



MET Laboratories, Inc. *Safety Certification - EMI - Telecom Environmental Simulation*

914 WEST PATAPSCO AVENUE • BALTIMORE, MARYLAND 21230-3432 • PHONE (410) 354-3300 • FAX (410) 354-3313

33439 WESTERN AVENUE • UNION CITY, CALIFORNIA 94587 • PHONE (510) 489-6300 • FAX (510) 489-6372

3162 BELICK STREET • SANTA CLARA, CALIFORNIA 95054 • PHONE (408) 748-3585 • FAX (510) 489-6372

13301 MCCALLEN PASS • AUSTIN, TX 78753 • PHONE (512) 287-2500 • FAX (512) 287-2513

March 3, 2015

Ubiquiti Networks
1250 S. Grove Ave., Suite 100
Barrington, IL 60010

Dear Alexandros Pavlos,

Enclosed is the EMC Wireless test report for compliance testing of the Ubiquiti Networks, AF-5X as tested to the requirements of Title 47 of the CFR, Ch. 1 (10-1-06 ed.), Title 47 of the CFR, Part 15, Subpart B for Unintentional Radiators and Part 15.407, Subpart E (UNII 1) for Intentional Radiators.

Thank you for using the services of MET Laboratories, Inc. If you have any questions regarding these results or if MET can be of further service to you, please feel free to contact me.

Sincerely yours,
MET LABORATORIES, INC.

Jennifer Warnell
Documentation Department

Reference: (\Ubiquiti Networks\EMC84027-FCC407 UNII 1 & 3 Rev. 4)

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Electromagnetic Compatibility Criteria Test Report

for the

**Ubiquiti Networks
Model AF-5X**

Tested under
the FCC Certification Rules
contained in
Title 47 of the CFR, Parts 15 Subpart B
for Class B Digital Devices
&
FCC Part 15.407 for Intentional Radiators

MET Report: EMC84027-FCC407 UNII 1 & 3 Rev. 4

March 3, 2015

Prepared For:

**Ubiquiti Networks
1250 S. Grove Ave., Suite 100
Barrington, IL 60010**

Prepared By:
MET Laboratories, Inc.
914 W. Patapsco Ave.
Baltimore, MD 21230

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&
FCC Part 15.407 for Intentional Radiators



Jason Allnutt, Project Engineer
Electromagnetic Compatibility Lab



Jennifer Warnell
Documentation Department

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Parts 15B, 15.407, of the FCC Rules under normal use and maintenance.



Asad Bajwa,
Director, Electromagnetic Compatibility Lab

Report Status Sheet

Revision	Report Date	Reason for Revision
Ø	December 19, 2014	Initial Issue.
1	January 23, 2015	Revised to add 34 dBi antenna information.
2	February 4, 2015	Revised to reflect model number change.
3	March 2, 2015	Revised to add 23 dBi antenna information.
4	March 3, 2015	Editorial correction.

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List of Terms and Abbreviations

AC	Alternating Current
ACF	Antenna Correction Factor
Cal	Calibration
<i>d</i>	Measurement Distance
dB	Decibels
dB μ A	Decibels above one microamp
dB μ V	Decibels above one microvolt
dB μ A/m	Decibels above one microamp per meter
dB μ V/m	Decibels above one microvolt per meter
DC	Direct Current
E	Electric Field
DSL	Digital Subscriber Line
ESD	Electrostatic Discharge
EUT	Equipment Under Test
<i>f</i>	Frequency
FCC	Federal Communications Commission
GRP	Ground Reference Plane
H	Magnetic Field
HCP	Horizontal Coupling Plane
Hz	Hertz
IEC	International Electrotechnical Commission
kHz	kilohertz
kPa	kilopascal
kV	kilovolt
LISN	Line Impedance Stabilization Network
MHz	Megahertz
μ H	microhenry
μ	microfarad
μ s	microseconds
PRF	Pulse Repetition Frequency
RF	Radio Frequency
RMS	Root-Mean-Square
TWT	Traveling Wave Tube
V/m	Volts per meter
VCP	Vertical Coupling Plane

I. Executive Summary

A. Purpose of Test

An EMC evaluation was performed to determine compliance of the Ubiquiti Networks AF-5X, with the requirements of Part 15, §15.407. All references are to the most current version of Title 47 of the Code of Federal Regulations in effect. In accordance with §2.1033, the following data is presented in support of the Certification of the AF-5X. Ubiquiti Networks should retain a copy of this document which should be kept on file for at least two years after the manufacturing of the AF-5X, has been **permanently** discontinued.

B. Executive Summary

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, §15.407, in accordance with Ubiquiti Networks, purchase order number US100789. All tests were conducted using measurement procedure ANSI C63.4-2003.

FCC Reference	Description	Results
§15.107	Conducted Emissions	Compliant
§15.109	Radiated Emissions	Compliant
§15.203	Antenna Requirements	Compliant
§15.207	AC Conducted Emissions 150KHz – 30MHz	Compliant
§15.403 (i)	26dB Occupied Bandwidth	Compliant
§15.407 (e)	6 dB Bandwidth	Compliant
§15.407 (a)(1)(i) & §15.407 (a)(3)	Conducted Transmitter Output Power	Compliant
§15.407 (a)(1)(i)	EIRP at elevation angles above 30 degrees	Compliant (P2P antenna)
§15.407 (a)(1)(i) & §15.407 (a)(3)	Power Spectral Density	Compliant
§15.407 (b)(1), (4), (6), (7)	Undesirable Emissions (15.205/15.209 - General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Compliant
§15.407(f)	RF Exposure	Compliant

Table 1. Executive Summary of EMC Part 15.407 Compliance Testing

II. Equipment Configuration

A. Overview

MET Laboratories, Inc. was contracted by Ubiquiti Networks to perform testing on the AF-5X, under Ubiquiti Networks's purchase order number US100789.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of the Ubiquiti Networks AF-5X.

The results obtained relate only to the item(s) tested.

Model(s) Tested:	AF-5X		
Model(s) Covered:	AF-5X		
EUT Specifications:	Primary Power: 120 VAC, 60 Hz		
	FCC ID: SWX-AF5X		
	Type of Modulations:	OFDM	
	Equipment Code:	NII	
	Max RF Output Power:	UNII 1: 17.59 dBm UNII 3: 28.87 dBm	
	EUT Frequency Ranges:	UNII 1 – 5160 – 5245 MHz UNII 3 – 5730 – 5845 MHz	
	Bandwidths:	10/20/30/40/50 MHz	
Analysis:	The results obtained relate only to the item(s) tested.		
Environmental Test Conditions:	Temperature: 15-35° C		
	Relative Humidity: 30-60%		
	Barometric Pressure: 860-1060 mbar		
Evaluated by:	Jason Allnutt		
Report Date(s):	March 3, 2015		

Table 2. EUT Summary

B. References

CFR 47, Part 15, Subpart B	Electromagnetic Compatibility: Criteria for Radio Frequency Devices
CFR 47, Part 15, Subpart E	Unlicensed National Information Infrastructure Devices (UNII)
ANSI C63.4:2003	Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical And Electronic Equipment in the Range of 9 kHz to 40 GHz
ISO/IEC 17025:2005	General Requirements for the Competence of Testing and Calibration Laboratories
ANSI C63.10-2009	American National Standard for Testing Unlicensed Wireless Devices

Table 3. References

C. Test Site

All testing was performed at MET Laboratories, Inc., 914 W. Patapsco Ave., Baltimore, MD 21230. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology.

Radiated Emissions measurements were performed in a 3 meter semi-anechoic chamber (equivalent to an Open Area Test Site). In accordance with §2.948(a)(3), a complete site description is contained at MET Laboratories.

D. Description of Test Sample

The Ubiquiti Networks AF-5X, Equipment Under Test (EUT), is a 5.1GHz, 5.2GHz, 5.4GHz and 5.8GHz Point-to-Point radio that uses OFDM MIMO Uncorrelated Cross-Polarized communication with a 50MHz/40MHz/30MHz/20MHz/10MHz bandwidth configuration. The EUT would be used outdoors and pole mounted. It is powered from a PoE adapter. The reverse-polarized connectorized has the ability when professionally installed by a user with cross-polarized antennas. This is the only matter that would be able to create a functional link to work.

E. Ports and Cabling Information

Ref. ID	Port name on EUT	Cable Description or reason for no cable	Qty.	Length as tested (m)	Shielded? (Y/N)	Termination Box ID & Port Name
1	Management Port	RJ45 Ethernet	1	2	Yes	--
2	Data Port	RJ45 Ethernet	1	2	Yes	--
3	RP sma CH0	RF coax	1	2	Yes	--
4	RP sma CH1	RF coax	1	2	Yes	--

Table 4. Ports and Cabling Information

F. Mode of Operation

Using internal test modes only for testing purposes the radio is set up in a continuous transmit mode. This allows for frequency, power, and channel bandwidth to be adjusted for measurement purposes. Scripts and specific command line commands are used to manipulate the radio in test mode.

G. Method of Monitoring EUT Operation

1. A blinking green “Data” LED will indicate error-free data is being transferred on the test cable.
2. Any other LED status besides the blinking green LED (i.e. LED light off, etc) will indicate error-free data is not being transferred on the test cable.

H. Modifications

a) Modifications to EUT

No modifications were made to the EUT.

b) Modifications to Test Standard

No modifications were made to the test standard.

I. Disposition of EUT

The test sample including all support equipment submitted to the Electro-Magnetic Compatibility Lab for testing was returned to Ubiquiti Networks upon completion of testing.

III. Electromagnetic Compatibility Criteria for Unintentional Radiators

Electromagnetic Compatibility Criteria

§ 15.107 Conducted Emissions Limits

Test Requirement(s): **15.107 (a)** Except for Class A digital devices, for equipment 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 Table 5. Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

15.107 (b) For a Class A digital device 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 Table 5. Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals. The lower limit applies at the band edges.

Frequency range (MHz)	Class A Conducted Limits (dBμV)		*Class B Conducted Limits (dBμV)	
	Quasi-Peak	Average	Quasi-Peak	Average
* 0.15- 0.45	79	66	66 - 56	56 - 46
0.45 - 0.5	79	66	56	46
0.5 - 30	73	60	60	50
Note 1 — The lower limit shall apply at the transition frequencies.				
Note 2 — The limit decreases linearly with the logarithm if the frequency in the range 0.15 MHz to 0.5 MHz.				

Table 5. Conducted Limits for Radio Frequency Devices calculated from FCC Part 15 Subsections 15.107(a) (b)

Test Procedures: The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a screen room. The method of testing, test conditions, and test procedures of ANSI C63.4 were used. The EUT was powered through a 50Ω/50μH LISN. An EMI receiver, connected to the measurement port of the LISN, scanned the frequency range from 150 kHz to 30 MHz in order to find the peak conducted emissions. All peak emissions within 6 dB of the limit were re-measured using a quasi-peak and/or average detector as appropriate.

Test Results: The EUT was compliant with the Class B requirement(s) of this section. Measured emissions were below applicable limits.

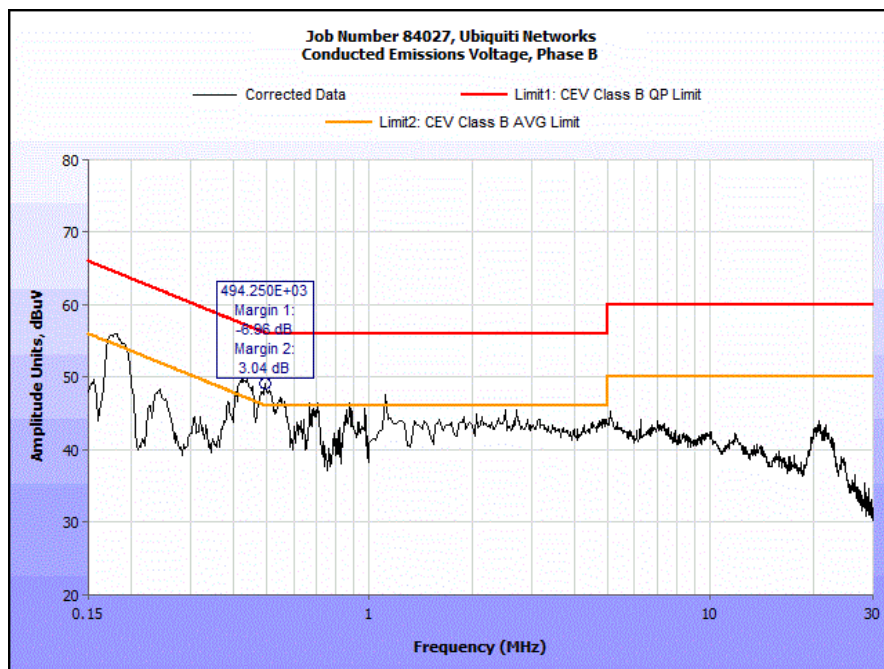
Test Engineer(s): Jason Allnutt

Test Date(s): 11/03/14

Conducted Emissions - Voltage, AC Power, Phase Line (120 VAC, 60 Hz)

Frequency (MHz)	Uncorrected Meter Reading (dBμV) QP	Cable Loss (dB)	Corrected Measurement (dBμV) QP	Limit (dBμV) Avg.	Margin (dB) QP	Uncorrected Meter Reading (dBμV) Avg.	Cable Loss (dB)	Corrected Measurement (dBμV) Avg.	Limit (dBμV) Avg.	Margin (dB) Avg.
0.1714	51.87	0	51.87	79	-27.13	34.77	0	34.77	66	-31.23
0.2351	45.24	0	45.24	79	-33.76	31.46	0	31.46	66	-34.54
0.4445	38.33	0	38.33	79	-40.67	28.06	0	28.06	66	-37.94
1.079	31.86	0	31.86	73	-41.14	20.43	0	20.43	60	-39.57
2.71	40.21	0	40.21	73	-32.79	29.36	0	29.36	60	-30.64
3.136	40.92	0	40.92	73	-32.08	31.04	0	31.04	60	-28.96

Table 6. Conducted Emissions - Voltage, AC Power, Phase Line (120 VAC, 60 Hz)

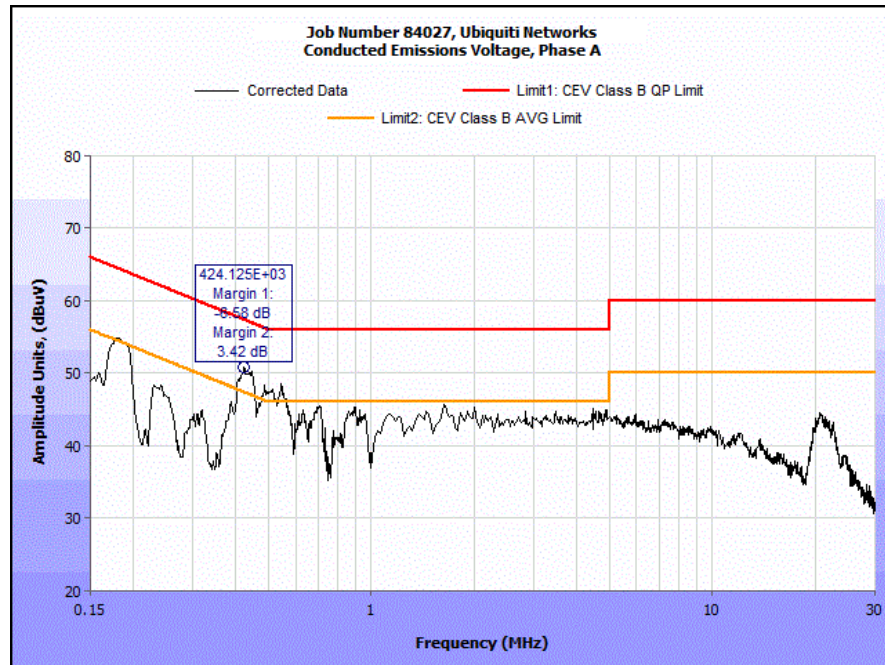


Plot 1. Conducted Emissions, Phase Line

Conducted Emissions - Voltage, AC Power, Neutral Line (120 VAC, 60 Hz)

Frequency (MHz)	Uncorrected Meter Reading (dBμV) QP	Cable Loss (dB)	Corrected Measurement (dBμV) QP	Limit (dBμV) Avg.	Margin (dB) QP	Uncorrected Meter Reading (dBμV) Avg.	Cable Loss (dB)	Corrected Measurement (dBμV) Avg.	Limit (dBμV) Avg.	Margin (dB) Avg.
0.174	51.26	0	51.26	79	-27.74	51.8	0	51.8	66	-14.2
0.2249	44.72	0	44.72	79	-34.28	31.78	0	31.78	66	-34.22
0.4621	41.73	0	41.73	79	-37.27	35.8	0	35.8	66	-30.2
2.8	37.3	0	37.3	73	-35.7	28.93	0	28.93	60	-31.07
4.335	32.67	0	32.67	73	-40.33	32.9	0	32.9	60	-27.1
5.955	30	0.17	30.17	73	-42.83	23	0.17	23.17	60	-36.83

Table 7. Conducted Emissions - Voltage, AC Power, Neutral Line (120 VAC, 60 Hz)



Plot 2. Conducted Emissions, Neutral Line

Radiated Emission Limits

§ 15.109 Radiated Emissions Limits

Test Requirement(s): **15.109 (a)** Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the Class B limits expressed in Table 8.

15.109 (b) The field strength of radiated emissions from a Class A digital device, as determined at a distance of 10 meters, shall not exceed the Class A limits expressed in Table 8.

Frequency (MHz)	Field Strength (dBμV/m)	
	§15.109 (b), Class A Limit (dBμV) @ 10m	§15.109 (a), Class B Limit (dBμV) @ 3m
30 - 88	39.00	40.00
88 - 216	43.50	43.50
216 - 960	46.40	46.00
Above 960	49.50	54.00

Table 8. Radiated Emissions Limits calculated from FCC Part 15, §15.109 (a) (b)

Test Procedures: The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. The method of testing and test conditions of ANSI C63.4 were used. An antenna was located 3 m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. Unless otherwise specified, measurements were made using a quasi-peak detector with a 120 kHz bandwidth.

Test Results: The EUT was compliant with the Class B requirement(s) of this section. Measured emissions were below applicable limits.

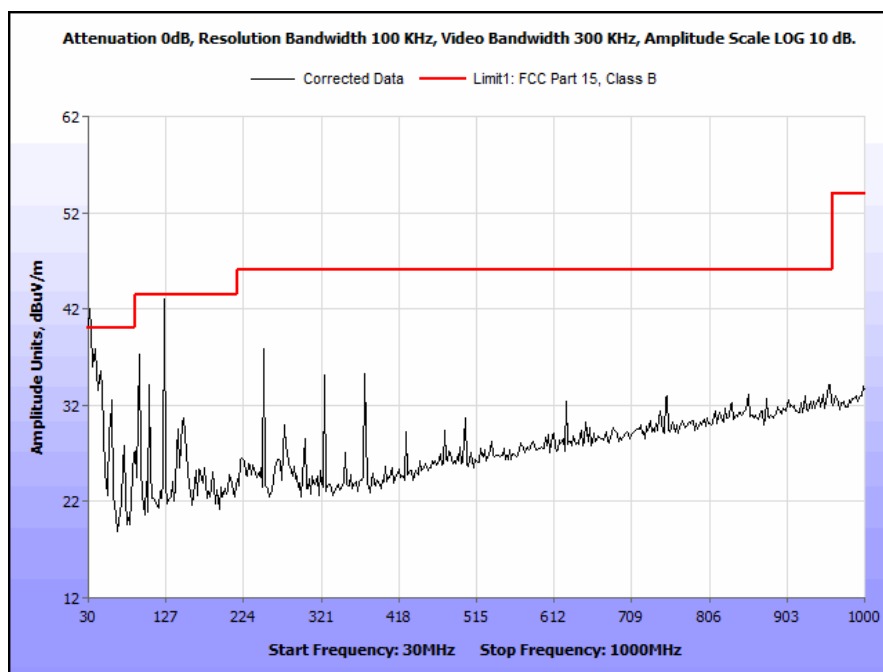
Test Engineer(s): Surinder Singh

Test Date(s): 10/29/14

Radiated Emissions Limits Test Results, Class B

Frequency (MHz)	EUT Azimuth (Degrees)	Antenna Polarity (H/V)	Antenna Height (m)	Uncorrected Amplitude (dBμV)	Antenna Correction Factor (dB) (+)	Cable Loss (dB) (+)	Distance Correction Factor (dB) (-)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
42.56	26	H	1.26	42.00	12.66	-20.68	0.00	33.98	40.00	-6.02
42.56	345	V	1.45	41.29	12.66	-20.68	0.00	33.27	40.00	-6.73
95.2	12	H	1.44	38.96	8.86	-20.15	0.00	27.67	43.50	-15.83
95.2	19	V	1.55	40.28	8.86	-20.15	0.00	28.99	43.50	-14.51
126.28	15	H	1.67	36.49	14.27	-20.23	0.00	30.53	43.50	-12.97
126.28	358	V	1.51	38.53	14.27	-20.23	0.00	32.57	43.50	-10.93
249.45	8	H	1.74	34.08	12.11	-19.74	0.00	26.45	46.00	-19.55
249.45	348	V	1.63	35.68	12.11	-19.74	0.00	28.05	46.00	-17.95
375.49	22	H	1.26	26.45	15.71	-19.33	0.00	22.83	46.00	-23.17
375.49	4	V	1.36	25.88	15.71	-19.33	0.00	22.26	46.00	-23.74
626.54	355	H	1.61	24.12	19.86	-19.72	0.00	24.26	46.00	-21.74
626.54	16	V	1.52	21.45	19.86	-19.72	0.00	21.59	46.00	-24.41

Table 9. Radiated Emissions Limits, Test Results, 30 MHz – 1 GHz



Plot 3. Radiated Emissions, Pre-Scan, 30 MHz – 1 GHz

IV. Electromagnetic Compatibility Criteria for Intentional Radiators

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.203 Antenna Requirement

Test Requirement: **§ 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.

The structure and application of the EUT were analyzed to determine compliance with Section 15.203 of the Rules. Section 15.203 states that the subject device must meet at least one of the following criteria:

- a.) Antenna must be permanently attached to the unit.
- b.) Antenna must use a unique type of connector to attach to the EUT.
- c.) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

Results: The EUT as tested is compliant the criteria of §15.203 as the antenna is professionally installed. The gains of the antennae are 23 dBi, 29 dBi and 34 dBi. They are used for point-to-point applications only.

Test Engineer(s): Jason Allnutt

Test Date(s): 12/01/14

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.207(a) Conducted Emissions Limits

Test Requirement(s): § 15.207 (a): 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 30MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 Σ line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency range (MHz)	§ 15.207(a), Conducted Limit (dB μ V)	
	Quasi-Peak	Average
* 0.15- 0.45	66 - 56	56 - 46
0.45 - 0.5	56	46
0.5 - 30	60	50

Table 10. Conducted Limits for Intentional Radiators from FCC Part 15 § 15.207(a)

Test Procedure: The EUT was placed on a 0.8 m-high wooden table inside a screen room. The EUT was situated such that the back of the EUT was 0.4 m from one wall of the vertical ground plane, and the remaining sides of the EUT were no closer than 0.8 m from any other conductive surface. The EUT was powered from a 50 Ω /50 μ H Line Impedance Stabilization Network (LISN). The EMC receiver scanned the frequency range from 150 kHz to 30 MHz. Conducted Emissions measurements were made in accordance with *ANSI C63.4-2003 "Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40 GHz"*. The measurements were performed over the frequency range of 0.15 MHz to 30 MHz using a 50 Ω /50 μ H LISN as the input transducer to an EMC/field intensity meter. For the purpose of this testing, the transmitter was turned on. Scans were performed with the transmitter on.

Test Results: The EUT was compliant with this requirement.

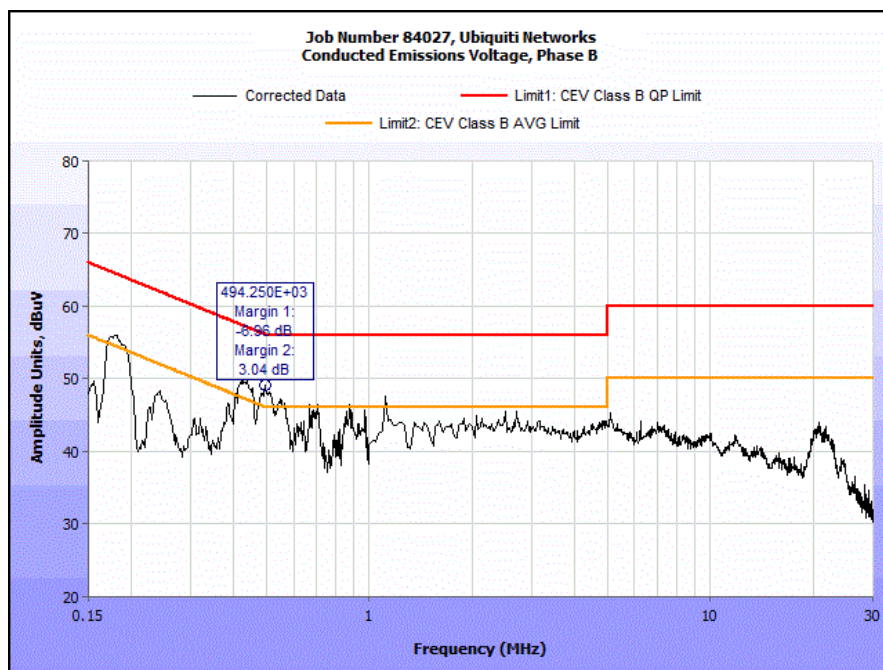
Test Engineer(s): Jason Allnutt

Test Date(s): 11/03/14

Conducted Emissions 15.207(a) - Voltage, AC Power, Phase Line (120 VAC, 60 Hz), UNII 1

Frequency (MHz)	Uncorrected Meter Reading (dBμV) QP	Cable Loss (dB)	Corrected Measurement (dBμV) QP	Limit (dBμV) QP	Margin (dB) QP	Uncorrected Meter Reading (dBμV) Avg.	Cable Loss (dB)	Corrected Measurement (dBμV) Avg.	Limit (dBμV) Avg.	Margin (dB) Avg.
0.1714	51.87	0	51.87	79	-27.13	34.77	0	34.77	66	-31.23
0.2351	45.24	0	45.24	79	-33.76	31.46	0	31.46	66	-34.54
0.4445	38.33	0	38.33	79	-40.67	28.06	0	28.06	66	-37.94
1.079	31.86	0	31.86	73	-41.14	20.43	0	20.43	60	-39.57
2.71	40.21	0	40.21	73	-32.79	29.36	0	29.36	60	-30.64
3.136	40.92	0	40.92	73	-32.08	31.04	0	31.04	60	-28.96

Table 11. Conducted Emissions - Voltage, AC Power, 15.207(a), Phase Line (120 VAC, 60 Hz), UNII 1

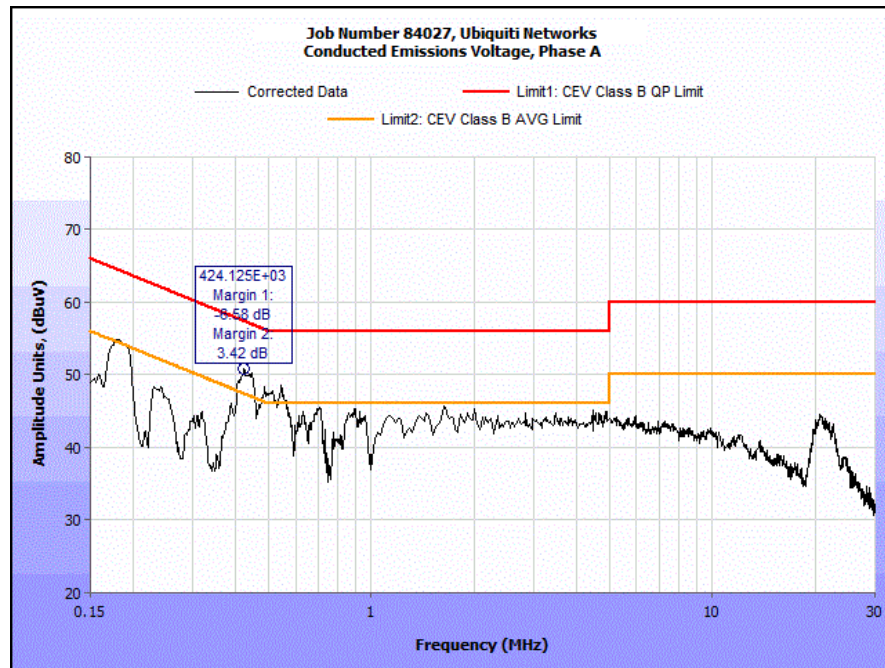


Plot 4. Conducted Emissions, 15.207(a), Phase Line, UNII 1

Conducted Emissions 15.207(a) - Voltage, AC Power, Neutral Line (120 VAC, 60 Hz), UNII 1

Frequency (MHz)	Uncorrected Meter Reading (dBμV) QP	Cable Loss (dB)	Corrected Measurement (dBμV) QP	Limit (dBμV) QP	Margin (dB) QP	Uncorrected Meter Reading (dBμV) Avg.	Cable Loss (dB)	Corrected Measurement (dBμV) Avg.	Limit (dBμV) Avg.	Margin (dB) Avg.
0.174	51.26	0	51.26	79	-27.74	51.8	0	51.8	66	-14.2
0.2249	44.72	0	44.72	79	-34.28	31.78	0	31.78	66	-34.22
0.4621	41.73	0	41.73	79	-37.27	35.8	0	35.8	66	-30.2
2.8	37.3	0	37.3	73	-35.7	28.93	0	28.93	60	-31.07
4.335	32.67	0	32.67	73	-40.33	32.9	0	32.9	60	-27.1
5.955	30	0.17	30.17	73	-42.83	23	0.17	23.17	60	-36.83

Table 12. Conducted Emissions - Voltage, AC Power, 15.207(a), Neutral Line (120 VAC, 60 Hz), UNII 1

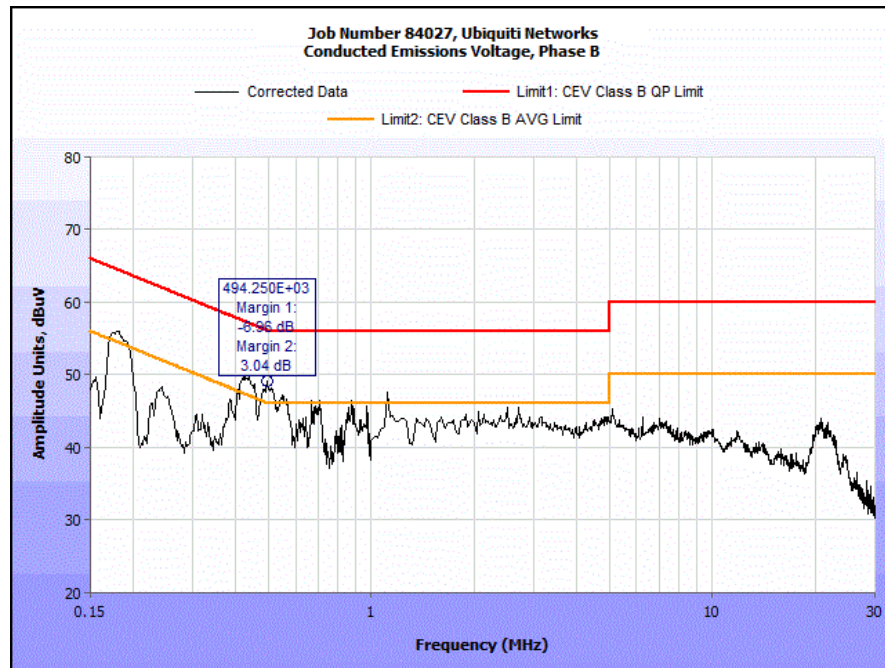


Plot 5. Conducted Emissions, 15.207(a), Neutral Line, UNII 1

Conducted Emissions 15.207(a) - Voltage, AC Power, Phase Line (120 VAC, 60 Hz), UNII 3

Frequency (MHz)	Uncorrected Meter Reading (dBμV) QP	Cable Loss (dB)	Corrected Measurement (dBμV) QP	Limit (dBμV) QP	Margin (dB) QP	Uncorrected Meter Reading (dBμV) Avg.	Cable Loss (dB)	Corrected Measurement (dBμV) Avg.	Limit (dBμV) Avg.	Margin (dB) Avg.
0.1714	51.87	0	51.87	79	-27.13	34.77	0	34.77	66	-31.23
0.2351	45.24	0	45.24	79	-33.76	31.46	0	31.46	66	-34.54
0.4445	38.33	0	38.33	79	-40.67	28.06	0	28.06	66	-37.94
1.079	31.86	0	31.86	73	-41.14	20.43	0	20.43	60	-39.57
2.71	40.21	0	40.21	73	-32.79	29.36	0	29.36	60	-30.64
3.136	40.92	0	40.92	73	-32.08	31.04	0	31.04	60	-28.96

Table 13. Conducted Emissions - Voltage, AC Power, 15.207(a), Phase Line (120 VAC, 60 Hz), UNII 3

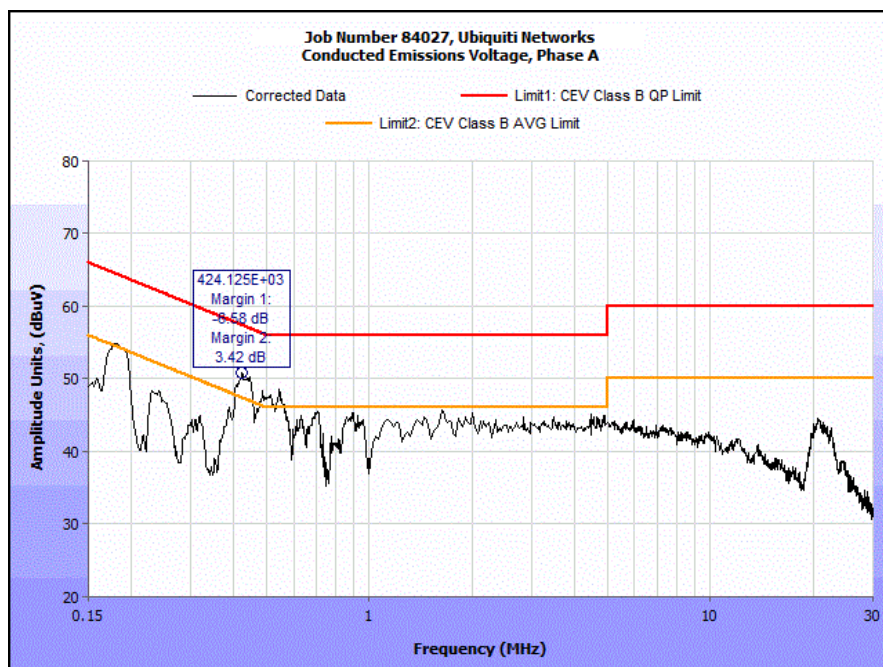


Plot 6. Conducted Emissions, 15.207(a), Phase Line, UNII 3

Conducted Emissions 15.207(a) - Voltage, AC Power, Neutral Line (120 VAC, 60 Hz), UNII 3

Frequency (MHz)	Uncorrected Meter Reading (dBμV) QP	Cable Loss (dB)	Corrected Measurement (dBμV) QP	Limit (dBμV) QP	Margin (dB) QP	Uncorrected Meter Reading (dBμV) Avg.	Cable Loss (dB)	Corrected Measurement (dBμV) Avg.	Limit (dBμV) Avg.	Margin (dB) Avg.
0.174	51.26	0	51.26	79	-27.74	51.8	0	51.8	66	-14.2
0.2249	44.72	0	44.72	79	-34.28	31.78	0	31.78	66	-34.22
0.4621	41.73	0	41.73	79	-37.27	35.8	0	35.8	66	-30.2
2.8	37.3	0	37.3	73	-35.7	28.93	0	28.93	60	-31.07
4.335	32.67	0	32.67	73	-40.33	32.9	0	32.9	60	-27.1
5.955	30	0.17	30.17	73	-42.83	23	0.17	23.17	60	-36.83

Table 14. Conducted Emissions - Voltage, AC Power, 15.207(a), Neutral Line (120 VAC, 60 Hz), UNII 3



Plot 7. Conducted Emissions, 15.207(a), Neutral Line, UNII 3

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.403(i) 26dB Bandwidth

Test Requirements: § 15.403 (i): For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

Test Procedure: The transmitter was set to low, mid, and high operating frequencies at the highest output power and connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using a RBW approximately equal to 1% of the total emission bandwidth, VBW > RBW. The 26 dB Bandwidth was measured and recorded.

Test Results The 26 dB Bandwidth was compliant with the requirements of this section and was determined from the plots on the following pages.

