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FCC RADIO TEST REPORT

Applicant's company	**ZEBRA TECHNOLOGIES CORPORATION**
Applicant Address	One Motorola Plaza Holtsville, NY 11742 USA
FCC ID	**H9PAP7562**
Manufacturer's company	**Wistron NeWeb Corporation**
Manufacturer Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308 Taiwan

Product Name	802.11 abgn/ac Access Point
Brand Name	ZEBRA
Model No.	AP-7562
Test Rule Part(s)	47 CFR FCC Part 15 Subpart E § 15.407
Test Freq. Range	5250 ~ 5350MHz / 5470 ~ 5725MHz
Received Date	Dec. 04, 2014
Final Test Date	Mar. 20, 2015
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 2009**, **47 CFR FCC Part 15 Subpart E, KDB789033 D02 v01, KDB662911 D01 v02r01, KDB644545 D03 v01.**

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

Note: Using 1.5m table as an alternative was permitted by the FCC per TCBC conference call of Dec. 2, 2014.

Testing Laboratory
1190

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR4D0488-01	Rev. 01	Initial issue of report	May 14, 2015

1. VERIFICATION OF COMPLIANCE

Product Name	:	802.11 abgn/ac Access Point
Brand Name	:	ZEBRA
Model No.	:	AP-7562
Applicant	:	ZEBRA TECHNOLOGIES CORPORATION
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 Dec. 04, 2014 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	15.207	AC Power Line Conducted Emissions	Complies	4.14 dB
4.2	15.407(a)	26dB Spectrum Bandwidth and 99% Occupied Bandwidth	Complies	-
4.3	15.407(e)	6dB Spectrum Bandwidth	Complies	-
4.4	15.407(a)	Maximum Conducted Output Power	Complies	0.01 dB
4.5	15.407(a)	Power Spectral Density	Complies	0.01 dB
4.6	15.407(b)	Radiated Emissions	Complies	3.04 dB
4.7	15.407(b)	Band Edge Emissions	Complies	1.00 dB
4.8	15.407(g)	Frequency Stability	Complies	-
4.9	15.203	Antenna Requirements	Complies	-

3. GENERAL INFORMATION

3.1. Product Details

Items	Description
Product Type	WLAN (1TX,2TX,3TX/1RX,2RX,3RX)
Radio Type	Intentional Transceiver
Power Type	From PoE
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: (Ant.2 Dipole antenna / 7.3dBi / 1TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.62 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.60 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.41 MHz Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.49 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.80 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.62 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.41 MHz

	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.49 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.80 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.48 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.77 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz <For STBC Mode> Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.06 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.90 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.06 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.04 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 17.88 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.75 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 17.97 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.75 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.23 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.19 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.54 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.36 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 37.60 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz

	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 17.97 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.90 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 75.83 MHz Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 18.06 MHz IEEE 802.11ac MCS0/Nss1 (VHT40): 36.90 MHz IEEE 802.11ac MCS0/Nss1 (VHT80): 76.12 MHz Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX) Band 2: IEEE 802.11ac MCS0/Nss2 (VHT20): 17.97 MHz IEEE 802.11ac MCS0/Nss2 (VHT40): 36.75 MHz IEEE 802.11ac MCS0/Nss2 (VHT80): 75.83 MHz Band 3: IEEE 802.11ac MCS0/Nss2 (VHT20): 17.97 MHz IEEE 802.11ac MCS0/Nss2 (VHT40): 36.75 MHz IEEE 802.11ac MCS0/Nss2 (VHT80): 76.12 MHz Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX) Band 2: IEEE 802.11ac MCS0/Nss2 (VHT20): 17.88 MHz IEEE 802.11ac MCS0/Nss2 (VHT40): 36.61 MHz IEEE 802.11ac MCS0/Nss2 (VHT80): 75.83 MHz Band 3: IEEE 802.11ac MCS0/Nss2 (VHT20): 17.88 MHz IEEE 802.11ac MCS0/Nss2 (VHT40): 36.61 MHz IEEE 802.11ac MCS0/Nss2 (VHT80): 75.83 MHz
Maximum Conducted Output Power	**<For Non-Beamforming Mode>** Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX) Band 2: IEEE 802.11a: 20.13 dBm IEEE 802.11n MCS0 (HT20): 20.12 dBm IEEE 802.11n MCS0 (HT40): 19.78 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.15 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.79 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 12.80 dBm

	Band 3: IEEE 802.11a: 20.51 dBm IEEE 802.11n MCS0 (HT20): 20.53 dBm IEEE 802.11n MCS0 (HT40): 19.75 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.55 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.78 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 19.63 dBm Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX) Band 2: IEEE 802.11a: 20.02 dBm IEEE 802.11n MCS0 (HT20): 20.04 dBm IEEE 802.11n MCS0 (HT40): 21.41 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.04 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.33 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 15.60 dBm Band 3: IEEE 802.11a: 20.24 dBm IEEE 802.11n MCS0 (HT20): 20.22 dBm IEEE 802.11n MCS0 (HT40): 22.68 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.23 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 22.66 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.39 dBm Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX) Band 2: IEEE 802.11a: 18.38 dBm IEEE 802.11n MCS0 (HT20): 18.39 dBm IEEE 802.11n MCS0 (HT40): 20.88 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 18.39 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 20.87 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 14.75 dBm Band 3: IEEE 802.11a: 18.40 dBm IEEE 802.11n MCS0 (HT20): 18.39 dBm IEEE 802.11n MCS0 (HT40): 21.29 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 18.39 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.29 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.69 dBm

	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX) Band 2: IEEE 802.11a: 20.06 dBm IEEE 802.11n MCS0 (HT20): 20.05 dBm IEEE 802.11n MCS0 (HT40): 19.88 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.09 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.89 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 16.83 dBm Band 3: IEEE 802.11a: 20.02 dBm IEEE 802.11n MCS0 (HT20): 20.03 dBm IEEE 802.11n MCS0 (HT40): 20.23 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.03 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 20.26 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 20.08 dBm Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX) Band 2: IEEE 802.11a: 22.28 dBm IEEE 802.11n MCS0 (HT20): 22.24 dBm IEEE 802.11n MCS0 (HT40): 22.86 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 22.14 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 22.86 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 15.59 dBm Band 3: IEEE 802.11a: 22.35 dBm IEEE 802.11n MCS0 (HT20): 22.33 dBm IEEE 802.11n MCS0 (HT40): 23.91 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 22.34 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 23.91 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.60 dBm Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX) Band 2: IEEE 802.11a: 20.55 dBm IEEE 802.11n MCS0 (HT20): 20.51 dBm IEEE 802.11n MCS0 (HT40): 22.50 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.55 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 22.51 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 15.82 dBm

	Band 3: IEEE 802.11a: 20.65 dBm IEEE 802.11n MCS0 (HT20): 20.67 dBm IEEE 802.11n MCS0 (HT40): 23.56 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.68 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 23.56dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.68 dBm Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX) Band 2: IEEE 802.11a: 20.06 dBm IEEE 802.11n MCS0 (HT20): 20.05 dBm IEEE 802.11n MCS0 (HT40): 19.88 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.09 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.89 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 13.94 dBm Band 3: IEEE 802.11a: 20.02 dBm IEEE 802.11n MCS0 (HT20): 20.03 dBm IEEE 802.11n MCS0 (HT40): 20.62 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.03 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 20.59 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 18.99 dBm Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX) Band 2: IEEE 802.11a: 21.62 dBm IEEE 802.11n MCS0 (HT20): 21.58 dBm IEEE 802.11n MCS0 (HT40): 21.43 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 21.56 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.46 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 16.99 dBm Band 3: IEEE 802.11a: 21.56 dBm IEEE 802.11n MCS0 (HT20): 21.63 dBm IEEE 802.11n MCS0 (HT40): 21.64 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 21.64 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.63 dBm

	IEEE 802.11ac MCS0/Nss1 (VHT80): 21.05 dBm Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX) Band 2: IEEE 802.11a: 21.49 dBm IEEE 802.11n MCS0 (HT20): 21.47 dBm IEEE 802.11n MCS0 (HT40): 21.69 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 21.48 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.68 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 16.53 dBm Band 3: IEEE 802.11a: 21.53 dBm IEEE 802.11n MCS0 (HT20): 21.54 dBm IEEE 802.11n MCS0 (HT40): 21.68 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 21.53 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.69 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 21.58 dBm <For Beamforming Mode> Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX) Band 2: IEEE 802.11a: 18.51 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 18.49 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.48 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 14.15 dBm Band 3: IEEE 802.11a: 19.67 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 19.68 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.63 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 19.60 dBm Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX) Band 2: IEEE 802.11a: 17.90 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 17.90 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 17.91dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 13.60 dBm Band 3: IEEE 802.11a: 17.92 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 17.92 dBm

	IEEE 802.11ac MCS0/Nss1 (VHT40): 17.78 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 17.83 dBm Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX) Band 2: IEEE 802.11a: 20.73 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.70 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 19.72 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 15.73 dBm Band 3: IEEE 802.11a: 21.83 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 21.85 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.88 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 21.67 dBm Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX) Band 2: IEEE 802.11a: 19.81 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 19.83 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 20.11 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 16.63 dBm Band 3: IEEE 802.11a: 20.12 dBm IEEE 802.11ac MCS0/Nss1 (VHT20): 20.12 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 20.12 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 20.12 dBm Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX) Band 2: IEEE 802.11a: 21.47 dBm IEEE 802.11ac MCS0/Nss2 (VHT20): 21.53 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 21.46 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 18.05 dBm Band 3: IEEE 802.11a: 21.56 dBm IEEE 802.11ac MCS0/Nss2 (VHT20): 21.64 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 21.63 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 21.67 dBm

	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX) Band 2: IEEE 802.11a: 20.61 dBm IEEE 802.11ac MCS0/Nss2 (VHT20): 20.61 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 20.56 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 17.09 dBm Band 3: IEEE 802.11a: 20.62 dBm IEEE 802.11ac MCS0/Nss2 (VHT20): 20.62 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 20.63 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 20.59 dBm <For STBC Mode> Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 22.54 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.86 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 17.03 dBm Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 22.62 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 22.63 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.57 dBm Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 22.49 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 21.61 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 15.90 dBm Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 22.68 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 22.69 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.67 dBm Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 23.95 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 23.44 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 16.79 dBm Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 23.90 dBm

	IEEE 802.11ac MCS0/Nss1 (VHT40): 23.53 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 22.83 dBm Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX) Band 2: IEEE 802.11ac MCS0/Nss1 (VHT20): 23.84 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 23.70 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 16.96 dBm Band 3: IEEE 802.11ac MCS0/Nss1 (VHT20): 23.91 dBm IEEE 802.11ac MCS0/Nss1 (VHT40): 23.98 dBm IEEE 802.11ac MCS0/Nss1 (VHT80): 23.70 dBm Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX) Band 2: IEEE 802.11ac MCS0/Nss2 (VHT20): 21.43 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 21.67 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 18.91 dBm Band 3: IEEE 802.11ac MCS0/Nss2 (VHT20): 21.51 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 21.67 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 21.58 dBm Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX) Band 2: IEEE 802.11ac MCS0/Nss2 (VHT20): 21.52 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 21.61 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 17.65 dBm Band 3: IEEE 802.11ac MCS0/Nss2 (VHT20): 21.66 dBm IEEE 802.11ac MCS0/Nss2 (VHT40): 21.64 dBm IEEE 802.11ac MCS0/Nss2 (VHT80): 21.52 dBm
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

Items	Description	
Communication Mode	☒ IP Based (Load Based)	☐ Frame Based
TPC Function	☒ With TPC	☐ Without TPC
Weather Band (5600~5650MHz)	☒ With 5600~5650MHz	☐ Without 5600~5650MHz
Beamforming Function	☒ With beamforming	☐ Without beamforming
STBC Function	☒ With STBC	☐ Without STBC
LDPC Function	☒ With LDPC	☐ Without LDPC
Operating Mode	☒ Outdoor access point with client without radar detection	
	☒ Indoor access point with client without radar detection	
	☒ Fixed point-to-point access points	
	☐ Mobile and portable client devices	

Note1: The product has beamforming function for 802.11g/n/ac in 2.4GHz and 802.11a/n/ac in 5GHz.

Note2: The product has STBC and LDPC in 2TX/3TX function for 802.11n/ac in 2.4GHz and 802.11n/ac in 5GHz.

Antenna and Band width

Antenna	Single (TX)			Two (TX)			Three (TX)		
Band width Mode	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz	20 MHz	40 MHz	80 MHz
IEEE 802.11a	V	X	X	V	X	X	V	X	X
IEEE 802.11n	V	V	X	V	V	X	V	V	X
IEEE 802.11ac	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	MCS 0-23
802.11n (HT40)	1,2,3	MCS 0-23
802.11ac (VHT40)	1,2,3	MCS 0-9/Nss1-3
802.11ac (VHT80)	1,2,3	MCS 0-9/Nss1-3

Note 1: IEEE Std. 802.11n modulation consists of HT20 and HT40 (HT: High Throughput). Then EUT support 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 in 2.4GHz and supports VHT20, VHT40, VHT80 in 5GHz.

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

Ant.	Brand	Zebra P/N	Antenna Type	Connector	Indoor/ Outdoor	Antenna Gain (dBi)		Cable Loss (dB)		True Gain (dBi)	
						2.4G	5G	2.4G	5G	2.4G	5G
1	Zebra	ML-5299-HPA5-01	Dipole	N Male	Indoor/ Outdoor	-	5.6	-	0.9	-	4.7
2	Zebra	ML-2452-HPAG4A6-01	Dipole	N Male	Indoor/ Outdoor	4	7.3	-	-	4	7.3
3	Laird	ML-2499-FHPA5-01R	Dipole	N Male	Indoor/ Outdoor	5.3	-	0.7	-	4.6	-
4	Zebra	ML-2499-HPA4-01	Dipole	N Male	Indoor/ Outdoor	4.5	-	0.7	-	3.8	-
5	Zebra	ML-2452-HPA6X6-036	Dipole	N Male	Indoor/ Outdoor	4	6	0.7	0.9	3.3	5.1
6	Zebra	ML-2452-HPA6-01	Dipole	N Male	Indoor/ Outdoor	5.3	6.1	-	-	5.3	6.1
7	Zebra	ML-2499-5PNL-72-N	Panel	N Male	Indoor/ Outdoor	6.5	-	-	-	6.5	-
8	Zebra	ML-2452-PNA5-01R	Panel	N Male	Indoor/ Outdoor	5.5	6	0.7	0.9	4.8	5.1
9	Zebra	ML-2452-PNL3M3-1	CROSS-POLARIZED PANEL ANTENNA*	N Female	Indoor/ Outdoor	Note 1					

Note 1:

Antenna	Antenna Gain (dBi)		Cable loss (dB)		True Gain (dBi)	
	2.4GHz	5GHz	2.4GHz	5GHz	2.4GHz	5GHz
A	9.5	9.2	0.7	0.9	8.8	8.3
B	6.6	6.8	0.7	0.9	5.9	5.9
C	9.7	9.1	0.7	0.9	9	8.2

Note 2: Ant. 1~9 are the different antenna type in the antenna list. Only the highest gain antenna was selected from each different type of antenna to test and record in this report. Ant. 6, Ant. 7 and Ant. 9 for 2.4GHz and Ant. 2, Ant. 8 and Ant. 9 for 5GHz were selected to perform the test and recorded in this report.

Note 3: *This Antenna has 3 of the same CROSS-POLARIZED PANEL ANTENNA in a single housing.

<For 2.4GHz Band>

For IEEE 802.11b/g/n/ac mode (1TX,2TX,3TX/1RX,2RX,3RX):

The EUT can support 1TX, 2TX, 3TX and 1RX, 2RX, 3RX functions.

For 1TX (Ant. 6 and Ant. 7)

Both Chain 4 and Chain 5 support transmit and receive functions, but only one of them will be used at one time.

After evaluating, Chain 5 has been evaluated to be the worst case, so it's selected to record in this test report.

For 1TX (Ant. 9)

Both Chain 4 and Chain 5 support transmit and receive functions, but only one of them will be used at one time.

After evaluating, Chain 4 has been evaluated to be the worst case, so it's selected to record in this test report.

For 2TX

Chain 4 and Chain 5 could transmit/receive simultaneously.

For 3TX

Chain 4, Chain 5 and Chain 6 could transmit/receive simultaneously.

<For 5GHz Band>

For IEEE 802.11a/n/ac mode (1TX,2TX,3TX/1RX,2RX,3RX):

The EUT can support 1TX, 2TX, 3TX and 1RX, 2RX, 3RX functions.

For 1TX (Ant. 2)

Both Chain 4 and Chain 5 support transmit and receive functions, but only one of them will be used at one time.

After evaluating, Chain 5 has been evaluated to be the worst case, so it's selected to record in this test report.

For 1TX (Ant. 8 and Ant. 9)

Both Chain 4 and Chain 5 support transmit and receive functions, but only one of them will be used at one time.

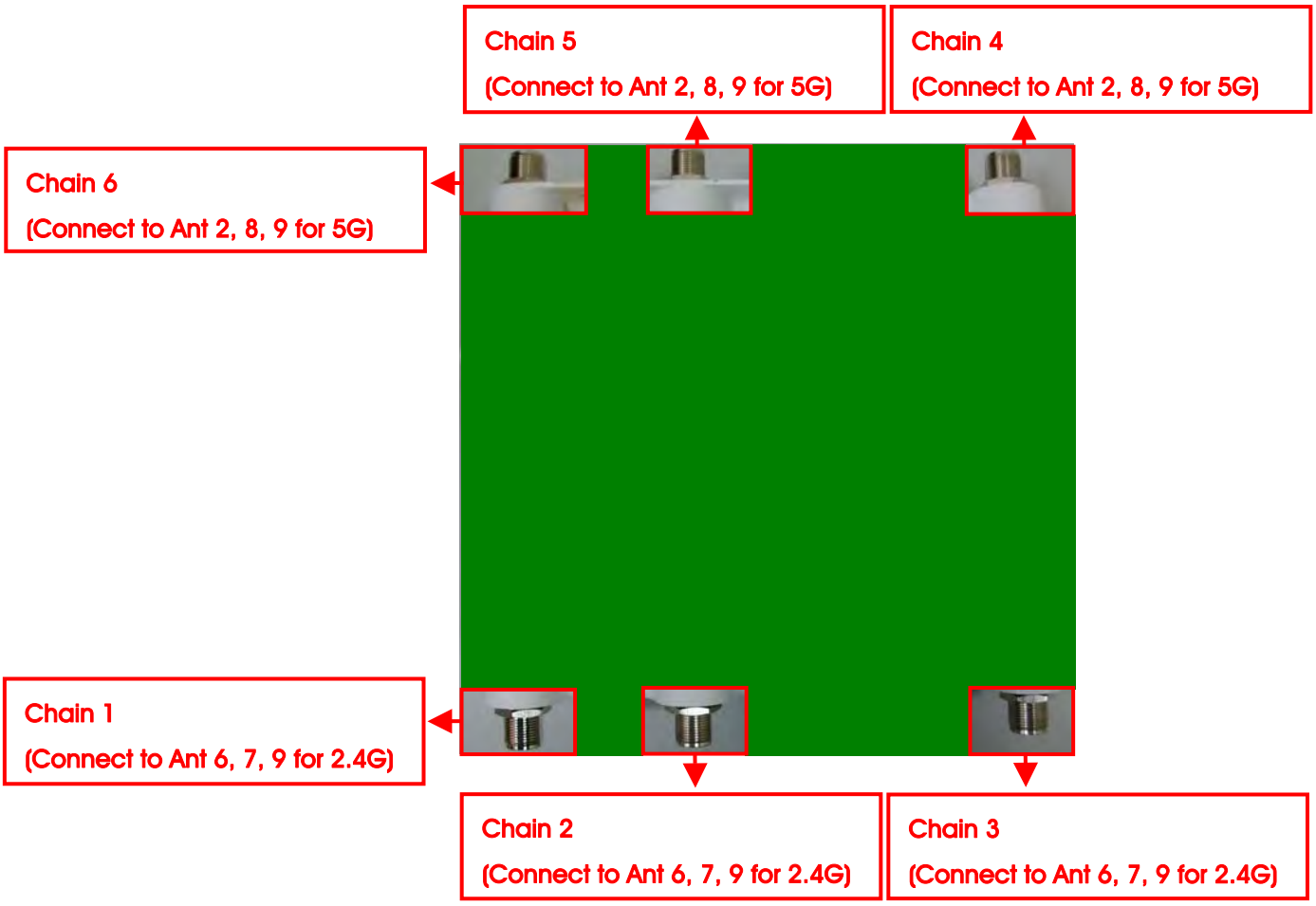
After evaluating, Chain 4 has been evaluated to be the worst case, so it's selected to record in this test report.

For 2TX

Chain 4 and Chain 5 could transmit/receive simultaneously.

For 3TX

Chain 4, Chain 5 and Chain 6 could transmit/receive simultaneously.


Chain 5
(Connect to Ant 2, 8, 9 for 5G)
Chain 4
(Connect to Ant 2, 8, 9 for 5G)
Chain 6
(Connect to Ant 2, 8, 9 for 5G)
Chain 1
(Connect to Ant 6, 7, 9 for 2.4G)
Chain 2
(Connect to Ant 6, 7, 9 for 2.4G)
Chain 3
(Connect to Ant 6, 7, 9 for 2.4G)

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	
AC Power Conducted Emission	Normal Link	-	-	-	
Max. Conducted Output Power	For Non-Beamforming Mode				
	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/116/140/144	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11n HT20	Band 2-3	MCS0	52/60/64/100/116/140/144	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11n HT40	Band 2-3	MCS0	54/62/102/110/134/142	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/134/142	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)

	For Beamforming Mode				
	11a/BPSK	Band 2-3	6Mbps	52/60/64/100/116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	For STBC Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
Power Spectral Density	For Non-Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/134/142	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	For Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
			MCS0/Nss2		

	For STBC Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1 MCS0/Nss2	52/60/64/100/ 116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1 MCS0/Nss2	54/62/102/ 110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1 MCS0/Nss2	58/106/122/ 138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
26dB Spectrum Bandwidth 99% Occupied Bandwidth Measurement	For Non-Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	4 (Ant. 8, 9) 5 (Ant. 2)
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/ 110/134/142	4 (Ant. 8, 9) 5 (Ant. 2)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/ 138	4 (Ant. 8, 9) 5 (Ant. 2)
	For STBC Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1 MCS0/Nss2	52/60/64/100/ 116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1 MCS0/Nss2	54/62/102/ 110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1 MCS0/Nss2	58/106/122/ 138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
6dB Spectrum Bandwidth Measurement	For Non-Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	144	4 (Ant. 8, 9) 5 (Ant. 2)
	11ac VHT40	Band 2-3	MCS0/Nss1	142	4 (Ant. 8, 9) 5 (Ant. 2)
	11ac VHT80	Band 2-3	MCS0/Nss1	138	4 (Ant. 8, 9) 5 (Ant. 2)
	For STBC Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1 MCS0/Nss2	144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1 MCS0/Nss2	142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1 MCS0/Nss2	138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)

Radiated Emission Below 1GHz	Normal Link		-	-	-
Radiated Emission Above 1GHz	For Non-Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/110/134/142	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/138	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	For Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1 MCS0/Nss2	52/60/64/100/116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1 MCS0/Nss2	54/62/102/110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1 MCS0/Nss2	58/106/122/138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	For STBC Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1 MCS0/Nss2	52/60/64/100/116/140/144	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1 MCS0/Nss2	54/62/102/110/134/142	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1 MCS0/Nss2	58/106/122/138	4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
Band Edge Emission	For Non-Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/116/140/144	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)

	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/ 110/134/142	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/ 138	4 (Ant. 8, 9) 5 (Ant. 2) 4+5 (Ant.2, 8. 9) 4+5+6 (Ant.2, 8. 9)
	For Beamforming Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	4+5 (Ant.2, 8. 9)
			MCS0/Nss2		4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/ 110/134/142	4+5 (Ant.2, 8. 9)
			MCS0/Nss2		4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/ 138	4+5 (Ant.2, 8. 9)
			MCS0/Nss2		4+5+6 (Ant.2, 8. 9)
	For STBC Mode				
	11ac VHT20	Band 2-3	MCS0/Nss1	52/60/64/100/ 116/140/144	4+5 (Ant.2, 8. 9)
			MCS0/Nss2		4+5+6 (Ant.2, 8. 9)
	11ac VHT40	Band 2-3	MCS0/Nss1	54/62/102/ 110/134/142	4+5 (Ant.2, 8. 9)
			MCS0/Nss2		4+5+6 (Ant.2, 8. 9)
	11ac VHT80	Band 2-3	MCS0/Nss1	58/106/122/ 138	4+5 (Ant.2, 8. 9)
			MCS0/Nss2		4+5+6 (Ant.2, 8. 9)
Frequency Stability	20 MHz	Band 2-3	-	60/116	4+5+6
	40 MHz	Band 2-3	-	62/110	4+5+6
	80 MHz	Band 2-3	-	58/106	4+5+6

Note 1: VHT20/VHT40 covers HT20/HT40, due to same modulation.

Note 2: The EUT only can standing use.

Note 3: The PoE is for measurement only, would not be marketed.

The PoE information as below:

Power	Brand	Model	Rating
PoE	MOTOROLA	AP-PSBIAS-7161	Input: 100-240Vac, 50/60Hz, 1.0A Output: 55Vdc

Note 4: Point-to-Multiple covers point-to-point.

The following test modes were performed for all tests:

Ant. 9 is the higher gain antenna, so it was selected to perform Conducted Emission test and Radiated Emission below 1GHz test:

For Conducted Emission test:

Test Mode 1: Normal Link - EUT standing + PoE + Ant.9

For Radiated Emission below 1GHz test:

Test Mode 1: Normal Link - EUT standing + PoE + Ant.9

For Radiated Emission above 1GHz test:

Test Mode 1: CTX - EUT standing + Ant. 2

Test Mode 2: CTX - EUT standing + Ant. 8

Test Mode 3: CTX - EUT standing + Ant. 9

For Co-location MPE and Radiated Emission Co-location Test:

The EUT could be applied with 2.4GHz WLAN function and 5GHz WLAN function; therefore Co-location Maximum Permissible Exposure (Please refer to FA4D0488-01) and Radiated Emission Co-location (please refer to Appendix B) tests are added for simultaneously transmit between 2.4GHz WLAN function and 5GHz WLAN function.

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	-
CO01-CB	Conduction	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: FR4D0488

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	All test items

3.8. Table for Supporting Units

For Test Site No: 03CH01-CB (For Below 1GHz)

Support Unit	Brand	Model	FCC ID
Notebook	DELL	M1330	E2K4965AGNM
Notebook	DELL	M1340	E2K4965AGNM
Notebook	DELL	E6430	DoC
Notebook	DELL	E6430	DoC
PoE	MOTOROLA	AP-PSBIAS-7161	DoC

For Test Site No: 03CH01-CB (For Above 1GHz)

For Non-beamforming and STBC Mode

Support Unit	Brand	Model	FCC ID
Notebook	DELL	M1330	E2K4965AGNM
PoE	MOTOROLA	AP-PSBIAS-7161	DoC

For beamforming Mode

Support Unit	Brand	Model	FCC ID
Notebook	DELL	M1330	E2K4965AGNM
Notebook	DELL	M1340	E2K4965AGNM
WLAN ac Dongle	Netgear	A6200	PY312200200
PoE	MOTOROLA	AP-PSBIAS-7161	DoC

For Test Site No: CO01-CB

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E6430	DoC
Notebook	DELL	E6430	DoC
Notebook	DELL	E6430	DoC
Notebook	DELL	E6430	DoC
PoE	MOTOROLA	AP-PSBIAS-7161	DoC

For Test Site No: TH01-CB

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E6220	DoC
PoE	MOTOROLA	AP-PSBIAS-7161	DoC

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: (Ant.2 Dipole antenna / 7.3dBi / 1TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	82	81	74	72	83	72	81
802.11n MCS0 HT20	82	81	74	72	83	72	81
802.11ac MCS0/Nss1 VHT20	82	81	74	72	83	72	81
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	81	62	62	77	69	80	
802.11ac MCS0/Nss1 VHT40	81	62	62	77	69	80	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	44	52	69	81			

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 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	70	69	70	70	70	62	71
802.11n MCS0 HT20	70	69	70	70	70	62	71
802.11ac MCS0/Nss1 VHT20	70	69	70	70	70	62	71
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	76	61	62	75	68	81	
802.11ac MCS0/Nss1 VHT40	76	61	62	75	68	81	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	51	50	68	80			

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	56	56	56	56	55	56	57
802.11n MCS0 HT20	56	56	56	56	55	56	57
802.11ac MCS0/Nss1 VHT20	56	56	56	56	55	56	57
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	66	46	50	61	64	68	
802.11ac MCS0/Nss1 VHT40	66	46	50	61	64	68	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	36	42	66	74			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	83	76	76	83	72	83
802.11n MCS0 HT20	83	83	76	76	83	72	83
802.11ac MCS0/Nss1 VHT20	83	83	76	76	83	72	83
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	83	68	68	81	74	83	
802.11ac MCS0/Nss1 VHT40	83	68	68	81	74	83	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	65	67	76	81			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 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	78	77	74	72	78	71	78
802.11n MCS0 HT20	78	77	74	72	78	71	78
802.11ac MCS0/Nss1 VHT20	78	77	74	72	78	71	78
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	81	60	60	81	71	85	
802.11ac MCS0/Nss1 VHT40	81	60	60	81	71	85	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	50	50	70	80			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	65	65	64	65	65	65	65
802.11n MCS0 HT20	65	65	64	65	65	65	65
802.11ac MCS0/Nss1 VHT20	65	65	64	65	65	65	65

Mode	NCB: 40MHz					
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz
802.11n MCS0 HT40	73	70	55	74	66	77
802.11ac MCS0/Nss1 VHT40	73	70	55	74	66	77

Mode	NCB: 80MHz			
	5290 MHz	5530 MHz	5610 MHz	5690 MHz
802.11ac MCS0/Nss1 VHT80	42	43	66	74

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	83	83	78	77	83	69	83
802.11n MCS0 HT20	83	83	78	77	83	69	83
802.11ac MCS0/Nss1 VHT20	83	83	78	77	83	69	83
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	83	65	63	85	73	83	
802.11ac MCS0/Nss1 VHT40	83	65	63	85	73	83	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	58	59	76	81			

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 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	75	75	76	74	75	69	75
802.11n MCS0 HT20	75	75	76	74	75	69	75
802.11ac MCS0/Nss1 VHT20	75	75	76	74	75	69	75
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	75	64	60	75	70	75	
802.11ac MCS0/Nss1 VHT40	75	64	60	75	70	75	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	56	56	70	74			

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	70	69	66	68	68	60	69
802.11n MCS0 HT20	70	69	66	68	68	60	69
802.11ac MCS0/Nss1 VHT20	70	69	66	68	68	60	69
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11n MCS0 HT40	70	55	54	70	67	69	
802.11ac MCS0/Nss1 VHT40	70	55	54	70	67	69	
Mode	NCB: 80MHz						
	5290 MHz		5530 MHz		5610 MHz	5690 MHz	
802.11ac MCS0/Nss1 VHT80	42		48		67	70	

<For Beamforming Mode>

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 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	64	60	58	68	68	54	68
802.11ac MCS0/Nss1 VHT20	64	60	58	68	68	54	68
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	68	50	54	64	66	68	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	42	44	67	68			

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	54	54	53	53	53	48	54
802.11ac MCS0/Nss1 VHT20	54	54	53	53	53	48	54
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	53	43	47	52	53	53	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	36	36	53	54			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 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	72	64	62	72	76	65	77
802.11ac MCS0/Nss1 VHT20	72	64	62	72	76	65	77
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	67	46	54	72	65	77	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	45	50	69	76			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	62	53	53	63	63	58	64
802.11ac MCS0/Nss1 VHT20	62	53	53	63	63	58	64
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	63	44	49	61	62	63	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	36	43	63	63			

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 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	75	75	74	75	75	68	75
802.11ac MCS0/Nss1 VHT20	75	75	74	75	75	68	75
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	75	66	60	75	69	75	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	61	56	74	76			

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)

Test Software Version	Mtool_2.0.1.0						
Mode	Test Frequency (MHz)						
	NCB: 20MHz						
	5260 MHz	5300 MHz	5320 MHz	5500 MHz	5580 MHz	5700 MHz	5720 MHz
802.11a	66	68	66	65	65	58	65
802.11ac MCS0/Nss1 VHT20	66	68	66	65	65	58	65
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	66	59	56	65	64	64	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	50	50	65	66			

<For STBC Mode>

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 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	80	79	76	76	80	74	80
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	77	65	63	78	70	80	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	52	56	74	80			

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 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	66	68	69	64	66	74
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	70	56	54	71	68	74	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	40	44	67	74			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 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	85	82	73	72	85	71	85
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	83	61	63	82	72	84	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	54	55	72	81			

Mode 2: (Ant.8 Panel antenna / 5.1dBi / 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	79	76	74	70	78	68	78
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	79	58	59	74	70	79	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	50	50	70	78			

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 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	75	75	75	73	75	69	75
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	76	63	60	75	71	76	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	57	64	74	76			

Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 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	70	70	70	64	69	60	69
Mode	NCB: 40MHz						
	5270 MHz	5310 MHz	5510 MHz	5550 MHz	5670 MHz	5710 MHz	
802.11ac MCS0/Nss1 VHT40	70	61	56	69	68	69	
Mode	NCB: 80MHz						
	5290 MHz	5530 MHz	5610 MHz	5690 MHz			
802.11ac MCS0/Nss1 VHT80	54	52	67	69			

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 WLAN ac dongle and transmit duty cycle no less 98%

For STBC mode:

The EUT was programmed to be in continuously transmitting mode.

3.11. Duty Cycle

<For Non-Beamforming Mode>

For 1TX

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	1.920	1.950	98.46%	0.07	0.01
802.11ac MCS0/Nss1 VHT40	0.944	0.984	95.93%	0.18	1.06
802.11ac MCS0/Nss1 VHT80	0.458	0.486	94.24%	0.26	2.18

For 2TX

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	1.920	1.950	98.46%	0.07	0.01
802.11ac MCS0/Nss1 VHT40	0.960	0.980	97.96%	0.09	1.04
802.11ac MCS0/Nss1 VHT80	0.462	0.484	95.45%	0.20	2.16

For 3TX

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	1.930	1.960	98.47%	0.07	0.01
802.11ac MCS0/Nss1 VHT40	0.920	0.978	94.07%	0.27	1.09
802.11ac MCS0/Nss1 VHT80	0.466	0.488	95.49%	0.20	2.15

<For Beamforming Mode>

For 2TX

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	1.930	2.030	95.07%	0.22	0.52
802.11ac MCS0/Nss1 VHT40	0.452	0.466	97.00%	0.13	2.21
802.11ac MCS0/Nss1 VHT80	5.023	5.354	93.82%	0.28	0.20

For 3TX

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	3.690	3.788	97.41%	0.11	0.27
802.11ac MCS0/Nss1 VHT40	4.512	4.611	97.85%	0.09	0.22
802.11ac MCS0/Nss1 VHT80	5.048	5.312	95.03%	0.22	0.20

<For STBC Mode>

For 2TX

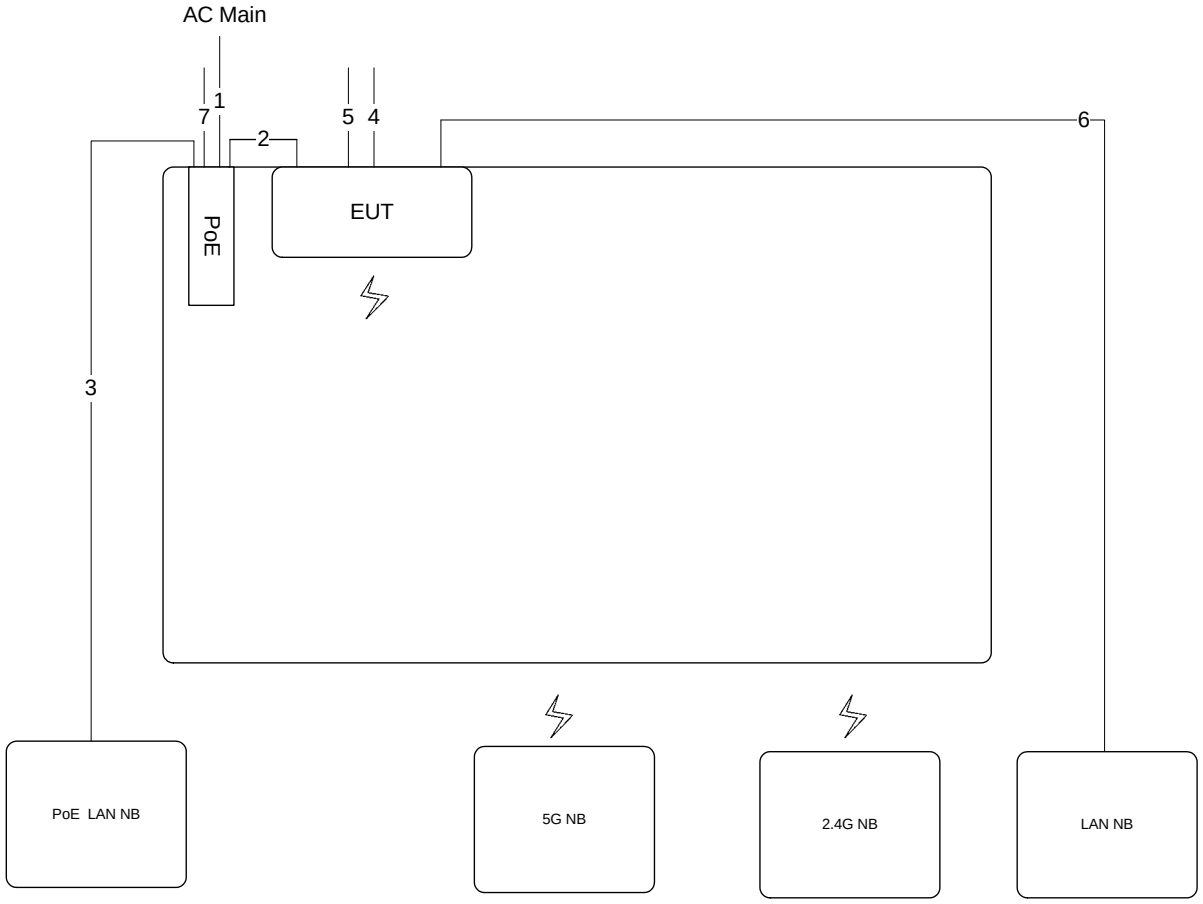
Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	1.932	1.964	98.37%	0.07	0.01
802.11ac MCS0/Nss1 VHT40	0.932	0.952	97.90%	0.09	1.07
802.11ac MCS0/Nss1 VHT80	0.432	0.455	94.95%	0.23	2.31

For 3TX

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11ac MCS0/Nss1 VHT20	1.942	1.958	99.18%	0.04	0.01
802.11ac MCS0/Nss1 VHT40	0.921	0.950	96.95%	0.13	1.09
802.11ac MCS0/Nss1 VHT80	0.470	0.492	95.53%	0.20	2.13

3.12. Test Configurations

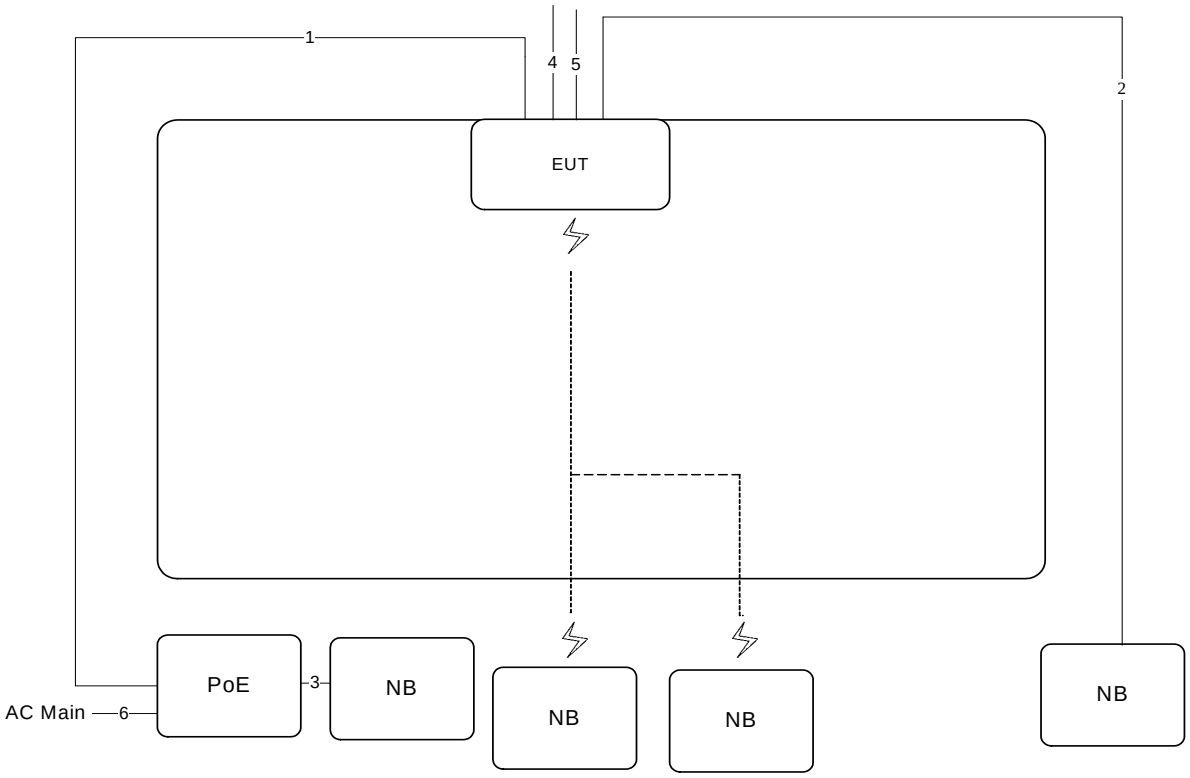
3.12.1. AC Power Line Conduction Emissions Test Configuration



Item	Connection	Shielded	Length(m)
1	Power cable	No	3
2	RJ-45 cable	No	1.5
3	RJ-45 cable	No	10
4	Ground cable	No	1.8
5	Console cable	No	1.5
6	RJ-45 cable	No	10
7	Ground cable	No	2

3.12.2. Radiation Emissions Test Configuration

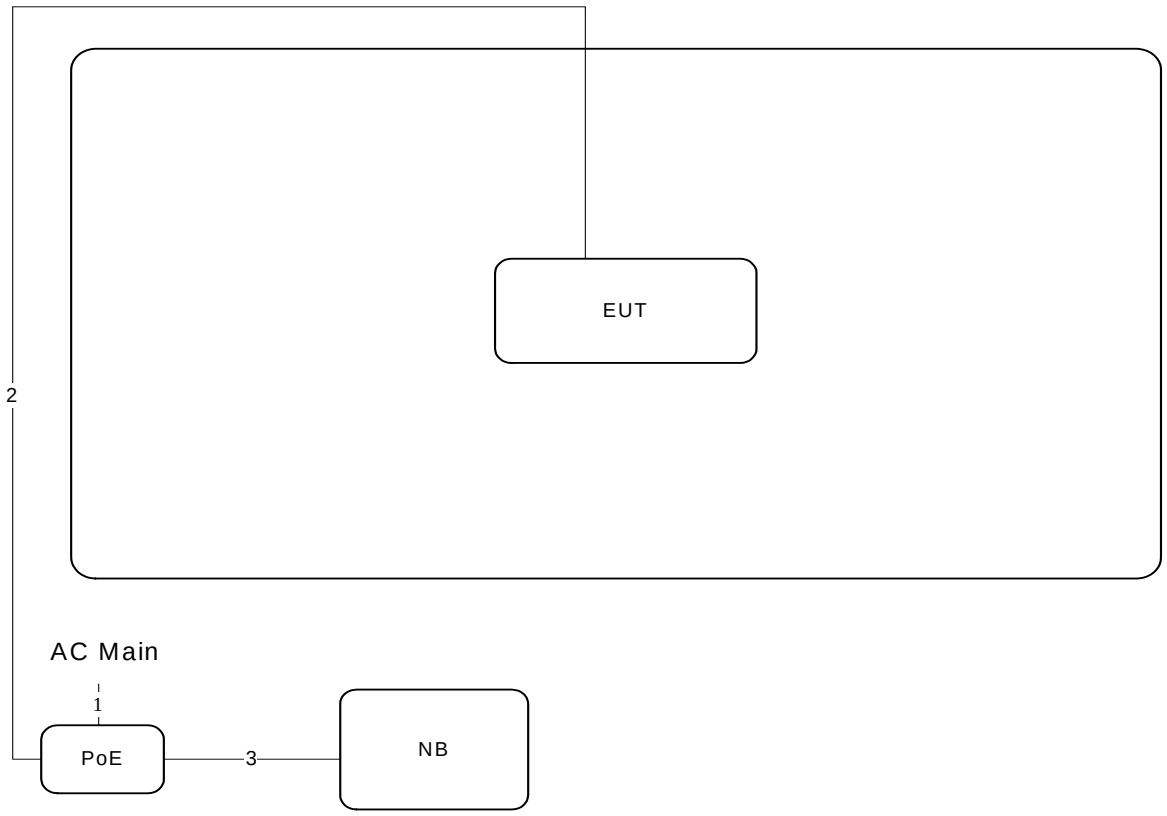
Test Configuration: 30MHz ~1GHz



Item	Connection	Shielded	Length(m)
1	RJ-45 cable	No	50
2	RJ-45 cable	No	10
3	RJ-45 cable	No	1.5
4	Ground cable	No	1.8
5	Console cable	No	1.5
6	Power cable	No	1.5

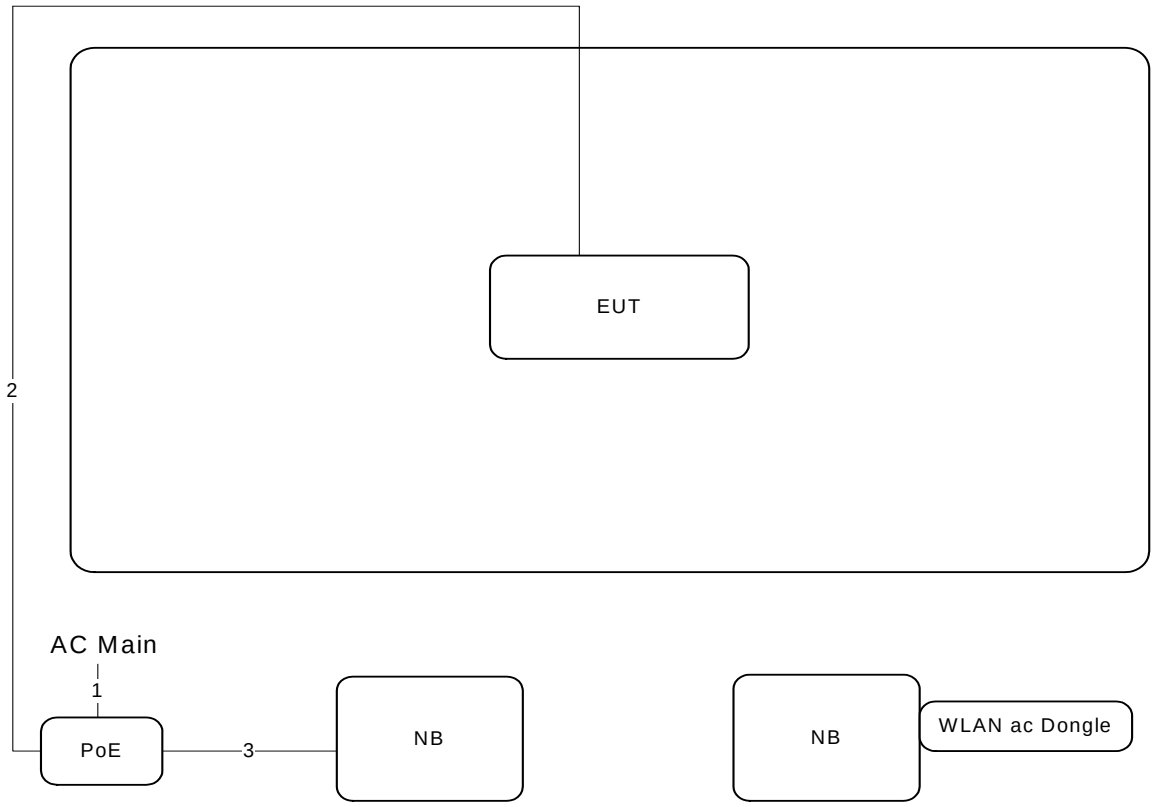
Test Configuration: above 1GHz:

For Non-Beamforming Mode



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

For Beamforming Mode



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

4. TEST RESULT

4.1. AC Power Line Conducted Emissions Measurement

4.1.1. Limit

For this product that is designed to connect to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	QP Limit (dBuV)	AV Limit (dBuV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

4.1.2. Measuring Instruments and Setting

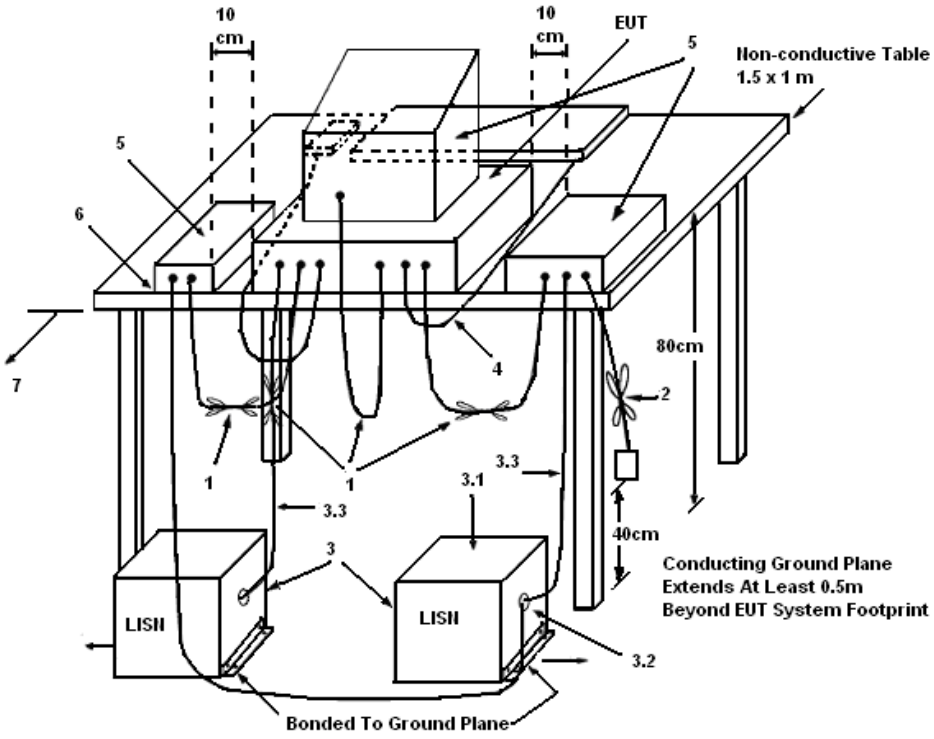
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver.

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.1.3. Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

4.1.4. Test Setup Layout



LEGEND:

(1) Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

(2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

(3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, reference ground plane.

(3.1) All other equipment powered from additional LISN(s).

(3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

(3.3) LISN at least 80 cm from nearest part of EUT chassis.

(4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.

(5) Non-EUT components of EUT system being tested.

(6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.

(7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

4.1.5. Test Deviation

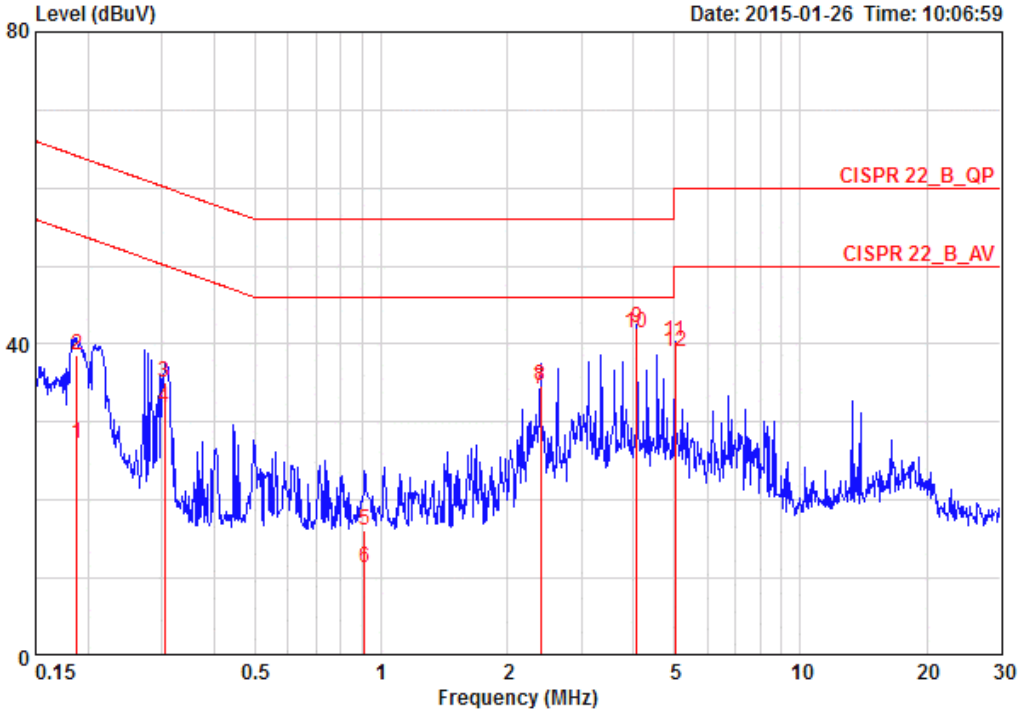
There is no deviation with the original standard.

4.1.6. EUT Operation during Test

The EUT was placed on the test table and programmed in normal function.

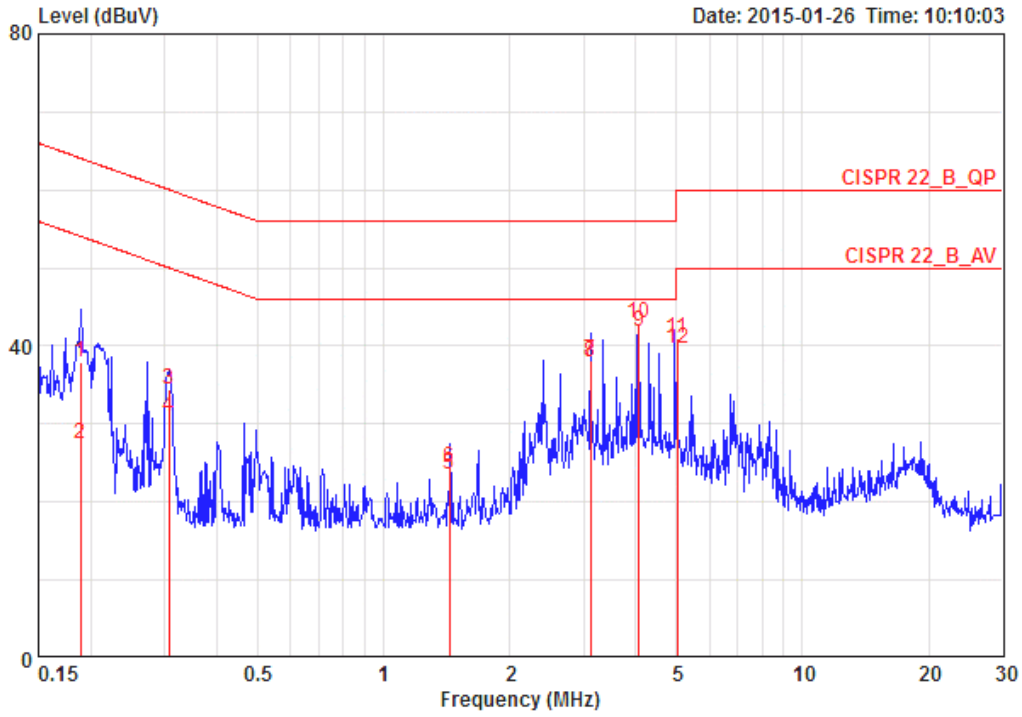
4.1.7. Results of AC Power Line Conducted Emissions Measurement

Temperature	23°C	Humidity	56%
Test Engineer	Parody Lin	Phase	Line
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.18814	27.24	-26.88	54.12	17.22	9.78	0.24	AVERAGE	LINE
2	0.18814	38.55	-25.57	64.12	28.53	9.78	0.24	QP	LINE
3	0.30509	35.01	-25.09	60.10	24.96	9.77	0.28	QP	LINE
4	0.30509	31.73	-18.37	50.10	21.68	9.77	0.28	AVERAGE	LINE
5	0.91357	16.18	-39.82	56.00	6.08	9.77	0.33	QP	LINE
6	0.91357	11.38	-34.62	46.00	1.28	9.77	0.33	AVERAGE	LINE
7	2.396	34.16	-11.84	46.00	24.07	9.74	0.36	AVERAGE	LINE
8	2.396	34.55	-21.45	56.00	24.46	9.74	0.36	QP	LINE
9	4.073	42.14	-13.86	56.00	32.06	9.71	0.37	QP	LINE
10	4.073	41.43	-4.57	46.00	31.35	9.71	0.37	AVERAGE	LINE
11	5.031	40.30	-19.70	60.00	30.24	9.68	0.38	QP	LINE
12	5.031	39.03	-10.97	50.00	28.97	9.68	0.38	AVERAGE	LINE

Temperature	23°C	Humidity	56%
Test Engineer	Parody Lin	Phase	Neutral
Configuration	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.18938	38.02	-26.04	64.06	27.86	9.92	0.24	QP	NEUTRAL
2	0.18938	27.46	-26.60	54.06	17.30	9.92	0.24	AVERAGE	NEUTRAL
3	0.30671	34.50	-25.55	60.06	24.31	9.91	0.28	QP	NEUTRAL
4	0.30671	30.95	-19.10	50.06	20.76	9.91	0.28	AVERAGE	NEUTRAL
5	1.437	23.54	-22.46	46.00	13.29	9.91	0.34	AVERAGE	NEUTRAL
6	1.437	24.48	-31.52	56.00	14.23	9.91	0.34	QP	NEUTRAL
7	3.114	38.12	-17.88	56.00	27.88	9.87	0.36	QP	NEUTRAL
8	3.114	37.86	-8.14	46.00	27.62	9.87	0.36	AVERAGE	NEUTRAL
9 @	4.072	41.86	-4.14	46.00	31.63	9.86	0.37	AVERAGE	NEUTRAL
10	4.072	42.99	-13.01	56.00	32.76	9.86	0.37	QP	NEUTRAL
11	5.029	40.92	-19.08	60.00	30.70	9.84	0.38	QP	NEUTRAL
12	5.029	39.58	-10.42	50.00	29.36	9.84	0.38	AVERAGE	NEUTRAL

Note:

Level = Read Level + LISN Factor + Cable Loss.

4.2. 26dB Bandwidth and 99% Occupied Bandwidth Measurement

4.2.1. Limit

No restriction limits.

4.2.2. 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	≥ 3 x RBW
Detector	Peak
Trace	Max Hold

4.2.3. 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%.

4.2.4. Test Setup Layout

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

This test setup layout is the same as that shown in section 4.6.4.

4.2.5. Test Deviation

There is no deviation with the original standard.

4.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

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

<For Non-Beamforming Mode>

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)		

For Chain 5

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	30.96	18.48
	5300 MHz	32.52	18.48
	5320 MHz	20.78	18.06
	5500 MHz	20.78	17.97
	5580 MHz	35.28	18.48
	5700 MHz	20.78	18.06
	5720 MHz	33.36	18.48
802.11ac MCS0/Nss1 VHT40	5270 MHz	79.42	37.62
	5310 MHz	41.01	36.90
	5510 MHz	41.01	36.76
	5550 MHz	56.38	37.19
	5670 MHz	40.72	36.75
	5710 MHz	74.00	37.60
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.90	75.83
	5530 MHz	82.60	75.83
	5610 MHz	82.60	75.83
	5690 MHz	122.31	76.41

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)		

For Chain 4

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	34.20	18.36
	5300 MHz	32.17	18.49
	5320 MHz	26.43	18.14
	5500 MHz	24.08	18.14
	5580 MHz	31.80	18.36
	5700 MHz	20.17	17.71
	5720 MHz	34.20	18.48
802.11ac MCS0/Nss1 VHT40	5270 MHz	84.60	37.80
	5310 MHz	45.50	36.90
	5510 MHz	47.97	36.90
	5550 MHz	69.42	37.62
	5670 MHz	63.91	37.19
	5710 MHz	76.80	37.60
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.89	76.12
	5530 MHz	82.60	75.83
	5610 MHz	97.68	76.41
	5690 MHz	124.34	76.41

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)		

For Chain 4

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	34.20	18.36
	5300 MHz	32.17	18.49
	5320 MHz	27.21	18.14
	5500 MHz	22.60	18.14
	5580 MHz	31.80	18.36
	5700 MHz	20.69	17.97
	5720 MHz	34.20	18.48
802.11ac MCS0/Nss1 VHT40	5270 MHz	84.60	37.80
	5310 MHz	41.01	36.90
	5510 MHz	40.87	36.90
	5550 MHz	81.88	37.77
	5670 MHz	48.69	36.90
	5710 MHz	76.80	37.60
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.60	76.12
	5530 MHz	82.60	75.83
	5610 MHz	84.34	75.83
	5690 MHz	119.71	76.12

<For STBC Mode>

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	26.08	17.97
	5300 MHz	28.60	18.06
	5320 MHz	21.56	17.88
	5500 MHz	21.13	17.88
	5580 MHz	25.04	18.06
	5700 MHz	20.34	17.97
	5720 MHz	25.73	18.06
802.11ac MCS0/Nss1 VHT40	5270 MHz	53.76	36.90
	5310 MHz	40.43	36.61
	5510 MHz	40.58	36.61
	5550 MHz	51.44	36.75
	5670 MHz	41.01	36.61
	5710 MHz	67.82	37.04
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.44	75.83
	5530 MHz	81.73	75.54
	5610 MHz	84.34	75.83
	5690 MHz	126.08	76.12

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	20.78	17.88
	5300 MHz	20.52	17.88
	5320 MHz	20.69	17.88
	5500 MHz	20.52	17.88
	5580 MHz	20.69	17.88
	5700 MHz	20.52	17.88
	5720 MHz	20.78	17.97
802.11ac MCS0/Nss1 VHT40	5270 MHz	40.72	36.75
	5310 MHz	40.72	36.61
	5510 MHz	40.58	36.61
	5550 MHz	40.72	36.61
	5670 MHz	40.58	36.61
	5710 MHz	40.87	36.75
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.60	75.83
	5530 MHz	82.31	75.83
	5610 MHz	82.02	75.83
	5690 MHz	82.60	76.12

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	32.95	18.23
	5300 MHz	31.39	18.23
	5320 MHz	20.60	17.88
	5500 MHz	20.52	17.97
	5580 MHz	32.60	18.14
	5700 MHz	20.34	17.88
	5720 MHz	30.36	18.36
802.11ac MCS0/Nss1 VHT40	5270 MHz	72.46	37.19
	5310 MHz	40.29	36.61
	5510 MHz	40.43	36.61
	5550 MHz	75.50	37.19
	5670 MHz	40.43	36.61
	5710 MHz	75.20	37.60
802.11ac MCS0/Nss1 VHT80	5290 MHz	81.73	75.54
	5530 MHz	82.31	75.54
	5610 MHz	82.89	75.83
	5690 MHz	126.08	76.12

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss1 VHT20	5260 MHz	21.04	17.97
	5300 MHz	20.95	17.97
	5320 MHz	20.69	17.97
	5500 MHz	20.52	17.97
	5580 MHz	21.65	18.06
	5700 MHz	20.43	17.88
	5720 MHz	22.69	18.06
802.11ac MCS0/Nss1 VHT40	5270 MHz	60.14	36.90
	5310 MHz	40.72	36.61
	5510 MHz	40.87	36.61
	5550 MHz	41.30	36.61
	5670 MHz	40.72	36.61
	5710 MHz	58.55	36.90
802.11ac MCS0/Nss1 VHT80	5290 MHz	82.31	75.83
	5530 MHz	82.31	75.83
	5610 MHz	82.31	75.83
	5690 MHz	94.20	76.12

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss2 VHT20	5260 MHz	20.86	17.88
	5300 MHz	21.56	17.97
	5320 MHz	21.39	17.88
	5500 MHz	20.60	17.97
	5580 MHz	20.69	17.88
	5700 MHz	20.34	17.88
	5720 MHz	23.04	17.88
802.11ac MCS0/Nss2 VHT40	5270 MHz	48.55	36.75
	5310 MHz	40.43	36.61
	5510 MHz	40.58	36.46
	5550 MHz	42.89	36.61
	5670 MHz	41.15	36.61
	5710 MHz	44.49	36.75
802.11ac MCS0/Nss2 VHT80	5290 MHz	81.73	75.83
	5530 MHz	81.44	75.83
	5610 MHz	82.60	75.83
	5690 MHz	83.47	76.12

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

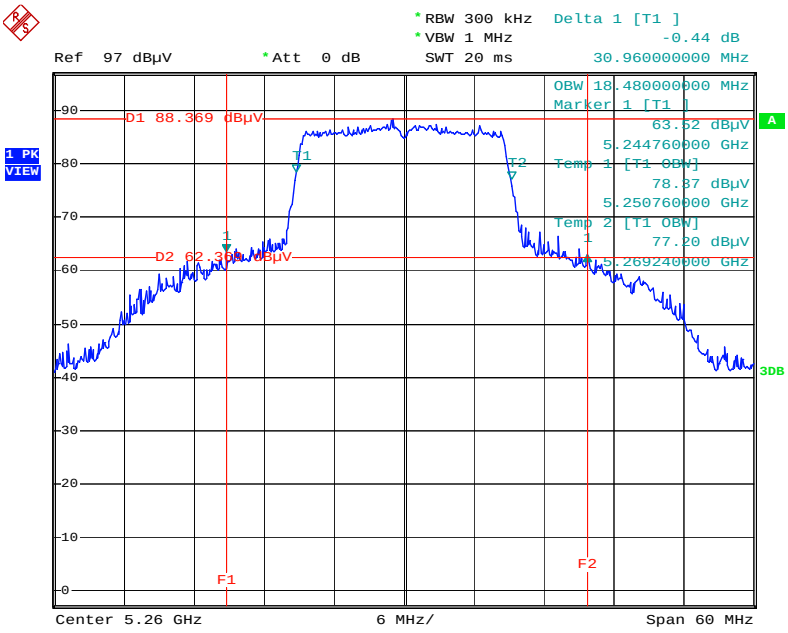
For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11ac MCS0/Nss2 VHT20	5260 MHz	20.52	17.88
	5300 MHz	20.69	17.88
	5320 MHz	20.52	17.88
	5500 MHz	20.43	17.88
	5580 MHz	20.26	17.88
	5700 MHz	20.26	17.88
	5720 MHz	20.52	17.88
802.11ac MCS0/Nss2 VHT40	5270 MHz	40.72	36.61
	5310 MHz	40.29	36.61
	5510 MHz	40.43	36.61
	5550 MHz	40.14	36.61
	5670 MHz	40.58	36.61
	5710 MHz	40.29	36.46
802.11ac MCS0/Nss2 VHT80	5290 MHz	81.73	75.83
	5530 MHz	81.73	75.54
	5610 MHz	82.02	75.54
	5690 MHz	81.73	75.83

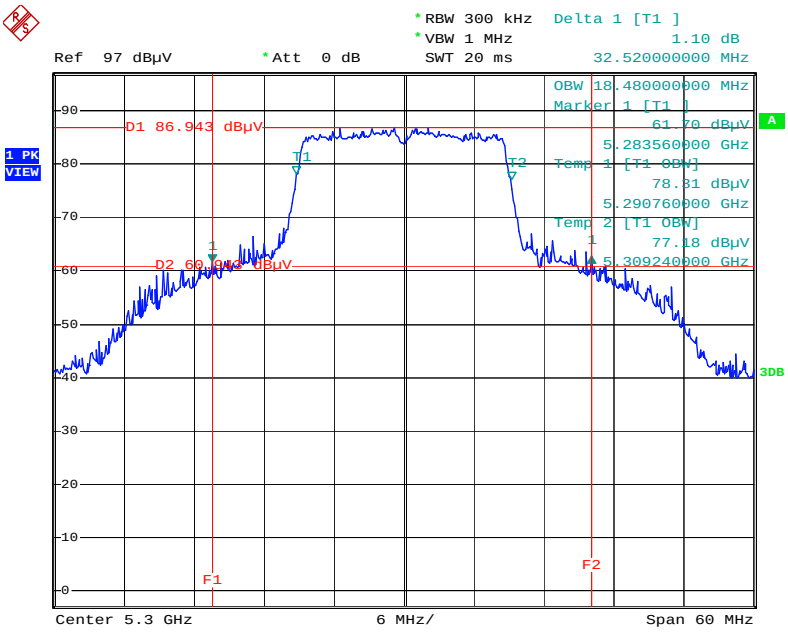
<For Non-Beamforming Mode>

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)

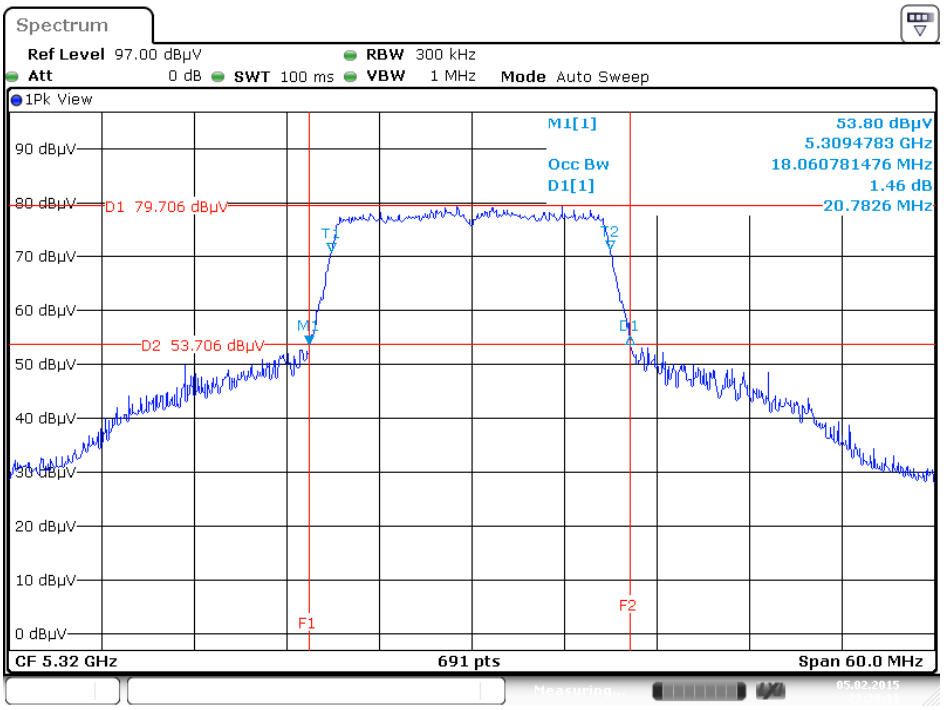
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5260 MHz



