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FCC RADIO TEST REPORT

Applicant's company	Motorola Solutions, Inc.
Applicant Address	One Motorola Plaza Holtsville, NY 11742 USA
FCC ID	UZ7RAAP800
Manufacturer's company	Wistron NeWeb Corporation
Manufacturer Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308,Taiwan,R.O.C.

Product Name	802.11ac Module
Brand Name	MOTOROLA
Model No.	RAAP-800
Test Rule Part(s)	47 CFR FCC Part 15 Subpart E § 15.407
Test Freq. Range	5150 ~ 5250MHz
Received Date	Apr. 02, 2012
Final Test Date	Jul. 05, 2013
Submission Type	Original Equipment
Operating Mode	Master



Statement

Test result included is for the IEEE 802.11n and IEEE 802.11a/ac (5150 ~ 5250MHz) 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, KDB 789033 D01 v01r03 and KDB 662911 D01 v02**.

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



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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR341810AB	Rev. 01	Initial issue of report	Aug. 29, 2013



Report No.: FR341810AB

Certificate No.: CB10205120

1. CERTIFICATE OF COMPLIANCE

Product Name : 802.11ac Module
Brand Name : MOTOROLA
Model No. : RAAP-800
Applicant : Motorola Solutions, Inc.
Test Rule Part(s) : 47 CFR FCC Part 15 Subpart E § 15.407

Sportun International as requested by the applicant to evaluate the EMC performance of the product sample received on Apr. 02, 2012 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.

A handwritten signature in blue ink that reads "Sam Chen". The signature is fluid and cursive, with "Sam" on top and "Chen" below it, both starting with a capital letter.

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	18.81 dB
4.2	15.407(a)	26dB Spectrum Bandwidth & 99% Occupied Bandwidth	Complies	-
4.3	15.407(a)	Maximum Conducted Output Power	Complies	0.01 dB
4.4	15.407(a)	Power Spectral Density	Complies	0.04 dB
4.5	15.407(a)	Peak Excursion	Complies	0.49 dB
4.6	15.407(b)	Radiated Emissions	Complies	3.13 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	-

Note: The module (Model number: RAAP-800) is Limited Module Approval and only limited to install to the AP (MOTOROLA / AP-8232).

Test Items	Uncertainty	Remark
AC Power Line Conducted Emissions	±2.3dB	Confidence levels of 95%
Maximum Conducted Output Power	±0.5dB	Confidence levels of 95%
Power Spectral Density	±0.5dB	Confidence levels of 95%
Peak Excursion	±0.5dB	Confidence levels of 95%
26dB Spectrum Bandwidth / Frequency Stability	$\pm 8.5 \times 10^{-8}$	Confidence levels of 95%
Radiated Emissions (9kHz~30MHz)	±0.8dB	Confidence levels of 95%
Radiated Emissions (30MHz~1000MHz)	±1.9dB	Confidence levels of 95%
Radiated / Band Edge Emissions (1GHz~18GHz)	±1.9dB	Confidence levels of 95%
Radiated Emissions (18GHz~40GHz)	±1.9dB	Confidence levels of 95%
Temperature	±0.7°C	Confidence levels of 95%
Humidity	±3.2%	Confidence levels of 95%
DC / AC Power Source	±1.4%	Confidence levels of 95%

3. GENERAL INFORMATION

3.1. Product Details

IEEE 802.11n/ac

Items	Description
Product Type	WLAN (1/2/3TX, 3RX)
Radio Type	Intentional Transceiver
Power Type	From Host System
Modulation	see the below table for IEEE 802.11n/ac
Data Modulation	For 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM) For 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Data Rate (Mbps)	see the below table for IEEE 802.11n/ac
Frequency Range	5150 ~ 5250MHz
Channel Number	4 for 20MHz bandwidth ; 2 for 40MHz bandwidth 1 for 80MHz bandwidth
Channel Band Width (99%)	<p>Mode 1 (Ant.1 Dipole antenna / 8dBi)</p> <p>1TX : MCS0/Nss1 (VHT20) : 18.24 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 76.16 MHz</p> <p>2TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 77.04 MHz</p> <p>MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.44 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz</p> <p>3TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 38.40 MHz; MCS0/Nss1 (VHT80) : 77.04 MHz</p> <p>MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz</p> <p>MCS0/Nss3 (VHT20) : 17.92 MHz; MCS0/Nss3 (VHT40) : 37.44 MHz; MCS0/Nss3 (VHT80) : 76.32 MHz</p> <p>Mode 2 (Ant.3 Panel antenna / 12.5dBi)</p> <p>1TX : MCS0/Nss1 (VHT20) : 18.24 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 76.80 MHz</p>

	<p>2TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 37.12 MHz; MCS0/Nss1 (VHT80) : 76.80 MHz; MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 36.48 MHz; MCS0/Nss2 (VHT80) : 76.80 MHz</p> <p>Mode 3 (Ant.4 Yagi antenna / 8dBi)</p> <p>1TX : MCS0/Nss1 (VHT20) : 18.24 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 76.80 MHz</p> <p>2TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 38.08 MHz; MCS0/Nss1 (VHT80) : 77.04 MHz; MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.44 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz</p> <p>3TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 38.40 MHz; MCS0/Nss1 (VHT80) : 74.16 MHz; MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 77.04 MHz; MCS0/Nss3 (VHT20) : 17.92 MHz; MCS0/Nss3 (VHT40) : 37.44 MHz; MCS0/Nss3 (VHT80) : 76.32 MHz</p> <p>Mode 4 (Ant.5 Patch antenna / 2.3dBi)</p> <p>1TX : MCS0/Nss1 (VHT20) : 18.40 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 76.80 MHz</p> <p>2TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 76.32 MHz MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz</p> <p>3TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 37.44 MHz; MCS0/Nss1 (VHT80) : 77.04 MHz;</p>
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	<p>MCS0/Nss2 (VHT20) : 18.08 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz; MCS0/Nss3 (VHT20) : 18.08 MHz; MCS0/Nss3 (VHT40) : 37.44 MHz; MCS0/Nss3 (VHT80) : 76.32 MHz</p> <p>Mode 5 (Ant.6 Facade antenna / 2.5dBi)</p> <p>1TX : MCS0/Nss1 (VHT20) : 18.40 MHz; MCS0/Nss1 (VHT40) : 36.48 MHz; MCS0/Nss1 (VHT80) : 76.80 MHz</p> <p>2TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 38.08 MHz; MCS0/Nss1 (VHT80) : 75.60 MHz; MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz</p> <p>3TX : MCS0/Nss1 (VHT20) : 18.88 MHz; MCS0/Nss1 (VHT40) : 37.44 MHz; MCS0/Nss1 (VHT80) : 73.44 MHz; MCS0/Nss2 (VHT20) : 18.08 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz; MCS0/Nss3 (VHT20) : 18.08 MHz; MCS0/Nss3 (VHT40) : 37.44 MHz; MCS0/Nss3 (VHT80) : 76.32 MHz</p> <p>Mode 6 (Ant.9 Panel antenna / 9.2dBi)</p> <p>3TX : MCS0/Nss1 (VHT20) : 19.04 MHz; MCS0/Nss1 (VHT40) : 38.40 MHz; MCS0/Nss1 (VHT80) : 76.32 MHz; MCS0/Nss2 (VHT20) : 18.40 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 77.04 MHz; MCS0/Nss3 (VHT20) : 18.24 MHz; MCS0/Nss3 (VHT40) : 37.44 MHz; MCS0/Nss3 (VHT80) : 77.04 MHz</p> <p>Mode 7 (Ant.10 PIFA antenna / 5.3dBi)</p> <p>1TX : MCS0/Nss1 (VHT20) : 18.24 MHz; MCS0/Nss1 (VHT40) : 37.44 MHz;</p>
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	MCS0/Nss1 (VHT80) : 76.32 MHz 2TX : MCS0/Nss1 (VHT20) : 18.40 MHz; MCS0/Nss1 (VHT40) : 37.12 MHz; MCS0/Nss1 (VHT80) : 74.16 MHz; MCS0/Nss2 (VHT20) : 18.24 MHz; MCS0/Nss2 (VHT40) : 37.12 MHz; MCS0/Nss2 (VHT80) : 76.32 MHz 3TX : MCS0/Nss1 (VHT20) : 18.72 MHz; MCS0/Nss1 (VHT40) : 37.44 MHz; MCS0/Nss1 (VHT80) : 74.88 MHz; MCS0/Nss2 (VHT20) : 18.08 MHz; MCS0/Nss2 (VHT40) : 37.44 MHz; MCS0/Nss2 (VHT80) : 74.88 MHz; MCS0/Nss3 (VHT20) : 18.08 MHz; MCS0/Nss3 (VHT40) : 37.12 MHz; MCS0/Nss3 (VHT80) : 76.80 MHz
Maximum Conducted Output Power	Mode 1 (Ant.1 Dipole antenna / 8dBi) 1TX : MCS0 (HT20) : 14.78 dBm; MCS0 (HT40) : 14.78 dBm; MCS0/Nss1 (VHT20) : 14.63 dBm; MCS0/Nss1 (VHT40) : 14.80 dBm; MCS0/Nss1 (VHT80) : 12.76 dBm 2TX : MCS0 (HT20) : 12.38 dBm; MCS0 (HT40) : 14.92 dBm; MCS8 (HT20) : 14.78 dBm; MCS8 (HT40) : 14.73 dBm; MCS0/Nss1 (VHT20) : 12.67 dBm; MCS0/Nss1 (VHT40) : 14.83 dBm; MCS0/Nss1 (VHT80) : 14.16 dBm; MCS0/Nss2 (VHT20) : 14.78 dBm; MCS0/Nss2 (VHT40) : 14.78 dBm; MCS0/Nss2 (VHT80) : 14.60 dBm 3TX : MCS0 (HT20) : 11.18 dBm; MCS0 (HT40) : 14.69 dBm; MCS8 (HT20) : 14.05 dBm; MCS8 (HT40) : 14.52 dBm; MCS16 (HT20) : 14.49 dBm; MCS16 (HT40) : 14.85 dBm;

	<p>MCS0/Nss1 (VHT20) : 11.25 dBm; MCS0/Nss1 (VHT40) : 14.63 dBm; MCS0/Nss1 (VHT80) : 14.05 dBm; MCS0/Nss2 (VHT20) : 14.23 dBm; MCS0/Nss2 (VHT40) : 14.53 dBm; MCS0/Nss2 (VHT80) : 14.56 dBm; MCS0/Nss3 (VHT20) : 14.64 dBm; MCS0/Nss3 (VHT40) : 14.88 dBm; MCS0/Nss3 (VHT80) : 14.67 dBm</p> <p>Mode 2 (Ant.3 Panel antenna / 12.5dBi)</p> <p>1TX : MCS0 (HT20) : 10.15 dBm; MCS0 (HT40) : 10.13 dBm; MCS0/Nss1 (VHT20) : 10.12 dBm; MCS0/Nss1 (VHT40) : 10.20 dBm; MCS0/Nss1 (VHT80) : 4.62 dBm</p> <p>2TX : MCS0 (HT20) : 7.74 dBm; MCS0 (HT40) : 10.49 dBm; MCS8 (HT20) : 10.04 dBm; MCS8 (HT40) : 10.31 dBm; MCS0/Nss1 (VHT20) : 7.78 dBm; MCS0/Nss1 (VHT40) : 10.48 dBm; MCS0/Nss1 (VHT80) : 8.12 dBm; MCS0/Nss2 (VHT20) : 10.10 dBm; MCS0/Nss2 (VHT40) : 10.40 dBm; MCS0/Nss2 (VHT80) : 6.70 dBm</p> <p>Mode 3 (Ant.4 Yagi antenna / 8dBi)</p> <p>1TX : MCS0 (HT20) : 14.78 dBm; MCS0 (HT40) : 14.78 dBm; MCS0/Nss1 (VHT20) : 14.63 dBm; MCS0/Nss1 (VHT40) : 14.80 dBm; MCS0/Nss1 (VHT80) : 9.81 dBm</p> <p>2TX : MCS0 (HT20) : 12.38 dBm; MCS0 (HT40) : 14.76 dBm; MCS8 (HT20) : 14.78 dBm; MCS8 (HT40) : 14.73 dBm; MCS0/Nss1 (VHT20) : 12.67 dBm; MCS0/Nss1 (VHT40) : 14.82 dBm; MCS0/Nss1 (VHT80) : 6.04 dBm;</p>
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	<p>MCS0/Nss2 (VHT20) : 14.78 dBm; MCS0/Nss2 (VHT40) : 14.75 dBm; MCS0/Nss2 (VHT80) : 9.23 dBm 3TX : MCS0 (HT20) : 11.18 dBm; MCS0 (HT40) : 14.69 dBm; MCS8 (HT20) : 14.05 dBm; MCS8 (HT40) : 14.52 dBm; MCS16 (HT20) : 14.49 dBm; MCS16 (HT40) : 14.85 dBm; MCS0/Nss1 (VHT20) : 11.25 dBm; MCS0/Nss1 (VHT40) : 14.63 dBm; MCS0/Nss1 (VHT80) : 6.76 dBm; MCS0/Nss2 (VHT20) : 14.23 dBm; MCS0/Nss2 (VHT40) : 14.53 dBm; MCS0/Nss2 (VHT80) : 9.06 dBm; MCS0/Nss3 (VHT20) : 14.64 dBm; MCS0/Nss3 (VHT40) : 14.88 dBm; MCS0/Nss3 (VHT80) : 10.49 dBm Mode 4 (Ant.5 Patch antenna / 2.3dBi) 1TX : MCS0 (HT20) : 16.61 dBm; MCS0 (HT40) : 16.68 dBm; MCS0/Nss1 (VHT20) : 16.72 dBm; MCS0/Nss1 (VHT40) : 16.76 dBm; MCS0/Nss1 (VHT80) : 13.22 dBm 2TX : MCS0 (HT20) : 16.91 dBm; MCS0 (HT40) : 16.93 dBm; MCS8 (HT20) : 16.77 dBm; MCS8 (HT40) : 16.73 dBm; MCS0/Nss1 (VHT20) : 16.73 dBm; MCS0/Nss1 (VHT40) : 16.86 dBm; MCS0/Nss1 (VHT80) : 12.22 dBm; MCS0/Nss2 (VHT20) : 16.77 dBm; MCS0/Nss2 (VHT40) : 16.73 dBm; MCS0/Nss2 (VHT80) : 14.60 dBm 3TX : MCS0 (HT20) : 16.99 dBm; MCS0 (HT40) : 16.65 dBm; MCS8 (HT20) : 16.49 dBm; MCS8 (HT40) : 16.54 dBm;</p>
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	MCS16 (HT20) : 16.90 dBm; MCS16 (HT40) : 16.79 dBm; MCS0/Nss1 (VHT20) : 16.99 dBm; MCS0/Nss1 (VHT40) : 16.65 dBm; MCS0/Nss1 (VHT80) : 10.58 dBm; MCS0/Nss2 (VHT20) : 16.67 dBm; MCS0/Nss2 (VHT40) : 16.60 dBm; MCS0/Nss2 (VHT80) : 14.56 dBm; MCS0/Nss3 (VHT20) : 16.99 dBm; MCS0/Nss3 (VHT40) : 16.88 dBm; MCS0/Nss3 (VHT80) : 14.67 dBm Mode 5 (Ant.6 Facade antenna / 2.5dBi) 1TX : MCS0 (HT20) : 16.61 dBm; MCS0 (HT40) : 16.68 dBm; MCS0/Nss1 (VHT20) : 16.72 dBm; MCS0/Nss1 (VHT40) : 16.76 dBm; MCS0/Nss1 (VHT80) : 14.24 dBm 2TX : MCS0 (HT20) : 16.91 dBm; MCS0 (HT40) : 16.93 dBm; MCS8 (HT20) : 16.77 dBm; MCS8 (HT40) : 16.73 dBm; MCS0/Nss1 (VHT20) : 16.73 dBm; MCS0/Nss1 (VHT40) : 16.86 dBm; MCS0/Nss1 (VHT80) : 14.76 dBm; MCS0/Nss2 (VHT20) : 16.77 dBm; MCS0/Nss2 (VHT40) : 16.73 dBm; MCS0/Nss2 (VHT80) : 15.66 dBm 3TX : MCS0 (HT20) : 16.56 dBm; MCS0 (HT40) : 16.65 dBm; MCS8 (HT20) : 16.49 dBm; MCS8 (HT40) : 16.54 dBm; MCS16 (HT20) : 16.90 dBm; MCS16 (HT40) : 16.79 dBm; MCS0/Nss1 (VHT20) : 16.49 dBm; MCS0/Nss1 (VHT40) : 16.65 dBm; MCS0/Nss1 (VHT80) : 13.05 dBm; MCS0/Nss2 (VHT20) : 16.67 dBm; MCS0/Nss2 (VHT40) : 16.60 dBm;
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	<p>MCS0/Nss2 (VHT80) : 16.43 dBm; MCS0/Nss3 (VHT20) : 16.99 dBm; MCS0/Nss3 (VHT40) : 16.88 dBm; MCS0/Nss3 (VHT80) : 16.44 dBm Mode 6 (Ant.9 Panel antenna / 9.2dBi) 3TX : MCS0 (HT20) : 10.19 dBm MCS0 (HT40) : 13.77 dBm; MCS8 (HT20) : 13.10 dBm; MCS8 (HT40) : 13.59 dBm; MCS16 (HT20) : 13.47 dBm; MCS16 (HT40) : 13.39 dBm; MCS0/Nss1 (VHT20) : 10.04 dBm; MCS0/Nss1 (VHT40) : 13.59 dBm; MCS0/Nss1 (VHT80) : 9.11 dBm; MCS0/Nss2 (VHT20) : 13.04 dBm; MCS0/Nss2 (VHT40) : 13.64 dBm; MCS0/Nss2 (VHT80) : 10.52 dBm; MCS0/Nss3 (VHT20) : 13.65 dBm; MCS0/Nss3 (VHT40) : 13.46 dBm; MCS0/Nss3 (VHT80) : 9.54 dBm Mode 7 (Ant.10 PIFA antenna / 5.3dBi) 1TX : MCS0 (HT20) : 16.89 dBm; MCS0 (HT40) : 16.85 dBm; MCS0/Nss1 (VHT20) : 16.89 dBm; MCS0/Nss1 (VHT40) : 16.68 dBm; MCS0/Nss1 (VHT80) : 13.67 dBm 2TX : MCS0 (HT20) : 14.69 dBm; MCS0 (HT40) : 16.85 dBm; MCS8 (HT20) : 16.86 dBm; MCS8 (HT40) : 16.90 dBm; MCS0/Nss1 (VHT20) : 14.65 dBm; MCS0/Nss1 (VHT40) : 16.94 dBm; MCS0/Nss1 (VHT80) : 11.39 dBm; MCS0/Nss2 (VHT20) : 16.93 dBm; MCS0/Nss2 (VHT40) : 16.90 dBm; MCS0/Nss2 (VHT80) : 14.17 dBm 3TX : MCS0 (HT20) : 13.13 dBm; MCS0 (HT40) : 16.14 dBm;</p>
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	MCS8 (HT20) : 16.46 dBm; MCS8 (HT40) : 16.95 dBm; MCS16 (HT20) : 16.93 dBm; MCS16 (HT40) : 16.75 dBm; MCS0/Nss1 (VHT20) : 13.32 dBm; MCS0/Nss1 (VHT40) : 16.05 dBm; MCS0/Nss1 (VHT80) : 12.92 dBm; MCS0/Nss2 (VHT20) : 16.37 dBm; MCS0/Nss2 (VHT40) : 16.95 dBm; MCS0/Nss2 (VHT80) : 14.03 dBm; MCS0/Nss3 (VHT20) : 16.93 dBm; MCS0/Nss3 (VHT40) : 16.79 dBm; MCS0/Nss3 (VHT80) : 15.30 dBm
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

IEEE 802.11a

Items	Description
Product Type	WLAN (1/2/3TX, 3RX)
Radio Type	Intentional Transceiver
Power Type	From Host System
Modulation	OFDM for IEEE 802.11a
Data Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)
Data Rate (Mbps)	OFDM (6/9/12/18/24/36/48/54)
Frequency Range	5150 ~ 5250MHz
Channel Number	11a: 4
Maximum Conducted Output Power	<p>Mode 1 (Ant.1 Dipole antenna / 8dBi) 1TX : 11a: 14.88 dBm; 2TX : 11a: 12.56 dBm; 3TX : 11a: 11.29 dBm</p> <p>Mode 2 (Ant.3 Panel antenna / 12.5dBi) 1TX : 11a: 10.24 dBm; 2TX : 11a: 7.97 dBm</p> <p>Mode 3 (Ant.4 Yagi antenna / 8dBi) 1TX : 11a: 14.88 dBm; 2TX : 11a: 12.56 dBm; 3TX : 11a: 11.25 dBm</p> <p>Mode 4 (Ant.5 Patch antenna / 2.3dBi) 1TX : 11a: 16.93 dBm; 2TX : 11a: 16.99 dBm; 3TX : 11a: 16.74 dBm</p> <p>Mode 5 (Ant.6 Facade antenna / 2.5dBi) 1TX : 11a: 16.93 dBm; 2TX : 11a: 16.99 dBm; 3TX : 11a: 16.74 dBm</p> <p>Mode 6 (Ant.9 Panel antenna / 9.2dBi) 3TX : 11a: 10.24 dBm</p> <p>Mode 7 (Ant.10 PIFA antenna / 5.3dBi) 1TX : 11a: 16.94 dBm; 2TX : 11a: 14.67 dBm; 3TX : 11a: 13.23 dBm</p>
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

Antenna & 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	MCS0-23
802.11n (HT40)	1, 2, 3	MCS0-23
802.11ac (VHT20)	1, 2, 3	MCS 0-9/Nss1-3
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 support VHT20, VHT40 and VHT80.
Note 3: Modulation modes consist of below configuration:
11a: IEEE 802.11a, HT20/HT40: IEEE 802.11n, VHT20/VHT40/VHT80: IEEE 802.11ac

3.2. Accessories

N/A

3.3. Table for Filed Antenna

Ant.	Model Name	Antenna Type	Gain (dBi)		Cable loss	True Gain (dBi)
			5GHz	5GHz		
1	ML-5299-FHPA10-01R	Dipole	10.5	2.5	8	
2	ML-2452-PNA7-01R	Panel	12	1.5	10.5	
3	ML-5299-WPNA1-01R	Panel	14	1.5	12.5	
4	ML-5299-BYGA15-012	Yagi	10.5	2.5	8	
5	ML-5299-PTA1-01R	Patch	3.8	1.5	2.3	
6	KAP-FACADE-ANT	Facade	4	1.5	2.5	
7	ML-2452-APAG2A1-01	Dipole	1.7	1.5	0.2	
8	ML-5299-HPA5-01	Dipole	5.6	2.5	3.1	
9	ML-2452-PNL9M3-036	Panel	10.7	1.5	9.2	
10	RAI-INT-ANT	PIFA	5.3	-	5.3	
11	ML-2452-HPAG5A8-01	Dipole	8	2.5	5.5	
12	ML-5299-HPA1-01R	Dipole	6	1.5	4.5	
13	ML-2452-APA2-01	Dipole	4.6	1.5	3.1	
14	ML-5299-APA1-01R	Dipole	4	1.5	2.5	
15	ML-2452-HPA5-036	Dipole	5	1.5	3.5	
16	ML-5299-HPA10-01	Dipole	10.5	2.5	8	
17	ML-2452-HPAG4A6-01	Dipole	7.3	2.5	4.8	
18	ML-2452-HPA6X6-036	Dipole	6	1.5	4.5	
19	ML-2452-PNA5-01R	Panel	6	2.5	3.5	
20	ML-2452-PTA6M6-036	Panel	6	1.5	4.5	
21	ML-2452-HPA6M6-072	Dipole	6.5	1.5	5	

Note:

1. Ant.1~21 are the different antenna type in the antenna list, antenna 1, 3~6, 9~10 are the highest gain antenna, so it was selected to perform the test and recorded in this report.

Table of TX/RX Function in each antenna:

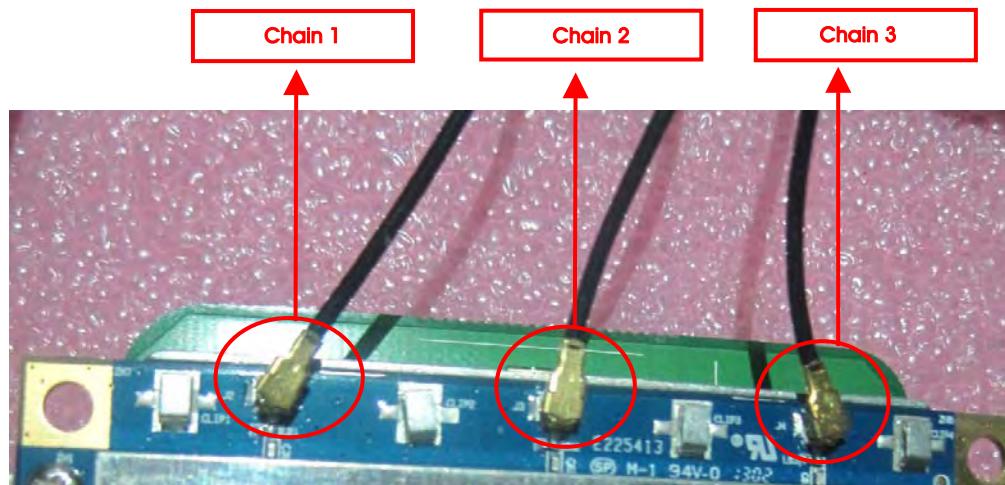
Item			Module					
			Chain 1		Chain 2		Chain 3	
			TX	RX	TX	RX	TX	RX
Ant.1	5GHz	11a	V	V	V	V	V	V
		11n	V	V	V	V	V	V
		11ac	V	V	V	V	V	V
Ant.3	5GHz	11a	V	V	V	V	X	X
		11n	V	V	V	V	X	X
		11ac	V	V	V	V	X	X
Ant.4	5GHz	11a	V	V	V	V	V	V
		11n	V	V	V	V	V	V
		11ac	V	V	V	V	V	V
Ant.5	5GHz	11a	V	V	V	V	V	V
		11n	V	V	V	V	V	V
		11ac	V	V	V	V	V	V
Ant.6	5GHz	11a	V	V	V	V	V	V
		11n	V	V	V	V	V	V
		11ac	V	V	V	V	V	V
Ant.9	5GHz	11a	V	V	V	V	V	V
		11n	V	V	V	V	V	V
		11ac	V	V	V	V	V	V
Ant.10	5GHz	11a	V	V	V	V	V	V
		11n	V	V	V	V	V	V
		11ac	V	V	V	V	V	V

Note : Marked "-" on behalf of no function.

Module	Required 1TX Port
5G	Chain 1

Module	Required 2TX Port
5G	Chain 1 and Chain 2

Module	Required 3TX Port
5G	Chain 1 and Chain 2 and Chain 3



3.4. Table for Carrier Frequencies

The EUT has three bandwidth system.

For 20MHz bandwidth systems, use Channel 36, 40, 44, 48.

For 40MHz bandwidth systems, use Channel 38, 46.

For 80MHz bandwidth systems, use Channel 42.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz Band 1	36	5180 MHz	44	5220 MHz
	38	5190 MHz	46	5230 MHz
	40	5200 MHz	48	5240 MHz
	42	5210 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	CTX		-	-	-
Max. Conducted Output Power	11n HT20	Band 1	MCS0	36/40/48	1 1+2 1+2+3
	11n HT20	Band 1	MCS8	36/40/48	1+2 1+2+3
	11n HT20	Band 1	MCS16	36/40/48	1+2+3
	11n HT40	Band 1	MCS0	38/46	1 1+2 1+2+3
	11n HT40	Band 1	MCS8	38/46	1+2 1+2+3
	11n HT40	Band 1	MCS16	38/46	1+2+3
	11ac VHT20	Band 1	MCS0/Nss1	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss2	36/40/48	1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss3	36/40/48	1+2+3
	11ac VHT40	Band 1	MCS0/Nss1	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss2	38/46	1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss3	38/46	1+2+3
	11ac VHT80	Band 1	MCS0/Nss1	42	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss2	42	1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss3	42	1+2+3

	11a	Band 1	6Mbps	36/40/48	1 1+2 1+2+3
Power Spectral Density	11ac VHT20	Band 1	MCS0/Nss1	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss2	36/40/48	1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss3	36/40/48	1+2+3
	11ac VHT40	Band 1	MCS0/Nss1	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss2	38/46	1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss3	38/46	1+2+3
	11ac VHT80	Band 1	MCS0/Nss1	42	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss2	42	1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss3	42	1+2+3
26dB Spectrum Bandwidth 99% Occupied Bandwidth Measurement Peak Excursion	11ac VHT20	Band 1	MCS0/Nss1	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss2	36/40/48	1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss3	36/40/48	1+2+3
	11ac VHT40	Band 1	MCS0/Nss1	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss2	38/46	1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss3	38/46	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss1	42	1 1+2 1+2+3

	11ac VHT80	Band 1	MCS0/Nss2	42	1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss3	42	1+2+3
Radiated Emission Below 1GHz	CTX		-	-	-
Radiated Emission Above 1GHz	11ac VHT20	Band 1	MCS0/Nss1	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss2	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss3	36/40/48	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss1	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss2	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss3	38/46	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss1	42	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss2	42	1 1+2 1+2+3
Band Edge Emission	11n HT20	Band 1	MCS0	36/40/48	1 1+2 1+2+3
	11n HT20	Band 1	MCS8	36/40/48	1 1+2 1+2+3

	11n HT20	Band 1	MCS16	36/40/48	1 1+2 1+2+3
	11n HT40	Band 1	MCS0	38/46	1 1+2 1+2+3
	11n HT40	Band 1	MCS8	38/46	1 1+2 1+2+3
	11n HT40	Band 1	MCS16	38/46	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss1	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss2	36/40/48	1 1+2 1+2+3
	11ac VHT20	Band 1	MCS0/Nss3	36/40/48	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss1	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss2	38/46	1 1+2 1+2+3
	11ac VHT40	Band 1	MCS0/Nss3	38/46	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss1	42	1 1+2 1+2+3
	11ac VHT80	Band 1	MCS0/Nss2	42	1 1+2 1+2+3



	11ac VHT80	Band 1	MCS0/Nss3	42	1 1+2 1+2+3
	11a	Band 1	6Mbps	36/40/48	1 1+2 1+2+3
Frequency Stability	Un-modulation		-	40	N/A

The following test modes were performed for all tests:

For Conducted Emission test:

Mode 1. Module + Antenna 3

For Radiated Emission test below 1GHz:

Mode 1. Module + Antenna 3

For Radiated Emission test above 1GHz:

Antenna/Test Mode		11a 1TX	11a 2TX	11a 3TX	11n HT20/40 1TX (MCS0)	11n HT20/40 2TX (MCS0)	11n HT20/40 3TX (MCS0)	11n HT20/40 2TX (MCS8)	11n HT20/40 3TX (MCS8)	11n HT20/40 3TX (MCS16)
Mode 1	Dipole-5G, Antenna 1	*	*	*	*	*	*	*	*	*
Mode 2	Panel -5G, Antenna 3	*	*	X	*	*	X	*	X	X
Mode 3	Yagi -5G, Antenna 4	*	*	*	*	*	*	*	*	*
Mode 4	Patch -5G, Antenna 5	*	*	*	*	*	*	*	*	*
Mode 5	Facade - 5G, Antenna 6	*	*	*	*	*	*	*	*	*
Mode 6	Panel -5G, Antenna 9	X	X	*	X	X	*	X	*	*
Mode 7	PIFA -5G, Antenna 10	*	*	*	*	*	*	*	*	*

Note 1: 11a/n (HT20/40) 1TX/2TX/3TX without test due to covered by 802.11 ac VHT20/40 1TX/2TX/3TX

(MCS0-single stream) which are same modulation, bandwidth and frequency.

Note 2: “*” evaluate output power and out-band emission for the 11a/n (HT20/40) 1TX, 2TX & 3TX, the other test items are covered by 802.11ac VHT20/40 VMCS0

Note 3: “x” The EUT does not support this function.

Antenna/Radio Mode		VHT 20/40/80 1TX (MCS0) (Nss1)	VHT 20/40/80 2TX (MCS0) (Nss1)	VHT 20/40/80 3TX (MCS0) (Nss1)	VHT 20/40/80 2TX (MCS0) (Nss2)	VHT 20/40/80 3TX (MCS0) (Nss2)	VHT 20/40/80 3TX (MCS0) (Nss3)
Mode 1	Dipole-5G, Antenna 1	v	v	v	v	v	v
Mode 2	Panel -5G, Antenna 3	v	v	x	v	x	x
Mode 3	Yagi -5G, Antenna 4	v	v	v	v	v	v
Mode 4	Patch -5G, Antenna 5	v	v	v	v	v	v
Mode 5	Facade - 5G, Antenna 6	v	v	v	v	v	v
Mode 6	Panel -5G, Antenna 9	x	x	v	x	v	v
Mode 7	PIFA -5G, Antenna 10	v	v	v	v	v	v

Note 1: 11a/n (HT20/40) 1TX/2TX/3TX without test due to covered by 802.11 ac VHT20/40 1TX/2TX/3TX

(MCS0-single stream) which are same modulation, bandwidth and frequency.

Note 2: “*”evaluate output power and out-band emission for the 11a/n (HT20/40) 1TX, 2TX & 3TX, the other test items are covered by 802.11ac VHT20/40 VMCS0.

Note 3: “x” The EUT does not support this function.

<For MPE and Co-location Test>:

The module (Model number: RAAP-800) is Limited Module Approval and only limited to install to the AP (MOTOROLA / AP-8232). The AP (MOTOROLA / AP-8232) could be applied with RadioA (2.4G)/(5G) RF module (FCC ID: UZ7KHAP800), RadioB (5G) RF module (FCC ID: UZ7RAAP800) and 2.4G/5G USB dongle (FCC ID: UZ7KHUSB600); therefore Maximum Permissible Exposure (Please refer to Appendix B) and Co-location (please refer to Appendix C) tests are added for simultaneously transmit between 2.4GHz, 5GHz WLAN function and 2.4G, 5G USB dongle.

Expected Array Gain Adjustment to Antenna Directivity for 2TX / 3TX Configurations and Supported Operational Modes

In the FCC regulatory domain, conducted testing of systems with multiple transmitters (2Tx transmitter configurations) was performed in accordance with KDB 662911 requires adjustment of antenna directivity by an array gain factor. The array gain factor is dependent on correlation of the multiple tx signals, and is therefore a function of operational mode.

The following table establishes the expected array gain for the 2Tx and 3TX transmitter configuration case for each supported operational mode.

Operational Mode >	11a (Legacy OFDM)	(M)HT20 1 Stream (MCS0-7)	(M)HT40 1 Stream (MCS0-7)	(M)HT20 2 Stream (MCS8-15)	(M)HT40 2 Stream (MCS8-15)	(v)HT40 3 Stream (MCS16-23)
2TX	3 dB	3dB	3dB	NA	NA	NA
3TX	4.77dB	4.77dB	4.77dB	1.8dB	1.8dB	NA

3.6. Table for Testing Locations

Test Site No.	Site Category	Location	FCC Reg. No.	IC File 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).

Please refer section 6 for Test Site Address.

3.7. Table for Supporting Units

For Test Site No : CO01-CB

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E6430	QDS-BRCM1049LE
Test Fixture	WNC	express card adapter	N/A

For Test Site No : 03CH01-CB

Support Unit	Brand	Model	FCC ID
Notebook	DELL	E6220	QDS-BRCM1049LE
Test Fixture	WNC	express card adapter	N/A

For Test Site No : TH01-CB

Support Unit	Brand	Model	FCC ID
Notebook	DELL	D520	E2KWM3945ABG
Test Fixture	WNC	express card adapter	N/A

3.8. Table for Parameters of Test Software Setting

During testing, Channel & 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.

Test Mode : Mode 1 (Ant.1 Dipole antenna / 8dBi)

1TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15.5	15.5	15.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	16	16	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15.5	15.5	15.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	16	16	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	14		

Power Parameters of IEEE 802.11a / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15	15	15

2TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	13	13	

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	13	13	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	13	13	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	12.5		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	13	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

3TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	10.5	10.5	

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	10	10	10

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	11	11	

Power Parameters of IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS16 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS16 40MHz	11.5	11.5	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	11	11

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	10.5		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	11	11

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	11.5	

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	11.5	11.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	11	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Mode 2 (Ant.3 Panel antenna / 12.5dBi)
1TX
Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	10	10.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	10.5	10.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz		5

Power Parameters of IEEE 802.11a / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

2TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	4.5	4.5	4.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	7.5	7.5	

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	7	7	7

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	7.5	7.5	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	4.5	4.5	4.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	7.5	7.5	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency		5210 MHz	
MCS0 80MHz		5.5	

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	7.5	7.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	4	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	4.5	4.5	4.5

Mode 3 (Ant.4 Yagi antenna / 8dBi)
1TX
Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15.5	15.5	15.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	16	16

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15.5	15.5	15.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	16	16

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz		11

Power Parameters of IEEE 802.11a / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15	15	15

2TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	12	13

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS8 40MHz	12.5	13

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	12	13

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	4	

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	12.5	13

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	7.5	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

3TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	10.5	10.5	

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	10	10	10

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	11	11	

Power Parameters of IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS16 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS16 40MHz	11.5	11.5	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	11	11

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	3		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10	10	10

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	11	11

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	5.5	

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	10.5	10.5	10.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	11.5	11.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	7	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	7	7	7

Mode 4 (Ant.5 Patch antenna / 2.3dBi)

1TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	17.5	17.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	18	18

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	14.5	

Power Parameters of IEEE 802.11a / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17	17	17

2TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15	15	15

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	15	15	15

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	14.5	14.5	14.5

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	15	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	14.5	14.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	15	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz		10.5	

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	14.5	14.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	13	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	14.5	14.5

3TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	13	13	13

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	13	13	13

Power Parameters of IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS16 20MHz	13	13	13

Power Parameters of IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS16 40MHz	13.5	13.5	13.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	13	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	7		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	10.5	

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	13	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13.5	13.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	11	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Mode 5 (Ant.6 Facade antenna / 2.5dBi)
1TX
Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	18	18	18

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	15.5		

Power Parameters of IEEE 802.11a / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17	17	17

2TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	15	15	15

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	15	15	15

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	14.5	14.5	14.5

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	15	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	14.5	14.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	15	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz		13	

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	14.5	14.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	14	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	14.5	14.5

3TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	13	13	13

Power Parameters of IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS16 20MHz	13	13	13

Power Parameters of IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS16 40MHz	13.5	13.5	13.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	9.5		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	13	

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	13	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13.5	13.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	13	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Mode 6 (Ant.9 Panel antenna / 9.2dBi)

3TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	6	6	6

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	9.5	9.5	

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	9	9	9

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	10	10	

Power Parameters of IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS16 20MHz	9.5	9.5	9.5

Power Parameters of IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS16 40MHz	10	10	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	6	6	6

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	10	10

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	5.5		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	9	9	9

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	10	10

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	7	

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	9.5	9.5	9.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	10	10

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	6	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	6	6	6

Test Mode : Mode 7 (Ant.10 PIFA antenna / 5.3dBi)

1TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	17.5	17.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	18	18

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	15	

Power Parameters of IEEE 802.11a / Chain 1

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	17.5	17.5	17.5

2TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12	12.5

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	14.5	15	15

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	14.5	15	15

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	15	15	15.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	15	15	15.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	10		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	14.5	15	15

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	15	15.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	13	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12	12	12.5

3TX

Power Parameters of IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	9	9	9

Power Parameters of IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS0 40MHz	12.5	12.5	

Power Parameters of IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS8 20MHz	12.5	12	12

Power Parameters of IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS8 40MHz	13.5	13.5	

Power Parameters of IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS16 20MHz	13	13	13

Power Parameters of IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5190 MHz	5230 MHz	
MCS16 40MHz	13.5	13.5	

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	9	9	9

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	12.5	12.5

Power Parameters of IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5210 MHz		
MCS0 80MHz	9.5		

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	12.5	12	12

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13.5	13.5

Power Parameters of IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	10.5	

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	13	13	13

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5190 MHz	5230 MHz
MCS0 40MHz	13.5	13.5

Power Parameters of IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Test Software Version	ART2-GUI Version 2.3	
Frequency	5210 MHz	
MCS0 80MHz	12	

Power Parameters of IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

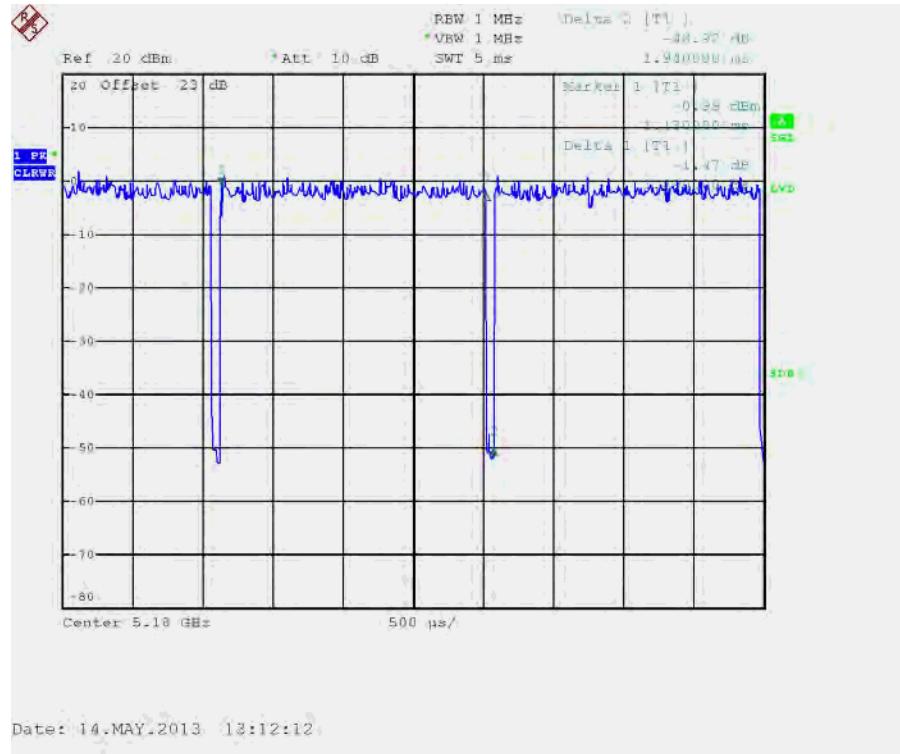
Test Software Version	ART2-GUI Version 2.3		
Frequency	5180 MHz	5200 MHz	5240 MHz
MCS0 20MHz	9	9	9

3.9. EUT Operation during Test

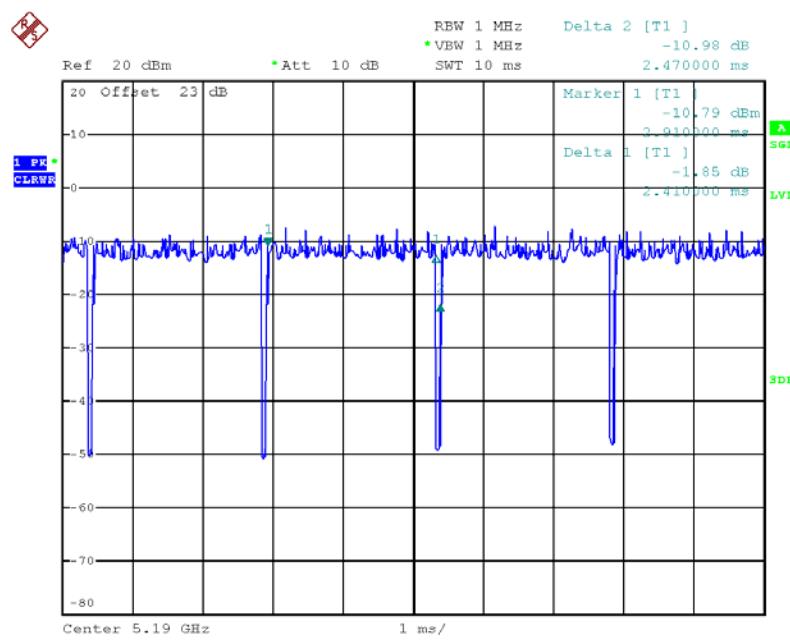
The EUT was programmed to be in continuously transmitting mode.

3.10.Duty Cycle

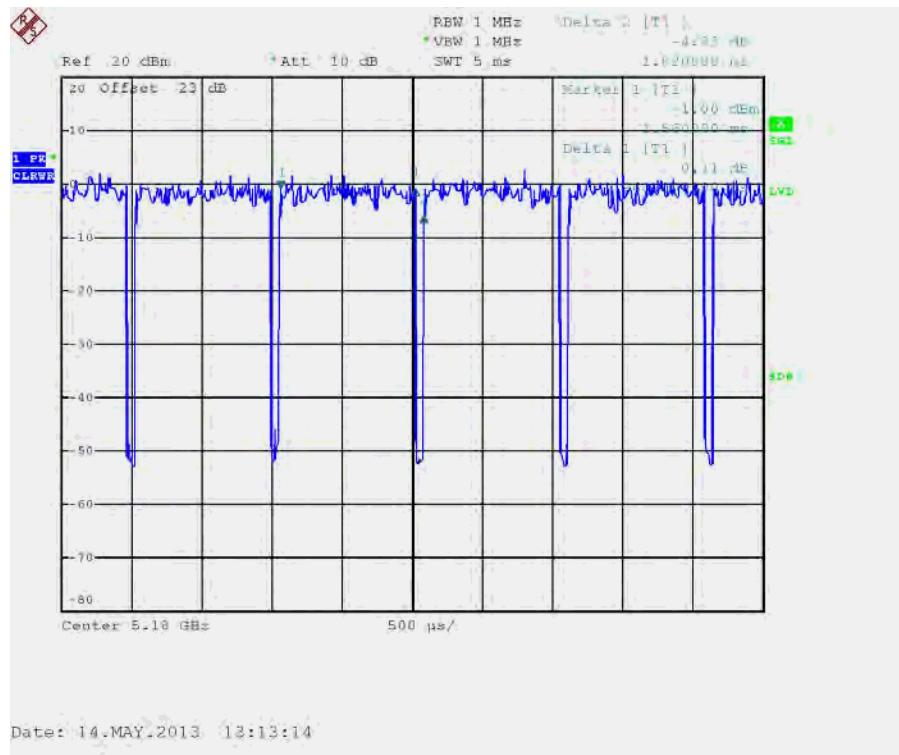
IEEE 802.11n MCS0 HT20



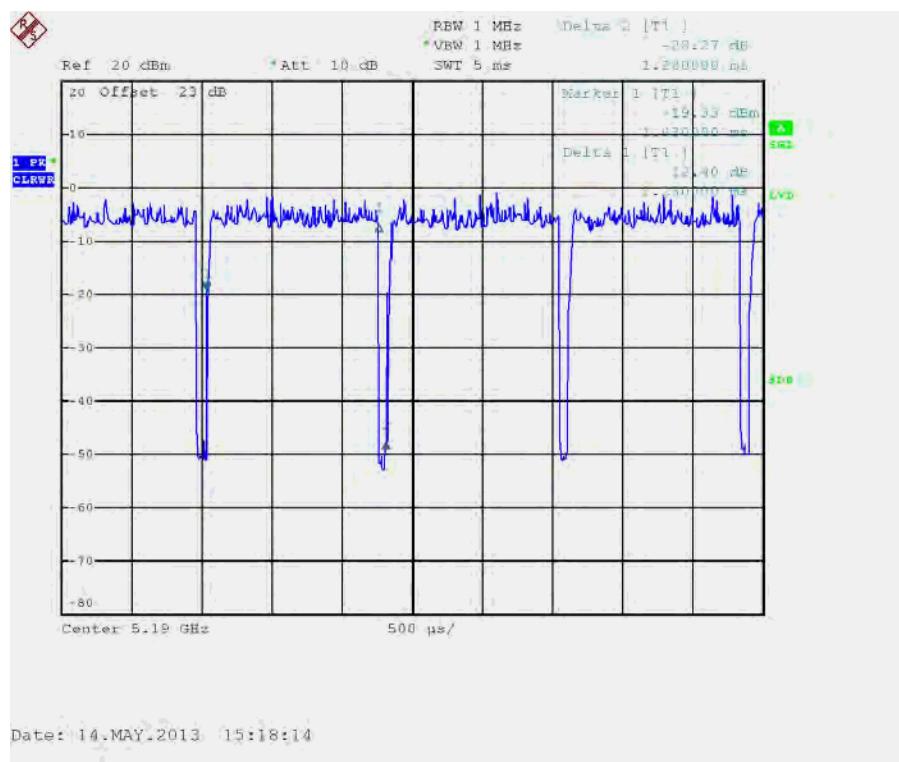
IEEE 802.11n MCS0 HT40

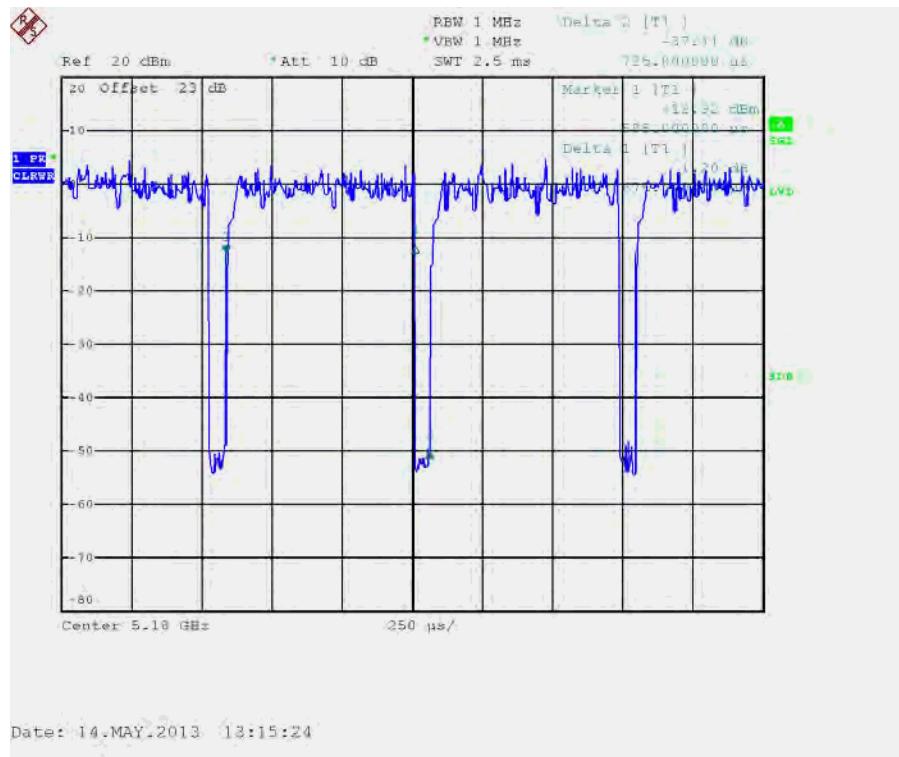
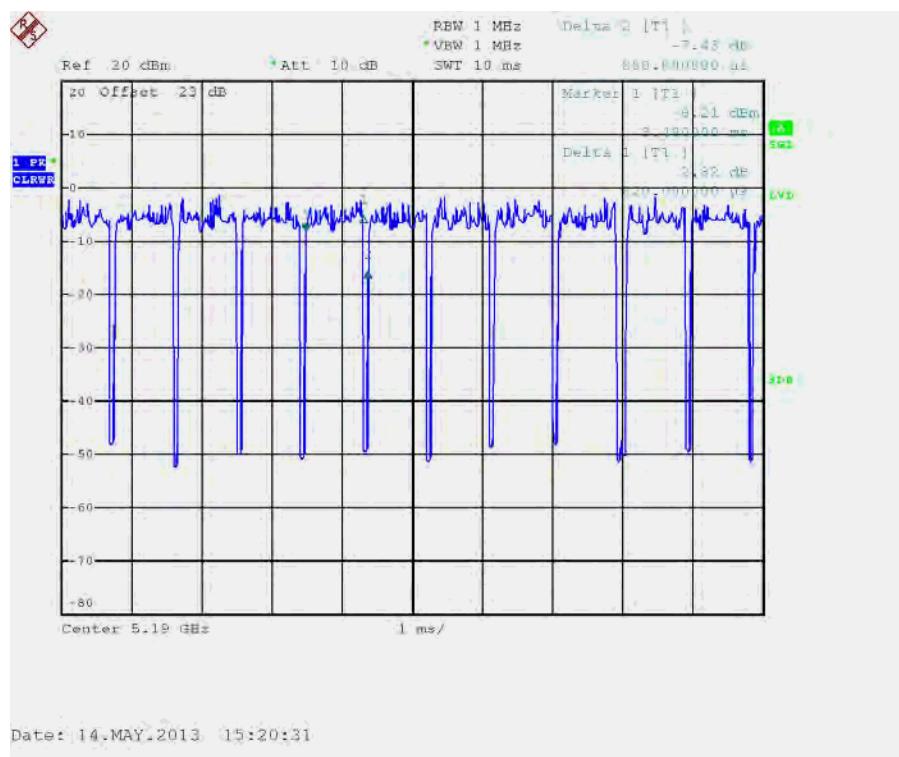


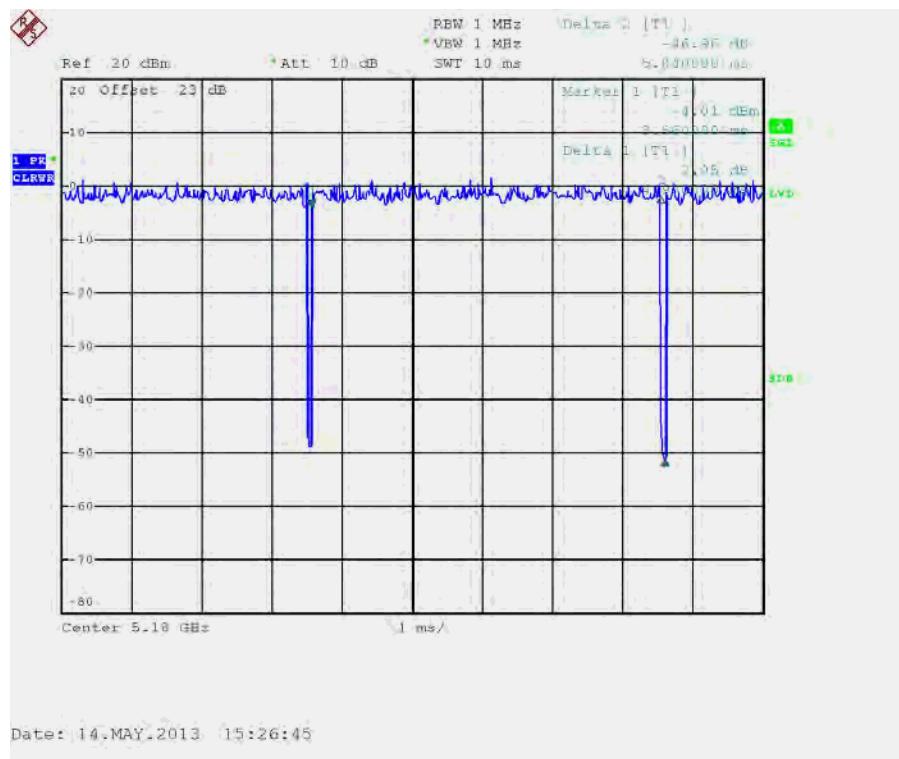
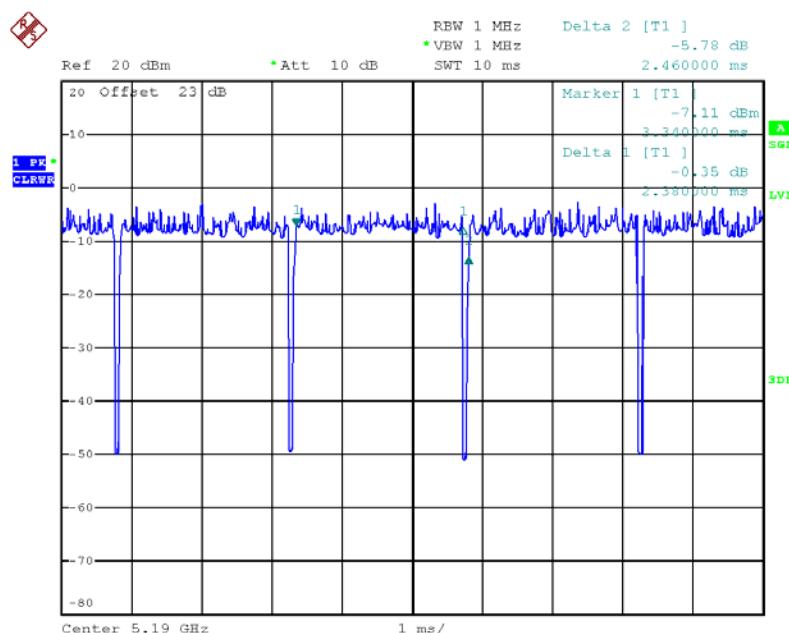
IEEE 802.11n MCS8 HT20

