FCC PART 15.407
TEST AND MEASUREMENT REPORT

For

Ruckus Wireless, Inc.

350 West Java Drive,

Sunnyvale, CA 94089, USA

FCC ID: S9G-MPE5N33A

Report Type:	**Product Type:**
CIIPC Report	802.11 a/n Wireless Module

Test Engineers:	Leonard Gray
Report Number:	R1504012-407
Report Date:	2016-02-16
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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1504012-407	Original Report	2016-02-16

1 General Description

1.1 Product Description for Equipment under Test (EUT)

This test and measurement report has been compiled on behalf of *Ruckus Wireless, Inc.* and their product, *FCC ID: S9G-MPE5N33A,* model number: MPE5N33A, which henceforth is referred to as the EUT (Equipment under Test.) The EUT is a 5 GHz 802.11a/n wireless module.

1.2 Mechanical Description of EUT

The "EUT" measures approximately *6.9cm (L) x 3.9cm (W) x 1.190cm (H)*, and weighs approximately *16* g.

The test data gathered are from typical production sample, serial number: R1504012-01 provided by the manufacturer.

1.3 Objective

This report is prepared on behalf of *Ruckus Wireless, Inc in* accordance with FCC CFR47 §15.407.
The objective is to determine compliance with FCC Part 15.407 for Output Power, Antenna Requirements, AC Line Conducted Emissions, Bandwidth, power spectral density, Band Edges Measurement, Spurious Emissions, Conducted and Radiated Spurious Emissions.

1.4 Related Submittal(s)/Grant(s)

FCC Part 15.247 DTS with FCC ID: S9G-MPE5N33A.

1.5 Test Methodology

All measurements contained in this report were conducted in accordance with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices and FCC KDB 789033 D01 General UNII Test Procedures v01r03: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E

1.6 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in the field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR16-4-2:2011, The Treatment of Uncertainty in EMC Measurements, the values ranging from $\pm$2.0 dB for Conducted Emissions tests and $\pm$4.0 dB for Radiated Emissions tests are the most accurate estimates pertaining to uncertainty of EMC measurements at BACL Corp.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratory, Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

1.7 Test Facility

Bay area compliance Laboratories Corp. (BACL) is:
1- An independent Commercial Test Laboratory accredited to **ISO 17025:2005** by **A2LA**, in the fields of: Electromagnetic Compatibility & Telecommunications covering Emissions, Immunity, Radio, RF Exposure, Safety and Telecom. This includes NEBS (Network Equipment Building System), Wireless RF, Telecommunications Terminal Equipment (TTE); Network Equipment; Information Technology Equipment (ITE); Medical Electrical Equipment; Industrial, Commercial, and Medical Test Equipment; Professional Audio and Video Equipment; Electronic (Digital) Products; Industrial and Scientific Instruments; Cabled Distribution Systems and Energy Efficiency Lighting.

2- An ENERGY STAR Recognized Laboratory, for the LM80 Testing, a wide variety of Luminares and Computers.

3- A NIST Designated Phase-I and Phase-II CAB including: ACMA (Australian Communication and Media Authority), BSMI (Bureau of Standards, Metrology and Inspection of Taiwan), IDA (Infocomm Development Authority of Singapore), IC(Industry Canada), Korea (Ministry of Communications Radio Research Laboratory), NCC (Formerly DGT; Directorate General of Telecommunication of Chinese Taipei) OFTA (Office of the Telecommunications Authority of Hong Kong), Vietnam, VCCI - Voluntary Control Council for Interference of Japan and a designated EU CAB (Conformity Assessment Body) (Notified Body) for the EMC and R&TTE Directives.

4- A Product Certification Body accredited to **ISO Guide 65:1996** by **A2LA** to certify:
.
2. Radio Standards Specifications (RSS) in the Category I Equipment Standards List and All Broadcasting Technical Standards (BETS) in Category I Equipment Standards List for Industry Canada.
3. Radio Communication Equipment for Singapore.
4. Radio Equipment Specifications, GMDSS Marine Radio Equipment Specifications, and Fixed Network Equipment Specifications for Hong Kong.
5. Japan MIC Telecommunication Business Law (A1, A2) and Radio Law (B1, B2 and B3).
6. Audio/Video, Battery Charging Systems, Computers, Displays, Enterprise Servers, Imaging Equipment, Set-Top Boxes, Telephony, Televisions, Ceiling Fans, CFLs (Including GU24s),Decorative Light Strings, Integral LED Lamps, Luminaires, Residential Ventilating Fans.

The test site used by BACL Corp. to collect radiated and conducted emissions measurement data is located at its facility in Sunnyvale, California, USA.

The test site at BACL Corp. has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 11 and December 10, 1997, and Article 8 of the VCCI regulations on December 25, 1997. The test site also complies with the test methods and procedures set forth in CISPR 22:2008 §10.4 for measurements below 1 GHz and §10.6 for measurements above 1 GHz as well as ANSI C63.4-2009, ANSI C63.4-2009, TIA/EIA-603 & CISPR 24:2010.

The Federal Communications Commission and Voluntary Control Council for Interference have the reports on file and they are listed under FCC registration number: 90464 and VCCI Registration No.: A-0027. The test site has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, BACL Corp. is an American Association for Laboratory Accreditation (A2LA) accredited laboratory (Lab Code 3297-02). The current scope of accreditations can be found at

http://www.a2la.org/scopepdf/3297-02.pdf?CFID=1132286&CFTOKEN=e42a3240dac3f6ba-6DE17DCB-1851-9E57-477422F667031258&jsessionid=8430d44f1f47cf2996124343c704b367816b

2 EUT Test Configuration

2.1 Justification

The EUT was configured for testing according to ANSI C63.10-2013.

The EUT was tested in a testing mode to represent worst-case results during the final qualification test.

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

2.2 EUT Exercise Software

The software used 3CDaemon Version 2.0, Putty Version 0.60.0.0, and Snoop Art version 2.18.2 were provided by client and verified by Lenoard Gray to comply with the standard requirements being tested against.

2.3 Equipment Modifications

No modifications were made to the EUT.

2.4 Special Accessories

N/A

2.5 Local Support Equipment

Manufacturer	Description	Model No.	Serial No.
Dell	Laptop	Latitude E5420	CHZMLQ1

2.6 EUT Internal Configuration

N/A

3 Summary of Test Results

FCC Rules	Description of Test	Result
FCC §15.407(f), §2.1093	RF Exposure	Compliant
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207	AC Power Line Conducted Emissions	Compliant
FCC §15.209(a), 15.407(b)	Spurious Radiated Emissions	Compliant
FCC §15.407(a)	Emission Bandwidth	Compliant
FCC §407(a)	Peak Output Power Measurement	Compliant
FCC §2.1051, §15.407(b)	Band Edges	Compliant
FCC §15.407(a)	Power Spectral Density	Compliant
FCC §2.1051, §15.407(b)	Spurious Emissions at Antenna Terminals	Compliant
FCC §15.407(h)	Dynamic Frequency Selection (DFS).	Compliant*

Note: DFS testing is not required for 5150-5250 MHz and 5725-5850 MHz band.*

4 FCC §15.407(f) - RF Exposure

4.1 Applicable Standard

According to FCC §15.407(f) and §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	* (100)	30
1.34-30	824/f	2.19/f	* ($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

4.2 MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = power density
P = power input to antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

4.3 MPE Results

3 dBi Antenna, 5.2 GHz

Maximum peak output power at antenna input terminal (dBm):	22.39
Maximum peak output power at antenna input terminal (mW):	173.38
Prediction distance (cm):	20
Prediction frequency (MHz):	5230
Maximum Antenna Gain, typical (dBi):	3
Maximum Antenna Gain (numeric):	1.995262
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.068822
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

3 dBi Antenna, 5.8 GHz

Maximum peak output power at antenna input terminal (dBm):	21.55
Maximum peak output power at antenna input terminal (mW):	142.89
Prediction distance (cm):	20
Prediction frequency (MHz):	5785
Maximum Antenna Gain, typical (dBi):	3
Maximum Antenna Gain (numeric):	1.99526231
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.0567
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

5 dBi Antenna, 5.2GHz

Maximum peak output power at antenna input terminal (dBm):	23.42
Maximum peak output power at antenna input terminal (mW):	219.786
Prediction distance (cm):	20
Prediction frequency (MHz):	5230
Maximum Antenna Gain, typical (dBi):	5
Maximum Antenna Gain (numeric):	3.162278
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.13827
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

5 dBi Antenna, 5.8 GHz

Maximum peak output power at antenna input terminal (dBm):	21.74
Maximum peak output power at antenna input terminal (mW):	149.28
Prediction distance (cm):	20
Prediction frequency (MHz):	5745
Maximum Antenna Gain, typical (dBi):	5
Maximum Antenna Gain (numeric):	3.162278
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.094
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

8 dBi Antenna, 5.2 GHz

Maximum peak output power at antenna input terminal (dBm):	22.66
Maximum peak output power at antenna input terminal (mW):	184.5015
Prediction distance (cm):	20
Prediction frequency (MHz):	5230
Maximum Antenna Gain, typical (dBi):	8
Maximum Antenna Gain (numeric):	6.309573
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.2316
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

8 dBi Antenna, 5.8 GHz

Maximum peak output power at antenna input terminal (dBm):	21.47
Maximum peak output power at antenna input terminal (mW):	140.2814
Prediction distance (cm):	20
Prediction frequency (MHz):	5785
Maximum Antenna Gain, typical (dBi):	8
Maximum Antenna Gain (numeric):	6.309573
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.1761
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

12 dBi Antenna, 5.2 GHz

Maximum peak output power at antenna input terminal (dBm):	18.42
Maximum peak output power at antenna input terminal (mW):	25.35129
Prediction distance (cm):	20
Prediction frequency (MHz):	5230
Maximum Antenna Gain, typical (dBi):	12
Maximum Antenna Gain (numeric):	15.84893
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.219
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

12 dBi Antenna, 5.8 GHz

Maximum peak output power at antenna input terminal (dBm):	16.05
Maximum peak output power at antenna input terminal (mW):	40.27
Prediction distance (cm):	20
Prediction frequency (MHz):	5745
Maximum Antenna Gain, typical (dBi):	12
Maximum Antenna Gain (numeric):	15.84893
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.127
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

15 dBi Antenna, 5.2 GHz

Maximum peak output power at antenna input terminal (dBm):	15.21
Maximum peak output power at antenna input terminal (mW):	33.19
Prediction distance (cm):	20
Prediction frequency (MHz):	5230
Maximum Antenna Gain, typical (dBi):	15
Maximum Antenna Gain (numeric):	31.62278
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.2088
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

15 dBi Antenna, 5.8 GHz

Maximum peak output power at antenna input terminal (dBm):	15.71
Maximum peak output power at antenna input terminal (mW):	37.24
Prediction distance (cm):	20
Prediction frequency (MHz):	5755
Maximum Antenna Gain, typical (dBi):	15
Maximum Antenna Gain (numeric):	31.62278
Power density of prediction frequency at 20.0 cm (mW/cm^2):	0.2343
MPE limit for uncontrolled exposure at prediction frequency (mW/cm^2):	1

The device meets FCC MPE requirement for uncontrolled exposure environment at 20 cm distance.

5 FCC §15.203 – Antenna Requirements

5.1 Applicable Standard

According to FCC §15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

And according to FCC §15.247 (b) (4), if transmitting antennas of directional gain greater than 6 dBi are used the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.2 Antenna Description

Ruckus Model	Manufacture	Manufacturer Model	Peak Antenna Gain (dBi) @ 5 GHz	Location
Corfu Omni	Ruckus	Corfu Omni	3	Internal
AT-0505-DP01	MARS	ME-WE2458-2HRU	5	External
TBolt3	Ruckus	TBolt3	8	Interal
AT-1212-DP	ARS	MA-WE56-DP12RU	12	External
TBolt2	Ruckus	TBolt2	15	Internal

6 FCC §15.207 - AC Power Line Conducted Emissions

6.1 Applicable Standards

As per FCC §15.207

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 μH/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 frequencies ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

**Decreases with the logarithm of the frequency.*

6.2 Test Setup

The measurement was performed at shield room, using the setup per ANSI C63.10-2013 measurement procedure. The specification used was FCC §15.207 limits

External I/O cables were draped along the edge of the test table and bundle when necessary.

The AC/DC power adapter of the EUT was connected with LISN-1 which provided 120 V / 60 Hz AC power.

6.3 Test Procedure

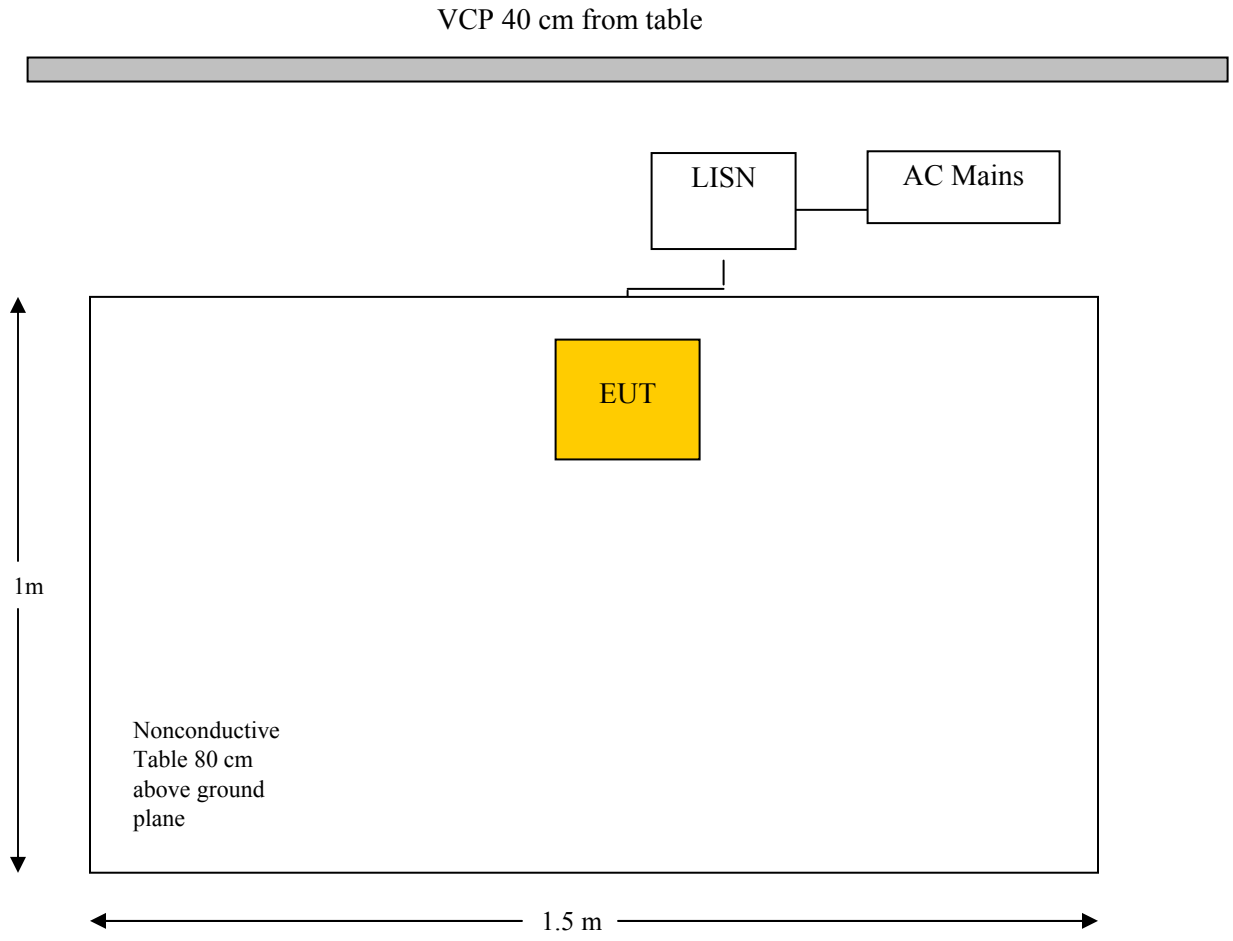
During the conducted emissions test, the power cord of the EUT host system was connected to the mains outlet of the LISN-1 and the power cord of the support equipment was connected to LISN-2.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the peak detection mode, quasi-peak and average. Quasi-Peak readings are distinguished with a “QP.” Average readings are distinguished with an “Ave”.

6.4 Test Setup Block Diagram

AC/DC Adaptor:



6.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude (CA) is calculated by adding the Cable Loss (CL), the Attenuator Factor (Atten) to indicated Amplitude (Ai) reading. The basic equation is as follows:

CA = Ai + CL + Atten

For example, a corrected amplitude of 46.2 dBuV = Indicated Reading (32.5 dBuV) + Cable Loss (3.7 dB) + Attenuator (10 dB)

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit. The equation for margin calculation is as follows:

Margin = Corrected Amplitude - Limit

6.6 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Rohde & Schwarz	EMI Test Receiver	ESCI 1166.5950K03	100337	2015-09-28	1 year
Solar Electronics	LISN	9252-50-R-24-N	160131	2015-07-04	1 year
TTE	Filter, High Pass	H962-150k-50-21378	K7133	2015-01-30	1 year
Suirong	30 ft conductive emission cable	LMR 400	-	Cal. Not Required	N/A
Hewlett-Packard	5 ft N-type RF cable	-	1268	Cal. Not Required	N/A

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed per the A2LA requirements, traceable to the NIST.*

6.7 Test Environmental Conditions

Temperature:	22-24º C
Relative Humidity:	40-41 %
ATM Pressure:	103.1-104.1 kPa

The testing was performed by Leonard Gray on 2015-10-26 in 5m chamber2.

6.8 Summary of Test Results

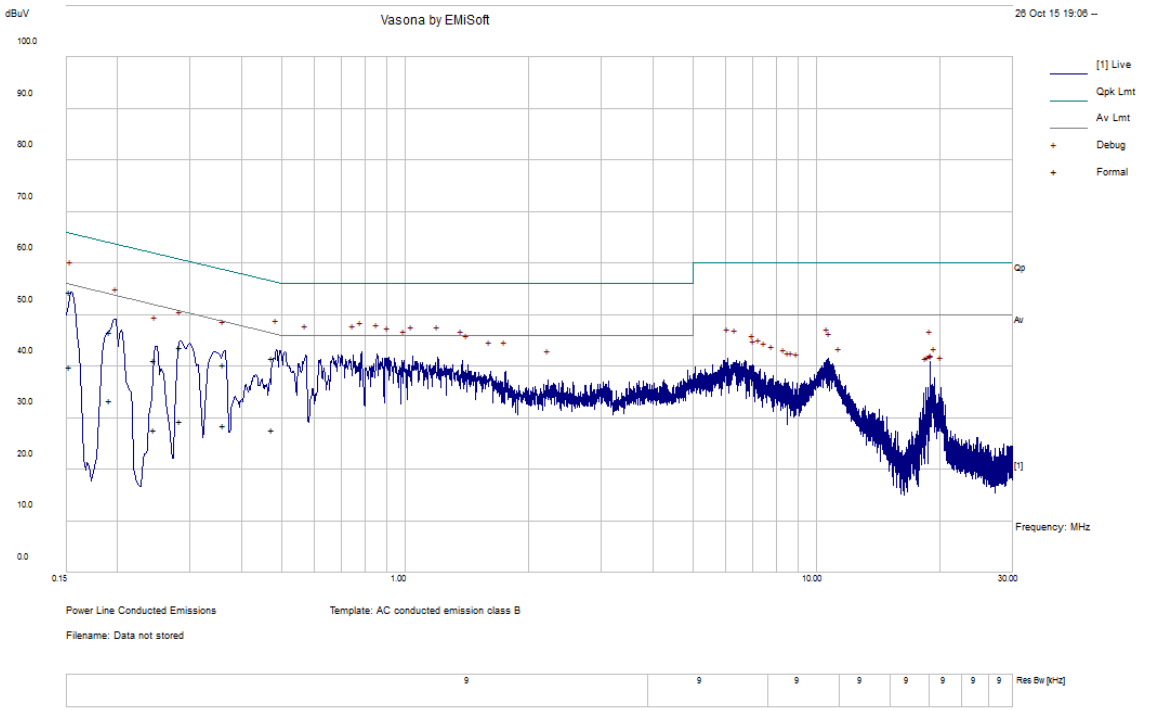
According to the recorded data in following table, the EUT complied with the FCC Part 15 standard's conducted emissions limits, with the margin reading of:

Connection: AC/DC adapter connected to 120 V/60 Hz, AC			
Margin (dB)	**Frequency (MHz)**	**Conductor Mode (Live/Neutral)**	**Range (MHz)**
-11.37	0.152741	Live	0.15-30

6.9 Conducted Emissions Test Plots and Data

Transmitting with 5 GHz Band worst case:

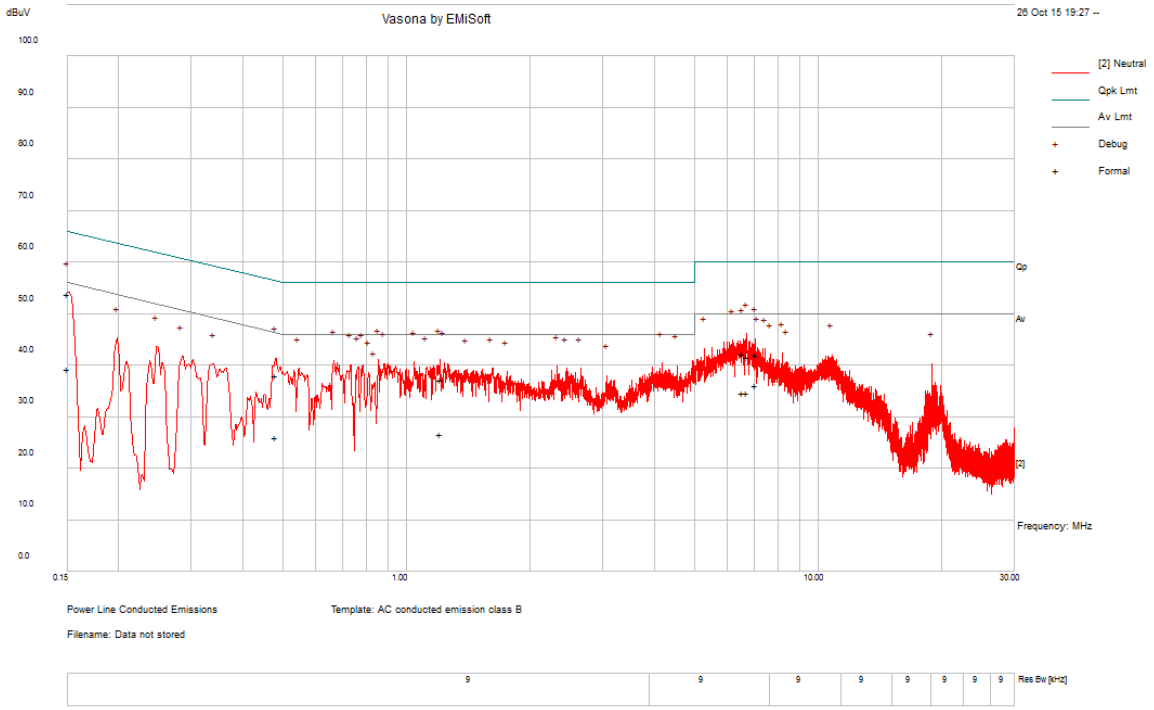
120 V, 60 Hz – Line



Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Live/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.152741	54.48	Line	65.85	-11.37	QP
0.474774	41.78	Line	56.43	-14.65	QP
0.191411	46.79	Line	63.98	-17.18	QP
0.362001	40.44	Line	58.68	-18.24	QP
0.284388	43.82	Line	60.69	-16.87	QP
0.24616	41.27	Line	61.89	-20.62	QP

Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Live/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.152741	39.97	Line	55.85	-15.88	Ave.
0.474774	27.79	Line	46.43	-18.64	Ave.
0.191411	33.44	Line	53.98	-20.53	Ave.
0.362001	28.56	Line	48.68	-20.12	Ave.
0.284388	29.57	Line	50.69	-21.12	Ave.
0.24616	27.8	Line	51.89	-24.08	Ave.

120 V, 60 Hz – Neutral



Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Live/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.150096	53.83	Neutral	65.99	-12.16	QP
6.716054	41.72	Neutral	60	-18.28	QP
7.047734	42.12	Neutral	60	-17.88	QP
6.572702	42.26	Neutral	60	-17.74	QP
1.205286	37.33	Neutral	56	-18.67	QP
0.479978	38.15	Neutral	56.34	-18.19	QP

Frequency (MHz)	Corrected Amplitude (dBµV)	Conductor (Live/Neutral)	Limit (dBµV)	Margin (dB)	Detector (QP/Ave.)
0.150096	39.39	Neutral	55.99	-16.6	Average
6.716054	34.7	Neutral	50	-15.3	Average
7.047734	36.14	Neutral	50	-13.86	Average
6.572702	34.79	Neutral	50	-15.21	Average
1.205286	26.72	Neutral	46	-19.28	Average
0.479978	26.13	Neutral	46.34	-20.21	Average

7 FCC §15.209 & §15.407(b) - Spurious Radiated Emissions

7.1 Applicable Standard

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz.

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100 Note 1	3
88 - 216	150 Note 1	3
216 - 960	200 Note 1	3
Above 960	500	3

Note 1: 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.

As Per FCC §15.205(a) except as show 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	960 – 1240	4. 5 – 5. 15
0.495 – 0.505	16.69475 – 16.69525	1300 – 1427	5. 35 – 5. 46
2.1735 – 2.1905	25.5 – 25.67	1435 – 1626.5	7.25 – 7.75
4.125 – 4.128	37.5 – 38.25	1645.5 – 1646.5	8.025 – 8.5
4.17725 – 4.17775	73 – 74.6	1660 – 1710	9.0 – 9.2
4.20725 – 4.20775	74.8 – 75.2	1718.8 – 1722.2	9.3 – 9.5
6.215 – 6.218	108 – 121.94	2200 – 2300	10.6 – 12.7
6.26775 – 6.26825	123 – 138	2310 – 2390	13.25 – 13.4
6.31175 – 6.31225	149.9 – 150.05	2483.5 – 2500	14.47 – 14.5
8.291 – 8.294	156.52475 – 156.52525	2690 – 2900	15.35 – 16.2
8.362 – 8.366	156.7 – 156.9	3260 – 3267	17.7 – 21.4
8.37625 – 8.38675	162.0125 –167.17	3.332 – 3.339	22.01 – 23.12
8.41425 – 8.41475	167.72 – 173.2	3 3458 – 3 358	23.6 – 24.0
12.29 – 12.293	240 – 285	3.600 – 4.400	31.2 – 31.8
12.51975 – 12.52025	322 – 335.4		36.43 – 36.5
12.57675 – 12.57725	399.9 – 410		Above 38.6
13.36 – 13.41	608 – 614		

As per FCC Part 15.407 (b)

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(3) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

7.2 Test Setup

The radiated emissions tests were performed in the 5-meter Chamber, using the setup in accordance with ANSI C63.10-2013. The specification used was the FCC 15C/15E limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

7.3 Test Procedure

For the radiated emissions test, the EUT host, and all support equipment power cords were connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all Installation combinations.

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 1.5 meter above ground plane, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

The spectrum analyzer or receiver is set as:

Below 1000 MHz:

RBW = 100 kHz / VBW = 300 kHz / Sweep = Auto

Above 1000 MHz:

(1) Peak: RBW = 1MHz / VBW = 3MHz / Sweep = 100ms
(2) Average: RBW = 1MHz / VBW = 10Hz / Sweep = Auto

7.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude (CA) is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) to indicated Amplitude (Ai) reading. The basic equation is as follows:

CA = Ai + AF + CL + Atten – Ga

For example, a corrected amplitude of 40.3 dBuV/m = Indicated Reading (32.5 dBuV) + Antenna Factor (+23.5dB) + Cable Loss (3.7 dB) + Attenuator (10 dB) - Amplifier Gain (29.4 dB)

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit for Class A. The equation for margin calculation is as follows:

Margin = Corrected Amplitude - Limit

7.5 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Rohde & Schwarz	EMI Test Receiver	ESCI 1166.5950K03	100337	2015-09-28	1 year
Agilent	Spectrum Analyzer	E4446A	US44300386	2015-10-24	1 year
Sunol Science Corp	System Controller	SC99V	011003-1	N/R	N/R
Sunol Science Corp	Combination Antenna	JB3	A020106-3	2015-09-18	1 year
EMCO	Horn Antenna	DRG-118/A	1132	2015-02-19	1 year
Hewlett Packard	Pre-amplifier	8449B	3008A01978	2015-05-19	1 year
WiseWave	Horn Antenna	ARH-4223-02	10555-01	2014-08-09	3 Years
Suirong	30 ft conductive emission cable	LMR 400	-	2015-03-05	1 year
-	SMA cable	-	C0001	Each time[1]	N/A
IW Microwave (UTiFLEX)	High Frequency Cable	223458-002	223458-001	2015-05-29	1 year
IW Microwave	High Frequency cable	223458-002	223458-002	2015-05-29	1 year
Suirong	30 ft conductive emission cable	LMR 400		2015-03-05	1 year
Agilent	Pre-Amplifier	8449B	3008A01978	2015-03-11	1year
MICRO -TRONICS	Band Reject	BRM50701	160	N/A	N/A
Wisewave	Amplifier	ALN-33144030-01	11424-01	2015-04-28	2 years
Wisewave	Amplifier	ALN-22093530-01	12263-01	2015-04-28	2 years

Statement of Traceability: BACL *attests that all calibrations have been performed per the A2LA requirements, traceable to NIST.*

7.6 Test Environmental Conditions

Temperature:	22-24º C
Relative Humidity:	40-41 %
ATM Pressure:	103.1-104.1 kPa

The testing was performed by Leonard Gray on 2015-10-26 to 2015-10-30 at 5 meter 3.

7.7 Summary of Test Results

According to the data hereinafter, the EUT complied with the FCC Part 15.205, 15.209 and 15.407 standard's radiated emissions limits, and had the worst margin of:

30 MHz-1 GHz

Mode: Transmitting			
Margin (dB)	**Frequency (MHz)**	**Polarization (Horizontal/Vertical)**	**Mode, Channel**
-2.39	47.21575	Vertical	802.11n40, High Channel

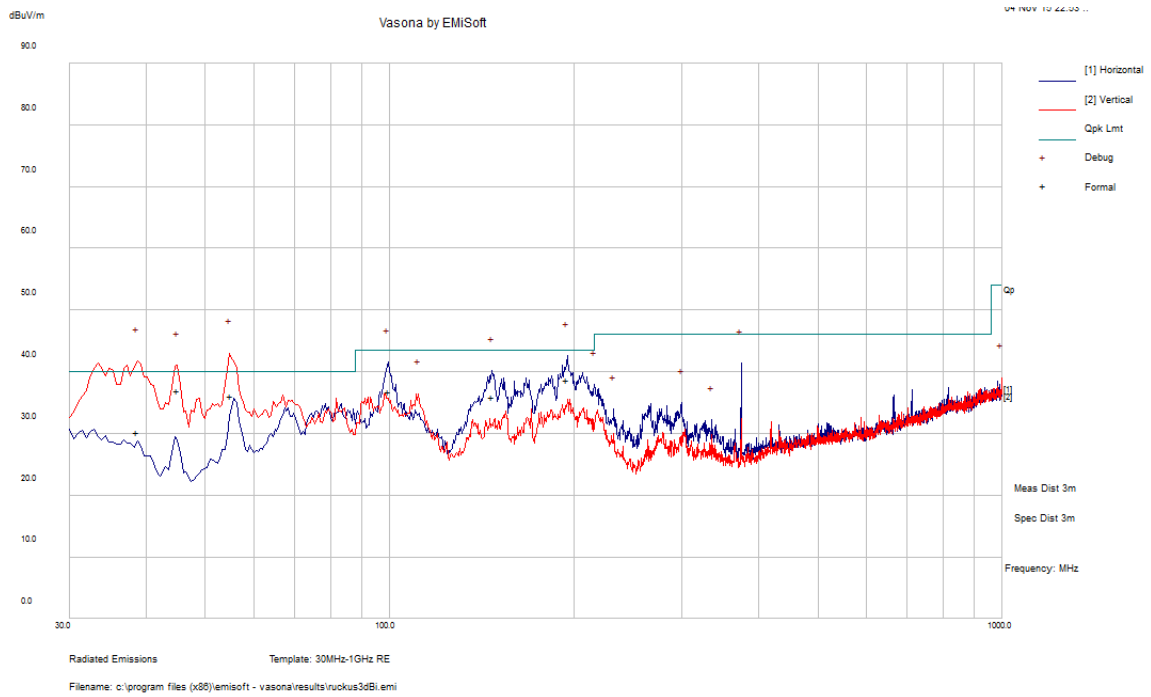
1 - 40 GHz

Mode: Transmitting			
Margin (dB)	**Frequency (MHz)**	**Polarization (Horizontal/Vertical)**	**Channel, Range**
-0.01	5715	Horizontal	1 GHz-40 GHz

7.8 Radiated Emissions Test Result Data

3 dBi Antenna 5.2 GHz Band

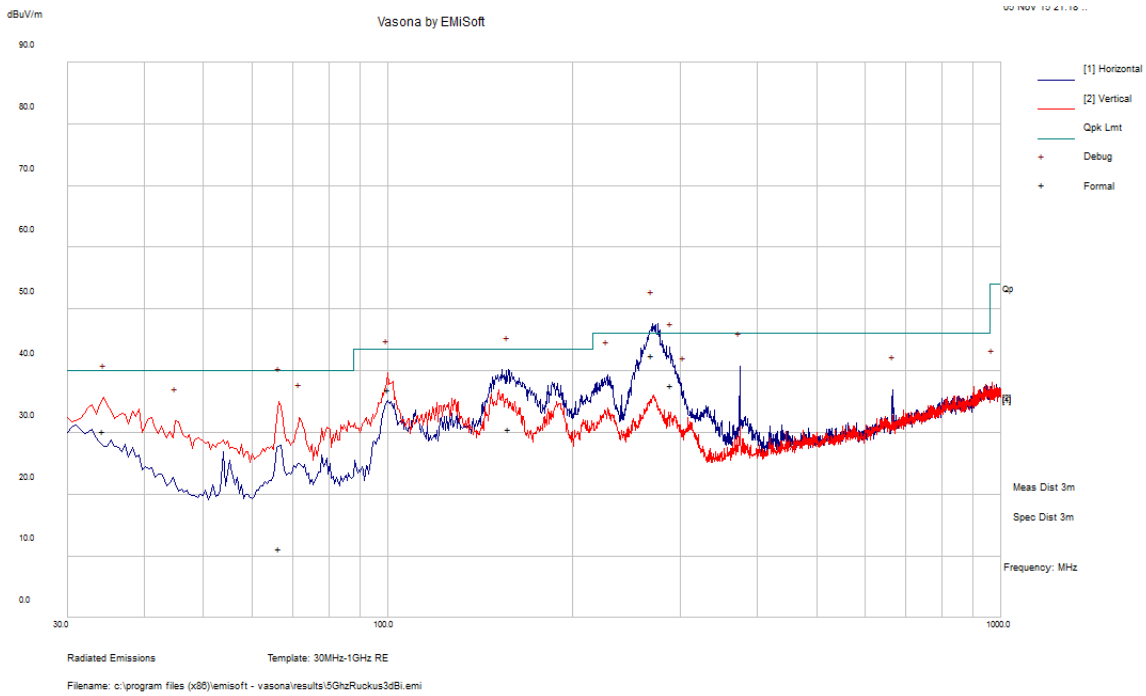
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
54.95625	36.11	100	V	351	40	-3.89	QP
38.68225	30.27	257	V	152	40	-9.73	QP
45.0255	36.99	104	V	48	40	-3.01	QP
194.9675	38.64	116	H	110	43.5	-4.86	QP
99.58525	36.8	265	H	100	43.5	-6.7	QP
146.781	35.97	161	H	334	43.5	-7.53	QP

3 dBi Antenna 5.8 GHz Band

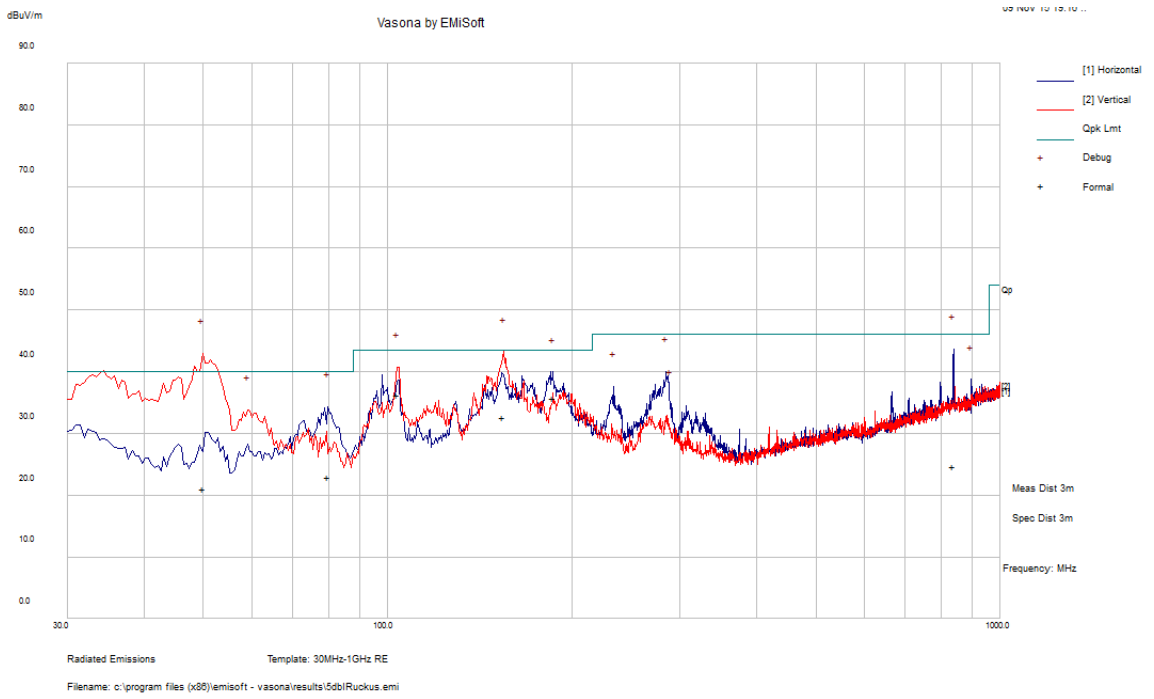
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
269.599	42.47	113	H	284	46	-3.53	QP
157.3115	30.55	105	H	131	43.5	-12.95	QP
289.8933	37.61	100	H	298	46	-8.39	QP
99.913	36.98	151	V	113	43.5	-6.52	QP
34.2375	30.18	171	V	101	40	-9.82	QP
66.57075	11.24	177	V	143	40	-28.76	QP

5 dBi Antenna 5.2 GHz Band

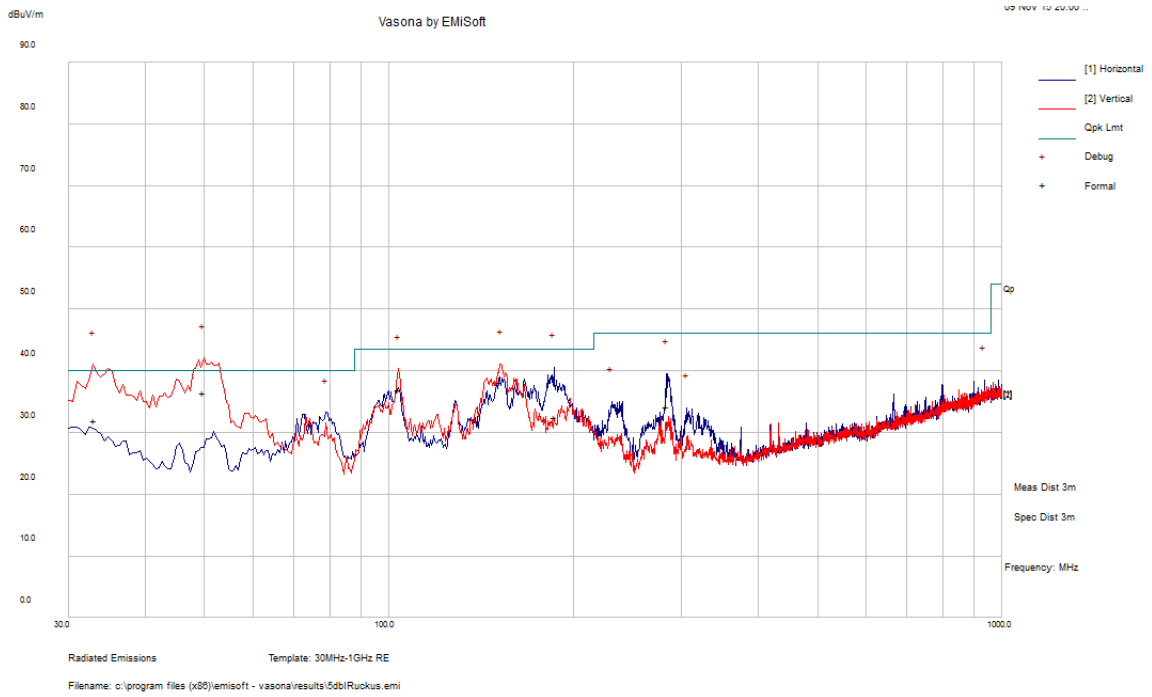
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
49.928	21.03	217	V	280	40	-18.97	QP
154.5065	32.58	119	V	46	43.5	-10.92	QP
838.9363	24.7	123	H	1	46	-21.3	QP
103.8513	36.27	119	V	320	43.5	-7.23	QP
186.1413	35.71	167	H	60	43.5	-7.79	QP
80.03975	22.94	136	H	360	40	-17.06	QP

5 dBi Antenna 5.8 GHz Band

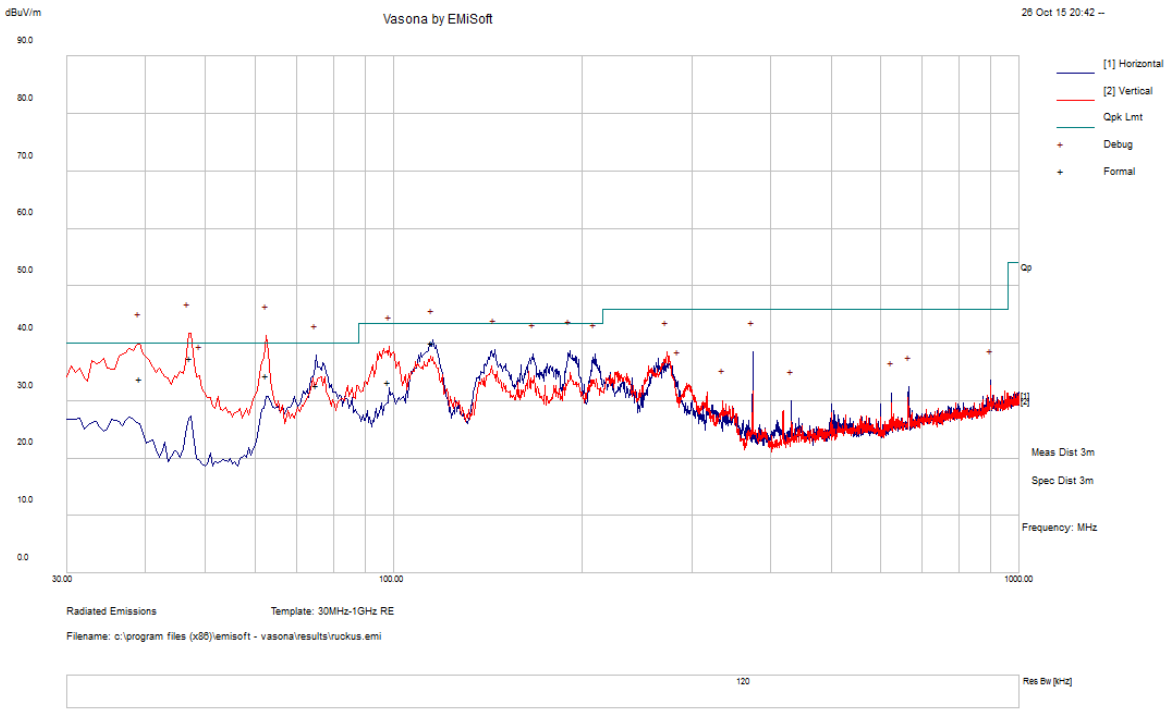
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
49.81925	36.44	100	V	247	40	-3.56	QP
33.14	31.94	124	V	186	40	-8.06	QP
151.974	38.16	101	V	87	43.5	-5.34	QP
185.9335	32.47	209	H	245	43.5	-11.03	QP
103.53	36.97	100	V	269	43.5	-6.53	QP
283.6838	34.26	100	H	257	46	-11.74	QP

8 dBi Antenna 5.2 GHz Band

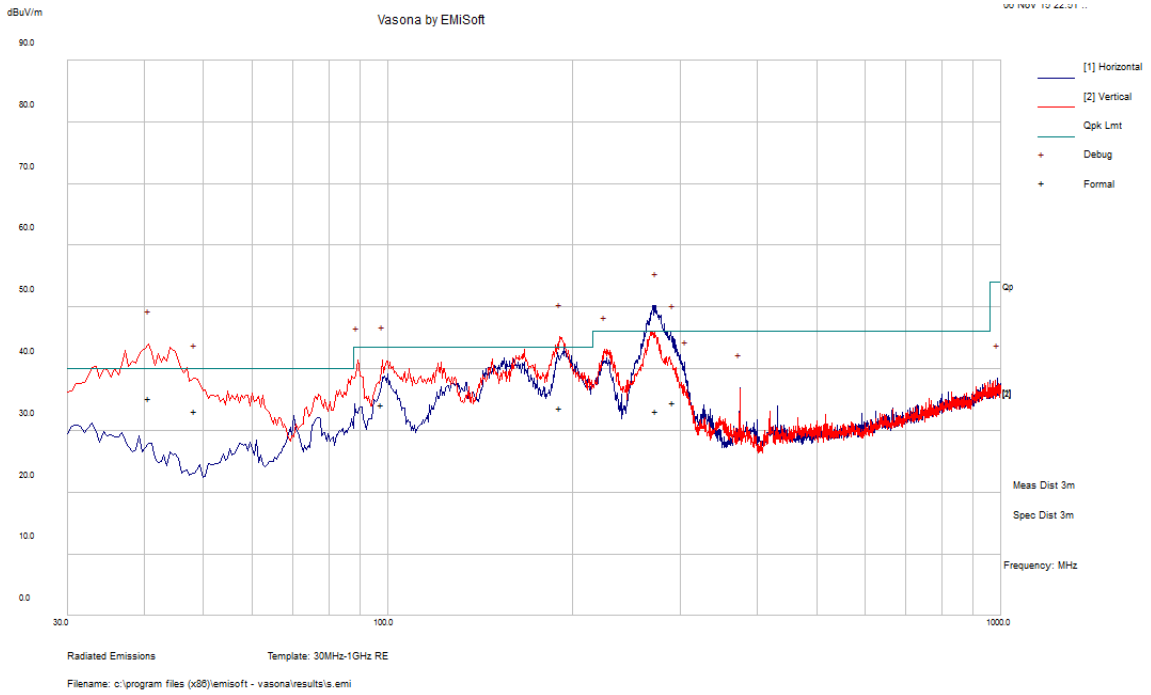
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
47.21575	37.61	100	V	337	40	-2.39	QP
62.533	34.41	242	V	0	40	-5.59	QP
39.36925	33.95	116	V	293	40	-6.05	QP
75.1735	32.75	299	H	239	40	-7.25	QP
115.188	40.22	281	H	65	43.5	-3.28	QP
98.17025	33.44	191	V	224	43.5	-10.06	QP

8 dBi Antenna 5.8 GHz Band

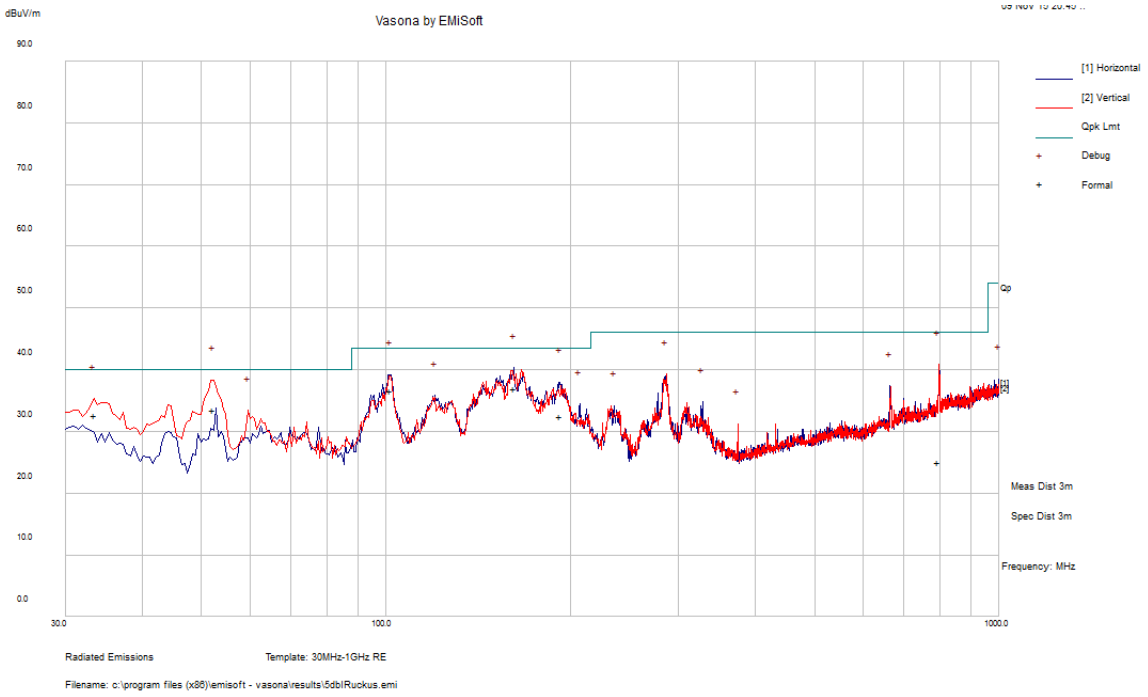
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
273.6268	33.11	109	H	10	46	-12.89	QP
40.76	35.26	123	V	248	40	-4.74	QP
190.7388	33.61	123	V	323	43.5	-9.89	QP
292.1545	34.64	105	H	93	46	-11.36	QP
48.481	33.22	104	V	131	40	-6.78	QP
97.6605	34.14	132	V	125	43.5	-9.36	QP

12 dBi Antenna 5.2 GHz Band

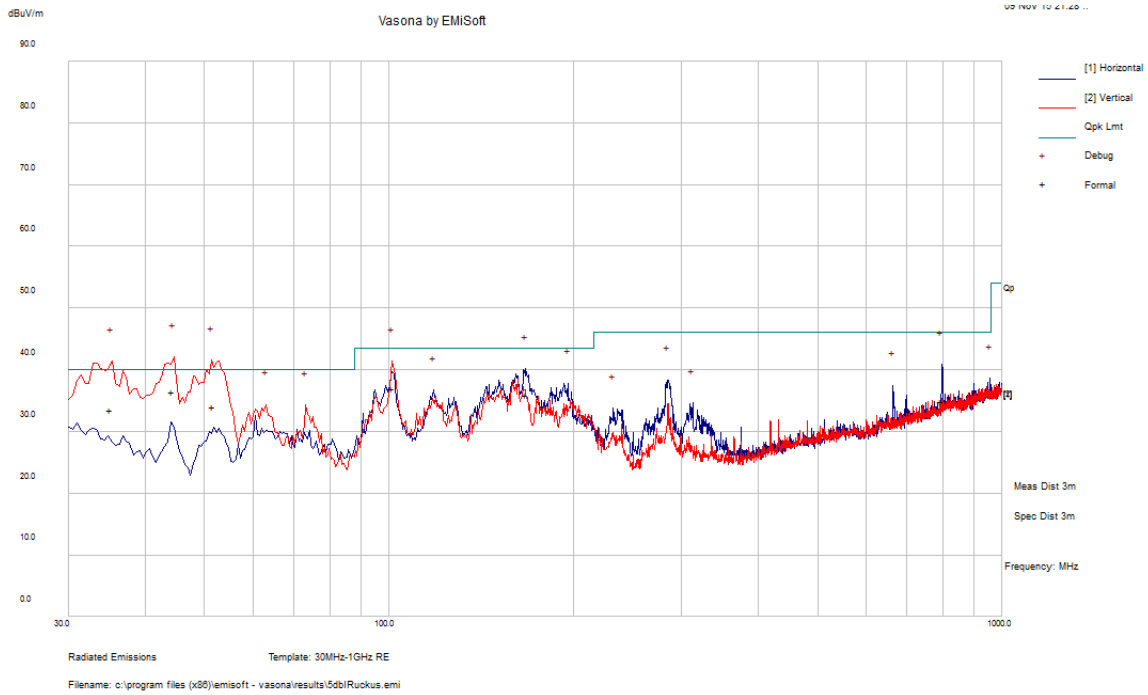
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
52.2485	33.46	281	V	149	40	-6.54	QP
161.7663	36.99	170	H	134	43.5	-6.51	QP
101.868	36.62	274	H	101	43.5	-6.88	QP
33.4455	32.59	152	V	333	40	-7.41	QP
796.56	25.06	128	V	136	46	-20.94	QP
192.1625	32.52	209	H	243	43.5	-10.98	QP

12 dBi Antenna 5.8 GHz Band

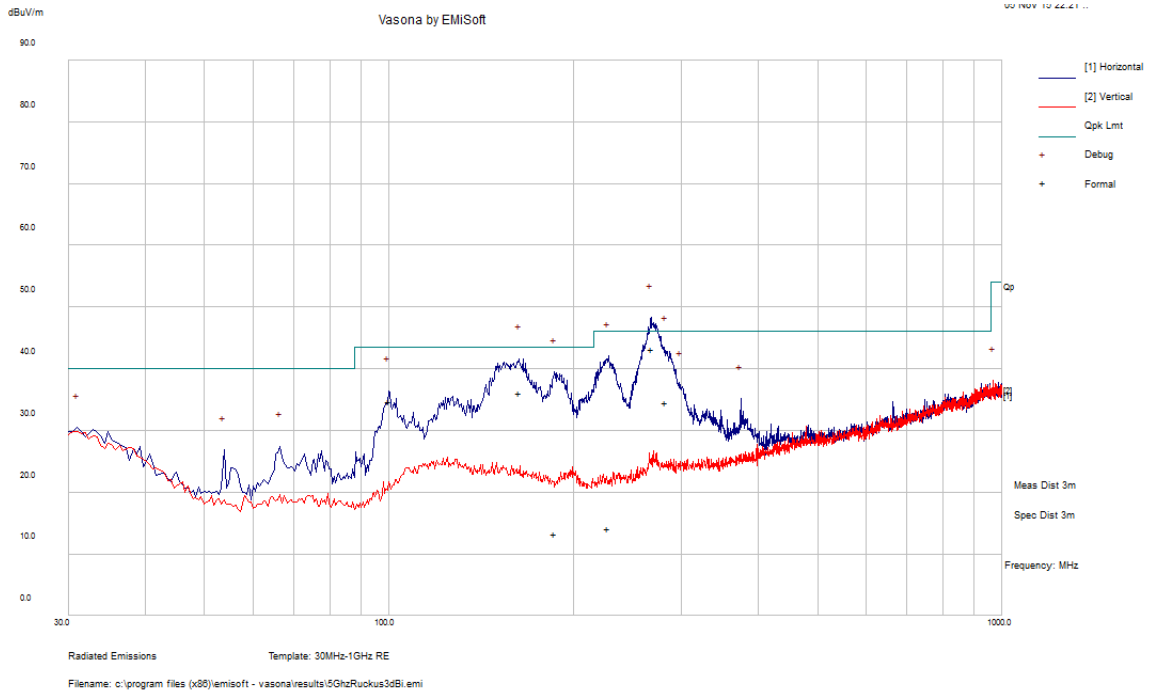
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
44.31475	36.53	100	V	299	40	-3.47	QP
51.5795	34.04	174	V	263	40	-5.96	QP
35.11125	33.57	134	V	207	40	-6.43	QP
101.2175	36.9	161	V	245	43.5	-6.6	QP
167.3095	36.02	227	H	153	43.5	-7.48	QP
796.802	34.98	116	H	301	46	-11.02	QP

15 dBi Antenna 5.2 GHz Band

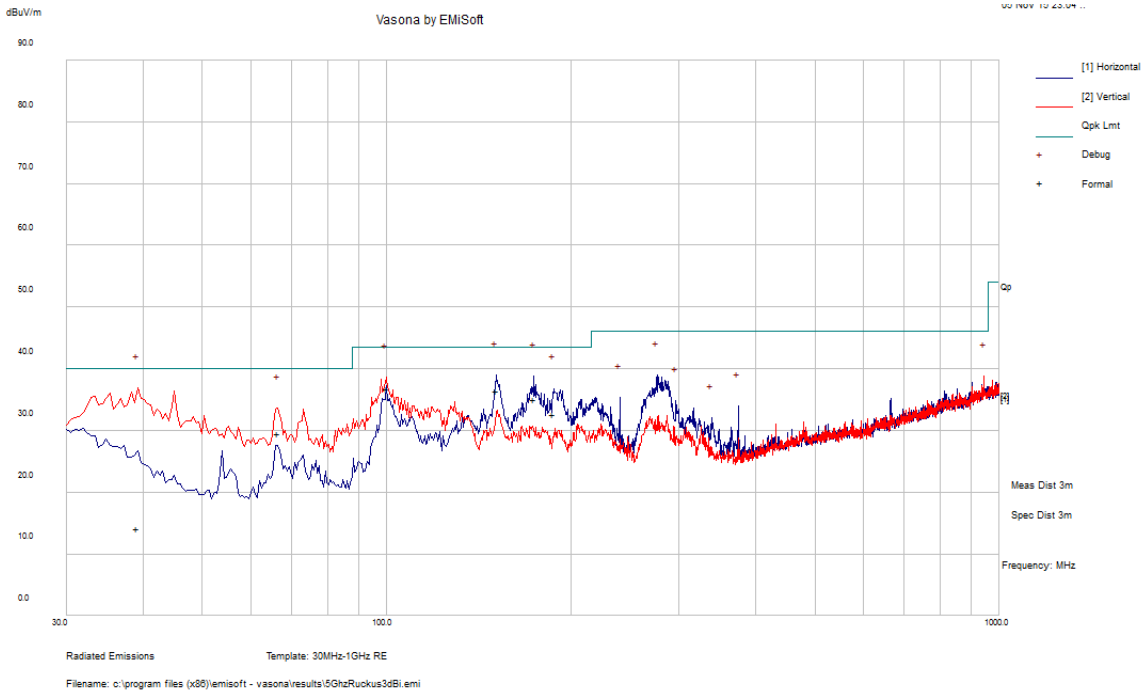
30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
267.8418	43.15	112	H	306	46	-2.85	QP
162.9755	36.19	138	H	130	43.5	-7.31	QP
282.5218	34.54	130	H	68	46	-11.46	QP
227.9393	14.1	141	H	154	46	-31.9	QP
186.2443	13.2	143	H	102	43.5	-30.3	QP
99.94375	34.75	104	H	46	43.5	-8.75	QP

15 dBi Antenna 5.8 GHz Band

30 MHz – 1 GHz



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBµV/m)	Margin (dB)	Comments
39.22025	14.21	267	V	74	40	-25.79	QP
150.9863	36.54	122	H	81	43.5	-6.96	QP
174.1145	35.03	134	H	74	43.5	-8.47	QP
99.912	36.82	206	V	126	43.5	-6.68	QP
66.53	29.52	267	V	234	40	-10.48	QP
187.2128	32.63	100	H	85	43.5	-10.87	QP

1–40 GHz

5.2 GHz Band

802.11a mode, 3 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 18											
5180	72.57	288	263	V	33.509	5.26	0.00	111.34	-	-	Peak
5180	71.54	110	289	H	33.608	5.26	0.00	110.41	-	-	Peak
5180	61.99	288	263	V	33.509	5.26	0.00	100.76	-	-	Ave
5180	59.68	110	289	H	33.608	5.26	0.00	98.55	-	-	Ave
5150	28.45	288	263	V	33.509	5.26	0.00	67.22	74.00	-6.78	Peak
5150	30.88	110	289	H	33.608	5.26	0.00	69.75	74.00	-4.25	Peak
5150	14.21	288	263	V	33.509	5.26	0.00	52.98	54.00	-1.02	Ave
5150	14.45	110	289	H	33.608	5.26	0.00	53.32	54.00	-0.68	Ave
10360	44.87	0	100	V	37.51	10.510	33.52	59.37	68.26	-8.89	Peak
10360	45.31	0	100	H	38.25	10.510	33.52	60.55	68.26	-7.71	Peak
10360	30.17	0	100	V	37.51	10.510	33.52	44.67	54.00	-9.33	Ave
10360	30.24	0	100	H	38.25	10.510	33.52	45.48	54.00	-8.52	Ave
15540	42.63	0	100	V	37.60	14.080	33.60	60.71	68.26	-7.55	Peak
15540	41.81	0	100	H	39.41	14.080	33.60	61.70	68.26	-6.56	Peak
15540	28.73	0	100	V	37.60	14.080	33.60	46.81	54.00	-7.19	Ave
15540	28.43	0	100	H	39.41	14.080	33.60	48.32	54.00	-5.68	Ave
Middle Channel 5200 MHz Power Setting Target											
5200	77.39	286	245	V	33.509	5.260	0.00	116.16	-	-	Peak
5200	75.8	211	302	H	33.608	5.260	0.00	114.67	-	-	Peak
5200	66.52	286	245	V	33.509	5.260	0.00	105.29	-	-	Ave
5200	64.03	211	302	H	33.608	5.260	0.00	102.90	-	-	Ave
10400	44.15	0	100	V	37.51	10.510	33.52	58.65	68.26	-9.61	Peak
10400	46.28	201	283	H	38.25	10.510	33.52	61.52	68.26	-6.74	Peak
10400	30.05	0	100	V	37.51	10.510	33.52	44.55	54.00	-9.45	Ave
10400	31.81	201	283	H	38.25	10.510	33.52	47.05	54.00	-6.95	Ave
15600	42.47	0	100	V	37.455	13.850	33.82	59.96	68.26	-8.31	Peak
15600	42.36	0	100	H	39.182	13.850	33.82	61.57	68.26	-6.69	Peak
15600	27.61	0	100	V	37.455	13.850	33.82	45.10	54.00	-8.91	Ave
15600	27.45	0	100	H	39.182	13.850	33.82	46.66	54.00	-7.34	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting Target											
5240	74.18	274	247	V	33.51	5.26	0.00	112.95	-	-	Peak
5240	75.4	219	271	H	33.61	5.26	0.00	114.27	-	-	Peak
5240	63.94	274	247	V	33.51	5.26	0.00	102.71	-	-	Ave
5240	63.7	219	271	H	33.61	5.26	0.00	102.57	-	-	Ave
5350	26.68	274	247	V	33.57	5.60	0.00	65.85	74.00	-8.15	Peak
5350	26.74	219	271	H	33.58	5.60	0.00	65.92	74.00	-8.08	Peak
5350	12.81	274	247	V	33.57	5.60	0.00	51.98	54.00	-2.02	Ave
5350	12.98	219	271	H	33.58	5.60	0.00	52.16	54.00	-1.84	Ave
10480	43.64	0	100	V	37.66	10.340	33.55	58.09	68.26	-10.18	Peak
10480	43.62	0	100	H	38.33	10.340	33.55	58.74	68.26	-9.52	Peak
10480	29.09	0	100	V	37.66	10.340	33.55	43.54	54.00	-10.47	Ave
10480	29.65	0	100	H	38.33	10.340	33.55	44.77	54.00	-9.23	Ave
15720	43.34	0	100	V	37.27	13.900	34.09	60.42	68.26	-7.84	Peak
15720	41.6	0	100	H	38.91	13.900	34.09	60.32	68.26	-7.94	Peak
15720	28.88	0	100	V	37.27	13.900	34.09	45.96	54.00	-8.04	Ave
15720	28.66	0	100	H	38.91	13.900	34.09	47.38	54.00	-6.62	Ave

802.11n20 mode 3 dBi Antena

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 17.5											
5180	73.48	213	237	V	33.509	5.26	0.00	112.25	-	-	Peak
5180	71.94	38	297	H	33.608	5.26	0.00	110.81	-	-	Peak
5180	61.89	213	237	V	33.509	5.26	0.00	100.66	-	-	Ave
5180	60.72	38	297	H	33.608	5.26	0.00	99.59	-	-	Ave
5150	28.2	213	297	V	33.509	5.26	0.00	66.97	74.00	-7.03	Peak
5150	31.21	38	297	H	33.608	5.26	0.00	70.08	74.00	-3.92	Peak
5150	13.64	213	237	V	33.509	5.26	0.00	52.41	54.00	-1.59	Ave
5150	14.92	38	297	H	33.608	5.26	0.00	53.79	54.00	-0.21	Ave
10360	45.03	0	100	V	37.51	10.510	33.52	59.53	68.26	-8.73	Peak
10360	45.64	0	100	H	38.25	10.510	33.52	60.88	68.26	-7.38	Peak
10360	31.22	0	100	V	37.51	10.510	33.52	45.72	54.00	-8.28	Ave
10360	31.26	0	100	H	38.25	10.510	33.52	46.50	54.00	-7.50	Ave
15540	44.6	0	100	V	37.60	14.080	33.60	62.68	68.26	-5.58	Peak
15540	44.32	0	100	H	39.41	14.080	33.60	64.21	68.26	-4.05	Peak
15540	30.9	0	100	V	37.60	14.080	33.60	48.98	54.00	-5.02	Ave
15540	30.72	0	100	H	39.41	14.080	33.60	50.61	54.00	-3.39	Ave
Middle Channel 5200 MHz Power Setting Target											
5200	76.59	203	243	V	33.509	5.260	0.00	115.36	-	-	Peak
5200	74.55	209	295	H	33.608	5.260	0.00	113.42	-	-	Peak
5200	65.49	203	243	V	33.509	5.260	0.00	104.26	-	-	Ave
5200	63.73	209	295	H	33.608	5.260	0.00	102.60	-	-	Ave
10400	44.62	0	100	V	37.51	10.510	33.52	59.12	68.26	-9.14	Peak
10400	44.83	0	100	H	38.25	10.510	33.52	60.07	68.26	-8.19	Peak
10400	30.82	0	100	V	37.51	10.510	33.52	45.32	54.00	-8.68	Ave
10400	30.89	0	100	H	38.25	10.510	33.52	46.13	54.00	-7.87	Ave
15600	44.69	0	100	V	37.455	13.850	33.82	62.18	68.26	-6.09	Peak
15600	43.91	0	100	H	39.182	13.850	33.82	63.12	68.26	-5.14	Peak
15600	30.18	0	100	V	37.455	13.850	33.82	47.67	54.00	-6.34	Ave
15600	30.33	0	100	H	39.182	13.850	33.82	49.54	54.00	-4.46	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting Target											
5240	77.21	212	237	V	33.51	5.26	0.00	115.98	-	-	Peak
5240	73.66	208	306	H	33.61	5.26	0.00	112.53	-	-	Peak
5240	66.09	212	237	V	33.51	5.26	0.00	104.86	-	-	Ave
5240	62.7	208	306	H	33.61	5.26	0.00	101.57	-	-	Ave
5350	26.89	212	237	V	33.57	5.60	0.00	66.06	74.00	-7.94	Peak
5350	26.45	208	306	H	33.58	5.60	0.00	65.63	74.00	-8.37	Peak
5350	13.14	212	237	V	33.57	5.60	0.00	52.31	54.00	-1.69	Ave
5350	12.89	208	306	H	33.58	5.60	0.00	52.07	54.00	-1.93	Ave
10480	45.3	0	100	V	37.66	10.340	33.55	59.75	68.26	-8.52	Peak
10480	44.21	0	100	H	38.33	10.340	33.55	59.33	68.26	-8.93	Peak
10480	30.63	0	100	V	37.66	10.340	33.55	45.08	54.00	-8.93	Ave
10480	30.64	0	100	H	38.33	10.340	33.55	45.76	54.00	-8.24	Ave
15720	43.95	0	100	V	37.27	13.900	34.09	61.03	68.26	-7.23	Peak
15720	44.01	0	100	H	38.91	13.900	34.09	62.73	68.26	-5.53	Peak
15720	30.74	0	100	V	37.27	13.900	34.09	47.82	54.00	-6.18	Ave
15720	30.65	0	100	H	38.91	13.900	34.09	49.37	54.00	-4.63	Ave

802.11n40 mode 3dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5190 MHz Power Setting 16											
5190	70.42	205	236	V	33.509	5.260	0.00	109.19	-	-	Peak
5190	69.46	211	297	H	33.608	5.260	0.00	108.33	-	-	Peak
5190	59.81	205	236	V	33.509	5.260	0.00	98.58	-	-	Ave
5190	57.84	211	297	H	33.608	5.260	0.00	96.71	-	-	Ave
5150	28.09	205	236	V	33.509	5.260	0.00	66.86	74.00	-7.14	Peak
5150	32.36	211	297	H	33.608	5.260	0.00	71.23	74.00	-2.77	Peak
5150	14.19	205	236	V	33.509	5.260	0.00	52.96	54.00	-1.04	Ave
5150	14.93	211	297	H	33.608	5.260	0.00	53.80	54.00	-0.20	Ave
10380	46.02	0	100	V	37.51	10.510	33.52	60.52	68.26	-7.74	Peak
10380	45.68	0	100	H	38.25	10.510	33.52	60.92	68.26	-7.34	Peak
10380	30.94	0	100	V	37.51	10.510	33.52	45.44	54.00	-8.56	Ave
10380	31.13	0	100	H	38.25	10.510	33.52	46.37	54.00	-7.63	Ave
15570	43.91	0	100	V	37.455	13.850	33.82	61.40	68.26	-6.87	Peak
15570	43.25	0	100	H	39.182	13.850	33.82	62.46	68.26	-5.80	Peak
15570	29.97	0	100	V	37.455	13.850	33.82	47.46	54.00	-6.55	Ave
15570	29.93	0	100	H	39.182	13.850	33.82	49.14	54.00	-4.86	Ave
High Channel 5230 MHz Power Setting Target											
5230	74.01	212	215	V	33.509	5.260	0.00	112.78	-	-	Peak
5230	71.22	111	307	H	33.608	5.260	0.00	110.09	-	-	Peak
5230	63.67	212	215	V	33.509	5.260	0.00	102.44	-	-	Ave
5230	60.08	111	307	H	33.608	5.260	0.00	98.95	-	-	Ave
5350	28.07	212	215	V	33.57	5.60	0.00	67.24	74.00	-6.76	Peak
5350	27.15	111	307	H	33.58	5.60	0.00	66.33	74.00	-7.67	Peak
5350	13.4	212	215	V	33.57	5.60	0.00	52.57	54.00	-1.43	Ave
5350	13.28	111	307	H	33.58	5.60	0.00	52.46	54.00	-1.54	Ave
10460	44.77	0	100	V	37.66	10.340	33.55	59.22	68.26	-9.04	Peak
10460	43.85	0	100	H	38.33	10.340	33.55	58.97	68.26	-9.29	Peak
10460	30.56	0	100	V	37.66	10.340	33.55	45.01	54.00	-8.99	Ave
10460	30.59	0	100	H	38.33	10.340	33.55	45.71	54.00	-8.29	Ave
15690	43.67	0	100	V	37.27	13.760	34.09	60.61	68.26	-7.65	Peak
15690	43.86	0	100	H	38.91	13.760	34.09	62.44	68.26	-5.82	Peak
15690	29.56	0	100	V	37.27	13.760	34.09	46.50	54.00	-7.50	Ave
15690	30.59	0	100	H	38.91	13.760	34.09	49.17	54.00	-4.83	Ave

5.8 GHz Band

802.11a mode, 3 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting 19											
5745	68.66	209	250	V	33.905	5.60	0.00	108.17	-	-	Peak
5745	70.4	229	296	H	33.870	5.60	0.00	109.87	-	-	Peak
5745	57.51	209	250	V	33.905	5.60	0.00	97.02	-	-	Ave
5745	57.94	229	296	H	33.870	5.60	0.00	97.41	-	-	Ave
5725	36.21	209	250	V	33.905	5.60	0.00	75.72	78.23	-2.52	Peak
5725	35.74	229	296	H	33.870	5.60	0.00	75.21	78.23	-3.02	Peak
5715	26.66	209	250	V	33.905	5.60	0.00	66.17	68.23	-2.07	Peak
5715	27.64	229	296	H	33.870	5.60	0.00	67.11	68.23	-1.12	Peak
11490	43.09	0	100	V	39.10	12.340	34.10	60.43	74.00	-13.57	Peak
11490	44.26	0	100	H	38.42	12.340	34.10	60.92	74.00	-13.08	Peak
11490	30.01	0	100	V	39.10	12.340	34.10	47.35	54.00	-6.65	Ave
11490	29.97	0	100	H	38.42	13.970	34.10	48.26	54.00	-5.74	Ave
17235	41.93	0	100	V	46.34	13.970	33.72	68.52	74.00	-5.48	Peak
17235	42.18	0	100	H	42.02	13.970	33.72	64.45	74.00	-9.55	Peak
17235	28.79	0	100	H	42.02	13.970	33.72	51.06	54.00	-2.94	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	71.1	213	264	V	34.012	5.600	0.00	110.71	-	-	Peak
5785	71.38	227	309	H	33.955	5.600	0.00	110.94	-	-	Peak
5785	61.08	213	264	V	34.012	5.600	0.00	100.69	-	-	Ave
5785	59.58	227	309	H	33.955	5.600	0.00	99.14	-	-	Ave
11570	43.94	0	100	V	39.38	13.070	34.06	62.33	74.00	-11.67	Peak
11570	44.02	0	100	H	38.30	13.070	34.06	61.33	74.00	-12.67	Peak
11570	29.95	0	100	V	39.38	13.070	34.06	48.34	54.00	-5.66	Ave
11570	30.09	0	100	H	38.30	13.070	34.06	47.40	54.00	-6.60	Ave
17355	41.68	0	100	V	50.057	13.510	33.81	71.44	74.00	-2.56	Peak
17355	43.6	0	100	H	43.816	13.510	33.81	67.12	74.00	-6.88	Peak
17355	28.49	0	100	H	43.816	13.510	33.81	52.01	54.00	-1.99	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting Target											
5825	68.45	309	245	V	34.01	5.60	0.00	108.06	-	-	Peak
5825	71.42	224	302	H	33.96	5.60	0.00	110.98	-	-	Peak
5825	58.36	309	245	V	34.01	5.60	0.00	97.97	-	-	Ave
5825	59.5	224	302	H	33.96	5.60	0.00	99.06	-	-	Ave
5850	25.91	309	245	V	34.03	5.60	0.00	65.54	78.23	-12.69	Peak
5850	29.7	224	302	H	34.22	5.60	0.00	69.52	78.23	-8.71	Peak
5860	26.07	309	245	V	34.03	5.60	0.00	65.70	68.23	-2.53	Peak
5860	27.66	224	302	H	34.22	5.60	0.00	67.48	68.23	-0.75	Peak
11650	44.35	0	100	V	39.91	13.890	34.12	64.03	74.00	-9.97	Peak
11650	44.02	0	100	H	38.33	13.890	34.12	62.12	74.00	-11.88	Peak
11650	30.24	0	100	V	39.91	13.890	34.12	49.92	54.00	-4.08	Ave
11650	30.33	0	100	H	38.33	13.890	34.12	48.43	54.00	-5.57	Ave
17475	41.47	0	100	H	44.41	13.540	33.87	65.55	74.00	-8.45	Peak
17475	27.61	0	100	H	44.41	13.540	33.87	51.69	54.00	-2.31	Ave

5.8 GHz Band

802.11n20 mode, 3 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting 19											
5745	69.68	313	271	V	33.905	5.60	0.00	109.19	-	-	Peak
5745	64.95	165	283	H	33.870	5.60	0.00	104.42	-	-	Peak
5745	58.56	313	271	V	33.905	5.60	0.00	98.07	-	-	Ave
5745	54.41	165	283	H	33.870	5.60	0.00	93.88	-	-	Ave
5725	38.1	313	271	V	33.905	5.60	0.00	77.61	78.23	-0.63	Peak
5725	37.31	165	283	H	33.870	5.60	0.00	76.78	78.23	-1.45	Peak
5715	27.32	313	271	V	33.905	5.60	0.00	66.83	68.23	-1.41	Peak
5715	27.02	165	283	H	33.870	5.60	0.00	66.49	68.23	-1.74	Peak
11490	42.23	0	100	V	39.10	12.340	34.10	59.57	74.00	-14.43	Peak
11490	42.25	0	100	H	38.42	12.340	34.10	58.91	74.00	-15.09	Peak
11490	28.43	0	100	V	39.10	12.340	34.10	45.77	54.00	-8.23	Ave
11490	28.52	0	100	H	38.42	13.970	34.10	46.81	54.00	-7.19	Ave
17235	42.69	0	100	V	46.34	13.970	33.72	69.28	74.00	-4.72	Peak
17235	42.72	0	100	H	42.02	13.970	33.72	64.99	74.00	-9.01	Peak
17235	29.31	0	100	H	42.02	13.970	33.72	51.58	54.00	-2.42	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	70.69	135	274	V	34.012	5.600	0.00	110.30	-	-	Peak
5785	65.94	108	334	H	33.955	5.600	0.00	105.50	-	-	Peak
5785	59.72	135	274	V	34.012	5.600	0.00	99.33	-	-	Ave
5785	55.15	108	334	H	33.955	5.600	0.00	94.71	-	-	Ave
11570	42.89	0	100	V	39.38	13.070	34.06	61.28	74.00	-12.72	Peak
11570	42.09	0	100	H	38.30	13.070	34.06	59.40	74.00	-14.60	Peak
11570	28.7	0	100	V	39.38	13.070	34.06	47.09	54.00	-6.91	Ave
11570	28.72	0	100	H	38.30	13.070	34.06	46.03	54.00	-7.97	Ave
17355	42.68	0	100	V	50.057	13.510	33.81	72.44	74.00	-1.56	Peak
17355	43.2	0	100	H	43.816	13.510	33.81	66.72	74.00	-7.28	Peak
17355	29.4	0	100	H	43.816	13.510	33.81	52.92	54.00	-1.08	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting Target											
5825	69.67	222	243	V	34.01	5.60	0.00	109.28	-	-	Peak
5825	67.08	110	323	H	33.96	5.60	0.00	106.64	-	-	Peak
5825	58.92	222	243	V	34.01	5.60	0.00	98.53	-	-	Ave
5825	56.24	110	323	H	33.96	5.60	0.00	95.80	-	-	Ave
5850	29.1	222	243	V	34.03	5.60	0.00	68.73	78.23	-9.50	Peak
5850	27.46	110	323	H	34.22	5.60	0.00	67.28	78.23	-10.95	Peak
5860	28.33	222	243	V	34.03	5.60	0.00	67.96	68.23	-0.27	Peak
5860	27.85	110	243	H	34.22	5.60	0.00	67.67	68.23	-0.56	Peak
11650	42.09	0	100	V	39.91	13.890	34.12	61.77	74.00	-12.23	Peak
11650	42.51	0	100	H	38.33	13.890	34.12	60.61	74.00	-13.39	Peak
11650	28.63	0	100	V	39.91	13.890	34.12	48.31	54.00	-5.69	Ave
11650	28.52	0	100	H	38.33	13.890	34.12	46.62	54.00	-7.38	Ave
17475	42.24	0	100	H	44.41	13.540	33.87	66.32	74.00	-7.68	Peak
17475	28.85	0	100	H	44.41	13.540	33.87	52.93	54.00	-1.07	Ave

5.8 GHz Band

802.11n40, 3 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5755 MHz Power Setting 15.5											
5755	63.52	243	312	V	33.905	5.60	0.00	103.03	-	-	Peak
5755	59.81	111	300	H	33.870	5.60	0.00	99.28	-	-	Peak
5755	52.66	243	312	V	33.905	5.60	0.00	92.17	-	-	Ave
5755	48.11	111	300	H	33.870	5.60	0.00	87.58	-	-	Ave
5725	31.99	243	312	V	33.905	5.60	0.00	71.50	78.23	-6.74	Peak
5725	28.49	111	300	H	33.870	5.60	0.00	67.96	78.23	-10.27	Peak
5715	28.01	243	312	V	33.905	5.60	0.00	67.52	68.23	-0.72	Peak
5715	26.11	111	300	H	33.870	5.60	0.00	65.58	68.23	-2.65	Peak
11510	42.12	0	100	V	39.10	12.340	34.10	59.46	74.00	-14.54	Peak
11510	42.64	0	100	H	38.42	12.340	34.10	59.30	74.00	-14.70	Peak
11510	28.45	0	100	V	39.10	12.340	34.10	45.79	54.00	-8.21	Ave
11510	28.43	0	100	H	38.42	12.340	34.10	45.09	54.00	-8.91	Ave
17265	42.61	0	100	V	46.34	13.970	33.72	69.20	74.00	-4.80	Peak
17265	42.52	0	100	H	42.02	13.970	33.72	64.79	74.00	-9.21	Peak
17265	29.22	0	100	H	42.02	13.970	33.72	51.49	54.00	-2.51	Ave
High Channel 5795 MHz Power Setting Target											
5795	66.85	136	207	V	34.01	5.60	0.00	106.46	-	-	Peak
5795	63.88	165	302	H	33.96	5.60	0.00	103.44	-	-	Peak
5795	55.28	136	207	V	34.01	5.60	0.00	94.89	-	-	Ave
5795	52.23	165	302	H	33.96	5.60	0.00	91.79	-	-	Ave
5850	26.19	136	207	V	34.03	5.60	0.00	65.82	78.23	-12.41	Peak
5850	26.06	165	302	H	34.22	5.60	0.00	65.88	78.23	-12.35	Peak
5860	26.34	136	207	V	34.03	5.60	0.00	65.97	68.23	-2.26	Peak
5860	27.14	165	302	H	34.22	5.60	0.00	66.96	68.23	-1.27	Peak
11590	43.09	0	100	V	39.91	10.710	34.12	59.59	74.00	-14.41	Peak
11590	42.44	0	100	H	38.33	10.710	34.12	57.36	74.00	-16.64	Peak
11590	28.41	0	100	V	39.91	10.710	34.12	44.91	54.00	-9.09	Ave
11590	28.42	0	100	H	38.33	10.710	34.12	43.34	54.00	-10.66	Ave
17385	42.9	0	100	V	52.05	12.010	33.87	73.09	74.00	-0.91	Peak
17385	42.37	0	100	H	44.41	12.010	33.87	64.92	74.00	-9.08	Peak
17385	28.67	0	100	H	44.41	12.010	33.87	51.22	54.00	-2.78	Ave

5.2 GHz Band

802.11a mode, 5 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting Target											
5180	67.85	14	113	V	33.509	5.26	0.00	106.62	-	-	Peak
5180	68.82	340	114	H	33.608	5.26	0.00	107.69	-	-	Peak
5180	57.15	14	113	V	33.509	5.26	0.00	95.92	-	-	Ave
5180	57.71	340	114	H	33.608	5.26	0.00	96.58	-	-	Ave
5150	28.45	14	113	V	33.509	5.26	0.00	67.22	74.00	-6.78	Peak
5150	29.91	340	114	H	33.608	5.26	0.00	68.78	74.00	-5.22	Peak
5150	14.54	14	113	V	33.509	5.26	0.00	53.31	54.00	-0.69	Ave
5150	14.9	340	114	H	33.608	5.26	0.00	53.77	54.00	-0.23	Ave
10360	44.72	0	100	V	37.51	10.510	33.52	59.22	68.26	-9.04	Peak
10360	44.74	0	100	H	38.25	10.510	33.52	59.98	68.26	-8.28	Peak
10360	30.63	0	100	V	37.51	10.510	33.52	45.13	54.00	-8.87	Ave
10360	30.55	0	100	H	38.25	10.510	33.52	45.79	54.00	-8.21	Ave
15540	43.41	0	100	V	37.60	14.080	33.60	61.49	68.26	-6.77	Peak
15540	41.6	0	100	H	39.41	14.080	33.60	61.49	68.26	-6.77	Peak
15540	28.37	0	100	V	37.60	14.080	33.60	46.45	54.00	-7.55	Ave
15540	28.53	0	100	H	39.41	14.080	33.60	48.42	54.00	-5.58	Ave
Middle Channel 5200 MHz Power Setting Target											
5200	69.82	334	254	V	33.509	5.260	0.00	108.59	-	-	Peak
5200	67.82	330	100	H	33.608	5.260	0.00	106.69	-	-	Peak
5200	59.03	334	254	V	33.509	5.260	0.00	97.80	-	-	Ave
5200	56.99	330	100	H	33.608	5.260	0.00	95.86	-	-	Ave
10400	45.14	0	100	V	37.51	10.510	33.52	59.64	68.26	-8.62	Peak
10400	44.4	0	100	H	38.25	10.510	33.52	59.64	68.26	-8.62	Peak
10400	30.44	0	100	V	37.51	10.510	33.52	44.94	54.00	-9.06	Ave
10400	30.49	0	100	H	38.25	10.510	33.52	45.73	54.00	-8.27	Ave
15600	44.47	0	100	V	37.455	13.850	33.82	61.96	68.26	-6.31	Peak
15600	44.25	0	100	H	39.182	13.850	33.82	63.46	68.26	-4.80	Peak
15600	29.19	0	100	V	37.455	13.850	33.82	46.68	54.00	-7.33	Ave
15600	29.13	0	100	H	39.182	13.850	33.82	48.34	54.00	-5.66	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting Target											
5240	68.88	327	100	V	33.51	5.26	0.00	107.65	-	-	Peak
5240	67.53	329	100	H	33.61	5.26	0.00	106.40	-	-	Peak
5240	58.01	327	100	V	33.51	5.26	0.00	96.78	-	-	Ave
5240	56.95	329	100	H	33.61	5.26	0.00	95.82	-	-	Ave
5350	26.93	327	100	V	33.57	5.60	0.00	66.10	74.00	-7.90	Peak
5350	26.48	329	100	H	33.58	5.60	0.00	65.66	74.00	-8.34	Peak
5350	12.76	327	100	V	33.57	5.60	0.00	51.93	54.00	-2.07	Ave
5350	12.77	329	100	H	33.58	5.60	0.00	51.95	54.00	-2.05	Ave
10480	43.5	0	100	V	37.66	10.340	33.55	57.95	68.26	-10.32	Peak
10480	43.77	0	100	H	38.33	10.340	33.55	58.89	68.26	-9.37	Peak
10480	28.99	0	100	V	37.66	10.340	33.55	43.44	54.00	-10.57	Ave
10480	28.7	0	100	H	38.33	10.340	33.55	43.82	54.00	-10.18	Ave
15720	45.29	0	100	V	37.27	13.900	34.09	62.37	68.26	-5.89	Peak
15720	44.22	0	100	H	38.91	13.900	34.09	62.94	68.26	-5.32	Peak
15720	30.44	0	100	V	37.27	13.900	34.09	47.52	54.00	-6.48	Ave
15720	30.29	0	100	H	38.91	13.900	34.09	49.01	54.00	-4.99	Ave

5.2 GHz Band

802.11n20 mode 5 dBi Antena

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 20											
5180	67.76	335	238	V	33.509	5.26	0.00	106.53	-	-	Peak
5180	66.55	337	178	H	33.608	5.26	0.00	105.42	-	-	Peak
5180	56.86	335	238	V	33.509	5.26	0.00	95.63	-	-	Ave
5180	55.72	337	178	H	33.608	5.26	0.00	94.59	-	-	Ave
5150	32.8	335	238	V	33.509	5.26	0.00	71.57	74.00	-2.43	Peak
5150	29.93	337	178	H	33.608	5.26	0.00	68.80	74.00	-5.20	Peak
5150	15.2	335	238	V	33.509	5.26	0.00	53.97	54.00	-0.03	Ave
5150	13.89	337	178	H	33.608	5.26	0.00	52.76	54.00	-1.24	Ave
10360	45.54	0	100	V	37.51	10.510	33.52	60.04	68.26	-8.22	Peak
10360	45.92	0	100	H	38.25	10.510	33.52	61.16	68.26	-7.10	Peak
10360	30.51	0	100	V	37.51	10.510	33.52	45.01	54.00	-8.99	Ave
10360	30.57	0	100	H	38.25	10.510	33.52	45.81	54.00	-8.19	Ave
15540	43.63	0	100	V	37.60	14.080	33.60	61.71	68.26	-6.55	Peak
15540	44.39	0	100	H	39.41	14.080	33.60	64.28	68.26	-3.98	Peak
15540	28.94	0	100	V	37.60	14.080	33.60	47.02	54.00	-6.98	Ave
15540	29.2	0	100	H	39.41	14.080	33.60	49.09	54.00	-4.91	Ave
Middle Channel 5200 MHz Power Setting Target											
5200	69.52	334	255	V	33.509	5.260	0.00	108.29	-	-	Peak
5200	68.41	331	100	H	33.608	5.260	0.00	107.28	-	-	Peak
5200	58.57	334	255	V	33.509	5.260	0.00	97.34	-	-	Ave
5200	57.34	331	100	H	33.608	5.260	0.00	96.21	-	-	Ave
10400	44.89	0	100	V	37.51	10.510	33.52	59.39	68.26	-8.87	Peak
10400	45.23	0	100	H	38.25	10.510	33.52	60.47	68.26	-7.79	Peak
10400	29.64	0	100	V	37.51	10.510	33.52	44.14	54.00	-9.86	Ave
10400	29.68	0	100	H	38.25	10.510	33.52	44.92	54.00	-9.08	Ave
15600	43.97	0	100	V	37.455	13.850	33.82	61.46	68.26	-6.81	Peak
15600	42.63	0	100	H	39.182	13.850	33.82	61.84	68.26	-6.42	Peak
15600	28.08	0	100	V	37.455	13.850	33.82	45.57	54.00	-8.44	Ave
15600	27.98	0	100	H	39.182	13.850	33.82	47.19	54.00	-6.81	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting Target											
5240	68.71	325	121	V	33.51	5.26	0.00	107.48	-	-	Peak
5240	67.62	331	117	H	33.61	5.26	0.00	106.49	-	-	Peak
5240	57.74	325	121	V	33.51	5.26	0.00	96.51	-	-	Ave
5240	56.52	331	117	H	33.61	5.26	0.00	95.39	-	-	Ave
5350	26.82	325	121	V	33.57	5.60	0.00	65.99	74.00	-8.01	Peak
5350	27.26	331	117	H	33.58	5.60	0.00	66.44	74.00	-7.56	Peak
5350	12.76	325	121	V	33.57	5.60	0.00	51.93	54.00	-2.07	Ave
5350	12.81	331	117	H	33.58	5.60	0.00	51.99	54.00	-2.01	Ave
10480	44.99	0	100	V	37.66	10.340	33.55	59.44	68.26	-8.82	Peak
10480	45.94	0	100	H	38.33	10.340	33.55	61.06	68.26	-7.20	Peak
10480	30.51	0	100	V	37.66	10.340	33.55	44.96	54.00	-9.04	Ave
10480	30.39	0	100	H	38.33	10.340	33.55	45.51	54.00	-8.49	Ave
15720	44.43	0	100	V	37.27	13.900	34.09	61.51	68.26	-6.75	Peak
15720	44.56	0	100	H	38.91	13.900	34.09	63.28	68.26	-4.98	Peak
15720	29.61	0	100	V	37.27	13.900	34.09	46.69	54.00	-7.31	Ave
15720	29.65	0	100	H	38.91	13.900	34.09	48.37	54.00	-5.63	Ave

5.2 GHz Band

802.11n40 mode, 5 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5190 MHz Power Setting 17											
5190	61.74	326	234	V	33.509	5.260	0.00	100.51	-	-	Peak
5190	60.88	328	100	H	33.608	5.260	0.00	99.75	-	-	Peak
5190	51	326	234	V	33.509	5.260	0.00	89.77	-	-	Ave
5190	49.65	328	100	H	33.608	5.260	0.00	88.52	-	-	Ave
5150	32.47	326	234	V	33.509	5.260	0.00	71.24	74.00	-2.76	Peak
5150	31.59	328	100	H	33.608	5.260	0.00	70.46	74.00	-3.54	Peak
5150	14.22	326	234	V	33.509	5.260	0.00	52.99	54.00	-1.01	Ave
5150	14.81	328	100	H	33.608	5.260	0.00	53.68	54.00	-0.32	Ave
10380	44.99	0	100	V	37.51	10.510	33.52	59.49	68.26	-8.77	Peak
10380	44.63	0	100	H	38.25	10.510	33.52	59.87	68.26	-8.39	Peak
10380	30.18	0	100	V	37.51	10.510	33.52	44.68	54.00	-9.32	Ave
10380	30.29	0	100	H	38.25	10.510	33.52	45.53	54.00	-8.47	Ave
15570	42.61	0	100	V	37.455	13.850	33.82	60.10	68.26	-8.17	Peak
15570	42.55	0	100	H	39.182	13.850	33.82	61.76	68.26	-6.50	Peak
15570	28.35	0	100	V	37.455	13.850	33.82	45.84	54.00	-8.17	Ave
15570	28.14	0	100	H	39.182	13.850	33.82	47.35	54.00	-6.65	Ave
High Channel 5230 MHz Power Setting Target											
5230	66.42	325	100	V	33.509	5.260	0.00	105.19	-	-	Peak
5230	64.56	338	100	H	33.608	5.260	0.00	103.43	-	-	Peak
5230	55.36	325	100	V	33.509	5.260	0.00	94.13	-	-	Ave
5230	53.22	338	100	H	33.608	5.260	0.00	92.09	-	-	Ave
5350	27.64	325	100	V	33.57	5.60	0.00	66.81	74.00	-7.19	Peak
5350	26.79	338	100	H	33.58	5.60	0.00	65.97	74.00	-8.03	Peak
5350	12.8	325	100	V	33.57	5.60	0.00	51.97	54.00	-2.03	Ave
5350	12.82	338	100	H	33.58	5.60	0.00	52.00	54.00	-2.00	Ave
10460	44.06	0	100	V	37.66	10.340	33.55	58.51	68.26	-9.76	Peak
10460	45.01	0	100	H	38.33	10.340	33.55	60.13	68.26	-8.13	Peak
10460	30.48	0	100	V	37.66	10.340	33.55	44.93	54.00	-9.07	Ave
10460	30.38	0	100	H	38.33	10.340	33.55	45.50	54.00	-8.50	Ave
15690	43.07	0	100	V	37.27	13.760	34.09	60.01	68.26	-8.25	Peak
15690	42.99	0	100	H	38.91	13.760	34.09	61.57	68.26	-6.69	Peak
15690	29.35	0	100	V	37.27	13.760	34.09	46.29	54.00	-7.71	Ave
15690	29.65	0	100	H	38.91	13.760	34.09	48.23	54.00	-5.77	Ave

5.8 GHz Band

802.11a, 5 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting Target											
5745	65.17	353	253	V	33.905	5.60	0.00	104.68	-	-	Peak
5745	66.04	341	100	H	33.870	5.60	0.00	105.51	-	-	Peak
5745	54.64	353	253	V	33.905	5.60	0.00	94.15	-	-	Ave
5745	54.2	341	100	H	33.870	5.60	0.00	93.67	-	-	Ave
5725	35.16	353	253	V	33.905	5.60	0.00	74.67	78.23	-3.57	Peak
5725	36.53	341	100	H	33.870	5.60	0.00	76.00	78.23	-2.23	Peak
5715	26.34	353	253	V	33.905	5.60	0.00	65.85	68.23	-2.39	Peak
5715	26.38	341	100	H	33.870	5.60	0.00	65.85	68.23	-2.38	Peak
11490	44.04	0	100	V	39.10	12.340	34.10	61.38	74.00	-12.62	Peak
11490	43.69	0	100	H	38.42	12.340	34.10	60.35	74.00	-13.65	Peak
11490	29.41	0	100	V	39.10	12.340	34.10	46.75	54.00	-7.25	Ave
11490	29.36	0	100	H	38.42	13.970	34.10	47.65	54.00	-6.35	Ave
17235	41.9	0	100	V	46.34	13.970	33.72	68.49	74.00	-5.51	Peak
17235	41.58	0	100	H	42.02	13.970	33.72	63.85	74.00	-10.15	Peak
17235	28.3	0	100	H	42.02	13.970	33.72	50.57	54.00	-3.43	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	65.41	7	131	V	34.012	5.600	0.00	105.02	-	-	Peak
5785	66.83	331	100	H	33.955	5.600	0.00	106.39	-	-	Peak
5785	54.87	7	131	V	34.012	5.600	0.00	94.48	-	-	Ave
5785	55.57	331	100	H	33.955	5.600	0.00	95.13	-	-	Ave
11570	44.56	0	100	V	39.38	13.070	34.06	62.95	74.00	-11.05	Peak
11570	43.22	0	100	H	38.30	13.070	34.06	60.53	74.00	-13.47	Peak
11570	29.21	0	100	V	39.38	13.070	34.06	47.60	54.00	-6.40	Ave
11570	29.153	0	100	H	38.30	13.070	34.06	46.46	54.00	-7.54	Ave
17355	41.46	0	100	V	50.057	13.510	33.81	71.22	74.00	-2.78	Peak
17355	41.73	0	100	H	43.816	13.510	33.81	65.25	74.00	-8.75	Peak
17355	27.79	0	100	H	43.816	13.510	33.81	51.31	54.00	-2.69	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting Target											
5825	67.81	348	242	V	34.01	5.60	0.00	107.42	-	-	Peak
5825	66.9	333	113	H	33.96	5.60	0.00	106.46	-	-	Peak
5825	56.73	348	242	V	34.01	5.60	0.00	96.34	-	-	Ave
5825	55.89	333	113	H	33.96	5.60	0.00	95.45	-	-	Ave
5850	27.88	348	242	V	34.03	5.60	0.00	67.51	78.23	-10.72	Peak
5850	26.82	333	113	H	34.22	5.60	0.00	66.64	78.23	-11.59	Peak
5860	26.91	348	242	V	34.03	5.60	0.00	66.54	68.23	-1.69	Peak
5860	26.57	333	113	H	34.22	5.60	0.00	66.39	68.23	-1.84	Peak
11650	44.19	0	100	V	39.91	13.890	34.12	63.87	74.00	-10.13	Peak
11650	44.59	0	100	H	38.33	13.890	34.12	62.69	74.00	-11.31	Peak
11650	29.78	0	100	V	39.91	13.890	34.12	49.46	54.00	-4.54	Ave
11650	29.76	0	100	H	38.33	13.890	34.12	47.86	54.00	-6.14	Ave
17475	41.69	0	100	H	44.41	13.540	33.87	65.77	74.00	-8.23	Peak
17475	27.75	0	100	H	44.41	13.540	33.87	51.83	68.23	-16.40	Ave

5.8 GHz Band

802.11n20 mode, 5 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting Target											
5745	64.3	347	251	V	33.905	5.60	0.00	103.81	-	-	Peak
5745	65.86	355	141	H	33.870	5.60	0.00	105.33	-	-	Peak
5745	53.93	347	251	V	33.905	5.60	0.00	93.44	-	-	Ave
5745	55.36	355	141	H	33.870	5.60	0.00	94.83	-	-	Ave
5725	31.87	347	251	V	33.905	5.60	0.00	71.38	78.23	-6.86	Peak
5725	34.15	355	141	H	33.870	5.60	0.00	73.62	78.23	-4.61	Peak
5715	25.65	347	251	V	33.905	5.60	0.00	65.16	68.23	-3.08	Peak
5715	26	355	141	H	33.870	5.60	0.00	65.47	68.23	-2.76	Peak
11490	45.14	0	100	V	39.10	12.340	34.10	62.48	74.00	-11.52	Peak
11490	45.12	0	100	H	38.42	12.340	34.10	61.78	74.00	-12.22	Peak
11490	30.92	0	100	V	39.10	12.340	34.10	48.26	54.00	-5.74	Ave
11490	30.85	0	100	H	38.42	13.970	34.10	49.14	54.00	-4.86	Ave
17235	46.01	0	100	V	46.34	13.970	33.72	72.60	74.00	-1.40	Peak
17235	45.34	0	100	H	42.02	13.970	33.72	67.61	74.00	-6.39	Peak
17235	31.26	0	100	H	42.02	13.970	33.72	53.53	54.00	-0.47	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	67.35	2	104	V	34.012	5.600	0.00	106.96	-	-	Peak
5785	68.82	9	251	H	33.955	5.600	0.00	108.38	-	-	Peak
5785	56.84	2	104	V	34.012	5.600	0.00	96.45	-	-	Ave
5785	58.28	9	251	H	33.955	5.600	0.00	97.84	-	-	Ave
11570	44.17	0	100	V	39.38	13.070	34.06	62.56	74.00	-11.44	Peak
11570	44.6	0	100	H	38.30	13.070	34.06	61.91	74.00	-12.09	Peak
11570	30.68	0	100	V	39.38	13.070	34.06	49.07	54.00	-4.93	Ave
11570	30.67	0	100	H	38.30	13.070	34.06	47.98	54.00	-6.02	Ave
17355	44.65	0	100	H	43.816	13.510	33.81	68.17	74.00	-5.83	Peak

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting Target											
5825	65.88	1	144	V	34.01	5.60	0.00	105.49	-	-	Peak
5825	68.08	9	110	H	33.96	5.60	0.00	107.64	-	-	Peak
5825	55.46	1	144	V	34.01	5.60	0.00	95.07	-	-	Ave
5825	57.46	9	110	H	33.96	5.60	0.00	97.02	-	-	Ave
5850	26.92	1	144	V	34.03	5.60	0.00	66.55	78.23	-11.68	Peak
5850	26.69	9	110	H	34.22	5.60	0.00	66.51	78.23	-11.72	Peak
5860	26.26	1	144	V	34.03	5.60	0.00	65.89	68.23	-2.34	Peak
5860	26.24	9	110	H	34.22	5.60	0.00	66.06	68.23	-2.17	Peak
11650	44.35	0	100	V	39.91	13.890	34.12	64.03	74.00	-9.97	Peak
11650	44.02	0	100	H	38.33	13.890	34.12	62.12	74.00	-11.88	Peak
11650	30.24	0	100	V	39.91	13.890	34.12	49.92	54.00	-4.08	Ave
11650	30.33	0	100	H	38.33	13.890	34.12	48.43	54.00	-5.57	Ave
17475	41.47	0	100	H	44.41	13.540	33.87	65.55	74.00	-8.45	Peak
17475	27.61	0	100	H	44.41	13.540	33.87	51.69	54.00	-2.31	Ave

