc.

3150-C Coronado Drive Santa Clara, California 95054

Prepared by

COMPLIANCE CERTIFICATION SERVICES (KUNSHAN) INC.

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1. TEST RESULT CERTIFICATION

Applicant: Aerohive Networks, Inc.
 3150-C Coronado Drive Santa Clara, California 95054

Equipment Under Test: 802.11a/b/g/n access point

Trade Name: Aerohive

Model: HiveAP 320

Date of Test: August 22, 2008 ~ February 2,2009

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 15 Subpart C	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2003 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

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

Approved by:

Miro Chueh
 EMC Manager
 Compliance Certification Service Inc.

Reviewed by:

Lin Zhang
 EMC Section Manager
 Compliance Certification Service Inc.



2. EUT DESCRIPTION

Product	802.11a/b/g/n access point
Trade Name	Aerohive
Model Number	HiveAP 320
Frequency Range	2412 ~ 2462 MHz 5725 ~ 5825 MHz
Transmit Power	IEEE 802.11b mode: 15.38dBm IEEE 802.11g mode: 15.92dBm draft 802.11gn Standard-20 MHz Channel mode: 20.18 dBm draft 802.11gn Wide-40 MHz Channel mode: 21.23 dBm IEEE 802.11a mode: 16.91dBm draft 802.11an Standard-20 MHz Channel mode: 21.38 dBm draft 802.11an Wide-40 MHz Channel mode: 22.85 dBm (the EUT transmitting and receiving with three antennas simultaneously working at n mode)
Modulation Technique	IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mbps) IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) IEEE 802.11a mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) draft 802.11n Standard-20 MHz Channel mode: OFDM (MCS 0~15) draft 802.11n Wide-40 MHz Channel mode: OFDM (MCS 0~15)
Number of Channels	IEEE 802.11b/g mode: 11 Channels IEEE 802.11a mode: 4 Channels draft 802.11n Standard-20 MHz Channel mode: 11 Channels draft 802.11n Wide-40 MHz Channel mode: 7 Channels
Antenna Specification	Three Puck antennas for 2.4GHz Gain 2dBi /Total gain 6.77 dBi and Three Puck antennas for 5 GHz Gain 3 dBi/Total gain 7.77 dBi

Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: **WBV-HIVEAP320** filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.



3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4 2003 and FCC CFR 47 15.207, 15.209 and 15.247.

EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 2003 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4 2003.



FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

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 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.



DESCRIPTION OF TEST MODES

The EUT transmitting and receiving with one (chain 0) antenna working at a/b/g mode, so one antenna working configuration was used for a/b/g mode testing in this report.

The EUT transmitting and receiving with three antennas simultaneously working at n mode, so 3x3 configuration was used for all testing in this report.

The worst-case data rates are determined to be as follows for each mode based on investigation by measuring the average power, peak power and PPSD across all data rates, bandwidths, and modulations.

The worst-case data rates:

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

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

IEEE802.11a: Channel low(5745MHz), Channel middle(5785MHz) and Channel high(5805MHz) with preliminary test 54/48/36/24/18/12/9/6 Mbps, After the preliminary scan , the following test mode 6Mbps data rate (the worst case) are chosen for the final testing.

draft 802.11gn Standard-20 MHz Channel mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with MCS8 data rate were chosen for full testing.

draft 802.11gn Wide-40 MHz Channel mode: Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2452MHz) with MCS8 data rate were chosen for full testing.

draft 802.11an Wide-40 MHz Channel mode: Channel Low (5755MHz), Channel High (5795MHz) with MCS8 data rate were chosen for full testing.

The following test mode was scanned during the preliminary test:

Mode 1: Wall, ceiling mounting, set the EUT vertically on the table top with power from AC power.

Mode 2: Wall, ceiling mounting, set the EUT vertically on the table top with power from Ethernet .

Mode 3: Table top mounting, set the EUT horizontally on the table top with power from AC power.

Mode 4: Table top mounting, set the EUT horizontally on the table top with power from Ethernet.

After the preliminary scan, the following test mode was found to produce the highest emission level.

Mode 3: Table top mounting, set the EUT horizontally on the table top with power from AC power.

Then, the EUT configuration and cable configuration of the above highest emission mode was recorded for all final test items.



4. INSTRUMENT CALIBRATION

MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY44020154	11/12/2009
Peak and Avg Power Sensor	Agilent	E9327A	US40441788	09/11/2009
EPM-P Series Power Meter	Agilent	E4416A	QB41292714	09/11/2009

3M Semi Anechoic Chamber				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY44020154	11/12/2009
Pre-Amplifier	Miteq	NSP4000-NF	870731	01/21/2010
Horn Antenna	Austriah	BBHA9120D	D267	05/09/2009
SHF-EHF Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170171	04/12/2009
Turn Table	CT	CT123	4162	N.C.R
Antenna Tower	CT	CTERG23	3253	N.C.R
Controller	CT	CT100	95635	N.C.R
Coax Switch	Anitsu	MP 598	M 80094	N/A
Site NSA	CCS Lab.	N/A	N/A	12/11/2009
ESPI3 EMI RECEIVER	R&S	ESPI3	101026	05/06/2009
Pre-Amplifier	MINI	ZFL-1000VH2	d041703	02/28/2009
Bilog Antenna	Sunol Sciences	JB1	A110204-2	11/22/2009

Remark: The measurement uncertainty is less than +/-2.0065dB (30MHz ~ 1GHz), +/-3.0958dB (Above 1GHz) which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV. The measurement uncertainty is less than +/-2.50dB (30MHz ~ 1GHz), +/-3.169dB (Above 1GHz)

Expanded Uncertainty (95% CONFIDENCE INTERVAL): K=2

Power Line Conducted Emission Test Site A				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	SCHAFFNER	SCR3501	343	04/22/2009
V (V-LISN)	Schwarzbeck	NNLK 8129	8129-143	04/11/2009
LISN (EUT)	FCC	FCC-LISN-50/250-50-2-02	SN:05012	04/11/2009
TRANSIENT LIMITER	SCHAFFNER	CFL9206	1710	04/06/2009

Remark: The measurement uncertainty is less than +/- 2.81dB, which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.

Expanded Uncertainty (95% CONFIDENCE INTERVAL): K=2



5. FACILITIES AND ACCREDITATIONS

FACILITIES

All measurement facilities used to collect the measurement data are located at CCS China Kunshan Lab at 10#Weiye Rd, Innovation Park Eco. & Tec. Development Zone Kunshan city JiangSu, (215300), CHINA.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 2003 and CISPR Publication 22.

EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

LABORATORY ACCREDITATIONS AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by American Association for Laboratory Accreditation Program for the specific scope accreditation under Lab Code: 200581-0 to perform Electromagnetic Interference tests according to FCC Part 15 and CISPR 22 requirements. In addition, the test facilities are listed with Industry Canada, Certification and Engineering Bureau, IC5743 for 10m chamber 10m, IC5743 for 10m chamber 3m.



TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	A2LA	47 CFR FCC Part 15/18 (using ANSI C63.4 :2003); VCCI V3; CNS 13438; CNS 13439; CNS 13803; CISPR 11; EN 55011; CISPR 13; EN 55013; CISPR 22:2005; CISPR 22:1997 +A1 :2000+A2 :2002; EN 55022:2006; EN55022 :1998 +A1 :2001+A2 :2003; EN 61000-6-3 (excluding discontinuous interference); EN 61000-6-4; AS/NZS CISPR 22; CAN/CSA-CEI/IEC CISPR 22; EN 61000-3-2; EN 61000-3-3; EN550024; EN 61000-4-2; EN 61000-4-3; EN61000-4-4; EN 61000-4-5; EN 61000-4-6; IEC 61000-4-8; EN 61000-4-11; IEC61000-3-2; IEC61000-3-3; IEC 61000-4-2; IEC 61000-4-3; IEC 61000-4-4; IEC 61000-4-5; IEC 61000-4-6; IEC 61000-4-8; IEC 61000-4-11; EN 300 220-3; EN 300 328; EN 300 330-2; EN 300 440-1; EN 300-440-2; EN 300 893; EN 301 489-01; EN 301 489-3; EN 301 489-07; EN 301 489-17; 47 CFR FCC Part 15, 22, 24	
USA	FCC	3/10 meter Sites to perform FCC Part 15/18 measurements	 93105, 90471
Japan	VCCI	3/10 meter Sites and conducted test sites to perform radiated/conducted measurements	 R-1600 C-1707

* No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.



6. SETUP OF EQUIPMENT UNDER TEST

SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID
1.	Notebook pc	IBM	X31	32P4413	DOC
2.	Notebook pc	DELL	4150	CN-04P20	DOC

Remark:

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



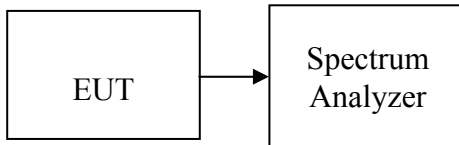
7. FCC PART 15.247 REQUIREMENTS

6DB BANDWIDTH

LIMIT

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

Test Configuration



TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the selected span. The VBW is set to 3 times the RBW. The sweep time is occupied.



TEST RESULTS

No non-compliance noted

Test Data

IEEE 802.11b mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	11.142	>500	PASS
Mid	2437	11.254		PASS
High	2462	11.527		PASS

IEEE 802.11g mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	16.407	>500	PASS
Mid	2437	16.409		PASS
High	2462	16.427		PASS

TRANSMIT CHAIN 0

draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.247	>500	PASS
Mid	2437	17.614		PASS
High	2462	17.575		PASS

draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2422	36.378	>500	PASS
Mid	2437	36.254		PASS
High	2452	36.243		PASS



TRANSMIT CHAIN 1

draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.604	>500	PASS
Mid	2437	17.274		PASS
High	2462	17.630		PASS

draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2422	36.378	>500	PASS
Mid	2437	36.420		PASS
High	2452	36.141		PASS

TRANSMIT CHAIN 2

draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.745	>500	PASS
Mid	2437	17.662		PASS
High	2462	17.379		PASS

draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2422	36.114	>500	PASS
Mid	2437	36.379		PASS
High	2452	36.389		PASS



IEEE 802.11a mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.646	>500	PASS
Mid	5785	17.423		PASS
High	5805	17.173		PASS

TRANSMIT CHAIN 0

draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.651	>500	PASS
Mid	5785	17.635		PASS
High	5805	17.696		PASS

draft 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	35.796	>500	PASS
High	5795	36.406		PASS

TRANSMIT CHAIN 1

draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.672	>500	PASS
Mid	5785	17.014		PASS
High	5805	17.660		PASS

draft 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	35.825	>500	PASS
High	5795	36.494		PASS



TRANSMIT CHAIN 2

draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.616	>500	PASS
Mid	5785	17.652		PASS
High	5805	17.671		PASS

draft 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	35.505	>500	PASS
High	5795	35.974		PASS

TRANSMIT CHAIN 0+ CHAIN 1+ CHAIN 2

draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.089	>500	PASS
Mid	2437	17.576		PASS
High	2462	17.641		PASS

draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2422	36.396	>500	PASS
Mid	2437	36.408		PASS
High	2452	36.337		PASS

TRANSMIT CHAIN 0+ CHAIN 1+ CHAIN 2

draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	17.319	>500	PASS
Mid	5785	17.634		PASS
High	5805	16.915		PASS

draft 802.11an Wide-40 MHz Channel mode

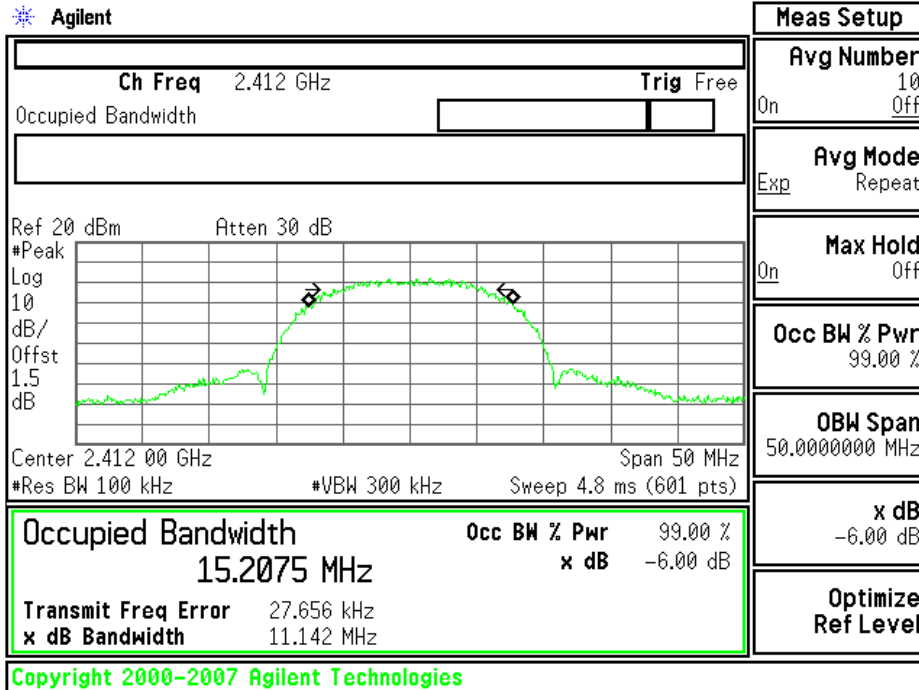
Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	35.769	>500	PASS
High	5795	36.314		PASS



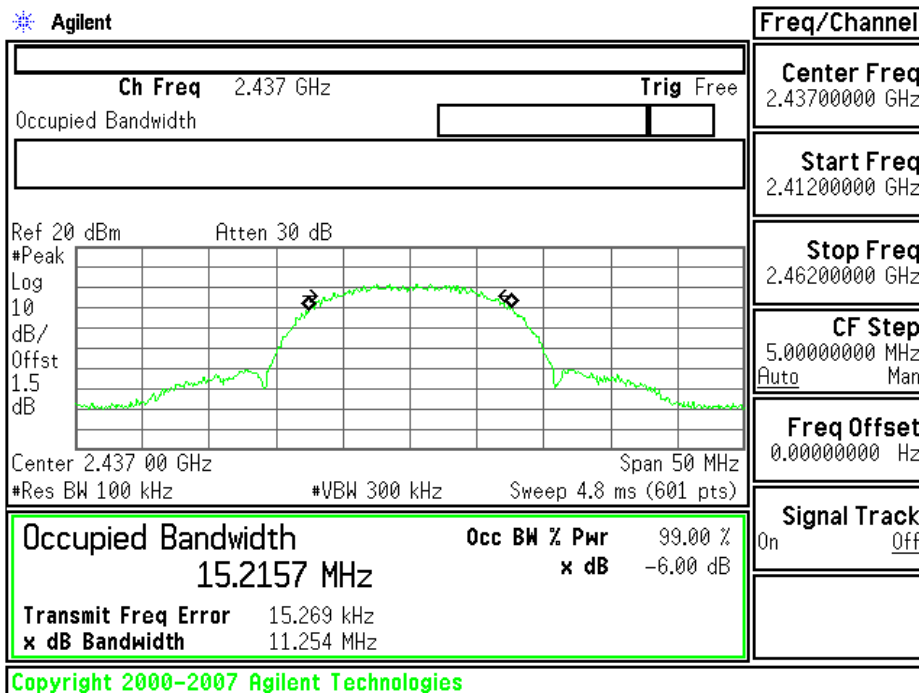
Test Plot

IEEE 802.11b MODE

6dB Bandwidth (CH Low)

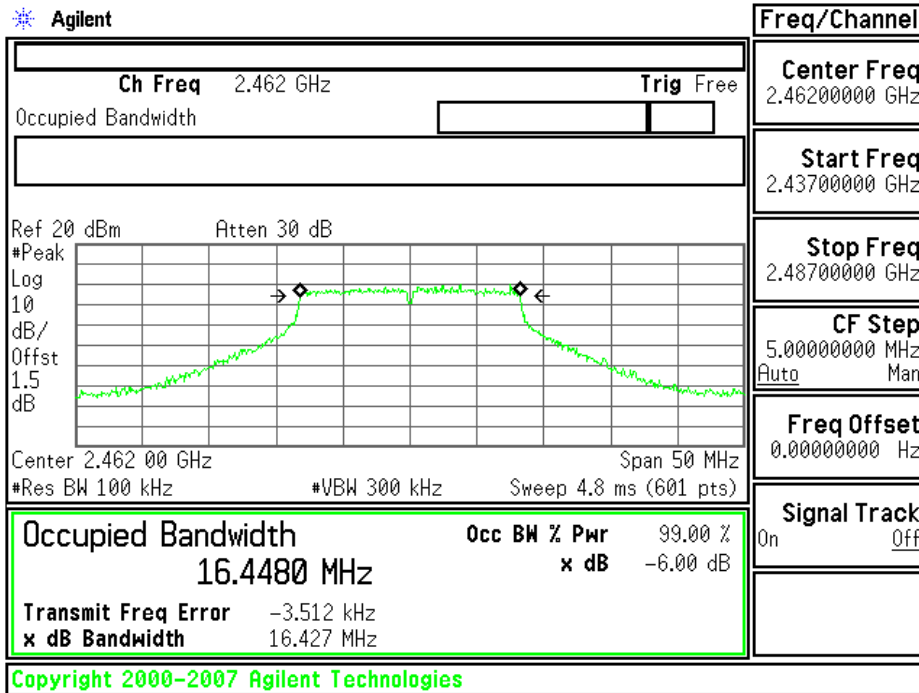


6dB Bandwidth (CH Mid)



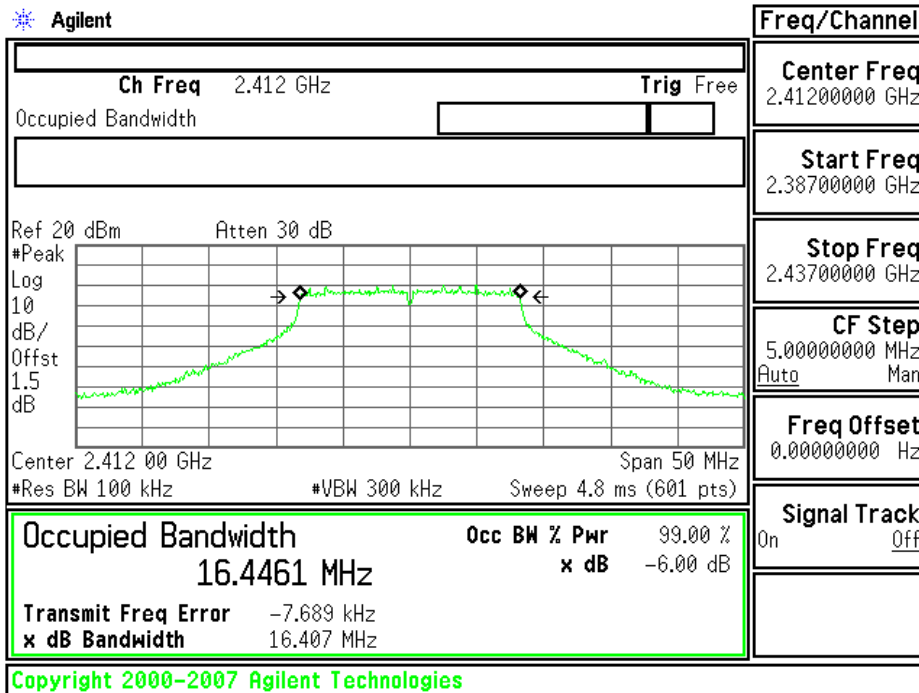


6dB Bandwidth (CH High)



IEEE 802.11g MODE

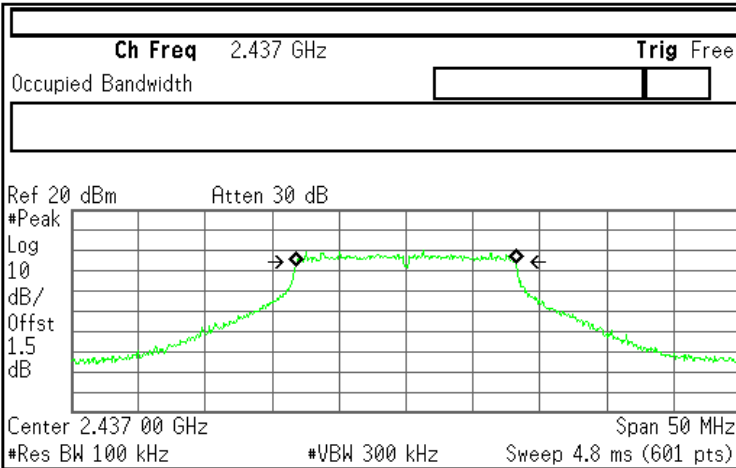
6dB Bandwidth (CH Low)





6dB Bandwidth (CH Mid)

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Freq/Channel

Center Freq 2.43700000 GHz

Start Freq 2.41200000 GHz

Stop Freq 2.46200000 GHz

CF Step 5.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

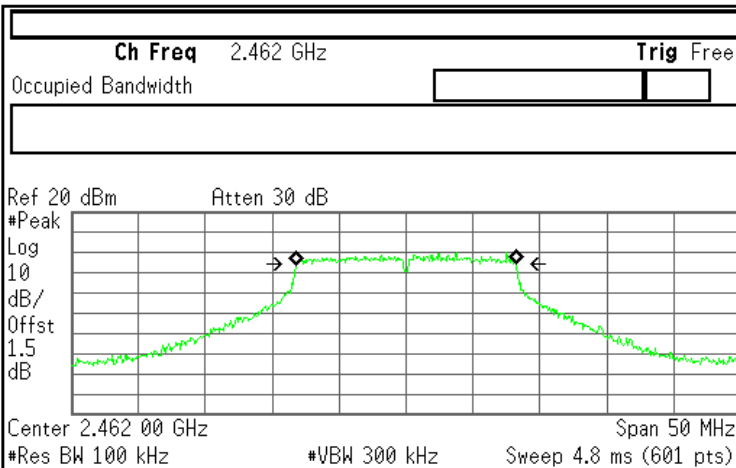
Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.4659 MHz	x dB	-6.00 dB
Transmit Freq Error		-12.411 kHz
x dB Bandwidth		16.409 MHz

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6dB Bandwidth (CH High)

Agilent



Freq/Channel

Center Freq 2.46200000 GHz

Start Freq 2.43700000 GHz

Stop Freq 2.48700000 GHz

CF Step 5.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

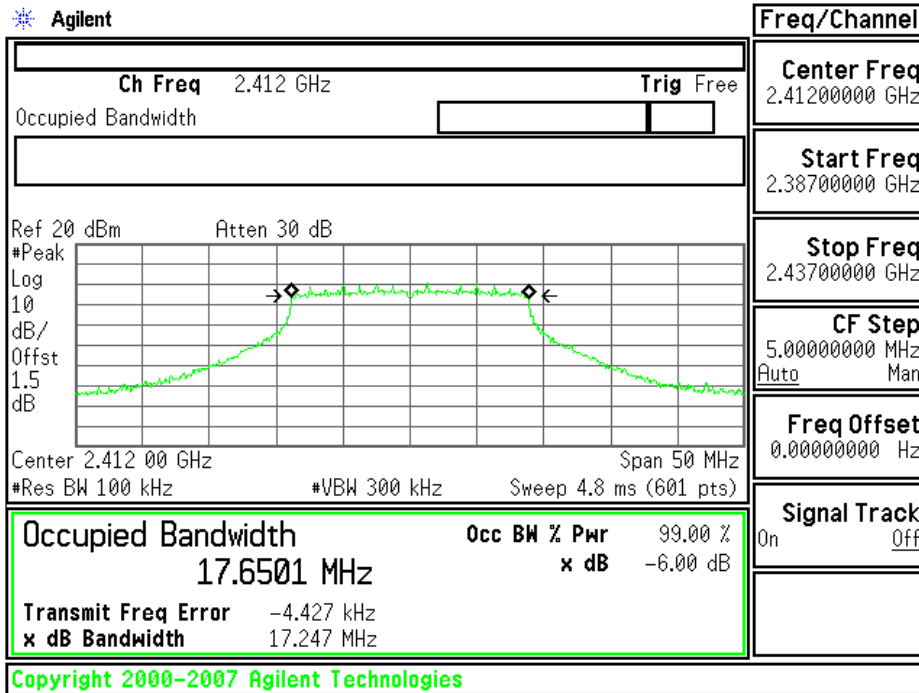
Occupied Bandwidth	Occ BW % Pwr	99.00 %
16.4480 MHz	x dB	-6.00 dB
Transmit Freq Error		-3.512 kHz
x dB Bandwidth		16.427 MHz

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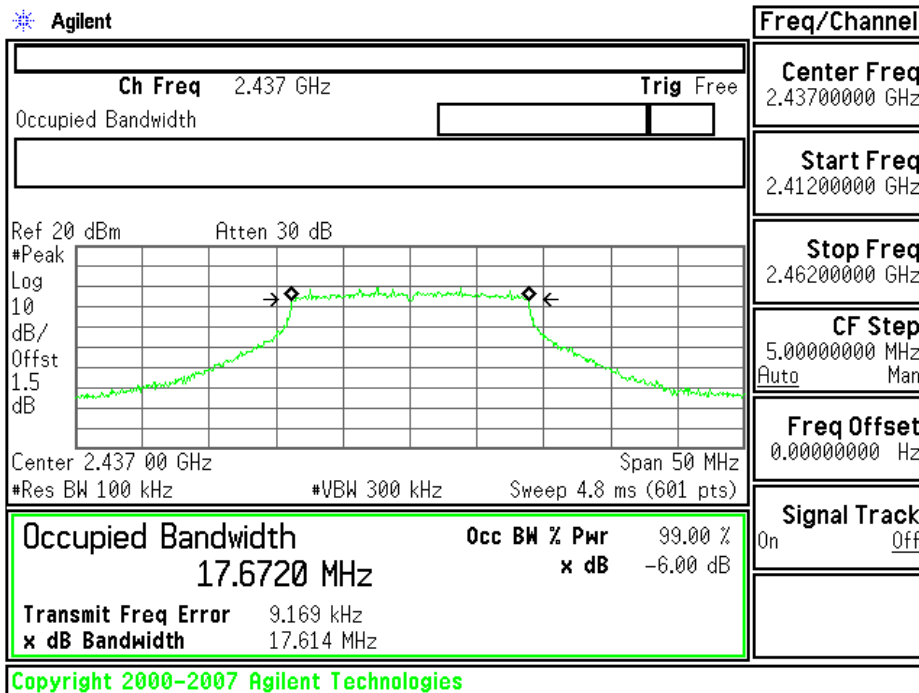


draft 802.11gn Standard-20 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)

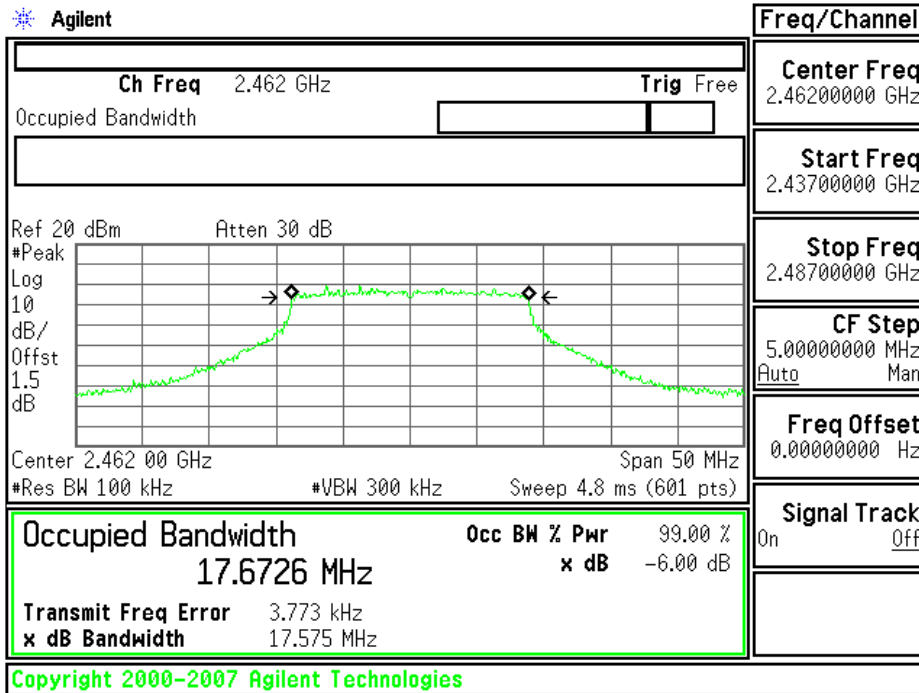


6dB Bandwidth (CH Mid)



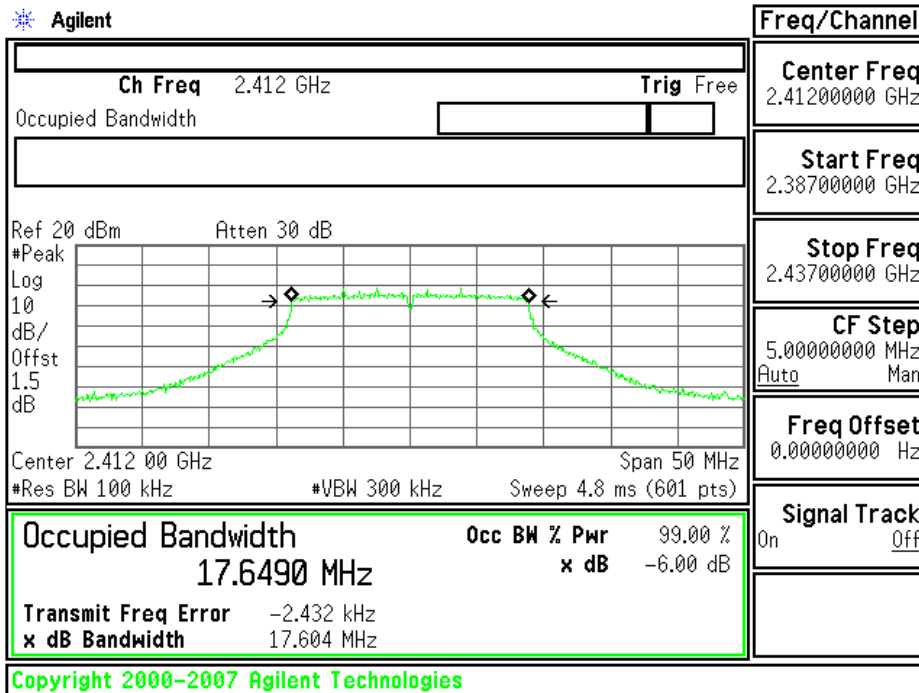


6dB Bandwidth (CH High)



draft 802.11gn Standard-20 MHz Channel mode / Chain 1

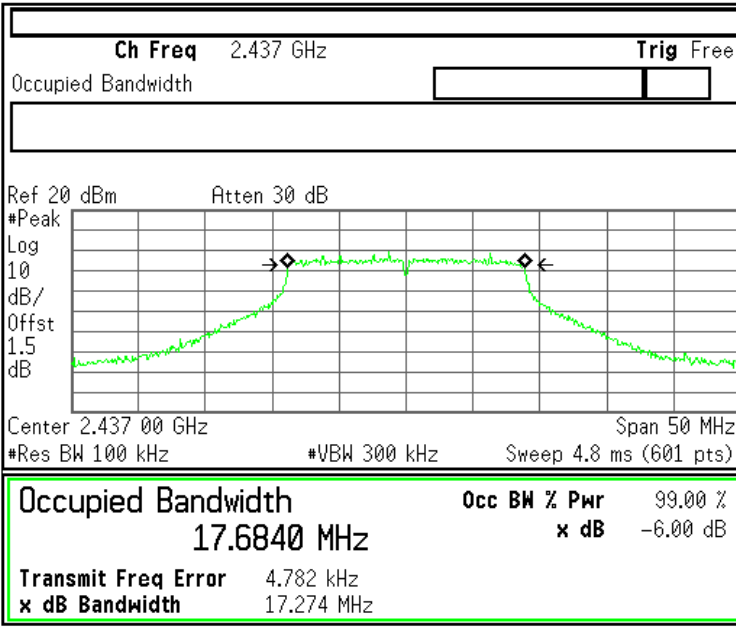
6dB Bandwidth (CH Low)





6dB Bandwidth (CH Mid)

Agilent

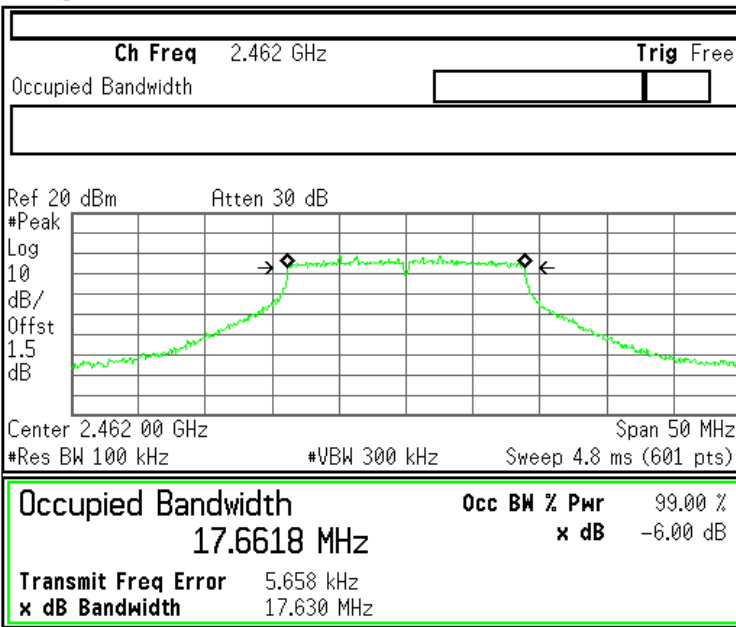


Freq/Channel
Center Freq 2.43700000 GHz
Start Freq 2.41200000 GHz
Stop Freq 2.46200000 GHz
CF Step Auto Man 5.00000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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6dB Bandwidth (CH High)

Agilent



Freq/Channel
Center Freq 2.46200000 GHz
Start Freq 2.43700000 GHz
Stop Freq 2.48700000 GHz
CF Step Auto Man 5.00000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

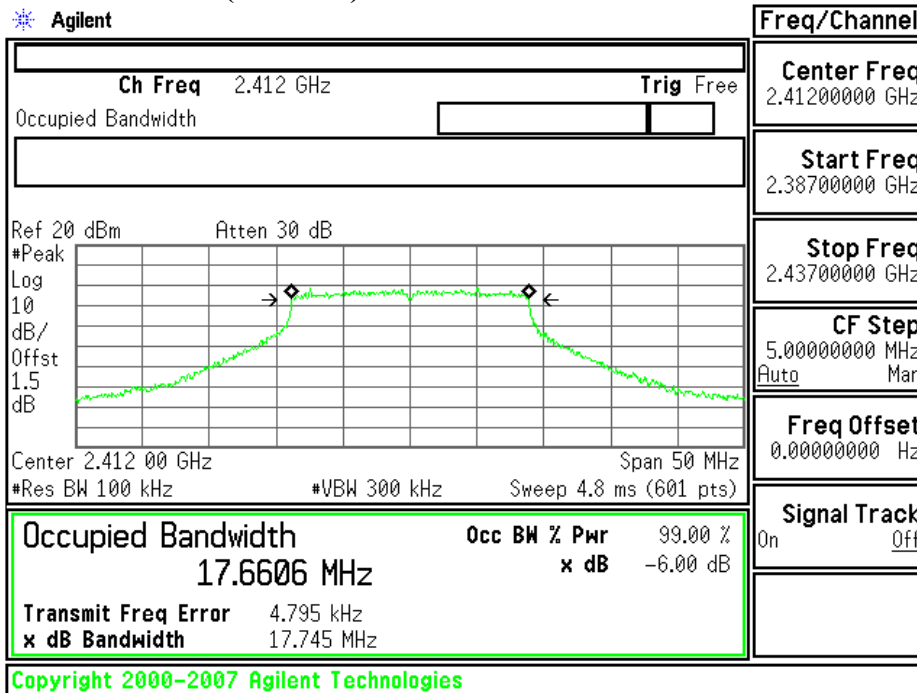
Copyright 2000-2007 Agilent Technologies



draft 802.11gn Standard-20 MHz Channel mode / Chain 2

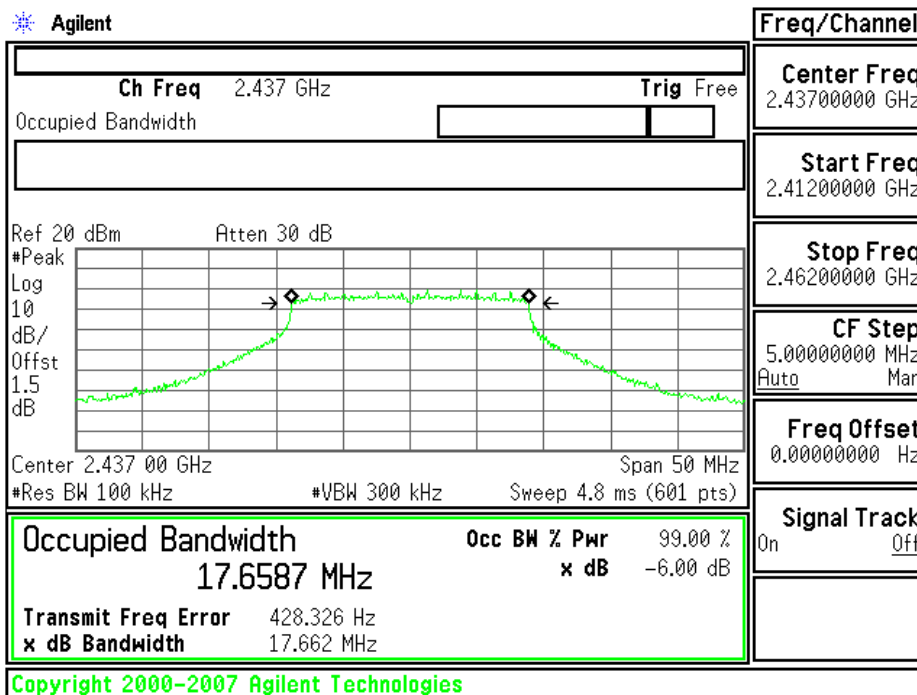
6dB Bandwidth (CH Low)

Agilent



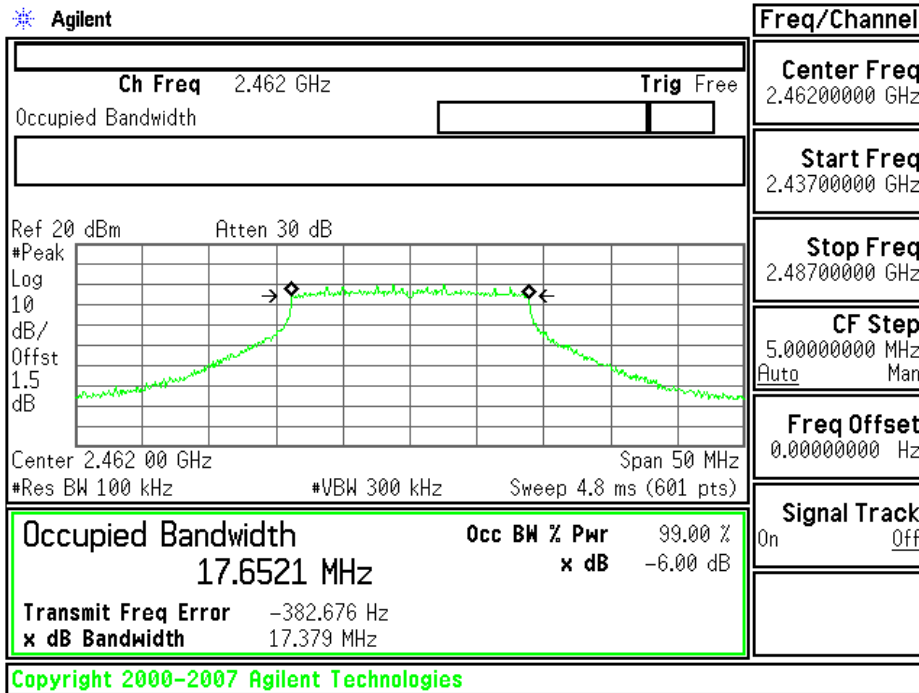
6dB Bandwidth (CH Mid)

Agilent



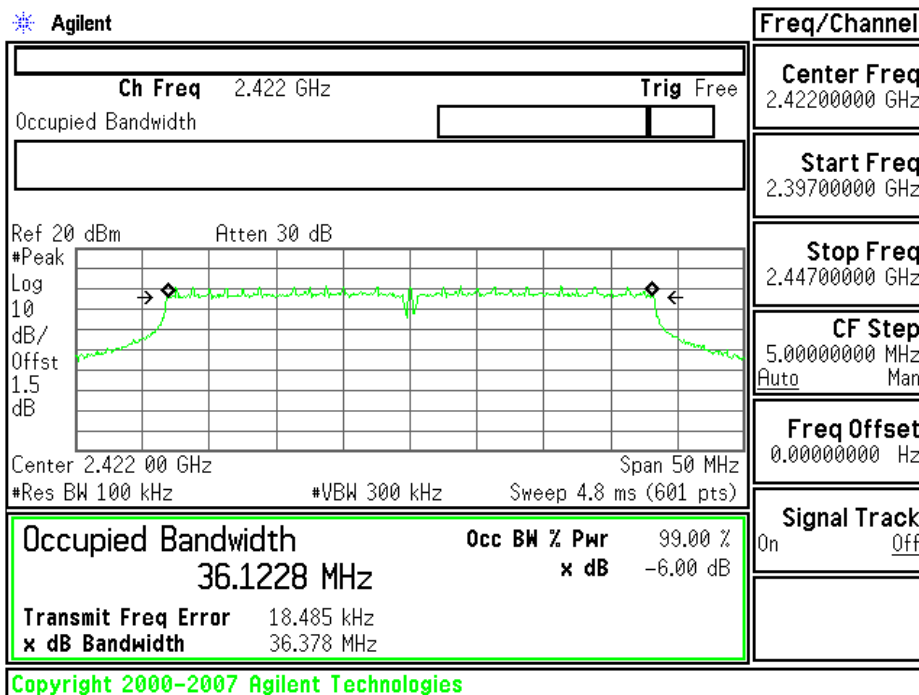


6dB Bandwidth (CH High)



draft 802.11gn Wide-40 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)

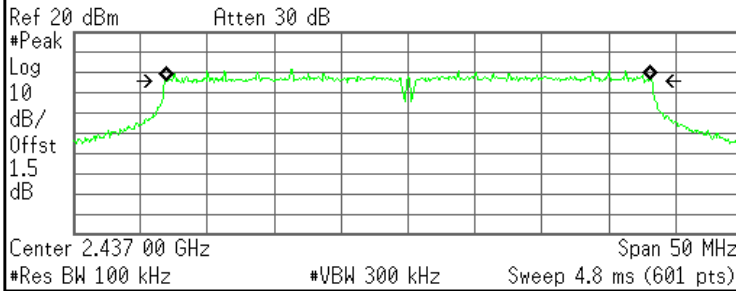




6dB Bandwidth (CH Mid)

Agilent

Ch Freq 2.437 GHz	Trig Free
Occupied Bandwidth	



Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1404 MHz	x dB	-6.00 dB
Transmit Freq Error	24.066 kHz	
x dB Bandwidth	36.254 MHz	

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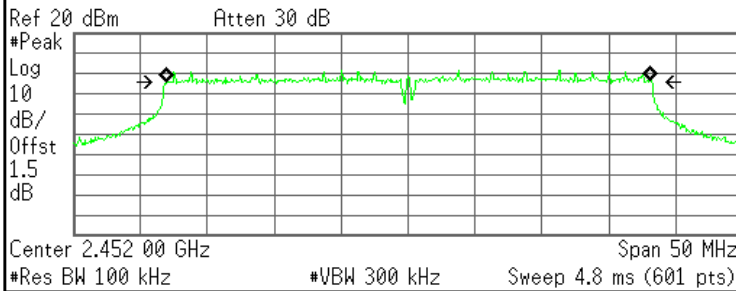
Freq/Channel

Center Freq	2.43700000 GHz
Start Freq	2.41200000 GHz
Stop Freq	2.46200000 GHz
CF Step	5.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

6dB Bandwidth (CH High)

Agilent

Ch Freq 2.452 GHz	Trig Free
Occupied Bandwidth	



Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1455 MHz	x dB	-6.00 dB
Transmit Freq Error	25.527 kHz	
x dB Bandwidth	36.243 MHz	

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Freq/Channel

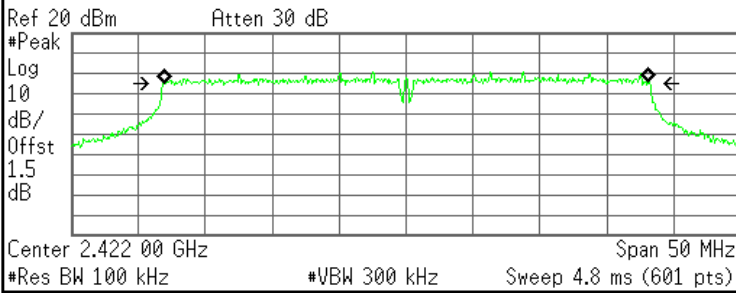
Center Freq	2.45200000 GHz
Start Freq	2.42700000 GHz
Stop Freq	2.47700000 GHz
CF Step	5.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off



draft 802.11gn Wide-40 MHz Channel mode / Chain 1
6dB Bandwidth (CH Low)

Agilent

Ch Freq 2.422 GHz	Trig Free
Occupied Bandwidth	



Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1657 MHz	x dB	-6.00 dB
Transmit Freq Error	21.254 kHz	
x dB Bandwidth	36.358 MHz	

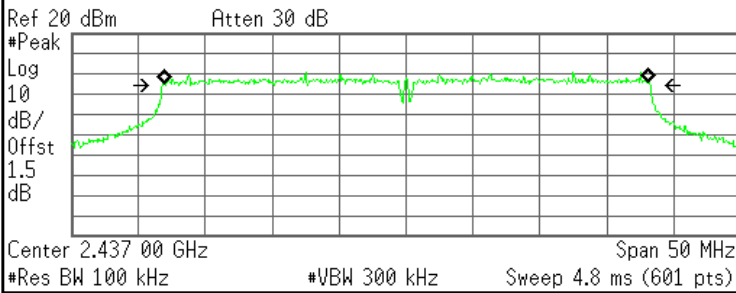
Copyright 2000-2007 Agilent Technologies

Freq/Channel
Center Freq 2.42200000 GHz
Start Freq 2.39700000 GHz
Stop Freq 2.44700000 GHz
CF Step Auto Man 5.00000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

6dB Bandwidth (CH Mid)

Agilent

Ch Freq 2.437 GHz	Trig Free
Occupied Bandwidth	



Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1816 MHz	x dB	-6.00 dB
Transmit Freq Error	18.466 kHz	
x dB Bandwidth	36.420 MHz	

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Freq/Channel
Center Freq 2.43700000 GHz
Start Freq 2.41200000 GHz
Stop Freq 2.46200000 GHz
CF Step Auto Man 5.00000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

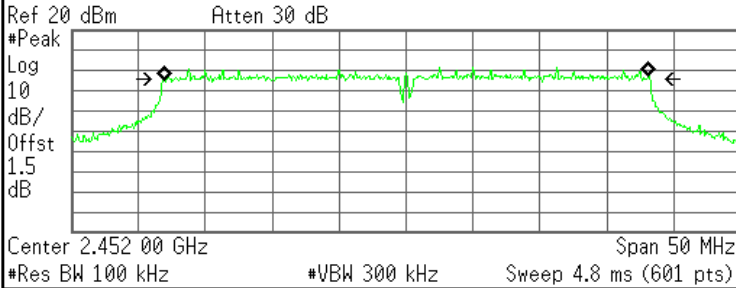


6dB Bandwidth (CH High)

Agilent

Ch Freq 2.452 GHz Trig Free

Occupied Bandwidth



Occupied Bandwidth 36.1780 MHz

Occ BW % Pwr 99.00 %

x dB Bandwidth 36.141 MHz

Transmit Freq Error 23.329 kHz

x dB -6.00 dB

Freq/Channel

Center Freq 2.45200000 GHz

Start Freq 2.42700000 GHz

Stop Freq 2.47700000 GHz

CF Step 5.00000000 MHz Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

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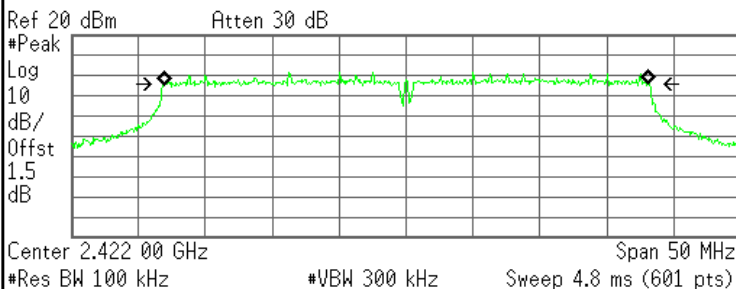
draft 802.11gn Wide-40 MHz Channel mode / Chain 2

6dB Bandwidth (CH Low)

Agilent

Ch Freq 2.422 GHz Trig Free

Occupied Bandwidth



Occupied Bandwidth 36.1524 MHz

Occ BW % Pwr 99.00 %

x dB Bandwidth 36.114 MHz

Transmit Freq Error 17.204 kHz

x dB -6.00 dB

Freq/Channel

Center Freq 2.42200000 GHz

Start Freq 2.39700000 GHz

Stop Freq 2.44700000 GHz

CF Step 5.00000000 MHz Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

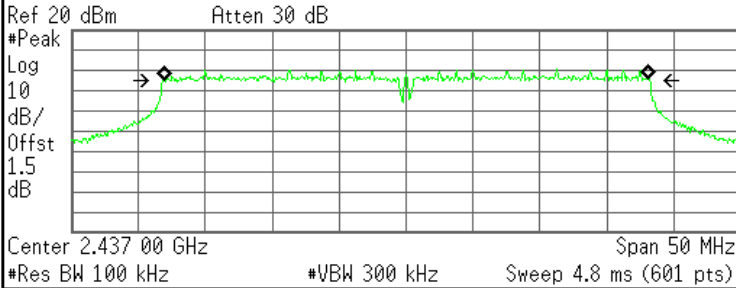
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6dB Bandwidth (CH Mid)

Agilent

Ch Freq 2.437 GHz	Trig Free
Occupied Bandwidth	



Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1623 MHz	x dB	-6.00 dB
Transmit Freq Error	10.862 kHz	
x dB Bandwidth	36.379 MHz	

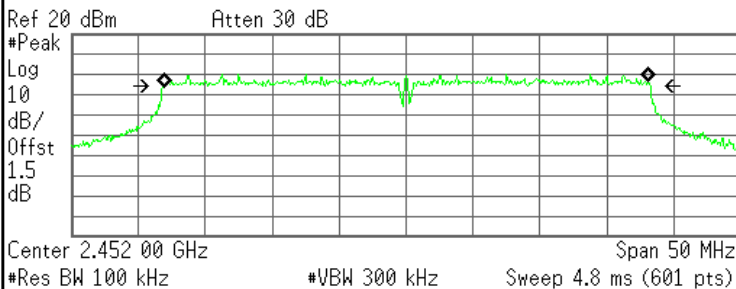
Freq/Channel
Center Freq 2.43700000 GHz
Start Freq 2.41200000 GHz
Stop Freq 2.46200000 GHz
CF Step 5.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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6dB Bandwidth (CH High)

Agilent

Ch Freq 2.452 GHz	Trig Free
Occupied Bandwidth	



Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1695 MHz	x dB	-6.00 dB
Transmit Freq Error	22.916 kHz	
x dB Bandwidth	36.389 MHz	

Freq/Channel
Center Freq 2.45200000 GHz
Start Freq 2.42700000 GHz
Stop Freq 2.47700000 GHz
CF Step 5.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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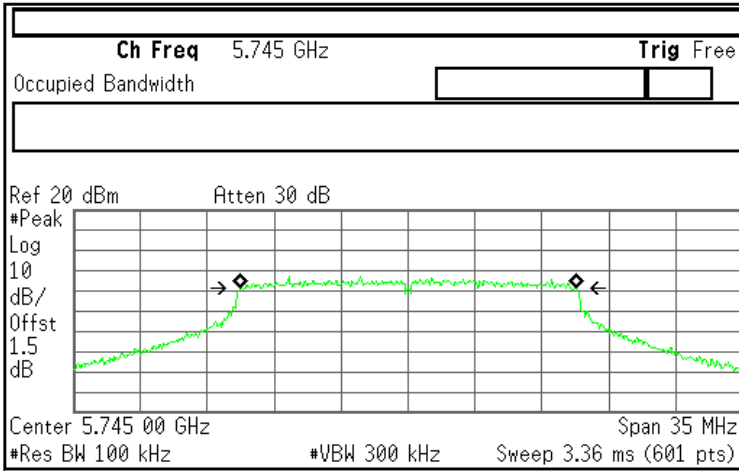


5725MHz-5825MHz

IEEE 802.11a mode

6dB Bandwidth (CH Low)

Agilent



Freq/Channel

Center Freq 5.74500000 GHz

Start Freq 5.72750000 GHz

Stop Freq 5.76250000 GHz

CF Step 3.50000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

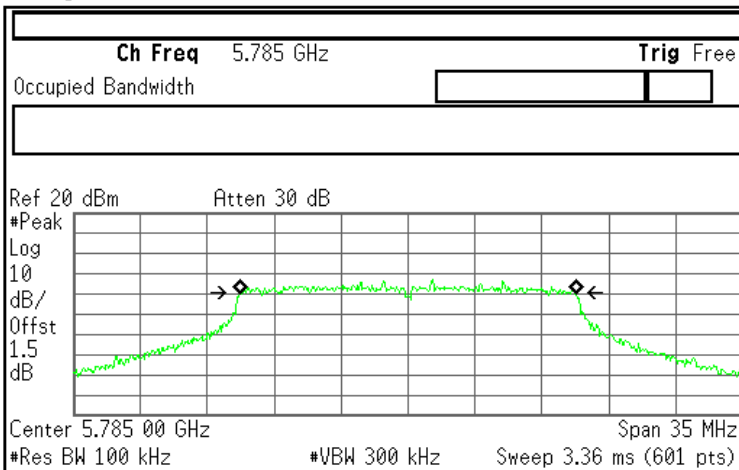
Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.6304 MHz	x dB	-6.00 dB
Transmit Freq Error		-7.599 kHz
x dB Bandwidth		17.646 MHz

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6dB Bandwidth (CH Mid)

Agilent



Freq/Channel

Center Freq 5.78500000 GHz

Start Freq 5.76750000 GHz

Stop Freq 5.80250000 GHz

CF Step 3.50000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

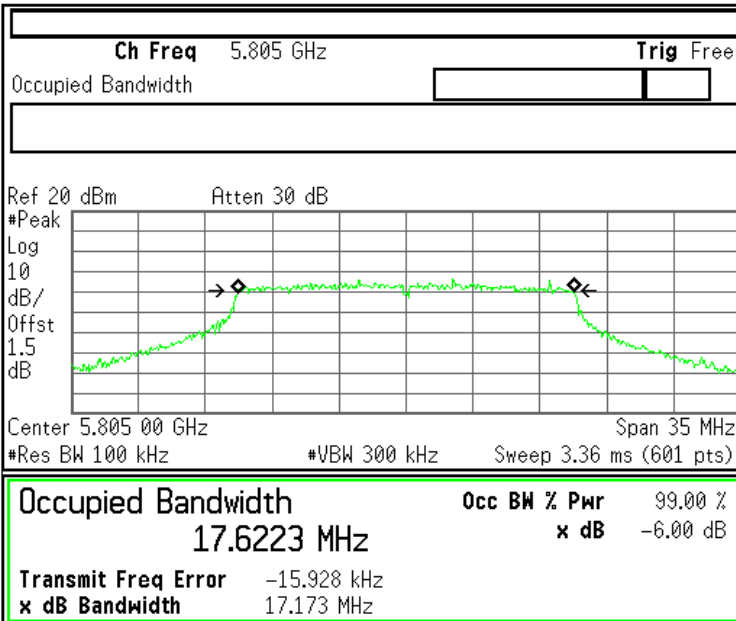
Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.6280 MHz	x dB	-6.00 dB
Transmit Freq Error		-343.353 Hz
x dB Bandwidth		17.423 MHz

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6dB Bandwidth (CH High)

Agilent



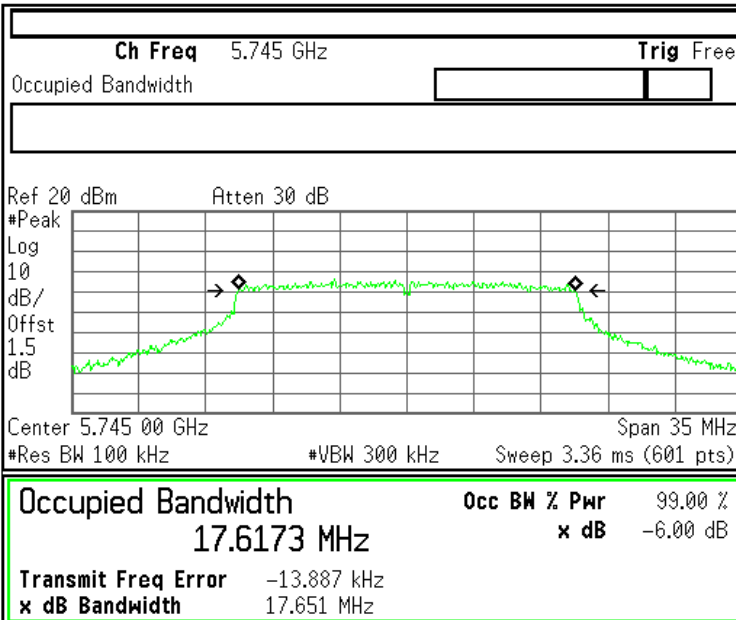
Freq/Channel
Center Freq 5.80500000 GHz
Start Freq 5.78750000 GHz
Stop Freq 5.82250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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draft 802.11an Standard-20 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)

Agilent



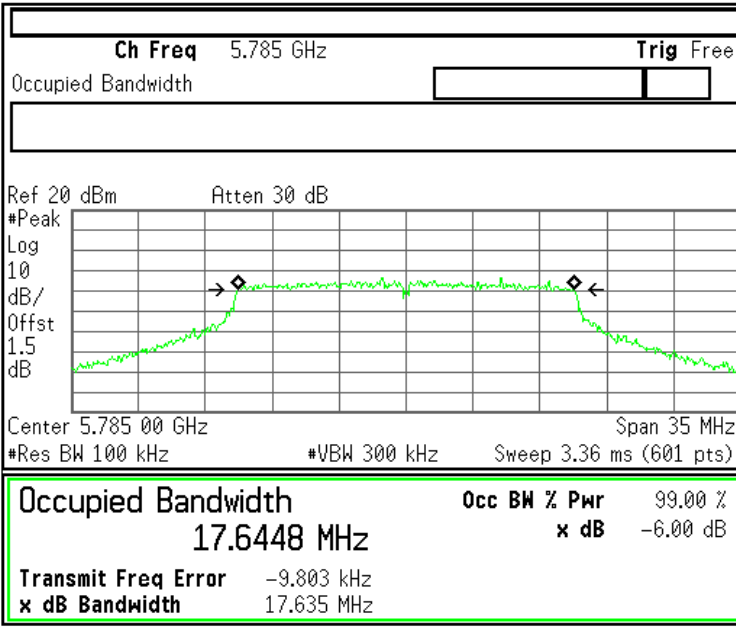
Freq/Channel
Center Freq 5.74500000 GHz
Start Freq 5.72750000 GHz
Stop Freq 5.76250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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6dB Bandwidth (CH Mid)

Agilent

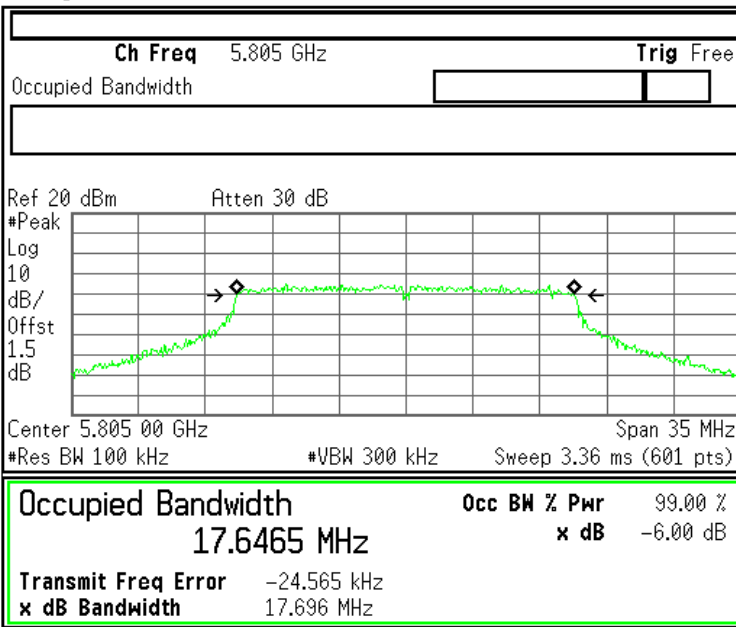


Freq/Channel	
Center Freq	5.78500000 GHz
Start Freq	5.76750000 GHz
Stop Freq	5.80250000 GHz
CF Step	3.50000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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6dB Bandwidth (CH High)

Agilent



Freq/Channel	
Center Freq	5.80500000 GHz
Start Freq	5.78750000 GHz
Stop Freq	5.82250000 GHz
CF Step	3.50000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

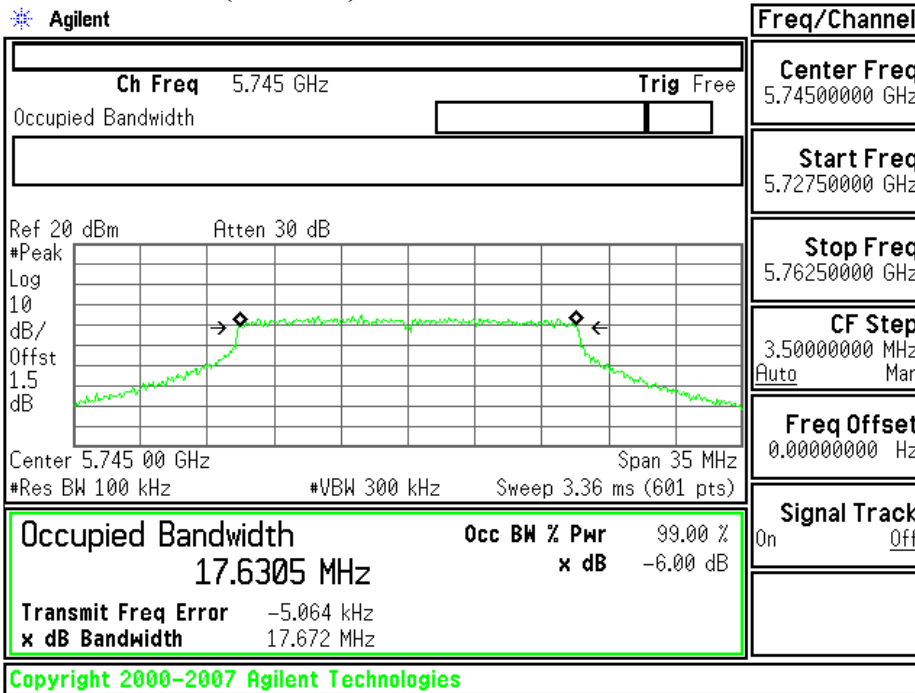
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draft 802.11an Standard-20 MHz Channel mode / Chain 1

