

Report on the FCC and IC Testing of the: Apple Inc. Model: A1993 In accordance with FCC 47 CFR Part 15E and Industry Canada RSS-247 and Industry Canada RSS-GEN

Prepared for: Apple Inc.
One Apple Park Way
Cupertino, California 95014, USA

FCC ID: BCGA1993 IC: 579C-A1993

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Product Service

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NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Matthew Russell	RF Team Leader	Authorised Signatory	05 October 2018
Simon Bennett	Chief Engineer	Authorised Signatory	05 October 2018

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

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 and Industry Canada RSS-247 and Industry Canada RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

SIGNATURE

			
NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
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Graeme Lawler	Test Engineer	Testing	05 October 2018
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Phillip Harrison	Senior Engineer	Testing	05 October 2018
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FCC Accreditation

90987 Octagon House, Fareham Test Laboratory

Industry Canada Accreditation

IC2932B-1 Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15E: 2017, Industry Canada RSS-247: Issue 2 (2017-02) and Industry Canada RSS-GEN: Issue 5 (2018-04).



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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	05 October 2018

Table 1

1.2 Introduction

Applicant	Apple Inc.
Manufacturer	Apple Inc.
Model Number(s)	A1993
Serial Number(s)	C07WT00HK2V0, C07WT003K2V0 and C07WR049K2T5
Hardware Version(s)	EVT
Software Version(s)	18B2034
Number of Samples Tested	3
Test Specification/Issue/Date	FCC 47 CFR Part 15E: 2017 Industry Canada RSS-247: Issue 2 (2017-02) Industry Canada RSS-GEN: Issue 5 (2018-04)
Order Number	0540058293
Date	18-May-2018
Date of Receipt of EUT	20-June-2018
Start of Test	30-July-2018
Finish of Test	05-October-2018
Name of Engineer(s)	Mehadi Choudhury, Graeme Lawler, Tony Hubbard Mohammed Malik, Sharif Sendagire, Phillip Harrison and Matthew Russell
Related Document(s)	ANSI C63.10 (2013) KDB 662911 D01 v02r02 KDB 905462 D02 v02



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15E and 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			
Configuration and Mode: Main						
2.1	15.407 (a)	6.2	6.12	Maximum Conducted Output Power	Pass	ANSI C63.10 (2013), KDB 662911 D01
2.2	15.407 (a)	6.2	6.12	Maximum Conducted Power Spectral Density	Pass	ANSI C63.10 (2013), KDB 662911 D01
2.3	15.407 (a)(e)	6.2	6.7	Emission Bandwidth	Pass	ANSI C63.10 (2013)
2.4	15.407 (b)	6.2	-	Authorised Band Edges	Pass	ANSI C63.10 (2013)
2.5	15.407 (b), 15.205	6.2	6.13	Spurious Radiated Emissions	Pass	ANSI C63.10 (2013)
2.6	15.205	-	8.10	Restricted Band Edges	Pass	ANSI C63.10 (2013)
2.7	15.407(h)(2)(iii) (iv)	6.3.2 (c)(d)(e)	-	Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period	Pass	KDB 905462 D02
Configuration and Mode: Aux						
2.1	15.407 (a)	6.2	6.12	Maximum Conducted Output Power	Pass	ANSI C63.10 (2013), KDB 662911 D01
2.2	15.407 (a)	6.2	6.12	Maximum Conducted Power Spectral Density	Pass	ANSI C63.10 (2013), KDB 662911 D01
2.3	15.407 (a)€	6.2	6.7	Emission Bandwidth	Pass	ANSI C63.10 (2013)
2.4	15.407 (b)	6.2	-	Authorised Band Edges	Pass	ANSI C63.10 (2013)
2.5	15.407 (b), 15.205	6.2	6.13	Spurious Radiated Emissions	Pass	ANSI C63.10 (2013)
2.6	15.205	-	8.10	Restricted Band Edges	Pass	ANSI C63.10 (2013)
2.7	15.407(h)(2)(iii) (iv)	6.3.2 (c)(d)(e)	-	Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period	N/T	DFS is handled by Main as Aux is a slave and only works when Main is operational.

Table 2



1.4 Product Information

1.4.1 Technical Description

The Equipment Under Test (EUT) was a desktop computer, with Bluetooth, Bluetooth Low Energy and 802.11 b/g/n/ac capabilities in the 2.4GHz and 5GHz bands.

The EUT featured a 'Main' 3x3 MIMO IEEE 802.11 radio (Cores 0, 1, and 2) transmitting on 3 antennas. The EUT also featured an 'Aux' SISO IEEE 802.11 radio which shared the antenna with Main Core 2. Main Core 1 also shares its antenna with the Bluetooth radio.

US and CA country codes changed the power table for U-NII band 1. Therefore U-NII-1 was tested to both powers. The CA country code also disabled any channels in the 5600-5650 MHz band, and the 'straddle channels' 138, 142, and 144.

1.4.2 Test Modes

The EUT's 'Main' radio supports SISO modes only for 802.11a operation. It operates in SISO, 2x2 MIMO, and 3x3 MIMO in 802.11n and ac modes with 20 MHz, 40 MHz, and 80 MHz channel bandwidths.

The EUT uses different output powers per Core dependent on how many Cores are used. The EUT also used different power tables for Cyclic Delay Diversity (CDD), Space Division Multiplexing (SDM), and transmit beamforming (TxBF) modes. It uses the same conducted power per Core in any given mode, but due to the different antenna gains the radiated powers per Core differs.

After preliminary investigations were performed, the EUT was therefore tested in the following worst-case modes:

- SISO Modes:
 - Main 802.11a (Core 0 for U-NII-1 / 2A / 2C and Core 2 for U-NII-3)
 - Main 802.11n HT20 (Core 0 for U-NII-1 / 2A / 2C and Core 2 for U-NII-3)
 - Main 802.11n HT40 (Core 0 for U-NII-1 / 2A / 2C and Core 2 for U-NII-3)
 - Main 802.11ac VHT80 (Core 0 for U-NII-1 / 2A / 2C and Core 2 for U-NII-3)
 - Aux 802.11a (Aux Core)
 - Aux 802.11n HT20 (Aux Core)
 - Aux 802.11n HT40 (Aux Core)
 - Aux 802.11ac VHT80 (Aux Core)
- 2x2 MIMO Modes:
 - Main 802.11n/ac (V)HT20* (Core 0+1 for U-NII-1 / 2A and Core 0+2 for U-NII-2C / 3)
 - Main 802.11n/ac (V)HT40* (Core 0+1 for U-NII-1 / 2A and Core 0+2 for U-NII-2C / 3)
 - Main 802.11ac VHT80 (Core 0+1 for U-NII-1 / 2A and Core 0+2 for U-NII-2C / 3)
- 3x3 MIMO Modes:
 - Main 802.11n/ac (V)HT20* (Cores 0+1+2)
 - Main 802.11n/ac (V)HT40* (Cores 0+1+2)
 - Main 802.11ac VHT80 (Cores 0+1+2)

* = 802.11n HT modes were used for CDD and SDM and 802.11ac VHT modes were used for TxBF modes.



1.4.3 Test Set-up

For conducted tests the EUT antennas were disconnected and replaced with U.FL to SMA test cables to enable conducted testing on each Core. The loss of these test cables were known and compensated for in any conducted measurements.

For transmit beamforming (TxBF) modes the EUT was set up communicating with a support notebook computer provided by the applicant, configured with custom commands to act as an access point. The test laptop was also set to a low output power (approximately 0 dBm) so in conjunction with the rest of the set-up configuration, would give negligible power at the measuring equipment and would not affect the test result. The support laptop's test network set the channel and bandwidth to which the EUT could connect. The EUT then set up a communications link to the support laptop, operating in normal communications mode but with beamforming modes forced on, with auto rate and TPC disabled via terminal commands so the EUT could be limited to worst-case modes. The EUT transmit duty cycle was then maximized by using iPerf bandwidth testing software to keep the transmit output buffer full and generate more traffic from the EUT to the support laptop than the link could sustain. The EUT therefore could fully operate its beamforming mode but with strictly controlled test parameters.

For all other testing except DFS the EUT was put into a continuous transmit test mode with the chipset manufacturer's test commands via a script running in the EUTs terminal application. The EUT then transmitted the required type of packeted 802.11 data frames of fixed length, containing the standard headers and with pseudo-random data content, ensuring the measured signals were representative and contained all the symbols at the highest power control level.

For DFS testing the EUT was connected to a test access point as shown in section 2.7. The iPerf data throughput test application was ran from the terminal to send UDP data packets from the EUT to the access point. The iPerf throughput rate was then adjusted to give >17 % duty cycle for each test mode.



1.4.4 Antenna Gain Table

Core 1

Frequency (MHz)	Peak Gain (dBi)	Conducted Cable Loss (dB)
5150 – 5250	2.00	1.39
5250 – 5350	2.00	1.42
5470 – 5725	0.50	1.27
5725 – 5850	0.50	1.30

Table 3

Core 0

Frequency (MHz)	Peak Gain (dBi)	Conducted Cable Loss (dB)
5150 – 5250	3.50	1.39
5250 – 5350	3.00	1.42
5470 – 5725	4.00	1.27
5725 – 5850	2.25	1.30

Table 4

Core 2/Aux

Frequency (MHz)	Peak Gain (dBi)	Conducted Cable Loss (dB)
5150 – 5250	1.50	1.39
5250 – 5350	1.50	1.42
5470 – 5725	2.75	1.27
5725 – 5850	2.50	1.30

Table 5



1.5 Deviations from the Standard

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

1.6 EUT Modification Record

The table below details modifications made to the EUT during the test programme.
The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Serial Number: C07WT00HK2V0			
0	As supplied by the customer	Not Applicable	Not Applicable
Serial Number: C07WT003K2V0			
0	As supplied by the customer	Not Applicable	Not Applicable
Serial Number: C07WR049K2T5			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 6



1.7 Test Location

TÜV SÜD Product Service conducted the following tests at our Fareham Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: Main - 20 MHz Bandwidth		
Maximum Conducted Output Power	Philip Harrison and Mehadi Choudhury	UKAS
Maximum Conducted Power Spectral Density	Philip Harrison and Mehadi Choudhury	UKAS
Emission Bandwidth	Philip Harrison and Mehadi Choudhury	UKAS
Authorised Band Edges	Sharifu Sendagire, Graeme Lawler, Tony Hubbard and Malik Mohammed	UKAS
Spurious Radiated Emissions	Sharifu Sendagire, Graeme Lawler, Tony Hubbard and Malik Mohammed	UKAS
Restricted Band Edges	Sharifu Sendagire, Graeme Lawler, Tony Hubbard and Malik Mohammed	UKAS
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period	Matthew Russell	UKAS

Table 7

Office Address:

Octagon House
Concorde Way
Segensworth North
Fareham
Hampshire
PO15 5RL
United Kingdom



2 Test Details

2.1 Maximum Conducted Output Power

2.1.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (a)
Industry Canada RSS-247, Clause 6.2
Industry Canada RSS-GEN, Clause 6.12.

2.1.2 Equipment Under Test and Modification State

A1993, S/N: C07WT003K2V0 - Modification State 0

2.1.3 Date of Test

27-July-2018 to 05-October-2018

2.1.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 12.3.3.2 and KDB 789033 D02 using method PM-G.

Since the gated power meter was used for method PM-G the EUT was measured only while transmitting and hence no duty cycle correction was necessary.

MIMO output port summing was performed in accordance with KDB 662911 D01.

The EUT has equal conducted powers on all ports for each mode of operation, but unequal antenna gains. Therefore for SISO and 2x2 MIMO modes the EUT was tested on the ports with the highest antenna gain combinations which would result in the highest EIRP output power.

2.1.5 Environmental Conditions

Ambient Temperature	23 to 26°C
Relative Humidity	33 to 45%



2.1.6 Test Results: U-NII-1

802.11a / 6 Mbps / SISO / Core 0 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Antenna Directional Gain (dBi)	3.50	3.50	3.50
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
Conducted Power (dBm)	16.49	20.32	20.44

Table 8 -

802.11a / 6 Mbps / SISO / Core 0 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Antenna Directional Gain (dBi)	3.50	3.50	3.50
Conducted Power (dBm)	16.03	15.87	15.98
RSS-247 EIRP Power Limit (dBm)	22.22	22.22	22.22
Total EIRP (dBm)	19.53	19.37	19.48

Table 9

802.11n / HT40 MCS0 / SISO / Core 0 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Antenna Directional Gain (dBi)	3.50	3.50
15.407 Conducted Power Limit (dBm)	24.00	24.00
Conducted Power (dBm)	14.07	19.49

Table 10

802.11n / HT40 MCS0 / SISO / Core 0 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Antenna Directional Gain (dBi)	3.50	3.50
Conducted Power (dBm)	14.09	18.42
RSS-247 EIRP Power Limit (dBm)	23.00	23.00
Total EIRP (dBm)	17.59	21.92

Table 11

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.28	17.89
Conducted Power Core 1 (dBm)	13.46	18.01
Antenna Directional Gain (dBi)	3.50	3.50
15.407 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	16.38	20.96

Table 12



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.29	13.38
Conducted Power Core 1 (dBm)	13.30	13.31
Total Conducted Power (dBm)	16.79	16.88
Antenna Directional Gain (dBi)	3.50	3.50
RSS-247 EIRP Power Limit (dBm)	23.00	23.00
Total EIRP (dBm)	20.29	20.38

Table 13

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.29	17.96
Conducted Power Core 1 (dBm)	13.31	18.04
Antenna Directional Gain (dBi)	2.81	2.81
15.407 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	16.31	21.01

Table 14

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.31	16.16
Conducted Power Core 1 (dBm)	13.28	16.21
Total Conducted Power (dBm)	16.31	19.20
Antenna Directional Gain (dBi)	2.81	2.81
RSS-247 EIRP Power Limit (dBm)	23.00	23.00
Total EIRP (dBm)	19.12	22.01

Table 15

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.49	17.29
Conducted Power Core 1 (dBm)	13.45	17.39
Conducted Power Core 2 (dBm)	13.43	17.60
Antenna Directional Gain (dBi)	3.50	3.50
15.407 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	18.23	22.20

Table 16



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	11.02	10.91
Conducted Power Core 1 (dBm)	11.02	10.81
Conducted Power Core 2 (dBm)	10.94	10.81
Total Conducted Power (dBm)	15.76	15.61
Antenna Directional Gain (dBi)	3.50	3.50
Total EIRP (dBm)	23.00	23.00
RSS-247 EIRP Power Limit (dBm)	19.26	19.11

Table 17

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.43	17.94
Conducted Power Core 1 (dBm)	13.47	18.01
Conducted Power Core 2 (dBm)	13.36	17.99
Antenna Directional Gain (dBi)	2.42	2.42
15.407 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	18.19	22.75

Table 18

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.37	14.62
Conducted Power Core 1 (dBm)	13.53	14.66
Conducted Power Core 2 (dBm)	13.60	14.61
Total Conducted Power (dBm)	18.27	19.40
Antenna Directional Gain (dBi)	2.42	2.42
Total EIRP (dBm)	23.00	23.00
RSS-247 EIRP Power Limit (dBm)	20.69	21.82

Table 19

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted Power Core 0 (dBm)	16.27	18.01	17.87
Conducted Power Core 1 (dBm)	16.28	18.10	17.93
Antenna Directional Gain (dBi)	5.79	5.79	5.79
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
Total Conducted Power (dBm)	19.29	21.07	20.91

Table 20



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted Power Core 0 (dBm)	10.54	10.40	10.39
Conducted Power Core 1 (dBm)	10.37	10.41	10.53
Total Conducted Power (dBm)	13.47	13.42	13.47
Antenna Directional Gain (dBi)	5.79	5.79	5.79
RSS-247 EIRP Power Limit (dBm)	22.59	22.62	22.60
Total EIRP (dBm)	19.26	19.21	19.26

Table 21

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted Power Core 0 (dBm)	15.03	15.00	15.02
Conducted Power Core 1 (dBm)	14.77	14.78	14.98
Conducted Power Core 2 (dBm)	15.08	14.97	15.08
Antenna Directional Gain (dBi)	7.15	7.15	7.15
15.407 Conducted Power Limit (dBm)	22.85	22.85	22.85
Total Conducted Power (dBm)	19.73	19.69	19.80

Table 22

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted Power Core 0 (dBm)	7.38	7.29	7.44
Conducted Power Core 1 (dBm)	7.36	7.53	7.37
Conducted Power Core 2 (dBm)	7.30	7.35	7.31
Total Conducted Power (dBm)	12.12	12.16	12.14
Antenna Directional Gain (dBi)	7.15	7.15	7.15
RSS-247 EIRP Power Limit (dBm)	22.61	22.63	22.61
Total EIRP (dBm)	19.26	19.31	19.29

Table 23

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.51	18.04
Conducted Power Core 1 (dBm)	13.43	17.97
Antenna Directional Gain (dBi)	5.79	5.79
15.407 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	16.48	21.02

Table 24



802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.13	13.30
Conducted Power Core 1 (dBm)	13.06	13.25
Total Conducted Power (dBm)	16.11	16.29
Antenna Directional Gain (dBi)	5.79	5.79
RSS-247 EIRP Power Limit (dBm)	23.00	23.00
Total EIRP (dBm)	21.90	22.08

Table 25

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	13.43	17.06
Conducted Power Core 1 (dBm)	13.33	16.93
Conducted Power Core 2 (dBm)	13.27	17.00
Antenna Directional Gain (dBi)	7.15	7.15
15.407 Conducted Power Limit (dBm)	22.85	22.85
Total Conducted Power (dBm)	18.12	21.77

Table 26

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted Power Core 0 (dBm)	9.89	9.86
Conducted Power Core 1 (dBm)	9.78	9.93
Conducted Power Core 2 (dBm)	10.10	9.93
Antenna Directional Gain (dBi)	7.15	7.15
Total Conducted Power (dBm)	14.70	14.68
Total EIRP (dBm)	23.00	23.00
RSS-247 EIRP Power Limit (dBm)	21.84	21.82

Table 27

802.11ac / VHT80 MCS0x1 / SISO / Core 0 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Antenna Directional Gain (dBi)	3.50
15.407 Conducted Power Limit (dBm)	24.00
Conducted Power (dBm)	13.86

Table 28



802.11ac / VHT80 MCS0x1 / SISO / Core 0 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted Power (dBm)	13.95
Antenna Directional Gain (dBi)	3.50
Total EIRP (dBm)	17.45
RSS-247 EIRP Power Limit (dBm)	23.00

Table 29

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	13.48
Conducted Power Core 1 (dBm)	13.36
Antenna Directional Gain (dBi)	3.50
15.407 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	16.43

Table 30

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	13.57
Conducted Power Core 1 (dBm)	13.25
Total Conducted Power (dBm)	16.42
Antenna Directional Gain (dBi)	3.50
RSS-247 EIRP Power Limit (dBm)	23.00
Total EIRP (dBm)	19.92

Table 31

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	13.60
Conducted Power Core 1 (dBm)	13.50
Antenna Directional Gain (dBi)	2.81
15.407 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	16.56

Table 32



802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	13.41
Conducted Power Core 1 (dBm)	13.29
Total Conducted Power (dBm)	16.36
Total Conducted Power (dBm)	2.81
RSS-247 EIRP Power Limit (dBm)	23.00
Total EIRP (dBm)	19.17

Table 33

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	12.87
Conducted Power Core 1 (dBm)	13.03
Conducted Power Core 2 (dBm)	12.97
Antenna Directional Gain (dBi)	3.50
15.407 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	17.73

Table 34

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	12.81
Conducted Power Core 1 (dBm)	13.04
Conducted Power Core 2 (dBm)	12.88
Total Conducted Power (dBm)	17.68
Antenna Directional Gain (dBi)	3.50
RSS-247 EIRP Power Limit (dBm)	23.00
Total EIRP (dBm)	21.18

Table 35

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	13.32
Conducted Power Core 1 (dBm)	13.36
Conducted Power Core 2 (dBm)	13.41
Antenna Directional Gain (dBi)	2.42
15.407 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	18.13

Table 36



802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted Power Core 0 (dBm)	13.56
Conducted Power Core 1 (dBm)	13.53
Conducted Power Core 2 (dBm)	13.48
Total Conducted Power (dBm)	18.29
Antenna Directional Gain (dBi)	2.42
RSS-247 EIRP Power Limit (dBm)	23.00
Total EIRP (dBm)	20.71

Table 37

802.11a / 6 Mbps / SISO / Core Aux / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Antenna Directional Gain (dBi)	1.50	1.50	1.50
Conducted Power (dBm)	17.27	20.47	20.49
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00

Table 38

802.11a / 6 Mbps / SISO / Core Aux / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Antenna Directional Gain (dBi)	1.50	1.50	1.50
Conducted Power (dBm)	17.57	17.90	17.78
Total EIRP (dBm)	19.07	19.40	19.28
RSS-247 EIRP Power Limit (dBm)	22.22	22.22	22.23

Table 39

802.11n / HT20 MCS0 / SISO / Core Aux / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Antenna Directional Gain (dBi)	1.50	1.50	1.50
Conducted Power (dBm)	17.43	20.40	20.39
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00

Table 40

802.11n / HT20 MCS0 / SISO / Core Aux / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Antenna Directional Gain (dBi)	1.50	1.50	1.50
Conducted Power (dBm)	17.34	17.78	17.75
Total EIRP (dBm)	18.84	19.28	19.25
RSS-247 EIRP Power Limit (dBm)	22.51	22.52	22.52

Table 41



802.11n / HT40 MCS0 / SISO / Core Aux / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Antenna Directional Gain (dBi)	1.50	1.50
15.407 Conducted Power Limit (dBm)	24.00	24.00
Conducted Power (dBm)	14.55	20.01

Table 42

802.11n / HT40 MCS0 / SISO / Core Aux / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Antenna Directional Gain (dBi)	1.50	1.50
Conducted Power (dBm)	14.42	19.83
Total EIRP (dBm)	15.92	21.33
RSS-247 EIRP Power Limit (dBm)	23.00	23.00

Table 43

802.11ac / VHT80 MCS0x1 / SISO / Core Aux / Country Code US

Channel	Middle
Frequency (MHz)	5210
Antenna Directional Gain (dBi)	1.50
15.407 Conducted Power Limit (dBm)	24.00
Conducted Power (dBm)	14.30

Table 44

802.11ac / VHT80 MCS0x1 / SISO / Core Aux / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Antenna Directional Gain (dBi)	1.50
Conducted Power (dBm)	14.38
RSS-247 EIRP Power Limit (dBm)	23.00
Total EIRP (dBm)	15.88

Table 45



2.1.7 Test Results: U-NII-2A

802.11a / 6 Mbps / SISO / Core 0

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Antenna Directional Gain (dBi)	3.00	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.29	23.29	23.22
Conducted Power (dBm)	20.49	20.55	16.09
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.29	29.29	29.22
EIRP Power (dBm)	23.49	23.55	19.09

Table 46

802.11n / HT20 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Antenna Directional Gain (dBi)	3.00	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.56	23.55	23.52
Conducted Power (dBm)	20.25	20.57	15.96
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.56	29.55	29.52
EIRP Power (dBm)	23.25	23.57	18.96

Table 47

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted Power Core 0 (dBm)	18.01	18.01	16.00
Conducted Power Core 1 (dBm)	17.91	18.09	15.89
Antenna Directional Gain (dBi)	3.00	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.53	23.53	23.52
Total Conducted Power (dBm)	20.97	21.06	18.96
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.53	29.53	29.52
EIRP Power (dBm)	23.97	24.06	21.96

Table 48



802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted Power Core 0 (dBm)	17.94	17.91	15.95
Conducted Power Core 1 (dBm)	17.85	17.95	15.89
Antenna Directional Gain (dBi)	2.53	2.53	2.53
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.51	23.51	23.50
Total Conducted Power (dBm)	20.91	20.94	18.93
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.51	29.51	29.50
EIRP Power (dBm)	23.43	23.47	21.46

Table 49

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted Power Core 0 (dBm)	15.08	15.08	15.01
Conducted Power Core 1 (dBm)	14.99	15.03	14.96
Conducted Power Core 2 (dBm)	14.77	15.09	14.94
Antenna Directional Gain (dBi)	3.00	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.52	23.52	23.52
Total Conducted Power (dBm)	19.72	19.84	19.74
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.52	29.52	29.52
EIRP Power (dBm)	22.72	22.84	22.74

Table 50

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted Power Core 0 (dBm)	16.09	16.08	16.02
Conducted Power Core 1 (dBm)	15.77	15.91	15.92
Conducted Power Core 2 (dBm)	16.09	15.99	16.05
Antenna Directional Gain (dBi)	2.21	2.21	2.21
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.51	23.51	23.50
Total Conducted Power (dBm)	20.76	20.77	20.77
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.51	29.51	29.50
EIRP Power (dBm)	22.97	22.98	22.98

Table 51



802.11n / HT40 MCS0 / SISO / Core 0

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Antenna Directional Gain (dBi)	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Conducted Power (dBm)	18.85	14.02
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	21.85	17.02

Table 52

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted Power Core 0 (dBm)	17.78	14.08
Conducted Power Core 1 (dBm)	18.10	13.93
Antenna Directional Gain (dBi)	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	20.95	17.02
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	23.95	20.02

Table 53

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted Power Core 0 (dBm)	17.75	13.94
Conducted Power Core 1 (dBm)	17.97	14.02
Antenna Directional Gain (dBi)	2.53	2.53
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	20.87	16.99
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	23.40	19.52

Table 54

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted Power Core 0 (dBm)	17.46	13.81
Conducted Power Core 1 (dBm)	17.45	13.97
Conducted Power Core 2 (dBm)	17.53	14.02
Antenna Directional Gain (dBi)	3.00	3.00
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	22.25	18.71
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	25.25	21.71

Table 55

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted Power Core 0 (dBm)	17.84	14.06
Conducted Power Core 1 (dBm)	18.05	14.05
Conducted Power Core 2 (dBm)	17.78	13.98
Antenna Directional Gain (dBi)	2.21	2.21
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	22.66	18.80
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	24.87	21.01

Table 56

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted Power Core 0 (dBm)	17.98	17.77	15.95
Conducted Power Core 1 (dBm)	18.04	17.94	16.10
Antenna Directional Gain (dBi)	5.52	5.52	5.52
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.61	23.62	23.60
Total Conducted Power (dBm)	21.02	20.87	19.04
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.61	29.62	29.60
EIRP Power (dBm)	26.55	26.39	24.56

Table 57



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted Power Core 0 (dBm)	14.91	14.97	14.83
Conducted Power Core 1 (dBm)	15.08	15.01	15.07
Conducted Power Core 2 (dBm)	14.97	15.02	14.78
Antenna Directional Gain (dBi)	6.96	6.96	6.96
15.407 Conducted Power Limit (dBm)	23.04	23.04	23.04
RSS-247 Conducted Power Limit (dBm)	23.58	23.63	23.60
Total Conducted Power (dBm)	19.76	19.77	19.67
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.58	29.63	29.60
EIRP Power (dBm)	26.72	26.73	26.63

Table 58

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted Power Core 0 (dBm)	17.84	13.92
Conducted Power Core 1 (dBm)	17.99	14.01
Antenna Directional Gain (dBi)	5.52	5.52
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	20.93	16.98
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	26.45	22.50

Table 59



802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted Power Core 0 (dBm)	17.28	14.09
Conducted Power Core 1 (dBm)	17.05	14.10
Conducted Power Core 2 (dBm)	17.09	13.90
Antenna Directional Gain (dBi)	6.96	6.96
15.407 Conducted Power Limit (dBm)	23.04	23.04
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Total Conducted Power (dBm)	21.91	18.80
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	28.87	25.76

Table 60

802.11ac / VHT80 MCS0x1 / SISO / Core 0

Channel	Middle
Frequency (MHz)	5290
Antenna Directional Gain (dBi)	3.00
15.407 Conducted Power Limit (dBm)	24.00
RSS-247 Conducted Power Limit (dBm)	24.00
Conducted Power (dBm)	12.96
15.407 TPC EIRP Limit (dBm)	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00
EIRP Power (dBm)	15.96

Table 61

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1

Channel	Middle
Frequency (MHz)	5290
Conducted Power Core 0 (dBm)	12.30
Conducted Power Core 1 (dBm)	12.25
Antenna Directional Gain (dBi)	3.00
15.407 Conducted Power Limit (dBm)	24.00
RSS-247 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	15.29
15.407 TPC EIRP Limit (dBm)	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00
EIRP Power (dBm)	18.29

Table 62



802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1

Channel	Middle
Frequency (MHz)	5290
Conducted Power Core 0 (dBm)	12.31
Conducted Power Core 1 (dBm)	12.28
Antenna Directional Gain (dBi)	2.53
15.407 Conducted Power Limit (dBm)	24.00
RSS-247 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	15.31
15.407 TPC EIRP Limit (dBm)	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00
EIRP Power (dBm)	17.83

Table 63

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2

Channel	Middle
Frequency (MHz)	5290
Conducted Power Core 0 (dBm)	12.39
Conducted Power Core 1 (dBm)	12.56
Conducted Power Core 2 (dBm)	12.48
Antenna Directional Gain (dBi)	3.00
15.407 Conducted Power Limit (dBm)	24.00
RSS-247 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	17.25
15.407 TPC EIRP Limit (dBm)	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00
EIRP Power (dBm)	20.25

Table 64

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2

Channel	Middle
Frequency (MHz)	5290
Conducted Power Core 0 (dBm)	12.51
Conducted Power Core 1 (dBm)	12.55
Conducted Power Core 2 (dBm)	12.54
Antenna Directional Gain (dBi)	2.21
15.407 Conducted Power Limit (dBm)	24.00
RSS-247 Conducted Power Limit (dBm)	24.00
Total Conducted Power (dBm)	17.30
15.407 TPC EIRP Limit (dBm)	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00
EIRP Power (dBm)	19.52

Table 65



802.11a / 6 Mbps / SISO / Core Aux

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Antenna Directional Gain (dBi)	1.50	1.50	1.50
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.25	23.29	23.23
Conducted Power (dBm)	20.57	20.52	17.27
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.25	29.29	29.23
EIRP Power (dBm)	22.07	22.02	18.77

Table 66

802.11n / HT20 MCS0 / SISO / Core Aux

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Antenna Directional Gain (dBi)	1.50	1.50	1.50
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.55	23.57	23.52
Conducted Power (dBm)	20.46	20.42	17.57
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.55	29.57	29.52
EIRP Power (dBm)	21.96	21.92	19.07

Table 67

802.11n / HT40 MCS0 / SISO / Core Aux

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Antenna Directional Gain (dBi)	1.50	1.50
15.407 Conducted Power Limit (dBm)	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00
Conducted Power (dBm)	18.87	14.59
15.407 TPC EIRP Limit (dBm)	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00
EIRP Power (dBm)	20.37	16.09

Table 68

802.11ac / VHT80 MCS0x1 / SISO / Core Aux

Channel	Middle
Frequency (MHz)	5290
Antenna Directional Gain (dBi)	1.50
15.407 Conducted Power Limit (dBm)	24.00
RSS-247 Conducted Power Limit (dBm)	24.00
Conducted Power (dBm)	14.50
15.407 TPC EIRP Limit (dBm)	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00
EIRP Power (dBm)	16.00

Table 69



2.1.8 Test Results: U-NII-2C

802.11a / 6 Mbps / SISO / Core 0

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.21	N/A	23.21	N/A
Conducted Power (dBm)	15.84	20.32	15.01	20.26
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.21	N/A	29.21	N/A
EIRP Power (dBm)	19.84	24.32	19.01	24.26

Table 70

802.11n / HT20 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.50	N/A	23.51	N/A
Conducted Power (dBm)	15.82	20.51	14.98	20.35
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.50	N/A	29.51	N/A
EIRP Power (dBm)	19.82	24.51	18.98	24.35

Table 71

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted Power Core 0 (dBm)	14.94	17.56	13.94	17.41
Conducted Power Core 2 (dBm)	15.00	17.47	13.82	17.49
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	23.23
RSS-247 Conducted Power Limit (dBm)	23.52	N/A	23.51	N/A
Total Conducted Power (dBm)	17.98	20.53	16.89	20.46
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	29.23
RSS-247 TPC EIRP Limit (dBm)	29.52	N/A	29.51	N/A
EIRP Power (dBm)	21.98	24.53	20.89	24.46

Table 72



802.11n / HT20 MCS8 / MIMO SDM / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted Power Core 0 (dBm)	15.04	18.05	13.87	17.93
Conducted Power Core 2 (dBm)	14.87	17.88	13.78	17.89
Antenna Directional Gain (dBi)	3.42	3.42	3.42	3.42
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.50	N/A	23.50	N/A
Total Conducted Power (dBm)	17.97	20.98	16.84	20.92
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.50	N/A	29.50	N/A
EIRP Power (dBm)	21.39	24.40	20.26	24.34

Table 73

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted Power Core 0 (dBm)	14.42	14.40	13.81	14.47
Conducted Power Core 1 (dBm)	14.40	14.49	13.96	14.51
Conducted Power Core 2 (dBm)	14.46	14.44	13.98	14.52
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	23.20
RSS-247 Conducted Power Limit (dBm)	23.52	N/A	23.52	N/A
Total Conducted Power (dBm)	19.20	19.21	18.69	19.27
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	29.20
RSS-247 TPC EIRP Limit (dBm)	29.52	N/A	29.52	N/A
EIRP Power (dBm)	23.20	23.21	22.69	23.27

Table 74

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted Power Core 0 (dBm)	14.79	15.96	13.94	15.85
Conducted Power Core 1 (dBm)	14.91	15.94	13.94	15.95
Conducted Power Core 2 (dBm)	14.84	16.04	14.10	15.93
Antenna Directional Gain (dBi)	2.65	2.65	2.65	2.65
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	23.10
RSS-247 Conducted Power Limit (dBm)	23.51	N/A	23.50	N/A
Total Conducted Power (dBm)	19.62	20.75	18.77	20.68
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	29.10
RSS-247 TPC EIRP Limit (dBm)	29.51	N/A	29.50	N/A
EIRP Power (dBm)	22.26	23.40	21.41	23.33

Table 75



802.11n / HT40 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Conducted Power (dBm)	15.39	22.04	18.44	21.95
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	19.39	26.04	22.44	25.95

Table 76

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted Power Core 0 (dBm)	15.09	19.98	17.88	20.04
Conducted Power Core 2 (dBm)	15.03	19.97	17.99	19.98
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Total Conducted Power (dBm)	18.07	22.99	20.95	23.02
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	22.07	26.99	24.95	27.02

Table 77

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted Power Core 0 (dBm)	15.06	19.94	17.87	20.01
Conducted Power Core 2 (dBm)	14.94	19.83	18.06	20.06
Antenna Directional Gain (dBi)	3.42	3.42	3.42	3.42
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Total Conducted Power (dBm)	18.01	22.90	20.98	23.05
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	21.43	26.32	24.40	26.47

Table 78



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted Power Core 0 (dBm)	14.83	17.49	17.47	17.28
Conducted Power Core 1 (dBm)	14.86	17.37	17.26	17.36
Conducted Power Core 2 (dBm)	15.00	17.35	17.38	17.41
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Total Conducted Power (dBm)	19.67	22.17	22.14	22.12
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	23.67	26.17	26.14	26.12

Table 79

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted Power Core 0 (dBm)	14.27	18.44	18.26	18.42
Conducted Power Core 1 (dBm)	14.42	18.36	18.48	18.54
Conducted Power Core 2 (dBm)	14.47	18.30	18.40	18.53
Antenna Directional Gain (dBi)	2.65	2.65	2.65	2.65
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Total Conducted Power (dBm)	19.16	23.14	23.15	23.27
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	21.80	25.78	25.80	25.91

Table 80

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted Power Core 0 (dBm)	14.91	17.32	13.89	17.54
Conducted Power Core 2 (dBm)	14.75	17.41	13.82	17.49
Antenna Directional Gain (dBi)	6.41	6.41	6.41	6.41
15.407 Conducted Power Limit (dBm)	23.59	N/A	23.59	N/A
RSS-247 Conducted Power Limit (dBm)	23.57	23.60	23.57	23.57
Total Conducted Power (dBm)	17.84	20.38	16.87	20.53
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	28.99
RSS-247 TPC EIRP Limit (dBm)	29.57	N/A	29.57	N/A
EIRP Power (dBm)	24.25	26.78	23.27	26.93

Table 81



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted Power Core 0 (dBm)	14.50	14.36	14.09	14.51
Conducted Power Core 1 (dBm)	14.43	14.45	14.09	14.35
Conducted Power Core 2 (dBm)	14.45	14.26	14.01	14.55
Antenna Directional Gain (dBi)	7.31	7.31	7.31	7.31
15.407 Conducted Power Limit (dBm)	22.69	22.69	22.69	21.70
RSS-247 Conducted Power Limit (dBm)	23.62	N/A	23.59	N/A
Total Conducted Power (dBm)	19.23	19.13	18.83	19.24
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	29.00
RSS-247 TPC EIRP Limit (dBm)	29.62	N/A	29.59	N/A
EIRP Power (dBm)	26.54	26.43	26.14	26.55

Table 82

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted Power Core 0 (dBm)	15.02	19.40	17.85	19.49
Conducted Power Core 2 (dBm)	15.03	19.60	18.00	19.32
Antenna Directional Gain (dBi)	6.41	6.41	6.41	6.41
15.407 Conducted Power Limit (dBm)	23.59	23.59	23.59	23.59
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Total Conducted Power (dBm)	18.04	22.51	20.94	22.42
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	24.44	28.92	27.34	28.82

Table 83

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted Power Core 0 (dBm)	14.52	17.07	17.09	17.07
Conducted Power Core 1 (dBm)	14.49	16.83	16.84	16.99
Conducted Power Core 2 (dBm)	14.58	16.87	16.97	17.00
Antenna Directional Gain (dBi)	7.31	7.31	7.31	7.31
15.407 Conducted Power Limit (dBm)	22.69	22.69	22.69	22.69
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Total Conducted Power (dBm)	19.30	21.70	21.74	21.79
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	26.61	29.00	29.05	29.10

Table 84

802.11ac / VHT80 MCS0x1 / SISO / Core 0

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Antenna Directional Gain (dBi)	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	N/A
Conducted Power (dBm)	15.60	18.76	20.75
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	N/A
EIRP Power (dBm)	19.60	22.76	24.75

Table 85

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted Power Core 0 (dBm)	13.98	18.90	19.82
Conducted Power Core 2 (dBm)	13.91	18.95	20.01
Antenna Directional Gain (dBi)	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	N/A
Total Conducted Power (dBm)	16.96	21.94	22.93
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	N/A
EIRP Power (dBm)	20.96	25.94	26.93

Table 86

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted Power Core 0 (dBm)	13.95	18.90	19.80
Conducted Power Core 2 (dBm)	13.84	19.02	20.01
Antenna Directional Gain (dBi)	3.42	3.42	3.42
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	N/A
Total Conducted Power (dBm)	16.91	21.97	22.92
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	N/A
EIRP Power (dBm)	20.33	25.39	26.34

Table 87



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted Power Core 0 (dBm)	13.65	18.15	18.20
Conducted Power Core 1 (dBm)	13.63	18.17	18.19
Conducted Power Core 2 (dBm)	13.64	18.30	18.29
Antenna Directional Gain (dBi)	4.00	4.00	4.00
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	N/A
Total Conducted Power (dBm)	18.41	22.98	23.00
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	N/A
EIRP Power (dBm)	22.41	26.98	27.00

Table 88

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted Power Core 0 (dBm)	12.84	16.78	16.93
Conducted Power Core 1 (dBm)	12.76	16.80	17.01
Conducted Power Core 2 (dBm)	12.79	16.84	16.84
Antenna Directional Gain (dBi)	2.65	2.65	2.65
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	N/A
Total Conducted Power (dBm)	17.57	21.58	21.70
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	N/A
EIRP Power (dBm)	20.21	24.22	24.35

Table 89

802.11a / 6 Mbps / SISO / Core Aux

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Antenna Directional Gain (dBi)	2.75	2.75	2.75	2.75
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.23	N/A	23.21	N/A
Conducted Power (dBm)	17.52	20.41	15.62	20.46
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.23	N/A	29.21	N/A
EIRP Power (dBm)	20.27	23.16	18.37	23.21

Table 90



802.11n / HT20 MCS0 / SISO / Core Aux

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Antenna Directional Gain (dBi)	2.75	2.75	2.75	2.75
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	23.52	N/A	23.51	N/A
Conducted Power (dBm)	17.52	20.40	15.61	20.45
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	29.52	N/A	29.51	N/A
EIRP Power (dBm)	20.27	23.15	18.36	23.20

Table 91

802.11n / HT40 MCS0 / SISO / Core Aux

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Antenna Directional Gain (dBi)	2.75	2.75	2.75	2.75
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	N/A	24.00	N/A
Conducted Power (dBm)	15.46	21.88	18.36	22.01
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	N/A	30.00	N/A
EIRP Power (dBm)	18.21	24.63	21.11	24.76

Table 92

802.11ac / VHT80 MCS0x1 / SISO / Core Aux

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Antenna Directional Gain (dBi)	2.75	2.75	2.75
15.407 Conducted Power Limit (dBm)	24.00	24.00	24.00
RSS-247 Conducted Power Limit (dBm)	24.00	24.00	N/A
Conducted Power (dBm)	15.52	20.50	22.08
15.407 TPC EIRP Limit (dBm)	30.00	30.00	30.00
RSS-247 TPC EIRP Limit (dBm)	30.00	30.00	N/A
EIRP Power (dBm)	18.27	23.25	24.83

Table 93



2.1.9 Test Results: U-NII-3

802.11a / 6 Mbps / SISO / Core 2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Conducted Power (dBm)	20.54	21.96	21.93	21.75
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	23.29	24.46	24.43	24.25

Table 94

802.11n / HT20 MCS0 / SISO / Core 2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Conducted Power (dBm)	20.49	21.94	21.96	21.91
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	23.24	24.44	24.46	24.41

Table 95

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted Power Core 0 (dBm)	17.29	21.89	22.05	21.82
Conducted Power Core 2 (dBm)	17.27	22.10	21.98	21.87
Antenna Directional Gain (dBi)	4.00	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	30.00	N/A	30.00	30.00
Total Conducted Power (dBm)	20.29	25.01	25.03	24.86
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	36.00	N/A	36.00	36.00
EIRP Power (dBm)	24.29	27.51	27.53	27.36