5.8 GHz Band

802.11n40 mode, 5 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5755 MHz Power Setting 20											
5755	62.18	358	148	V	33.905	5.60	0.00	101.69	-	-	Peak
5755	63.64	9	248	H	33.870	5.60	0.00	103.11	-	-	Peak
5755	51.11	358	148	V	33.905	5.60	0.00	90.62	-	-	Ave
5755	52.25	9	248	H	33.870	5.60	0.00	91.72	-	-	Ave
5725	32.75	358	148	V	33.905	5.60	0.00	72.26	78.23	-5.98	Peak
5725	35.29	9	248	H	33.870	5.60	0.00	74.76	78.23	-3.47	Peak
5715	28.46	358	148	V	33.905	5.60	0.00	67.97	68.23	-0.27	Peak
5715	28.01	9	248	H	33.870	5.60	0.00	67.48	68.23	-0.75	Peak
11510	43.74	0	100	V	39.10	12.340	34.10	61.08	74.00	-12.92	Peak
11510	44.76	0	100	H	38.42	12.340	34.10	61.42	74.00	-12.58	Peak
11510	30.27	0	100	V	39.10	12.340	34.10	47.61	54.00	-6.39	Ave
11510	30.28	0	100	H	38.42	12.340	34.10	46.94	54.00	-7.06	Ave
17265	44.36	0	100	V	46.34	13.970	33.72	70.95	74.00	-3.05	Peak
17265	44.02	0	100	H	42.02	13.970	33.72	66.29	74.00	-7.71	Peak
17265	30.02	0	100	V	46.34	13.970	33.72	56.61	68.23	-11.62	Ave
17265	30.04	0	100	H	42.02	13.970	33.72	52.31	68.23	-15.92	Ave
High Channel 5795 MHz Power Setting Target											
5795	63.43	1	131	V	34.01	5.60	0.00	103.04	-	-	Peak
5795	65.24	10	229	H	33.96	5.60	0.00	104.80	-	-	Peak
5795	51.97	1	131	V	34.01	5.60	0.00	91.58	-	-	Ave
5795	54.35	10	229	H	33.96	5.60	0.00	93.91	-	-	Ave
5850	25.66	1	131	V	34.03	5.60	0.00	65.29	78.23	-12.94	Peak
5850	26.05	10	229	H	34.22	5.60	0.00	65.87	78.23	-12.36	Peak
5860	26.23	1	131	V	34.03	5.60	0.00	65.86	68.23	-2.37	Peak
5860	26.57	10	229	H	34.22	5.60	0.00	66.39	68.23	-1.84	Peak
11590	45	0	100	V	39.91	13.070	34.12	63.86	74.00	-10.14	Peak
11590	44.81	0	100	H	38.33	13.070	34.12	62.09	74.00	-11.91	Peak
11590	30.28	0	100	V	39.91	13.070	34.12	49.14	54.00	-4.86	Ave
11590	30.72	0	100	H	38.33	13.070	34.12	48.00	54.00	-6.00	Ave
17385	44.7	0	100	H	44.41	13.510	33.87	68.75	74.00	-5.25	Peak
17385	30.81	0	100	V	52.05	13.510	33.87	62.50	68.23	-5.73	Ave
17385	30.89	0	100	H	44.41	13.510	33.87	54.94	68.23	-13.29	Ave

5.2 GHz Band

802.11a mode, 8 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 16											
5180	76.18	323	260	V	33.509	5.26	0.00	114.95	-	-	Peak
5180	71.53	217	313	H	33.608	5.26	0.00	110.40	-	-	Peak
5180	65.65	323	260	V	33.509	5.26	0.00	104.42	-	-	Ave
5180	59.63	217	313	H	33.608	5.26	0.00	98.50	-	-	Ave
5150	31.49	323	260	V	33.509	5.26	0.00	70.26	74.00	-3.74	Peak
5150	27.67	217	313	H	33.608	5.26	0.00	66.54	74.00	-7.46	Peak
5150	15.04	323	260	V	33.509	5.26	0.00	53.81	54.00	-0.19	Ave
5150	13.5	217	313	H	33.608	5.26	0.00	52.37	54.00	-1.63	Ave
10360	44.48	0	100	V	37.51	10.510	33.52	58.98	68.26	-9.28	Peak
10360	43.82	0	100	H	38.25	10.510	33.52	59.06	68.26	-9.20	Peak
10360	30.05	0	100	V	37.51	10.510	33.52	44.55	54.00	-9.45	Ave
10360	29.53	0	100	H	38.25	10.510	33.52	44.77	54.00	-9.23	Ave
15540	43.86	0	100	V	37.60	14.080	33.60	61.94	68.26	-6.32	Peak
15540	44.16	0	100	H	39.41	14.080	33.60	64.05	68.26	-4.21	Peak
15540	30.67	0	100	V	37.60	14.080	33.60	48.75	54.00	-5.25	Ave
15540	30.55	0	100	H	39.41	14.080	33.60	50.44	54.00	-3.56	Ave
Middle Channel 5200 MHz Power Setting 16.5											
5200	78.23	322	269	V	33.509	5.260	0.00	117.00	-	-	Peak
5200	71.99	210	258	H	33.608	5.260	0.00	110.86	-	-	Peak
5200	66.59	322	269	V	33.509	5.260	0.00	105.36	-	-	Ave
5200	60.36	210	258	H	33.608	5.260	0.00	99.23	-	-	Ave
10400	44.03	0	100	V	37.51	10.510	33.52	58.53	68.26	-9.73	Peak
10400	43.18	0	100	H	38.25	10.510	33.52	58.42	68.26	-9.84	Peak
10400	29.84	0	100	V	37.51	10.510	33.52	44.34	54.00	-9.66	Ave
10400	29.82	0	100	H	38.25	10.510	33.52	45.06	54.00	-8.94	Ave
15600	43.65	0	100	V	37.455	13.850	33.82	61.14	68.26	-7.13	Peak
15600	44.69	0	100	H	39.182	13.850	33.82	63.90	68.26	-4.36	Peak
15600	30.57	0	100	V	37.455	13.850	33.82	48.06	54.00	-5.95	Ave
15600	30.58	0	100	H	39.182	13.850	33.82	49.79	54.00	-4.21	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting 17.5											
5240	77.84	151	270	V	33.51	5.26	0.00	116.61	-	-	Peak
5240	70.44	127	304	H	33.61	5.26	0.00	109.31	-	-	Peak
5240	67.65	151	270	V	33.51	5.26	0.00	106.42	-	-	Ave
5240	59.33	127	304	H	33.61	5.26	0.00	98.20	-	-	Ave
5350	28.39	151	270	V	33.57	5.60	0.00	67.56	74.00	-6.44	Peak
5350	26.44	127	304	H	33.58	5.60	0.00	65.62	74.00	-8.38	Peak
5350	14.09	151	270	V	33.57	5.60	0.00	53.26	54.00	-0.74	Ave
5350	13.15	127	304	H	33.58	5.60	0.00	52.33	54.00	-1.67	Ave
10480	42.86	0	100	V	37.66	10.340	33.55	57.31	68.26	-10.96	Peak
10480	43.04	0	100	H	38.33	10.340	33.55	58.16	68.26	-10.10	Peak
10480	29.93	0	100	V	37.66	10.340	33.55	44.38	54.00	-9.62	Ave
10480	29.66	0	100	H	38.33	10.340	33.55	44.78	54.00	-9.22	Ave
15720	44.62	0	100	V	37.27	13.900	34.09	61.70	68.26	-6.56	Peak
15720	44.46	0	100	H	38.91	13.900	34.09	63.18	68.26	-5.08	Peak
15720	31.29	0	100	V	37.27	13.900	34.09	48.37	54.00	-5.63	Ave
15720	31.21	0	100	H	38.91	13.900	34.09	49.93	54.00	-4.07	Ave

5.2 GHz Band

802.11n20 mode, 8 dBi Antena

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 16.5											
5180	76.83	317	266	V	33.509	5.26	0.00	115.60	-	-	Peak
5180	69.33	307	286	H	33.608	5.26	0.00	108.20	-	-	Peak
5180	65.92	317	266	V	33.509	5.26	0.00	104.69	-	-	Ave
5180	57.68	307	286	H	33.608	5.26	0.00	96.55	-	-	Ave
5150	34.68	317	266	V	33.509	5.26	0.00	73.45	74.00	-0.55	Peak
5150	28.28	307	286	H	33.608	5.26	0.00	67.15	74.00	-6.85	Peak
5150	14.74	317	266	V	33.509	5.26	0.00	53.51	54.00	-0.49	Ave
5150	13.1	307	286	H	33.608	5.26	0.00	51.97	54.00	-2.03	Ave
10360	43.33	0	100	V	37.51	10.510	33.52	57.83	68.26	-10.43	Peak
10360	44.69	0	100	H	38.25	10.510	33.52	59.93	68.26	-8.33	Peak
10360	29.47	0	100	V	37.51	10.510	33.52	43.97	54.00	-10.03	Ave
10360	29.4	0	100	H	38.25	10.510	33.52	44.64	54.00	-9.36	Ave
15540	44.66	0	100	V	37.60	14.080	33.60	62.74	68.26	-5.52	Peak
15540	44.79	0	100	H	39.41	14.080	33.60	64.68	68.26	-3.58	Peak
15540	30.06	0	100	V	37.60	14.080	33.60	48.14	54.00	-5.86	Ave
15540	30.01	0	100	H	39.41	14.080	33.60	49.90	54.00	-4.10	Ave
Middle Channel 5200 MHz Power Setting 16											
5200	77.66	158	264	V	33.509	5.260	0.00	116.43	-	-	Peak
5200	68.65	116	247	H	33.608	5.260	0.00	107.52	-	-	Peak
5200	66.67	158	264	V	33.509	5.260	0.00	105.44	-	-	Ave
5200	58.19	116	247	H	33.608	5.260	0.00	97.06	-	-	Ave
10400	43.19	0	100	V	37.51	10.510	33.52	57.69	68.26	-10.57	Peak
10400	43.02	0	100	H	38.25	10.510	33.52	58.26	68.26	-10.00	Peak
10400	29.34	0	100	V	37.51	10.510	33.52	43.84	54.00	-10.16	Ave
10400	29.39	0	100	H	38.25	10.510	33.52	44.63	54.00	-9.37	Ave
15600	42.58	0	100	V	37.455	13.850	33.82	60.07	68.26	-8.20	Peak
15600	42.96	0	100	H	39.182	13.850	33.82	62.17	68.26	-6.09	Peak
15600	29.58	0	100	V	37.455	13.850	33.82	47.07	54.00	-6.94	Ave
15600	29.61	0	100	H	39.182	13.850	33.82	48.82	54.00	-5.18	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting 17.5											
5240	76.09	133	243	V	33.51	5.26	0.00	114.86	-	-	Peak
5240	70.75	291	285	H	33.61	5.26	0.00	109.62	-	-	Peak
5240	65.63	133	243	V	33.51	5.26	0.00	104.40	-	-	Ave
5240	60	291	285	H	33.61	5.26	0.00	98.87	-	-	Ave
5350	27.07	133	243	V	33.57	5.60	0.00	66.24	74.00	-7.76	Peak
5350	26.88	291	285	H	33.58	5.60	0.00	66.06	74.00	-7.94	Peak
5350	13.76	133	243	V	33.57	5.60	0.00	52.93	54.00	-1.07	Ave
5350	13.26	291	285	H	33.58	5.60	0.00	52.44	54.00	-1.56	Ave
10480	43.57	0	100	V	37.66	10.340	33.55	58.02	68.26	-10.25	Peak
10480	43.59	0	100	H	38.33	10.340	33.55	58.71	68.26	-9.55	Peak
10480	30.04	0	100	V	37.66	10.340	33.55	44.49	54.00	-9.52	Ave
10480	29.98	0	100	H	38.33	10.340	33.55	45.10	54.00	-8.90	Ave
15720	44.89	0	100	V	37.27	13.900	34.09	61.97	68.26	-6.29	Peak
15720	44.62	0	100	H	38.91	13.900	34.09	63.34	68.26	-4.92	Peak
15720	31.23	0	100	V	37.27	13.900	34.09	48.31	54.00	-5.69	Ave
15720	31.3	0	100	H	38.91	13.900	34.09	50.02	54.00	-3.98	Ave

5.2 GHz Band

802.11n40 mode, 8 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5190 MHz Power Setting 13.5											
5190	72.86	321	267	V	33.509	5.260	0.00	111.63	-	-	Peak
5190	66.18	292	244	H	33.608	5.260	0.00	105.05	-	-	Peak
5190	64	321	267	V	33.509	5.260	0.00	102.77	-	-	Ave
5190	55.13	292	244	H	33.608	5.260	0.00	94.00	-	-	Ave
5150	34.32	321	267	V	33.509	5.260	0.00	73.09	74.00	-0.91	Peak
5150	26.87	292	244	H	33.608	5.260	0.00	65.74	74.00	-8.26	Peak
5150	14.95	321	267	V	33.509	5.260	0.00	53.72	54.00	-0.28	Ave
5150	13.45	292	244	H	33.608	5.260	0.00	52.32	54.00	-1.68	Ave
10380	45.16	0	100	V	37.51	10.510	33.52	59.66	68.26	-8.60	Peak
10380	45.14	0	100	H	38.25	10.510	33.52	60.38	68.26	-7.88	Peak
10380	30.86	0	100	V	37.51	10.510	33.52	45.36	54.00	-8.64	Ave
10380	30.7	0	100	H	38.25	10.510	33.52	45.94	54.00	-8.06	Ave
15570	43.65	0	100	V	37.455	13.850	33.82	61.14	68.26	-7.13	Peak
15570	45.24	0	100	H	39.182	13.850	33.82	64.45	68.26	-3.81	Peak
15570	30.58	0	100	V	37.455	13.850	33.82	48.07	54.00	-5.94	Ave
15570	30.54	0	100	H	39.182	13.850	33.82	49.75	54.00	-4.25	Ave
High Channel 5230 MHz Power Setting 19											
5230	77.95	286	271	V	33.509	5.260	0.00	116.72	-	-	Peak
5230	70.61	216	284	H	33.608	5.260	0.00	109.48	-	-	Peak
5230	67	286	271	V	33.509	5.260	0.00	105.77	-	-	Ave
5230	60.07	216	284	H	33.608	5.260	0.00	98.94	-	-	Ave
5350	27.3	286	271	V	33.57	5.60	0.00	66.47	74.00	-7.53	Peak
5350	26.77	216	284	H	33.58	5.60	0.00	65.95	74.00	-8.05	Peak
5350	14.02	286	271	V	33.57	5.60	0.00	53.19	54.00	-0.81	Ave
5350	13.39	216	284	H	33.58	5.60	0.00	52.57	54.00	-1.43	Ave
10460	43.65	0	100	V	37.66	10.340	33.55	58.10	68.26	-10.17	Peak
10460	43.98	0	100	H	38.33	10.340	33.55	59.10	68.26	-9.16	Peak
10460	29.65	0	100	V	37.66	10.340	33.55	44.10	54.00	-9.90	Ave
10460	29.49	0	100	H	38.33	10.340	33.55	44.61	54.00	-9.39	Ave
15690	44.38	0	100	V	37.27	13.760	34.09	61.32	68.26	-6.94	Peak
15690	45.8	0	100	H	38.91	13.760	34.09	64.38	68.26	-3.88	Peak
15690	31.15	0	100	V	37.27	13.760	34.09	48.09	54.00	-5.91	Ave
15690	31.03	0	100	H	38.91	13.760	34.09	49.61	54.00	-4.39	Ave

5.8 GHz Band

802.11a mode, 8 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting 14											
5745	73.71	302	237	V	33.905	5.60	0.00	113.22	-	-	Peak
5745	67.6	318	253	H	33.870	5.60	0.00	107.07	-	-	Peak
5745	63.15	302	237	V	33.905	5.60	0.00	102.66	-	-	Ave
5745	56.19	318	253	H	33.870	5.60	0.00	95.66	-	-	Ave
5725	36.86	302	237	V	33.905	5.60	0.00	76.37	78.23	-1.87	Peak
5725	29.04	318	253	H	33.870	5.60	0.00	68.51	78.23	-9.72	Peak
5715	28.07	302	237	V	33.905	5.60	0.00	67.58	68.23	-0.66	Peak
5715	27.03	318	253	H	33.870	5.60	0.00	66.50	68.23	-1.73	Peak
11490	43.54	0	100	V	39.10	12.340	34.10	60.88	74.00	-13.12	Peak
11490	44.99	0	100	H	38.42	12.340	34.10	61.65	74.00	-12.35	Peak
11490	30.1	0	100	V	39.10	12.340	34.10	47.44	54.00	-6.56	Ave
11490	30.61	0	100	H	38.42	13.970	34.10	48.90	54.00	-5.10	Ave
17235	45.75	0	100	V	46.34	13.970	33.72	72.34	74.00	-1.66	Peak
17235	45.12	0	100	H	42.02	13.970	33.72	67.39	74.00	-6.61	Peak
17235	31.2	0	100	V	46.34	13.970	33.72	57.79	68.23	-10.44	Ave
17235	31.12	0	100	H	42.02	13.970	33.72	53.39	68.23	-14.84	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	78.87	84	262	V	34.012	5.600	0.00	118.48	-	-	Peak
5785	71.49	46	273	H	33.955	5.600	0.00	111.05	-	-	Peak
5785	68.21	84	262	V	34.012	5.600	0.00	107.82	-	-	Ave
5785	61.09	46	273	H	33.955	5.600	0.00	100.65	-	-	Ave
11570	44.06	0	100	V	39.38	13.070	34.06	62.45	74.00	-11.55	Peak
11570	44.09	0	100	H	38.30	13.070	34.06	61.40	74.00	-12.60	Peak
11570	30.58	0	100	V	39.38	13.070	34.06	48.97	54.00	-5.03	Ave
11570	30.47	0	100	H	38.30	13.070	34.06	47.78	54.00	-6.22	Ave
17355	44.08	0	100	H	43.816	13.510	33.81	67.60	74.00	-6.40	Peak
17355	30.67	0	100	V	50.057	13.510	33.81	60.43	68.23	-7.80	Ave
17355	30.82	0	100	H	43.816	13.510	33.81	54.34	68.23	-13.89	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting 17.5											
5825	75.45	84	278	V	34.01	5.60	0.00	115.06	-	-	Peak
5825	69.44	46	258	H	33.96	5.60	0.00	109.00	-	-	Peak
5825	64.61	84	278	V	34.01	5.60	0.00	104.22	-	-	Ave
5825	57.6	46	258	H	33.96	5.60	0.00	97.16	-	-	Ave
5850	32.58	84	278	V	34.03	5.60	0.00	72.21	78.23	-6.02	Peak
5850	26.82	46	258	H	34.22	5.60	0.00	66.64	78.23	-11.59	Peak
5860	28.53	84	278	V	34.03	5.60	0.00	68.16	68.23	-0.07	Peak
5860	27.64	46	258	H	34.22	5.60	0.00	67.46	68.23	-0.77	Peak
11650	44.62	0	100	V	39.91	13.890	34.12	64.30	74.00	-9.70	Peak
11650	44.92	0	100	H	38.33	13.890	34.12	63.02	74.00	-10.98	Peak
11650	30.36	0	100	V	39.91	13.890	34.12	50.04	54.00	-3.96	Ave
11650	30.45	0	100	H	38.33	13.890	34.12	48.55	54.00	-5.45	Ave
17475	43.76	0	100	H	44.41	13.540	33.87	67.84	74.00	-6.16	Peak
17475	30.23	0	100	H	44.41	13.540	33.87	54.31	68.23	-13.92	Ave

5.8 GHz Band

802.11n20 mode, 8 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting 16.5											
5745	75.57	79	277	V	33.905	5.60	0.00	115.08	-	-	Peak
5745	68.83	221	336	H	33.870	5.60	0.00	108.30	-	-	Peak
5745	64.79	79	277	V	33.905	5.60	0.00	104.30	-	-	Ave
5745	57.92	221	336	H	33.870	5.60	0.00	97.39	-	-	Ave
5725	38.04	79	277	V	33.905	5.60	0.00	77.55	78.23	-0.69	Peak
5725	35.27	221	336	H	33.870	5.60	0.00	74.74	78.23	-3.49	Peak
5715	28.18	79	277	V	33.905	5.60	0.00	67.69	68.23	-0.55	Peak
5715	28.09	221	336	H	33.870	5.60	0.00	67.56	68.23	-0.67	Peak
11490	44.55	0	100	V	39.10	12.340	34.10	61.89	74.00	-12.11	Peak
11490	44.13	0	100	H	38.42	12.340	34.10	60.79	74.00	-13.21	Peak
11490	30.86	0	100	V	39.10	12.340	34.10	48.20	54.00	-5.80	Ave
11490	30.77	0	100	H	38.42	13.970	34.10	49.06	54.00	-4.94	Ave
17235	44.92	0	100	V	46.34	13.970	33.72	71.51	74.00	-2.49	Peak
17235	45.35	0	100	H	42.02	13.970	33.72	67.62	74.00	-6.38	Peak
17235	30.84	0	100	H	42.02	13.970	33.72	53.11	54.00	-0.89	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	78.4	86	270	V	34.012	5.600	0.00	118.01	-	-	Peak
5785	72.65	220	346	H	33.955	5.600	0.00	112.21	-	-	Peak
5785	67.9	86	270	V	34.012	5.600	0.00	107.51	-	-	Ave
5785	61.77	220	346	H	33.955	5.600	0.00	101.33	-	-	Ave
11570	44.27	0	100	V	39.38	13.070	34.06	62.66	74.00	-11.34	Peak
11570	44.86	0	100	H	38.30	13.070	34.06	62.17	74.00	-11.83	Peak
11570	30.72	0	100	V	39.38	13.070	34.06	49.11	54.00	-4.89	Ave
11570	30.71	0	100	H	38.30	13.070	34.06	48.02	54.00	-5.98	Ave
17355	44.13	0	100	V	50.057	13.510	33.81	73.89	74.00	-0.11	Peak
17355	44.26	0	100	H	43.816	13.510	33.81	67.78	74.00	-6.22	Peak
17355	30.97	0	100	V	50.057	13.510	33.81	60.73	68.23	-7.50	Ave
17355	30.95	0	100	H	43.816	13.510	33.81	54.47	68.23	-13.76	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting 17.5											
5825	74.05	264	266	V	34.01	5.60	0.00	113.66	-	-	Peak
5825	67.7	317	168	H	33.96	5.60	0.00	107.26	-	-	Peak
5825	63.19	264	266	V	34.01	5.60	0.00	102.80	-	-	Ave
5825	56.32	317	168	H	33.96	5.60	0.00	95.88	-	-	Ave
5850	31.33	264	266	V	34.03	5.60	0.00	70.96	78.23	-7.27	Peak
5850	27.23	317	168	H	34.22	5.60	0.00	67.05	78.23	-11.18	Peak
5860	28.48	264	266	V	34.03	5.60	0.00	68.11	68.23	-0.12	Peak
5860	25.3	317	168	H	34.22	5.60	0.00	65.12	68.23	-3.11	Peak
11650	44.35	0	100	V	39.91	13.890	34.12	64.03	74.00	-9.97	Peak
11650	45.22	0	100	H	38.33	13.890	34.12	63.32	74.00	-10.68	Peak
11650	30.74	0	100	V	39.91	13.890	34.12	50.42	54.00	-3.58	Ave
11650	30.78	0	100	H	38.33	13.890	34.12	48.88	54.00	-5.12	Ave
17475	44.68	0	100	H	44.41	13.540	33.87	68.76	74.00	-5.24	Peak
17475	31.2	0	100	H	44.41	13.540	33.87	55.28	68.23	-12.95	Ave

5.8 GHz Band

802.11n40 mode, 8 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5755 MHz Power Setting 13.5											
5755	70.74	86	279	V	33.905	5.60	0.00	110.25	-	-	Peak
5755	63.95	224	345	H	33.870	5.60	0.00	103.42	-	-	Peak
5755	59.07	86	279	V	33.905	5.60	0.00	98.58	-	-	Ave
5755	52.59	224	345	H	33.870	5.60	0.00	92.06	-	-	Ave
5725	34.12	86	279	V	33.905	5.60	0.00	73.63	78.23	-4.61	Peak
5725	28.22	224	345	H	33.870	5.60	0.00	67.69	78.23	-10.54	Peak
5715	28.43	86	279	V	33.905	5.60	0.00	67.94	68.23	-0.30	Peak
5715	26.98	224	345	H	33.870	5.60	0.00	66.45	68.23	-1.78	Peak
11510	45.05	0	100	V	39.10	12.340	34.10	62.39	74.00	-11.61	Peak
11510	45.23	0	100	H	38.42	12.340	34.10	61.89	74.00	-12.11	Peak
11510	30	0	100	V	39.10	12.340	34.10	47.34	54.00	-6.66	Ave
11510	30.68	0	100	H	38.42	12.340	34.10	47.34	54.00	-6.66	Ave
17265	44.59	0	100	V	46.34	13.970	33.72	71.18	74.00	-2.82	Peak
17265	43.93	0	100	H	42.02	13.970	33.72	66.20	74.00	-7.80	Peak
17265	29.91	0	100	H	42.02	13.970	33.72	52.18	54.00	-1.82	Ave
High Channel 5795 MHz Power Setting Target											
5795	73.83	267	277	V	34.01	5.60	0.00	113.44	-	-	Peak
5795	67.62	342	330	H	33.96	5.60	0.00	107.18	-	-	Peak
5795	62.56	267	277	V	34.01	5.60	0.00	102.17	-	-	Ave
5795	56.61	342	330	H	33.96	5.60	0.00	96.17	-	-	Ave
5850	28.99	267	277	V	34.03	5.60	0.00	68.62	78.23	-9.61	Peak
5850	26.58	342	330	H	34.22	5.60	0.00	66.40	78.23	-11.83	Peak
5860	28.02	267	277	V	34.03	5.60	0.00	67.65	68.23	-0.58	Peak
5860	26.07	342	330	H	34.22	5.60	0.00	65.89	68.23	-2.34	Peak
11590	45.53	0	100	V	39.91	13.070	34.12	64.39	74.00	-9.61	Peak
11590	44.23	0	100	H	38.33	13.070	34.12	61.51	74.00	-12.49	Peak
11590	30.29	0	100	V	39.91	13.070	34.12	49.15	54.00	-4.85	Ave
11590	30.27	0	100	H	38.33	13.070	34.12	47.55	54.00	-6.45	Ave
17385	44.74	0	100	H	44.41	13.510	33.87	68.79	74.00	-5.21	Peak
17385	29.8	0	100	V	52.05	13.510	33.87	61.49	68.23	-6.74	Ave
17385	29.87	0	100	H	44.41	13.510	33.87	53.92	68.23	-14.31	Ave

5.2 GHz Band

802.11a mode, 12 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 12											
5180	75.12	222	219	V	33.509	5.26	0.00	113.89	-	-	Peak
5180	75.37	170	190	H	33.608	5.26	0.00	114.24	-	-	Peak
5180	64	222	219	V	33.509	5.26	0.00	102.77	-	-	Ave
5180	64.59	170	190	H	33.608	5.26	0.00	103.46	-	-	Ave
5150	29.56	222	219	V	33.509	5.26	0.00	68.33	74.00	-5.67	Peak
5150	28.34	170	190	H	33.608	5.26	0.00	67.21	74.00	-6.79	Peak
5150	14.53	222	219	V	33.509	5.26	0.00	53.30	54.00	-0.70	Ave
5150	14.26	170	190	H	33.608	5.26	0.00	53.13	54.00	-0.87	Ave
10360	43.43	188	200	V	37.51	10.510	33.52	57.93	74.00	-16.07	Peak
10360	44.18	181	220	H	38.25	10.510	33.52	59.42	74.00	-14.58	Peak
10360	31.17	188	200	V	37.51	10.510	33.52	45.67	54.00	-8.33	Ave
10360	30.52	181	220	H	38.25	10.510	33.52	45.76	54.00	-8.24	Ave
15540	45.28	188	200	V	37.60	14.080	33.60	63.36	74.00	-10.64	Peak
15540	43.52	181	220	H	39.41	14.080	33.60	63.41	74.00	-10.59	Peak
15540	31.38	188	200	V	37.60	14.080	33.60	49.46	54.00	-4.54	Ave
15540	29.75	181	220	H	39.41	14.080	33.60	49.64	54.00	-4.36	Ave
Middle Channel 5200 MHz Power Setting 13											
5200	76.88	187	204	V	33.509	5.260	0.00	115.65	-	-	Peak
5200	76.69	196	206	H	33.608	5.260	0.00	115.56	-	-	Peak
5200	65.73	187	204	V	33.509	5.260	0.00	104.50	-	-	Ave
5200	65.64	196	206	H	33.608	5.260	0.00	104.51	-	-	Ave
10400	44.12	187	204	V	37.51	10.510	33.52	58.62	74.00	-15.38	Peak
10400	43.24	196	206	H	38.25	10.510	33.52	58.48	74.00	-15.52	Peak
10400	29.81	187	204	V	37.51	10.510	33.52	44.31	54.00	-9.69	Ave
10400	29.38	196	206	H	38.25	10.510	33.52	44.62	54.00	-9.38	Ave
15600	44	187	204	V	37.455	13.850	33.82	61.49	74.00	-12.52	Peak
15600	44.05	196	206	H	39.182	13.850	33.82	63.26	74.00	-10.74	Peak
15600	30.48	187	204	V	37.455	13.850	33.82	47.97	54.00	-6.04	Ave
15600	30.47	196	206	H	39.182	13.850	33.82	49.68	54.00	-4.32	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting 14											
5240	77.25	10	144	V	33.51	5.26	0.00	116.02	-	-	Peak
5240	77.97	0	159	H	33.61	5.26	0.00	116.84	-	-	Peak
5240	65.06	10	144	V	33.51	5.26	0.00	103.83	-	-	Ave
5240	67.04	0	159	H	33.61	5.26	0.00	105.91	-	-	Ave
5350	27.63	10	144	V	33.57	5.60	0.00	66.80	74.00	-7.20	Peak
5350	28.43	0	159	H	33.58	5.60	0.00	67.61	74.00	-6.39	Peak
5350	14.59	10	144	V	33.57	5.60	0.00	53.76	54.00	-0.24	Ave
5350	14.47	0	159	H	33.58	5.60	0.00	53.65	54.00	-0.35	Ave
10480	43.81	0	100	V	37.66	10.340	33.55	58.26	74.00	-15.75	Peak
10480	43.92	0	100	H	38.33	10.340	33.55	59.04	74.00	-14.96	Peak
10480	30.45	0	100	V	37.66	10.340	33.55	44.90	54.00	-9.10	Ave
10480	30.34	0	100	H	38.33	10.340	33.55	45.46	54.00	-8.54	Ave
15720	45.87	0	100	V	37.27	13.900	34.09	62.95	74.00	-11.05	Peak
15720	45.39	0	100	H	38.91	13.900	34.09	64.11	74.00	-9.89	Peak
15720	31.52	0	100	V	37.27	13.900	34.09	48.60	54.00	-5.40	Ave
15720	32.04	0	100	H	38.91	13.900	34.09	50.76	54.00	-3.24	Ave

5.2 GHz Band

802.11n20 mode 12 dBi Antena

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 12											
5180	74.18	11	153	V	33.509	5.26	0.00	112.95	-	-	Peak
5180	73.83	350	149	H	33.608	5.26	0.00	112.70	-	-	Peak
5180	62.36	11	153	V	33.509	5.26	0.00	101.13	-	-	Ave
5180	63.32	350	149	H	33.608	5.26	0.00	102.19	-	-	Ave
5150	27.08	11	153	V	33.509	5.26	0.00	65.85	74.00	-8.15	Peak
5150	28.42	350	149	H	33.608	5.26	0.00	67.29	74.00	-6.71	Peak
5150	14.28	11	153	V	33.509	5.26	0.00	53.05	54.00	-0.95	Ave
5150	14.35	350	149	H	33.608	5.26	0.00	53.22	54.00	-0.78	Ave
10360	45	0	100	V	37.51	10.510	33.52	59.50	74.00	-14.50	Peak
10360	44	0	100	H	38.25	10.510	33.52	59.24	74.00	-14.76	Peak
10360	30.94	0	100	V	37.51	10.510	33.52	45.44	54.00	-8.56	Ave
10360	30.89	0	100	H	38.25	10.510	33.52	46.13	54.00	-7.87	Ave
15540	45.16	0	100	V	37.60	14.080	33.60	63.24	74.00	-10.76	Peak
15540	44.68	0	100	H	39.41	14.080	33.60	64.57	74.00	-9.43	Peak
15540	31.64	0	100	V	37.60	14.080	33.60	49.72	54.00	-4.28	Ave
15540	31.67	0	100	H	39.41	14.080	33.60	51.56	54.00	-2.44	Ave
Middle Channel 5200 MHz Power Setting 13											
5200	75.79	23	152	V	33.509	5.260	0.00	114.56	-	-	Peak
5200	77.04	352	155	H	33.608	5.260	0.00	115.91	-	-	Peak
5200	64.22	23	152	V	33.509	5.260	0.00	102.99	-	-	Ave
5200	65.79	352	155	H	33.608	5.260	0.00	104.66	-	-	Ave
10400	44.36	0	100	V	37.51	10.510	33.52	58.86	74.00	-15.14	Peak
10400	44.25	0	100	H	38.25	10.510	33.52	59.49	74.00	-14.51	Peak
10400	30.89	0	100	V	37.51	10.510	33.52	45.39	54.00	-8.61	Ave
10400	30.98	0	100	H	38.25	10.510	33.52	46.22	54.00	-7.78	Ave
15600	45.28	0	100	V	37.455	13.850	33.82	62.77	74.00	-11.24	Peak
15600	45.82	0	100	H	39.182	13.850	33.82	65.03	74.00	-8.97	Peak
15600	31.93	0	100	V	37.455	13.850	33.82	49.42	54.00	-4.59	Ave
15600	31.84	0	100	H	39.182	13.850	33.82	51.05	54.00	-2.95	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting 14											
5240	75.95	26	159	V	33.51	5.26	0.00	114.72	-	-	Peak
5240	76.43	347	156	H	33.61	5.26	0.00	115.30	-	-	Peak
5240	64.03	26	159	V	33.51	5.26	0.00	102.80	-	-	Ave
5240	65.57	347	156	H	33.61	5.26	0.00	104.44	-	-	Ave
5350	27.18	26	159	V	33.57	5.60	0.00	66.35	74.00	-7.65	Peak
5350	27.49	347	156	H	33.58	5.60	0.00	66.67	74.00	-7.33	Peak
5350	14.59	26	159	V	33.57	5.60	0.00	53.76	54.00	-0.24	Ave
5350	14.63	347	156	H	33.58	5.60	0.00	53.81	54.00	-0.19	Ave
10480	43.7	0	100	V	37.66	10.340	33.55	58.15	74.00	-15.86	Peak
10480	43.88	0	100	H	38.33	10.340	33.55	59.00	74.00	-15.00	Peak
10480	30.79	0	100	V	37.66	10.340	33.55	45.24	54.00	-8.77	Ave
10480	30.84	0	100	H	38.33	10.340	33.55	45.96	54.00	-8.04	Ave
15720	46.37	0	100	V	37.27	13.900	34.09	63.45	74.00	-10.55	Peak
15720	45.45	0	100	H	38.91	13.900	34.09	64.17	74.00	-9.83	Peak
15720	32.04	0	100	V	37.27	13.900	34.09	49.12	54.00	-4.88	Ave
15720	31.94	0	100	H	38.91	13.900	34.09	50.66	54.00	-3.34	Ave

5.2 GHz Band

802.11n40 mode, 12 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5190 MHz Power Setting 11.5											
5190	72.59	0	151	V	33.509	5.260	0.00	111.36	-	-	Peak
5190	73.39	350	151	H	33.608	5.260	0.00	112.26	-	-	Peak
5190	60.94	0	151	V	33.509	5.260	0.00	99.71	-	-	Ave
5190	62.45	350	151	H	33.608	5.260	0.00	101.32	-	-	Ave
5150	27.53	0	151	V	33.509	5.260	0.00	66.30	74.00	-7.70	Peak
5150	30.24	350	151	H	33.608	5.260	0.00	69.11	74.00	-4.89	Peak
5150	14.87	0	151	V	33.509	5.260	0.00	53.64	54.00	-0.36	Ave
5150	14.42	350	151	H	33.608	5.260	0.00	53.29	54.00	-0.71	Ave
10380	44.3	0	100	V	37.51	10.510	33.52	58.80	74.00	-15.20	Peak
10380	45.27	0	100	H	38.25	10.510	33.52	60.51	74.00	-13.49	Peak
10380	31.01	0	100	V	37.51	10.510	33.52	45.51	54.00	-8.49	Ave
10380	31.03	0	100	H	38.25	10.510	33.52	46.27	54.00	-7.73	Ave
15570	44.87	0	100	V	37.455	13.850	33.82	62.36	74.00	-11.65	Peak
15570	45.36	0	100	H	39.182	13.850	33.82	64.57	74.00	-9.43	Peak
15570	31.55	0	100	V	37.455	13.850	33.82	49.04	54.00	-4.97	Ave
15570	31.52	0	100	H	39.182	13.850	33.82	50.73	54.00	-3.27	Ave
High Channel 5230 MHz Power Setting 13.5											
5230	73.42	22	151	V	33.509	5.260	0.00	112.19	-	-	Peak
5230	74.19	341	157	H	33.608	5.260	0.00	113.06	-	-	Peak
5230	61.45	22	151	V	33.509	5.260	0.00	100.22	-	-	Ave
5230	63.09	341	157	H	33.608	5.260	0.00	101.96	-	-	Ave
5350	27.42	22	151	V	33.57	5.60	0.00	66.59	74.00	-7.41	Peak
5350	28.2	341	157	H	33.58	5.60	0.00	67.38	74.00	-6.62	Peak
5350	14.65	22	151	V	33.57	5.60	0.00	53.82	54.00	-0.18	Ave
5350	14.72	341	157	H	33.58	5.60	0.00	53.90	54.00	-0.10	Ave
10460	44.33	0	100	V	37.66	10.340	33.55	58.78	74.00	-15.23	Peak
10460	43.69	0	100	H	38.33	10.340	33.55	58.81	74.00	-15.19	Peak
10460	30.74	0	100	V	37.66	10.340	33.55	45.19	54.00	-8.82	Ave
10460	30.68	0	100	H	38.33	10.340	33.55	45.80	54.00	-8.20	Ave
15690	45.88	0	100	V	37.27	13.760	34.09	62.82	74.00	-11.18	Peak
15690	45.83	0	100	H	38.91	13.760	34.09	64.41	74.00	-9.59	Peak
15690	32.11	0	100	V	37.27	13.760	34.09	49.05	54.00	-4.95	Ave
15690	32.08	0	100	H	38.91	13.760	34.09	50.66	54.00	-3.34	Ave

5.8 GHz Band

802.11a mode, 12 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting 13											
5745	71.71	5	147	V	33.905	5.60	0.00	111.22	-	-	Peak
5745	75.16	323	162	H	33.870	5.60	0.00	114.63	-	-	Peak
5745	60.19	5	147	V	33.905	5.60	0.00	99.70	-	-	Ave
5745	64.17	323	162	H	33.870	5.60	0.00	103.64	-	-	Ave
5725	30.99	5	147	V	33.905	5.60	0.00	70.50	78.23	-7.74	Peak
5725	34.83	323	162	H	33.870	5.60	0.00	74.30	78.23	-3.93	Peak
5715	27.35	5	147	V	33.905	5.60	0.00	66.86	68.23	-1.38	Peak
5715	27.39	323	162	H	33.870	5.60	0.00	66.86	68.23	-1.37	Peak
11490	43.72	0	100	V	39.10	12.340	34.10	61.06	74.00	-12.94	Peak
11490	43.68	0	100	H	38.42	12.340	34.10	60.34	74.00	-13.66	Peak
11490	30.43	0	100	V	39.10	12.340	34.10	47.77	54.00	-6.23	Ave
11490	30.35	0	100	H	38.42	13.970	34.10	48.64	54.00	-5.36	Ave
17235	44.8	0	100	V	46.34	13.970	33.72	71.39	74.00	-2.61	Peak
17235	44.69	0	100	H	42.02	13.970	33.72	66.96	74.00	-7.04	Peak
17235	31.26	0	100	V	46.34	13.970	33.72	57.85	68.23	-10.38	Ave
17235	31.32	0	100	H	42.02	13.970	33.72	53.59	68.23	-14.64	Ave
Middle Channel 5785 MHz Power Setting 13											
5785	74.22	5	158	V	34.012	5.600	0.00	113.83	-	-	Peak
5785	76.02	335	146	H	33.955	5.600	0.00	115.58	-	-	Peak
5785	61.41	5	158	V	34.012	5.600	0.00	101.02	-	-	Ave
5785	64.94	335	146	H	33.955	5.600	0.00	104.50	-	-	Ave
11570	44.08	0	100	V	39.38	13.070	34.06	62.47	74.00	-11.53	Peak
11570	43.89	0	100	H	38.30	13.070	34.06	61.20	74.00	-12.80	Peak
11570	30.35	0	100	V	39.38	13.070	34.06	48.74	54.00	-5.26	Ave
11570	30.34	0	100	H	38.30	13.070	34.06	47.65	54.00	-6.35	Ave
17355	44.68	0	100	H	43.816	13.510	33.81	68.20	74.00	-5.80	Peak
17355	31.02	0	100	V	50.057	13.510	33.81	60.78	68.23	-7.45	Ave
17355	31.05	0	100	H	43.816	13.510	33.81	54.57	68.23	-13.66	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting 14											
5825	73.64	3	149	V	34.01	5.60	0.00	113.25	-	-	Peak
5825	76.1	336	166	H	33.96	5.60	0.00	115.66	-	-	Peak
5825	61.9	3	149	V	34.01	5.60	0.00	101.51	-	-	Ave
5825	64.39	336	166	H	33.96	5.60	0.00	103.95	-	-	Ave
5850	29.29	3	149	V	34.03	5.60	0.00	68.92	78.23	-9.31	Peak
5850	29.06	336	166	H	34.22	5.60	0.00	68.88	78.23	-9.35	Peak
5860	27.02	3	149	V	34.03	5.60	0.00	66.65	68.23	-1.58	Peak
5860	27.31	336	166	H	34.22	5.60	0.00	67.13	68.23	-1.10	Peak
11650	43.94	0	100	V	39.91	13.890	34.12	63.62	74.00	-10.38	Peak
11650	43.98	0	100	H	38.33	13.890	34.12	62.08	74.00	-11.92	Peak
11650	30.43	0	100	V	39.91	13.890	34.12	50.11	54.00	-3.89	Ave
11650	30.63	0	100	H	38.33	13.890	34.12	48.73	54.00	-5.27	Ave
17475	44.51	0	100	H	44.41	13.540	33.87	68.59	74.00	-5.41	Peak
17475	31.21	0	100	H	44.41	13.540	33.87	55.29	68.23	-12.94	Ave

5.8 GHz Band

802.11n20 mode, 12 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting 12											
5745	70.9	10	167	V	33.905	5.60	0.00	110.41	-	-	Peak
5745	73.71	318	183	H	33.870	5.60	0.00	113.18	-	-	Peak
5745	60.94	10	167	V	33.905	5.60	0.00	100.45	-	-	Ave
5745	62.35	318	183	H	33.870	5.60	0.00	101.82	-	-	Ave
5725	34.08	10	167	V	33.905	5.60	0.00	73.59	78.23	-4.65	Peak
5725	34.9	318	183	H	33.870	5.60	0.00	74.37	78.23	-3.86	Peak
5715	28.63	10	167	V	33.905	5.60	0.00	68.14	68.23	-0.10	Peak
5715	28.13	318	183	H	33.870	5.60	0.00	67.60	68.23	-0.63	Peak
11490	45.07	166	228	V	39.10	12.340	34.10	62.41	74.00	-11.59	Peak
11490	45.31	256	221	H	38.42	12.340	34.10	61.97	74.00	-12.03	Peak
11490	30.98	166	228	V	39.10	12.340	34.10	48.32	54.00	-5.68	Ave
11490	30.84	256	221	H	38.42	12.340	34.10	47.50	54.00	-6.50	Ave
17235	45.83	0	100	V	46.34	13.970	33.72	72.42	74.00	-1.58	Peak
17235	46.01	0	100	H	42.02	13.970	33.72	68.28	74.00	-5.72	Peak
17235	31.51	0	100	V	46.34	13.970	33.72	58.10	68.23	-10.13	Ave
17235	31.52	0	100	H	42.02	13.970	33.72	53.79	68.23	-14.44	Ave
Middle Channel 5785 MHz Power Setting 13											
5785	72.92	9	165	V	34.012	5.600	0.00	112.53	-	-	Peak
5785	77.14	334	168	H	33.955	5.600	0.00	116.70	-	-	Peak
5785	62.38	9	165	V	34.012	5.600	0.00	101.99	-	-	Ave
5785	65.1	334	168	H	33.955	5.600	0.00	104.66	-	-	Ave
11570	45.29	0	100	V	39.38	13.070	34.06	63.68	74.00	-10.32	Peak
11570	45.59	0	100	H	38.30	13.070	34.06	62.90	74.00	-11.10	Peak
11570	30.74	0	100	V	39.38	13.070	34.06	49.13	54.00	-4.87	Ave
11570	30.79	0	100	H	38.30	13.070	34.06	48.10	54.00	-5.90	Ave
17355	45.37	0	100	H	43.816	13.510	33.81	68.89	74.00	-5.11	Peak
17355	31.23	0	100	V	50.057	13.510	33.81	60.99	68.23	-7.24	Ave
17355	31.24	0	100	H	43.816	13.510	33.81	54.76	68.23	-13.47	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting 14											
5825	71.29	12	170	V	34.01	5.60	0.00	110.90	-	-	Peak
5825	76.44	352	165	H	33.96	5.60	0.00	116.00	-	-	Peak
5825	60.4	12	170	V	34.01	5.60	0.00	100.01	-	-	Ave
5825	64.2	352	165	H	33.96	5.60	0.00	103.76	-	-	Ave
5850	25.49	12	170	V	34.03	5.60	0.00	65.12	78.23	-13.11	Peak
5850	32.22	352	165	H	34.22	5.60	0.00	72.04	78.23	-6.19	Peak
5860	26.91	12	170	V	34.03	5.60	0.00	66.54	68.23	-1.69	Peak
5860	28.14	352	165	H	34.22	5.60	0.00	67.96	68.23	-0.27	Peak
11650	46.27	0	100	V	39.91	13.890	34.12	65.95	74.00	-8.05	Peak
11650	45.27	0	100	H	38.33	13.890	34.12	63.37	74.00	-10.63	Peak
11650	30.94	0	100	V	39.91	13.890	34.12	50.62	54.00	-3.38	Ave
11650	30.9	0	100	H	38.33	13.890	34.12	49.00	54.00	-5.00	Ave
17475	45.58	0	100	H	44.41	13.540	33.87	69.66	74.00	-4.34	Peak
17475	31.25	0	100	H	44.41	13.540	33.87	55.33	68.23	-12.90	Ave

5.8 GHz Band

802.11n40 mode, 12 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5755 MHz Power Setting 10											
5755	65.37	40	160	V	33.905	5.60	0.00	104.88	-	-	Peak
5755	72.21	348	171	H	33.870	5.60	0.00	111.68	-	-	Peak
5755	54.43	40	160	V	33.905	5.60	0.00	93.94	-	-	Ave
5755	59.38	348	171	H	33.870	5.60	0.00	98.85	-	-	Ave
5725	30.84	40	160	V	33.905	5.60	0.00	70.35	78.23	-7.89	Peak
5725	34.26	348	171	H	33.870	5.60	0.00	73.73	78.23	-4.50	Peak
5715	26.85	40	160	V	33.905	5.60	0.00	66.36	68.23	-1.88	Peak
5715	28.75	348	171	H	33.870	5.60	0.00	68.22	68.23	-0.01	Peak
11510	45.14	0	100	V	39.10	12.340	34.10	62.48	74.00	-11.52	Peak
11510	44.93	0	100	H	38.42	12.340	34.10	61.59	74.00	-12.41	Peak
11510	30.77	0	100	V	39.10	12.340	34.10	48.11	54.00	-5.89	Ave
11510	30.68	0	100	H	38.42	12.340	34.10	47.34	54.00	-6.66	Ave
17265	45.14	0	100	V	46.34	13.970	33.72	71.73	74.00	-2.27	Peak
17265	44.36	0	100	H	42.02	13.970	33.72	66.63	74.00	-7.37	Peak
17265	31.01	0	100	V	46.34	13.970	33.72	57.60	68.23	-10.63	Ave
17265	31.06	0	100	H	42.02	13.970	33.72	53.33	68.23	-14.90	Ave
High Channel 5795 MHz Power Setting 14											
5795	70.03	10	161	V	34.01	5.60	0.00	109.64	-	-	Peak
5795	74.49	347	170	H	33.96	5.60	0.00	114.05	-	-	Peak
5795	58.8	10	161	V	34.01	5.60	0.00	98.41	-	-	Ave
5795	62.5	347	170	H	33.96	5.60	0.00	102.06	-	-	Ave
5850	26.24	10	161	V	34.03	5.60	0.00	65.87	78.23	-12.36	Peak
5850	27.63	347	170	H	34.22	5.60	0.00	67.45	78.23	-10.78	Peak
5860	27.1	10	161	V	34.03	5.60	0.00	66.73	68.23	-1.50	Peak
5860	28.17	347	170	H	34.22	5.60	0.00	67.99	68.23	-0.24	Peak
11590	44.93	11	176	V	39.91	13.07	34.12	63.79	74.00	-10.21	Peak
11590	45.65	353	167	H	38.33	13.07	34.12	62.93	74.00	-11.07	Peak
11590	30.87	11	176	V	39.91	13.07	34.12	49.73	54.00	-4.27	Ave
11590	30.93	353	167	H	38.33	13.07	34.12	48.21	54.00	-5.79	Ave
17385	45.04	0	100	H	44.41	13.51	33.87	69.09	74.00	-4.91	Peak
17385	31.12	0	100	V	52.05	13.51	33.87	62.81	68.23	-5.42	Ave
17385	31.07	0	100	H	44.41	13.51	33.87	55.12	68.23	-13.11	Ave

5.2 GHz Band

802.11a mode, 15 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 17											
5180	62.84	92	162	V	33.509	5.26	0.00	101.61	-	-	Peak
5180	76.16	92	233	H	33.608	5.26	0.00	115.03	-	-	Peak
5180	52.55	92	162	V	33.509	5.26	0.00	91.32	-	-	Ave
5180	63.63	92	233	H	33.608	5.26	0.00	102.50	-	-	Ave
5150	27.53	92	162	V	33.509	5.26	0.00	66.30	74.00	-7.70	Peak
5150	31.56	92	233	H	33.608	5.26	0.00	70.43	74.00	-3.57	Peak
5150	13.25	92	162	V	33.509	5.26	0.00	52.02	54.00	-1.98	Ave
5150	15.11	92	233	H	33.608	5.26	0.00	53.98	54.00	-0.02	Ave
10360	45.18	0	100	V	37.51	10.510	33.52	59.68	68.26	-8.58	Peak
10360	45.53	0	100	H	38.25	10.510	33.52	60.77	68.26	-7.49	Peak
10360	31.02	0	100	V	37.51	10.510	33.52	45.52	54.00	-8.48	Ave
10360	30.91	0	100	H	38.25	10.510	33.52	46.15	54.00	-7.85	Ave
15540	44.62	0	100	V	37.60	14.080	33.60	62.70	68.26	-5.56	Peak
15540	44.82	0	100	H	39.41	14.080	33.60	64.71	68.26	-3.55	Peak
15540	30.31	0	100	V	37.60	14.080	33.60	48.39	54.00	-5.61	Ave
15540	30.33	0	100	H	39.41	14.080	33.60	50.22	54.00	-3.78	Ave
Middle Channel 5200 MHz Power Setting Target											
5200	65.92	96	160	V	33.509	5.260	0.00	104.69	-	-	Peak
5200	79.91	91	246	H	33.608	5.260	0.00	118.78	-	-	Peak
5200	55.78	96	160	V	33.509	5.260	0.00	94.55	-	-	Ave
5200	68.14	91	246	H	33.608	5.260	0.00	107.01	-	-	Ave
10400	43.66	0	100	V	37.51	10.510	33.52	58.16	68.26	-10.10	Peak
10400	45.14	0	100	H	38.25	10.510	33.52	60.38	68.26	-7.88	Peak
10400	30.57	0	100	V	37.51	10.510	33.52	45.07	54.00	-8.93	Ave
10400	30.59	0	100	H	38.25	10.510	33.52	45.83	54.00	-8.17	Ave
15600	45.05	0	100	V	37.455	13.850	33.82	62.54	68.26	-5.73	Peak
15600	44.53	0	100	H	39.182	13.850	33.82	63.74	68.26	-4.52	Peak
15600	30.23	0	100	V	37.455	13.850	33.82	47.72	54.00	-6.29	Ave
15600	30.21	0	100	H	39.182	13.850	33.82	49.42	54.00	-4.58	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting Target											
5240	64.1	102	242	V	33.51	5.26	0.00	102.87	-	-	Peak
5240	79.99	93	258	H	33.61	5.26	0.00	118.86	-	-	Peak
5240	54.11	102	242	V	33.51	5.26	0.00	92.88	-	-	Ave
5240	67.97	93	258	H	33.61	5.26	0.00	106.84	-	-	Ave
5350	26.77	102	242	V	33.57	5.60	0.00	65.94	74.00	-8.06	Peak
5350	27.32	93	258	H	33.58	5.60	0.00	66.50	74.00	-7.50	Peak
5350	13.16	102	242	V	33.57	5.60	0.00	52.33	54.00	-1.67	Ave
5350	13.64	93	258	H	33.58	5.60	0.00	52.82	54.00	-1.18	Ave
10480	45.64	0	100	V	37.66	10.340	33.55	60.09	68.26	-8.18	Peak
10480	45.25	0	100	H	38.33	10.340	33.55	60.37	68.26	-7.89	Peak
10480	30.76	0	100	V	37.66	10.340	33.55	45.21	54.00	-8.79	Ave
10480	30.78	0	100	H	38.33	10.340	33.55	45.90	54.00	-8.10	Ave
15720	45.76	0	100	V	37.27	13.900	34.09	62.84	68.26	-5.42	Peak
15720	45.55	0	100	H	38.91	13.900	34.09	64.27	68.26	-3.99	Peak
15720	31.41	0	100	V	37.27	13.900	34.09	48.49	54.00	-5.51	Ave
15720	31.22	0	100	H	38.91	13.900	34.09	49.94	54.00	-4.06	Ave

5.2 GHz Band

802.11n20 mode, 15 dBi Antena

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5180 MHz Power Setting 17											
5180	62.78	98	217	V	33.509	5.26	0.00	101.55	-	-	Peak
5180	73.92	90	253	H	33.608	5.26	0.00	112.79	-	-	Peak
5180	52.85	98	217	V	33.509	5.26	0.00	91.62	-	-	Ave
5180	62.21	90	253	H	33.608	5.26	0.00	101.08	-	-	Ave
5150	27.81	98	217	V	33.509	5.26	0.00	66.58	74.00	-7.42	Peak
5150	30.05	90	253	H	33.608	5.26	0.00	68.92	74.00	-5.08	Peak
5150	13.26	98	217	V	33.509	5.26	0.00	52.03	54.00	-1.97	Ave
5150	15	90	253	H	33.608	5.26	0.00	53.87	54.00	-0.13	Ave
10360	44.83	0	100	V	37.51	10.510	33.52	59.33	68.26	-8.93	Peak
10360	44.25	0	100	H	38.25	10.510	33.52	59.49	68.26	-8.77	Peak
10360	30.52	0	100	V	37.51	10.510	33.52	45.02	54.00	-8.98	Ave
10360	30.68	0	100	H	38.25	10.510	33.52	45.92	54.00	-8.08	Ave
15540	43.49	0	100	V	37.60	14.080	33.60	61.57	68.26	-6.69	Peak
15540	43.75	0	100	H	39.41	14.080	33.60	63.64	68.26	-4.62	Peak
15540	29.47	0	100	V	37.60	14.080	33.60	47.55	54.00	-6.45	Ave
15540	29.44	0	100	H	39.41	14.080	33.60	49.33	54.00	-4.67	Ave
Middle Channel 5200 MHz Power Setting Target											
5200	64.76	100	243	V	33.509	5.260	0.00	103.53	-	-	Peak
5200	79.21	90	254	H	33.608	5.260	0.00	118.08	-	-	Peak
5200	53.9	100	243	V	33.509	5.260	0.00	92.67	-	-	Ave
5200	67.7	90	254	H	33.608	5.260	0.00	106.57	-	-	Ave
10400	44.2	0	100	V	37.51	10.510	33.52	58.70	68.26	-9.56	Peak
10400	43.91	0	100	H	38.25	10.510	33.52	59.15	68.26	-9.11	Peak
10400	29.5	0	100	V	37.51	10.510	33.52	44.00	54.00	-10.00	Ave
10400	29.45	0	100	H	38.25	10.510	33.52	44.69	54.00	-9.31	Ave
15600	45.12	0	100	V	37.455	13.850	33.82	62.61	68.26	-5.66	Peak
15600	43.87	0	100	H	39.182	13.850	33.82	63.08	68.26	-5.18	Peak
15600	29.6	0	100	V	37.455	13.850	33.82	47.09	54.00	-6.92	Ave
15600	29.49	0	100	H	39.182	13.850	33.82	48.70	54.00	-5.30	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5240 MHz Power Setting Target											
5240	63.42	103	269	V	33.51	5.26	0.00	102.19	-	-	Peak
5240	78.33	93	249	H	33.61	5.26	0.00	117.20	-	-	Peak
5240	53.2	103	269	V	33.51	5.26	0.00	91.97	-	-	Ave
5240	66.95	93	249	H	33.61	5.26	0.00	105.82	-	-	Ave
5350	26.63	103	269	V	33.57	5.60	0.00	65.80	74.00	-8.20	Peak
5350	27.34	93	249	H	33.58	5.60	0.00	66.52	74.00	-7.48	Peak
5350	13.18	103	269	V	33.57	5.60	0.00	52.35	54.00	-1.65	Ave
5350	13.57	93	249	H	33.58	5.60	0.00	52.75	54.00	-1.25	Ave
10480	44.82	0	100	V	37.66	10.340	33.55	59.27	68.26	-9.00	Peak
10480	45.8	0	100	H	38.33	10.340	33.55	60.92	68.26	-7.34	Peak
10480	30.65	0	100	V	37.66	10.340	33.55	45.10	54.00	-8.90	Ave
10480	30.68	0	100	H	38.33	10.340	33.55	45.80	54.00	-8.20	Ave
15720	44.82	0	100	V	37.27	13.900	34.09	61.90	68.26	-6.36	Peak
15720	46.67	0	100	H	38.91	13.900	34.09	65.39	68.26	-2.87	Peak
15720	31.36	0	100	V	37.27	13.900	34.09	48.44	54.00	-5.56	Ave
15720	31.34	0	100	H	38.91	13.900	34.09	50.06	54.00	-3.94	Ave

5.2 GHz Band

802.11n40 mode, 15 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5190 MHz Power Setting 15											
5190	58.22	98	149	V	33.509	5.260	0.00	96.99	-	-	Peak
5190	72.09	94	251	H	33.608	5.260	0.00	110.96	-	-	Peak
5190	47.02	98	149	V	33.509	5.260	0.00	85.79	-	-	Ave
5190	60.12	94	251	H	33.608	5.260	0.00	98.99	-	-	Ave
5150	27.03	98	149	V	33.509	5.260	0.00	65.80	74.00	-8.20	Peak
5150	32.06	94	251	H	33.608	5.260	0.00	70.93	74.00	-3.07	Peak
5150	13.24	98	149	V	33.509	5.260	0.00	52.01	54.00	-1.99	Ave
5150	14.81	94	251	H	33.608	5.260	0.00	53.68	54.00	-0.32	Ave
10380	44.65	0	100	V	37.51	10.510	33.52	59.15	68.26	-9.11	Peak
10380	44.71	0	100	H	38.25	10.510	33.52	59.95	68.26	-8.31	Peak
10380	30.92	0	100	V	37.51	10.510	33.52	45.42	54.00	-8.58	Ave
10380	30.97	0	100	H	38.25	10.510	33.52	46.21	54.00	-7.79	Ave
15570	44.54	0	100	V	37.455	13.850	33.82	62.03	68.26	-6.24	Peak
15570	43.86	0	100	H	39.182	13.850	33.82	63.07	68.26	-5.19	Peak
15570	30.33	0	100	V	37.455	13.850	33.82	47.82	54.00	-6.19	Ave
15570	30.32	0	100	H	39.182	13.850	33.82	49.53	54.00	-4.47	Ave
High Channel 5230 MHz Power Setting Target											
5230	60.52	100	265	V	33.509	5.260	0.00	99.29	-	-	Peak
5230	75.12	90	255	H	33.608	5.260	0.00	113.99	-	-	Peak
5230	50.31	100	265	V	33.509	5.260	0.00	89.08	-	-	Ave
5230	64.58	90	255	H	33.608	5.260	0.00	103.45	-	-	Ave
5350	27	100	265	V	33.57	5.60	0.00	66.17	74.00	-7.83	Peak
5350	27.64	90	255	H	33.58	5.60	0.00	66.82	74.00	-7.18	Peak
5350	13.18	100	265	V	33.57	5.60	0.00	52.35	54.00	-1.65	Ave
5350	13.89	90	255	H	33.58	5.60	0.00	53.07	54.00	-0.93	Ave
10460	43.98	0	100	V	37.66	10.340	33.55	58.43	68.26	-9.84	Peak
10460	44.77	0	100	H	38.33	10.340	33.55	59.89	68.26	-8.37	Peak
10460	30.64	0	100	V	37.66	10.340	33.55	45.09	54.00	-8.91	Ave
10460	30.59	0	100	H	38.33	10.340	33.55	45.71	54.00	-8.29	Ave
15690	44.84	0	100	V	37.27	13.760	34.09	61.78	68.26	-6.48	Peak
15690	44.27	0	100	H	38.91	13.760	34.09	62.85	68.26	-5.41	Peak
15690	31.12	0	100	V	37.27	13.760	34.09	48.06	54.00	-5.94	Ave
15690	31.25	0	100	H	38.91	13.760	34.09	49.83	54.00	-4.17	Ave

5.8 GHz Band

802.11a mode, 15 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting Target											
5745	63.21	300	210	V	33.905	5.60	0.00	102.72	-	-	Peak
5745	65.59	111	252	H	33.870	5.60	0.00	105.06	-	-	Peak
5745	52.58	300	210	V	33.905	5.60	0.00	92.09	-	-	Ave
5745	54.21	111	252	H	33.870	5.60	0.00	93.68	-	-	Ave
5725	34.8	300	210	V	33.905	5.60	0.00	74.31	78.23	-3.93	Peak
5725	38	111	252	H	33.870	5.60	0.00	77.47	78.23	-0.76	Peak
5715	26.8	300	210	V	33.905	5.60	0.00	66.31	68.23	-1.93	Peak
5715	27.26	111	252	H	33.870	5.60	0.00	66.73	68.23	-1.50	Peak
11490	43.72	0	100	V	39.10	12.340	34.10	61.06	74.00	-12.94	Peak
11490	43.26	0	100	H	38.42	12.340	34.10	59.92	74.00	-14.08	Peak
11490	29.74	0	100	V	39.10	12.340	34.10	47.08	54.00	-6.92	Ave
11490	29.69	0	100	H	38.42	13.970	34.10	47.98	54.00	-6.02	Ave
17235	42.7	0	100	V	46.34	13.970	33.72	69.29	74.00	-4.71	Peak
17235	43.4	0	100	H	42.02	13.970	33.72	65.67	74.00	-8.33	Peak
17235	29.09	0	100	H	42.02	13.970	33.72	51.36	54.00	-2.64	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	68.57	268	312	V	34.012	5.600	0.00	108.18	-	-	Peak
5785	62.39	258	184	H	33.955	5.600	0.00	101.95	-	-	Peak
5785	58.52	268	312	V	34.012	5.600	0.00	98.13	-	-	Ave
5785	51.42	258	184	H	33.955	5.600	0.00	90.98	-	-	Ave
11570	43.8	0	100	V	39.38	13.070	34.06	62.19	74.00	-11.81	Peak
11570	43.1	0	100	H	38.30	13.070	34.06	60.41	74.00	-13.59	Peak
11570	29.66	0	100	V	39.38	13.070	34.06	48.05	54.00	-5.95	Ave
11570	29.66	0	100	H	38.30	13.070	34.06	46.97	54.00	-7.03	Ave
17355	42.4	0	100	V	50.057	13.510	33.81	72.16	74.00	-1.84	Peak
17355	43.15	0	100	H	43.816	13.510	33.81	66.67	74.00	-7.33	Peak
17355	28.98	0	100	H	43.816	13.510	33.81	52.50	54.00	-1.50	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting Target											
5825	67.66	284	296	V	34.01	5.60	0.00	107.27	-	-	Peak
5825	63.69	112	250	H	33.96	5.60	0.00	103.25	-	-	Peak
5825	56.94	284	296	V	34.01	5.60	0.00	96.55	-	-	Ave
5825	52.51	112	250	H	33.96	5.60	0.00	92.07	-	-	Ave
5850	27.62	284	296	V	34.03	5.60	0.00	67.25	78.23	-10.98	Peak
5850	26.68	112	250	H	34.22	5.60	0.00	66.50	78.23	-11.73	Peak
5860	27.07	284	296	V	34.03	5.60	0.00	66.70	68.23	-1.53	Peak
5860	26.93	112	250	H	34.22	5.60	0.00	66.75	68.23	-1.48	Peak
11650	43.91	0	100	V	39.91	13.890	34.12	63.59	74.00	-10.41	Peak
11650	43.41	0	100	H	38.33	13.890	34.12	61.51	74.00	-12.49	Peak
11650	30.04	0	100	V	39.91	13.890	34.12	49.72	54.00	-4.28	Ave
11650	30.18	0	100	H	38.33	13.890	34.12	48.28	54.00	-5.72	Ave
17475	43.87	0	100	H	44.41	13.540	33.87	67.95	74.00	-6.05	Peak
17475	29.09	0	100	H	44.41	13.540	33.87	53.17	54.00	-0.83	Ave

5.8 GHz Band

802.11n20 mode, 15 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5745 MHz Power Setting Target											
5745	62.14	183	258	V	33.905	5.60	0.00	101.65	-	-	Peak
5745	64.11	261	333	H	33.870	5.60	0.00	103.58	-	-	Peak
5745	51.93	183	258	V	33.905	5.60	0.00	91.44	-	-	Ave
5745	53.72	261	333	H	33.870	5.60	0.00	93.19	-	-	Ave
5725	37.87	183	258	V	33.905	5.60	0.00	77.38	78.23	-0.86	Peak
5725	38.47	261	333	H	33.870	5.60	0.00	77.94	78.23	-0.29	Peak
5715	27.27	183	258	V	33.905	5.60	0.00	66.78	68.23	-1.46	Peak
5715	26.63	261	333	H	33.870	5.60	0.00	66.10	68.23	-2.13	Peak
11490	43.5	0	100	V	39.10	12.340	34.10	60.84	74.00	-13.16	Peak
11490	42.26	0	100	H	38.42	12.340	34.10	58.92	74.00	-15.08	Peak
11490	28.92	0	100	V	39.10	12.340	34.10	46.26	54.00	-7.74	Ave
11490	28.68	0	100	H	38.42	13.970	34.10	46.97	54.00	-7.03	Ave
17235	42.39	0	100	V	46.34	13.970	33.72	68.98	74.00	-5.02	Peak
17235	42.5	0	100	H	42.02	13.970	33.72	64.77	74.00	-9.23	Peak
17235	29.3	0	100	H	42.02	13.970	33.72	51.57	54.00	-2.43	Ave
Middle Channel 5785 MHz Power Setting Target											
5785	69.3	283	312	V	34.012	5.600	0.00	108.91	-	-	Peak
5785	61.7	73	232	H	33.955	5.600	0.00	101.26	-	-	Peak
5785	59.24	283	312	V	34.012	5.600	0.00	98.85	-	-	Ave
5785	50.39	73	232	H	33.955	5.600	0.00	89.95	-	-	Ave
11570	42.57	0	100	V	39.38	13.070	34.06	60.96	74.00	-13.04	Peak
11570	43.17	0	100	H	38.30	13.070	34.06	60.48	74.00	-13.52	Peak
11570	28.61	0	100	V	39.38	13.070	34.06	47.00	54.00	-7.00	Ave
11570	28.59	0	100	H	38.30	13.070	34.06	45.90	54.00	-8.10	Ave
17355	42.89	0	100	V	50.057	13.510	33.81	72.65	74.00	-1.35	Peak
17355	42.72	0	100	H	43.816	13.510	33.81	66.24	74.00	-7.76	Peak
17355	29.23	0	100	H	43.816	13.510	33.81	52.75	54.00	-1.25	Ave

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
High Channel 5825 MHz Power Setting Target											
5825	67.47	284	301	V	34.01	5.60	0.00	107.08	-	-	Peak
5825	60.82	260	139	H	33.96	5.60	0.00	100.38	-	-	Peak
5825	56.42	284	301	V	34.01	5.60	0.00	96.03	-	-	Ave
5825	49.07	260	139	H	33.96	5.60	0.00	88.63	-	-	Ave
5850	28.01	284	301	V	34.03	5.60	0.00	67.64	78.23	-10.59	Peak
5850	27.16	260	139	H	34.22	5.60	0.00	66.98	78.23	-11.25	Peak
5860	27.8	284	301	V	34.03	5.60	0.00	67.43	68.23	-0.80	Ave
5860	28.11	260	139	H	34.22	5.60	0.00	67.93	68.23	-0.30	Ave
11650	42.63	0	100	V	39.91	13.890	34.12	62.31	74.00	-11.69	Peak
11650	42.23	0	100	H	38.33	13.890	34.12	60.33	74.00	-13.67	Peak
11650	28.51	0	100	V	39.91	13.890	34.12	48.19	54.00	-5.81	Ave
11650	28.42	0	100	H	38.33	13.890	34.12	46.52	54.00	-7.48	Ave
17475	42.34	0	100	H	44.41	13.540	33.87	66.42	74.00	-7.58	Peak
17475	28.97	0	100	H	44.41	13.540	33.87	53.05	54.00	-0.95	Ave

5.8 GHz Band

802.11n40 mode, 15 dBi Antenna

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre-Amp. (dB)	Cord. Reading (dBµV/m)	FCC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Low Channel 5755 MHz Power Setting 17											
5755	67.16	281	328	V	33.905	5.60	0.00	106.67	-	-	Peak
5755	58.83	111	223	H	33.870	5.60	0.00	98.30	-	-	Peak
5755	56.25	281	328	V	33.905	5.60	0.00	95.76	-	-	Ave
5755	46.93	111	223	H	33.870	5.60	0.00	86.40	-	-	Ave
5725	35.94	281	328	V	33.905	5.60	0.00	75.45	78.23	-2.79	Peak
5725	28.25	111	223	H	33.870	5.60	0.00	67.72	78.23	-10.51	Peak
5715	28.58	281	328	V	33.905	5.60	0.00	68.09	68.23	-0.15	Peak
5715	27.04	111	223	H	33.870	5.60	0.00	66.51	68.23	-1.72	Peak
11510	42.7	0	100	V	39.10	12.340	34.10	60.04	74.00	-13.96	Peak
11510	42.91	0	100	H	38.42	12.340	34.10	59.57	74.00	-14.43	Peak
11510	28.55	0	100	V	39.10	12.340	34.10	45.89	54.00	-8.11	Ave
11510	28.64	0	100	H	38.42	12.340	34.10	45.30	54.00	-8.70	Ave
17265	43.37	0	100	V	46.34	13.970	33.72	69.96	74.00	-4.04	Peak
17265	42.28	0	100	H	42.02	13.970	33.72	64.55	74.00	-9.45	Peak
17265	29.35	0	100	V	46.34	13.970	33.72	55.94	68.23	-12.29	Ave
17265	29.32	0	100	H	42.02	13.970	33.72	51.59	68.23	-16.64	Ave
High Channel 5795 MHz Power Setting Target											
5795	65.72	282	318	V	34.01	5.60	0.00	105.33	-	-	Peak
5795	59.26	259	189	H	33.96	5.60	0.00	98.82	-	-	Peak
5795	55.08	282	318	V	34.01	5.60	0.00	94.69	-	-	Ave
5795	47.95	259	189	H	33.96	5.60	0.00	87.51	-	-	Ave
5850	29.2	282	318	V	34.03	5.60	0.00	68.83	78.23	-9.40	Peak
5850	25.49	259	189	H	34.22	5.60	0.00	65.31	78.23	-12.92	Peak
5860	27.49	282	318	V	34.03	5.60	0.00	67.12	68.23	-1.11	Peak
5860	26.02	259	189	H	34.22	5.60	0.00	65.84	68.23	-2.39	Peak
11590	41.78	0	100	V	39.91	13.070	34.12	60.64	74.00	-13.36	Peak
11590	42.87	0	100	H	38.33	13.070	34.12	60.15	74.00	-13.85	Peak
11590	28.36	0	100	V	39.91	13.070	34.12	47.22	54.00	-6.78	Ave
11590	28.44	0	100	H	38.33	13.070	34.12	45.72	54.00	-8.28	Ave
17385	42.37	0	100	H	44.41	13.510	33.87	66.42	74.00	-7.58	Peak
17385	28.63	0	100	V	52.05	13.510	33.87	60.32	68.23	-7.91	Ave
17385	28.61	0	100	H	44.41	13.510	33.87	52.66	68.23	-15.57	Ave

8 FCC §15.407- Occupied Bandwidth

8.1 Applicable Standards

FCC §15.407, for equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

8.2 Measurement Procedure

The measurements are based on FCC KDB 789033 D02 General UNII Test Procedures New Rules v01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices section C: Emission bandwidth and section D: 99 Percent Occupied Bandwidth

8.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Speactrum Analyzer	E4446A	MY48250238	09-03-2015	1 year
-	RF cable	-	00609	06-05-2015	1year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed according to A2LA requirements, traceable to the NIST.*

8.4 Test Environmental Conditions

Temperature:	22-24º C
Relative Humidity:	40-41 %
ATM Pressure:	103.1-104.1 kPa

The testing was performed by Jin Yang on 2015-10-29 to at RF site.

8.5 Test Results

Please refer to the following tables and plots.

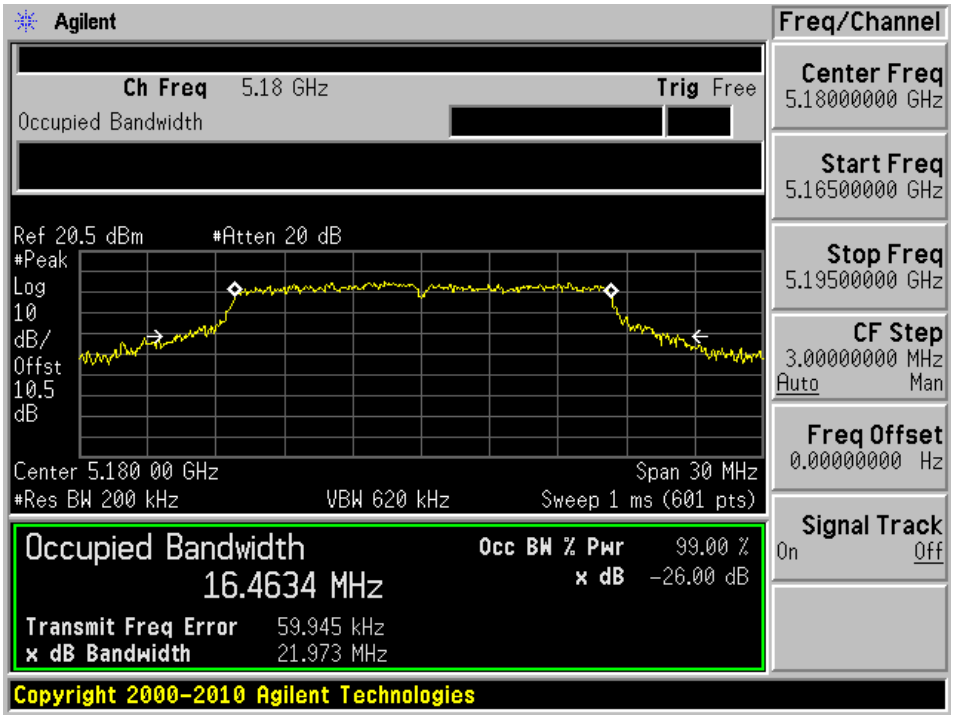
5.2 GHz Band:

TX Chain	Channel	Frequency (MHz)	26 dB OBW (MHz)	99% OBW (MHz)
Chain 0	802.11a mode			
	Low	5180	21.973	16.4634
	Middle	5200	21.074	16.5086
	High	5240	20.877	16.5380
	802.11n20 mode			
	Low	5180	22.223	17.6943
	Middle	5200	20.964	17.6170
	High	5240	22.218	17.7013
	802.11n40 mode			
	Low	5190	45.178	36.1473
	High	5230	44.778	36.2295
Chain 1	802.11a mode			
	Low	5180	22.715	16.5119
	Middle	5200	21.936	16.5266
	High	5240	21.505	16.4896
	802.11n20 mode			
	Low	5180	21.462	17.6670
	Middle	5200	23.018	17.7199
	High	5240	22.517	17.6762
	802.11n40 mode			
	Low	5190	42.852	36.1863
	High	5230	45.622	36.3682
Chain 2	802.11a mode			
	Low	5180	26.612	16.5860
	Middle	5200	25.915	16.5417
	High	5240	22.120	16.5263
	802.11n20 mode			
	Low	5180	25.425	17.7473
	Middle	5200	23.486	17.6180
	High	5240	25.428	17.7741
	802.11n40 mode			
	Low	5190	46.978	36.0666
	High	5230	52.600	36.3745

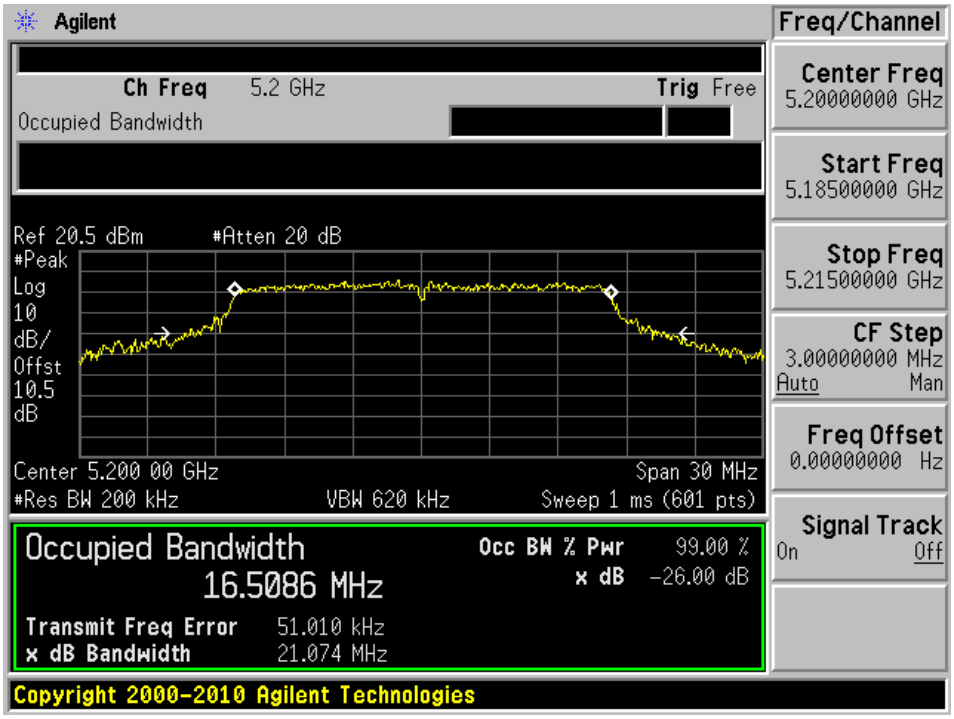
5.2 GHz Band

802.11a mode, Chain 0

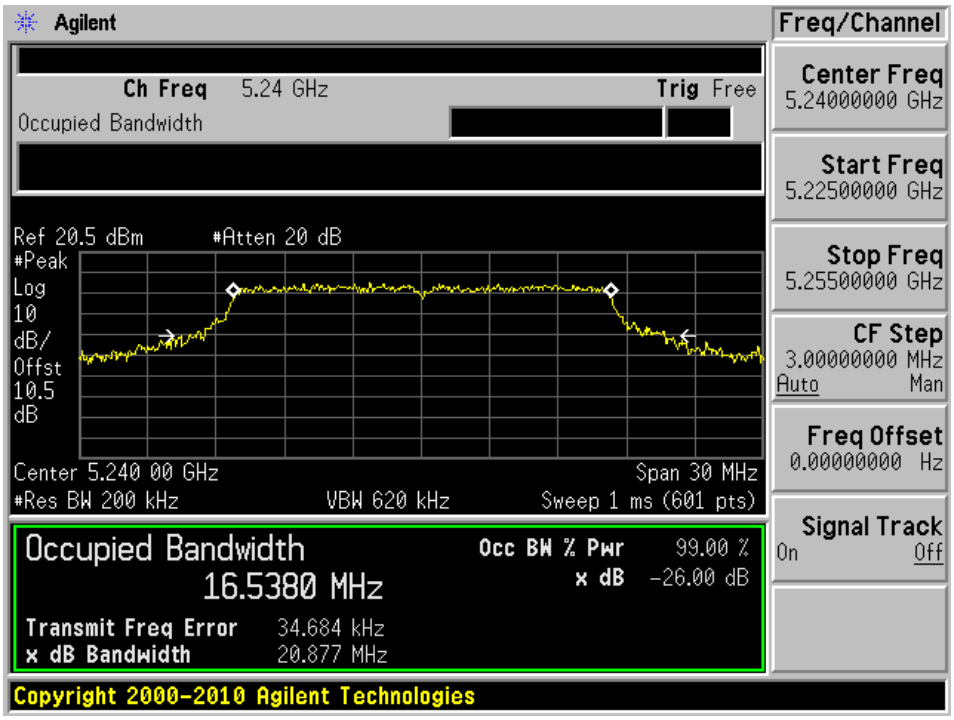
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

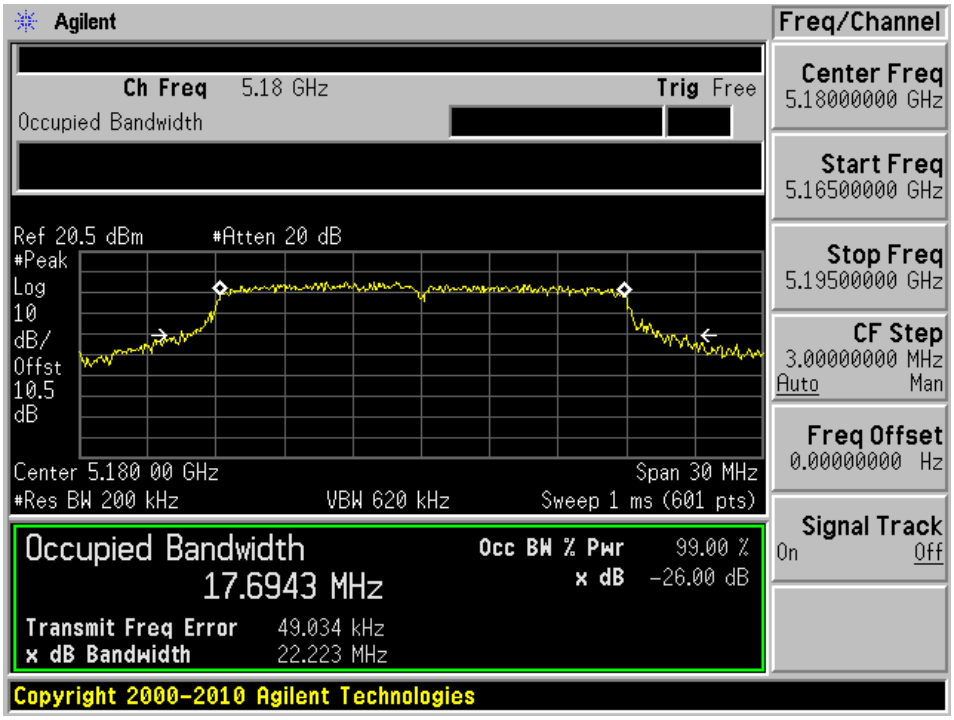


802.11a High channel: 5240 MHz

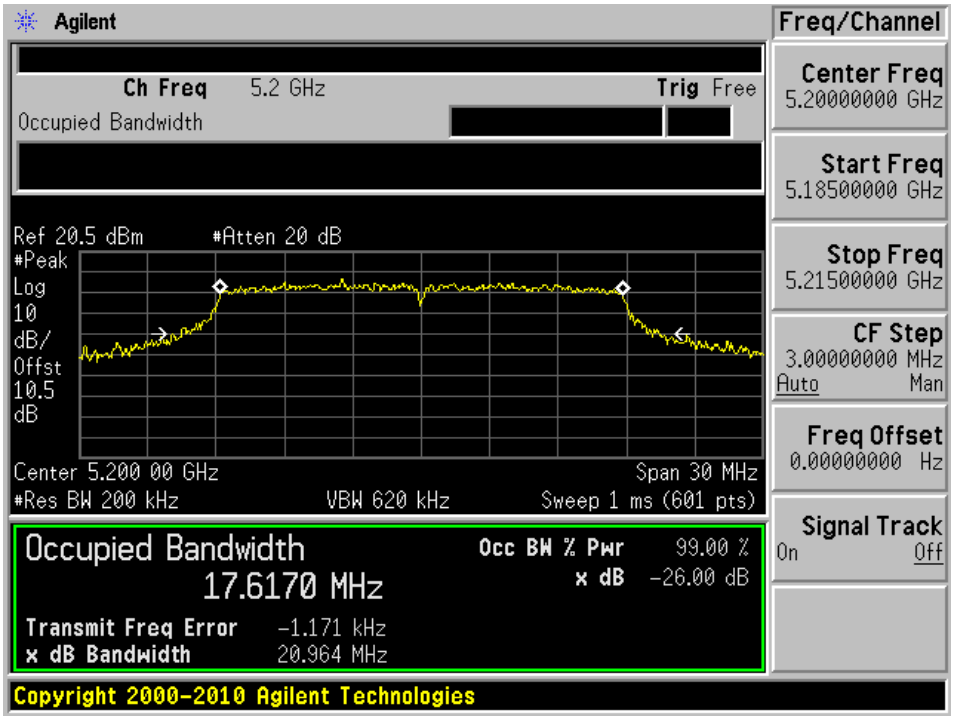


802.11n HT20 mode, Chain 0

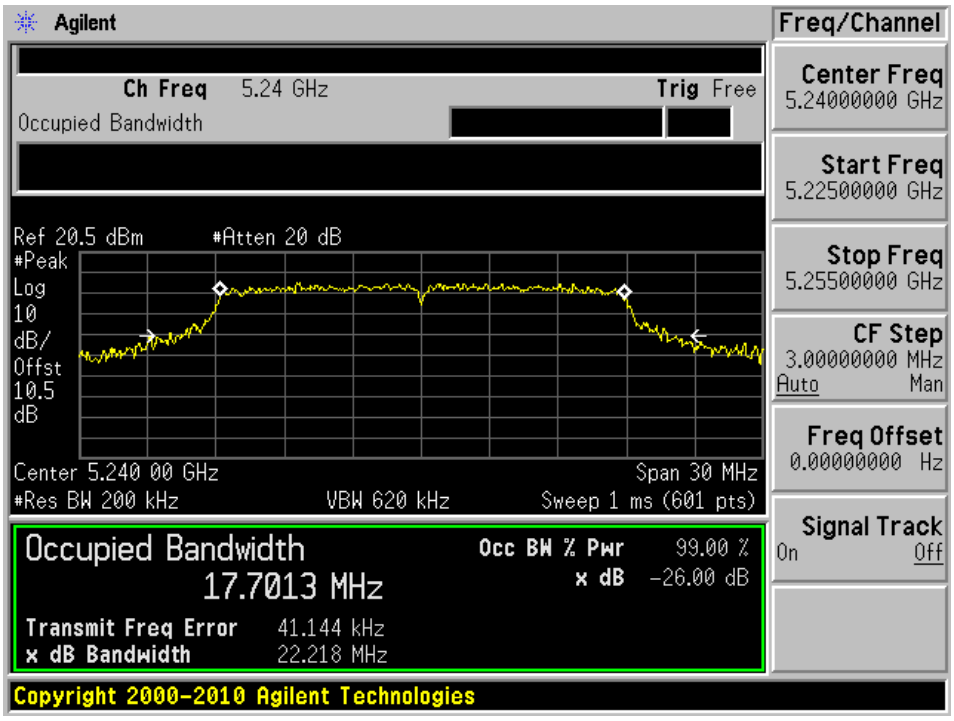
802.11n HT20 Low channel: 5180 MHz



802.11n HT20 Middle channel: 5200 MHz

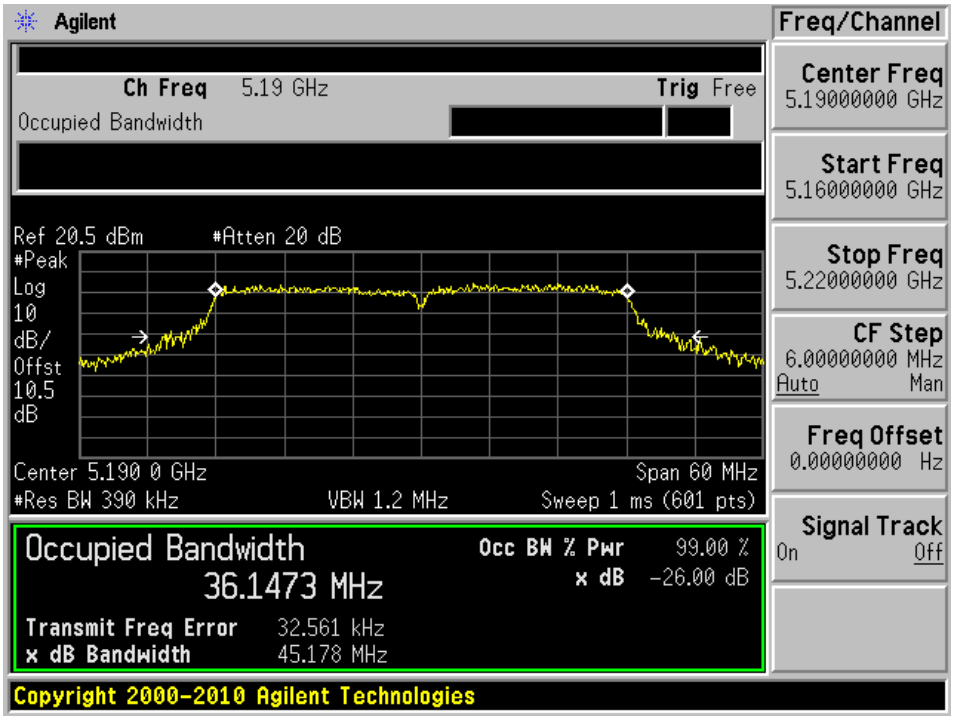


802.11n HT20 High channel: 5240 MHz

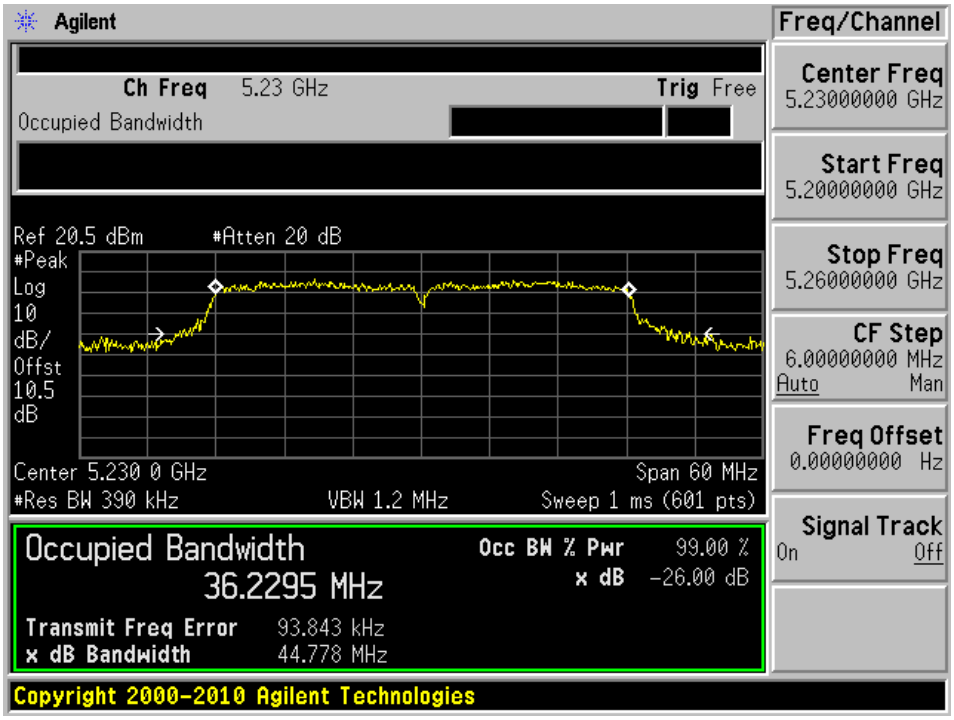


802.11n HT40 mode, Chain 0

802.11n HT40 Low channel: 5190 MHz

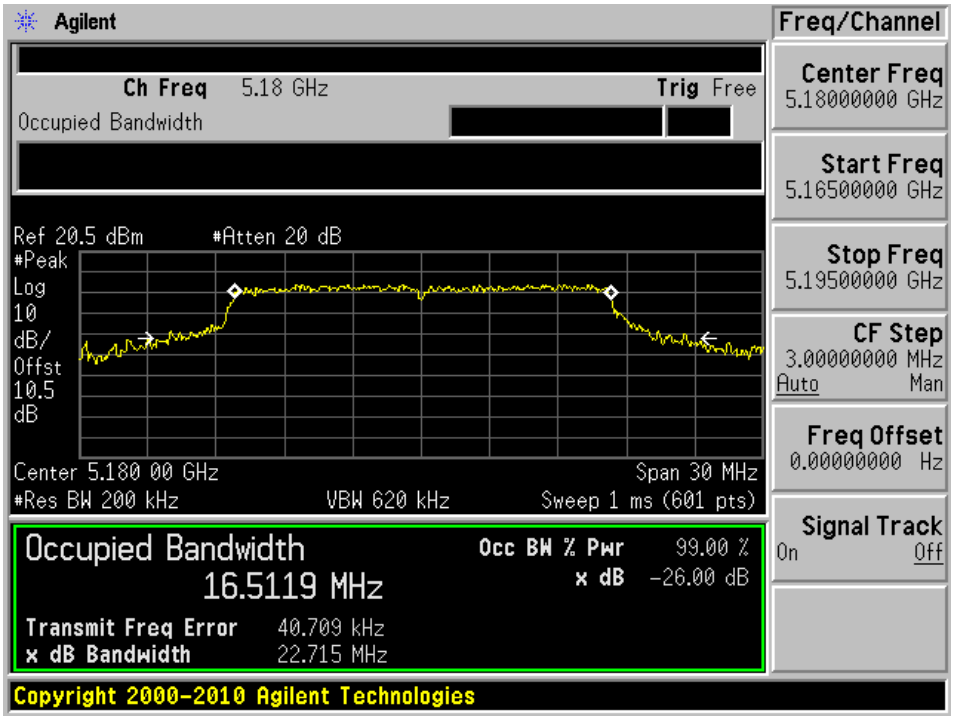


802.11n HT40 High channel: 5230 MHz

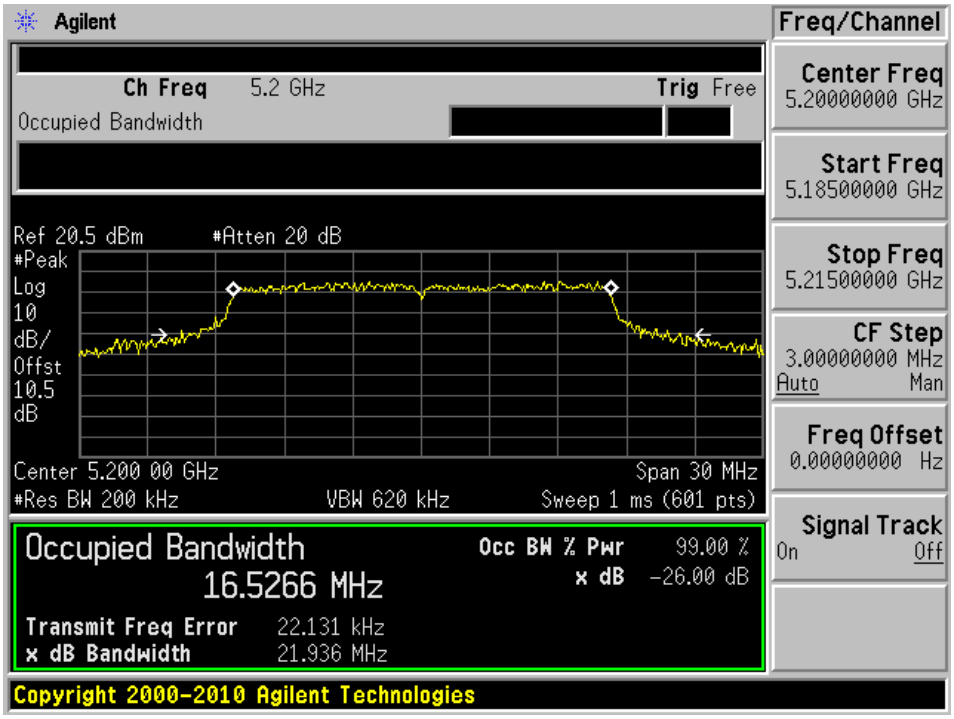


802.11a mode, Chain 1

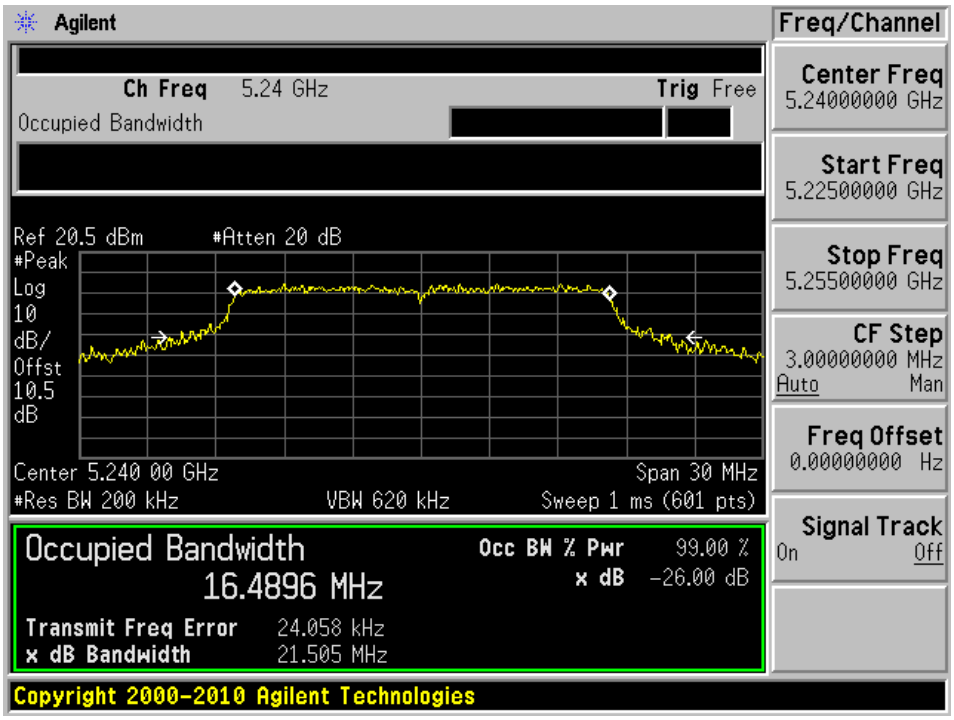
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