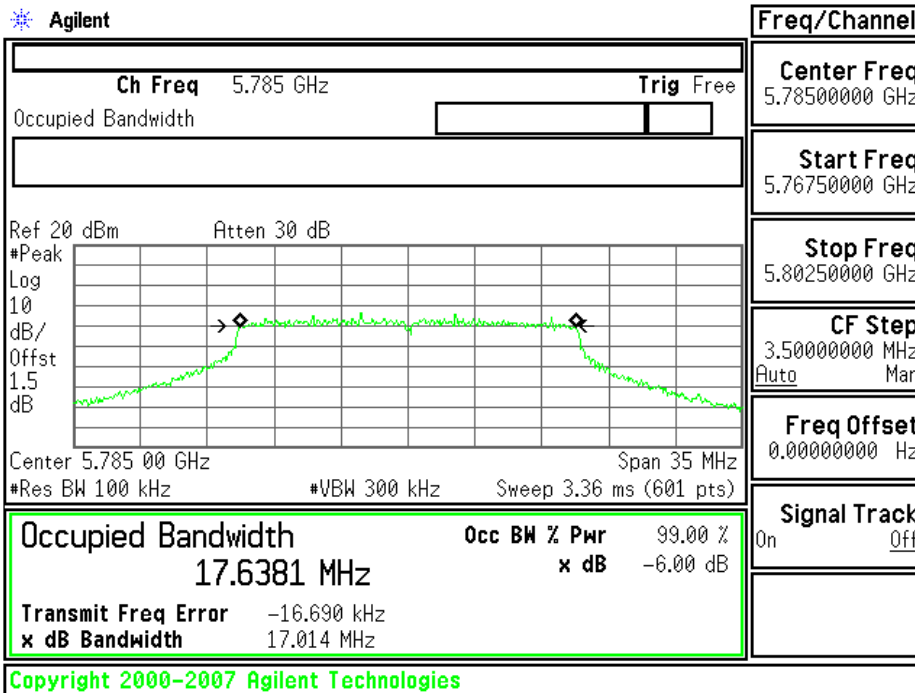
6dB Bandwidth (CH Low)

Agilent



6dB Bandwidth (CH Mid)

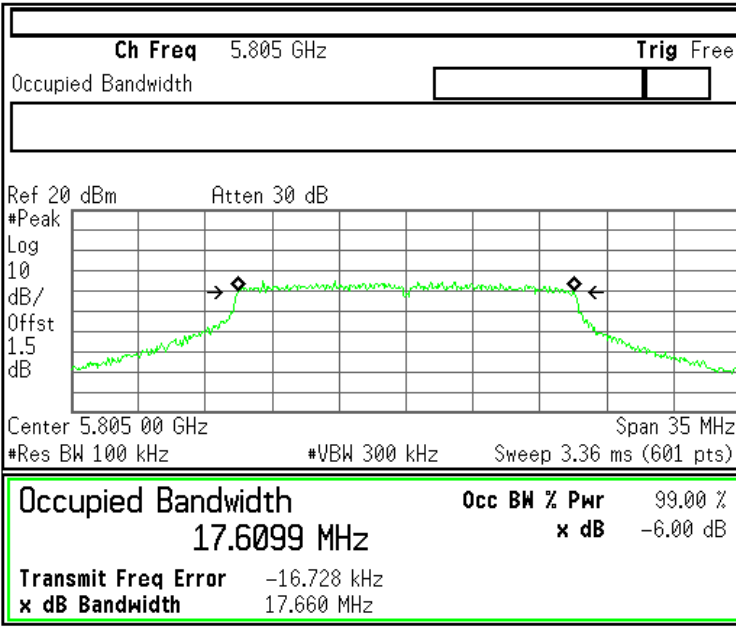
Agilent





6dB Bandwidth (CH High)

Agilent



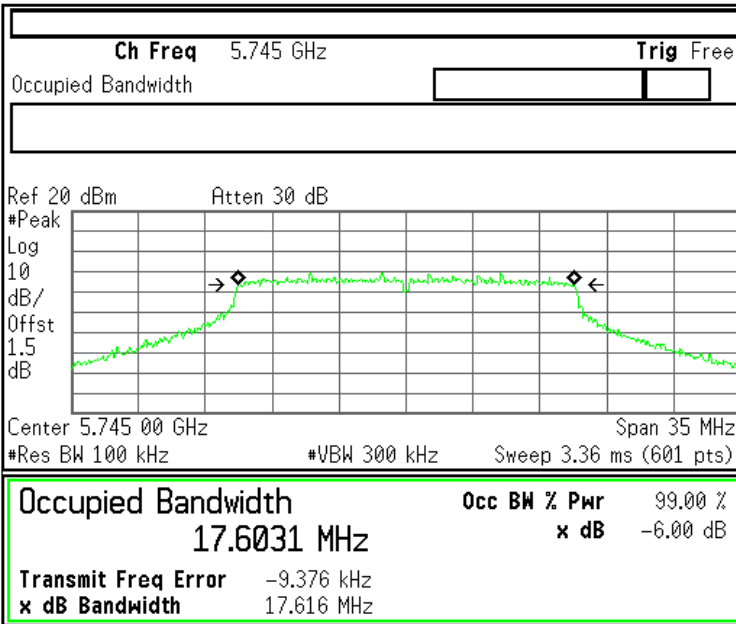
Freq/Channel
Center Freq 5.80500000 GHz
Start Freq 5.78750000 GHz
Stop Freq 5.82250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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draft 802.11an Standard-20 MHz Channel mode / Chain 2

6dB Bandwidth (CH Low)

Agilent



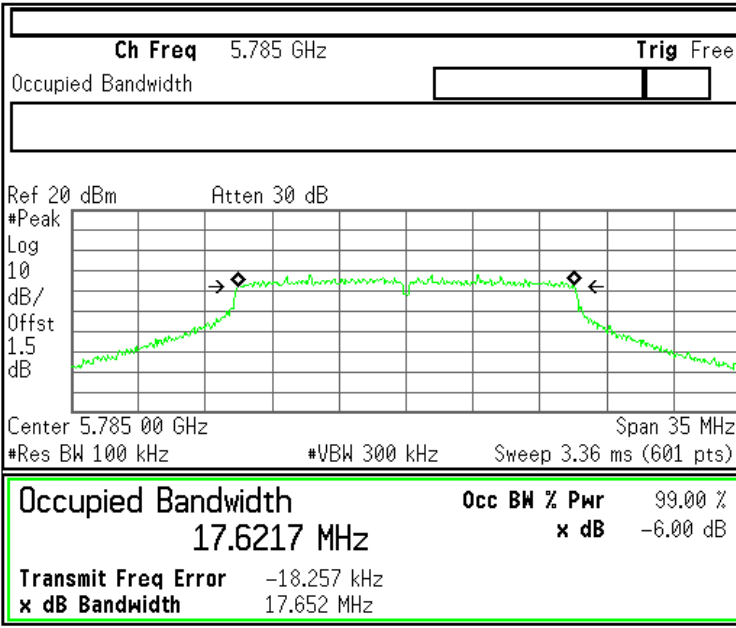
Freq/Channel
Center Freq 5.74500000 GHz
Start Freq 5.72750000 GHz
Stop Freq 5.76250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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6dB Bandwidth (CH Mid)

Agilent

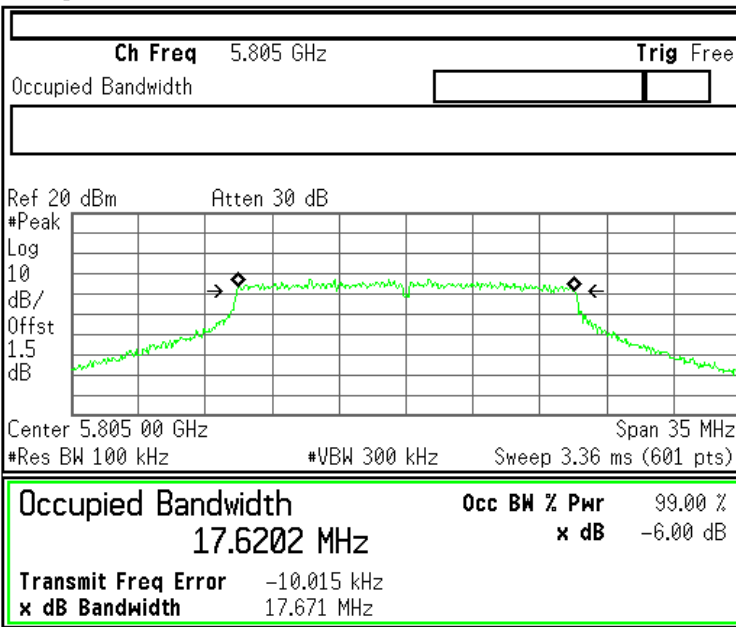


Freq/Channel
Center Freq 5.78500000 GHz
Start Freq 5.76750000 GHz
Stop Freq 5.80250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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6dB Bandwidth (CH High)

Agilent



Freq/Channel
Center Freq 5.80500000 GHz
Start Freq 5.78750000 GHz
Stop Freq 5.82250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

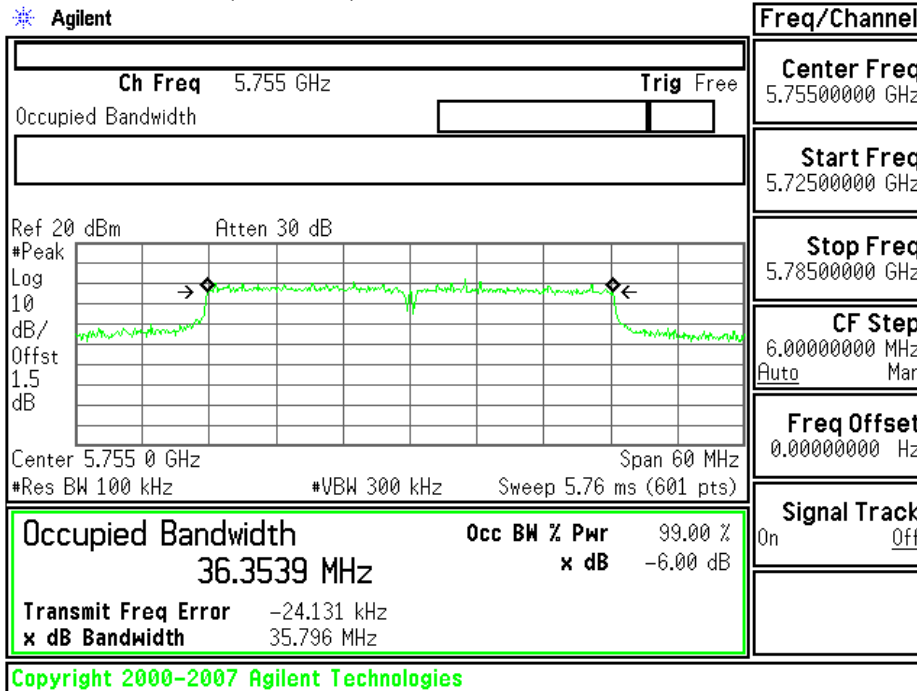
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draft 802.11an Standard-40 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)

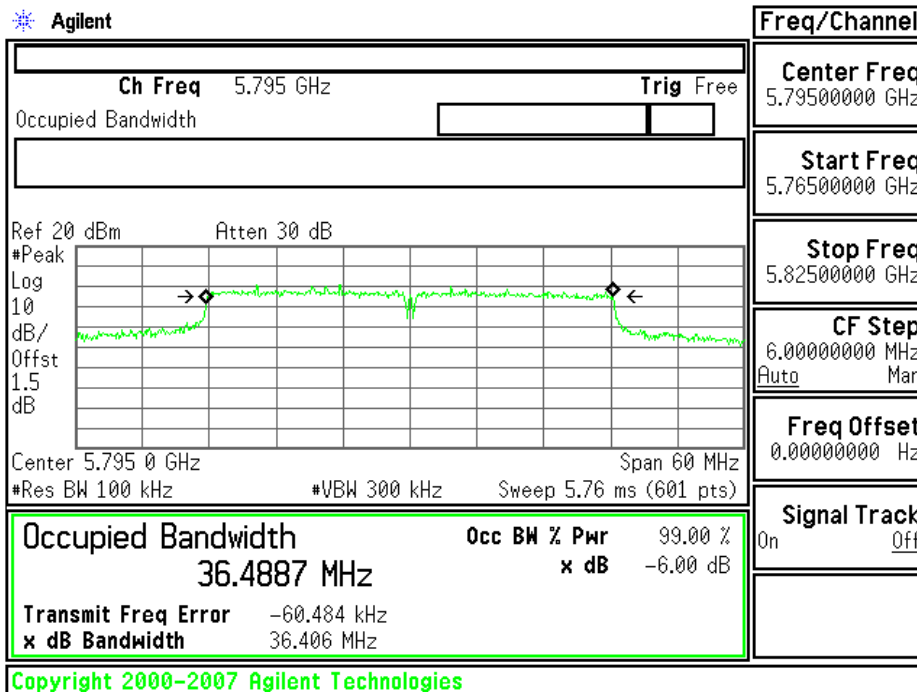
Agilent



Freq/Channel
Center Freq 5.75500000 GHz
Start Freq 5.72500000 GHz
Stop Freq 5.78500000 GHz
CF Step 6.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

6dB Bandwidth (CH High)

Agilent



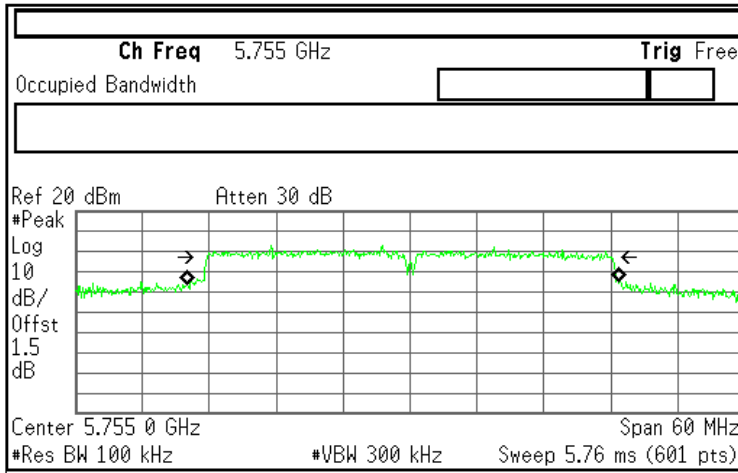
Freq/Channel
Center Freq 5.79500000 GHz
Start Freq 5.76500000 GHz
Stop Freq 5.82500000 GHz
CF Step 6.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off



draft 802.11an Standard-40 MHz Channel mode / Chain 1

6dB Bandwidth (CH Low)

Agilent



Freq/Channel

Center Freq 5.75500000 GHz

Start Freq 5.72500000 GHz

Stop Freq 5.78500000 GHz

CF Step 6.00000000 MHz Auto Man

Freq Offset 0.00000000 Hz

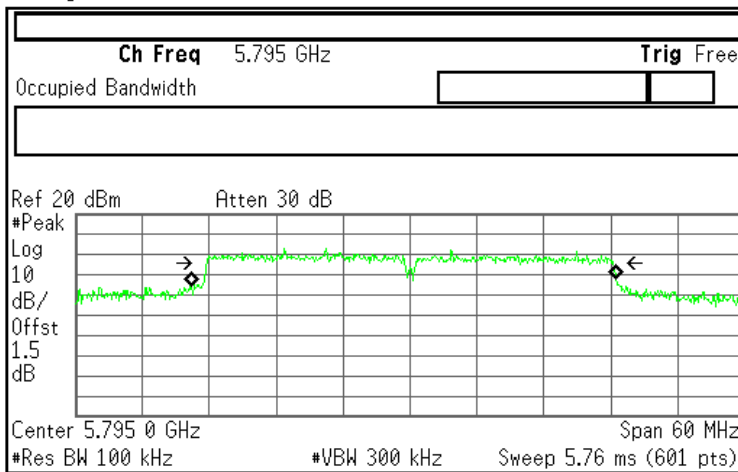
Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr	99.00 %
38.7011 MHz	x dB	-6.00 dB
Transmit Freq Error		-682.067 kHz
x dB Bandwidth		35.825 MHz

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6dB Bandwidth (CH High)

Agilent



Freq/Channel

Center Freq 5.79500000 GHz

Start Freq 5.76500000 GHz

Stop Freq 5.82500000 GHz

CF Step 6.00000000 MHz Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr	99.00 %
38.1243 MHz	x dB	-6.00 dB
Transmit Freq Error		-576.273 kHz
x dB Bandwidth		36.494 MHz

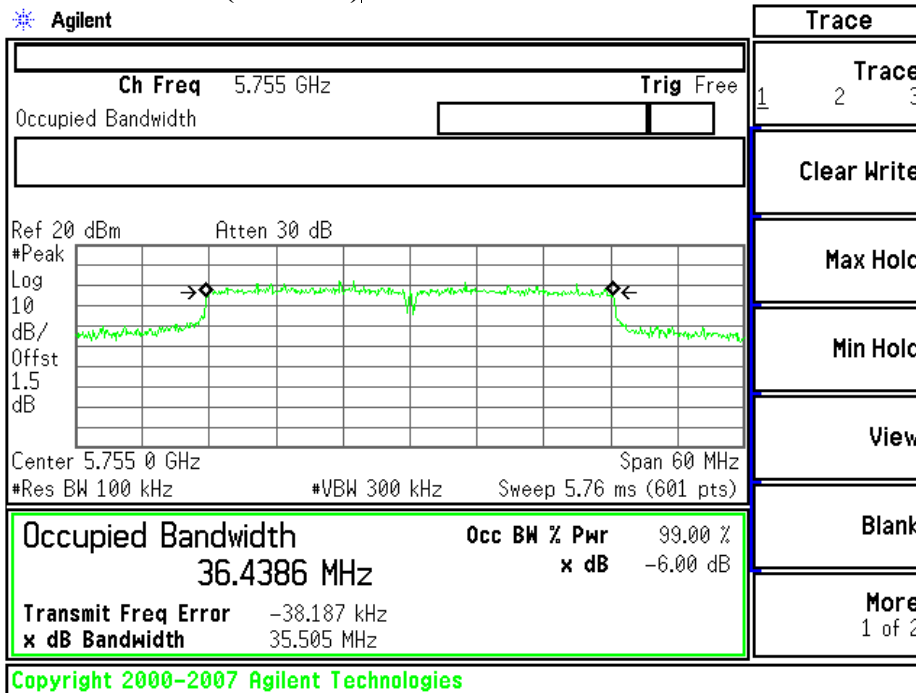
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draft 802.11an Standard-40 MHz Channel mode / Chain 2

6dB Bandwidth (CH Low)

Agilent

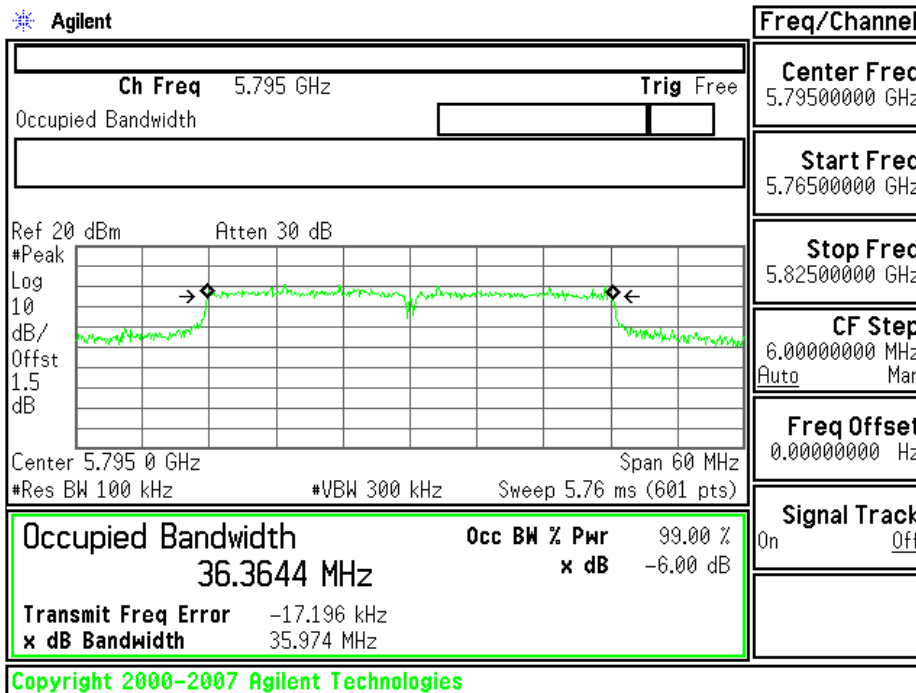


Trace		
1	Trace	3
2		
Clear Write		
Max Hold		
Min Hold		
View		
Blank		
More		
1 of 2		

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6dB Bandwidth (CH High)

Agilent

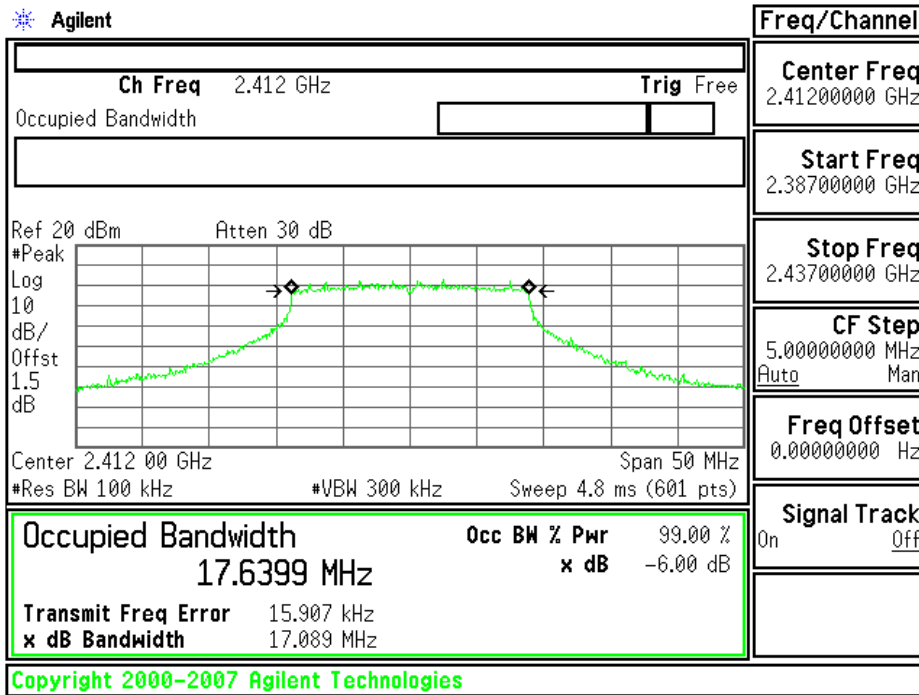


Freq/Channel	
Center Freq	5.79500000 GHz
Start Freq	5.76500000 GHz
Stop Freq	5.82500000 GHz
CF Step	6.00000000 MHz
	Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

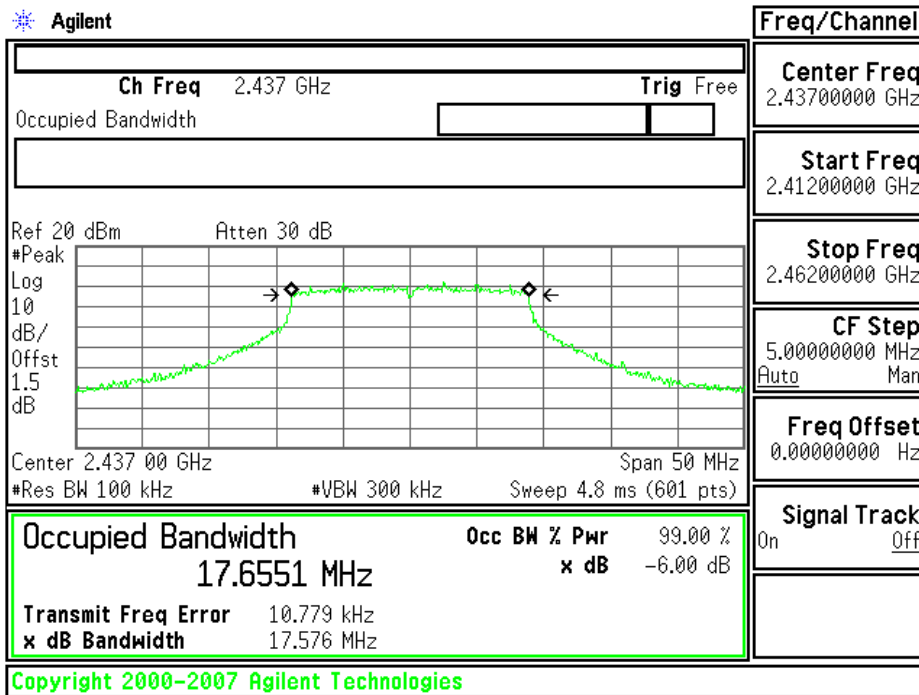
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draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2
6dB Bandwidth (CH Low)

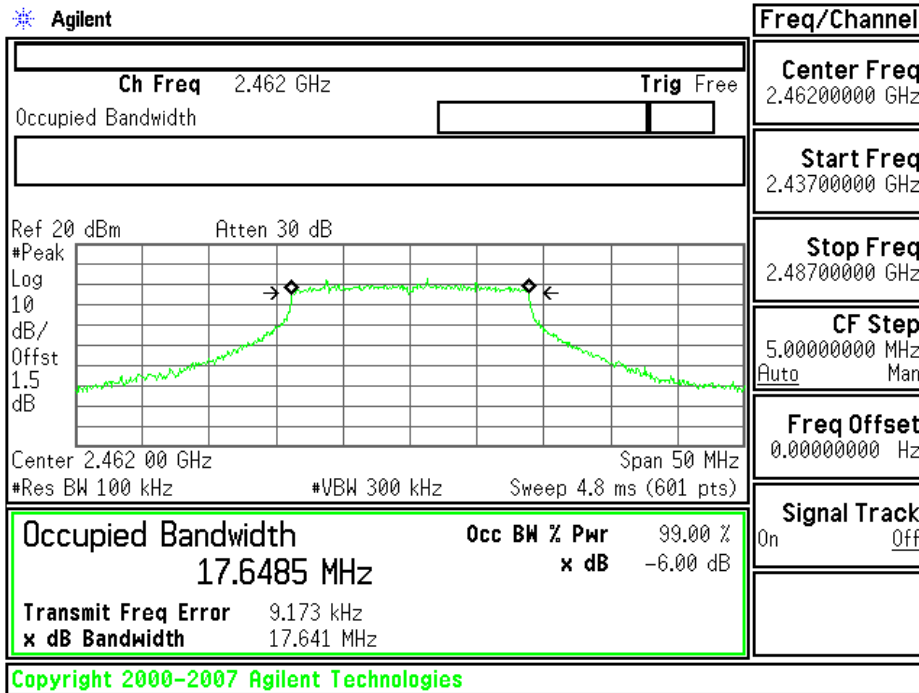


6dB Bandwidth (CH Mid)



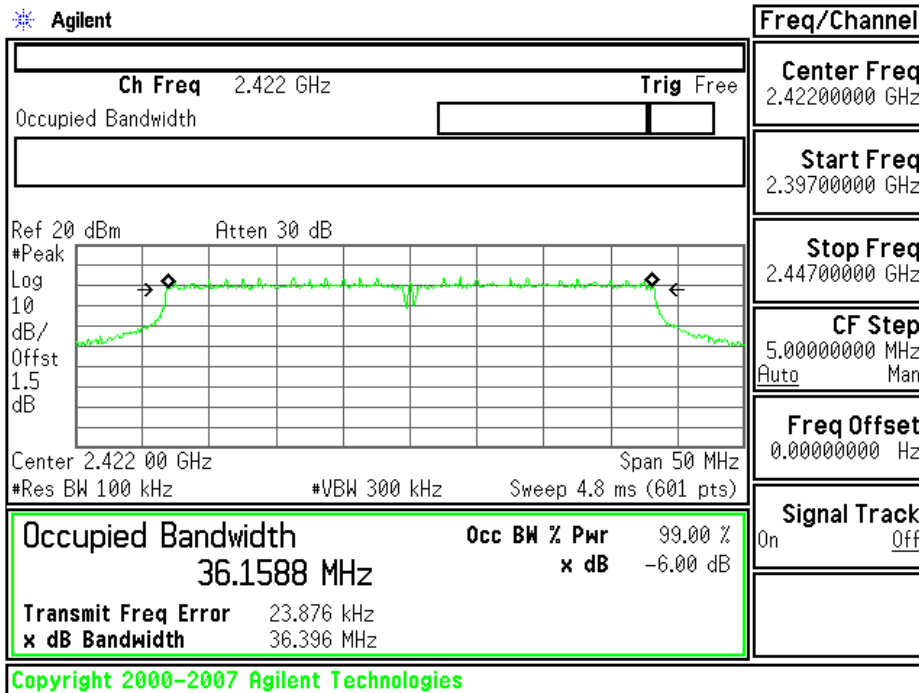


6dB Bandwidth (CH High)



draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

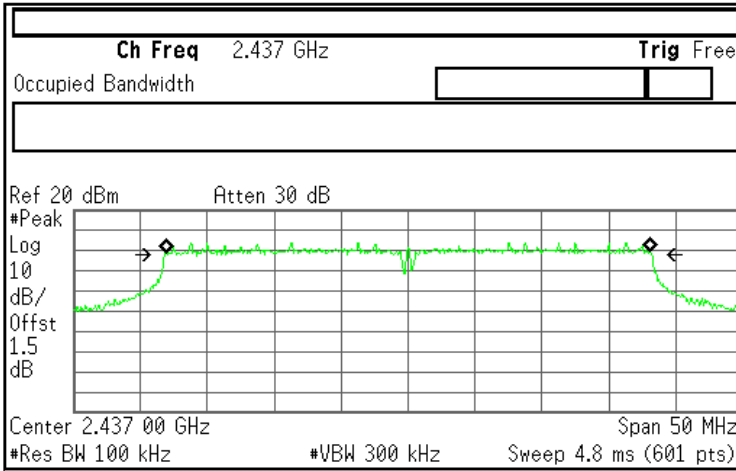
6dB Bandwidth (CH Low)





6dB Bandwidth (CH Mid)

Agilent



Freq/Channel

Center Freq 2.43700000 GHz

Start Freq 2.41200000 GHz

Stop Freq 2.46200000 GHz

CF Step 5.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

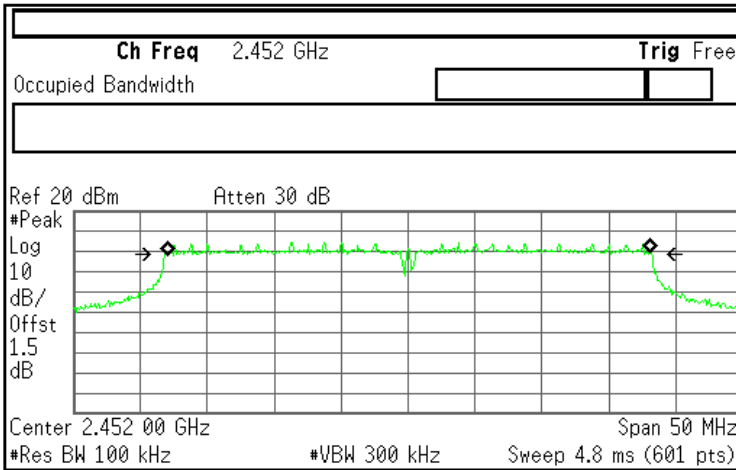
Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1663 MHz	x dB	-6.00 dB
Transmit Freq Error	13.121 kHz	
x dB Bandwidth	36.408 MHz	

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6dB Bandwidth (CH High)

Agilent



Freq/Channel

Center Freq 2.45200000 GHz

Start Freq 2.42700000 GHz

Stop Freq 2.47700000 GHz

CF Step 5.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr	99.00 %
36.1293 MHz	x dB	-6.00 dB
Transmit Freq Error	29.819 kHz	
x dB Bandwidth	36.337 MHz	

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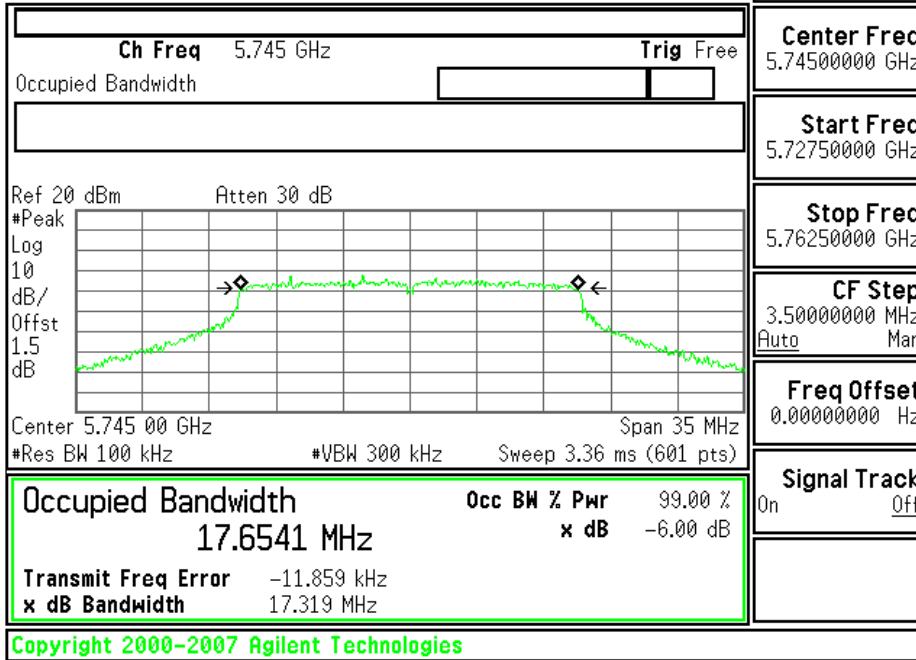


5725MHz-5825MHz

draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

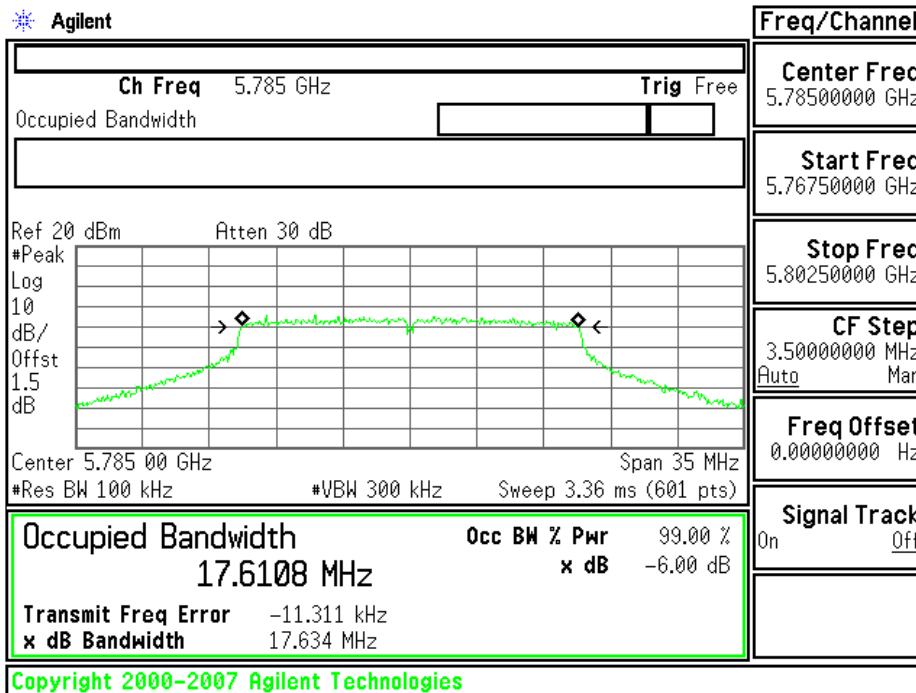
6dB Bandwidth (CH Low)

Agilent



6dB Bandwidth (CH Mid)

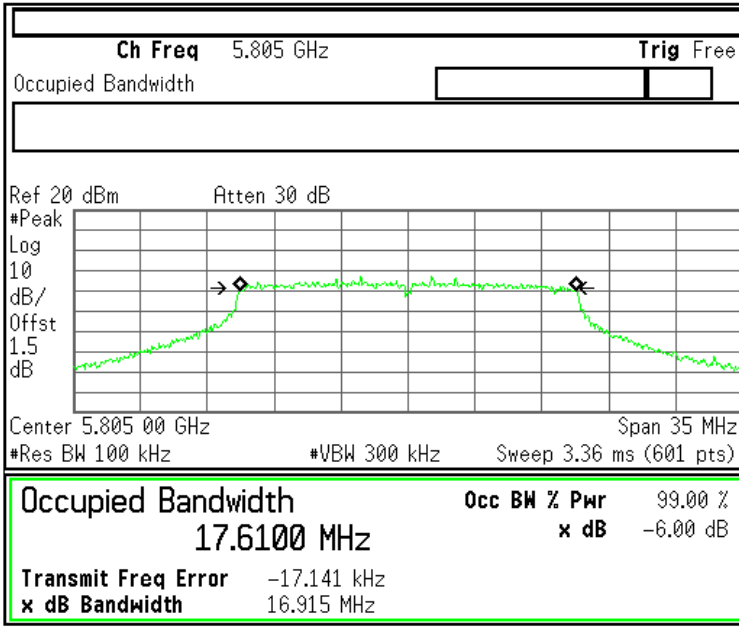
Agilent





6dB Bandwidth (CH High)

Agilent



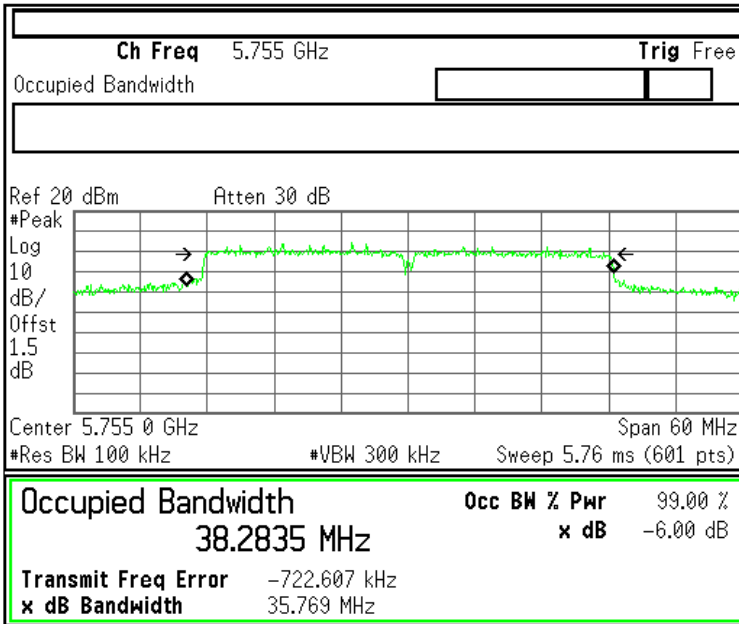
Center Freq	5.80500000 GHz
Start Freq	5.78750000 GHz
Stop Freq	5.82250000 GHz
CF Step	3.50000000 MHz
Freq Offset	0.00000000 Hz
Signal Track	On Off

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draft 802.11an Standard-40 MHz Channel mode / Chain0 + Chain1 + Chain 2

6dB Bandwidth (CH Low)

Agilent



Center Freq	5.75500000 GHz
Start Freq	5.72500000 GHz
Stop Freq	5.78500000 GHz
CF Step	6.00000000 MHz
Freq Offset	0.00000000 Hz
Signal Track	On Off

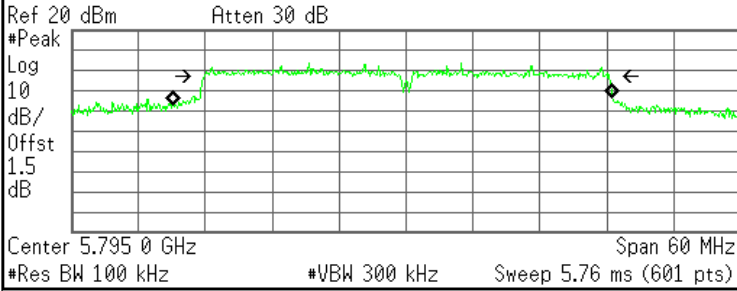
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6dB Bandwidth (CH High)

Agilent

Ch Freq 5.795 GHz	Trig Free
Occupied Bandwidth	



Freq/Channel

Center Freq 5.79500000 GHz
Start Freq 5.76500000 GHz
Stop Freq 5.82500000 GHz
CF Step 6.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

Occupied Bandwidth	Occ BM % Pwr	99.00 %
39.4606 MHz	x dB	-6.00 dB
Transmit Freq Error	-1.219 MHz	
x dB Bandwidth	36.314 MHz	

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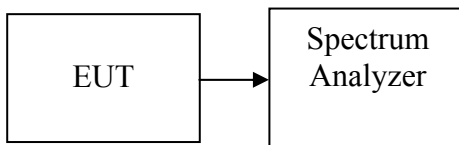
PEAK POWER

LIMIT

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

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

Test Configuration



TEST PROCEDURE

- 1 Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2 Set RBW = 1 MHz.
- 3 Set VBW \geq 3 MHz.
- 4 Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise use peak detector mode.
- 5 Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to δ hichfree run δ hich.
- 6 Trace average 100 traces in power averaging mode.
- 7 Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer's band power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	15.38	0.0345	1.00	PASS
Mid	2437	15.26	0.0336		PASS
High	2462	15.29	0.0338		PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	15.72	0.0373	1.00	PASS
Mid	2437	15.60	0.0363		PASS
High	2462	15.92	0.0391		PASS

Test mode: draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	15.85	15.10	15.24	20.18	0.1042	1.00	PASS
Mid	2437	15.26	14.85	14.68	19.71	0.0935		PASS
High	2462	15.57	15.16	15.31	20.12	0.1028		PASS

Test mode: draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	16.56	16.40	16.42	21.23	0.1327	1.00	PASS
Mid	2437	16.35	16.26	16.24	21.05	0.1274		PASS
High	2452	16.33	16.42	16.30	21.12	0.1294		PASS

Test mode: draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	19.40	0.0871	1.00	PASS
Mid	2437	19.35	0.0861		PASS
High	2462	19.51	0.0893		PASS



Test mode: draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	19.61	0.0914	1.00	PASS
Mid	2437	19.68	0.0929		PASS
High	2452	19.57	0.0906		PASS

Test mode: IEEE 802.11a mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	5745	16.91	0.0491	1.00	PASS
Mid	5785	16.80	0.0479		PASS
High	5805	15.36	0.0344		PASS

Test mode: draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	5745	17.25	15.46	16.93	21.38	0.1374	1.00	PASS
Mid	5785	15.93	15.84	16.65	20.93	0.1239		PASS
High	5805	16.96	16.22	16.25	21.26	0.1337		PASS

Test mode: draft 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	5755	14.99	14.87	14.93	19.70	0.0933	1.00	PASS
Mid	5795	14.92	14.76	14.72	19.57	0.0906		PASS

Test mode: draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	5745	18.24	0.0667	1.00	PASS
Mid	5785	17.07	0.0509		PASS
High	5805	17.10	0.0513		PASS

Test mode: draft 802.11an Wide-40 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

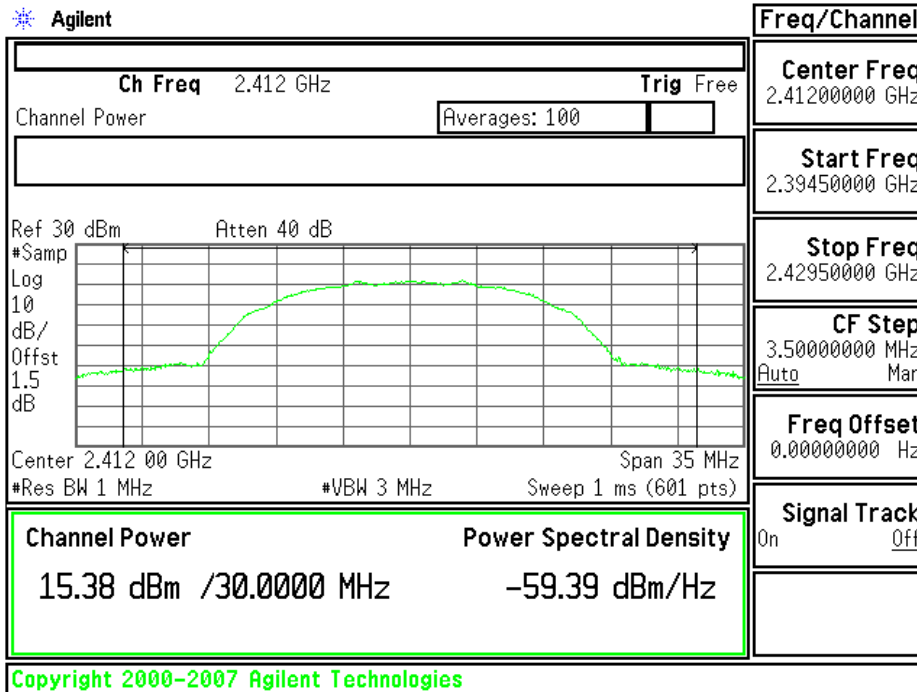
Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	5755	21.85	0.1531	1.00	PASS
Mid	5795	22.85	0.1928		PASS



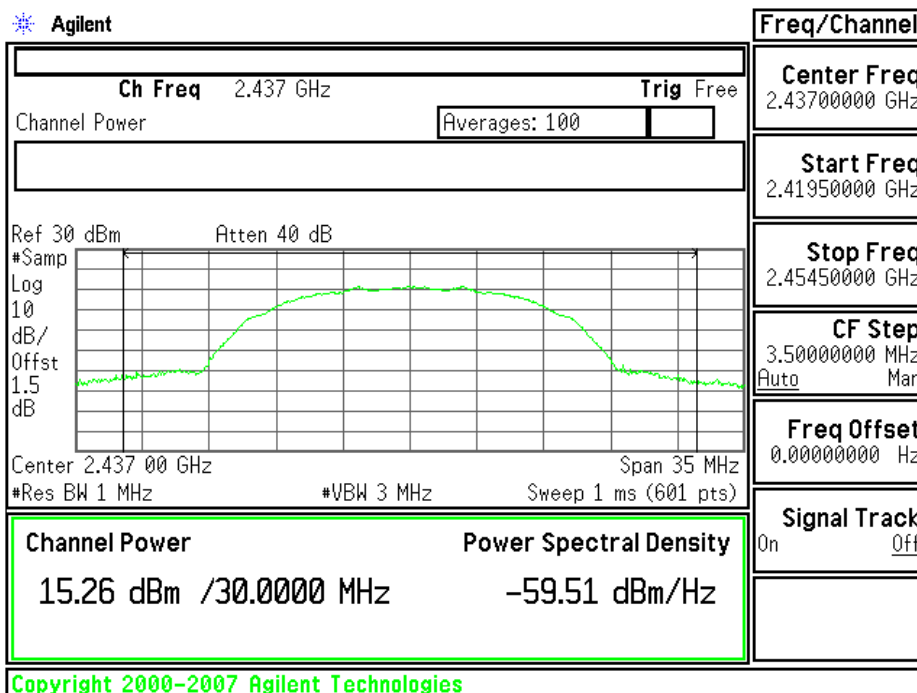
Test Plot

IEEE 802.11b mode

Peak Power (CH Low)



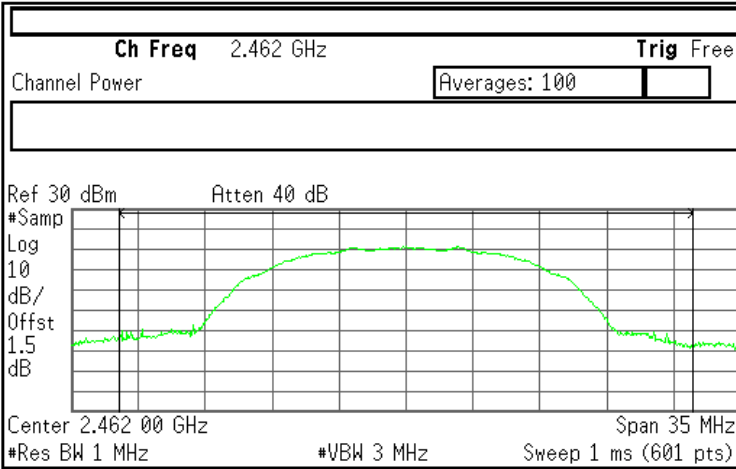
Peak Power (CH Mid)





Peak Power (CH High)

Agilent



Freq/Channel

Center Freq 2.46200000 GHz

Start Freq 2.44450000 GHz

Stop Freq 2.47950000 GHz

CF Step 3.50000000 MHz Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Channel Power Power Spectral Density

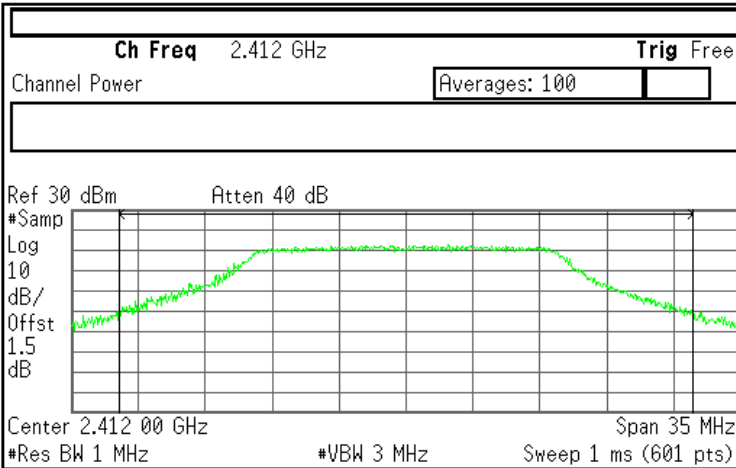
15.29 dBm /30.0000 MHz -59.48 dBm/Hz

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IEEE 802.11g mode

Peak Power (CH Low)

Agilent



Freq/Channel

Center Freq 2.41200000 GHz

Start Freq 2.39450000 GHz

Stop Freq 2.42950000 GHz

CF Step 3.50000000 MHz Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Channel Power Power Spectral Density

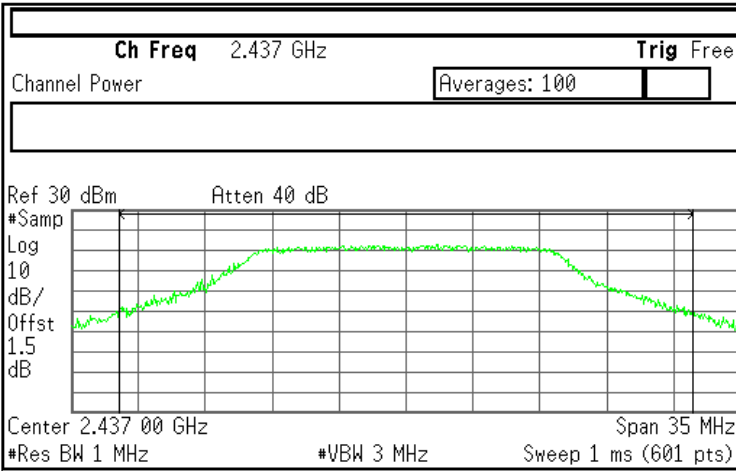
15.72 dBm /30.0000 MHz -59.05 dBm/Hz

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Peak Power (CH Mid)

Agilent



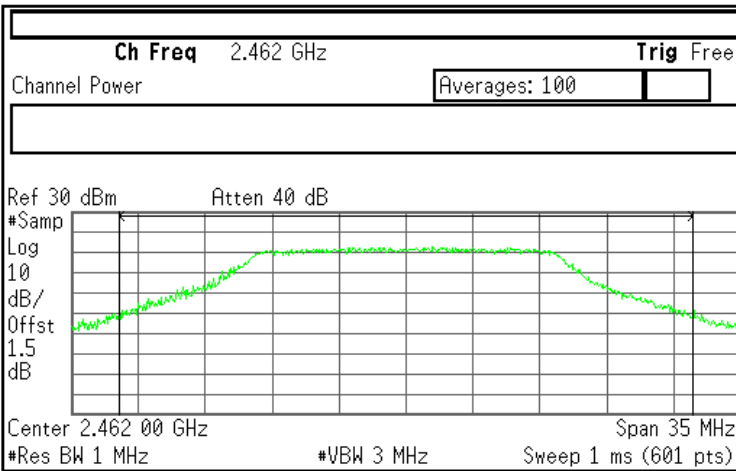
Freq/Channel
Center Freq 2.43700000 GHz
Start Freq 2.41950000 GHz
Stop Freq 2.45450000 GHz
CF Step Auto Man 3.50000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

Channel Power	Power Spectral Density
15.60 dBm /30.0000 MHz	-59.18 dBm/Hz

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Peak Power (CH High)

Agilent



Freq/Channel
Center Freq 2.46200000 GHz
Start Freq 2.44450000 GHz
Stop Freq 2.47950000 GHz
CF Step Auto Man 3.50000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

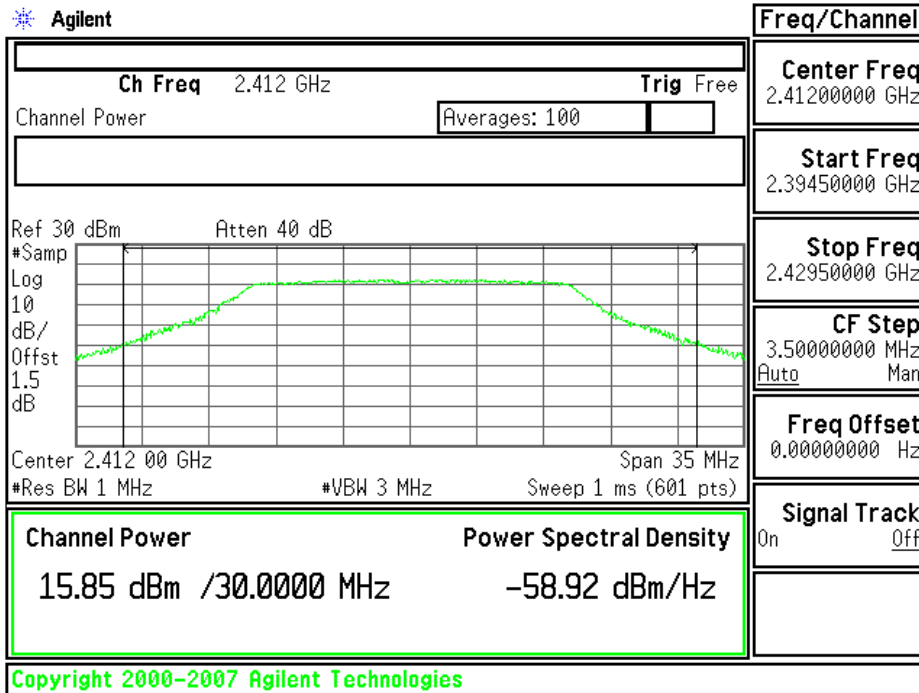
Channel Power	Power Spectral Density
15.92 dBm /30.0000 MHz	-58.85 dBm/Hz

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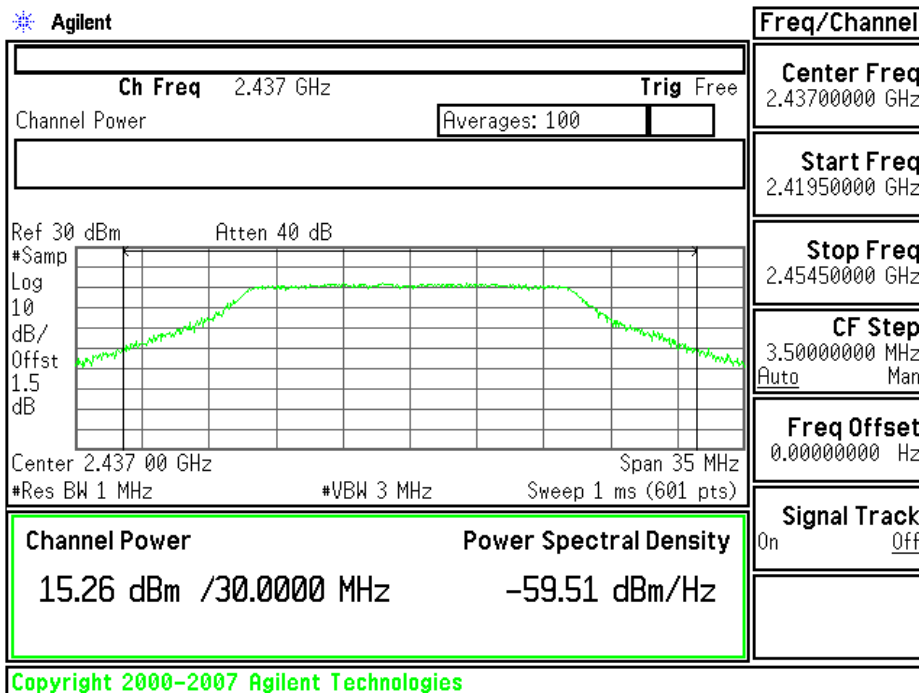


draft 802.11gn Standard-20 MHz Channel mode / Chain 0

Peak Power (CH Low)



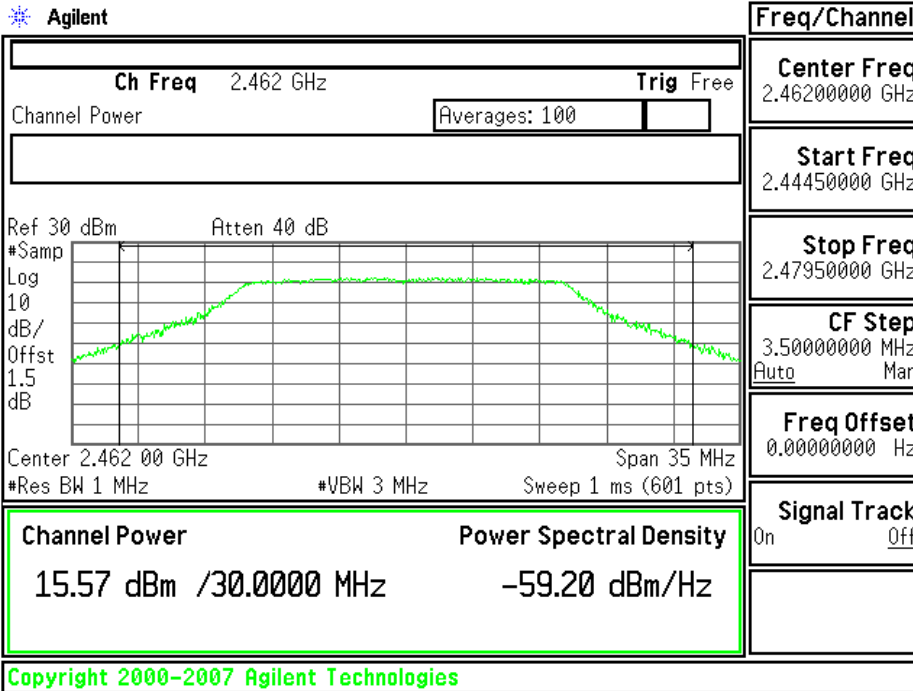
Peak Power (CH Mid)





Peak Power (CH High)

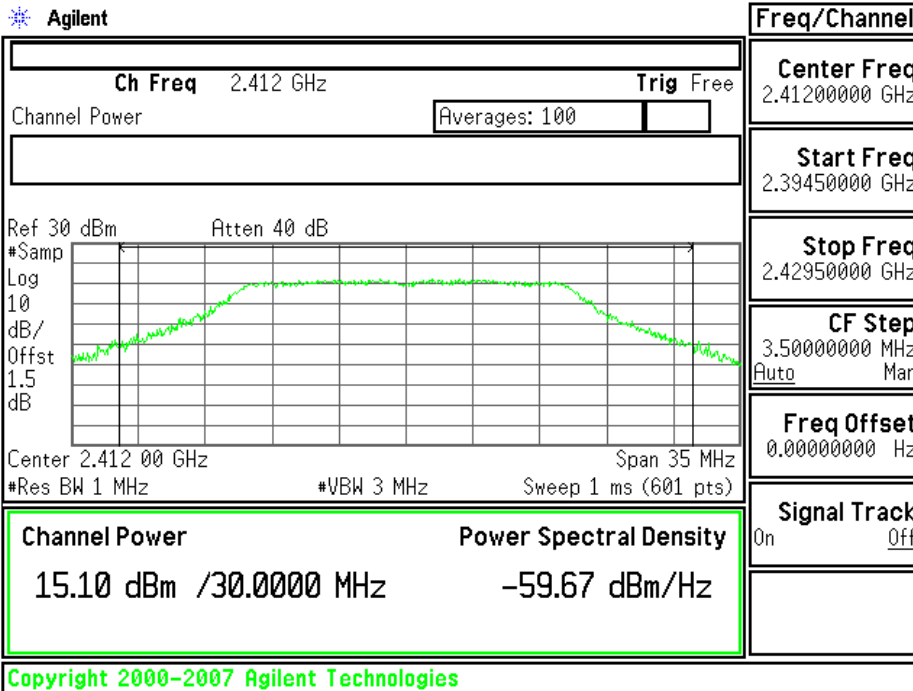
Agilent



draft 802.11gn Standard-20 MHz Channel mode / Chain 1

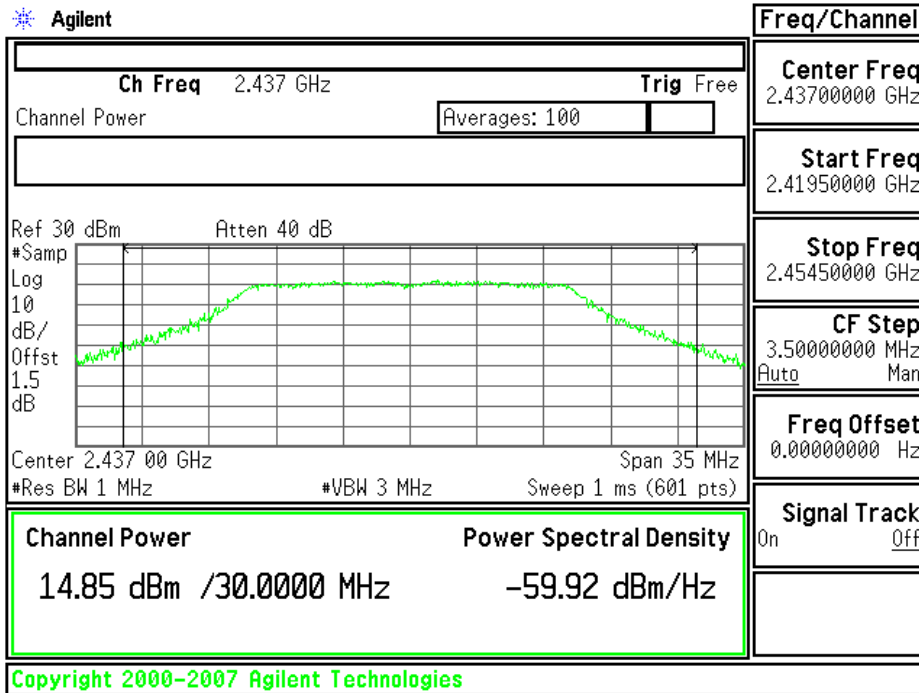
Peak Power (CH Low)

