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FCC RADIO TEST REPORT

Applicant's company	Zebra Technologies, Corp.
Applicant Address	1 Zebra Plaza Holtsville, NY 11742 USA
FCC ID	UZ7CDR5G
Manufacturer's company	Wistron NeWeb Corporation
Manufacturer Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308 Taiwan

Product Name	802.11 an/ac radio module
Brand Name	ZEBRA
Model No.	CDR5G
Test Rule Part(s)	47 CFR FCC Part 15 Subpart E § 15.407
Test Freq. Range	5250 ~ 5350MHz / 5470 ~ 5725MHz
Received Date	Oct. 07, 2015
Final Test Date	Feb. 15, 2016
Submission Type	Class II Change

Statement

Test result included is for the IEEE 802.11n and IEEE 802.11a/ac of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.10-2013, 47 CFR FCC Part 15 Subpart E, KDB789033 D02 v01r01, KDB662911 D01 v02r01, KDB644545 D03 v01.**

The test equipment used to perform the test is calibrated and traceable to NML/ROC.



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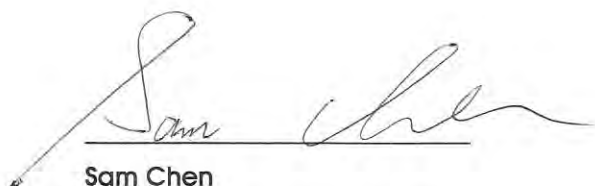
History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR592302-02	Rev. 01	Initial issue of report	Mar. 29, 2016

1. VERIFICATION OF COMPLIANCE

Product Name : 802.11 an/ac radio module
Brand Name : ZEBRA
Model No. : CDR5G
Applicant : Zebra Technologies, Corp.
Test Rule Part(s) : 47 CFR FCC Part 15 Subpart E § 15.407

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Oct. 07, 2015 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.



Sam Chen

SPORTON INTERNATIONAL INC.

2. SUMMARY OF THE TEST RESULT

Applied Standard: 47 CFR FCC Part 15 Subpart E				
Part	Rule Section	Description of Test	Result	Under Limit
4.1	15.407(a)	26dB Spectrum Bandwidth and 99% Occupied Bandwidth	Complies	-
4.2	15.407(e)	6dB Spectrum Bandwidth	Complies	-
4.3	15.407(a)	Maximum Conducted Output Power	Complies	0.02 dB
4.4	15.407(a)	Power Spectral Density	Complies	0.01 dB
4.5	15.407(b)	Radiated Emissions	Complies	1.10 dB
4.6	15.407(b)	Band Edge Emissions	Complies	1.00 dB
4.7	15.407(g)	Frequency Stability	Complies	-
4.8	15.203	Antenna Requirements	Complies	-

3. GENERAL INFORMATION

3.1. Product Details

Items	Description
Product Type	IEEE 802.11a/n/ac: WLAN (1TX/2TX/3TX/4TX, 4RX)
Radio Type	Intentional Transceiver
Power Type	From host system
Modulation	IEEE 802.11a: OFDM IEEE 802.11n/ac: see the below table
Data Modulation	IEEE 802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Data Rate (Mbps)	IEEE 802.11a: OFDM (6/9/12/18/24/36/48/54) IEEE 802.11n/ac: see the below table
Frequency Range	5250 ~ 5350MHz / 5470 ~ 5725MHz
Channel Number	16 for 20MHz bandwidth ; 8 for 40MHz bandwidth 4 for 80MHz bandwidth
Channel Band Width (99%)	For Non-Beamforming Mode Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX) Band 2: IEEE 802.11a: 17.40 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz Band 3: IEEE 802.11a: 17.28 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX) Band 2: IEEE 802.11a: 17.52 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz Band 3: IEEE 802.11a: 17.40 MHz IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz

	<p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.68 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.04 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.12 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.52 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.12 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.28 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.28 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.52 MHz</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.04 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.88 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p>
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	<p>Band 3:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.52 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 16.92 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.88 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p>
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	<p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.52 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.68 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.04 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.12 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.04 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.60 MHz</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 16.68 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.28 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.52 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.68 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.24 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.04 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.12 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.20 MHz</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.64 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.60 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 16.68 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.40 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.28 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.68 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.88 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 36.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p>
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	<p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.52 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.88 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.16 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.80 MHz</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 16.92 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.00 MHz</p> <p>Band 3:</p> <p>IEEE 802.11a: 16.80 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 37.00 MHz</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 76.40 MHz</p>
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Maximum Conducted Output Power	<p>For Non-Beamforming Mode</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 15.85 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 20.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.92 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.13 dBm</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.27 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.42 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 22.79 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.29 dBm</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 21.75 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.71 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.90 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 16.72 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 21.72 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.73 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.54 dBm</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.47 dBm</p>
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IEEE 802.11ac MCS0/Nss1 (VHT20): 20.48 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 22.93 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 17.51 dBm
Band 3:
IEEE 802.11a: 20.49 dBm
IEEE 802.11ac MCS0/Nss1 (VHT20): 20.49 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 22.96 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 22.34 dBm
Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)
Band 2:
IEEE 802.11a: 20.96 dBm
IEEE 802.11ac MCS0/Nss1 (VHT20): 20.97 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 20.88 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 15.85 dBm
Band 3:
IEEE 802.11a: 20.91 dBm
IEEE 802.11ac MCS0/Nss1 (VHT20): 20.94 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 20.92 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 20.13 dBm
Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)
Band 2:
IEEE 802.11a: 23.27 dBm
IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 18.42 dBm
Band 3:
IEEE 802.11a: 22.79 dBm
IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 21.29 dBm
Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)
Band 2:
IEEE 802.11a: 23.92 dBm
IEEE 802.11ac MCS0/Nss1 (VHT20): 23.98 dBm
IEEE 802.11ac MCS0/Nss1 (VHT40): 23.97 dBm
IEEE 802.11ac MCS0/Nss1 (VHT80): 17.47 dBm

	<p>Band 3:</p> <p>IEEE 802.11a: 23.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.90 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.54 dBm</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.39 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.38 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.93 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.47 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 23.39 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.36 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.82 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 15.91 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 20.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.92 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.44 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.27 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.21 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 22.79 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 22.75 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.79 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.74 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 17.51 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 22.85 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.78 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.91 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 21.26 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.30 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.93 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 16.47 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 21.31 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.31 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.32 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.21 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 20.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.92 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.44 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.27 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.19 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 22.79 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.63 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.57 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.90 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 17.76 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 23.54 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.60 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.89 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.30 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.24 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.51 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.08 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 23.64 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.25 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.81 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.32 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 15.85 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 20.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.94 dBm</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.92 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.44 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 23.27 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.42 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 22.79 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 21.75 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.71 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.90 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.40 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 21.93 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.78 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 21.03 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.12 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.84 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.30 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 21.13 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.17 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.74 dBm</p>
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	<p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.92 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 13.37 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 20.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.92 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.76 dBm</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 20.62 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.53 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 16.56 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 20.66 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.51 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 18.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.75 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.35 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 13.88 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 18.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.64 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.77 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.10 dBm</p>
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	<p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11a: 17.66 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.41 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.52 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 14.96 dBm</p> <p>Band 3:</p> <p>IEEE 802.11a: 17.79 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.76 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.83 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.12 dBm</p> <p>For Beamforming Mode</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.93 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 16.12 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.29 dBm</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.24 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.01 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 16.76 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.24 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.11 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.23 dBm</p> <p>Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 19.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 19.96 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 17.21 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 19.96 dBm</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT40): 19.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.92 dBm</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.26 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.29 dBm</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 17.38 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.90 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.84 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.90 dBm</p> <p>Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.88 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.72 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.47 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.84 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.87 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 15.67 dBm</p>
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	<p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.58 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.01 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.29 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.45 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.51 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.10 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.55 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.48 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.52 dBm</p> <p>Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.30 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.30 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.23 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.30 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.30 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.29 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.72 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.00 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.57 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.90 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.27 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.60 dBm</p>
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	<p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.98 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.89 dBm</p> <p>Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.07 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.85 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 19.60 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.89 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.99 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 23.05 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 23.08 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 22.97 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 16.12 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 22.91 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 23.01 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 22.84 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.94 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.67 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.46 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 21.87 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 21.86 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 21.95 dBm</p> <p>Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.42 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.69 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.35 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.45 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.68 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.69 dBm</p>
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	<p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.20 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.20 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 15.67 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 20.07 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 20.06 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 20.13 dBm</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.28 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 18.36 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.46 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 18.49 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 18.38 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 18.49 dBm</p> <p>Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)</p> <p>Band 2:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.44 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 17.25 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 17.29 dBm</p> <p>Band 3:</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT20): 17.44 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT40): 17.41 dBm</p> <p>IEEE 802.11ac MCS0/Nss1 (VHT80): 17.45 dBm</p>
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

Items	Description	
Communication Mode	<input checked="" type="checkbox"/> IP Based (Load Based)	<input type="checkbox"/> Frame Based
TPC Function	<input checked="" type="checkbox"/> With TPC	<input type="checkbox"/> Without TPC
Weather Band (5600~5650MHz)	<input checked="" type="checkbox"/> With 5600~5650MHz	<input type="checkbox"/> Without 5600~5650MHz
Beamforming Function	<input checked="" type="checkbox"/> With beamforming	<input type="checkbox"/> Without beamforming
Operate Condition	<input checked="" type="checkbox"/> Indoor	<input checked="" type="checkbox"/> Outdoor

Note: The product has beamforming function for 802.11n/ac.

Antenna and Band width

Antenna	Single (TX)			Two (TX)			Three (TX)			Four (TX)		
Band width Mode	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
IEEE 802.11a	V	X	X	V	X	X	V	X	X	V	X	X
IEEE 802.11n	V	V	X	V	V	X	V	V	X	V	V	X
IEEE 802.11ac	V	V	V	V	V	V	V	V	V	V	V	V

IEEE 11n/ac Spec.

Protocol	Number of Transmit Chains (NTX)	Data Rate / MCS
802.11n (HT20)	1,2,3,4	MCS0-7, MCS0-15, MCS0-23, MCS0-31
802.11n (HT40)	1,2,3,4	MCS0-7, MCS0-15, MCS0-23, MCS0-31
802.11ac (VHT20)	1,2,3,4	MCS0-9/Nss1, MCS0-9/Nss1-2, MCS0-9/Nss1-3, MCS0-9/Nss1-4
802.11ac (VHT40)	1,2,3,4	MCS0-9/Nss1, MCS0-9/Nss1-2, MCS0-9/Nss1-3, MCS0-9/Nss1-4
802.11ac (VHT80)	1,2,3,4	MCS0-9/Nss1, MCS0-9/Nss1-2, MCS0-9/Nss1-3, MCS0-9/Nss1-4

Note 1: IEEE Std. 802.11n modulation consists of HT20 and HT40 (HT: High Throughput).

Then EUT supports HT20 and HT40.

Note 2: IEEE Std. 802.11ac modulation consists of VHT20, VHT40, VHT80 and VHT160 (VHT: Very High Throughput). Then EUT supports VHT20, VHT40 and VHT80.

Note 3: Modulation modes consist of below configuration:

HT20/HT40: IEEE 802.11n, VHT20/VHT40/VHT80: IEEE 802.11ac

3.2. Accessories

N/A

3.3. Table for Filed Antenna

Set	Ant.	Brand	Model Name (Part Number)	Polarity	Antenna Type	Connector	Indoor/ Outdoor
1	1	ZEBRA	ML-2452-HPAG4A6-01	-	Dipole	N-Type male	Indoor/ Outdoor
2	2	ZEBRA	ML-2452-APAG2A1-01	-		RP-SMA male	Indoor
3	3	ZEBRA	ML-2452-HPA6-01	-		N-TYPE male	Indoor/ Outdoor
4	4	ZEBRA	ML-2452-APA2-01	-		RP-SMA male	Indoor
5	5 (2A)	ZEBRA	ML-2452-HPAG4A6-01	(V)	Polarized Dipole	N-TYPE male	Indoor/ Outdoor
	5 (2B)	ZEBRA	ML-5299-HPA5H-01	(H)		N-TYPE male	Indoor/ Outdoor
6	6	ZEBRA	ML-2452-PNA5-01R	-	Panel	N-TYPE male	Indoor/ Outdoor
7	7	ZEBRA	ML-2452-SEC5M4-N36	-	Polarized Panel	RP-SMA male	Indoor/ Outdoor
8	8	ZEBRA	ML-2452-PTA4M4-036	-	Patch	RP-SMA Male	Indoor
9	9	ZEBRA	CEDAR-INT-ANT	-	Monopole	U.FL	Indoor/ Outdoor

Note1:

Set	Ant.	Antenna Gain (dBi)	Cable Loss (dB)	True Gain (dBi)
		5G	5G	5G
1	1	7.3	3.34	3.96
2	2	1.7	3.34	-1.64
3	3	6.1	3.34	2.76
4	4	4.85	3.34	1.51
5	5 (2A)	7.3	3.34	3.96
	5 (2B)	5	3.34	1.66
6	6	6	3.34	2.66
7	7	7.23	3.34	3.89
8	8	6.6	3.34	3.26

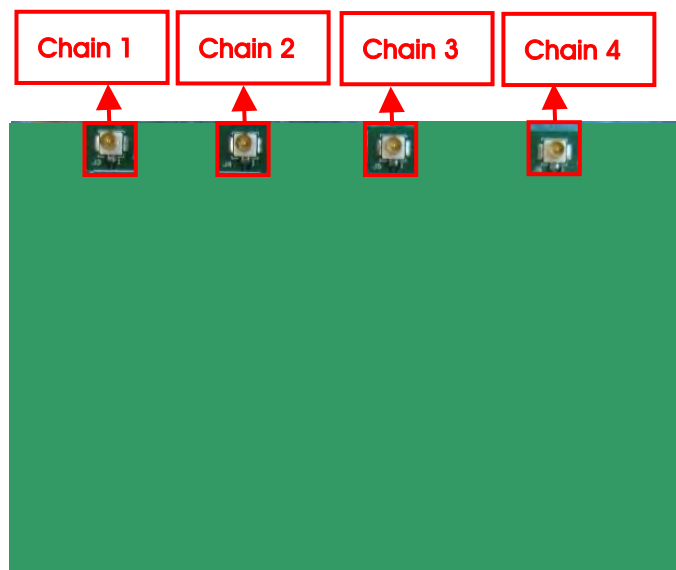
Set	Ant.	Antenna Gain (dBi)			
		5G			
		Chain 1	Chain 2	Chain 3	Chain 4
9	9	6.8	6.7	6.6	5.9

Note2:

There are 9 set antennas in the antenna table list. Besides, only set 1, 5, 6, 7, 8 and 9 were selected to perform the test and written in this report due to the highest gain.

For IEEE 802.11a/n/ac						
Mode	BF	Non BF	Chain 1	Chain 2	Chain 3	Chain 4
For 1TX	-	V	TX/RX	RX	RX	RX
For 2TX-Type 1 (Worst case)	-	V	TX/RX	TX/RX	RX	RX
For 2TX-Type 2	-	V	TX/RX	RX	TX/RX	RX
For 2TX	V	-	TX/RX	TX/RX	RX	RX
For 3TX	V	V	TX/RX	TX/RX	TX/RX	RX
For 4TX	V	V	TX/RX	TX/RX	TX/RX	TX/RX

Note: BF = Beamforming ; Non-BF = Non Beamforming



3.4. Table for Carrier Frequencies

There are three bandwidth systems.

For 20MHz bandwidth systems, use Channel 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144.

For 40MHz bandwidth systems, use Channel 54, 62, 102, 110, 118, 126, 134, 142.

For 80MHz bandwidth systems, use Channel 58, 106, 122, 138.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5250~5350 MHz Band 2	52	5260 MHz	60	5300 MHz
	54	5270 MHz	62	5310 MHz
	56	5280 MHz	64	5320 MHz
	58	5290 MHz	-	-
5470~5725 MHz Band 3	100	5500 MHz	124	5620 MHz
	102	5510 MHz	126	5630 MHz
	104	5520 MHz	128	5640 MHz
	106	5530 MHz	132	5660 MHz
	108	5540 MHz	134	5670 MHz
	110	5550 MHz	136	5680 MHz
	112	5560 MHz	138	5690 MHz
	116	5580 MHz	140	5700 MHz
	118	5590 MHz	142	5710 MHz
	120	5600 MHz	144	5720 MHz
	122	5610 MHz	-	-

3.5. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel	Chain
Max. Conducted Output Power	For Non-Beamforming Mode			
	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/ 116/140/144
				1 1+2 1+2+3 1+2+3+4
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144
				1 1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142
				1 1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138
				1 1+2 1+2+3 1+2+3+4
	For Beamforming Mode			
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144
				1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142
				1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138
				1+2 1+2+3 1+2+3+4

Power Spectral Density	For Non-Beamforming Mode				
	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/ 116/140/144	1 1+2 1+2+3 1+2+3+4
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	1 1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142	1 1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	1 1+2 1+2+3 1+2+3+4
	For Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142	1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	1+2 1+2+3 1+2+3+4
	For Non-Beamforming Mode				
26dB Spectrum Bandwidth 99% Occupied Bandwidth Measurement	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/ 116/140/144	1 1+2 1+2+3 1+2+3+4
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	1 1+2 1+2+3 1+2+3+4

	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142	1 1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	1 1+2 1+2+3 1+2+3+4
6dB Spectrum Bandwidth Measurement	For Non-Beamforming Mode				
	11a/BPSK	Band 4	6Mbps	144	1 1+2 1+2+3 1+2+3+4
	11ac VHT20	Band 4	MCS0/Nss1	144	1 1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 4	MCS0/Nss1	142	1 1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 4	MCS0/Nss1	138	1 1+2 1+2+3 1+2+3+4
Radiated Emission Above 1GHz	For Non-Beamforming Mode				
	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/ 116/140/144	1+2+3+4
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142	1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	1+2+3+4

Band Edge Emission	For Non-Beamforming Mode				
	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/ 116/140/144	1 1+2 1+2+3 1+2+3+4
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	1 1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142	1 1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	1 1+2 1+2+3 1+2+3+4
	For Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	1+2 1+2+3 1+2+3+4
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/ 134/142	1+2 1+2+3 1+2+3+4
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	1+2 1+2+3 1+2+3+4
	Frequency Stability	20 MHz	Band 2-3	-	60/116
		40 MHz	Band 2-3	-	62/110
		80 MHz	Band 2-3	-	58/106

Note1: VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

Note2: There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 802.11n/ac. Beamforming mode and non-beamforming mode has been test and record in this test report for Maximum Conducted Output Power、Power Spectral Density and Band Edge Emissions tests.

Note3: After evaluating, non-beamforming mode had been evaluated to be the worst case, so it was selected to record in this test report for 26dB Bandwidth and 99% Occupied Bandwidth, 6dB Spectrum Bandwidth and Radiated Emissions 1GHz~10th Harmonic tests.

Note4: All the specification of test configurations and test modes were based on customer's request

The following test modes were performed for all tests:

Radiated Emission above 1GHz test																	
The EUT can only be placed in Y axis for Mode 1 ~ Mode 2. The Mode 3~Mode 6 was performed at Y axis and Z axis position. Z axis has been evaluated to be the worst case, thus measurement will follow this same test mode.																	
Mode	Non BF	BF	1TX	2TX	3TX	4TX	EUT in Y axis	EUT in Z axis	Set in Y axis	Set in Z axis	Set 1	Set 5 (2A)	Set 5 (2B)	Set 6	Set 7	Set 8	Set 9
1	●	-	●	●	●	●	●	-	●	-	●	-	-	-	-	-	-
1	-	●	-	●	●	●	●	-	●	-	●	-	-	-	-	-	-
2	●	-	●	-	-	-	●	-	●	-	-	●	-	-	-	-	-
2	●	●	-	●	-	-	●	-	●	-	-	●*1	●*1	-	-	-	-
2	●	●	-	-	●	-	●	-	●	-	-	●*2	●*1	-	-	-	-
2	●	●	-	-	-	●	●	-	●	-	-	●*2	●*2	-	-	-	-
3	●	-	●	●	●	●	-	●	●	-	-	-	-	●	-	-	-
3	-	●	-	●	●	●	-	●	●	-	-	-	-	●	-	-	-
4	●	-	●	●	●	●	-	●	●	-	-	-	-	-	●	-	-
4	-	●	-	●	●	●	-	●	●	-	-	-	-	-	●	-	-
5	●	-	●	●	●	●	-	●	●	-	-	-	-	-	-	●	-
5	-	●	-	●	●	●	-	●	●	-	-	-	-	-	-	●	-
6	●	-	●	●	●	●	-	●	-	●	-	-	-	-	-	-	●
6	-	●	-	●	●	●	-	●	-	●	-	-	-	-	-	-	●

3.6. Table for Testing Locations

Test Site Location					
Address:	No.8, Lane 724, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C.				
TEL:	886-3-656-9065				
FAX:	886-3-656-9085				
Test Site No.	Site Category	Location	FCC Reg. No.	IC File No.	VCCI Reg. No
03CH01-CB	SAC	Hsin Chu	262045	IC 4086D	-
TH01-CB	OVEN Room	Hsin Chu	-	-	-

Open Area Test Site (OATS); Semi Anechoic Chamber (SAC).

3.7. Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR592302-01

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Add Band 2 and Band 3 (5250~5350 MHz, 5470~5725 MHz)	<ol style="list-style-type: none"> 26dB Bandwidth and 99% Occupied Bandwidth Measurement 6dB Spectrum Bandwidth Measurement Maximum Conducted Output Power Measurement Power Spectral Density Measurement Radiated Emissions above 1GHz Band Edge Emissions Measurement Frequency Stability Measurement

3.8. Table for Supporting Units

For Test Site No: 03CH01-CB (For Non-Beamforming Mode)

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E4300	DoC
PoE	Symbol	APSBIAS-2P3-ATR	N/A
Fixture	Bplus	P22S-P22F	N/A

For Test Site No: 03CH01-CB (For Beamforming Mode)

Support Unit	Brand	Model	FCC ID
Notebook*2	DELL	E4300	DoC
Client Device	Cedar	AP-8532	N/A
PoE	Symbol	APSBIAS-2P3-ATR	N/A
Fixture	Bplus	P22S-P22F	N/A

For Test Site No: TH01-CB

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E4300	DoC
PoE	Symbol	APSBIAS-2P3-ATR	N/A
Fixture	Bplus	P22S-P22F	N/A

3.9. Table for Parameters of Test Software Setting

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

For Non-Beamforming Mode

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	88	91	90	89	90	80	91
802.11ac MCS0/Nss1 VHT20	87	89	89	88	91	79	89
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	91	70	80	92	86	91	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	70	78	90	92			

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	84	84	78	78	76	84
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	76	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	82	74	82	78	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	66	70	78	83			

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	74	74	75	71	72	72	72
802.11ac MCS0/Nss1 VHT20	74	74	74	71	72	72	74
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	83	60	72	79	74	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	54	58	76	83			

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	62	63	64	61	61	60	63
802.11ac MCS0/Nss1 VHT20	62	63	64	61	61	60	66
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	75	56	68	70	70	78	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	52	56	70	70			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	88	91	90	89	90	80	91
802.11ac MCS0/Nss1 VHT20	87	89	89	88	91	79	89
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	91	70	80	92	86	91	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	70	78	90	92			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	84	84	78	78	76	84
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	76	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	76	73	82	78	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	66	70	78	83			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	80	79	80	77	79	79	83
802.11ac MCS0/Nss1 VHT20	80	80	81	77	78	75	85
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	81	64	72	80	81	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	57	69	79	83			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	74	75	75	73	73	71	76
802.11ac MCS0/Nss1 VHT20	73	72	72	70	70	72	77
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	79	60	72	74	77	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	56	66	76	70			

Mode 3 (Set 6 Panel antenna / 2.66dBi / 1TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	88	91	90	89	90	86	91
802.11ac MCS0/Nss1 VHT20	87	89	91	89	91	87	89
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	91	75	80	92	89	91	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	71	81	92	92			

Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	84	84	78	78	77	84
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	78	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	67	71	82	84	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	64	69	82	83			

Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	75	76	76	73	73	75	82
802.11ac MCS0/Nss1 VHT20	75	76	76	73	74	76	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	80	66	69	77	80	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	54	58	81	83			

Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	63	65	65	63	63	63	70
802.11ac MCS0/Nss1 VHT20	63	64	64	62	60	62	72
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	79	55	68	74	75	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	48	42	74	70			

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 1TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	88	91	90	89	90	90	91
802.11ac MCS0/Nss1 VHT20	87	89	91	89	91	91	89
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	91	82	84	92	90	91	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	80	81	92	92			

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	84	84	78	78	79	84
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	77	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	68	74	82	82	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	68	72	82	83			

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	82	83	83	78	81	77	77
802.11ac MCS0/Nss1 VHT20	84	83	84	78	79	74	79
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	83	64	72	79	78	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	61	61	76	83			

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	79	80	80	79	80	74	80
802.11ac MCS0/Nss1 VHT20	79	80	80	76	78	79	80
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	64	71	78	76	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	60	60	74	70			

Mode 5 (Set 8 Patch antenna / 3.26dBi / 1TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	88	91	90	89	90	88	91
802.11ac MCS0/Nss1 VHT20	87	89	91	89	91	91	89
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	91	79	82	92	90	91	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	70	79	92	92			

Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	84	84	78	78	82	84
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	81	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	75	74	82	84	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	66	71	82	83			

Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	74	74	75	71	72	72	80
802.11ac MCS0/Nss1 VHT20	74	74	74	71	72	72	80
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	83	70	74	79	85	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	65	70	84	83			

Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	69	69	70	68	67	69	69
802.11ac MCS0/Nss1 VHT20	68	69	69	68	67	69	69
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	80	69	73	77	77	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	62	68	81	70			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	88	91	87	85	90	79	91
802.11ac MCS0/Nss1 VHT20	87	89	85	83	91	77	89
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	91	61	73	92	83	91	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	60	78	86	92			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	76	76	76	74	74	73	80
802.11ac MCS0/Nss1 VHT20	76	76	77	74	74	72	80
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	61	73	82	78	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	56	66	82	83			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	65	65	66	63	64	65	67
802.11ac MCS0/Nss1 VHT20	65	65	66	63	63	66	67
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	76	53	69	74	71	77	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	46	53	76	80			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	55	56	56	55	55	55	59
802.11ac MCS0/Nss1 VHT20	55	56	56	54	55	55	60
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	69	53	65	65	69	69	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	45	47	73	70			

For Beamforming Mode

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	81	82	82	79	78	75	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	69	72	82	78	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	59		69		79		83

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	72	72	72	69	70	71	74
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	72	56	68	68	70	78	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	52		67		72		75

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	60	61	62	59	59	58	65
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	62	56	57	57	61	68	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	50	55	59	64			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	74	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	68	66	82	84	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	72	76	78	83			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	80	80	81	77	78	67	85
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	81	62	64	80	74	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	56	68	80	83			

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	69	70	71	68	68	70	77
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	74	60	69	69	72	80	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	56		64		72		70

Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	82	83	78	75	78	73	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	70	68	82	77	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	58		64		78		83

Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	74	75	75	73	72	73	79
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	75	63	68	72	75	80	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	55		62		76		77

Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	63	64	64	62	60	62	68
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	69	60	64	64	67	70	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	54		60		66		70

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	69	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	72	69	82	80	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	69		69		82		83

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	84	83	84	78	79	69	79
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	83	68	70	79	75	85	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	62		69		84		83

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	78	80	80	77	77	77	75
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	79	72	69	76	75	79	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	64		66		73		70

Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	82	83	83	79	78	78	82
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	82	64	75	82	83	83	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	59		71		82		83

Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	73	74	73	71	71	72	80
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	73	55	70	70	74	79	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz		5530 MHz		5610 MHz		5690 MHz
	58		67		74		76

Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	63	63	63	62	60	61	67
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	64	55	60	60	64	69	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	62	60	64	65			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	74	76	77	73	73	70	76
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	75	60	70	73	77	76	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	58	65	77	75			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	63	64	64	62	62	64	63
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	64	60	61	61	64	64	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	58	60	63	60			

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)

Test Software Version	DOS						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11ac MCS0/Nss1 VHT20	55	55	56	54	53	53	55
Mode	NCB: 40MHz						
802.11ac MCS0/Nss1 VHT40	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
	55	54	51	51	53	56	
Mode	NCB: 80MHz						
802.11ac MCS0/Nss1 VHT80	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
	54	50	54	53			

3.10. EUT Operation during Test

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN XP were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe " to link with the remote workstation to receive and transmit packet by Client Device and transmit duty cycle no less 98%

3.11.1. Duty Cycle

For non-beamforming mode:

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.070	2.080	99.52	0.02	0.01
802.11ac MCS0/Nss1 VHT20	1.944	1.960	99.18	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.960	0.975	98.46	0.07	0.01
802.11ac MCS0/Nss1 VHT80	0.458	0.484	94.63	0.24	2.18

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 3 (Set 6 Panel antenna / 2.66dBi / 1TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 1TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 5 (Set 8 Patch antenna / 3.26dBi / 1TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.070	2.080	99.52	0.02	0.01
802.11ac MCS0/Nss1 VHT20	1.944	1.960	99.18	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.960	0.975	98.46	0.07	0.01
802.11ac MCS0/Nss1 VHT80	0.458	0.484	94.63	0.24	2.18

Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.049	2.083	98.37	0.07	0.01
802.11ac MCS0/Nss1 VHT20	1.932	1.950	99.08	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.975	94.36	0.25	1.09
802.11ac MCS0/Nss1 VHT80	0.415	0.475	87.37	0.59	2.41

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.070	2.080	99.52	0.02	0.01
802.11ac MCS0/Nss1 VHT20	1.944	1.960	99.18	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.960	0.975	98.46	0.07	0.01
802.11ac MCS0/Nss1 VHT80	0.458	0.484	94.63	0.24	2.18

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.060	98.54	0.06	0.01
802.11ac MCS0/Nss1 VHT20	1.910	1.950	97.95	0.09	0.52
802.11ac MCS0/Nss1 VHT40	0.920	0.976	94.26	0.26	1.09
802.11ac MCS0/Nss1 VHT80	0.422	0.480	87.92	0.56	2.37

For beamforming mode:

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.824	4.144	92.28	0.35	0.26
802.11ac MCS0/Nss1 VHT40	4.608	5.004	92.09	0.36	0.22
802.11ac MCS0/Nss1 VHT80	5.091	5.469	93.09	0.31	0.20

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.840	4.144	92.66	0.33	0.26
802.11ac MCS0/Nss1 VHT40	4.577	4.899	93.43	0.30	0.22
802.11ac MCS0/Nss1 VHT80	5.086	5.491	92.62	0.33	0.20

Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.824	4.144	92.28	0.35	0.26
802.11ac MCS0/Nss1 VHT40	4.608	5.004	92.09	0.36	0.22
802.11ac MCS0/Nss1 VHT80	5.091	5.469	93.09	0.31	0.20

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.840	4.144	92.66	0.33	0.26
802.11ac MCS0/Nss1 VHT40	4.577	4.899	93.43	0.30	0.22
802.11ac MCS0/Nss1 VHT80	5.086	5.491	92.62	0.33	0.20

Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.824	4.144	92.28	0.35	0.26
802.11ac MCS0/Nss1 VHT40	4.608	5.004	92.09	0.36	0.22
802.11ac MCS0/Nss1 VHT80	5.091	5.469	93.09	0.31	0.20

Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.840	4.144	92.66	0.33	0.26
802.11ac MCS0/Nss1 VHT40	4.577	4.899	93.43	0.30	0.22
802.11ac MCS0/Nss1 VHT80	5.086	5.491	92.62	0.33	0.20

Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.824	4.144	92.28	0.35	0.26
802.11ac MCS0/Nss1 VHT40	4.608	5.004	92.09	0.36	0.22
802.11ac MCS0/Nss1 VHT80	5.091	5.469	93.09	0.31	0.20

