Report On

FCC and Industry Canada Testing of the
Frontier Silicon Ltd Minuet/FS5332
In accordance with FCC 47 CFR Part 15E, Industry Canada RSS-247 and Industry Canada RSS-GEN

COMMERCIAL-IN-CONFIDENCE

FCC ID: YYX-FS5332
IC: 11458A-FS5332

Document 75934517 Report 05 Issue 1 August 2016

Product Service

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Frontier Silicon Ltd Minuet/FS5332
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Document 75934517 Report 05 Issue 1

August 2016

PREPARED FOR

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PREPARED BY

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APPROVED BY

Simon Bennett
Authorised Signatory

DATED 02 August 2016

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15E, Industry Canada RSS-247 and Industry Canada RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineer(s);

G Lawler M Choudhury J Tuckwell

UKAS TESTING 0141

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SECTION 1

REPORT SUMMARY

FCC and Industry Canada Testing of the
Frontier Silicon Ltd Minuet/FS5332
In accordance with FCC 47 CFR Part 15E, Industry Canada RSS-247
and Industry Canada RSS-GEN

Product Service

1.1 INTRODUCTION

The information contained in this report is intended to show the verification of FCC and Industry Canada Testing of the Frontier Silicon Ltd Minuet/FS5332 to the requirements of FCC 47 CFR Part 15E, Industry Canada RSS-247 and Industry Canada RSS-GEN.

Objective	To perform FCC and Industry Canada Testing to determine the Equipment Under Test's (EUT's) compliance with the Test Specification, for the series of tests carried out.
Manufacturer	Frontier Silicon Ltd
Model Number(s)	Minuet/FS5332
Serial Number(s)	RAD108621 (Module) and RAD108181 (Platform) - Conducted RAD108620 (Module) and RAD108704 (Platform) - Conducted RAD108624 (Module) and RAD108700 (Platform) - Radiated RAD108616 (Module) and RAD108700 (Platform) - Radiated
Number of Samples Tested	4
Test Specification/Issue/Date	FCC 47 CFR Part 15E (2015) Industry Canada RSS-247 (Issue 1, 2015) Industry Canada RSS-GEN (Issue 4, 2014)
Incoming Release Date	Application Form 11 July 2016
Disposal Reference Number Date	Held Pending Disposal Not Applicable Not Applicable
Order Number Date	FD160438 08 April 2016
Start of Test	10 May 2016
Finish of Test	5 July 2016
Name of Engineer(s)	G Lawler M Choudhury J Tuckwell
Related Document(s)	KDB 789033 D02 General UNII Test Procedures New Rules v01r02; ETSI TR 100 028 (2001) and ANCI C63.10 (2013)

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1.2 BRIEF SUMMARY OF RESULTS

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15E, Industry Canada RSS-247 and Industry Canada RSS-GEN is shown below.

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15E	RSS-247	RSS-GEN			
802.11a						
2.1	15.207	-	8.8	AC Line Conducted Emissions	Pass	
2.2	15.407 (a)	6.2	-	26 dB Bandwidth	Pass	
2.3	15.407 (a)(1)(2)	6.2	-	Maximum Conducted Output Power	Pass	
2.4	15.407 (a)(5)	6.2	-	Peak Power Spectral Density	Pass	
2.5	15.407 (b), 15.205 and 15.209	6.2	-	Spurious Radiated Emissions	Pass	
2.6	15.407 (g)	-		Frequency Stability	Pass	
2.7	15.205	-	8.10	Restricted Band Edges	Pass	
2.8	15.407 (b)(1)(2)(3)(4)	6.2	-	Authorised Band Edges	Pass	

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Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15E	RSS-247	RSS-GEN			
802.11n 20 MHz Bandwidth						
2.2	15.407 (a)	6.2	-	26 dB Bandwidth	Pass	
2.3	15.407 (a)(1)(2)	6.2	-	Maximum Conducted Output Power	Pass	
2.4	15.407 (a)(5)	6.2	-	Peak Power Spectral Density	Pass	
2.5	15.407 (b), 15.205 and 15.209	6.2	-	Spurious Radiated Emissions	Pass	
2.6	15.407 (g)	-		Frequency Stability	Pass	
2.7	15.205	-	8.10	Restricted Band Edges	Pass	
2.8	15.407 (b)(1)(2)(3)(4)	6.2	-	Authorised Band Edges	Pass	
802.11n 40 MHz Bandwidth						
2.2	15.407 (a)	6.2	-	26 dB Bandwidth	Pass	
2.3	15.407 (a)(1)(2)	6.2	-	Maximum Conducted Output Power	Pass	
2.4	15.407 (a)(5)	6.2	-	Peak Power Spectral Density	Pass	
2.6	15.407 (g)	-		Frequency Stability	Pass	
2.7	15.205	-	8.10	Restricted Band Edges	Pass	
2.8	15.407 (b)(1)(2)(3)(4)	6.2	-	Authorised Band Edges	Pass	

Product Service

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15E	RSS-247	RSS-GEN			
802.11ac 20 MHz Bandwidth						
2.2	15.407 (a)	6.2	-	26 dB Bandwidth	Pass	
2.3	15.407 (a)(1)(2)	6.2	-	Maximum Conducted Output Power	Pass	
2.4	15.407 (a)(5)	6.2	-	Peak Power Spectral Density	Pass	
2.5	15.407 (b), 15.205 and 15.209	6.2	-	Spurious Radiated Emissions	Pass	
2.6	15.407 (g)	-		Frequency Stability	Pass	
2.7	15.205	-	8.10	Restricted Band Edges	Pass	
2.8	15.407 (b)(1)(2)(3)(4)	6.2	-	Authorised Band Edges	Pass	
802.11ac 40 MHz Bandwidth						
2.2	15.407 (a)	6.2	-	26 dB Bandwidth	Pass	
2.3	15.407 (a)(1)(2)	6.2	-	Maximum Conducted Output Power	Pass	
2.4	15.407 (a)(5)	6.2	-	Peak Power Spectral Density	Pass	
2.6	15.407 (g)	-		Frequency Stability	Pass	
2.7	15.205	-	8.10	Restricted Band Edges	Pass	
2.8	15.407 (b)(1)(2)(3)(4)	6.2	-	Authorised Band Edges	Pass	

Product Service

Section	Specification Clause			Test Description	Result	Comments/Base Standard
	Part 15E	RSS-247	RSS-GEN			
802.11ac 80 MHz Bandwidth						
2.2	15.407 (a)	6.2	-	26 dB Bandwidth	Pass	
2.3	15.407 (a)(1)(2)	6.2	-	Maximum Conducted Output Power	Pass	
2.4	15.407 (a)(5)	6.2	-	Peak Power Spectral Density	Pass	
2.6	15.407 (g)	-		Frequency Stability	Pass	
2.7	15.205	-	8.10	Restricted Band Edges	Pass	
2.8	15.407 (b)(1)(2)(3)(4)	6.2	-	Authorised Band Edges	Pass	
802.11a (2nd Diversity Antenna)						
2.5	15.407 (b), 15.205 and 15.209	6.2	-	Spurious Radiated Emissions	Pass	
802.11n 20 MHz Bandwidth (2nd Diversity Antenna)						
2.5	15.407 (b), 15.205 and 15.209	6.2	-	Spurious Radiated Emissions	Pass	
802.11ac 20 MHz Bandwidth (2nd Diversity Antenna)						
2.5	15.407 (b), 15.205 and 15.209	6.2	-	Spurious Radiated Emissions	Pass	

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1.3 APPLICATION FORM

EQUIPMENT DESCRIPTION	
Model Name/Number	Minuet/FS5332
Part Number	HA-FS5332-xxxxxx (where xxxxxxx denotes the customer variant eg HA-FS5332-000001)
Hardware Version	Rev6
Software Version	NS1.0.13
FCC ID (if applicable)	YYX-FS5332
Industry Canada ID (if applicable)	11458A-FS5332
Technical Description (Please provide a brief description of the intended use of the equipment)	Minuet is a module, which when installed in a consumer audio product enables high-quality audio streaming over Wi-Fi, Bluetooth and Ethernet.

INFORMATION REQUIRED			
Modes:			
☒	802.11(a)	☒	802.11(ac)
☒	802.11(n)		
a) The occupied channel bandwidth(s):			
☒	Channel Bandwidth 1: 20MHz	☒	Channel Bandwidth 2:40MHz
☒	Channel Bandwidth 3: 80MHz		
NOTE: Add more lines if the equipment has more channel Bandwidths.			
b) The DFS related operating mode(s) of the equipment:			
☐	Master		
☐	Slave with radar detection		
☒	Slave without radar detection		
NOTE: If the equipment has more than 1 operating mode, tick all that apply.			
c) The equipment can operate in ad-hoc mode:			
☒	no ad-hoc operation		
☐	ad-hoc operation in the frequency range 5150MHz to 5250MHz without DFS		
☐	ad-hoc operation with DFS		
NOTE: If more than 1 is applicable, tick all that apply			
d) Operating Frequency Range(s):			
☒	Range 1: 5150MHz to 5250MHz		
☒	Range 2: 5250MHz to 5350MHz		
☒	Range 3: 5470MHz to 5725MHz		
☒	Range 4: 5725MHz to 5825MHz		
NOTE: If the equipment has more than 1 Operating Frequency Range, tick all that apply.			
e) TPC feature available:		☒ Yes	☐ No

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INFORMATION REQUIRED			
f) If the equipment has a TPC range, the lowest and highest power level (or lowest and highest EIRP level in case of integrated antenna equipment), intended antenna assemblies and corresponding operating frequency range for the TPC range (or for each of the TPC ranges if more than one is implemented).			
TPC range: Applicable Frequency Range:			
☒	5250MHz to 5350MHz		
☒	5470 MHz to 5725 MHz		
☐	A TPC mechanism is not required for systems with an e.i.r.p of less than 500 mW		
DFS Threshold level:	N/A as EUT is slave without radar detection. dBm		
☒	at the antenna connector	☐	in front of the antenna
NOTE: For equipment with a maximum EIRP below 200 mW, the DFS threshold level shall be -62 dBm or less, for equipment with an EIRP of 200 mW or above, the DFS threshold level shall be -64 dBm or less. These levels assume a 0 dBi antenna gain. To define the applicable threshold level at the (temporary) antenna connector, the gain of the antenna (in dBi) shall be added to the threshold level. If more than one antenna is intended for this TPC range or power setting, the antenna gain of the antenna with the lowest gain shall be used.			
Power Setting 1: Applicable Frequency Range: 5150 MHz to 5250 MHz			
Conducted Average Power	13 dBm	Average EIRP	17.7 dBm
Power Setting 2: Applicable Frequency Range: 5250 MHz to 5350 MHz			
Conducted Average Power	13 dBm	Average EIRP	17.7 dBm
Power Setting 3: Applicable Frequency Range: 5470 MHz to 5725MHz			
Conducted Average Power	13 dBm	Average EIRP	17.7 dBm
Power Setting 4: Applicable Frequency Range: 5725 MHz to 5825MHz			
Conducted Average Power	13 dBm	Average EIRP	17.7 dBm

Table 3: Intended Antenna Assemblies

Antenna Assembly name	Antenna Gain (dBi)
SW700M（SW750M）	4.7
RFPCA431223IMLB301	4.3

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INFORMATION REQUIRED	
h) The extreme operating temperature range that apply to the equipment:	
Please state conditions of normal operation as specified in the users manual: 0 °C to 70 °C	
Supply Voltage:	
☐	AC mains. State AC voltage
☒	DC. State DC voltage
☐	State DC current
In case of DC, indicate the type of power source:	
☐	Internal Power Supply
☒	External Power Supply or AC/DC adapter
☐	Battery Nickel Cadmium
☐	Alkaline
☐	Nickel-Metal Hydride
☐	Lithium-Ion
☐	Lead acid (Vehicle regulated)
☐	Other (please specify):

ADDITIONAL INFORMATION PROVIDED BY THE SUBMITTER					
a) Modulation:					
Continuous duty			☐ Yes	☒	No
Can the transmitter operate un-modulated?			☐ Yes	☒	No
b) Duty Cycle					
Is transmitter intended for :					
Continuous duty			☐ Yes	☒	No
Intermittent duty only			☒ Yes	☐	No
If intermittent duty state DUTY CYCLE					
Transmitter ON	Seconds	Transmitter OFF	Seconds		
☐ Continuous operation possible for testing purposes					
Details:					

I hereby declare that that the information supplied is correct and complete.

Name: Abdul Wahed Dewan Position held: RF Principal Engineer
Date: 11/07/2016

Product Service

1.4 PRODUCT INFORMATION

1.4.1 Technical Description

The Equipment Under Test (EUT) was a Frontier Silicon Ltd Minuet/FS5332. A full technical description can be found in the manufacturer's documentation.

1.5 TEST CONDITIONS

For all tests the EUT was set up in accordance with the relevant test standard and to represent typical operating conditions. Tests were applied with the EUT situated in a shielded enclosure.

The EUT was powered from a 5.00 V DC supply.

FCC Measurement Facility Registration Number
90987 Octagon House, Fareham Test Laboratory

Industry Canada Company Address Code
IC2932B-1 Octagon House, Fareham Test Laboratory

1.6 DEVIATIONS FROM THE STANDARD

No deviations from the applicable test standard were made during testing.

1.7 MODIFICATION RECORD

Modification 0 - No modifications were made to the test sample during testing.

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SECTION 2

TEST DETAILS

FCC and Industry Canada Testing of the
Frontier Silicon Ltd Minuet/FS5332
In accordance with FCC 47 CFR Part 15E, Industry Canada RSS-247
and Industry Canada RSS-GEN

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2.1 AC LINE CONDUCTED EMISSIONS

2.1.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.207
Industry Canada RSS-GEN, Clause 8.8

2.1.2 Equipment Under Test and Modification State

Minuet/FS5332 S/N: RAD108621 (Module) and RAD108181 (Platform) - Modification State 0

2.1.3 Date of Test

5 July 2016

2.1.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.5 Test Procedure

The test was performed in accordance with ANSI C63.10, Clause 6.2.

Remarks

A mains supply cable of 1 m length was used to supply mains power to the EUT from the LISN.

All final measurements were assessed against the emission limits in FCC 47 CFR Part 15, Clause 15.207 and Industry Canada RSS-GEN, Clause 8.8.

2.1.6 Environmental Conditions

Ambient Temperature	22.1°C
Relative Humidity	45.0%

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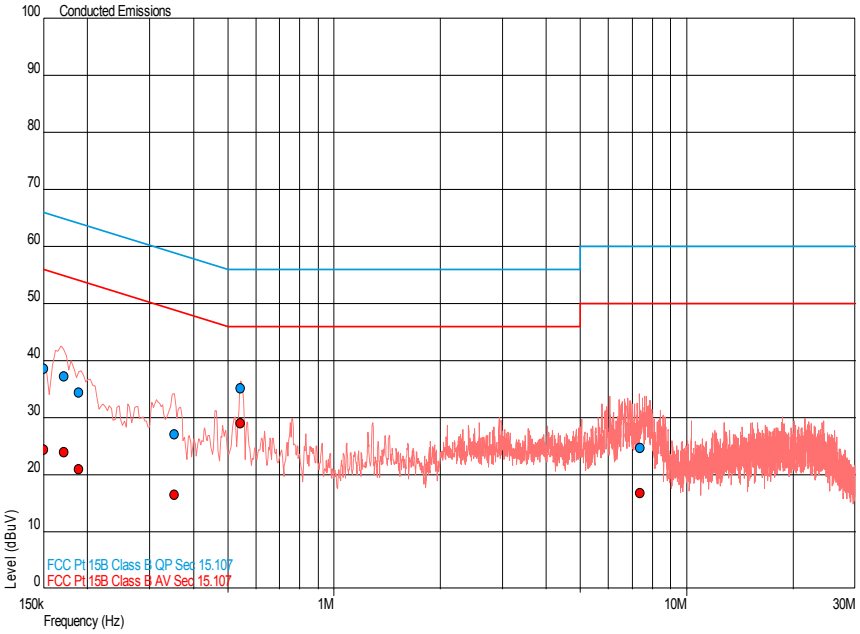
2.1.7 Test Results

802.11a, Live Line, AC Line Conducted Emissions Result

Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.150	38.5	66.0	-27.5	24.4	56.0	-31.6
0.171	37.2	64.9	-27.7	24.0	54.9	-30.9
0.189	34.4	64.1	-29.7	21.0	54.1	-33.1
0.353	27.0	58.9	-31.8	16.6	48.9	-32.3
0.543	35.2	56.0	-20.8	29.1	46.0	-16.9
7.380	24.8	60.0	-35.2	16.9	50.0	-33.1

802.11a, Live Line, AC Line Conducted Emissions Plot



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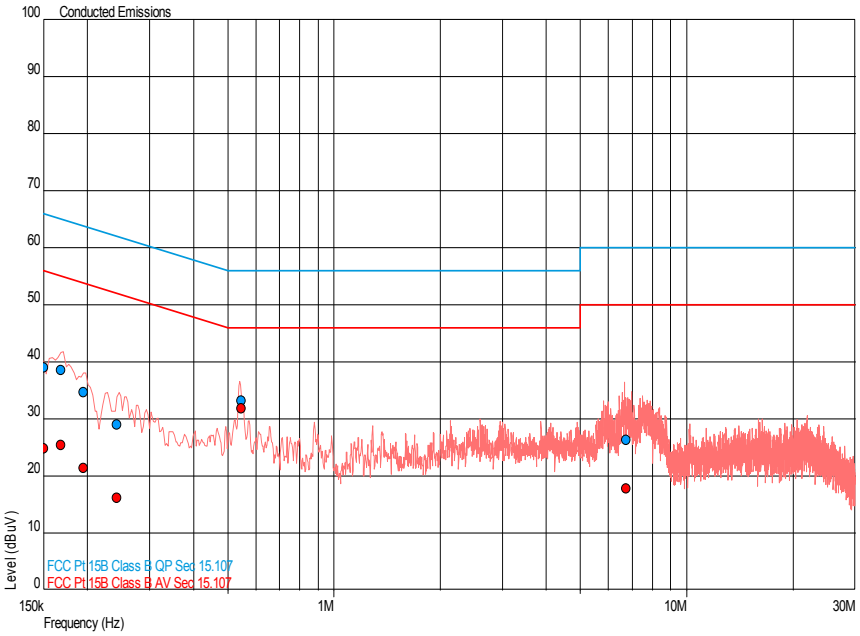
802.11a, Neutral Line, AC Line Conducted Emissions Result

Frequency (MHz)	QP Level (dBuV)	QP Limit (dBuV)	QP Margin (dBuV)	AV Level (dBuV)	AV Limit (dBuV)	AV Margin (dBuV)
0.150	39.0	66.0	-27.0	24.8	56.0	-31.2
0.168	38.5	65.1	-26.5	25.5	55.1	-29.6
0.195	34.7	63.8	-29.1	21.4	53.8	-32.4
0.243	29.1	62.0	-32.9	16.2	52.0	-35.8
0.546	33.2	56.0	-22.8	31.9	46.0	-14.1
6.721	26.4	60.0	-33.6	17.9	50.0	-32.1

802.11a, Neutral Line, AC Line Conducted Emissions Plot



FCC 47 CFR Part 15, Limit Clause 15.207

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

*Decreases with the logarithm of the frequency.