26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5300 MHz

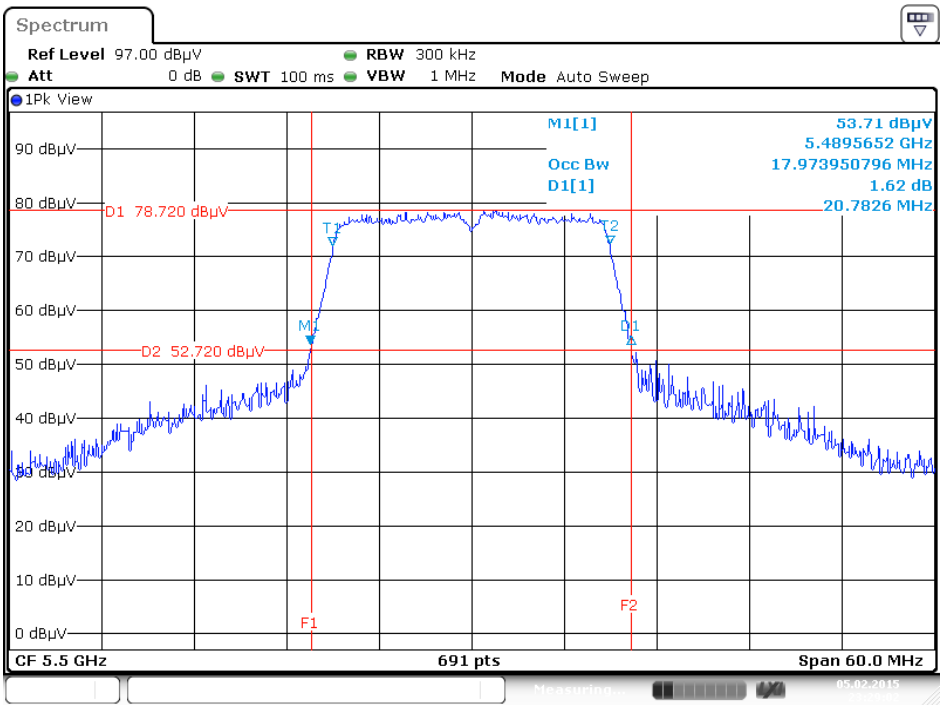


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5320 MHz



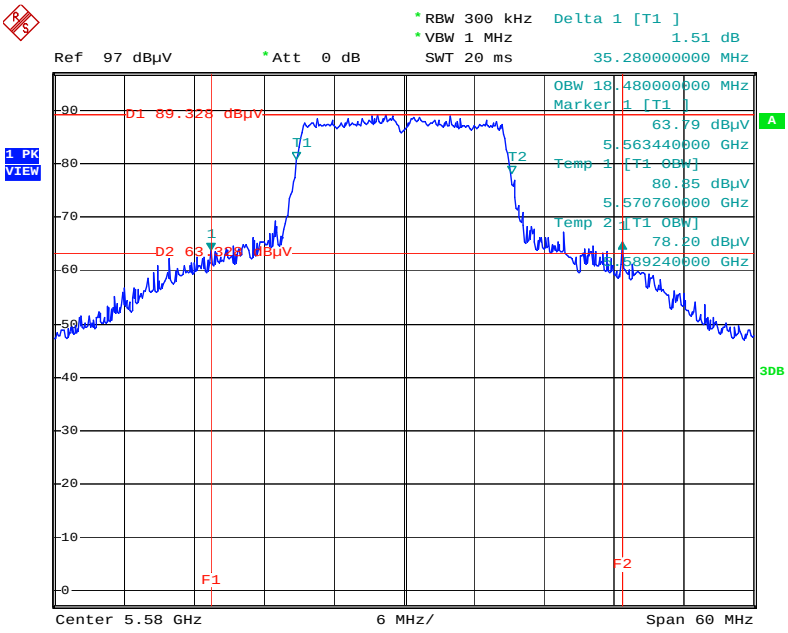
Date: 5.FEB.2015 23:28:11

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5500 MHz



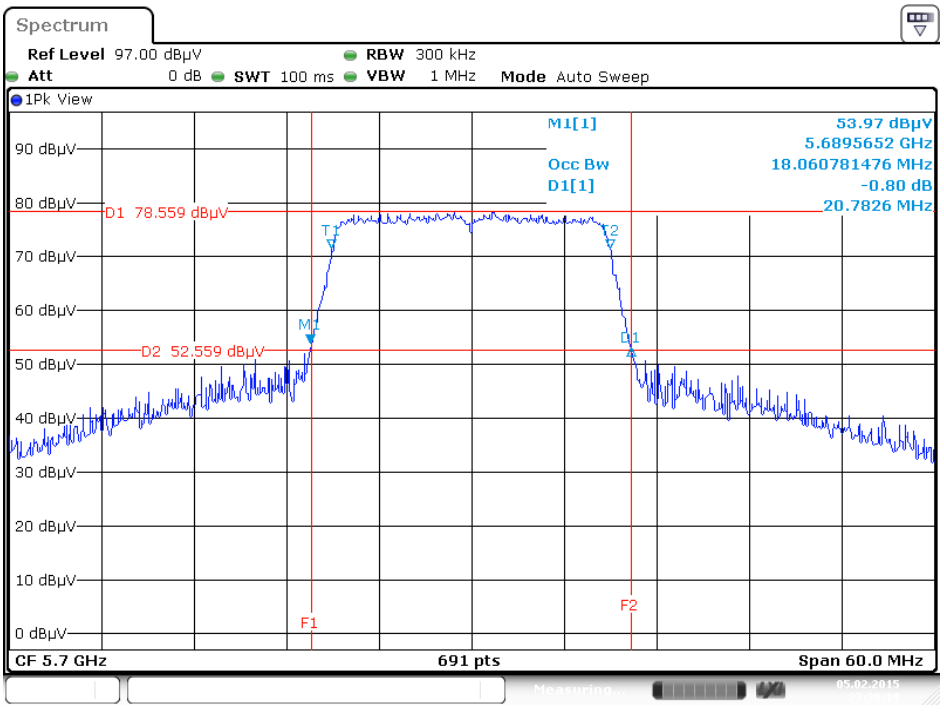
Date: 5.FEB.2015 23:29:01

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5580 MHz



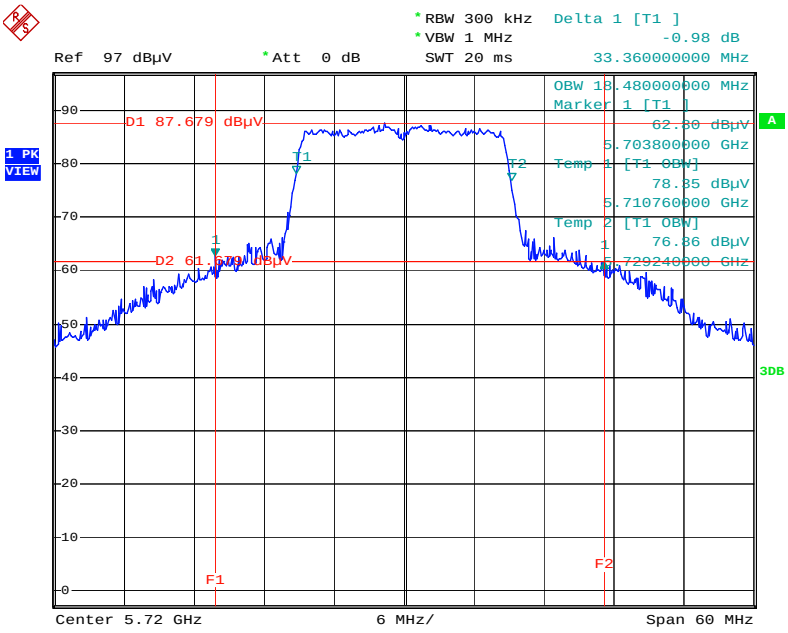
Date: 19.MAR.2015 15:38:51

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5700 MHz



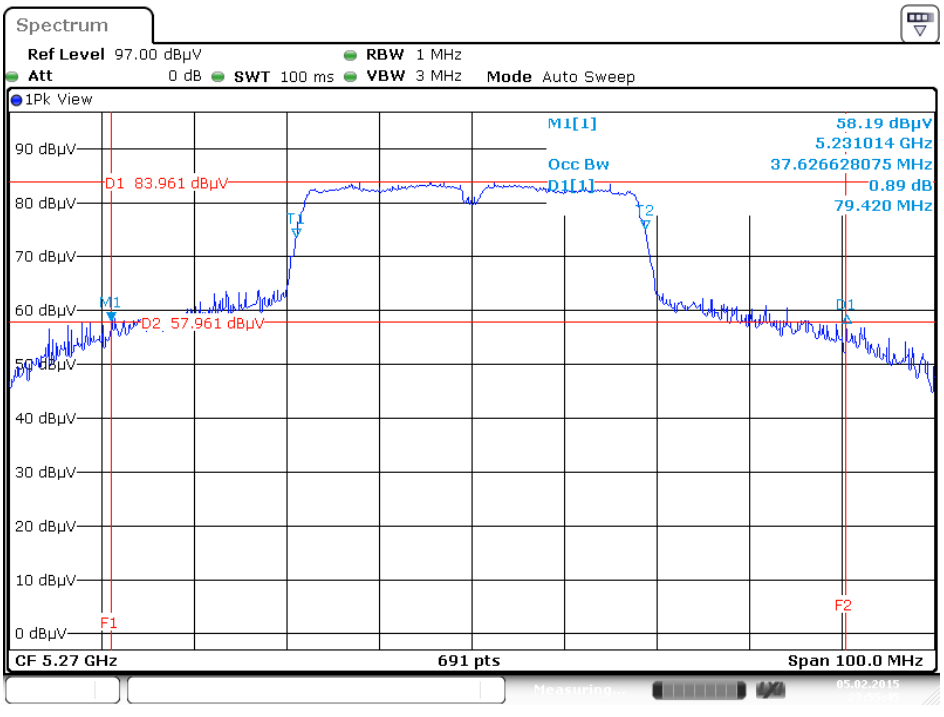
Date: 5.FEB.2015 23:30:19

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5720 MHz



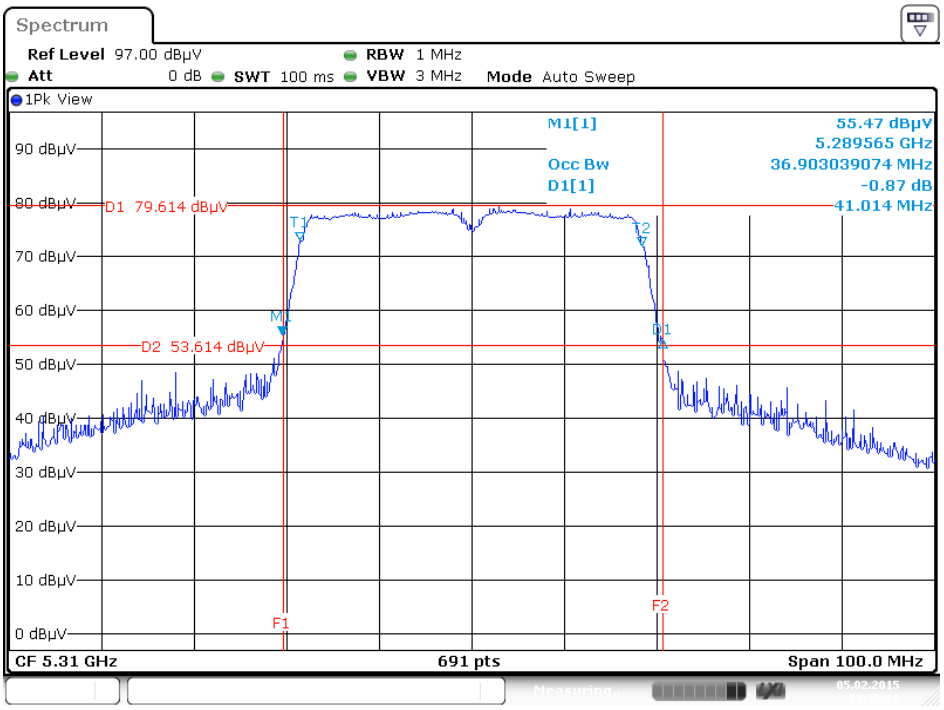
Date: 19.MAR.2015 15:45:05

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5270 MHz



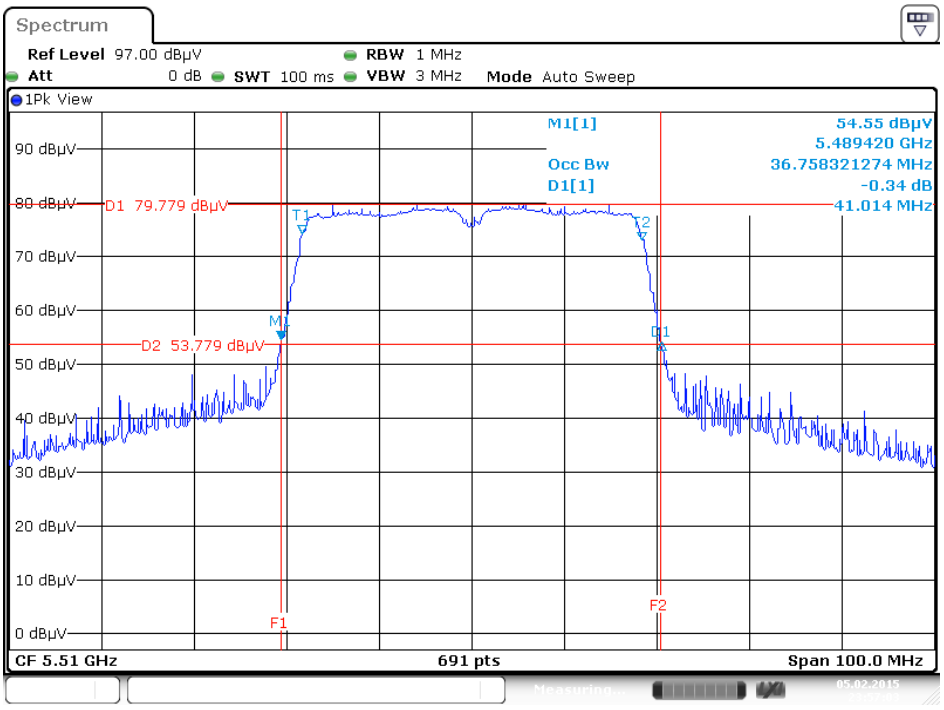
Date: 5.FEB.2015 23:55:45

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5310 MHz



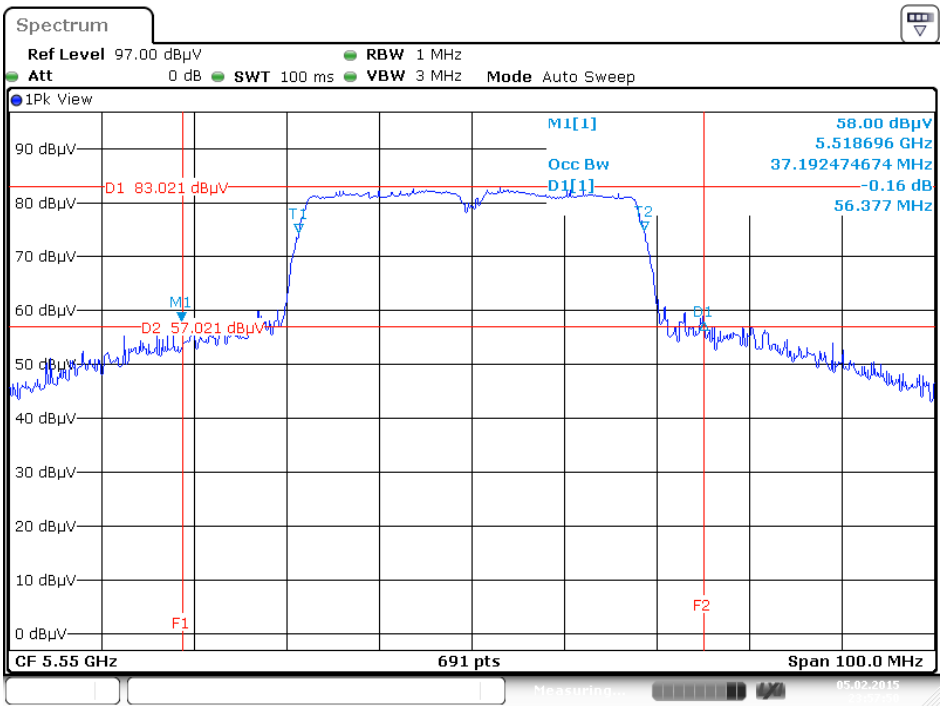
Date: 5.FEB.2015 23:56:20

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5510 MHz



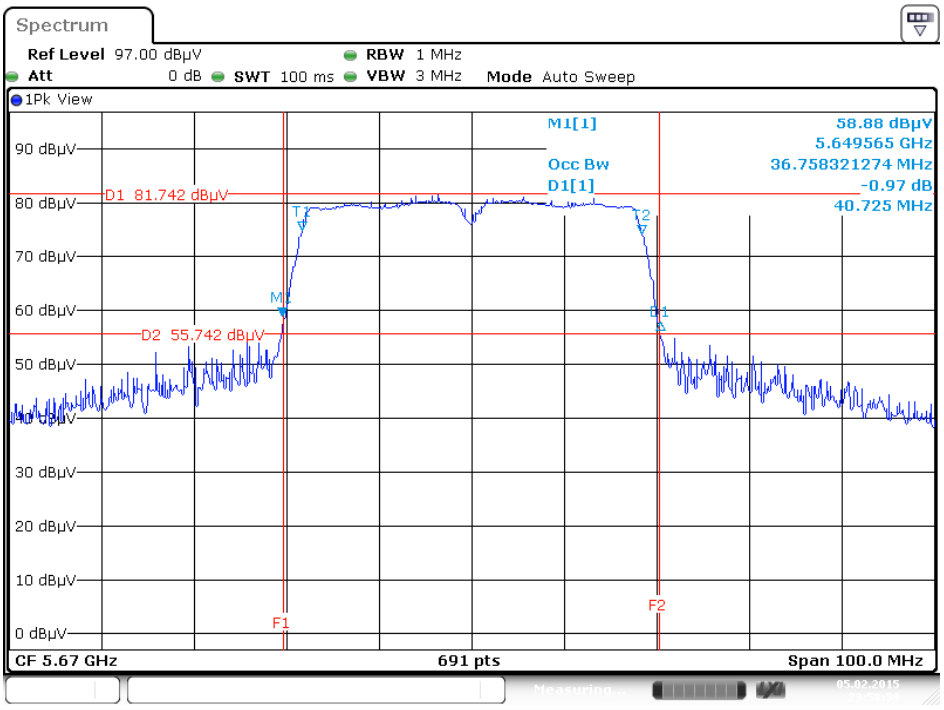
Date: 5.FEB.2015 23:57:03

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5550 MHz



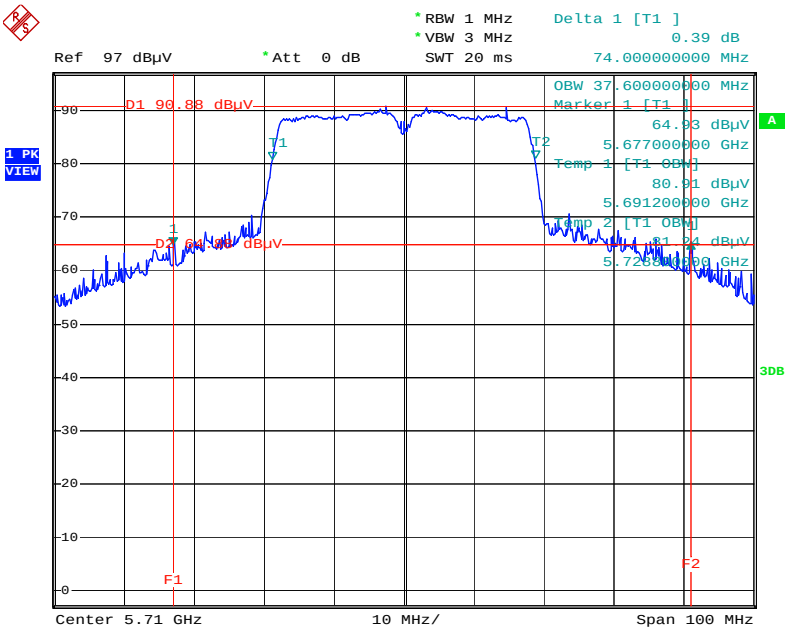
Date: 5.FEB.2015 23:57:51

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5670 MHz



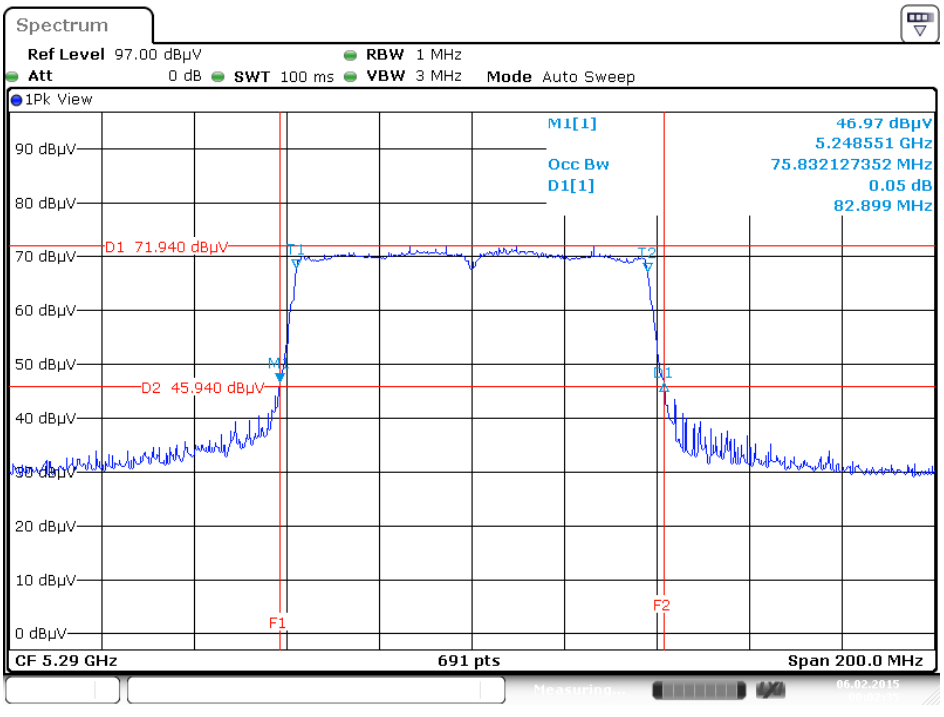
Date: 5.FEB.2015 23:58:59

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5710 MHz



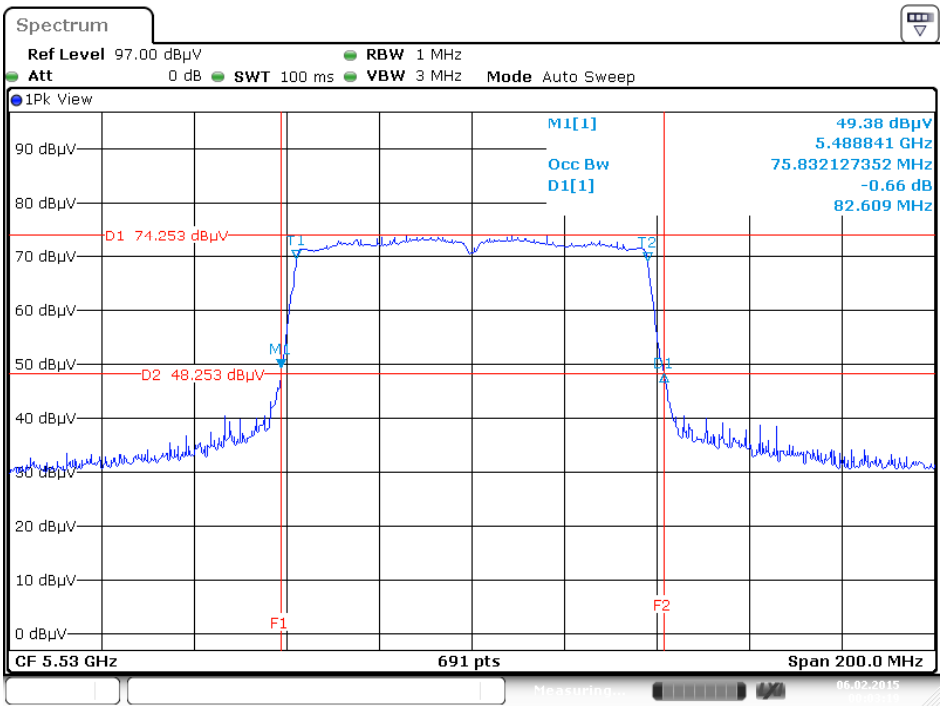
Date: 20.MAR.2015 10:33:51

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5290 MHz



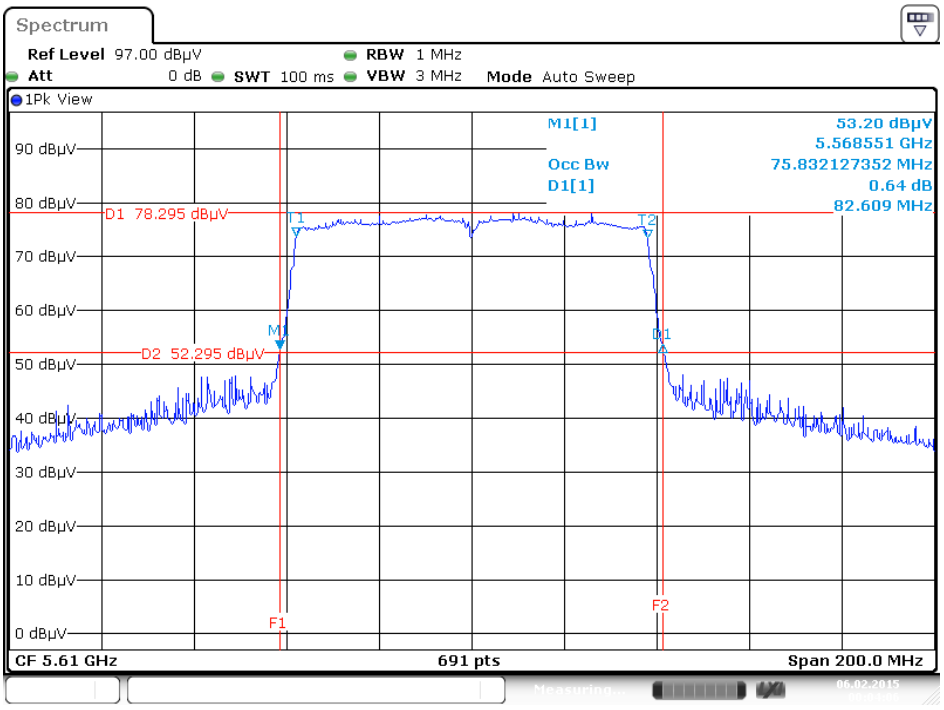
Date: 6.FEB.2015 00:02:36

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5530 MHz



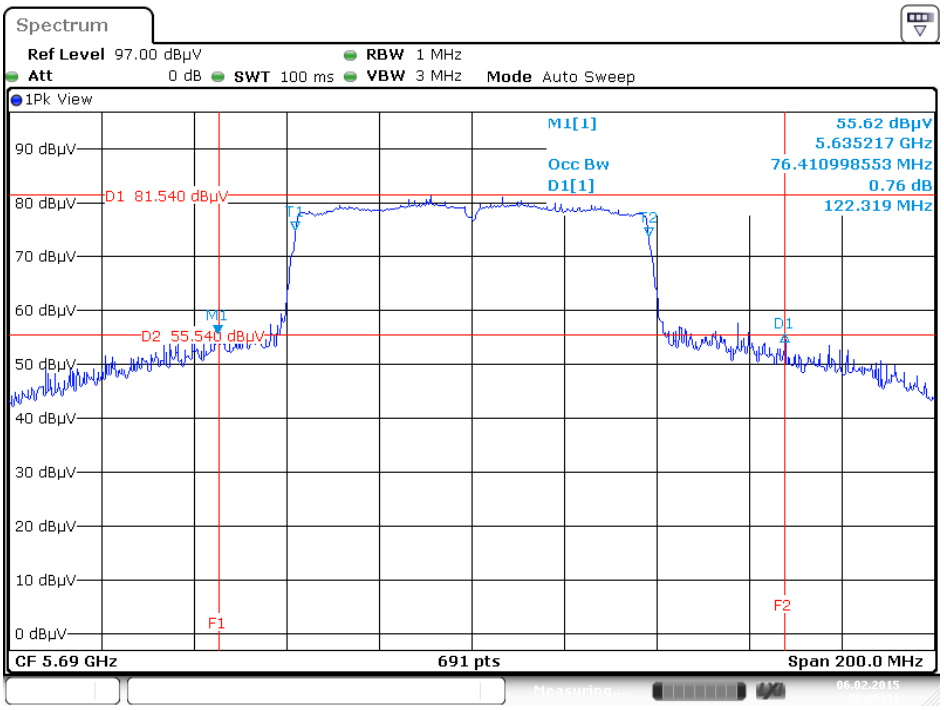
Date: 6.FEB.2015 00:03:19

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5610 MHz



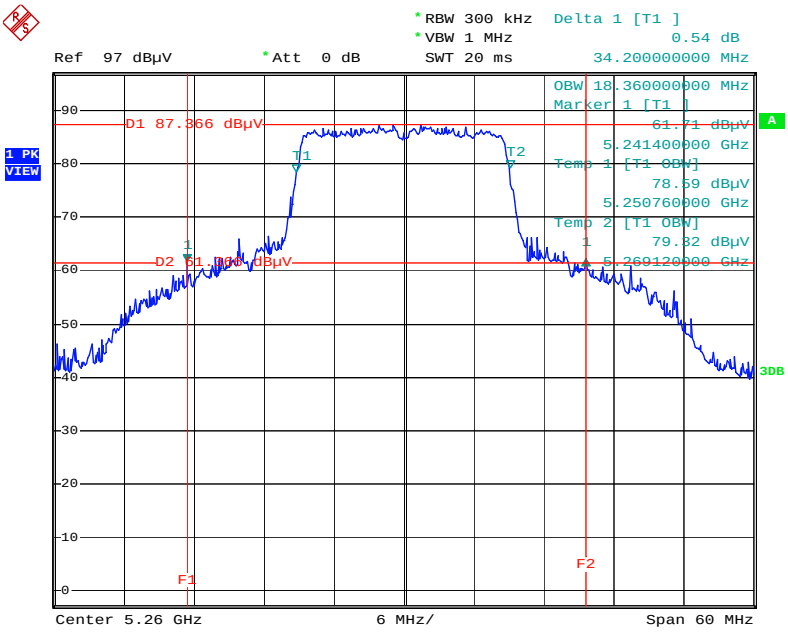
Date: 6.FEB.2015 00:04:06

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5690 MHz



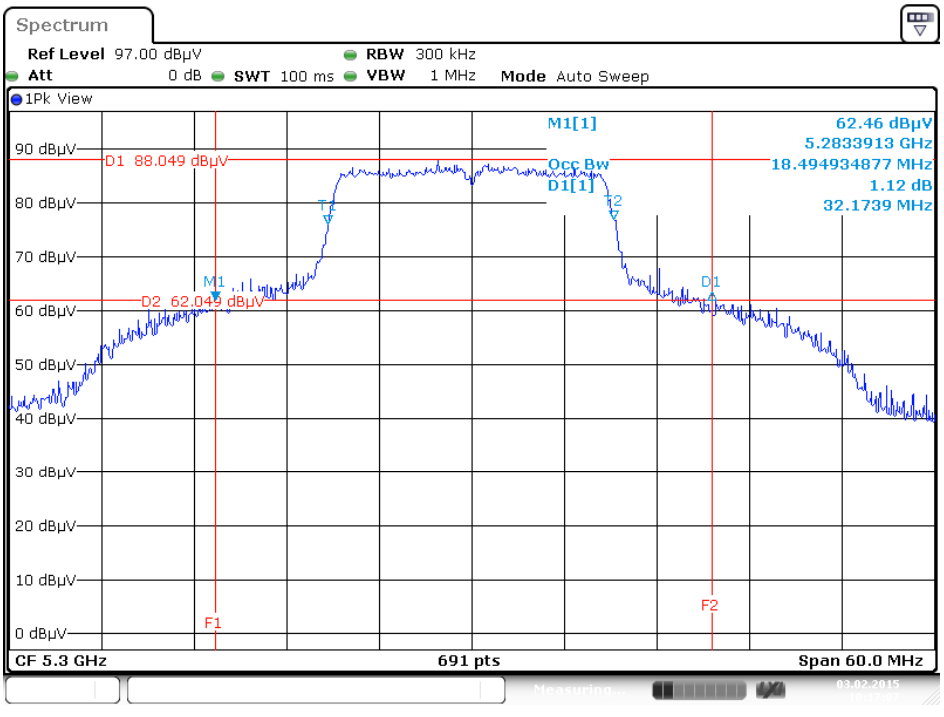
Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)

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



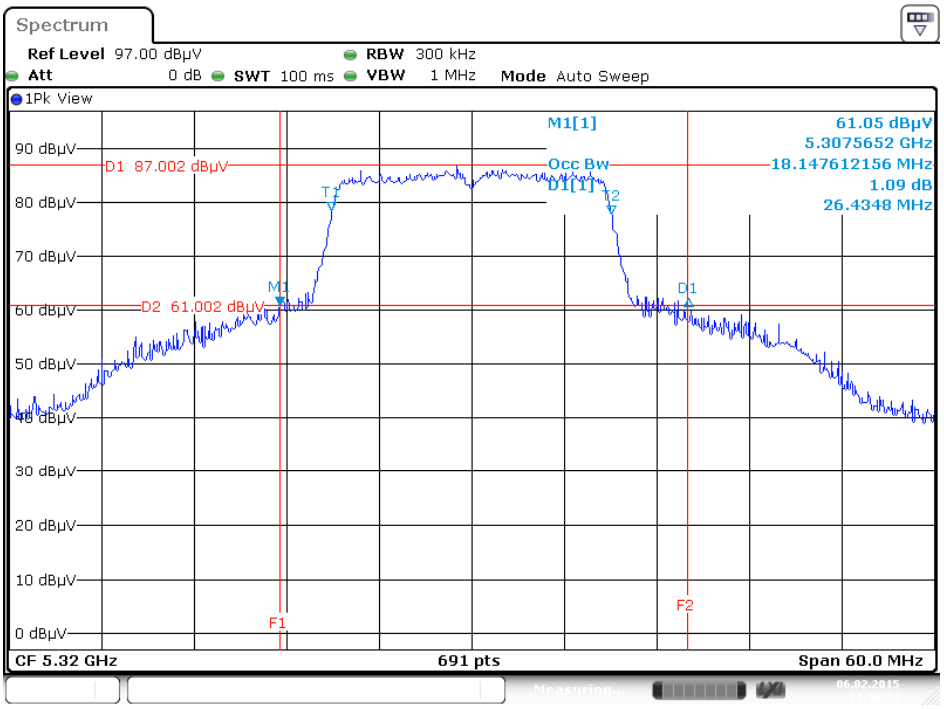
Date: 19.MAR.2015 14:24:14

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



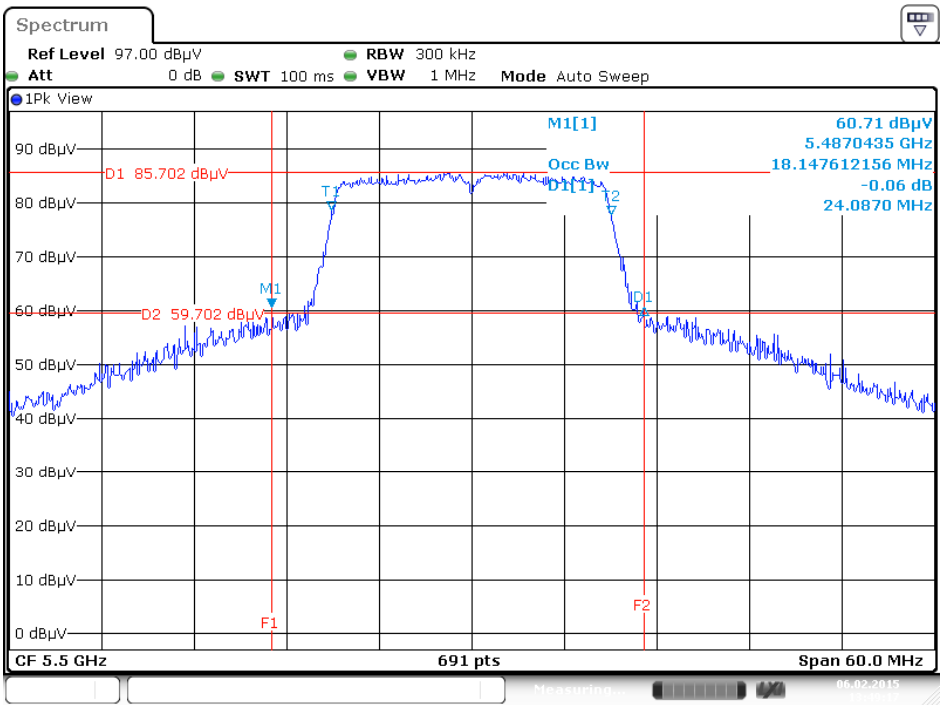
Date: 3.FEB.2015 10:17:07

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



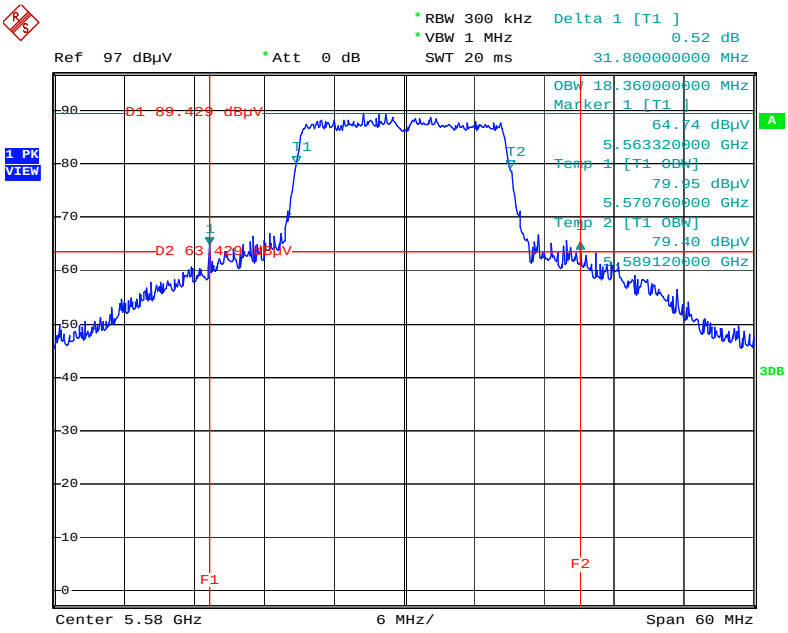
Date: 6.FEB.2015 13:46:34

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



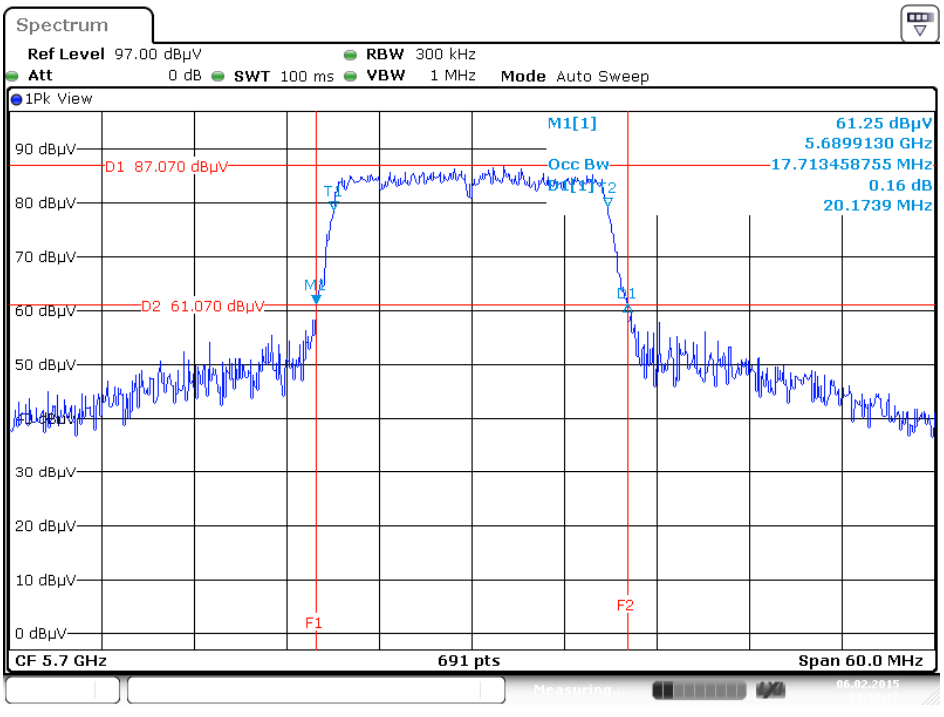
Date: 6.FEB.2015 13:49:17

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



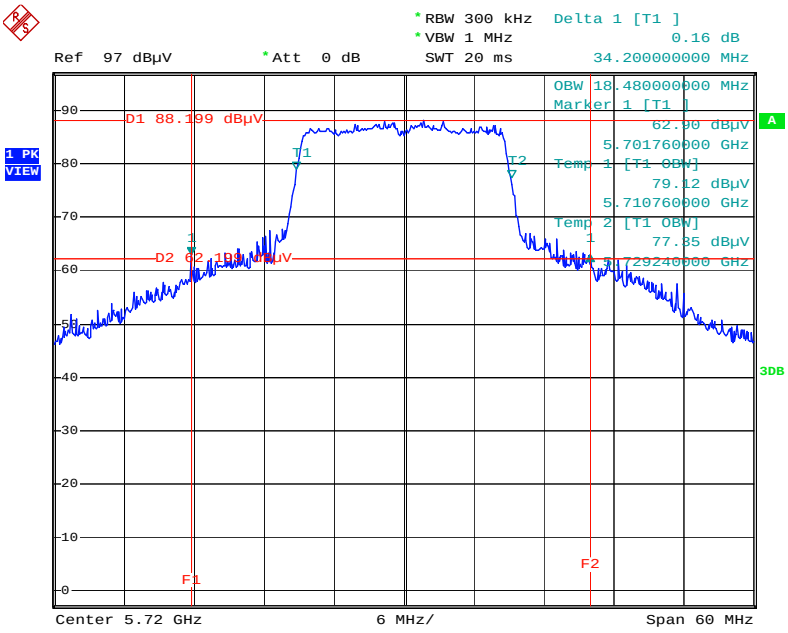
Date: 19.MAR.2015 14:37:37

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



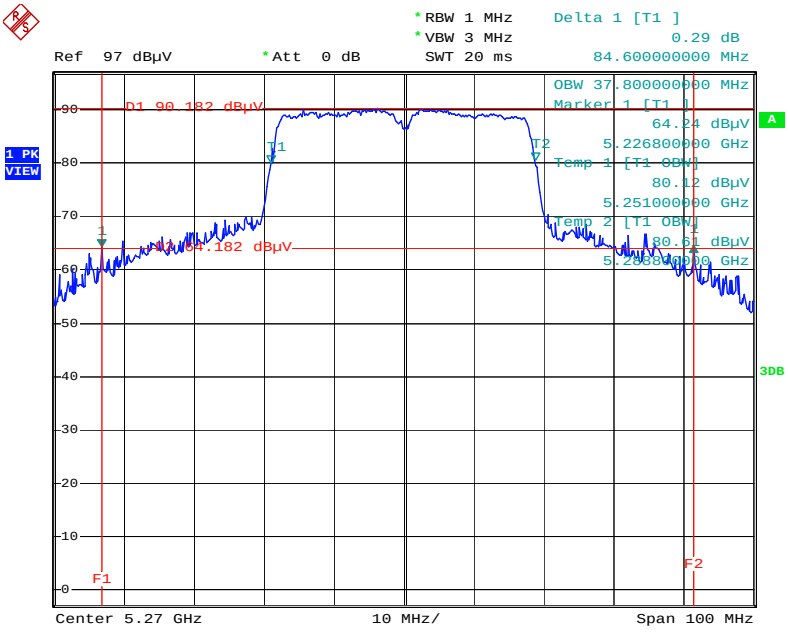
Date: 6.FEB.2015 13:52:17

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



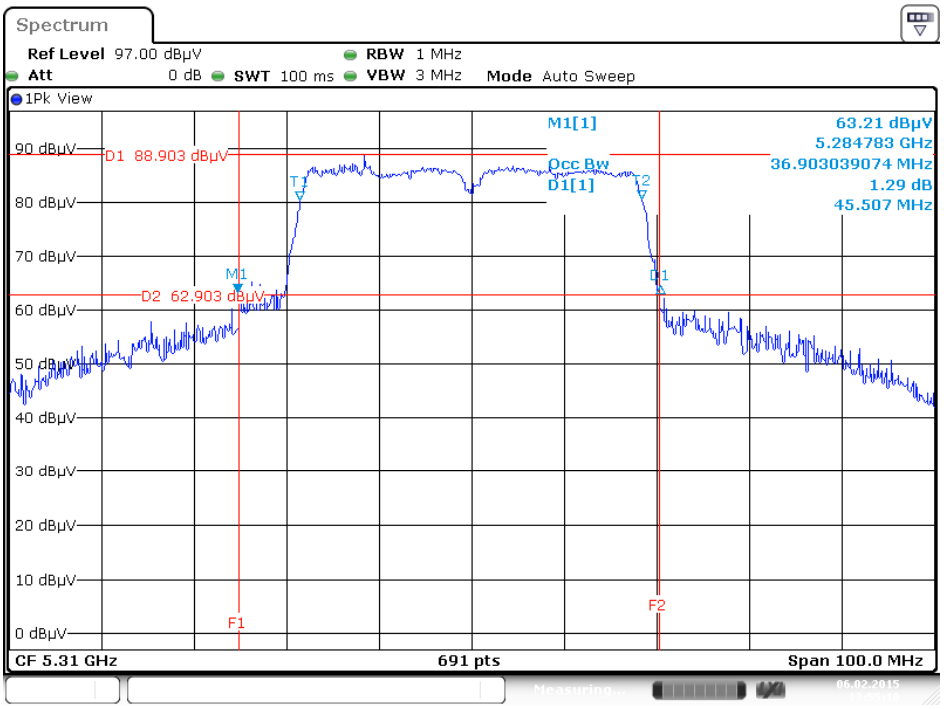
Date: 19.MAR.2015 14:43:33

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



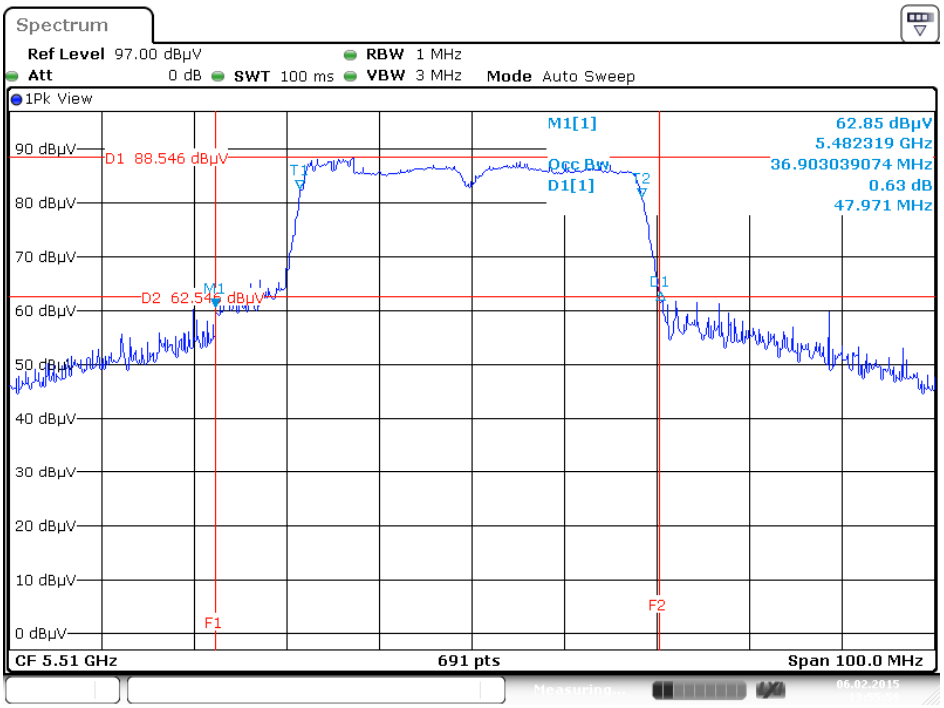
Date: 19.MAR.2015 14:51:43

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



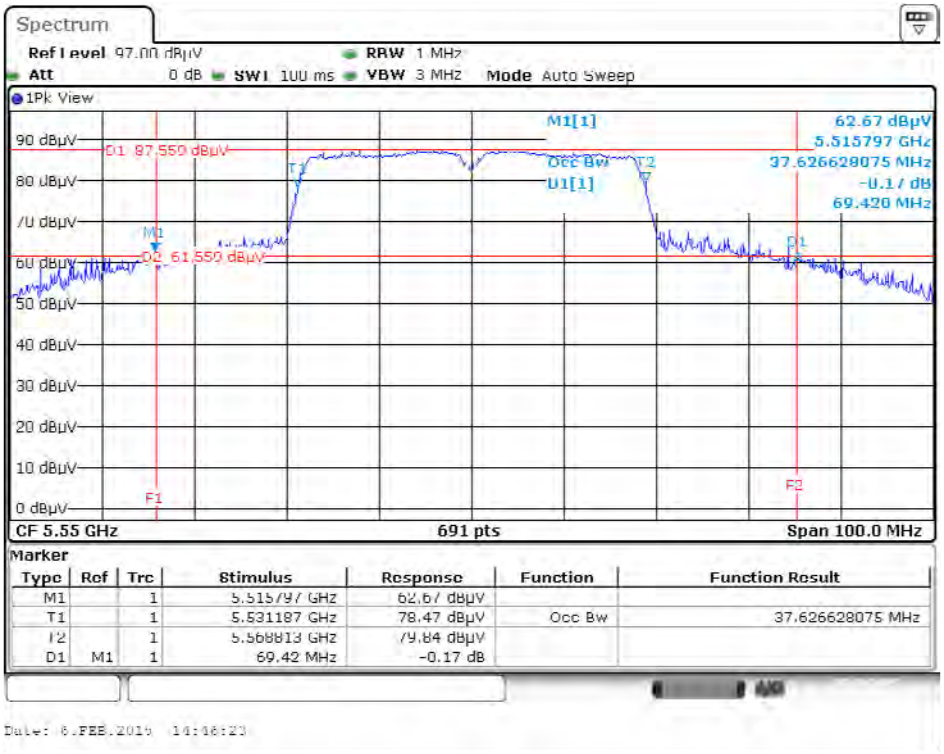
Date: 6.FEB.2015 13:55:10

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

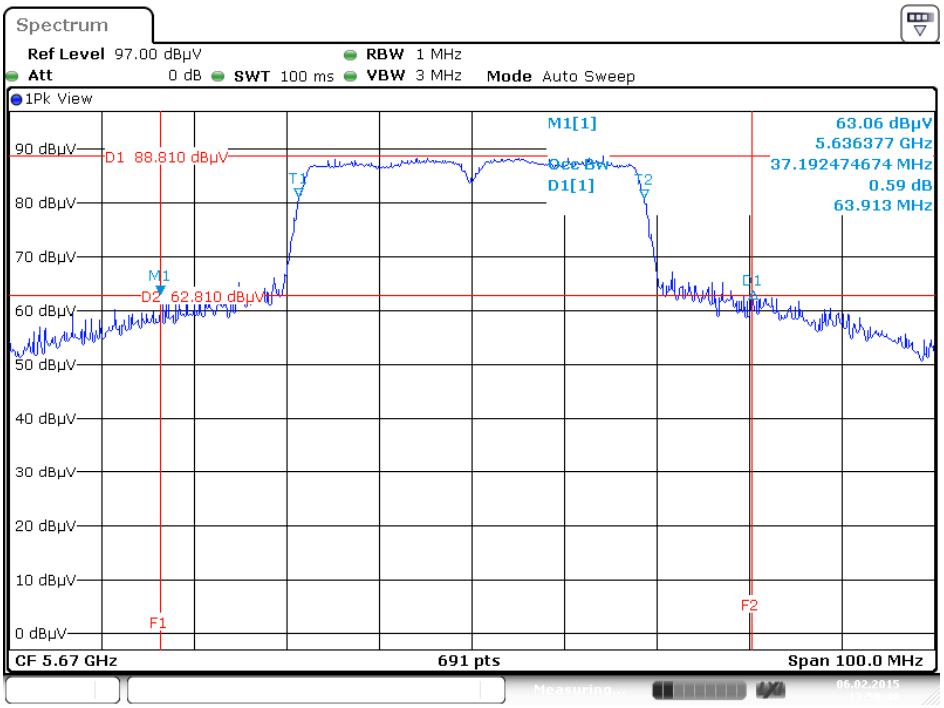


Date: 6.FEB.2015 13:55:59

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

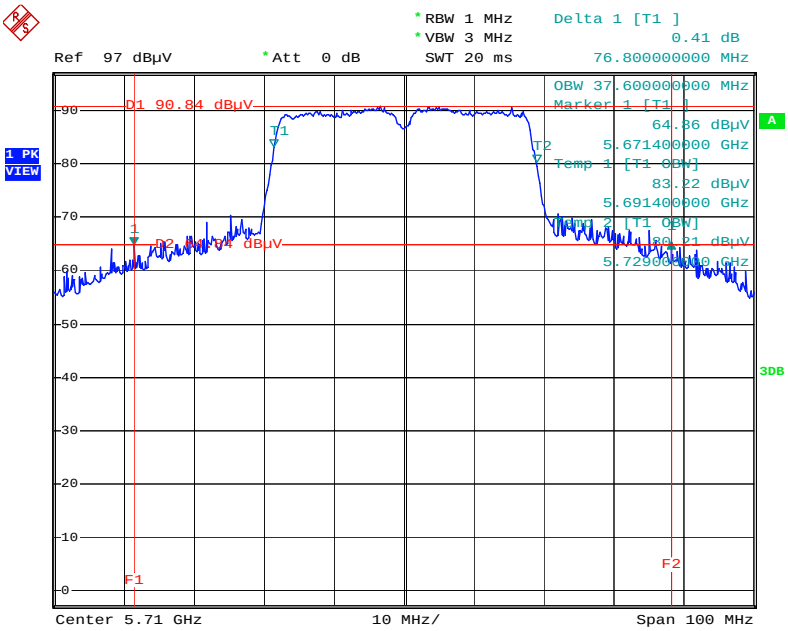


26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5670 MHz



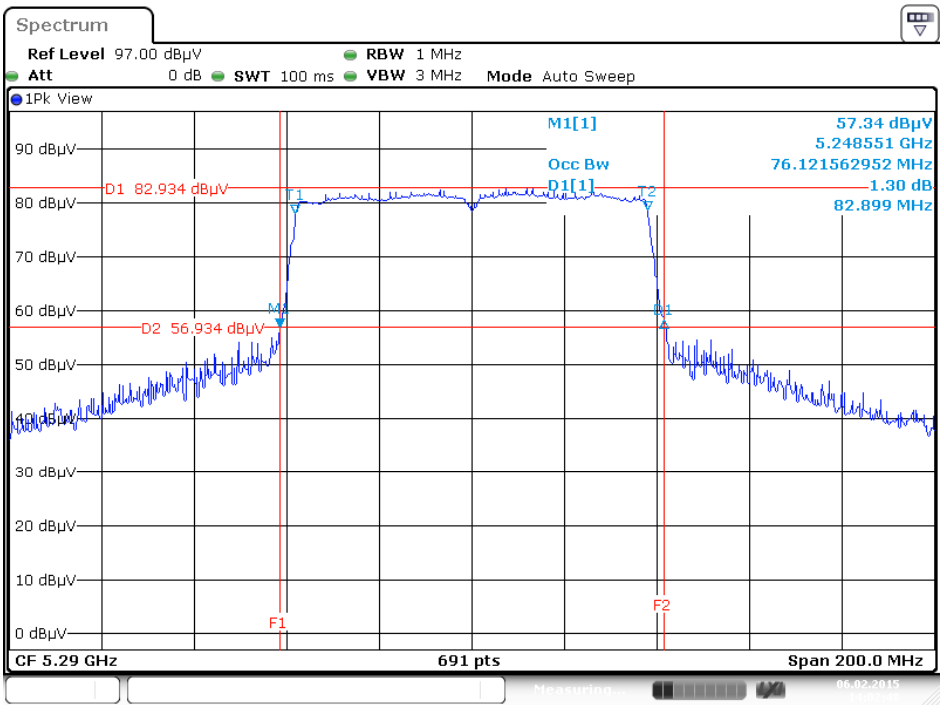
Date: 6.FEB.2015 13:59:39

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



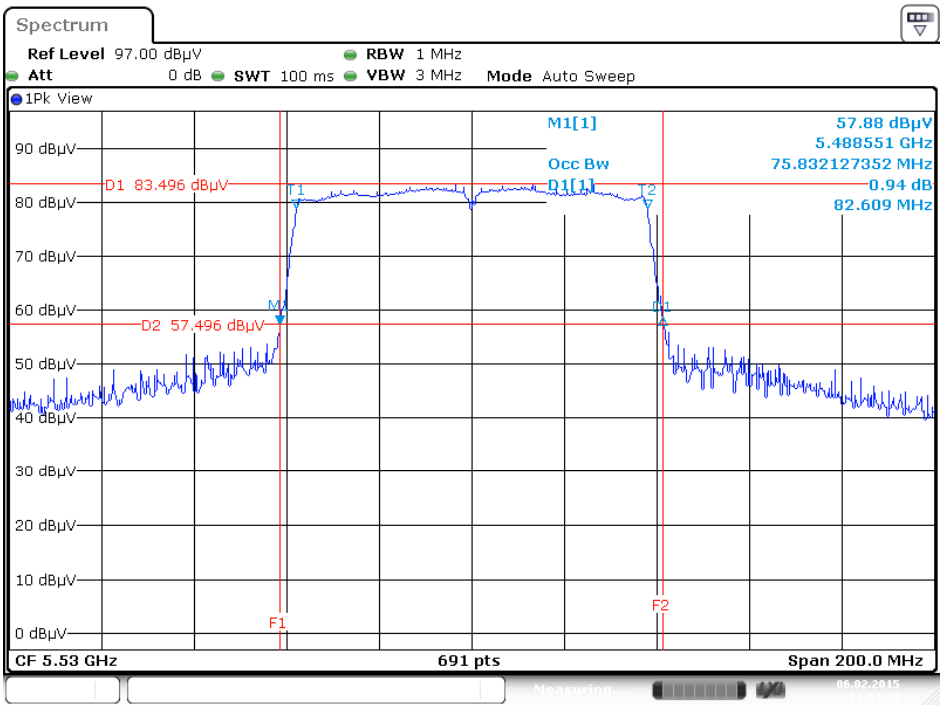
Date: 20.MAR.2015 10:15:05

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



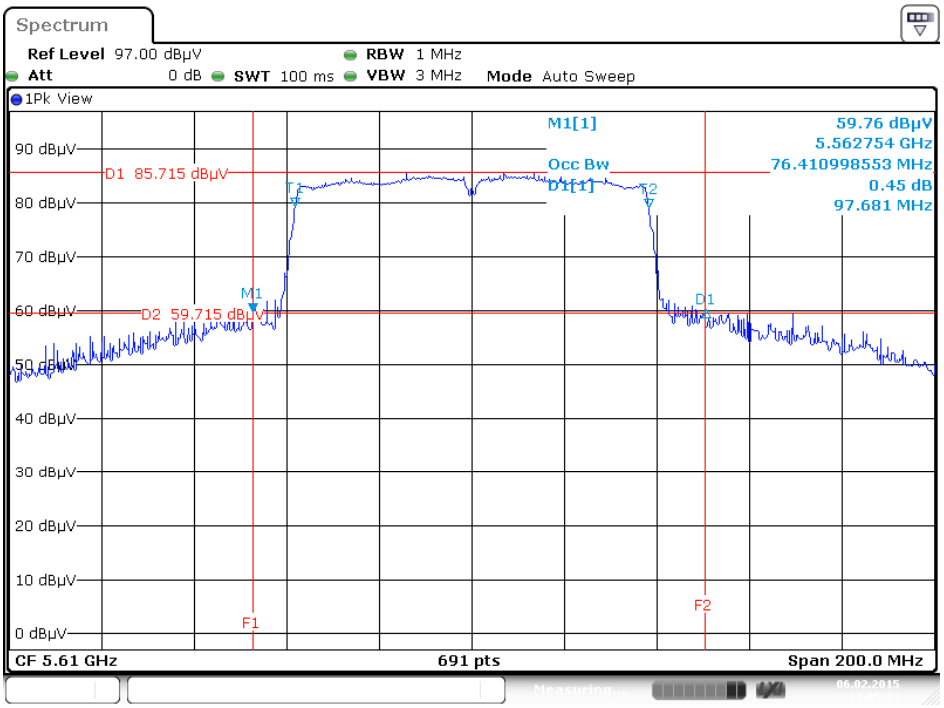
Date: 6.FEB.2015 14:02:49

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



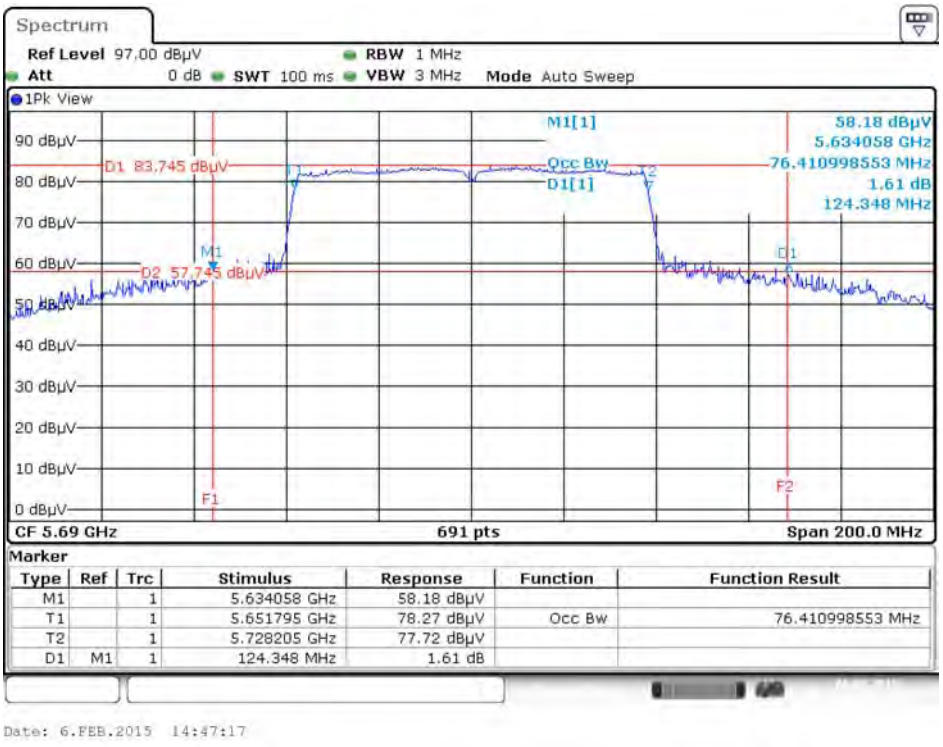
Date: 6.FEB.2015 14:04:30

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



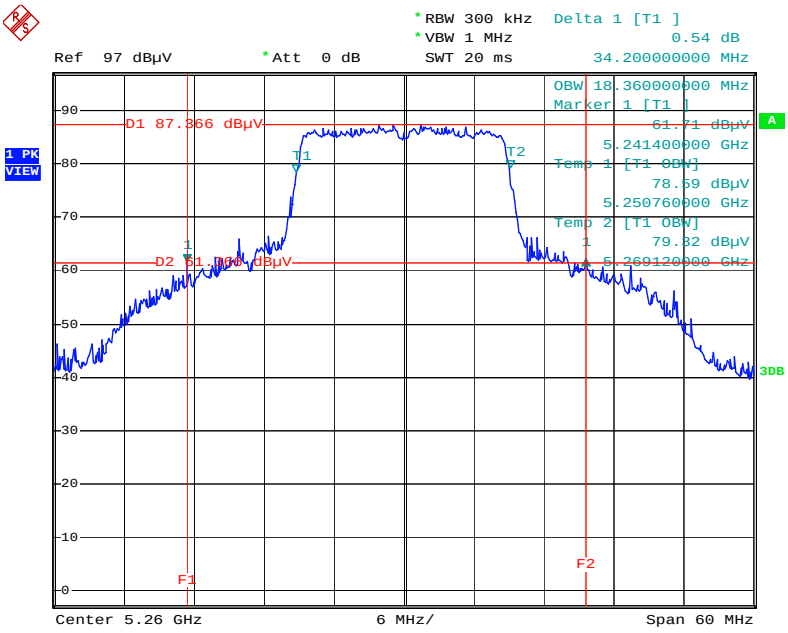
Date: 6.FEB.2015 14:05:24

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



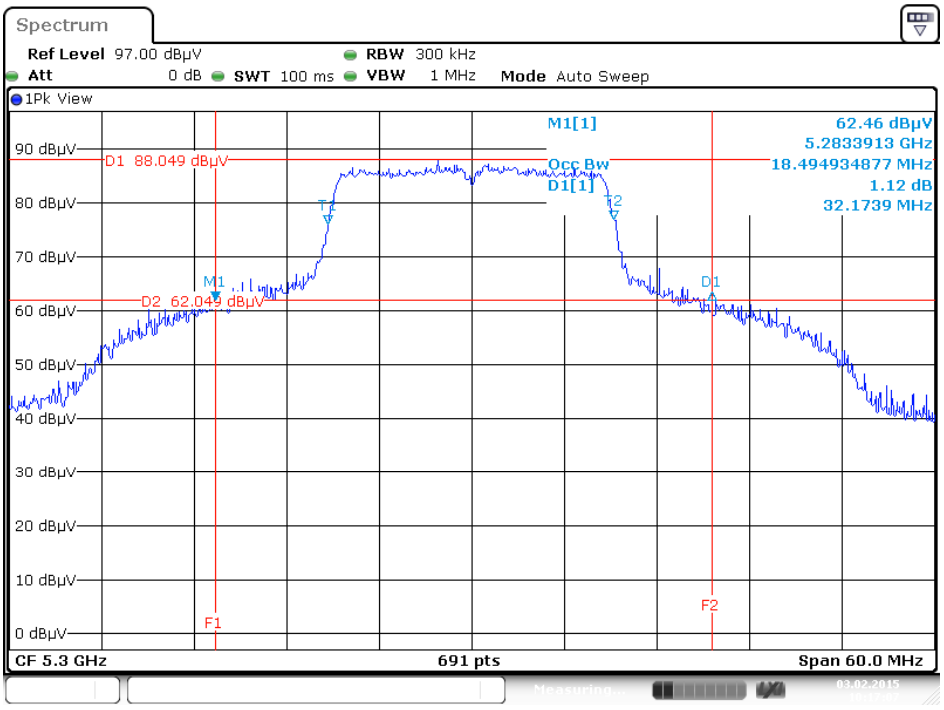
Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)