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.824	4.144	92.28	0.35	0.26
802.11ac MCS0/Nss1 VHT40	4.608	5.004	92.09	0.36	0.22
802.11ac MCS0/Nss1 VHT80	5.091	5.469	93.09	0.31	0.20

Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.840	4.144	92.66	0.33	0.26
802.11ac MCS0/Nss1 VHT40	4.577	4.899	93.43	0.30	0.22
802.11ac MCS0/Nss1 VHT80	5.086	5.491	92.62	0.33	0.20

Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.824	4.144	92.28	0.35	0.26
802.11ac MCS0/Nss1 VHT40	4.608	5.004	92.09	0.36	0.22
802.11ac MCS0/Nss1 VHT80	5.091	5.469	93.09	0.31	0.20

Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.840	4.144	92.66	0.33	0.26
802.11ac MCS0/Nss1 VHT40	4.577	4.899	93.43	0.30	0.22
802.11ac MCS0/Nss1 VHT80	5.086	5.491	92.62	0.33	0.20

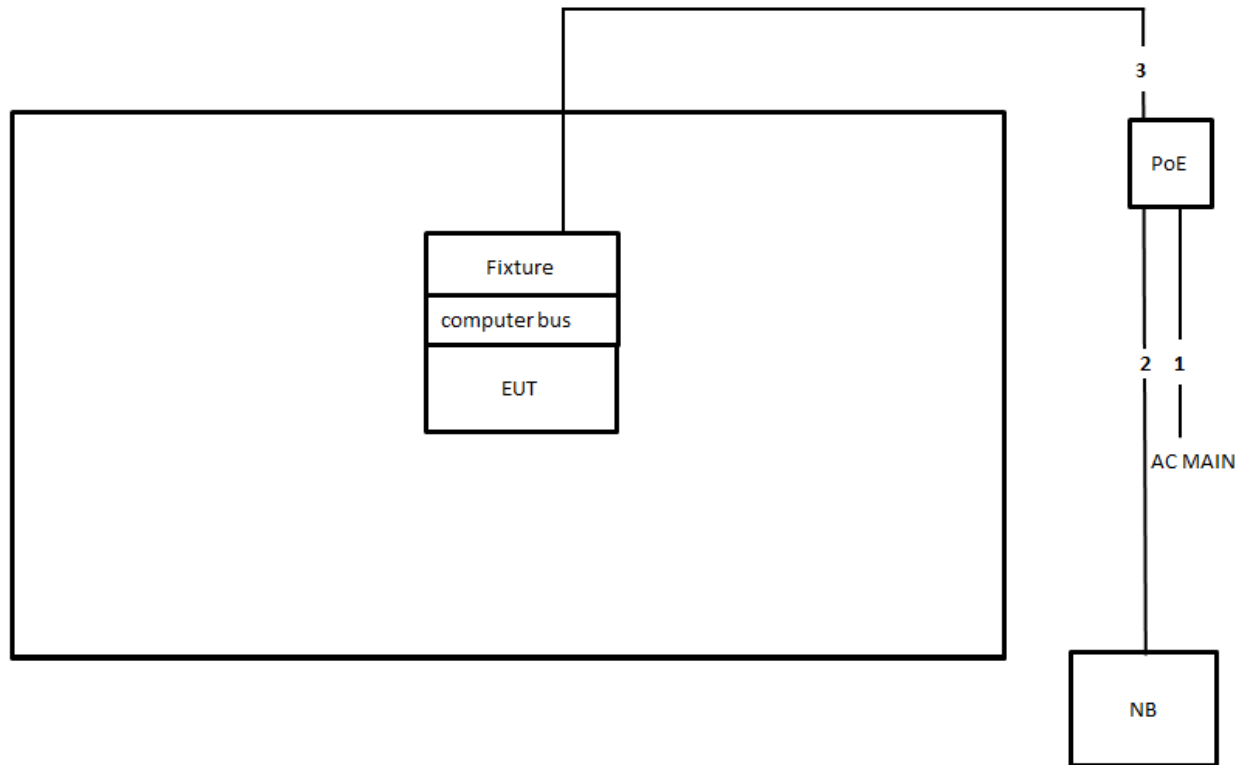
Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.770	4.140	91.06	0.41	0.27
802.11ac MCS0/Nss1 VHT40	4.566	4.967	91.93	0.37	0.22
802.11ac MCS0/Nss1 VHT80	5.049	5.426	93.06	0.31	0.20

3.12. Test Configurations

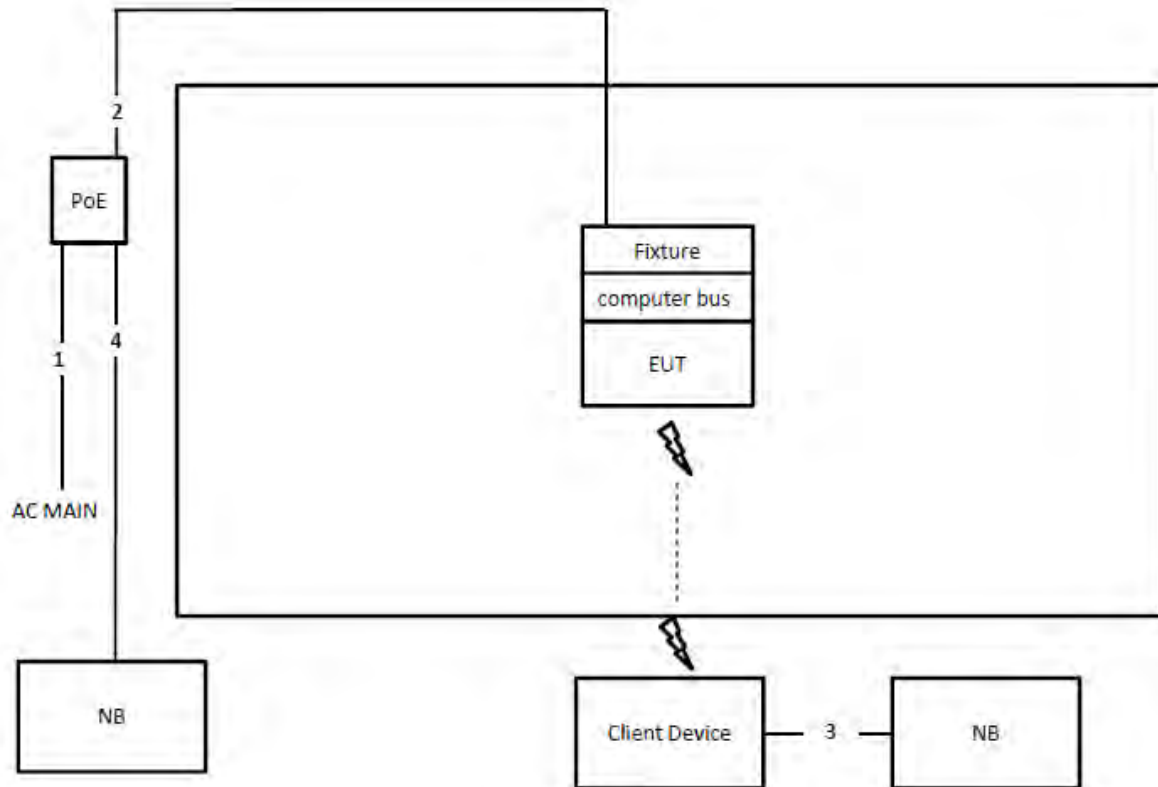
3.12.1. Radiation Emissions Test Configuration

Test Configuration: for non-beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

Test Configuration: for beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	1.5m

4. TEST RESULT

4.1. 26dB Bandwidth and 99% Occupied Bandwidth Measurement

4.1.1. Limit

No restriction limits.

4.1.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

26dB Bandwidth	
Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth	
Spectrum Parameters	Setting
Span	1.5 times to 5.0 times the OBW
RBW	1 % to 5 % of the OBW
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold

4.1.3. Test Procedures

For Radiated 26dB Bandwidth and 99% Occupied Bandwidth Measurement:

1. The transmitter was radiated to the spectrum analyzer in peak hold mode.
2. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.1.4. Test Setup Layout

For Radiated 26dB Bandwidth and 99% Occupied Bandwidth Measurement:

This test setup layout is the same as that shown in section 4.5.4.

4.1.5. Test Deviation

There is no deviation with the original standard.

4.1.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.1.7. Test Result of 26dB Bandwidth and 99% Occupied Bandwidth

For Non-Beamforming Mode

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.96	17.28
	5300 MHz	21.72	17.40
	5320 MHz	21.84	17.28
	5500 MHz	21.72	17.28
	5580 MHz	21.72	17.16
	5700 MHz	21.48	17.16
802.11ac MCS0/Nss1 VHT20	5260 MHz	22.20	18.36
	5300 MHz	21.96	18.36
	5320 MHz	21.96	18.36
	5500 MHz	21.72	18.36
	5580 MHz	21.96	18.36
	5700 MHz	22.08	18.24
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.60	37.00
	5310 MHz	41.00	36.80
	5510 MHz	41.60	37.00
	5550 MHz	41.60	37.00
	5670 MHz	41.80	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.40	76.00
	5530 MHz	82.40	76.40
	5610 MHz	82.80	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.84	17.40	5709.20	5711.36	15.80	6.04	13.64	3.76
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.96	18.36	5708.96	5710.76	16.04	5.92	14.24	4.12
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.80	37.20	5689.00	5691.40	36.00	5.80	33.60	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	83.20	76.80	5648.40	5651.60	76.60	6.60	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.36	17.52
	5300 MHz	21.48	17.52
	5320 MHz	21.48	17.40
	5500 MHz	21.36	17.40
	5580 MHz	21.12	17.40
	5700 MHz	21.48	17.16
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.48	18.36
	5300 MHz	21.48	18.24
	5320 MHz	21.72	18.36
	5500 MHz	21.48	18.24
	5580 MHz	21.48	18.36
	5700 MHz	21.48	18.12
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.80
	5310 MHz	40.80	37.00
	5510 MHz	41.00	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.20	76.40
	5530 MHz	82.00	76.40
	5610 MHz	81.60	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	17.28	5709.68	5711.84	15.32	5.68	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	18.12	5709.32	5710.88	15.68	5.68	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	57.60	37.80	5689.20	5691.20	35.80	21.80	33.80	4.00
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.76	16.20
	5300 MHz	20.64	16.56
	5320 MHz	20.76	16.68
	5500 MHz	20.64	16.56
	5580 MHz	20.88	16.80
	5700 MHz	20.88	17.04
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.24	18.24
	5300 MHz	21.24	18.12
	5320 MHz	21.36	18.00
	5500 MHz	21.12	18.12
	5580 MHz	21.12	18.12
	5700 MHz	21.12	18.00
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	37.00
	5310 MHz	40.80	37.00
	5510 MHz	40.40	37.00
	5550 MHz	40.80	36.80
	5670 MHz	40.60	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.40
	5530 MHz	81.60	76.40
	5610 MHz	81.60	76.80

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	25.20	17.28	5705.60	5711.72	19.40	5.80	13.28	4.00
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.00	17.88	5709.44	5710.76	15.56	5.44	14.24	3.64
802.11ac MCS0/Nss1 VHT40	5710 MHz	40.80	37.40	5689.60	5691.20	35.40	5.40	33.80	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.00	17.40
	5300 MHz	21.00	17.52
	5320 MHz	20.88	17.40
	5500 MHz	21.24	17.28
	5580 MHz	21.00	17.28
	5700 MHz	21.00	17.04
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.12	18.12
	5300 MHz	21.12	18.00
	5320 MHz	21.12	18.12
	5500 MHz	21.00	18.24
	5580 MHz	21.60	18.00
	5700 MHz	21.00	17.88
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	37.20
	5310 MHz	41.40	37.20
	5510 MHz	40.80	37.20
	5550 MHz	41.40	37.40
	5670 MHz	41.20	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.00	76.80
	5530 MHz	82.00	76.80
	5610 MHz	82.00	76.80

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	16.92	5709.32	5711.36	15.68	5.32	13.64	3.28
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.12	18.00	5709.32	5710.88	15.68	5.44	14.12	3.88
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	37.60	5689.40	5691.20	35.60	5.60	33.80	3.80
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.96	17.28
	5300 MHz	21.72	17.40
	5320 MHz	21.84	17.28
	5500 MHz	21.72	17.28
	5580 MHz	21.72	17.16
	5700 MHz	21.48	17.16
802.11ac MCS0/Nss1 VHT20	5260 MHz	22.20	18.36
	5300 MHz	21.96	18.36
	5320 MHz	21.96	18.36
	5500 MHz	21.72	18.36
	5580 MHz	21.96	18.36
	5700 MHz	22.08	18.24
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.60	37.00
	5310 MHz	41.00	36.80
	5510 MHz	41.60	37.00
	5550 MHz	41.60	37.00
	5670 MHz	41.80	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.40	76.00
	5530 MHz	82.40	76.40
	5610 MHz	82.80	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.84	17.40	5709.20	5711.36	15.80	6.04	13.64	3.76
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.96	18.36	5708.96	5710.76	16.04	5.92	14.24	4.12
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.80	37.20	5689.00	5691.40	36.00	5.80	33.60	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	83.20	76.80	5648.40	5651.60	76.60	6.60	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.36	17.52
	5300 MHz	21.48	17.52
	5320 MHz	21.48	17.40
	5500 MHz	21.36	17.40
	5580 MHz	21.12	17.40
	5700 MHz	21.48	17.16
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.48	18.36
	5300 MHz	21.48	18.24
	5320 MHz	21.72	18.36
	5500 MHz	21.48	18.24
	5580 MHz	21.48	18.36
	5700 MHz	21.48	18.12
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.80
	5310 MHz	41.00	37.00
	5510 MHz	41.00	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.20	76.40
	5530 MHz	82.00	76.40
	5610 MHz	81.60	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	17.28	5709.68	5711.84	15.32	5.68	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	18.12	5709.32	5710.88	15.68	5.68	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	57.60	37.80	5689.20	5691.20	35.80	21.80	33.80	4.00
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.52	16.44
	5300 MHz	20.88	16.80
	5320 MHz	20.88	16.80
	5500 MHz	20.64	16.92
	5580 MHz	20.52	16.92
	5700 MHz	20.76	17.04
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.12	18.12
	5300 MHz	21.24	18.12
	5320 MHz	21.24	18.24
	5500 MHz	21.48	18.00
	5580 MHz	21.12	17.88
	5700 MHz	21.12	18.00
802.11ac MCS0/Nss1 VHT40	5270 MHz	40.80	36.80
	5310 MHz	40.80	37.00
	5510 MHz	40.40	37.00
	5550 MHz	40.80	37.00
	5670 MHz	41.20	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.20	76.40
	5530 MHz	81.60	76.40
	5610 MHz	81.20	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.36	18.00	5709.68	5711.72	15.32	6.04	13.28	4.72
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.24	17.88	5709.20	5710.88	15.80	5.44	14.12	3.76
802.11ac MCS0/Nss1 VHT40	5710 MHz	40.80	37.40	5689.60	5691.20	35.40	5.40	33.80	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	81.60	76.40	5648.80	5651.60	76.20	5.40	73.40	3.00

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.48	17.64
	5300 MHz	21.48	17.76
	5320 MHz	21.72	17.88
	5500 MHz	21.24	17.76
	5580 MHz	21.24	17.76
	5700 MHz	20.88	17.64
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.60	18.24
	5300 MHz	21.48	18.24
	5320 MHz	21.84	18.24
	5500 MHz	21.24	18.12
	5580 MHz	21.36	18.24
	5700 MHz	21.36	18.12
802.11ac MCS0/Nss1 VHT40	5270 MHz	40.80	36.80
	5310 MHz	41.00	36.80
	5510 MHz	40.40	36.60
	5550 MHz	40.60	36.60
	5670 MHz	40.80	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.40
	5530 MHz	81.20	76.00
	5610 MHz	80.80	75.60

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	20.76	16.92	5709.20	5711.10	15.80	4.96	13.90	3.02
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.12	17.88	5709.44	5710.88	15.56	5.56	14.12	3.76
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	36.80	5689.40	5691.40	35.60	5.60	33.60	3.20
802.11ac MCS0/Nss1 VHT80	5690 MHz	81.60	76.40	5648.80	5651.60	76.20	5.40	73.40	3.00

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 1TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.96	17.28
	5300 MHz	21.72	17.40
	5320 MHz	21.84	17.28
	5500 MHz	21.72	17.28
	5580 MHz	21.72	17.16
	5700 MHz	21.72	17.40
802.11ac MCS0/Nss1 VHT20	5260 MHz	22.20	18.36
	5300 MHz	21.96	18.36
	5320 MHz	21.96	18.36
	5500 MHz	21.96	18.36
	5580 MHz	21.96	18.36
	5700 MHz	21.96	18.36
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.60	37.00
	5310 MHz	41.80	37.00
	5510 MHz	41.60	37.00
	5550 MHz	41.60	37.00
	5670 MHz	41.60	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.40	76.40
	5530 MHz	82.00	76.40
	5610 MHz	82.00	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.84	17.40	5709.20	5711.36	15.80	6.04	13.64	3.76
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.96	18.36	5708.96	5710.76	16.04	5.92	14.24	4.12
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.80	37.20	5689.00	5691.40	36.00	5.80	33.60	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	83.20	76.80	5648.40	5651.60	76.60	6.60	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.36	17.52
	5300 MHz	21.48	17.52
	5320 MHz	21.48	17.40
	5500 MHz	21.36	17.40
	5580 MHz	21.12	17.40
	5700 MHz	21.48	17.16
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.48	18.36
	5300 MHz	21.48	18.24
	5320 MHz	21.72	18.36
	5500 MHz	21.48	18.24
	5580 MHz	21.48	18.36
	5700 MHz	21.48	18.24
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.80
	5310 MHz	41.00	36.60
	5510 MHz	40.80	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.00	76.00
	5530 MHz	82.00	76.00
	5610 MHz	82.00	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	17.28	5709.68	5711.84	15.32	5.68	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	18.12	5709.32	5710.88	15.68	5.68	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	57.60	37.80	5689.20	5691.20	35.80	21.80	33.80	4.00
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.00	16.44
	5300 MHz	20.52	16.80
	5320 MHz	20.52	16.68
	5500 MHz	20.76	16.80
	5580 MHz	20.88	16.68
	5700 MHz	20.88	16.68
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.36	18.24
	5300 MHz	21.24	18.36
	5320 MHz	21.36	18.00
	5500 MHz	21.24	17.88
	5580 MHz	21.36	18.00
	5700 MHz	21.00	17.88
802.11ac MCS0/Nss1 VHT40	5270 MHz	40.60	36.80
	5310 MHz	40.80	37.00
	5510 MHz	40.80	37.00
	5550 MHz	40.80	37.00
	5670 MHz	41.00	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.20	76.40
	5530 MHz	80.80	76.40
	5610 MHz	81.60	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.36	18.00	5709.32	5710.88	15.68	5.68	14.12	3.88
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.24	17.88	5709.20	5710.88	15.80	5.44	14.12	3.76
802.11ac MCS0/Nss1 VHT40	5710 MHz	40.80	37.40	5689.60	5691.20	35.40	5.40	33.80	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.76	16.44
	5300 MHz	20.76	16.68
	5320 MHz	20.64	16.80
	5500 MHz	21.12	16.44
	5580 MHz	20.76	16.08
	5700 MHz	20.88	16.92
802.11ac MCS0/Nss1 VHT20	5260 MHz	20.88	17.52
	5300 MHz	21.36	17.76
	5320 MHz	21.36	17.52
	5500 MHz	21.00	17.76
	5580 MHz	21.00	17.64
	5700 MHz	21.12	17.88
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.00	36.80
	5310 MHz	40.80	36.60
	5510 MHz	40.60	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.40
	5530 MHz	81.20	76.00
	5610 MHz	81.20	76.80

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	20.52	16.80	5709.32	5711.12	15.68	4.84	13.88	2.92
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.24	17.88	5709.32	5710.88	15.68	5.56	14.12	3.76
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	36.80	5689.40	5691.40	35.60	5.60	33.60	3.20
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 1TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.96	17.28
	5300 MHz	21.72	17.40
	5320 MHz	21.84	17.28
	5500 MHz	21.72	17.28
	5580 MHz	21.72	17.16
	5700 MHz	21.84	17.40
802.11ac MCS0/Nss1 VHT20	5260 MHz	22.20	18.36
	5300 MHz	21.96	18.36
	5320 MHz	21.96	18.36
	5500 MHz	21.96	18.36
	5580 MHz	21.96	18.36
	5700 MHz	21.96	18.48
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.60	37.00
	5310 MHz	41.60	37.20
	5510 MHz	41.60	36.80
	5550 MHz	41.60	37.00
	5670 MHz	41.40	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.40	76.00
	5530 MHz	82.40	76.00
	5610 MHz	82.00	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.84	17.40	5709.20	5711.36	15.80	6.04	13.64	3.76
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.96	18.36	5708.96	5710.76	16.04	5.92	14.24	4.12
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.80	37.20	5689.00	5691.40	36.00	5.80	33.60	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	83.20	76.80	5648.40	5651.60	76.60	6.60	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.36	17.52
	5300 MHz	21.48	17.52
	5320 MHz	21.48	17.40
	5500 MHz	21.36	17.40
	5580 MHz	21.12	17.40
	5700 MHz	21.00	16.80
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.36	18.36
	5300 MHz	21.48	18.24
	5320 MHz	21.72	18.36
	5500 MHz	21.48	18.24
	5580 MHz	21.48	18.36
	5700 MHz	21.36	17.88
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.80
	5310 MHz	41.20	37.20
	5510 MHz	41.00	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.00	76.80
	5530 MHz	82.00	76.40
	5610 MHz	82.00	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	17.28	5709.68	5711.84	15.32	5.68	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	18.12	5709.32	5710.88	15.68	5.68	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	57.60	37.80	5689.20	5691.20	35.80	21.80	33.80	4.00
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.76	16.20
	5300 MHz	20.64	16.56
	5320 MHz	20.76	16.68
	5500 MHz	20.64	16.56
	5580 MHz	20.88	16.80
	5700 MHz	20.88	17.04
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.24	18.24
	5300 MHz	21.24	18.12
	5320 MHz	21.36	18.00
	5500 MHz	21.12	18.12
	5580 MHz	21.12	18.12
	5700 MHz	21.12	18.00
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	37.00
	5310 MHz	41.20	37.20
	5510 MHz	40.40	37.00
	5550 MHz	40.80	36.80
	5670 MHz	41.20	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.80
	5530 MHz	82.00	76.40
	5610 MHz	81.60	76.80

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	25.20	17.28	5705.60	5711.72	19.40	5.80	13.28	4.00
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.00	17.88	5709.44	5710.76	15.56	5.44	14.24	3.64
802.11ac MCS0/Nss1 VHT40	5710 MHz	40.80	37.40	5689.60	5691.20	35.40	5.40	33.80	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.76	16.80
	5300 MHz	20.76	16.68
	5320 MHz	20.88	17.04
	5500 MHz	20.88	16.32
	5580 MHz	21.00	16.08
	5700 MHz	20.76	16.68
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.24	17.76
	5300 MHz	21.24	17.52
	5320 MHz	21.00	17.52
	5500 MHz	21.48	17.52
	5580 MHz	21.12	17.52
	5700 MHz	21.36	17.76
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.00	36.60
	5310 MHz	41.00	36.60
	5510 MHz	41.40	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.00	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.00
	5530 MHz	81.60	76.00
	5610 MHz	81.20	76.80

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.36	17.04	5709.32	5711.12	15.68	5.68	13.88	3.16
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.48	18.12	5709.32	5710.88	15.68	5.80	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	36.80	5689.40	5691.40	35.60	5.60	33.60	3.20
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 1TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.96	17.28
	5300 MHz	21.72	17.40
	5320 MHz	21.84	17.28
	5500 MHz	21.72	17.28
	5580 MHz	21.72	17.16
	5700 MHz	21.60	17.28
802.11ac MCS0/Nss1 VHT20	5260 MHz	22.20	18.36
	5300 MHz	21.96	18.36
	5320 MHz	21.96	18.36
	5500 MHz	21.96	18.36
	5580 MHz	21.96	18.36
	5700 MHz	21.96	18.48
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.60	37.00
	5310 MHz	41.60	37.20
	5510 MHz	41.40	37.00
	5550 MHz	41.60	37.00
	5670 MHz	41.40	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.40	76.00
	5530 MHz	82.80	76.00
	5610 MHz	82.00	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.84	17.40	5709.20	5711.36	15.80	6.04	13.64	3.76
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.96	18.36	5708.96	5710.76	16.04	5.92	14.24	4.12
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.80	37.20	5689.00	5691.40	36.00	5.80	33.60	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	83.20	76.80	5648.40	5651.60	76.60	6.60	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.36	17.52
	5300 MHz	21.48	17.52
	5320 MHz	21.48	17.40
	5500 MHz	21.36	17.40
	5580 MHz	21.12	17.40
	5700 MHz	21.60	16.92
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.48	18.36
	5300 MHz	21.48	18.24
	5320 MHz	21.72	18.36
	5500 MHz	21.48	18.24
	5580 MHz	21.48	18.36
	5700 MHz	21.72	17.88
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.80
	5310 MHz	41.00	37.20
	5510 MHz	41.00	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.20	76.40
	5530 MHz	81.60	76.40
	5610 MHz	82.00	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	17.28	5709.68	5711.84	15.32	5.68	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	18.12	5709.32	5710.88	15.68	5.68	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	57.60	37.80	5689.20	5691.20	35.80	21.80	33.80	4.00
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.76	16.20
	5300 MHz	20.64	16.56
	5320 MHz	20.76	16.68
	5500 MHz	20.64	16.56
	5580 MHz	20.88	16.80
	5700 MHz	20.88	17.04
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.24	18.24
	5300 MHz	21.24	18.12
	5320 MHz	21.36	18.00
	5500 MHz	21.12	18.12
	5580 MHz	21.12	18.12
	5700 MHz	21.12	18.00
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	37.00
	5310 MHz	41.00	37.20
	5510 MHz	41.20	37.20
	5550 MHz	40.80	36.80
	5670 MHz	41.40	37.20
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.40	76.40
	5530 MHz	81.60	76.40
	5610 MHz	82.00	76.80

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.12	17.28	5709.68	5711.84	15.32	5.80	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.60	18.00	5709.32	5711.00	15.68	5.92	14.00	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	40.80	37.40	5689.60	5691.20	35.40	5.40	33.80	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.52	16.56
	5300 MHz	20.64	16.80
	5320 MHz	20.64	16.44
	5500 MHz	20.64	16.20
	5580 MHz	20.64	16.68
	5700 MHz	20.88	16.56
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.24	17.64
	5300 MHz	21.00	17.64
	5320 MHz	21.24	17.64
	5500 MHz	21.36	17.52
	5580 MHz	21.36	17.52
	5700 MHz	20.88	17.76
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.60
	5310 MHz	40.80	36.60
	5510 MHz	40.80	36.80
	5550 MHz	41.20	36.80
	5670 MHz	40.80	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.40
	5530 MHz	81.60	76.00
	5610 MHz	81.60	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	20.88	16.80	5709.32	5711.24	15.68	5.20	13.76	3.04
802.11ac MCS0/Nss1 VHT20	5720 MHz	20.88	17.88	5709.56	5711.00	15.44	5.44	14.00	3.88
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	36.80	5689.40	5691.40	35.60	5.60	33.60	3.20
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.96	17.28
	5300 MHz	21.72	17.40
	5320 MHz	21.84	17.28
	5500 MHz	21.72	17.28
	5580 MHz	21.72	17.16
	5700 MHz	21.48	17.16
802.11ac MCS0/Nss1 VHT20	5260 MHz	22.20	18.36
	5300 MHz	21.96	18.36
	5320 MHz	21.96	18.36
	5500 MHz	21.84	18.48
	5580 MHz	21.96	18.36
	5700 MHz	21.72	18.36
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.60	37.00
	5310 MHz	41.40	36.80
	5510 MHz	41.80	36.80
	5550 MHz	41.60	37.00
	5670 MHz	41.60	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.80	76.00
	5530 MHz	82.40	76.40
	5610 MHz	82.80	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.84	17.40	5709.20	5711.36	15.80	6.04	13.64	3.76
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.96	18.36	5708.96	5710.76	16.04	5.92	14.24	4.12
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.80	37.20	5689.00	5691.40	36.00	5.80	33.60	3.60
802.11ac MCS0/Nss1 VHT80	5690 MHz	83.20	76.80	5648.40	5651.60	76.60	6.60	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.00	16.56
	5300 MHz	20.88	16.68
	5320 MHz	21.00	16.56
	5500 MHz	20.76	16.68
	5580 MHz	21.00	16.80
	5700 MHz	21.00	16.80
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.48	17.88
	5300 MHz	21.36	17.76
	5320 MHz	21.36	17.76
	5500 MHz	21.36	17.88
	5580 MHz	21.36	18.00
	5700 MHz	21.48	17.76
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	36.80
	5310 MHz	41.00	37.00
	5510 MHz	41.00	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.20	36.80
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.00	76.40
	5530 MHz	82.00	76.00
	5610 MHz	82.00	76.00

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.00	17.28	5709.68	5711.84	15.32	5.68	13.16	4.12
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	18.12	5709.32	5710.88	15.68	5.68	14.12	4.00
802.11ac MCS0/Nss1 VHT40	5710 MHz	57.60	37.80	5689.20	5691.20	35.80	21.80	33.80	4.00
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	21.36	17.52
	5300 MHz	21.00	17.16
	5320 MHz	21.12	17.40
	5500 MHz	20.88	17.16
	5580 MHz	21.12	17.04
	5700 MHz	20.88	17.04
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.60	17.76
	5300 MHz	21.36	17.88
	5320 MHz	21.24	17.88
	5500 MHz	21.24	17.88
	5580 MHz	21.48	18.00
	5700 MHz	21.24	17.88
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.20	37.00
	5310 MHz	41.40	37.00
	5510 MHz	40.80	37.00
	5550 MHz	41.40	37.00
	5670 MHz	41.00	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.60	76.80
	5530 MHz	81.60	76.80
	5610 MHz	81.60	76.40

Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	21.36	17.28	5709.56	5711.72	15.44	5.92	13.28	4.00
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.36	17.88	5709.32	5711.00	15.68	5.68	14.00	3.88
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	37.00	5689.20	5691.40	35.80	5.40	33.60	3.40
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

Temperature	25°C	Humidity	46%
Test Engineer	Eddie Weng		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5260 MHz	20.40	16.92
	5300 MHz	21.00	16.56
	5320 MHz	20.64	16.80
	5500 MHz	20.88	16.56
	5580 MHz	20.64	16.44
	5700 MHz	20.64	16.80
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.24	17.40
	5300 MHz	21.36	17.76
	5320 MHz	21.48	17.52
	5500 MHz	21.00	17.40
	5580 MHz	21.00	17.76
	5700 MHz	21.12	17.64
802.11ac MCS0/Nss1 VHT40	5270 MHz	41.00	37.00
	5310 MHz	40.60	36.60
	5510 MHz	40.80	36.80
	5550 MHz	41.00	36.80
	5670 MHz	41.00	37.00
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.00	76.00
	5530 MHz	82.00	76.40
	5610 MHz	81.20	76.40