Agilent

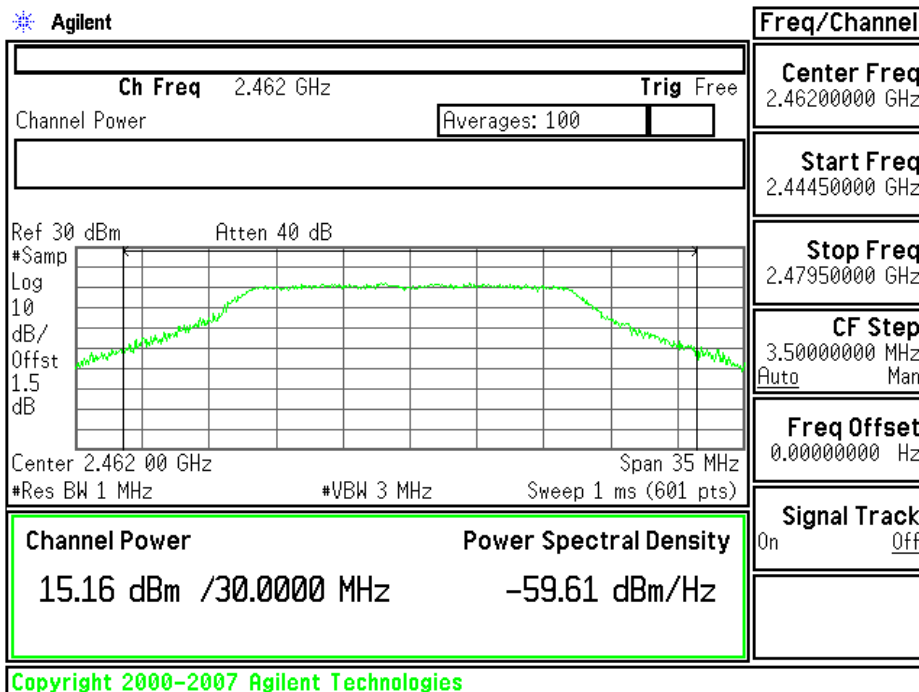




Peak Power (CH Mid)

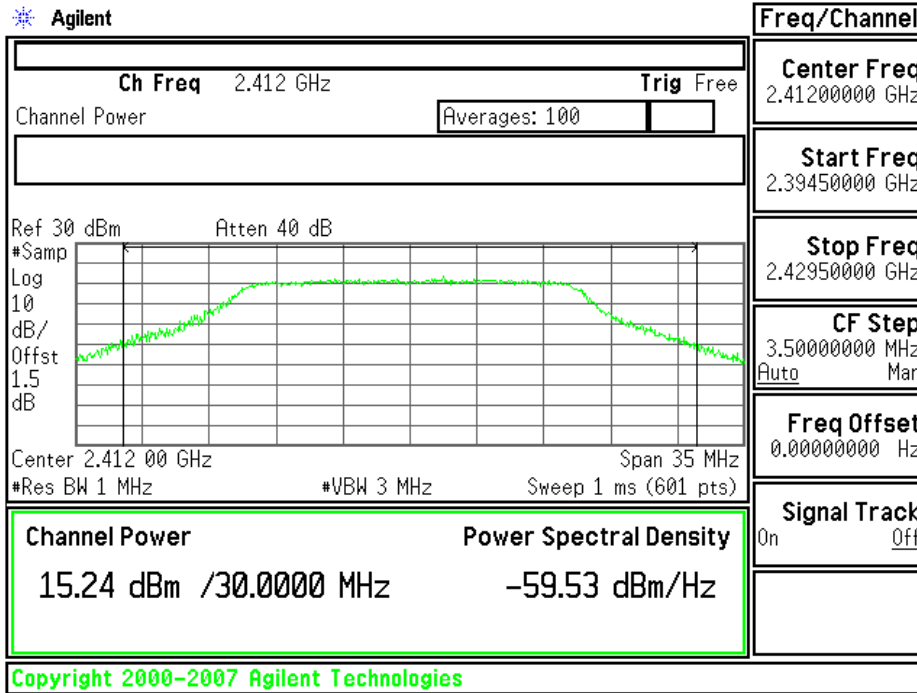


Peak Power (CH High)

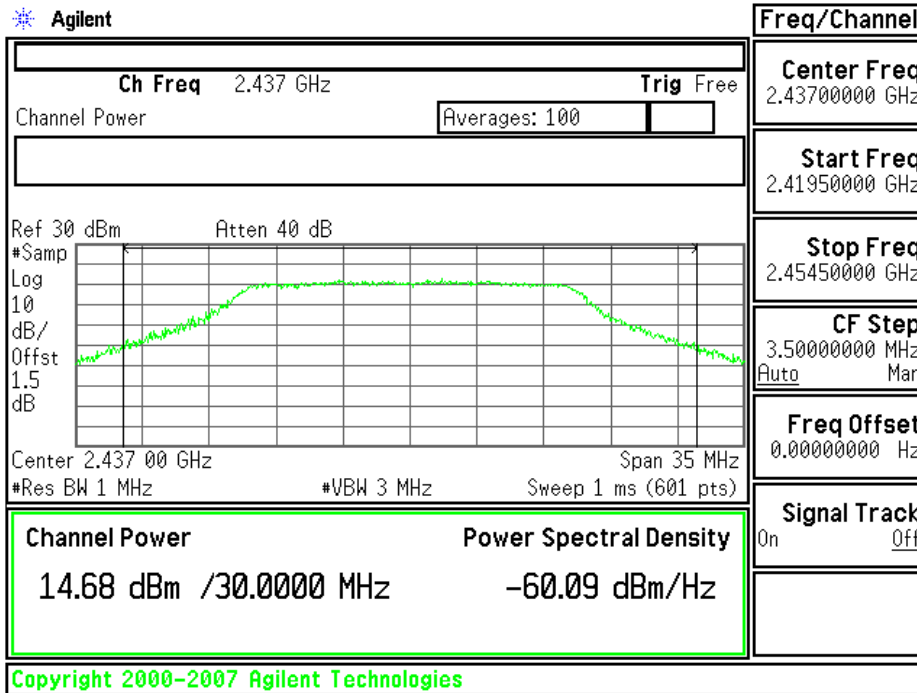




draft 802.11gn Standard-20 MHz Channel mode / Chain 2
Peak Power (CH Low)



Peak Power (CH Mid)

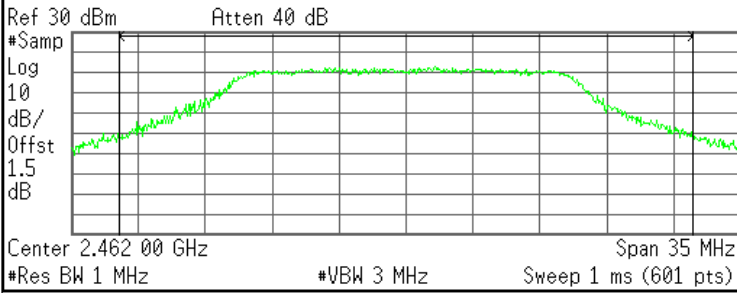




Peak Power (CH High)

Agilent

Ch Freq 2.462 GHz	Trig Free
Channel Power	Averages: 100



Channel Power	Power Spectral Density
15.31 dBm /30.0000 MHz	-59.46 dBm/Hz

Freq/Channel
Center Freq 2.46200000 GHz
Start Freq 2.44450000 GHz
Stop Freq 2.47950000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

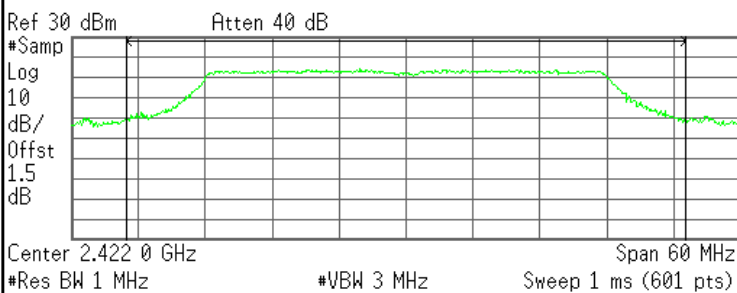
Copyright 2000-2007 Agilent Technologies

draft 802.11gn Wide-40 MHz Channel mode / Chain 0

Peak Power (CH Low)

Agilent

Ch Freq 2.422 GHz	Trig Free
Channel Power	Averages: 100



Channel Power	Power Spectral Density
16.56 dBm /50.0000 MHz	-60.43 dBm/Hz

Freq/Channel
Center Freq 2.42200000 GHz
Start Freq 2.39200000 GHz
Stop Freq 2.45200000 GHz
CF Step 6.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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Peak Power (CH Mid)

Agilent

Ch Freq 2.437 GHz Trig Free Channel Power <input type="text"/> Averages: 100 <input type="text"/>		Freq/Channel Center Freq 2.43700000 GHz
Ref 30 dBm Atten 40 dB #Samp 10 Log dB/Offst 1.5 dB 		Start Freq 2.40700000 GHz Stop Freq 2.46700000 GHz CF Step 6.00000000 MHz Auto Man
Center 2.437 0 GHz Span 60 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 1 ms (601 pts)		Freq Offset 0.00000000 Hz Signal Track On Off
Channel Power 16.35 dBm /50.0000 MHz	Power Spectral Density -60.64 dBm/Hz	
Copyright 2000-2007 Agilent Technologies		

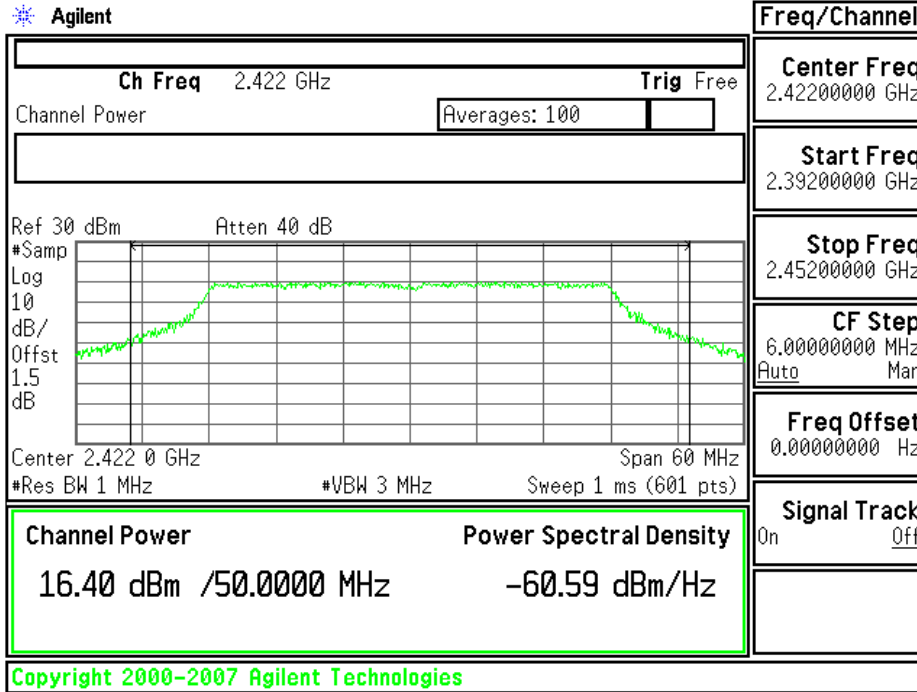
Peak Power (CH High)

Agilent

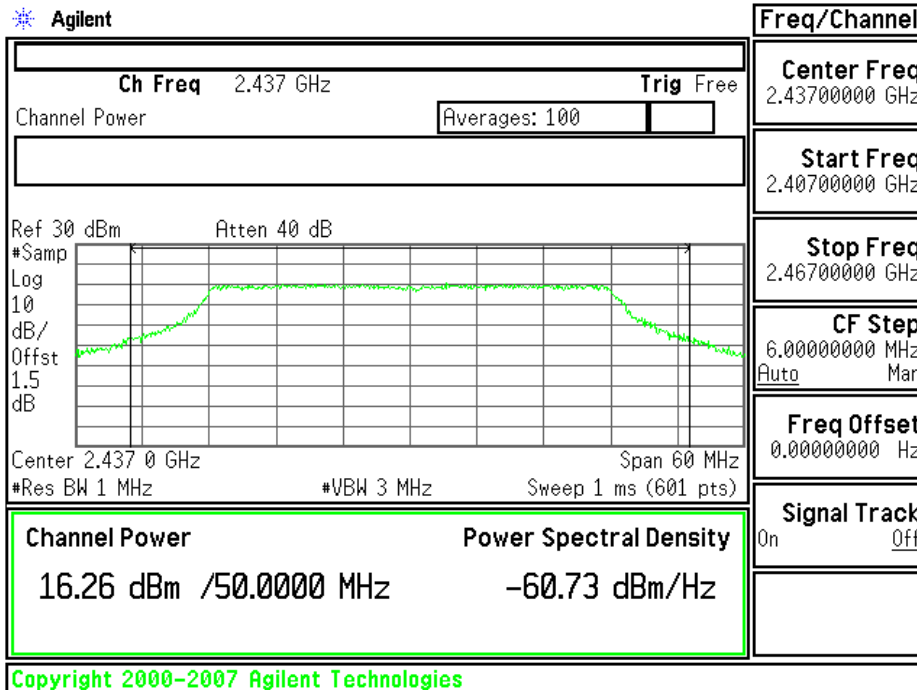
Ch Freq 2.452 GHz Trig Free Channel Power <input type="text"/> Averages: 100 <input type="text"/>		Freq/Channel Center Freq 2.45200000 GHz
Ref 30 dBm Atten 40 dB #Samp 10 Log dB/Offst 1.5 dB 		Start Freq 2.42200000 GHz Stop Freq 2.48200000 GHz CF Step 6.00000000 MHz Auto Man
Center 2.452 0 GHz Span 60 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 1 ms (601 pts)		Freq Offset 0.00000000 Hz Signal Track On Off
Channel Power 16.33 dBm /50.0000 MHz	Power Spectral Density -60.66 dBm/Hz	
Copyright 2000-2007 Agilent Technologies		



draft 802.11gn Wide-40 MHz Channel mode / Chain 1
Peak Power (CH Low)



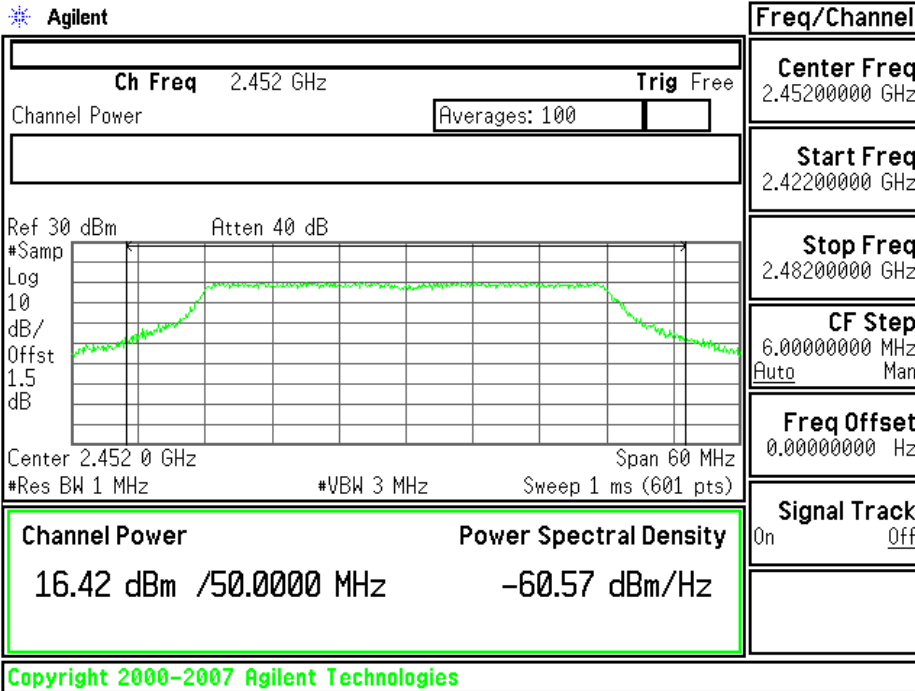
Peak Power (CH Mid)





Peak Power (CH High)

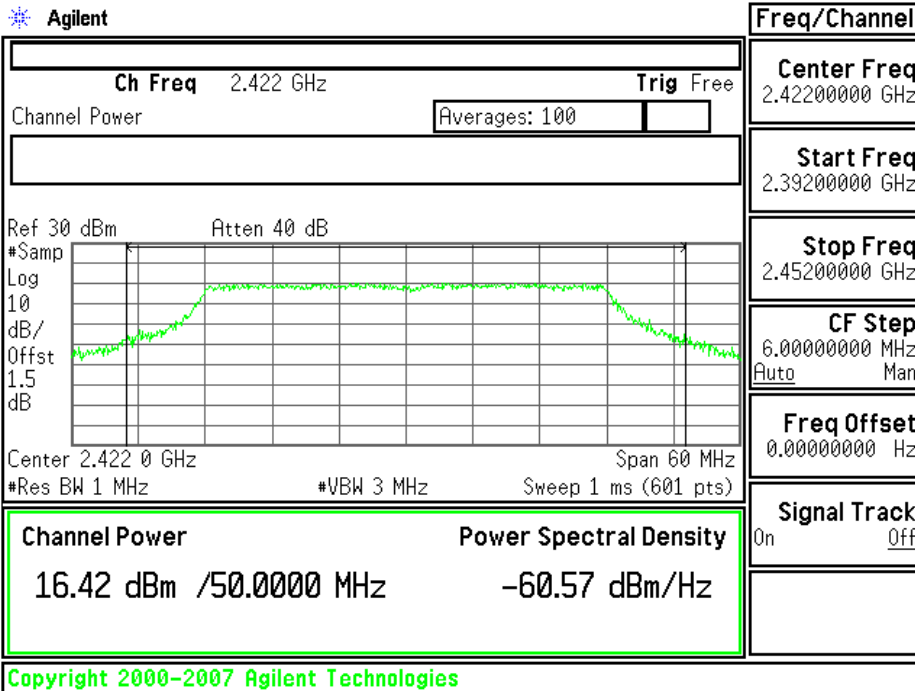
Agilent



draft 802.11gn Wide-40 MHz Channel mode / Chain 2

Peak Power (CH Low)

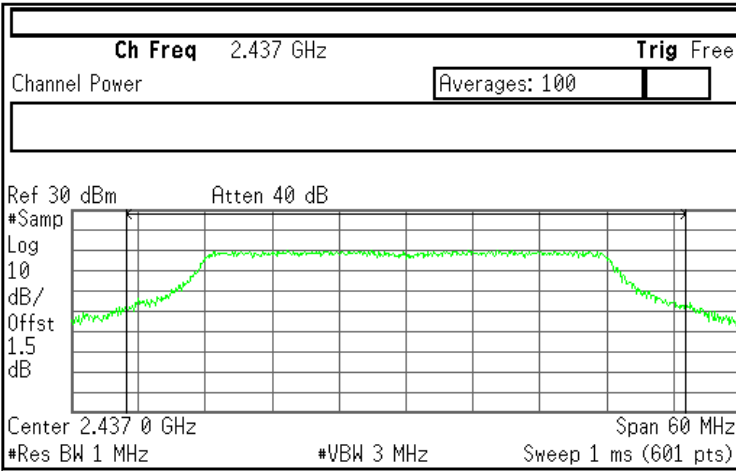
Agilent





Peak Power (CH Mid)

Agilent



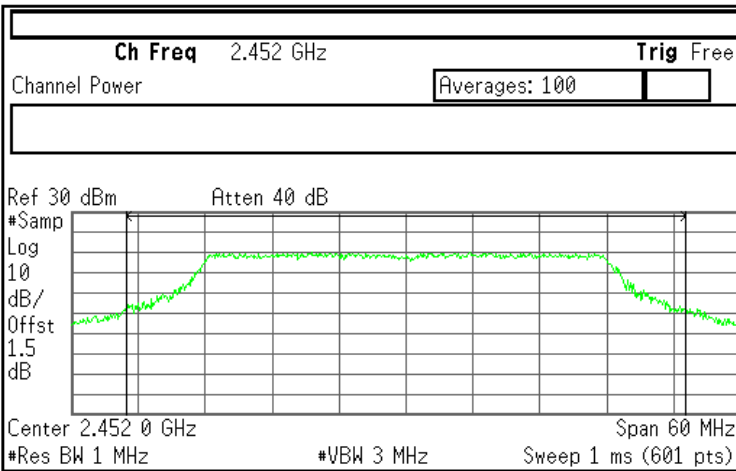
Freq/Channel
Center Freq 2.43700000 GHz
Start Freq 2.40700000 GHz
Stop Freq 2.46700000 GHz
CF Step Auto Man 6.00000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

Channel Power	Power Spectral Density
16.24 dBm /50.0000 MHz	-60.75 dBm/Hz

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Peak Power (CH High)

Agilent



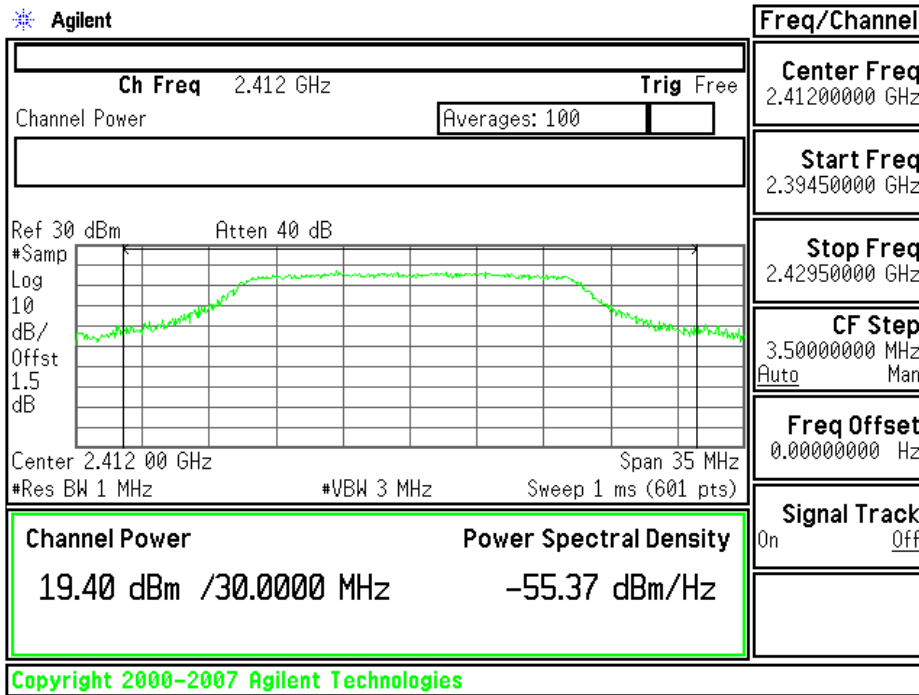
Freq/Channel
Center Freq 2.45200000 GHz
Start Freq 2.42200000 GHz
Stop Freq 2.48200000 GHz
CF Step Auto Man 6.00000000 MHz
Freq Offset 0.00000000 Hz
Signal Track On Off

Channel Power	Power Spectral Density
16.30 dBm /50.0000 MHz	-60.69 dBm/Hz

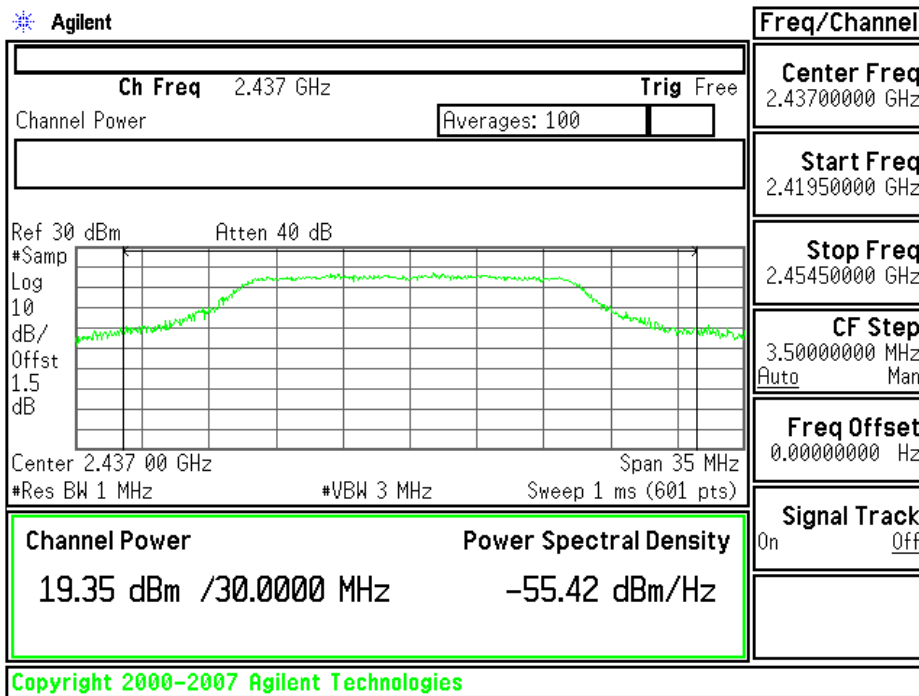
Copyright 2000-2007 Agilent Technologies



draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2
Peak Power (CH Low)

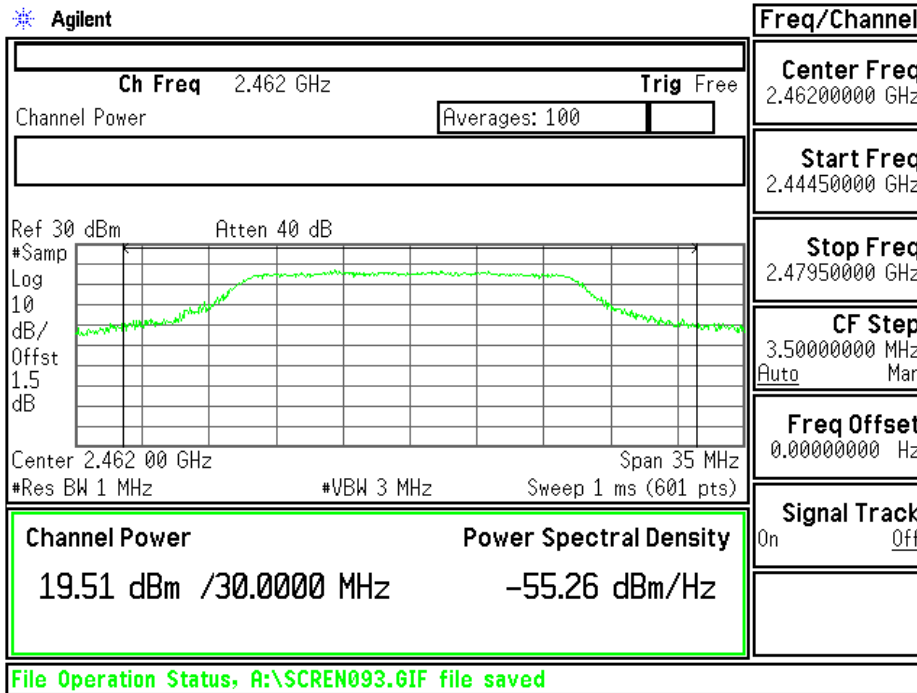


Peak Power (CH Mid)



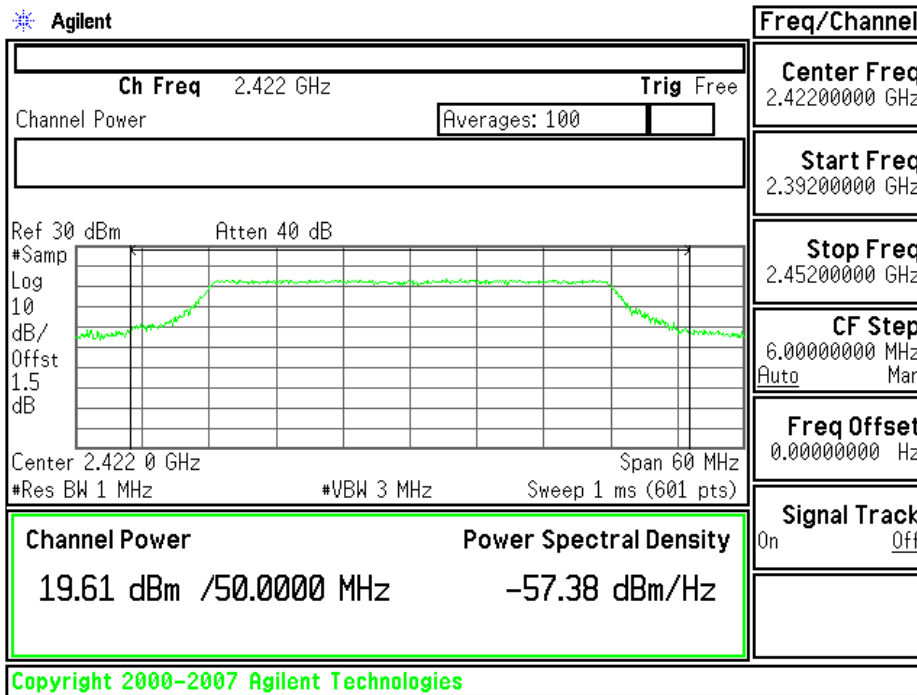


Peak Power (CH High)



draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

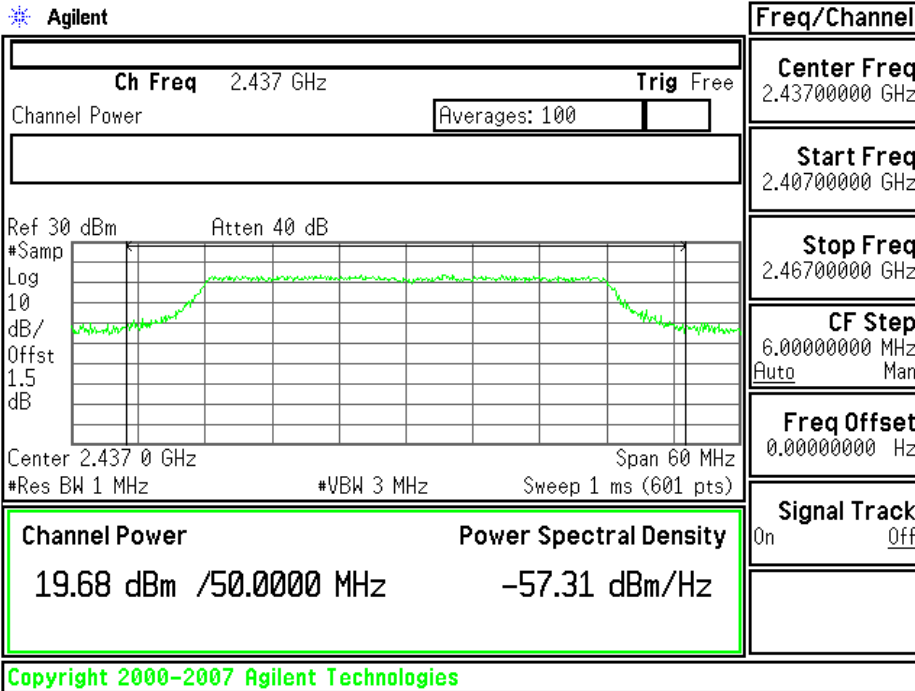
Peak Power (CH Low)





Peak Power (CH Mid)

Agilent



Freq/Channel

Center Freq
2.43700000 GHz

Start Freq
2.40700000 GHz

Stop Freq
2.46700000 GHz

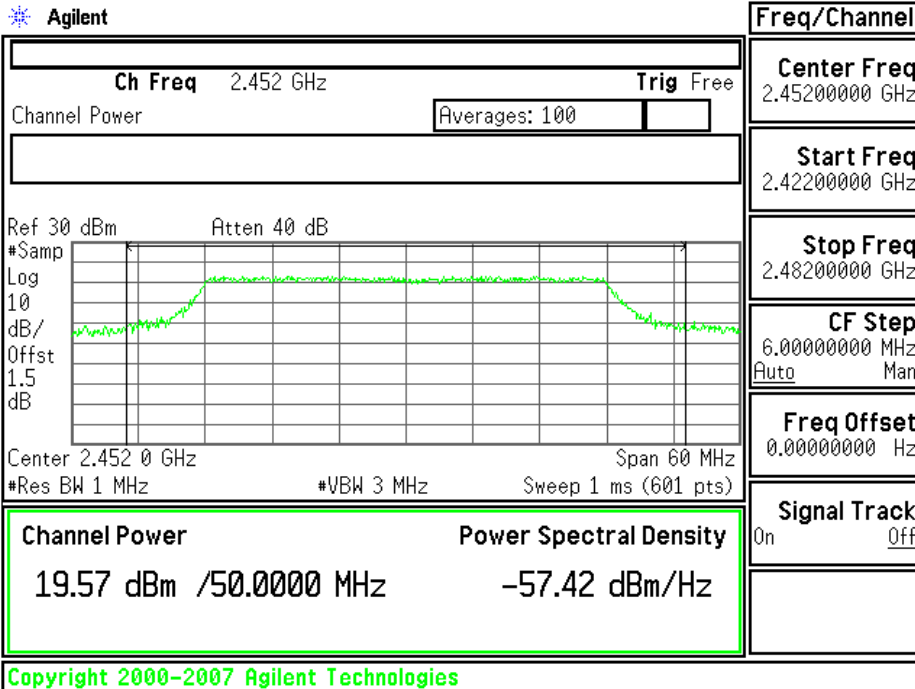
CF Step
6.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

Peak Power (CH High)

Agilent



Freq/Channel

Center Freq
2.45200000 GHz

Start Freq
2.42200000 GHz

Stop Freq
2.48200000 GHz

CF Step
6.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

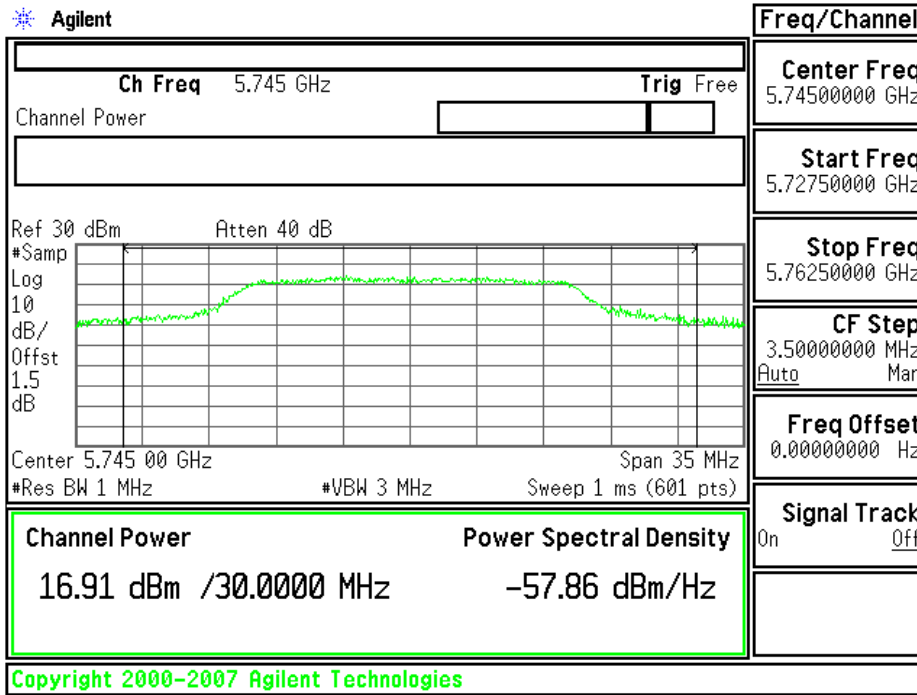
Signal Track
On Off



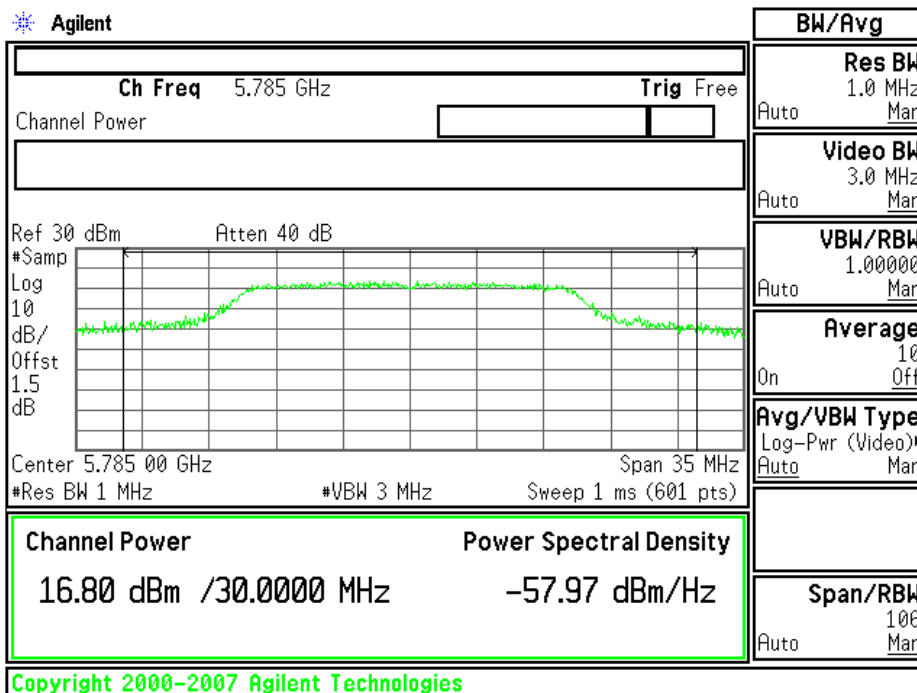
5725-5825

IEEE 802.11a mode

Peak Power (CH Low)

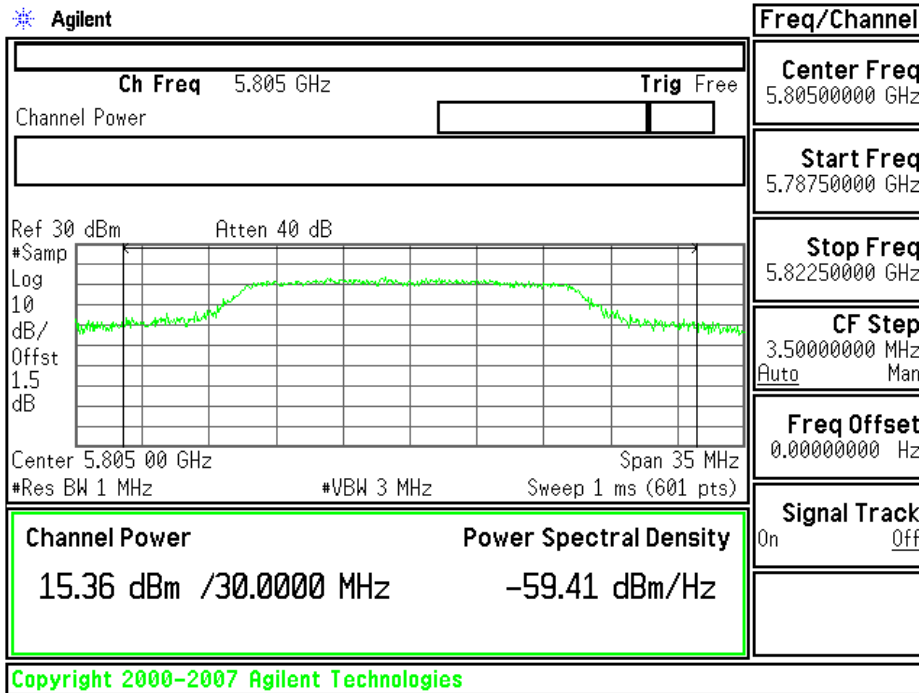


Peak Power (CH Mid)



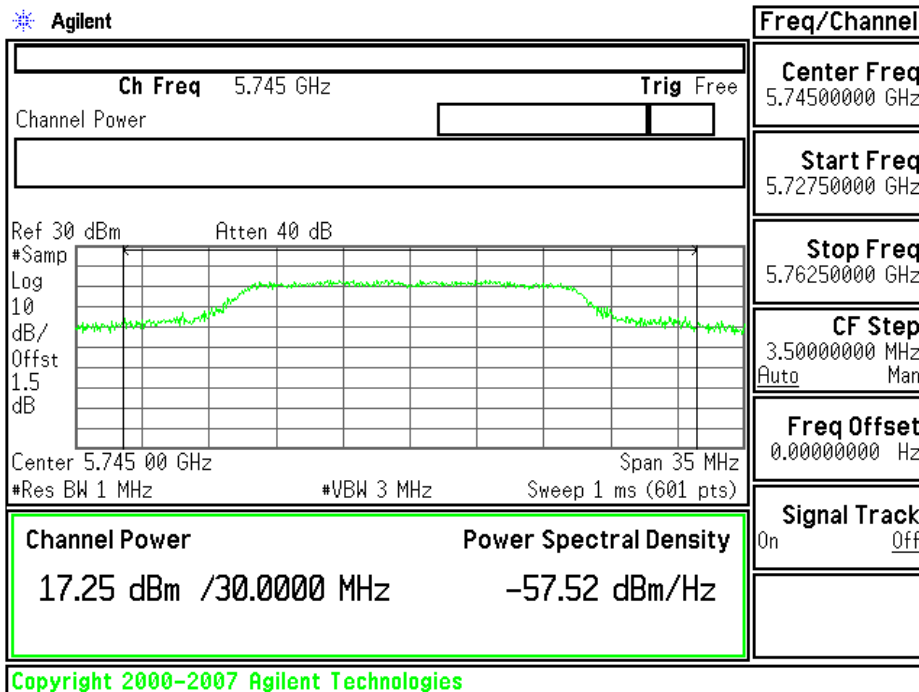


Peak Power (CH Hgih)



draft 802.11an Standard-20 MHz Channel mode / Chain 0

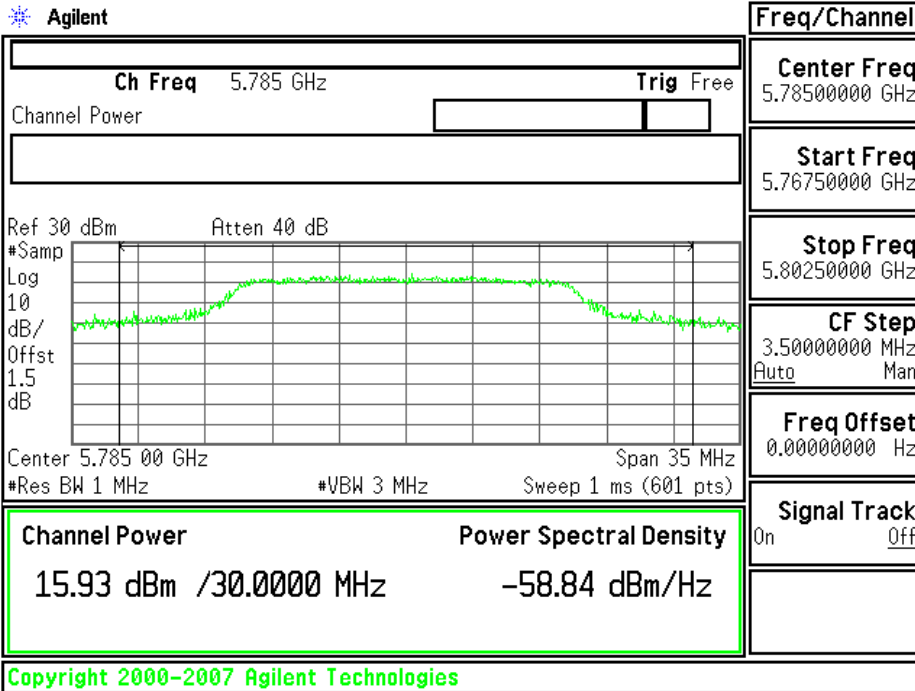
Peak Power (CH Low)





Peak Power (CH Mid)

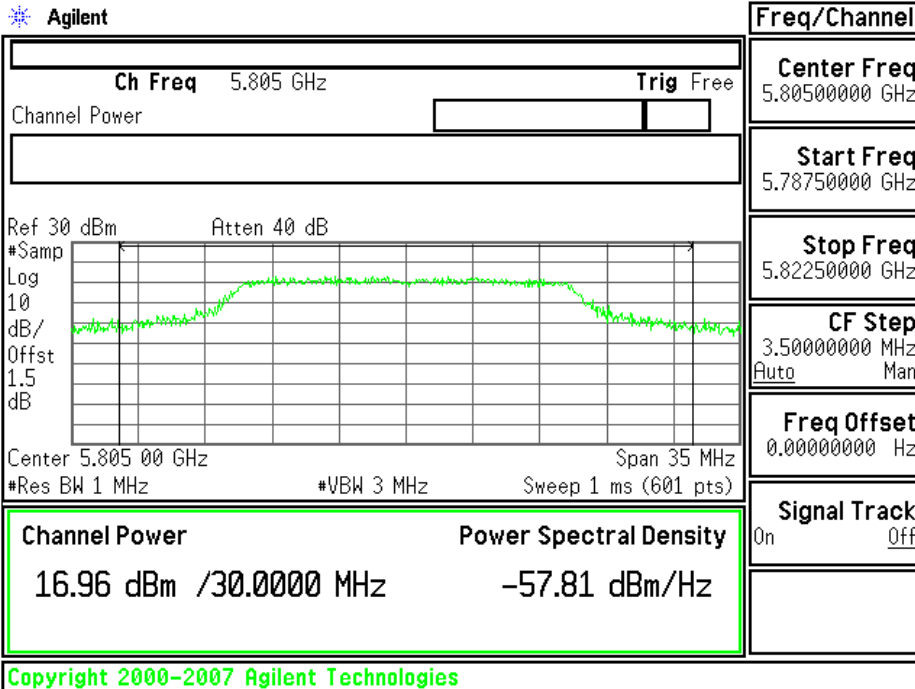
Agilent



Freq/Channel
Center Freq 5.78500000 GHz
Start Freq 5.76750000 GHz
Stop Freq 5.80250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

Peak Power (CH High)

Agilent

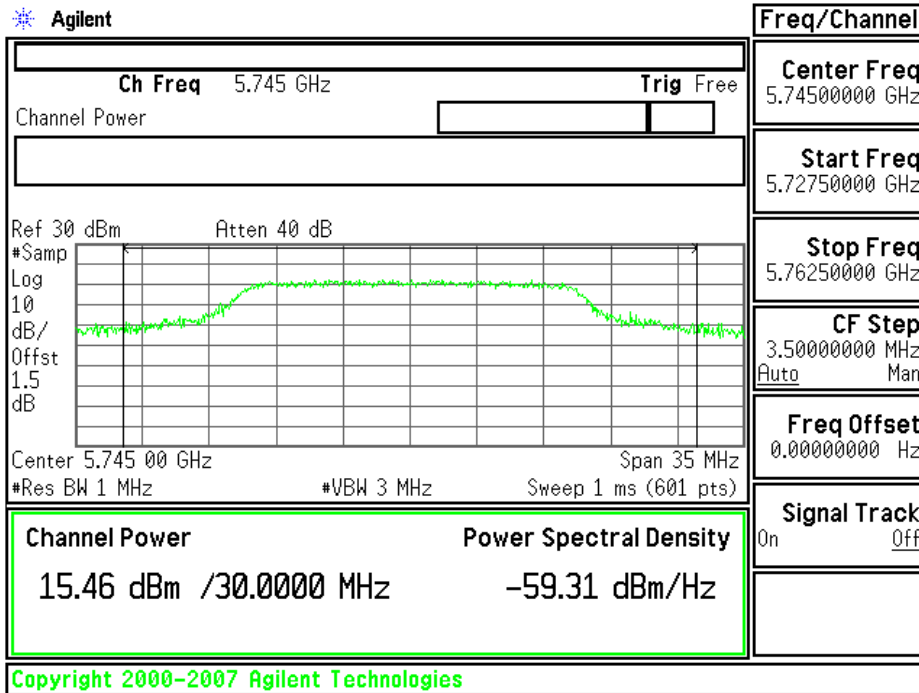


Freq/Channel
Center Freq 5.80500000 GHz
Start Freq 5.78750000 GHz
Stop Freq 5.82250000 GHz
CF Step 3.50000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

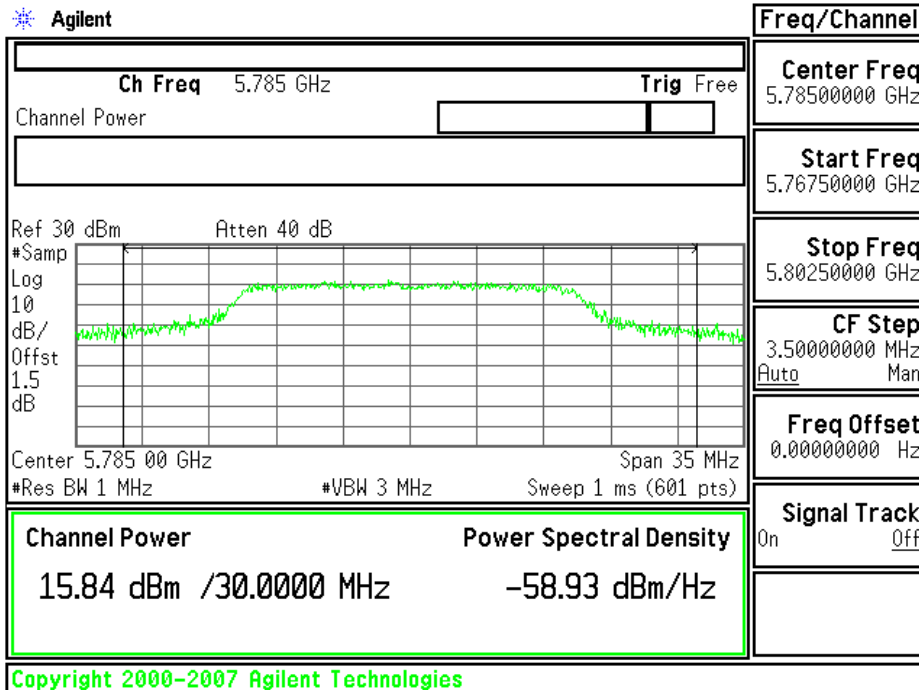


draft 802.11an Standard-20 MHz Channel mode / Chain 1

Peak Power (CH Low)

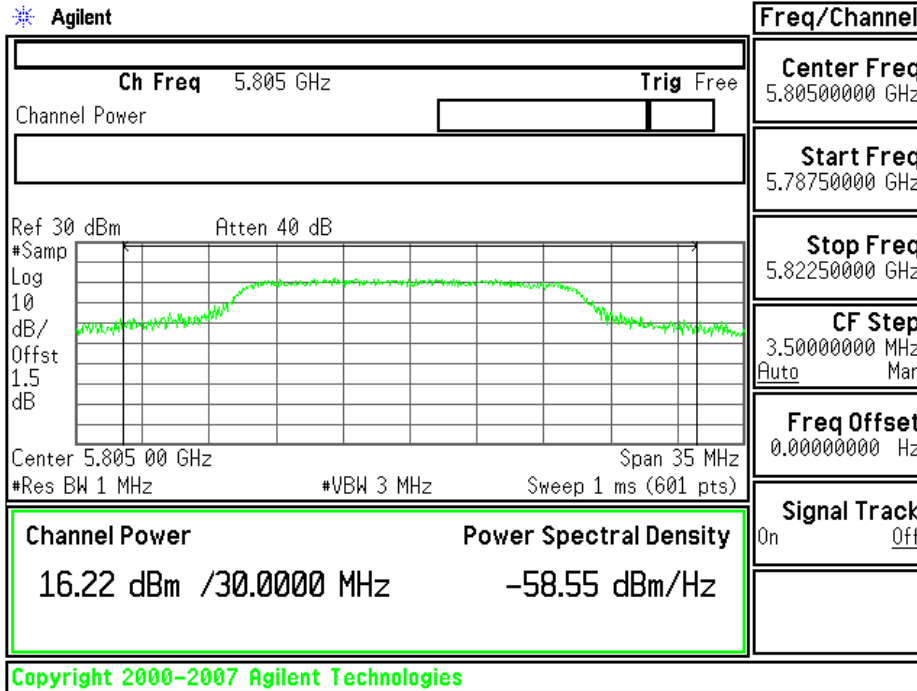


Peak Power (CH Mid)



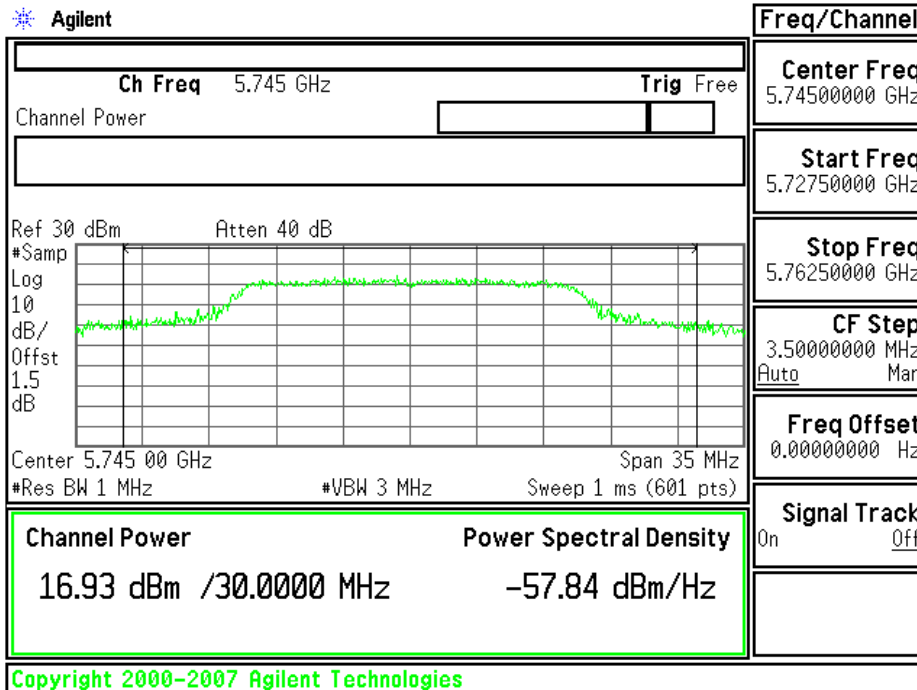


Peak Power (CH High)



draft 802.11an Standard-20 MHz Channel mode / Chain 2

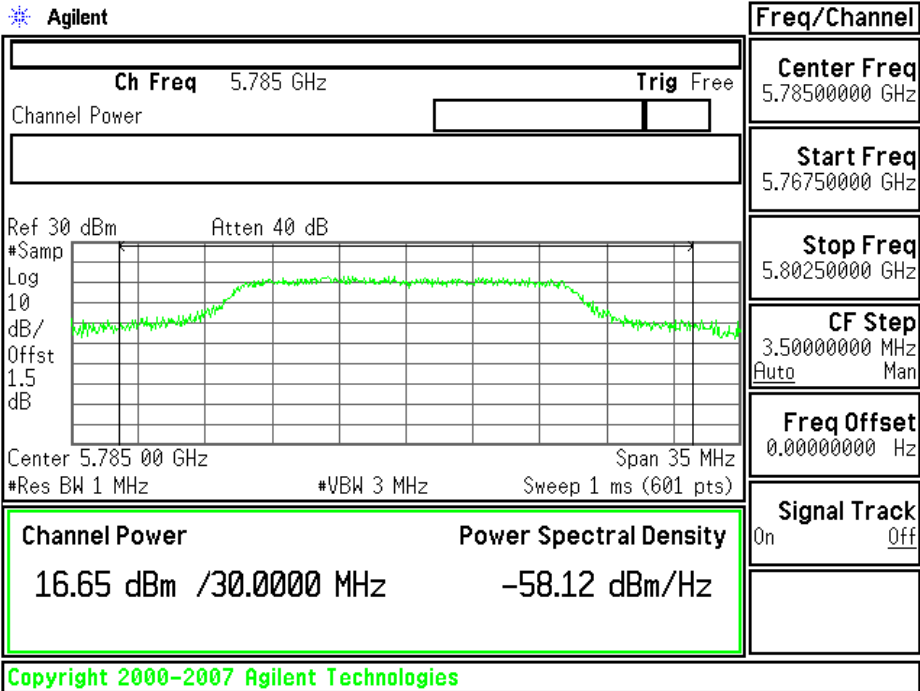
Peak Power (CH Low)





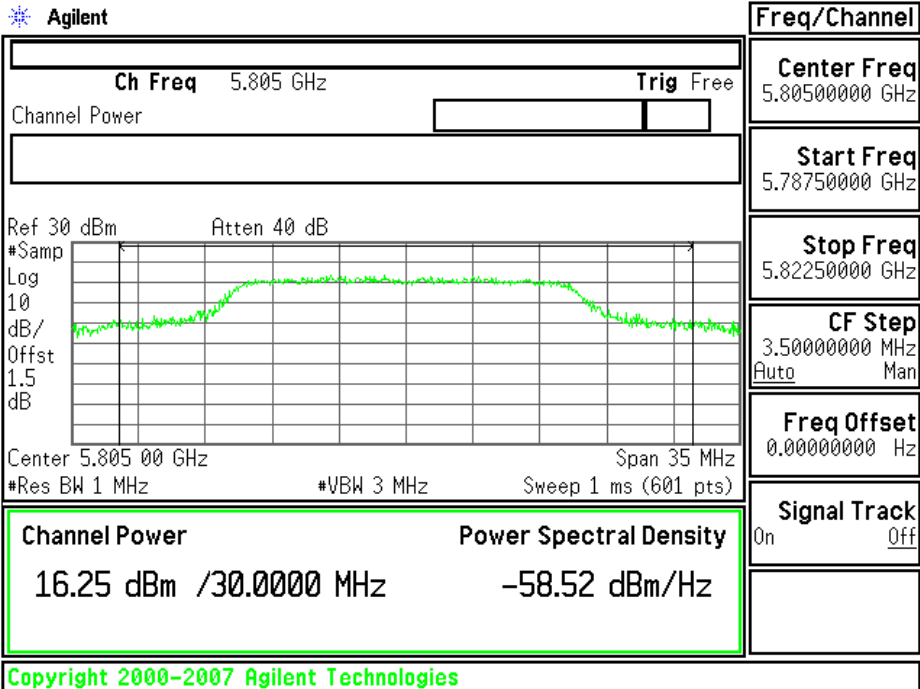
Peak Power (CH Mid)

Agilent



Peak Power (CH High)

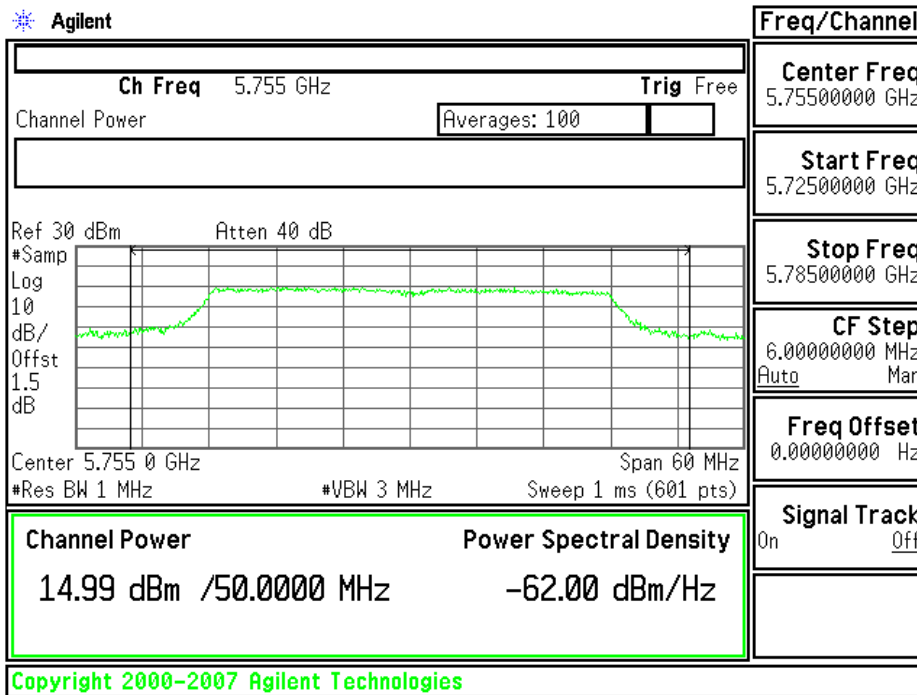
Agilent



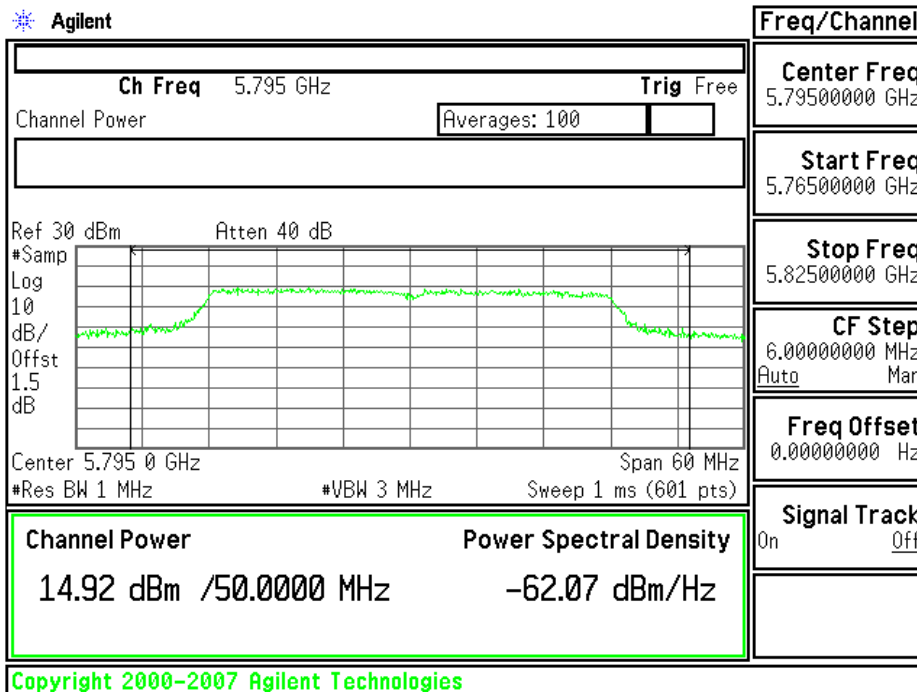


draft 802.11an Standard-40 MHz Channel mode / Chain 0

Peak Power (CH Low)