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



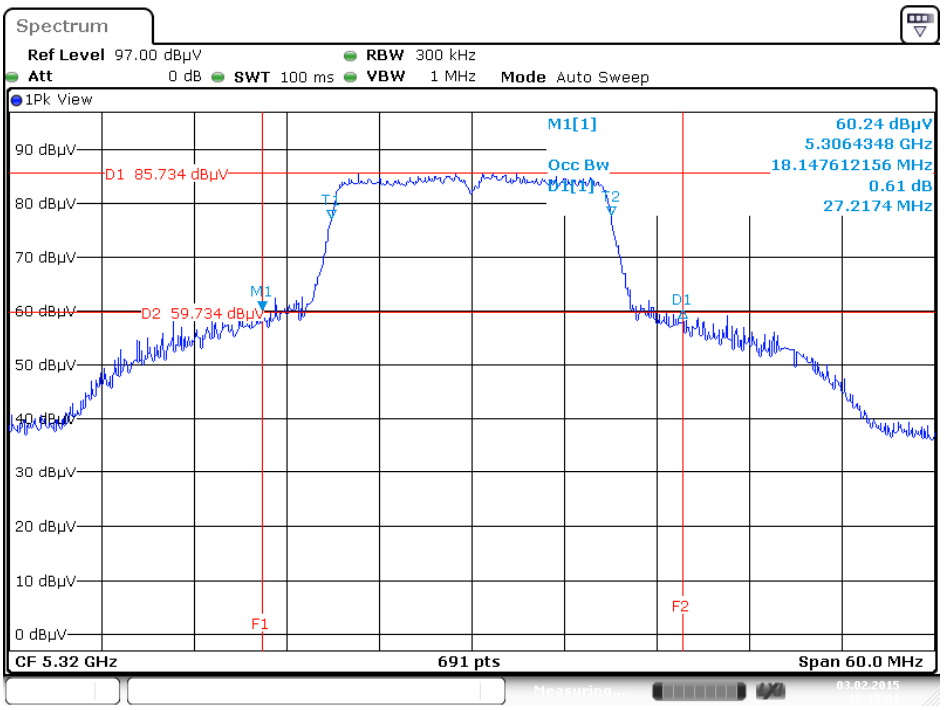
Date: 19.MAR.2015 14:24:14

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



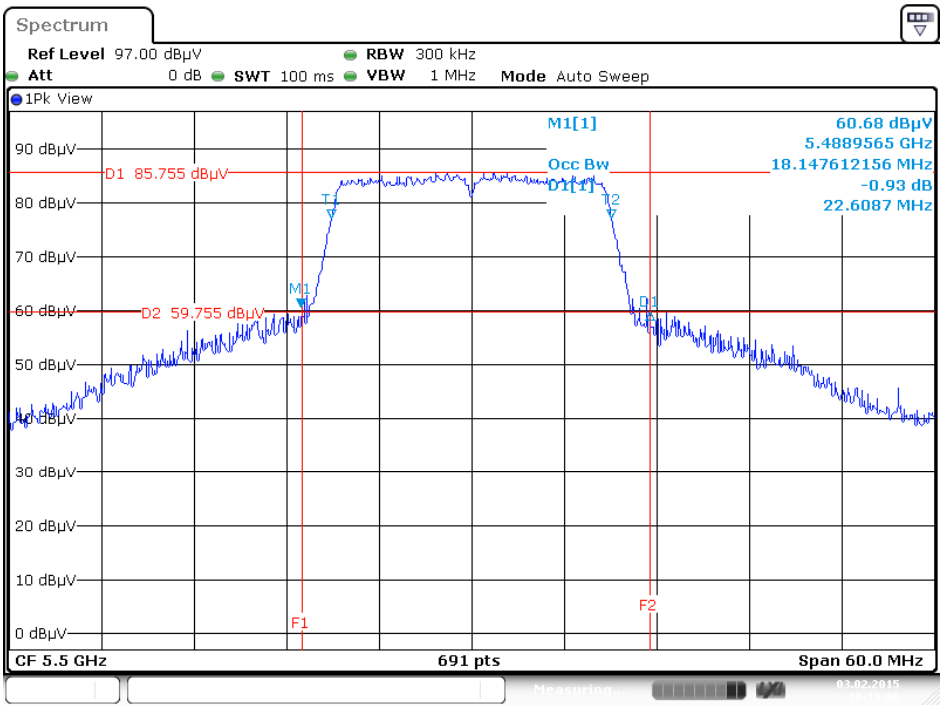
Date: 3.FEB.2015 10:17:07

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



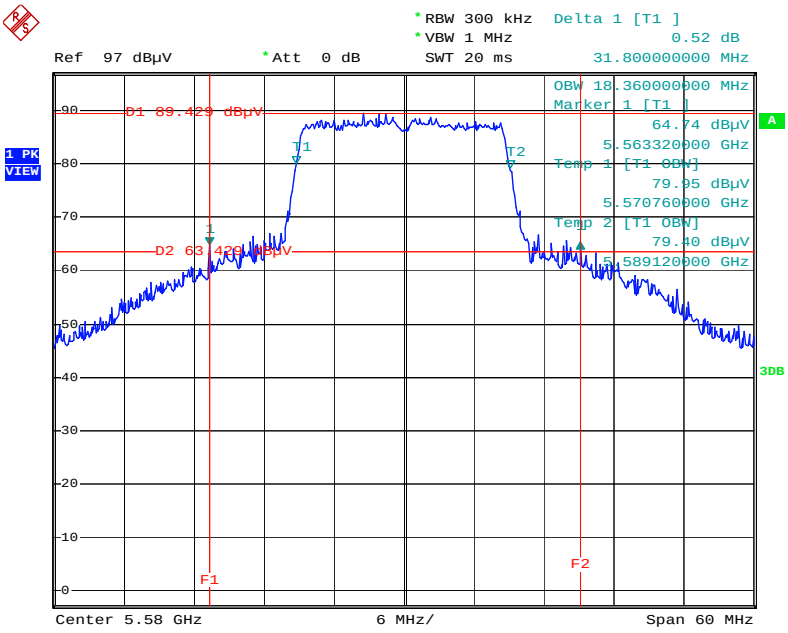
Date: 3.FEB.2015 10:18:00

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



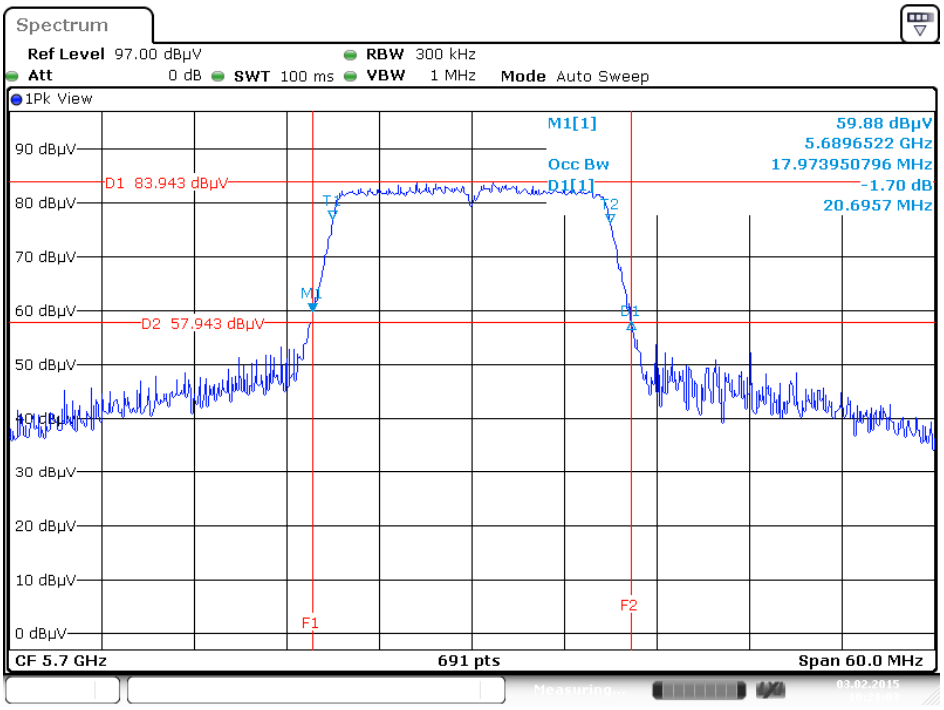
Date: 3.FEB.2015 10:19:06

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



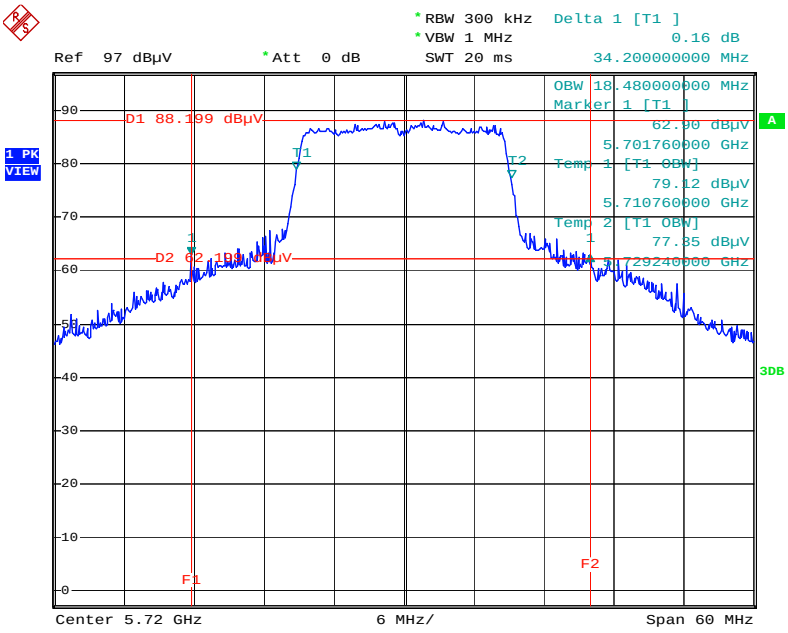
Date: 19.MAR.2015 14:37:37

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



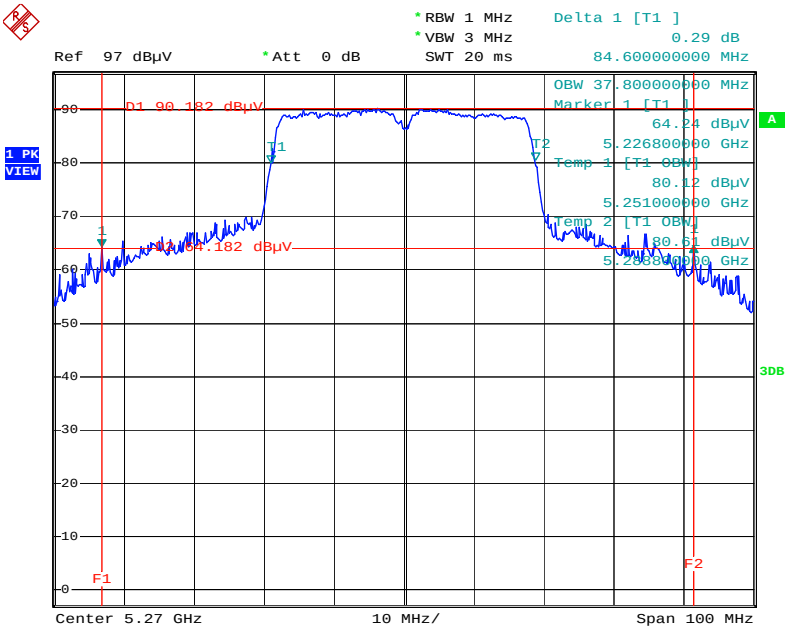
Date: 3.FEB.2015 10:21:04

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



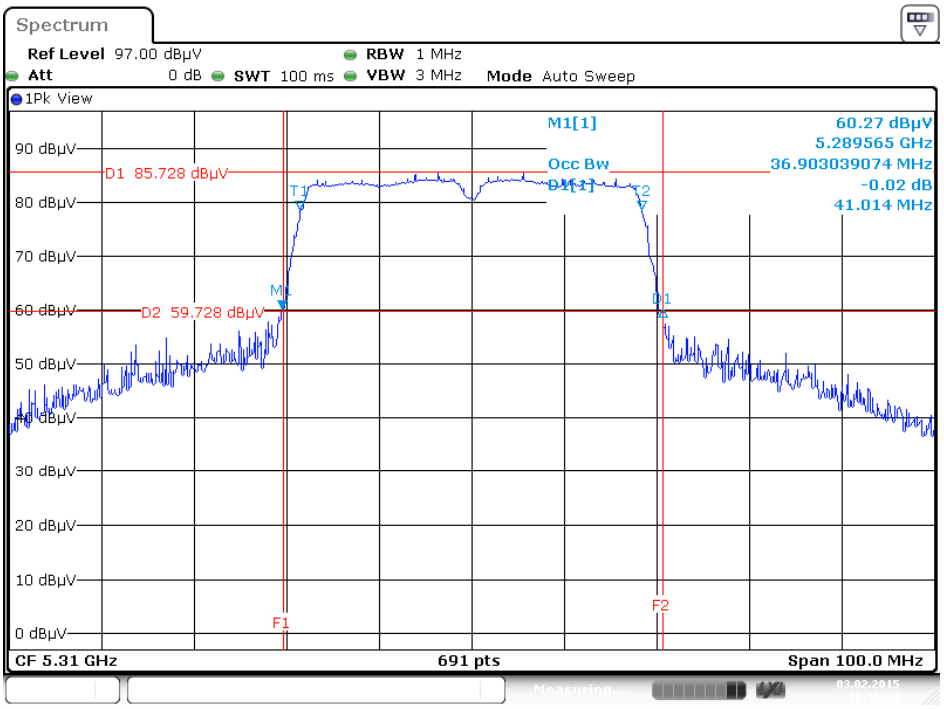
Date: 19.MAR.2015 14:43:33

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



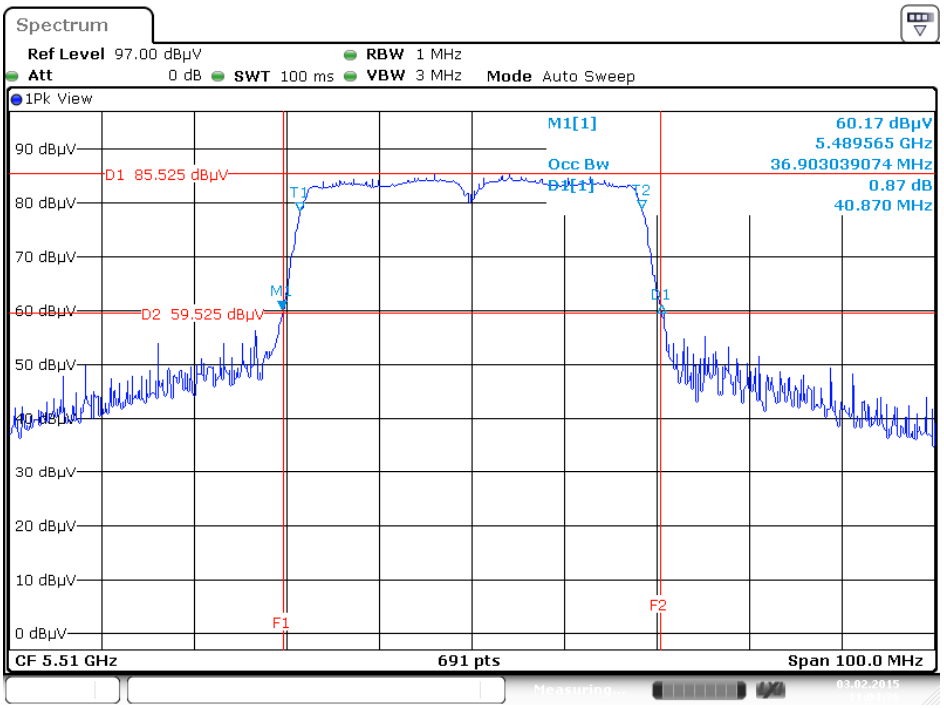
Date: 19.MAR.2015 14:51:43

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



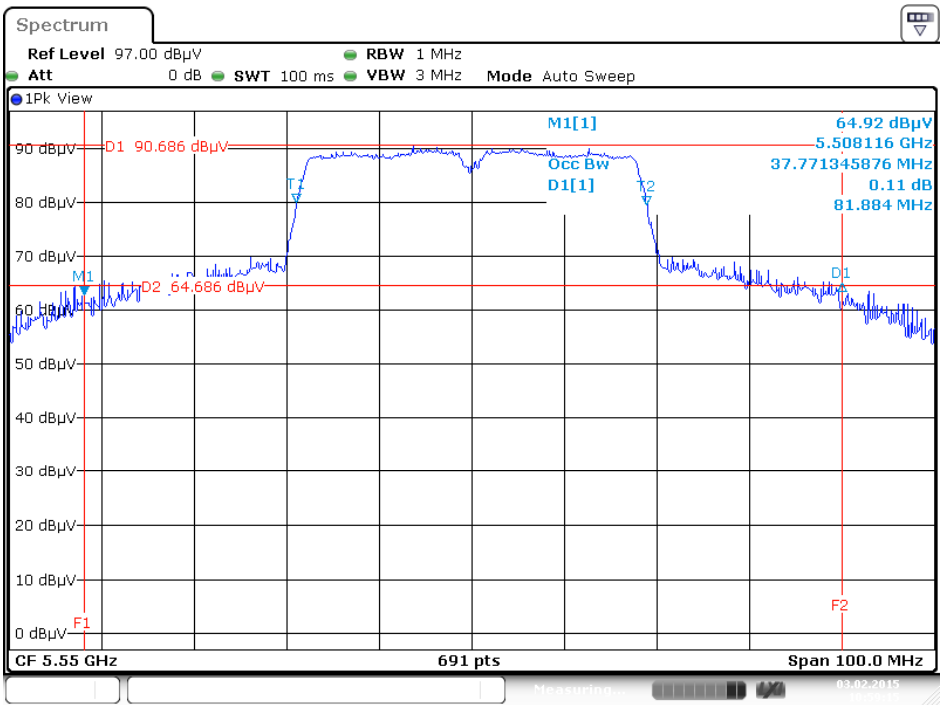
Date: 3.FEB.2015 10:55:38

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



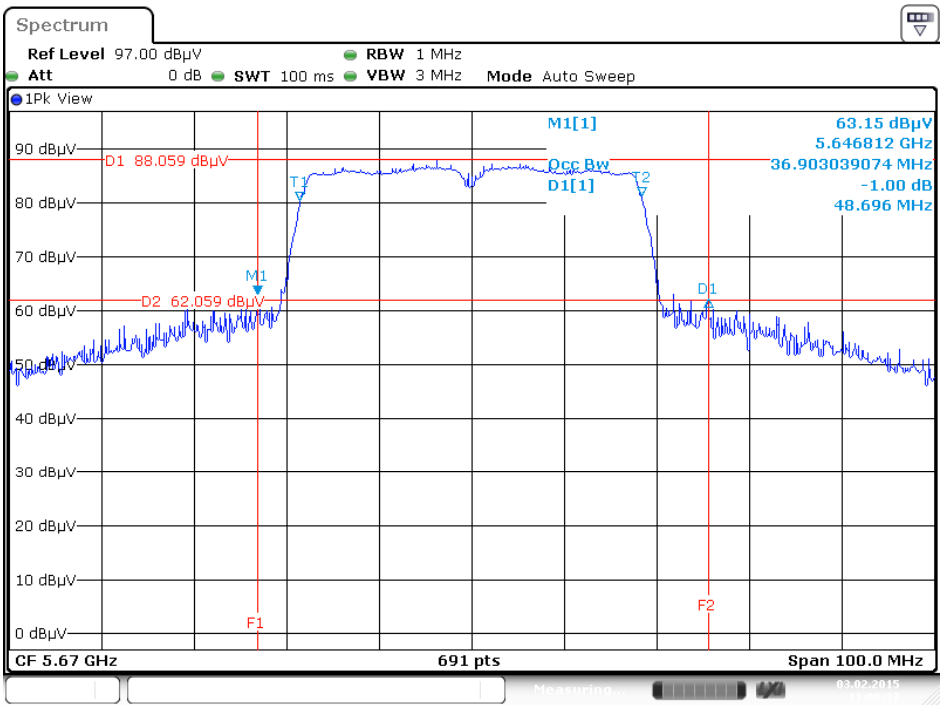
Date: 3.FEB.2015 11:04:36

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



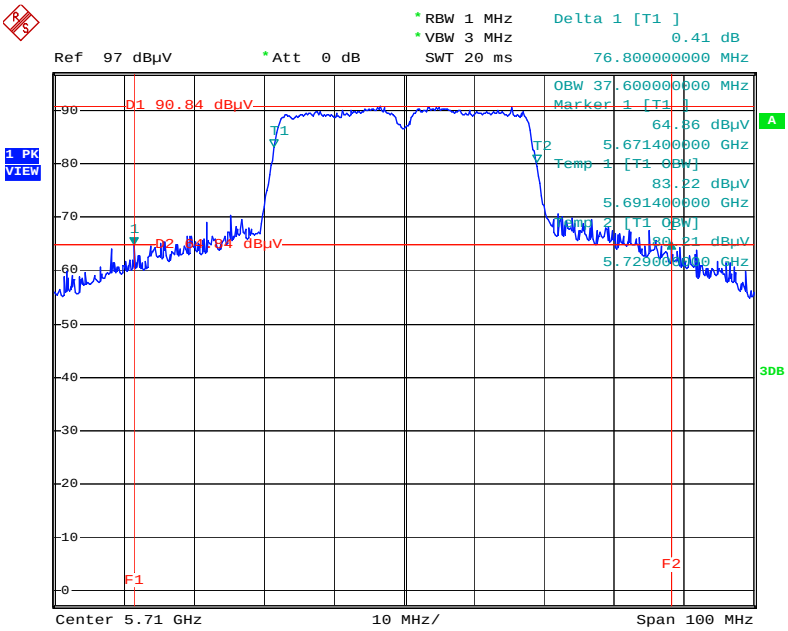
Date: 3.FEB.2015 10:59:15

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



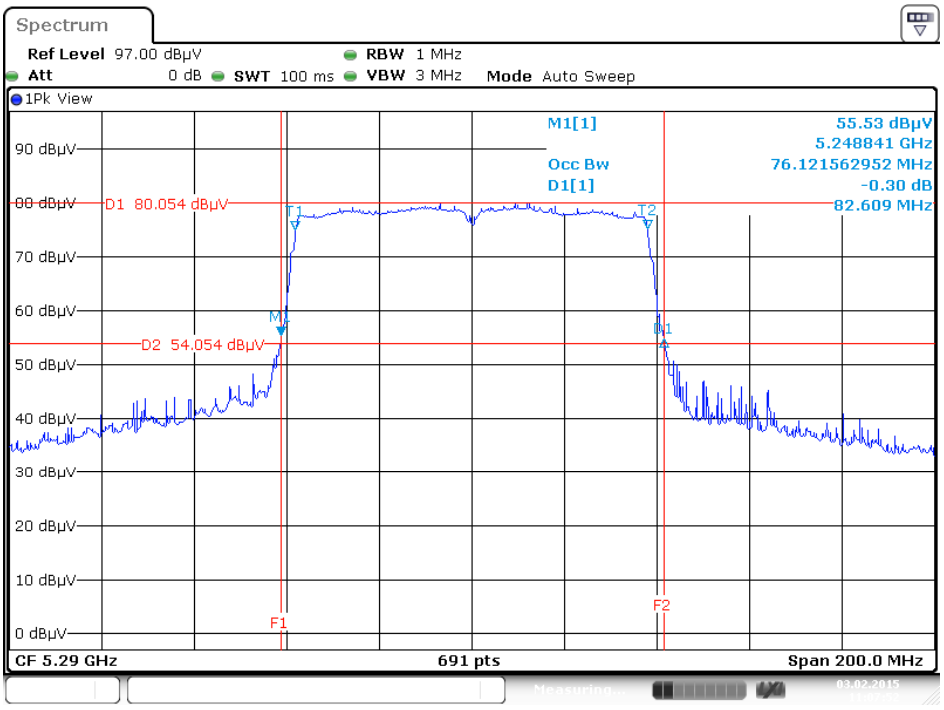
Date: 3.FEB.2015 11:00:37

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



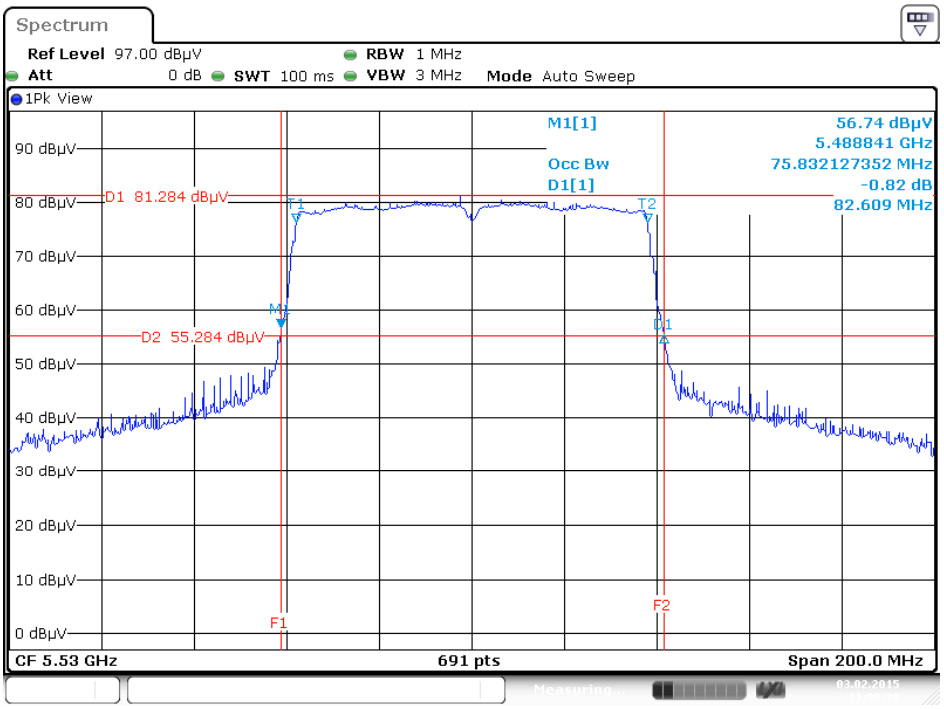
Date: 20.MAR.2015 10:15:05

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



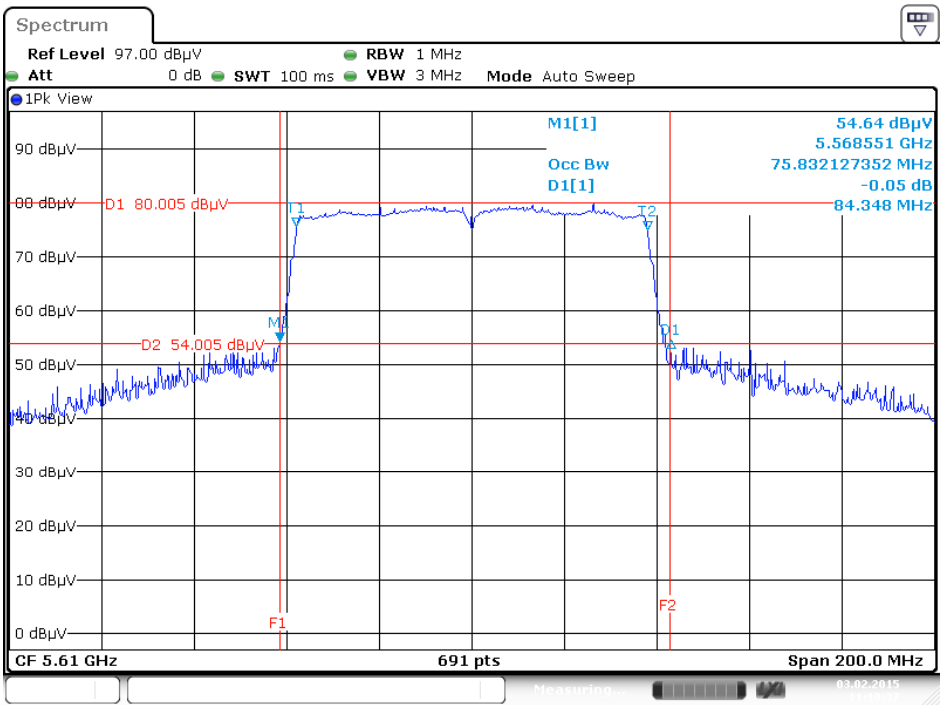
Date: 3.FEB.2015 11:07:52

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



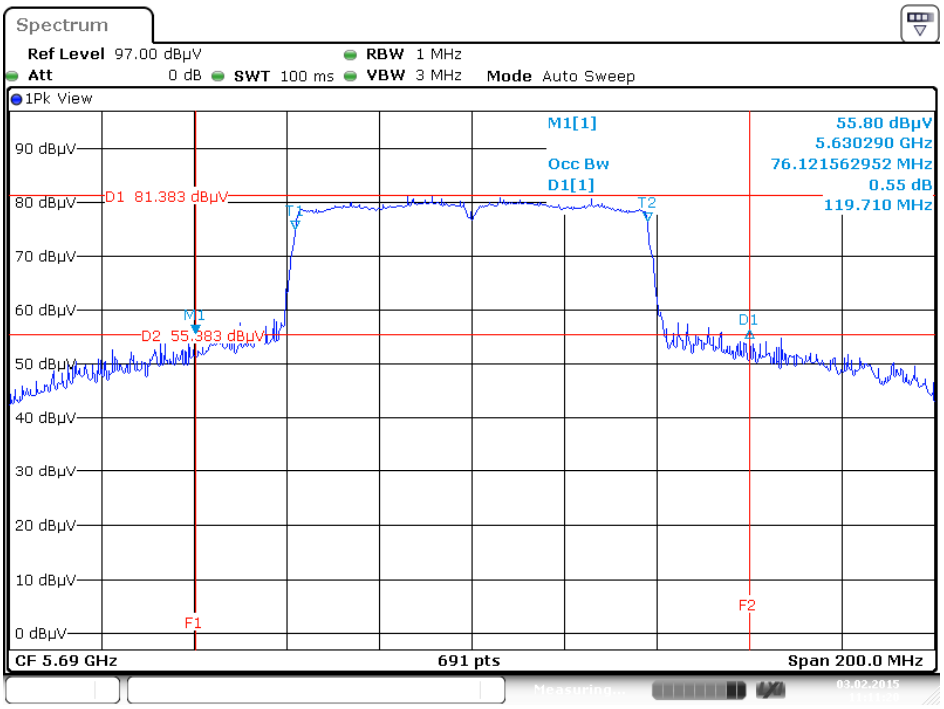
Date: 3.FEB.2015 11:08:39

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



Date: 3.FEB.2015 11:10:37

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

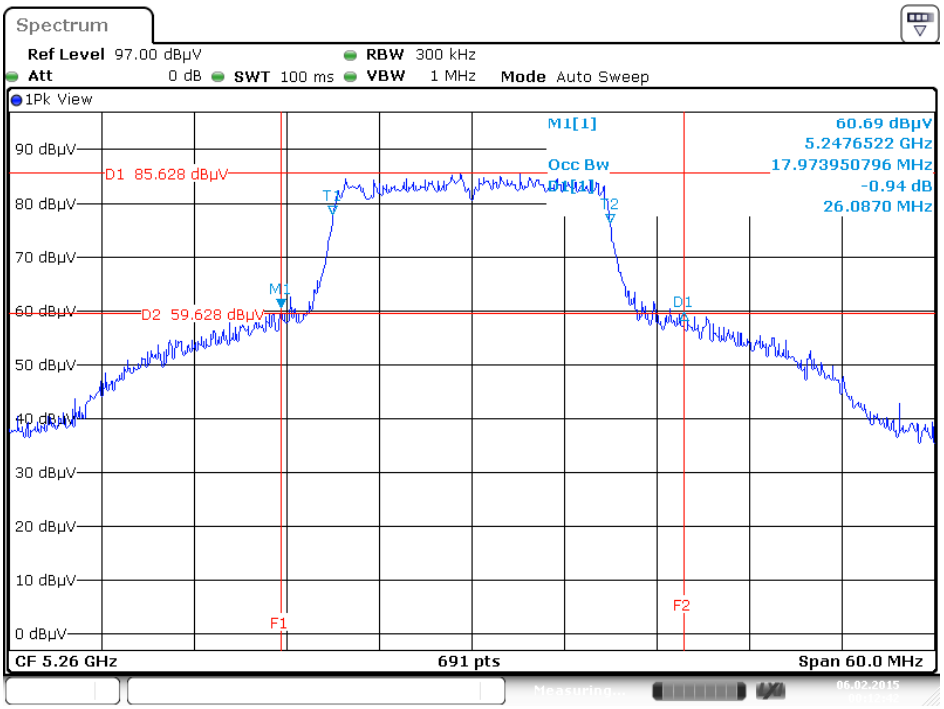


Date: 3.FEB.2015 11:11:19

<For STBC Mode>

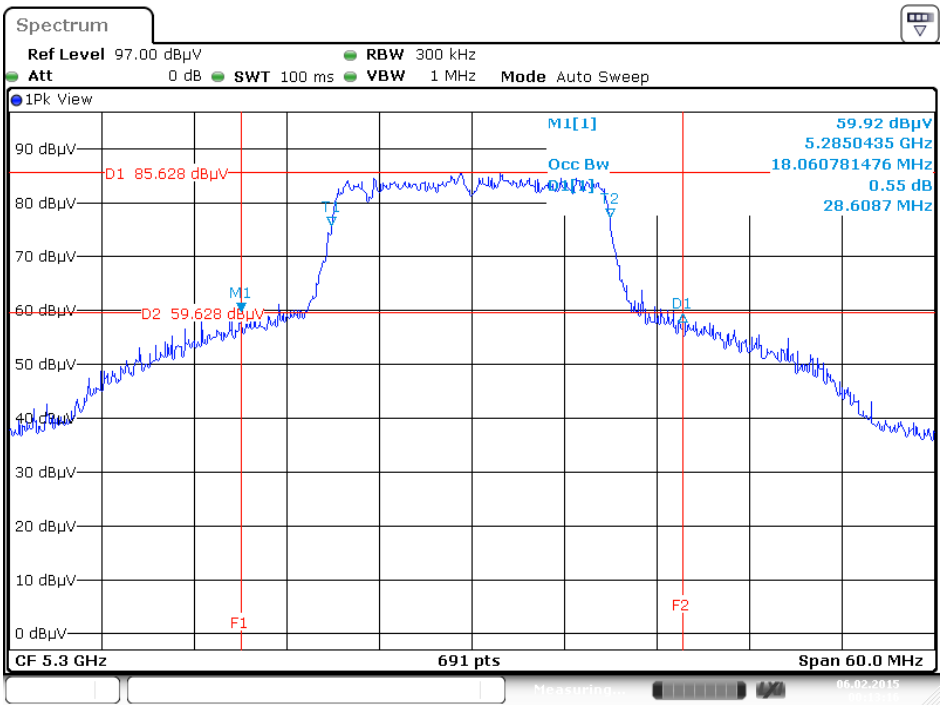
Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5260 MHz



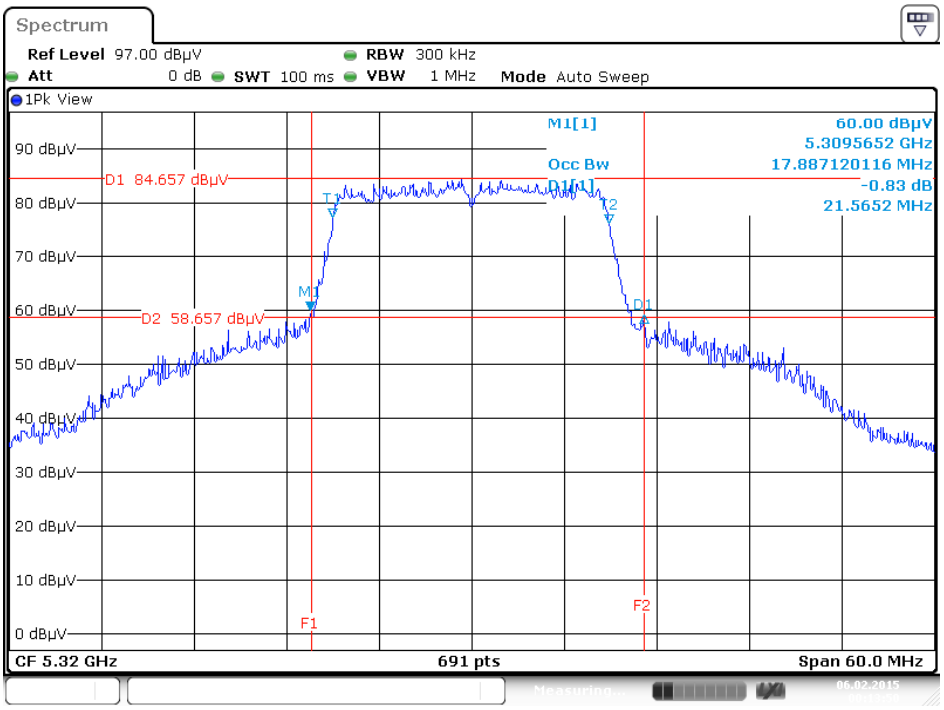
Date: 6.FEB.2015 00:12:42

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5300 MHz



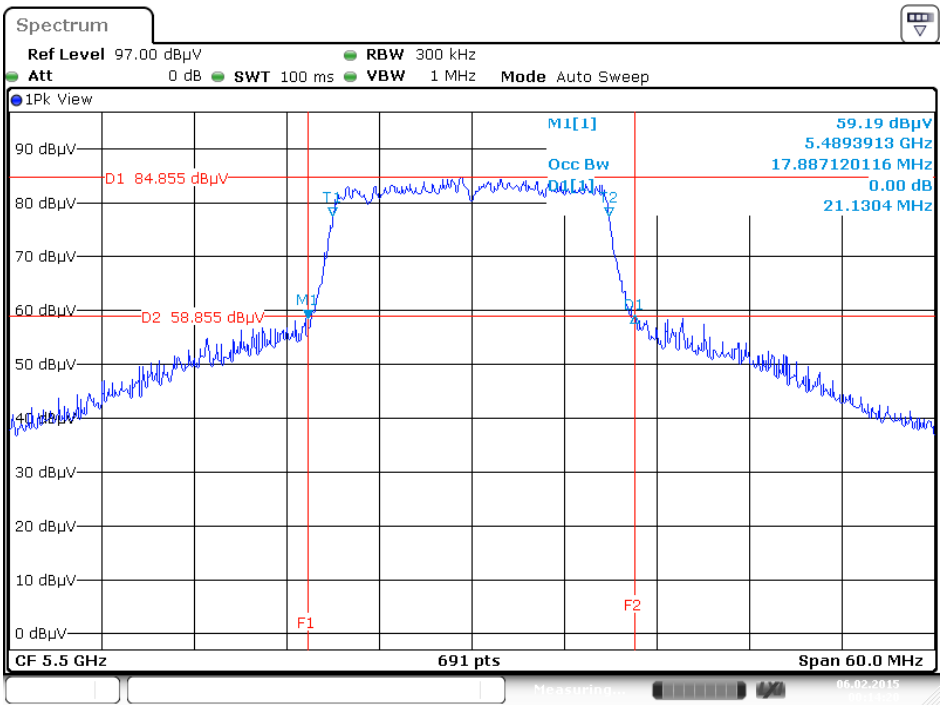
Date: 6.FEB.2015 00:13:17

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5320 MHz



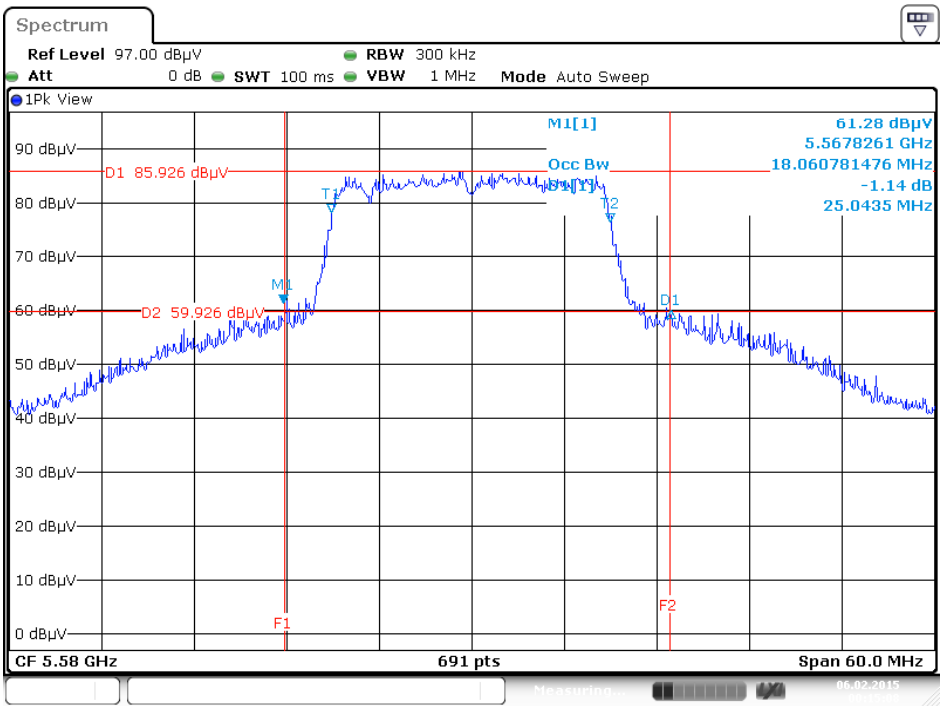
Date: 6.FEB.2015 00:13:50

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5500 MHz



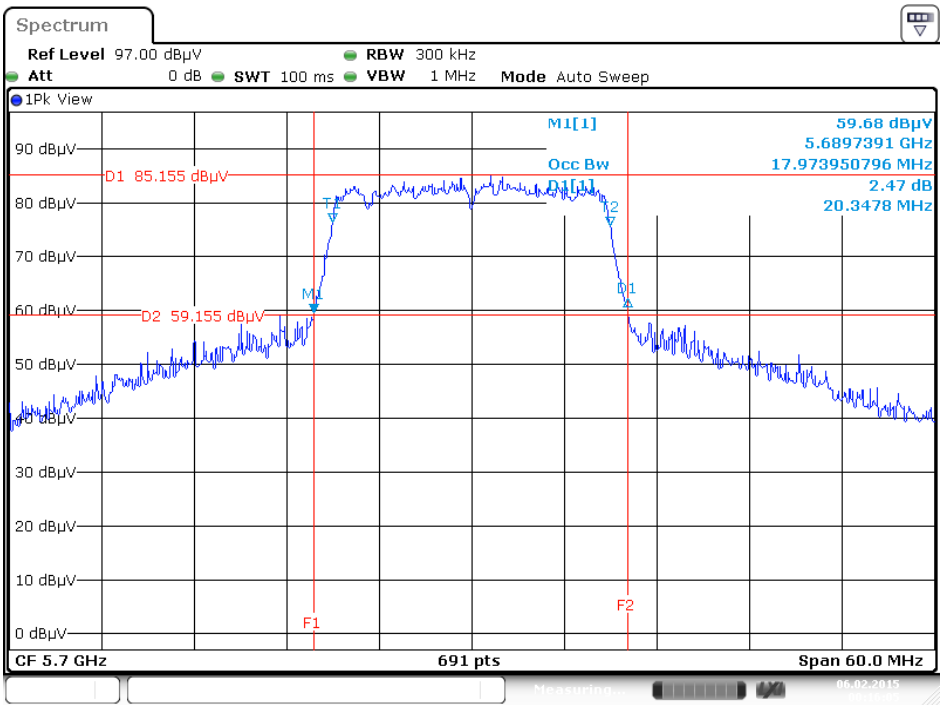
Date: 6.FEB.2015 00:14:20

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5580 MHz



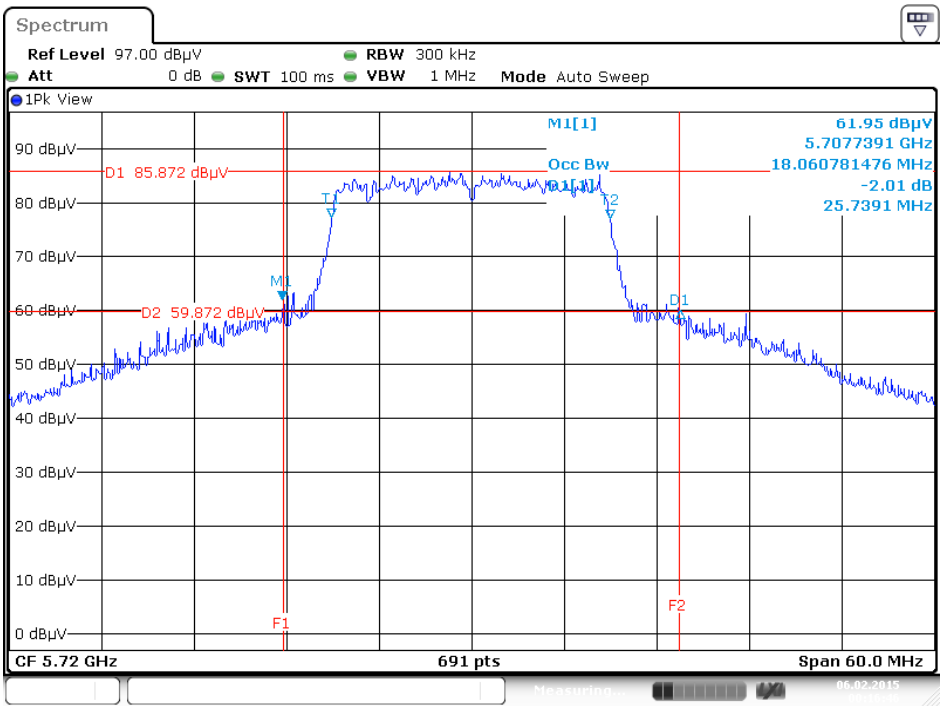
Date: 6.FEB.2015 00:15:08

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5700 MHz



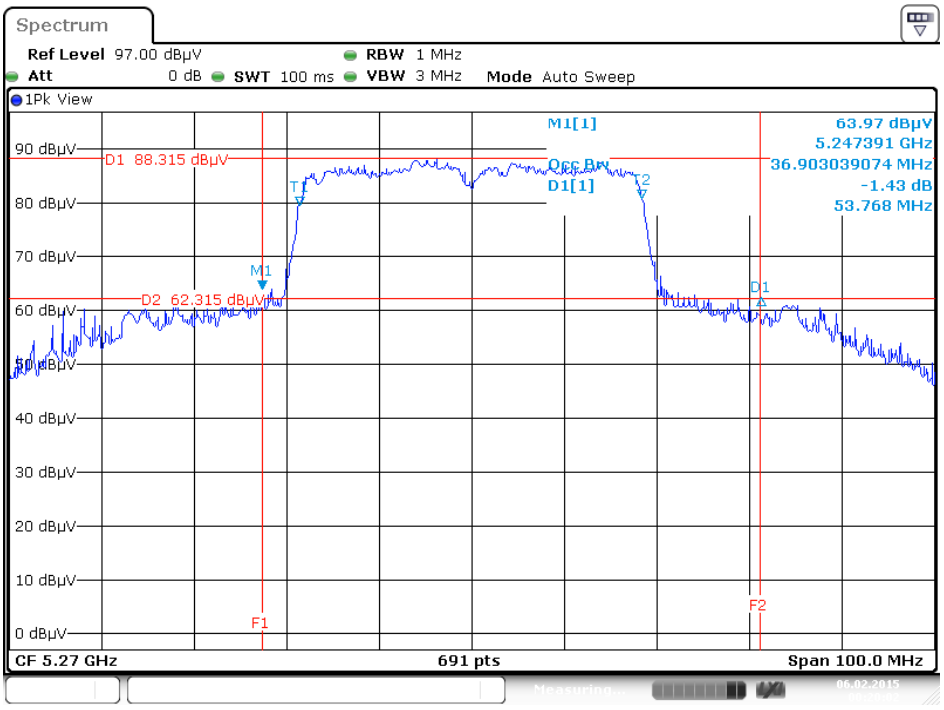
Date: 6.FEB.2015 00:16:05

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5720 MHz



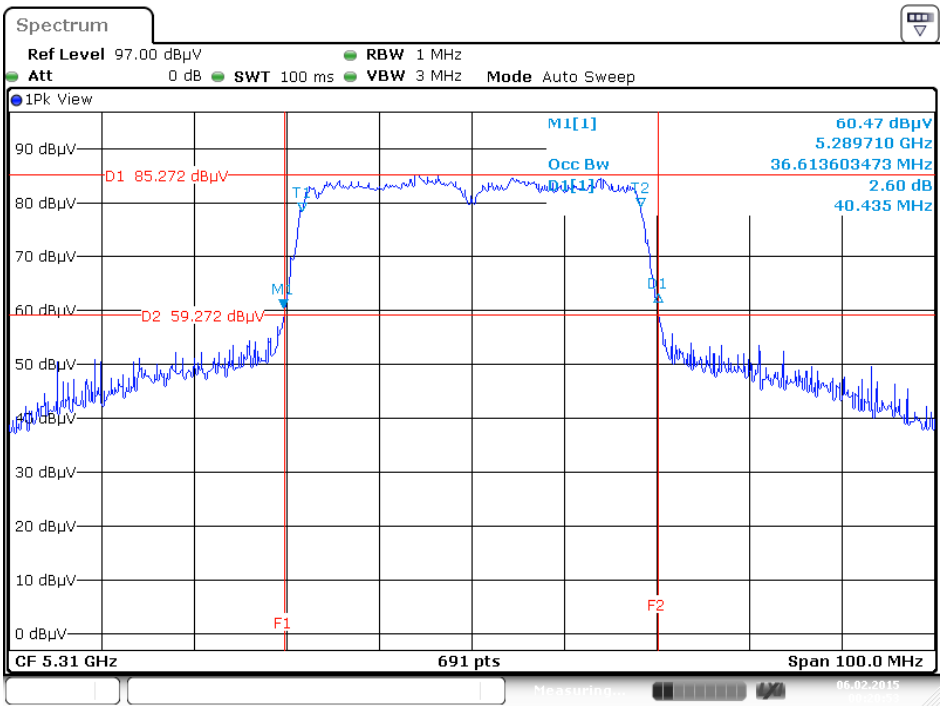
Date: 6.FEB.2015 00:16:46

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5270 MHz



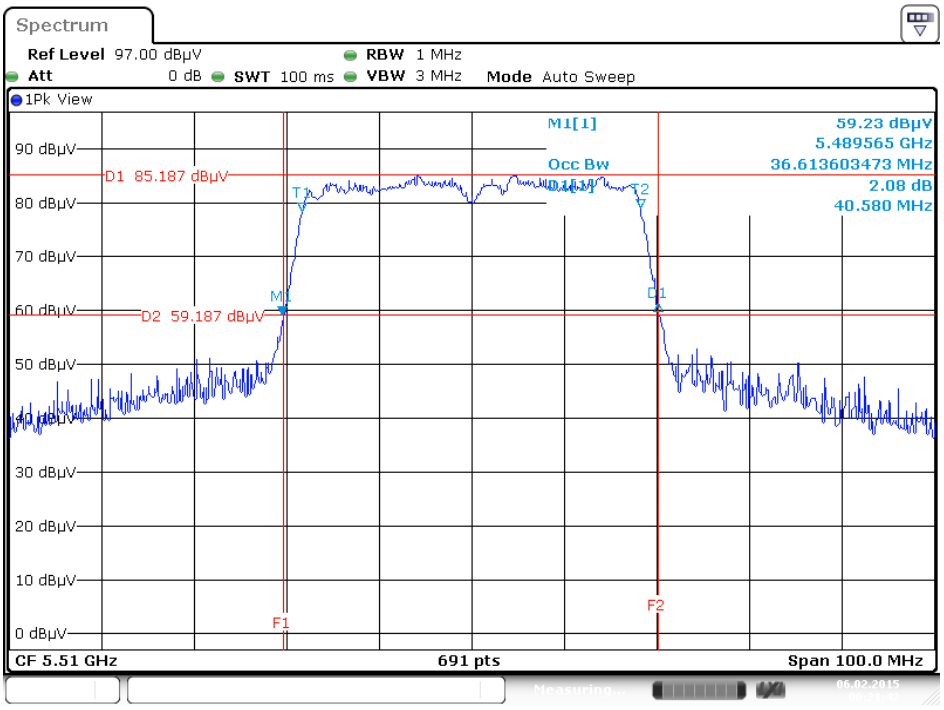
Date: 6.FEB.2015 00:20:02

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5310 MHz



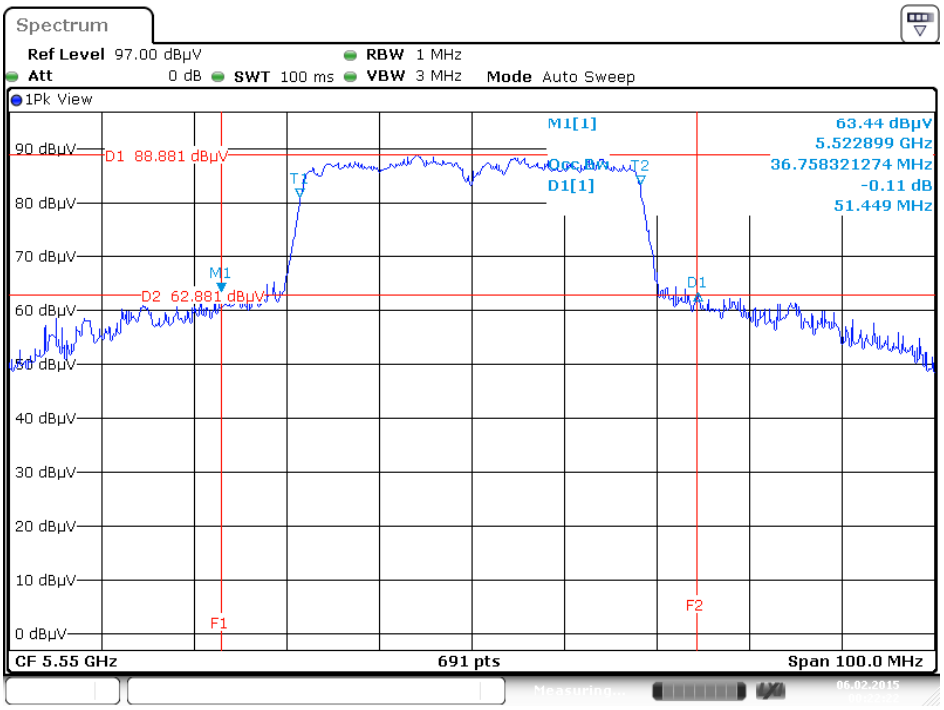
Date: 6.FEB.2015 00:20:52

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5510 MHz



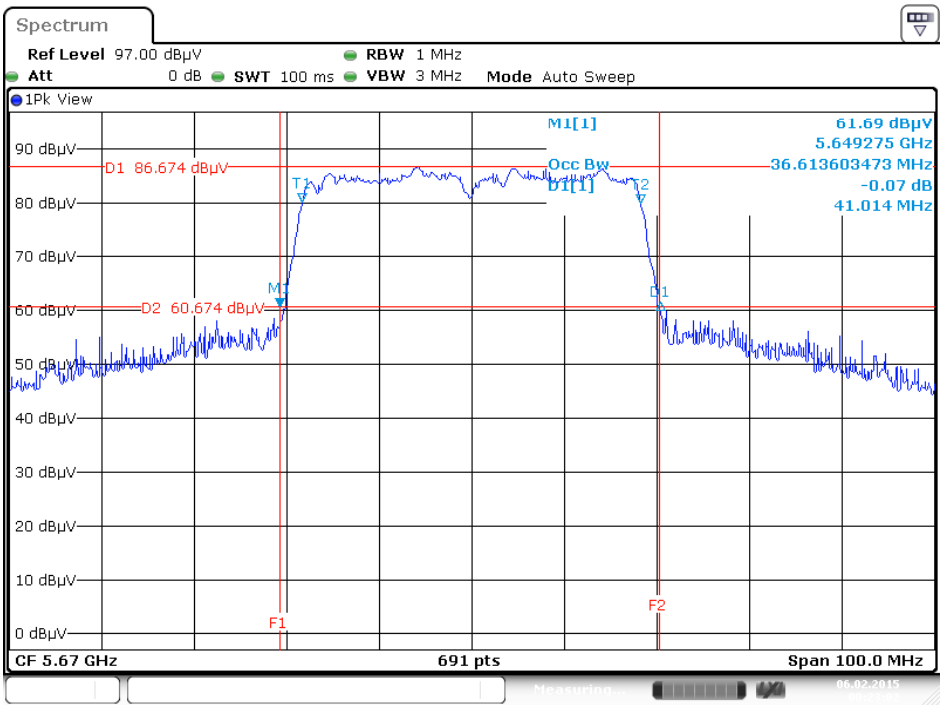
Date: 6.FEB.2015 00:21:42

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5550 MHz



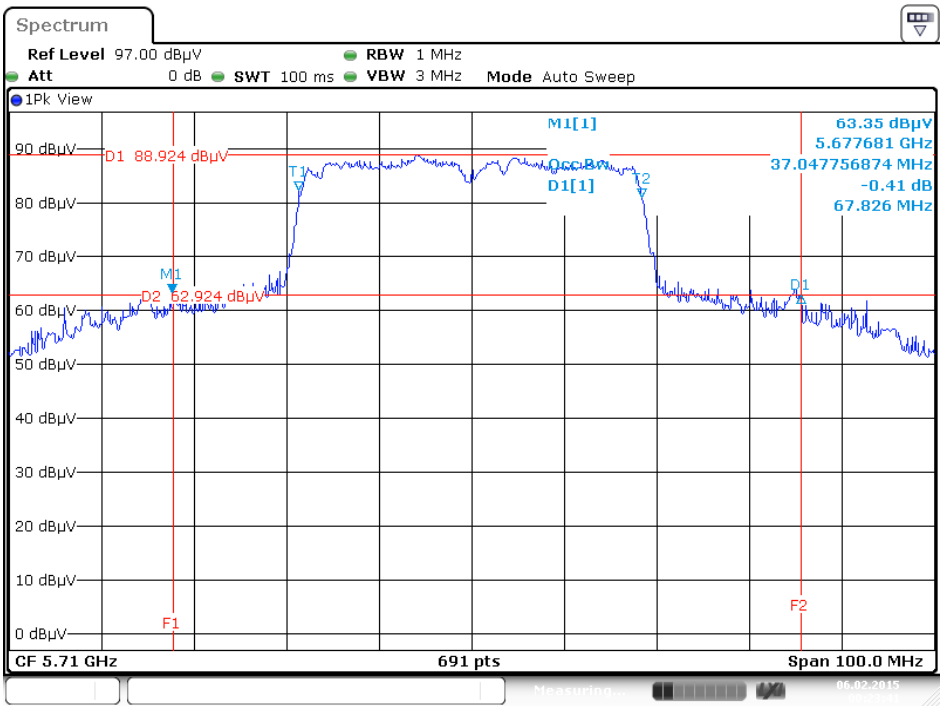
Date: 6.FEB.2015 00:22:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5670 MHz



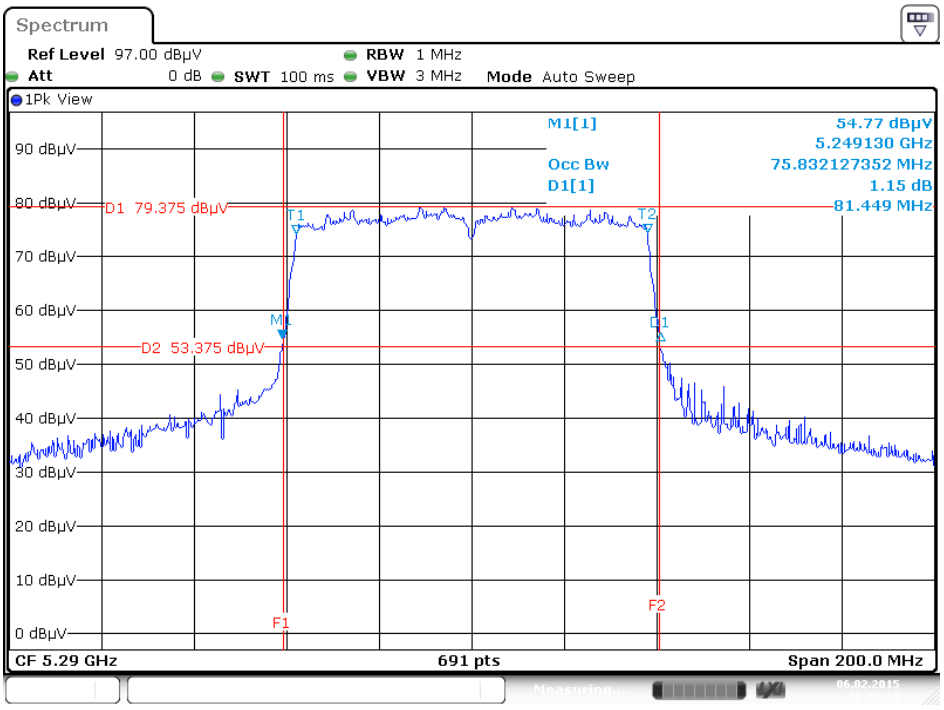
Date: 6.FEB.2015 00:23:03

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5710 MHz



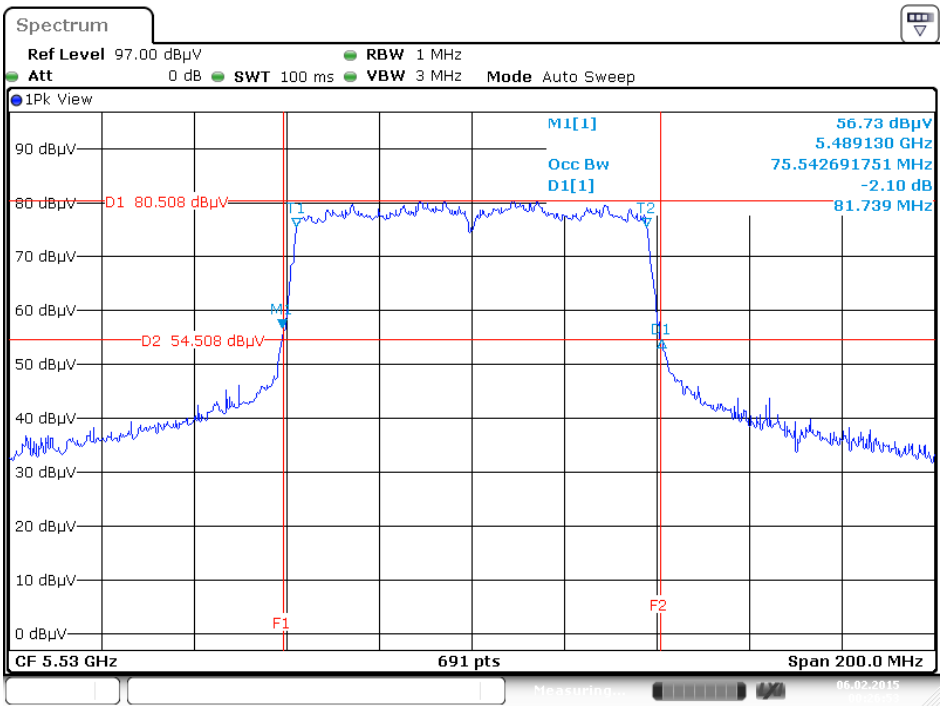
Date: 6.FEB.2015 00:23:41

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5290 MHz



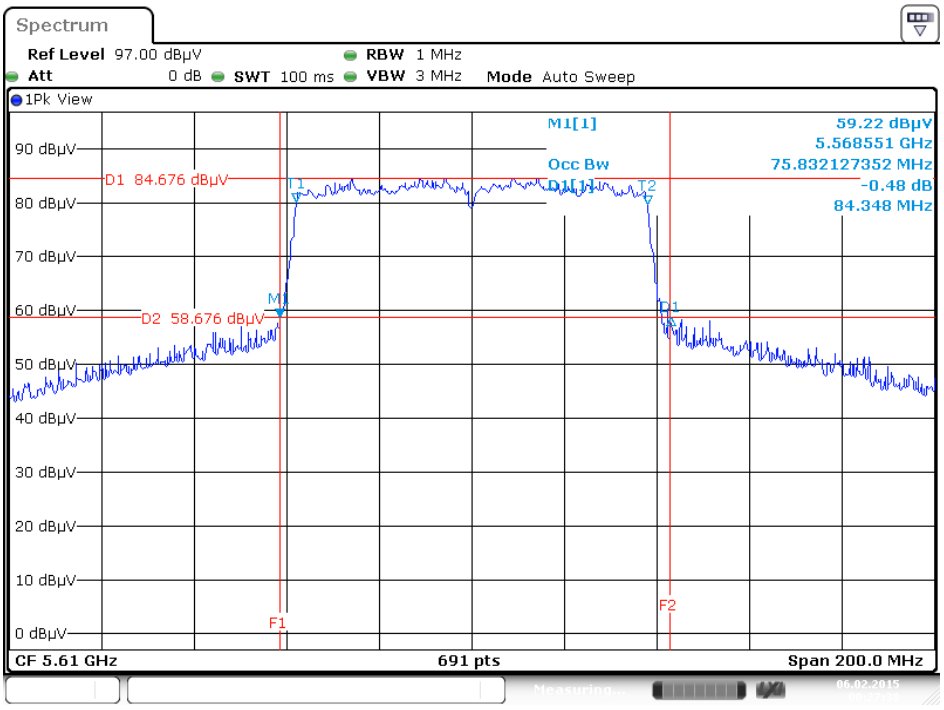
Date: 6.FEB.2015 00:26:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5530 MHz



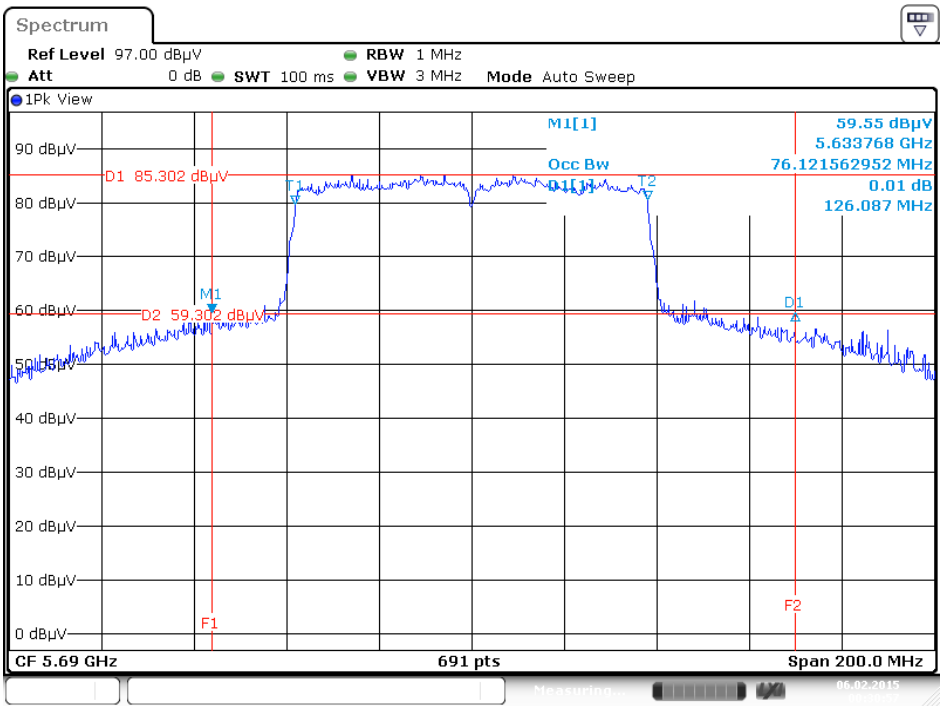
Date: 6.FEB.2015 00:26:52

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5610 MHz



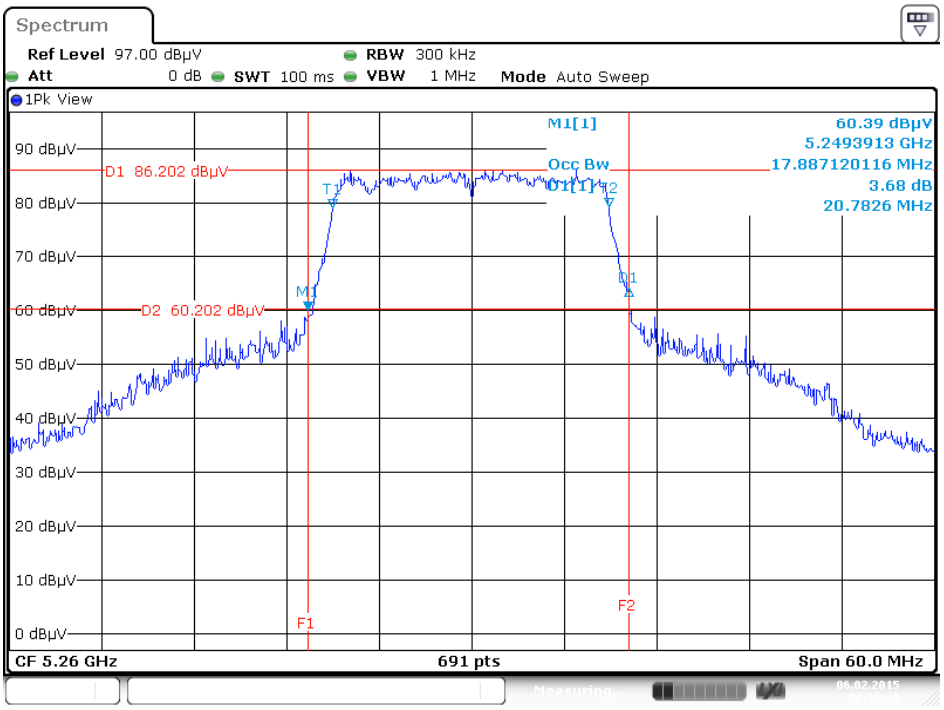
Date: 6.FEB.2015 00:27:38

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5690 MHz



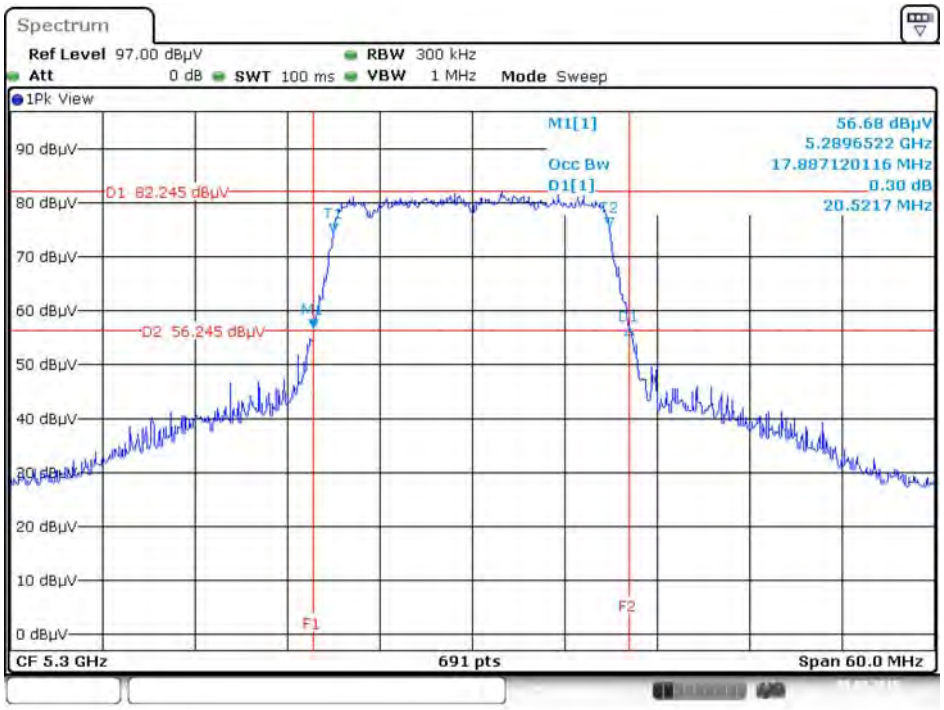
Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



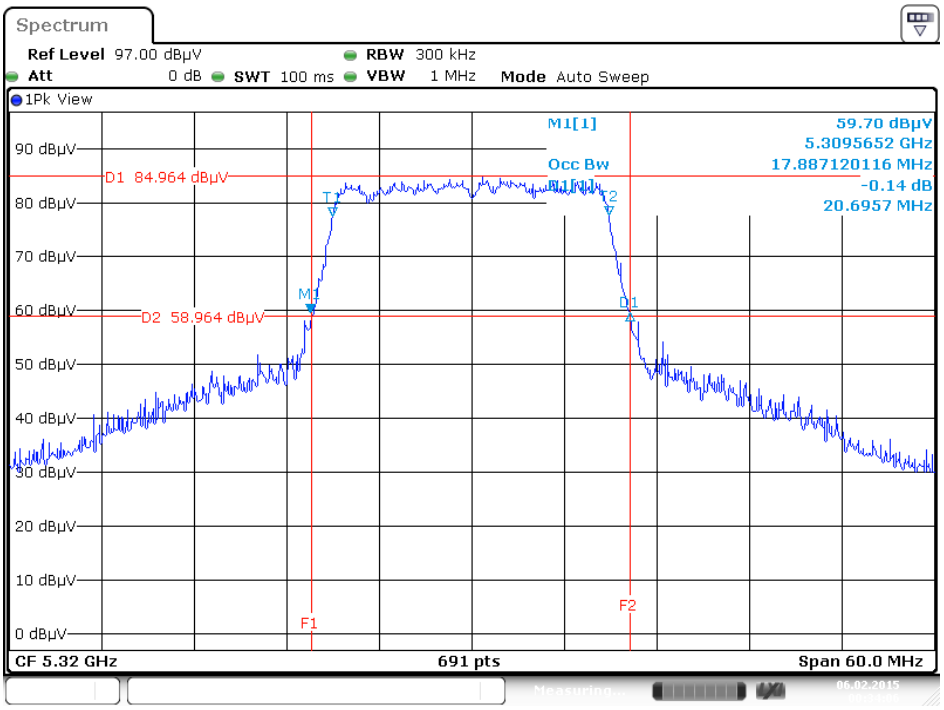
Date: 6.FEB.2015 00:32:49

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5300 MHz



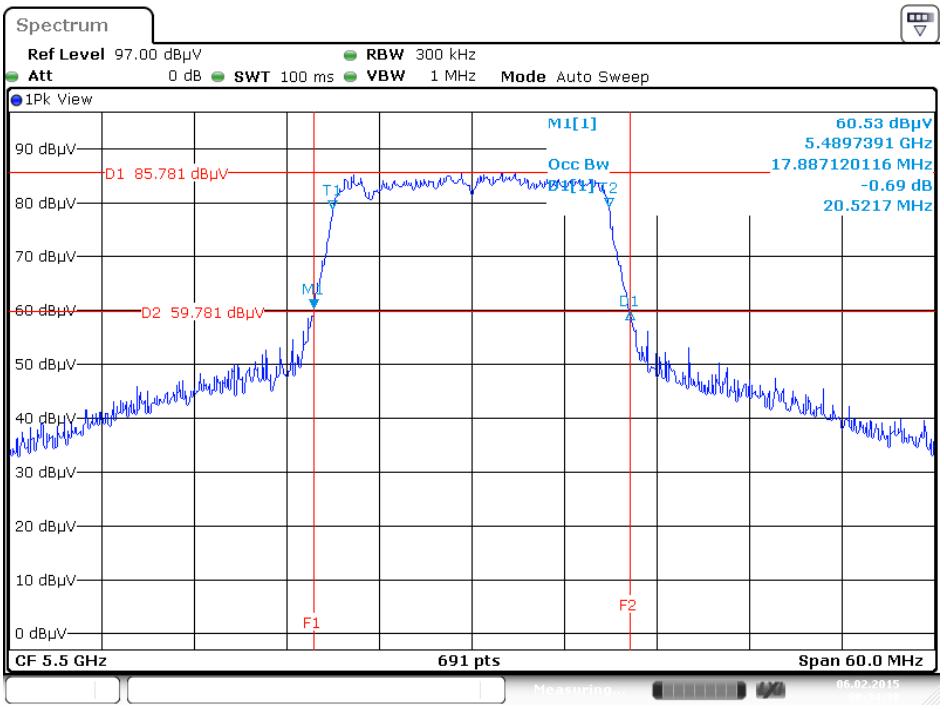
Date: 9.FEB.2015 14:14:43

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5320 MHz



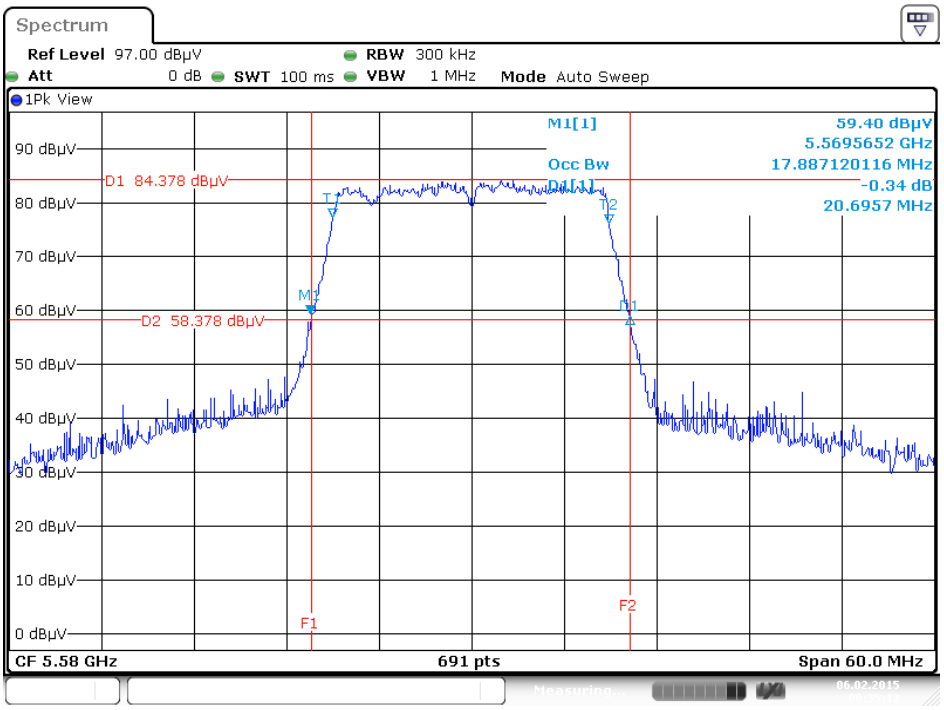
Date: 6.FEB.2015 00:34:06

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5500 MHz



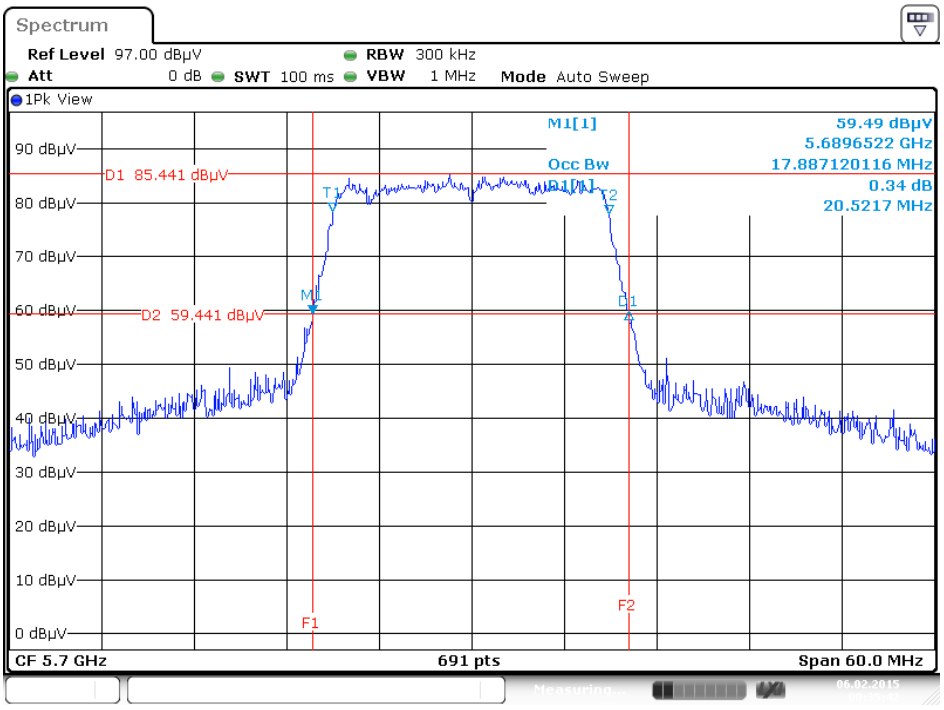
Date: 6.FEB.2015 00:34:38

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5580 MHz



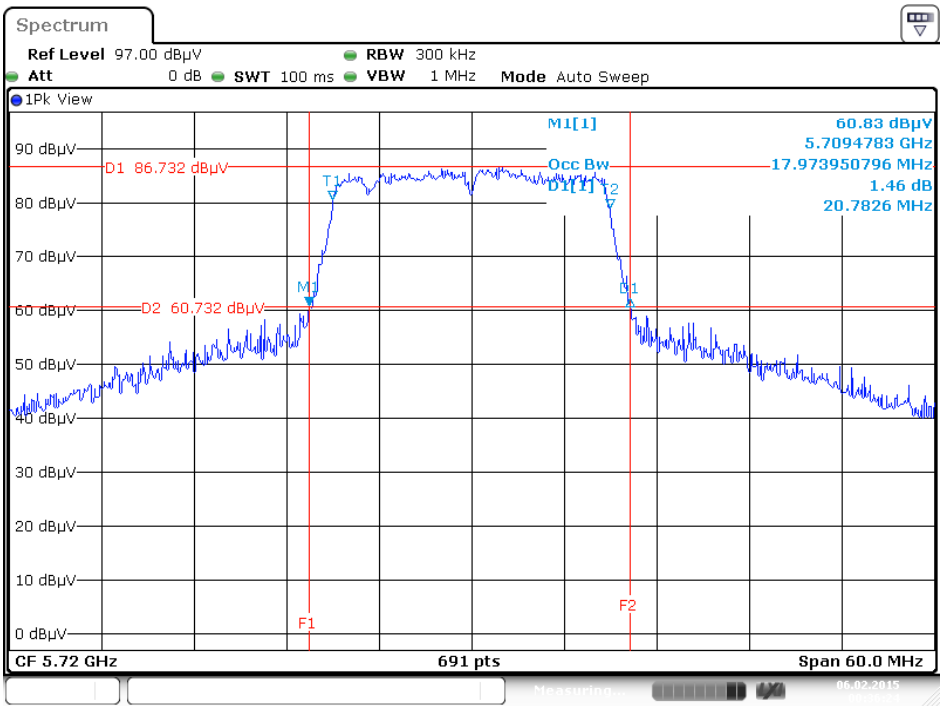
Date: 6.FEB.2015 00:35:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5700 MHz



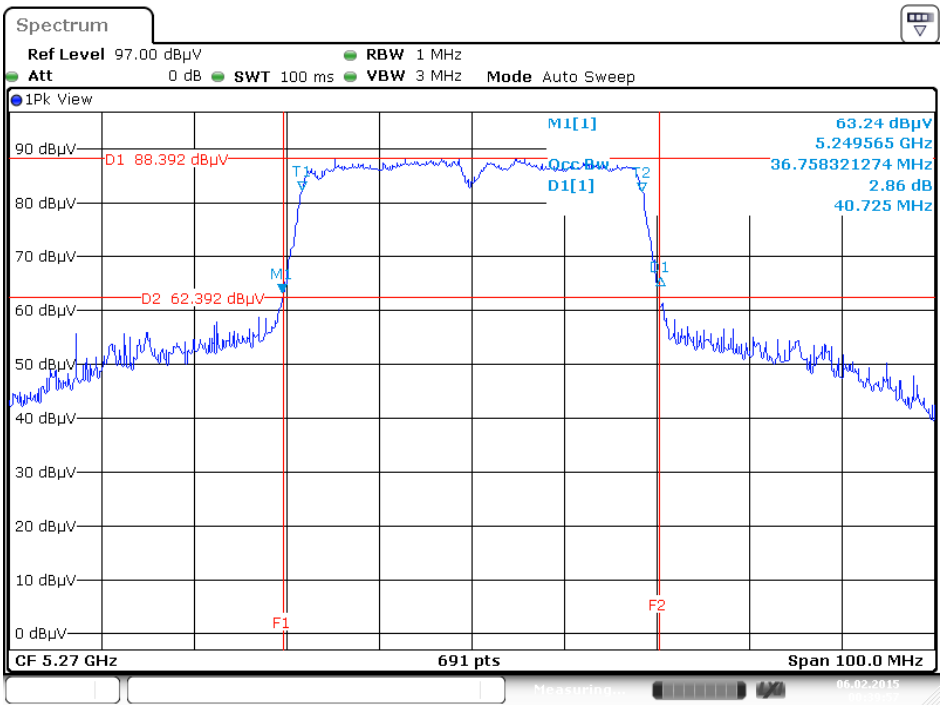
Date: 6.FEB.2015 00:35:42

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5720 MHz



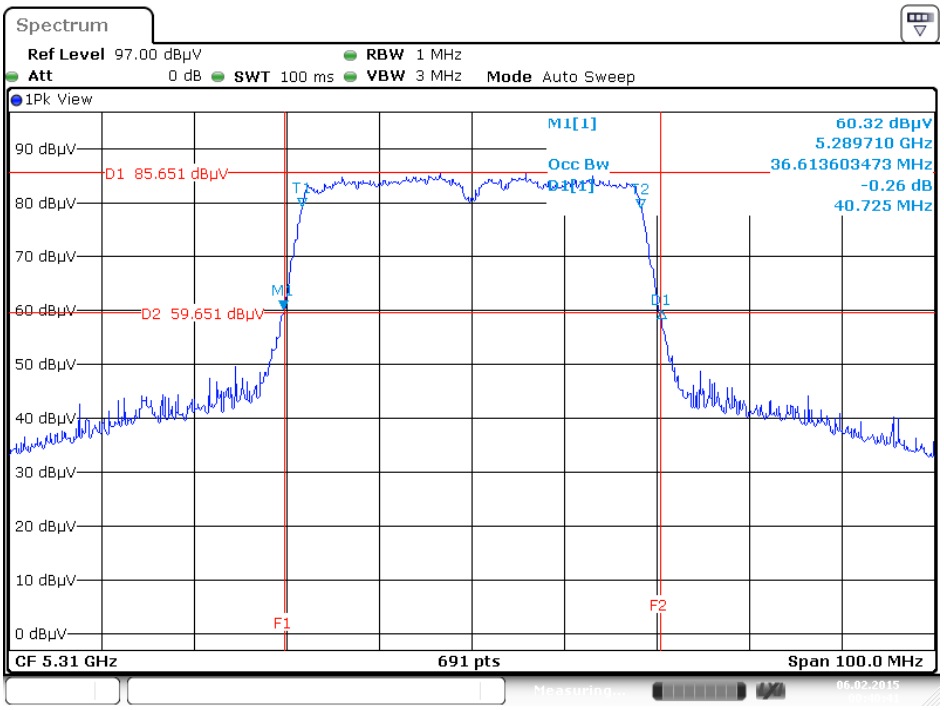
Date: 6.FEB.2015 00:36:24

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5270 MHz



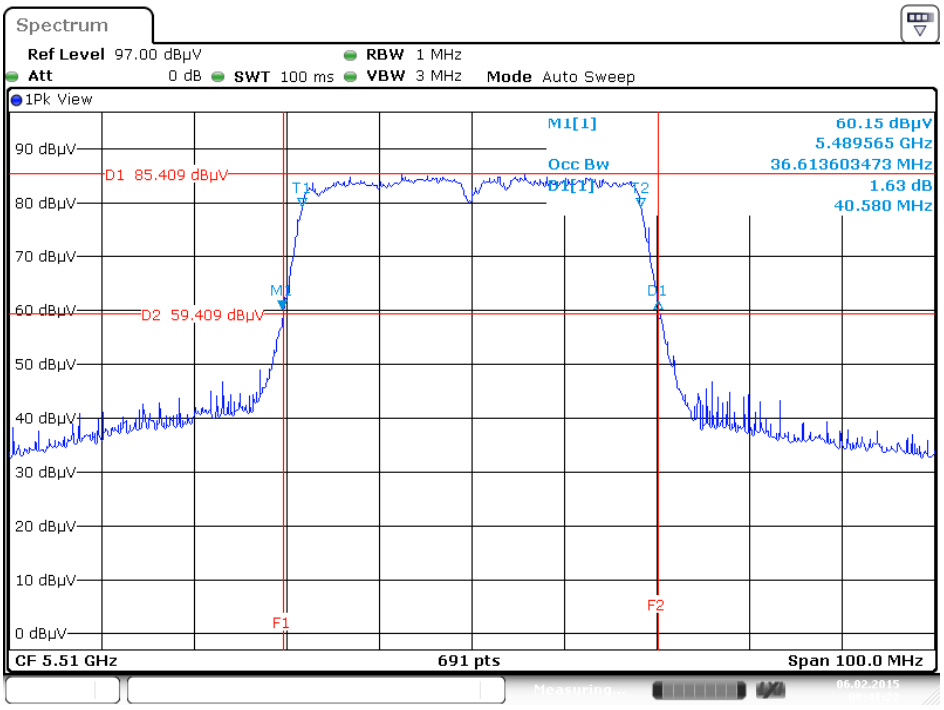
Date: 6.FEB.2015 00:39:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5310 MHz



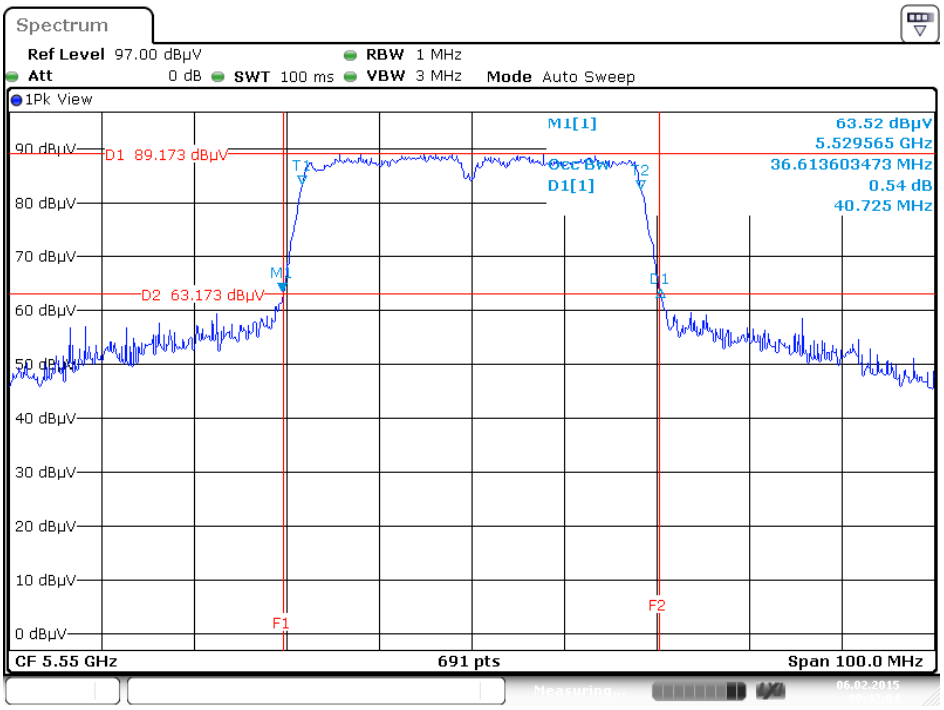
Date: 6.FEB.2015 00:40:41

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5510 MHz



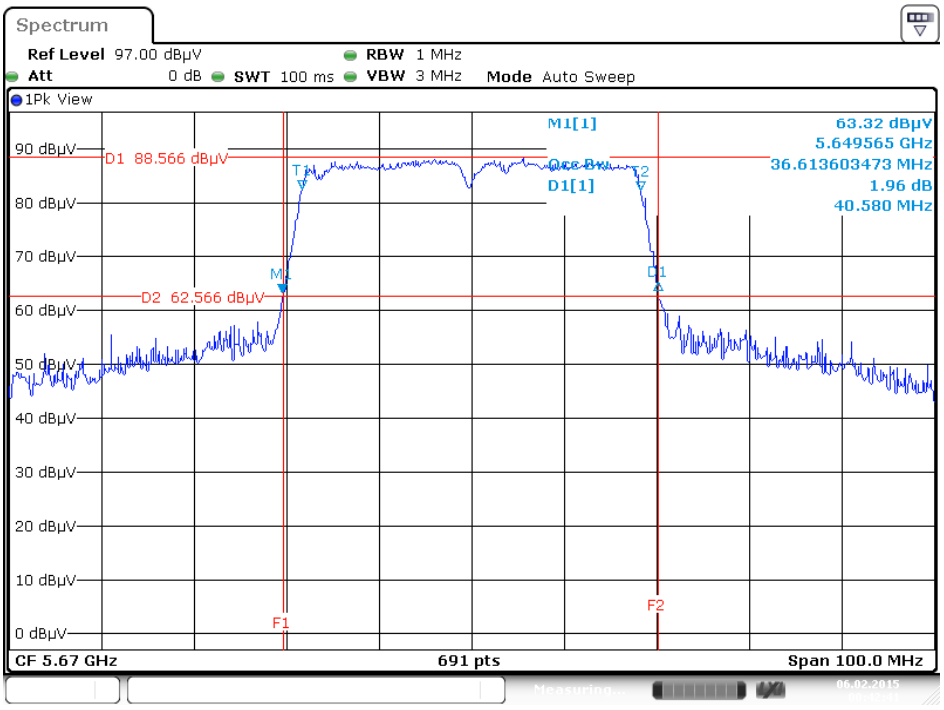
Date: 6.FEB.2015 00:41:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5550 MHz