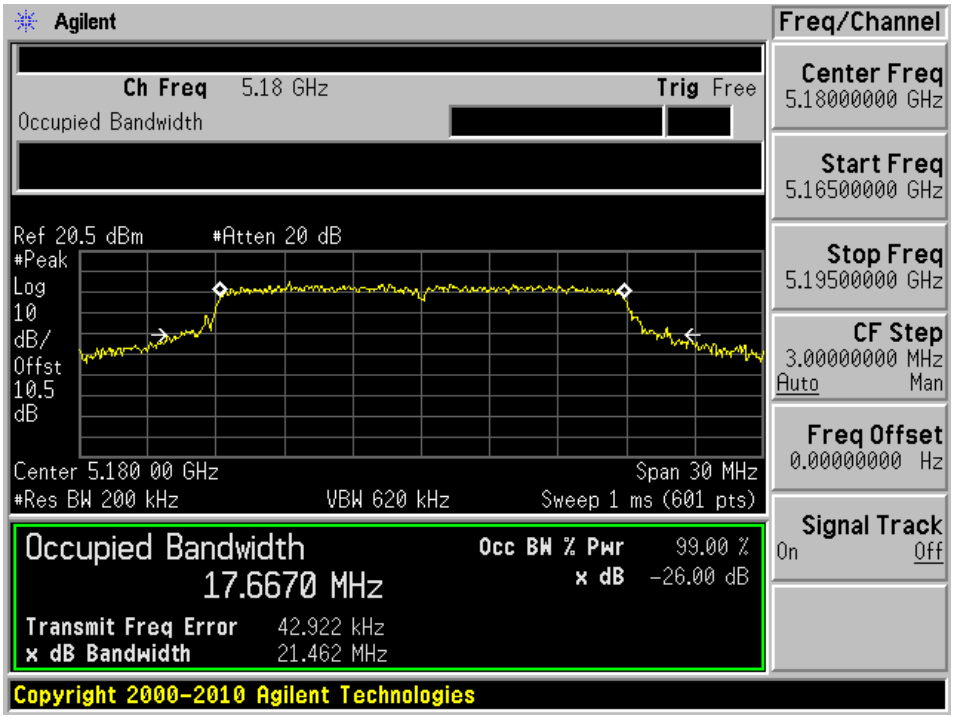


802.11a High channel: 5240 MHz

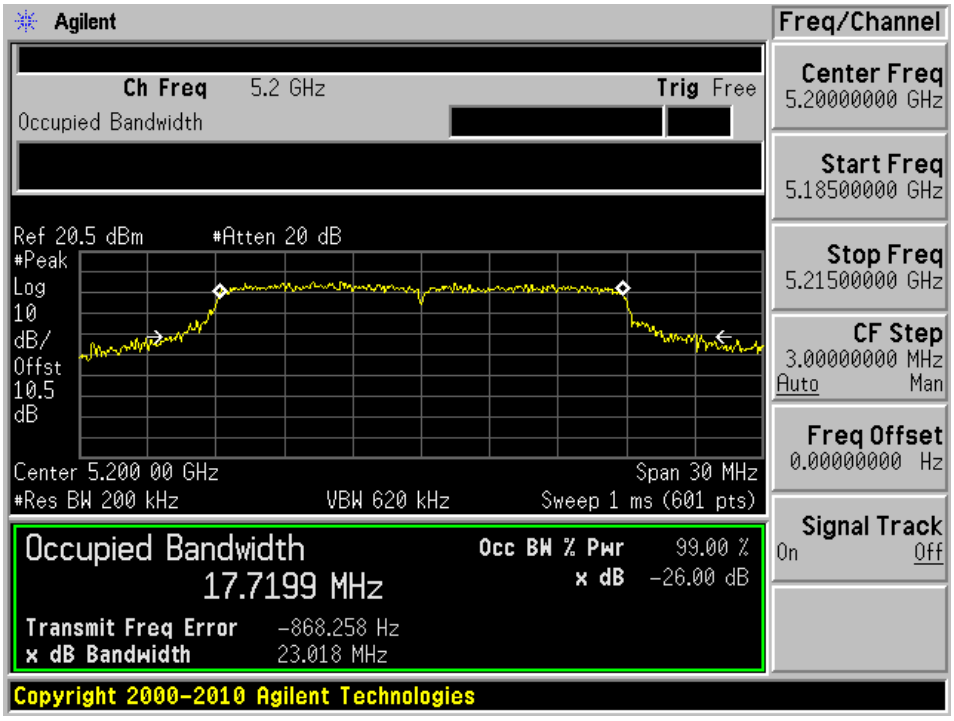


802.11n HT20 mode, Chian 1

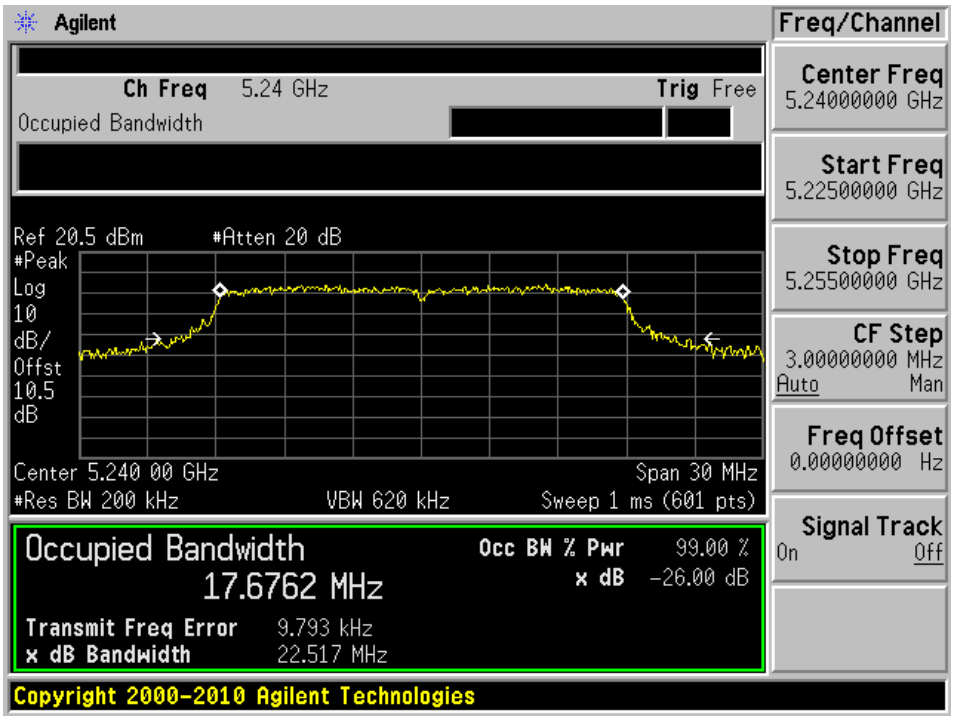
802.11n HT20 Low channel: 5180 MHz



802.11n HT20 Middle channel: 5200 MHz

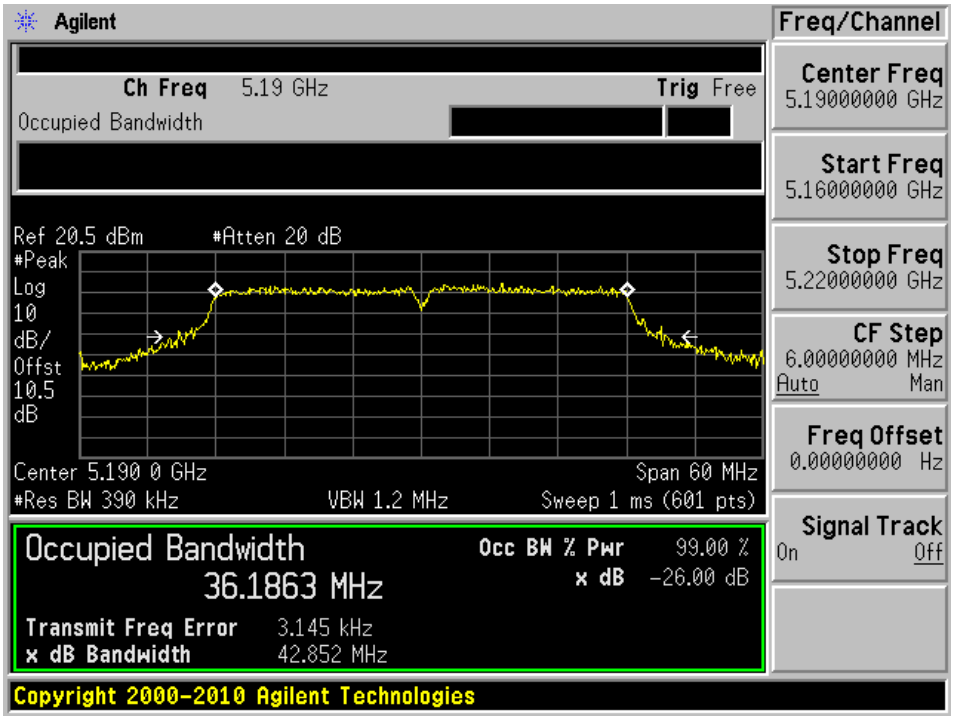


802.11n HT20 High channel: 5240 MHz

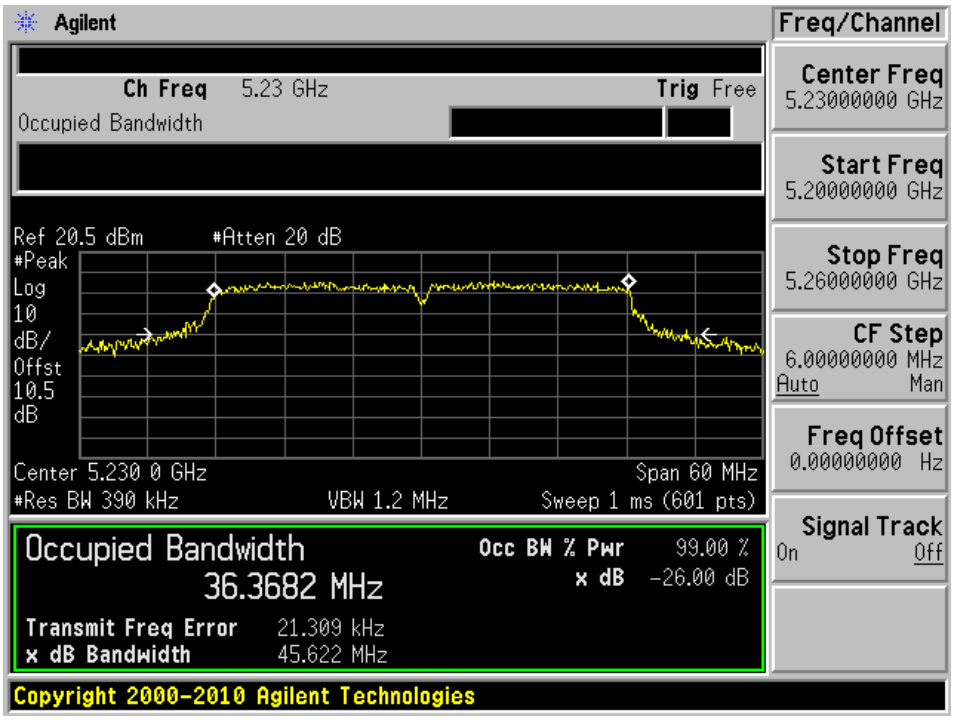


802.11n HT40 mode, Chain 1

802.11n HT40 Low channel: 5190 MHz

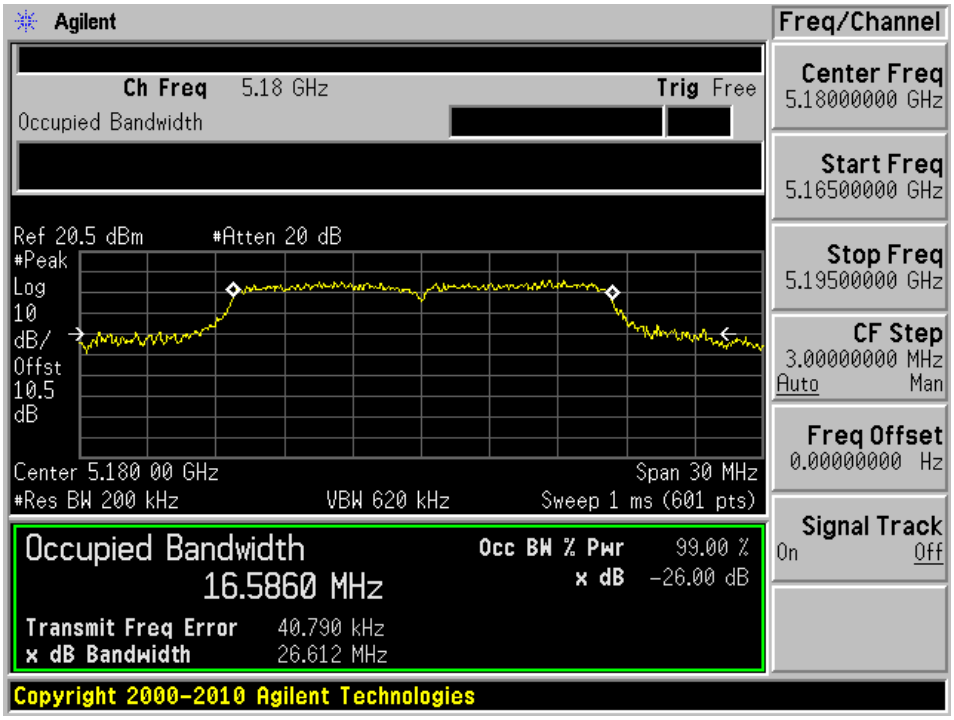


802.11n HT40 High channel: 5230 MHz

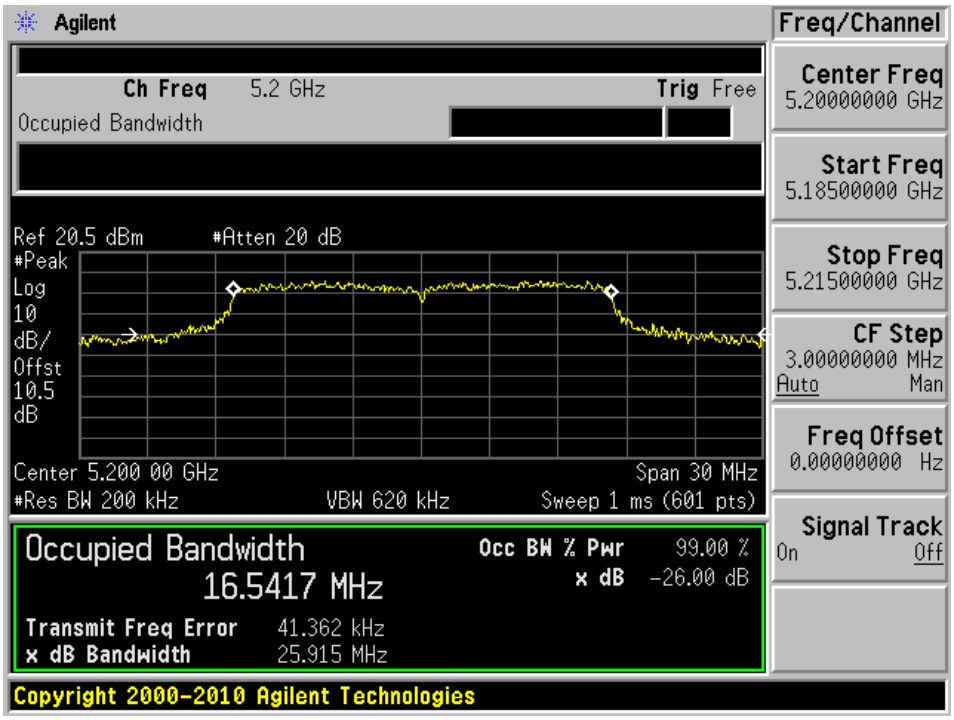


802.11a mode, Chain 2

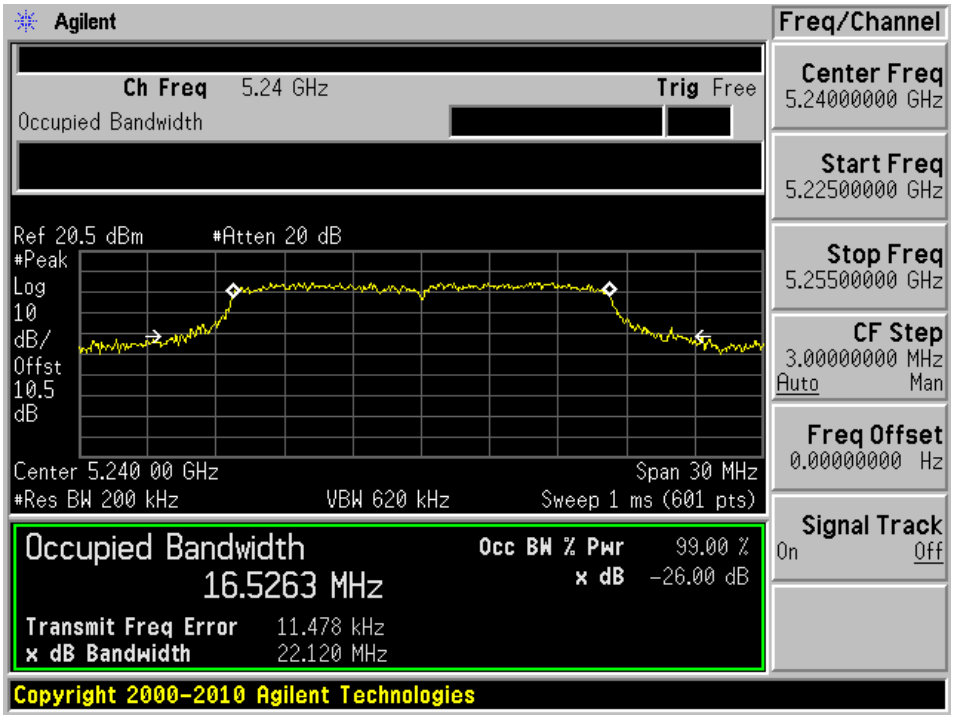
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

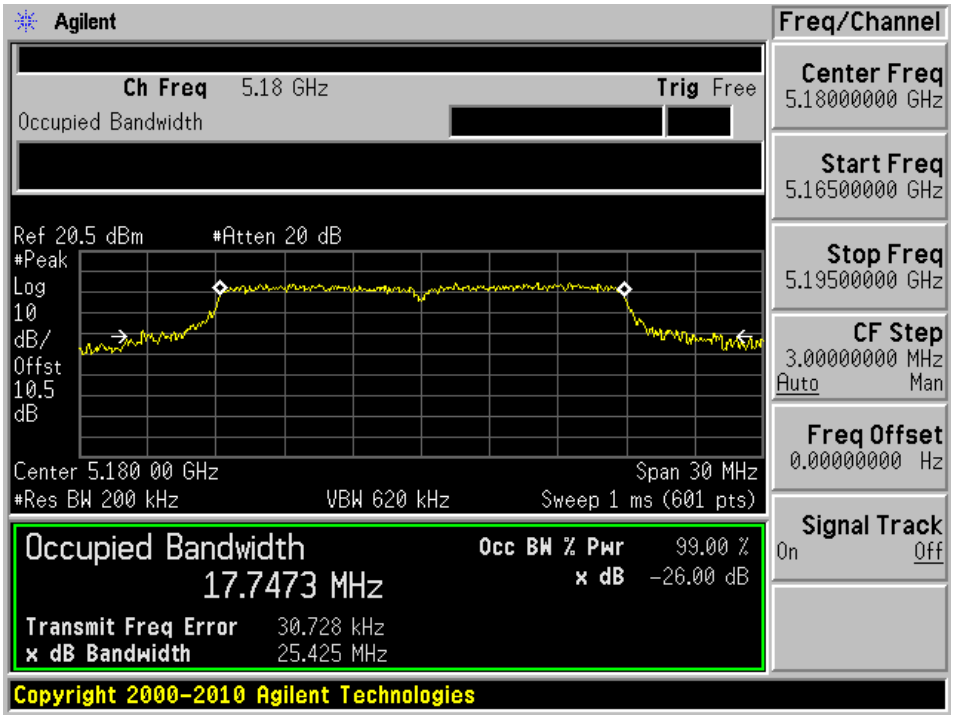


802.11a High channel: 5240 MHz

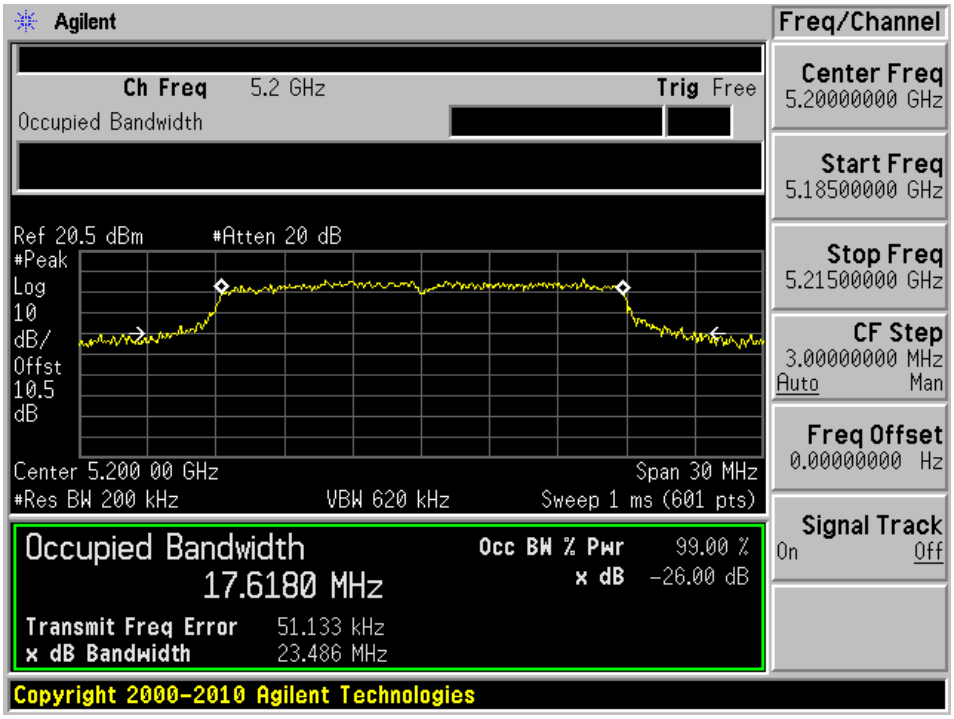


802.11n HT20 mode, Chain 2

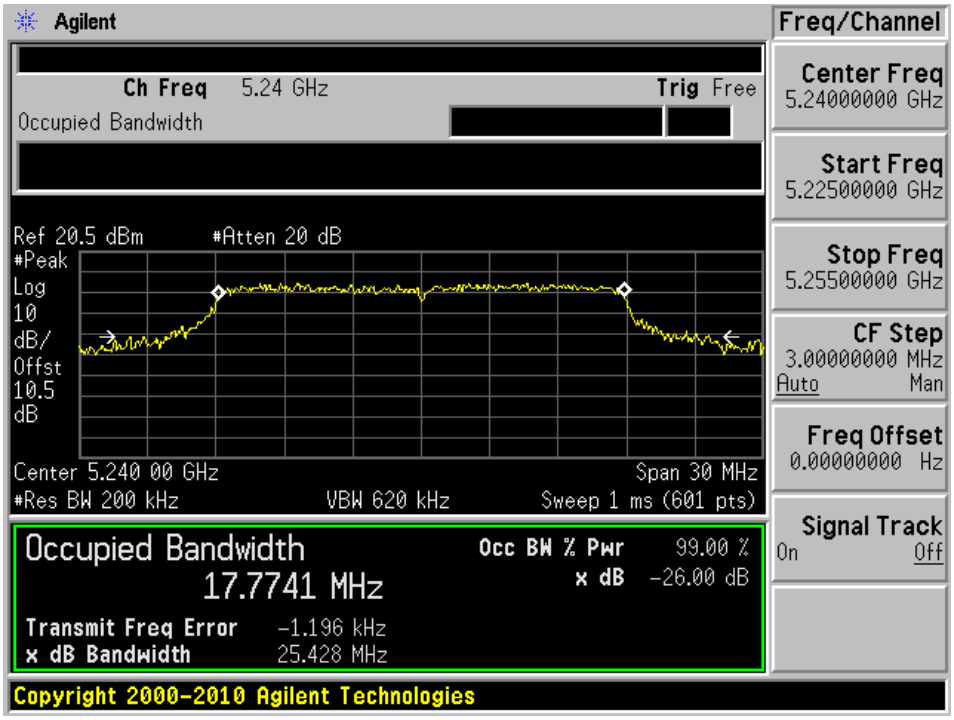
802.11n HT20 Low channel: 5180 MHz



802.11n HT20 Middle channel: 5200 MHz

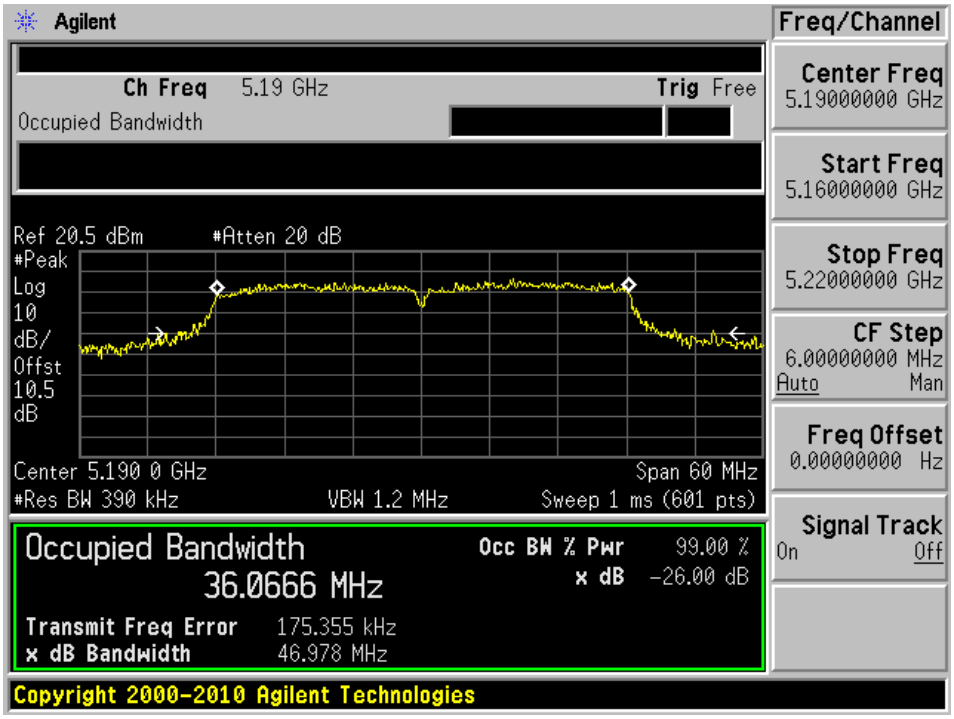


802.11n HT20 High channel: 5240 MHz

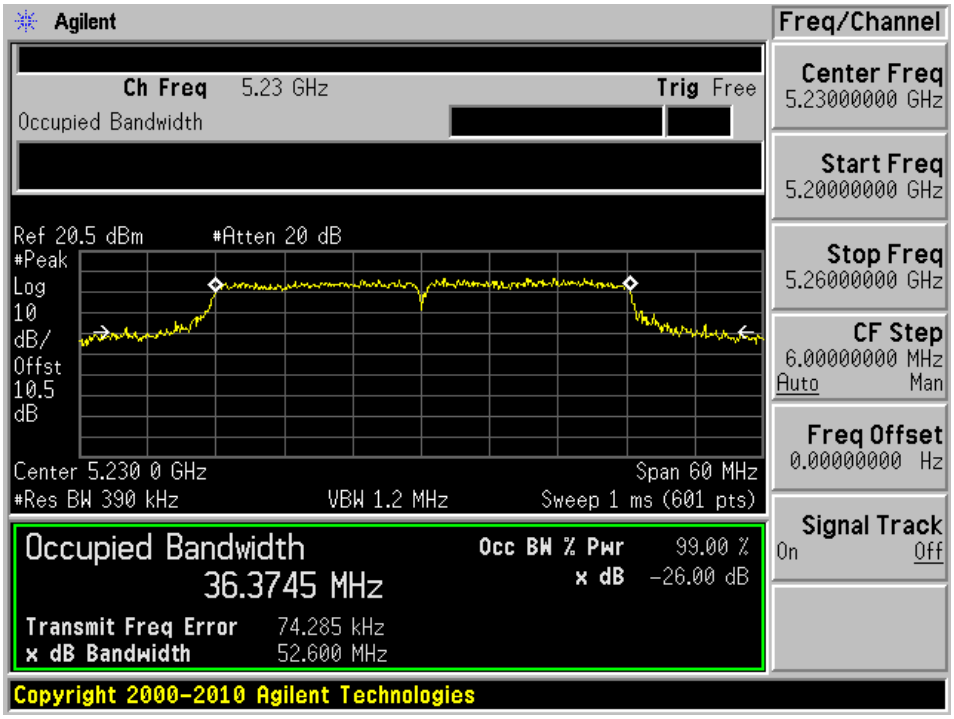


802.11n HT40 mode, Chian 2

802.11n HT40 Low channel: 5190 MHz



802.11n HT40 High channel: 5230 MHz



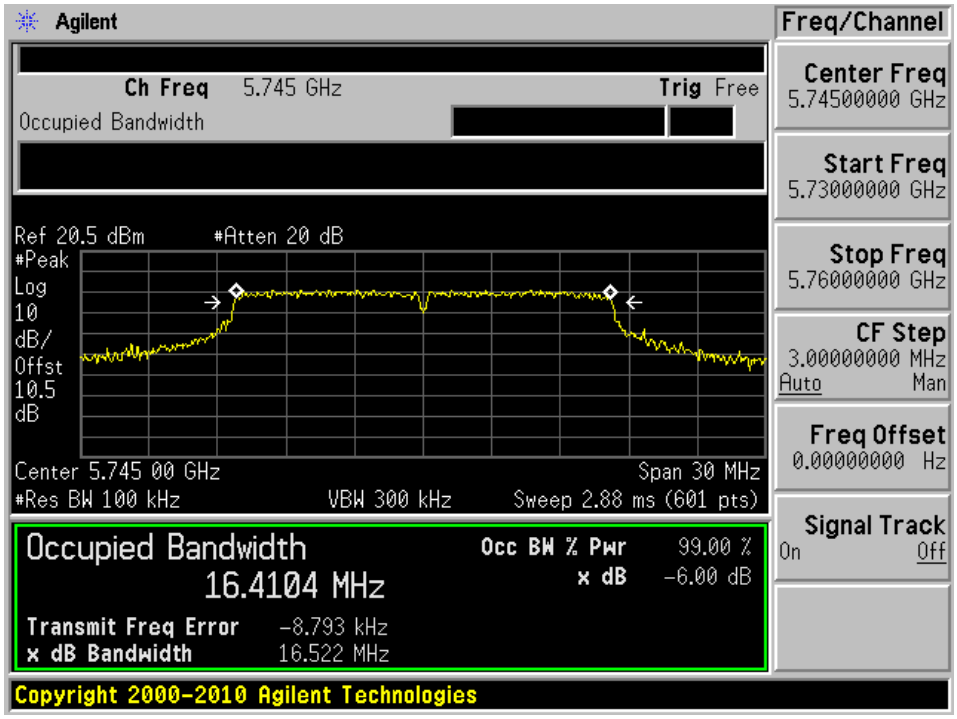
5.8 GHz Band:

TX Chain	Channel	Frequency (MHz)	26 dB OBW (MHz)	99% OBW (MHz)
Chain 0	802.11a mode			
	Low	5745	16.522	16.4104
	Middle	5785	16.438	16.4713
	High	5825	16.507	16.461
	802.11n20 mode			
	Low	5745	17.689	17.6213
	Middle	5785	17.684	17.6422
	High	5825	17.721	17.6335
	802.11n40 mode			
	Low	5755	36.607	36.1948
	High	5795	36.505	36.1394
Chain 1	802.11a mode			
	Low	5745	16.463	16.4088
	Middle	5785	16.131	16.3664
	High	5825	16.535	16.4497
	802.11n20 mode			
	Low	5745	17.634	17.5819
	Middle	5785	17.666	17.6288
	High	5825	17.763	17.6561
	802.11n40 mode			
	Low	5755	36.558	36.0887
	High	5795	36.544	36.1710
Chain 2	802.11a mode			
	Low	5745	16.478	16.4629
	Middle	5785	16.455	16.4384
	High	5825	16.438	16.4569
	802.11n20 mode			
	Low	5745	17.714	17.6243
	Middle	5785	17.678	17.6242
	High	5825	17.713	17.6715
	802.11n40 mode			
	Low	5755	36.502	36.1280
	High	5795	36.543	36.1828

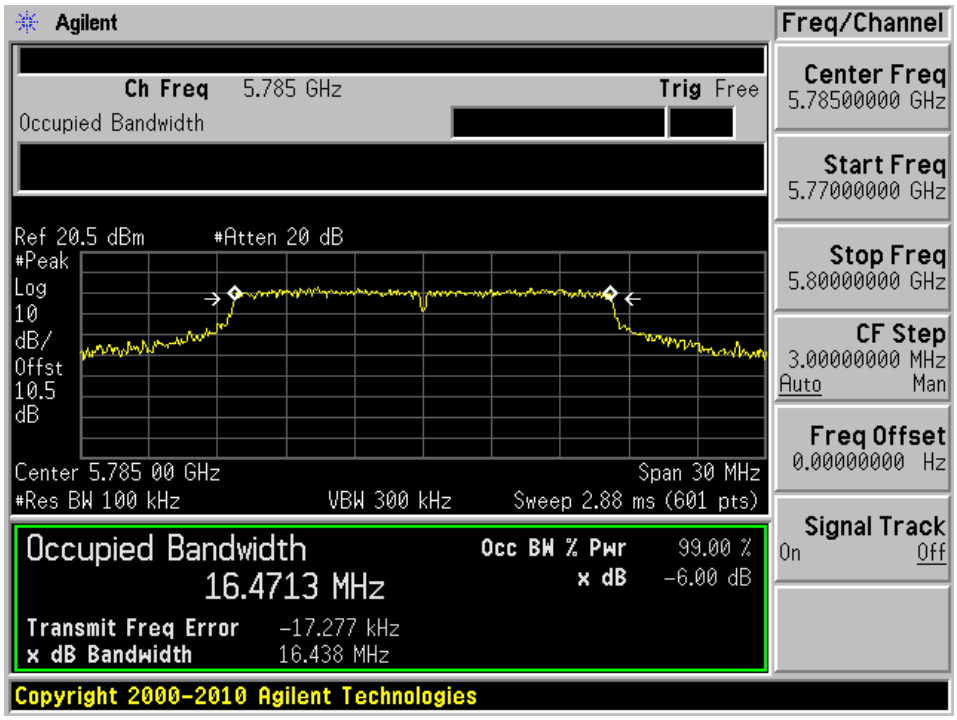
5.8 GHz Band

802.11a mode, Chain 0

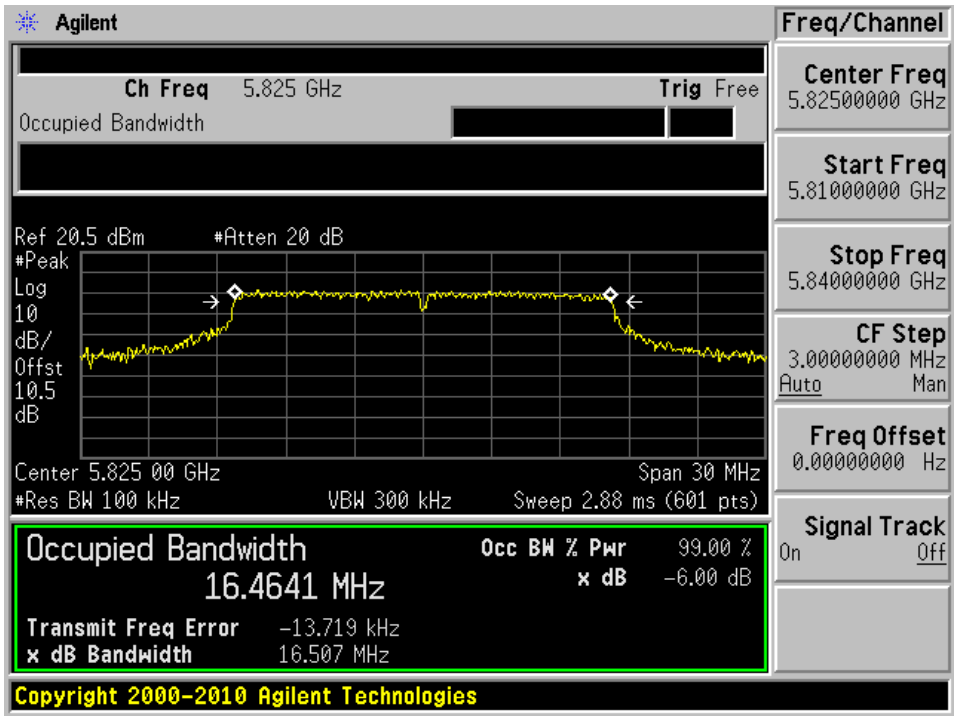
Low channel: 5745 MHz



Middle channel: 5785 MHz

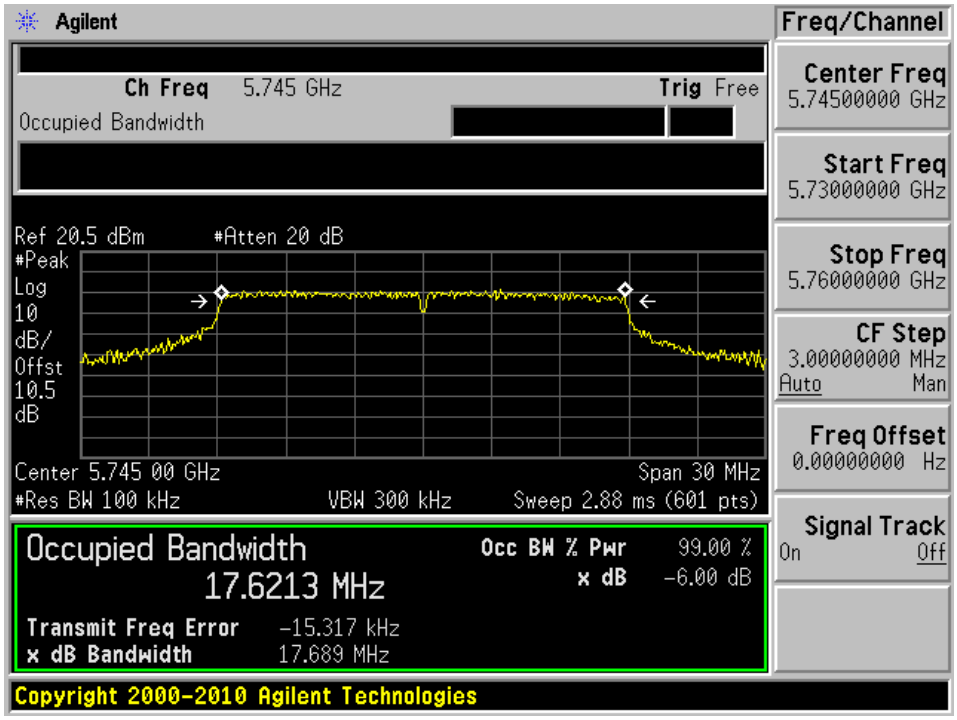


High channel: 5825 MHz

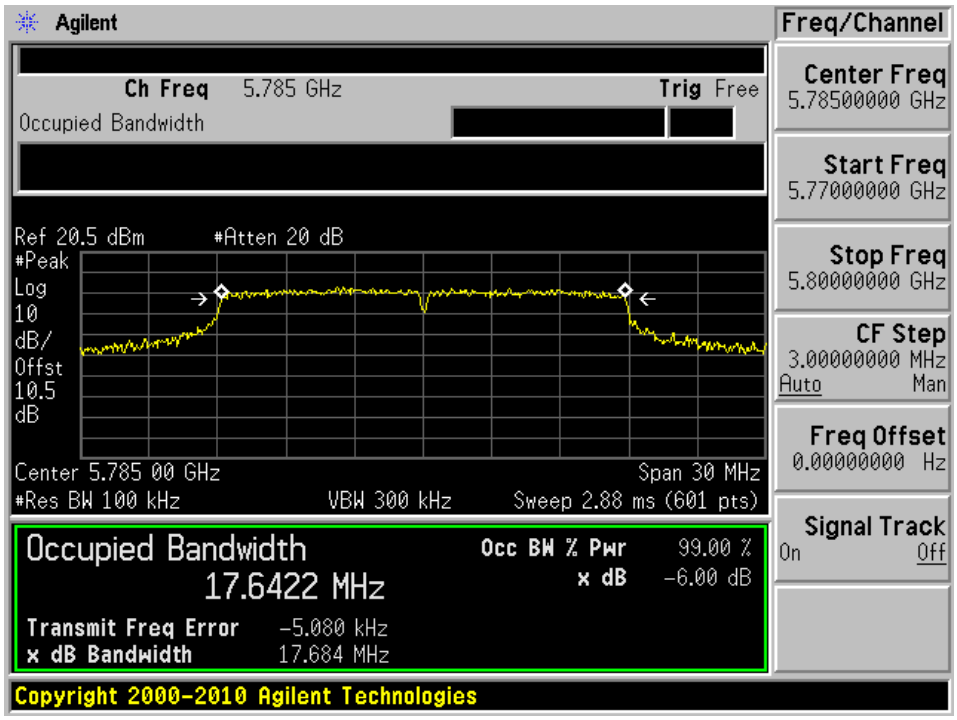


802.11n20 mode, Chain 0

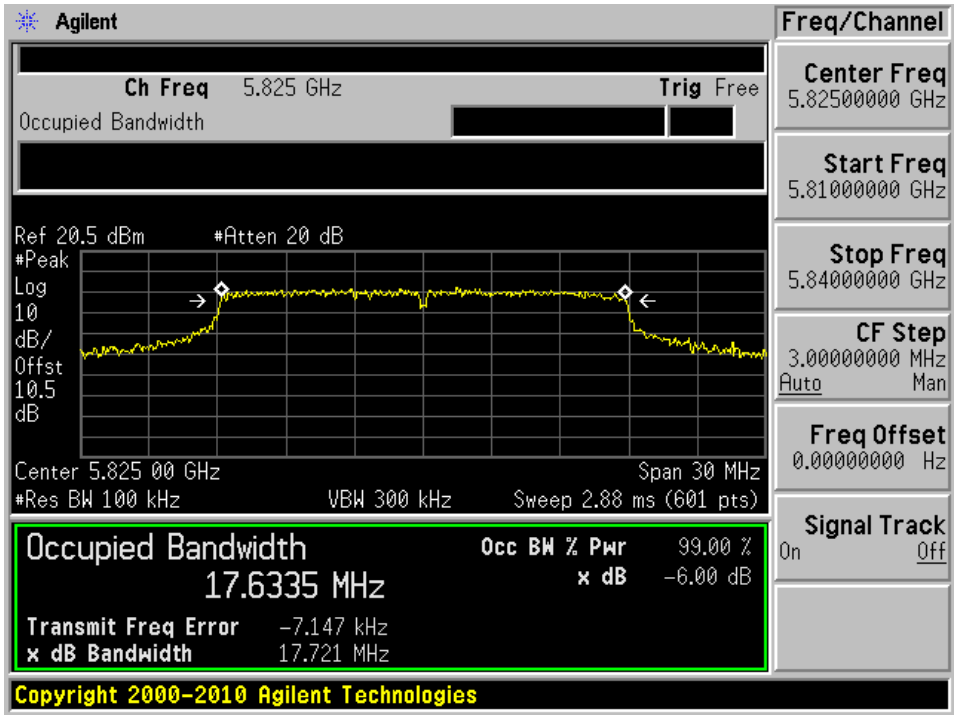
Low channel: 5745 MHz



Middle channel: 5785 MHz

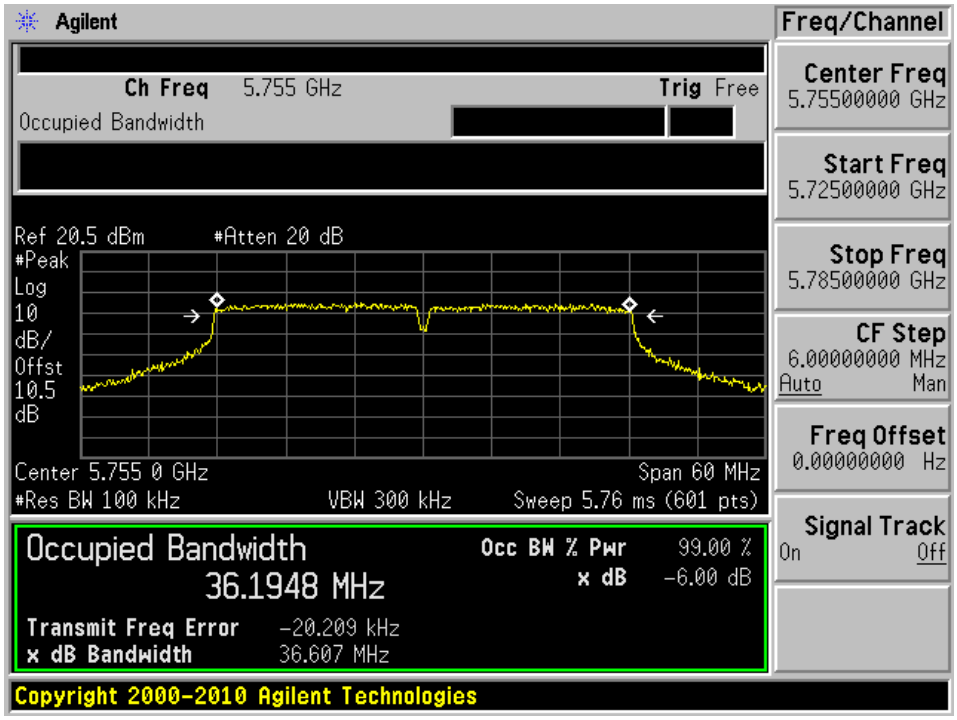


High channel: 5825 MHz

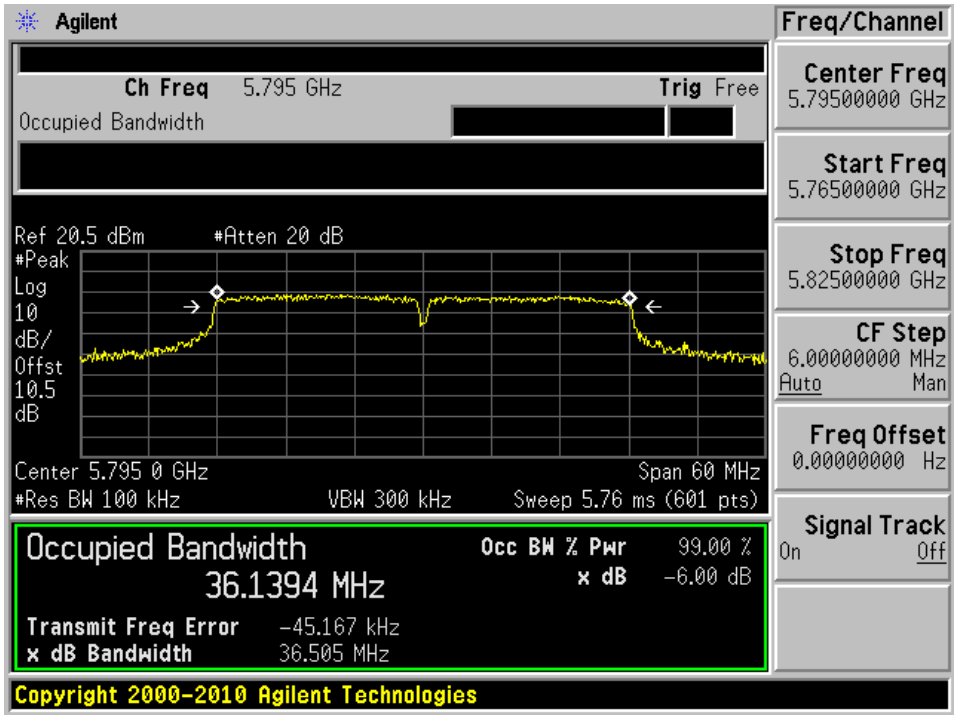


802.11n40 mode, Chain 0

Low Channel: 5755 MHz



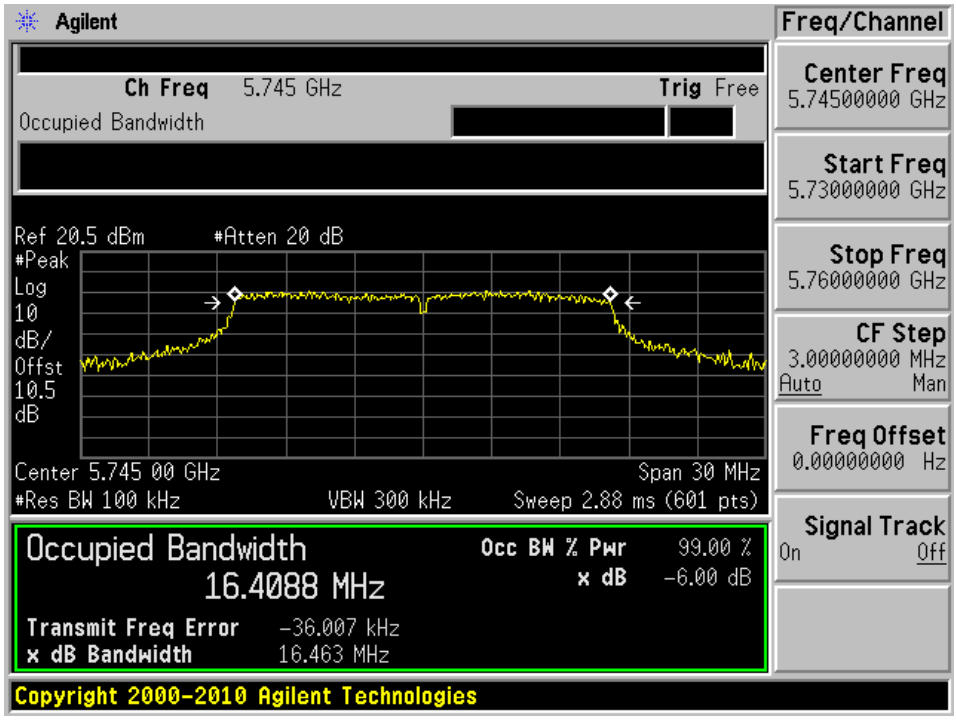
High Channel: 5795 MHz



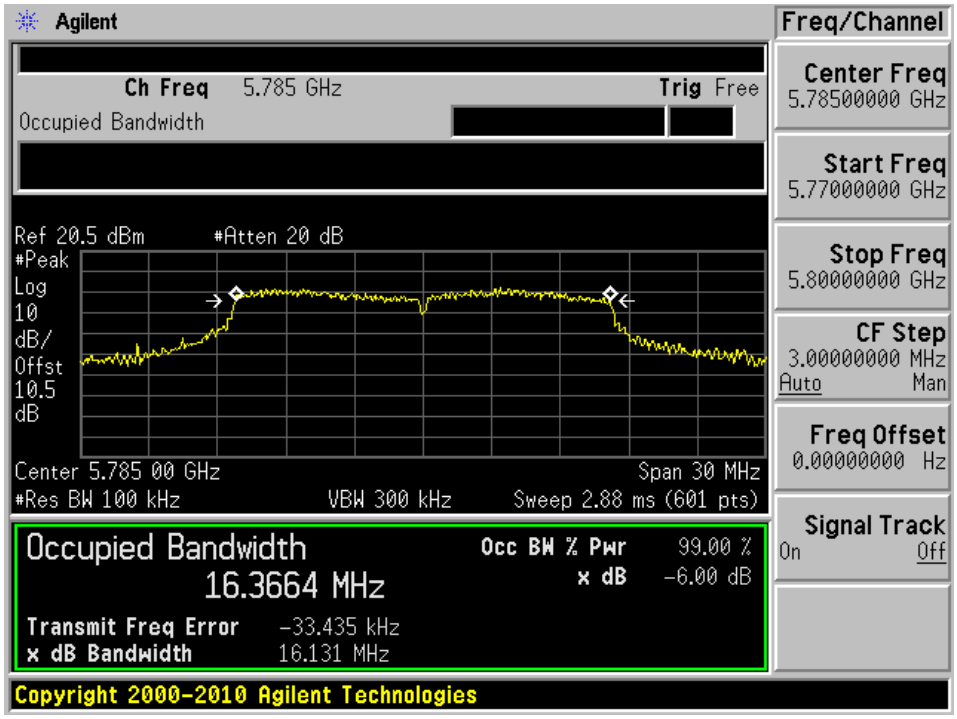
5.8 GHz Band

802.11a mode, Chain 1

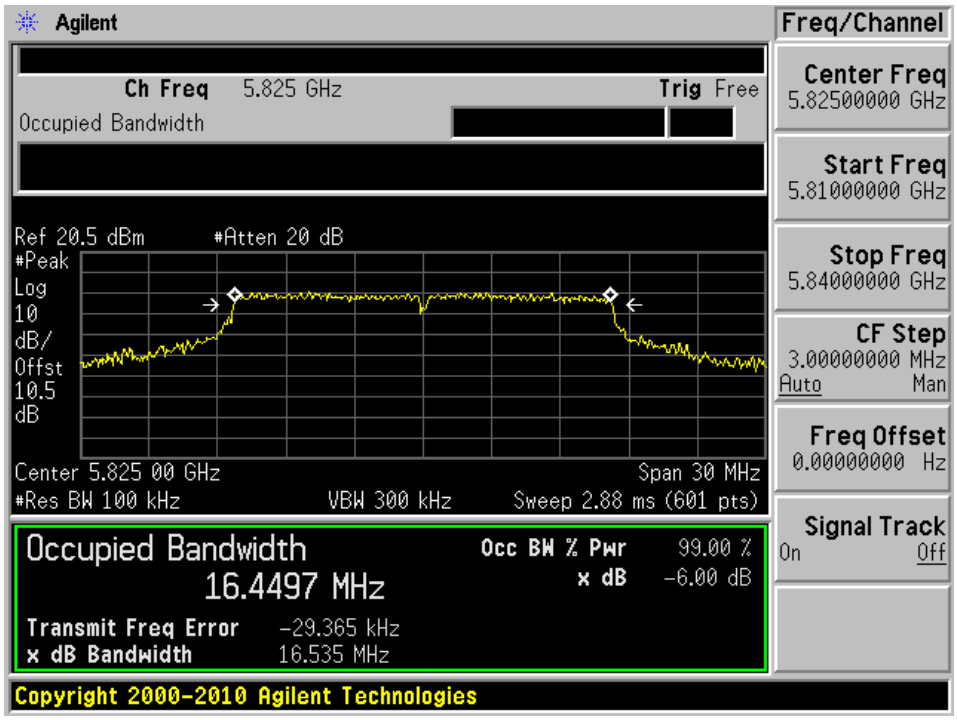
Low channel: 5745 MHz



Middle channel: 5785 MHz

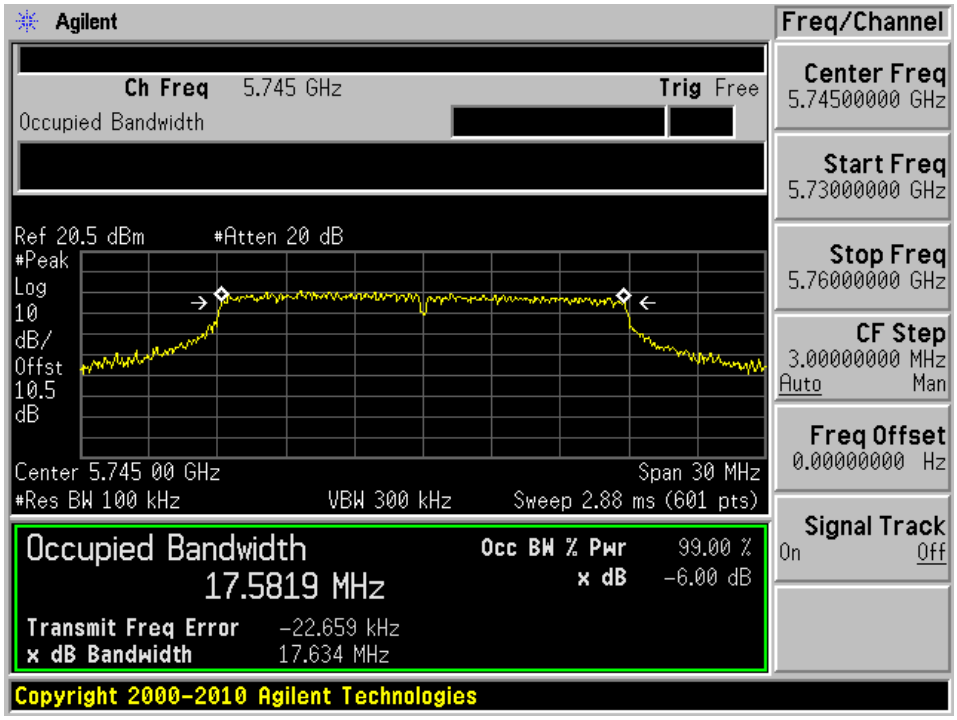


High channel: 5825 MHz

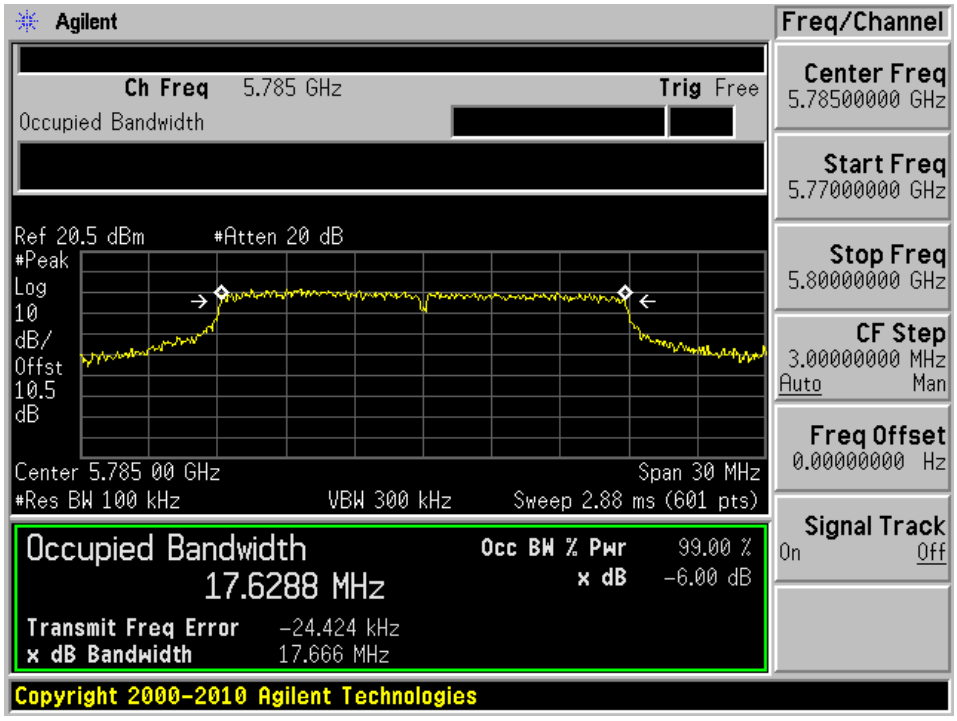


802.11n20 mode, Chain 1

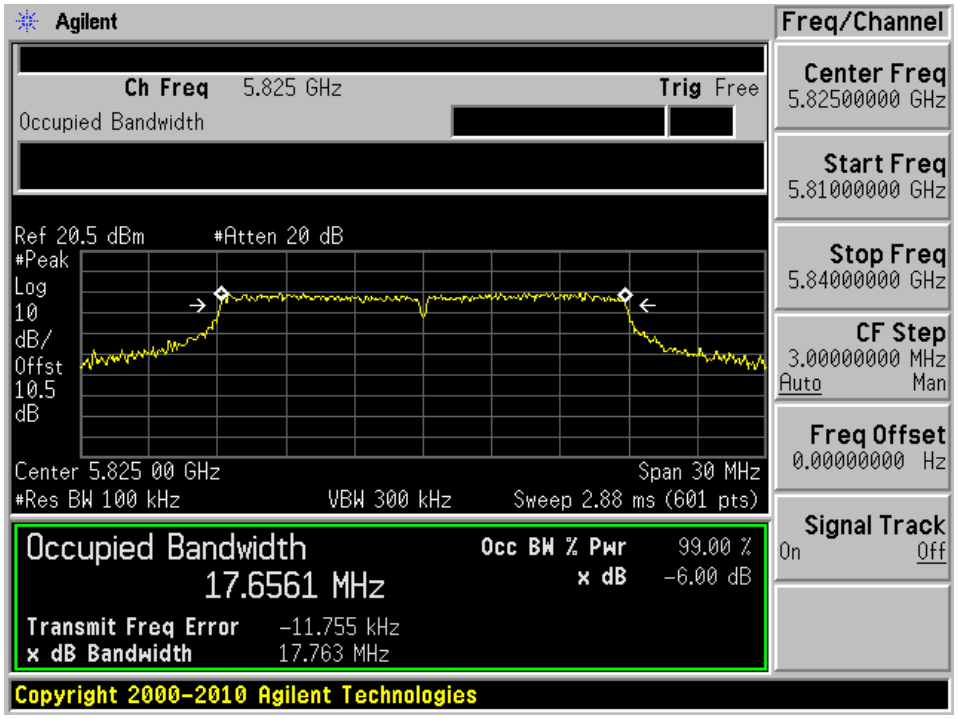
Low channel: 5745 MHz



Middle channel: 5785 MHz

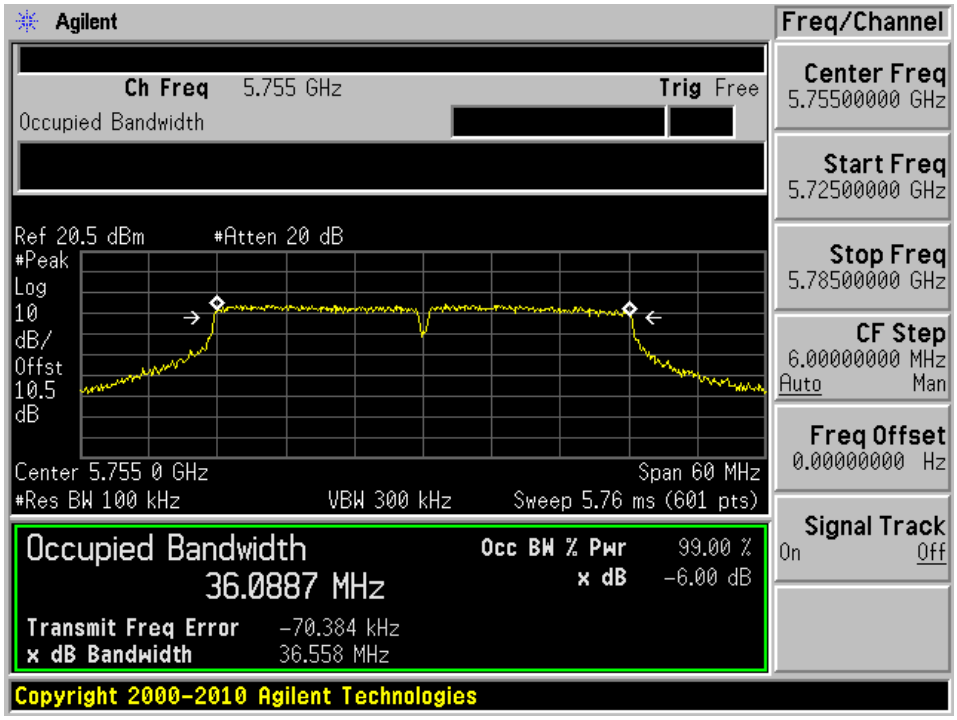


High channel: 5825 MHz

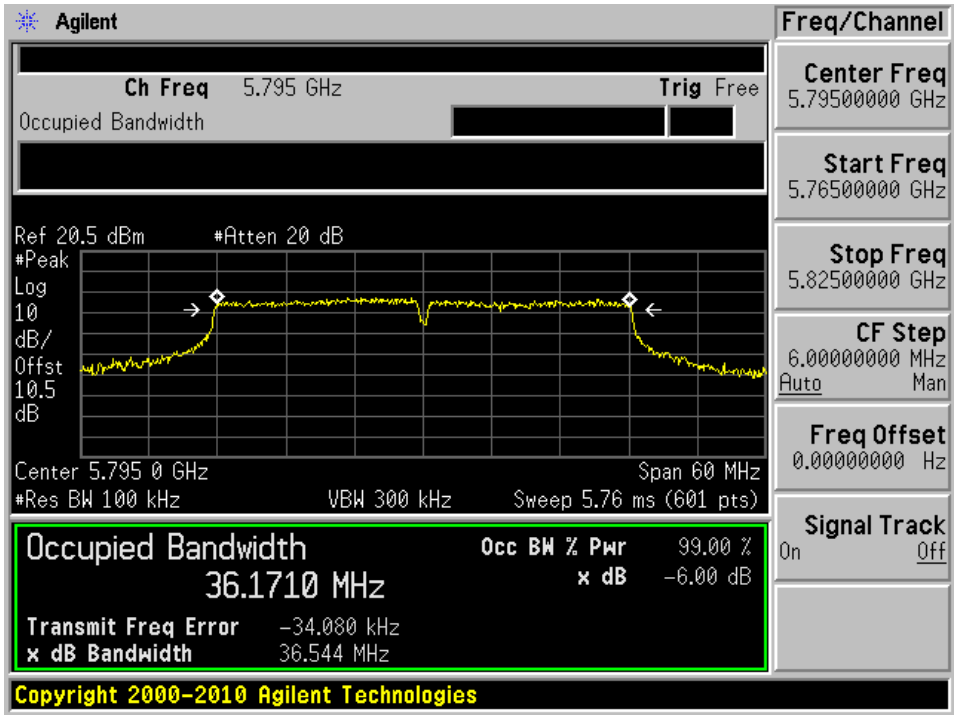


802.11n40 mode, Chain 1

Low Channel: 5755 MHz

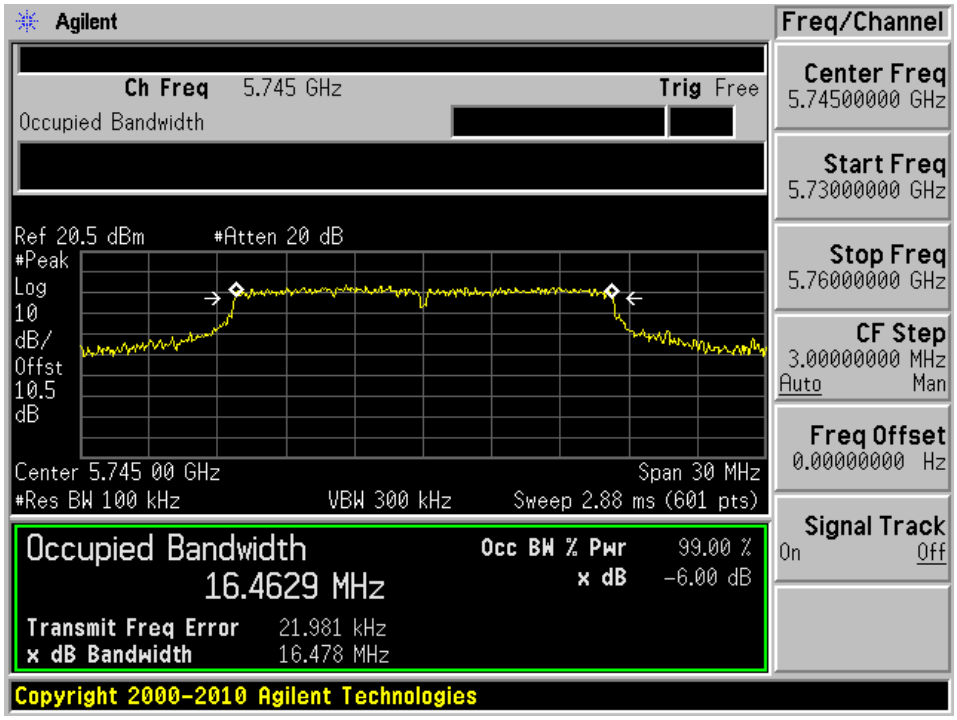


High Channel: 5795 MHz

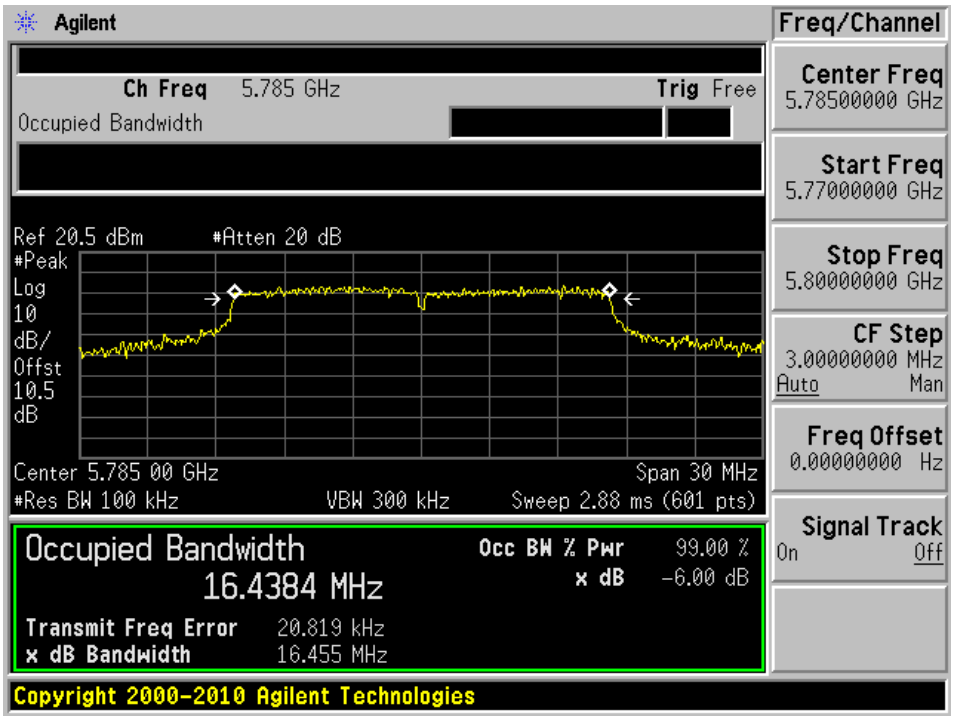


802.11a mode, Chain 2

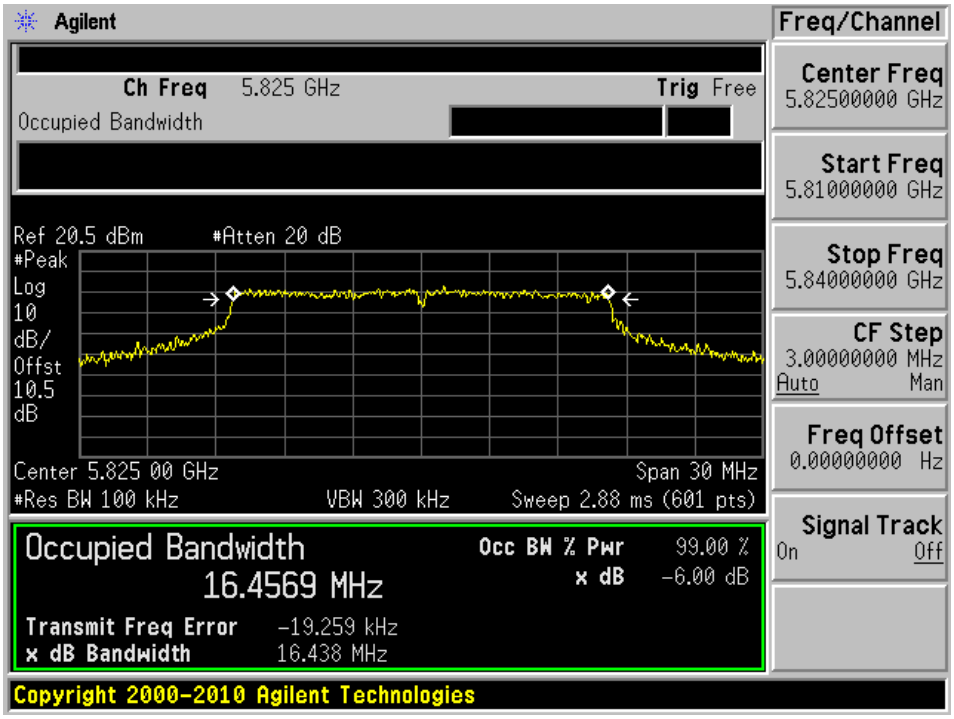
Low channel: 5745 MHz



Middle channel: 5785 MHz

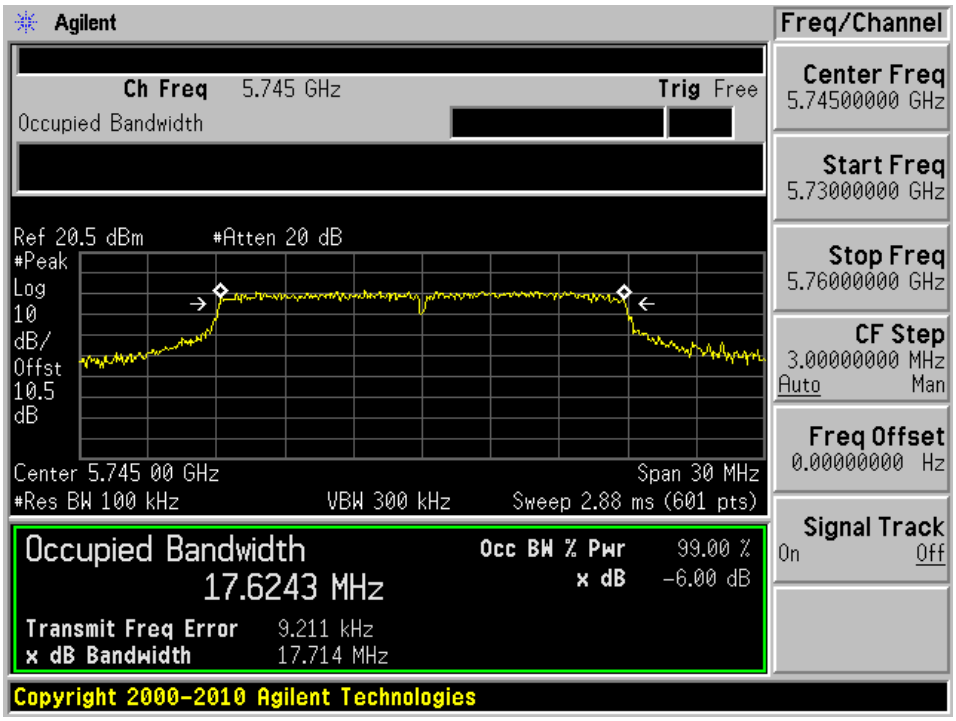


High channel: 5825 MHz

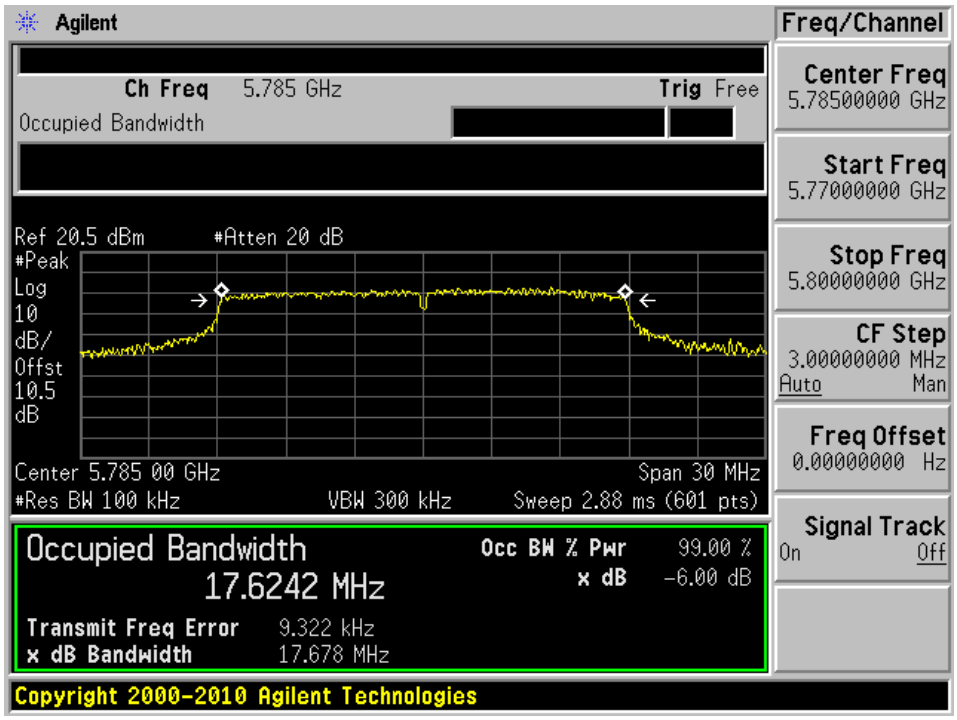


802.11n20 mode, Chain 2

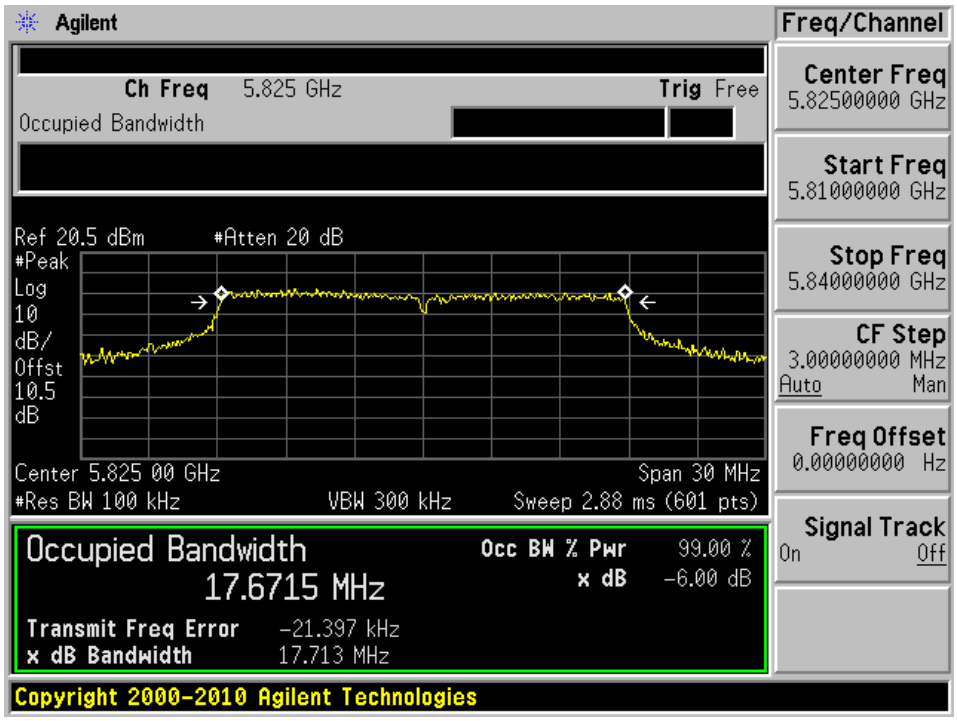
Low channel: 5745 MHz



Middle channel: 5785 MHz

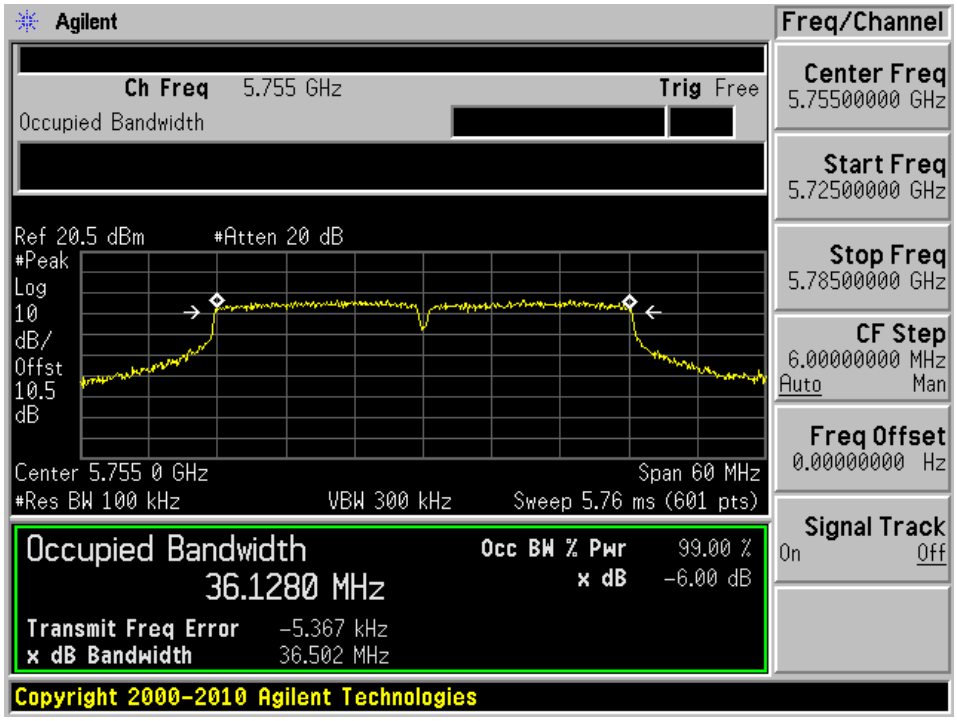


High channel: 5825 MHz

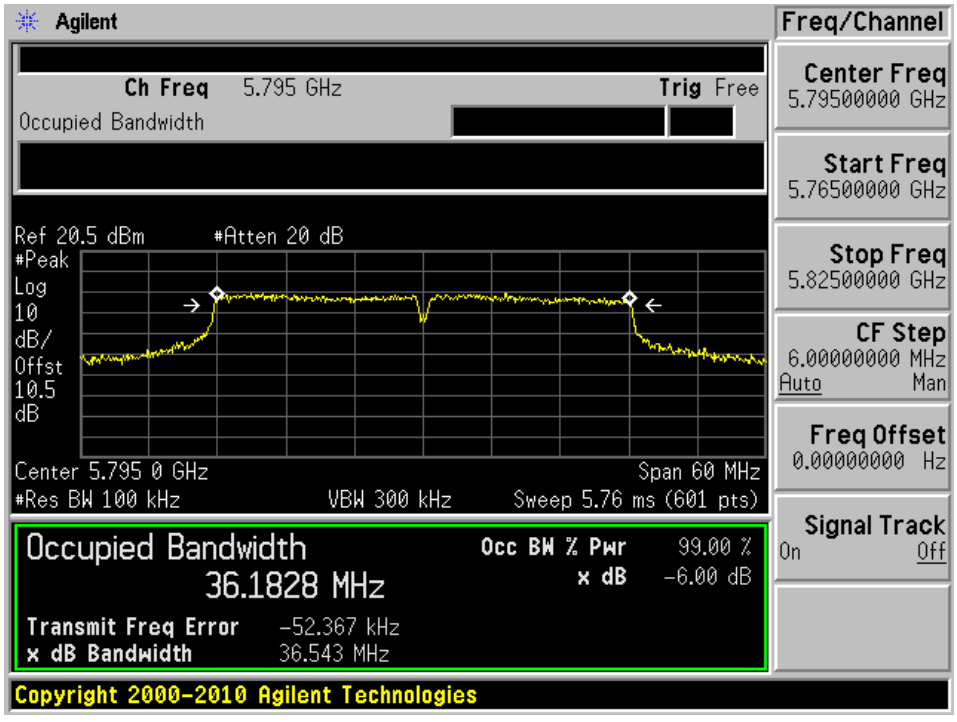


802.11n40 mode, Chain 2

Low Channel: 5755 MHz



High Channel: 5795 MHz



9 FCC §407(a) - Output Power Measurement

9.1 Applicable Standards

According to FCC §15.407(a)

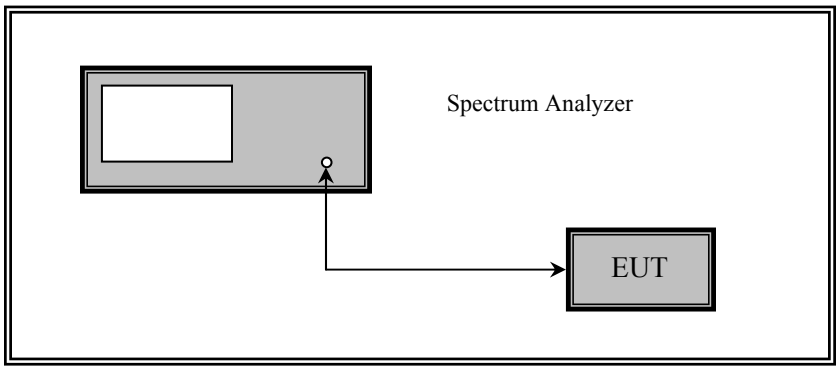
(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

9.2 Measurement Procedure

Test measurements are based on FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.



9.3 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Agilent	Spectrum Analyzer	E4446A	MY48250238	09-03-2015	1 year
-	RF cable	-	00609	06-05-2015	1year

Statement of Traceability: BACL Corp. *attests that all calibrations have been performed according to A2LA requirements, traceable to the NIST.*

9.4 Test Environmental Conditions

Temperature:	22-24 ºC
Relative Humidity:	40-41 %
ATM Pressure:	103.1-104.1 kPa

The testing was performed by Jin Yang on 2015-10-29 at RF site.

9.5 Test Results

Please refer to the following tables and plots.

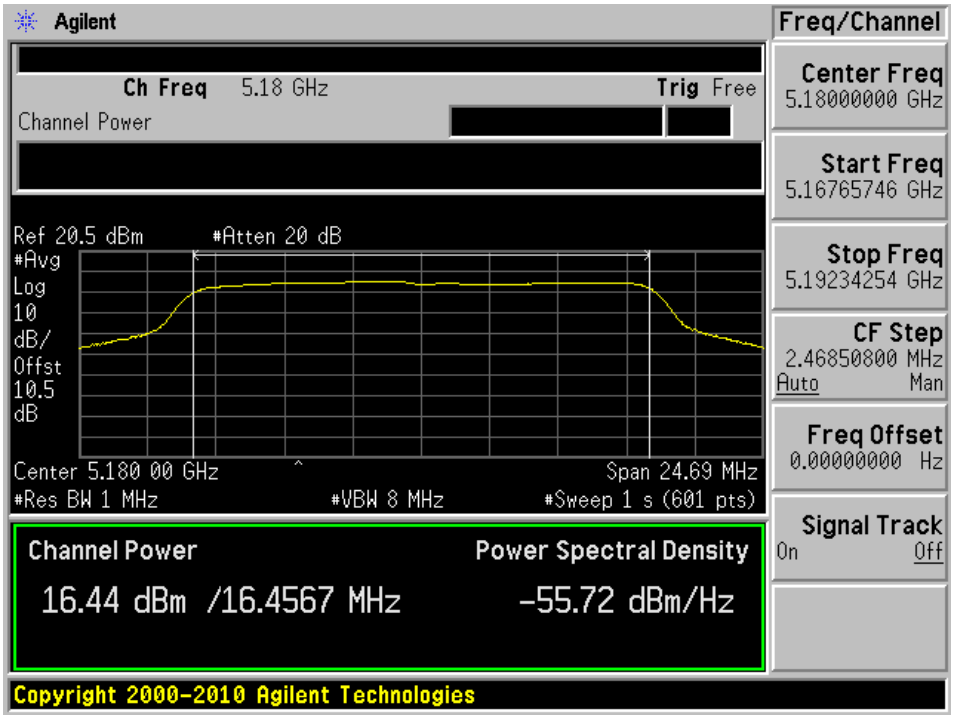
5.2 GHz Band, 3 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5180	16.44	16.44	17.27	21.51	30	-8.49
Middle	5200	17.01	16.99	17.70	22.02	30	-7.98
High	5240	16.59	16.14	16.80	21.29	30	-8.71
802.11n HT20 mode							
Low	5180	16.79	16.26	16.79	21.39	30	-8.61
Middle	5200	17.07	16.78	17.56	21.92	30	-8.08
High	5240	16.88	16.22	16.77	21.40	30	-8.60
802.11n HT40 mode							
Low	5190	15.72	15.13	16.76	20.69	30	-9.31
High	5230	17.51	17.25	18.06	22.39	30	-7.61

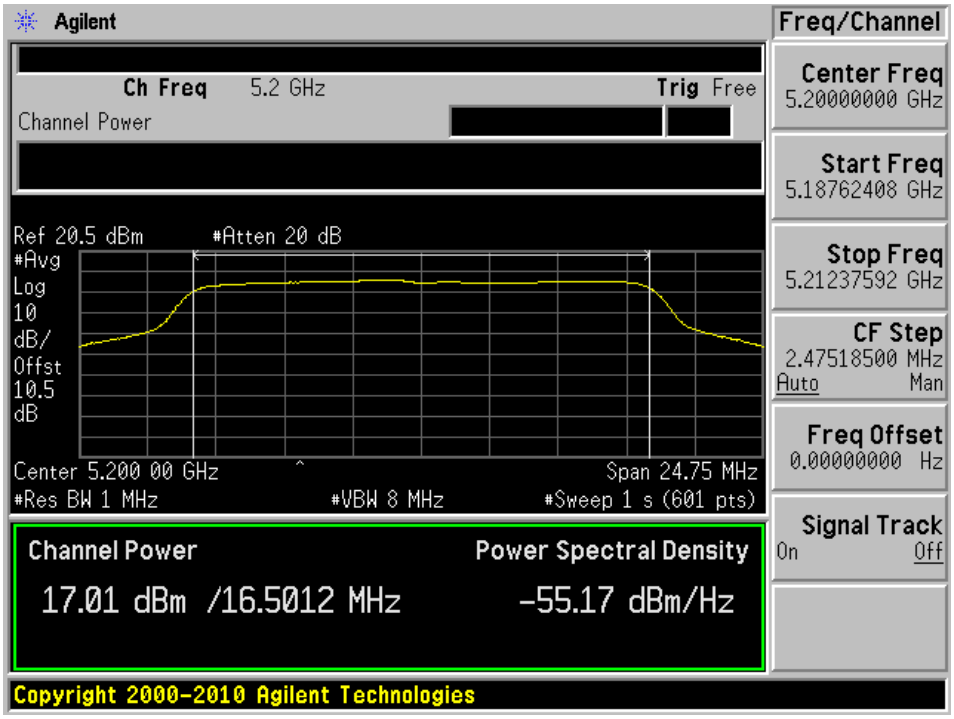
5.2 GHz

802.11a mode, 3 dBi Antenna Chain 0

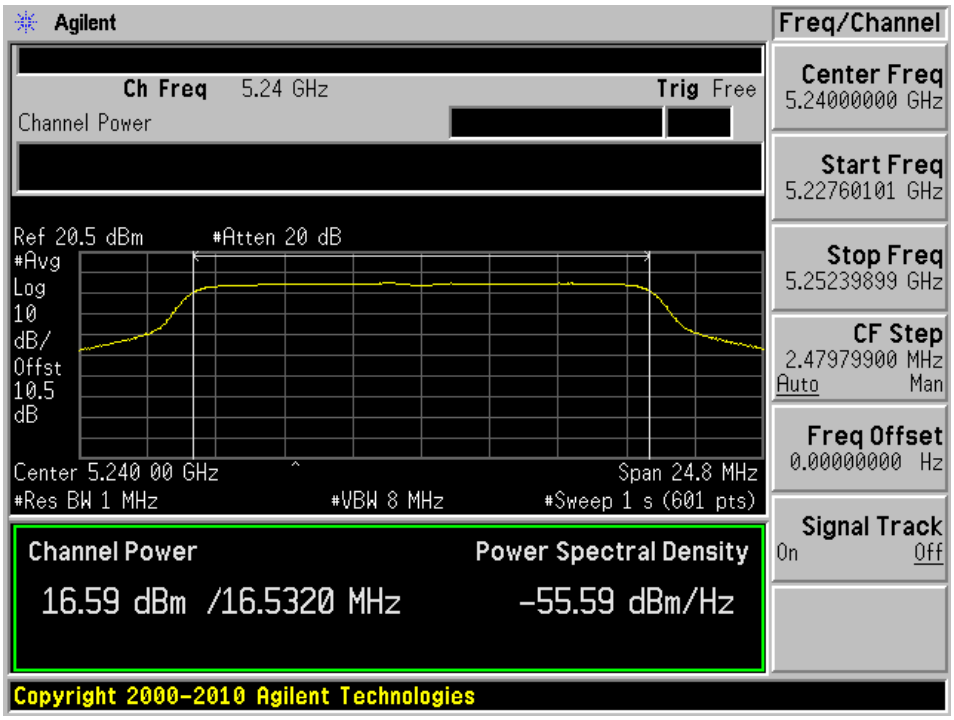
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

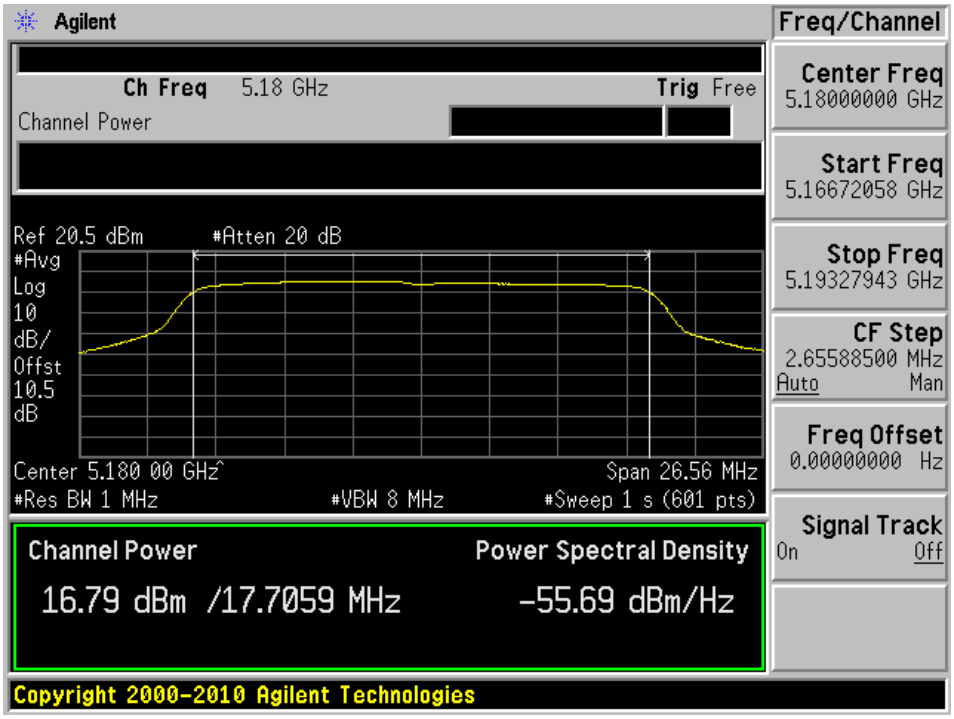


802.11a High channel: 5240 MHz

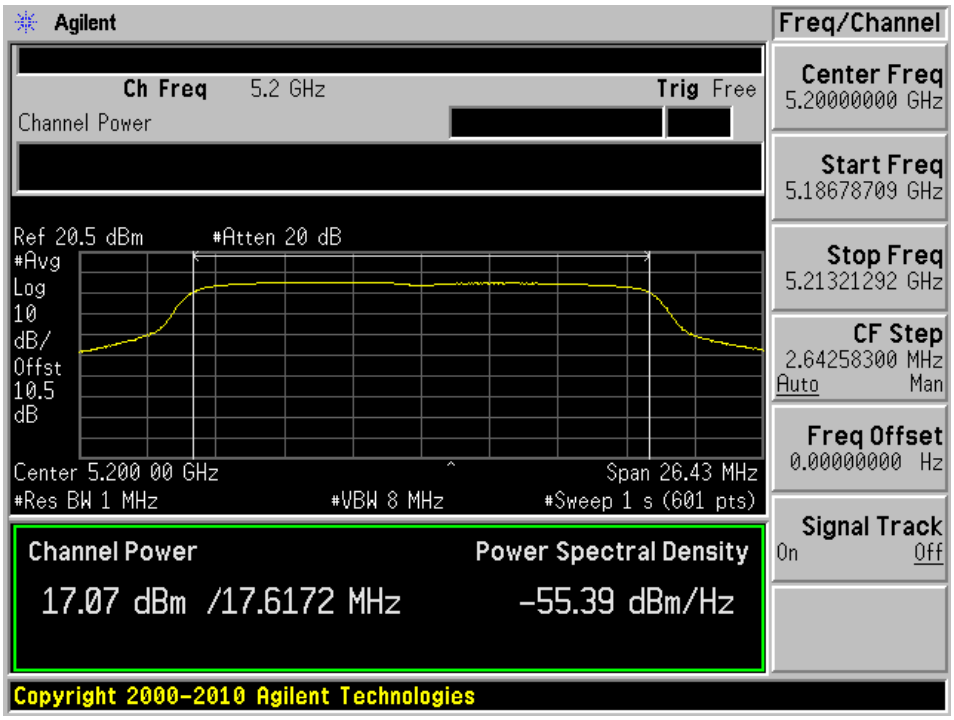


802.11 n20 mode, 3 dBi Antenna Chain 0

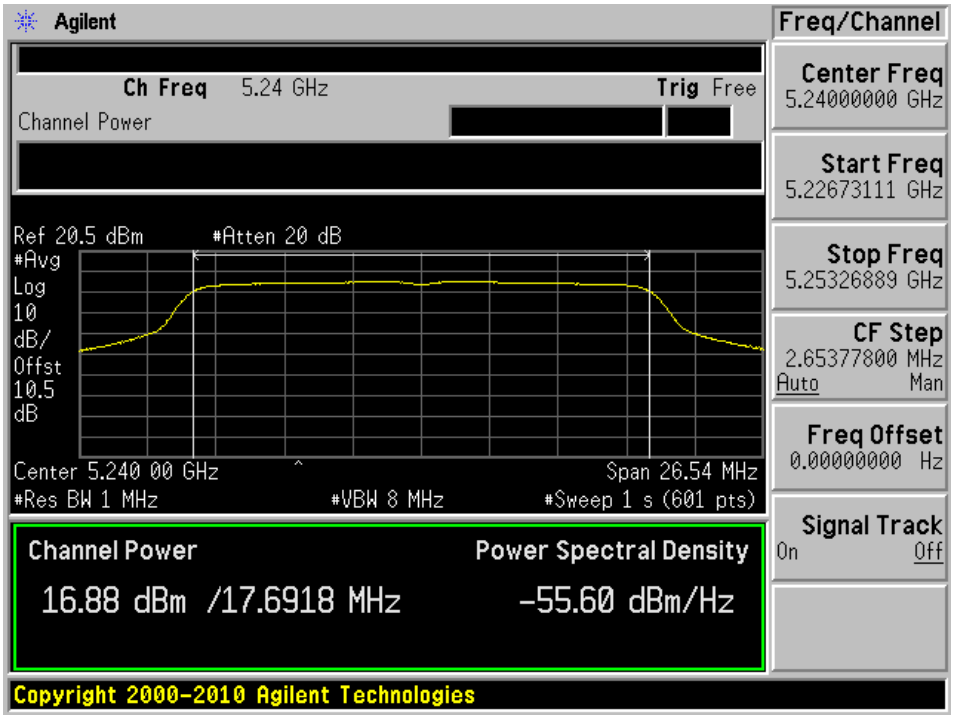
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

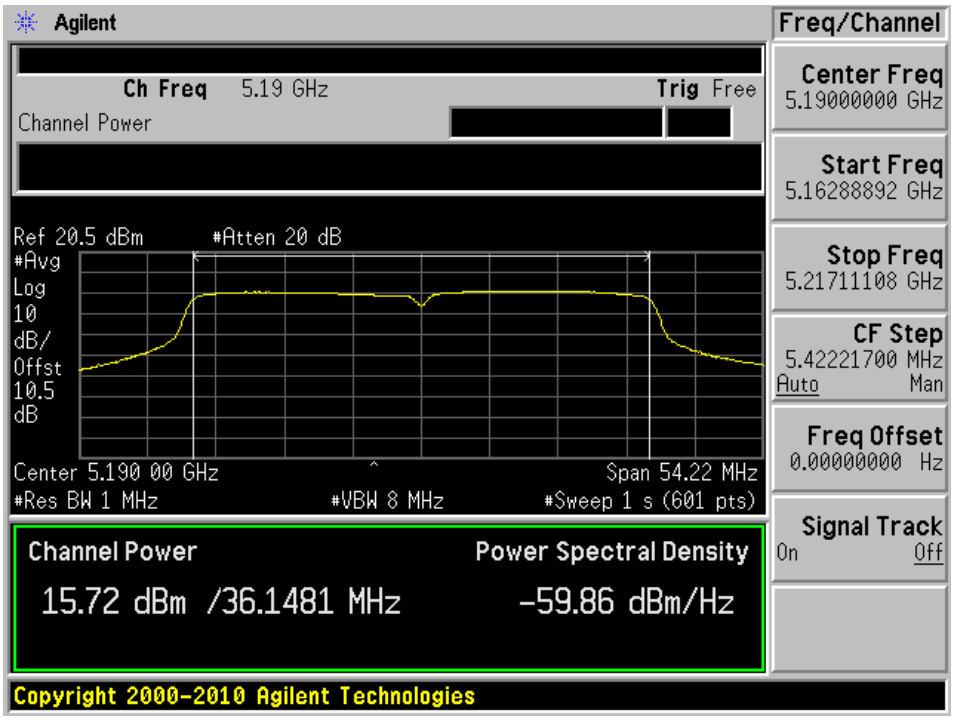


802.11n20 High channel: 5240 MHz

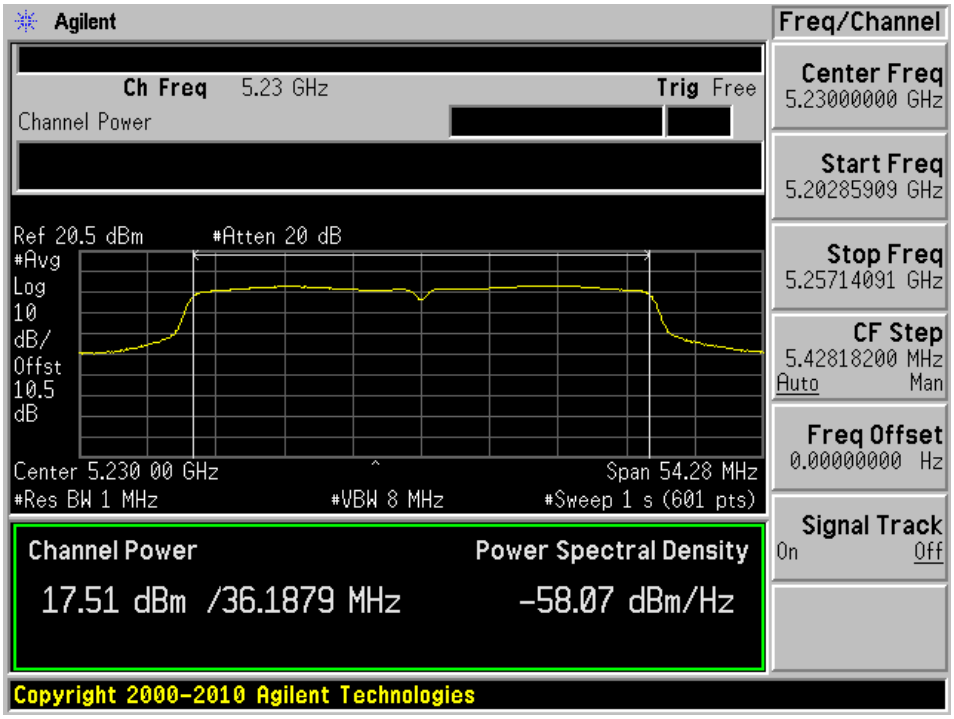


802.11n40 mode, 3 dBi Antenna Chain 0

802.11n40 Low channel: 5190 MHz

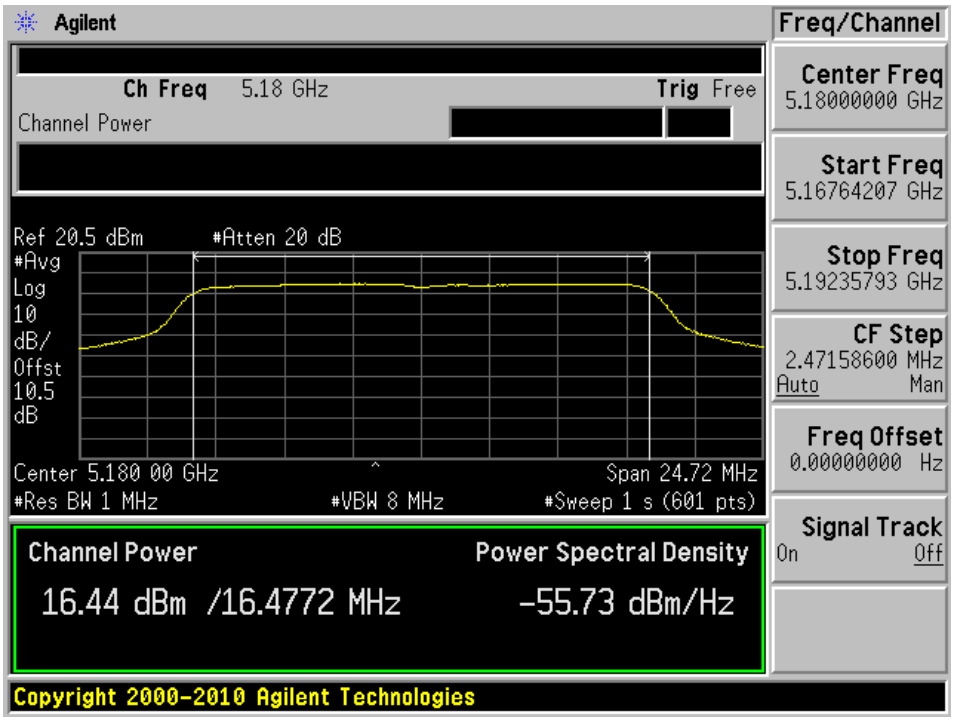


802.11n40 High Channel: 5230 MHz

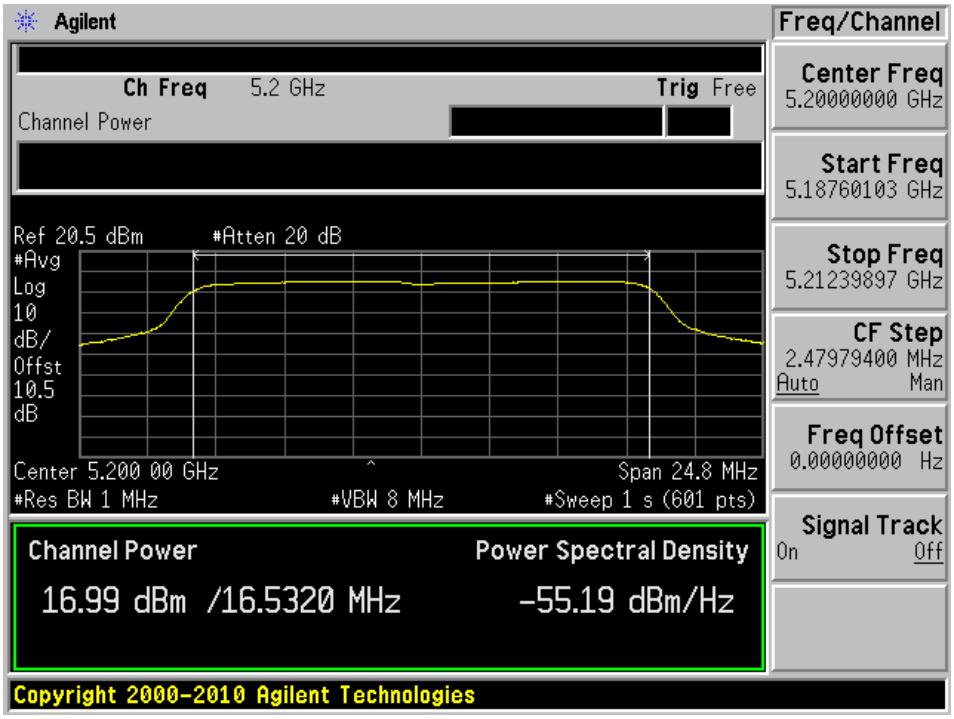


802.11a mode, 3 dBi Antenna Chain 1

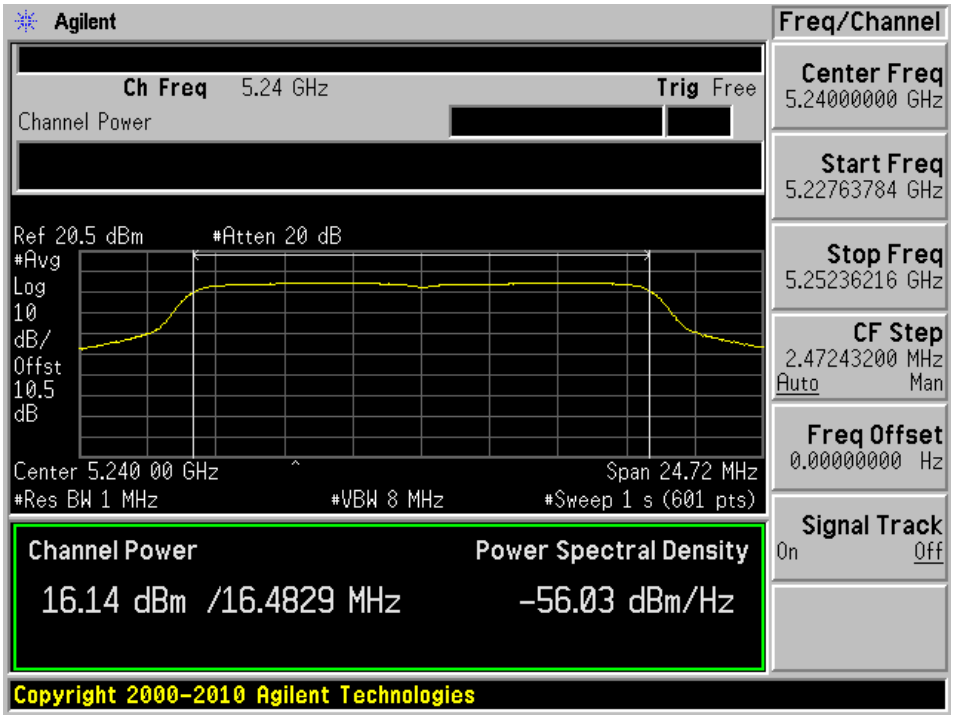
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