Table 96



802.11n / HT20 MCS8 / MIMO SDM / Cores 0+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted Power Core 0 (dBm)	18.01	21.88	22.07	22.03
Conducted Power Core 2 (dBm)	17.88	22.10	21.86	21.77
Antenna Directional Gain (dBi)	2.38	2.38	2.38	2.38
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Total Conducted Power (dBm)	20.96	25.00	24.98	24.91
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	23.33	27.38	27.35	27.29

Table 97

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted Power Core 0 (dBm)	14.53	21.75	22.10	21.91
Conducted Power Core 1 (dBm)	14.51	21.83	21.91	21.90
Conducted Power Core 2 (dBm)	14.28	22.06	21.82	21.84
Antenna Directional Gain (dBi)	2.50	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Total Conducted Power (dBm)	19.21	26.65	26.72	26.65
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	21.71	29.15	29.22	29.15

Table 98

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Straddle	Bottom	Middle
Frequency (MHz)	5720	5745	5785
Conducted Power Core 0 (dBm)	15.81	21.86	22.09
Conducted Power Core 1 (dBm)	15.85	21.86	21.93
Conducted Power Core 2 (dBm)	15.94	21.86	21.88
Antenna Directional Gain (dBi)	1.84	1.84	1.84
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Total Conducted Power (dBm)	20.64	26.63	26.74
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	22.47	28.47	28.58

Table 99



802.11n / HT40 MCS0 / SISO / Core 2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Conducted Power (dBm)	21.88	22.01	21.85
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	24.38	24.51	24.35

Table 100

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted Power Core 0 (dBm)	20.04	22.00	21.76
Conducted Power Core 2 (dBm)	20.09	21.98	22.10
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Total Conducted Power (dBm)	23.08	25.00	24.94
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	25.58	27.50	27.44

Table 101

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted Power Core 0 (dBm)	19.82	22.02	22.01
Conducted Power Core 2 (dBm)	20.06	21.94	21.92
Antenna Directional Gain (dBi)	2.38	2.38	2.38
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Total Conducted Power (dBm)	22.95	24.99	24.98
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	25.33	27.37	27.35

Table 102

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted Power Core 0 (dBm)	17.55	22.09	21.99
Conducted Power Core 1 (dBm)	17.36	21.83	21.75
Conducted Power Core 2 (dBm)	17.41	21.96	21.92
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Total Conducted Power (dBm)	22.21	26.73	26.66
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	24.71	29.23	29.16

Table 103

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted Power Core 0 (dBm)	18.45	22.02	22.06
Conducted Power Core 1 (dBm)	18.56	21.75	22.04
Conducted Power Core 2 (dBm)	18.55	22.00	21.76
Antenna Directional Gain (dBi)	1.84	1.84	1.84
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Total Conducted Power (dBm)	23.29	26.70	26.73
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	25.13	28.53	28.56

Table 104

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted Power Core 0 (dBm)	17.47	21.94	21.87	21.86
Conducted Power Core 2 (dBm)	17.53	21.83	21.80	21.75
Antenna Directional Gain (dBi)	5.39	5.39	5.39	5.39
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Total Conducted Power (dBm)	20.51	24.90	24.85	24.82
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	25.90	30.28	30.23	30.20

Table 105



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted Power Core 0 (dBm)	14.48	22.05	21.86	21.79
Conducted Power Core 1 (dBm)	14.48	21.75	21.83	21.76
Conducted Power Core 2 (dBm)	14.31	21.90	21.90	21.90
Antenna Directional Gain (dBi)	6.57	6.57	6.57	6.57
15.407 Conducted Power Limit (dBm)	29.43	29.43	29.43	29.43
RSS-247 Conducted Power Limit (dBm)	N/A	29.43	29.43	29.43
Total Conducted Power (dBm)	19.20	26.67	26.63	26.59
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	25.76	33.24	33.20	33.15

Table 106

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted Power Core 0 (dBm)	19.50	22.05	21.82
Conducted Power Core 2 (dBm)	19.30	21.77	21.89
Antenna Directional Gain (dBi)	5.39	5.39	5.39
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Total Conducted Power (dBm)	22.41	24.92	24.87
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	27.80	30.31	30.25

Table 107

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted Power Core 0 (dBm)	16.78	21.90	21.90
Conducted Power Core 1 (dBm)	17.01	22.01	22.10
Conducted Power Core 2 (dBm)	16.89	22.03	22.08
Antenna Directional Gain (dBi)	6.57	6.57	6.57
15.407 Conducted Power Limit (dBm)	29.43	29.43	29.43
RSS-247 Conducted Power Limit (dBm)	N/A	29.43	29.43
Total Conducted Power (dBm)	21.67	26.75	26.80
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	28.23	33.32	33.36

Table 108



802.11ac / VHT80 MCS0x1 / SISO / Core 2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Antenna Directional Gain (dBi)	2.75	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00
Conducted Power (dBm)	21.00	20.01
15.407 EIRP Limit (dBm)	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00
EIRP Power (dBm)	23.75	22.51

Table 109

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted Power Core 0 (dBm)	19.81	19.31
Conducted Power Core 2 (dBm)	19.96	19.04
Antenna Directional Gain (dBi)	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00
Total Conducted Power (dBm)	22.90	22.19
15.407 EIRP Limit (dBm)	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00
EIRP Power (dBm)	25.40	24.69

Table 110

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted Power Core 0 (dBm)	19.85	19.26
Conducted Power Core 2 (dBm)	20.00	19.19
Antenna Directional Gain (dBi)	2.38	2.38
15.407 Conducted Power Limit (dBm)	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00
Total Conducted Power (dBm)	22.94	22.24
15.407 EIRP Limit (dBm)	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00
EIRP Power (dBm)	25.31	24.61

Table 111



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted Power Core 0 (dBm)	18.15	19.12
Conducted Power Core 1 (dBm)	18.18	19.32
Conducted Power Core 2 (dBm)	18.31	19.30
Antenna Directional Gain (dBi)	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	30.00	30.00
Total Conducted Power (dBm)	22.99	24.02
15.407 EIRP Limit (dBm)	36.00	36.00
RSS-247 EIRP Limit (dBm)	36.00	36.00
EIRP Power (dBm)	25.49	26.52

Table 112

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted Power Core 0 (dBm)	16.93	19.26
Conducted Power Core 1 (dBm)	17.00	19.20
Conducted Power Core 2 (dBm)	16.87	19.19
Antenna Directional Gain (dBi)	1.84	1.84
15.407 Conducted Power Limit (dBm)	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	30.00	30.00
Total Conducted Power (dBm)	21.70	23.99
15.407 EIRP Limit (dBm)	36.00	36.00
RSS-247 EIRP Limit (dBm)	36.00	36.00
EIRP Power (dBm)	23.54	25.82

Table 113

802.11a / 6 Mbps / SISO / Core Aux

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Conducted Power (dBm)	20.35	22.04	21.91	21.93
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	23.10	24.54	24.41	24.43

Table 114



802.11n / HT20 MCS0 / SISO / Core Aux

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00	30.00
Conducted Power (dBm)	20.54	21.94	21.88	21.97
15.407 EIRP Limit (dBm)	36.00	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00	36.00
EIRP Power (dBm)	23.29	24.44	24.38	24.47

Table 115

802.11n / HT40 MCS0 / SISO / Core Aux

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	N/A	30.00	30.00
Conducted Power (dBm)	22.03	21.95	22.06
15.407 EIRP Limit (dBm)	36.00	36.00	36.00
RSS-247 EIRP Limit (dBm)	N/A	36.00	36.00
EIRP Power (dBm)	24.53	24.45	24.56

Table 116

802.11ac / VHT80 MCS0x1 / SISO / Core Aux

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Antenna Directional Gain (dBi)	2.75	2.50
15.407 Conducted Power Limit (dBm)	30.00	30.00
RSS-247 Conducted Power Limit (dBm)	30.00	30.00
Conducted Power (dBm)	21.90	18.94
15.407 EIRP Limit (dBm)	36.00	36.00
RSS-247 EIRP Limit (dBm)	36.00	36.00
EIRP Power (dBm)	24.65	21.44

Table 117



2.1.10 Limits

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

Condition of Operation	Frequency Range (MHz)			
	5150-5250	5250-5350	5470-5725	5725-5850
Max Conducted TX Power	30 dBm (1W) for master device 24 dBm (250 mW) for client device	24 dBm (250 mW) or 11 dBm + 10 Log B, whichever is lower (B = 26 dB emission BW)		30 dBm (1 W)
Max EIRP	4W (36 dBm) with 6 dBi antenna 200 W (53 dBm) for fixed P-t-P application with 23 dBi antenna Additional rule for outdoor operation: Max_EIRP < 125 mW (21 dBm) at any elevation angle > 30° from horizon.	1 W (30 dBm) with 6 dBi antenna		4 W (36 dBm) with 6 dBi antenna. No EIRP limit for fixed P-t-P application (i.e. no antenna gain limit)

Table 118

Industry Canada RSS-247, Limit Clause 6.2.1.1, 6.2.2.1, 6.2.3.1 and 6.2.4.1

Device	Frequency Range (MHz)			
	5150-5250	5250-5350	5470-5725	5725-5850
OEM installed in vehicles	30 mW or $1.76 + 10 \log_{10} B$, dBm (EIRP); whichever is less	30 mW or $1.76 + 10 \log_{10} B$, dBm (EIRP); whichever is less	-	-
Other	200 mW or $10 + 10 \log_{10} B$ dBm (EIRP); whichever is less	250 mW or $11 + 10 \log_{10} B$; whichever is less 1.0 W or $17 + 10 \log_{10} B$ dBm EIRP; whichever is less	250 mW or $11 + 10 \log_{10} B$; whichever is less 1.0 W or $17 + 10 \log_{10} B$ dBm EIRP; whichever is less	1 W 4W EIRP

Table 119



2.1.11 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 3.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Directional Coupler	Hewlett Packard	11692D	451	12	O/P Mon
Attenuator (20dB, 2W)	Pasternack	PE7004-20	2943	12	18-Jul-2019
Attenuator (20dB, 150W)	Narda	769-20	3367	12	17-Jul-2019
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	2-Oct-2018*
'3.5mm' - '3.5mm' RF Cable (2m)	Rhophase	3PS-1803-2000-3PS	3702	12	9-Feb-2019
DC - 12.4 GHz 10 dB Attenuator	Suhner	6810.17.A	3965	12	18-Jul-2019
P-Series Power Meter	Agilent Technologies	N1911A	3981	12	29-Sep-2018
50 MHz-18 GHz Wideband Power Sensor	Agilent Technologies	N1921A	3983	12	29-Sep-2018
Calibration Unit	Rohde & Schwarz	ZV-Z54	4368	12	6-Mar-2019
PXA Signal Analyser	Keysight Technologies	N9030A	4653	12	5-Feb-2019
Power splitter - 4 port	Mini-Circuits	ZN4PD1-63-S+	4744	12	14-Sep-2018

Table 120

O/P Mon – Output Monitored using Calibrated Equipment.

*Testing was performed over multiple days, however it was confirmed that all equipment was in calibration at the time it was used and we hold records of this.



2.2 Maximum Conducted Power Spectral Density

2.2.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (a)
Industry Canada RSS-247, Clause 6.2
Industry Canada RSS-GEN, Clause 6.12

2.2.2 Equipment Under Test and Modification State

A1993, S/N: C07WT003K2V0 - Modification State 0

2.2.3 Date of Test

16-August-2018 to 05-October-2018

2.2.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 12.5 and KDB 789033 D02.

Results shown in the table with a duty cycle correction factor were tested with the SA-2 method (duty cycle corrected). Other results showing duty cycle is not applicable state which method was used on a per measurement basis (SA-1 or SA-3).

Results for the U-NII-3 band were measured in a narrower bandwidth and integrated over 500 kHz using the spectrum analyzers channel power integration function.

MIMO output port summing was performed in accordance with KDB 662911 D01.

2.2.5 Environmental Conditions

Ambient Temperature	22°C to 24°C
Relative Humidity	44% to 64%



2.2.6 Test Results: U-NII-1

802.11a / 6 Mbps / SISO / Core 0 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	5.01	9.09	10.06
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.50	3.50	3.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	5.01	9.09	10.06

Table 121

802.11a / 6 Mbps / SISO / Core 0 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	4.47	4.32	4.58
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.50	3.50	3.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	7.97	7.82	8.07

Table 122

802.11n / HT20 MCS0 / SISO / Core 0 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	4.51	8.79	9.72
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.50	3.50	3.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	4.51	8.79	9.72

Table 123

802.11n / HT20 MCS0 / SISO / Core 0 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	4.80	4.62	4.80
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.50	3.50	3.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	8.30	8.12	8.30

Table 124



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	4.23	6.12	6.33
Conducted PSD Core 1 (dBm/MHz)	4.72	6.56	6.35
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	5.79	5.79	5.79
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	7.49	9.36	9.35

Table 125

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	-2.18	-2.12	-2.19
Conducted PSD Core 1 (dBm/MHz)	-1.64	-1.88	-2.20
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	5.79	5.79	5.79
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	6.91	6.80	6.61

Table 126

802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	4.47	6.31	6.44
Conducted PSD Core 1 (dBm/MHz)	4.42	6.20	6.58
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.81	2.81	2.81
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	7.46	9.27	9.52

Table 127

802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	1.27	1.48	1.46
Conducted PSD Core 1 (dBm/MHz)	1.73	1.56	1.81
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.81	2.81	2.81
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	7.33	7.34	7.46

Table 128



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	3.12	3.22	3.11
Conducted PSD Core 1 (dBm/MHz)	3.21	3.06	3.42
Conducted PSD Core 2 (dBm/MHz)	3.15	3.66	3.38
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	7.15	7.15	7.15
15.407 Conducted PSD Limit (dBm/MHz)	9.85	9.85	9.85
Conducted PSD Result (dBm/MHz)	7.93	8.09	8.08

Table 129

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	-4.57	-4.58	-4.45
Conducted PSD Core 1 (dBm/MHz)	-3.94	-3.78	-3.90
Conducted PSD Core 2 (dBm/MHz)	-4.93	-4.52	-4.24
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	7.15	7.15	7.15
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	7.46	7.64	7.73

Table 130

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	4.34	4.24	4.19
Conducted PSD Core 1 (dBm/MHz)	4.03	4.01	4.36
Conducted PSD Core 2 (dBm/MHz)	4.42	4.71	4.62
Duty Cycle Correction (dB)	0.09	0.09	0.09
Antenna Directional Gain (dBi)	2.42	2.42	2.42
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.13	9.19	9.25

Table 131

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	0.58	0.65	0.47
Conducted PSD Core 1 (dBm/MHz)	-4.04	1.25	1.25
Conducted PSD Core 2 (dBm/MHz)	0.74	0.29	-4.12
Duty Cycle Correction (dB)	0.09	0.10	N/A SA-1
Antenna Directional Gain (dBi)	2.42	2.42	2.42
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	6.86	8.03	6.94

Table 132



802.11n / HT40 MCS0 / SISO / Core 0 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Raw Conducted Power (dBm)	-0.03	5.68
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.50	3.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	-0.03	5.68

Table 133

802.11n / HT40 MCS0 / SISO / Core 0 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Raw Conducted Power (dBm)	-0.59	3.59
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.50	3.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	2.91	7.09

Table 134

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-1.57	2.99
Conducted PSD Core 1 (dBm/MHz)	-1.13	3.77
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	5.79	5.79
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	1.67	6.41

Table 135

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-2.07	-2.33
Conducted PSD Core 1 (dBm/MHz)	-1.95	-2.12
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	5.79	5.79
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	6.79	6.58

Table 136



802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-1.85	3.24
Conducted PSD Core 1 (dBm/MHz)	-1.67	3.44
Duty Cycle Correction (dB)	0.13	0.13
Antenna Directional Gain (dBi)	2.81	2.81
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	1.38	6.47

Table 137

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-2.34	0.60
Conducted PSD Core 1 (dBm/MHz)	-1.88	0.82
Duty Cycle Correction (dB)	0.13	0.12
Antenna Directional Gain (dBi)	2.81	2.81
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	3.86	6.66

Table 138

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-1.61	2.70
Conducted PSD Core 1 (dBm/MHz)	-1.27	2.72
Conducted PSD Core 2 (dBm/MHz)	-1.36	2.77
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	7.15	7.15
15.407 Conducted PSD Limit (dBm/MHz)	9.85	9.85
Conducted PSD Result (dBm/MHz)	3.36	7.50

Table 139

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-4.00	-4.04
Conducted PSD Core 1 (dBm/MHz)	-3.35	-3.52
Conducted PSD Core 2 (dBm/MHz)	-4.14	-4.25
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	7.15	7.15
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	8.10	7.99

Table 140



802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-1.37	3.10
Conducted PSD Core 1 (dBm/MHz)	-1.41	3.22
Conducted PSD Core 2 (dBm/MHz)	-1.01	3.64
Duty Cycle Correction (dB)	0.17	0.17
Antenna Directional Gain (dBi)	2.42	2.42
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	3.68	8.27

Table 141

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-1.78	-0.01
Conducted PSD Core 1 (dBm/MHz)	-0.80	0.52
Conducted PSD Core 2 (dBm/MHz)	-1.37	-0.16
Duty Cycle Correction (dB)	0.17	0.17
Antenna Directional Gain (dBi)	2.42	2.42
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	6.06	7.49

Table 142

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	5.03	6.04	6.33
Conducted PSD Core 1 (dBm/MHz)	4.54	6.60	6.55
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	5.79	5.79	5.79
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	8.47	10.01	10.12

Table 143

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	-0.89	-1.20	-1.02
Conducted PSD Core 1 (dBm/MHz)	-0.98	-0.95	-1.26
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	5.79	5.79	5.79
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	8.54	8.40	8.33

Table 144



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	4.62	4.20	3.31
Conducted PSD Core 1 (dBm/MHz)	3.49	3.20	2.76
Conducted PSD Core 2 (dBm/MHz)	3.65	3.33	6.00
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	7.15	7.15	7.15
15.407 Conducted PSD Limit (dBm/MHz)	9.85	9.85	9.85
Conducted PSD Result (dBm/MHz)	9.39	9.04	9.71

Table 145

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Conducted PSD Core 0 (dBm/MHz)	-3.99	-3.37	-4.07
Conducted PSD Core 1 (dBm/MHz)	-4.47	-3.72	-4.60
Conducted PSD Core 2 (dBm/MHz)	-1.12	-1.58	-1.72
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	7.15	7.15	7.15
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	9.66	9.80	9.31

Table 146

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-2.37	2.08
Conducted PSD Core 1 (dBm/MHz)	-2.38	2.11
Duty Cycle Correction (dB)	0.67	0.67
Antenna Directional Gain (dBi)	5.79	5.79
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	1.31	5.78

Table 147

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-2.83	-2.50
Conducted PSD Core 1 (dBm/MHz)	-2.82	-3.09
Duty Cycle Correction (dB)	0.67	0.67
Antenna Directional Gain (dBi)	5.79	5.79
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	6.65	6.69

Table 148



802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-2.10	1.03
Conducted PSD Core 1 (dBm/MHz)	-1.81	2.13
Conducted PSD Core 2 (dBm/MHz)	0.60	3.67
Duty Cycle Correction (dB)	0.67	0.67
Antenna Directional Gain (dBi)	7.15	7.15
15.407 Conducted PSD Limit (dBm/MHz)	9.85	9.85
Conducted PSD Result (dBm/MHz)	4.52	7.85

Table 149

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Conducted PSD Core 0 (dBm/MHz)	-5.34	-5.99
Conducted PSD Core 1 (dBm/MHz)	-6.46	-5.16
Conducted PSD Core 2 (dBm/MHz)	-2.68	-3.67
Duty Cycle Correction (dB)	0.67	0.67
Antenna Directional Gain (dBi)	7.15	7.15
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	8.06	7.75

Table 150

802.11ac / VHT80 MCS0x1 / SISO / Core 0 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Raw Conducted Power (dBm)	-3.28
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	3.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-3.15

Table 151

802.11ac / VHT80 MCS0x1 / SISO / Core 0 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Raw Conducted Power (dBm)	-3.35
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	3.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00
EIRP Spectral Density Result (dBm/MHz)	0.28

Table 152



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-3.99
Conducted PSD Core 1 (dBm/MHz)	-3.93
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	5.79
15.407 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-0.82

Table 153

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-4.73
Conducted PSD Core 1 (dBm/MHz)	-5.12
Duty Cycle Correction (dB)	0.14
Antenna Directional Gain (dBi)	5.79
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00
EIRP Spectral Density Result (dBm/MHz)	4.02

Table 154

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-3.31
Conducted PSD Core 1 (dBm/MHz)	-5.40
Duty Cycle Correction (dB)	0.26
Antenna Directional Gain (dBi)	2.81
15.407 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-0.96

Table 155

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-4.83
Conducted PSD Core 1 (dBm/MHz)	-5.09
Duty Cycle Correction (dB)	0.26
Antenna Directional Gain (dBi)	2.81
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00
EIRP Spectral Density Result (dBm/MHz)	1.12

Table 156



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-4.50
Conducted PSD Core 1 (dBm/MHz)	-4.49
Conducted PSD Core 2 (dBm/MHz)	-4.36
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	7.15
15.407 Conducted PSD Limit (dBm/MHz)	9.85
Conducted PSD Result (dBm/MHz)	0.45

Table 157

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-4.84
Conducted PSD Core 1 (dBm/MHz)	-4.28
Conducted PSD Core 2 (dBm/MHz)	-5.00
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	7.15
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00
EIRP Spectral Density Result (dBm/MHz)	7.35

Table 158

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-3.89
Conducted PSD Core 1 (dBm/MHz)	-5.52
Conducted PSD Core 2 (dBm/MHz)	-3.44
Duty Cycle Correction (dB)	0.31
Antenna Directional Gain (dBi)	2.42
15.407 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	0.89

Table 159

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Conducted PSD Core 0 (dBm/MHz)	-4.10
Conducted PSD Core 1 (dBm/MHz)	-3.57
Conducted PSD Core 2 (dBm/MHz)	-4.19
Duty Cycle Correction (dB)	N/A SA-1
Antenna Directional Gain (dBi)	2.42
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00
EIRP Spectral Density Result (dBm/MHz)	3.25

Table 160



802.11a / 6 Mbps / SISO / Core Aux / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	5.80	8.99	9.27
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	5.80	8.99	9.27

Table 161

802.11a / 6 Mbps / SISO / Core Aux / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	5.89	6.06	6.44
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50	1.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	7.39	7.56	7.94

Table 162

802.11n / HT20 MCS0 / SISO / Core Aux / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	5.49	8.80	8.91
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	5.49	8.80	8.91

Table 163

802.11n / HT20 MCS0 / SISO / Core Aux / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
Raw Conducted Power (dBm)	5.22	5.84	5.96
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50	1.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	6.72	7.34	7.46

Table 164

802.11n / HT40 MCS0 / SISO / Core Aux / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Raw Conducted Power (dBm)	-0.60	5.49
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	-0.60	5.49

Table 165



802.11n / HT40 MCS0 / SISO / Core Aux / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
Raw Conducted Power (dBm)	-0.46	4.85
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00	10.00
EIRP Spectral Density Result (dBm/MHz)	1.04	6.35

Table 166

802.11ac / VHT80 MCS0x1 / SISO / Core Aux / Country Code US

Channel	Middle
Frequency (MHz)	5210
Raw Conducted Power (dBm)	-3.28
Duty Cycle Correction (dB)	0.15
Antenna Directional Gain (dBi)	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-3.14

Table 167

802.11ac / VHT80 MCS0x1 / SISO / Core Aux / Country Code CA

Channel	Middle
Frequency (MHz)	5210
Raw Conducted Power (dBm)	-3.44
Duty Cycle Correction (dB)	0.14
Antenna Directional Gain (dBi)	1.50
RSS-247 EIRP Spectral Density Limit (dBm/MHz)	10.00
EIRP Spectral Density Result (dBm/MHz)	-1.79

Table 168

2.2.7 Test Results: U-NII-2A

802.11a / 6 Mbps / SISO / Core 0

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Raw Conducted Power (dBm)	9.93	10.12	5.49
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.00	3.00	3.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.93	10.12	5.49

Table 169

802.11n / HT20 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Raw Conducted Power (dBm)	9.74	9.75	4.68
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.00	3.00	3.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.74	9.75	4.68

Table 170

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted PSD Core 0 (dBm/MHz)	6.29	6.34	3.92
Conducted PSD Core 1 (dBm/MHz)	6.38	6.57	4.19
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	5.52	5.52	5.52
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.34	9.47	7.07

Table 171

802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted PSD Core 0 (dBm/MHz)	6.64	6.54	4.20
Conducted PSD Core 1 (dBm/MHz)	6.23	6.13	4.04
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.53	2.53	2.53
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.45	9.35	7.13

Table 172



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted PSD Core 0 (dBm/MHz)	3.38	3.34	2.90
Conducted PSD Core 1 (dBm/MHz)	3.36	3.62	3.04
Conducted PSD Core 2 (dBm/MHz)	3.08	3.45	3.31
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	6.96	6.96	6.96
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	8.05	8.24	7.86

Table 173

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted PSD Core 0 (dBm/MHz)	4.34	4.42	4.11
Conducted PSD Core 1 (dBm/MHz)	4.21	4.30	3.86
Conducted PSD Core 2 (dBm/MHz)	4.89	4.60	4.43
Duty Cycle Correction (dB)	0.09	0.09	0.09
Antenna Directional Gain (dBi)	2.21	2.21	2.21
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.35	9.30	9.00

Table 174

802.11n / HT40 MCS0 / SISO / Core 0

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Raw Conducted Power (dBm)	5.01	-0.07
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.00	3.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	5.01	-0.07

Table 175

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted PSD Core 0 (dBm/MHz)	2.67	-0.71
Conducted PSD Core 1 (dBm/MHz)	3.67	-0.63
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	5.52	5.52
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	6.21	2.34

Table 176



802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted PSD Core 0 (dBm/MHz)	3.27	-0.89
Conducted PSD Core 1 (dBm/MHz)	3.24	-0.84
Duty Cycle Correction (dB)	0.13	0.13
Antenna Directional Gain (dBi)	2.53	2.53
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	6.40	2.28

Table 177

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted PSD Core 0 (dBm/MHz)	2.67	-1.32
Conducted PSD Core 1 (dBm/MHz)	2.90	-1.21
Conducted PSD Core 2 (dBm/MHz)	2.92	-0.67
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	6.96	6.96
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	7.60	3.71

Table 178

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted PSD Core 0 (dBm/MHz)	2.93	-0.85
Conducted PSD Core 1 (dBm/MHz)	3.22	-2.09
Conducted PSD Core 2 (dBm/MHz)	3.30	-0.68
Duty Cycle Correction (dB)	0.17	0.17
Antenna Directional Gain (dBi)	2.21	2.21
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	8.10	3.78

Table 179

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted PSD Core 0 (dBm/MHz)	6.33	6.13	4.22
Conducted PSD Core 1 (dBm/MHz)	6.63	6.20	4.57
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	5.52	5.52	5.52
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	10.16	9.84	8.08

Table 180



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Conducted PSD Core 0 (dBm/MHz)	3.48	2.74	3.37
Conducted PSD Core 1 (dBm/MHz)	3.78	2.55	3.20
Conducted PSD Core 2 (dBm/MHz)	5.91	5.76	5.14
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	6.96	6.96	6.96
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	9.97	9.39	9.44

Table 181

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted PSD Core 0 (dBm/MHz)	1.78	-2.27
Conducted PSD Core 1 (dBm/MHz)	1.79	-1.95
Duty Cycle Correction (dB)	0.67	0.67
Antenna Directional Gain (dBi)	5.52	5.52
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	5.47	1.57

Table 182

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Conducted PSD Core 0 (dBm/MHz)	1.20	-2.29
Conducted PSD Core 1 (dBm/MHz)	1.80	-1.09
Conducted PSD Core 2 (dBm/MHz)	3.94	0.66
Duty Cycle Correction (dB)	0.67	0.67
Antenna Directional Gain (dBi)	6.96	6.96
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	7.92	4.71

Table 183

802.11ac / VHT80 MCS0x1 / SISO / Core 0

Channel	Middle
Frequency (MHz)	5290
Raw Conducted Power (dBm)	-4.48
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	3.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-4.35

Table 184



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1

Channel	Middle
Frequency (MHz)	5290
Conducted PSD Core 0 (dBm/MHz)	-5.00
Conducted PSD Core 1 (dBm/MHz)	-4.93
Duty Cycle Correction (dB)	0.14
Antenna Directional Gain (dBi)	5.52
15.407 Conducted PSD Limit (dBm/MHz)	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-1.81

Table 185

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1

Channel	Middle
Frequency (MHz)	5290
Conducted PSD Core 0 (dBm/MHz)	-4.96
Conducted PSD Core 1 (dBm/MHz)	-6.33
Duty Cycle Correction (dB)	N/A SA-1
Antenna Directional Gain (dBi)	2.53
15.407 Conducted PSD Limit (dBm/MHz)	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-2.58

Table 186

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2

Channel	Middle
Frequency (MHz)	5290
Conducted PSD Core 0 (dBm/MHz)	-4.97
Conducted PSD Core 1 (dBm/MHz)	-4.96
Conducted PSD Core 2 (dBm/MHz)	-4.96
Duty Cycle Correction (dB)	0.13
Antenna Directional Gain (dBi)	6.96
15.407 Conducted PSD Limit (dBm/MHz)	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-0.06

Table 187

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2

Channel	Middle
Frequency (MHz)	5290
Conducted PSD Core 0 (dBm/MHz)	-4.97
Conducted PSD Core 1 (dBm/MHz)	-4.58
Conducted PSD Core 2 (dBm/MHz)	-4.46
Duty Cycle Correction (dB)	0.31
Antenna Directional Gain (dBi)	2.21
15.407 Conducted PSD Limit (dBm/MHz)	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	0.42

Table 188



802.11a / 6 Mbps / SISO / Core Aux

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Raw Conducted Power (dBm)	8.87	9.10	6.02
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	8.87	9.10	6.02

Table 189

802.11n / HT20 MCS0 / SISO / Core Aux

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
Raw Conducted Power (dBm)	8.82	8.71	5.75
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
Conducted PSD Result (dBm/MHz)	8.82	8.71	5.75

Table 190

802.11n / HT40 MCS0 / SISO / Core Aux

Channel	Bottom	Top
Frequency (MHz)	5270	5310
Raw Conducted Power (dBm)	4.14	-0.54
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	1.50	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	11.00
Conducted PSD Result (dBm/MHz)	4.14	-0.54

Table 191

802.11ac / VHT80 MCS0x1 / SISO / Core Aux

Channel	Middle
Frequency (MHz)	5290
Raw Conducted Power (dBm)	-3.07
Duty Cycle Correction (dB)	0.16
Antenna Directional Gain (dBi)	1.50
15.407 Conducted PSD Limit (dBm/MHz)	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00
Conducted PSD Result (dBm/MHz)	-2.91

Table 192



2.2.8 Test Results: U-NII-2C

802.11a / 6 Mbps / SISO / Core 0

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Raw Conducted Power (dBm)	5.30	9.74	4.45	9.94
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	5.30	9.74	4.45	9.94

Table 193

802.11n / HT20 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Raw Conducted Power (dBm)	4.84	9.75	4.16	9.55
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	4.84	9.75	4.16	9.55

Table 194

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted PSD Core 0 (dBm/MHz)	2.90	5.50	2.04	5.85
Conducted PSD Core 2 (dBm/MHz)	3.36	5.54	2.00	5.78
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	6.41	6.41	6.41	6.41
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	6.14	8.53	5.03	8.82

Table 195

802.11n / HT20 MCS8 / MIMO SDM / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted PSD Core 0 (dBm/MHz)	3.64	5.81	1.80	6.09
Conducted PSD Core 2 (dBm/MHz)	3.24	6.17	2.36	6.29
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	3.42	3.42	3.42	3.42
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	6.45	9.00	5.10	9.20

Table 196



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted PSD Core 0 (dBm/MHz)	2.66	2.37	1.92	2.53
Conducted PSD Core 1 (dBm/MHz)	2.85	2.74	2.29	2.88
Conducted PSD Core 2 (dBm/MHz)	2.56	2.47	2.35	2.40
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	7.31	7.31	7.31	7.31
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	7.46	7.30	6.96	7.38

Table 197

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted PSD Core 0 (dBm/MHz)	3.01	3.88	2.02	3.99
Conducted PSD Core 1 (dBm/MHz)	3.48	4.00	2.11	4.11
Conducted PSD Core 2 (dBm/MHz)	3.28	4.16	2.41	4.20
Duty Cycle Correction (dB)	0.09	0.10	0.09	0.10
Antenna Directional Gain (dBi)	2.65	2.65	2.65	2.65
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	8.12	8.88	7.04	8.96

Table 198

802.11n / HT40 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Raw Conducted Power (dBm)	1.01	9.19	3.43	6.91
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	4.00	4.00	4.00	4.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	1.01	9.19	3.43	6.91

Table 199

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted PSD Core 0 (dBm/MHz)	0.08	4.78	2.44	4.89
Conducted PSD Core 2 (dBm/MHz)	0.42	5.02	2.93	4.89
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	6.41	6.41	6.41	6.41
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	3.26	7.91	5.70	7.90

Table 200



802.11n / HT40 MCS8 / MIMO SDM / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted PSD Core 0 (dBm/MHz)	0.12	4.88	2.60	5.10
Conducted PSD Core 2 (dBm/MHz)	0.70	5.17	3.02	5.75
Duty Cycle Correction (dB)	0.12	0.12	0.12	0.12
Antenna Directional Gain (dBi)	3.42	3.42	3.42	3.42
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	3.55	8.16	5.94	8.57

Table 201

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted PSD Core 0 (dBm/MHz)	0.12	2.18	2.15	2.67
Conducted PSD Core 1 (dBm/MHz)	0.44	2.29	2.57	2.82
Conducted PSD Core 2 (dBm/MHz)	0.30	2.41	1.98	2.51
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	7.31	7.31	7.31	7.31
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	5.06	7.07	7.01	7.44

Table 202

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted PSD Core 0 (dBm/MHz)	-0.66	3.34	3.30	3.57
Conducted PSD Core 1 (dBm/MHz)	-0.53	3.37	3.26	3.76
Conducted PSD Core 2 (dBm/MHz)	0.01	3.64	3.35	4.13
Duty Cycle Correction (dB)	0.17	0.17	0.17	0.17
Antenna Directional Gain (dBi)	2.65	2.65	2.65	2.65
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	4.56	8.40	8.25	8.77

Table 203

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted PSD Core 0 (dBm/MHz)	3.48	5.53	2.14	5.11
Conducted PSD Core 2 (dBm/MHz)	5.83	8.20	4.76	8.06
Duty Cycle Correction (dB)	0.67	0.67	0.67	0.67
Antenna Directional Gain (dBi)	6.41	6.41	6.41	6.41
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	8.50	10.75	7.32	10.51

Table 204

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Conducted PSD Core 0 (dBm/MHz)	3.10	2.91	2.36	3.00
Conducted PSD Core 1 (dBm/MHz)	3.16	3.54	2.51	2.15
Conducted PSD Core 2 (dBm/MHz)	5.98	5.42	5.19	5.53
Duty Cycle Correction (dB)	0.67	0.67	0.67	0.67
Antenna Directional Gain (dBi)	7.31	7.31	7.31	7.31
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	9.74	9.54	9.00	9.25

Table 205

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted PSD Core 0 (dBm/MHz)	-0.58	3.46	1.37	3.35
Conducted PSD Core 2 (dBm/MHz)	1.75	6.10	3.84	5.47
Duty Cycle Correction (dB)	N/A SA-1	0.67	0.67	0.67
Antenna Directional Gain (dBi)	6.41	6.41	6.41	6.41
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	3.75	8.66	6.46	8.22

Table 206

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Conducted PSD Core 0 (dBm/MHz)	-1.37	1.78	1.00	0.69
Conducted PSD Core 1 (dBm/MHz)	-1.43	1.80	1.52	2.08
Conducted PSD Core 2 (dBm/MHz)	1.75	4.78	5.25	4.60
Duty Cycle Correction (dB)	0.67	0.67	0.67	0.67
Antenna Directional Gain (dBi)	7.31	7.31	7.31	7.31
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	5.36	8.47	8.47	8.21

Table 207

802.11ac / VHT80 MCS0x1 / SISO / Core 0

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Raw Conducted Power (dBm)	-1.72	1.25	3.18
Duty Cycle Correction (dB)	0.13	0.13	0.14
Antenna Directional Gain (dBi)	4.00	4.00	4.00
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	N/A
Conducted PSD Result (dBm/MHz)	-1.59	1.39	3.32

Table 208



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted PSD Core 0 (dBm/MHz)	-3.38	1.70	2.38
Conducted PSD Core 2 (dBm/MHz)	-3.65	1.21	2.71
Duty Cycle Correction (dB)	0.13	0.14	0.14
Antenna Directional Gain (dBi)	6.41	6.41	6.41
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	N/A
Conducted PSD Result (dBm/MHz)	-0.37	4.61	5.70

Table 209

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted PSD Core 0 (dBm/MHz)	-3.46	1.37	2.35
Conducted PSD Core 2 (dBm/MHz)	-3.50	1.56	2.78
Duty Cycle Correction (dB)	0.23	0.25	0.25
Antenna Directional Gain (dBi)	3.42	3.42	3.42
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	N/A
Conducted PSD Result (dBm/MHz)	-0.24	4.72	5.83

Table 210

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted PSD Core 0 (dBm/MHz)	-4.03	0.77	0.72
Conducted PSD Core 1 (dBm/MHz)	-3.94	0.72	0.68
Conducted PSD Core 2 (dBm/MHz)	-3.92	0.56	0.91
Duty Cycle Correction (dB)	0.13	0.14	0.14
Antenna Directional Gain (dBi)	7.31	7.31	7.31
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	N/A
Conducted PSD Result (dBm/MHz)	0.94	5.59	5.68

Table 211

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Conducted PSD Core 0 (dBm/MHz)	-4.73	-0.85	-0.44
Conducted PSD Core 1 (dBm/MHz)	-4.72	-0.50	-0.84
Conducted PSD Core 2 (dBm/MHz)	-4.60	-0.66	-0.49
Duty Cycle Correction (dB)	0.31	0.33	0.33
Antenna Directional Gain (dBi)	2.65	2.65	2.65
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	N/A
Conducted PSD Result (dBm/MHz)	0.40	4.43	4.51

Table 212



802.11a / 6 Mbps / SISO / Core Aux

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Raw Conducted Power (dBm)	6.18	8.95	4.15	9.15
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.75	2.75	2.75
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	6.18	8.95	4.15	9.15

Table 213

802.11n / HT20 MCS0 / SISO / Core Aux

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5500	5600	5700	5720
Raw Conducted Power (dBm)	6.02	8.56	4.10	8.94
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.75	2.75	2.75
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	6.02	8.56	4.10	8.94

Table 214

802.11n / HT40 MCS0 / SISO / Core Aux

Channel	Bottom	Middle	Top	Straddle
Frequency (MHz)	5510	5590	5670	5710
Raw Conducted Power (dBm)	0.64	7.15	3.48	6.92
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.75	2.75	2.75
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	11.00	N/A
Conducted PSD Result (dBm/MHz)	0.64	7.15	3.48	6.92

Table 215

802.11ac / VHT80 MCS0x1 / SISO / Core Aux

Channel	Bottom	Top	Straddle
Frequency (MHz)	5530	5610	5690
Raw Conducted Power (dBm)	-1.82	2.46	4.12
Duty Cycle Correction (dB)	0.15	0.14	0.15
Antenna Directional Gain (dBi)	2.75	2.75	2.75
15.407 Conducted PSD Limit (dBm/MHz)	11.00	11.00	11.00
RSS-247 Conducted PSD Limit (dBm/MHz)	11.00	N/A	N/A
Conducted PSD Result (dBm/MHz)	-1.68	2.61	4.28

Table 216



2.2.9 Test Results: U-NII-3

802.11a / 6 Mbps / SISO / Core 2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Raw Conducted Power (dBm)	5.15	6.37	5.99	6.06
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	5.15	6.37	5.99	6.06

Table 217

802.11n / HT20 MCS0 / SISO / Core 2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Raw Conducted Power (dBm)	4.23	6.16	6.45	6.11
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.23	6.16	6.45	6.11

Table 218

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted PSD Core 0 (dBm/500kHz)	2.18	5.44	5.96	5.75
Conducted PSD Core 2 (dBm/500kHz)	1.54	6.01	6.26	5.74
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	4.00	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	29.59	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	29.59	N/A	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.88	8.74	9.12	8.76

Table 219

802.11n / HT20 MCS8 / MIMO SDM / Cores 0+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted PSD Core 0 (dBm/500kHz)	2.27	5.73	5.98	6.05
Conducted PSD Core 2 (dBm/500kHz)	2.71	6.56	6.74	5.68
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.38	2.38	2.38	2.38
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	5.51	9.17	9.39	8.88

Table 220



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted PSD Core 0 (dBm/500kHz)	-1.46	5.74	5.94	5.81
Conducted PSD Core 1 (dBm/500kHz)	-0.64	6.13	5.79	5.96
Conducted PSD Core 2 (dBm/500kHz)	-1.92	6.47	5.71	5.58
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.50	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	29.43	29.43	29.43	29.43
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	29.43	29.43	29.43
Conducted PSD Result (dBm/500kHz)	3.46	10.90	10.59	10.56

Table 221

802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted PSD Core 0 (dBm/500kHz)	0.36	6.15	5.88	6.81
Conducted PSD Core 1 (dBm/500kHz)	-0.09	5.92	4.71	5.97
Conducted PSD Core 2 (dBm/500kHz)	-0.29	6.66	6.39	0.00
Duty Cycle Correction (dB)	0.10	0.09	0.09	0.09
Antenna Directional Gain (dBi)	1.84	1.84	1.84	1.03
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.87	11.11	10.58	9.98

Table 222

802.11n / HT40 MCS0 / SISO / Core 2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Raw Conducted Power (dBm)	2.74	3.28	3.27
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00
Conducted PSD Result (dBm/500kHz)	2.74	3.28	3.27

Table 223

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted PSD Core 0 (dBm/500kHz)	1.68	3.66	3.08
Conducted PSD Core 2 (dBm/500kHz)	1.32	3.18	3.63
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.51	6.44	6.37