Industry Canada RSS-GEN, Limit Clause 8.8

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

*Decreases with the logarithm of the frequency.

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2.2 26 dB BANDWIDTH

2.2.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (a)
Industry Canada RSS-247, Clause 6.2

2.2.2 Equipment Under Test and Modification State

Minuet/FS5332 S/N: RAD108620 (Module) and RAD108704 (Platform) - Modification State 0

2.2.3 Date of Test

18 May 2016

2.2.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.5 Test Procedure

This test was performed in accordance with KDB 789033 D02 v01r02, Section II clause C.1.

2.2.6 Environmental Conditions

Ambient Temperature	20.5°C
Relative Humidity	50.3%

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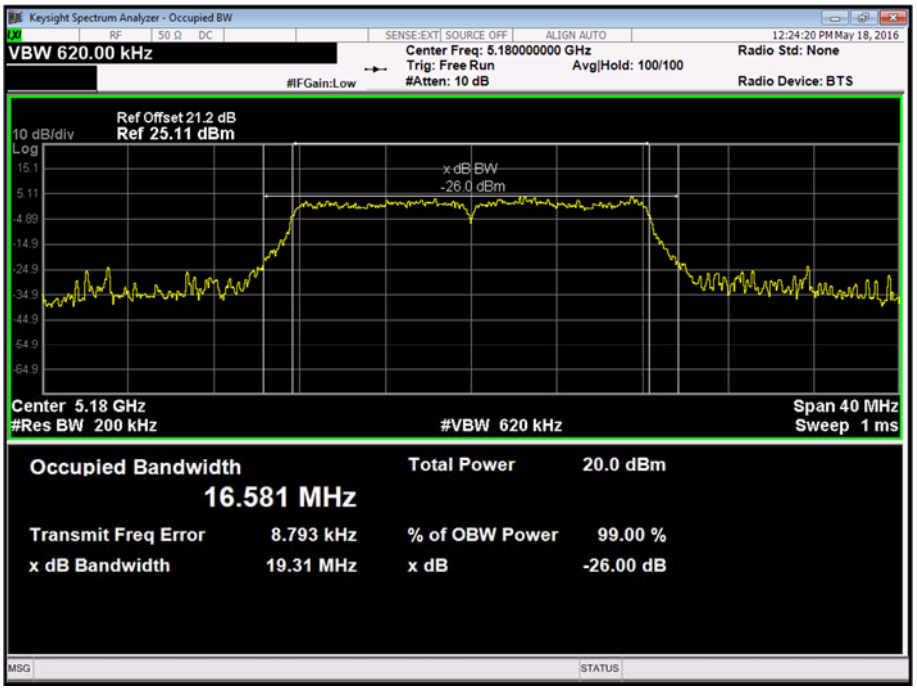
2.2.7 Test Results

802.11a, OFDM, 9 Mbps, Frequency Band 1, 26 dB Bandwidth Results

5180 MHz	5200 MHz	5240 MHz
MHz	MHz	MHz
19.31	19.16	19.52

802.11a, 5180 MHz, OFDM, 9 Mbps, Frequency Band 1, 26 dB Bandwidth Plot



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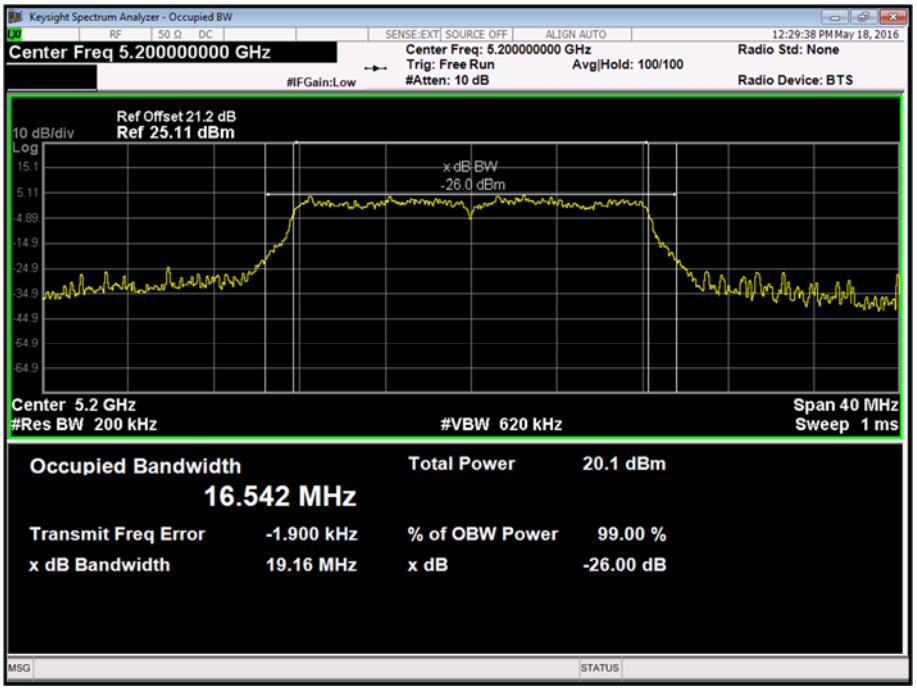
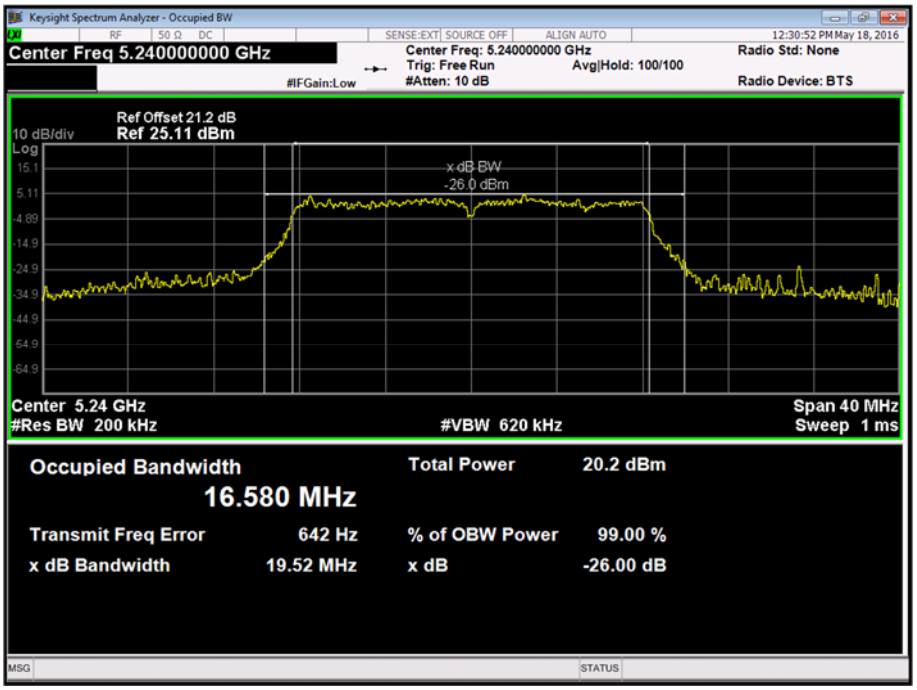
802.11a, 5200 MHz, OFDM, 9 Mbps, Frequency Band 1, 26 dB Bandwidth Plot



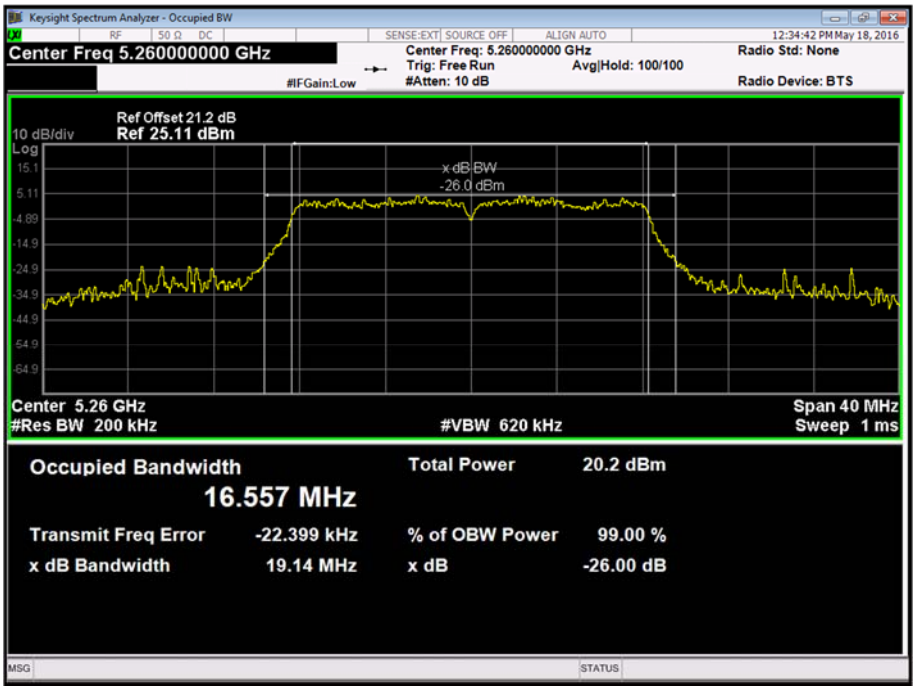
802.11a, 5240 MHz, OFDM, 9 Mbps, Frequency Band 1, 26 dB Bandwidth Plot



802.11a, OFDM, 9 Mbps, Frequency Band 2, 26 dB Bandwidth Results

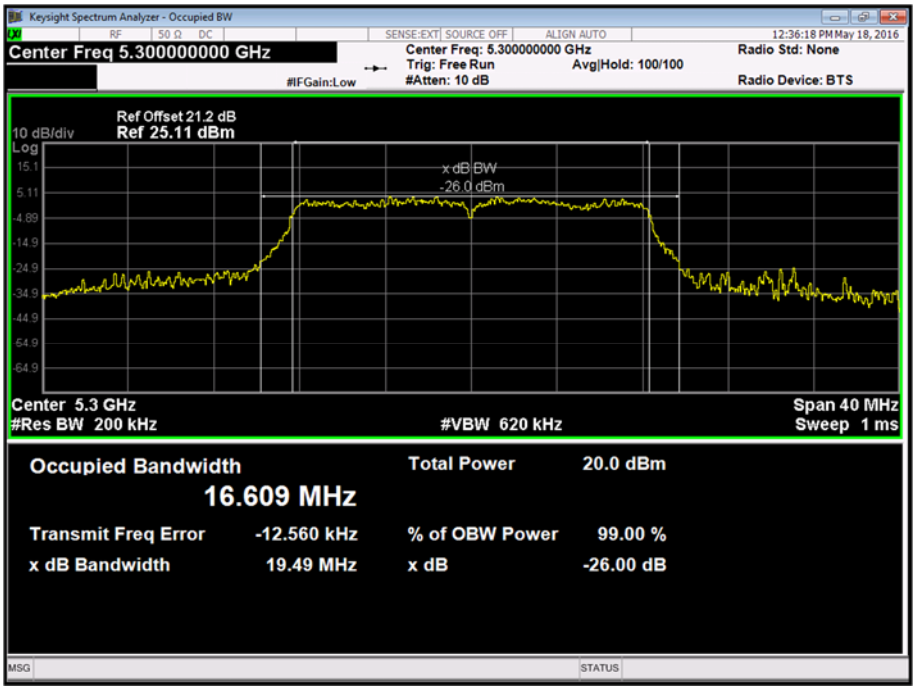
5260 MHz	5300 MHz	5320 MHz
MHz	MHz	MHz
19.14	19.49	19.27

802.11a, 5260 MHz, OFDM, 9 Mbps, Frequency Band 2, 26 dB Bandwidth Plot

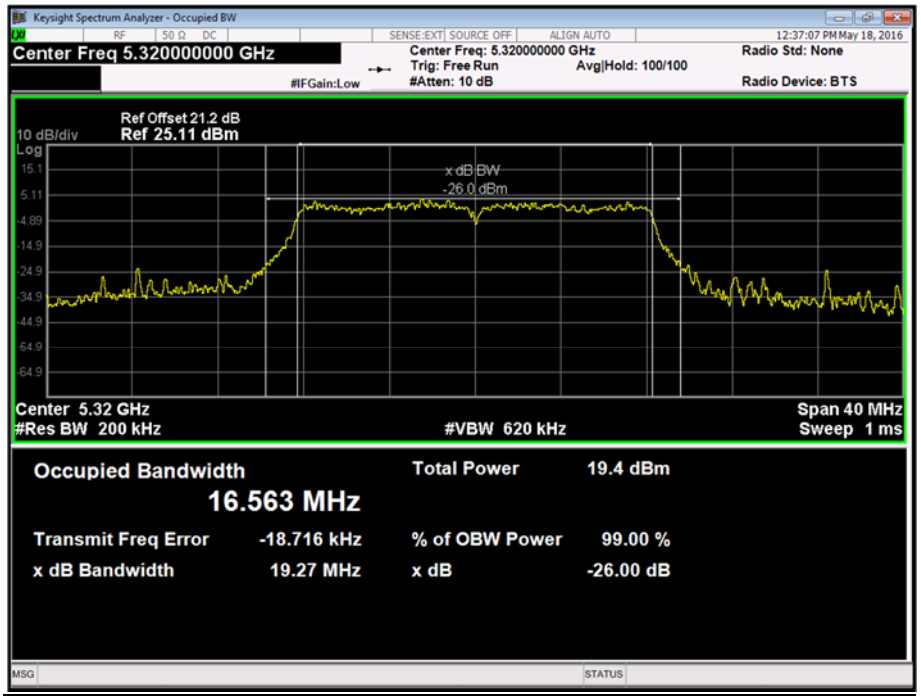


Product Service

802.11a, 5300 MHz, OFDM, 9 Mbps, Frequency Band 2, 26 dB Bandwidth Plot



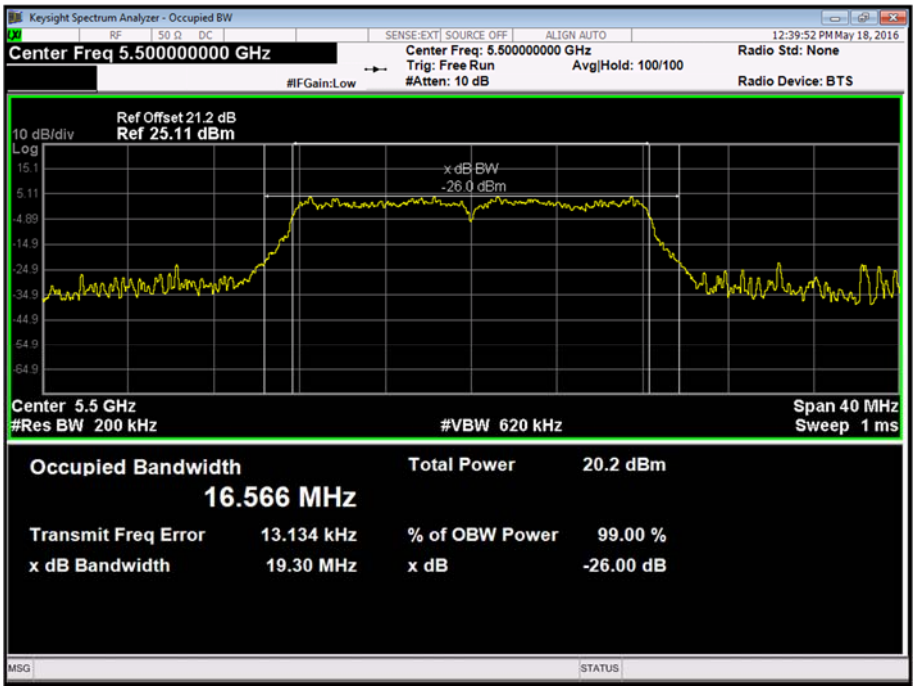
802.11a, 5320 MHz, OFDM, 9 Mbps, Frequency Band 2, 26 dB Bandwidth Plot