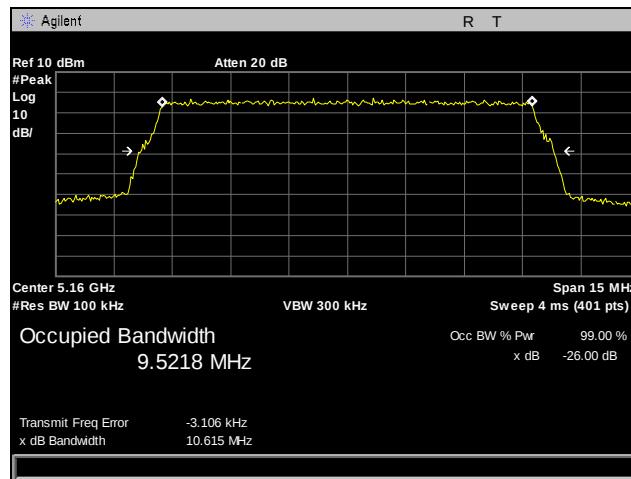
Test Engineer(s): Jason Allnutt

Test Date(s): 12/01/14

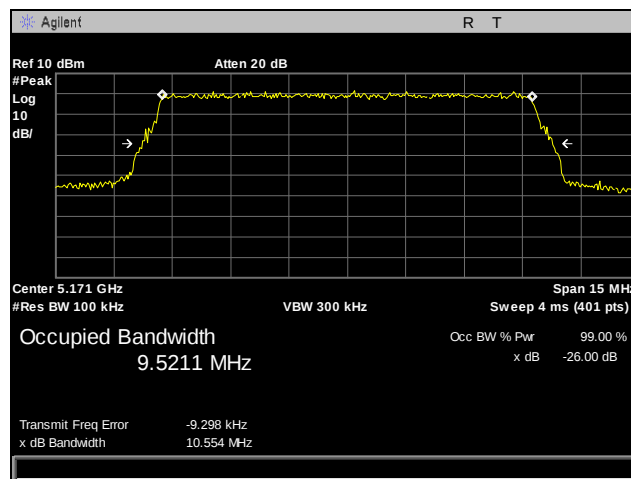


Figure 1. Occupied Bandwidth, Test Setup

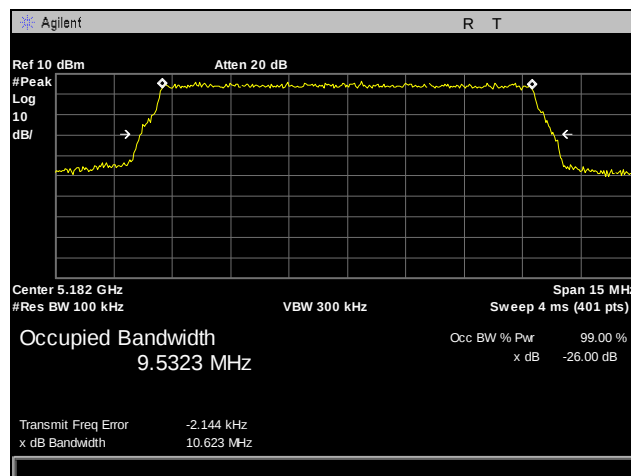
26 dB Occupied Bandwidth, Antenna 0, 10 MHz, UNII 1



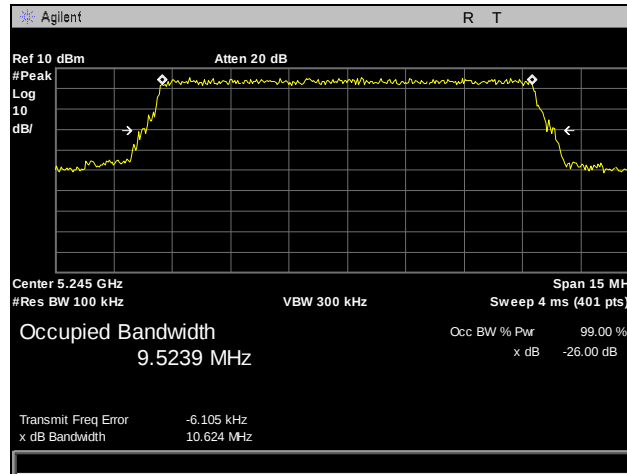
Plot 8. 26 dB Occupied Bandwidth, 5160 MHz, Antenna 0, 10 MHz



Plot 9. 26 dB Occupied Bandwidth, 5171 MHz, Antenna 0, 10 MHz

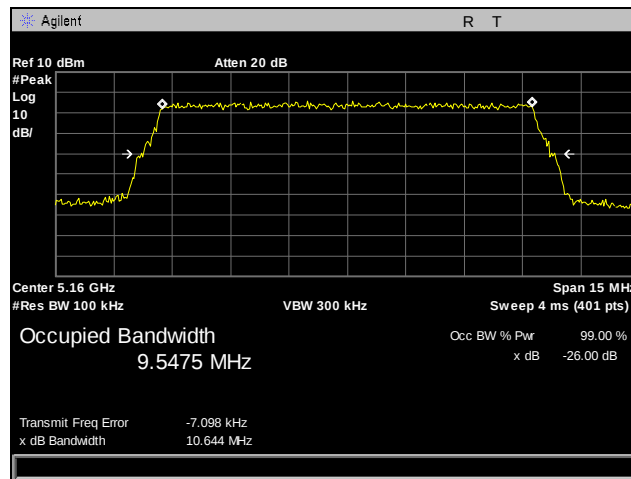


Plot 10. 26 dB Occupied Bandwidth, 5182 MHz, Antenna 0, 10 MHz

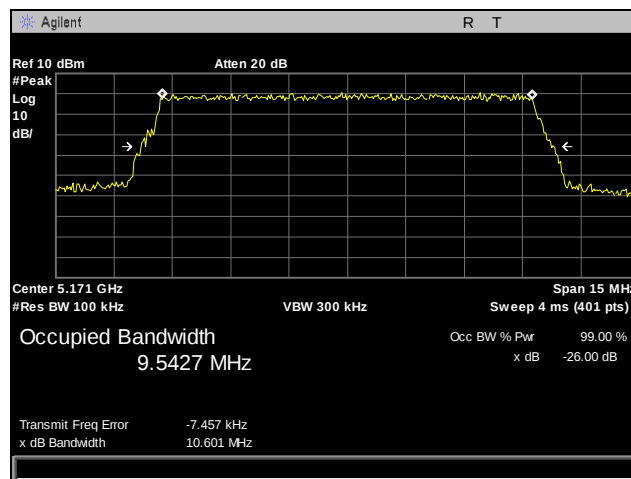


Plot 11. 26 dB Occupied Bandwidth, 5245 MHz, Antenna 0, 10 MHz

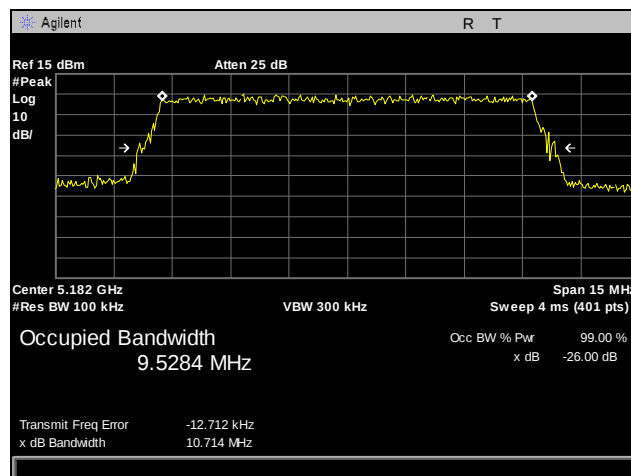
26 dB Occupied Bandwidth, Antenna 1, 10 MHz, UNII 1



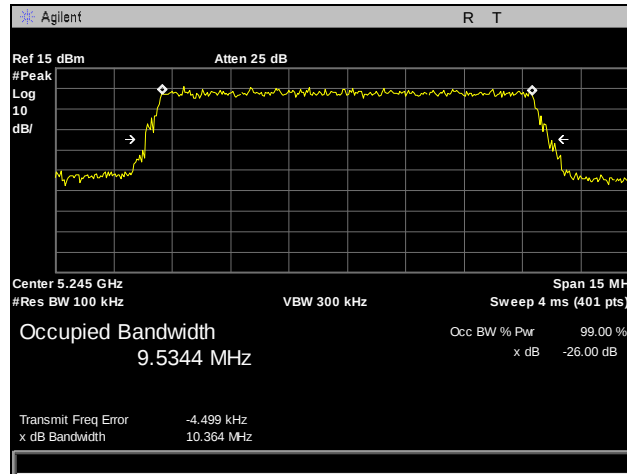
Plot 12. 26 dB Occupied Bandwidth, 5160 MHz, Antenna 1, 10 MHz



Plot 13. 26 dB Occupied Bandwidth, 5171 MHz, Antenna 1, 10 MHz

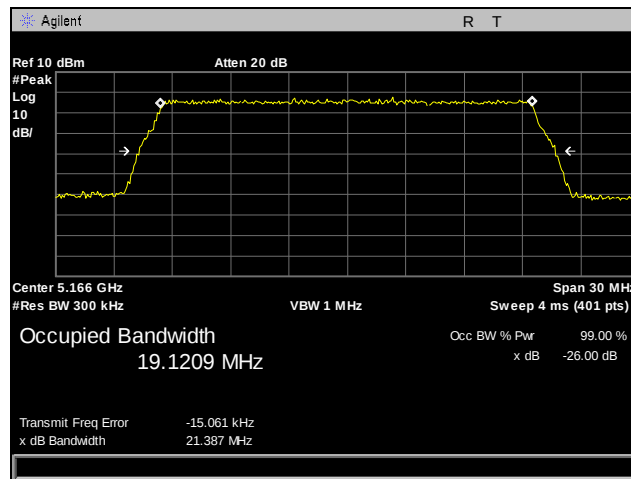


Plot 14. 26 dB Occupied Bandwidth, 5182 MHz, Antenna 1, 10 MHz

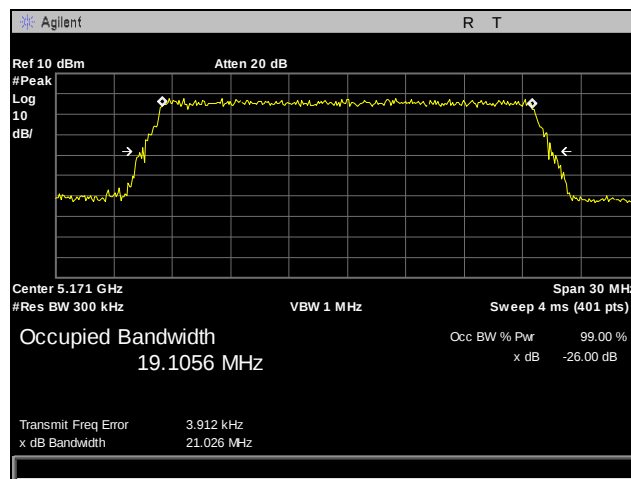


Plot 15. 26 dB Occupied Bandwidth, 5245 MHz, Antenna 1, 10 MHz

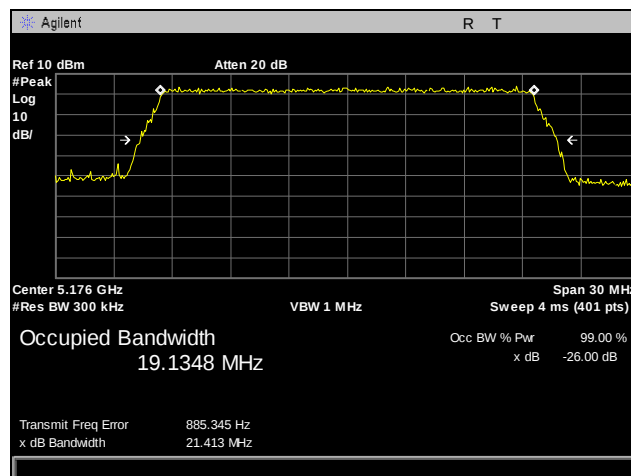
26 dB Occupied Bandwidth, Antenna 0, 20 MHz, UNII 1



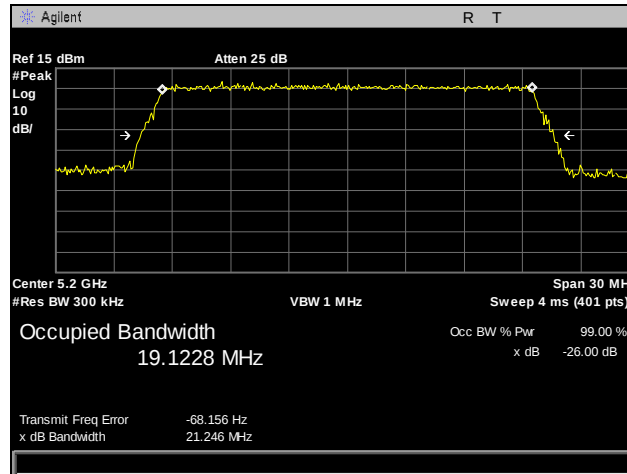
Plot 16. 26 dB Occupied Bandwidth, 5166 MHz, Antenna 0, 20 MHz



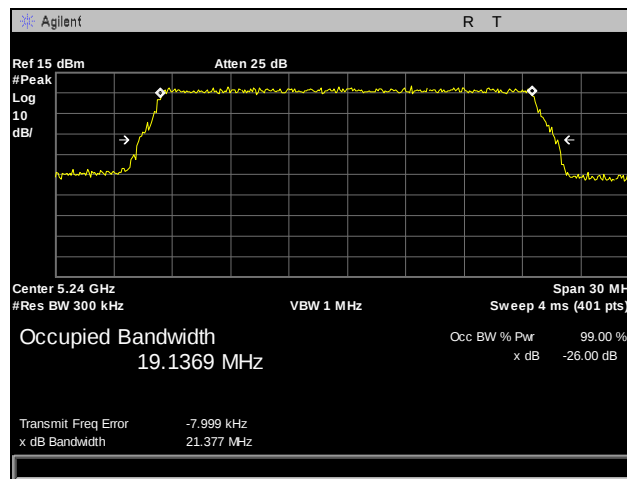
Plot 17. 26 dB Occupied Bandwidth, 5171 MHz, Antenna 0, 20 MHz



Plot 18. 26 dB Occupied Bandwidth, 5176 MHz, Antenna 0, 20 MHz

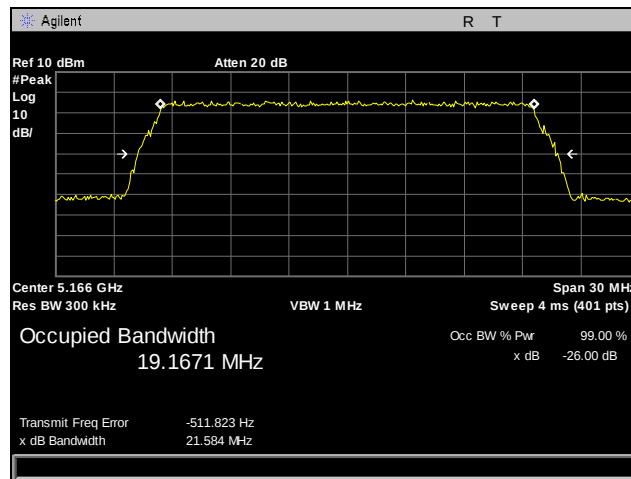


Plot 19. 26 dB Occupied Bandwidth, 5200 MHz, Antenna 0, 20 MHz

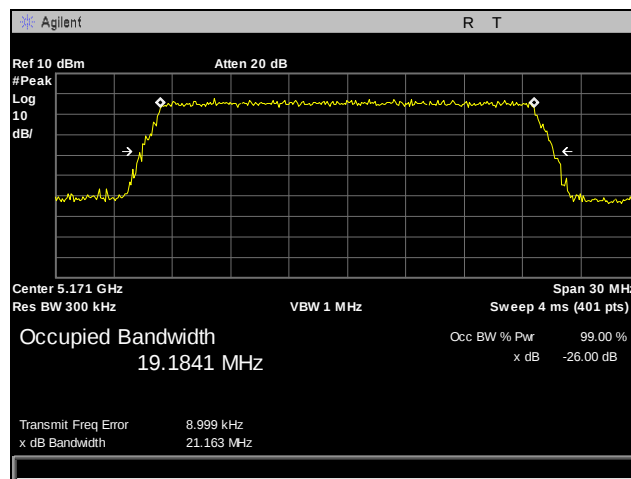


Plot 20. 26 dB Occupied Bandwidth, 5240 MHz, Antenna 0, 20 MHz

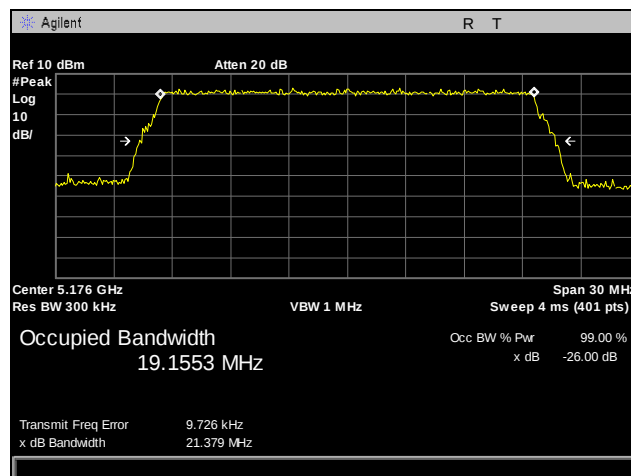
26 dB Occupied Bandwidth, Antenna 1, 20 MHz, UNII 1



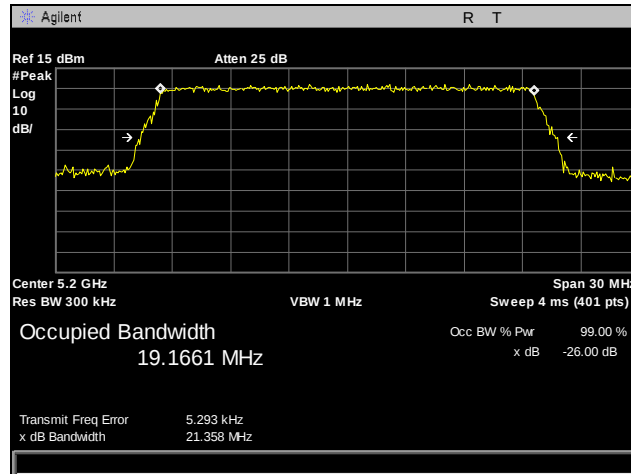
Plot 21. 26 dB Occupied Bandwidth, 5166 MHz, Antenna 1, 20 MHz



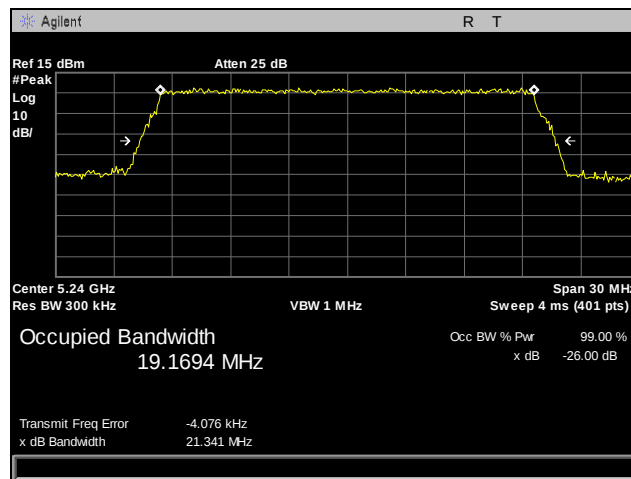
Plot 22. 26 dB Occupied Bandwidth, 5171 MHz, Antenna 1, 20 MHz



Plot 23. 26 dB Occupied Bandwidth, 5176 MHz, Antenna 1, 20 MHz

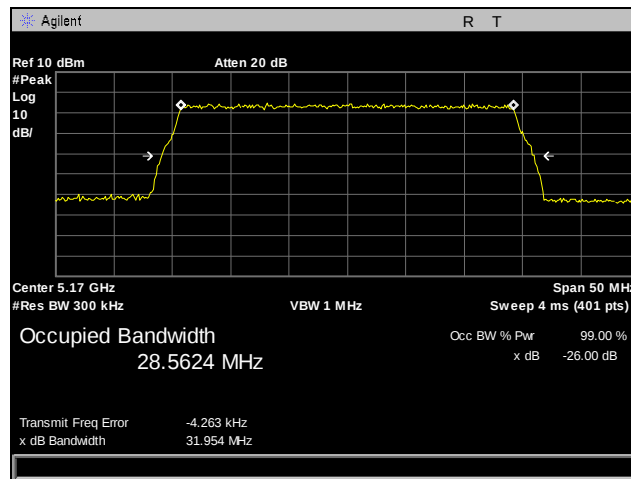


Plot 24. 26 dB Occupied Bandwidth, 5200 MHz, Antenna 1, 20 MHz

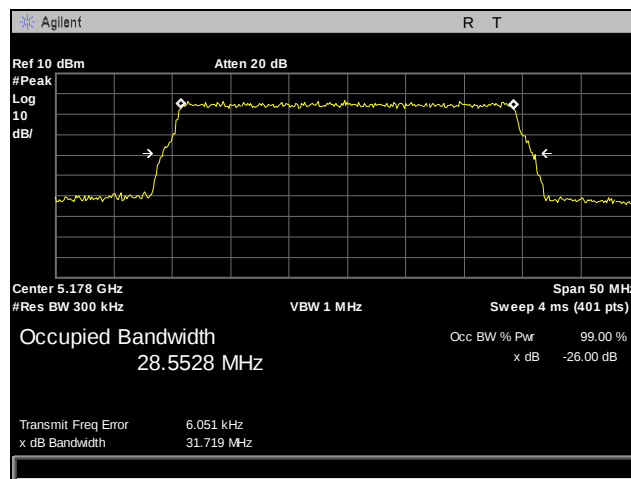


Plot 25. 26 dB Occupied Bandwidth, 5240 MHz, Antenna 1, 20 MHz

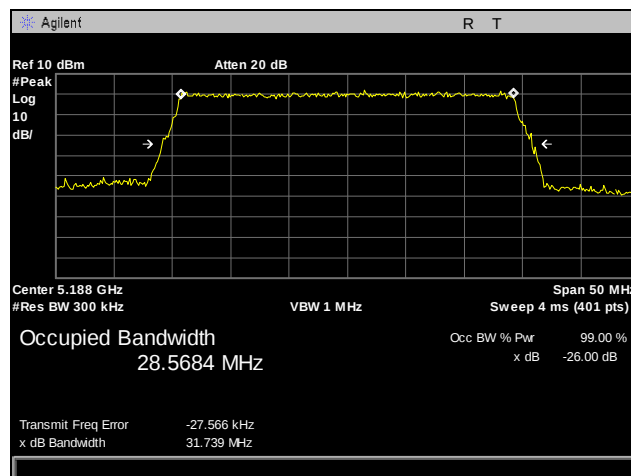
26 dB Occupied Bandwidth, Antenna 0, 30 MHz, UNII 1



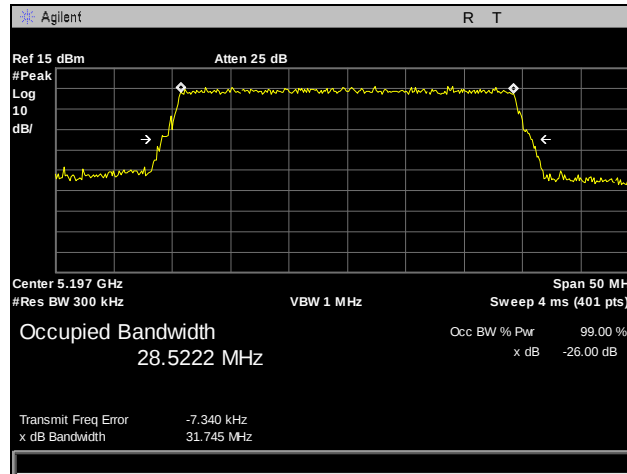
Plot 26. 26 dB Occupied Bandwidth, 5170 MHz, Antenna 0, 30 MHz



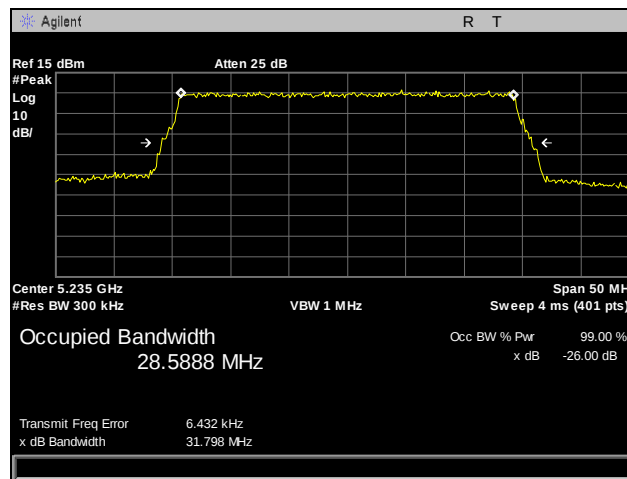
Plot 27. 26 dB Occupied Bandwidth, 5178 MHz, Antenna 0, 30 MHz



Plot 28. 26 dB Occupied Bandwidth, 5188 MHz, Antenna 0, 30 MHz

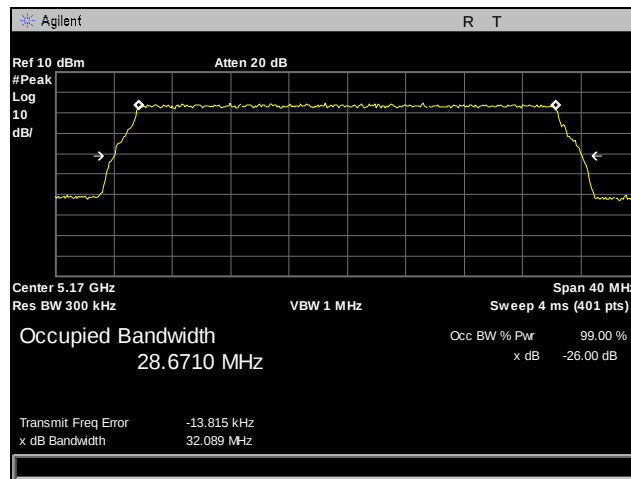


Plot 29. 26 dB Occupied Bandwidth, 5197 MHz, Antenna 0, 30 MHz

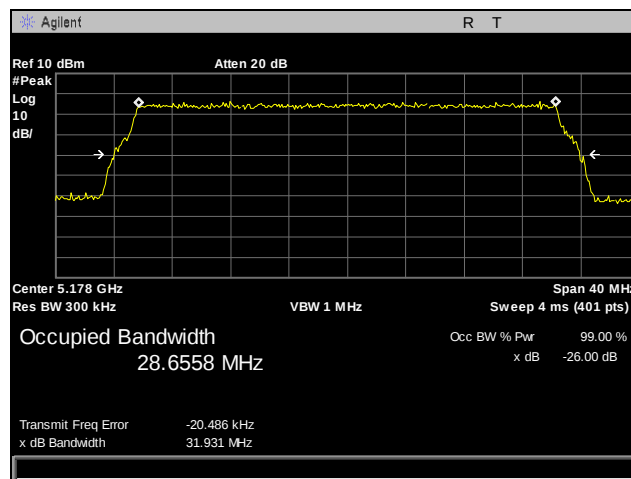


Plot 30. 26 dB Occupied Bandwidth, 5235 MHz, Antenna 0, 30 MHz

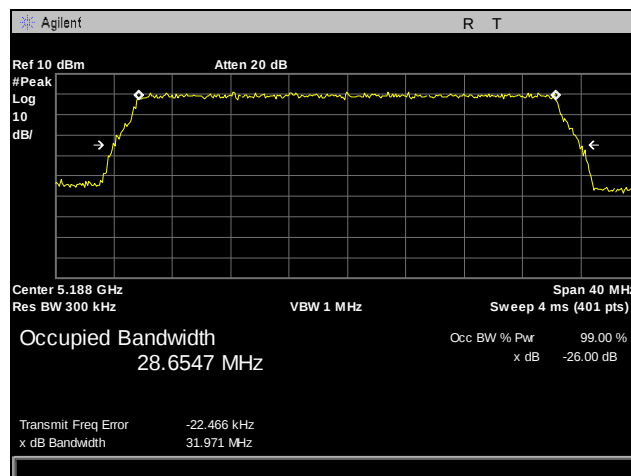
26 dB Occupied Bandwidth, Antenna 1, 30 MHz, UNII 1



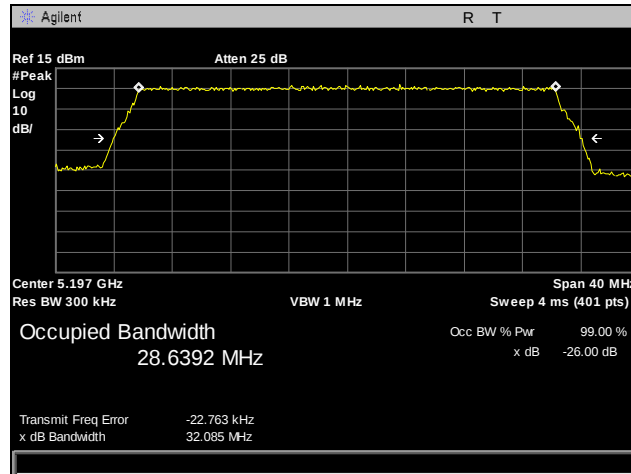
Plot 31. 26 dB Occupied Bandwidth, 5170 MHz, Antenna 1, 30 MHz



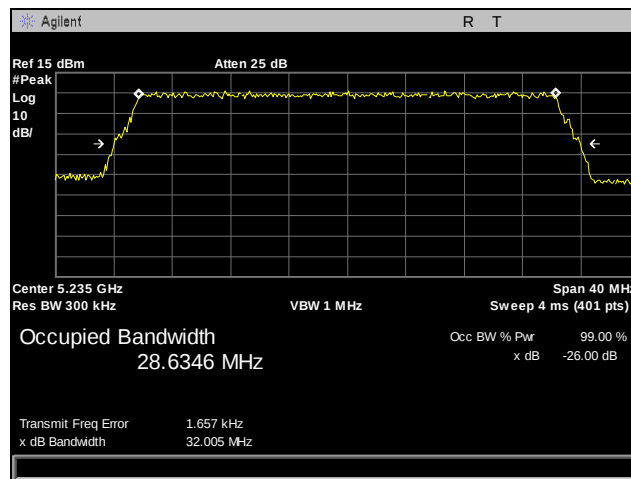
Plot 32. 26 dB Occupied Bandwidth, 5178 MHz, Antenna 1, 30 MHz



Plot 33. 26 dB Occupied Bandwidth, 5188 MHz, Antenna 1, 30 MHz

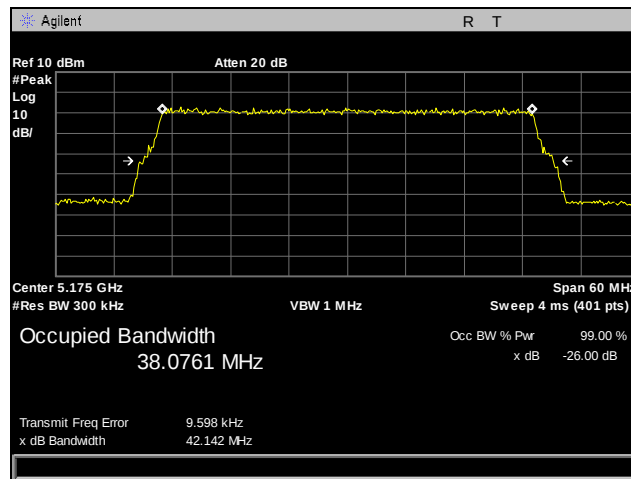


Plot 34. 26 dB Occupied Bandwidth, 5197 MHz, Antenna 1, 30 MHz

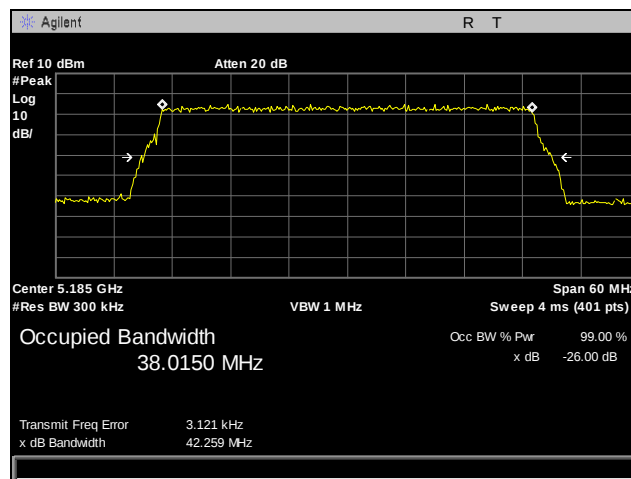


Plot 35. 26 dB Occupied Bandwidth, 5235 MHz, Antenna 1, 30 MHz

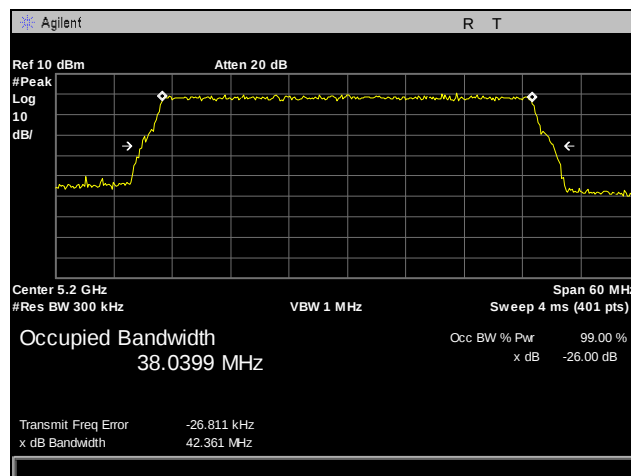
26 dB Occupied Bandwidth, Antenna 0, 40 MHz, UNII 1



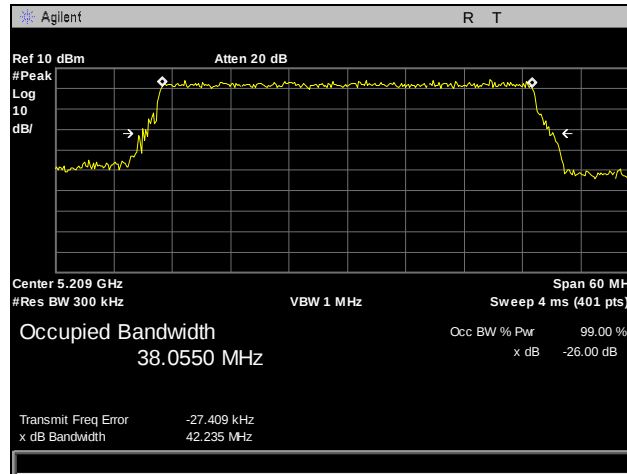
Plot 36. 26 dB Occupied Bandwidth, 5175 MHz, Antenna 0, 40 MHz



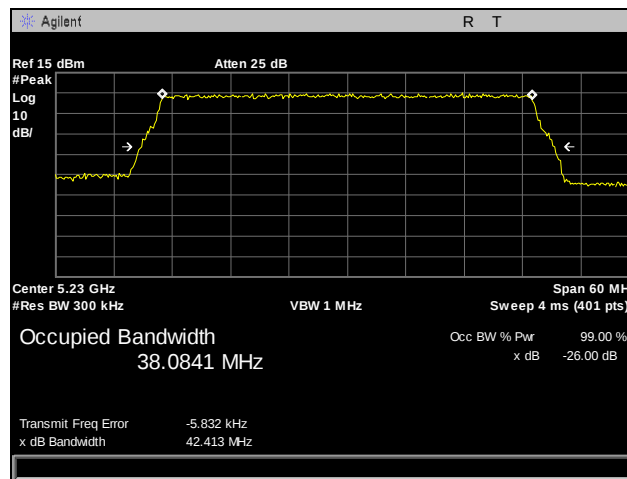
Plot 37. 26 dB Occupied Bandwidth, 5185 MHz, Antenna 0, 40 MHz



Plot 38. 26 dB Occupied Bandwidth, 5200 MHz, Antenna 0, 40 MHz

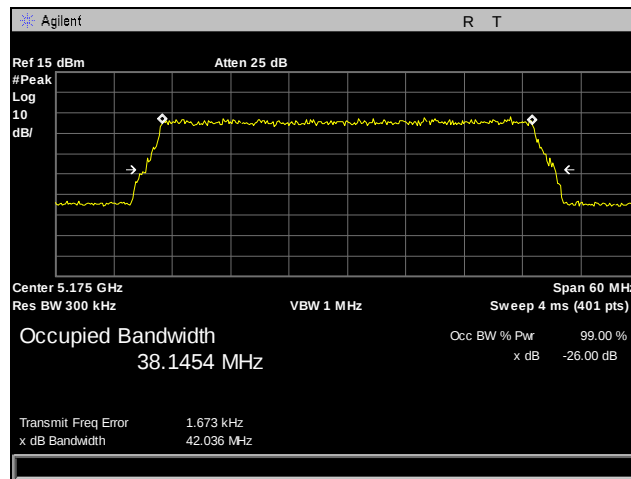


Plot 39. 26 dB Occupied Bandwidth, 5209 MHz, Antenna 0, 40 MHz

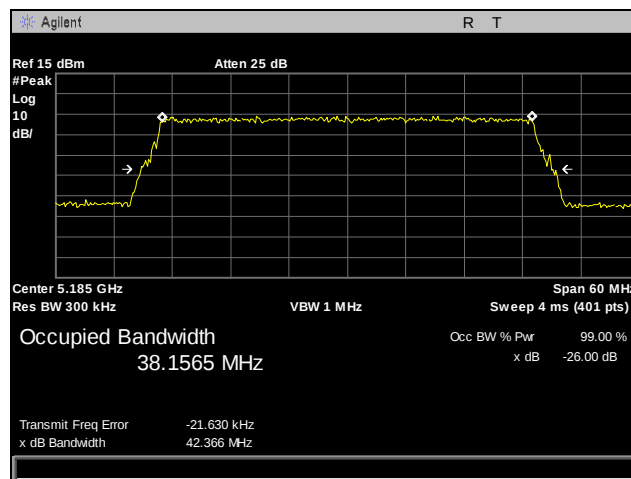


Plot 40. 26 dB Occupied Bandwidth, 5230 MHz, Antenna 0, 40 MHz

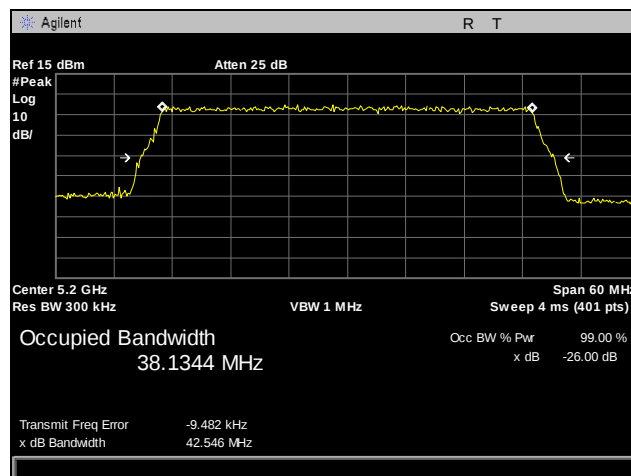
26 dB Occupied Bandwidth, Antenna 1, 40 MHz, UNII 1



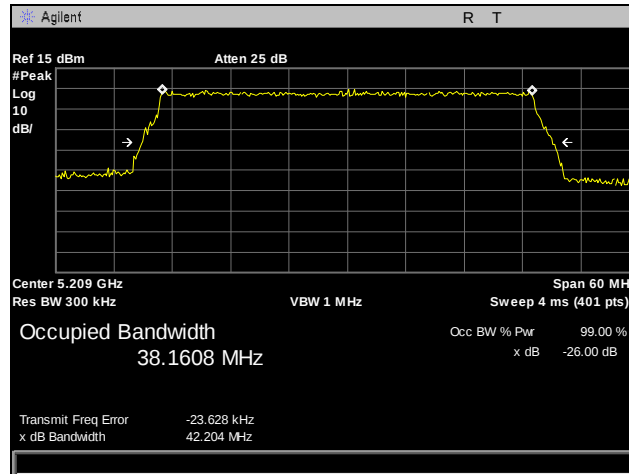
Plot 41. 26 dB Occupied Bandwidth, 5175 MHz, Antenna 1, 40 MHz



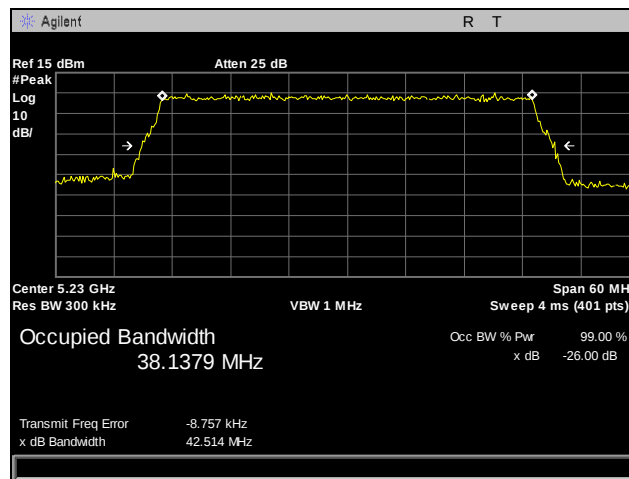
Plot 42. 26 dB Occupied Bandwidth, 5185 MHz, Antenna 1, 40 MHz



Plot 43. 26 dB Occupied Bandwidth, 5200 MHz, Antenna 1, 40 MHz

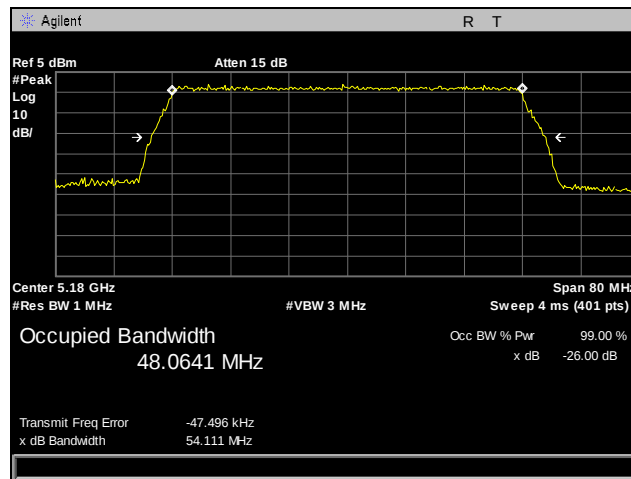


Plot 44. 26 dB Occupied Bandwidth, 5209 MHz, Antenna 1, 40 MHz

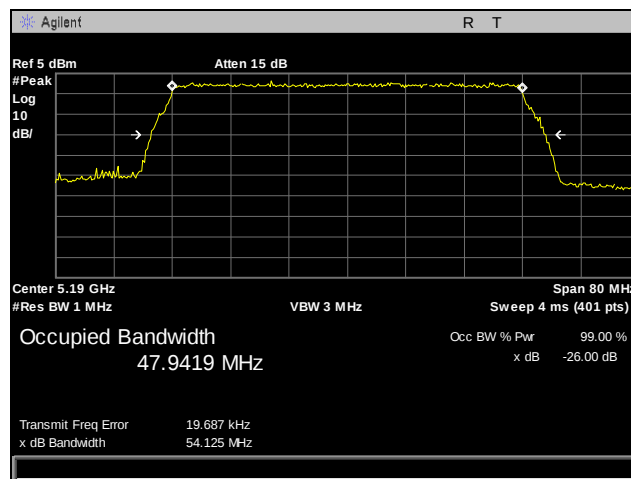


Plot 45. 26 dB Occupied Bandwidth, 5230 MHz, Antenna 1, 40 MHz

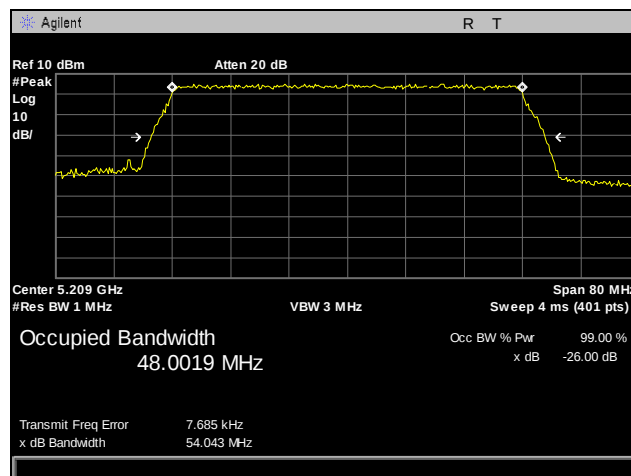
26 dB Occupied Bandwidth, Antenna 0, 50 MHz, UNII 1