Table 224

802.11n / HT40 MCS8 / MIMO SDM / Cores 0+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted PSD Core 0 (dBm/500kHz)	1.57	3.11	3.37
Conducted PSD Core 2 (dBm/500kHz)	0.82	3.41	3.28
Duty Cycle Correction (dB)	0.12	0.12	0.12
Antenna Directional Gain (dBi)	2.38	2.38	2.38
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.35	6.40	6.46

Table 225

802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted PSD Core 0 (dBm/500kHz)	-0.83	3.44	3.17
Conducted PSD Core 1 (dBm/500kHz)	-1.38	3.43	2.60
Conducted PSD Core 2 (dBm/500kHz)	-1.53	3.39	2.76
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	29.43	29.43	29.43
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	29.43	29.43
Conducted PSD Result (dBm/500kHz)	3.54	8.19	7.62

Table 226

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted PSD Core 0 (dBm/500kHz)	-0.76	3.59	3.20
Conducted PSD Core 1 (dBm/500kHz)	-0.31	2.67	2.38
Conducted PSD Core 2 (dBm/500kHz)	0.23	3.13	3.37
Duty Cycle Correction (dB)	N/A SA-1	0.17	0.17
Antenna Directional Gain (dBi)	1.84	1.84	1.84
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.51	8.09	7.94

Table 227

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted PSD Core 0 (dBm/500kHz)	-0.51	6.37	6.24	5.54
Conducted PSD Core 2 (dBm/500kHz)	1.87	8.73	8.42	8.49
Duty Cycle Correction (dB)	0.67	0.67	0.67	0.67
Antenna Directional Gain (dBi)	5.39	5.39	5.39	5.39
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.52	11.38	11.15	10.94

Table 228



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Conducted PSD Core 0 (dBm/500kHz)	-3.80	6.82	5.57	6.09
Conducted PSD Core 1 (dBm/500kHz)	-2.90	7.11	6.50	7.82
Conducted PSD Core 2 (dBm/500kHz)	-2.06	8.16	8.79	9.32
Duty Cycle Correction (dB)	0.67	0.67	0.67	0.67
Antenna Directional Gain (dBi)	6.57	6.57	6.57	6.57
15.407 Conducted PSD Limit (dBm/500kHz)	29.43	29.43	29.43	29.43
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	29.43	29.43	29.43
Conducted PSD Result (dBm/500kHz)	2.58	12.84	12.61	13.38

Table 229

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted PSD Core 0 (dBm/500kHz)	-1.10	2.39	1.45
Conducted PSD Core 2 (dBm/500kHz)	1.28	4.46	4.06
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	5.39	5.39	5.39
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	N/A
Conducted PSD Result (dBm/500kHz)	3.93	7.23	6.63

Table 230

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Conducted PSD Core 0 (dBm/500kHz)	-3.57	3.57	2.62
Conducted PSD Core 1 (dBm/500kHz)	-3.15	4.05	4.29
Conducted PSD Core 2 (dBm/500kHz)	-3.47	6.27	5.41
Duty Cycle Correction (dB)	0.67	0.67	0.67
Antenna Directional Gain (dBi)	6.57	6.57	6.57
15.407 Conducted PSD Limit (dBm/500kHz)	29.43	29.43	29.43
RSS-247 Conducted PSD Limit (dBm/500kHz)	29.43	29.43	N/A
Conducted PSD Result (dBm/500kHz)	2.05	10.24	9.70

Table 231

802.11ac / VHT80 MCS0x1 / SISO / Core 2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Raw Conducted Power (dBm)	-4.07	-1.46
Duty Cycle Correction (dB)	0.14	0.14
Antenna Directional Gain (dBi)	2.75	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
Conducted PSD Result (dBm/500kHz)	-3.94	-1.32

Table 232



802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted PSD Core 0 (dBm/500kHz)	-2.83	-1.56
Conducted PSD Core 2 (dBm/500kHz)	-2.78	-1.78
Duty Cycle Correction (dB)	0.14	0.14
Antenna Directional Gain (dBi)	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
Conducted PSD Result (dBm/500kHz)	0.34	1.48

Table 233

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted PSD Core 0 (dBm/500kHz)	-2.63	-1.95
Conducted PSD Core 2 (dBm/500kHz)	-2.80	-2.19
Duty Cycle Correction (dB)	0.25	0.25
Antenna Directional Gain (dBi)	2.38	2.38
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
Conducted PSD Result (dBm/500kHz)	0.54	1.19

Table 234

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted PSD Core 0 (dBm/500kHz)	-4.60	-2.68
Conducted PSD Core 1 (dBm/500kHz)	-4.14	-1.40
Conducted PSD Core 2 (dBm/500kHz)	-4.44	-2.71
Duty Cycle Correction (dB)	0.14	0.14
Antenna Directional Gain (dBi)	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	29.43	29.43
RSS-247 Conducted PSD Limit (dBm/500kHz)	29.43	29.43
Conducted PSD Result (dBm/500kHz)	0.52	2.69

Table 235

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Conducted PSD Core 0 (dBm/500kHz)	-6.34	-1.66
Conducted PSD Core 1 (dBm/500kHz)	-4.81	-2.60
Conducted PSD Core 2 (dBm/500kHz)	-5.79	-1.98
Duty Cycle Correction (dB)	0.33	0.33
Antenna Directional Gain (dBi)	1.84	1.84
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
Conducted PSD Result (dBm/500kHz)	-0.50	3.04

Table 236



802.11a / 6 Mbps / SISO / Core Aux

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Raw Conducted Power (dBm)	5.38	6.56	6.01	6.77
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	5.38	6.56	6.01	6.77

Table 237

802.11n / HT20 MCS0 / SISO / Core Aux

Channel	Straddle	Bottom	Middle	Top
Frequency (MHz)	5720	5745	5785	5825
Raw Conducted Power (dBm)	4.57	6.02	5.87	6.26
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.75	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00	30.00
Conducted PSD Result (dBm/500kHz)	4.57	6.02	5.87	6.26

Table 238

802.11n / HT40 MCS0 / SISO / Core Aux

Channel	Straddle	Bottom	Top
Frequency (MHz)	5710	5755	5795
Raw Conducted Power (dBm)	2.83	3.01	3.23
Duty Cycle Correction (dB)	N/A SA-1	N/A SA-1	N/A SA-1
Antenna Directional Gain (dBi)	2.50	2.50	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	N/A	30.00	30.00
Conducted PSD Result (dBm/500kHz)	2.83	3.01	3.23

Table 239

802.11ac / VHT80 MCS0x1 / SISO / Core Aux

Channel	Straddle	Middle
Frequency (MHz)	5690	5775
Raw Conducted Power (dBm)	-1.14	-2.26
Duty Cycle Correction (dB)	0.15	0.16
Antenna Directional Gain (dBi)	2.75	2.50
15.407 Conducted PSD Limit (dBm/500kHz)	30.00	30.00
RSS-247 Conducted PSD Limit (dBm/500kHz)	30.00	N/A
Conducted PSD Result (dBm/500kHz)	-0.99	-2.10

Table 240



2.2.10 Limits

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

Condition of Operation	Frequency Range (MHz)			
	5150-5250	5250-5350	5470-5725	5725-5850
Max Conducted Power Spectral Density	17 dBm/MHz for master device 11 dBm/MHz for mobile/portable client device	11 dBm/MHz		30 dBm/500 kHz

Table 241

Industry Canada RSS-247, Limit Clause 6.2.1.1, 6.2.2.1, 6.2.3.1 and 6.2.4.1

Device	Frequency Range (MHz)			
	5150-5250	5250-5350	5470-5725	5725-5850
OEM installed in vehicles	-	-	-	-
Other	≤10 dBm/MHz EIRP	≤11 dBm/MHz	≤11 dBm/MHz	≤30 dBm/500kHz

Table 242



2.2.11 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 3.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Directional Coupler	Hewlett Packard	11692D	451	-	O/P Mon
Attenuator (20dB, 2W)	Pasternack	PE7004-20	2943	12	18-Jul-2019
Attenuator (20dB, 150W)	Narda	769-20	3367	12	17-Jul-2019
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	*2-Oct-2018
'3.5mm' - '3.5mm' RF Cable (2m)	Rhophase	3PS-1803-2000-3PS	3702	12	9-Feb-2019
DC - 12.4 GHz 10 dB Attenuator	Suhner	6810.17.A	3965	12	18-Jul-2019
Calibration Unit	Rohde & Schwarz	ZV-Z54	4368	12	6-Mar-2019
PXA Signal Analyser	Keysight Technologies	N9030A	4653	12	5-Feb-2019
Power splitter - 4 port	Mini-Circuits	ZN4PD1-63-S+	4744	12	14-Sep-2018

Table 243

O/P Mon – Output Monitored using Calibrated Equipment.

*Testing was performed over multiple days, however it was confirmed that all equipment was in calibration at the time it was used and we hold records of this.



2.3 Emission Bandwidth

2.3.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (a),
Industry Canada RSS-247, Clause 6.2
Industry Canada RSS-GEN, Clause 6.7

2.3.2 Equipment Under Test and Modification State

A1993, S/N: C07WT003K2V0 - Modification State 0

2.3.3 Date of Test

16-August-2018 to 12-September-2018

2.3.4 Test Method

The test was performed in accordance with ANSI C63.10 clause 12.4.1 & 12.4.2, KDB 789033 D02 section C, and RSS-GEN 4.6.1 and 4.6.2

For modes of operation using multiple Cores, measurements were made on each Core but only the worst case results are reported. Worst case was considered as the narrowest results for 6 dB bandwidth and the widest result for 26 dB bandwidth and 99% occupied bandwidth.

2.3.5 Environmental Conditions

Ambient Temperature	20 to 26°C
Relative Humidity	39 to 67%



2.3.6 Test Results: U-NII-1

802.11a / 6 Mbps / SISO / Core 0 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.04	22.23	30.15
99% Bandwidth (MHz)	16.636	16.758	16.952

Table 244

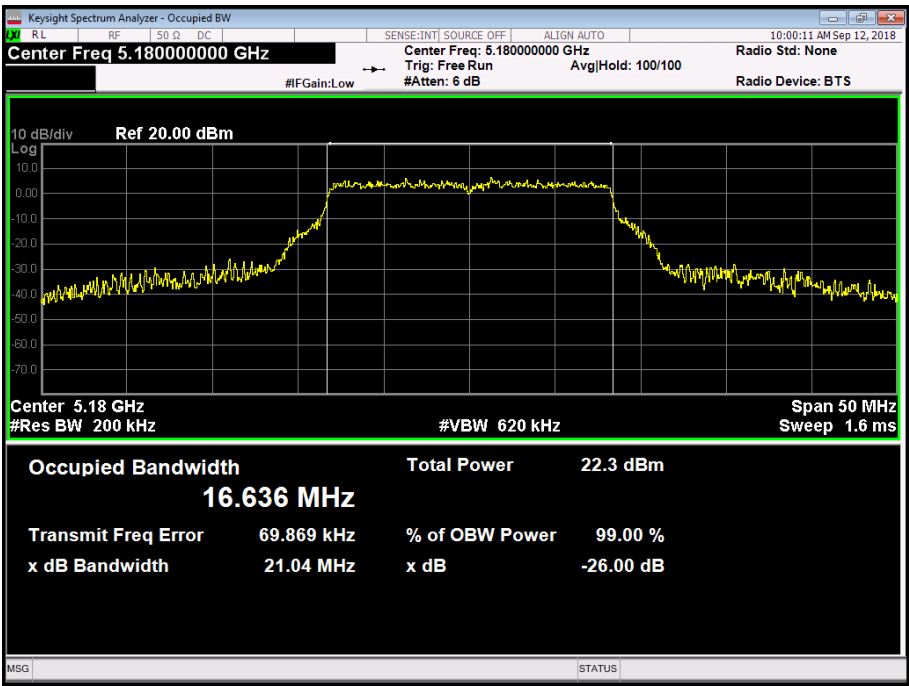


Figure 1 - 5180 MHz - 99% Occupied Bandwidth



Product Service

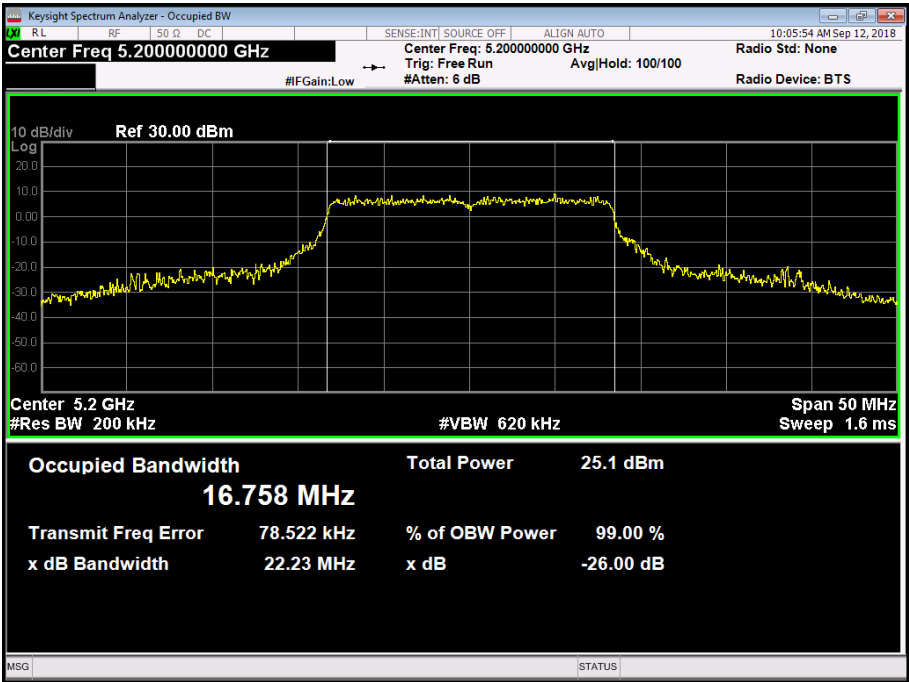


Figure 2 - 5200 MHz - 99% Occupied Bandwidth

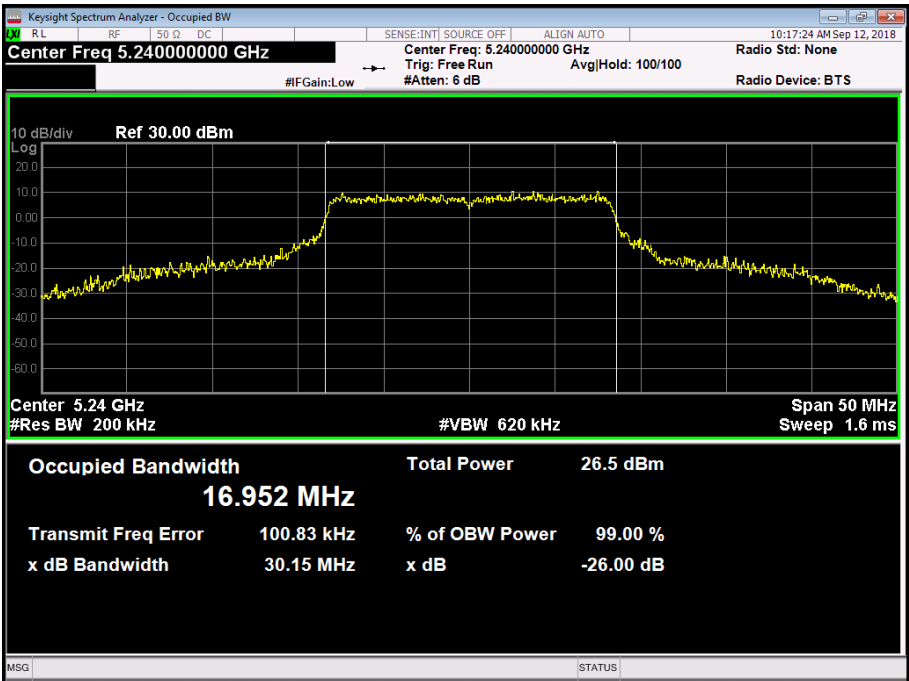


Figure 3 - 5240 MHz - 99% Occupied Bandwidth



802.11a / 6 Mbps / SISO / Core 0 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.19	21.05	21.10
99% Bandwidth (MHz)	16.672	16.688	16.666

Table 245

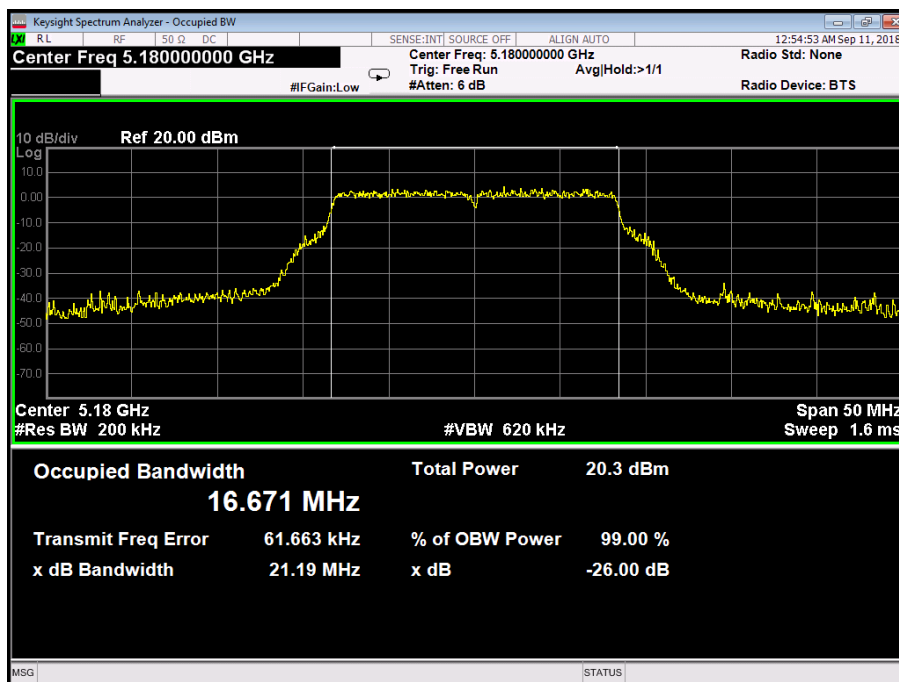


Figure 4 - 5180 MHz - 99% Occupied Bandwidth

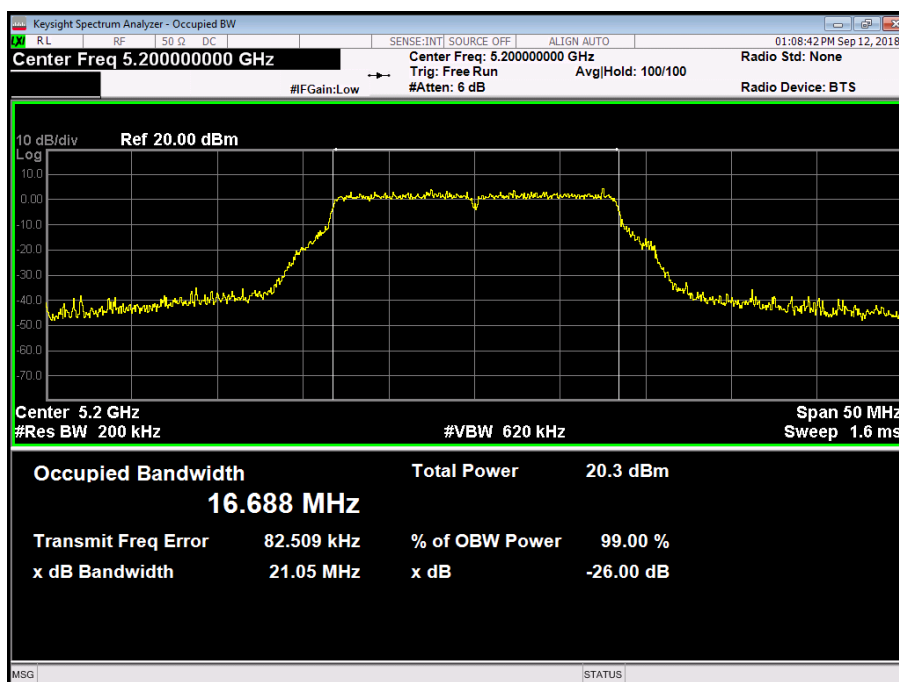


Figure 5 - 5200 MHz - 99% Occupied Bandwidth



Product Service

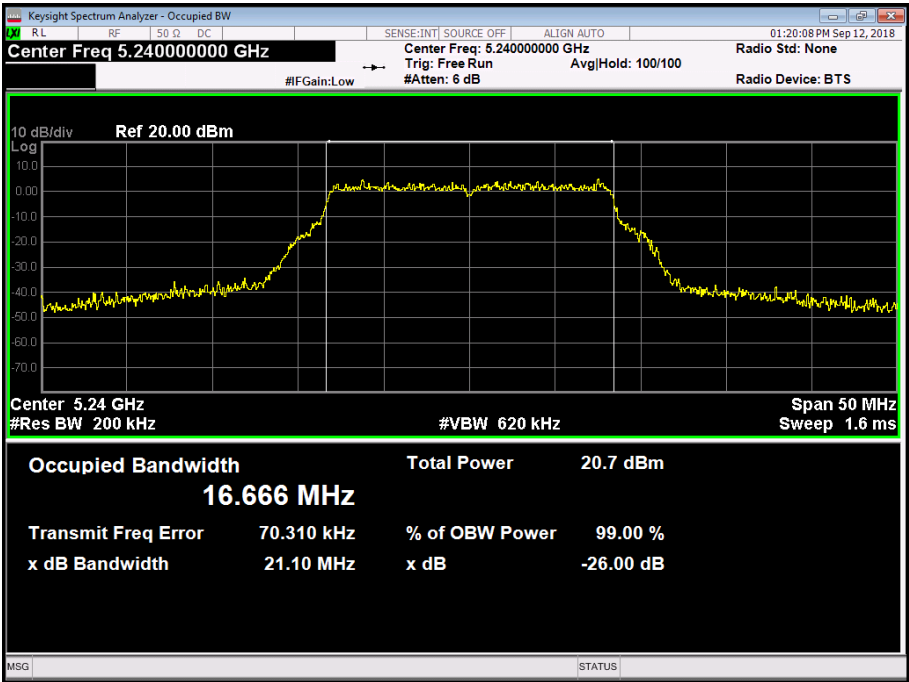


Figure 6 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / SISO / Core 0 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.31	23.05	26.93
99% Bandwidth (MHz)	17.887	17.979	18.008

Table 246

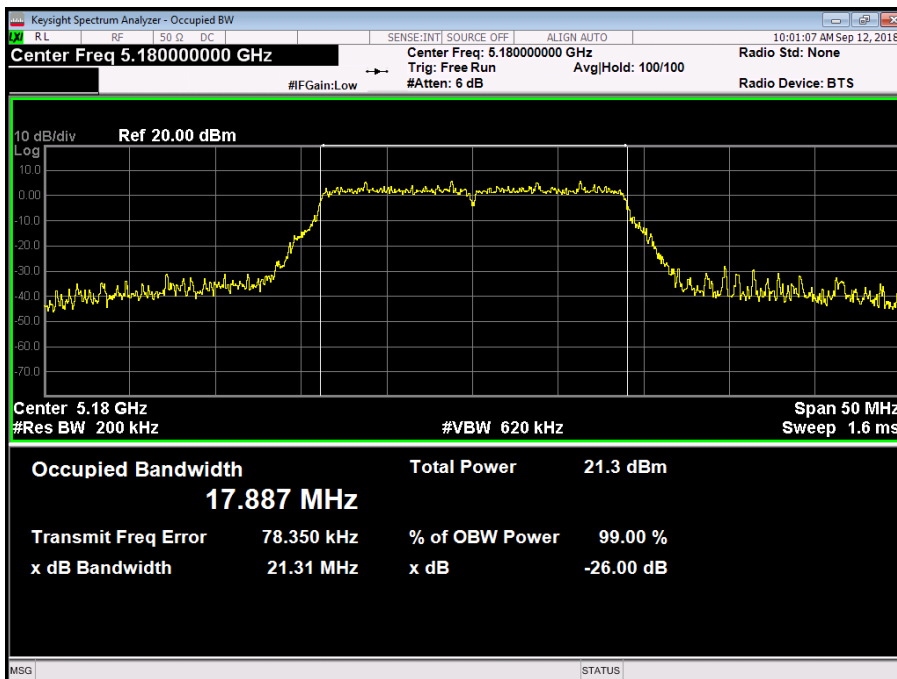


Figure 7 - 5180 MHz - 99% Occupied Bandwidth

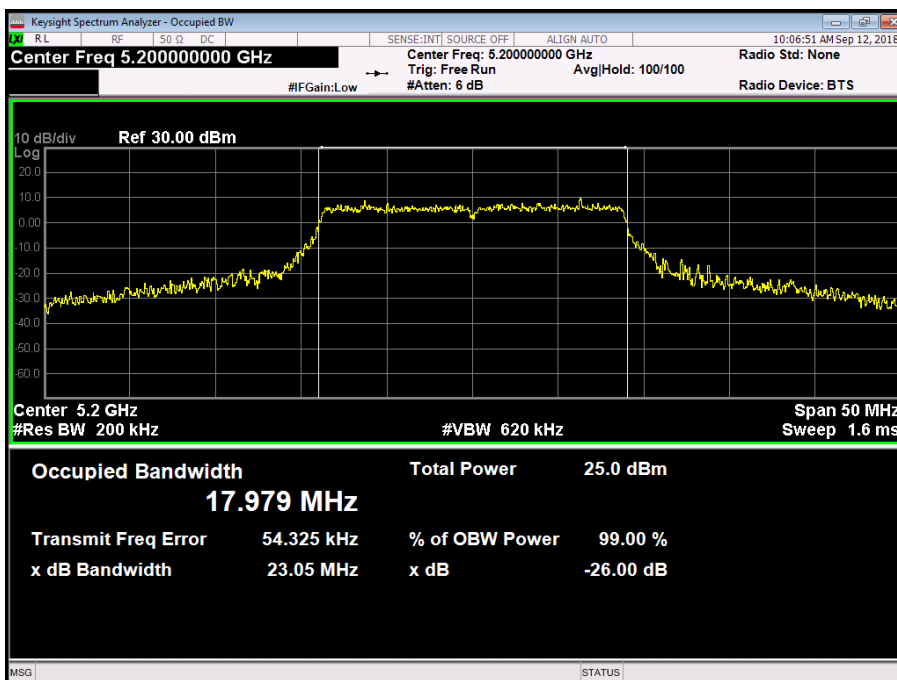


Figure 8 - 5200 MHz - 99% Occupied Bandwidth



Product Service

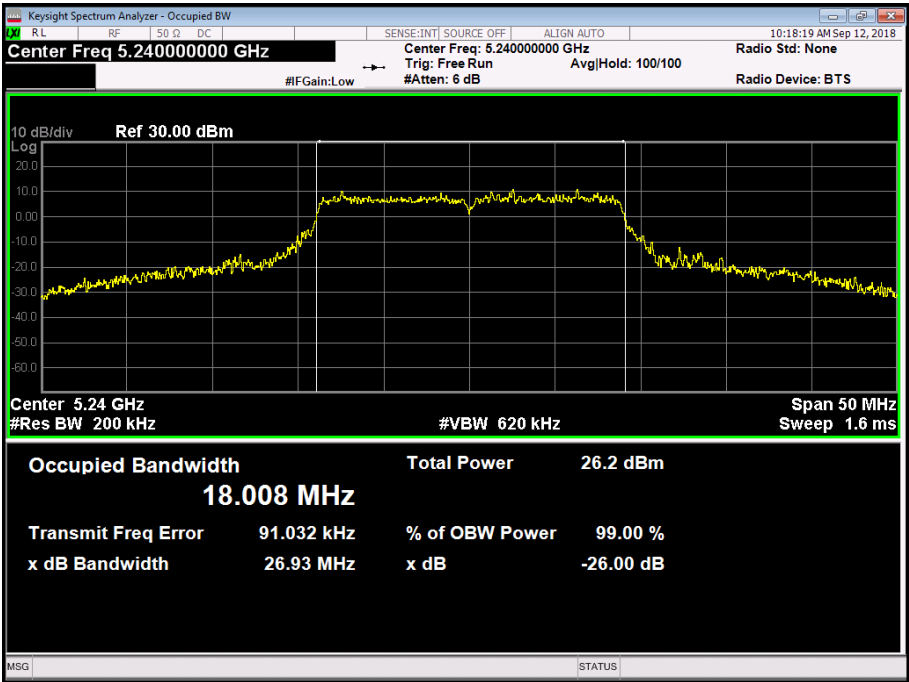


Figure 9 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / SISO / Core 0 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.37	21.31	21.29
99% Bandwidth (MHz)	17.860	17.832	17.850

Table 247

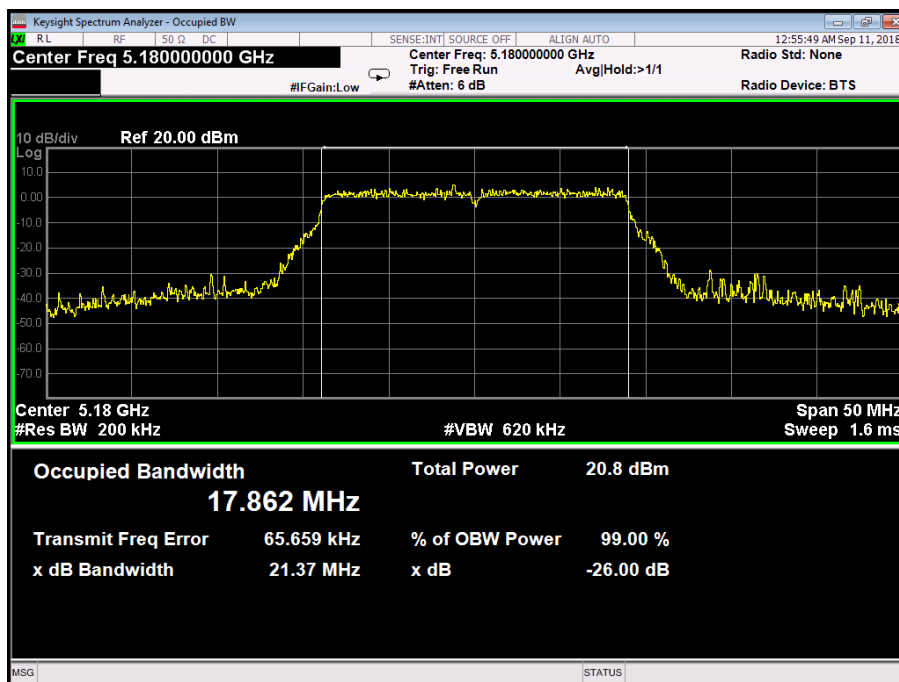


Figure 10 - 5180 MHz - 99% Occupied Bandwidth

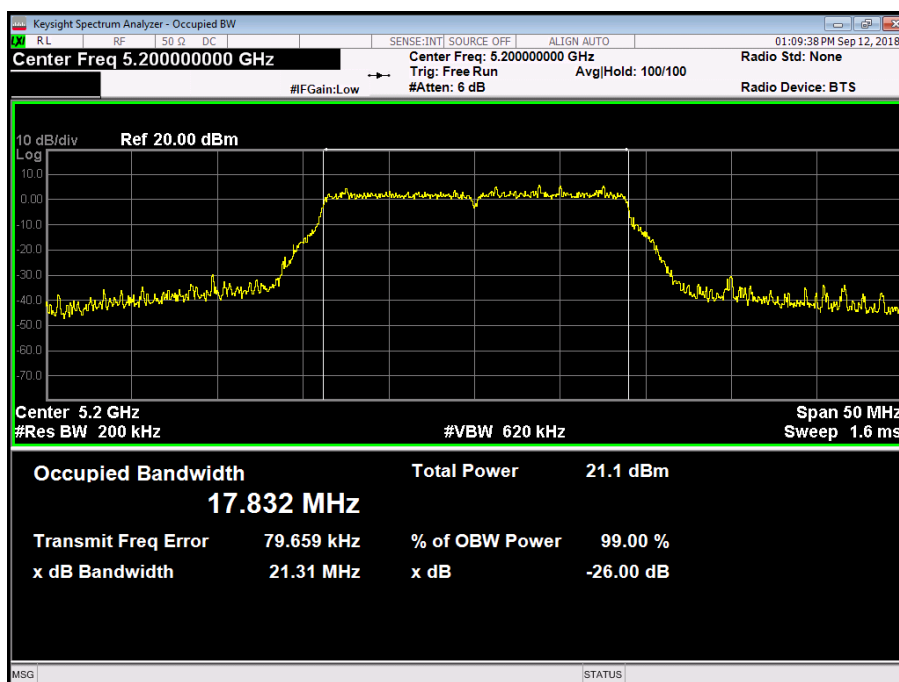


Figure 11 - 5200 MHz - 99% Occupied Bandwidth



Product Service

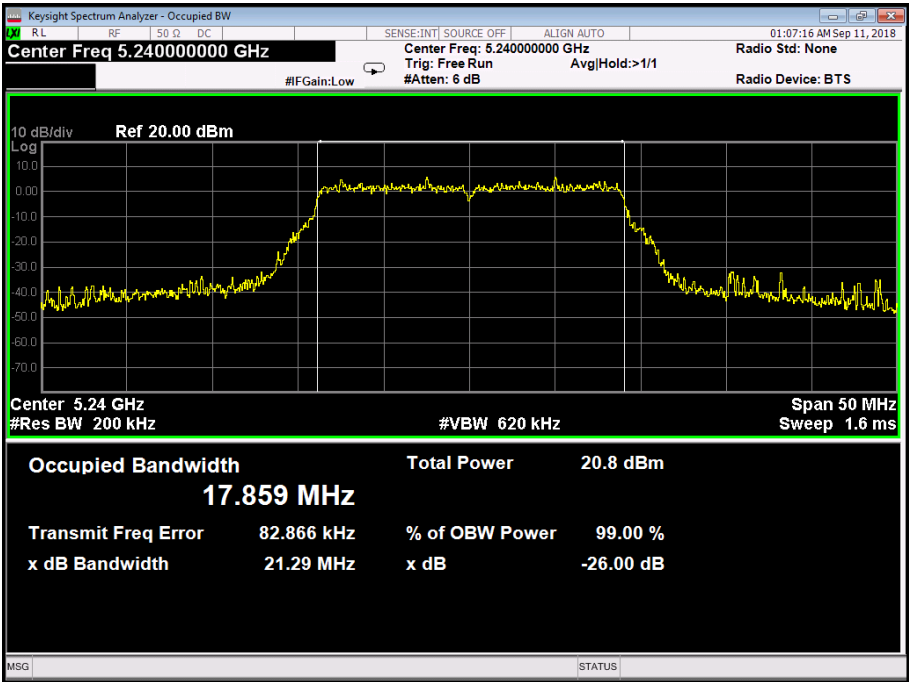


Figure 12 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.37	21.29	21.36
99% Bandwidth (MHz)	17.876	17.860	17.887

Table 248

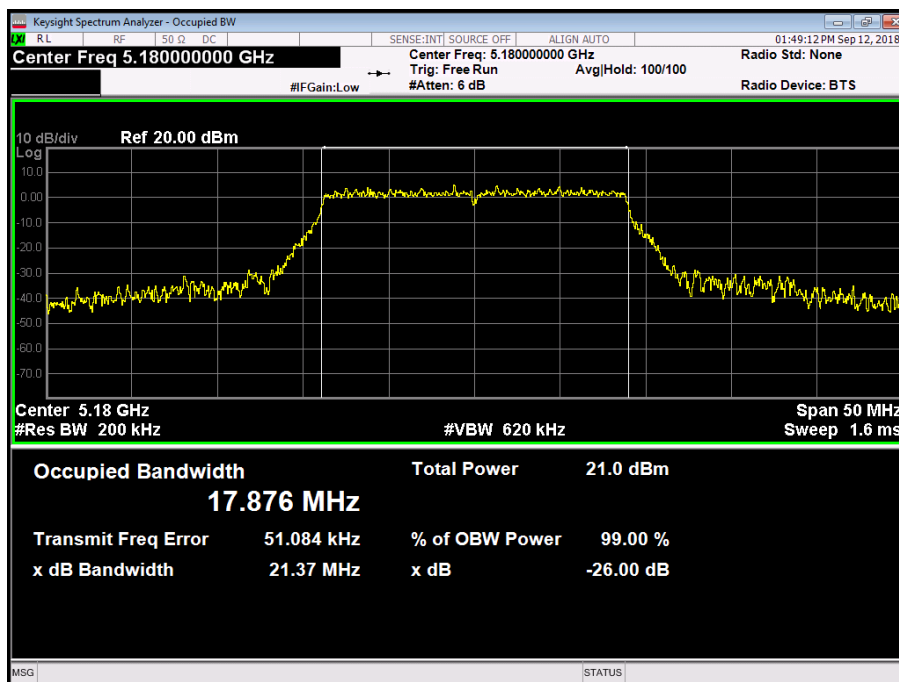


Figure 13 - 5180 MHz - 99% Occupied Bandwidth

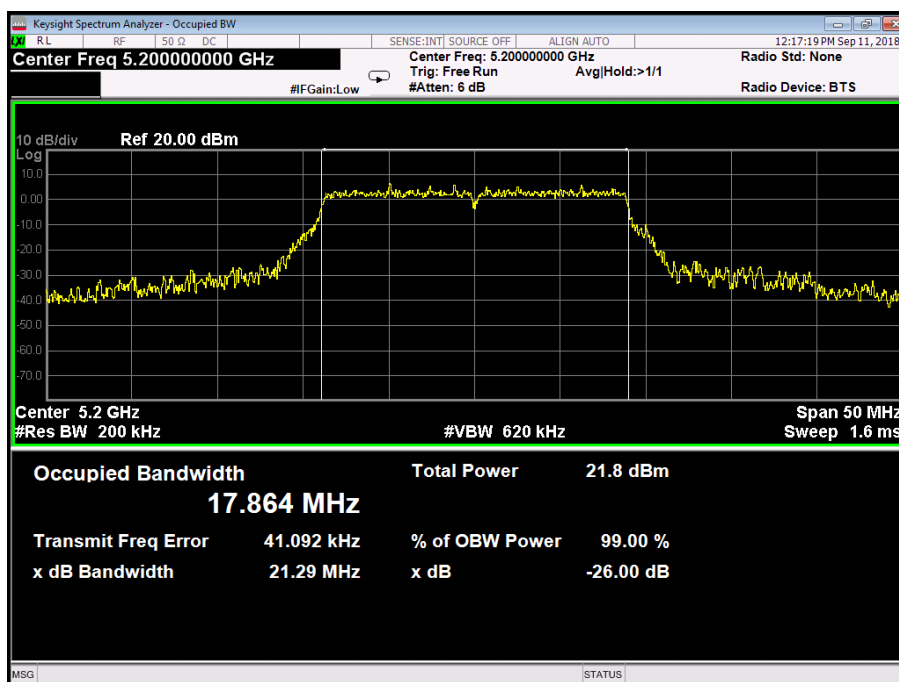


Figure 14 - 5200 MHz - 99% Occupied Bandwidth



Product Service

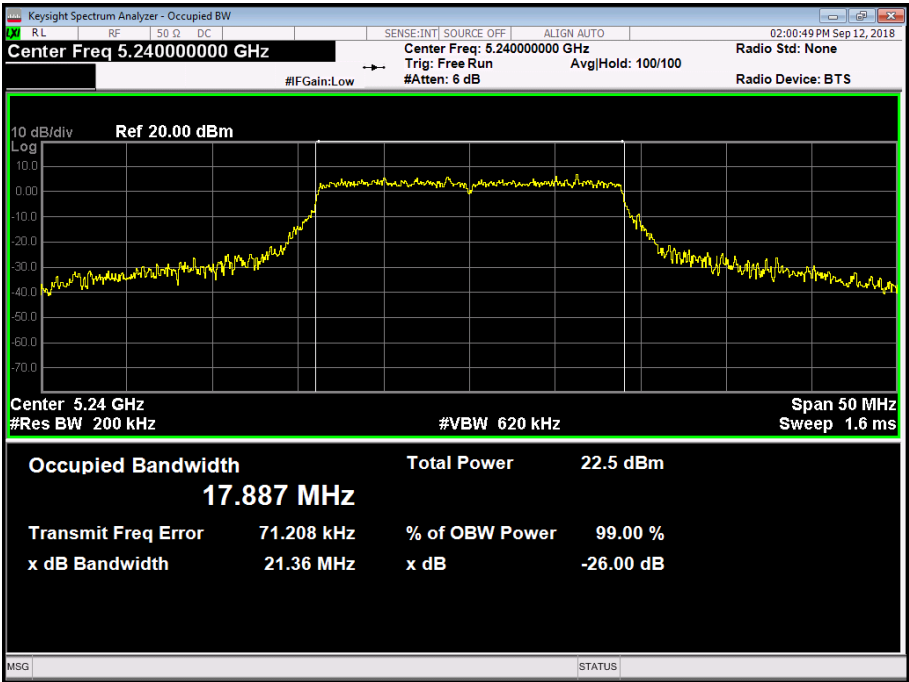


Figure 15 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.20	21.24	21.22
99% Bandwidth (MHz)	17.829	17.869	17.835