802.11a, OFDM, 9 Mbps, Frequency Band 3, 26 dB Bandwidth Results

5500 MHz	5600 MHz	5700 MHz
MHz	MHz	MHz
19.30	19.45	19.25

802.11a, 5500 MHz, OFDM, 9 Mbps, Frequency Band 3, 26 dB Bandwidth Plot



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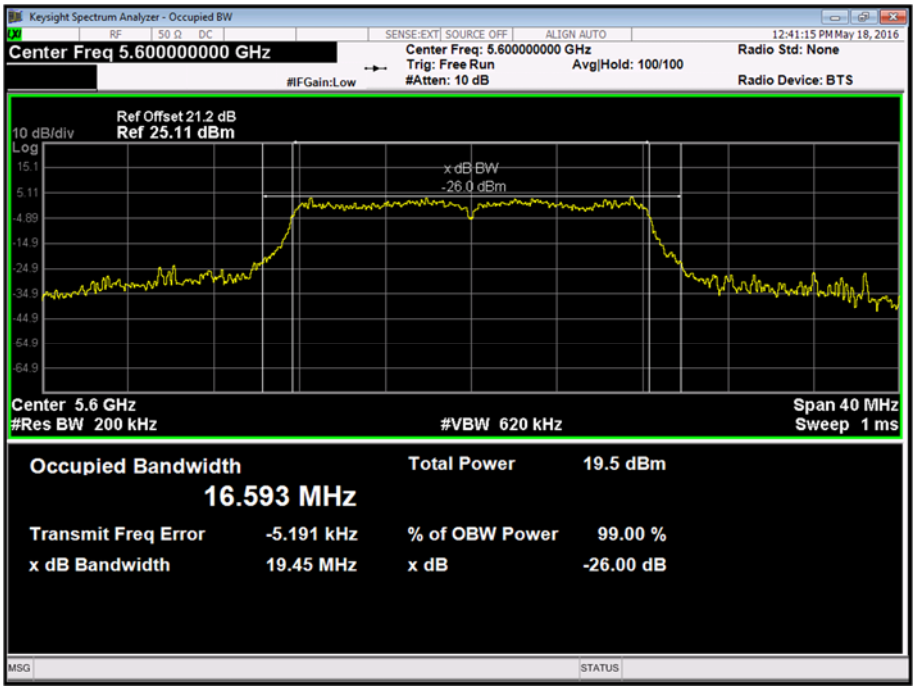
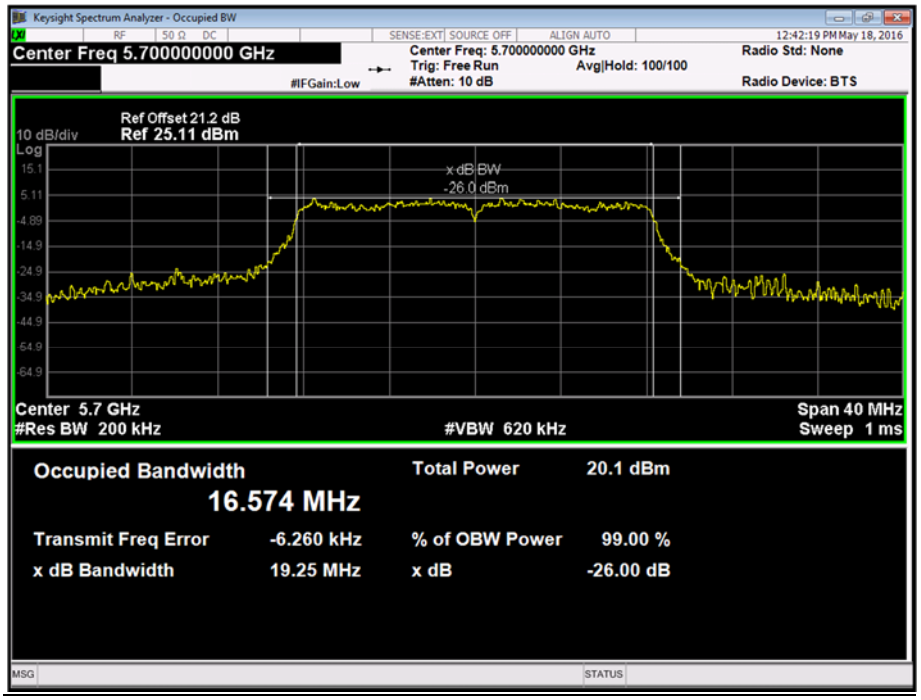
802.11a, 5600 MHz, OFDM, 9 Mbps, Frequency Band 3, 26 dB Bandwidth Plot



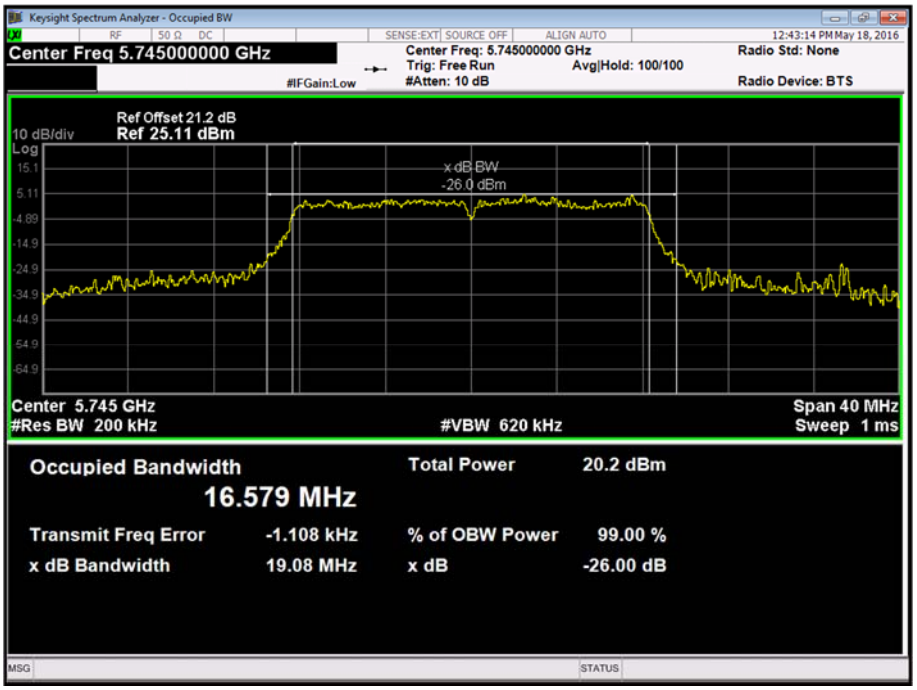
802.11a, 5700 MHz, OFDM, 9 Mbps, Frequency Band 3, 26 dB Bandwidth 3 Plot



802.11a, OFDM, 9 Mbps, Frequency Band 4, 26 dB Bandwidth Results

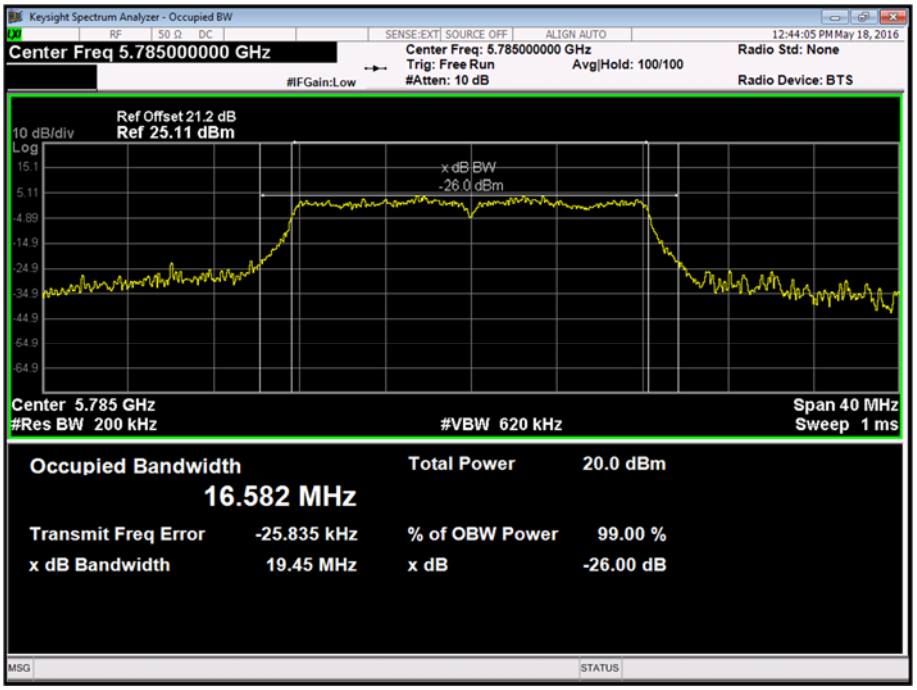
5745 MHz	5785 MHz	5825 MHz
MHz	MHz	MHz
19.08	19.45	19.26

802.11a, 5745 MHz, OFDM, 9 Mbps, Frequency Band 4, 26 dB Bandwidth Plot

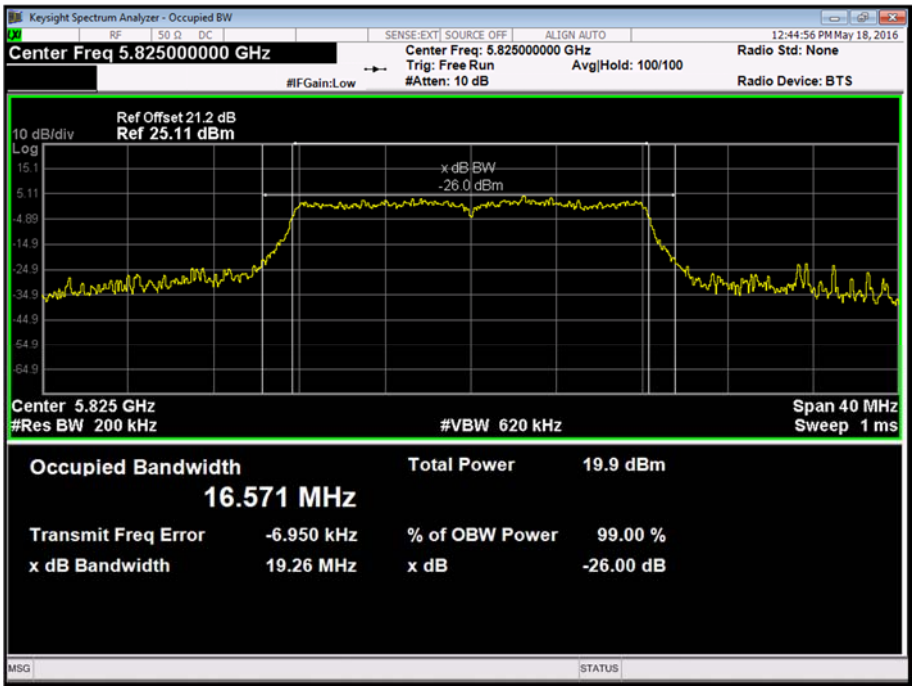


Product Service

802.11a, 5785 MHz, OFDM, 9 Mbps, Frequency Band 4, 26 dB Bandwidth Plot



802.11a, 5825 MHz, OFDM, 9 Mbps, Frequency Band 4, 26 dB Bandwidth Plot



FCC 47 CFR Part 15, Limit Clause 15.407 (a)

No limit specified.

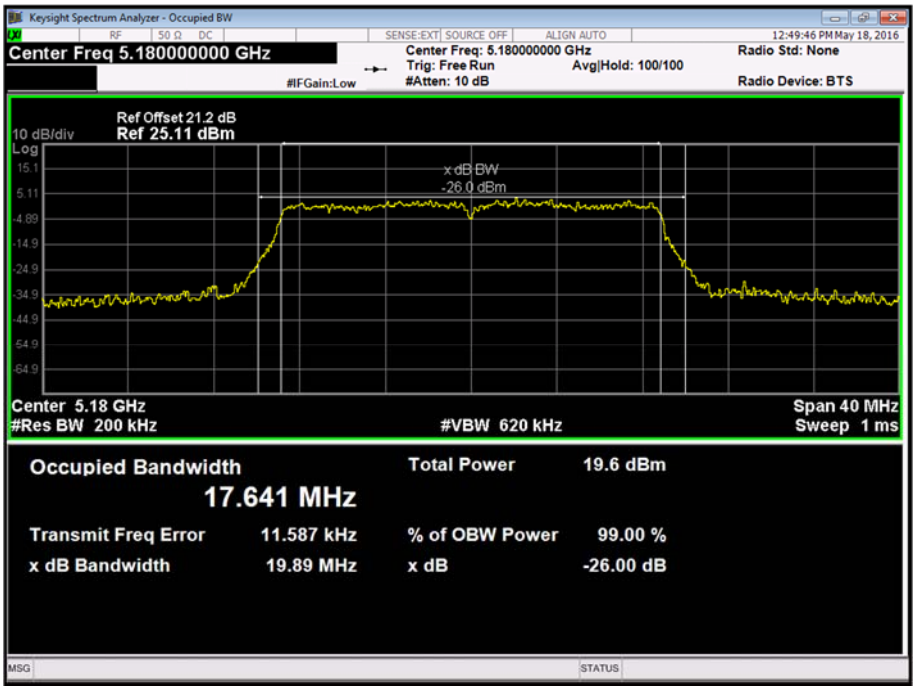
Industry Canada RSS-247, Limit Clause 6.2

No limit specified.

802.11ac 20 MHz Bandwidth, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Results

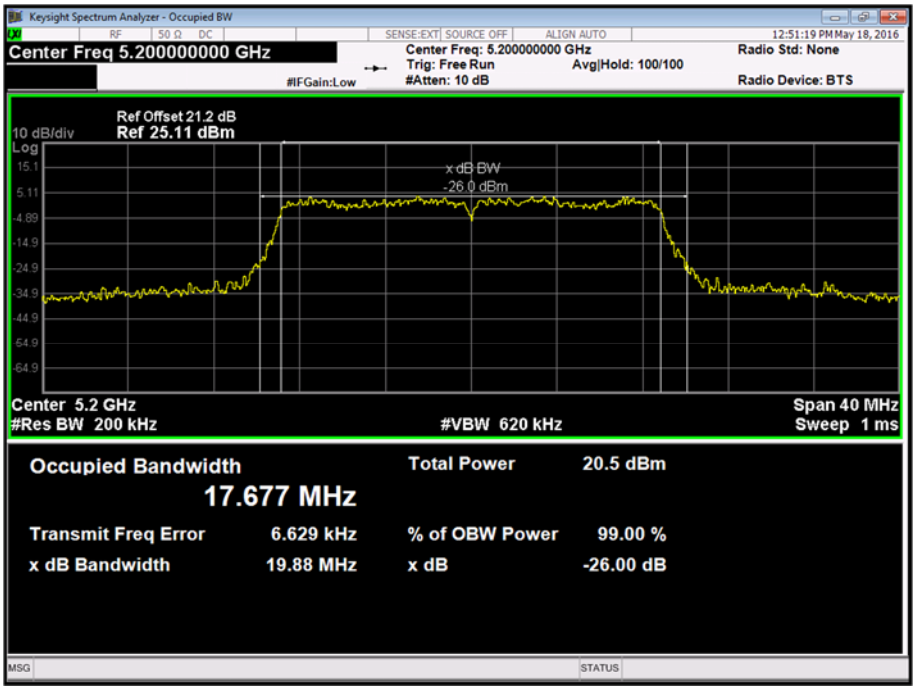
5180 MHz	5200 MHz	5240 MHz
MHz	MHz	MHz
19.89	19.88	19.61

802.11ac 20 MHz Bandwidth, 5180 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot

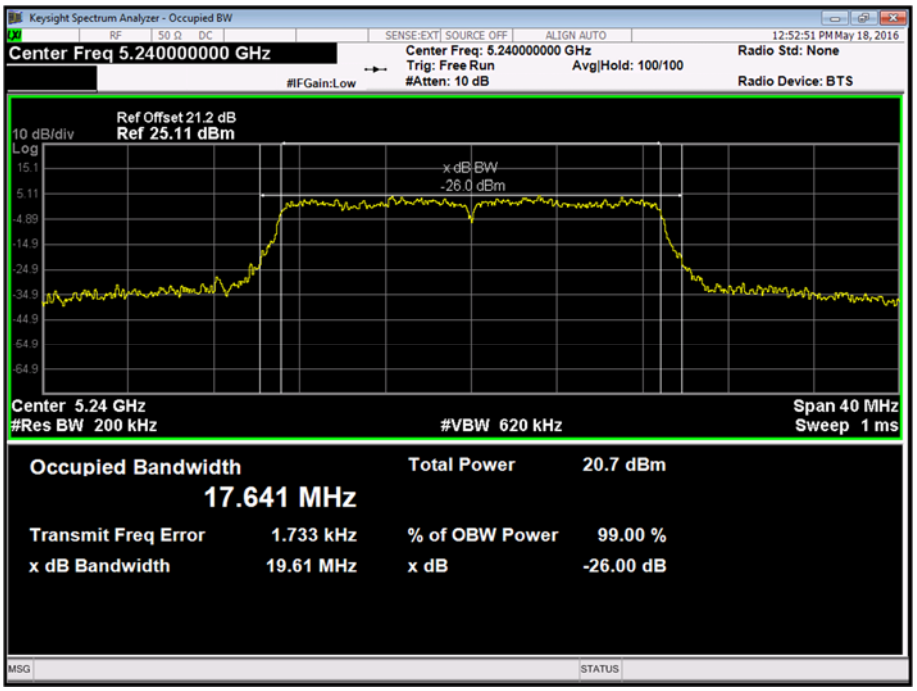


Product Service

802.11ac 20 MHz Bandwidth, 5200 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot