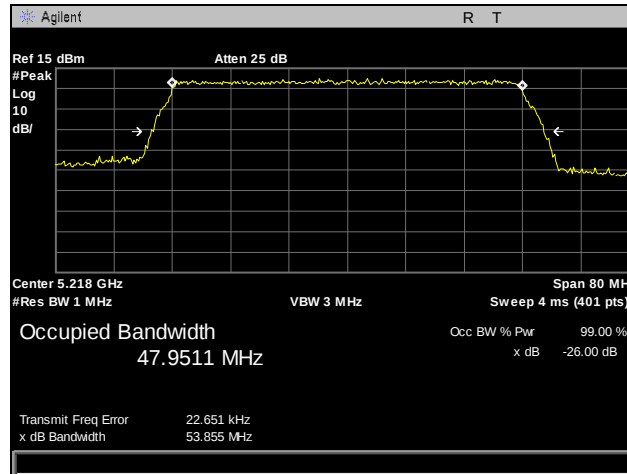
Plot 46. 26 dB Occupied Bandwidth, 5180 MHz, Antenna 0, 50 MHz



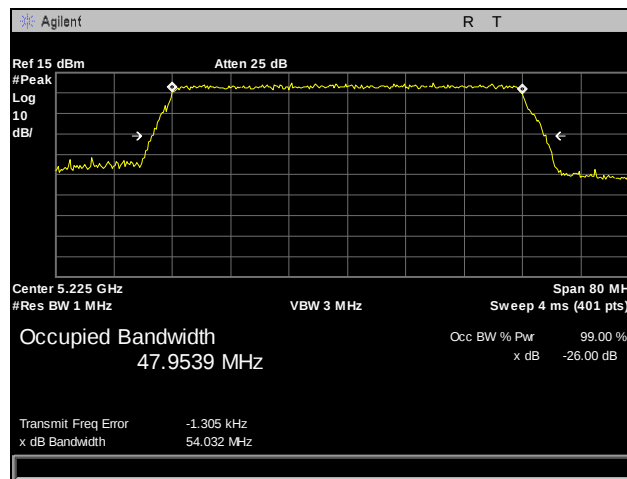
Plot 47. 26 dB Occupied Bandwidth, 5190 MHz, Antenna 0, 50 MHz



Plot 48. 26 dB Occupied Bandwidth, 5209 MHz, Antenna 0, 50 MHz

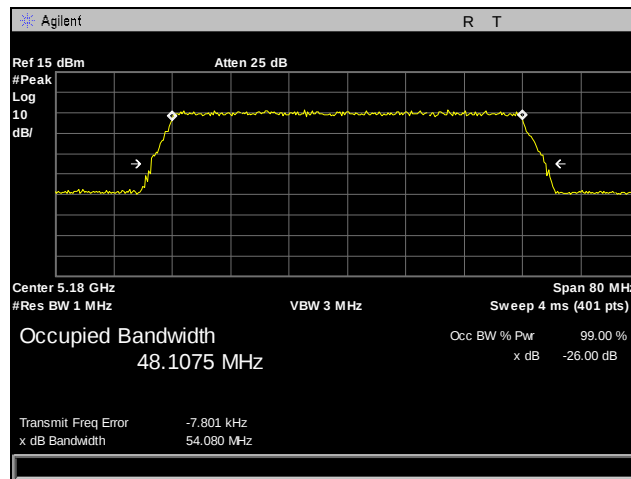


Plot 49. 26 dB Occupied Bandwidth, 5218 MHz, Antenna 0, 50 MHz

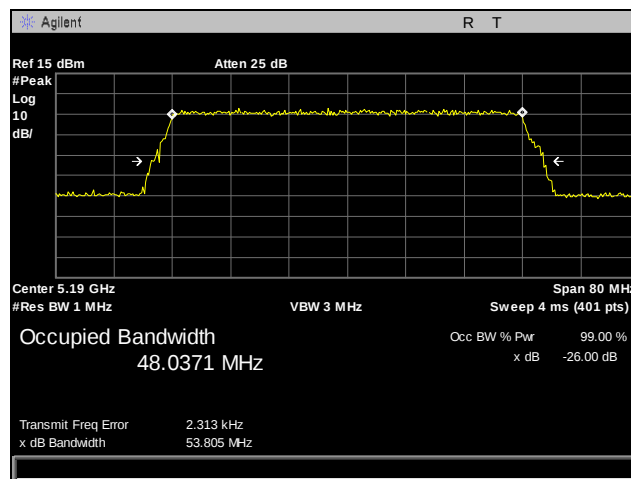


Plot 50. 26 dB Occupied Bandwidth, 5225 MHz, Antenna 0, 50 MHz

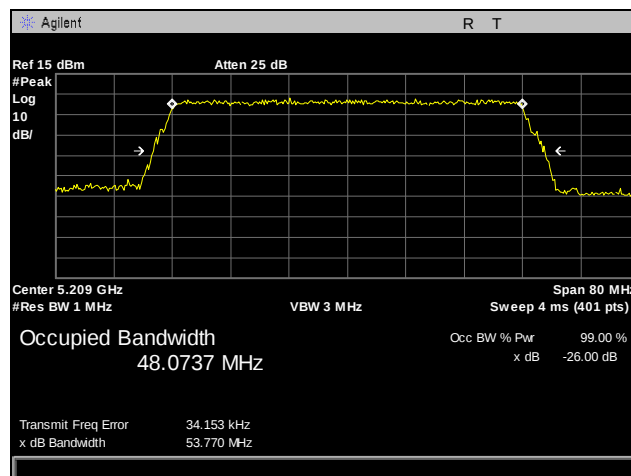
26 dB Occupied Bandwidth, Antenna 1, 50 MHz, UNII 1



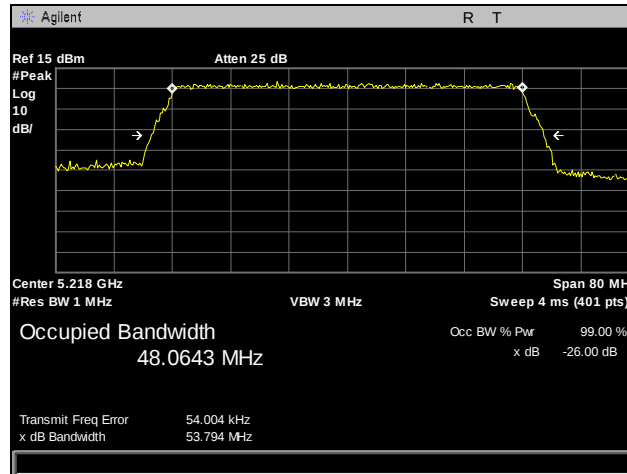
Plot 51. 26 dB Occupied Bandwidth, 5180 MHz, Antenna 1, 50 MHz



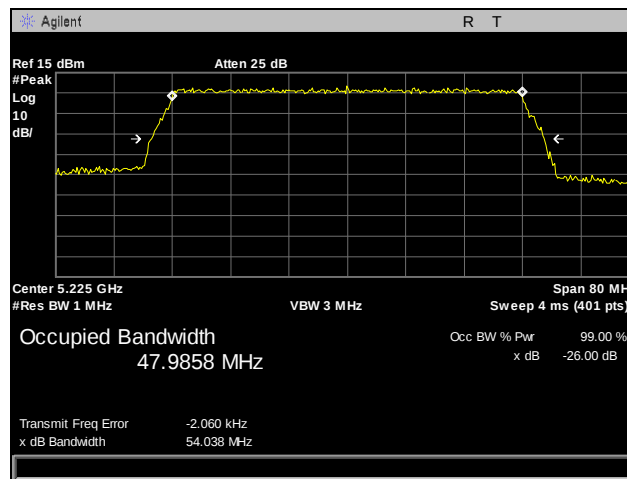
Plot 52. 26 dB Occupied Bandwidth, 5190 MHz, Antenna 1, 50 MHz



Plot 53. 26 dB Occupied Bandwidth, 5209 MHz, Antenna 1, 50 MHz

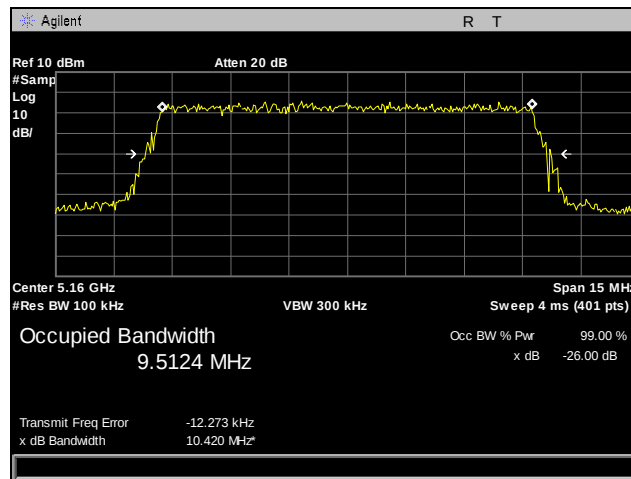


Plot 54. 26 dB Occupied Bandwidth, 5218 MHz, Antenna 1, 50 MHz

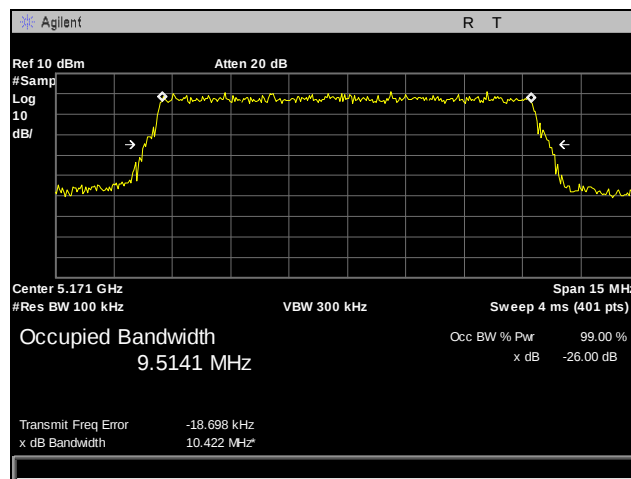


Plot 55. 26 dB Occupied Bandwidth, 5225 MHz, Antenna 1, 50 MHz

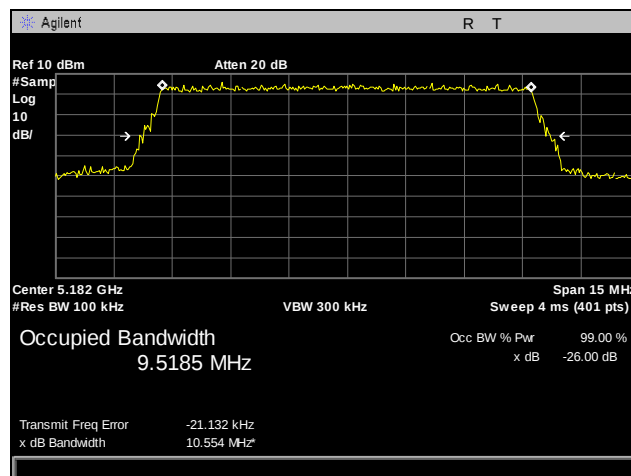
99% Occupied Bandwidth, Antenna 0, 10 MHz, UNII 1



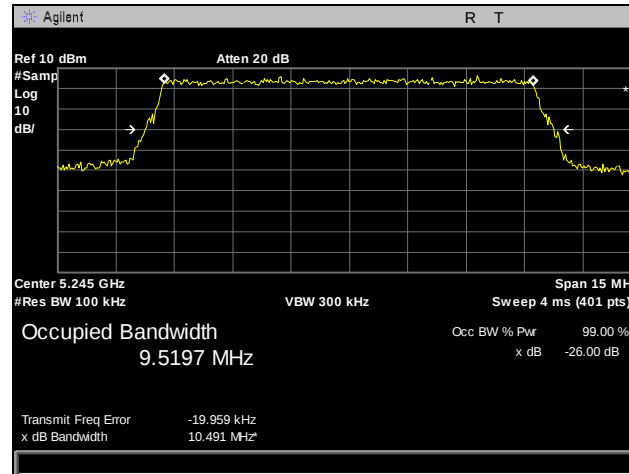
Plot 56. 99% Occupied Bandwidth, 5160 MHz, Antenna 0, 10 MHz



Plot 57. 99% Occupied Bandwidth, 5171 MHz, Antenna 0, 10 MHz

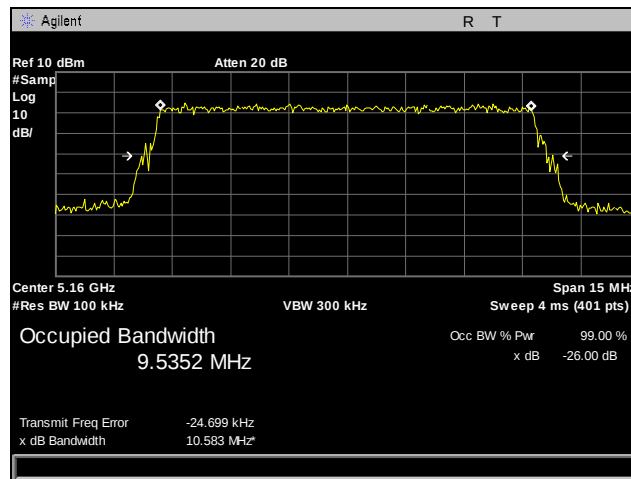


Plot 58. 99% Occupied Bandwidth, 5182 MHz, Antenna 0, 10 MHz

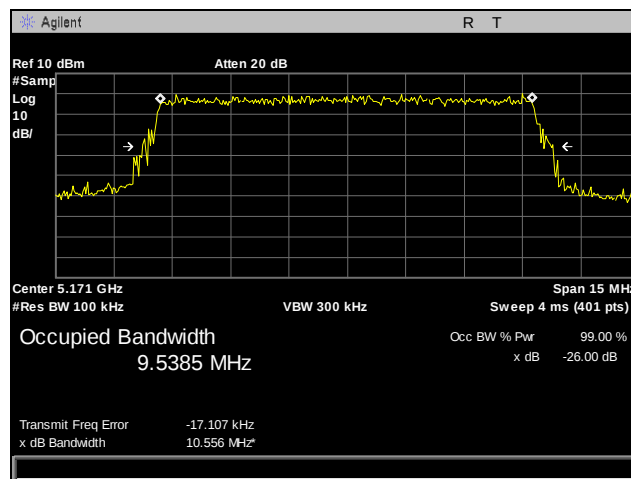


Plot 59. 99% Occupied Bandwidth, 5245 MHz, Antenna 0, 10 MHz

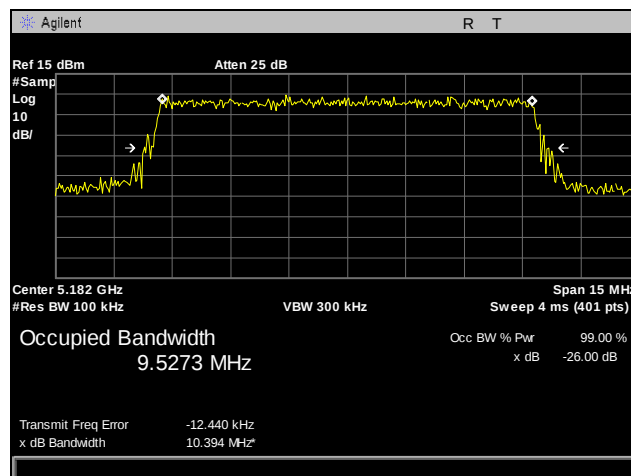
99% Occupied Bandwidth, Antenna 1, 10 MHz, UNII 1



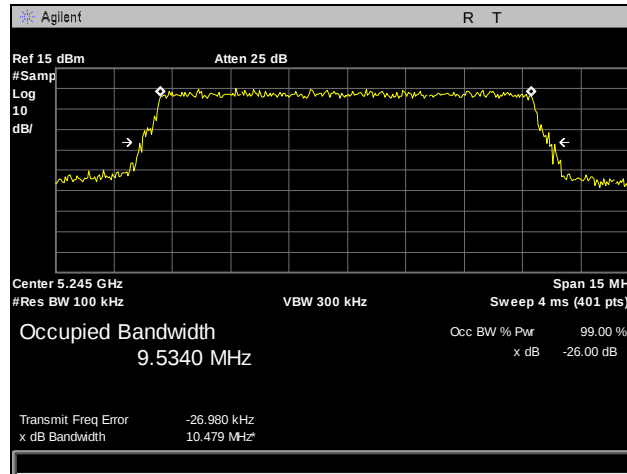
Plot 60. 99% Occupied Bandwidth, 5160 MHz, Antenna 1, 10 MHz



Plot 61. 99% Occupied Bandwidth, 5171 MHz, Antenna 1, 10 MHz

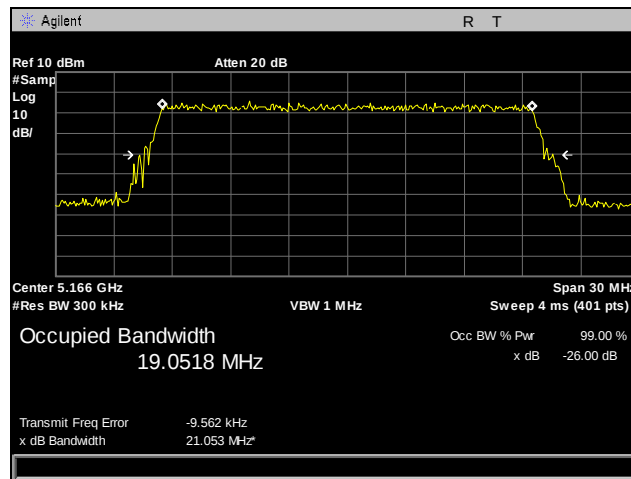


Plot 62. 99% Occupied Bandwidth, 5182 MHz, Antenna 1, 10 MHz

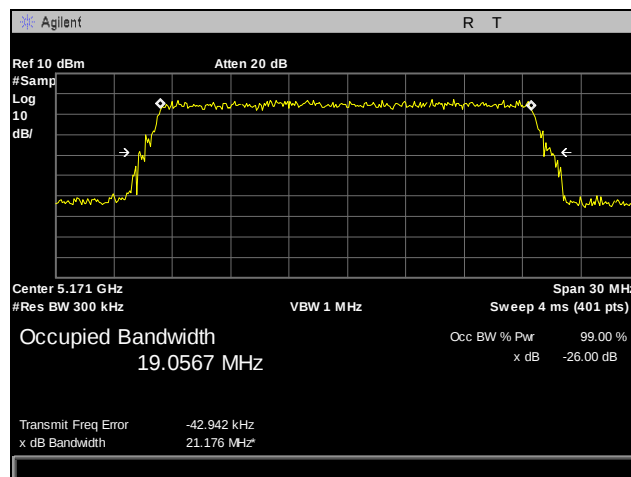


Plot 63. 99% Occupied Bandwidth, 5245 MHz, Antenna 1, 10 MHz

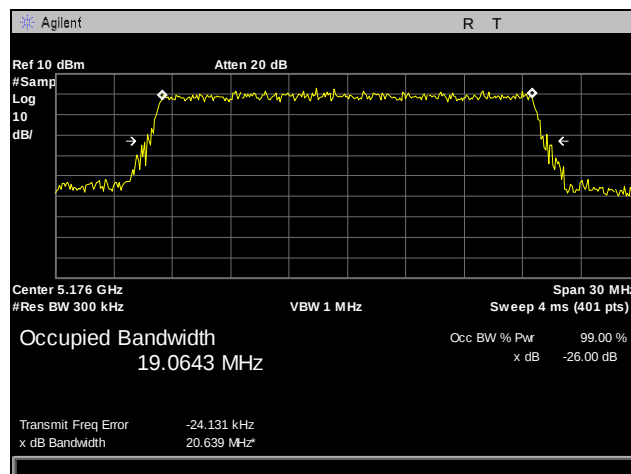
99% Occupied Bandwidth, Antenna 0, 20 MHz, UNII 1



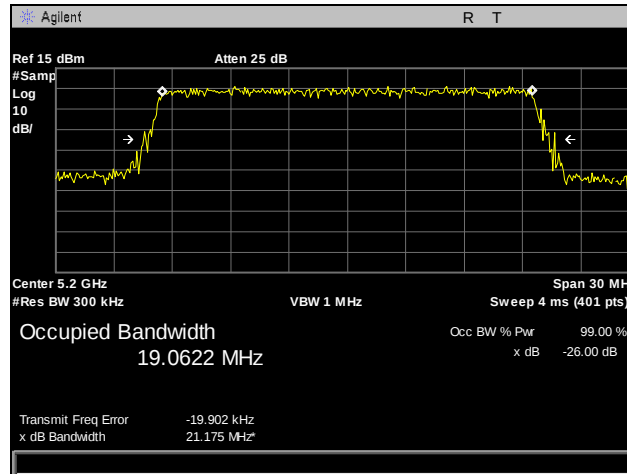
Plot 64. 99% Occupied Bandwidth, 5166 MHz, Antenna 0, 20 MHz



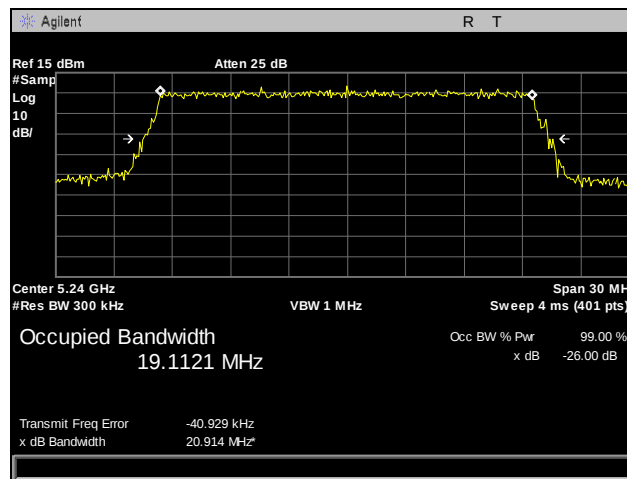
Plot 65. 99% Occupied Bandwidth, 5171 MHz, Antenna 0, 20 MHz



Plot 66. 99% Occupied Bandwidth, 5176 MHz, Antenna 0, 20 MHz

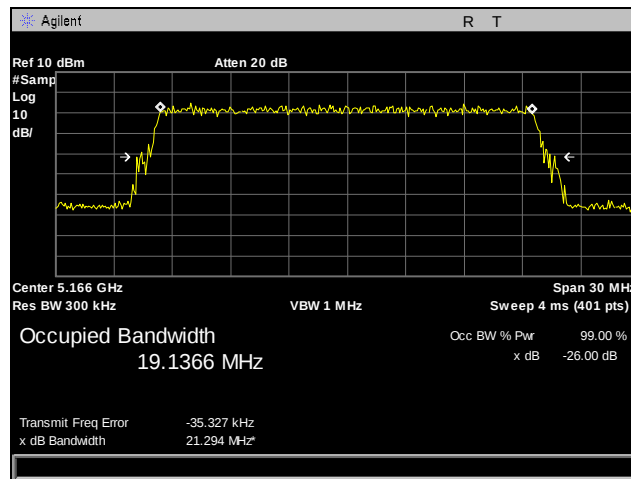


Plot 67. 99% Occupied Bandwidth, 5200 MHz, Antenna 0, 20 MHz

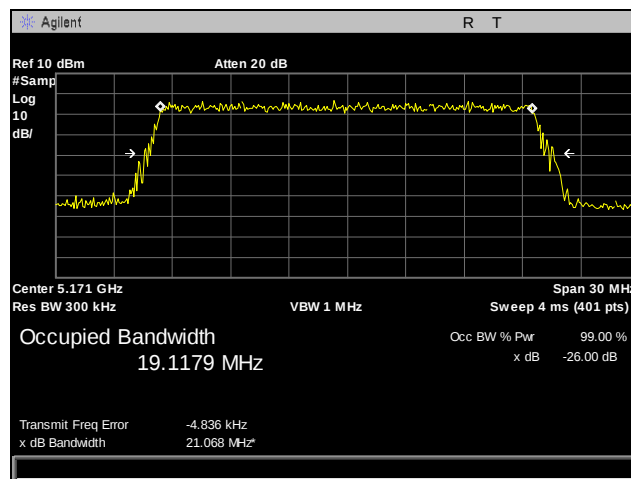


Plot 68. 99% Occupied Bandwidth, 5240 MHz, Antenna 0, 20 MHz

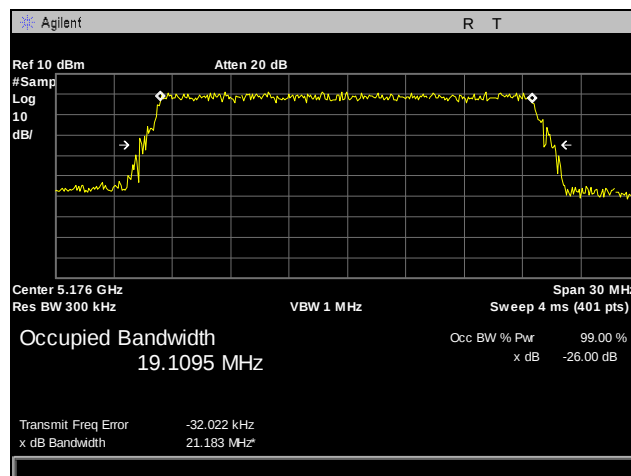
99% Occupied Bandwidth, Antenna 1, 20 MHz, UNII 1



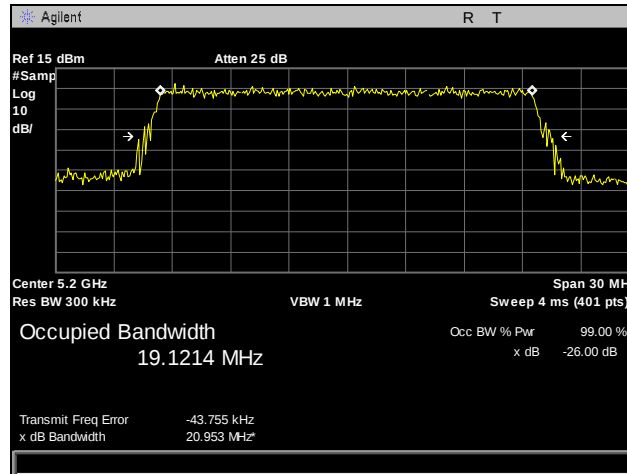
Plot 69. 99% Occupied Bandwidth, 5166 MHz, Antenna 1, 20 MHz



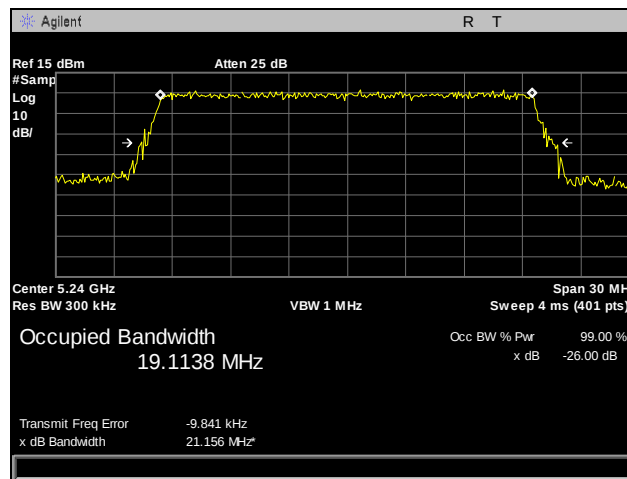
Plot 70. 99% Occupied Bandwidth, 5171 MHz, Antenna 1, 20 MHz



Plot 71. 99% Occupied Bandwidth, 5176 MHz, Antenna 1, 20 MHz

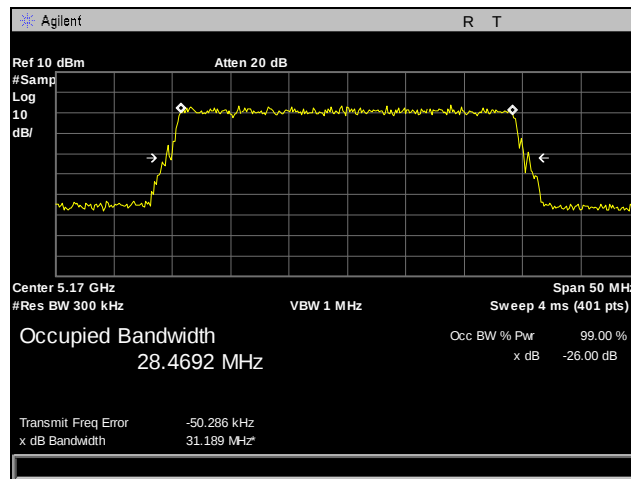


Plot 72. 99% Occupied Bandwidth, 5200 MHz, Antenna 1, 20 MHz

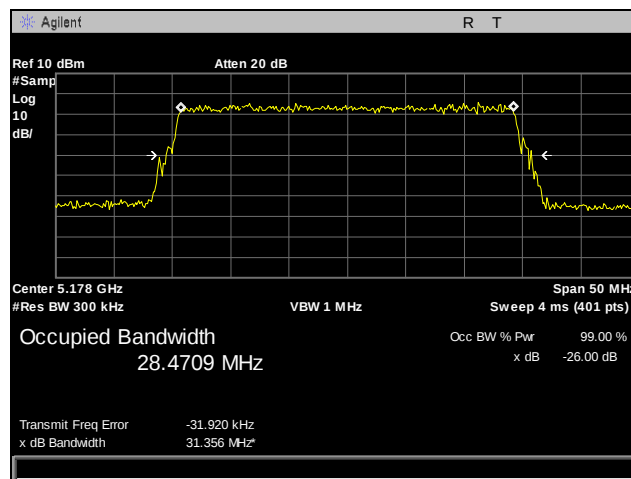


Plot 73. 99% Occupied Bandwidth, 5240 MHz, Antenna 1, 20 MHz

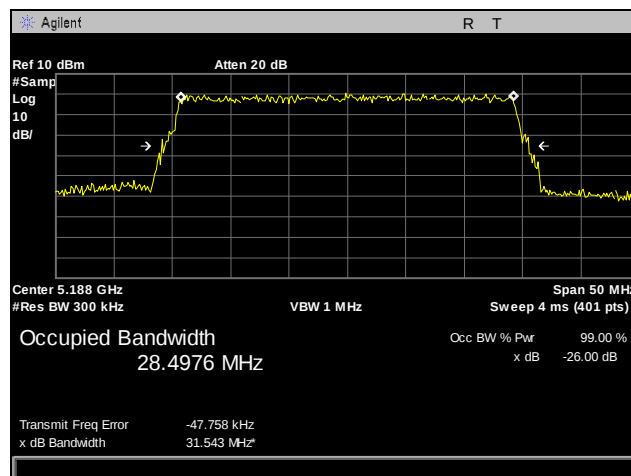
99% Occupied Bandwidth, Antenna 0, 30 MHz, UNII 1



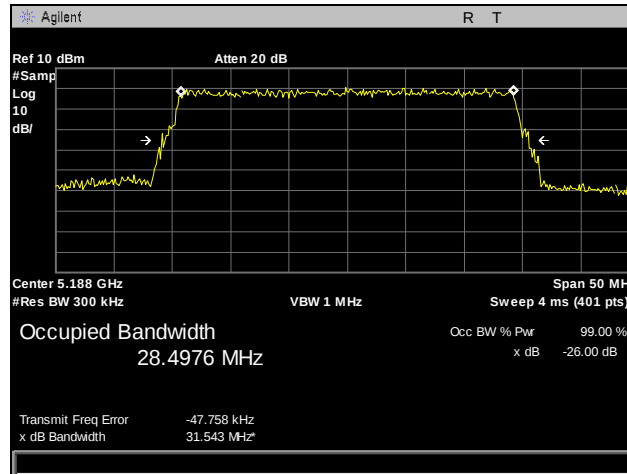
Plot 74. 99% Occupied Bandwidth, 5170 MHz, Antenna 0, 30 MHz



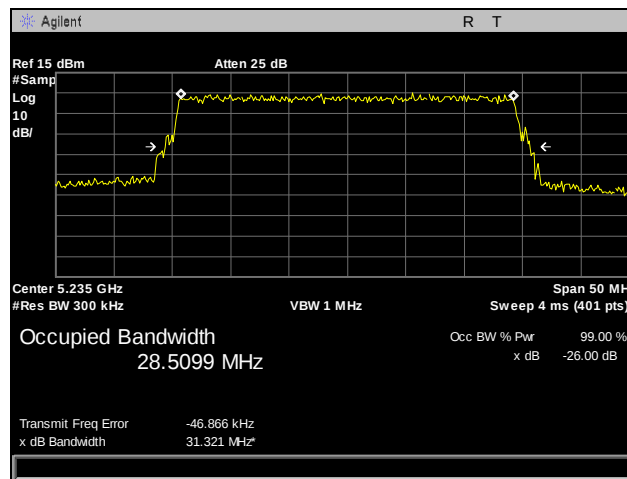
Plot 75. 99% Occupied Bandwidth, 5178 MHz, Antenna 0, 30 MHz



Plot 76. 99% Occupied Bandwidth, 5188 MHz, Antenna 0, 30 MHz

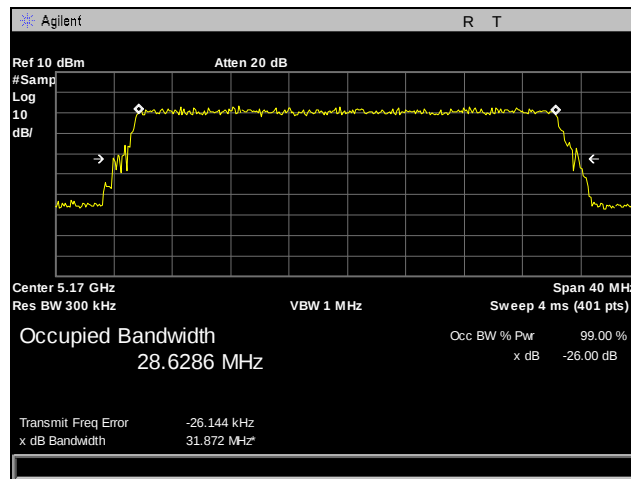


Plot 77. 99% Occupied Bandwidth, 5197 MHz, Antenna 0, 30 MHz

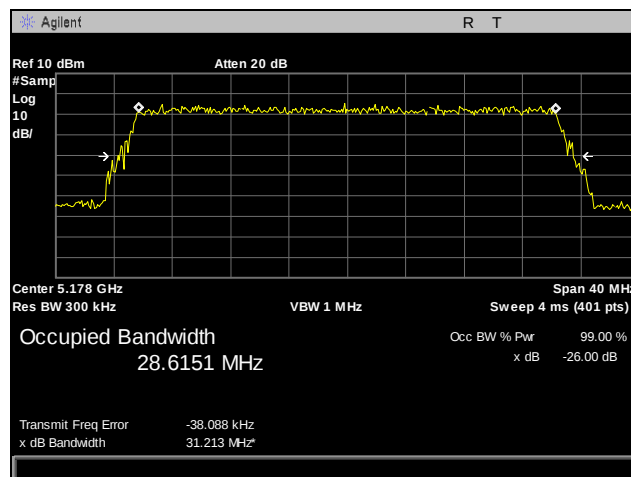


Plot 78. 99% Occupied Bandwidth, 5235 MHz, Antenna 0, 30 MHz

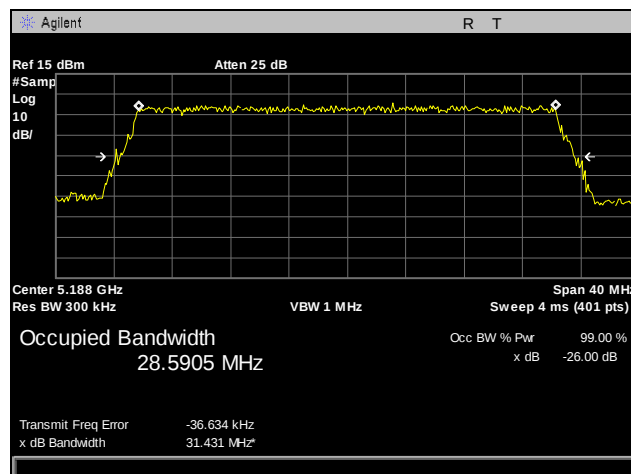
99% Occupied Bandwidth, Antenna 1, 30 MHz, UNII 1



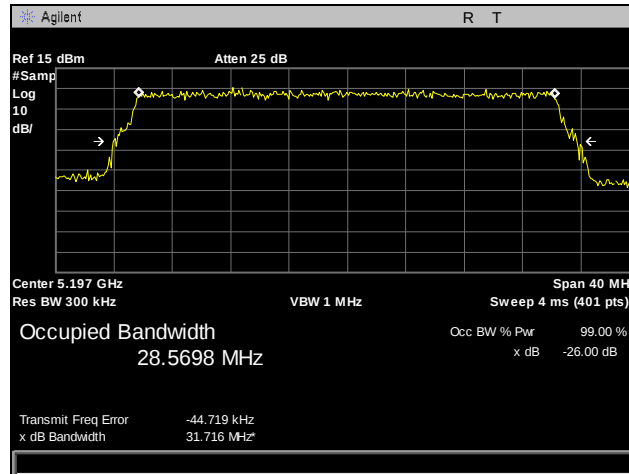
Plot 79. 99% Occupied Bandwidth, 5170 MHz, Antenna 1, 30 MHz



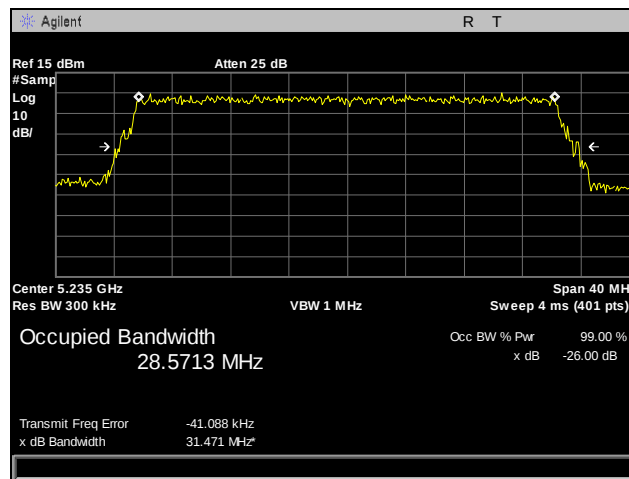
Plot 80. 99% Occupied Bandwidth, 5178 MHz, Antenna 1, 30 MHz