Table 249

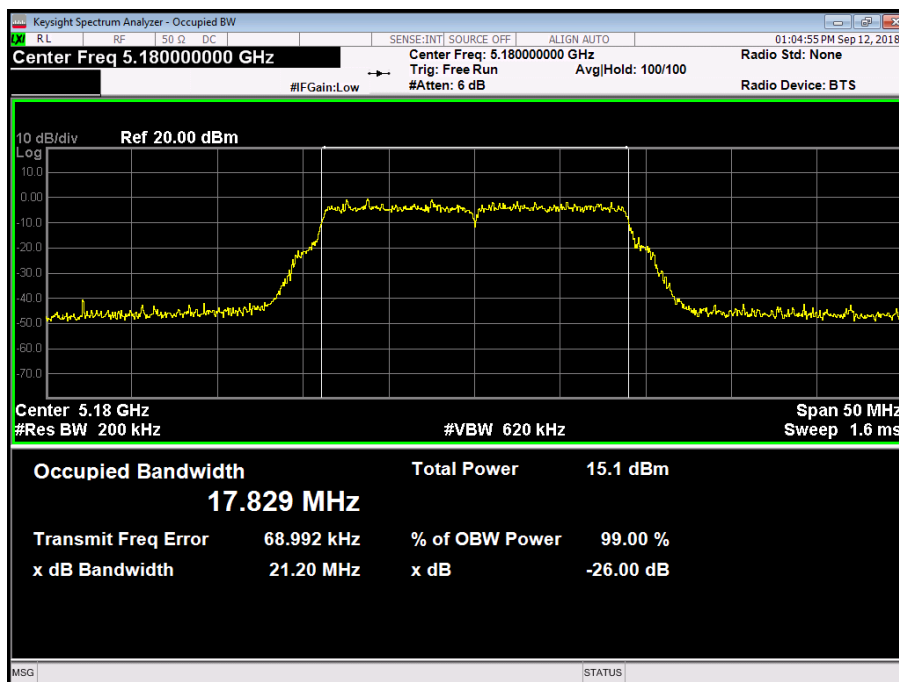


Figure 16 - 5180 MHz - 99% Occupied Bandwidth

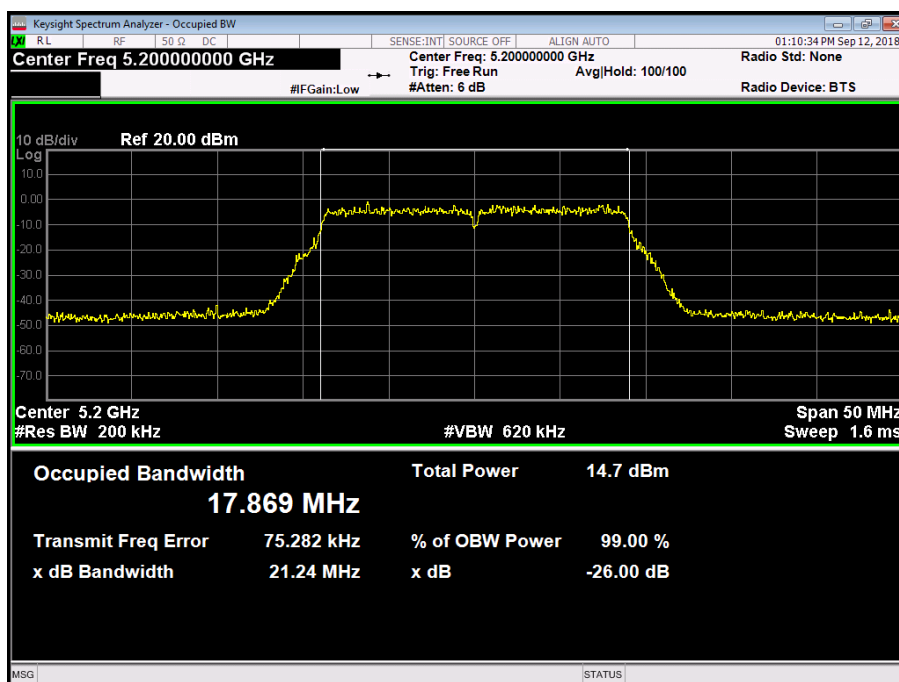


Figure 17 - 5200 MHz - 99% Occupied Bandwidth



Product Service

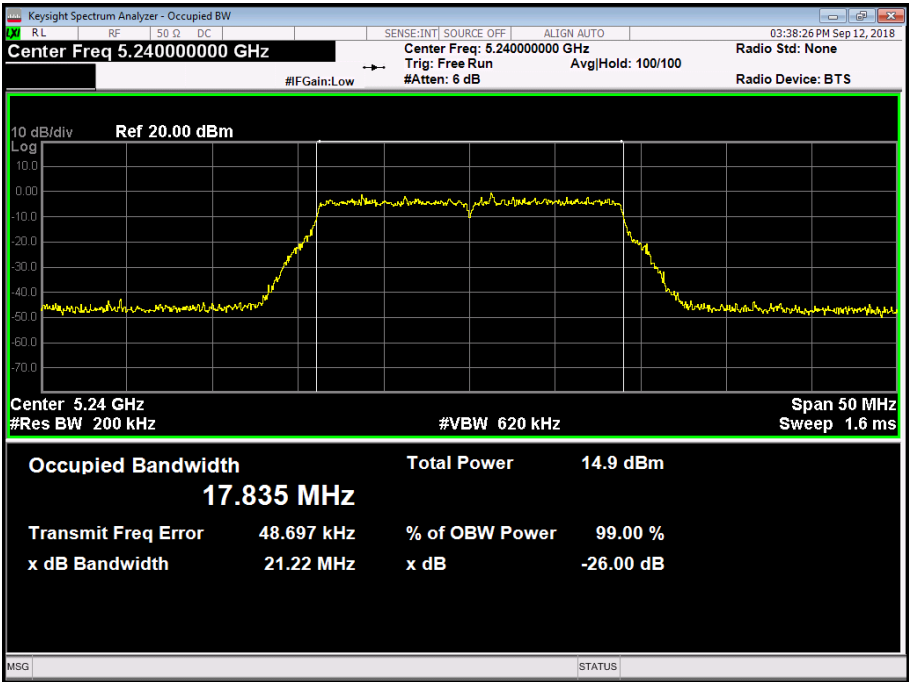


Figure 18 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.32	21.15	21.19
99% Bandwidth (MHz)	17.786	17.820	17.829

Table 250

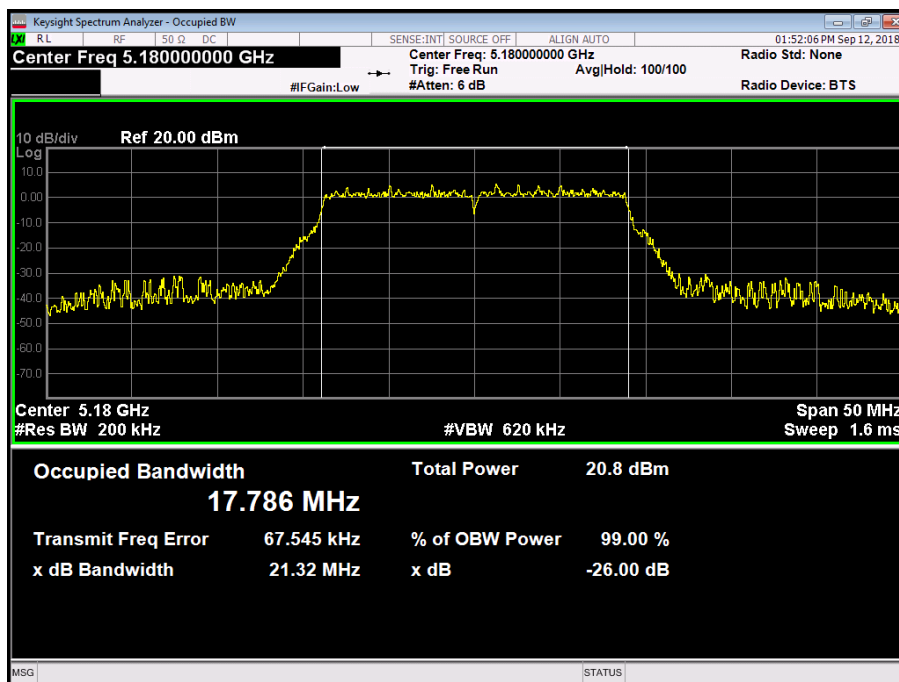


Figure 19 - 5180 MHz - 99% Occupied Bandwidth

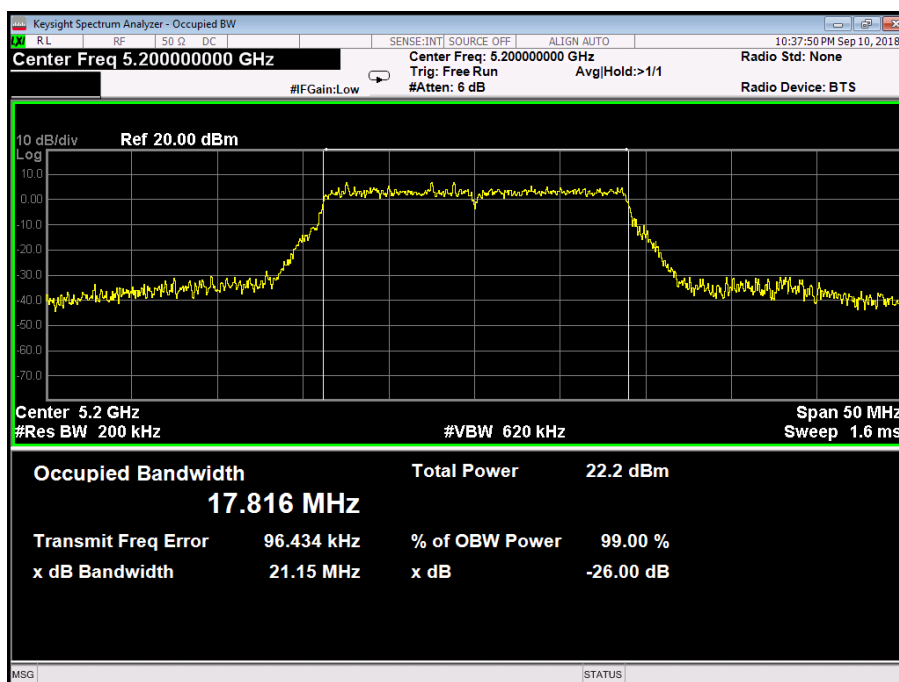


Figure 20 - 5200 MHz - 99% Occupied Bandwidth



Product Service

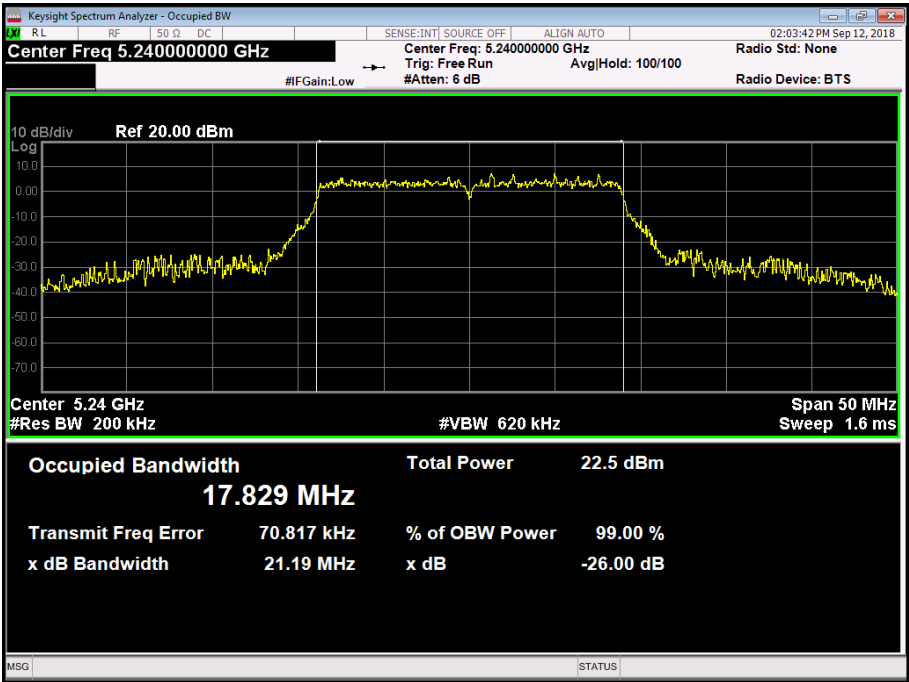


Figure 21 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.21	21.21	21.24
99% Bandwidth (MHz)	17.852	17.823	17.838

Table 251

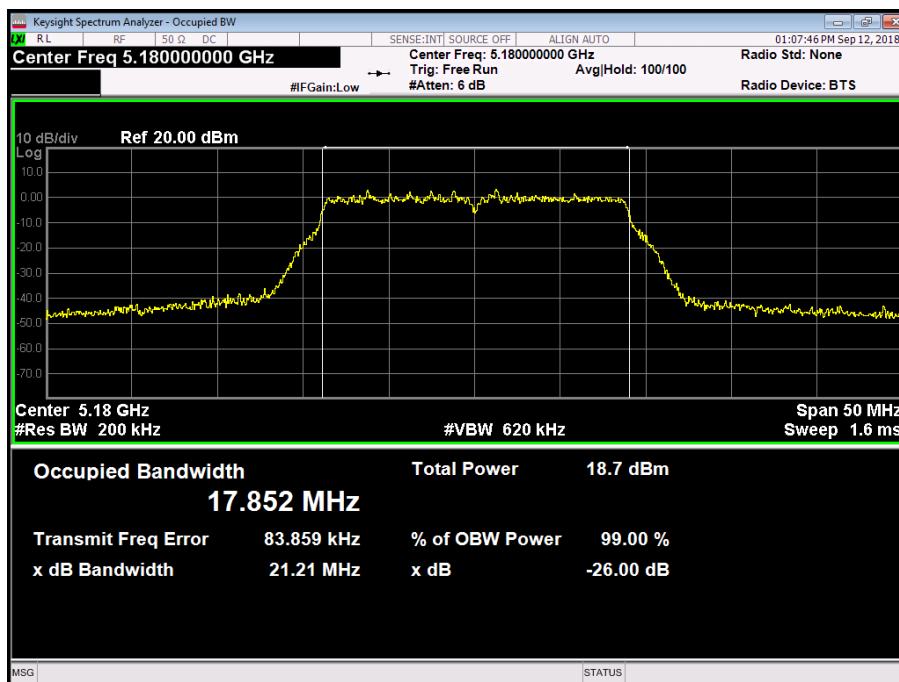


Figure 22 - 5180 MHz - 99% Occupied Bandwidth

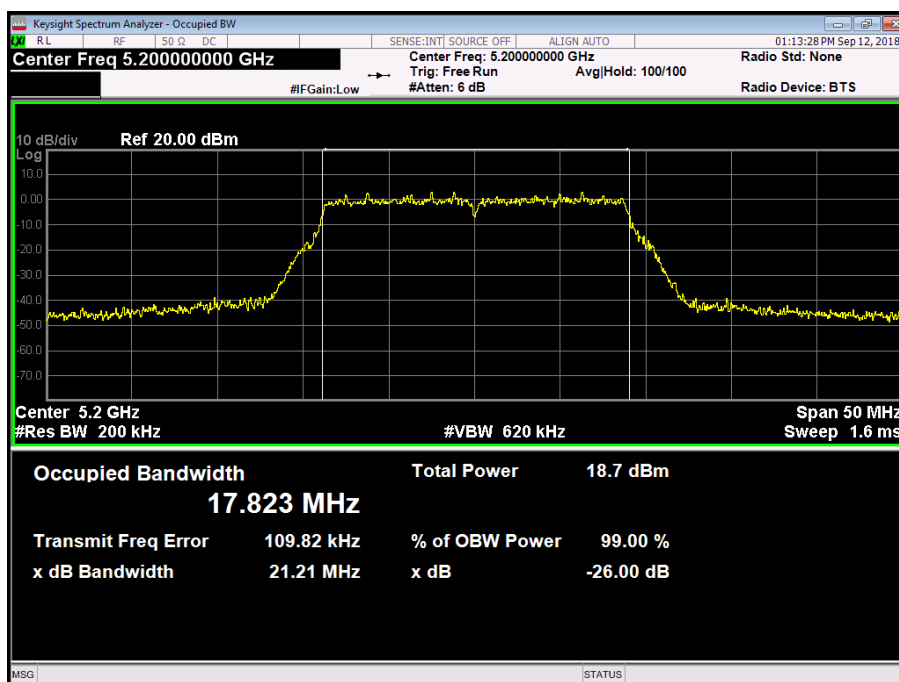


Figure 23 - 5200 MHz - 99% Occupied Bandwidth



Product Service

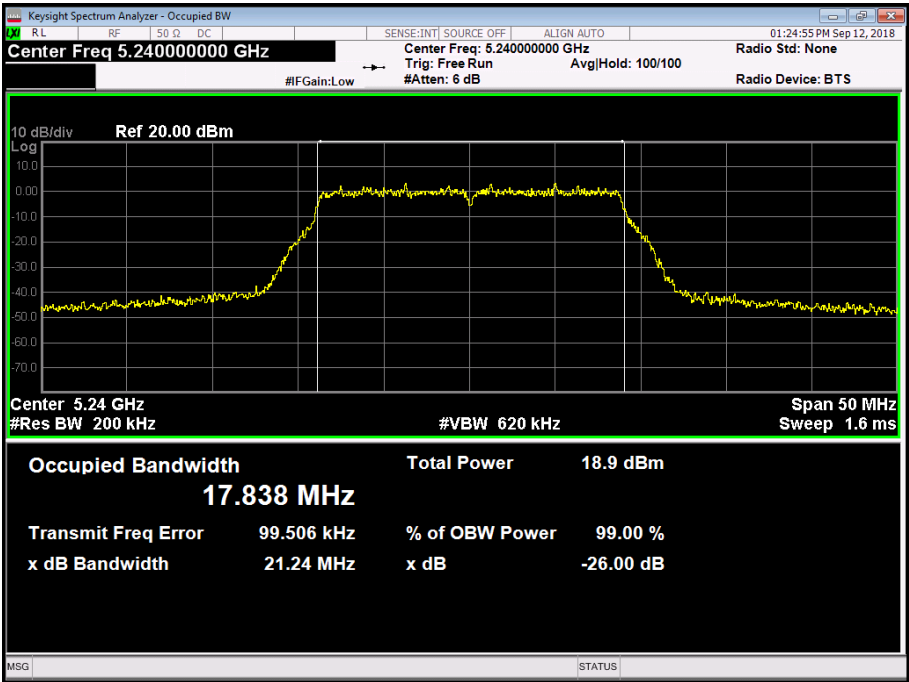


Figure 24 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.66	21.08	21.28
99% Bandwidth (MHz)	17.872	17.815	17.847

Table 252

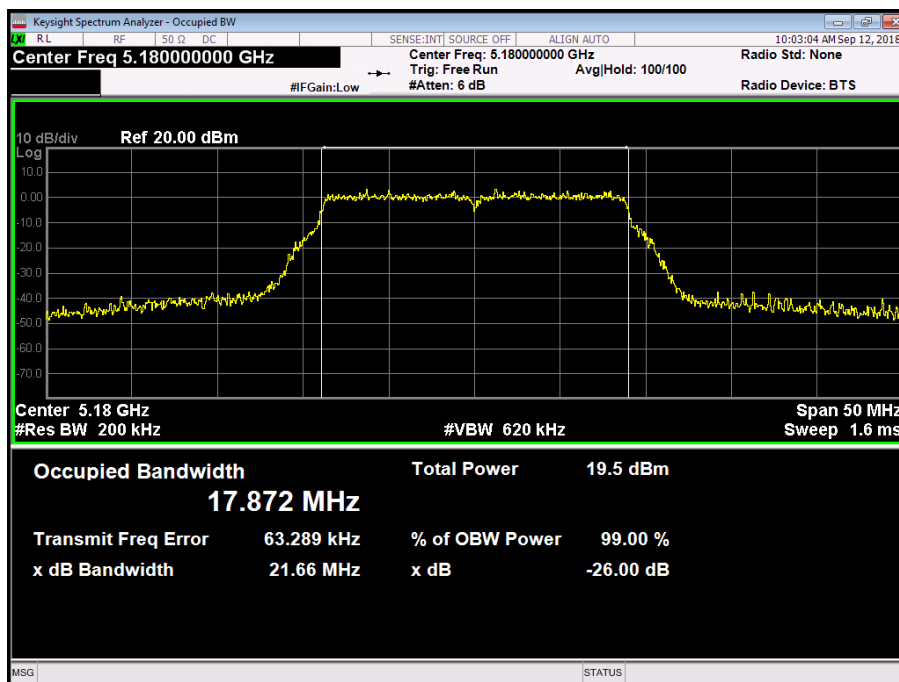


Figure 25 - 5180 MHz - 99% Occupied Bandwidth

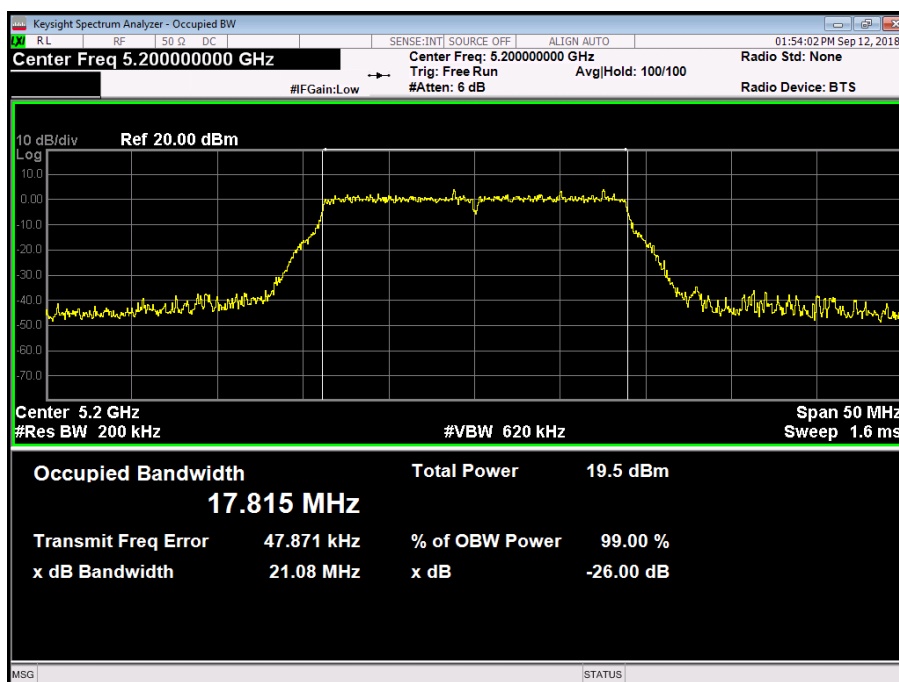


Figure 26 - 5200 MHz - 99% Occupied Bandwidth



Product Service

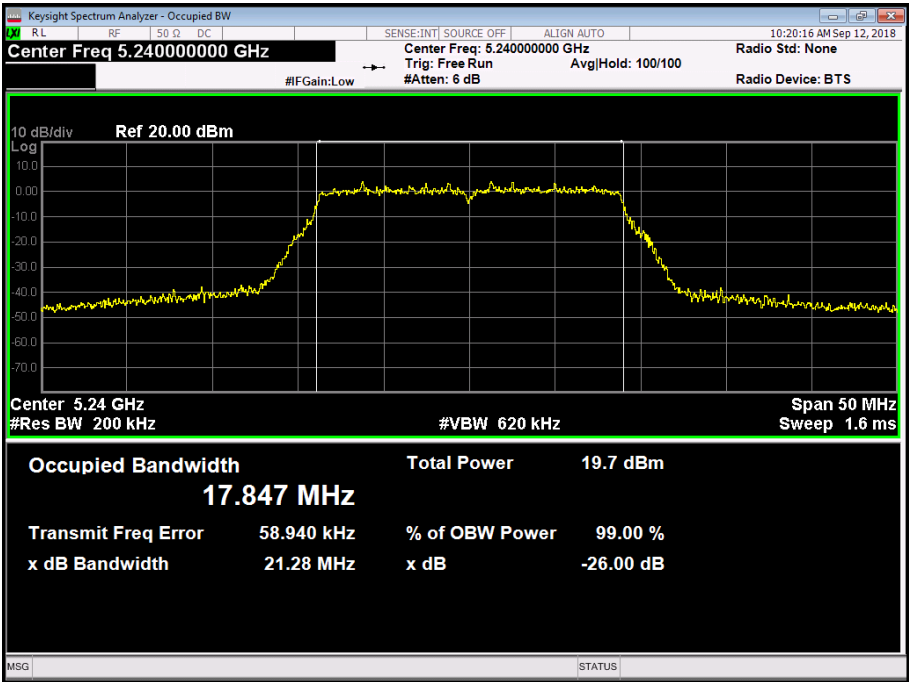


Figure 27 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.46	21.02	21.45
99% Bandwidth (MHz)	17.876	17.853	17.882

Table 253

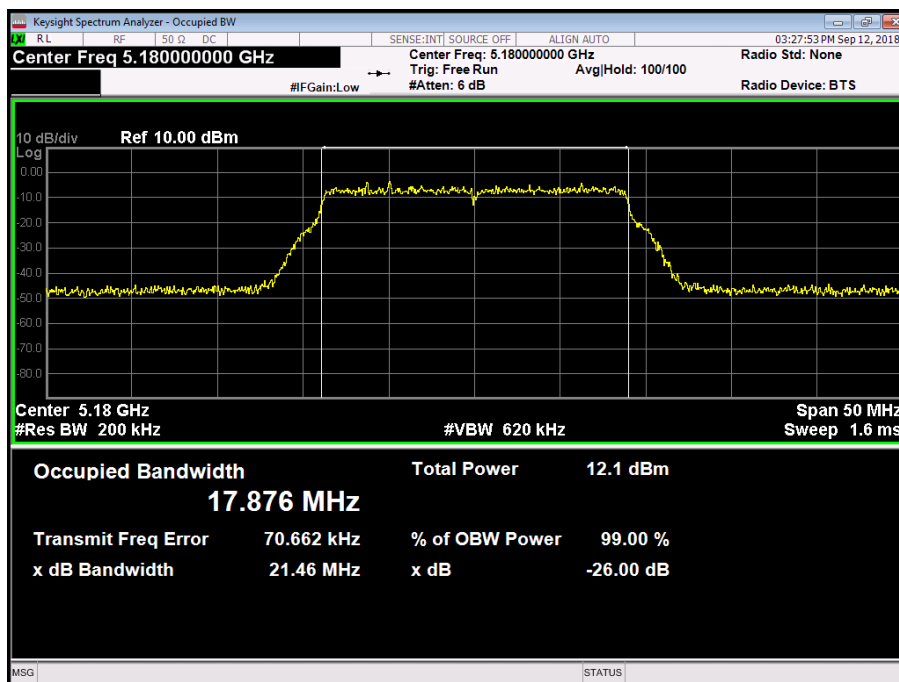


Figure 28 - 5180 MHz - 99% Occupied Bandwidth

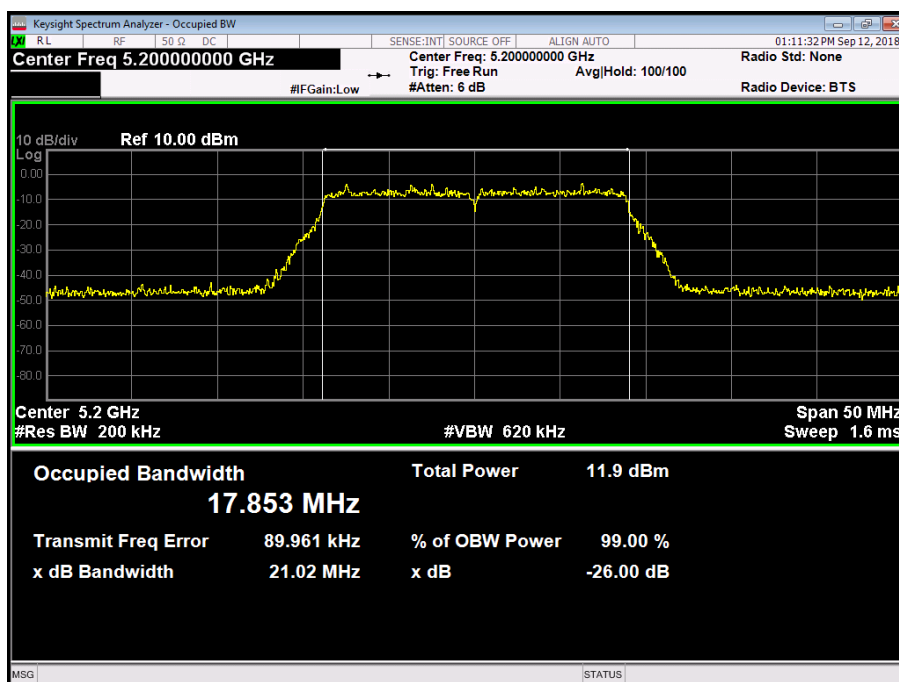


Figure 29 - 5200 MHz - 99% Occupied Bandwidth



Product Service

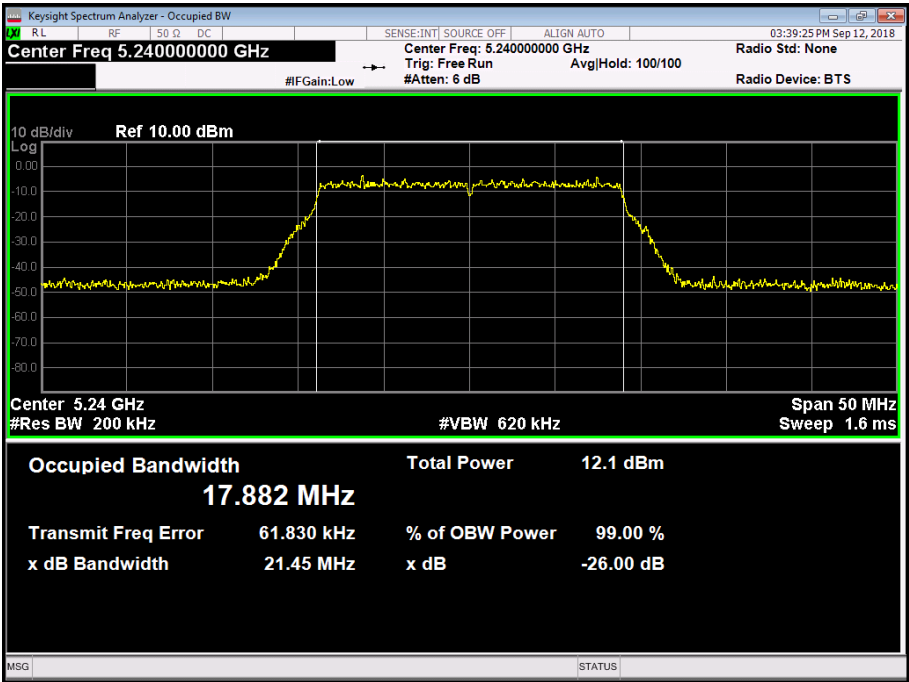


Figure 30 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.97	21.18	21.09
99% Bandwidth (MHz)	17.819	17.825	17.796

Table 254

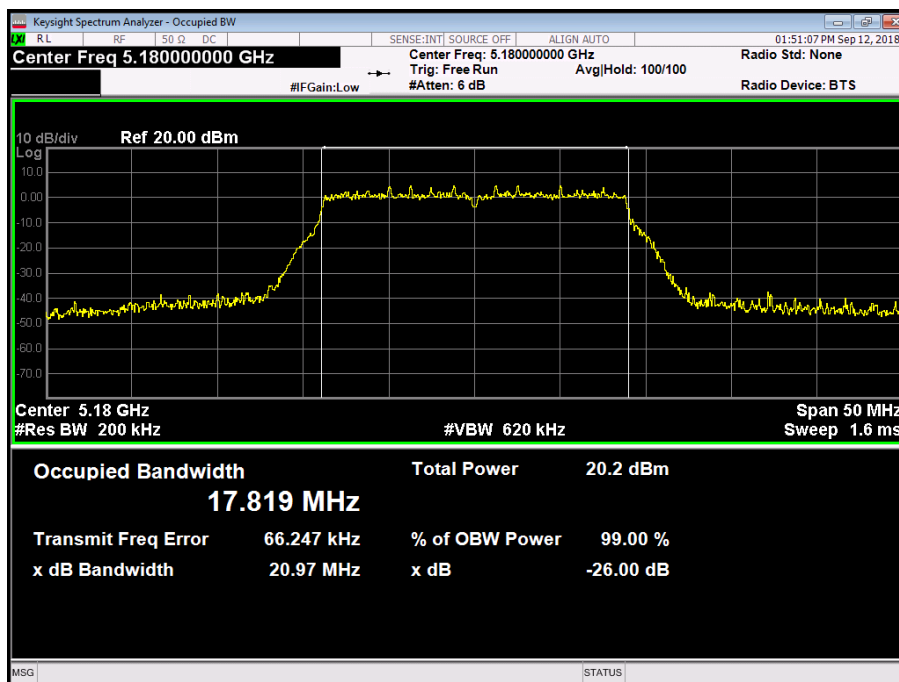


Figure 31 - 5180 MHz - 99% Occupied Bandwidth

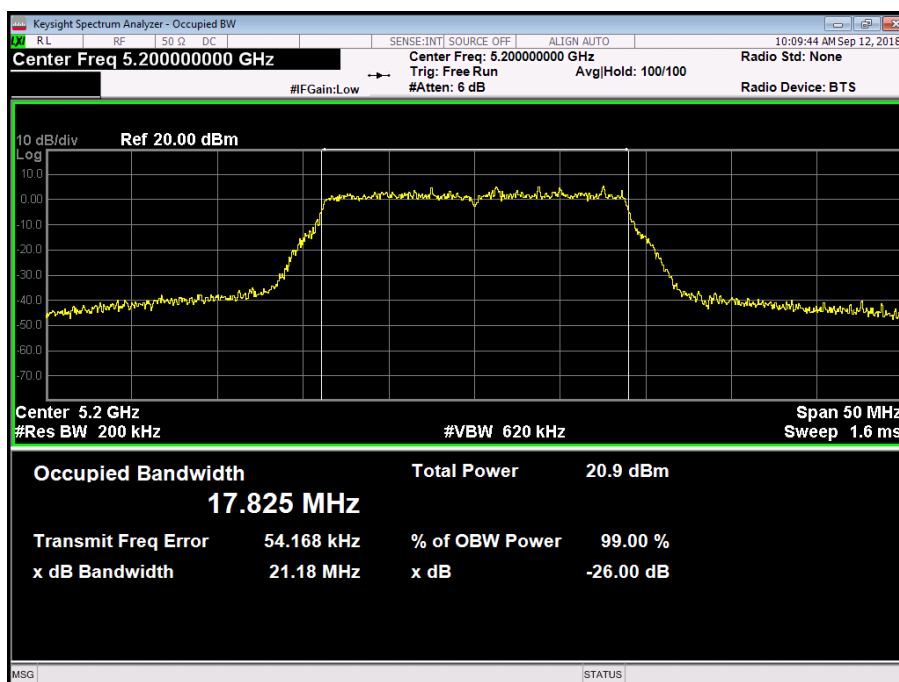


Figure 32 - 5200 MHz - 99% Occupied Bandwidth



Product Service

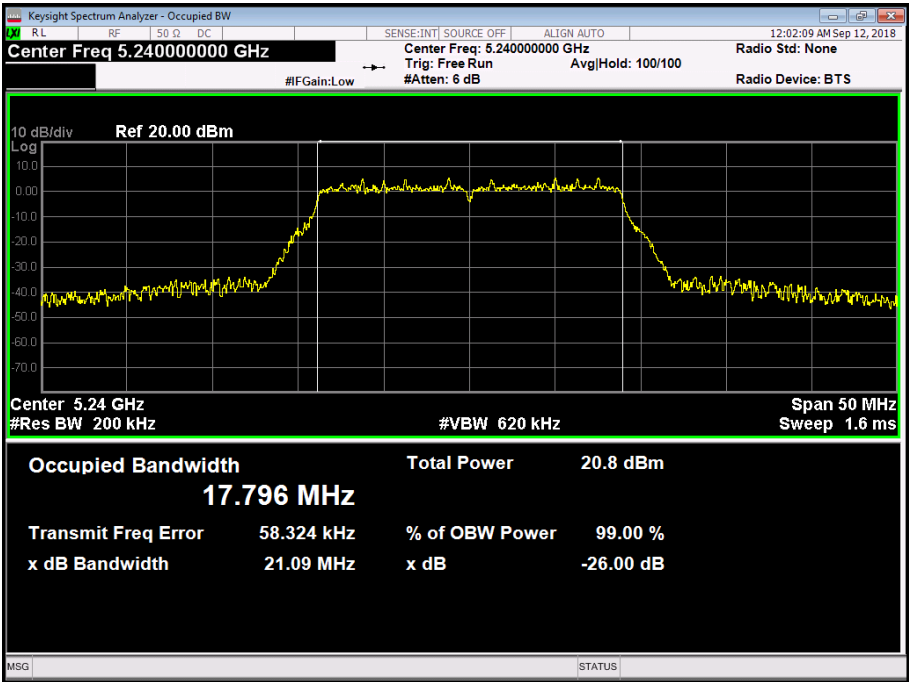


Figure 33 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.87	21.05	21.15
99% Bandwidth (MHz)	17.817	17.832	17.822

Table 255

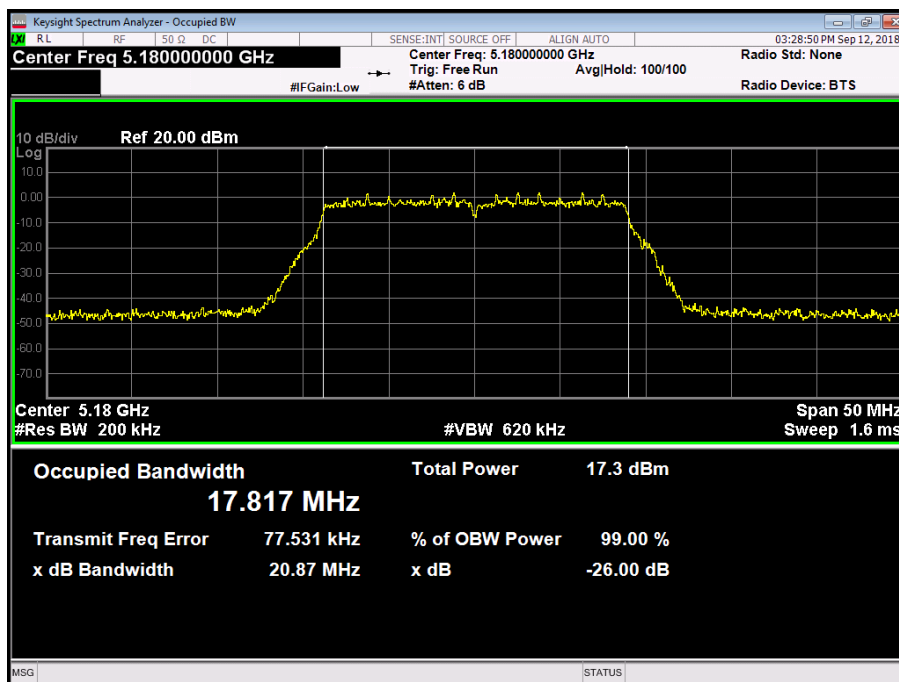


Figure 34 - 5180 MHz - 99% Occupied Bandwidth

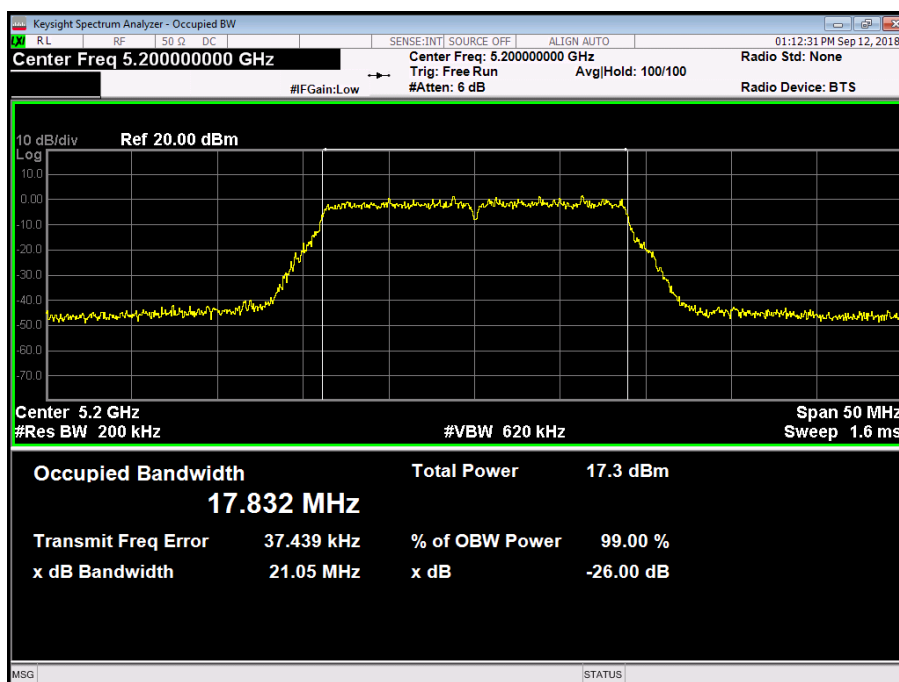


Figure 35 - 5200 MHz - 99% Occupied Bandwidth



Product Service

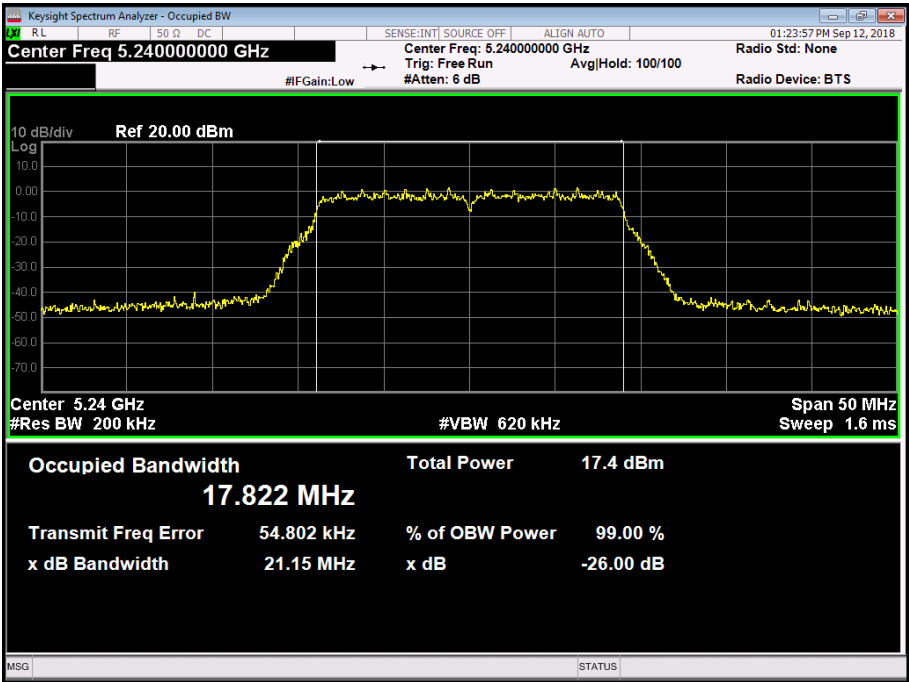


Figure 36 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / SISO / Core 0 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.82	56.21
99% Bandwidth (MHz)	36.344	36.371