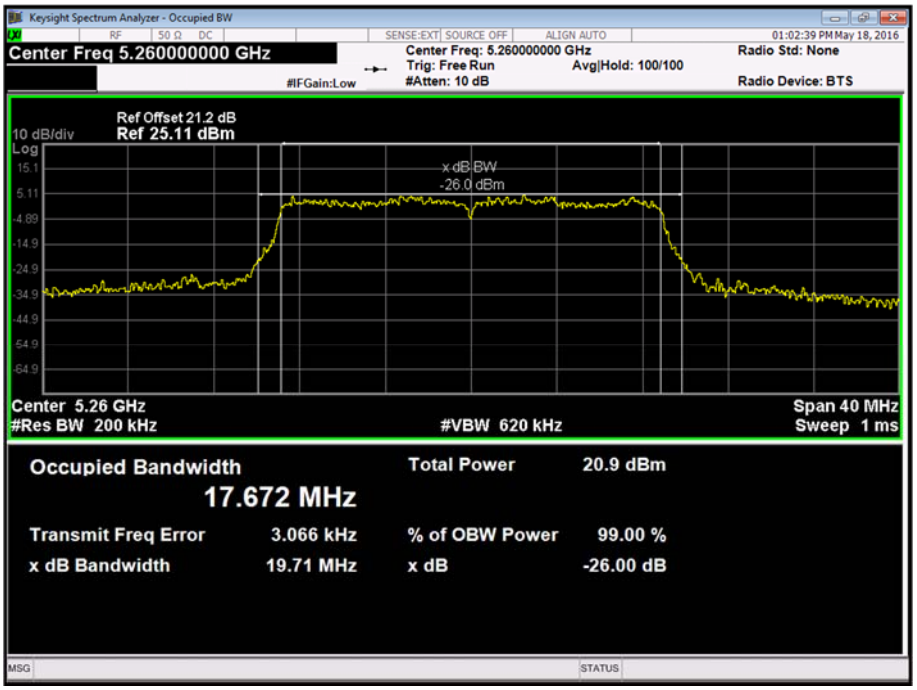
802.11ac 20 MHz Bandwidth, 5240 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot



802.11ac 20 MHz Bandwidth, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Results

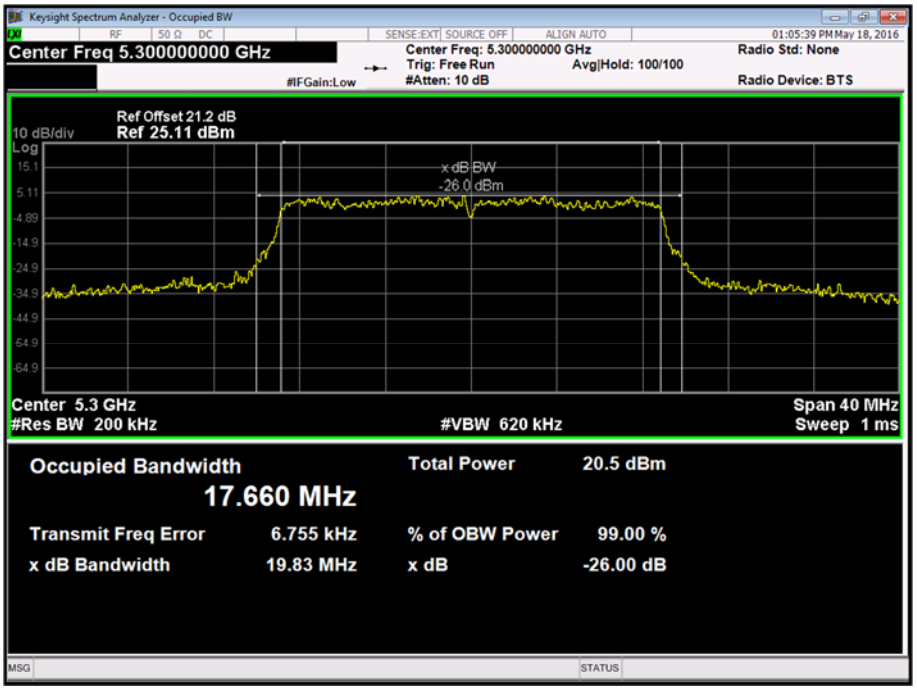
5260 MHz	5300 MHz	5320 MHz
MHz	MHz	MHz
19.71	19.83	19.63

802.11ac 20 MHz Bandwidth, 5260 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot

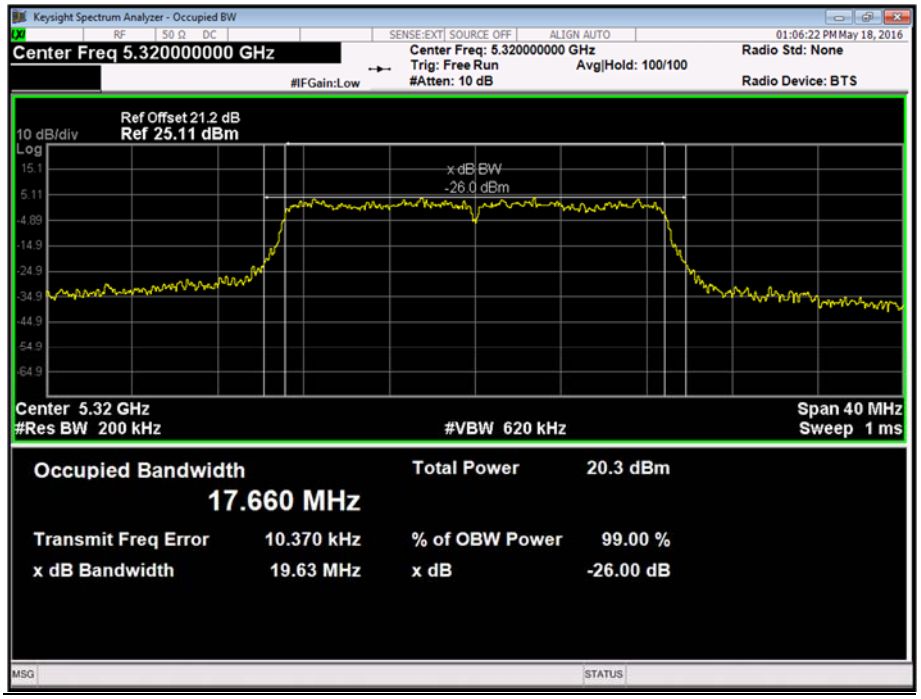


Product Service

802.11ac 20 MHz Bandwidth, 5300 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot



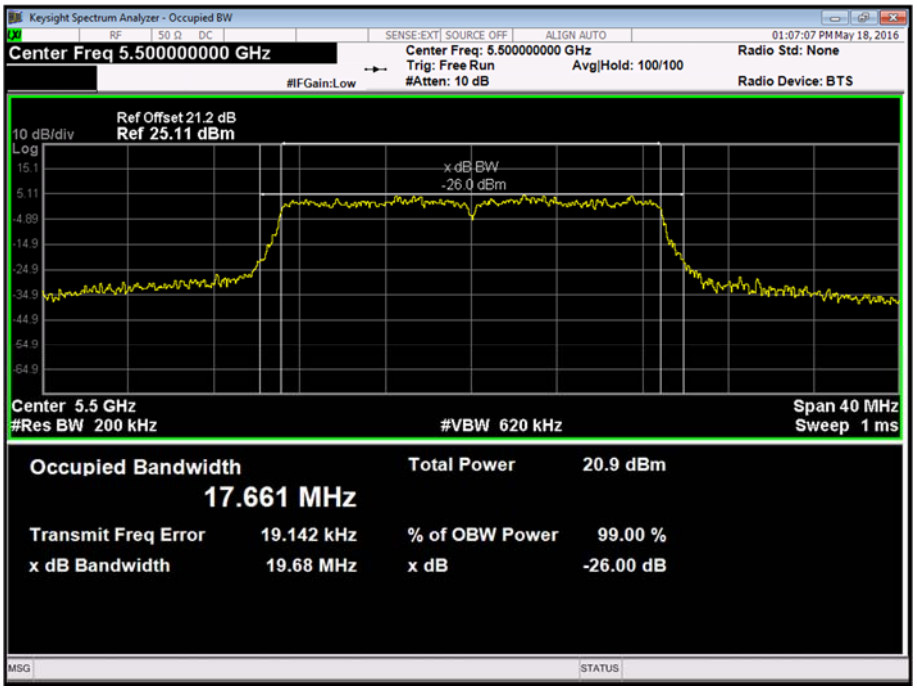
802.11ac 20 MHz Bandwidth, 5320 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot



802.11ac 20 MHz Bandwidth, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Results

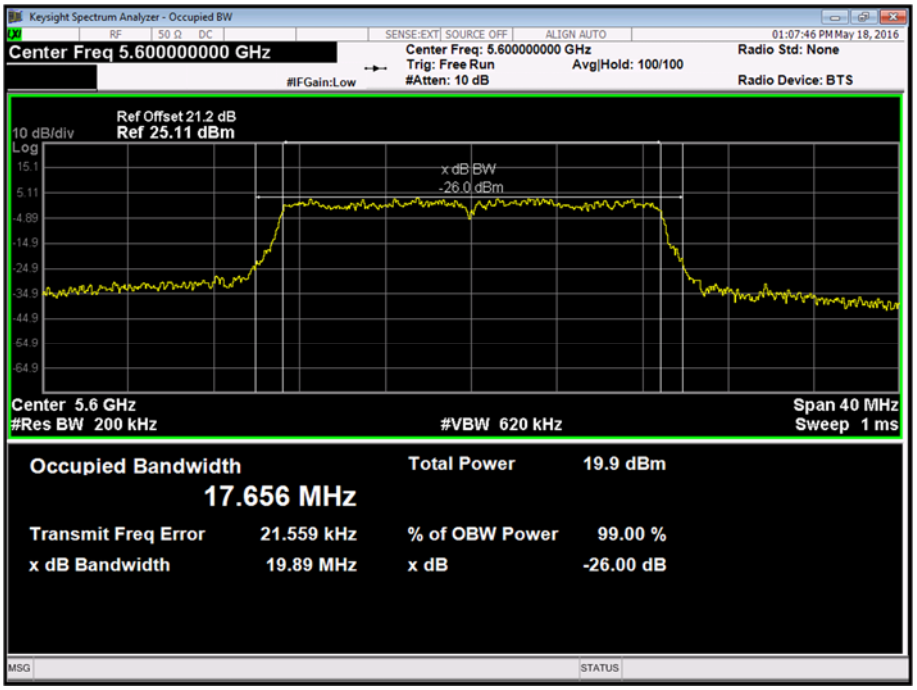
5500 MHz	5600 MHz	5700 MHz
MHz	MHz	MHz
19.68	19.89	19.89

802.11ac 20 MHz Bandwidth, 5500 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Plot

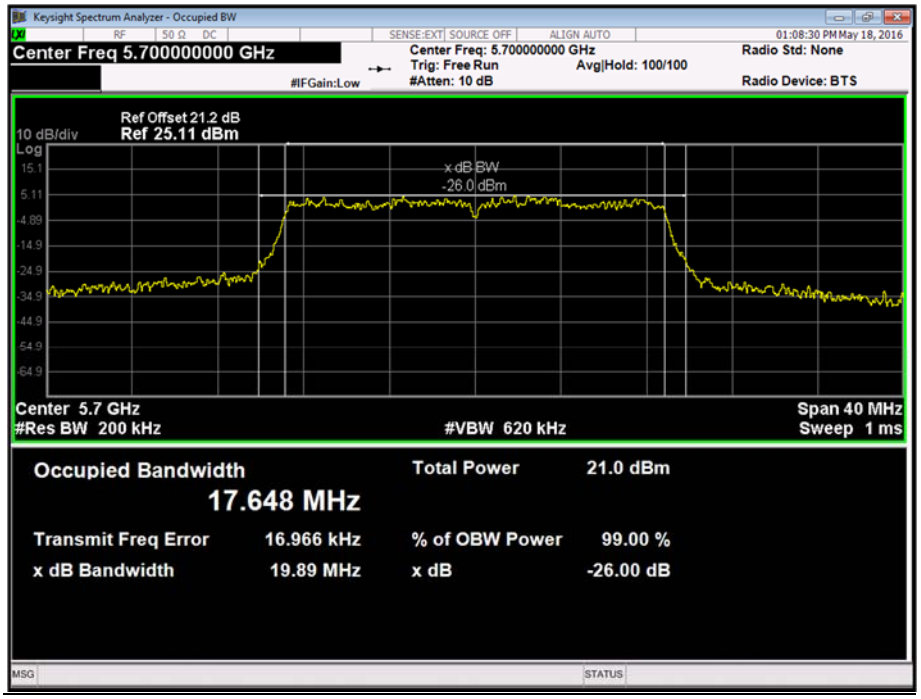


Product Service

802.11ac 20 MHz Bandwidth, 5600 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Plot



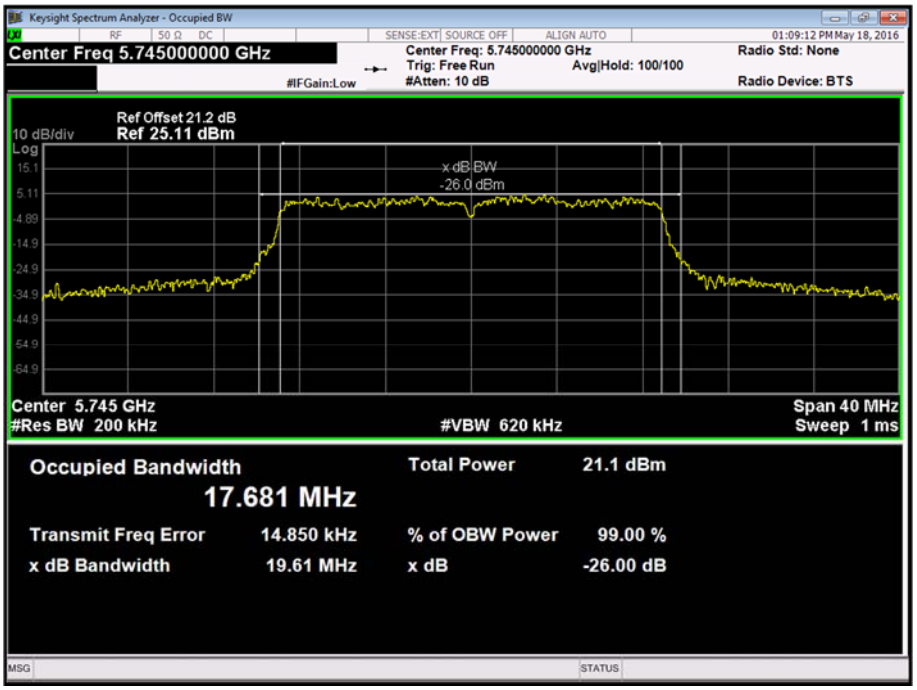
802.11ac 20 MHz Bandwidth, 5700 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth 3 Plot



802.11ac 20 MHz Bandwidth, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Results

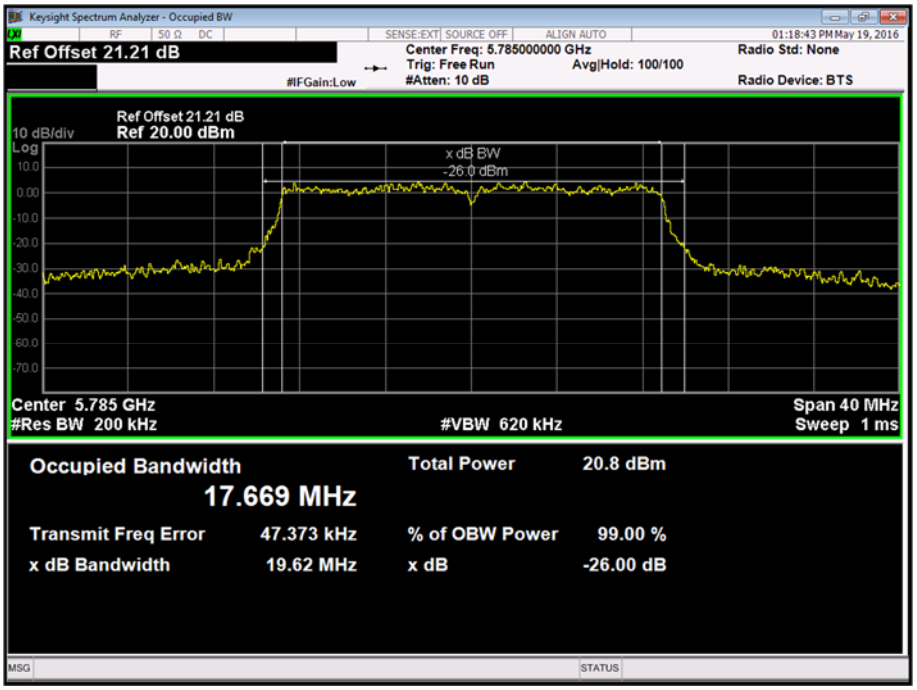
5745 MHz	5785 MHz	5825 MHz
MHz	MHz	MHz
19.61	19.62	19.64

802.11ac 20 MHz Bandwidth, 5745 MHz, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Plot

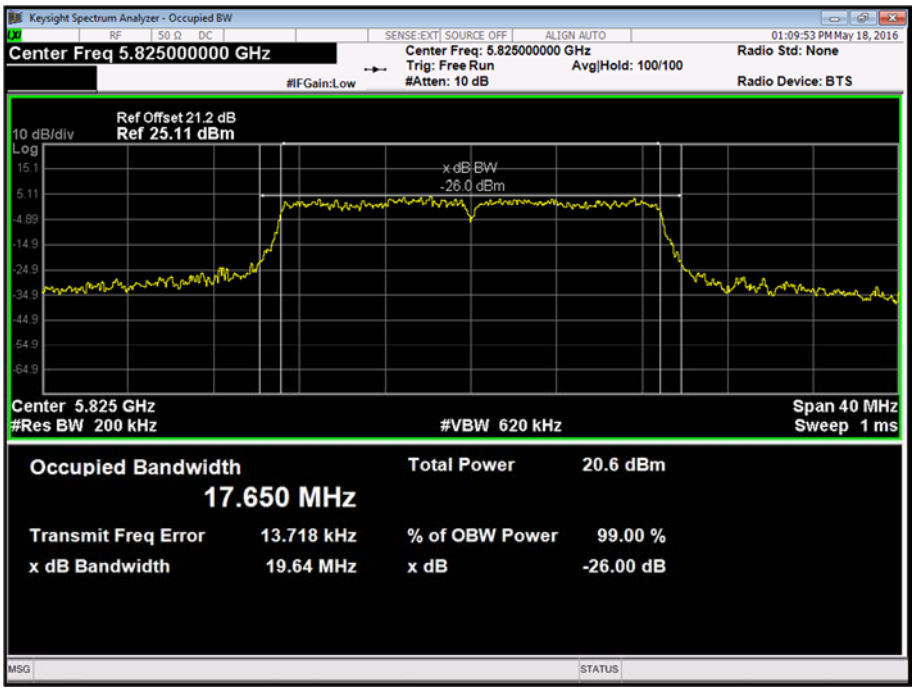


Product Service

802.11ac 20 MHz Bandwidth, 5785 MHz, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Plot



802.11ac 20 MHz Bandwidth, 5825 MHz, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Plot



FCC 47 CFR Part 15, Limit Clause 15.407 (a)

No limit specified.