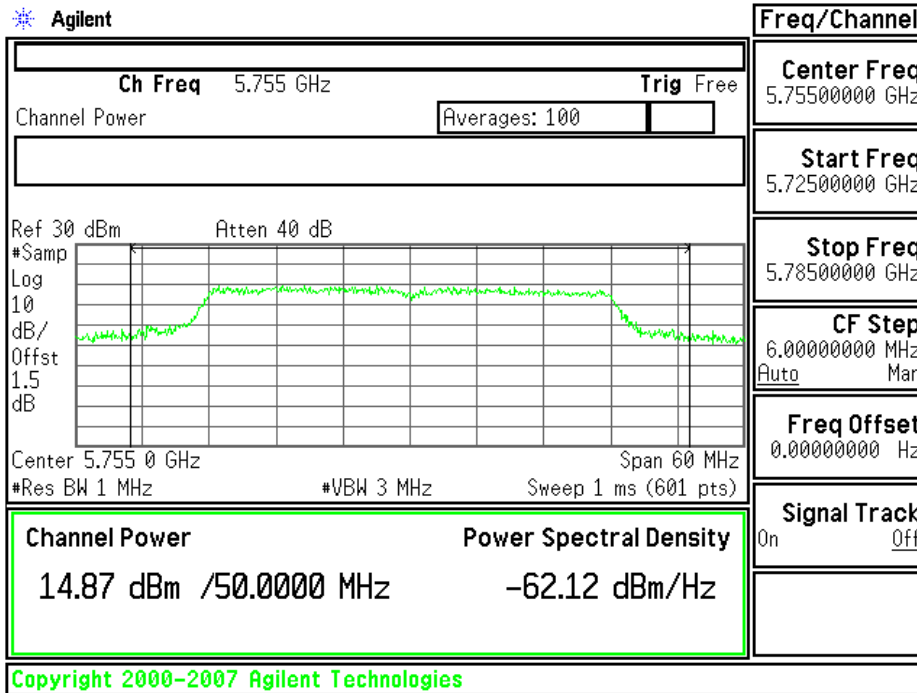
Peak Power (CH High)



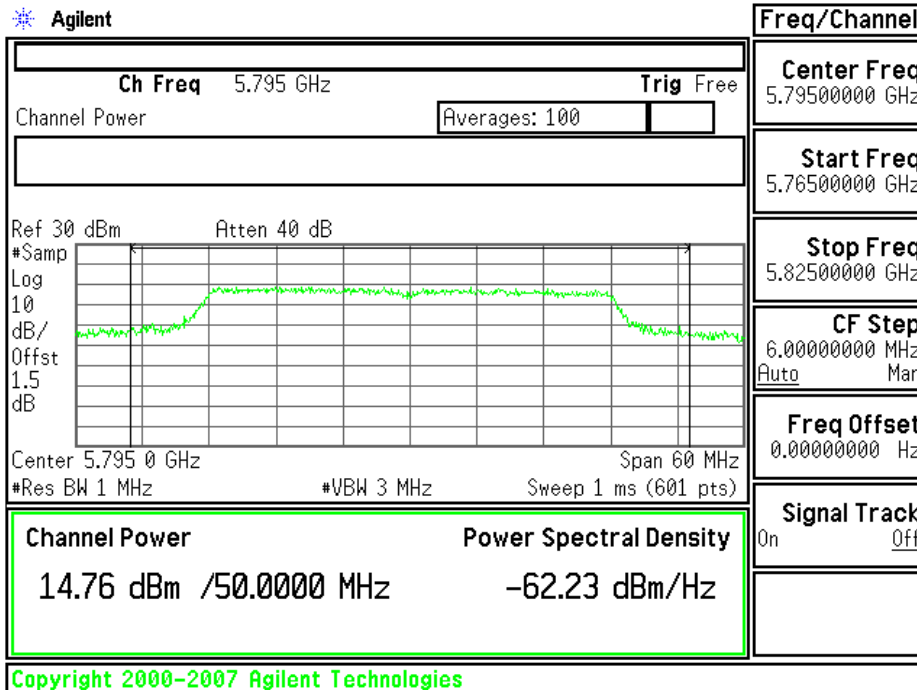


draft 802.11an Standard-40 MHz Channel mode / Chain 1

Peak Power (CH Low)



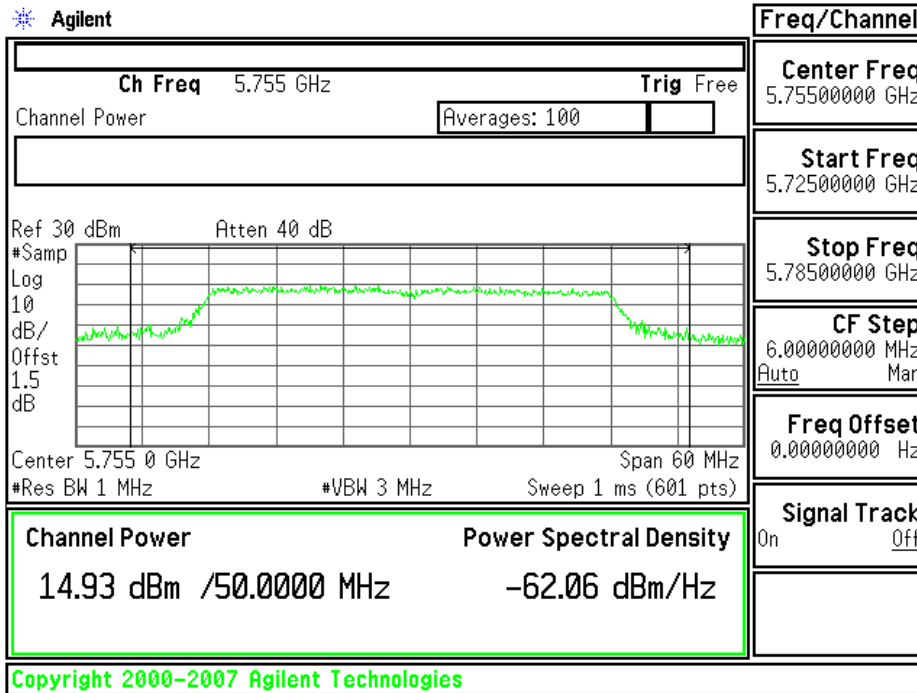
Peak Power (CH High)



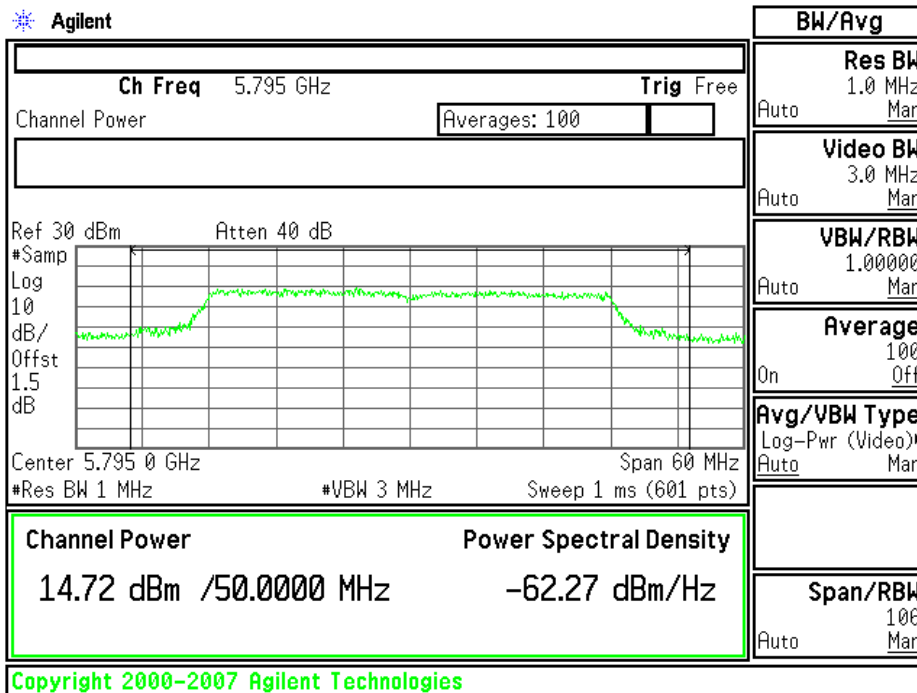


draft 802.11an Standard-40 MHz Channel mode / Chain 2

Peak Power (CH Low)



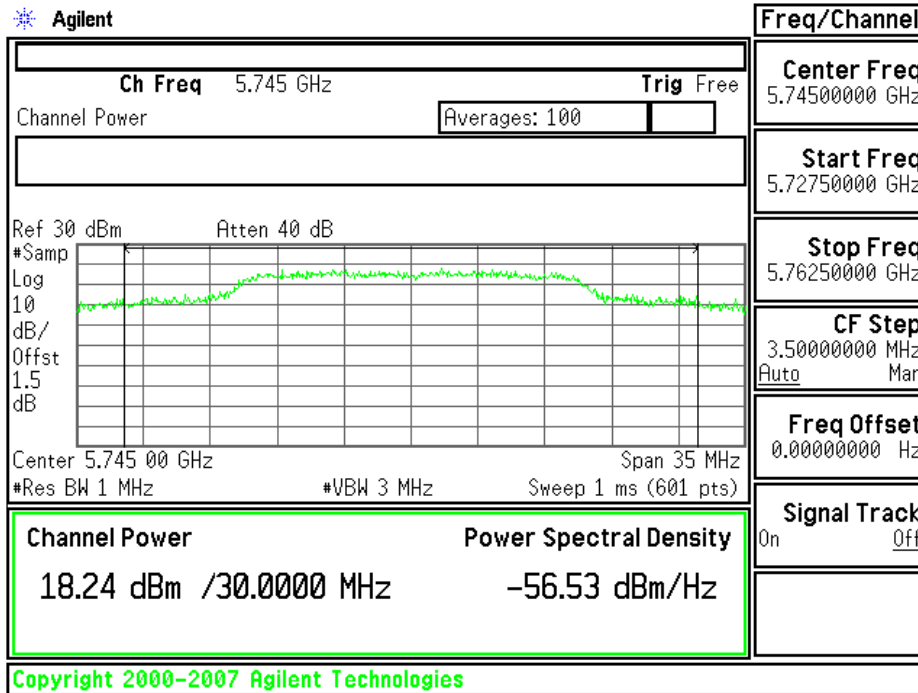
Peak Power (CH High)



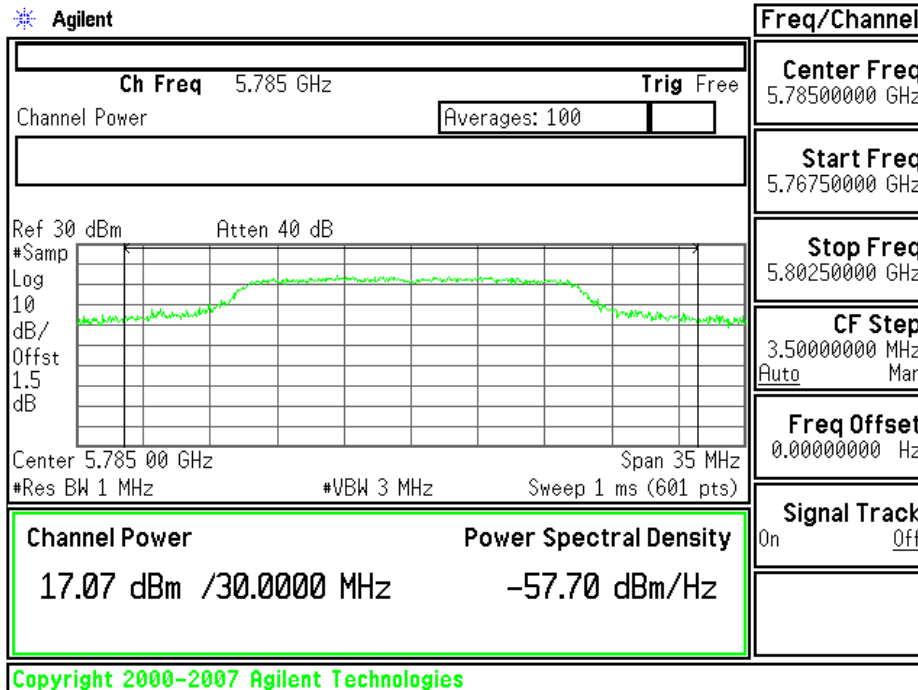


draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

Peak Power (CH Low)

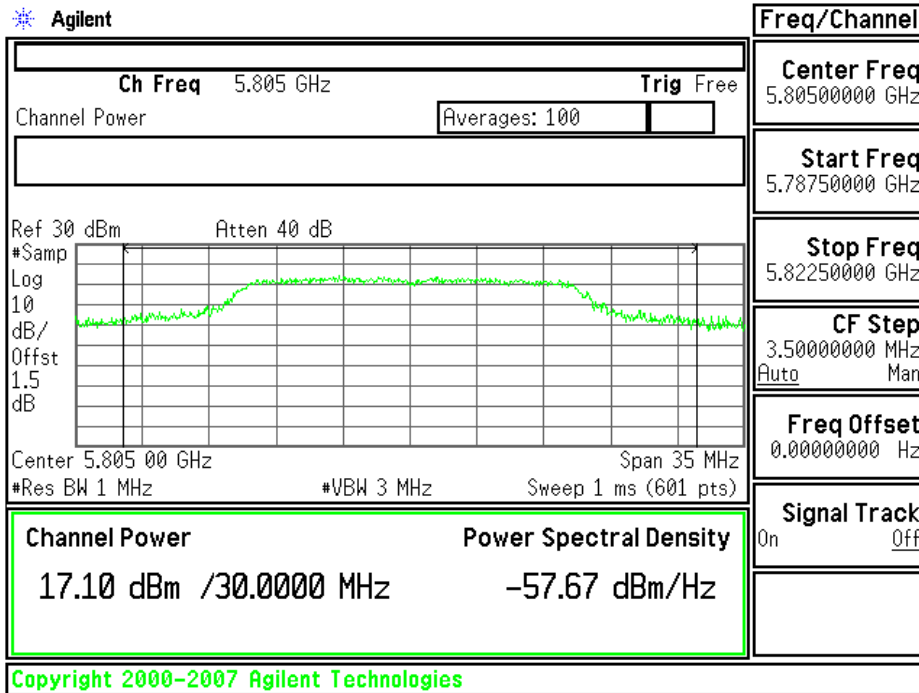


Peak Power (CH Mid)



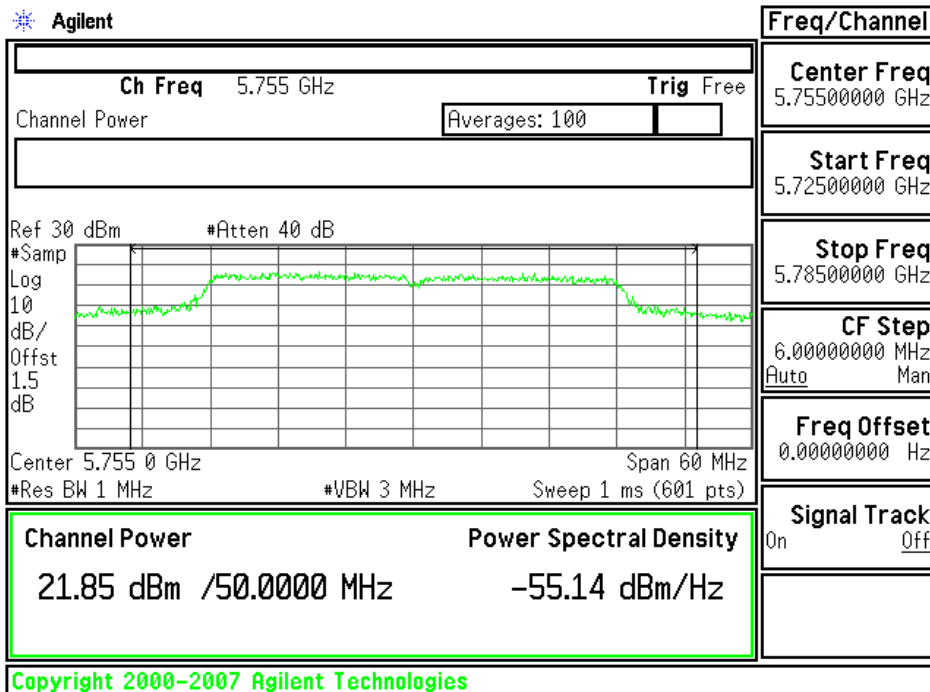


Peak Power (CH High)



draft 802.11an Standard-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

Peak Power (CH Low)





Peak Power (CH High)

Agilent

Ch Freq 5.795 GHz		Trig Free	
Channel Power		Averages: 100	
<p>Ref 30 dBm #Atten 40 dB</p>			
Channel Power		Power Spectral Density	
22.85 dBm /50.0000 MHz		-55.26 dBm/Hz	

Freq/Channel
Center Freq 5.79500000 GHz
Start Freq 5.76500000 GHz
Stop Freq 5.82500000 GHz
CF Step 6.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

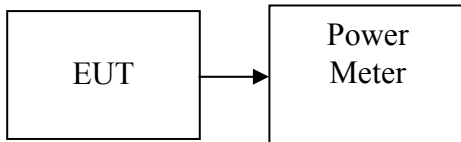


AVERAGE POWER

LIMIT

None; for reporting purposes only.

Test Configuration



TEST PROCEDURE

The transmitter output is connected to the Power meter.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Output Power (dBm)
Low	2412	13.20
Mid	2437	13.15
High	2462	13.25

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Output Power (dBm)
Low	2412	14.69
Mid	2437	14.47
High	2462	14.74

Test mode: draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)
Low	2412	14.39	14.35	14.19	19.12
Mid	2437	14.27	14.21	14.05	18.90
High	2462	14.32	14.59	14.33	19.23

Test mode: draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)
Low	2422	14.90	14.85	14.98	19.66
Mid	2437	14.81	14.79	14.75	19.52
High	2452	14.72	14.91	14.93	19.59

Test mode: draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	Output Power (dBm)
Low	2412	19.31
Mid	2437	18.75
High	2462	19.41



Test mode: draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	Output Power (dBm)
Low	2422	19.79
Mid	2437	19.65
High	2452	19.50

Test mode: IEEE 802.11a mode

Channel	Frequency (MHz)	Output Power (dBm)
Low	5745	15.41
Mid	5785	15.33
High	5805	14.98

Test mode: draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)
Low	5745	15.33	15.02	15.16	19.99
Mid	5785	15.02	15.10	14.89	19.69
High	5805	15.13	15.36	15.04	19.77

Test mode: draft 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Chain 2 Output Power (dBm)	Output Power (dBm)
Low	5755	15.57	15.47	15.24	20.10
Mid	5795	15.41	15.12	15.09	19.89



Test mode: draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	Output Power (dBm)
Low	5745	19.88
Mid	5785	19.67
High	5805	19.79

Test mode: draft 802.11an Wide-40 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

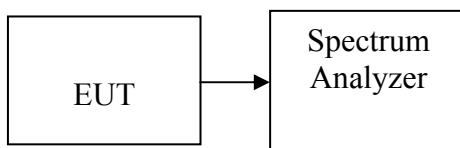
Channel	Frequency (MHz)	Output Power (dBm)
Low	5755	19.68
Mid	5795	19.79

PEAK POWER SPECTRAL DENSITY

LIMIT

1. According to §15.247(e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
2. According to §15.247(f), the digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3 kHz, VBW = 10 kHz, Span = 300 kHz, Sweep = 100 s
3. Record the max reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.



TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-8.96	8.00	PASS
Mid	2437	-8.92	8.00	PASS
High	2462	-8.84	8.00	PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-5.41	8.00	PASS
Mid	2437	-5.34	8.00	PASS
High	2462	-5.20	8.00	PASS

Test mode: draft 802.11gn Standard-20 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Chain 2 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	2412	-3.48	-5.20	-5.14	0.24	8.00	PASS
Mid	2437	-5.30	-5.66	-4.70	-0.43	8.00	PASS
High	2462	-4.99	-4.43	-5.19	-0.09	8.00	PASS

Test mode: draft 802.11gn Wide-40 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Chain 2 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	2422	-3.10	-2.93	-3.70	1.54	8.00	PASS
Mid	2437	-3.48	-3.52	-3.80	1.17	8.00	PASS
High	2452	-3.59	-2.86	-2.86	1.68	8.00	PASS



Test mode: draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	PPSD Total (dBm)	Limit (dBm)	Result
Low	2412	-4.34	8.00	PASS
Mid	2437	-4.30	8.00	PASS
High	2462	-4.08	8.00	PASS

Test mode: draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	PPSD Total (dBm)	Limit (dBm)	Result
Low	2422	1.84	8.00	PASS
Mid	2437	1.64	8.00	PASS
High	2452	1.39	8.00	PASS

Test mode: IEEE 802.11a mode

Channel	Frequency (MHz)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5745	-9.81	8.00	PASS
Mid	5785	-10.69	8.00	PASS
High	5805	-11.72	8.00	PASS

Test mode: draft 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Chain 2 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5745	-10.27	-12.26	-12.25	-6.72	8.00	PASS
Mid	5785	-11.52	-11.82	-12.55	-7.17	8.00	PASS
High	5805	-12.23	-12.94	-11.28	-7.33	8.00	PASS

Test mode: draft 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Chain 2 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5755	-7.52	-4.78	-6.02	-1.19	8.00	PASS
Mid	5795	-10.28	-7.12	-7.12	-3.17	8.00	PASS



Test mode: draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

Channel	Frequency (MHz)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5745	-10.30	8.00	PASS
Mid	5785	-10.24	8.00	PASS
High	5805	-11.57	8.00	PASS

Test mode: draft 802.11an Wide-40 MHz Channel mode / Chain 0+ Chain 1 +Chain 2

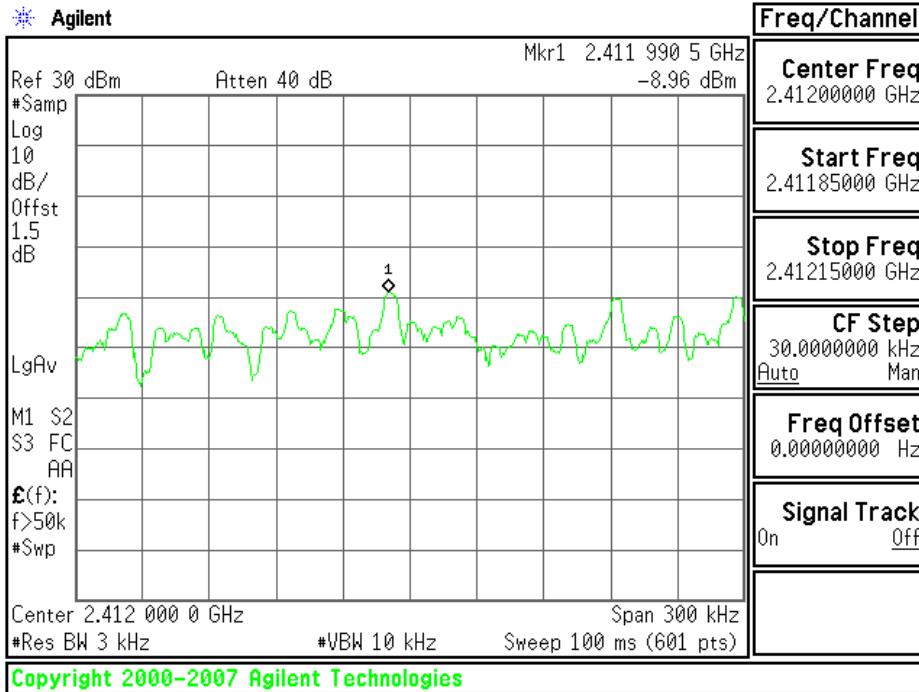
Channel	Frequency (MHz)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5755	-4.73	8.00	PASS
Mid	5795	-7.07	8.00	PASS



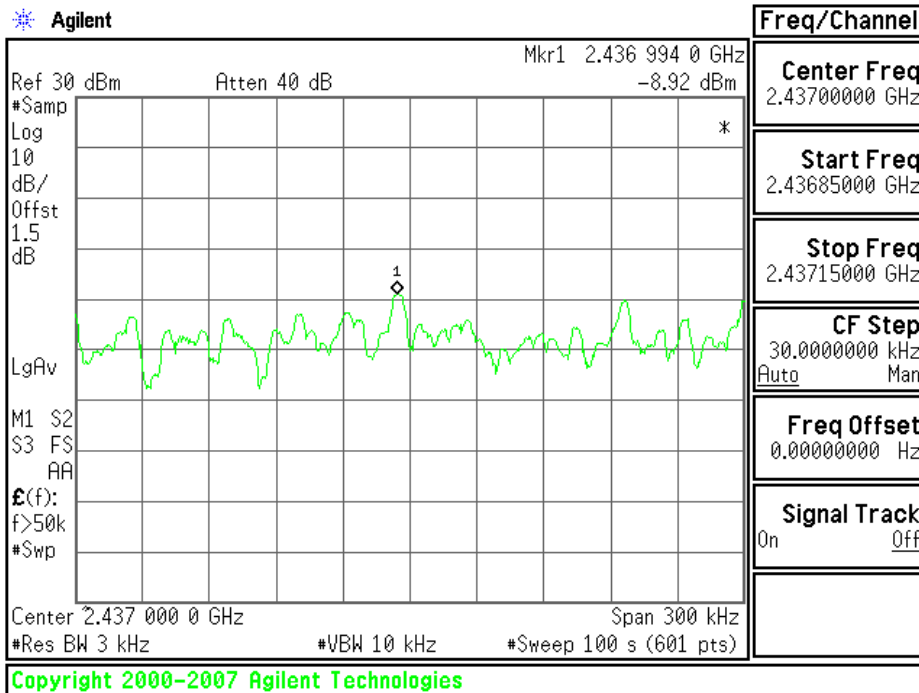
Test Plot

IEEE 802.11b mode

PPSD (CH Low)

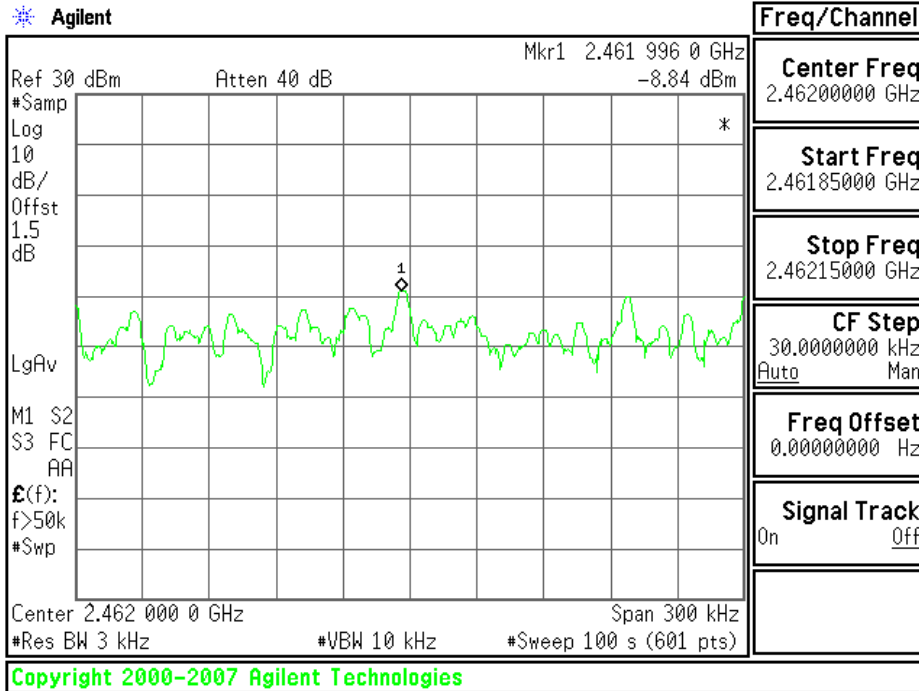


PPSD (CH Mid)



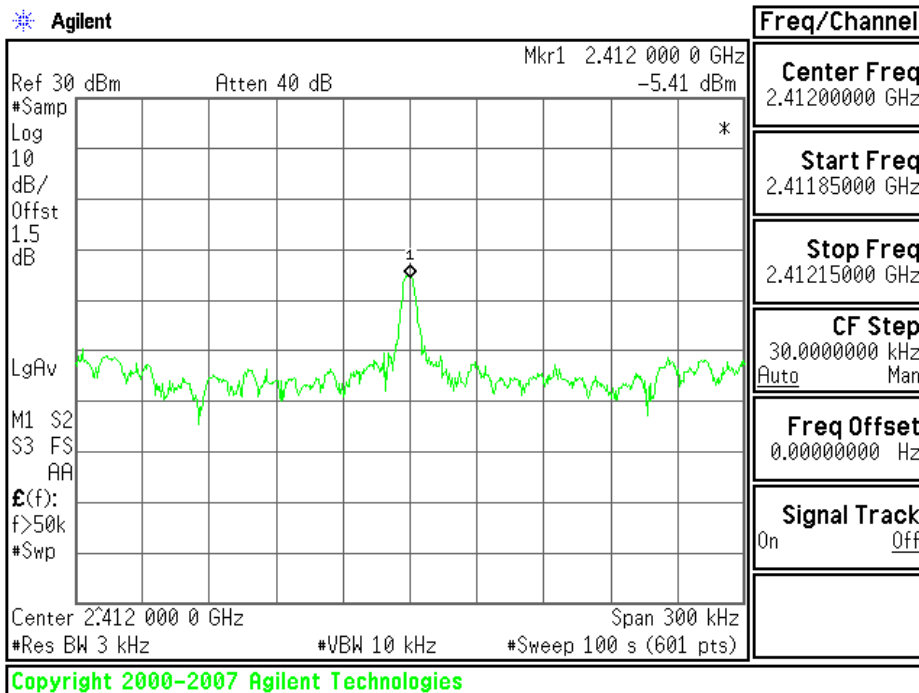


PPSD (CH High)



IEEE 802.11g mode

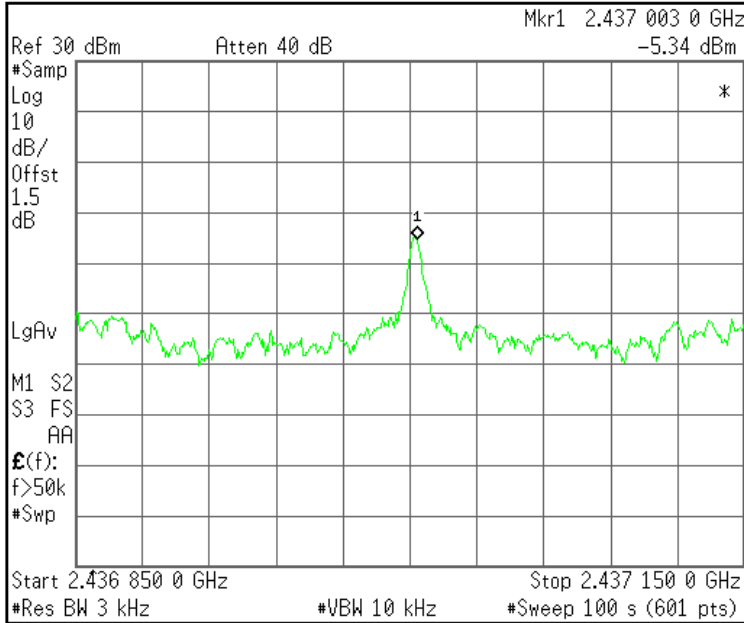
PPSD (CH Low)





PPSD (CH Mid)

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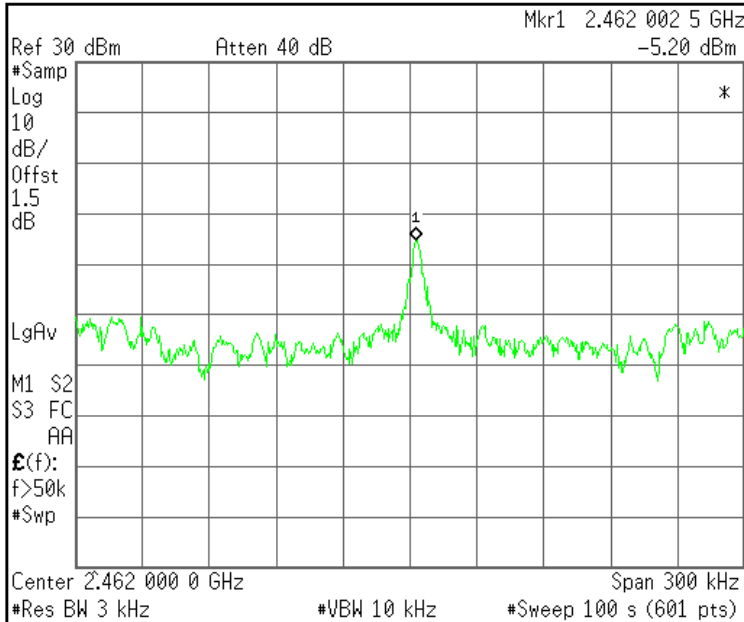
Freq/Channel

Center Freq	2.43700000 GHz
Start Freq	2.43685000 GHz
Stop Freq	2.43715000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH High)

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Freq/Channel

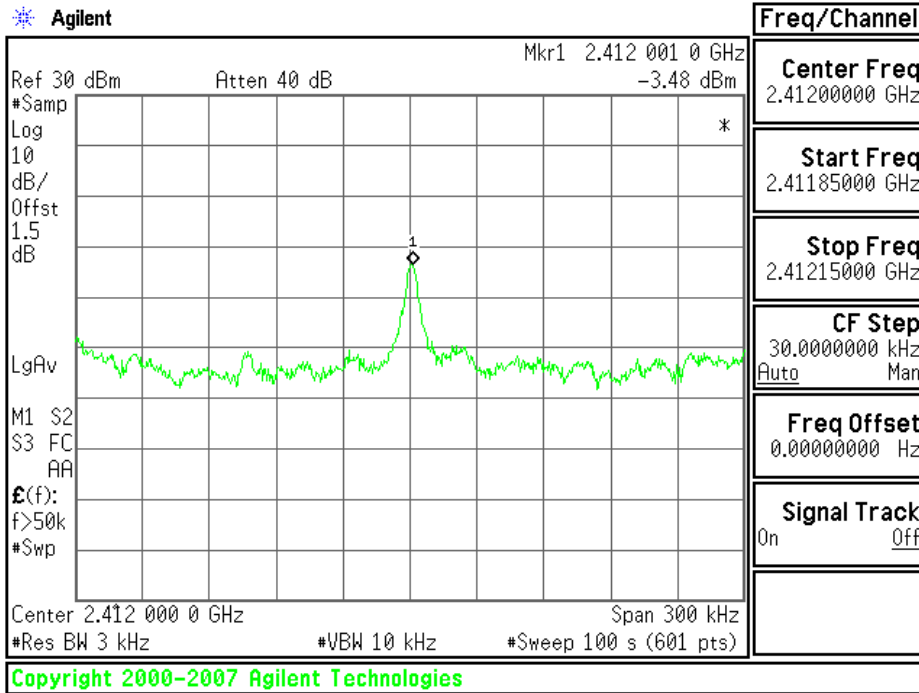
Center Freq	2.46200000 GHz
Start Freq	2.46185000 GHz
Stop Freq	2.46215000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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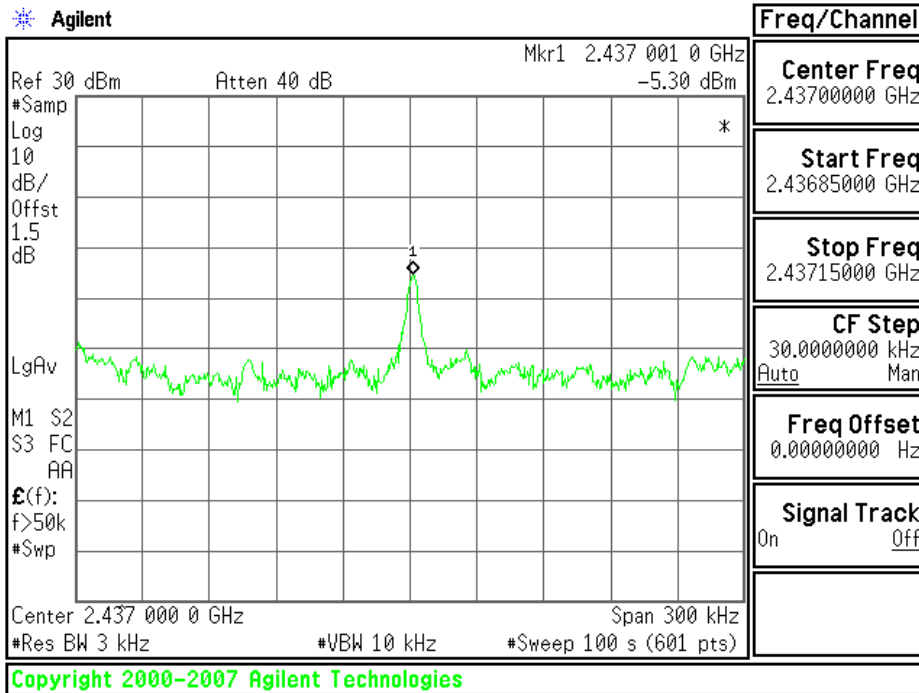


draft 802.11gn Standard-20 MHz Channel mode / Chain 0

PPSD (CH Low)



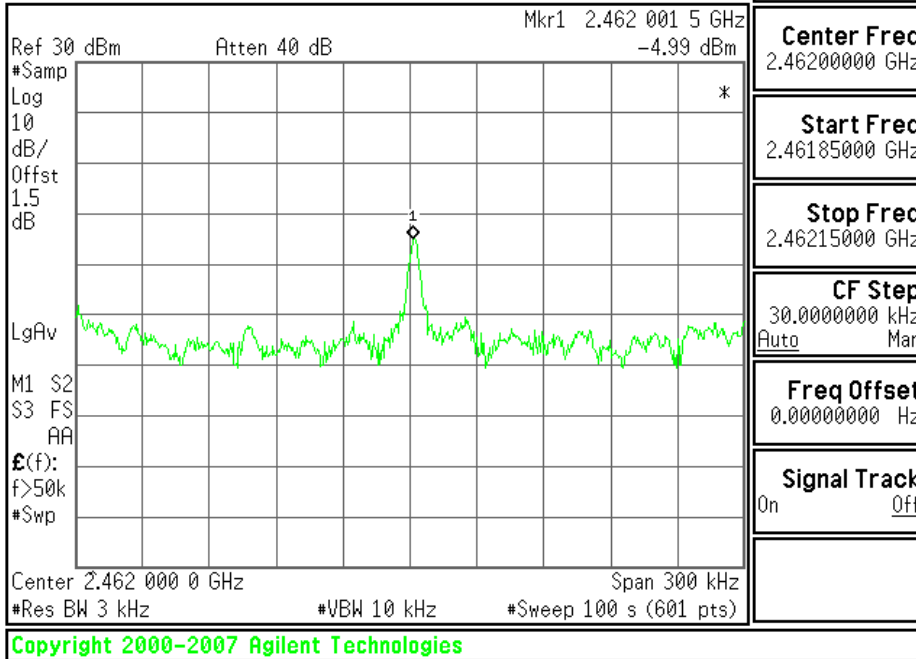
PPSD (CH Mid)





PPSD (CH High)

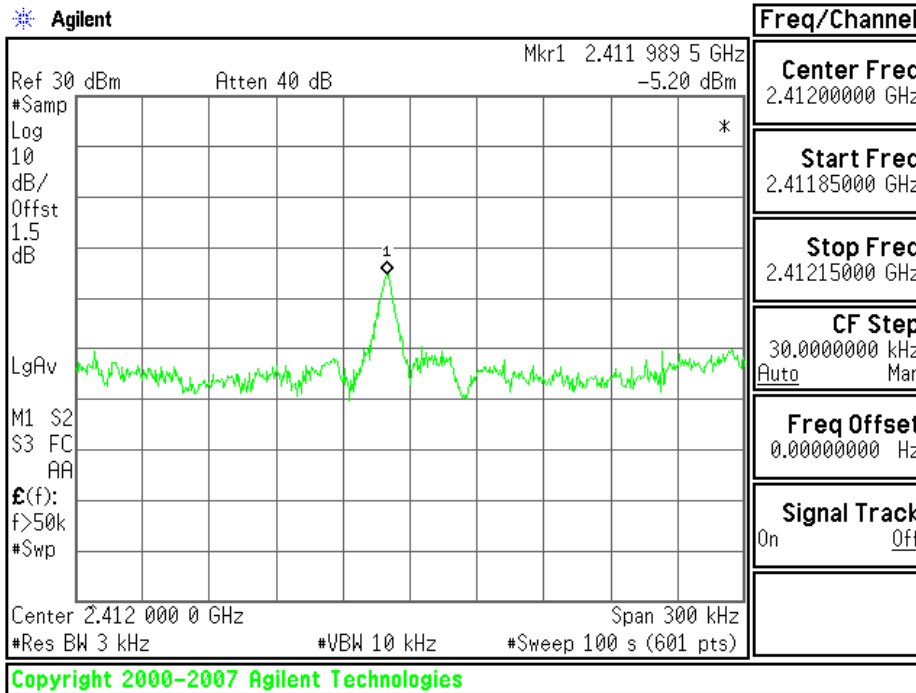
Agilent



draft 802.11gn Standard-20 MHz Channel mode / Chain 1

PPSD (CH Low)

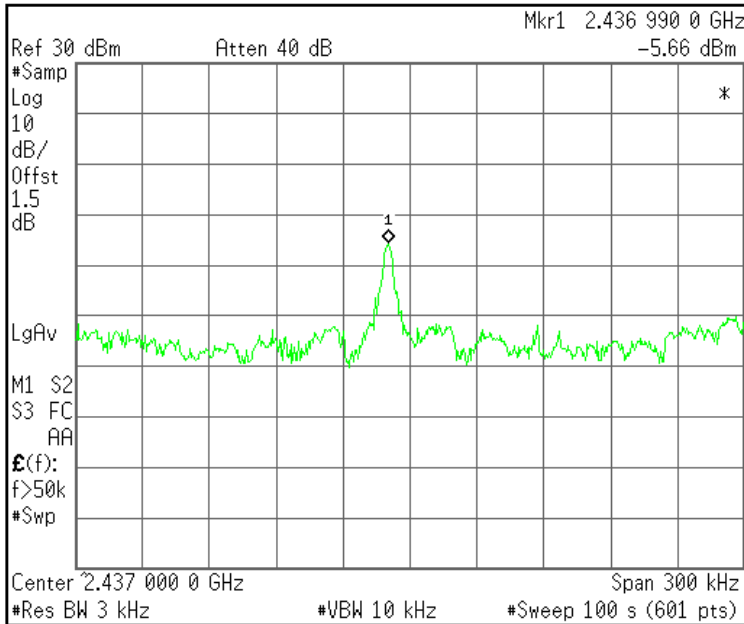
Agilent





PPSD (CH Mid)

Agilent



Freq/Channel

Center Freq
2.43700000 GHz

Start Freq
2.43685000 GHz

Stop Freq
2.43715000 GHz

CF Step
30.0000000 kHz
Auto Man

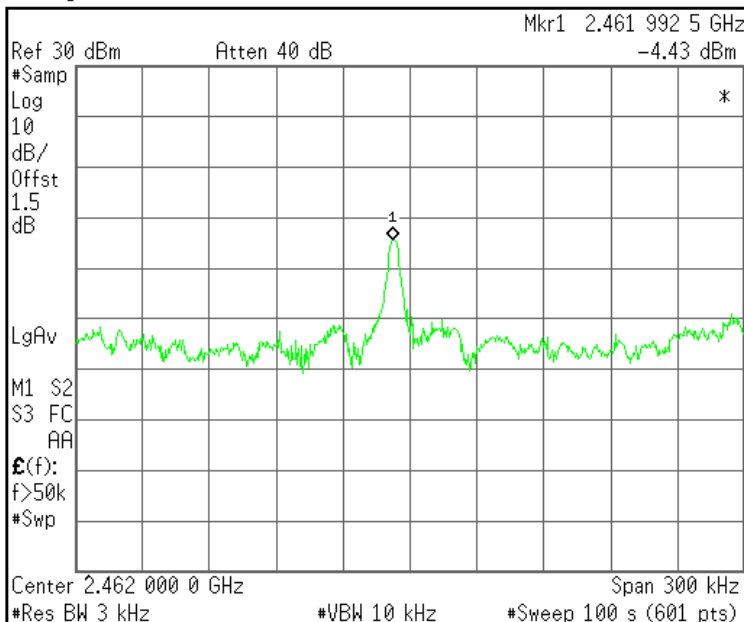
Freq Offset
0.00000000 Hz

Signal Track
On Off

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PPSD (CH High)

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Sweep

Sweep Time
100.0 s
Auto Man

Sweep
Single Cont

Auto Sweep
Time
Norm Accy

Gate
On Off

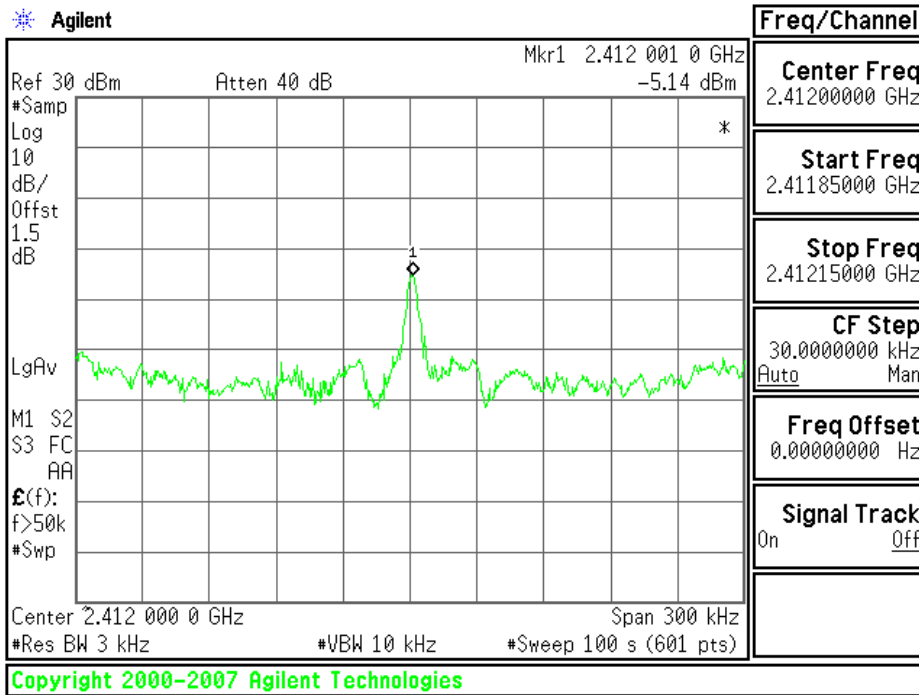
Gate Setup

Points
601

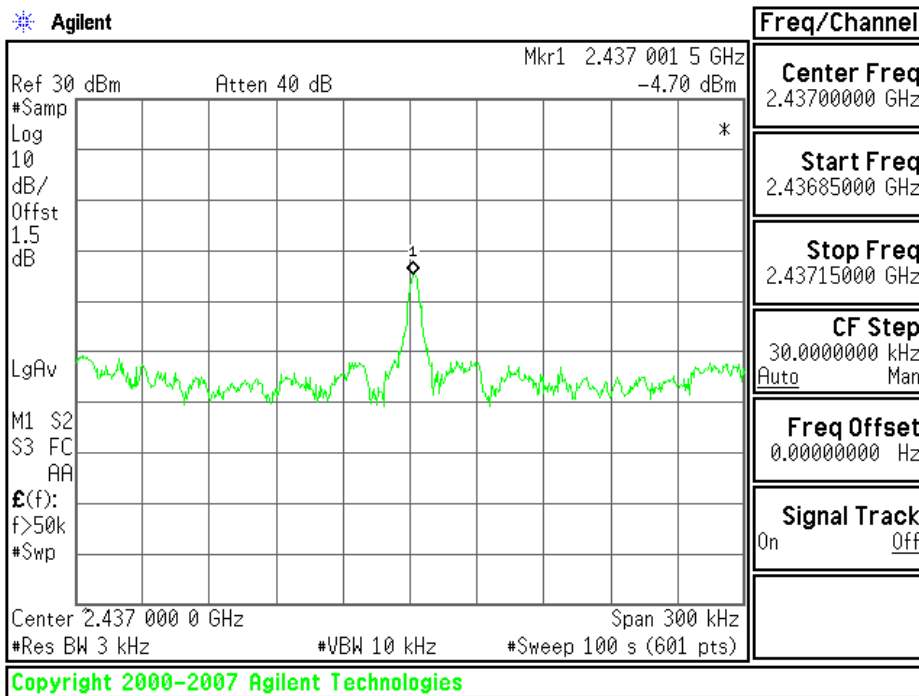
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draft 802.11gn Standard-20 MHz Channel mode / Chain 2
PPSD (CH Low)



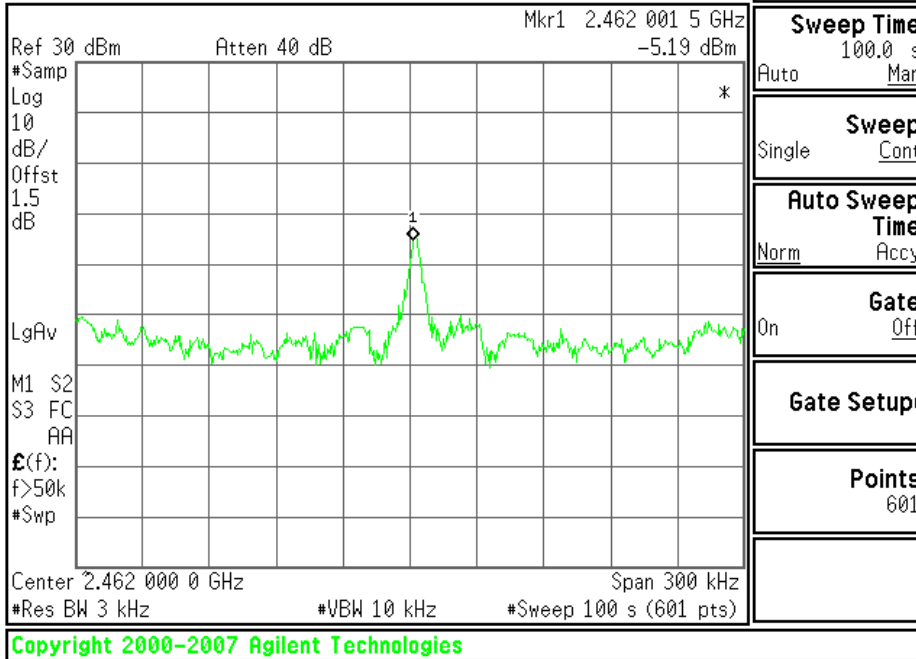
PPSD (CH Mid)





PPSD (CH High)

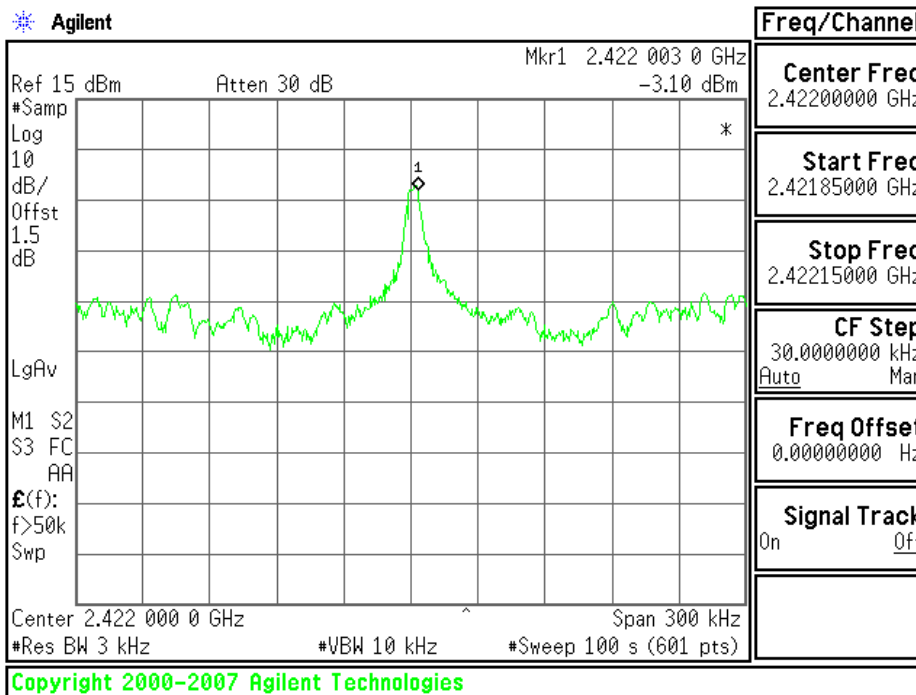
Agilent



draft 802.11gn Wide-40 MHz Channel mode / Chain 0

PPSD (CH Low)

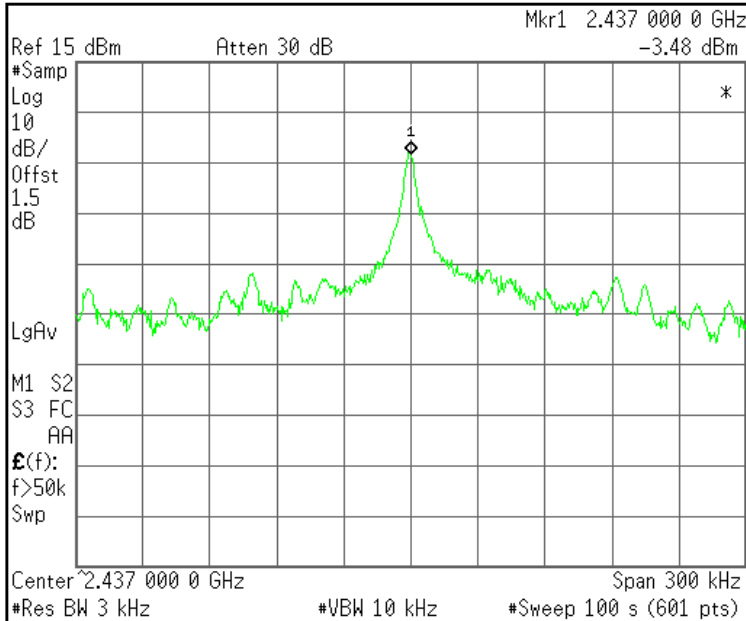
Agilent





PPSD (CH Mid)

Agilent

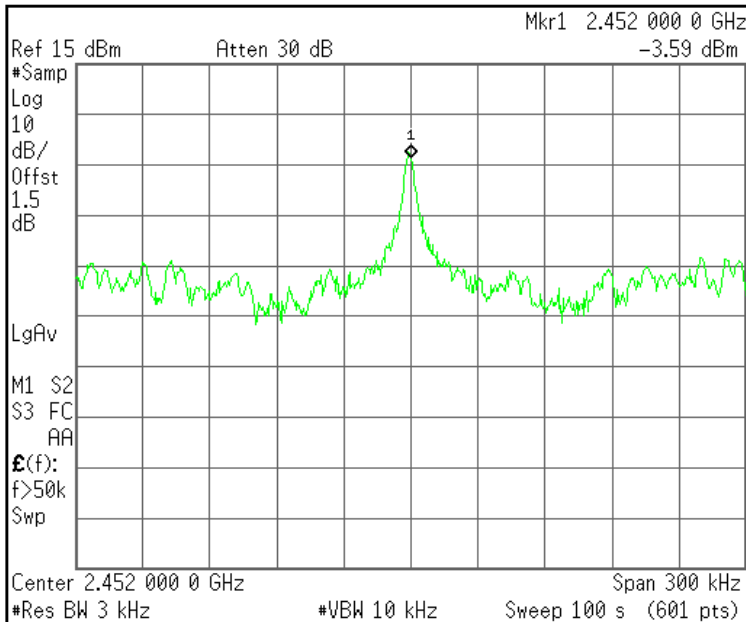


Freq/Channel	
Center Freq	2.43700000 GHz
Start Freq	2.43685000 GHz
Stop Freq	2.43715000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH High)

Agilent

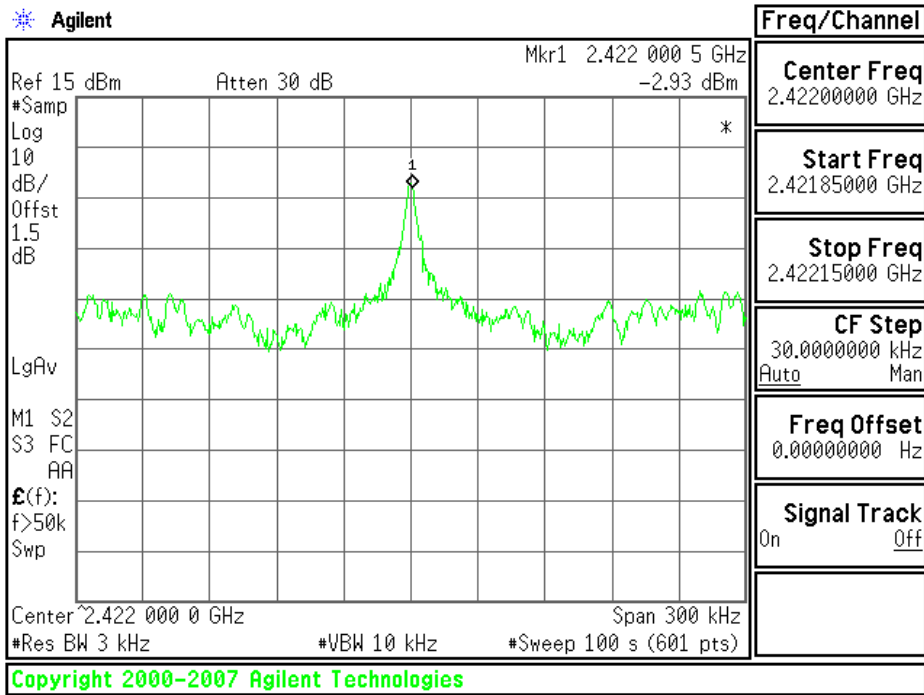


Freq/Channel	
Center Freq	2.45200000 GHz
Start Freq	2.45185000 GHz
Stop Freq	2.45215000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

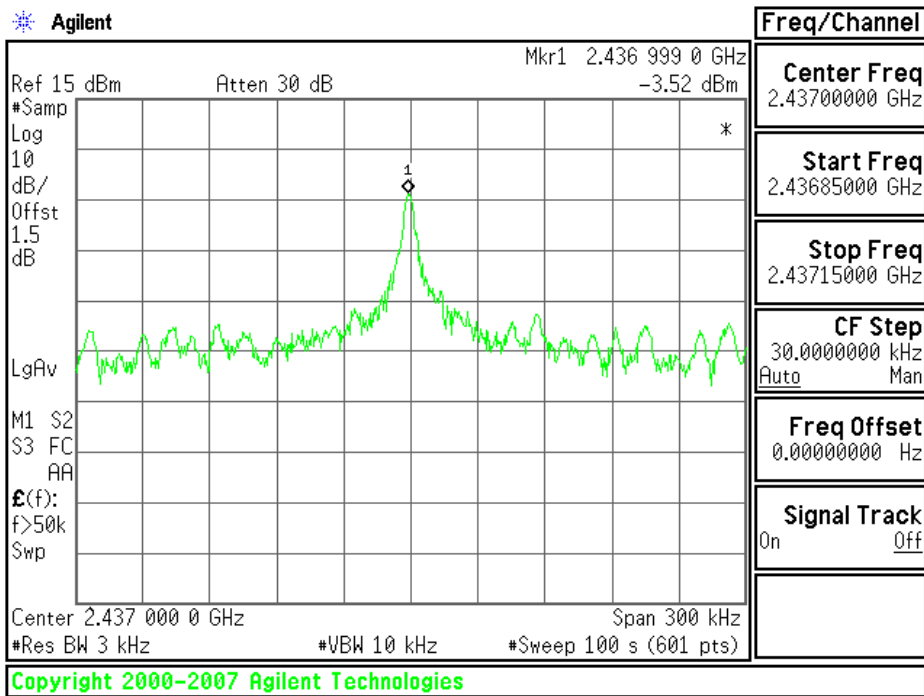
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draft 802.11gn Wide-40 MHz Channel mode / Chain 1
PPSD (CH Low)



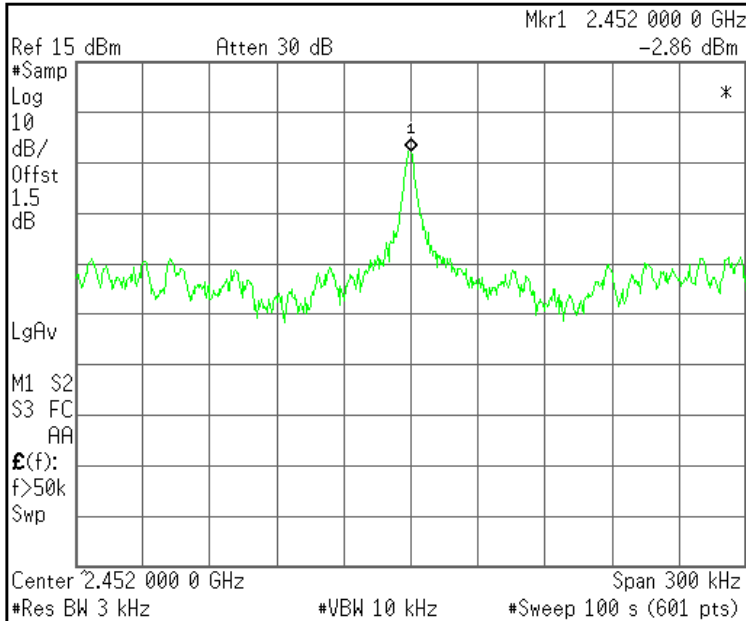
PPSD (CH Mid)





PPSD (CH High)

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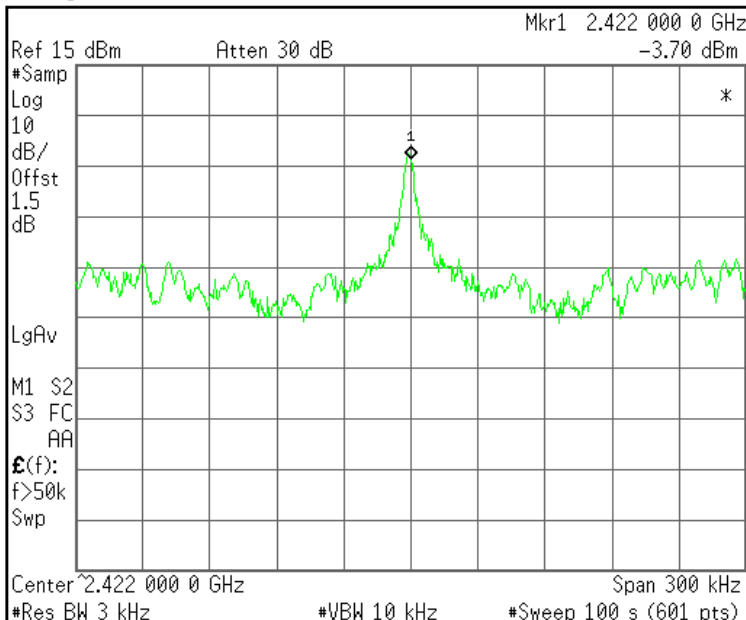
Freq/Channel	
Center Freq	2.45200000 GHz
Start Freq	2.45185000 GHz
Stop Freq	2.45215000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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draft 802.11gn Wide-40 MHz Channel mode / Chain 2

PPSD (CH Low)

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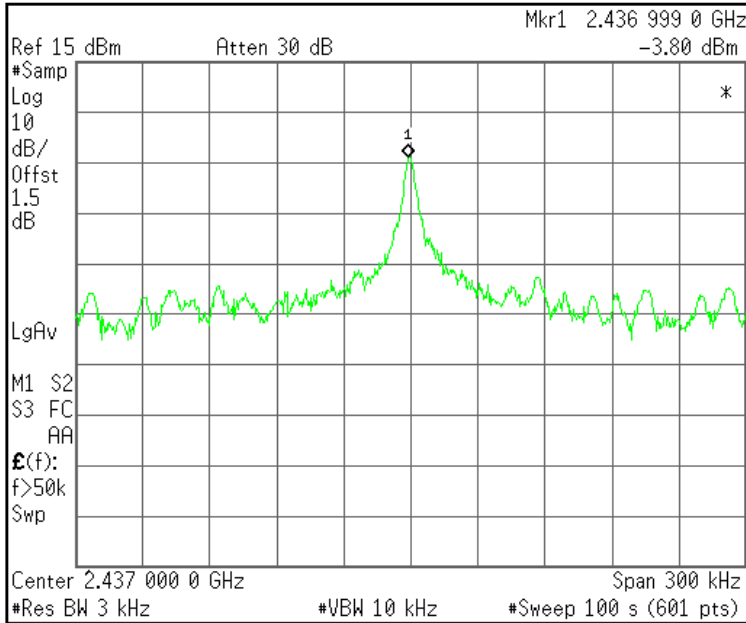
Freq/Channel	
Center Freq	2.42200000 GHz
Start Freq	2.42185000 GHz
Stop Freq	2.42215000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH Mid)