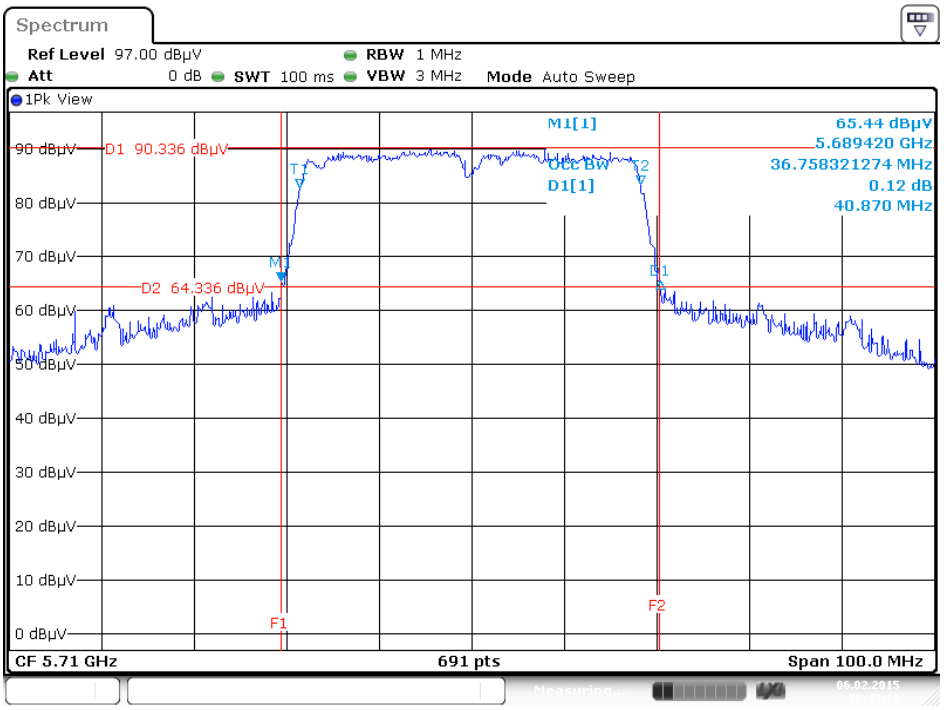
Date: 6.FEB.2015 00:42:04

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5670 MHz



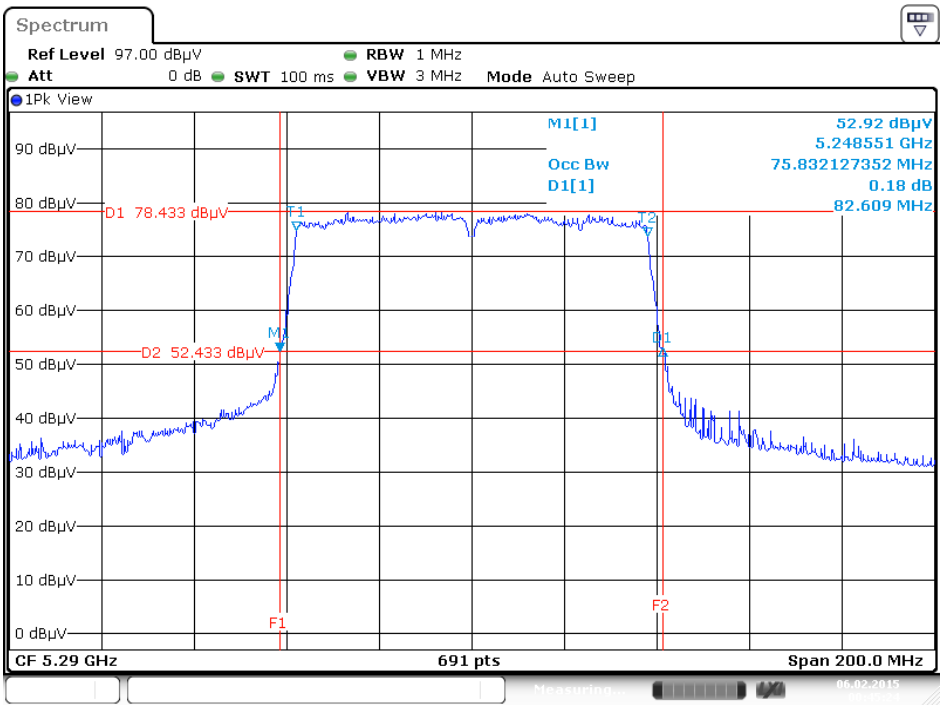
Date: 6.FEB.2015 00:42:40

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5710 MHz



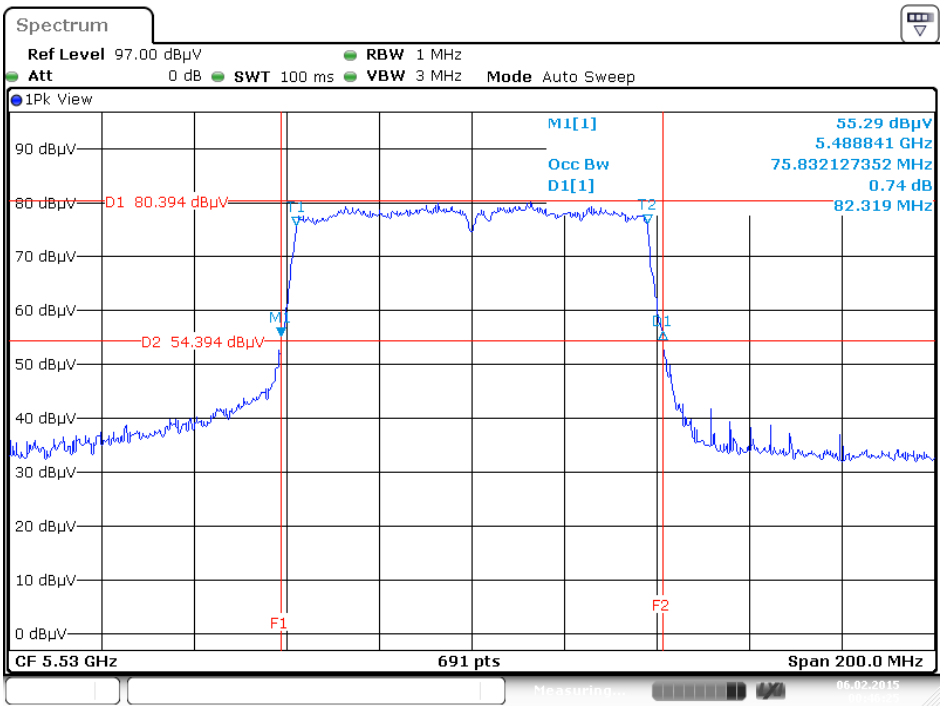
Date: 6.FEB.2015 00:43:11

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5290 MHz



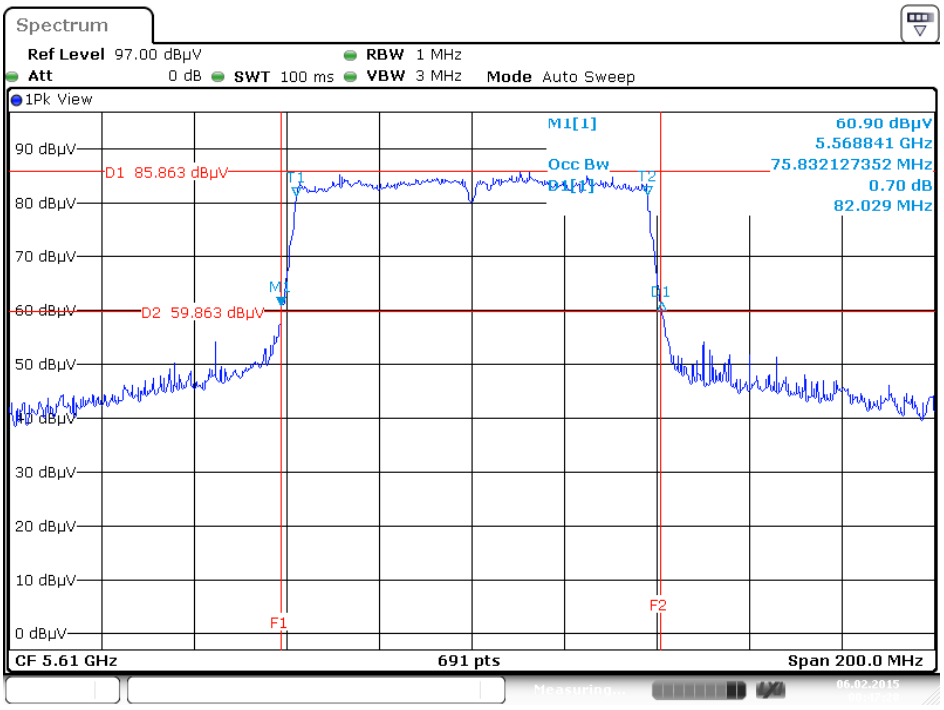
Date: 6.FEB.2015 00:45:25

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5530 MHz



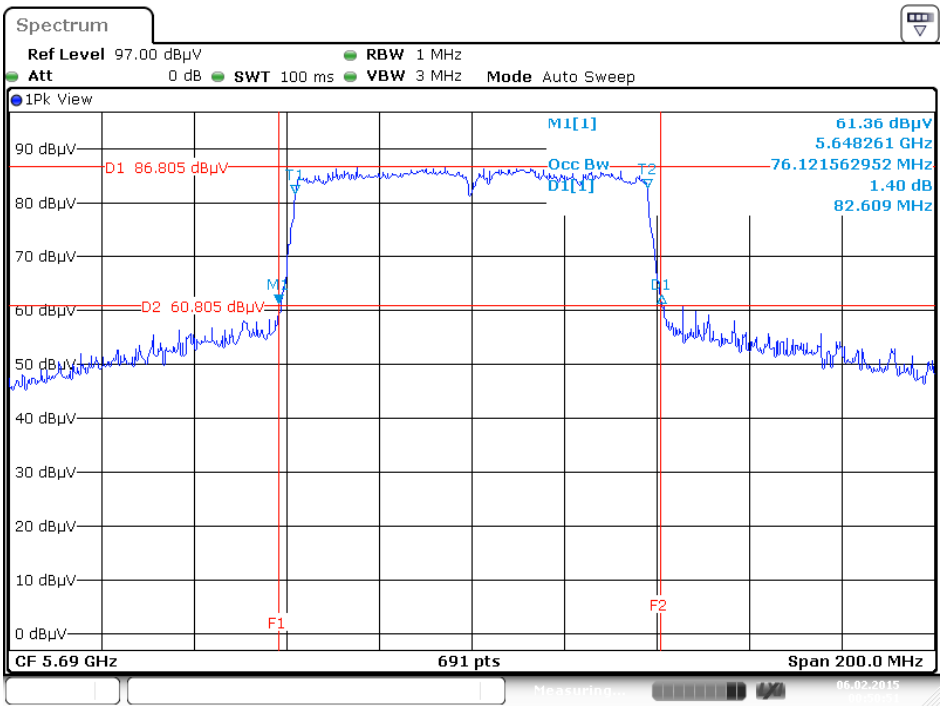
Date: 6.FEB.2015 00:46:25

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5610 MHz



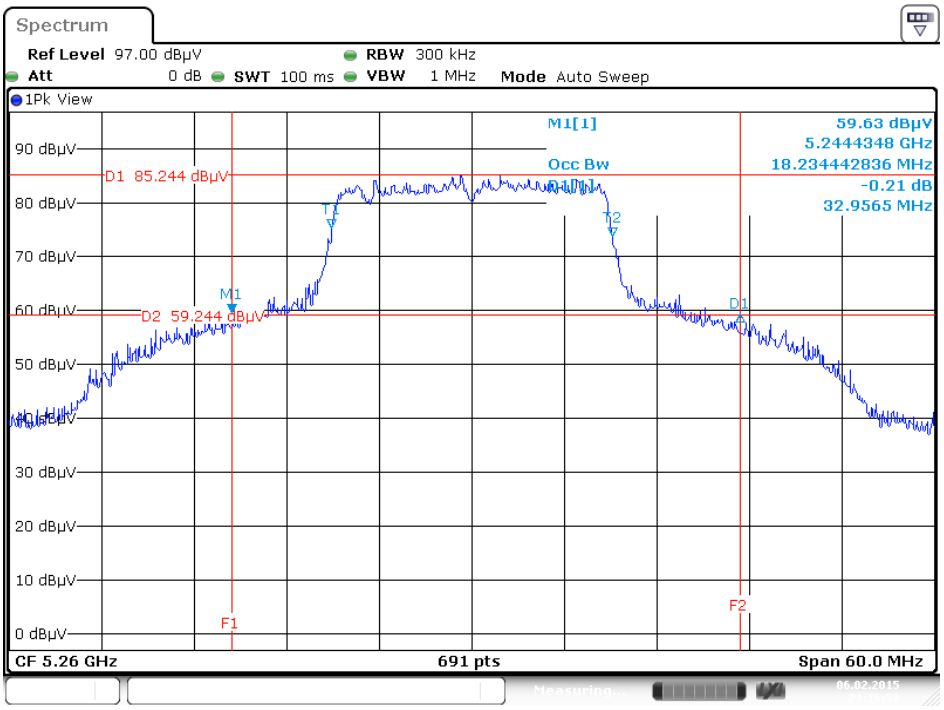
Date: 6.FEB.2015 00:47:28

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5690 MHz



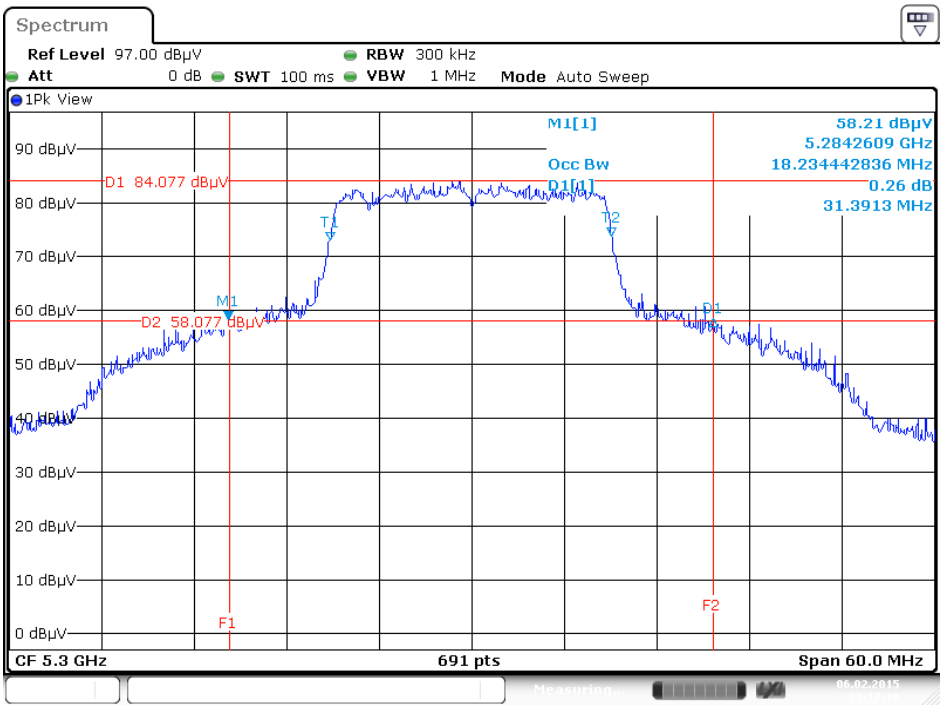
Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5260 MHz



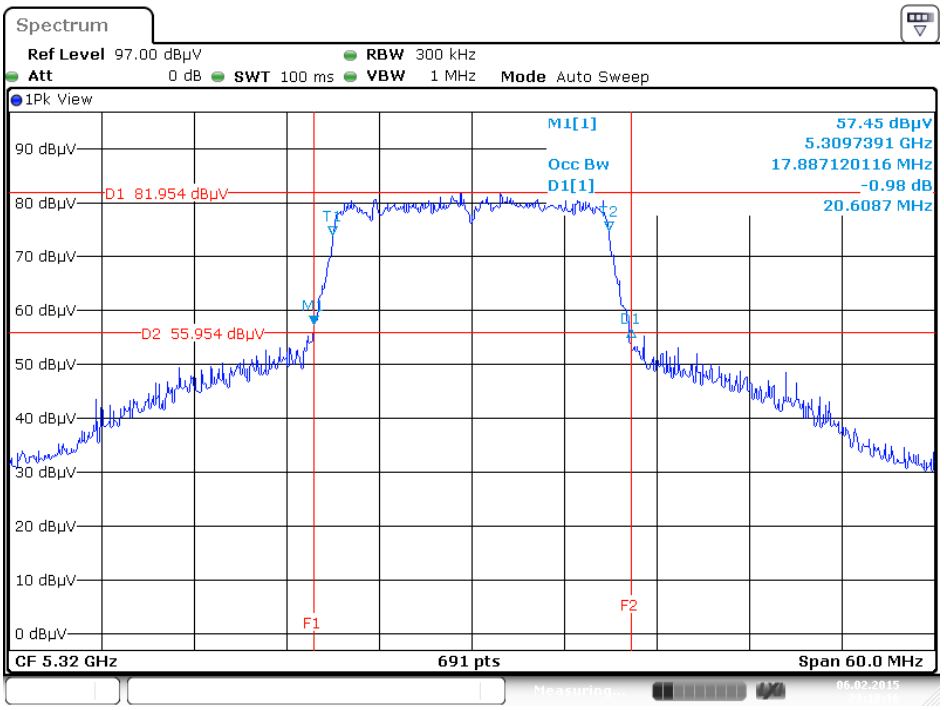
Date: 6.FEB.2015 23:16:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5300 MHz



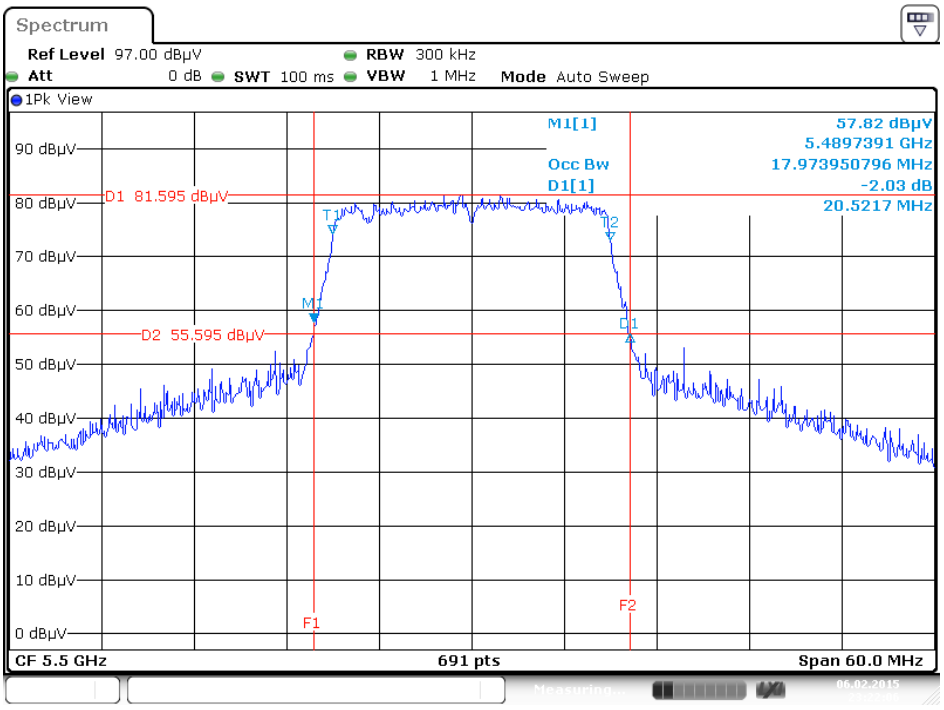
Date: 6.FEB.2015 23:17:10

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5320 MHz



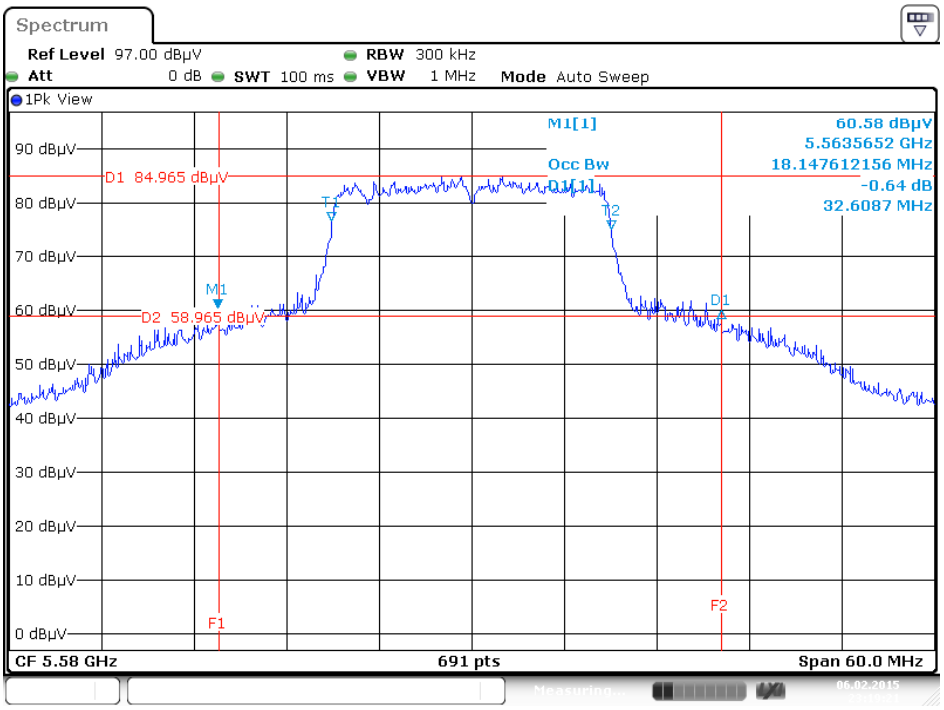
Date: 6.FEB.2015 23:18:16

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5500 MHz



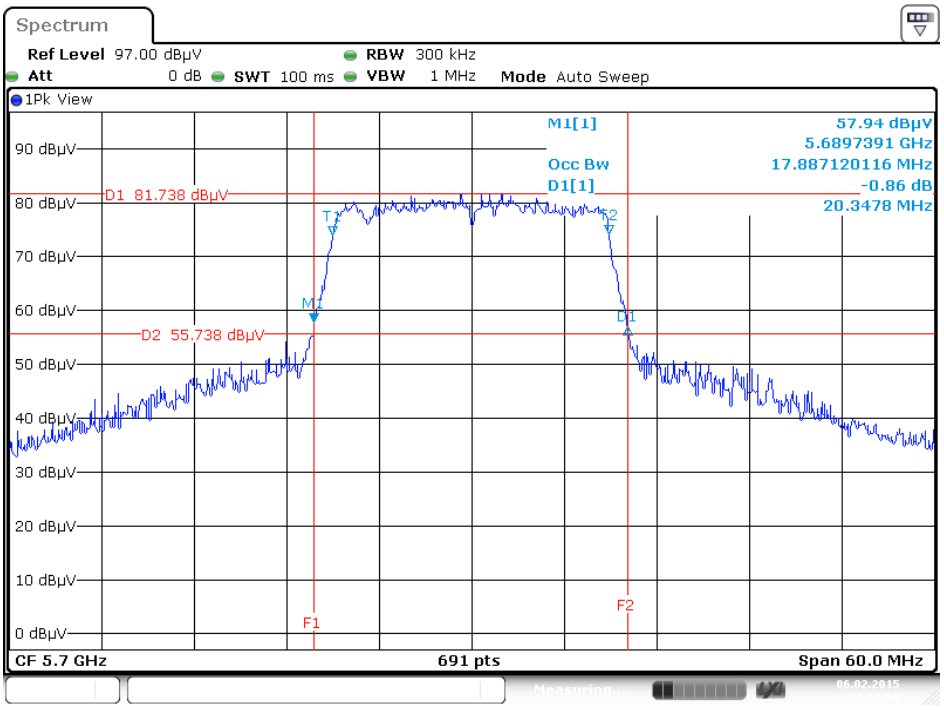
Date: 6.FEB.2015 23:22:07

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5580 MHz



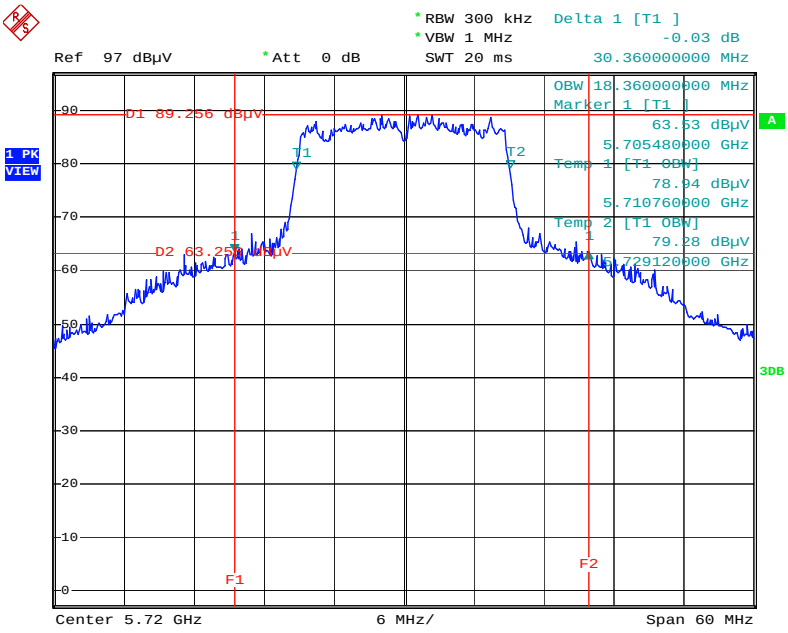
Date: 6.FEB.2015 23:19:21

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5700 MHz



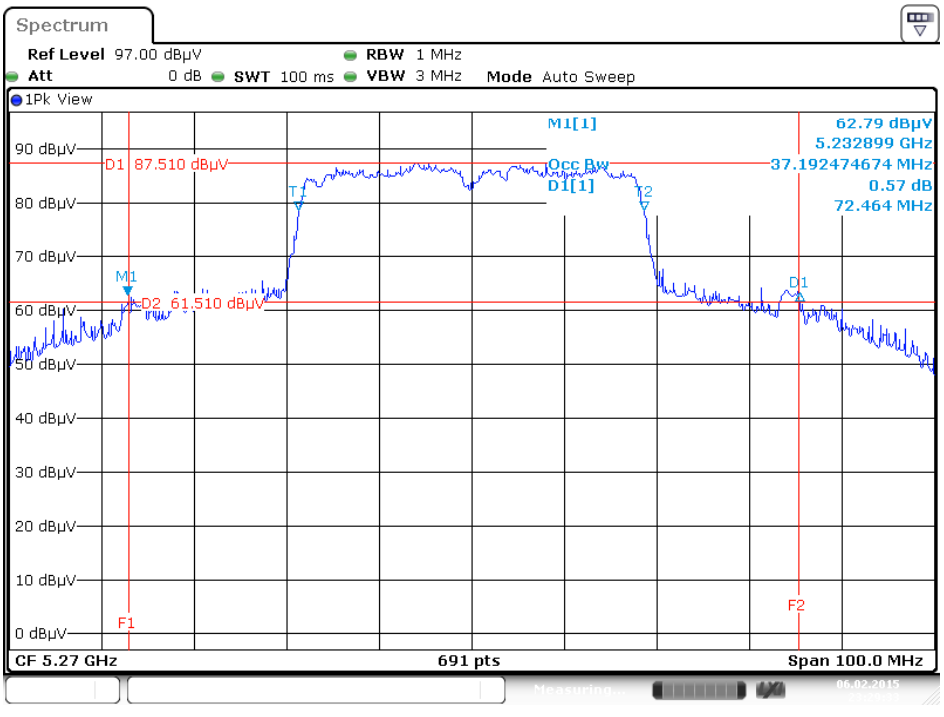
Date: 6.FEB.2015 23:23:06

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5720 MHz



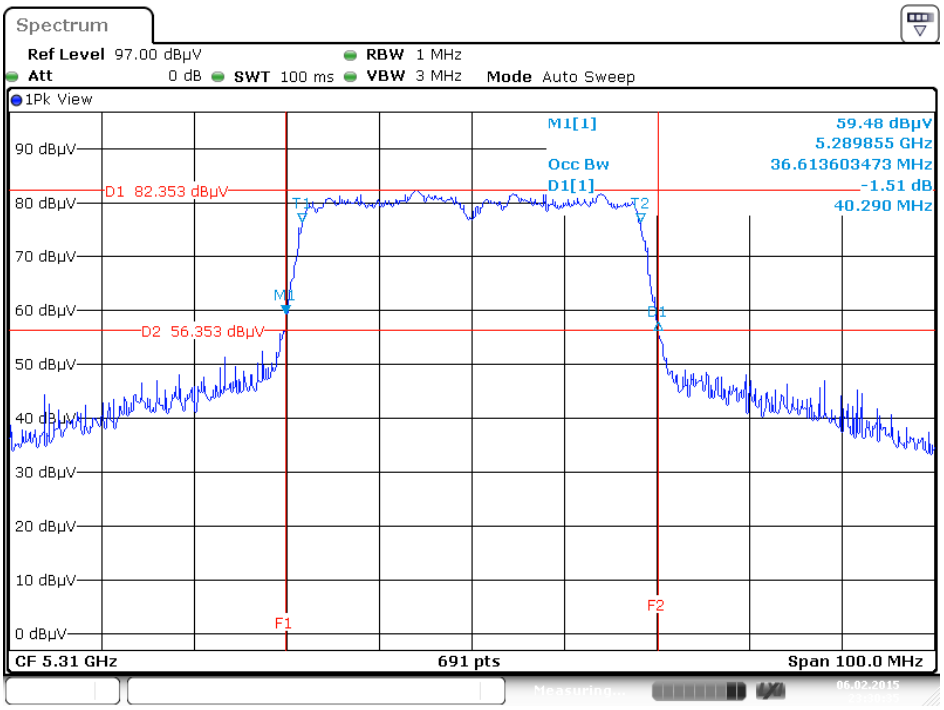
Date: 19.MAR.2015 16:41:23

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5270 MHz



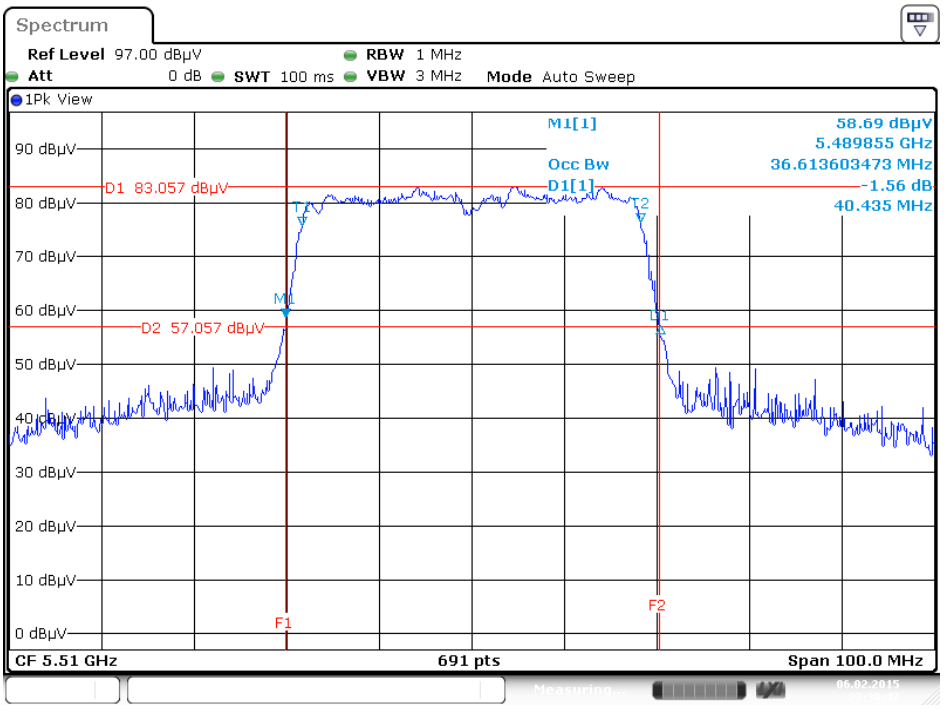
Date: 6.FEB.2015 23:29:34

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5310 MHz



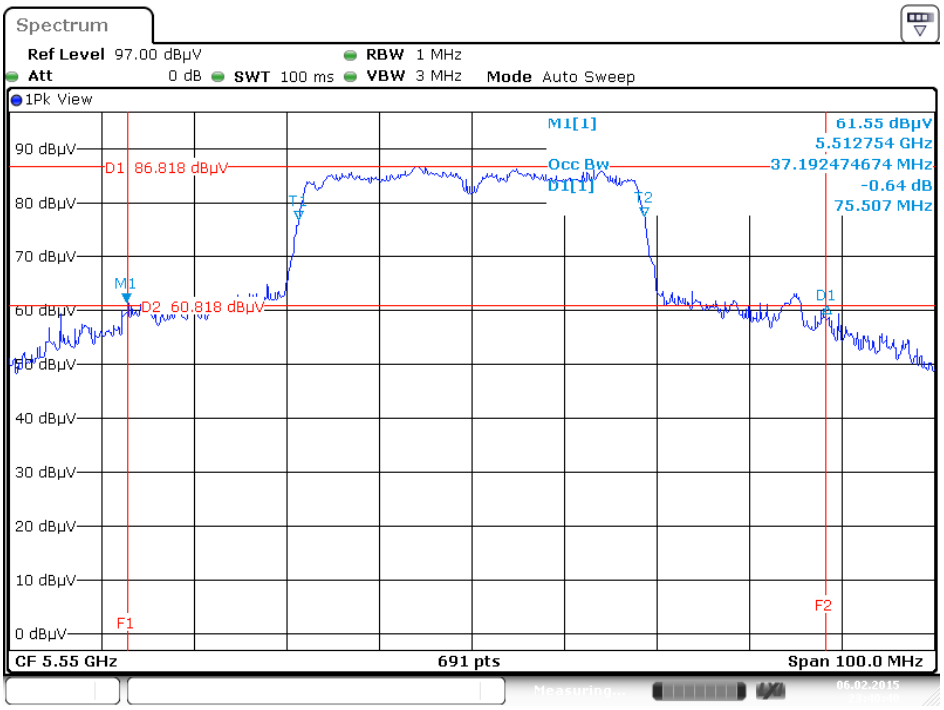
Date: 6.FEB.2015 23:30:35

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5510 MHz



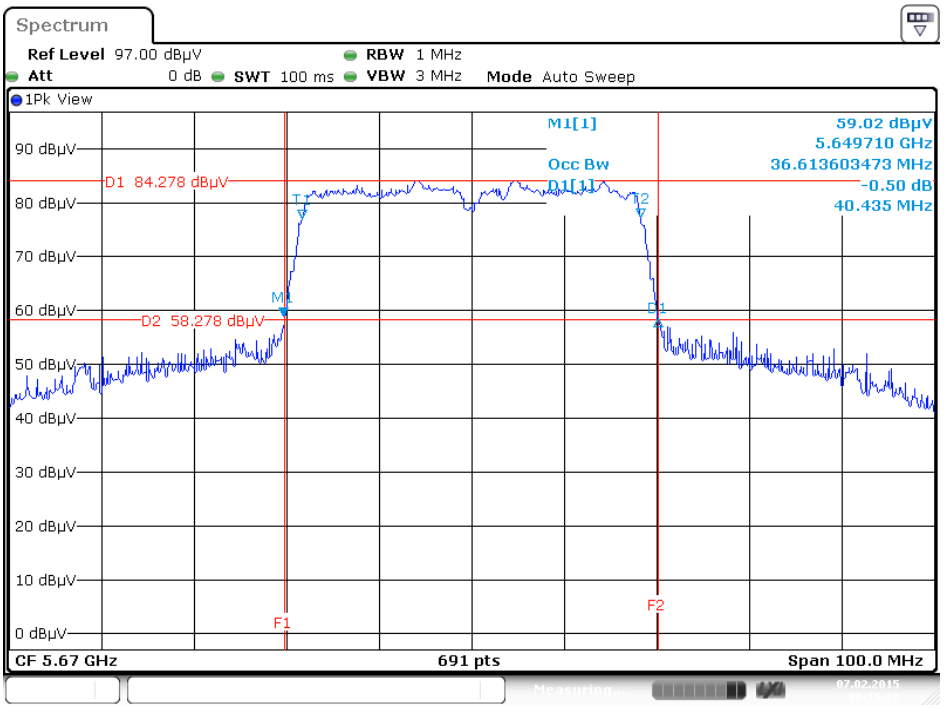
Date: 6.FEB.2015 23:38:47

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5550 MHz



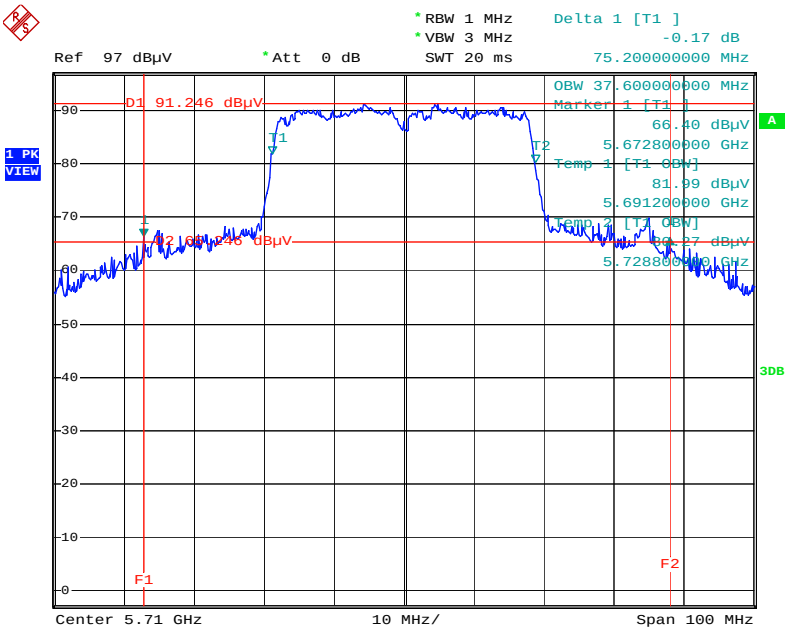
Date: 6.FEB.2015 23:40:40

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5670 MHz



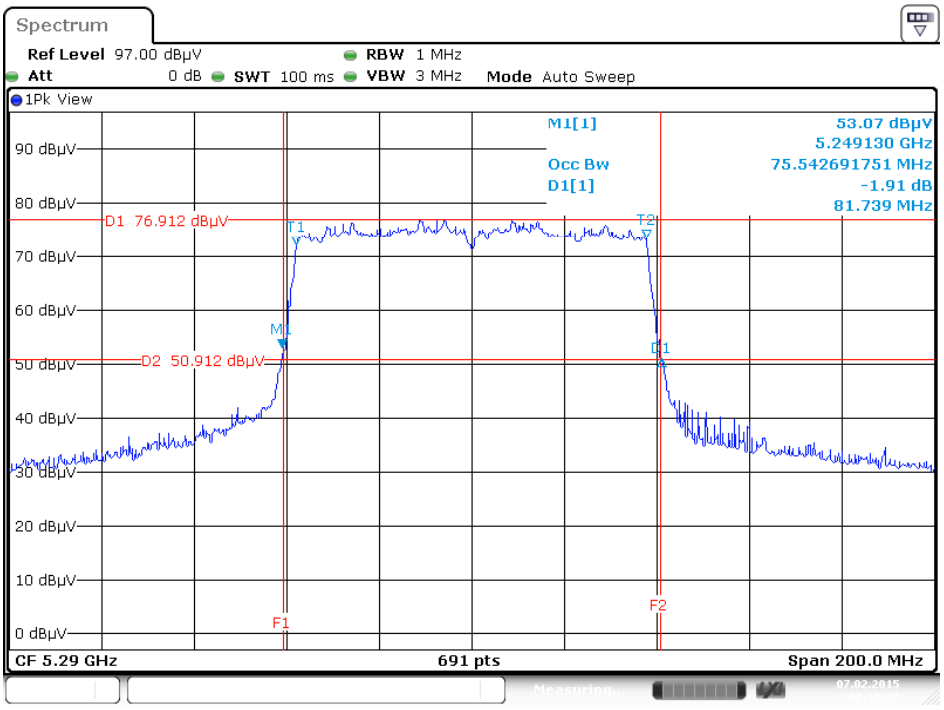
Date: 7.FEB.2015 00:15:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5710 MHz



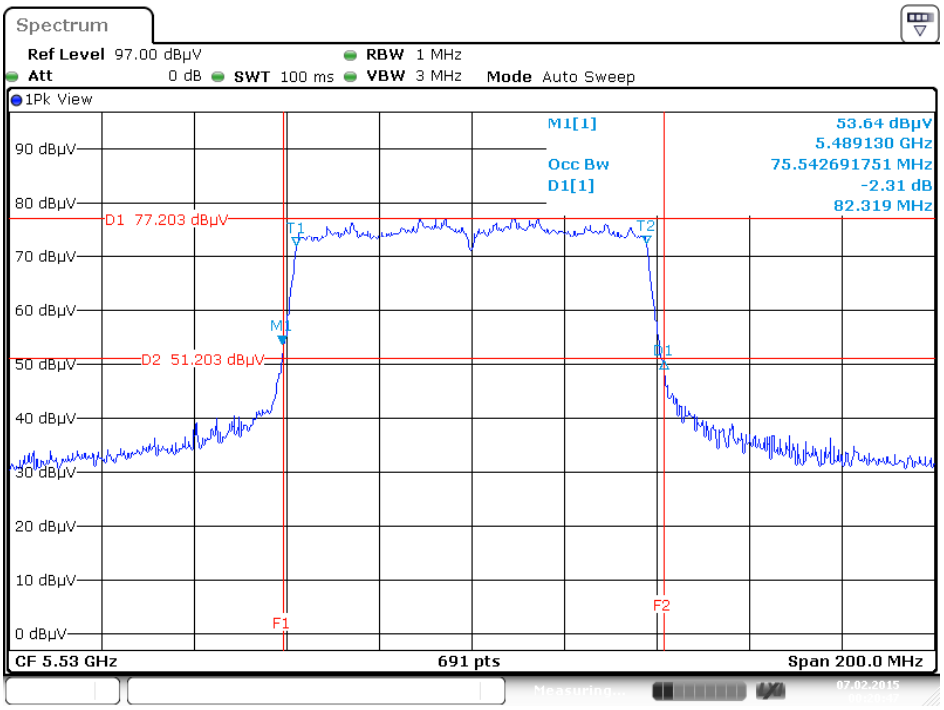
Date: 20.MAR.2015 10:59:37

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5290 MHz



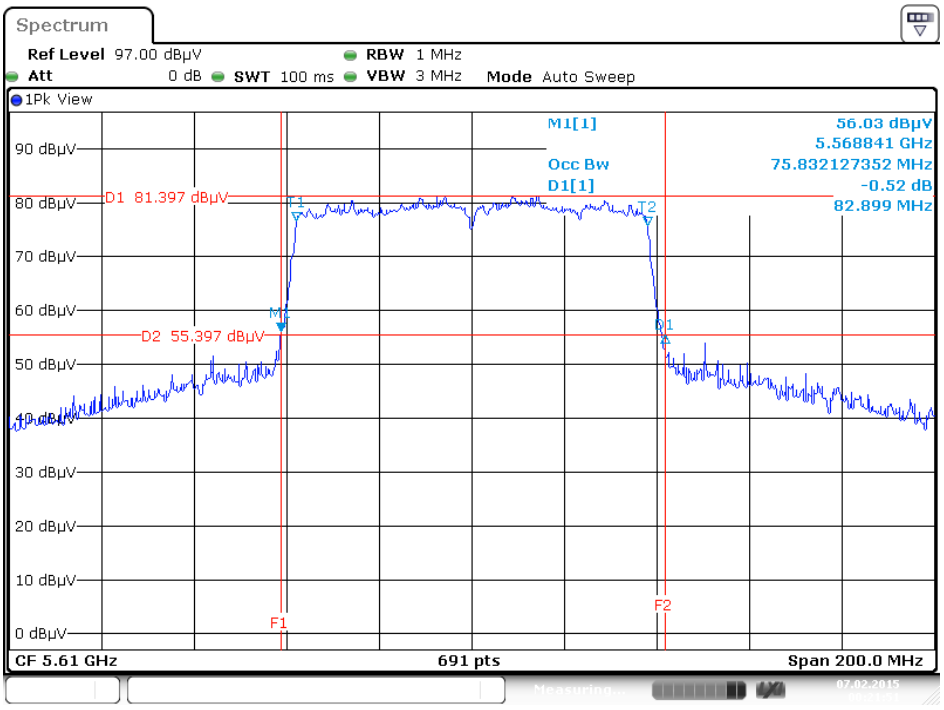
Date: 7.FEB.2015 00:18:47

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5530 MHz



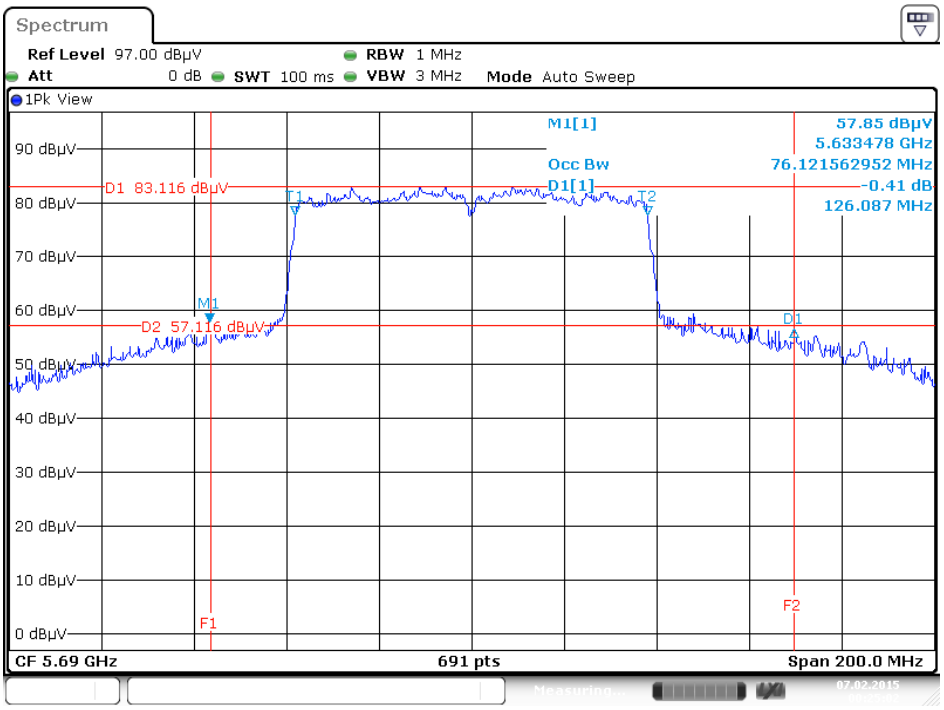
Date: 7.FEB.2015 00:20:47

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5610 MHz



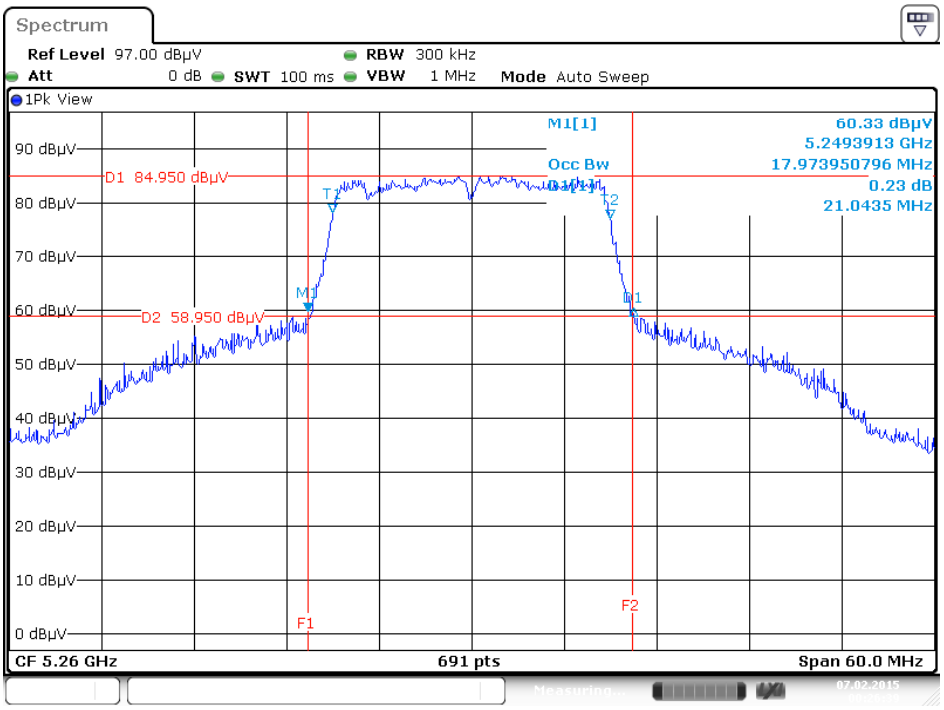
Date: 7.FEB.2015 00:21:51

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5690 MHz



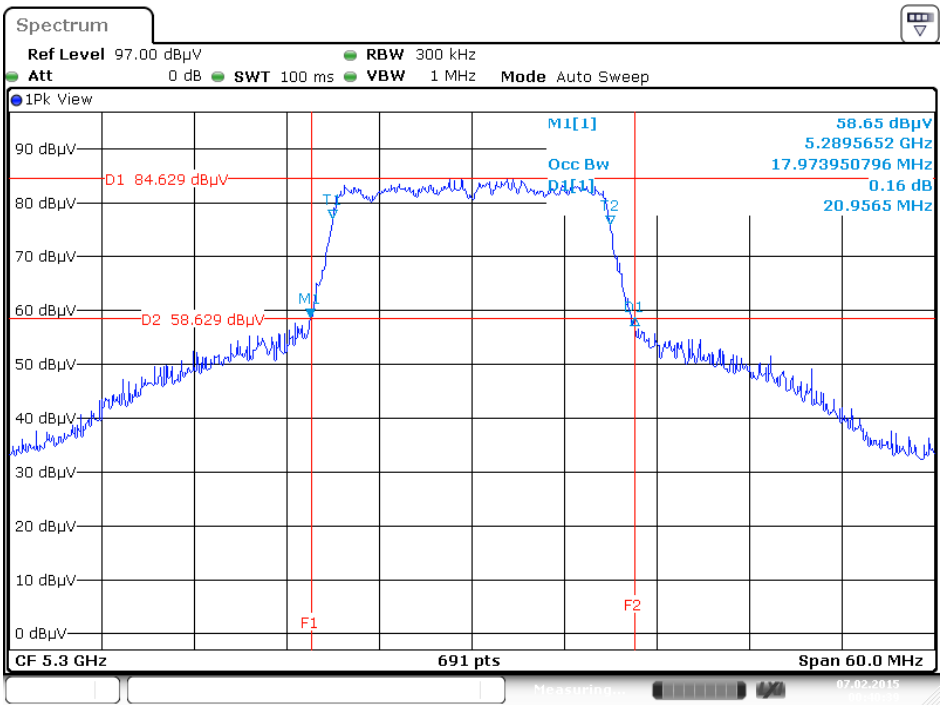
Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



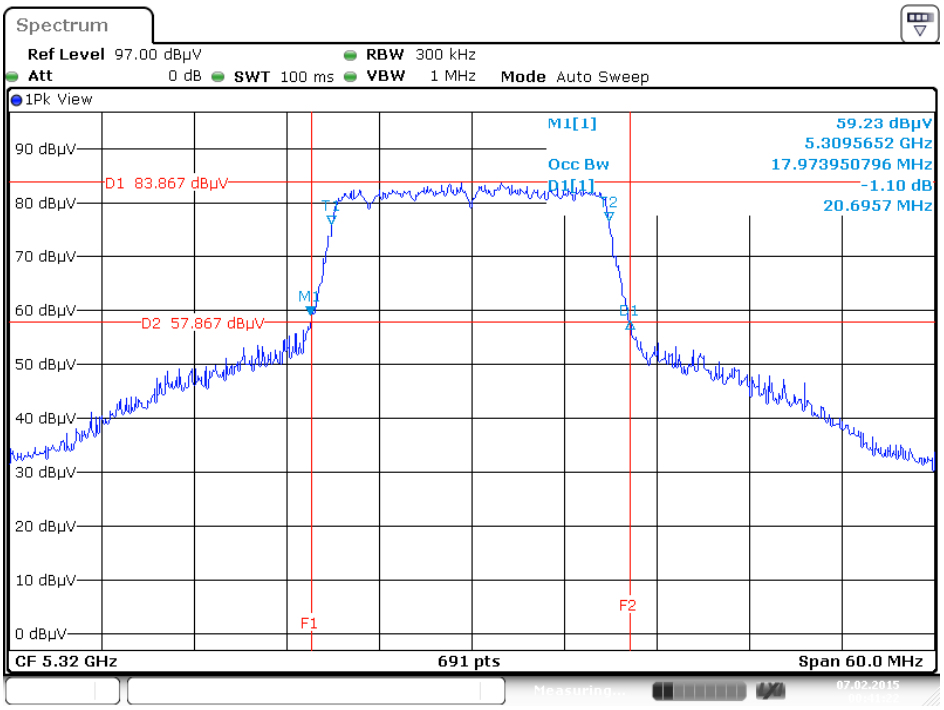
Date: 7.FEB.2015 00:26:40

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5300 MHz



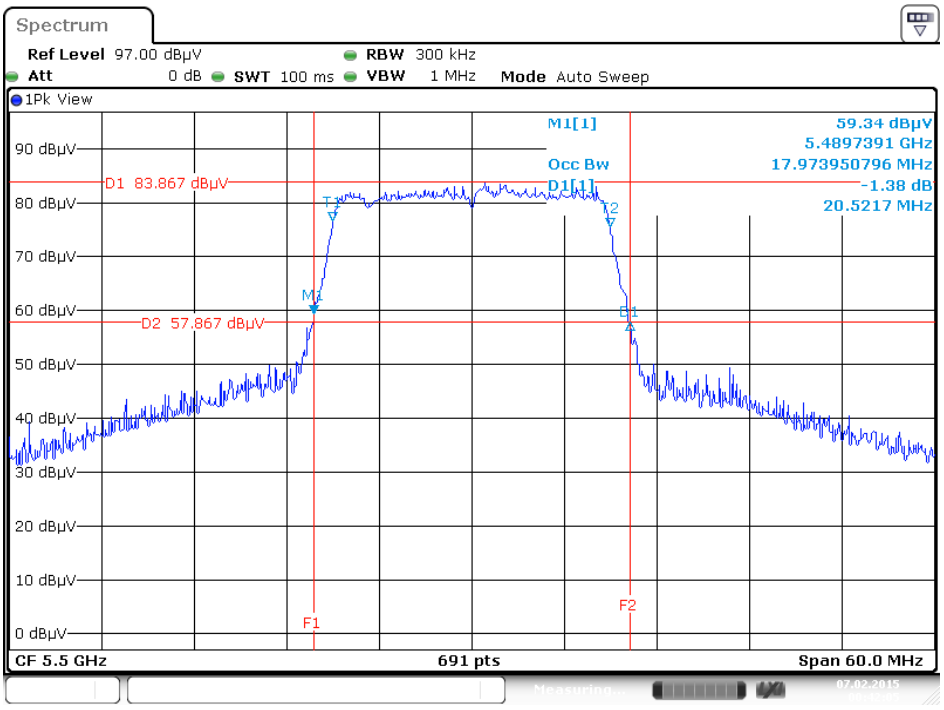
Date: 7.FEB.2015 00:40:39

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5320 MHz



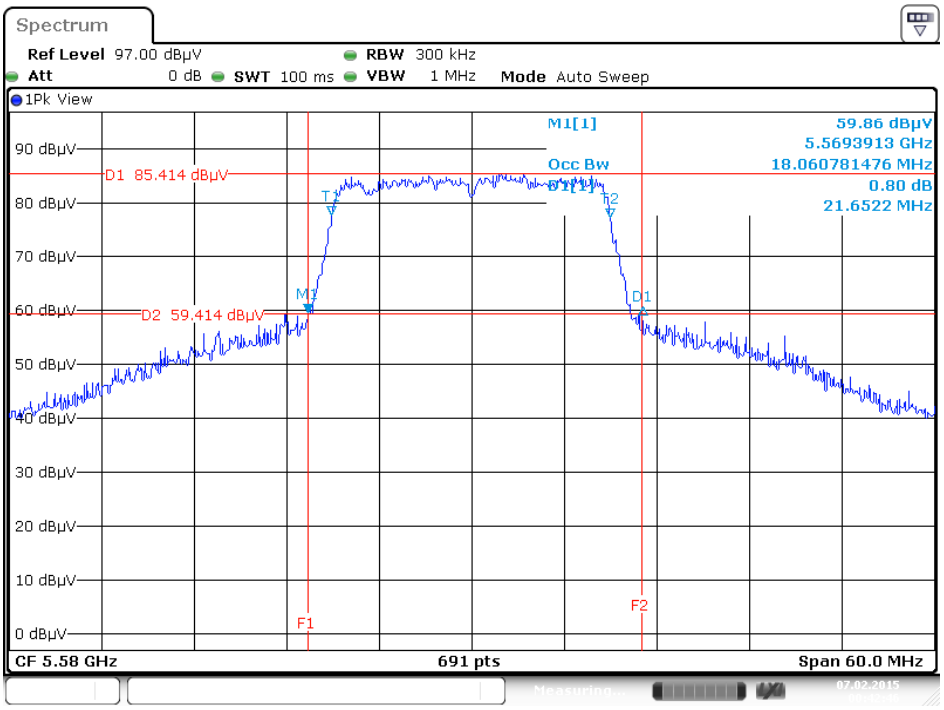
Date: 7.FEB.2015 00:41:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5500 MHz



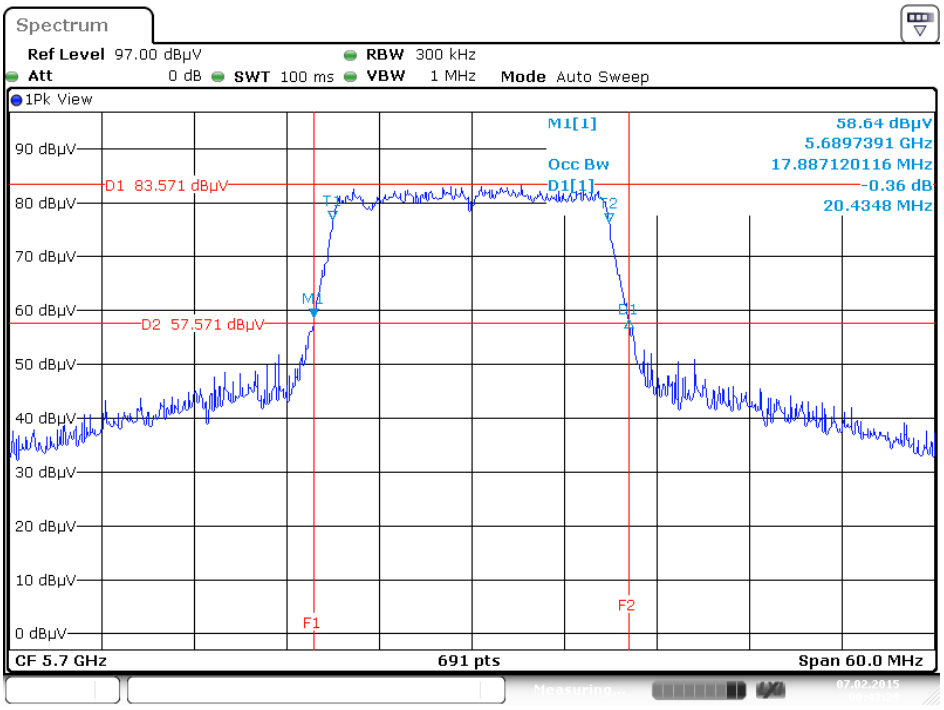
Date: 7.FEB.2015 00:42:05

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5580 MHz



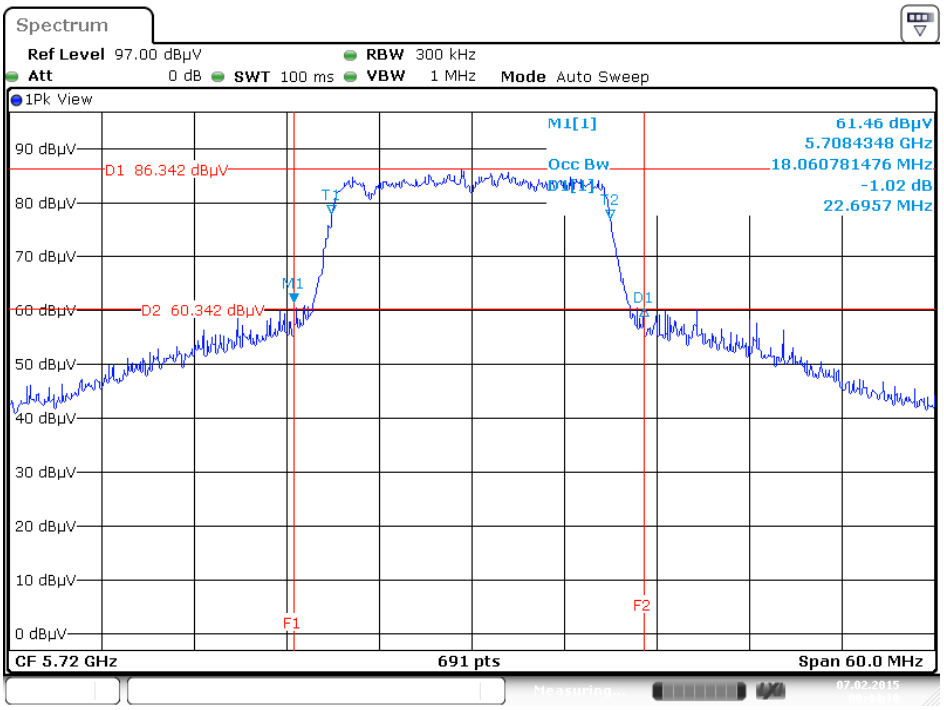
Date: 7.FEB.2015 00:42:46

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5700 MHz



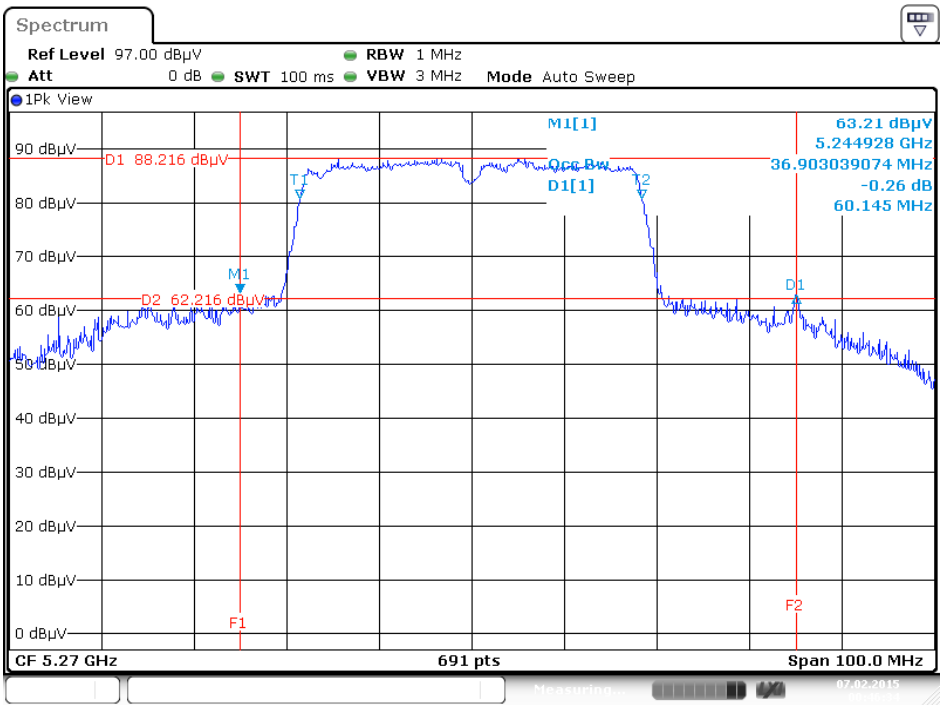
Date: 7.FEB.2015 00:43:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5720 MHz



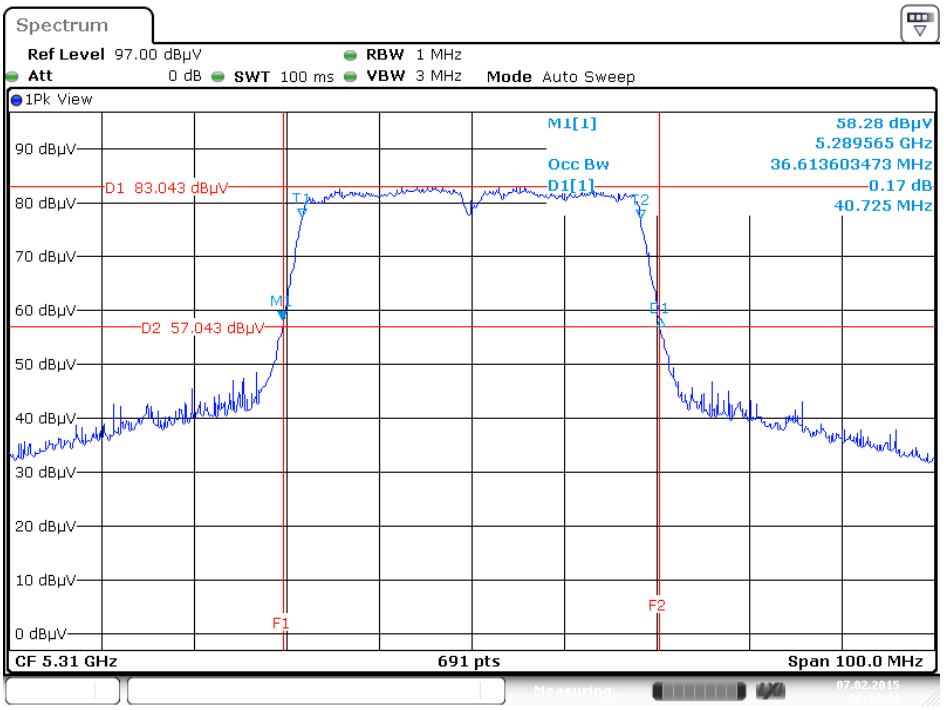
Date: 7.FEB.2015 00:44:10

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5270 MHz



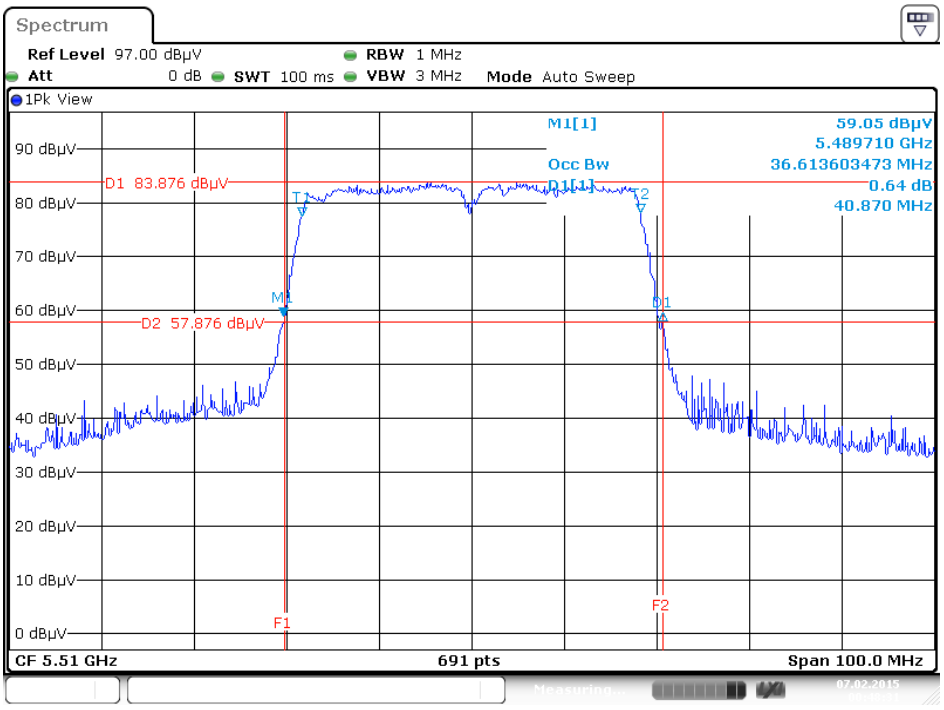
Date: 7.FEB.2015 00:46:34

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5310 MHz



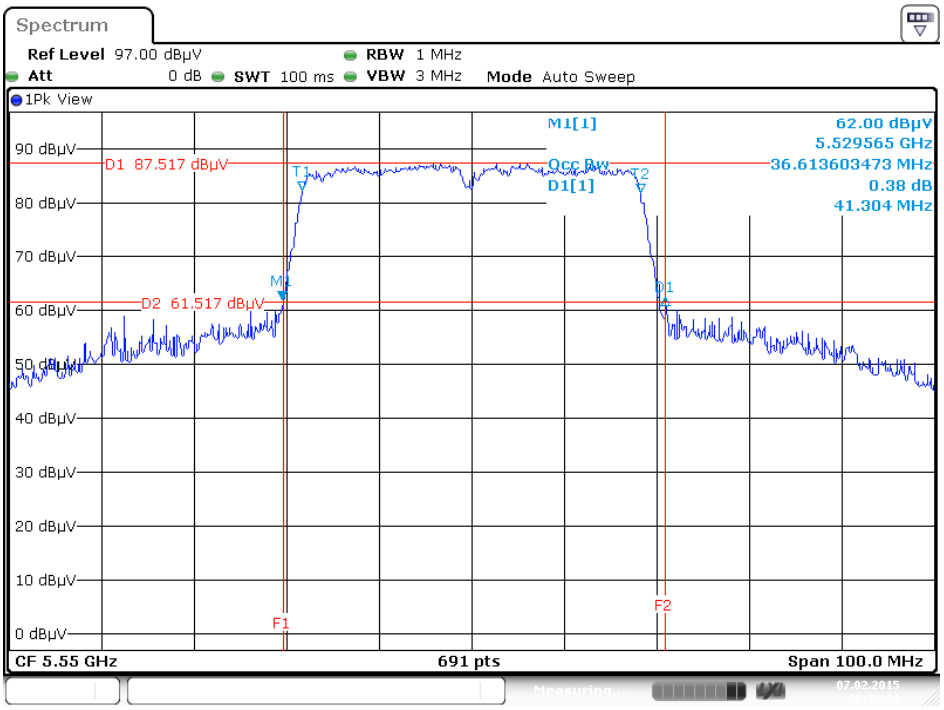
Date: 7.FEB.2015 00:47:44

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5510 MHz



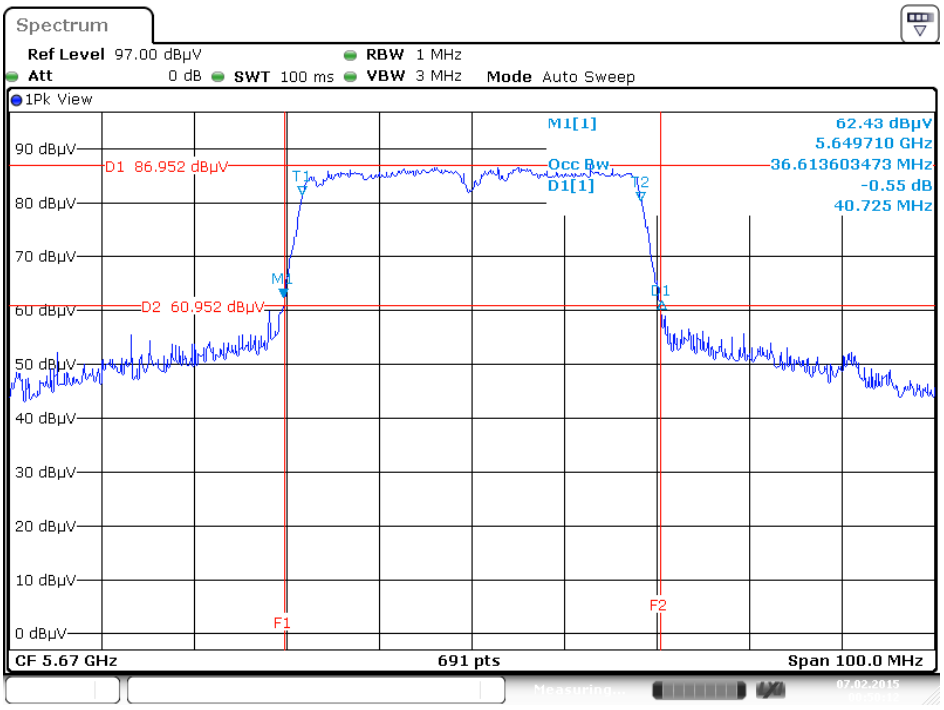
Date: 7.FEB.2015 00:48:30

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5550 MHz



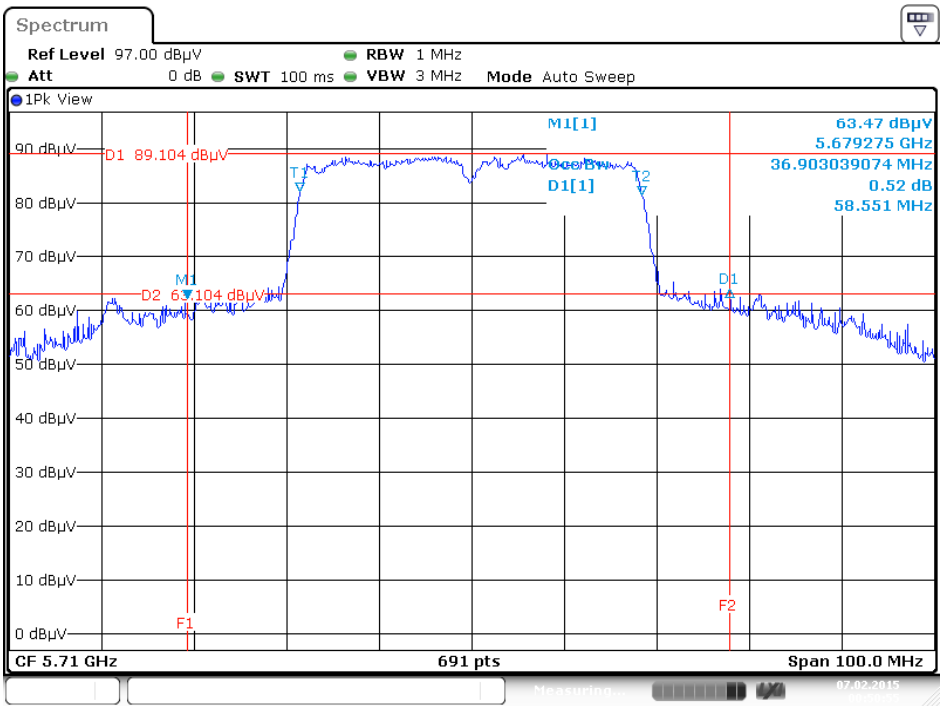
Date: 7.FEB.2015 00:49:24

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5670 MHz



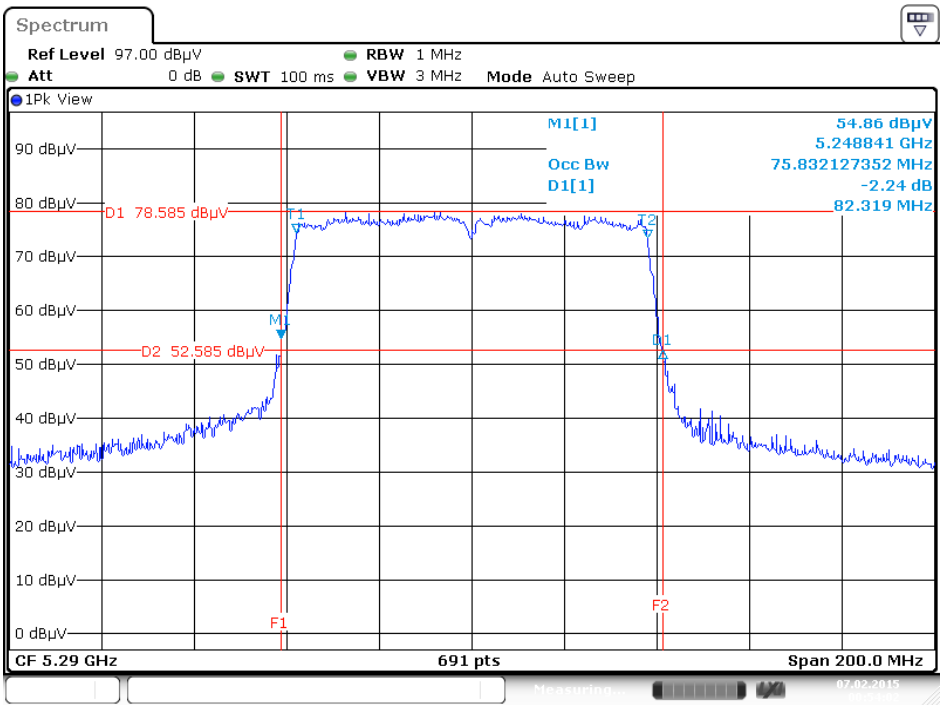
Date: 7.FEB.2015 00:50:12

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5710 MHz



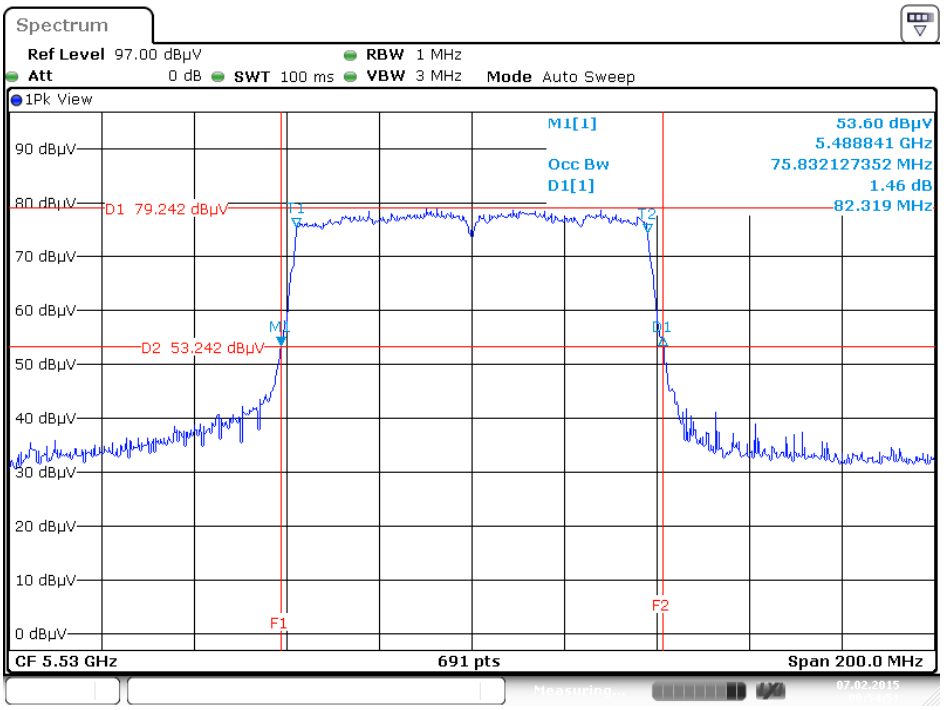
Date: 7.FEB.2015 00:50:55

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5290 MHz



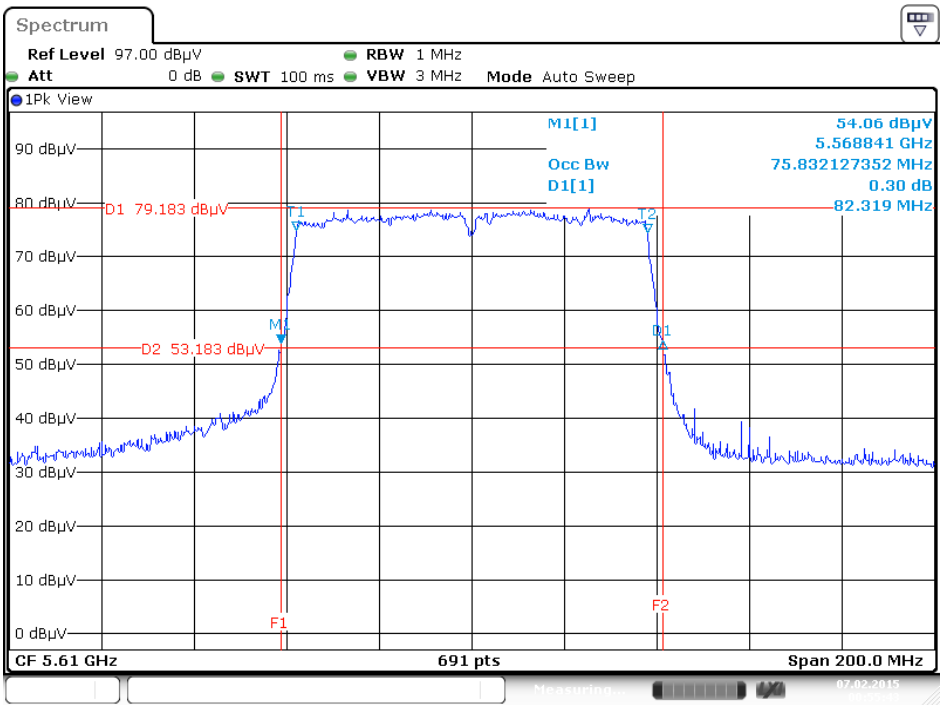
Date: 7.FEB.2015 00:54:02

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5530 MHz



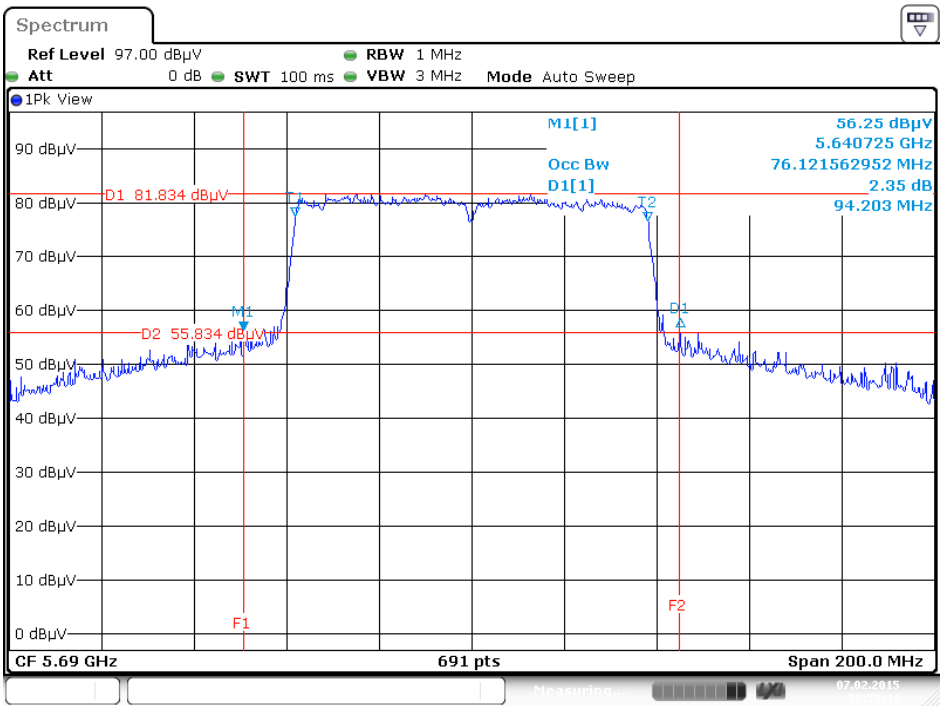
Date: 7.FEB.2015 00:54:51

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5610 MHz



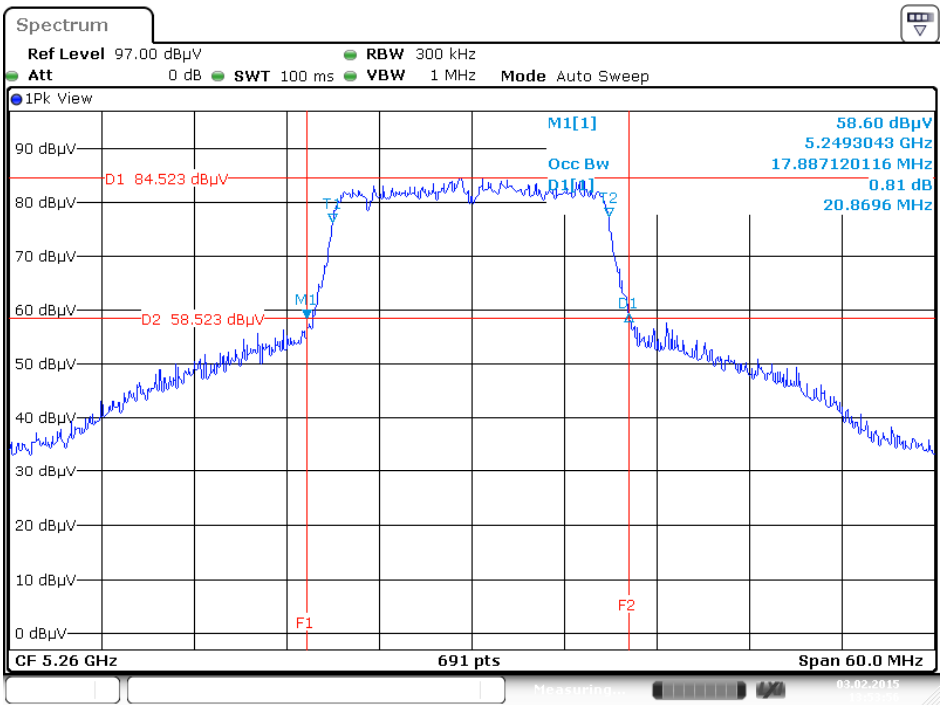
Date: 7.FEB.2015 00:55:42

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5690 MHz



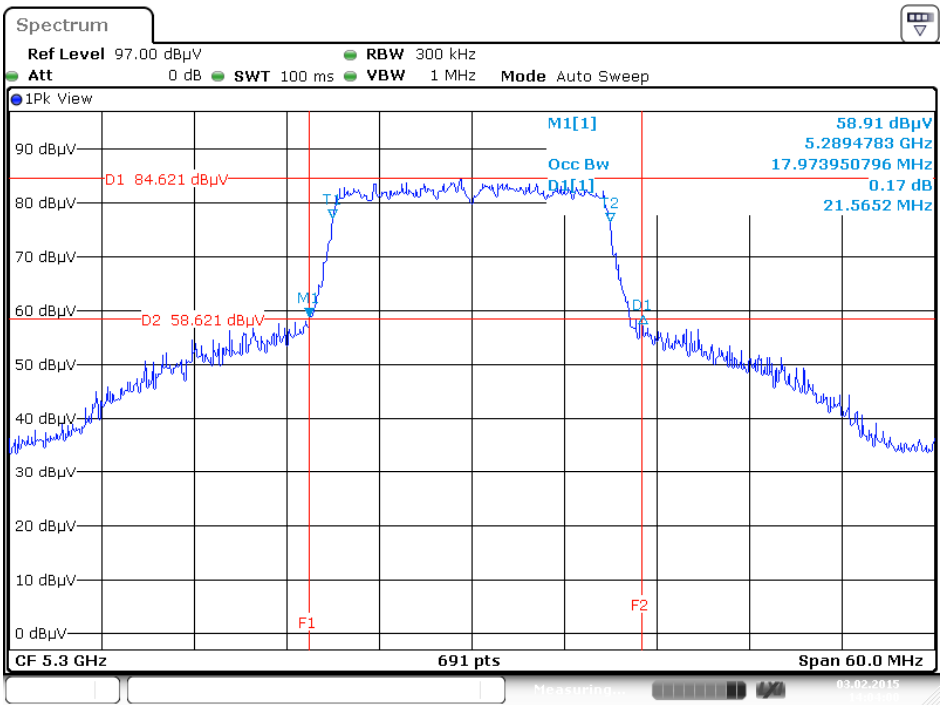
Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5260 MHz