Industry Canada RSS-247, Limit Clause 6.2

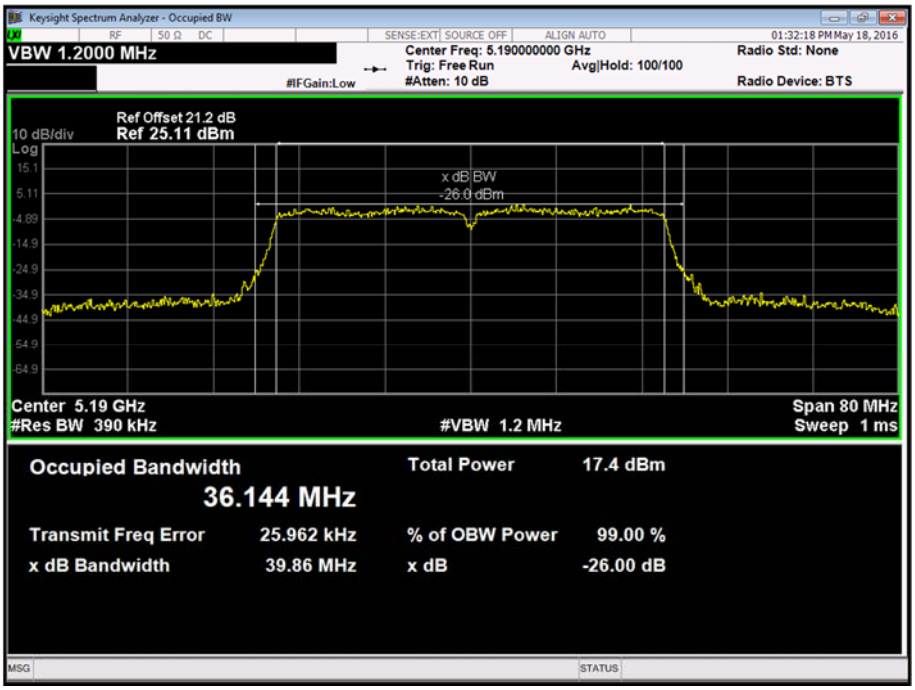
No limit specified.

Product Service

802.11ac 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Results

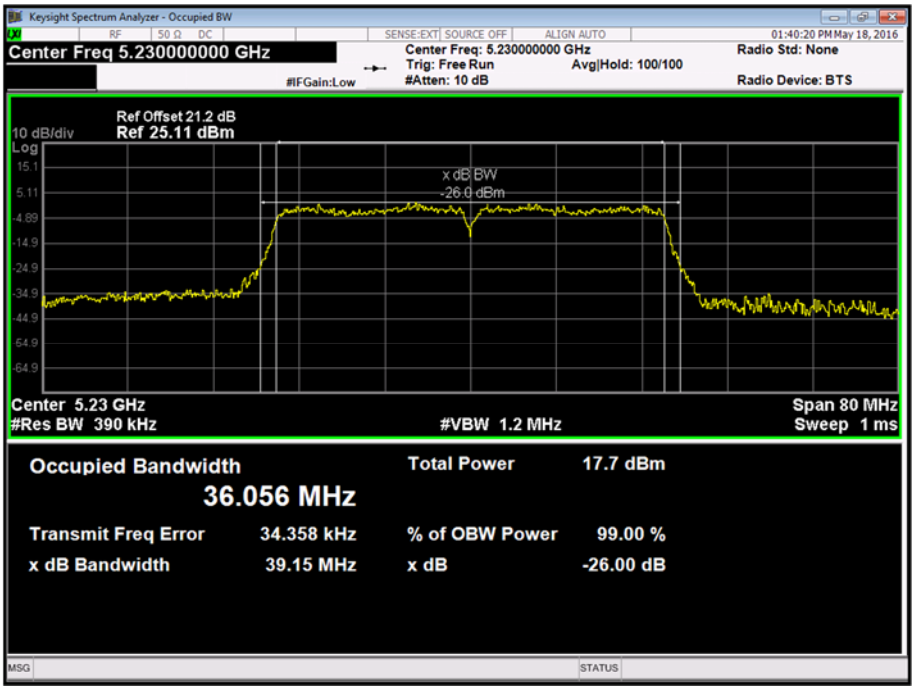
5190 MHz	5230 MHz
MHz	MHz
39.86	39.15

802.11ac 40 MHz Bandwidth, 5190 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot



Product Service

802.11ac 40 MHz Bandwidth, 5230 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot

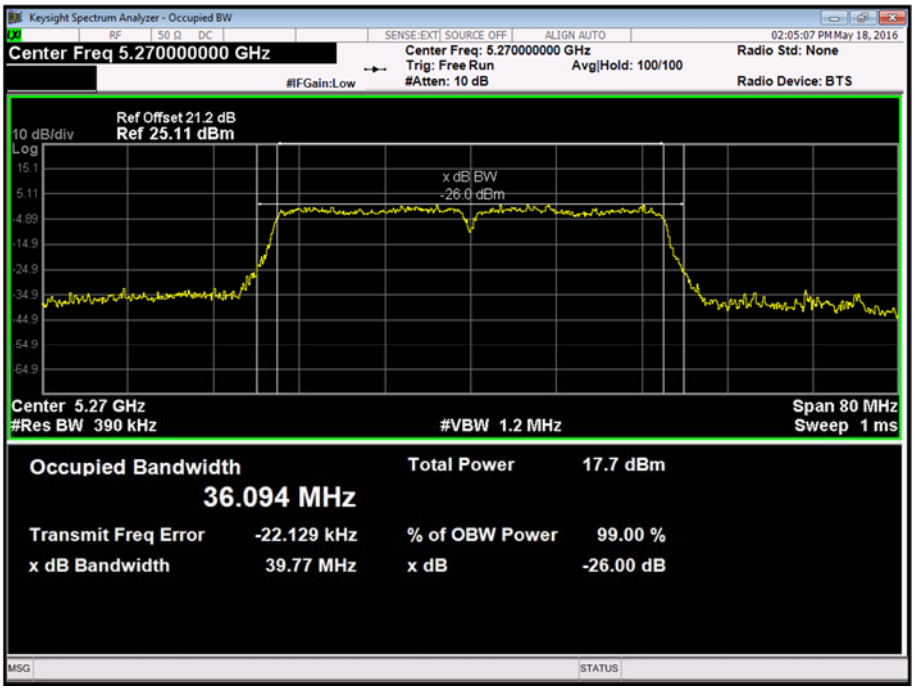


Product Service

802.11ac 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Results

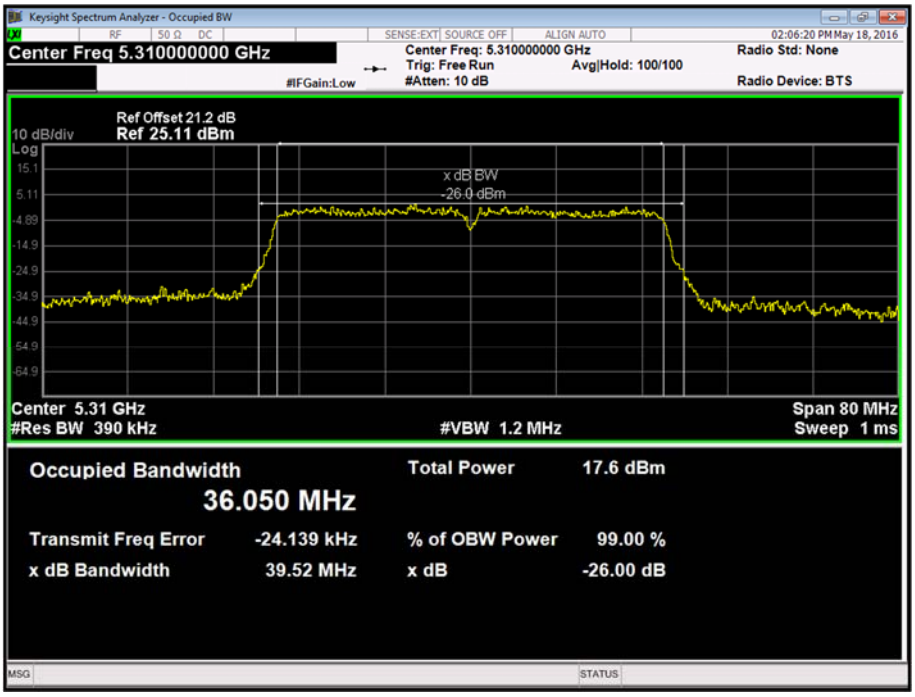
5270 MHz	5310 MHz
MHz	MHz
39.77	39.52

802.11ac 40 MHz Bandwidth, 5270 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot



Product Service

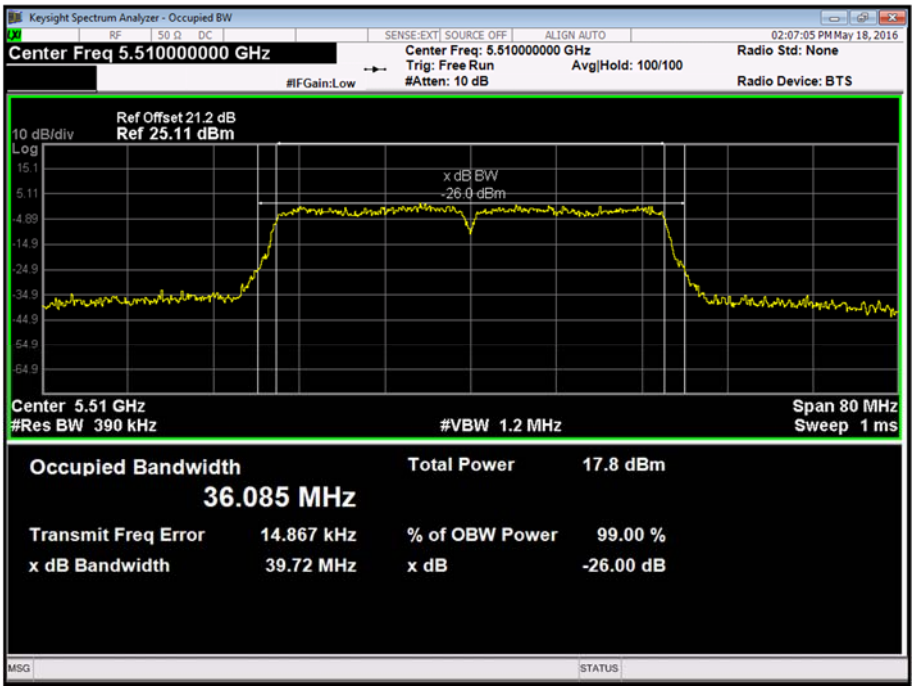
802.11ac 40 MHz Bandwidth, 5310 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot



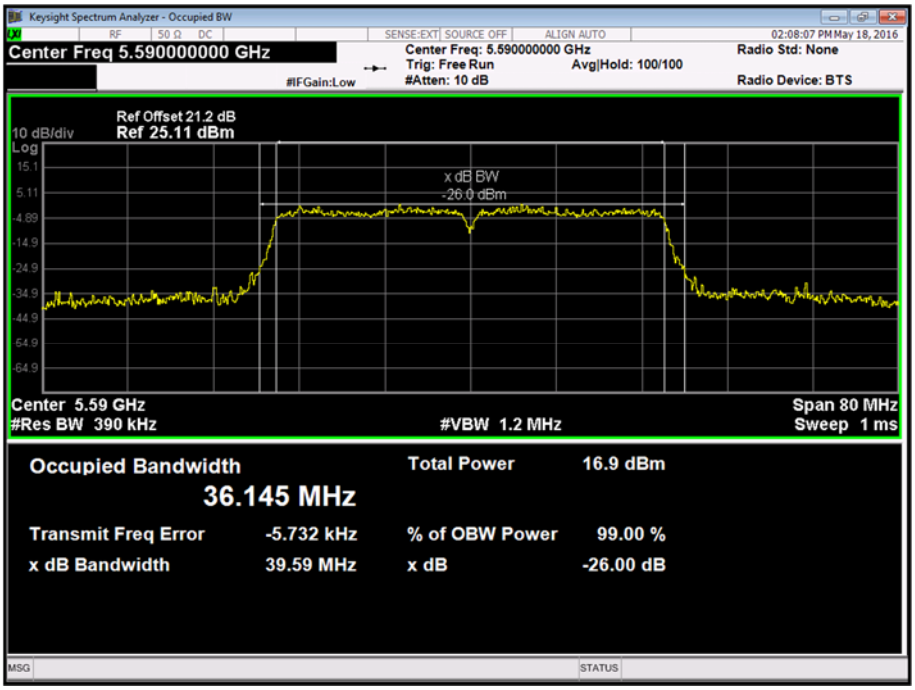
802.11ac 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Results

5510 MHz	5590 MHz	5670 MHz
MHz	MHz	MHz
39.72	39.59	39.61

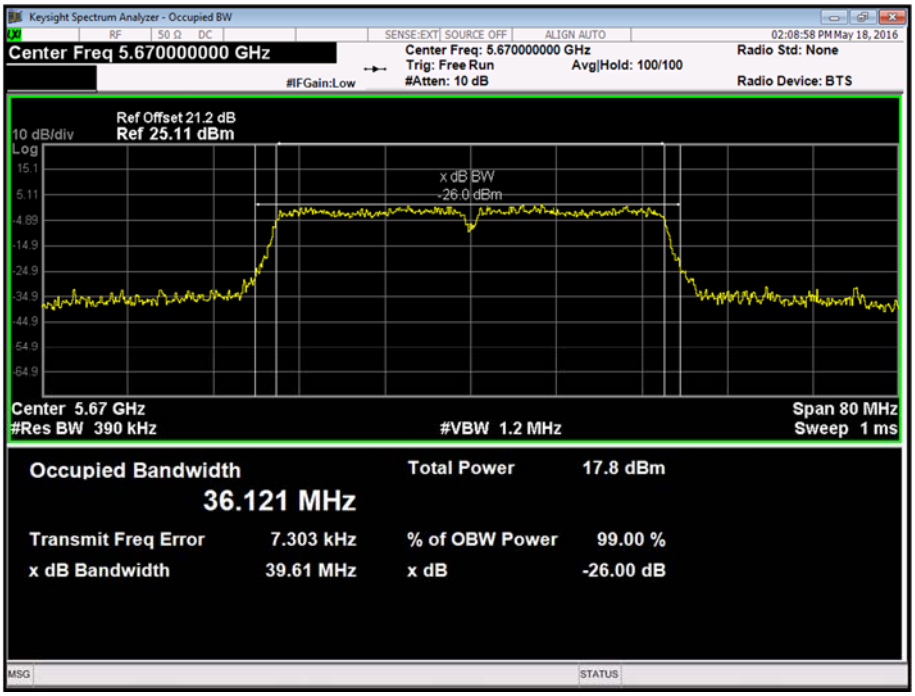
802.11ac 40 MHz Bandwidth, 5510 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Plot



802.11ac 40 MHz Bandwidth, 5590 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Plot



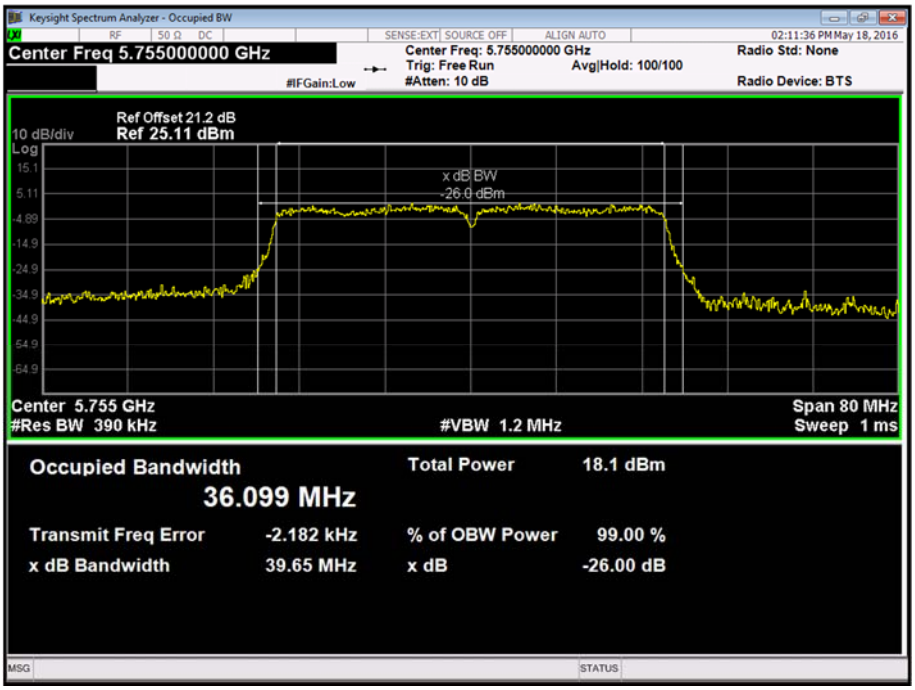
802.11ac 40 MHz Bandwidth, 5670 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth 3 Plot



802.11ac 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Results

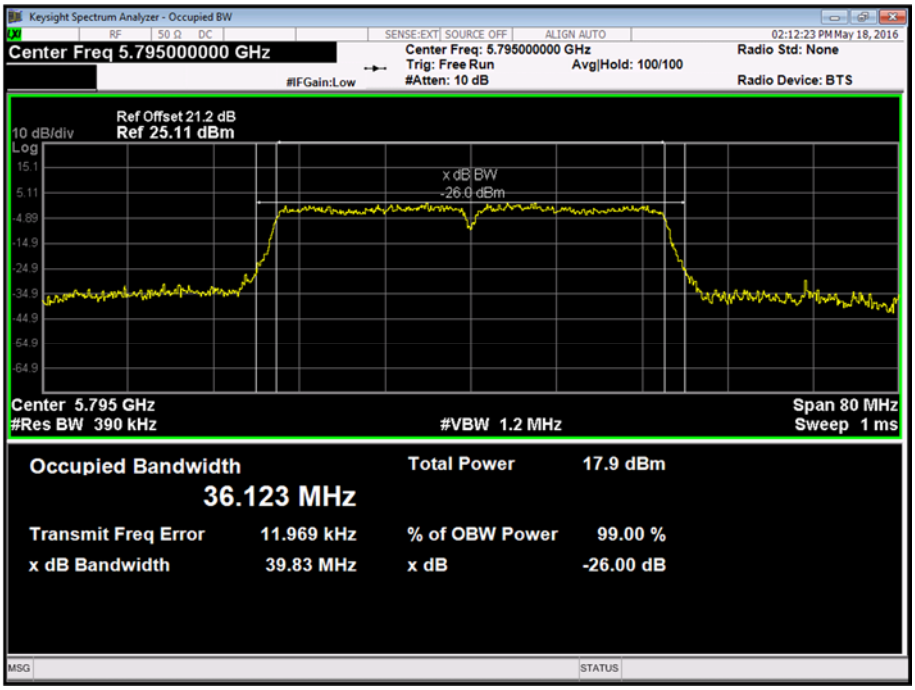
5755 MHz	5795 MHz
MHz	MHz
39.65	39.83

802.11ac 40 MHz Bandwidth, 5755 MHz, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Plot



Product Service

802.11ac 40 MHz Bandwidth, 5795 MHz, OFDM, MCS7, Frequency Band 4, 26 dB Bandwidth Plot



FCC 47 CFR Part 15, Limit Clause 15.407 (a)

No limit specified.