Plot 81. 99% Occupied Bandwidth, 5188 MHz, Antenna 1, 30 MHz

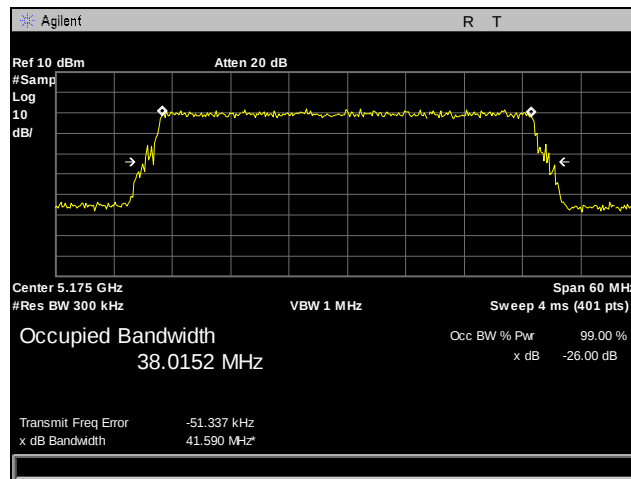


Plot 82. 99% Occupied Bandwidth, 5197 MHz, Antenna 1, 30 MHz

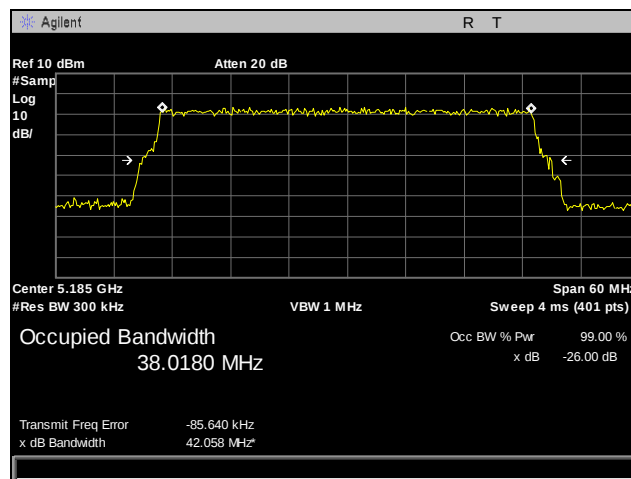


Plot 83. 99% Occupied Bandwidth, 5235 MHz, Antenna 1, 30 MHz

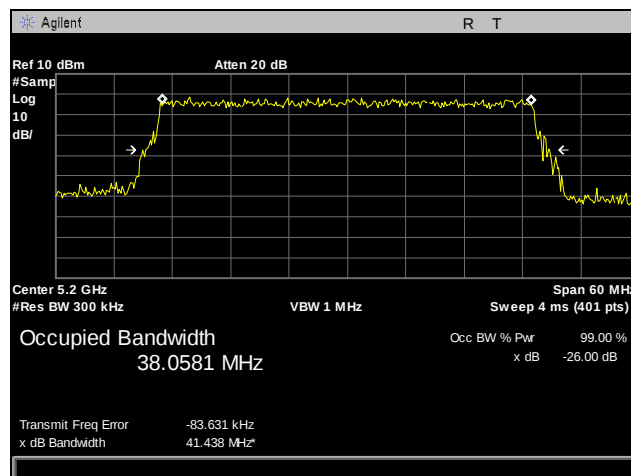
99% Occupied Bandwidth, Antenna 0, 40 MHz, UNII 1



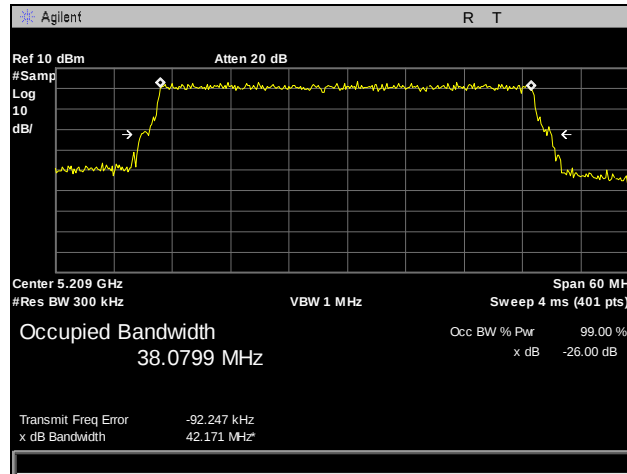
Plot 84. 99% Occupied Bandwidth, 5175 MHz, Antenna 0, 40 MHz



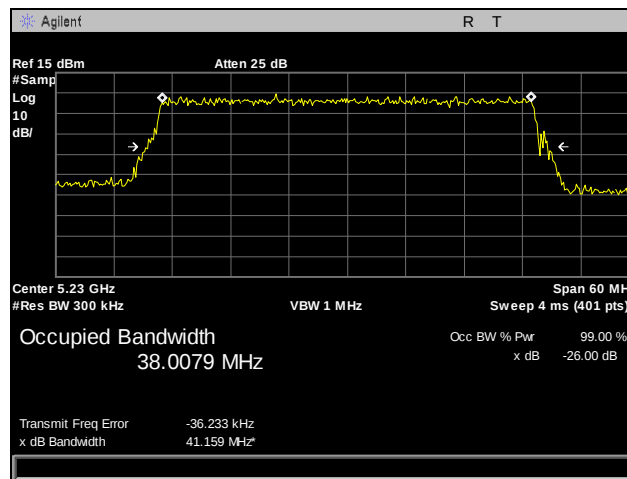
Plot 85. 99% Occupied Bandwidth, 5185 MHz, Antenna 0, 40 MHz



Plot 86. 99% Occupied Bandwidth, 5200 MHz, Antenna 0, 40 MHz

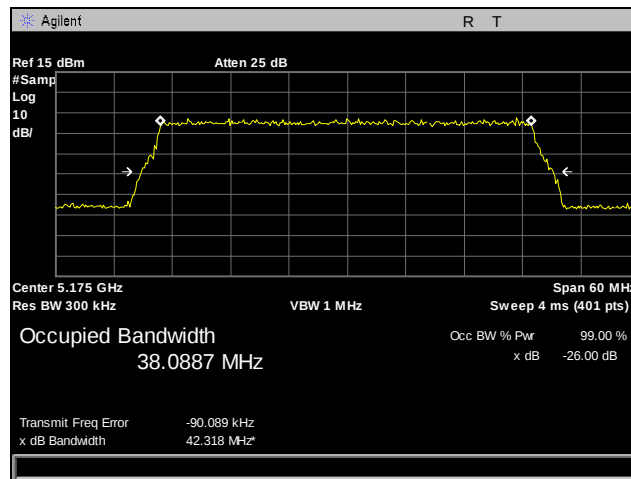


Plot 87. 99% Occupied Bandwidth, 5209 MHz, Antenna 0, 40 MHz

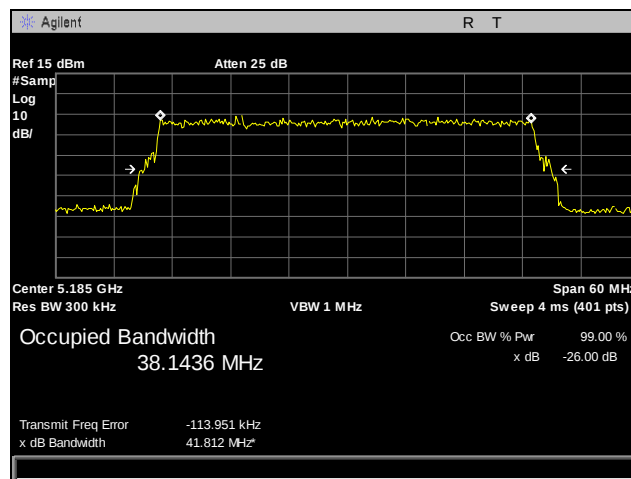


Plot 88. 99% Occupied Bandwidth, 5230 MHz, Antenna 0, 40 MHz

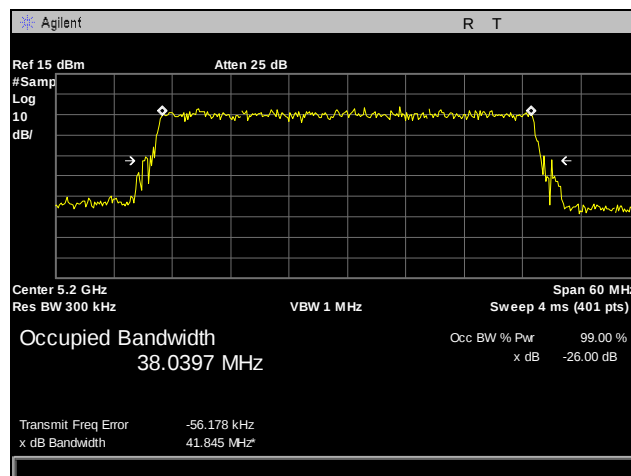
99% Occupied Bandwidth, Antenna 1, 40 MHz, UNII 1



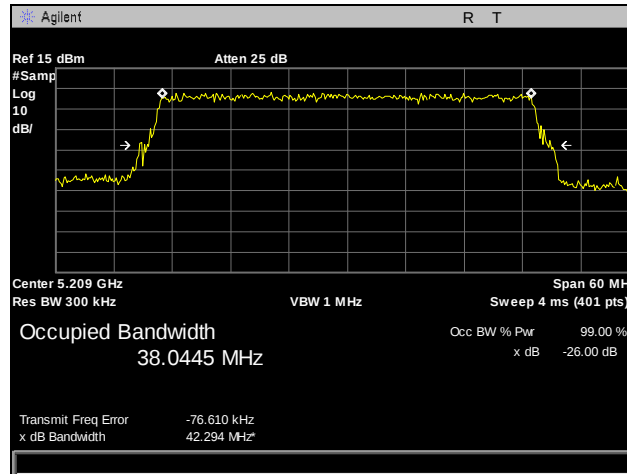
Plot 89. 99% Occupied Bandwidth, 5175 MHz, Antenna 1, 40 MHz



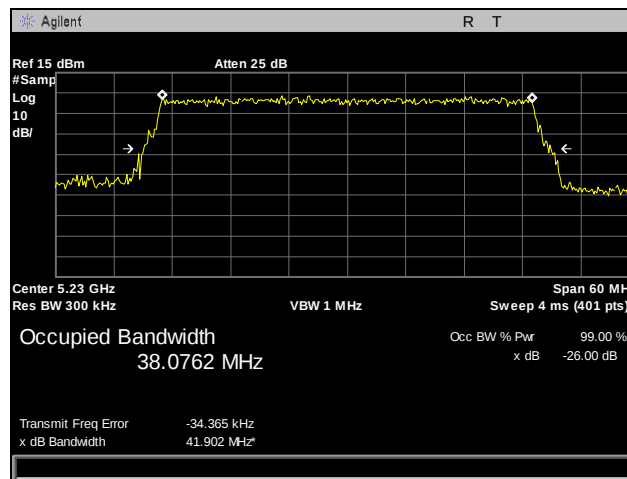
Plot 90. 99% Occupied Bandwidth, 5185 MHz, Antenna 1, 40 MHz



Plot 91. 99% Occupied Bandwidth, 5200 MHz, Antenna 1, 40 MHz

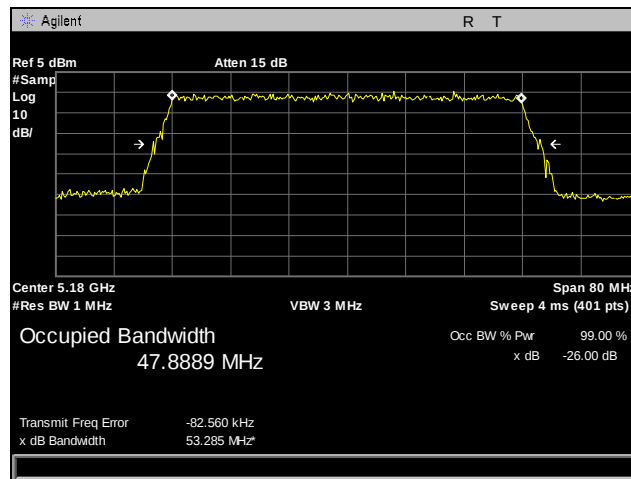


Plot 92. 99% Occupied Bandwidth, 5209 MHz, Antenna 1, 40 MHz

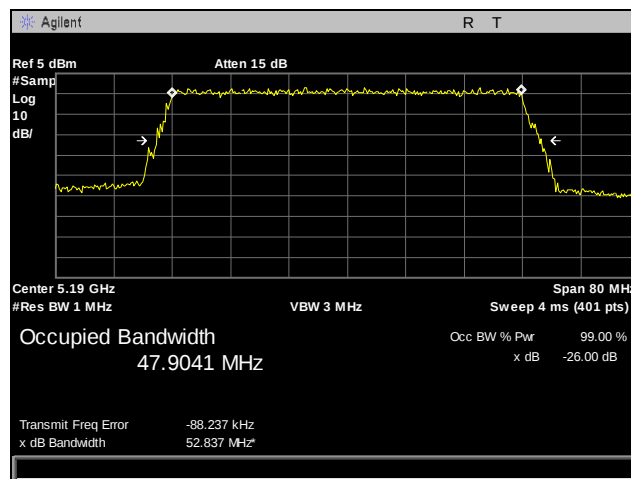


Plot 93. 99% Occupied Bandwidth, 5230 MHz, Antenna 1, 40 MHz

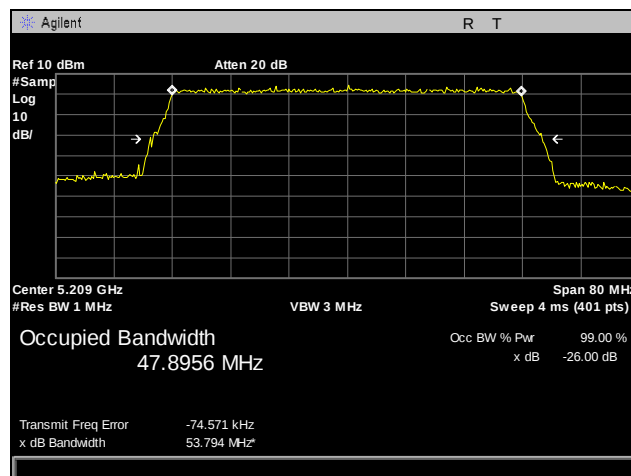
99% Occupied Bandwidth, Antenna 0, 50 MHz, UNII 1



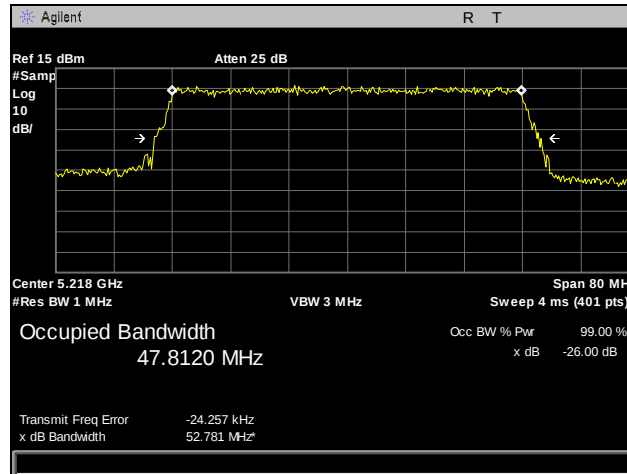
Plot 94. 99% Occupied Bandwidth, 5180 MHz, Antenna 0, 50 MHz



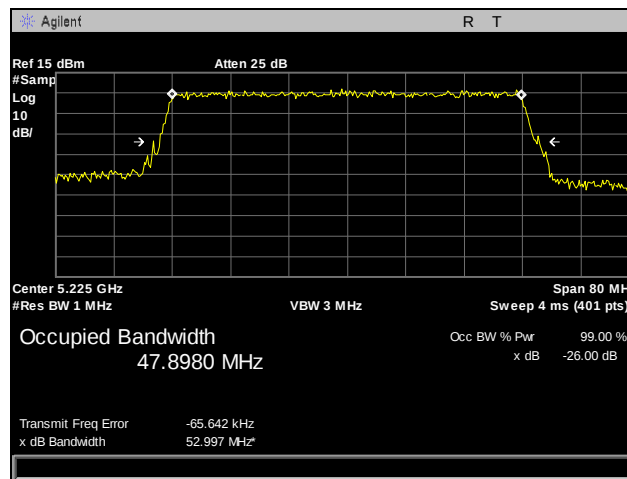
Plot 95. 99% Occupied Bandwidth, 5190 MHz, Antenna 0, 50 MHz



Plot 96. 99% Occupied Bandwidth, 5209 MHz, Antenna 0, 50 MHz

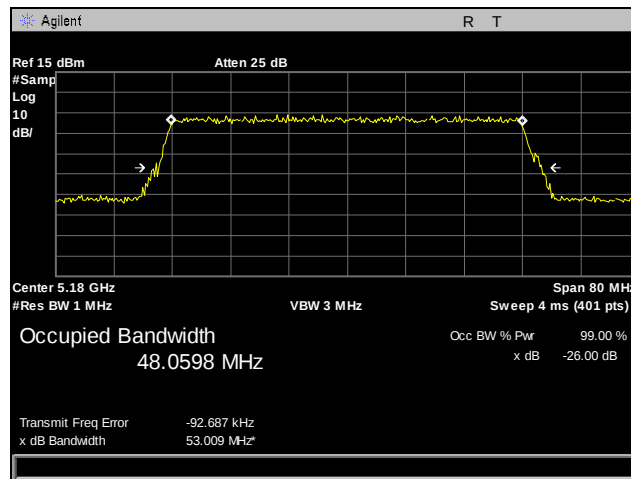


Plot 97. 99% Occupied Bandwidth, 5218 MHz, Antenna 0, 50 MHz

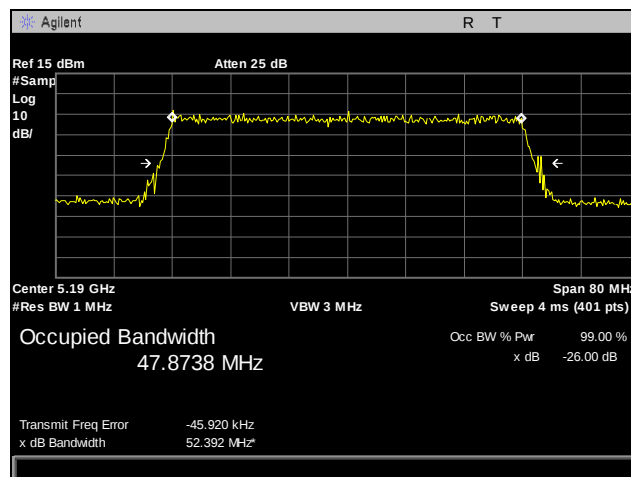


Plot 98. 99% Occupied Bandwidth, 5225 MHz, Antenna 0, 50 MHz

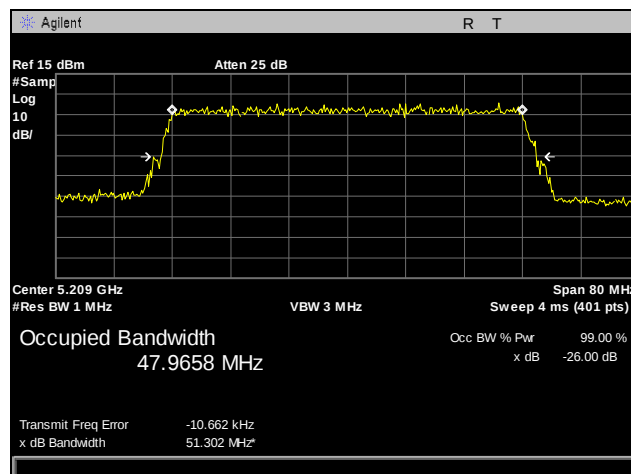
99% Occupied Bandwidth, Antenna 1, 50 MHz, UNII 1



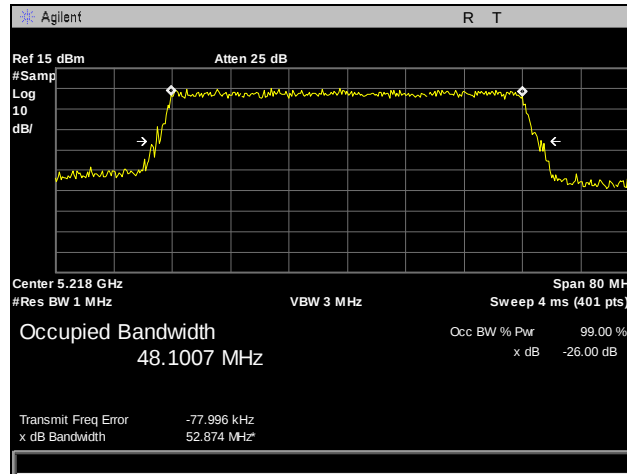
Plot 99. 99% Occupied Bandwidth, 5180 MHz, Antenna 1, 50 MHz



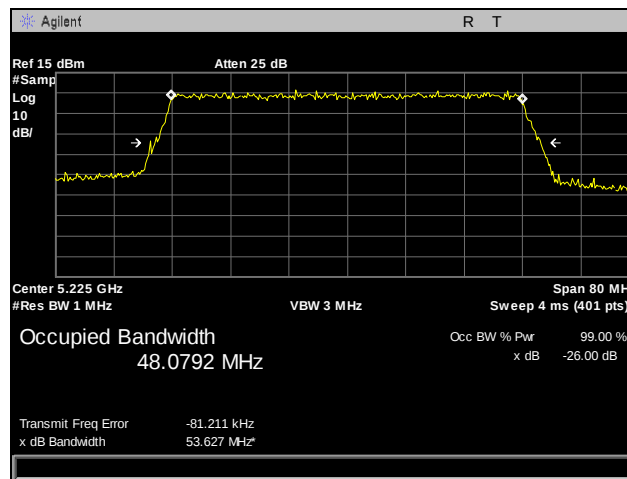
Plot 100. 99% Occupied Bandwidth, 5190 MHz, Antenna 1, 50 MHz



Plot 101. 99% Occupied Bandwidth, 5209 MHz, Antenna 1, 50 MHz

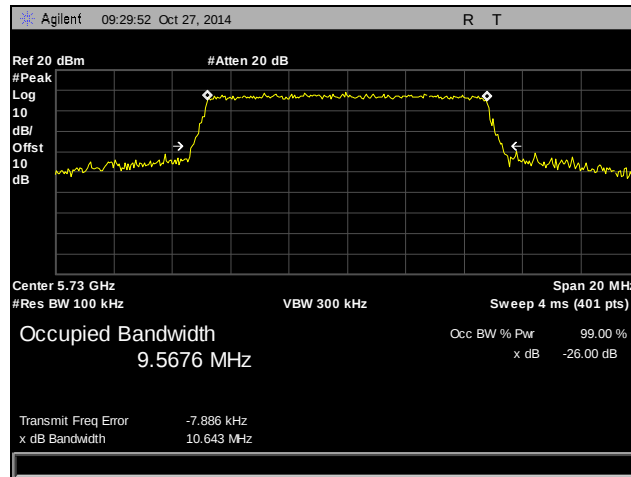


Plot 102. 99% Occupied Bandwidth, 5218 MHz, Antenna 1, 50 MHz

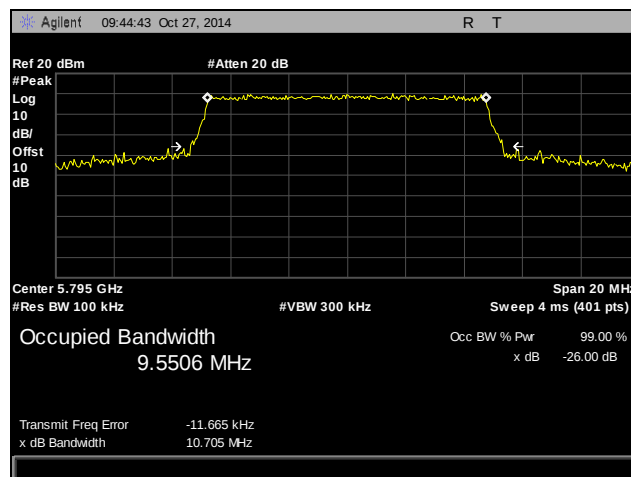


Plot 103. 99% Occupied Bandwidth, 5225 MHz, Antenna 1, 50 MHz

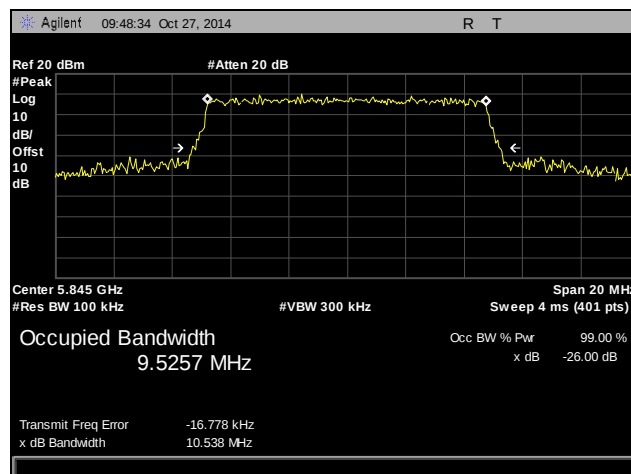
26 dB Occupied Bandwidth, Antenna 0, 10 MHz, UNII 3



Plot 104. 26 dB Occupied Bandwidth, 5730 MHz, Antenna 0, 10 MHz

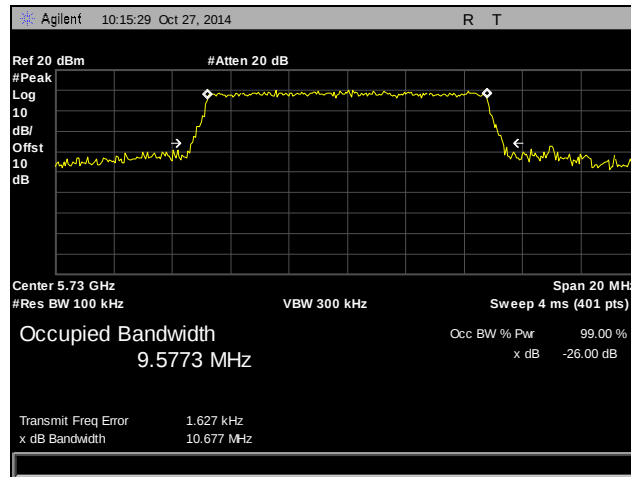


Plot 105. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 0, 10 MHz

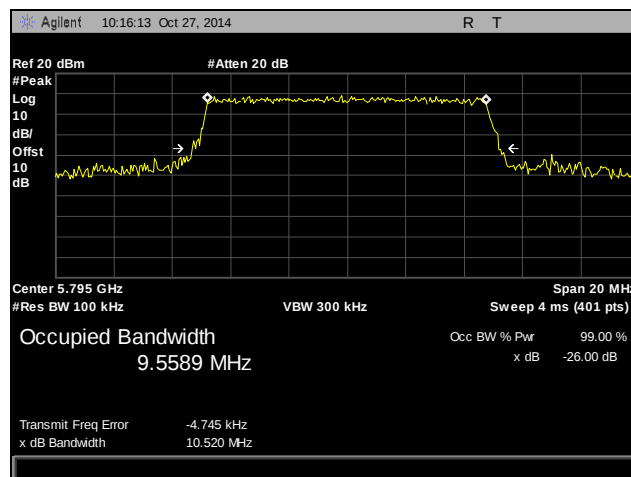


Plot 106. 26 dB Occupied Bandwidth, 5845 MHz, Antenna 0, 10 MHz

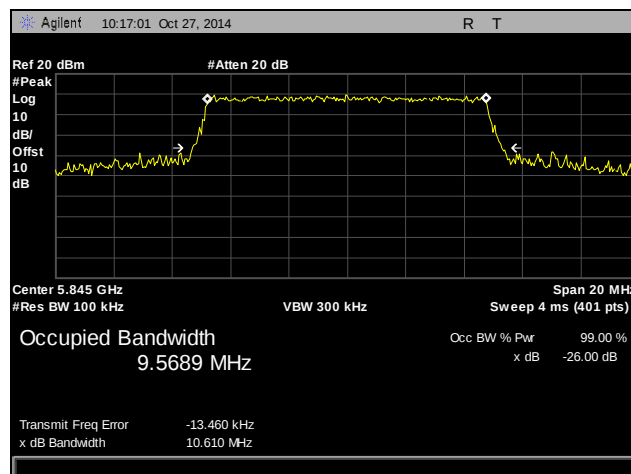
26 dB Occupied Bandwidth, Antenna 1, 10 MHz, UNII 3



Plot 107. 26 dB Occupied Bandwidth, 5730 MHz, Antenna 1, 10 MHz

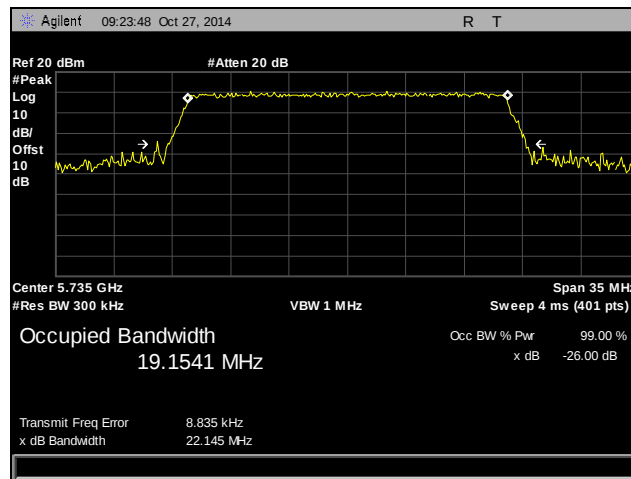


Plot 108. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 1, 10 MHz

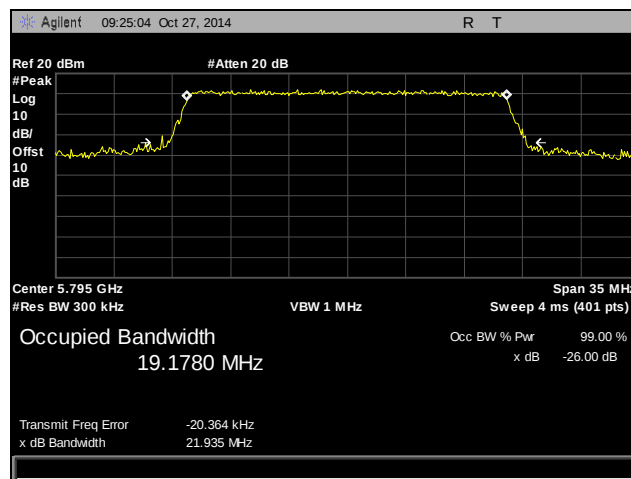


Plot 109. 26 dB Occupied Bandwidth, 5845 MHz, Antenna 1, 10 MHz

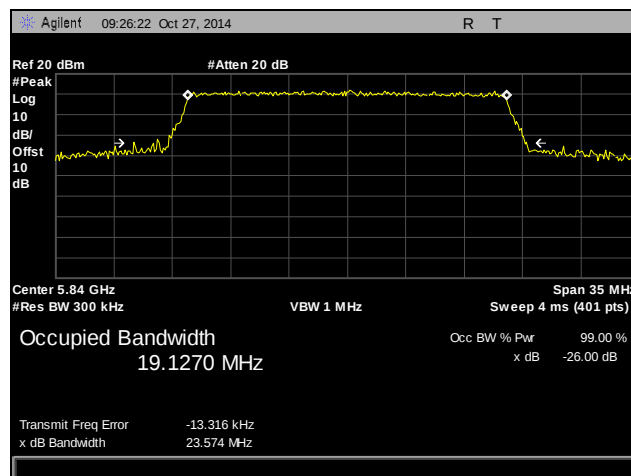
26 dB Occupied Bandwidth, Antenna 0, 20 MHz, UNII 3



Plot 110. 26 dB Occupied Bandwidth, 5735 MHz, Antenna 0, 20 MHz

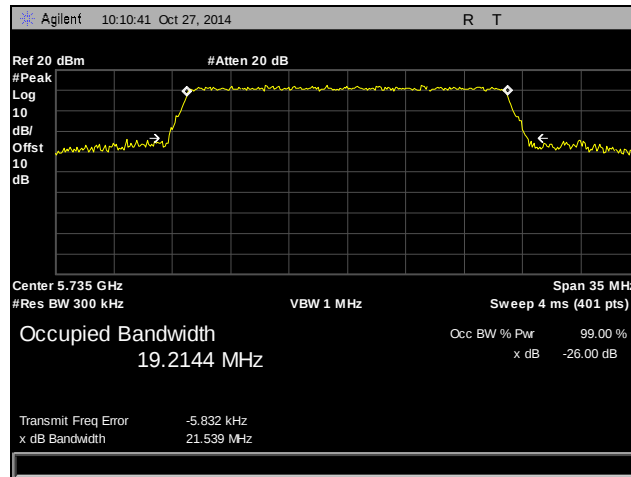


Plot 111. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 0, 20 MHz

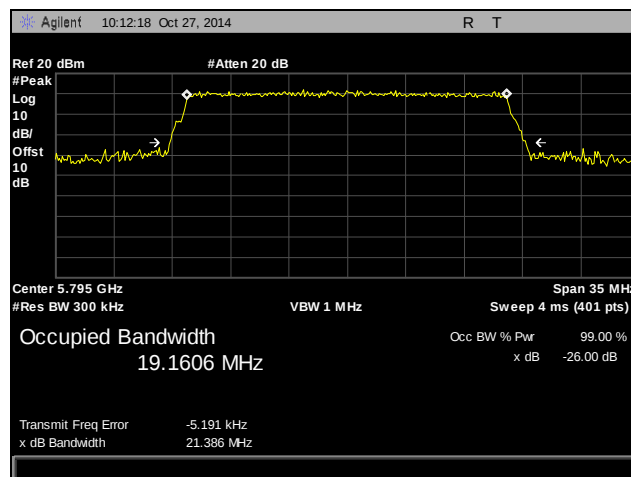


Plot 112. 26 dB Occupied Bandwidth, 5840 MHz, Antenna 0, 20 MHz

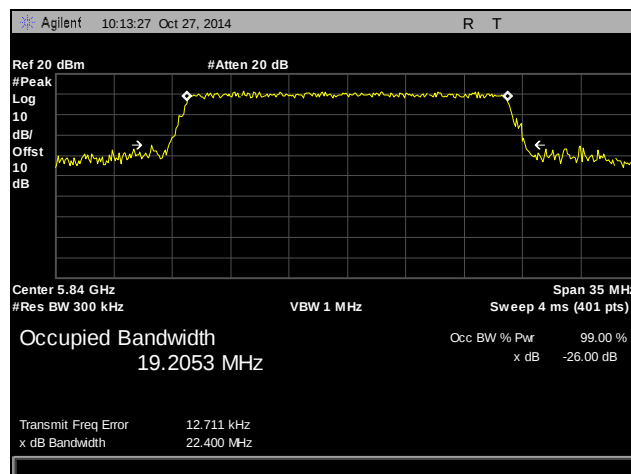
26 dB Occupied Bandwidth, Antenna 1, 20 MHz, UNII 3



Plot 113. 26 dB Occupied Bandwidth, 5735 MHz, Antenna 1, 20 MHz

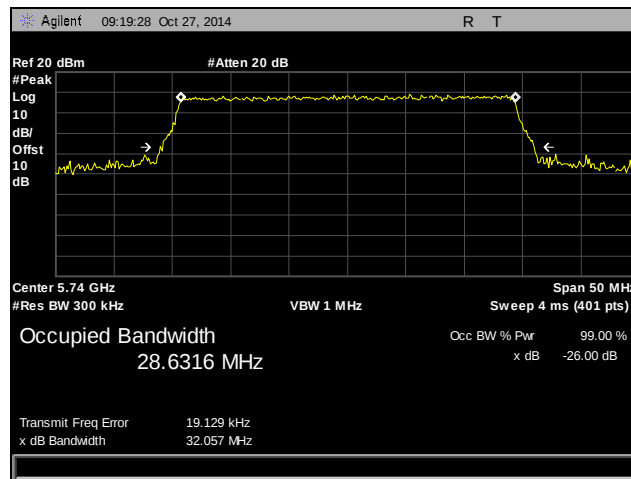


Plot 114. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 1, 20 MHz

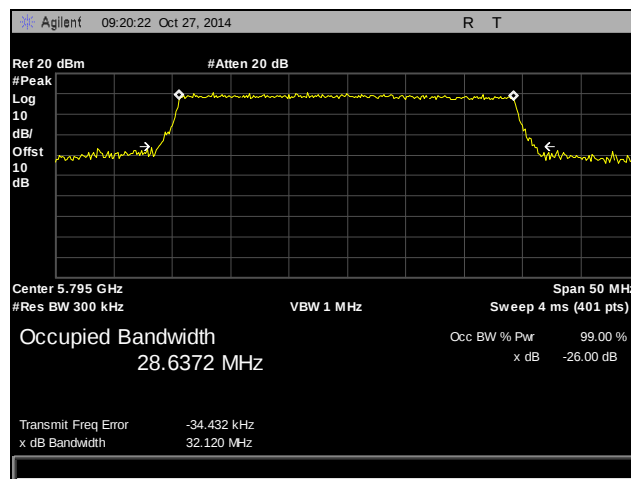


Plot 115. 26 dB Occupied Bandwidth, 5840 MHz, Antenna 1, 20 MHz

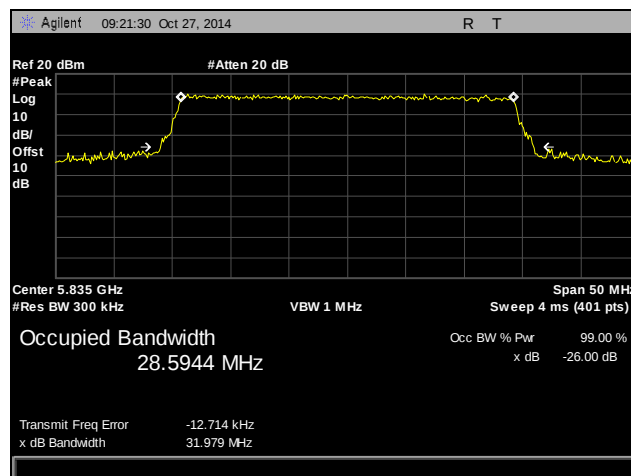
26 dB Occupied Bandwidth, Antenna 0, 30 MHz, UNII 3



Plot 116. 26 dB Occupied Bandwidth, 5740 MHz, Antenna 0, 30 MHz

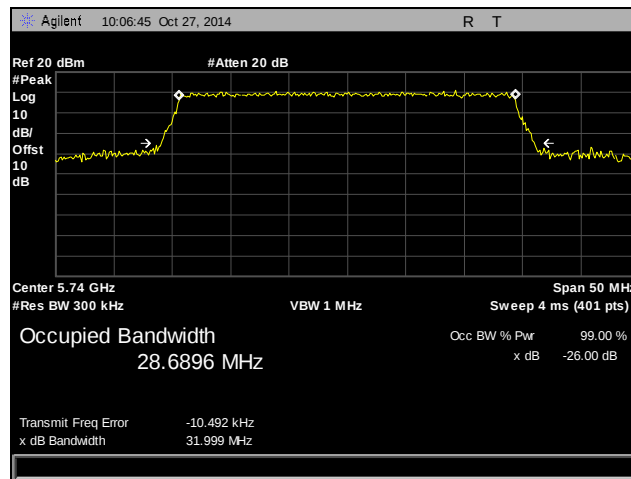


Plot 117. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 0, 30 MHz

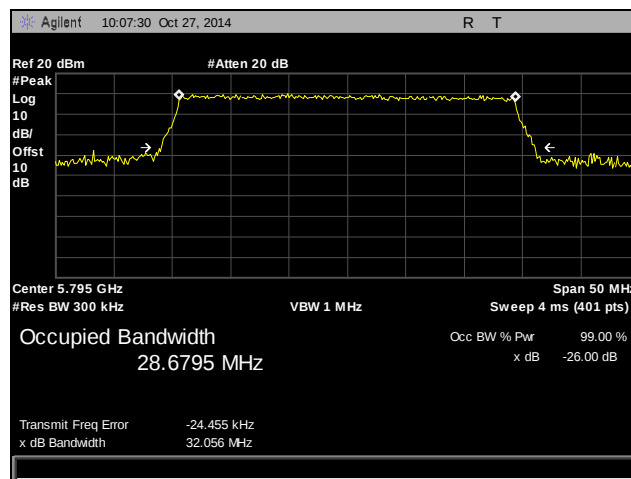


Plot 118. 26 dB Occupied Bandwidth, 5835 MHz, Antenna 0, 30 MHz

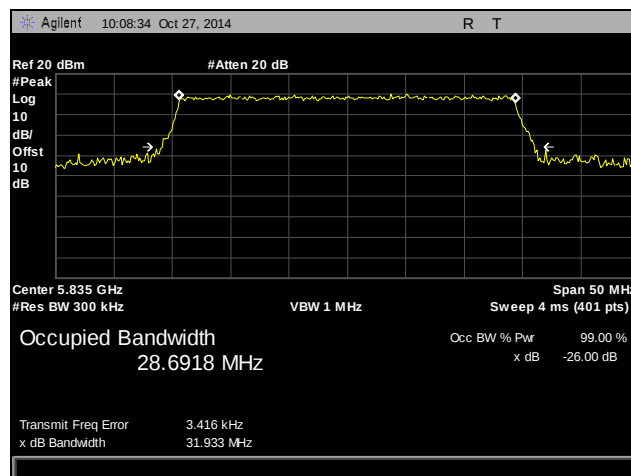
26 dB Occupied Bandwidth, Antenna 1, 30 MHz, UNII 3