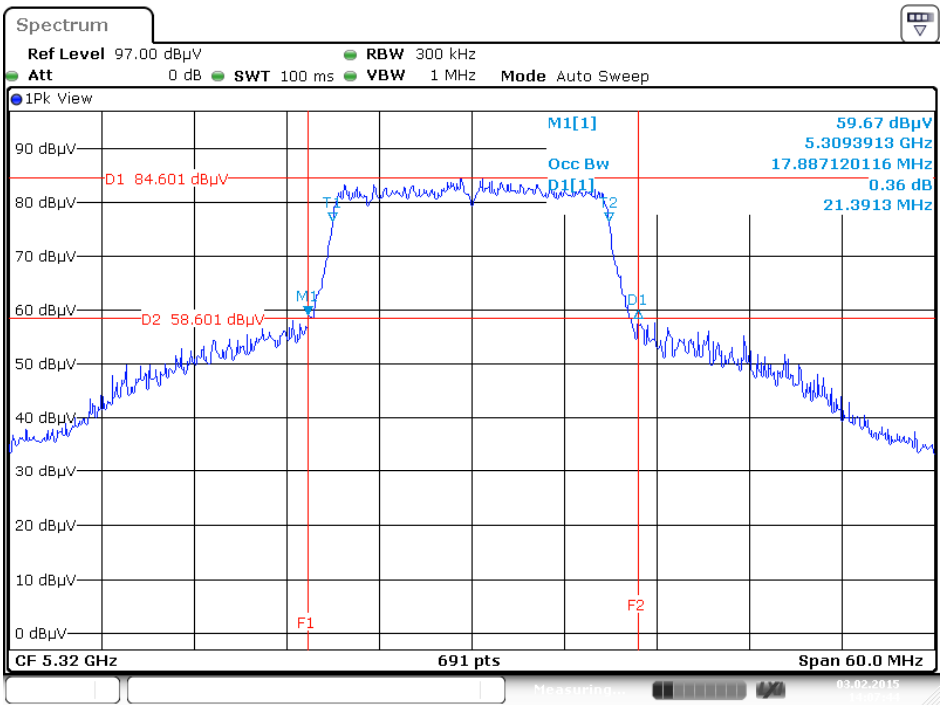
Date: 3.FEB.2015 13:53:57

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5300 MHz



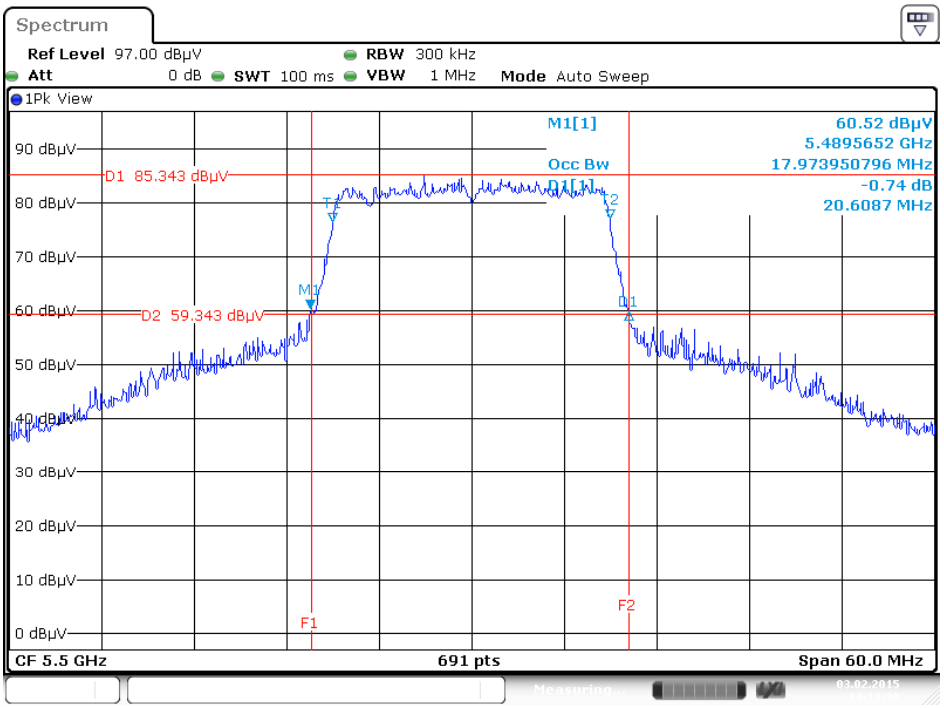
Date: 3.FEB.2015 14:04:00

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5320 MHz



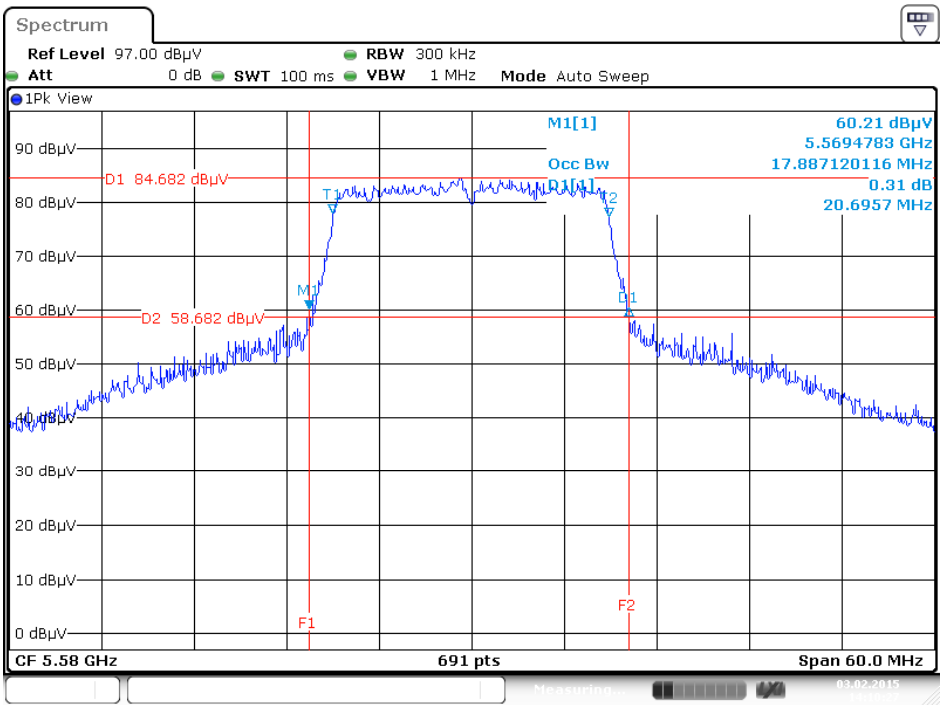
Date: 3.FEB.2015 14:07:44

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5500 MHz



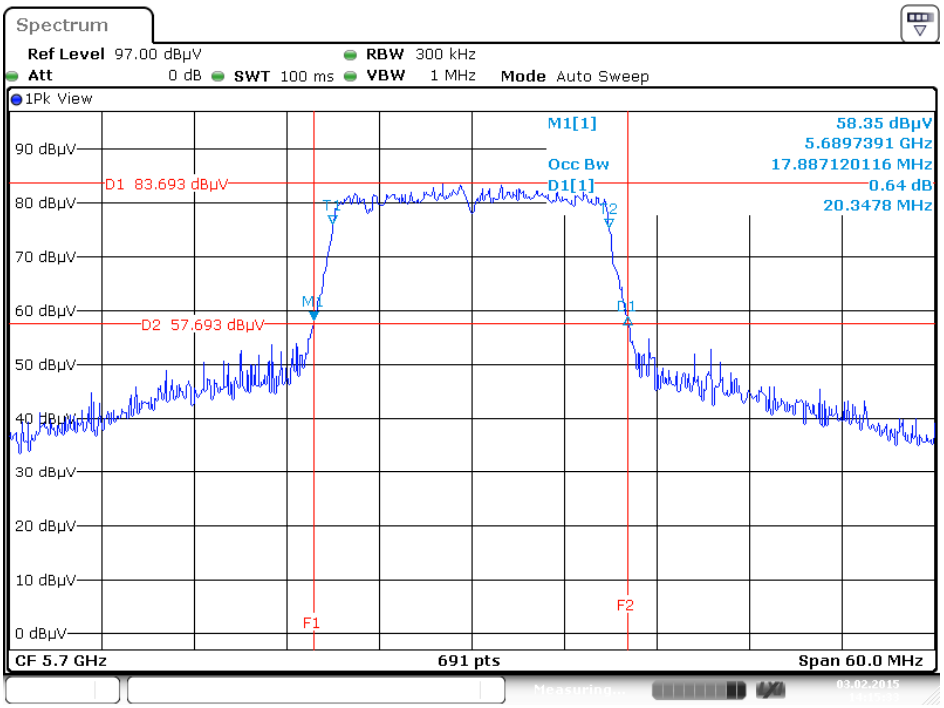
Date: 3.FEB.2015 14:13:39

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5580 MHz



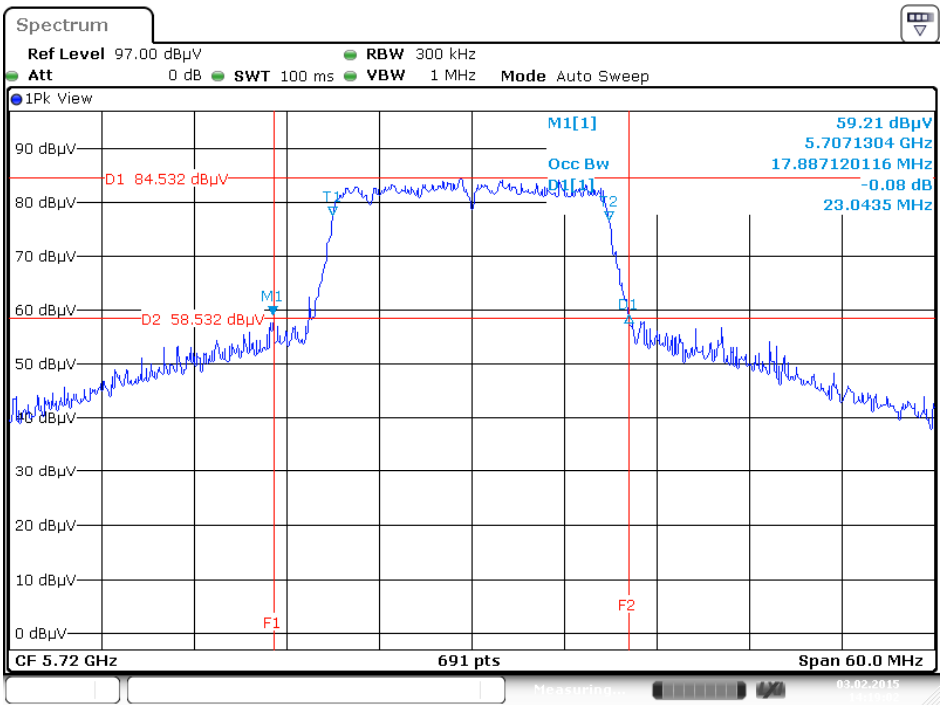
Date: 3.FEB.2015 14:10:27

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5700 MHz



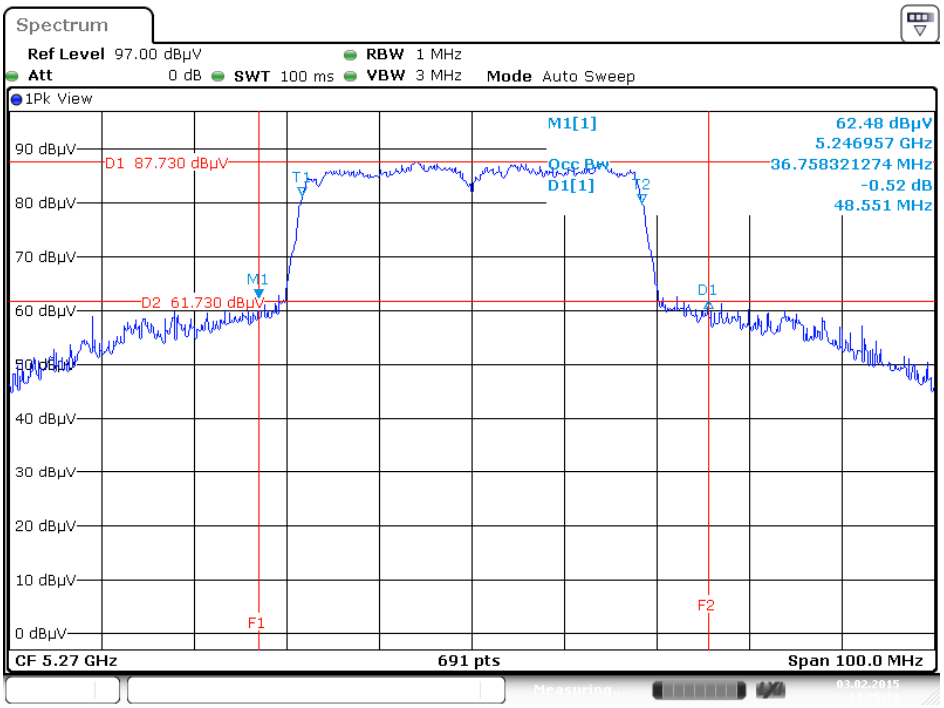
Date: 3.FEB.2015 14:15:33

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 / 5720 MHz



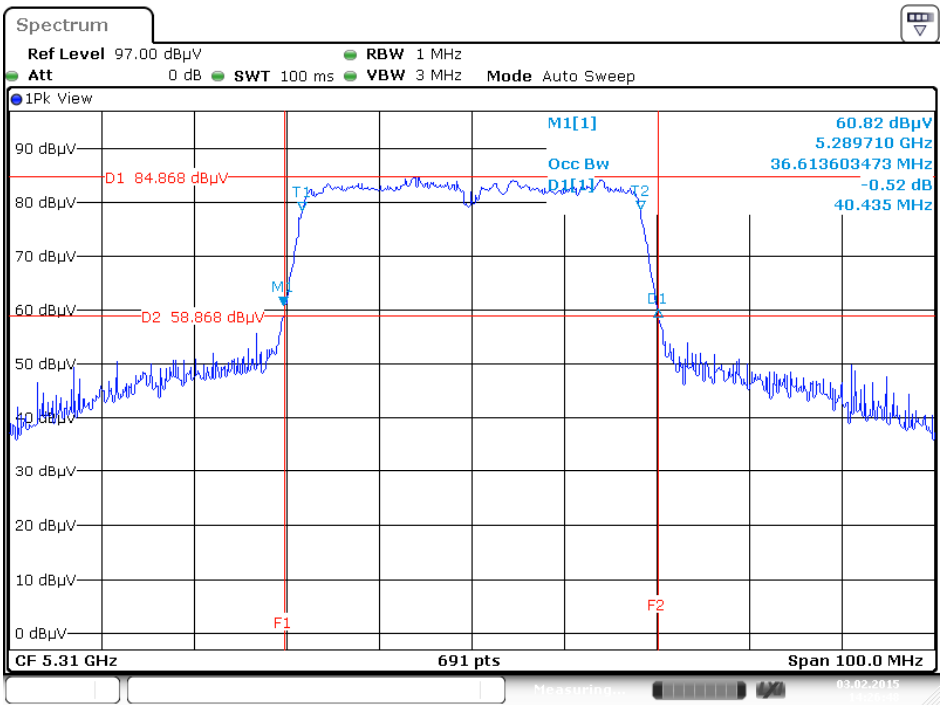
Date: 3.FEB.2015 14:19:02

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 / 5270 MHz



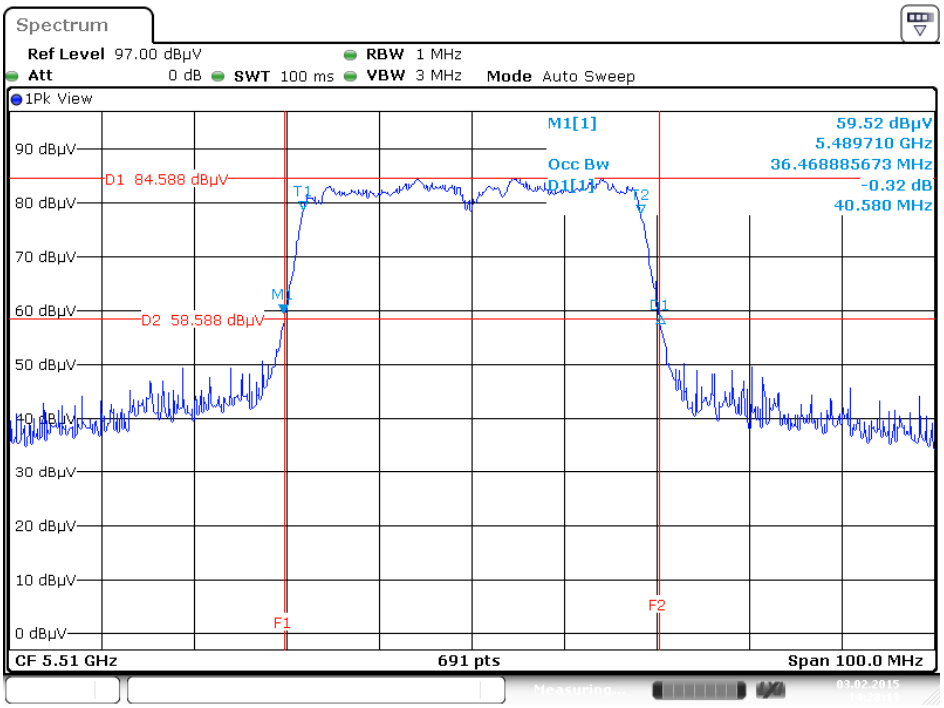
Date: 3.FEB.2015 14:25:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 / 5310 MHz



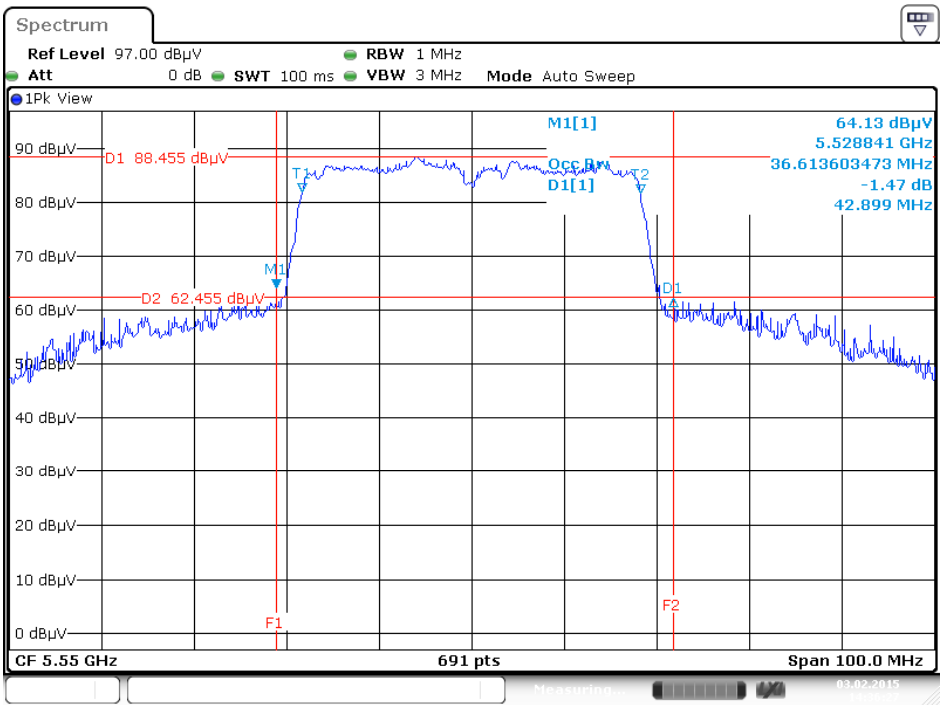
Date: 3.FEB.2015 14:26:48

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 / 5510 MHz



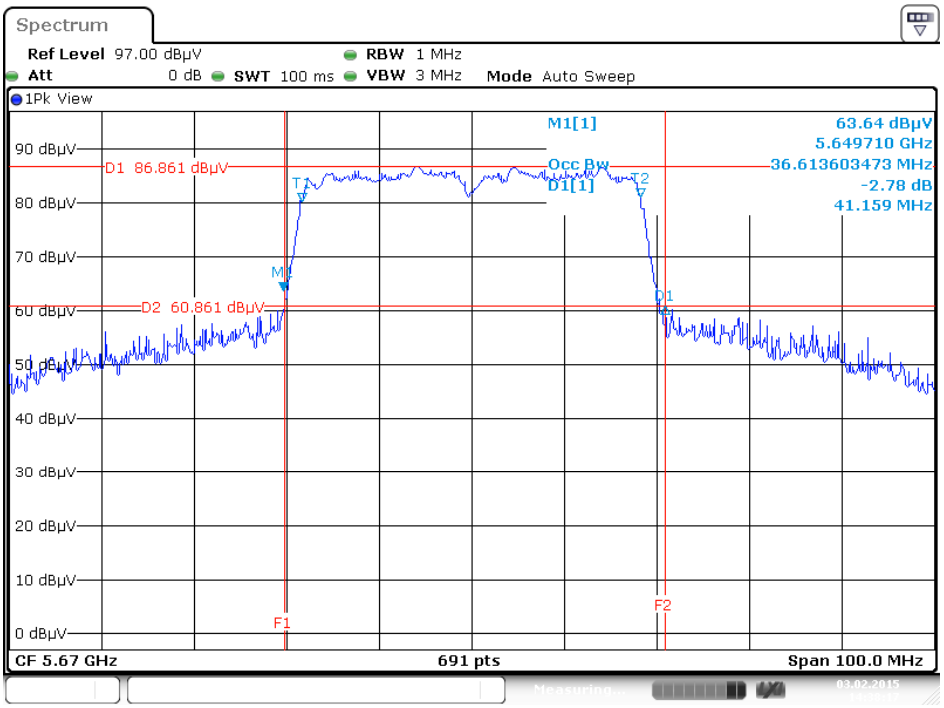
Date: 3.FEB.2015 14:28:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 / 5550 MHz



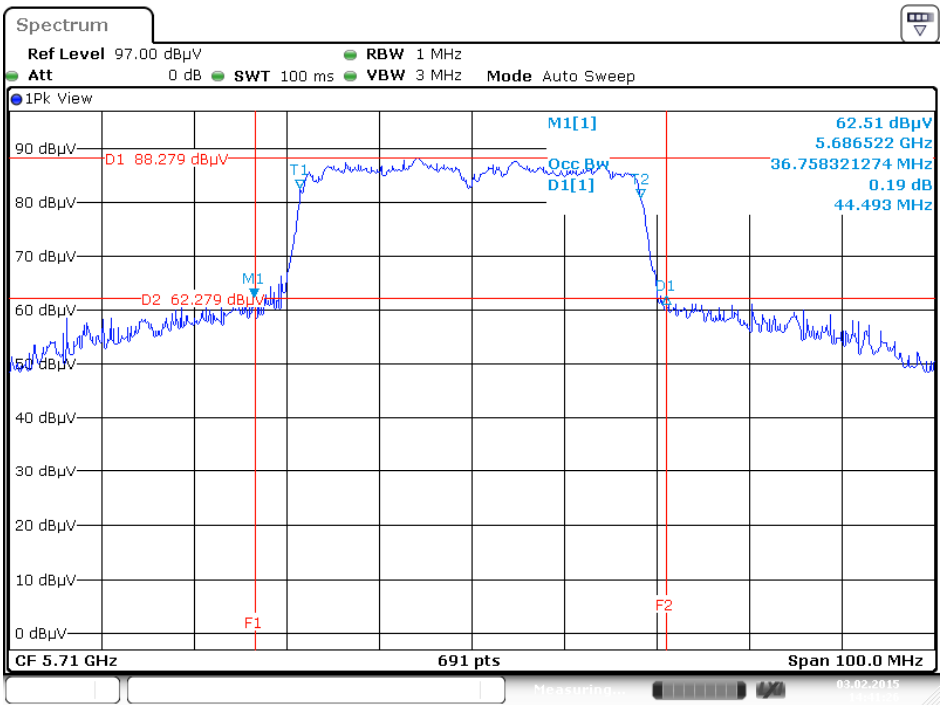
Date: 3.FEB.2015 14:36:27

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 / 5670 MHz



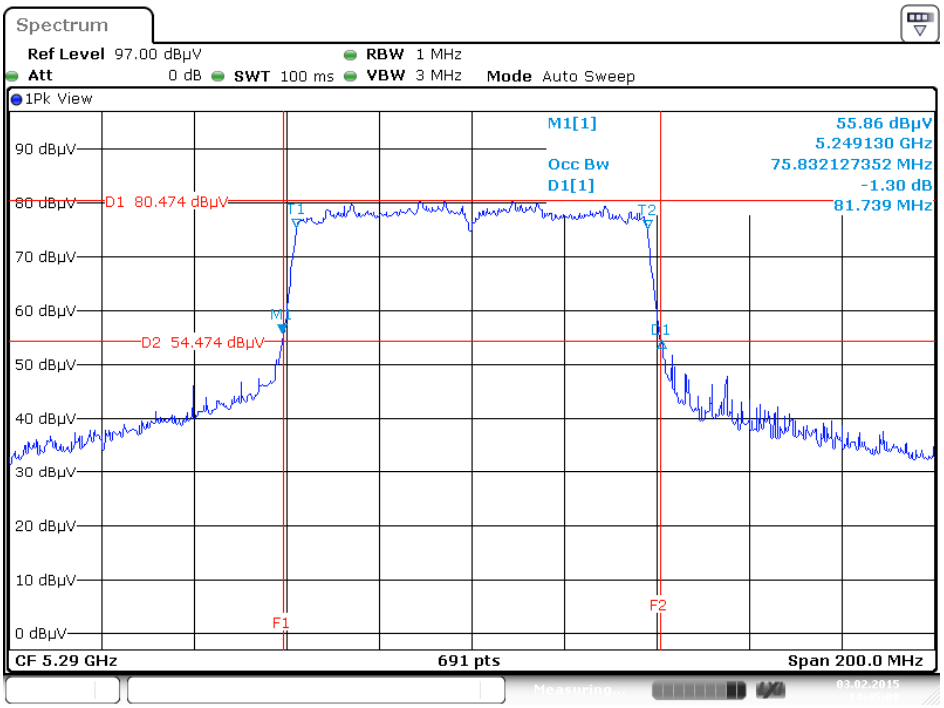
Date: 3.FEB.2015 14:38:17

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 / 5710 MHz



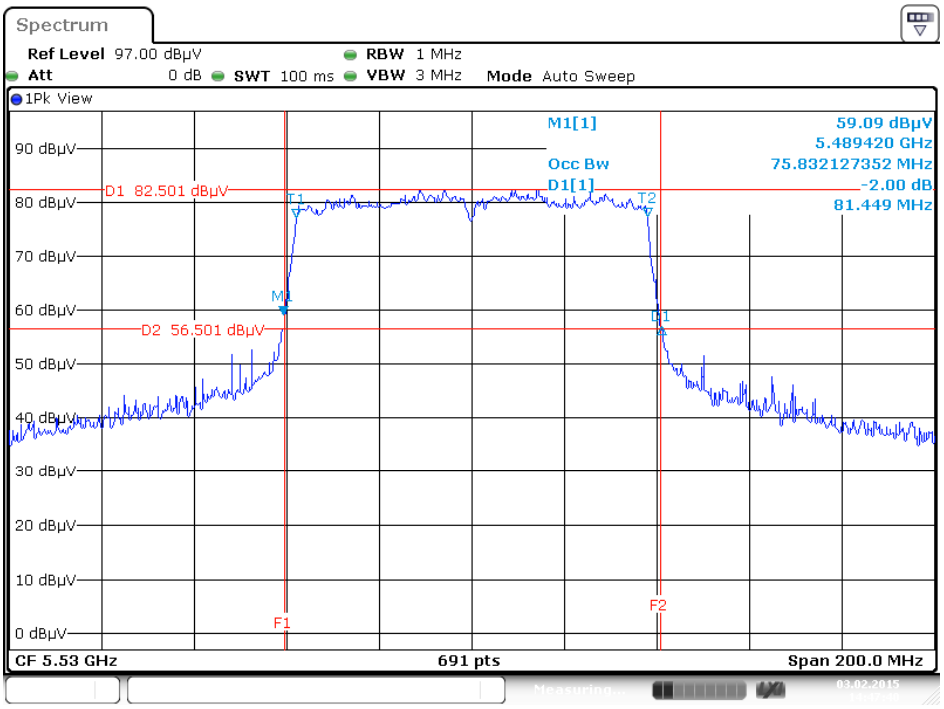
Date: 3.FEB.2015 14:41:26

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 / 5290 MHz



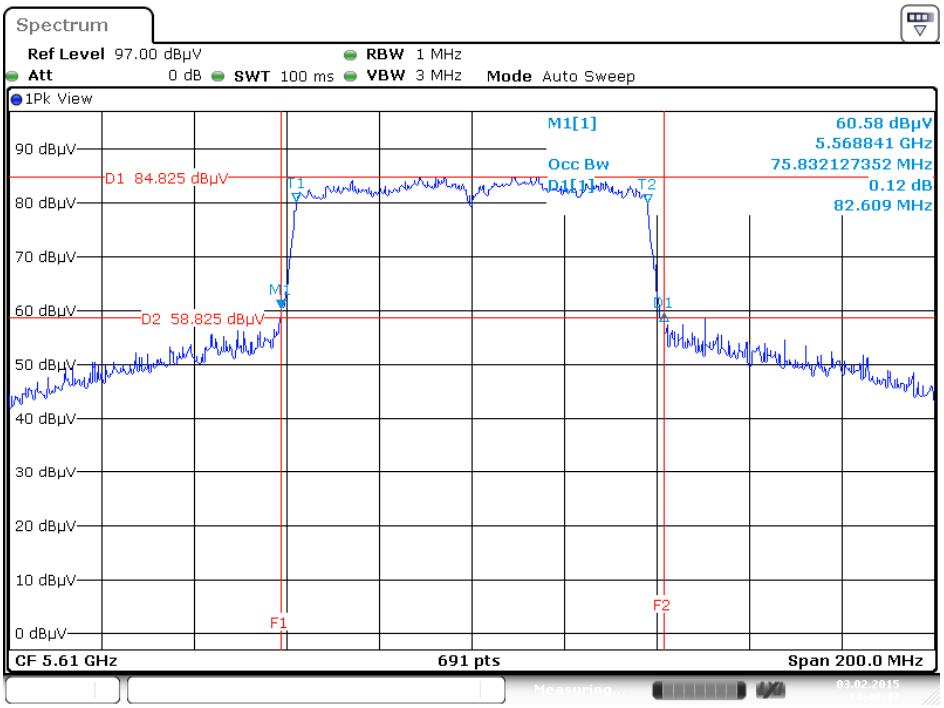
Date: 3.FEB.2015 14:45:08

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 / 5530 MHz



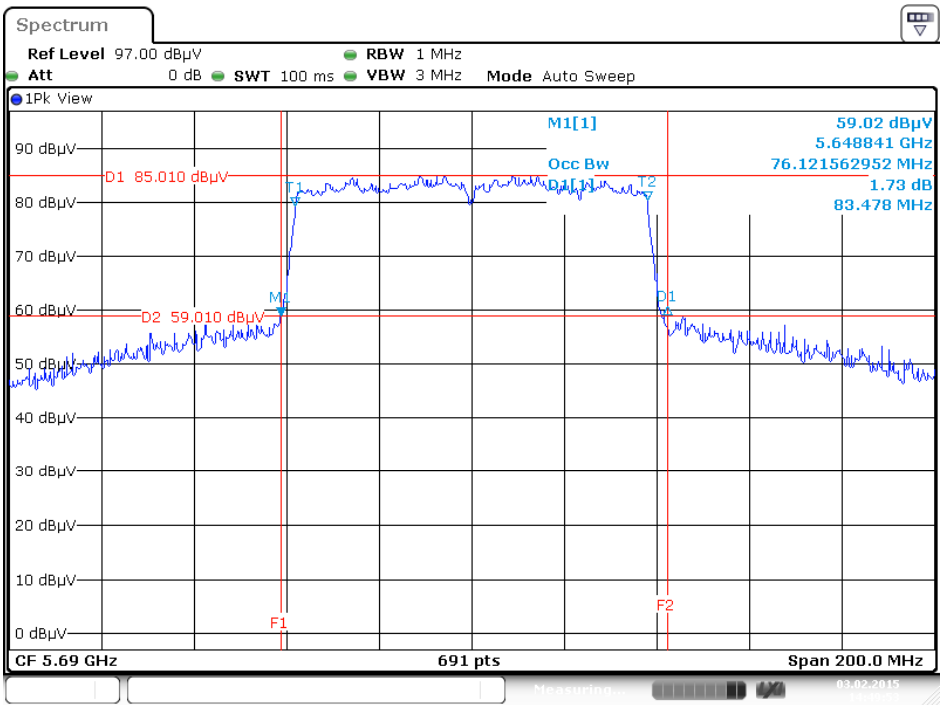
Date: 3.FEB.2015 14:47:41

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 / 5610 MHz



Date: 3.FEB.2015 14:48:43

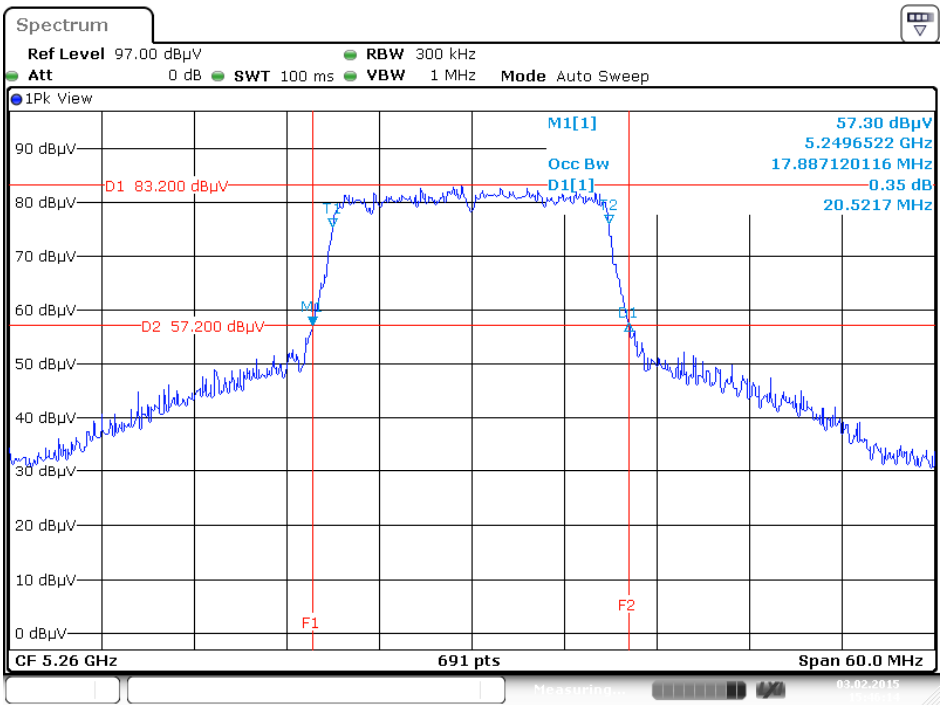
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 / 5690 MHz



Date: 3.FEB.2015 14:49:53

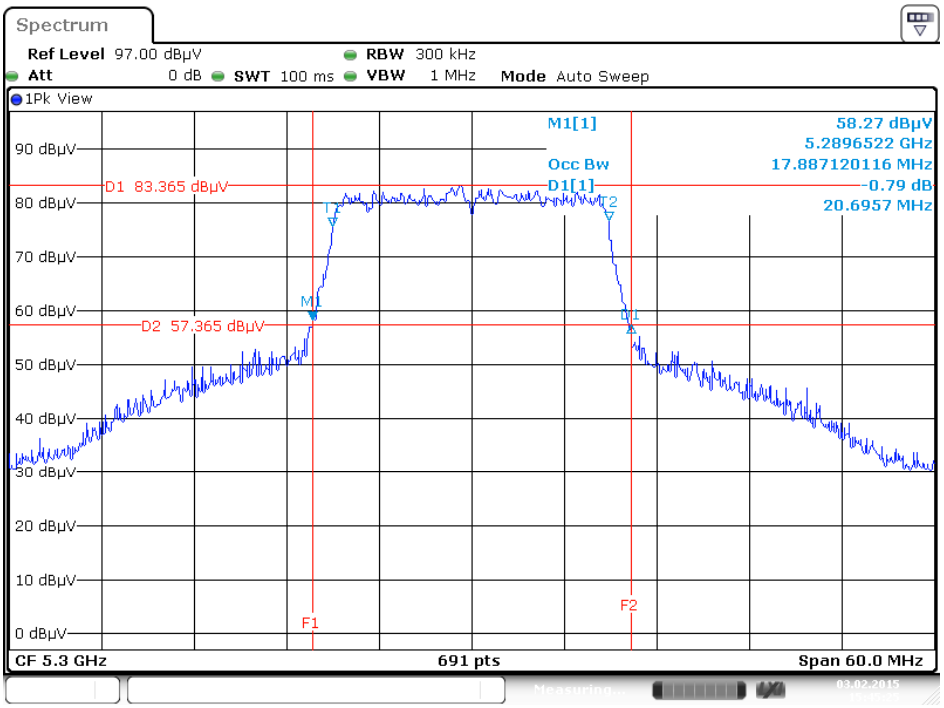
Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



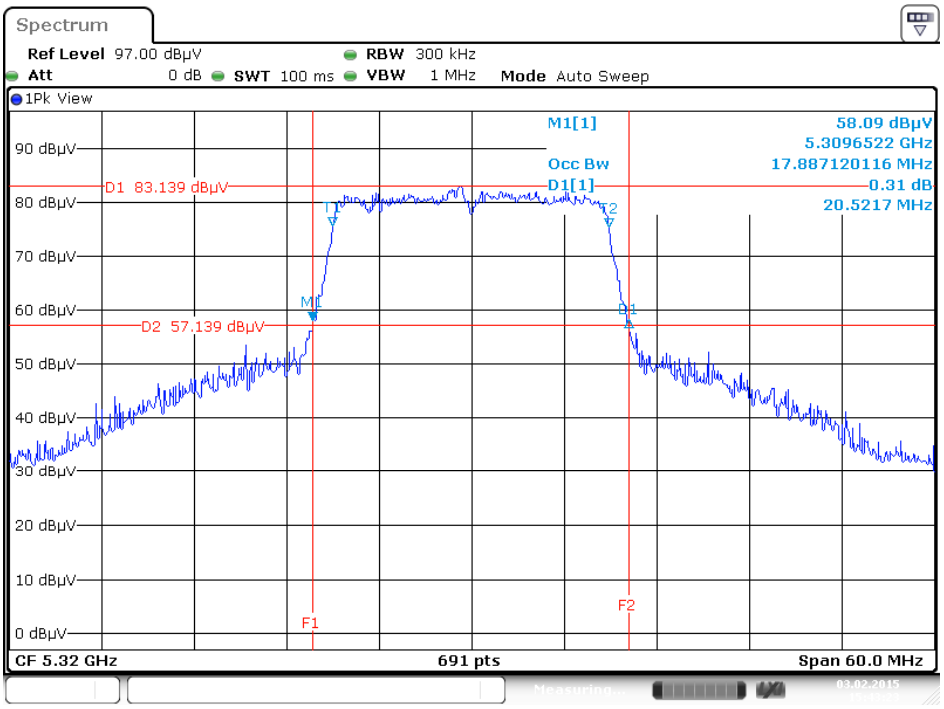
Date: 3.FEB.2015 15:46:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5300 MHz



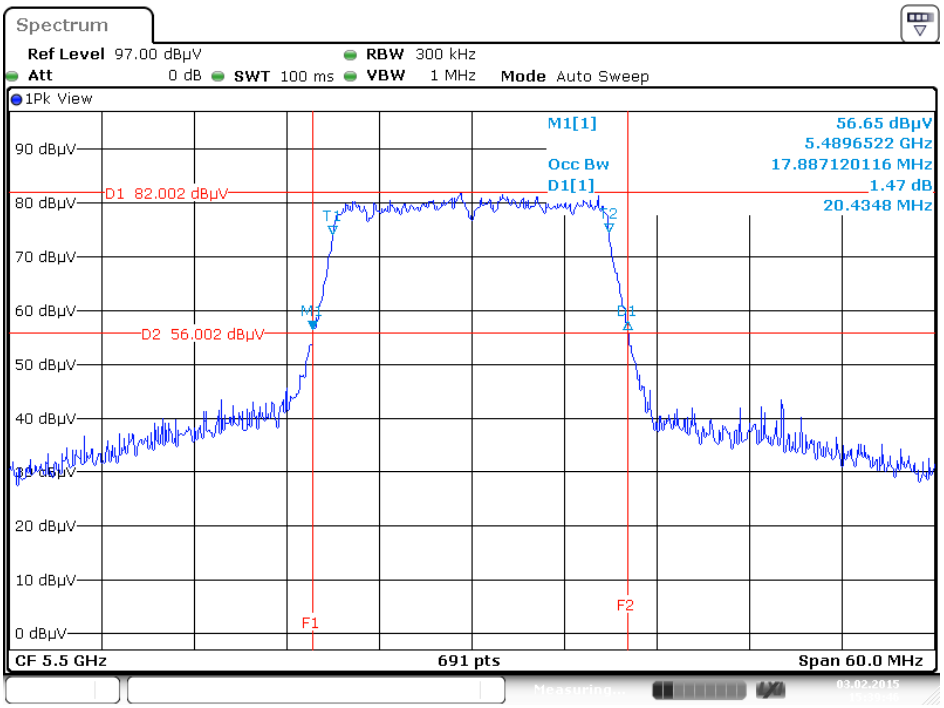
Date: 3.FEB.2015 15:45:25

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5320 MHz



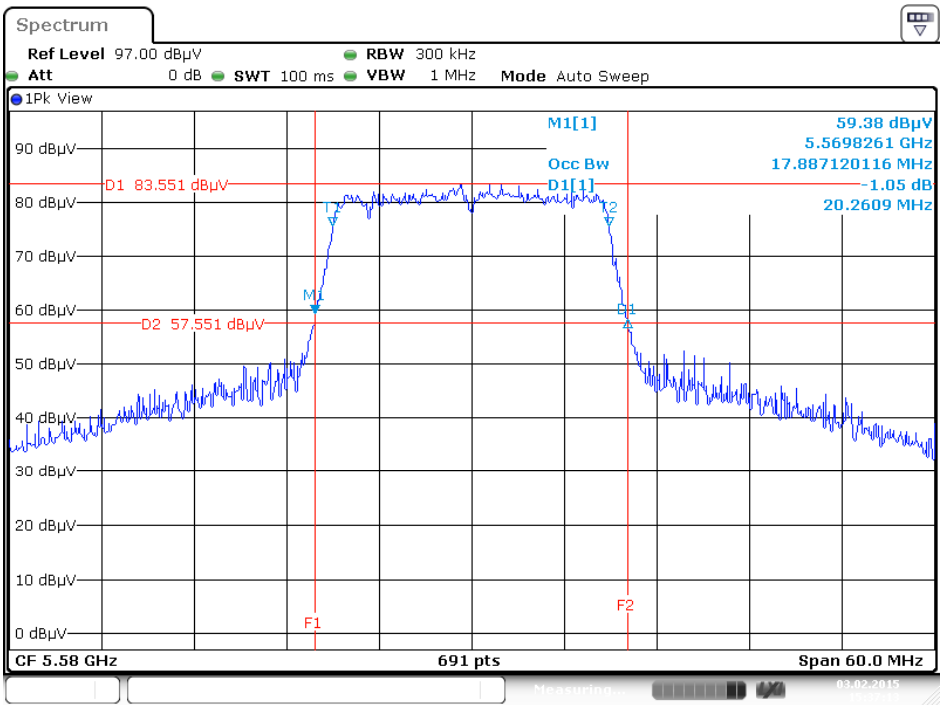
Date: 3.FEB.2015 15:43:24

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5500 MHz



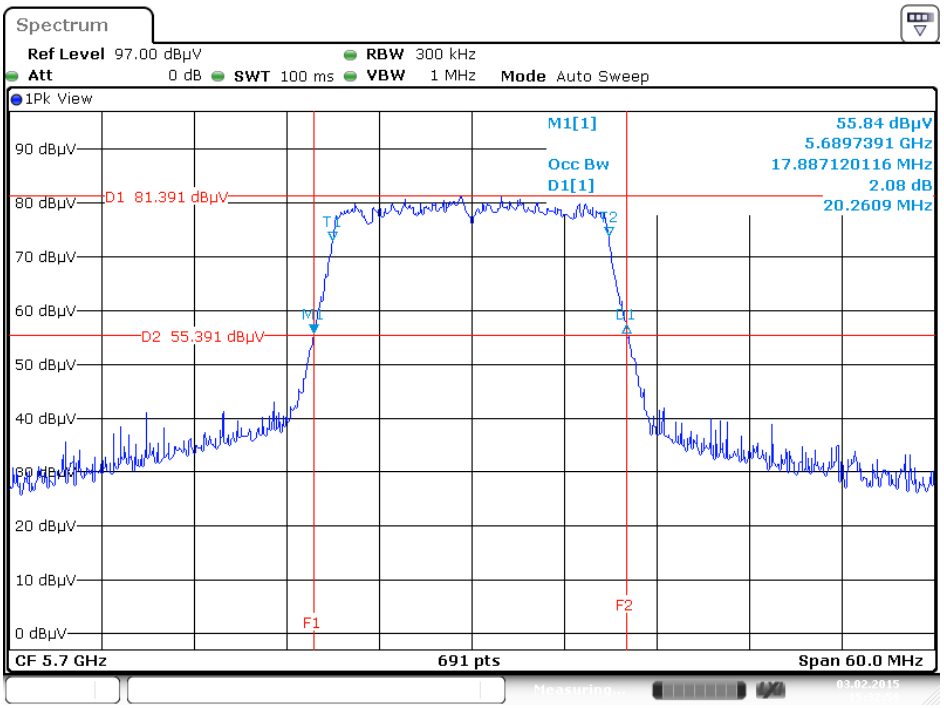
Date: 3.FEB.2015 15:39:46

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5580 MHz



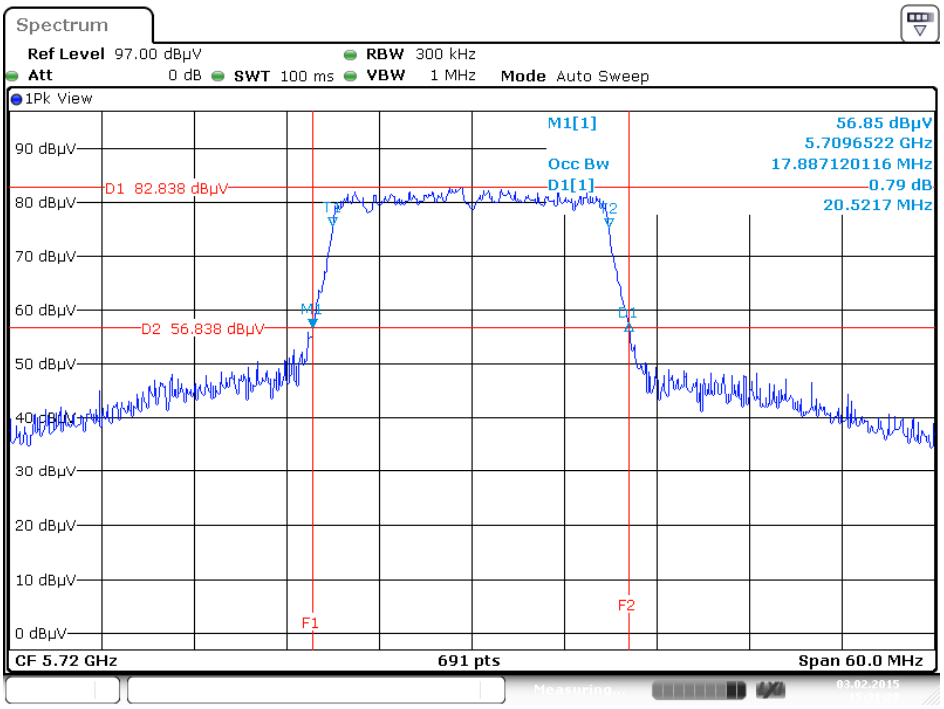
Date: 3.FEB.2015 15:37:14

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5700 MHz



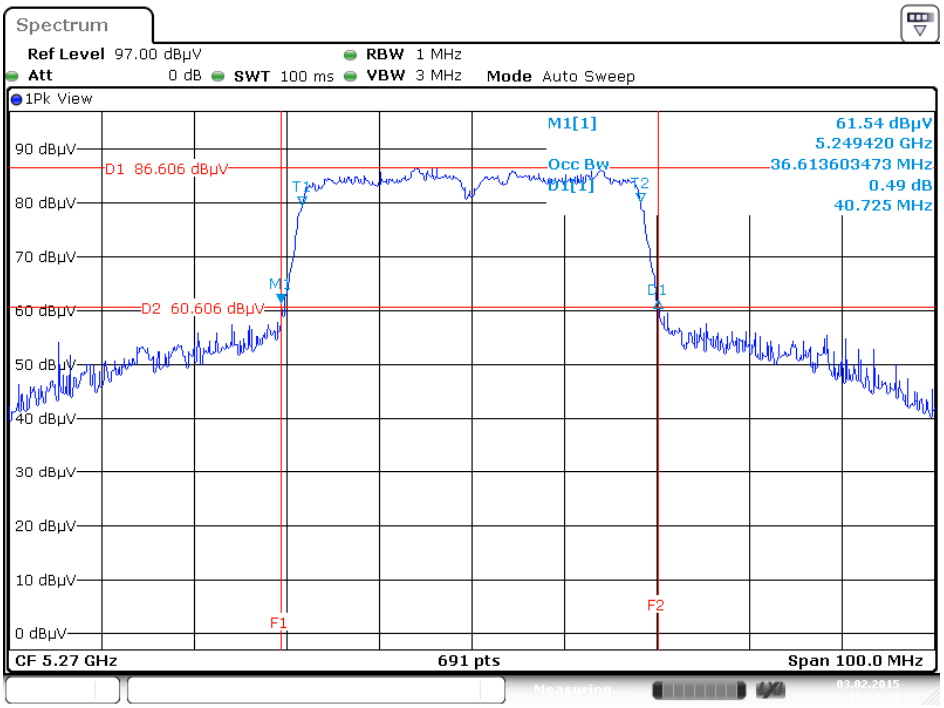
Date: 3.FEB.2015 15:32:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5720 MHz



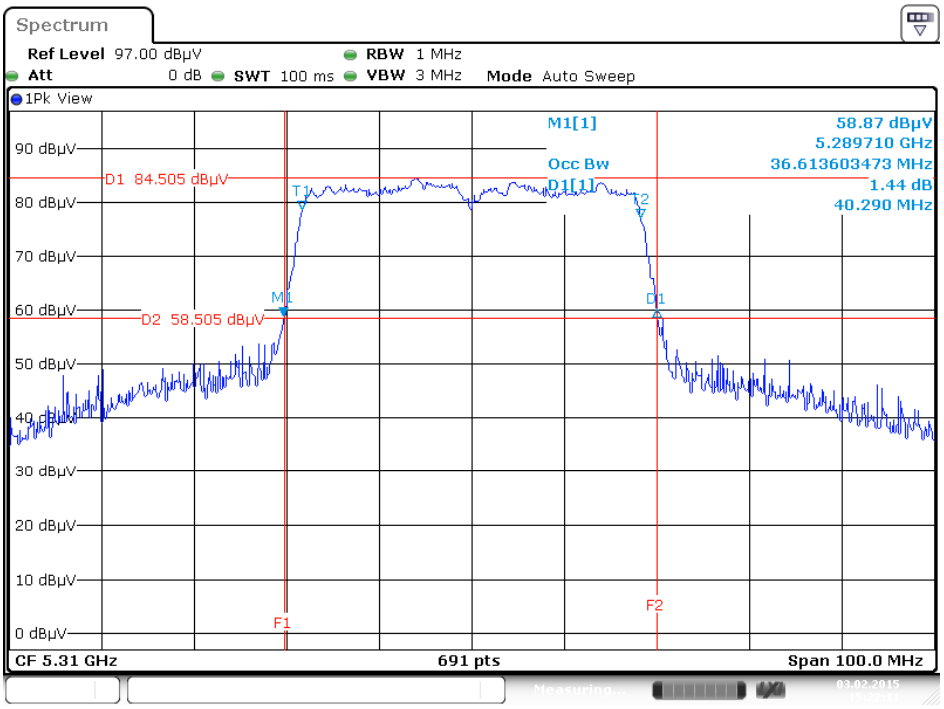
Date: 3.FEB.2015 15:31:28

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5270 MHz



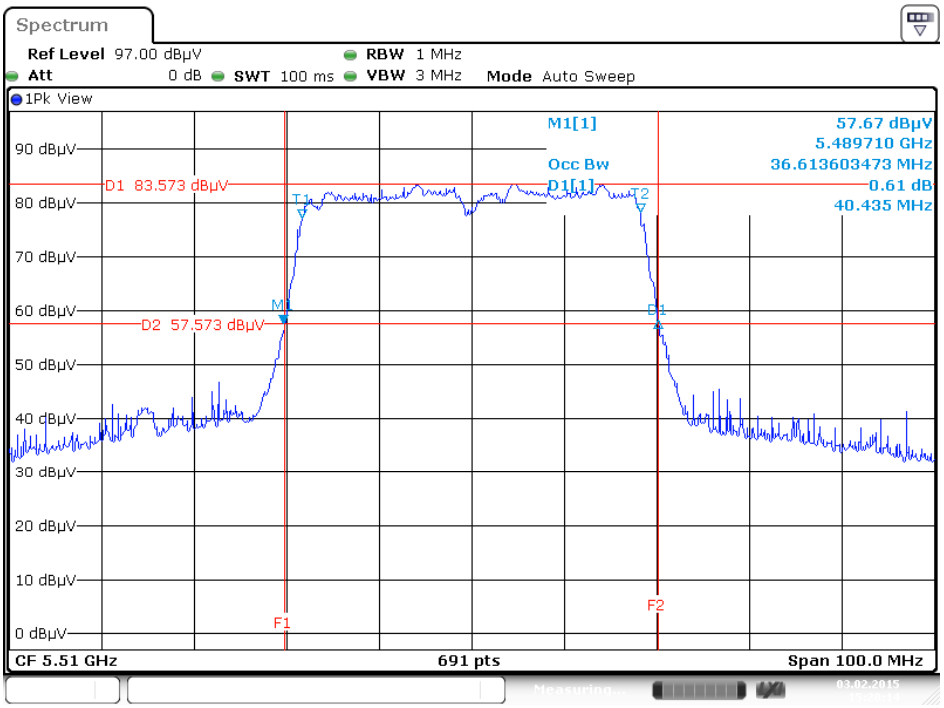
Date: 3.FEB.2015 15:23:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5310 MHz



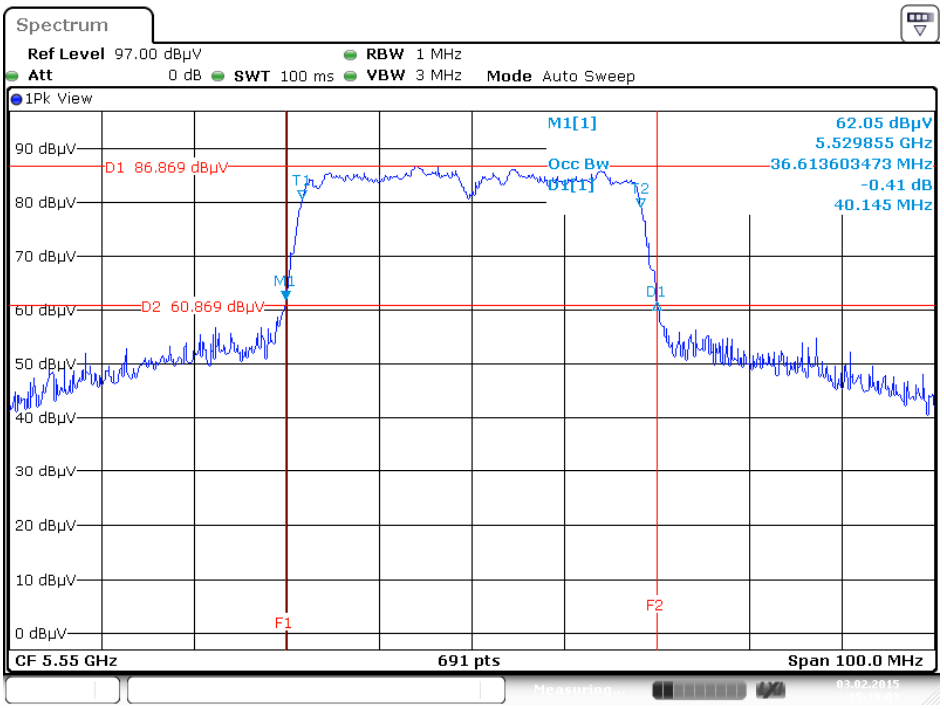
Date: 3.FEB.2015 15:22:11

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5510 MHz



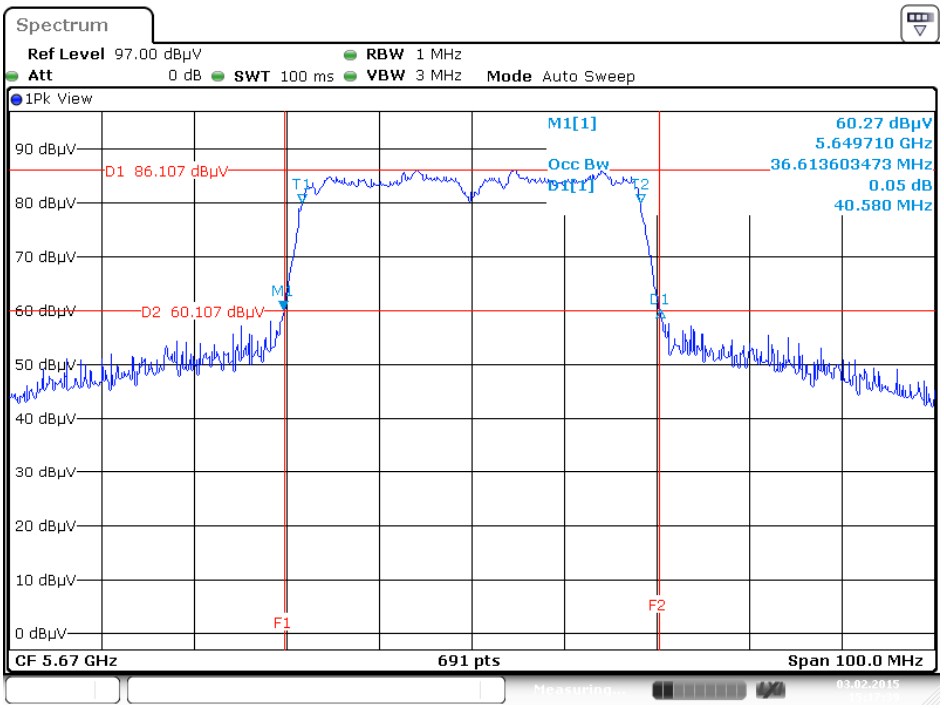
Date: 3.FEB.2015 15:20:14

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5550 MHz



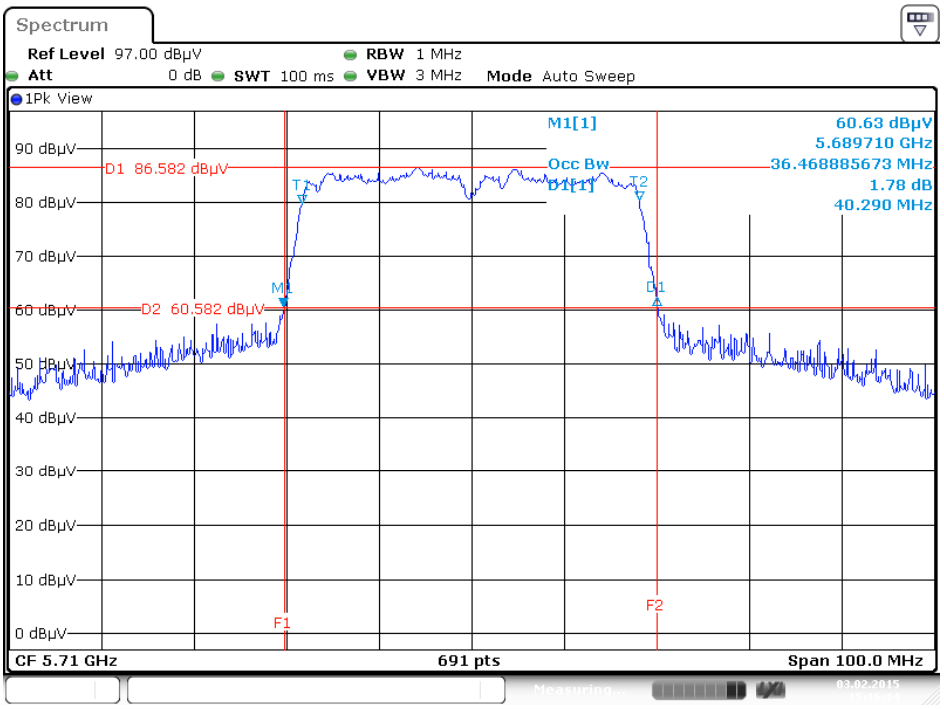
Date: 3.FEB.2015 15:19:03

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5670 MHz



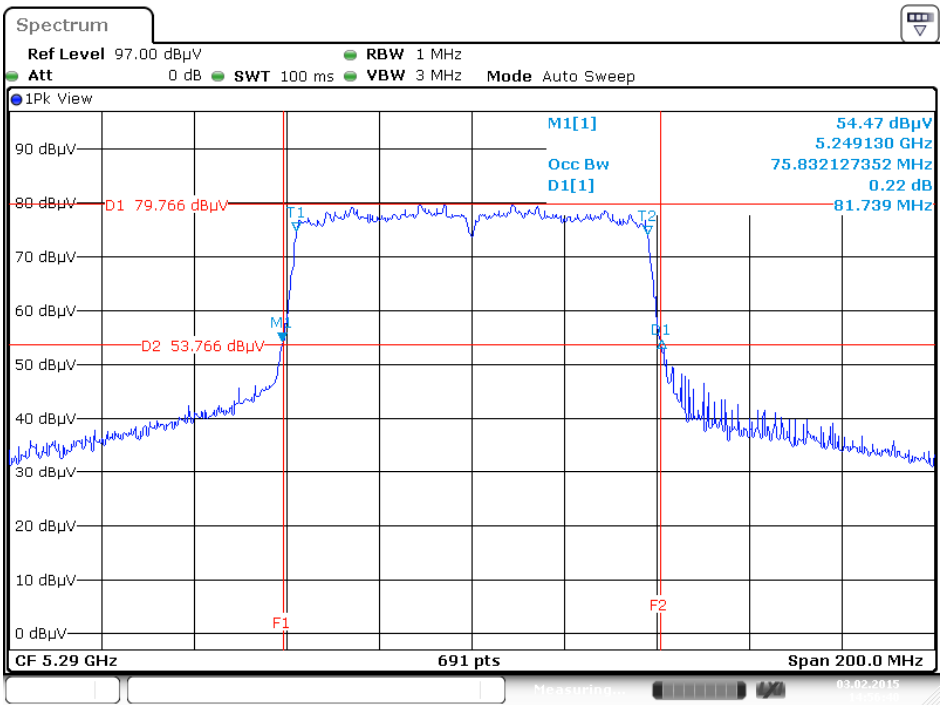
Date: 3.FEB.2015 15:17:39

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5710 MHz



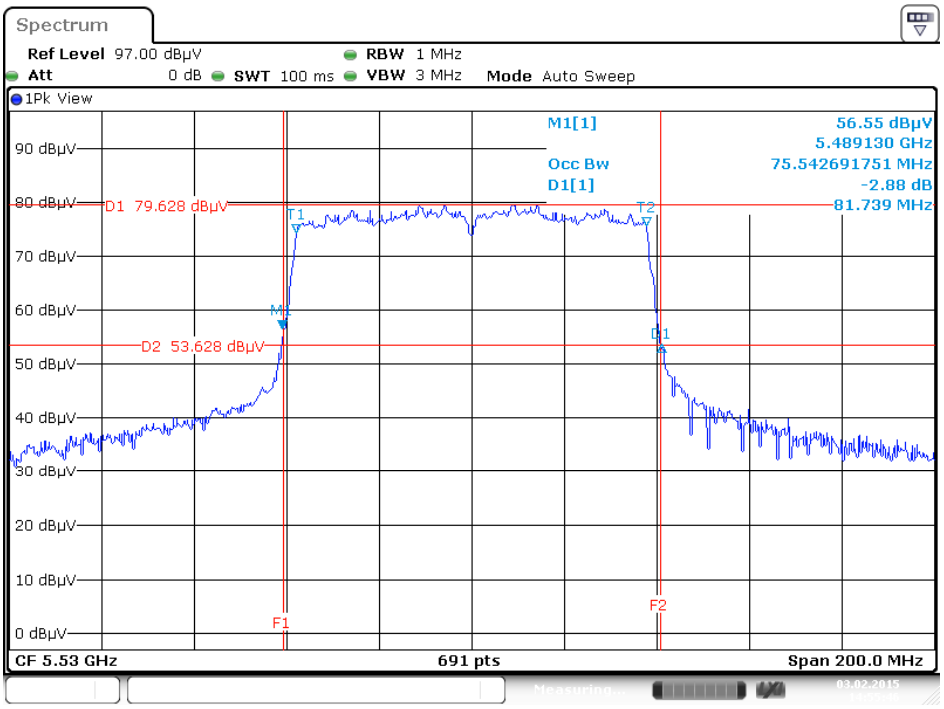
Date: 3.FEB.2015 15:16:14

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5290 MHz



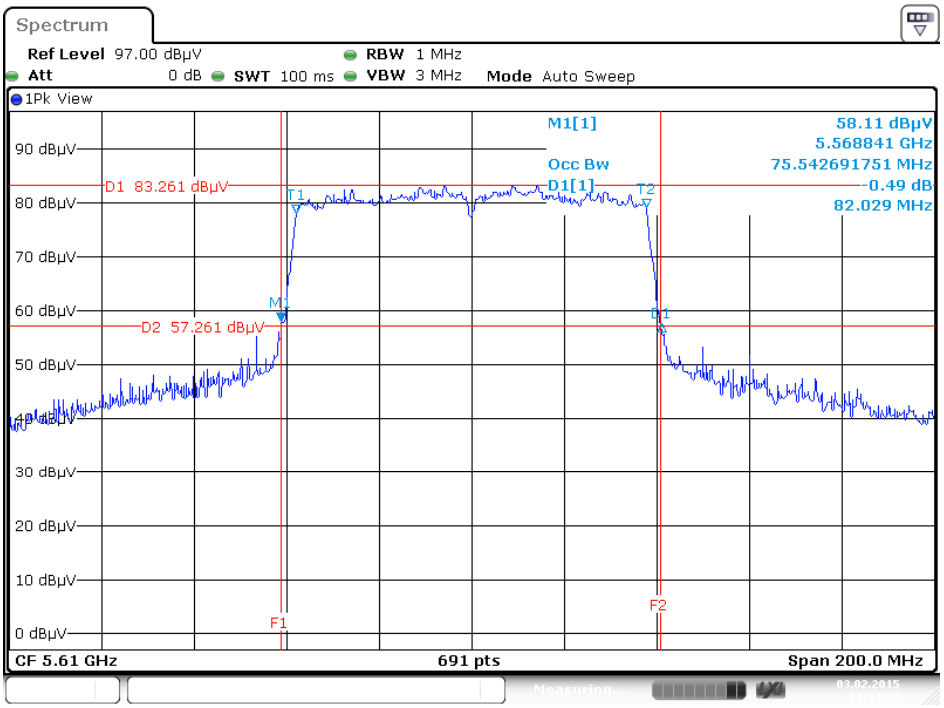
Date: 3.FEB.2015 14:56:40

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5530 MHz



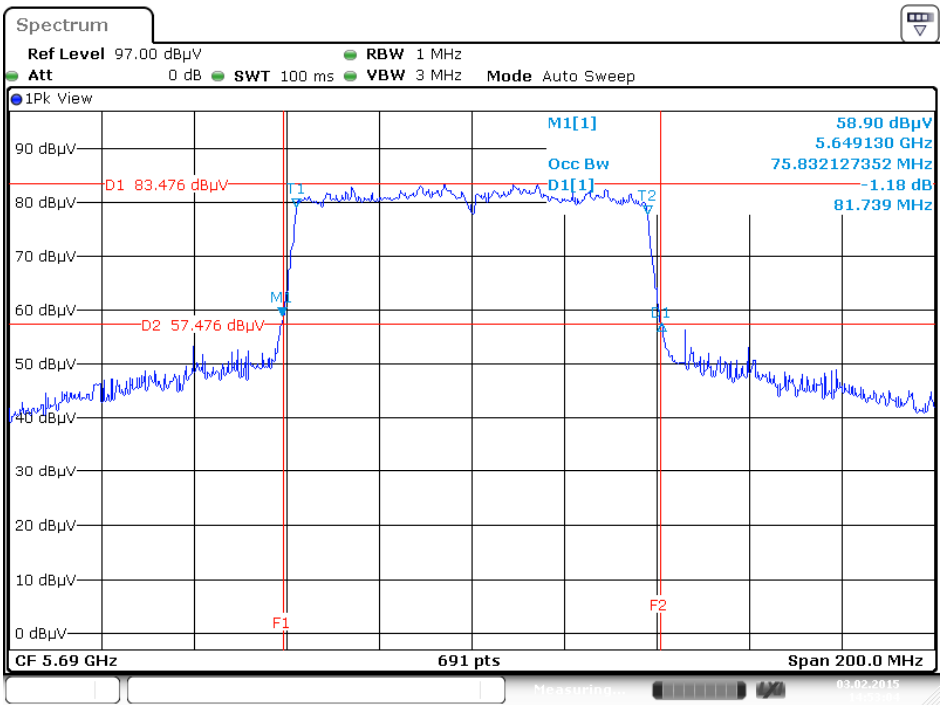
Date: 3.FEB.2015 14:55:46

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5610 MHz



Date: 3.FEB.2015 14:54:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5690 MHz



4.3. 6dB Spectrum Bandwidth Measurement

4.3.1. Limit

For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz.

4.3.2. Measuring Instruments and Setting

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

6dB Spectrum Bandwidth	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span Frequency	> 6dB Bandwidth
RBW	approximately 1% of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.3.3. Test Procedures

For Radiated 6dB Bandwidth Measurement:

1. The transmitter was radiated to the spectrum analyzer in peak hold mode.
2. Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (C) Emission Bandwidth.
3. Multiple antenna system was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
4. Measured the spectrum width with power higher than 6dB below carrier.

4.3.4. Test Setup Layout

For Radiated 6dB Bandwidth Measurement:

This test setup layout is the same as that shown in section 4.6.4.

4.3.5. Test Deviation

There is no deviation with the original standard.