Industry Canada RSS-247, Limit Clause 6.2

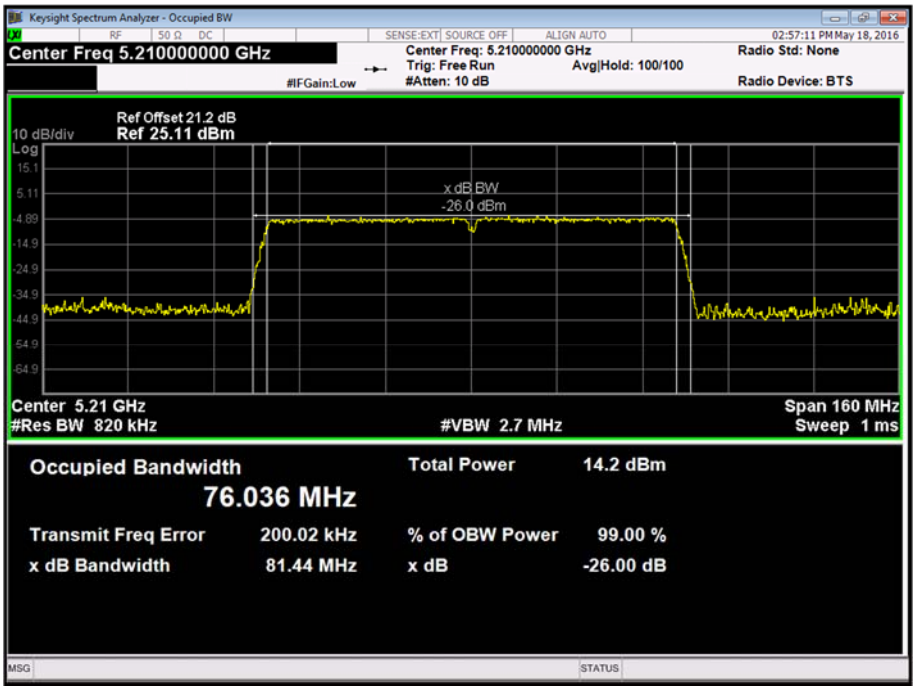
No limit specified.

Product Service

802.11ac 80 MHz Bandwidth, OFDM, MCS0, Frequency Band 1, 26 dB Bandwidth Results

5210 MHz
MHz
81.44

802.11ac 80 MHz Bandwidth, 5210 MHz, OFDM, MCS0, Frequency Band 1, 26 dB Bandwidth Plot

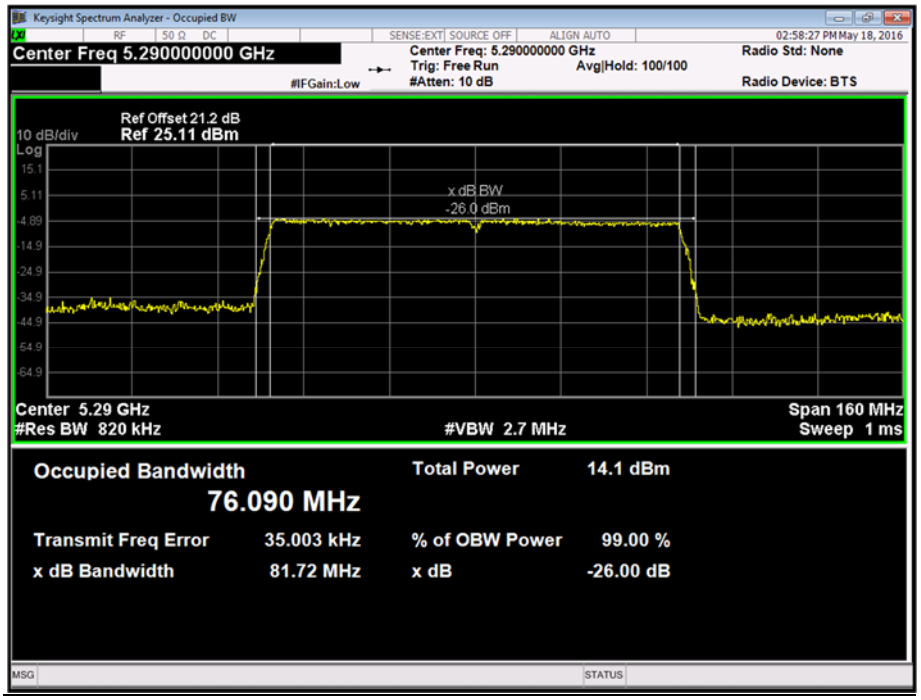


Product Service

802.11ac 80 MHz Bandwidth, OFDM, MCS0, Frequency Band 2, 26 dB Bandwidth Results

5290 MHz
MHz
81.72

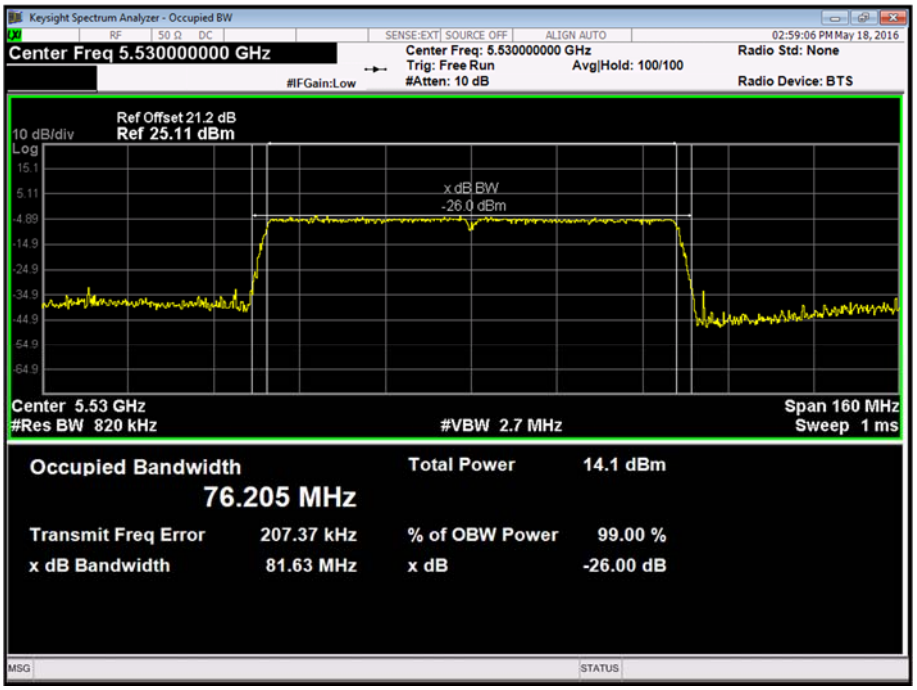
802.11ac 80 MHz Bandwidth, 5290 MHz, OFDM, MCS0, Frequency Band 2, 26 dB Bandwidth Plot



802.11ac 80 MHz Bandwidth, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth Results

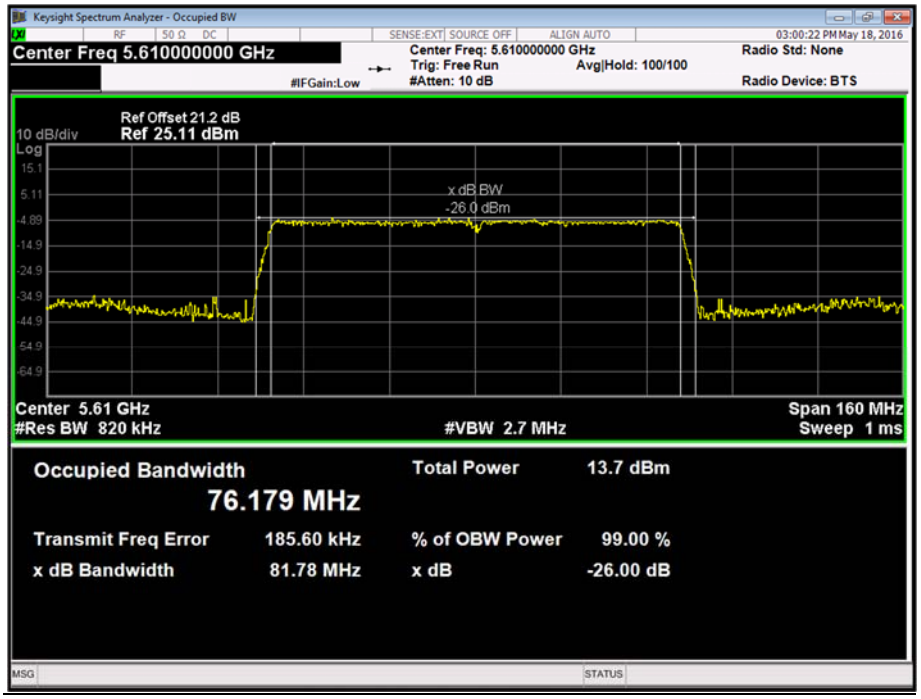
5530 MHz	5610 MHz
MHz	MHz
81.63	81.78

802.11ac 80 MHz Bandwidth, 5530 MHz, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth Plot



Product Service

802.11ac 80 MHz Bandwidth, 5610 MHz, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth Plot

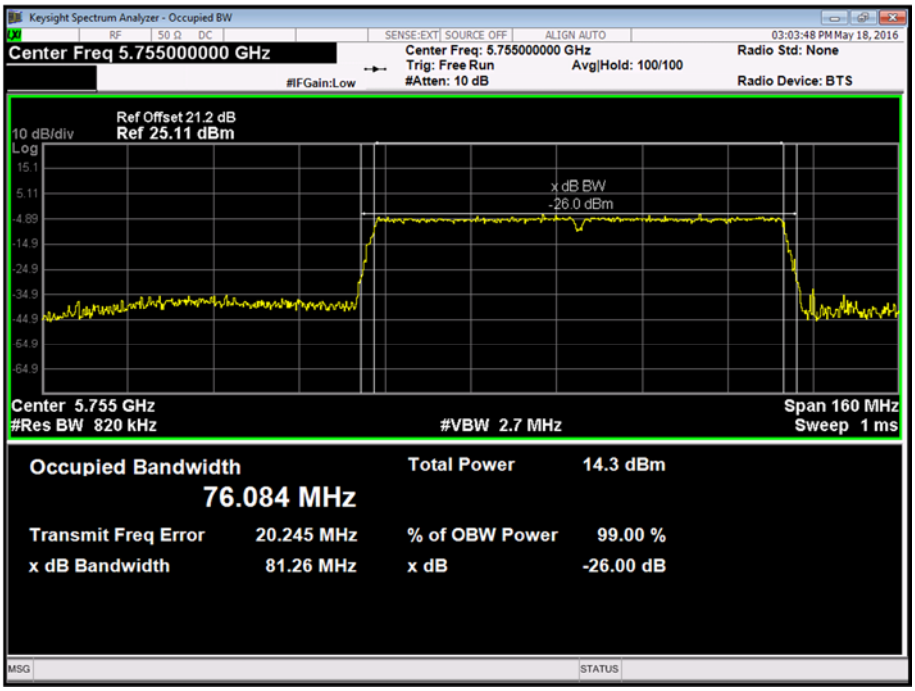


Product Service

802.11ac 80 MHz Bandwidth, OFDM, MCS0, Frequency Band 4, 26 dB Bandwidth Results

5775 MHz
MHz
81.26

802.11ac 80 MHz Bandwidth, 5775 MHz, OFDM, MCS0, Frequency Band 4, 26 dB Bandwidth Plot



FCC 47 CFR Part 15, Limit Clause 15.407 (a)

No limit specified.

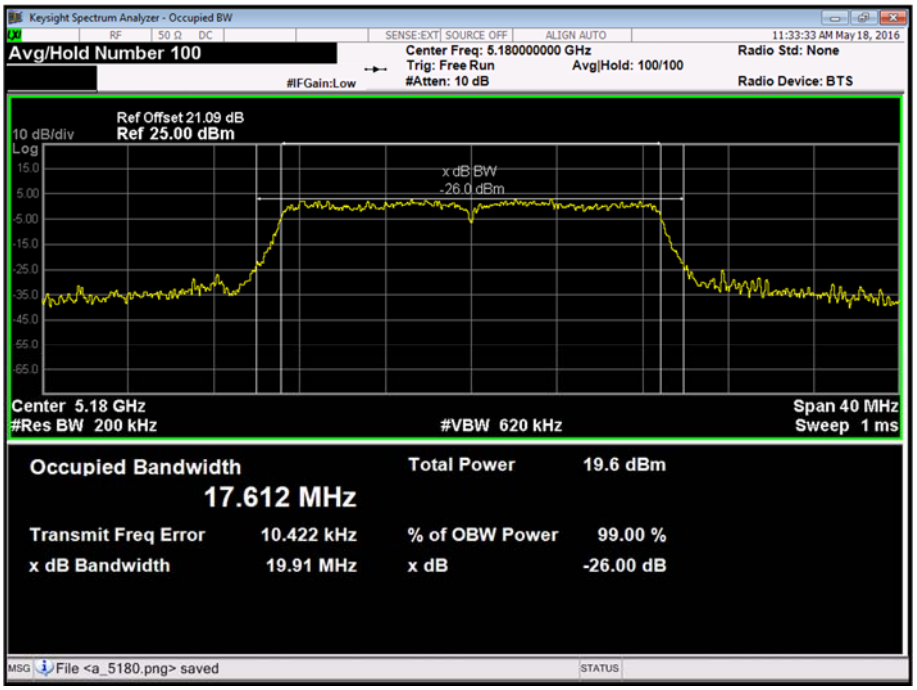
Industry Canada RSS-247, Limit Clause 6.2

No limit specified.