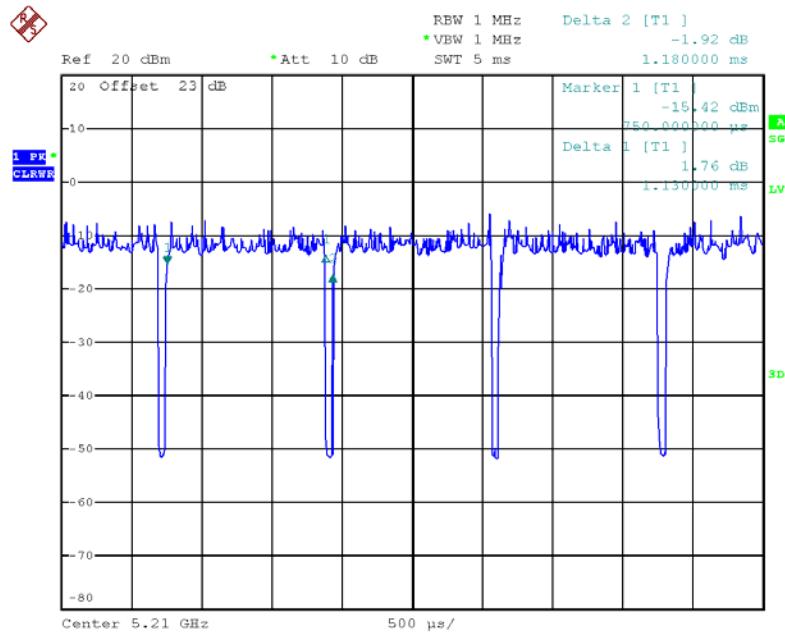


IEEE 802.11n MCS8 HT40

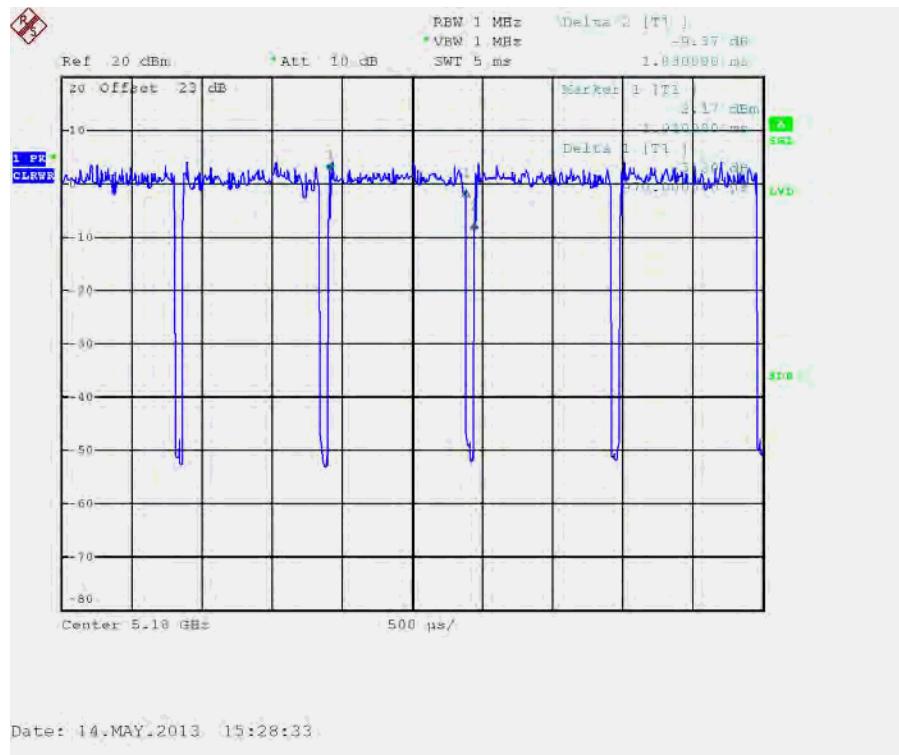


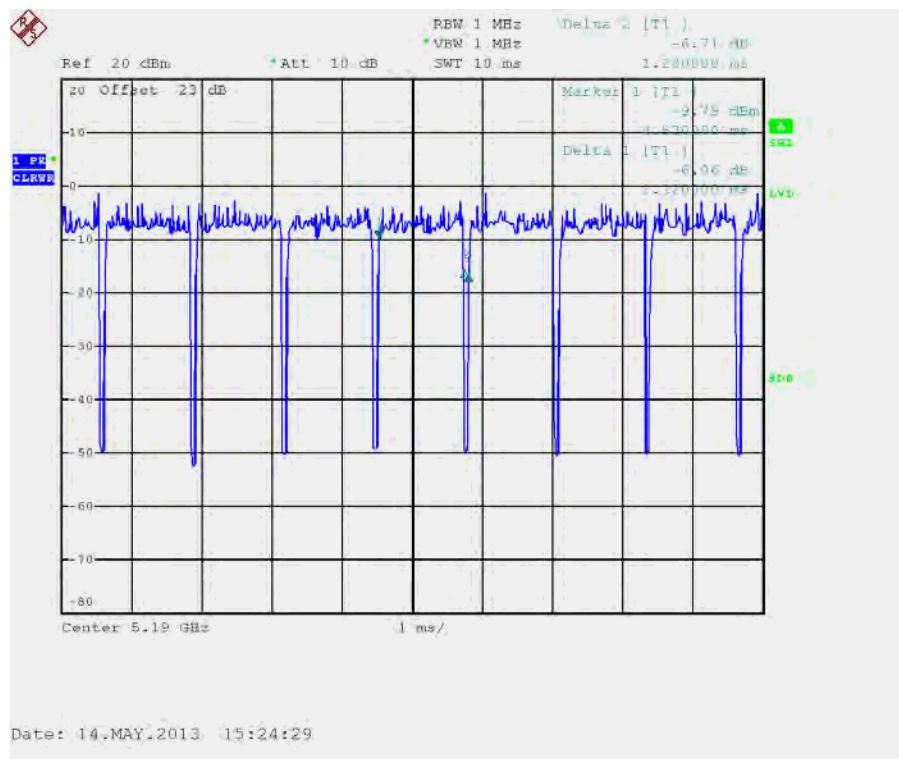
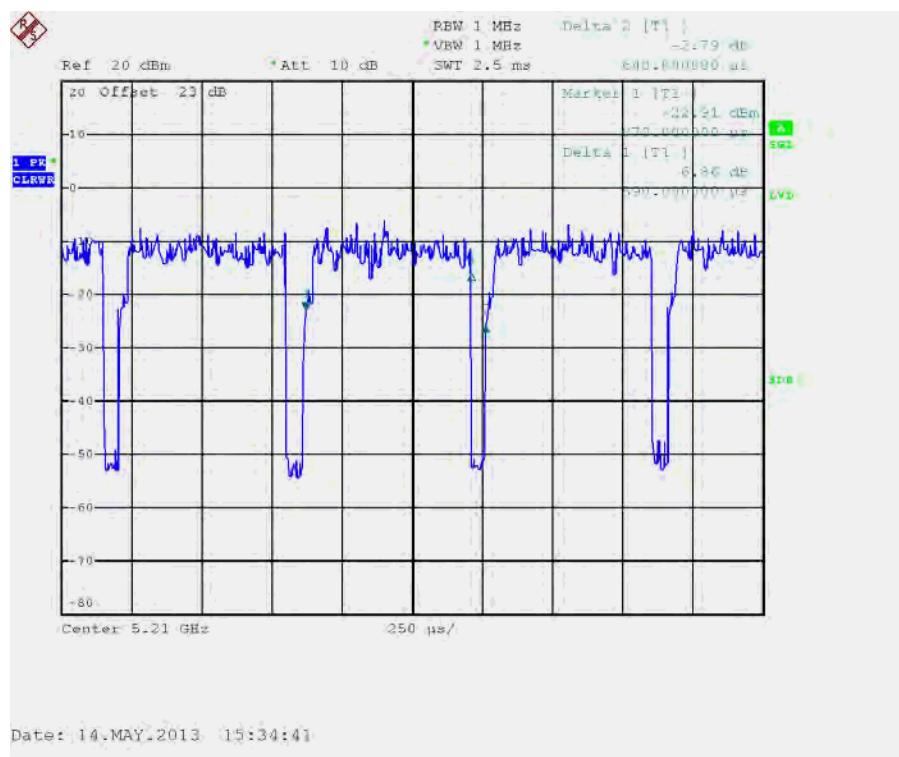
IEEE 802.11n MCS16 HT20

IEEE 802.11n MCS16 HT40


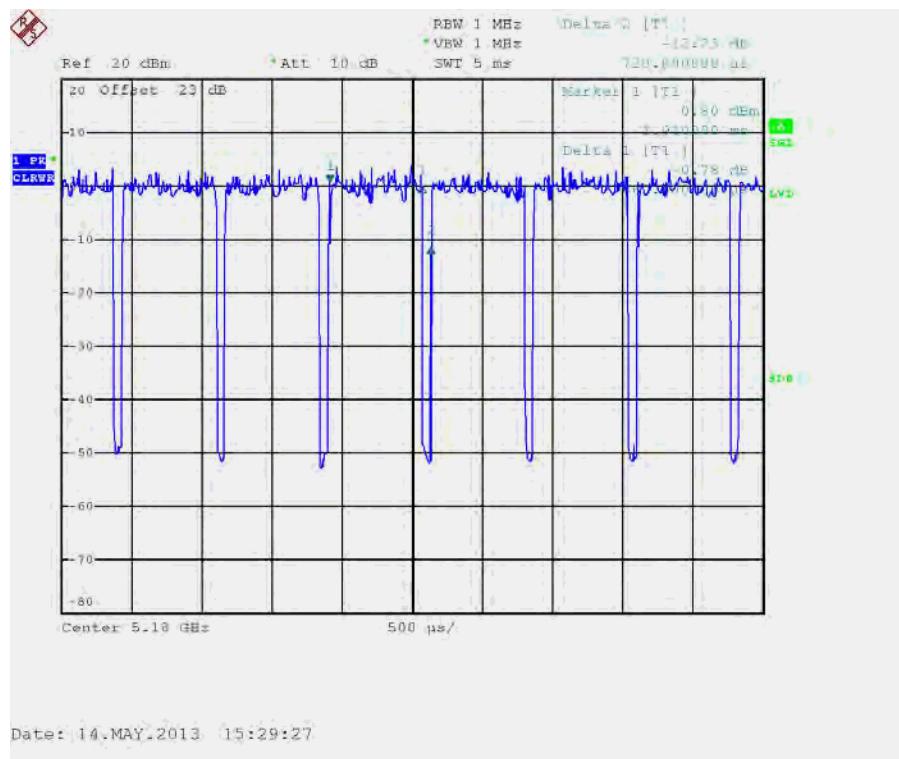
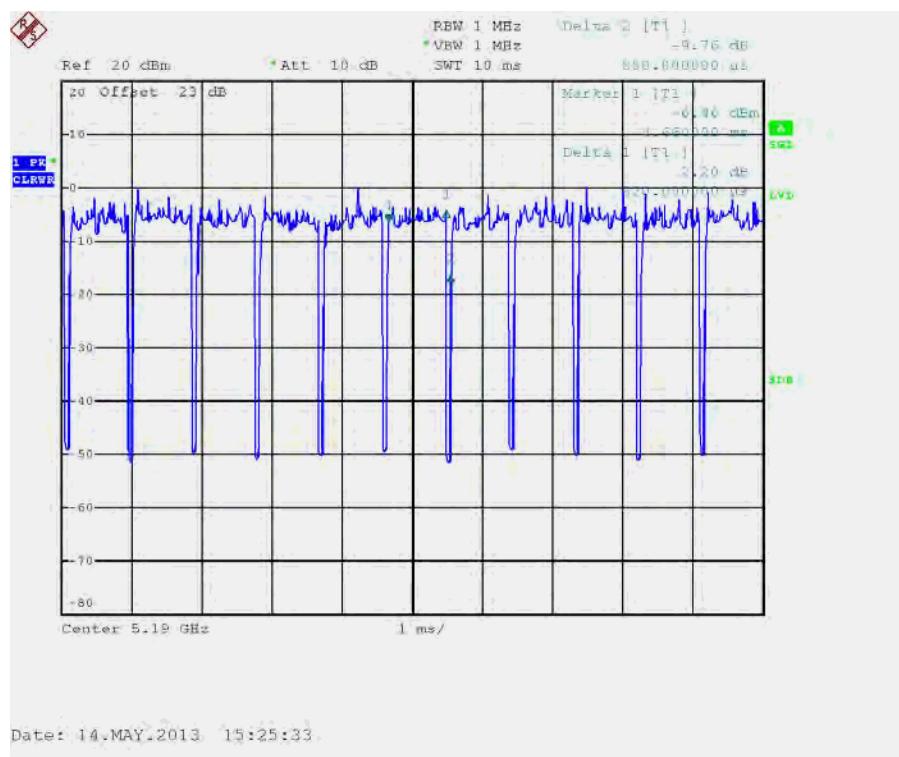
IEEE 802.11ac MCS0/Nss1 VHT20

IEEE 802.11ac MCS0/Nss1 VHT40


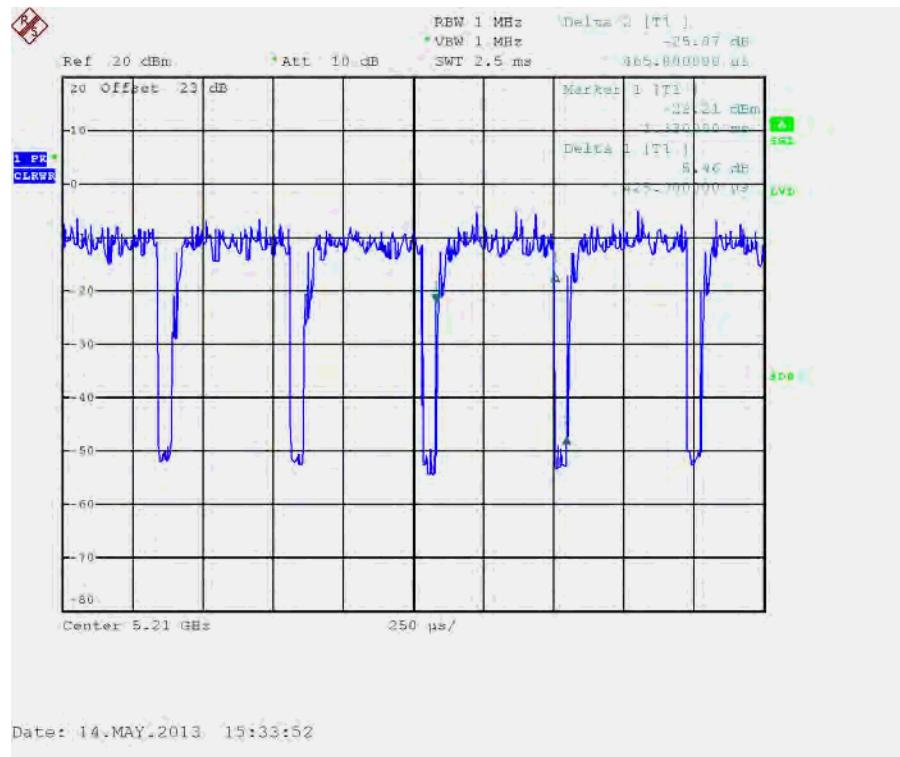
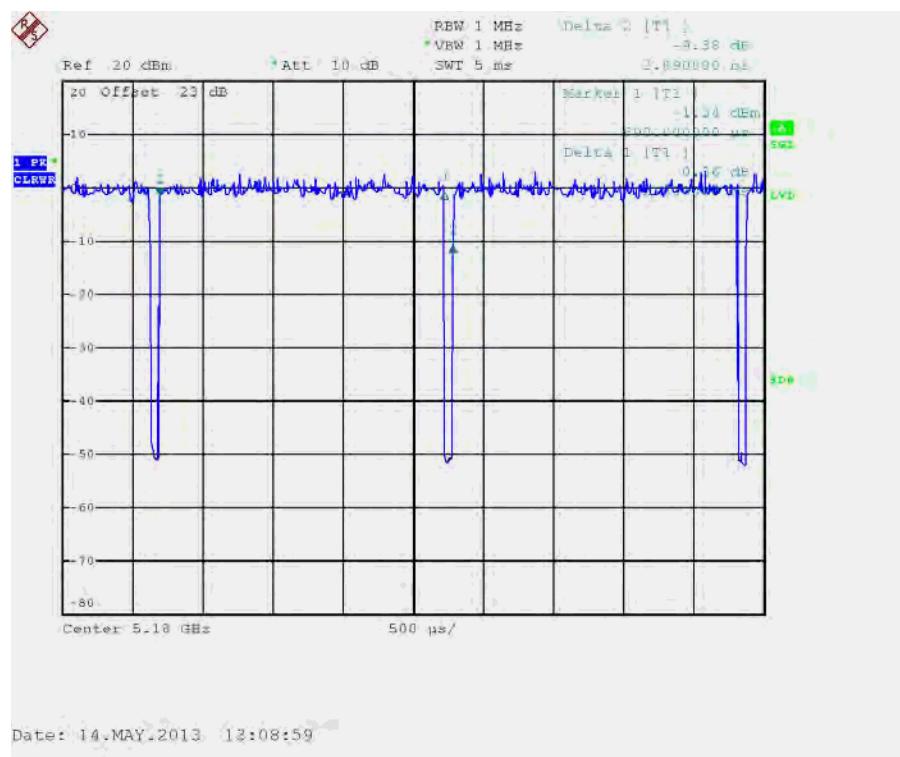
IEEE 802.11ac MCS0/Nss1 VHT80


Date: 14.MAY.2013 15:31:32

IEEE 802.11ac MCS0/Nss2 VHT20


IEEE 802.11ac MCS0/Nss2 VHT40

IEEE 802.11ac MCS0/Nss2 VHT80


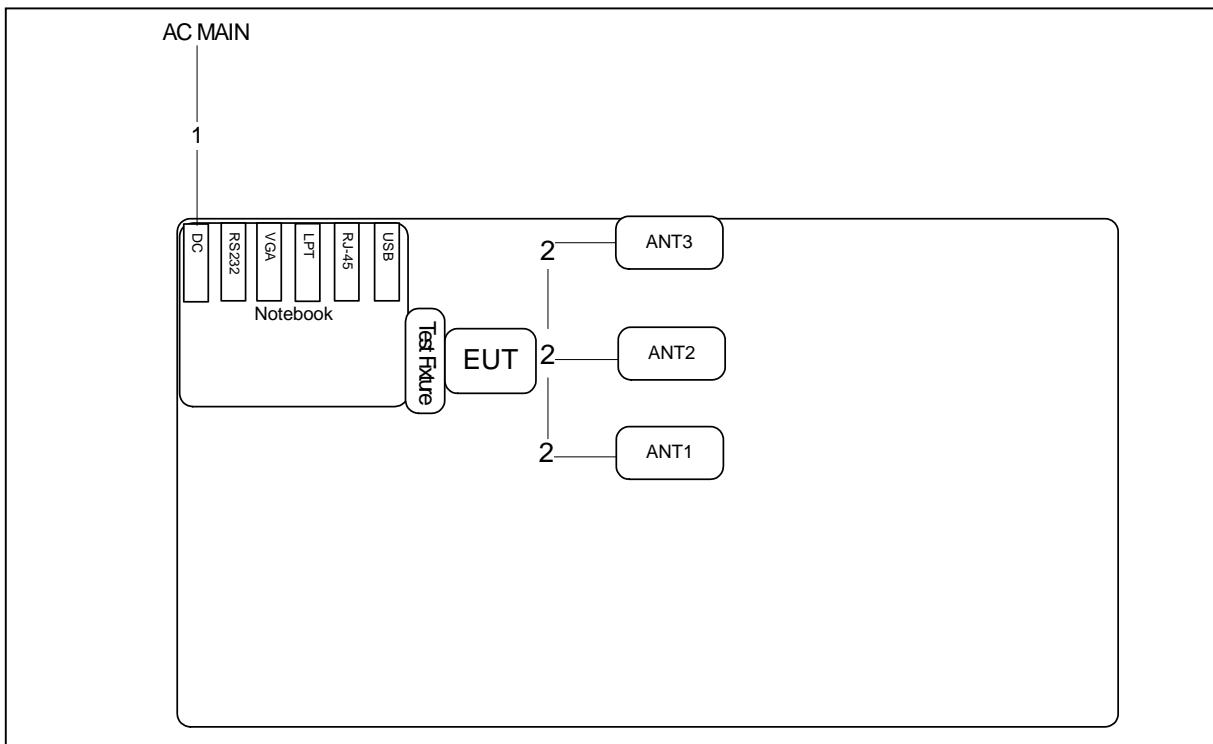
IEEE 802.11ac MCS0/Nss3 VHT20

IEEE 802.11ac MCS0/Nss3 VHT40


IEEE 802.11ac MCS0/Nss3 VHT80

IEEE 802.11a


3.11. Test Configurations

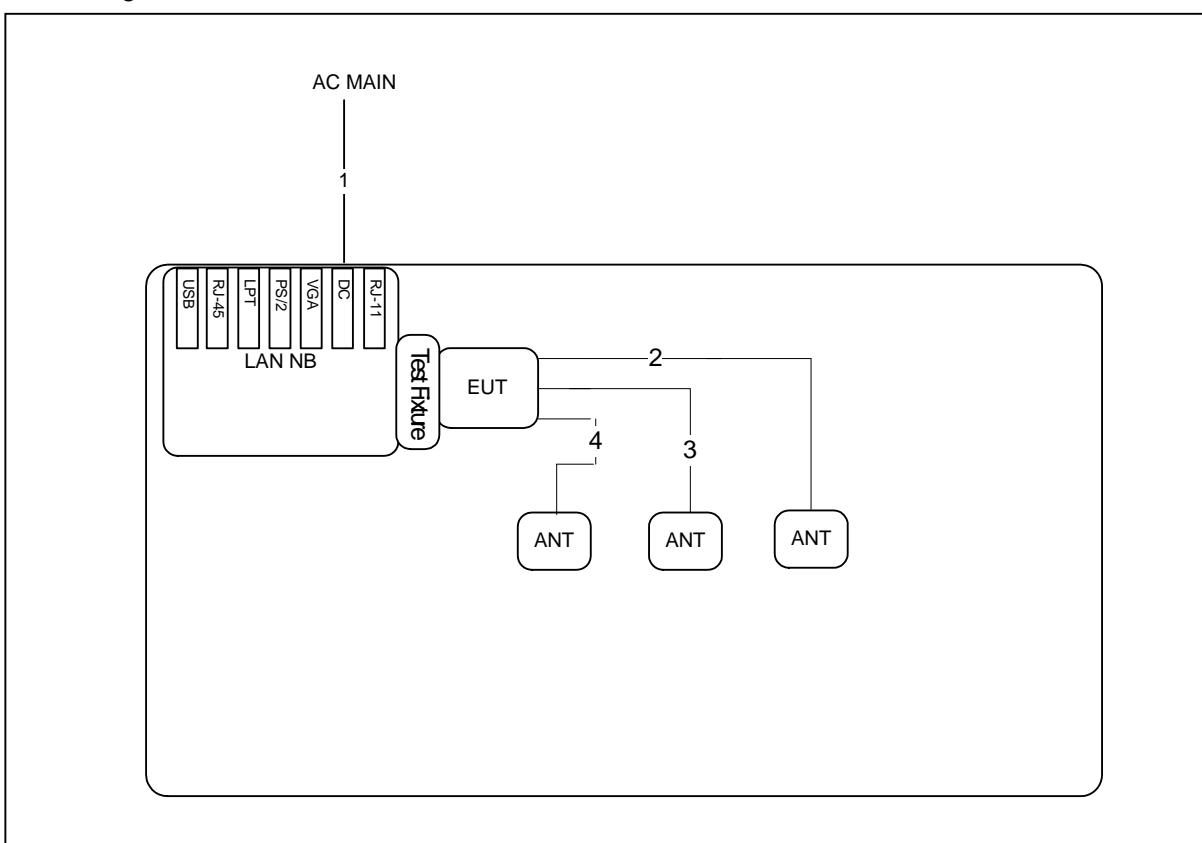
3.11.1. AC Power Line Conduction and Radiation Emissions Test Configuration

Test Configuration: Conduction and Radiation 30MHz~1GHz / Test Mode: Mode 1



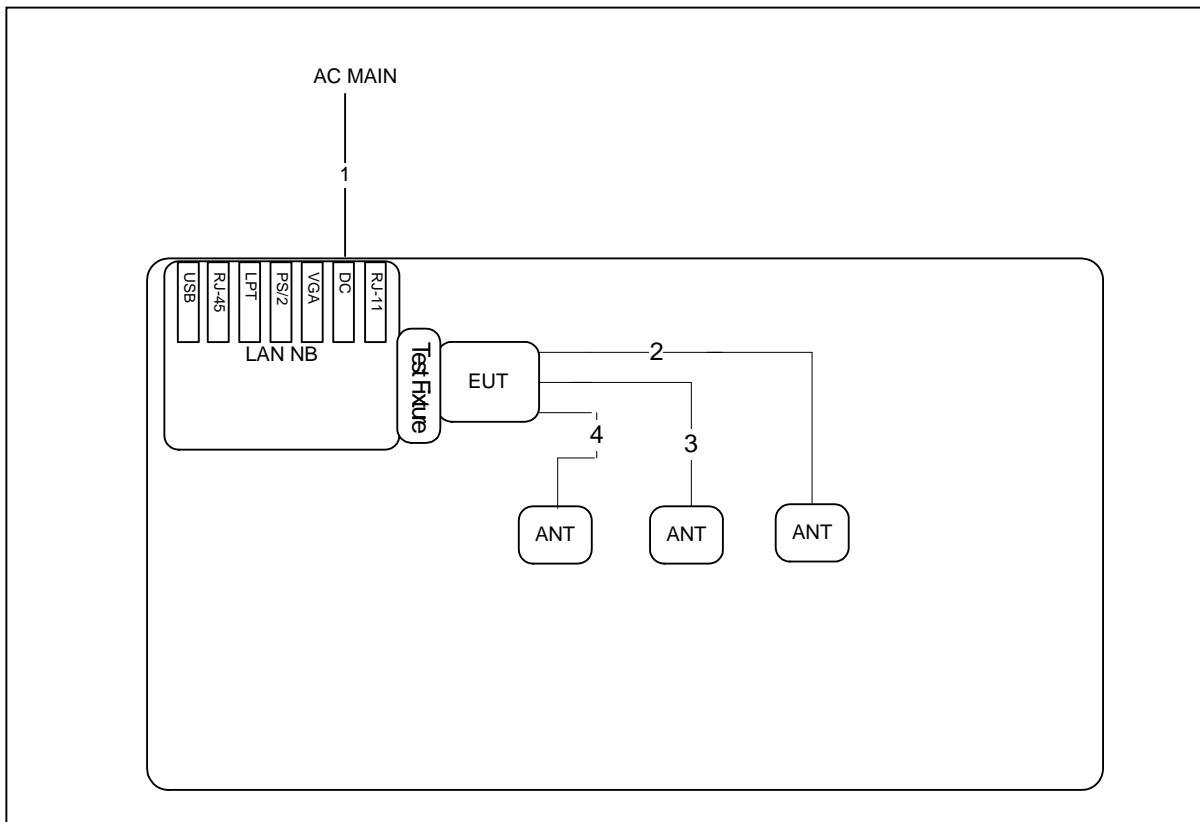
Item	Connection	Shield	Length
1	Power cable	No	2.97m
2	Ant cable	No	1.1m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 1



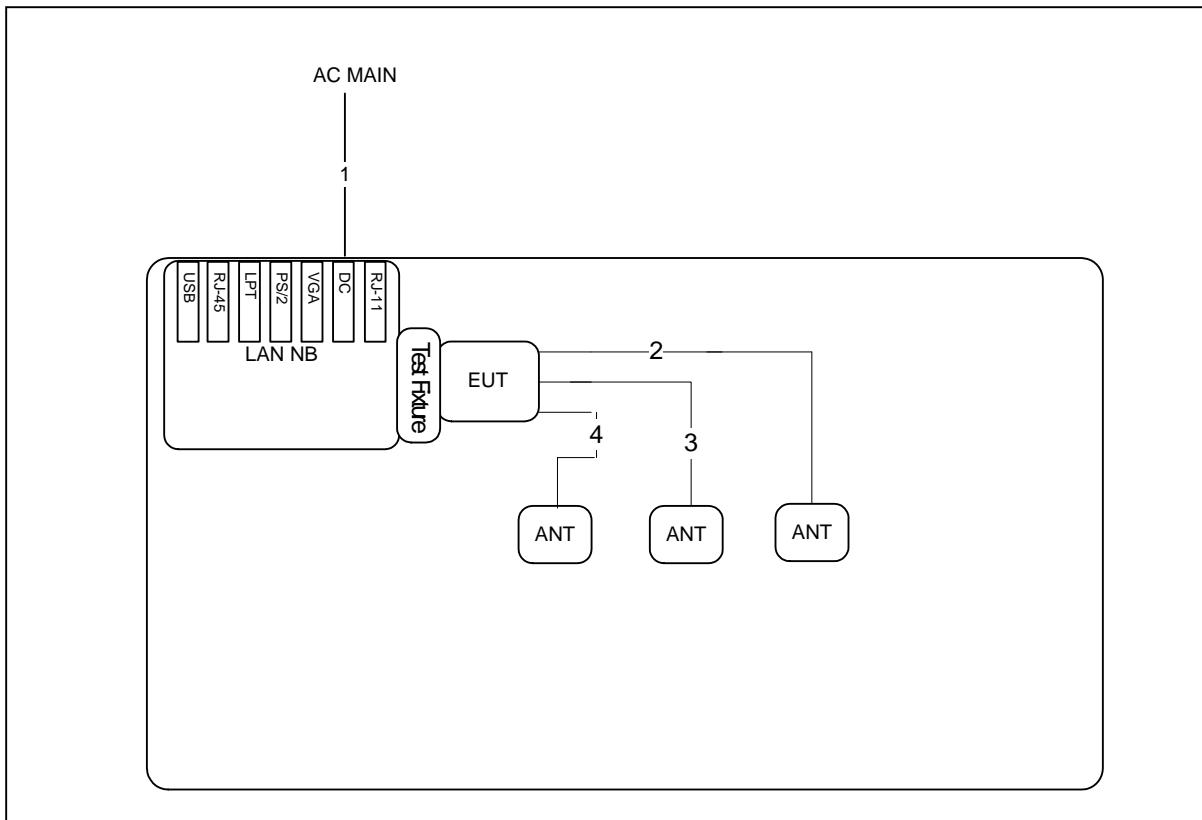
Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	1.2m
3	Ant cable	Yes	1.2m
4	Ant cable	Yes	1.2m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 2



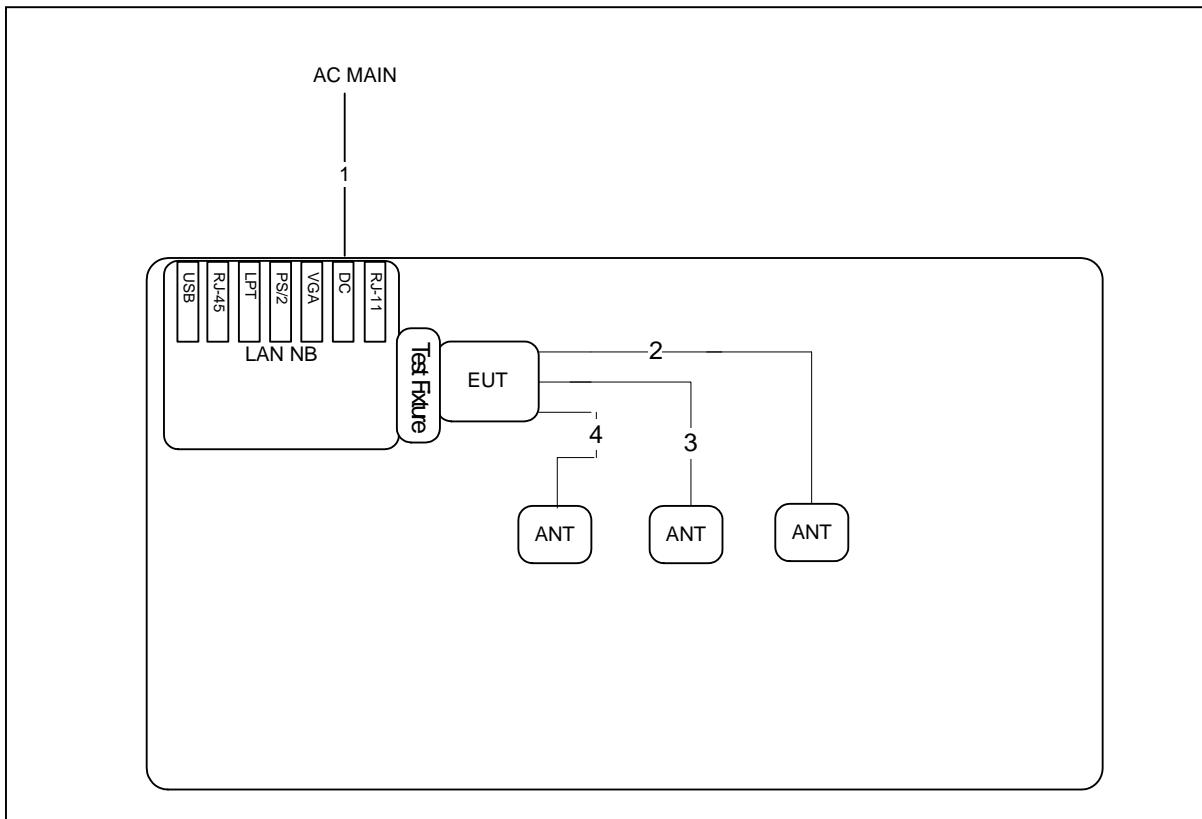
Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	1.1m
3	Ant cable	Yes	1.1m
4	Ant cable	Yes	1.1m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 3



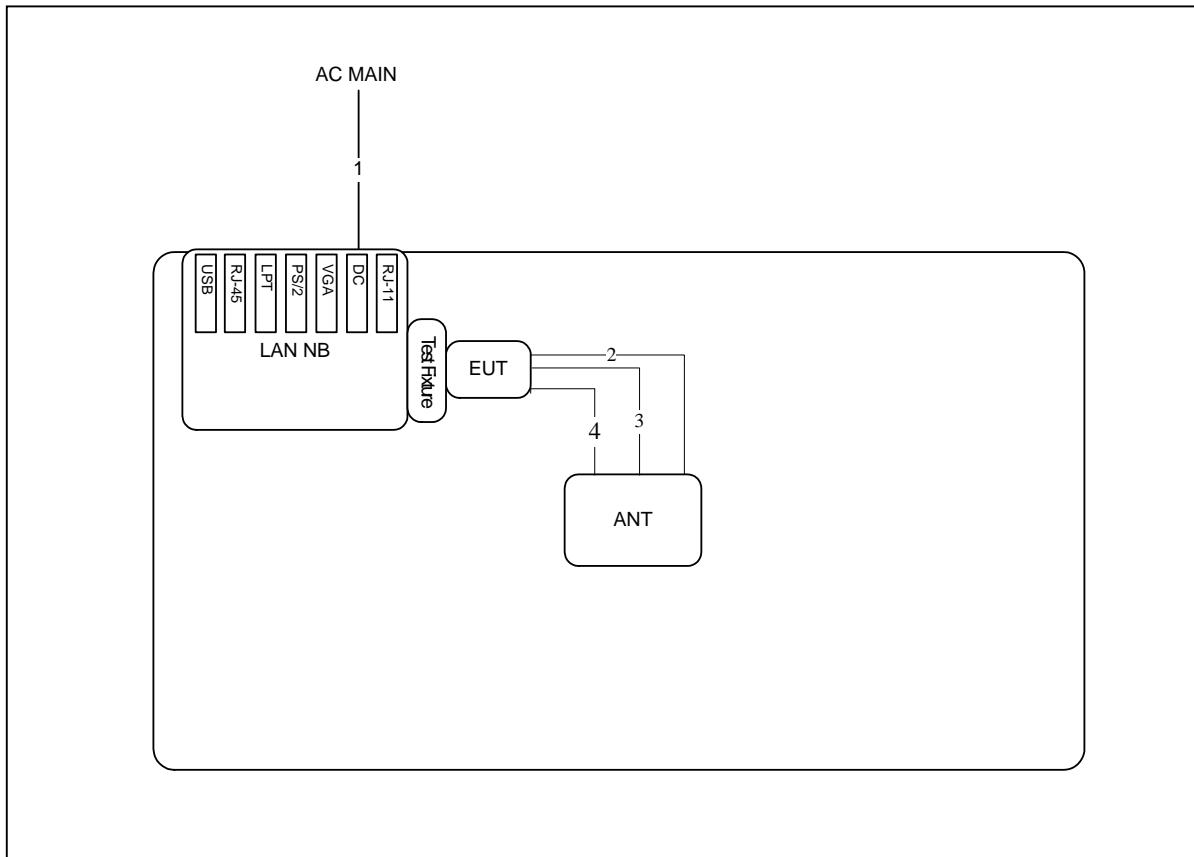
Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	1.2m
3	Ant cable	Yes	1.2m
4	Ant cable	Yes	1.2m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 4



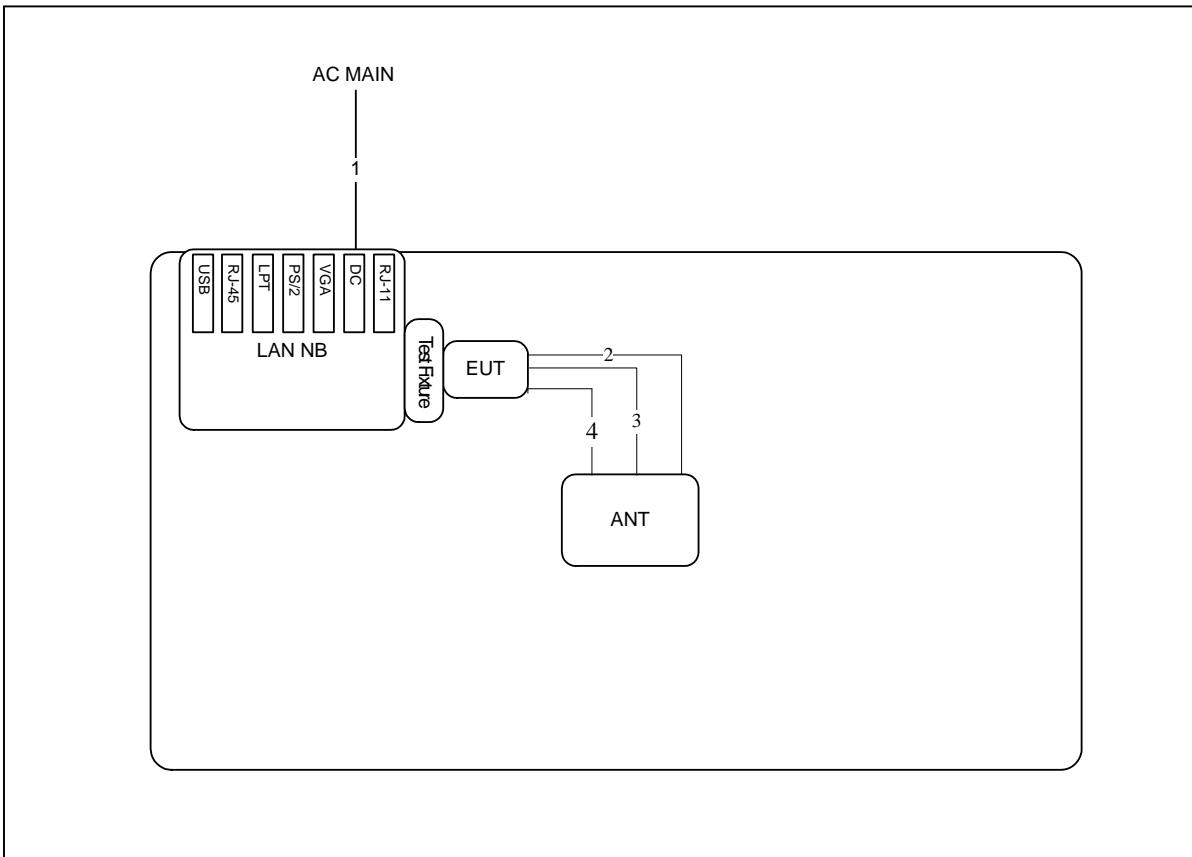
Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	1.2m
3	Ant cable	Yes	1.2m
4	Ant cable	Yes	1.2m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 5



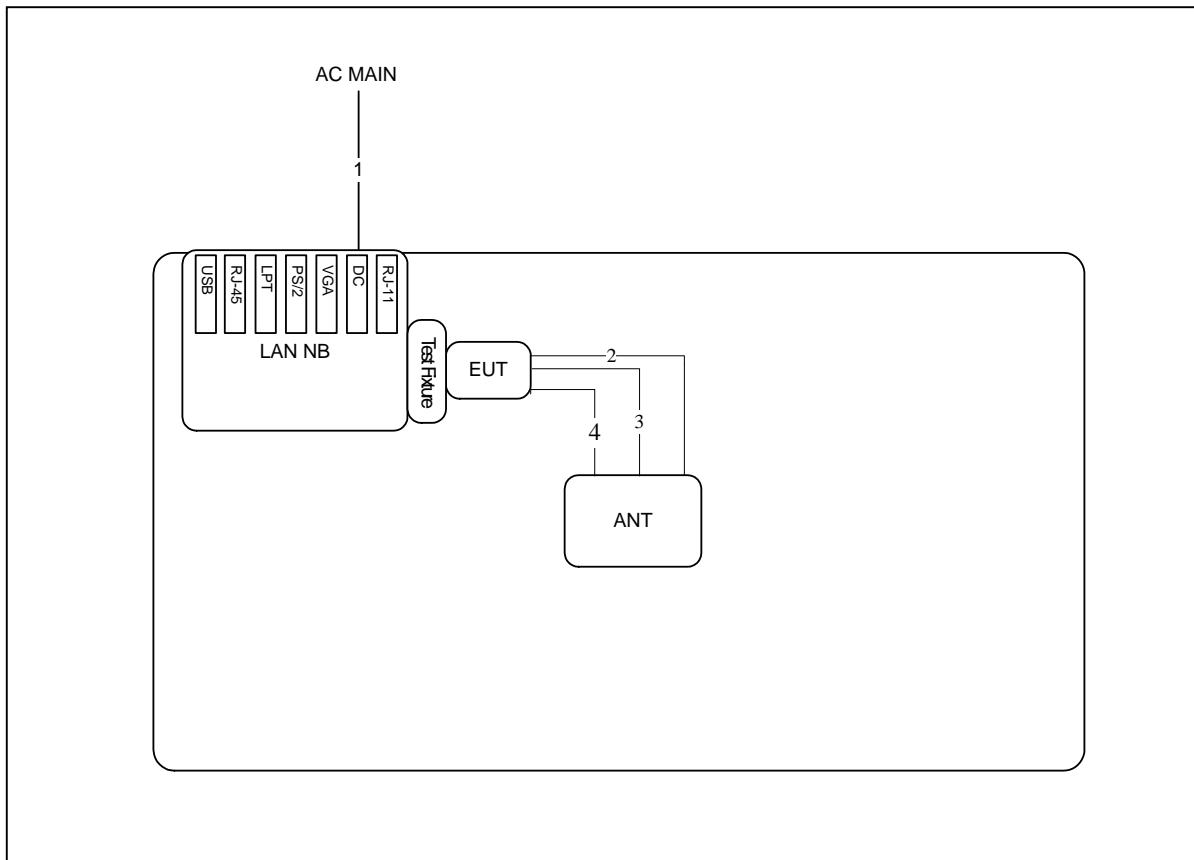
Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	0.25m
3	Ant cable	Yes	0.25m
4	Ant cable	Yes	0.25m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 6



Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	1.1m
3	Ant cable	Yes	1.1m
4	Ant cable	Yes	1.1m

Test Configuration: Radiation above 1GHz / Test Mode: Mode 7



Item	Connection	Shield	Length
1	Power cable	No	1.8m
2	Ant cable	Yes	0.18m
3	Ant cable	Yes	0.18m
4	Ant cable	Yes	0.18m

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

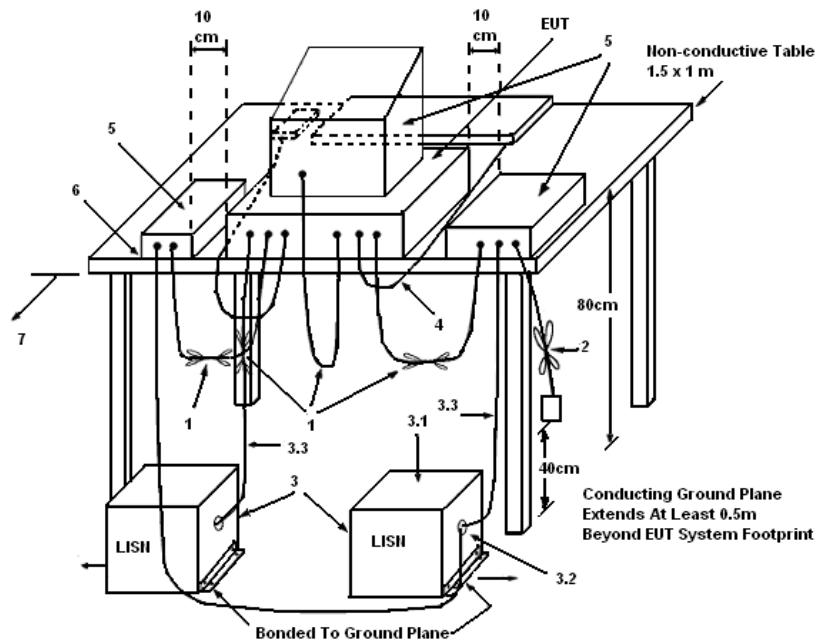
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver.

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 50Ω . 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

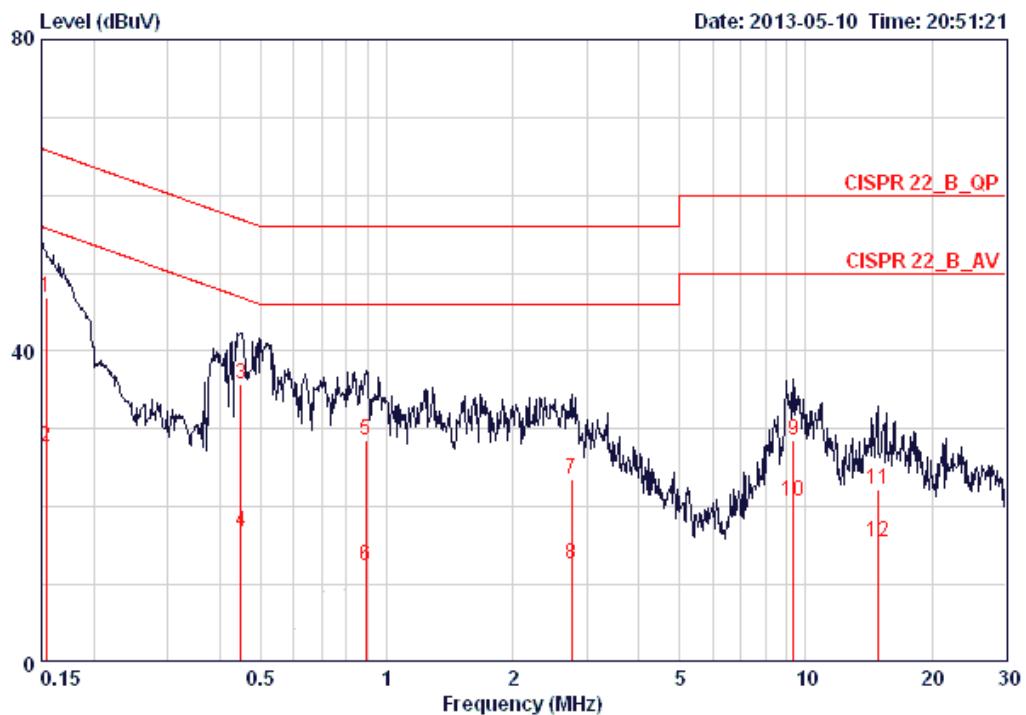
There is no deviation with the original standard.

4.1.6. EUT Operation during Test

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

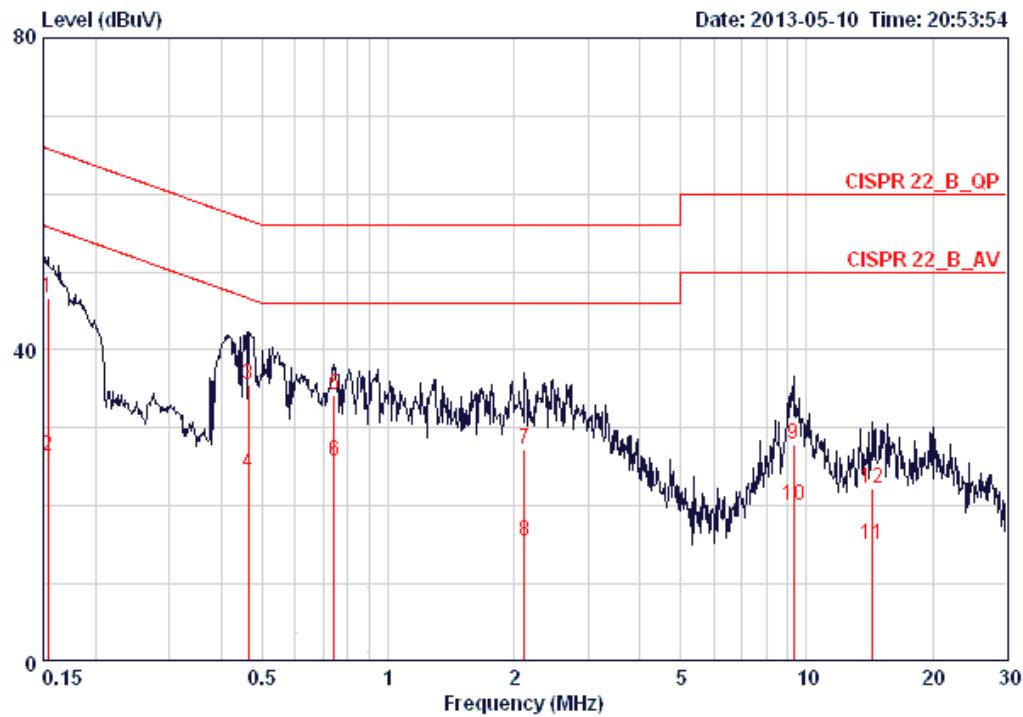
4.1.7. Results of AC Power Line Conducted Emissions Measurement

Temperature	24°C	Humidity	48%
Test Engineer	Hank Yang	Phase	Line
Configuration	CTX	Test Mode	Mode 1



Freq	Level	Over	Limit	Read	LISN	Cable	Remark
		Limit	Line	Level	Factor	Loss	
MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.15403	46.97	-18.81	65.78	46.63	0.16	0.18 LINE QP
2	0.15403	27.66	-28.12	55.78	27.32	0.16	0.18 LINE AVERAGE
3	0.44916	35.73	-21.16	56.89	35.38	0.15	0.20 LINE QP
4	0.44916	16.72	-30.17	46.89	16.37	0.15	0.20 LINE AVERAGE
5	0.88969	28.64	-27.36	56.00	28.27	0.17	0.20 LINE QP
6	0.88969	12.47	-33.53	46.00	12.10	0.17	0.20 LINE AVERAGE
7	2.765	23.63	-32.37	56.00	23.18	0.20	0.25 LINE QP
8	2.765	12.54	-33.46	46.00	12.09	0.20	0.25 LINE AVERAGE
9	9.352	28.46	-31.54	60.00	27.81	0.33	0.32 LINE QP
10	9.352	20.79	-29.21	50.00	20.14	0.33	0.32 LINE AVERAGE
11	14.828	22.34	-37.66	60.00	21.52	0.41	0.41 LINE QP
12	14.828	15.57	-34.43	50.00	14.75	0.41	0.41 LINE AVERAGE

Temperature	24°C	Humidity	48%
Test Engineer	Hank Yang	Phase	Neutral
Configuration	CTX	Test Mode	Mode 1



Freq	Level	Over	Limit	Read	LISN	Cable	Remark
		Limit	Line	Level	Factor	Loss	
MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.15403	46.71	-19.07	65.78	46.45	0.08	0.18 NEUTRAL QP
2	0.15403	26.36	-29.42	55.78	26.10	0.08	0.18 NEUTRAL AVERAGE
3	0.46367	35.43	-21.20	56.63	35.15	0.08	0.20 NEUTRAL QP
4	0.46367	24.20	-22.43	46.63	23.92	0.08	0.20 NEUTRAL AVERAGE
5	0.74302	34.15	-21.85	56.00	33.86	0.09	0.20 NEUTRAL QP
6	0.74302	25.64	-20.36	46.00	25.35	0.09	0.20 NEUTRAL AVERAGE
7	2.121	27.34	-28.66	56.00	27.00	0.11	0.23 NEUTRAL QP
8	2.121	15.47	-30.53	46.00	15.13	0.11	0.23 NEUTRAL AVERAGE
9	9.302	27.95	-32.05	60.00	27.41	0.23	0.32 NEUTRAL QP
10	9.302	20.12	-29.88	50.00	19.58	0.23	0.32 NEUTRAL AVERAGE
11	14.364	15.04	-34.96	50.00	14.33	0.31	0.40 NEUTRAL AVERAGE
12	14.364	22.19	-37.81	60.00	21.48	0.31	0.40 NEUTRAL QP

Note:

Level = Read Level + LISN Factor + Cable Loss.

4.2. 26dB Bandwidth & 99% Occupied Bandwidth Measurement

4.2.1. Limit

No restriction limits.