4.3.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.3.7. Test Result of 6dB Spectrum Bandwidth

<For Non-Beamforming Mode>

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)		

For Chain 5

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.62	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	36.29	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.65	500	Complies

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)		

For Chain 4

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.56	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	36.40	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.36	500	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)		

For Chain 4

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.56	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	36.29	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.36	500	Complies

<For STBC Mode>

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.62	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	35.71	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.07	500	Complies

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.62	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	36.40	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.36	500	Complies

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.21	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	35.47	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.07	500	Complies

Temperature	26℃	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss1 VHT20	5720 MHz	17.56	500	Complies
802.11ac MCS0/Nss1 VHT40	5710 MHz	36.52	500	Complies
802.11ac MCS0/Nss1 VHT80	5690 MHz	75.36	500	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss2 VHT20	5720 MHz	17.56	500	Complies
802.11ac MCS0/Nss2 VHT40	5710 MHz	35.71	500	Complies
802.11ac MCS0/Nss2 VHT80	5690 MHz	75.07	500	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

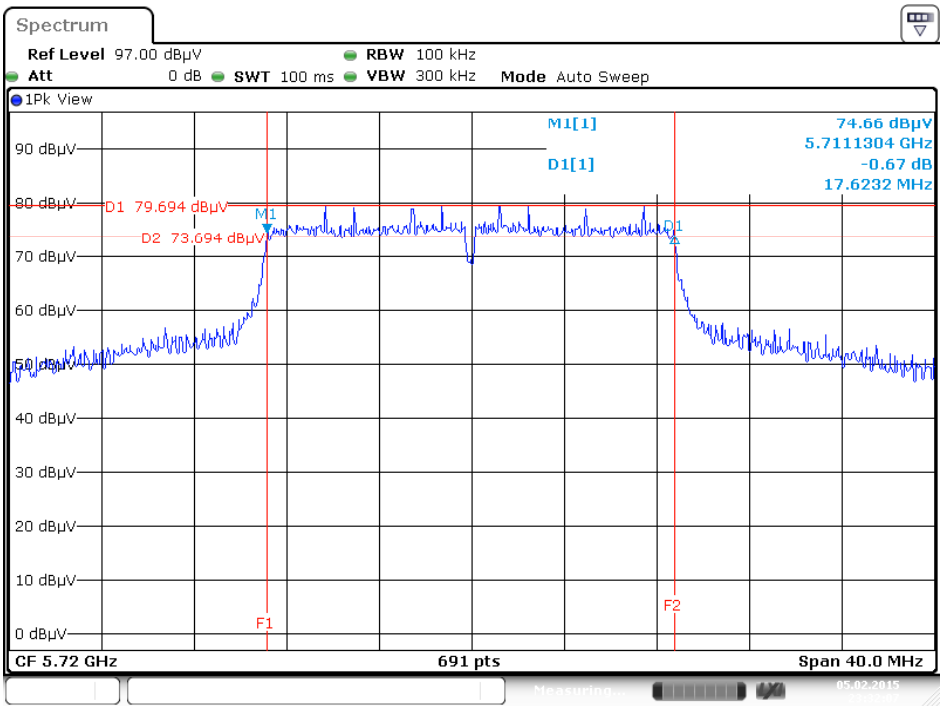
For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Test Result
802.11ac MCS0/Nss2 VHT20	5720 MHz	17.56	500	Complies
802.11ac MCS0/Nss2 VHT40	5710 MHz	36.40	500	Complies
802.11ac MCS0/Nss2 VHT80	5690 MHz	75.94	500	Complies

<For Non-Beamforming Mode>

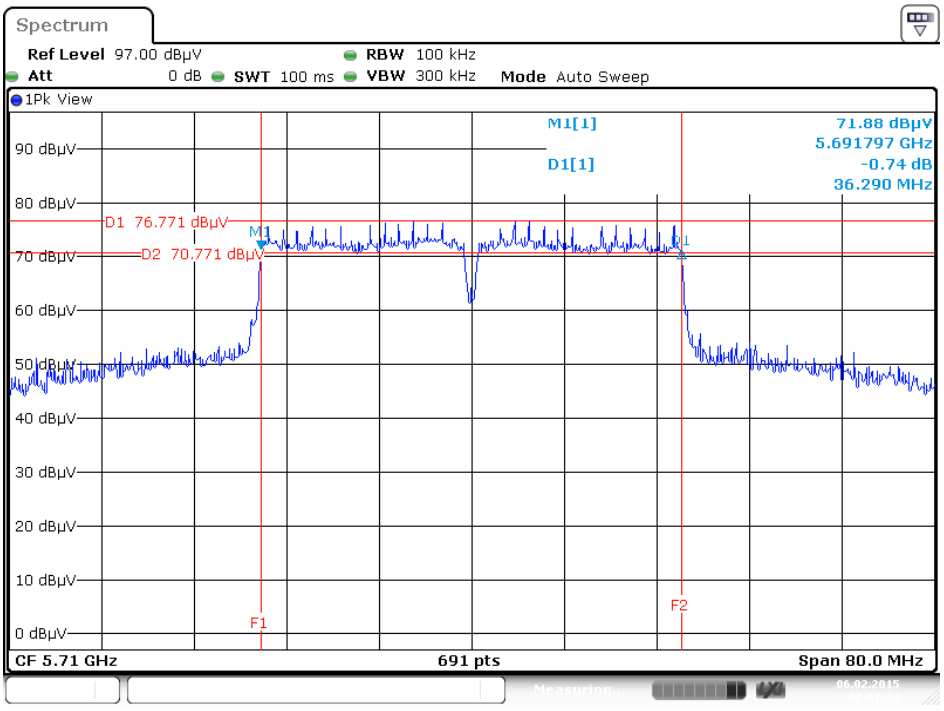
Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 5



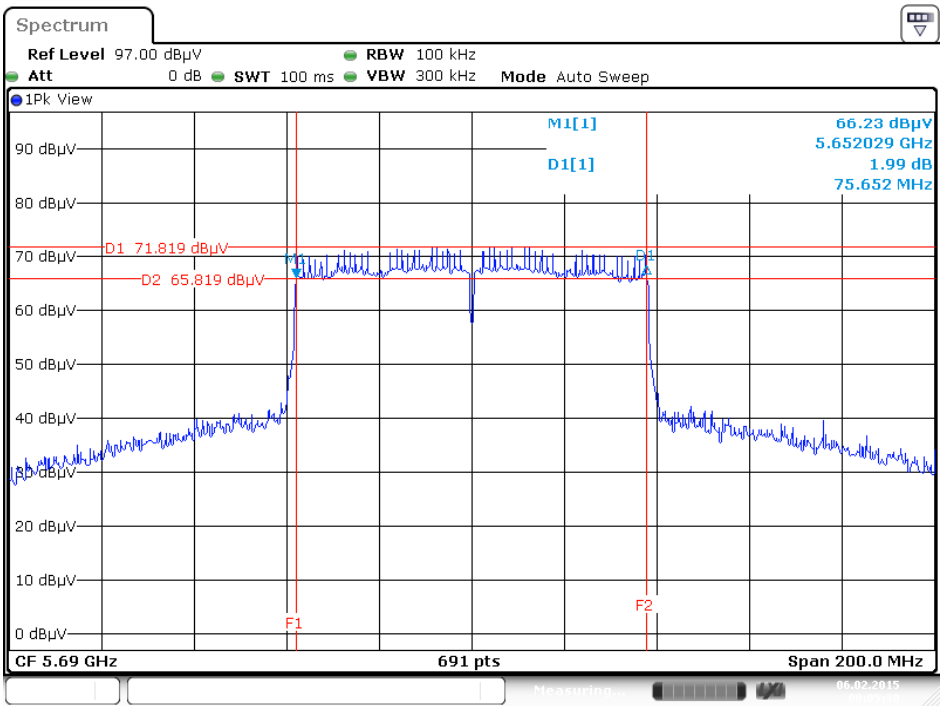
Date: 5.FEB.2015 23:32:07

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 5



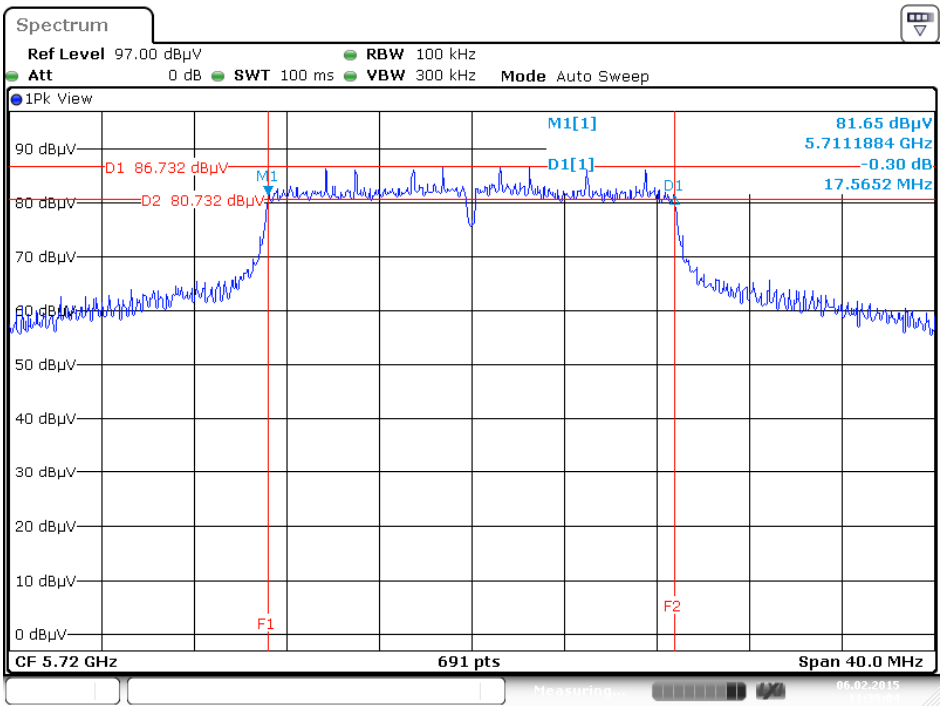
Date: 6.FEB.2015 00:01:25

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 5



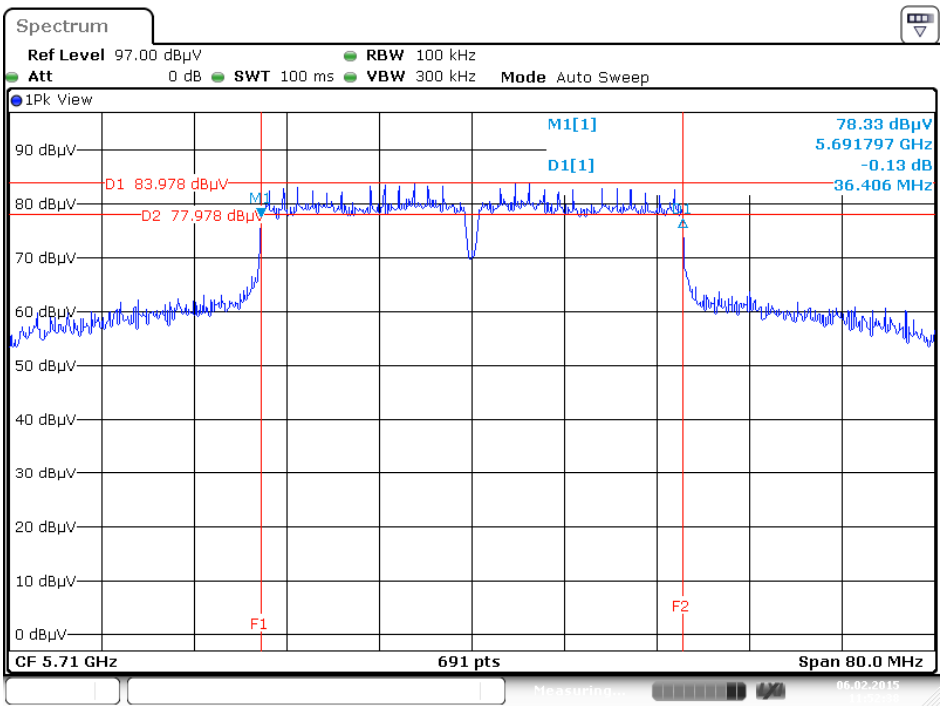
Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 4



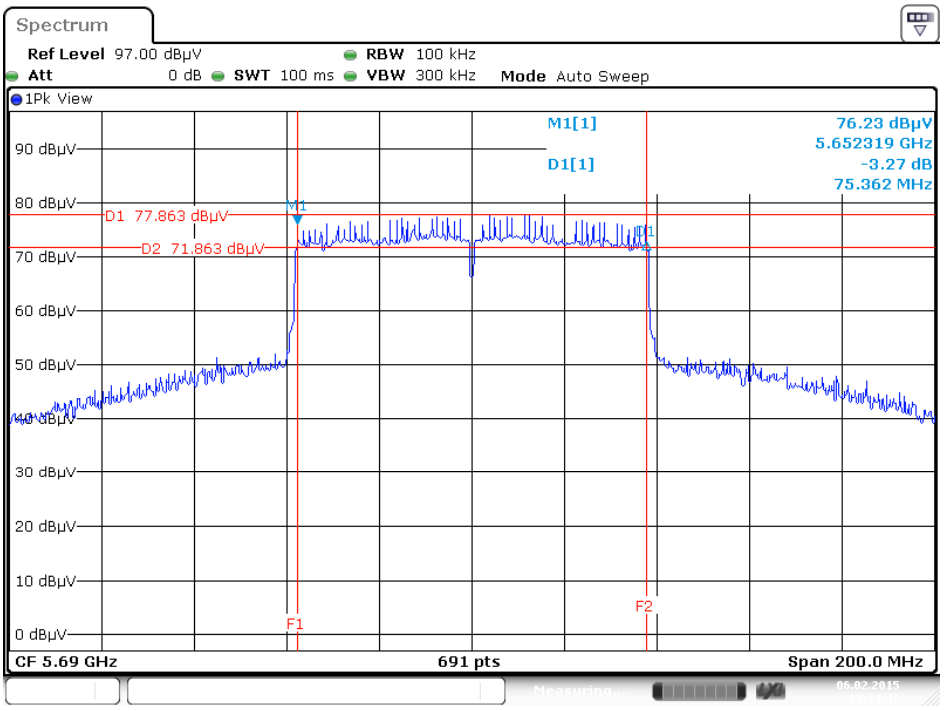
Date: 6.FEB.2015 11:39:05

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 4



Date: 6.FEB.2015 11:52:38

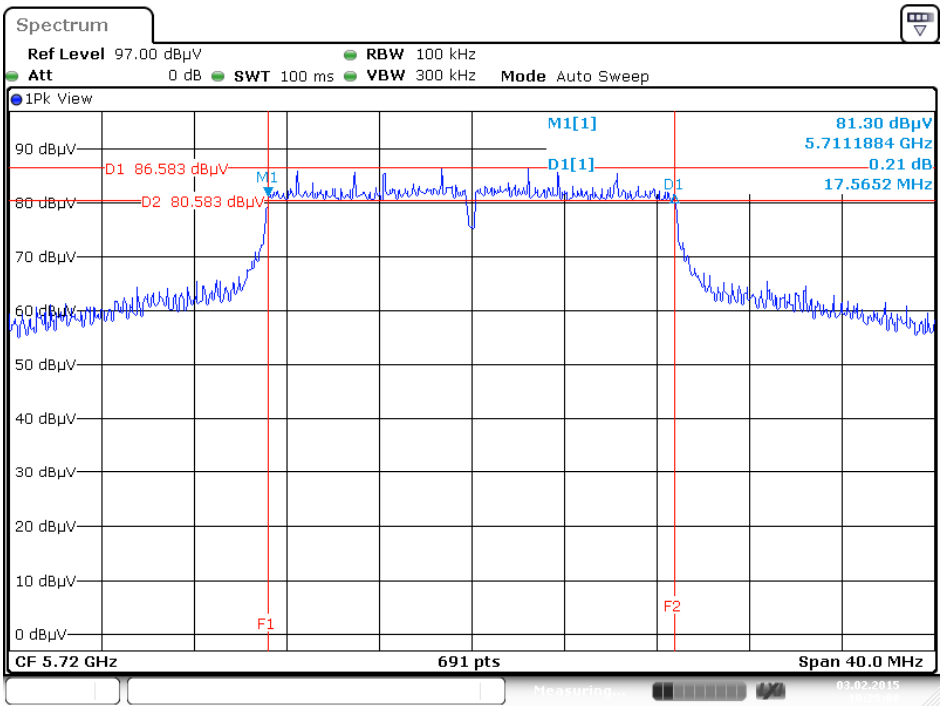
6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 4



Date: 6.FEB.2015 13:34:47

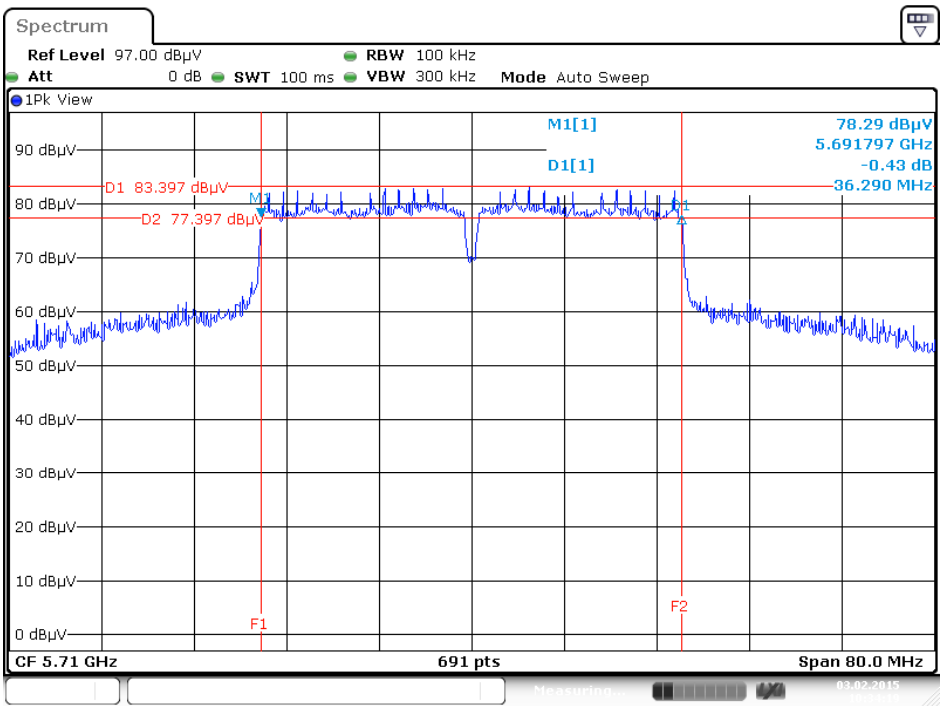
Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 4



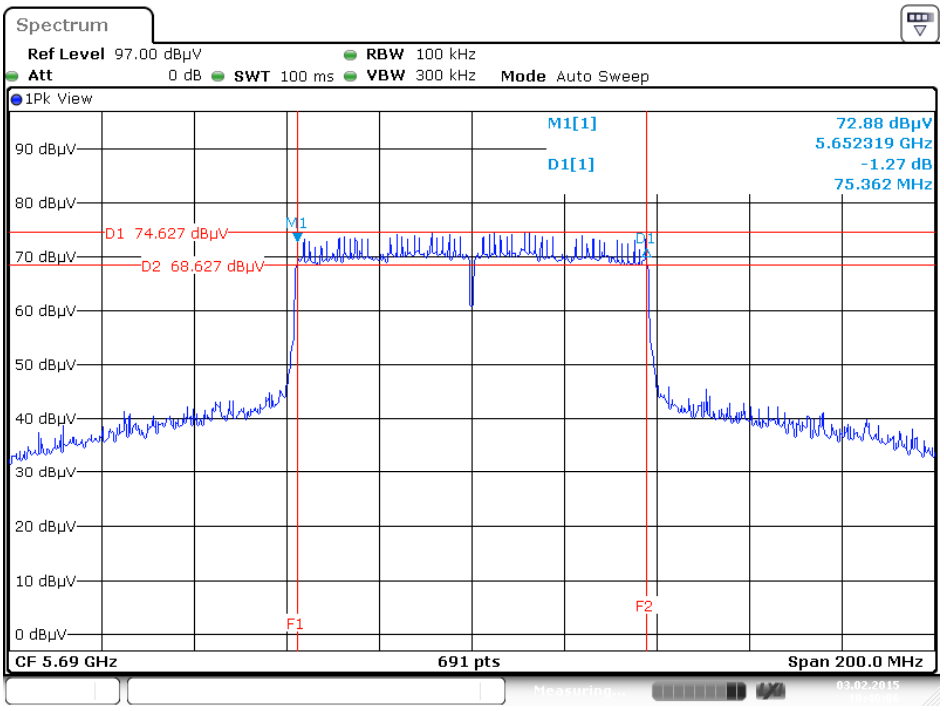
Date: 3.FEB.2015 10:28:08

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 4



Date: 3.FEB.2015 10:34:19

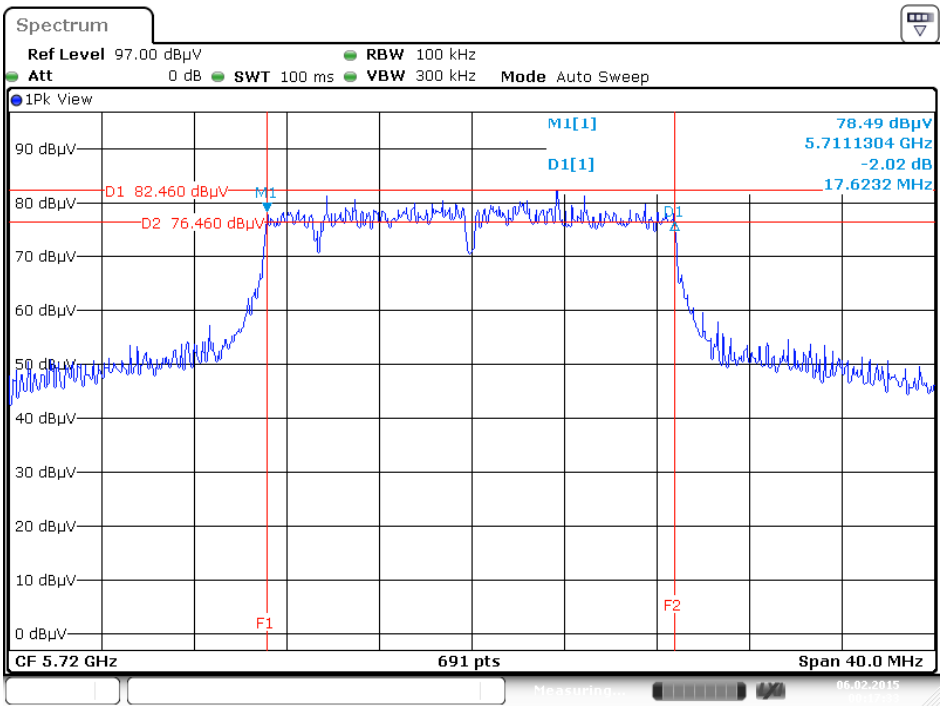
6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 4



<For STBC Mode>

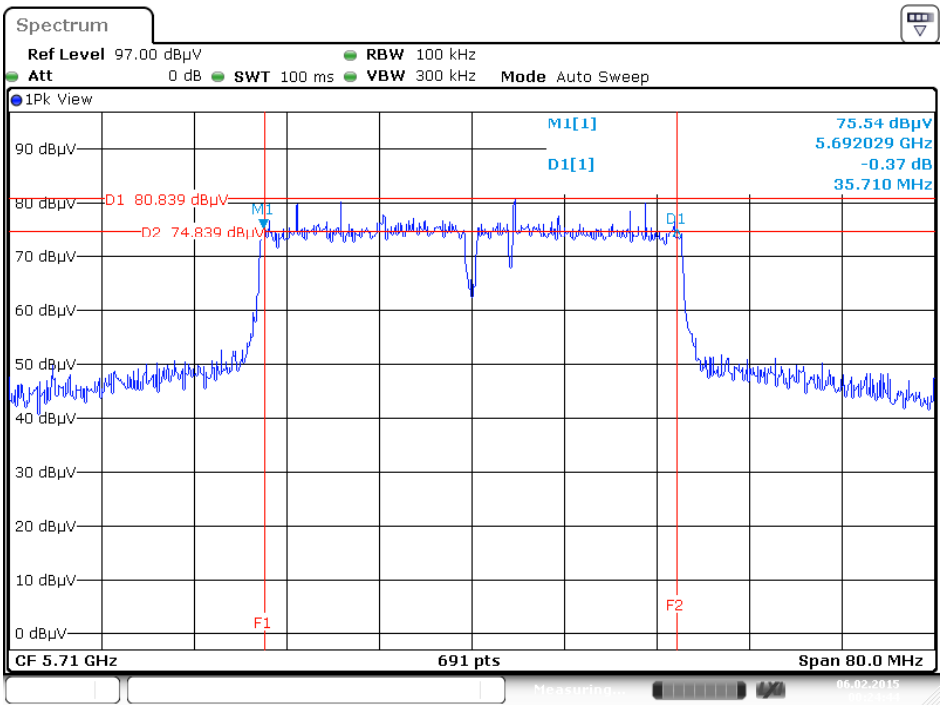
Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 4 + Chain 5



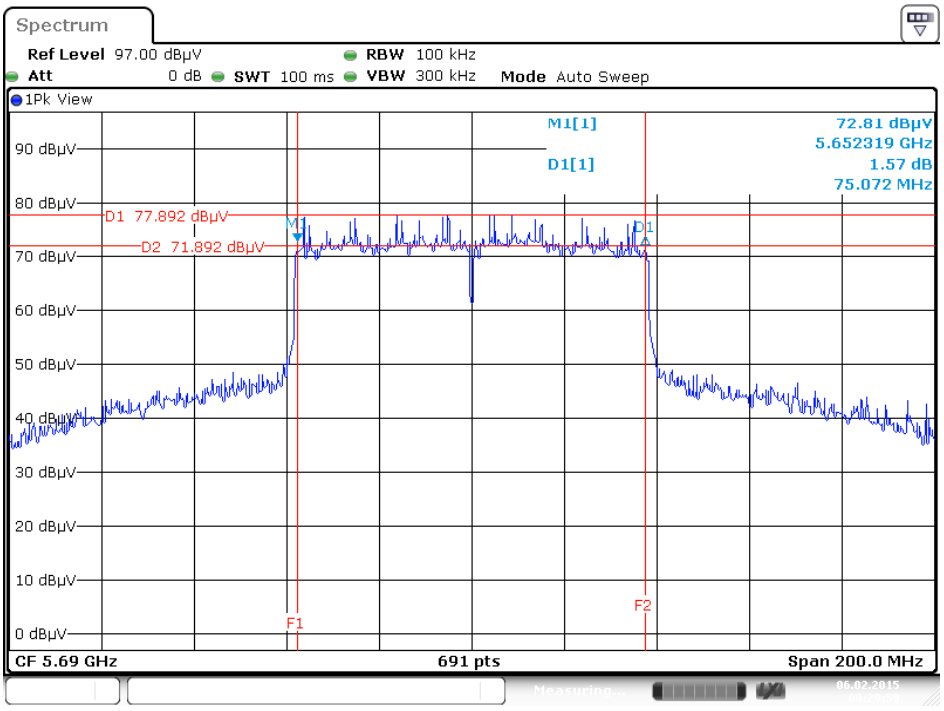
Date: 6.FEB.2015 00:17:33

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 4 + Chain 5



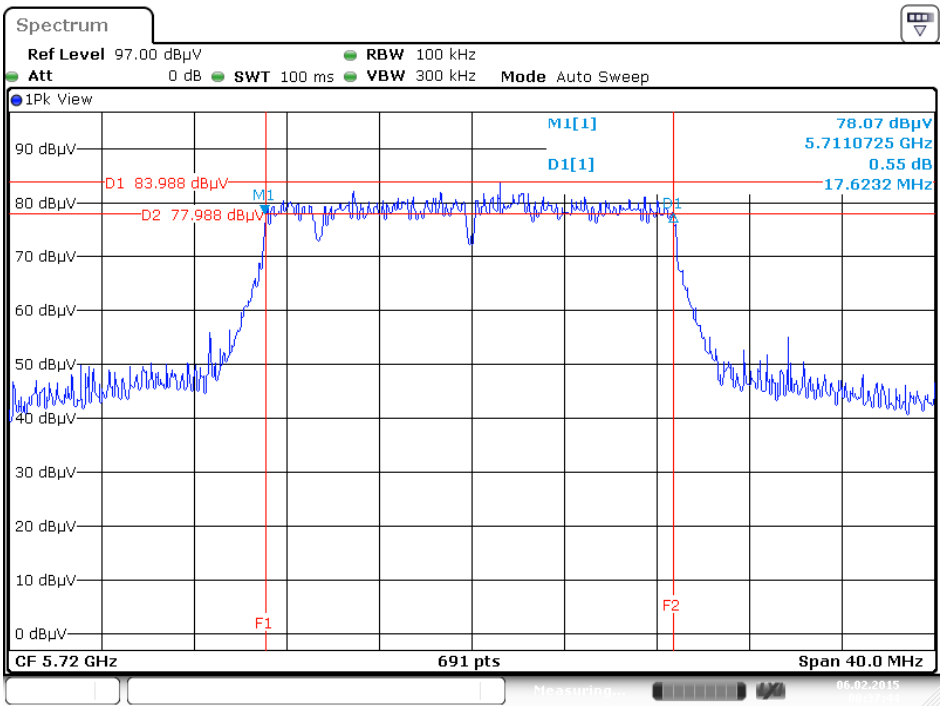
Date: 6.FEB.2015 00:24:44

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 4 + Chain 5



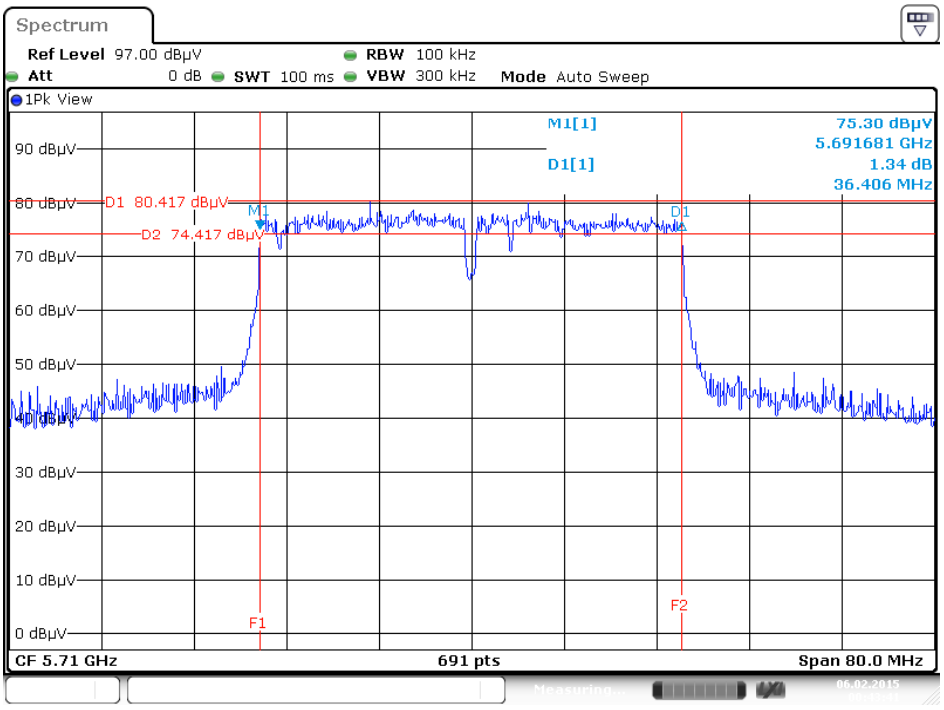
Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 4 + Chain 5 + Chain 6



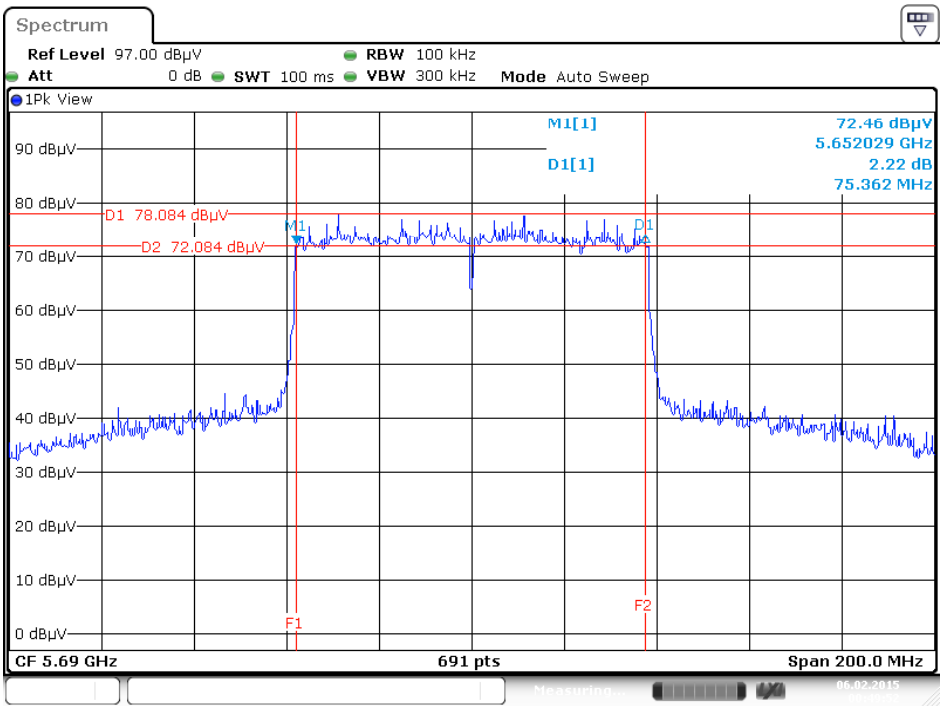
Date: 6.FEB.2015 00:37:44

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 4 + Chain 5 + Chain 6



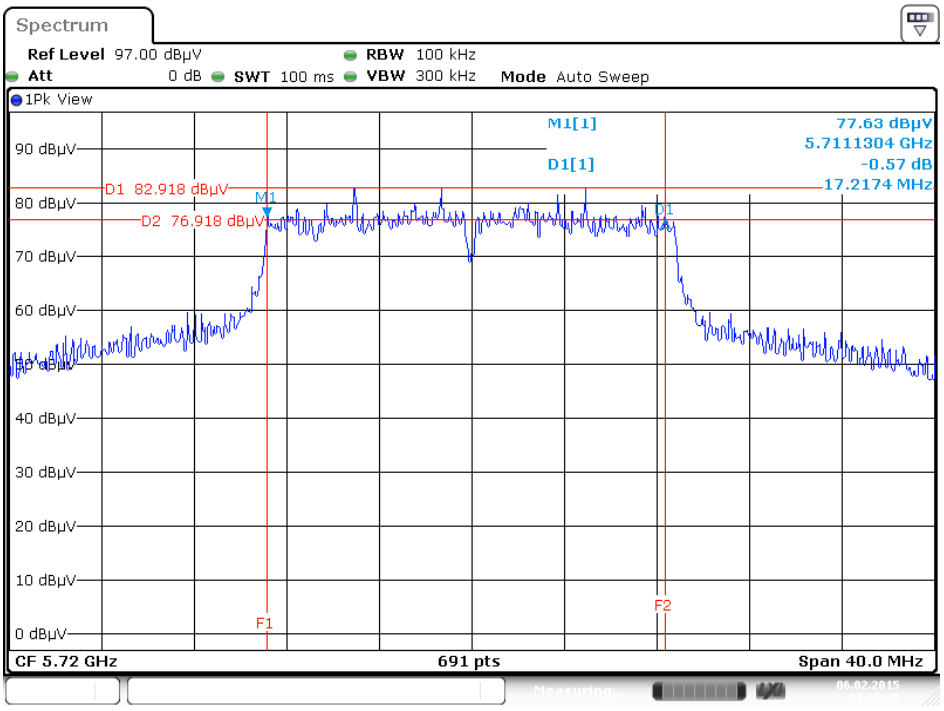
Date: 6.FEB.2015 00:43:42

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 4 + Chain 5 + Chain 6



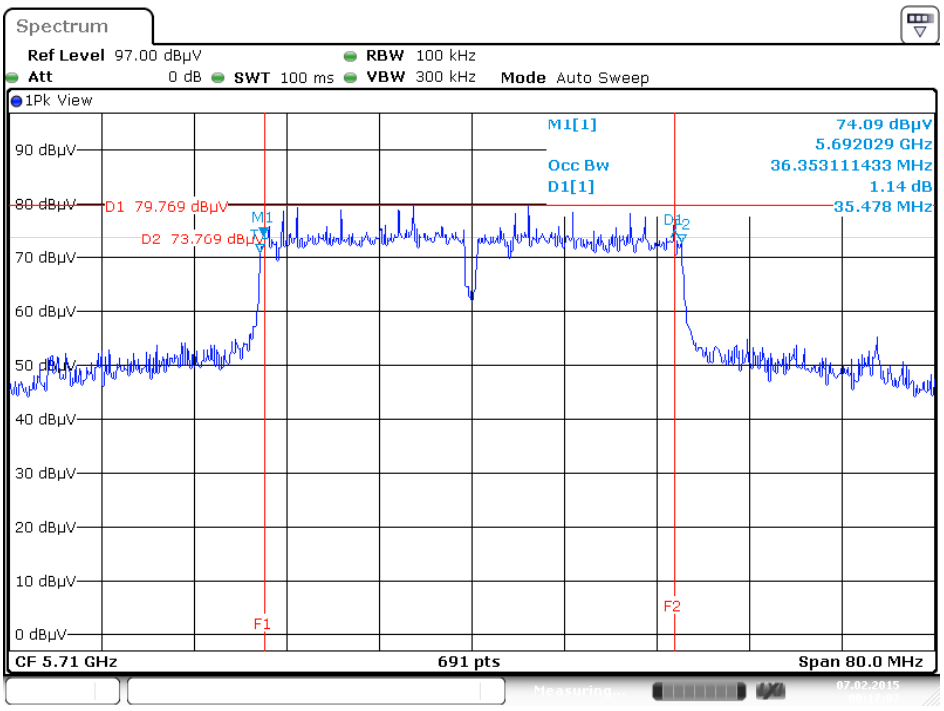
Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 4 + Chain 5



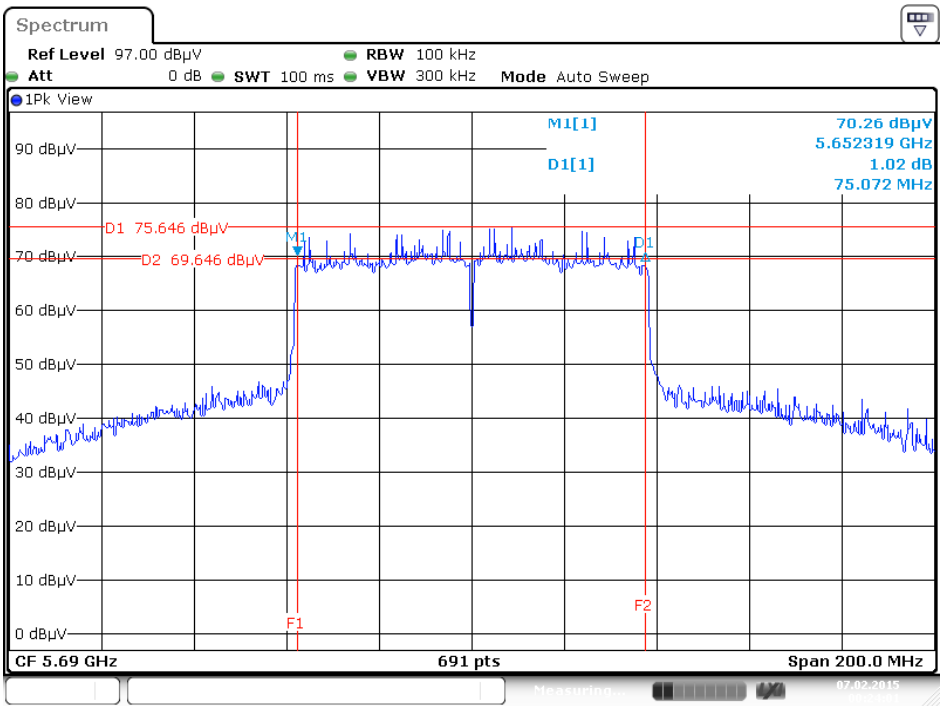
Date: 6.FEB.2015 23:26:45

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 4 + Chain 5



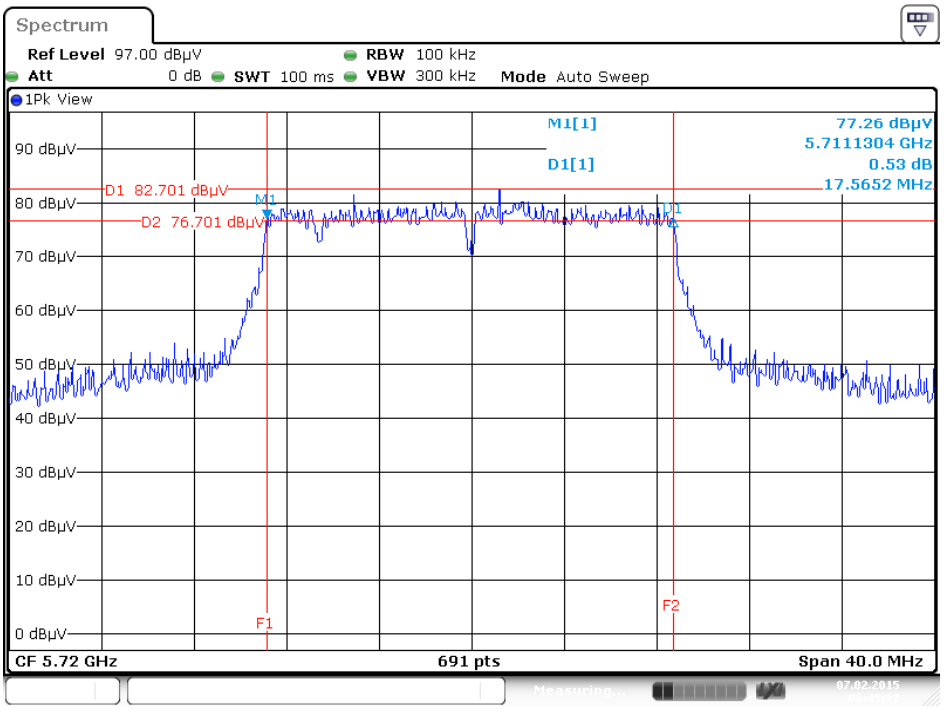
Date: 7.FEB.2015 00:17:03

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 4 + Chain 5



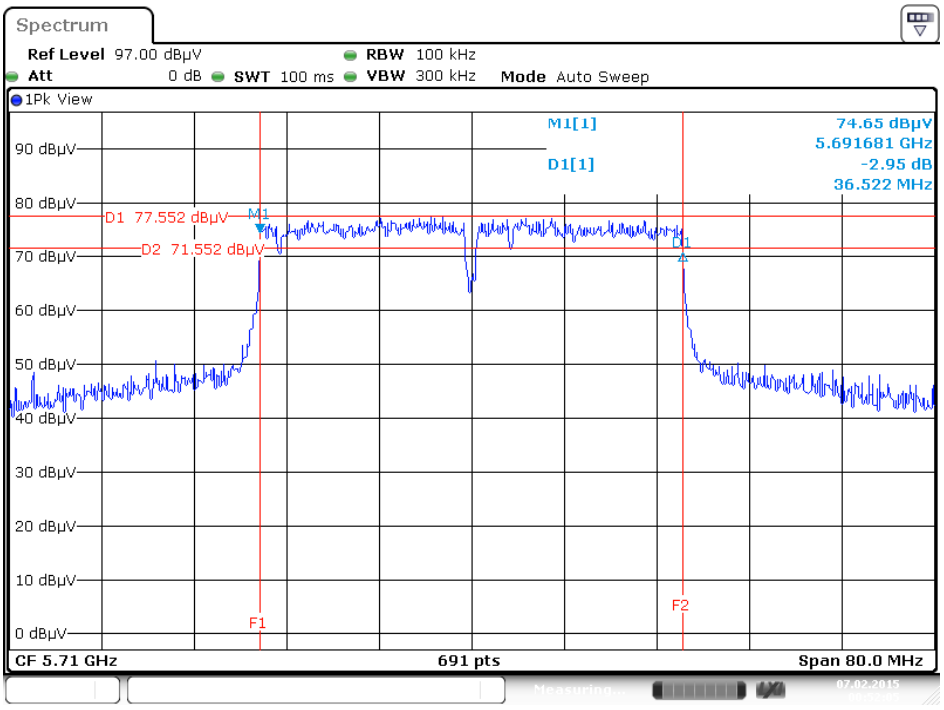
Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / 5720 MHz / Chain 4 + Chain 5 + Chain 6



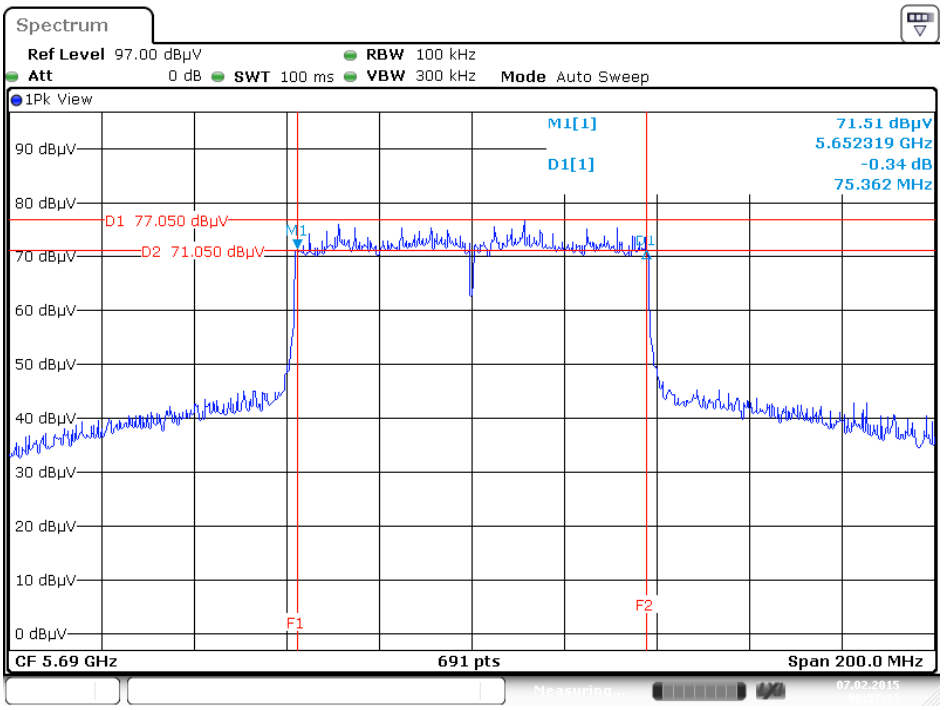
Date: 7.FEB.2015 00:45:12

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / 5710 MHz / Chain 4 + Chain 5 + Chain 6



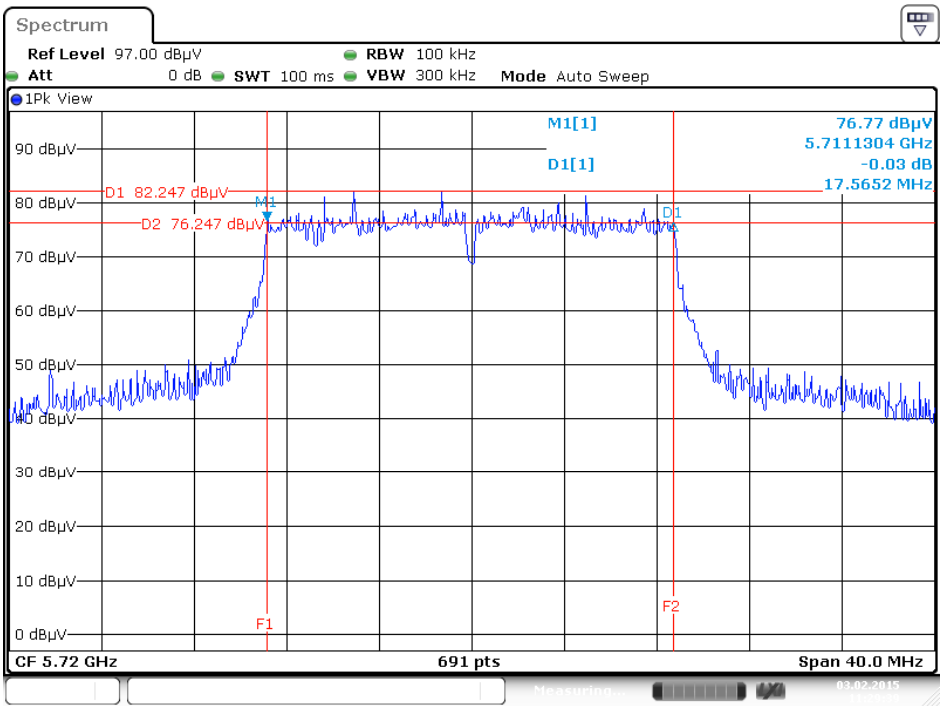
Date: 7.FEB.2015 00:52:04

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / 5690 MHz / Chain 4 + Chain 5 + Chain 6



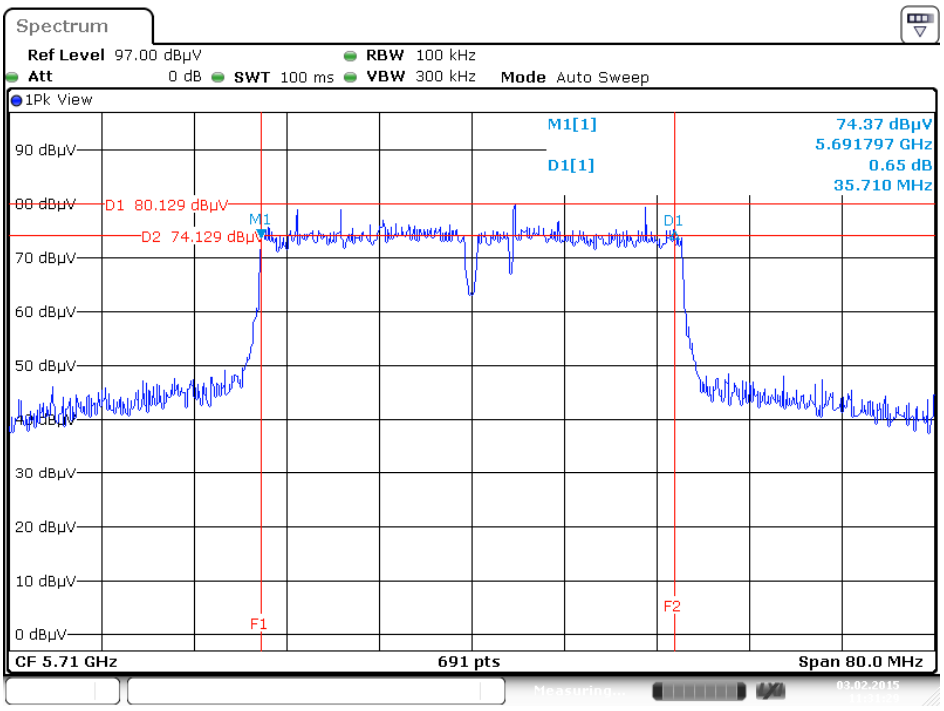
Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / 5720 MHz / Chain 4 + Chain 5



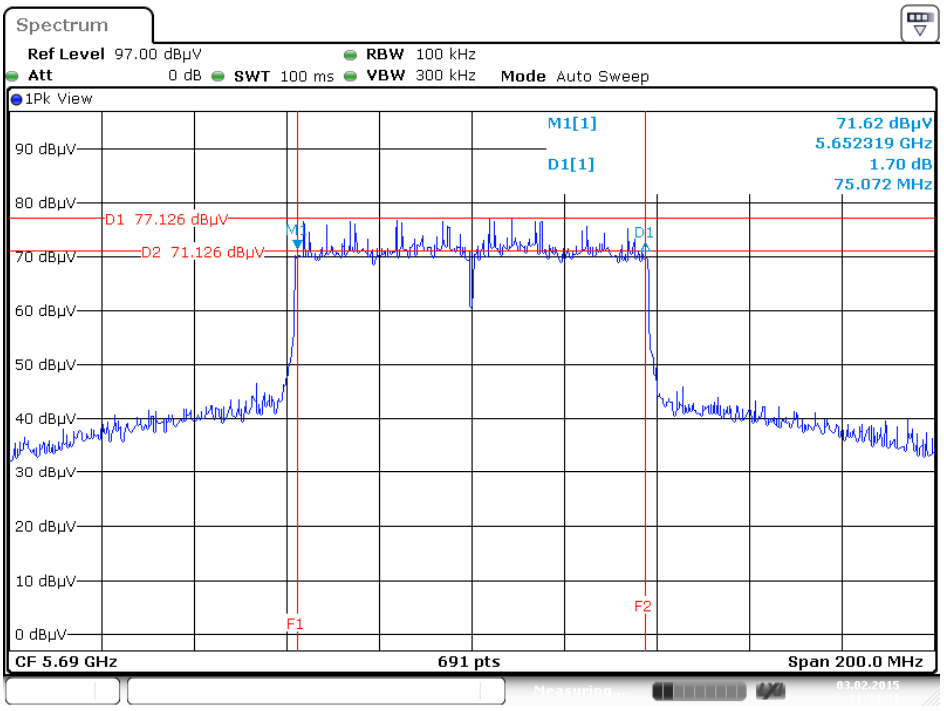
Date: 3.FEB.2015 11:29:39

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / 5710 MHz / Chain 4 + Chain 5



Date: 3.FEB.2015 11:31:30

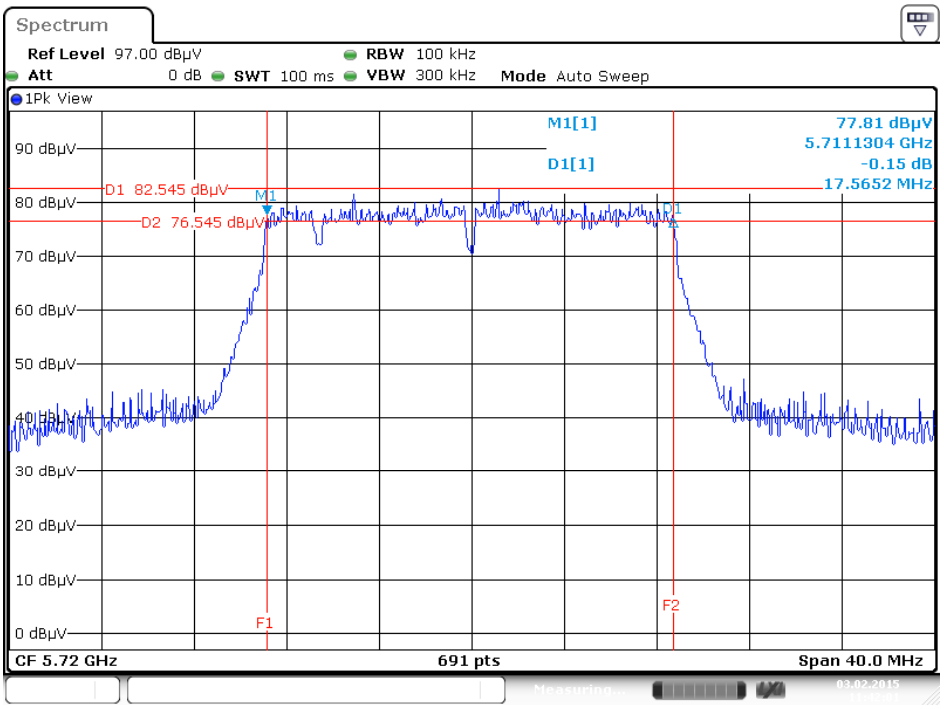
6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / 5690 MHz / Chain 4 + Chain 5



Date: 3.FEB.2015 11:34:51

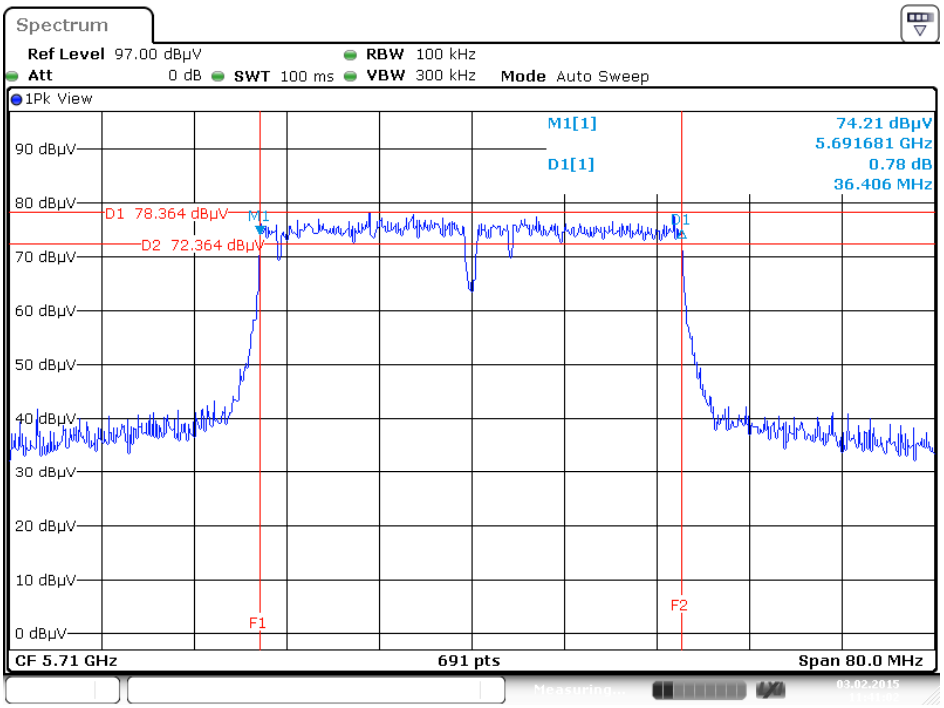
Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / 5720 MHz / Chain 4 + Chain 5 + Chain 6



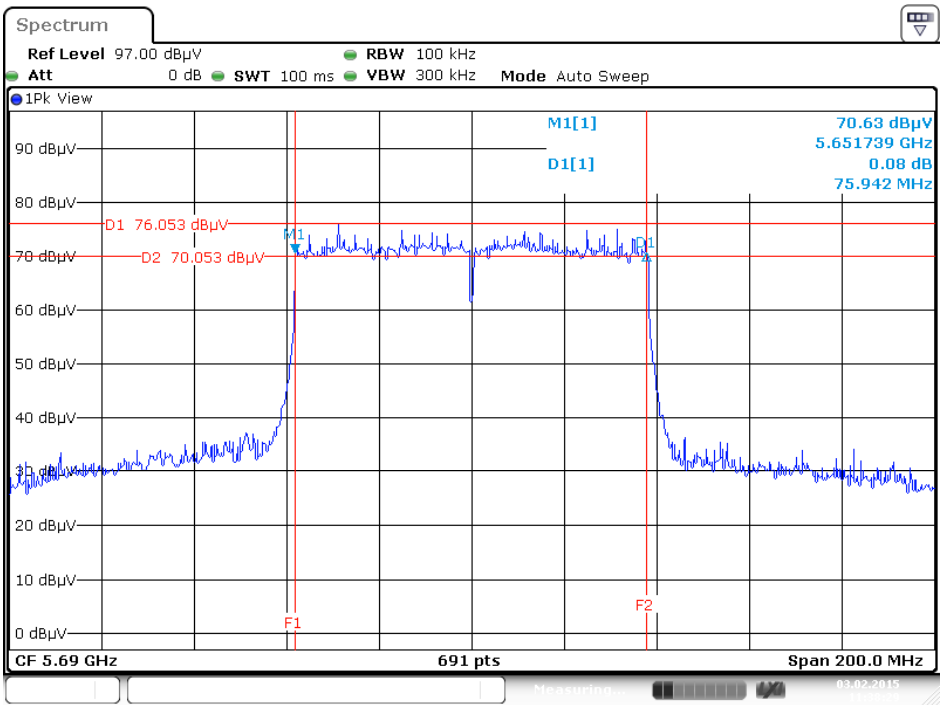
Date: 3.FEB.2015 11:42:02

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / 5710 MHz / Chain 4 + Chain 5 + Chain 6



Date: 3.FEB.2015 11:41:02

6 dB Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / 5690 MHz / Chain 4 + Chain 5 + Chain 6



Date: 3.FEB.2015 11:38:29

4.4. Maximum Conducted Output Power Measurement

4.4.1. Limit

Frequency Band		Limit
☒	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
☒	5.470-5.725 GHz	

4.4.2. Measuring Instruments and Setting

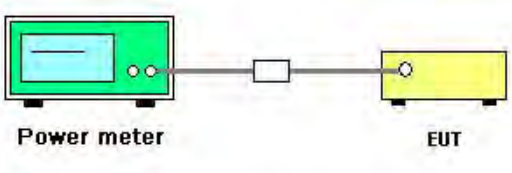
Please refer to section 5 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	Setting
Detector	AVERAGE

4.4.3. Test Procedures

1. The transmitter output (antenna port) was connected to the power meter.
2. Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (E) Maximum conducted output power =>3. Measurement using a Power Meter (PM) =>b) Method PM-G (Measurement using a gated RF average power meter).
3. Multiple antenna systems was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
4. When measuring maximum conducted output power with multiple antenna systems,add every result of the values by mathematic formula.

4.4.4. Test Setup Layout



4.4.5. Test Deviation

There is no deviation with the original standard.

4.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.4.7. Test Result of Maximum Conducted Output Power

<For Non-Beamforming Mode>

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)		

Mode	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
		Chain 5		
802.11a	5260 MHz	20.13	22.70	Complies
	5300 MHz	19.90	22.70	Complies
	5320 MHz	18.38	22.70	Complies
	5500 MHz	17.93	22.70	Complies
	5580 MHz	20.51	22.70	Complies
	5700 MHz	17.69	22.70	Complies
	5720 MHz	20.01	22.70	Complies
802.11n MCS0 HT20	5260 MHz	20.12	22.70	Complies
	5300 MHz	19.89	22.70	Complies
	5320 MHz	18.35	22.70	Complies
	5500 MHz	17.90	22.70	Complies
	5580 MHz	20.53	22.70	Complies
	5700 MHz	17.68	22.70	Complies
	5720 MHz	20.02	22.70	Complies
802.11n MCS0 HT40	5270 MHz	19.78	22.70	Complies
	5310 MHz	15.84	22.70	Complies
	5510 MHz	15.75	22.70	Complies
	5550 MHz	19.36	22.70	Complies
	5670 MHz	17.33	22.70	Complies
	5710 MHz	19.75	22.70	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	20.15	22.70	Complies
	5300 MHz	19.91	22.70	Complies
	5320 MHz	18.37	22.70	Complies
	5500 MHz	17.92	22.70	Complies
	5580 MHz	20.55	22.70	Complies
	5700 MHz	17.68	22.70	Complies
	5720 MHz	20.01	22.70	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	19.79	22.70	Complies
	5310 MHz	15.83	22.70	Complies
	5510 MHz	15.77	22.70	Complies
	5550 MHz	19.37	22.70	Complies
	5670 MHz	17.23	22.70	Complies
	5710 MHz	19.78	22.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	11.26	22.70	Complies
	5530 MHz	12.80	22.70	Complies
	5610 MHz	16.92	22.70	Complies
	5690 MHz	19.63	22.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =24-(7.30-6)=22.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11a	5260 MHz	16.55	17.42	20.02	22.70	Complies
	5300 MHz	16.28	17.22	19.79	22.70	Complies
	5320 MHz	16.32	17.61	20.02	22.70	Complies
	5500 MHz	16.64	17.56	20.13	22.70	Complies
	5580 MHz	16.89	17.55	20.24	22.70	Complies
	5700 MHz	14.74	15.24	18.01	22.70	Complies
	5720 MHz	16.85	17.55	20.22	22.70	Complies
802.11n MCS0 HT20	5260 MHz	16.58	17.43	20.04	22.70	Complies
	5300 MHz	16.28	17.26	19.81	22.70	Complies
	5320 MHz	16.33	17.62	20.03	22.70	Complies
	5500 MHz	16.65	17.55	20.13	22.70	Complies
	5580 MHz	16.85	17.55	20.22	22.70	Complies
	5700 MHz	17.77	15.26	19.70	22.70	Complies
	5720 MHz	16.88	17.50	20.21	22.70	Complies
802.11n MCS0 HT40	5270 MHz	17.88	18.87	21.41	22.70	Complies
	5310 MHz	14.48	15.66	18.12	22.70	Complies
	5510 MHz	15.28	15.99	18.66	22.70	Complies
	5550 MHz	18.25	19.00	21.65	22.70	Complies
	5670 MHz	16.37	17.19	19.81	22.70	Complies
	5710 MHz	19.21	20.09	22.68	22.70	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	16.58	17.44	20.04	22.70	Complies
	5300 MHz	16.26	17.21	19.77	22.70	Complies
	5320 MHz	16.31	17.60	20.01	22.70	Complies
	5500 MHz	16.63	17.55	20.12	22.70	Complies
	5580 MHz	16.88	17.53	20.23	22.70	Complies
	5700 MHz	14.74	15.23	18.00	22.70	Complies
	5720 MHz	16.84	17.52	20.20	22.70	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	17.86	18.74	21.33	22.70	Complies
	5310 MHz	14.49	15.63	18.11	22.70	Complies
	5510 MHz	15.29	15.97	18.65	22.70	Complies
	5550 MHz	18.22	19.03	21.65	22.70	Complies
	5670 MHz	16.35	17.17	19.79	22.70	Complies
	5710 MHz	19.21	20.05	22.66	22.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	11.42	13.35	15.50	22.70	Complies
	5530 MHz	12.14	12.99	15.60	22.70	Complies
	5610 MHz	16.12	17.31	19.77	22.70	Complies
	5690 MHz	18.85	19.85	22.39	22.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =24-(7.30-6)=22.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11a	5260 MHz	13.02	14.09	13.44	18.31	22.70	Complies
	5300 MHz	13.11	14.22	13.43	18.38	22.70	Complies
	5320 MHz	13.12	14.28	13.29	18.37	22.70	Complies
	5500 MHz	13.26	14.14	13.42	18.40	22.70	Complies
	5580 MHz	13.33	13.98	13.42	18.36	22.70	Complies
	5700 MHz	13.24	13.99	13.09	18.23	22.70	Complies
	5720 MHz	13.51	13.81	13.44	18.36	22.70	Complies
802.11n MCS0 HT20	5260 MHz	13.03	14.06	13.41	18.29	22.70	Complies
	5300 MHz	13.14	14.21	13.44	18.39	22.70	Complies
	5320 MHz	13.16	14.26	13.32	18.38	22.70	Complies
	5500 MHz	13.26	14.12	13.44	18.39	22.70	Complies
	5580 MHz	13.34	13.99	13.42	18.36	22.70	Complies
	5700 MHz	13.28	14.01	13.11	18.26	22.70	Complies
	5720 MHz	13.56	13.79	13.43	18.37	22.70	Complies
802.11n MCS0 HT40	5270 MHz	15.66	16.59	16.02	20.88	22.70	Complies
	5310 MHz	11.23	12.30	11.21	16.38	22.70	Complies
	5510 MHz	12.24	13.14	12.58	17.44	22.70	Complies
	5550 MHz	14.98	15.55	15.03	19.97	22.70	Complies
	5670 MHz	15.59	15.93	15.50	20.45	22.70	Complies
	5710 MHz	16.18	17.04	16.29	21.29	22.70	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	13.04	14.07	13.42	18.30	22.70	Complies
	5300 MHz	13.14	14.21	13.43	18.39	22.70	Complies
	5320 MHz	13.11	14.29	13.32	18.38	22.70	Complies
	5500 MHz	13.25	14.13	13.42	18.39	22.70	Complies
	5580 MHz	13.34	13.99	13.41	18.36	22.70	Complies
	5700 MHz	13.22	13.98	13.09	18.22	22.70	Complies
	5720 MHz	13.51	13.79	13.42	18.35	22.70	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	15.63	16.59	16.03	20.87	22.70	Complies
	5310 MHz	11.19	12.31	11.20	16.37	22.70	Complies
	5510 MHz	12.30	13.09	12.56	17.43	22.70	Complies
	5550 MHz	14.96	15.58	14.99	19.96	22.70	Complies
	5670 MHz	15.58	15.91	15.52	20.44	22.70	Complies
	5710 MHz	16.18	17.03	16.30	21.29	22.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	7.77	9.07	9.06	13.45	22.70	Complies
	5530 MHz	9.40	10.25	10.23	14.75	22.70	Complies
	5610 MHz	15.34	16.62	16.11	20.83	22.70	Complies
	5690 MHz	17.32	18.25	18.14	22.69	22.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =24-(7.30-6)=22.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)		

Mode	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
		Chain 4		
802.11a	5260 MHz	20.06	24.00	Complies
	5300 MHz	19.91	24.00	Complies
	5320 MHz	18.99	24.00	Complies
	5500 MHz	19.14	24.00	Complies
	5580 MHz	20.02	24.00	Complies
	5700 MHz	18.12	24.00	Complies
	5720 MHz	19.62	24.00	Complies
802.11n MCS0 HT20	5260 MHz	20.05	24.00	Complies
	5300 MHz	19.90	24.00	Complies
	5320 MHz	19.01	24.00	Complies
	5500 MHz	19.16	24.00	Complies
	5580 MHz	20.03	24.00	Complies
	5700 MHz	18.08	24.00	Complies
	5720 MHz	19.63	24.00	Complies
802.11n MCS0 HT40	5270 MHz	19.88	24.00	Complies
	5310 MHz	17.32	24.00	Complies
	5510 MHz	17.39	24.00	Complies
	5550 MHz	20.23	24.00	Complies
	5670 MHz	18.76	24.00	Complies
	5710 MHz	20.01	24.00	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	20.09	24.00	Complies
	5300 MHz	19.92	24.00	Complies
	5320 MHz	19.01	24.00	Complies
	5500 MHz	19.16	24.00	Complies
	5580 MHz	20.03	24.00	Complies
	5700 MHz	18.01	24.00	Complies
	5720 MHz	19.68	24.00	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	19.89	24.00	Complies
	5310 MHz	17.29	24.00	Complies
	5510 MHz	17.38	24.00	Complies
	5550 MHz	20.26	24.00	Complies
	5670 MHz	18.73	24.00	Complies
	5710 MHz	20.02	24.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	16.14	24.00	Complies
	5530 MHz	16.83	24.00	Complies
	5610 MHz	18.88	24.00	Complies
	5690 MHz	20.08	24.00	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11a	5260 MHz	18.98	19.54	22.28	24.00	Complies
	5300 MHz	18.49	19.08	21.81	24.00	Complies
	5320 MHz	17.79	18.55	21.20	24.00	Complies
	5500 MHz	17.41	18.41	20.95	24.00	Complies
	5580 MHz	18.87	19.77	22.35	24.00	Complies
	5700 MHz	16.99	17.85	20.45	24.00	Complies
	5720 MHz	18.81	19.74	22.31	24.00	Complies
802.11n MCS0 HT20	5260 MHz	18.94	19.51	22.24	24.00	Complies
	5300 MHz	18.51	19.07	21.81	24.00	Complies
	5320 MHz	17.74	18.53	21.16	24.00	Complies
	5500 MHz	17.34	18.21	20.81	24.00	Complies
	5580 MHz	18.88	19.72	22.33	24.00	Complies
	5700 MHz	16.98	17.82	20.43	24.00	Complies
	5720 MHz	18.76	19.66	22.24	24.00	Complies
802.11n MCS0 HT40	5270 MHz	19.61	20.08	22.86	24.00	Complies
	5310 MHz	14.58	15.41	18.03	24.00	Complies
	5510 MHz	14.87	15.66	18.29	24.00	Complies
	5550 MHz	19.81	20.36	23.10	24.00	Complies
	5670 MHz	17.38	17.92	20.67	24.00	Complies
	5710 MHz	20.52	21.25	23.91	24.00	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	18.89	19.36	22.14	24.00	Complies
	5300 MHz	18.42	19.04	21.75	24.00	Complies
	5320 MHz	17.75	18.52	21.16	24.00	Complies
	5500 MHz	17.39	18.30	20.88	24.00	Complies
	5580 MHz	18.98	19.66	22.34	24.00	Complies
	5700 MHz	16.98	17.72	20.38	24.00	Complies
	5720 MHz	18.72	19.61	22.20	24.00	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	19.61	20.08	22.86	24.00	Complies
	5310 MHz	14.58	15.41	18.03	24.00	Complies
	5510 MHz	14.87	15.66	18.29	24.00	Complies
	5550 MHz	19.81	20.36	23.10	24.00	Complies
	5670 MHz	17.38	17.92	20.67	24.00	Complies
	5710 MHz	20.52	21.25	23.91	24.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	11.75	13.22	15.56	24.00	Complies
	5530 MHz	12.07	13.04	15.59	24.00	Complies
	5610 MHz	16.81	17.81	20.35	24.00	Complies
	5690 MHz	19.04	20.08	22.60	24.00	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11a	5260 MHz	15.28	16.26	15.51	20.48	24.00	Complies
	5300 MHz	15.22	16.52	15.47	20.55	24.00	Complies
	5320 MHz	15.19	16.17	15.22	20.32	24.00	Complies
	5500 MHz	15.37	16.41	15.77	20.64	24.00	Complies
	5580 MHz	15.42	16.43	15.72	20.65	24.00	Complies
	5700 MHz	15.33	16.37	15.60	20.56	24.00	Complies
	5720 MHz	15.36	16.21	15.62	20.52	24.00	Complies
802.11n MCS0 HT20	5260 MHz	15.32	16.28	15.55	20.51	24.00	Complies
	5300 MHz	15.30	16.30	15.49	20.49	24.00	Complies
	5320 MHz	15.23	16.20	15.26	20.36	24.00	Complies
	5500 MHz	15.38	16.45	15.79	20.67	24.00	Complies
	5580 MHz	15.44	16.44	15.75	20.67	24.00	Complies
	5700 MHz	15.33	16.33	15.60	20.55	24.00	Complies
	5720 MHz	15.36	16.24	15.61	20.52	24.00	Complies
802.11n MCS0 HT40	5270 MHz	17.38	18.21	17.55	22.50	24.00	Complies
	5310 MHz	16.58	17.70	16.79	21.82	24.00	Complies
	5510 MHz	13.61	14.26	13.68	18.63	24.00	Complies
	5550 MHz	17.66	18.61	17.80	22.82	24.00	Complies
	5670 MHz	15.90	16.77	15.83	20.96	24.00	Complies
	5710 MHz	18.25	19.29	18.77	23.56	24.00	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	15.28	16.26	15.51	20.48	24.00	Complies
	5300 MHz	15.22	16.52	15.47	20.55	24.00	Complies
	5320 MHz	15.19	16.17	15.22	20.32	24.00	Complies
	5500 MHz	15.40	16.42	15.80	20.66	24.00	Complies
	5580 MHz	15.49	16.41	15.78	20.68	24.00	Complies
	5700 MHz	15.35	16.35	15.62	20.57	24.00	Complies
	5720 MHz	15.38	16.23	15.62	20.53	24.00	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	17.36	18.22	17.59	22.51	24.00	Complies
	5310 MHz	16.59	17.71	16.78	21.83	24.00	Complies
	5510 MHz	13.61	14.16	13.66	18.59	24.00	Complies
	5550 MHz	17.67	18.62	17.81	22.83	24.00	Complies
	5670 MHz	15.91	16.76	15.84	20.96	24.00	Complies
	5710 MHz	18.26	19.28	18.78	23.56	24.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	8.83	10.87	9.70	14.65	24.00	Complies
	5530 MHz	10.39	11.41	11.28	15.82	24.00	Complies
	5610 MHz	15.28	16.74	16.23	20.90	24.00	Complies
	5690 MHz	17.28	18.42	17.94	22.68	24.00	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)		

Mode	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
		Chain 4		
802.11a	5260 MHz	20.06	21.70	Complies
	5300 MHz	19.91	21.70	Complies
	5320 MHz	18.60	21.70	Complies
	5500 MHz	18.55	21.70	Complies
	5580 MHz	20.02	21.70	Complies
	5700 MHz	16.45	21.70	Complies
	5720 MHz	19.62	21.70	Complies
802.11n MCS0 HT20	5260 MHz	20.05	21.70	Complies
	5300 MHz	19.90	21.70	Complies
	5320 MHz	18.63	21.70	Complies
	5500 MHz	18.54	21.70	Complies
	5580 MHz	20.03	21.70	Complies
	5700 MHz	16.36	21.70	Complies
	5720 MHz	19.63	21.70	Complies
802.11n MCS0 HT40	5270 MHz	19.88	21.70	Complies
	5310 MHz	15.66	21.70	Complies
	5510 MHz	15.63	21.70	Complies
	5550 MHz	20.62	21.70	Complies
	5670 MHz	17.54	21.70	Complies
	5710 MHz	20.01	21.70	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	20.09	21.70	Complies
	5300 MHz	19.92	21.70	Complies
	5320 MHz	18.61	21.70	Complies
	5500 MHz	18.54	21.70	Complies
	5580 MHz	20.03	21.70	Complies
	5700 MHz	16.39	21.70	Complies
	5720 MHz	19.68	21.70	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	19.89	21.70	Complies
	5310 MHz	15.61	21.70	Complies
	5510 MHz	15.62	21.70	Complies
	5550 MHz	20.59	21.70	Complies
	5670 MHz	17.47	21.70	Complies
	5710 MHz	20.02	21.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	13.46	21.70	Complies
	5530 MHz	13.94	21.70	Complies
	5610 MHz	17.77	21.70	Complies
	5690 MHz	18.99	21.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =24-(8.30-6)=21.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11a	5260 MHz	18.27	18.64	21.47	21.70	Complies
	5300 MHz	18.12	18.74	21.45	21.70	Complies
	5320 MHz	18.23	18.96	21.62	21.70	Complies
	5500 MHz	17.80	18.45	21.15	21.70	Complies
	5580 MHz	18.18	18.89	21.56	21.70	Complies
	5700 MHz	16.63	17.14	19.90	21.70	Complies
	5720 MHz	18.02	18.74	21.41	21.70	Complies
802.11n MCS0 HT20	5260 MHz	18.16	18.62	21.41	21.70	Complies
	5300 MHz	18.22	18.68	21.47	21.70	Complies
	5320 MHz	18.29	18.83	21.58	21.70	Complies
	5500 MHz	17.82	18.63	21.25	21.70	Complies
	5580 MHz	18.24	18.96	21.63	21.70	Complies
	5700 MHz	16.71	17.34	20.05	21.70	Complies
	5720 MHz	18.12	18.76	21.46	21.70	Complies
802.11n MCS0 HT40	5270 MHz	18.16	18.67	21.43	21.70	Complies
	5310 MHz	15.28	16.01	18.67	21.70	Complies
	5510 MHz	14.91	15.58	18.27	21.70	Complies
	5550 MHz	18.24	18.98	21.64	21.70	Complies
	5670 MHz	17.09	17.49	20.30	21.70	Complies
	5710 MHz	18.18	18.68	21.45	21.70	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	18.21	18.58	21.41	21.70	Complies
	5300 MHz	18.29	18.73	21.53	21.70	Complies
	5320 MHz	18.25	18.83	21.56	21.70	Complies
	5500 MHz	17.92	18.59	21.28	21.70	Complies
	5580 MHz	18.29	18.94	21.64	21.70	Complies
	5700 MHz	16.76	17.42	20.11	21.70	Complies
	5720 MHz	18.18	18.74	21.48	21.70	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	18.19	18.69	21.46	21.70	Complies
	5310 MHz	15.30	16.14	18.75	21.70	Complies
	5510 MHz	14.99	15.63	18.33	21.70	Complies
	5550 MHz	18.28	18.93	21.63	21.70	Complies
	5670 MHz	17.19	17.59	20.40	21.70	Complies
	5710 MHz	18.24	18.72	21.50	21.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	13.02	14.38	16.76	21.70	Complies
	5530 MHz	13.50	14.42	16.99	21.70	Complies
	5610 MHz	16.78	17.92	20.40	21.70	Complies
	5690 MHz	17.56	18.48	21.05	21.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =24-(8.30-6)=21.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11a	5260 MHz	16.23	17.07	16.80	21.49	21.70	Complies
	5300 MHz	16.05	16.91	16.55	21.29	21.70	Complies
	5320 MHz	15.46	16.60	15.36	20.62	21.70	Complies
	5500 MHz	16.32	17.00	16.77	21.48	21.70	Complies
	5580 MHz	16.33	17.11	16.79	21.53	21.70	Complies
	5700 MHz	14.25	14.86	14.09	19.18	21.70	Complies
	5720 MHz	16.54	16.83	16.60	21.43	21.70	Complies
802.11n MCS0 HT20	5260 MHz	16.23	17.06	16.77	21.47	21.70	Complies
	5300 MHz	16.05	16.91	16.54	21.29	21.70	Complies
	5320 MHz	15.46	16.60	15.33	20.61	21.70	Complies
	5500 MHz	16.32	17.02	16.74	21.47	21.70	Complies
	5580 MHz	16.33	17.16	16.79	21.54	21.70	Complies
	5700 MHz	14.25	14.88	14.09	19.19	21.70	Complies
	5720 MHz	16.54	16.82	16.62	21.43	21.70	Complies
802.11n MCS0 HT40	5270 MHz	16.42	17.46	16.82	21.69	21.70	Complies
	5310 MHz	13.06	14.33	13.09	18.31	21.70	Complies
	5510 MHz	13.16	14.46	13.19	18.42	21.70	Complies
	5550 MHz	16.39	17.45	16.82	21.68	21.70	Complies
	5670 MHz	16.02	16.83	16.23	21.14	21.70	Complies
	5710 MHz	16.80	17.00	16.66	21.59	21.70	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	16.24	17.07	16.78	21.48	21.70	Complies
	5300 MHz	16.06	16.92	16.53	21.29	21.70	Complies
	5320 MHz	15.45	16.61	15.34	20.61	21.70	Complies
	5500 MHz	16.33	17.02	16.75	21.48	21.70	Complies
	5580 MHz	16.34	17.12	16.77	21.53	21.70	Complies
	5700 MHz	14.26	14.87	14.08	19.19	21.70	Complies
	5720 MHz	16.55	16.84	16.59	21.43	21.70	Complies