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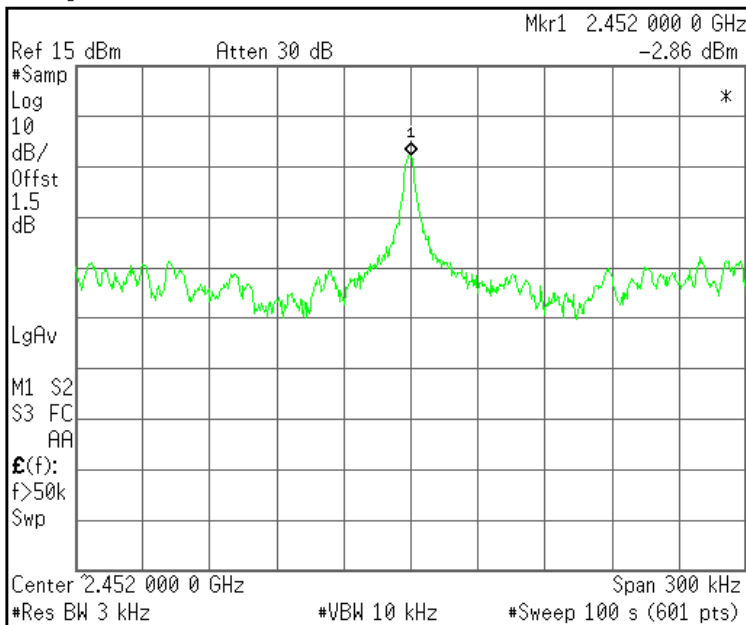


Freq/Channel	
Center Freq	2.43700000 GHz
Start Freq	2.43685000 GHz
Stop Freq	2.43715000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH High)

Agilent

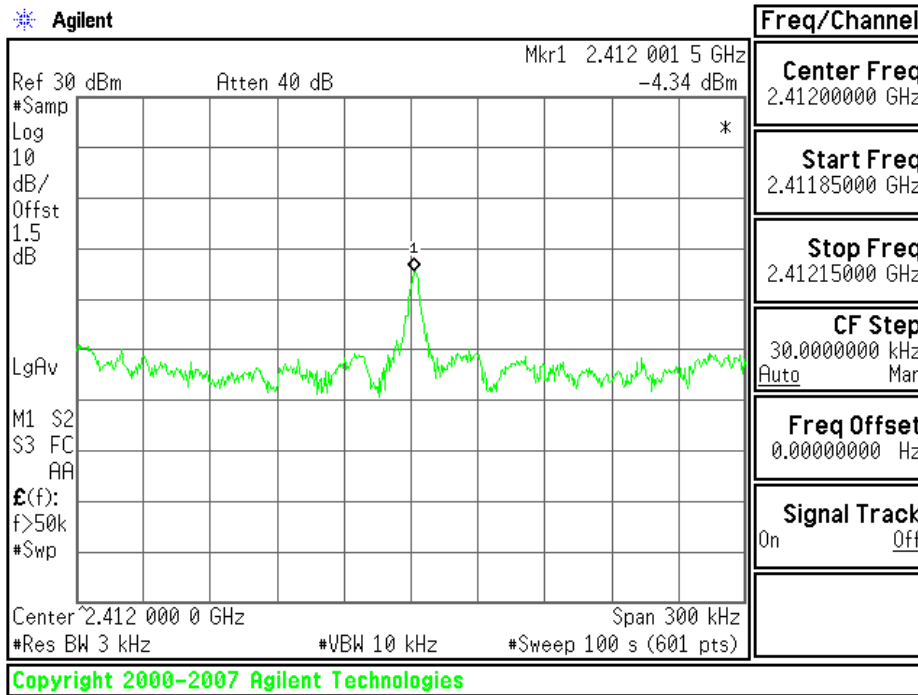


Freq/Channel	
Center Freq	2.45200000 GHz
Start Freq	2.45185000 GHz
Stop Freq	2.45215000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

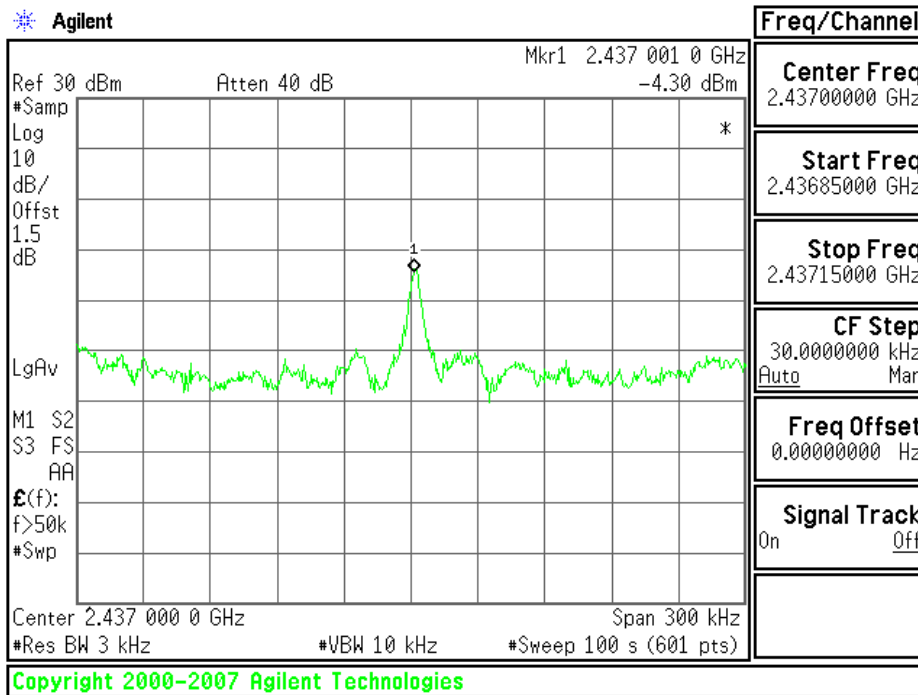
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draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2
PPSD (CH Low)



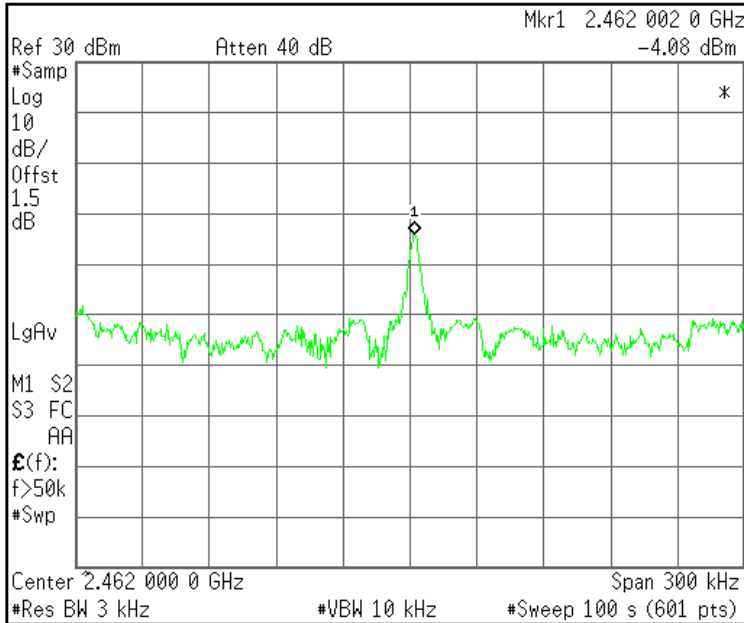
PPSD (CH Mid)





PPSD (CH High)

Agilent



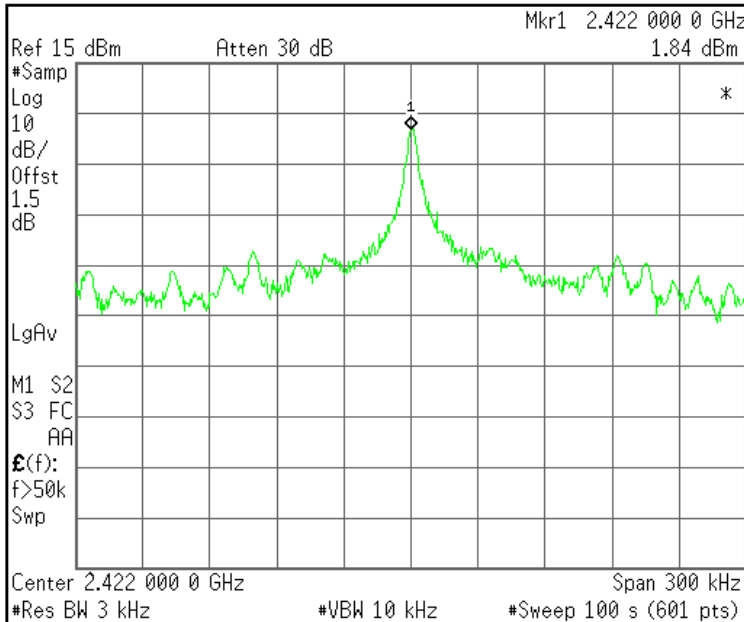
Sweep	
Sweep Time	100.0 s
Auto	Man
Sweep	
Single	Cont
Auto Sweep Time	
Norm	Accy
Gate	
On	Off
Gate Setup	
Points	
601	

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draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

PPSD (CH Low)

Agilent



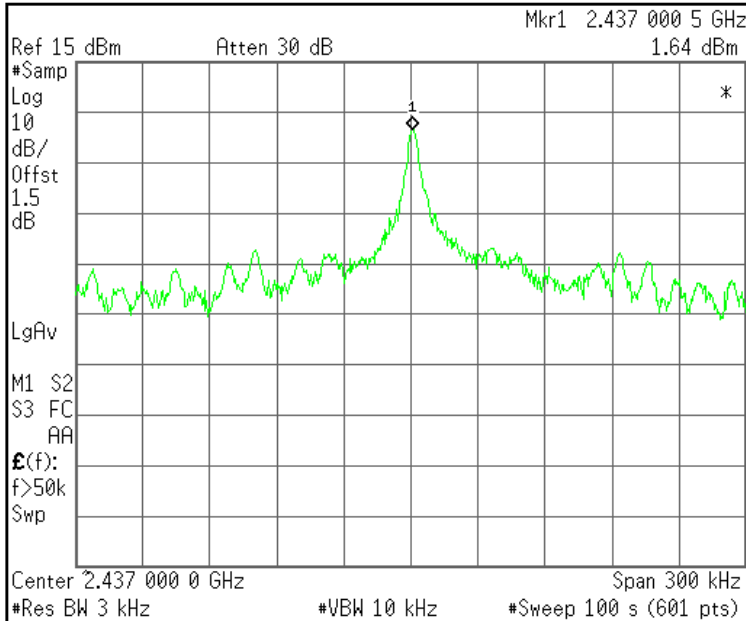
Freq/Channel	
Center Freq	2.42200000 GHz
Start Freq	2.42185000 GHz
Stop Freq	2.42215000 GHz
CF Step	30.0000000 kHz
Auto	Man
Freq Offset	0.00000000 Hz
Signal Track	Off
On	Off

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PPSD (CH Mid)

Agilent

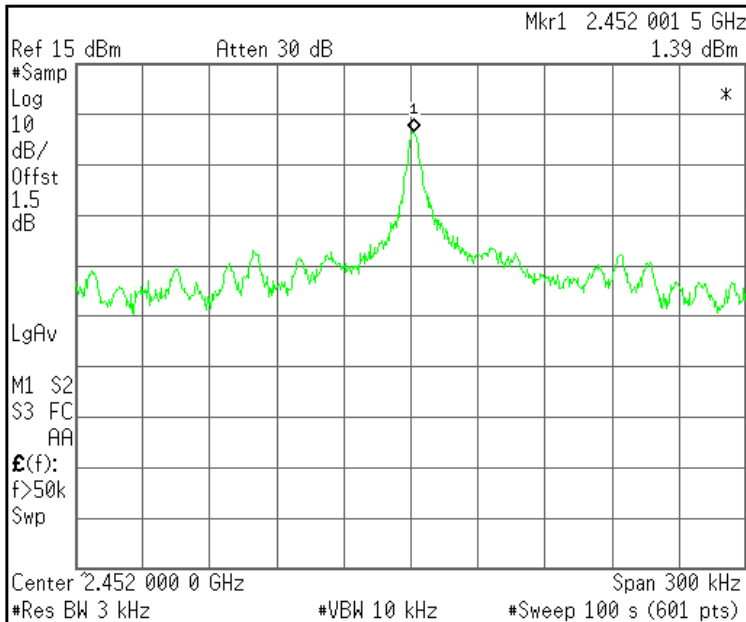


Freq/Channel	
Center Freq	2.43700000 GHz
Start Freq	2.43685000 GHz
Stop Freq	2.43715000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH High)

Agilent



Freq/Channel	
Center Freq	2.45200000 GHz
Start Freq	2.45185000 GHz
Stop Freq	2.45215000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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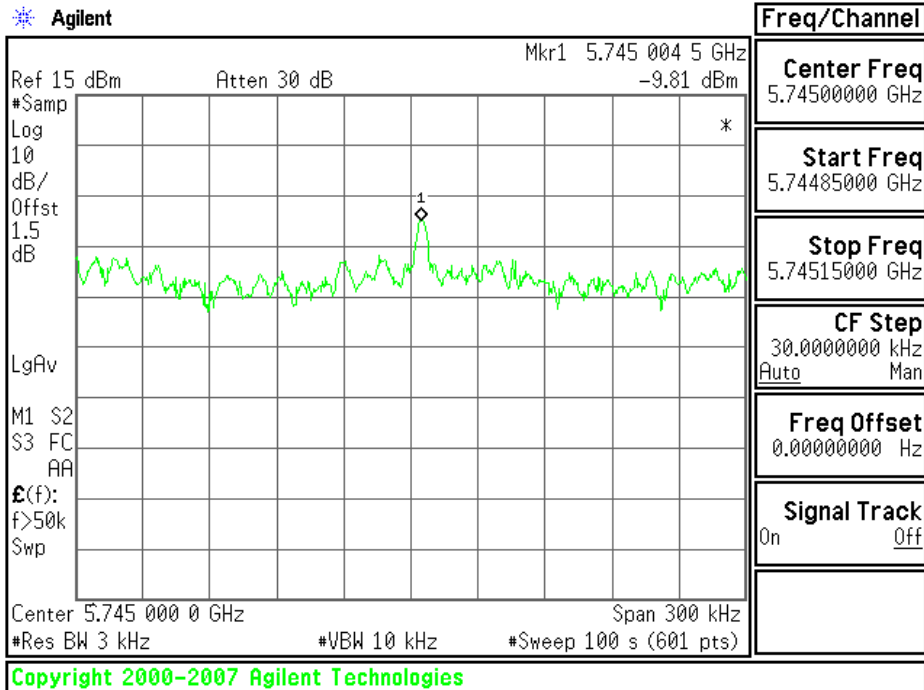


5725-5825

IEEE 802.11a mode

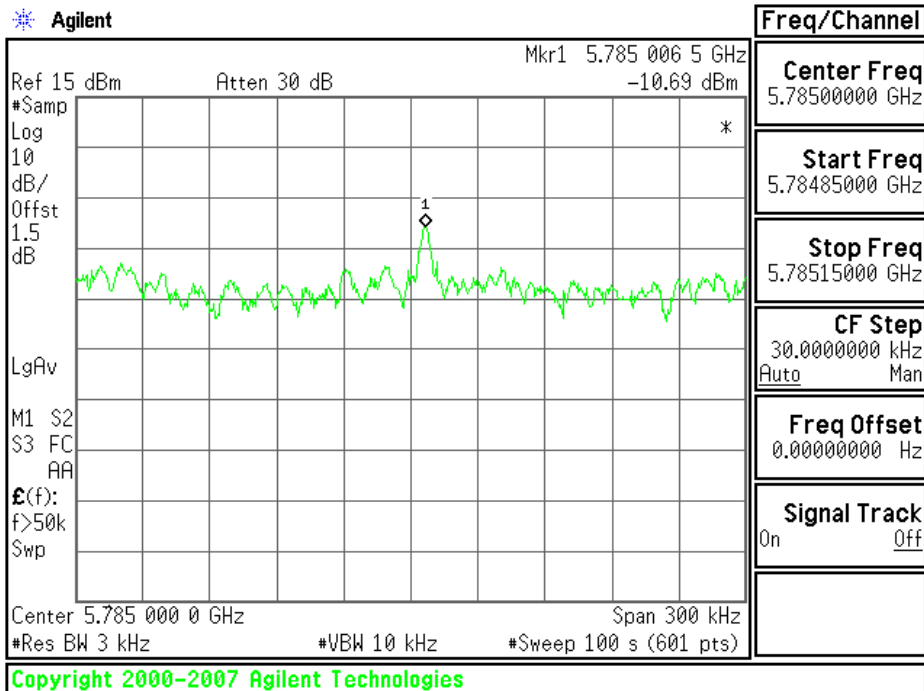
PPSD (CH Low)

Agilent



PPSD (CH Mid)

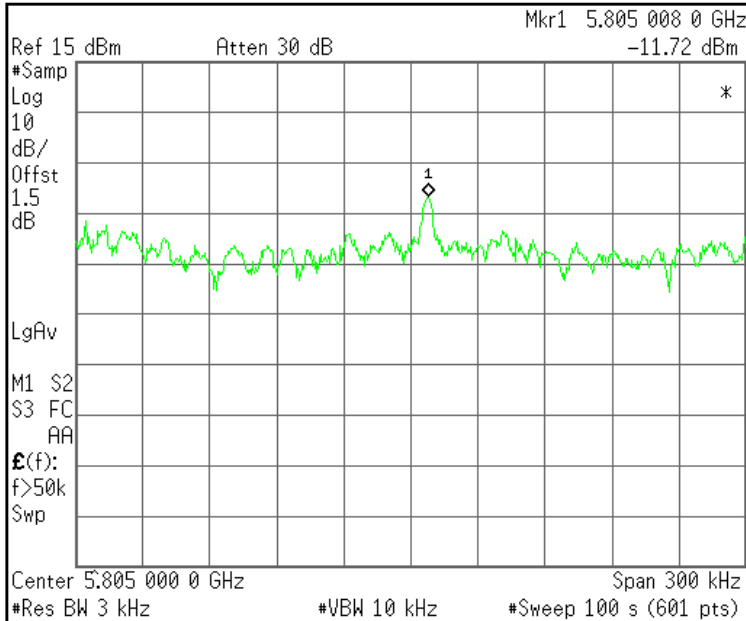
Agilent





PPSD (CH High)

Agilent



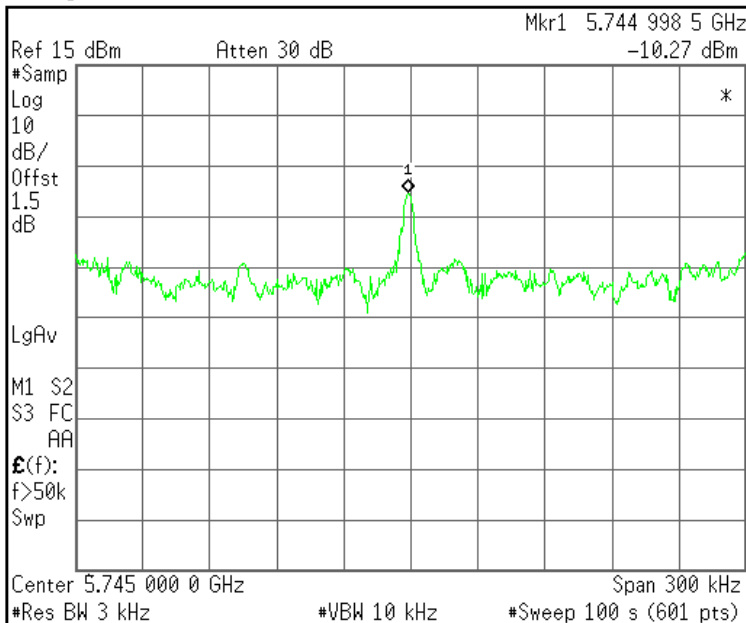
Freq/Channel	
Center Freq	5.80500000 GHz
Start Freq	5.80485000 GHz
Stop Freq	5.80515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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draft 802.11an Standard-20 MHz Channel mode / Chain 0

PPSD (CH Low)

Agilent



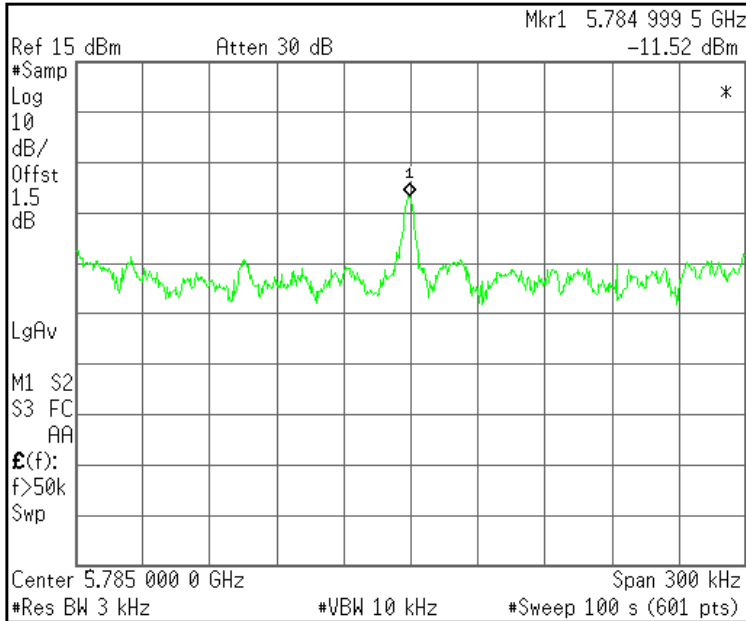
Freq/Channel	
Center Freq	5.74500000 GHz
Start Freq	5.74485000 GHz
Stop Freq	5.74515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH Mid)

Agilent

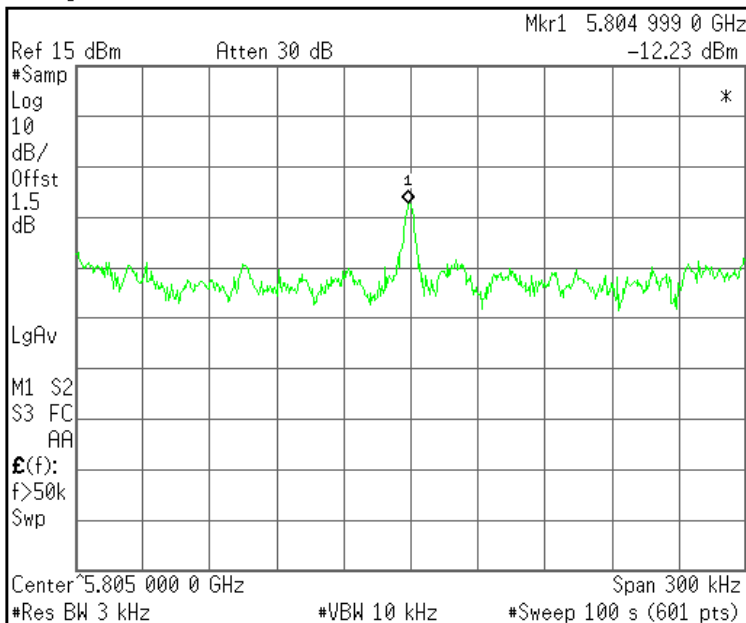


Freq/Channel	
Center Freq	5.78500000 GHz
Start Freq	5.78485000 GHz
Stop Freq	5.78515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH High)

Agilent



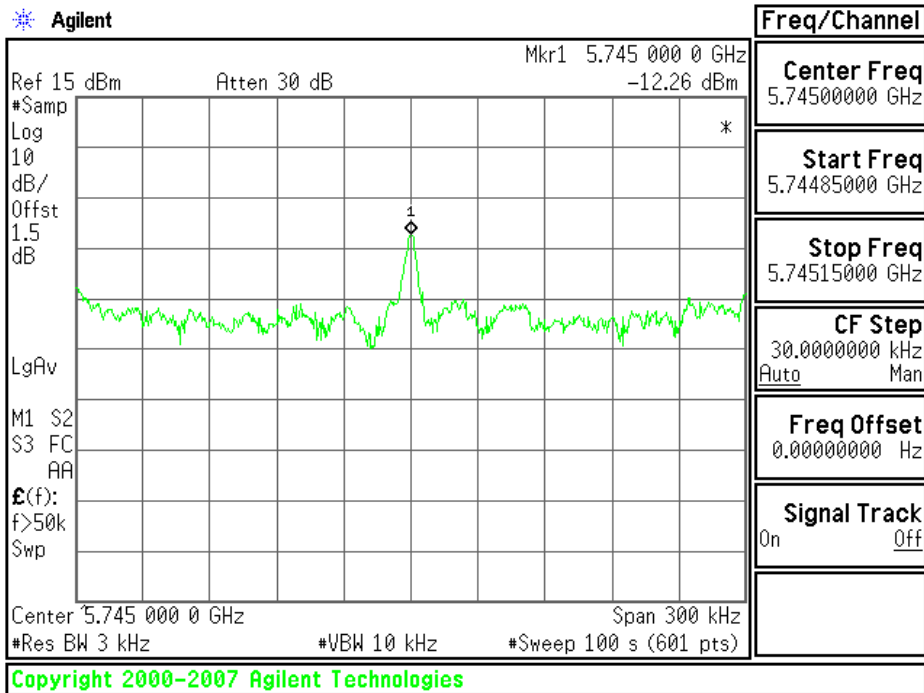
Freq/Channel	
Center Freq	5.80500000 GHz
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Stop Freq	5.80515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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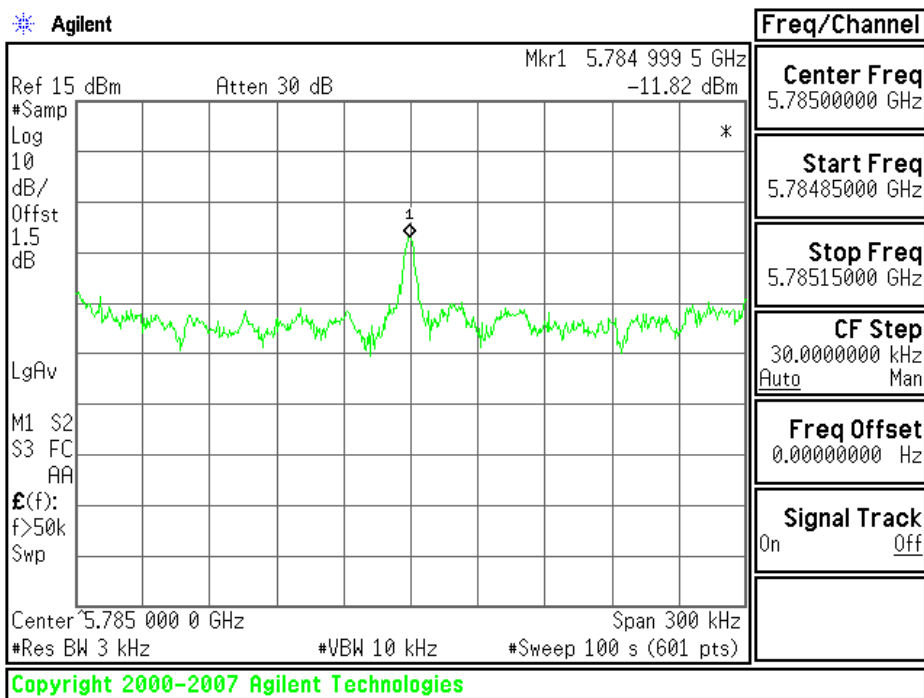


draft 802.11an Standard-20 MHz Channel mode / Chain 1

PPSD (CH Low)



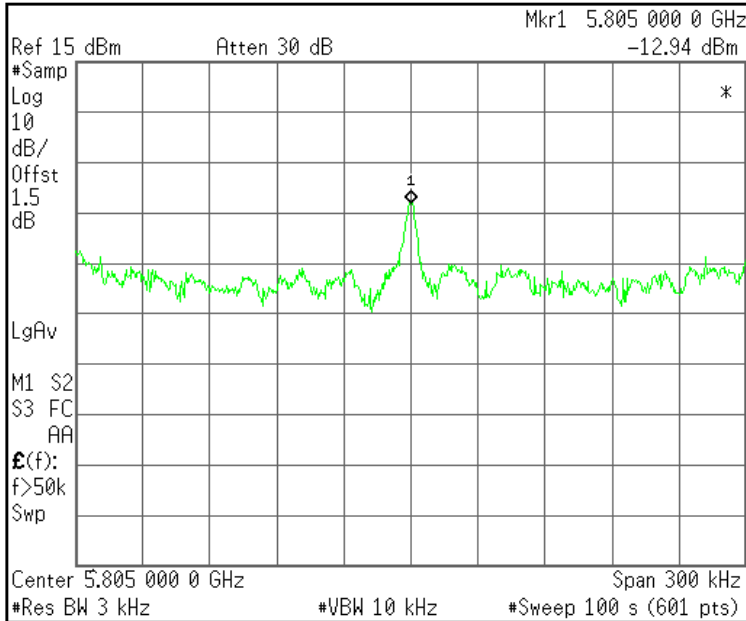
PPSD (CH Mid)





PPSD (CH High)

Agilent



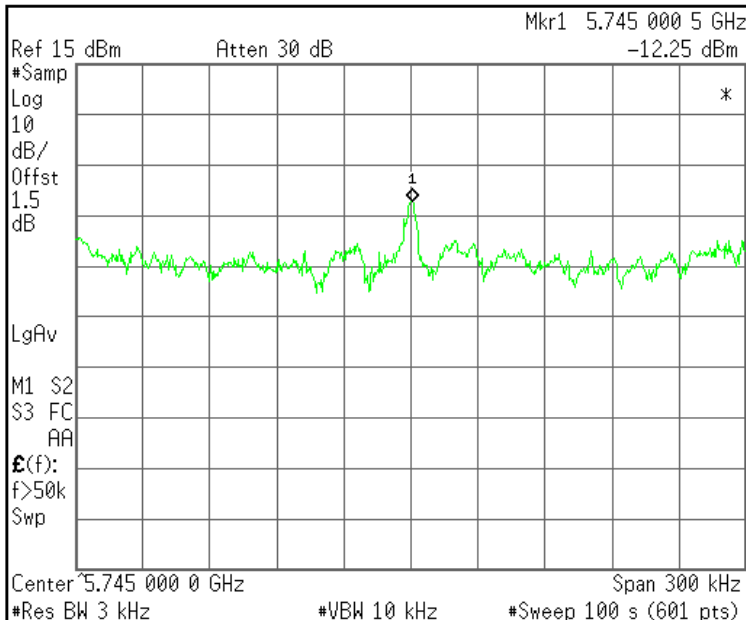
Freq/Channel	
Center Freq	5.80500000 GHz
Start Freq	5.80485000 GHz
Stop Freq	5.80515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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draft 802.11an Standard-20 MHz Channel mode / Chain 2

PPSD (CH Low)

Agilent



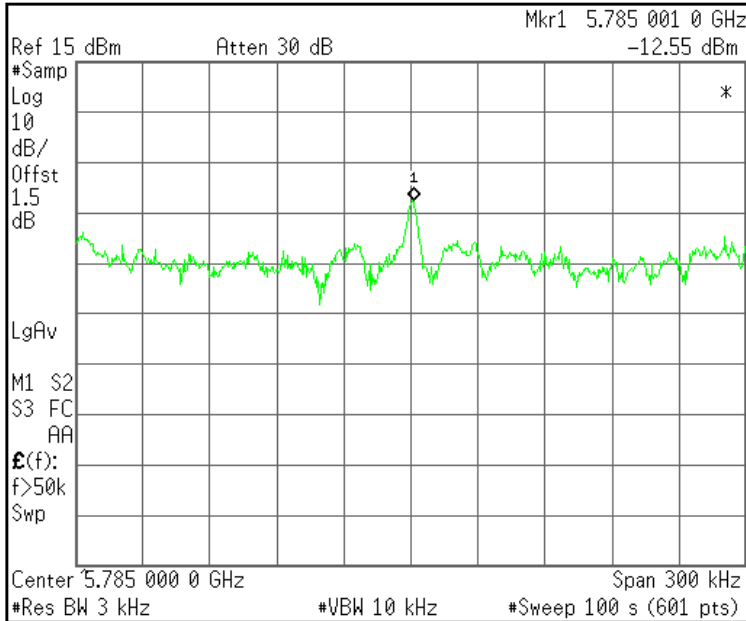
Freq/Channel	
Center Freq	5.74500000 GHz
Start Freq	5.74485000 GHz
Stop Freq	5.74515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH Mid)

Agilent

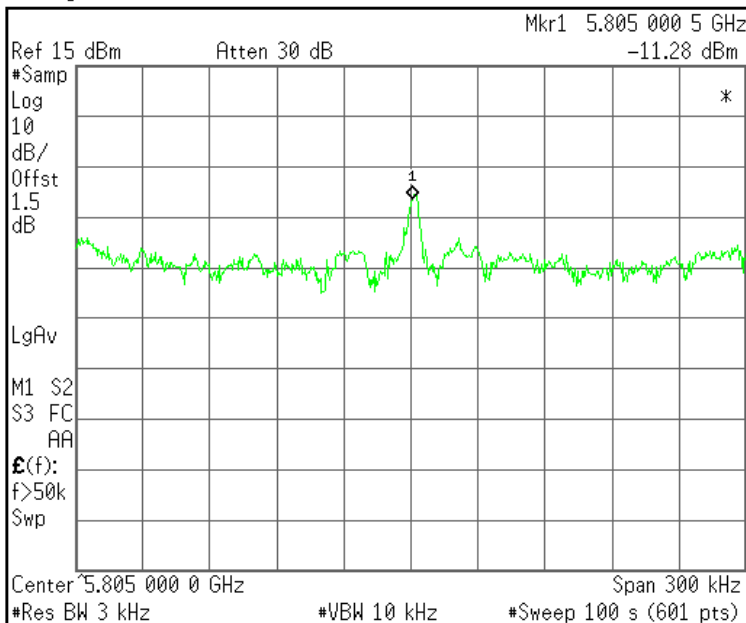


Freq/Channel	
Center Freq	5.78500000 GHz
Start Freq	5.78485000 GHz
Stop Freq	5.78515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

Copyright 2000-2007 Agilent Technologies

PPSD (CH High)

Agilent



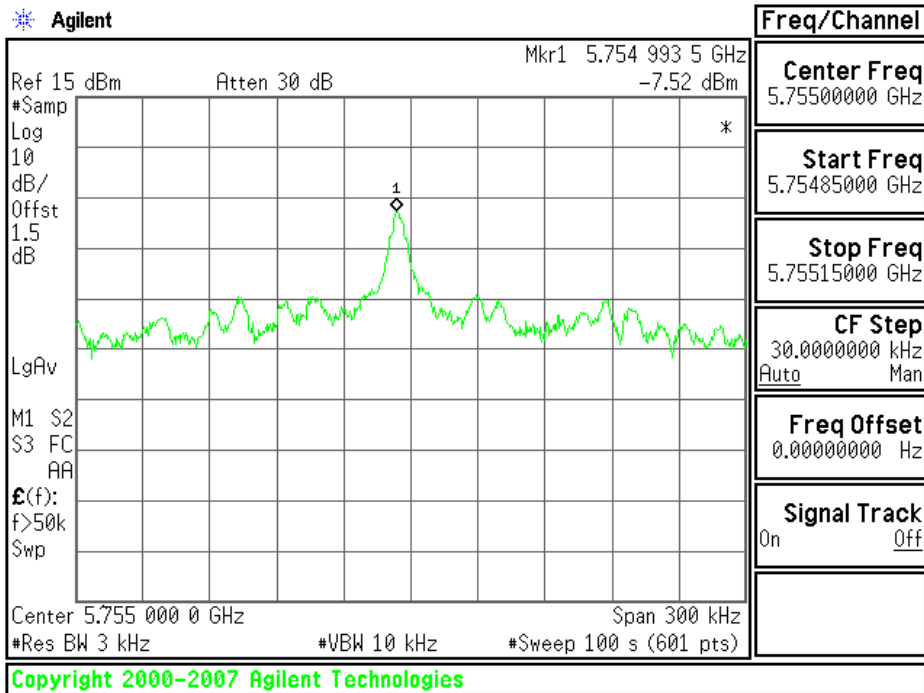
Freq/Channel	
Center Freq	5.80500000 GHz
Start Freq	5.80485000 GHz
Stop Freq	5.80515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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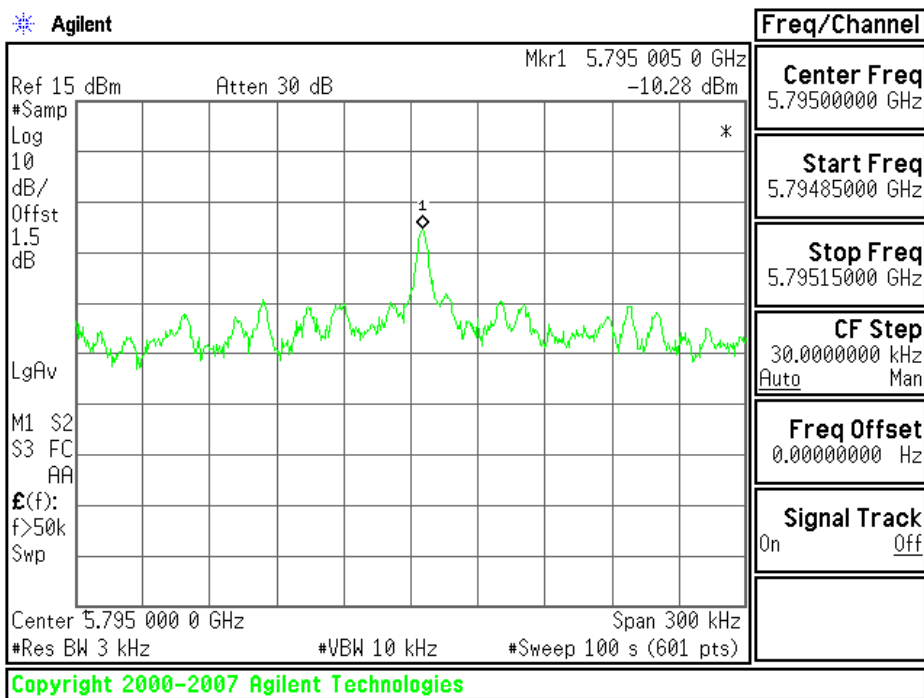


draft 802.11an Standard-40 MHz Channel mode / Chain 0

PPSD (CH Low)

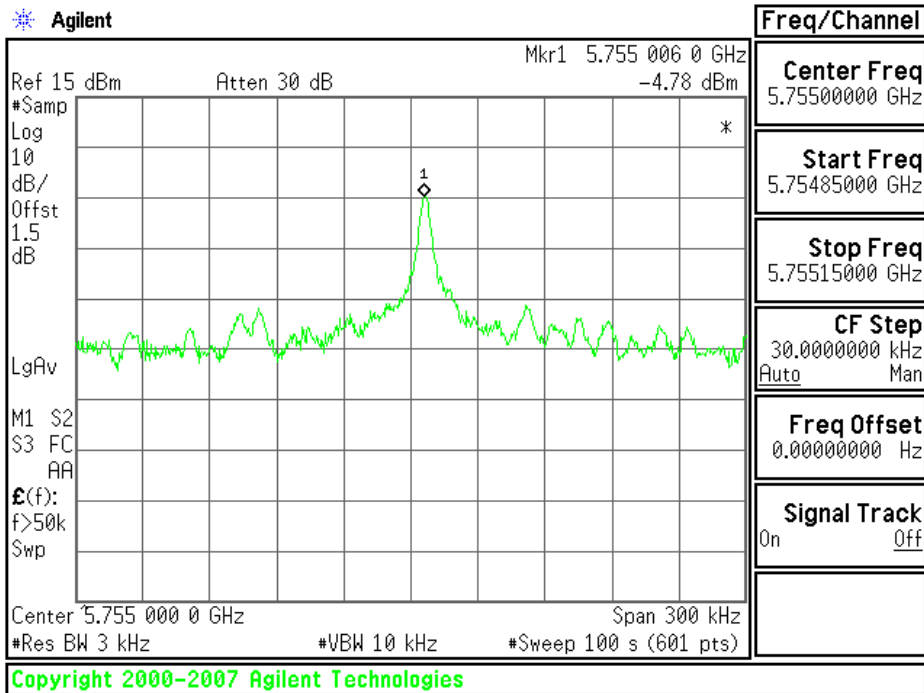


PPSD (CH High)

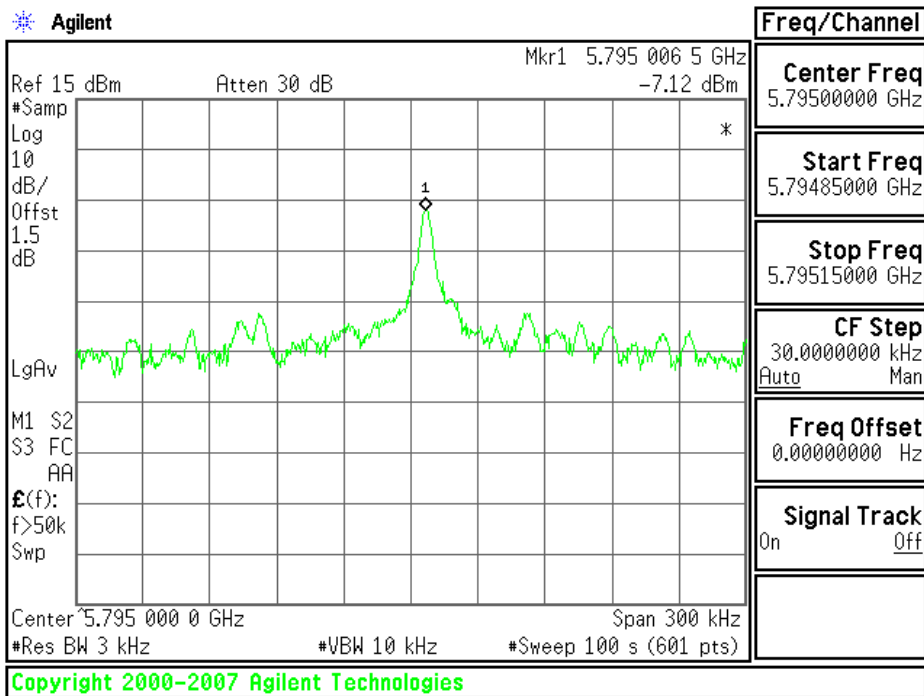




draft 802.11an Standard-40 MHz Channel mode / Chain 1
PPSD (CH Low)

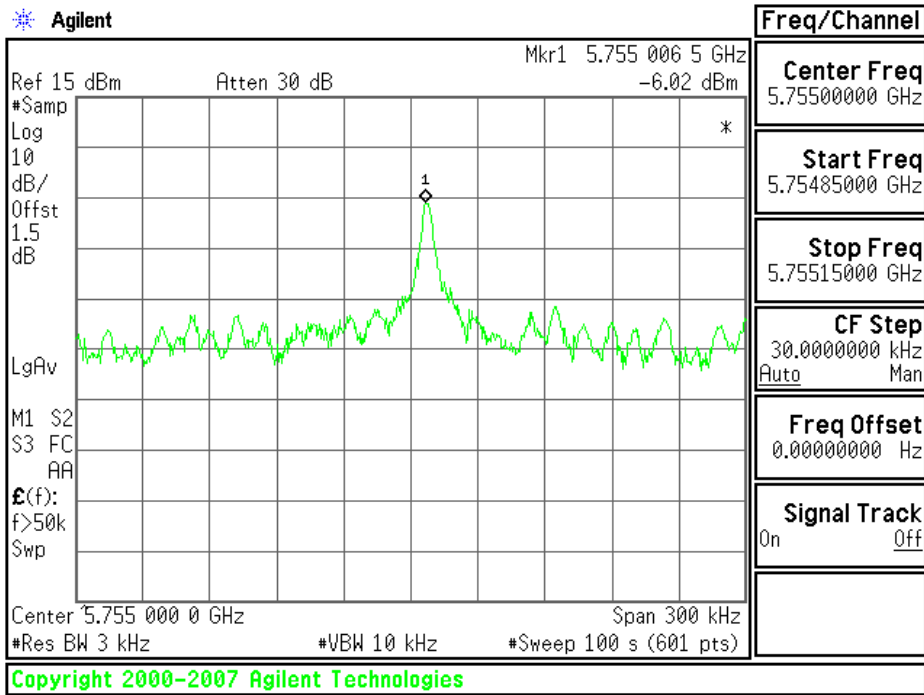


PPSD (CH High)

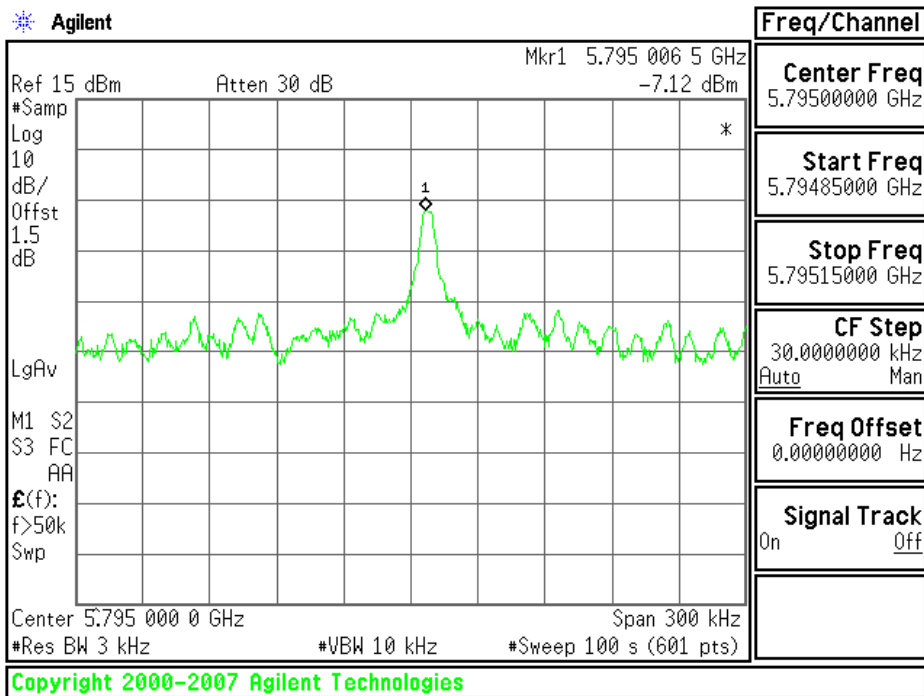




draft 802.11an Standard-40 MHz Channel mode / Chain 2
PPSD (CH Low)



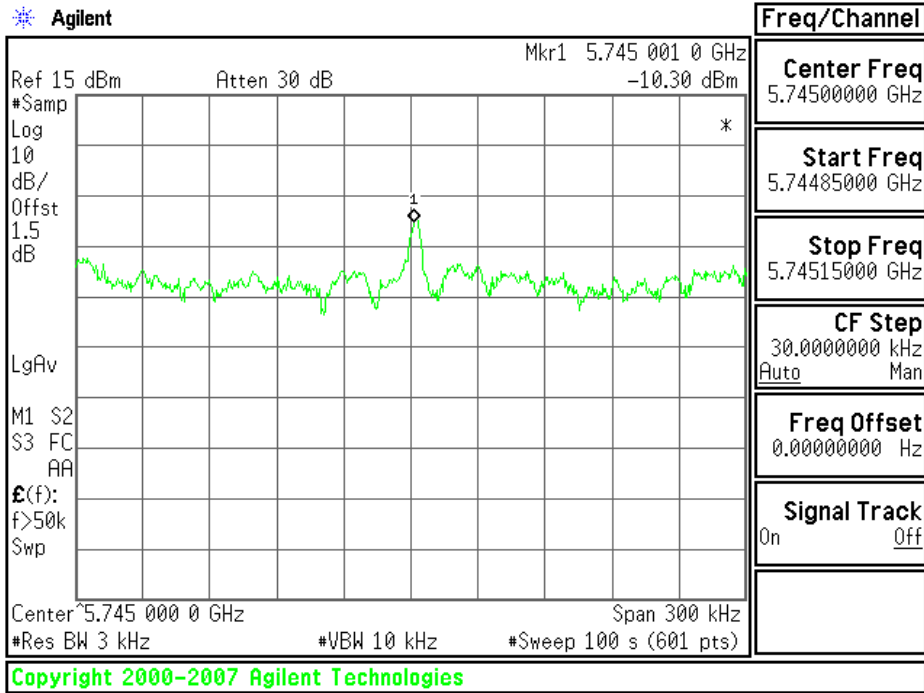
PPSD (CH High)



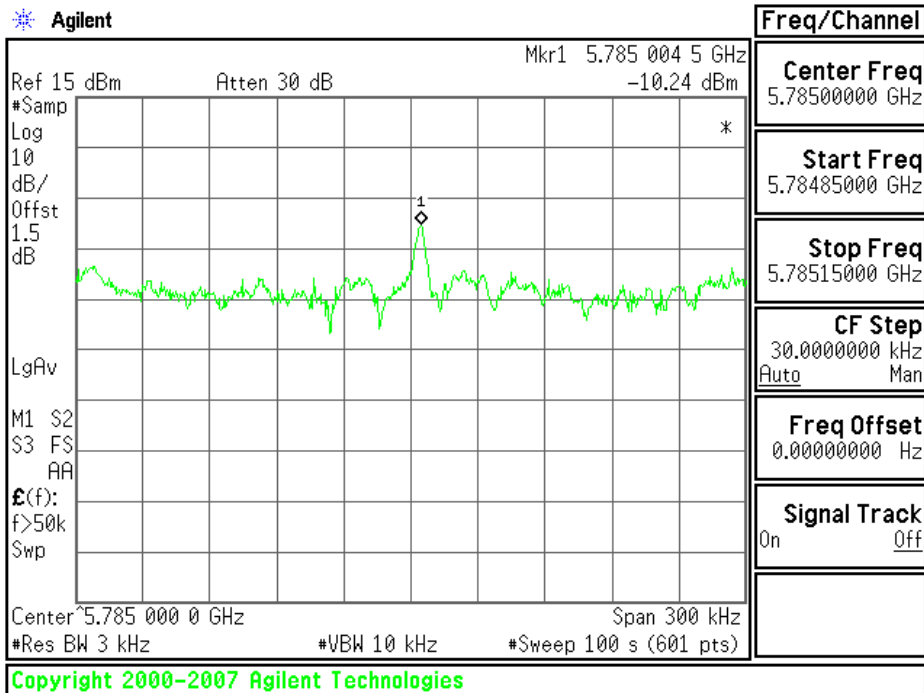


draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

PPSD (CH Low)



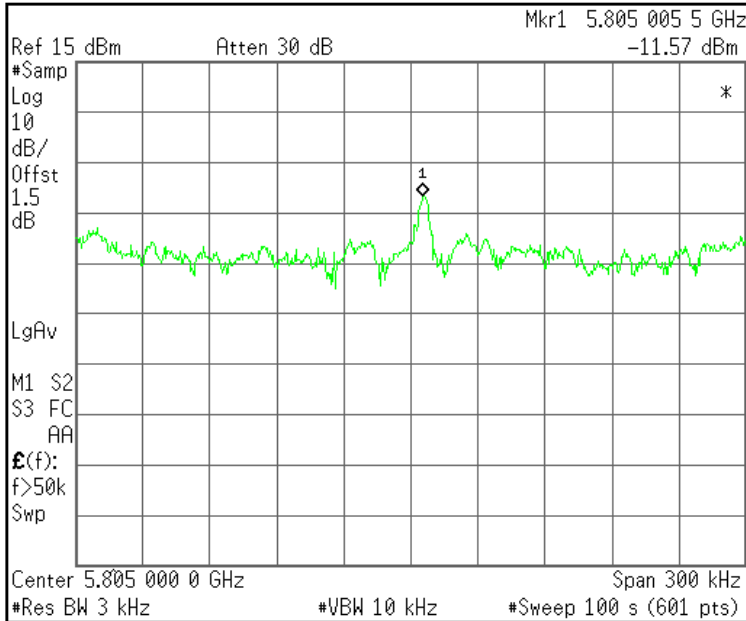
PPSD (CH Mid)





PPSD (CH High)

Agilent



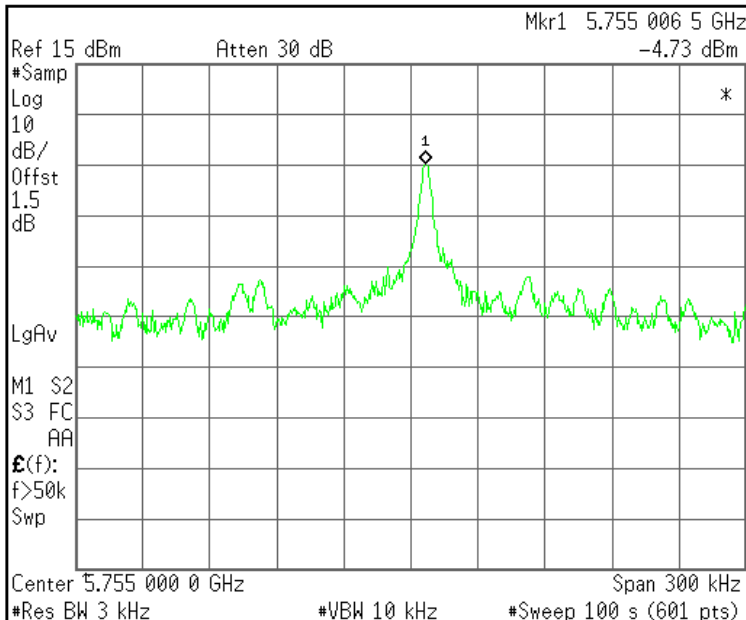
Freq/Channel	
Center Freq	5.80500000 GHz
Start Freq	5.80485000 GHz
Stop Freq	5.80515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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draft 802.11an Standard-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

PPSD (CH Low)

Agilent



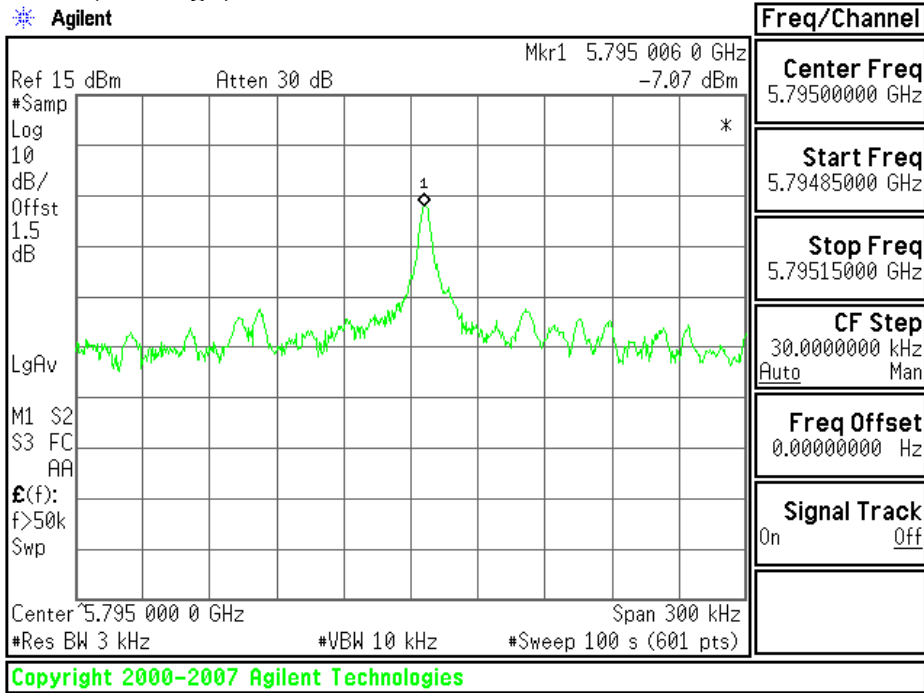
Freq/Channel	
Center Freq	5.75500000 GHz
Start Freq	5.75485000 GHz
Stop Freq	5.75515000 GHz
CF Step	30.0000000 kHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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PPSD (CH High)

Agilent





SPURIOUS EMISSIONS

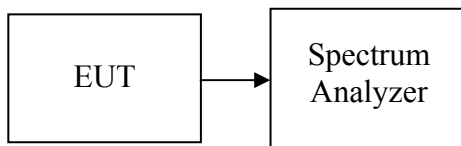
Conducted Measurement

LIMIT

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

Conducted power was measured based on the use of RMS averaging over a time interval, therefore the required attenuation is 30 dB.

Test Configuration





TEST PROCEDURE

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

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

Measurements are made over the 30MHz to 40GHz range with the transmitter set to the lowest, middle, and highest channels.