Table 256

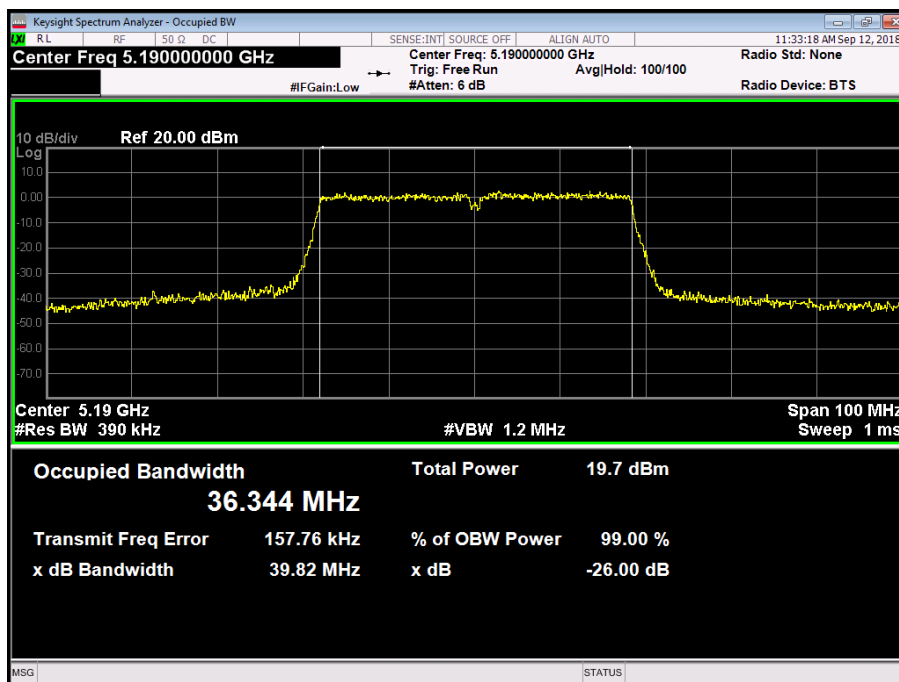


Figure 37 - 5190 MHz - 99% Occupied Bandwidth

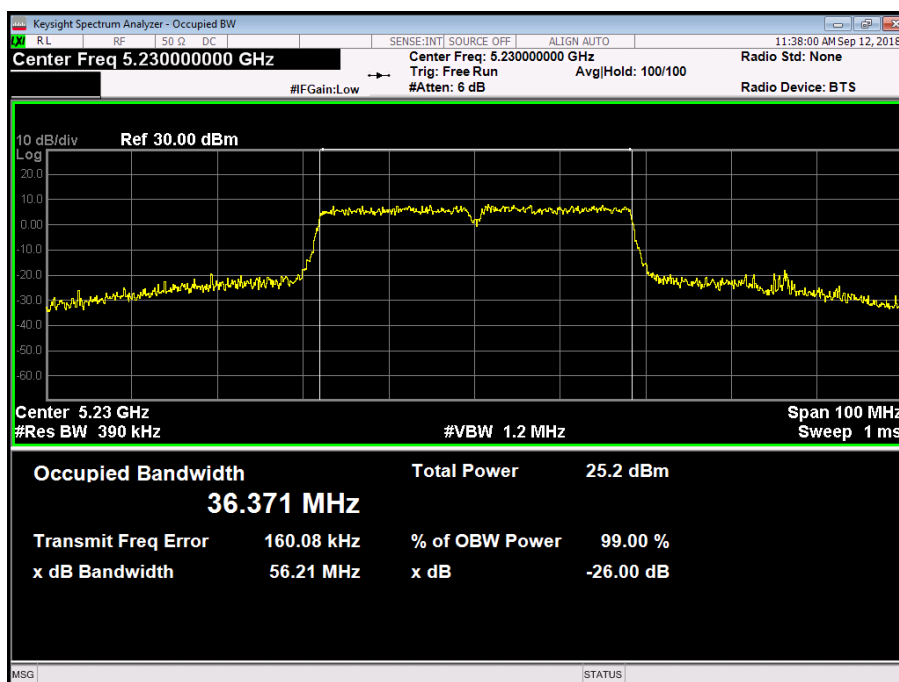


Figure 38 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / SISO / Core 0 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.94	39.97
99% Bandwidth (MHz)	36.304	36.359

Table 257

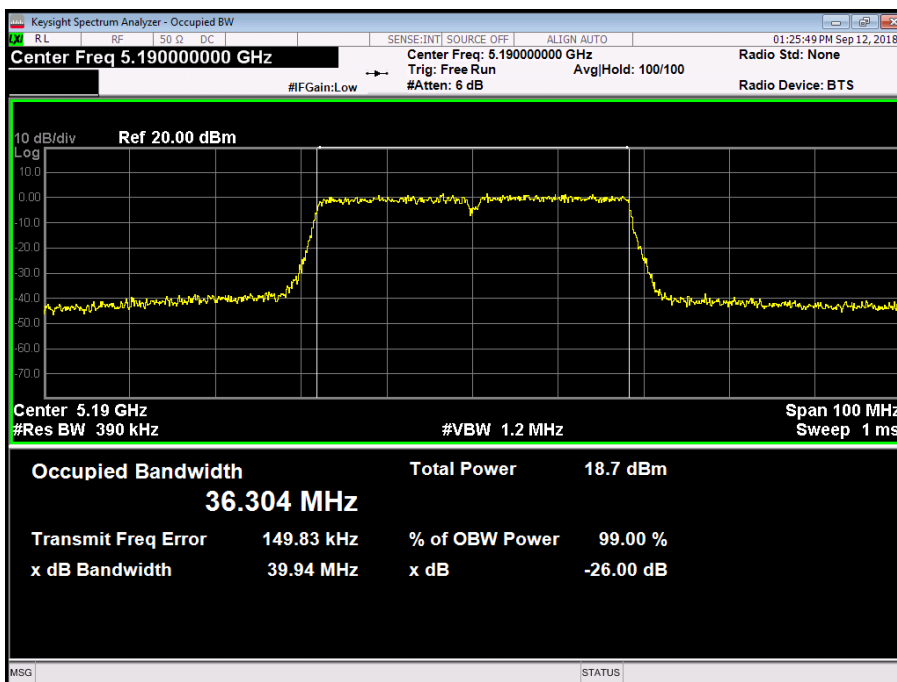


Figure 39 - 5190 MHz - 99% Occupied Bandwidth

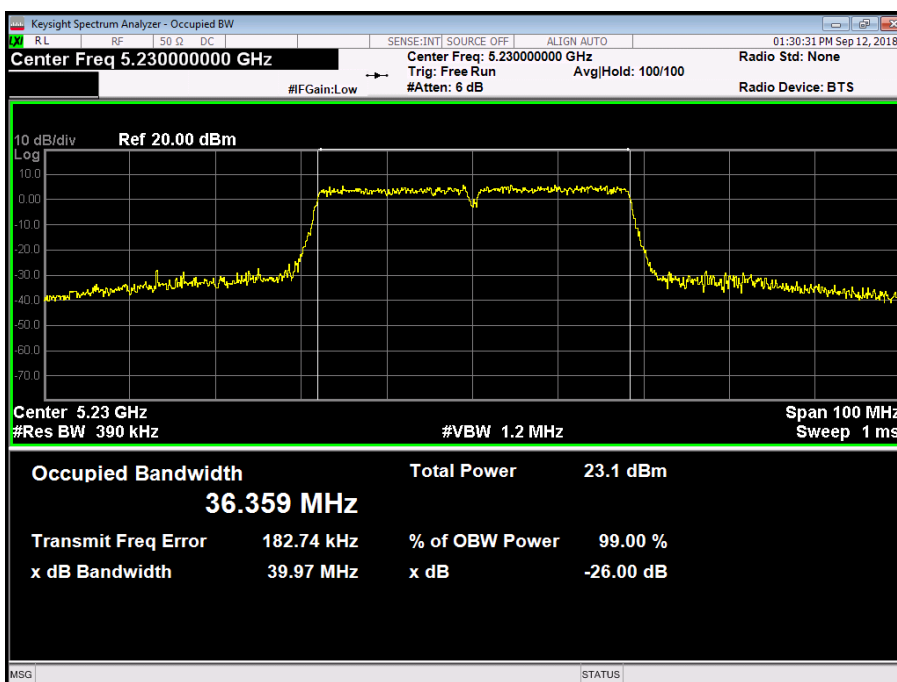


Figure 40 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.62	39.31
99% Bandwidth (MHz)	36.338	36.353

Table 258

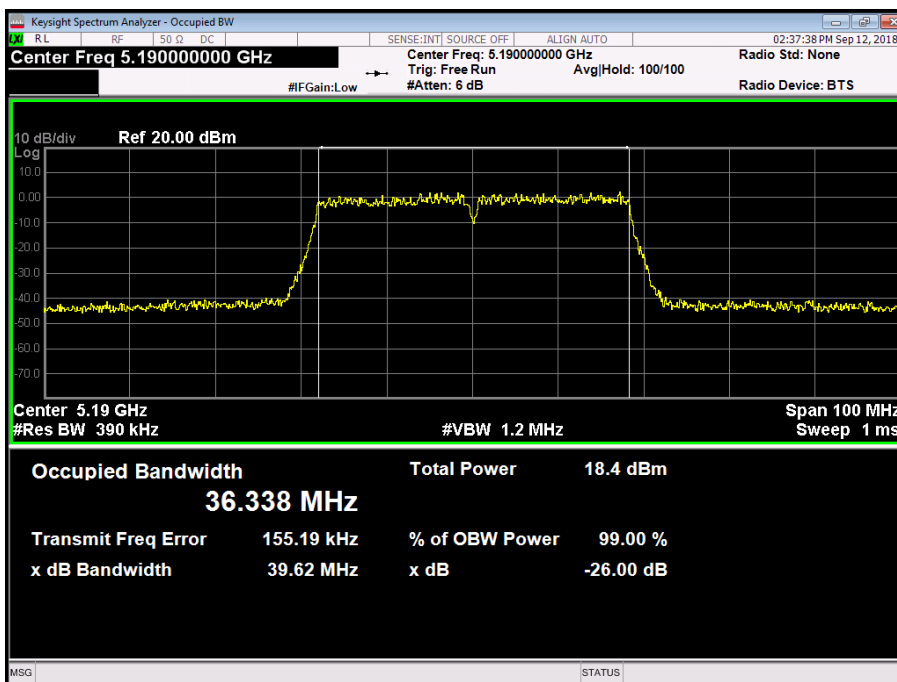


Figure 41 - 5190 MHz - 99% Occupied Bandwidth

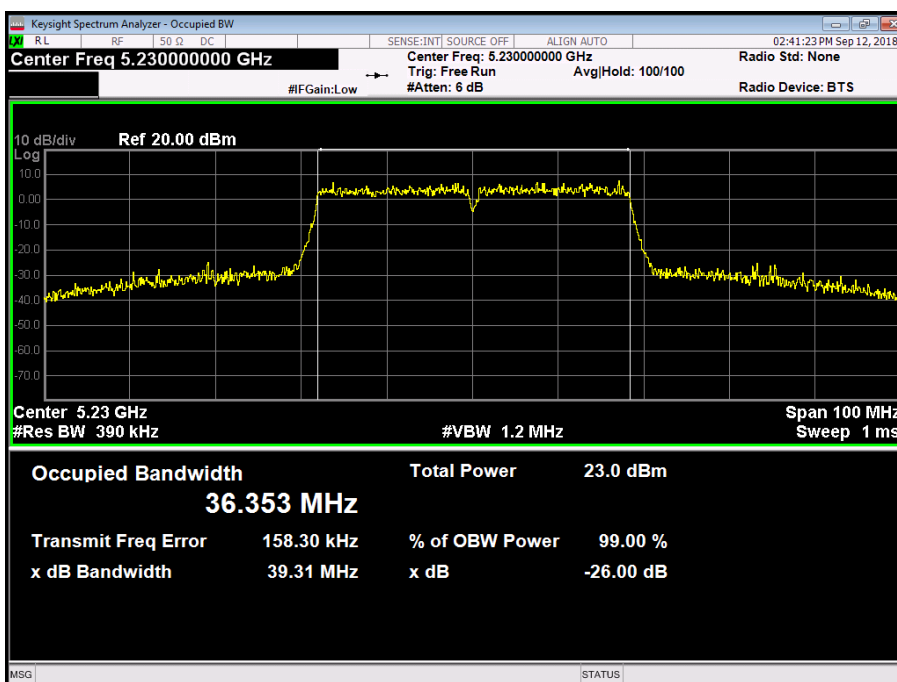


Figure 42 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.34	39.81
99% Bandwidth (MHz)	36.336	36.334

Table 259

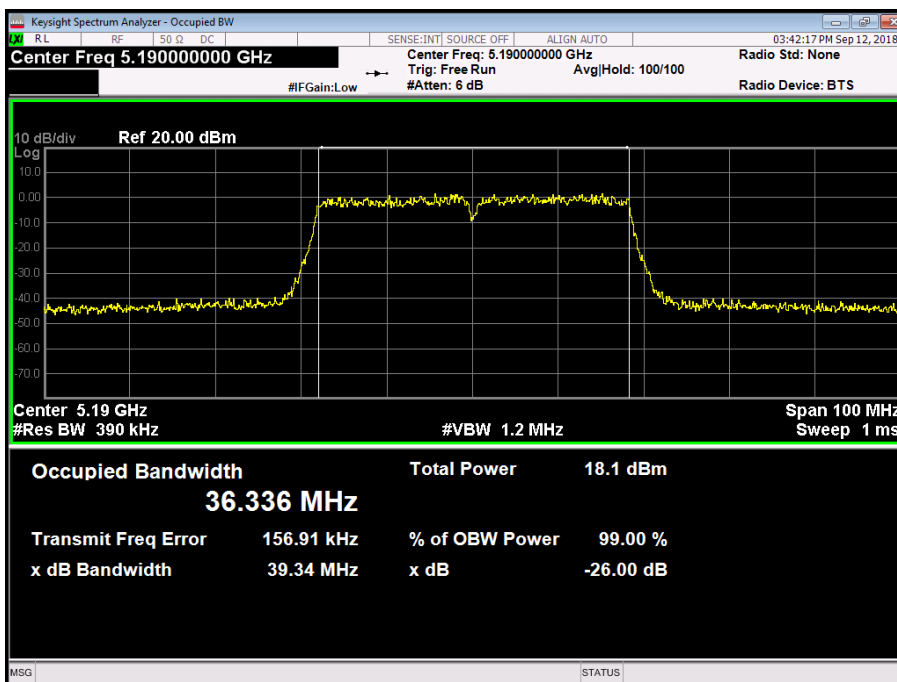


Figure 43 - 5190 MHz - 99% Occupied Bandwidth

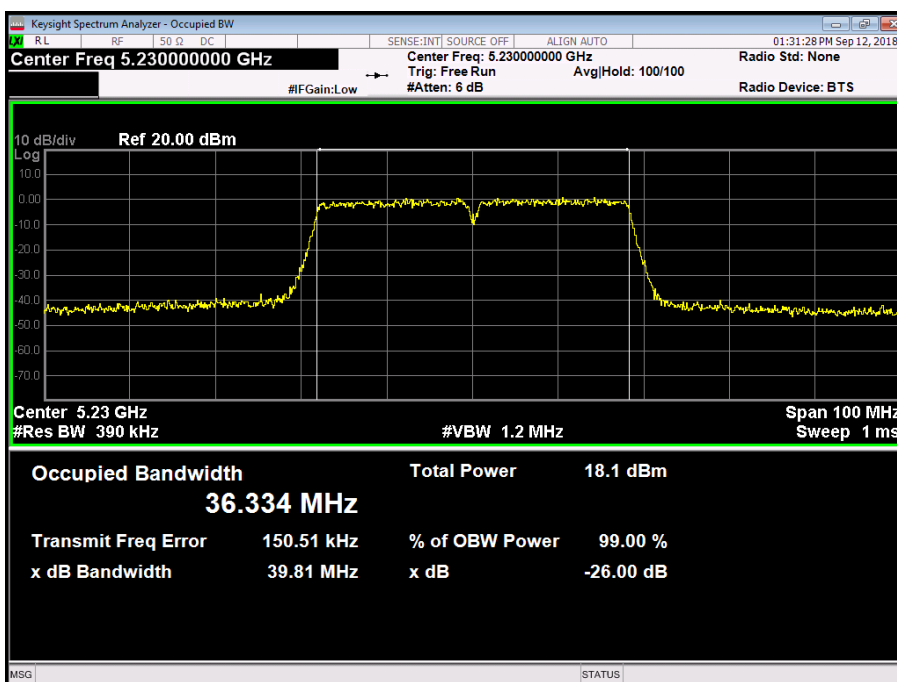


Figure 44 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	40.04	39.41
99% Bandwidth (MHz)	36.300	36.328

Table 260

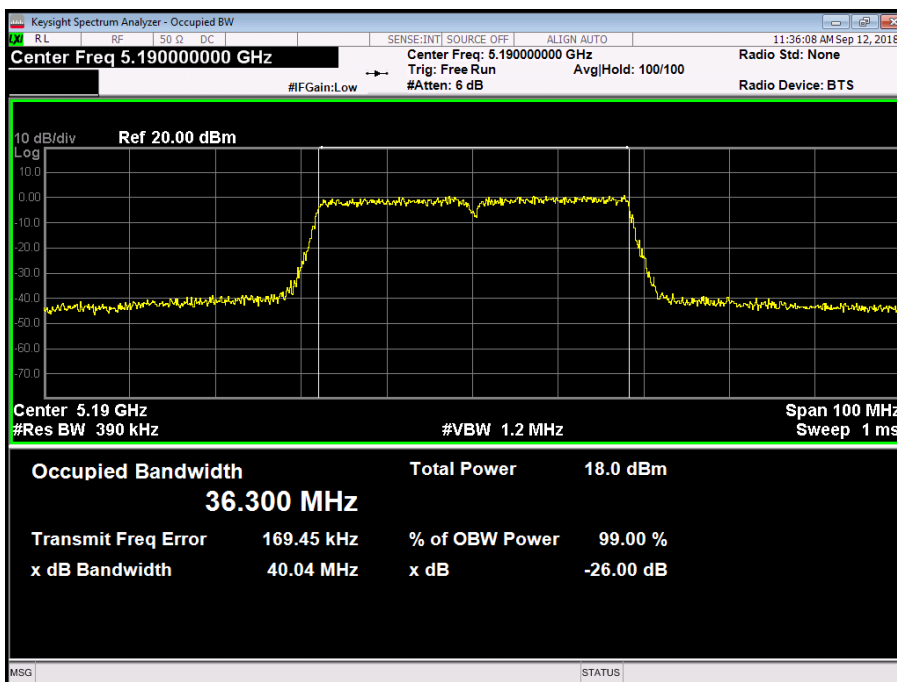


Figure 45 - 5190 MHz - 99% Occupied Bandwidth

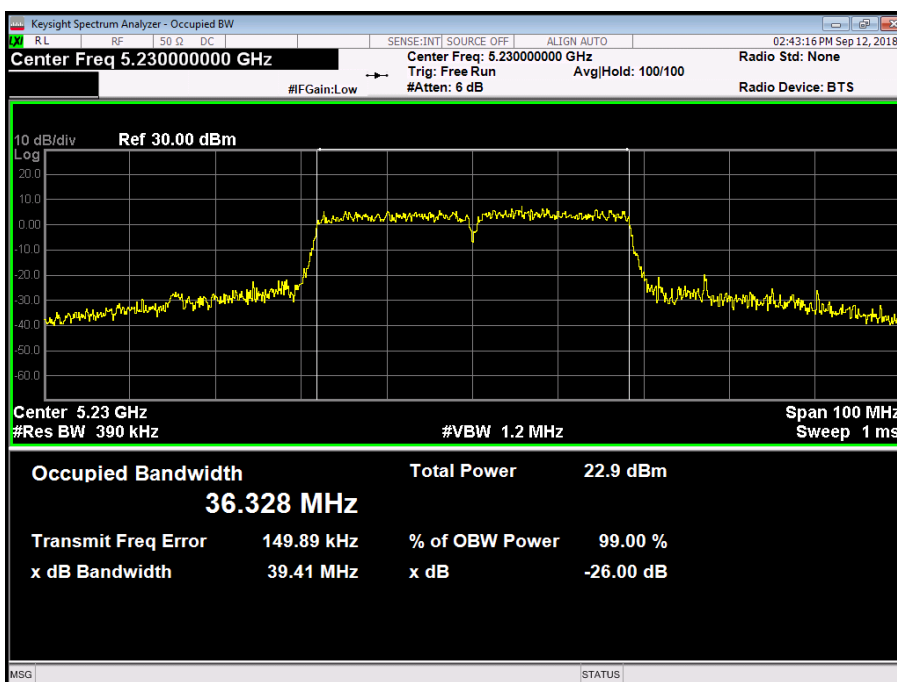


Figure 46 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS8 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.66	39.24
99% Bandwidth (MHz)	36.334	36.250

Table 261

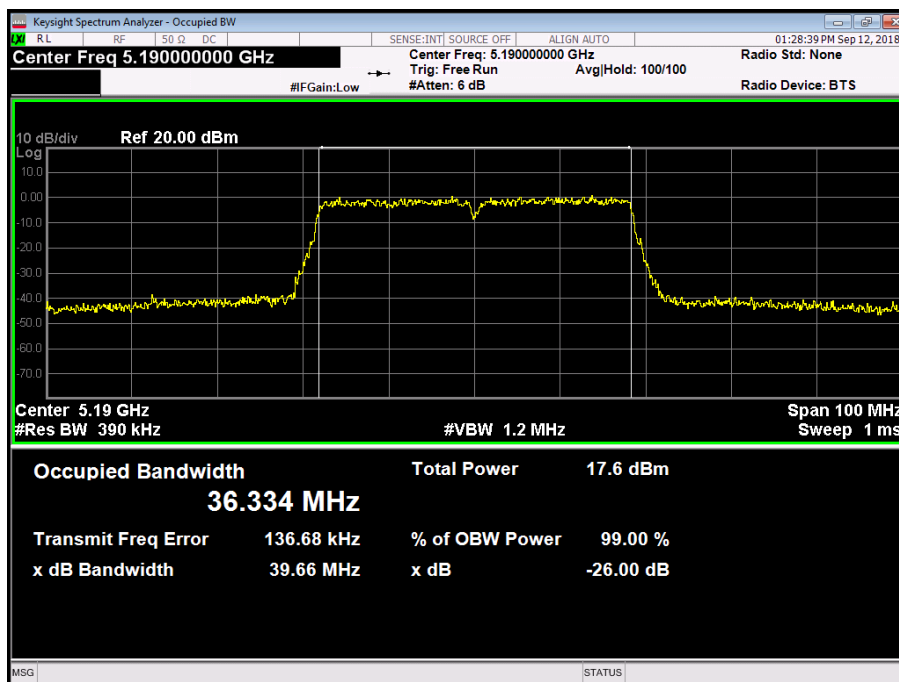


Figure 47 - 5190 MHz - 99% Occupied Bandwidth

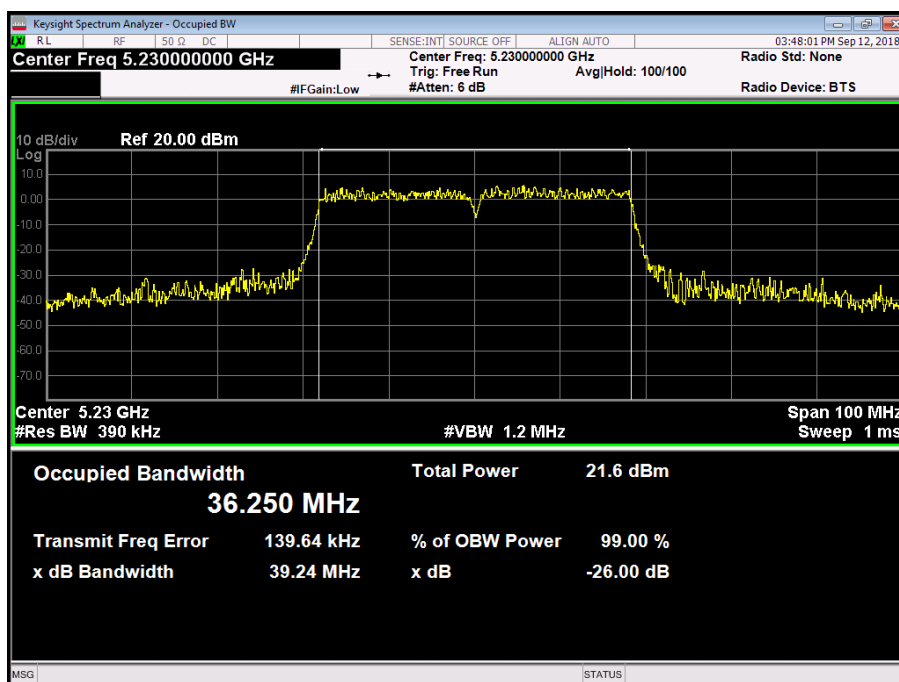


Figure 48 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.31	39.42
99% Bandwidth (MHz)	36.309	36.364

Table 262

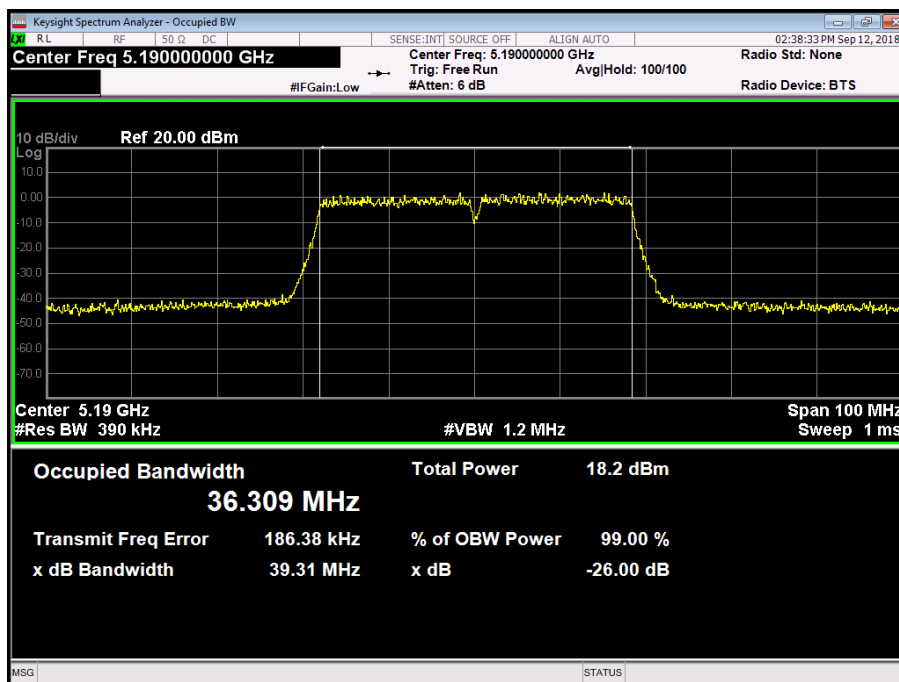


Figure 49 - 5190 MHz - 99% Occupied Bandwidth

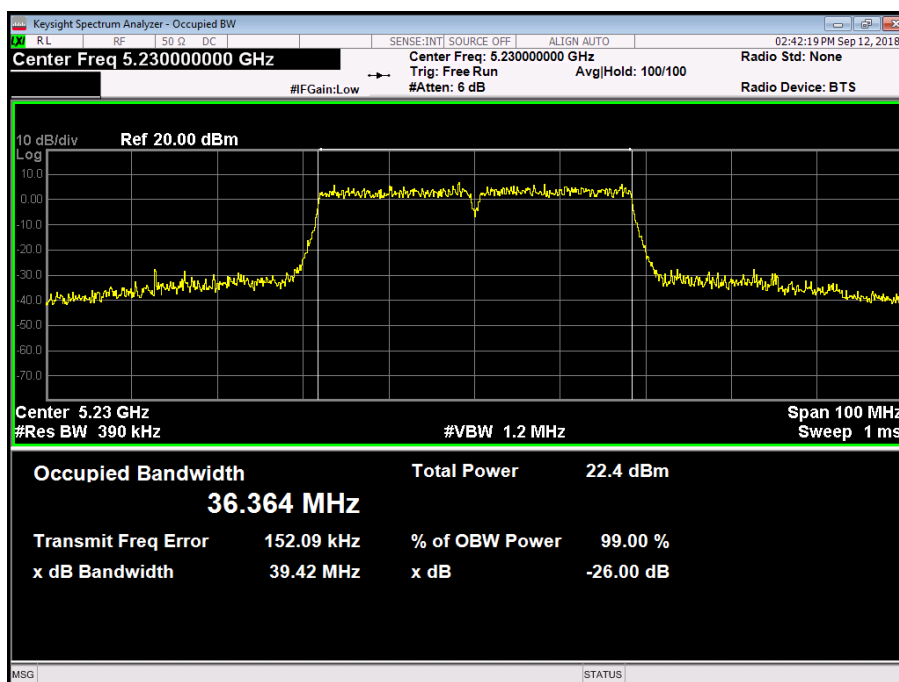


Figure 50 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.69	39.43
99% Bandwidth (MHz)	36.345	36.342

Table 263

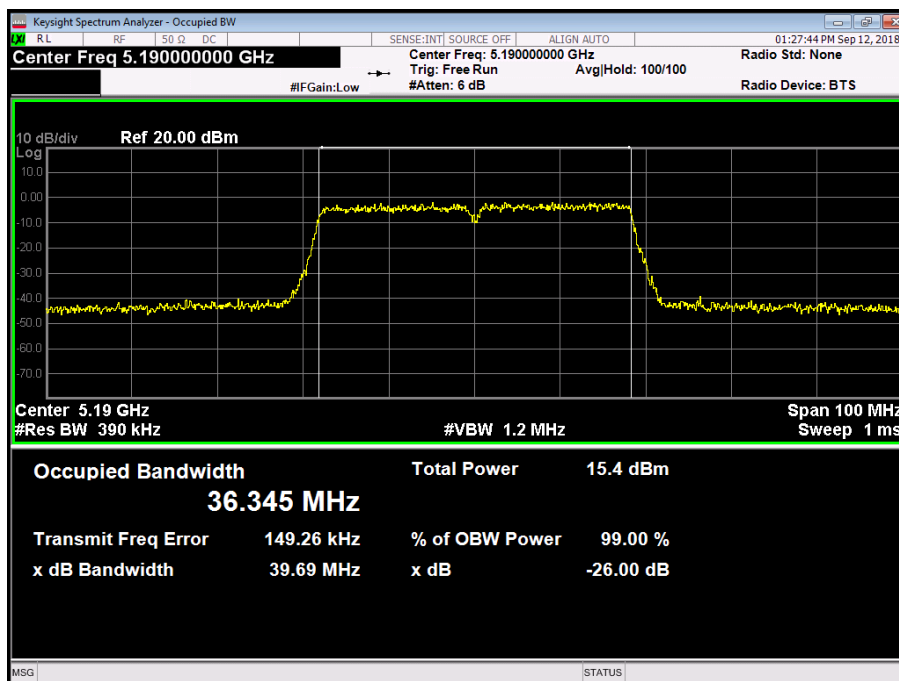


Figure 51 - 5190 MHz - 99% Occupied Bandwidth

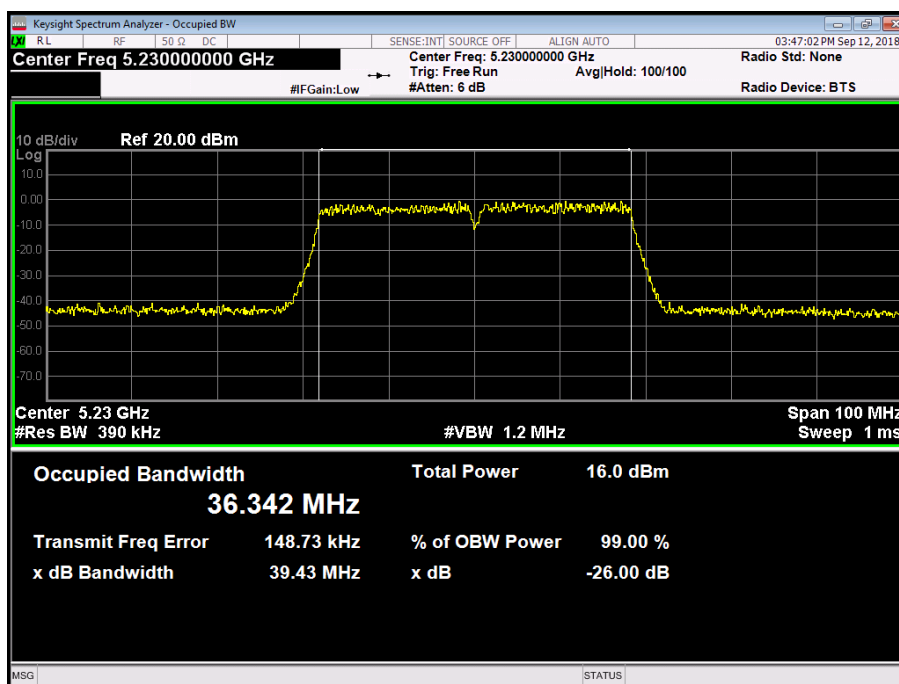


Figure 52 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.74	39.58
99% Bandwidth (MHz)	36.320	36.371

Table 264

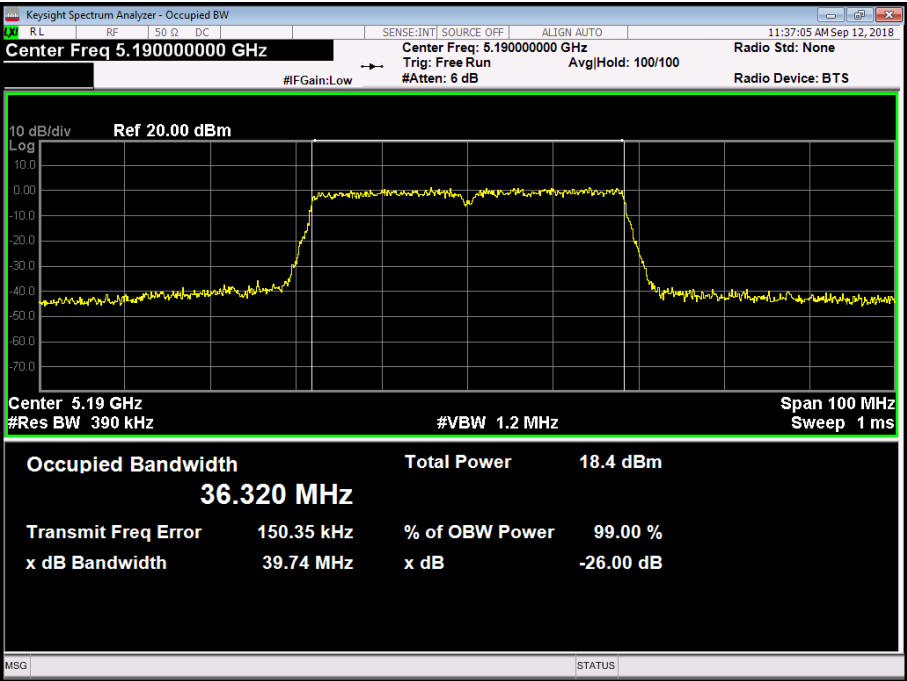


Figure 53 - 5190 MHz - 99% Occupied Bandwidth

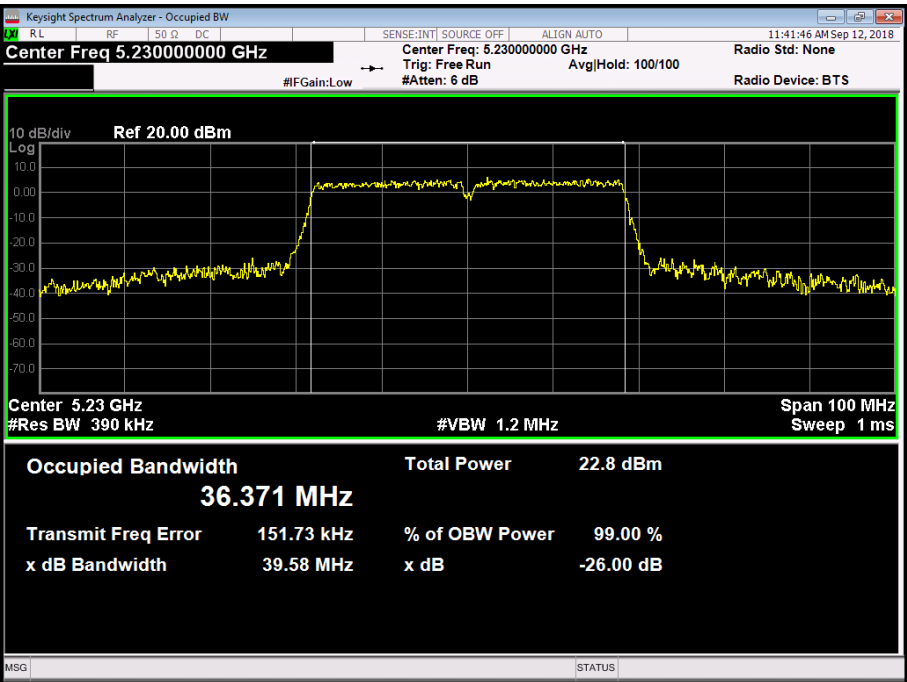


Figure 54 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11n / HT40 MCS16 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.82	39.09
99% Bandwidth (MHz)	36.296	36.266

Table 265

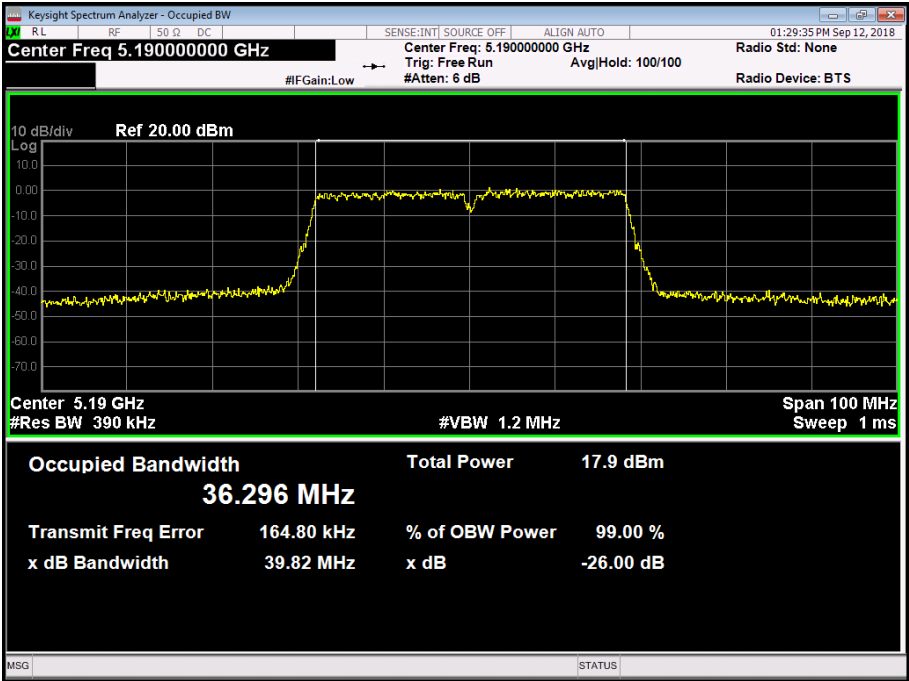


Figure 55 - 5190 MHz - 99% Occupied Bandwidth

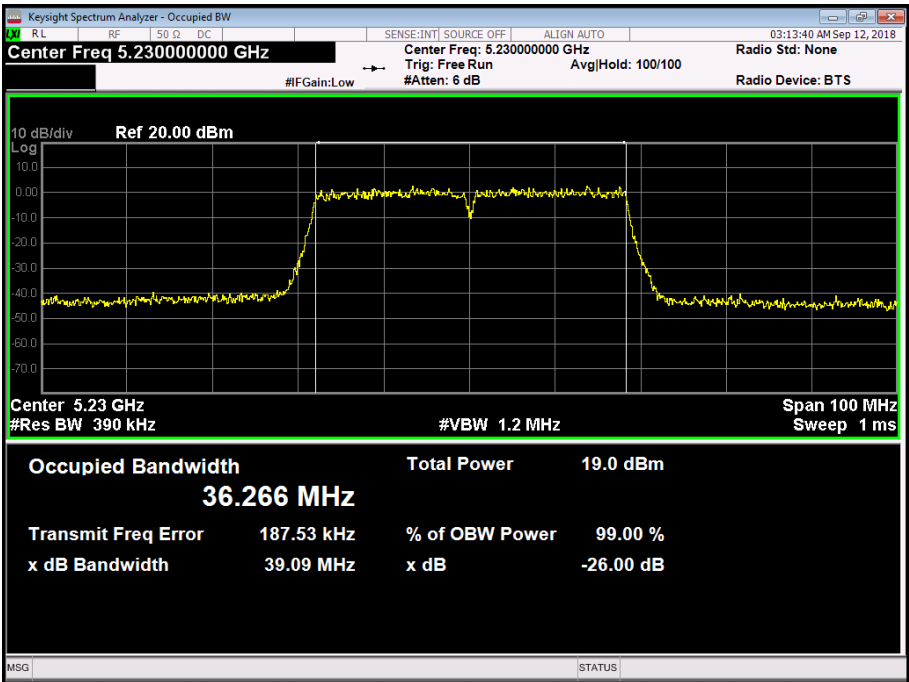


Figure 56 - 5230 MHz - 99% Occupied Bandwidth



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.20	20.61	20.27
99% Bandwidth (MHz)	17.516	17.532	17.563