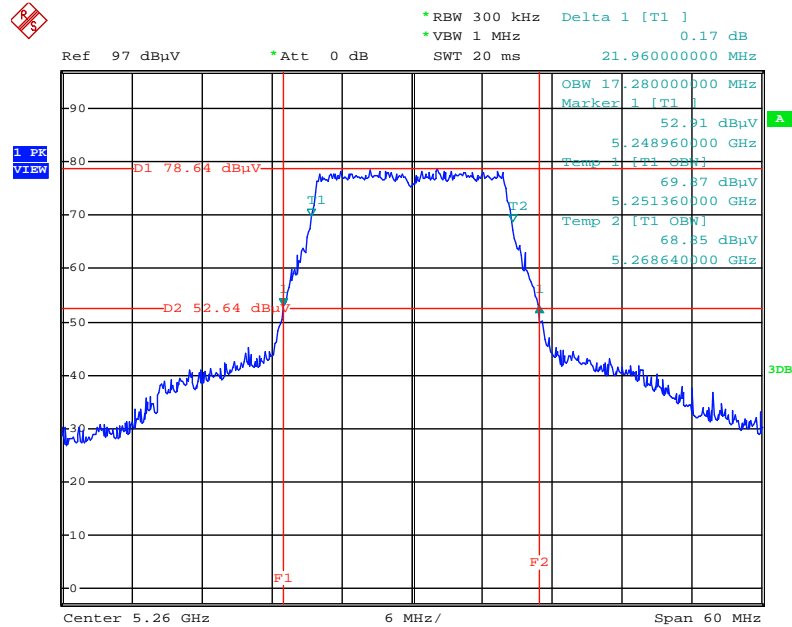
Straddle Channel

Mode	Frequency	26dB BW (MHz)	99% OBW (MHz)	26dB BW F1 (MHz)	99% OBW T1 (MHz)	UNII 2C 26dB BW (MHz)	UNII 3 26dB BW (MHz)	UNII 2C 99% BW (MHz)	UNII 3 99% BW (MHz)
802.11a	5720 MHz	20.76	16.68	5709.44	5711.24	15.56	5.20	13.76	2.92
802.11ac MCS0/Nss1 VHT20	5720 MHz	21.12	17.76	5709.32	5710.88	15.68	5.44	14.12	3.64
802.11ac MCS0/Nss1 VHT40	5710 MHz	41.20	36.80	5689.40	5691.40	35.60	5.60	33.60	3.20
802.11ac MCS0/Nss1 VHT80	5690 MHz	82.40	76.80	5648.80	5651.60	76.20	6.20	73.40	3.40

For Non-Beamforming Mode

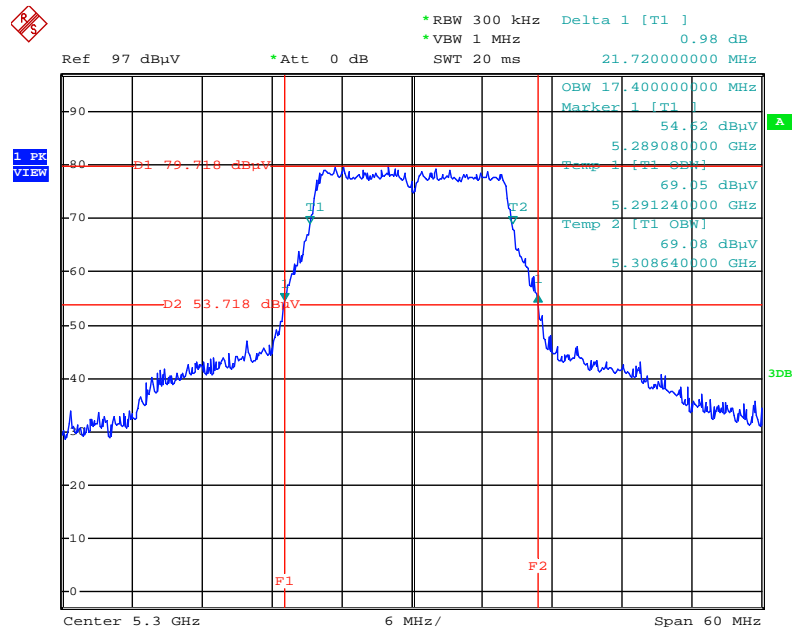
Mode 1 (Set 1 Dipole antenna / 3.96dBi / 1TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5260 MHz



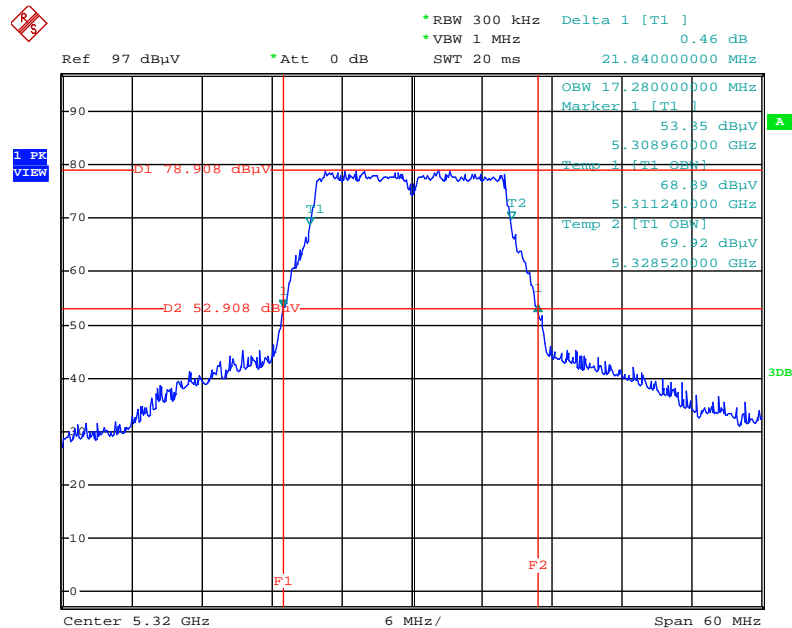
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5300 MHz



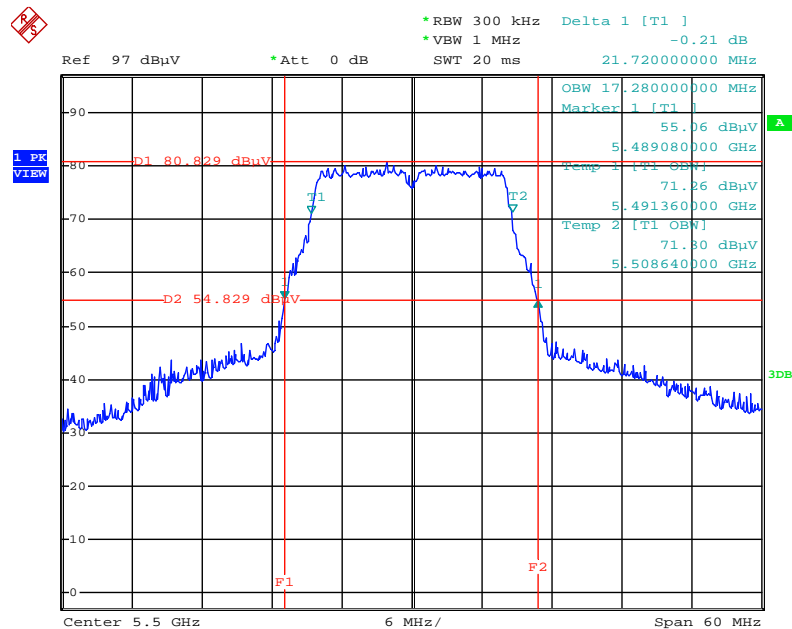
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5320 MHz



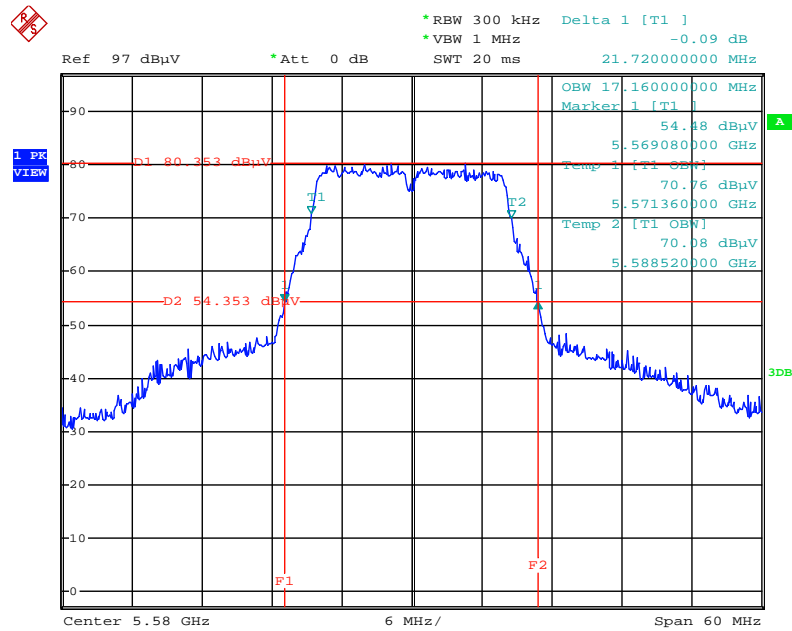
Date: 7.JAN.2016 17:25:08

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5500 MHz



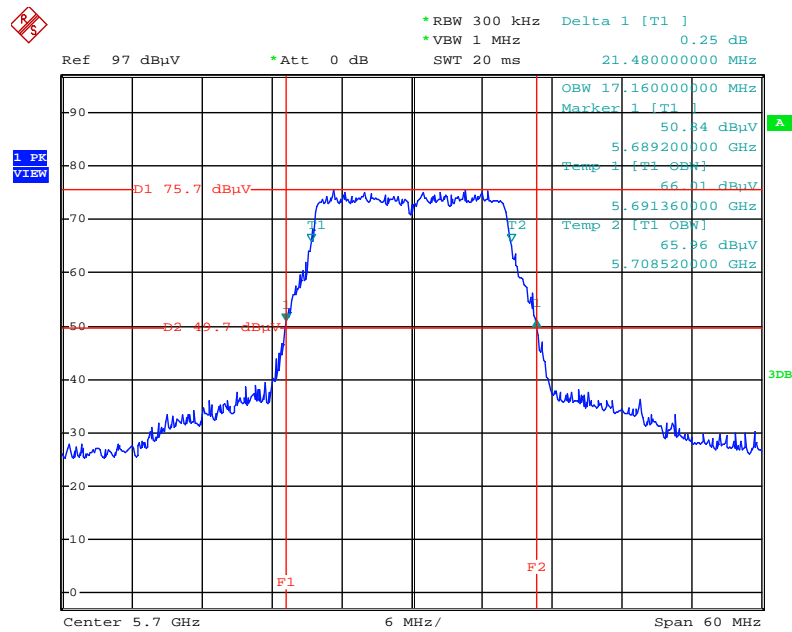
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5580 MHz



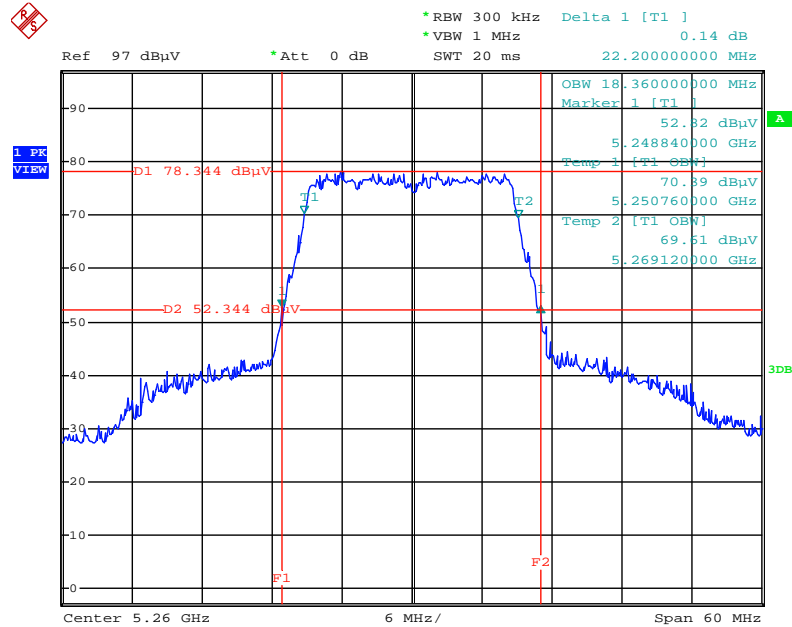
Date: 7.JAN.2016 17:28:48

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5700 MHz



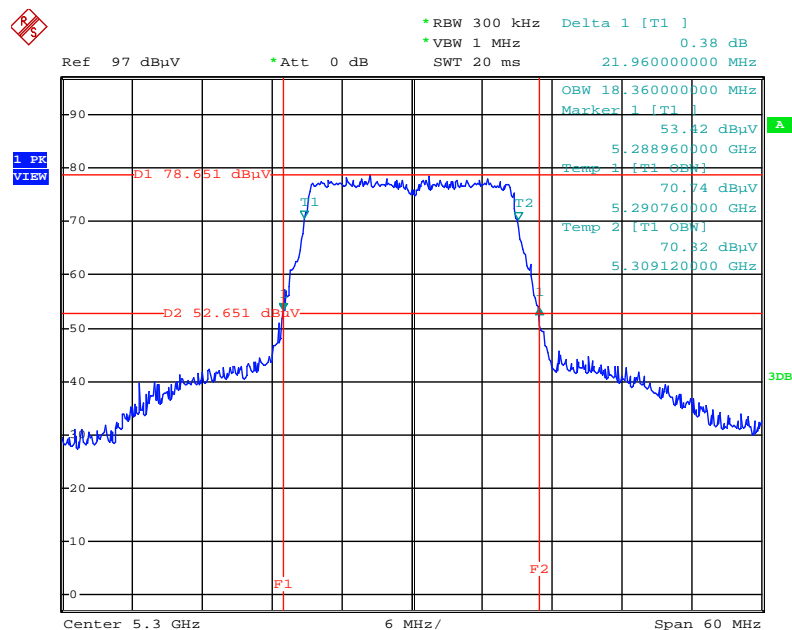
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5260 MHz



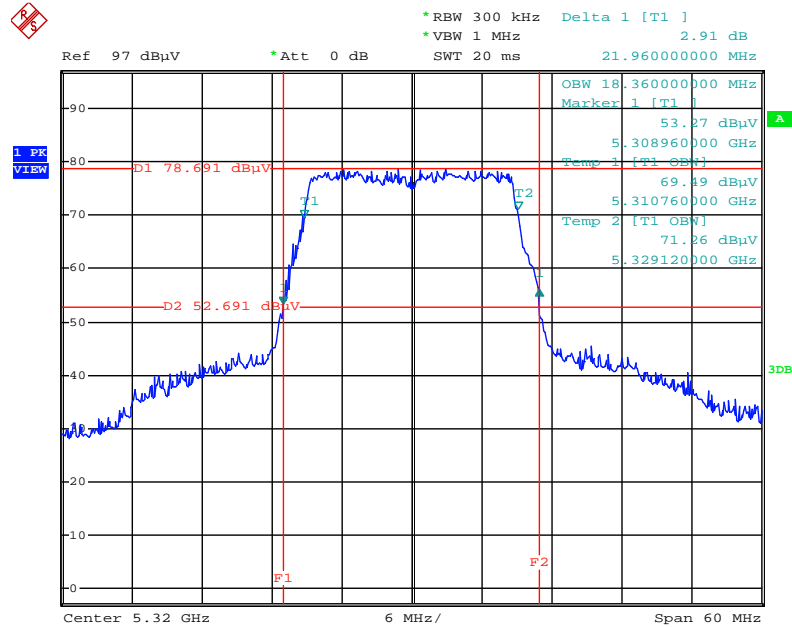
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5300 MHz



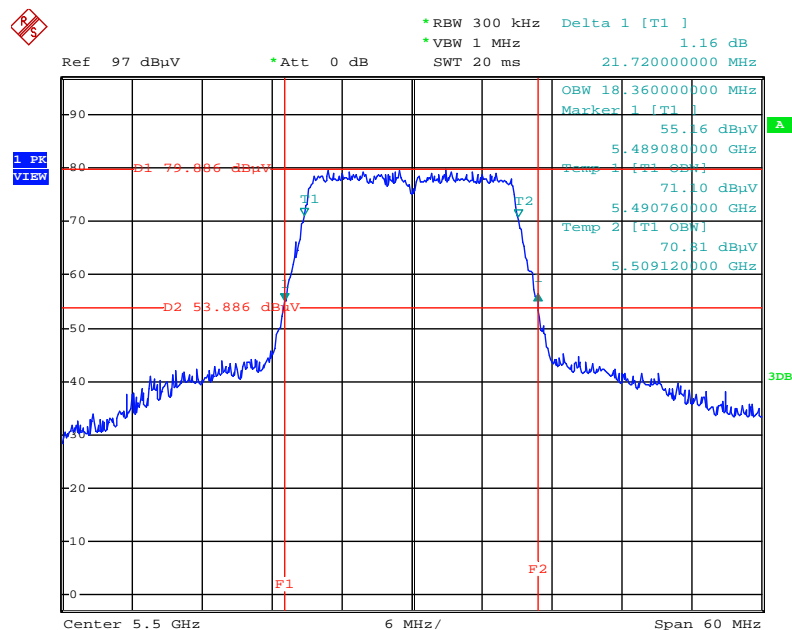
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5320 MHz



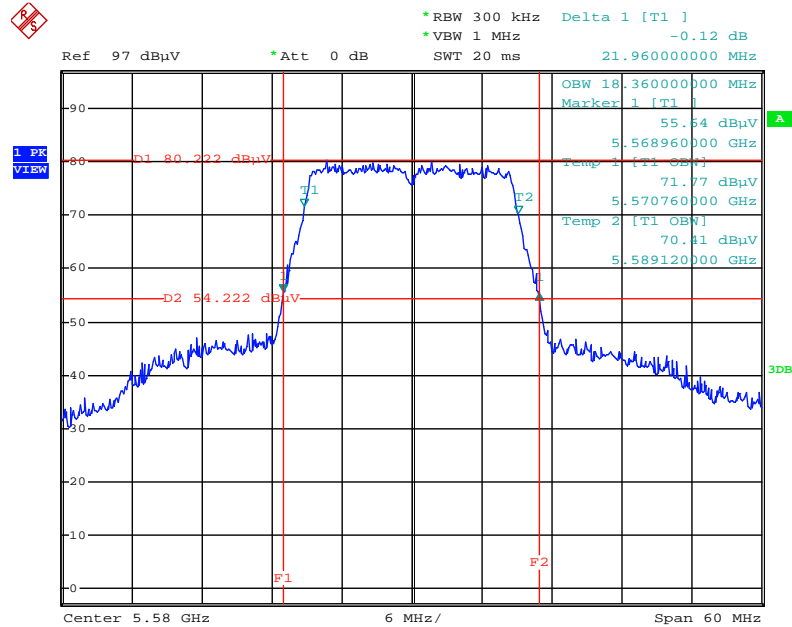
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5500 MHz



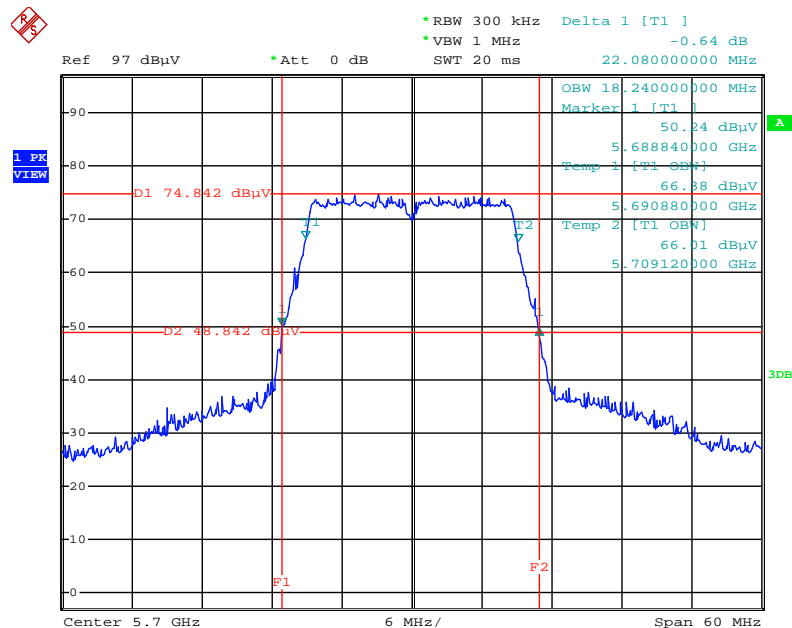
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5580 MHz



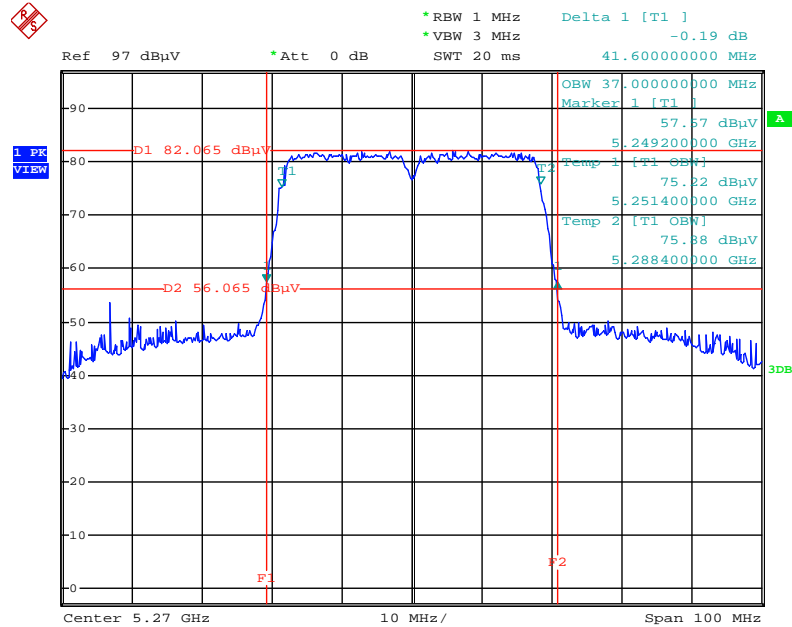
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5700 MHz



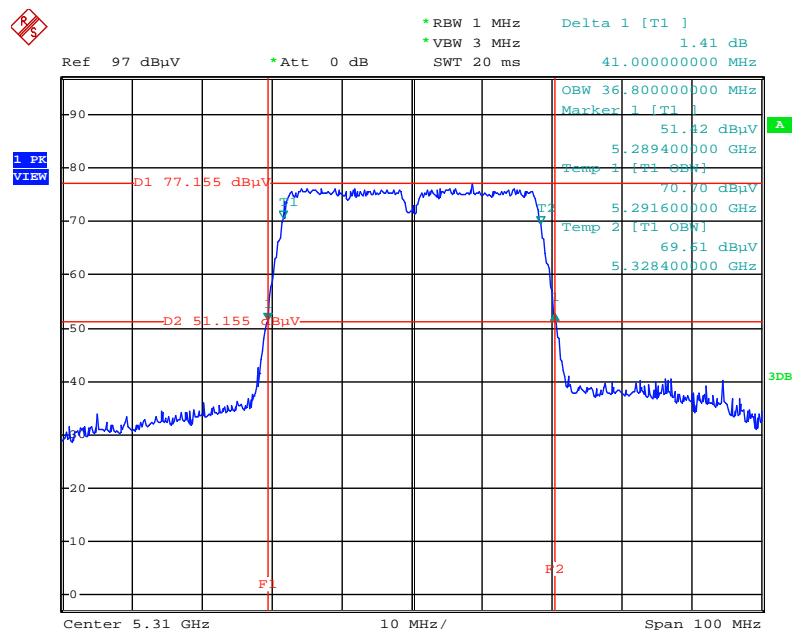
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5270 MHz



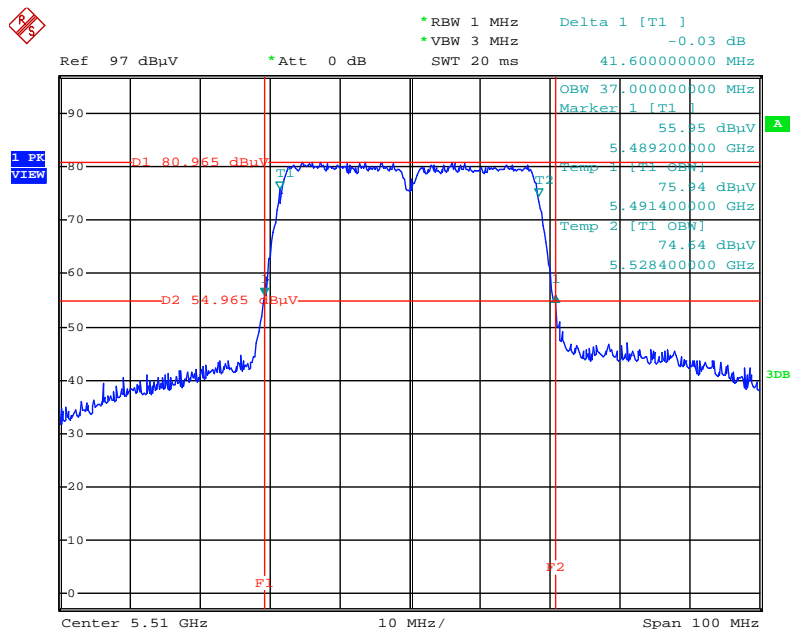
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5310 MHz



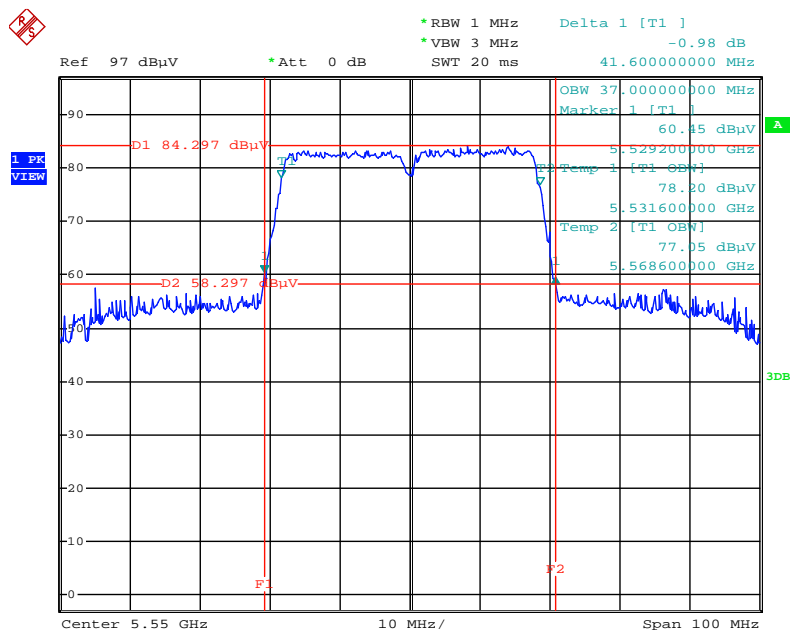
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5510 MHz



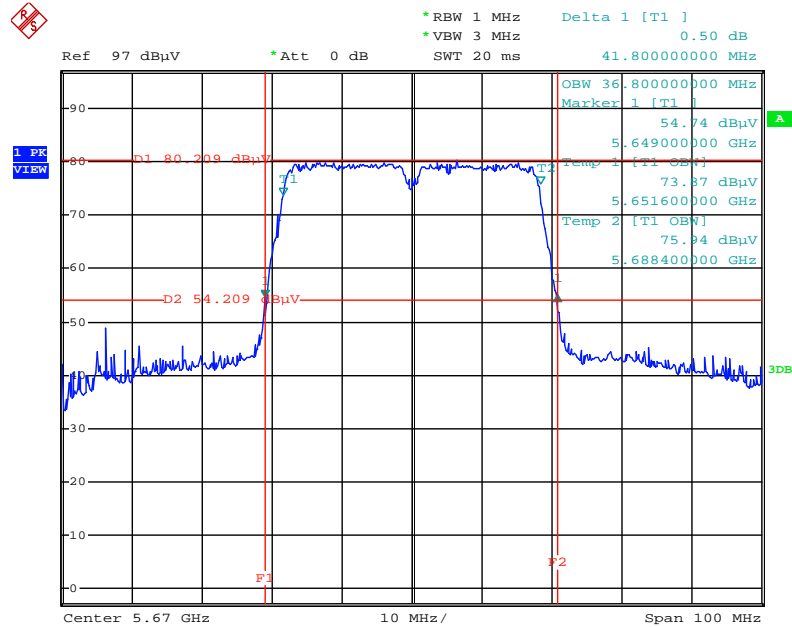
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5550 MHz



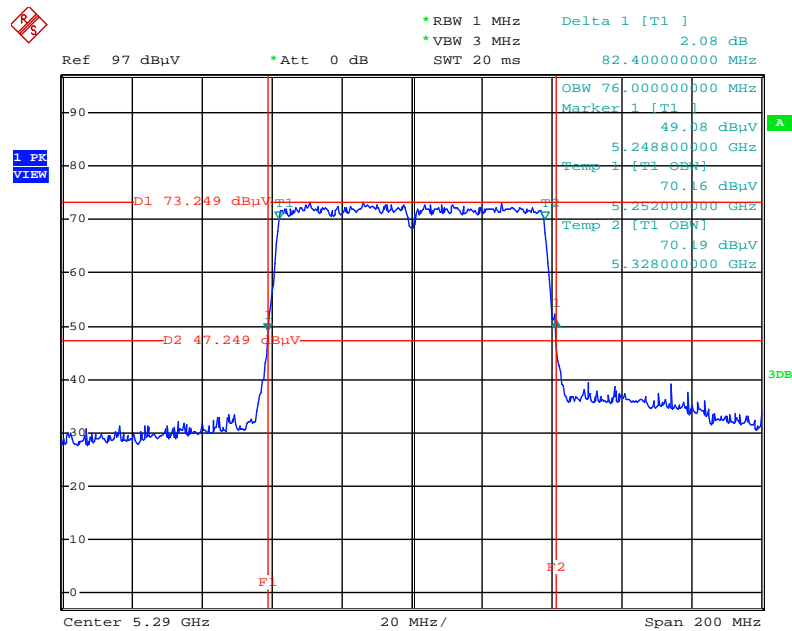
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5670 MHz



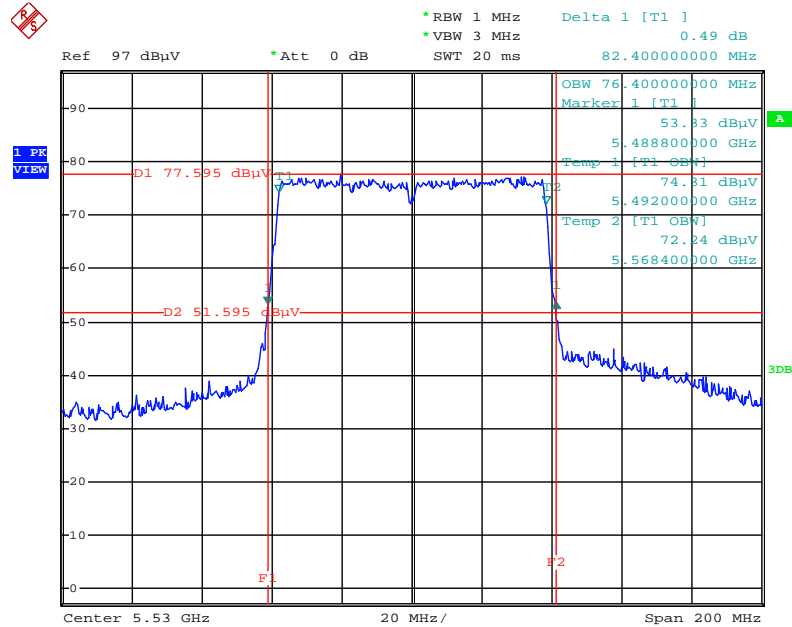
Date: 7.JAN.2016 17:47:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5290 MHz