TEST RESULTS

No non-compliance noted

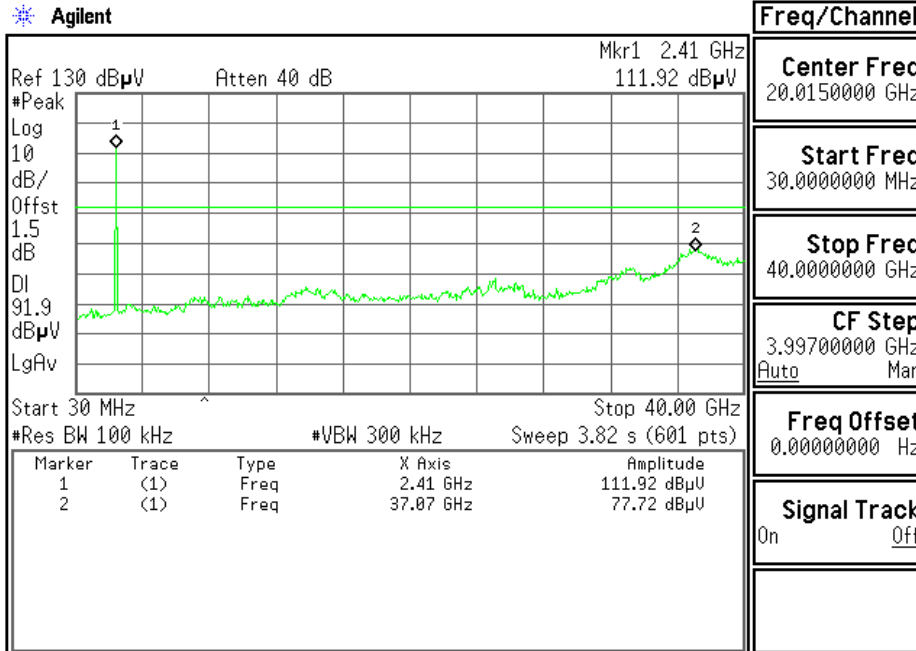


Test Plot

IEEE 802.11b mode

CH Low

Agilent



Freq/Channel

Center Freq
20.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
40.0000000 GHz

CF Step
3.99700000 GHz
Auto Man

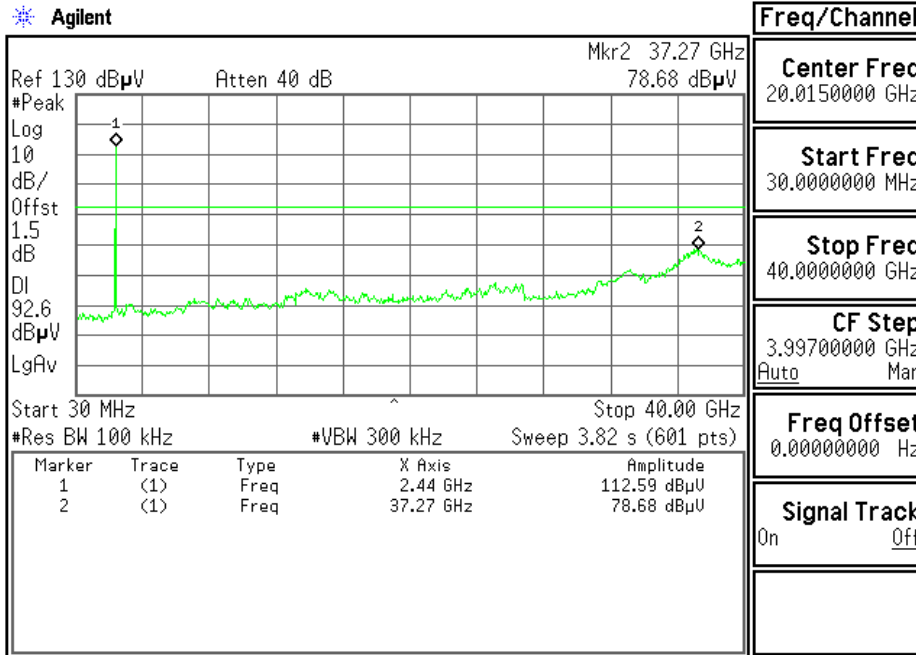
Freq Offset
0.0000000 Hz

Signal Track
On Off

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CH Mid

Agilent



Freq/Channel

Center Freq
20.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
40.0000000 GHz

CF Step
3.99700000 GHz
Auto Man

Freq Offset
0.0000000 Hz

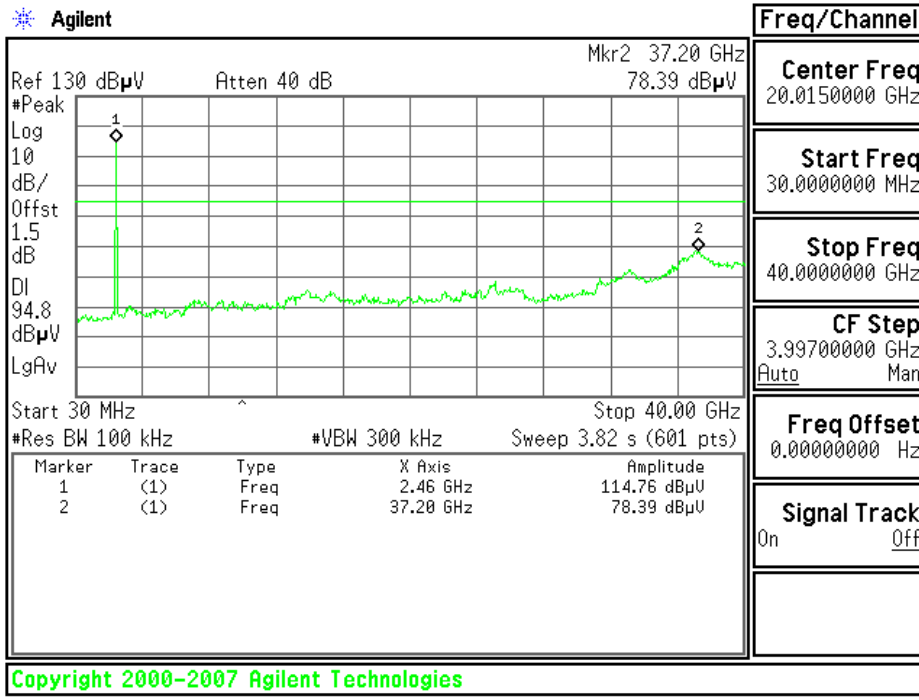
Signal Track
On Off

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CH High

Agilent



Freq/Channel

Center Freq
20.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
40.0000000 GHz

CF Step
3.99700000 GHz
Auto Man

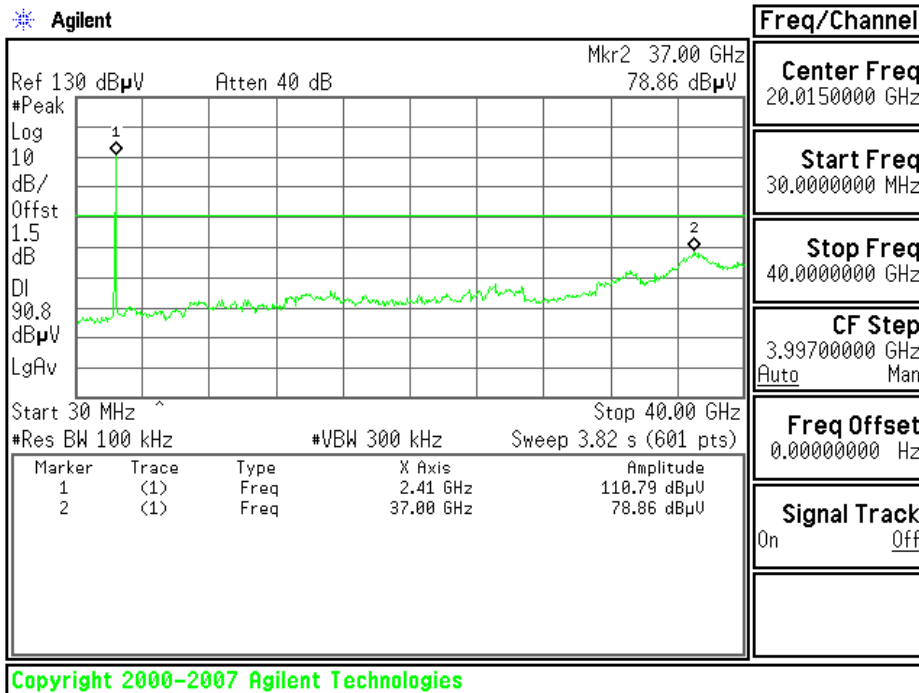
Freq Offset
0.00000000 Hz

Signal Track
On Off

IEEE 802.11g mode

CH Low

Agilent



Freq/Channel

Center Freq
20.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
40.0000000 GHz

CF Step
3.99700000 GHz
Auto Man

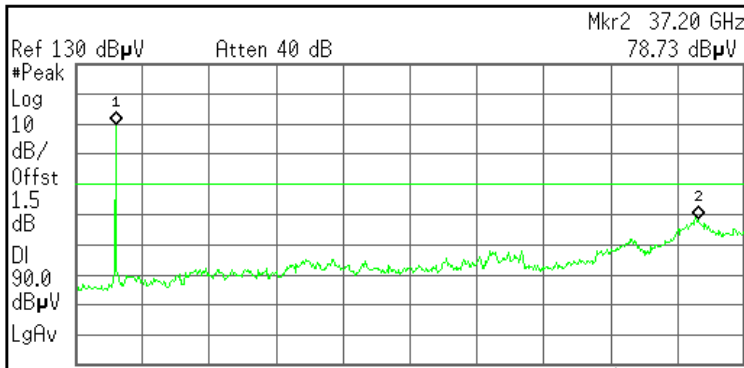
Freq Offset
0.00000000 Hz

Signal Track
On Off



CH Mid

Agilent



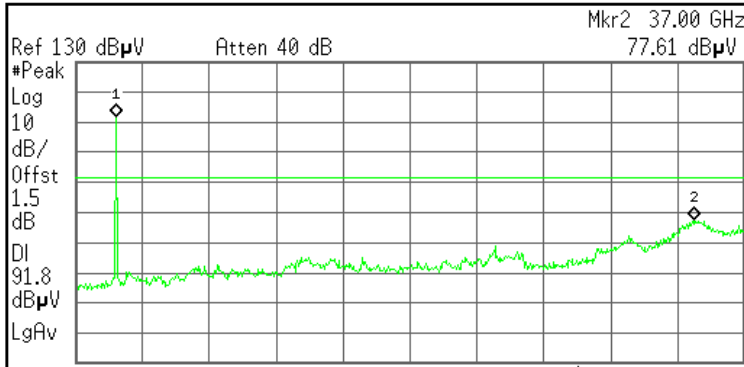
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.44 GHz	110.02 dBµV
2	(1)	Freq	37.20 GHz	78.73 dBµV

Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step 3.99700000 GHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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CH High

Agilent



Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.46 GHz	111.76 dBµV
2	(1)	Freq	37.00 GHz	77.61 dBµV

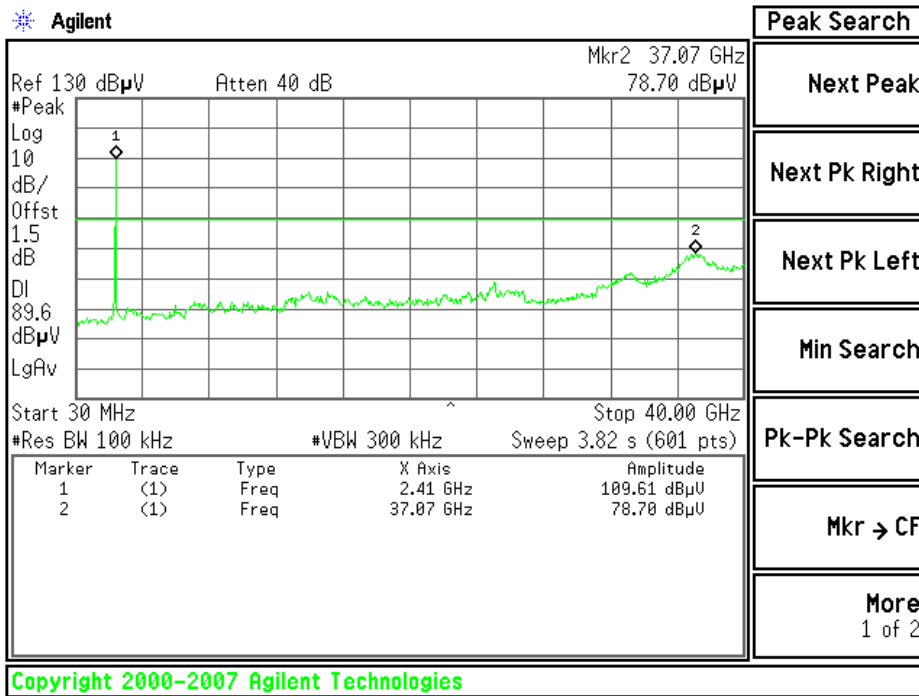
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step 3.99700000 GHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

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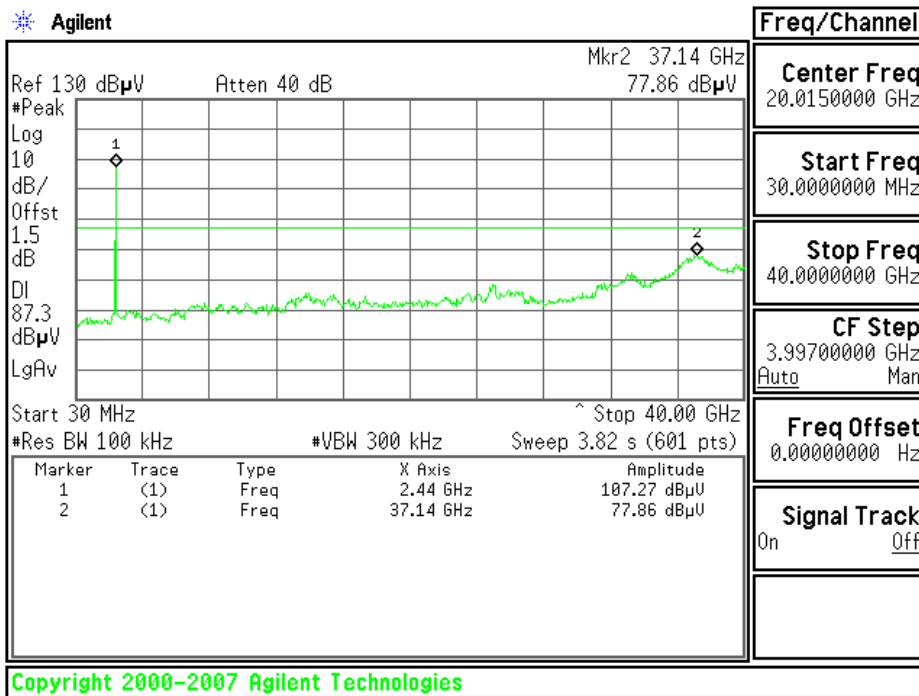


draft 802.11gn Standard-20 MHz Channel mode / Chain 0

CH Low



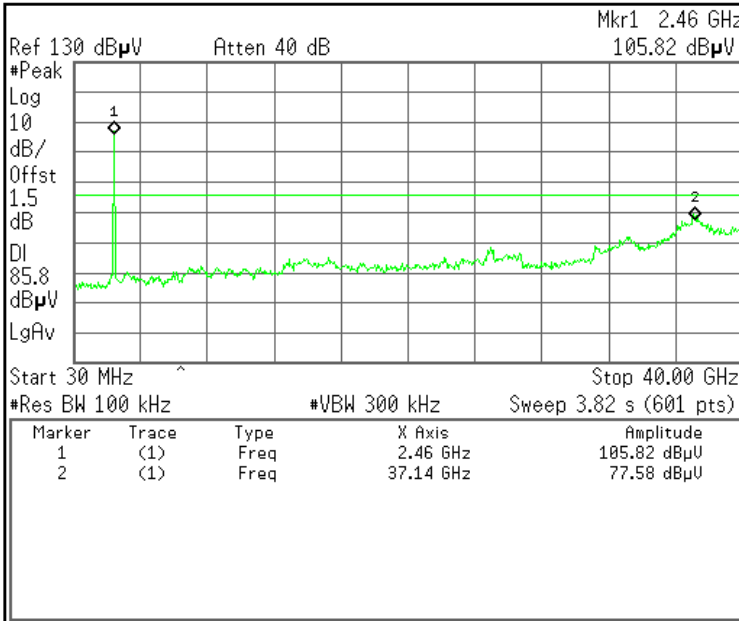
CH Mid





CH High

Agilent



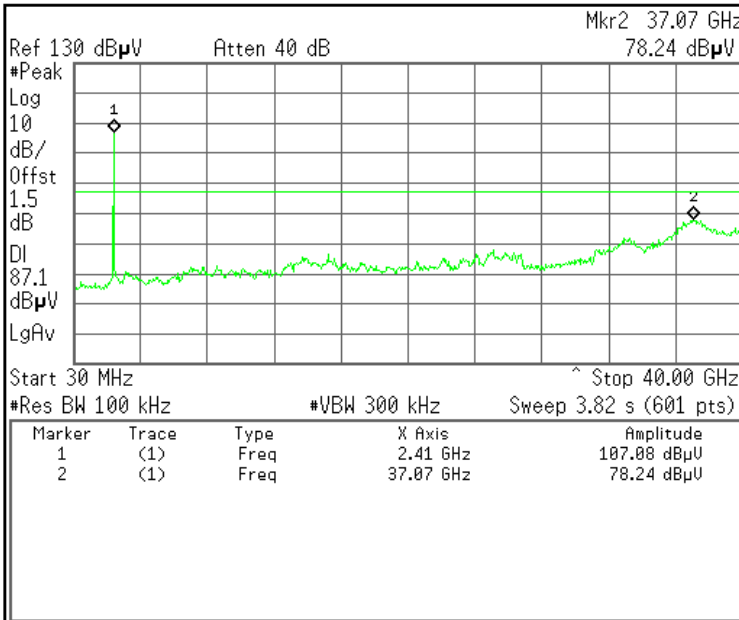
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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draft 802.11gn Standard-20 MHz Channel mode / Chain 1

CH Low

Agilent



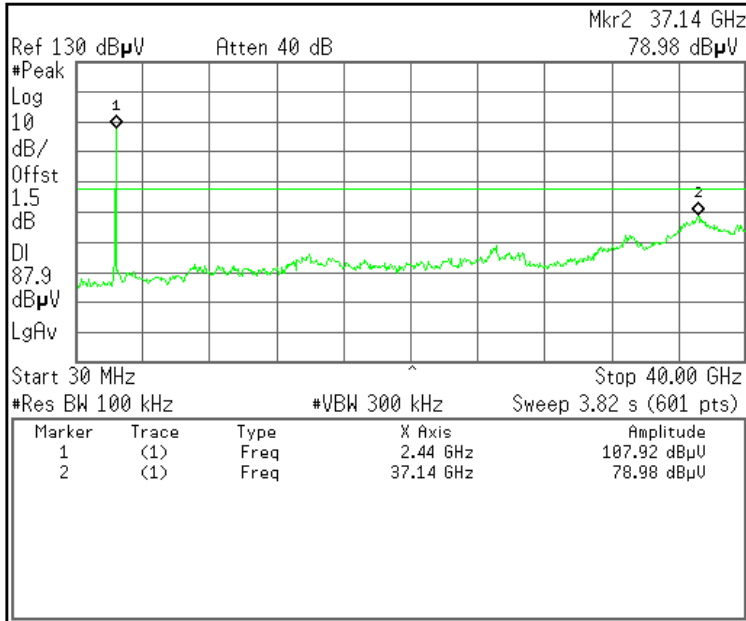
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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CH Mid

Agilent

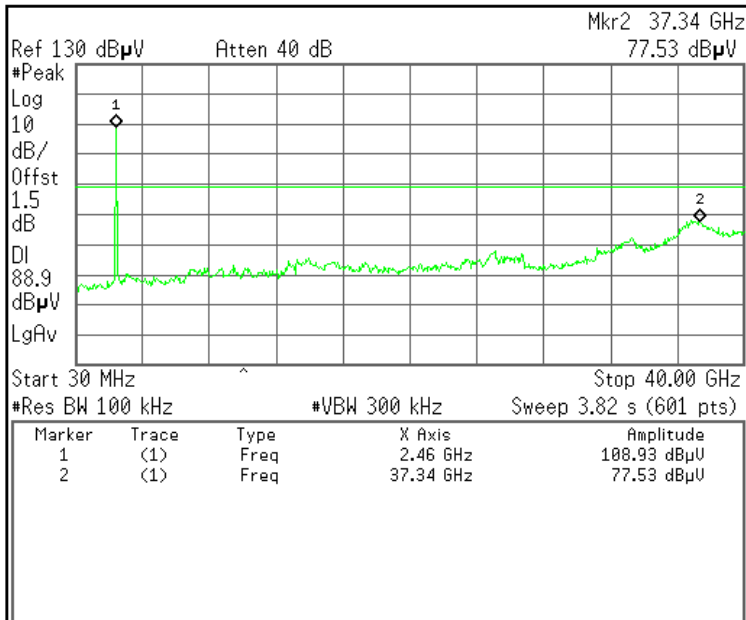


Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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CH High

Agilent



Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

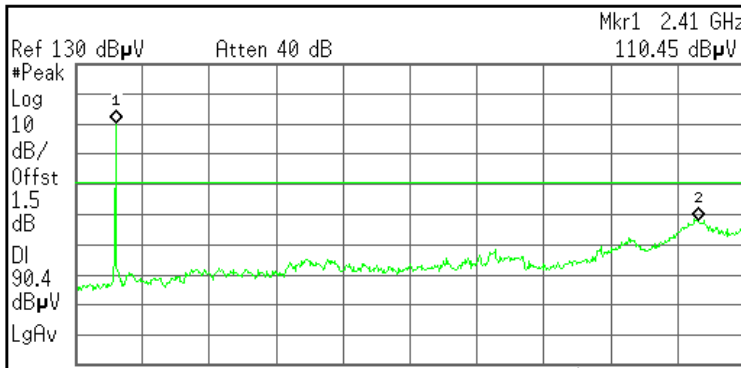
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draft 802.11gn Standard-20 MHz Channel mode / Chain 2

CH Low

Agilent



Ref 130 dBµV Atten 40 dB Mkr1 2.41 GHz 110.45 dBµV
 #Peak Log 10 dB/ Offst 1.5 dB DI 90.4 dBµV LgAv
 Start 30 MHz Stop 40.00 GHz
 #Res BW 100 kHz #VBW 300 kHz Sweep 3.82 s (601 pts)

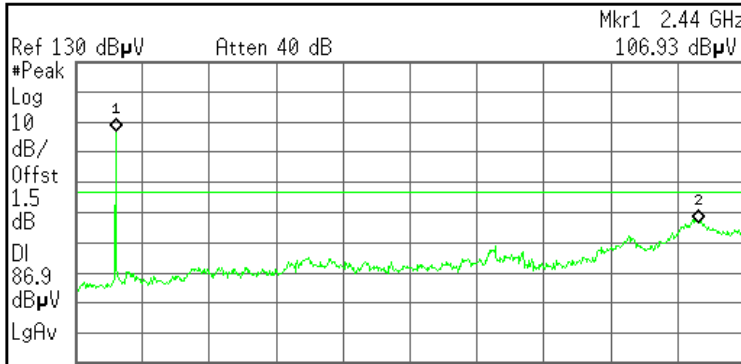
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.41 GHz	110.45 dBµV
2	(1)	Freq	37.20 GHz	77.95 dBµV

Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref) Ref ▲			
Span Pair Span Center			
Off			
More 1 of 2			

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CH Mid

Agilent



Ref 130 dBµV Atten 40 dB Mkr1 2.44 GHz 106.93 dBµV
 #Peak Log 10 dB/ Offst 1.5 dB DI 86.9 dBµV LgAv
 Start 30 MHz Stop 40.00 GHz
 #Res BW 100 kHz #VBW 300 kHz Sweep 3.82 s (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.44 GHz	106.93 dBµV
2	(1)	Freq	37.20 GHz	76.78 dBµV

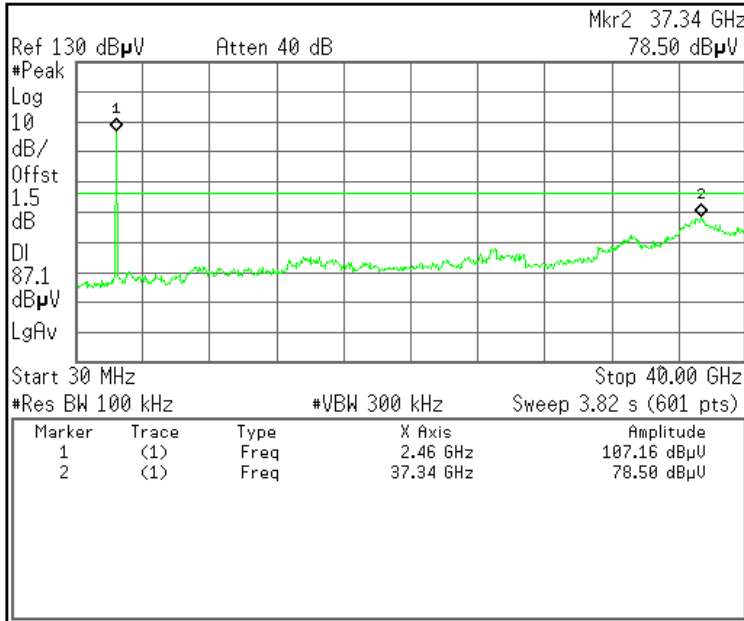
Freq/Channel	
Center Freq	20.0150000 GHz
Start Freq	30.0000000 MHz
Stop Freq	40.0000000 GHz
CF Step	3.99700000 GHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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CH High

Agilent



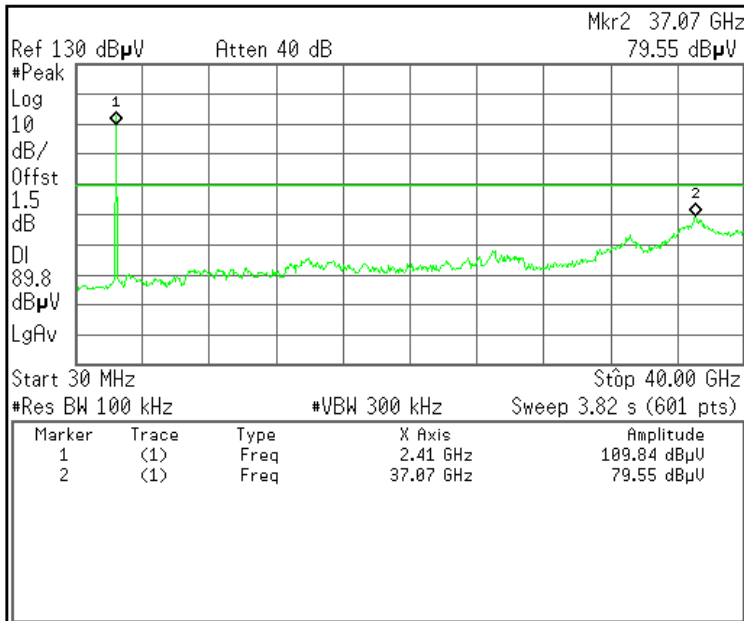
Freq/Channel	
Center Freq	20.0150000 GHz
Start Freq	30.0000000 MHz
Stop Freq	40.0000000 GHz
CF Step	3.99700000 GHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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draft 802.11gn Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

CH Low

Agilent



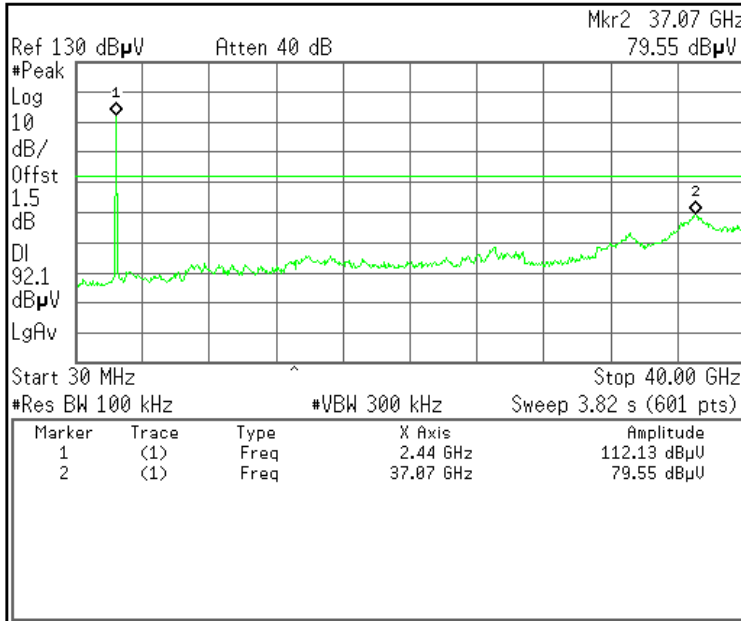
Freq/Channel	
Center Freq	20.0150000 GHz
Start Freq	30.0000000 MHz
Stop Freq	40.0000000 GHz
CF Step	3.99700000 GHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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CH Mid

Agilent

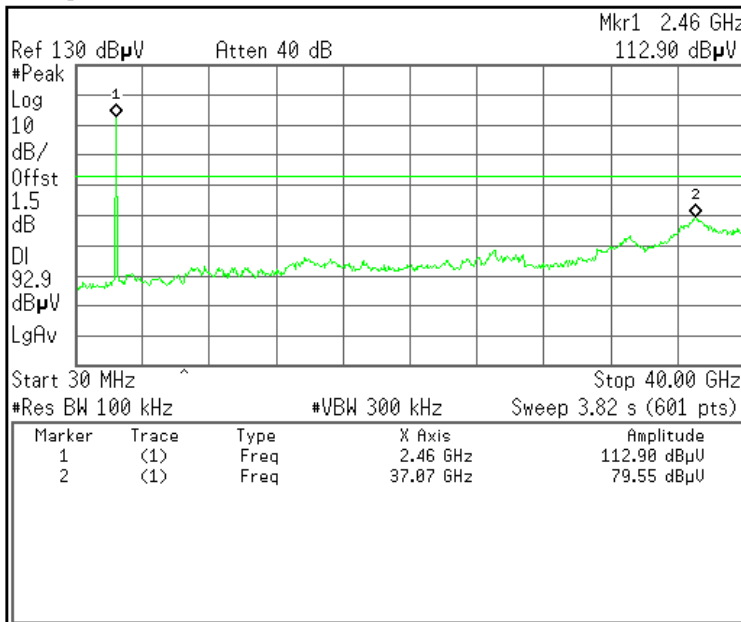


Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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CH High

Agilent



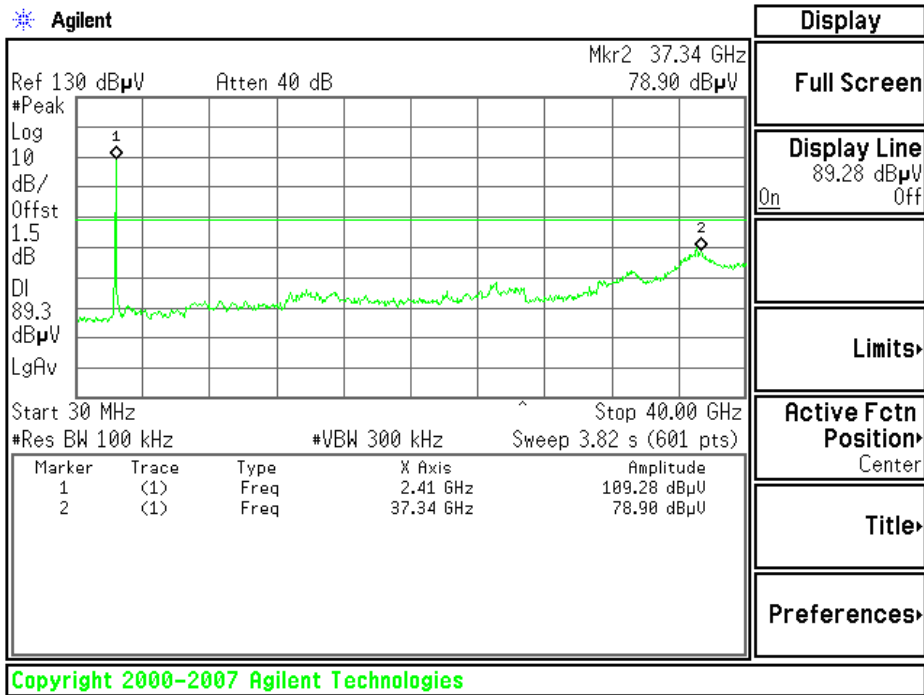
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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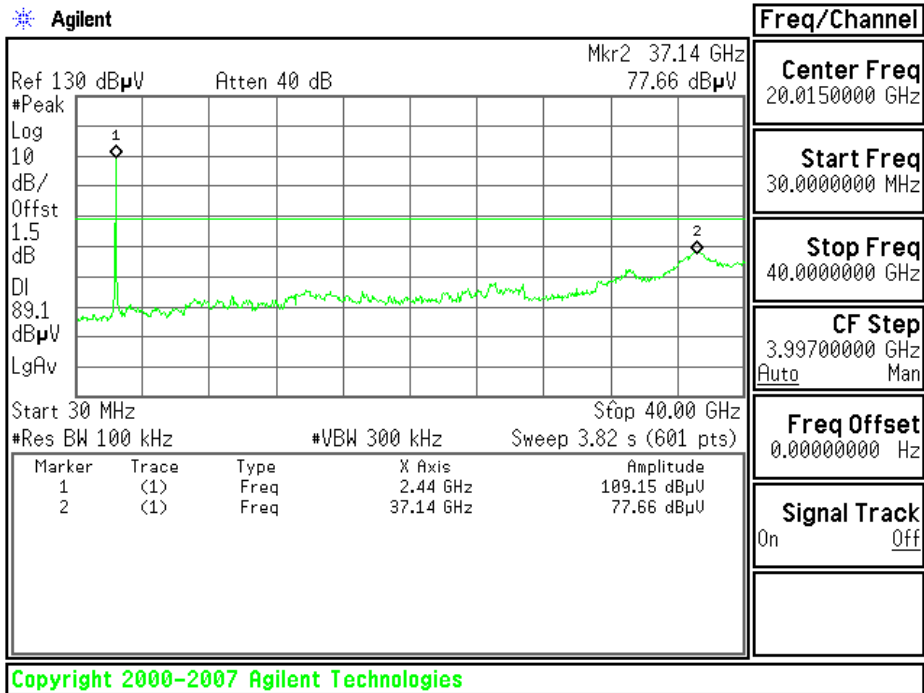


draft 802.11gn Wide-40 MHz Channel mode / Chain 0

CH Low



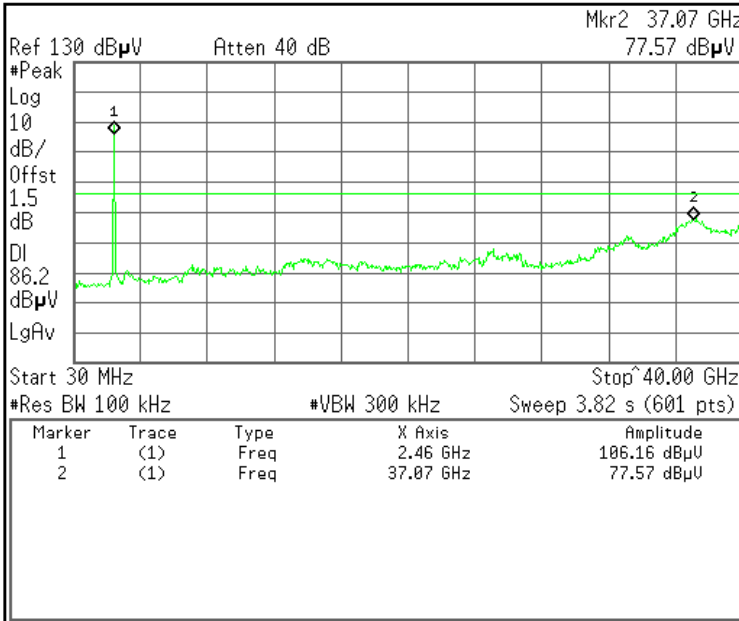
CH Mid





CH High

Agilent



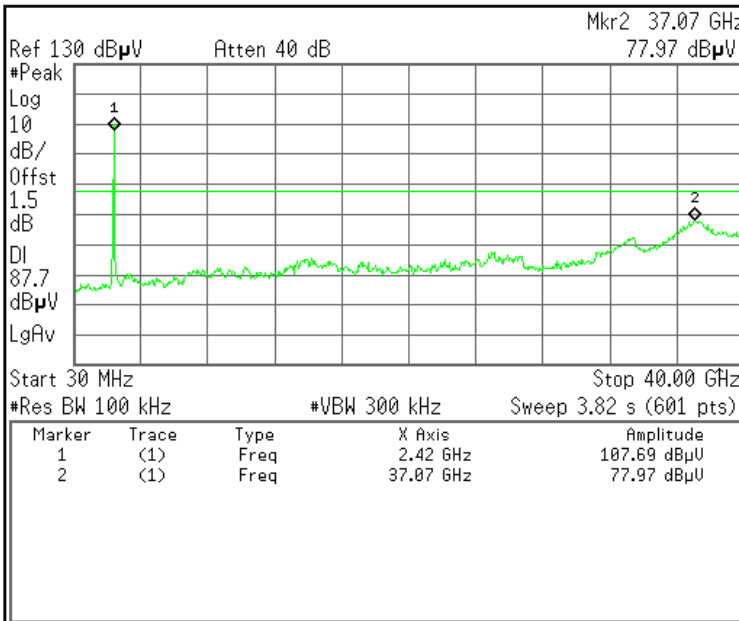
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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draft 802.11gn Wide-40 MHz Channel mode / Chain 1

CH Low

Agilent



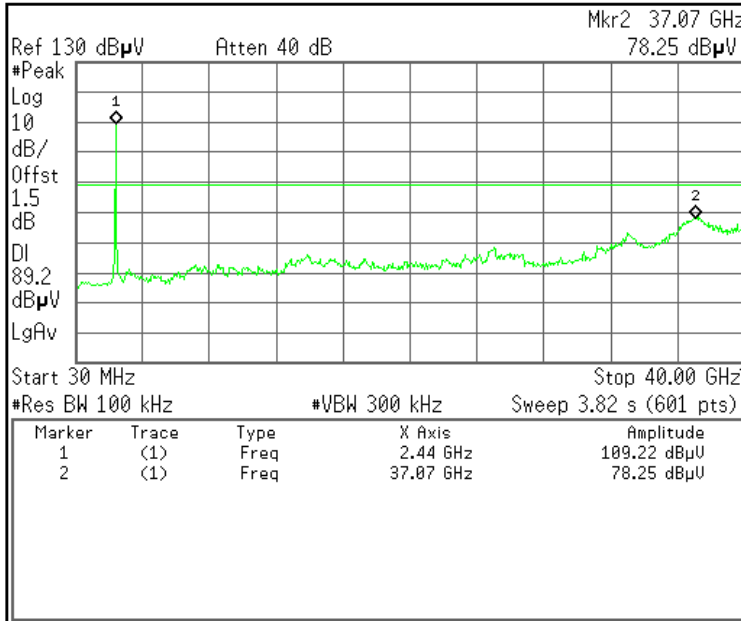
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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CH Mid

Agilent



Freq/Channel

Center Freq
20.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
40.0000000 GHz

CF Step
3.99700000 GHz
Auto Man

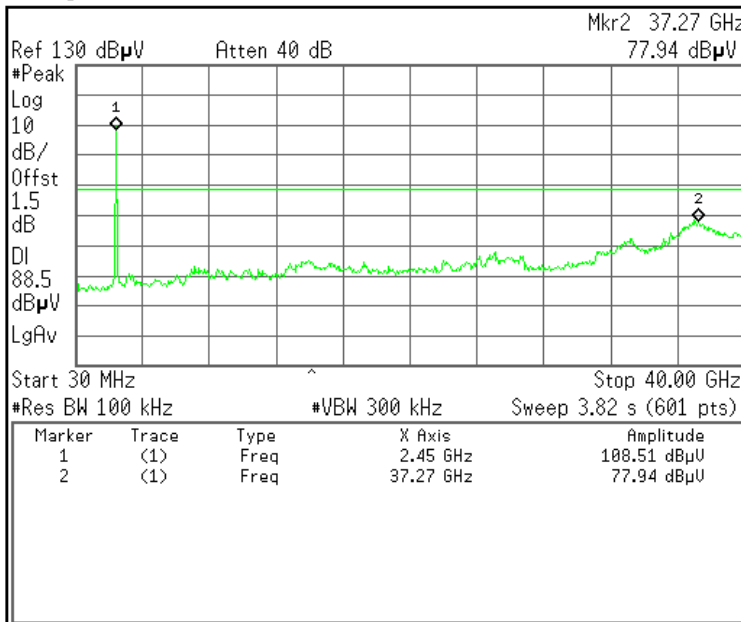
Freq Offset
0.00000000 Hz

Signal Track
On Off

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CH High

Agilent



Freq/Channel

Center Freq
20.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
40.0000000 GHz

CF Step
3.99700000 GHz
Auto Man

Freq Offset
0.00000000 Hz

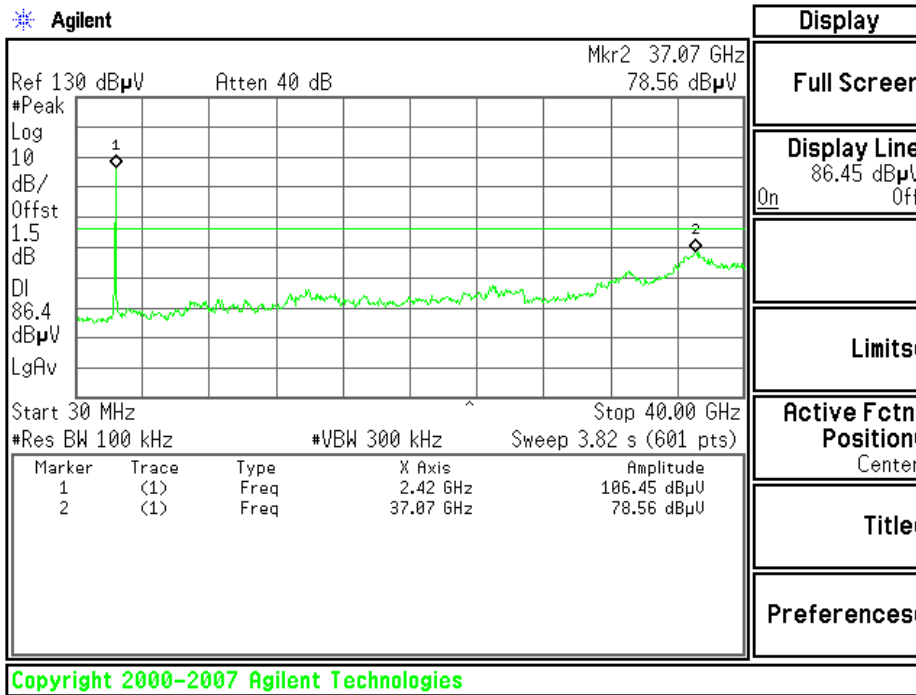
Signal Track
On Off

Copyright 2000-2007 Agilent Technologies

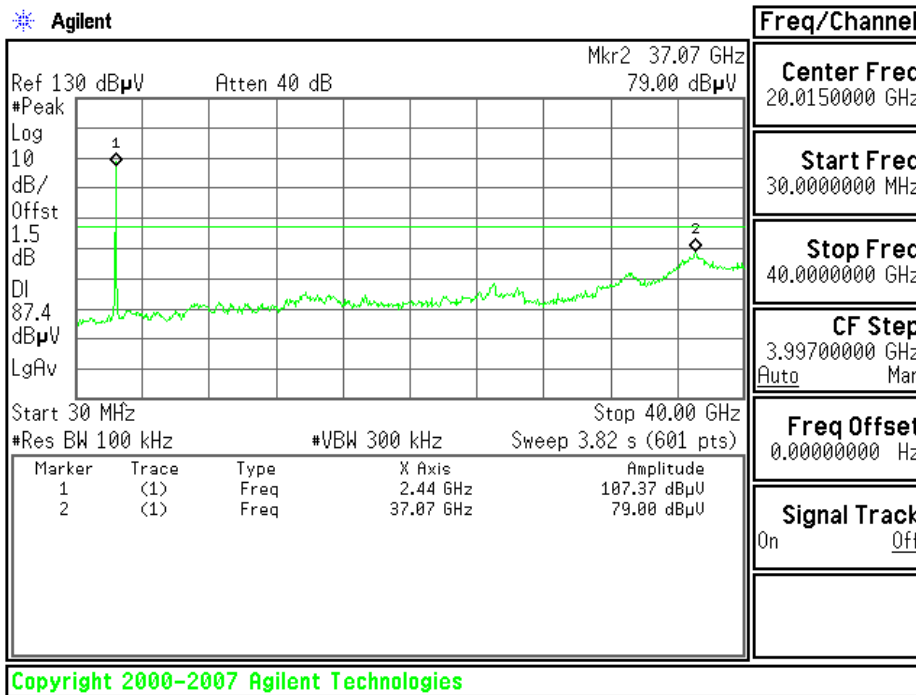


draft 802.11gn Wide-40 MHz Channel mode / Chain 2

CH Low



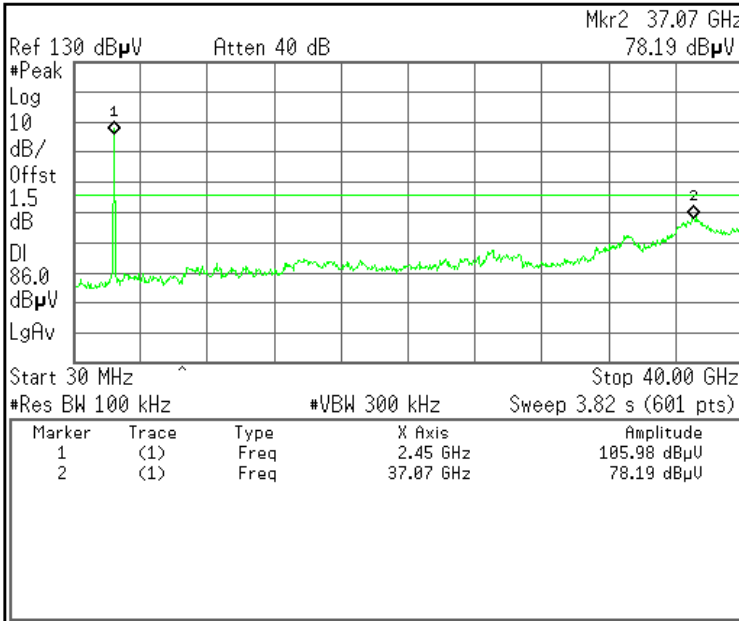
CH Mid





CH High

Agilent



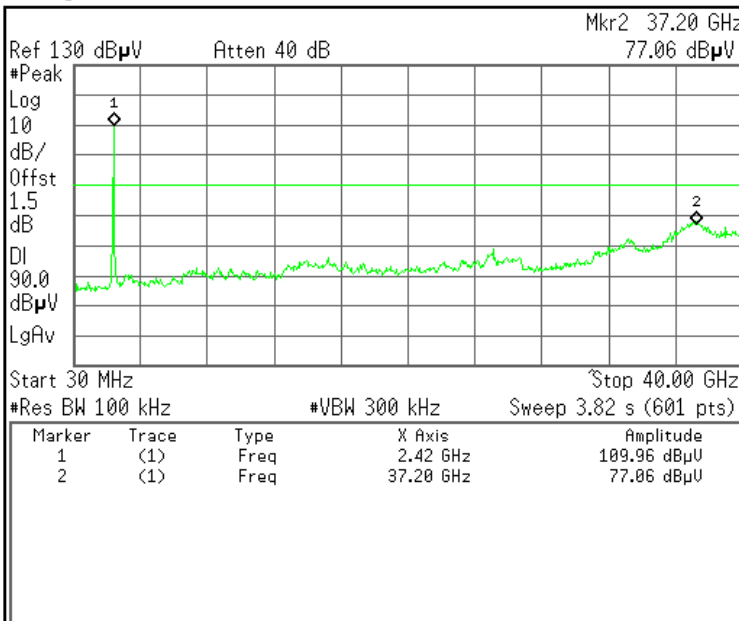
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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draft 802.11gn Wide-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

CH Low

Agilent



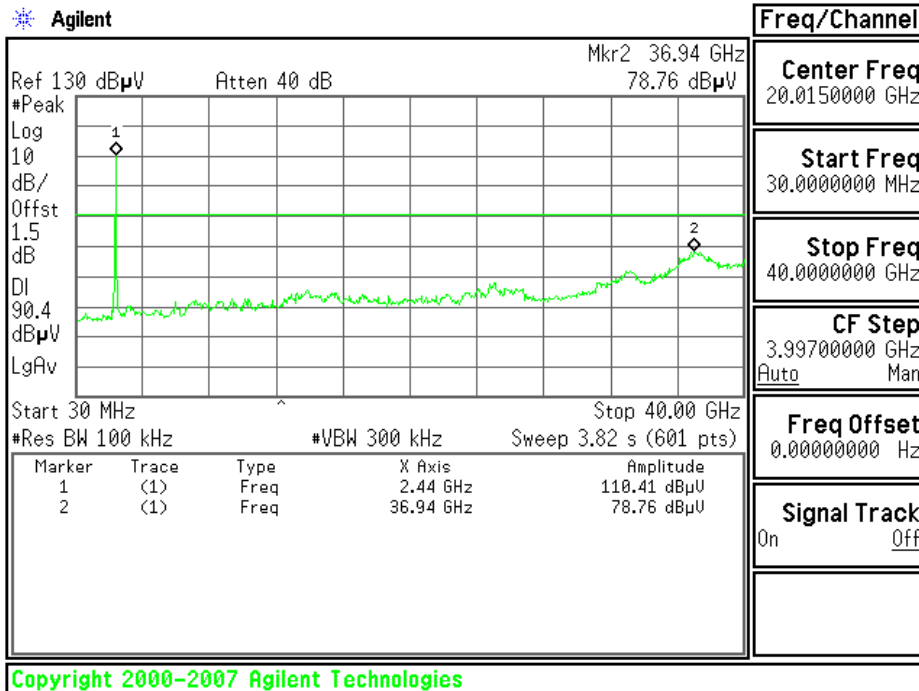
Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step Auto Man 3.99700000 GHz
Freq Offset 0.00000000 Hz
Signal Track On Off

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CH Mid

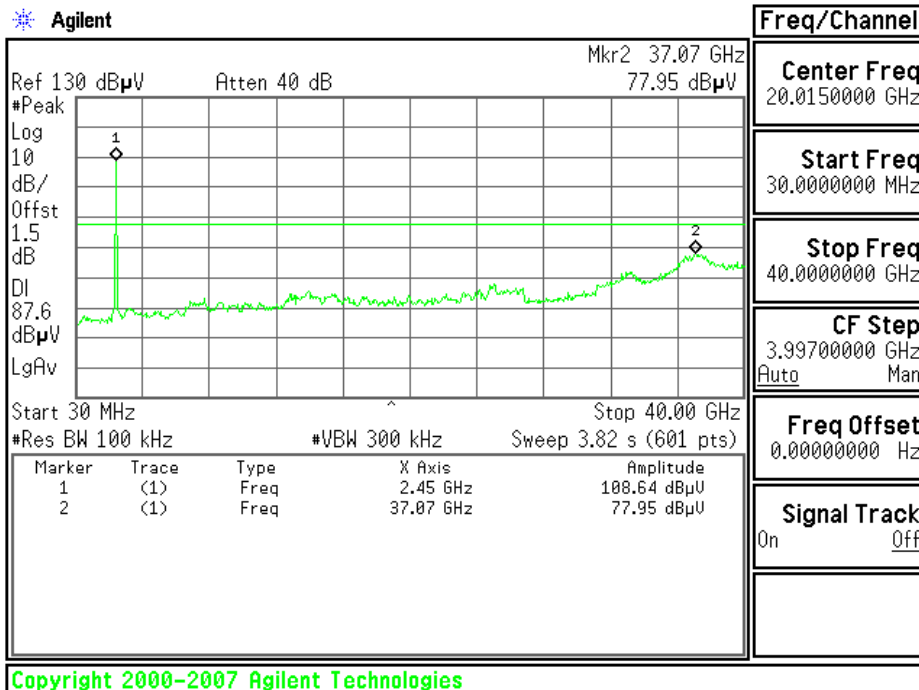
Agilent



Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step 3.99700000 GHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

CH High

Agilent



Freq/Channel
Center Freq 20.0150000 GHz
Start Freq 30.0000000 MHz
Stop Freq 40.0000000 GHz
CF Step 3.99700000 GHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

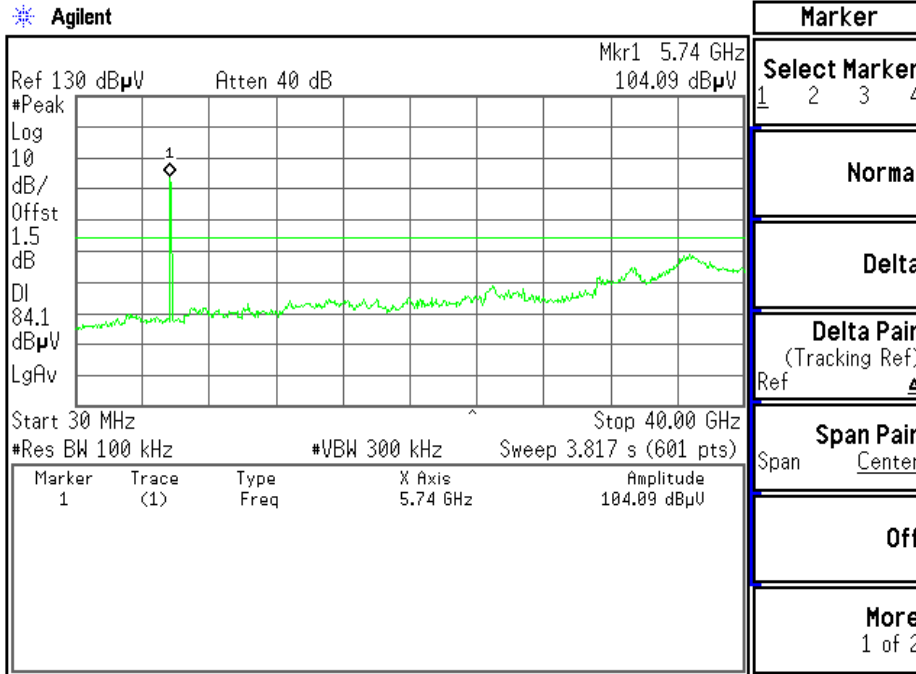


5725-5825

IEEE 802.11a mode

CH Low

Agilent

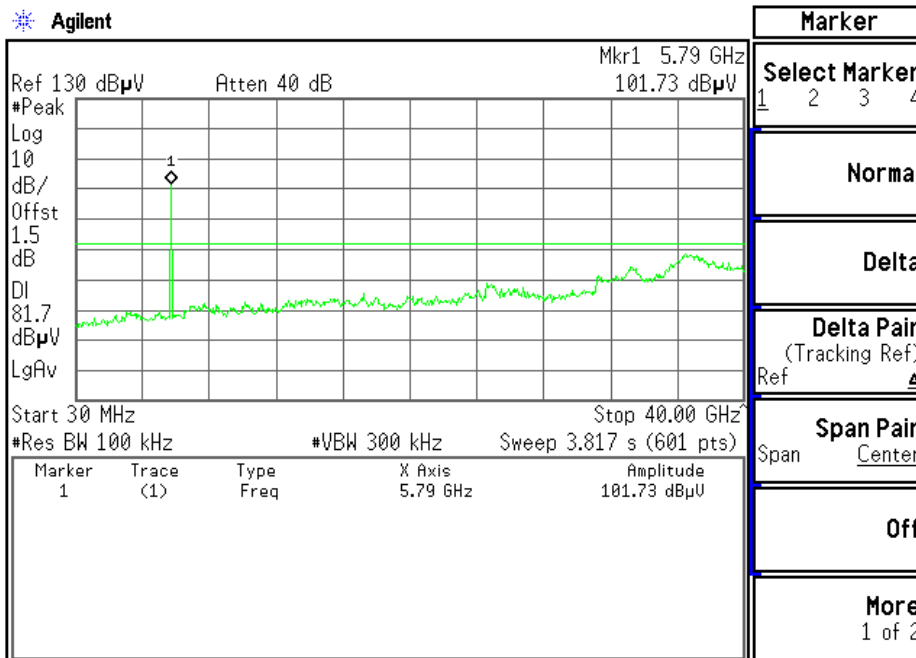


Marker	
Select Marker	1 2 3 4
Normal	
Delta	
Delta Pair (Tracking Ref)	Ref ▲
Span Pair	Span Center
Off	
More	1 of 2

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CH Mid

Agilent



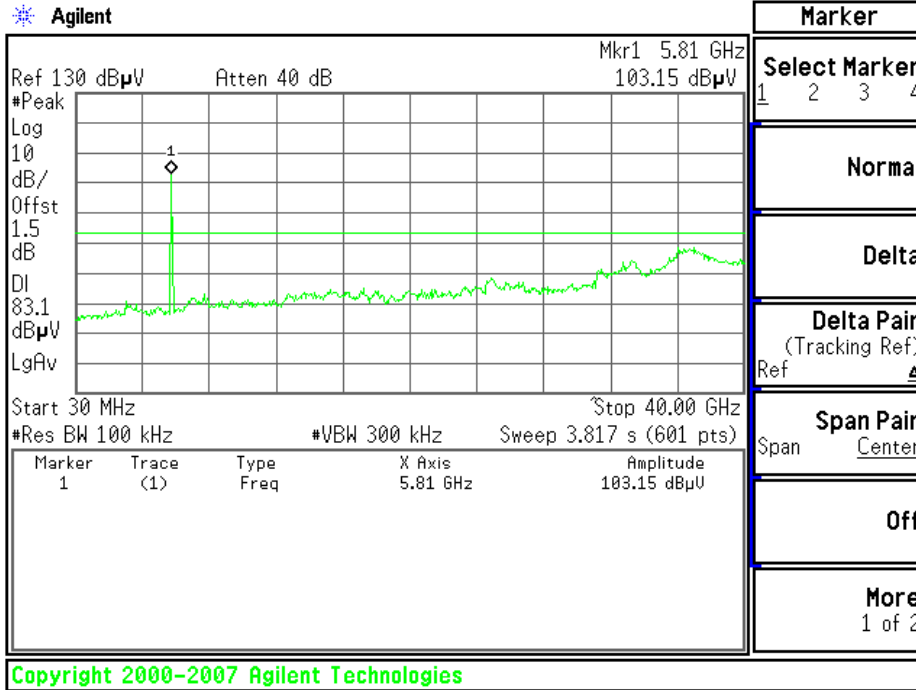
Marker	
Select Marker	1 2 3 4
Normal	
Delta	
Delta Pair (Tracking Ref)	Ref ▲
Span Pair	Span Center
Off	
More	1 of 2

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CH High

Agilent

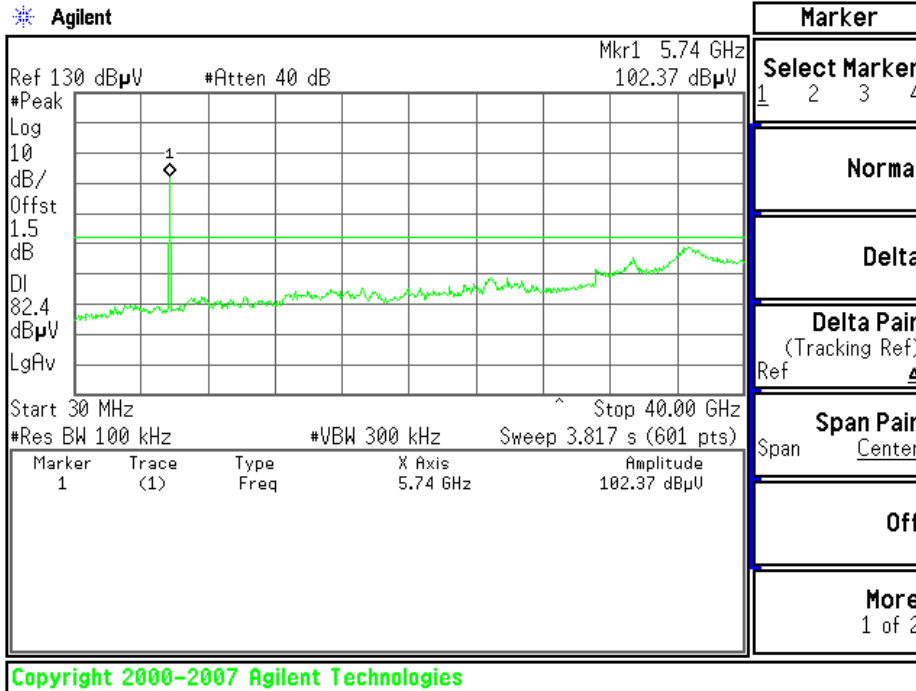


Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

draft 802.11an Standard-20 MHz Channel mode / Chain 0

CH Low

Agilent

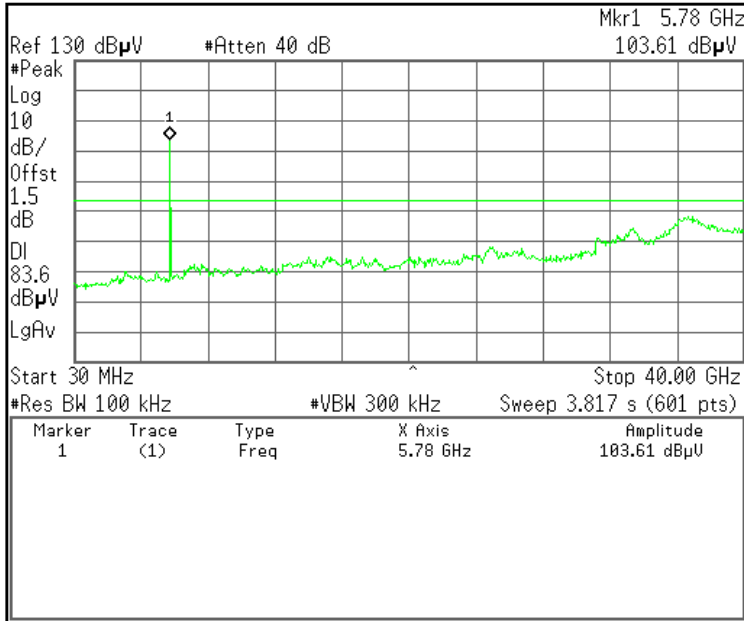


Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		



CH Mid

Agilent

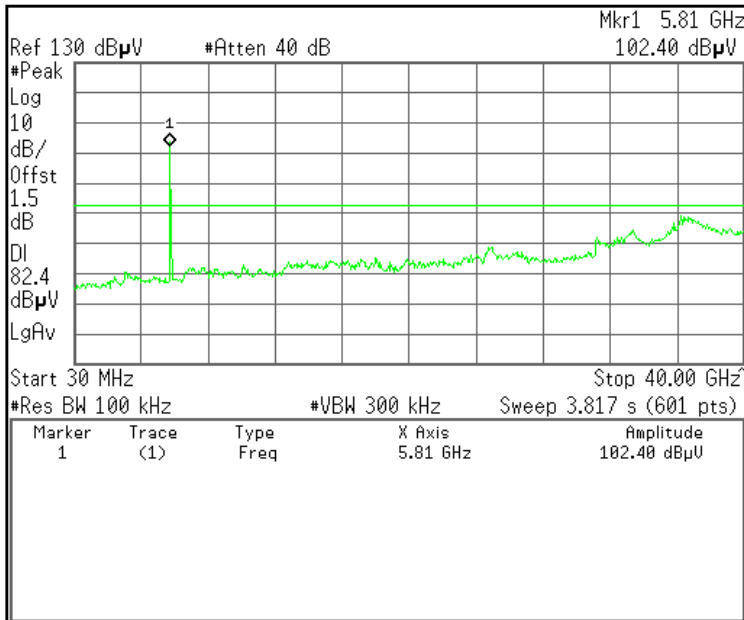


Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

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CH High

Agilent



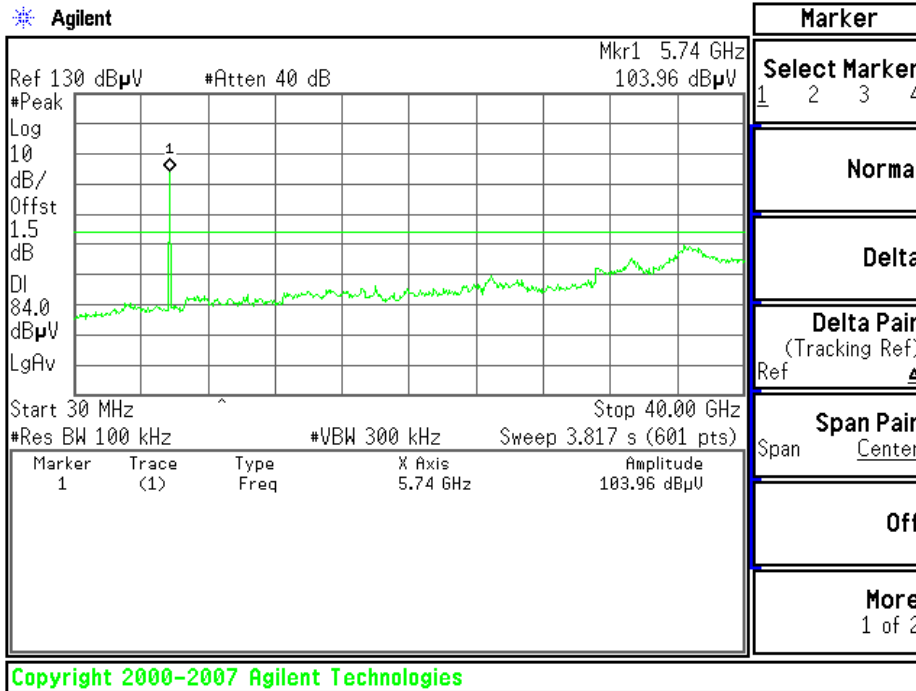
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

File Operation Status. A:\SCREEN113.GIF file saved

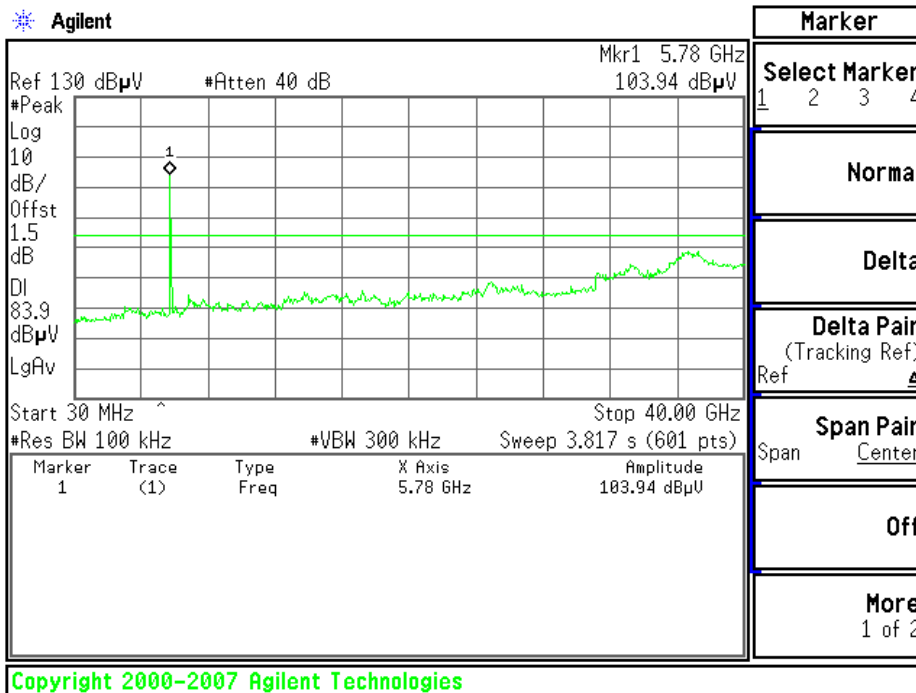


draft 802.11an Standard-20 MHz Channel mode / Chain 1

CH Low



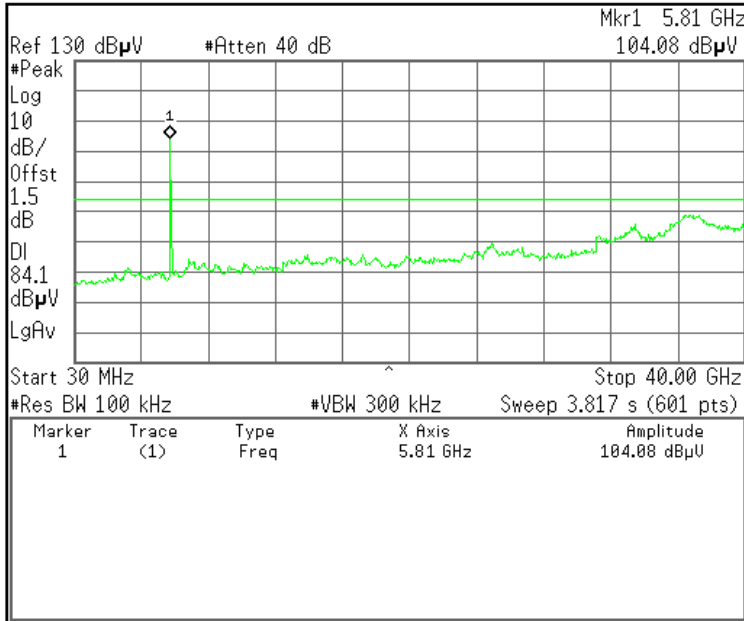
CH Mid





CH High

Agilent



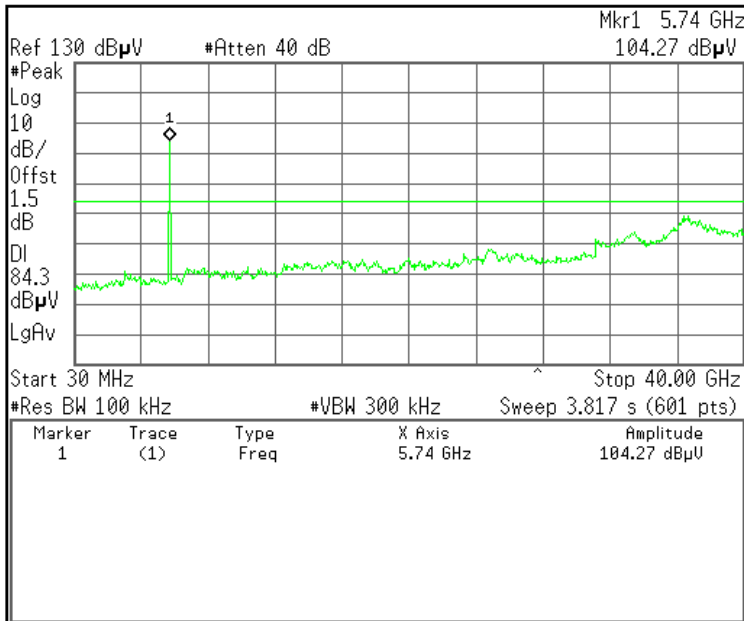
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		
Span Pair	Span	Center	
Off			
More	1 of 2		