802.11n 20 MHz Bandwidth, OFDM, MCS0, Frequency Band 1, 26 dB Bandwidth Results

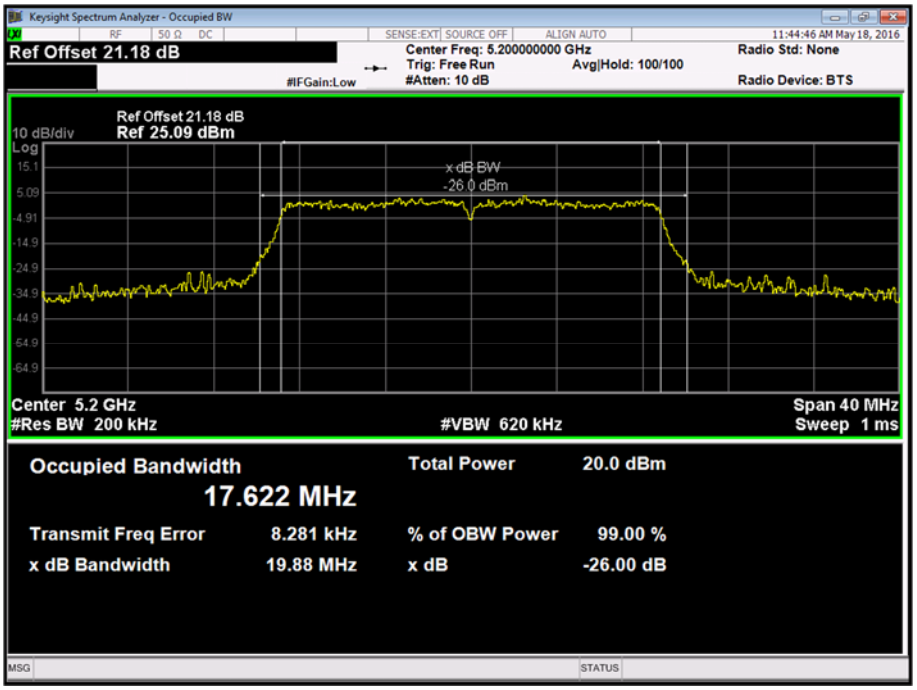
5180 MHz	5200 MHz	5240 MHz
MHz	MHz	MHz
19.91	19.88	19.92

802.11n 20 MHz Bandwidth, 5180 MHz, OFDM, MCS0, Frequency Band 1, 26 dB Bandwidth Plot

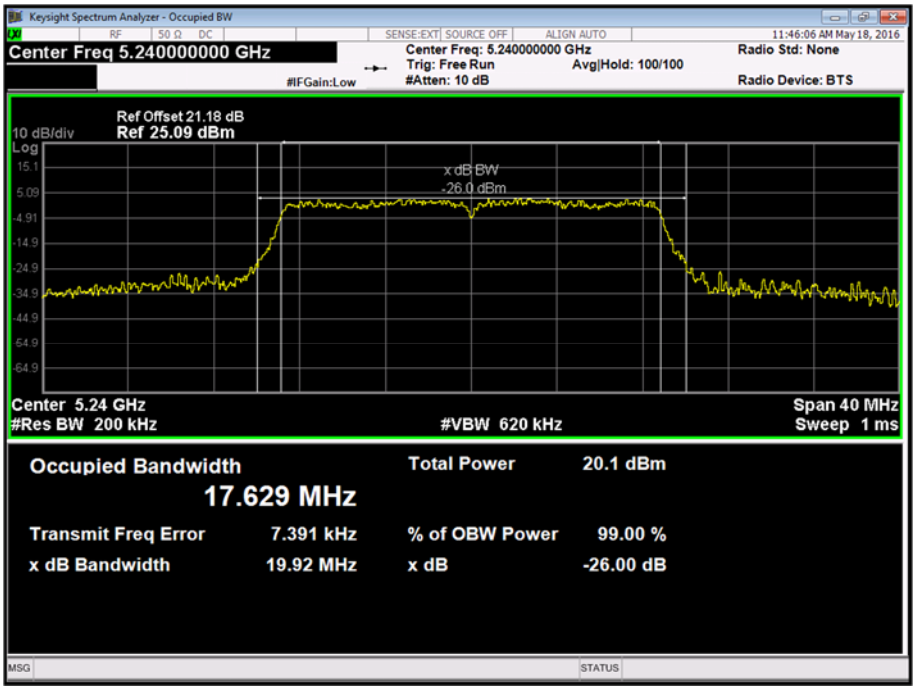


Product Service

802.11n 20 MHz Bandwidth, 5200 MHz, OFDM, MCS0, Frequency Band 1, 26 dB Bandwidth Plot



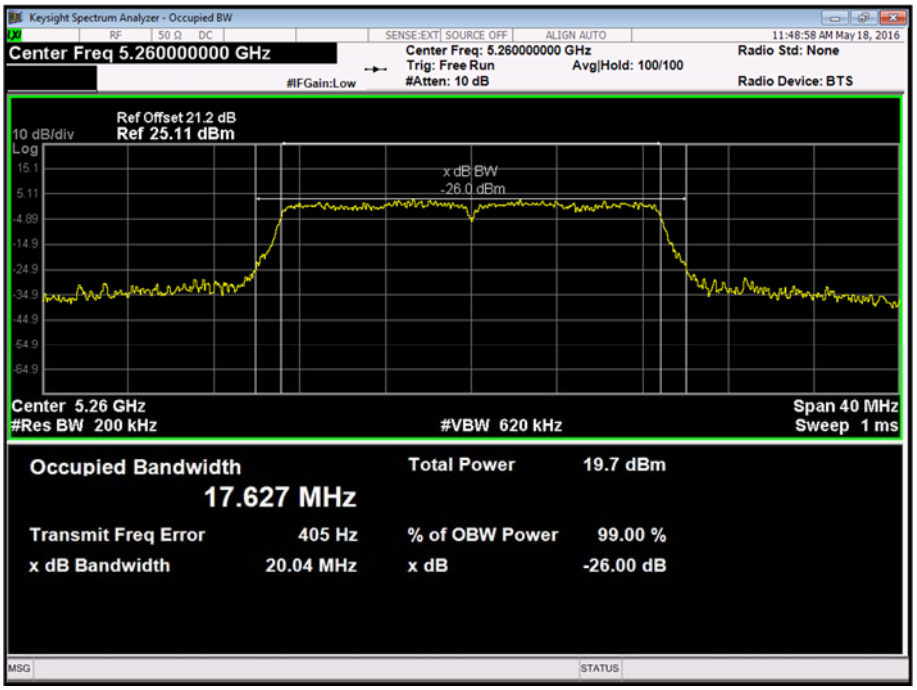
802.11n 20 MHz Bandwidth, 5240 MHz, OFDM, MCS0, Frequency Band 1, 26 dB Bandwidth Plot



802.11n 20 MHz Bandwidth, OFDM, MCS0, Frequency Band 2, 26 dB Bandwidth Results

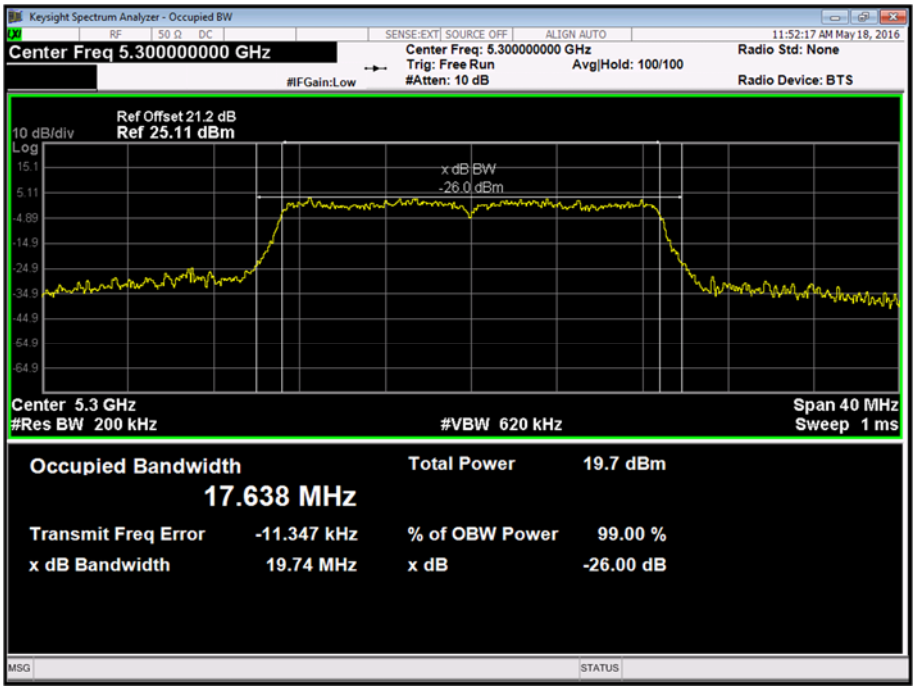
5260 MHz	5300 MHz	5320 MHz
MHz	MHz	MHz
20.04	19.74	19.87

802.11n 20 MHz Bandwidth, 5260 MHz, OFDM, MCS0, Frequency Band 2, 26 dB Bandwidth Plot

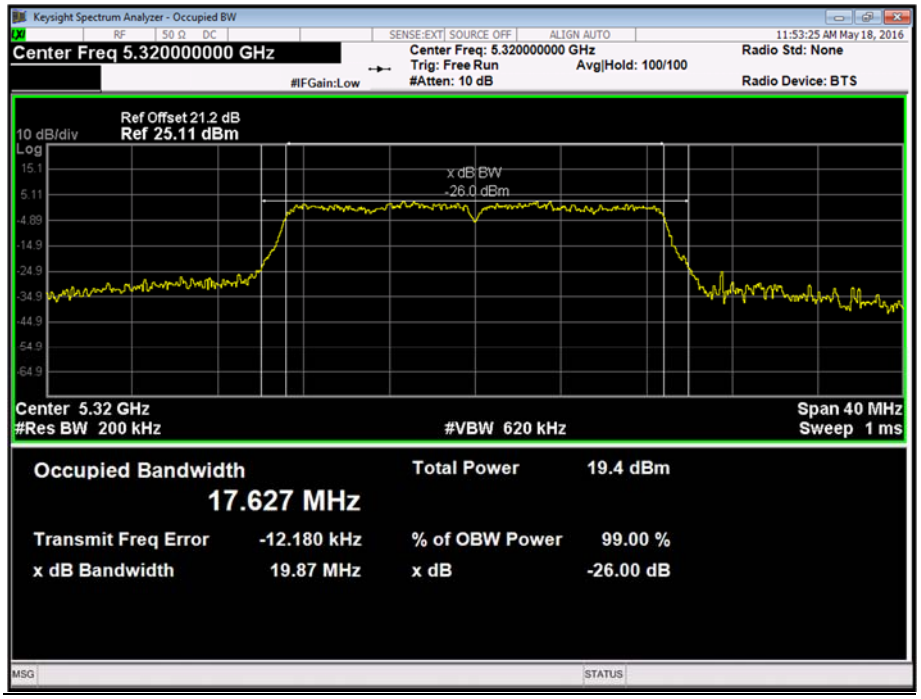


Product Service

802.11n 20 MHz Bandwidth, 5300 MHz, OFDM, MCS0, Frequency Band 2, 26 dB Bandwidth Plot



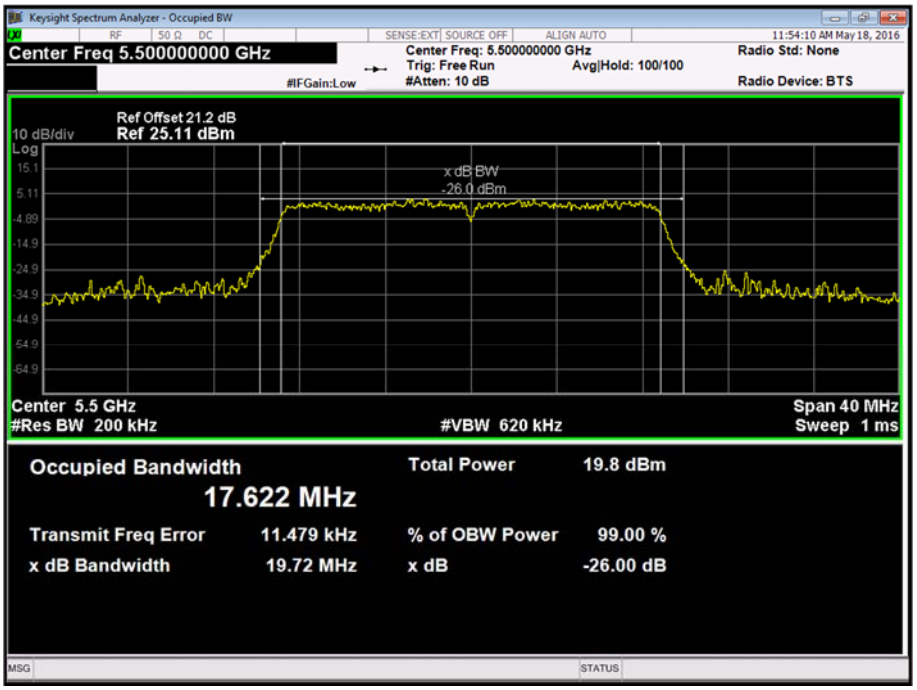
802.11n 20 MHz Bandwidth, 5320 MHz, OFDM, MCS0, Frequency Band 2, 26 dB Bandwidth Plot



802.11n 20 MHz Bandwidth, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth Results

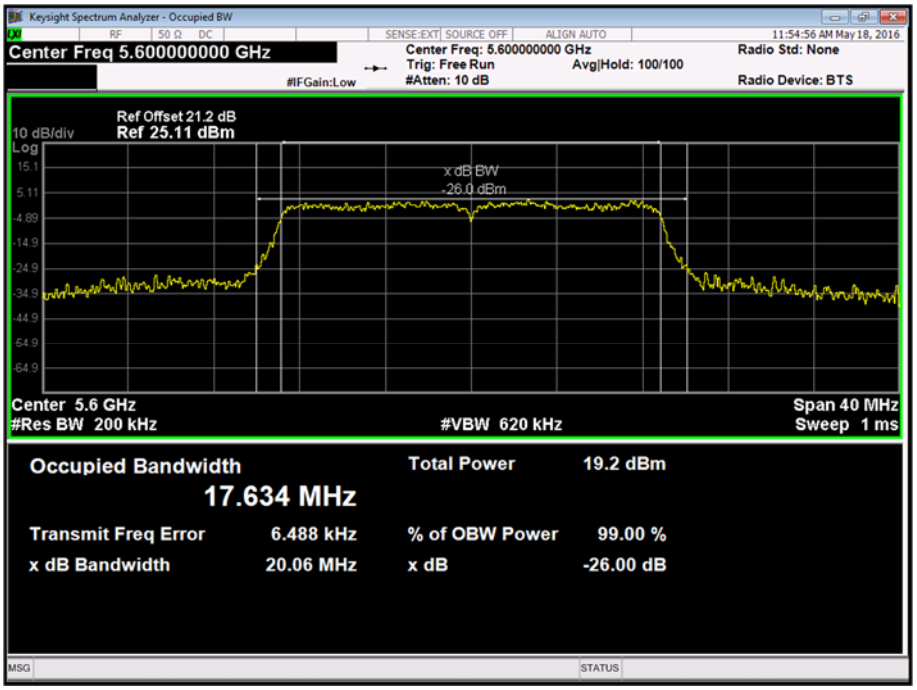
5500 MHz	5600 MHz	5700 MHz
MHz	MHz	MHz
19.72	20.06	19.89

802.11n 20 MHz Bandwidth, 5500 MHz, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth Plot

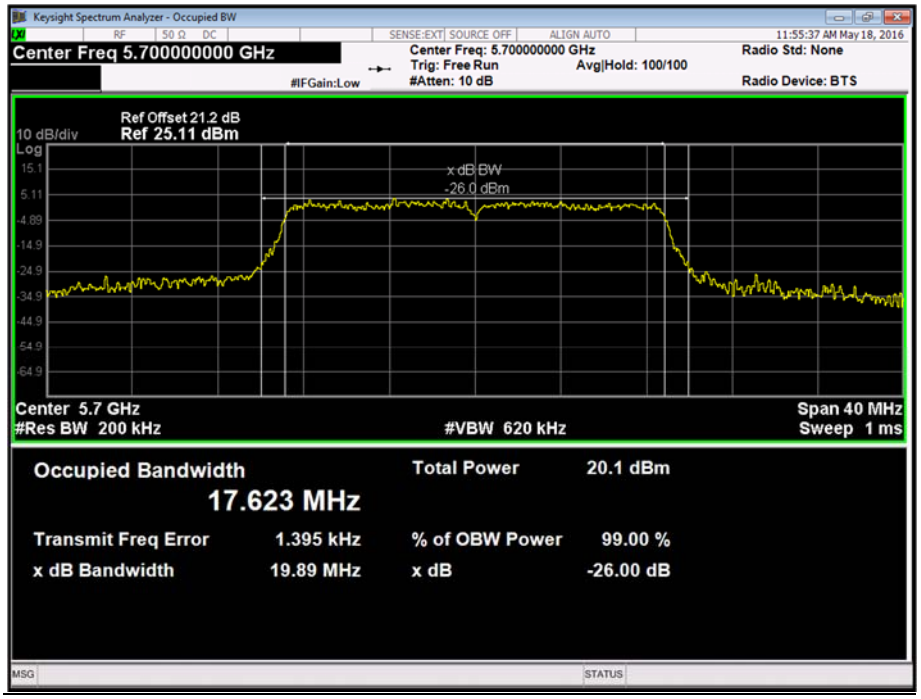


Product Service

802.11n 20 MHz Bandwidth, 5600 MHz, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth Plot



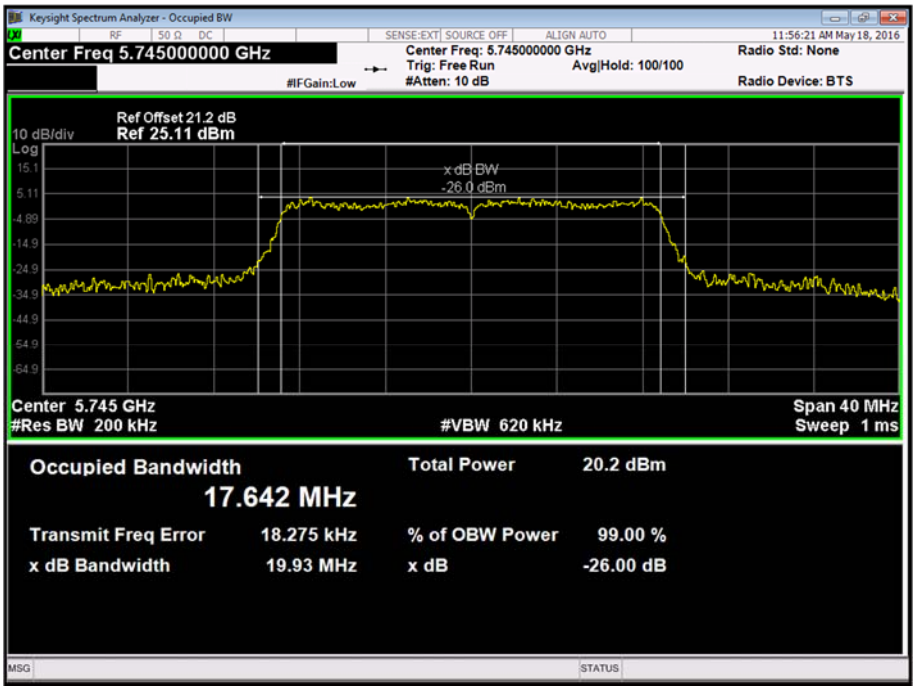
802.11n 20 MHz Bandwidth, 5700 MHz, OFDM, MCS0, Frequency Band 3, 26 dB Bandwidth 3 Plot