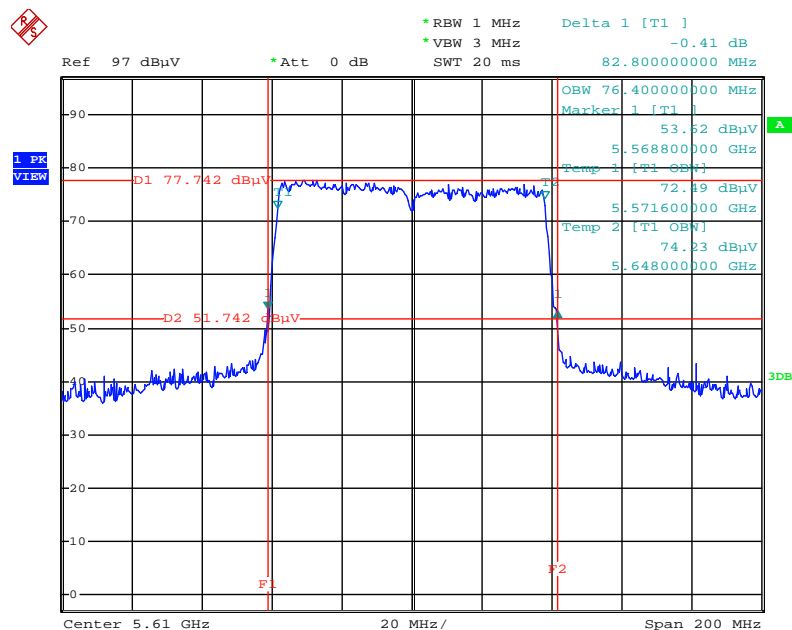
Date: 7.JAN.2016 17:48:52

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5530 MHz



Date: 7.JAN.2016 17:50:06

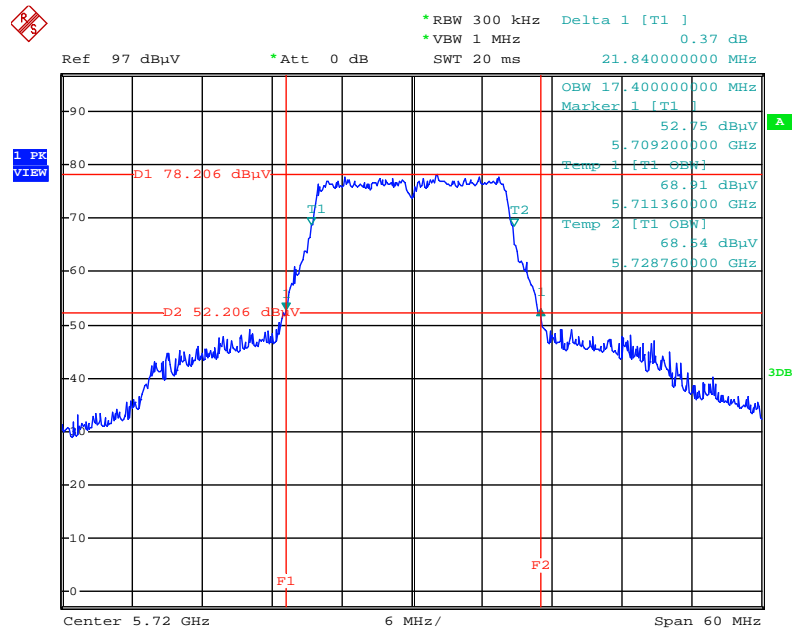
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5610 MHz



Date: 7.JAN.2016 17:50:55

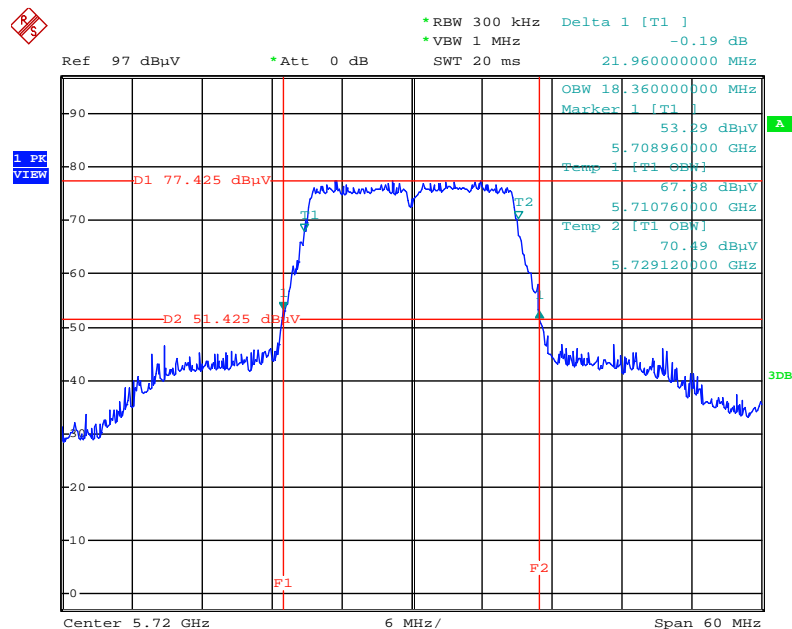
Straddle Channel

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz



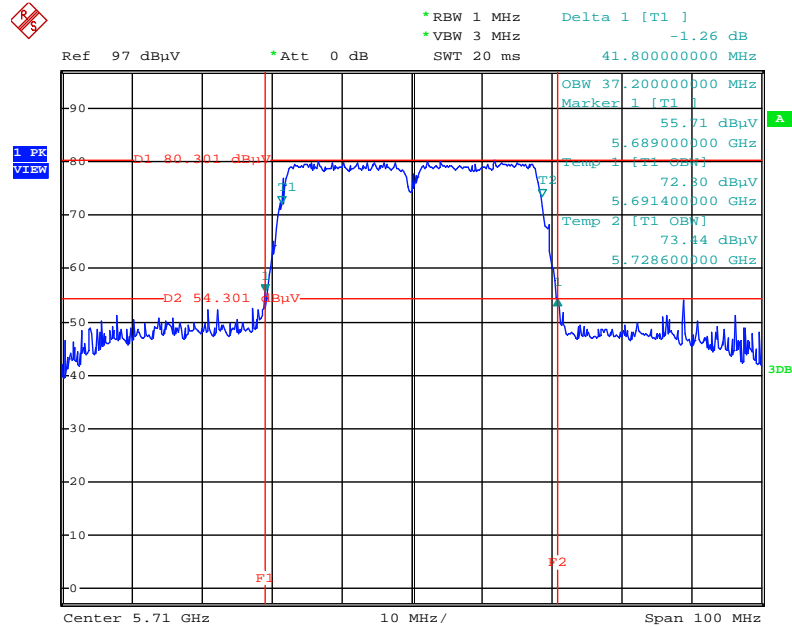
Date: 8.JAN.2016 09:40:00

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz



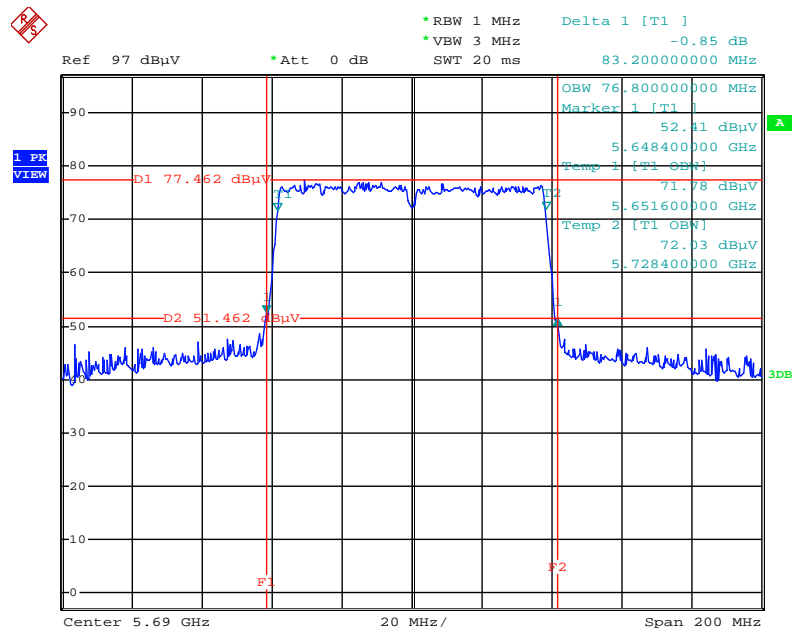
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz



Date: 8.JAN.2016 09:44:11

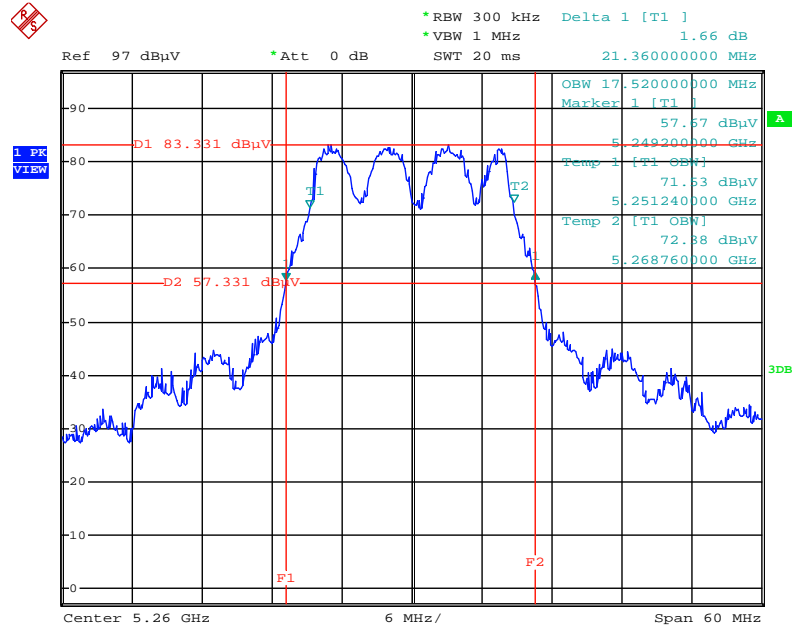
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz



Date: 8.JAN.2016 09:44:59

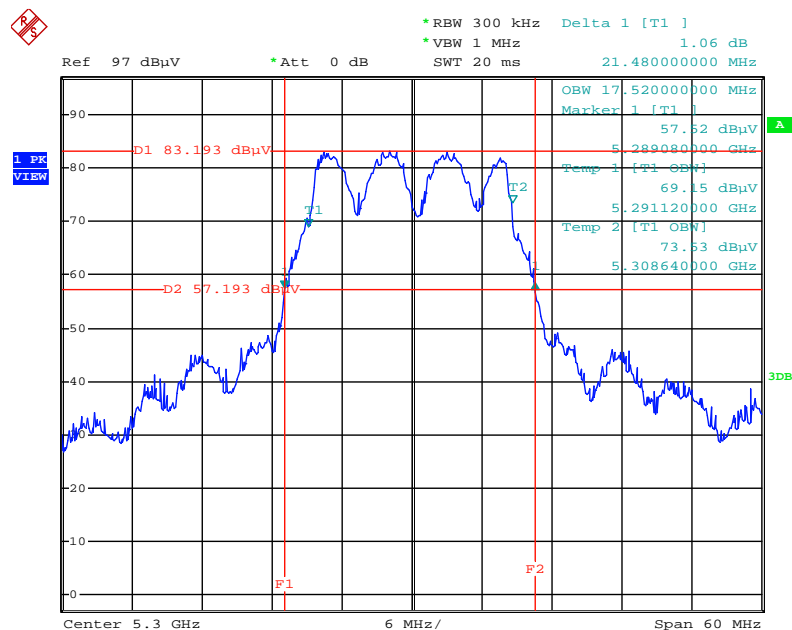
Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5260 MHz



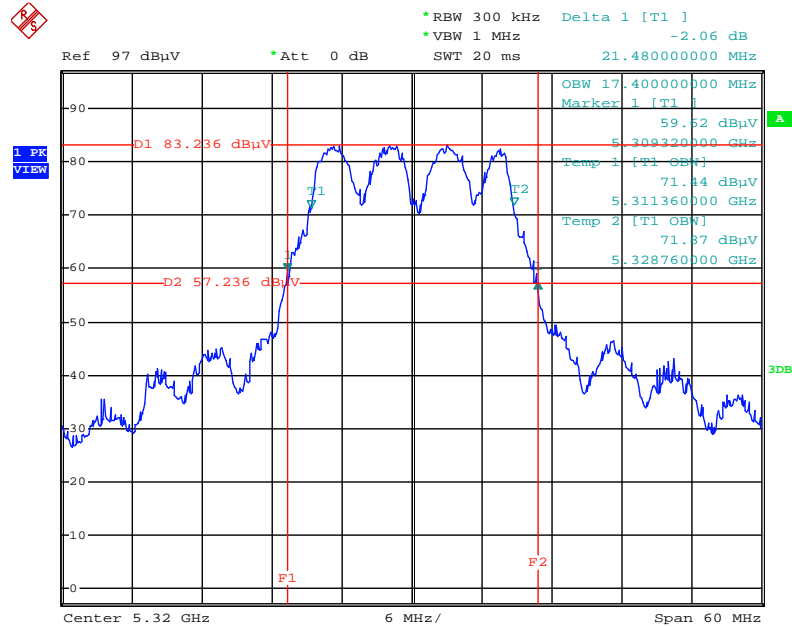
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5300 MHz



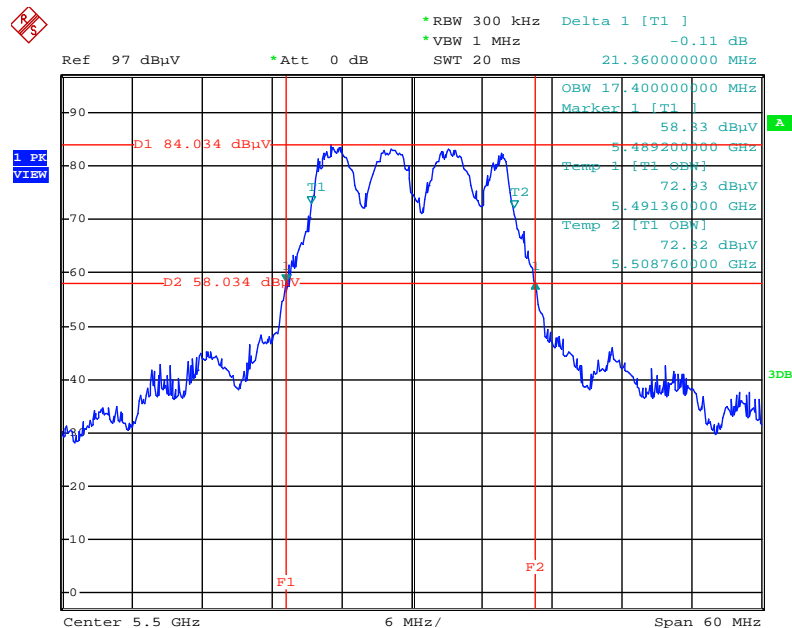
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5320 MHz



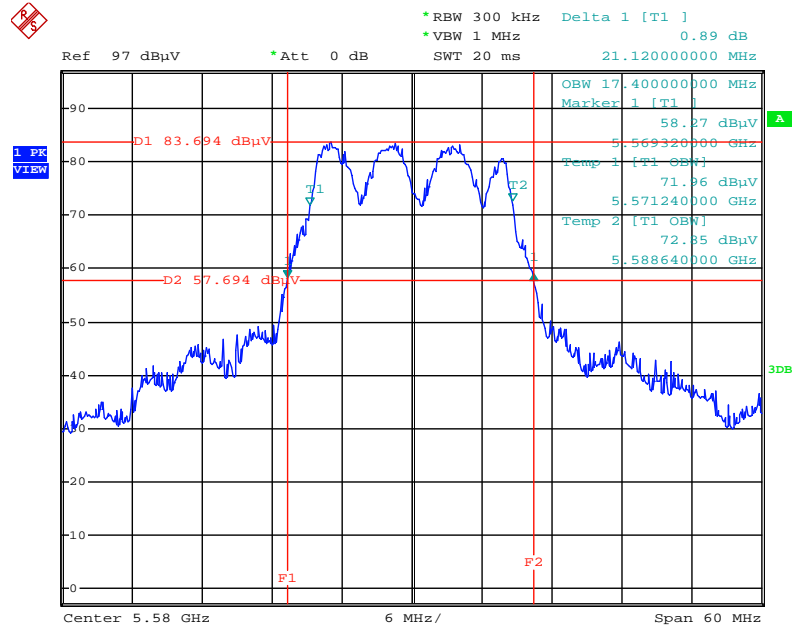
Date: 7.JAN.2016 18:08:03

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5500 MHz



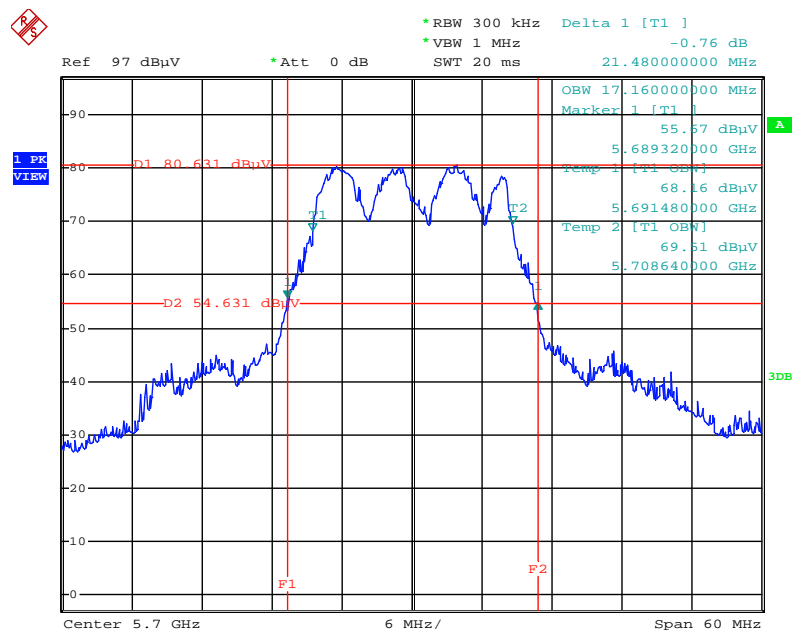
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5580 MHz



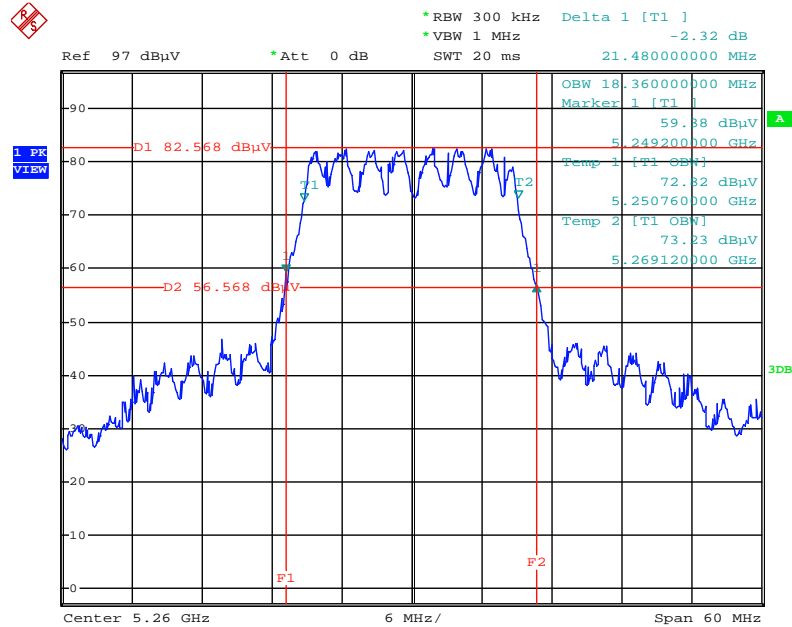
Date: 7.JAN.2016 18:10:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5700 MHz



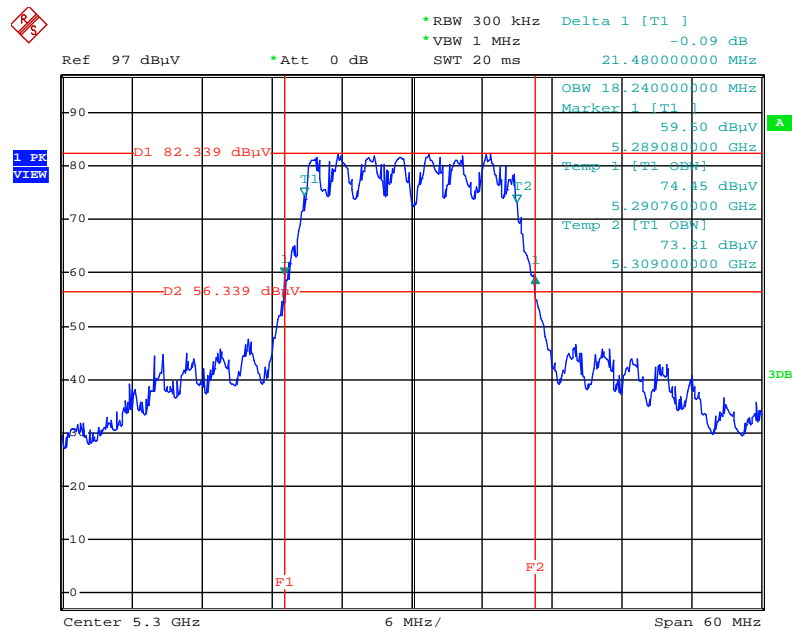
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5260 MHz



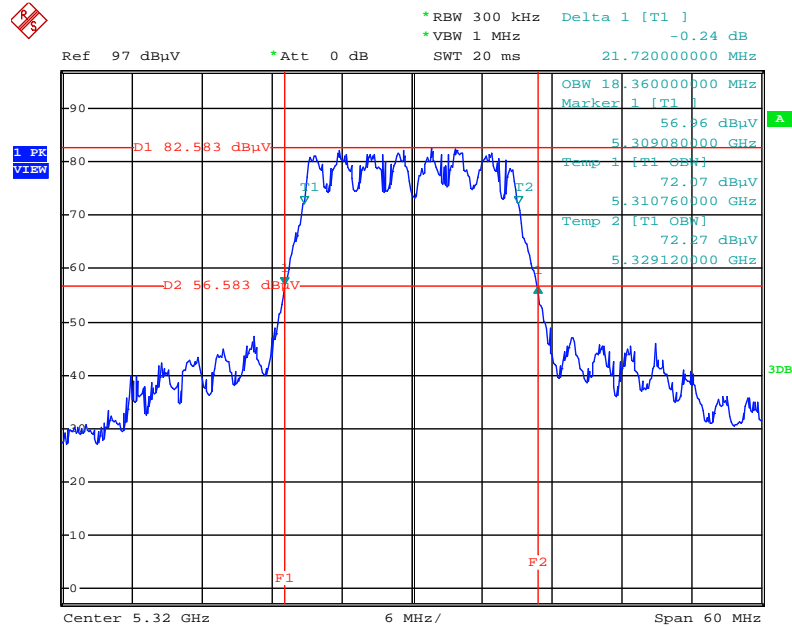
Date: 7.JAN.2016 18:12:48

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5300 MHz



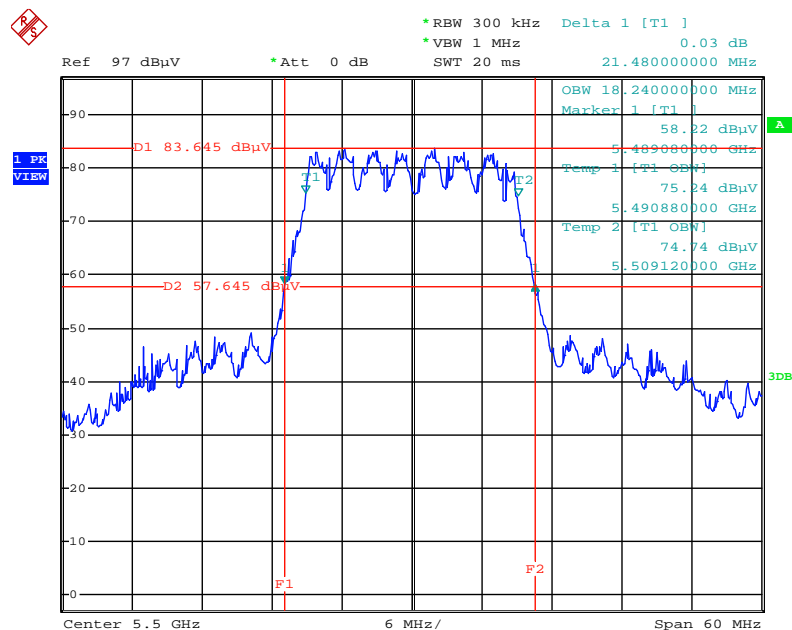
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5320 MHz



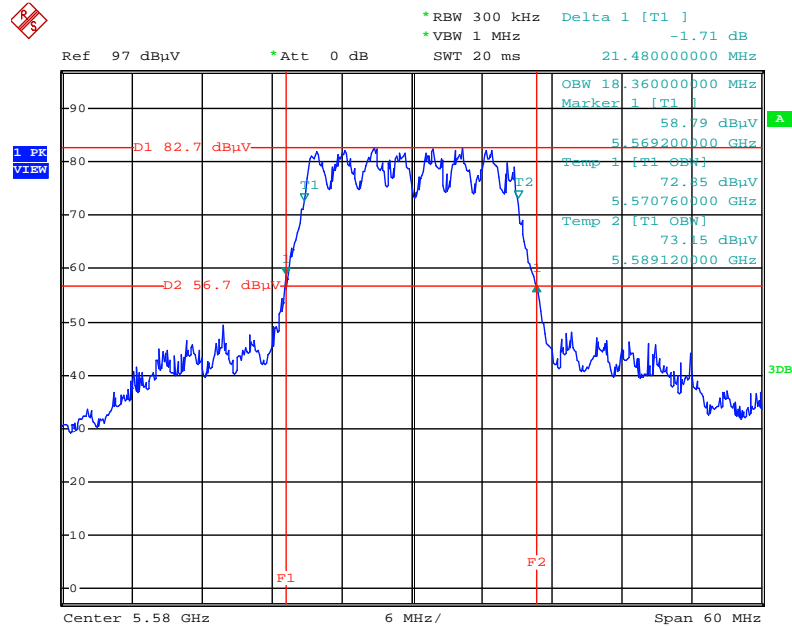
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5500 MHz



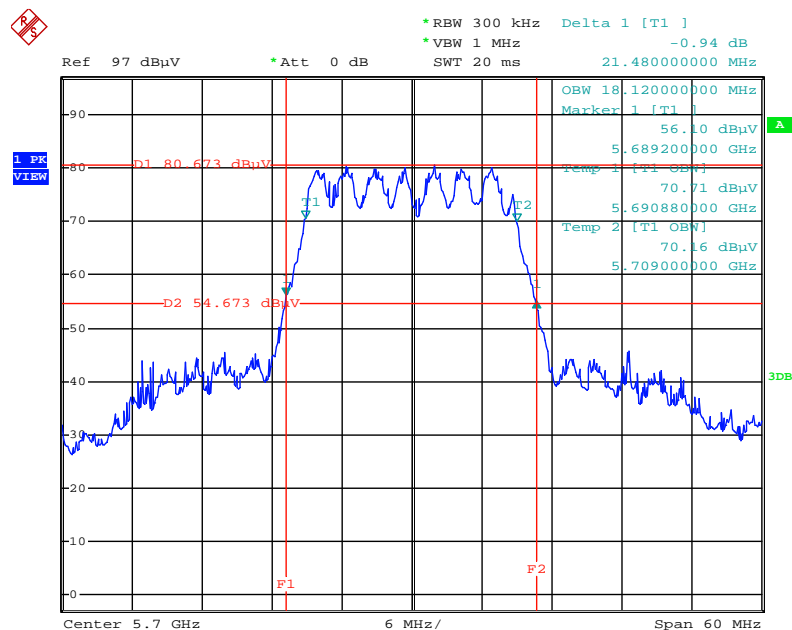
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5580 MHz



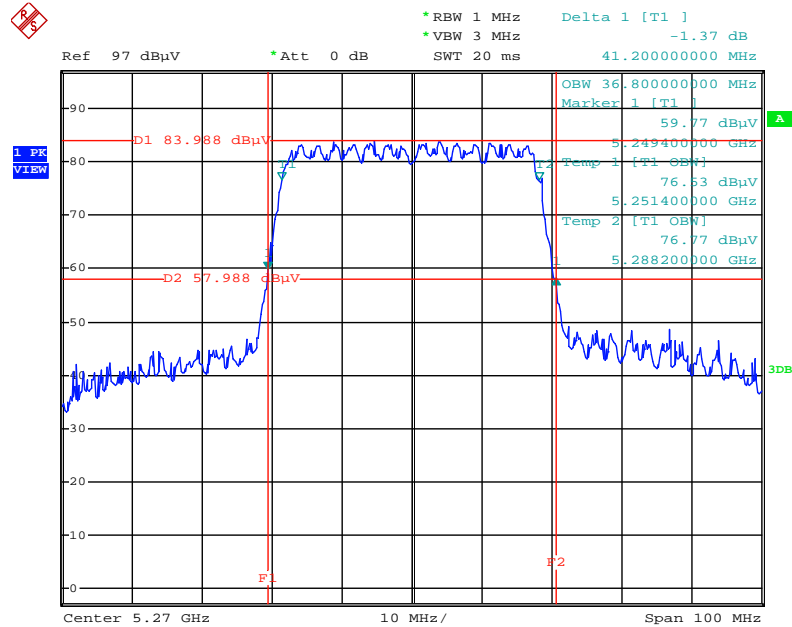
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5700 MHz



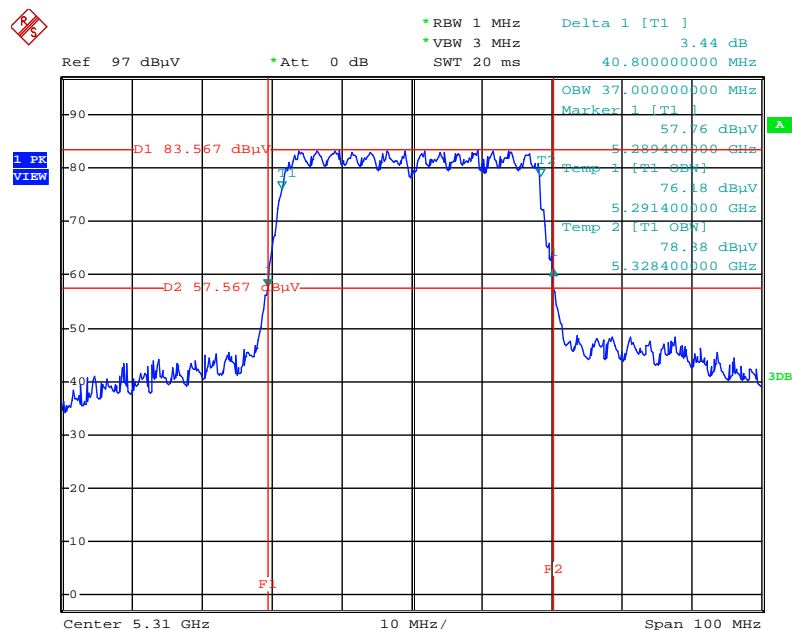
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5270 MHz