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draft 802.11an Standard-20 MHz Channel mode / Chain 2

CH Low

Agilent



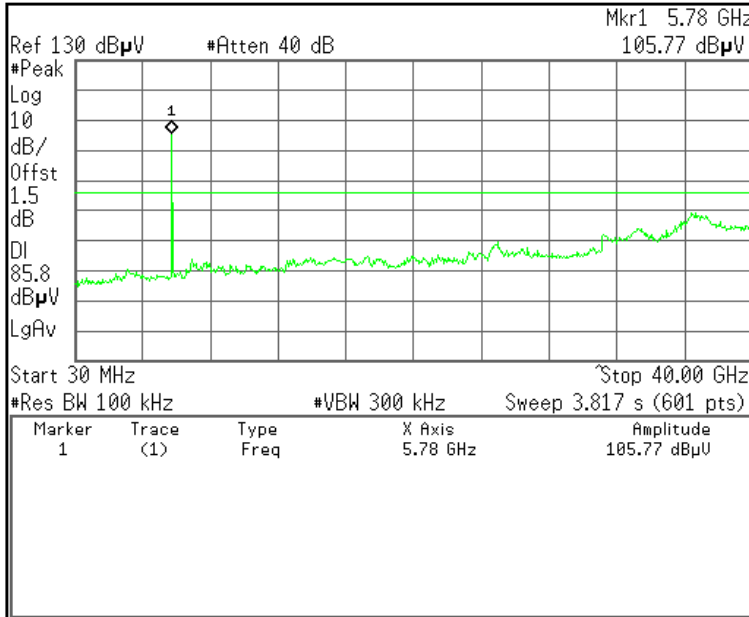
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		
Span Pair	Span	Center	
Off			
More	1 of 2		

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CH Mid

Agilent

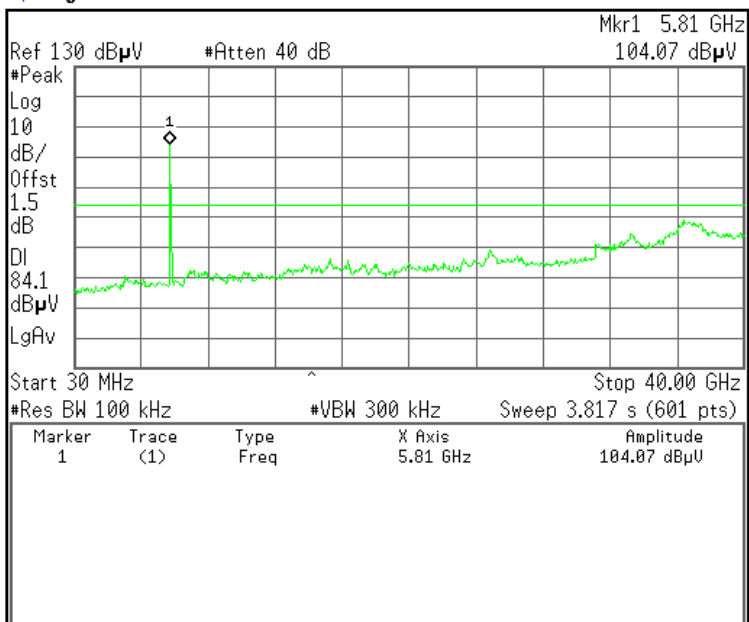


Marker				
Select Marker	1	2	3	4
Normal				
Delta				
Delta Pair (Tracking Ref)				
Ref	▲			
Span Pair				
Span	Center			
Off				
More 1 of 2				

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CH High

Agilent



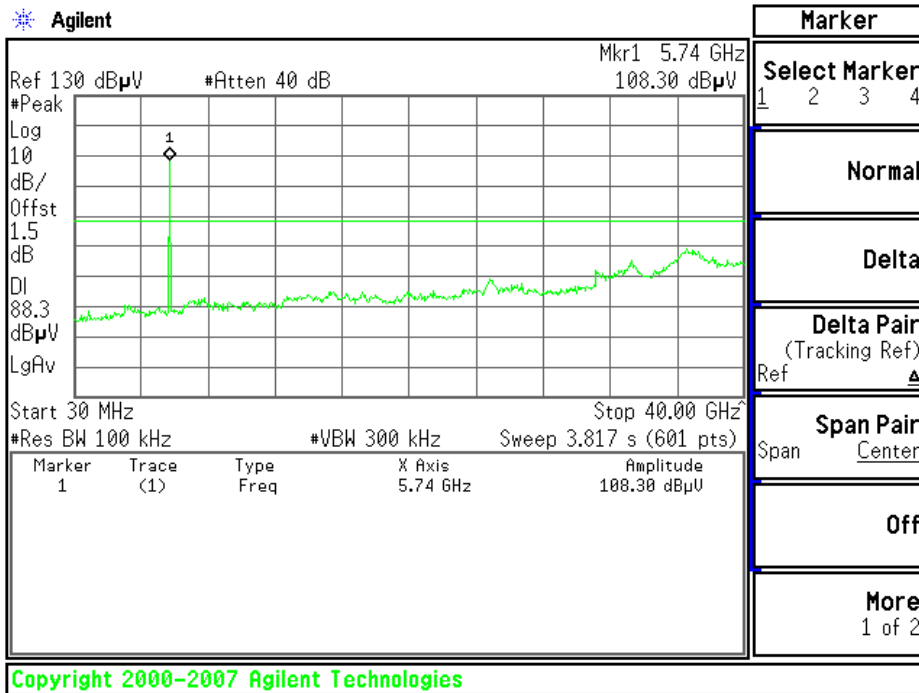
Marker				
Select Marker	1	2	3	4
Normal				
Delta				
Delta Pair (Tracking Ref)				
Ref	▲			
Span Pair				
Span	Center			
Off				
More 1 of 2				

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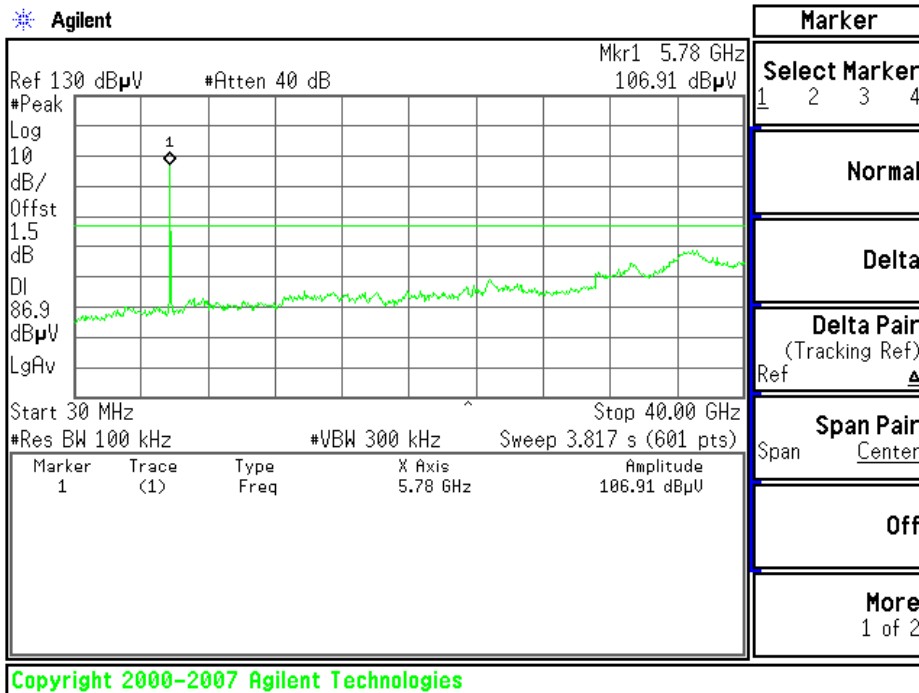


draft 802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

CH Low



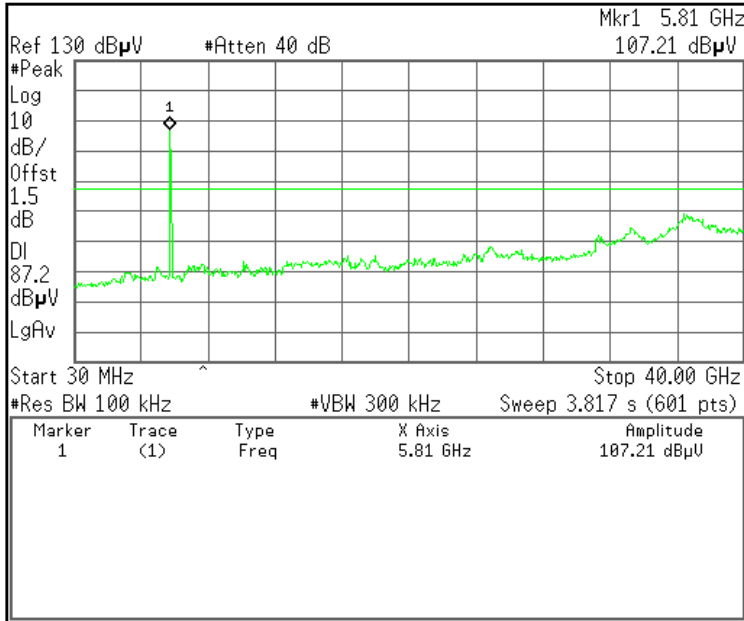
CH Mid





CH High

Agilent



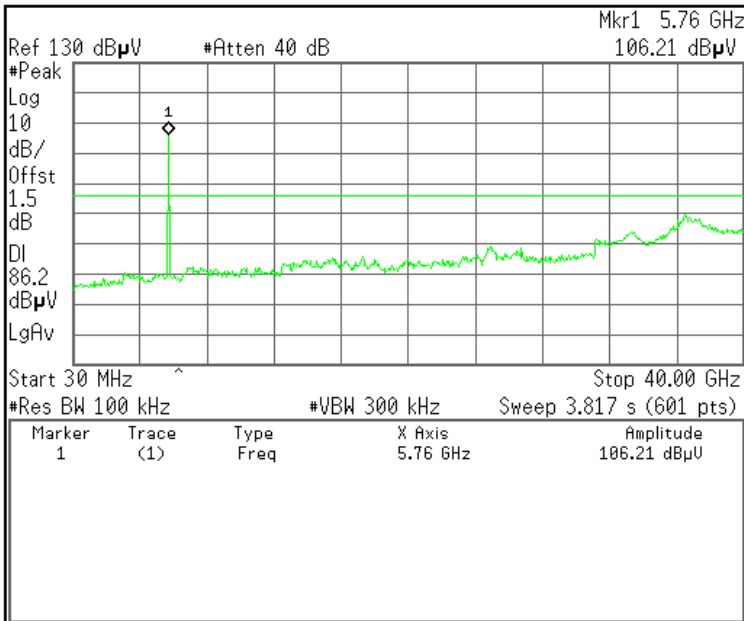
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

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draft 802.11an Standard-40 MHz Channel mode / Chain 0

CH Low

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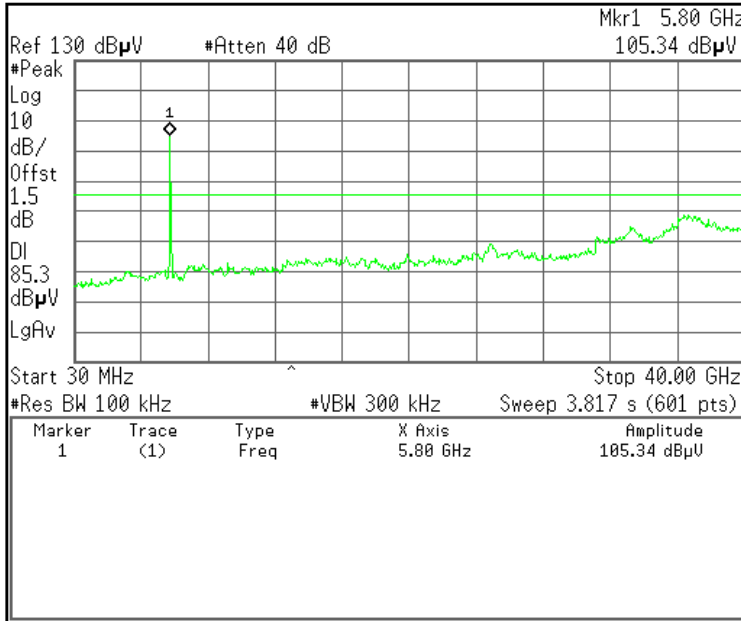
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

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CH High

Agilent



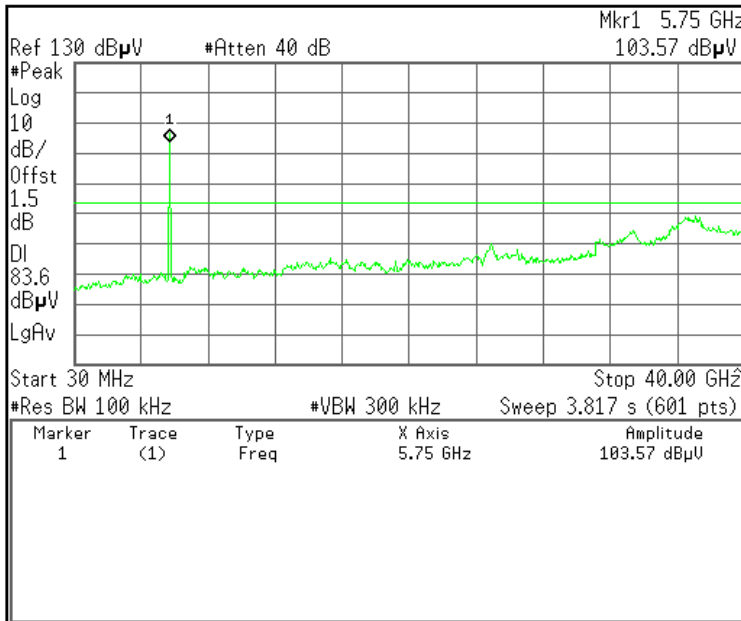
Marker
Select Marker 1 2 3 4
Normal
Delta
Delta Pair (Tracking Ref) Ref ▲
Span Pair Span Center
Off
More 1 of 2

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draft 802.11an Standard-40 MHz Channel mode / Chain 1

CH Low

Agilent



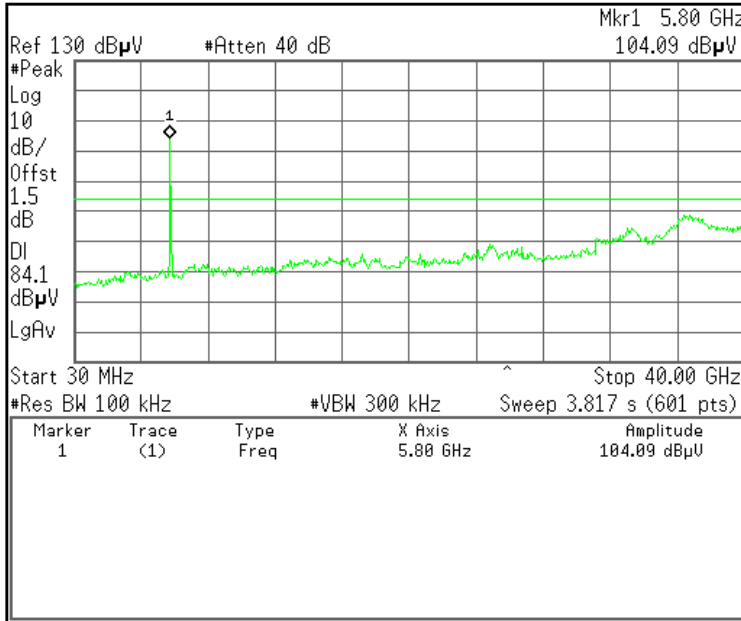
Marker
Select Marker 1 2 3 4
Normal
Delta
Delta Pair (Tracking Ref) Ref ▲
Span Pair Span Center
Off
More 1 of 2

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CH High

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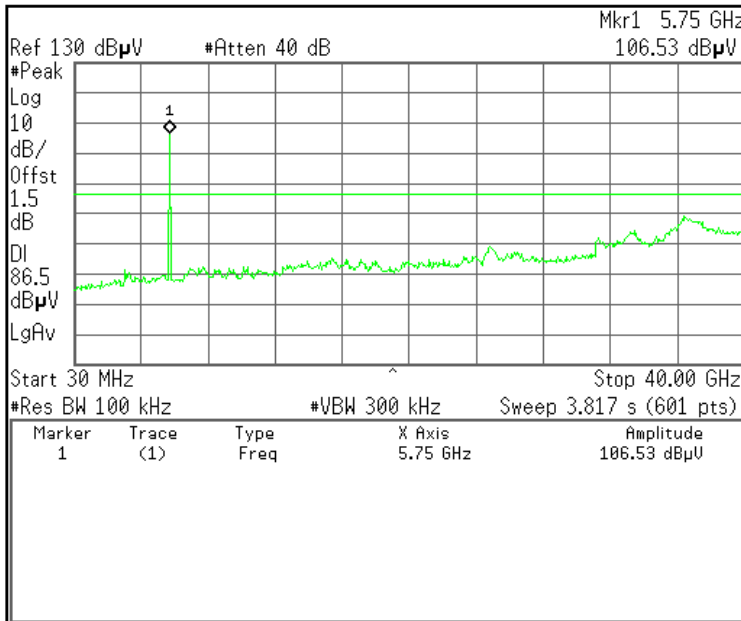
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref	▲	
Span Pair	Span	Center	
Off			
More 1 of 2			

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draft 802.11an Standard-40 MHz Channel mode / Chain 2

CH Low

Agilent



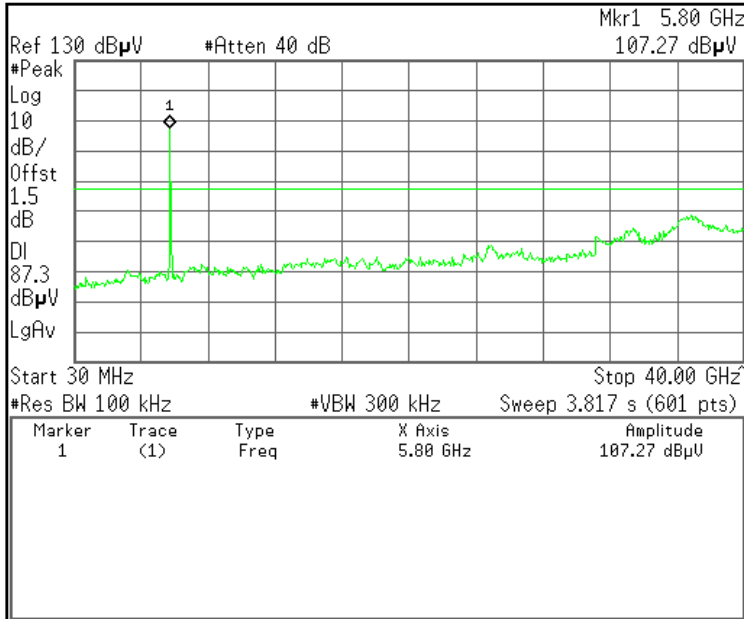
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref	▲	
Span Pair	Span	Center	
Off			
More 1 of 2			

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CH High

Agilent



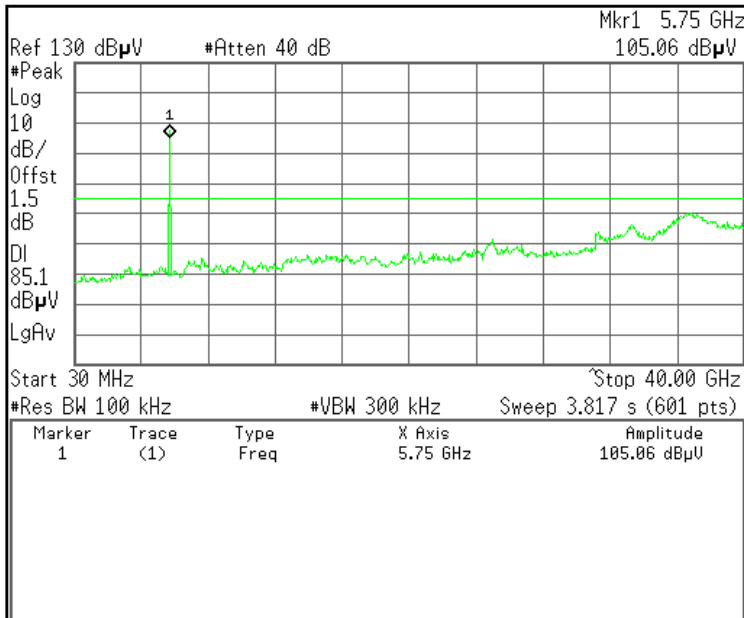
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

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draft 802.11an Standard-40 MHz Channel mode / Chain 0+ Chain 1+ Chain 2

CH Low

Agilent



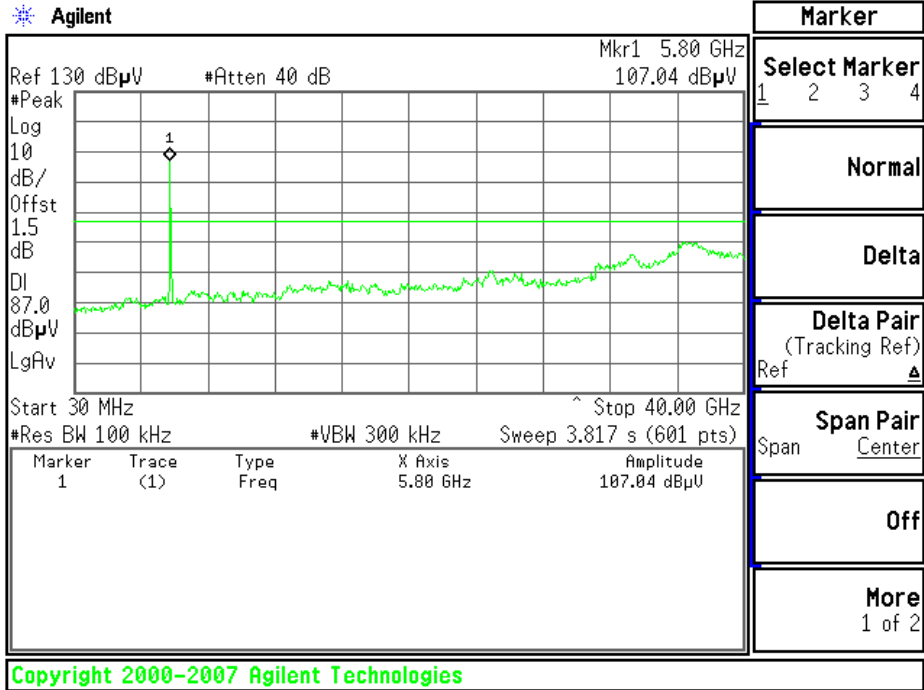
Marker			
Select Marker	1	2	3 4
Normal			
Delta			
Delta Pair (Tracking Ref)	Ref		▲
Span Pair	Span	Center	
Off			
More	1 of 2		

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CH High

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RADIATED EMISSIONS

LIMIT

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

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

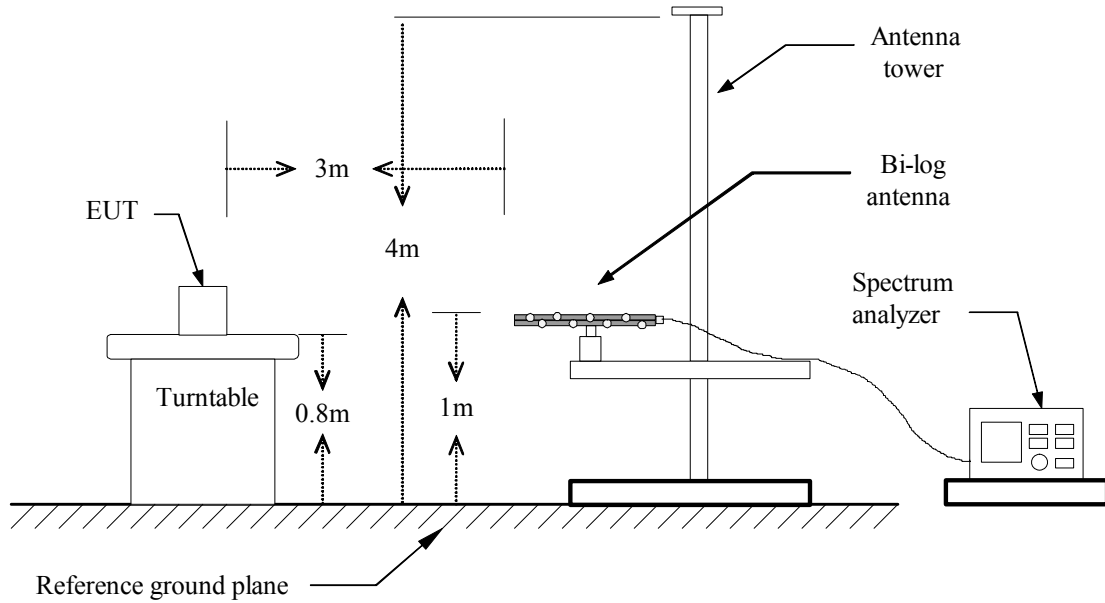
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of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

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

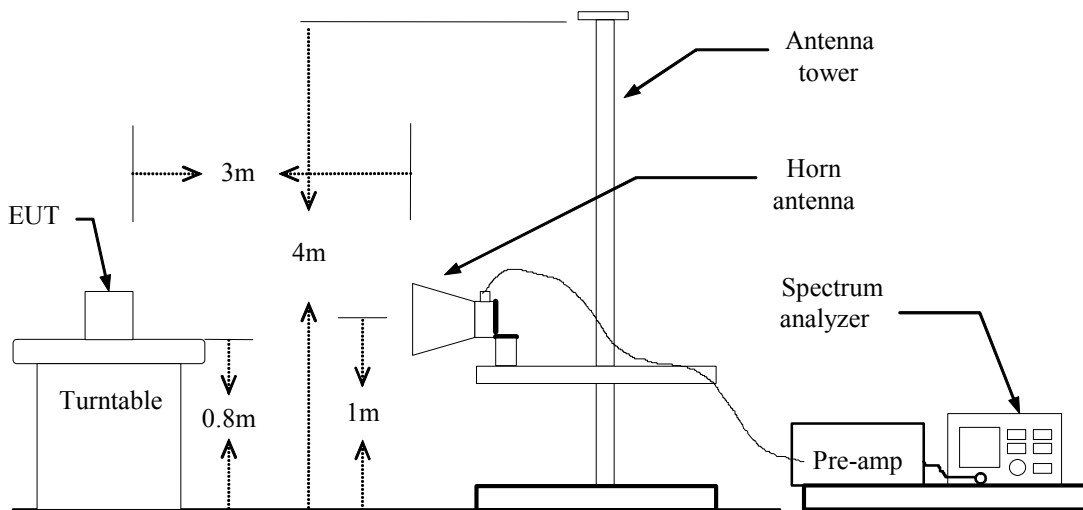
Frequency (MHz)	Field Strength ($\mu\text{V/m}$ at 3-meter)	Field Strength (dB $\mu\text{V/m}$ at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Configuration

Below 1 GHz



Above 1 GHz





TEST PROCEDURE

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

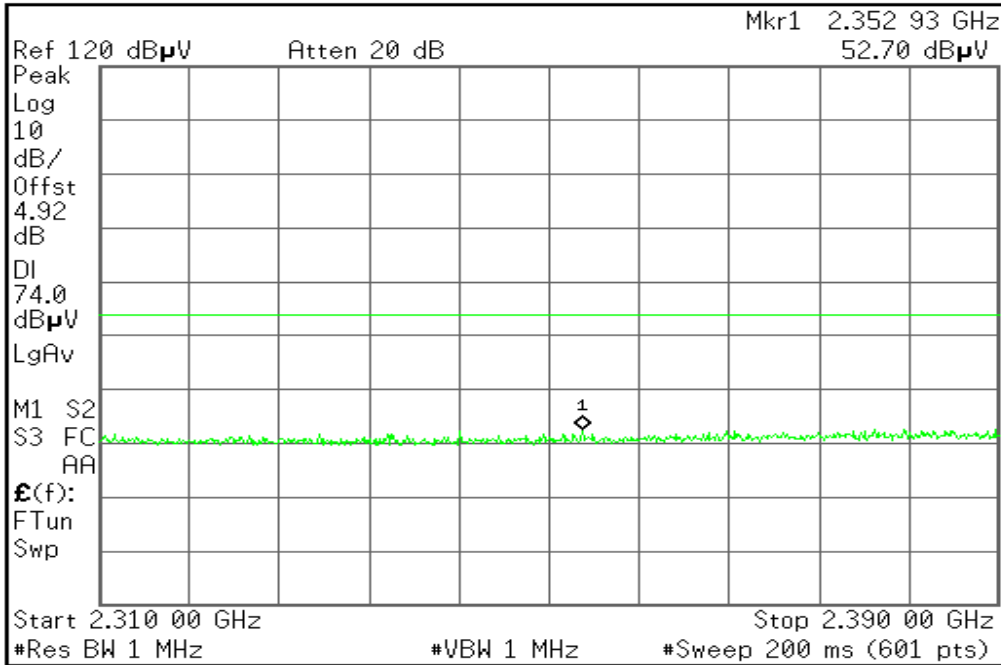


TEST RESULTS

RESTRICTED BANDEDGE (b Mode, Low Channel, Horizontal)

PEAK

Agilent

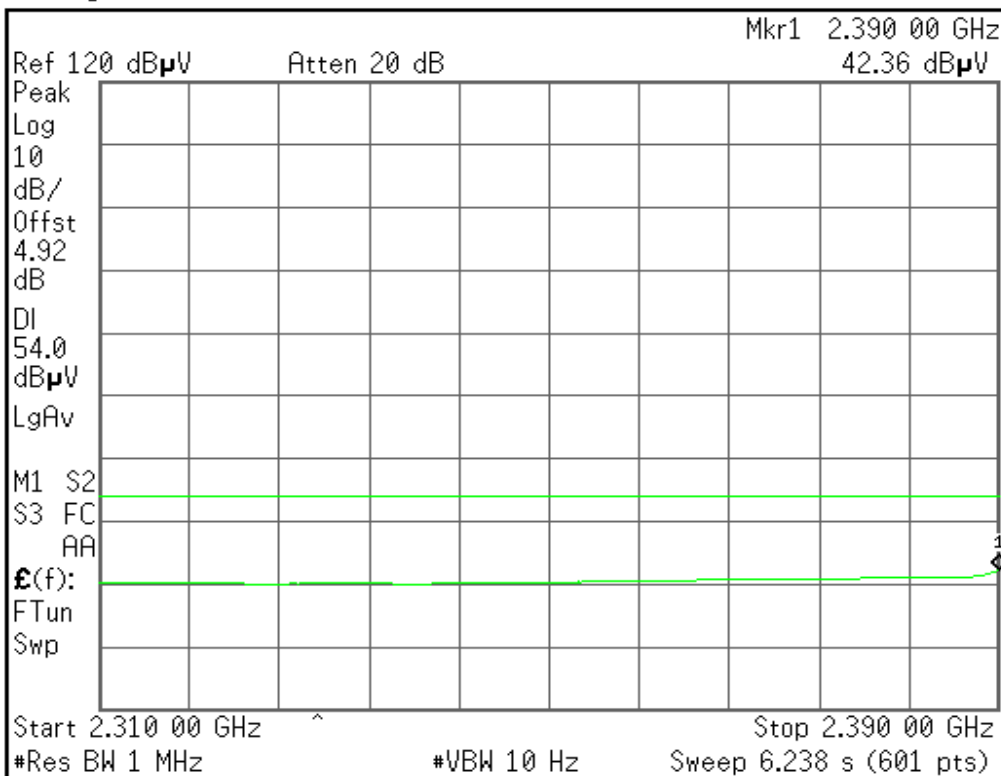


Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More 1 of 2

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Freq/Channel
Center Freq 2.35000000 GHz
Start Freq 2.31000000 GHz
Stop Freq 2.39000000 GHz
CF Step 8.00000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

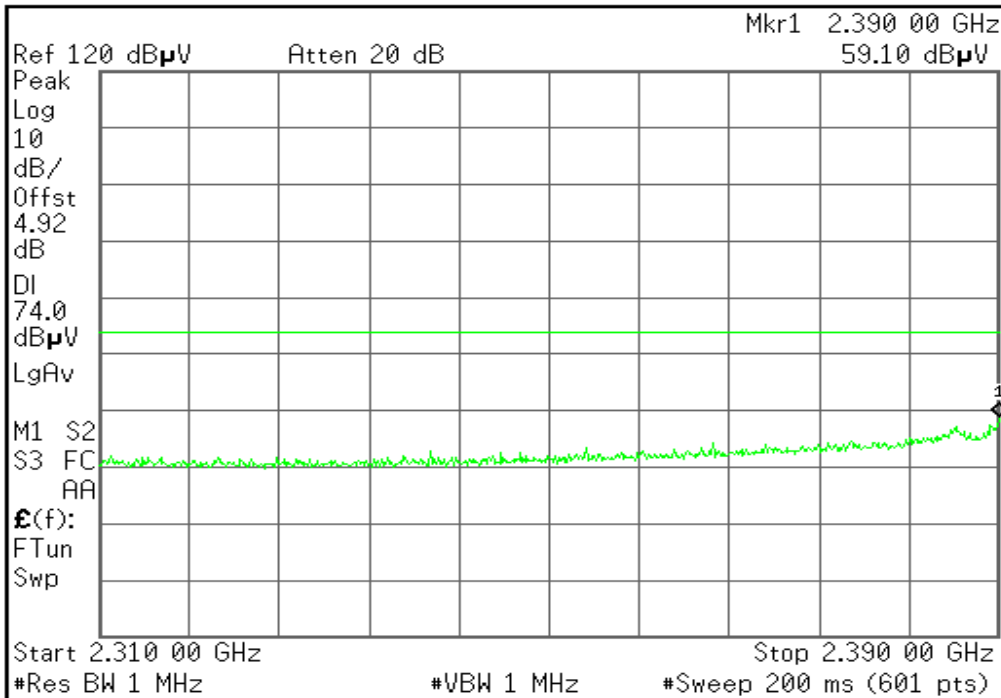
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RESTRICTED BANDEDGE (b Mode, Low Channel, Vertical)

PEAK

Agilent

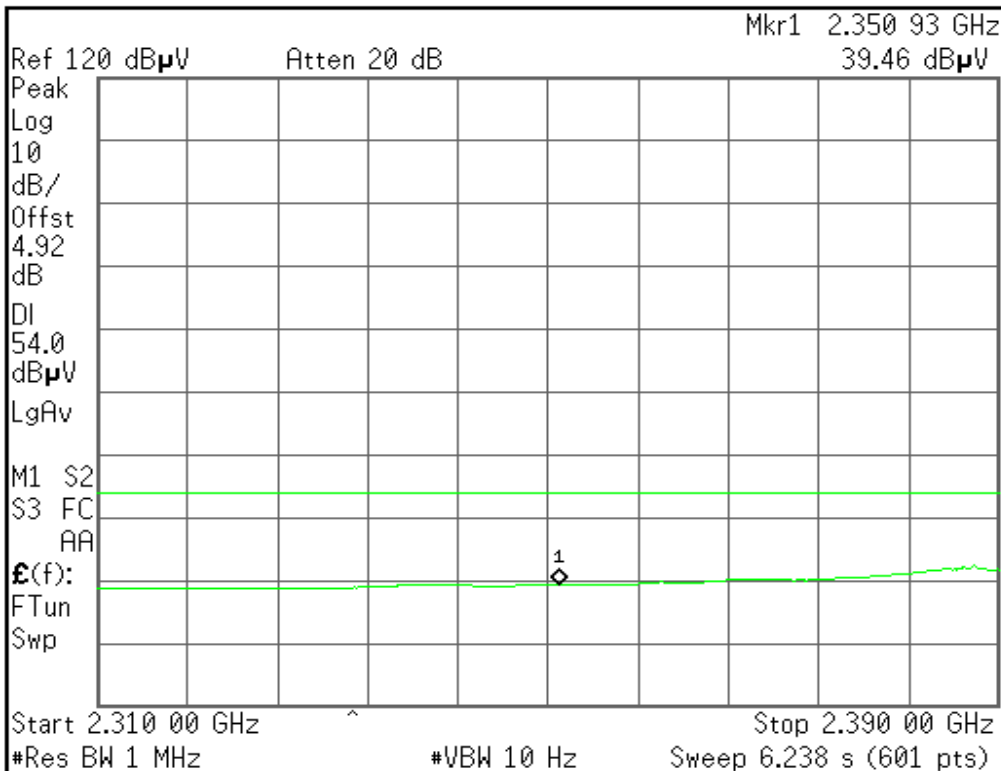


Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz
	Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Trace		
1	2	3
Trace		
Clear Write		
Max Hold		
Min Hold		
View		
Blank		
More 1 of 2		

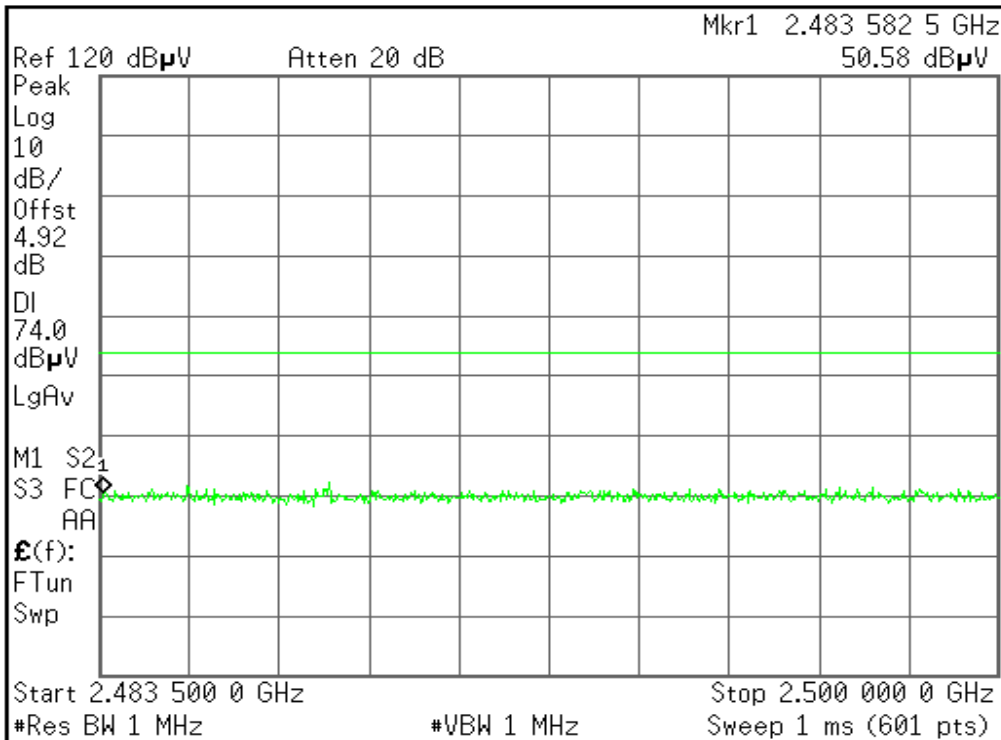
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RESTRICTED BANDEDGE (b Mode, High Channel, Horizontal)

PEAK

Agilent

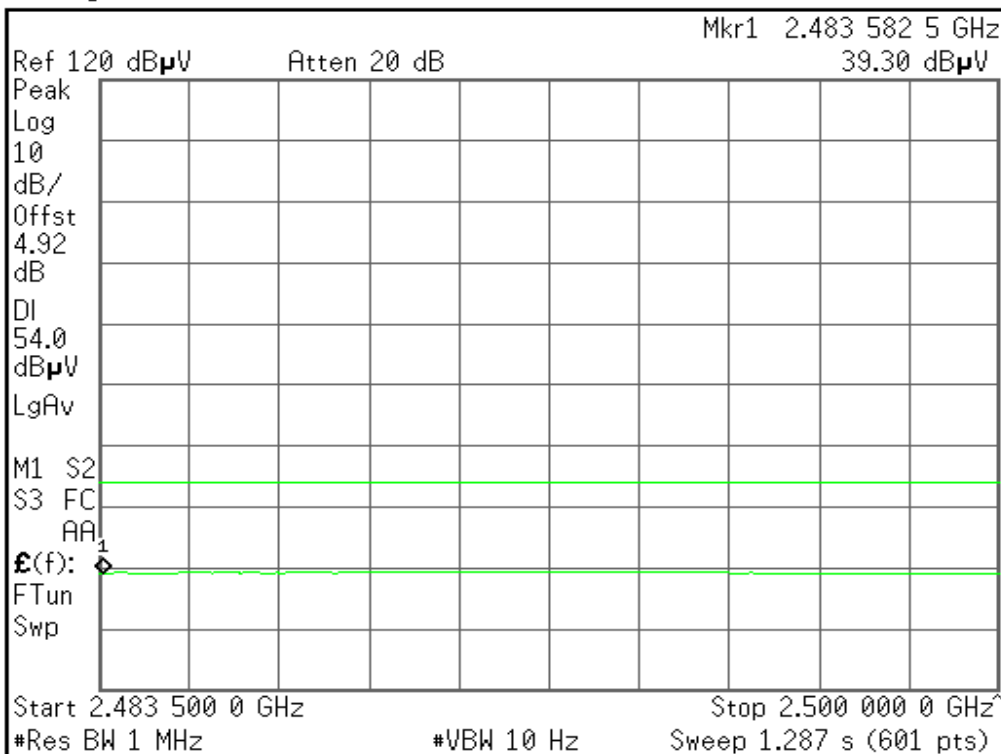


Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz
	Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz
	Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

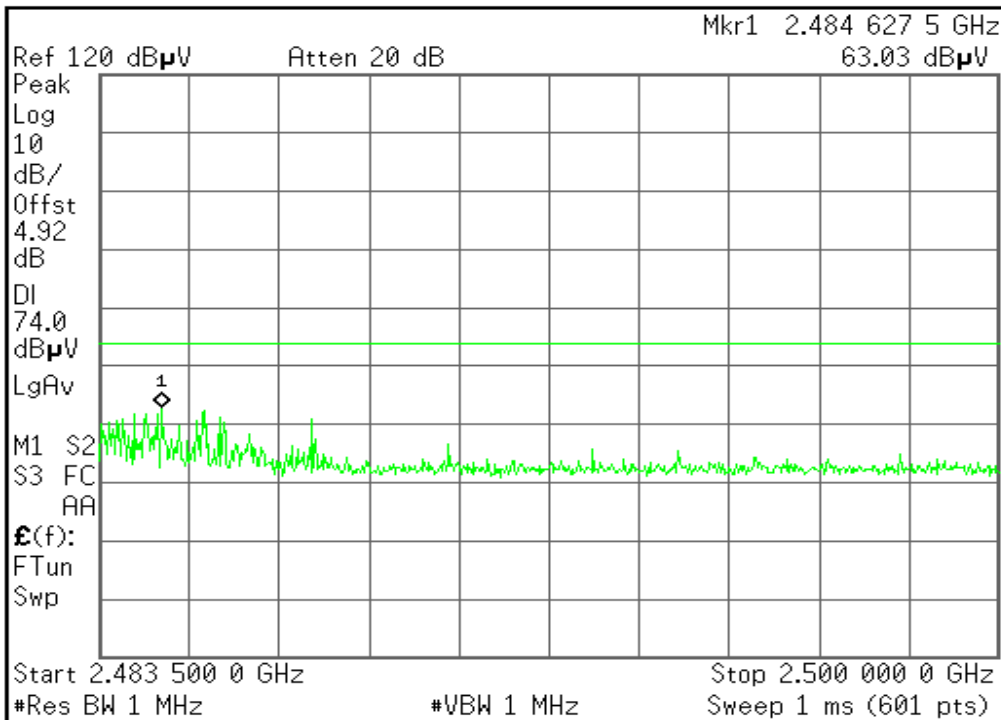
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RESTRICTED BANDEDGE (b Mode, High Channel, Vertical)

PEAK

Agilent

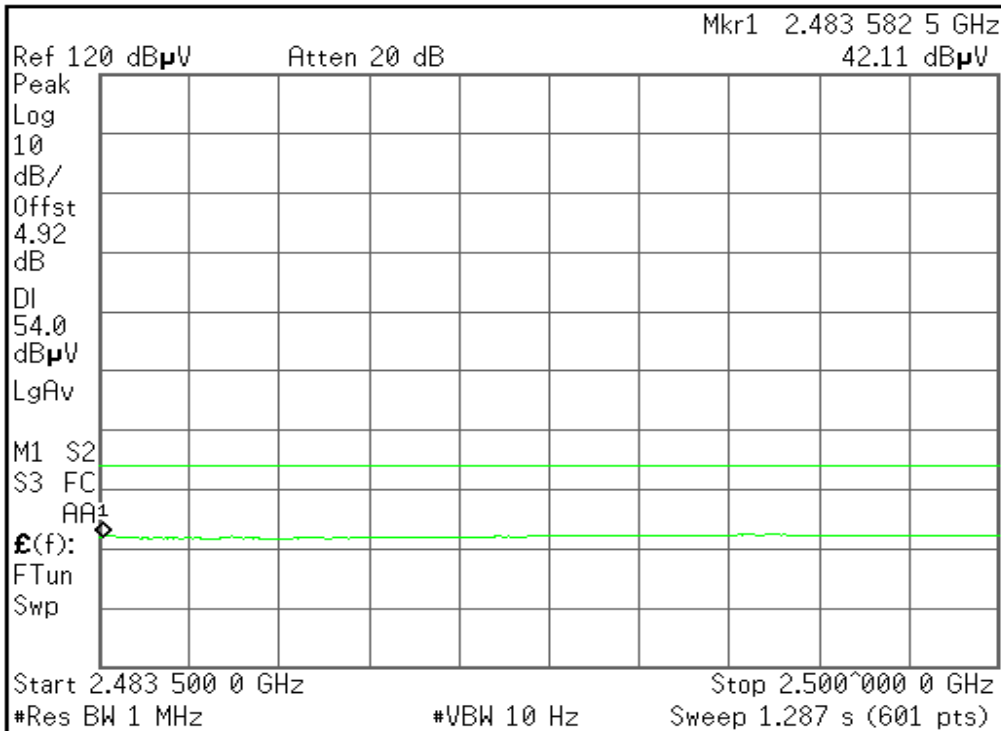


Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Peak Search	
Next Peak	
Next Pk Right	
Next Pk Left	
Min Search	
Pk-Pk Search	
Mkr → CF	
More 1 of 2	

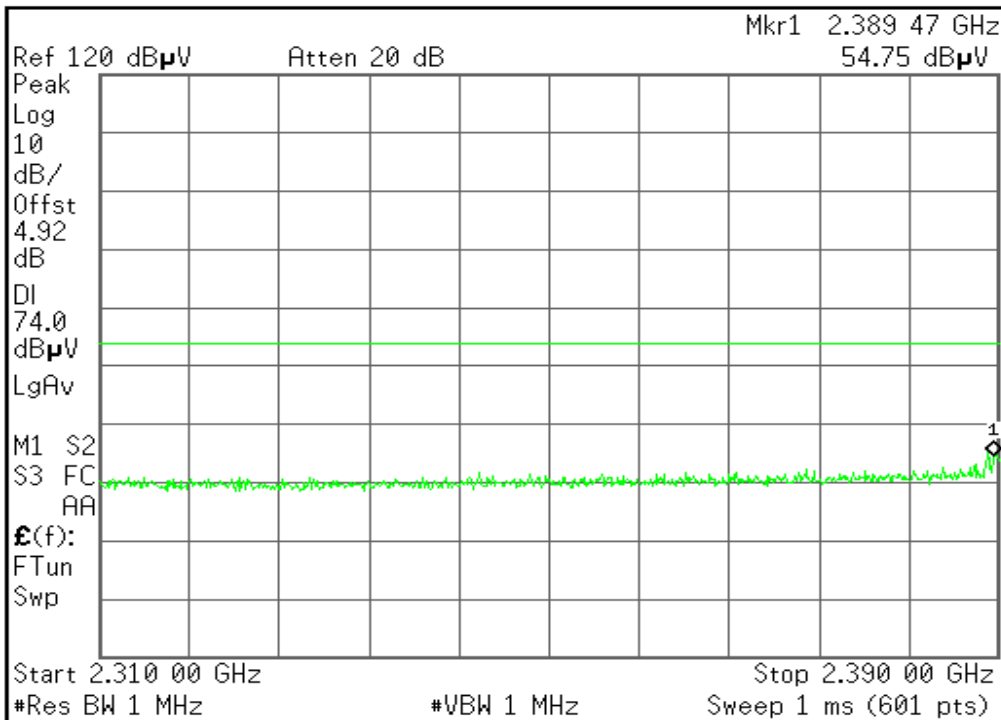
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RESTRICTED BANDEDGE (g Mode, Low Channel, Horizontal)

PEAK

Agilent

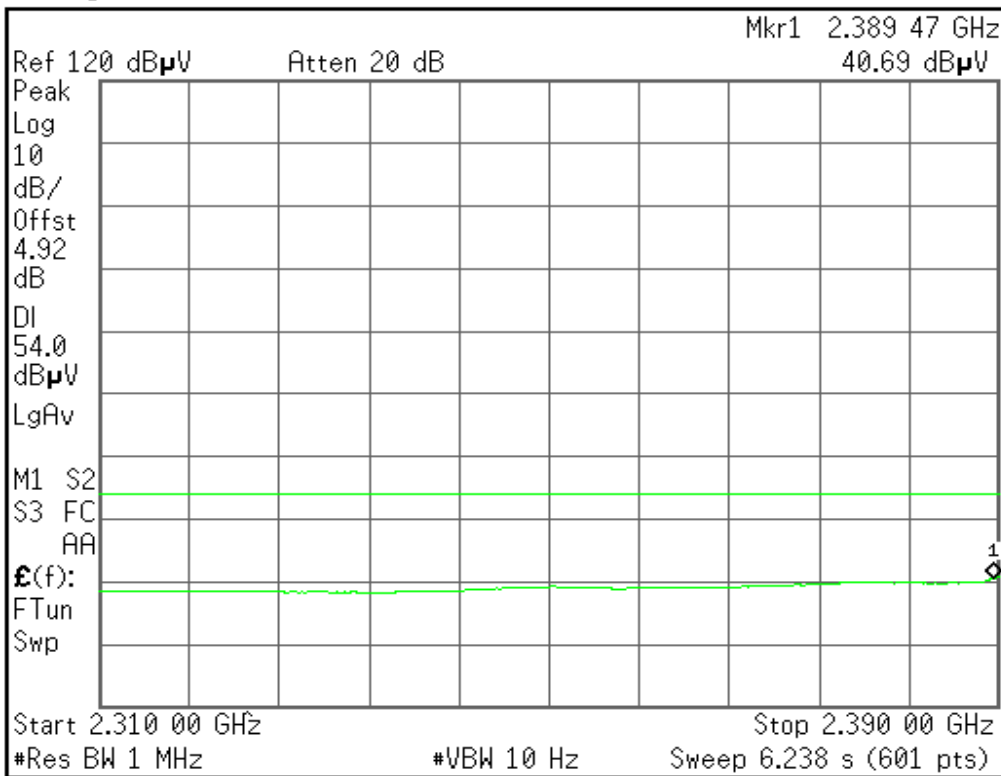


Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

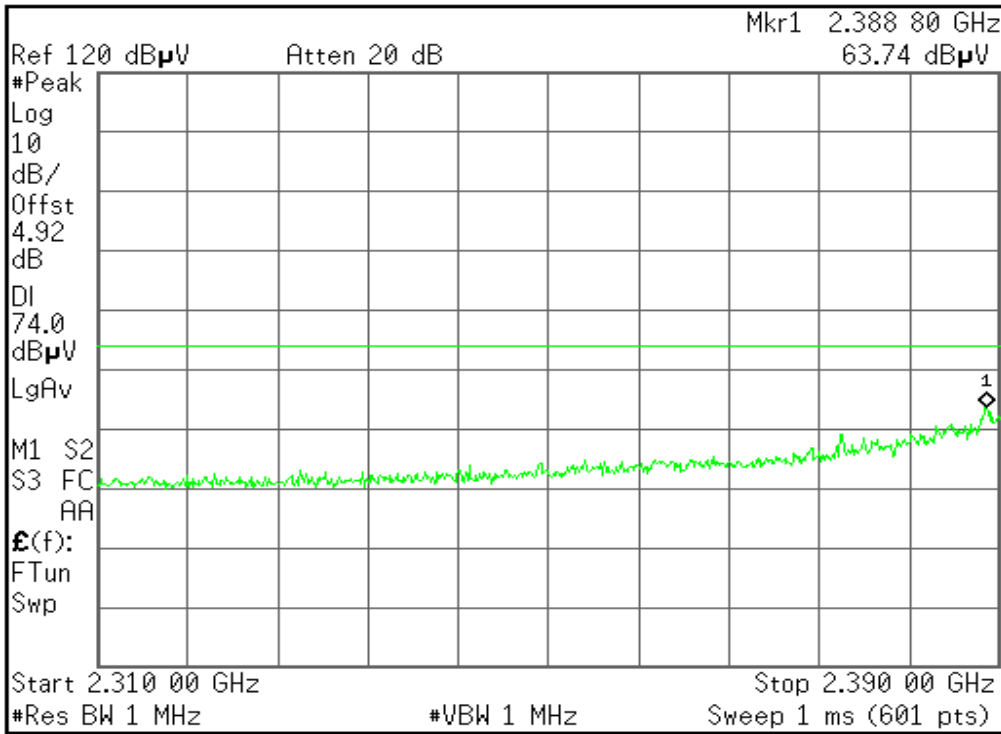
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RESTRICTED BANDEDGE (g Mode, Low Channel, Vertical)

PEAK

Agilent



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Min Search

Pk-Pk Search

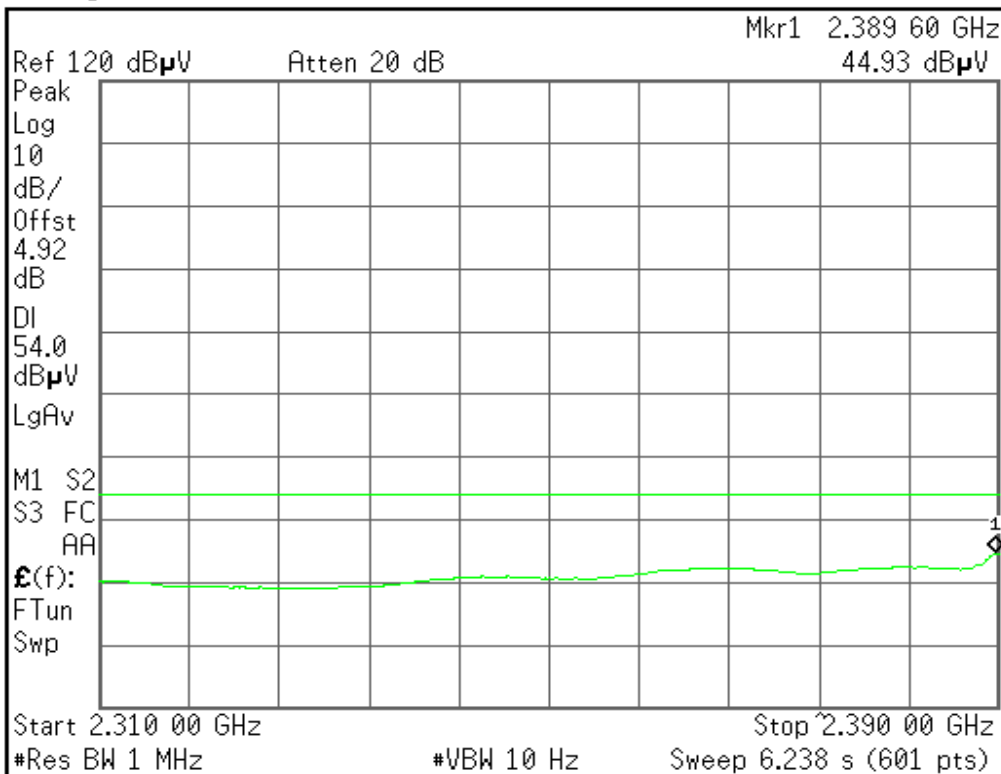
Mkr \rightarrow CF

More
1 of 2

Unable to save file

AVG

Agilent



Freq/Channel

Center Freq
2.35000000 GHz

Start Freq
2.31000000 GHz

Stop Freq
2.39000000 GHz

CF Step
8.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

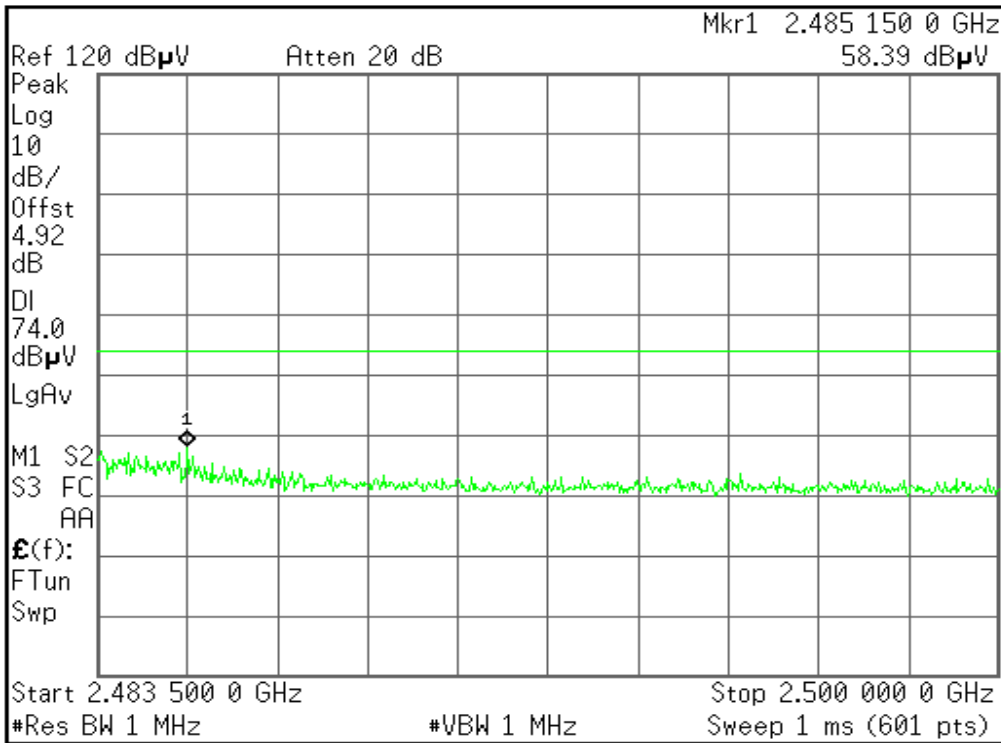
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RESTRICTED BANDEDGE (g Mode, High Channel, Horizontal)

PEAK

Agilent

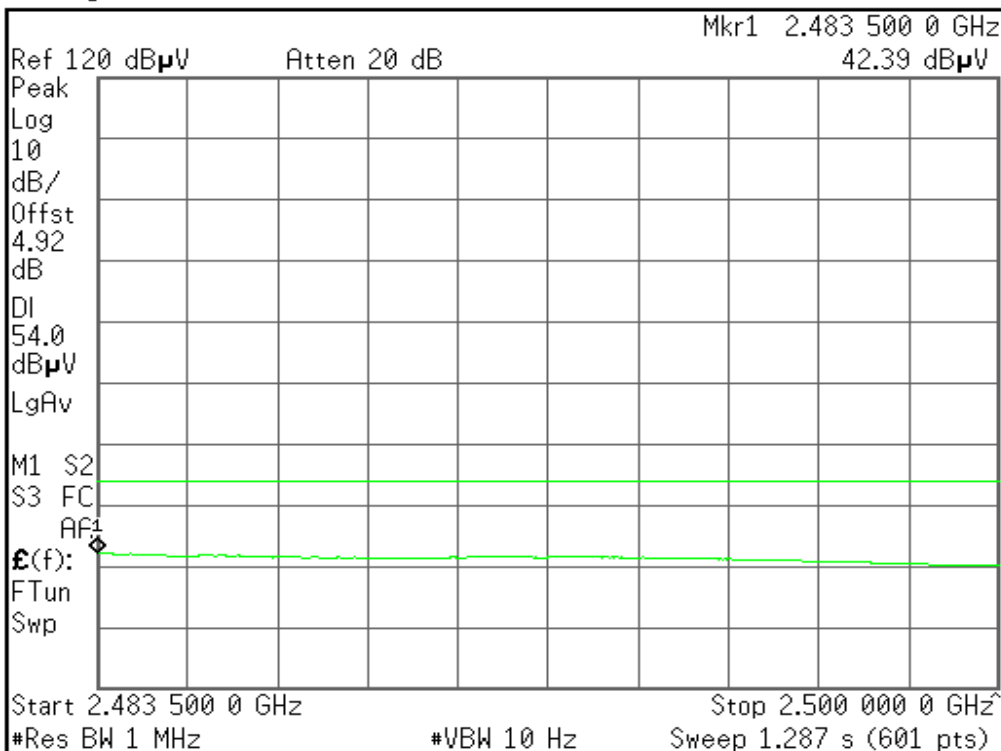


Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

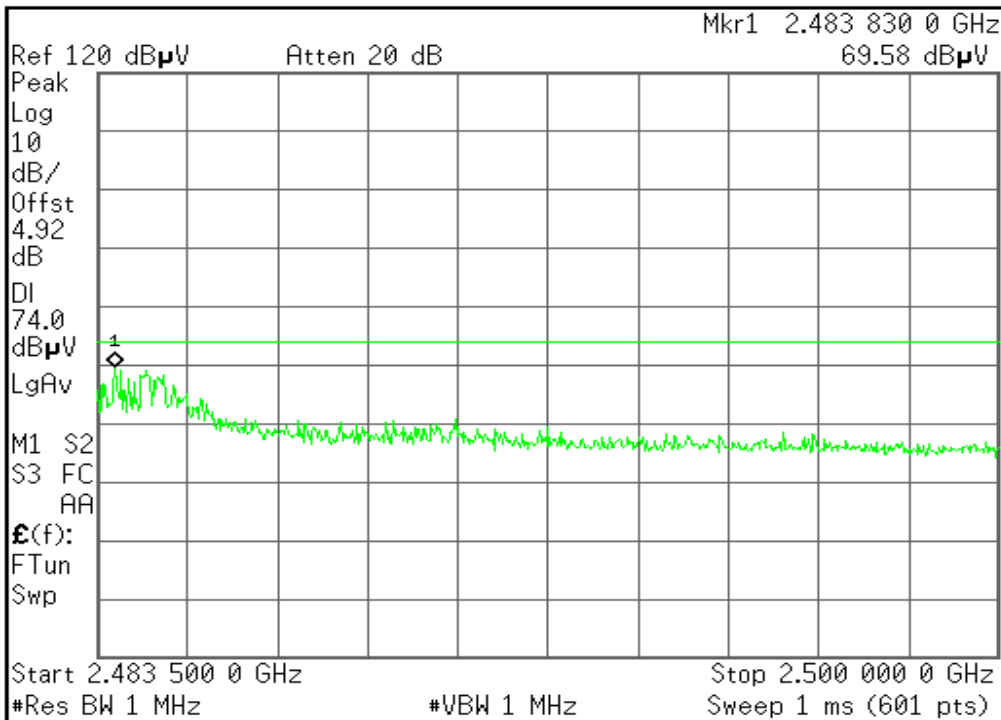
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RESTRICTED BANDEDGE (g Mode, High Channel, Vertical)