4.2.2. Measuring Instruments and Setting

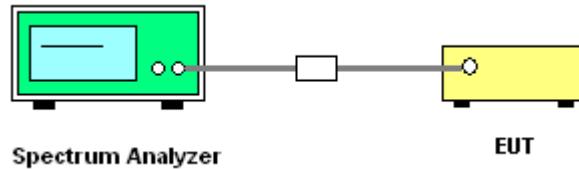
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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	$\geq 3 \times$ RBW
Detector	Peak
Trace	Max Hold

4.2.3. Test Procedures

1. The transmitter output (antenna port) was connected 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



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 & 99% Occupied Bandwidth

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Mode	Mode 1 (Ant.1 Dipole antenna / 8dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.44	18.24
40	5200 MHz	26.08	18.24
48	5240 MHz	25.92	18.24

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	48.32	36.48
46	5230 MHz	49.60	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	96.00	76.16

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	21.60	17.12
40	5200 MHz	20.48	16.96
48	5240 MHz	25.44	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.12	36.16
46	5230 MHz	45.44	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	89.28	77.04

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.32	18.08
40	5200 MHz	23.36	17.92
48	5240 MHz	23.84	18.24

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.72	37.44
46	5230 MHz	49.28	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.00	76.32

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.52	17.92
40	5200 MHz	23.04	17.92
48	5240 MHz	24.48	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.72	38.40
46	5230 MHz	44.48	35.52

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	87.12	77.04

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.04	18.24
40	5200 MHz	23.04	18.24
48	5240 MHz	22.24	18.08

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.08	37.12
46	5230 MHz	46.72	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	87.84	76.32

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.72	17.92
40	5200 MHz	22.88	17.92
48	5240 MHz	21.76	17.92

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.76	37.44
46	5230 MHz	48.96	37.44

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	88.56	76.32

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Mode	Mode 2 (Ant.3 Panel antenna / 12.5dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.80	18.24
40	5200 MHz	25.76	18.24
48	5240 MHz	25.76	18.24

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.04	36.48
46	5230 MHz	48.32	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	99.20	76.80

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	20.32	16.64
40	5200 MHz	24.32	18.88
48	5240 MHz	25.12	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.08	37.12
46	5230 MHz	47.36	37.12

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.24	76.80

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.68	18.24
40	5200 MHz	24.64	18.24
48	5240 MHz	24.32	18.08

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.36	36.48
46	5230 MHz	47.68	36.48

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	93.44	76.80

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Mode	Mode 3 (Ant.4 Yagi antenna / 8dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.44	18.24
40	5200 MHz	26.08	18.24
48	5240 MHz	25.92	18.24

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	48.32	36.48
46	5230 MHz	49.60	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	96.00	76.80

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	21.60	17.12
40	5200 MHz	20.48	16.96
48	5240 MHz	25.44	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.44	38.08
46	5230 MHz	45.44	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.72	77.04

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.32	18.08
40	5200 MHz	23.36	17.92
48	5240 MHz	23.84	18.24

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.72	37.44
46	5230 MHz	49.28	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	92.88	76.32

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.52	17.92
40	5200 MHz	23.04	17.92
48	5240 MHz	24.48	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.72	38.40
46	5230 MHz	44.48	35.52

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	98.64	74.16

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.04	18.24
40	5200 MHz	23.04	18.24
48	5240 MHz	22.24	18.08

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.08	37.12
46	5230 MHz	46.72	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	93.60	77.04

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.72	17.92
40	5200 MHz	22.88	17.92
48	5240 MHz	21.76	17.92

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.76	37.44
46	5230 MHz	48.96	37.44

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	87.12	76.32

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Mode	Mode 4 (Ant.5 Patch antenna / 2.3dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.28	18.24
40	5200 MHz	25.44	18.24
48	5240 MHz	25.92	18.40

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	48.96	36.48
46	5230 MHz	49.28	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	97.28	76.80

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.44	18.56
40	5200 MHz	24.64	18.72
48	5240 MHz	25.28	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.76	36.48
46	5230 MHz	46.72	38.08

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.72	76.32

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.32	18.08
40	5200 MHz	24.32	18.08
48	5240 MHz	24.64	18.24

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.68	37.12
46	5230 MHz	47.36	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.00	76.32

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.84	17.92
40	5200 MHz	24.80	18.88
48	5240 MHz	20.00	16.00

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.36	37.44
46	5230 MHz	47.36	37.12

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	92.88	77.04

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.72	17.92
40	5200 MHz	22.88	18.08
48	5240 MHz	22.72	17.92

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.44	37.12
46	5230 MHz	49.28	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	92.16	76.32

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.24	17.92
40	5200 MHz	22.88	17.92
48	5240 MHz	23.04	18.08

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.04	37.44
46	5230 MHz	50.56	37.44

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	88.56	76.32

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Mode	Mode 5 (Ant.6 Facade antenna / 2.5dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.28	18.24
40	5200 MHz	25.44	18.24
48	5240 MHz	25.92	18.40

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	48.96	36.48
46	5230 MHz	49.28	36.48

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	94.08	76.80

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	25.44	18.56
40	5200 MHz	24.64	18.72
48	5240 MHz	25.28	18.88

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.76	36.48
46	5230 MHz	46.72	38.08

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	88.56	75.60

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.32	18.08
40	5200 MHz	24.32	18.08
48	5240 MHz	24.64	18.24

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.68	37.12
46	5230 MHz	47.36	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	89.28	76.32

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.84	17.92
40	5200 MHz	24.80	18.88
48	5240 MHz	20.00	16.00

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.36	37.44
46	5230 MHz	47.36	37.12

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.00	73.44

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.72	17.92
40	5200 MHz	22.88	18.08
48	5240 MHz	22.72	17.92

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.44	37.12
46	5230 MHz	49.28	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	92.88	76.32

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.24	17.92
40	5200 MHz	22.88	17.92
48	5240 MHz	23.04	18.08

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.04	37.44
46	5230 MHz	50.56	37.44

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	87.12	76.32

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Mode	Mode 6 (Ant.9 Panel antenna / 9.2dBi)		

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.32	19.04
40	5200 MHz	23.68	17.76
48	5240 MHz	24.16	17.60

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.40	38.40
46	5230 MHz	41.28	35.52

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	93.60	76.32

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.40	17.92
40	5200 MHz	22.72	17.92
48	5240 MHz	23.04	18.40

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.72	37.12
46	5230 MHz	48.00	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.72	77.04

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.52	17.92
40	5200 MHz	23.20	18.24
48	5240 MHz	22.56	17.92

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.76	37.12
46	5230 MHz	50.24	37.44

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	93.60	77.04

Temperature	25°C	Humidity	56%
Test Engineer	Serway Li	Configurations	IEEE 802.11ac
Test Mode	Mode 7 (Ant.10 PIFA antenna / 5.3dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	26.24	18.24
40	5200 MHz	25.76	18.24
48	5240 MHz	26.24	18.24

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	50.24	37.44
46	5230 MHz	49.60	37.12

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	95.76	76.32

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.04	17.92
40	5200 MHz	24.32	18.08
48	5240 MHz	23.52	18.40

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.68	37.12
46	5230 MHz	48.64	37.12

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	88.56	74.16

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	23.36	17.92
40	5200 MHz	24.00	18.24
48	5240 MHz	23.20	17.92

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.36	37.12
46	5230 MHz	47.68	37.12

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	90.72	76.32

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.32	18.72
40	5200 MHz	24.64	18.72
48	5240 MHz	24.32	18.40

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	45.76	37.44
46	5230 MHz	45.44	37.12

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	88.96	74.88

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	22.88	18.08
40	5200 MHz	23.36	18.08
48	5240 MHz	23.68	18.08

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	47.68	37.44
46	5230 MHz	47.04	37.44

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	87.04	74.88

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

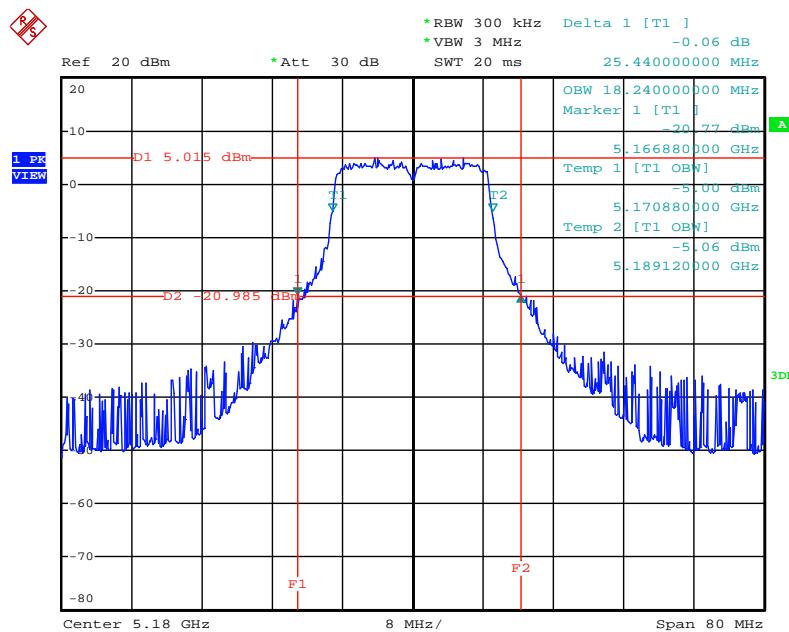
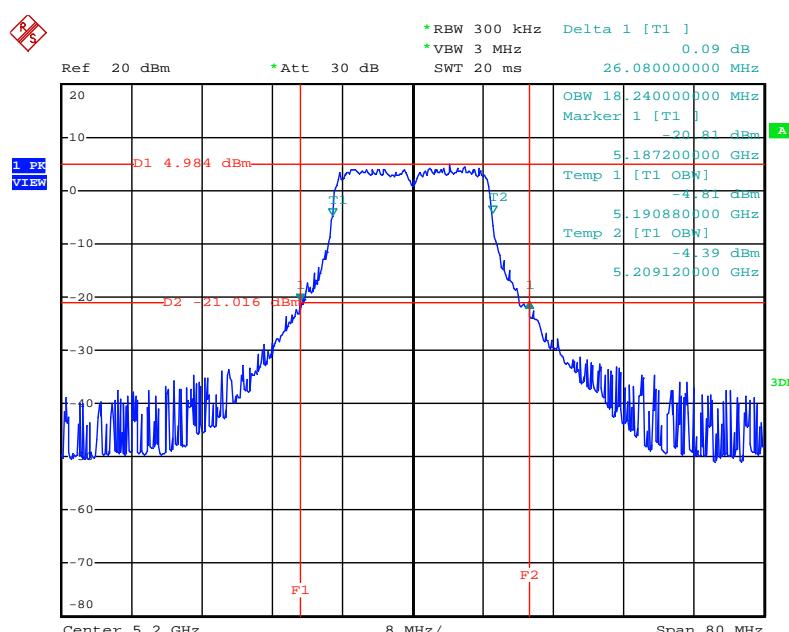
Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
36	5180 MHz	24.16	18.08
40	5200 MHz	23.36	18.08
48	5240 MHz	23.20	17.92

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

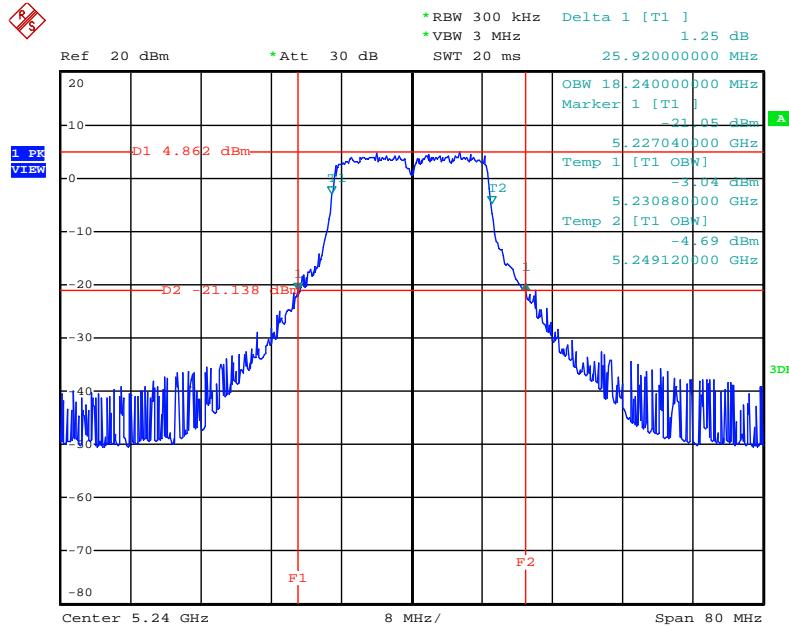
Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
38	5190 MHz	46.72	37.12
46	5230 MHz	45.76	37.12

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
42	5210 MHz	83.84	76.80

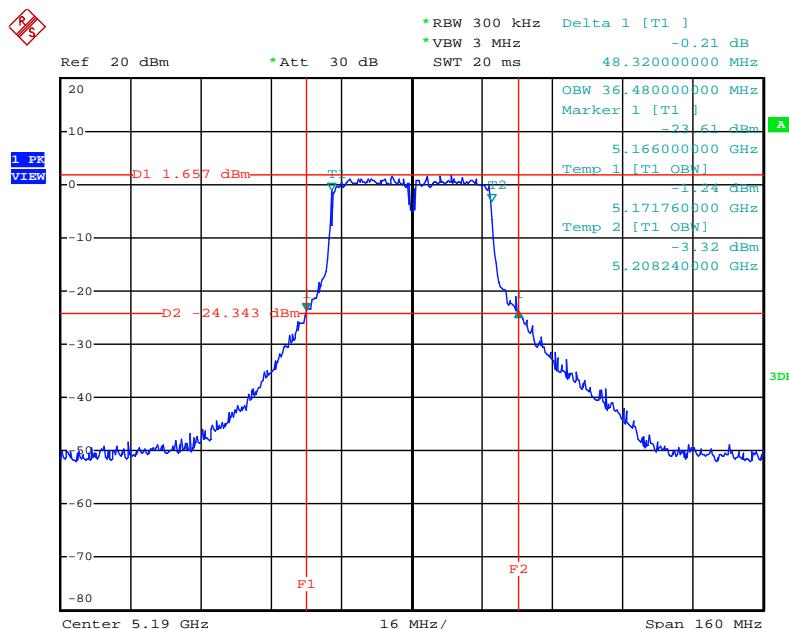
Mode 1 (Ant.1 Dipole antenna / 8dBi)
1TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5180 MHz

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5200 MHz


26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



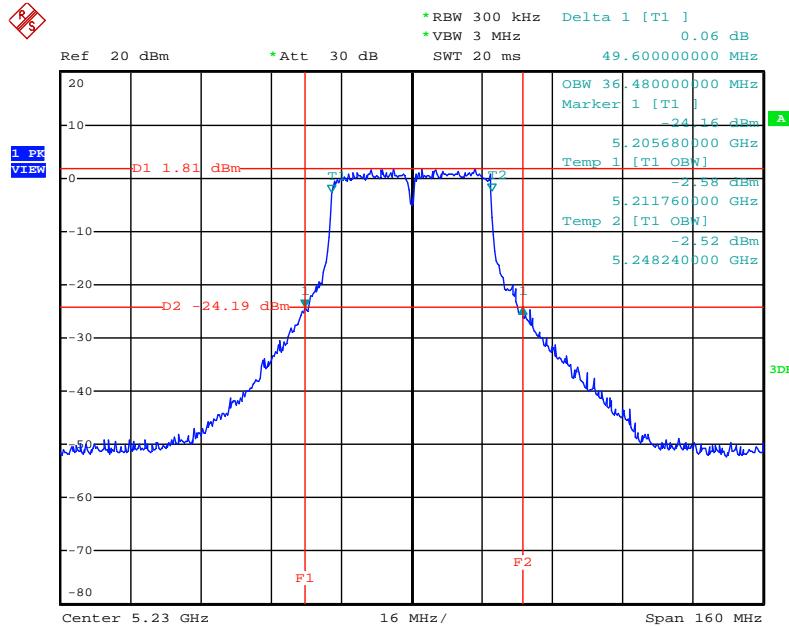
Date: 6.MAY.2013 11:51:04

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5190 MHz



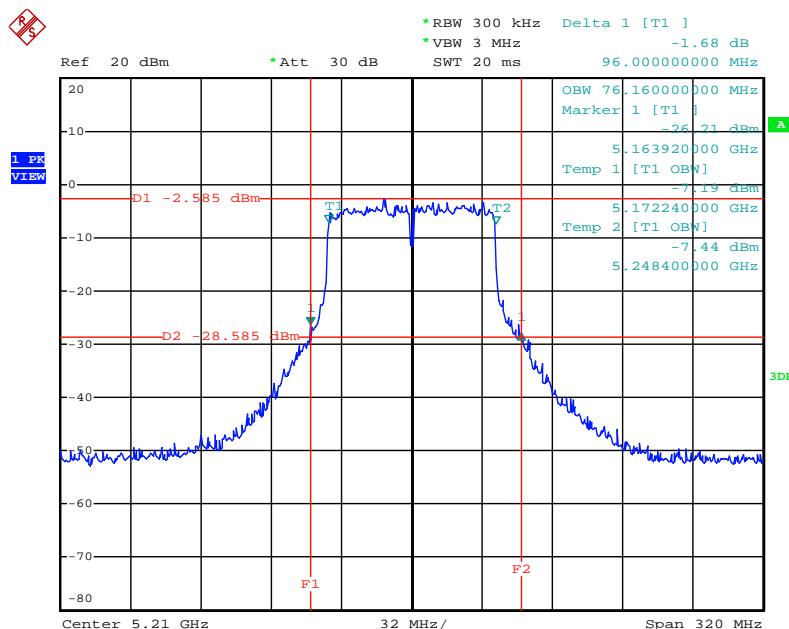
Date: 6.MAY.2013 12:04:31

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

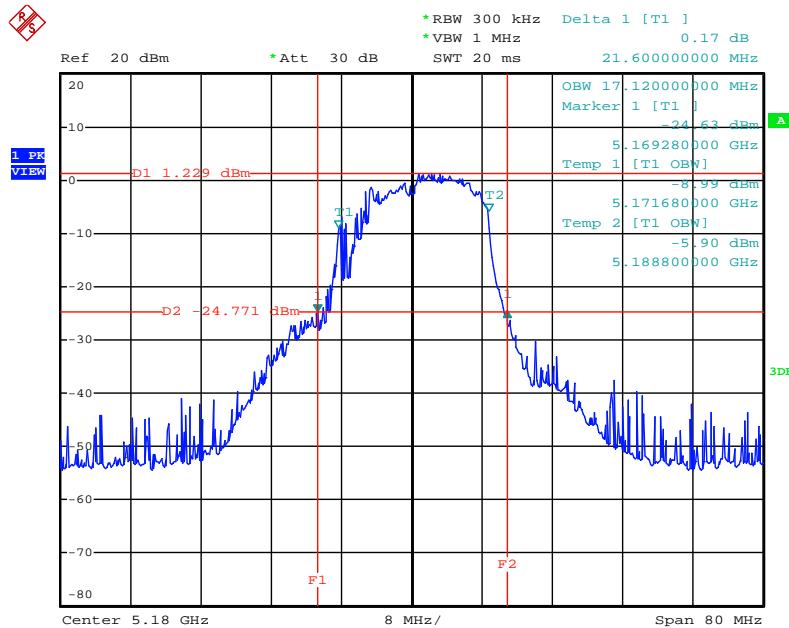


Date: 6.MAY.2013 12:05:58

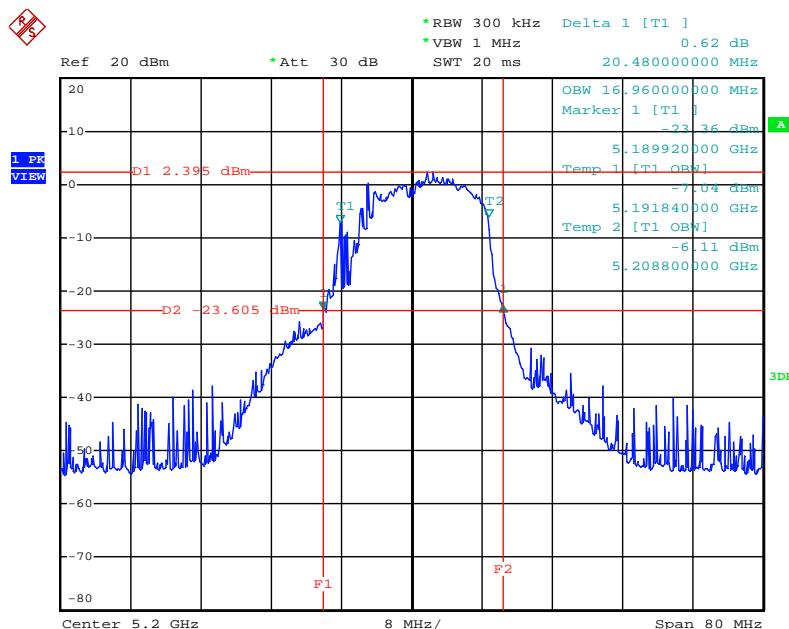
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz



Date: 6.MAY.2013 12:10:46

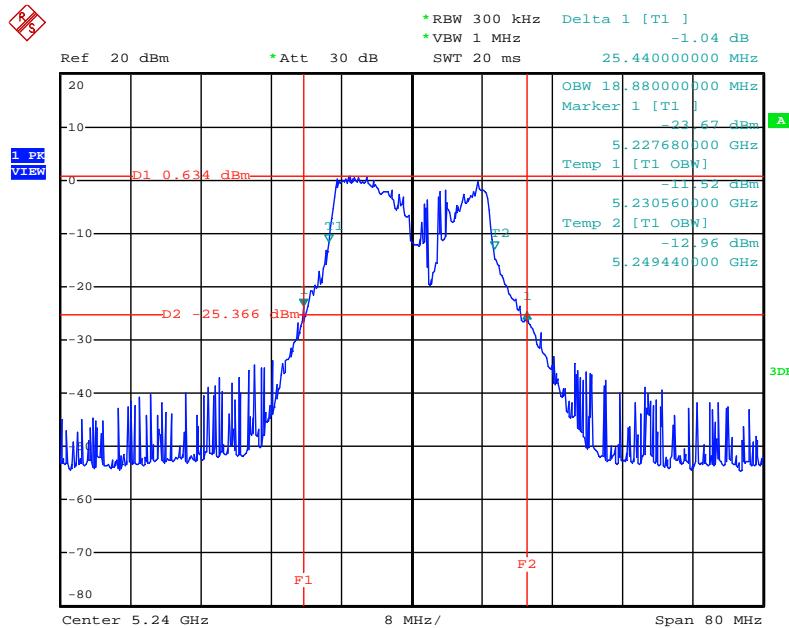
2TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz


Date: 8.MAY.2013 12:02:31

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz


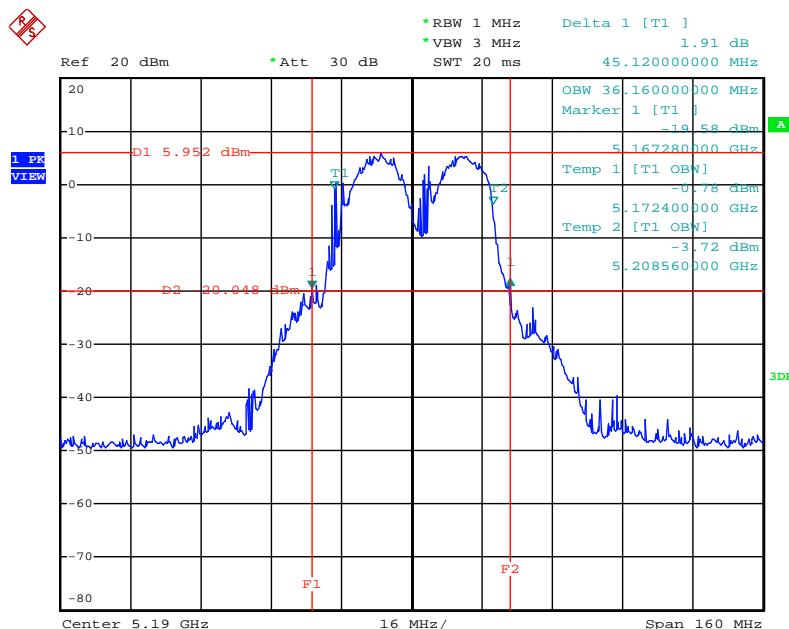
Date: 8.MAY.2013 12:02:48

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



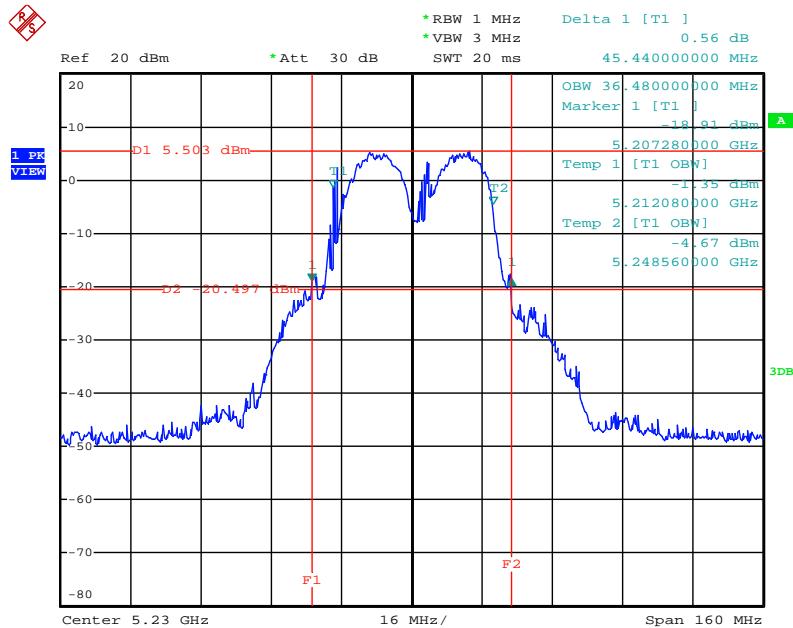
Date: 8.MAY.2013 12:03:04

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



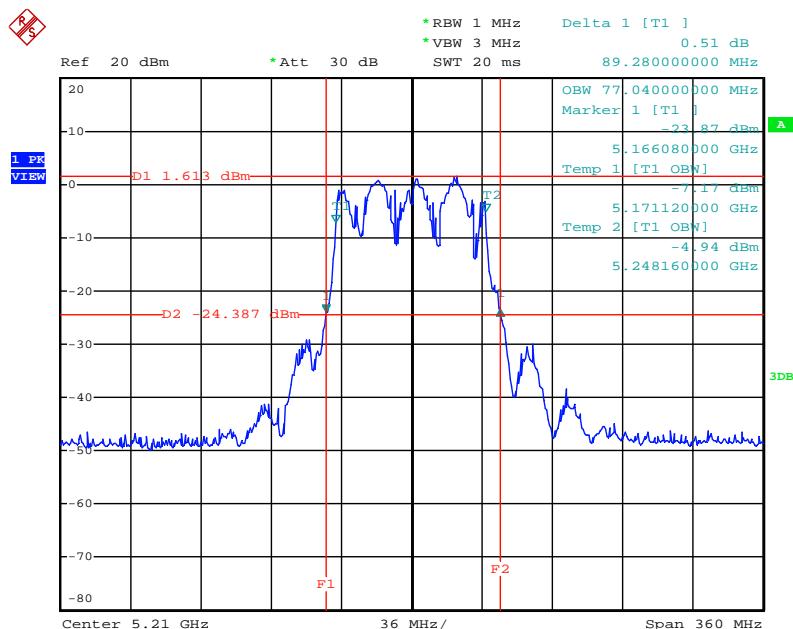
Date: 8.MAY.2013 12:04:40

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**



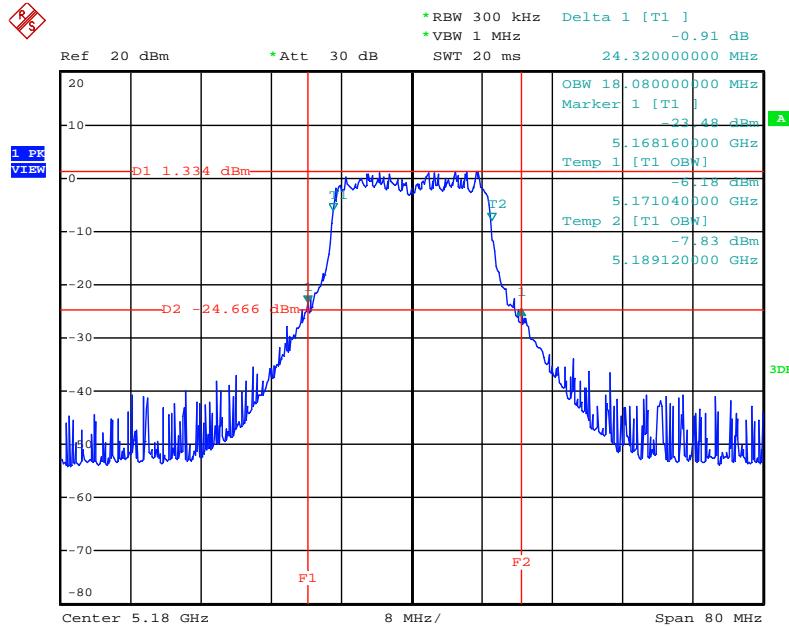
Date: 8.MAY.2013 12:05:04

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



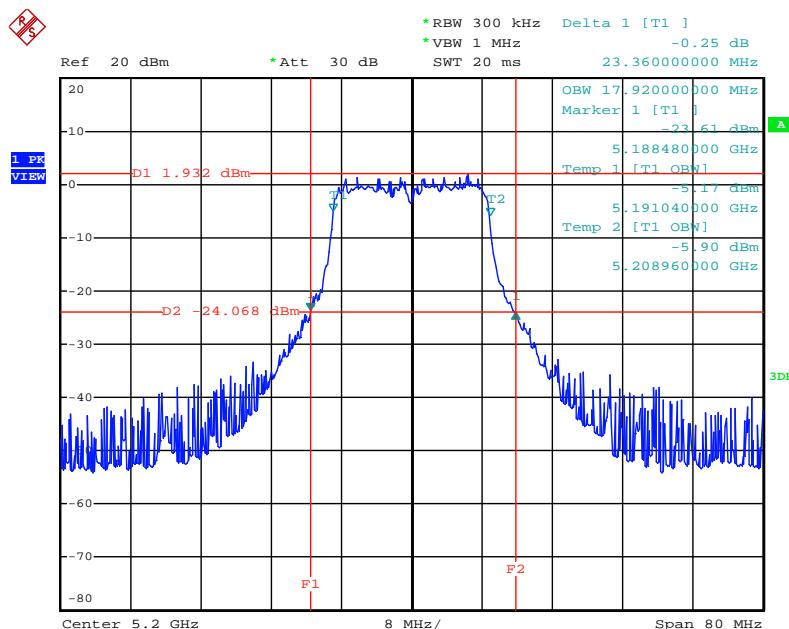
Date: 8.MAY.2013 12:11:19

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5180 MHz**



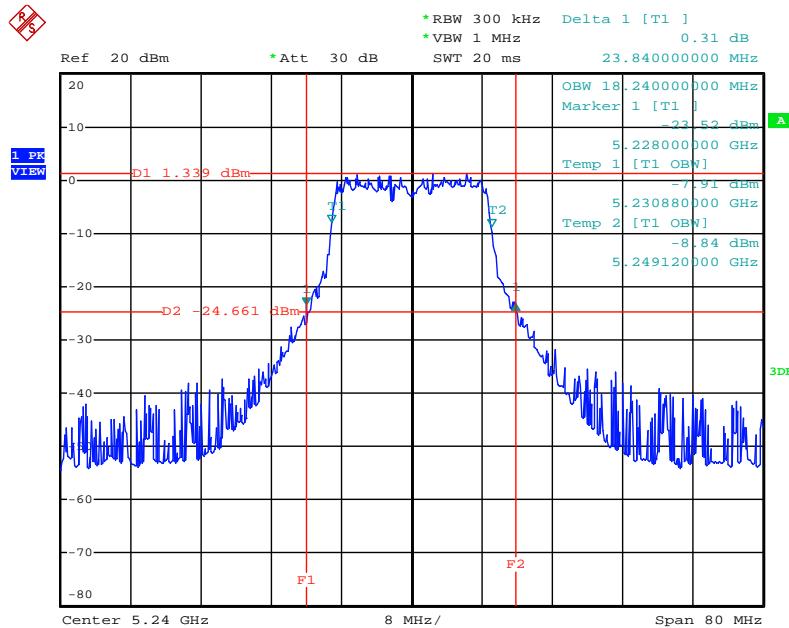
Date: 8.MAY.2013 12:36:54

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5200 MHz**



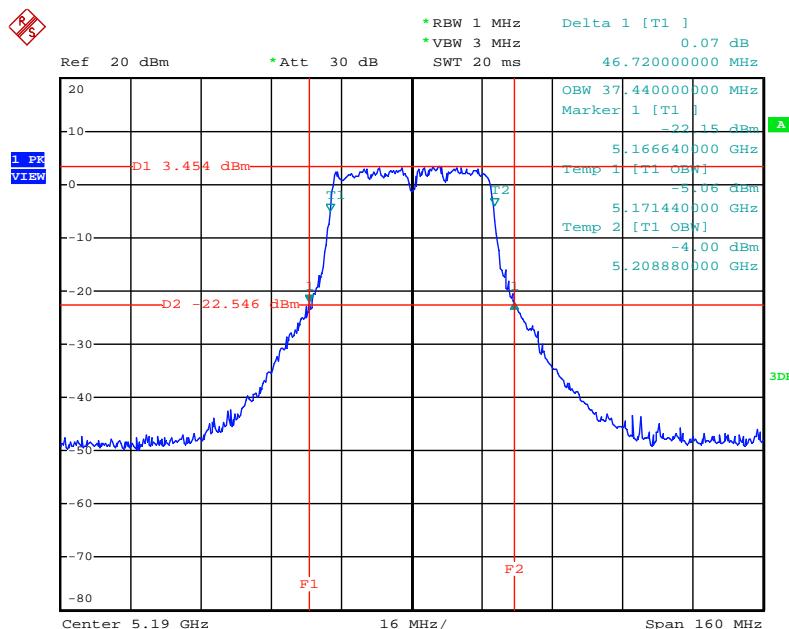
Date: 8.MAY.2013 12:37:45

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



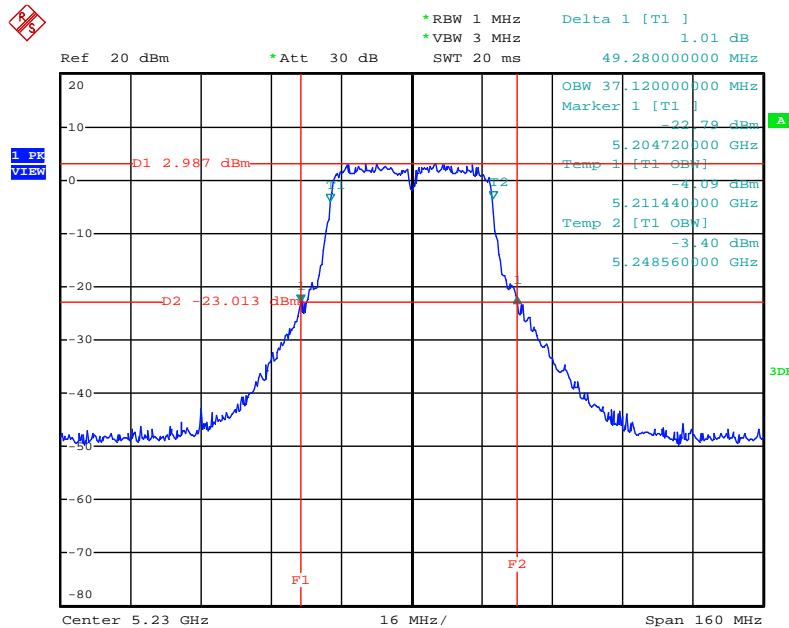
Date: 8.MAY.2013 12:38:02

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



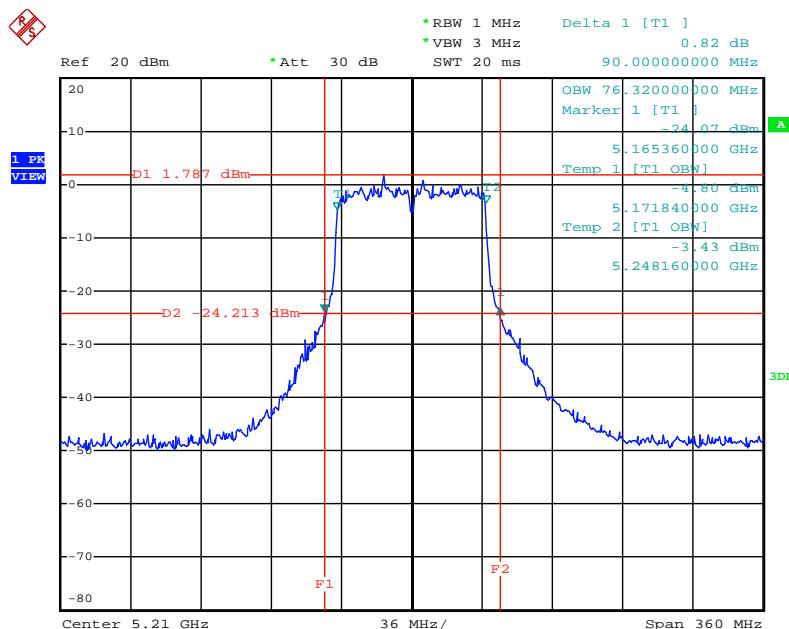
Date: 8.MAY.2013 12:45:23

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**

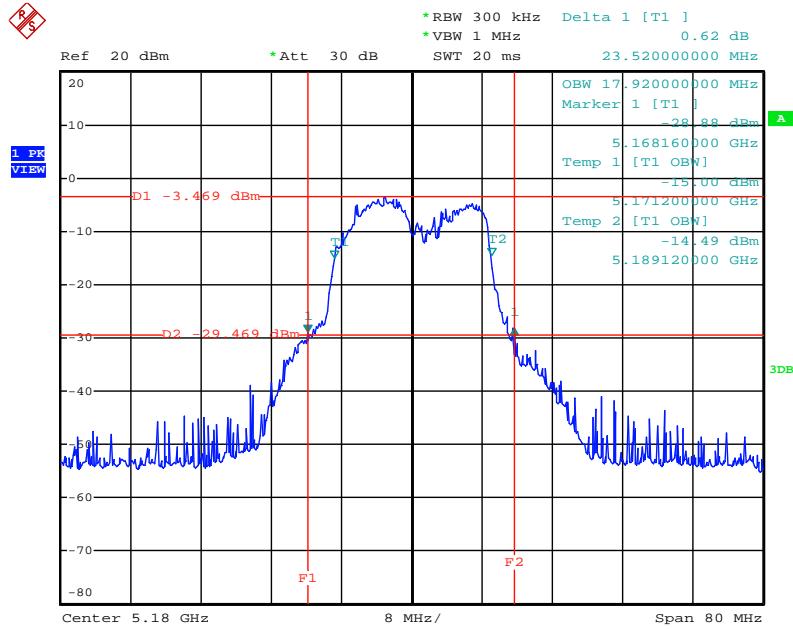


Date: 8.MAY.2013 12:45:05

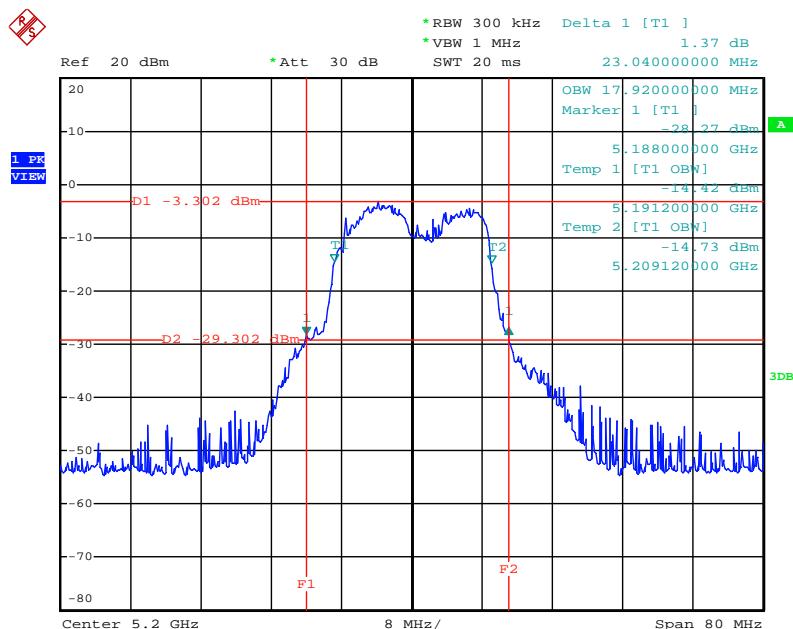
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



Date: 8.MAY.2013 12:46:43

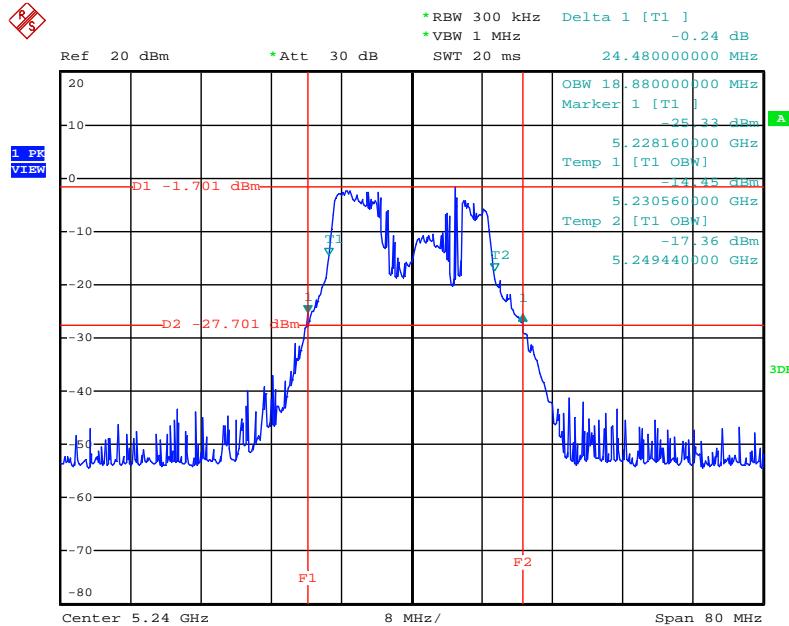
3TX
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**