Table 266

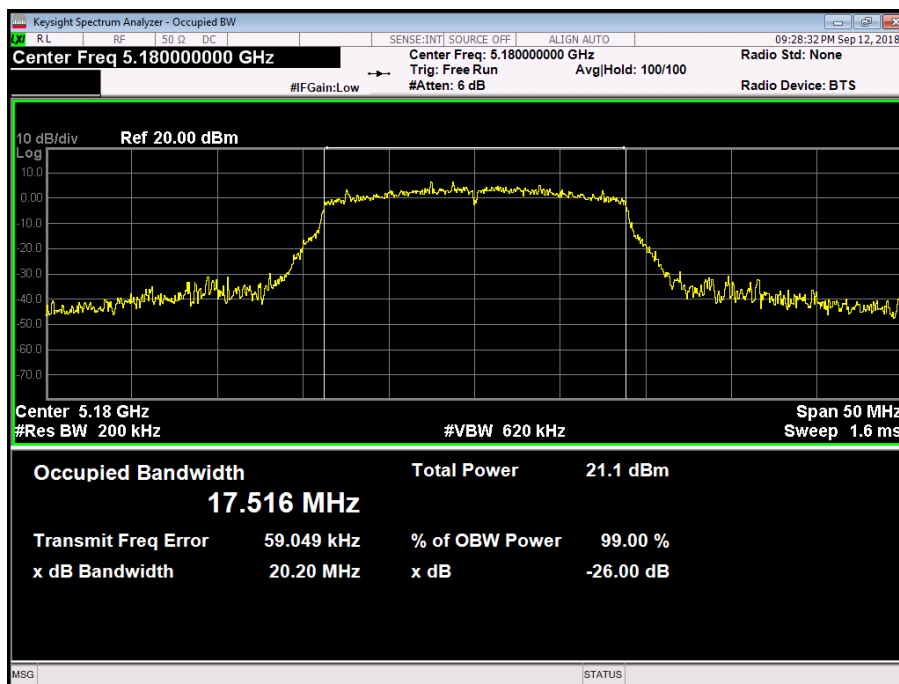


Figure 57 - 5180 MHz - 99% Occupied Bandwidth

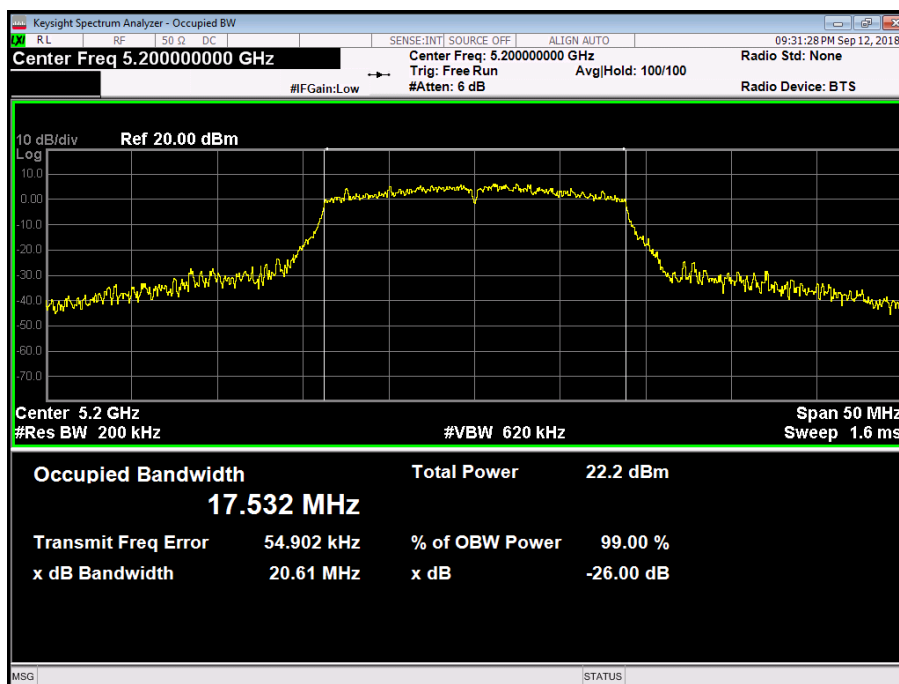


Figure 58 - 5200 MHz - 99% Occupied Bandwidth



Product Service

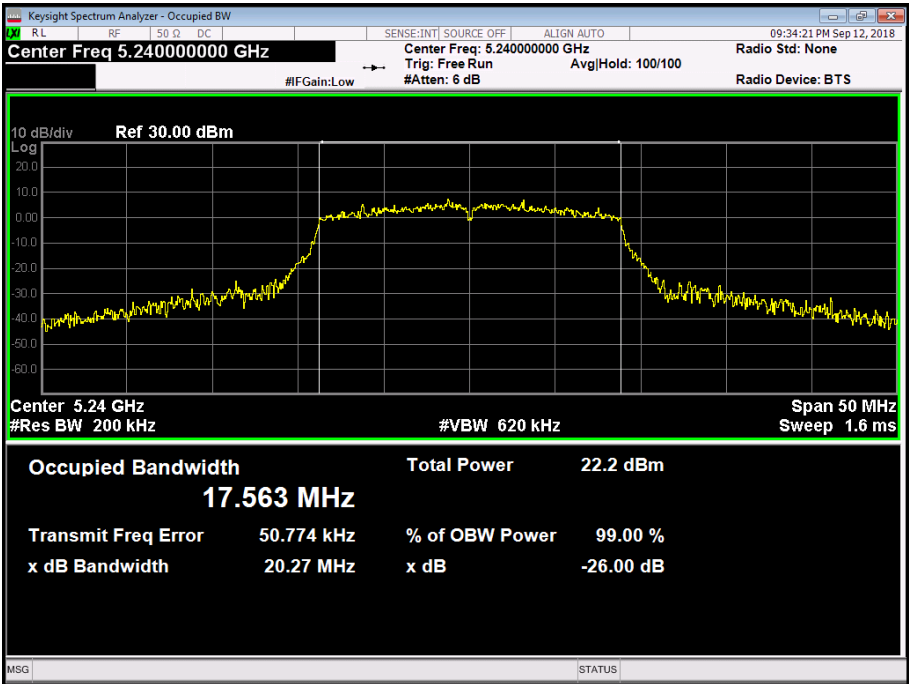


Figure 59 - 5240 MHz - 99% Occupied Bandwidth



802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.07	20.24	20.60
99% Bandwidth (MHz)	17.505	17.529	17.520

Table 267

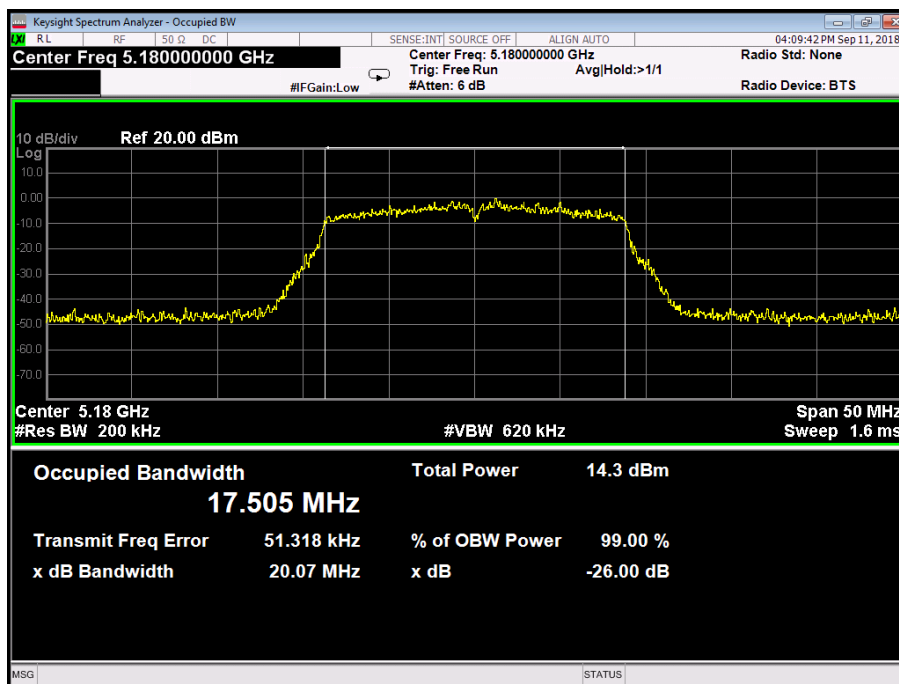


Figure 60 - 5180 MHz - 99% Occupied Bandwidth

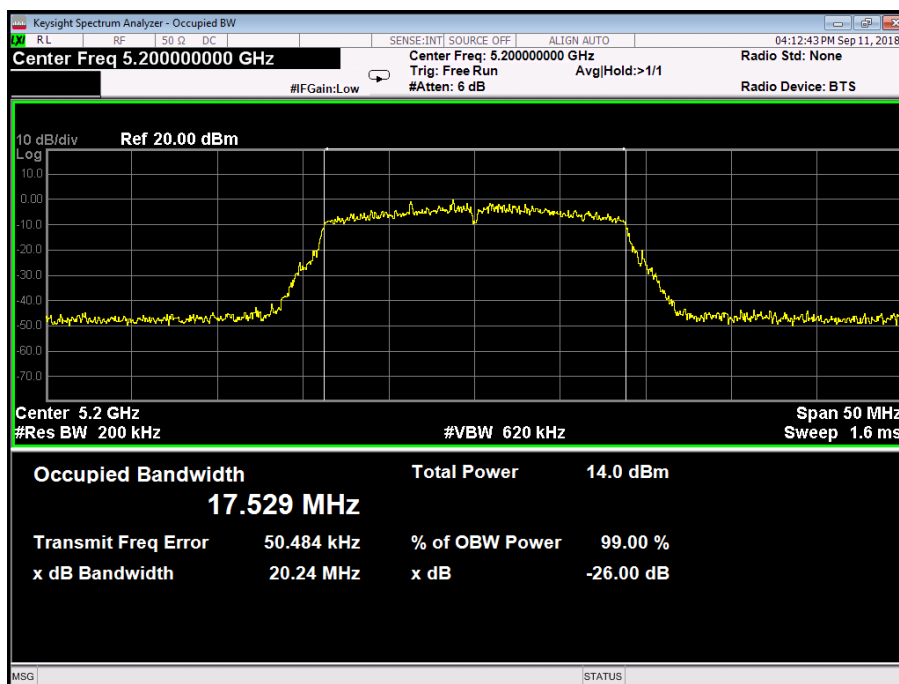


Figure 61 - 5200 MHz - 99% Occupied Bandwidth



Product Service

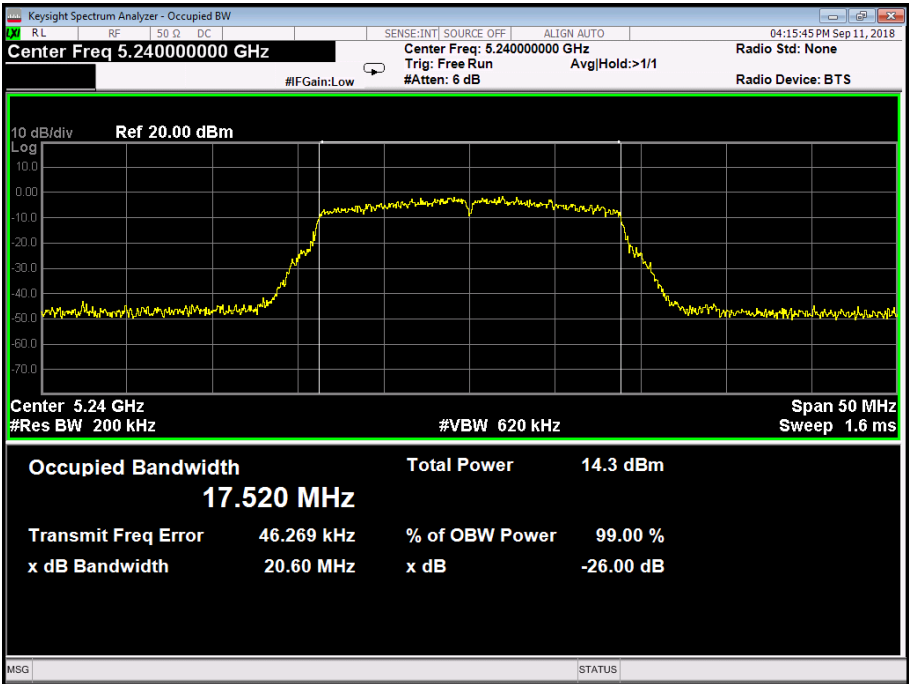


Figure 62 - 5240 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.82	20.42	20.67
99% Bandwidth (MHz)	17.490	17.554	17.544

Table 268

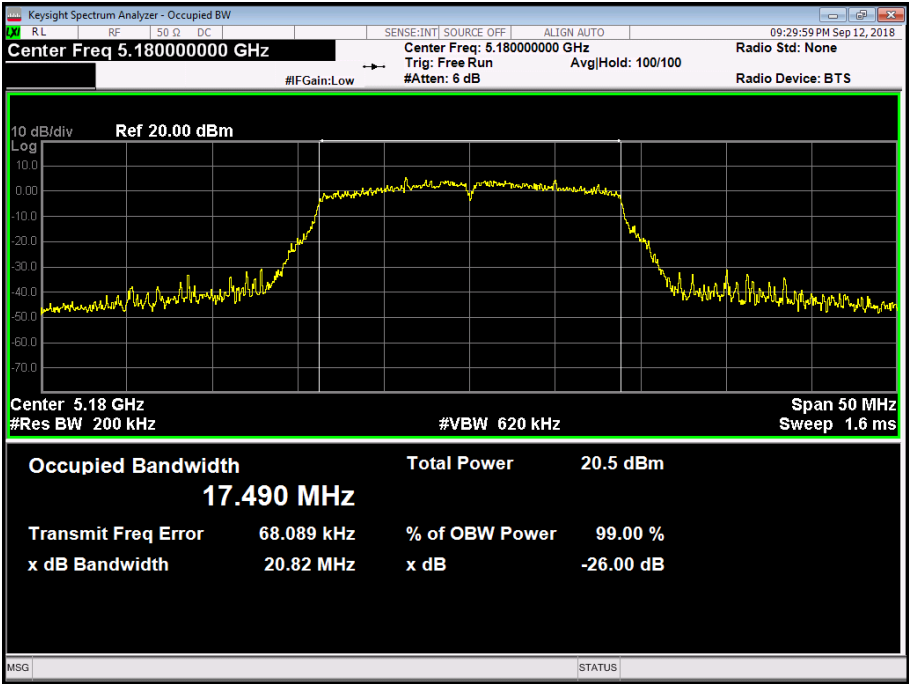


Figure 63 - 5180 MHz - 99% Occupied Bandwidth

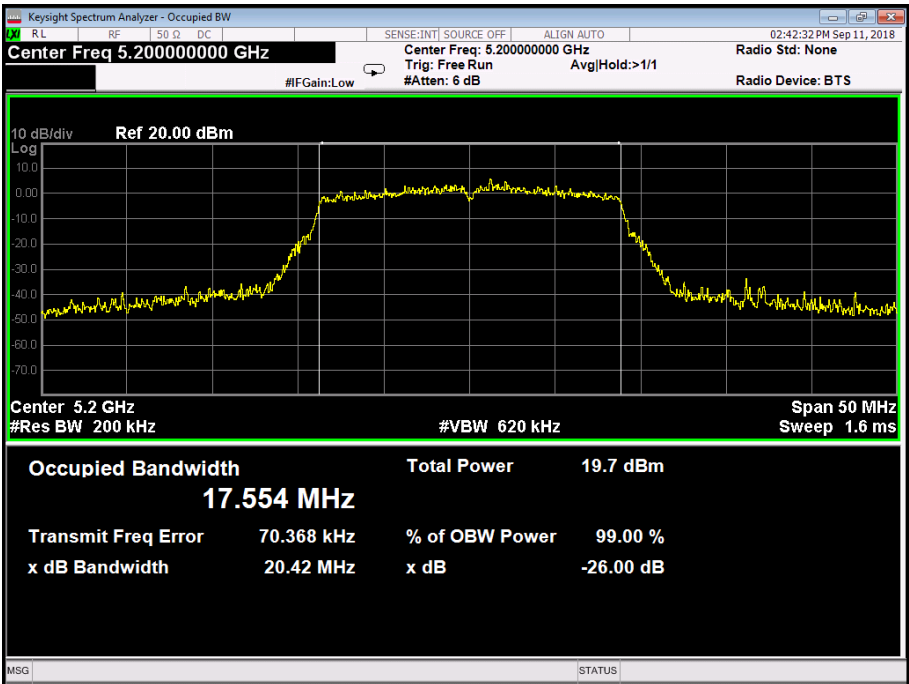


Figure 64 - 5200 MHz - 99% Occupied Bandwidth



Product Service

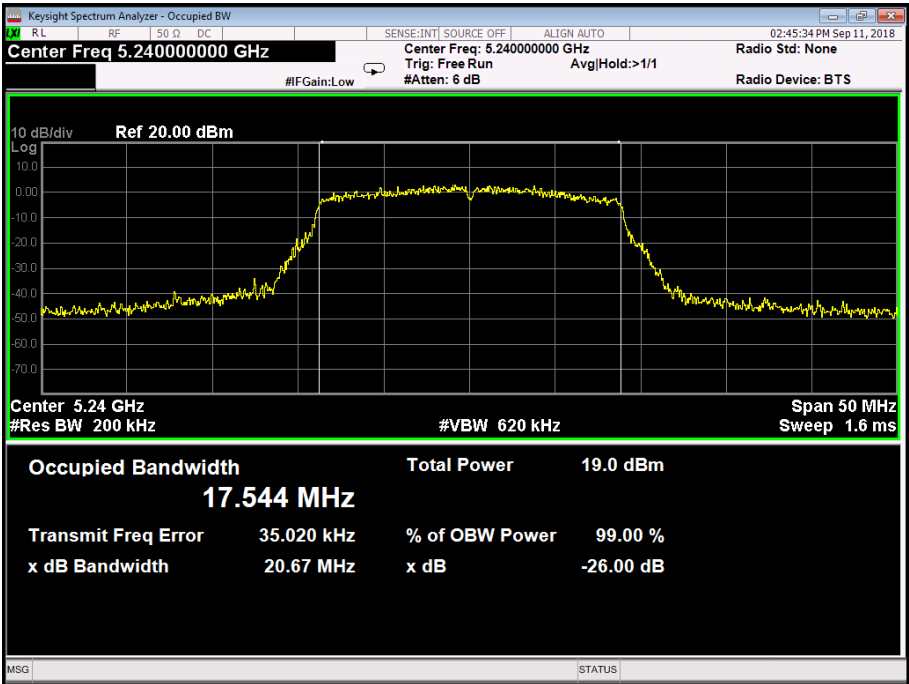


Figure 65 - 5240 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT20 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.37	20.26	20.43
99% Bandwidth (MHz)	17.497	17.571	17.533

Table 269

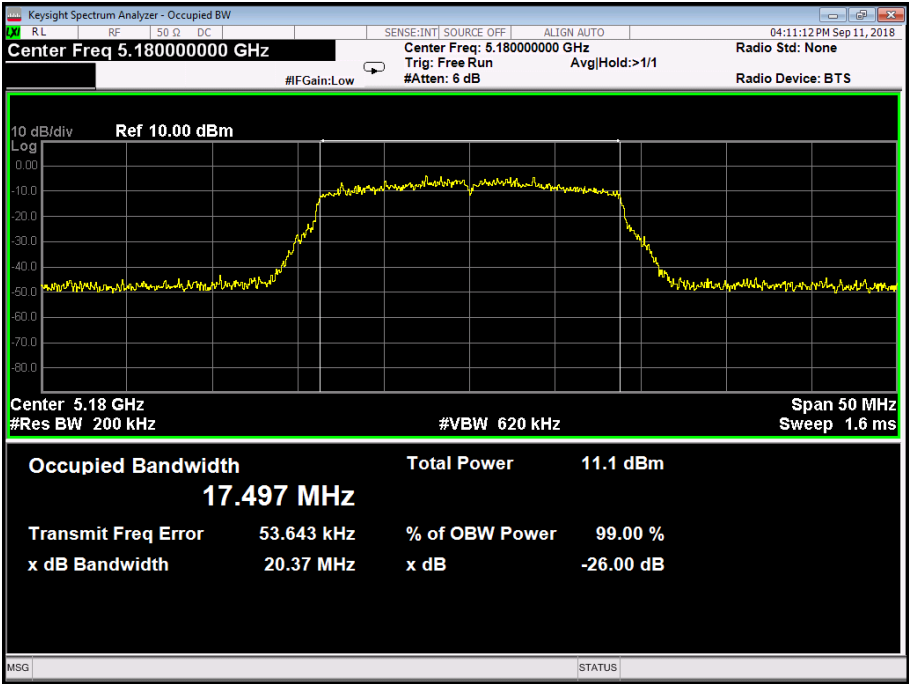


Figure 66 - 5180 MHz - 99% Occupied Bandwidth

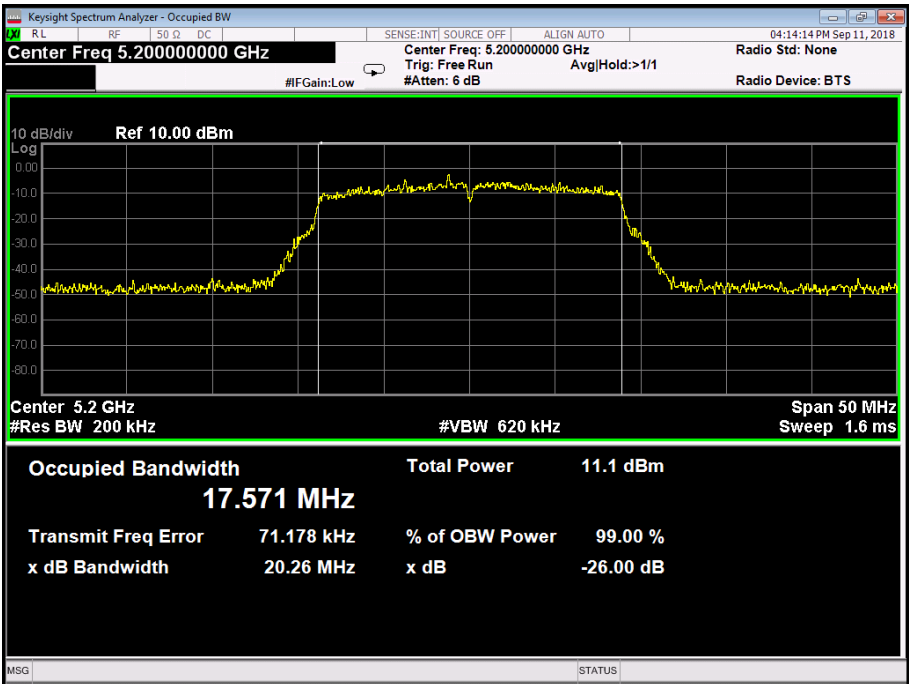


Figure 67 - 5200 MHz - 99% Occupied Bandwidth



Product Service

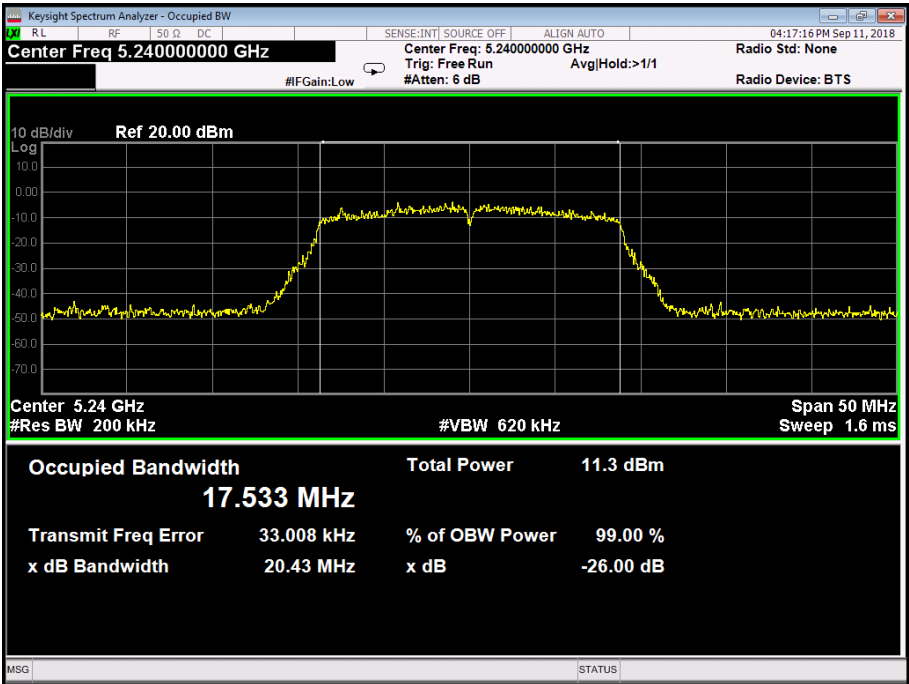


Figure 68 - 5240 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.37	39.82
99% Bandwidth (MHz)	36.270	36.263

Table 270

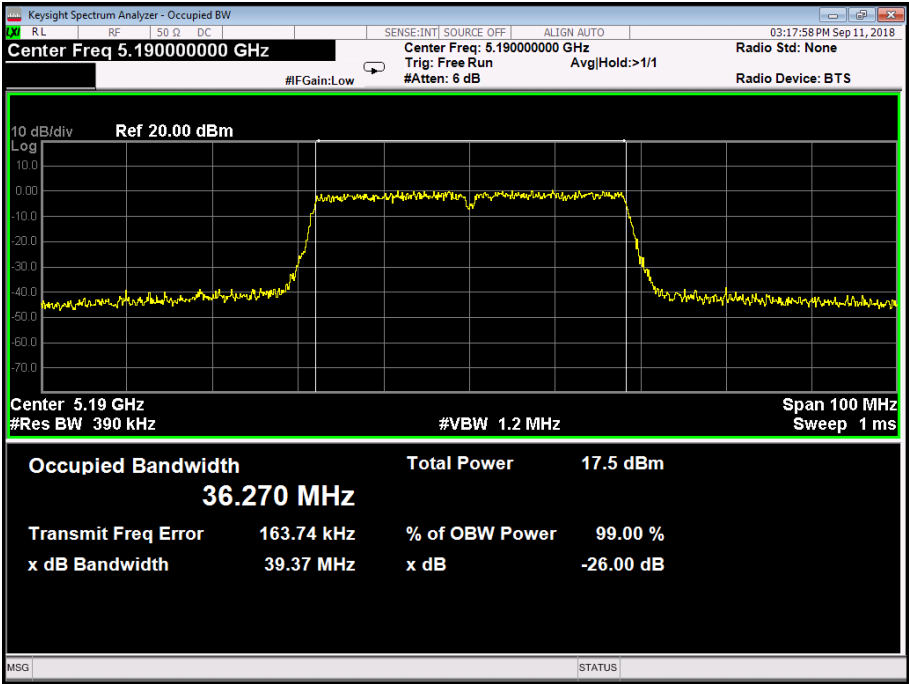


Figure 69 - 5190 MHz - 99% Occupied Bandwidth

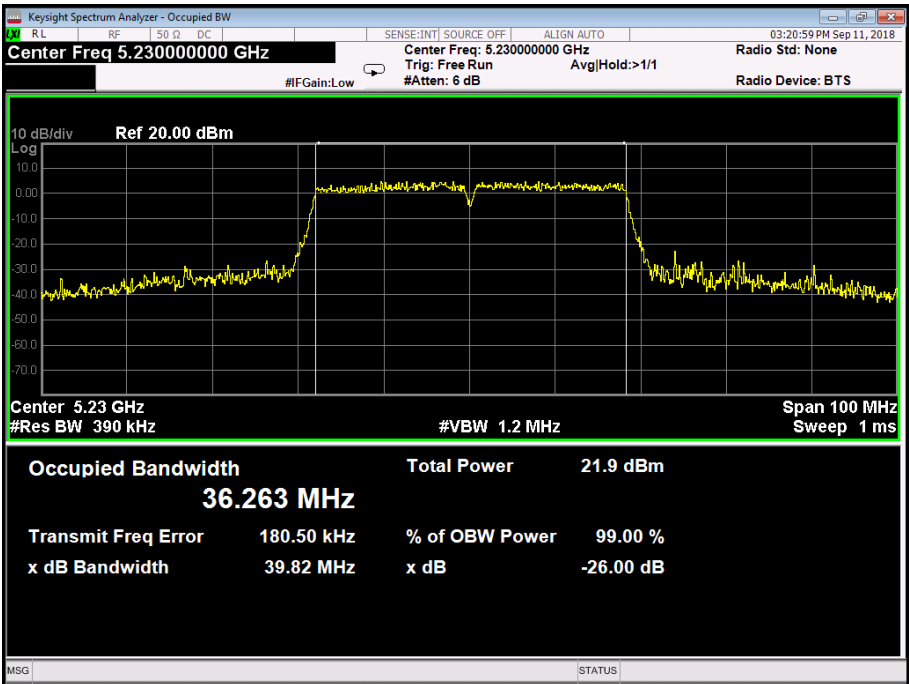


Figure 70 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.98	39.49
99% Bandwidth (MHz)	36.296	36.285

Table 271

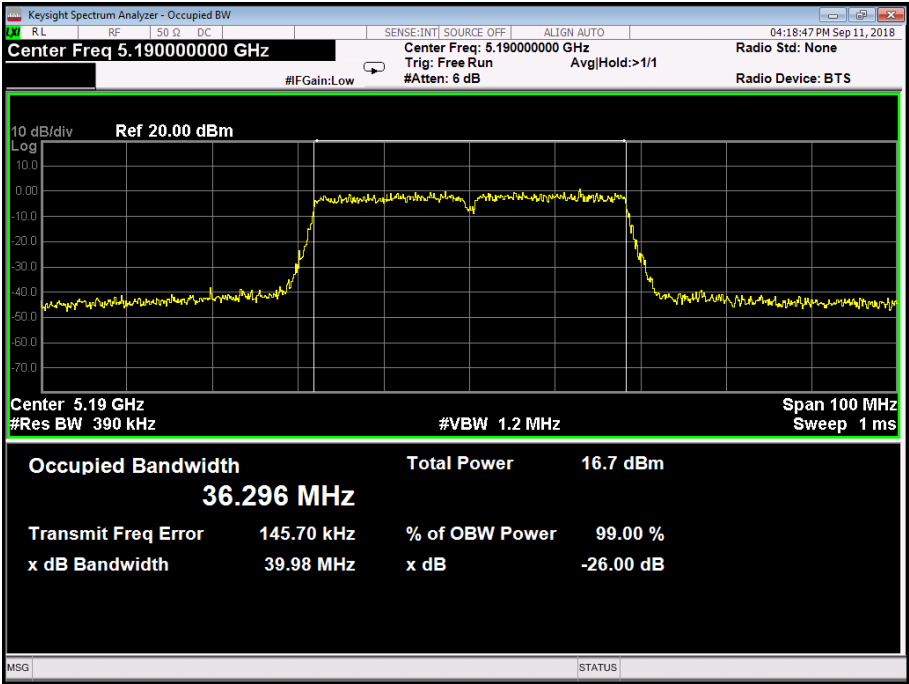


Figure 71 - 5190 MHz - 99% Occupied Bandwidth

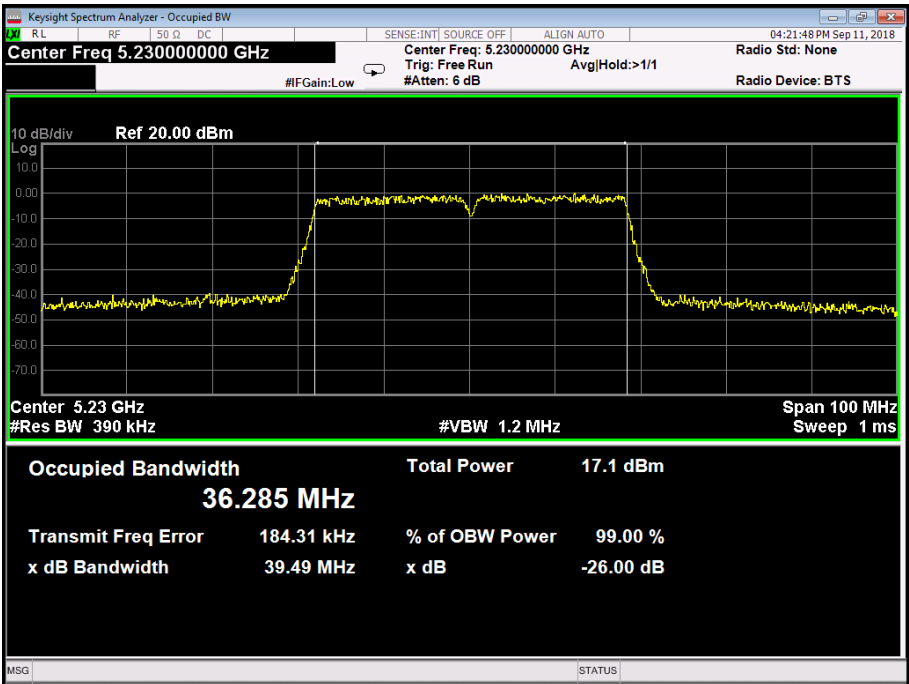


Figure 72 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.72	39.62
99% Bandwidth (MHz)	36.302	36.252

Table 272

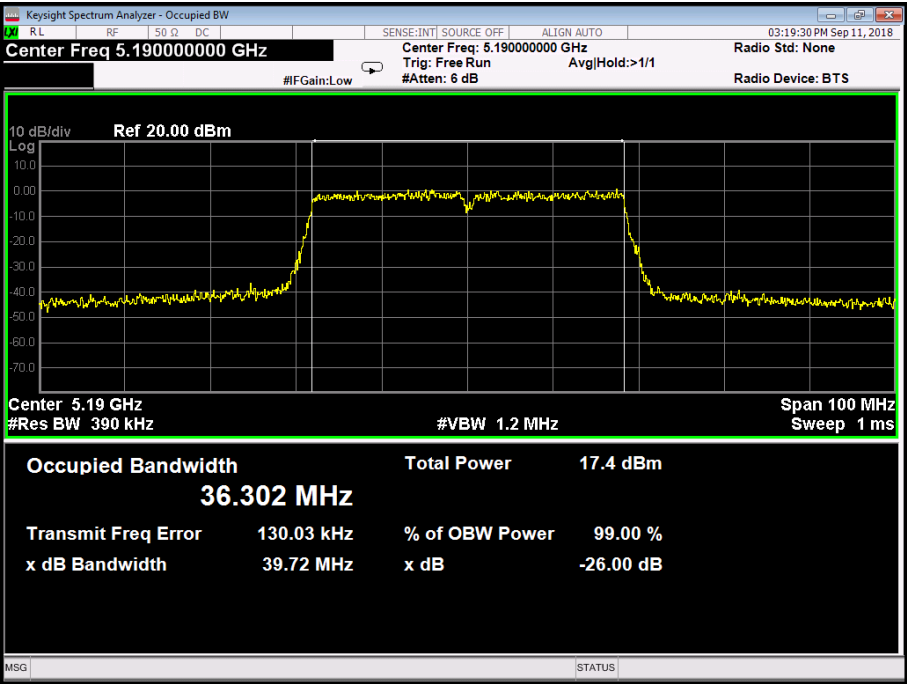


Figure 73 - 5190 MHz - 99% Occupied Bandwidth

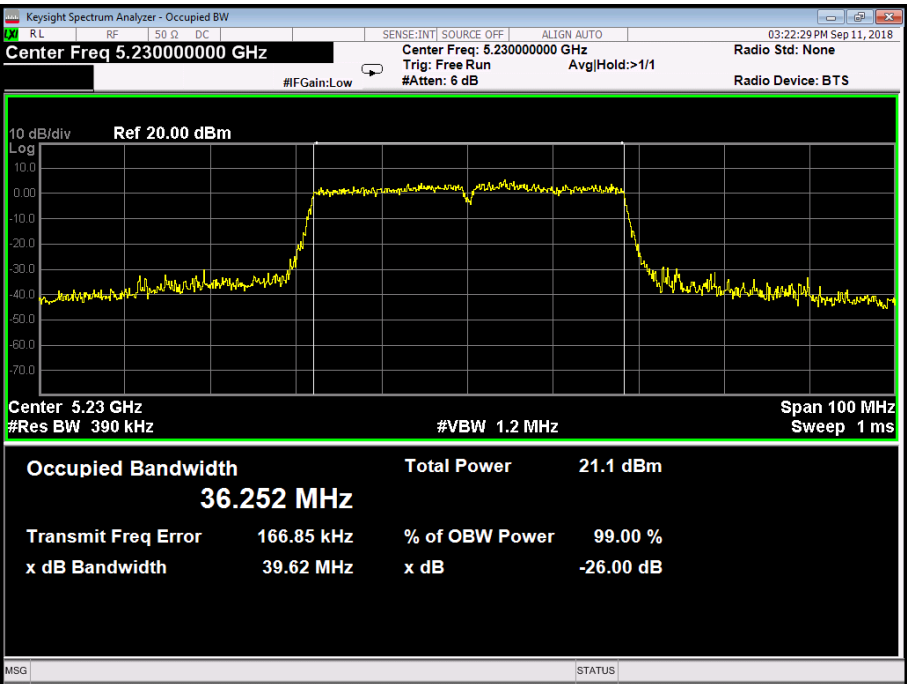


Figure 74 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT40 MCS0x1 / MIMO TxBF / Cores 0+1+2 / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.63	39.22
99% Bandwidth (MHz)	36.354	36.295

Table 273

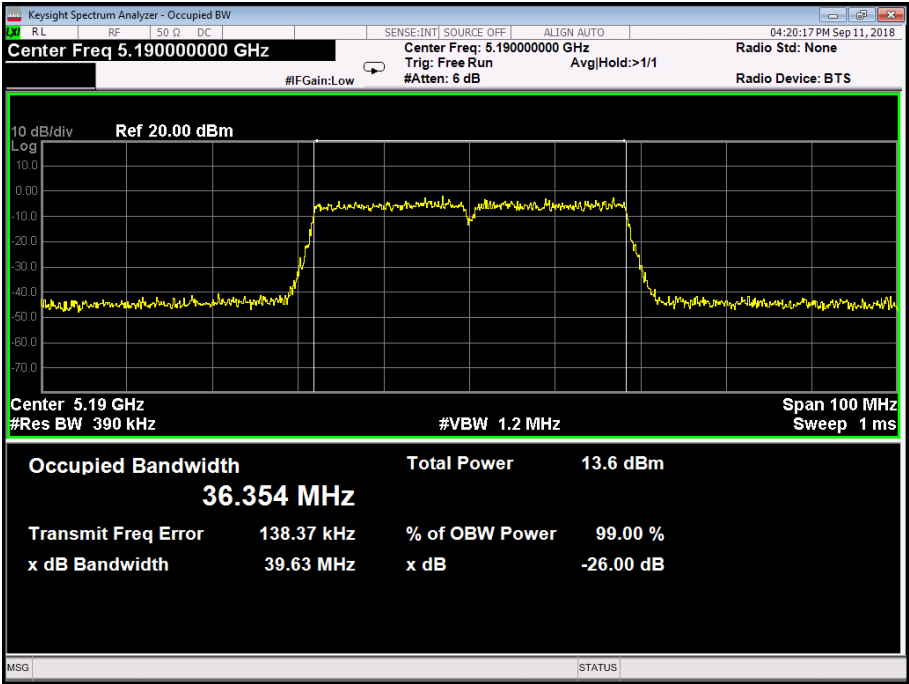


Figure 75 - 5190 MHz - 99% Occupied Bandwidth

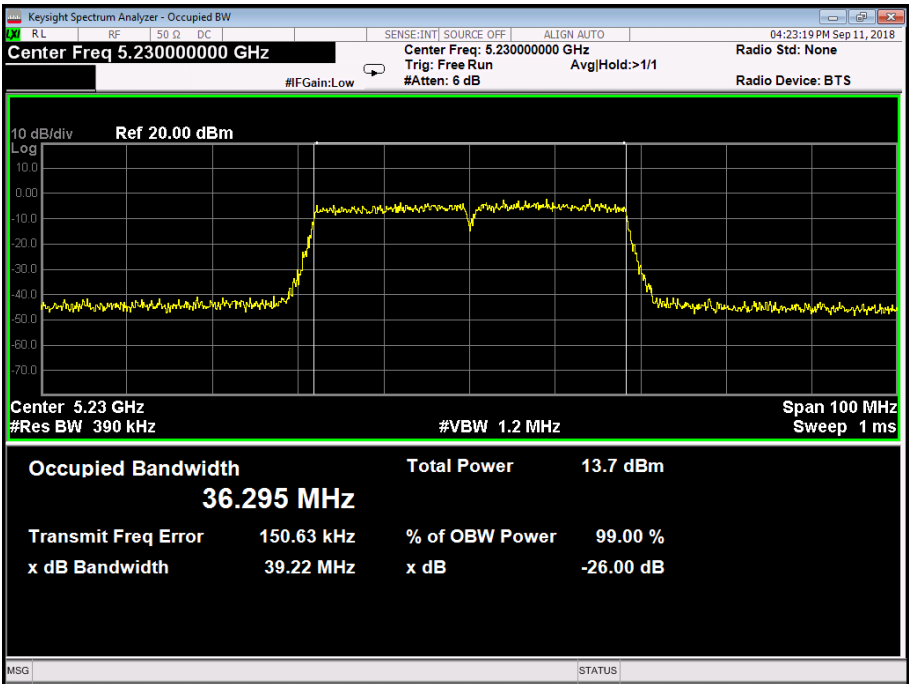


Figure 76 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / SISO / Core 0 / Country Code US

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.97
99% Bandwidth (MHz)	75.707