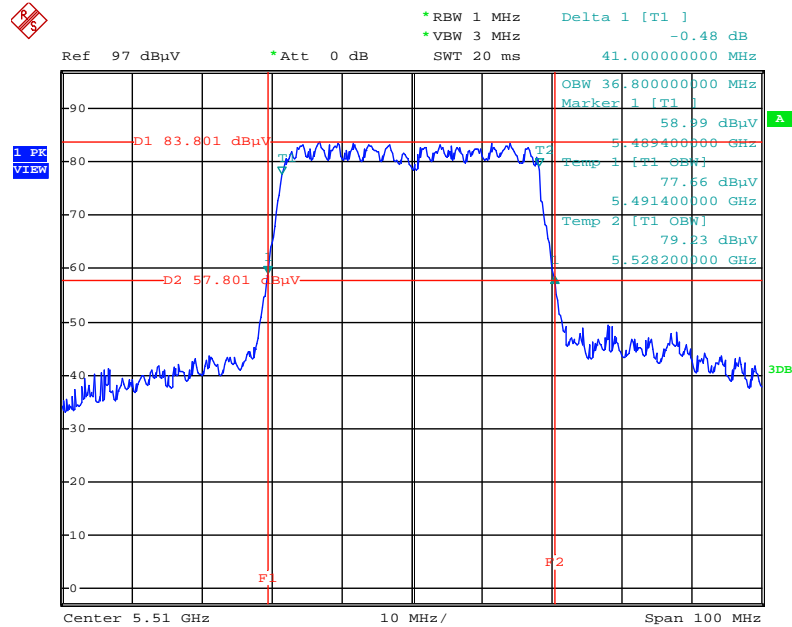
Date: 7.JAN.2016 18:22:57

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5310 MHz



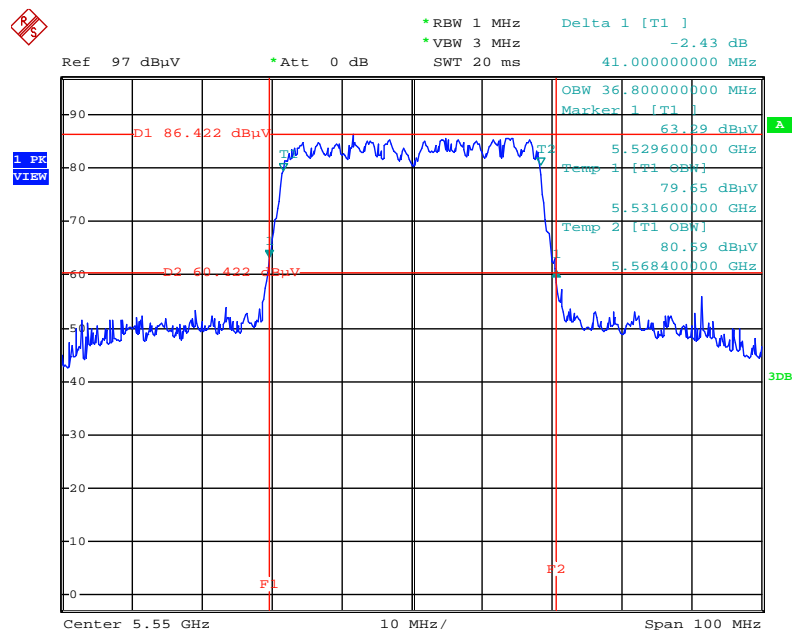
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5510 MHz



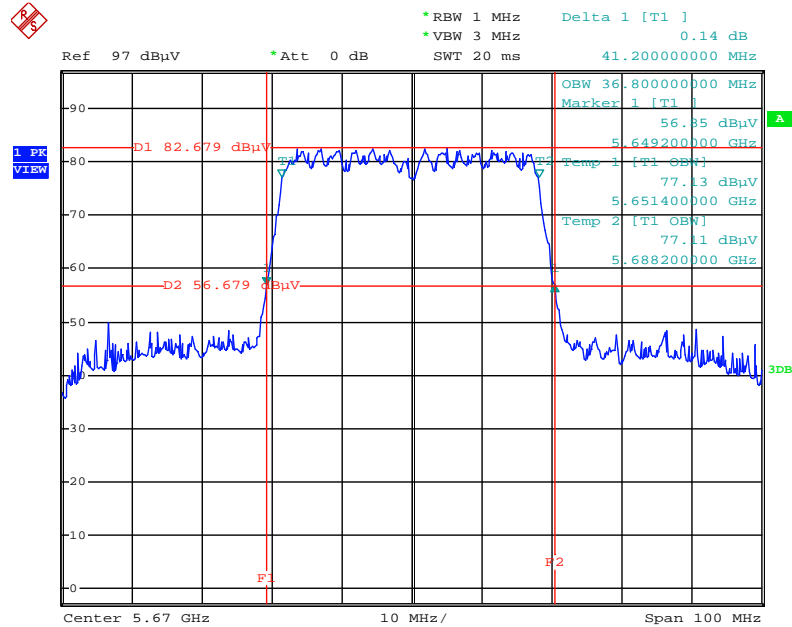
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5550 MHz



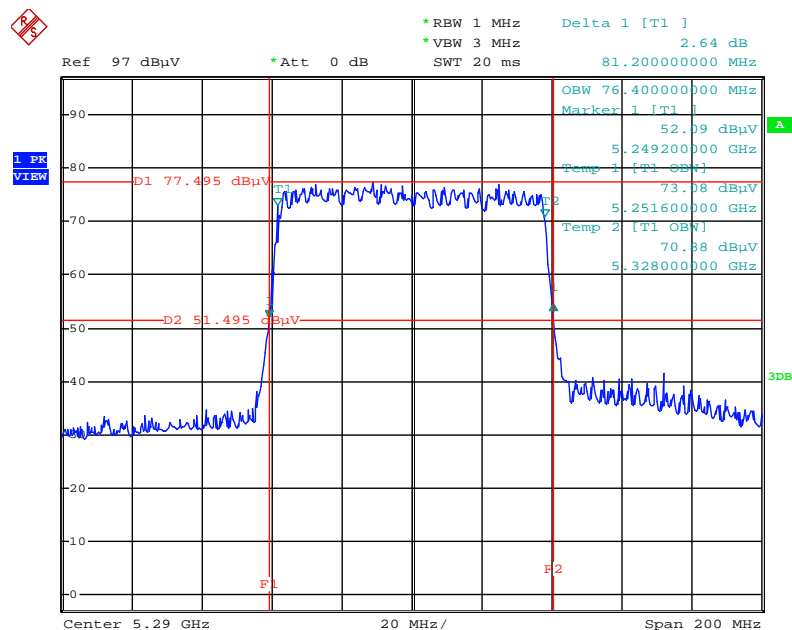
Date: 7.JAN.2016 18:26:23

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5670 MHz



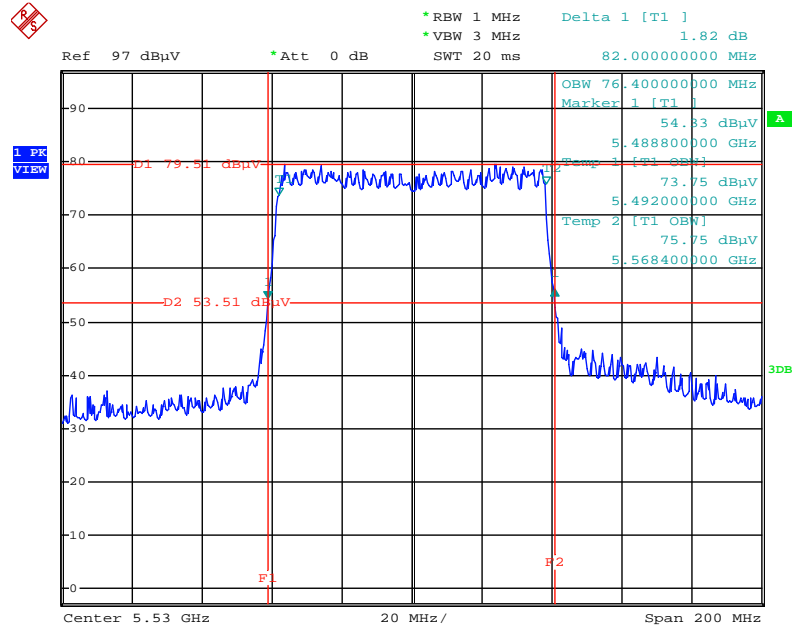
Date: 7.JAN.2016 18:27:19

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5290 MHz



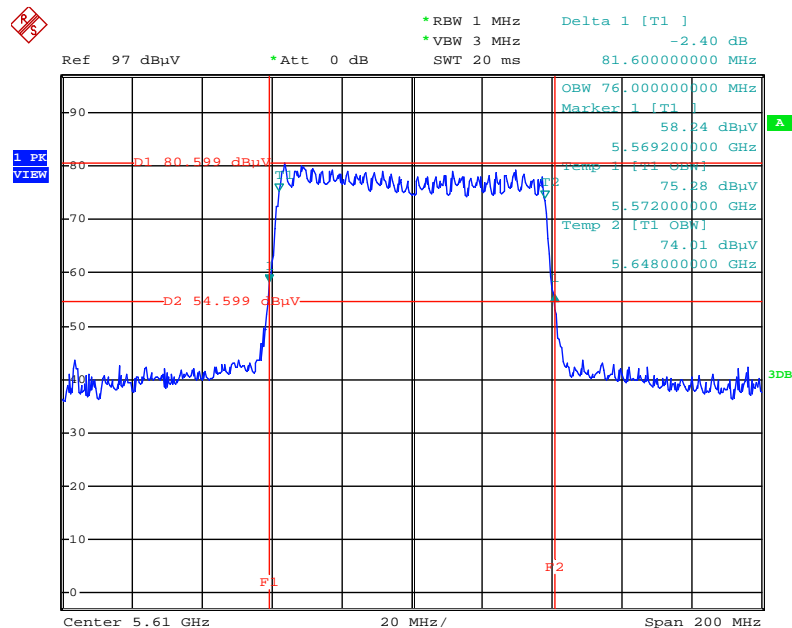
Date: 7.JAN.2016 18:28:42

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5530 MHz



Date: 7.JAN.2016 18:29:49

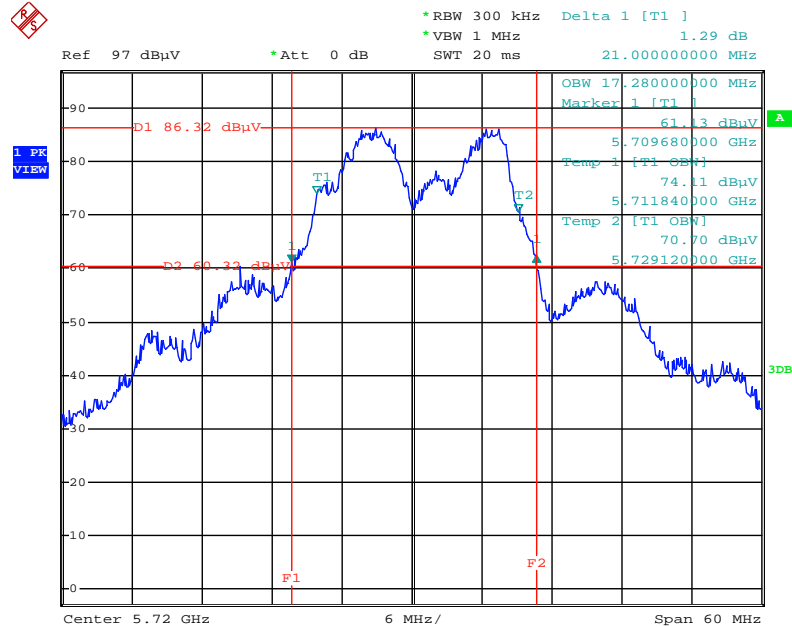
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5610 MHz



Date: 7.JAN.2016 18:30:50

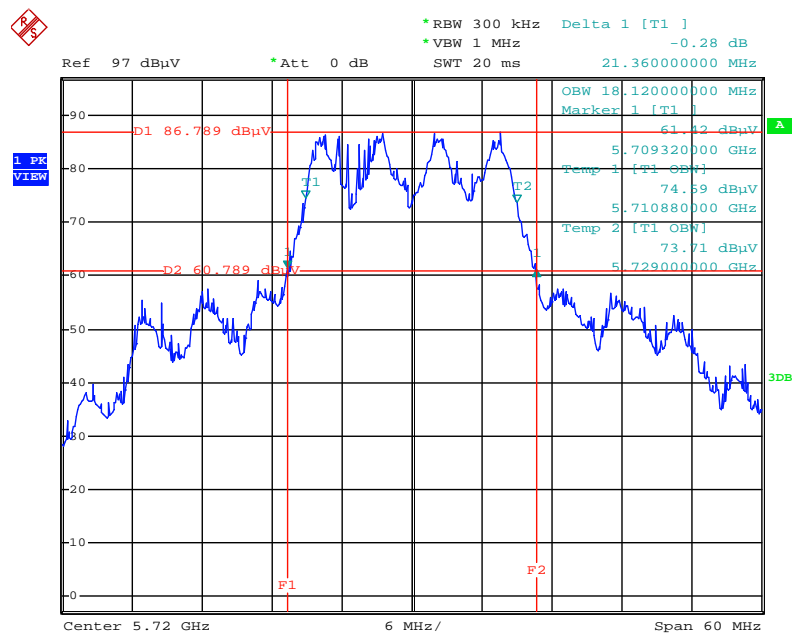
Straddle Channel

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5720 MHz



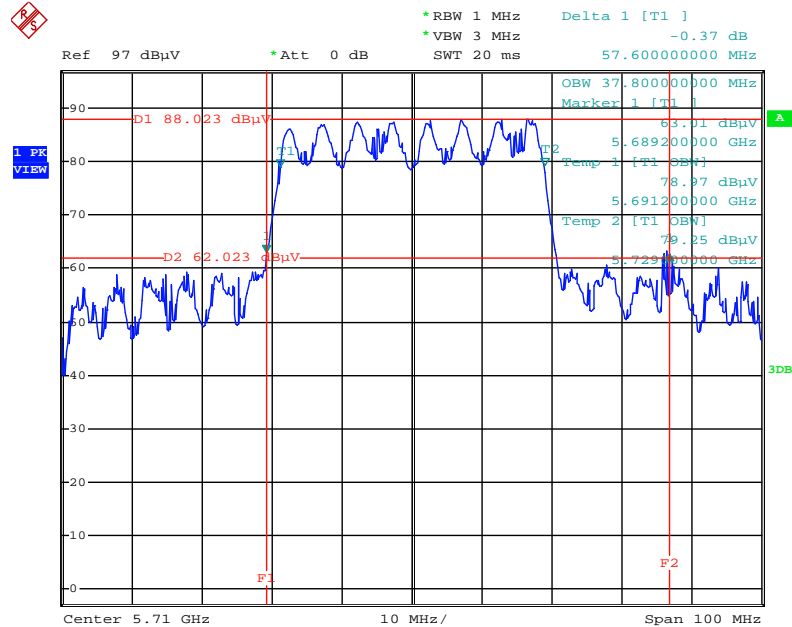
Date: 8.JAN.2016 09:55:08

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5720 MHz



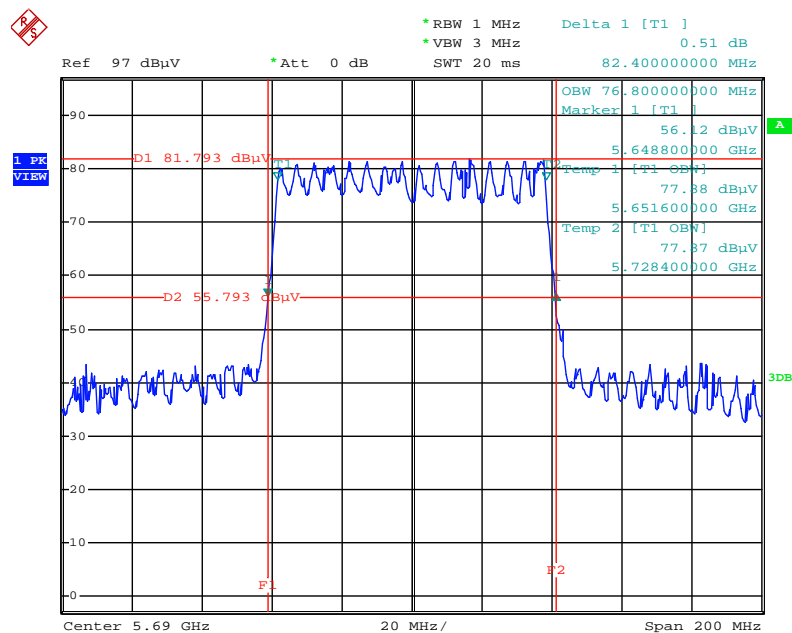
Date: 8.JAN.2016 09:54:06

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5710 MHz



Date: 8.JAN.2016 09:53:30

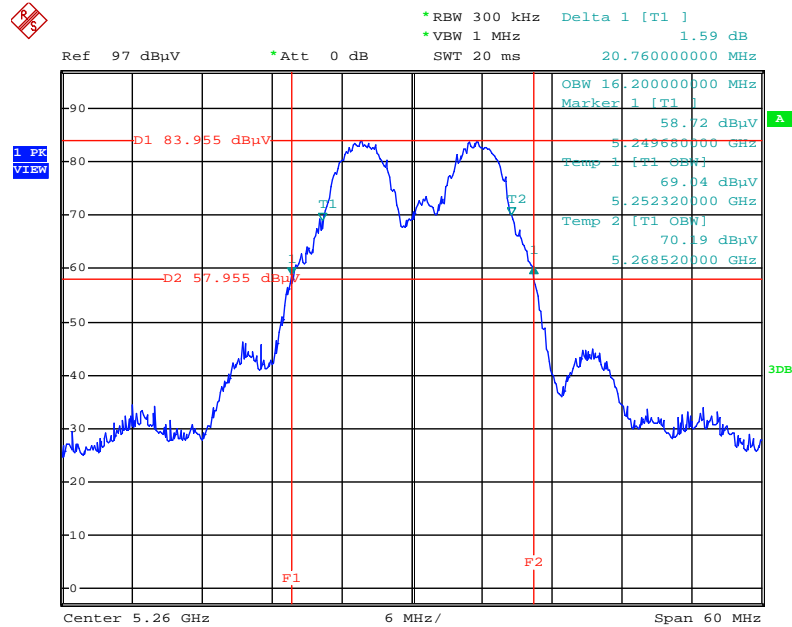
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5690 MHz



Date: 8.JAN.2016 13:54:46

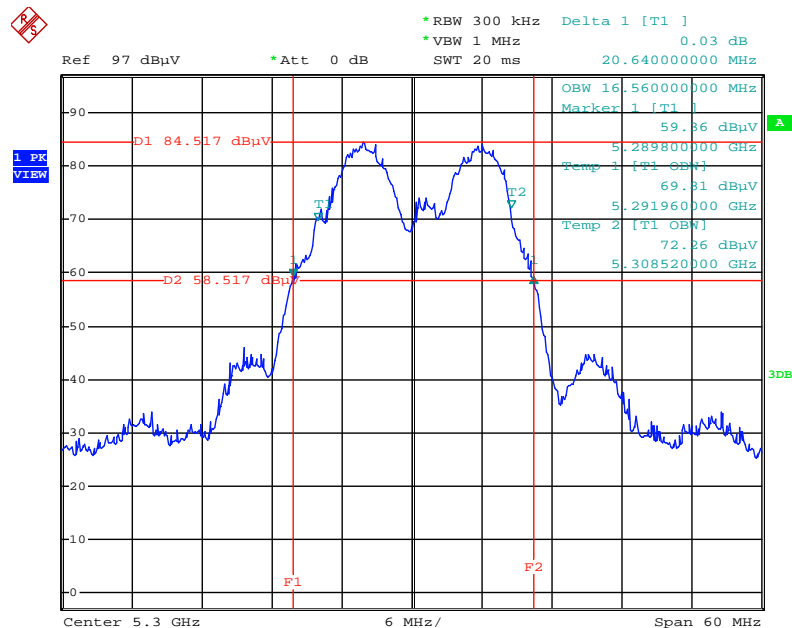
Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5260 MHz



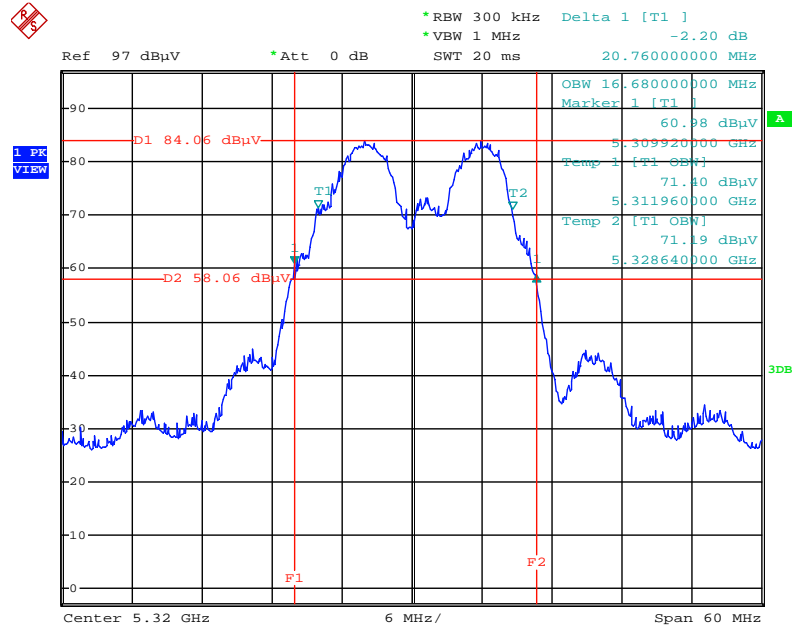
Date: 7.JAN.2016 19:32:36

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5300 MHz



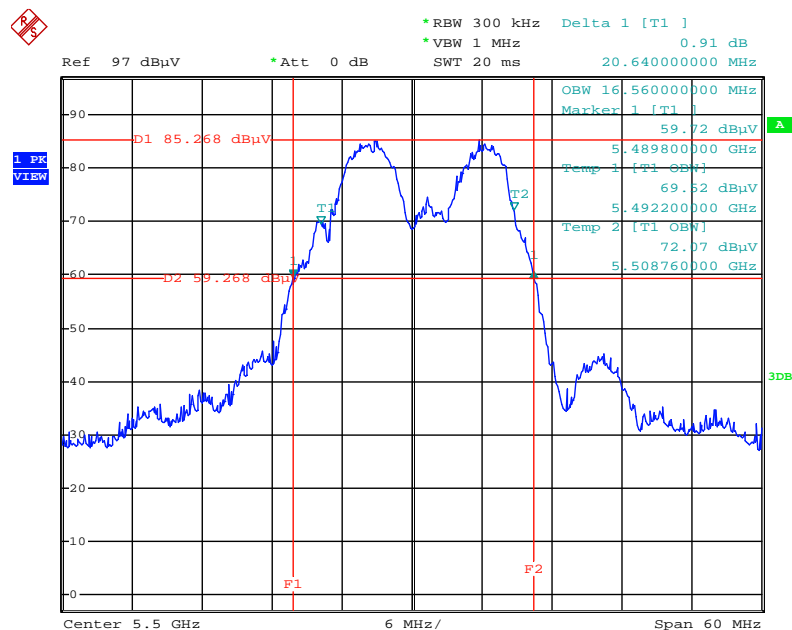
Date: 7.JAN.2016 19:37:09

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5320 MHz



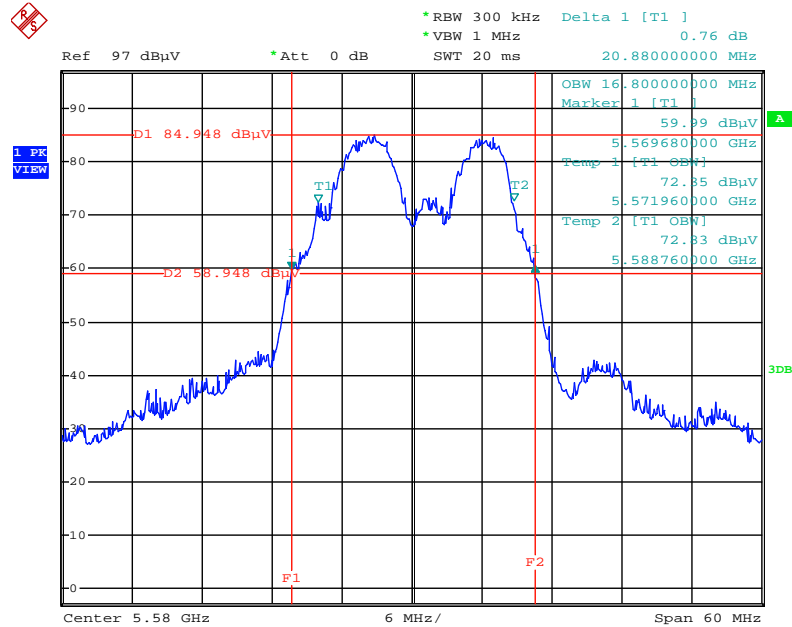
Date: 7.JAN.2016 19:37:34

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5500 MHz



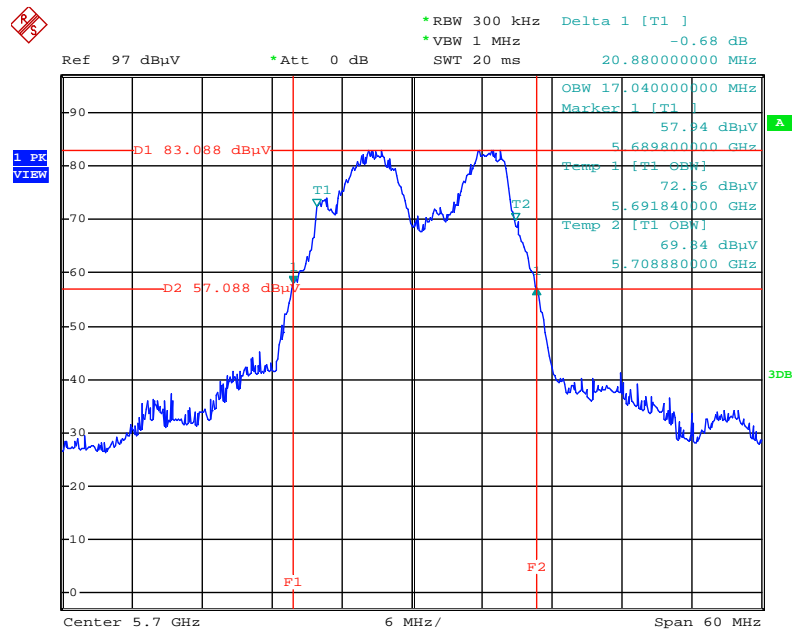
Date: 7.JAN.2016 19:38:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5580 MHz