Plot 119. 26 dB Occupied Bandwidth, 5740 MHz, Antenna 1, 30 MHz

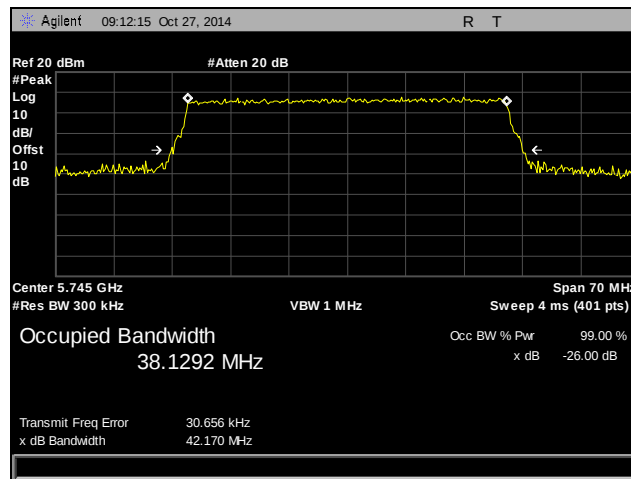


Plot 120. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 1, 30 MHz

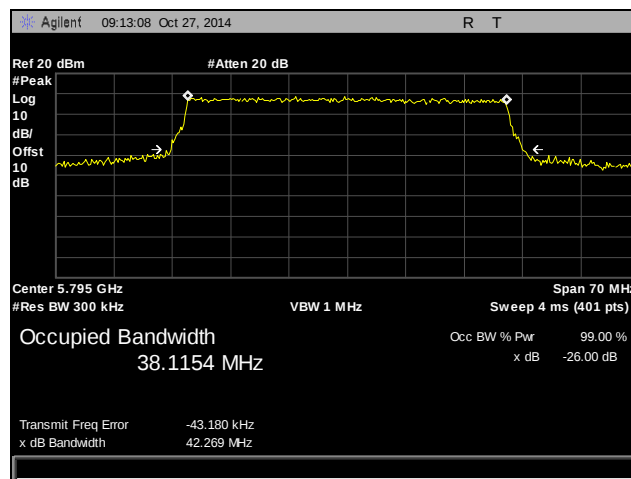


Plot 121. 26 dB Occupied Bandwidth, 5835 MHz, Antenna 1, 30 MHz

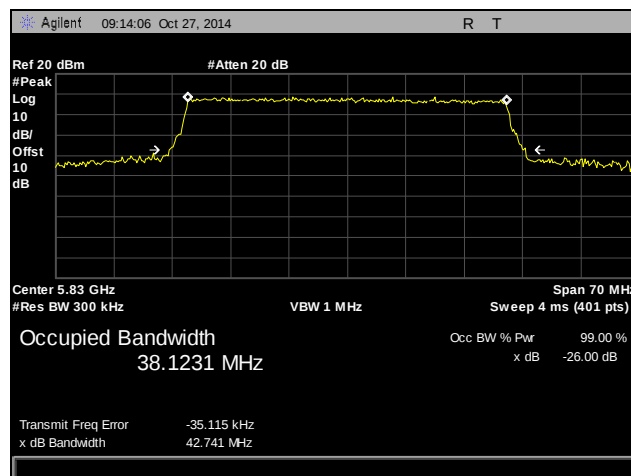
26 dB Occupied Bandwidth, Antenna 0, 40 MHz, UNII 3



Plot 122. 26 dB Occupied Bandwidth, 5745 MHz, Antenna 0, 40 MHz

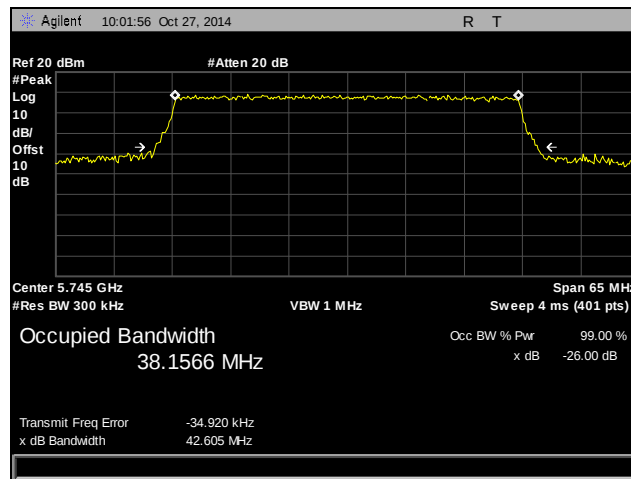


Plot 123. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 0, 40 MHz

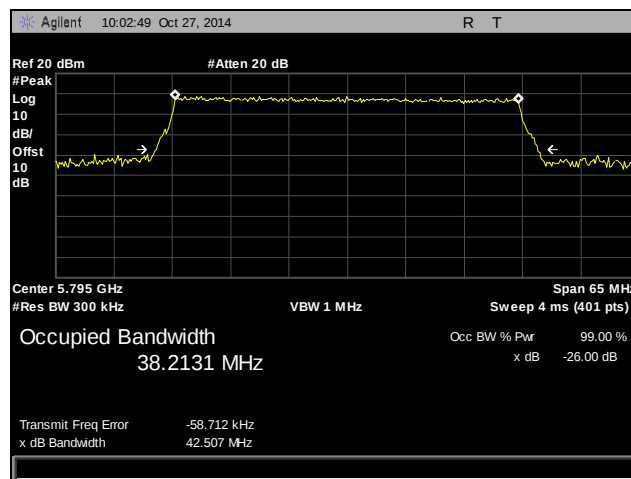


Plot 124. 26 dB Occupied Bandwidth, 5830 MHz, Antenna 0, 40 MHz

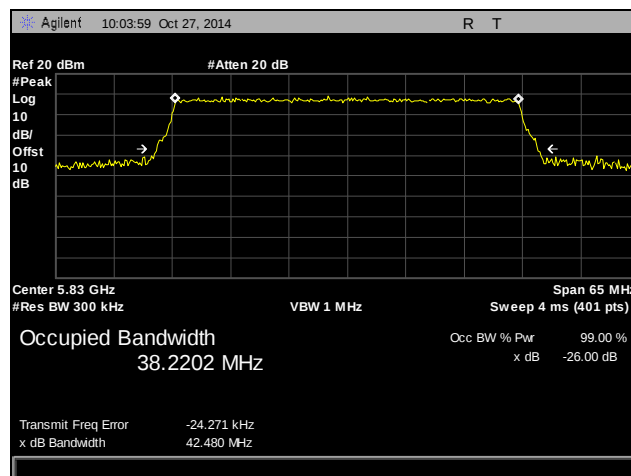
26 dB Occupied Bandwidth, Antenna 1, 40 MHz, UNII 3



Plot 125. 26 dB Occupied Bandwidth, 5745 MHz, Antenna 1, 40 MHz

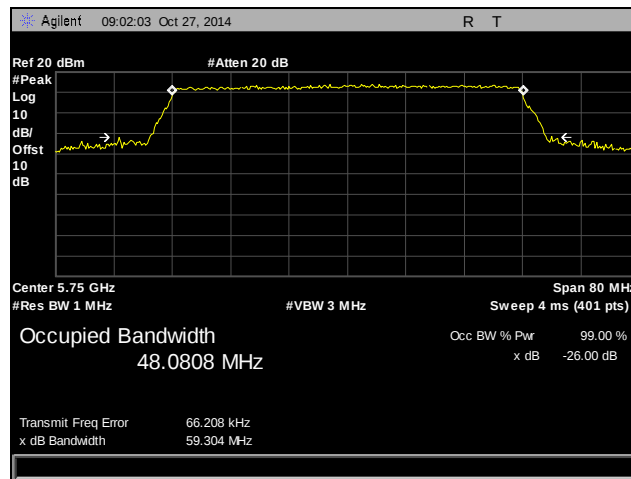


Plot 126. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 1, 40 MHz

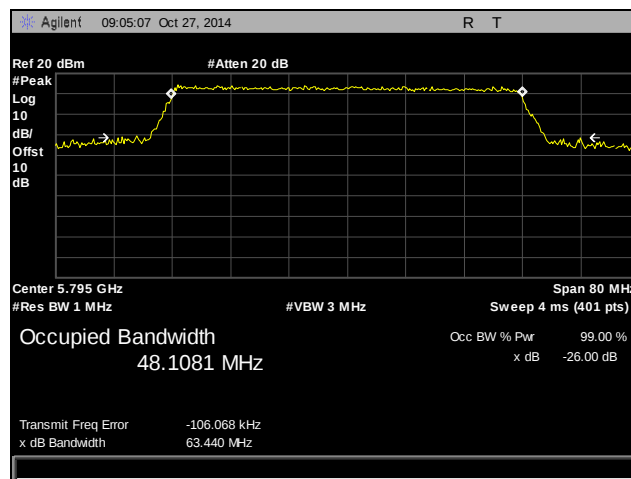


Plot 127. 26 dB Occupied Bandwidth, 5830 MHz, Antenna 1, 40 MHz

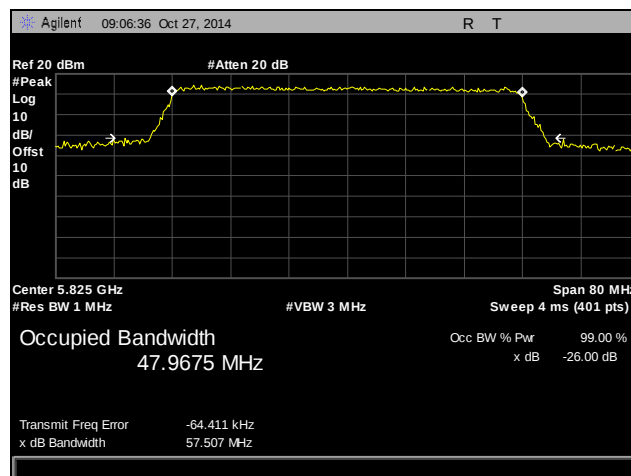
26 dB Occupied Bandwidth, Antenna 0, 50 MHz, UNII 3



Plot 128. 26 dB Occupied Bandwidth, 5750 MHz, Antenna 0, 50 MHz

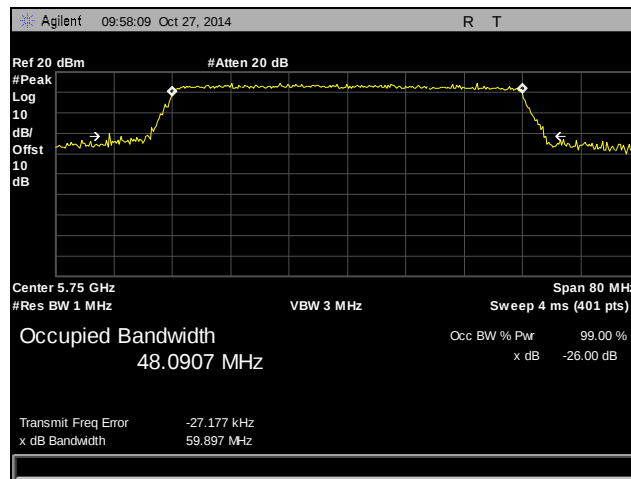


Plot 129. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 0, 50 MHz

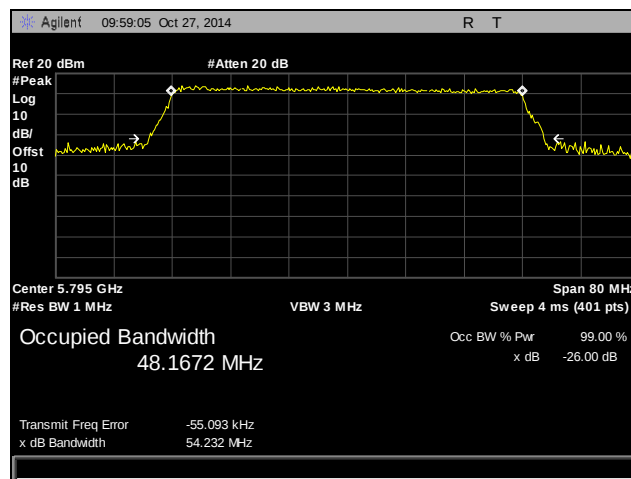


Plot 130. 26 dB Occupied Bandwidth, 5825 MHz, Antenna 0, 50 MHz

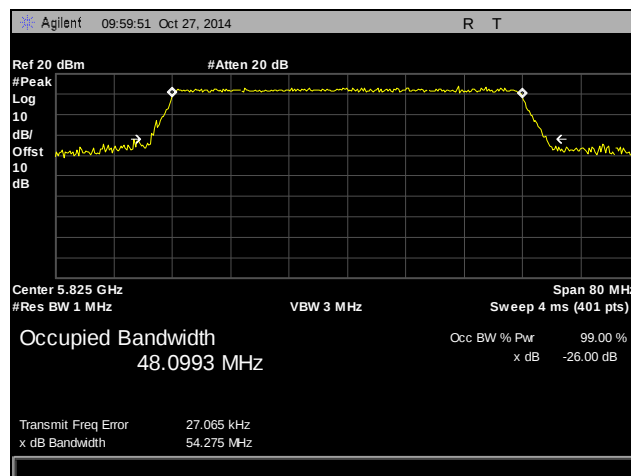
26 dB Occupied Bandwidth, Antenna 1, 50 MHz, UNII 3



Plot 131. 26 dB Occupied Bandwidth, 5750 MHz, Antenna 1, 50 MHz

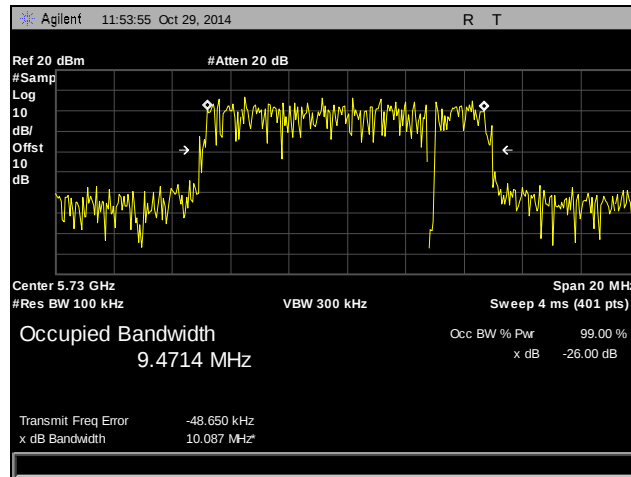


Plot 132. 26 dB Occupied Bandwidth, 5795 MHz, Antenna 1, 50 MHz

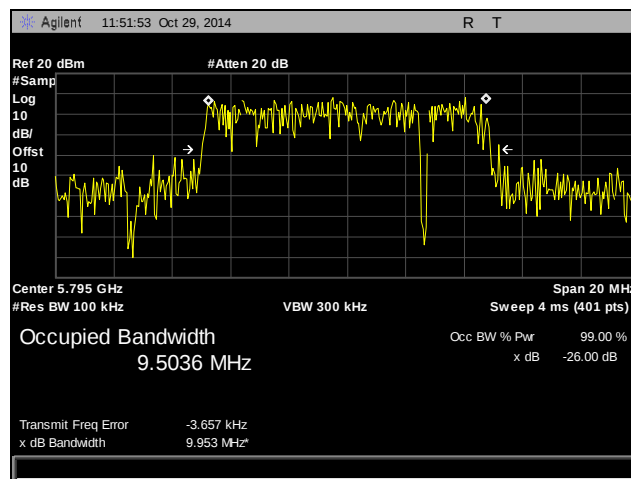


Plot 133. 26 dB Occupied Bandwidth, 5825 MHz, Antenna 1, 50 MHz

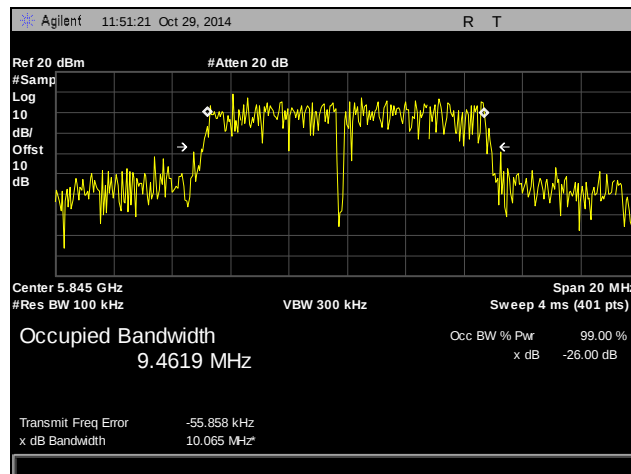
99% Occupied Bandwidth, Antenna 0, 10 MHz, UNII 3



Plot 134. 99% Occupied Bandwidth, 5730 MHz, Antenna 0, 10 MHz

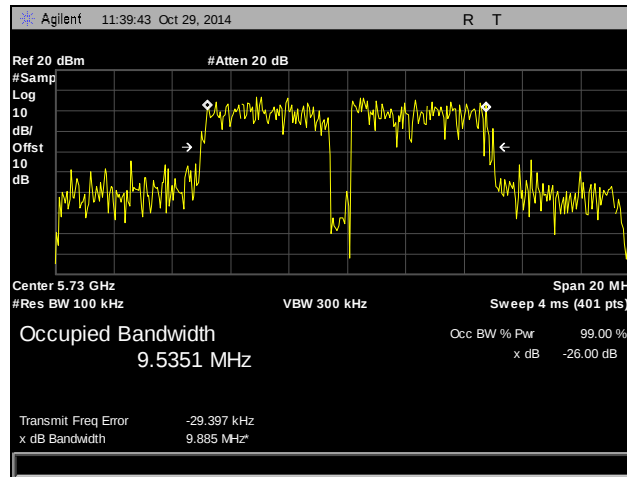


Plot 135. 99% Occupied Bandwidth, 5795 MHz, Antenna 0, 10 MHz

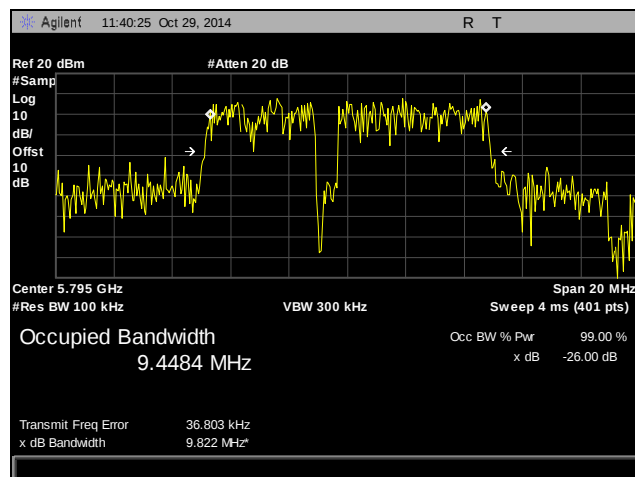


Plot 136. 99% Occupied Bandwidth, 5845 MHz, Antenna 0, 10 MHz

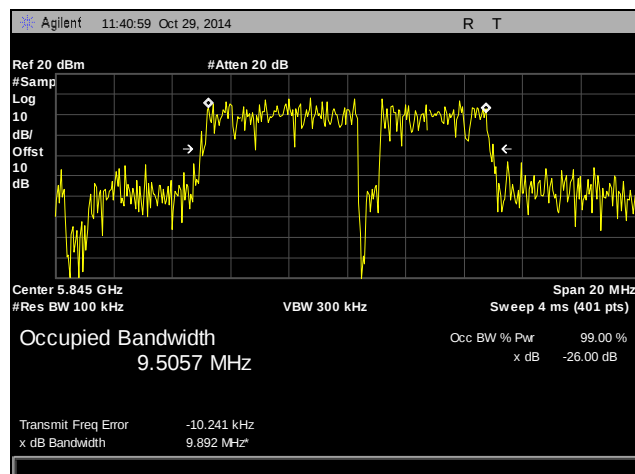
99% Occupied Bandwidth, Antenna 1, 10 MHz, UNII 3



Plot 137. 99% Occupied Bandwidth, 5730 MHz, Antenna 1, 10 MHz

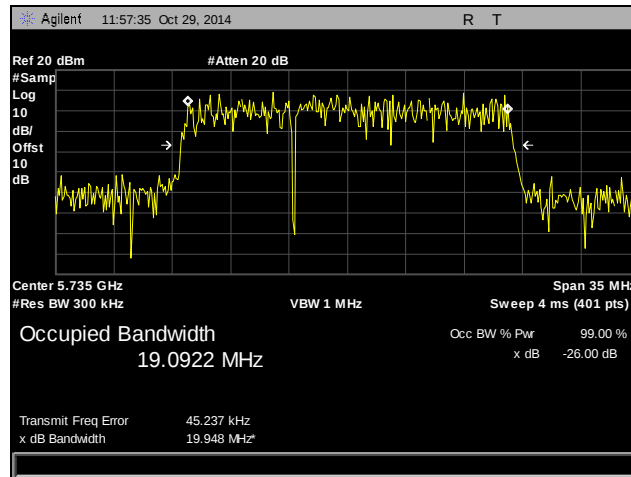


Plot 138. 99% Occupied Bandwidth, 5795 MHz, Antenna 1, 10 MHz

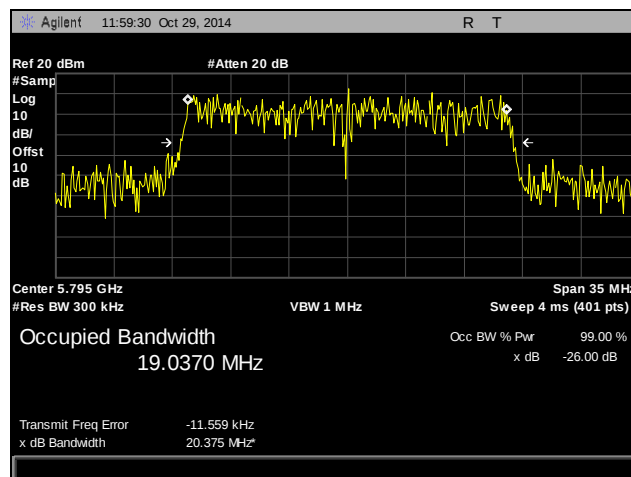


Plot 139. 99% Occupied Bandwidth, 5845 MHz, Antenna 1, 10 MHz

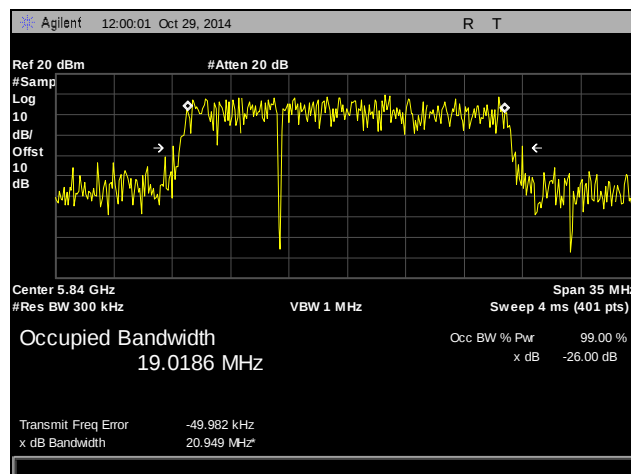
99% Occupied Bandwidth, Antenna 0, 20 MHz, UNII 3



Plot 140. 99% Occupied Bandwidth, 5735 MHz, Antenna 0, 20 MHz

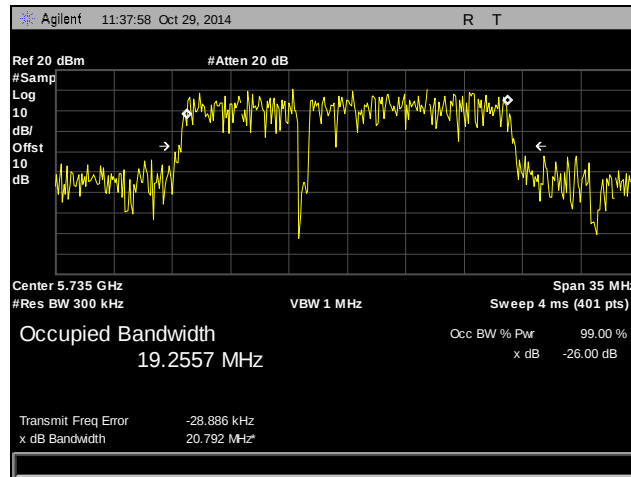


Plot 141. 99% Occupied Bandwidth, 5795 MHz, Antenna 0, 20 MHz

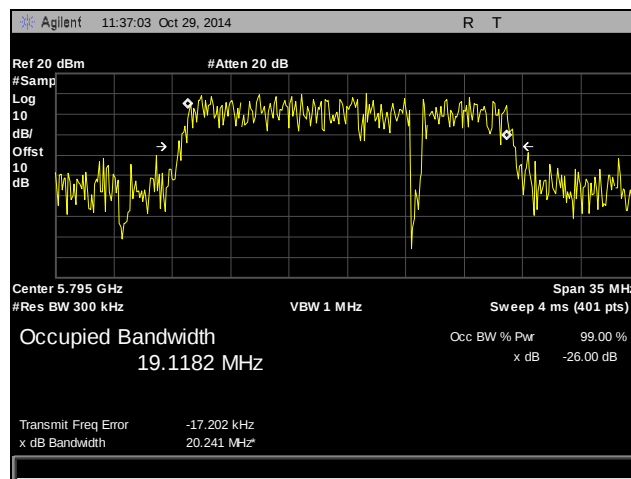


Plot 142. 99% Occupied Bandwidth, 5840 MHz, Antenna 0, 20 MHz

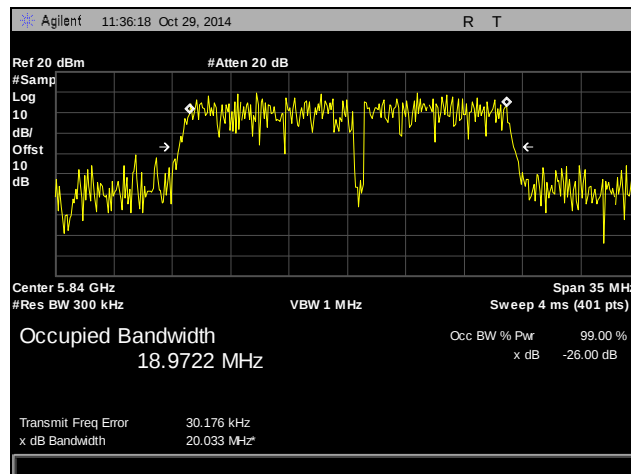
99% Occupied Bandwidth, Antenna 1, 20 MHz, UNII 3



Plot 143. 99% Occupied Bandwidth, 5735 MHz, Antenna 1, 20 MHz

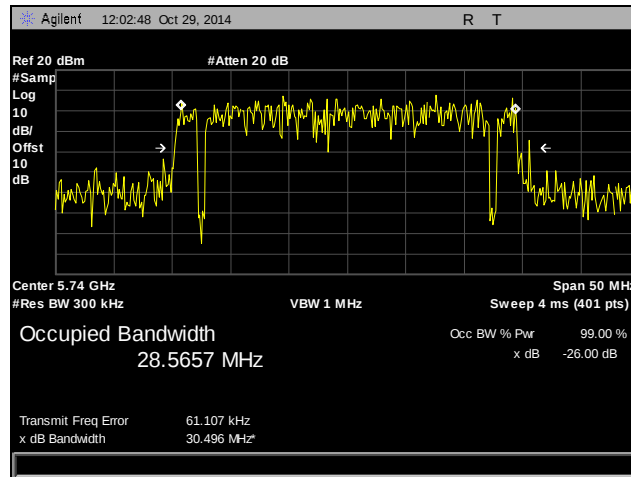


Plot 144. 99% Occupied Bandwidth, 5795 MHz, Antenna 1, 20 MHz

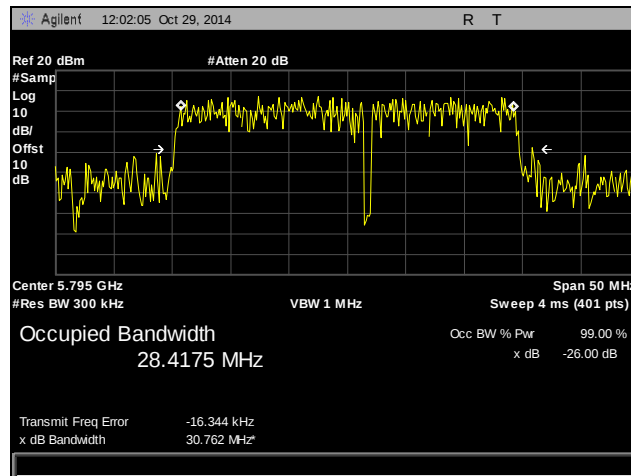


Plot 145. 99% Occupied Bandwidth, 5840 MHz, Antenna 1, 20 MHz

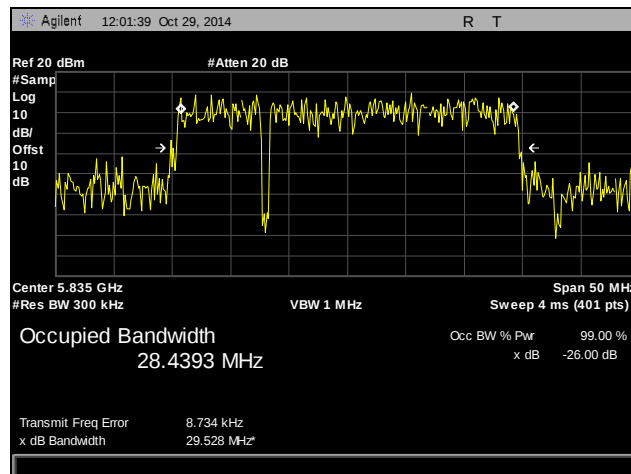
99% Occupied Bandwidth, Antenna 0, 30 MHz, UNII 3



Plot 146. 99% Occupied Bandwidth, 5740 MHz, Antenna 0, 30 MHz

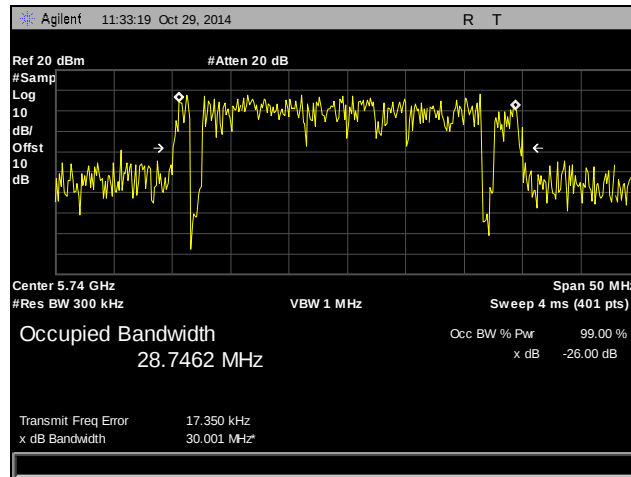


Plot 147. 99% Occupied Bandwidth, 5795 MHz, Antenna 0, 30 MHz

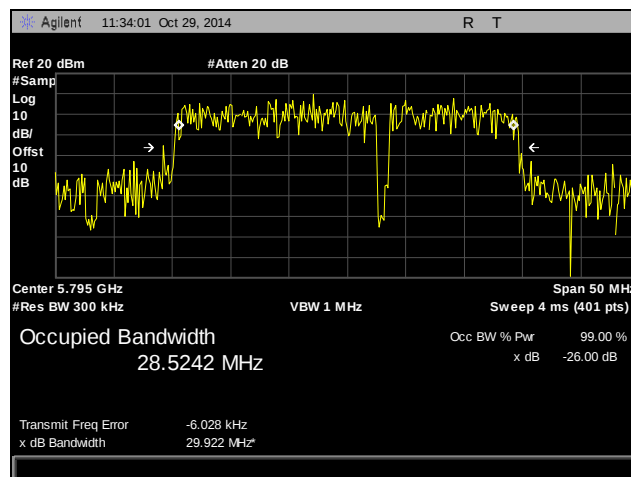


Plot 148. 99% Occupied Bandwidth, 5835 MHz, Antenna 0, 30 MHz

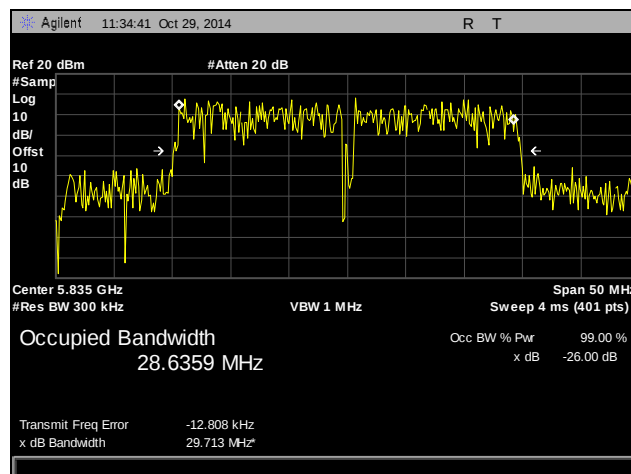
99% Occupied Bandwidth, Antenna 1, 30 MHz, UNII 3



Plot 149. 99% Occupied Bandwidth, 5740 MHz, Antenna 1, 30 MHz

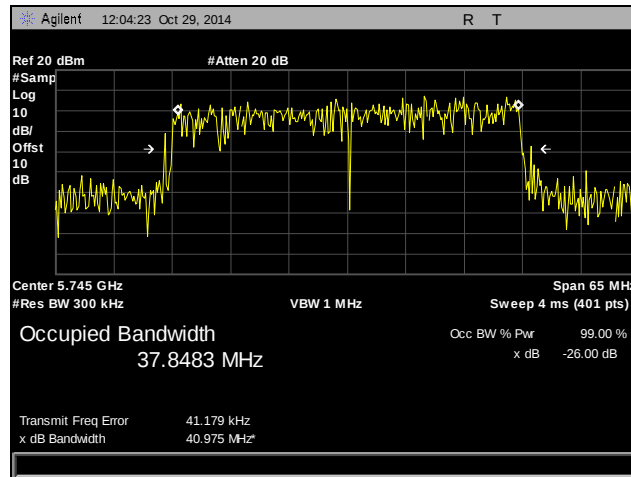


Plot 150. 99% Occupied Bandwidth, 5795 MHz, Antenna 1, 30 MHz

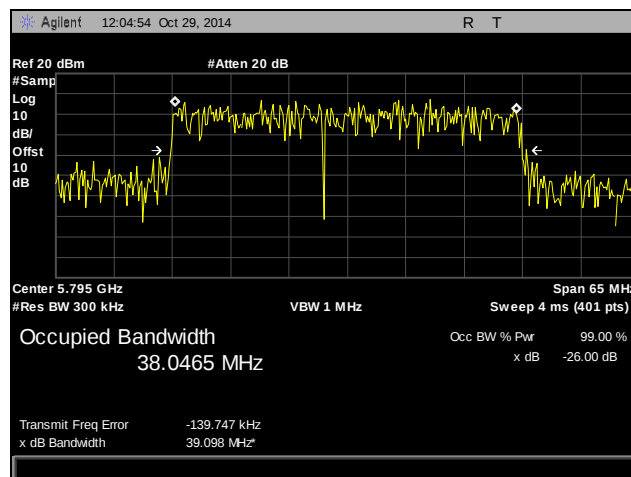


Plot 151. 99% Occupied Bandwidth, 5835 MHz, Antenna 1, 30 MHz

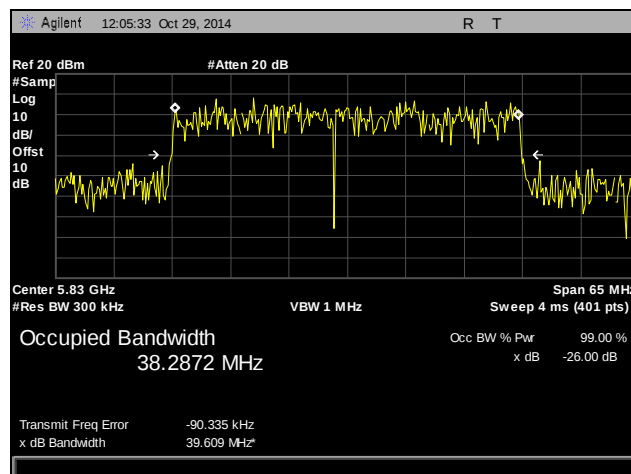
99% Occupied Bandwidth, Antenna 0, 40 MHz, UNII 3



Plot 152. 99% Occupied Bandwidth, 5745 MHz, Antenna 0, 40 MHz

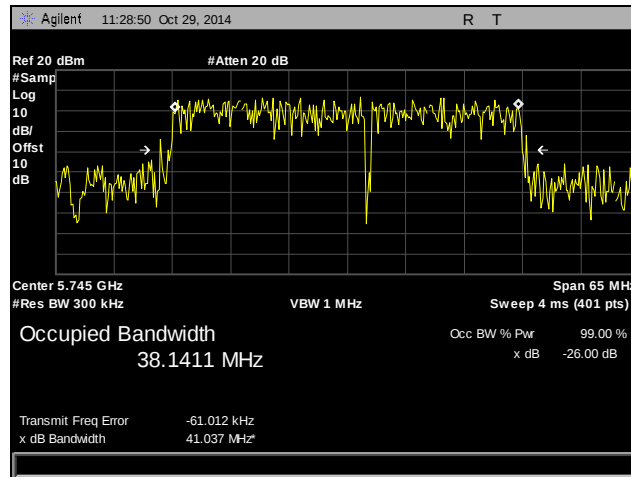


Plot 153. 99% Occupied Bandwidth, 5795 MHz, Antenna 0, 40 MHz

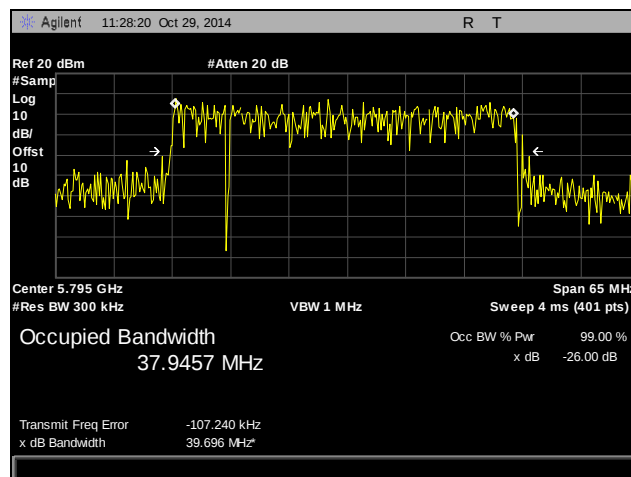


Plot 154. 99% Occupied Bandwidth, 5830 MHz, Antenna 0, 40 MHz

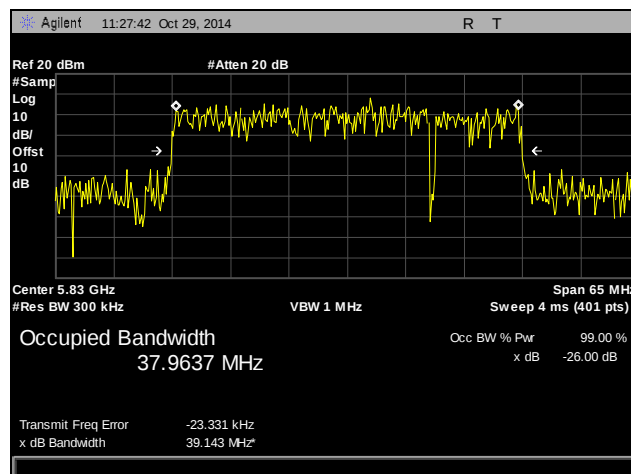
99% Occupied Bandwidth, Antenna 1, 40 MHz, UNII 3