Date: 8.MAY.2013 13:15:21

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**


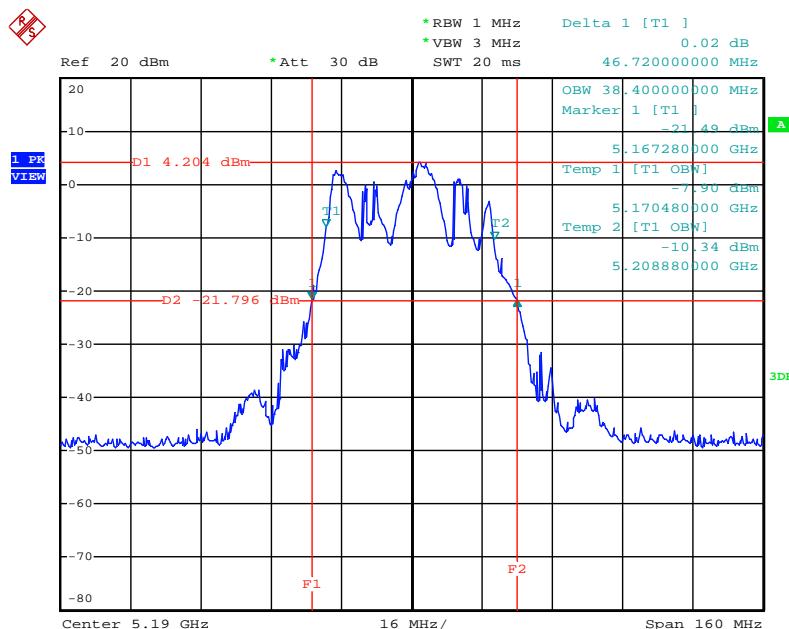
Date: 8.MAY.2013 13:15:02

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



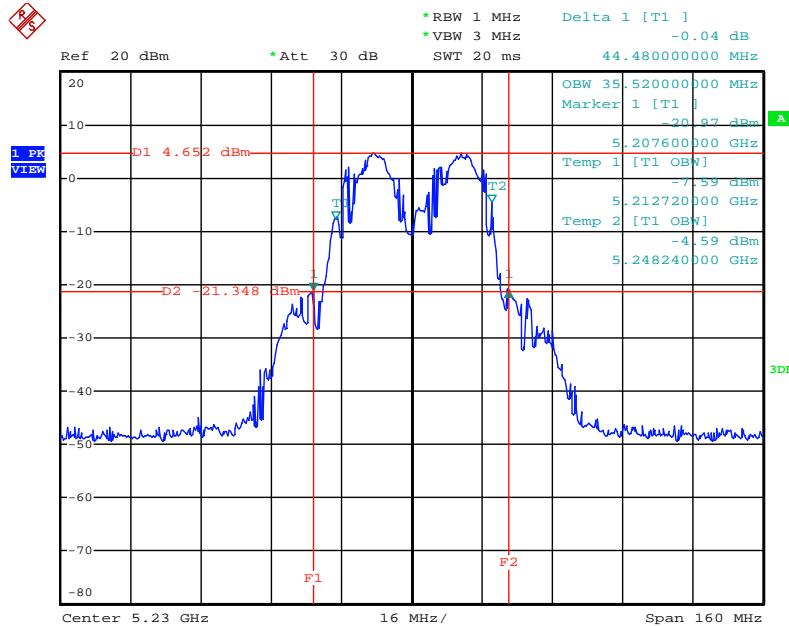
Date: 8.MAY.2013 13:14:30

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



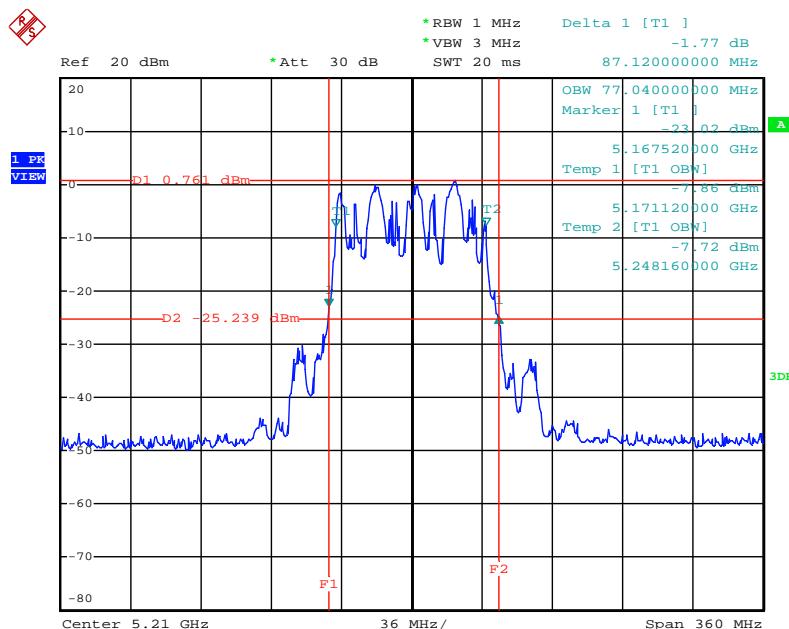
Date: 8.MAY.2013 13:21:03

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



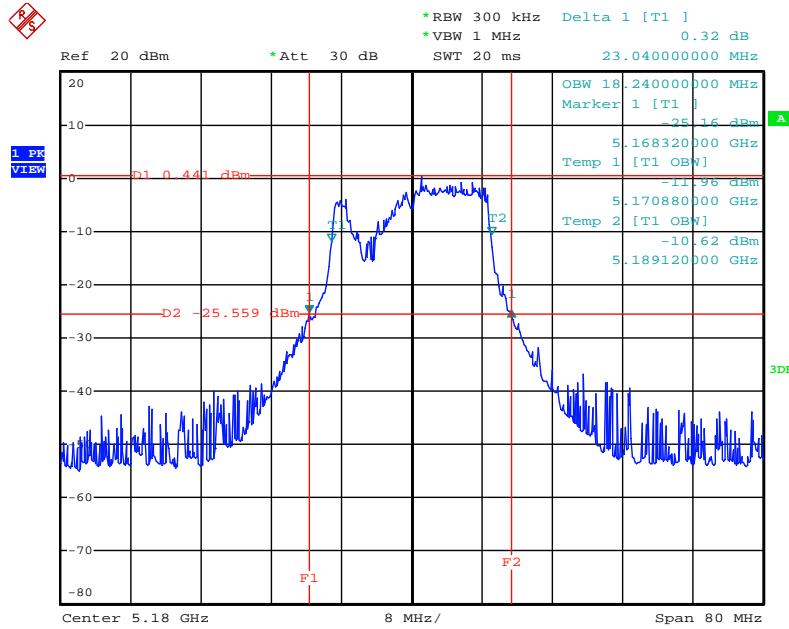
Date: 8.MAY.2013 13:21:20

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



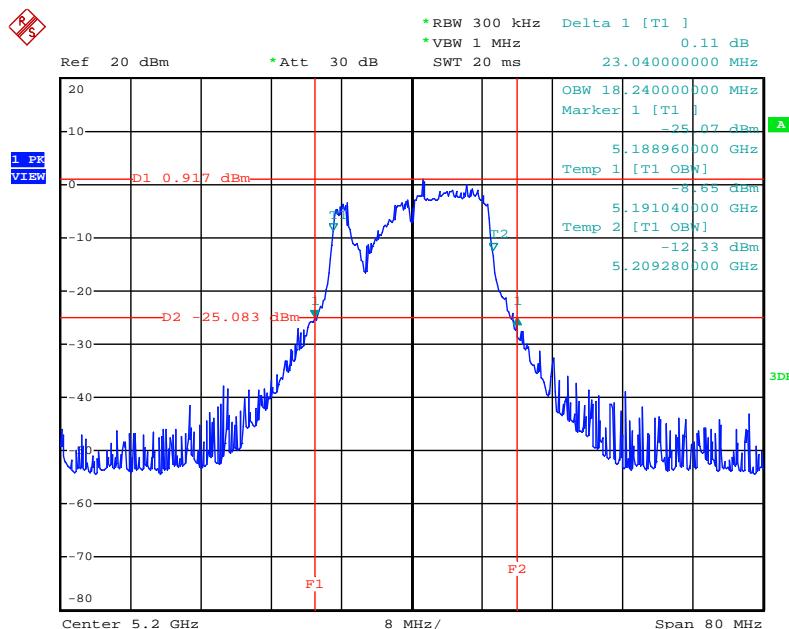
Date: 8.MAY.2013 13:26:28

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



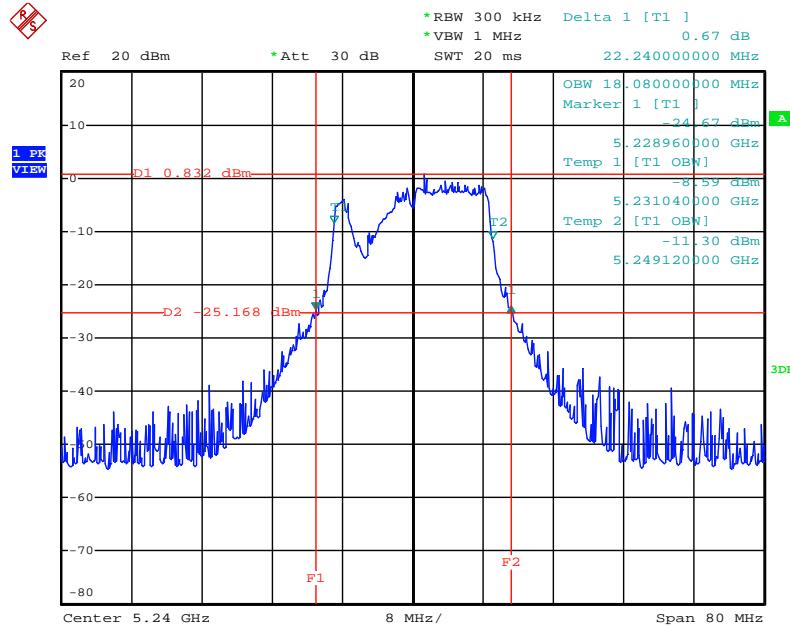
Date: 8.MAY.2013 13:40:43

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



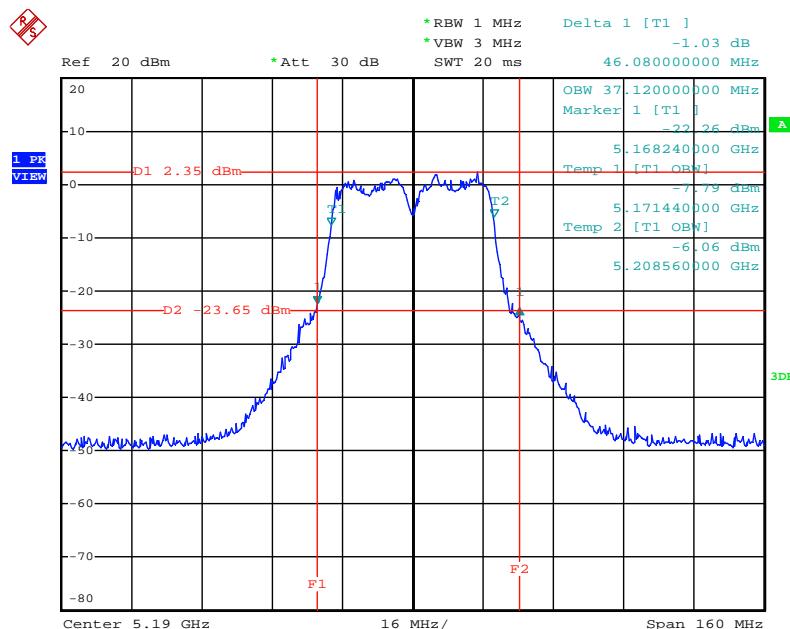
Date: 8.MAY.2013 13:40:26

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



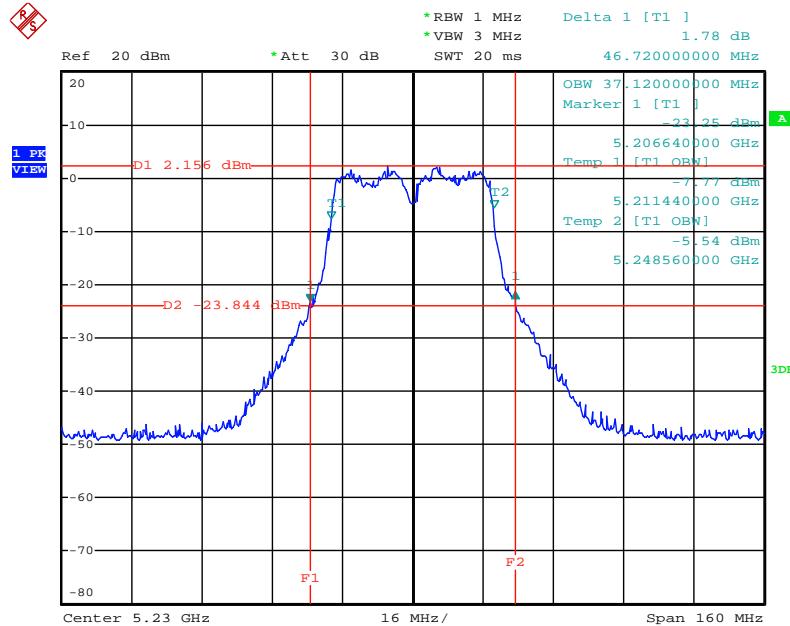
Date: 8.MAY.2013 13:40:08

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



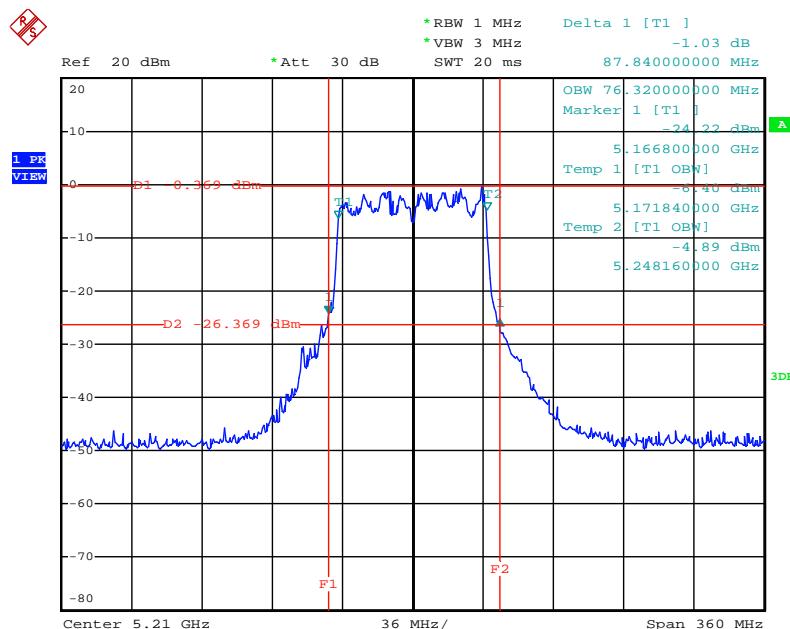
Date: 8.MAY.2013 13:44:58

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



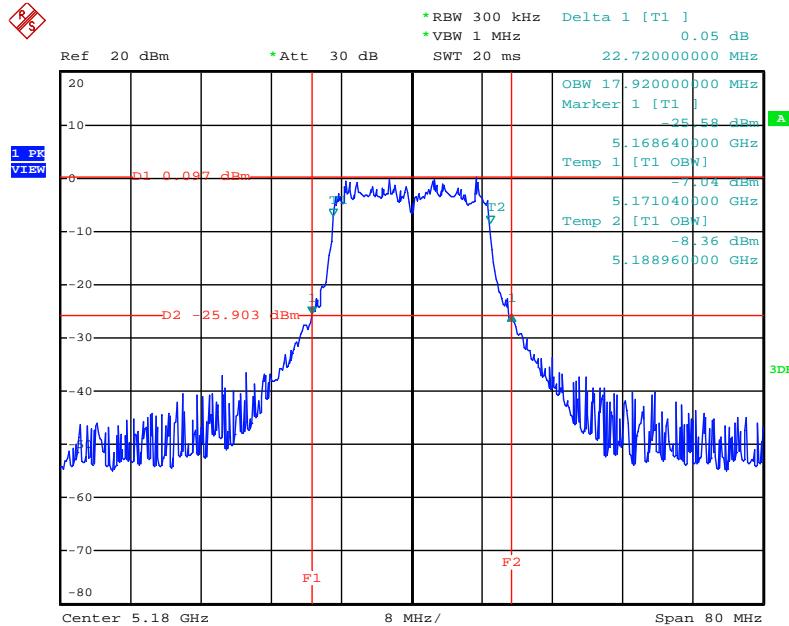
Date: 8.MAY.2013 13:44:40

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



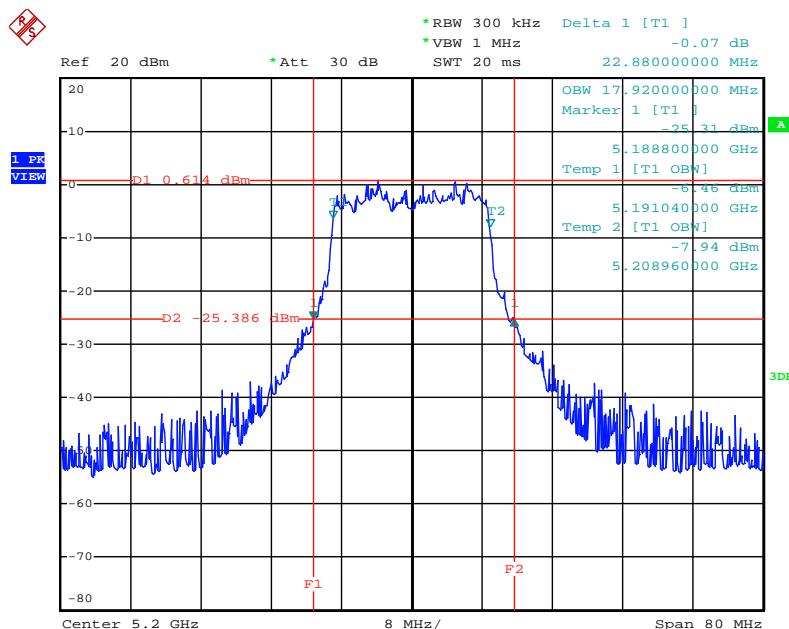
Date: 8.MAY.2013 13:47:10

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**



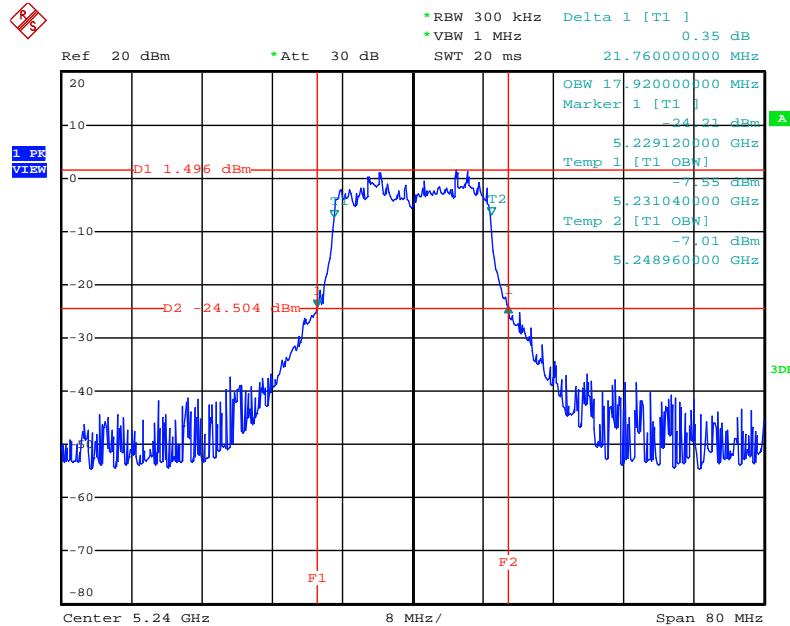
Date: 8.MAY.2013 14:00:07

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**



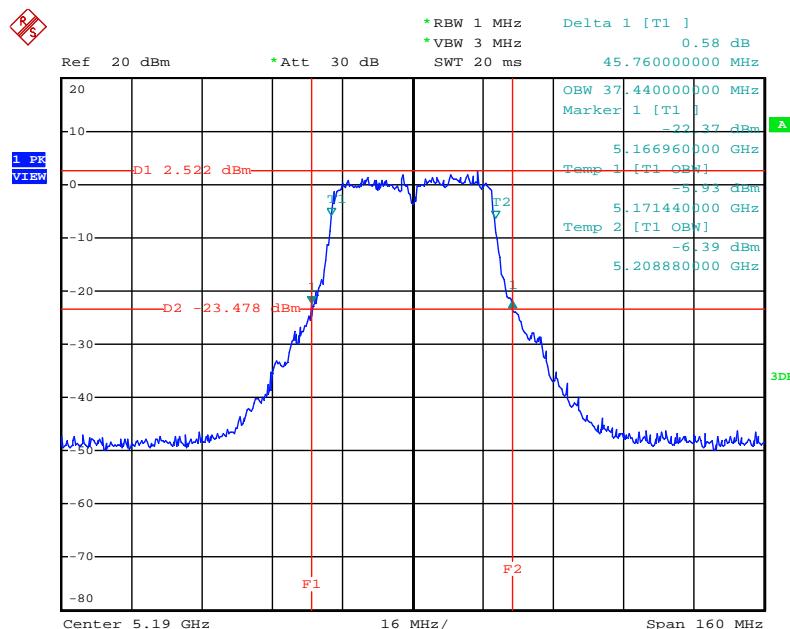
Date: 8.MAY.2013 14:00:24

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



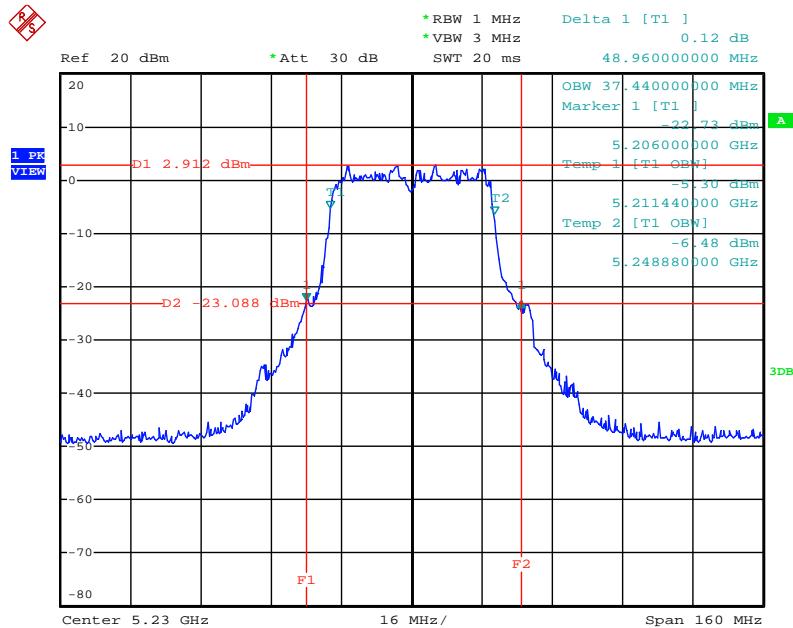
Date: 8.MAY.2013 14:00:40

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



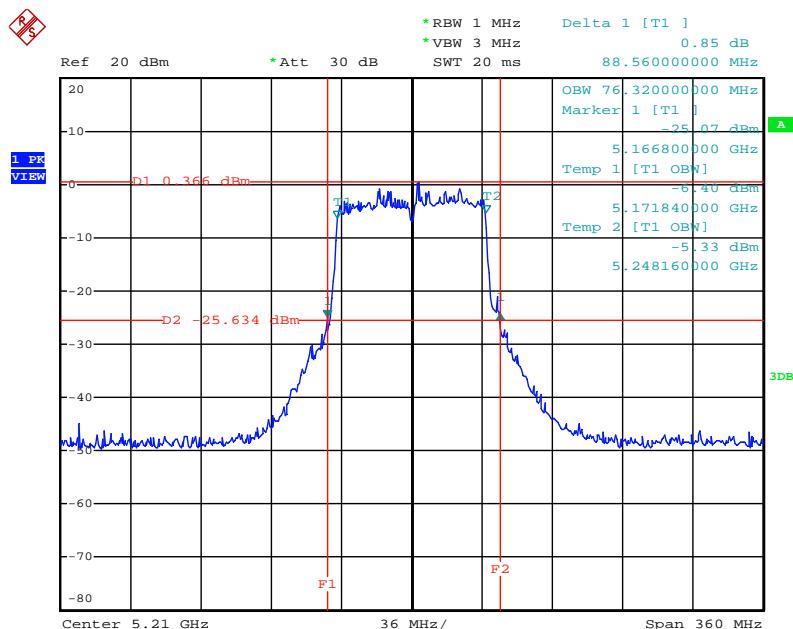
Date: 8.MAY.2013 14:01:51

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**

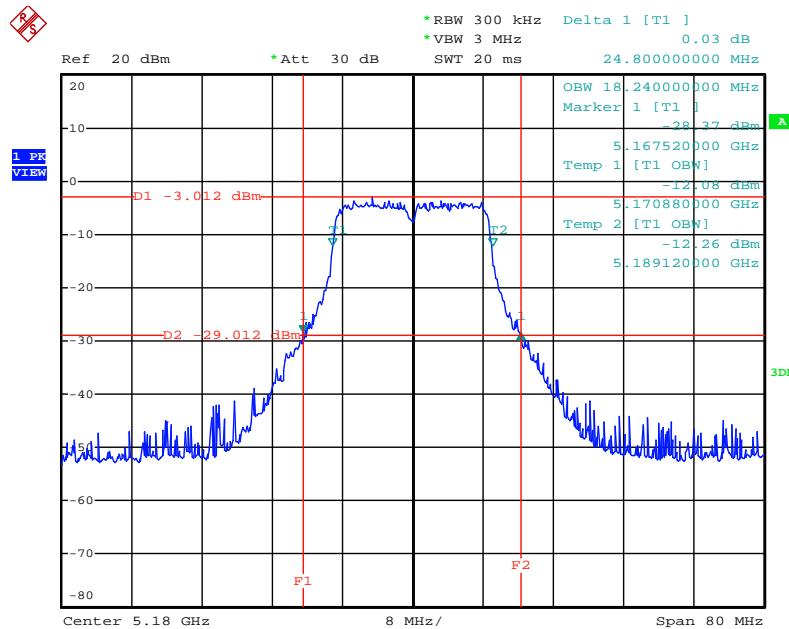


Date: 8.MAY.2013 14:01:32

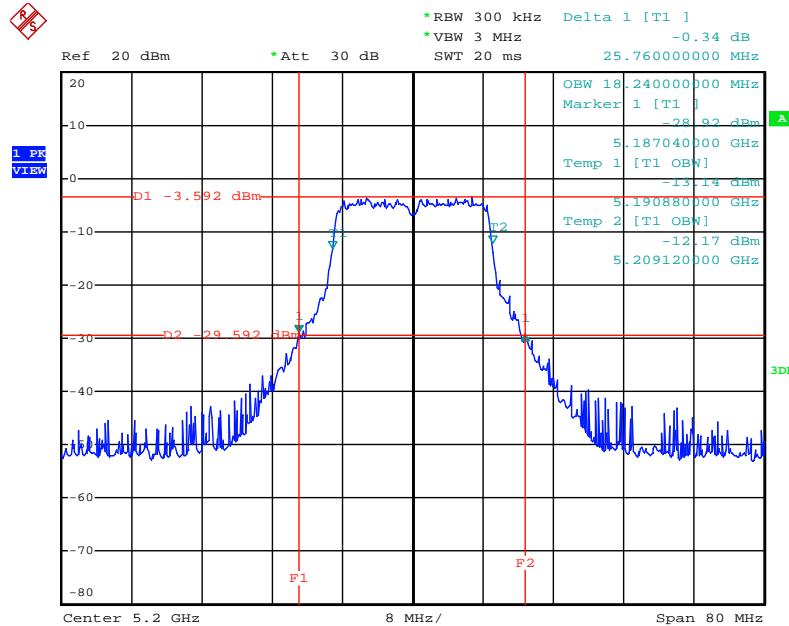
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



Date: 8.MAY.2013 13:54:04

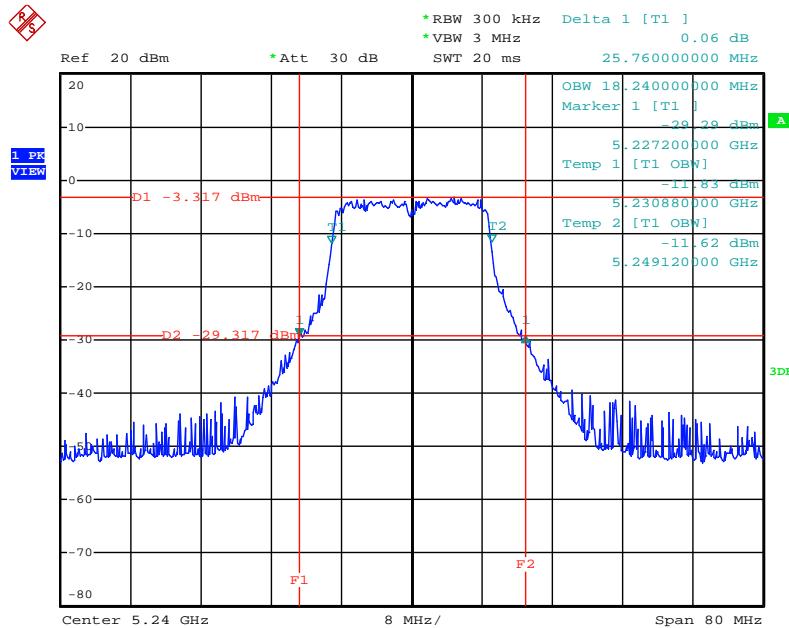
Mode 2 (Ant.3 Panel antenna / 12.5dBi)
1TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5180 MHz


Date: 15.MAY.2013 18:29:24

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5200 MHz


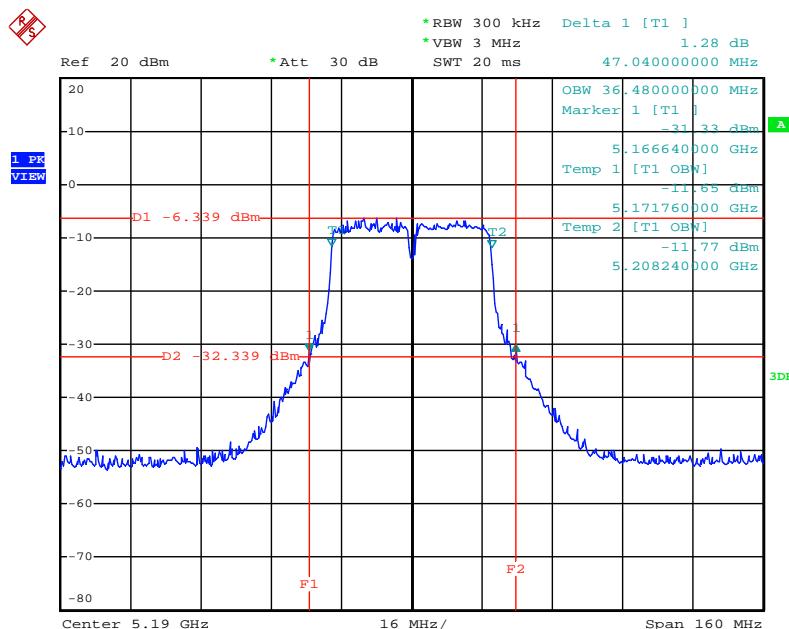
Date: 15.MAY.2013 18:30:17

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5240 MHz**



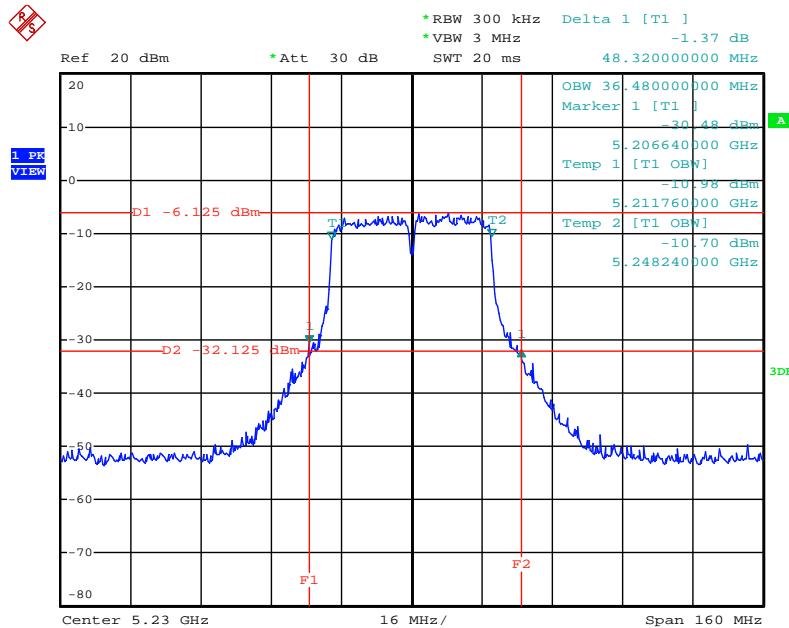
Date: 15.MAY.2013 18:30:48

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 / 5190 MHz**



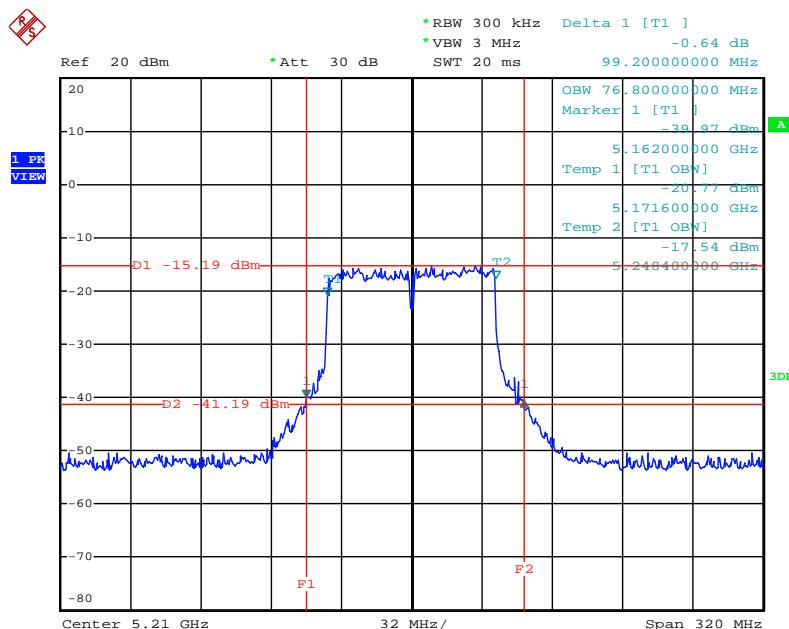
Date: 15.MAY.2013 18:33:36

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

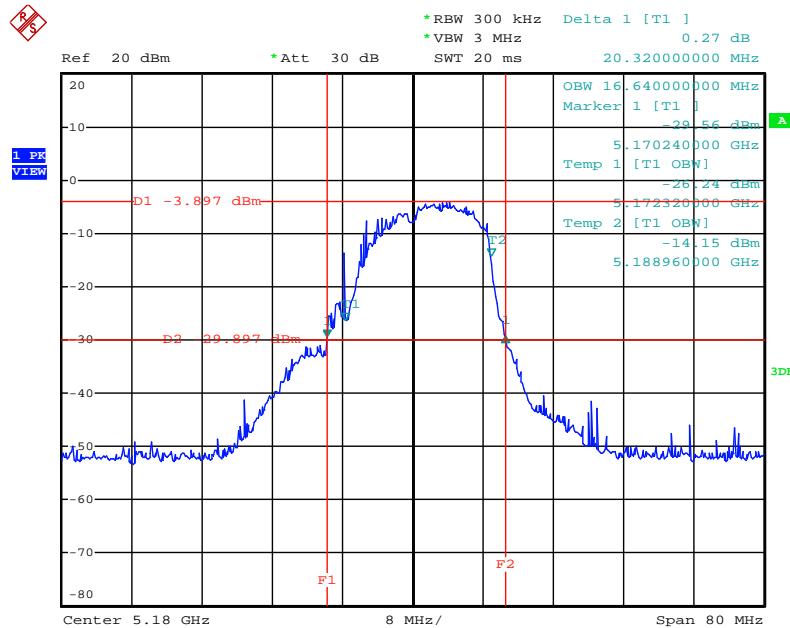


Date: 15.MAY.2013 18:34:01

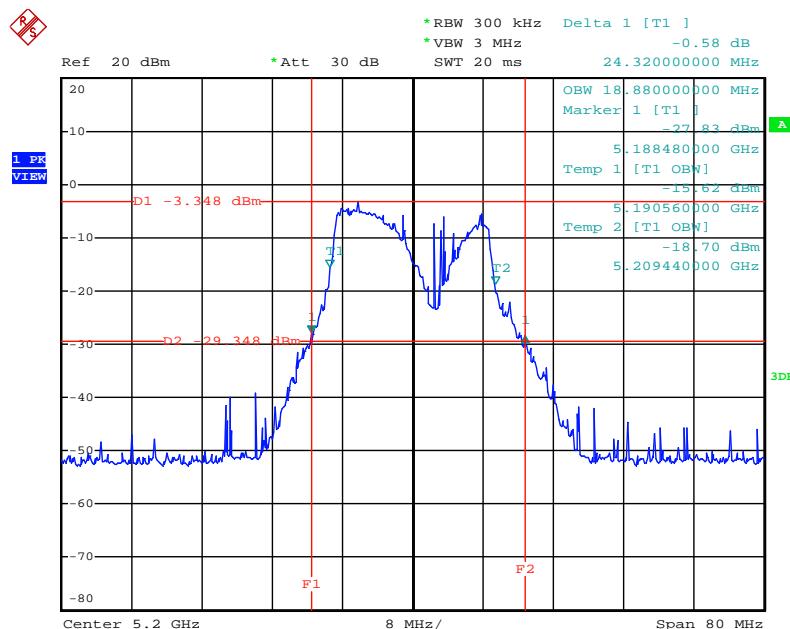
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz



Date: 15.MAY.2013 18:36:01

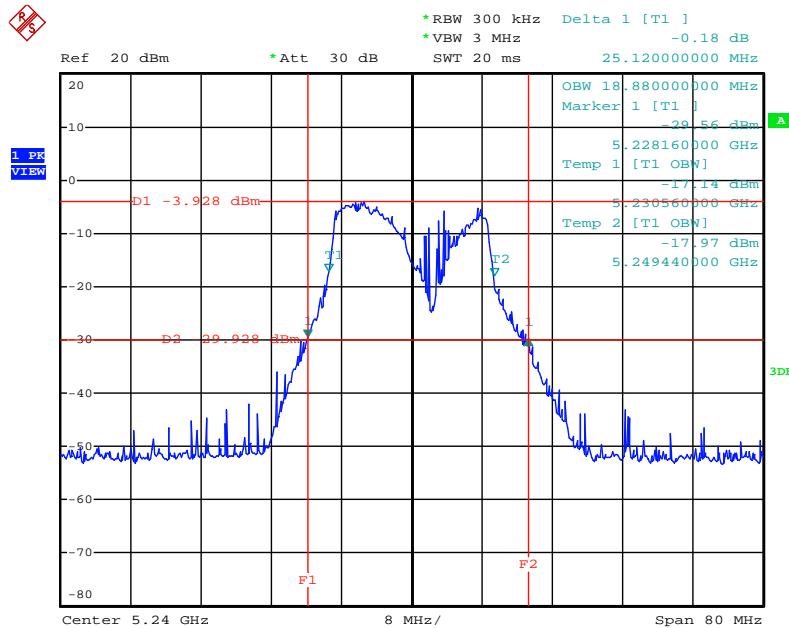
2TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz


Date: 15.MAY.2013 18:42:35

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz


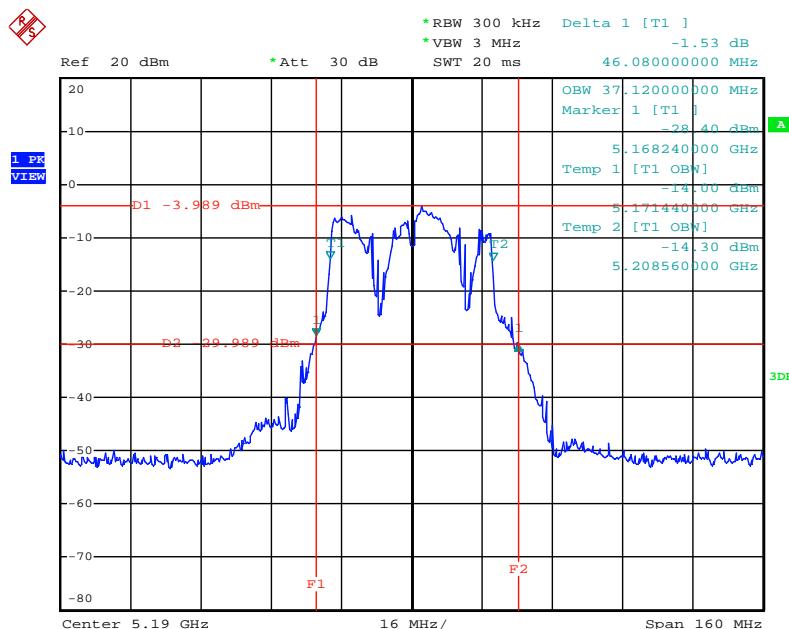
Date: 15.MAY.2013 18:42:53

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



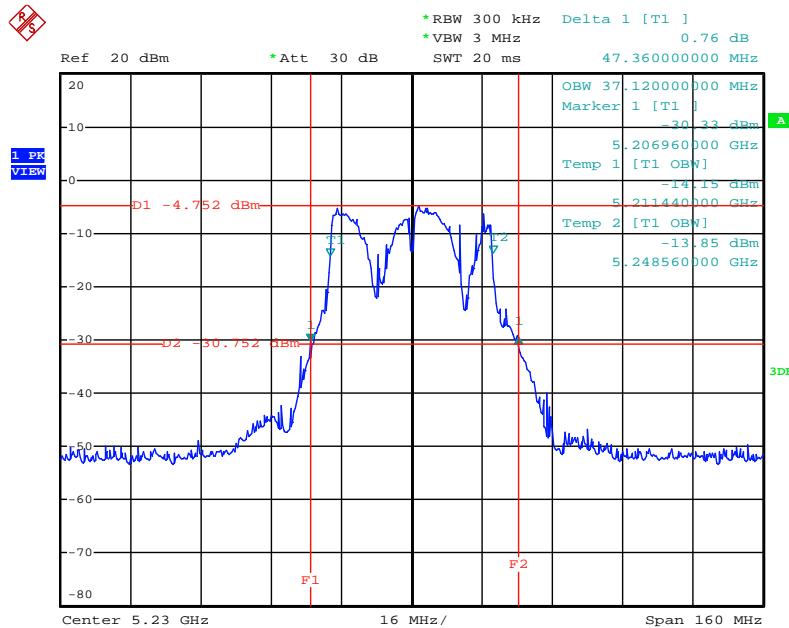
Date: 15.MAY.2013 18:43:09

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



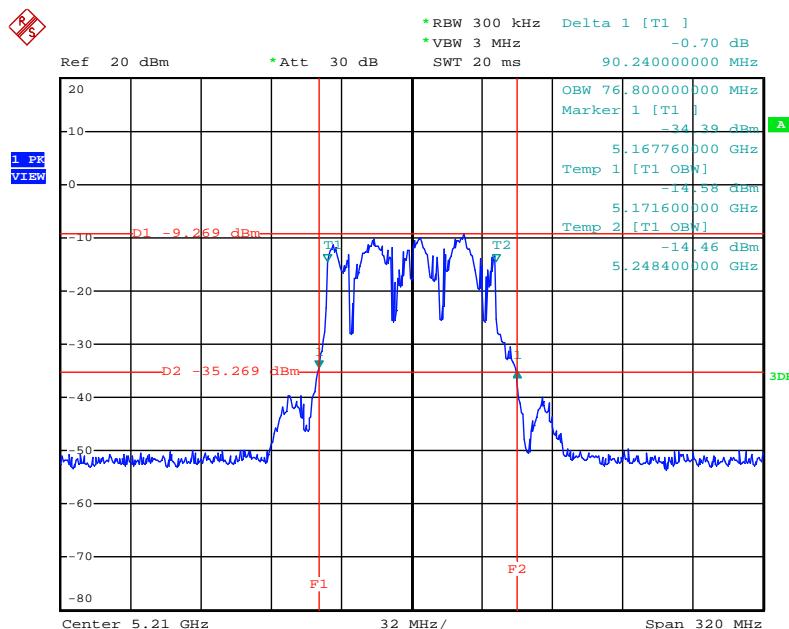
Date: 15.MAY.2013 18:39:04

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**



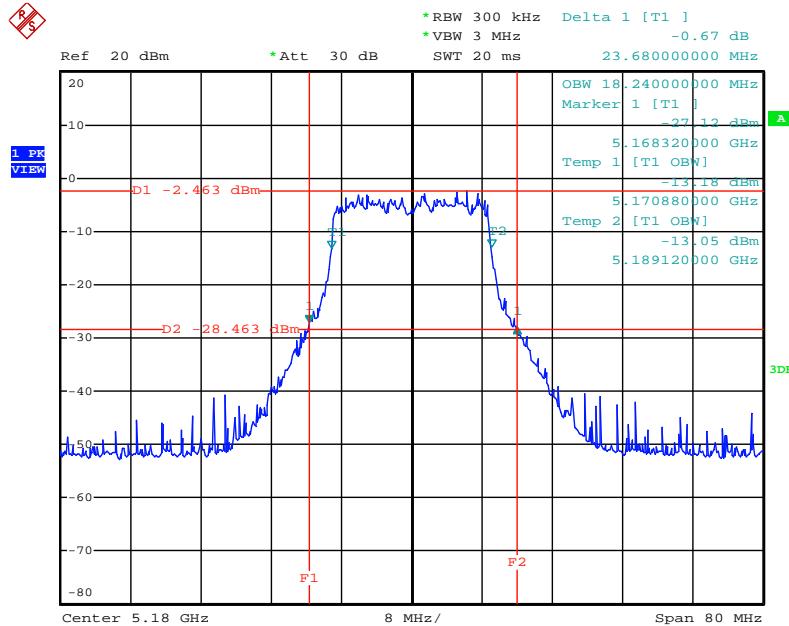
Date: 15.MAY.2013 18:38:44

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



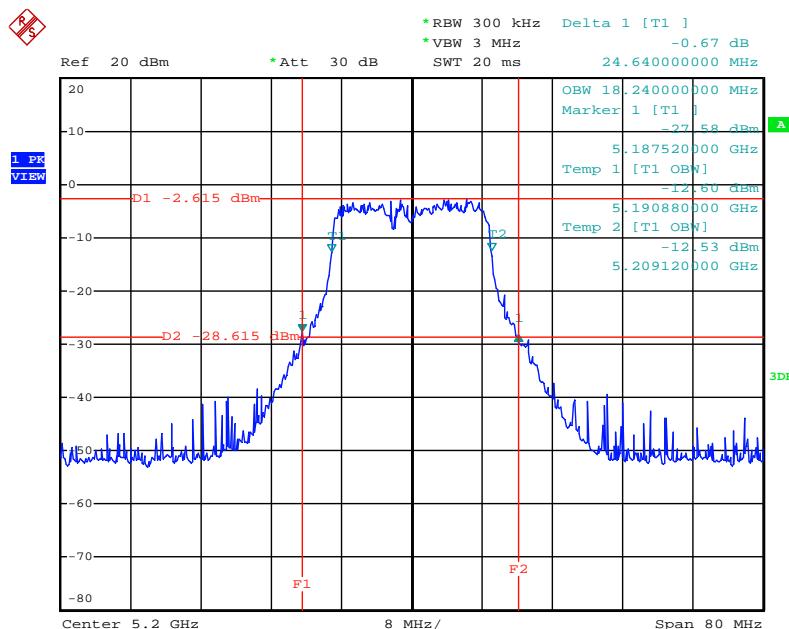
Date: 15.MAY.2013 18:45:14

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5180 MHz



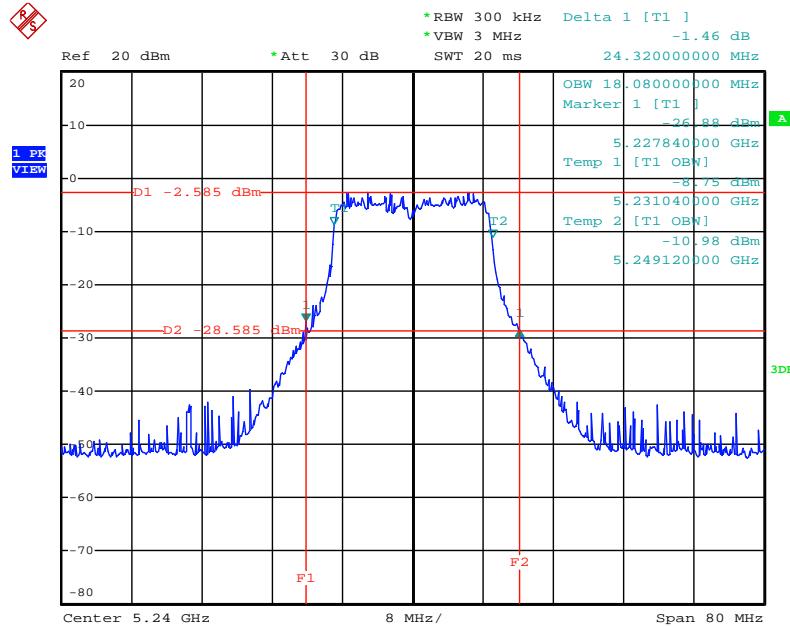
Date: 15.MAY.2013 18:41:44

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



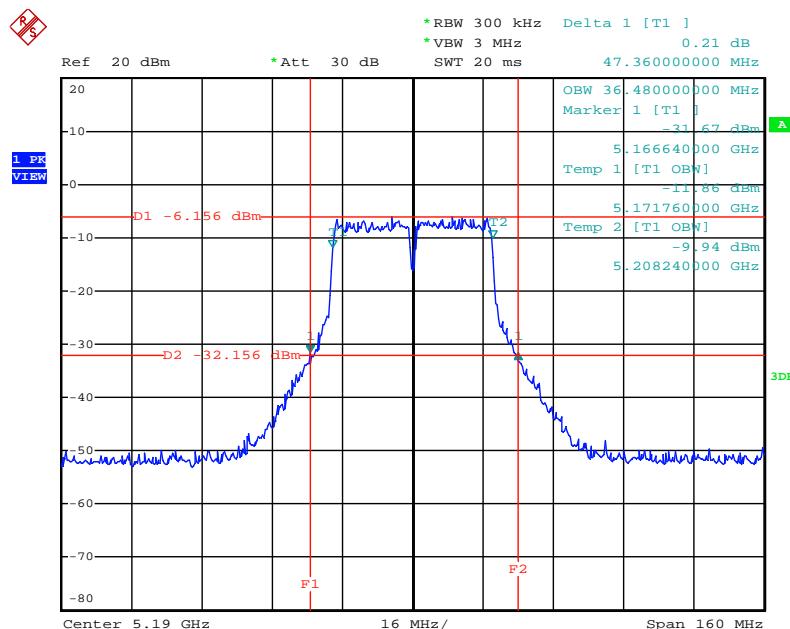
Date: 15.MAY.2013 18:41:26

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



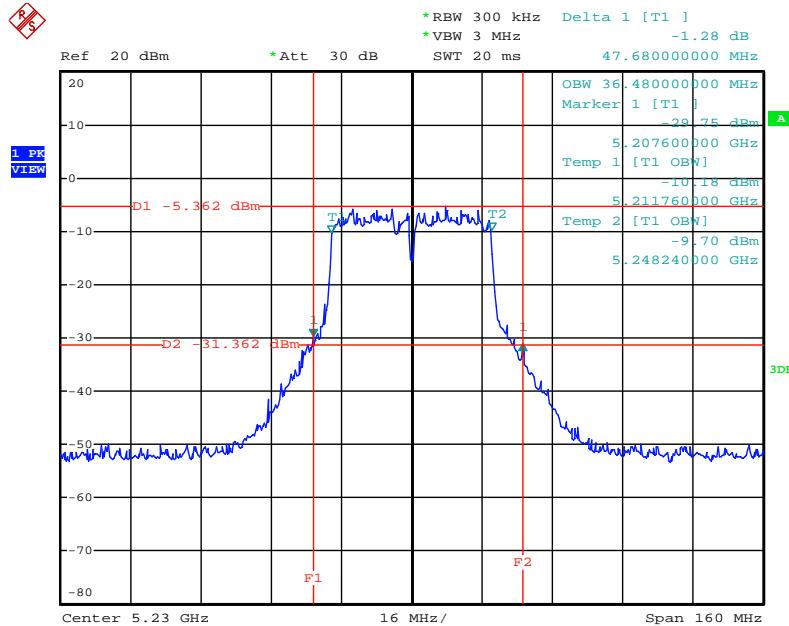
Date: 15.MAY.2013 18:41:05

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



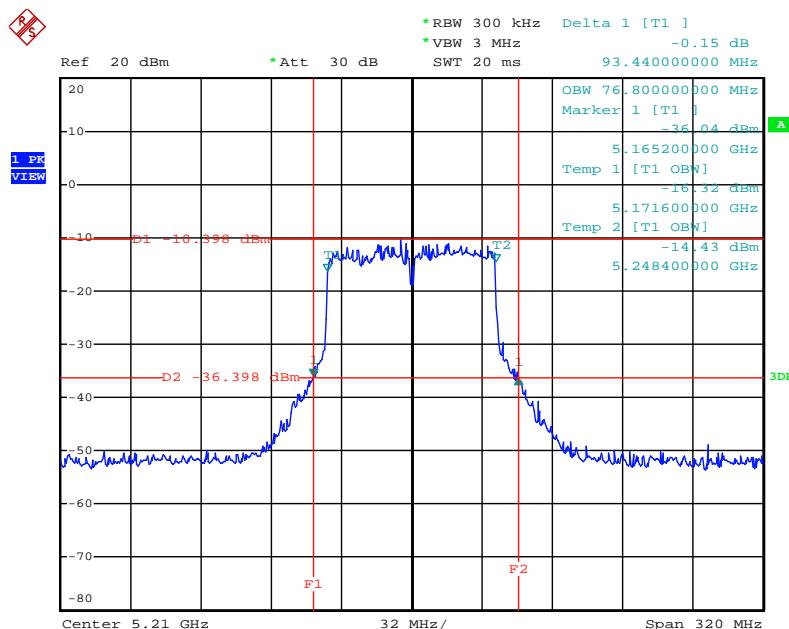
Date: 15.MAY.2013 18:39:53

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 / 5230 MHz

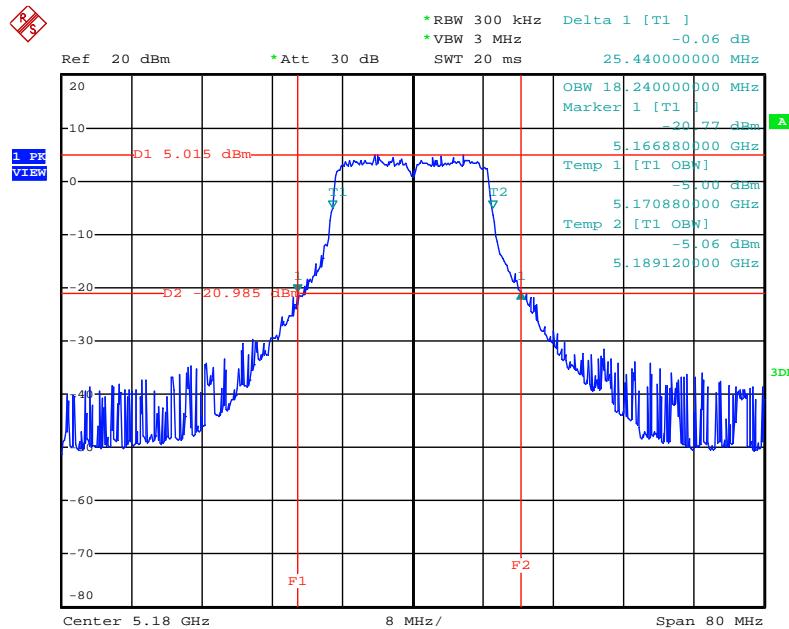


Date: 15.MAY.2013 18:40:10

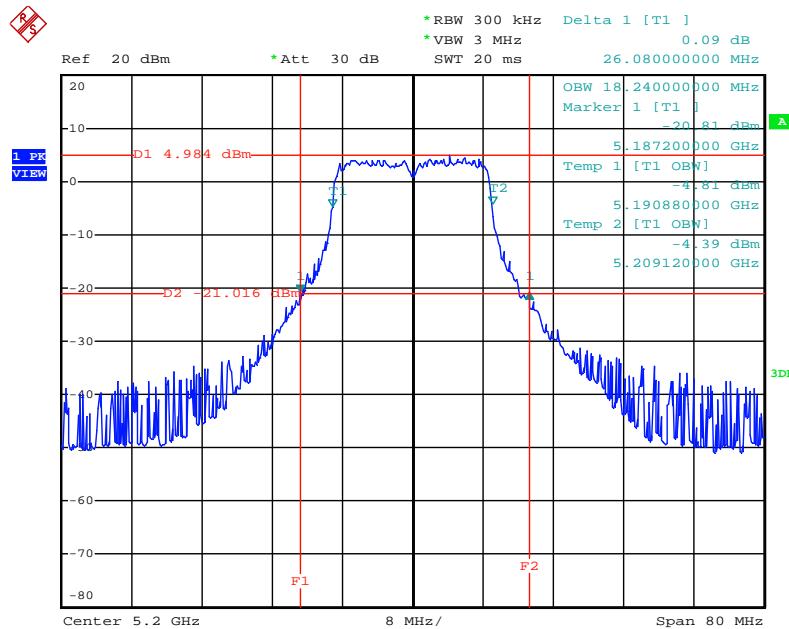
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



Date: 15.MAY.2013 18:46:07

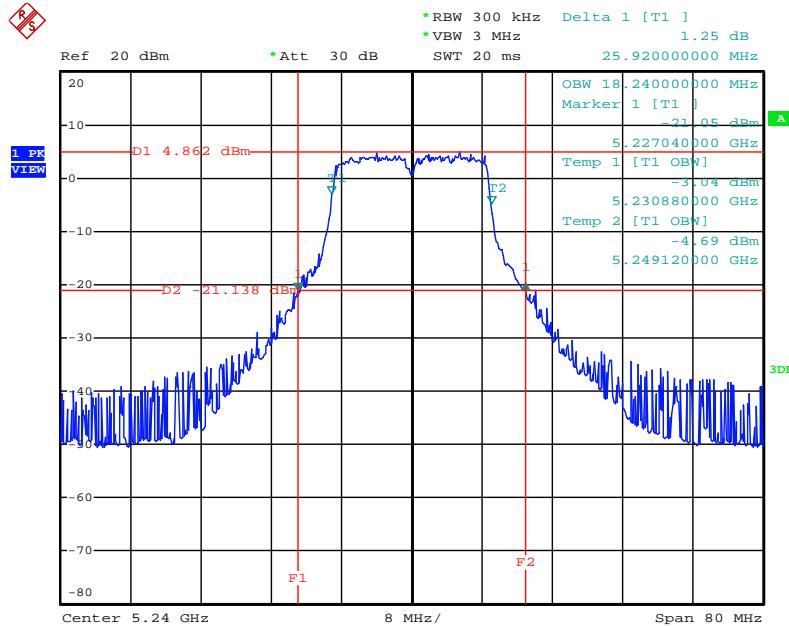
Mode 3 (Ant.4 Yagi antenna / 8dBi)
1TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5180 MHz


Date: 6.MAY.2013 11:47:51

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5200 MHz


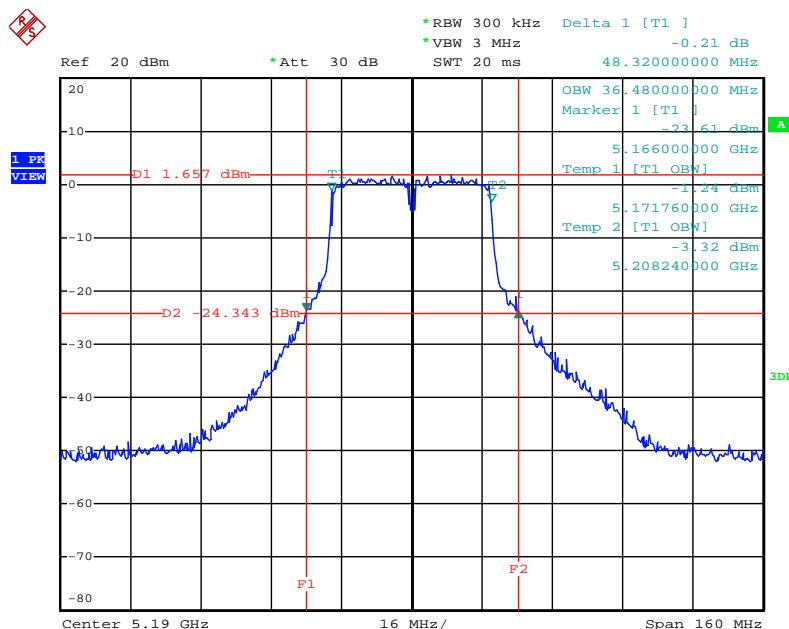
Date: 6.MAY.2013 11:49:55

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



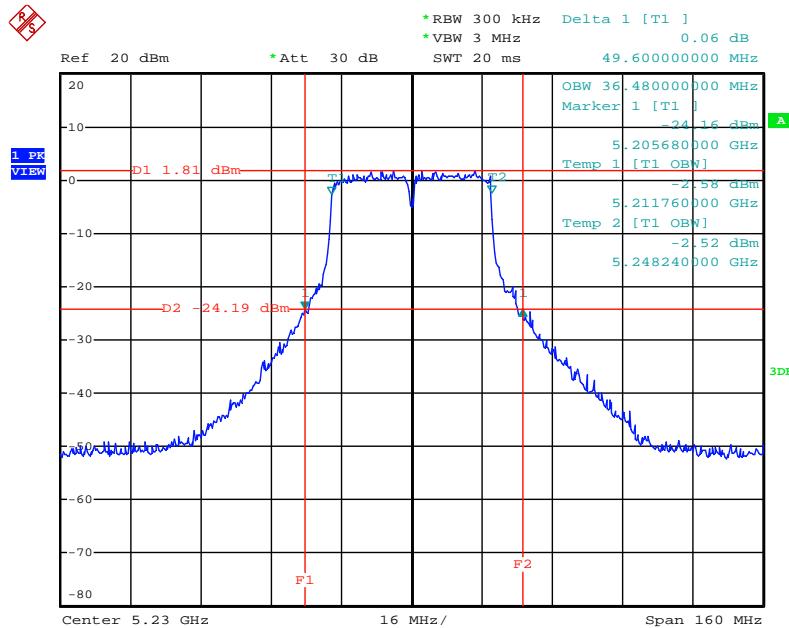
Date: 6.MAY.2013 11:51:04

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5190 MHz



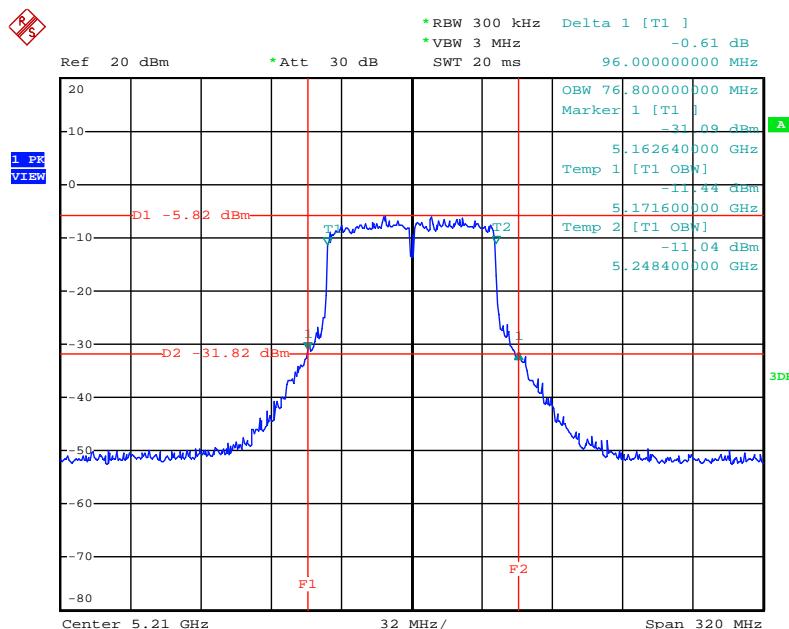
Date: 6.MAY.2013 12:04:31

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

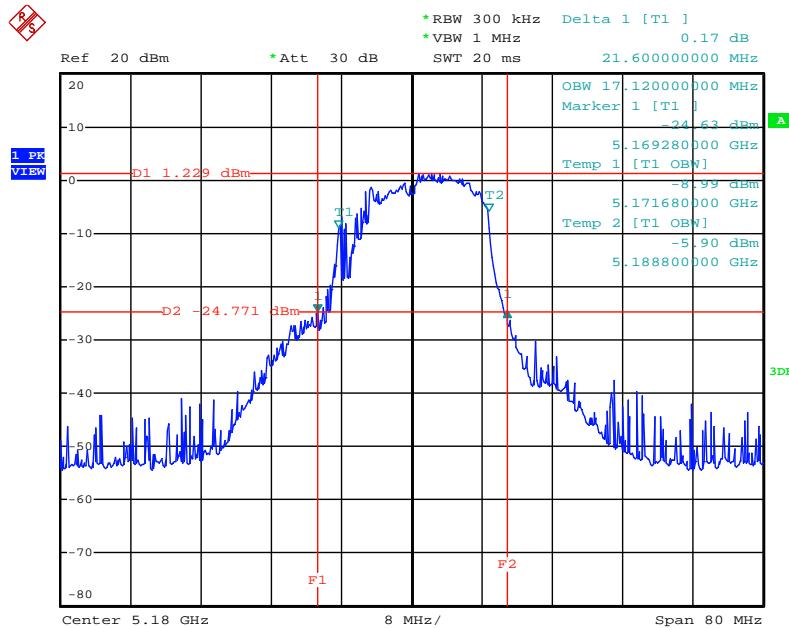


Date: 6.MAY.2013 12:05:58

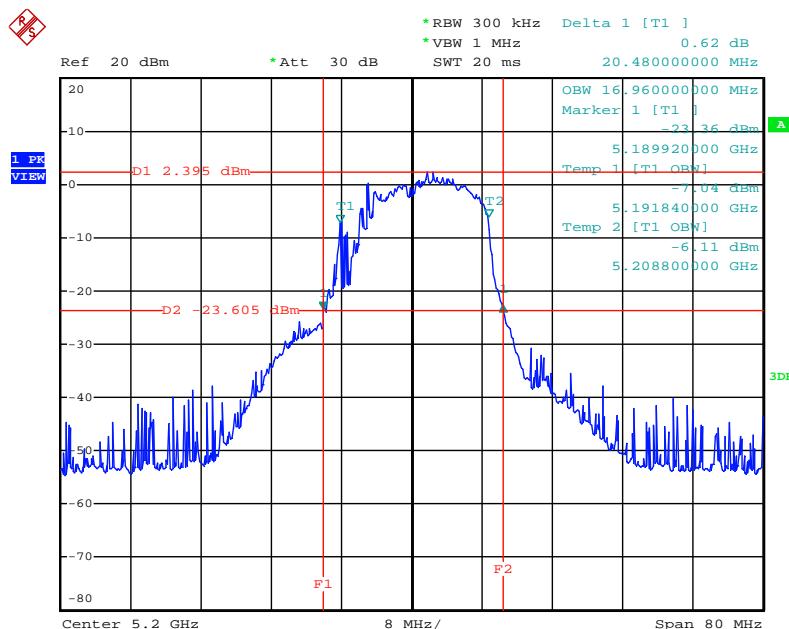
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz



Date: 6.MAY.2013 12:11:19

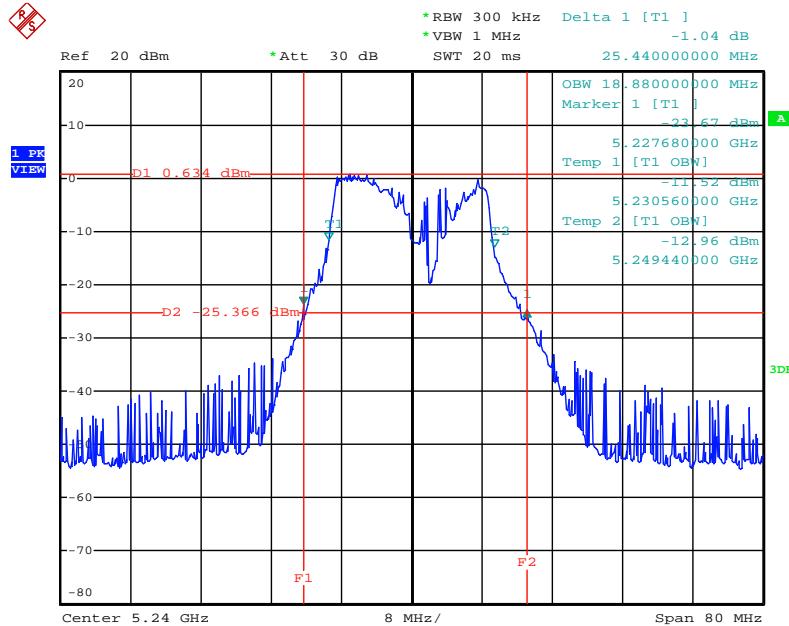
2TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz


Date: 8.MAY.2013 12:02:31

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz


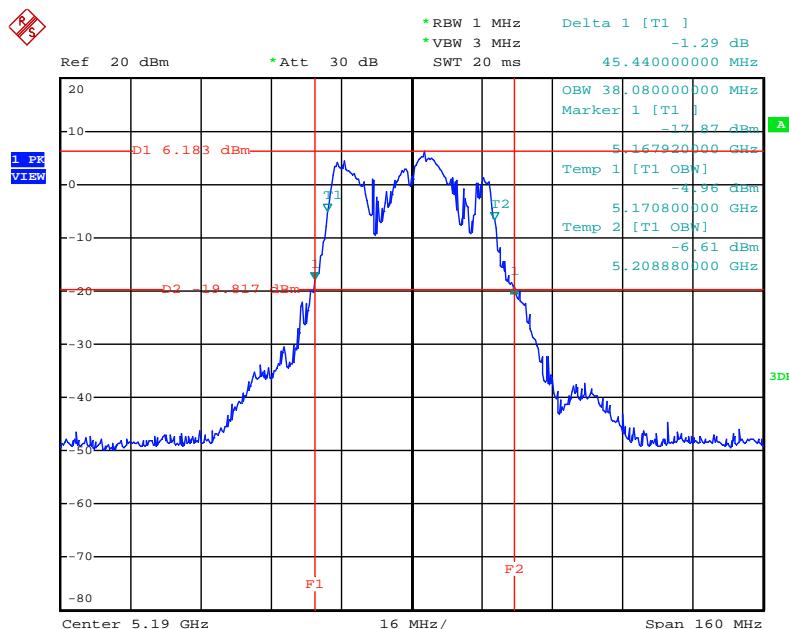
Date: 8.MAY.2013 12:02:48

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5240 MHz



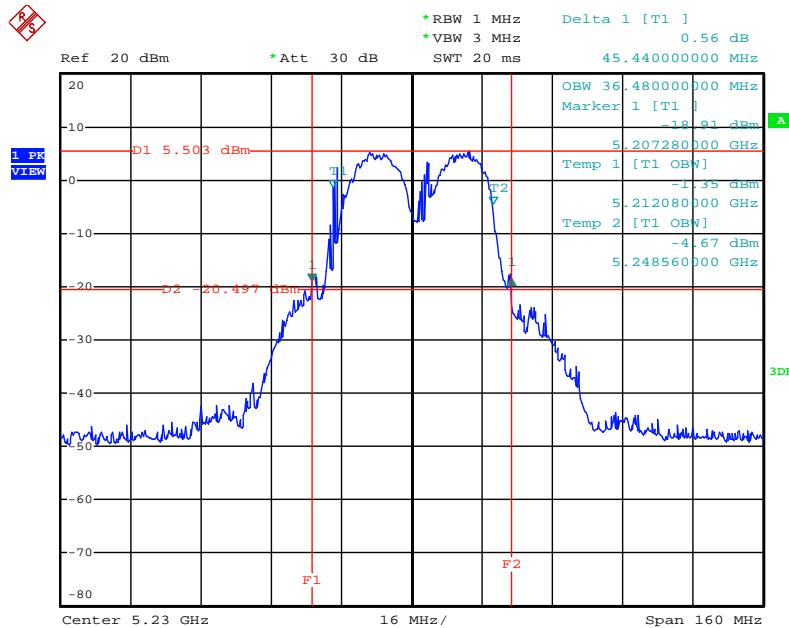
Date: 8.MAY.2013 12:03:04

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5190 MHz



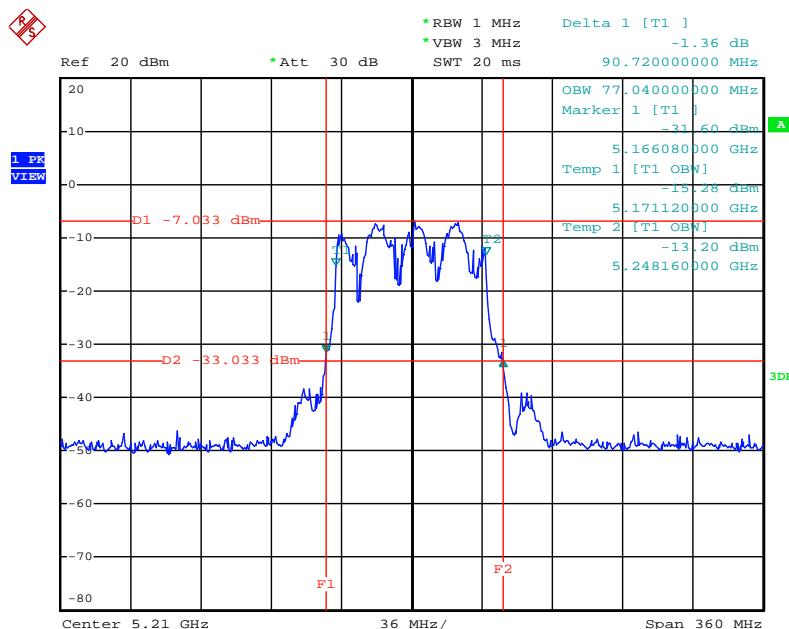
Date: 8.MAY.2013 12:05:54

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**



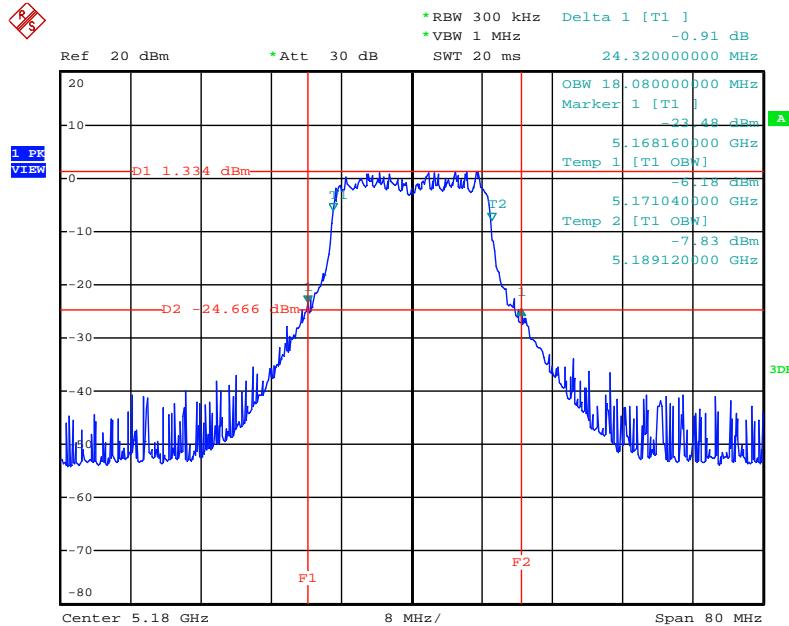
Date: 8.MAY.2013 12:05:04

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



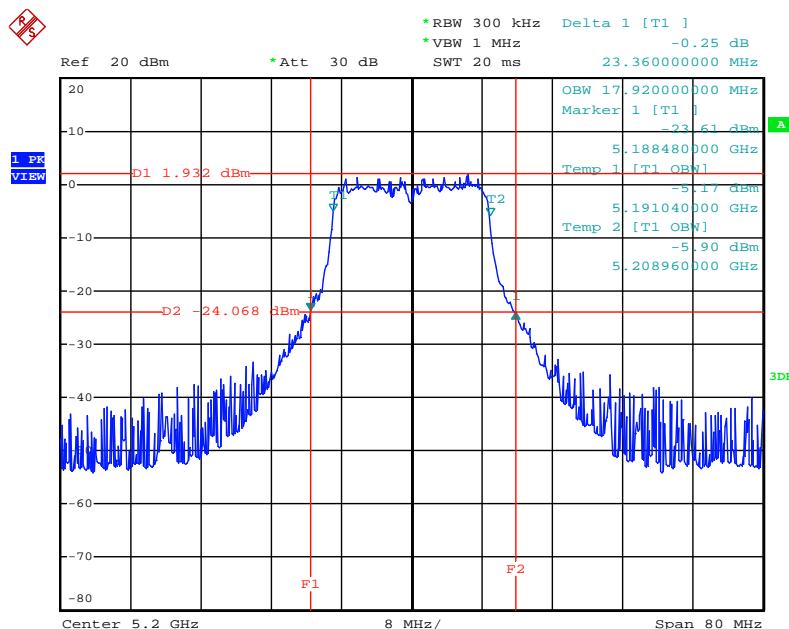
Date: 8.MAY.2013 12:15:03

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5180 MHz



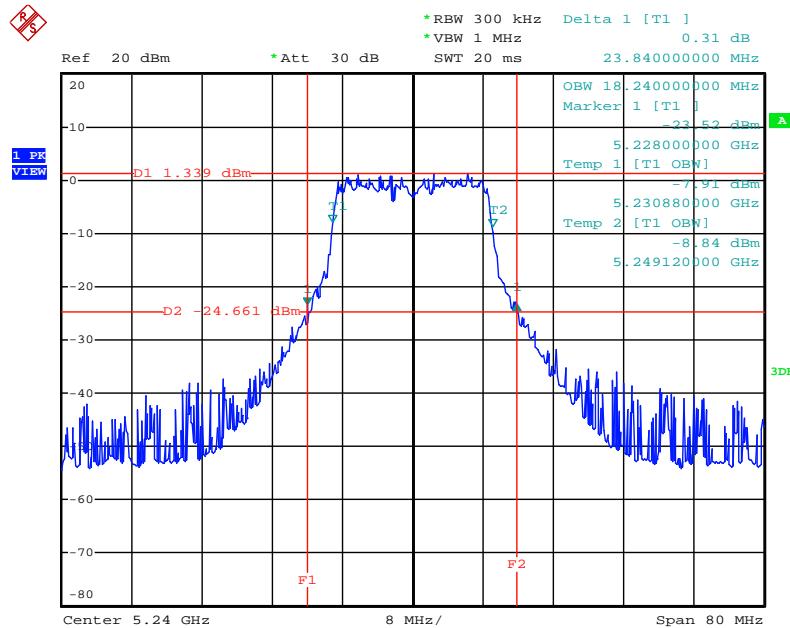
Date: 8.MAY.2013 12:36:54

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



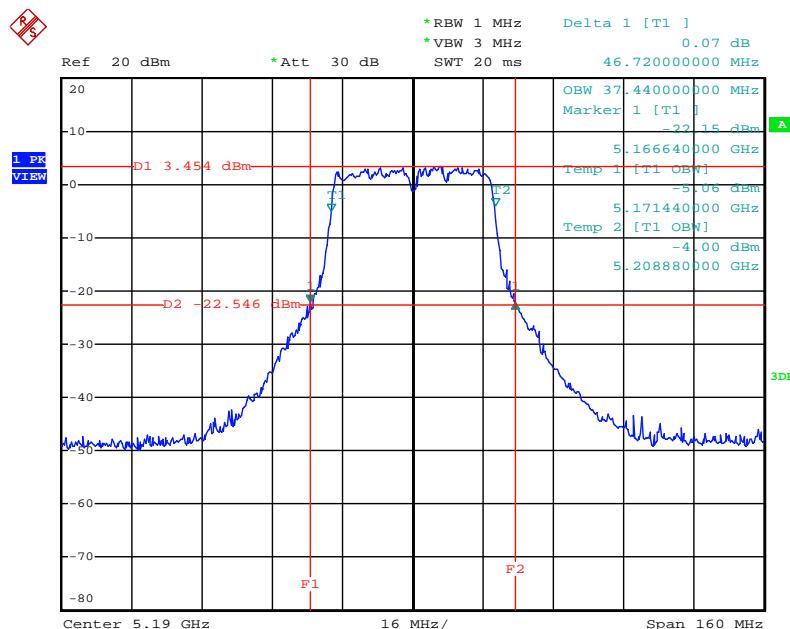
Date: 8.MAY.2013 12:37:45

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



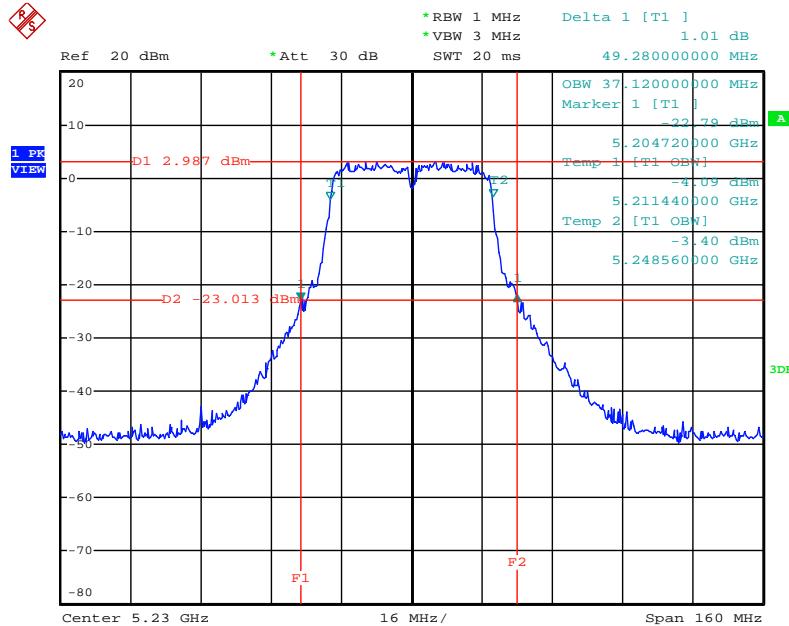
Date: 8.MAY.2013 12:38:02

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



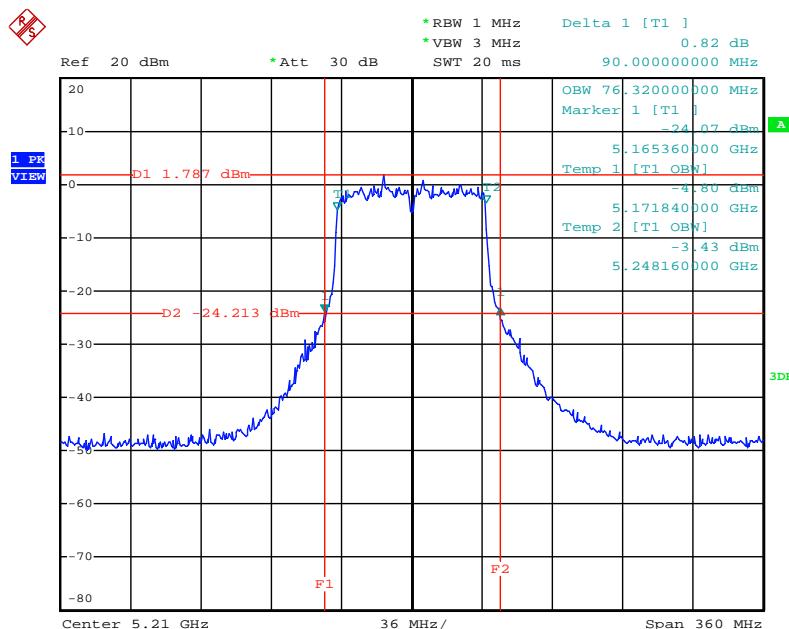
Date: 8.MAY.2013 12:45:23

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**

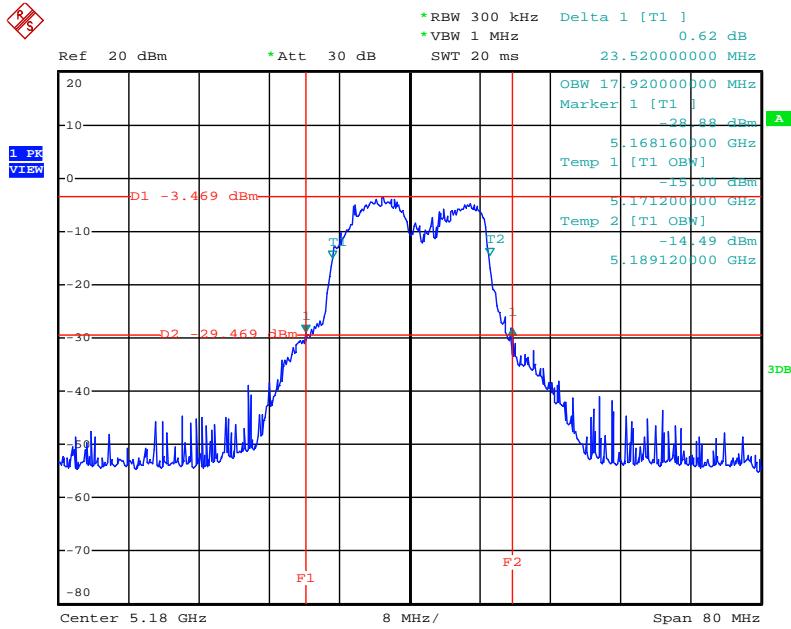


Date: 8.MAY.2013 12:45:05

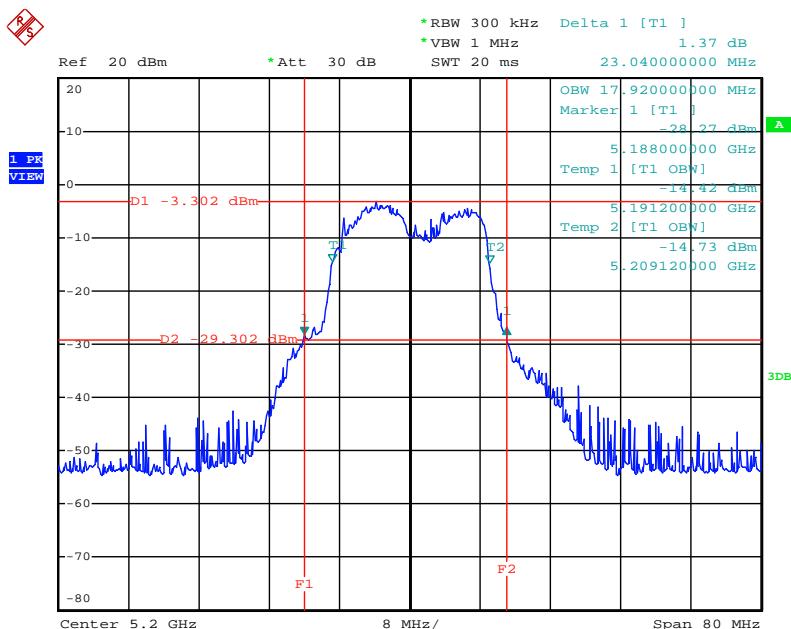
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



Date: 8.MAY.2013 12:46:43

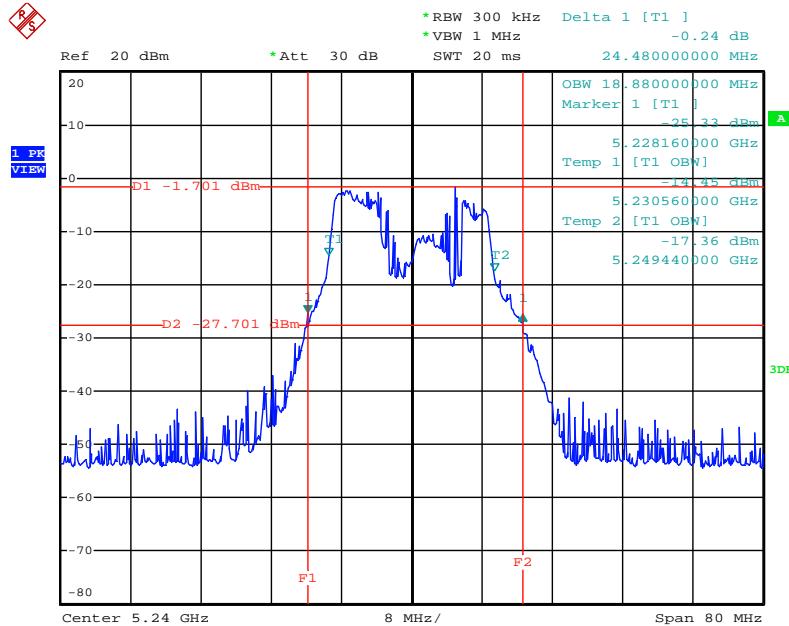
3TX
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**


Date: 8.MAY.2013 13:15:21

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**


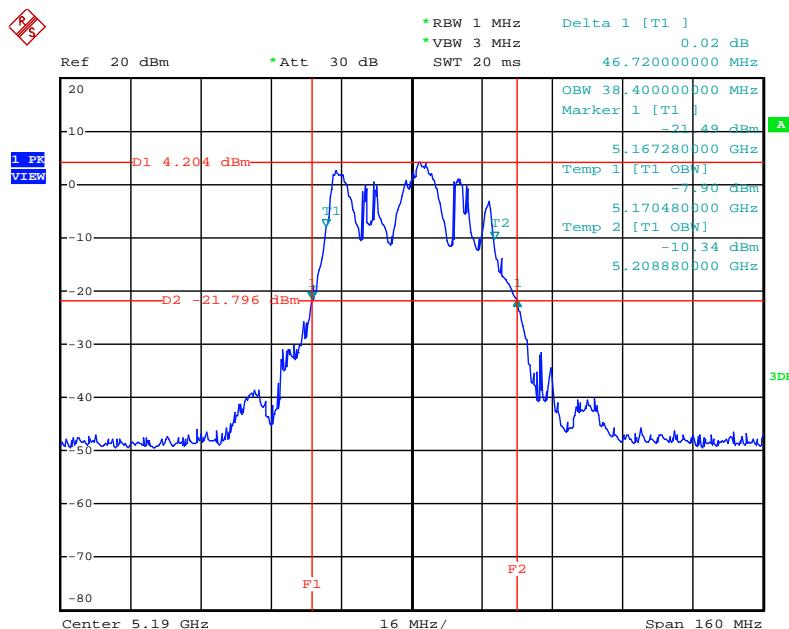
Date: 8.MAY.2013 13:15:02

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5240 MHz



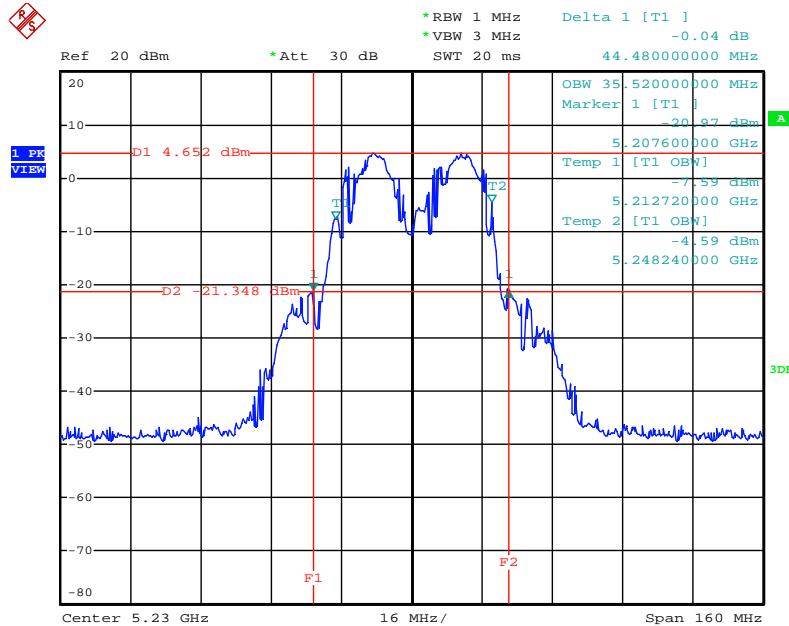
Date: 8.MAY.2013 13:14:30

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5190 MHz



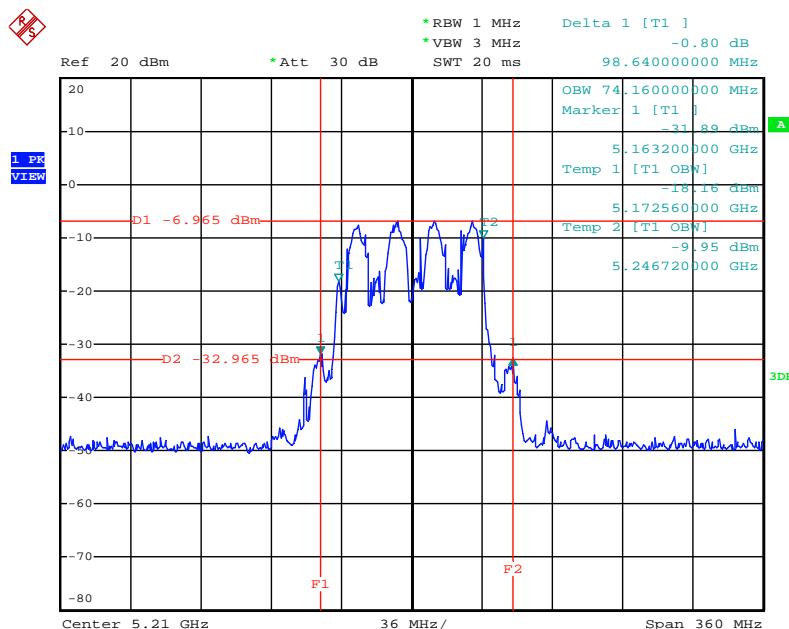
Date: 8.MAY.2013 13:21:03

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



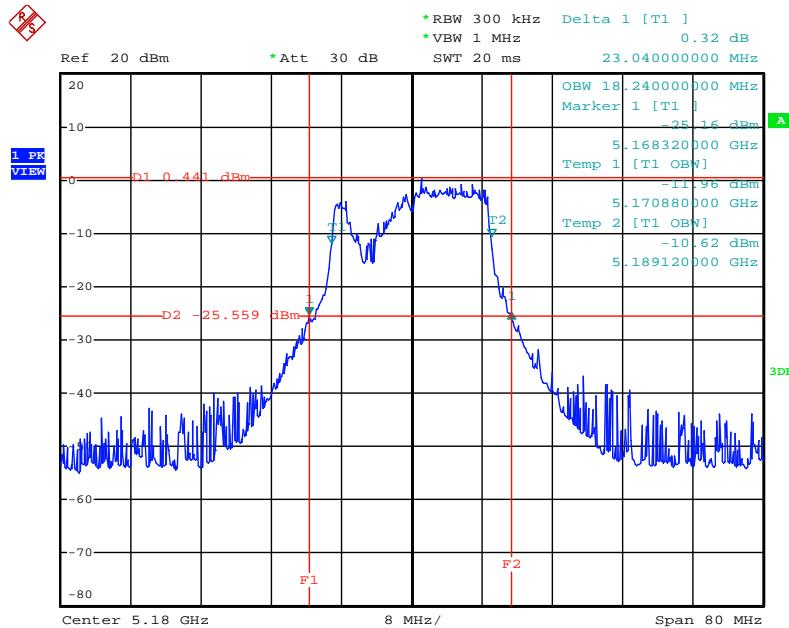
Date: 8.MAY.2013 13:21:20

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



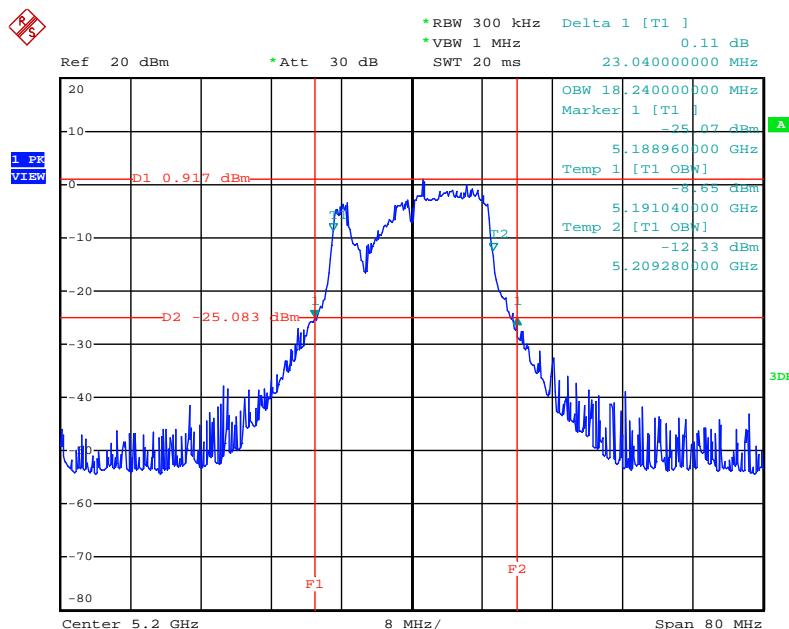
Date: 8.MAY.2013 13:27:05

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



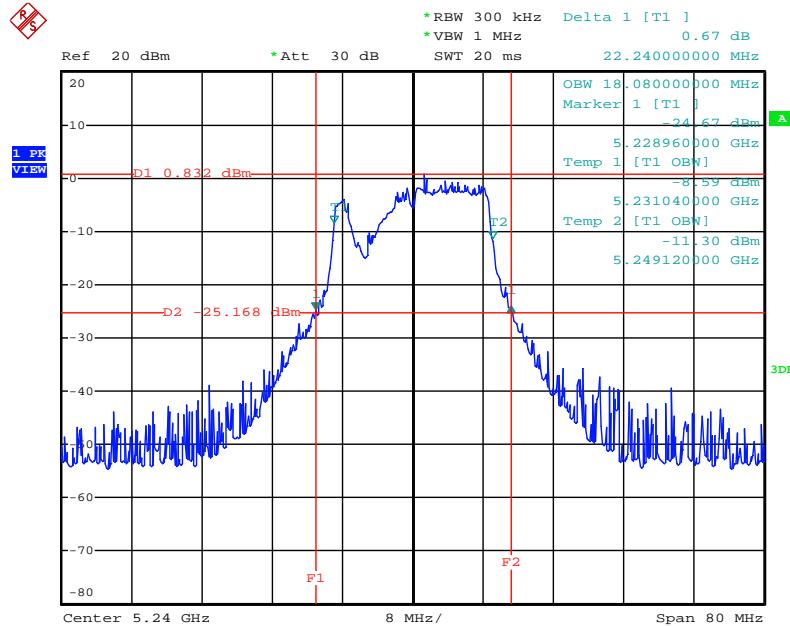
Date: 8.MAY.2013 13:40:43

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



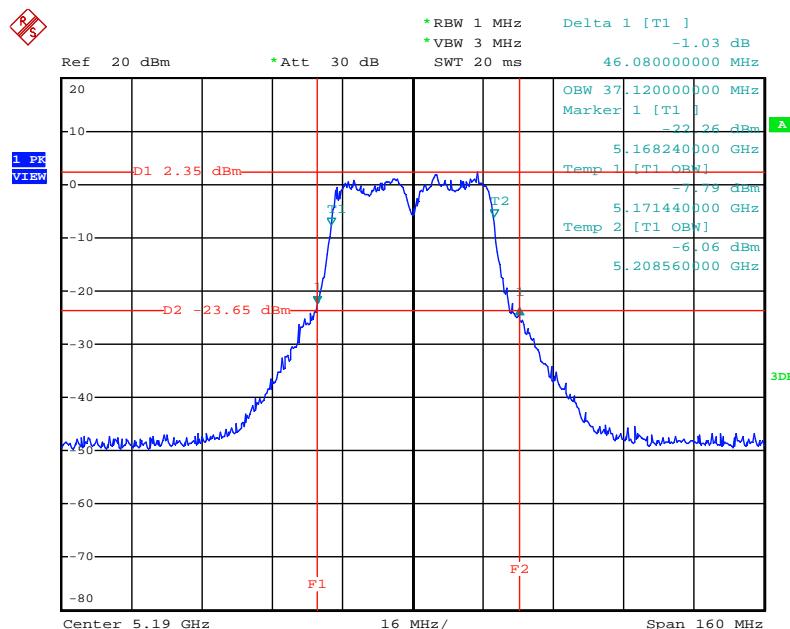
Date: 8.MAY.2013 13:40:26

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5240 MHz



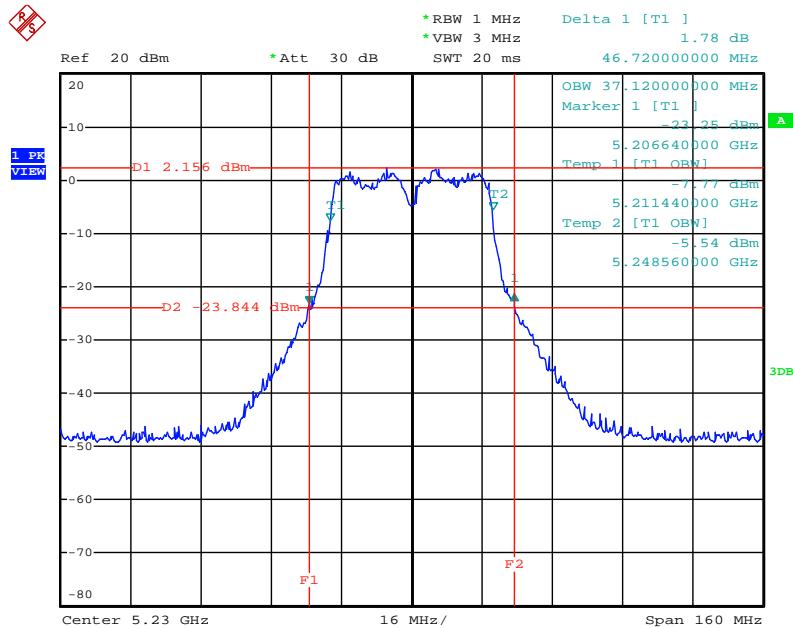
Date: 8.MAY.2013 13:40:08

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5190 MHz



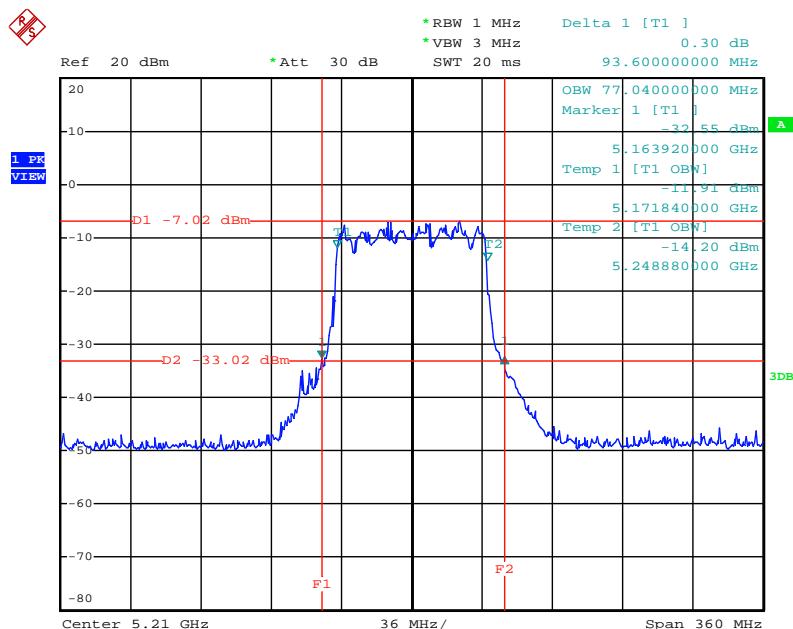
Date: 8.MAY.2013 13:44:58

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



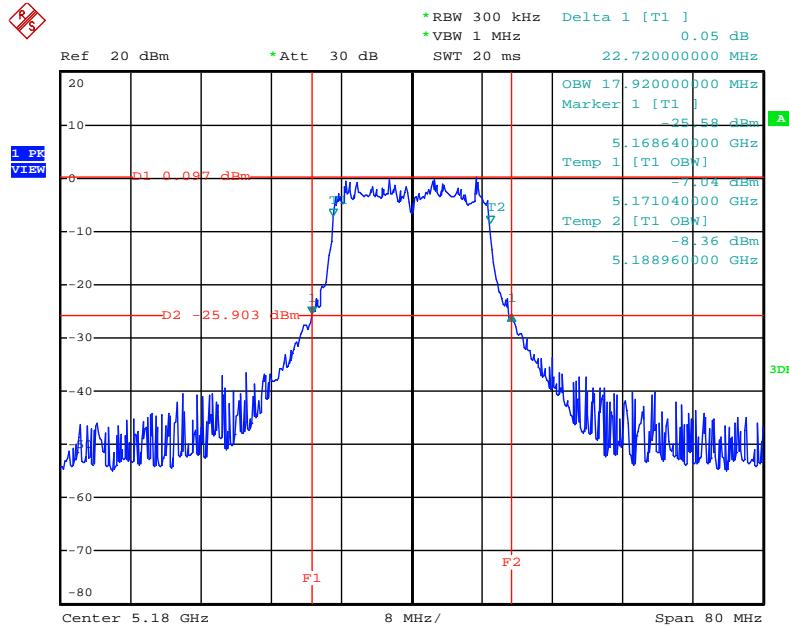
Date: 8.MAY.2013 13:44:40

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



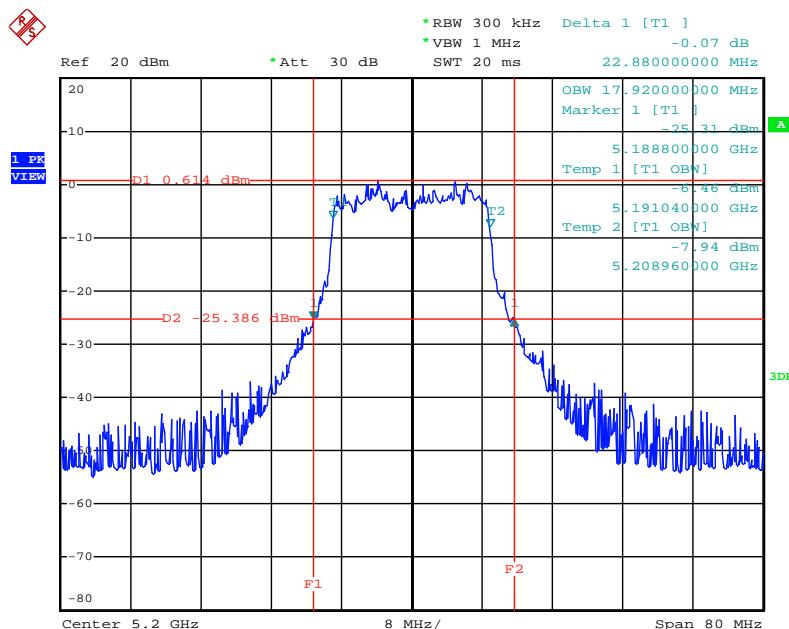
Date: 8.MAY.2013 13:48:16

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**



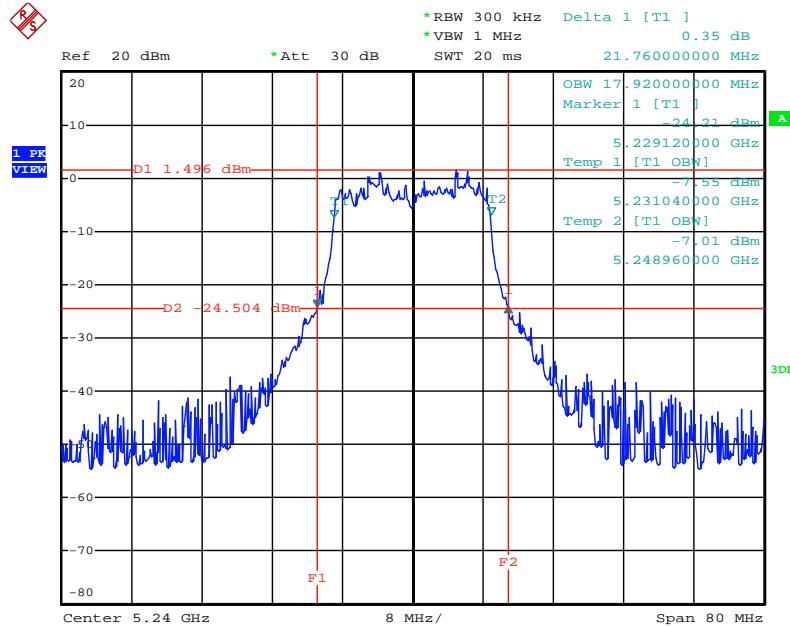
Date: 8.MAY.2013 14:00:07

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**



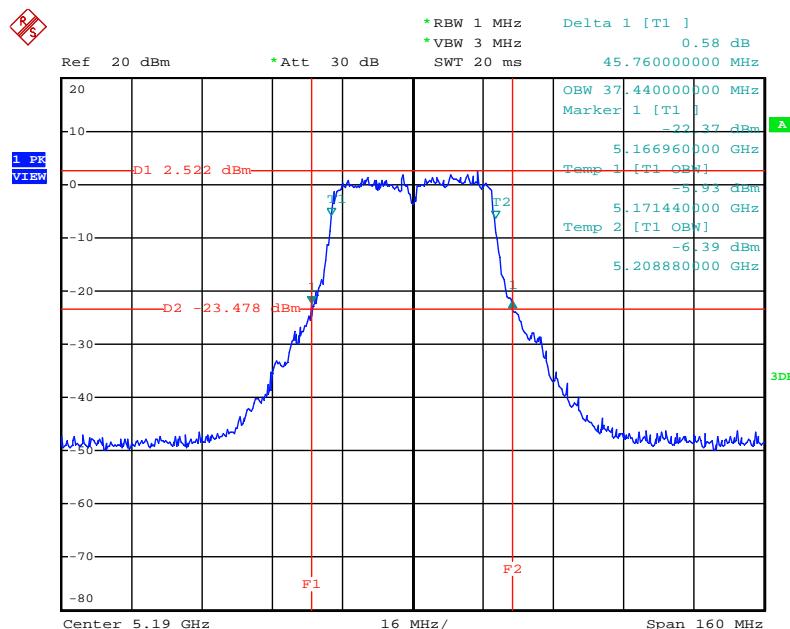
Date: 8.MAY.2013 14:00:24

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



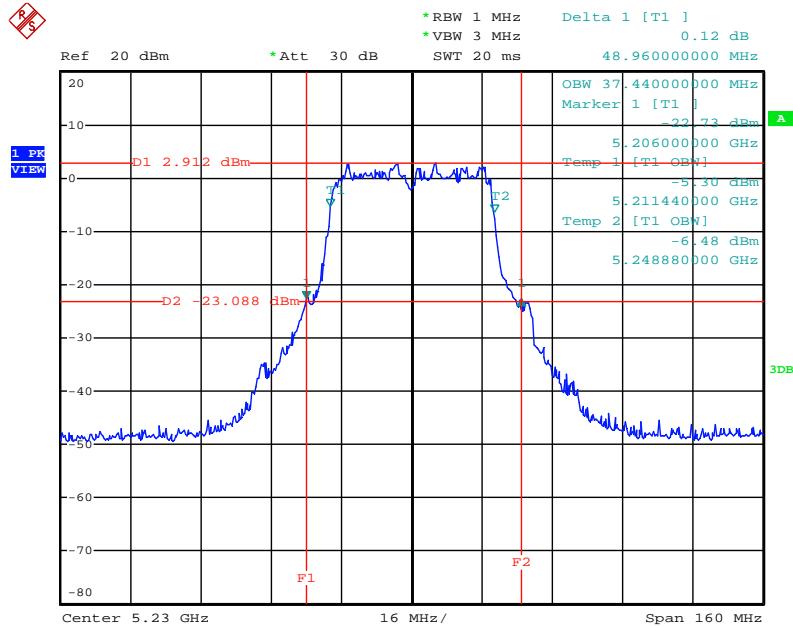
Date: 8.MAY.2013 14:00:40

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



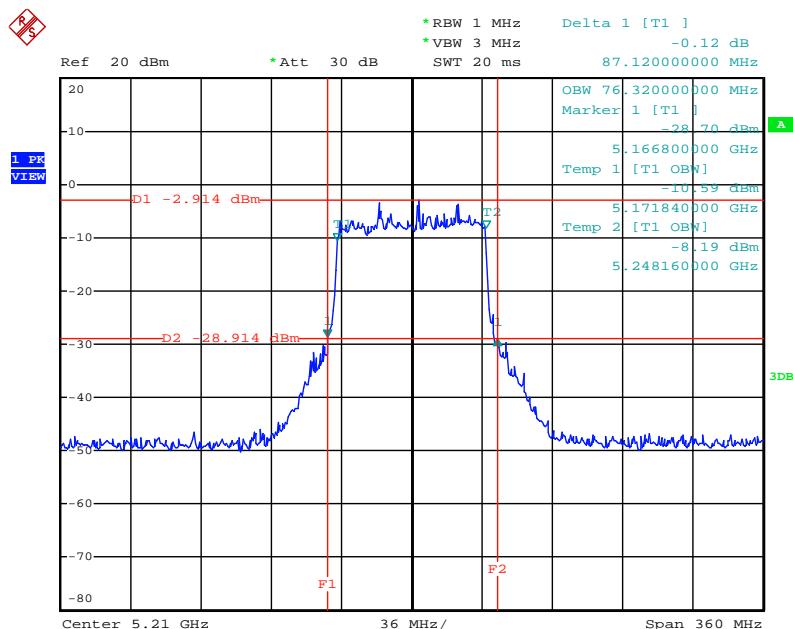
Date: 8.MAY.2013 14:01:51

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**

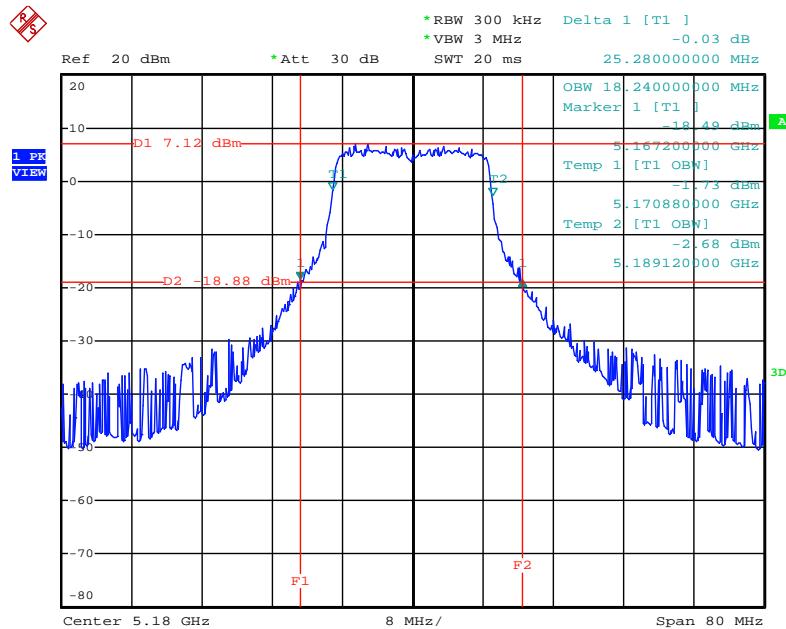


Date: 8.MAY.2013 14:01:32

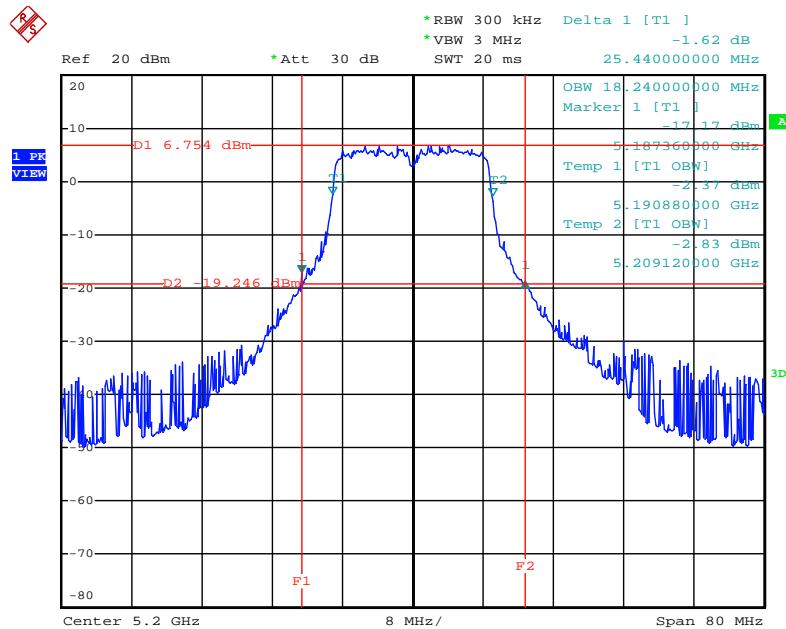
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



Date: 8.MAY.2013 13:54:46

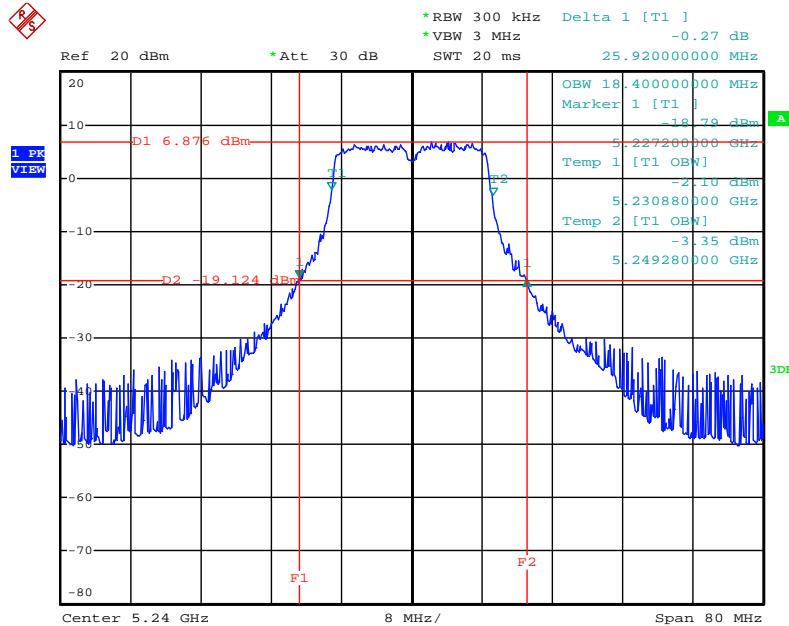
Mode 4 (Ant.5 Patch antenna / 2.3dBi)
1TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5180 MHz


Date: 6.MAY.2013 11:48:21

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5200 MHz


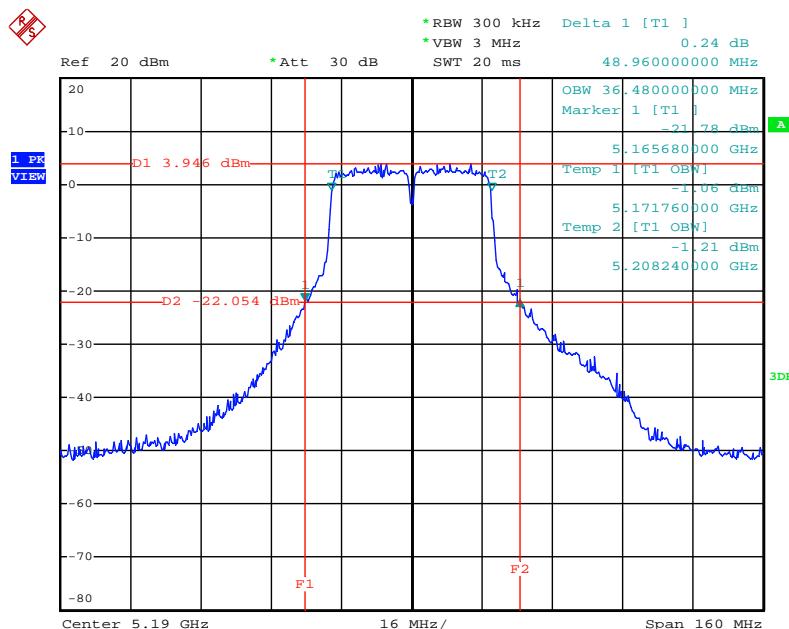
Date: 6.MAY.2013 11:49:21

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



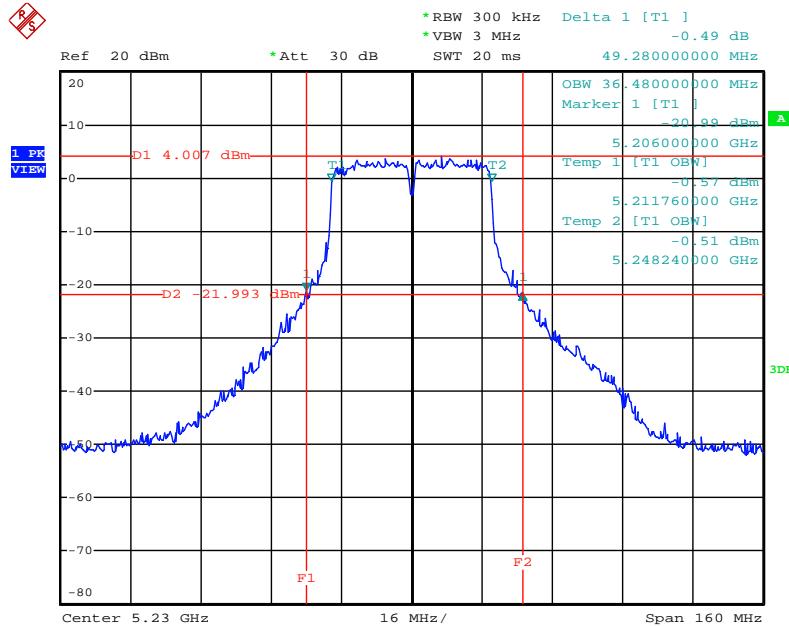
Date: 6.MAY.2013 11:51:53

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5190 MHz



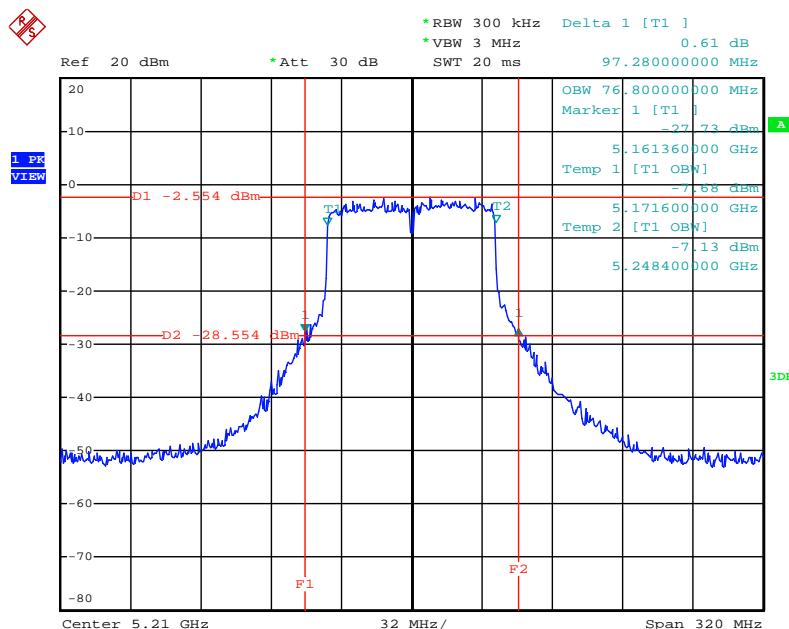
Date: 6.MAY.2013 12:04:58

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

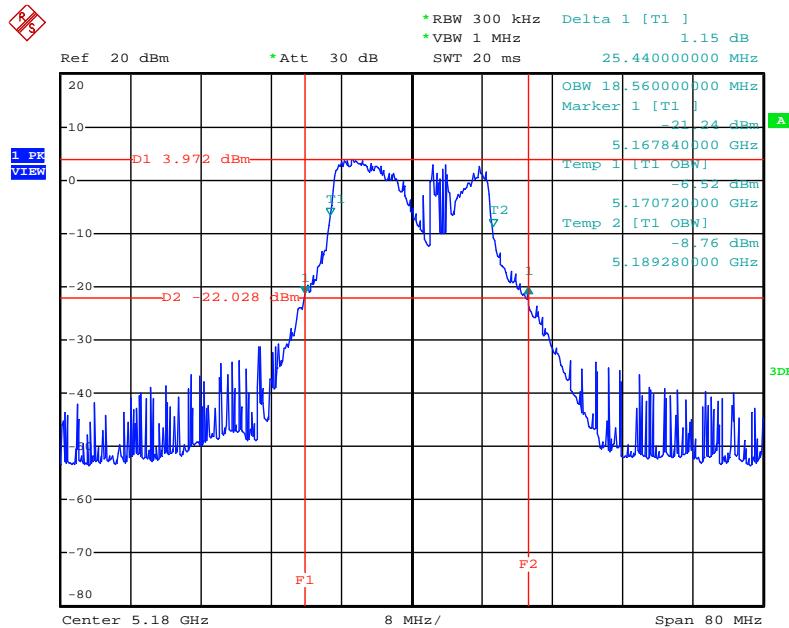


Date: 6.MAY.2013 12:05:30

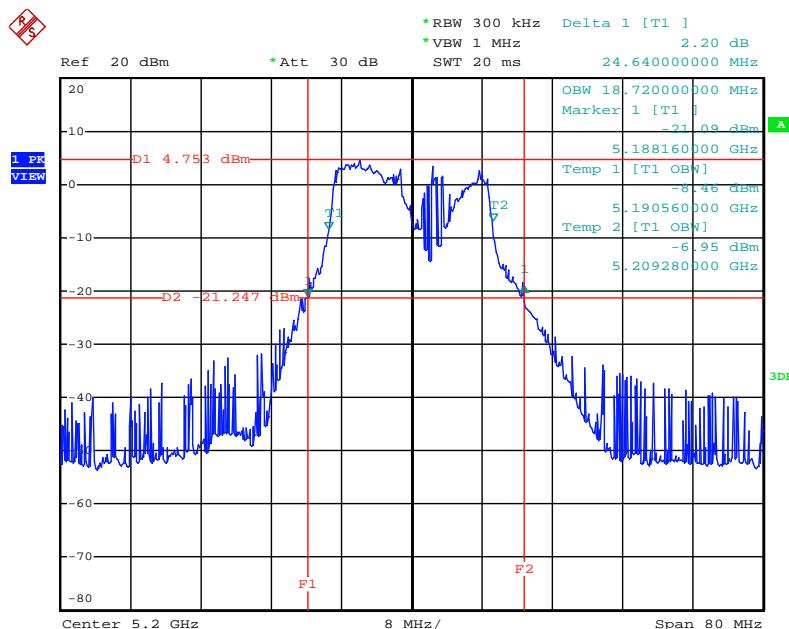
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz



Date: 6.MAY.2013 12:09:18

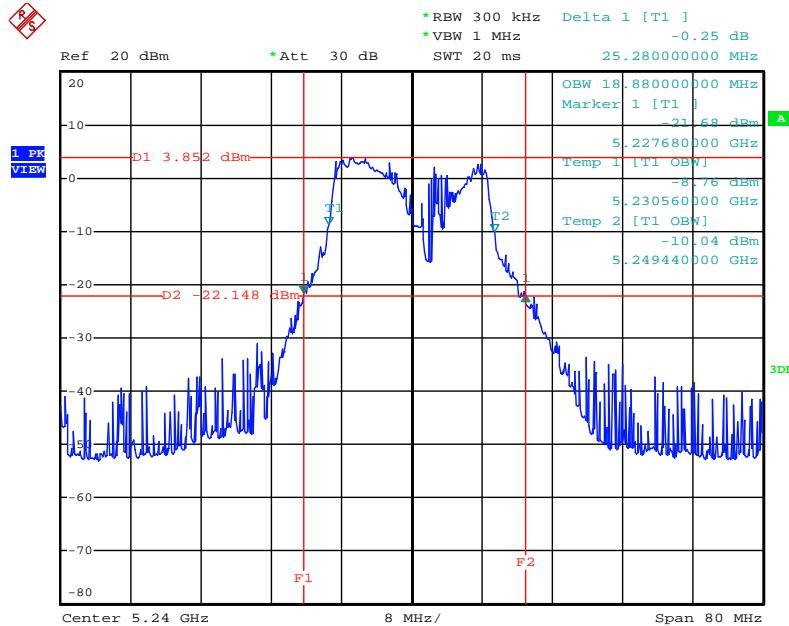
2TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz


Date: 8.MAY.2013 12:01:46

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz


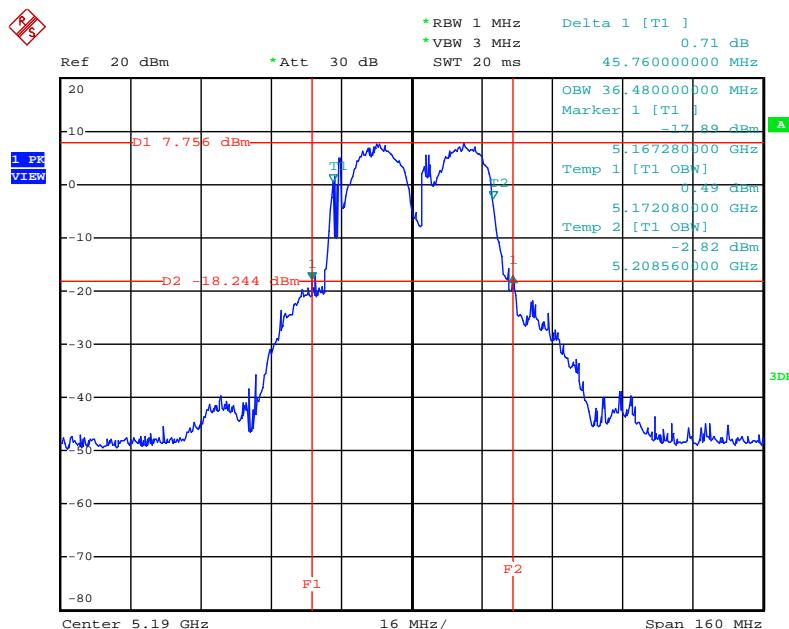
Date: 8.MAY.2013 12:01:29

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5240 MHz



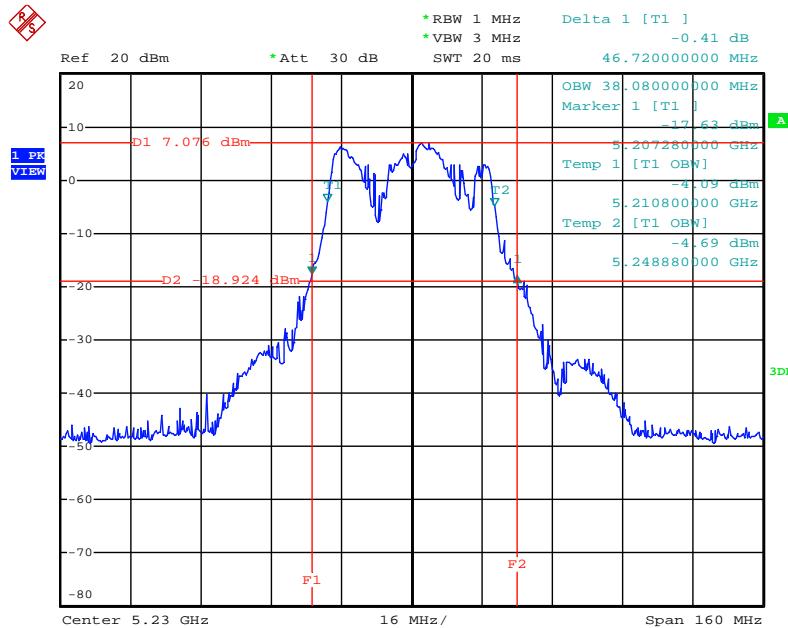
Date: 8.MAY.2013 12:01:13

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5190 MHz



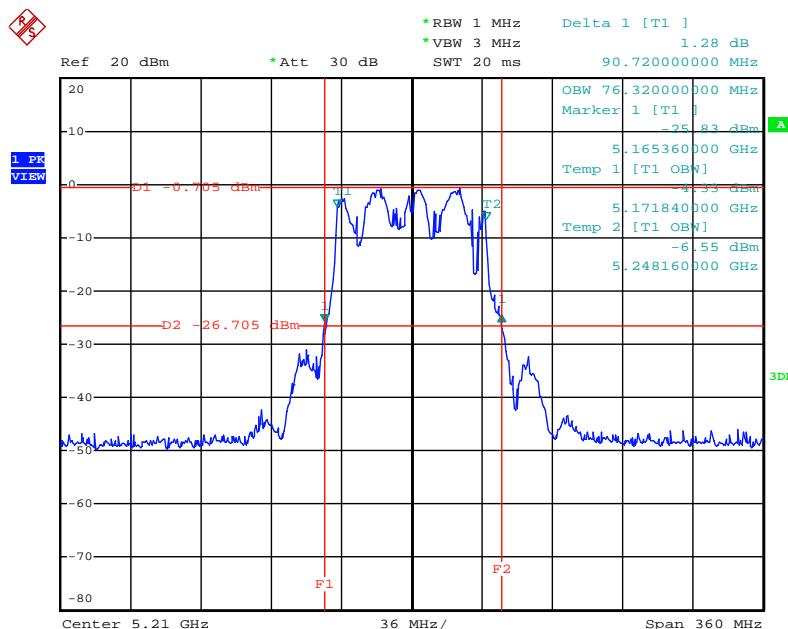
Date: 8.MAY.2013 12:06:35

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**



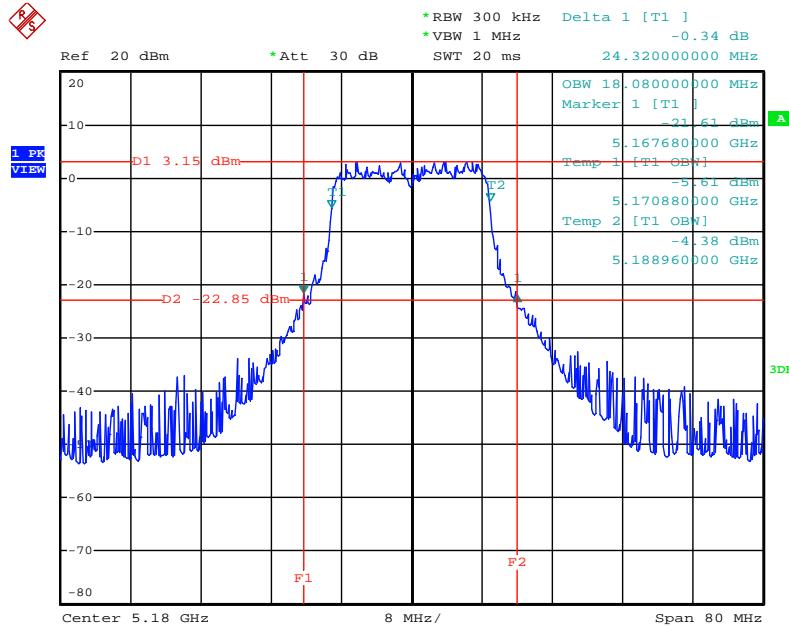
Date: 8.MAY.2013 12:06:54

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



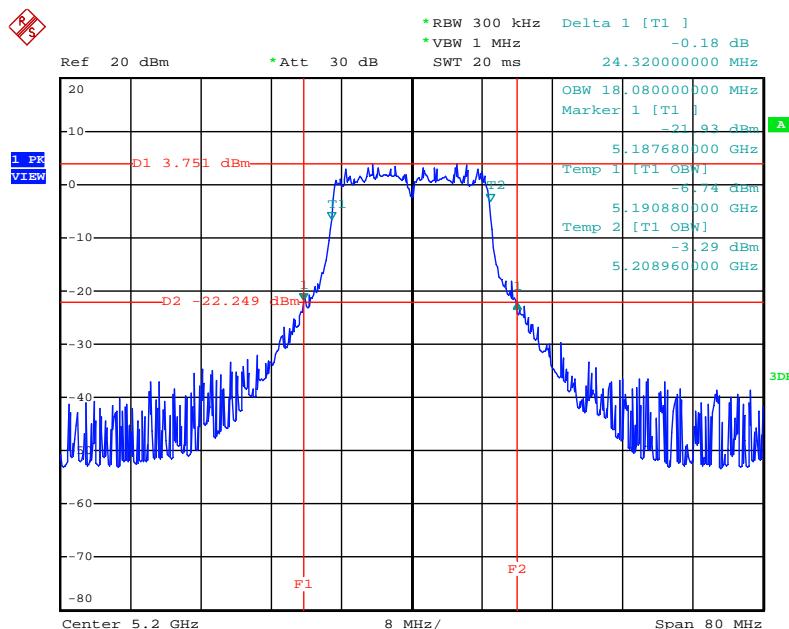
Date: 8.MAY.2013 12:15:48

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5180 MHz



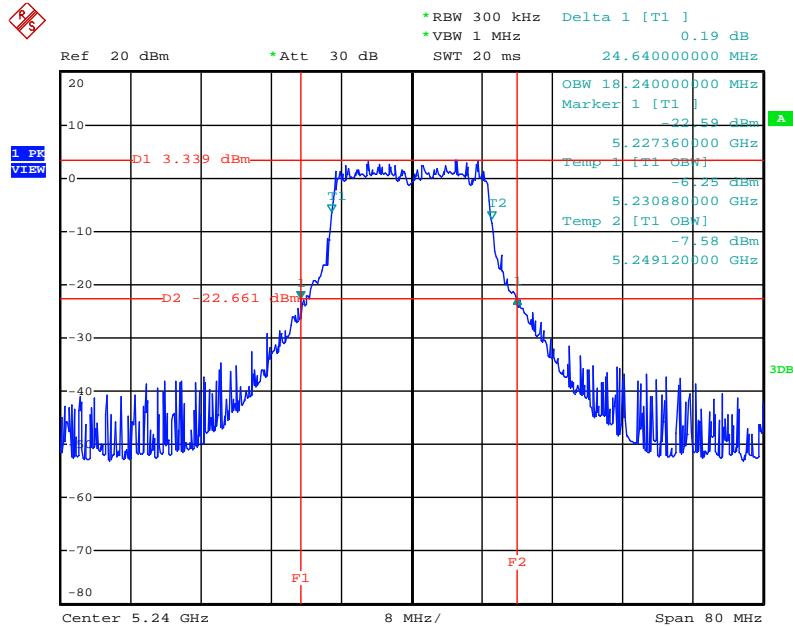
Date: 8.MAY.2013 12:39:11

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



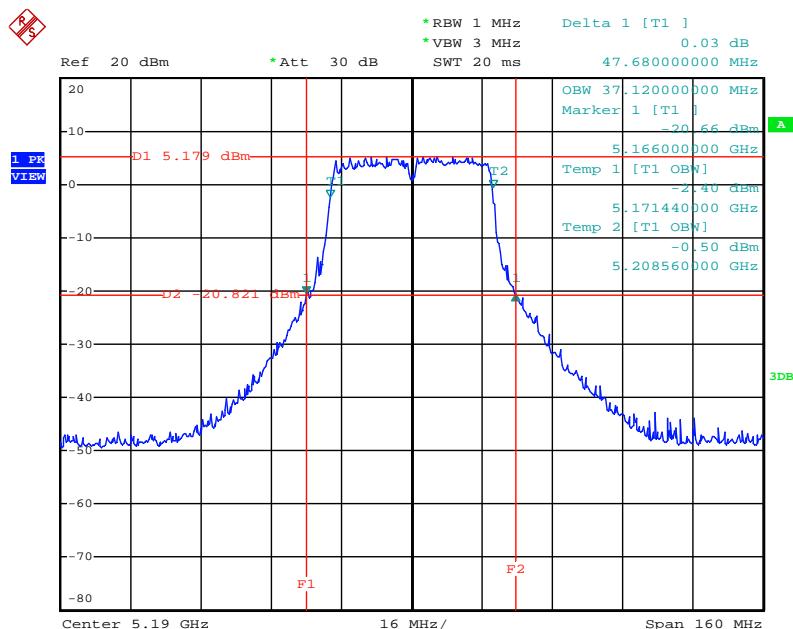
Date: 8.MAY.2013 12:38:51

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



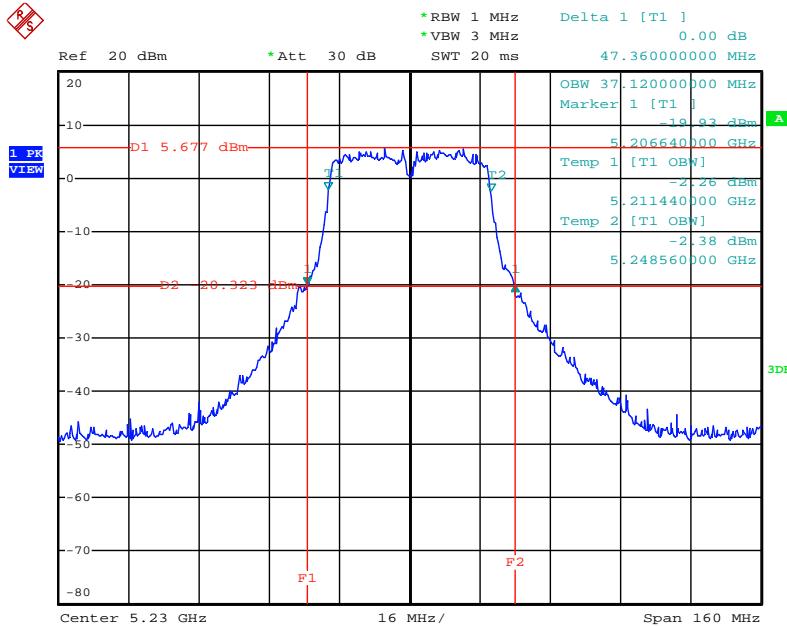
Date: 8.MAY.2013 12:38:31

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



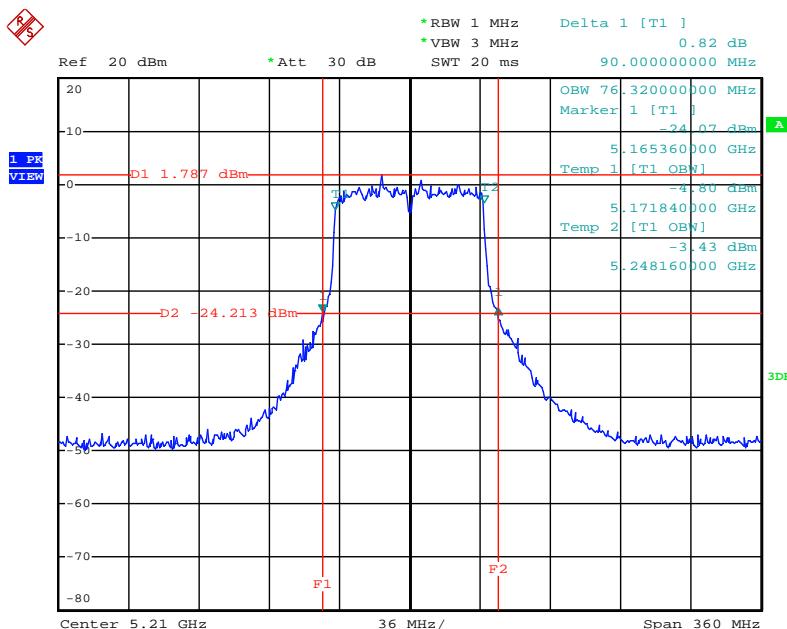
Date: 8.MAY.2013 12:44:08

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**

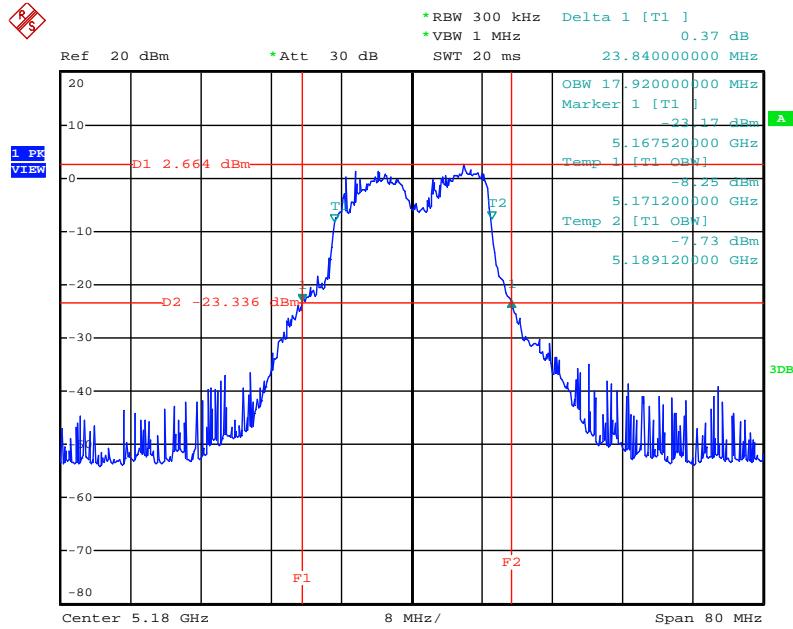


Date: 8.MAY.2013 12:44:30

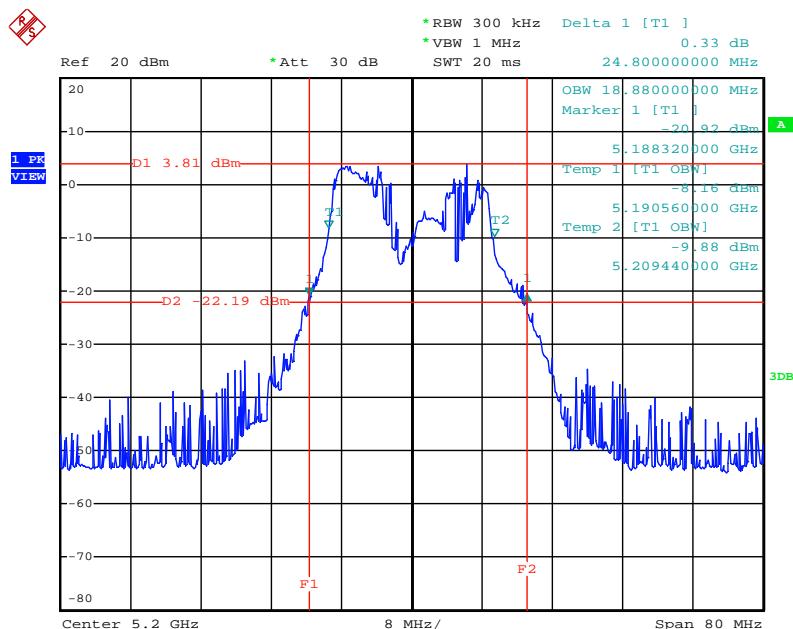
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



Date: 8.MAY.2013 12:46:43

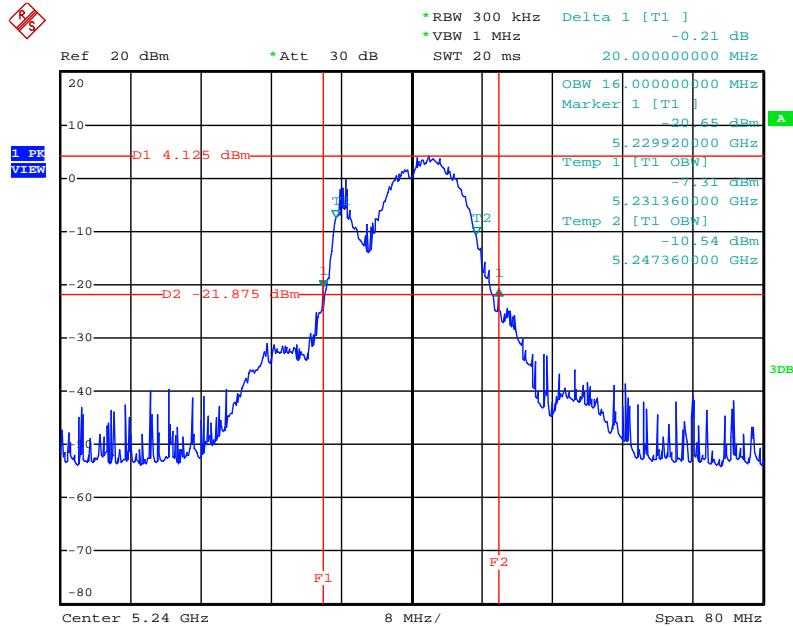
3TX
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**


Date: 8.MAY.2013 13:16:18

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**


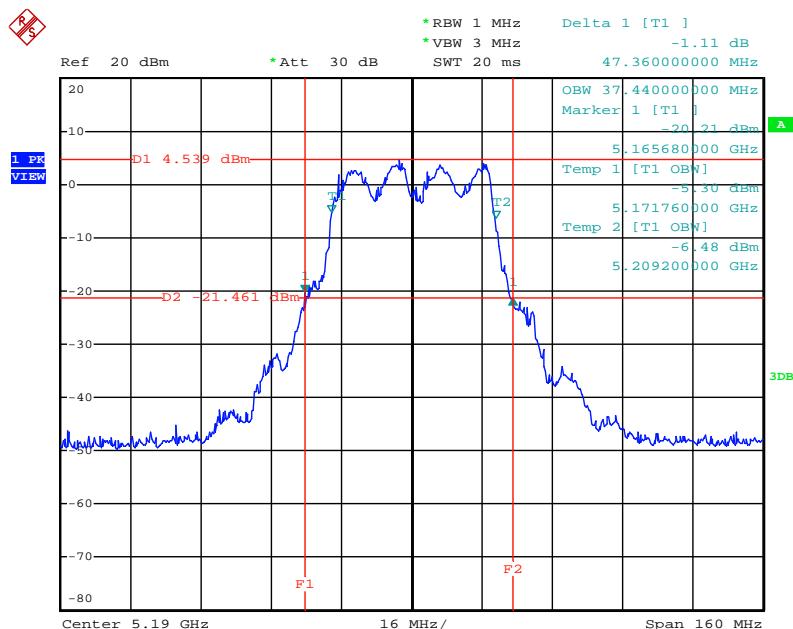
Date: 8.MAY.2013 13:16:39

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5240 MHz



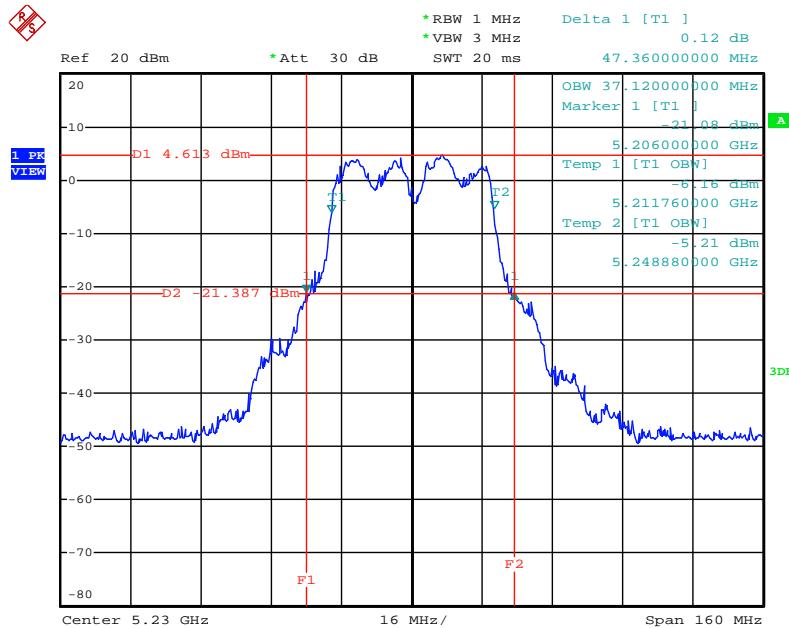
Date: 8.MAY.2013 13:16:57

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5190 MHz



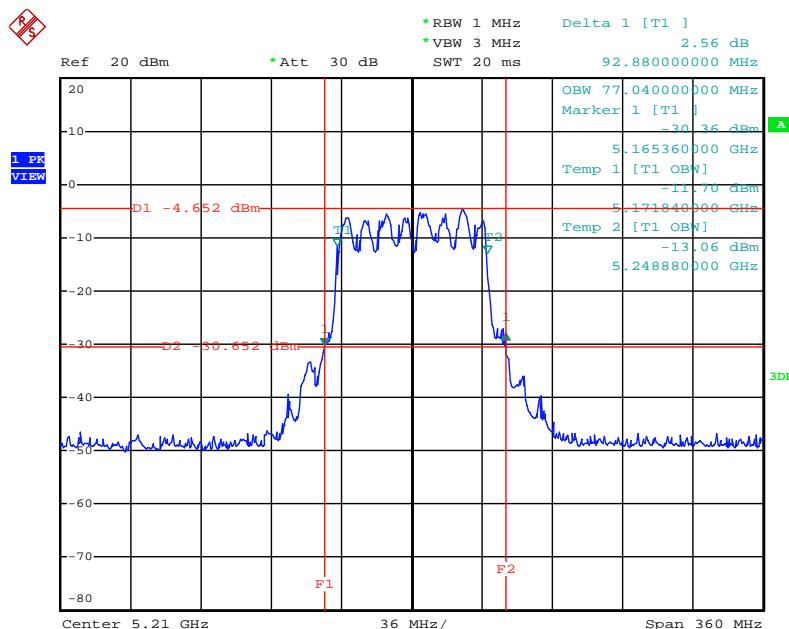
Date: 8.MAY.2013 13:20:27

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



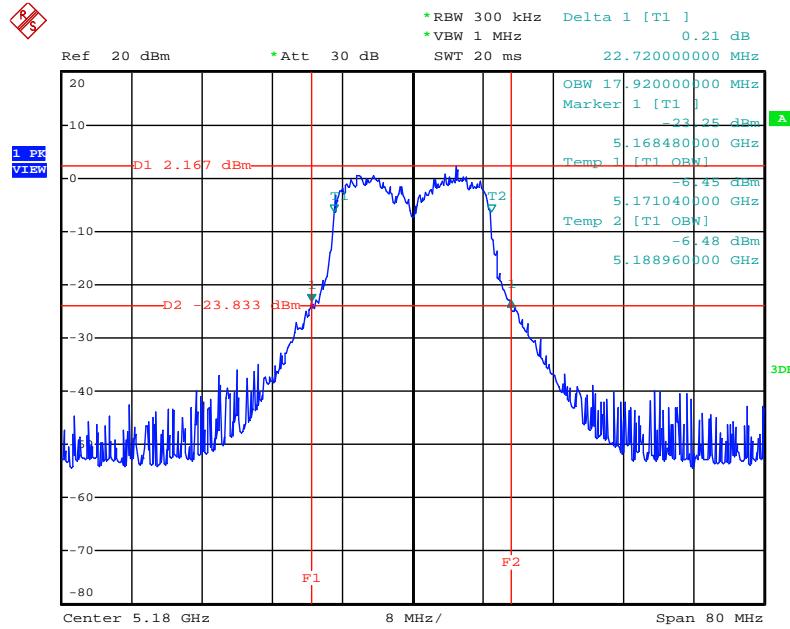
Date: 8.MAY.2013 13:20:07

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



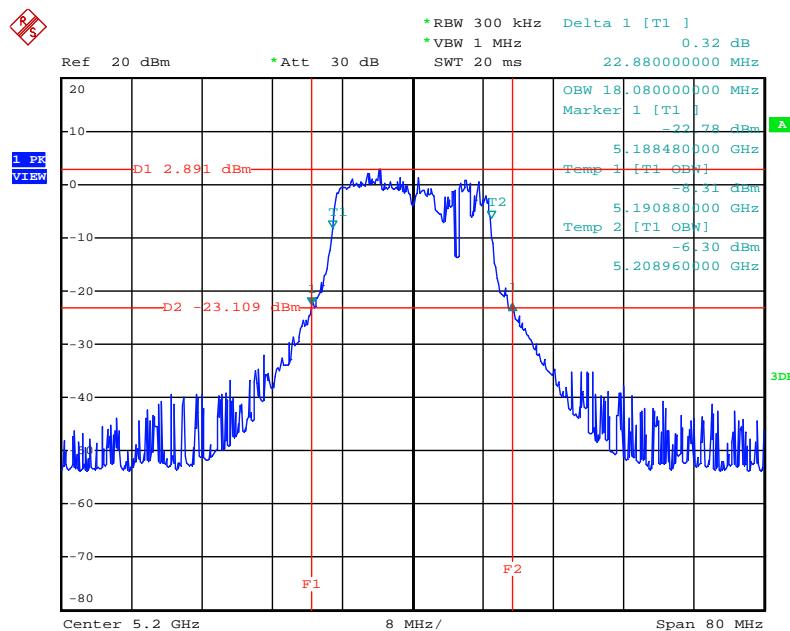
Date: 8.MAY.2013 13:28:02

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



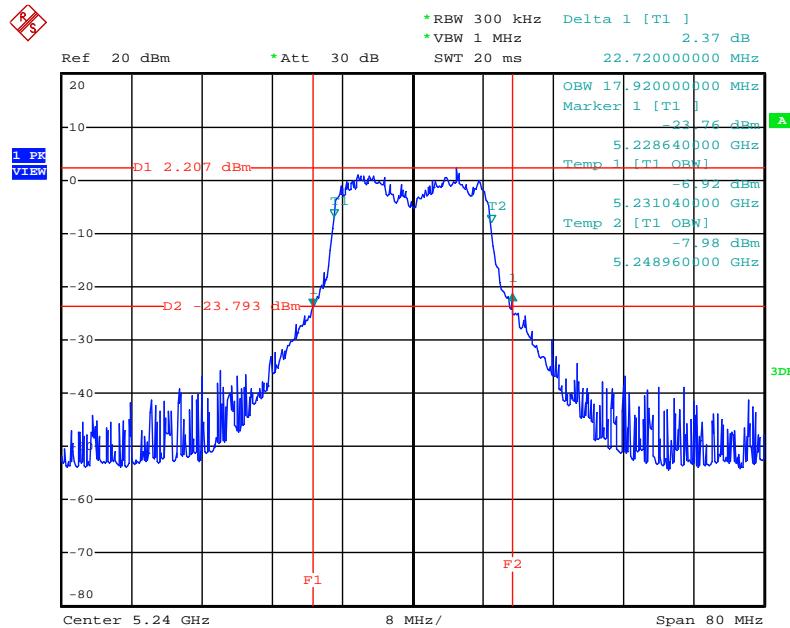
Date: 8.MAY.2013 13:41:31

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



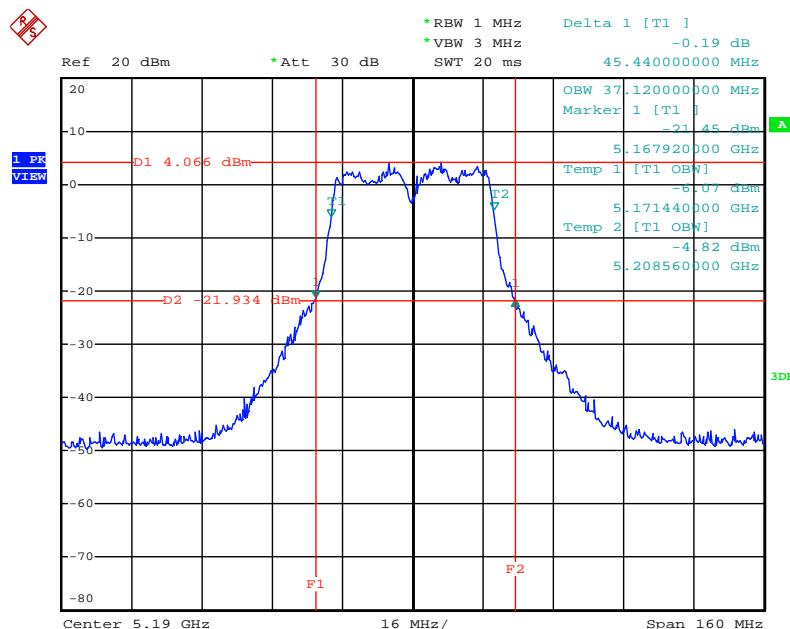
Date: 8.MAY.2013 13:41:49

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



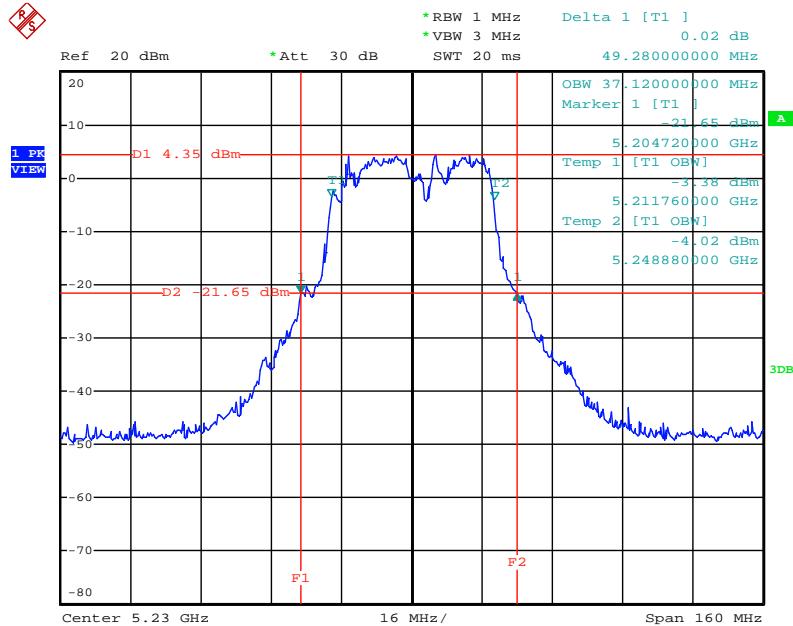
Date: 8.MAY.2013 13:42:06

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



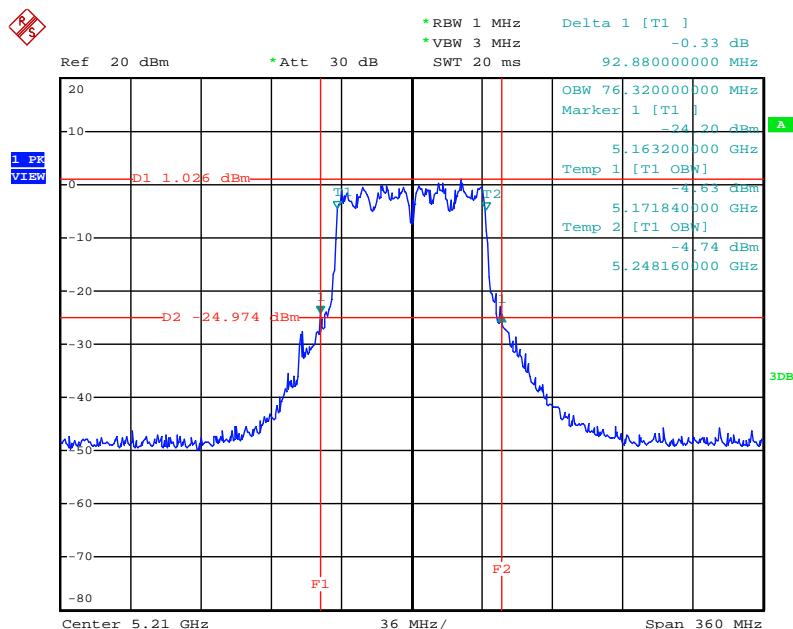
Date: 8.MAY.2013 13:45:29

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



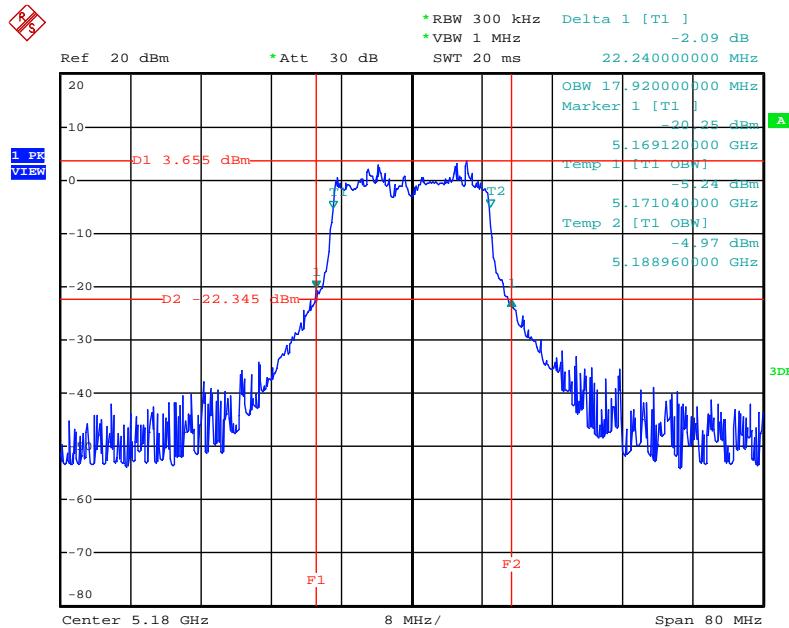
Date: 8.MAY.2013 13:45:46

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



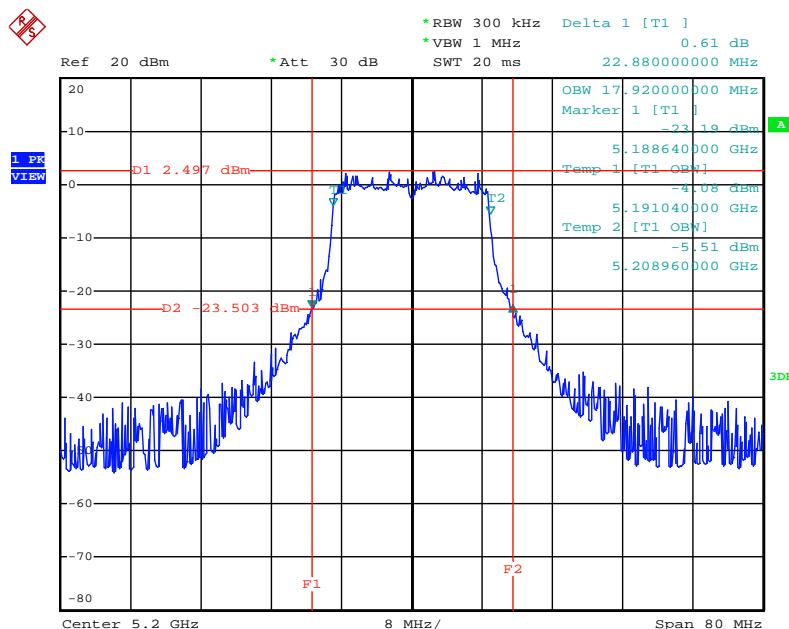
Date: 8.MAY.2013 13:49:23

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



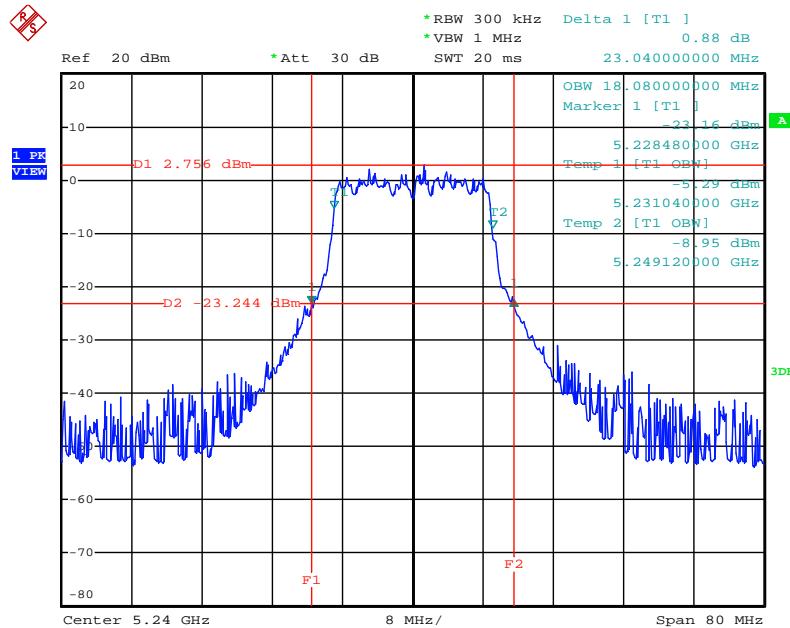
Date: 8.MAY.2013 13:59:22

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



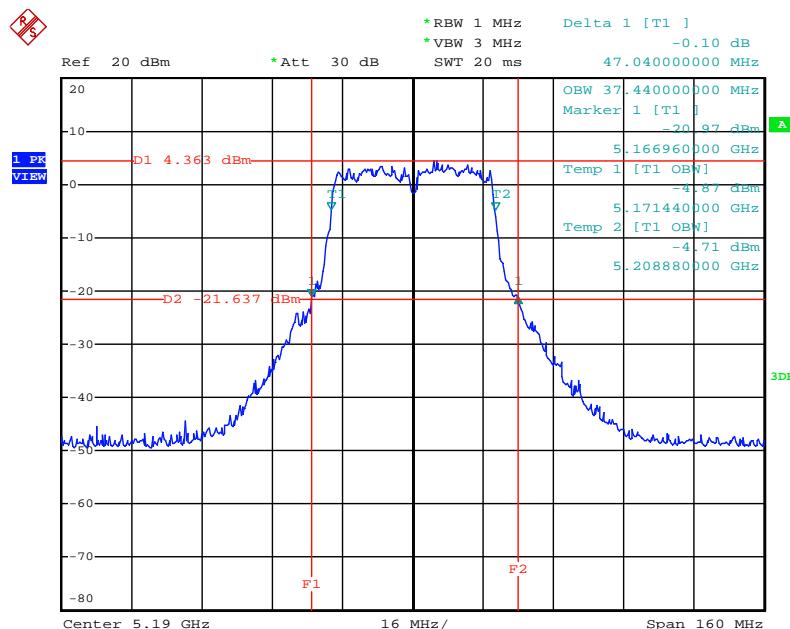
Date: 8.MAY.2013 13:59:03

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



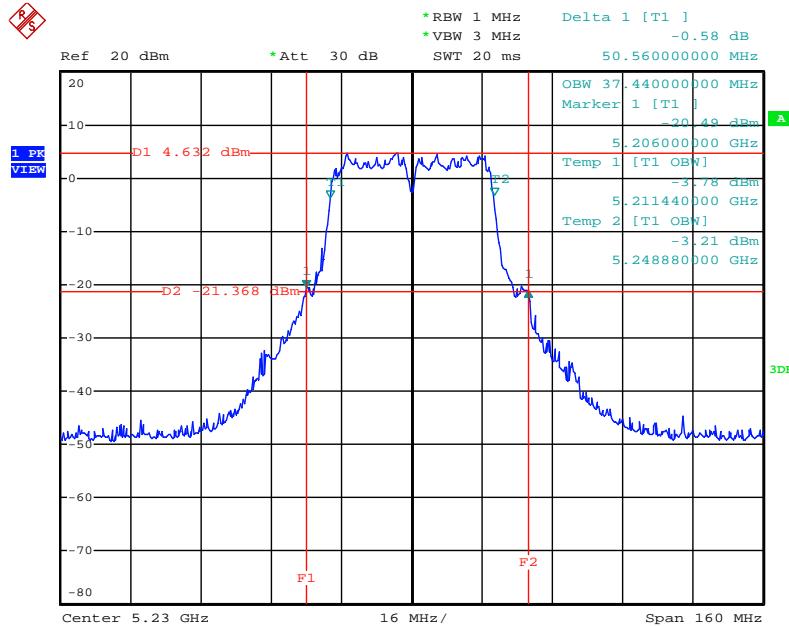
Date: 8.MAY.2013 13:58:44

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



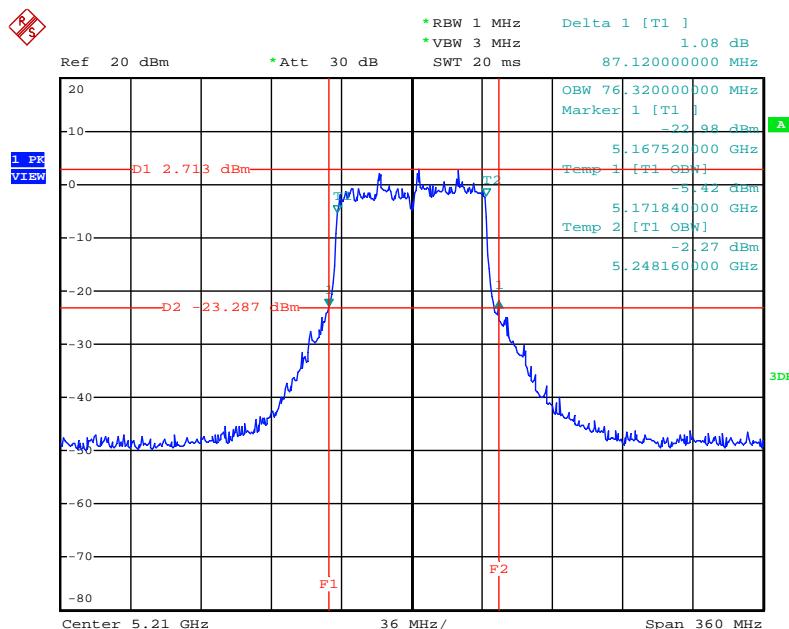
Date: 8.MAY.2013 14:02:20

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**

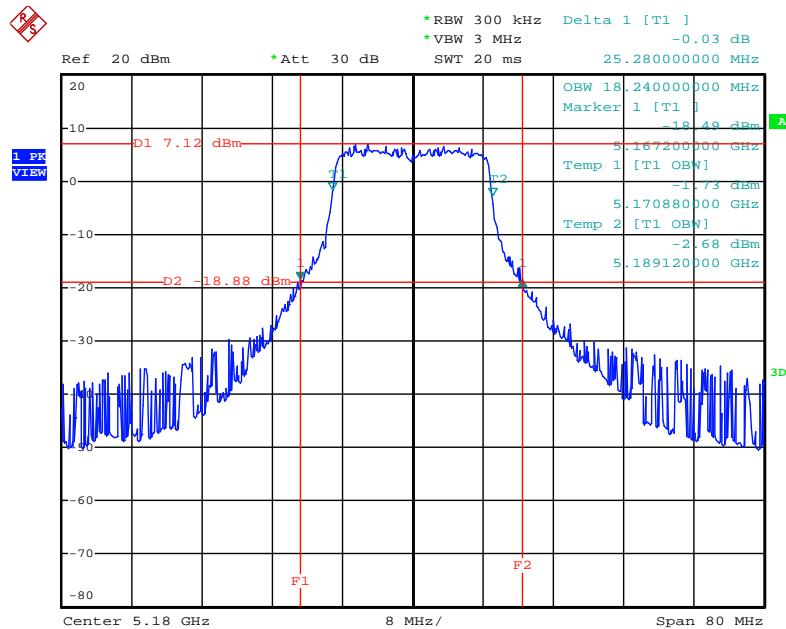


Date: 8.MAY.2013 14:02:38

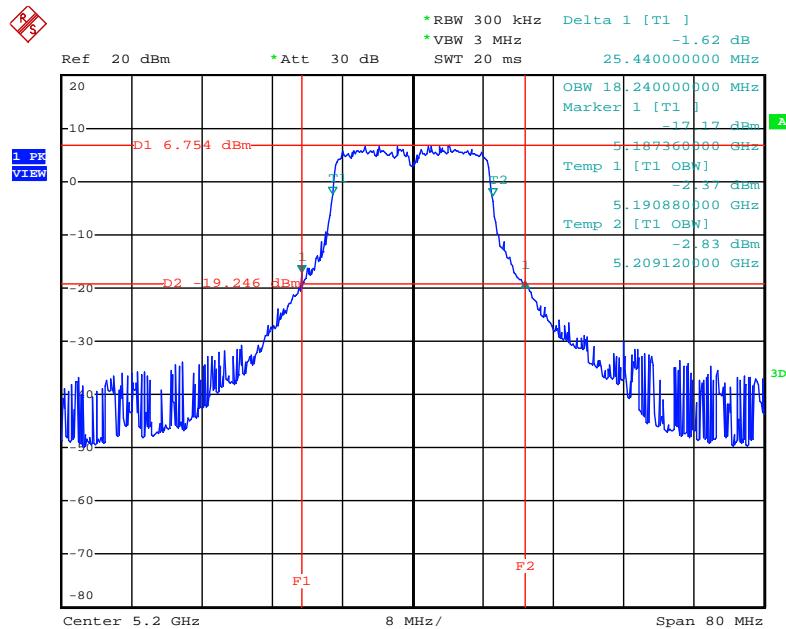
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



Date: 8.MAY.2013 13:55:25

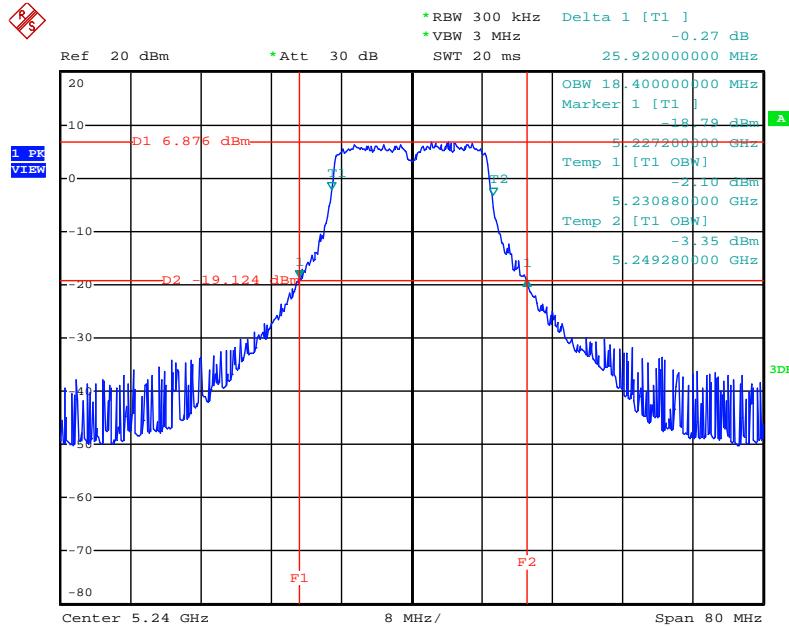
Mode 5 (Ant.6 Facade antenna / 2.5dBi)
1TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5180 MHz


Date: 6.MAY.2013 11:48:21

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5200 MHz


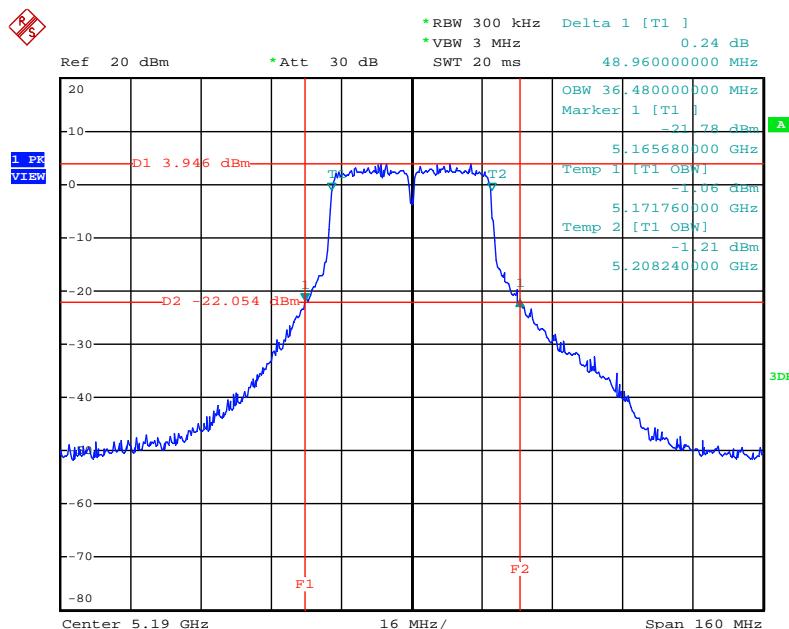
Date: 6.MAY.2013 11:49:21

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



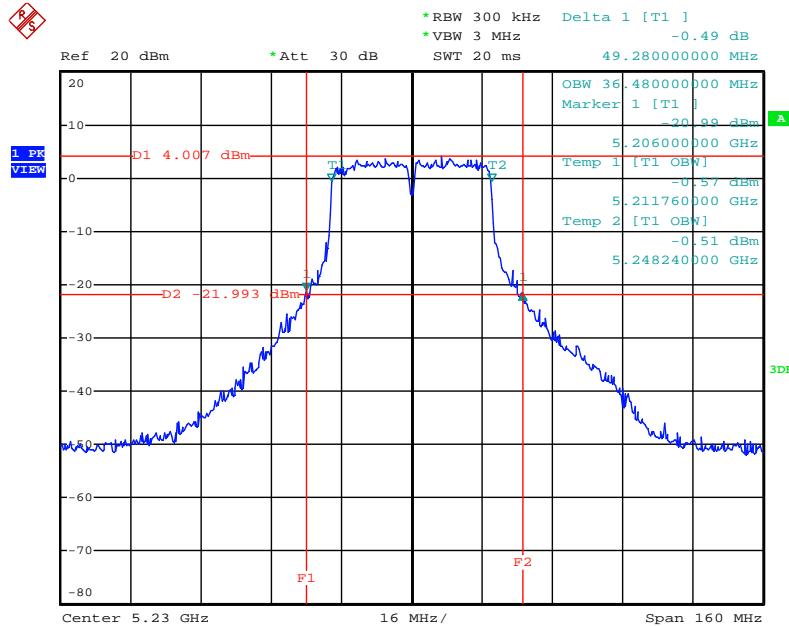
Date: 6.MAY.2013 11:51:53

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5190 MHz



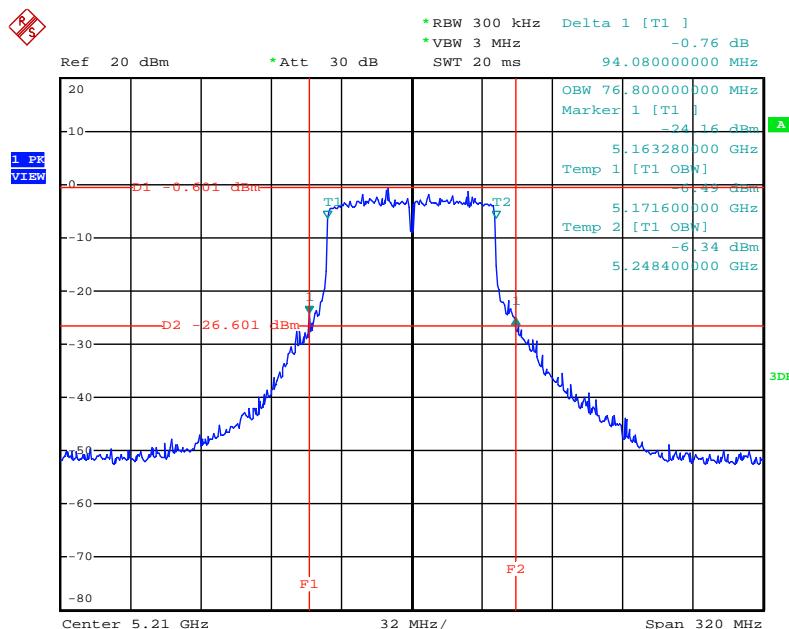
Date: 6.MAY.2013 12:04:58

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

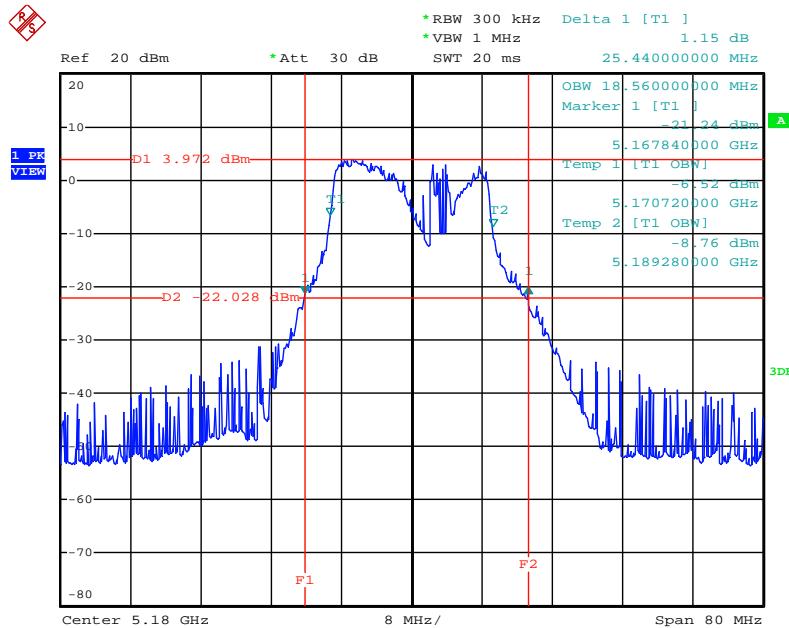


Date: 6.MAY.2013 12:05:30

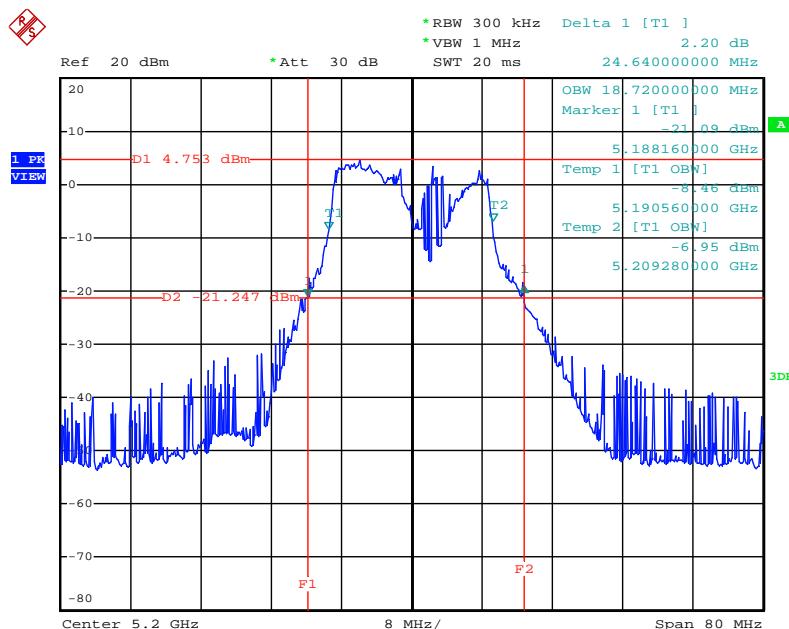
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz



Date: 6.MAY.2013 12:10:01

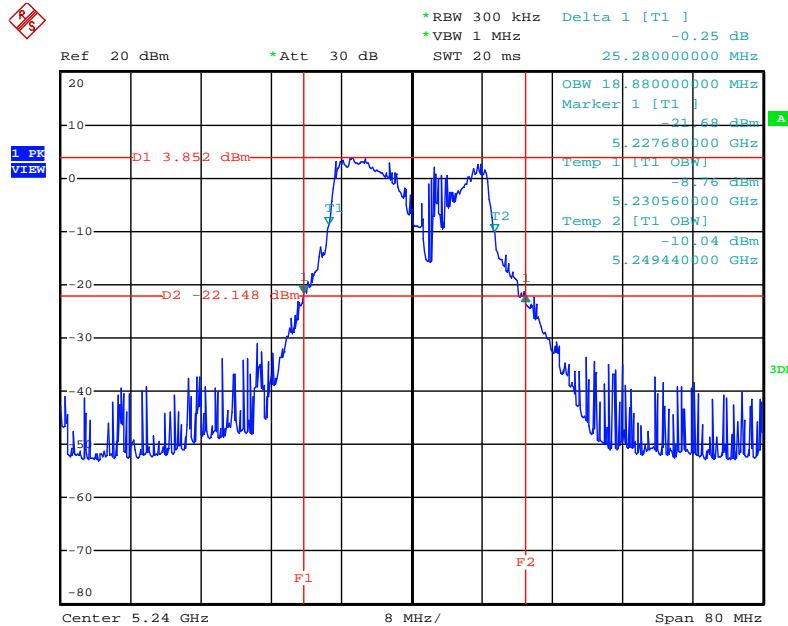
2TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz


Date: 8.MAY.2013 12:01:46

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz


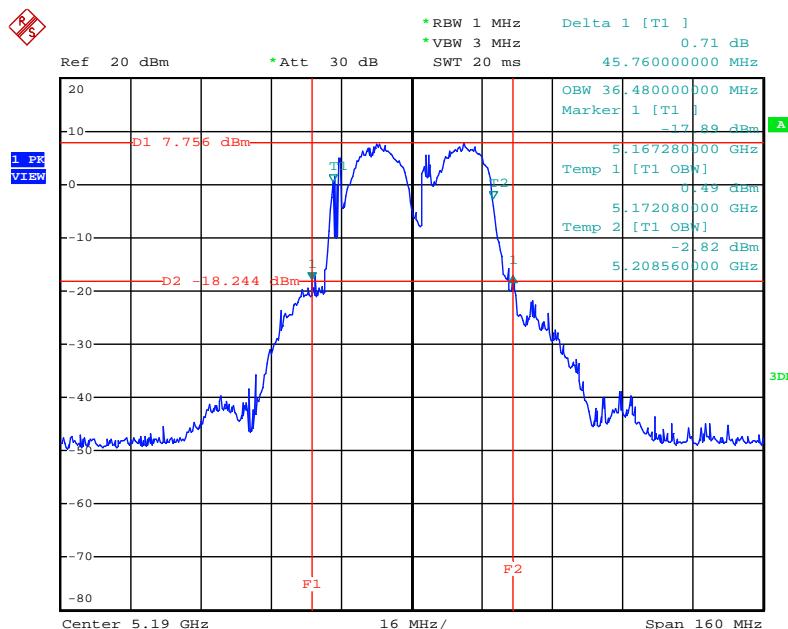
Date: 8.MAY.2013 12:01:29

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



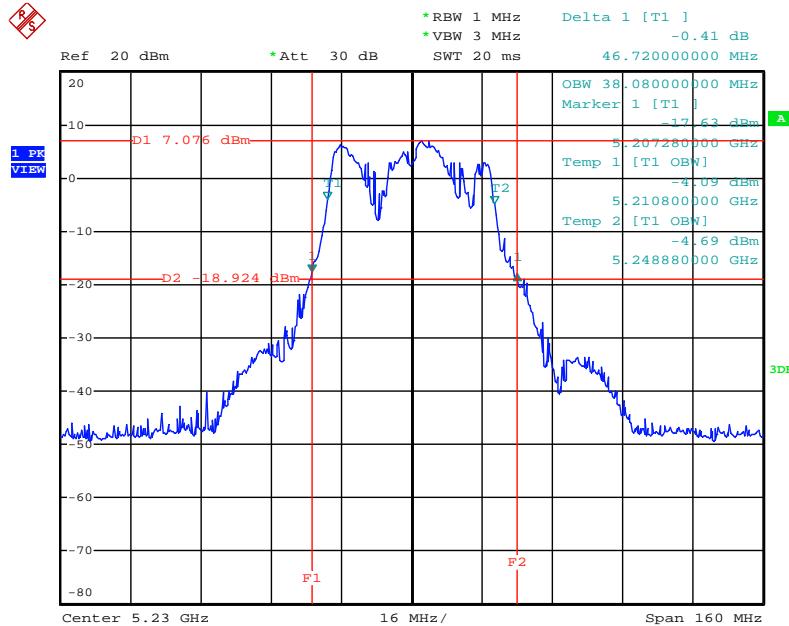
Date: 8.MAY.2013 12:01:13

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



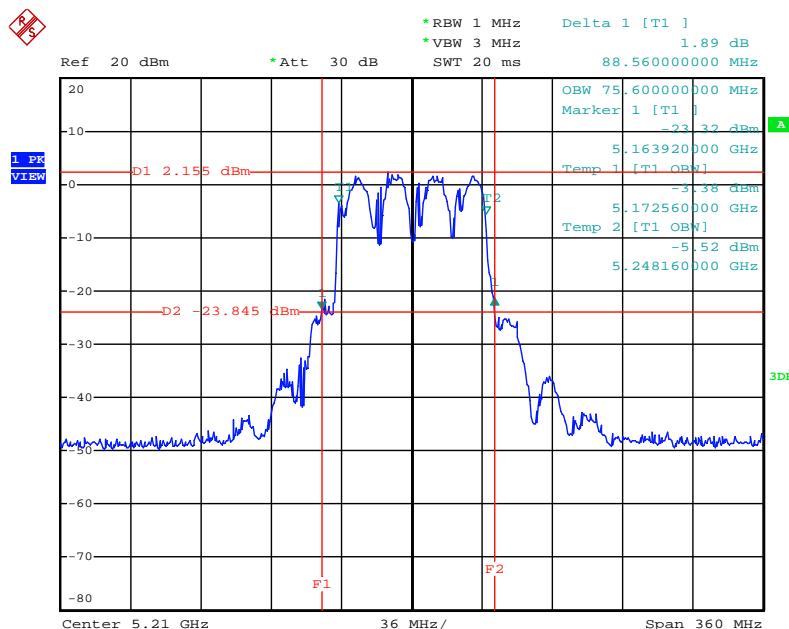
Date: 8.MAY.2013 12:06:35

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**



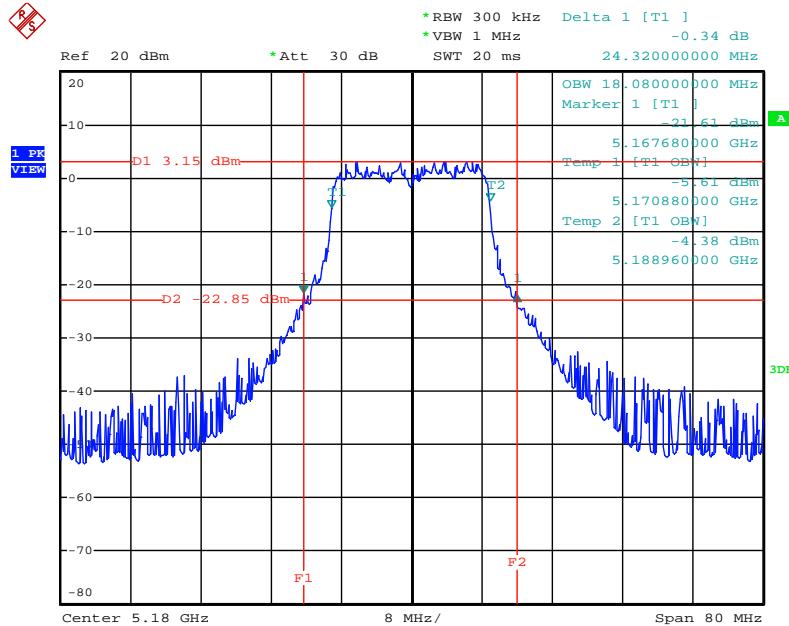
Date: 8.MAY.2013 12:06:54

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



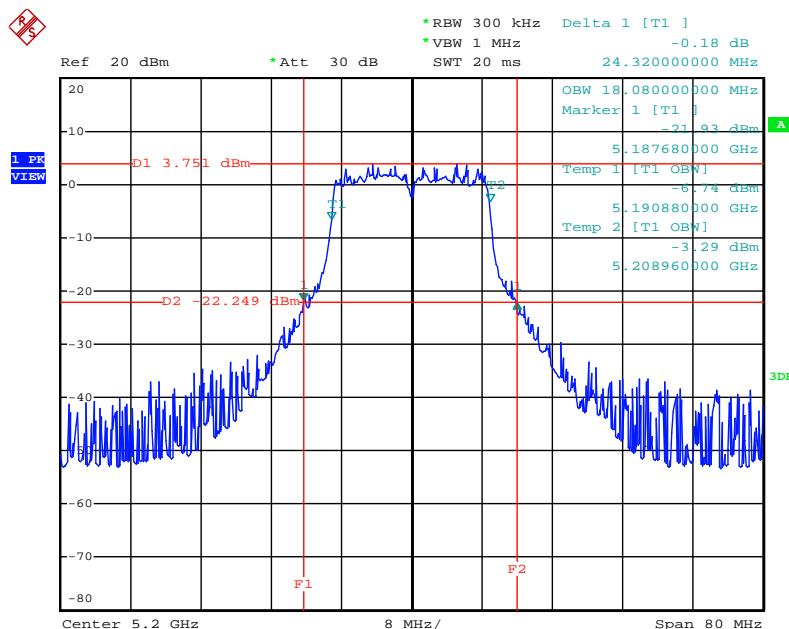
Date: 8.MAY.2013 12:16:42

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5180 MHz



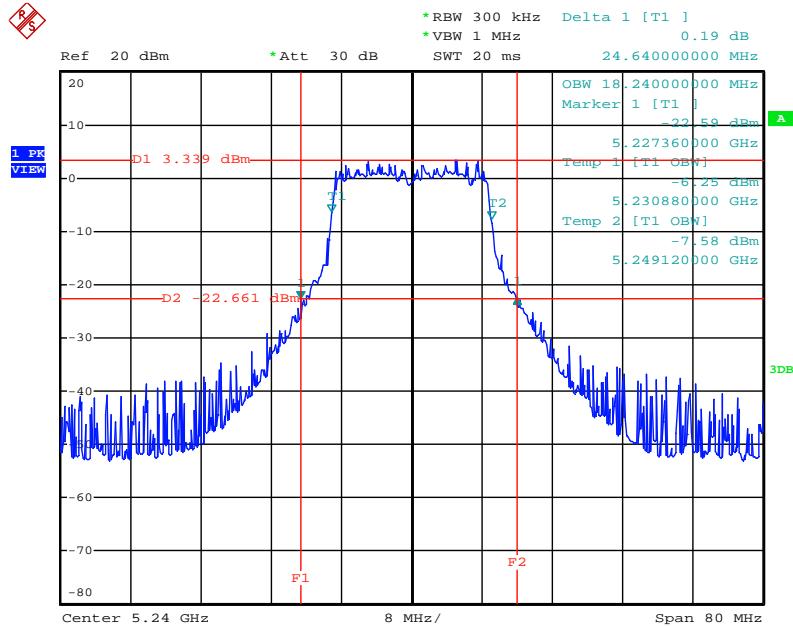
Date: 8.MAY.2013 12:39:11

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



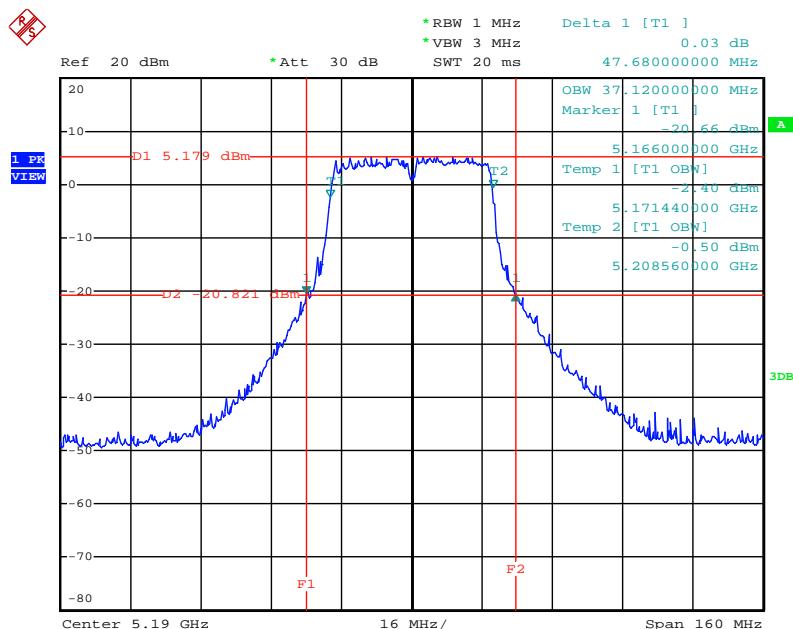
Date: 8.MAY.2013 12:38:51

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



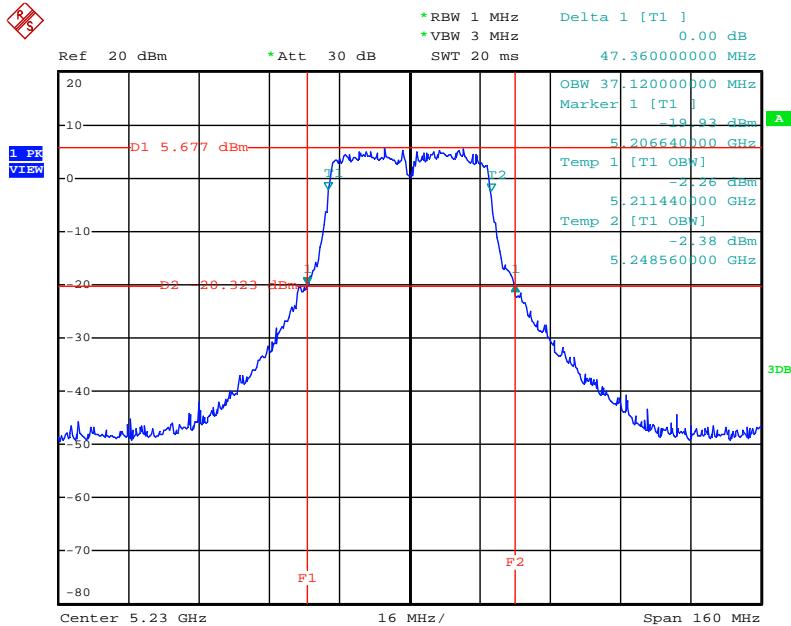
Date: 8.MAY.2013 12:38:31

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



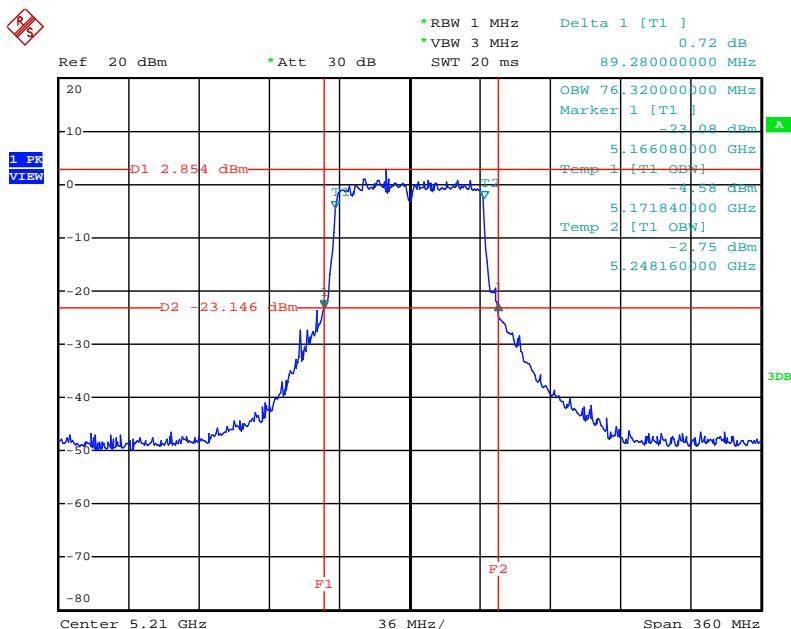
Date: 8.MAY.2013 12:44:08

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**

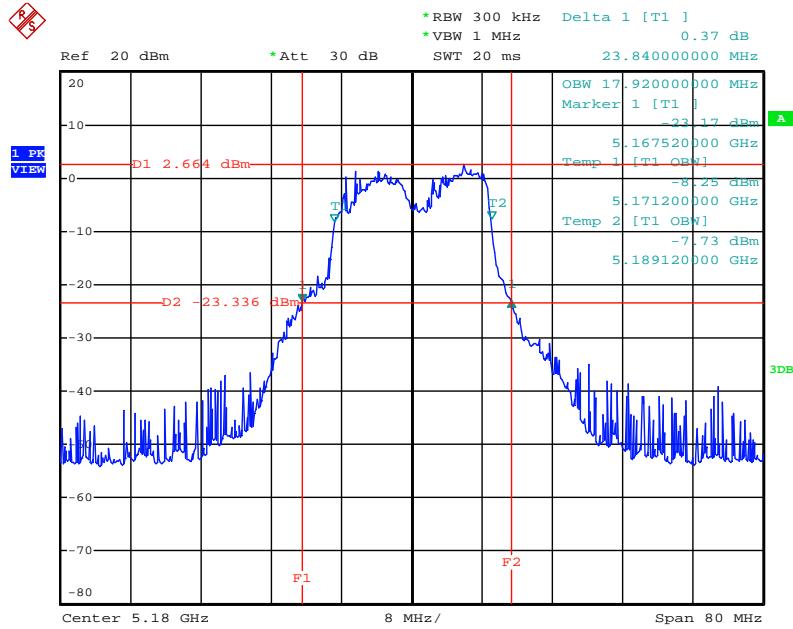


Date: 8.MAY.2013 12:44:30

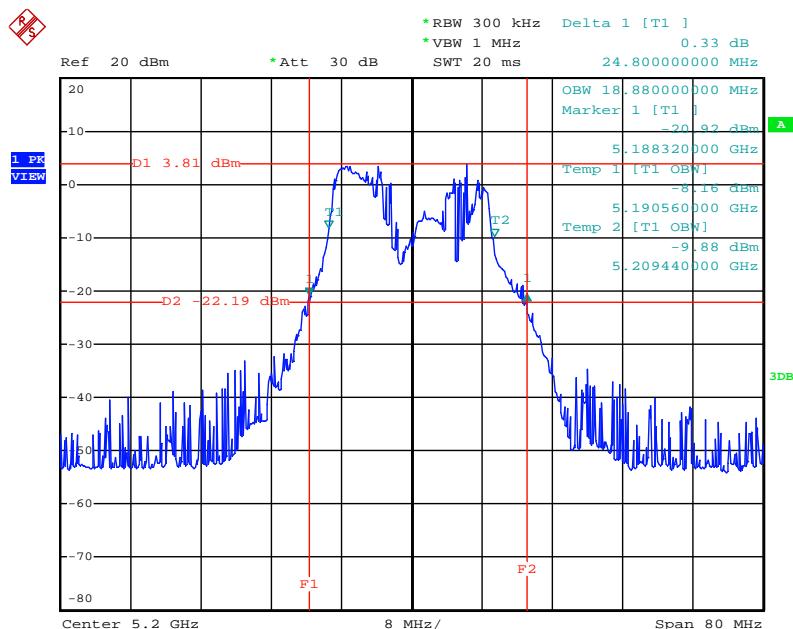
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



Date: 8.MAY.2013 12:48:43

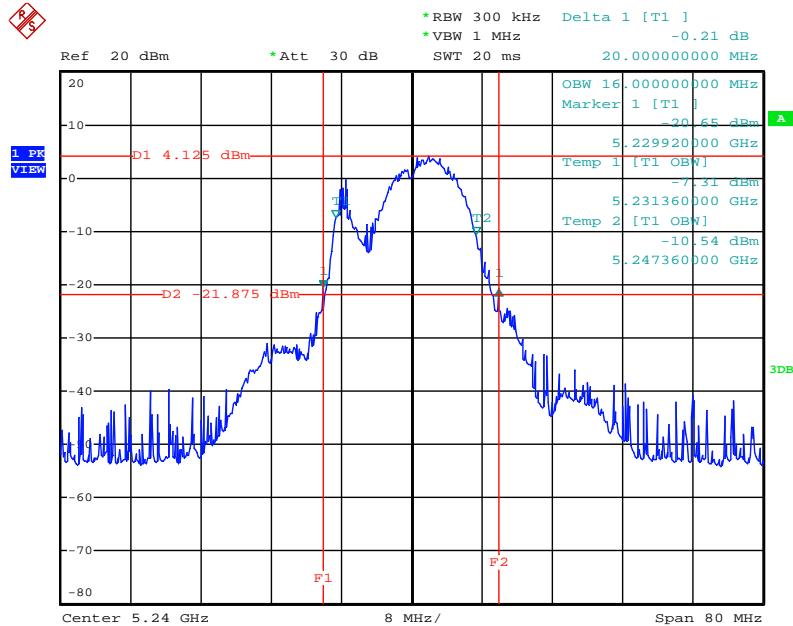
3TX
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**


Date: 8.MAY.2013 13:16:18

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**


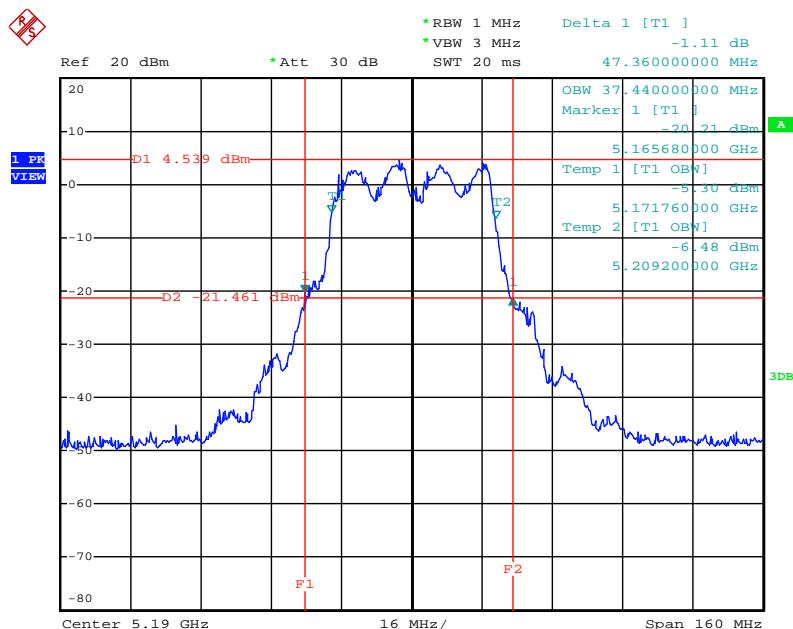
Date: 8.MAY.2013 13:16:39

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



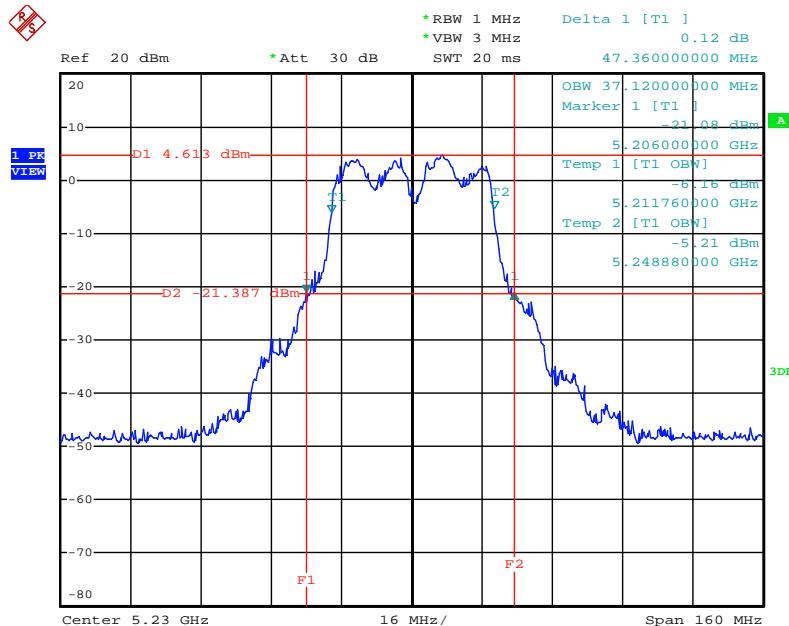
Date: 8.MAY.2013 13:16:57

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



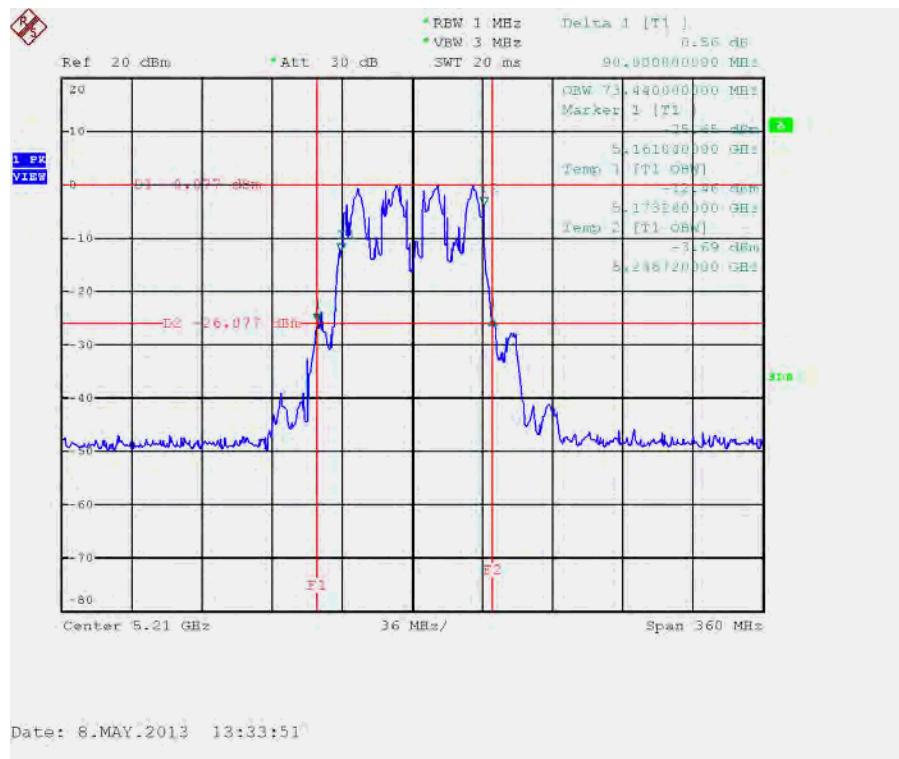
Date: 8.MAY.2013 13:20:27

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**

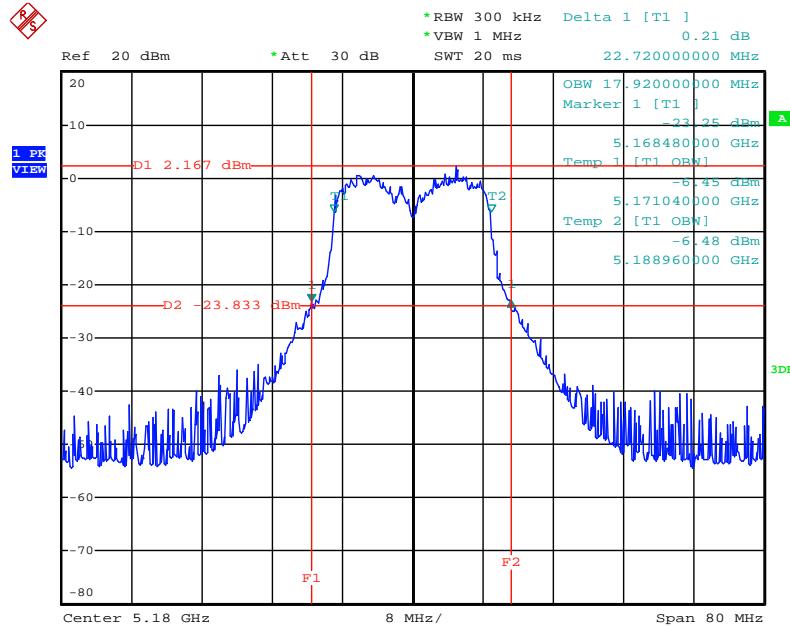


Date: 8.MAY.2013 13:20:07

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**

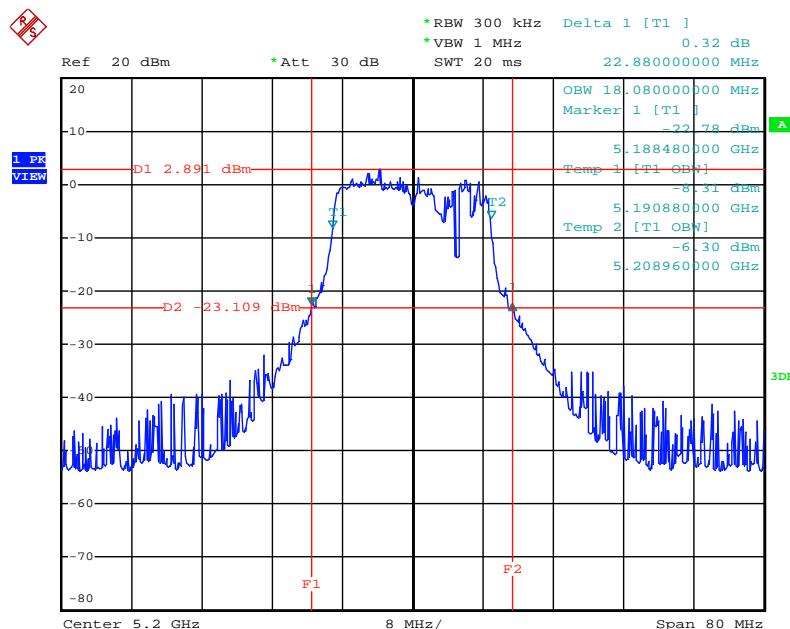


26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



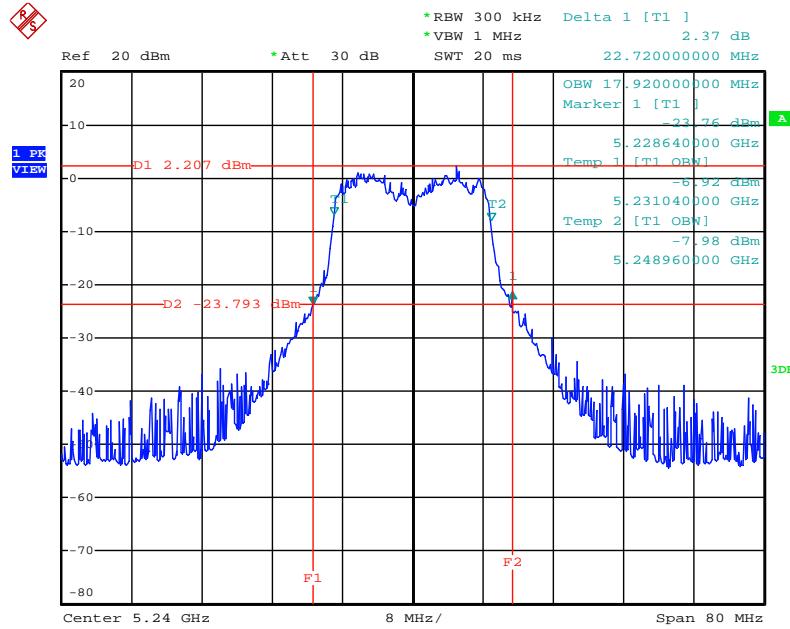
Date: 8.MAY.2013 13:41:31

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



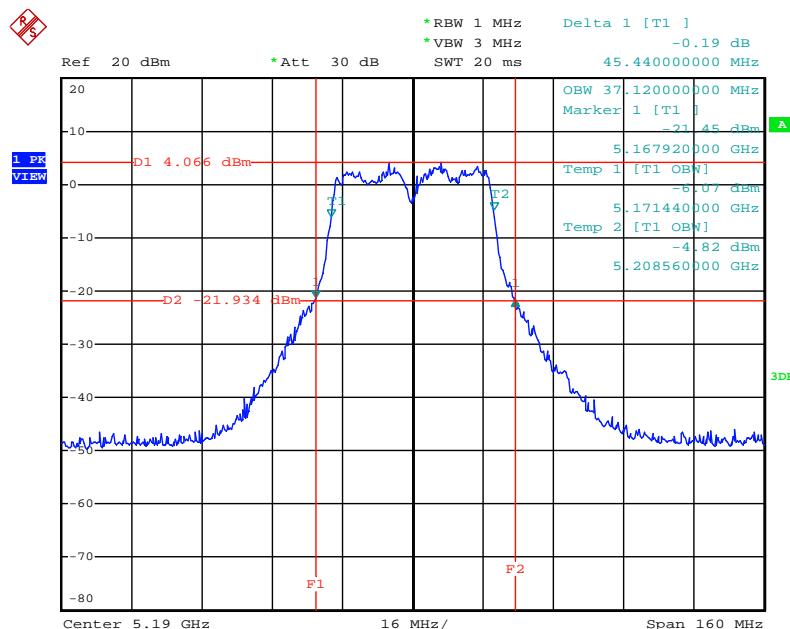
Date: 8.MAY.2013 13:41:49

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



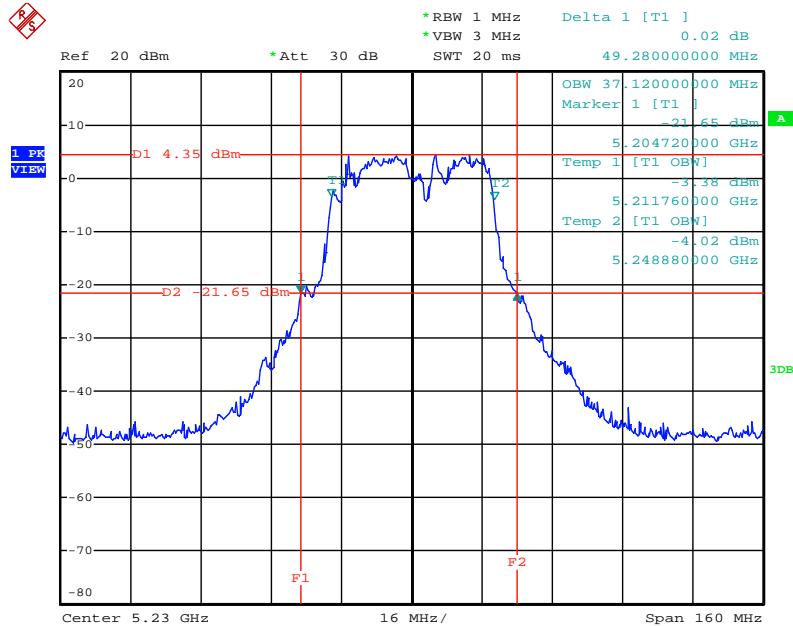
Date: 8.MAY.2013 13:42:06

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



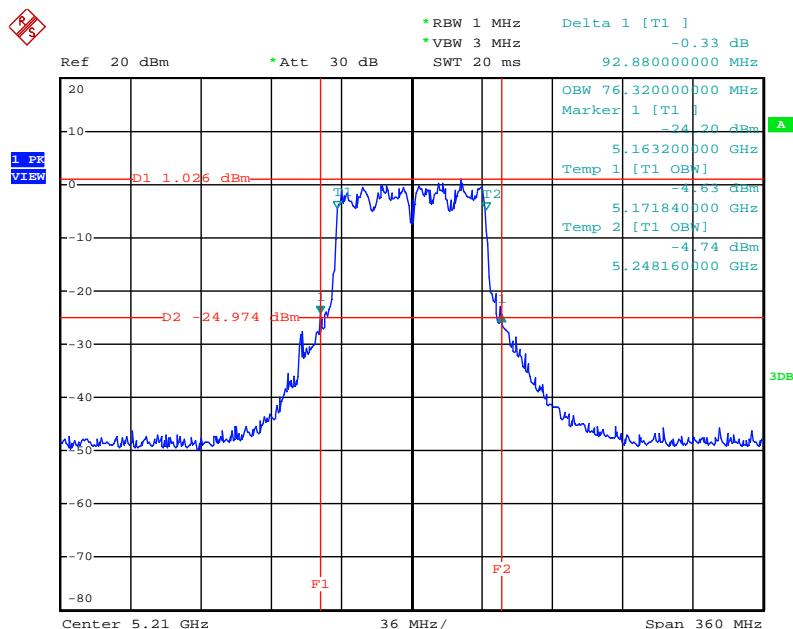
Date: 8.MAY.2013 13:45:29

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



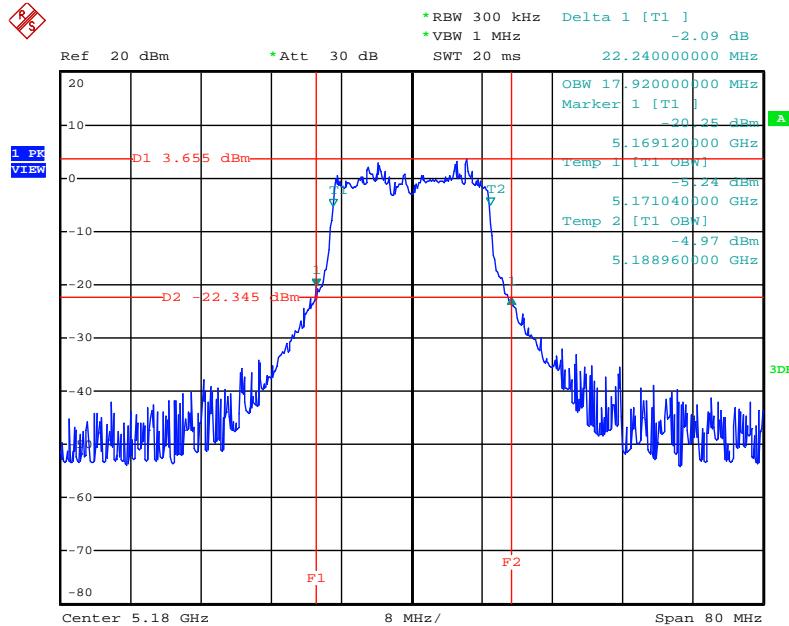
Date: 8.MAY.2013 13:45:46

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



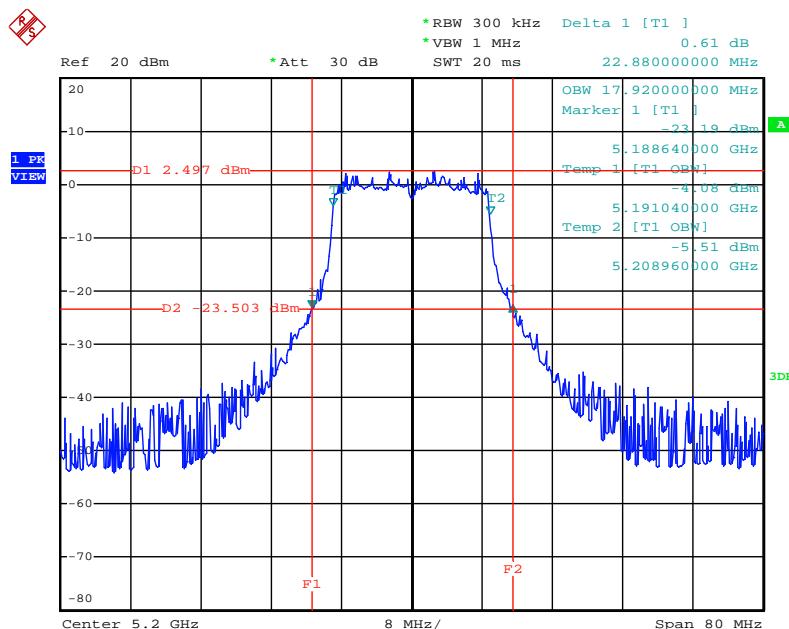
Date: 8.MAY.2013 13:49:23

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



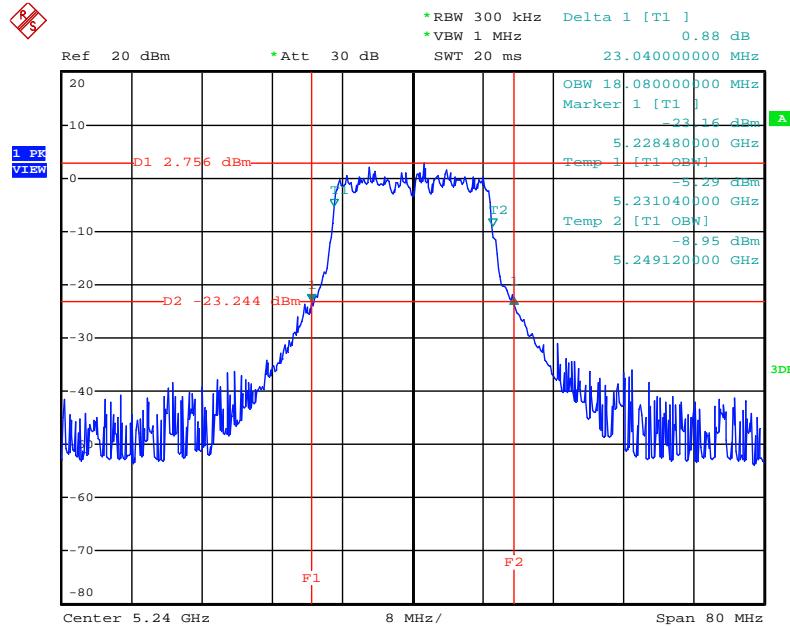
Date: 8.MAY.2013 13:59:22

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



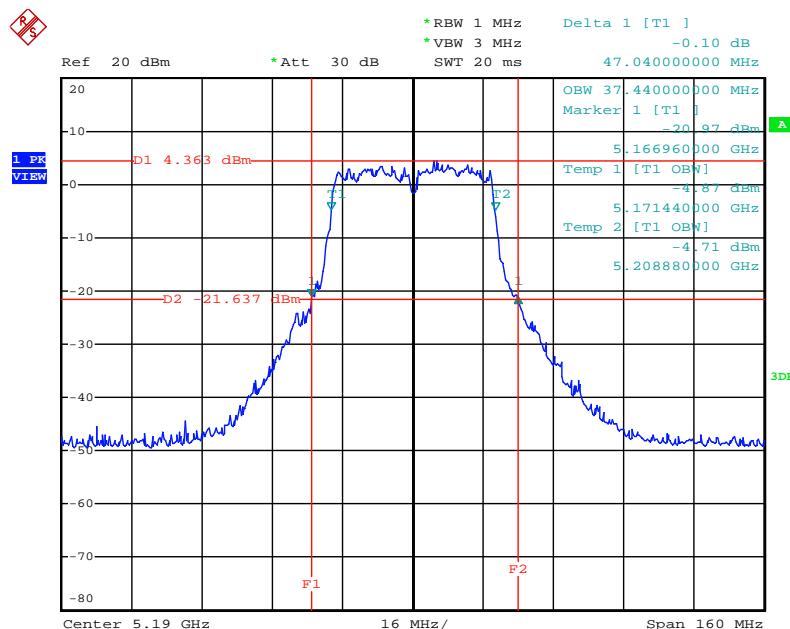
Date: 8.MAY.2013 13:59:03

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



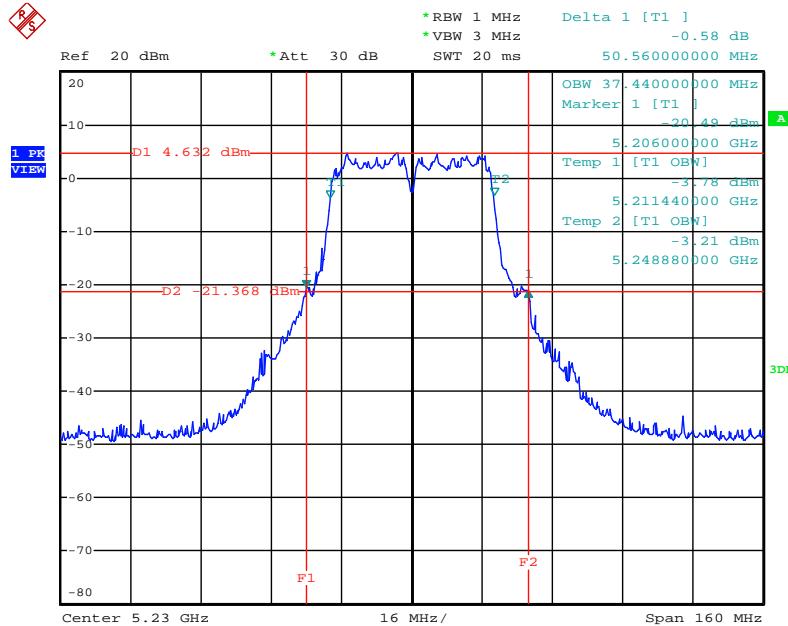
Date: 8.MAY.2013 13:58:44

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



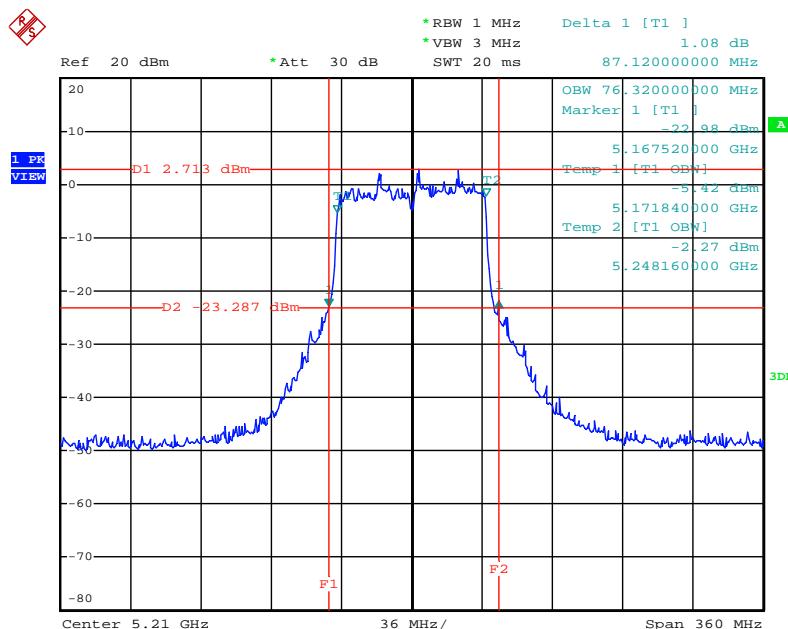
Date: 8.MAY.2013 14:02:20

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**

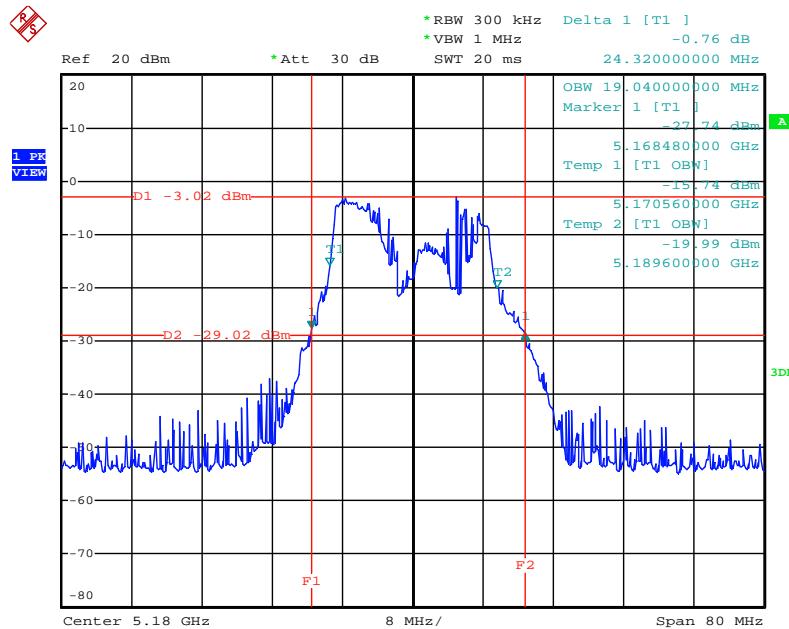


Date: 8.MAY.2013 14:02:38

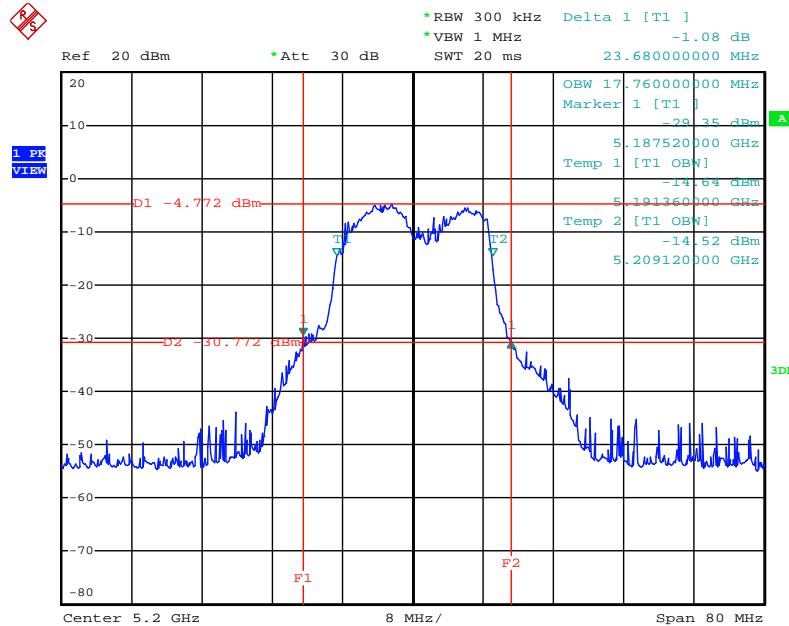
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



Date: 8.MAY.2013 13:55:25

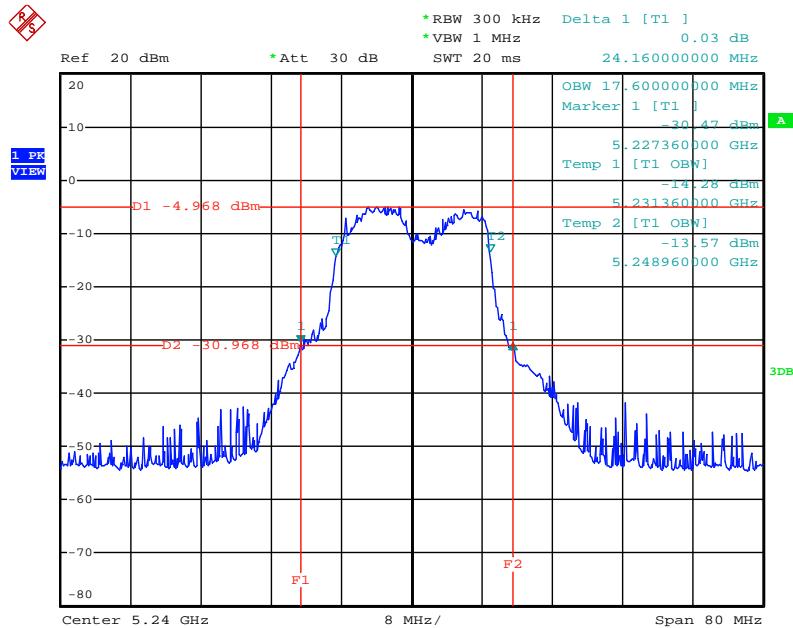
Mode 6 (Ant.9 Panel antenna / 9.2dBi)
3TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz