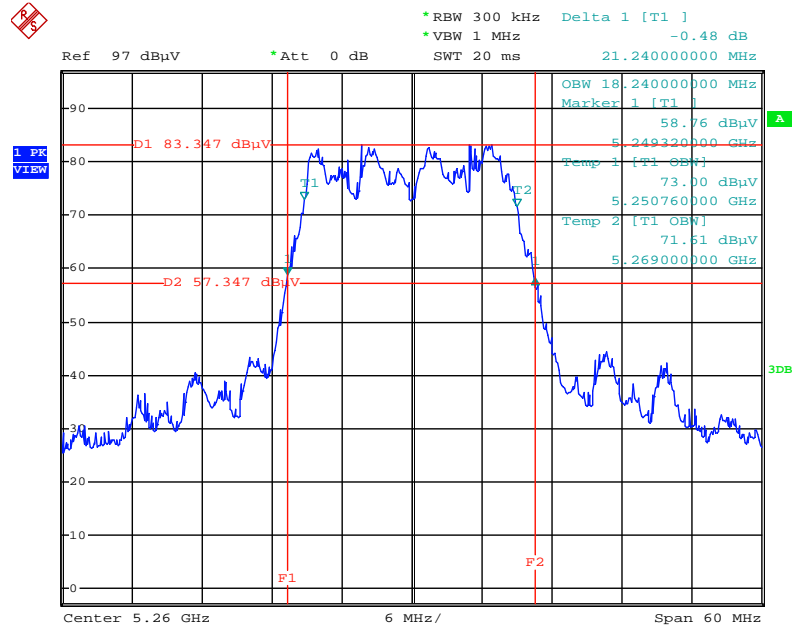
Date: 7.JAN.2016 19:39:02

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5700 MHz



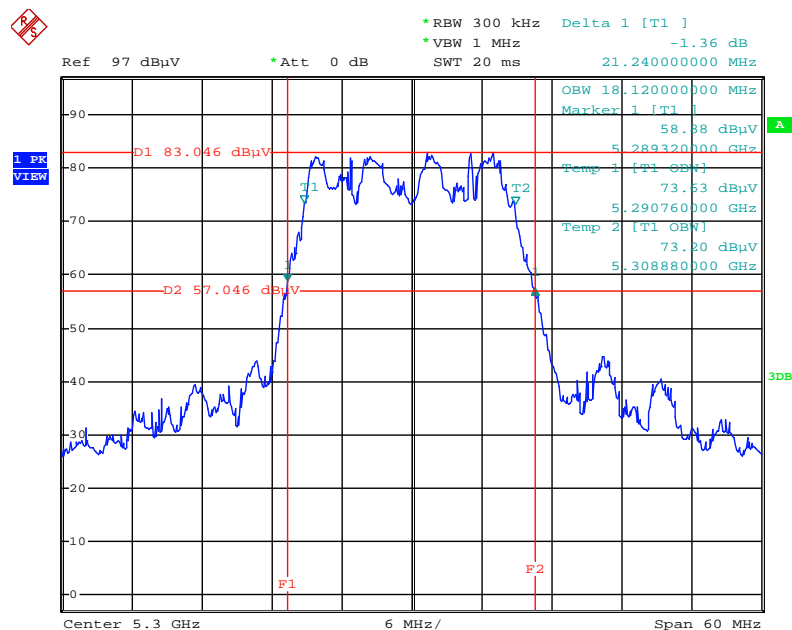
Date: 7.JAN.2016 19:39:30

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5260 MHz



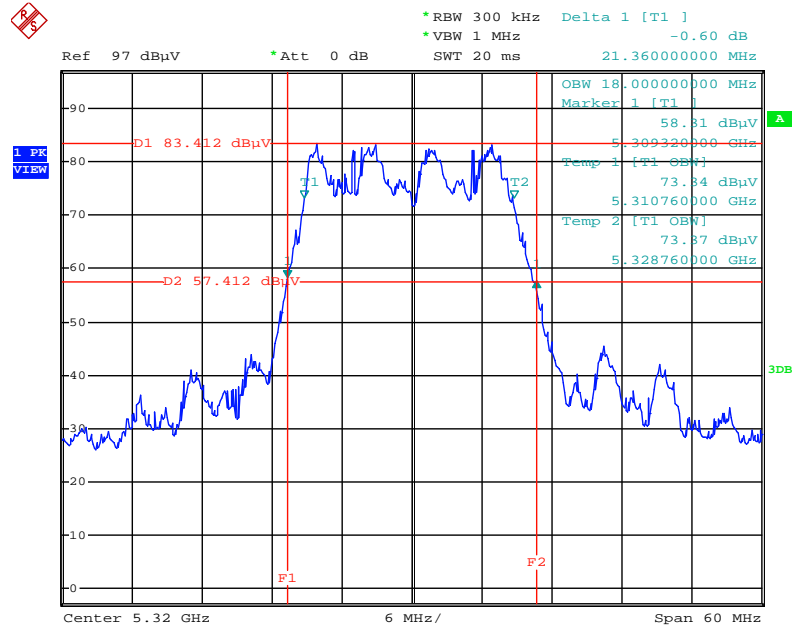
Date: 7.JAN.2016 19:46:11

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5300 MHz



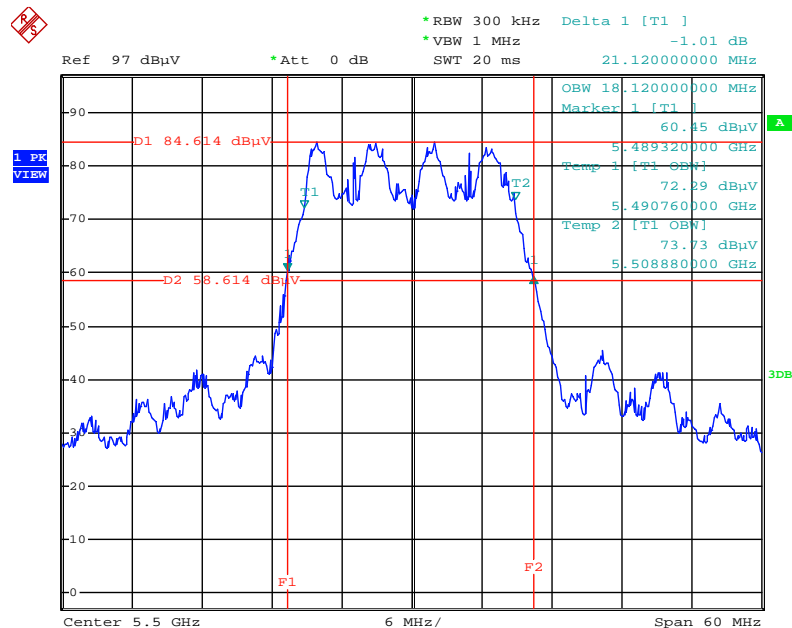
Date: 7.JAN.2016 19:47:31

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5320 MHz



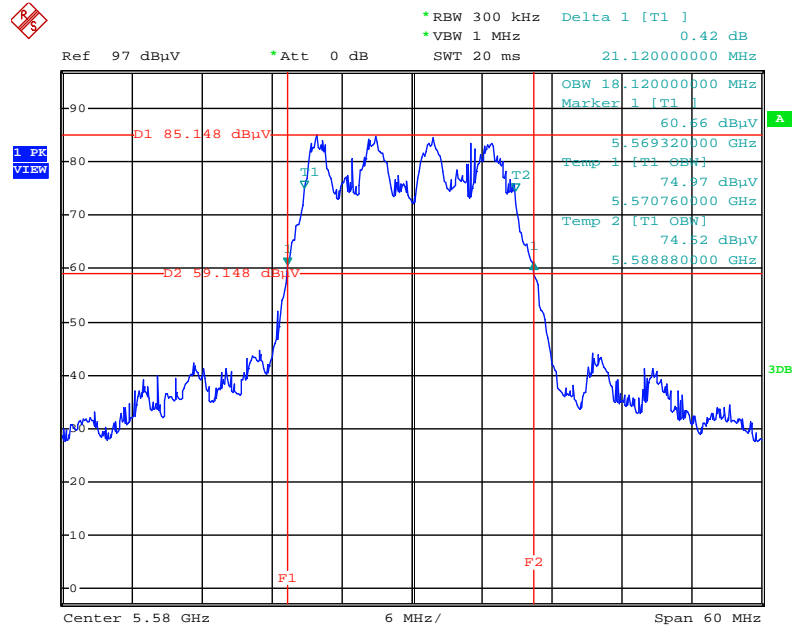
Date: 7.JAN.2016 19:47:56

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5500 MHz



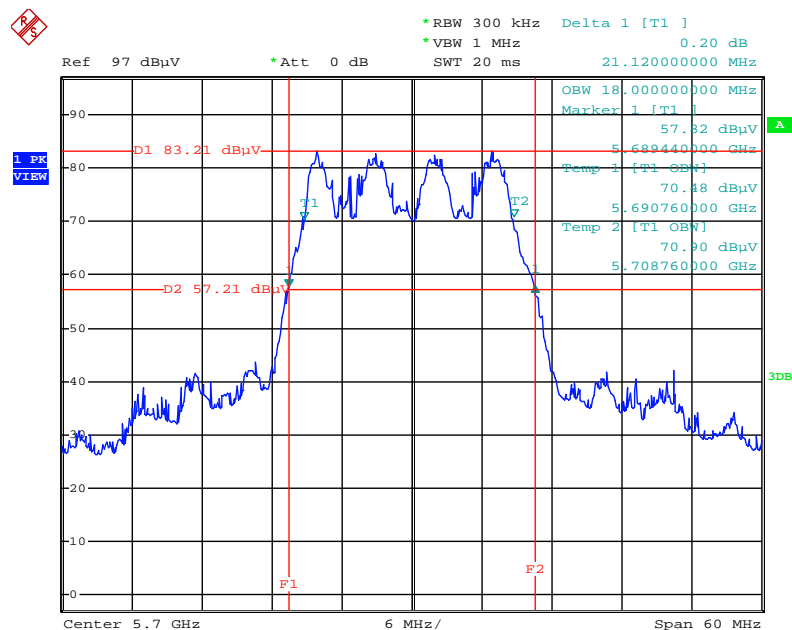
Date: 7.JAN.2016 19:48:50

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5580 MHz



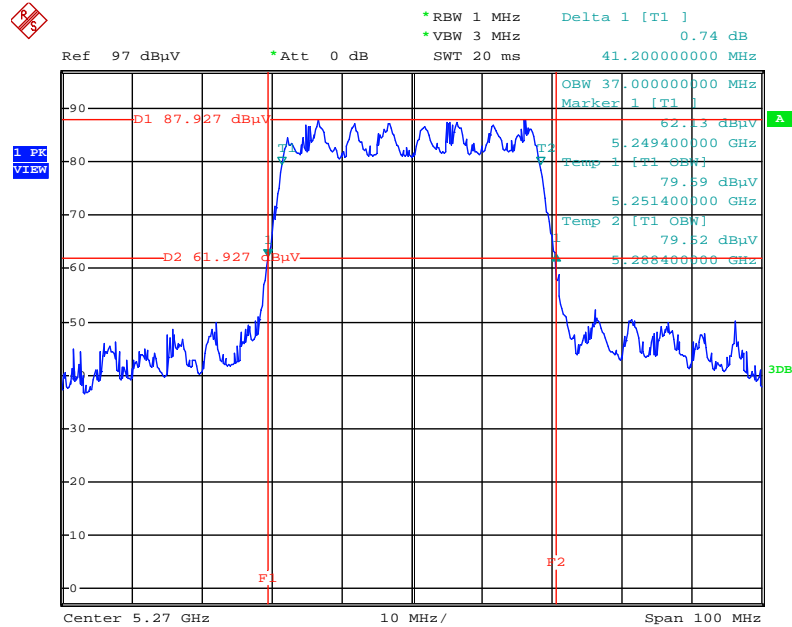
Date: 7.JAN.2016 19:49:20

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5700 MHz



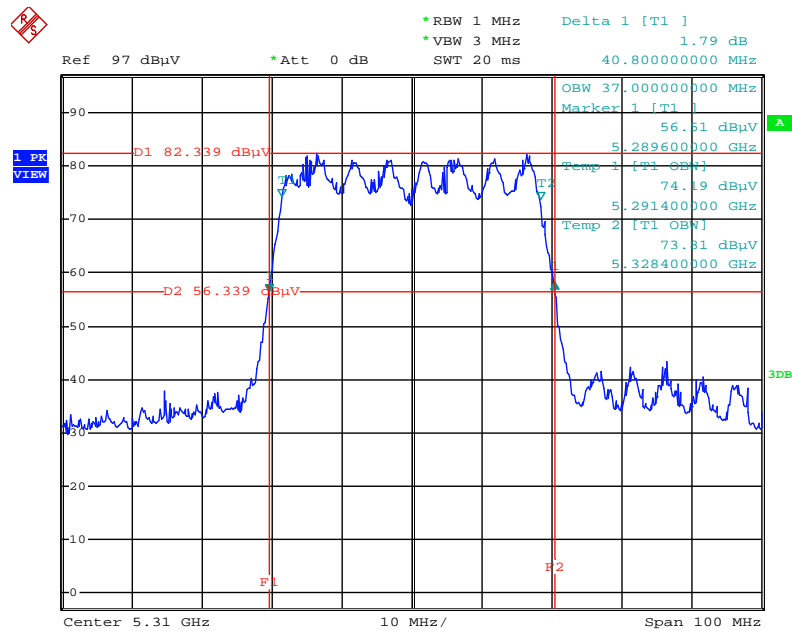
Date: 7.JAN.2016 19:49:45

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5270 MHz



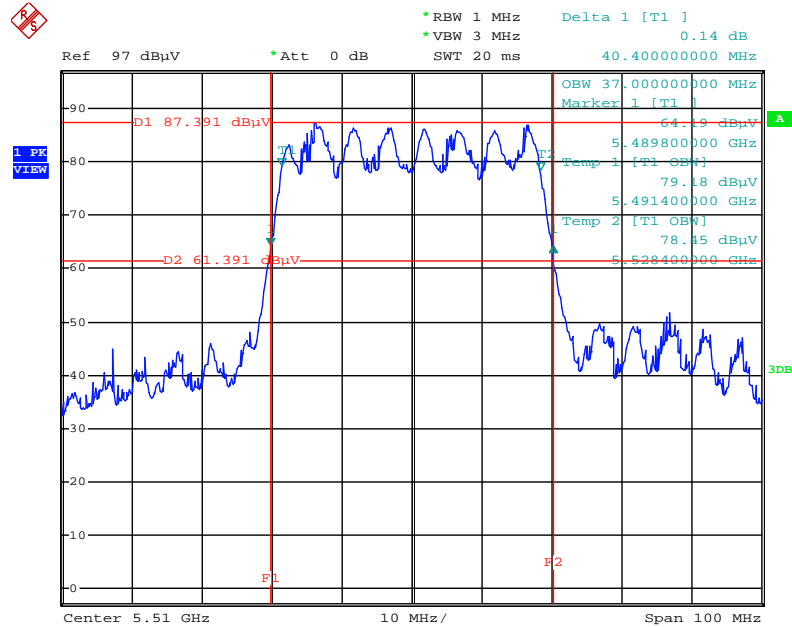
Date: 7.JAN.2016 19:51:50

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5310 MHz



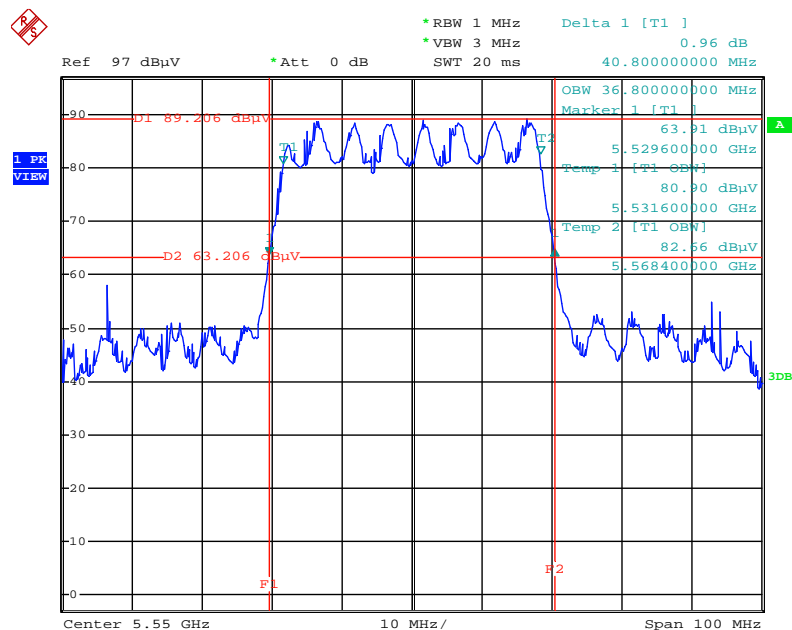
Date: 7.JAN.2016 19:52:56

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5510 MHz



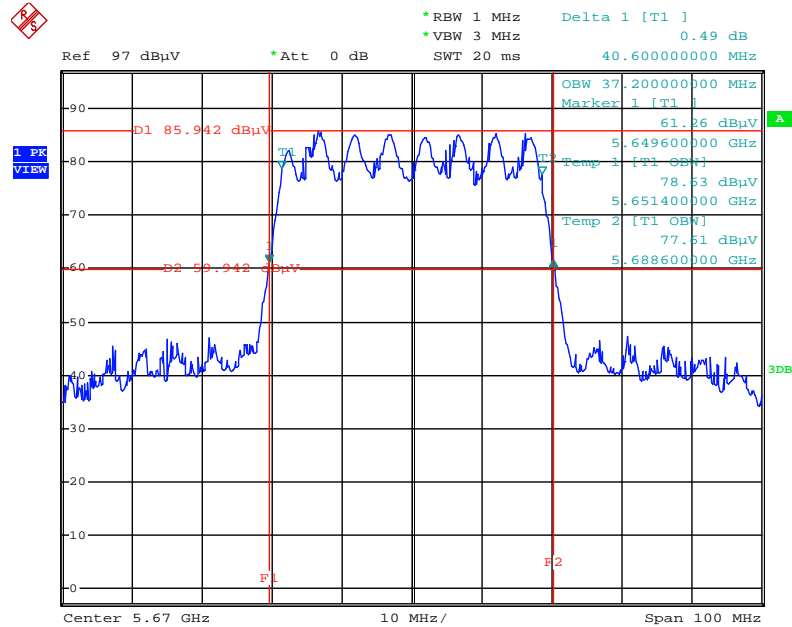
Date: 7.JAN.2016 19:53:36

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5550 MHz



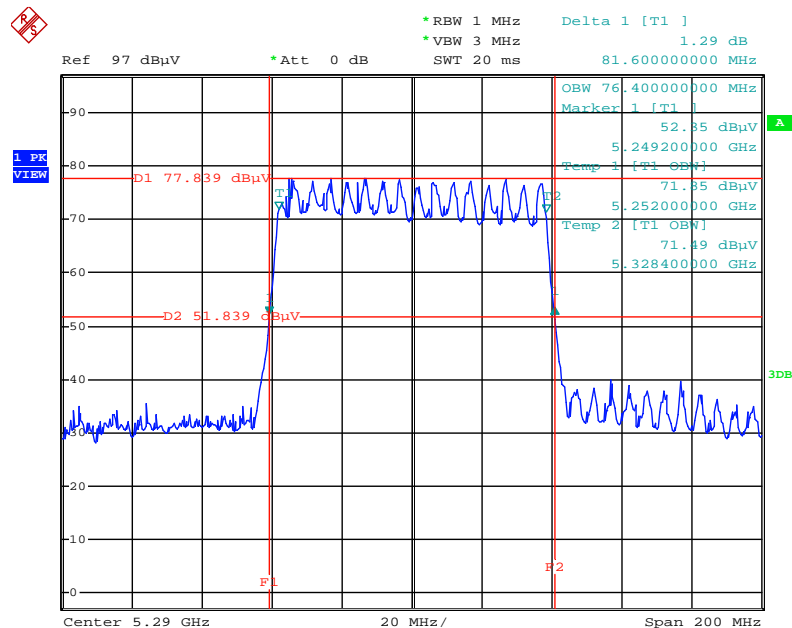
Date: 7.JAN.2016 19:54:05

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5670 MHz



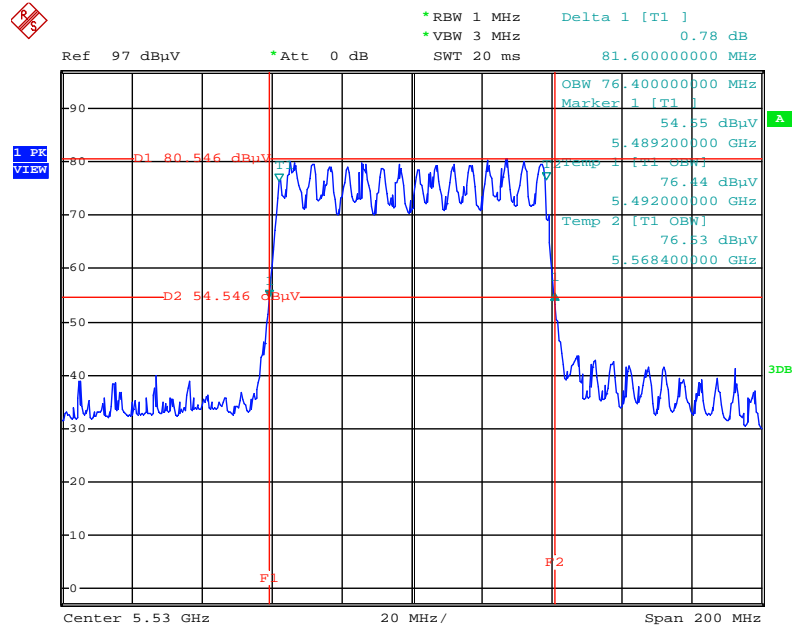
Date: 7.JAN.2016 19:54:38

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5290 MHz



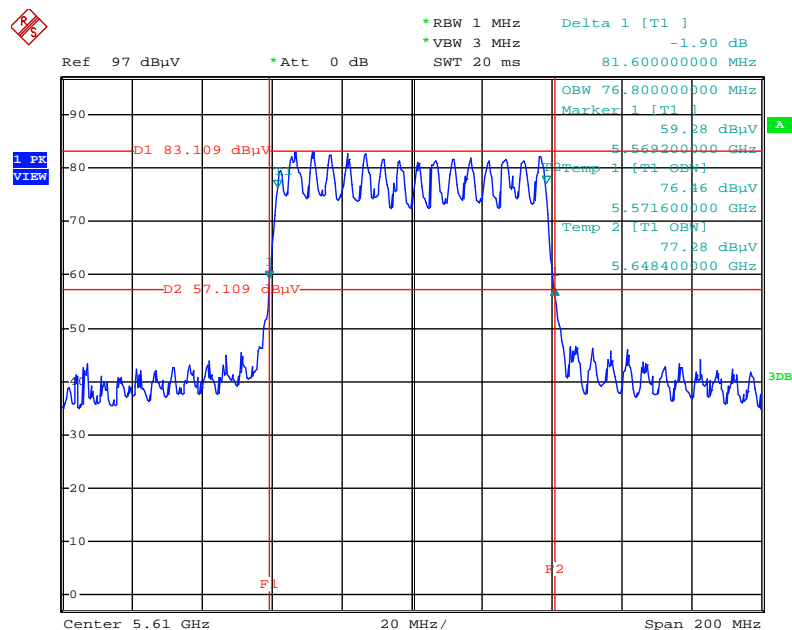
Date: 7.JAN.2016 19:56:49

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5530 MHz



Date: 7.JAN.2016 19:57:22

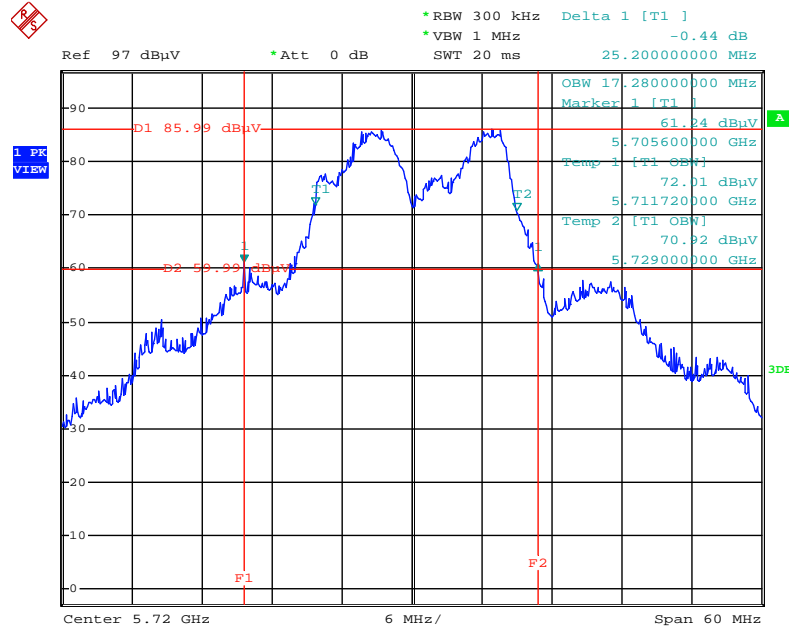
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5610 MHz



Date: 7.JAN.2016 19:57:59

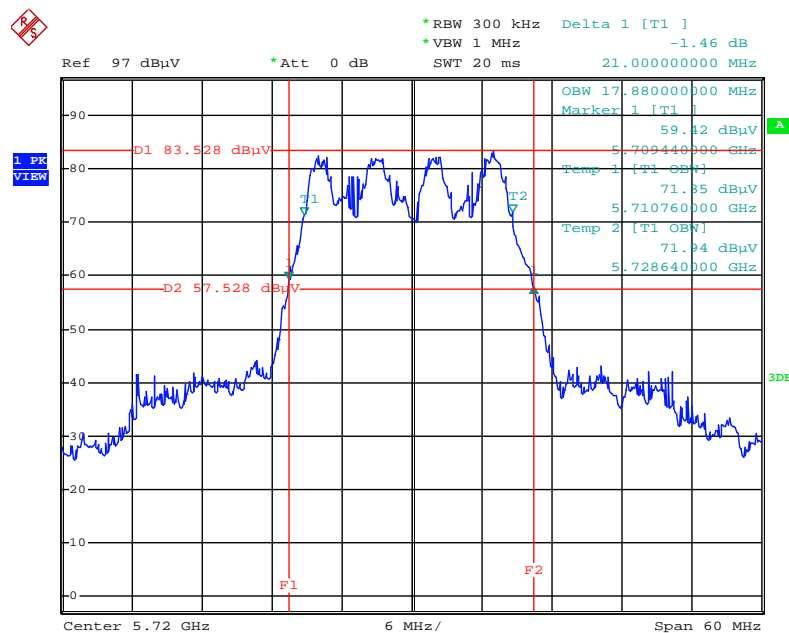
Straddle Channel

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5720 MHz



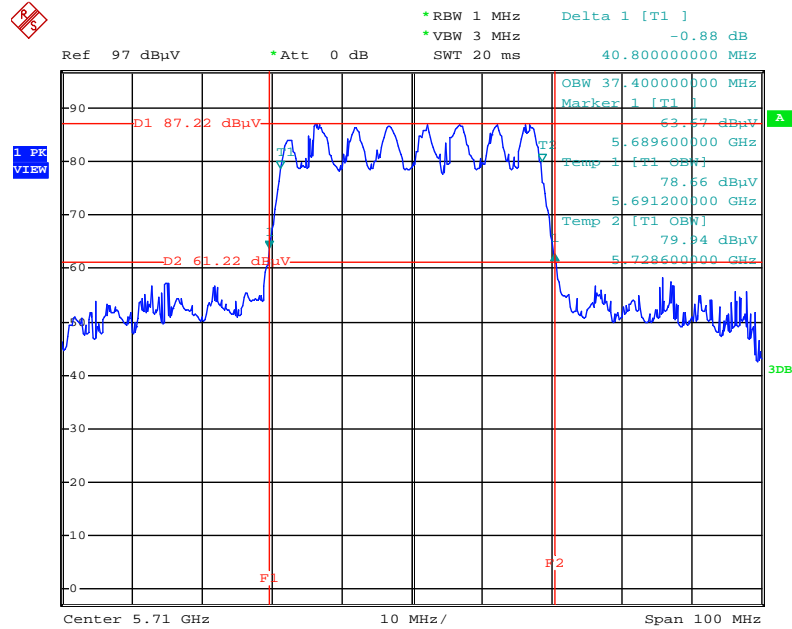
Date: 8.JAN.2016 09:59:27

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5720 MHz



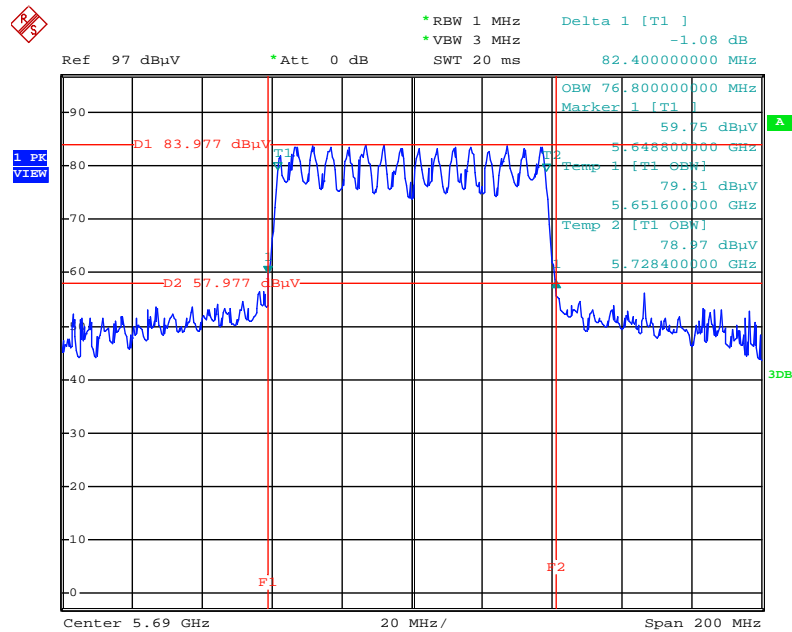
Date: 8.JAN.2016 10:00:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5710 MHz



Date: 8.JAN.2016 10:01:16

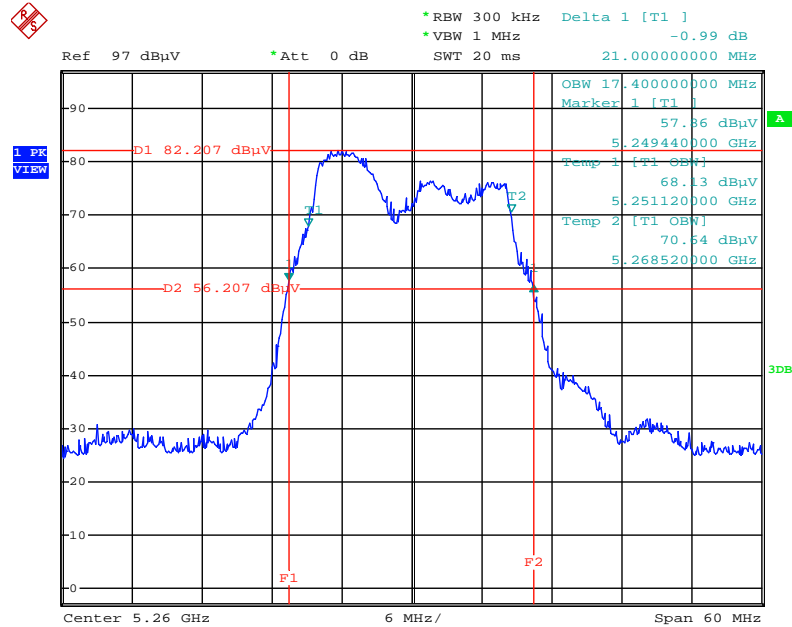
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5690 MHz



Date: 8.JAN.2016 10:01:58

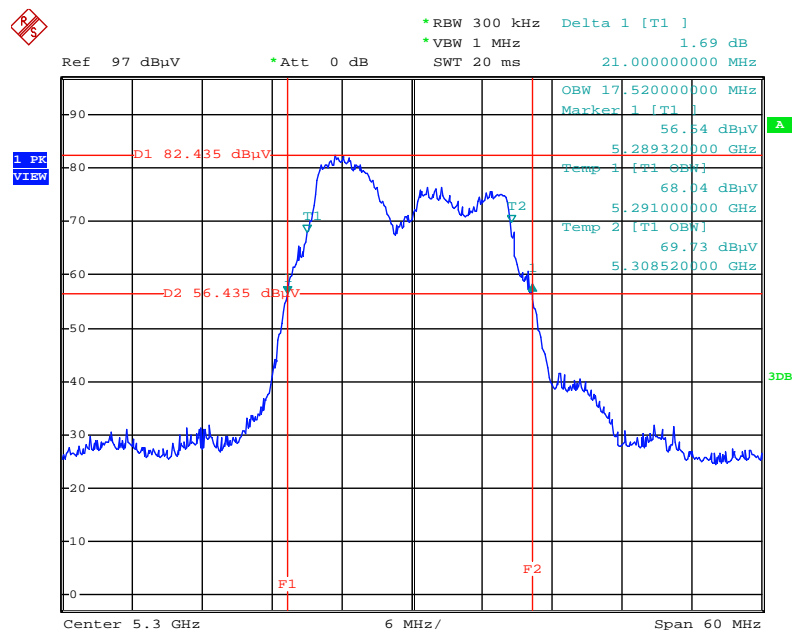
Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5260 MHz



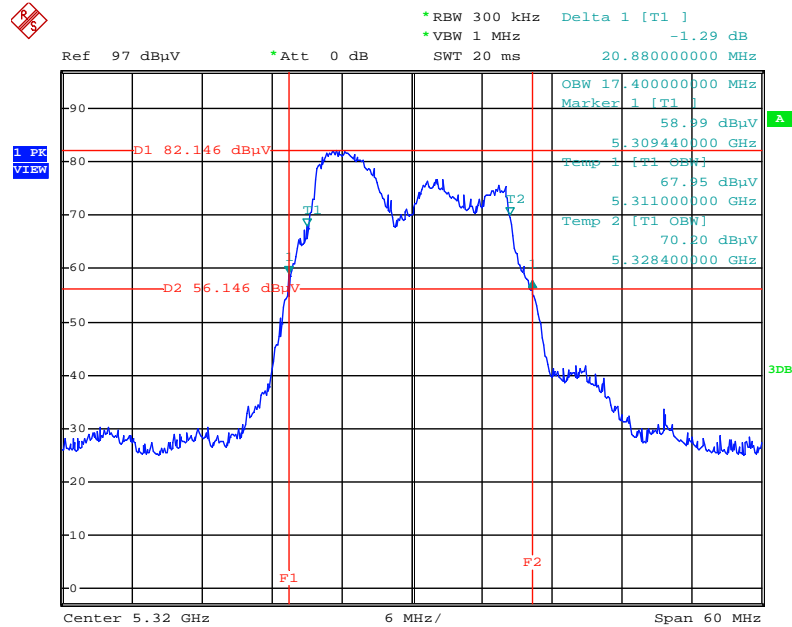
Date: 7.JAN.2016 20:02:03

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5300 MHz



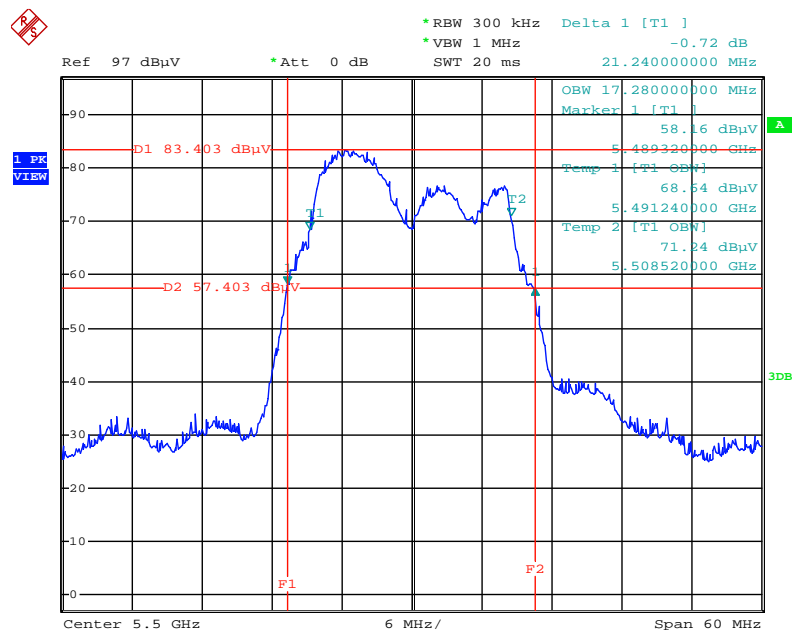
Date: 7.JAN.2016 20:03:43

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5320 MHz



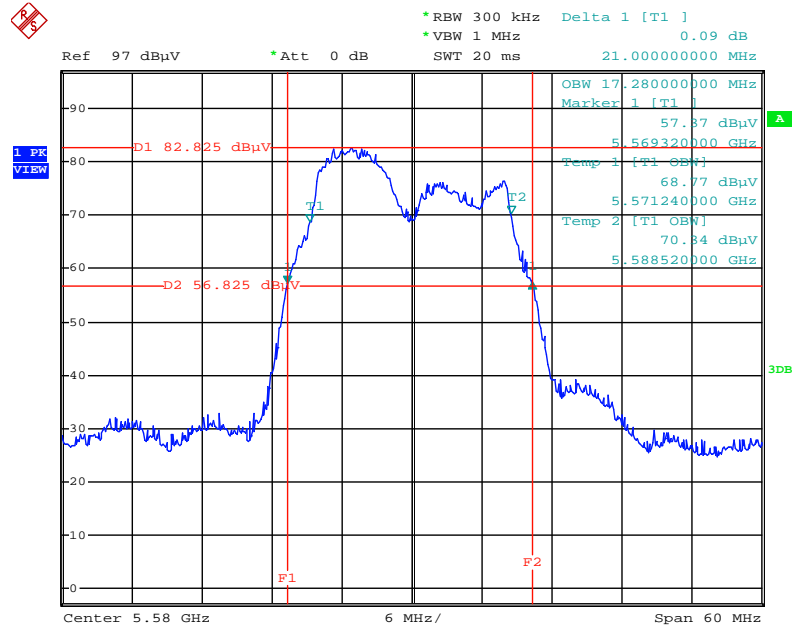
Date: 7.JAN.2016 20:04:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5500 MHz