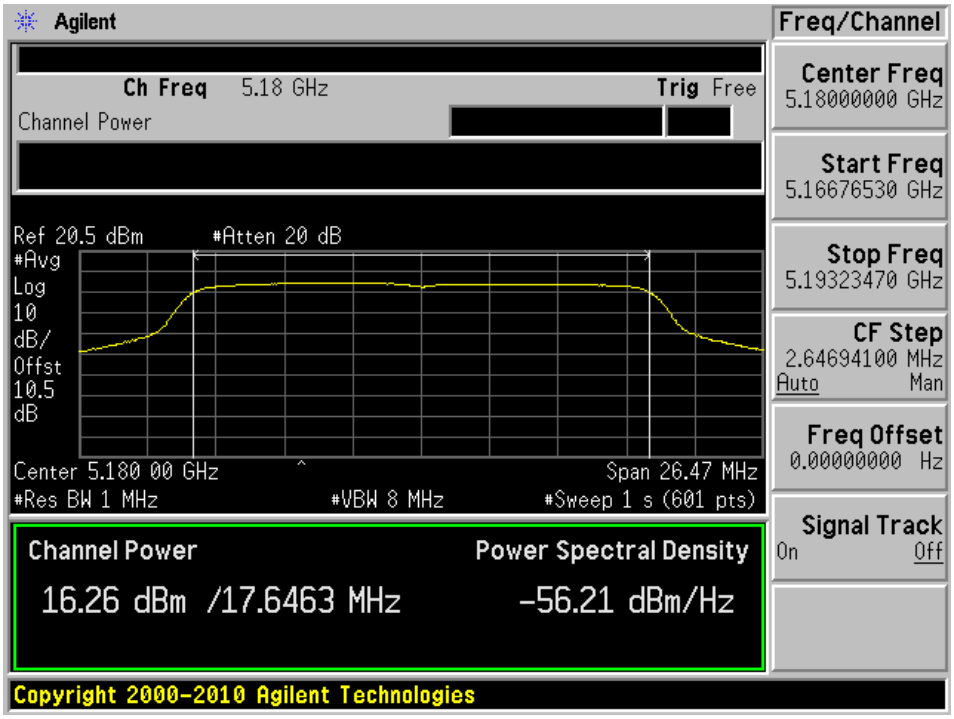


802.11a High channel: 5240 MHz

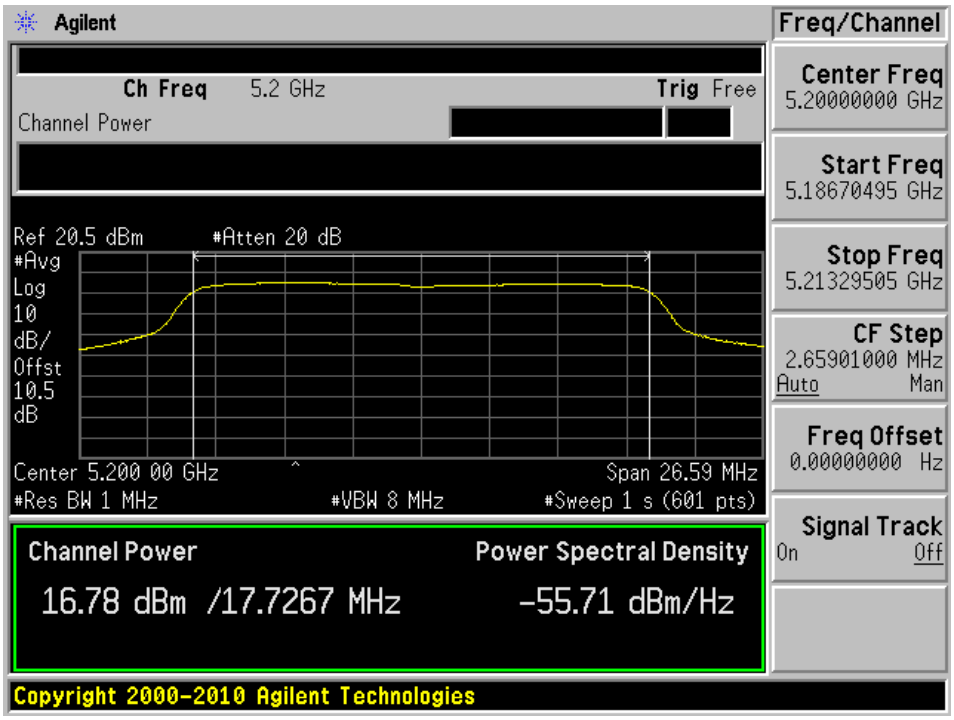


802.11 n20 mode, 3 dBi Antenna Chain 1

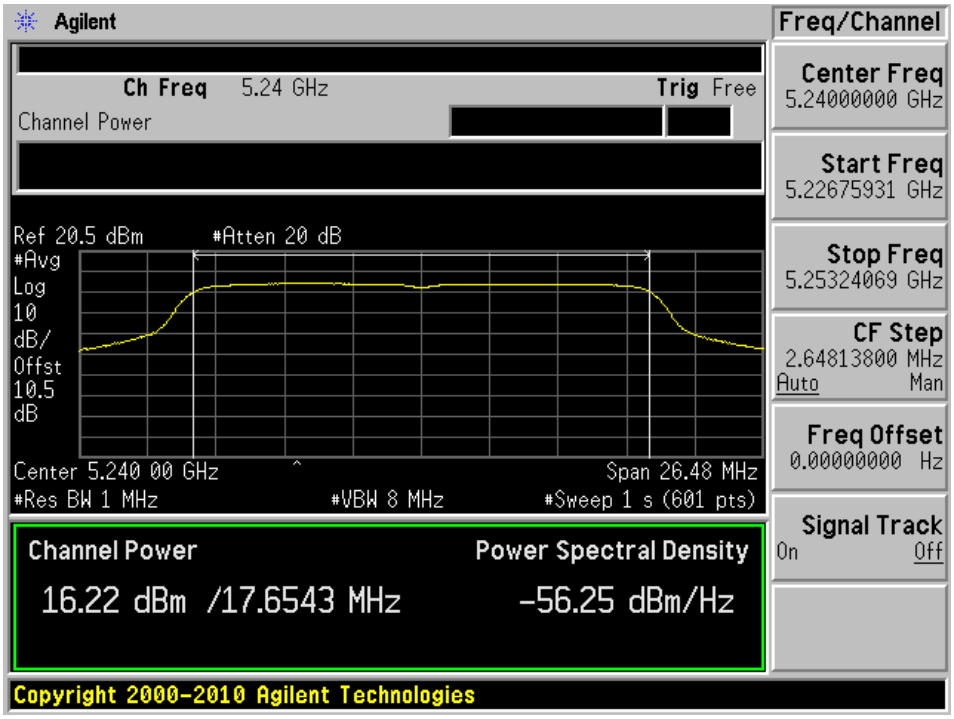
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

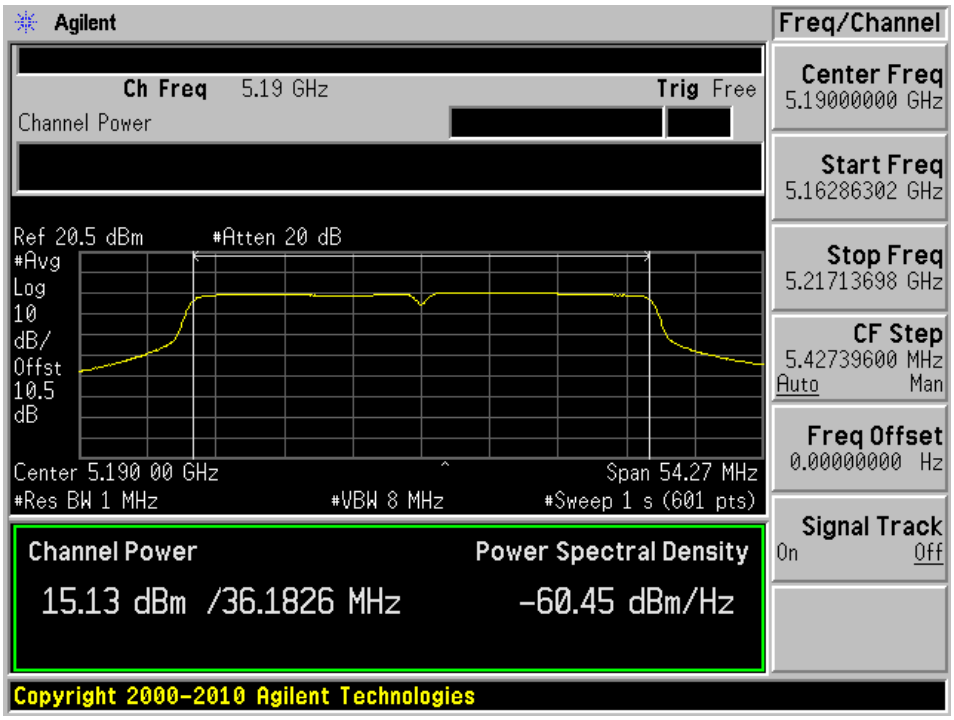


802.11n20 High channel: 5240 MHz

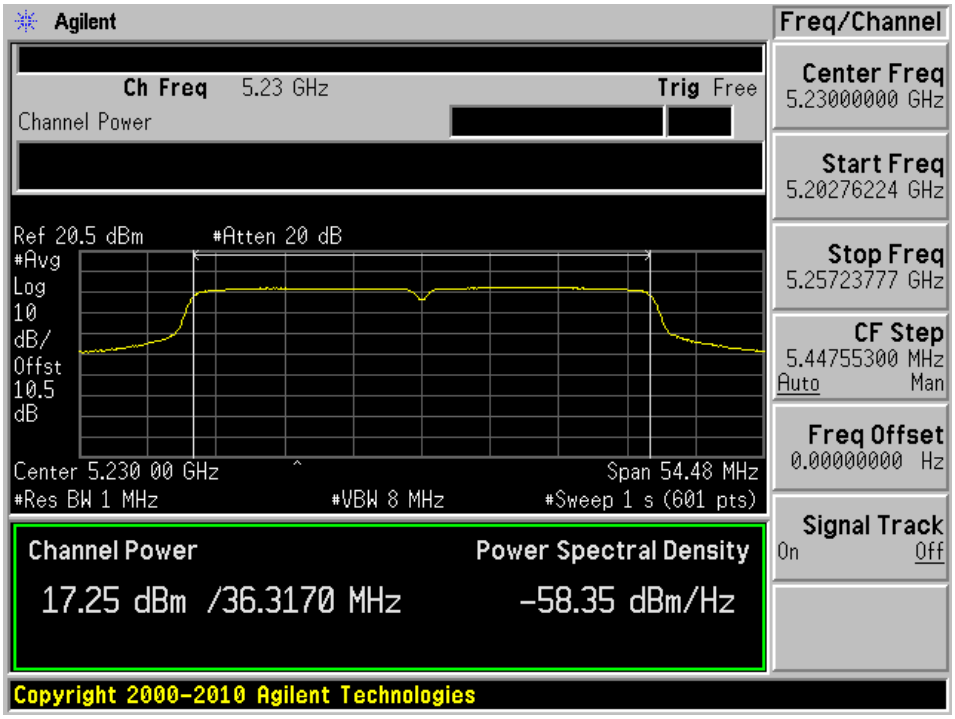


802.11n40 mode, 3 dBi Antenna Chain 1

802.11n40 Low channel: 5190 MHz

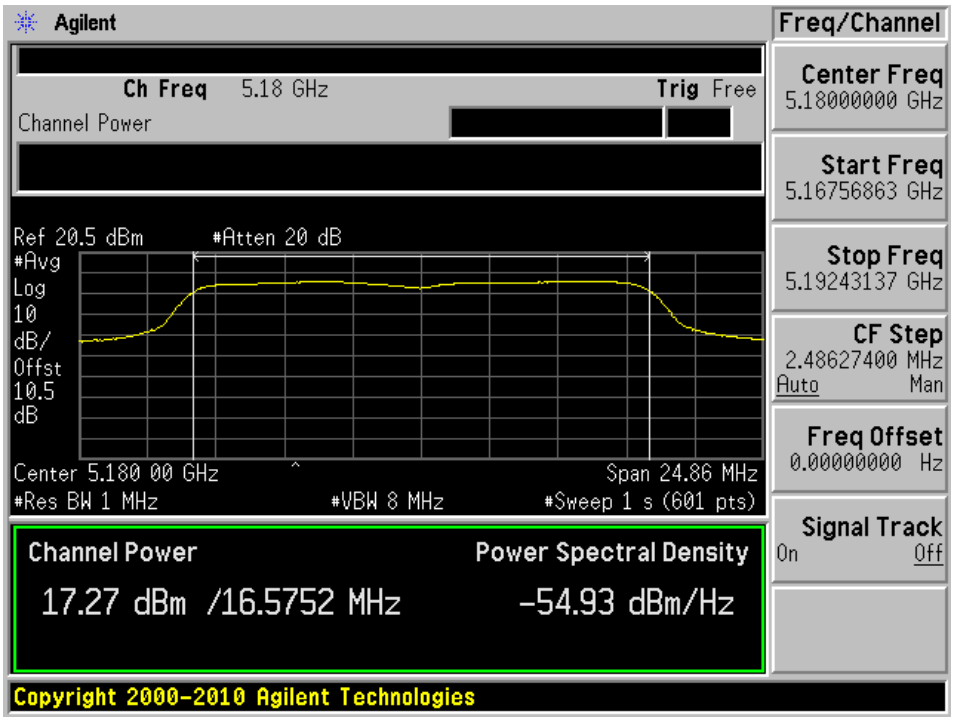


802.11n40 High Channel: 5230 MHz

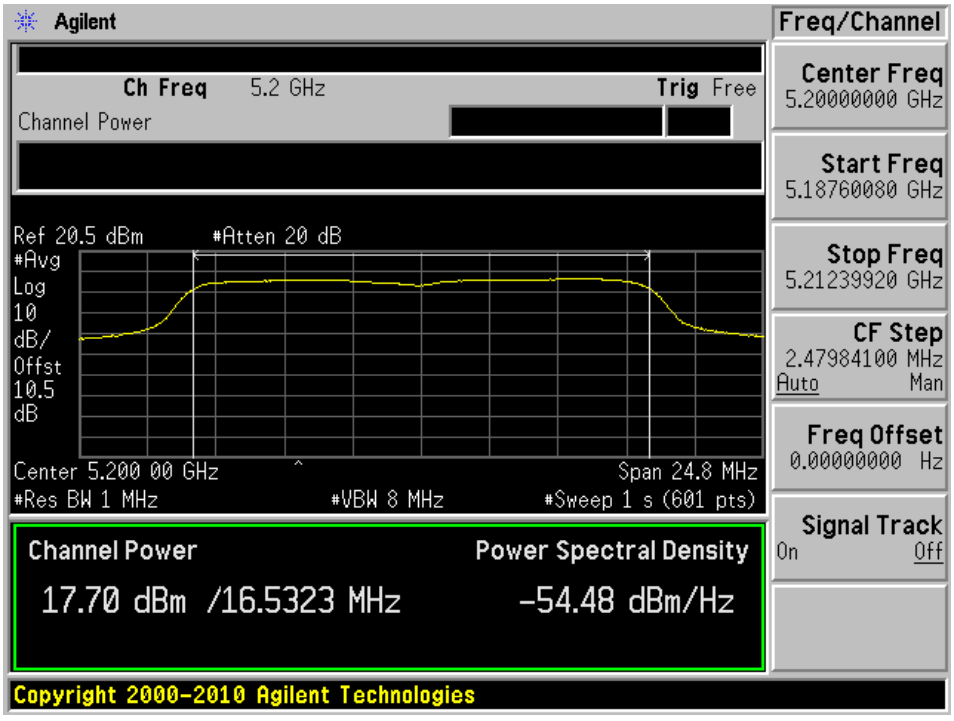


802.11a mode, 3 dBi Antenna Chain 2

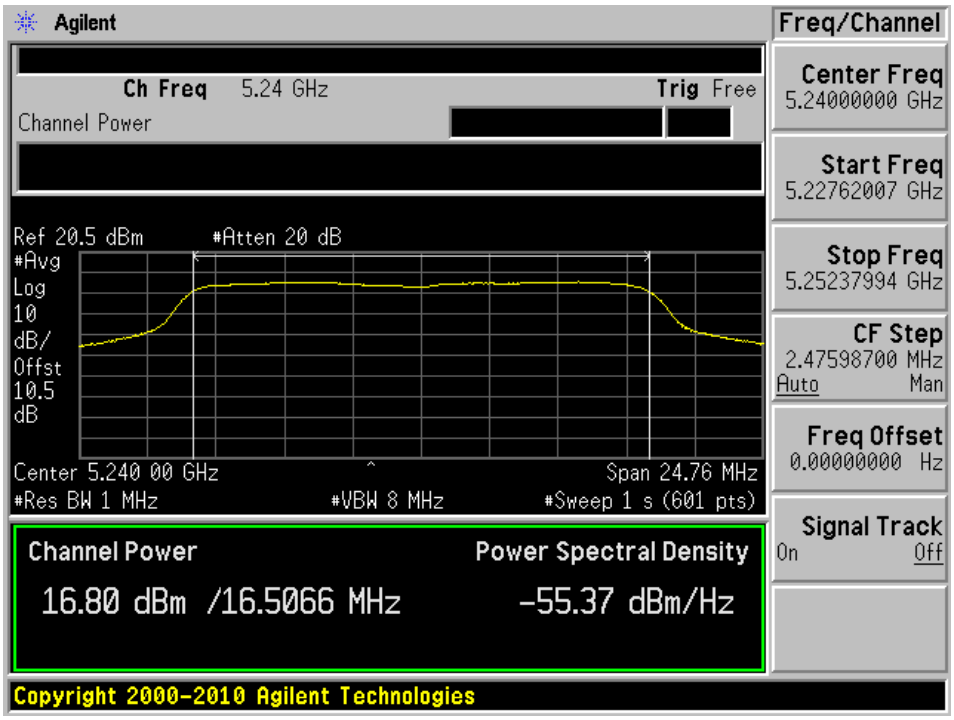
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

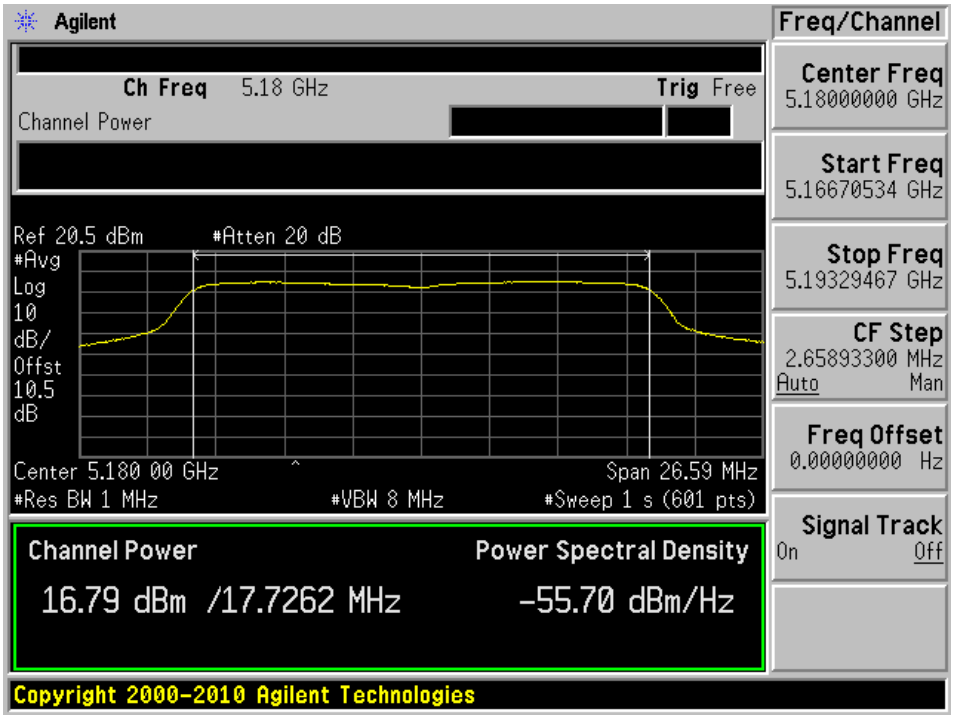


802.11a High channel: 5240 MHz

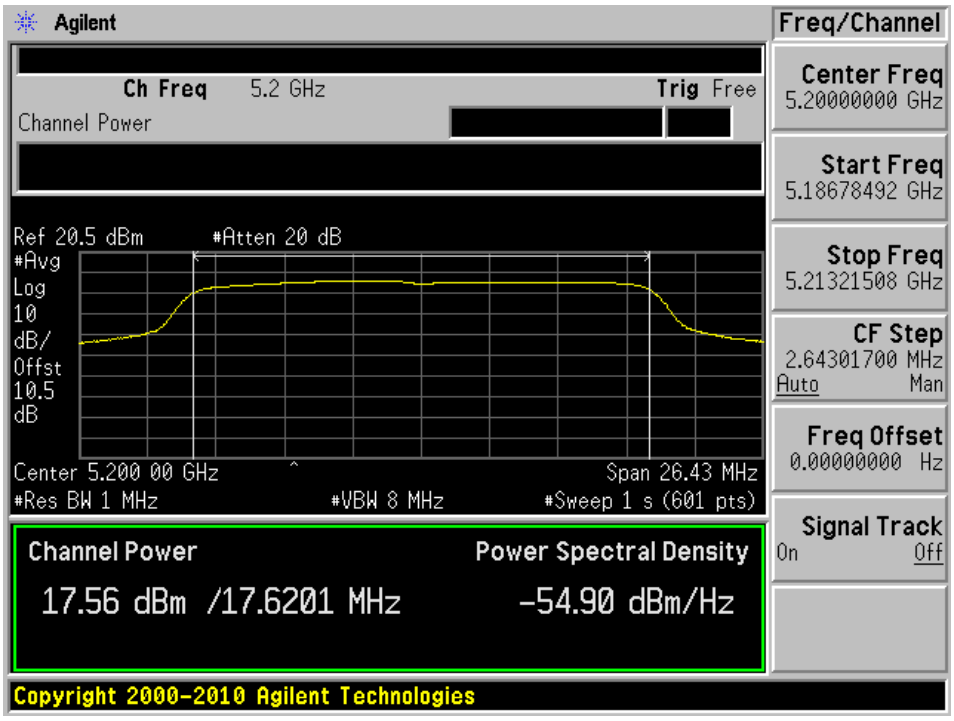


802.11 n20 mode, 3 dBi Antenna Chain 2

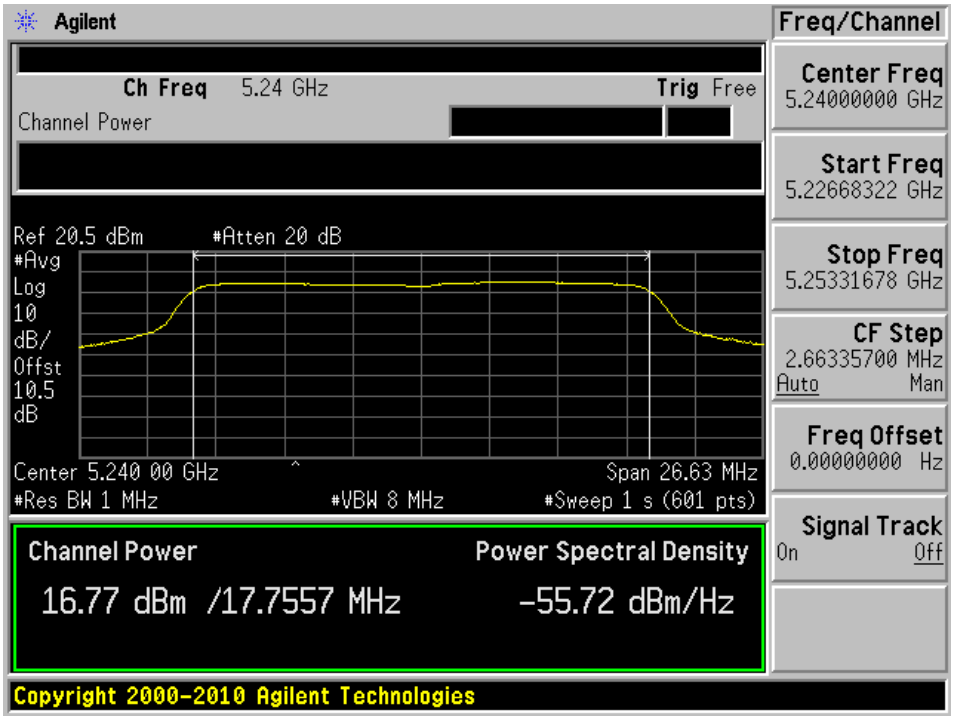
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

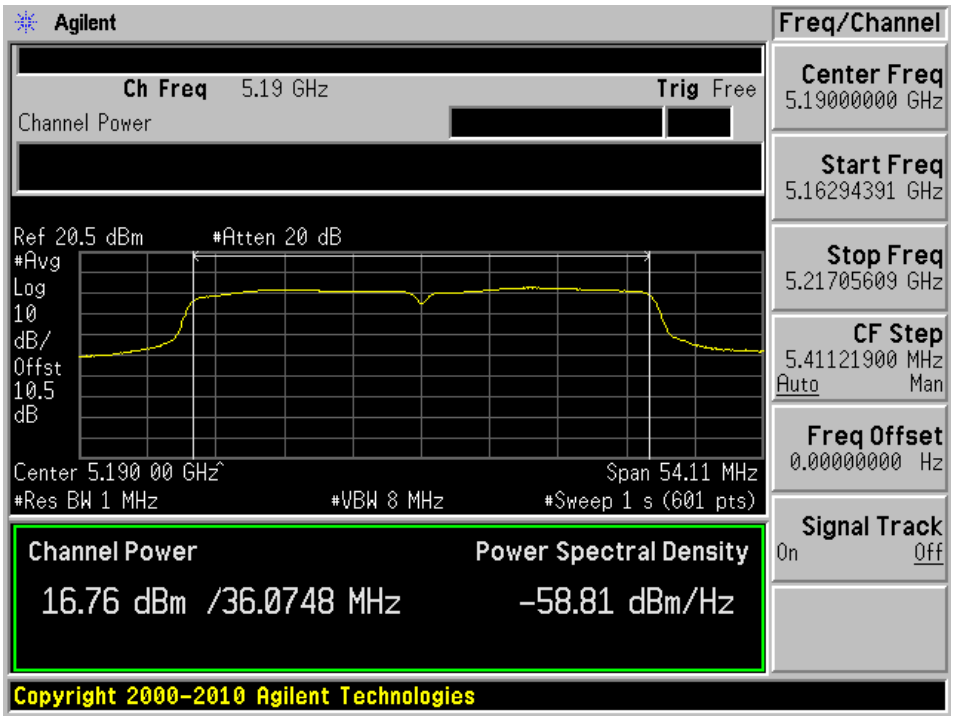


802.11n20 High channel: 5240 MHz

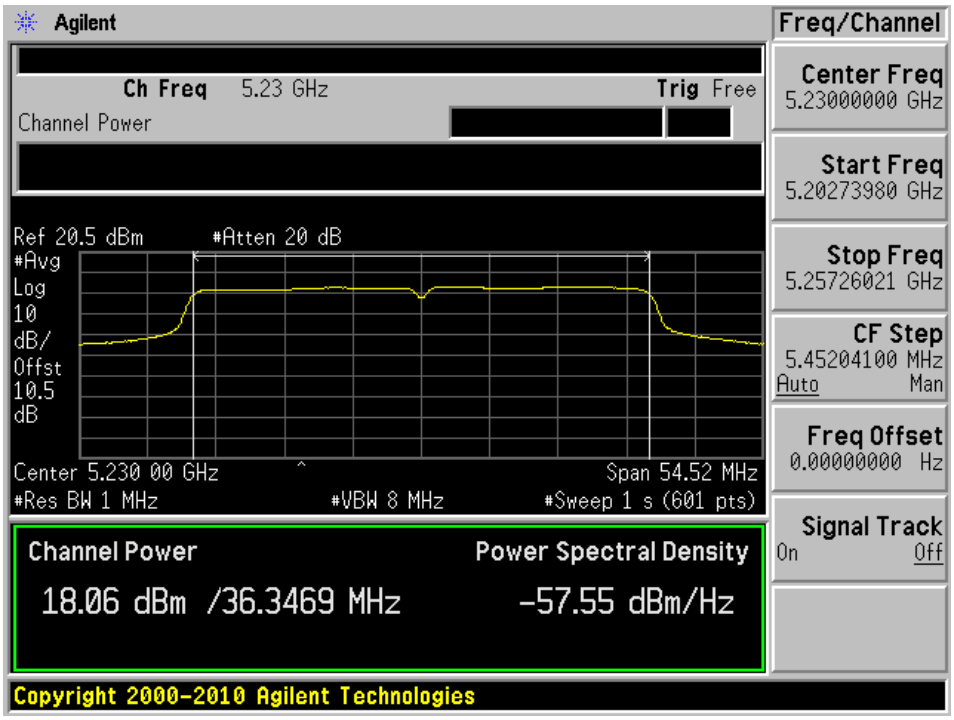


802.11n40 mode, 3 dBi Antenna Chain 2

802.11n40 Low channel: 5190 MHz



802.11n40 High Channel: 5230 MHz



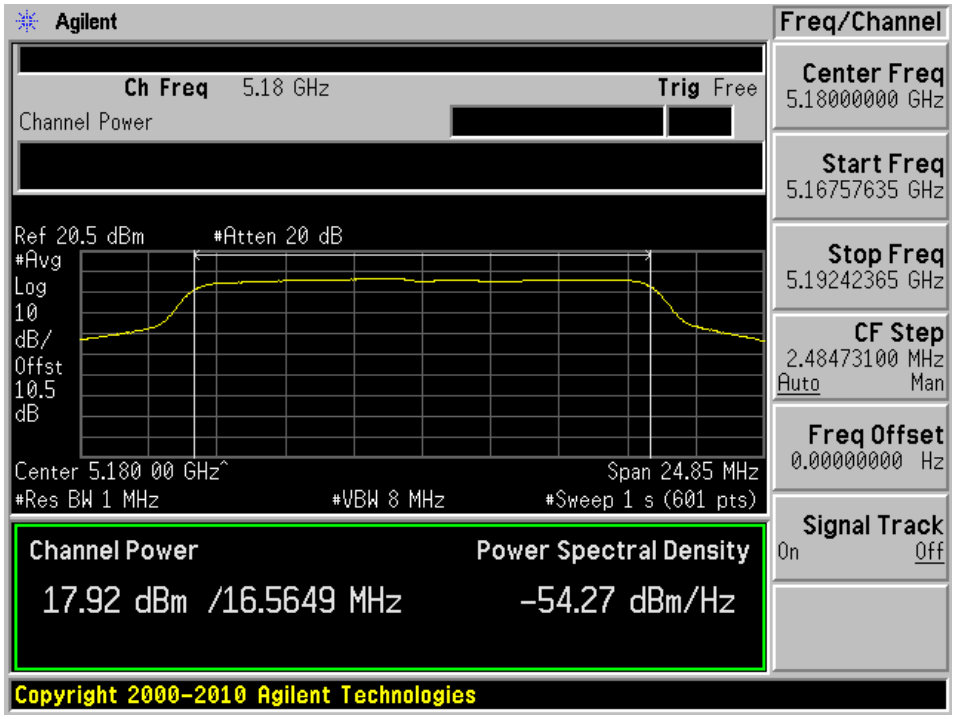
5.2 GHz Band, 5 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5180	17.92	17.94	18.30	22.83	30	-7.17
Middle	5200	17.61	17.38	17.83	22.38	30	-7.62
High	5240	17.20	16.73	16.83	21.70	30	-8.30
802.11n HT20 mode							
Low	5180	18.38	18.10	18.28	23.03	30	-6.97
Middle	5200	17.39	17.45	17.65	22.27	30	-7.73
High	5240	17.39	16.90	17.27	21.96	30	-8.04
802.11n HT40 mode							
Low	5190	16.06	15.76	16.83	21.01	30	-8.99
High	5230	18.61	18.43	18.90	23.42	30	-6.58

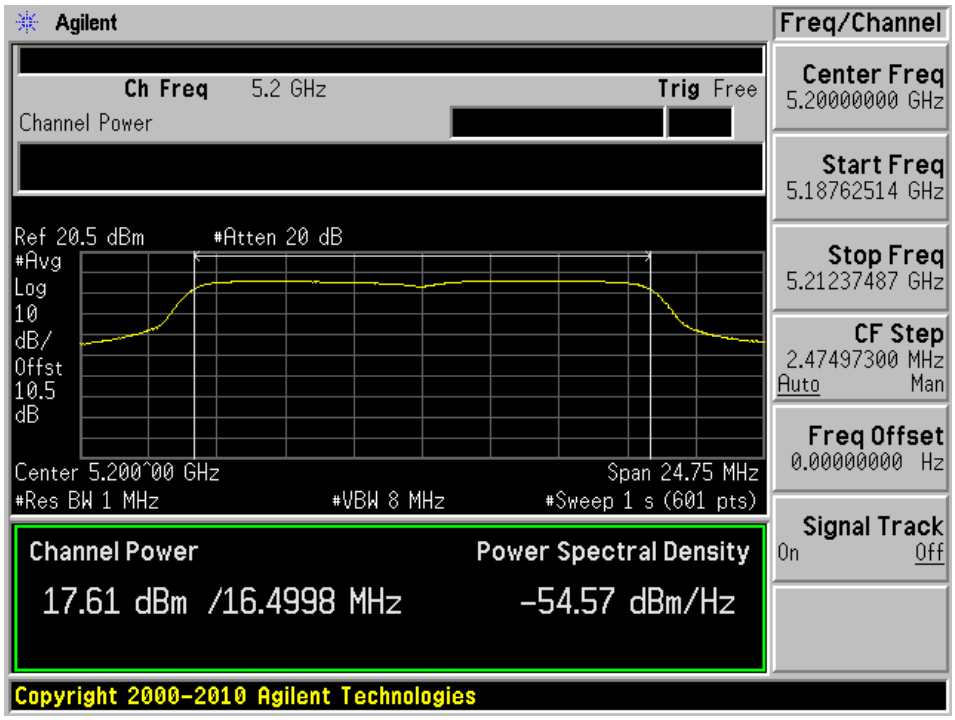
5.2 GHz Band

802.11a mode, 5 dBi Antenna Chain 0

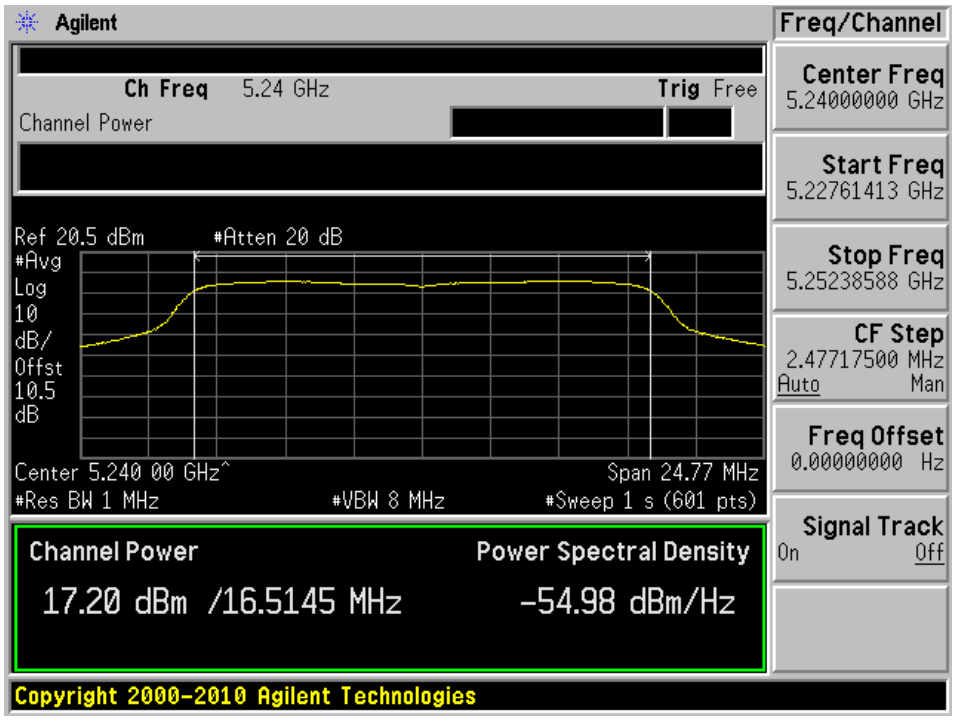
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

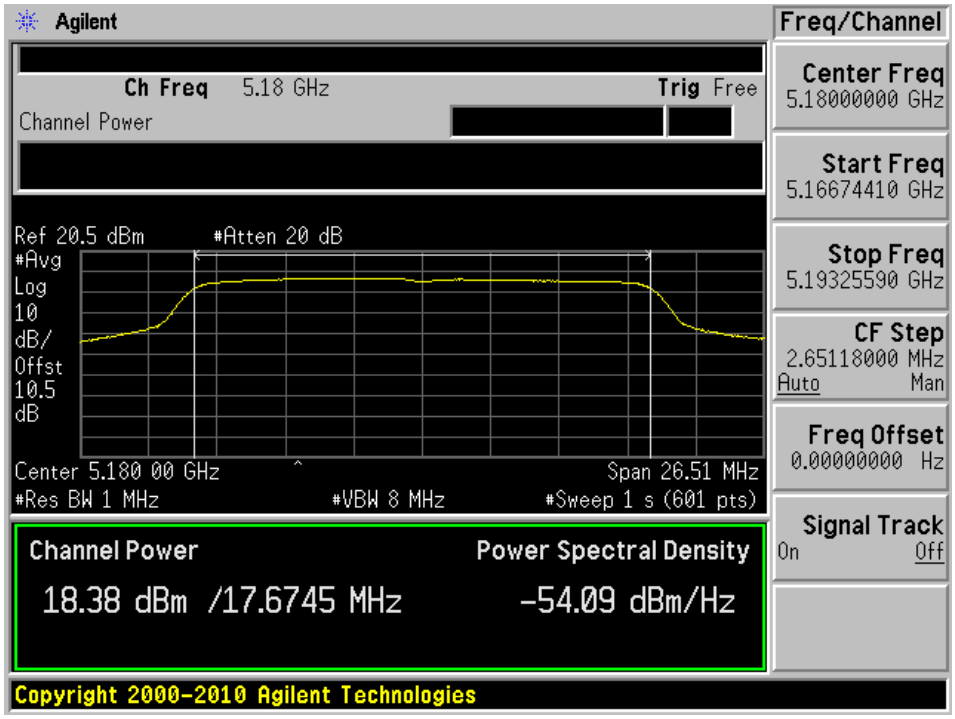


802.11a High channel: 5240 MHz

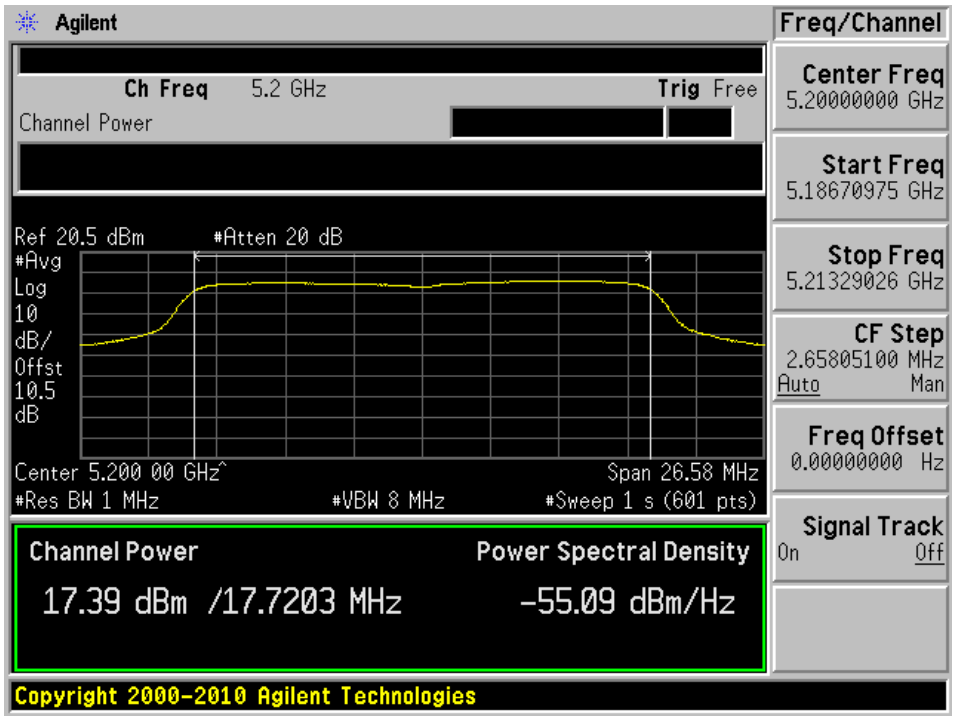


802.11 n20 mode, 5 dBi Antenna Chain 0

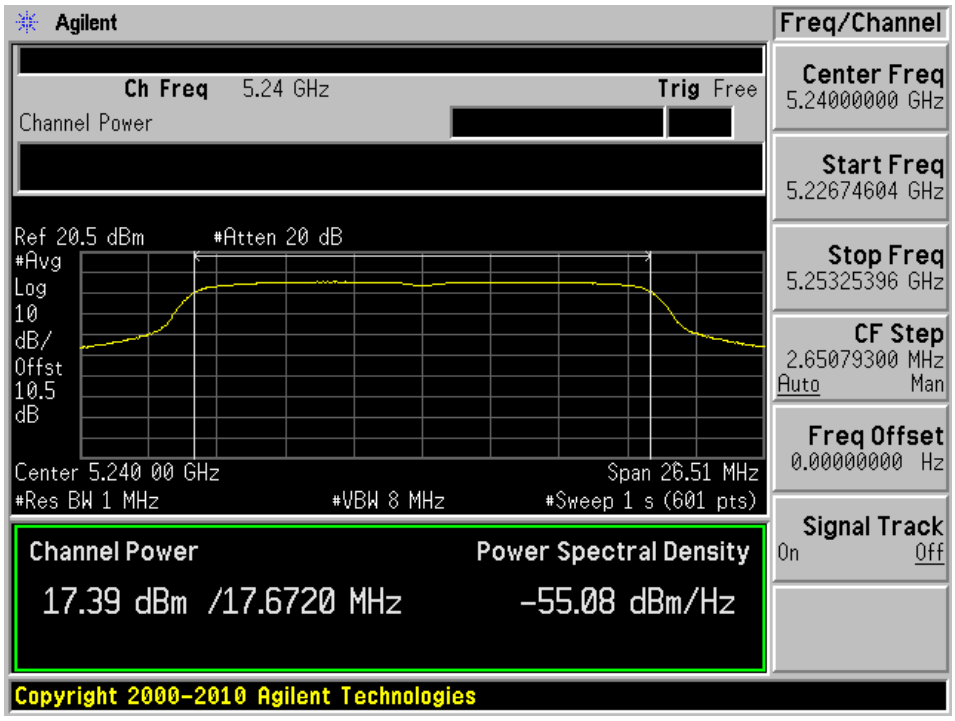
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

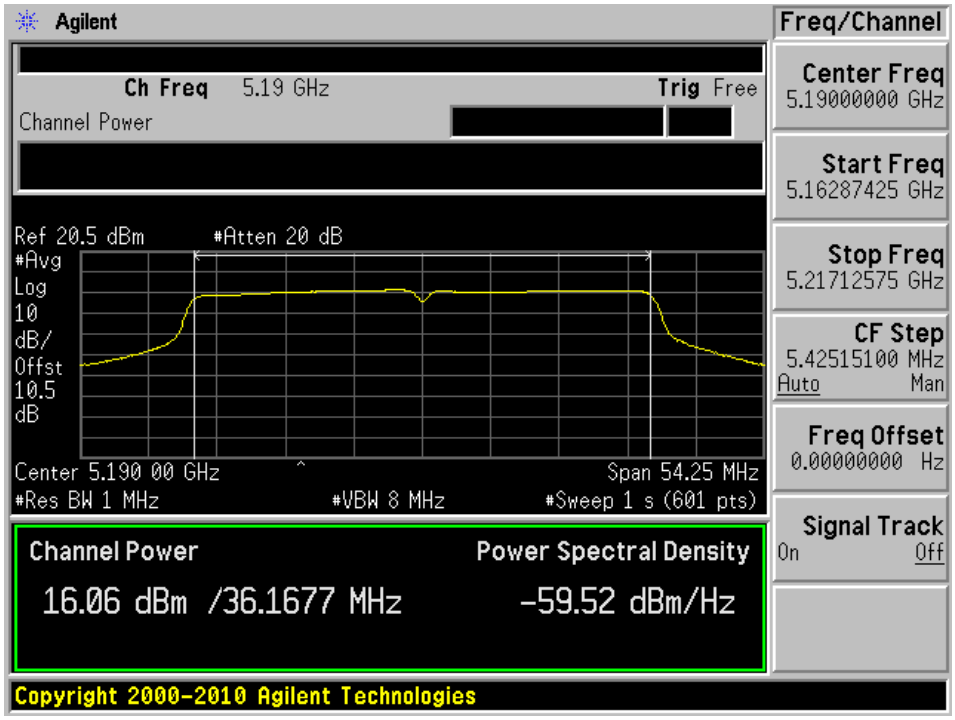


802.11n20 High channel: 5240 MHz

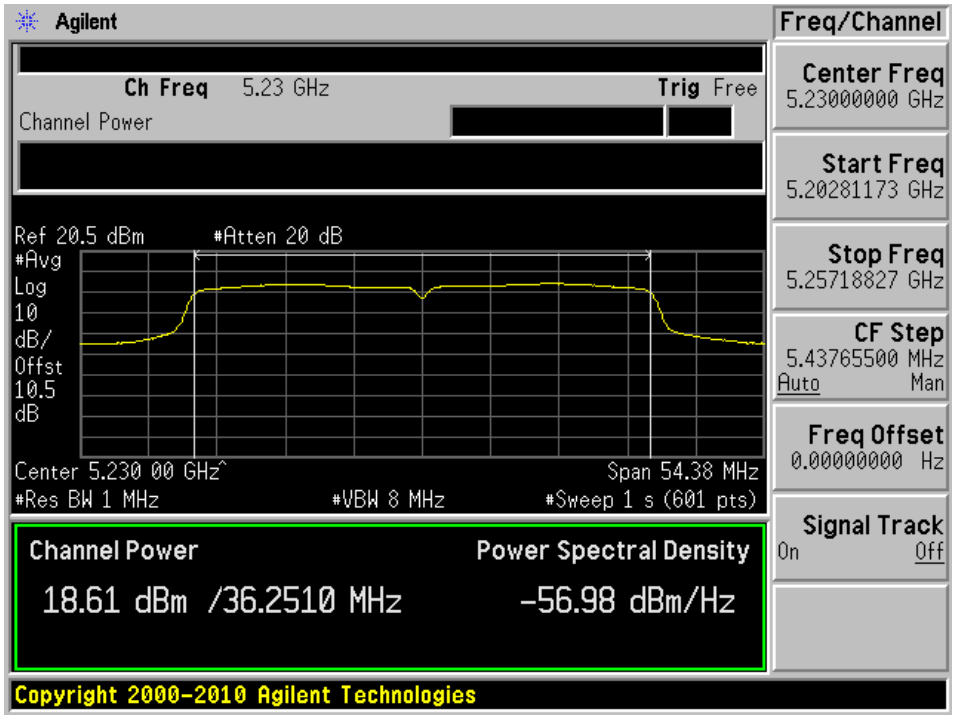


802.11n40 mode, 5 dBi Antenna Chain 0

802.11n40 Low channel: 5190 MHz

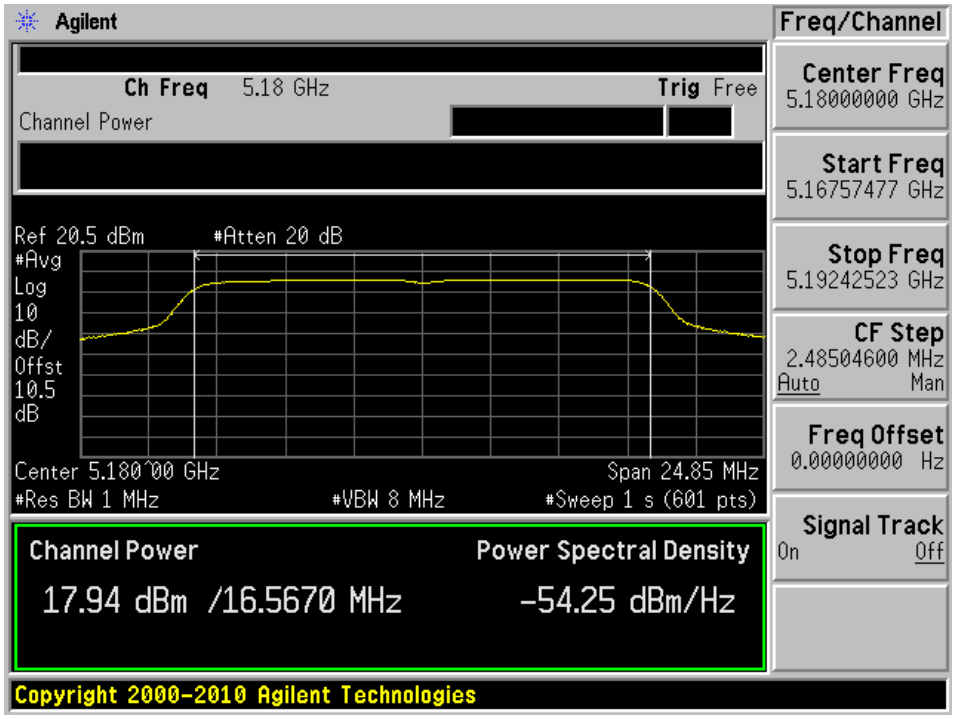


802.11n40 High Channel: 5230 MHz

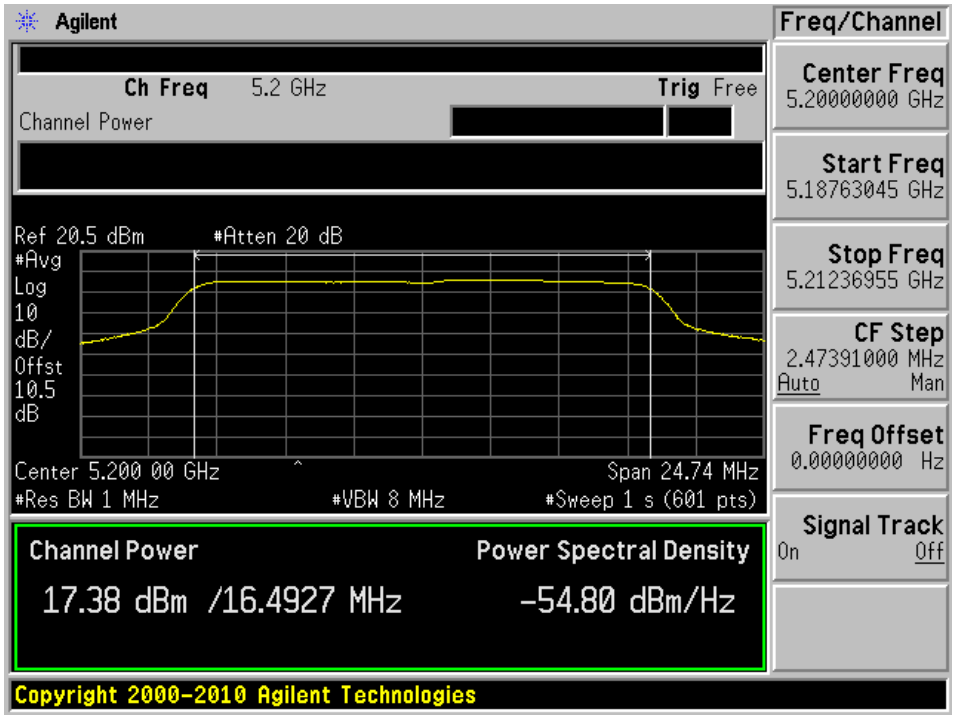


802.11a mode, 5 dBi Antenna Chain 1

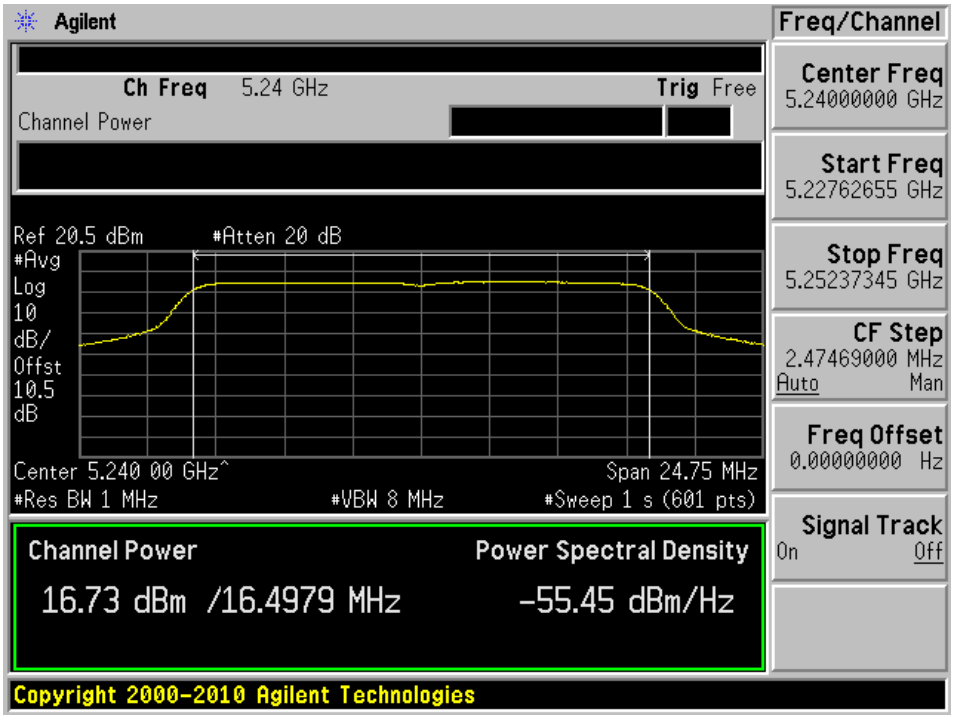
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

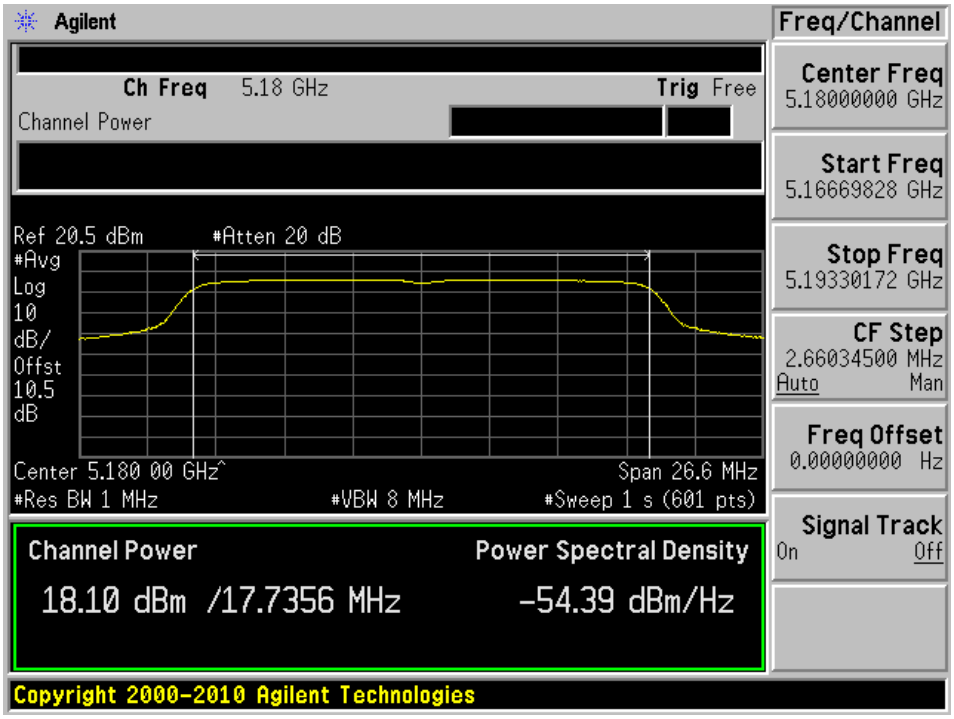


802.11a High channel: 5240 MHz

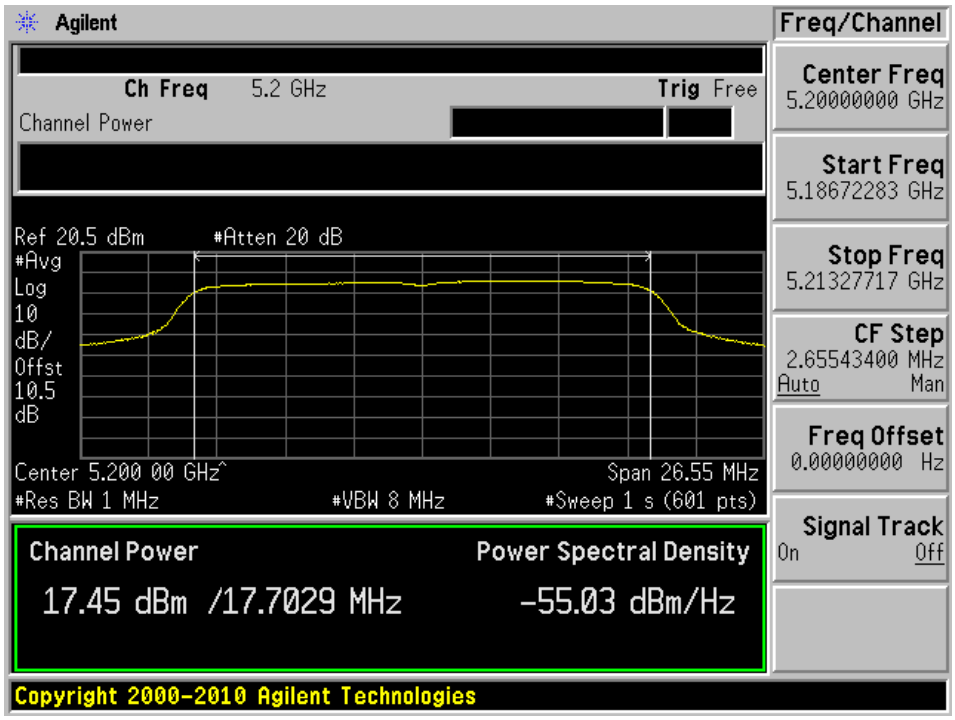


802.11 n20 mode, 5 dBi Antenna Chain 1

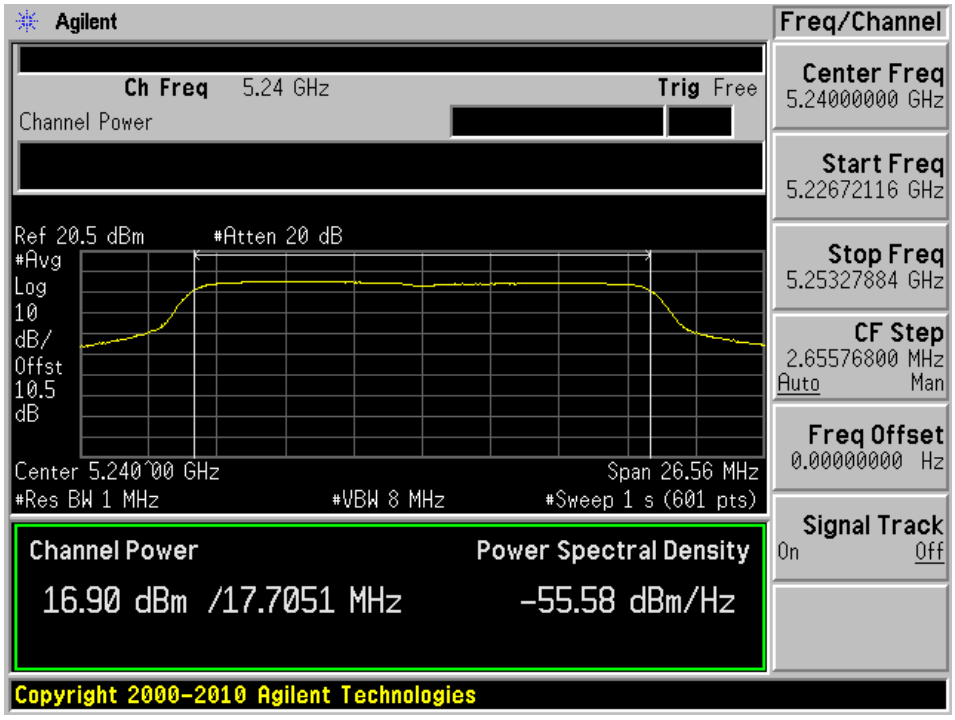
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

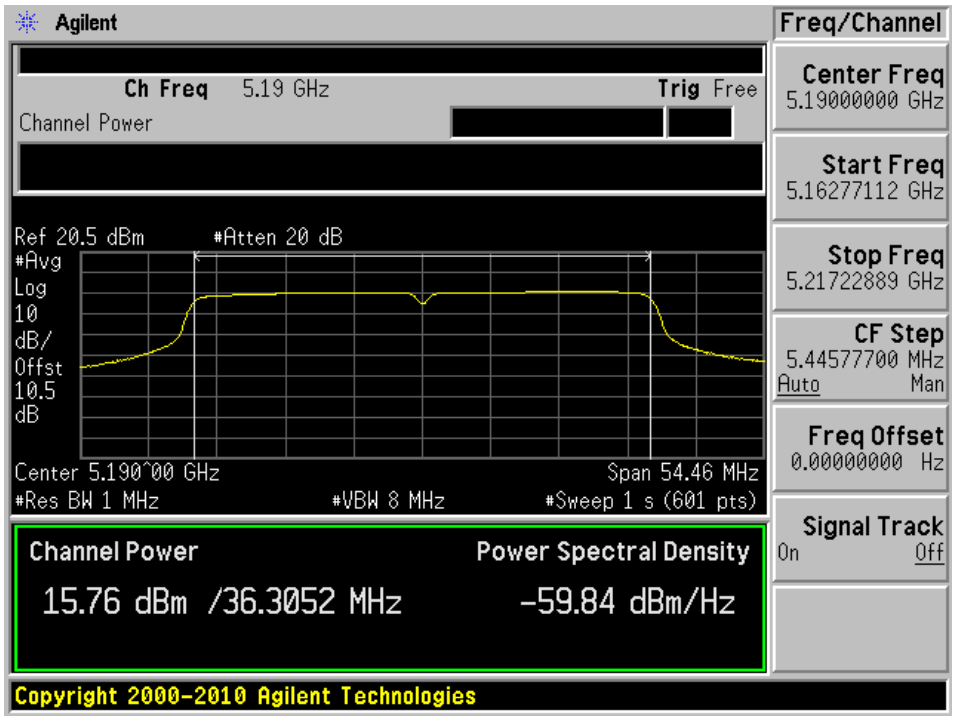


802.11n20 High channel: 5240 MHz

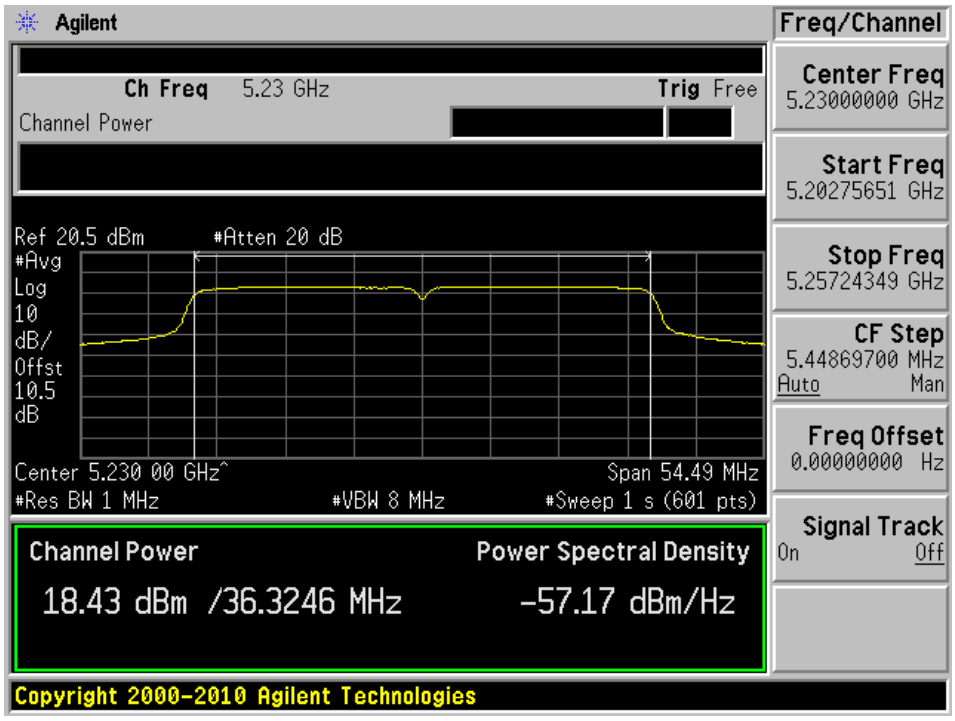


802.11n40 mode, 5 dBi Antenna Chain 1

802.11n40 Low channel: 5190 MHz

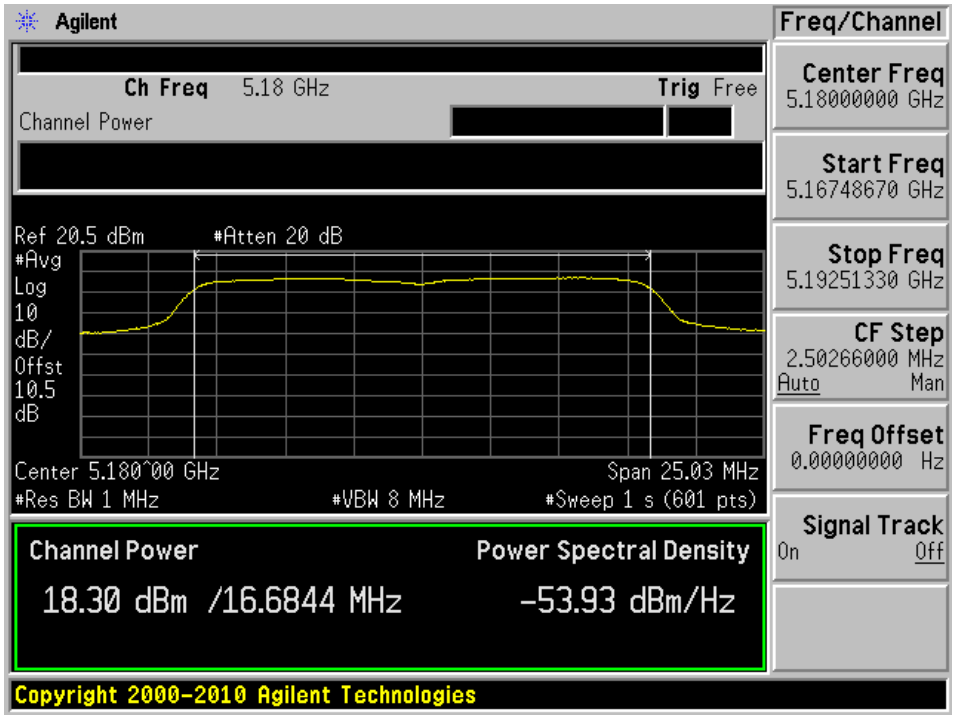


802.11n40 High Channel: 5230 MHz

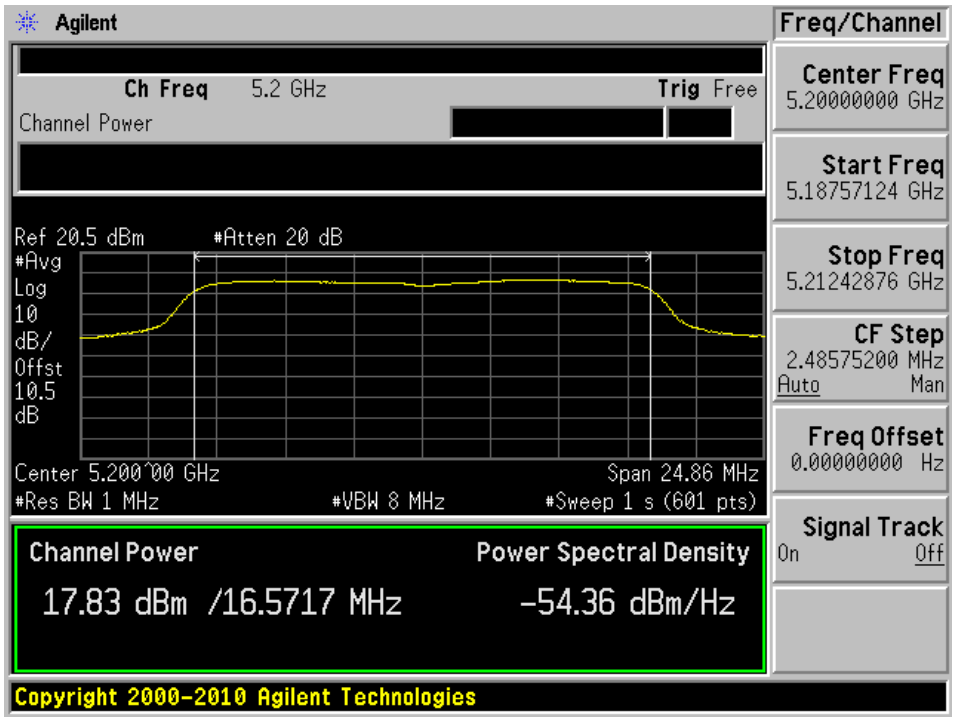


802.11a mode, 5 dBi Antenna Chain 2

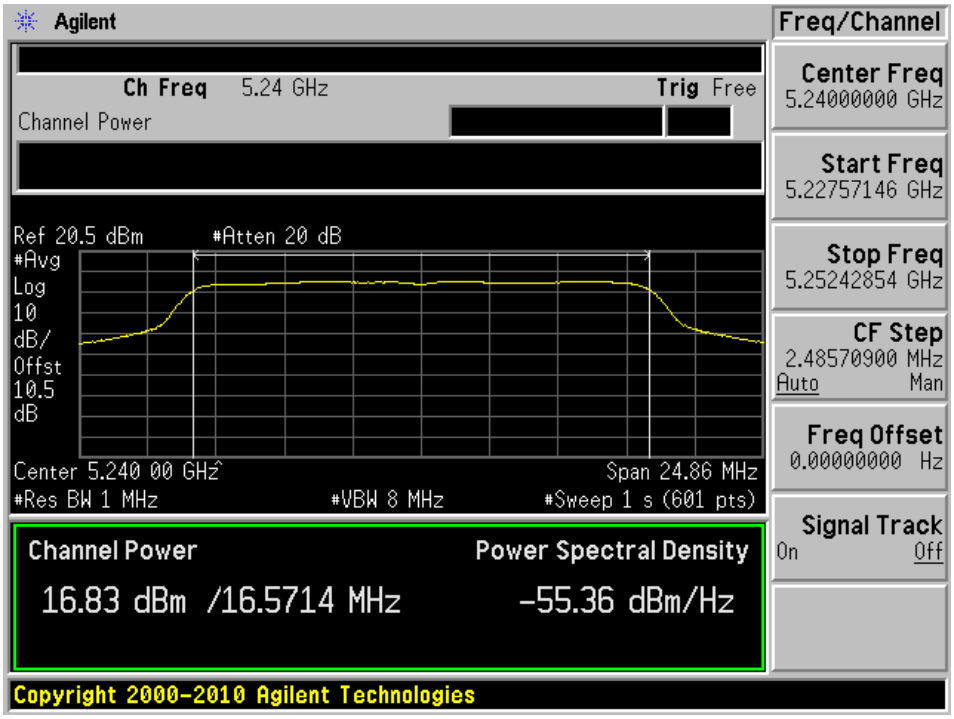
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

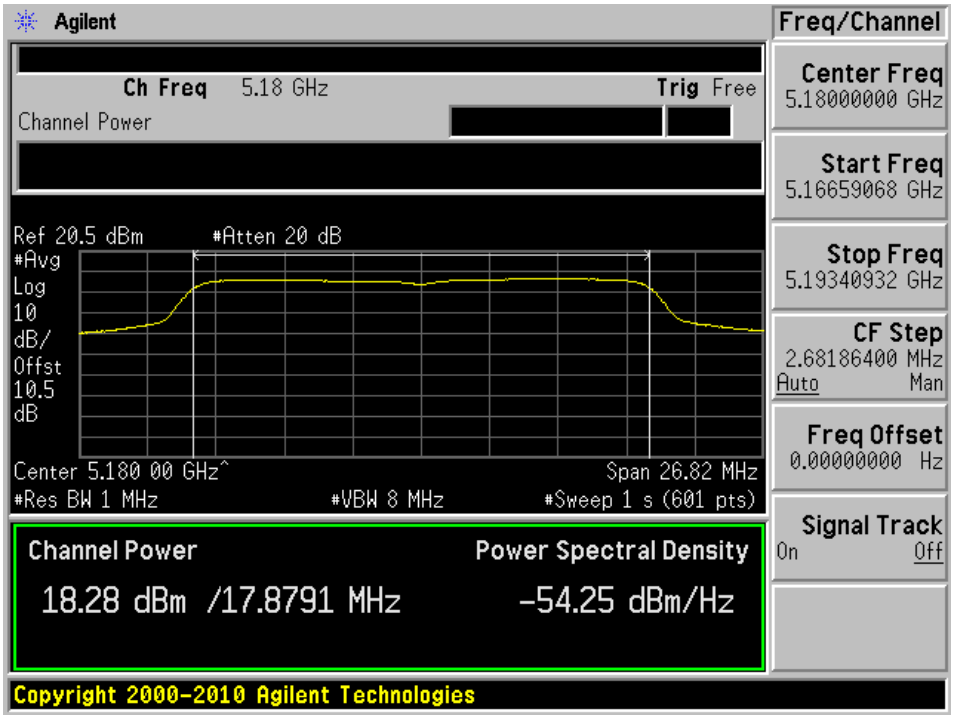


802.11a High channel: 5240 MHz

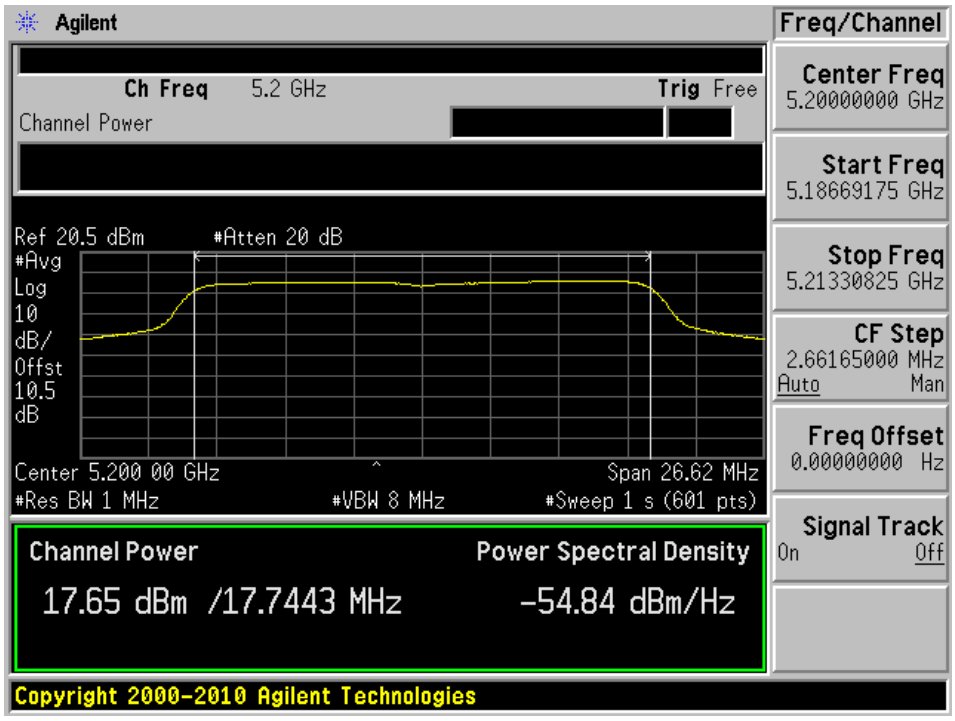


802.11 n20 mode, 5 dBi Antenna Chain 2

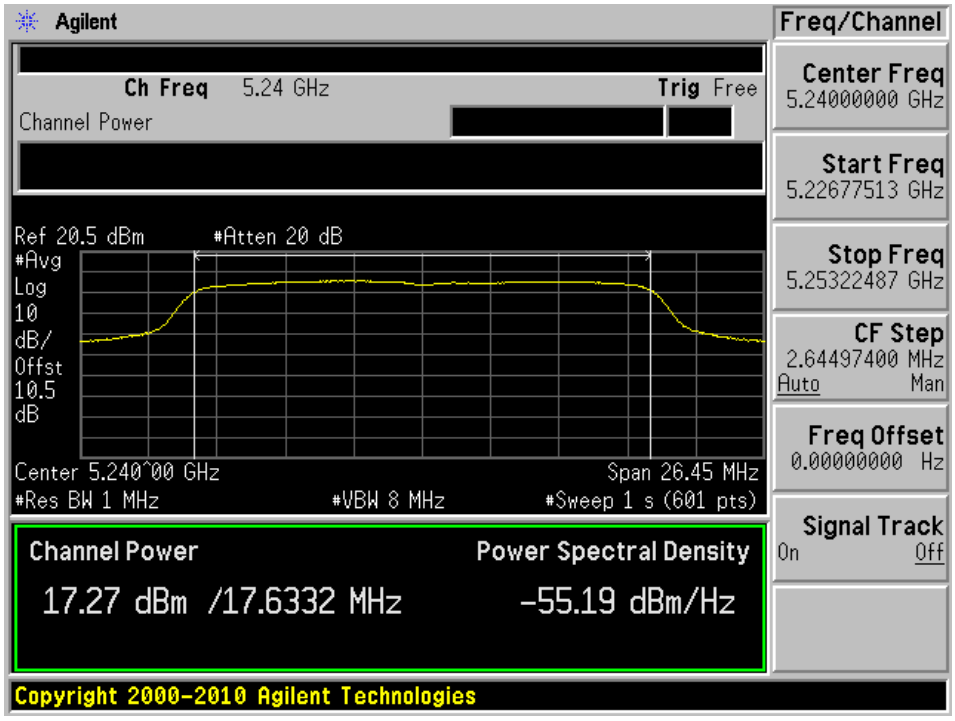
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

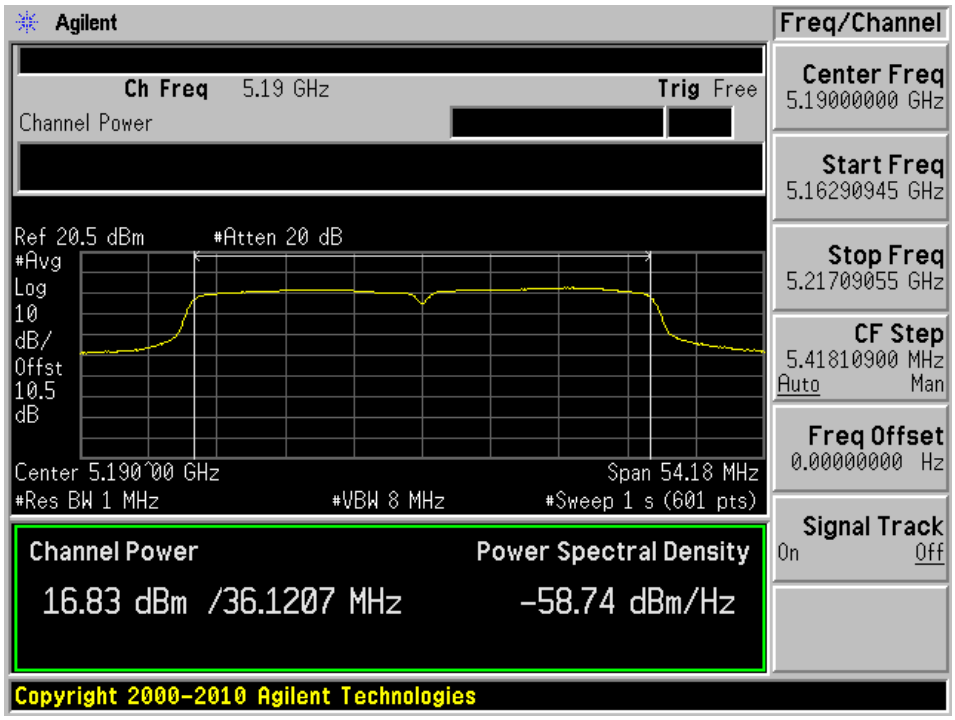


802.11n20 High channel: 5240 MHz

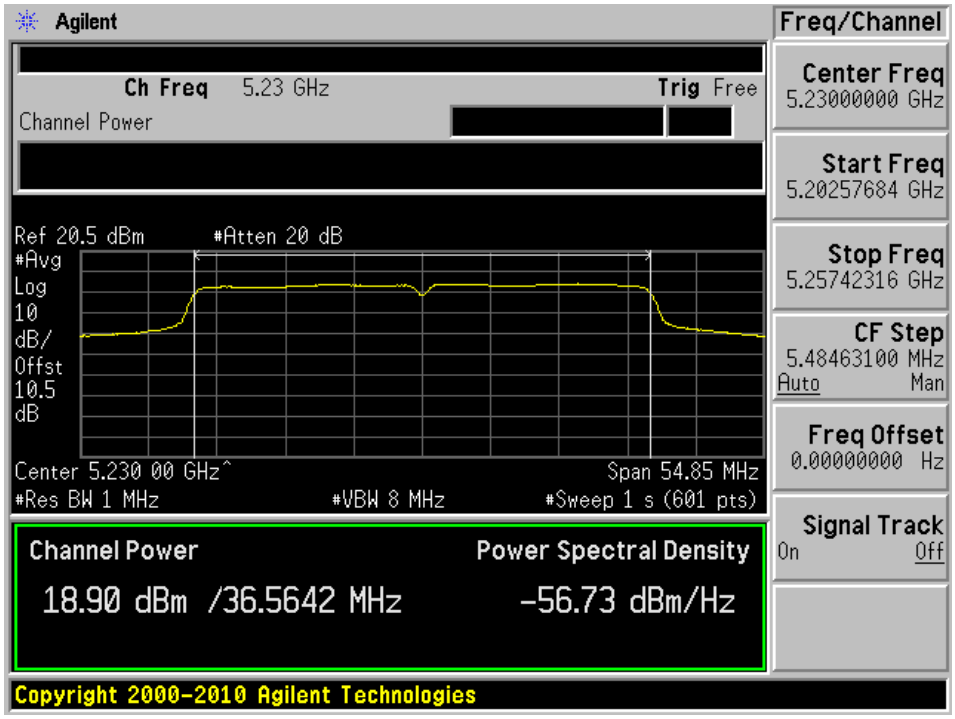


802.11n40 mode, 5 dBi Antenna Chain 2

802.11n40 Low channel: 5190 MHz



802.11n40 High Channel: 5230 MHz



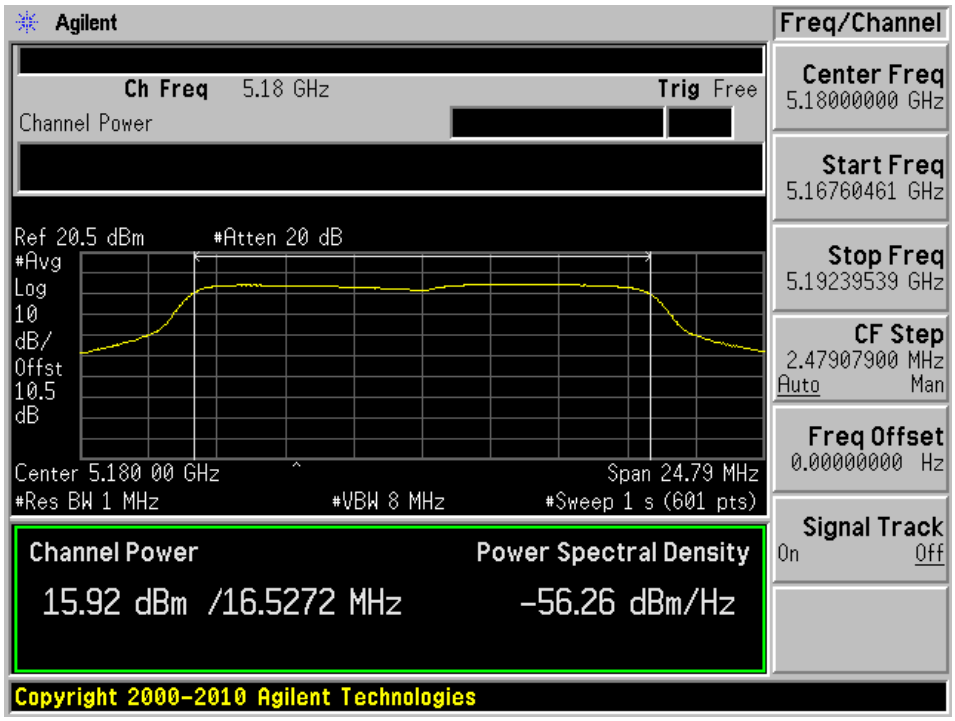
5.2 GHz Band, 8 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5180	15.91	15.37	16.09	20.57	28	-7.43
Middle	5200	15.88	15.47	15.63	20.43	28	-7.57
High	5240	15.79	15.46	16.02	20.53	28	-7.47
802.11n HT20 mode							
Low	5180	15.96	15.41	16.43	20.72	28	-7.28
Middle	5200	16.37	15.86	15.77	20.78	28	-7.22
High	5240	16.10	15.65	16.11	20.73	28	-7.27
802.11n HT40 mode							
Low	5190	12.90	12.54	13.07	17.61	28	-10.39
High	5230	17.84	17.42	18.36	22.66	28	-5.34

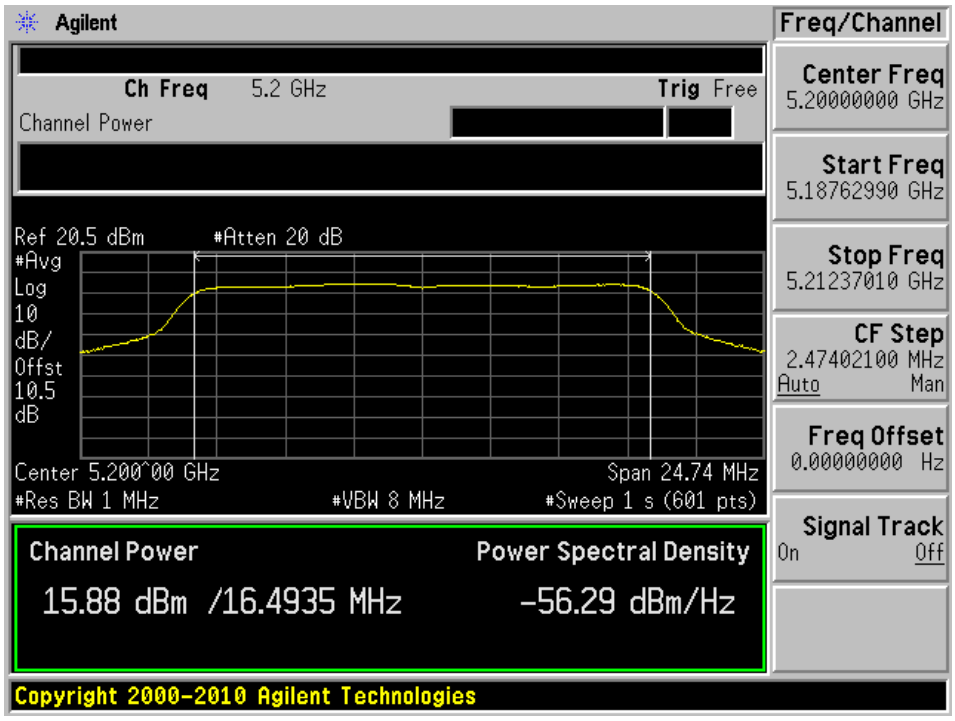
Note: Antenna gain over 6 dBi, therefore the limit is 30-(8-6) =28 dBm

802.11a mode, 8 dBi Antenna Chain 0

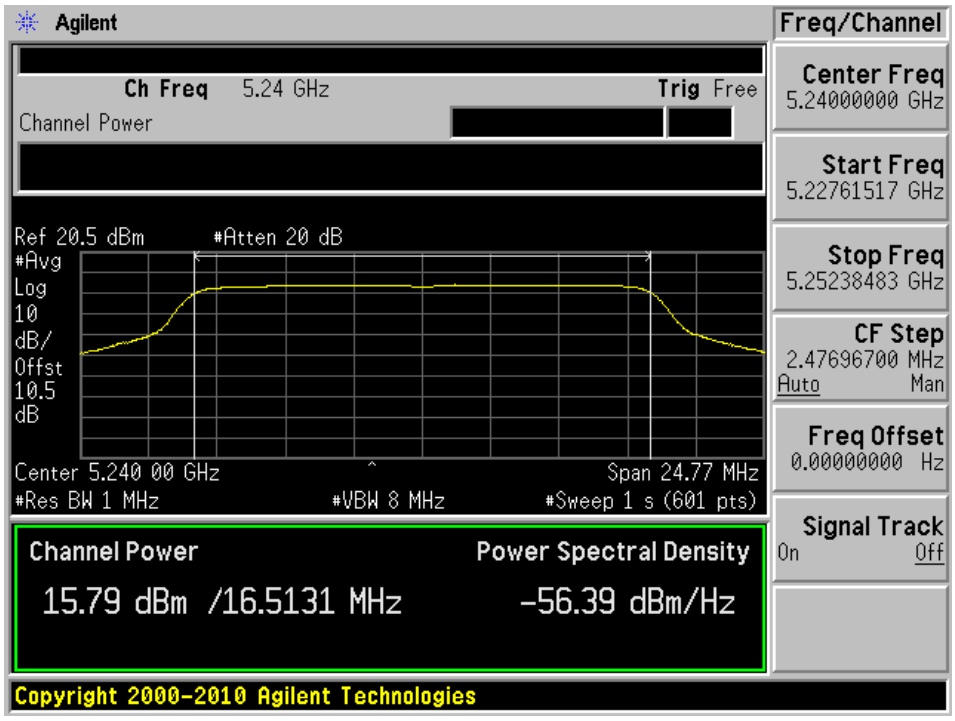
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

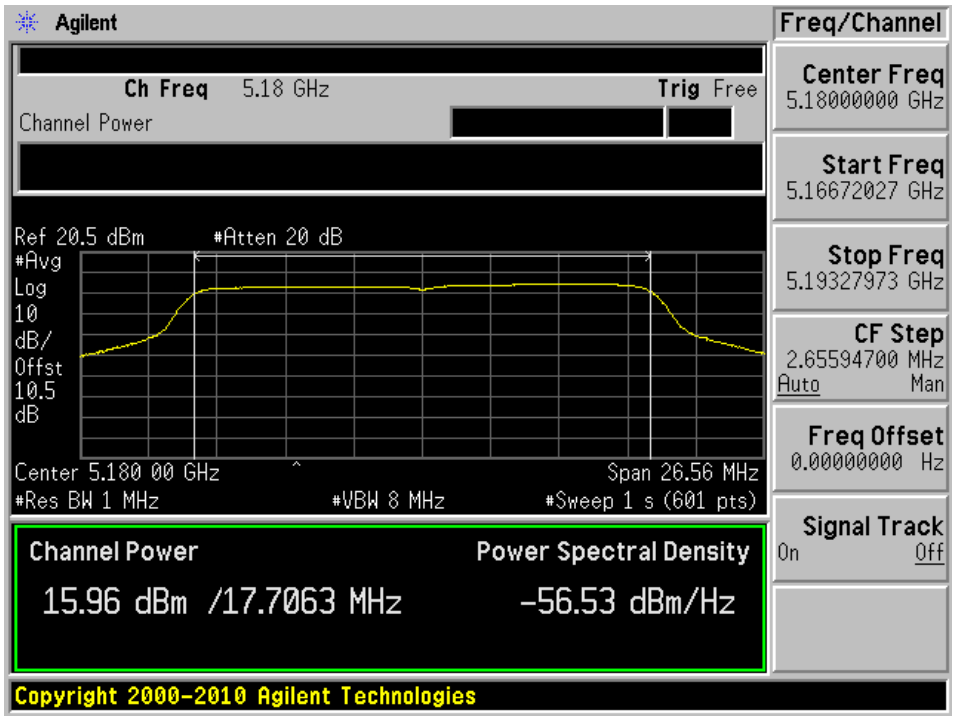


802.11a High channel: 5240 MHz

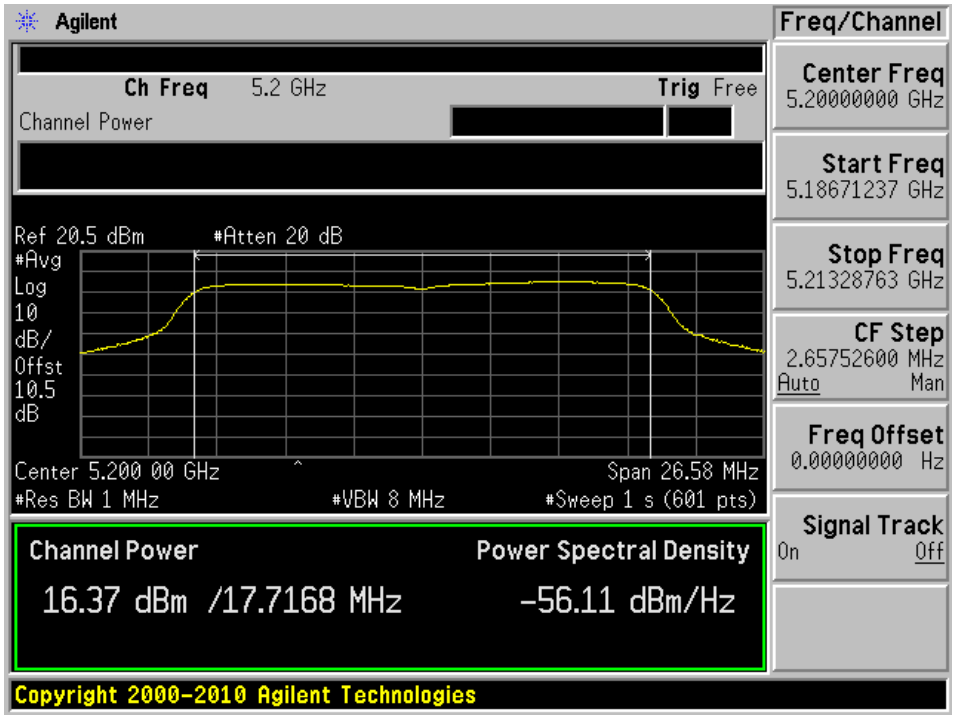


802.11 n20 mode, 8 dBi Antenna Chain 0

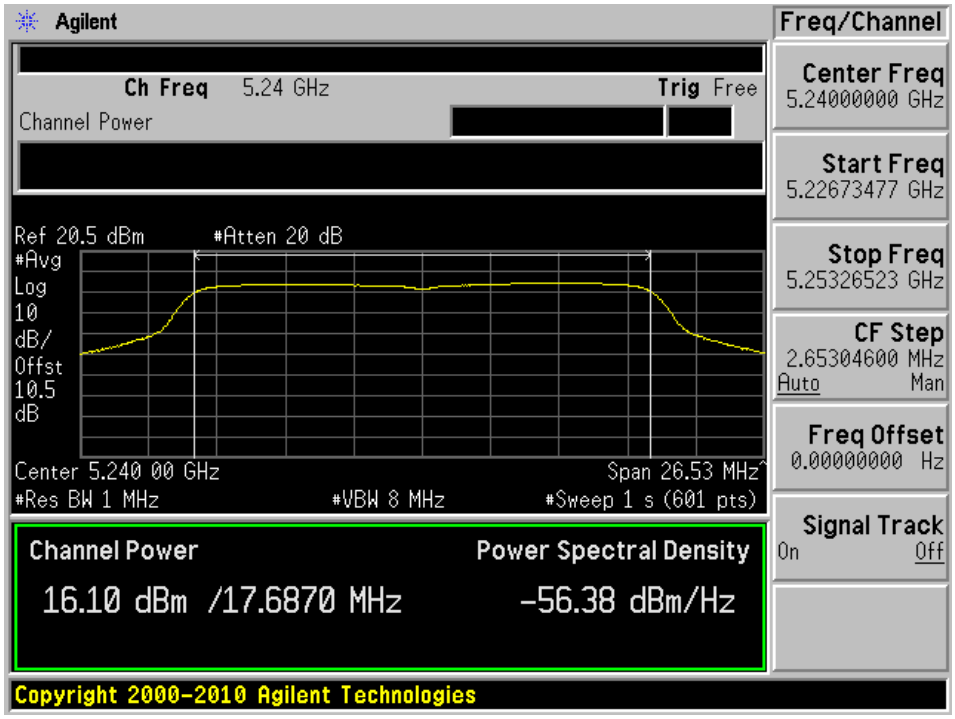
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