802.11ac MCS0/Nss1 VHT40	5270 MHz	16.41	17.45	16.80	21.68	21.70	Complies
	5310 MHz	13.01	14.39	13.06	18.31	21.70	Complies
	5510 MHz	13.12	14.44	13.18	18.40	21.70	Complies
	5550 MHz	16.38	17.44	16.87	21.69	21.70	Complies
	5670 MHz	16.01	16.84	16.22	21.14	21.70	Complies
	5710 MHz	16.81	17.01	16.55	21.57	21.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	9.37	10.66	10.41	14.95	21.70	Complies
	5530 MHz	11.32	11.88	12.04	16.53	21.70	Complies
	5610 MHz	15.67	16.55	16.44	21.01	21.70	Complies
	5690 MHz	16.34	17.13	16.93	21.58	21.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =24-(8.30-6)=21.70dBm/MHz

<For Beamforming Mode>

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11a	5260 MHz	15.09	15.88	18.51	19.69	Complies
	5300 MHz	14.23	15.12	17.71	19.69	Complies
	5320 MHz	13.55	14.69	17.17	19.69	Complies
	5500 MHz	16.10	17.02	19.59	19.69	Complies
	5580 MHz	16.28	17.00	19.67	19.69	Complies
	5700 MHz	12.84	13.39	16.13	19.69	Complies
	5720 MHz	16.21	16.80	19.53	19.69	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	15.04	15.87	18.49	19.69	Complies
	5300 MHz	14.22	15.10	17.69	19.69	Complies
	5320 MHz	13.52	14.68	17.15	19.69	Complies
	5500 MHz	16.03	16.99	19.55	19.69	Complies
	5580 MHz	16.28	17.02	19.68	19.69	Complies
	5700 MHz	12.83	13.38	16.12	19.69	Complies
	5720 MHz	16.21	16.74	19.49	19.69	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	16.16	16.75	19.48	19.69	Complies
	5310 MHz	12.02	13.28	15.71	19.69	Complies
	5510 MHz	13.59	14.07	16.85	19.69	Complies
	5550 MHz	15.76	16.32	19.06	19.69	Complies
	5670 MHz	15.96	16.82	19.42	19.69	Complies
	5710 MHz	16.33	16.90	19.63	19.69	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	9.72	10.98	13.41	19.69	Complies
	5530 MHz	10.68	11.56	14.15	19.69	Complies
	5610 MHz	15.82	17.09	19.51	19.69	Complies
	5690 MHz	16.08	17.05	19.60	19.69	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} w_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.31dBi >6dBi,So Band 2~3 Limit =24-(10.31-6)=19.69dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11a	5260 MHz	12.62	13.79	12.75	17.86	17.93	Complies
	5300 MHz	12.63	13.84	12.82	17.90	17.93	Complies
	5320 MHz	12.43	13.52	12.37	17.58	17.93	Complies
	5500 MHz	12.92	13.48	13.02	17.92	17.93	Complies
	5580 MHz	12.94	13.35	12.89	17.84	17.93	Complies
	5700 MHz	11.66	11.74	11.58	16.43	17.93	Complies
	5720 MHz	12.89	13.16	12.94	17.77	17.93	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	12.63	13.78	12.74	17.85	17.93	Complies
	5300 MHz	12.64	13.83	12.81	17.90	17.93	Complies
	5320 MHz	12.44	13.51	12.36	17.57	17.93	Complies
	5500 MHz	12.94	13.47	13.01	17.92	17.93	Complies
	5580 MHz	12.95	13.34	12.89	17.84	17.93	Complies
	5700 MHz	11.67	11.73	11.57	16.43	17.93	Complies
	5720 MHz	12.91	13.15	12.93	17.77	17.93	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	12.83	13.60	12.96	17.91	17.93	Complies
	5310 MHz	10.74	11.91	10.57	15.89	17.93	Complies
	5510 MHz	11.49	12.32	12.06	16.74	17.93	Complies
	5550 MHz	12.74	13.41	12.82	17.77	17.93	Complies
	5670 MHz	12.81	13.38	12.81	17.78	17.93	Complies
	5710 MHz	12.89	13.33	12.55	17.71	17.93	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	7.54	8.94	8.85	13.26	17.93	Complies
	5530 MHz	8.78	8.94	8.76	13.60	17.93	Complies
	5610 MHz	12.49	13.51	13.13	17.83	17.93	Complies
	5690 MHz	12.52	13.42	13.09	17.80	17.93	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} S_{j,k}\right\}^2}{N_{ANT}}\right]$ =12.07dBi >6dBi,So Band 2~3 Limit =24-(12.07-6)=17.93dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11a	5260 MHz	17.33	18.08	20.73	21.89	Complies
	5300 MHz	15.15	15.88	18.54	21.89	Complies
	5320 MHz	14.75	15.66	18.24	21.89	Complies
	5500 MHz	17.26	18.09	20.71	21.89	Complies
	5580 MHz	18.39	19.21	21.83	21.89	Complies
	5700 MHz	15.51	16.37	18.97	21.89	Complies
	5720 MHz	18.34	19.25	21.83	21.89	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	17.29	18.06	20.70	21.89	Complies
	5300 MHz	15.15	15.85	18.52	21.89	Complies
	5320 MHz	14.73	15.67	18.24	21.89	Complies
	5500 MHz	17.23	18.09	20.69	21.89	Complies
	5580 MHz	18.35	19.17	21.79	21.89	Complies
	5700 MHz	15.48	16.39	18.97	21.89	Complies
	5720 MHz	18.37	19.27	21.85	21.89	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	16.29	17.09	19.72	21.89	Complies
	5310 MHz	11.38	12.13	14.78	21.89	Complies
	5510 MHz	13.56	14.08	16.84	21.89	Complies
	5550 MHz	17.63	18.27	20.97	21.89	Complies
	5670 MHz	15.89	16.44	19.18	21.89	Complies
	5710 MHz	18.53	19.18	21.88	21.89	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	10.79	12.16	14.54	21.89	Complies
	5530 MHz	12.28	13.11	15.73	21.89	Complies
	5610 MHz	16.68	17.55	20.15	21.89	Complies
	5690 MHz	18.02	19.22	21.67	21.89	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{SS}} S_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.11dBi >6dBi,So Band 2~3 Limit =24-(8.11-6)=21.89dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11a	5260 MHz	14.54	15.60	14.92	19.81	20.13	Complies
	5300 MHz	12.44	13.62	12.60	17.69	20.13	Complies
	5320 MHz	12.49	13.66	12.43	17.67	20.13	Complies
	5500 MHz	15.07	15.68	15.22	20.10	20.13	Complies
	5580 MHz	15.08	15.70	15.15	20.09	20.13	Complies
	5700 MHz	13.99	14.66	13.92	18.97	20.13	Complies
	5720 MHz	15.09	15.74	15.20	20.12	20.13	Complies
802.11ac MCS0/Nss1 VHT20	5260 MHz	14.55	15.61	14.96	19.83	20.13	Complies
	5300 MHz	12.46	13.64	12.58	17.70	20.13	Complies
	5320 MHz	12.48	13.67	12.41	17.66	20.13	Complies
	5500 MHz	15.07	15.71	15.24	20.12	20.13	Complies
	5580 MHz	15.11	15.70	15.17	20.11	20.13	Complies
	5700 MHz	13.99	14.62	13.91	18.96	20.13	Complies
	5720 MHz	15.07	15.72	15.22	20.12	20.13	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	14.82	16.01	15.11	20.11	20.13	Complies
	5310 MHz	10.61	11.99	10.82	15.95	20.13	Complies
	5510 MHz	12.08	12.82	12.35	17.20	20.13	Complies
	5550 MHz	15.01	15.84	14.88	20.04	20.13	Complies
	5670 MHz	14.88	15.77	14.96	19.99	20.13	Complies
	5710 MHz	15.14	15.71	15.16	20.12	20.13	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	7.95	9.28	8.38	13.34	20.13	Complies
	5530 MHz	10.22	13.41	11.33	16.63	20.13	Complies
	5610 MHz	14.89	15.71	15.41	20.12	20.13	Complies
	5690 MHz	14.77	15.58	15.31	20.00	20.13	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{SS}} S_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.87dBi >6dBi,So Band 2~3 Limit =24-(9.87-6)=20.13dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11a	5260 MHz	18.27	18.64	21.47	21.70	Complies
	5300 MHz	18.12	18.74	21.45	21.70	Complies
	5320 MHz	17.68	18.54	21.14	21.70	Complies
	5500 MHz	18.09	18.58	21.35	21.70	Complies
	5580 MHz	18.18	18.89	21.56	21.70	Complies
	5700 MHz	16.25	17.05	19.68	21.70	Complies
	5720 MHz	18.02	18.74	21.41	21.70	Complies
802.11ac MCS0/Nss2 VHT20	5260 MHz	18.21	18.58	21.41	21.70	Complies
	5300 MHz	18.29	18.73	21.53	21.70	Complies
	5320 MHz	17.72	18.64	21.21	21.70	Complies
	5500 MHz	18.18	18.62	21.42	21.70	Complies
	5580 MHz	18.29	18.94	21.64	21.70	Complies
	5700 MHz	16.37	17.14	19.78	21.70	Complies
	5720 MHz	18.18	18.74	21.48	21.70	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	18.19	18.69	21.46	21.70	Complies
	5310 MHz	15.91	16.61	19.28	21.70	Complies
	5510 MHz	14.99	15.63	18.33	21.70	Complies
	5550 MHz	18.28	18.93	21.63	21.70	Complies
	5670 MHz	17.09	17.46	20.29	21.70	Complies
	5710 MHz	18.24	18.72	21.50	21.70	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	14.23	15.73	18.05	21.70	Complies
	5530 MHz	13.50	14.42	16.99	21.70	Complies
	5610 MHz	17.72	18.81	21.31	21.70	Complies
	5690 MHz	18.02	19.22	21.67	21.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =24-(8.30-6)=21.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11a	5260 MHz	15.58	16.33	15.18	20.49	20.64	Complies
	5300 MHz	15.57	16.56	15.06	20.55	20.64	Complies
	5320 MHz	15.45	16.61	15.34	20.61	20.64	Complies
	5500 MHz	15.44	16.41	15.62	20.62	20.64	Complies
	5580 MHz	15.41	16.32	15.32	20.48	20.64	Complies
	5700 MHz	13.69	14.39	13.74	18.72	20.64	Complies
	5720 MHz	15.39	16.22	15.33	20.44	20.64	Complies
802.11ac MCS0/Nss2 VHT20	5260 MHz	15.58	16.33	15.18	20.49	20.64	Complies
	5300 MHz	15.57	16.56	15.06	20.55	20.64	Complies
	5320 MHz	15.45	16.61	15.34	20.61	20.64	Complies
	5500 MHz	15.44	16.41	15.62	20.62	20.64	Complies
	5580 MHz	15.41	16.32	15.32	20.48	20.64	Complies
	5700 MHz	13.69	14.39	13.74	18.72	20.64	Complies
	5720 MHz	15.39	16.22	15.33	20.44	20.64	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	15.62	16.35	15.34	20.56	20.64	Complies
	5310 MHz	14.18	14.98	14.07	19.20	20.64	Complies
	5510 MHz	13.74	14.38	13.51	18.66	20.64	Complies
	5550 MHz	15.69	16.35	15.50	20.63	20.64	Complies
	5670 MHz	15.72	16.09	15.51	20.55	20.64	Complies
	5710 MHz	15.47	15.94	15.26	20.34	20.64	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	11.58	12.47	12.46	16.96	20.64	Complies
	5530 MHz	11.78	12.54	12.58	17.09	20.64	Complies
	5610 MHz	15.19	16.28	15.92	20.59	20.64	Complies
	5690 MHz	14.96	16.25	16.13	20.59	20.64	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{i=1}^{N_{ANT}} g_{j,i}\right\}^2}{N_{ANT}}\right]$ =9.36dBi >6dBi,So Band 2~3 Limit =24-(9.36-6)=20.64dBm/MHz

<For STBC Mode>

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11ac MCS0/Nss1 VHT20	5260 MHz	19.14	19.89	22.54	22.70	Complies
	5300 MHz	18.89	19.54	22.24	22.70	Complies
	5320 MHz	18.16	19.05	21.64	22.70	Complies
	5500 MHz	18.26	19.22	21.78	22.70	Complies
	5580 MHz	19.16	20.01	22.62	22.70	Complies
	5700 MHz	17.49	18.61	21.10	22.70	Complies
	5720 MHz	19.11	19.96	22.57	22.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	18.40	19.26	21.86	22.70	Complies
	5310 MHz	15.49	16.55	19.06	22.70	Complies
	5510 MHz	15.74	16.14	18.95	22.70	Complies
	5550 MHz	19.02	19.82	22.45	22.70	Complies
	5670 MHz	17.23	17.88	20.58	22.70	Complies
	5710 MHz	19.23	19.98	22.63	22.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	12.09	13.74	16.00	22.70	Complies
	5530 MHz	13.62	14.39	17.03	22.70	Complies
	5610 MHz	17.67	18.98	21.38	22.70	Complies
	5690 MHz	18.87	20.16	22.57	22.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =24-(7.30-6)=22.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11ac MCS0/Nss1 VHT20	5260 MHz	17.08	18.32	17.66	22.49	22.70	Complies
	5300 MHz	15.55	16.23	15.62	20.58	22.70	Complies
	5320 MHz	15.74	16.69	16.17	20.99	22.70	Complies
	5500 MHz	16.66	17.49	16.92	21.81	22.70	Complies
	5580 MHz	15.31	16.17	15.38	20.41	22.70	Complies
	5700 MHz	15.47	16.57	15.88	20.77	22.70	Complies
	5720 MHz	17.59	18.17	17.95	22.68	22.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	16.25	17.42	16.77	21.61	22.70	Complies
	5310 MHz	13.30	14.05	13.53	18.41	22.70	Complies
	5510 MHz	13.19	14.11	13.06	18.25	22.70	Complies
	5550 MHz	16.89	17.91	17.12	22.10	22.70	Complies
	5670 MHz	16.32	17.36	16.58	21.55	22.70	Complies
	5710 MHz	17.39	18.49	17.81	22.69	22.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	9.27	10.18	10.01	14.61	22.70	Complies
	5530 MHz	10.45	11.38	11.49	15.90	22.70	Complies
	5610 MHz	15.74	16.94	16.49	21.19	22.70	Complies
	5690 MHz	17.28	18.32	18.03	22.67	22.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =24-(7.30-6)=22.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11ac MCS0/Nss1 VHT20	5260 MHz	20.63	21.22	23.95	24.00	Complies
	5300 MHz	19.86	20.34	23.12	24.00	Complies
	5320 MHz	19.33	18.21	21.82	24.00	Complies
	5500 MHz	17.39	18.10	20.77	24.00	Complies
	5580 MHz	20.53	21.23	23.90	24.00	Complies
	5700 MHz	17.11	17.86	20.51	24.00	Complies
	5720 MHz	20.35	20.89	23.64	24.00	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	20.05	20.78	23.44	24.00	Complies
	5310 MHz	14.73	15.73	18.27	24.00	Complies
	5510 MHz	15.72	16.23	18.99	24.00	Complies
	5550 MHz	19.92	20.79	23.39	24.00	Complies
	5670 MHz	17.51	18.27	20.92	24.00	Complies
	5710 MHz	20.23	20.79	23.53	24.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	12.87	14.01	16.49	24.00	Complies
	5530 MHz	13.39	14.13	16.79	24.00	Complies
	5610 MHz	17.23	18.38	20.85	24.00	Complies
	5690 MHz	19.22	20.35	22.83	24.00	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11ac MCS0/Nss1 VHT20	5260 MHz	18.66	19.58	18.92	23.84	24.00	Complies
	5300 MHz	17.92	18.66	18.44	23.12	24.00	Complies
	5320 MHz	17.32	18.09	17.77	22.51	24.00	Complies
	5500 MHz	16.92	17.61	17.40	22.09	24.00	Complies
	5580 MHz	18.67	19.71	18.96	23.91	24.00	Complies
	5700 MHz	16.14	16.88	16.38	21.25	24.00	Complies
	5720 MHz	18.54	19.27	18.96	23.70	24.00	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	18.44	19.32	18.99	23.70	24.00	Complies
	5310 MHz	13.66	14.45	14.01	18.82	24.00	Complies
	5510 MHz	14.38	15.44	14.52	19.58	24.00	Complies
	5550 MHz	17.74	18.66	17.97	22.91	24.00	Complies
	5670 MHz	16.92	17.78	17.14	22.07	24.00	Complies
	5710 MHz	18.79	19.58	19.23	23.98	24.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	10.51	11.92	12.32	16.42	24.00	Complies
	5530 MHz	10.98	12.75	12.62	16.96	24.00	Complies
	5610 MHz	16.56	17.68	17.22	21.95	24.00	Complies
	5690 MHz	18.35	19.31	19.06	23.70	24.00	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Mode	Frequency	Conducted Power (dBm)			Max. Limit (dBm)	Result
		Chain 4	Chain 5	Total		
802.11ac MCS0/Nss2 VHT20	5260 MHz	18.01	18.79	21.43	21.70	Complies
	5300 MHz	18.04	18.62	21.35	21.70	Complies
	5320 MHz	18.05	18.74	21.42	21.70	Complies
	5500 MHz	17.48	18.32	20.93	21.70	Complies
	5580 MHz	18.12	18.84	21.51	21.70	Complies
	5700 MHz	16.71	17.02	19.88	21.70	Complies
	5720 MHz	18.02	18.64	21.35	21.70	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	18.21	19.07	21.67	21.70	Complies
	5310 MHz	15.01	16.18	18.64	21.70	Complies
	5510 MHz	14.81	15.63	18.25	21.70	Complies
	5550 MHz	18.26	19.02	21.67	21.70	Complies
	5670 MHz	17.39	18.07	20.75	21.70	Complies
	5710 MHz	18.19	19.06	21.66	21.70	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	13.26	14.76	17.08	21.70	Complies
	5530 MHz	15.32	16.41	18.91	21.70	Complies
	5610 MHz	17.67	18.98	21.38	21.70	Complies
	5690 MHz	17.89	19.16	21.58	21.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =24-(8.30-6)=21.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Mode	Frequency	Conducted Power (dBm)				Max. Limit (dBm)	Result
		Chain 4	Chain 5	Chain 6	Total		
802.11ac MCS0/Nss2 VHT20	5260 MHz	15.93	17.52	16.66	21.52	21.70	Complies
	5300 MHz	16.25	17.21	16.74	21.52	21.70	Complies
	5320 MHz	16.08	17.11	16.64	21.40	21.70	Complies
	5500 MHz	15.44	16.21	15.44	20.48	21.70	Complies
	5580 MHz	16.54	17.31	16.77	21.66	21.70	Complies
	5700 MHz	14.28	15.06	14.22	19.31	21.70	Complies
	5720 MHz	16.54	17.11	16.55	21.51	21.70	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	16.25	17.42	16.77	21.61	21.70	Complies
	5310 MHz	14.29	15.19	14.88	19.57	21.70	Complies
	5510 MHz	13.72	14.57	15.35	19.37	21.70	Complies
	5550 MHz	16.52	17.41	16.63	21.64	21.70	Complies
	5670 MHz	16.32	17.36	16.58	21.55	21.70	Complies
	5710 MHz	16.49	17.29	16.56	21.57	21.70	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	11.38	12.98	13.14	17.34	21.70	Complies
	5530 MHz	11.98	13.39	13.13	17.65	21.70	Complies
	5610 MHz	15.74	16.94	16.49	21.19	21.70	Complies
	5690 MHz	16.21	17.11	16.89	21.52	21.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =24-(8.30-6)=21.70dBm/MHz

4.5. Power Spectral Density Measurement

4.5.1. Limit

The following table is power spectral density limits and decrease power density limit rule refer to section 4.4.1.

Frequency Band		Limit
☒	5.25-5.35 GHz	11 dBm/MHz
☒	5.470-5.725 GHz	11 dBm/MHz

4.5.2. Measuring Instruments and Setting

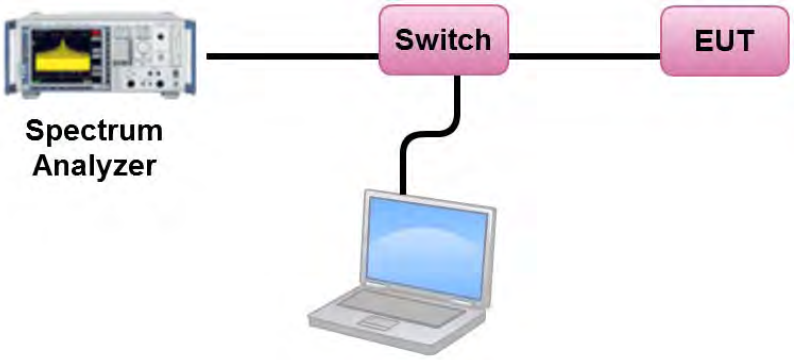
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1000 kHz
VBW	3000 kHz
Detector	RMS
Trace	AVERAGE
Sweep Time	Auto
Trace Average	100 times

4.5.3. Test Procedures

1. The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
2. Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (F) Maximum Power Spectral Density (PSD).
3. Multiple antenna systems was performed in accordance KDB662911 D01 v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs.
4. When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3 and so on up to the Nth output to obtain the value for the first frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.

4.5.4. Test Setup Layout



4.5.5. Test Deviation

There is no deviation with the original standard.

4.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.5.7. Test Result of Power Spectral Density

<For Non-Beamforming Mode>

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)		

For Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	6.91	9.70	Complies
	5300 MHz	6.76	9.70	Complies
	5320 MHz	5.44	9.70	Complies
	5500 MHz	4.94	9.70	Complies
	5580 MHz	7.38	9.70	Complies
	5700 MHz	4.92	9.70	Complies
	5720 MHz	6.92	9.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	4.16	9.70	Complies
	5310 MHz	0.10	9.70	Complies
	5510 MHz	0.13	9.70	Complies
	5550 MHz	3.72	9.70	Complies
	5670 MHz	1.66	9.70	Complies
	5710 MHz	4.14	9.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-7.63	9.70	Complies
	5530 MHz	-6.04	9.70	Complies
	5610 MHz	-1.96	9.70	Complies
	5690 MHz	0.82	9.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =11-(7.30-6)=9.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	6.55	6.69	Complies
	5300 MHz	6.65	6.69	Complies
	5320 MHz	6.66	6.69	Complies
	5500 MHz	6.67	6.69	Complies
	5580 MHz	6.61	6.69	Complies
	5700 MHz	4.64	6.69	Complies
	5720 MHz	6.60	6.69	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	5.56	6.69	Complies
	5310 MHz	1.85	6.69	Complies
	5510 MHz	2.42	6.69	Complies
	5550 MHz	5.54	6.69	Complies
	5670 MHz	3.86	6.69	Complies
	5710 MHz	6.65	6.69	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-3.71	6.69	Complies
	5530 MHz	-3.86	6.69	Complies
	5610 MHz	0.39	6.69	Complies
	5690 MHz	3.30	6.69	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.31dBi >6dBi,So Band 2~3 Limit =11-(10.31-6)=6.69dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	4.91	4.93	Complies
	5300 MHz	4.82	4.93	Complies
	5320 MHz	4.90	4.93	Complies
	5500 MHz	4.85	4.93	Complies
	5580 MHz	4.69	4.93	Complies
	5700 MHz	4.85	4.93	Complies
	5720 MHz	4.83	4.93	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	4.71	4.93	Complies
	5310 MHz	0.05	4.93	Complies
	5510 MHz	1.14	4.93	Complies
	5550 MHz	4.15	4.93	Complies
	5670 MHz	4.70	4.93	Complies
	5710 MHz	4.79	4.93	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-5.85	4.93	Complies
	5530 MHz	-4.01	4.93	Complies
	5610 MHz	1.74	4.93	Complies
	5690 MHz	3.52	4.93	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{i=1}^{N_{ANT}} g_{j,i}\right\}^2}{N_{ANT}}\right]$ =12.07dBi >6dBi,So Band 2~3 Limit =11-(12.07-6)=4.93dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)		

For Chain 4

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	6.80	11.00	Complies
	5300 MHz	6.93	11.00	Complies
	5320 MHz	5.98	11.00	Complies
	5500 MHz	6.09	11.00	Complies
	5580 MHz	6.85	11.00	Complies
	5700 MHz	4.64	11.00	Complies
	5720 MHz	6.17	11.00	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	3.84	11.00	Complies
	5310 MHz	0.86	11.00	Complies
	5510 MHz	1.45	11.00	Complies
	5550 MHz	4.76	11.00	Complies
	5670 MHz	2.61	11.00	Complies
	5710 MHz	4.04	11.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-3.06	11.00	Complies
	5530 MHz	-2.56	11.00	Complies
	5610 MHz	-0.13	11.00	Complies
	5690 MHz	0.93	11.00	Complies

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	8.66	8.89	Complies
	5300 MHz	8.37	8.89	Complies
	5320 MHz	8.06	8.89	Complies
	5500 MHz	7.37	8.89	Complies
	5580 MHz	8.78	8.89	Complies
	5700 MHz	7.05	8.89	Complies
	5720 MHz	8.66	8.89	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	7.06	8.89	Complies
	5310 MHz	2.03	8.89	Complies
	5510 MHz	1.95	8.89	Complies
	5550 MHz	7.21	8.89	Complies
	5670 MHz	4.65	8.89	Complies
	5710 MHz	7.61	8.89	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-3.91	8.89	Complies
	5530 MHz	-3.66	8.89	Complies
	5610 MHz	1.09	8.89	Complies
	5690 MHz	3.32	8.89	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.11dBi >6dBi,So Band 2~3 Limit =11-(8.11-6)=8.89dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	7.05	7.13	Complies
	5300 MHz	6.95	7.13	Complies
	5320 MHz	6.75	7.13	Complies
	5500 MHz	6.84	7.13	Complies
	5580 MHz	6.86	7.13	Complies
	5700 MHz	6.80	7.13	Complies
	5720 MHz	7.04	7.13	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	6.55	7.13	Complies
	5310 MHz	6.01	7.13	Complies
	5510 MHz	2.54	7.13	Complies
	5550 MHz	6.93	7.13	Complies
	5670 MHz	4.97	7.13	Complies
	5710 MHz	7.08	7.13	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-4.45	7.13	Complies
	5530 MHz	-3.61	7.13	Complies
	5610 MHz	1.11	7.13	Complies
	5690 MHz	3.32	7.13	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.87dBi >6dBi,So Band 2~3 Limit =11-(9.87-6)=7.13dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)		

For Chain 4

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	6.80	8.70	Complies
	5300 MHz	6.93	8.70	Complies
	5320 MHz	5.72	8.70	Complies
	5500 MHz	5.41	8.70	Complies
	5580 MHz	6.85	8.70	Complies
	5700 MHz	3.68	8.70	Complies
	5720 MHz	6.17	8.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	3.84	8.70	Complies
	5310 MHz	-0.53	8.70	Complies
	5510 MHz	-0.59	8.70	Complies
	5550 MHz	4.40	8.70	Complies
	5670 MHz	1.45	8.70	Complies
	5710 MHz	4.04	8.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-5.70	8.70	Complies
	5530 MHz	-5.73	8.70	Complies
	5610 MHz	-1.41	8.70	Complies
	5690 MHz	-0.09	8.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =11-(8.30-6)=8.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	8.40	8.70	Complies
	5300 MHz	8.66	8.70	Complies
	5320 MHz	8.67	8.70	Complies
	5500 MHz	8.33	8.70	Complies
	5580 MHz	8.38	8.70	Complies
	5700 MHz	6.79	8.70	Complies
	5720 MHz	8.31	8.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	5.63	8.70	Complies
	5310 MHz	2.85	8.70	Complies
	5510 MHz	2.18	8.70	Complies
	5550 MHz	5.73	8.70	Complies
	5670 MHz	4.31	8.70	Complies
	5710 MHz	5.43	8.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-2.50	8.70	Complies
	5530 MHz	-2.37	8.70	Complies
	5610 MHz	0.85	8.70	Complies
	5690 MHz	1.96	8.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =11-(8.30-6)=8.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	7.55	7.64	Complies
	5300 MHz	7.52	7.64	Complies
	5320 MHz	7.45	7.64	Complies
	5500 MHz	7.60	7.64	Complies
	5580 MHz	7.62	7.64	Complies
	5700 MHz	6.21	7.64	Complies
	5720 MHz	7.43	7.64	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	5.86	7.64	Complies
	5310 MHz	2.27	7.64	Complies
	5510 MHz	2.30	7.64	Complies
	5550 MHz	5.93	7.64	Complies
	5670 MHz	5.24	7.64	Complies
	5710 MHz	5.64	7.64	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-4.13	7.64	Complies
	5530 MHz	-2.59	7.64	Complies
	5610 MHz	1.75	7.64	Complies
	5690 MHz	2.48	7.64	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{i=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{ANT}} g_{i,k}\right\}^2}{N_{ANT}}\right]$ =9.36dBi >6dBi,So Band 2~3 Limit =11-(9.36-6)=7.64dBm/MHz

<For Beamforming Mode>

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	5.01	6.69	Complies
	5300 MHz	4.11	6.69	Complies
	5320 MHz	3.84	6.69	Complies
	5500 MHz	6.43	6.69	Complies
	5580 MHz	6.35	6.69	Complies
	5700 MHz	2.66	6.69	Complies
	5720 MHz	5.83	6.69	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	2.73	6.69	Complies
	5310 MHz	-1.00	6.69	Complies
	5510 MHz	0.12	6.69	Complies
	5550 MHz	2.84	6.69	Complies
	5670 MHz	2.98	6.69	Complies
	5710 MHz	2.87	6.69	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-6.30	6.69	Complies
	5530 MHz	-5.12	6.69	Complies
	5610 MHz	-0.28	6.69	Complies
	5690 MHz	0.15	6.69	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{SS}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.31dBi >6dBi,So Band 2~3 Limit =11-(10.31-6)=6.69dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	4.78	4.93	Complies
	5300 MHz	4.78	4.93	Complies
	5320 MHz	4.52	4.93	Complies
	5500 MHz	4.82	4.93	Complies
	5580 MHz	4.87	4.93	Complies
	5700 MHz	3.10	4.93	Complies
	5720 MHz	3.91	4.93	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	1.55	4.93	Complies
	5310 MHz	-0.37	4.93	Complies
	5510 MHz	0.63	4.93	Complies
	5550 MHz	1.55	4.93	Complies
	5670 MHz	1.40	4.93	Complies
	5710 MHz	1.17	4.93	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-6.01	4.93	Complies
	5530 MHz	-5.64	4.93	Complies
	5610 MHz	-1.93	4.93	Complies
	5690 MHz	-1.55	4.93	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =12.07dBi >6dBi,So Band 2~3 Limit =11-(12.07-6)=4.93dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	7.65	8.89	Complies
	5300 MHz	5.85	8.89	Complies
	5320 MHz	5.29	8.89	Complies
	5500 MHz	7.68	8.89	Complies
	5580 MHz	8.68	8.89	Complies
	5700 MHz	5.90	8.89	Complies
	5720 MHz	8.85	8.89	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	3.58	8.89	Complies
	5310 MHz	-1.36	8.89	Complies
	5510 MHz	0.87	8.89	Complies
	5550 MHz	4.86	8.89	Complies
	5670 MHz	3.09	8.89	Complies
	5710 MHz	5.76	8.89	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-4.76	8.89	Complies
	5530 MHz	-3.66	8.89	Complies
	5610 MHz	0.54	8.89	Complies
	5690 MHz	2.27	8.89	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.11dBi >6dBi,So Band 2~3 Limit =11-(8.11-6)=8.89dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	6.77	7.13	Complies
	5300 MHz	4.57	7.13	Complies
	5320 MHz	4.75	7.13	Complies
	5500 MHz	7.07	7.13	Complies
	5580 MHz	7.05	7.13	Complies
	5700 MHz	5.80	7.13	Complies
	5720 MHz	7.01	7.13	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	4.03	7.13	Complies
	5310 MHz	-0.32	7.13	Complies
	5510 MHz	1.07	7.13	Complies
	5550 MHz	3.81	7.13	Complies
	5670 MHz	3.75	7.13	Complies
	5710 MHz	4.01	7.13	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-5.59	7.13	Complies
	5530 MHz	-3.55	7.13	Complies
	5610 MHz	0.59	7.13	Complies
	5690 MHz	0.47	7.13	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{ANT}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =9.87dBi >6dBi,So Band 2~3 Limit =11-(9.87-6)=7.13dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss2 VHT20	5260 MHz	8.60	8.70	Complies
	5300 MHz	8.46	8.70	Complies
	5320 MHz	8.14	8.70	Complies
	5500 MHz	8.39	8.70	Complies
	5580 MHz	8.51	8.70	Complies
	5700 MHz	6.59	8.70	Complies
	5720 MHz	8.33	8.70	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	5.32	8.70	Complies
	5310 MHz	3.49	8.70	Complies
	5510 MHz	2.26	8.70	Complies
	5550 MHz	5.67	8.70	Complies
	5670 MHz	3.92	8.70	Complies
	5710 MHz	5.51	8.70	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	-1.01	8.70	Complies
	5530 MHz	-2.42	8.70	Complies
	5610 MHz	1.77	8.70	Complies
	5690 MHz	2.50	8.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =11-(8.30-6)=8.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss2 VHT20	5260 MHz	7.44	7.64	Complies
	5300 MHz	7.49	7.64	Complies
	5320 MHz	7.57	7.64	Complies
	5500 MHz	7.39	7.64	Complies
	5580 MHz	7.33	7.64	Complies
	5700 MHz	5.76	7.64	Complies
	5720 MHz	7.32	7.64	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	4.73	7.64	Complies
	5310 MHz	3.33	7.64	Complies
	5510 MHz	2.74	7.64	Complies
	5550 MHz	4.84	7.64	Complies
	5670 MHz	4.35	7.64	Complies
	5710 MHz	4.24	7.64	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	-2.27	7.64	Complies
	5530 MHz	-2.23	7.64	Complies
	5610 MHz	1.31	7.64	Complies
	5690 MHz	1.11	7.64	Complies

Note: $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{k=1}^{N_{ANT}}\left\{\sum_{i=1}^{N_{ANT}} g_{i,k}\right\}^2}{N_{ANT}}\right]$ =9.36dBi >6dBi,So Band 2~3 Limit =11-(9.36-6)=7.64dBm/MHz

<For STBC Mode>

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	9.24	9.70	Complies
	5300 MHz	8.80	9.70	Complies
	5320 MHz	8.24	9.70	Complies
	5500 MHz	8.17	9.70	Complies
	5580 MHz	9.01	9.70	Complies
	5700 MHz	7.21	9.70	Complies
	5720 MHz	8.63	9.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	5.37	9.70	Complies
	5310 MHz	2.53	9.70	Complies
	5510 MHz	2.27	9.70	Complies
	5550 MHz	5.99	9.70	Complies
	5670 MHz	3.70	9.70	Complies
	5710 MHz	5.97	9.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-3.91	9.70	Complies
	5530 MHz	-2.74	9.70	Complies
	5610 MHz	1.24	9.70	Complies
	5690 MHz	2.86	9.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =11-(7.30-6)=9.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	9.46	9.70	Complies
	5300 MHz	7.52	9.70	Complies
	5320 MHz	8.26	9.70	Complies
	5500 MHz	8.66	9.70	Complies
	5580 MHz	7.78	9.70	Complies
	5700 MHz	7.25	9.70	Complies
	5720 MHz	9.33	9.70	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	5.26	9.70	Complies
	5310 MHz	2.42	9.70	Complies
	5510 MHz	2.38	9.70	Complies
	5550 MHz	6.18	9.70	Complies
	5670 MHz	5.15	9.70	Complies
	5710 MHz	6.33	9.70	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-4.77	9.70	Complies
	5530 MHz	-3.32	9.70	Complies
	5610 MHz	1.55	9.70	Complies
	5690 MHz	3.22	9.70	Complies

Note: Antenna gain=7.30dBi >6dBi,So Band 2~3 Limit =11-(7.30-6)=9.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	10.87	11.00	Complies
	5300 MHz	10.09	11.00	Complies
	5320 MHz	7.89	11.00	Complies
	5500 MHz	7.68	11.00	Complies
	5580 MHz	10.85	11.00	Complies
	5700 MHz	7.32	11.00	Complies
	5720 MHz	10.49	11.00	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	7.11	11.00	Complies
	5310 MHz	1.95	11.00	Complies
	5510 MHz	2.80	11.00	Complies
	5550 MHz	7.16	11.00	Complies
	5670 MHz	4.53	11.00	Complies
	5710 MHz	7.69	11.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-2.92	11.00	Complies
	5530 MHz	-2.82	11.00	Complies
	5610 MHz	1.38	11.00	Complies
	5690 MHz	3.52	11.00	Complies

Note: Antenna gain=5.1dBi <6dBi, so the limit doesn't reduce.

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss1 VHT20	5260 MHz	10.57	11.00	Complies
	5300 MHz	9.83	11.00	Complies
	5320 MHz	9.35	11.00	Complies
	5500 MHz	8.82	11.00	Complies
	5580 MHz	10.92	11.00	Complies
	5700 MHz	8.16	11.00	Complies
	5720 MHz	10.56	11.00	Complies
802.11ac MCS0/Nss1 VHT40	5270 MHz	7.46	11.00	Complies
	5310 MHz	2.68	11.00	Complies
	5510 MHz	3.33	11.00	Complies
	5550 MHz	6.85	11.00	Complies
	5670 MHz	5.87	11.00	Complies
	5710 MHz	7.94	11.00	Complies
802.11ac MCS0/Nss1 VHT80	5290 MHz	-2.75	11.00	Complies
	5530 MHz	-2.44	11.00	Complies
	5610 MHz	2.42	11.00	Complies
	5690 MHz	4.16	11.00	Complies

Note: Antenna gain=5.1dBi <6dBi, so the limit doesn't reduce.

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

For Chain 4 + Chain 5

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss2 VHT20	5260 MHz	8.24	8.70	Complies
	5300 MHz	8.31	8.70	Complies
	5320 MHz	8.26	8.70	Complies
	5500 MHz	8.06	8.70	Complies
	5580 MHz	8.69	8.70	Complies
	5700 MHz	6.93	8.70	Complies
	5720 MHz	8.28	8.70	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	5.53	8.70	Complies
	5310 MHz	2.85	8.70	Complies
	5510 MHz	2.29	8.70	Complies
	5550 MHz	5.55	8.70	Complies
	5670 MHz	4.40	8.70	Complies
	5710 MHz	5.63	8.70	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	-2.26	8.70	Complies
	5530 MHz	-0.26	8.70	Complies
	5610 MHz	1.83	8.70	Complies
	5690 MHz	2.32	8.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =11-(8.30-6)=8.70dBm/MHz

Temperature	26°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 30, 2015~Mar. 20, 2015
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

For Chain 4 + Chain 5 + Chain 6

Mode	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
802.11ac MCS0/Nss2 VHT20	5260 MHz	8.60	8.70	Complies
	5300 MHz	8.49	8.70	Complies
	5320 MHz	8.41	8.70	Complies
	5500 MHz	7.37	8.70	Complies
	5580 MHz	8.68	8.70	Complies
	5700 MHz	6.42	8.70	Complies
	5720 MHz	8.54	8.70	Complies
802.11ac MCS0/Nss2 VHT40	5270 MHz	5.60	8.70	Complies
	5310 MHz	3.36	8.70	Complies
	5510 MHz	2.64	8.70	Complies
	5550 MHz	5.69	8.70	Complies
	5670 MHz	5.34	8.70	Complies
	5710 MHz	5.48	8.70	Complies
802.11ac MCS0/Nss2 VHT80	5290 MHz	-1.69	8.70	Complies
	5530 MHz	-1.59	8.70	Complies
	5610 MHz	2.03	8.70	Complies
	5690 MHz	2.08	8.70	Complies

Note: Antenna gain=8.30dBi >6dBi,So Band 2~3 Limit =11-(8.30-6)=8.70dBm/MHz

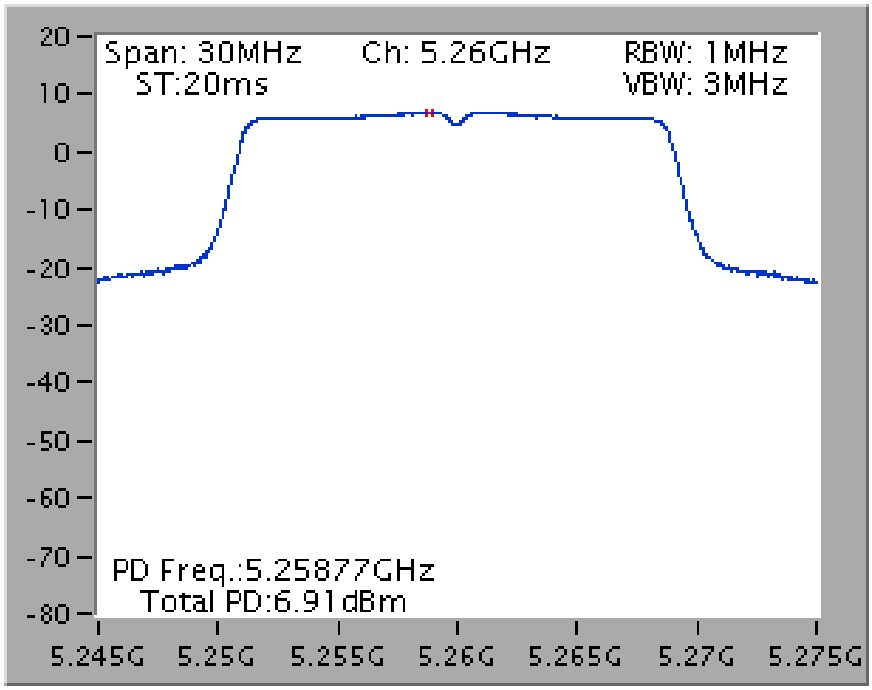
Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

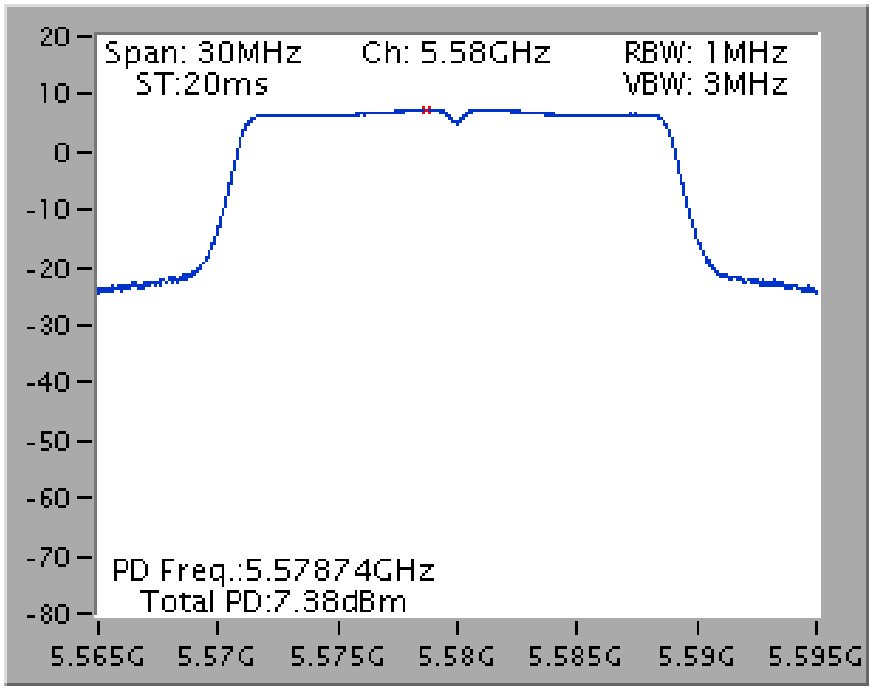
<For Non-Beamforming Mode>

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 1TX)

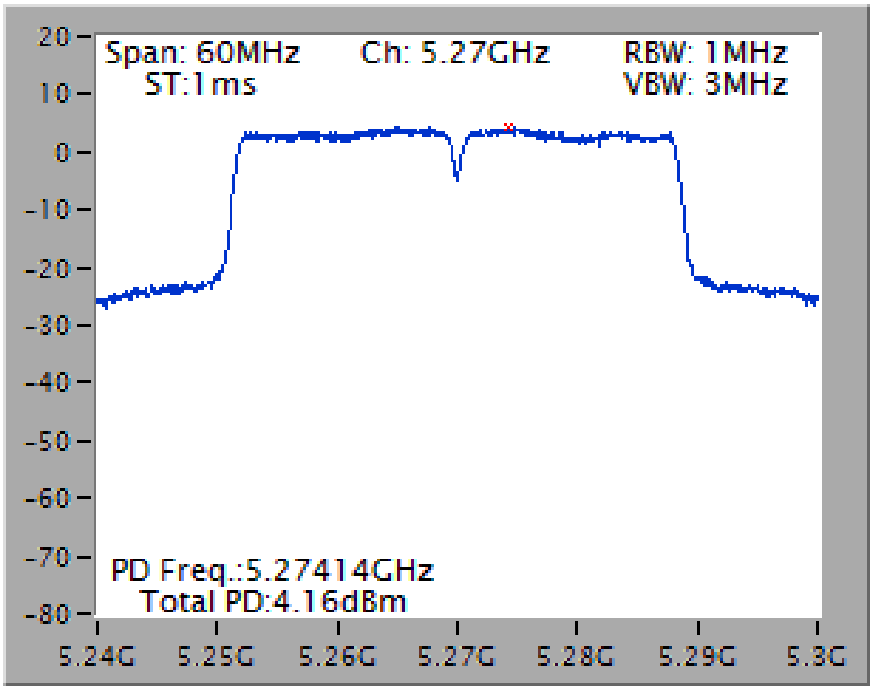
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5260 MHz



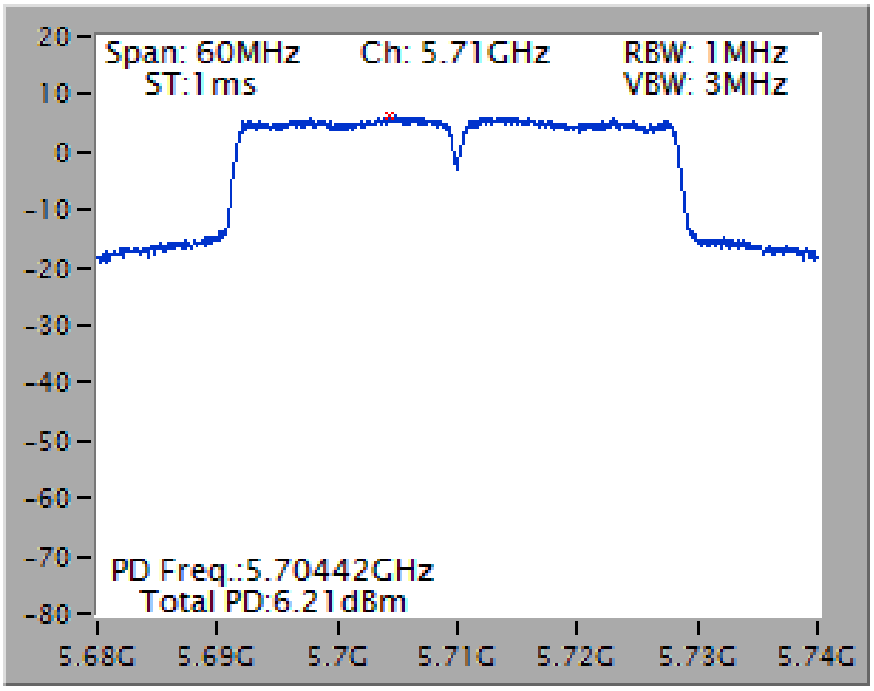
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5580 MHz



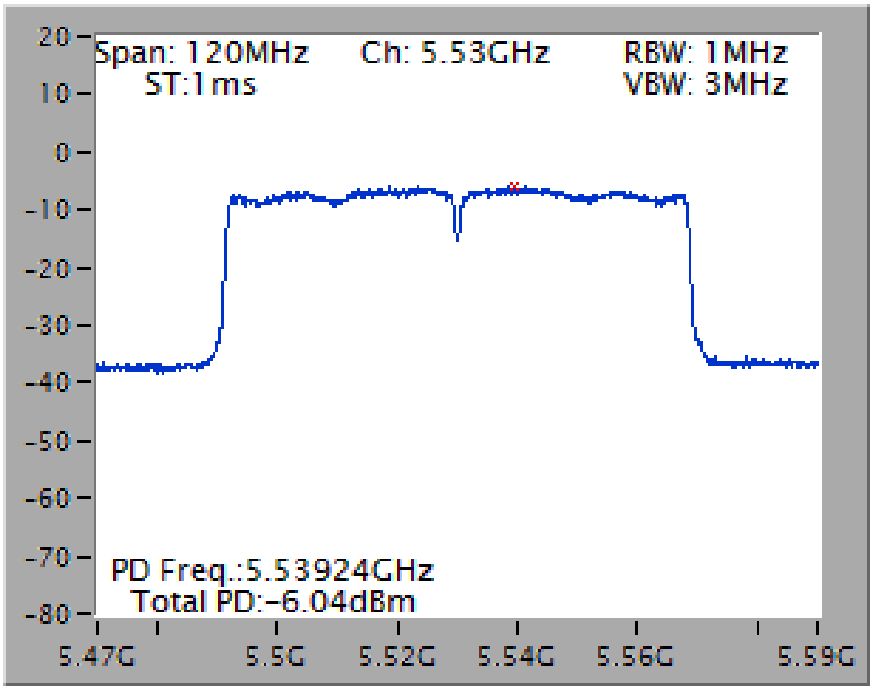
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5270 MHz



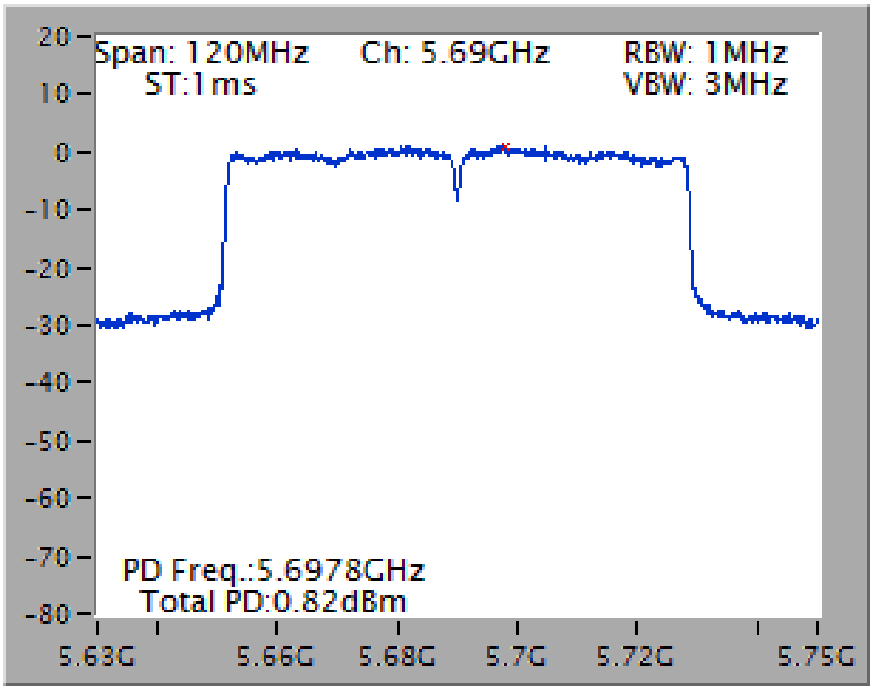
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5710 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5530 MHz

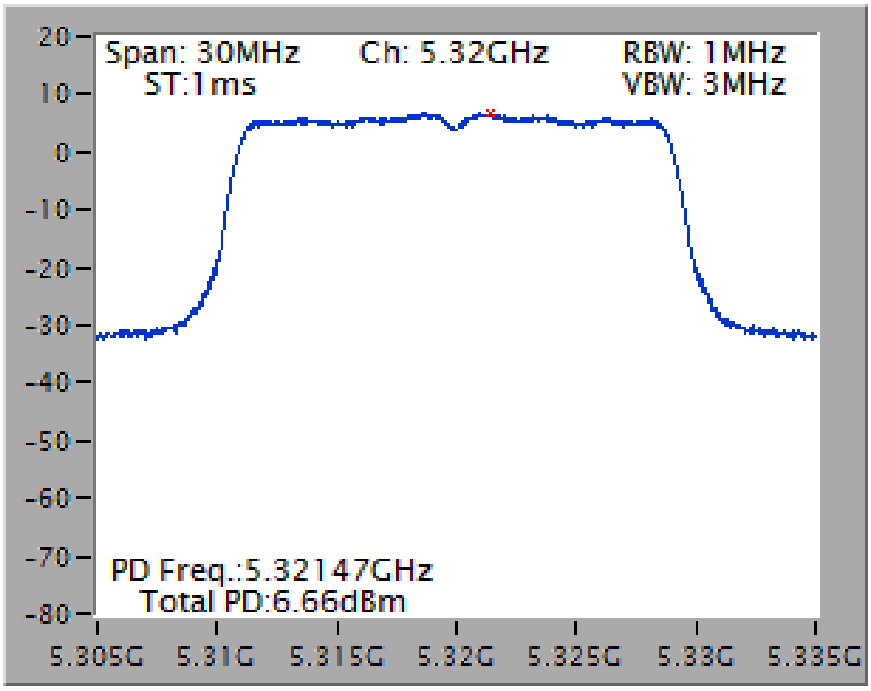


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5690 MHz

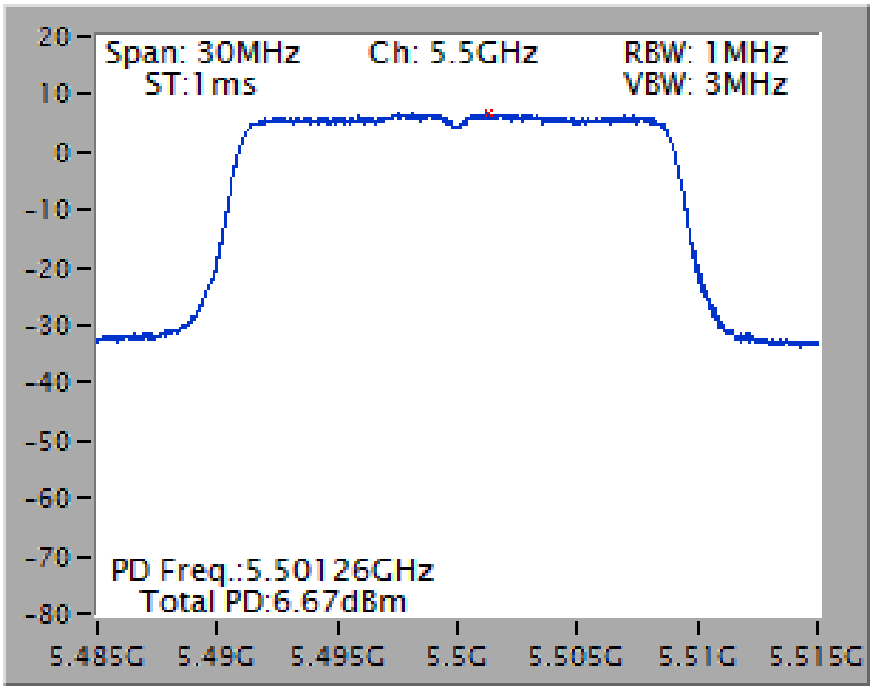


Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)

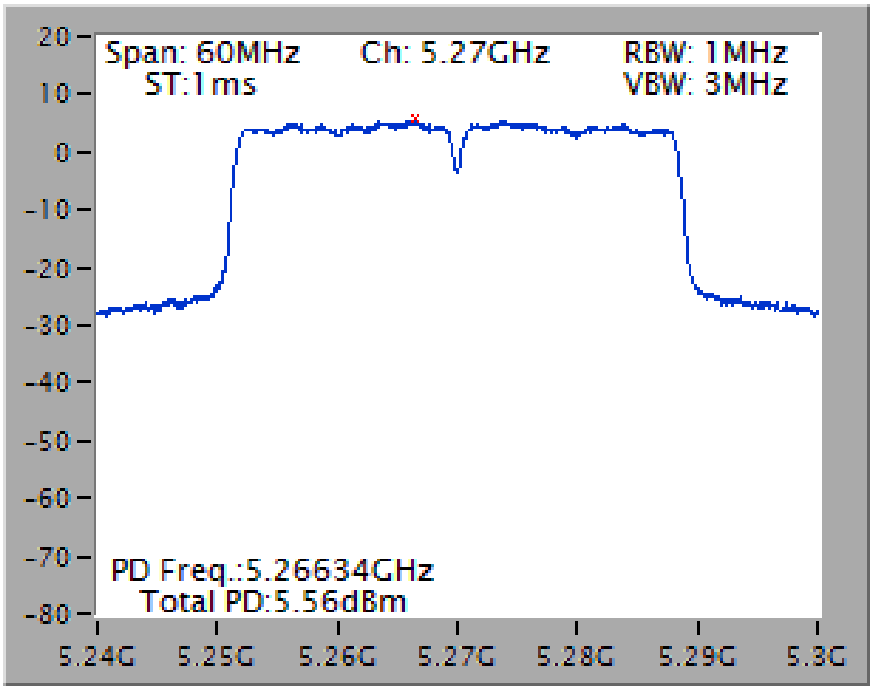
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5320 MHz



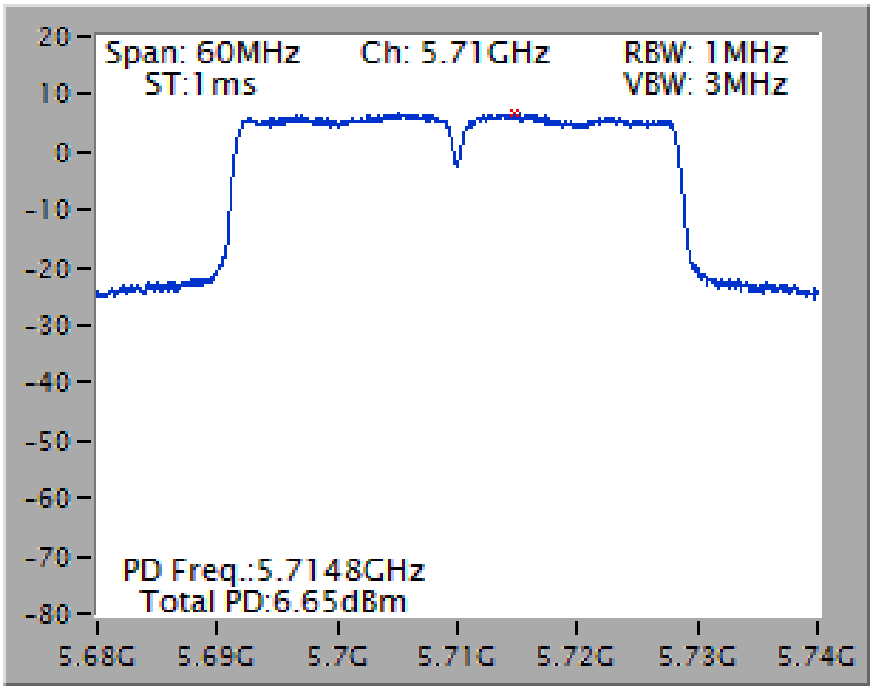
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5500 MHz



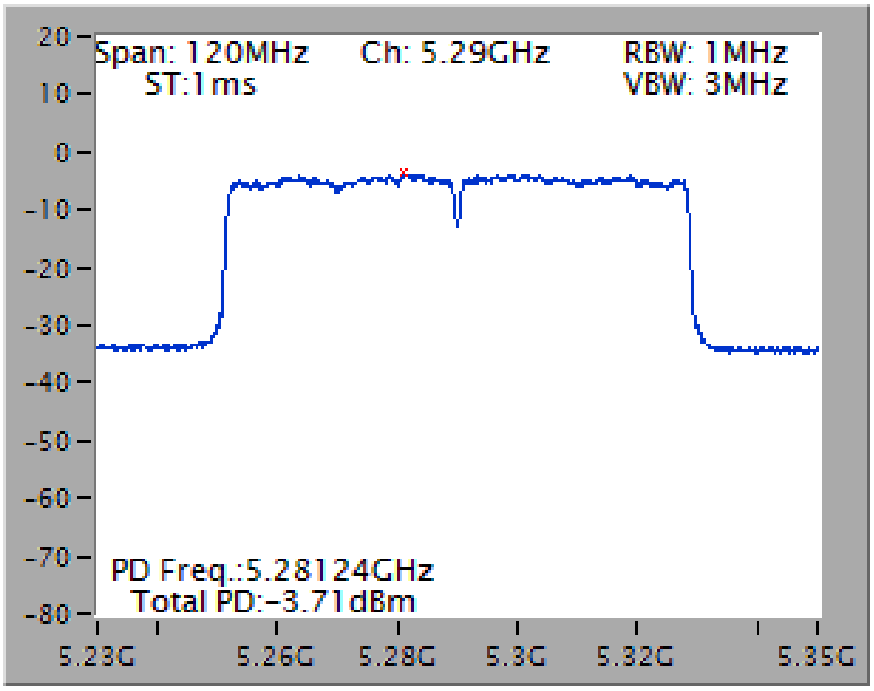
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5270 MHz



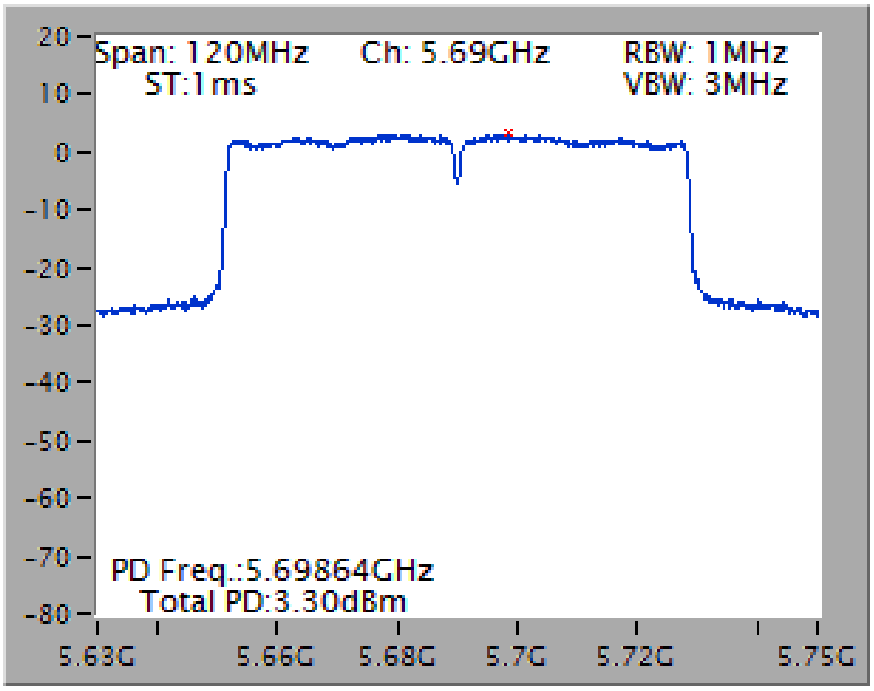
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5710 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5290 MHz

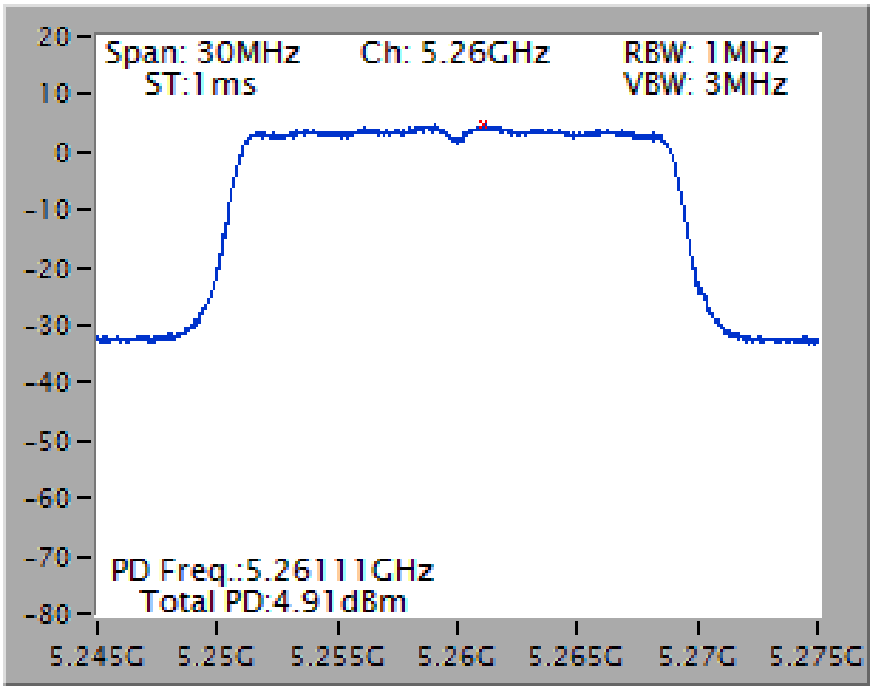


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5690 MHz

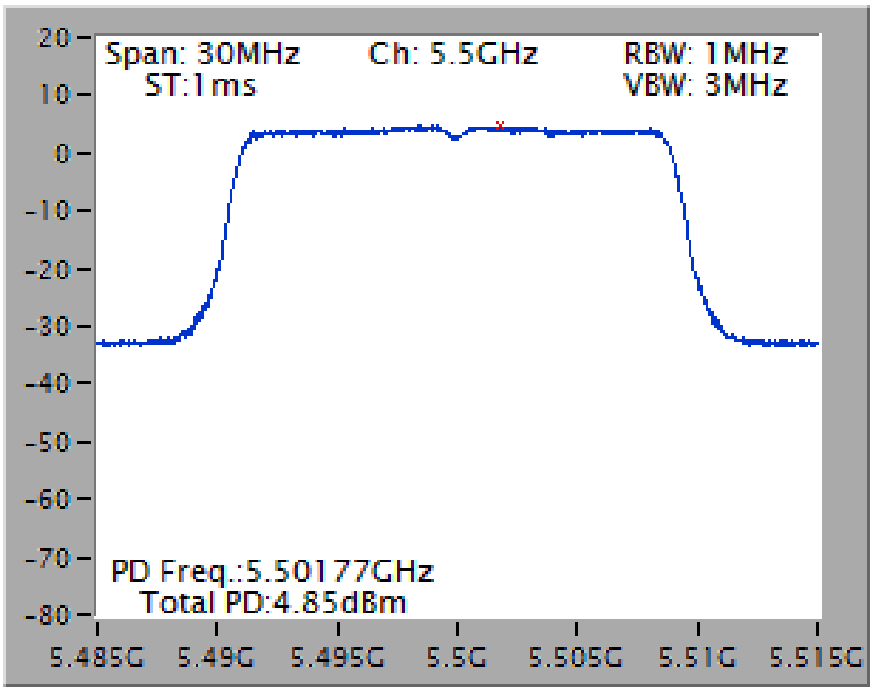


Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)

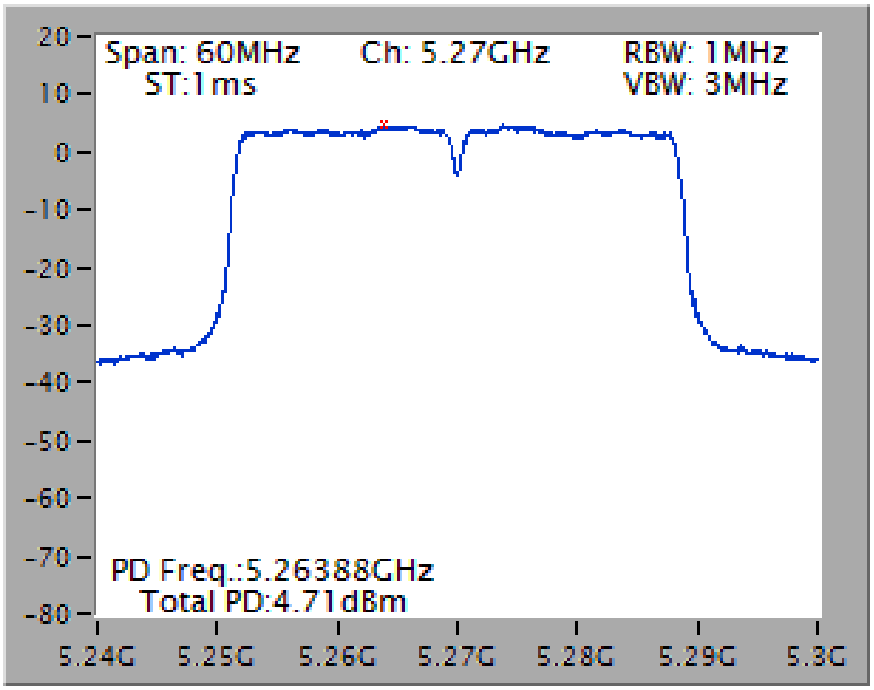
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



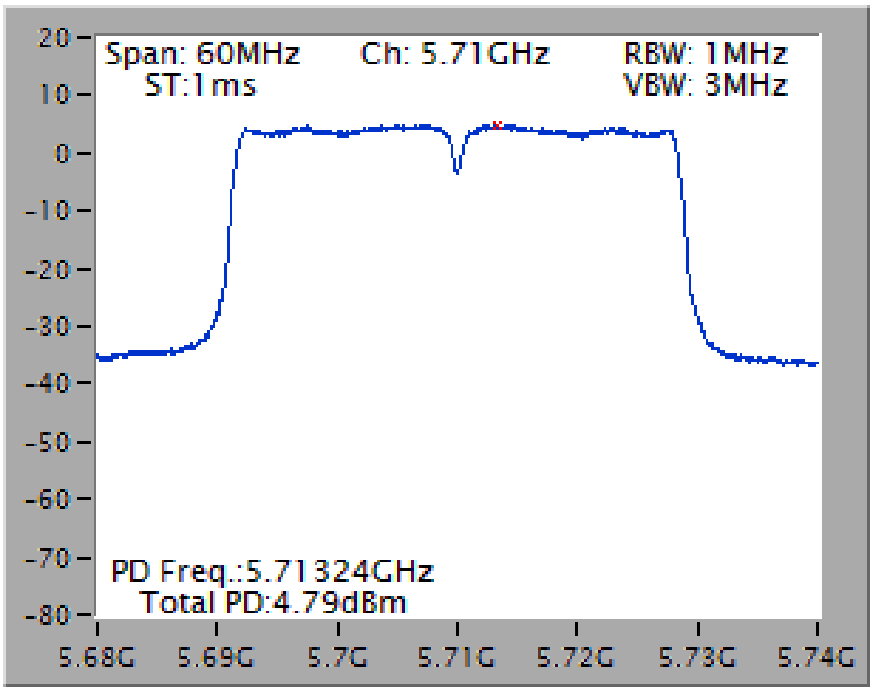
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5500 MHz



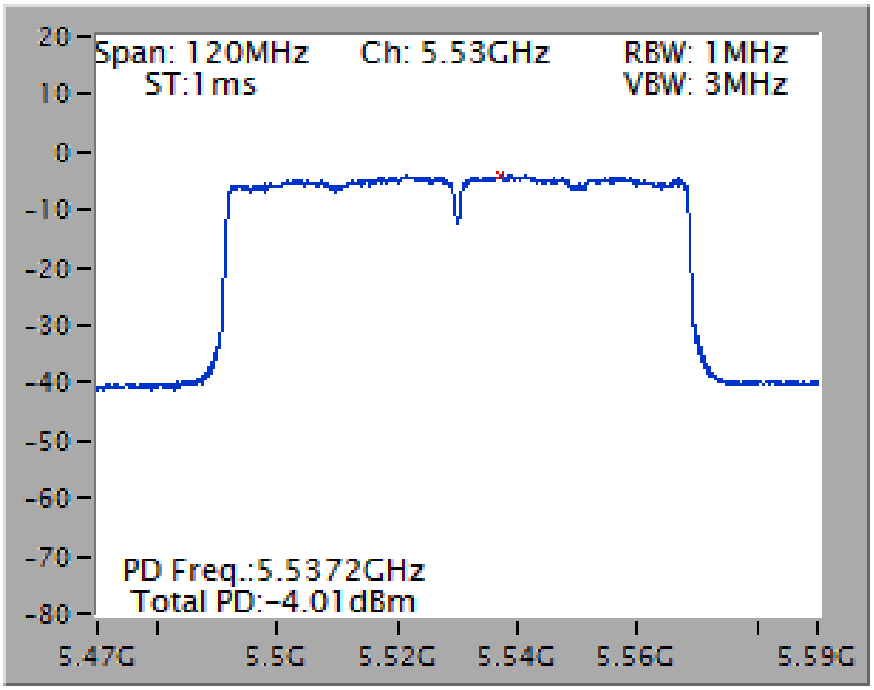
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5270 MHz



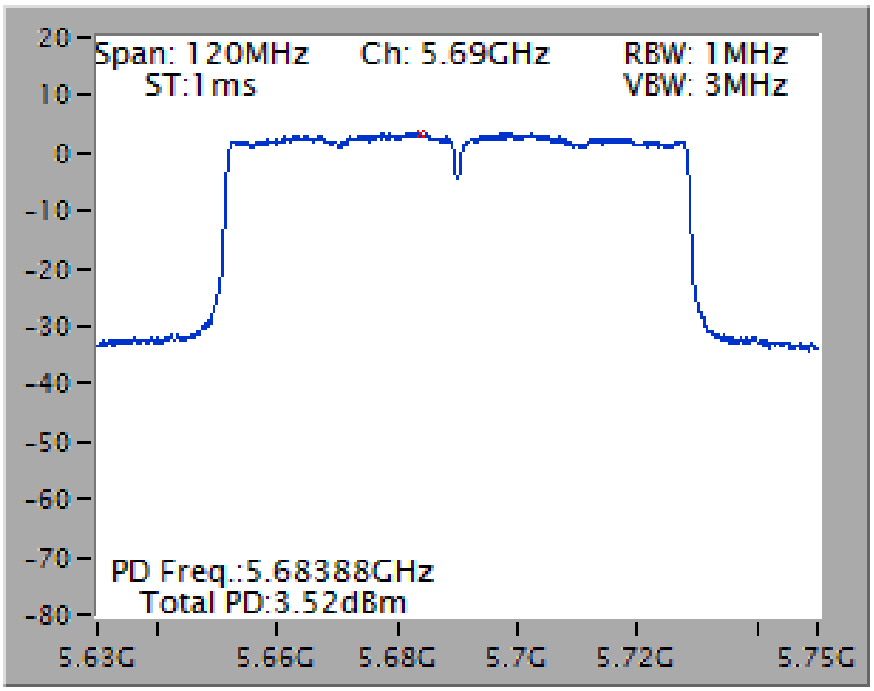
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5710 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5530 MHz

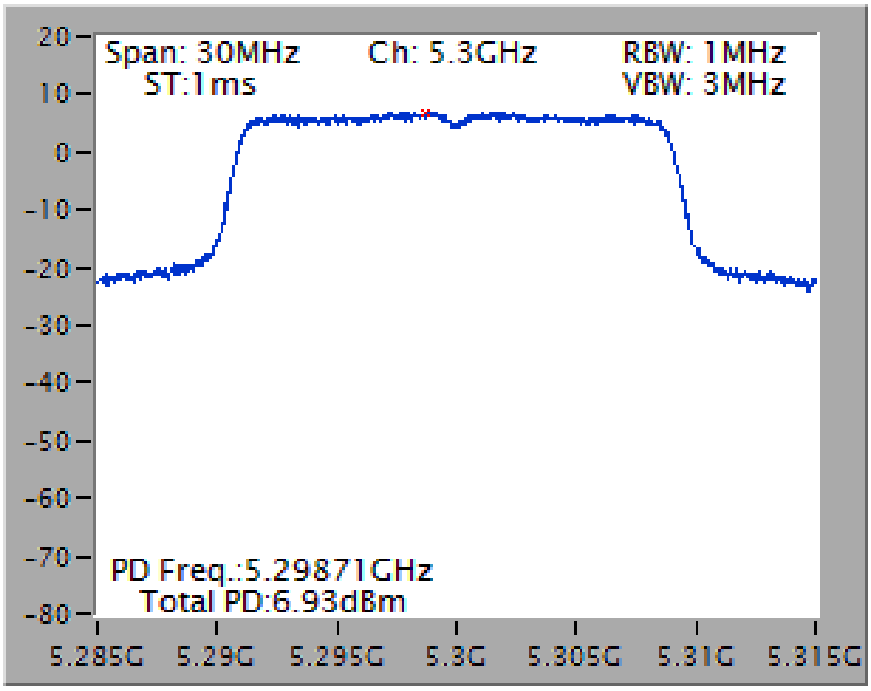


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5690 MHz

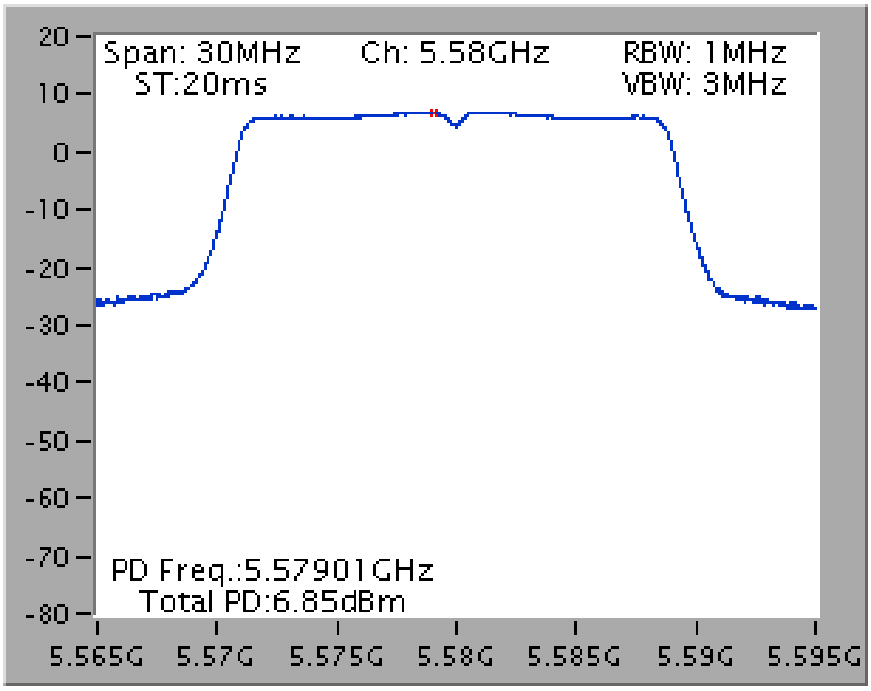


Mode 2: (Ant.8 Panel antenna / 5.1dBi / 1TX)