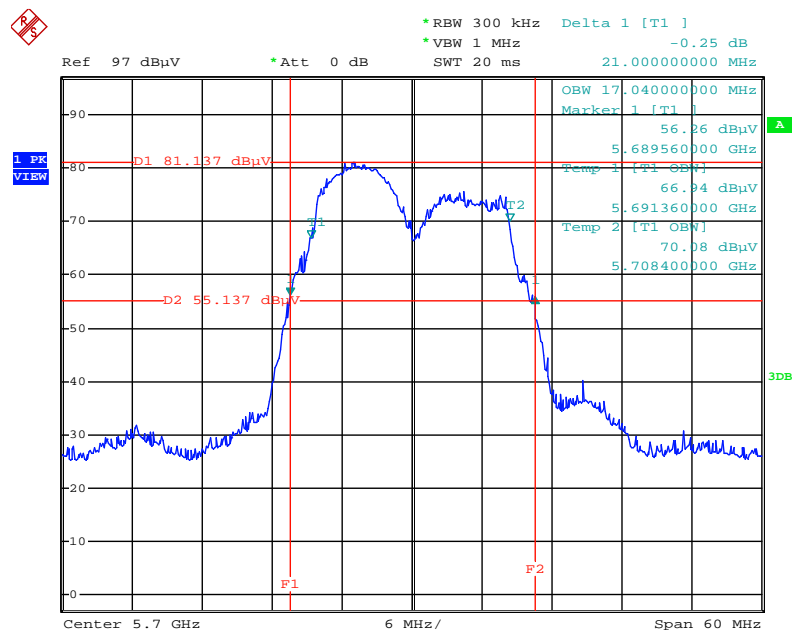
Date: 7.JAN.2016 20:04:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5580 MHz



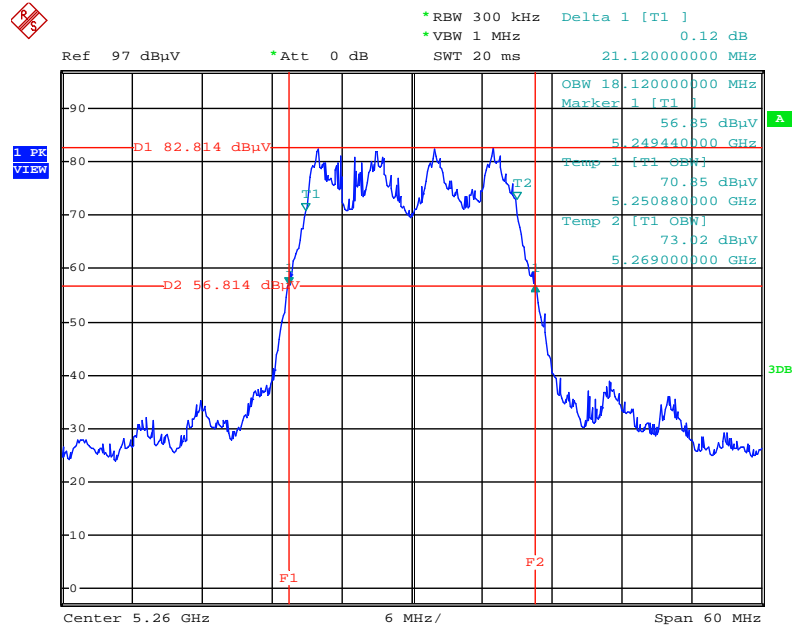
Date: 7.JAN.2016 20:05:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5700 MHz



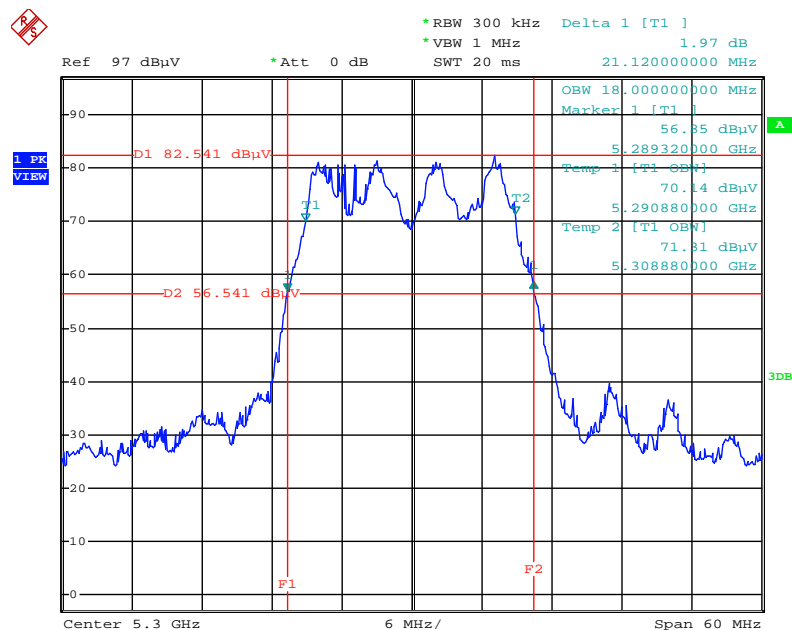
Date: 7.JAN.2016 20:05:41

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5260 MHz



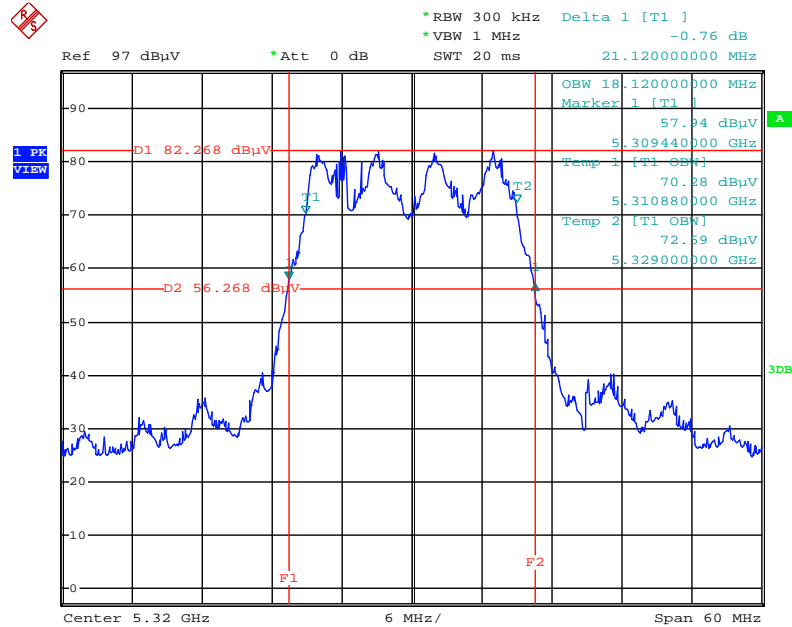
Date: 7.JAN.2016 20:11:04

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5300 MHz



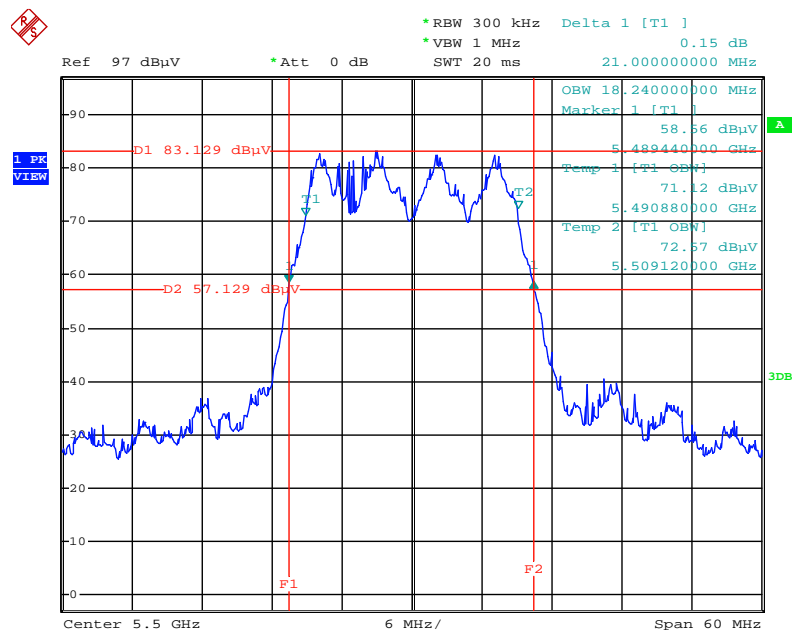
Date: 7.JAN.2016 20:12:36

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5320 MHz



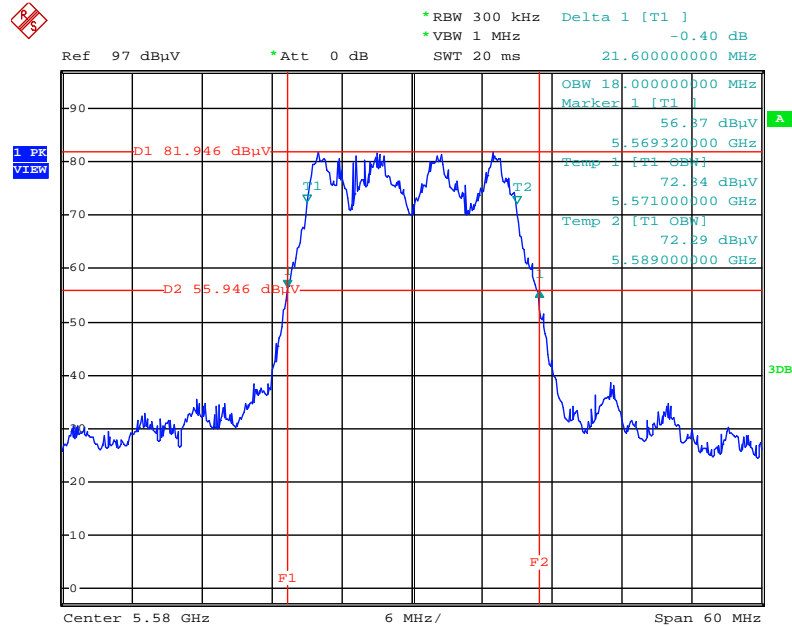
Date: 7.JAN.2016 20:13:04

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5500 MHz



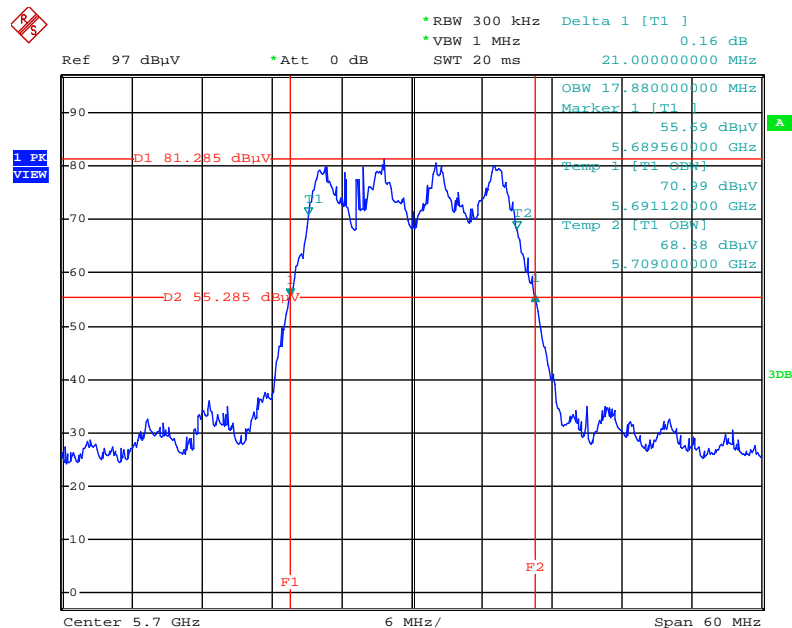
Date: 7.JAN.2016 20:13:30

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5580 MHz



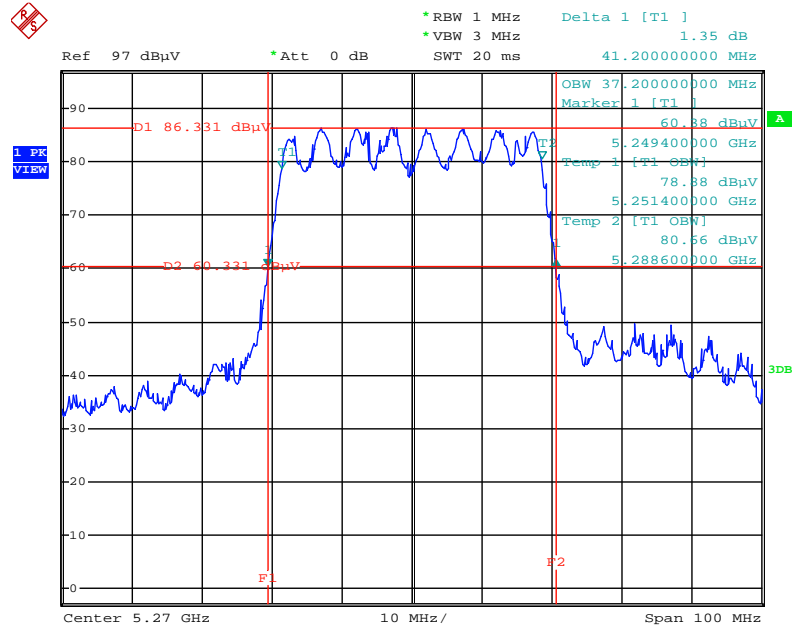
Date: 7.JAN.2016 20:13:52

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5700 MHz



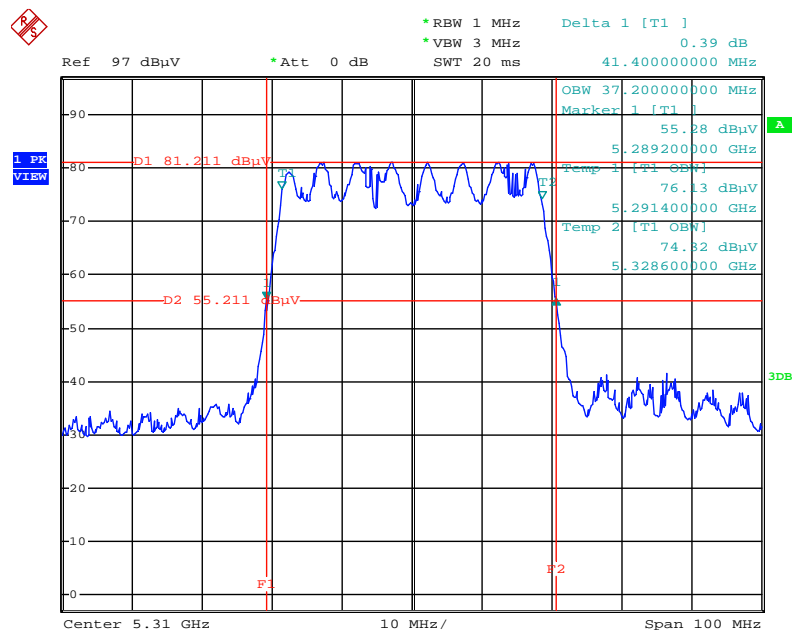
Date: 7.JAN.2016 20:14:15

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5270 MHz



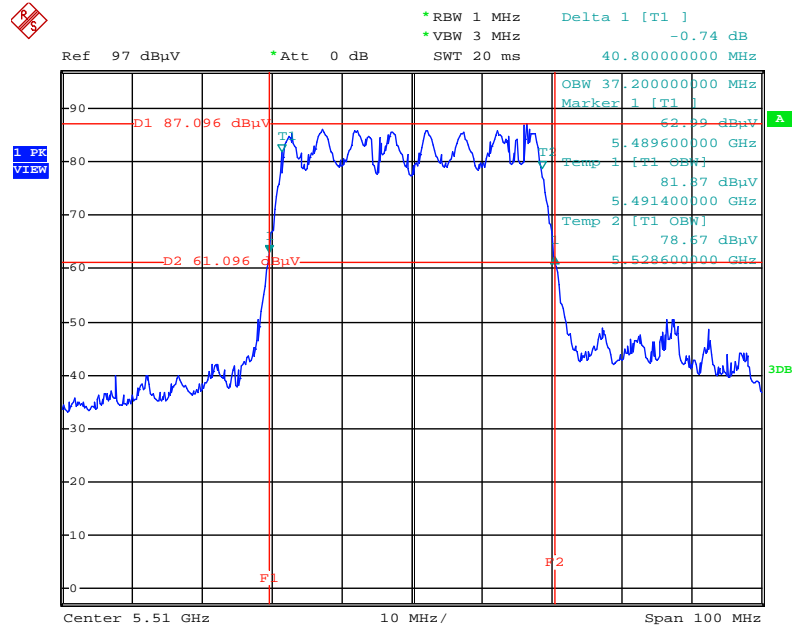
Date: 7.JAN.2016 20:16:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5310 MHz



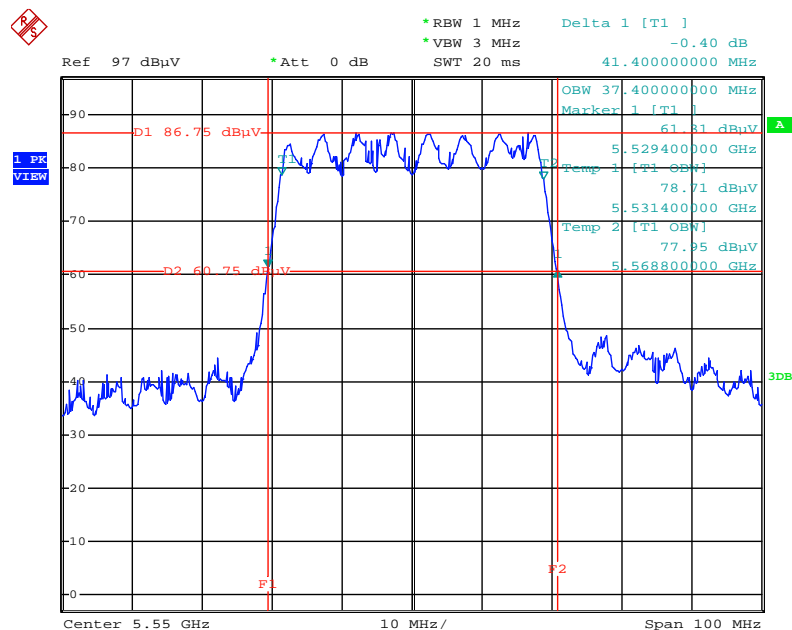
Date: 7.JAN.2016 20:16:41

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5510 MHz



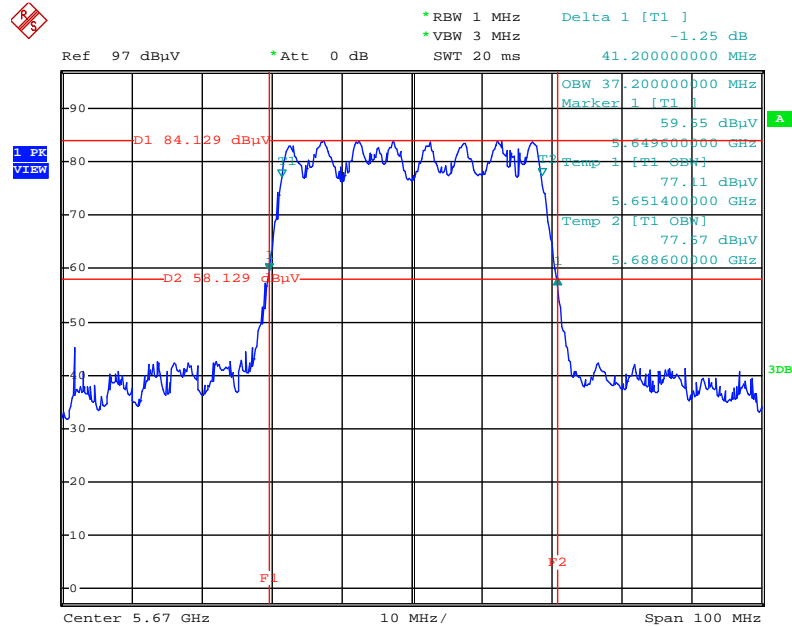
Date: 7.JAN.2016 20:17:04

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5550 MHz



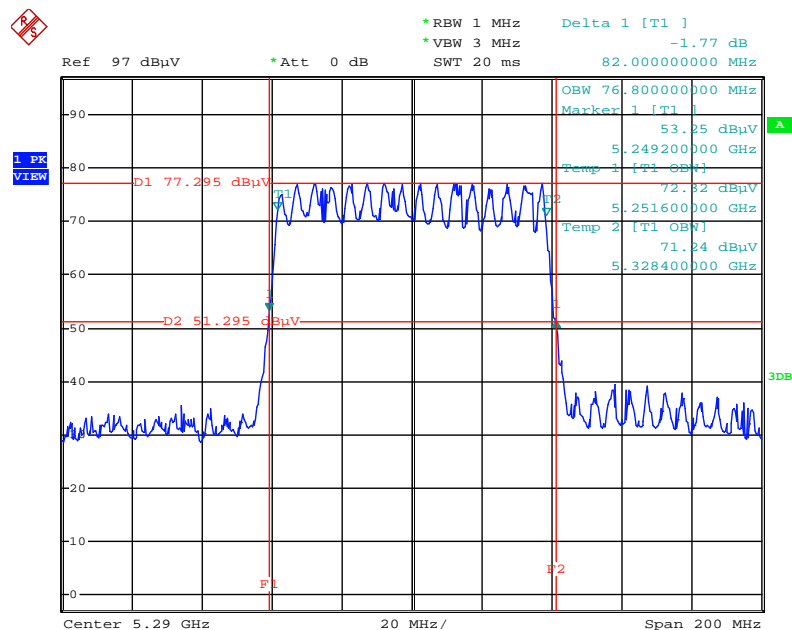
Date: 7.JAN.2016 20:17:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5670 MHz



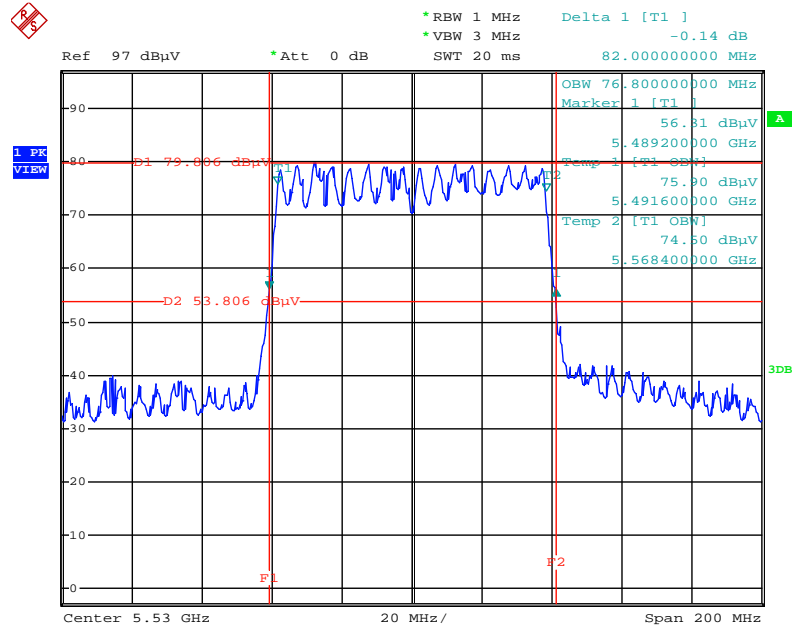
Date: 7.JAN.2016 20:17:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5290 MHz



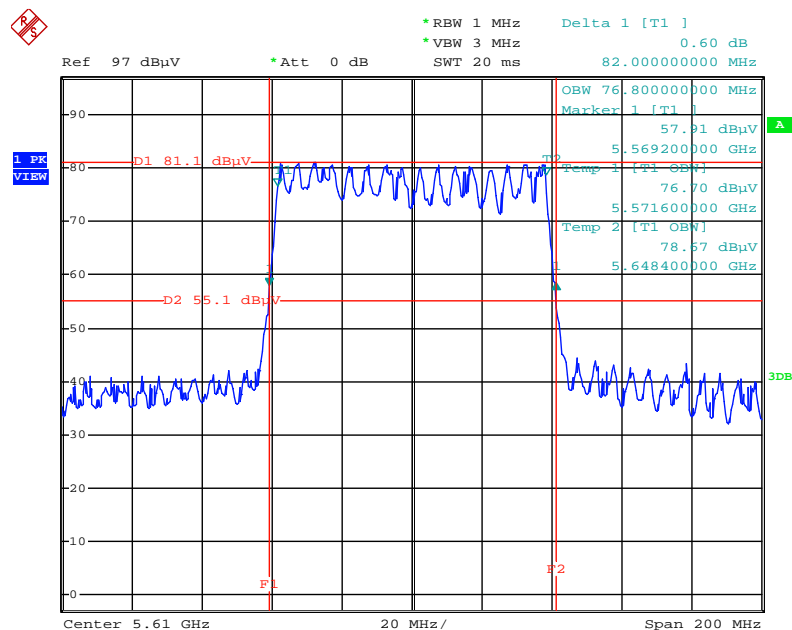
Date: 7.JAN.2016 20:19:38

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5530 MHz



Date: 7.JAN.2016 20:20:05

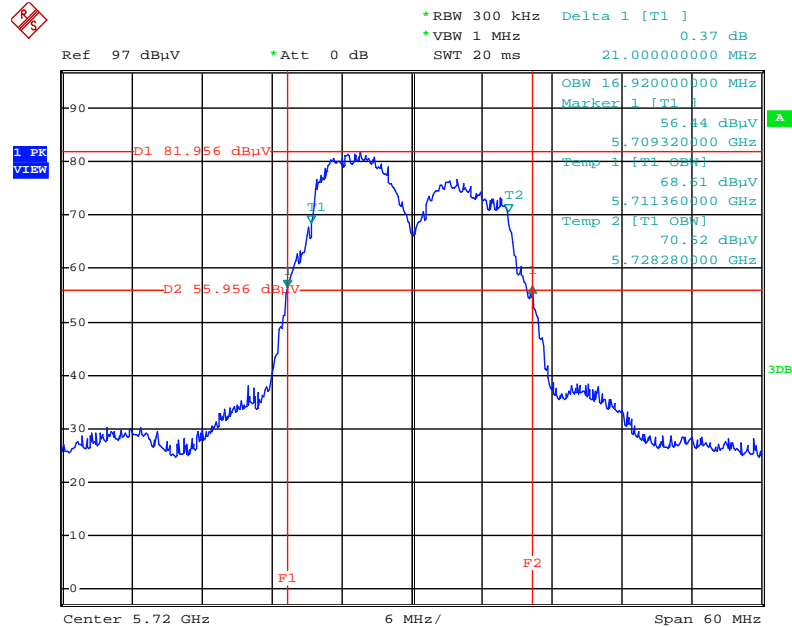
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5610 MHz



Date: 7.JAN.2016 20:20:35

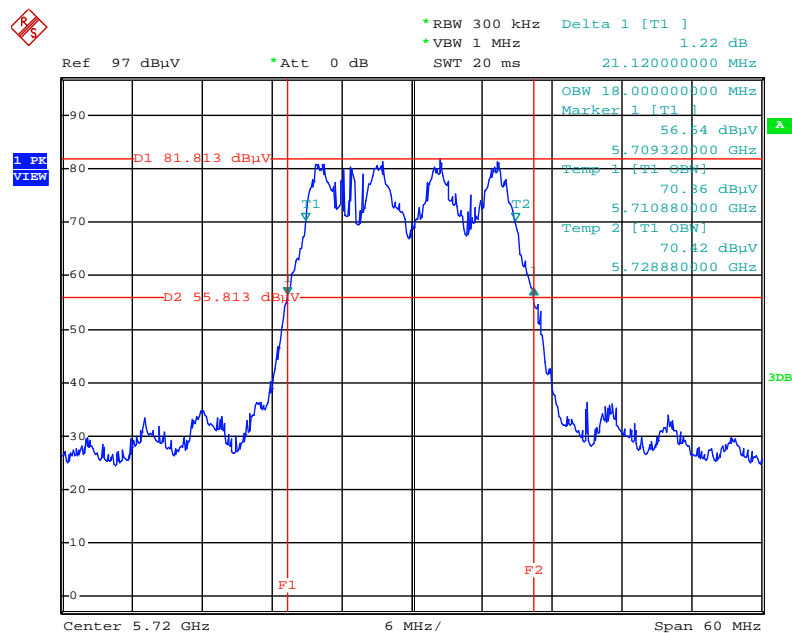
Straddle Channel

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2
+ Chain 3 + Chain 4 / 5720 MHz