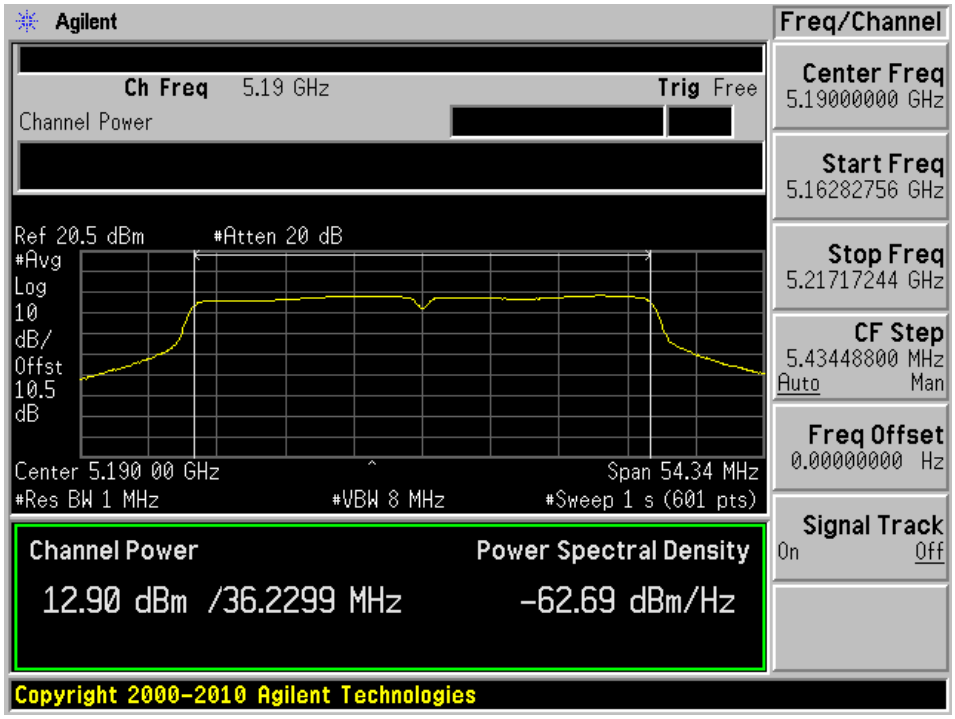


802.11n20 High channel: 5240 MHz

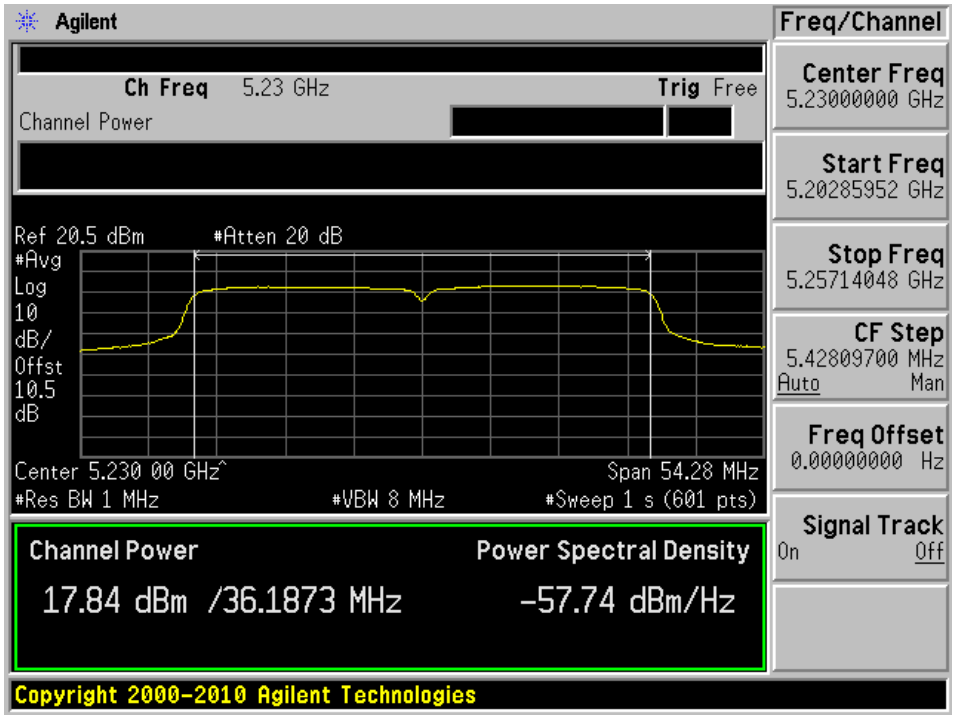


802.11n40 mode, 8 dBi Antenna Chain 0

802.11n40 Low channel: 5190 MHz

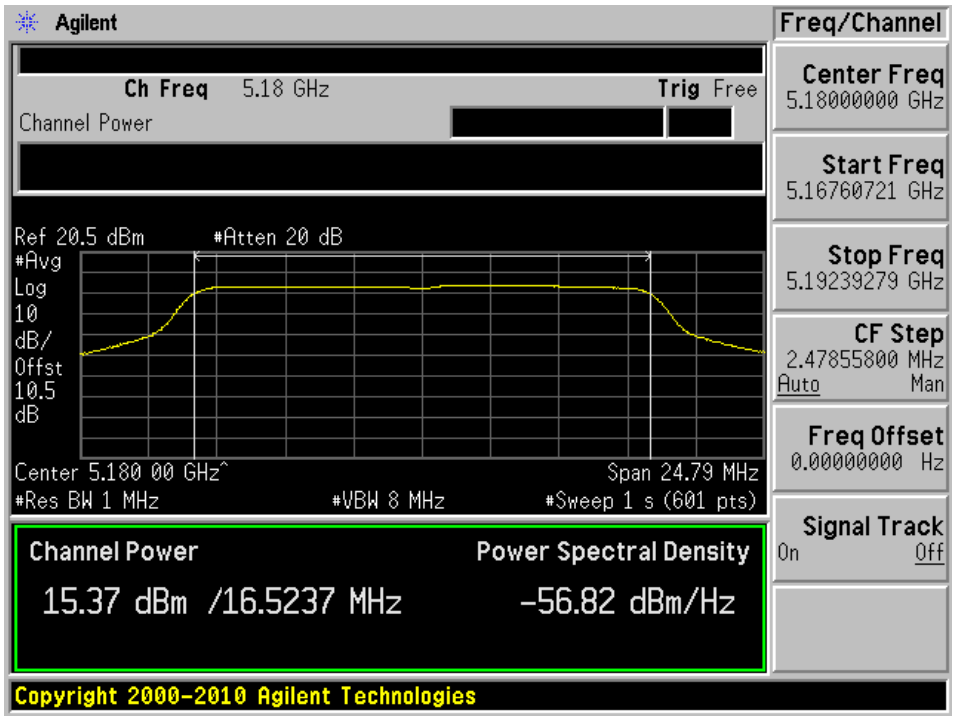


802.11n40 High Channel: 5230 MHz

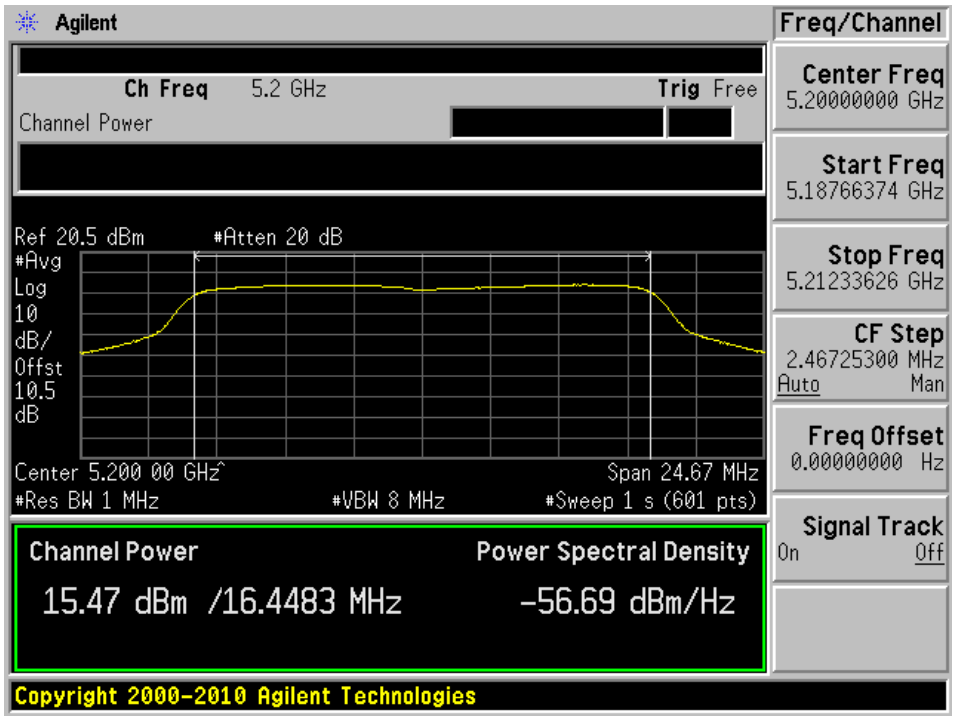


802.11a mod, 8 dBi Antenna Chain 1

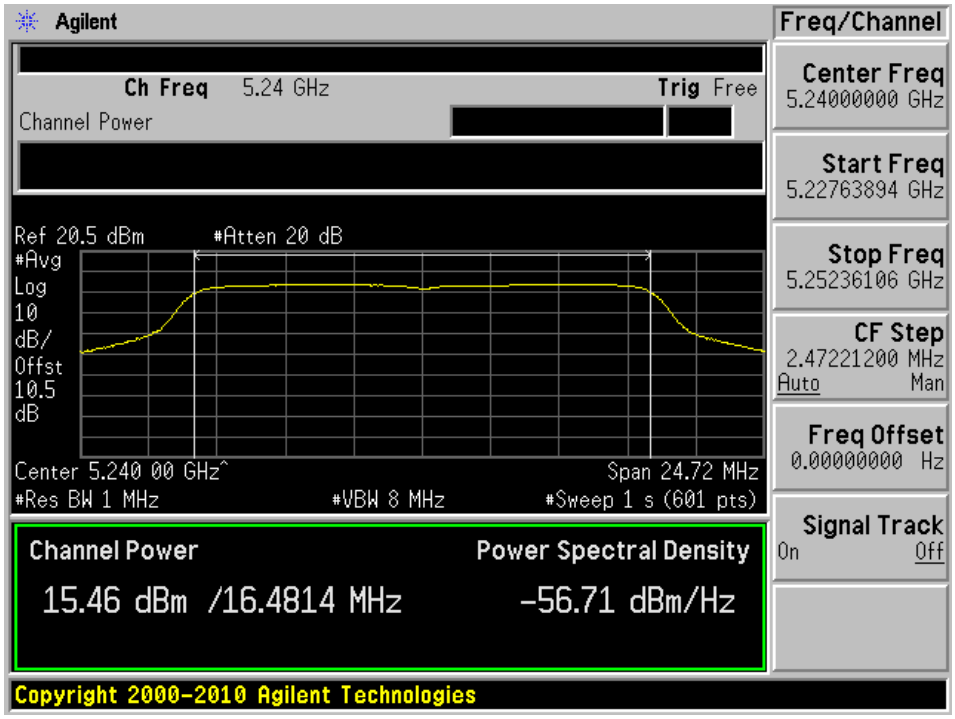
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

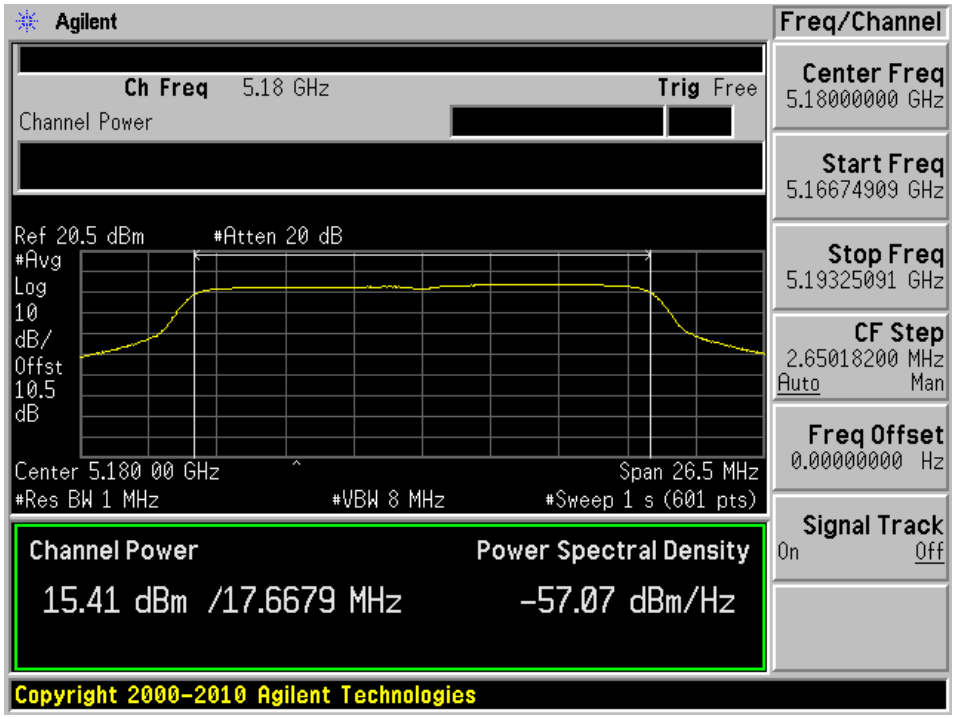


802.11a High channel: 5240 MHz

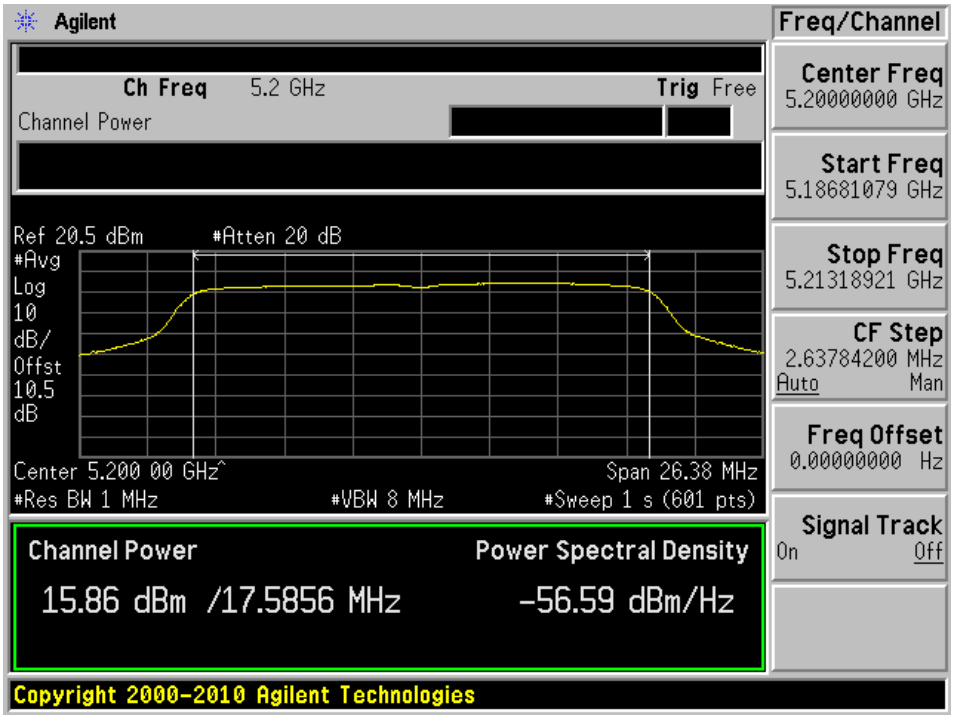


802.11 n20 mode, 8 dBi Antenna Chain 1

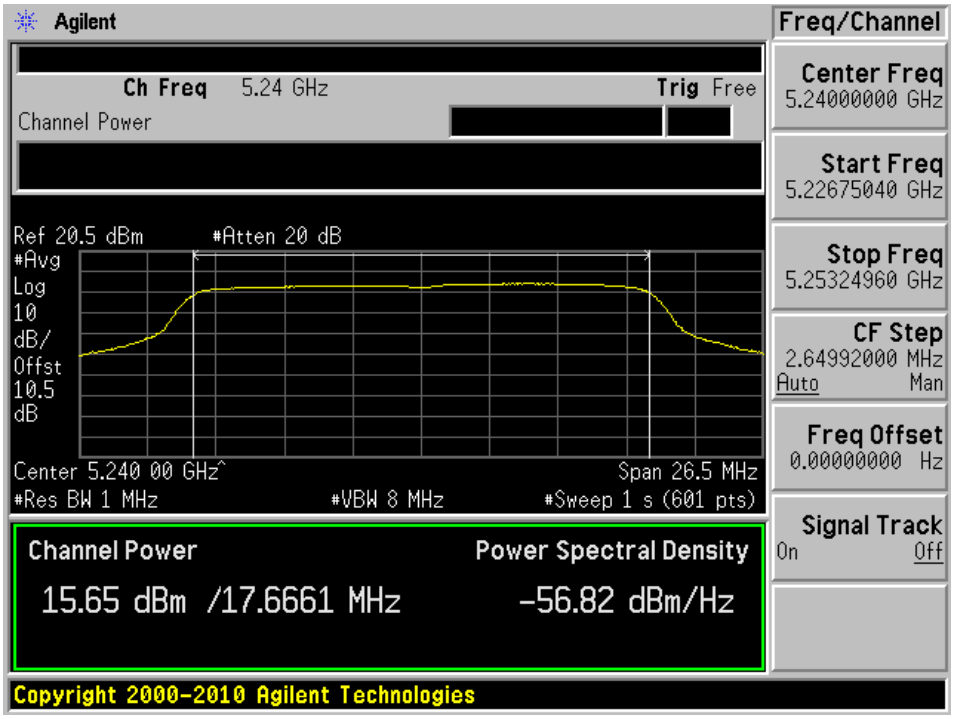
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

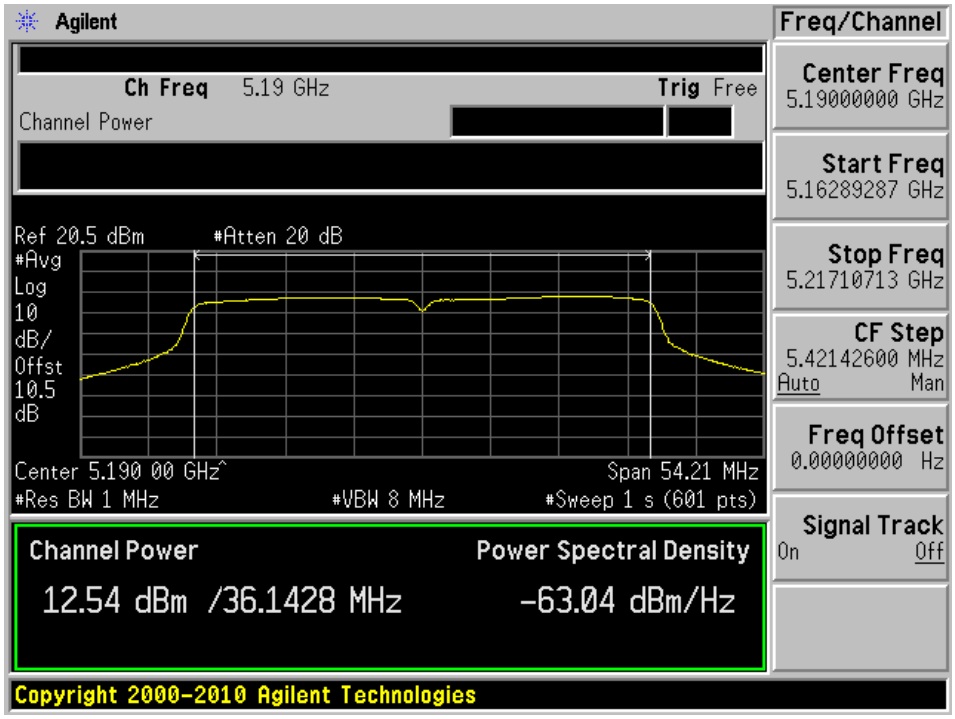


802.11n20 High channel: 5240 MHz

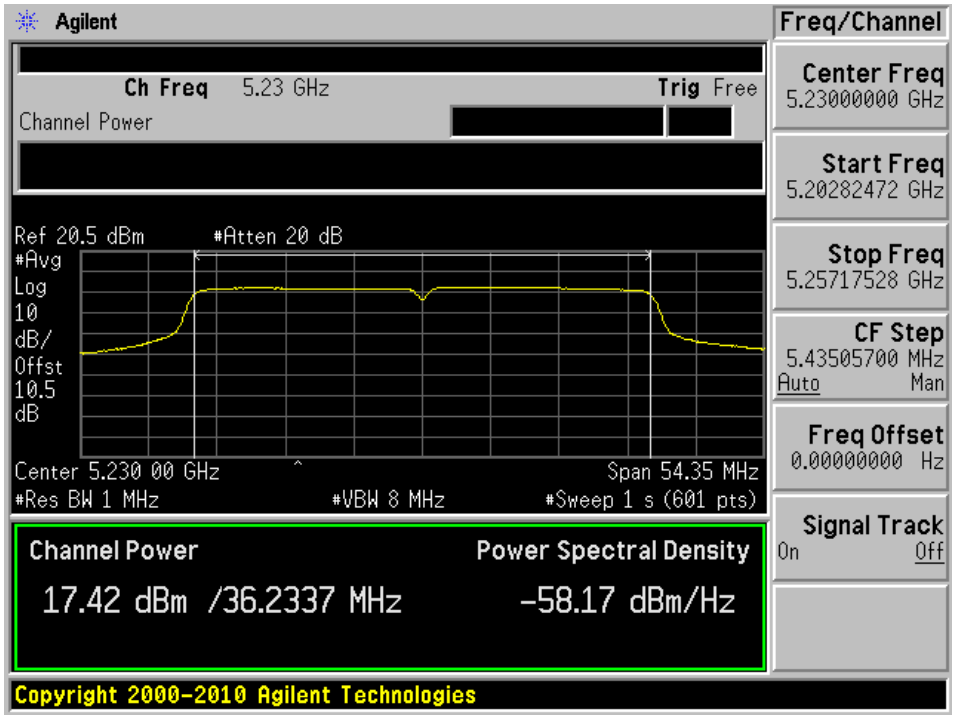


802.11n40 mode, 8 dBi Antenna Chain 1

802.11n40 Low channel: 5190 MHz

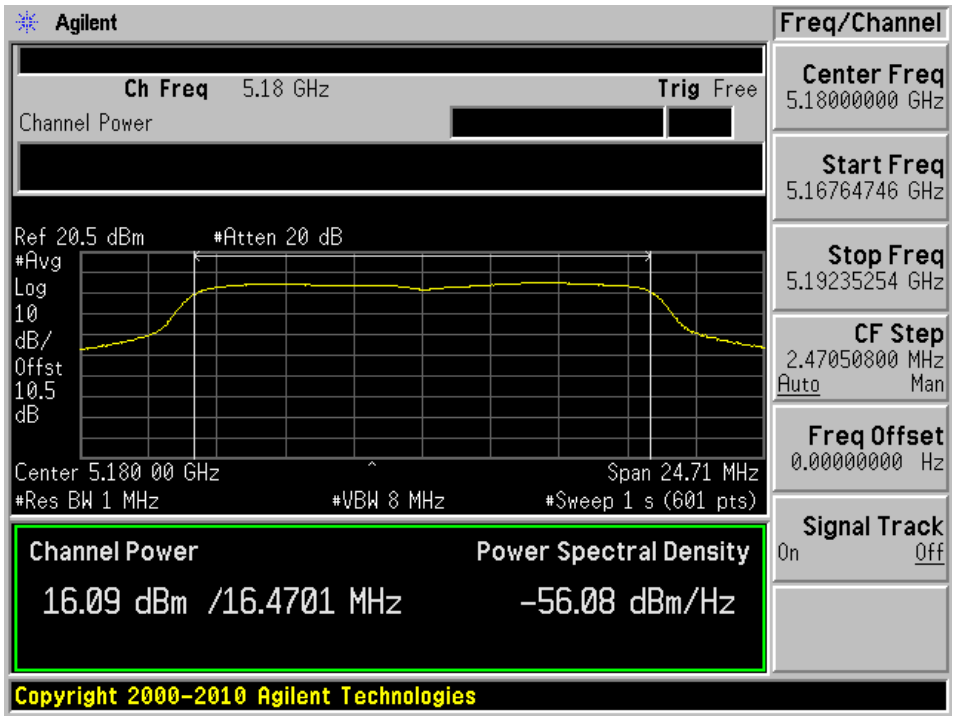


802.11n40 High Channel: 5230 MHz

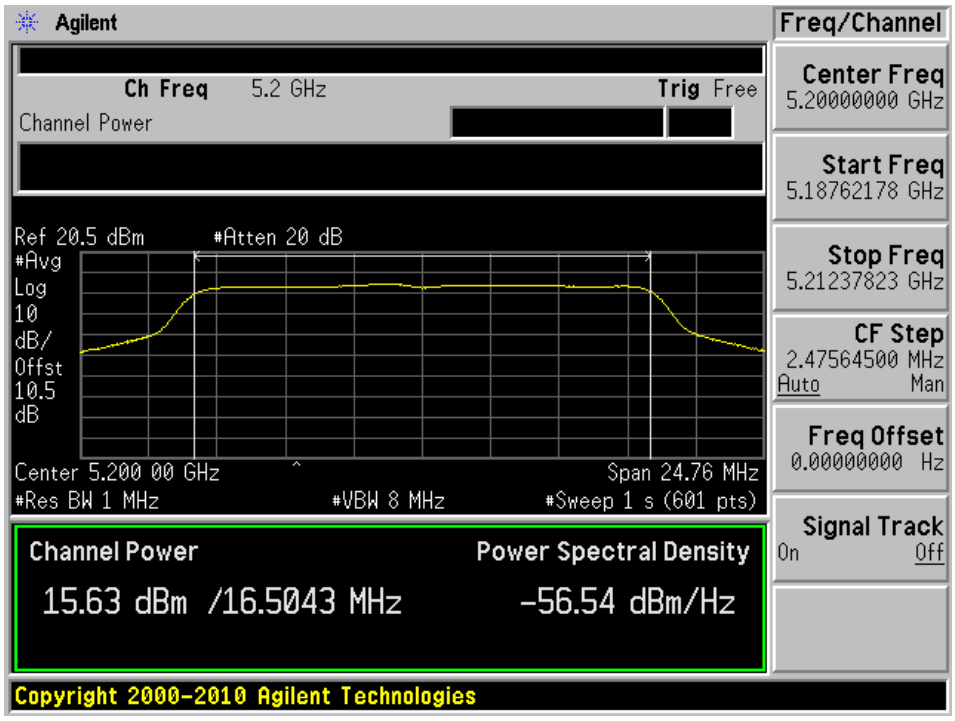


802.11a mode, 8 dBi Antenna Chain 2

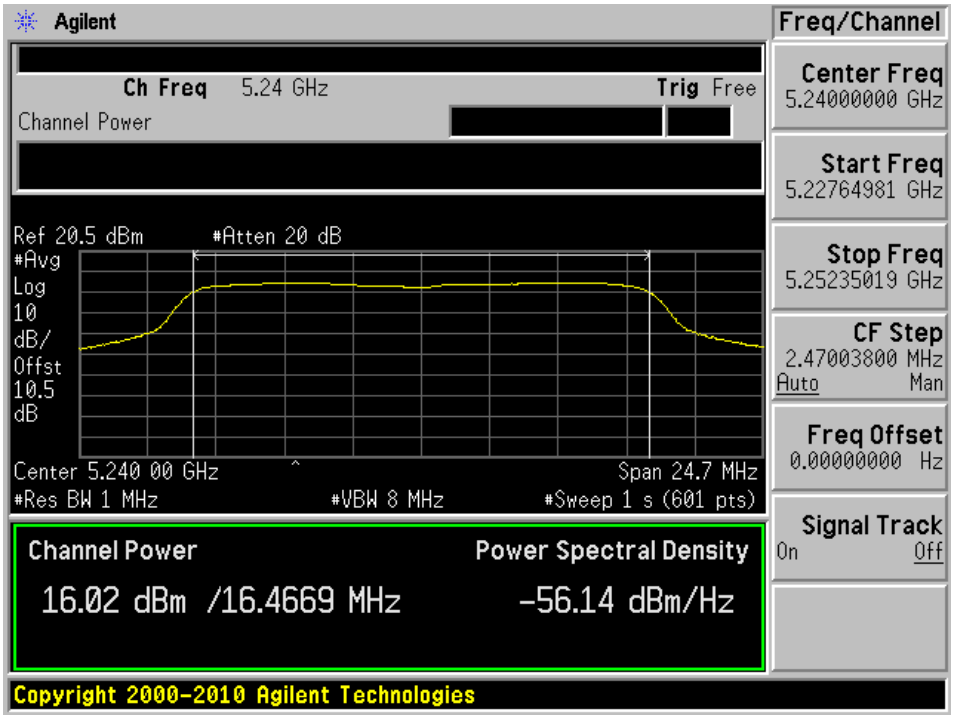
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

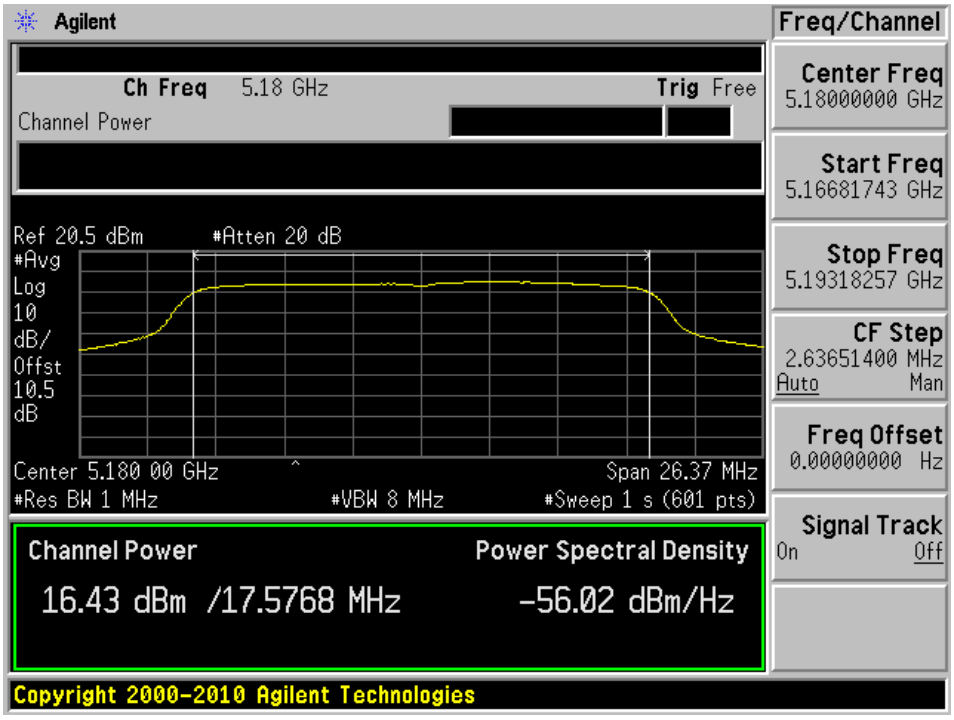


802.11a High channel: 5240 MHz

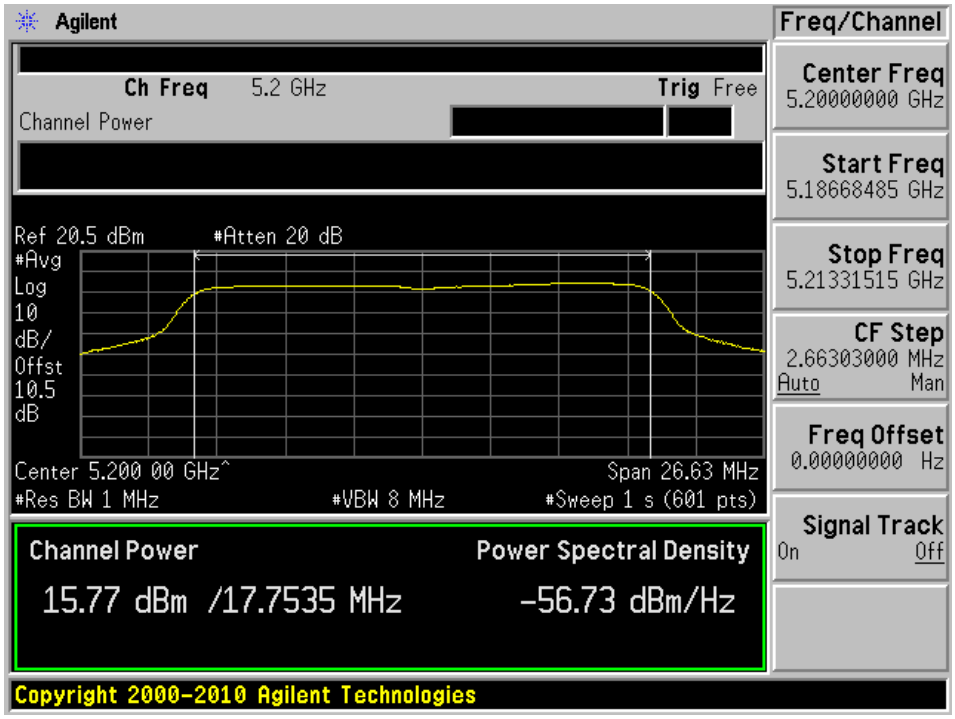


802.11 n20 mode, 8 dBi Antenna Chain 2

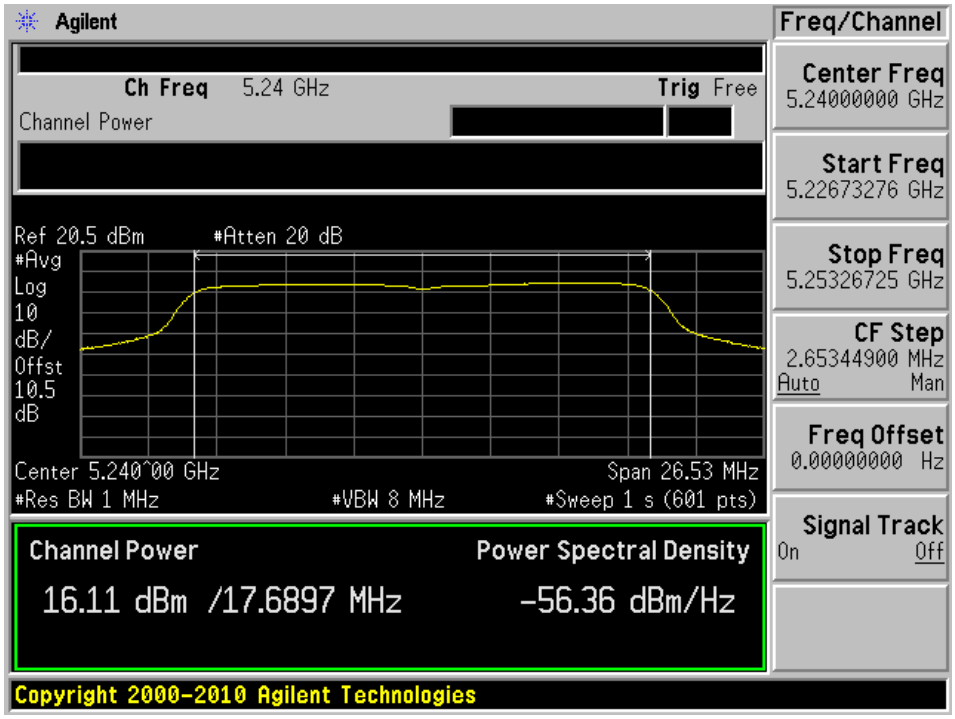
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

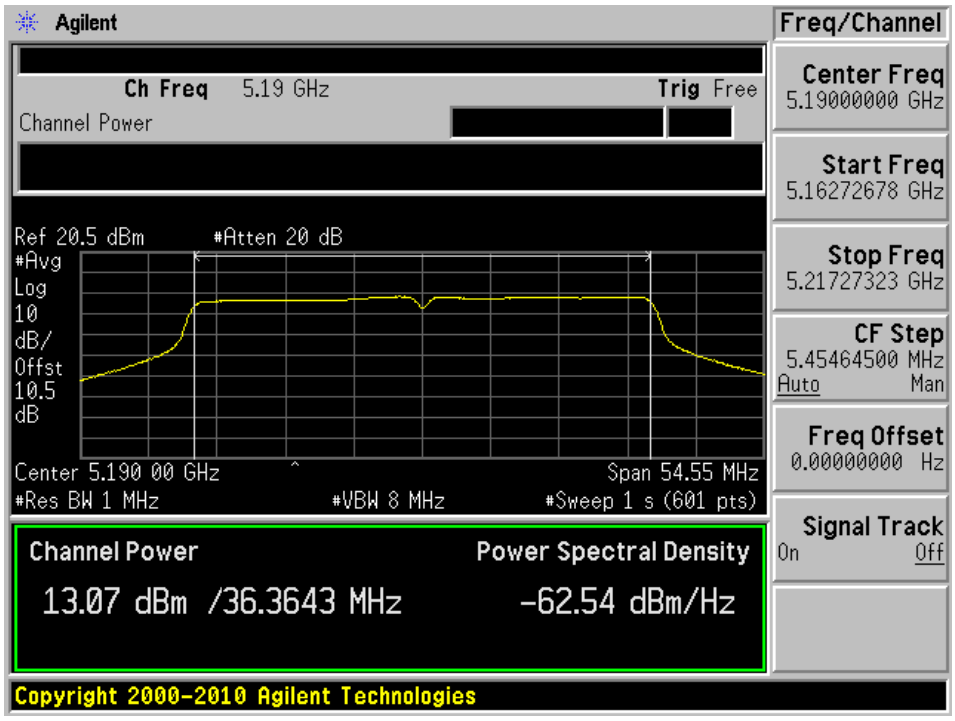


802.11n20 High channel: 5240 MHz

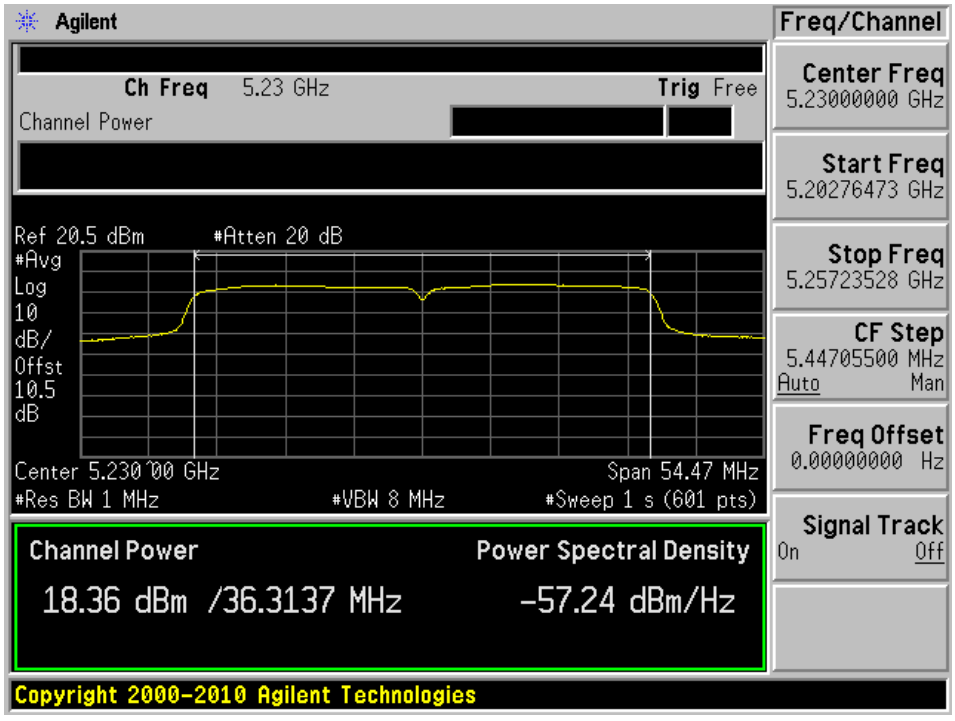


802.11n40 mode, 8 dBi Antenna Chain 2

802.11n40 Low channel: 5190 MHz



802.11n40 High Channel: 5230 MHz



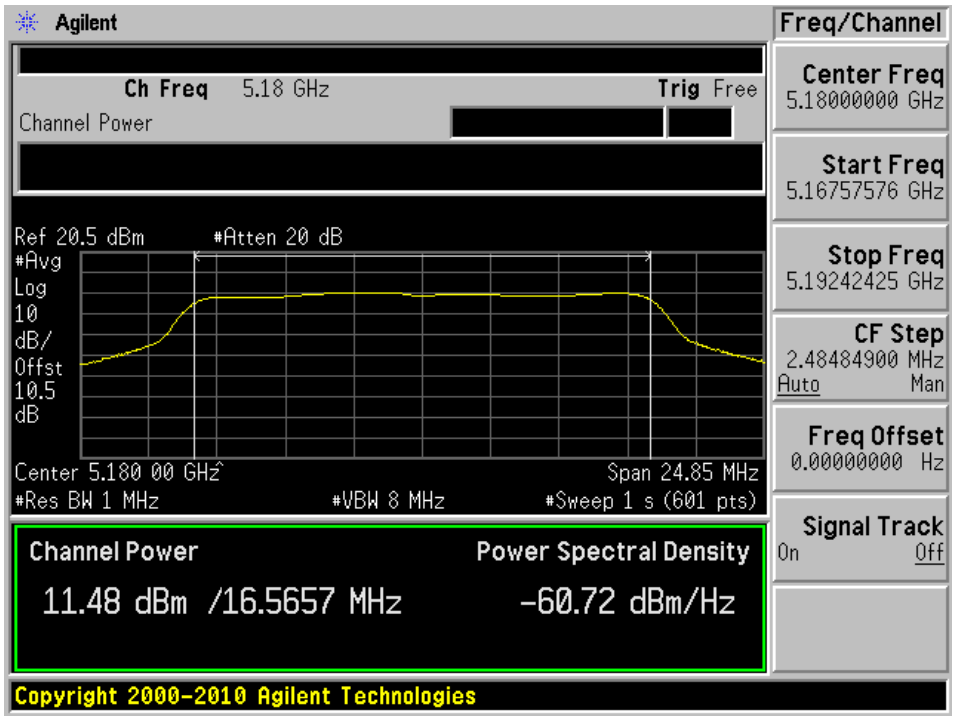
5.2 GHz Band, 12 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5180	11.48	10.76	11.34	15.98	24	-8.02
Middle	5200	12.54	11.24	11.94	16.71	24	-7.29
High	5240	12.62	11.49	12.28	16.93	24	-7.07
802.11n HT20 mode							
Low	5180	11.32	10.83	11.28	15.92	24	-8.08
Middle	5200	12.30	11.26	11.88	16.61	24	-7.39
High	5240	12.60	11.58	12.29	16.95	24	-7.05
802.11n HT40 mode							
Low	5190	11.54	10.60	11.42	15.98	24	-8.02
High	5230	13.64	13.22	14.04	18.42	24	-5.58

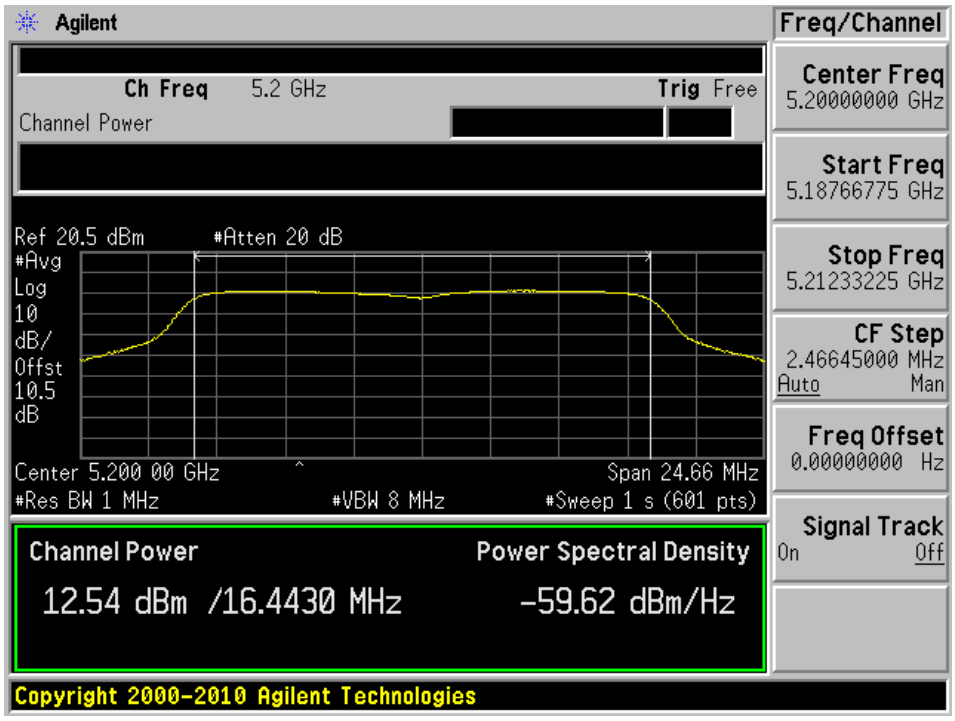
Note: Antenna gain over 6 dBi, therefore the limit is 30-(12-6) =24 dBm

802.11a mode, 12 dBi Antenna Chain 0

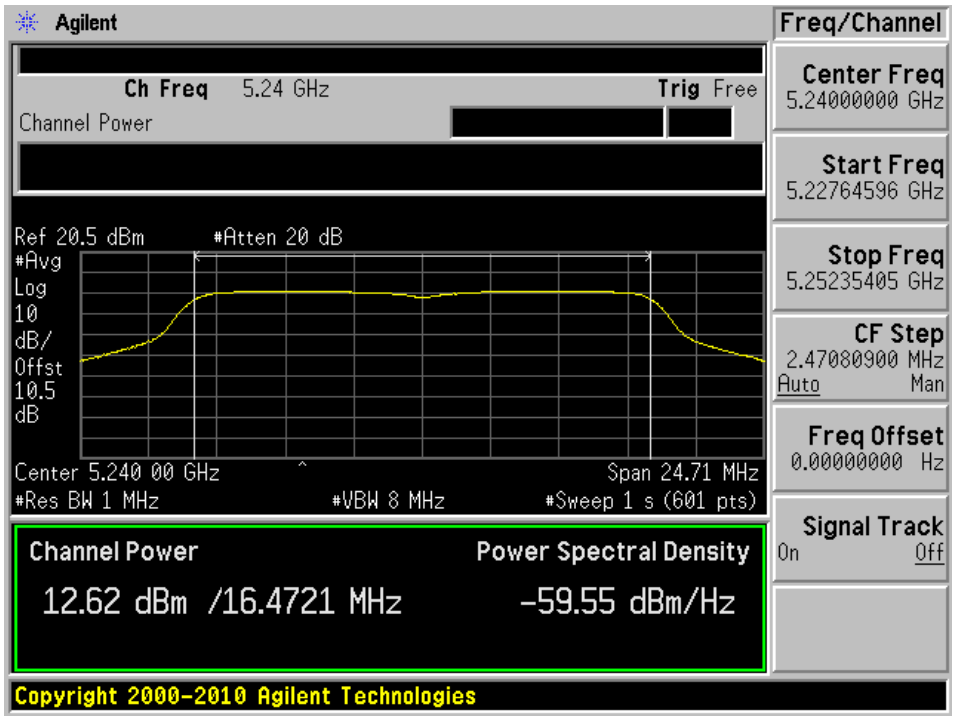
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

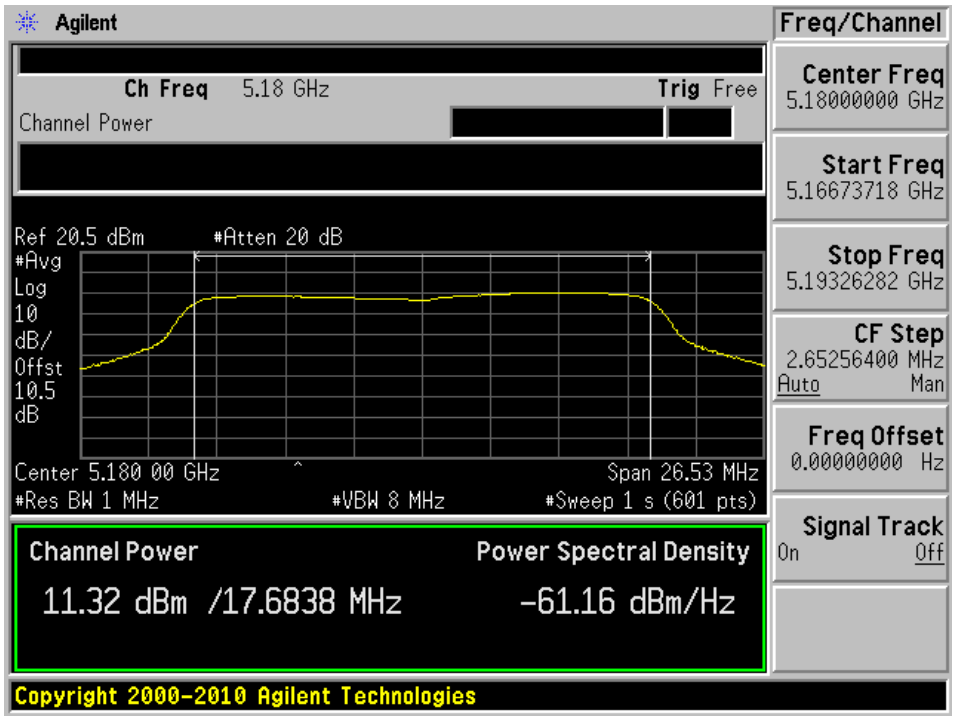


802.11a High channel: 5240 MHz

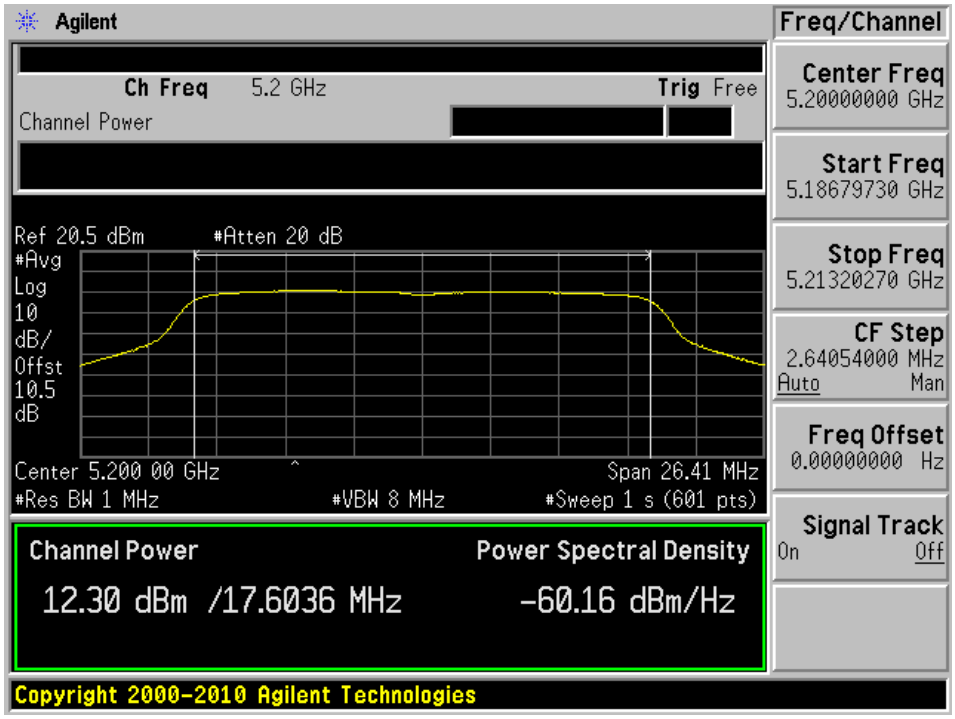


802.11 n20 mode, 12 dBi Antenna Chain 0

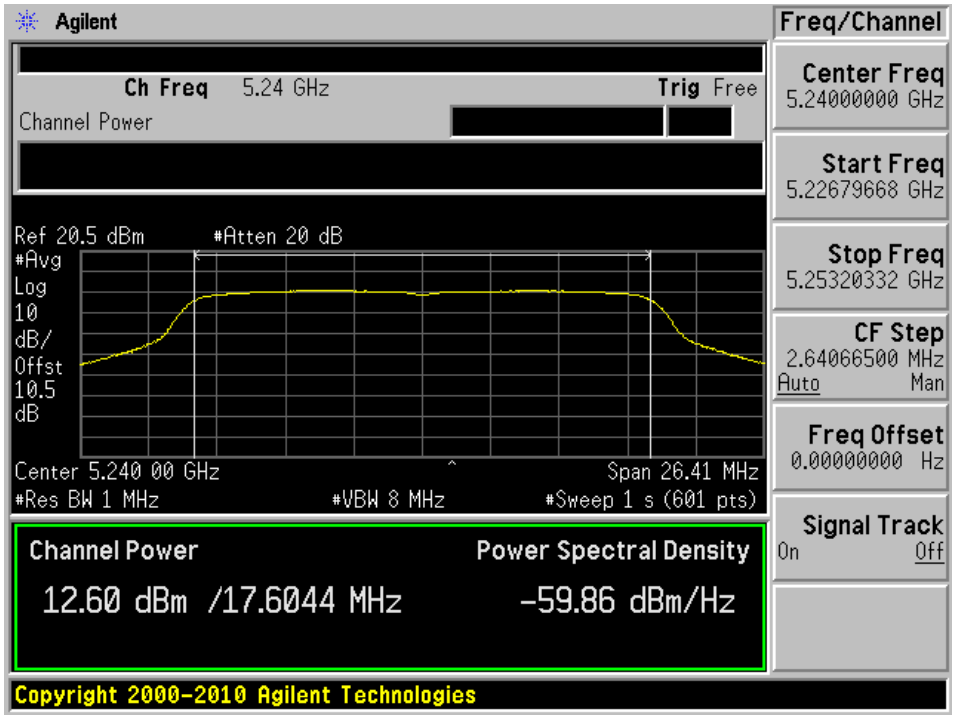
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

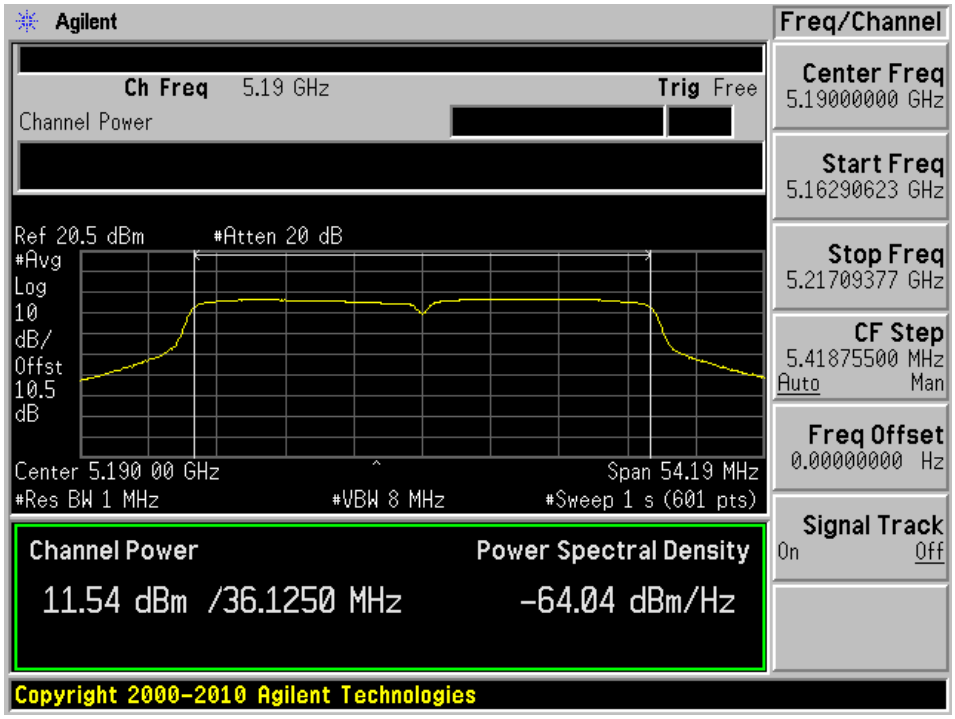


802.11n20 High channel: 5240 MHz

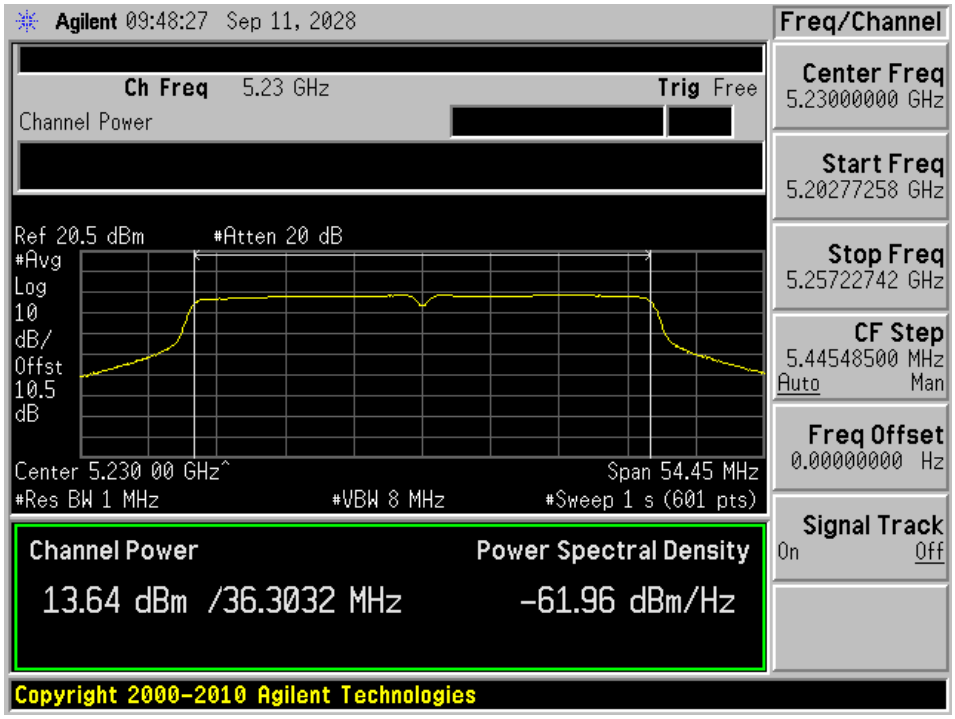


802.11n40 mode, 12 dBi Antenna Chain 0

802.11n40 Low channel: 5190 MHz

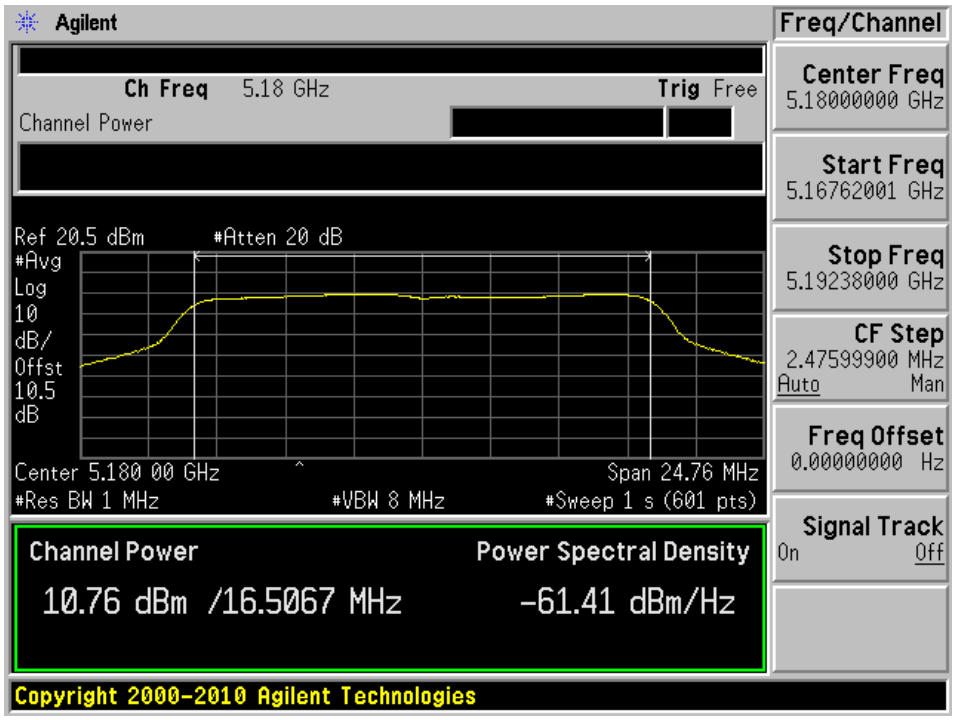


802.11n40 High Channel: 5230 MHz

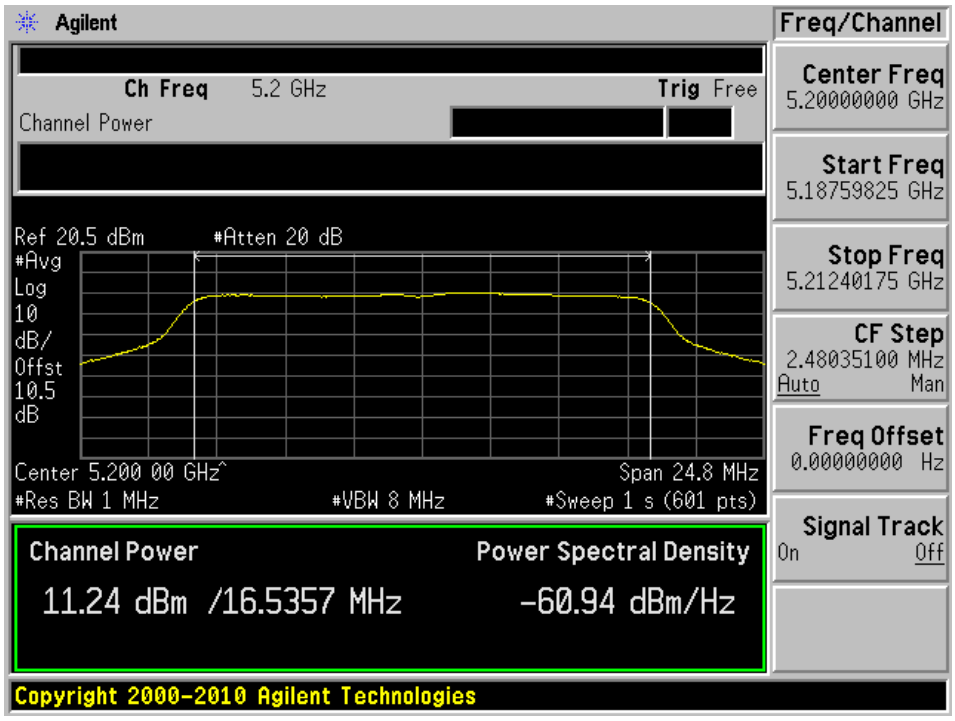


802.11a mode, 12 dBi Antenna Chain 1

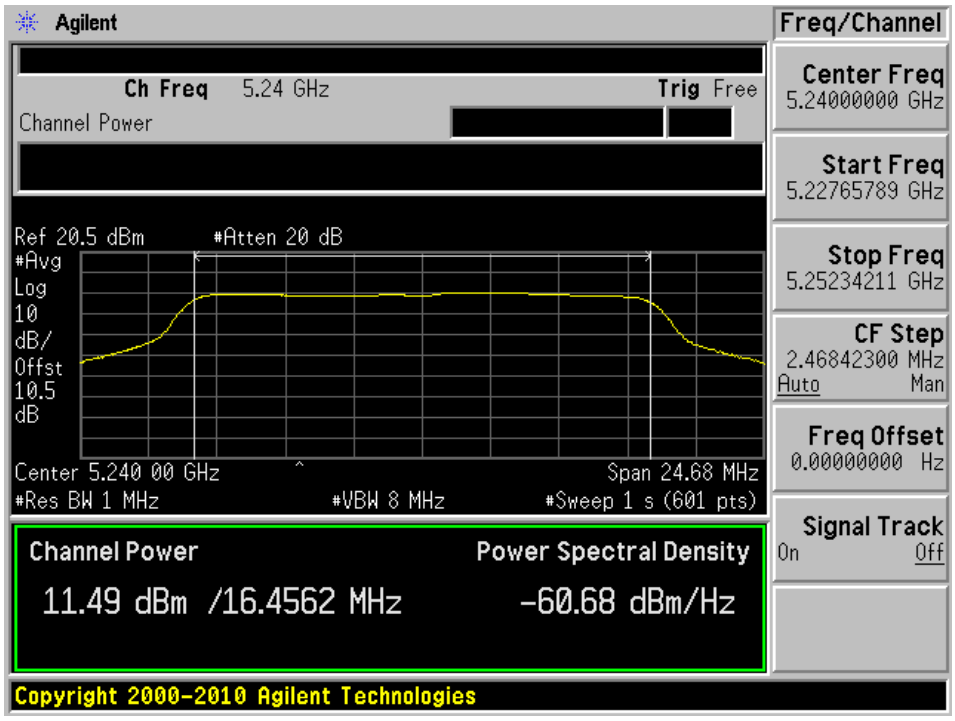
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

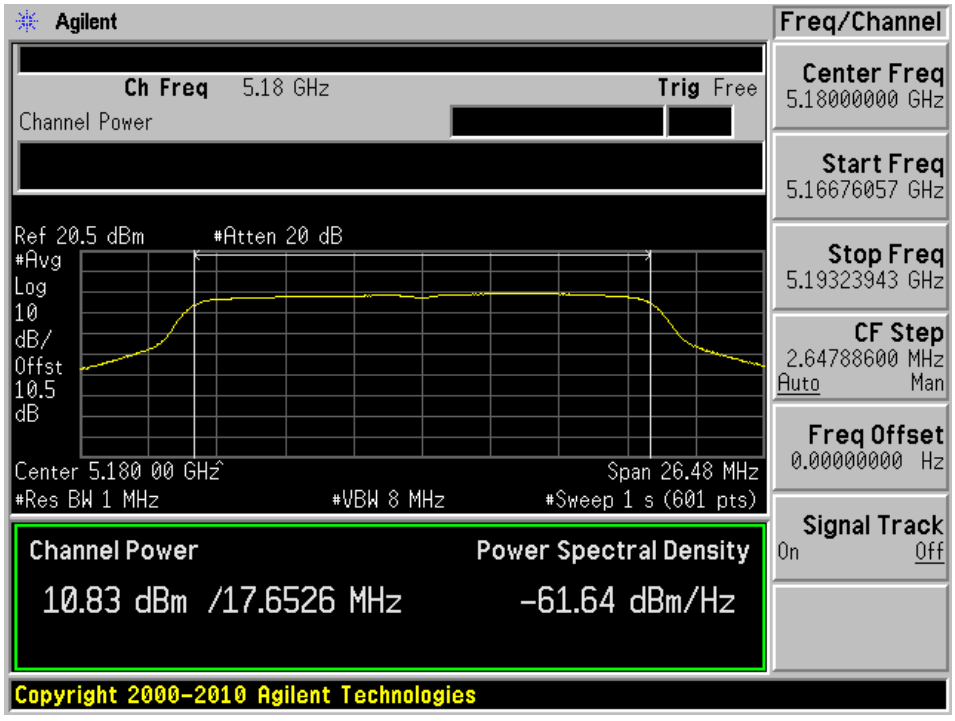


802.11a High channel: 5240 MHz

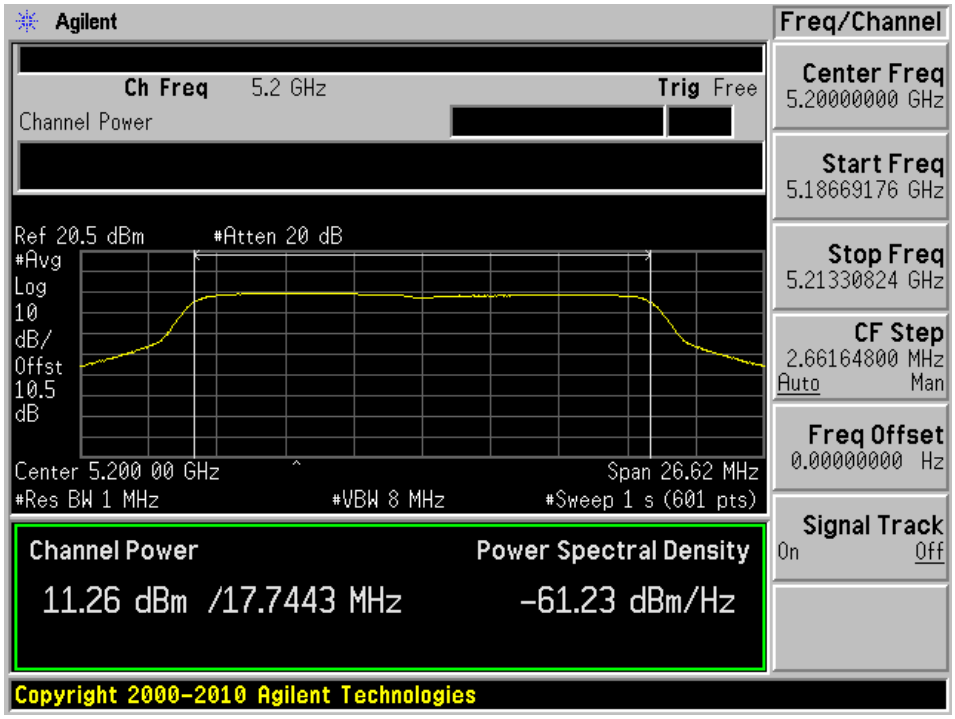


802.11 n20 mode, 12 dBi Antenna Chain 1

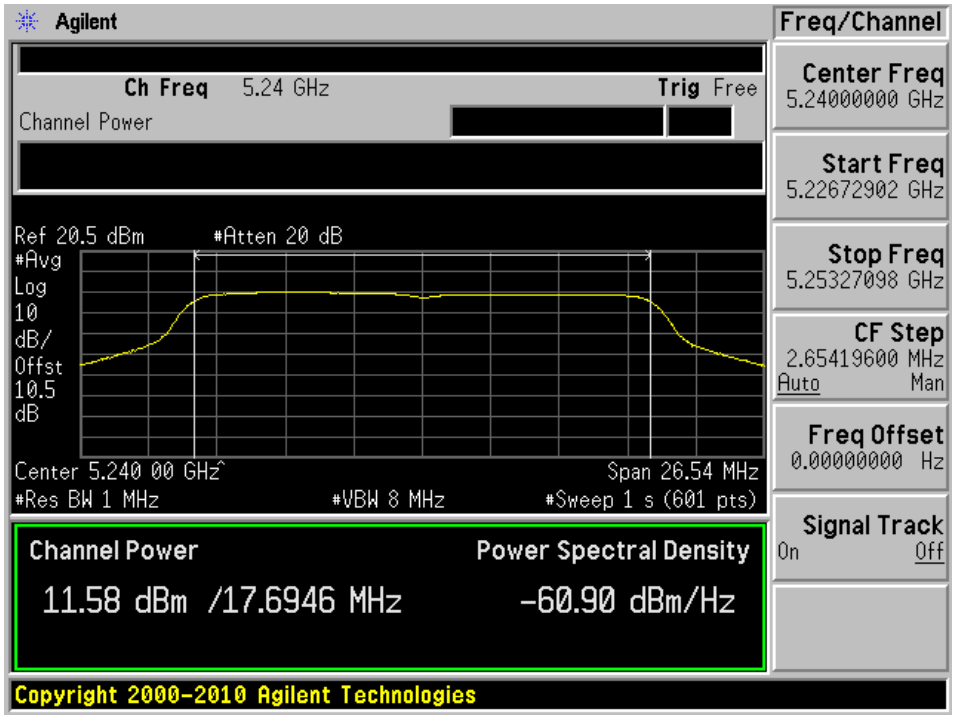
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

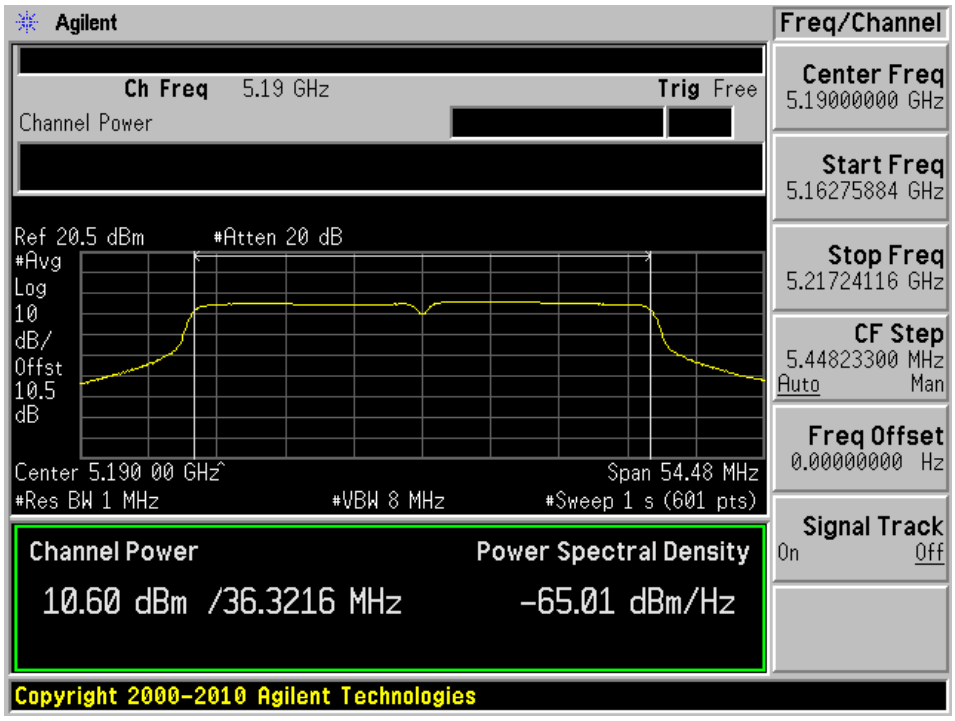


802.11n20 High channel: 5240 MHz

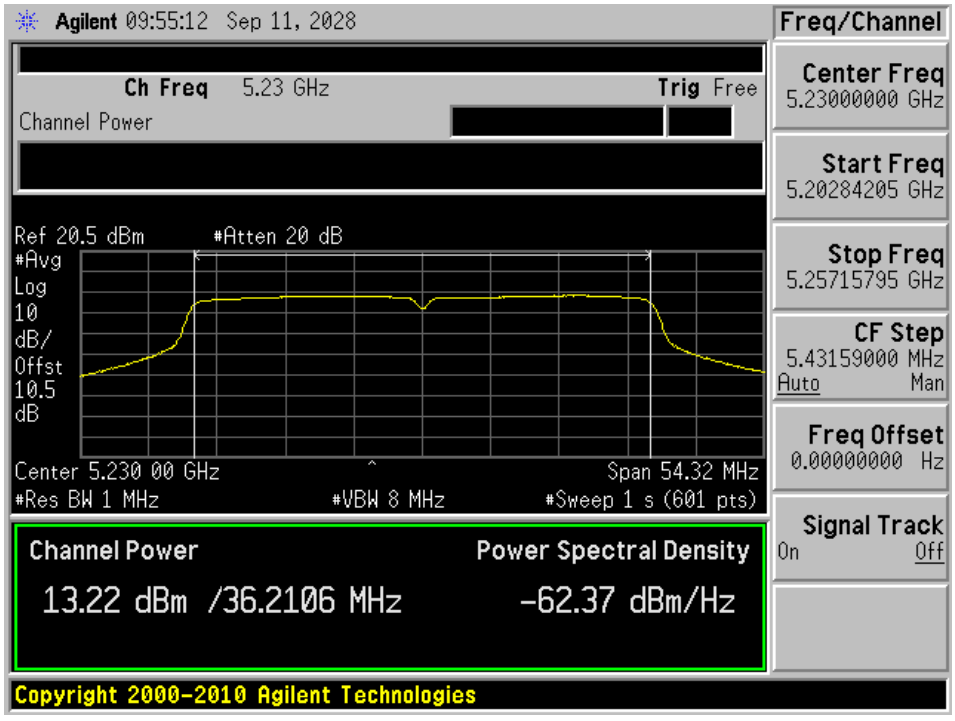


802.11n40 mode, 12 dBi Antenna Chain 1

802.11n40 Low channel: 5190 MHz

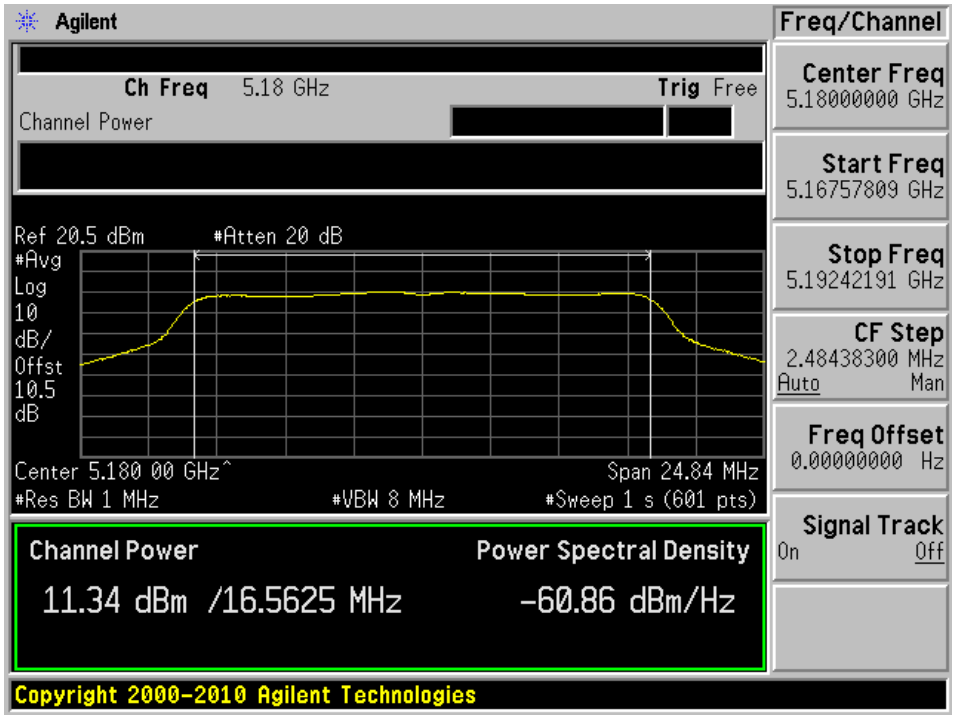


802.11n40 High Channel: 5230 MHz

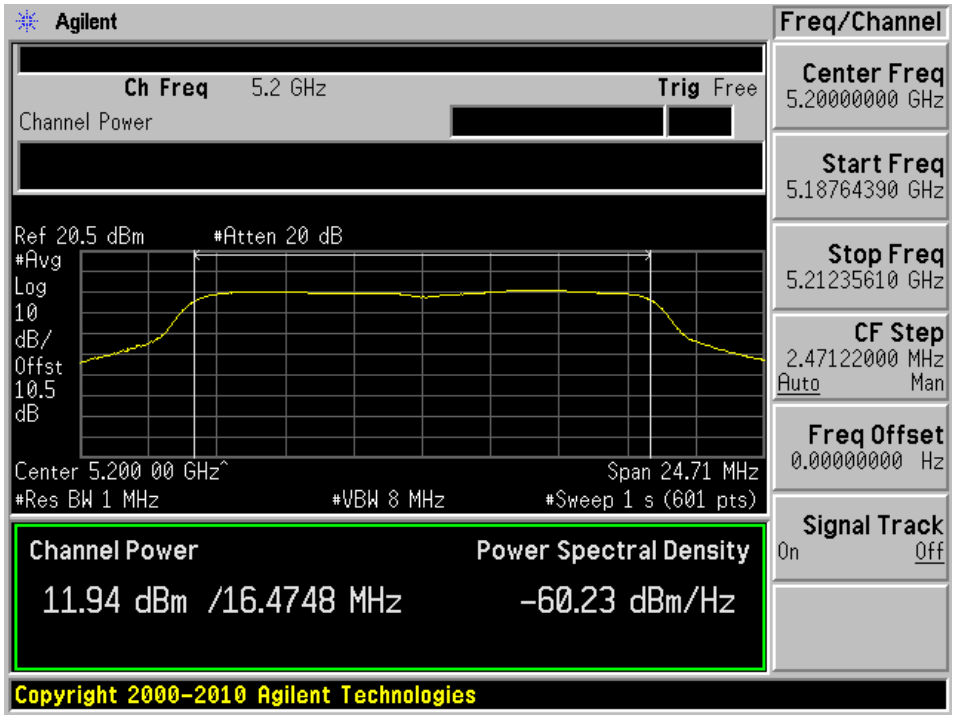


802.11a mode, 12 dBi Antenna Chain 2

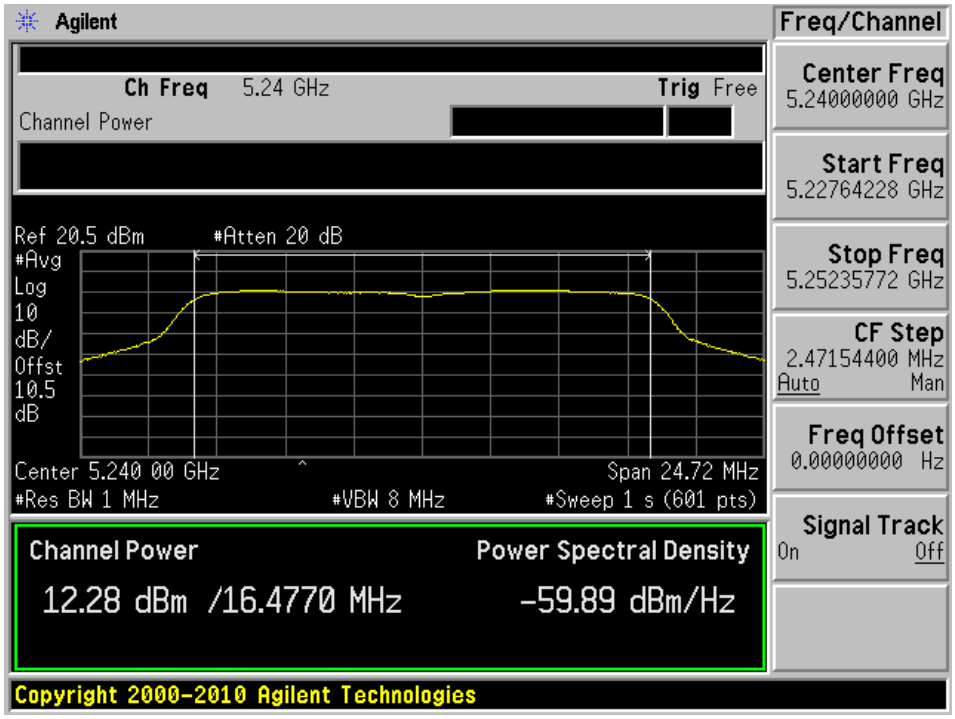
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

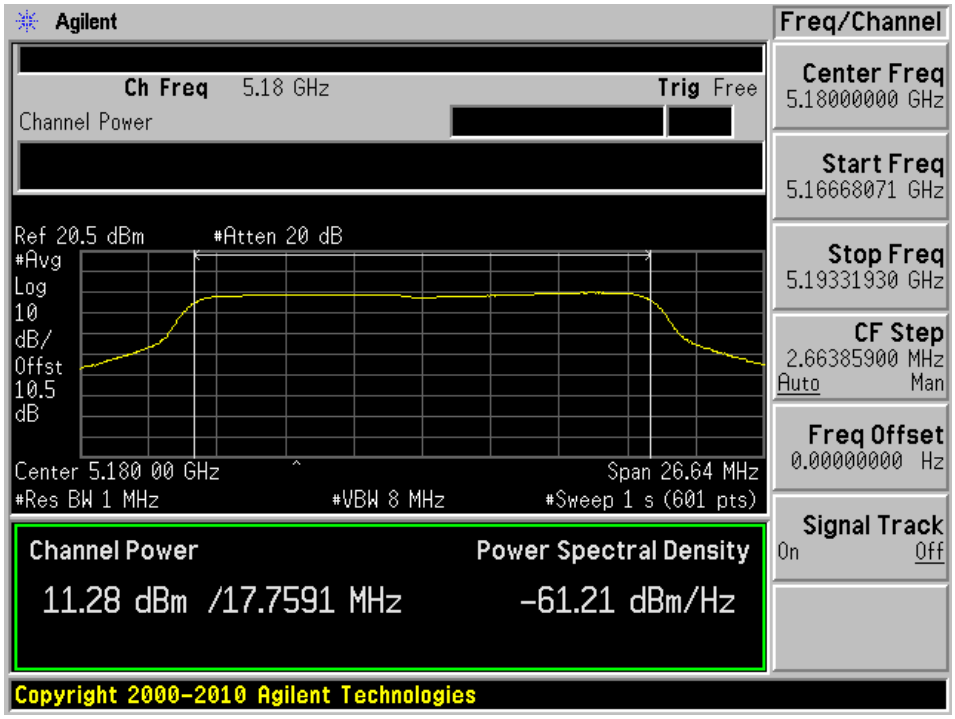


802.11a High channel: 5240 MHz

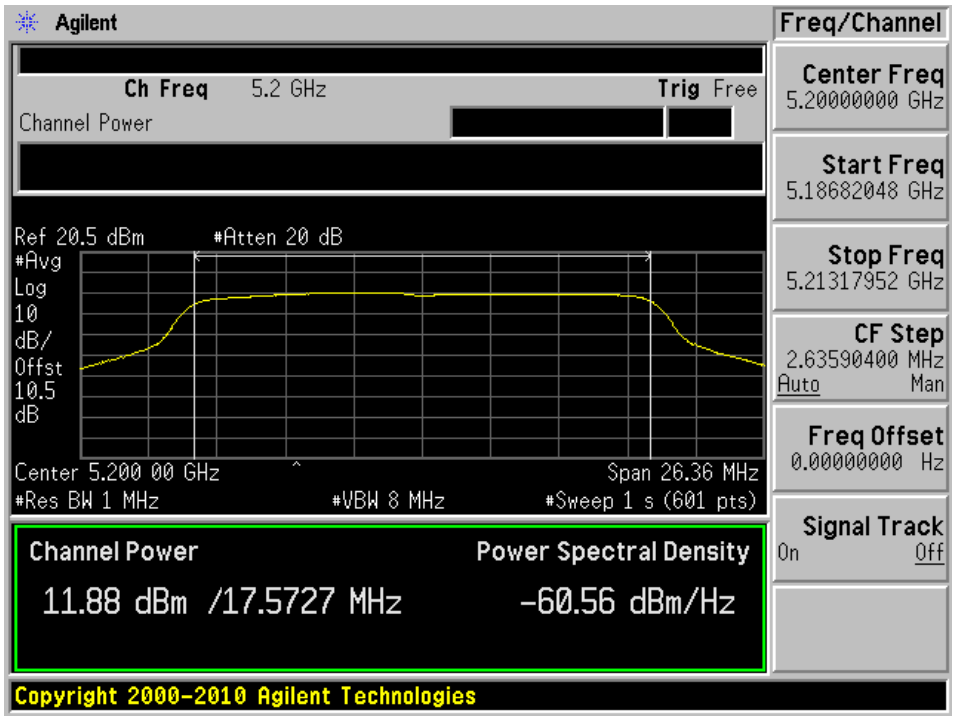


802.11 n20 mode, 12 dBi Antenna Chain 2

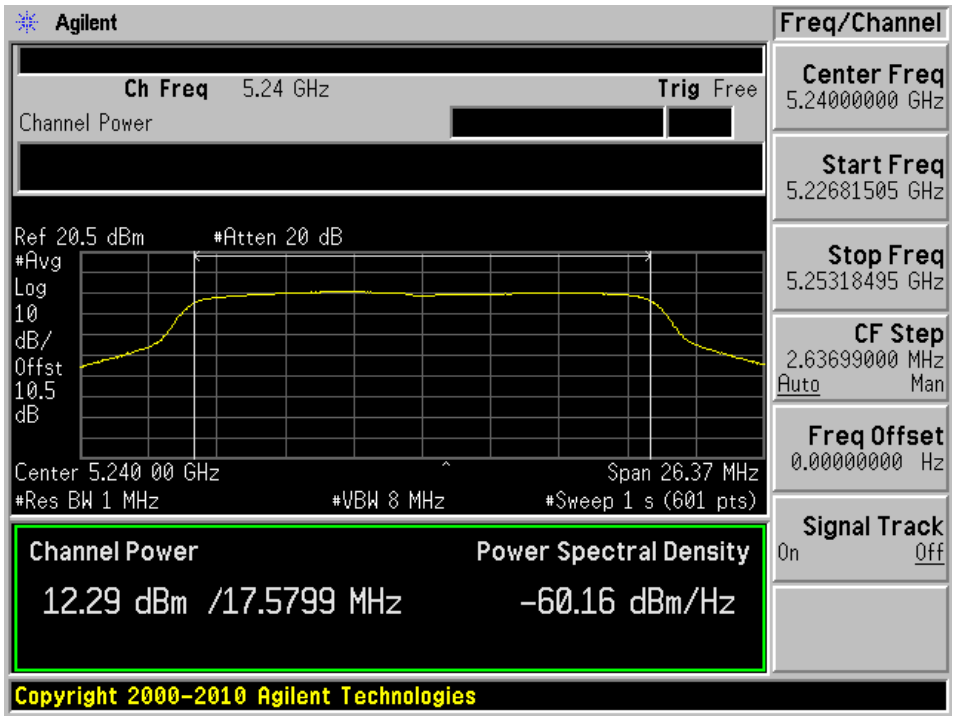
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

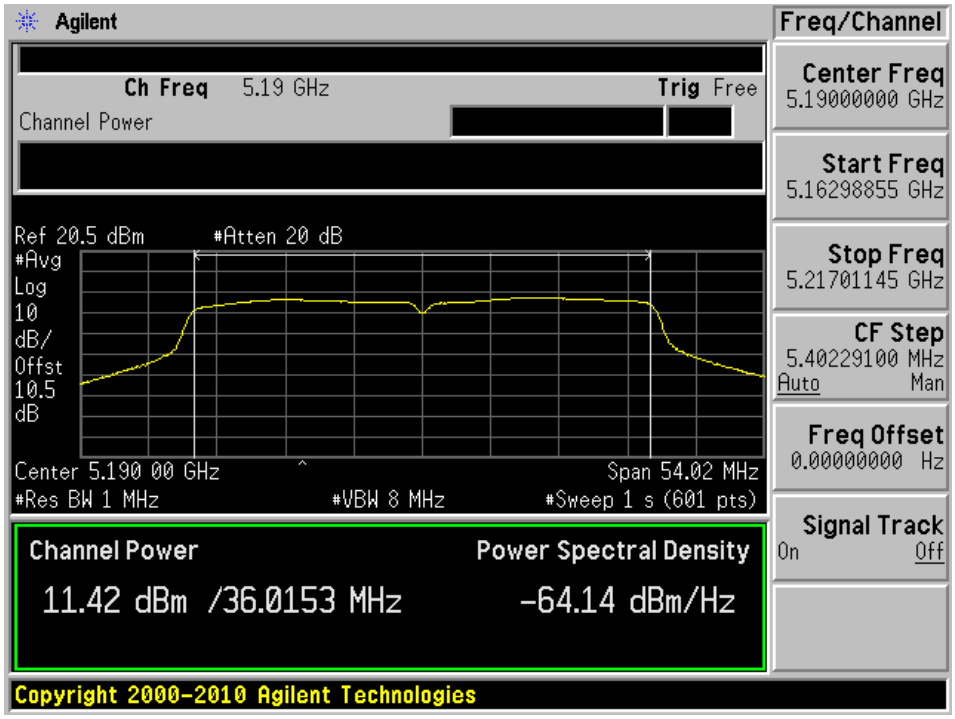


802.11n20 High channel: 5240 MHz

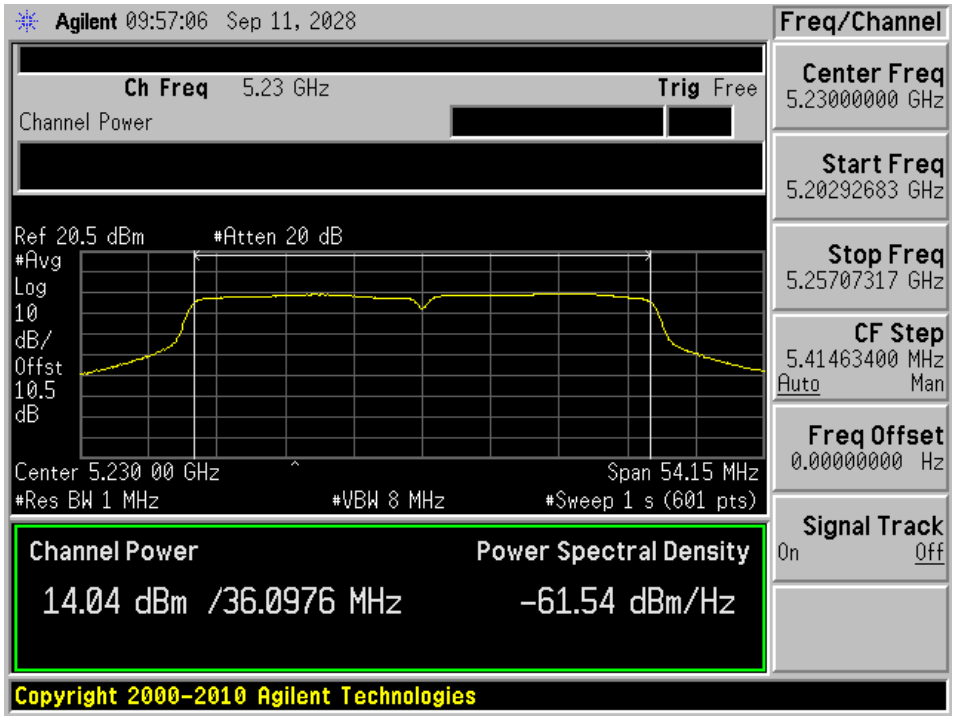


802.11n40 mode, 12 dBi Antenna Chain 2

802.11n40 Low channel: 5190 MHz



802.11n40 High Channel: 5230 MHz



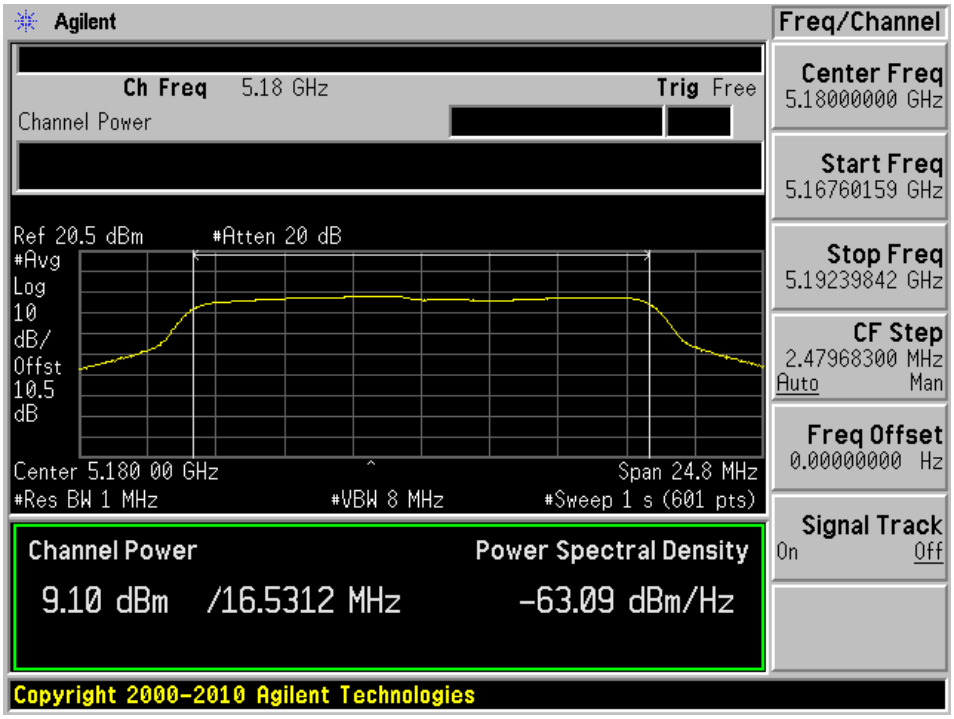
5.2 GHz Band, 15 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5180	9.10	8.54	9.55	13.85	21	-7.15
Middle	5200	9.27	8.50	9.43	13.86	21	-7.14
High	5240	9.62	9.14	9.57	14.22	21	-6.78
802.11n HT20 mode							
Low	5180	8.86	8.29	9.26	13.59	21	-7.41
Middle	5200	9.17	8.61	8.83	13.65	21	-7.35
High	5240	9.38	9.00	9.71	14.14	21	-6.86
802.11n HT40 mode							
Low	5190	9.17	8.42	9.57	13.85	21	-7.15
High	5230	10.51	9.88	10.87	15.21	21	-5.79

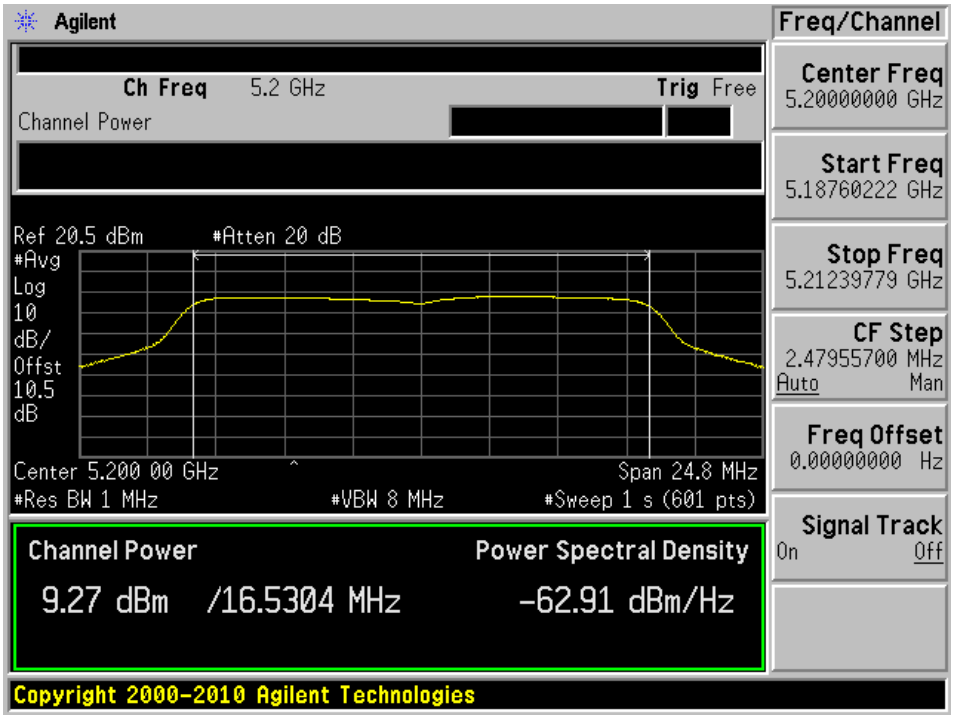
Note: Antenna gain over 6 dBi, therefore the limit is 30-(15-6) =21 dBm

802.11a mode, 15 dBi Antenna Chain 0

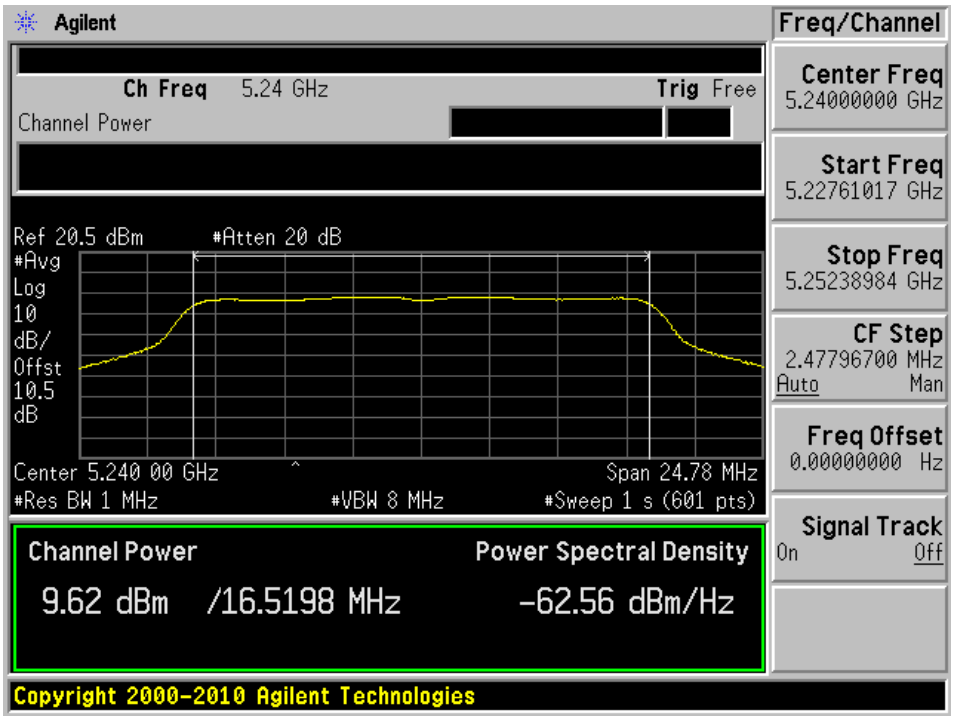
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

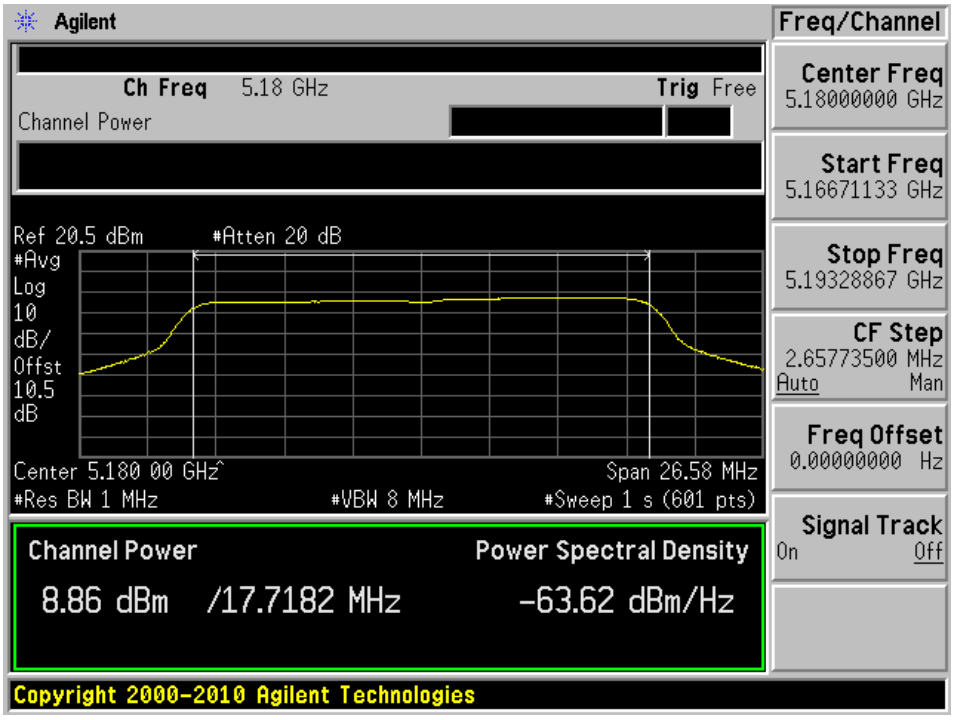


802.11a High channel: 5240 MHz

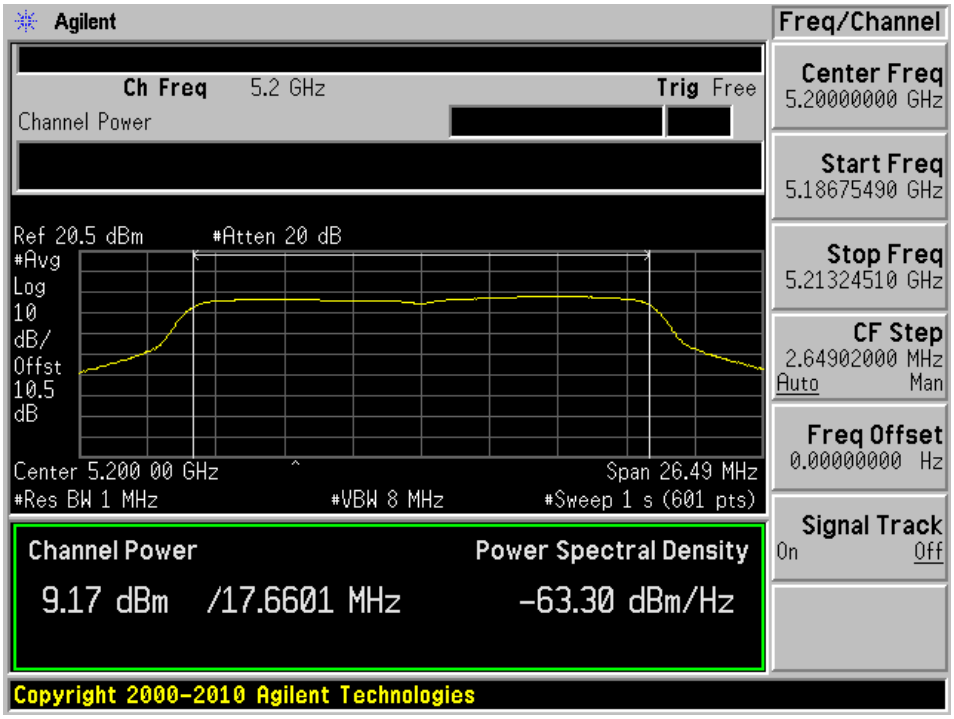


802.11 n20 mode, 15 dBi Antenna Chain 0

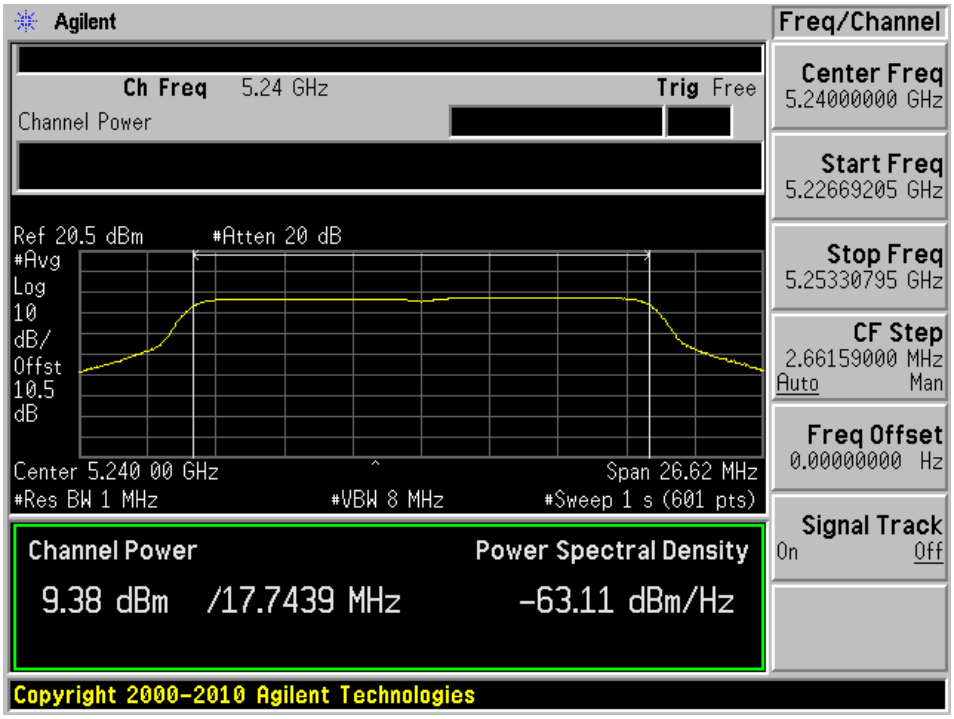
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