Table 274

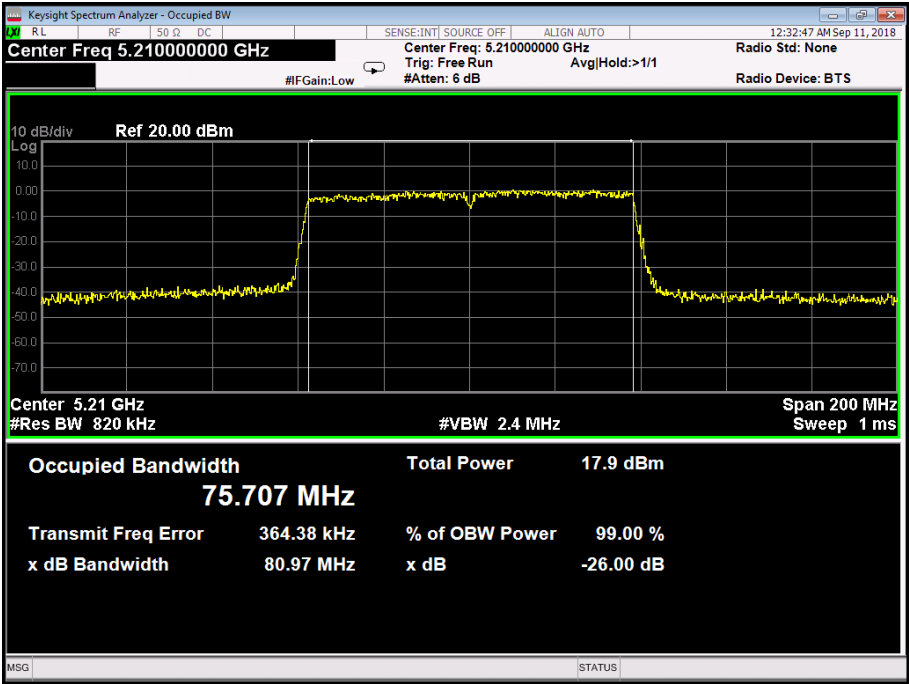


Figure 77 - 5210 MHz - 99% Occupied Bandwidth



802.11ac / VHT80 MCS0x1 / SISO / Core 0 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.87
99% Bandwidth (MHz)	75.694

Table 275

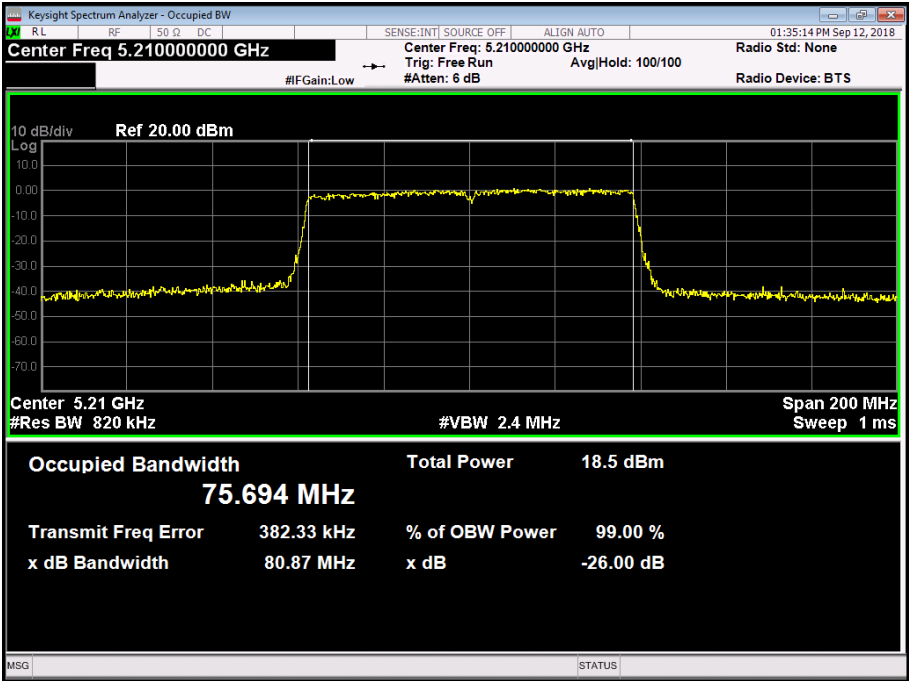


Figure 78 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1 / Country Code US

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	81.39
99% Bandwidth (MHz)	75.839

Table 276

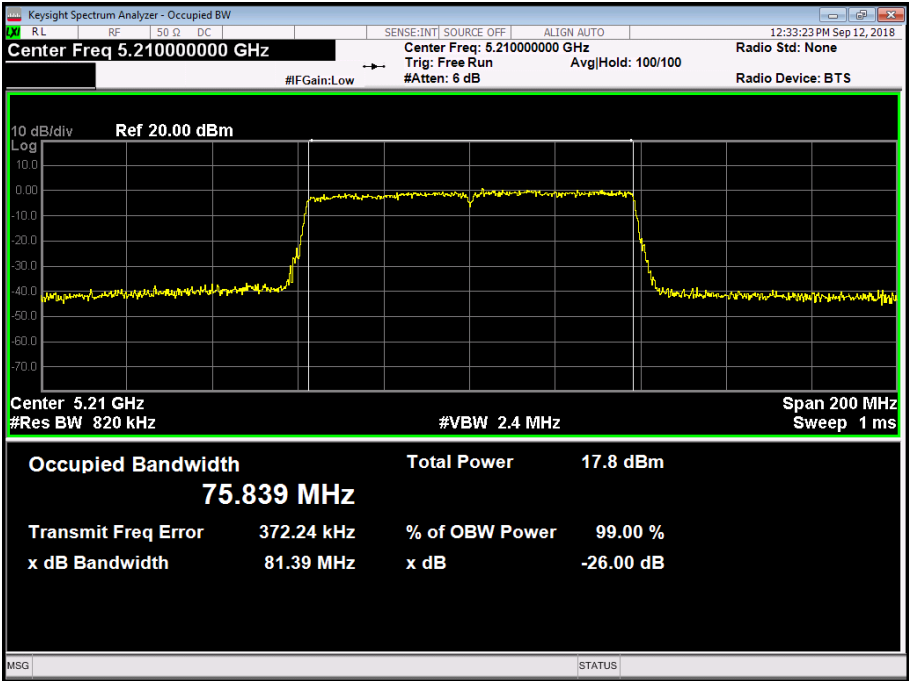


Figure 79 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.14
99% Bandwidth (MHz)	75.868

Table 277

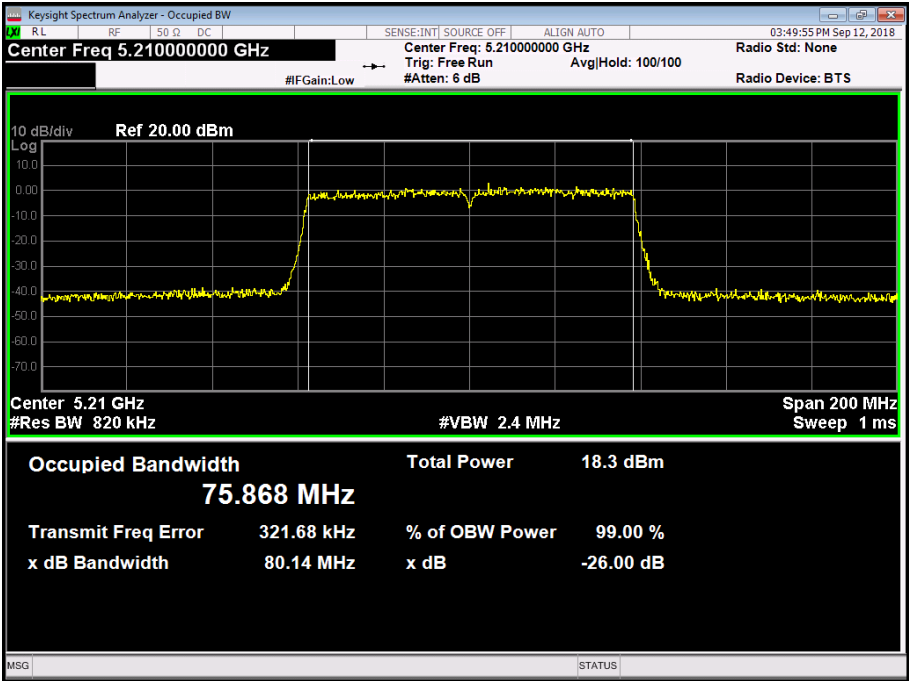


Figure 80 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1 / Country Code US

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.33
99% Bandwidth (MHz)	75.883

Table 278

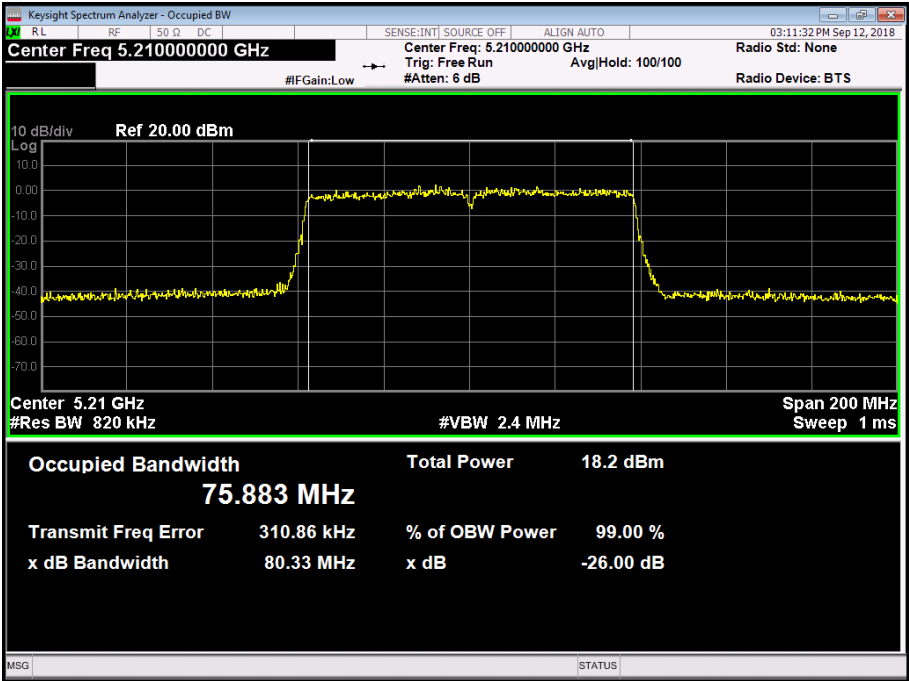


Figure 81 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x2 / MIMO SDM / Cores 0+1 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	81.14
99% Bandwidth (MHz)	75.896

Table 279

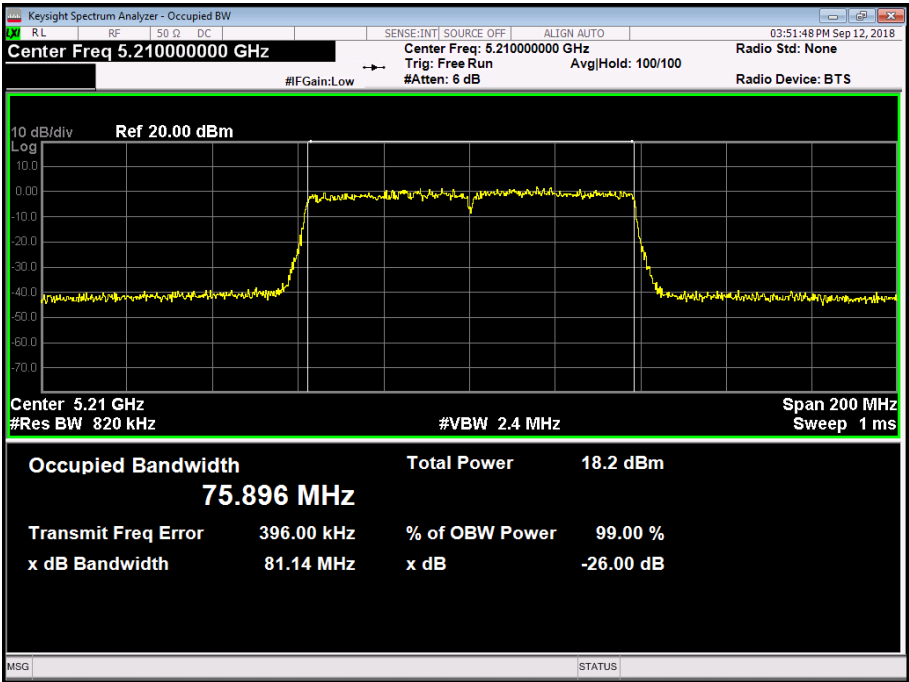


Figure 82 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2 / Country Code US

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.80
99% Bandwidth (MHz)	75.818

Table 280

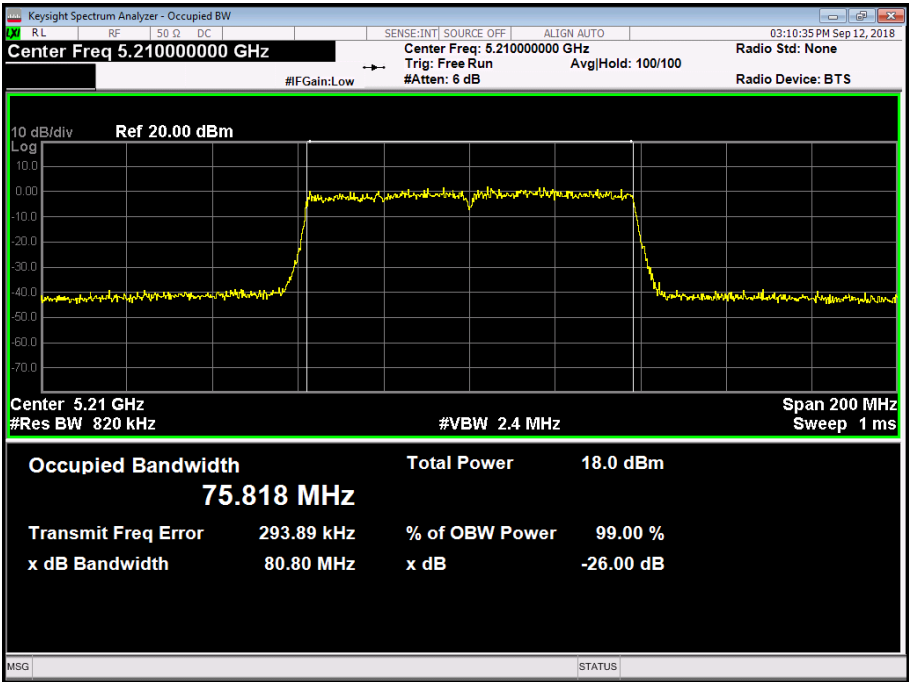


Figure 83 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / MIMO CDD / Cores 0+1+2 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.42
99% Bandwidth (MHz)	75.880

Table 281

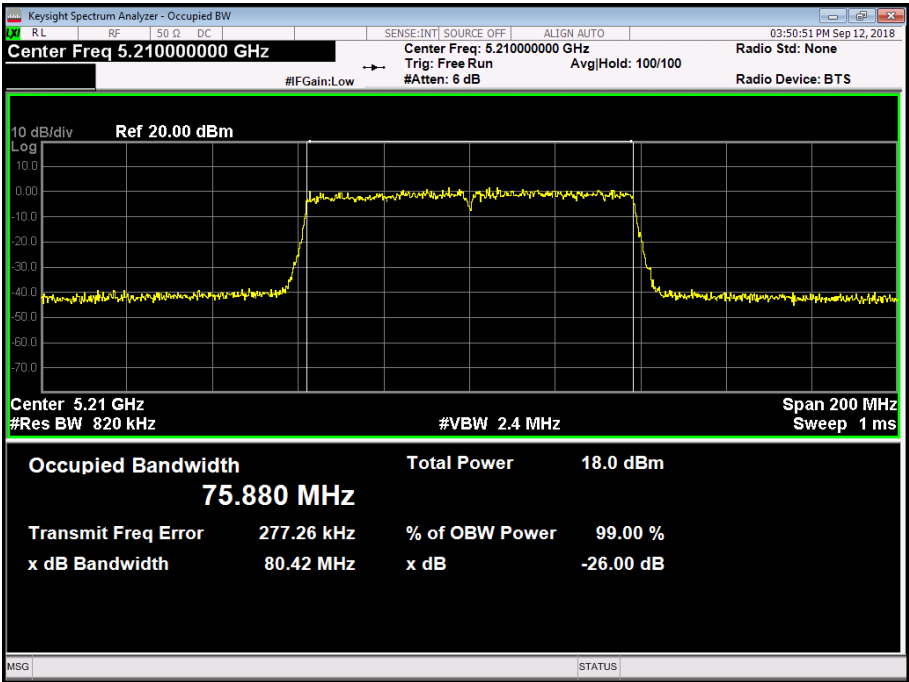


Figure 84 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2 / Country Code US

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.44
99% Bandwidth (MHz)	75.859

Table 282

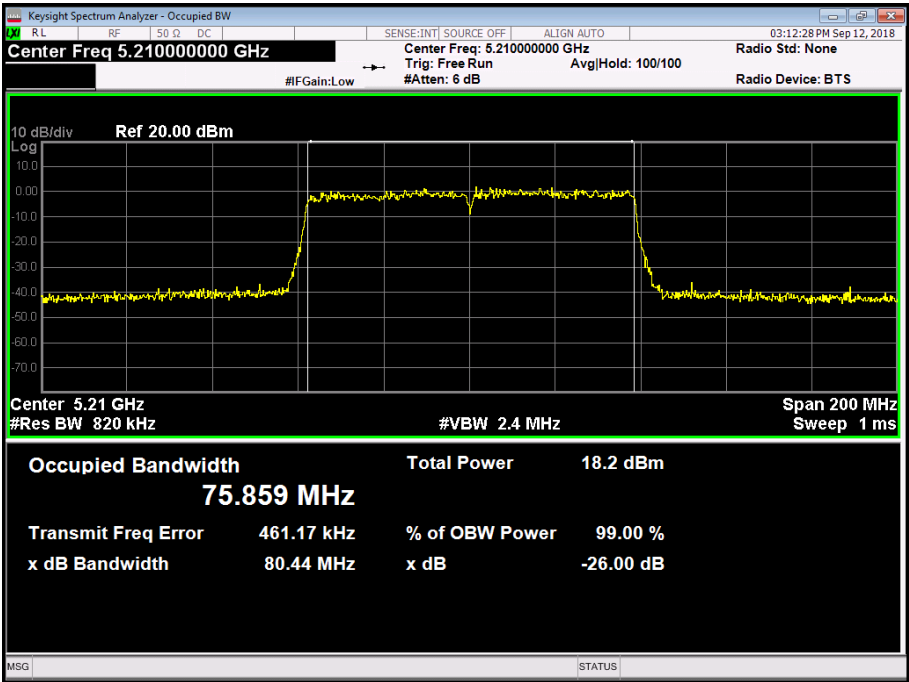


Figure 85 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x3 / MIMO SDM / Cores 0+1+2 / Country Code CA

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	81.21
99% Bandwidth (MHz)	75.732

Table 283

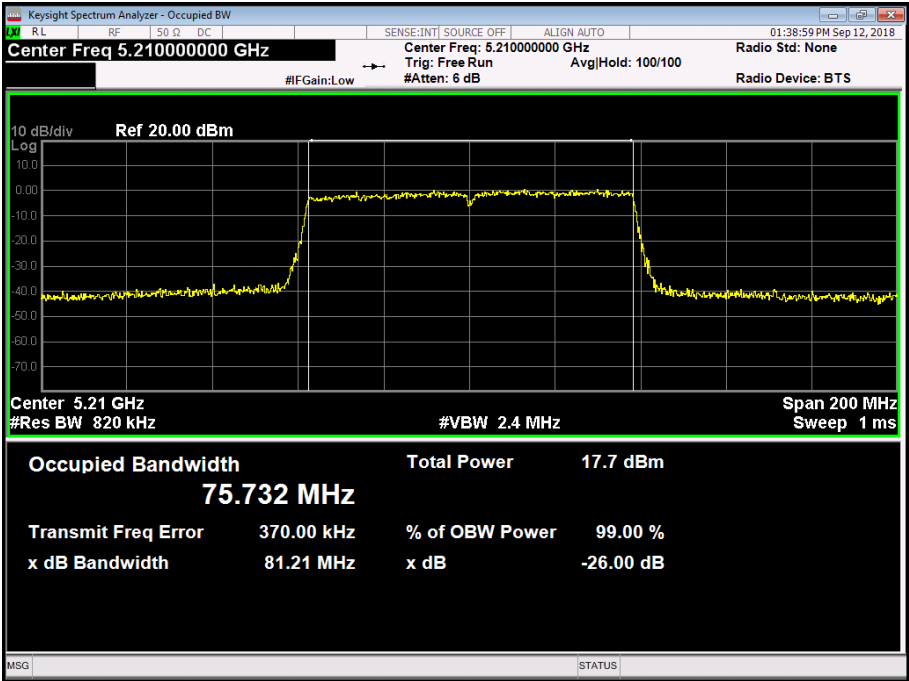


Figure 86 - 5210 MHz - 99% Occupied Bandwidth



802.11a / 6 Mbps / SISO / Core Aux / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	20.97	21.58	22.88
99% Bandwidth (MHz)	16.657	16.874	16.908

Table 284

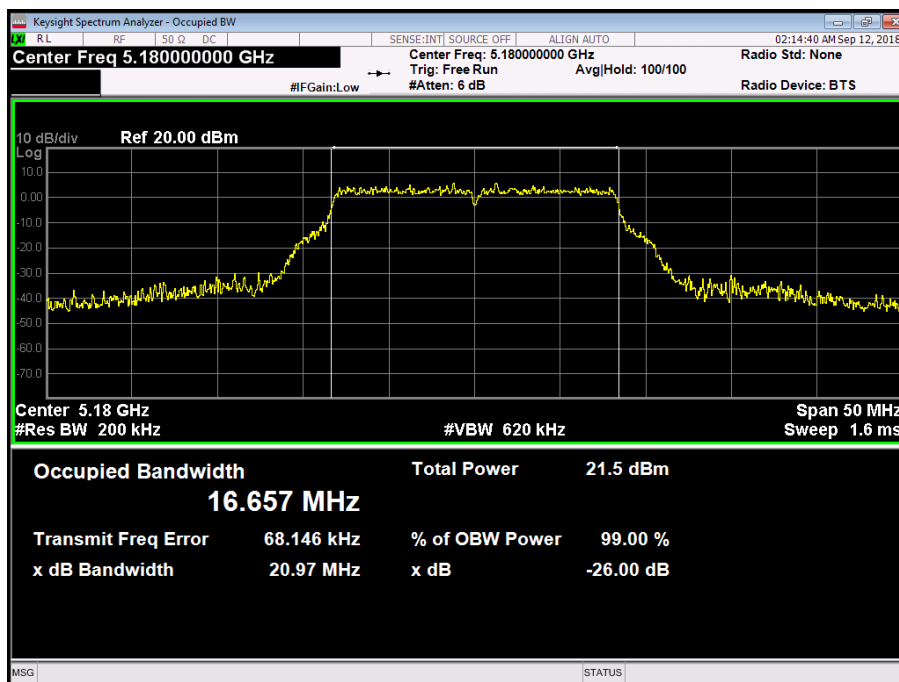


Figure 87 - 5180 MHz - 99% Occupied Bandwidth

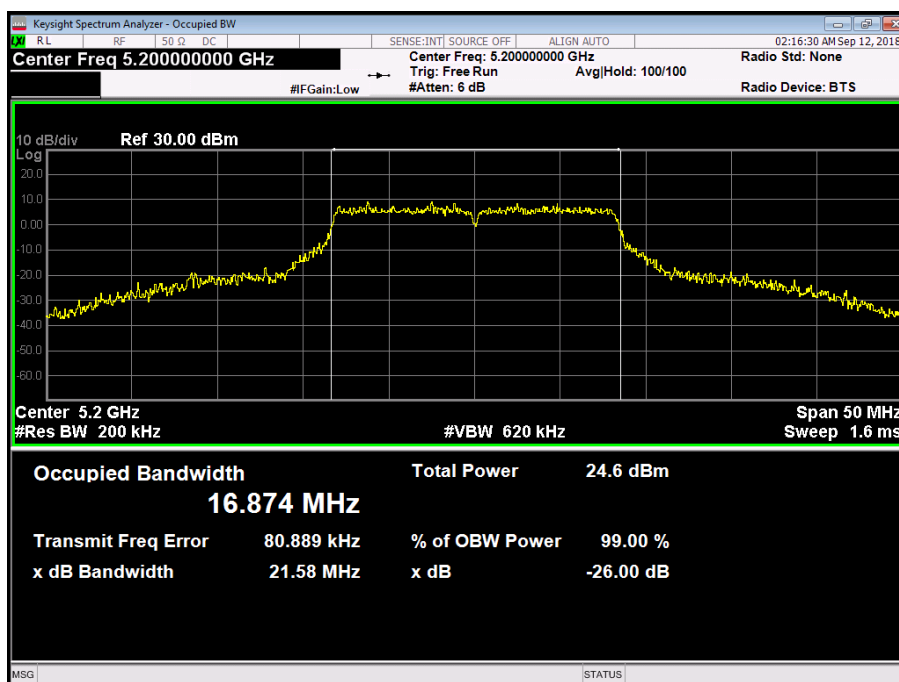


Figure 88 - 5200 MHz - 99% Occupied Bandwidth



Product Service

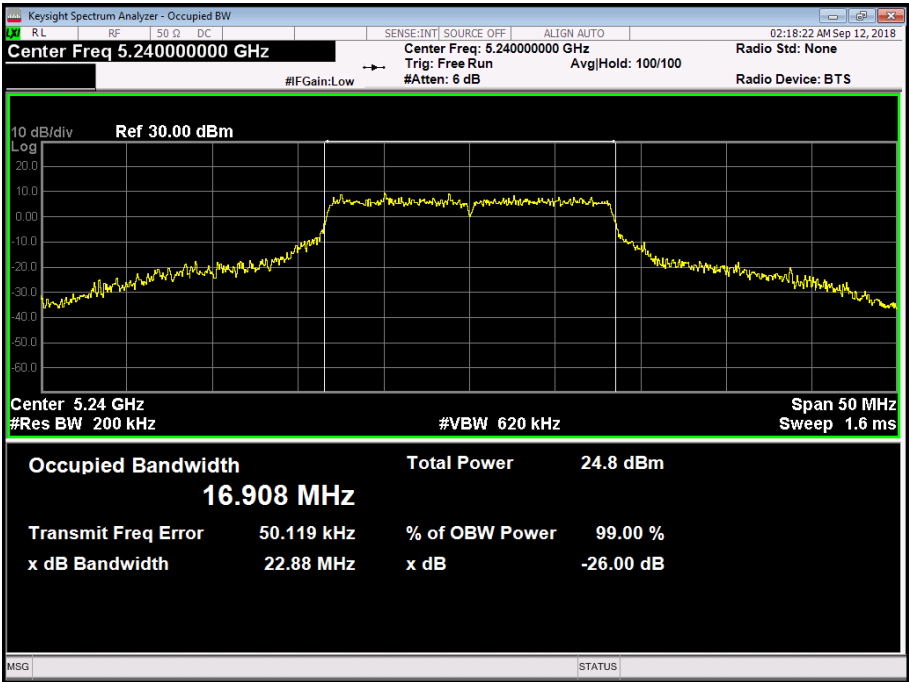


Figure 89 - 5240 MHz - 99% Occupied Bandwidth



802.11a / 6 Mbps / SISO / Core Aux / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.06	21.06	21.01
99% Bandwidth (MHz)	16.657	16.691	16.705

Table 285

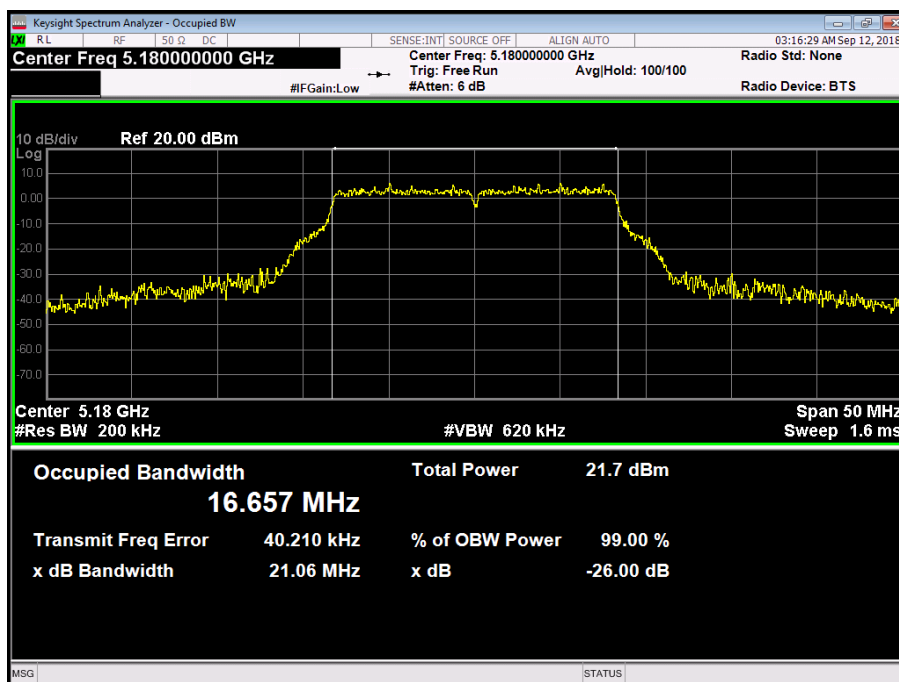


Figure 90 - 5180 MHz - 99% Occupied Bandwidth

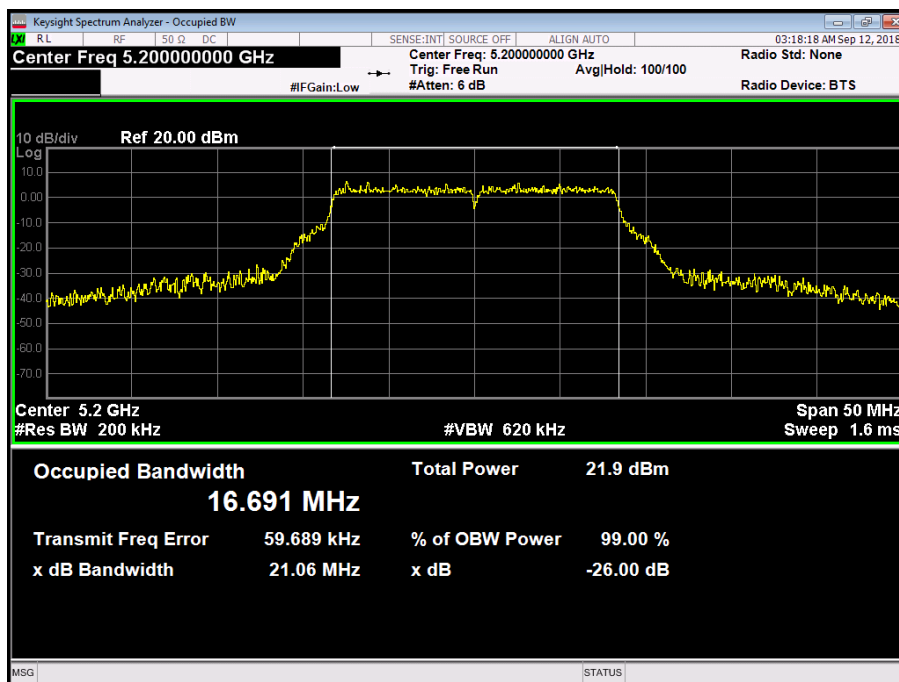


Figure 91 - 5200 MHz - 99% Occupied Bandwidth



Product Service

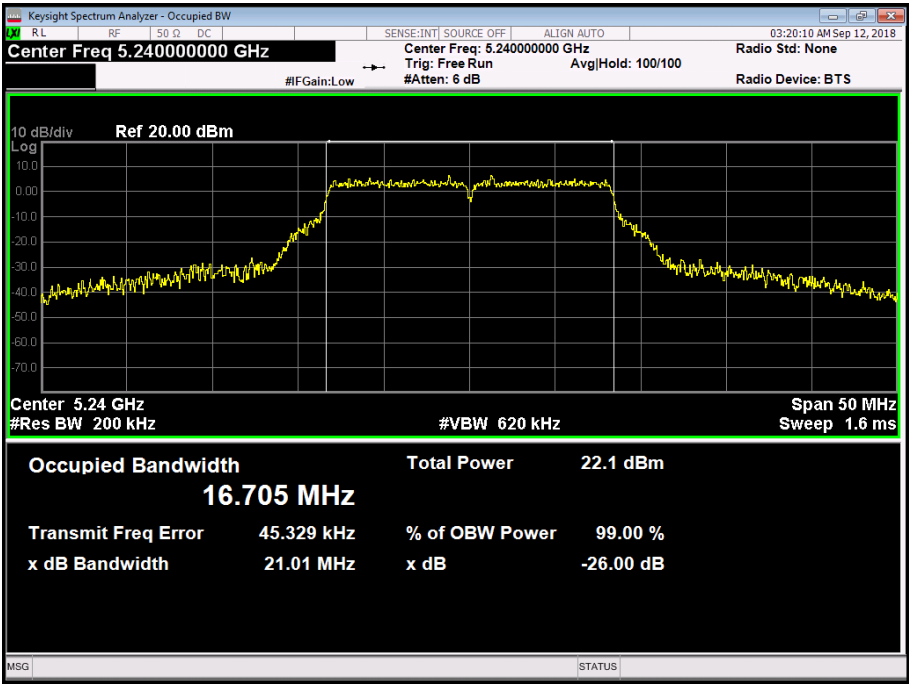


Figure 92 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / SISO / Core Aux / Country Code US

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.11	23.38	24.13
99% Bandwidth (MHz)	17.850	18.027	18.043

Table 286

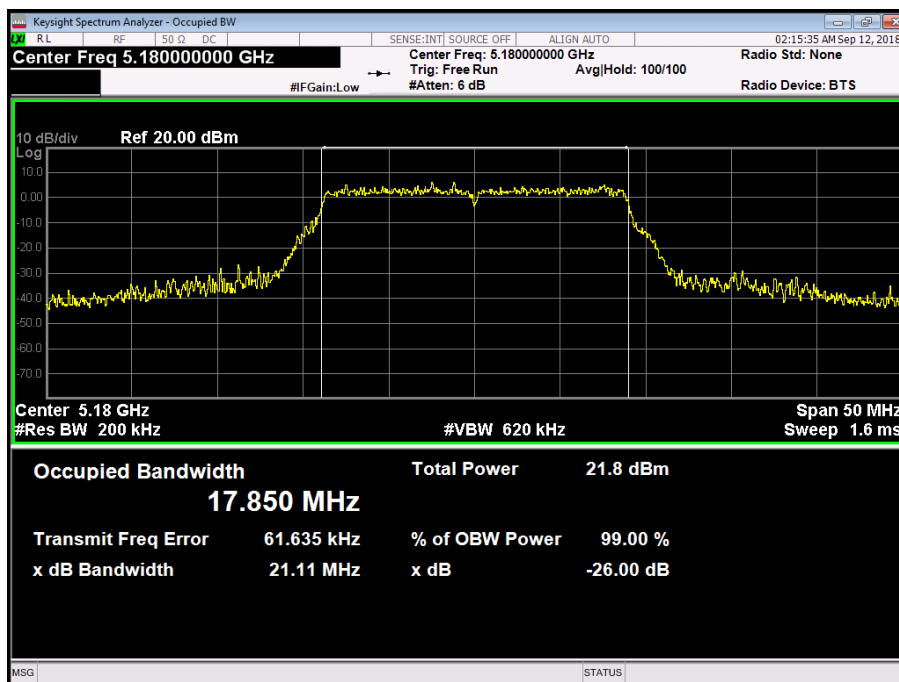


Figure 93 - 5180 MHz - 99% Occupied Bandwidth

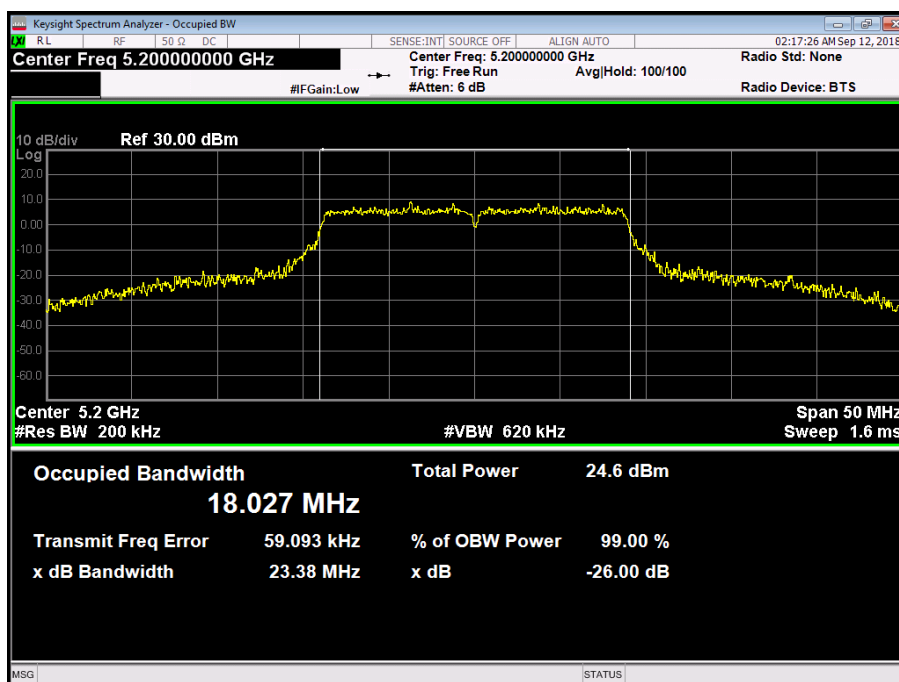


Figure 94 - 5200 MHz - 99% Occupied Bandwidth



Product Service

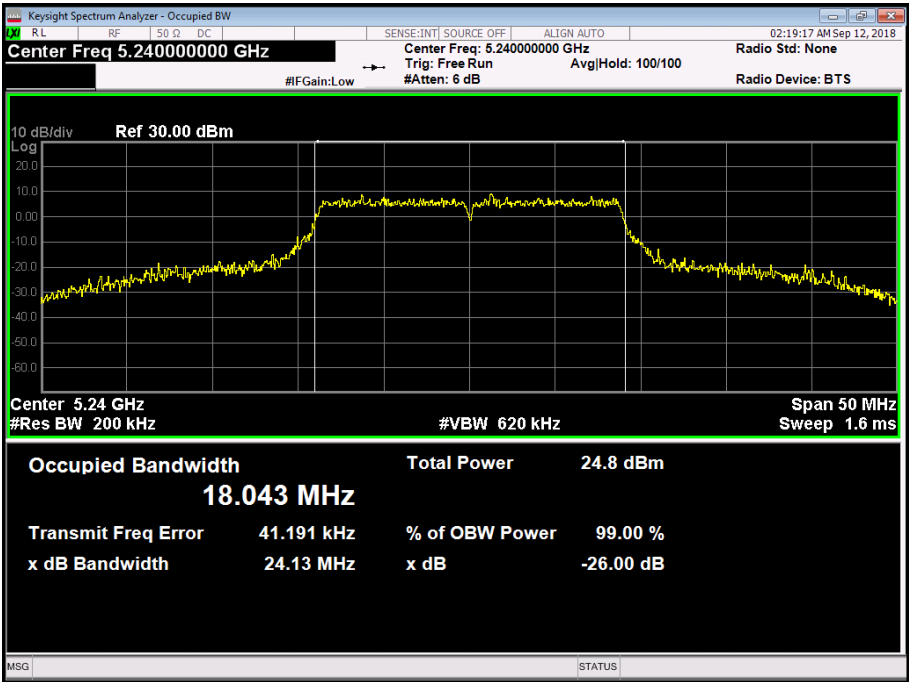


Figure 95 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS0 / SISO / Core Aux / Country Code CA

Channel	Bottom	Middle	Top
Frequency (MHz)	5180	5200	5240
26 dB Bandwidth (MHz)	21.47	21.49	21.41
99% Bandwidth (MHz)	17.841	17.861	17.854