Plot 155. 99% Occupied Bandwidth, 5745 MHz, Antenna 1, 40 MHz

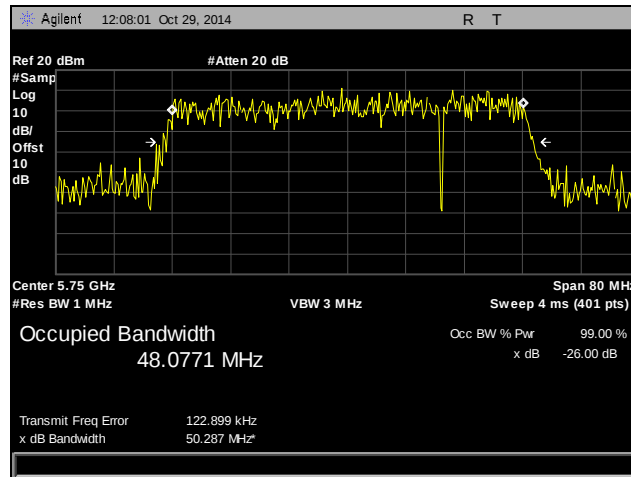


Plot 156. 99% Occupied Bandwidth, 5795 MHz, Antenna 1, 40 MHz

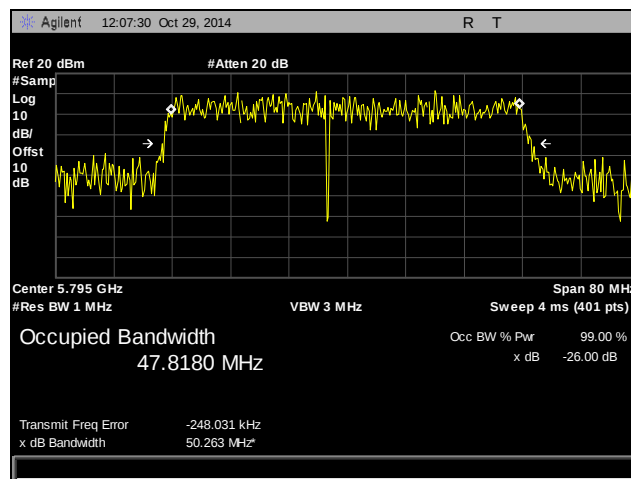


Plot 157. 99% Occupied Bandwidth, 5830 MHz, Antenna 1, 40 MHz

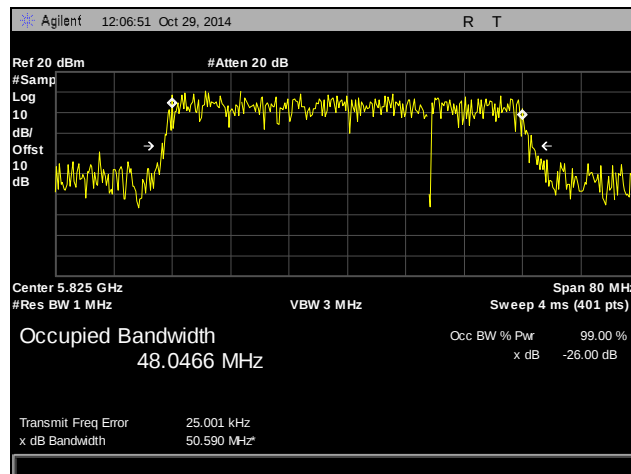
99% Occupied Bandwidth, Antenna 0, 50 MHz, UNII 3



Plot 158. 99% Occupied Bandwidth, 5750 MHz, Antenna 0, 50 MHz

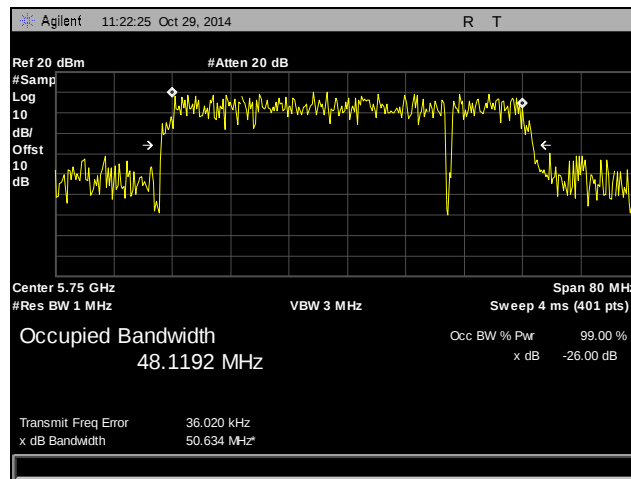


Plot 159. 99% Occupied Bandwidth, 5795 MHz, Antenna 0, 50 MHz

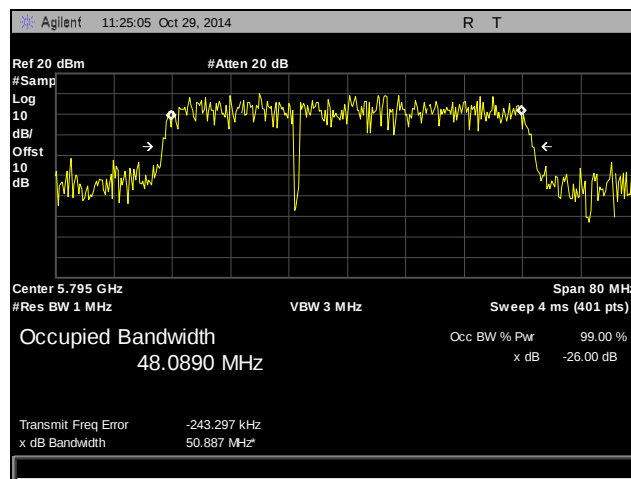


Plot 160. 99% Occupied Bandwidth, 5825 MHz, Antenna 0, 50 MHz

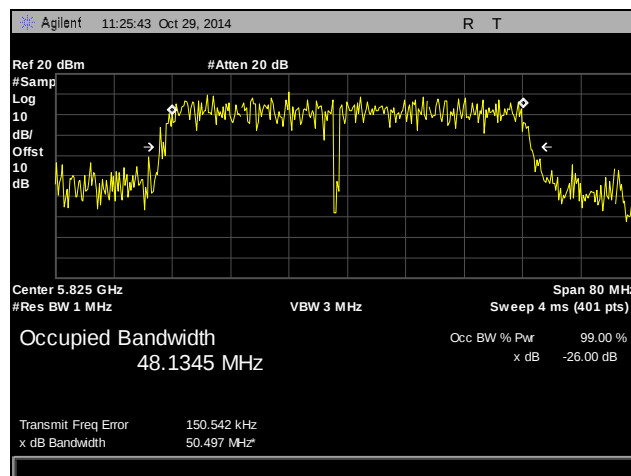
99% Occupied Bandwidth, Antenna 1, 50 MHz, UNII 3



Plot 161. 99% Occupied Bandwidth, 5750 MHz, Antenna 1, 50 MHz



Plot 162. 99% Occupied Bandwidth, 5795 MHz, Antenna 1, 50 MHz



Plot 163. 99% Occupied Bandwidth, 5825 MHz, Antenna 1, 50 MHz

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.407(a)(1)(i) & §15.407(a)(3) RF Power Output

Test Requirements:	§15.407(a)(1)(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. §15.407(a)(1)(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. 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. §15.407(a)(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. 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
Test Procedure:	The EUT was connected to a spectrum analyzer through an attenuator and set to transmit continuously on the low, mid, and high channels. Its power was measured according to measurement method SA-1, as described in 789033 D02 General UNII Test Procedures v01. Plots were corrected for attenuator and cable loss. Tables provide power levels for both a 29 dBi and 34 dBi antenna as mentioned in 15.203.
Test Results:	Equipment was compliant with the Peak Power Output limits of § 15.407(a)(1)(i) and §15.407(a)(3).
Test Engineer(s):	Jason Allnutt
Test Date(s):	11/17/14 and 11/27/14



Figure 2. Power Output Test Setup

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5160	4.360	4.710	2.73	2.96	5.69	7.55	Compliant
5171	9.090	9.510	8.11	8.93	17.04	12.32	Compliant
5182	14.090	14.420	25.64	27.67	53.31	17.27	Compliant
5245	14.170	14.480	26.12	28.05	54.18	17.34	Compliant

Table 15. RF Output Power, Test Results, 10 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5166	2.330	2.810	1.71	1.91	3.62	5.59	Compliant
5171	4.480	4.620	2.81	2.90	5.70	7.56	Compliant
5176	9.130	9.650	8.18	9.23	17.41	12.41	Compliant
5200	14.000	14.350	25.12	27.23	52.35	17.19	Compliant
5240	14.520	14.600	28.31	28.84	57.15	17.57	Compliant

Table 16. RF Output Power, Test Results, 20 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5170	2.560	2.920	1.80	1.96	3.76	5.75	Compliant
5178	4.520	4.960	2.83	3.13	5.96	7.76	Compliant
5188	9.470	9.840	8.85	9.64	18.49	12.67	Compliant
5197	14.160	14.600	26.06	28.84	54.90	17.40	Compliant
5235	14.170	14.370	26.12	27.35	53.47	17.28	Compliant

Table 17. RF Output Power, Test Results, 30 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5175	2.570	2.860	1.81	1.93	3.74	5.73	Compliant
5185	4.500	4.920	2.82	3.10	5.92	7.73	Compliant
5200	9.410	9.690	8.73	9.31	18.04	12.56	Compliant
5209	14.170	14.310	26.12	26.98	53.10	17.25	Compliant
5230	14.390	14.630	27.48	29.04	56.52	17.52	Compliant

Table 18. RF Output Power, Test Results, 40 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5180	2.490	2.890	1.77	1.95	3.72	5.70	Compliant
5190	4.460	4.690	2.79	2.94	5.74	7.59	Compliant
5209	9.460	9.600	8.83	9.12	17.95	12.54	Compliant
5218	14.420	14.300	27.67	26.92	54.58	17.37	Compliant
5225	14.530	14.630	28.38	29.04	57.42	17.59	Compliant

Table 19. RF Output Power, Test Results, 50 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5730	19.04	19.11	80.17	81.47	161.64	22.09	Compliant
5795	19.38	20.59	86.70	114.55	201.25	23.04	Compliant
5845	19.63	20.07	91.83	101.62	193.46	22.87	Compliant

Table 20. RF Output Power, Test Results, 10 MHz, UNII 3, 29 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5735	19.64	19.53	92.04	89.74	181.79	22.60	Compliant
5795	19.73	19.91	93.97	97.95	191.92	22.83	Compliant
5840	20.13	20.10	103.04	102.33	205.37	23.13	Compliant

Table 21. RF Output Power, Test Results, 20 MHz, UNII 3, 29 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5740	19.47	20.03	88.51	100.69	189.20	22.77	Compliant
5795	20.05	19.92	101.16	98.17	199.33	23.00	Compliant
5835	19.63	20.10	91.83	102.33	194.16	22.88	Compliant

Table 22. RF Output Power, Test Results, 30 MHz, UNII 3, 29 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5745	20.22	20.09	105.20	102.09	207.29	23.17	Compliant
5795	19.91	19.61	97.95	91.41	189.36	22.77	Compliant
5830	20.01	20.40	100.23	109.65	209.88	23.22	Compliant

Table 23. RF Output Power, Test Results, 40 MHz, UNII 3, 29 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5750	20.39	19.77	109.40	94.84	204.24	23.10	Compliant
5795	20.27	20.47	106.41	111.43	217.84	23.38	Compliant
5825	20.28	19.79	106.66	95.28	201.94	23.05	Compliant

Table 24. RF Output Power, Test Results, 50 MHz, UNII 3, 29 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5160	-2.930	-2.580	0.51	0.55	1.06	0.26	Compliant
5171	1.760	2.180	1.50	1.65	3.15	4.99	Compliant
5182	7.390	7.720	5.48	5.92	11.40	10.57	Compliant
5245	7.850	8.160	6.10	6.55	12.64	11.02	Compliant

Table 25. RF Output Power, Test Results, 10 MHz, UNII 1, 34 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5166	-3.400	-2.920	0.46	0.51	0.97	-0.14	Compliant
5171	-1.490	-1.350	0.71	0.73	1.44	1.59	Compliant
5176	3.860	4.380	2.43	2.74	5.17	7.14	Compliant
5200	7.850	8.200	6.10	6.61	12.70	11.04	Compliant
5240	8.370	8.450	6.87	7.00	13.87	11.42	Compliant

Table 26. RF Output Power, Test Results, 20 MHz, UNII 1, 34 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5170	-3.070	-2.710	0.49	0.54	1.03	0.12	Compliant
5178	-1.490	-1.050	0.71	0.79	1.49	1.75	Compliant
5188	3.580	3.950	2.28	2.48	4.76	6.78	Compliant
5197	8.960	9.400	7.87	8.71	16.58	12.20	Compliant
5235	8.730	8.930	7.46	7.82	15.28	11.84	Compliant

Table 27. RF Output Power, Test Results, 30 MHz, UNII 1, 34 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5175	-3.700	-3.410	0.43	0.46	0.88	-0.54	Compliant
5185	-1.380	-0.960	0.73	0.80	1.53	1.85	Compliant
5200	3.910	4.190	2.46	2.62	5.08	7.06	Compliant
5209	8.650	8.790	7.33	7.57	14.90	11.73	Compliant
5230	8.950	9.190	7.85	8.30	16.15	12.08	Compliant

Table 28. RF Output Power, Test Results, 40 MHz, UNII 1, 34 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5180	-2.980	-2.580	0.50	0.55	1.06	0.23	Compliant
5190	-1.210	-0.980	0.76	0.80	1.55	1.92	Compliant
5209	4.310	4.450	2.70	2.79	5.48	7.39	Compliant
5218	9.300	9.180	8.51	8.28	16.79	12.25	Compliant
5225	9.350	9.450	8.61	8.81	17.42	12.41	Compliant

Table 29. RF Output Power, Test Results, 50 MHz, UNII 1, 34 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5730	13.50	13.57	22.39	22.75	45.14	16.55	Compliant
5795	13.84	15.05	24.21	31.99	56.20	17.50	Compliant
5845	14.09	14.53	25.64	28.38	54.02	17.33	Compliant

Table 30. RF Output Power, Test Results, 10 MHz, UNII 3, 34 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5735	14.39	14.28	27.48	26.79	54.27	17.35	Compliant
5795	14.48	14.66	28.05	29.24	57.30	17.58	Compliant
5840	14.88	14.85	30.76	30.55	61.31	17.88	Compliant

Table 31. RF Output Power, Test Results, 20 MHz, UNII 3, 34 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5740	13.94	14.50	24.77	28.18	52.96	17.24	Compliant
5795	14.52	14.39	28.31	27.48	55.79	17.47	Compliant
5835	14.10	14.57	25.70	28.64	54.35	17.35	Compliant

Table 32. RF Output Power, Test Results, 30 MHz, UNII 3, 34 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5745	14.95	14.82	31.26	30.34	61.60	17.90	Compliant
5795	14.64	14.34	29.11	27.16	56.27	17.50	Compliant
5830	14.74	15.13	29.79	32.58	62.37	17.95	Compliant

Table 33. RF Output Power, Test Results, 40 MHz, UNII 3, 34 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5750	14.81	14.19	30.27	26.24	56.51	17.52	Compliant
5795	14.69	14.89	29.44	30.83	60.28	17.80	Compliant
5825	14.70	14.21	29.51	26.36	55.88	17.47	Compliant

Table 34. RF Output Power, Test Results, 50 MHz, UNII 3, 34 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5730	19.04	19.11	80.17	81.47	161.64	22.09	Compliant
5738	21.70	22.19	147.91	165.58	313.49	24.96	Compliant
5741	23.75	23.49	237.14	223.36	460.49	26.63	Compliant
5745	25.89	25.82	388.15	381.94	770.09	28.87	Compliant
5833	25.42	25.89	348.34	388.15	736.49	28.67	Compliant
5835	23.52	23.93	224.91	247.17	472.08	26.74	Compliant
5839	22.03	22.18	159.59	165.20	324.78	25.12	Compliant
5845	19.63	20.07	91.83	101.62	193.46	22.87	Compliant

Table 35. RF Output Power, Test Results, 10 MHz, UNII 3, 23 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5735	19.64	19.53	92.04	89.74	181.79	22.60	Compliant
5750	21.86	22.45	153.46	175.79	329.25	25.18	Compliant
5755	23.78	23.76	238.78	237.68	476.47	26.78	Compliant
5760	25.36	25.62	343.56	364.75	708.31	28.50	Compliant
5820	25.38	25.08	345.14	322.11	667.25	28.24	Compliant
5825	23.13	23.93	205.59	247.17	452.76	26.56	Compliant
5830	21.85	22.21	153.11	166.34	319.45	25.04	Compliant
5840	20.13	20.10	103.04	102.33	205.37	23.13	Compliant

Table 36. RF Output Power, Test Results, 20 MHz, UNII 3, 23 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5740	19.47	20.03	88.51	100.69	189.20	22.77	Compliant
5765	21.62	22.27	145.21	168.66	313.87	24.97	Compliant
5770	23.81	23.85	240.44	242.66	483.10	26.84	Compliant
5775	25.28	25.26	337.29	335.74	673.02	28.28	Compliant
5820	25.01	25.55	316.96	358.92	675.88	28.30	Compliant
5825	23.32	23.60	214.78	229.09	443.87	26.47	Compliant
5830	21.98	22.26	157.76	168.27	326.03	25.13	Compliant
5835	19.63	20.10	91.83	102.33	194.16	22.88	Compliant

Table 37. RF Output Power, Test Results, 30 MHz, UNII 3, 23 dBi Antenna

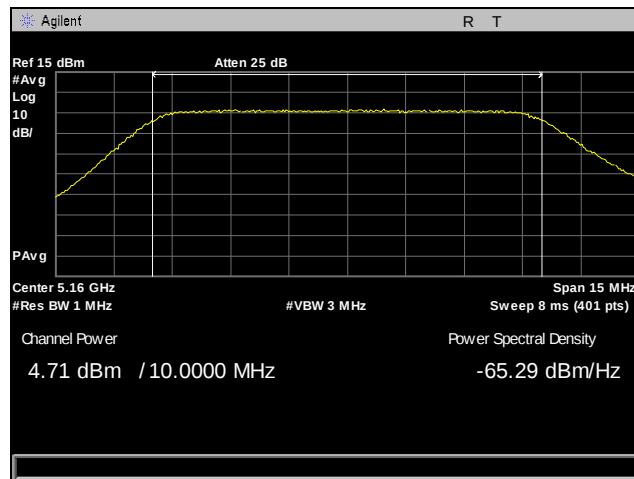
40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5745	20.22	20.09	105.20	102.09	207.29	23.17	Compliant
5765	21.93	22.36	155.96	172.19	328.14	25.16	Compliant
5770	23.76	23.88	237.68	244.34	482.03	26.83	Compliant
5775	25.17	25.41	328.85	347.54	676.39	28.30	Compliant
5805	25.25	25.50	334.97	354.81	689.78	28.39	Compliant
5810	23.25	23.80	211.35	239.88	451.23	26.54	Compliant
5815	21.79	22.13	151.01	163.31	314.31	24.97	Compliant
5830	20.01	20.40	100.23	109.65	209.88	23.22	Compliant

Table 38. RF Output Power, Test Results, 40 MHz, UNII 3, 23 dBi Antenna

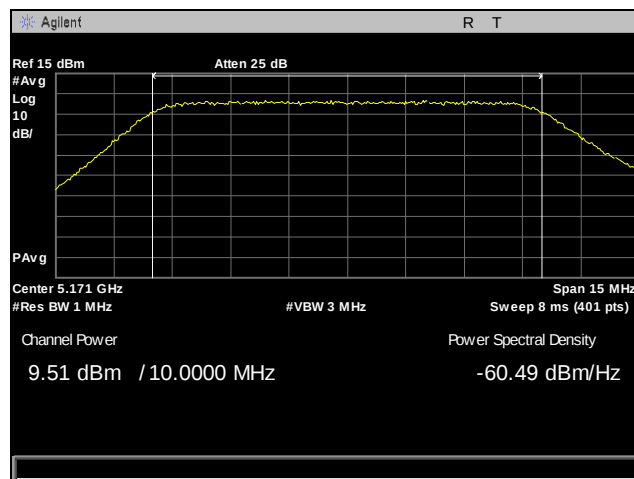
50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5750	20.39	19.77	109.40	94.84	204.24	23.10	Compliant
5765	21.65	21.87	146.22	153.82	300.03	24.77	Compliant
5770	23.98	23.97	250.03	249.46	499.49	26.99	Compliant
5775	25.32	25.59	340.41	362.24	702.65	28.47	Compliant
5800	25.14	25.61	326.59	363.92	690.50	28.39	Compliant
5805	23.91	23.89	246.04	244.91	490.94	26.91	Compliant
5810	21.29	21.73	134.59	148.94	283.52	24.53	Compliant
5825	20.28	19.79	106.66	95.28	201.94	23.05	Compliant

Table 39. RF Output Power, Test Results, 50 MHz, UNII 3, 23 dBi Antenna

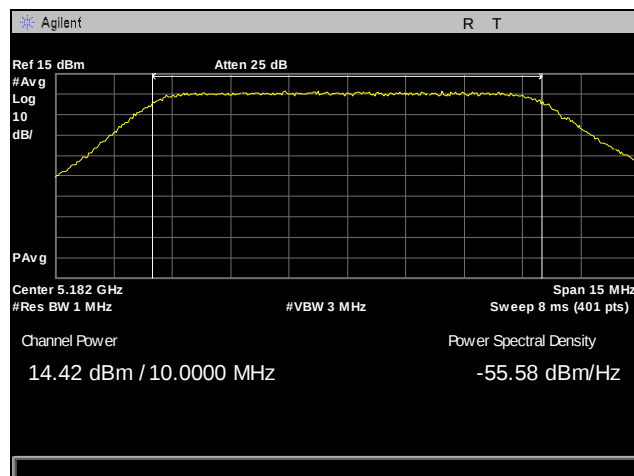
Conducted Output Power, Antenna 0, 10 MHz, UNII 1



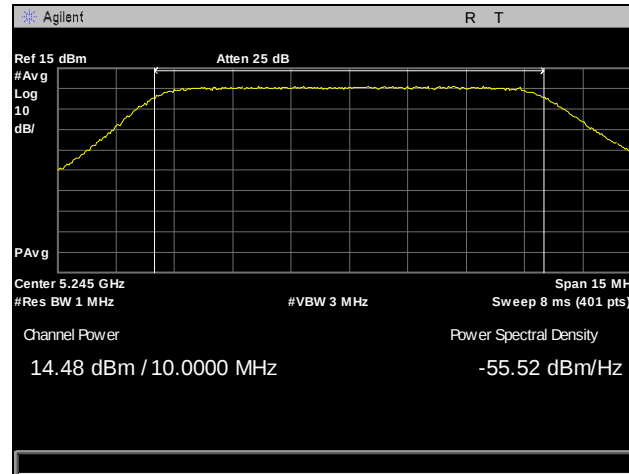
Plot 164. Conducted Output Power, 5160 MHz, Antenna 0, 10 MHz



Plot 165. Conducted Output Power, 5171 MHz, Antenna 0, 10 MHz

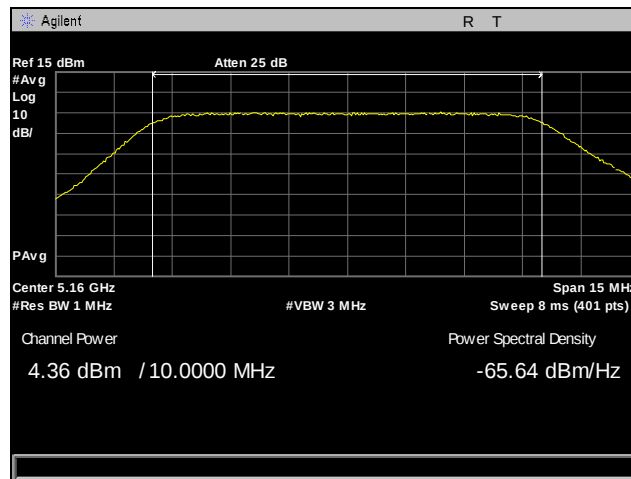


Plot 166. Conducted Output Power, 5182 MHz, Antenna 0, 10 MHz

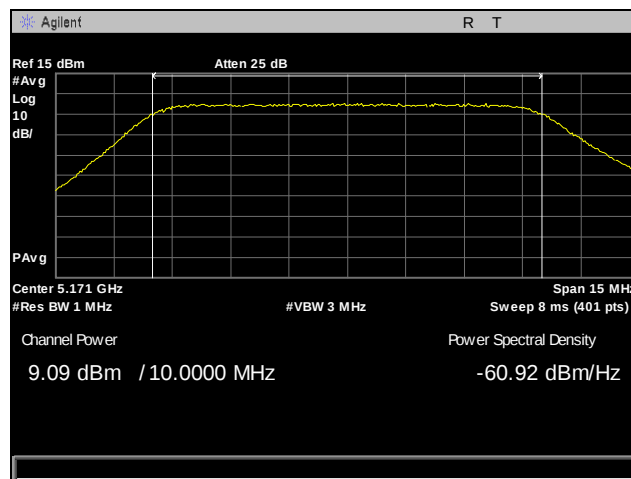


Plot 167. Conducted Output Power, 5245 MHz, Antenna 0, 10 MHz

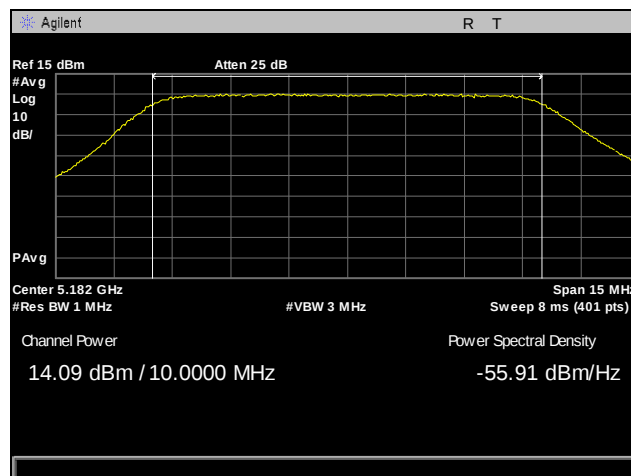
Conducted Output Power, Antenna 1, 10 MHz, UNII 1



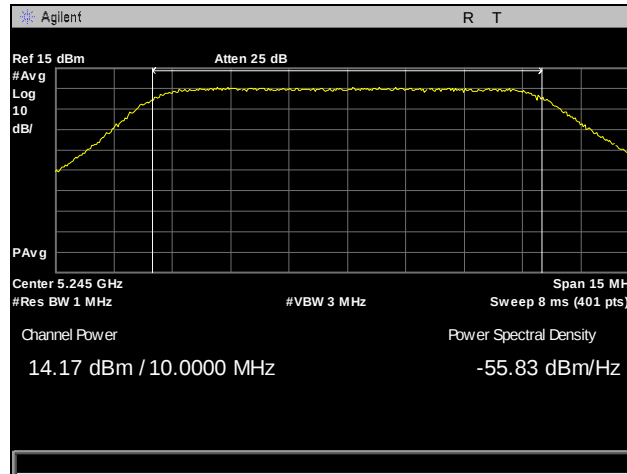
Plot 168. Conducted Output Power, 5160 MHz, Antenna 1, 10 MHz



Plot 169. Conducted Output Power, 5171 MHz, Antenna 1, 10 MHz

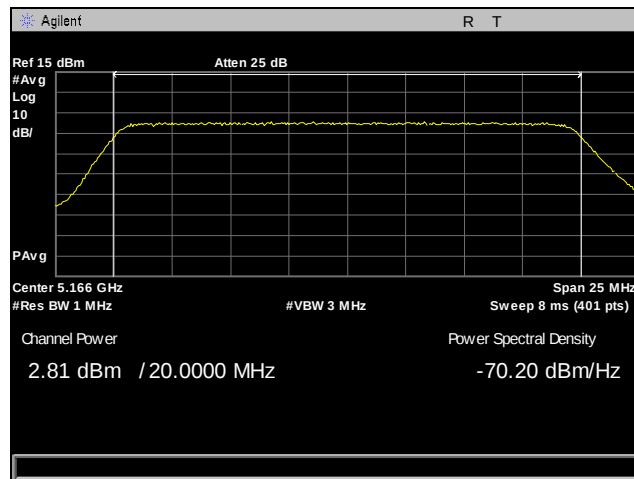


Plot 170. Conducted Output Power, 5182 MHz, Antenna 1, 10 MHz

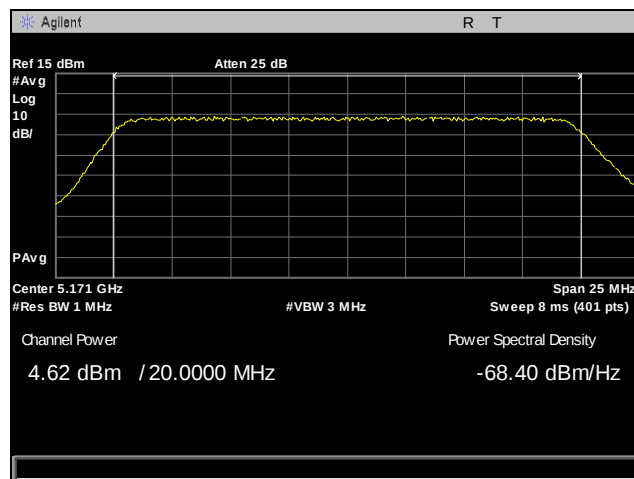


Plot 171. Conducted Output Power, 5245 MHz, Antenna 1, 10 MHz

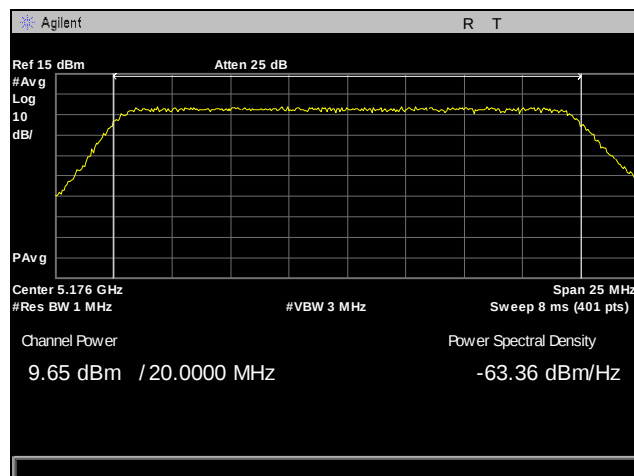
Conducted Output Power, Antenna 0, 20 MHz, UNII 1



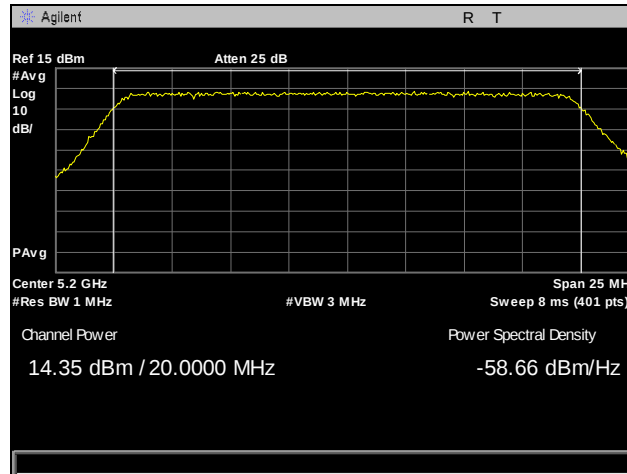
Plot 172. Conducted Output Power, 5166 MHz, Antenna 0, 20 MHz



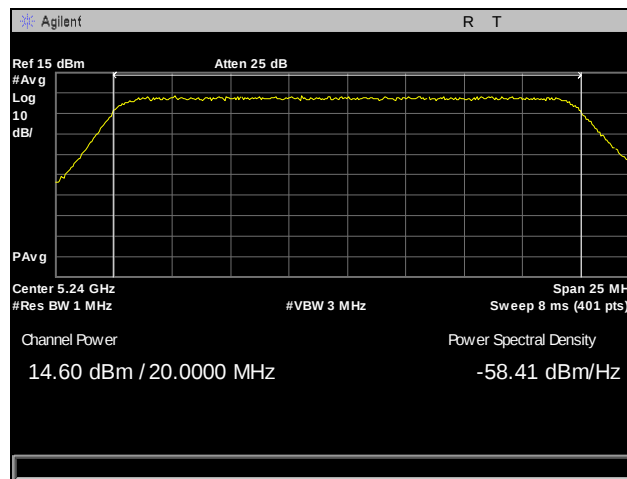
Plot 173. Conducted Output Power, 5171 MHz, Antenna 0, 20 MHz



Plot 174. Conducted Output Power, 5176 MHz, Antenna 0, 20 MHz

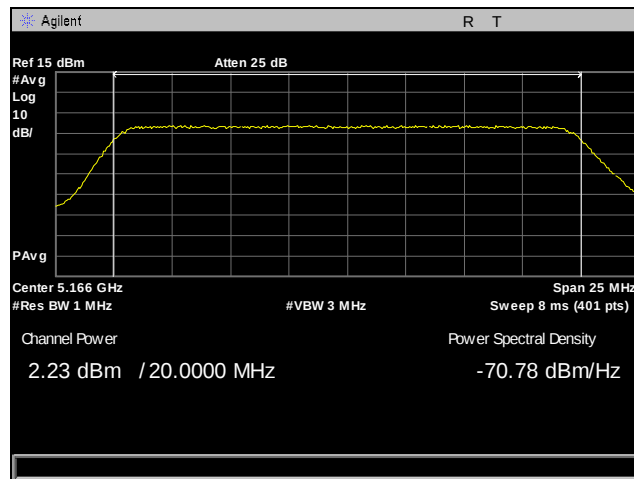


Plot 175. Conducted Output Power, 5200 MHz, Antenna 0, 20 MHz

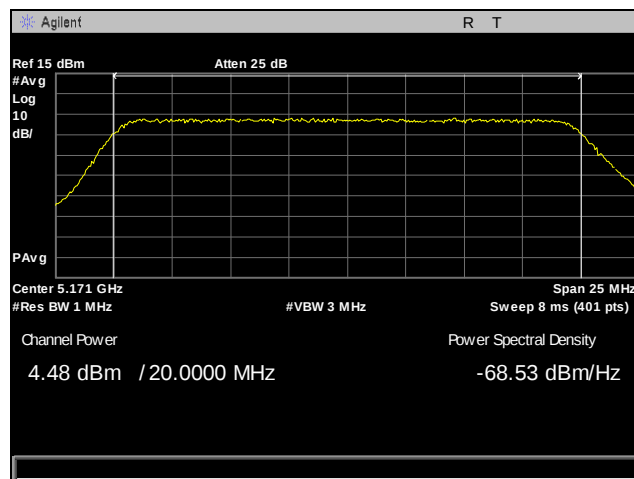


Plot 176. Conducted Output Power, 5240 MHz, Antenna 0, 20 MHz

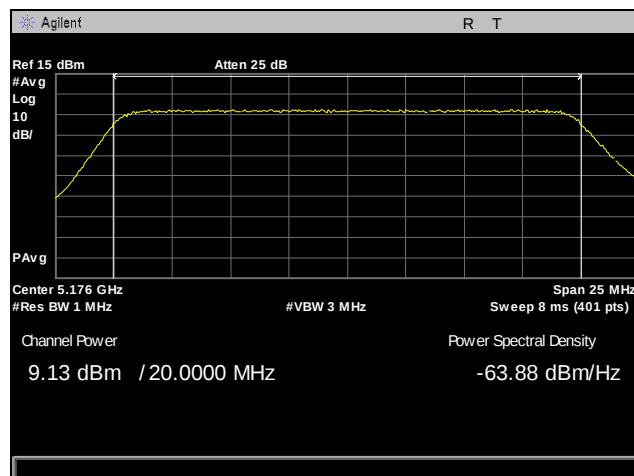
Conducted Output Power, Antenna 1, 20 MHz, UNII 1



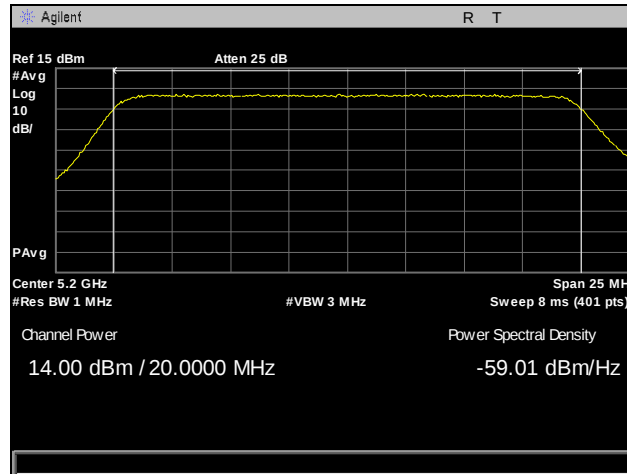
Plot 177. Conducted Output Power, 5166 MHz, Antenna 1, 20 MHz



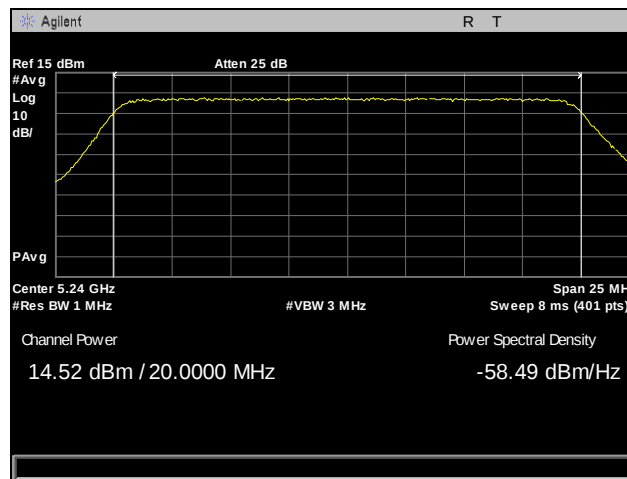
Plot 178. Conducted Output Power, 5171 MHz, Antenna 1, 20 MHz



Plot 179. Conducted Output Power, 5176 MHz, Antenna 1, 20 MHz

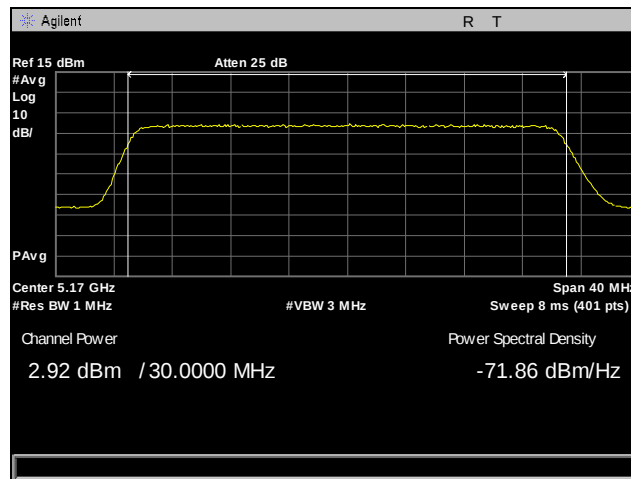


Plot 180. Conducted Output Power, 5200 MHz, Antenna 1, 20 MHz

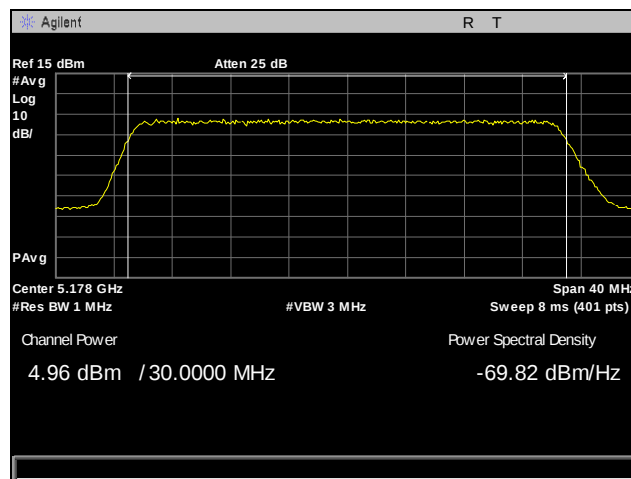


Plot 181. Conducted Output Power, 5240 MHz, Antenna 1, 20 MHz

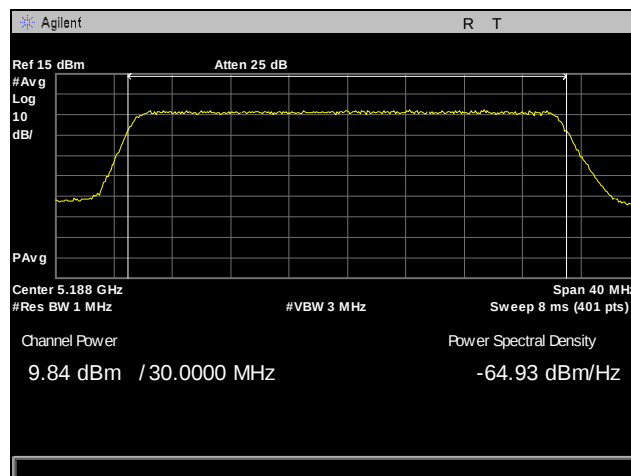
Conducted Output Power, Antenna 0, 30 MHz, UNII 1