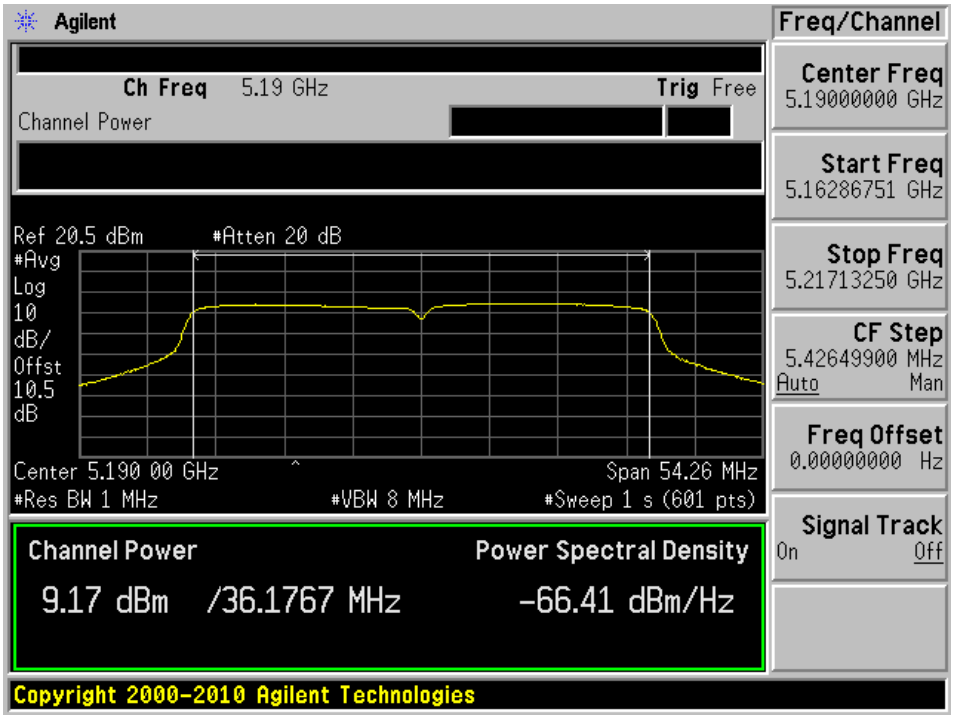


802.11n20 High channel: 5240 MHz

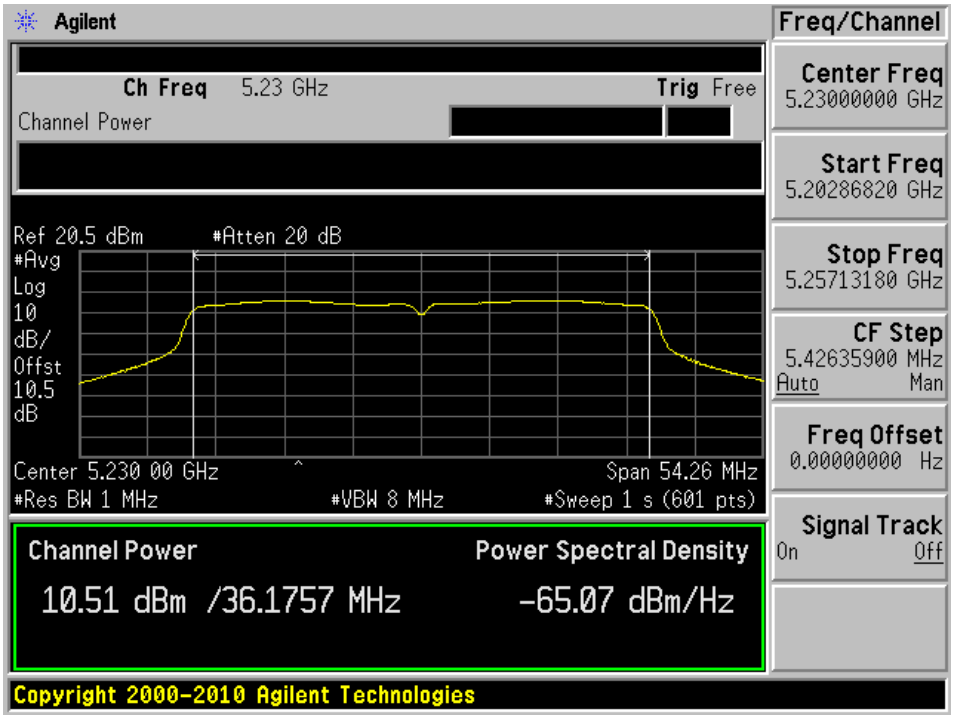


802.11n40 mode, 15 dBi Antenna Chain 0

802.11n40 Low channel: 5190 MHz

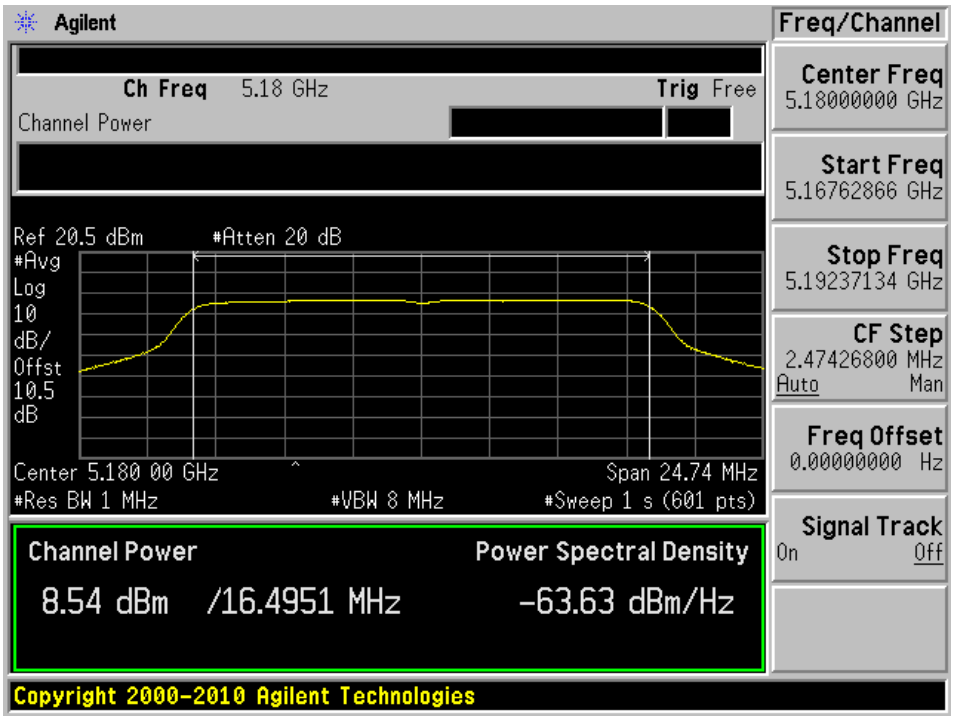


802.11n40 High Channel: 5230 MHz

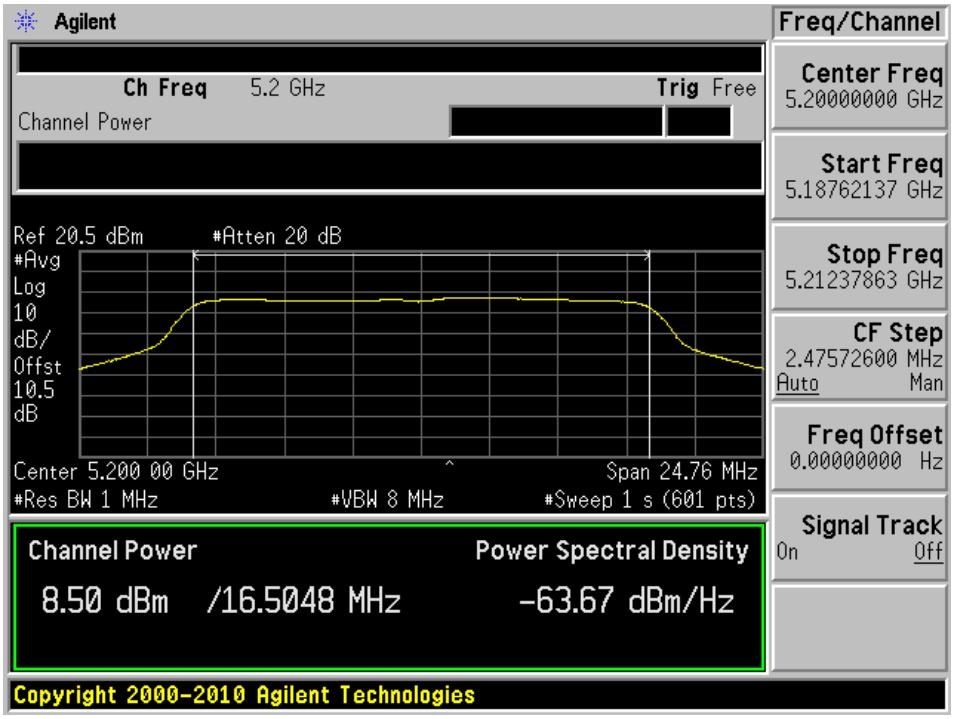


802.11a mode, 15 dBi Antenna Chain 1

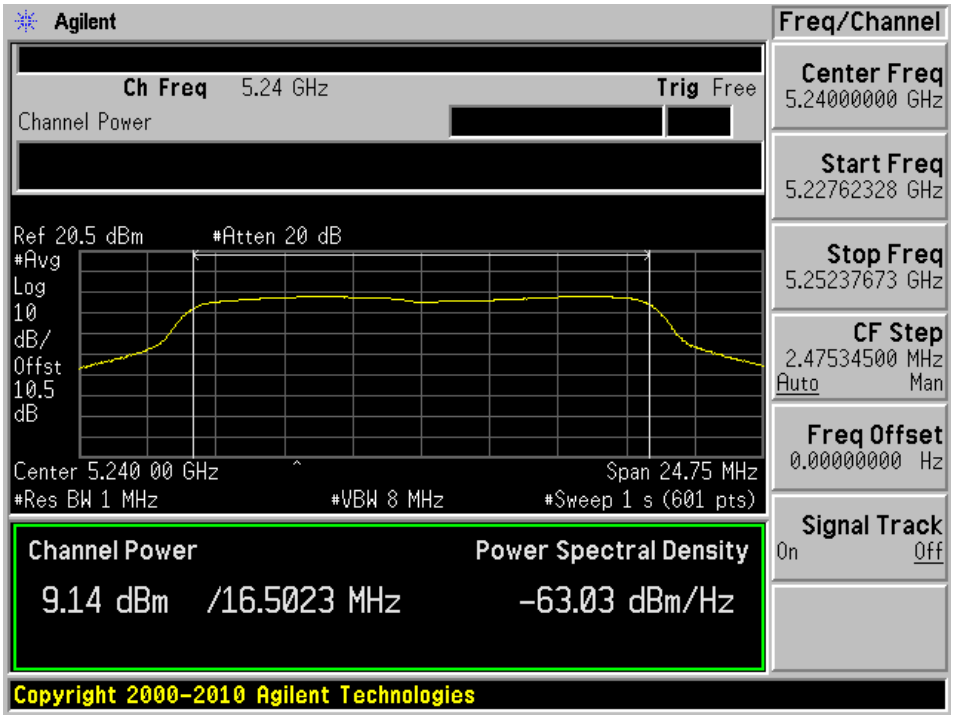
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

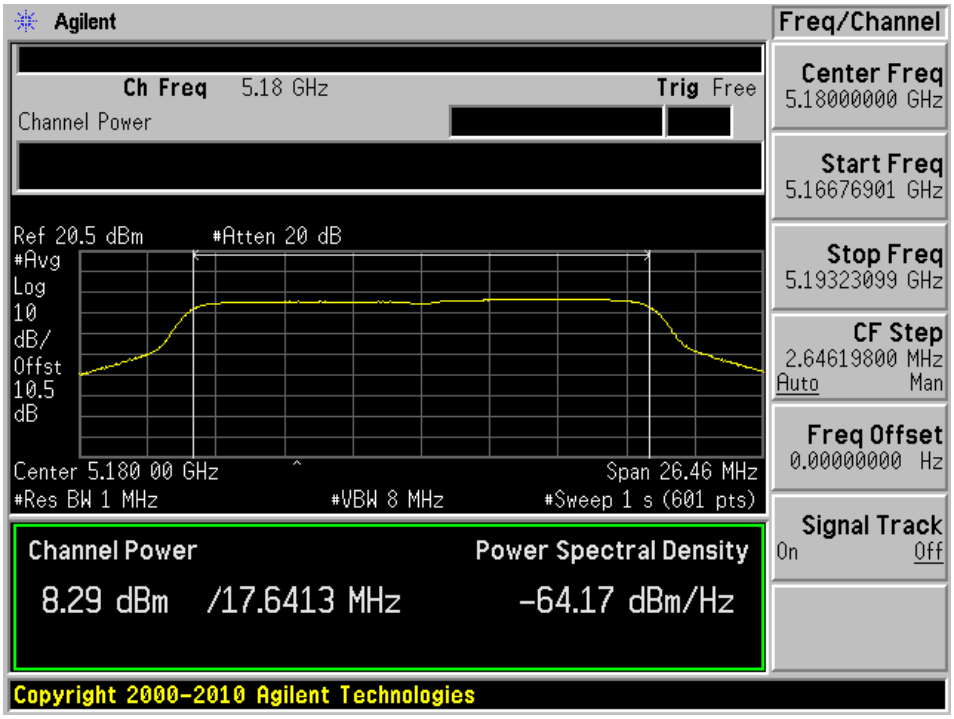


802.11a High channel: 5240 MHz

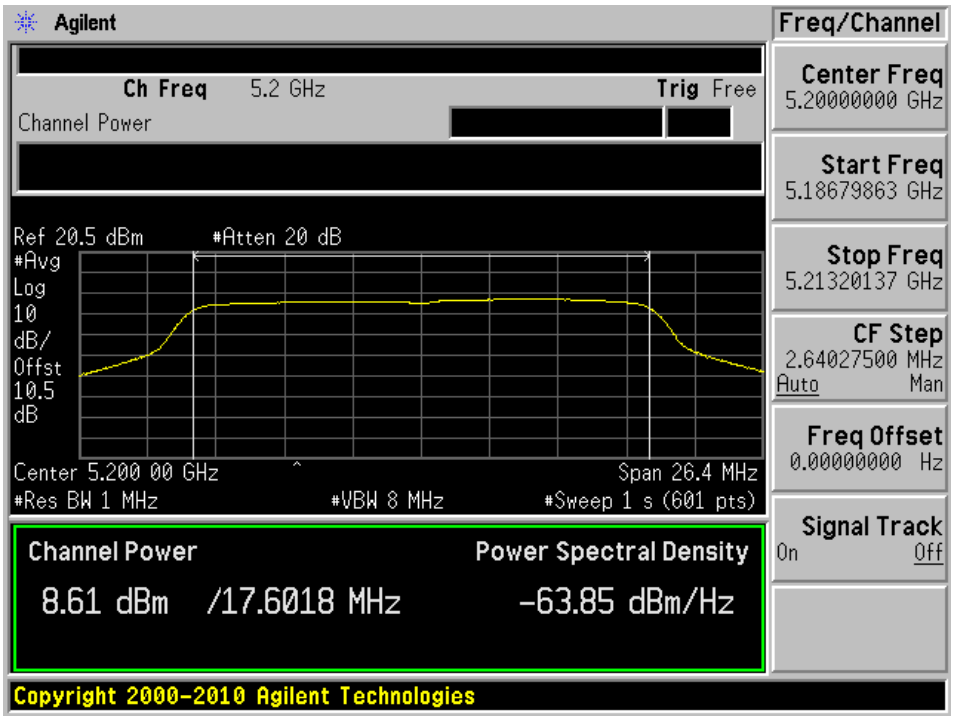


802.11 n20 mode, 15 dBi Antenna Chain 1

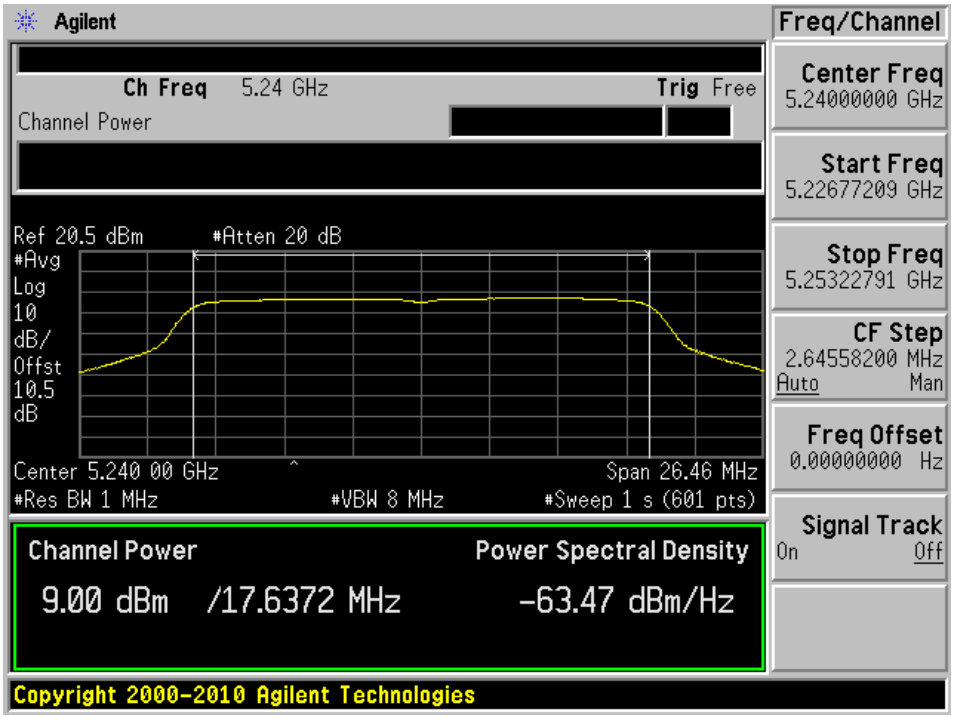
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

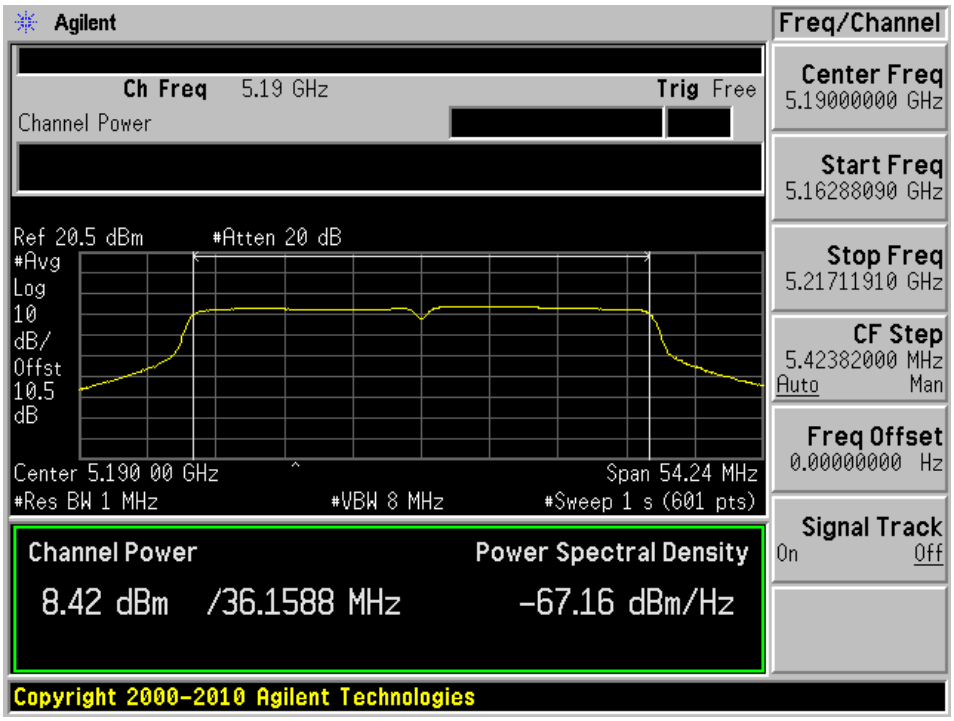


802.11n20 High channel: 5240 MHz

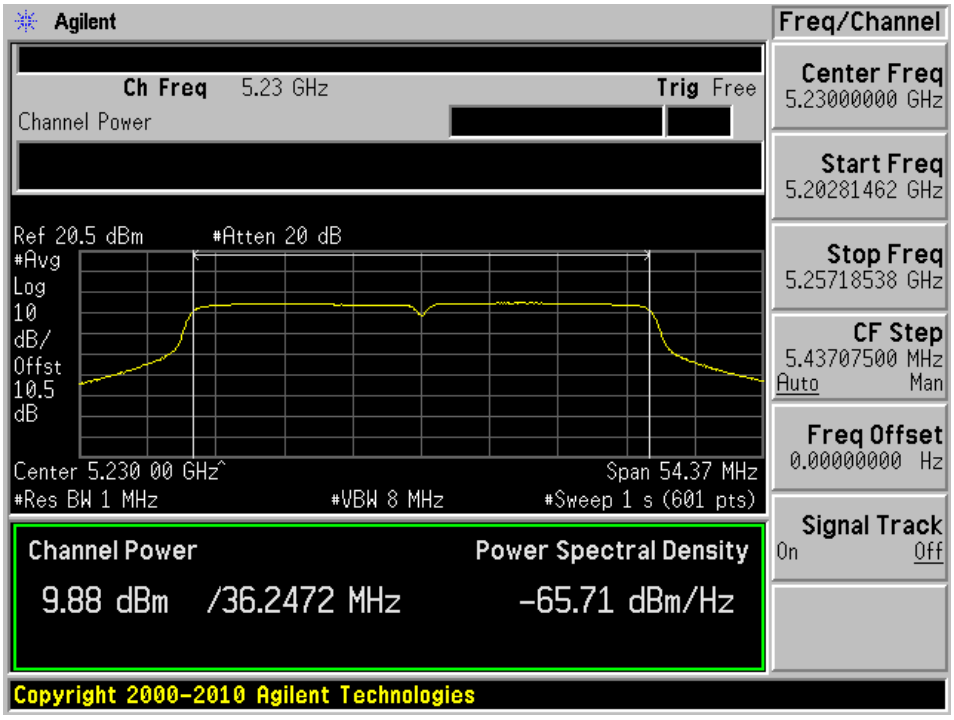


802.11n40 mode, 15 dBi Antenna Chain 1

802.11n40 Low channel: 5190 MHz

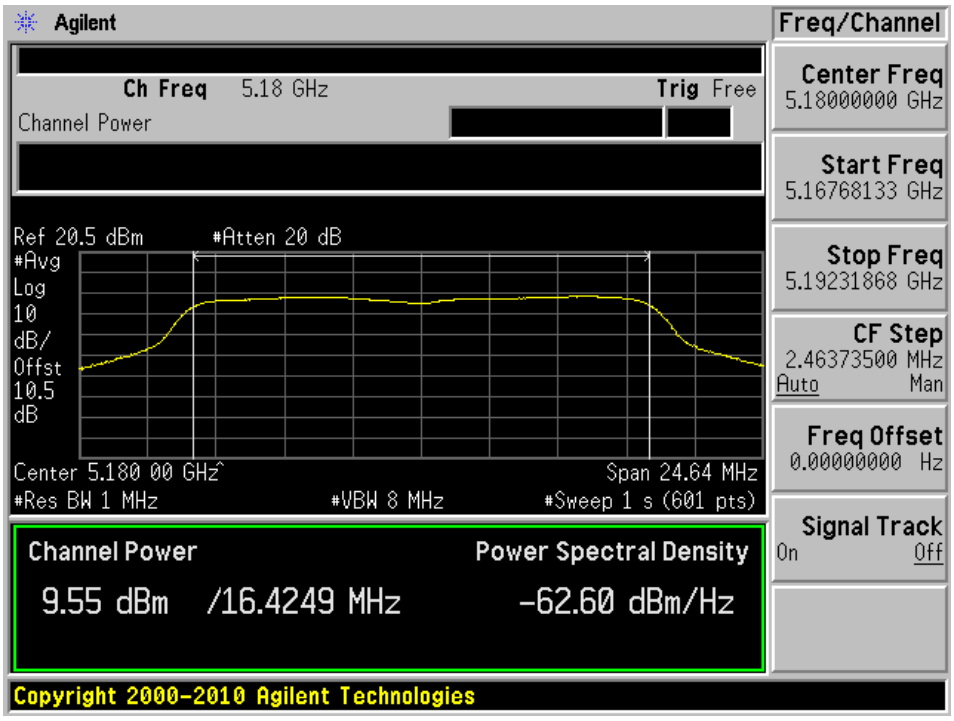


802.11n40 High Channel: 5230 MHz

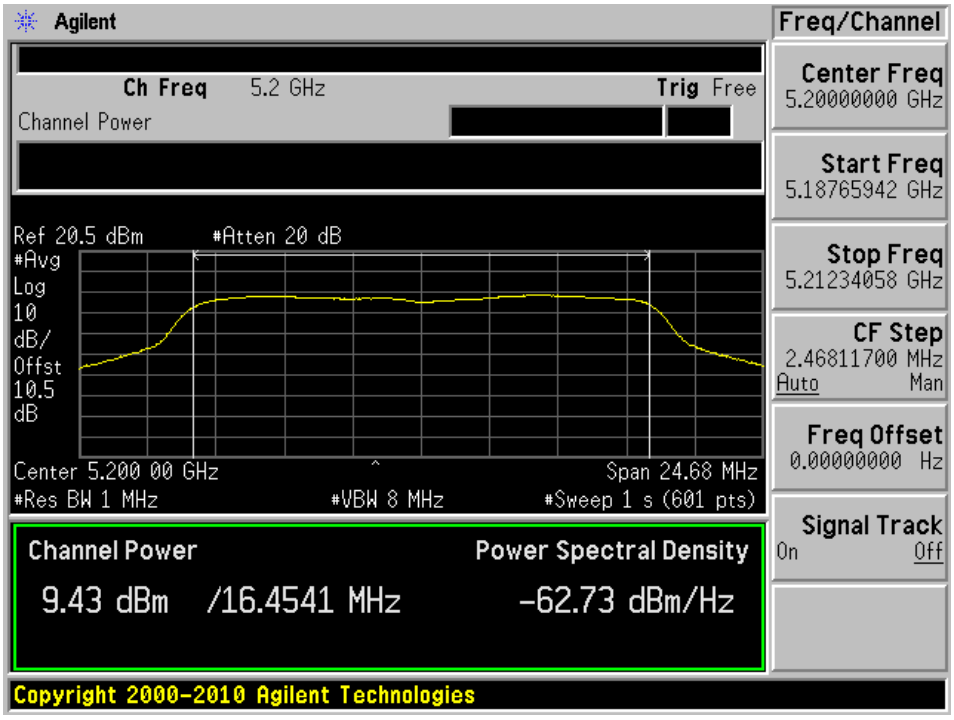


802.11a mode, 15 dBi Antenna Chain 2

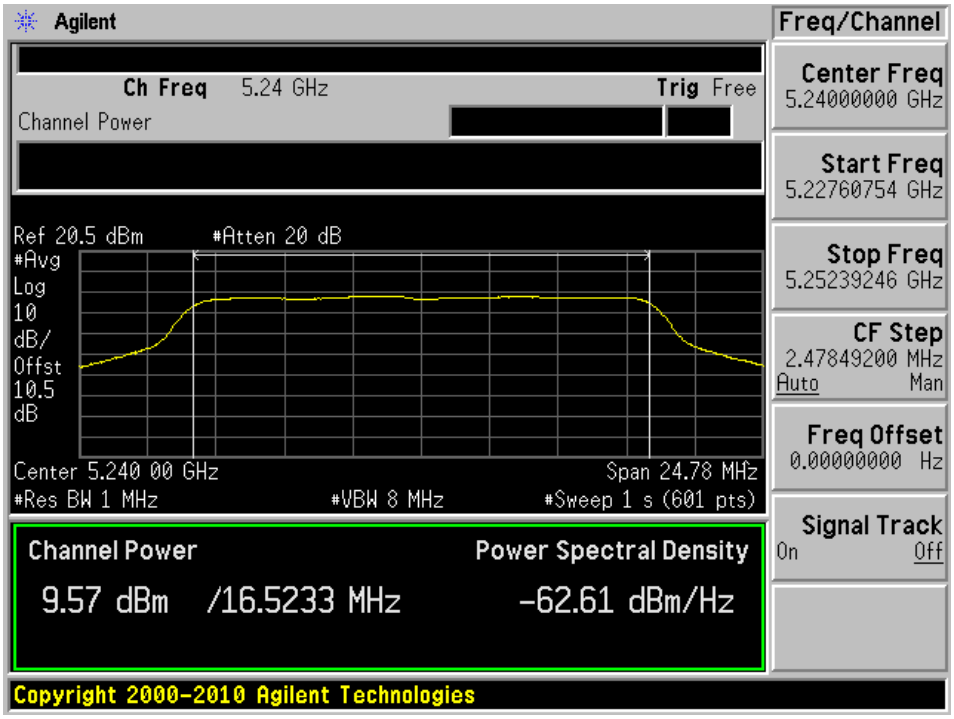
802.11a Low channel: 5180 MHz



802.11a Middle channel: 5200 MHz

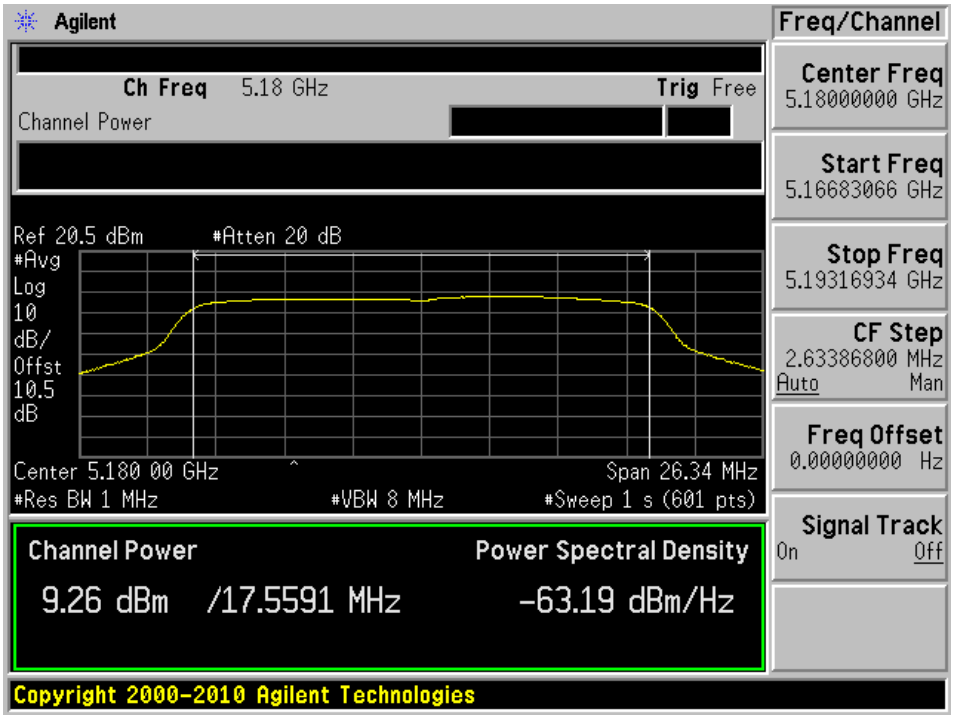


802.11a High channel: 5240 MHz

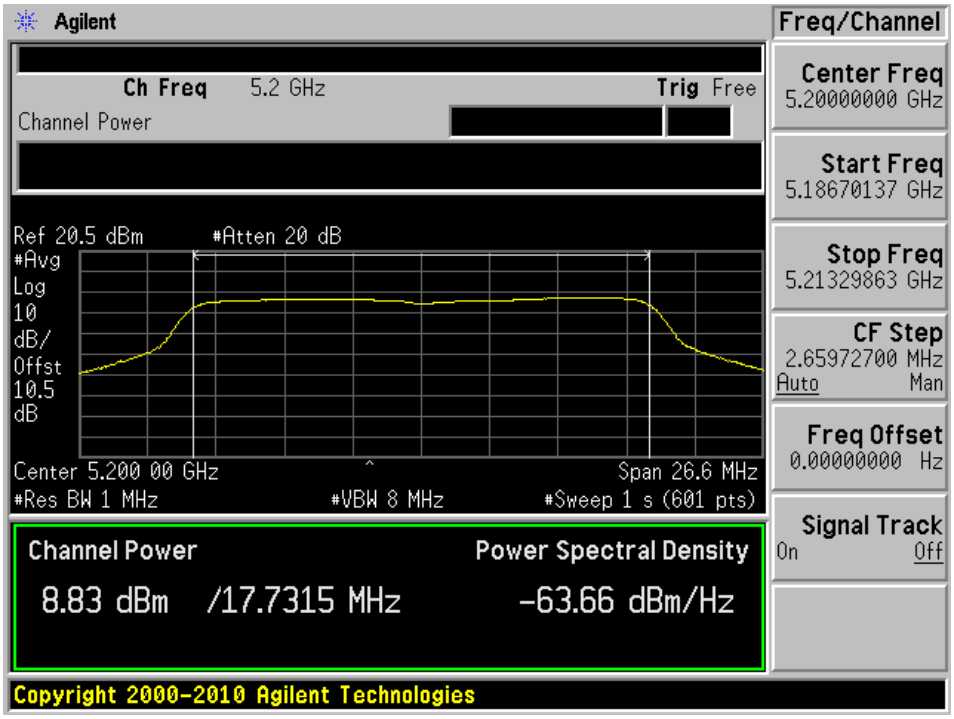


802.11 n20 mode, 15 dBi Antenna Chain 2

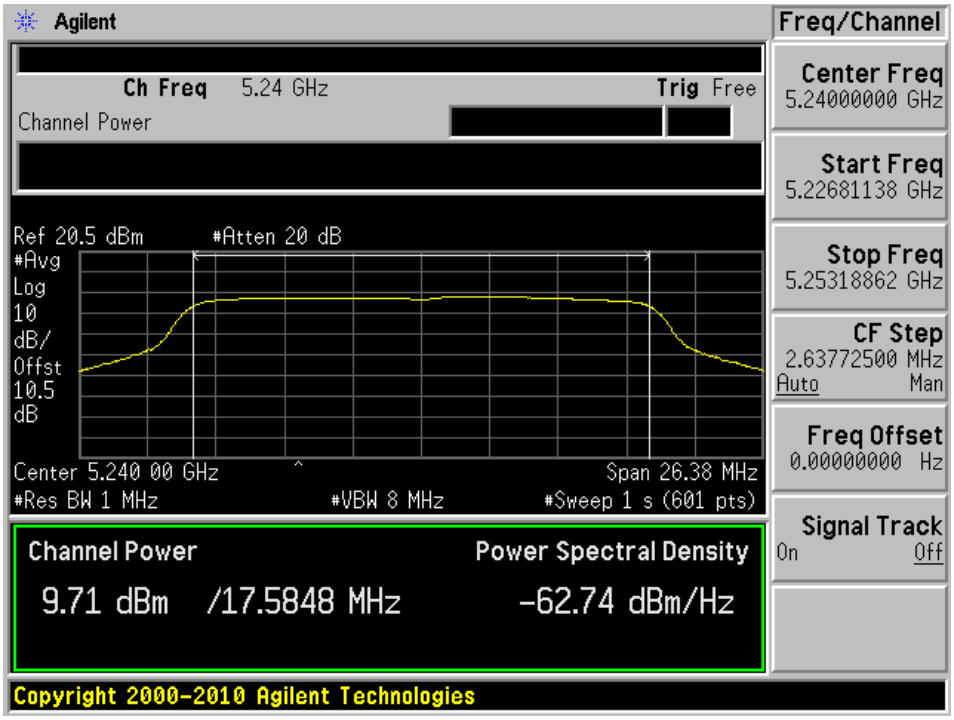
802.11n20 Low channel: 5180 MHz



802.11n20 Middle channel: 5200 MHz

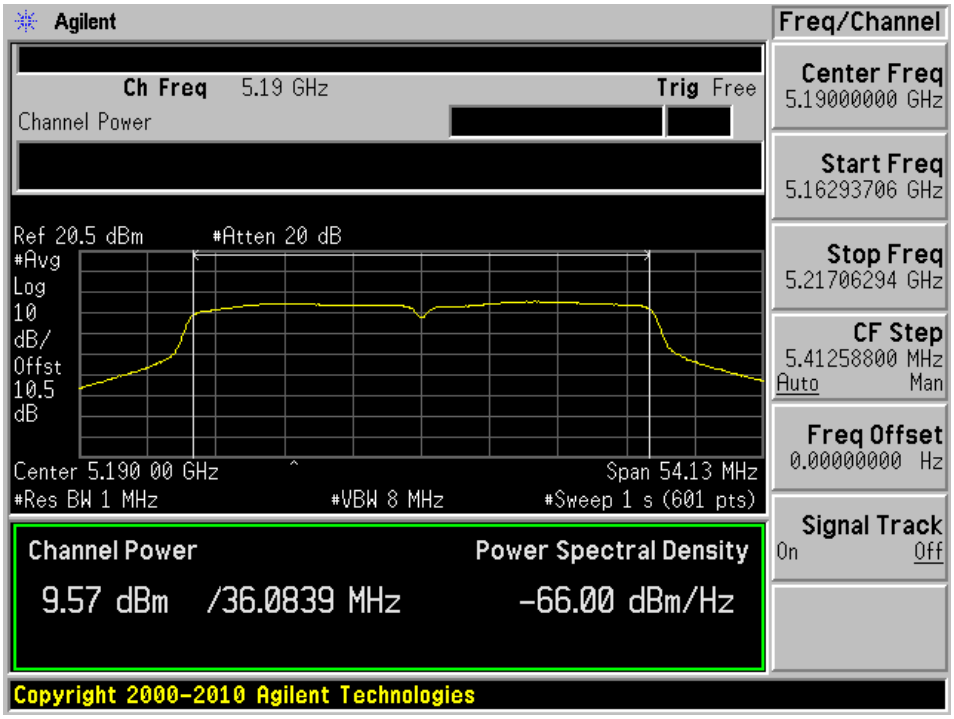


802.11n20 High channel: 5240 MHz

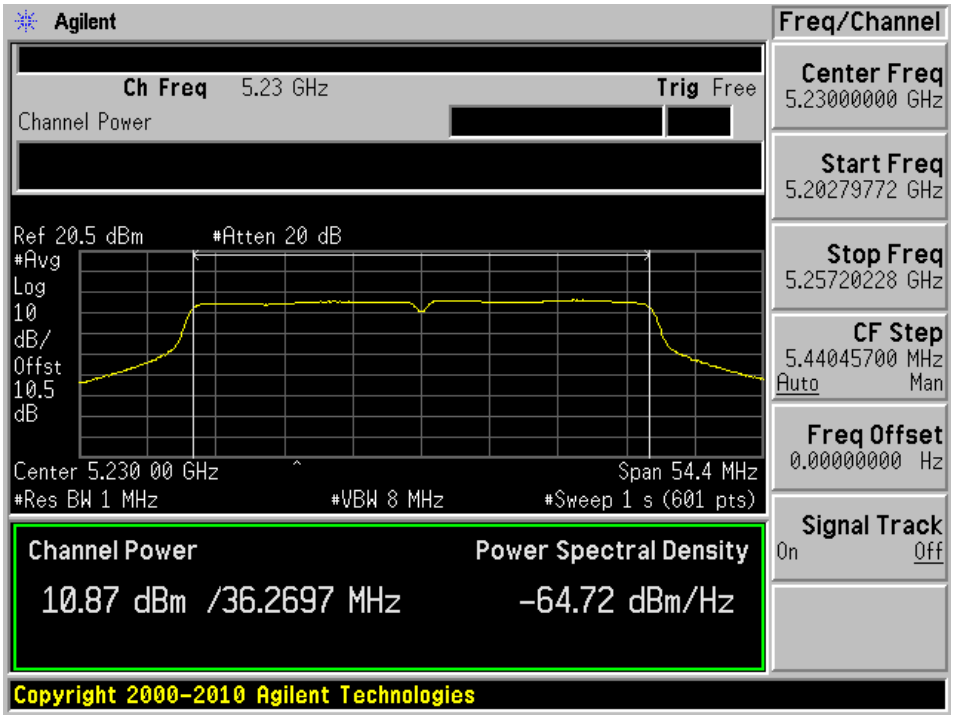


802.11n40 mode, 15 dBi Antenna Chain 2

802.11n40 Low channel: 5190 MHz



802.11n40 High Channel: 5230 MHz

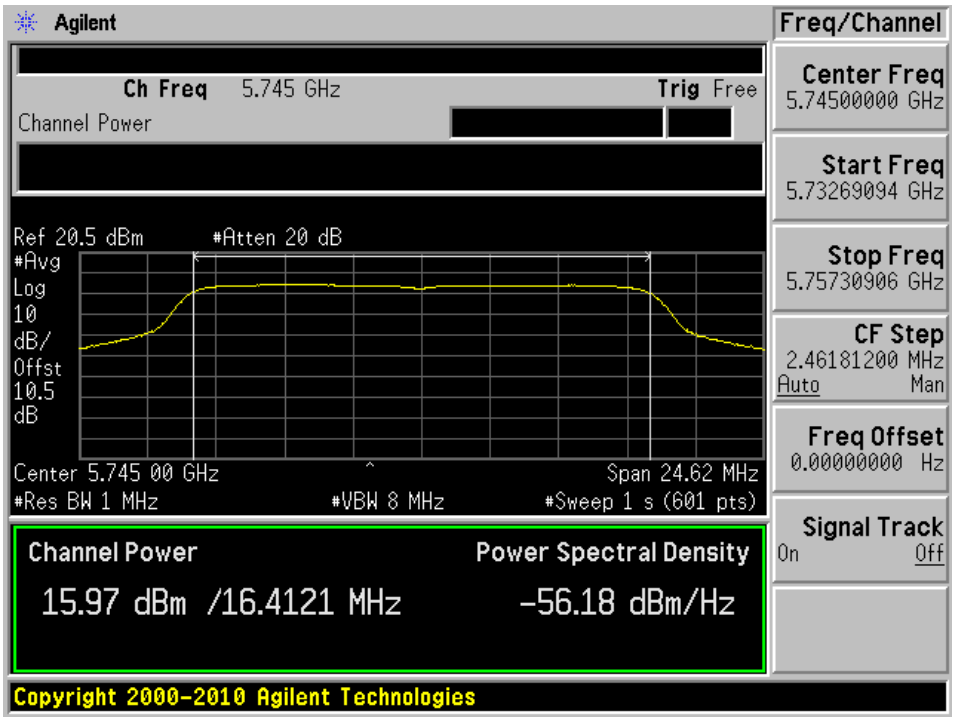


5.8 GHz Band, 3 dBi Antenna

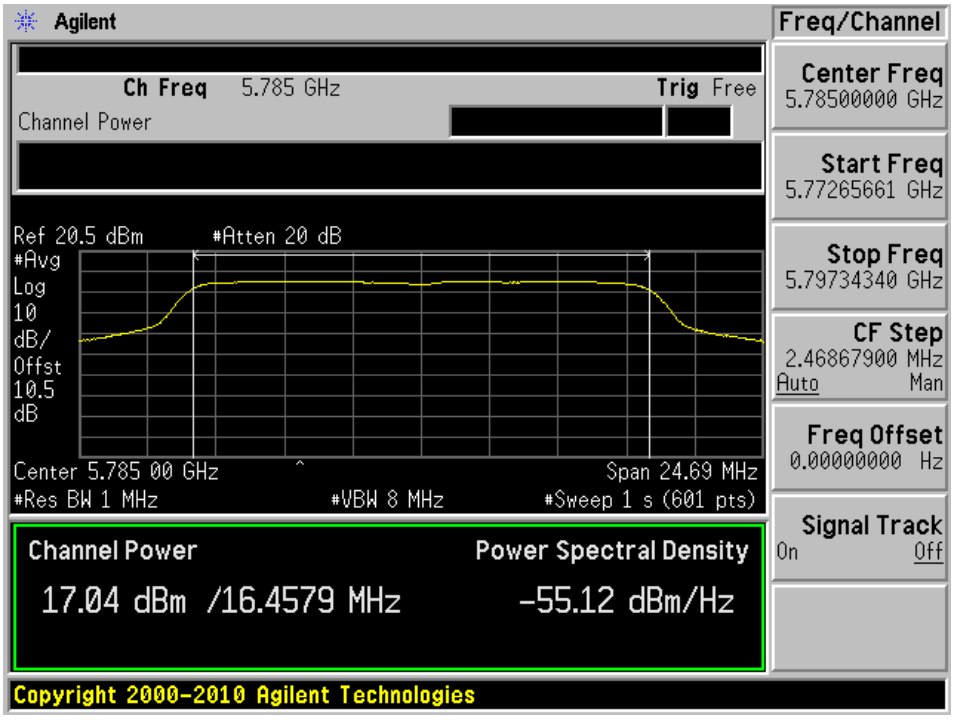
Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5745	15.97	14.93	17.17	20.89	30	-9.11
Middle	5785	17.04	15.35	17.31	21.42	30	-8.58
High	5825	16.18	15.05	16.18	20.61	30	-9.39
802.11n HT20 mode							
Low	5745	15.99	14.72	16.11	20.42	30	-9.58
Middle	5785	17.34	15.73	17.11	21.55	30	-8.45
High	5825	16.65	14.68	16.07	20.65	30	-9.35
802.11n HT40 mode							
Low	5755	12.81	12.07	13.90	17.76	30	-12.24
High	5795	16.86	14.73	16.84	21.02	30	-8.98

802.11a mode, 3 dBi Antenna Chain 0

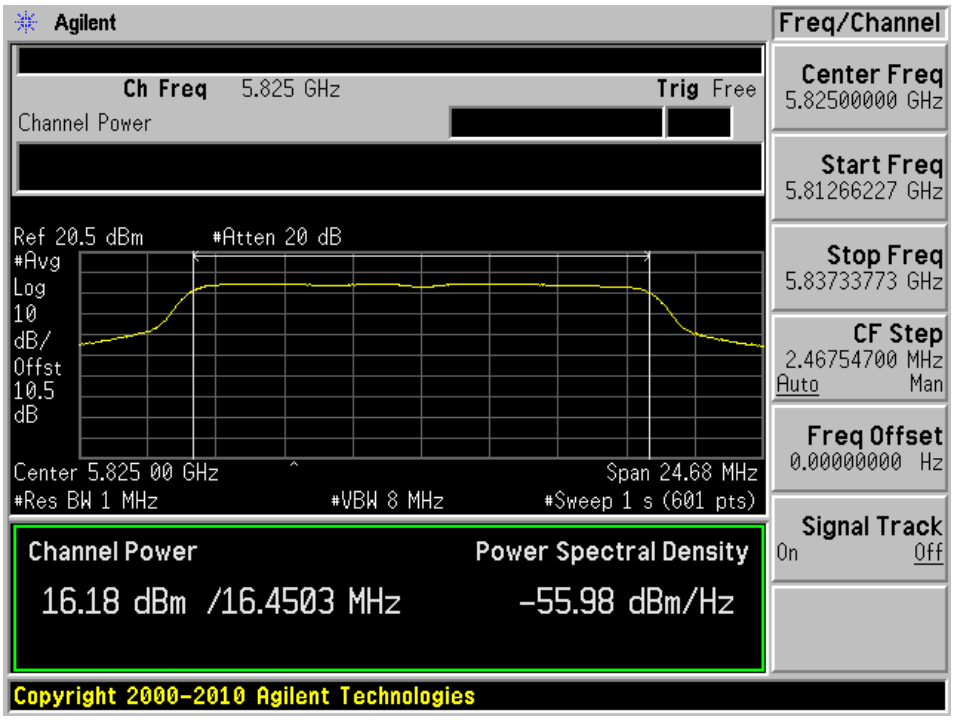
Low channel: 5745 MHz



Middle channel: 5785 MHz

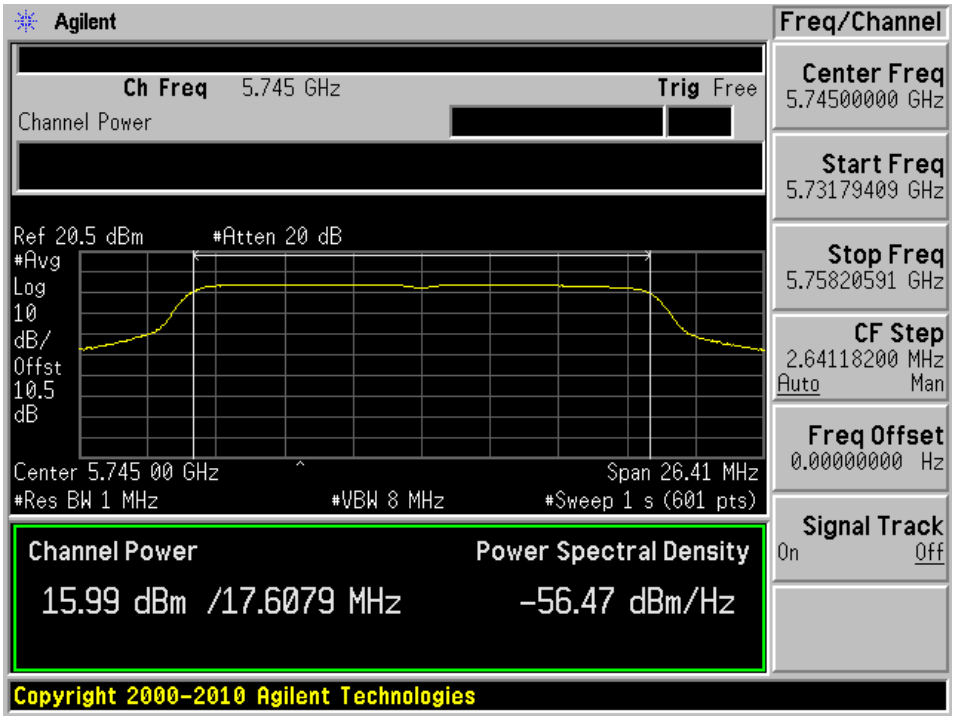


High channel: 5825 MHz

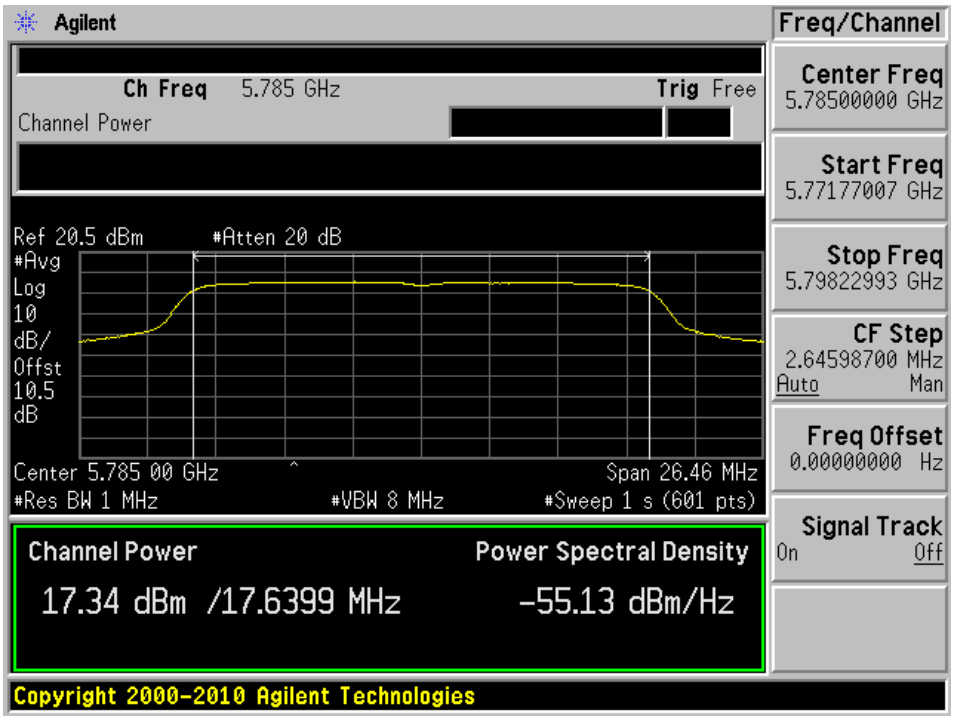


802.11n20 mode, 3 dBi Antenna Chain 0

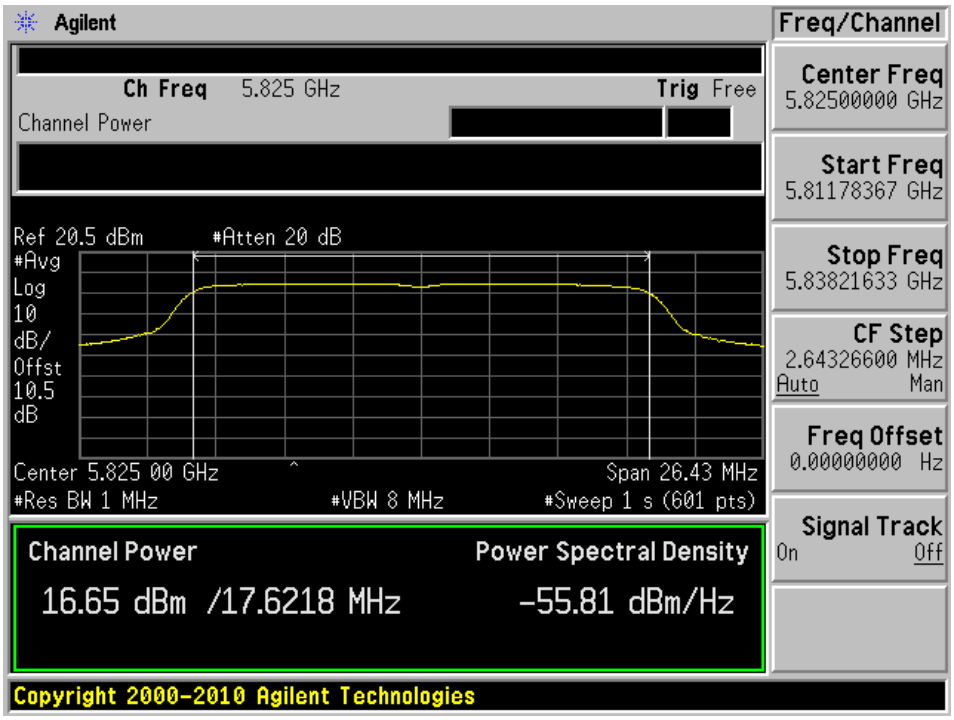
Low channel: 5745 MHz



Middle channel: 5785 MHz

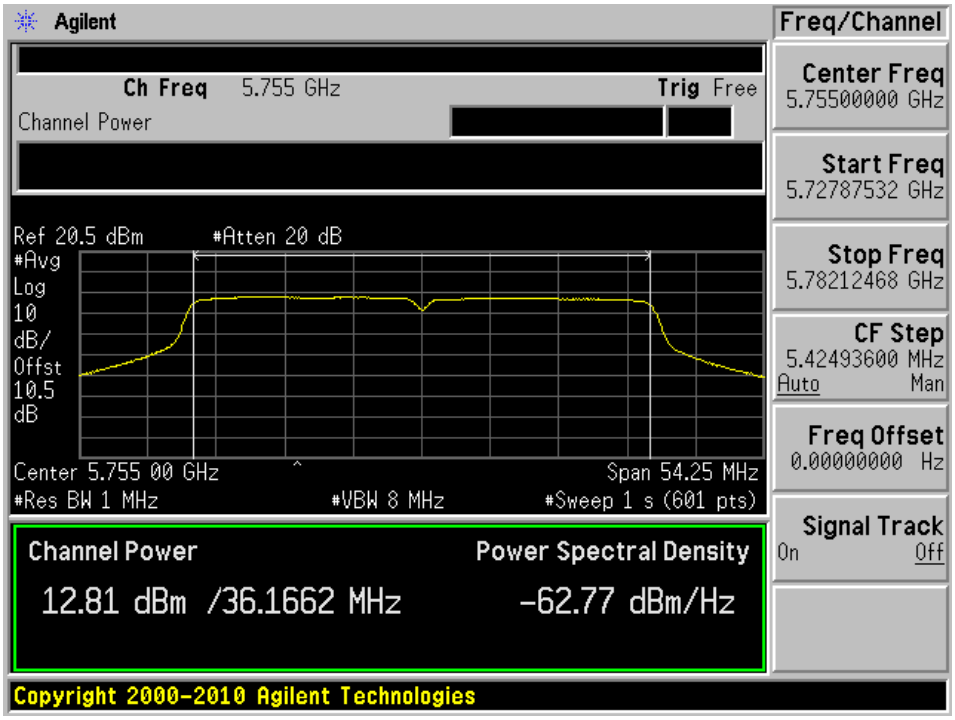


High channel: 5825 MHz

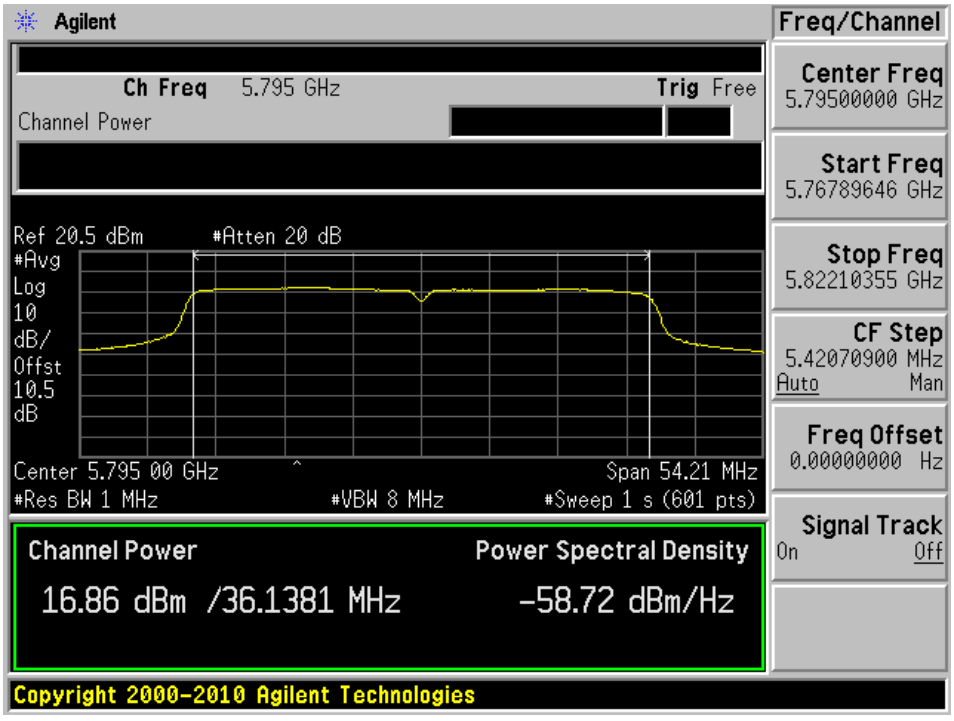


802.11n40 mode, 3 dBi Antenna Chain 0

Low channel: 5755 MHz

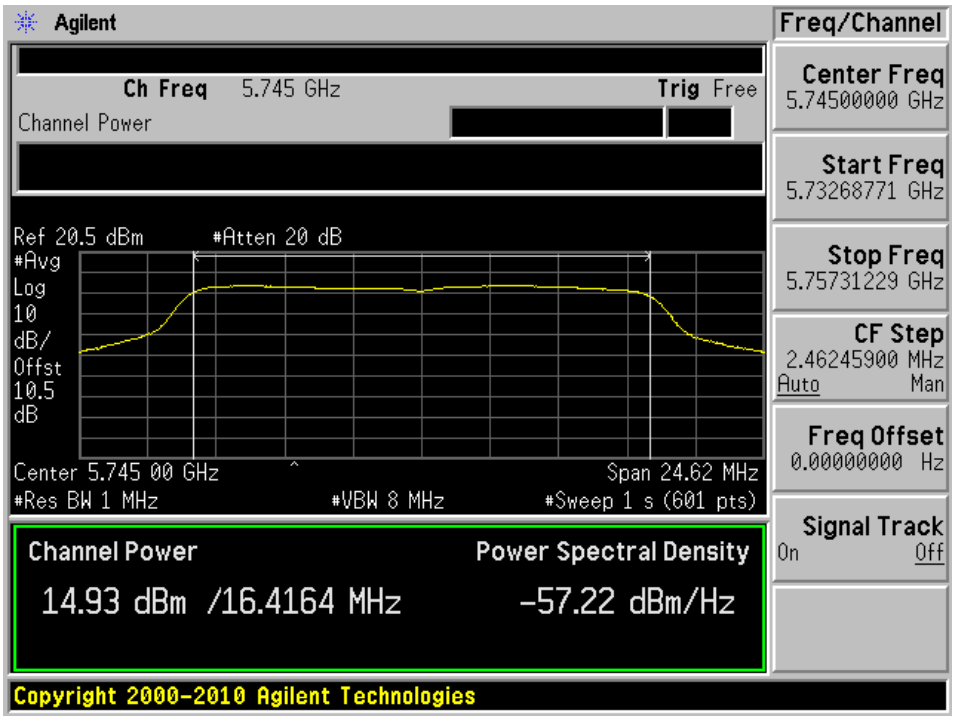


High channel: 5795 MHz

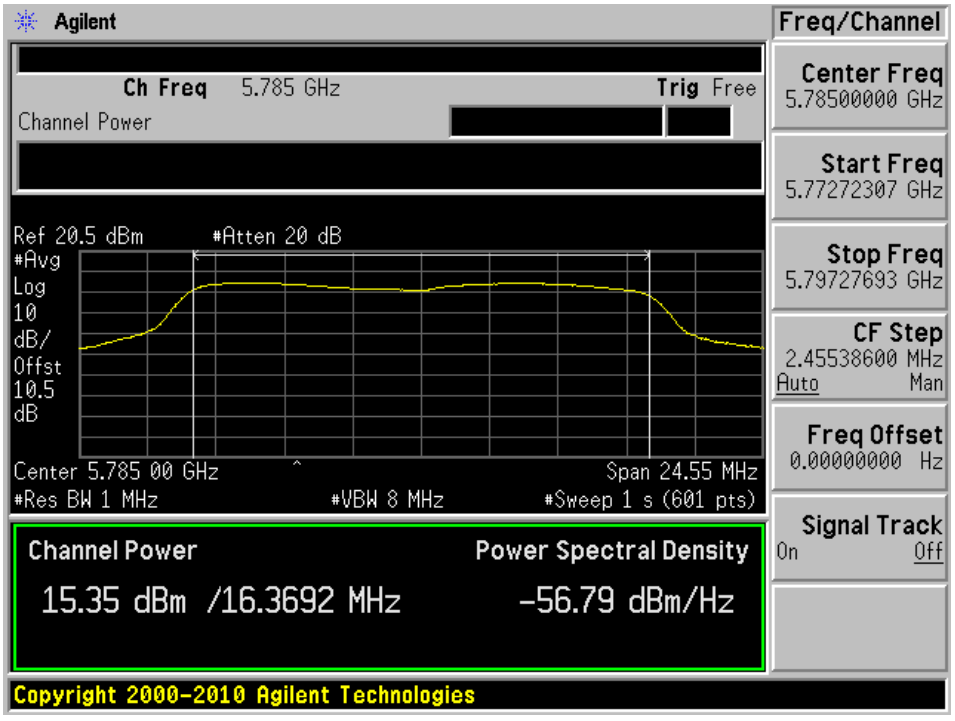


802.11a mode, 3 dBi Antenna Chain 1

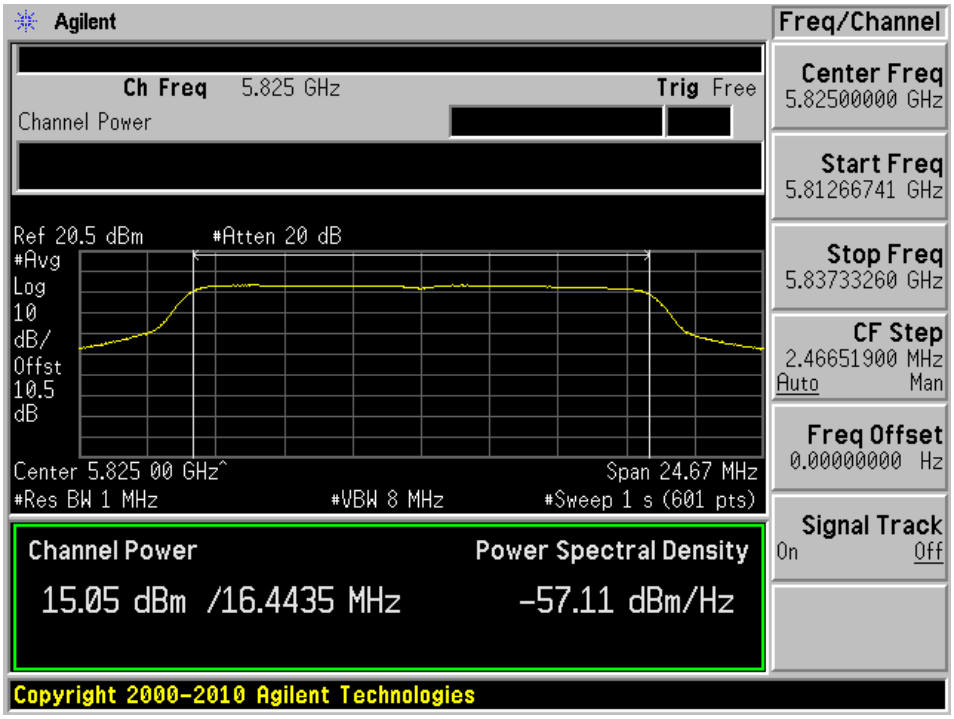
Low channel: 5745 MHz



Middle channel: 5785 MHz

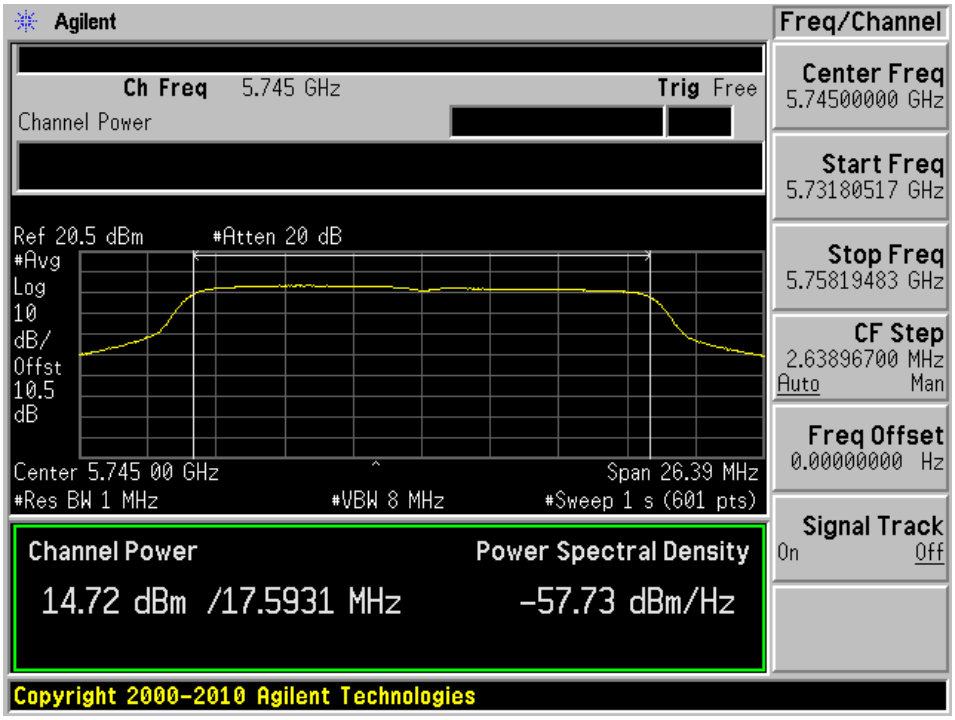


High channel: 5825 MHz

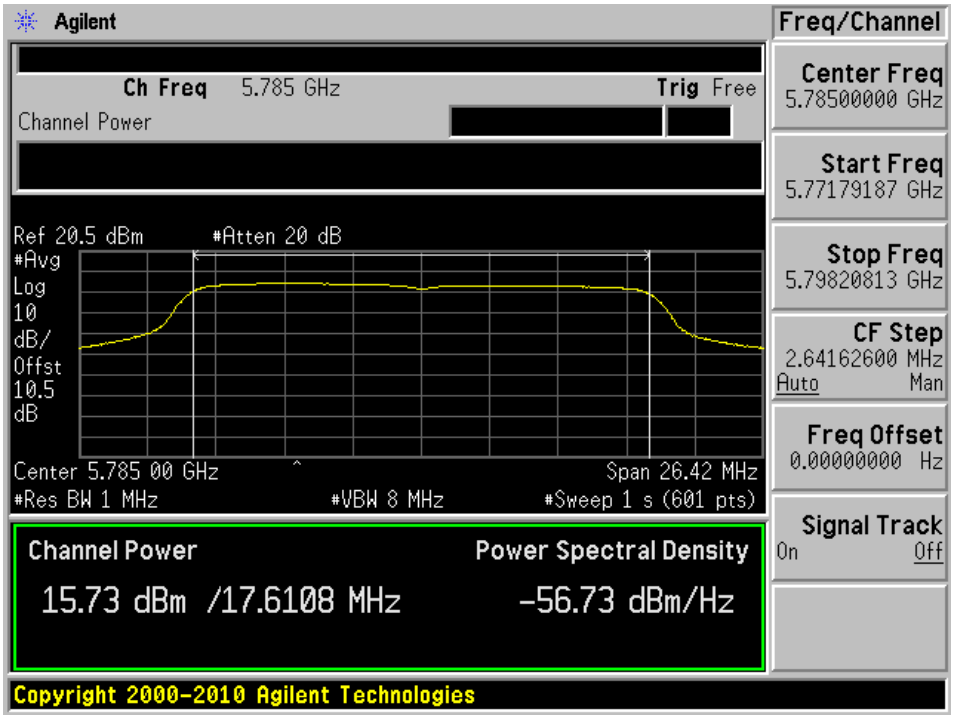


802.11n20 mode, 3 dBi Antenna Chain 1

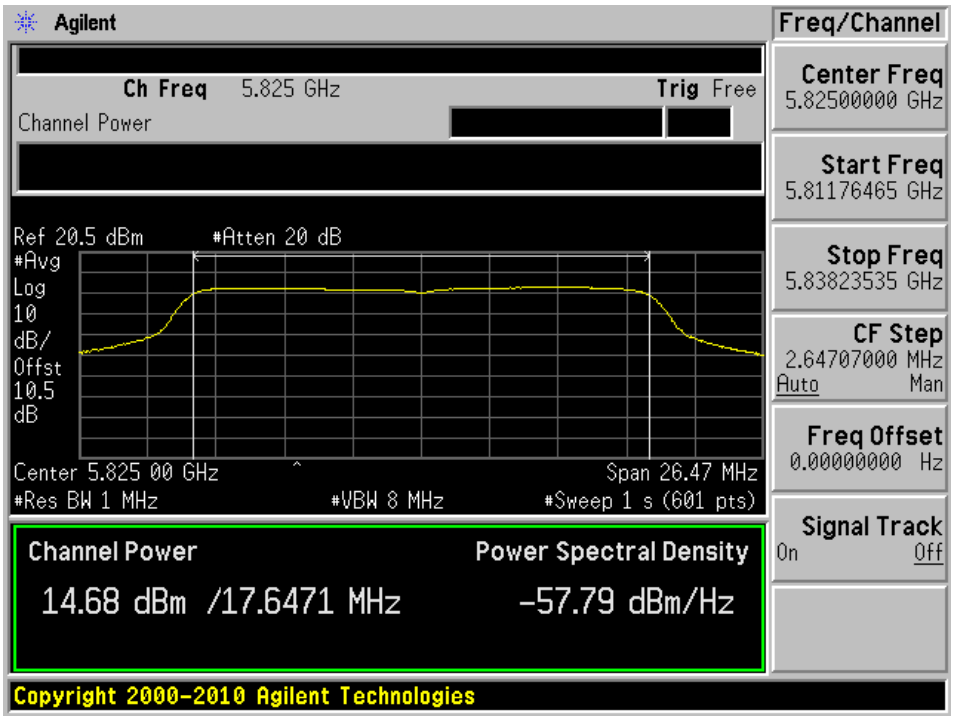
Low channel: 5745 MHz



Middle channel: 5785 MHz

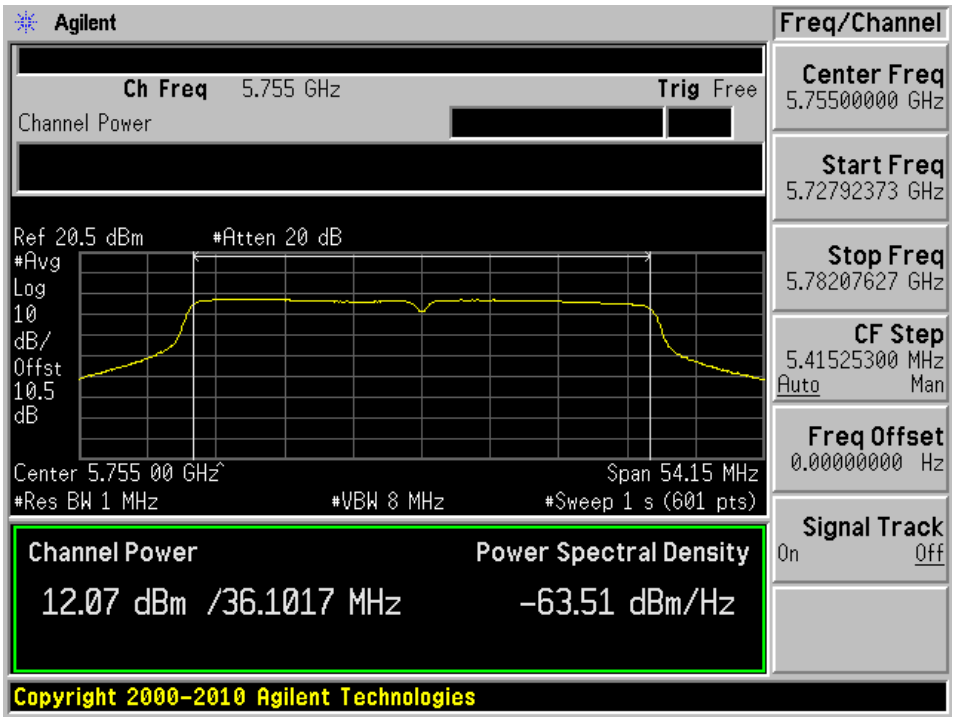


High channel: 5825 MHz

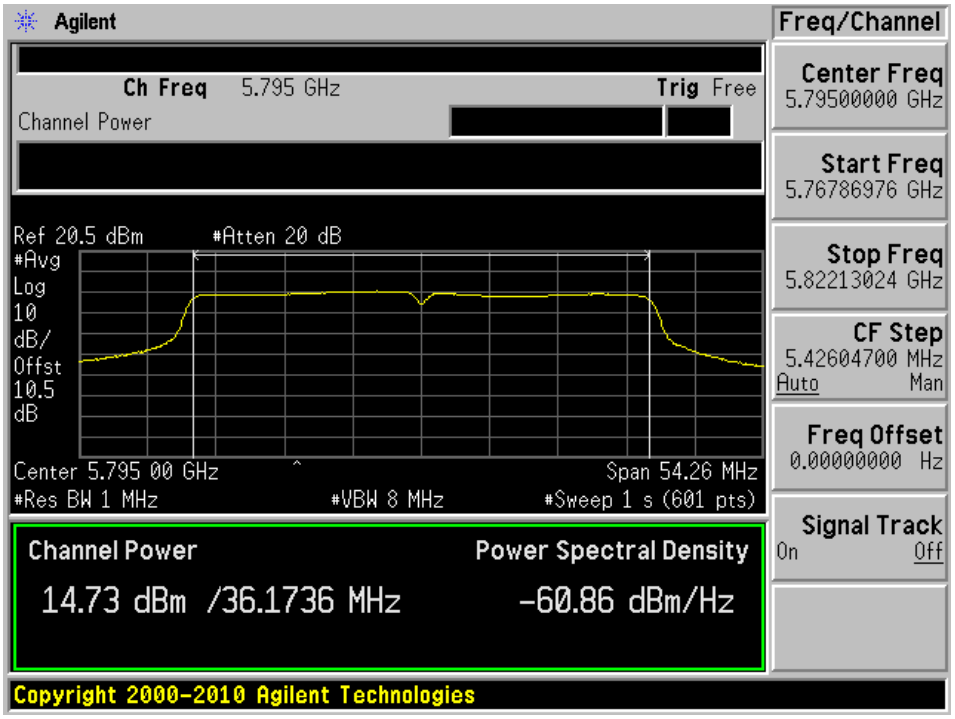


802.11n40 modfe, 3 dBi Antenna Chain 1

Low channel: 5755 MHz

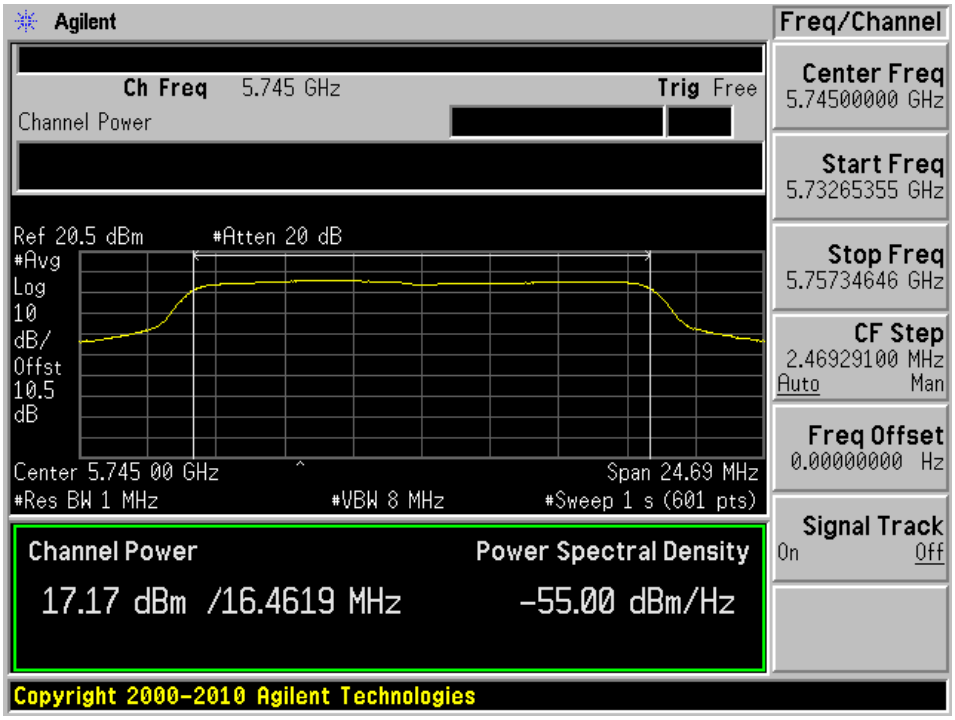


High channel: 5795 MHz

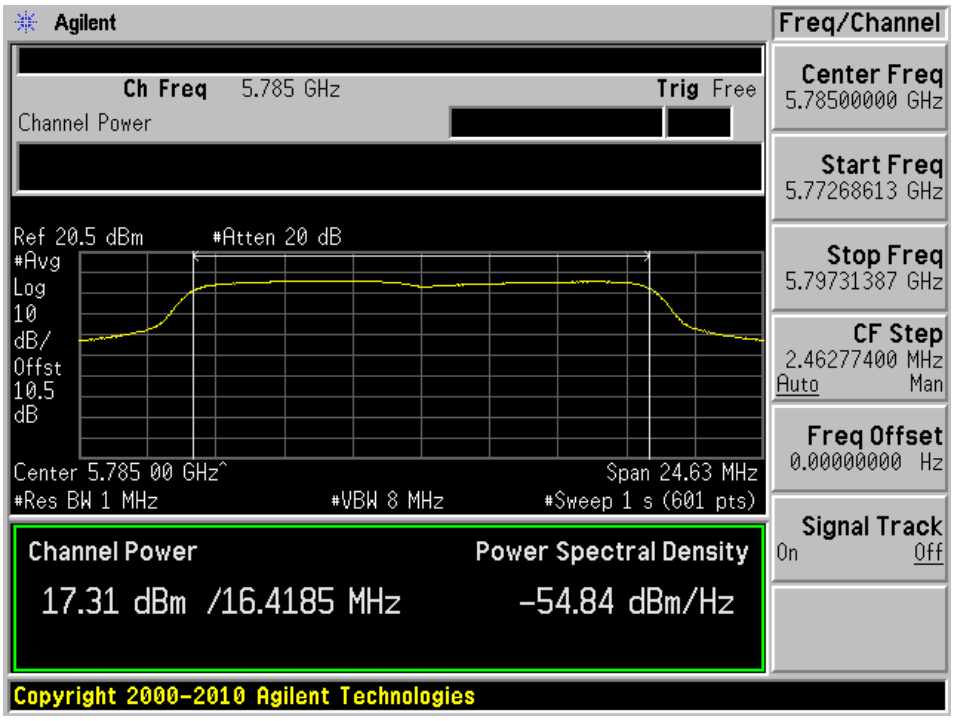


802.11a mode, 3 dBi Antenna Chain 2

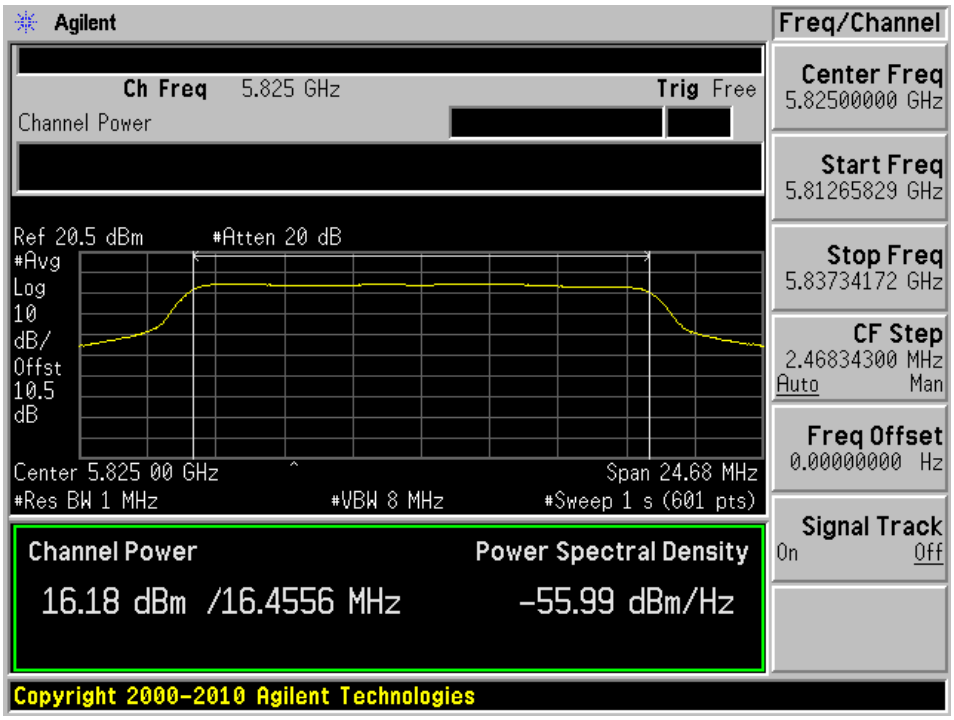
Low channel: 5745 MHz



Middle channel: 5785 MHz

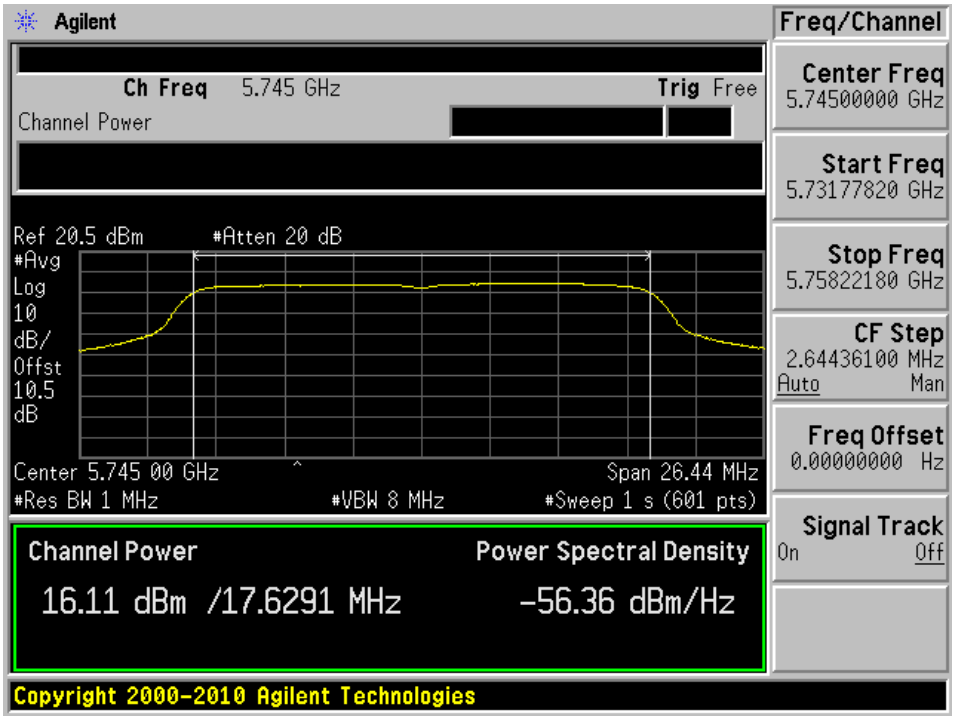


High channel: 5825 MHz

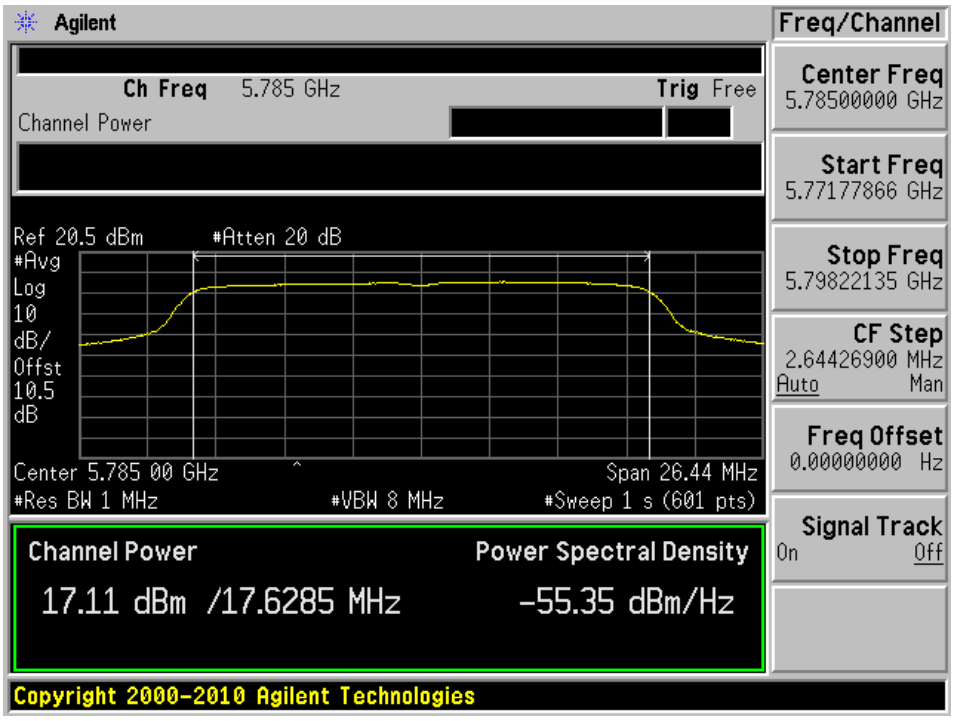


802.11n20 mode, 3 dBi Antenna Chain 2

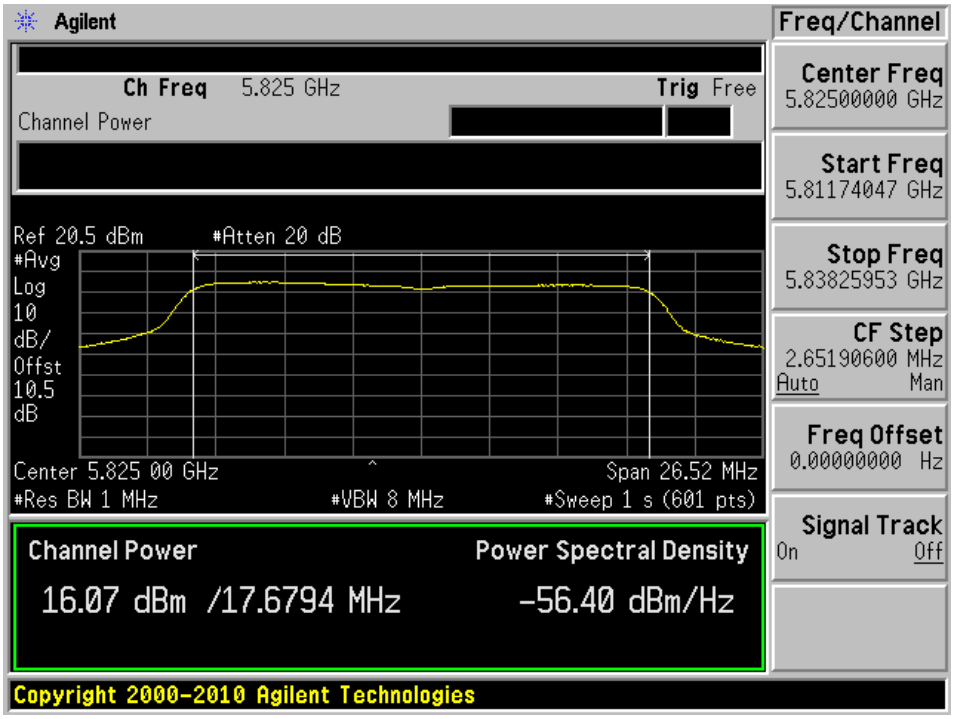
Low channel: 5745 MHz



Middle channel: 5785 MHz

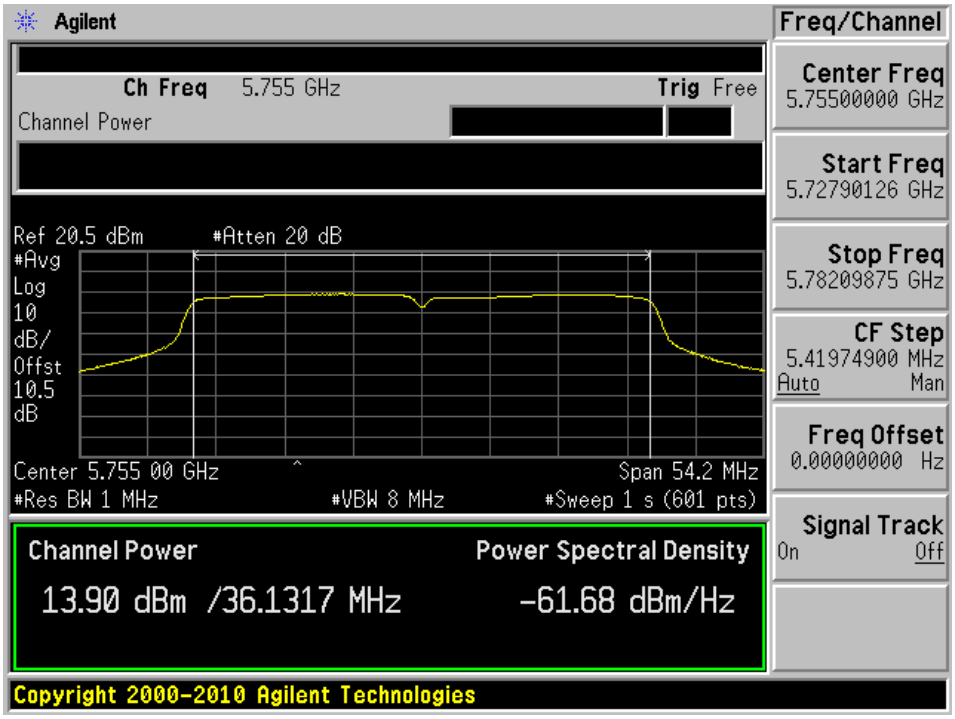


High channel: 5825 MHz

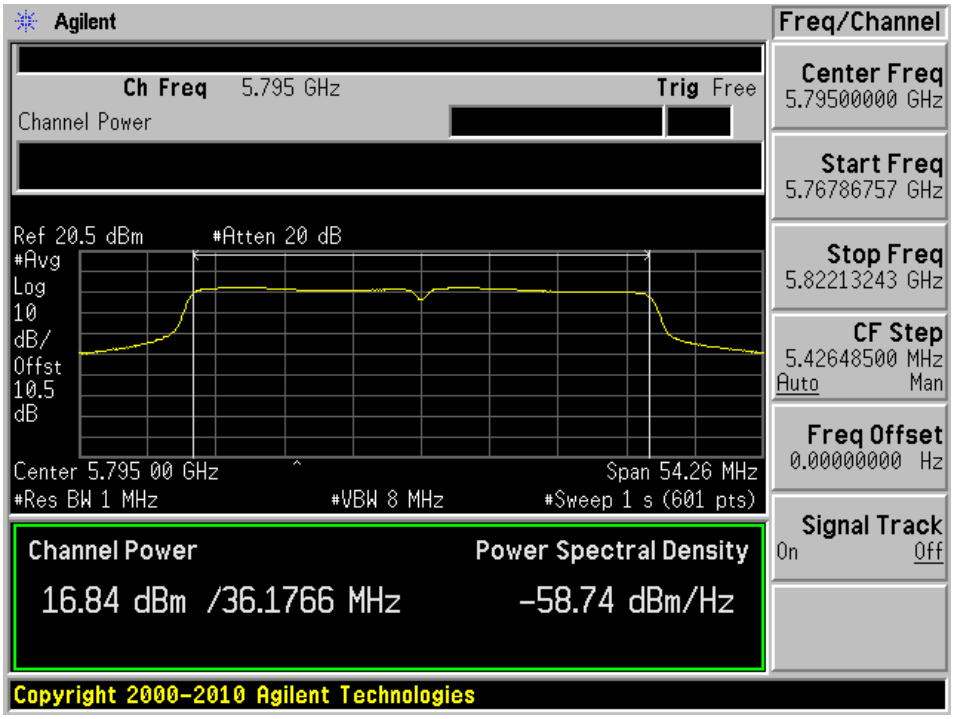


802.11n40 mode, 3 dBi Antenna Chain 2

Low channel: 5755 MHz



High channel: 5795 MHz

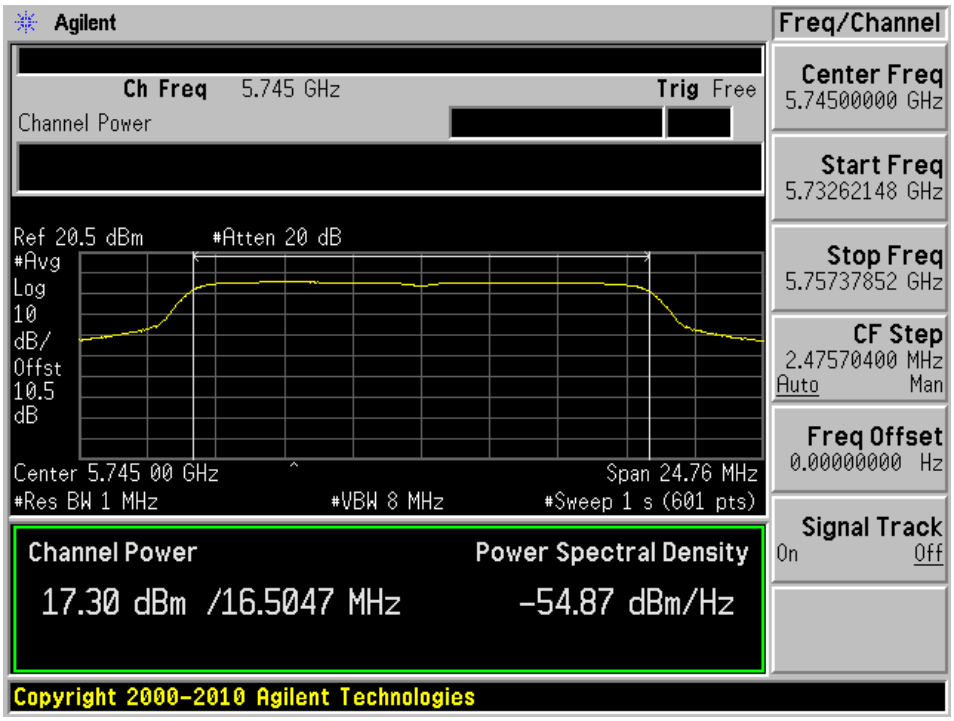


5.8 GHz Band, 5 dBi Antenna

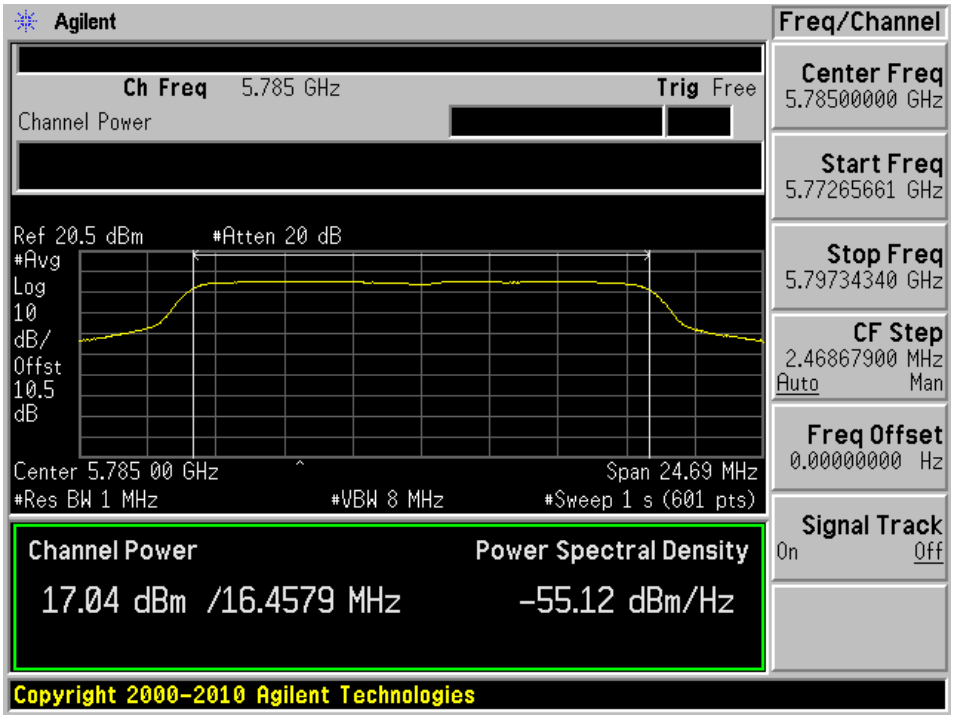
Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5745	17.30	15.82	17.60	21.74	30	-8.26
Middle	5785	17.04	15.35	17.31	21.42	30	-8.58
High	5825	16.18	15.05	16.18	20.61	30	-9.39
802.11n HT20 mode							
Low	5745	17.26	15.66	17.47	21.64	30	-8.36
Middle	5785	17.34	15.73	17.11	21.55	30	-8.45
High	5825	16.65	14.68	16.07	20.65	30	-9.35
802.11n HT40 mode							
Low	5755	15.91	14.55	16.55	20.52	30	-9.48
High	5795	16.86	14.73	16.84	21.02	30	-8.98