Table 287

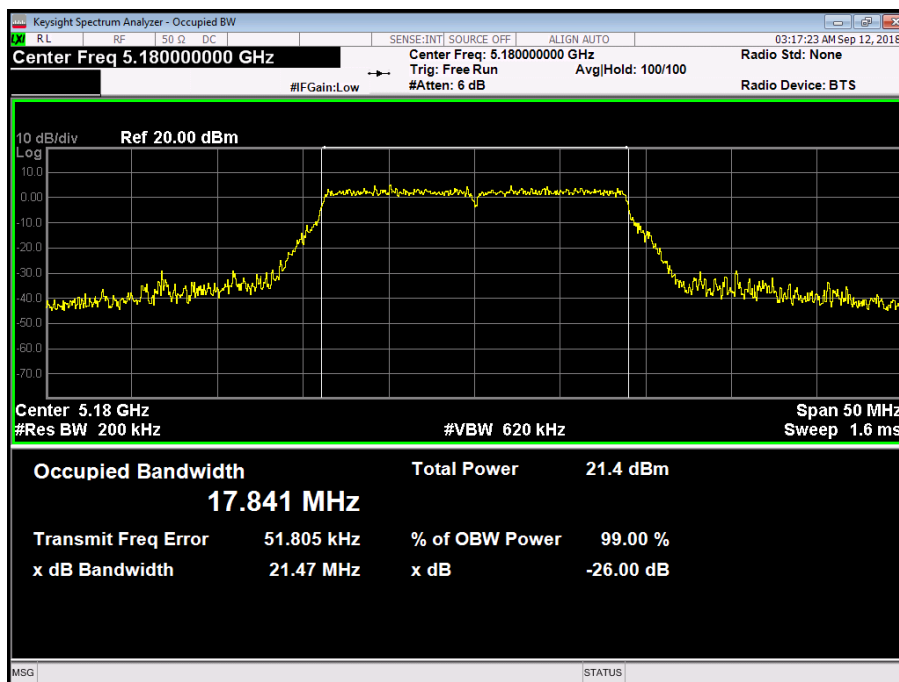


Figure 96 - 5180 MHz - 99% Occupied Bandwidth

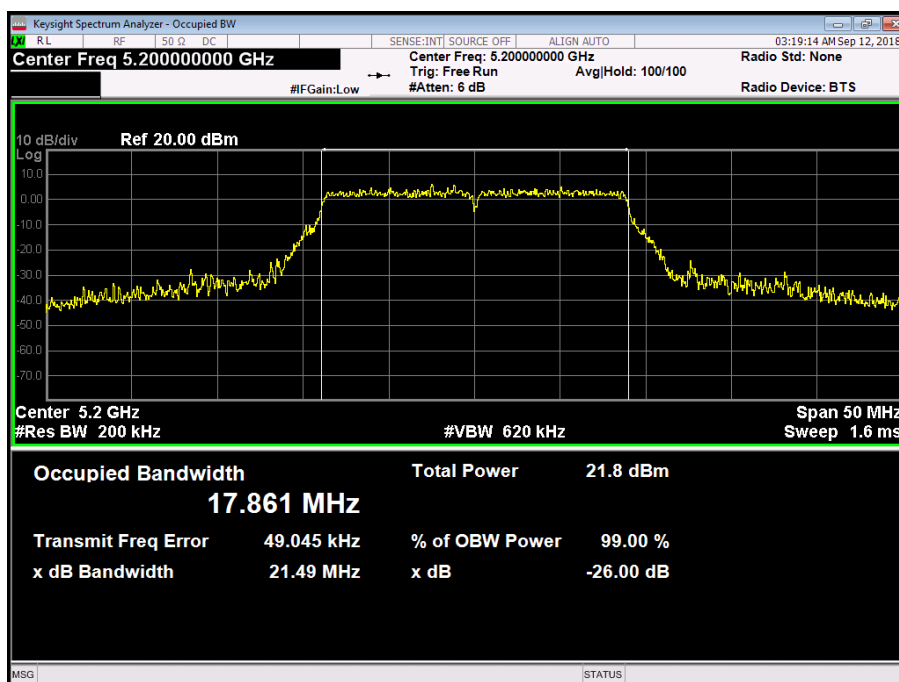


Figure 97 - 5200 MHz - 99% Occupied Bandwidth



Product Service

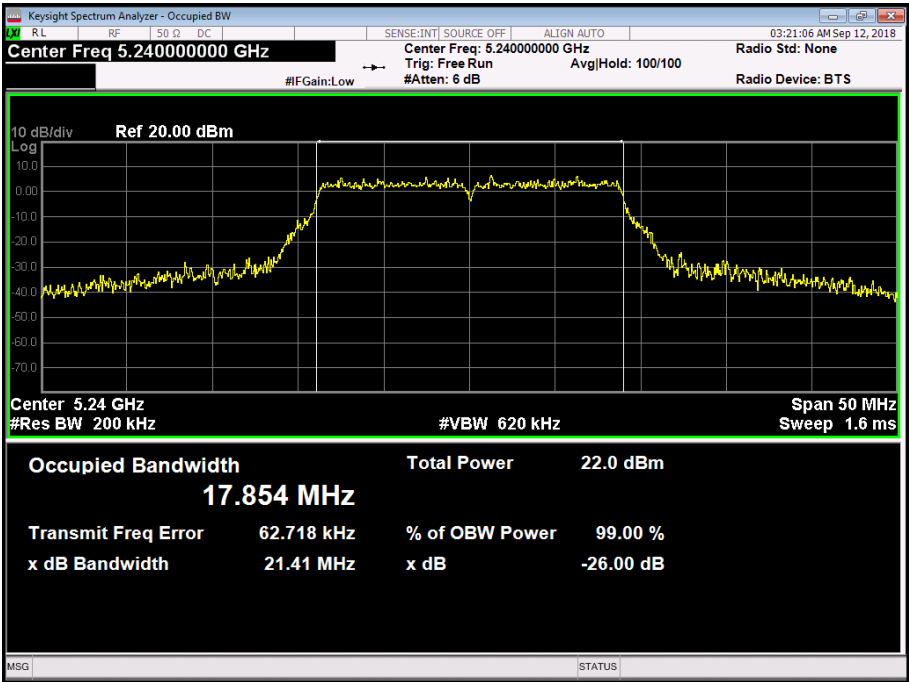


Figure 98 - 5240 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / SISO / Core Aux / Country Code US

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.73	69.84
99% Bandwidth (MHz)	36.259	36.474

Table 288

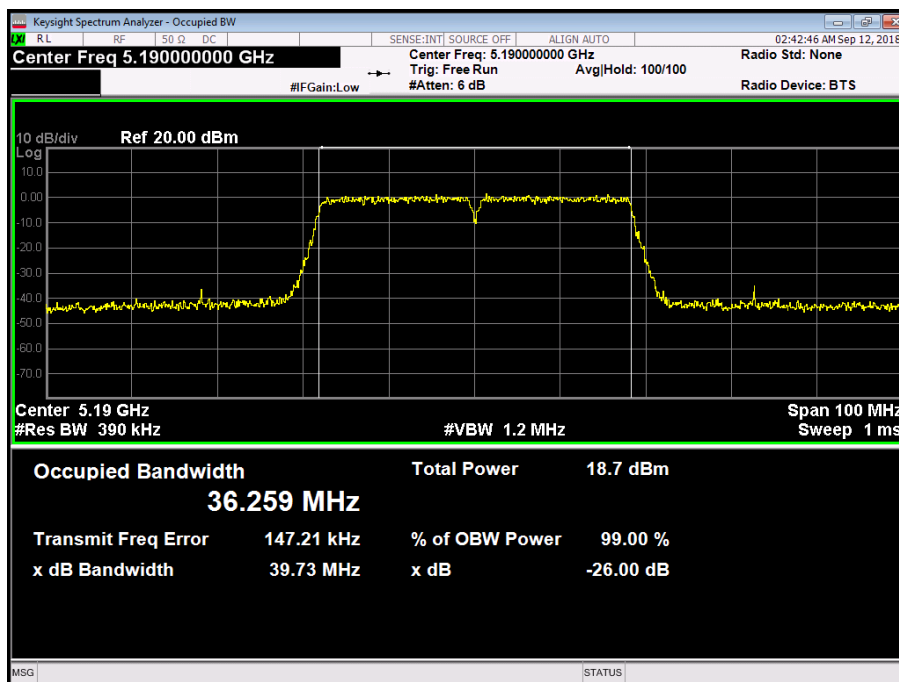


Figure 99 - 5190 MHz - 99% Occupied Bandwidth

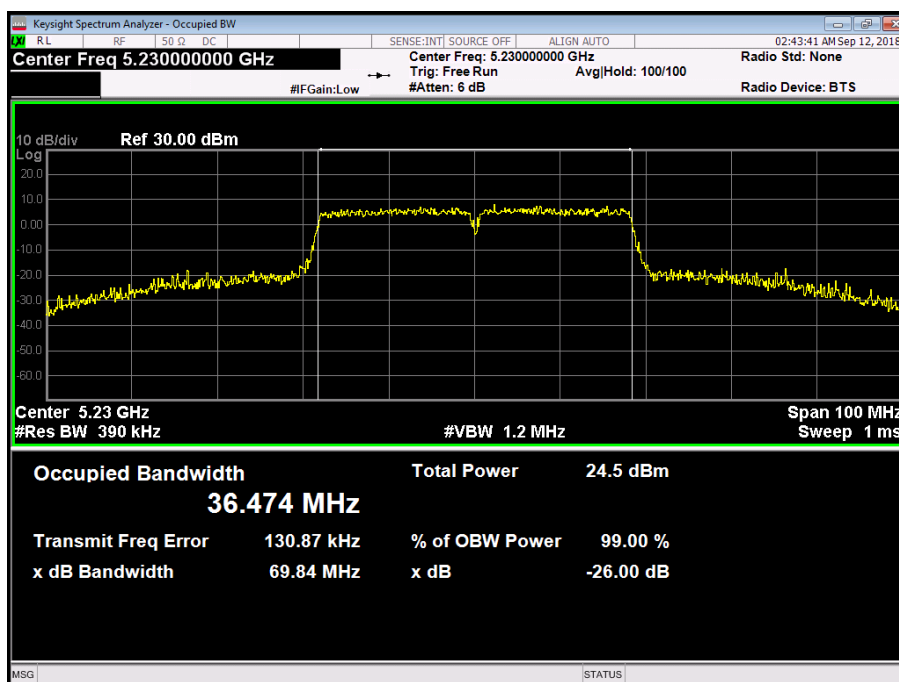


Figure 100 - 5230 MHz - 99% Occupied Bandwidth



802.11n / HT40 MCS0 / SISO / Core Aux / Country Code CA

Channel	Bottom	Top
Frequency (MHz)	5190	5230
26 dB Bandwidth (MHz)	39.63	48.01
99% Bandwidth (MHz)	36.224	36.443

Table 289

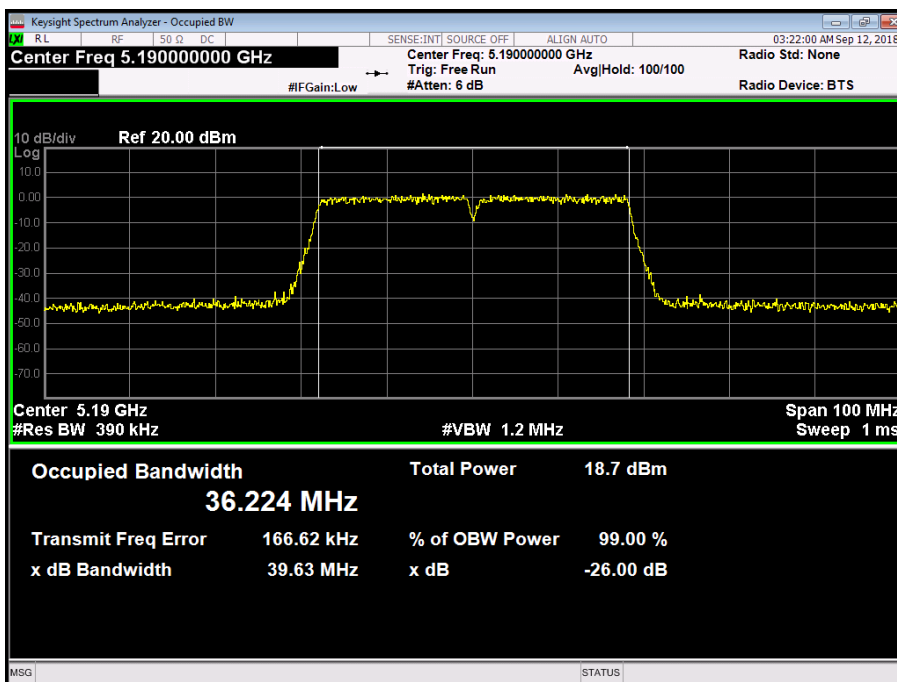


Figure 101 - 5190 MHz - 99% Occupied Bandwidth

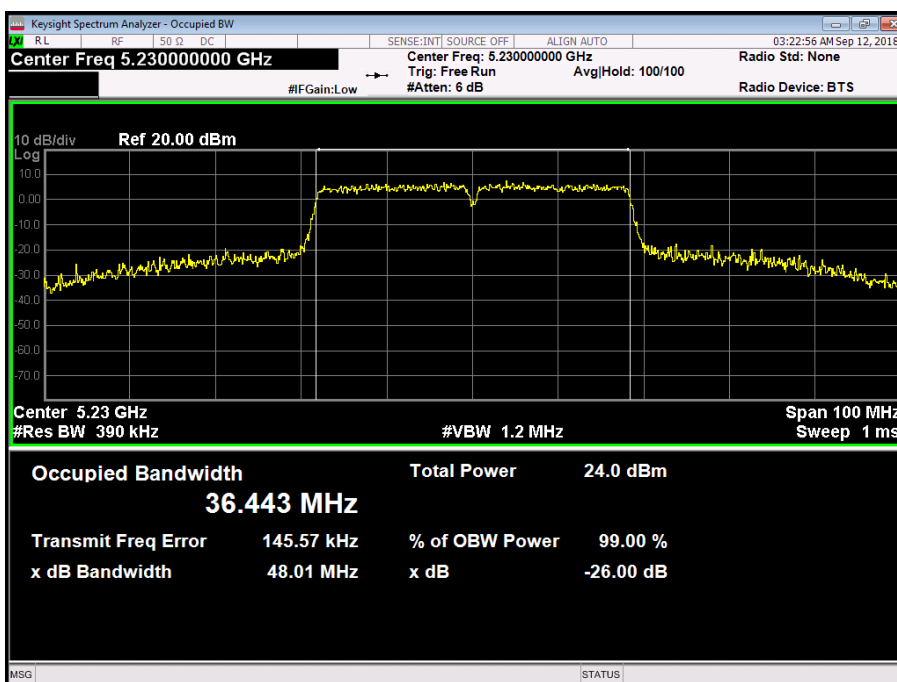


Figure 102 - 5230 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / SISO / Core Aux / Country Code US

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.50
99% Bandwidth (MHz)	75.684

Table 290

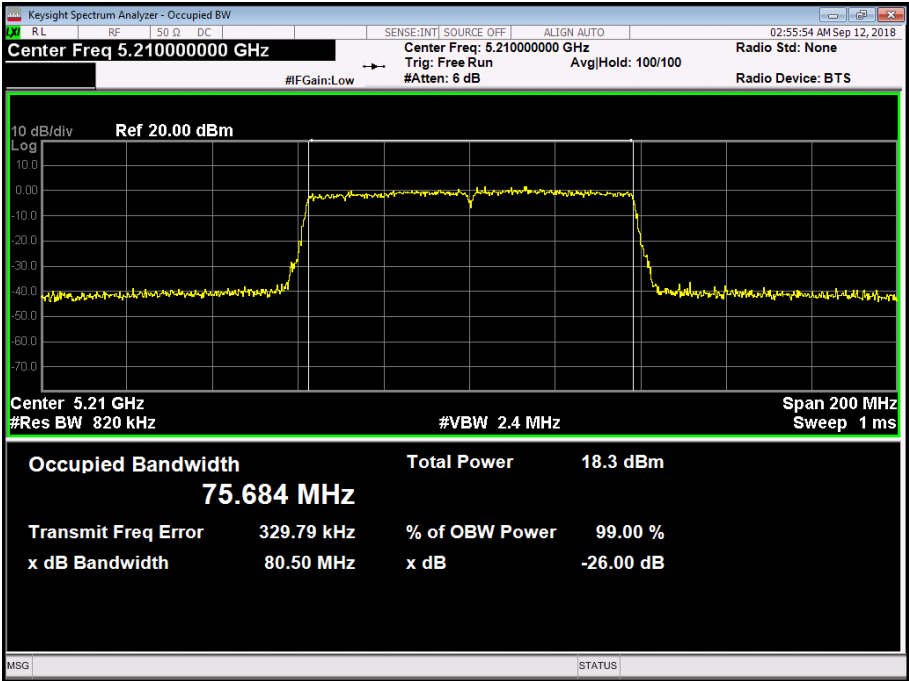


Figure 103 - 5210 MHz - 99% Occupied Bandwidth



Product Service

802.11ac / VHT80 MCS0x1 / SISO / Core Aux / Country Code CA

Channel	Middle
Frequency (MHz)	5210
26 dB Bandwidth (MHz)	80.90
99% Bandwidth (MHz)	75.737

Table 291

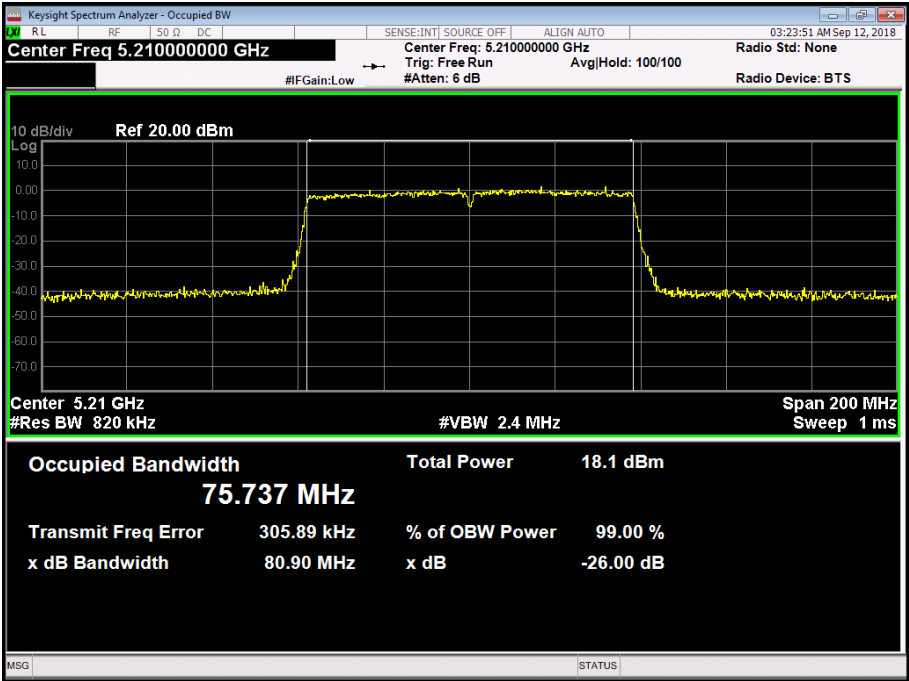


Figure 104 - 5210 MHz - 99% Occupied Bandwidth



2.3.7 Test Results: U-NII-2A

802.11a / 6 Mbps / SISO / Core 0

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
26 dB Bandwidth (MHz)	27.83	27.93	21.04
99% Bandwidth (MHz)	16.939	16.929	16.684

Table 292

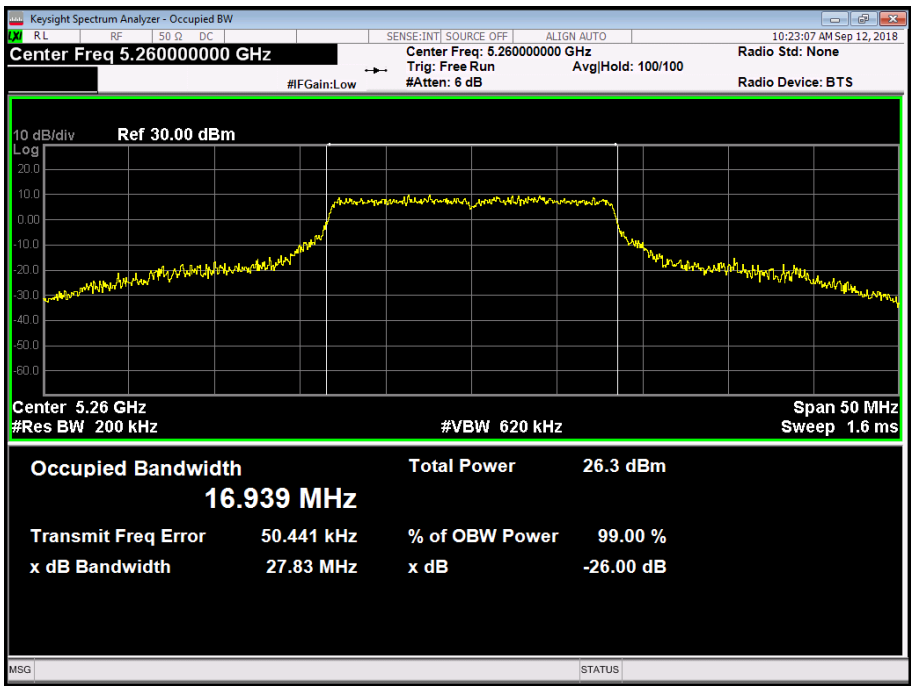


Figure 105 - 5260 MHz - 99% Occupied Bandwidth

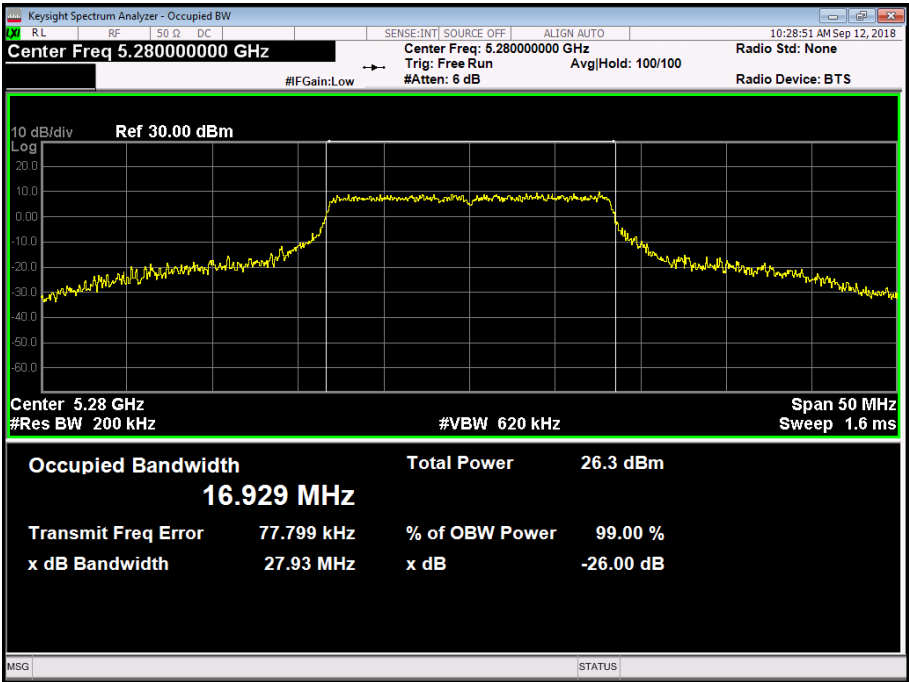


Figure 106 - 5280 MHz - 99% Occupied Bandwidth

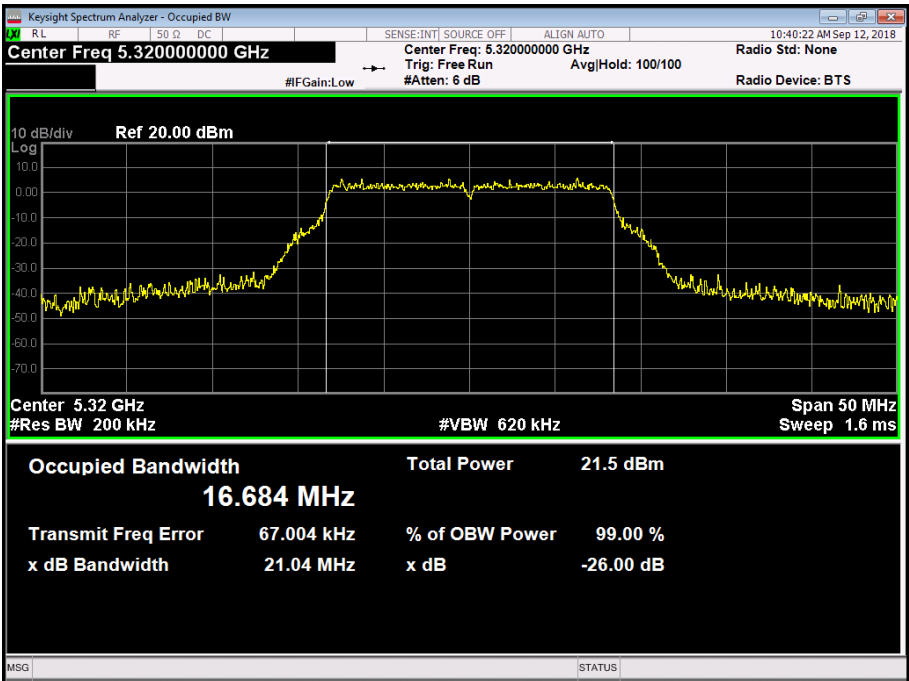


Figure 107 - 5320 MHz - 99% Occupied Bandwidth



Product Service

802.11n / HT20 MCS0 / SISO / Core 0

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
26 dB Bandwidth (MHz)	24.62	26.00	21.01
99% Bandwidth (MHz)	18.049	17.974	17.853

Table 293

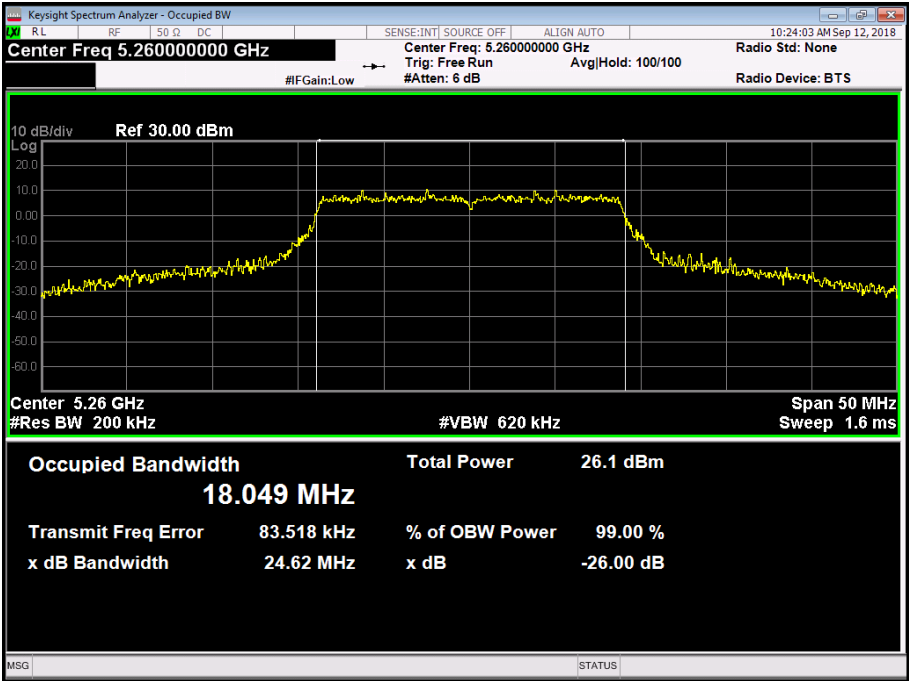


Figure 108 - 5260 MHz - 99% Occupied Bandwidth

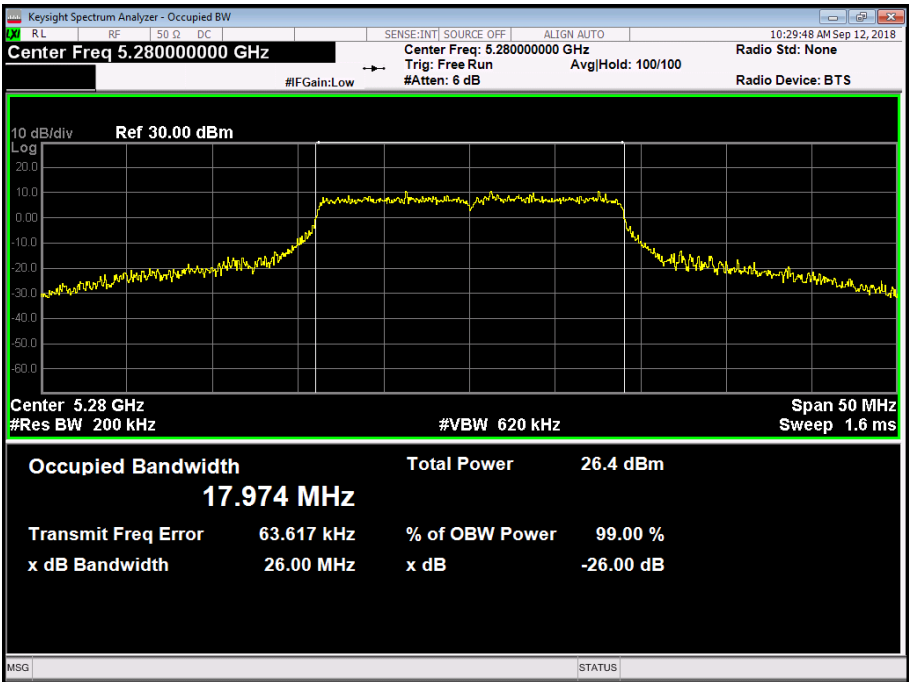


Figure 109 - 5280 MHz - 99% Occupied Bandwidth



Product Service

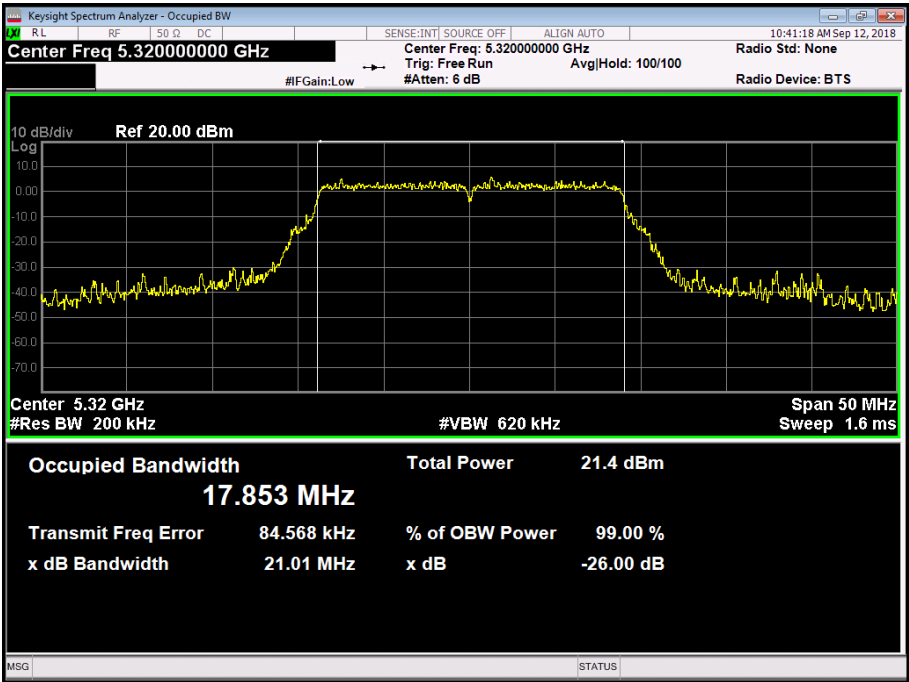


Figure 110 - 5320 MHz - 99% Occupied Bandwidth



Product Service

802.11n / HT20 MCS0 / MIMO CDD / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
26 dB Bandwidth (MHz)	21.48	21.45	21.19
99% Bandwidth (MHz)	17.896	17.922	17.852

Table 294

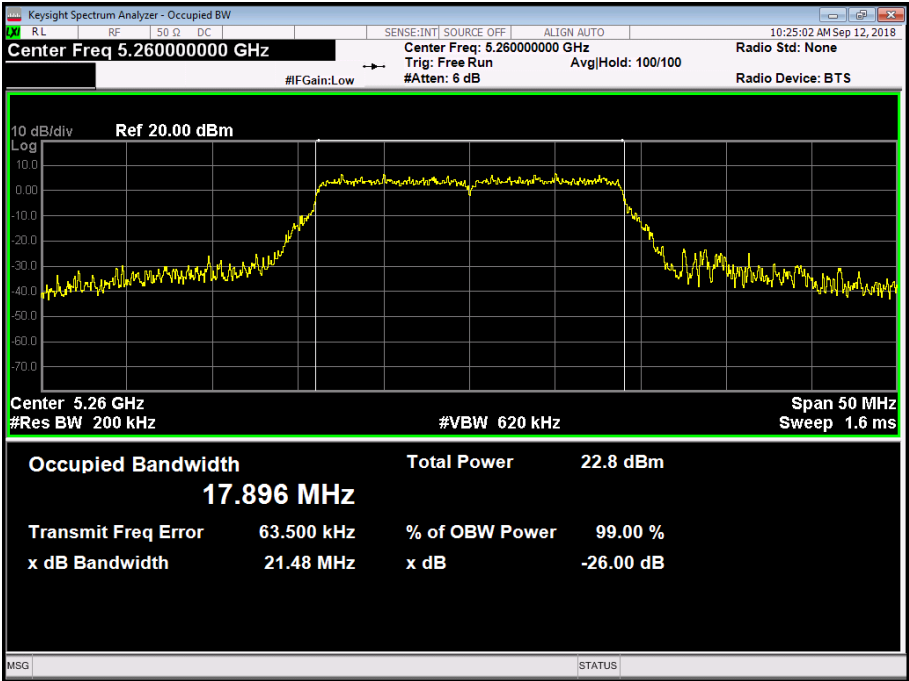


Figure 111 - 5260 MHz - 99% Occupied Bandwidth

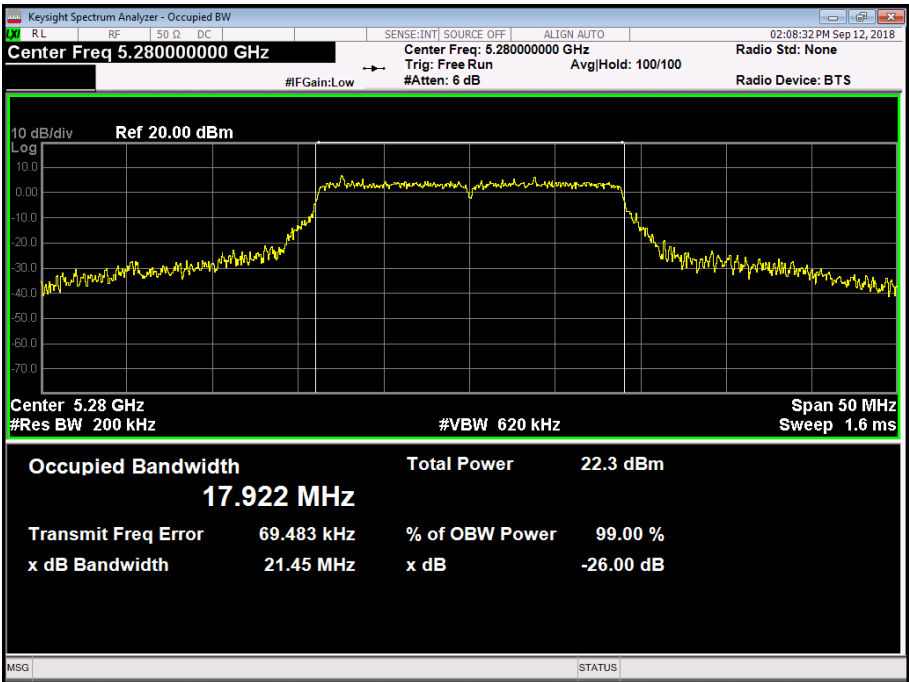


Figure 112 - 5280 MHz - 99% Occupied Bandwidth



Product Service

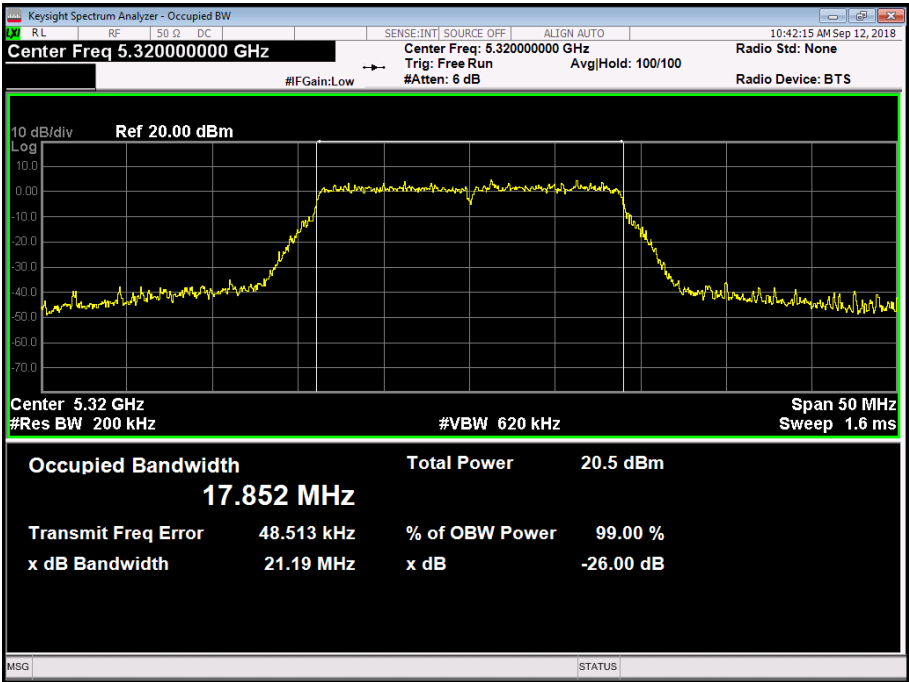


Figure 113 - 5320 MHz - 99% Occupied Bandwidth



802.11n / HT20 MCS8 / MIMO SDM / Cores 0+1

Channel	Bottom	Middle	Top
Frequency (MHz)	5260	5280	5320
26 dB Bandwidth (MHz)	21.20	21.25	21.05
99% Bandwidth (MHz)	17.811	17.810	17.768

Table 295

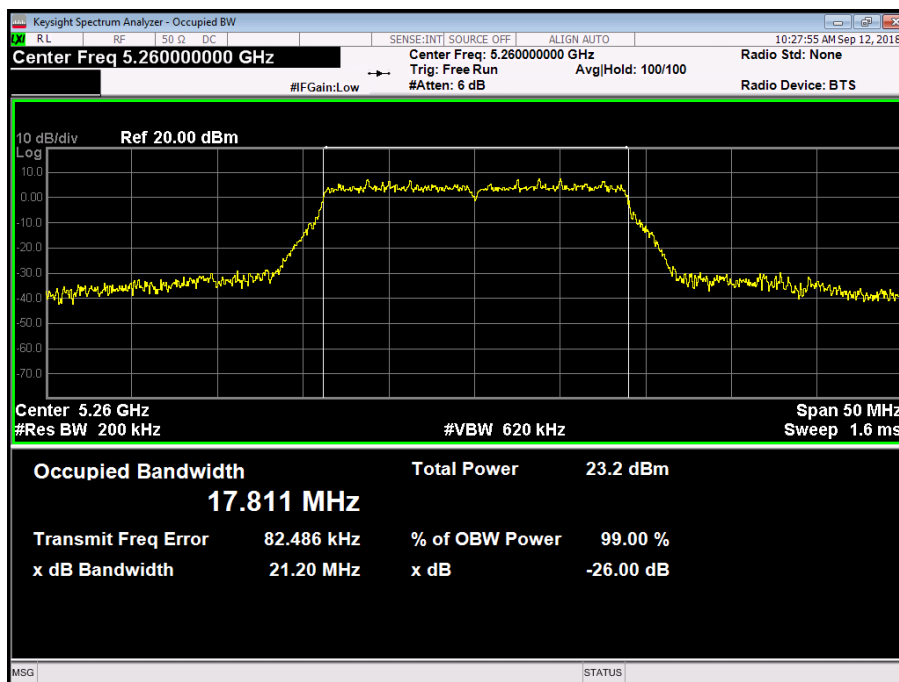


Figure 114 - 5260 MHz - 99% Occupied Bandwidth

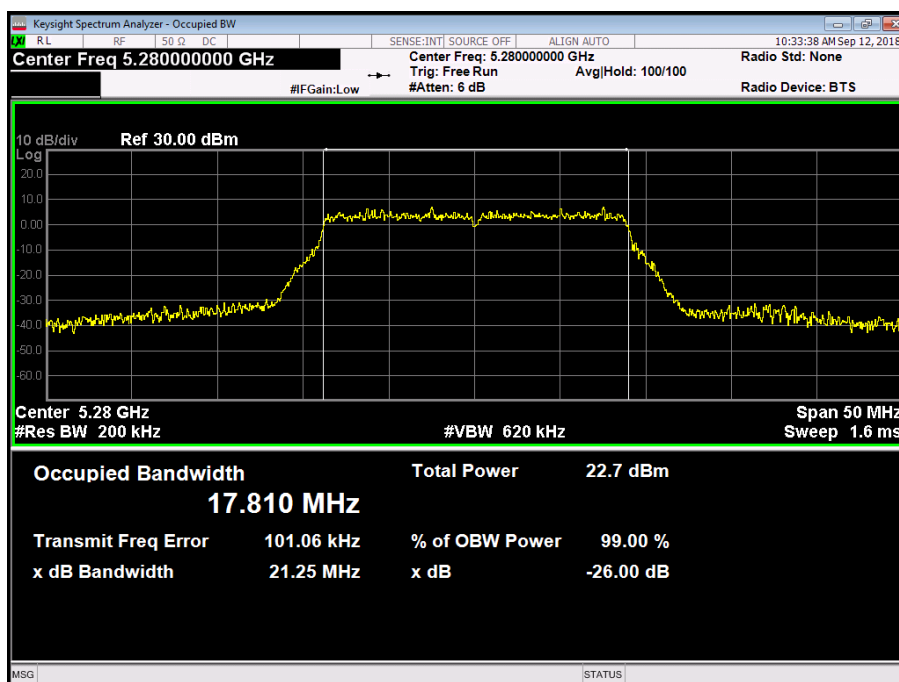


Figure 115 - 5280 MHz - 99% Occupied Bandwidth



Product Service

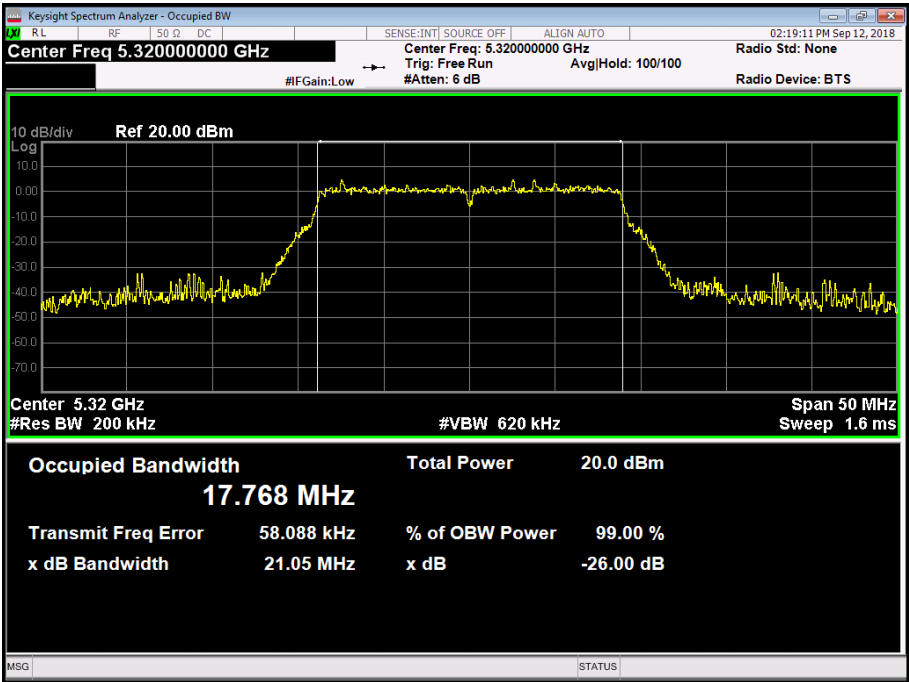


Figure 116 - 5320 MHz - 99% Occupied Bandwidth