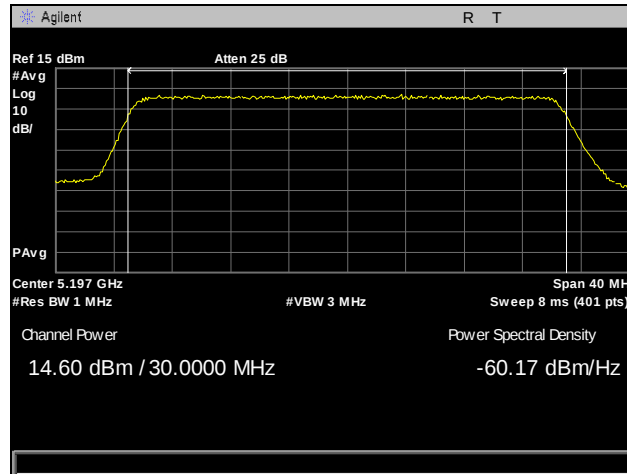
Plot 182. Conducted Output Power, 5170 MHz, Antenna 0, 30 MHz



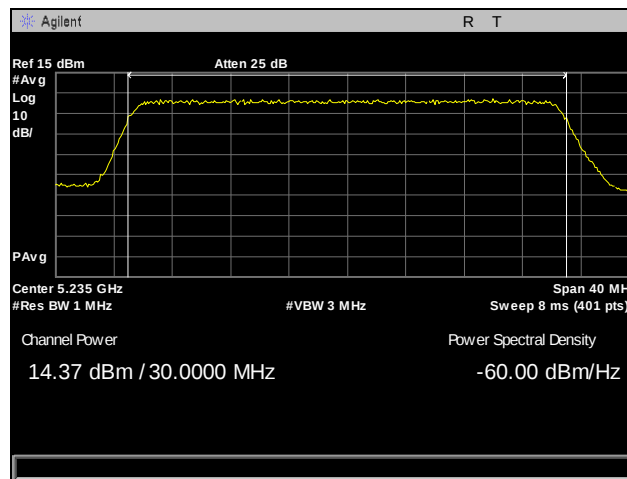
Plot 183. Conducted Output Power, 5178 MHz, Antenna 0, 30 MHz



Plot 184. Conducted Output Power, 5188 MHz, Antenna 0, 30 MHz

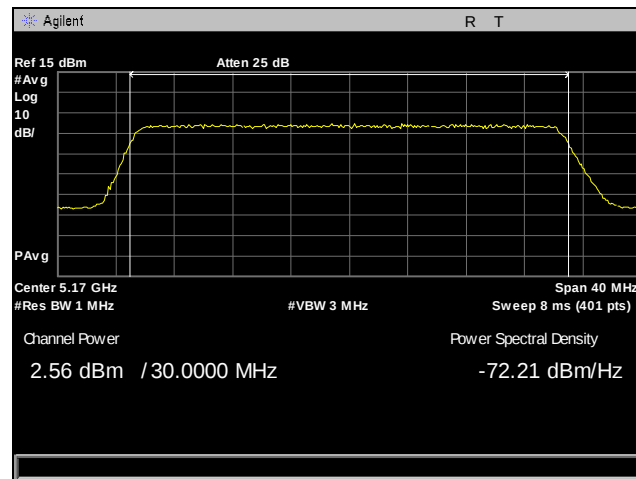


Plot 185. Conducted Output Power, 5197 MHz, Antenna 0, 30 MHz

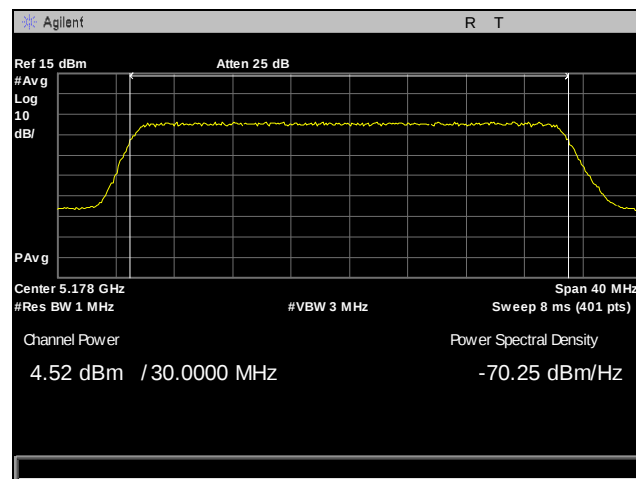


Plot 186. Conducted Output Power, 5235 MHz, Antenna 0, 30 MHz

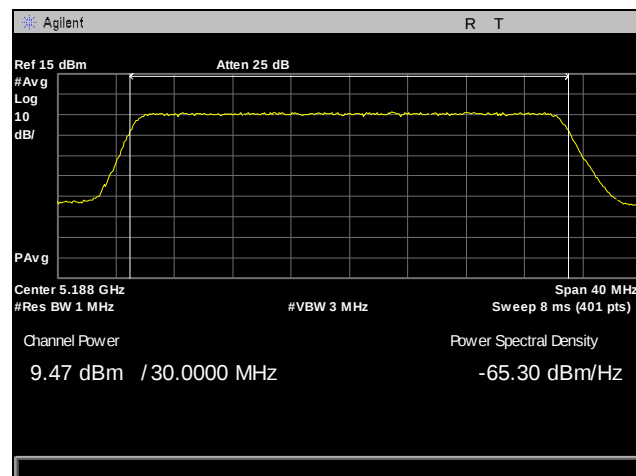
Conducted Output Power, Antenna 1, 30 MHz, UNII 1



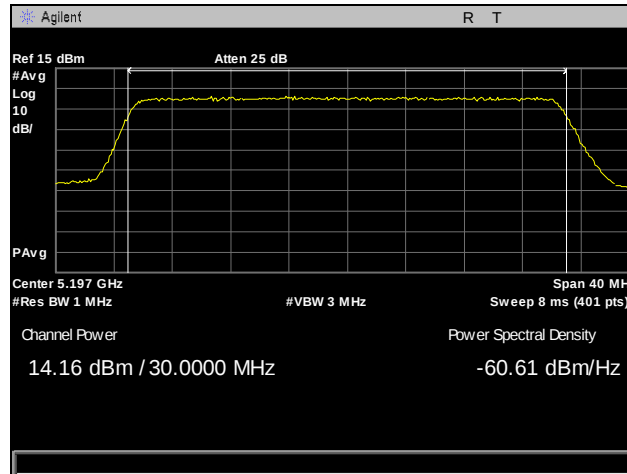
Plot 187. Conducted Output Power, 5170 MHz, Antenna 1, 30 MHz



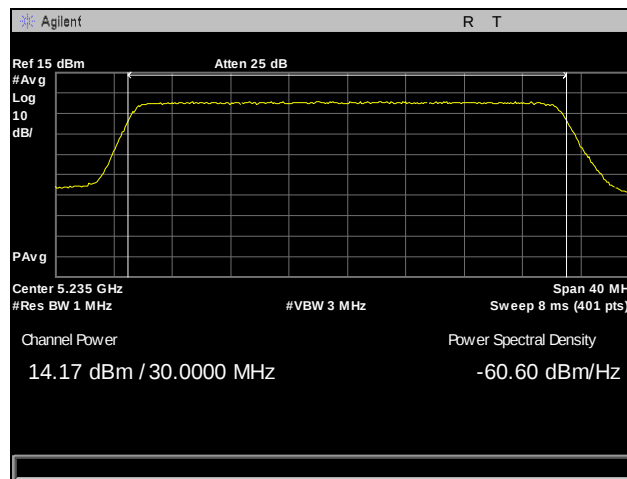
Plot 188. Conducted Output Power, 5178 MHz, Antenna 1, 30 MHz



Plot 189. Conducted Output Power, 5188 MHz, Antenna 1, 30 MHz

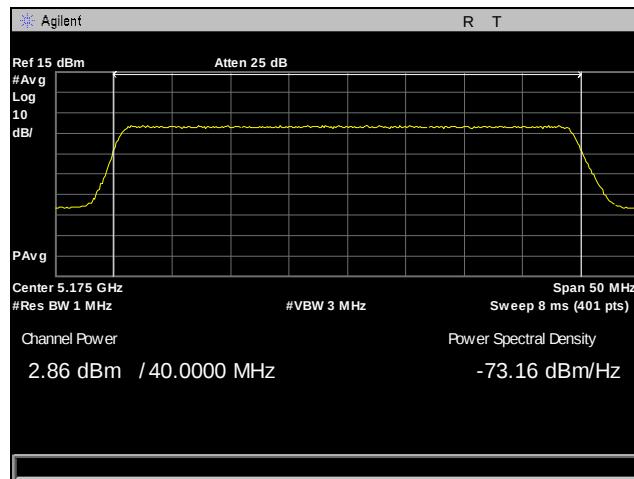


Plot 190. Conducted Output Power, 5197 MHz, Antenna 1, 30 MHz

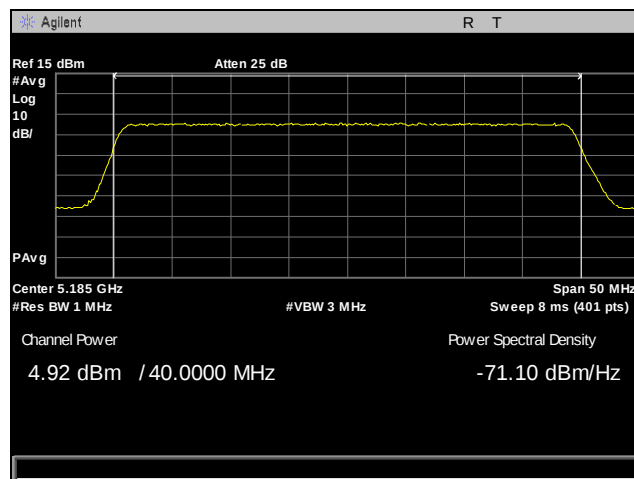


Plot 191. Conducted Output Power, 5235 MHz, Antenna 1, 30 MHz

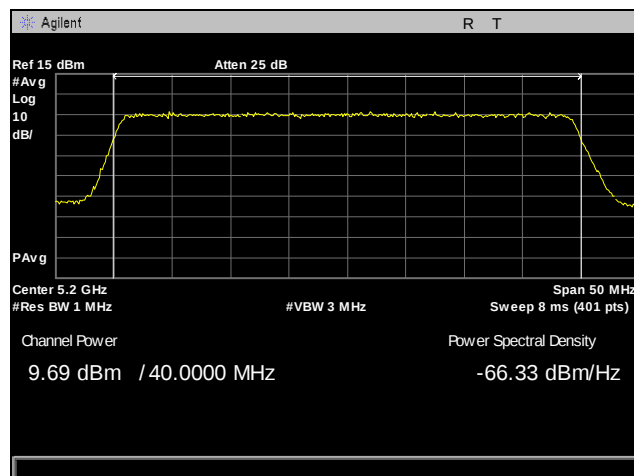
Conducted Output Power, Antenna 0, 40 MHz, UNII 1



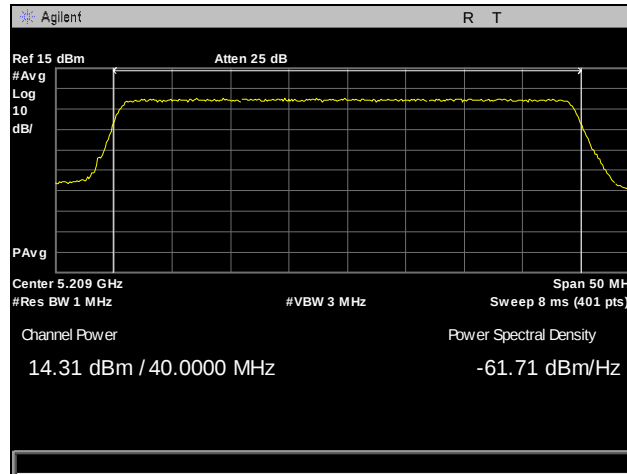
Plot 192. Conducted Output Power, 5175 MHz, Antenna 0, 40 MHz



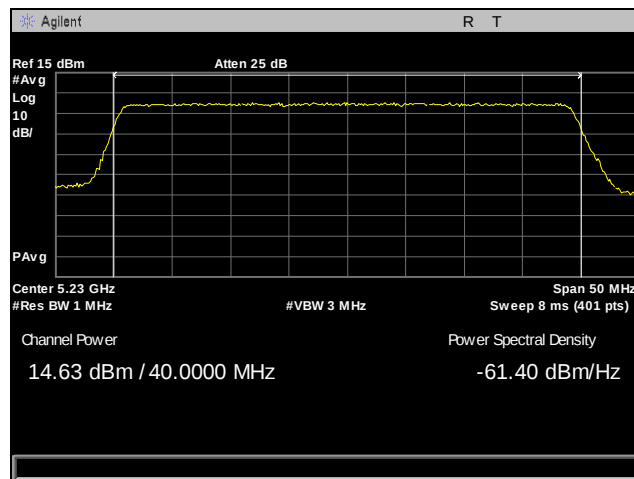
Plot 193. Conducted Output Power, 5185 MHz, Antenna 0, 40 MHz



Plot 194. Conducted Output Power, 5200 MHz, Antenna 0, 40 MHz

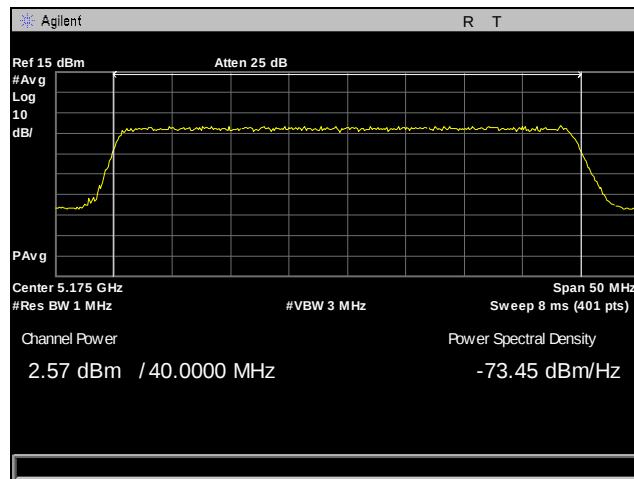


Plot 195. Conducted Output Power, 5209 MHz, Antenna 0, 40 MHz

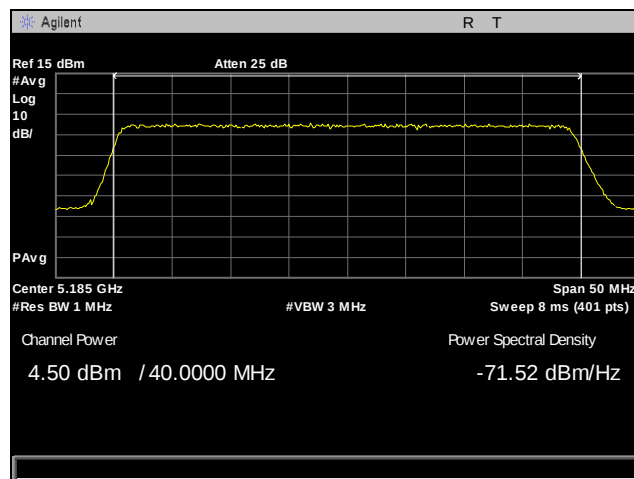


Plot 196. Conducted Output Power, 5230 MHz, Antenna 0, 40 MHz

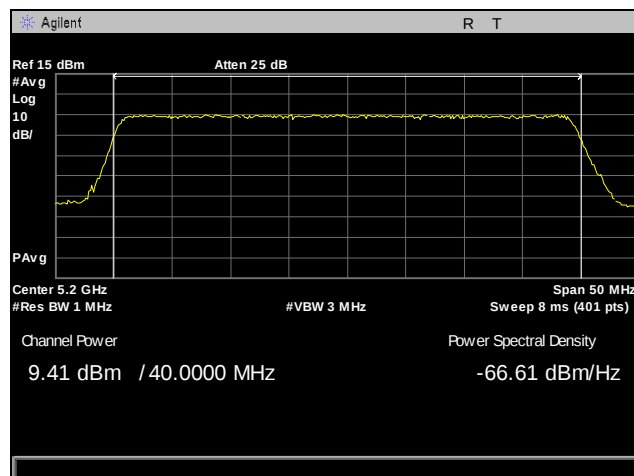
Conducted Output Power, Antenna 1, 40 MHz, UNII 1



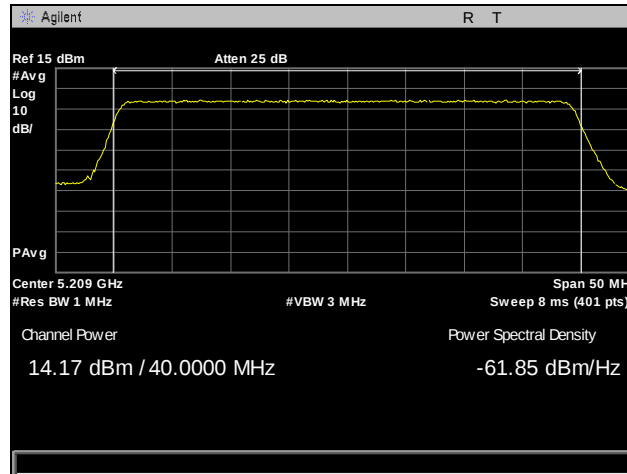
Plot 197. Conducted Output Power, 5175 MHz, Antenna 1, 40 MHz



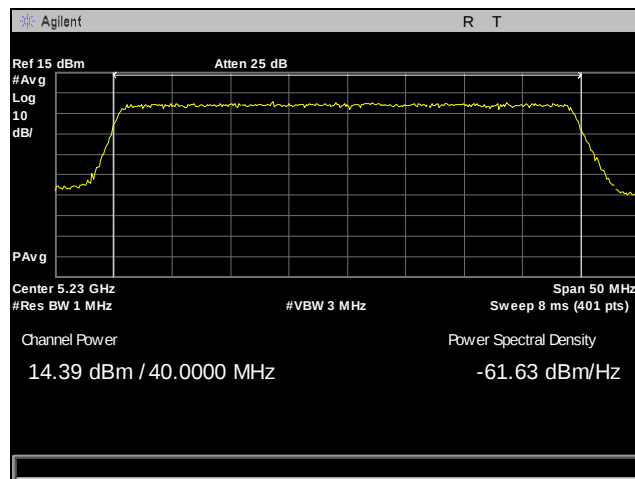
Plot 198. Conducted Output Power, 5185 MHz, Antenna 1, 40 MHz



Plot 199. Conducted Output Power, 5200 MHz, Antenna 1, 40 MHz

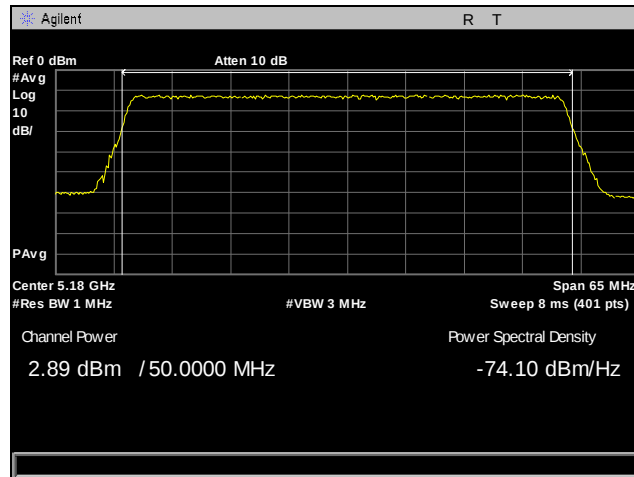


Plot 200. Conducted Output Power, 5209 MHz, Antenna 1, 40 MHz

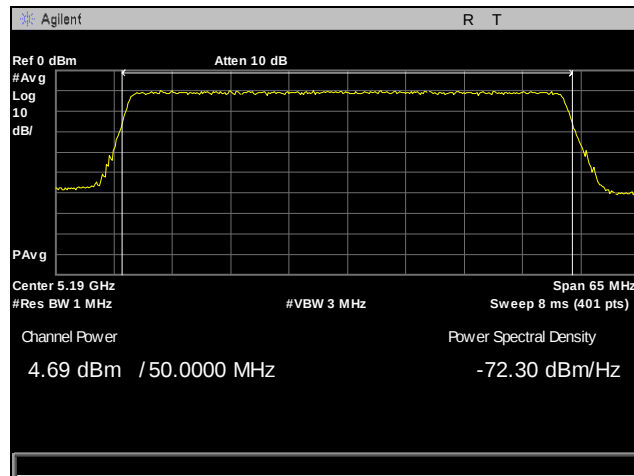


Plot 201. Conducted Output Power, 5230 MHz, Antenna 1, 40 MHz

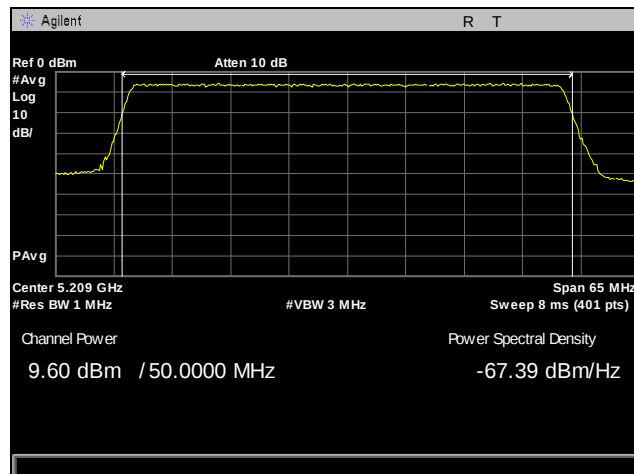
Conducted Output Power, Antenna 0, 50 MHz, UNII 1



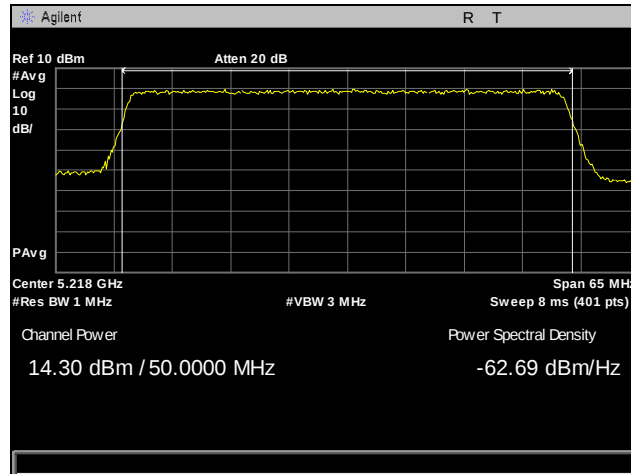
Plot 202. Conducted Output Power, 5180 MHz, Antenna 0, 50 MHz



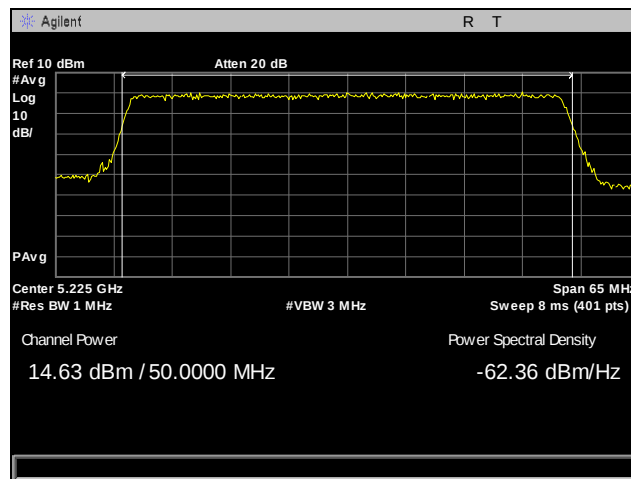
Plot 203. Conducted Output Power, 5190 MHz, Antenna 0, 50 MHz



Plot 204. Conducted Output Power, 5209 MHz, Antenna 0, 50 MHz

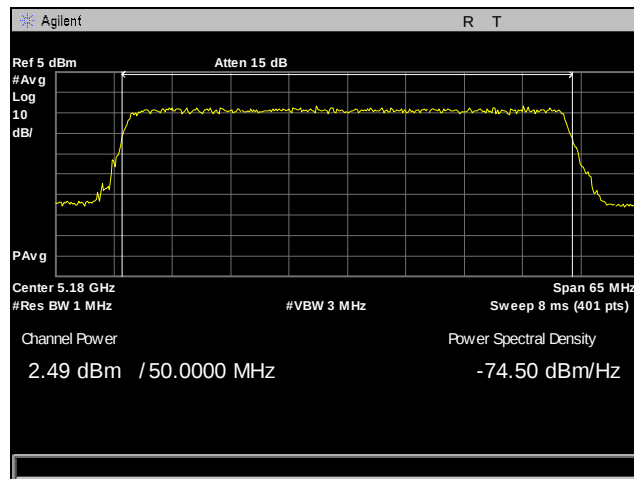


Plot 205. Conducted Output Power, 5218 MHz, Antenna 0, 50 MHz

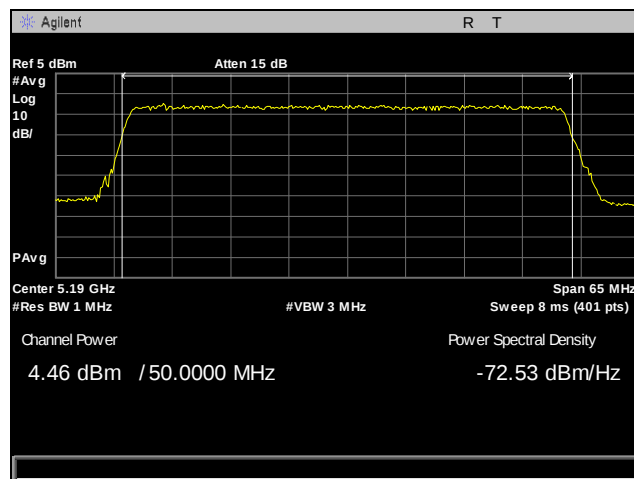


Plot 206. Conducted Output Power, 5225 MHz, Antenna 0, 50 MHz

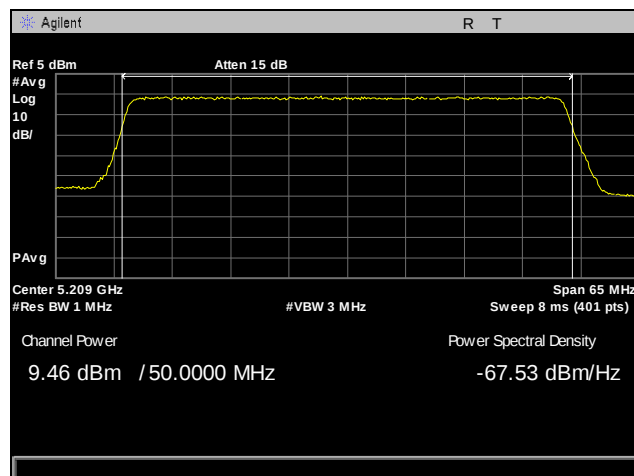
Conducted Output Power, Antenna 1, 50 MHz, UNII 1



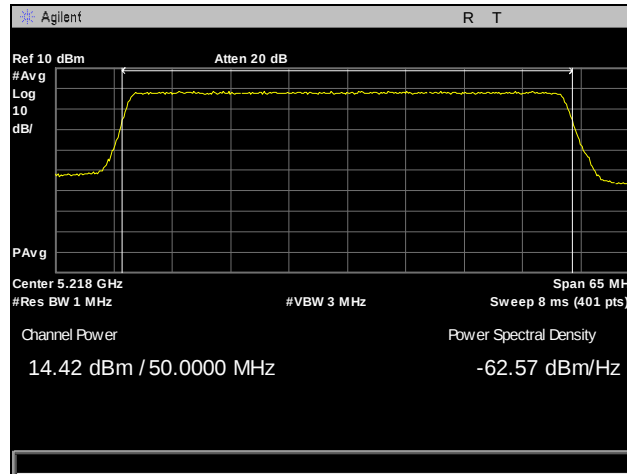
Plot 207. Conducted Output Power, 5180 MHz, Antenna 1, 50 MHz



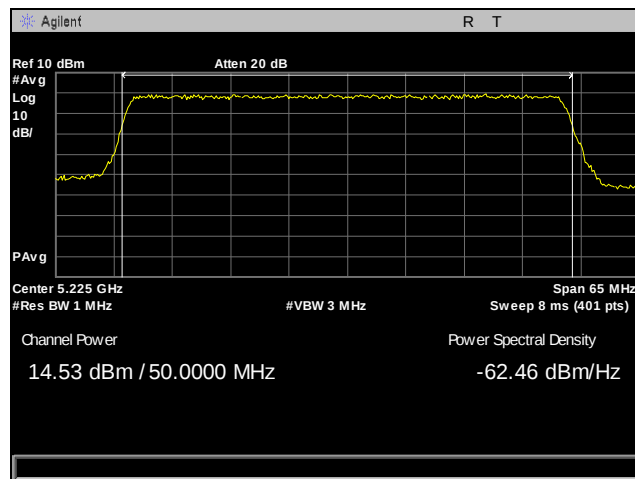
Plot 208. Conducted Output Power, 5190 MHz, Antenna 1, 50 MHz



Plot 209. Conducted Output Power, 5209 MHz, Antenna 1, 50 MHz

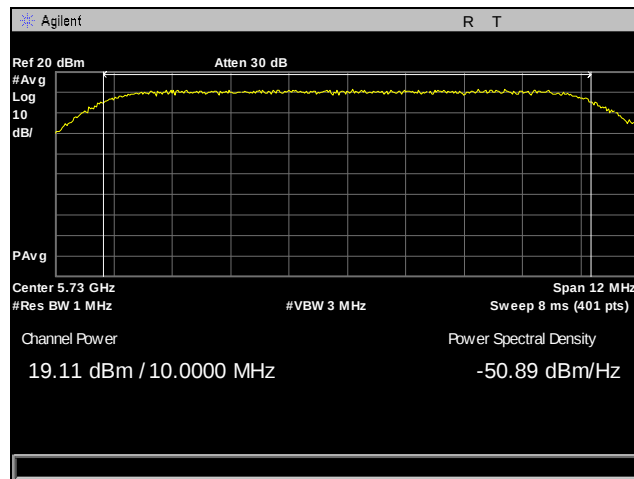


Plot 210. Conducted Output Power, 5218 MHz, Antenna 1, 50 MHz

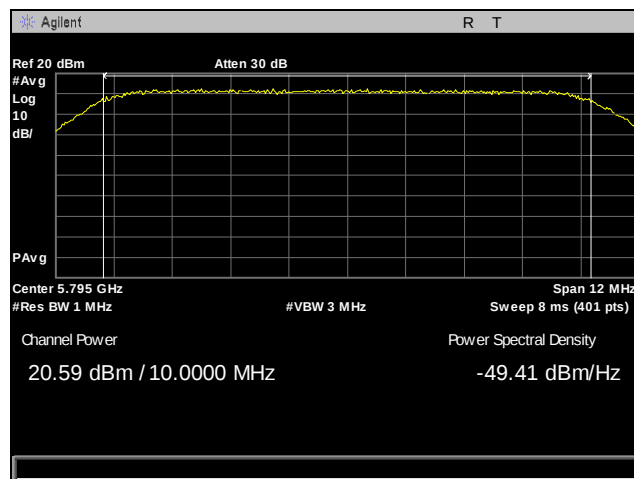


Plot 211. Conducted Output Power, 5225 MHz, Antenna 1, 50 MHz

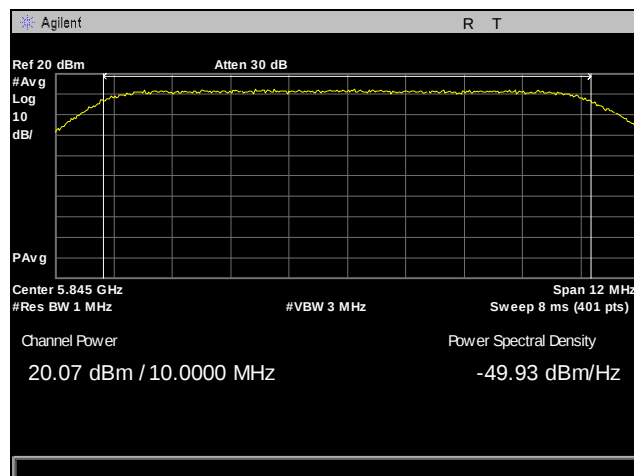
Conducted Output Power, Antenna 0, 10 MHz, UNII 3



Plot 212. Conducted Output Power, 5730 MHz, Antenna 0, 10 MHz

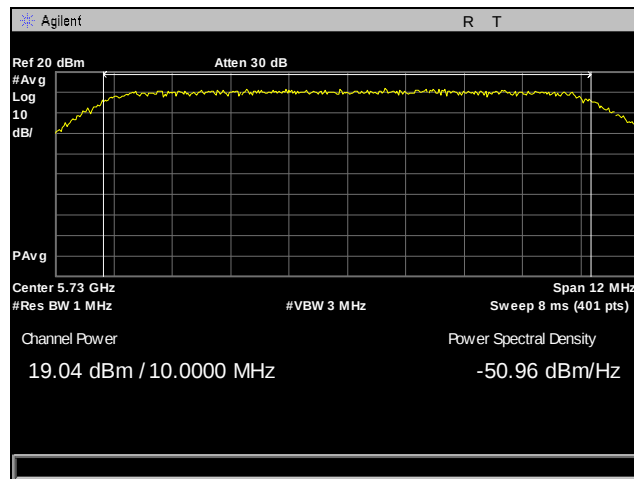


Plot 213. Conducted Output Power, 5795 MHz, Antenna 0, 10 MHz

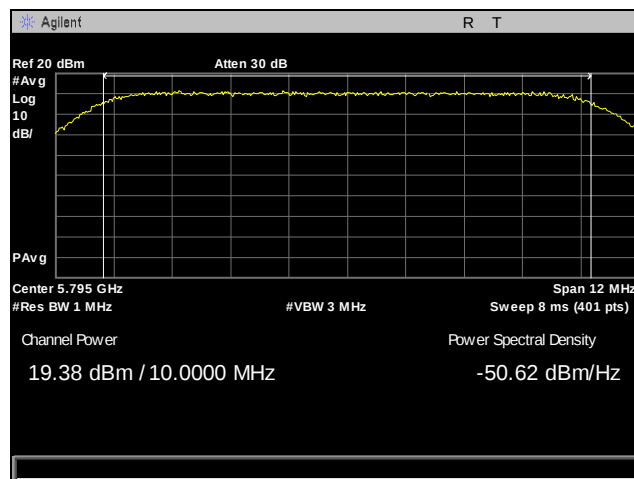


Plot 214. Conducted Output Power, 5845 MHz, Antenna 0, 10 MHz

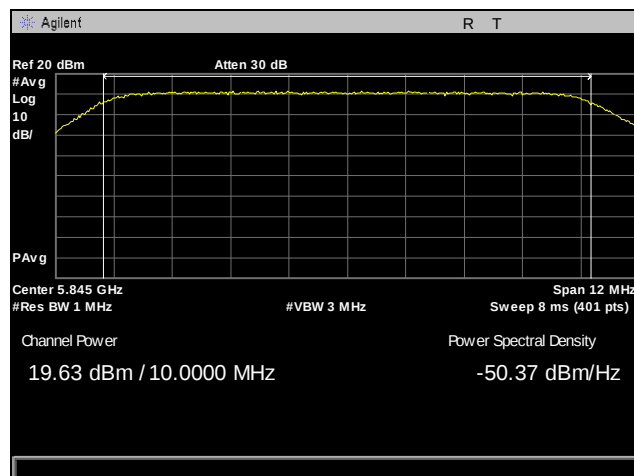
Conducted Output Power, Antenna 1, 10 MHz, UNII 3



Plot 215. Conducted Output Power, 5730 MHz, Antenna 1, 10 MHz

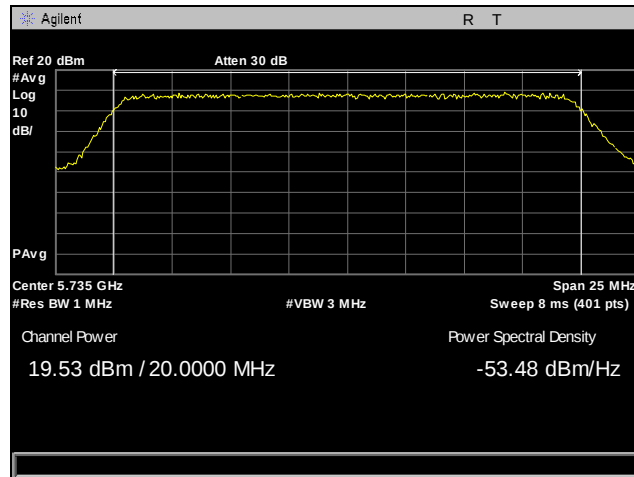


Plot 216. Conducted Output Power, 5795 MHz, Antenna 1, 10 MHz

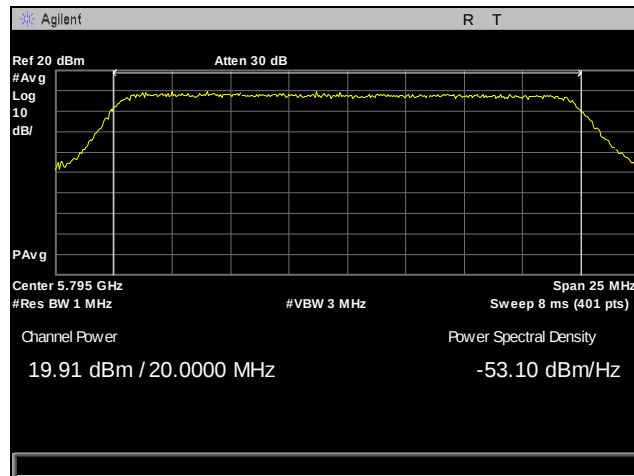


Plot 217. Conducted Output Power, 5845 MHz, Antenna 1, 10 MHz

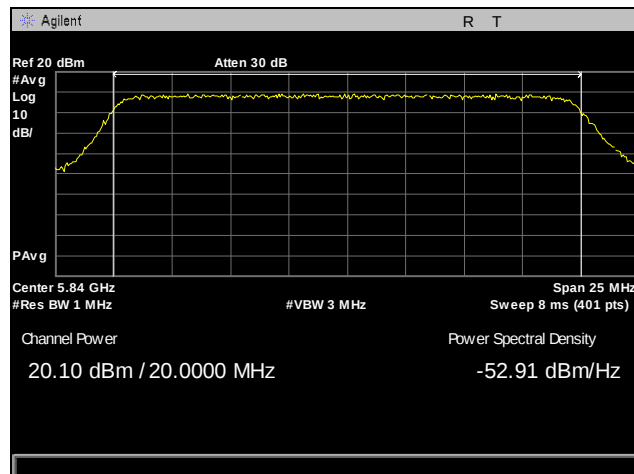
Conducted Output Power, Antenna 0, 20 MHz, UNII 3