PEAK

Agilent

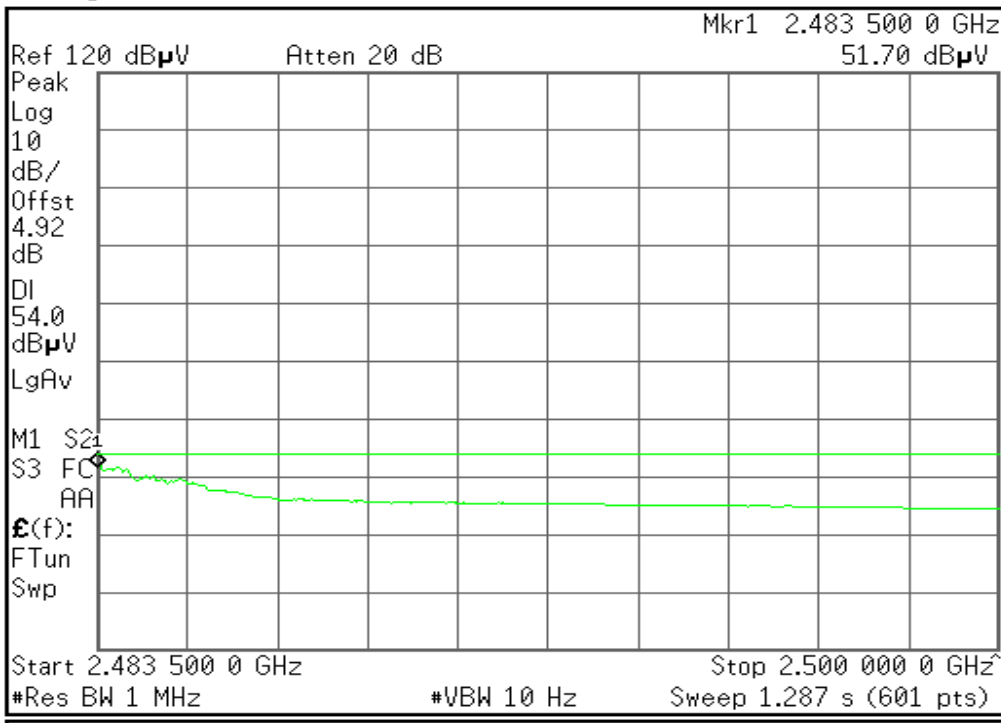


Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Freq/Channel	
Center Freq	2.49175000 GHz
Start Freq	2.48350000 GHz
Stop Freq	2.50000000 GHz
CF Step	1.65000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

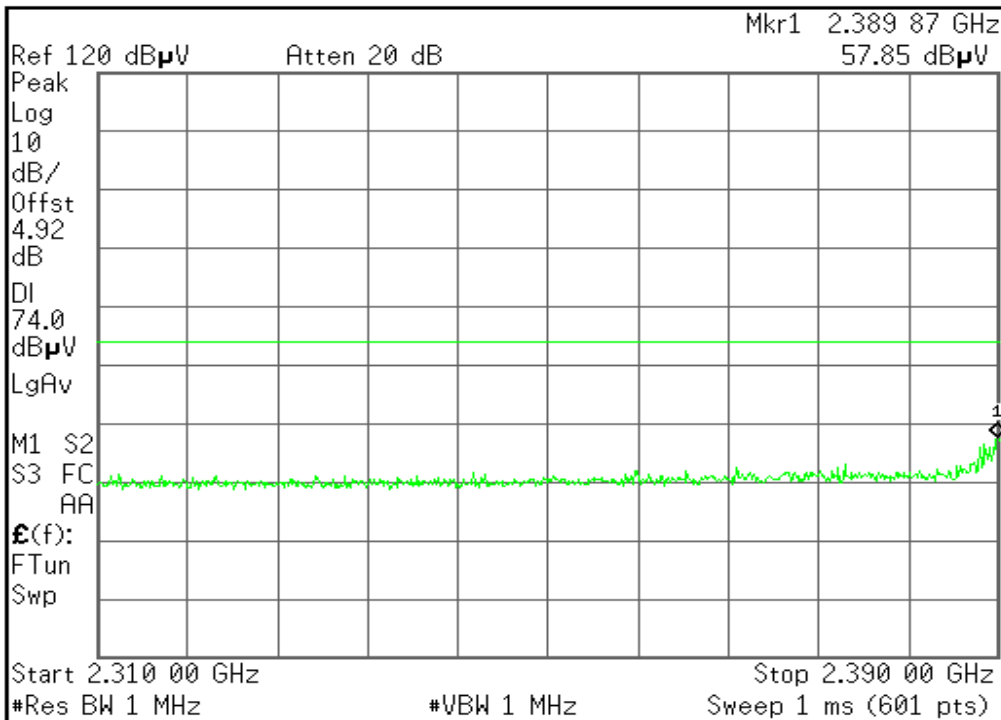
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RESTRICTED BANDEDGE (draft 802.11gn Standard-20 MHz Channel mode, Low Channel, Horizontal)

PEAK

Agilent

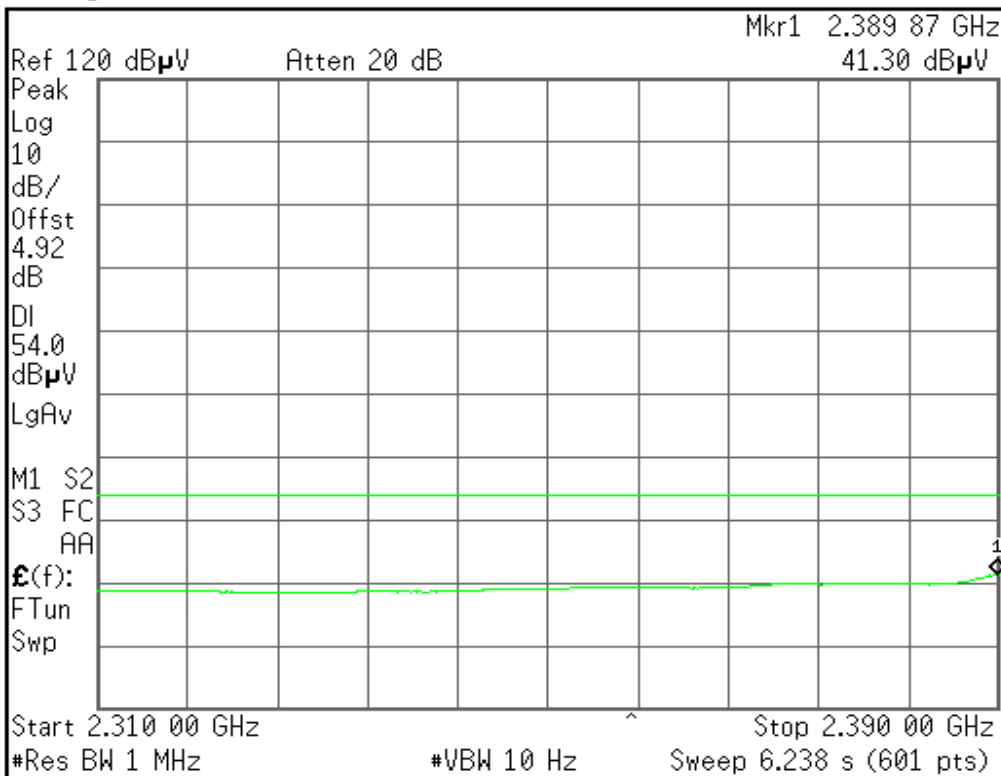


Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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AVG

Agilent



Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

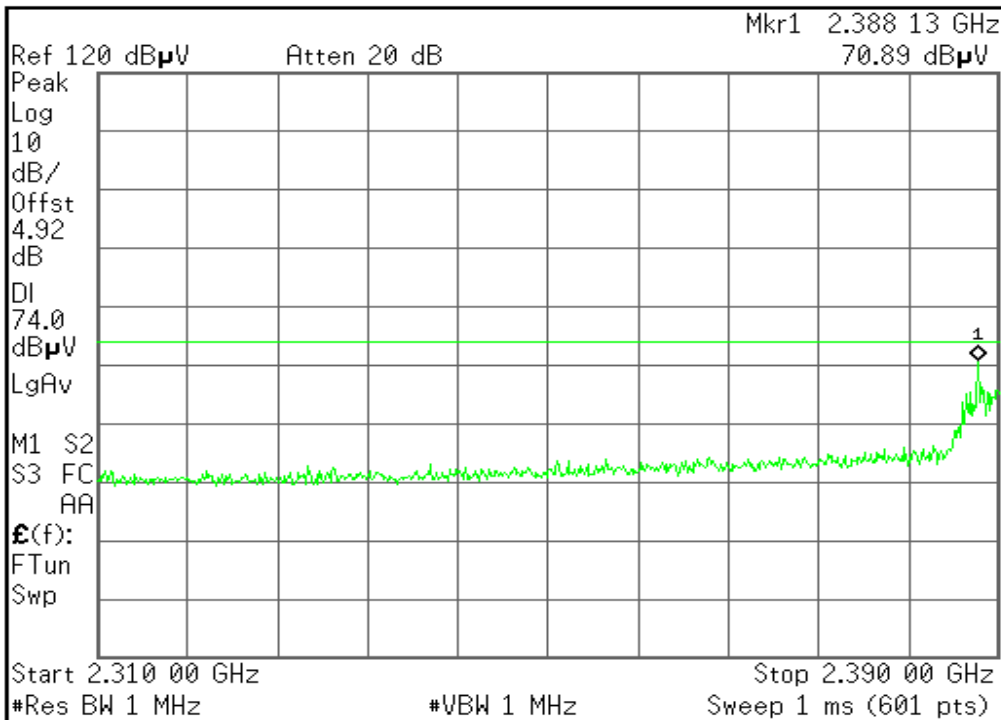
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RESTRICTED BANDEDGE (draft 802.11gn Standard-20 MHz Channel mode, Low Channel, Vertical)

PEAK

Agilent

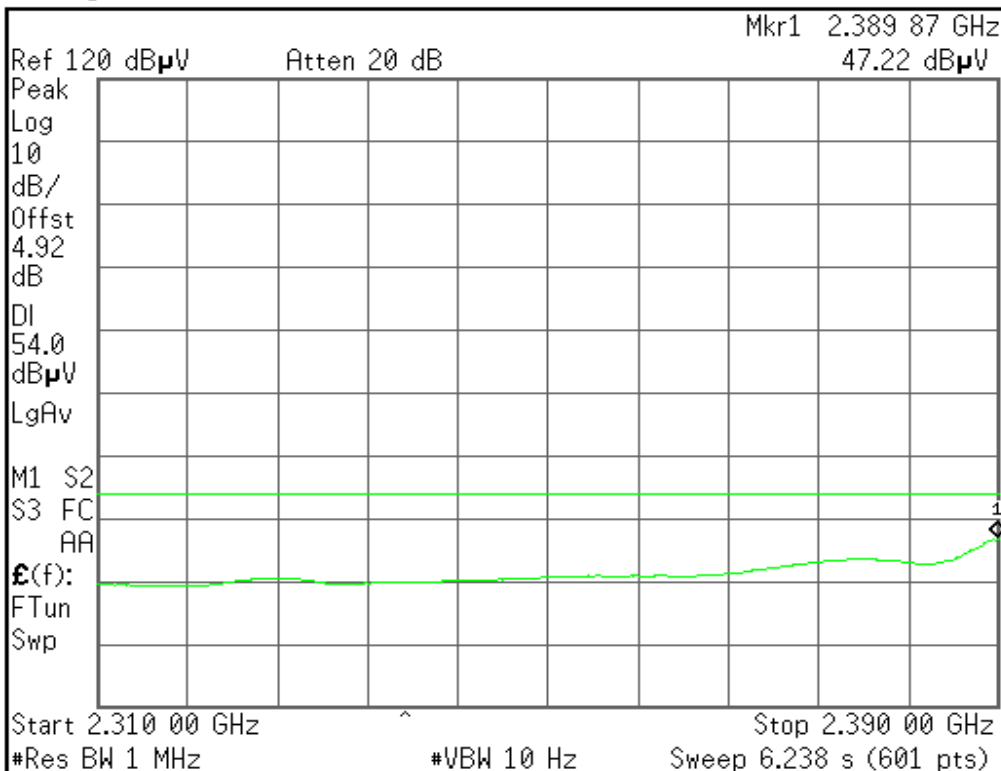


Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

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Freq/Channel	
Center Freq	2.35000000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.39000000 GHz
CF Step	8.00000000 MHz Auto Man
Freq Offset	0.00000000 Hz
Signal Track	On Off

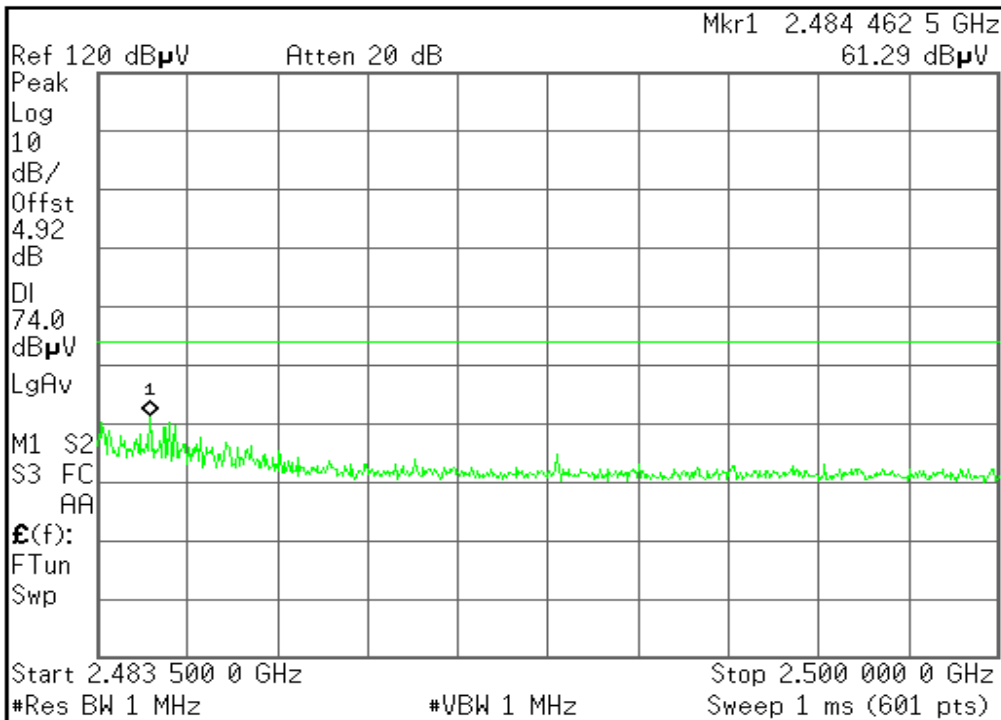
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RESTRICTED BANDEDGE (draft 802.11gn Standard-20 MHz Channel mode, High Channel, Horizontal)

PEAK

Agilent

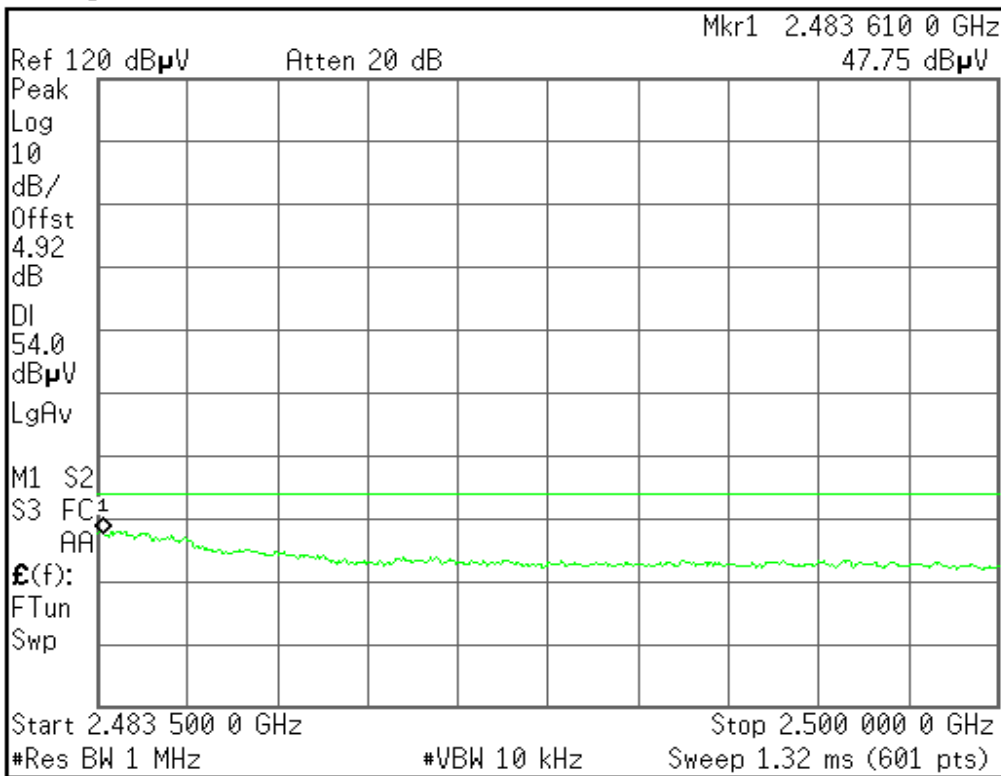


Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr \rightarrow CF
More 1 of 2

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Freq/Channel
Center Freq 2.49175000 GHz
Start Freq 2.48350000 GHz
Stop Freq 2.50000000 GHz
CF Step 1.65000000 MHz Auto Man
Freq Offset 0.00000000 Hz
Signal Track On Off

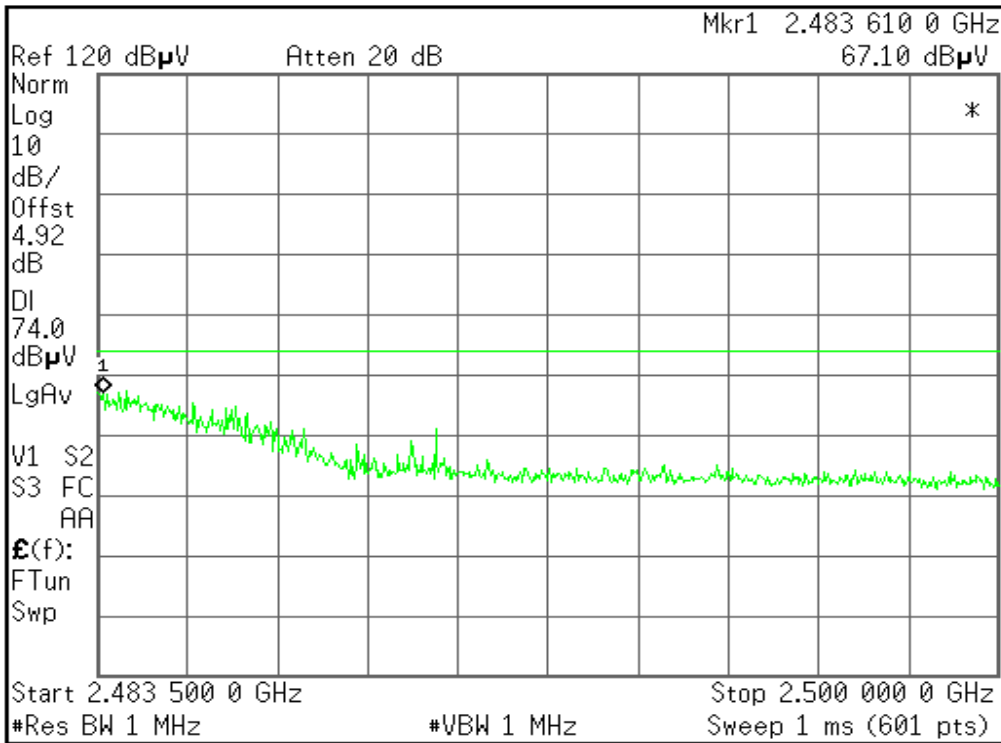
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RESTRICTED BANDEDGE (draft 802.11gn Standard-20 MHz Channel mode, High Channel, Vertical)

PEAK

Agilent

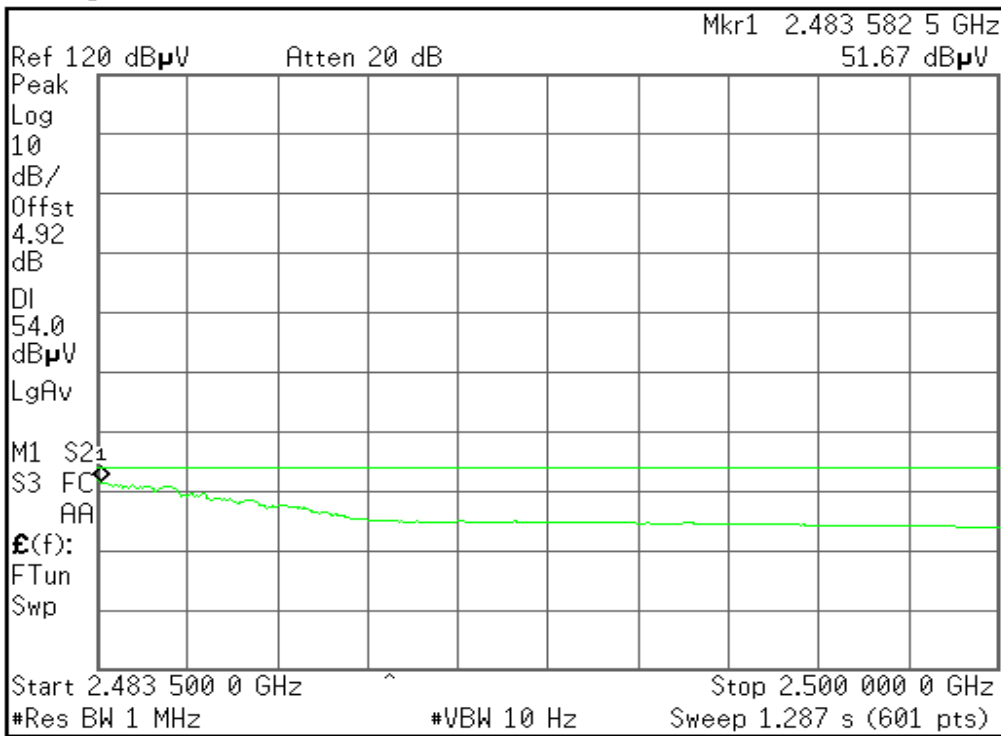


Trace		
1	2	3
Trace		
Clear Write		
Max Hold		
Min Hold		
View		
Blank		
More		
1 of 2		

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Freq/Channel	
Center Freq	
2.49175000 GHz	
Start Freq	
2.48350000 GHz	
Stop Freq	
2.50000000 GHz	
CF Step	
1.65000000 MHz	
Auto	Man
Freq Offset	
0.00000000 Hz	
Signal Track	
On	Off

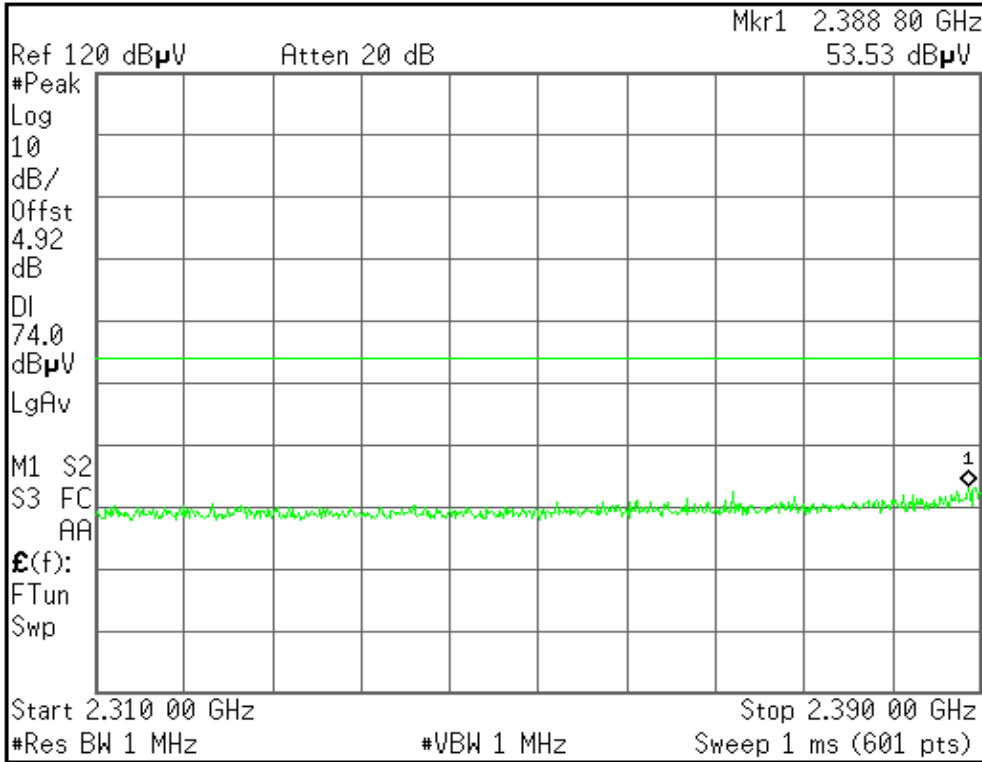
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RESTRICTED BANDEDGE (draft 802.11gn Wide -40 MHz Channel mode, Low Channel, Horizontal)

PEAK

Agilent



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Min Search

PK-PK Search

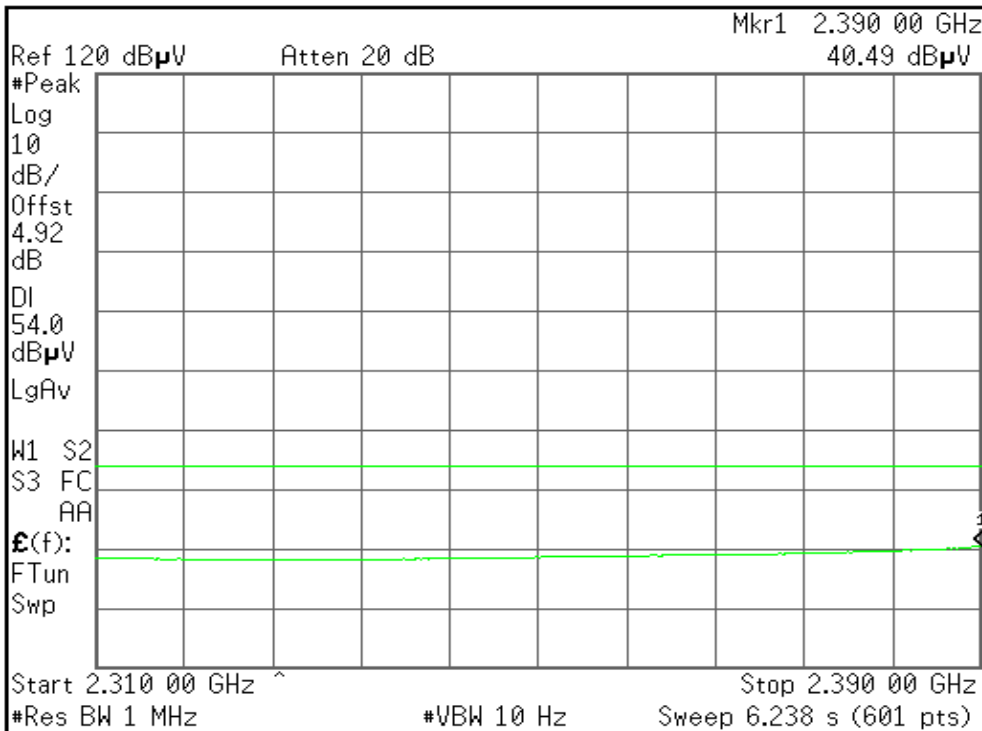
Mkr → CF

More
1 of 2

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Display

Full Screen

Display Line
54.00 dB μ V
On Off

Limits>

Active Fctn
Position>
Center

Title>

Preferences>

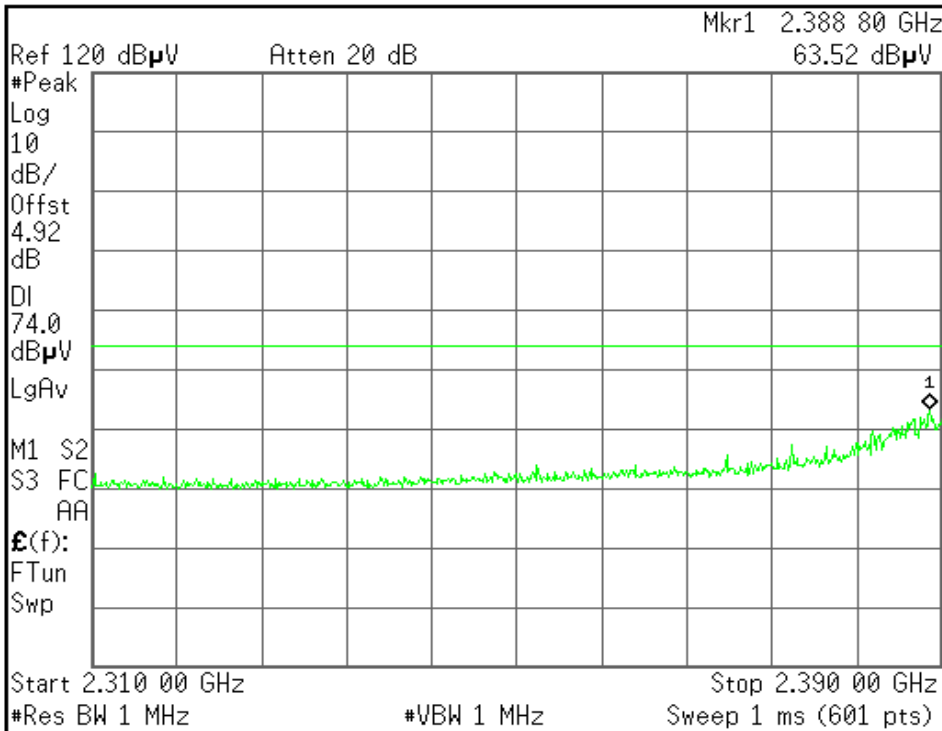
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RESTRICTED BANDEDGE (draft 802.11gn Wide -40 MHz Channel mode, Low Channel, Vertical)

PEAK

Agilent



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Min Search

Pk-Pk Search

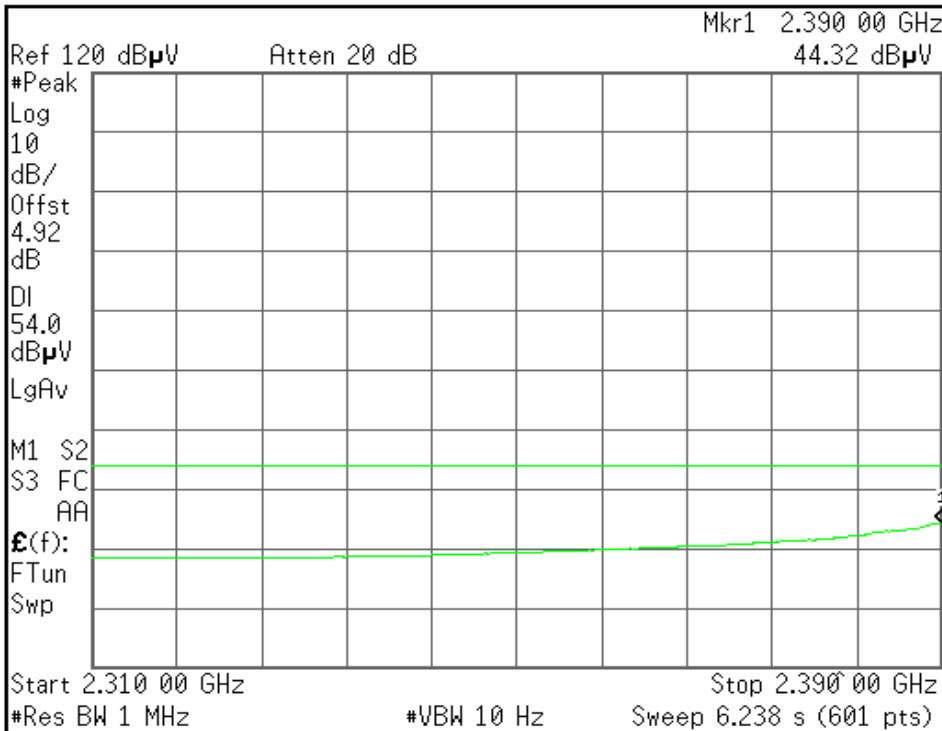
Mkr \rightarrow CF

More
1 of 2

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AVG

Agilent



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Min Search

Pk-Pk Search

Mkr \rightarrow CF

More
1 of 2

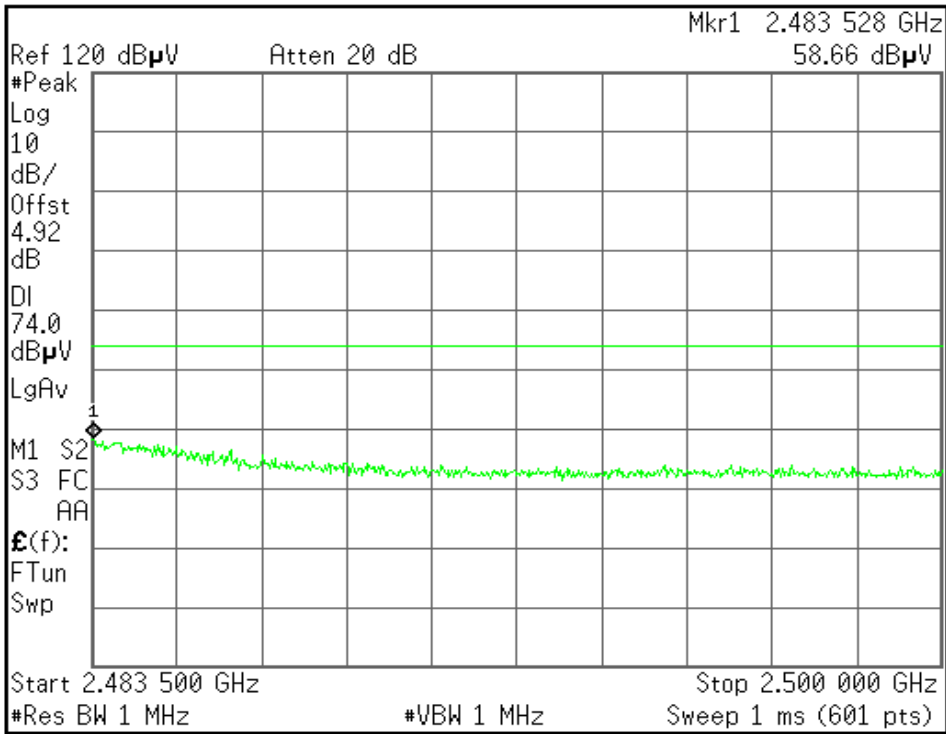
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RESTRICTED BANDEDGE (draft 802.11gn Wide -40 MHz Channel mode, High Channel, Horizontal)

PEAK

Agilent

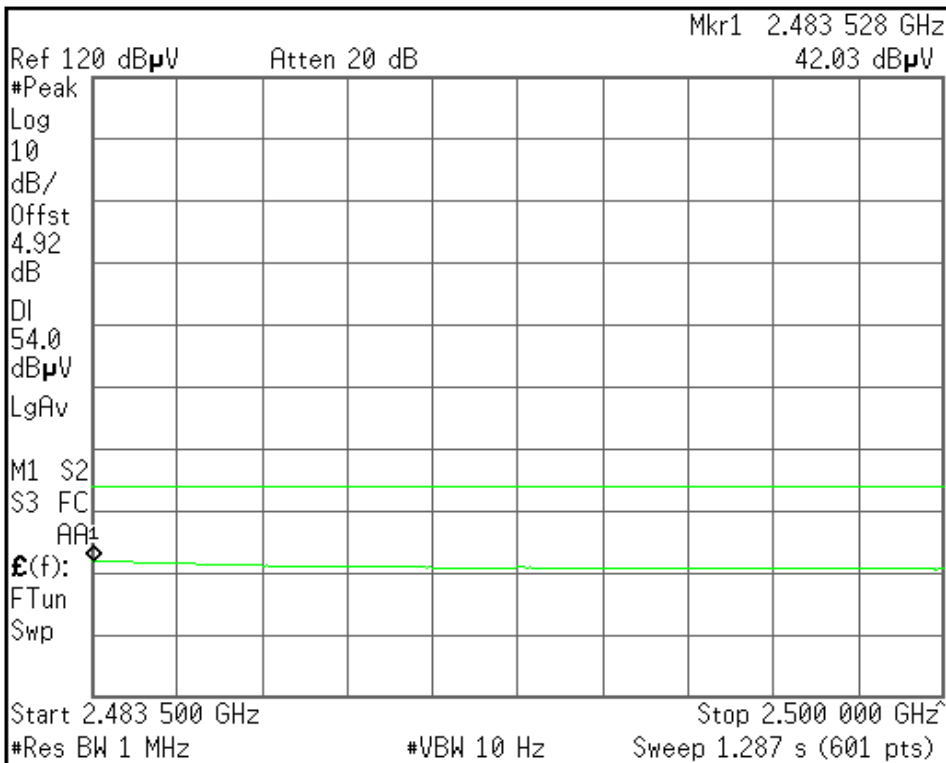


Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr \rightarrow CF
More 1 of 2

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Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr \rightarrow CF
More 1 of 2

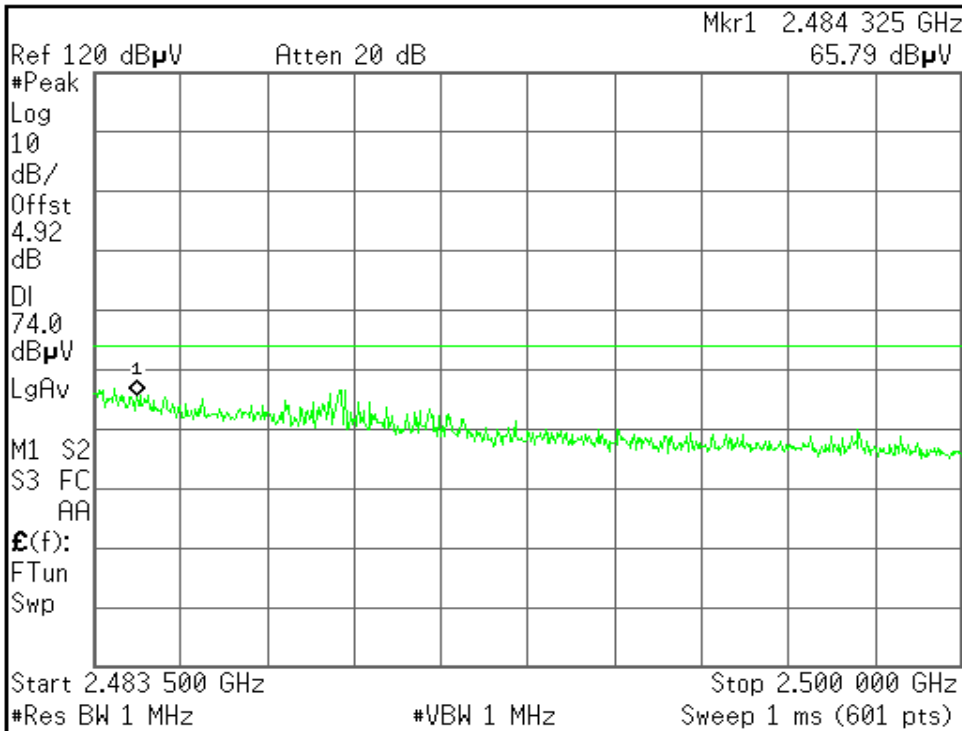
File Operation Status, A:\SCREN074.GIF file saved



RESTRICTED BANDEDGE (draft 802.11gn Wide -40 MHz Channel mode, High Channel, Vertical)

PEAK

Agilent

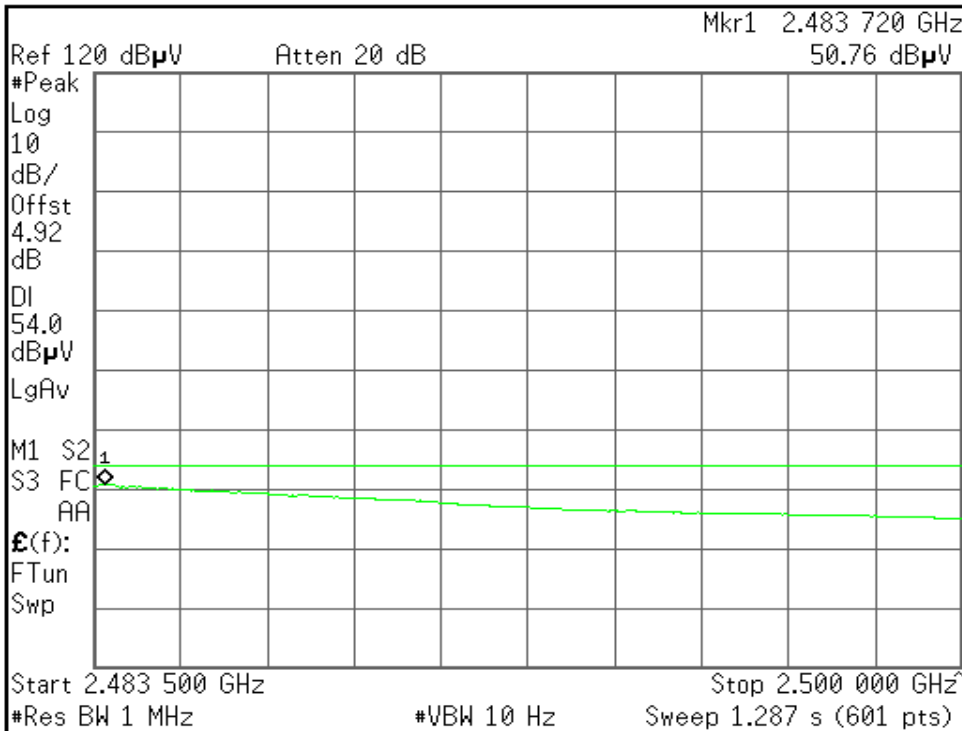


Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr \rightarrow CF
More 1 of 2

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AVG

Agilent



Peak Search
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr \rightarrow CF
More 1 of 2

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Below 1GHz

Operation Mode: Normal Link

Test Date: February 2, 2009

Temperature: 22°C

Tested by: Jeff

Humidity: 48% RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
65.3258	V	49.17	-12.22	36.95	40.00	-3.05	Peak
71.6033	V	42.79	-14.41	28.38	40.00	-11.62	Peak
199.5741	V	34.53	-9.49	25.04	43.50	-18.46	Peak
399.4669	V	31.90	1.44	33.34	46.00	-12.66	Peak
760.3878	V	30.50	2.38	32.88	46.00	-13.12	Peak
765.3658	V	35.90	3.27	39.17	46.00	-6.83	Peak
66.2535	H	33.96	-5.87	28.09	40.00	-11.91	Peak
70.6471	H	42.67	-14.45	28.22	46.00	-11.78	Peak
198.3694	H	38.03	-9.01	29.02	46.00	-14.48	Peak
398.2554	H	35.63	1.44	37.07	46.00	-8.93	Peak
755.1420	H	34.24	2.38	36.62	46.00	-9.38	Peak
796.2545	H	39.96	3.24	43.20	46.00	-2.80	QP

Remark:

1. Measuring frequencies from 30 MHz to the 1GHz (No emission found between lowest internal used/generated frequency to 30 MHz).
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
3. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
4. Margin (dB) = Result (dBuV/m) – Limit (dBuV/m).



Above 1 GHz

Operation Mode: TX / IEEE 802.11b / CH Low

Test Date: February 2, 2009

Temperature: 22°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4825.00	V	36.18	---	12.41	48.59	---	74.00	54.00	-5.74	Peak
7236.67	V	38.85	27.71	15.48	54.33	43.19	74.00	54.00	-10.81	Average
4824.33	H	34.36	---	12.41	46.77	---	74.00	54.00	-7.23	Peak
7233.33	H	38.35	27.48	15.47	53.82	42.95	74.00	54.00	-11.05	Average
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11b / CH Mid

Test Date: February 2, 2009

Temperature: 22°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4865.00	V	36.43	---	12.68	49.11	---	74.00	54.00	-4.89	Peak
7307.67	V	37.74	26.17	15.72	53.46	41.89	74.00	54.00	-12.11	Average
N/A										
4866.67	H	35.15	---	12.68	47.83	---	74.00	54.00	-6.17	Peak
7321.67	H	36.82	25.57	15.76	52.58	41.33	74.00	54.00	-12.67	Average
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11b / CH High

Test Date: February 2, 2009

Temperature: 22°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4921.00	V	35.63	---	12.93	48.56	---	74.00	54.00	-5.44	Peak
7378.33	V	39.64	27.89	15.82	55.46	43.71	74.00	54.00	-10.29	Average
N/A										
4923.33	H	34.28	---	12.93	47.21	---	74.00	54.00	-6.79	Peak
7380.67	H	38.94	26.06	15.82	54.76	41.88	74.00	54.00	-12.12	Average
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11g / CH Low

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4819.00	V	35.14	---	12.41	47.55	---	74.00	54.00	-6.45	Peak
7233.82	V	36.85	27.28	15.48	52.33	42.76	74.00	54.00	-11.24	Average
N/A										
4823.67	H	34.02	---	12.41	46.43	---	74.00	54.00	-7.57	Peak
7238.45	H	35.30	25.54	15.48	50.78	41.02	74.00	54.00	-12.98	Average
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11g / CH Mid

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4876.34	V	33.61	---	12.68	46.29	---	74.00	54.00	-7.71	Peak
7320.69	V	37.35	25.06	15.76	53.11	40.82	74.00	54.00	-13.18	Average
N/A										
4875.34	H	32.99	---	12.68	45.67	---	74.00	54.00	-8.33	Peak
7318.25	H	37.14	24.04	15.74	52.88	39.78	74.00	54.00	-14.22	Average
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11g / CH High

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4930.33	V	33.60	---	12.94	46.54	---	74.00	54.00	-7.46	Peak
7391.67	V	37.38	26.35	15.82	53.20	42.17	74.00	54.00	-11.83	Average
N/A										
4929.67	H	34.38	---	12.93	47.31	---	74.00	54.00	-6.69	Peak
7389.33	H	37.16	25.92	15.82	52.98	41.74	74.00	54.00	-12.26	Average
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11a / CH low

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11490.66	V	44.01	35.74	3.56	47.57	39.3	74	54	-14.7	AVG
N/A										
11491.67	H	43.25	35.01	3.56	46.81	38.57	74	54	-15.43	AVG
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11a / CH mid

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11570.33	V	43.36	36.58	2.40	45.76	38.98	74.00	54.00	-19.02	AVG
N/A										
11575.67	H	43.05	37.21	2.40	45.4	39.61	74.00	54.00	-14.39	AVG
N/A										

Remark:

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



Operation Mode: TX / IEEE 802.11a / CH high

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11611.33	V	42.01	34.02	3.56	45.57	37.58	74	54	-16.42	AVG
N/A										
11615.67	H	41.23	34.14	3.56	44.79	37.7	74	54	-16.30	AVG
N/A										

Remark:

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



Operation Mode: TX / draft 802.11gn Standard-20 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Low

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4832.33	V	34.48	---	12.41	46.89	---	74.00	54.00	-7.11	Peak
7230.34	V	37.94	26.68	15.48	53.42	42.16	74.00	54.00	-11.84	Average
N/A										
4824.33	H	33.32	---	12.41	45.73	---	74.00	54.00	-8.27	Peak
7219.36	H	36.30	23.17	15.48	51.78	38.65	74.00	54.00	-15.35	Average
N/A										

Remark:

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



Operation Mode: TX / draft 802.11gn Standard-20 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Mid

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4876.33	V	34.64	---	12.68	47.32	---	74.00	54.00	-6.68	Peak
7321.23	V	36.89	27.42	15.76	52.65	43.18	74.00	54.00	-10.82	Average
N/A										
4875.64	H	35.00	---	11.02	46.02	---	74.00	54.00	-7.98	Peak
7316.33	H	39.74	27.50	15.72	55.46	43.22	74.00	54.00	-10.78	Average
N/A										

Remark:

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



Operation Mode: TX / draft 802.11gn Standard-20 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH High

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4930.66	V	37.60	---	12.93	46.52	---	74.00	54.00	-7.48	Peak
7387.67	V	38.30	26.99	15.82	54.12	42.81	74.00	54.00	-11.19	Average
N/A										
4924.67	H	32.74	---	12.93	45.67	---	74.00	54.00	-8.33	Peak
7384.78	H	39.64	28.09	15.82	55.46	43.91	74.00	54.00	-10.09	Average
N/A										

Remark:

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



Operation Mode: TX / draft 802.11gn Wide-40 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Low

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4845.67	V	35.42	---	12.41	47.83	---	74.00	54.00	-6.17	Peak
7385.54	V	39.27	27.80	15.48	54.75	43.28	74.00	54.00	-10.72	Average
N/A										
4850.67	H	34.38	---	12.41	46.79	---	74.00	54.00	-5.29	Peak
7389.67	H	38.55	26.67	15.48	54.03	42.15	74.00	54.00	-11.85	Average
N/A										

Remark:

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



Operation Mode: TX / draft 802.11gn Wide-40 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Mid

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4874.55	V	33.74	---	12.68	46.42	---	74.00	54.00	-7.58	Peak
7313.34	V	36.77	25.38	15.71	52.48	41.09	74.00	54.00	-12.91	Average
N/A										
4874.33	H	32.75	---	12.68	45.43	---	74.00	54.00	-8.57	Peak
7314.56	H	36.26	24.11	15.71	51.97	39.82	74.00	54.00	-14.18	Average
N/A										

Remark:

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



Operation Mode: TX / draft 802.11gn Wide-40 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH High

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
4910.33	V	37.72	---	12.93	47.07	---	74.00	54.00	-6.93	Peak
7360.67	V	37.89	26.25	15.83	53.72	42.08	74.00	54.00	-11.92	Average
N/A										
4911.67	H	33.58	---	12.93	46.51	---	74.00	54.00	-7.49	Peak
7359.33	H	36.35	24.57	15.82	52.17	40.39	74.00	54.00	-13.61	Average
N/A										

Remark:

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



Operation Mode: TX / draft 802.11an Standard-20 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Low

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11490.33	V	42.36	35.14	3.56	45.92	38.7	74	54	-15.3	AVG
N/A										
11495.00	H	41.85	34.75	3.56	45.41	38.31	74	54	-15.69	AVG
N/A										

Remark:

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



Operation Mode: TX / draft 802.11an Standard-20 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Mid

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11570.67	V	40.69	34.96	3.56	44.25	38.52	74	54	-15.48	AVG
N/A										
11571.33	H	40.24	34.12	3.56	43.80	37.68	74	54	-16.32	AVG
N/A										

Remark:

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



Operation Mode: TX / draft 802.11an Standard-20 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH High

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11610.00	V	41.02	35.11	3.56	44.58	38.67	74	54	-15.33	AVG
N/A										
11612.67	H	40.79	34.74	3.56	44.35	38.3	74	54	-15.7	AVG
N/A										

Remark:

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



Operation Mode: TX / draft 802.11an Wide-40 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH Low

Test Date: February 2, 2009

Temperature: 24°C

Tested by: Jeff

Humidity: 48 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11510.00	V	42.55	35.41	3.56	46.11	38.97	74	54	-15.03	AVG
N/A										
11510.67	H	42.35	34.96	3.56	45.91	38.52	74	54	-15.48	AVG
N/A										

Remark:

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



Operation Mode: TX / draft 802.11an Wide-40 MHz Channel mode (Chain 0 + Chain 1+ Chain 2) / CH High **Test Date:** February 2, 2009
Temperature: 24°C **Tested by:** Jeff
Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
11590.00	V	42.36	35.17	3.56	45.92	38.73	74	54	-15.27	AVG
N/A										
11595.00	V	42.11	34.47	3.56	45.67	38.03	74	54	-15.97	AVG
N/A										

Remark:

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



POWERLINE CONDUCTED EMISSIONS

LIMIT

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

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

* Decreases with the logarithm of the frequency.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

**TEST RESULTS**

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Test Data

Operation Mode: Normal Link **Test Date:** August 22, 2008
Temperature: 23°C **Tested by:** Jeff
Humidity: 50% RH

Freq. (MHz)	PEAK. Raw (dBuV)	Q.P. Raw (dBuV)	AVG Raw (dBuV)	Q.P. Limit (dBuV)	AVG Limit (dBuV)	Margin (dB)	Factor (dB)	Remark
0.204	53.21	48.61	41.01	64.47	54.47	-13.46	12.65	Line
0.348	54.46	47.28	35.78	60.33	50.33	-14.55	12.89	Line
0.414	56.48	51.41	44.58	58.46	48.46	-3.88	12.94	Line
0.482	54.37	50.83	43.42	56.51	46.51	-3.09	12.96	Line
1.565	53.87	49.83	37.72	56.00	46.00	-8.28	13.18	Line
2.158	51.31	47.48	33.68	56.00	46.00	-12.32	13.27	Line
0.205	51.99	46.77	39.16	64.43	54.43	-15.27	11.57	Neutral
0.345	51.76	45.26	33.05	60.43	50.43	-17.38	11.68	Neutral
0.411	54.66	50.08	43.93	58.55	48.55	-4.62	11.69	Neutral
0.482	52.70	49.13	41.79	56.51	46.51	-4.72	11.71	Neutral
1.046	52.34	45.46	34.08	56.00	46.00	-11.92	11.81	Neutral
2.164	51.96	47.34	33.54	56.00	46.00	-12.46	11.92	Neutral

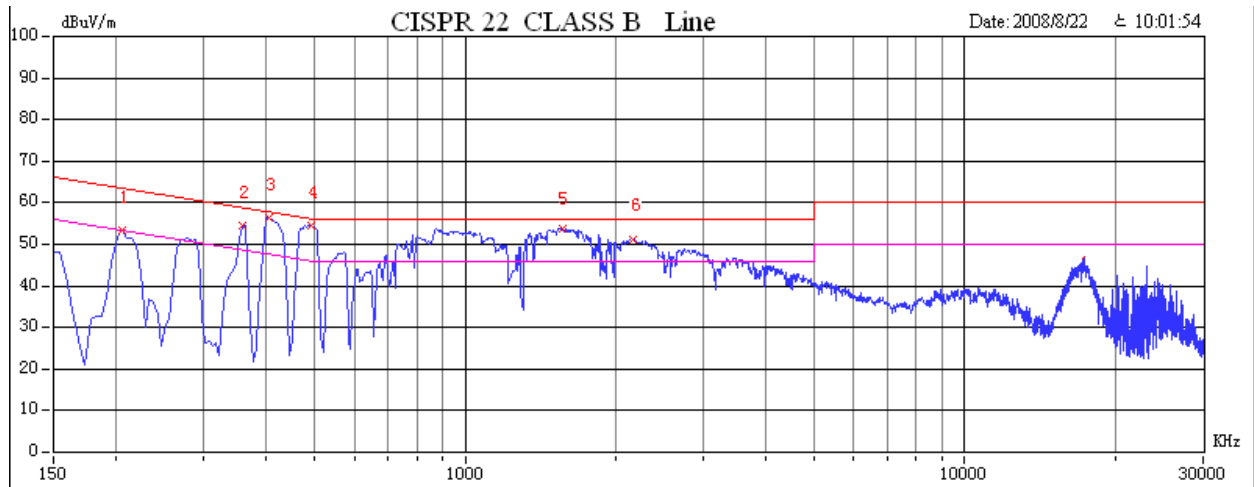
Remark:

- 1. Measuring frequencies from 0.15 MHz to 30MHz.*
- 2. The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.*
- 3. The IF bandwidth of SPA between 0.15MHz and 30MHz was 10 kHz; the IF bandwidth of Test Receiver between 0.15MHz and 30MHz was 9 kHz;*
- 4. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)*

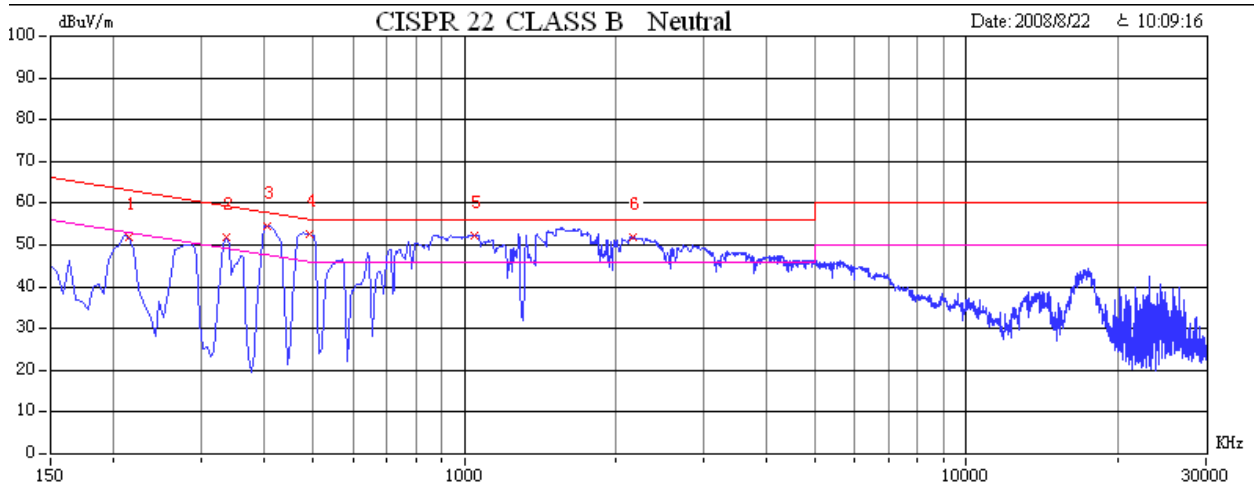


Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)





APPENDIX 1 RADIO FREQUENCY EXPOSURE

LIMIT

According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

EUT Specification

EUT	802.11a/b/g/n access point
Frequency band (Operating)	<input checked="" type="checkbox"/> WLAN: 2.412GHz ~ 2.462GHz <input type="checkbox"/> WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz <input checked="" type="checkbox"/> WLAN: 5.745GHz ~ 5.825GHz <input type="checkbox"/> Others
Device category	<input type="checkbox"/> Portable (<20cm separation) <input checked="" type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others
Exposure classification	<input type="checkbox"/> Occupational/Controlled exposure (S = 5mW/cm ²) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm ²)
Antenna diversity	<input type="checkbox"/> Single antenna <input checked="" type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input checked="" type="checkbox"/> Tx/Rx diversity
Max. output power	IEEE 802.11b mode: 15.38dBm(34.51mW) IEEE 802.11g mode: 15.92dBm(39.08mW) draft 802.11gn Standard-20 MHz Channel mode: 20.18 dBm(104.2mW) draft 802.11gn Wide-40 MHz Channel mode: 21.23 dBm(132.7mw) IEEE 802.11a mode: 16.91dBm(49.09mW) draft 802.11an Standard-20 MHz Channel mode: 21.38 dBm(137.4mw) draft 802.11an Wide-40 MHz Channel mode: 22.85 dBm(192.8mw)
Antenna gain (Max)	Gain 2dBi (2.4GHz) /Total gain 6.77(4.75) and Gain 3dBi (5GHz) /Total gain 7.77(5.98)
Evaluation applied	<input checked="" type="checkbox"/> MPE Evaluation* <input type="checkbox"/> SAR Evaluation <input type="checkbox"/> N/A

Remark:

- The maximum output power is 21.23dBm (132.7mW) at 2422MHz (with 4.75numeric antenna gain.); 22.85dBm (192.8mW) at 5795MHz (with 5.98numeric antenna gain.)*
- DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
- For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.*



TEST RESULTS

No non-compliance noted.

Calculation

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{3770}$

Where $E =$ Field strength in Volts / meter

$P =$ Power in Watts

$G =$ Numeric antenna gain

$d =$ Distance in meters

$S =$ Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770d^2}$$

Changing to units of mW and cm, using:

$P (mW) = P (W) / 1000$ and

$d (cm) = d(m) / 100$

Yields

$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$ **Equation 1**

Where $d =$ Distance in cm

$P =$ Power in mW

$G =$ Numeric antenna gain

$S =$ Power density in mW / cm²

Maximum Permissible Exposure

Substituting the MPE safe distance using d = 20 cm into Equation 1:

Yields

$S = 0.000199 \times P \times G$

Where $P =$ Power in mW

$G =$ Numeric antenna gain

$S =$ Power density in mW / cm²



IEEE 802.11b:

EUT output power = 34. 5mW

Numeric Antenna gain = 4.75

→ Power density = 0.0326 mW / cm²

IEEE 802.11g:

EUT output power = 39. 1mW

Numeric Antenna gain = 4.75

→ Power density = 0.0370 mW / cm²

draft 802.11gn Standard-20 MHz Channel mode

EUT output power = 104. 2mW

Numeric Antenna gain = 4.75

→ Power density = 0.0985 mW / cm²

draft 802.11gn Wide-40 MHz Channel mode

EUT output power = 132. 7mW

Numeric Antenna gain = 4.75

→ Power density = 0.1254 mW / cm²

IEEE 802.11a:

EUT output power = 49. 1mW

Numeric Antenna gain = 5.98

→ Power density = 0.0584 mW / cm²

draft 802.11an Standard-20 MHz Channel mode

EUT output power = 137. 4mW

Numeric Antenna gain = 5.98

→ Power density = 0.1635 mW / cm²

draft 802.11an Wide-40 MHz Channel mode

EUT output power =192. 8mW

Numeric Antenna gain = 5.98

→ Power density = 0.2294 mW / cm²

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.)