802.11n 20 MHz Bandwidth, OFDM, MCS0, Frequency Band 4, 26 dB Bandwidth Results

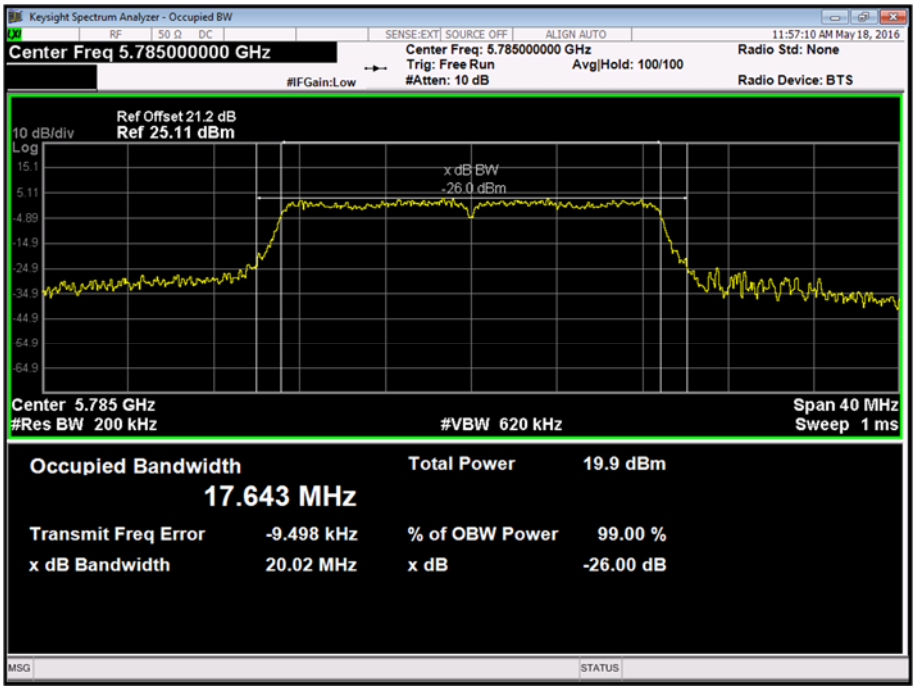
5745 MHz	5785 MHz	5825 MHz
MHz	MHz	MHz
19.93	20.02	19.92

802.11n 20 MHz Bandwidth, 5745 MHz, OFDM, MCS0, Frequency Band 4, 26 dB Bandwidth Plot

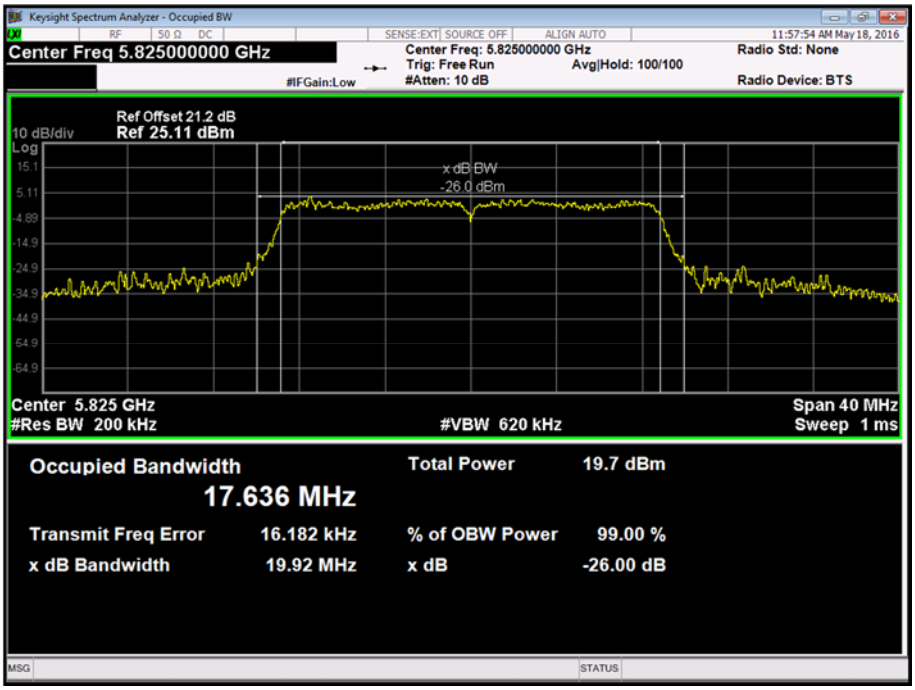


Product Service

802.11n 20 MHz Bandwidth, 5785 MHz, OFDM, MCS0, Frequency Band 4, 26 dB Bandwidth Plot



802.11n 20 MHz Bandwidth, 5825 MHz, OFDM, MCS0, Frequency Band 4, 26 dB Bandwidth Plot



FCC 47 CFR Part 15, Limit Clause 15.407 (a)

No limit specified.

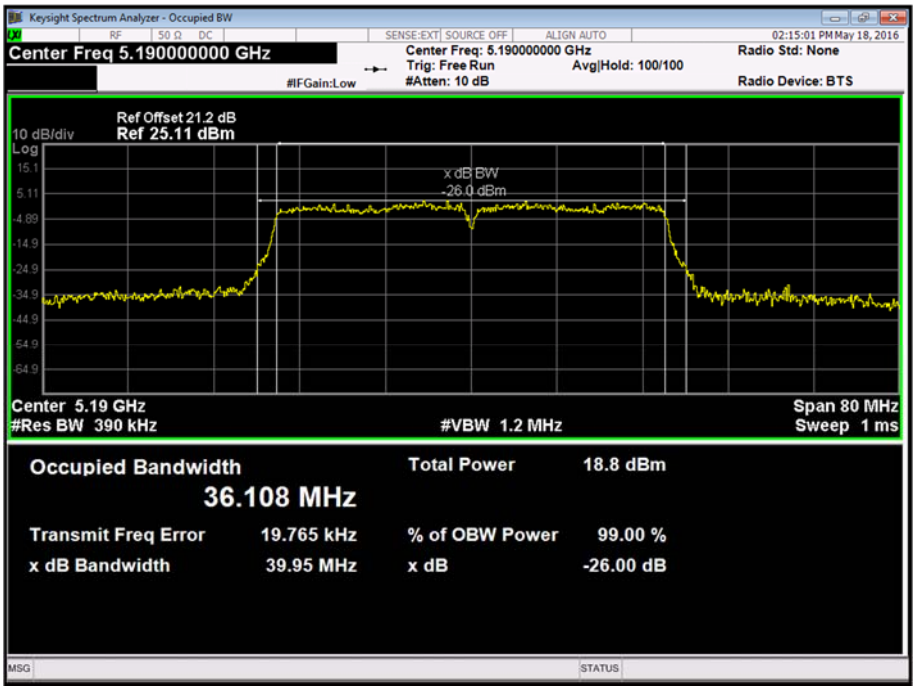
Industry Canada RSS-247, Limit Clause 6.2

No limit specified.

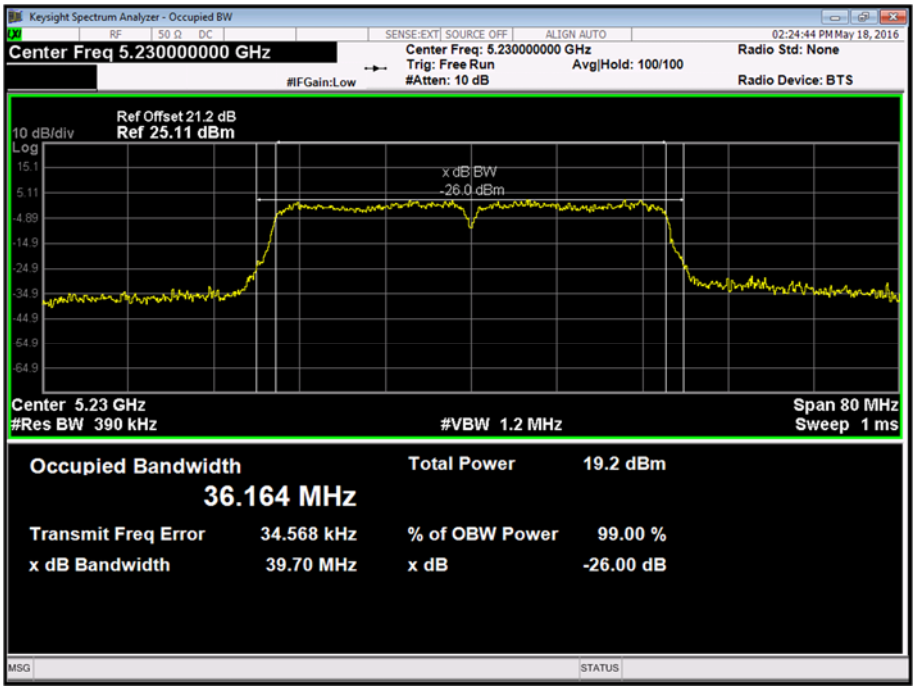
802.11n 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Results

5190 MHz	5230 MHz
MHz	MHz
39.95	39.70

802.11n 40 MHz Bandwidth, 5190 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot



802.11n 40 MHz Bandwidth, 5230 MHz, OFDM, MCS7, Frequency Band 1, 26 dB Bandwidth Plot

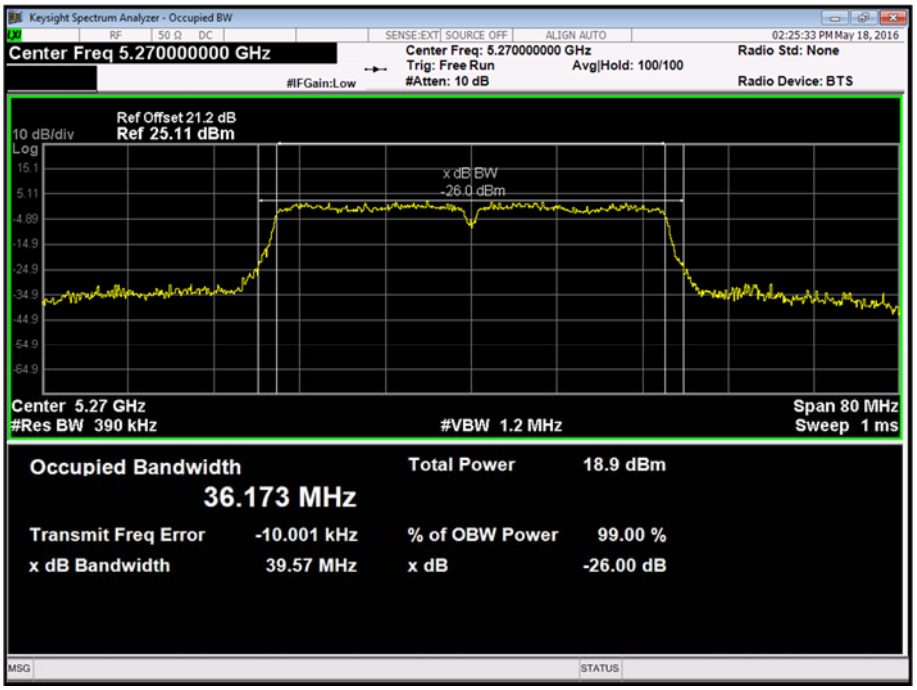


Product Service

802.11n 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Results

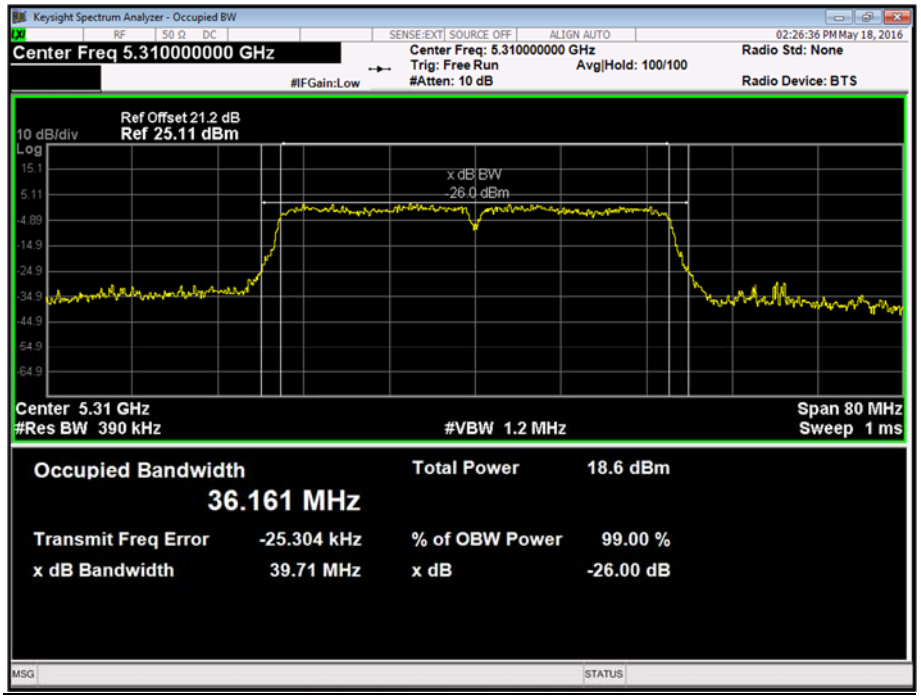
5270 MHz	5310 MHz
MHz	MHz
39.57	39.71

802.11n 40 MHz Bandwidth, 5270 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot



Product Service

802.11n 40 MHz Bandwidth, 5310 MHz, OFDM, MCS7, Frequency Band 2, 26 dB Bandwidth Plot

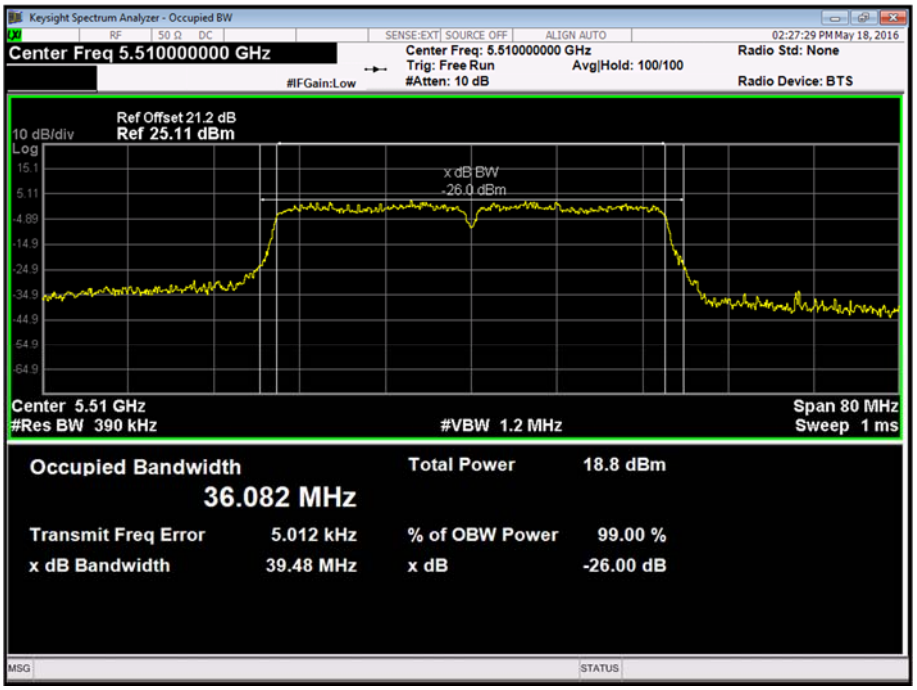


Product Service

802.11n 40 MHz Bandwidth, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Results

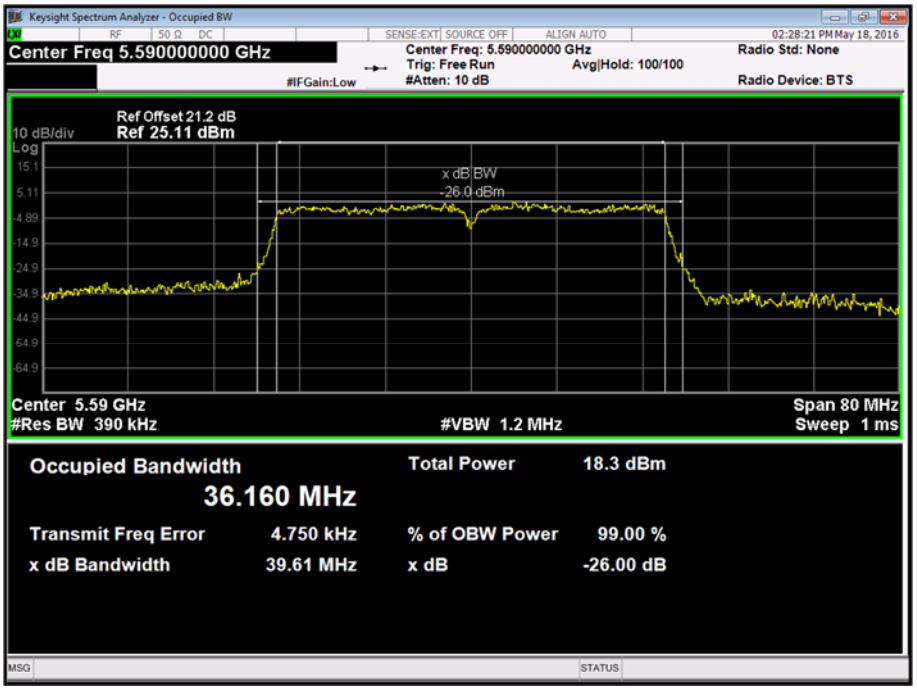
5510 MHz	5590 MHz	5670 MHz
MHz	MHz	MHz
39.48	39.61	39.18

802.11n 40 MHz Bandwidth, 5510 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Plot



Product Service

802.11n 40 MHz Bandwidth, 5590 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth Plot



802.11n 40 MHz Bandwidth, 5670 MHz, OFDM, MCS7, Frequency Band 3, 26 dB Bandwidth 3 Plot