Plot 218. Conducted Output Power, 5735 MHz, Antenna 0, 20 MHz

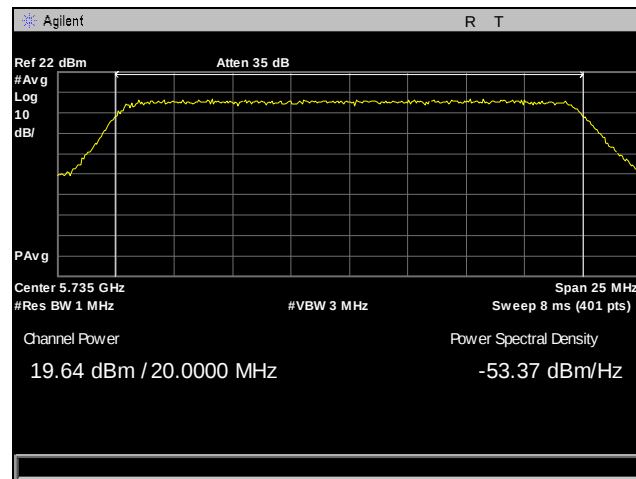


Plot 219. Conducted Output Power, 5795 MHz, Antenna 0, 20 MHz

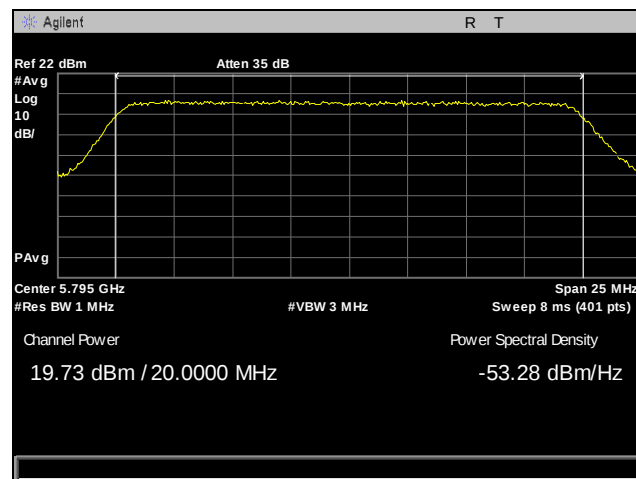


Plot 220. Conducted Output Power, 5840 MHz, Antenna 0, 20 MHz

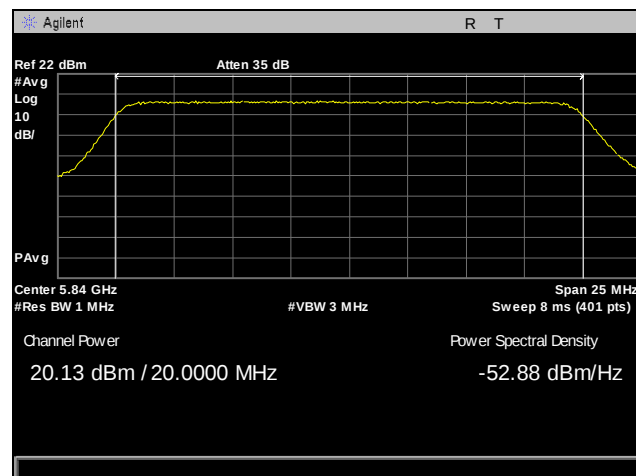
Conducted Output Power, Antenna 1, 20 MHz, UNII 3



Plot 221. Conducted Output Power, 5735 MHz, Antenna 1, 20 MHz

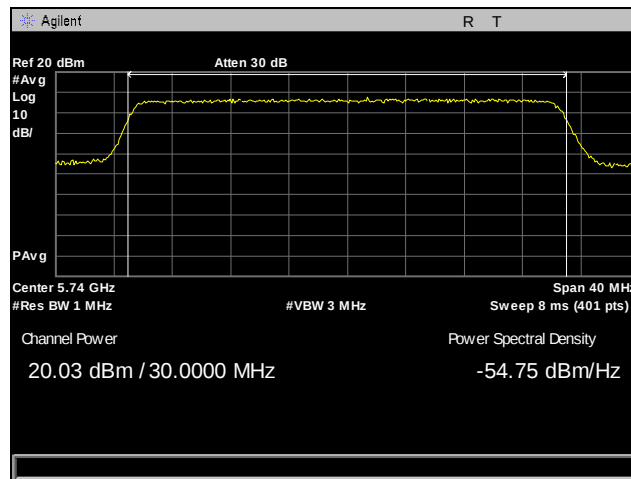


Plot 222. Conducted Output Power, 5795 MHz, Antenna 1, 20 MHz

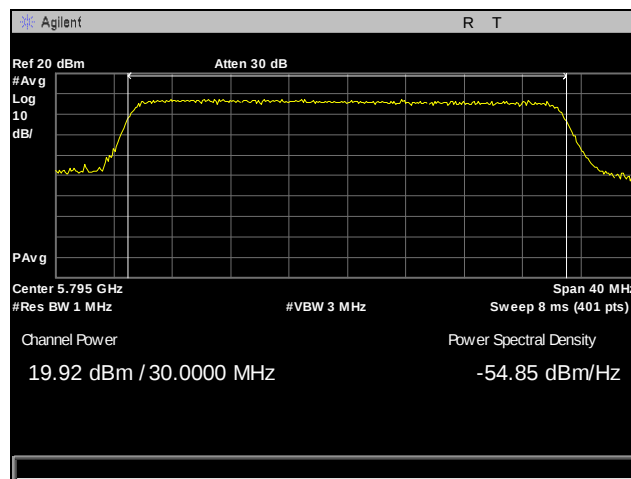


Plot 223. Conducted Output Power, 5840 MHz, Antenna 1, 20 MHz

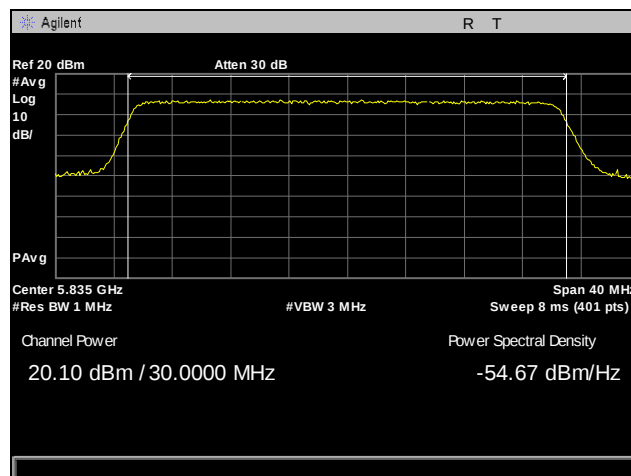
Conducted Output Power, Antenna 0, 30 MHz, UNII 3



Plot 224. Conducted Output Power, 5740 MHz, Antenna 0, 30 MHz

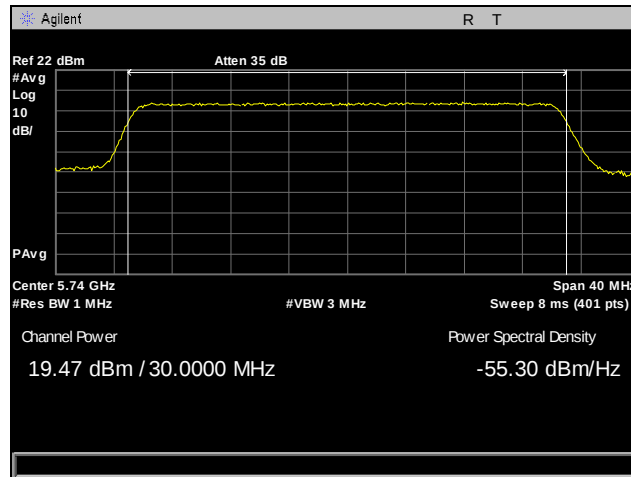


Plot 225. Conducted Output Power, 5795 MHz, Antenna 0, 30 MHz

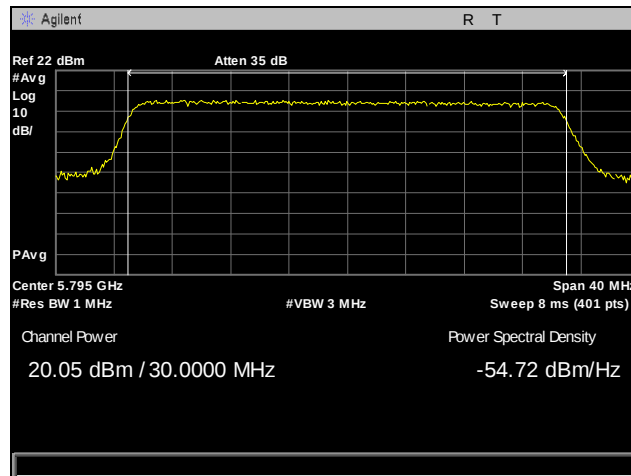


Plot 226. Conducted Output Power, 5835 MHz, Antenna 0, 30 MHz

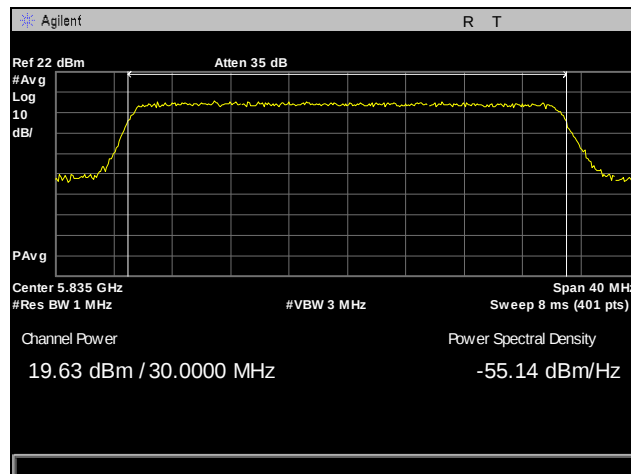
Conducted Output Power, Antenna 1, 30 MHz, UNII 3



Plot 227. Conducted Output Power, 5740 MHz, Antenna 1, 30 MHz

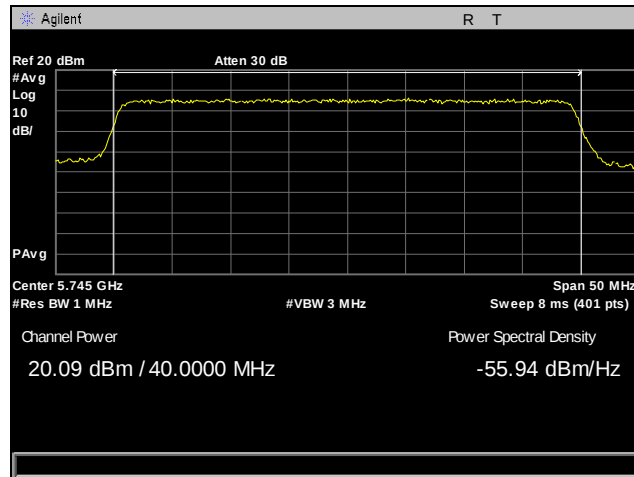


Plot 228. Conducted Output Power, 5795 MHz, Antenna 1, 30 MHz

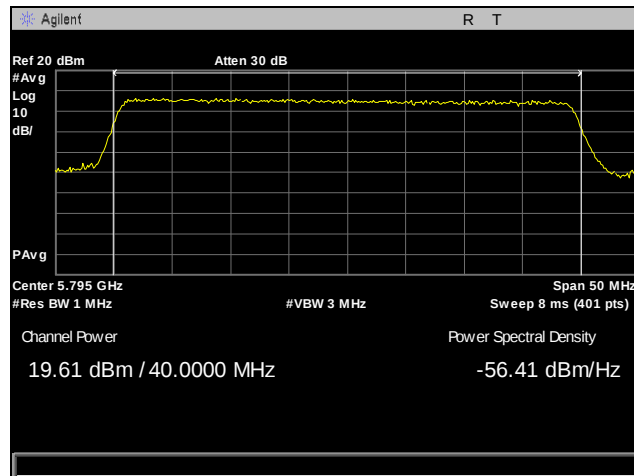


Plot 229. Conducted Output Power, 5835 MHz, Antenna 1, 30 MHz

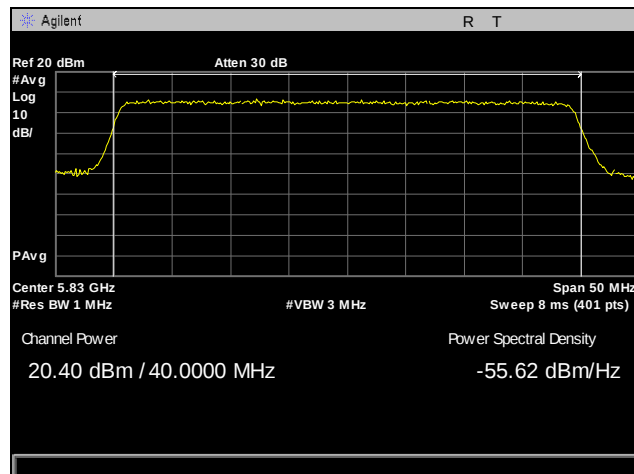
Conducted Output Power, Antenna 0, 40 MHz, UNII 3



Plot 230. Conducted Output Power, 5745 MHz, Antenna 0, 40 MHz

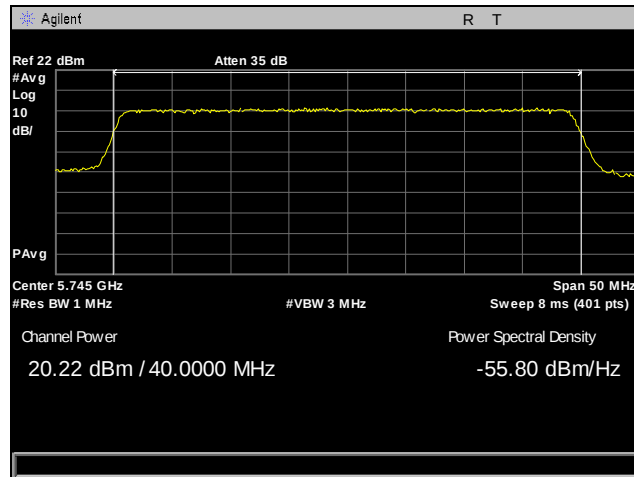


Plot 231. Conducted Output Power, 5795 MHz, Antenna 0, 40 MHz

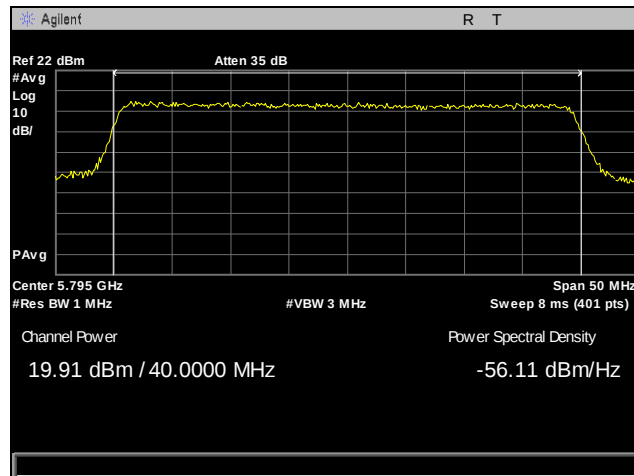


Plot 232. Conducted Output Power, 5830 MHz, Antenna 0, 40 MHz

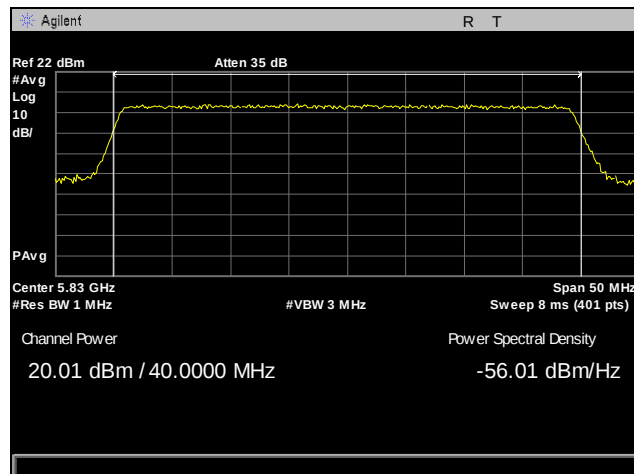
Conducted Output Power, Antenna 1, 40 MHz, UNII 3



Plot 233. Conducted Output Power, 5745 MHz, Antenna 1, 40 MHz

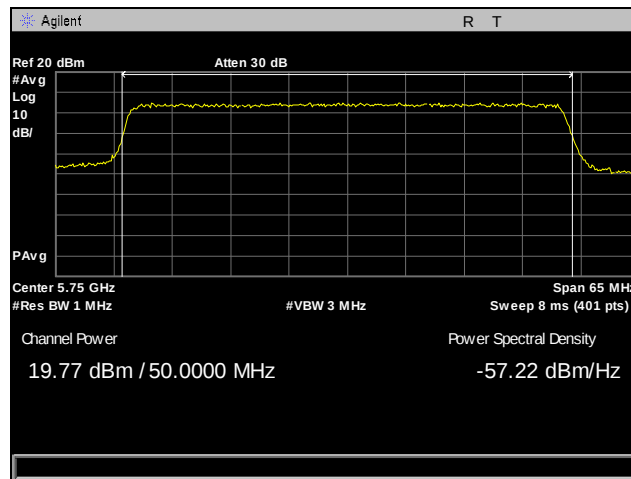


Plot 234. Conducted Output Power, 5795 MHz, Antenna 1, 40 MHz

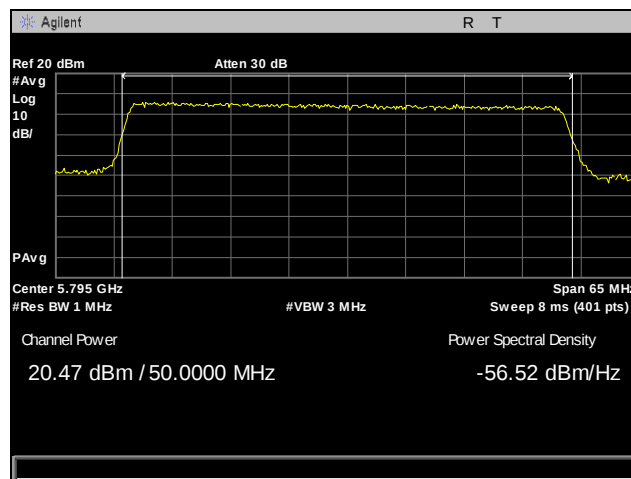


Plot 235. Conducted Output Power, 5830 MHz, Antenna 1, 40 MHz

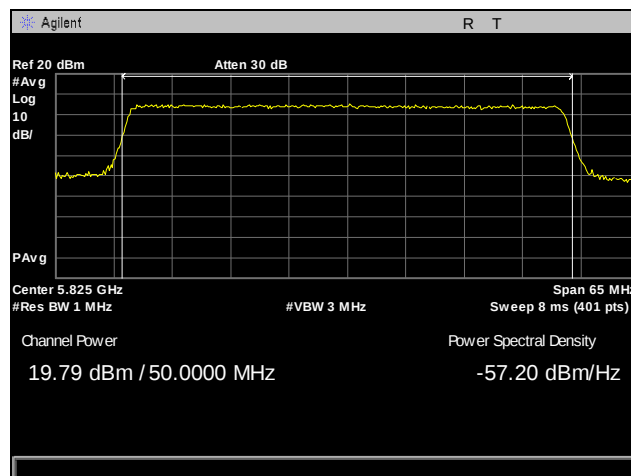
Conducted Output Power, Antenna 0, 50 MHz, UNII 3



Plot 236. Conducted Output Power, 5750 MHz, Antenna 0, 50 MHz

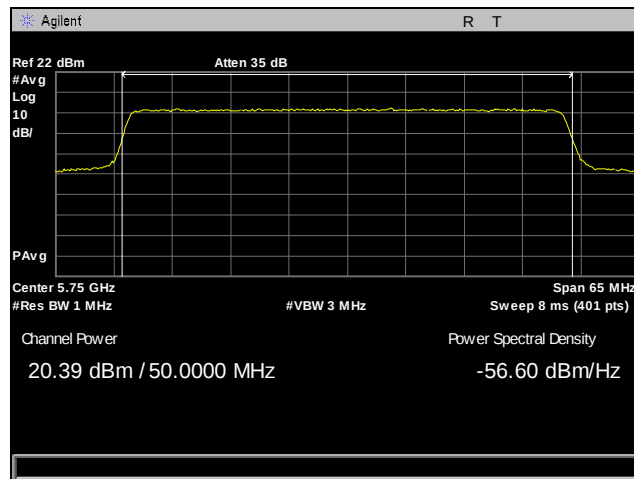


Plot 237. Conducted Output Power, 5795 MHz, Antenna 0, 50 MHz

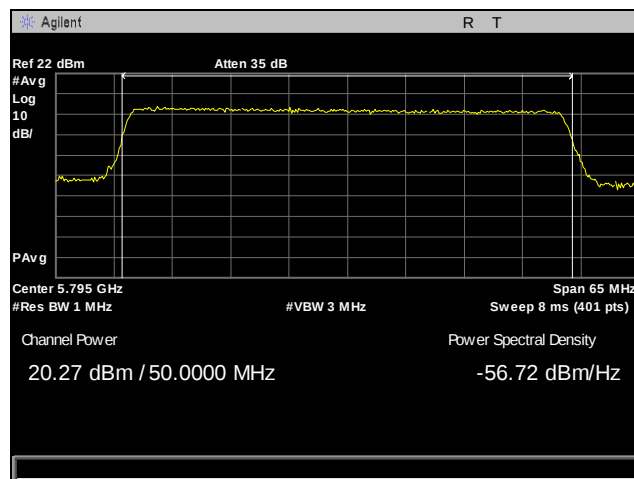


Plot 238. Conducted Output Power, 5825 MHz, Antenna 0, 50 MHz

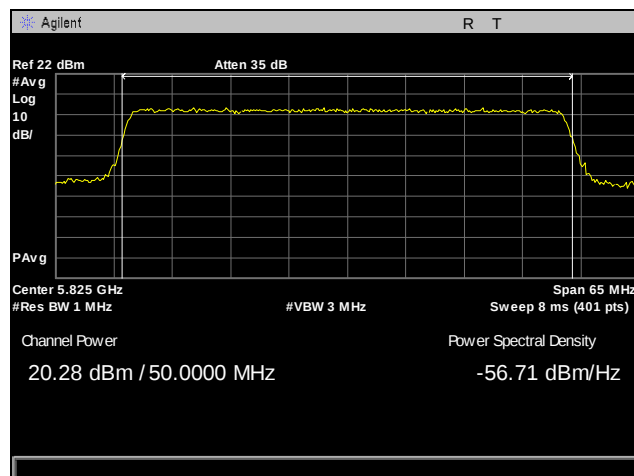
Conducted Output Power, Antenna 1, 50 MHz, UNII 3



Plot 239. Conducted Output Power, 5750 MHz, Antenna 1, 50 MHz



Plot 240. Conducted Output Power, 5795 MHz, Antenna 1, 50 MHz



Plot 241. Conducted Output Power, 5825 MHz, Antenna 1, 50 MHz

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.407(a)(1)(i) & § 15.407(a)(3): Peak Power Spectral Density

Test Requirements: **§ 15.407(a)(1)(i):** 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.

§ 15.407(a)(3): 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.

Test Procedure: The transmitter was connected directly to a Spectrum Analyzer through an attenuator. The power level was set to the maximum level on the EUT. The RBW was set to 1MHz and the VBW was set to 3MHz. The method of measurement used was method SA-1 from 789033 D02 General UNII Test Procedures v01. Plots are correct for attenuators and cable loss. Tables provide PSD levels for both a 29 dBi and 34 dBi antenna as mentioned in 15.203.

Test Results: Equipment was compliant with the peak power spectral density limits of **§ 15.407 (a)(1)(i)** and **§ 15.407(a)(3)**. The peak power spectral density was determined from plots on the following page(s).

Test Engineer(s): Jason Allnutt

Test Date(s): 11/18/14 and 11/27/14



Figure 3. Power Spectral Density Test Setup

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5160	-4.529	-4.553	0.35	0.35	0.70	-1.53	Compliant
5171	-0.168	0.297	0.96	1.07	2.03	3.08	Compliant
5182	4.132	4.545	2.59	2.85	5.44	7.35	Compliant
5245	4.330	5.063	2.71	3.21	5.92	7.72	Compliant

Table 40. Peak Power Spectral Density, Test Results, 10 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5166	-10.140	-9.358	0.10	0.12	0.21	-6.72	Compliant
5171	-7.362	-7.196	0.18	0.19	0.37	-4.27	Compliant
5176	-2.680	-1.836	0.54	0.66	1.19	0.77	Compliant
5200	1.778	2.363	1.51	1.72	3.23	5.09	Compliant
5240	1.789	2.449	1.51	1.76	3.27	5.14	Compliant

Table 41. Peak Power Spectral Density, Test Results, 20 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5170	-11.450	-10.680	0.07	0.09	0.16	-8.04	Compliant
5178	-9.783	-8.683	0.11	0.14	0.24	-6.19	Compliant
5188	-5.096	-4.573	0.31	0.35	0.66	-1.82	Compliant
5197	0.121	0.758	1.03	1.19	2.22	3.46	Compliant
5235	0.395	1.047	1.10	1.27	2.37	3.74	Compliant

Table 42. Peak Power Spectral Density, Test Results, 30 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5175	-12.880	-12.070	0.05	0.06	0.11	-9.45	Compliant
5185	-10.730	-9.962	0.08	0.10	0.19	-7.32	Compliant
5200	-4.954	-5.098	0.32	0.31	0.63	-2.02	Compliant
5209	-1.025	-0.682	0.79	0.85	1.64	2.16	Compliant
5230	-0.946	0.025	0.80	1.01	1.81	2.58	Compliant

Table 43. Peak Power Spectral Density, Test Results, 40 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5180	-13.810	-13.190	0.04	0.05	0.09	-10.48	Compliant
5190	-11.660	-10.670	0.07	0.09	0.15	-8.13	Compliant
5209	-5.989	-6.592	0.25	0.22	0.47	-3.27	Compliant
5218	-1.725	-2.057	0.67	0.62	1.29	1.12	Compliant
5225	-2.671	-0.793	0.54	0.83	1.37	1.38	Compliant

Table 44. Peak Power Spectral Density, Test Results, 50 MHz, UNII 1, 29 dBi Antenna & 23 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5730	10.18	10.27	10.42	10.64	21.06	13.24	Compliant
5795	10.19	10.57	10.45	11.40	21.85	13.39	Compliant
5845	10.18	10.61	10.42	11.51	21.93	13.41	Compliant

Table 45. Peak Power Spectral Density, Test Results, 10 MHz, UNII 3, 29 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5735	5.79	6.54	3.80	4.51	8.30	9.19	Compliant
5795	7.53	7.76	5.66	5.96	11.63	10.66	Compliant
5840	5.97	7.73	3.96	5.93	9.89	9.95	Compliant

Table 46. Peak Power Spectral Density, Test Results, 20 MHz, UNII 3, 29 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5740	5.26	6.18	3.36	4.15	7.51	8.76	Compliant
5795	4.87	5.35	3.07	3.43	6.50	8.13	Compliant
5835	5.33	6.09	3.42	4.06	7.48	8.74	Compliant

Table 47. Peak Power Spectral Density, Test Results, 30 MHz, UNII 3, 29 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5745	4.06	4.23	2.55	2.65	5.19	7.15	Compliant
5795	4.51	4.40	2.83	2.76	5.58	7.47	Compliant
5830	4.40	4.83	2.76	3.04	5.80	7.63	Compliant

Table 48. Peak Power Spectral Density, Test Results, 40 MHz, UNII 3, 29 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5750	3.44	4.23	2.21	2.65	4.86	6.87	Compliant
5795	4.56	3.46	2.85	2.22	5.07	7.05	Compliant
5825	3.05	4.53	2.02	2.84	4.86	6.86	Compliant

Table 49. Peak Power Spectral Density, Test Results, 50 MHz, UNII 3, 29 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5160	-10.289	-10.313	0.09	0.09	0.19	-7.29	Compliant
5171	-5.928	-5.463	0.26	0.28	0.54	-2.68	Compliant
5182	-1.628	-1.215	0.69	0.76	1.44	1.59	Compliant
5245	-1.430	-0.697	0.72	0.85	1.57	1.96	Compliant

Table 50. Peak Power Spectral Density, Test Results, 10 MHz, UNII 1, 34 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5166	-15.003	-14.221	0.03	0.04	0.07	-11.58	Compliant
5171	-12.225	-12.059	0.06	0.06	0.12	-9.13	Compliant
5176	-7.543	-6.699	0.18	0.21	0.39	-4.09	Compliant
5200	-3.085	-2.500	0.49	0.56	1.05	0.23	Compliant
5240	-3.074	-2.414	0.49	0.57	1.07	0.28	Compliant

Table 51. Peak Power Spectral Density, Test Results, 20 MHz, UNII 1, 34 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5170	-17.018	-16.248	0.02	0.02	0.04	-13.61	Compliant
5178	-15.351	-14.251	0.03	0.04	0.07	-11.76	Compliant
5188	-10.664	-10.141	0.09	0.10	0.18	-7.38	Compliant
5197	-5.447	-4.810	0.29	0.33	0.62	-2.11	Compliant
5235	-5.173	-4.521	0.30	0.35	0.66	-1.82	Compliant

Table 52. Peak Power Spectral Density, Test Results, 30 MHz, UNII 1, 34 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5175	-18.742	-17.932	0.01	0.02	0.03	-15.31	Compliant
5185	-16.592	-15.824	0.02	0.03	0.05	-13.18	Compliant
5200	-10.816	-10.960	0.08	0.08	0.16	-7.88	Compliant
5209	-6.887	-6.544	0.20	0.22	0.43	-3.70	Compliant
5230	-6.808	-5.837	0.21	0.26	0.47	-3.29	Compliant

Table 53. Peak Power Spectral Density, Test Results, 40 MHz, UNII 1, 34 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5180	-18.890	-18.270	0.01	0.01	0.03	-15.56	Compliant
5190	-16.740	-15.750	0.02	0.03	0.05	-13.21	Compliant
5209	-11.069	-11.672	0.08	0.07	0.15	-8.35	Compliant
5218	-6.805	-7.137	0.21	0.19	0.40	-3.96	Compliant
5225	-7.751	-5.873	0.17	0.26	0.43	-3.70	Compliant

Table 54. Peak Power Spectral Density, Test Results, 50 MHz, UNII 1, 34 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5730	4.38	4.47	2.74	2.80	5.54	7.44	Compliant
5795	4.39	4.77	2.75	3.00	5.75	7.59	Compliant
5845	4.38	4.81	2.74	3.03	5.77	7.61	Compliant

Table 55. Peak Power Spectral Density, Test Results, 10 MHz, UNII 3, 34 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5735	0.99	1.74	1.26	1.49	2.75	4.39	Compliant
5795	2.73	2.96	1.88	1.98	3.85	5.86	Compliant
5840	1.17	2.93	1.31	1.96	3.27	5.15	Compliant

Table 56. Peak Power Spectral Density, Test Results, 20 MHz, UNII 3, 34 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5740	-0.04	0.88	0.99	1.22	2.22	3.46	Compliant
5795	-0.43	0.05	0.91	1.01	1.92	2.83	Compliant
5835	0.03	0.79	1.01	1.20	2.21	3.44	Compliant

Table 57. Peak Power Spectral Density, Test Results, 30 MHz, UNII 3, 34 dBi Antenna

40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5745	-0.94	-0.77	0.81	0.84	1.64	2.15	Compliant
5795	-0.49	-0.60	0.89	0.87	1.77	2.47	Compliant
5830	-0.60	-0.17	0.87	0.96	1.83	2.63	Compliant

Table 58. Peak Power Spectral Density, Test Results, 40 MHz, UNII 3, 34 dBi Antenna

50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5750	-0.96	-0.17	0.80	0.96	1.76	2.47	Compliant
5795	0.16	-0.94	1.04	0.81	1.84	2.65	Compliant
5825	-1.35	0.13	0.73	1.03	1.76	2.46	Compliant

Table 59. Peak Power Spectral Density, Test Results, 50 MHz, UNII 3, 34 dBi Antenna

10 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5730	10.18	10.27	10.42	10.64	21.06	13.24	Compliant
5738	13.98	13.94	25.00	24.77	49.78	16.97	Compliant
5741	15.62	15.48	36.48	35.32	71.79	18.56	Compliant
5745	16.19	17.07	41.59	50.93	92.52	19.66	Compliant
5833	16.77	17.29	47.53	53.58	101.11	20.05	Compliant
5835	14.77	15.59	29.99	36.22	66.22	18.21	Compliant
5839	12.92	13.80	19.59	23.99	43.58	16.39	Compliant
5845	10.18	10.61	10.42	11.51	21.93	13.41	Compliant

Table 60. Peak Power Spectral Density, Test Results, 10 MHz, UNII 3, 23 dBi Antenna

20 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5735	5.79	6.54	3.80	4.51	8.30	9.19	Compliant
5750	10.40	10.36	10.96	10.86	21.83	13.39	Compliant
5755	12.86	12.94	19.32	19.68	39.00	15.91	Compliant
5760	14.52	13.65	28.31	23.17	51.49	17.12	Compliant
5820	12.67	13.43	18.49	22.03	40.52	16.08	Compliant
5825	11.96	12.53	15.70	17.91	33.61	15.26	Compliant
5830	10.84	11.63	12.13	14.55	26.69	14.26	Compliant
5840	5.97	7.73	3.96	5.93	9.89	9.95	Compliant

Table 61. Peak Power Spectral Density, Test Results, 20 MHz, UNII 3, 23 dBi Antenna

30 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5740	5.26	6.18	3.36	4.15	7.51	8.76	Compliant
5765	8.63	9.18	7.29	8.27	15.56	11.92	Compliant
5770	10.54	10.42	11.32	11.02	22.34	13.49	Compliant
5775	10.71	12.86	11.78	19.32	31.10	14.93	Compliant
5820	12.08	11.41	16.14	13.84	29.98	14.77	Compliant
5825	9.96	10.84	9.90	12.13	22.03	13.43	Compliant
5830	8.33	8.50	6.80	7.08	13.88	11.43	Compliant
5835	5.33	6.09	3.42	4.06	7.48	8.74	Compliant
5740	5.26	6.18	3.36	4.15	7.51	8.76	Compliant

Table 62. Peak Power Spectral Density, Test Results, 30 MHz, UNII 3, 23 dBi Antenna

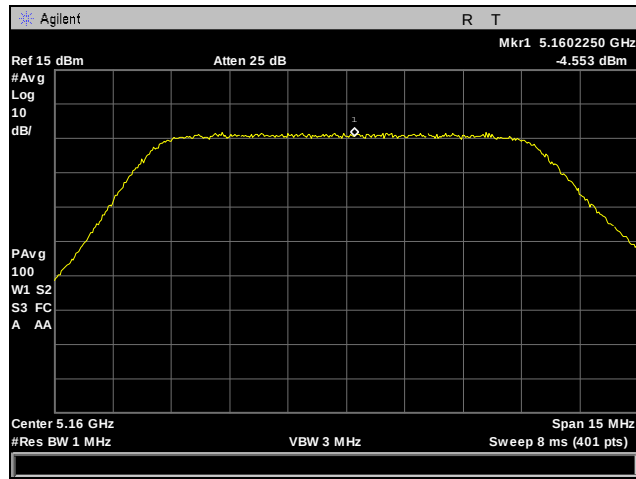
40 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5745	4.06	4.23	2.55	2.65	5.19	7.15	Compliant
5765	7.67	7.01	5.85	5.02	10.87	10.36	Compliant
5770	9.55	10.22	9.01	10.52	19.53	12.91	Compliant
5775	10.80	12.15	12.02	16.41	28.43	14.54	Compliant
5805	9.94	12.16	9.85	16.44	26.30	14.20	Compliant
5810	8.39	9.18	6.90	8.28	15.18	11.81	Compliant
5815	7.53	7.49	5.66	5.61	11.27	10.52	Compliant
5830	4.40	4.83	2.76	3.04	5.80	7.63	Compliant

Table 63. Peak Power Spectral Density, Test Results, 40 MHz, UNII 3, 23 dBi Antenna

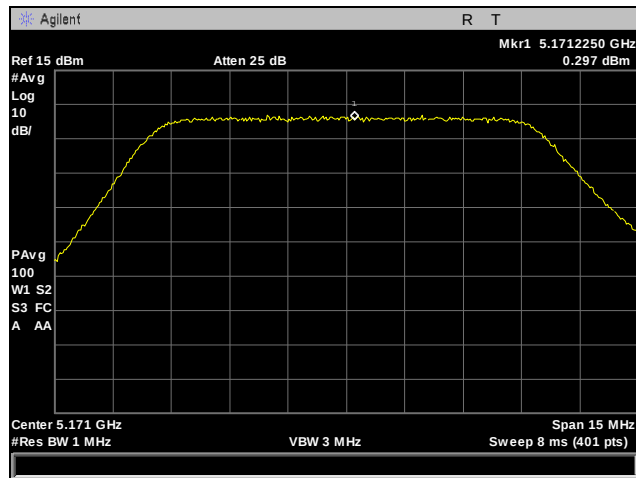
50 MHz							
Freq.	Antenna 1 (dBm)	Antenna 0 (dBm)	Antenna 1 (mW)	Antenna 0 (mW)	Sum (mW)	Sum (dBm)	Result
5750	3.44	4.23	2.21	2.65	4.86	6.87	Compliant
5765	7.09	8.08	5.12	6.43	11.55	10.62	Compliant
5770	8.60	9.56	7.24	9.03	16.27	12.11	Compliant
5775	9.14	10.37	8.21	10.89	19.09	12.81	Compliant
5800	9.06	10.48	8.06	11.17	19.22	12.84	Compliant
5805	7.27	7.77	5.33	5.98	11.31	10.54	Compliant
5810	6.38	6.42	4.35	4.39	8.74	9.41	Compliant
5825	3.05	4.53	2.02	2.84	4.86	6.86	Compliant

Table 64. Peak Power Spectral Density, Test Results, 50 MHz, UNII 3, 23 dBi Antenna

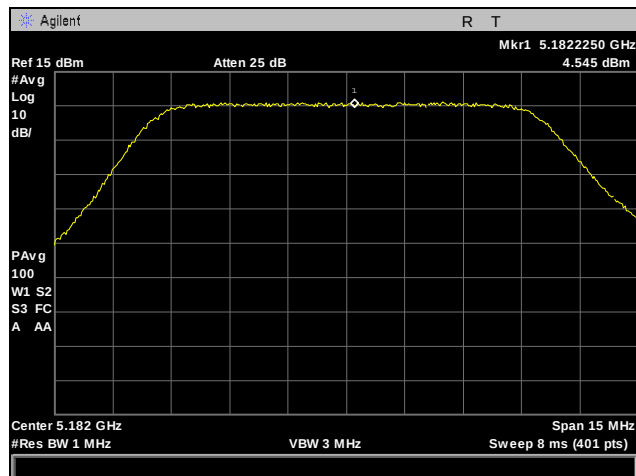
Peak Power Spectral Density, Antenna 0, 10 MHz, UNII 1



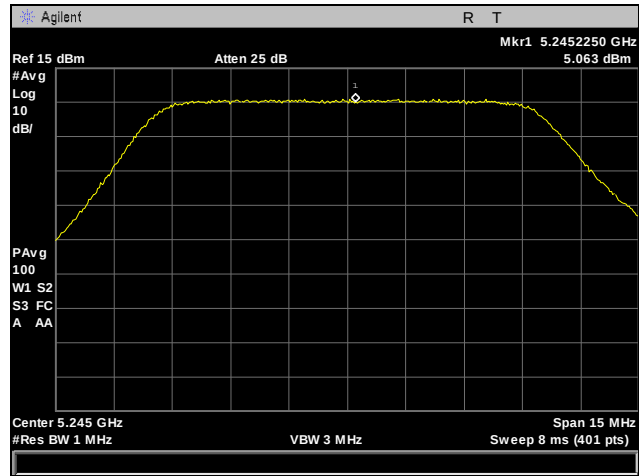
Plot 242. Peak Power Spectral Density, 5160 MHz, Antenna 0, 10 MHz



Plot 243. Peak Power Spectral Density, 5171 MHz, Antenna 0, 10 MHz



Plot 244. Peak Power Spectral Density, 5182 MHz, Antenna 0, 10 MHz



Plot 245. Peak Power Spectral Density, 5245 MHz, Antenna 0, 10 MHz