802.11a mode, 5 dBi Antenna Chain 0

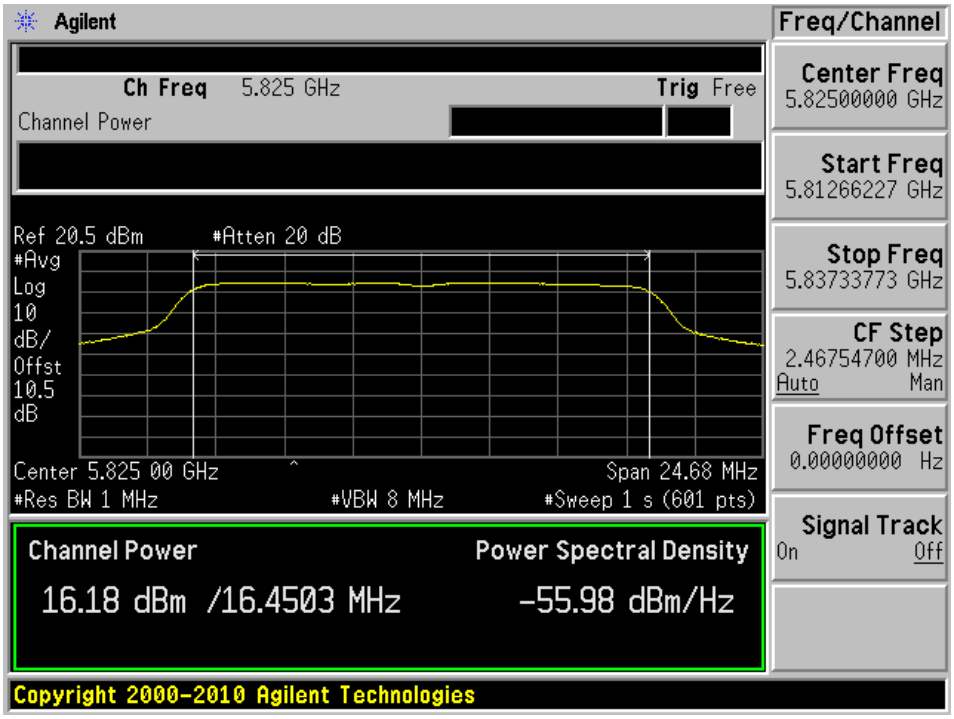
Low channel: 5745 MHz



Middle channel: 5785 MHz

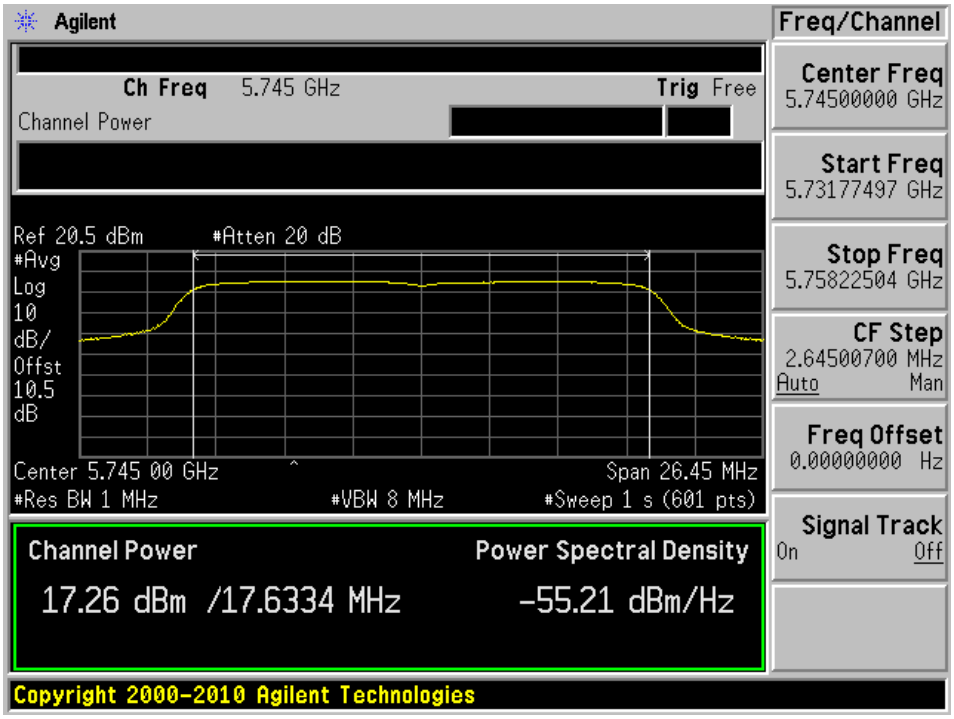


High channel: 5825 MHz

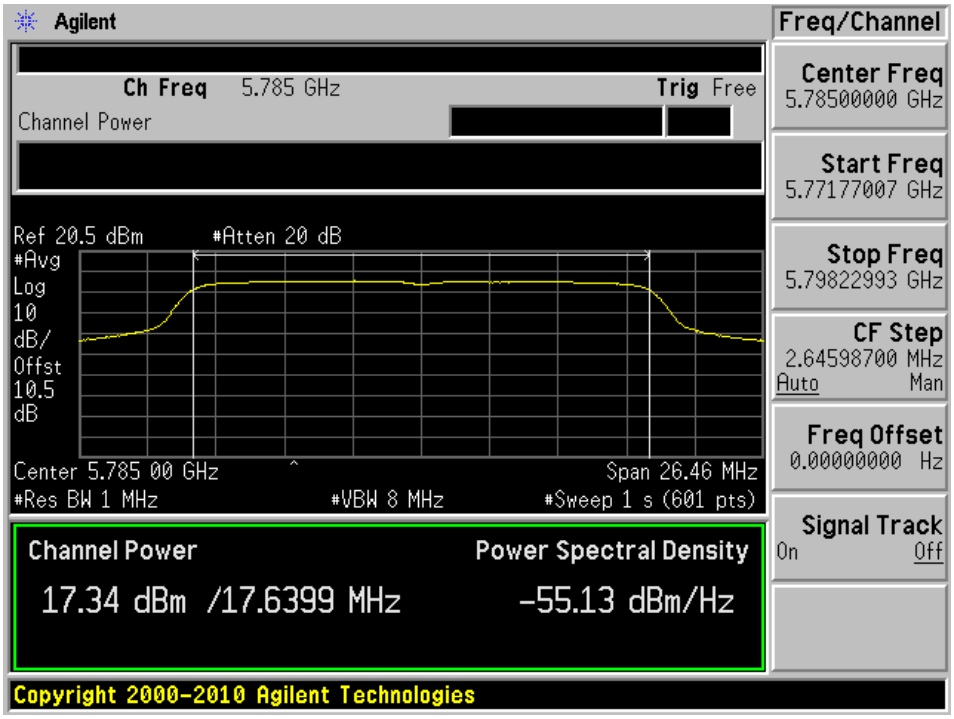


802.11n20 mode, 5 dBi Antenna Chain 0

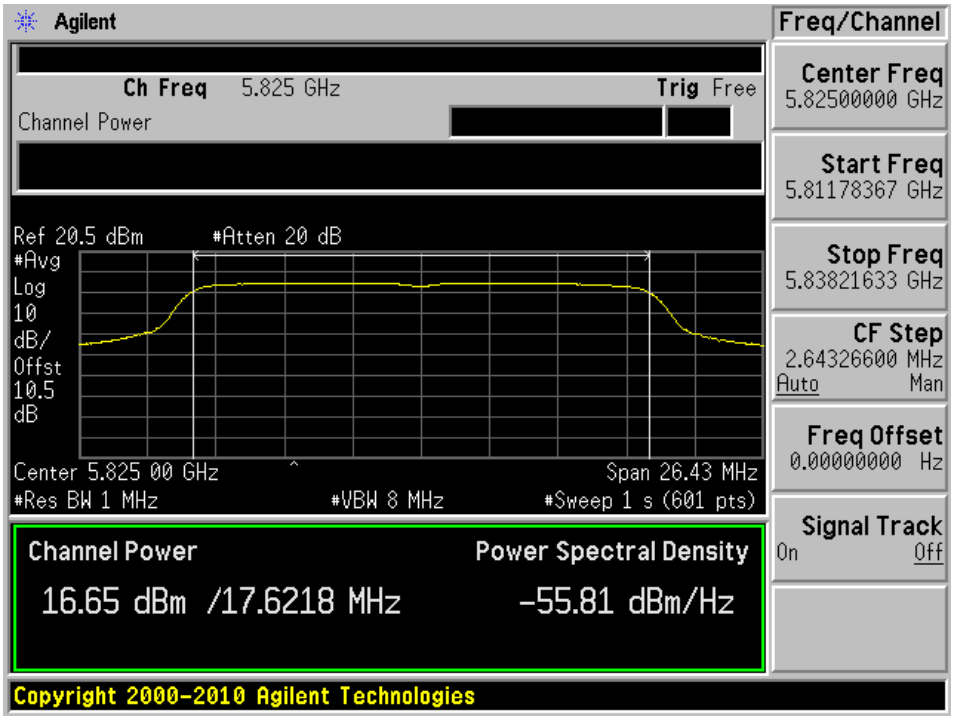
Low channel: 5745 MHz



Middle channel: 5785 MHz

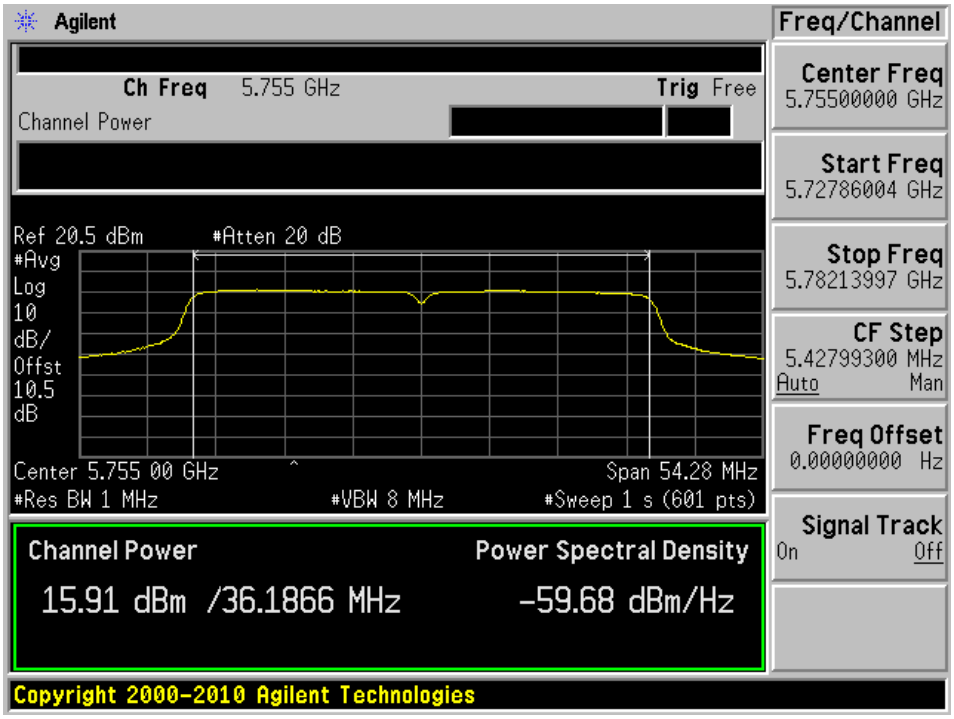


High channel: 5825 MHz

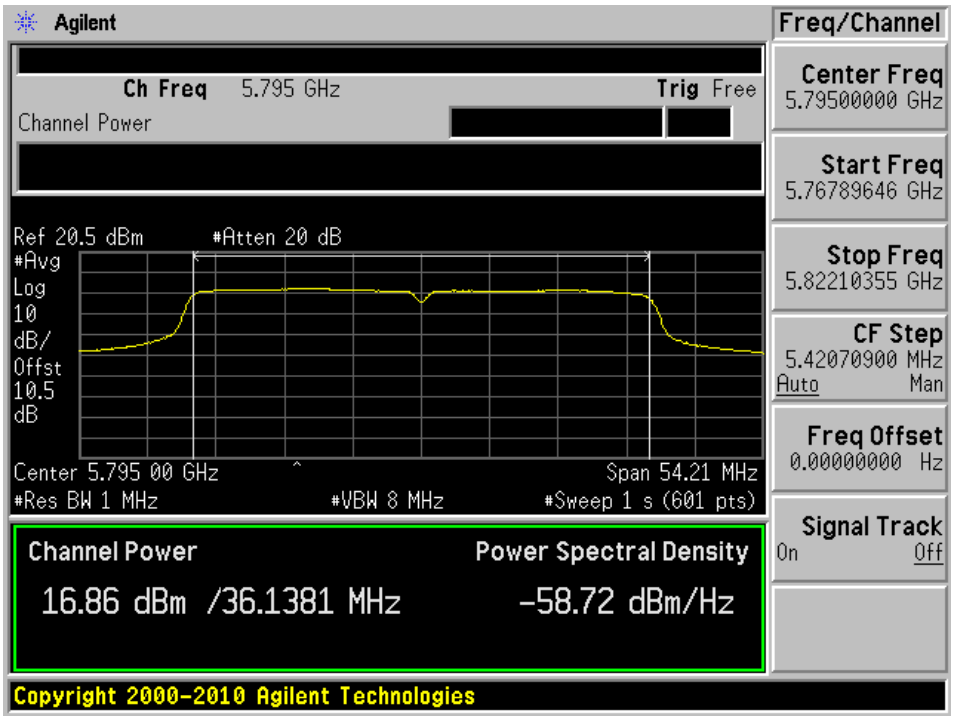


802.11n40 mode, 5 dBi Antenna Chain 0

Low channel: 5755 MHz

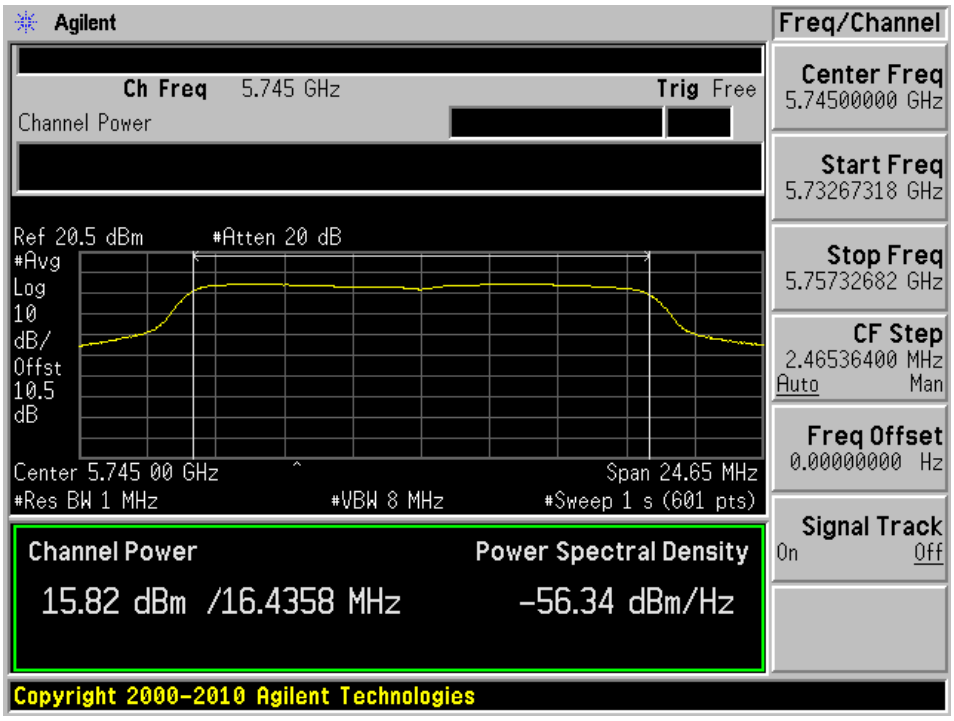


High channel: 5795 MHz

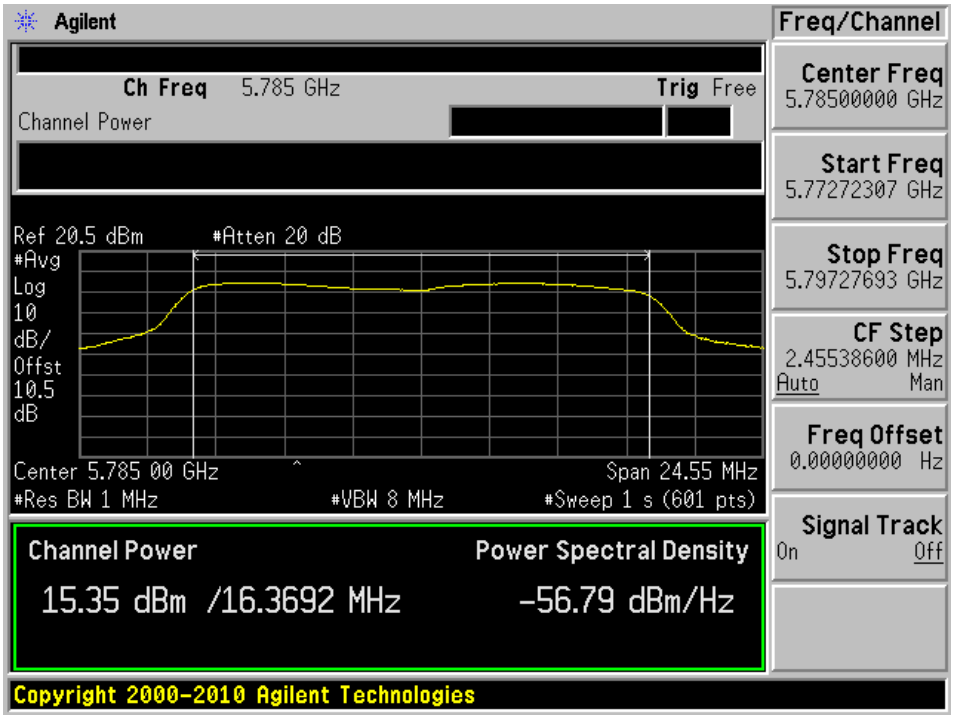


802.11a mode, 5 dBi Antenna Chain 1

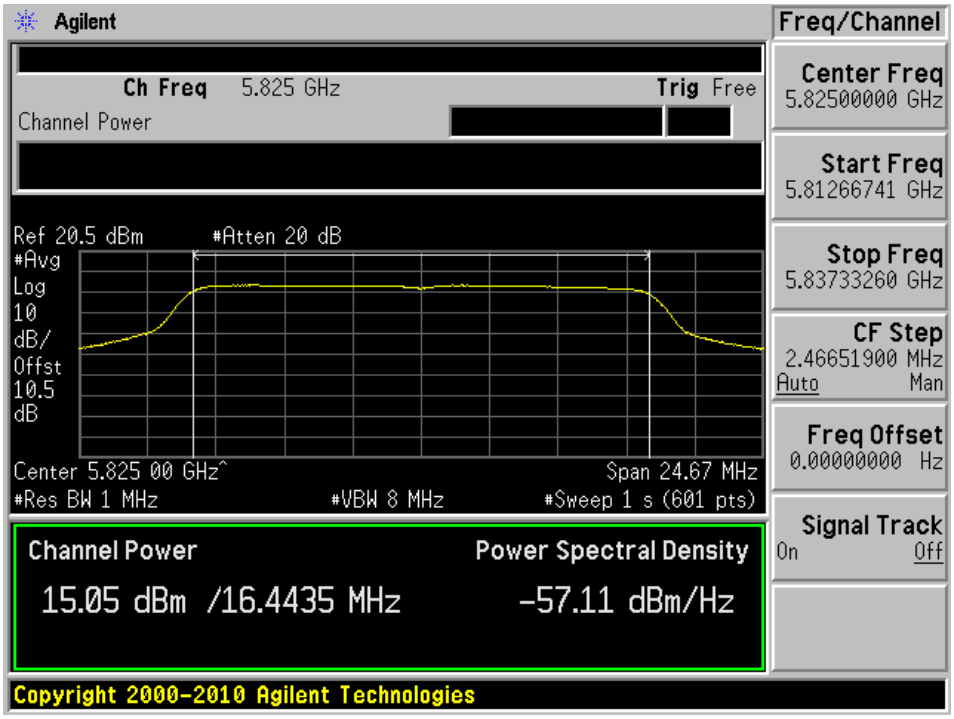
Low channel: 5745 MHz



Middle channel: 5785 MHz

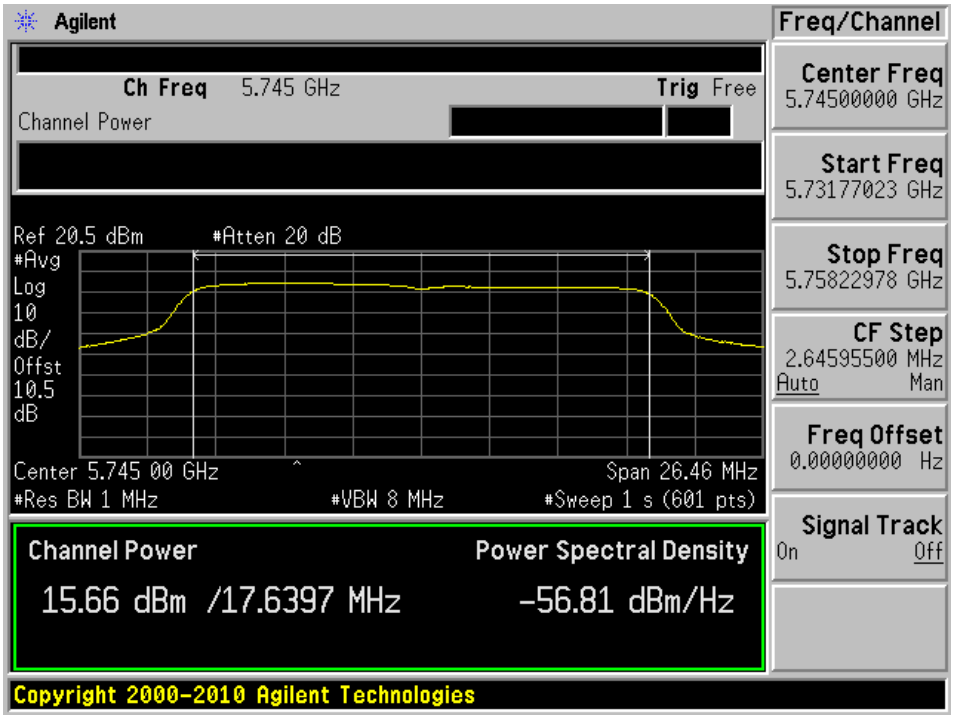


High channel: 5825 MHz

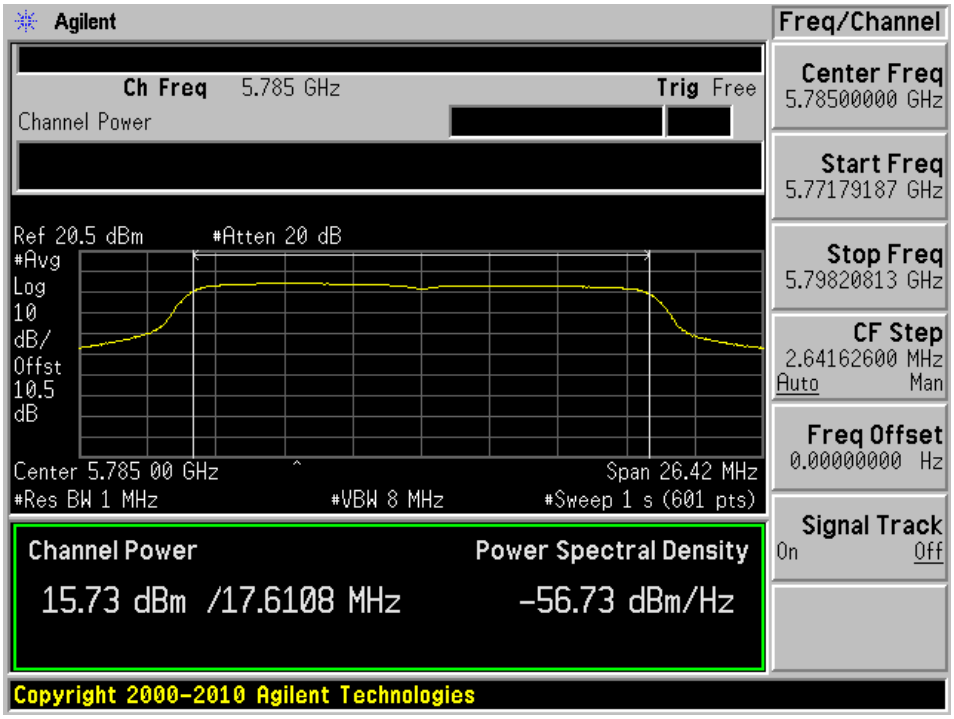


802.11n20 mode, 5 dBi Antenna Chain 1

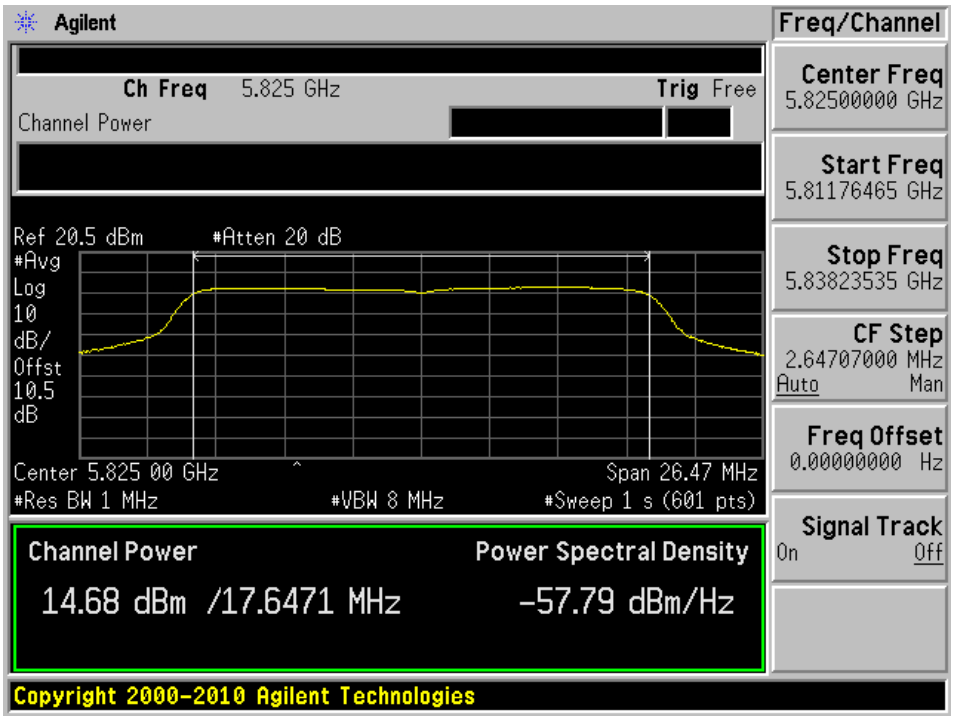
Low channel: 5745 MHz



Middle channel: 5785 MHz

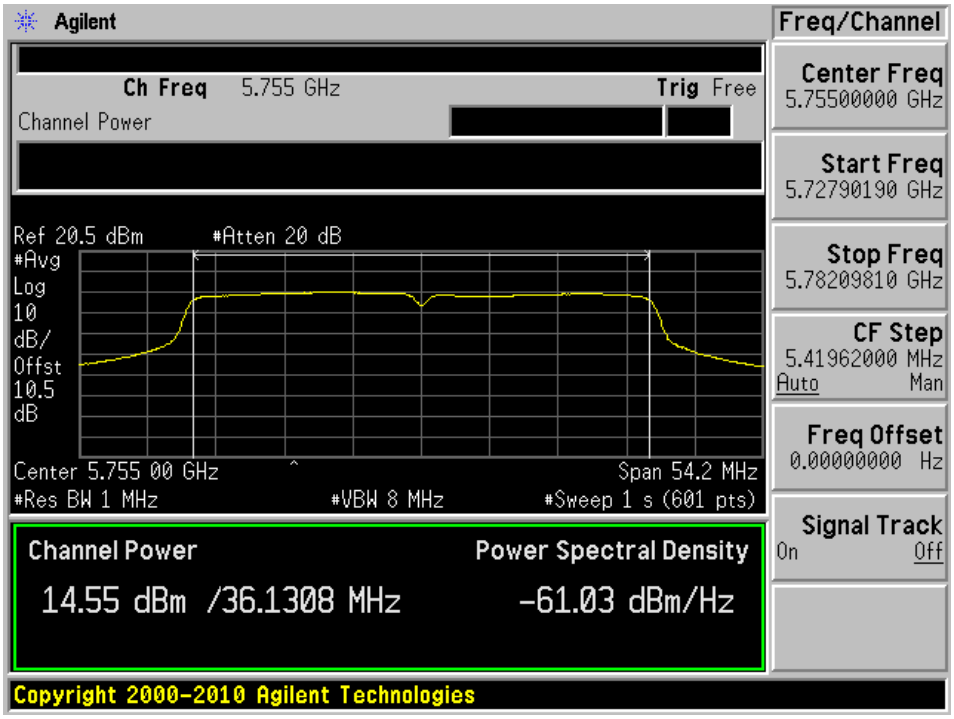


High channel: 5825 MHz

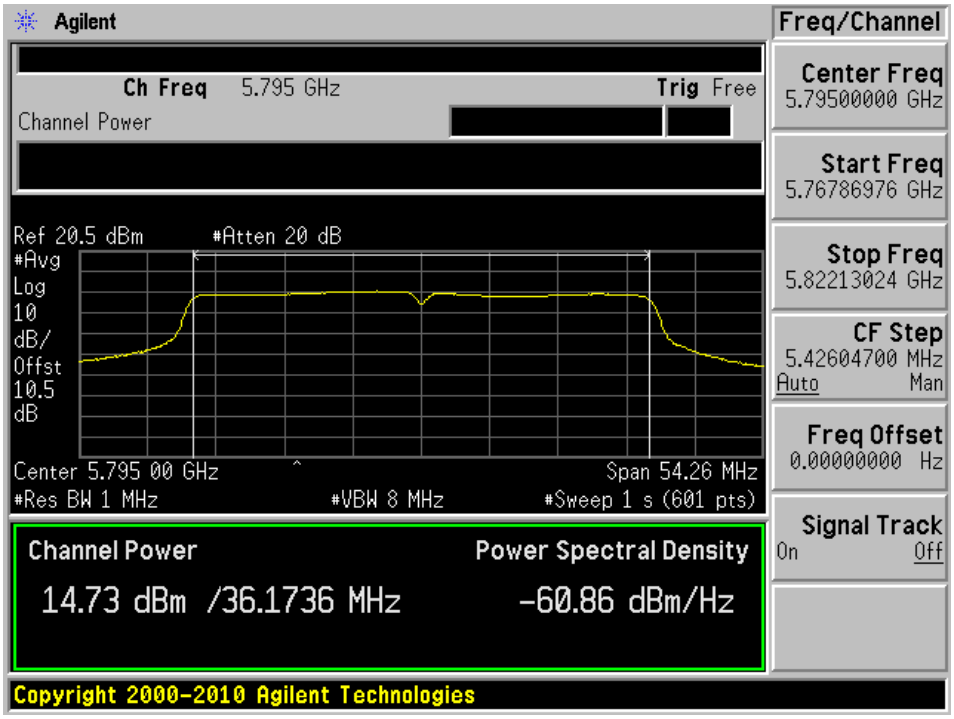


802.11n40 mode, 5 dBi Antenna Chain 1

Low channel: 5755 MHz

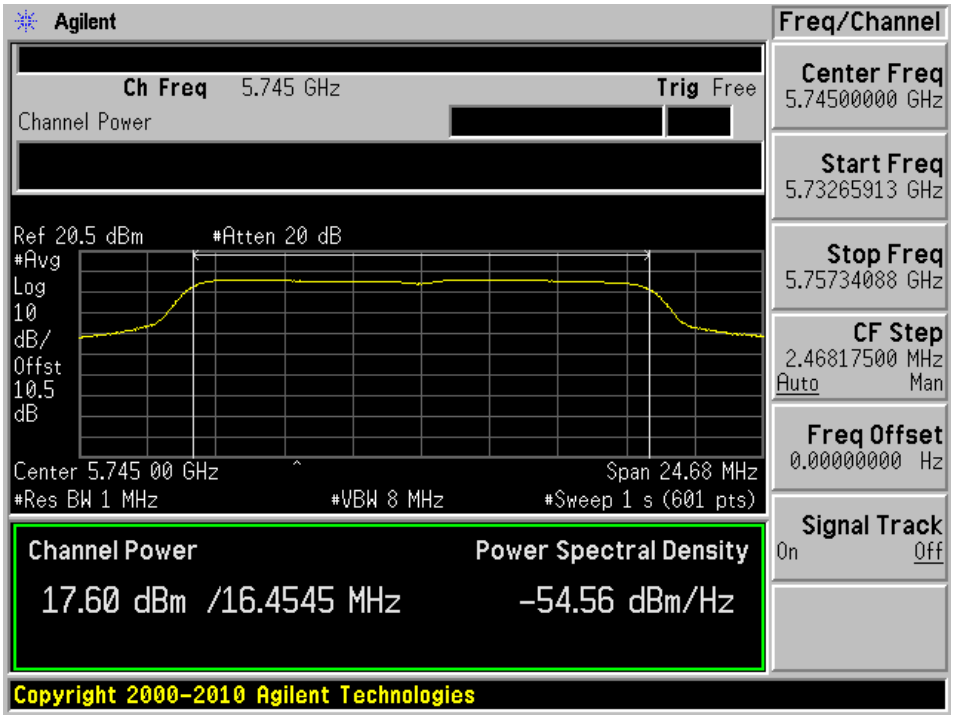


High channel: 5795 MHz

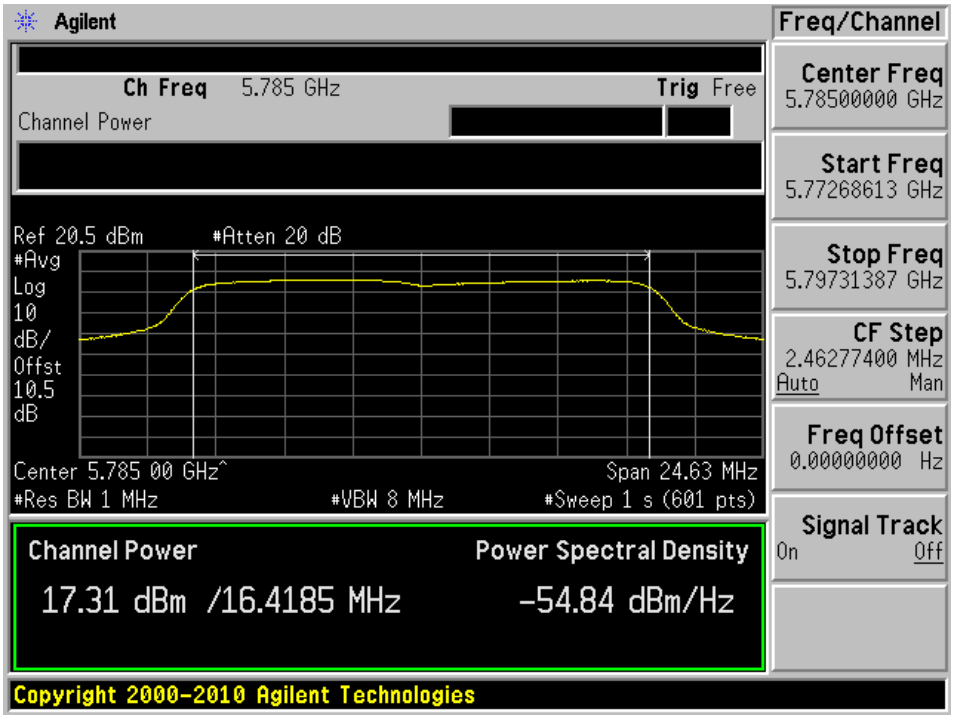


802.11a mode, 5 dBi Antenna Chain 2

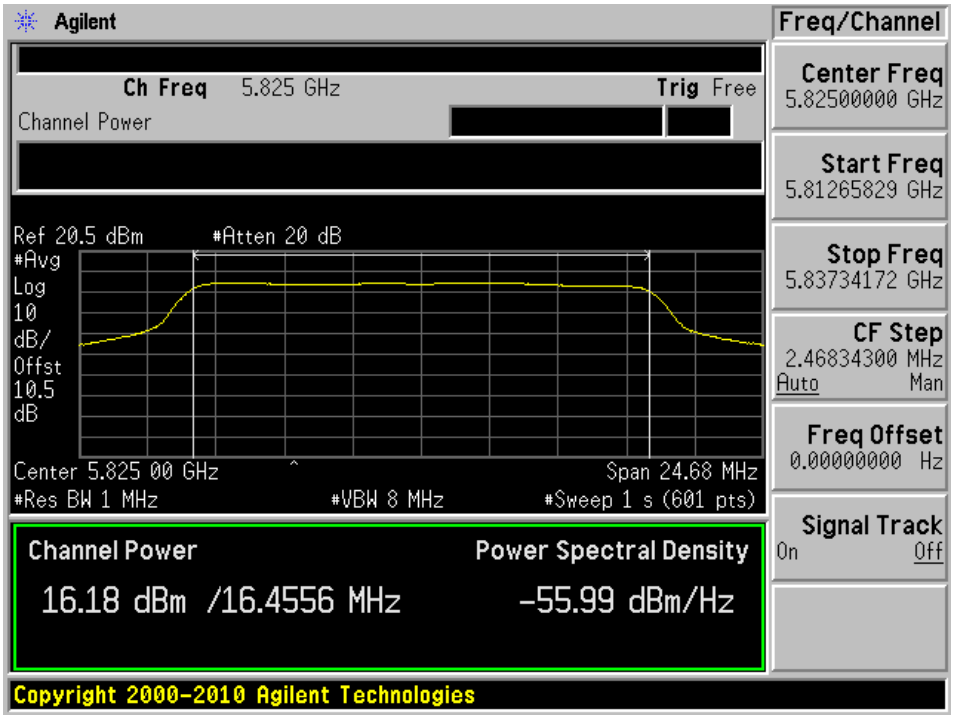
Low channel: 5745 MHz



Middle channel: 5785 MHz

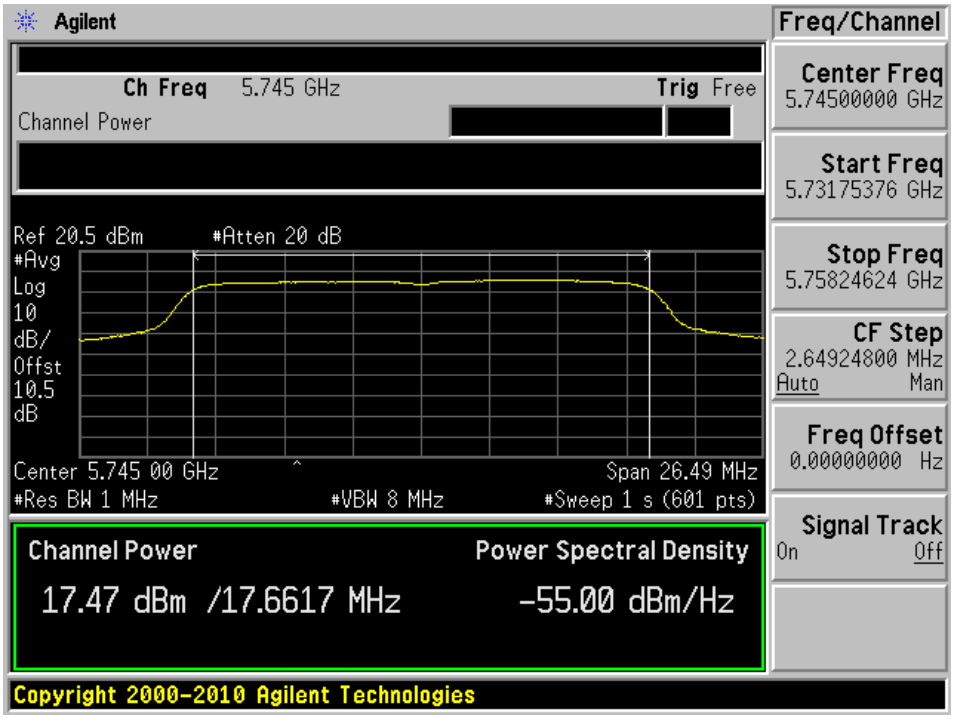


High channel: 5825 MHz

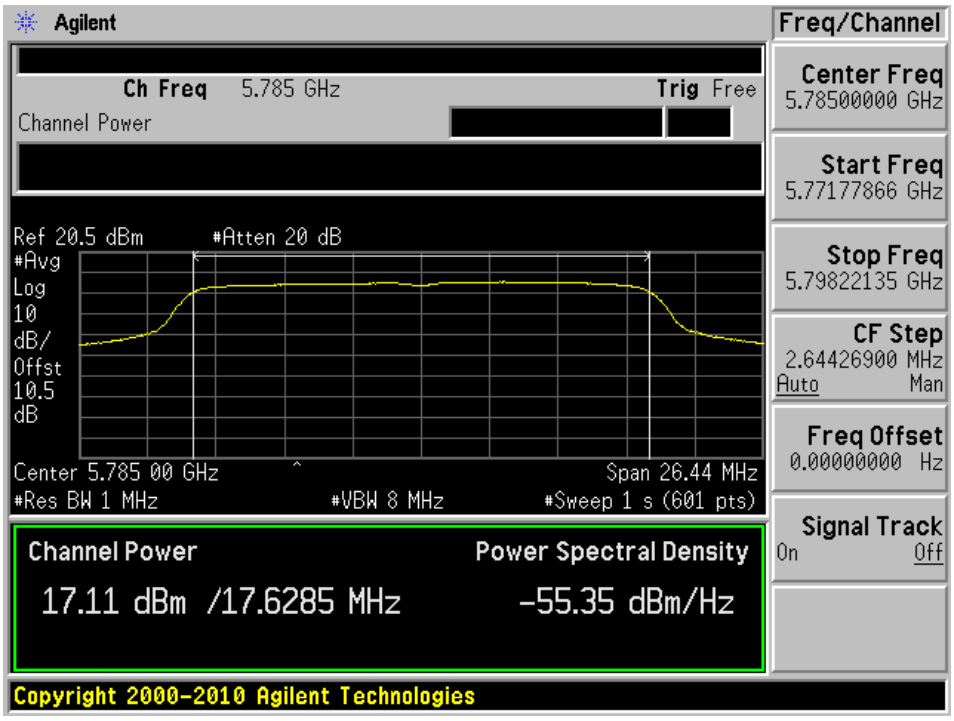


802.11n20 mode, 5 dBi Antenna Chain 2

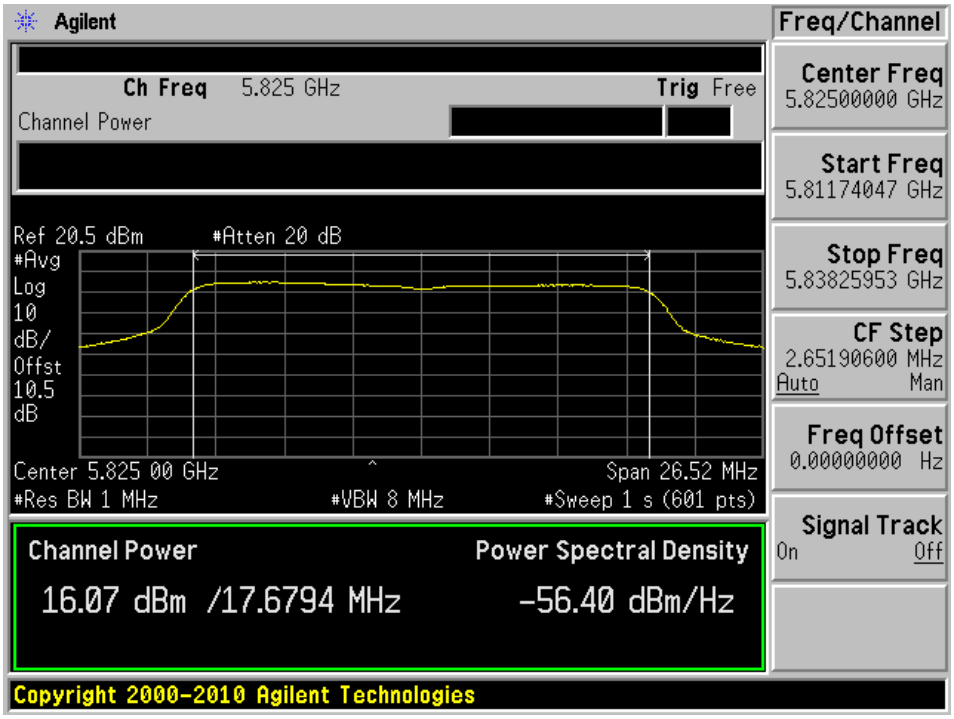
Low channel: 5745 MHz



Middle channel: 5785 MHz

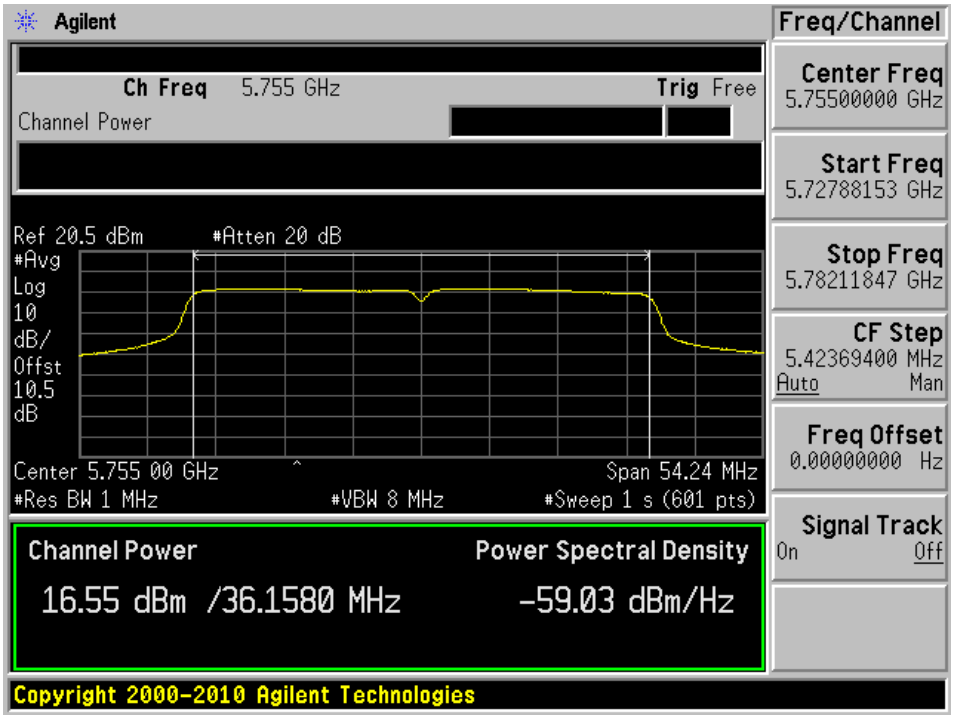


High channel: 5825 MHz

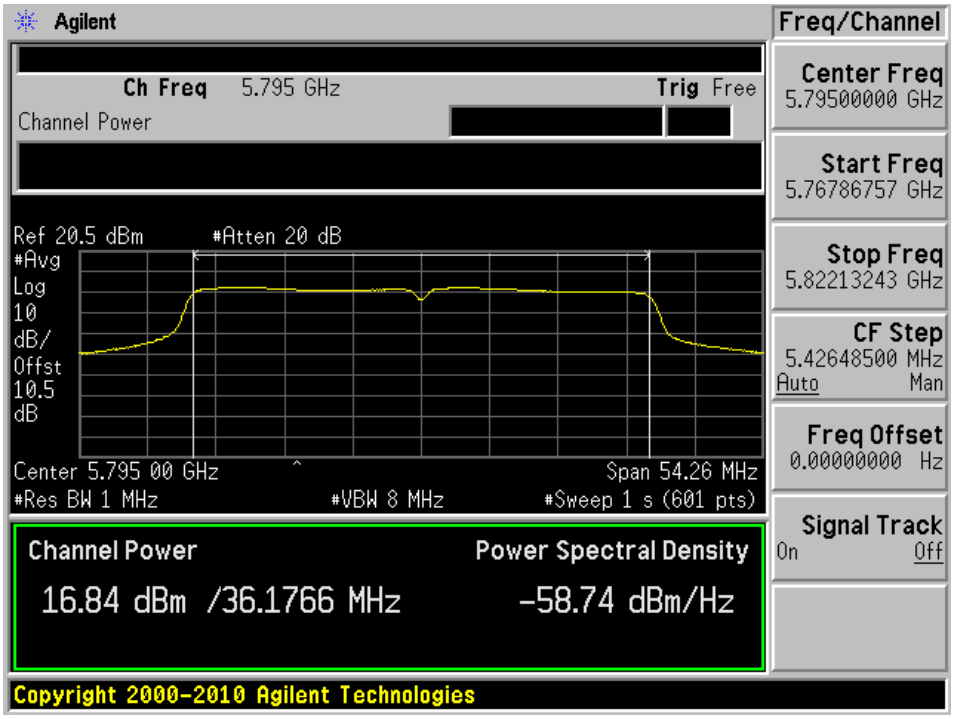


802.11n40 mode, 5 dBi Antenna Chain 2

Low channel: 5755 MHz



High channel: 5795 MHz



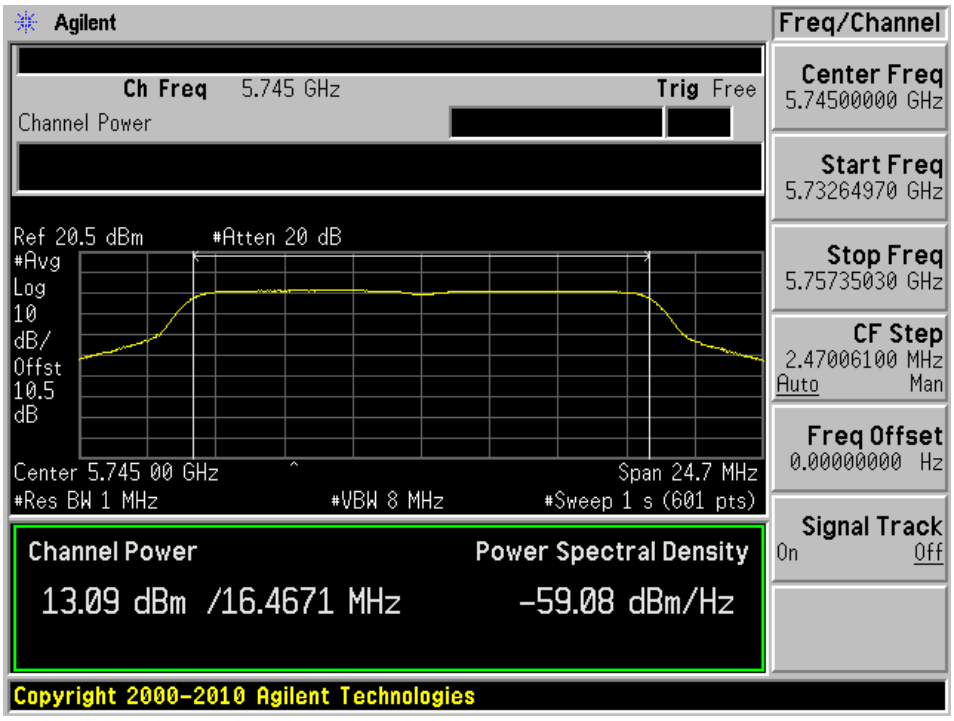
5.8 GHz Band, 8 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5745	13.09	10.55	11.85	16.72	28	-11.28
Middle	5785	17.15	15.47	17.04	21.39	28	-6.61
High	5825	14.08	13.08	15.67	19.18	28	-8.82
802.11n HT20 mode							
Low	5745	14.13	12.19	13.77	18.21	28	-9.79
Middle	5785	17.09	15.27	17.43	21.47	28	-6.53
High	5825	14.03	12.60	13.82	18.30	28	-9.70
802.11n HT40 mode							
Low	5755	11.61	10.51	10.91	15.81	28	-12.19
High	5795	16.94	14.76	16.88	21.08	28	-6.92

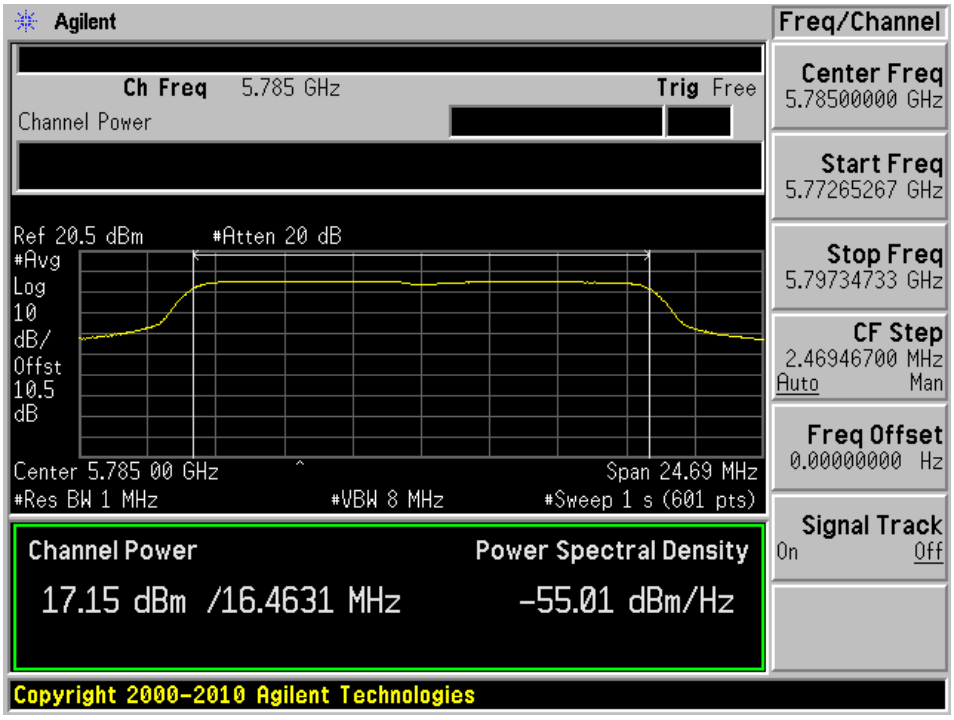
Note: Antenna gain exceed 6 dBi, therefore the limit should be 30-(8-6) =28 dBm

802.11a mode, 8 dBi Antenna Chain 0

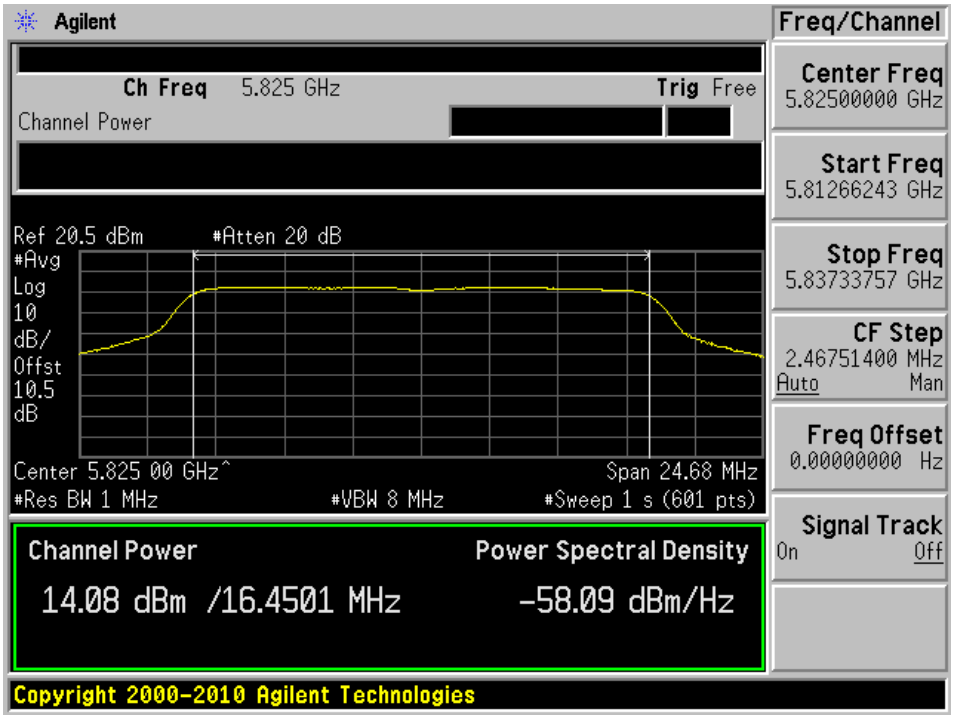
Low channel: 5745 MHz



Middle channel: 5785 MHz

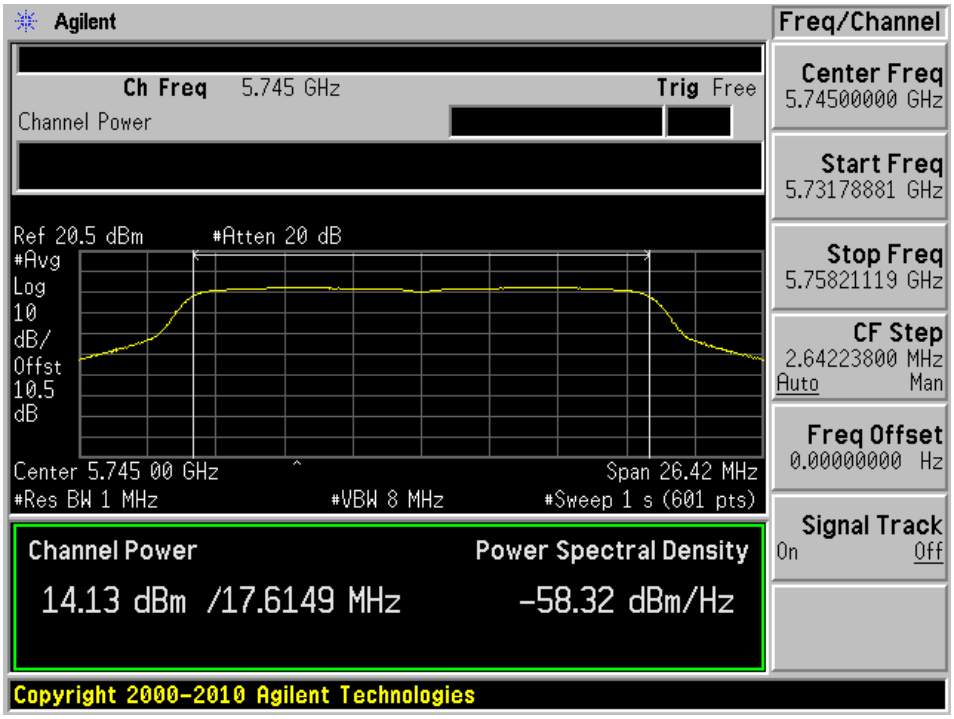


High channel: 5825 MHz

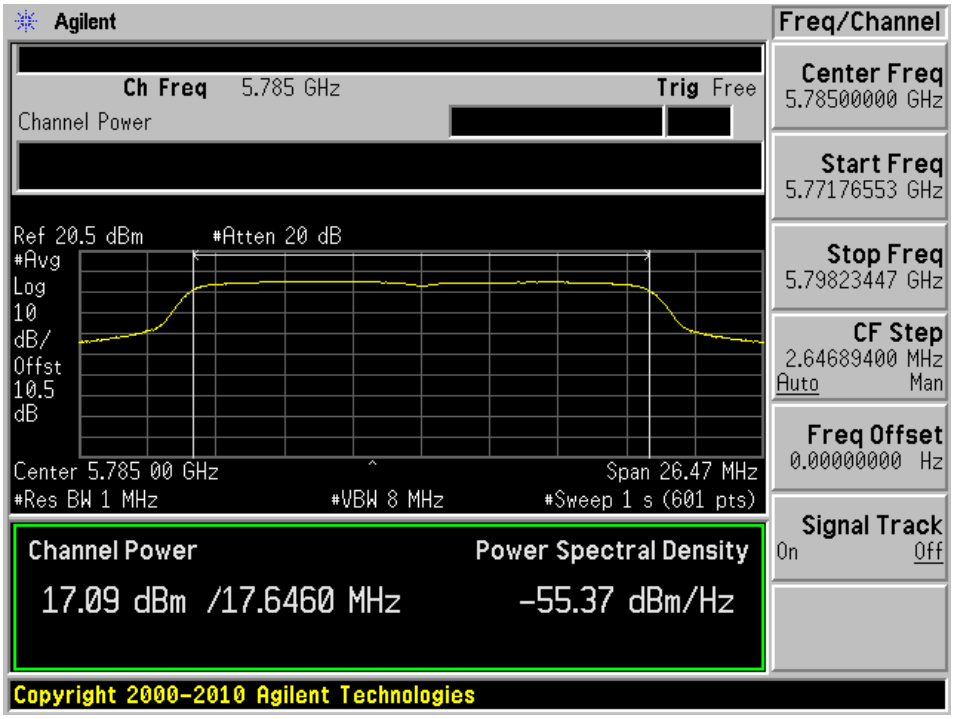


802.11n20 mode, 8 dBi Antenna Chain 0

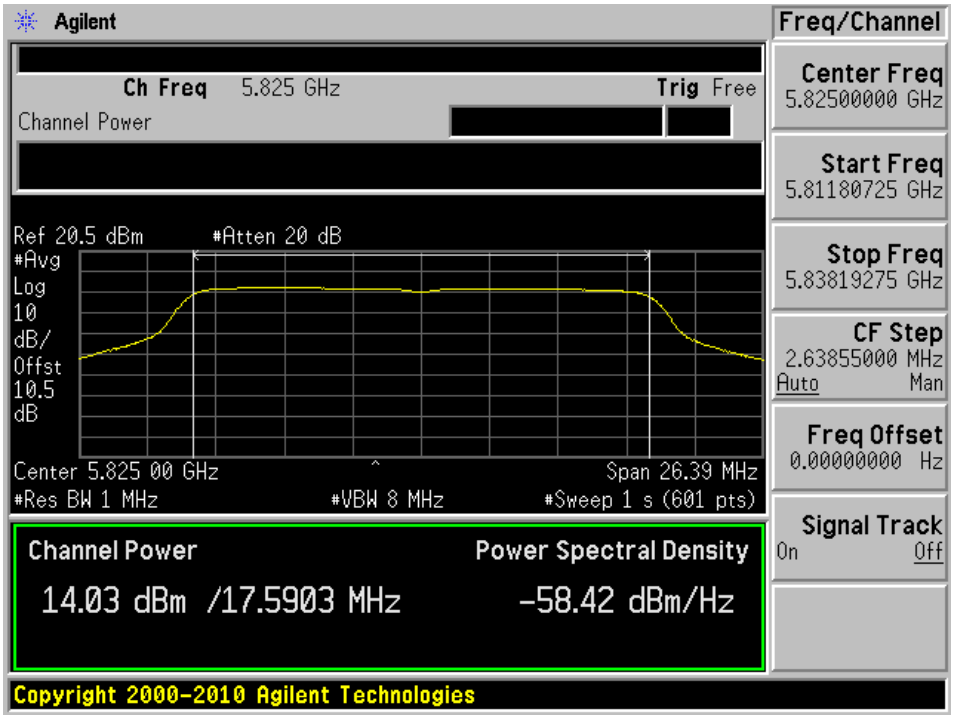
Low channel: 5745 MHz



Middle channel: 5785 MHz

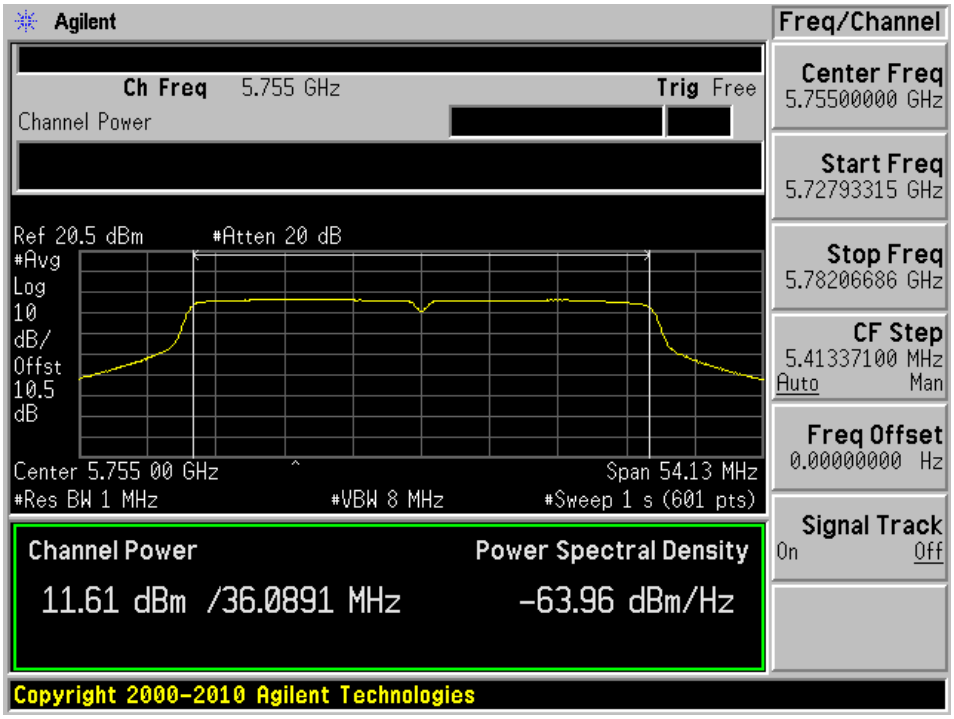


High channel: 5825 MHz

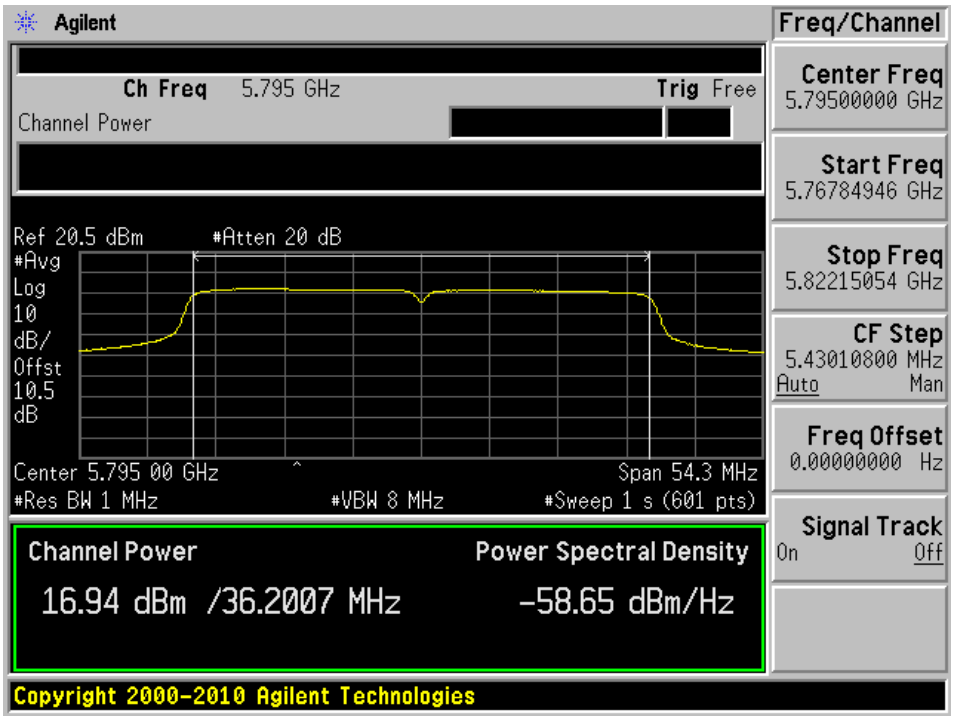


802.11n40 mode, 8 dBi Antenna Chain 0

Low channel: 5755 MHz

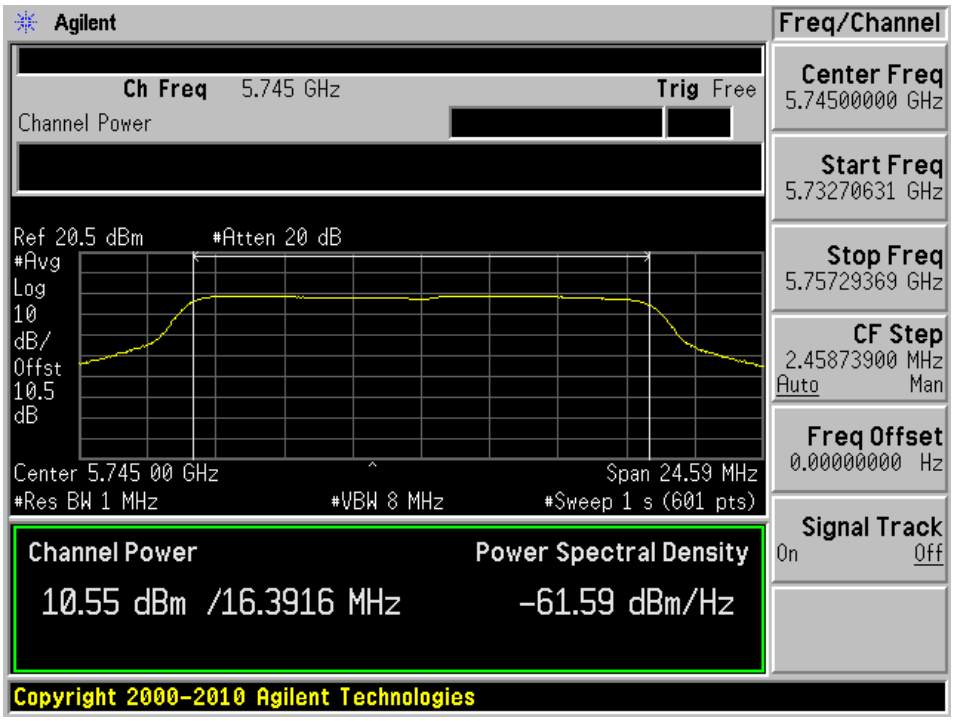


High channel: 5795 MHz

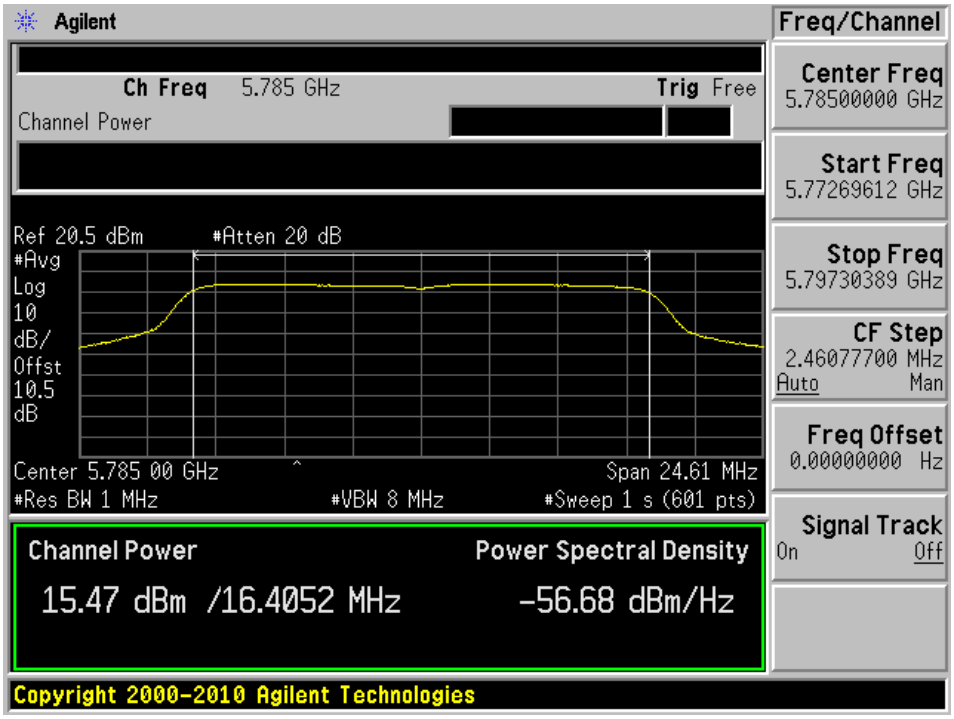


802.11a mode, 8 dBi Antenna Chain 1

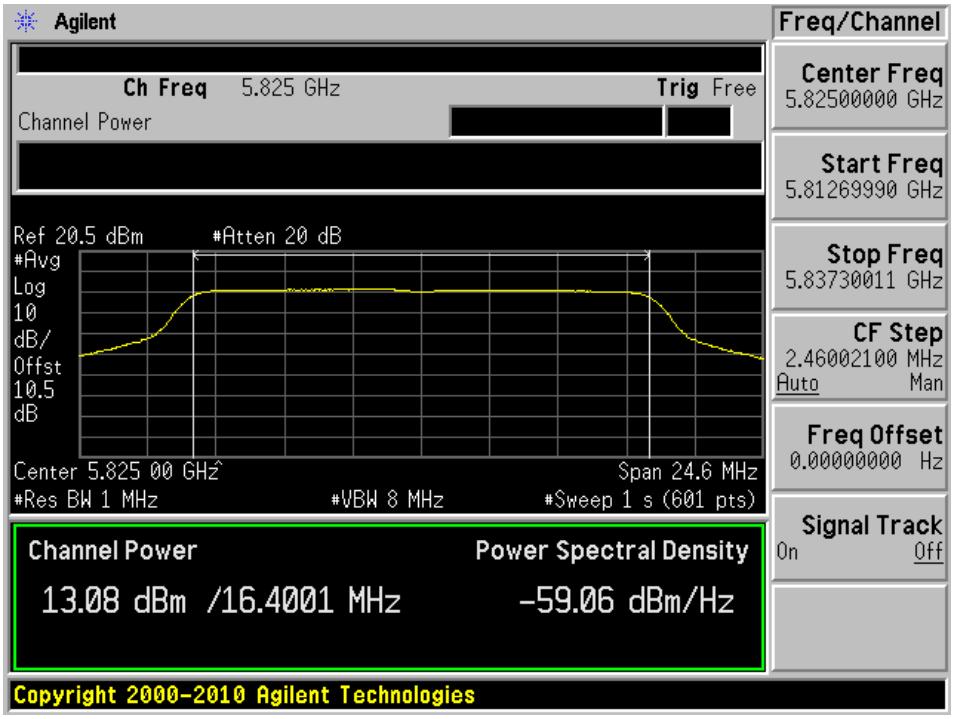
Low channel: 5745 MHz



Middle channel: 5785 MHz

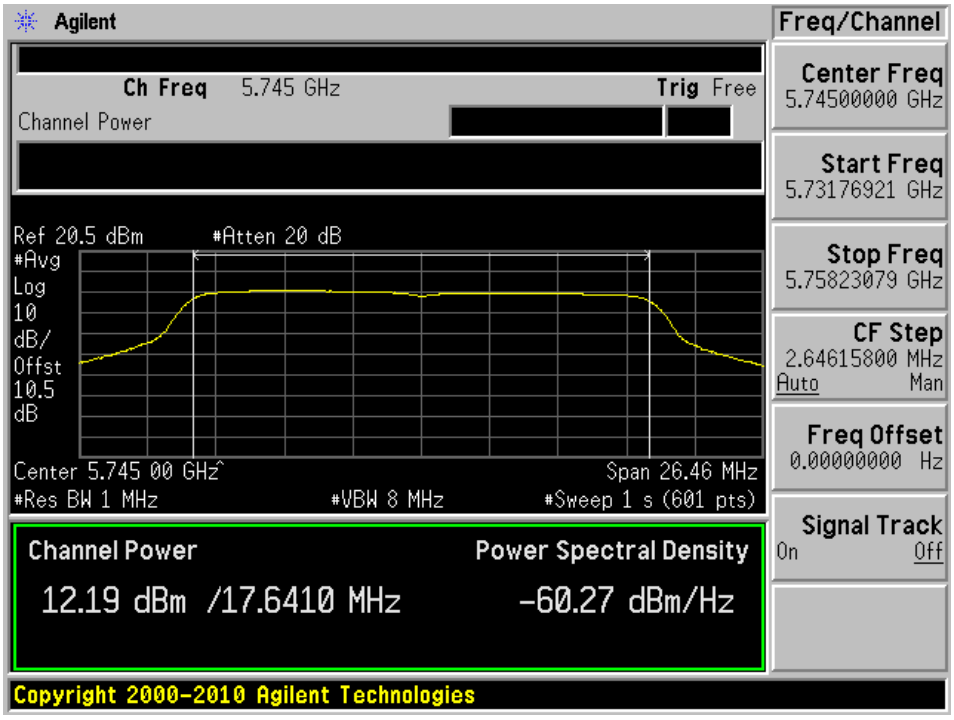


High channel: 5825 MHz

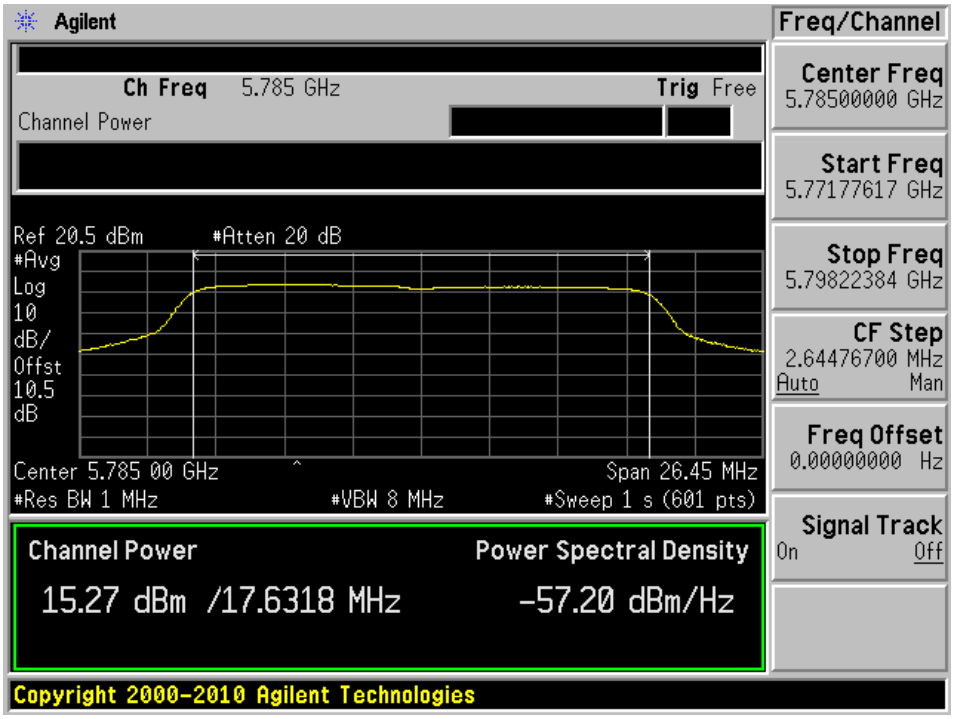


802.11n20 mode, 8 dBi Antenna Chain 1

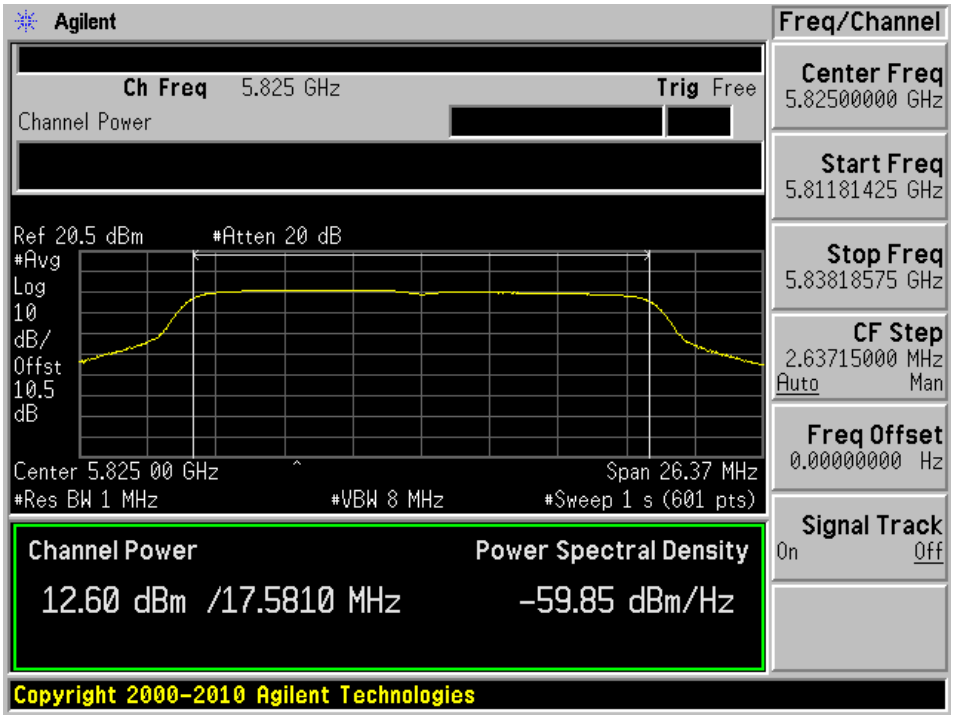
Low channel: 5745 MHz



Middle channel: 5785 MHz

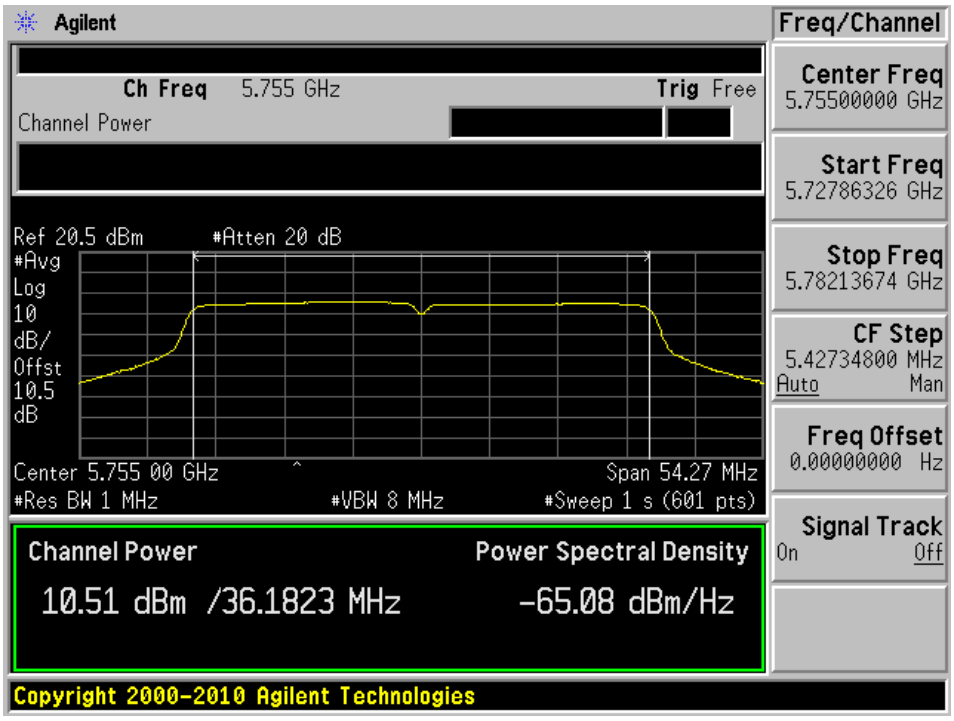


High channel: 5825 MHz

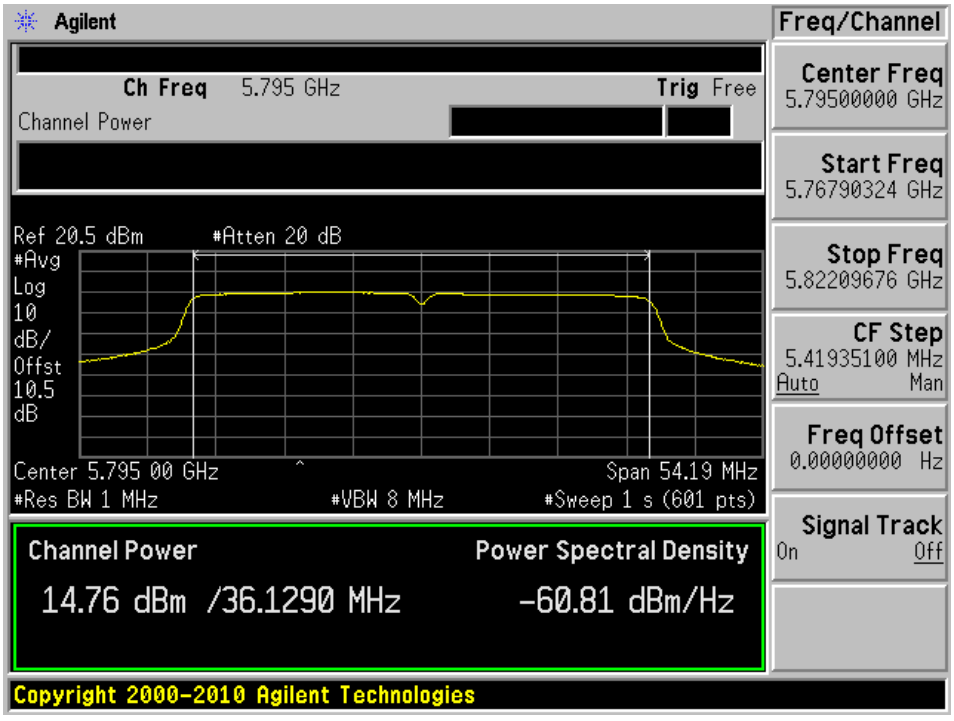


802.11n40 mode, 8 dBi Antenna Chain 1

Low channel: 5755 MHz

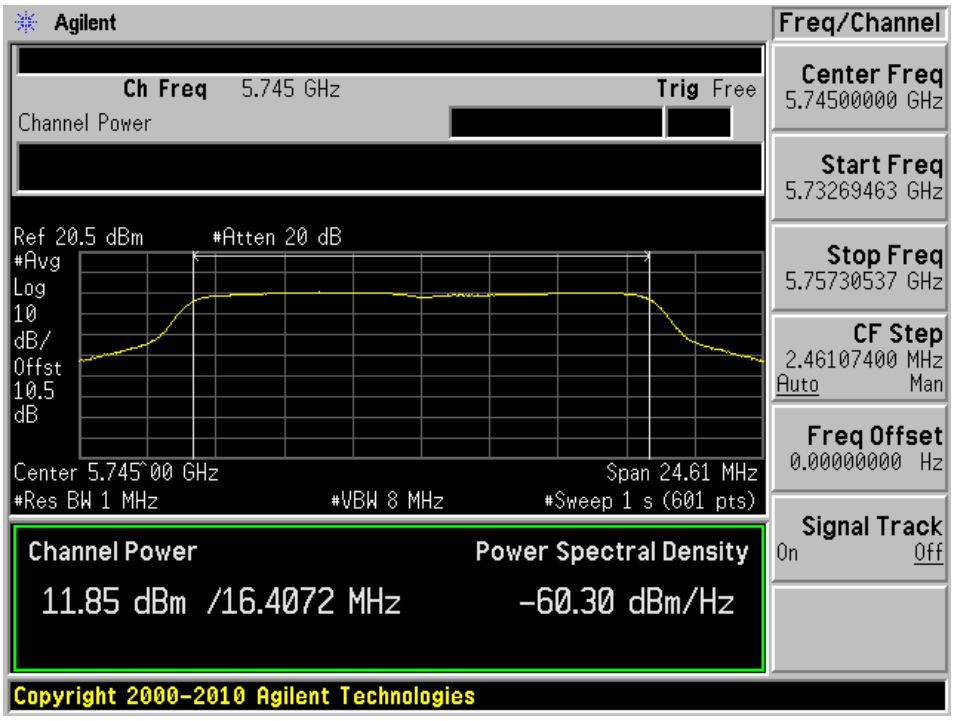


High channel: 5795 MHz

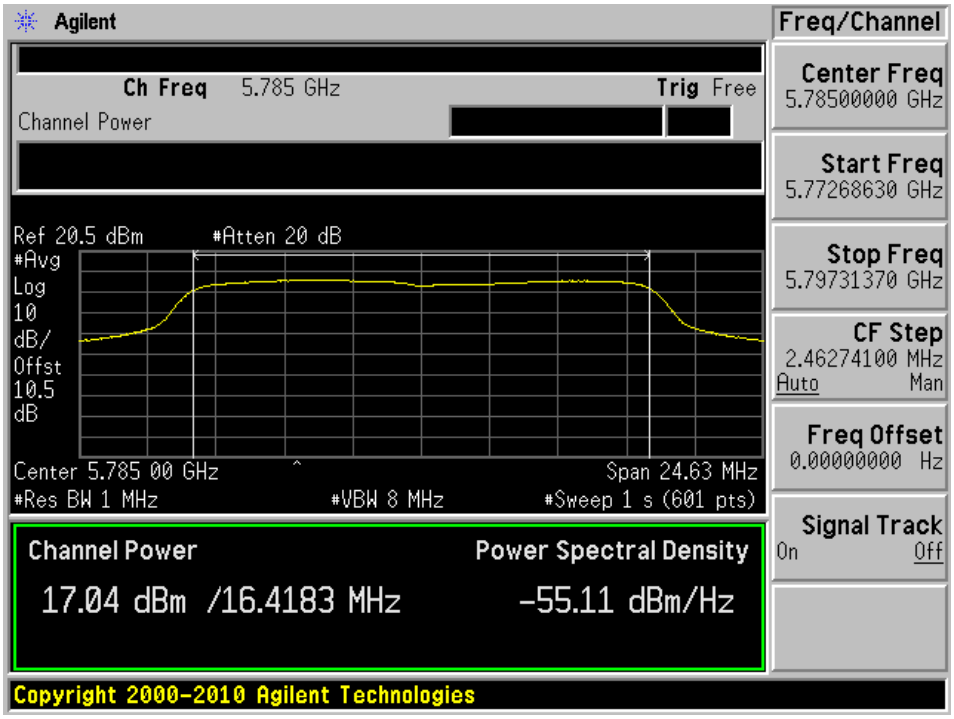


802.11a mode, 8 dBi Antenna Chain 2

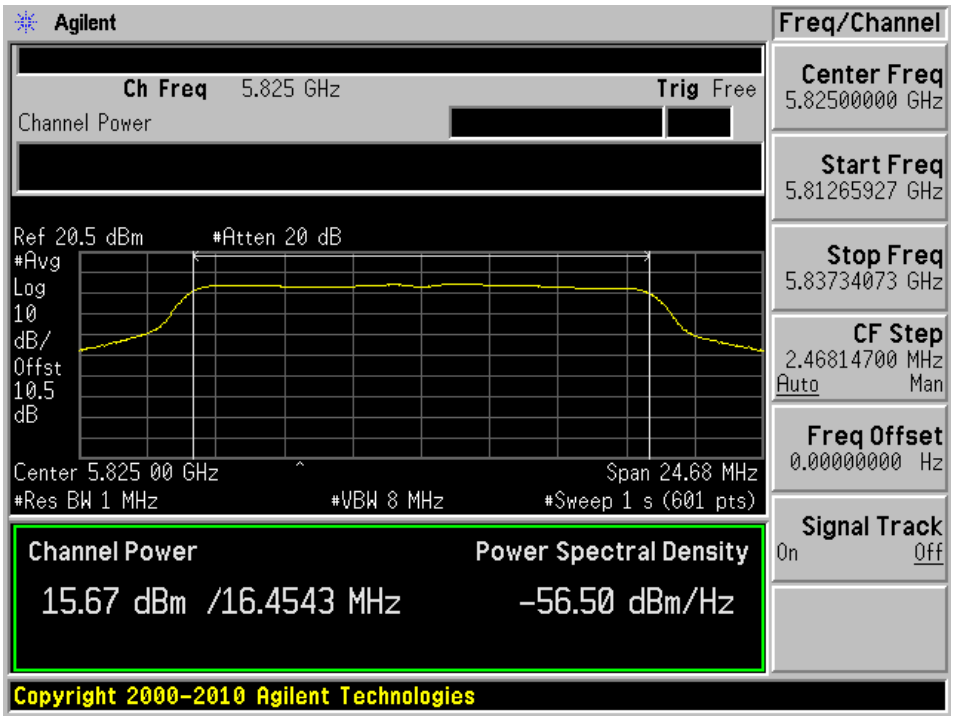
Low channel: 5745 MHz



Middle channel: 5785 MHz

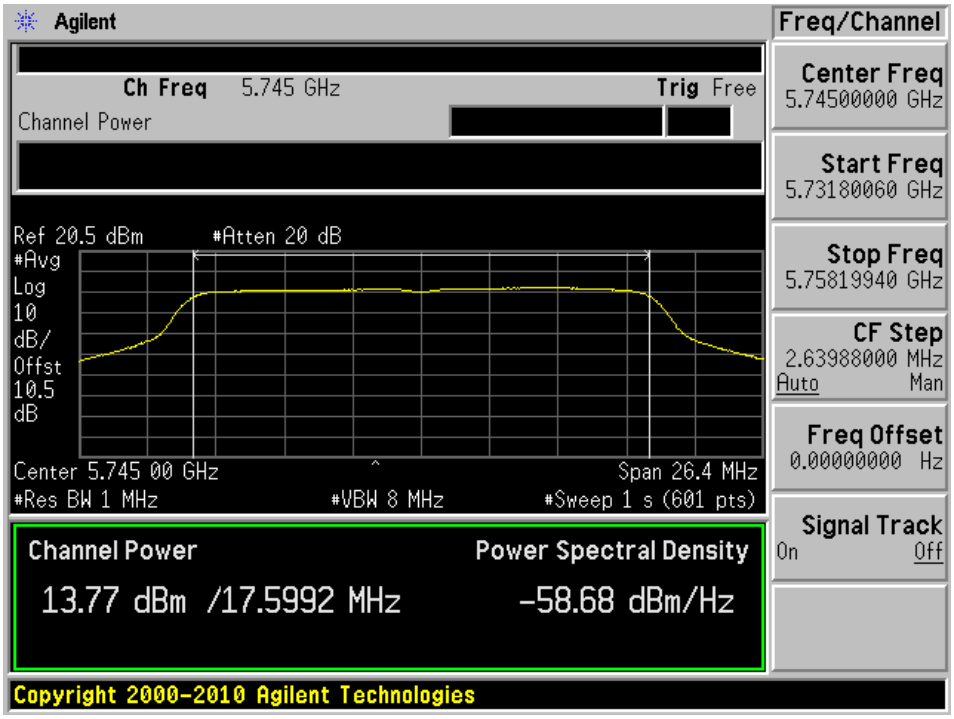


High channel: 5825 MHz

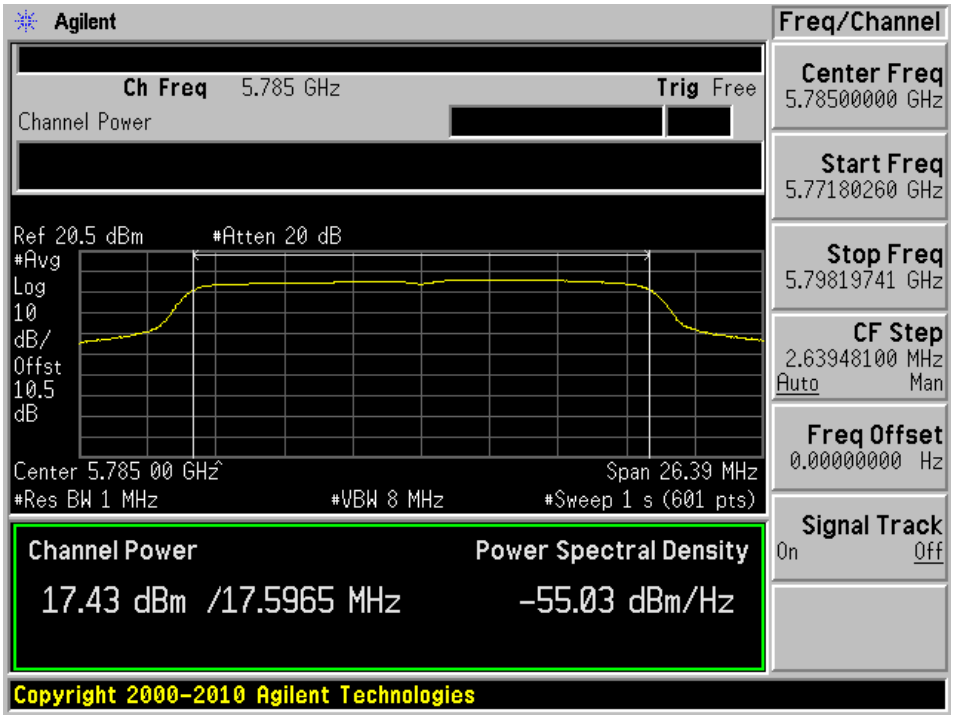


802.11n20 mode, 8 dBi Antenna Chain 2

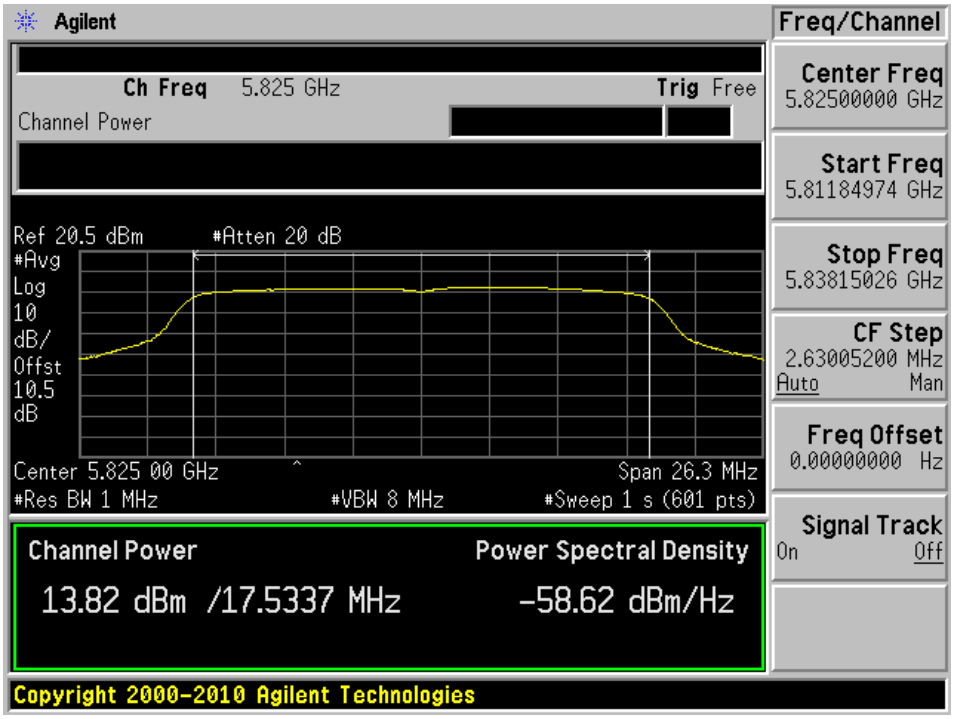
Low channel: 5745 MHz



Middle channel: 5785 MHz

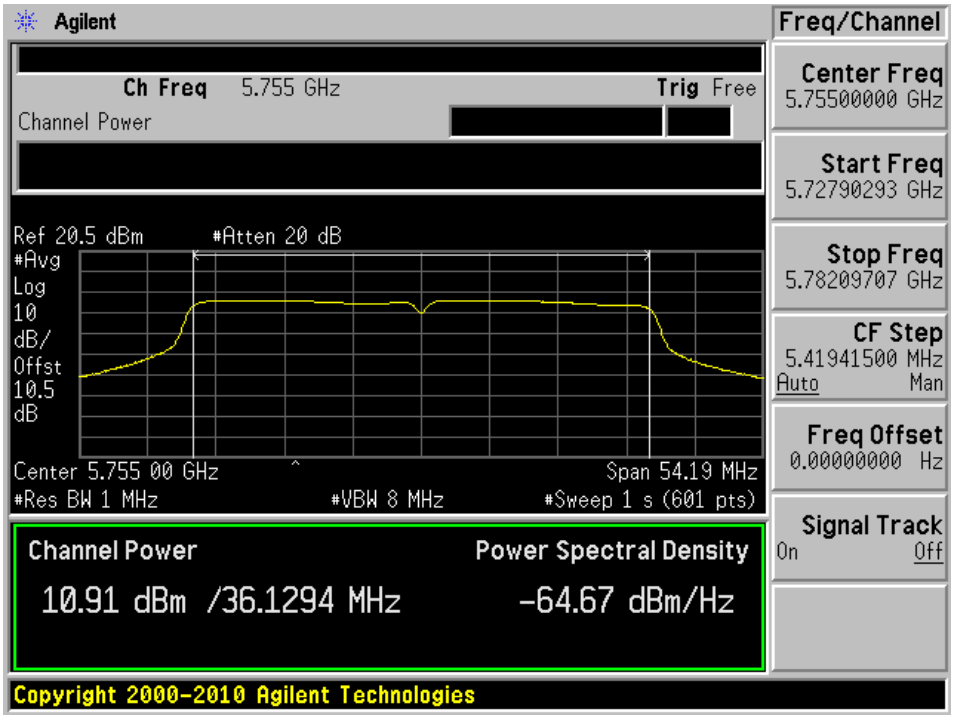


High channel: 5825 MHz

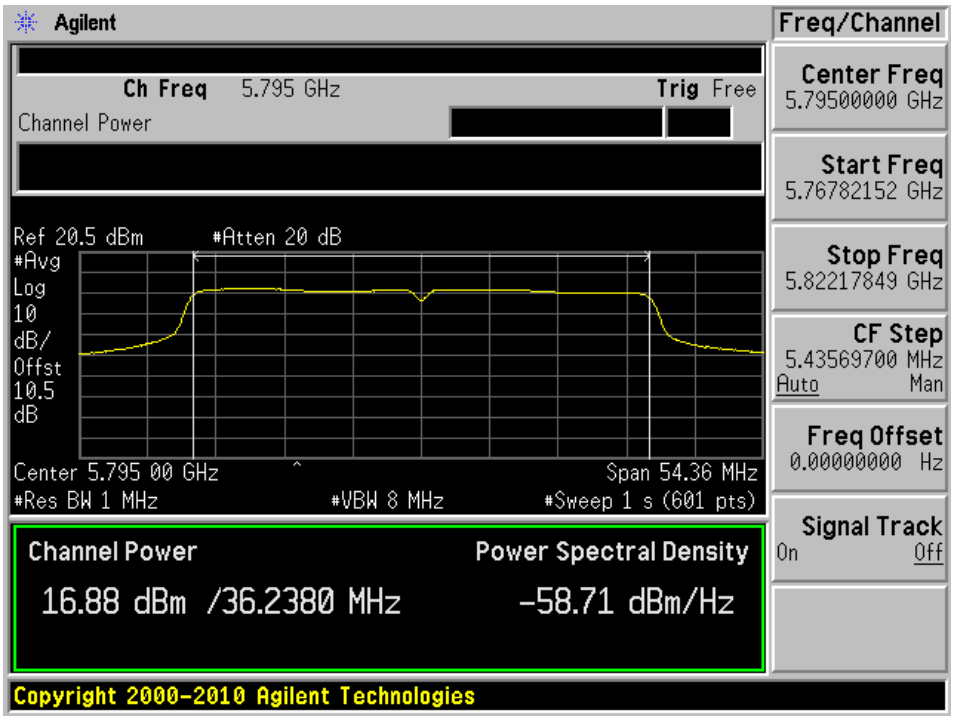


802.11n40 mode, 8 dBi Antenna Chain 2

Low channel: 5755 MHz



High channel: 5795 MHz



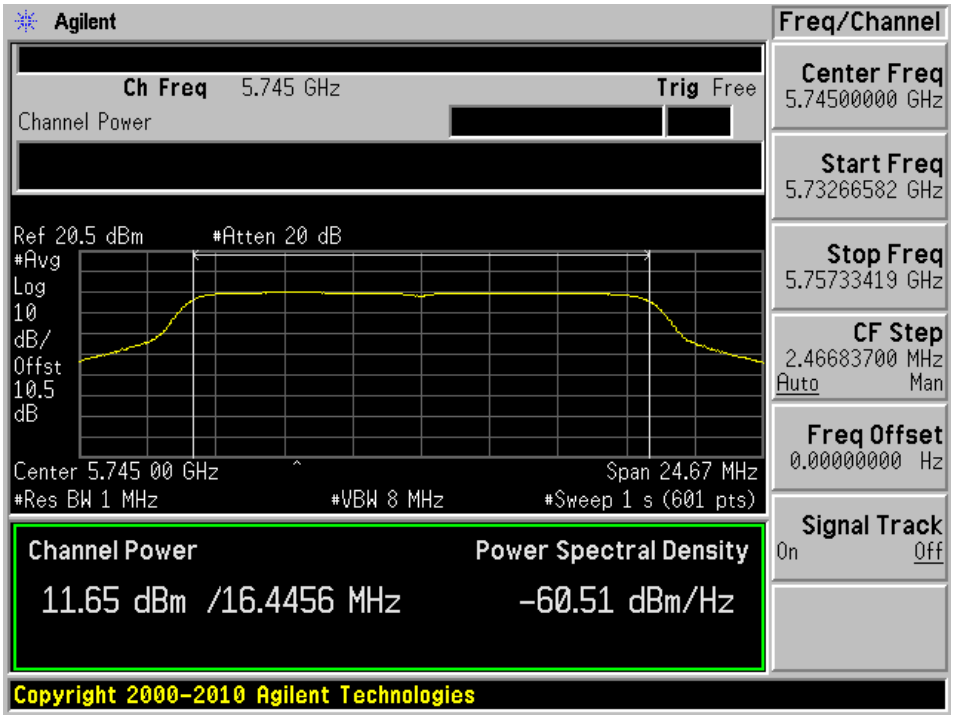
5.8 GHz Band, 12 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5745	11.65	10.38	11.67	16.05	24	-7.95
Middle	5785	11.23	9.29	10.94	15.34	24	-8.66
High	5825	9.90	7.77	9.45	13.90	24	-10.10
802.11n HT20 mode							
Low	5745	10.55	9.53	10.45	14.97	24	-9.03
Middle	5785	11.37	9.29	10.87	15.37	24	-8.63
High	5825	9.98	7.97	9.63	14.05	24	-9.95
802.11n HT40 mode							
Low	5755	8.75	7.27	8.58	13.02	24	-10.98
High	5795	11.11	9.08	10.44	15.06	24	-8.94