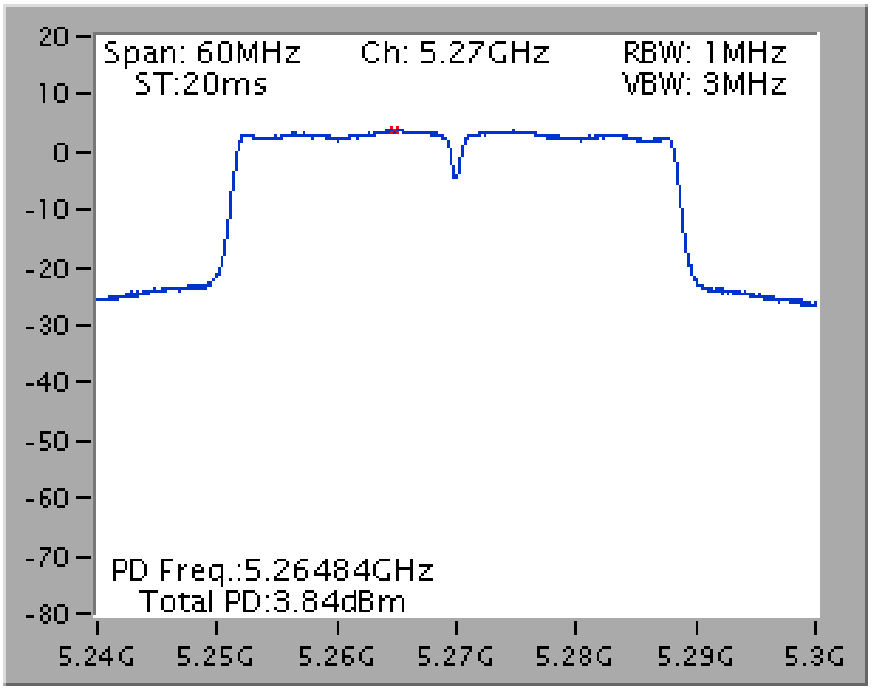
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 / 5300 MHz



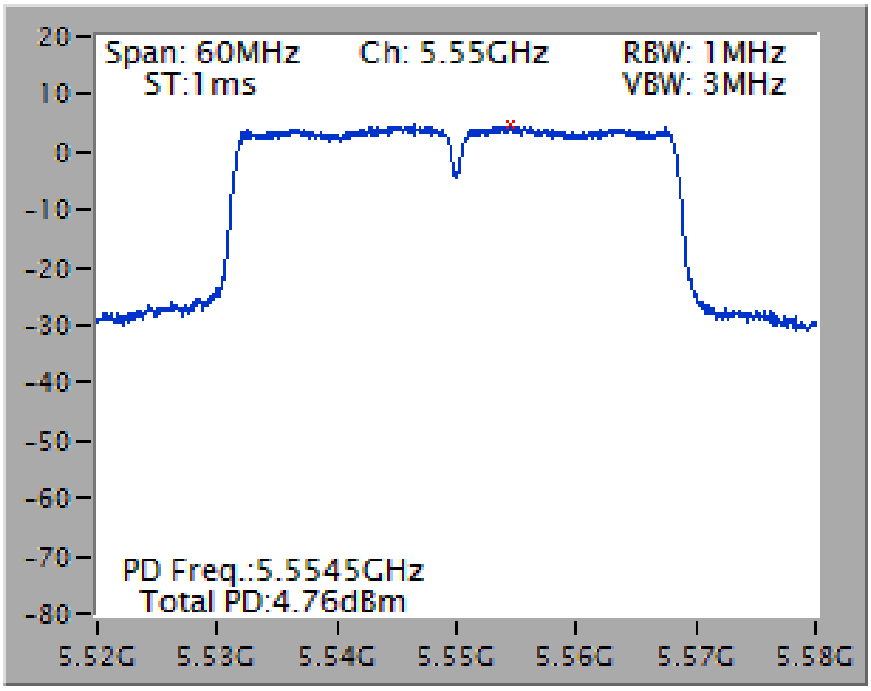
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 / 5580 MHz



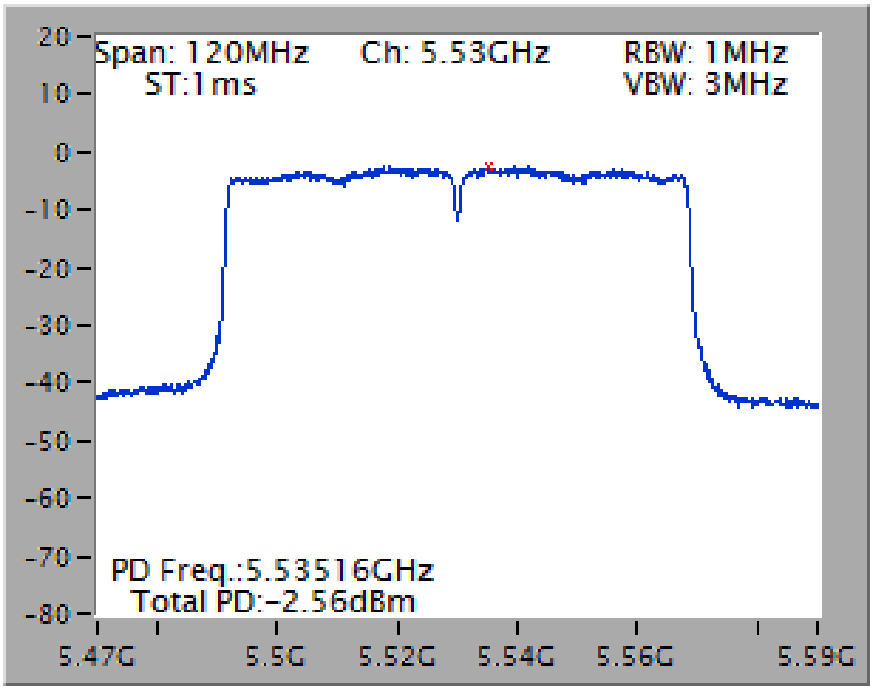
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5270 MHz



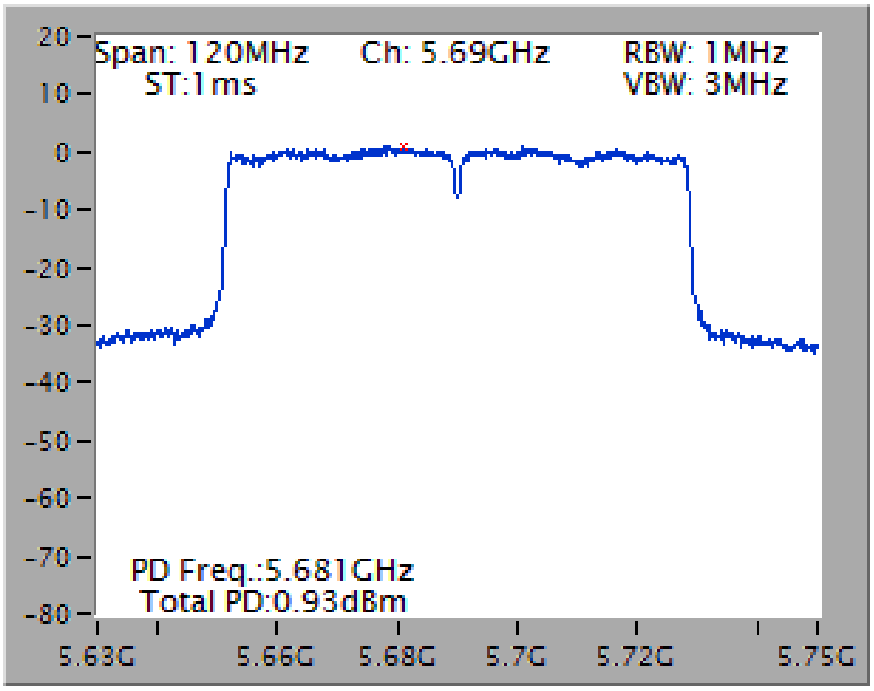
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5550 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 / 5530 MHz

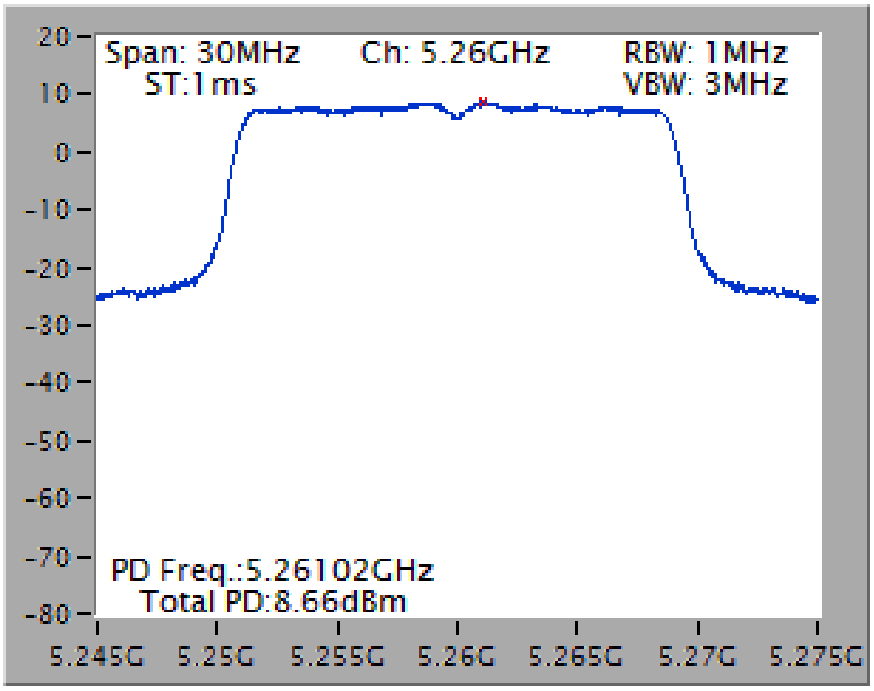


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 / 5690 MHz

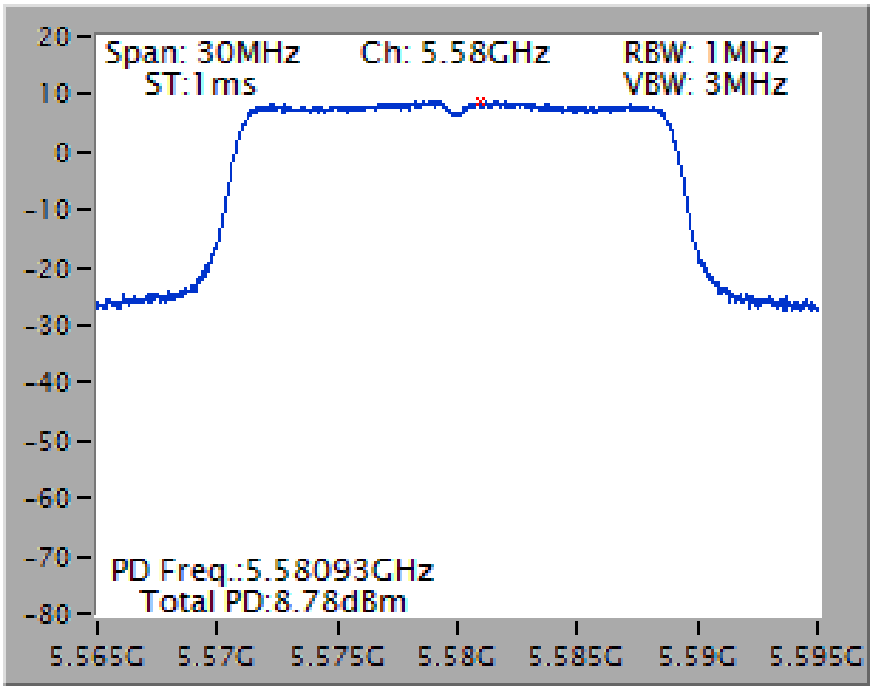


Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)

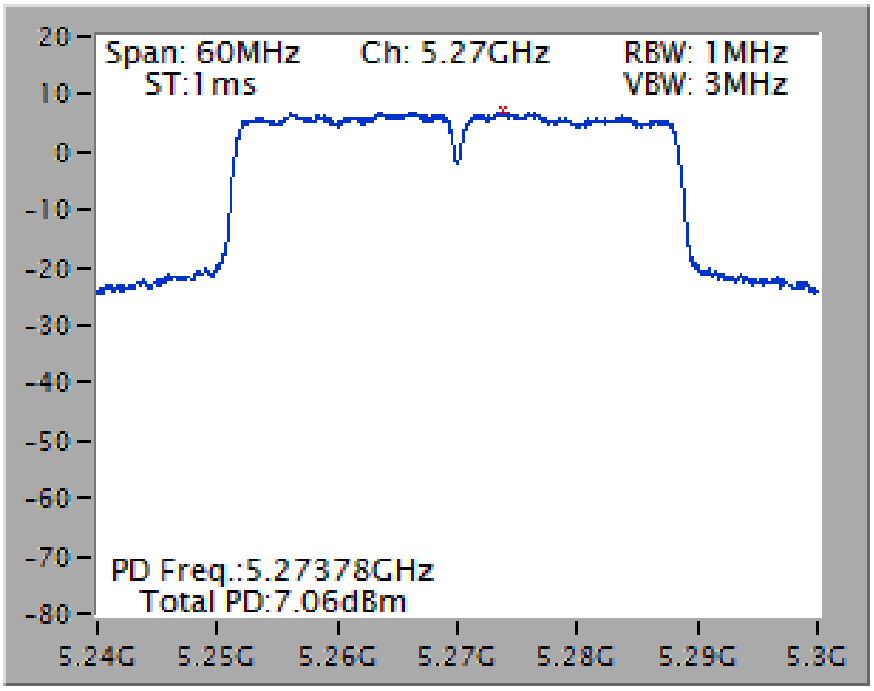
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5260 MHz



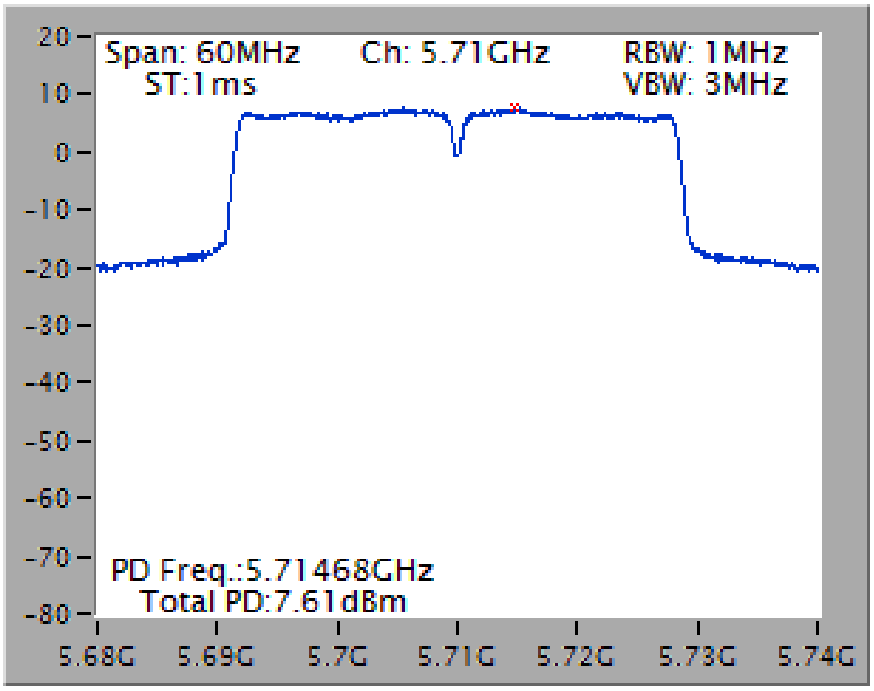
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5580 MHz



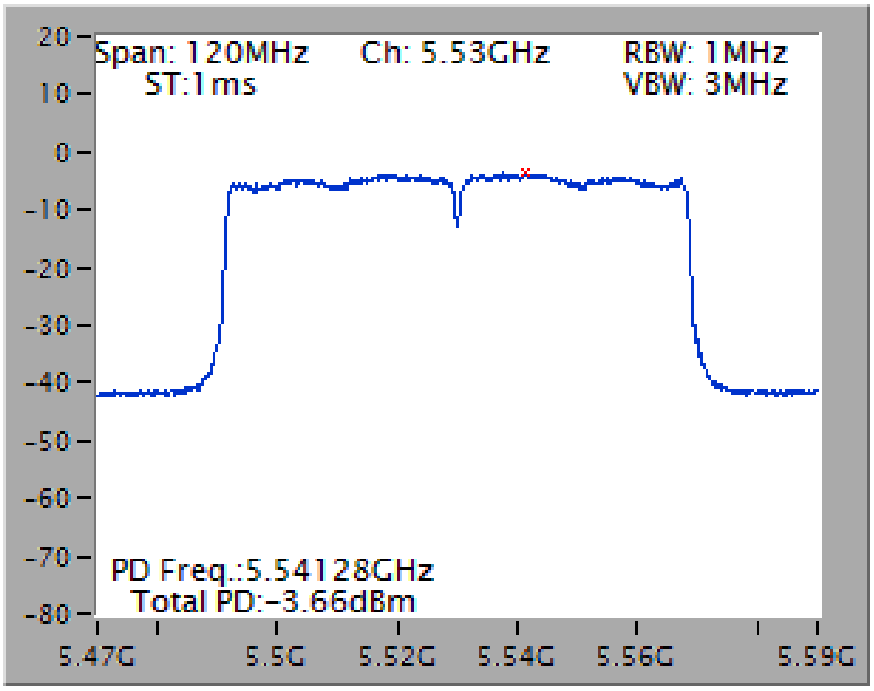
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5270 MHz



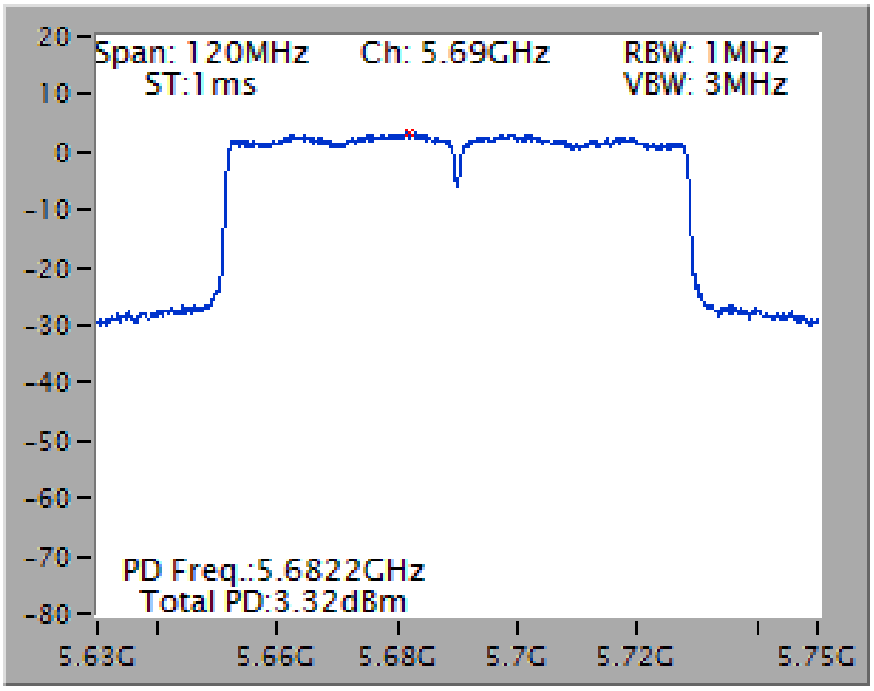
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5710 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5530 MHz

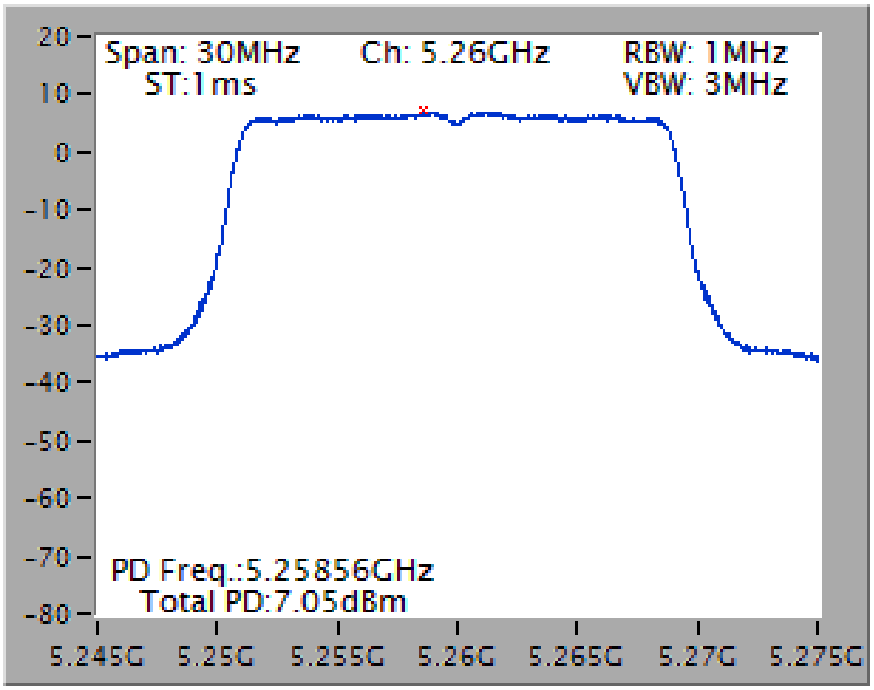


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5690 MHz

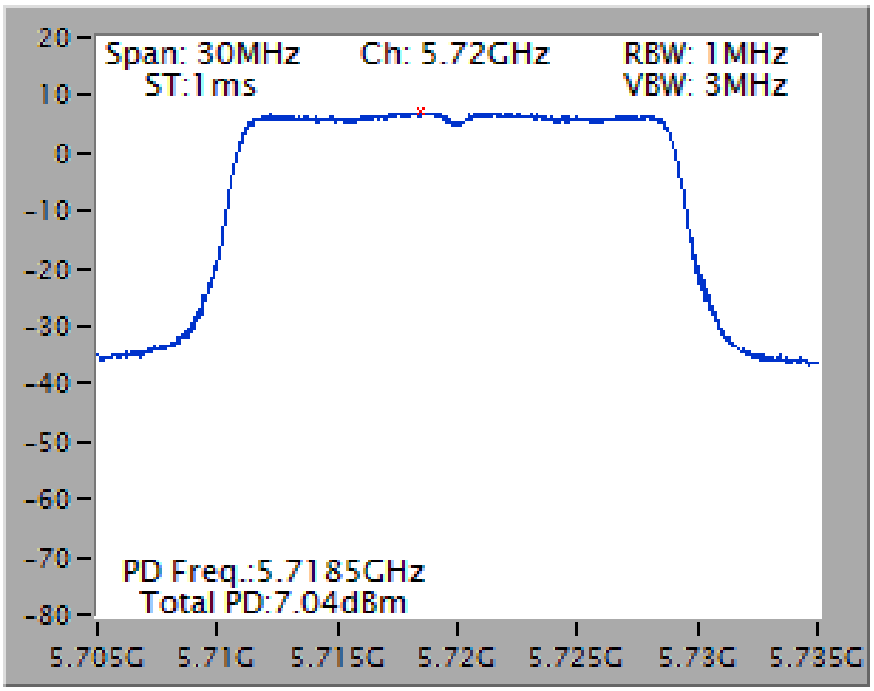


Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)

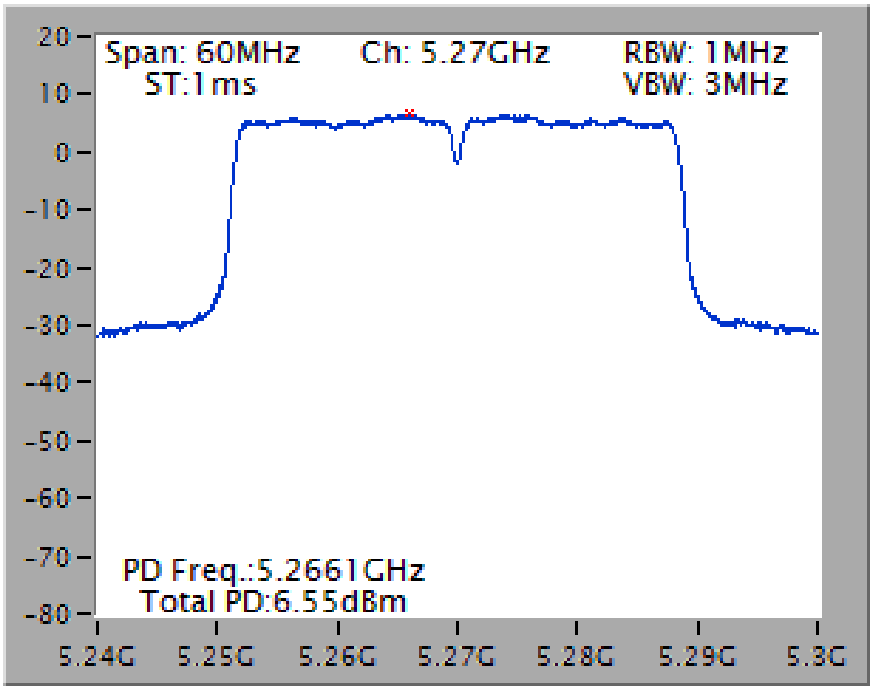
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



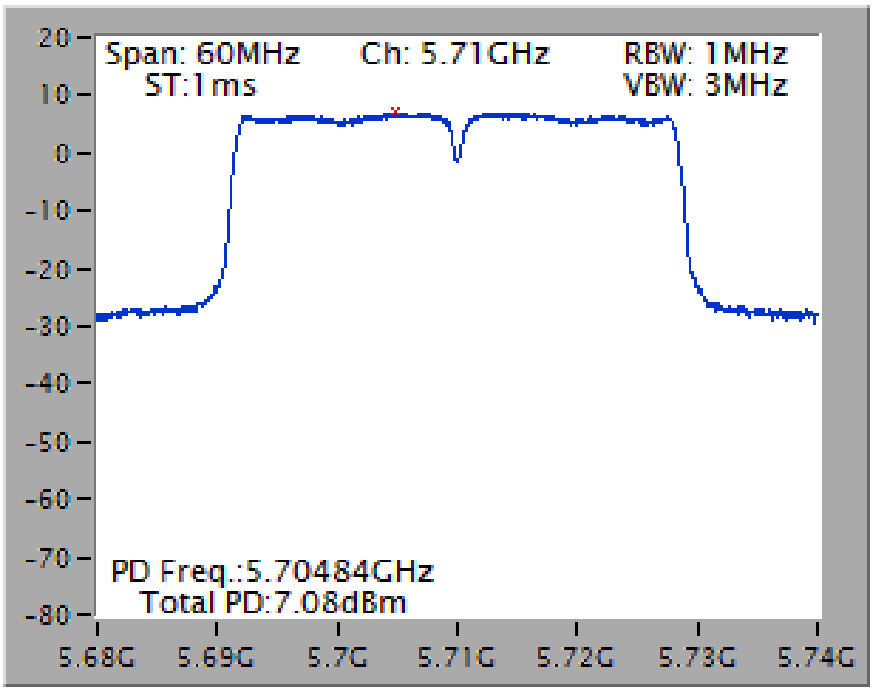
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5720 MHz



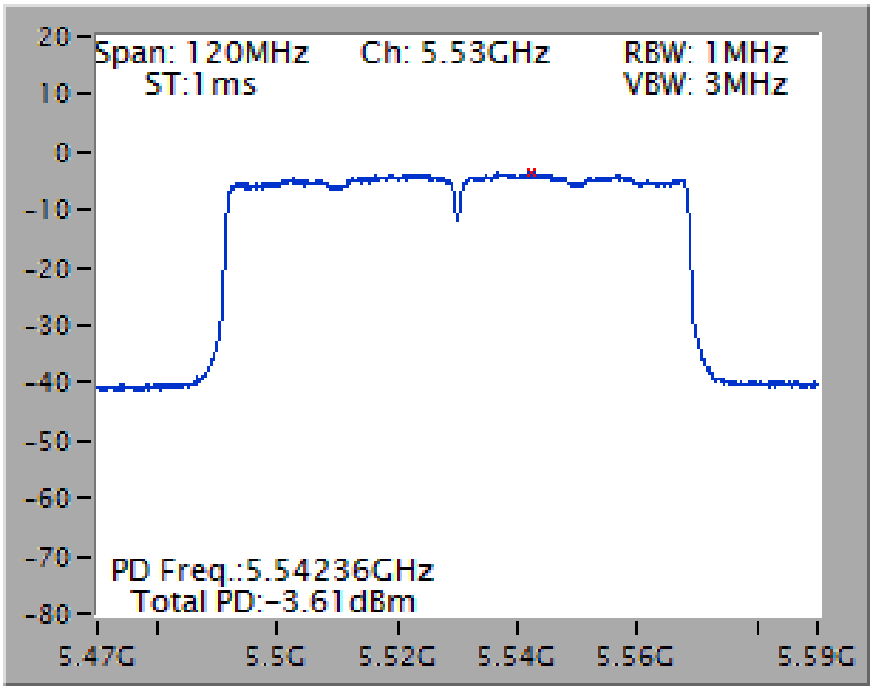
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5270 MHz



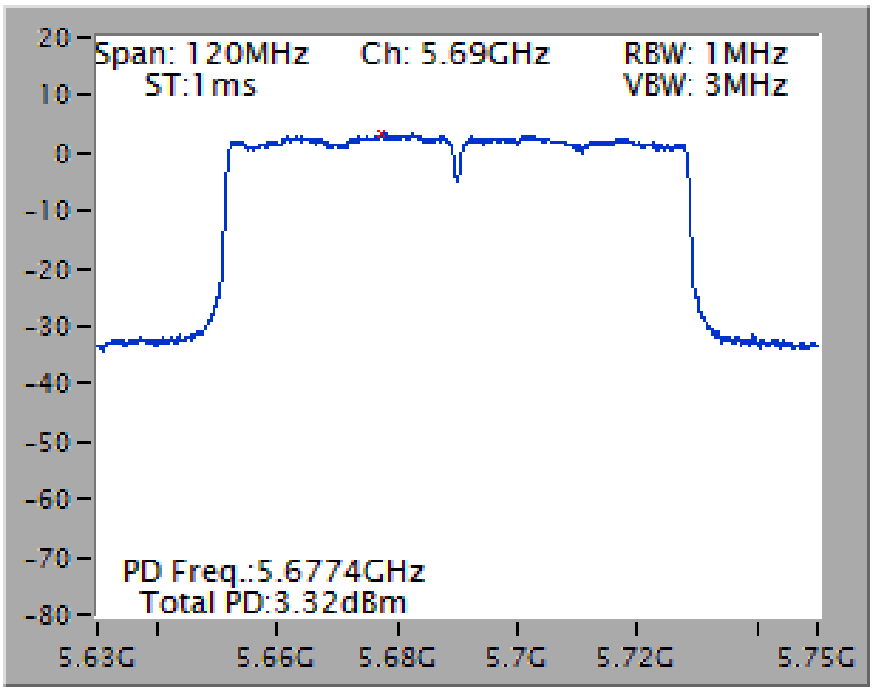
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5710 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5530 MHz

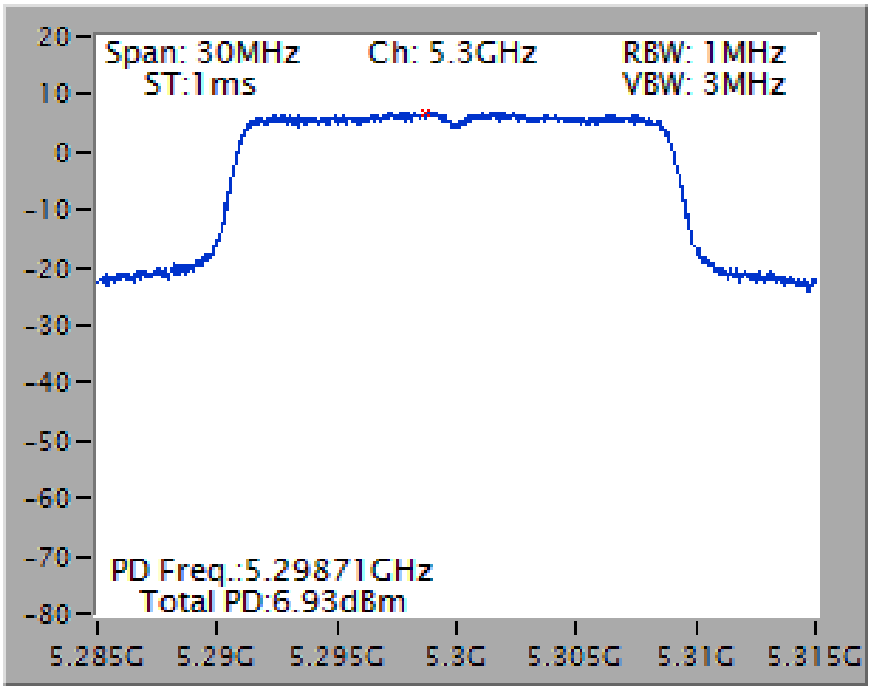


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5690 MHz

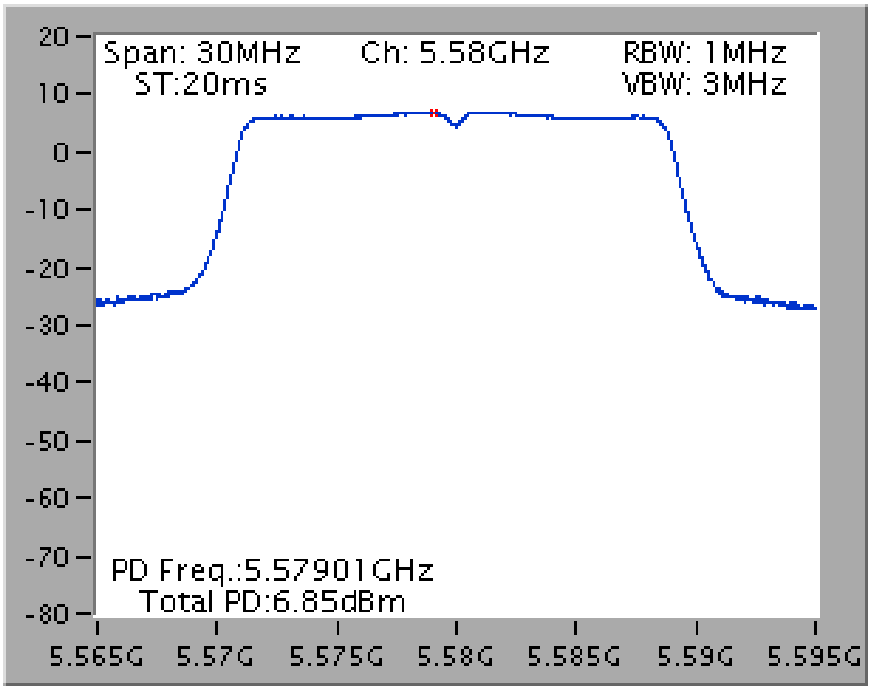


Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 1TX)

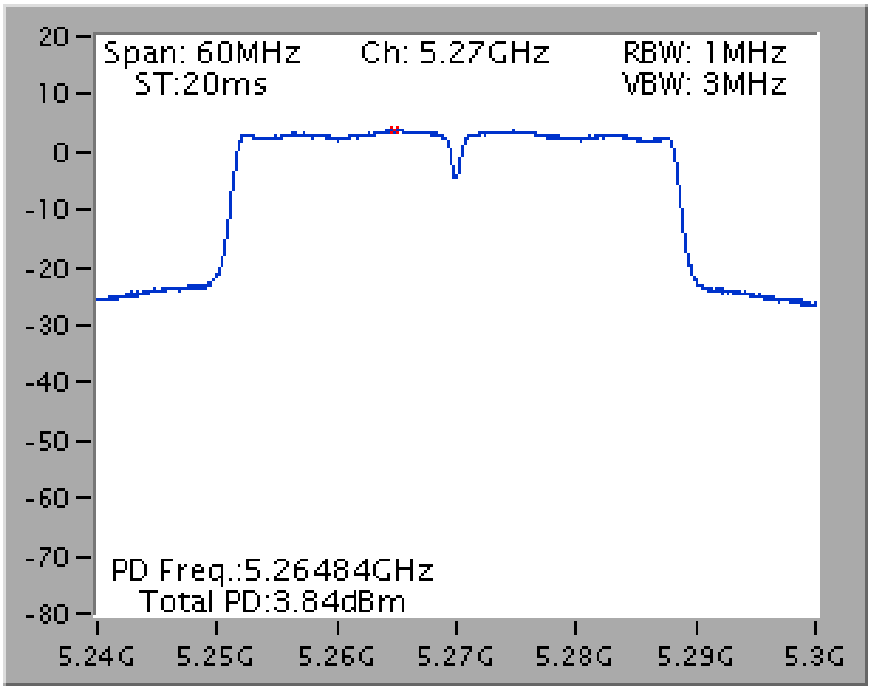
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 / 5300 MHz



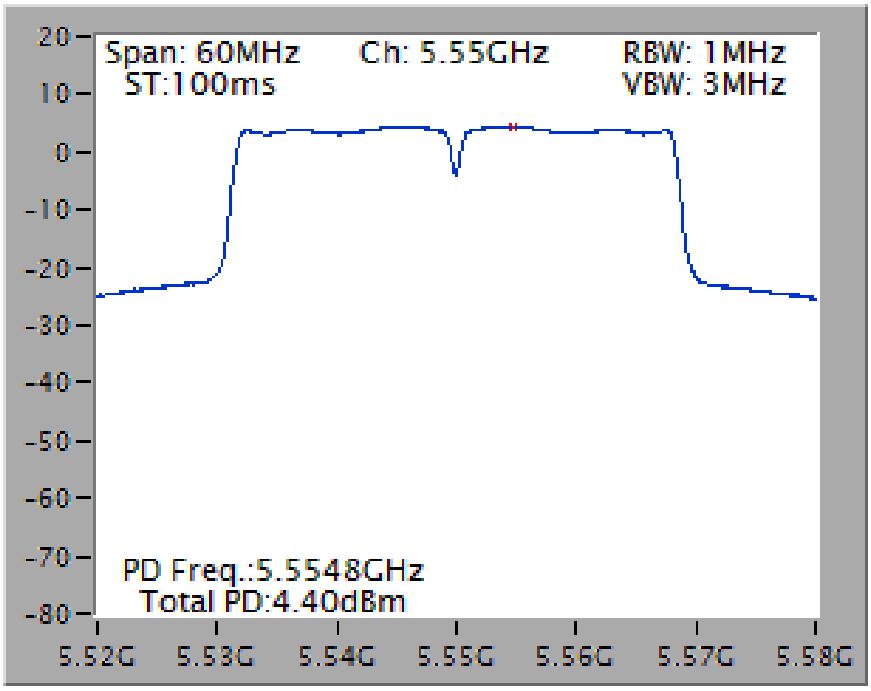
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 / 5580 MHz



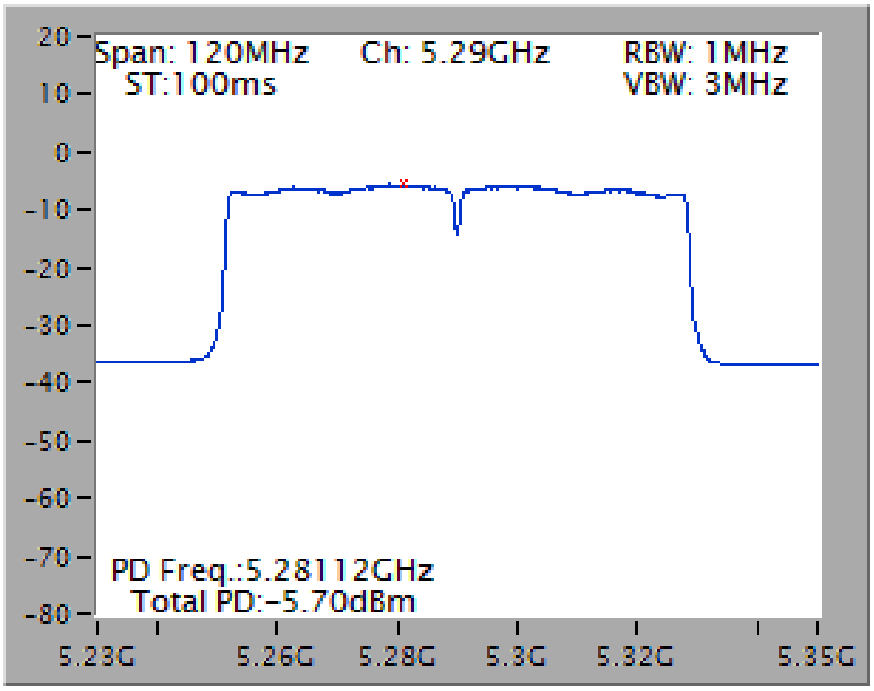
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5270 MHz



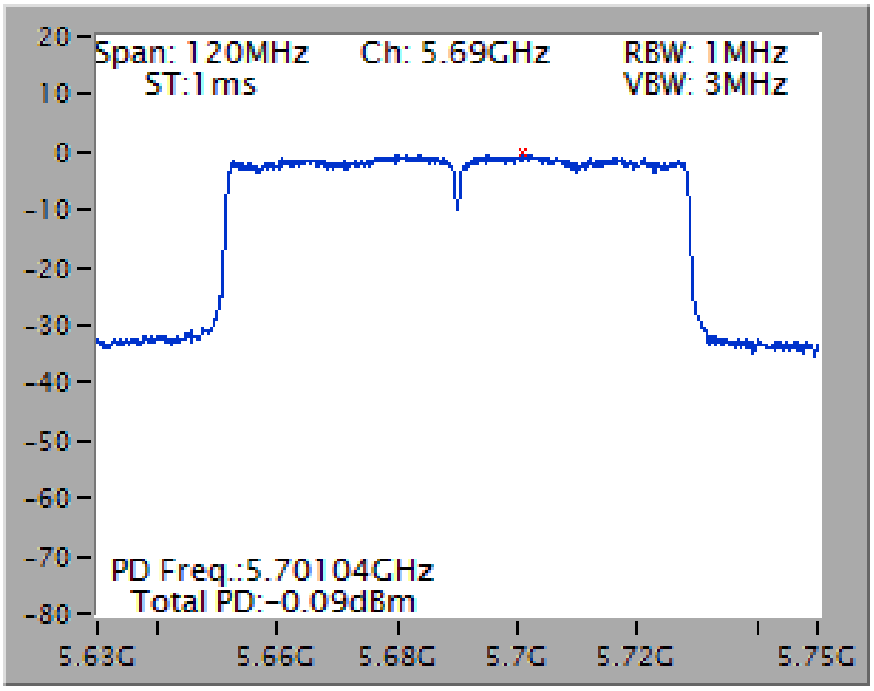
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 / 5550 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 / 5290 MHz

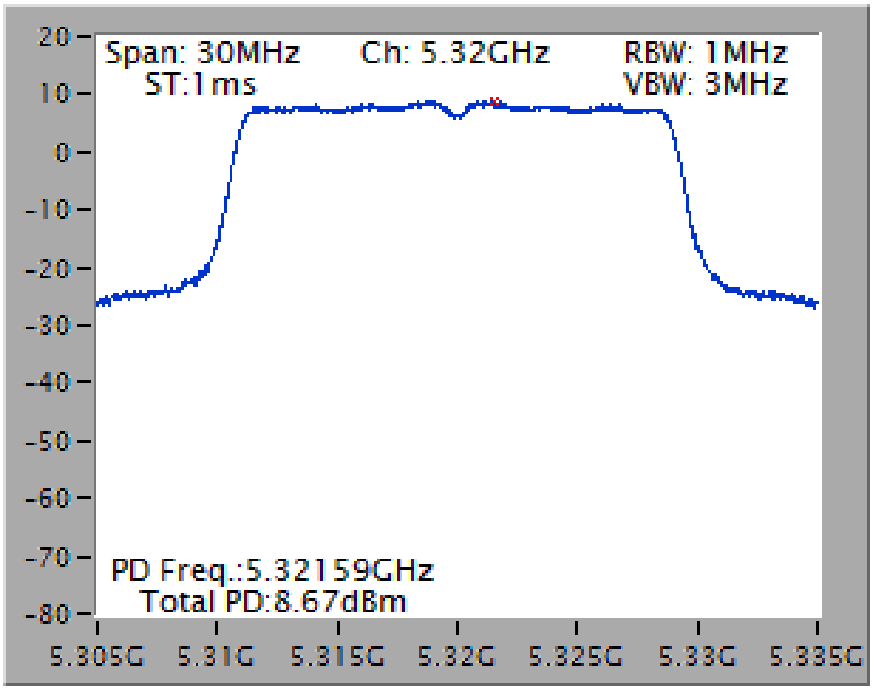


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 / 5690 MHz

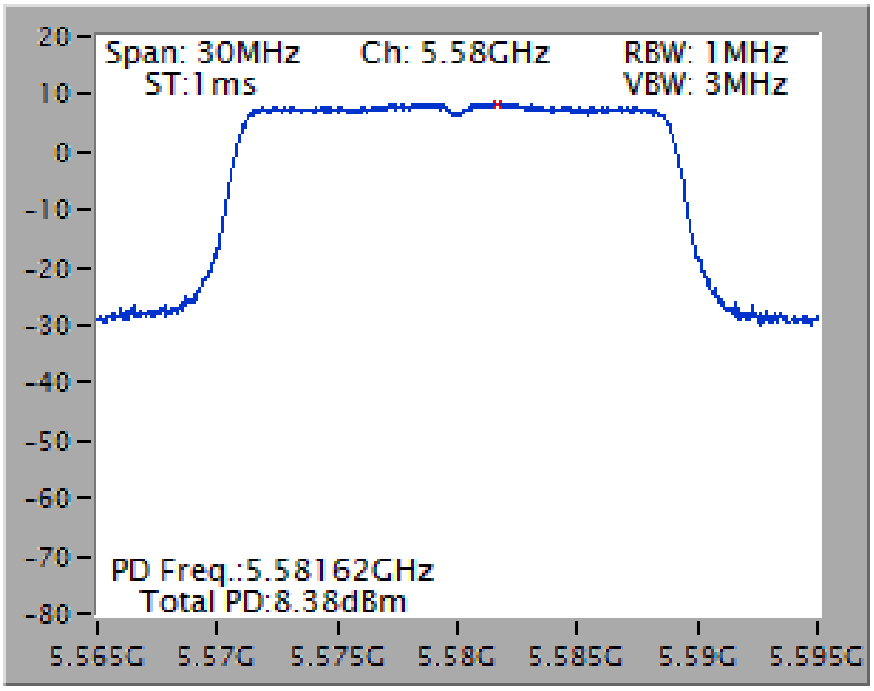


Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)

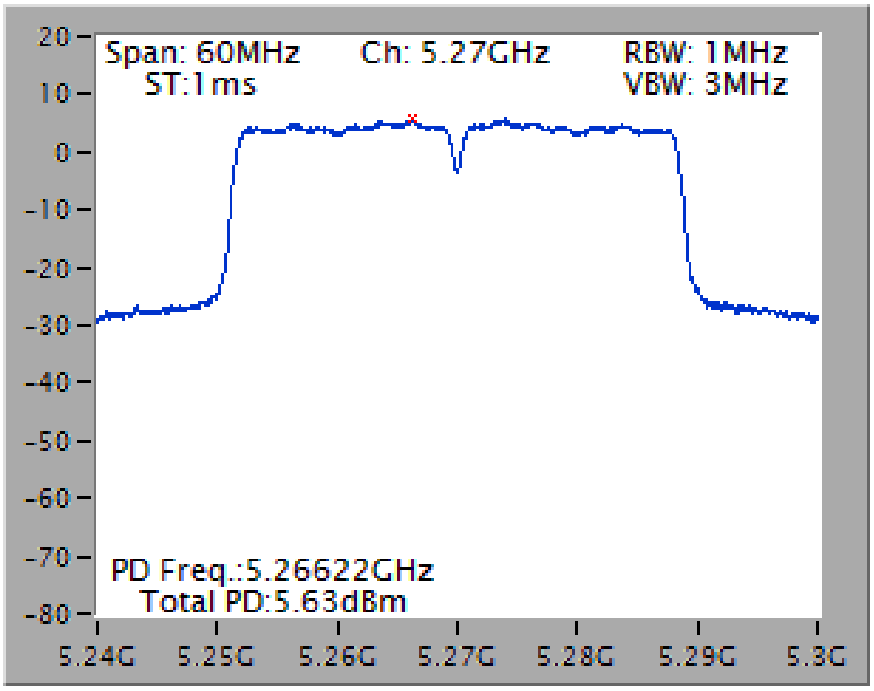
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5320 MHz



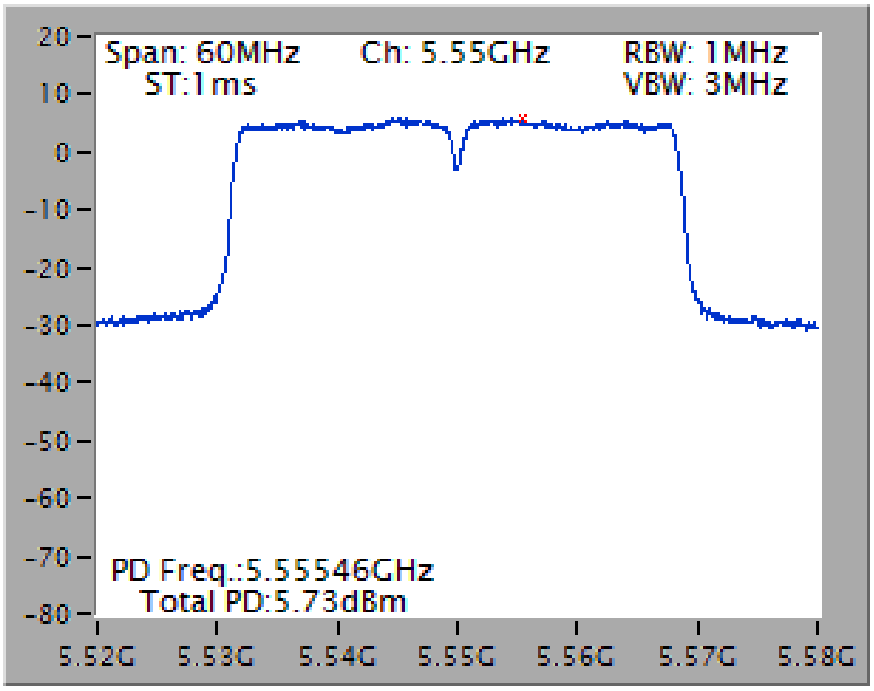
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5580 MHz



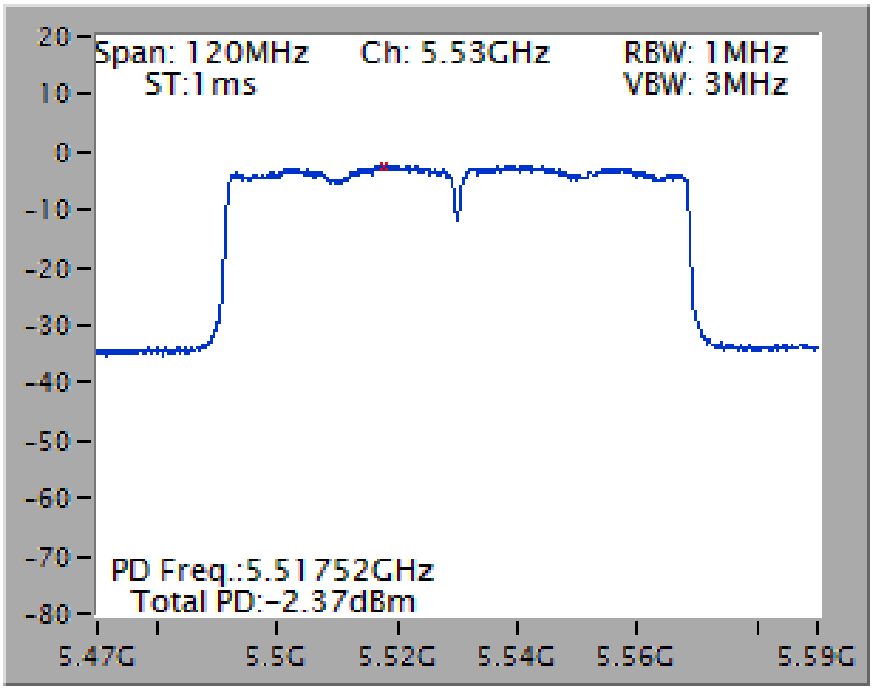
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5270 MHz



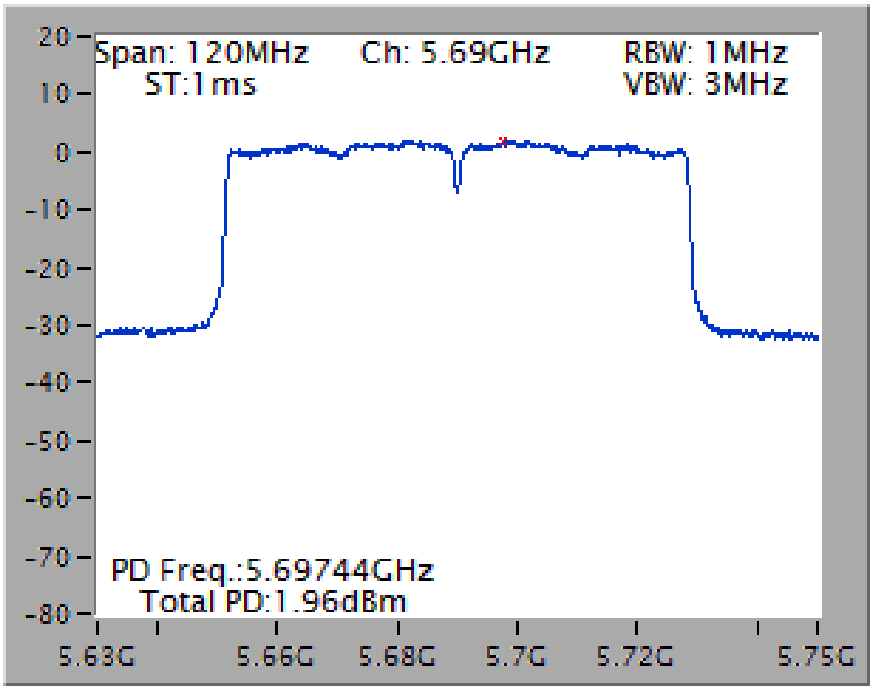
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5550 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5530 MHz

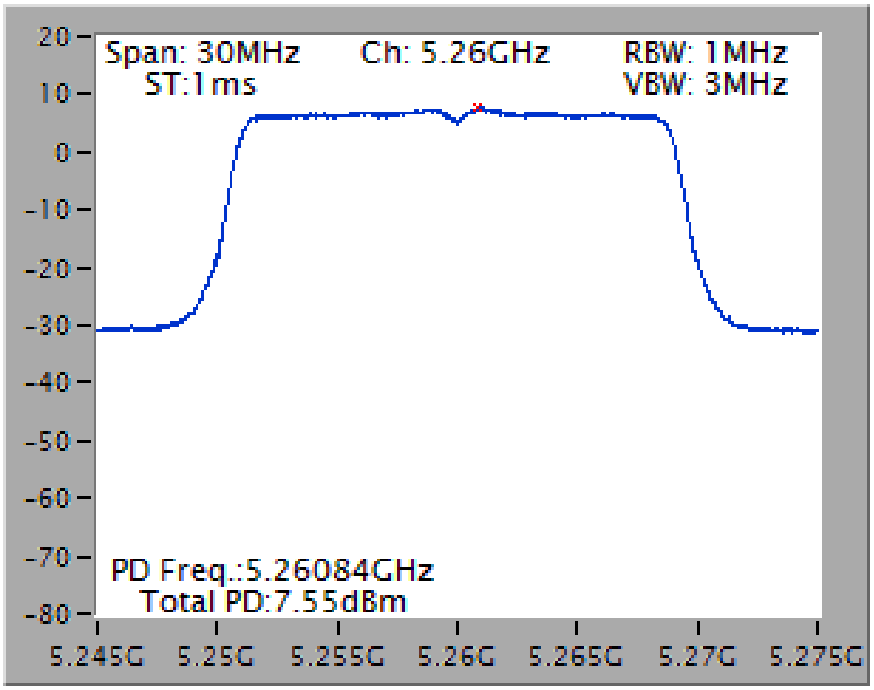


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5690 MHz

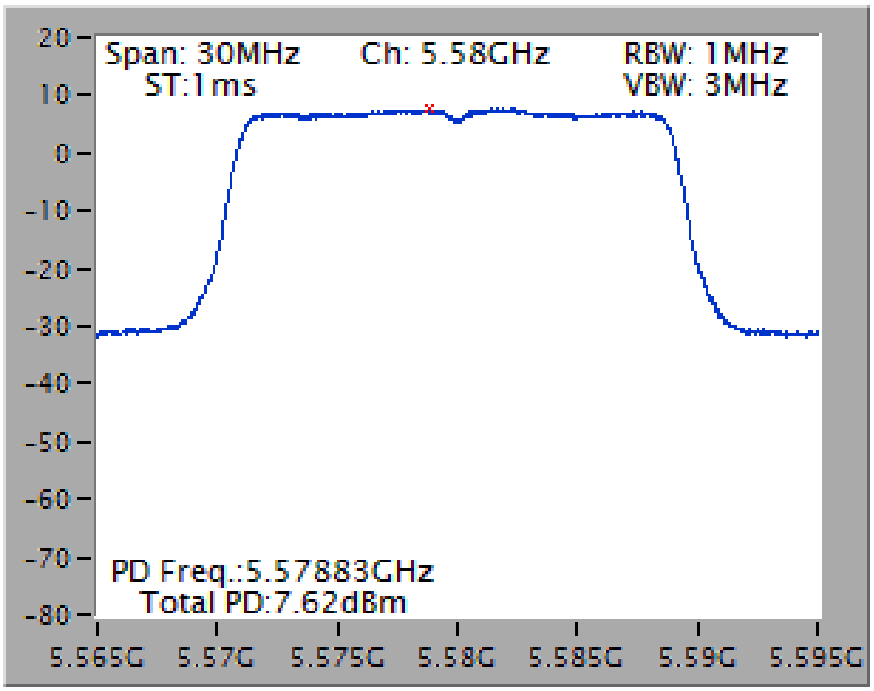


Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)

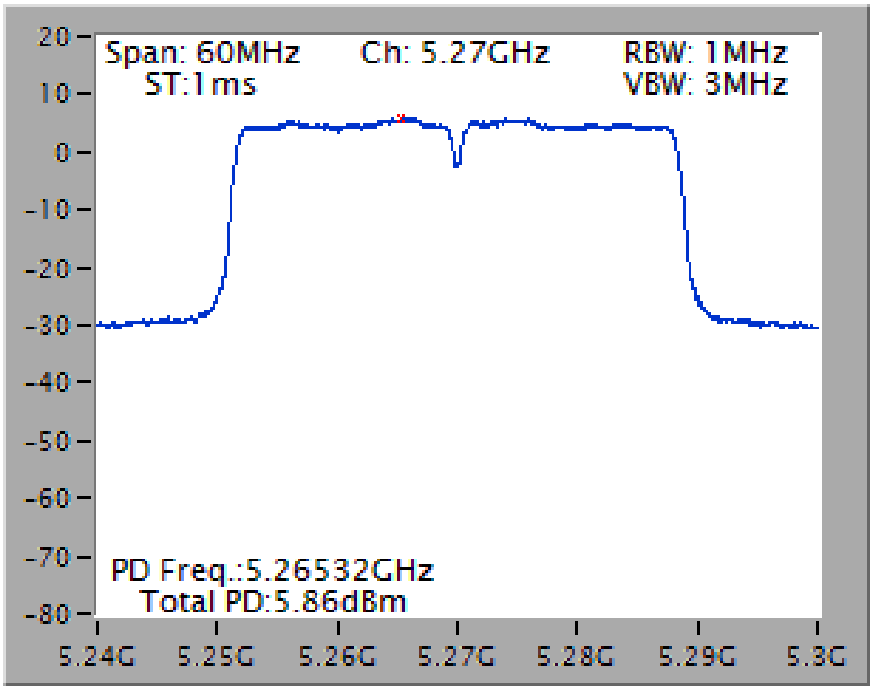
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



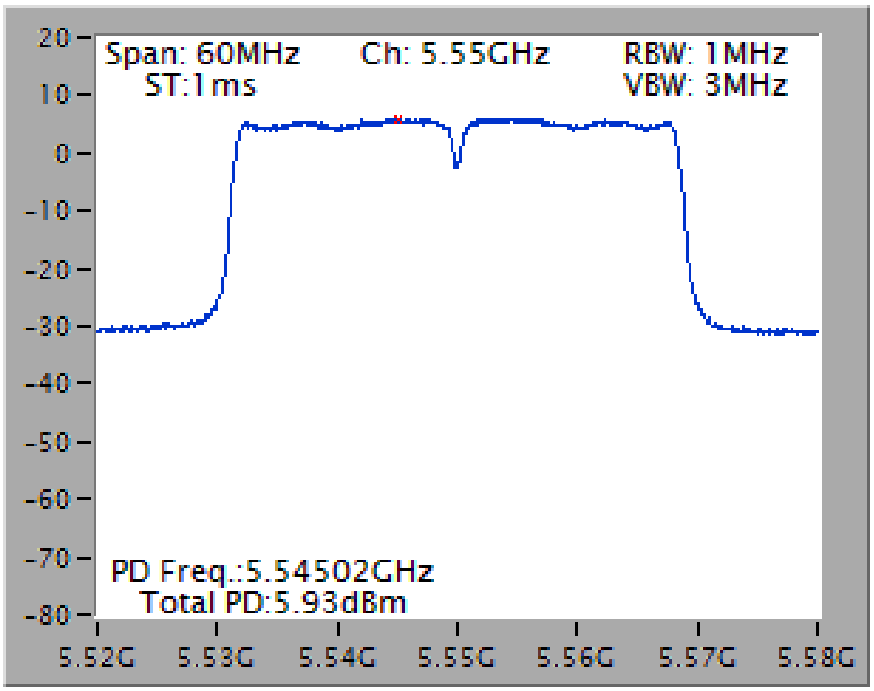
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5580 MHz



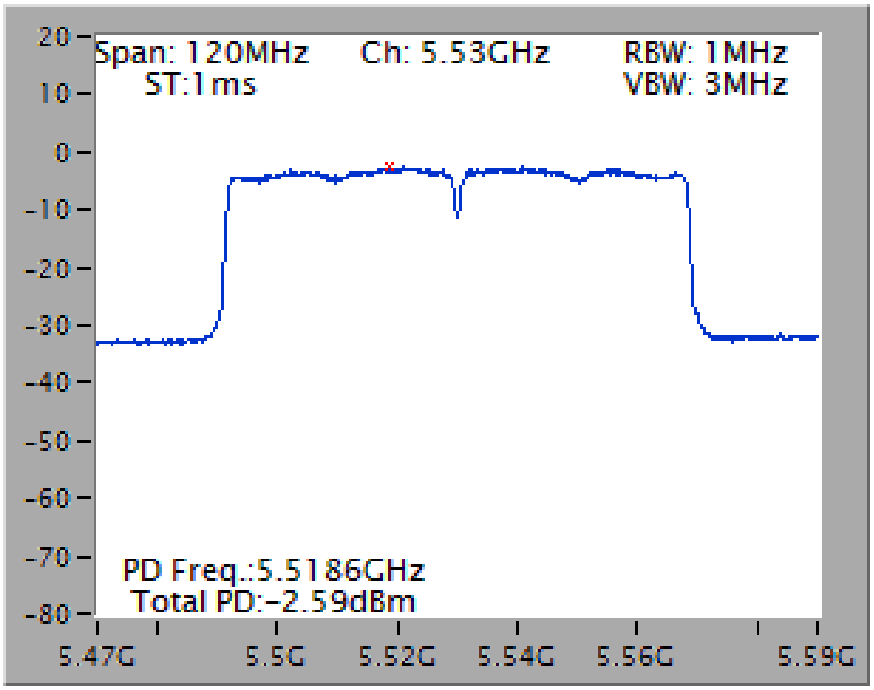
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5270 MHz



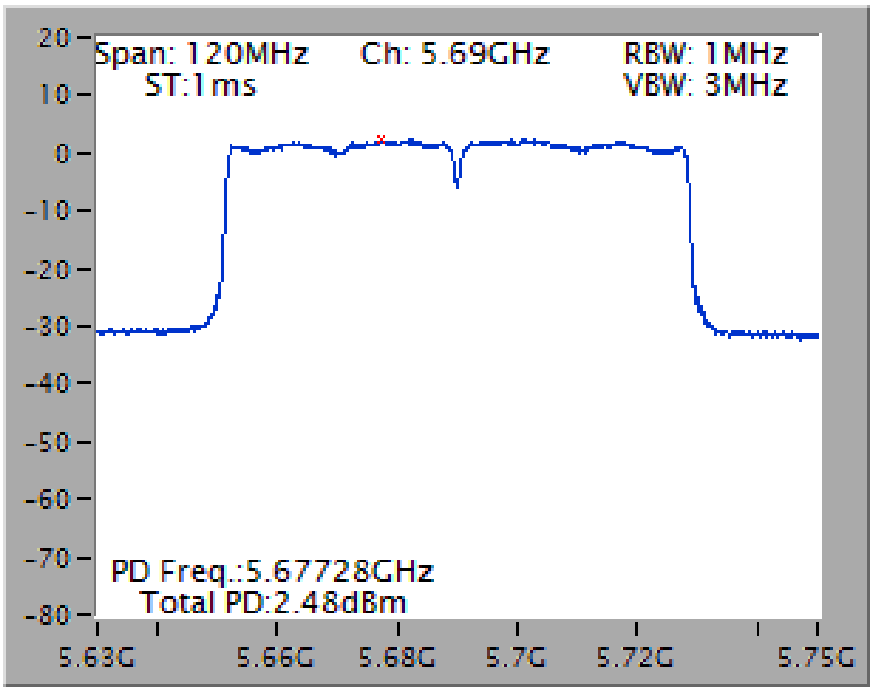
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 + Chain 6 / 5550 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5530 MHz



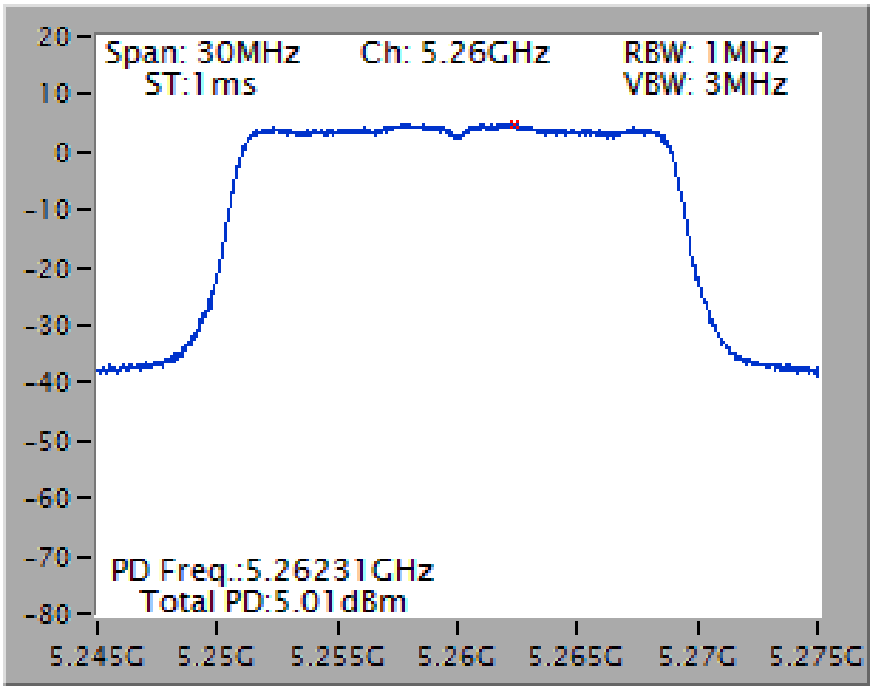
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 + Chain 6 / 5690 MHz



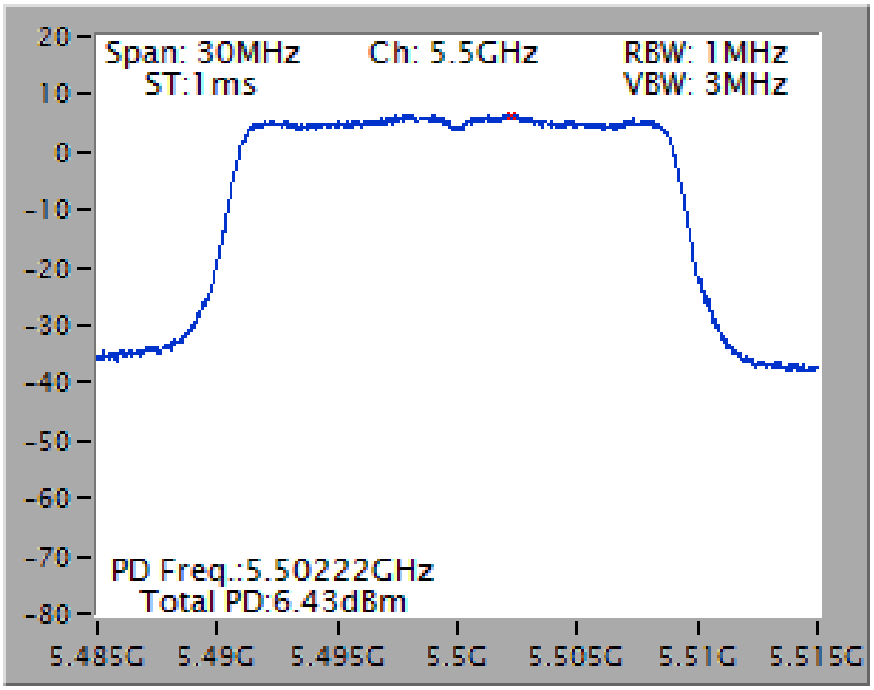
<For Beamforming Mode>

Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)

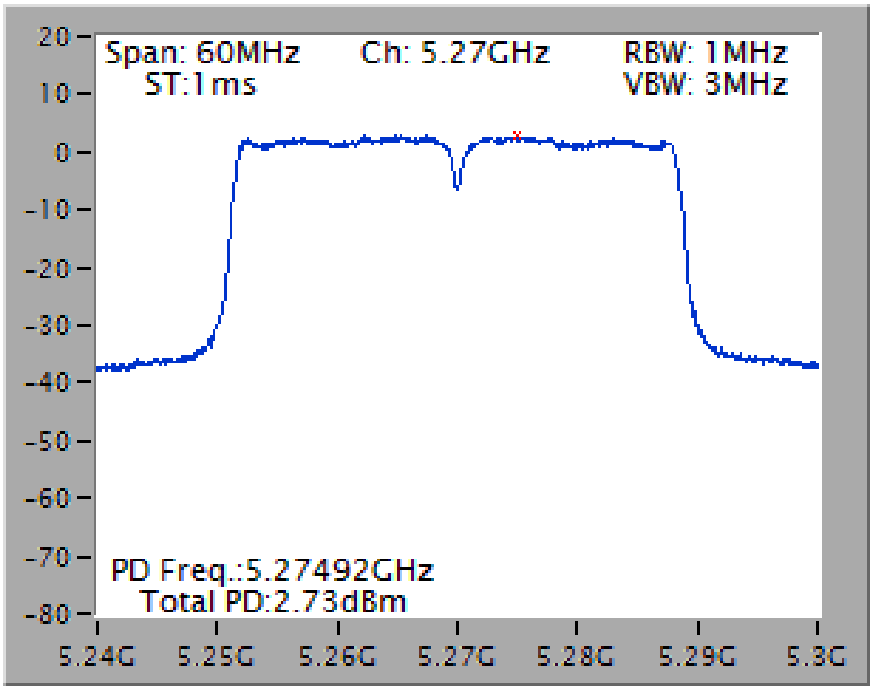
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5260 MHz



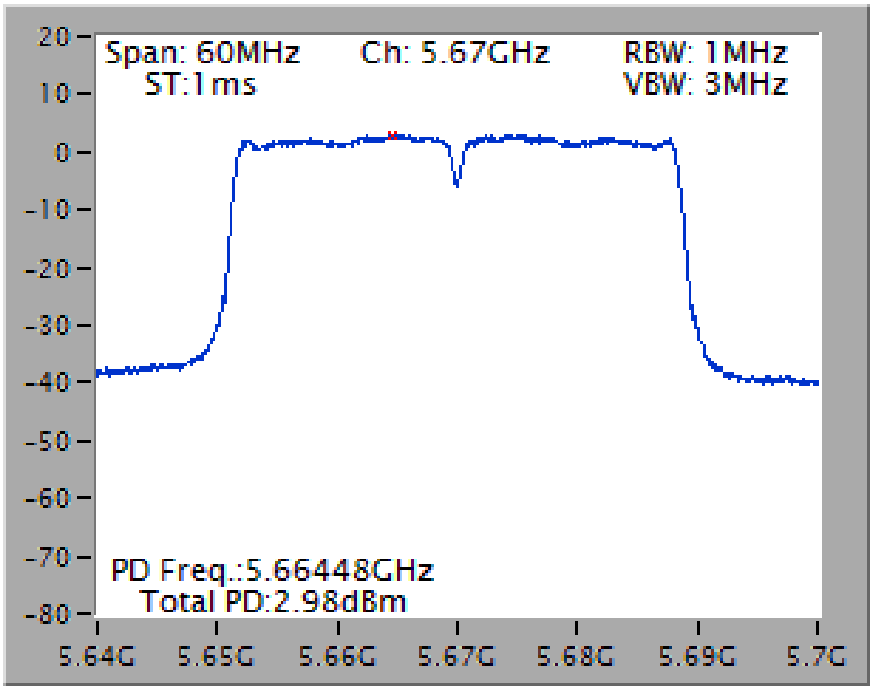
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 / 5500 MHz



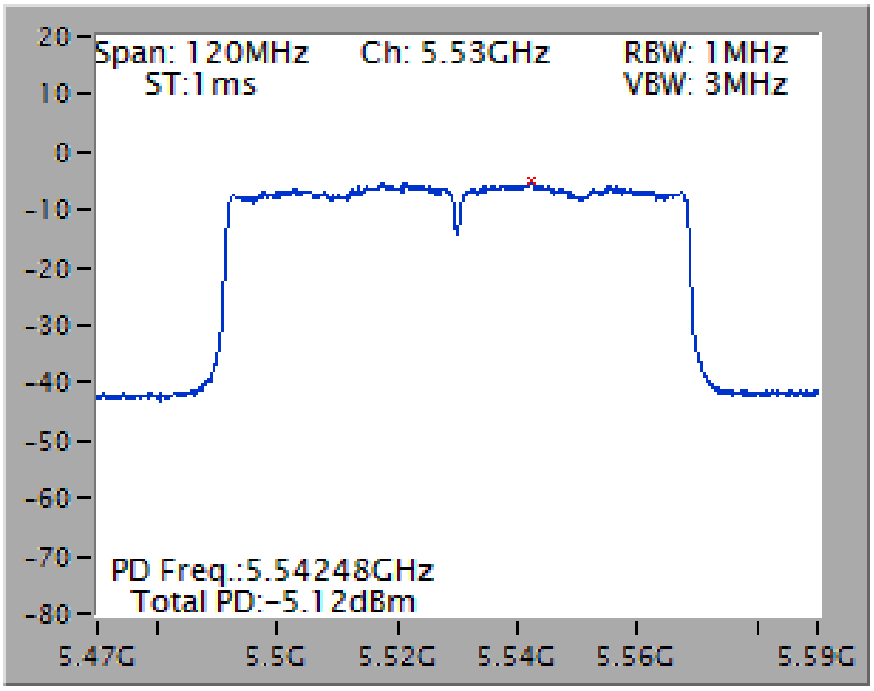
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5270 MHz



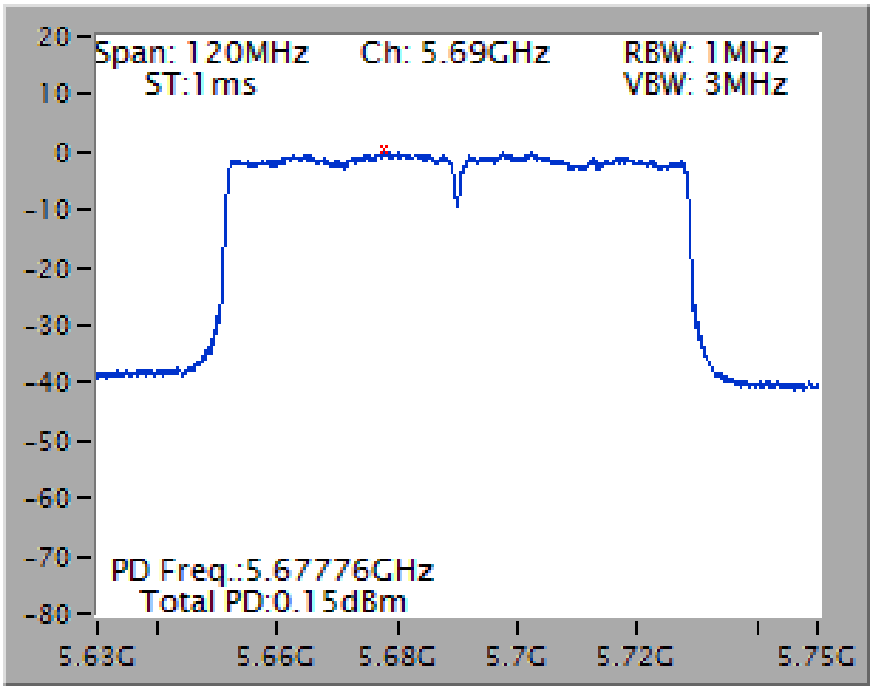
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 4 + Chain 5 / 5670 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5530 MHz

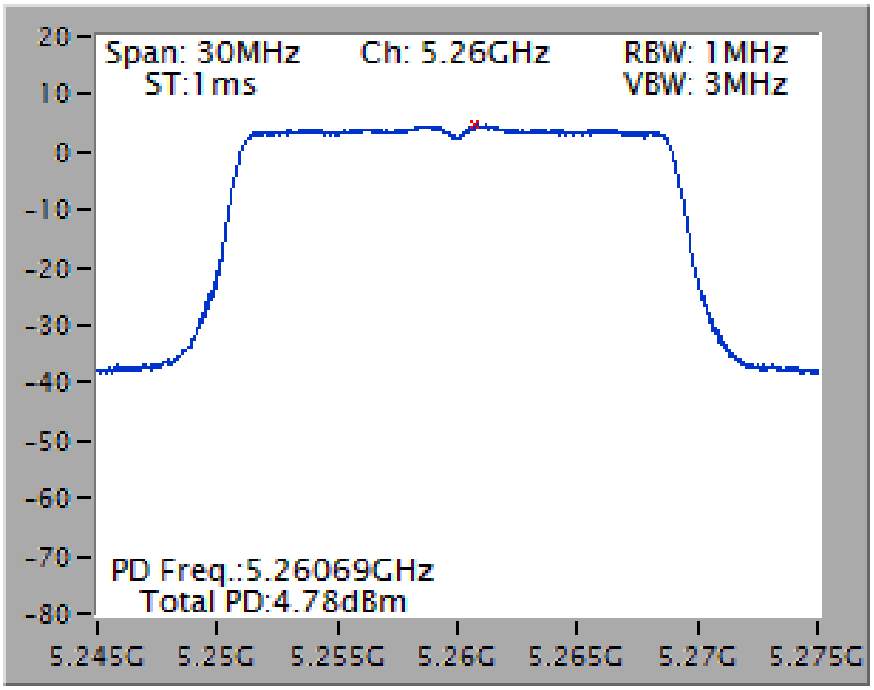


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 4 + Chain 5 / 5690 MHz



Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)

Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5260 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 4 + Chain 5 + Chain 6 / 5580 MHz