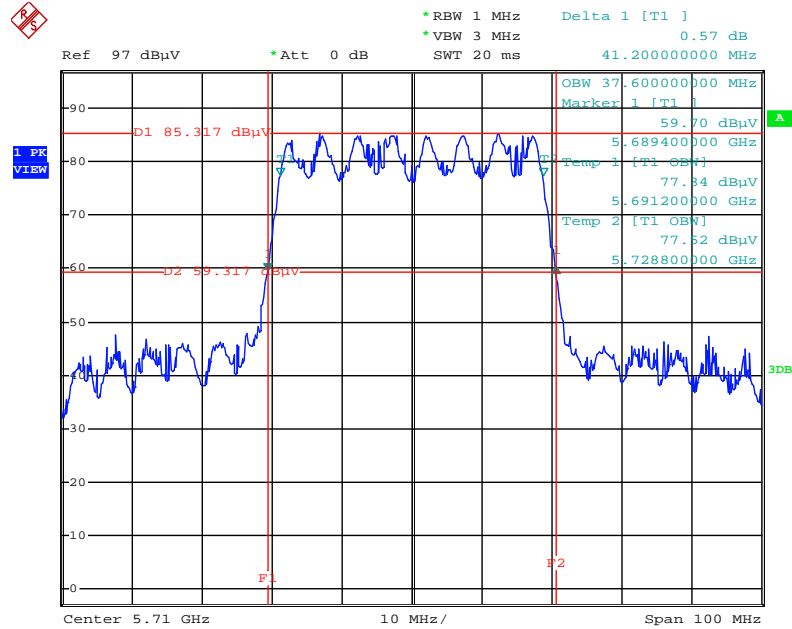
Date: 8.JAN.2016 10:03:37

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz



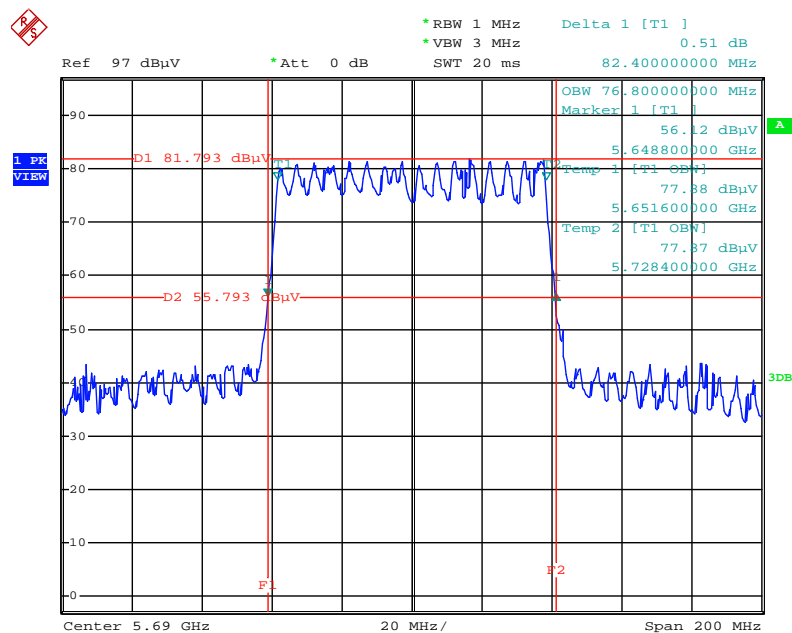
Date: 8.JAN.2016 10:12:10

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz



Date: 8.JAN.2016 10:13:25

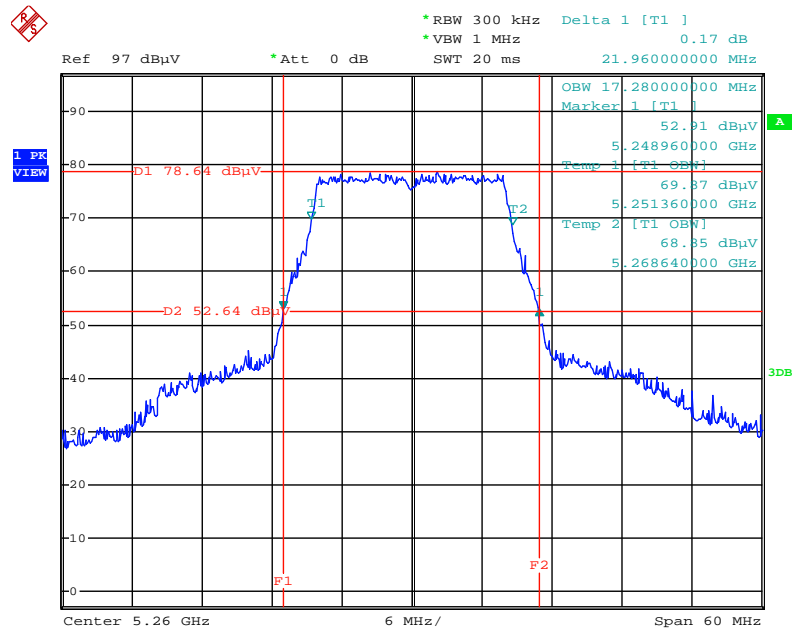
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz



Date: 8.JAN.2016 13:54:46

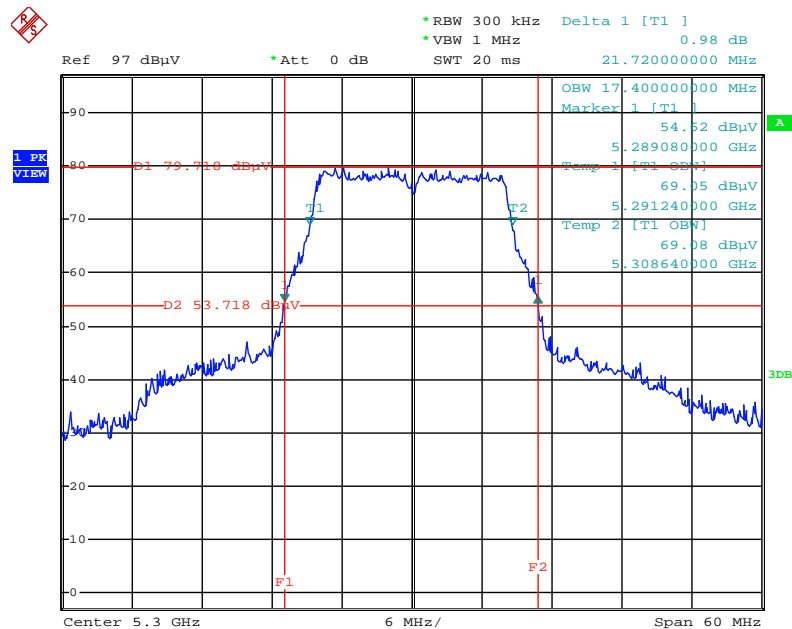
Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1 / 1TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5260 MHz



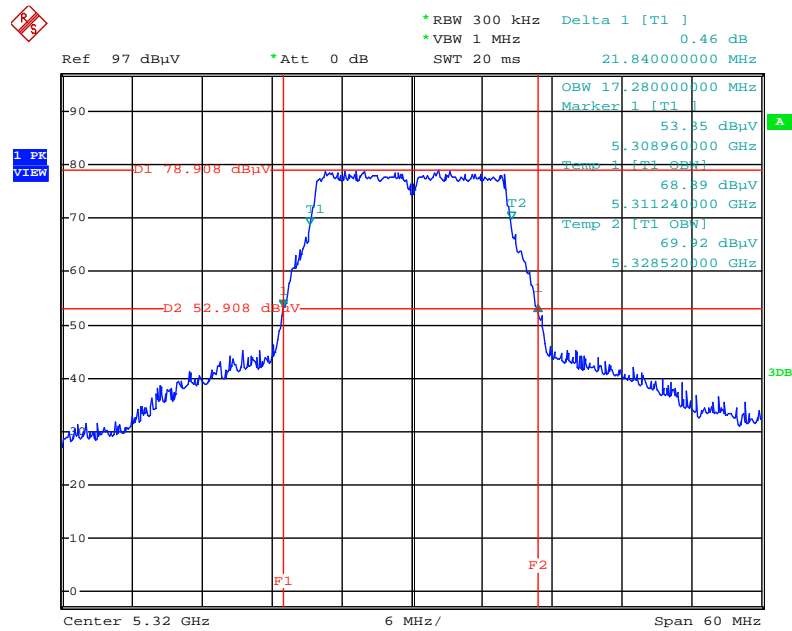
Date: 7.JAN.2016 17:14:28

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5300 MHz



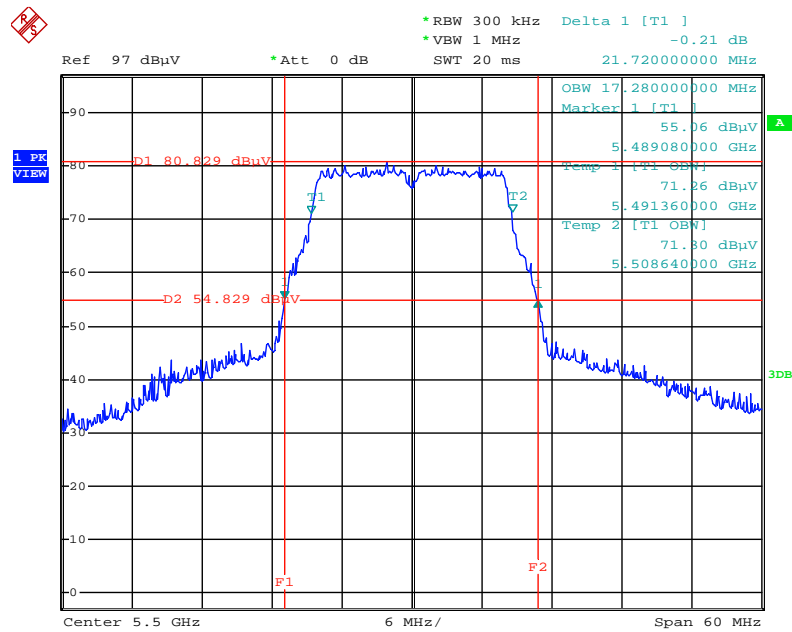
Date: 7.JAN.2016 17:23:50

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5320 MHz



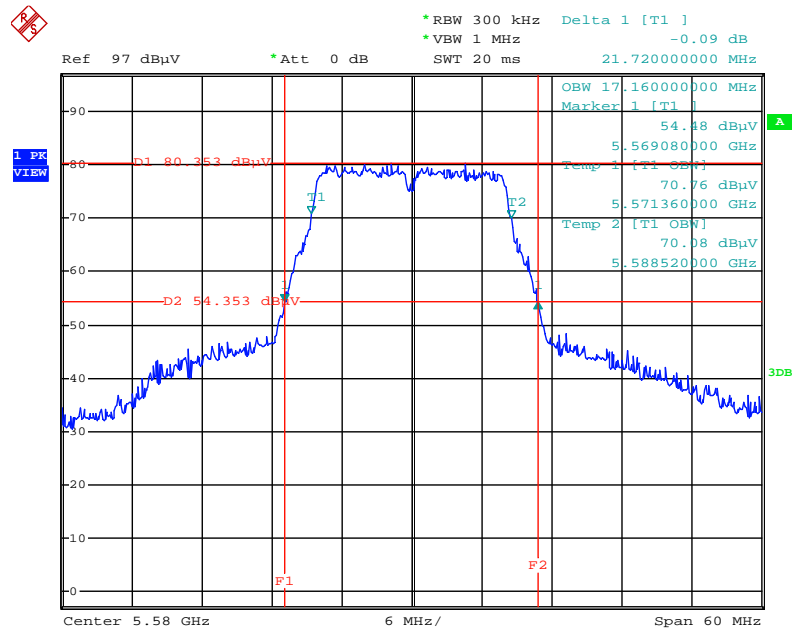
Date: 7.JAN.2016 17:25:08

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5500 MHz



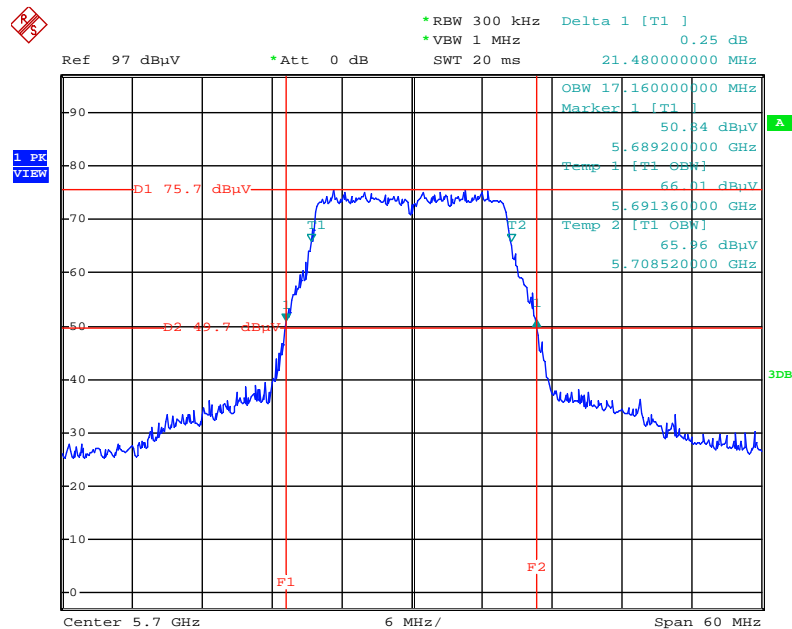
Date: 7.JAN.2016 17:27:21

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5580 MHz



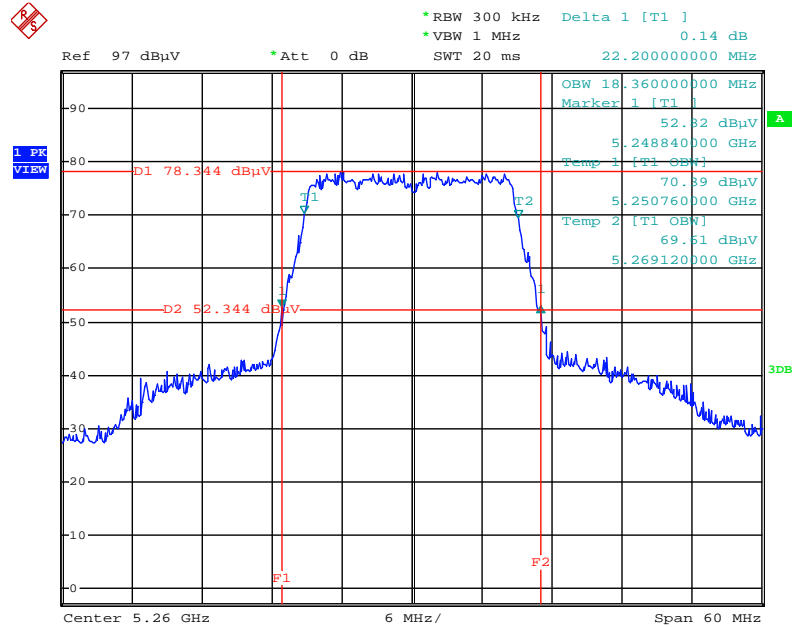
Date: 7.JAN.2016 17:28:48

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11a / Chain 1 / 5700 MHz



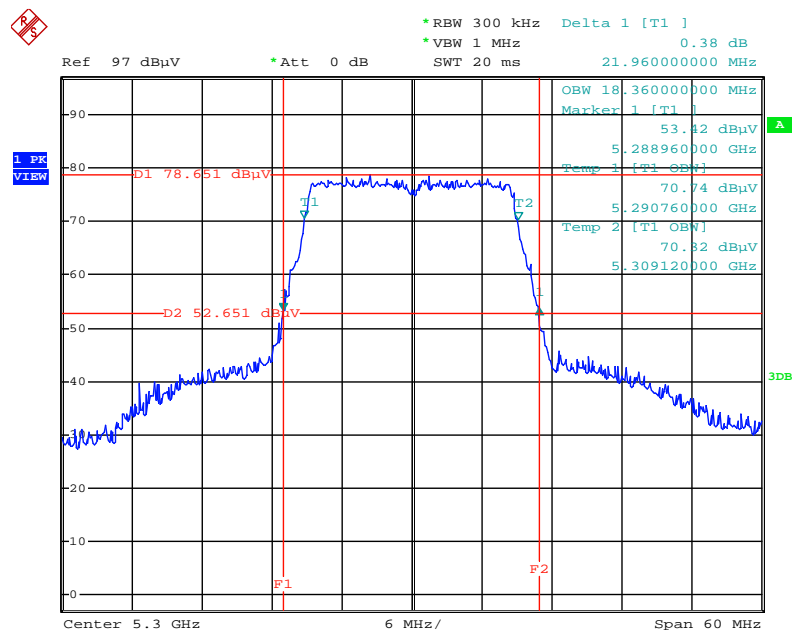
Date: 7.JAN.2016 17:30:03

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5260 MHz



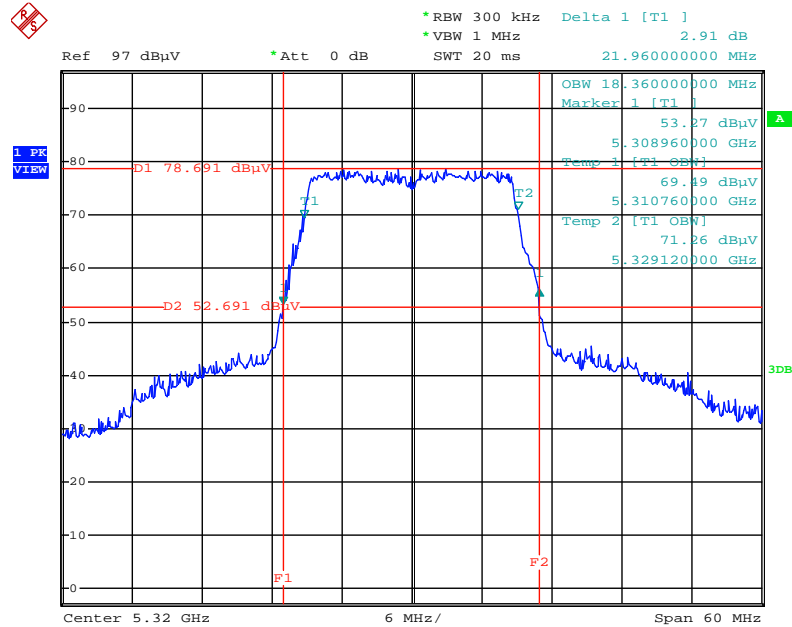
Date: 7.JAN.2016 17:31:55

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5300 MHz



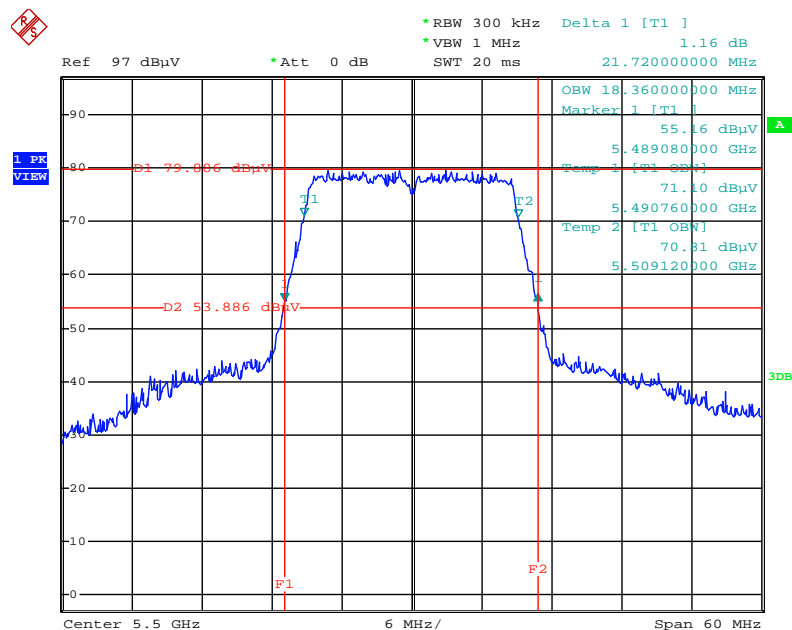
Date: 7.JAN.2016 17:34:21

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5320 MHz



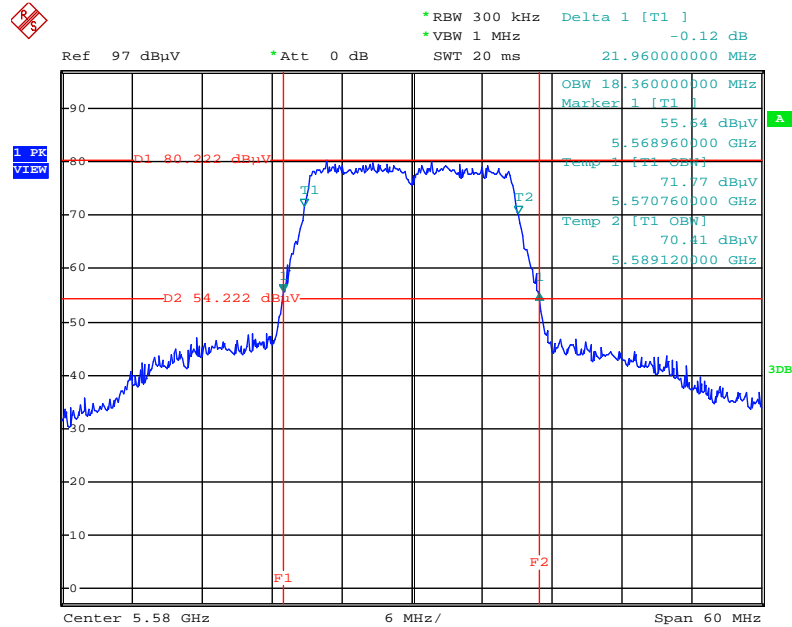
Date: 7.JAN.2016 17:35:39

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5500 MHz



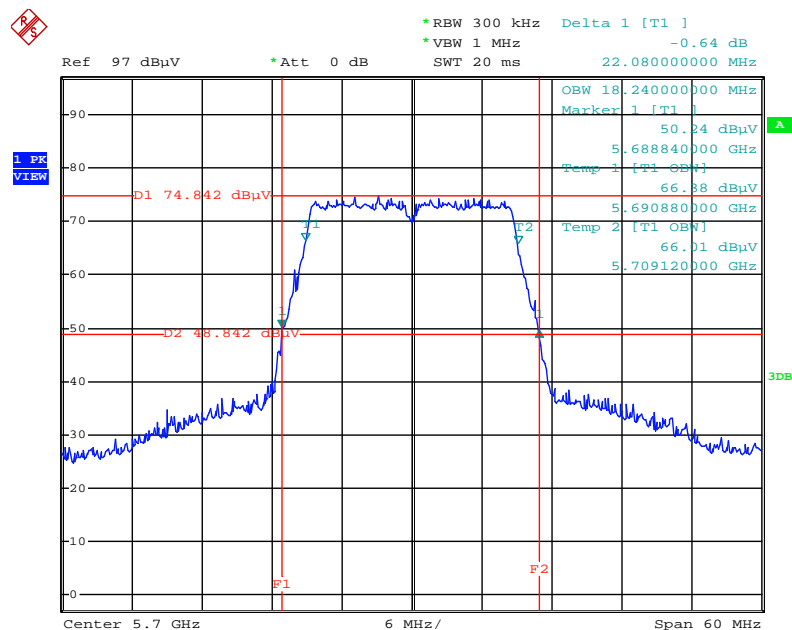
Date: 7.JAN.2016 17:37:21

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5580 MHz



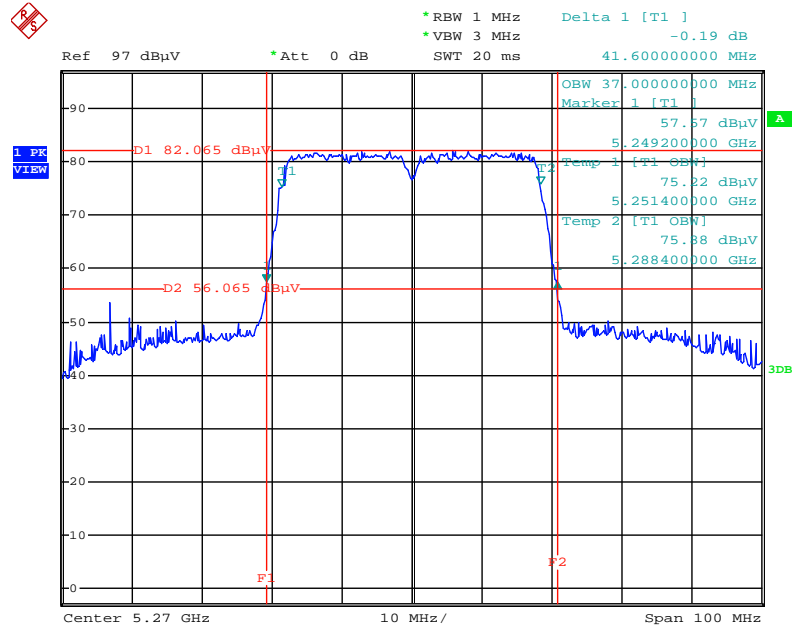
Date: 7.JAN.2016 17:38:25

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5700 MHz



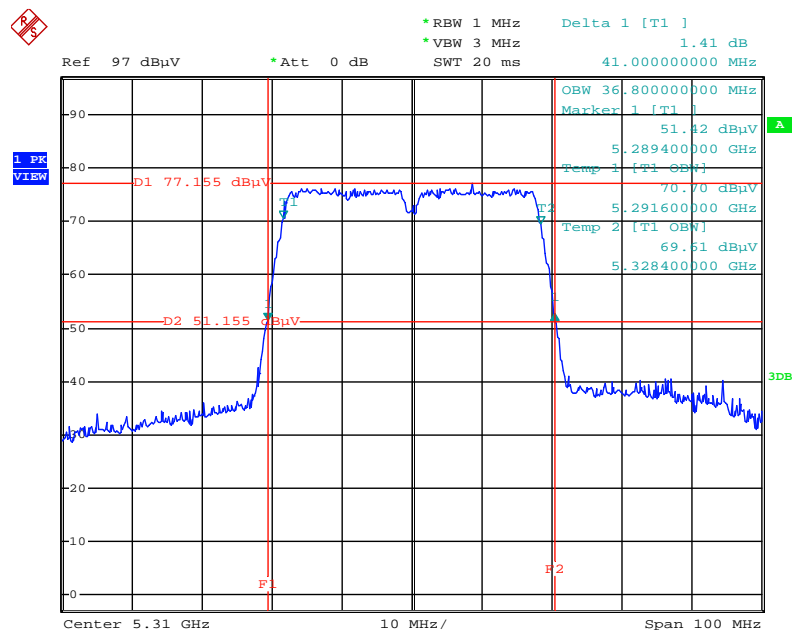
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26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5270 MHz



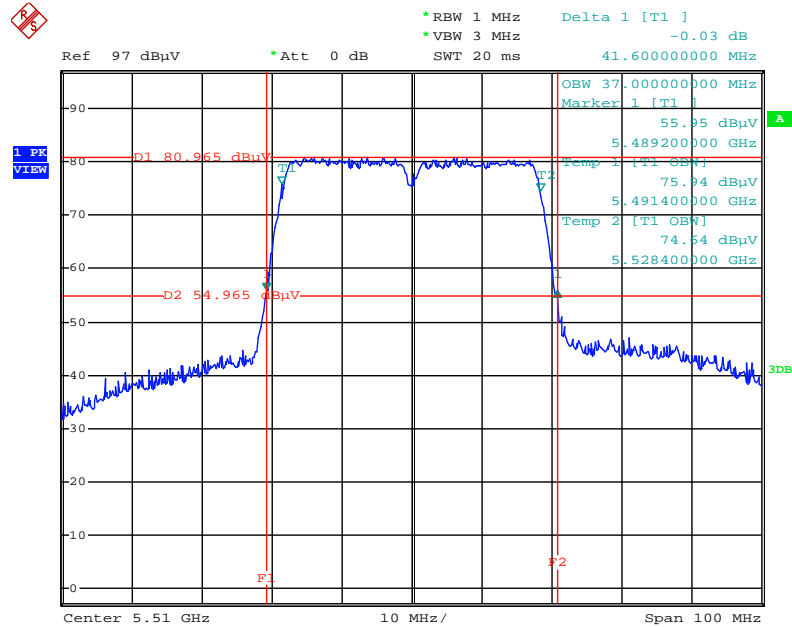
Date: 7.JAN.2016 17:41:27

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5310 MHz



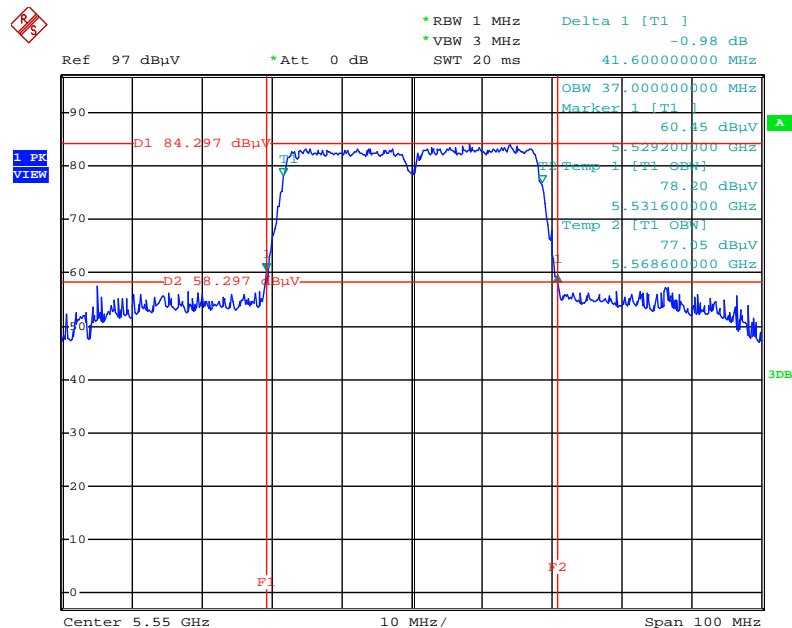
Date: 7.JAN.2016 17:42:34

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5510 MHz



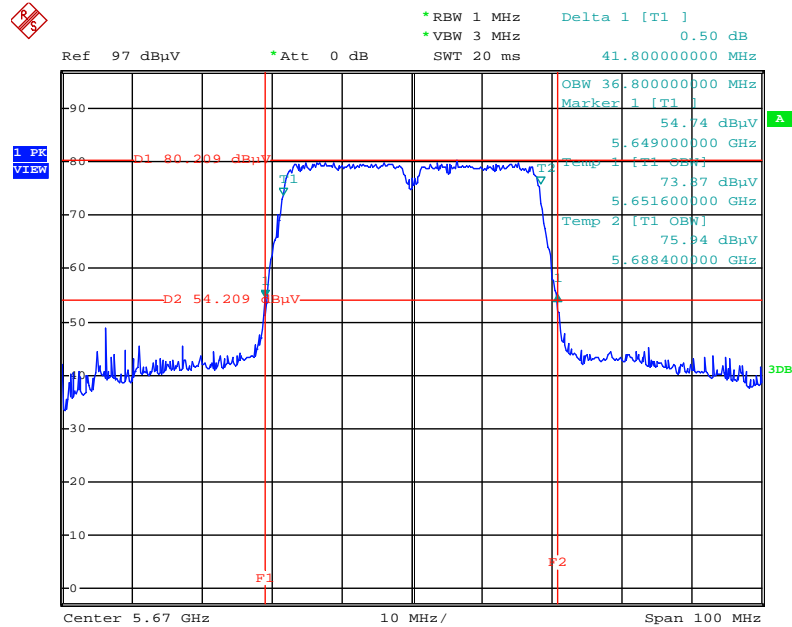
Date: 7.JAN.2016 17:43:53

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5550 MHz



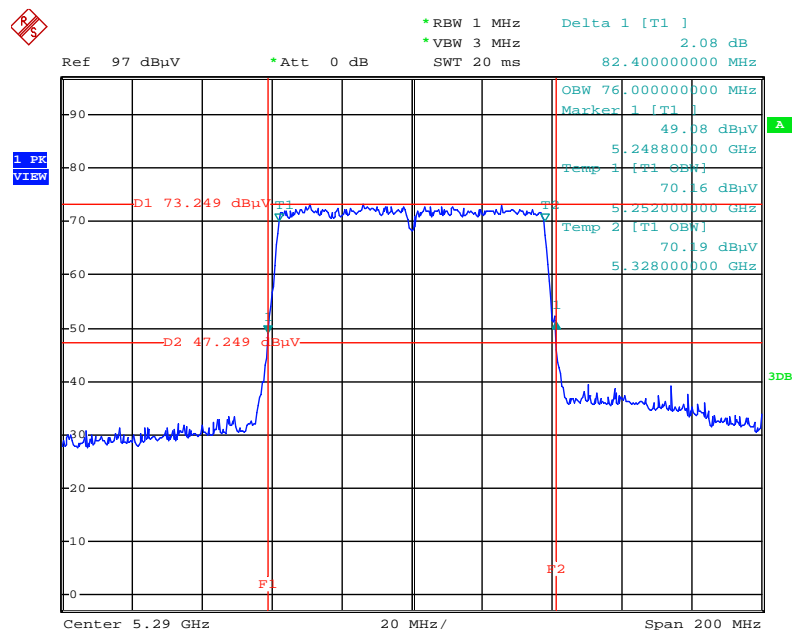
Date: 7.JAN.2016 17:45:14

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5670 MHz



Date: 7.JAN.2016 17:47:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5290 MHz



Date: 7.JAN.2016 17:48:52