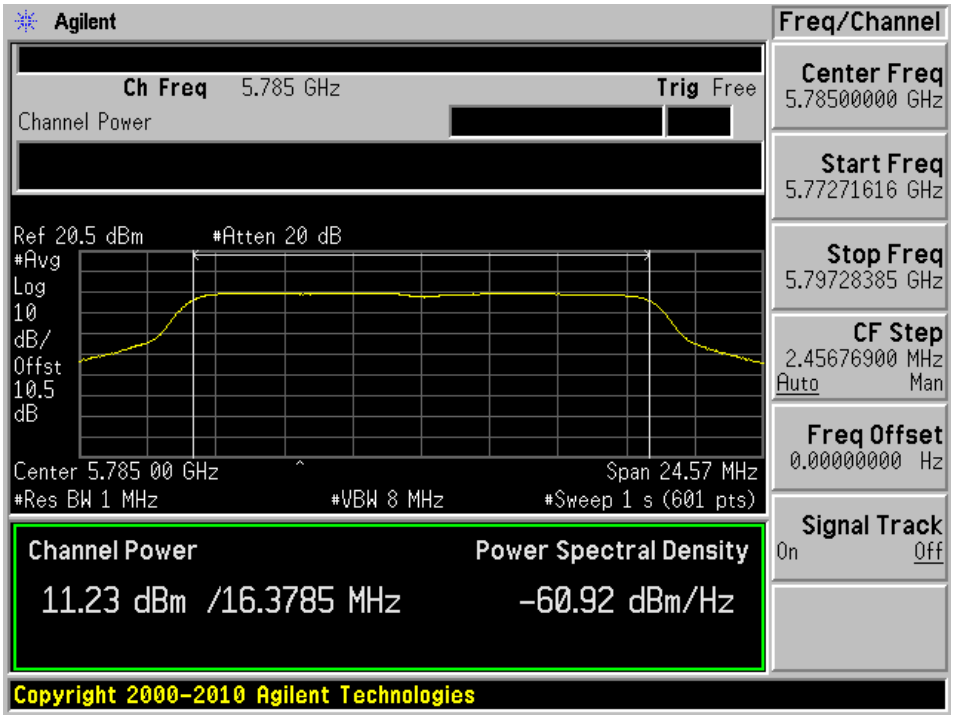
Note: Antenna gain exceed 6 dBi, therefore the limit should be 30-(12-6) =24 dBm

802.11a mode, 12 dBi Antenna Chain 0

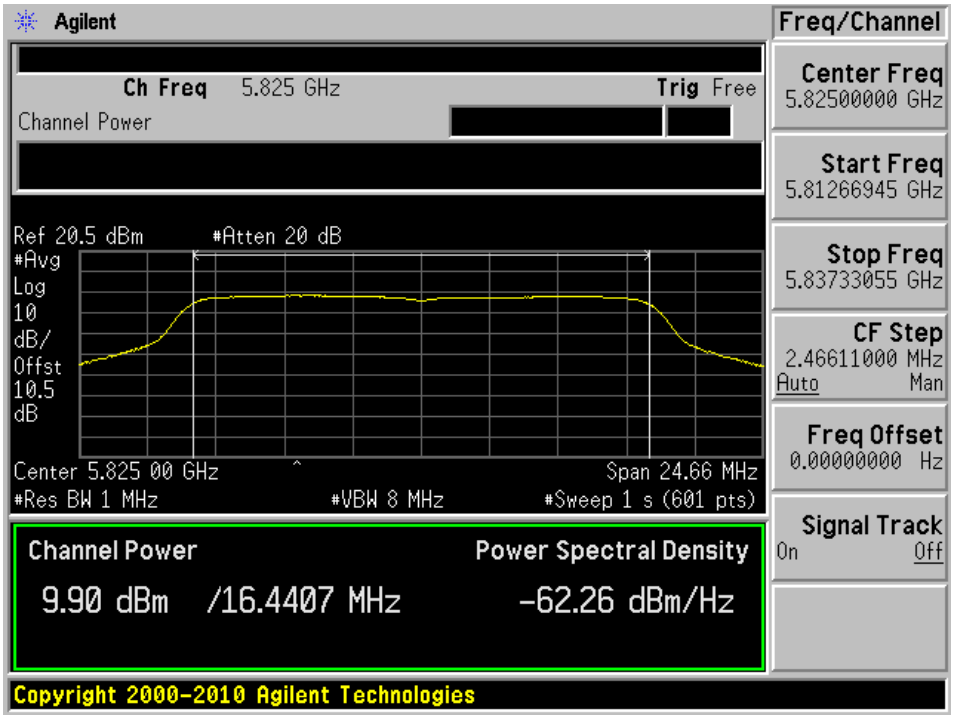
Low channel: 5745 MHz



Middle channel: 5785 MHz

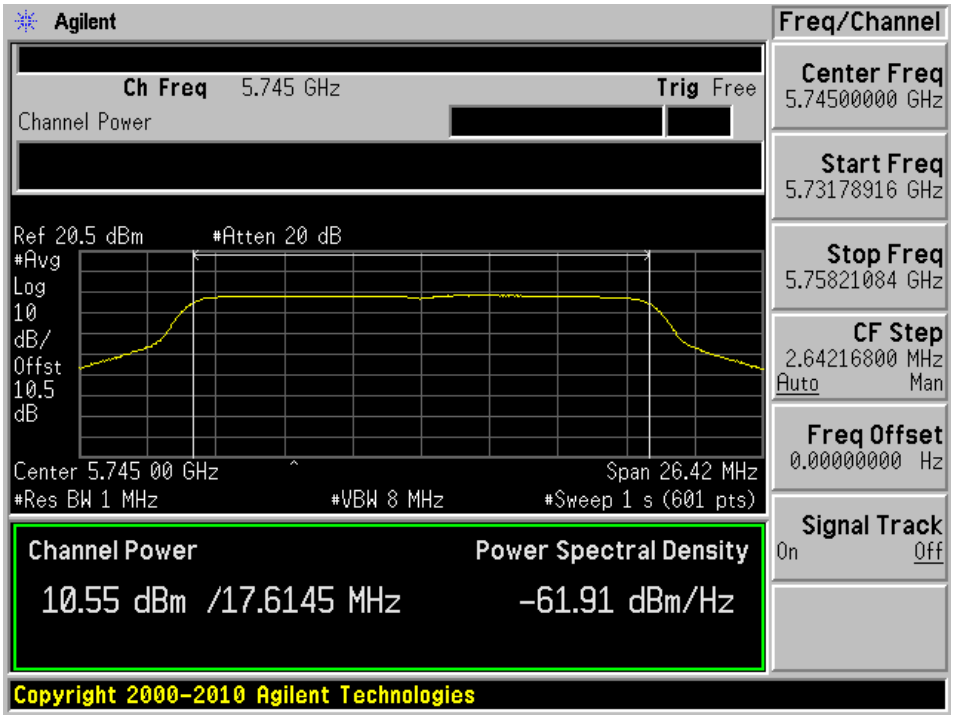


High channel: 5825 MHz

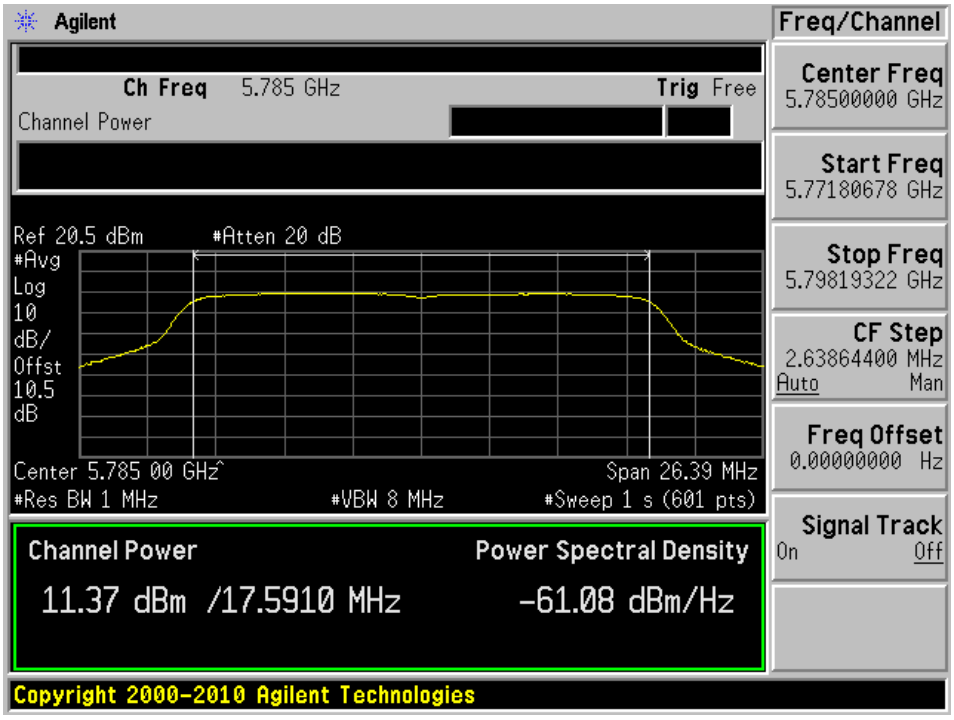


802.11n20 mode, 12 dBi Antenna Chain 0

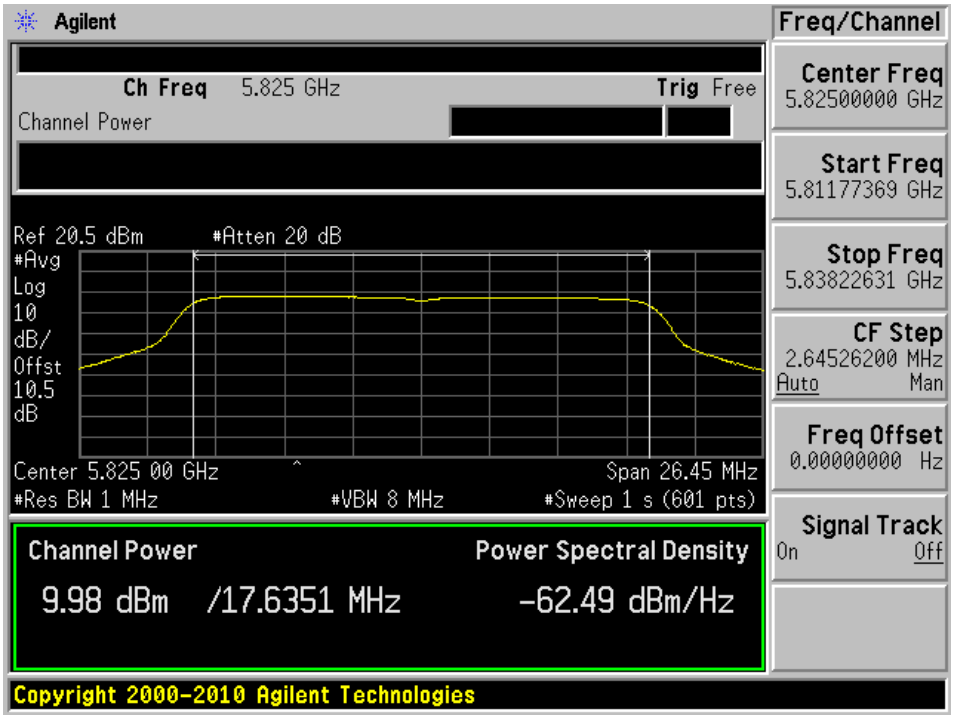
Low channel: 5745 MHz



Middle channel: 5785 MHz

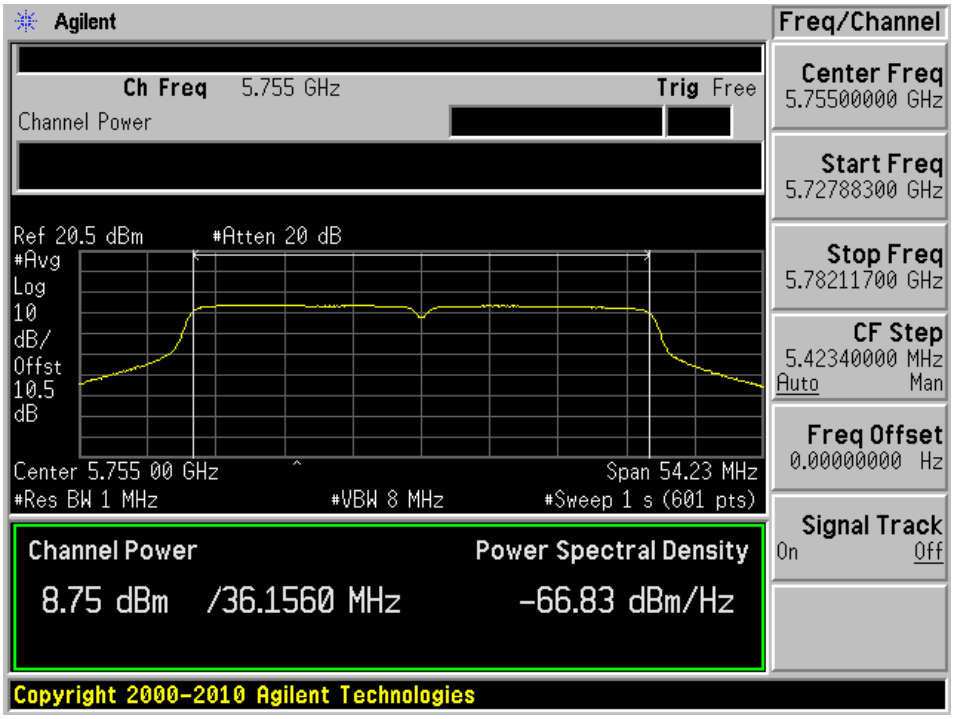


High channel: 5825 MHz

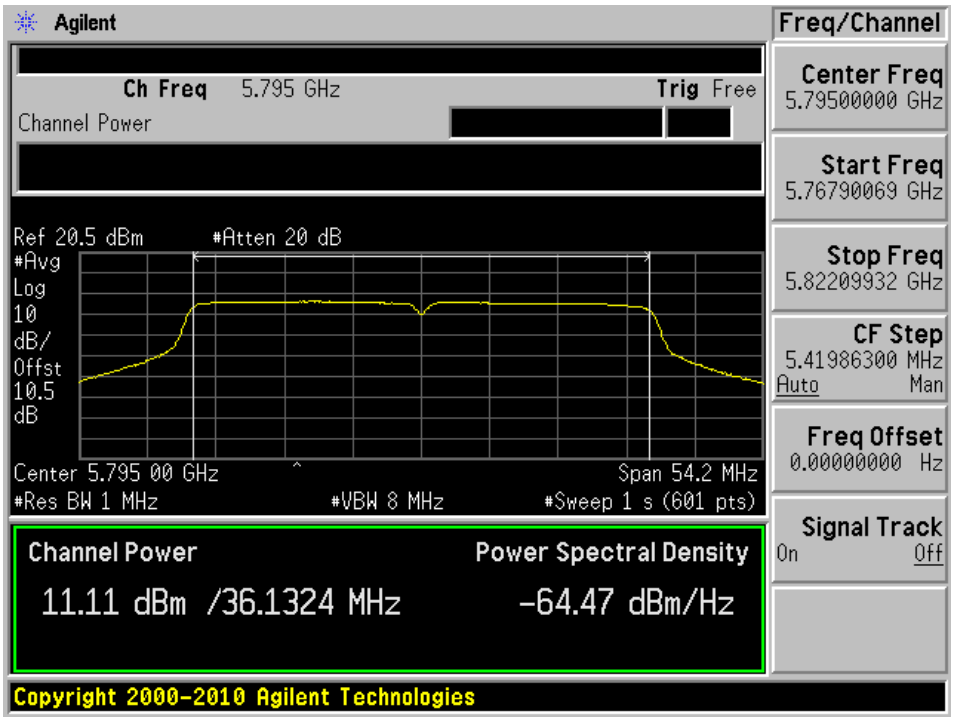


802.11n40 mode, 12 dBi Antenna Chain 0

Low channel: 5755 MHz

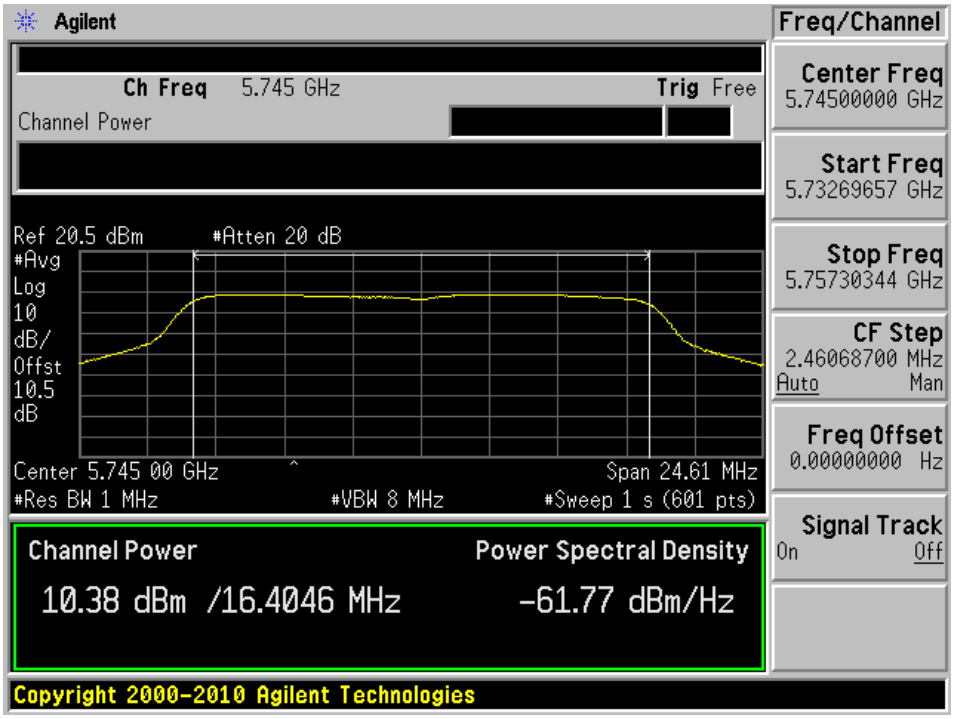


High channel: 5795 MHz

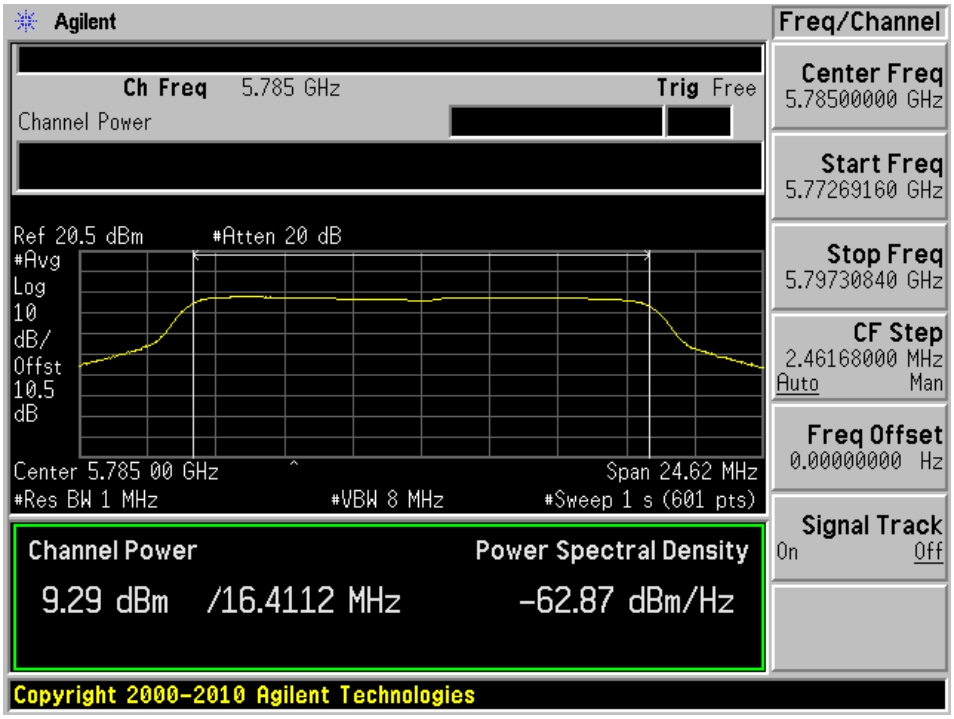


802.11a mode, 12 dBi Antenna Chain 1

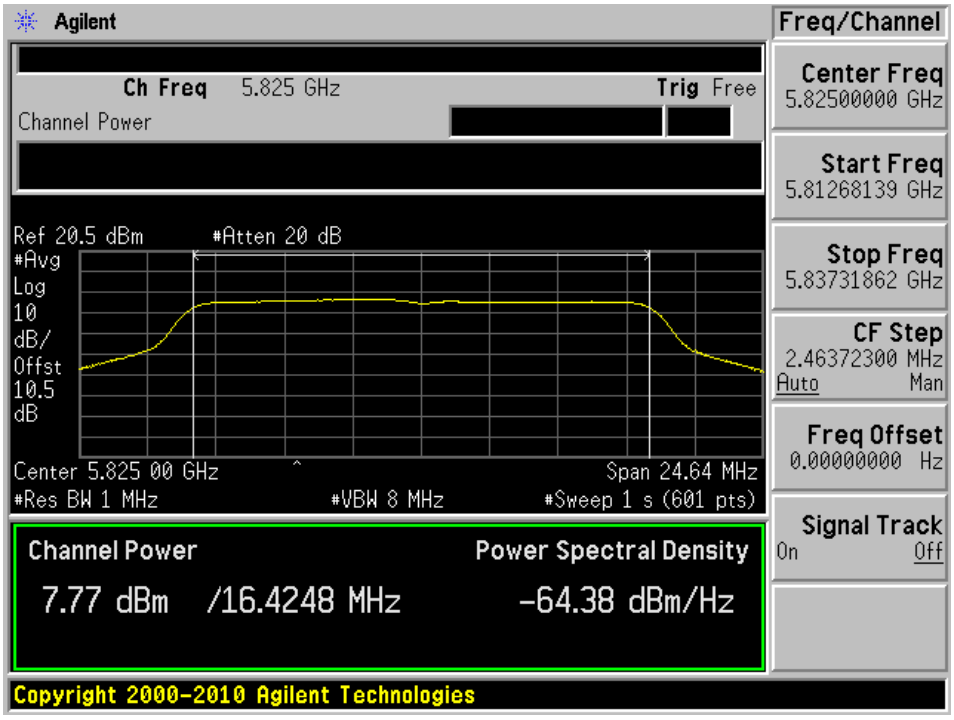
Low channel: 5745 MHz



Middle channel: 5785 MHz

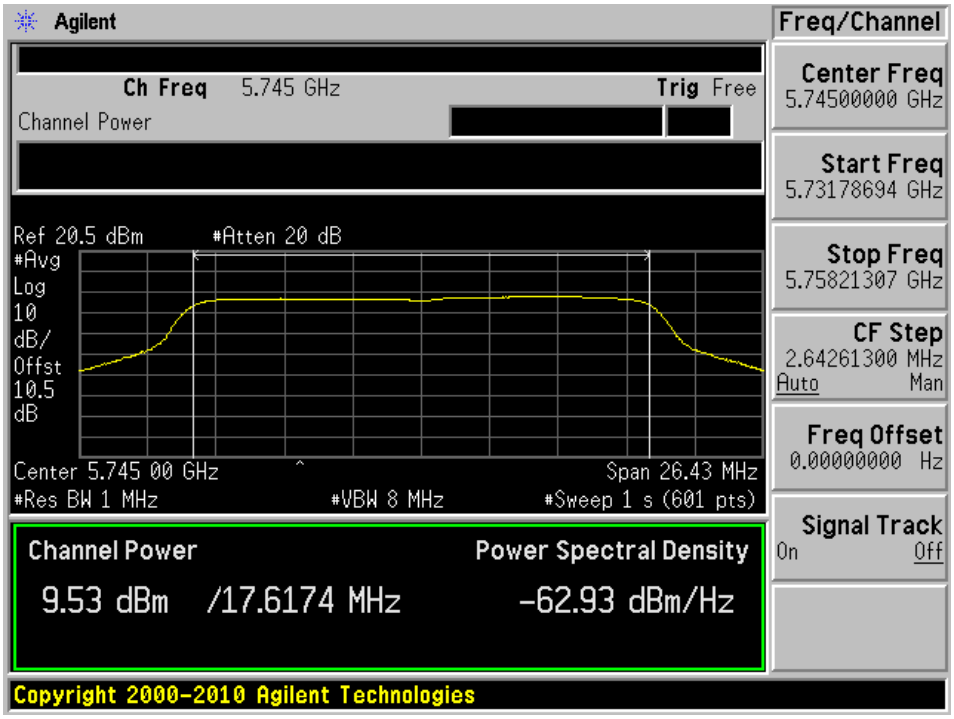


High channel: 5825 MHz

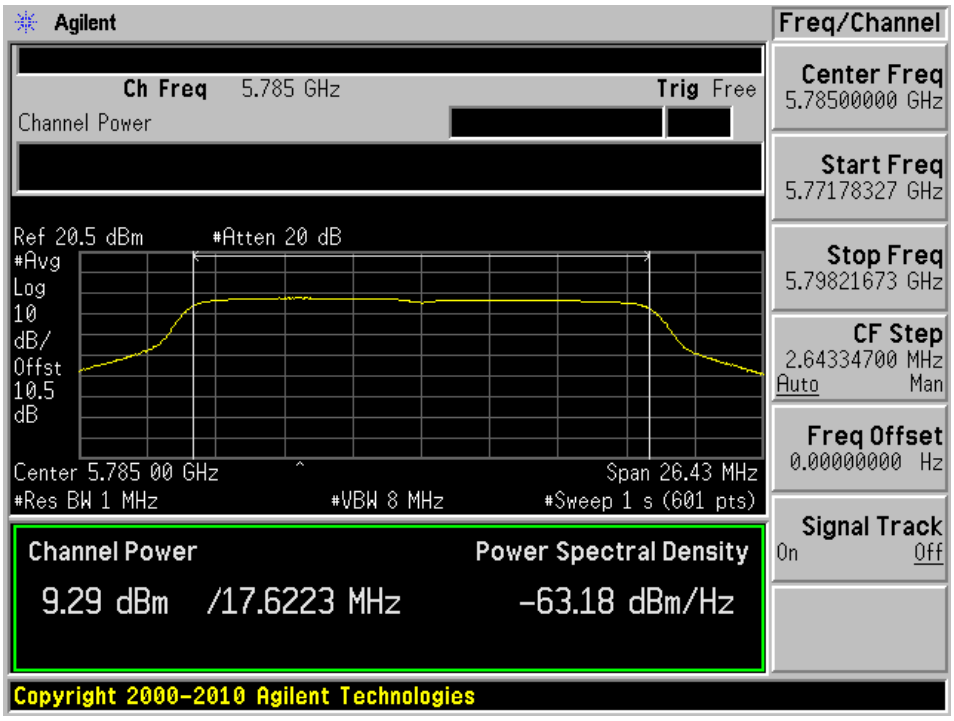


802.11n20 mode, 12 dBi Antenna Chain 1

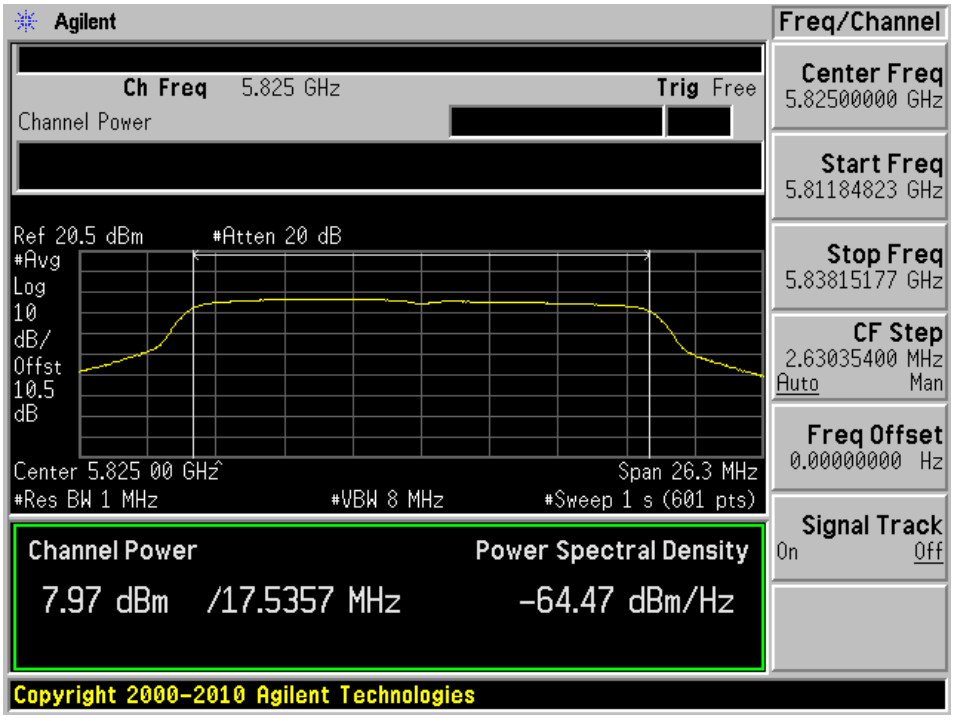
Low channel: 5745 MHz



Middle channel: 5785 MHz

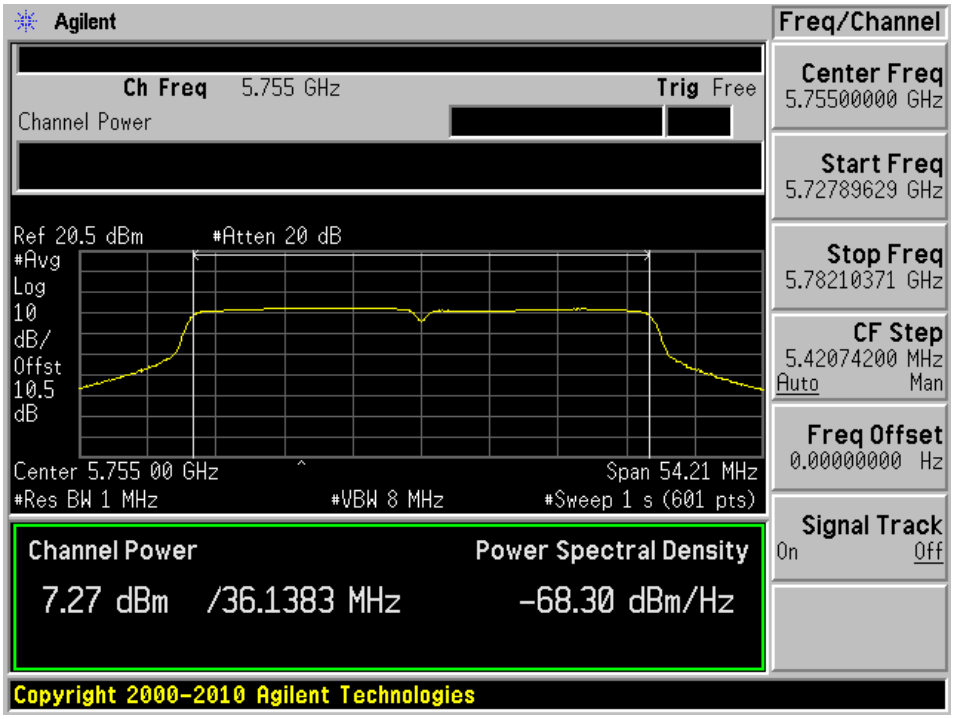


High channel: 5825 MHz

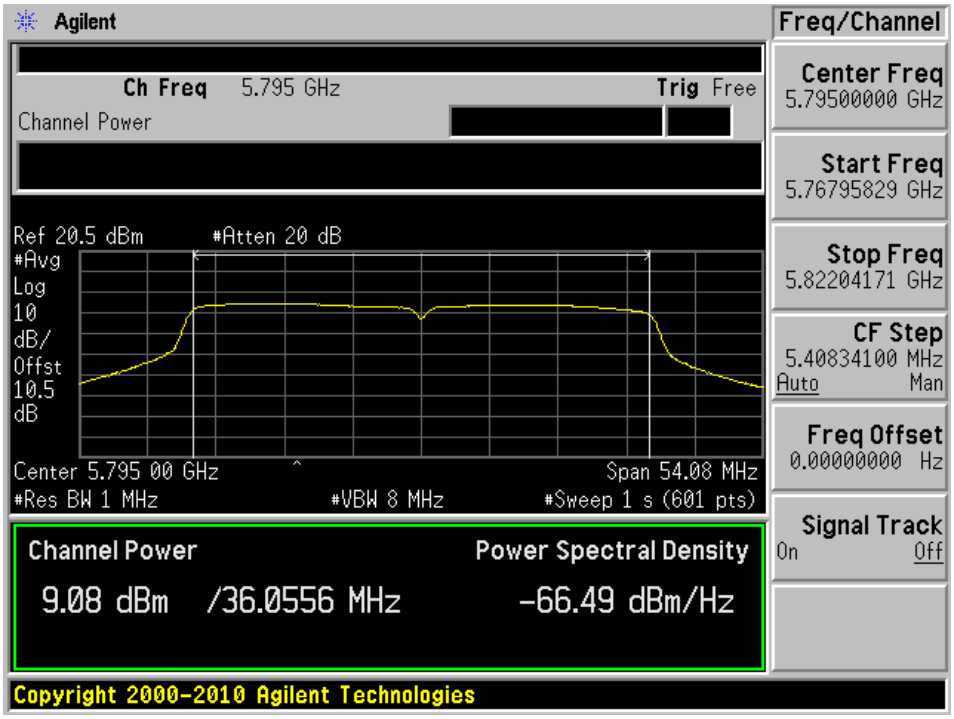


802.11n40 mode, 12 dBi Antenna Chain 1

Low channel: 5755 MHz

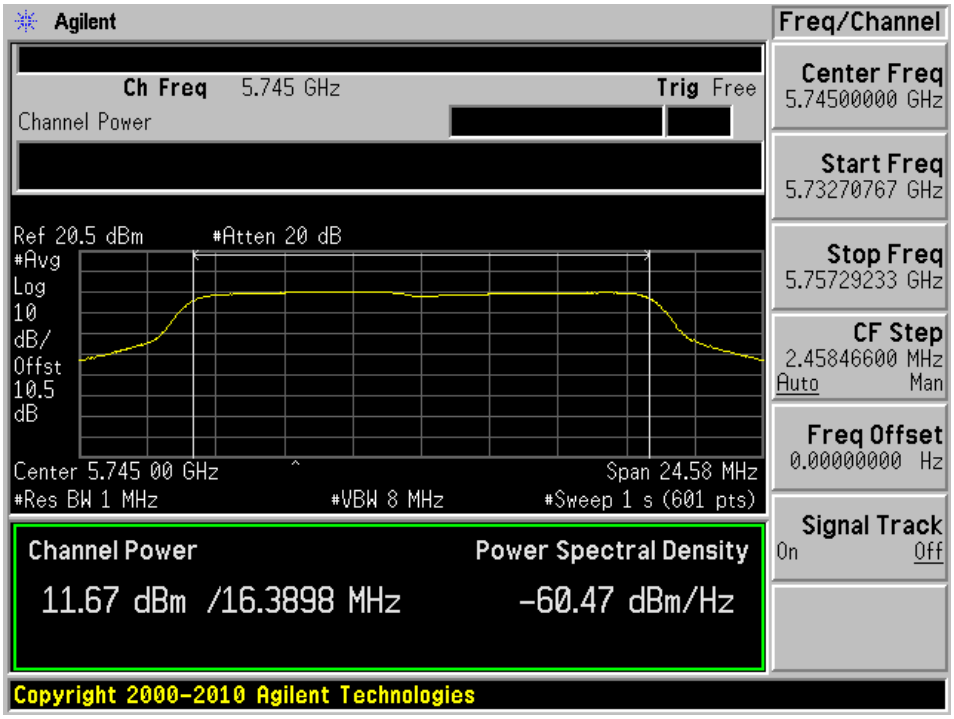


High channel: 5795 MHz

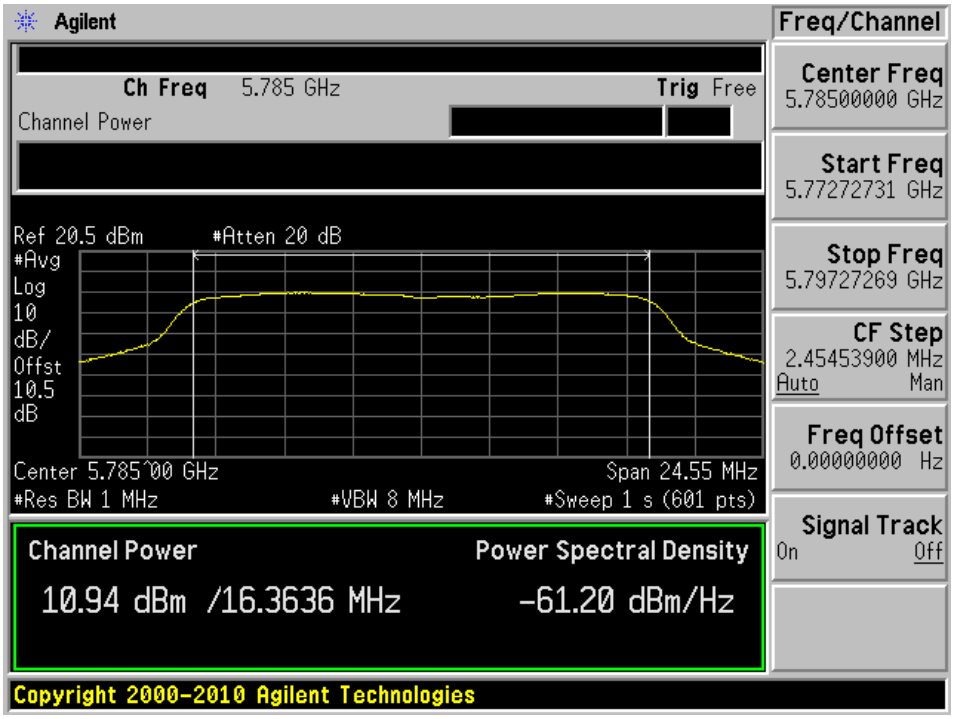


802.11a mode, 12 dBi Antenna Chain 2

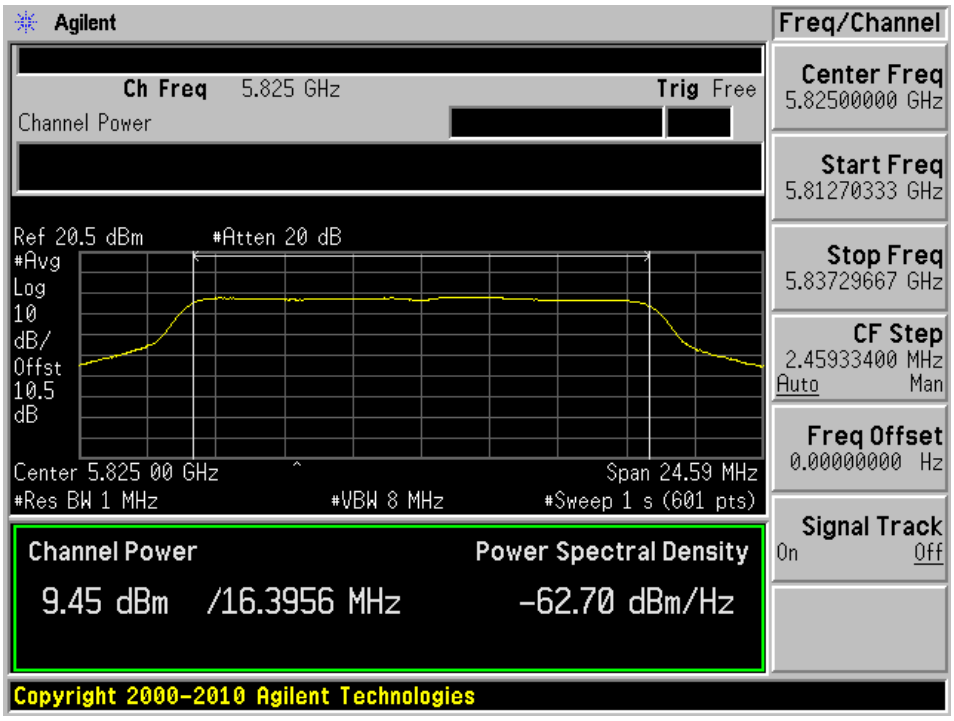
Low channel: 5745 MHz



Middle channel: 5785 MHz

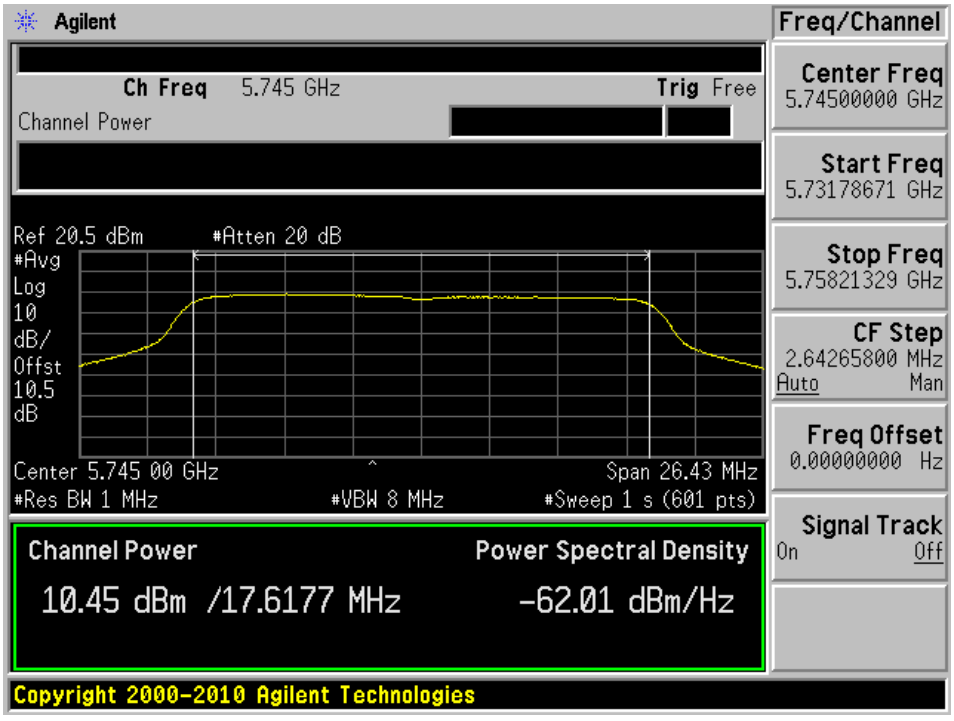


High channel: 5825 MHz

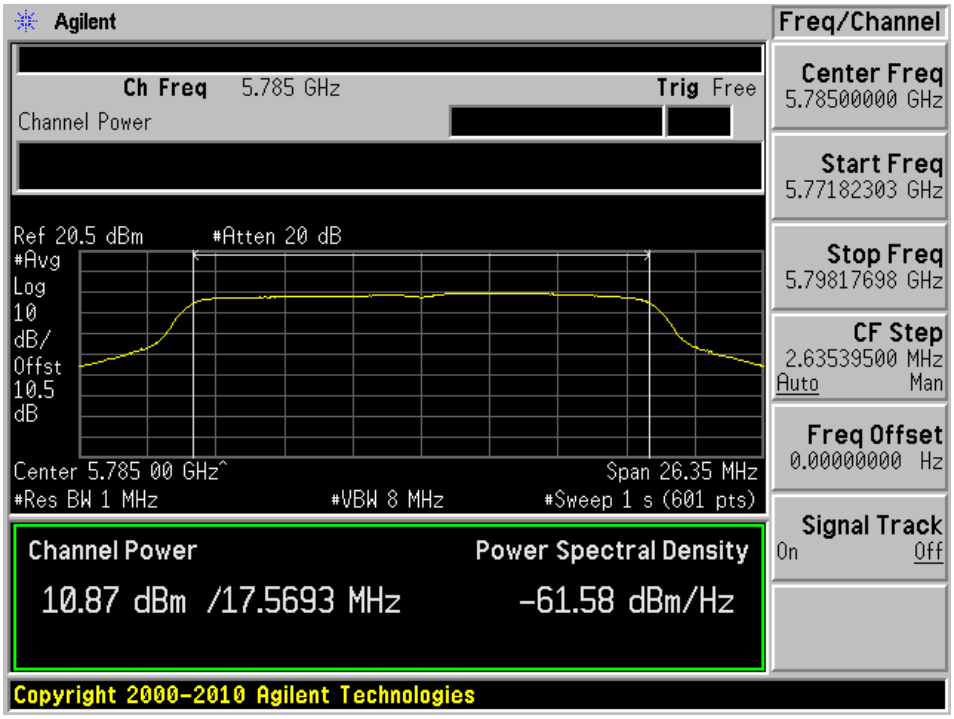


802.11n20 mode, 12 dBi Antenna Chain 2

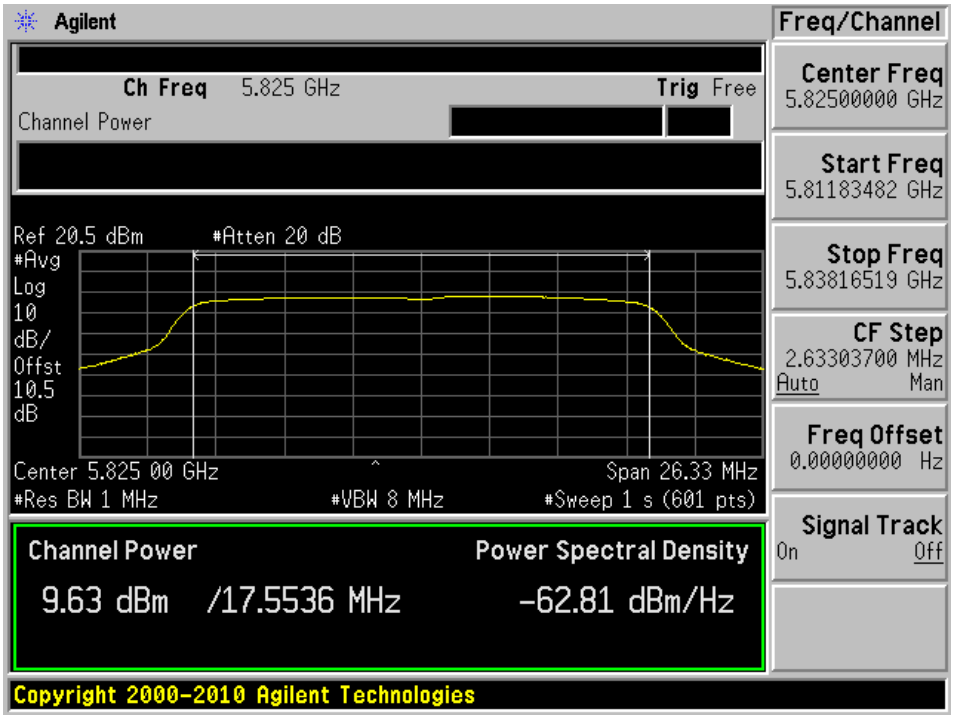
Low channel: 5745 MHz



Middle channel: 5785 MHz

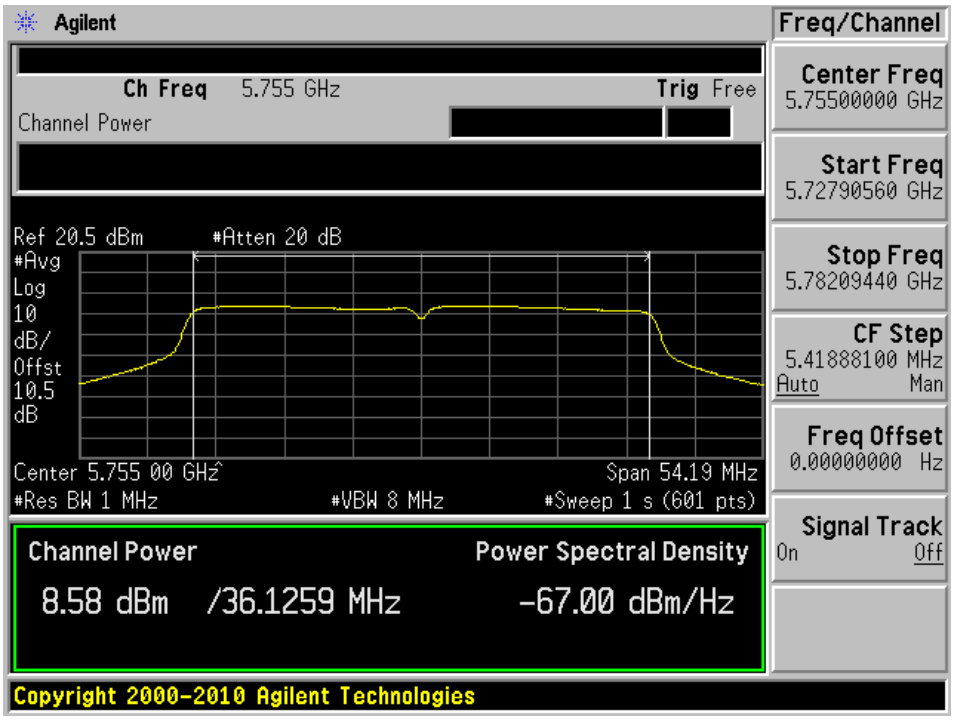


High channel: 5825 MHz

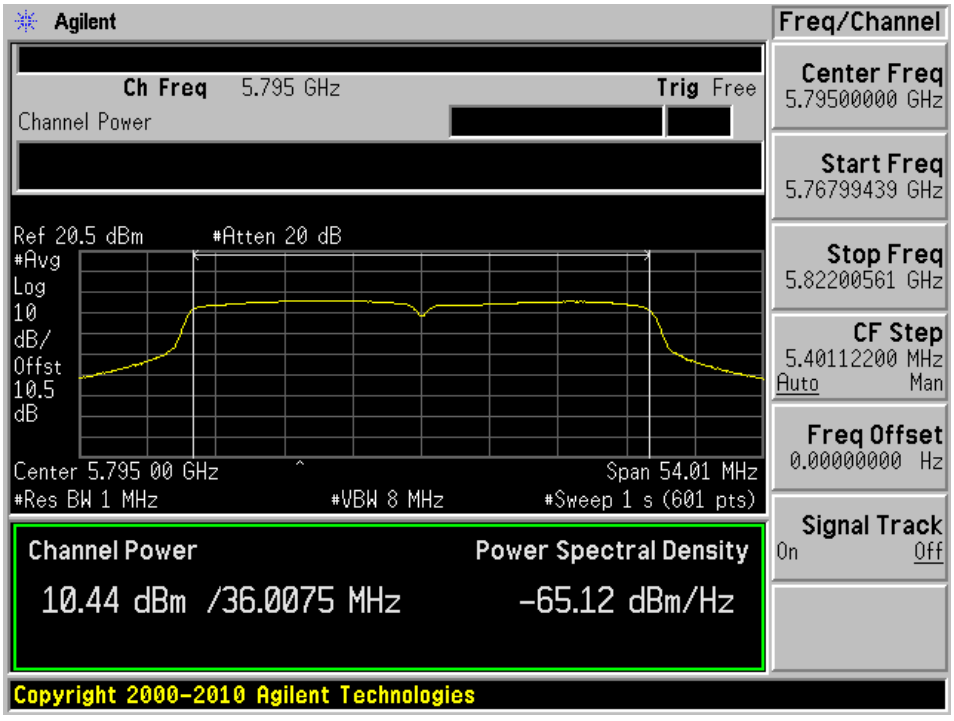


802.11n40 mode, 12 dBi Antenna Chain 2

Low channel: 5755 MHz



High channel: 5795 MHz



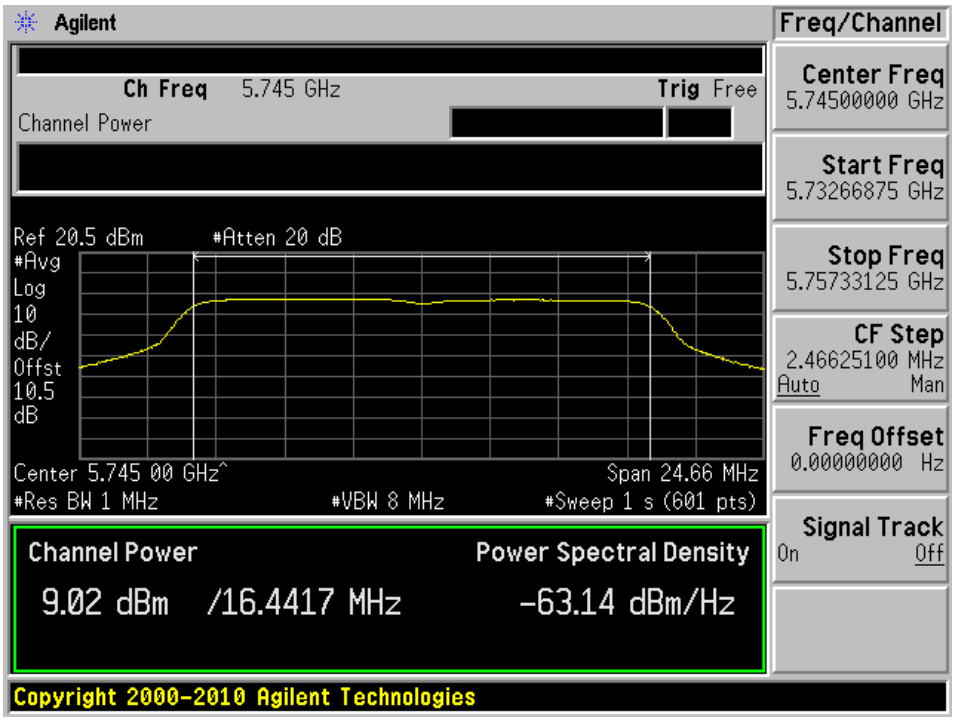
5.8 GHz Band, 15 dBi Antenna

Channel	Frequency (MHz)	Conducted Output Power (dBm)			Total Power (dBm)	Limit (dbm)	Margin (dB)
		Chain 0	Chain 1	Chain 2			
802.11 a mode							
Low	5745	9.02	7.91	8.90	13.41	21	-7.59
Middle	5785	8.21	7.41	9.09	13.06	21	-7.94
High	5825	7.76	6.74	7.43	12.10	21	-8.90
802.11n HT20 mode							
Low	5745	8.90	8.40	9.02	13.55	21	-7.45
Middle	5785	9.32	8.36	9.90	14.01	21	-6.99
High	5825	7.38	6.36	7.16	11.76	21	-9.24
802.11n HT40 mode							
Low	5755	11.34	10.04	11.31	15.71	21	-5.29
High	5795	8.73	7.68	8.88	13.23	21	-7.77

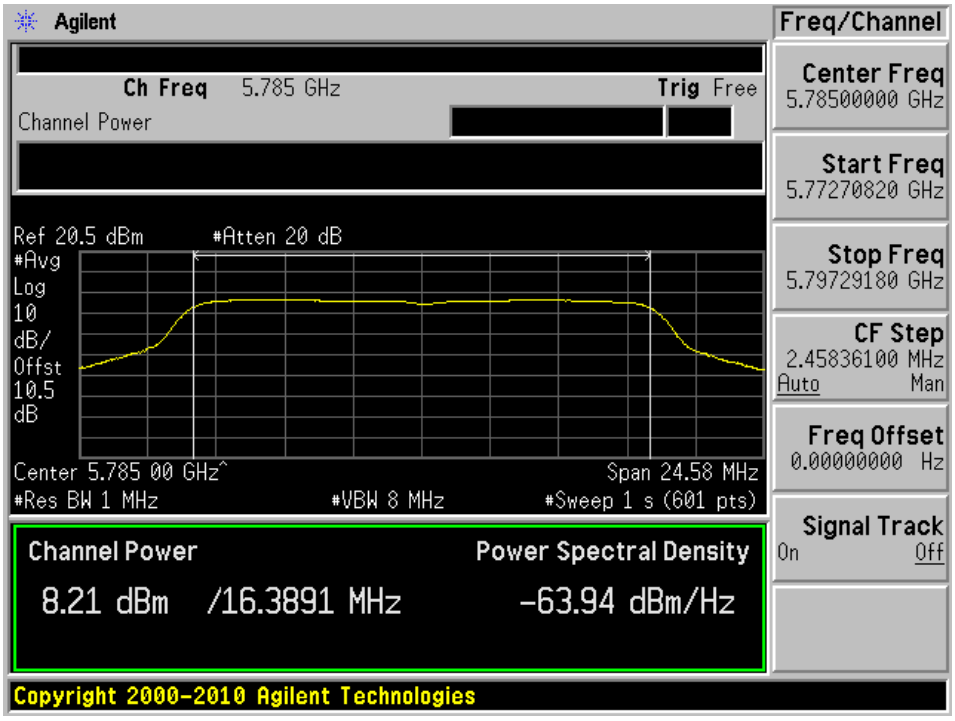
Note: Antenna gain exceed 6 dBi, therefore the limit should be 30-(15-6) =21 dBm

802.11a mode,15 dBi Antenna Chain 0

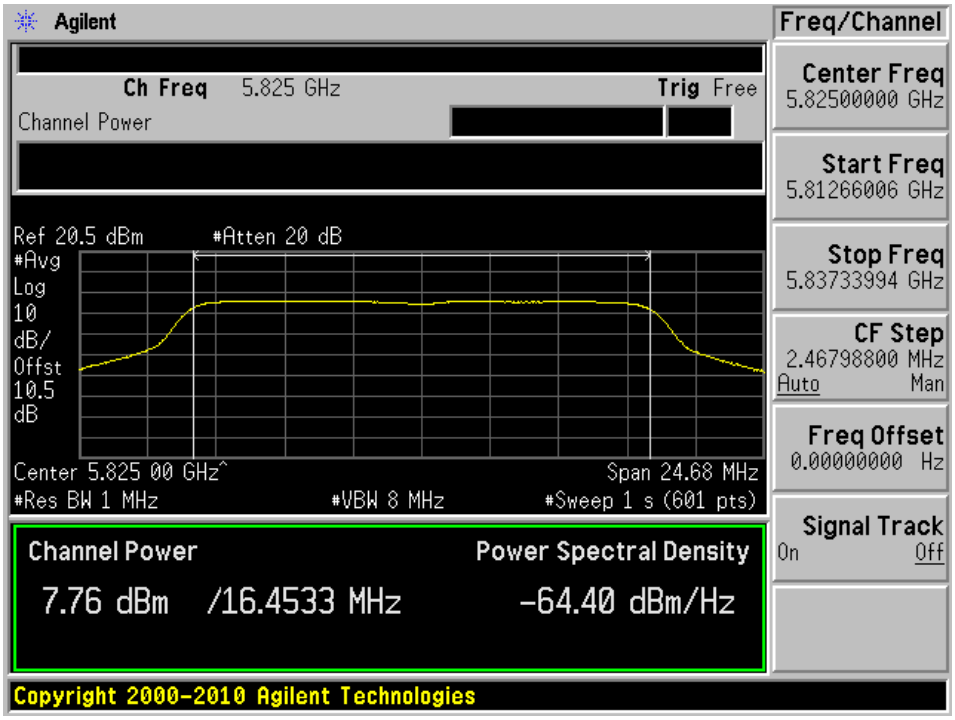
Low channel: 5745 MHz



Middle channel: 5785 MHz

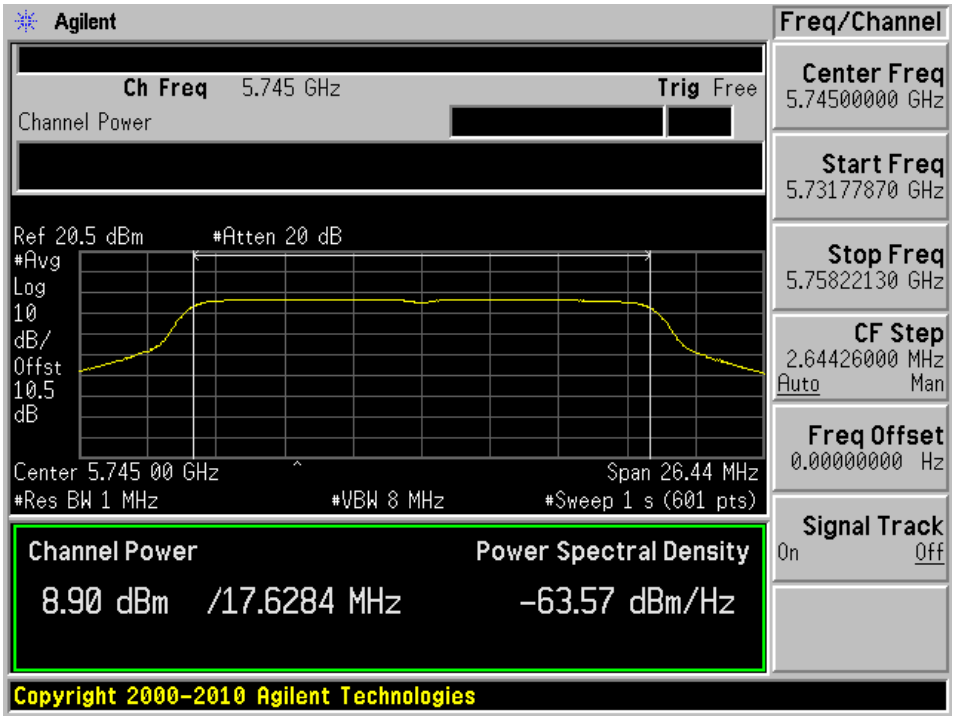


High channel: 5825 MHz

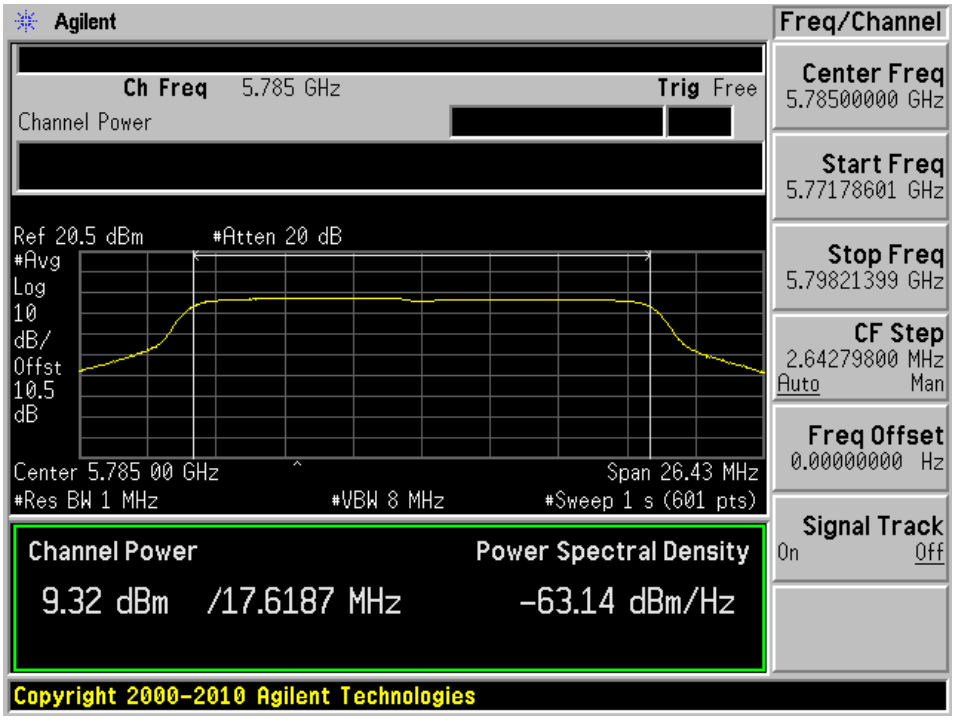


802.11n20 mode, 15 dBi Antenna Chain 0

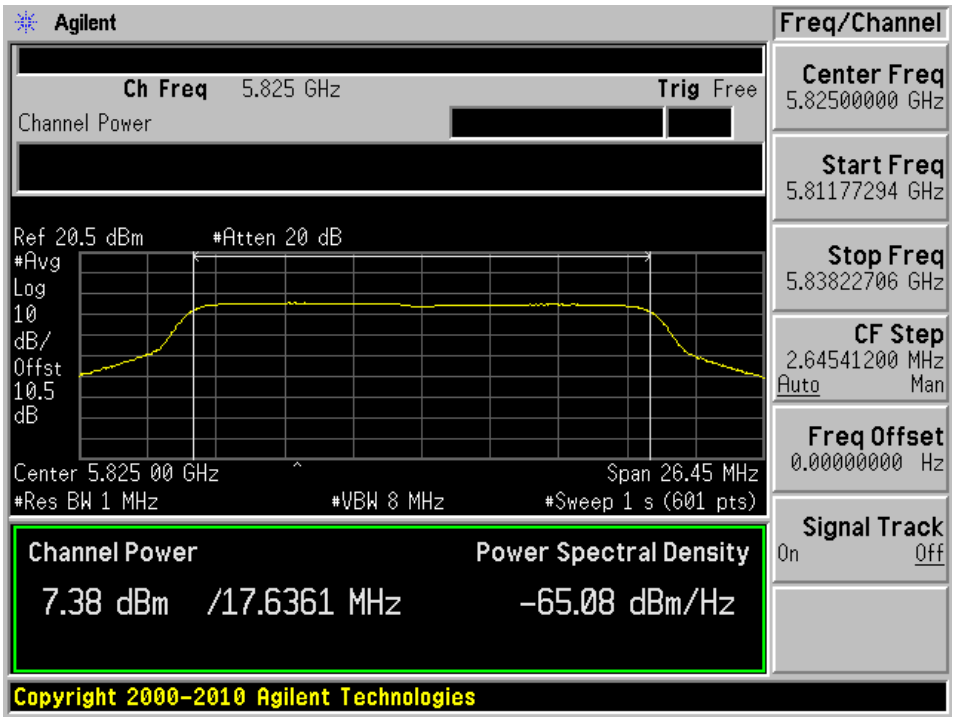
Low channel: 5745 MHz



Middle channel: 5785 MHz

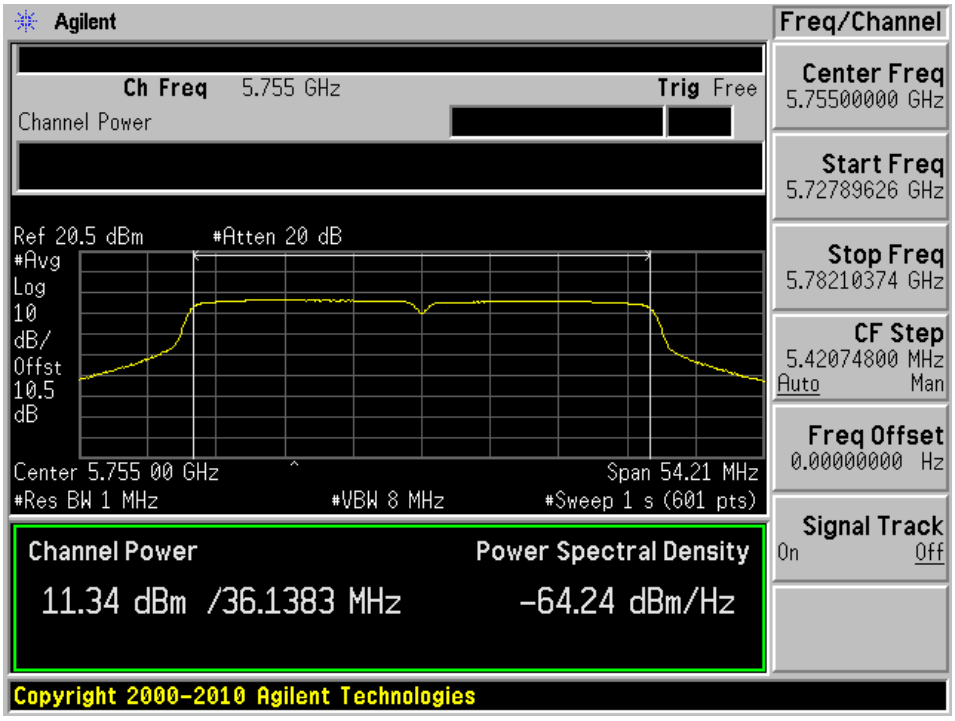


High channel: 5825 MHz

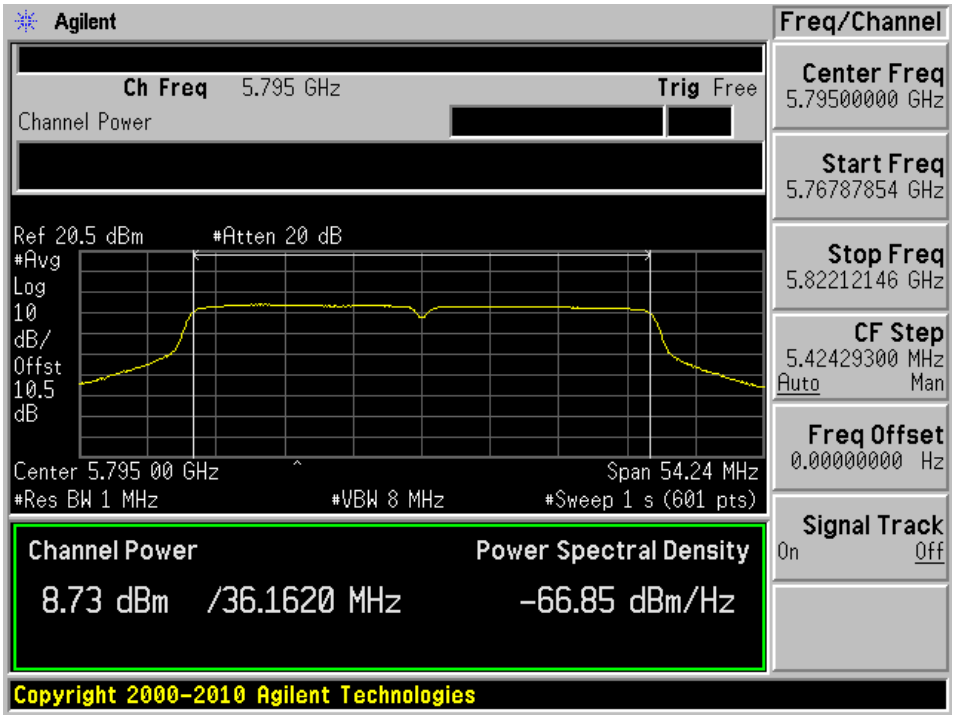


802.11n40 mode, 15 dBi Antenna Chain 0

Low channel: 5755 MHz

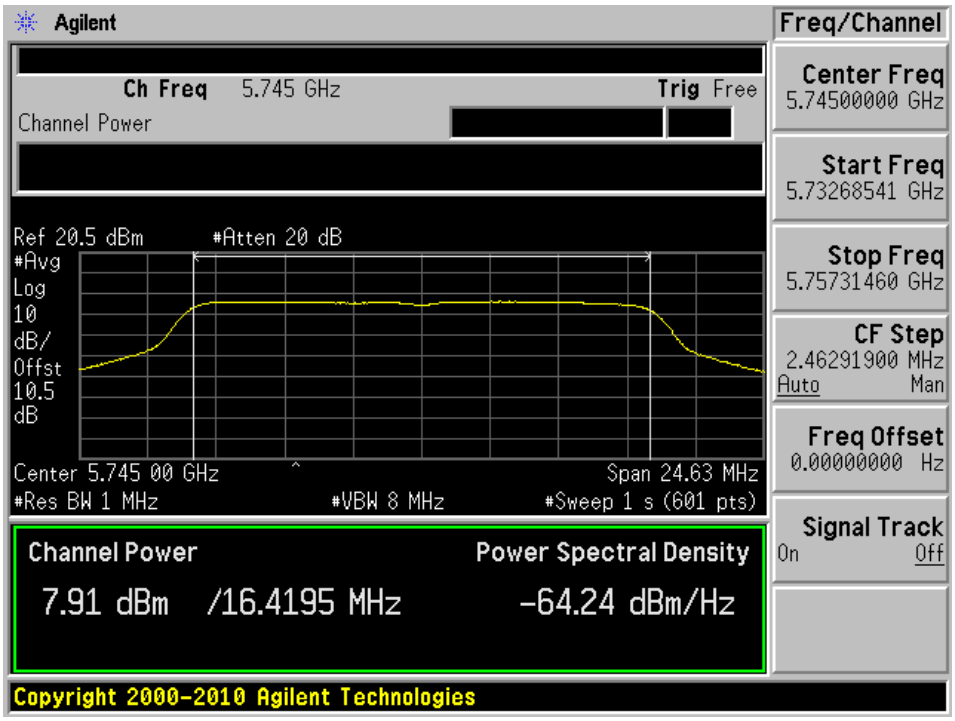


High channel: 5795 MHz

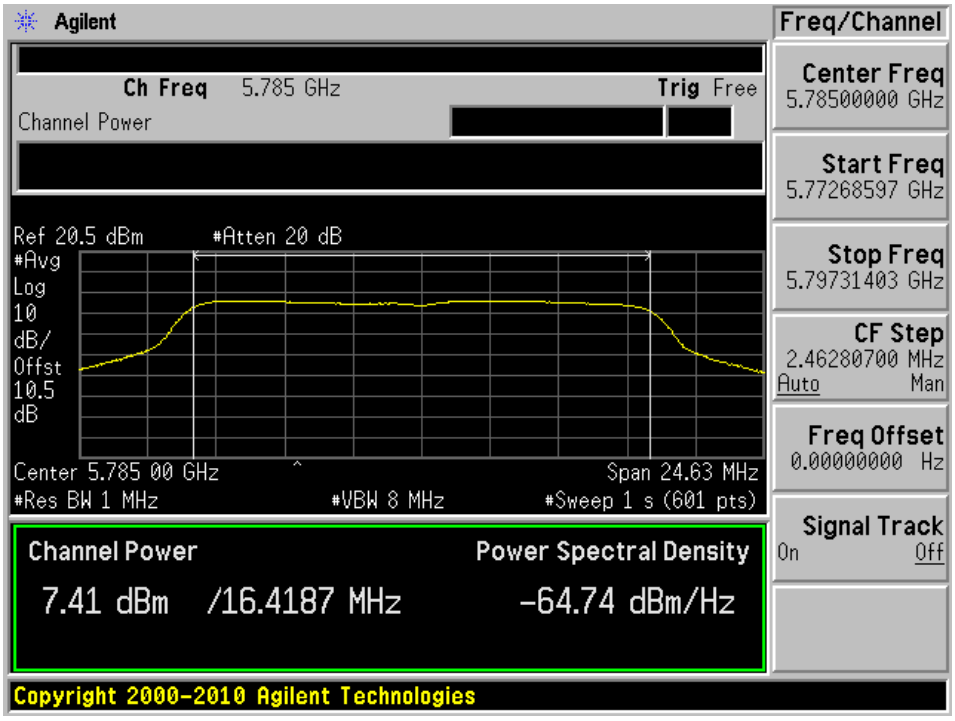


802.11a mode, 15 dBi Antenna Chain 1

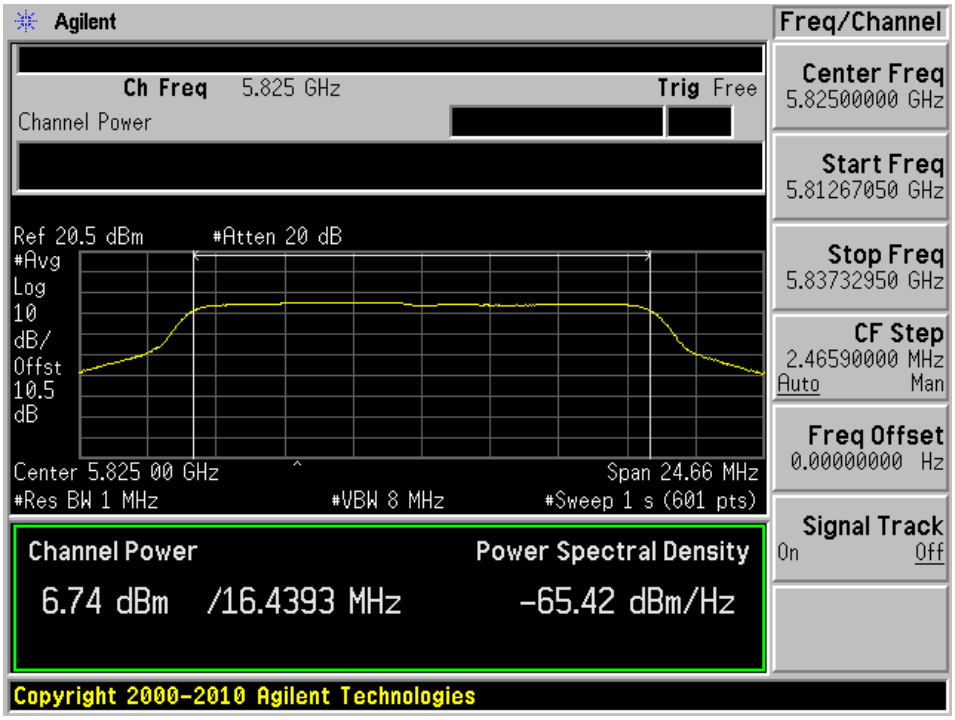
Low channel: 5745 MHz



Middle channel: 5785 MHz

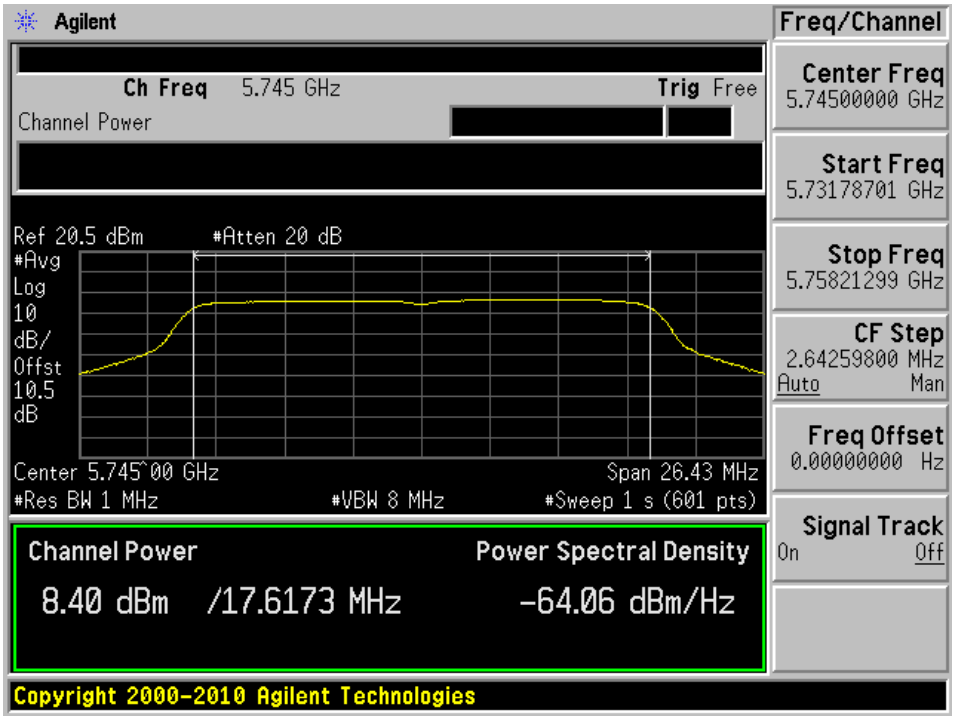


High channel: 5825 MHz

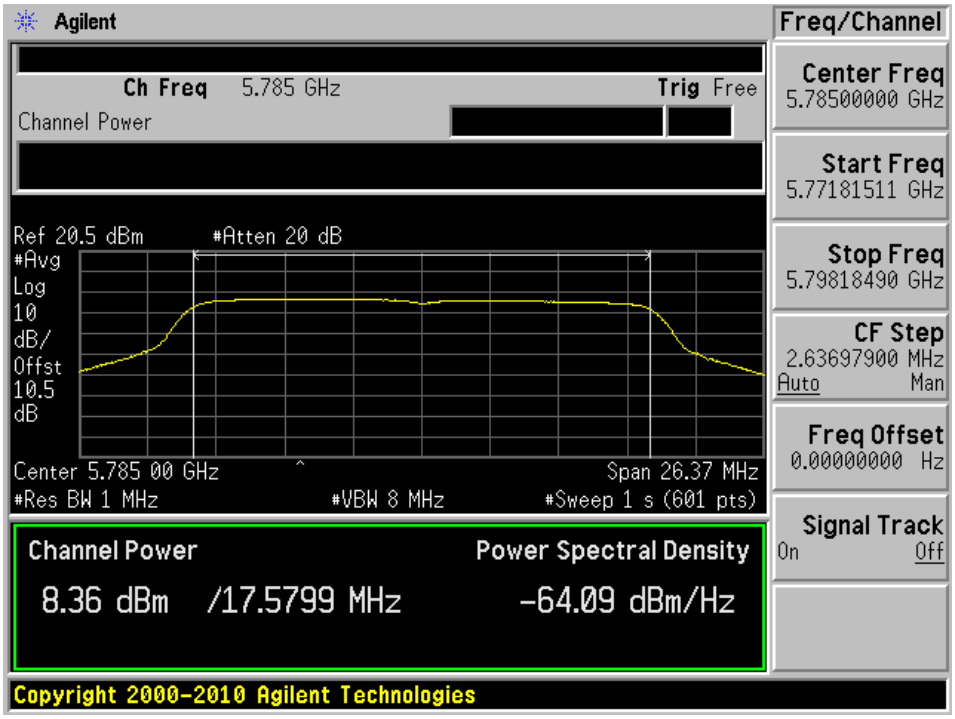


802.11n20 mode, 15 dBi Antenna Chain 1

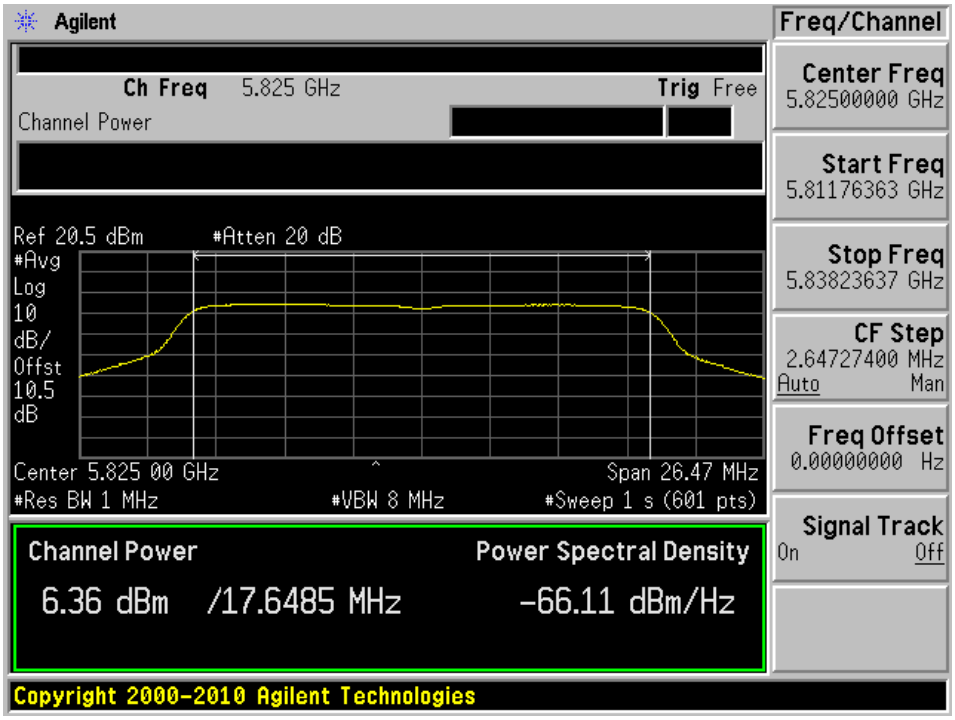
Low channel: 5745 MHz



Middle channel: 5785 MHz

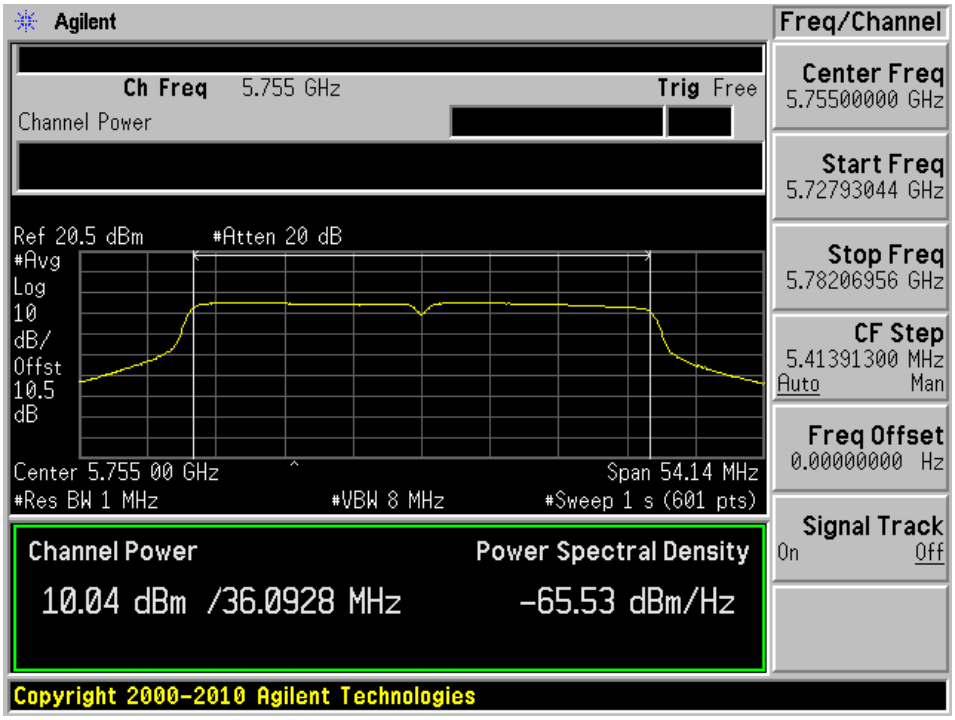


High channel: 5825 MHz

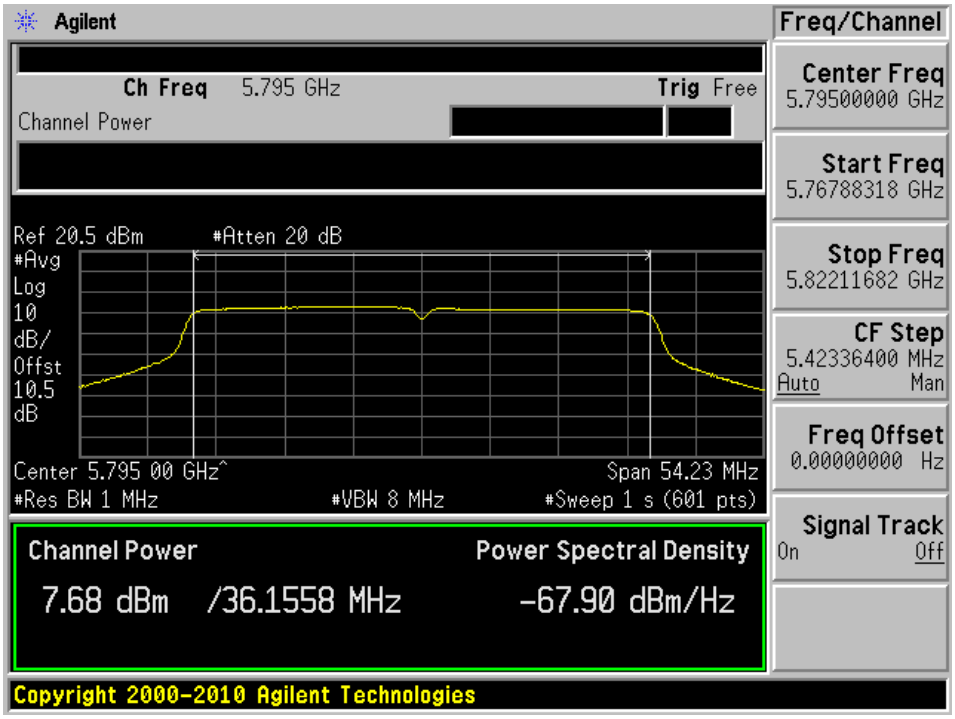


802.11n40 mode, 15 dBi Antenna Chain 1

Low channel: 5755 MHz

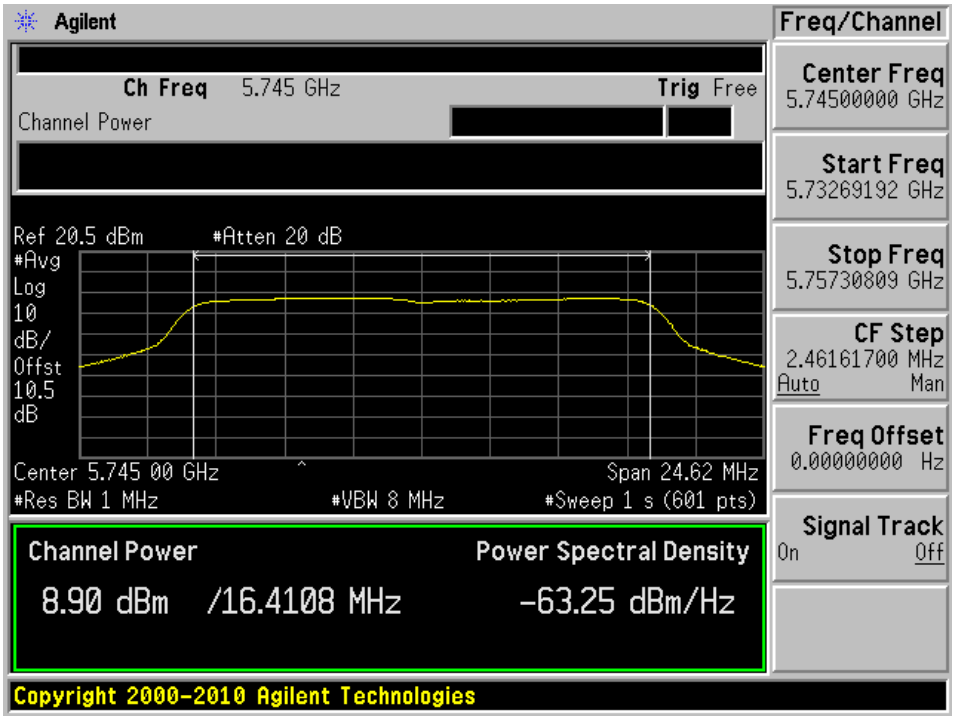


High channel: 5795 MHz

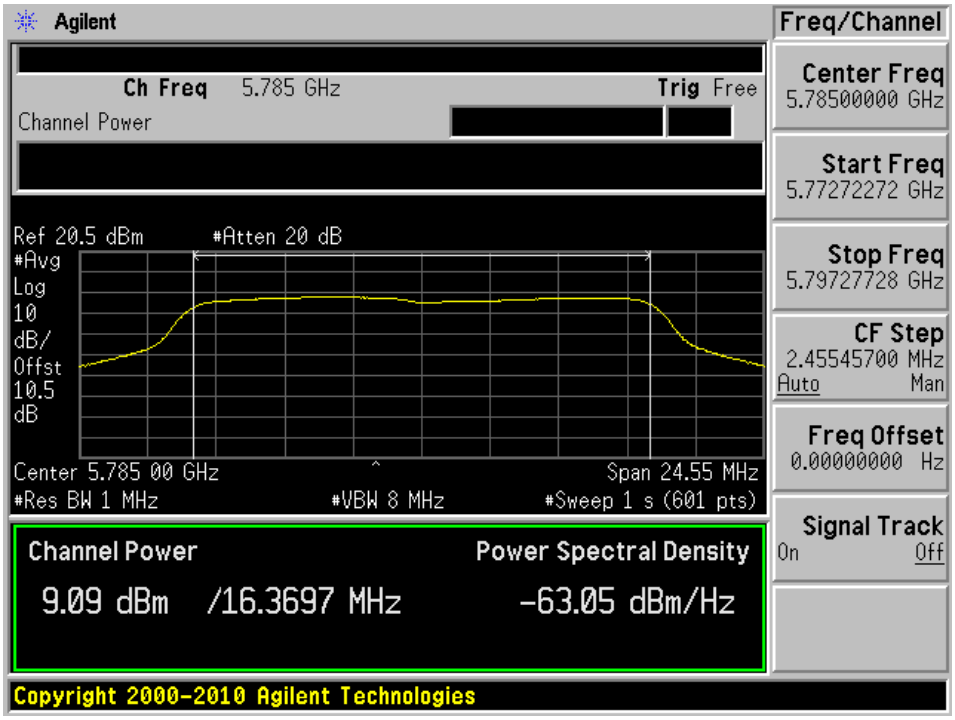


802.11a mode, 15 dBi Antenna Chain 2

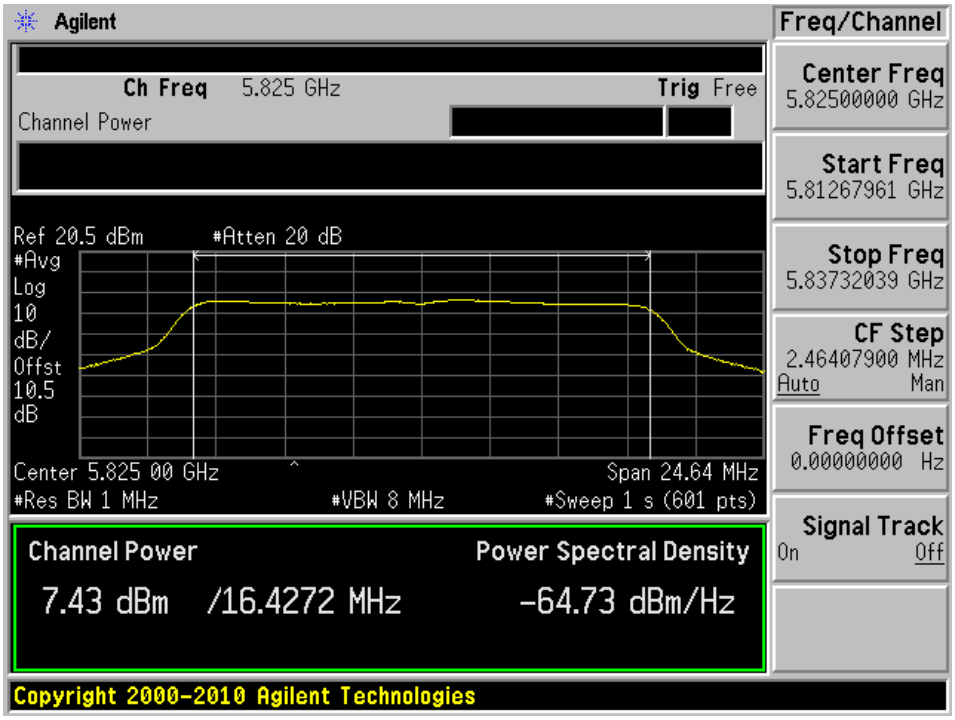
Low channel: 5745 MHz



Middle channel: 5785 MHz

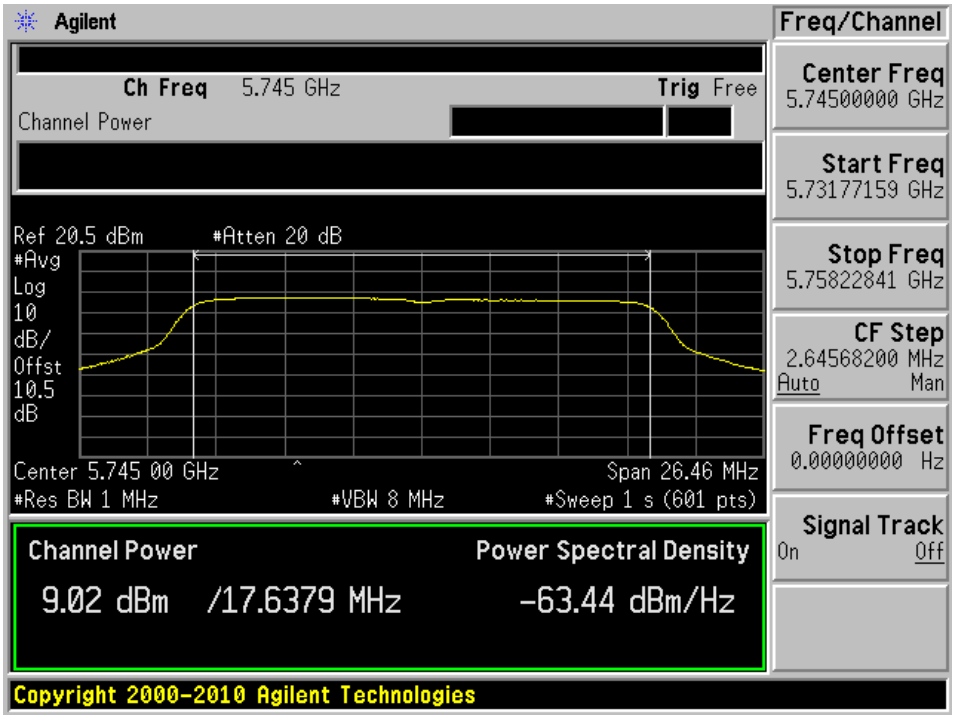


High channel: 5825 MHz

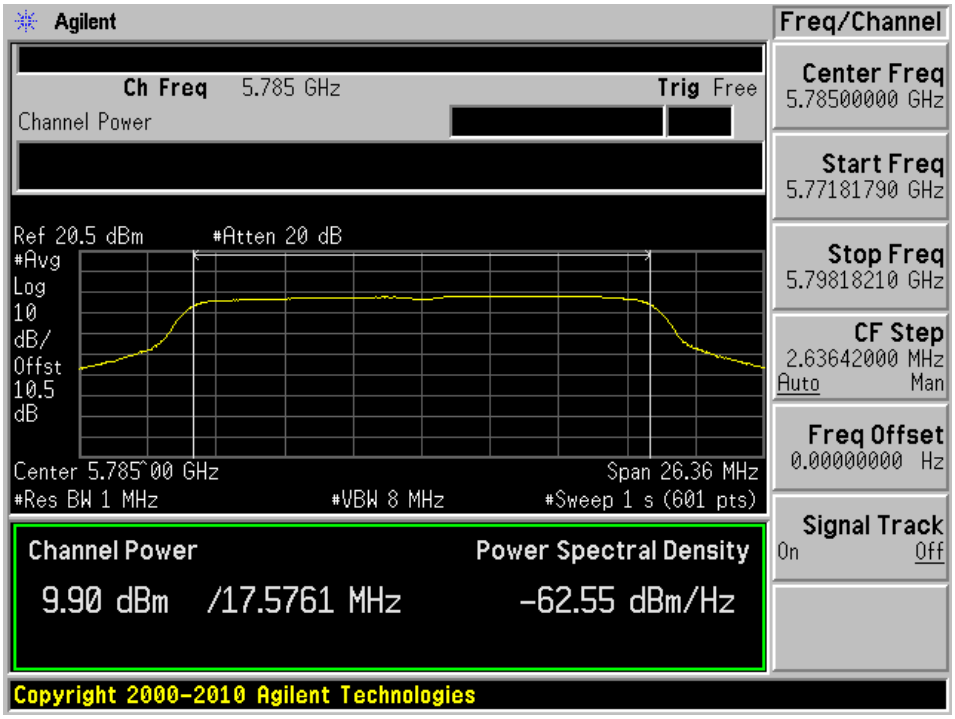


802.11n20 mode, 15 dBi Antenna Chain 2

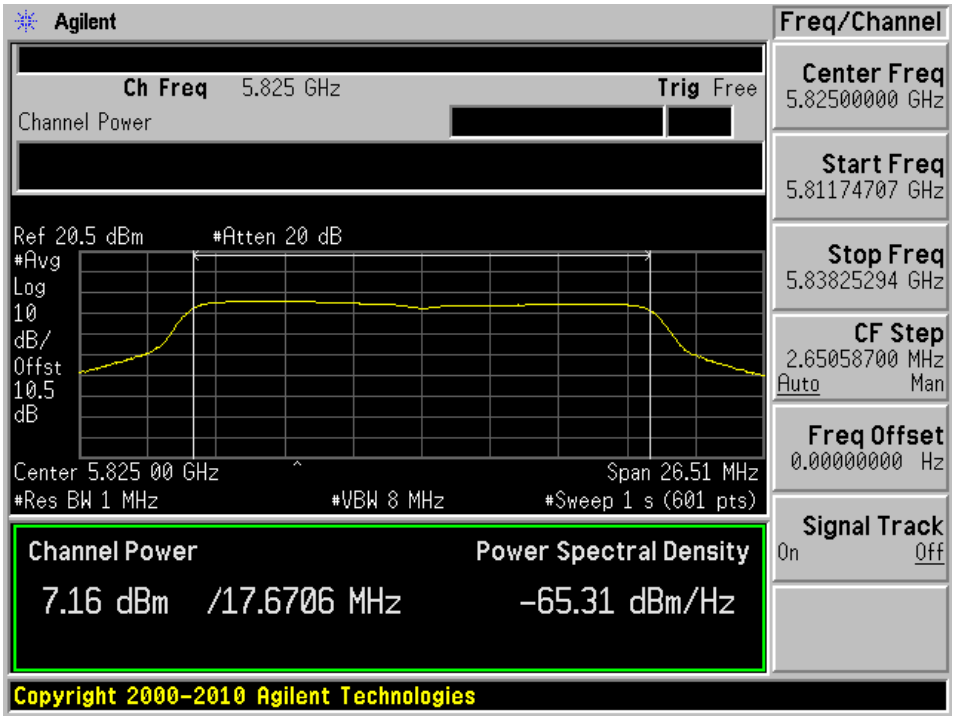
Low channel: 5745 MHz



Middle channel: 5785 MHz

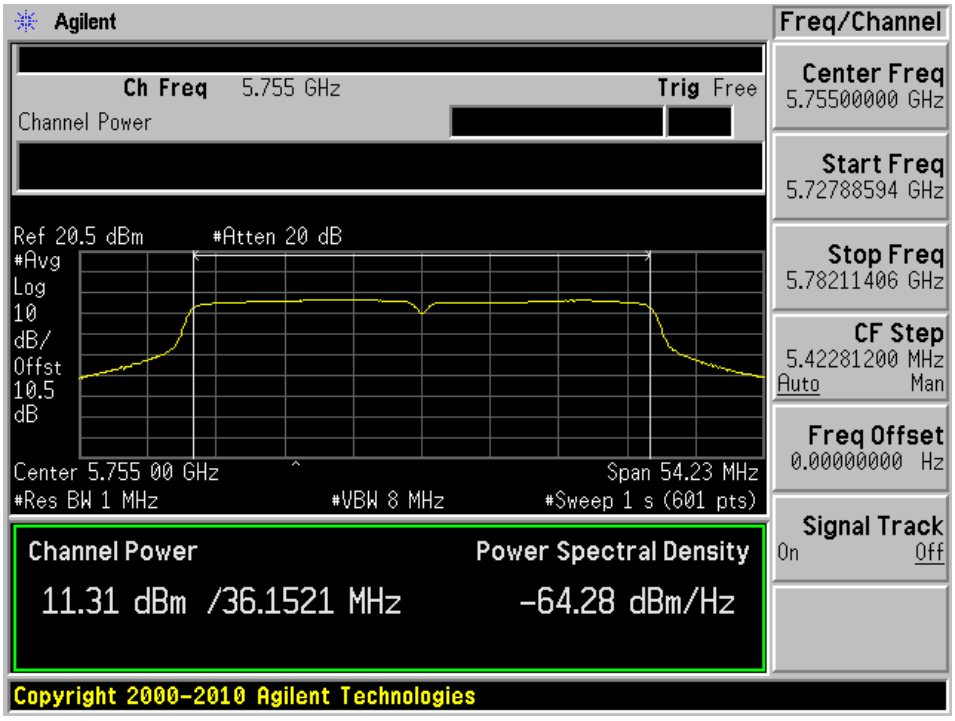


High channel: 5825 MHz



802.11n40 mode, 15 dBi Antenna Chain 2

Low channel: 5755 MHz



High channel: 5795 MHz