Date: 8.MAY.2013 13:18:28

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz


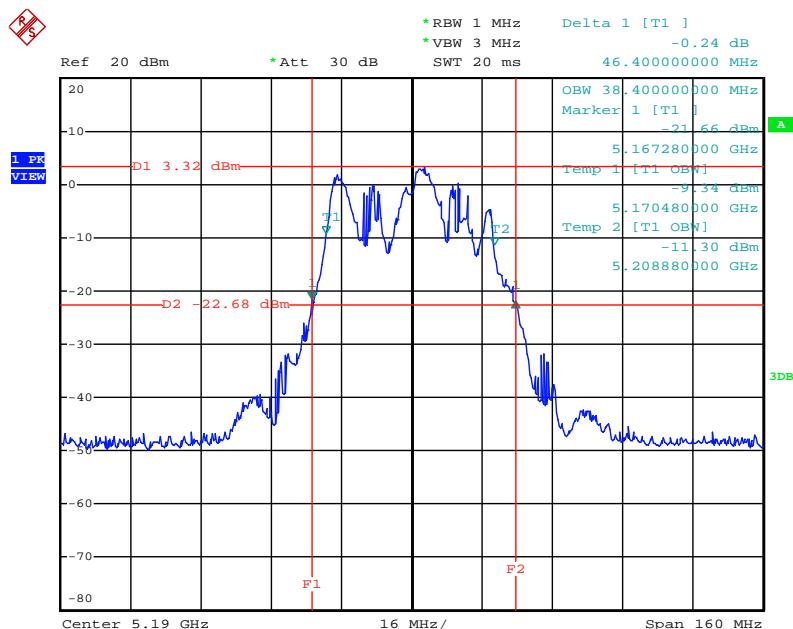
Date: 8.MAY.2013 13:17:56

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



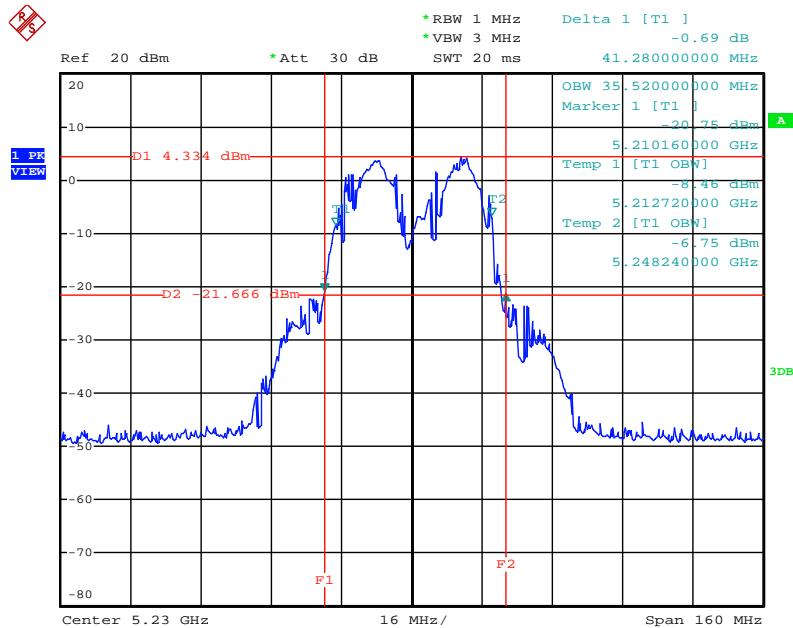
Date: 8.MAY.2013 13:17:38

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



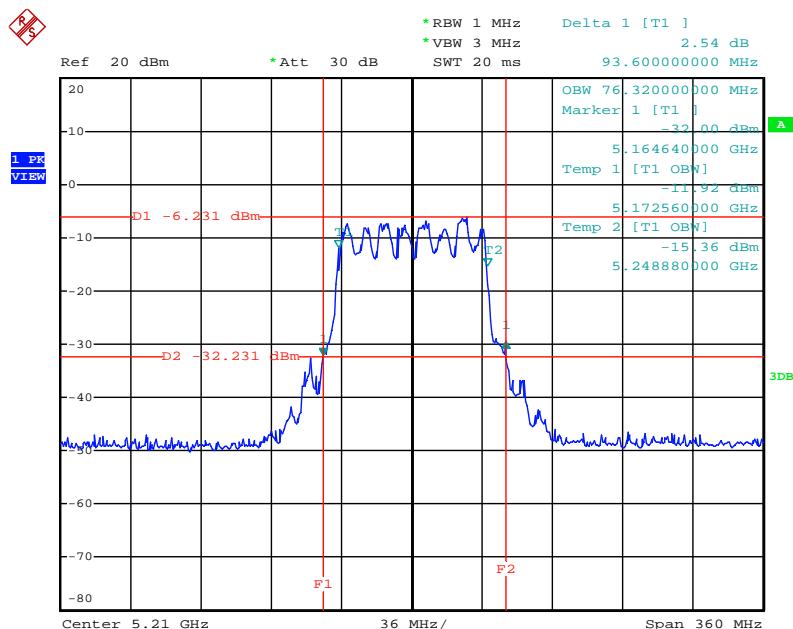
Date: 8.MAY.2013 13:19:18

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



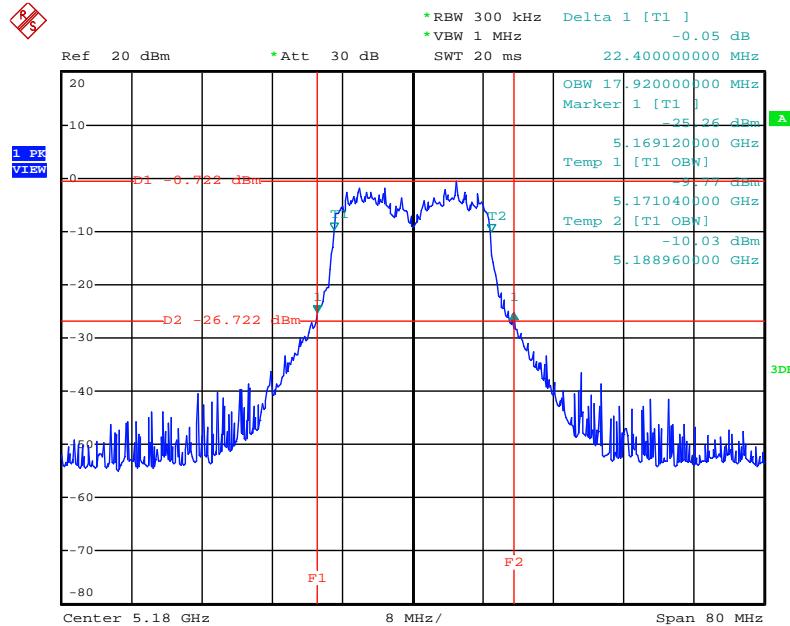
Date: 8.MAY.2013 13:19:35

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



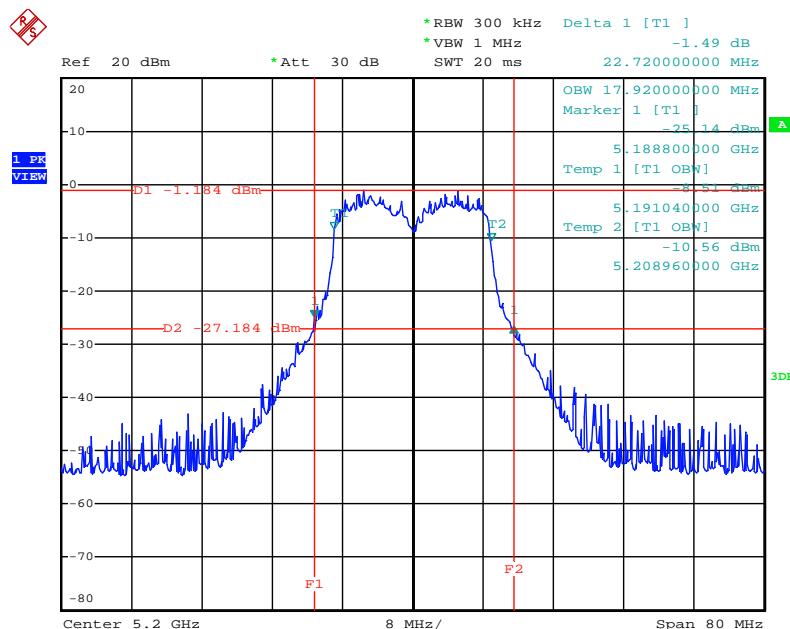
Date: 8.MAY.2013 13:29:13

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



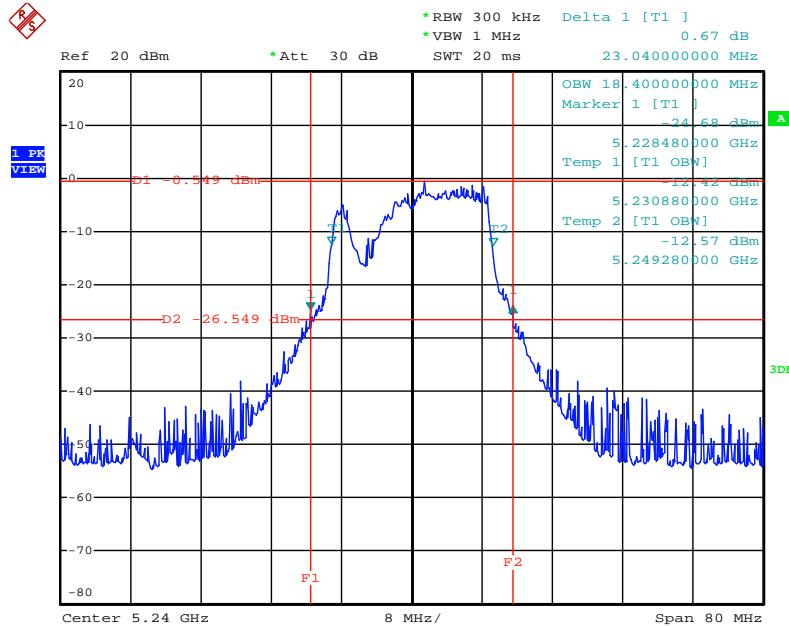
Date: 8.MAY.2013 13:43:16

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



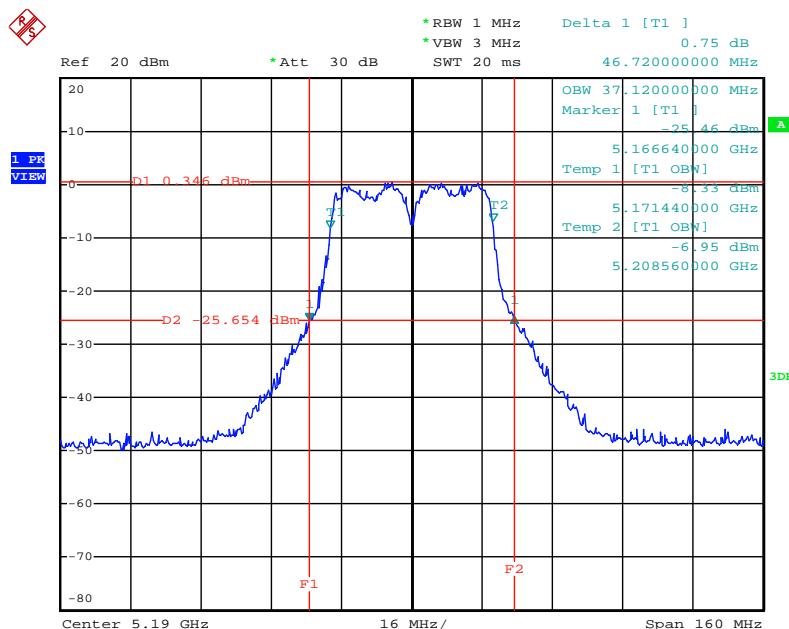
Date: 8.MAY.2013 13:42:59

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



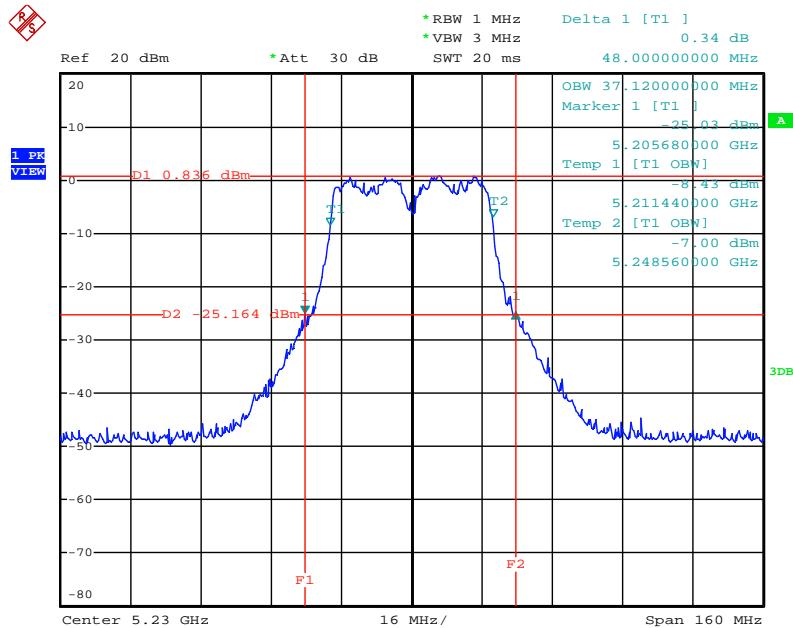
Date: 8.MAY.2013 13:42:44

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



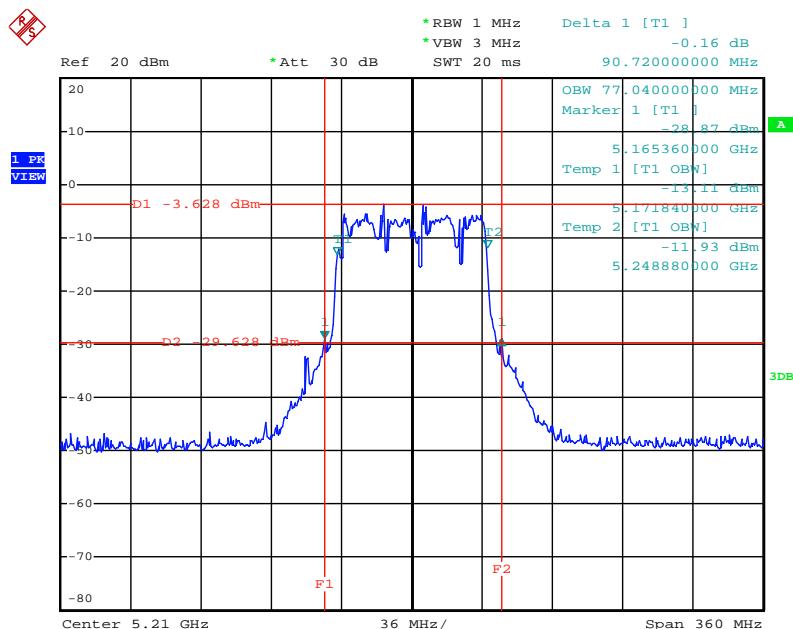
Date: 8.MAY.2013 13:43:51

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



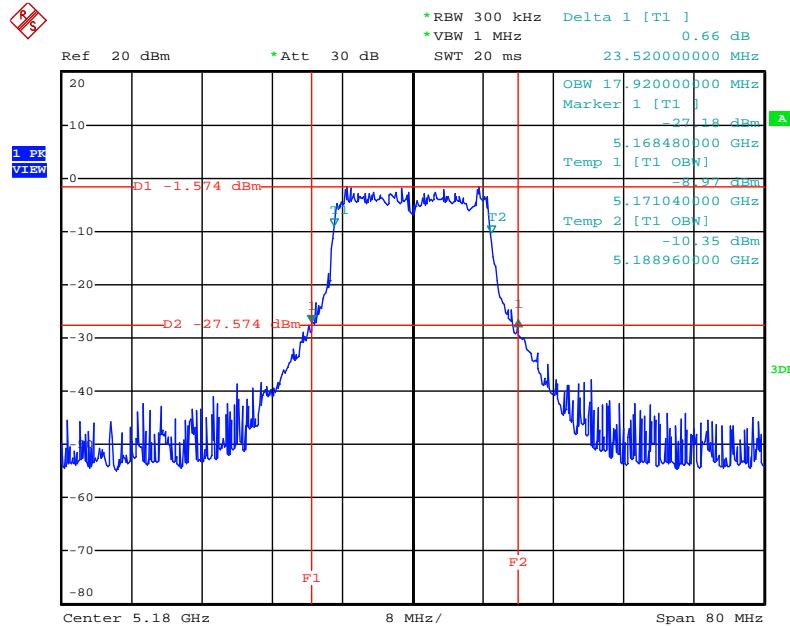
Date: 8.MAY.2013 13:44:11

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



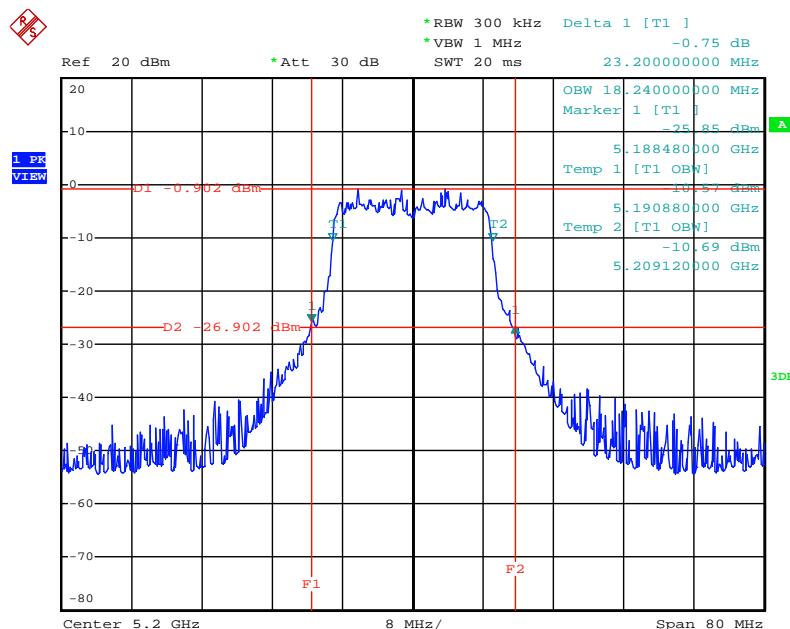
Date: 8.MAY.2013 13:49:54

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



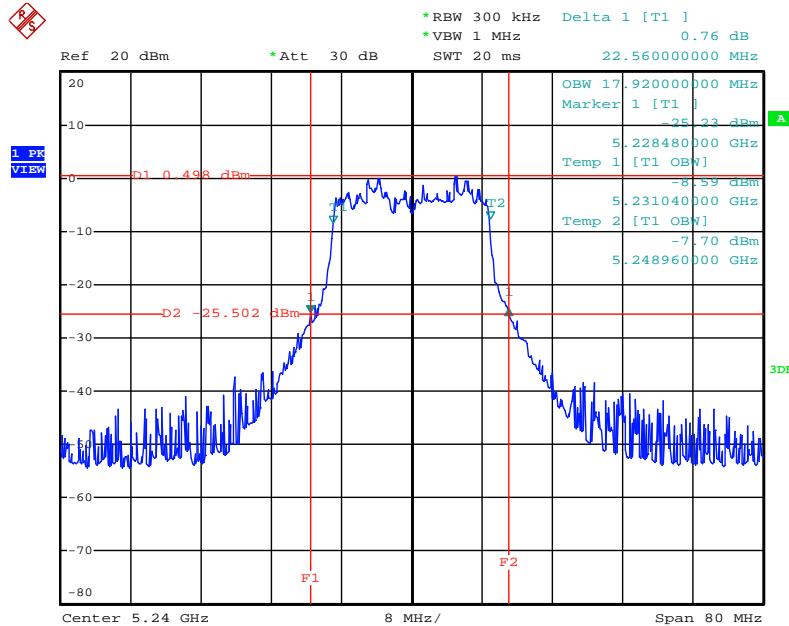
Date: 8.MAY.2013 13:57:37

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



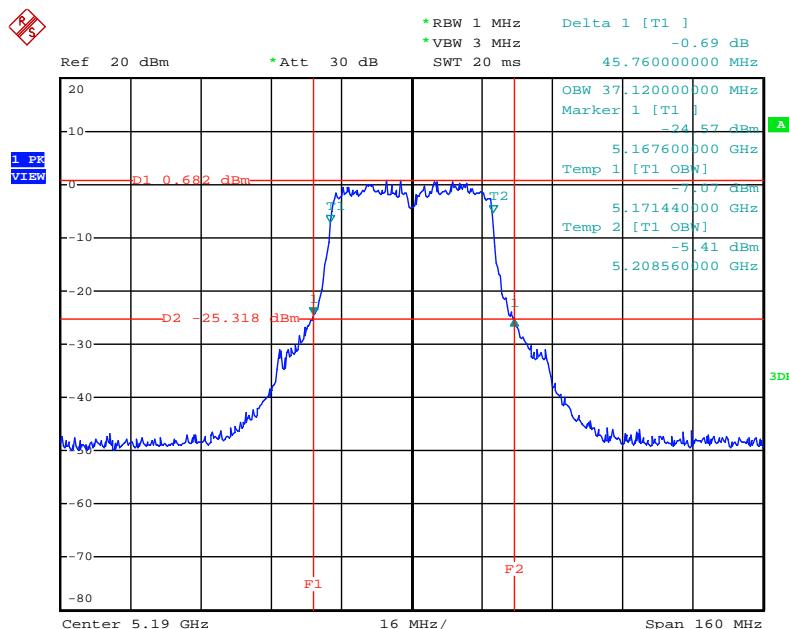
Date: 8.MAY.2013 13:57:57

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5240 MHz



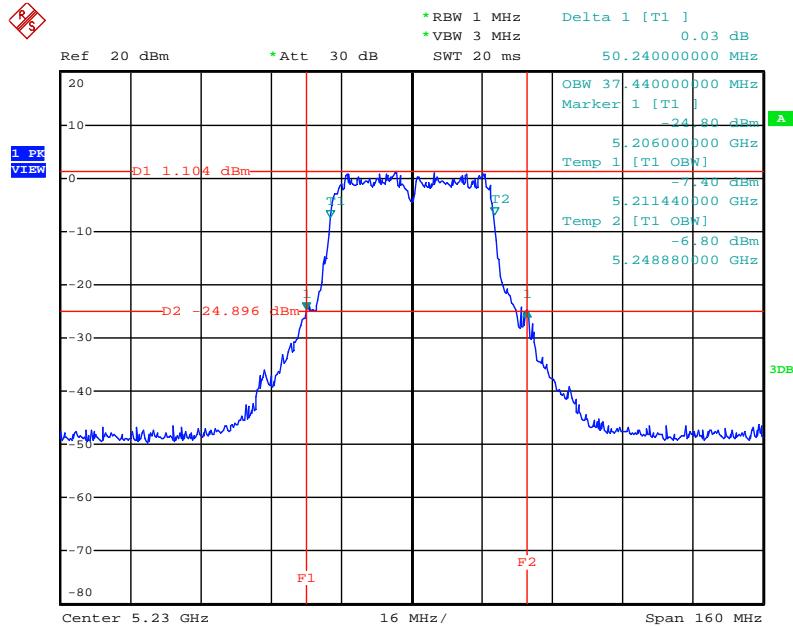
Date: 8.MAY.2013 13:58:15

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5190 MHz



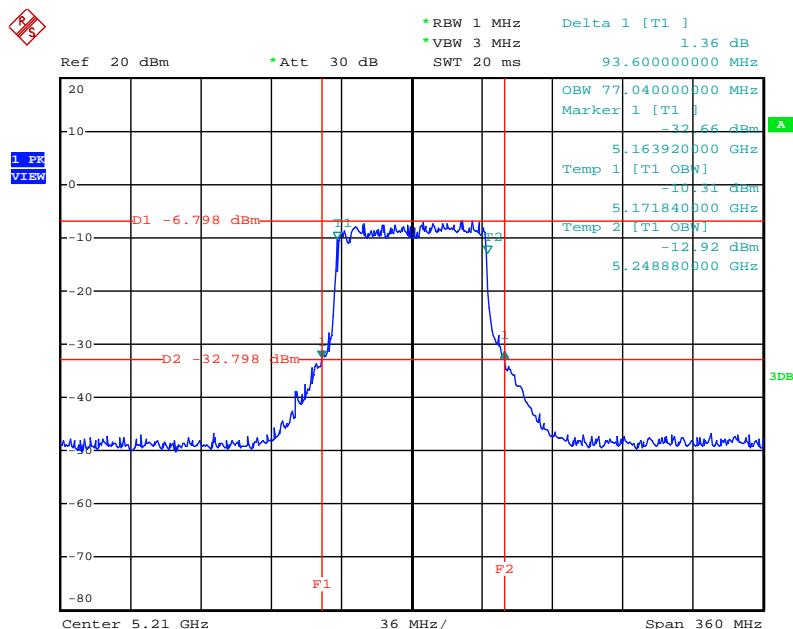
Date: 8.MAY.2013 14:03:28

**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**

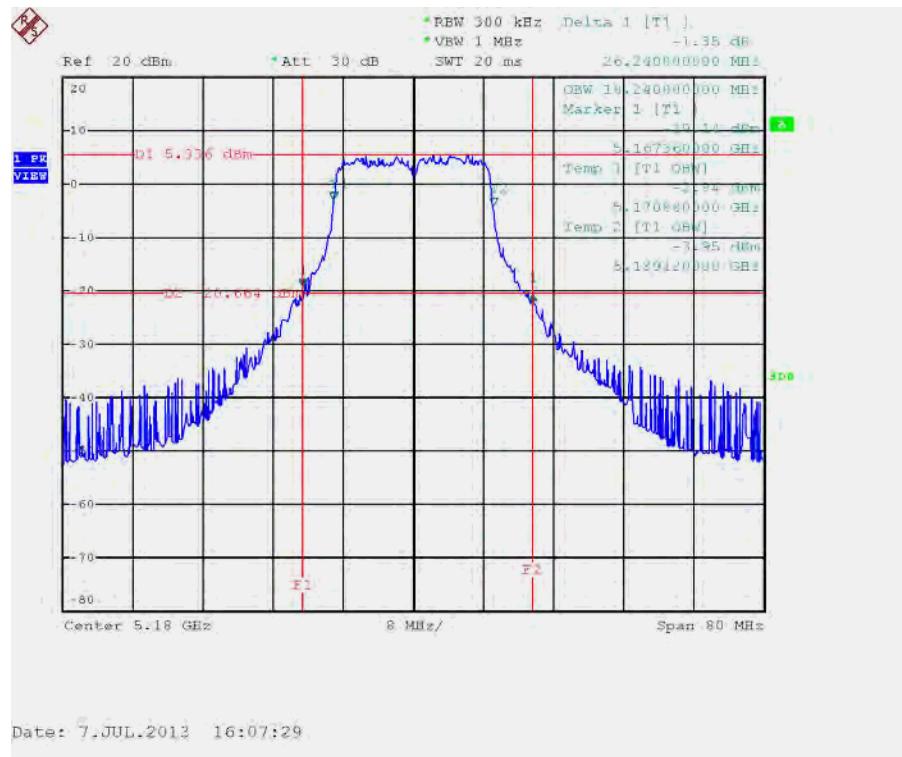
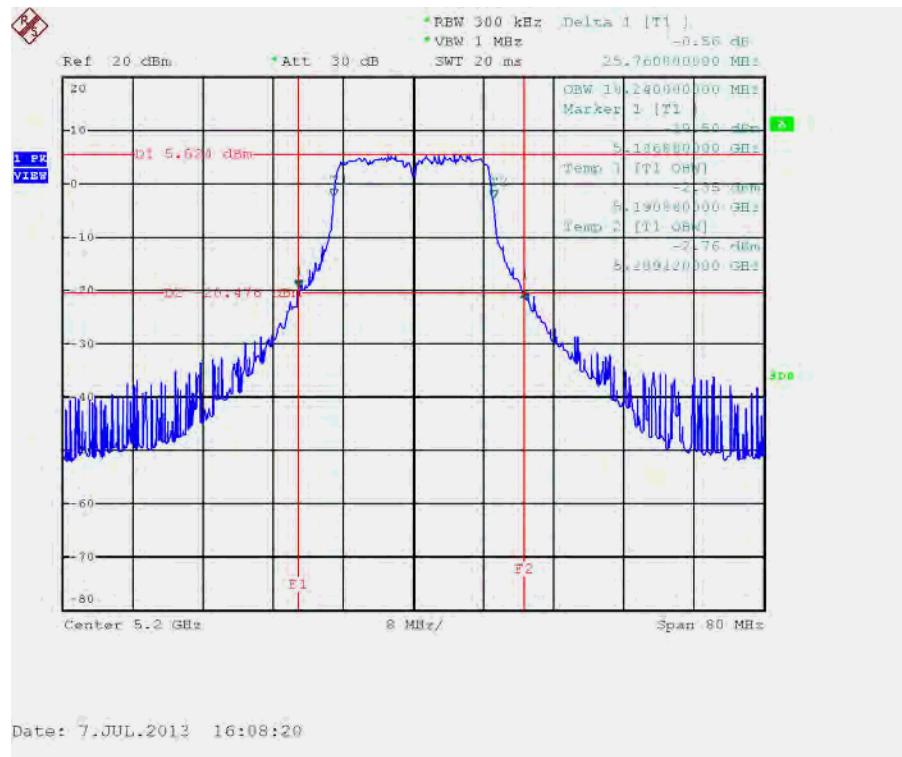


Date: 8.MAY.2013 14:03:10

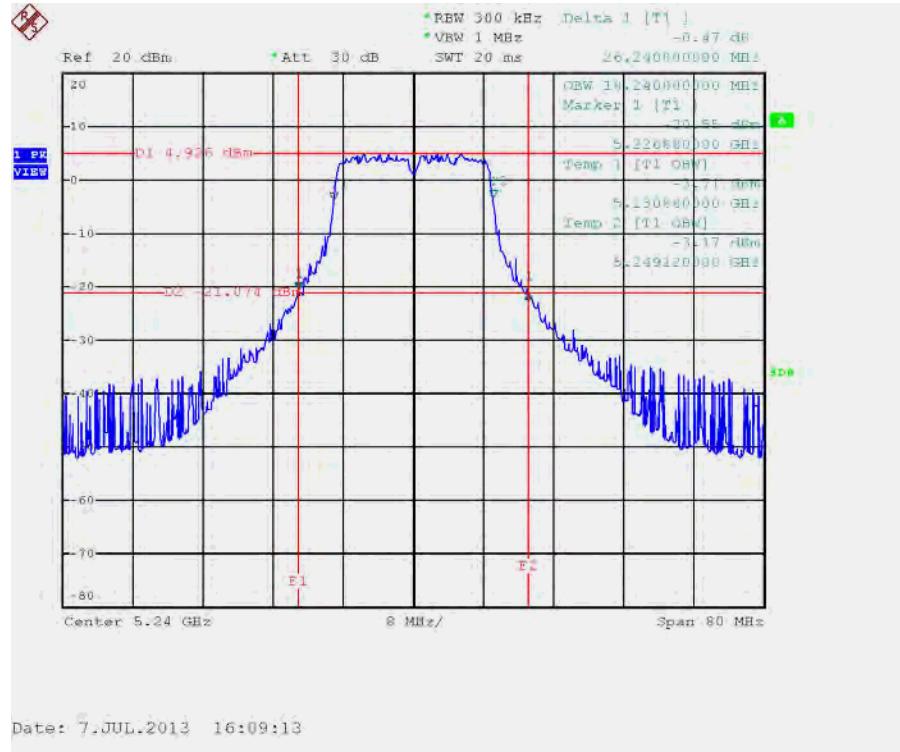
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



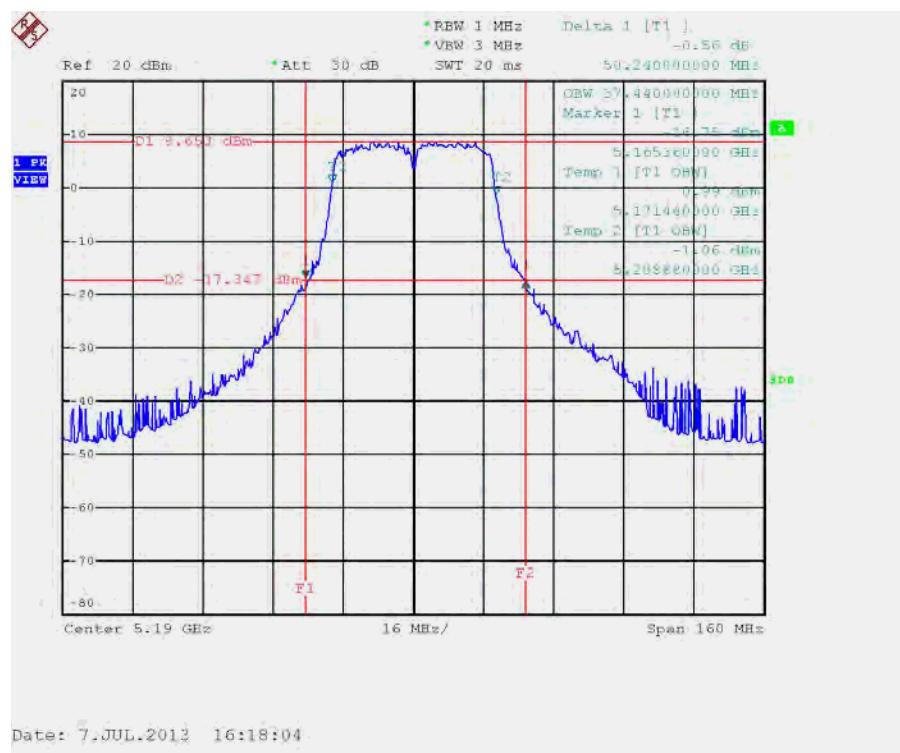
Date: 8.MAY.2013 13:56:43

Mode 7 (Ant.10 PIFA antenna / 5.3dBi)
1TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5180 MHz

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5200 MHz


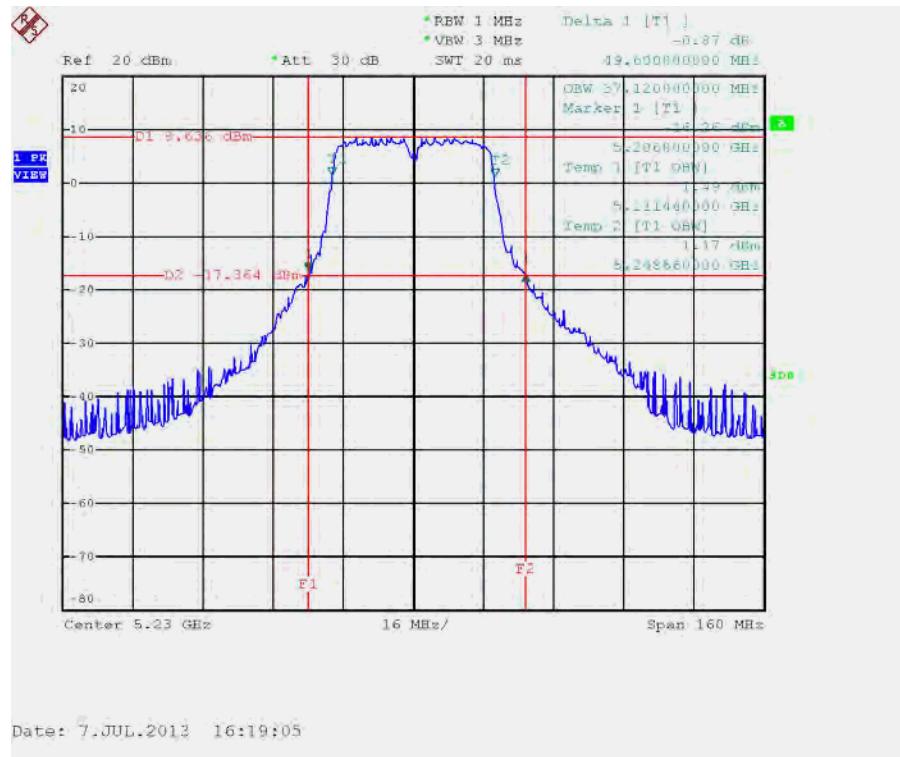
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 / 5240 MHz**



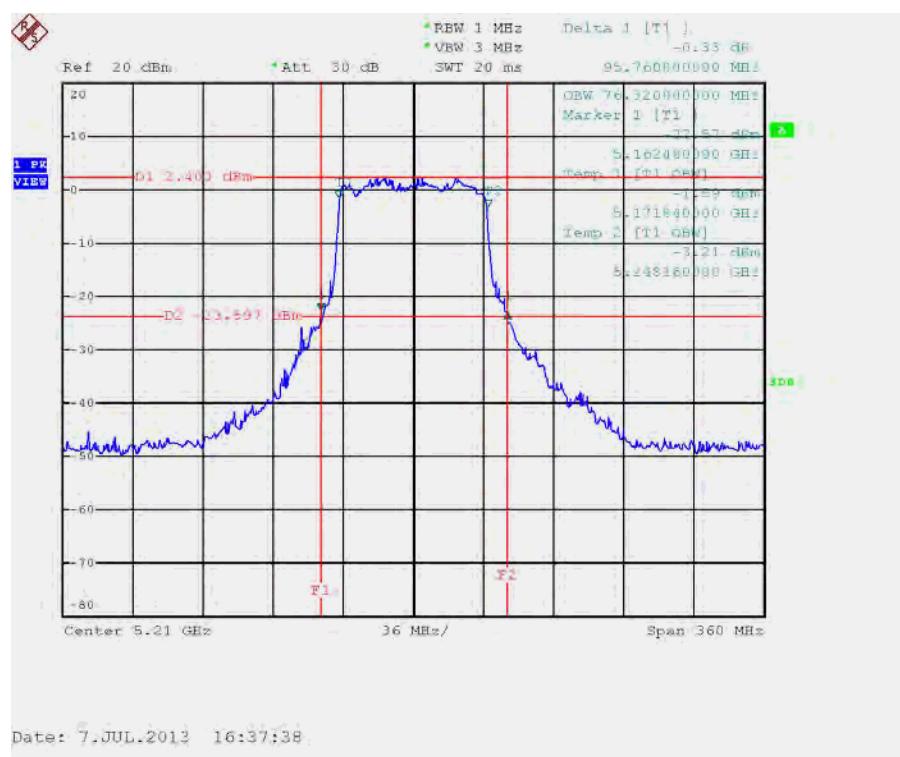
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 / 5190 MHz**



**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 / 5230 MHz**

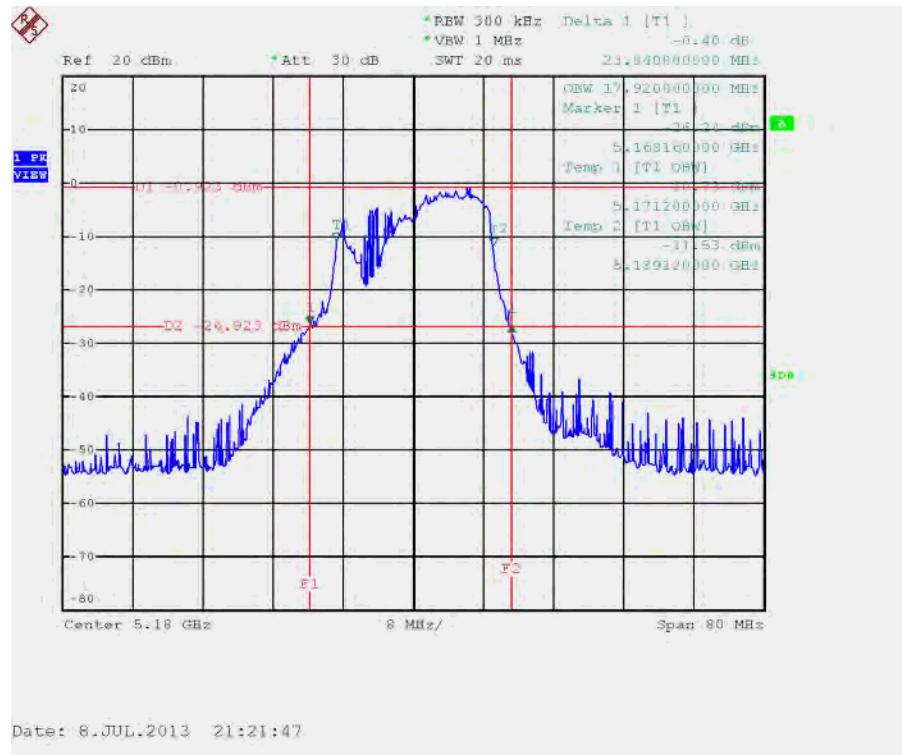


**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 / 5210 MHz**

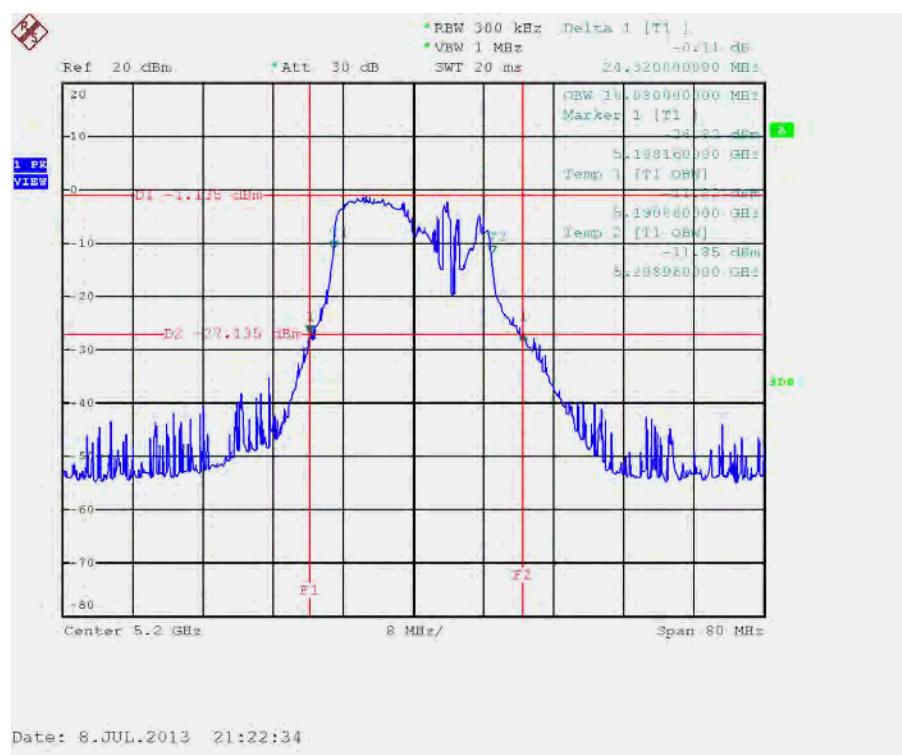


2TX

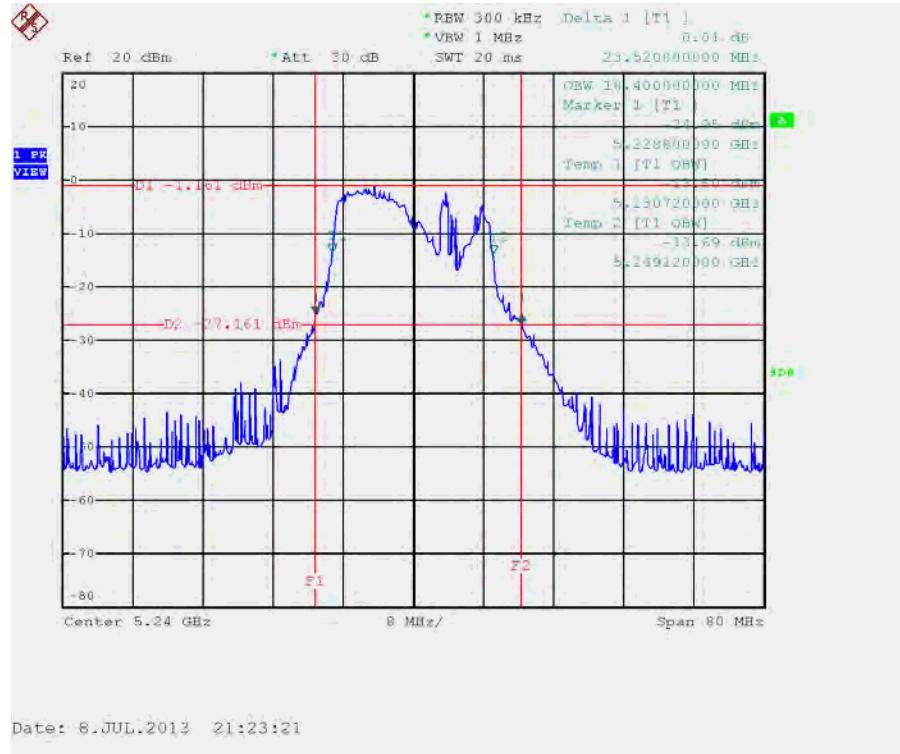
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz



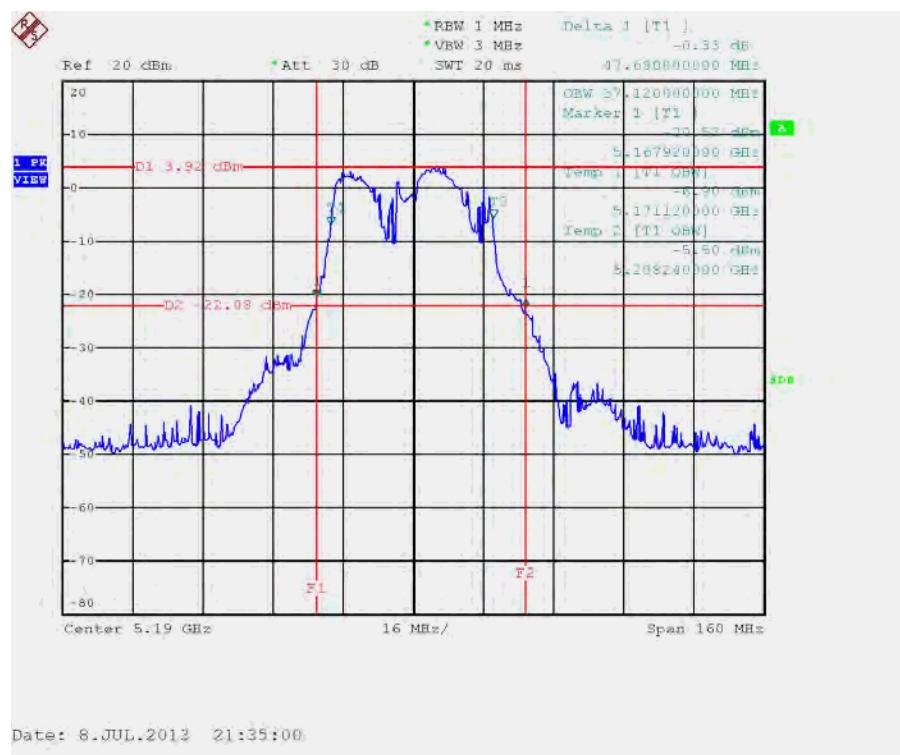
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz



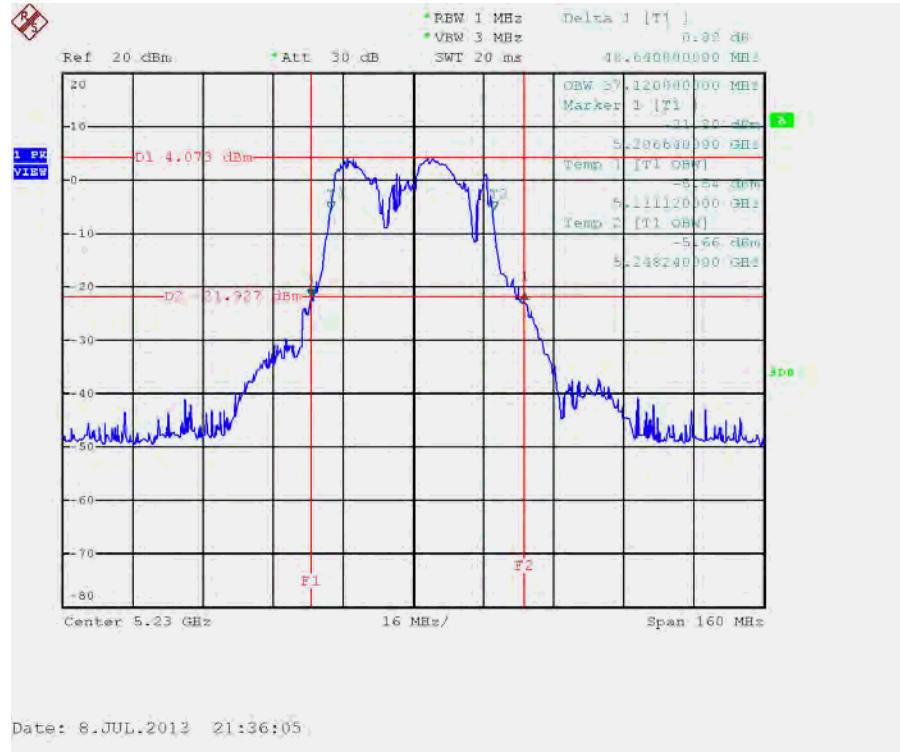
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



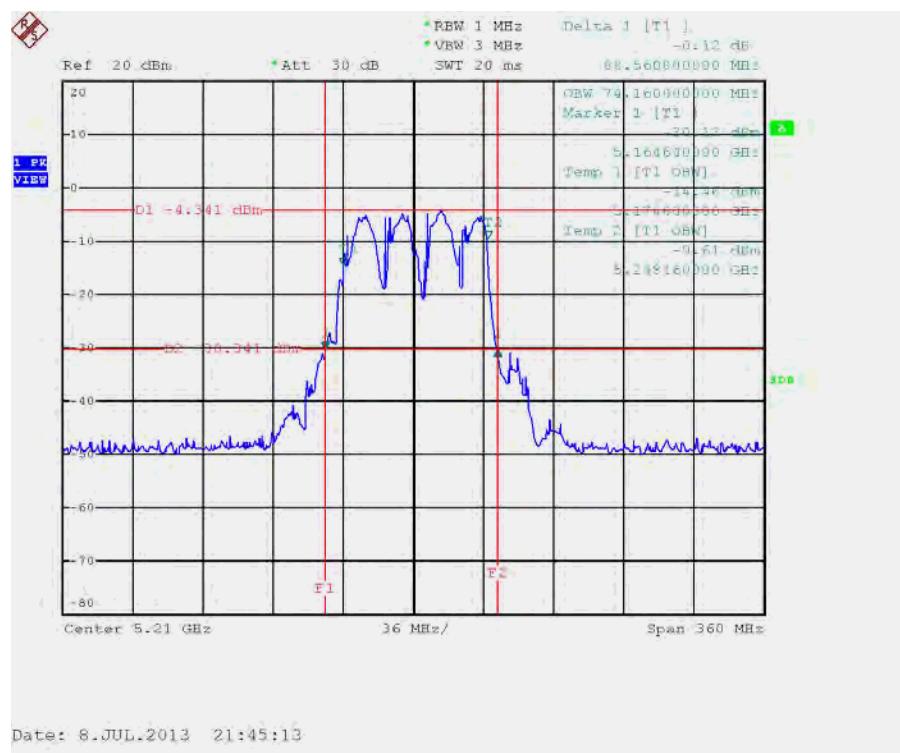
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**



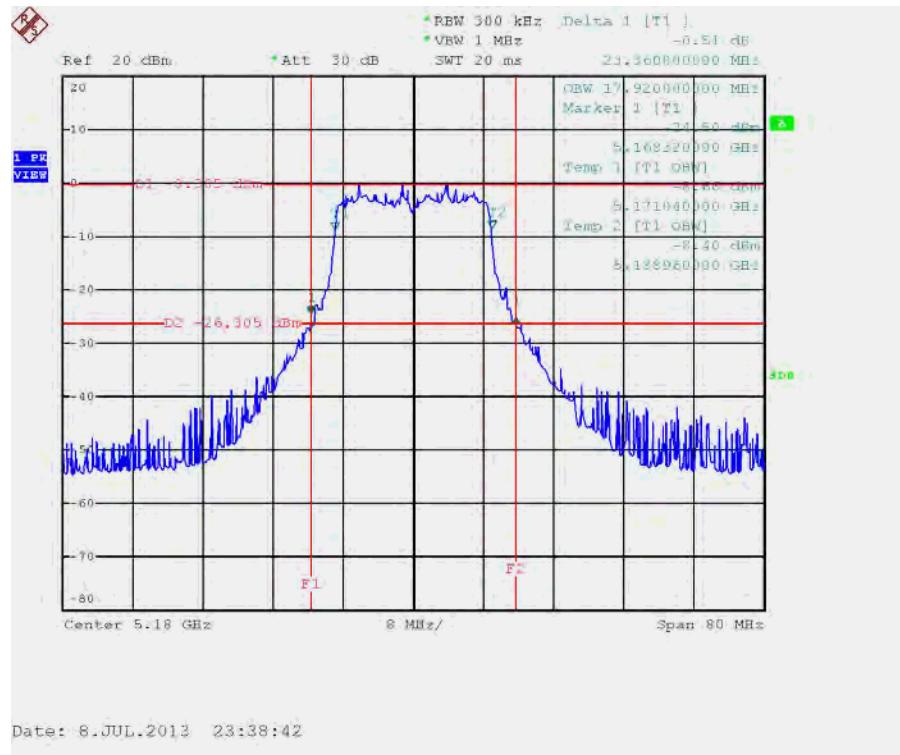
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**



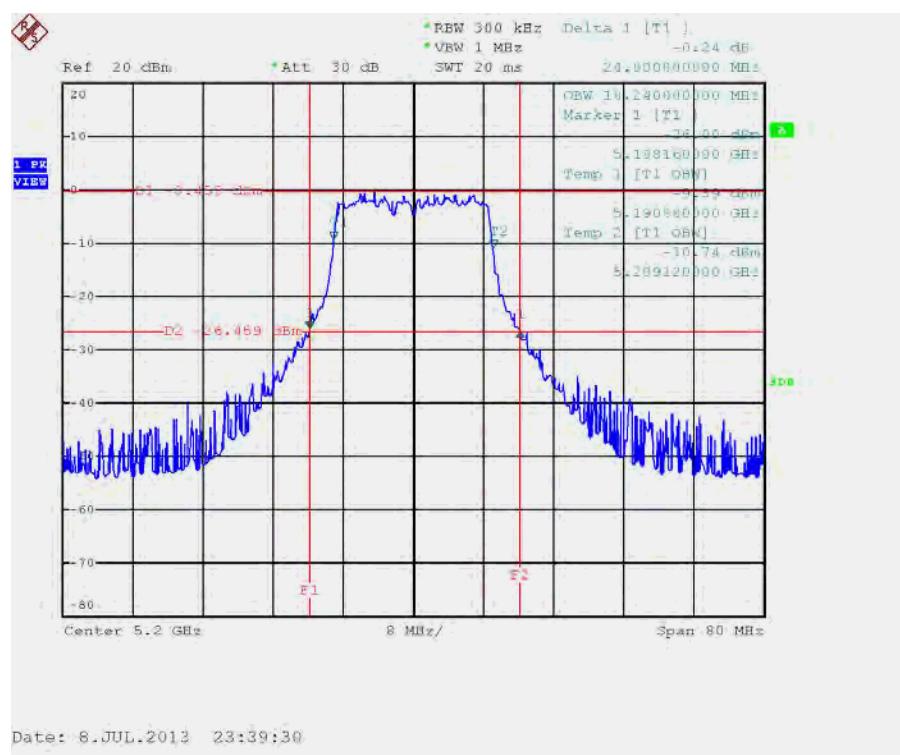
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**



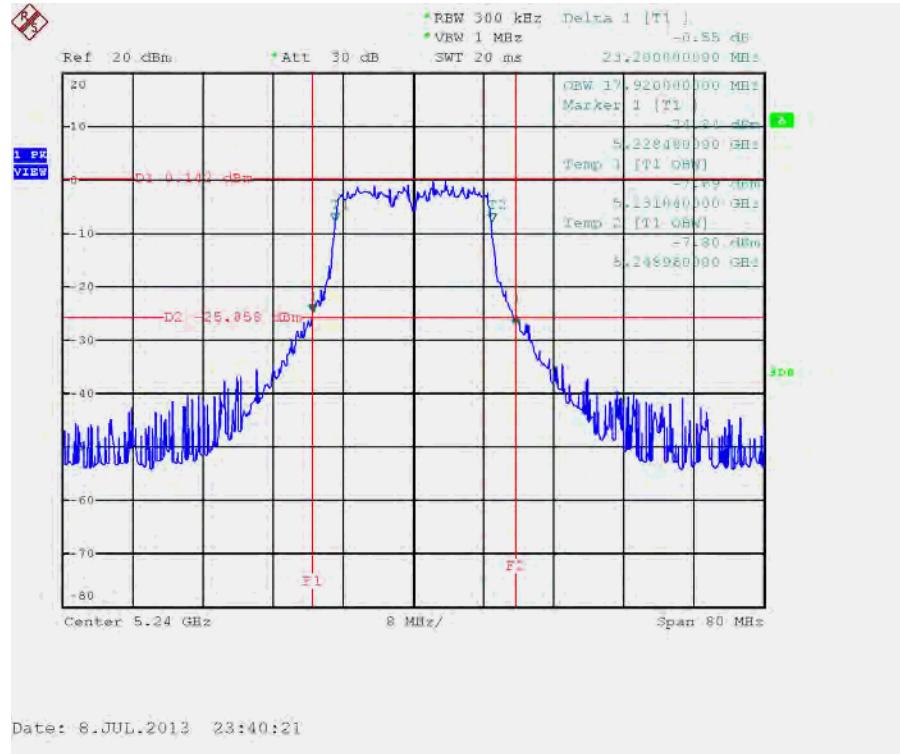
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5180 MHz**



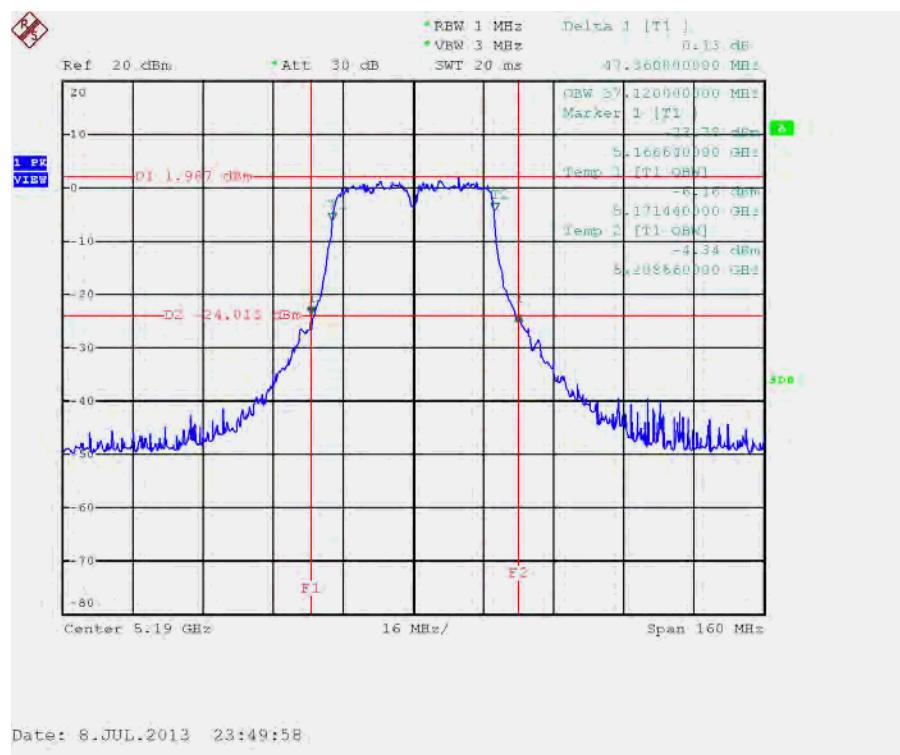
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5200 MHz**



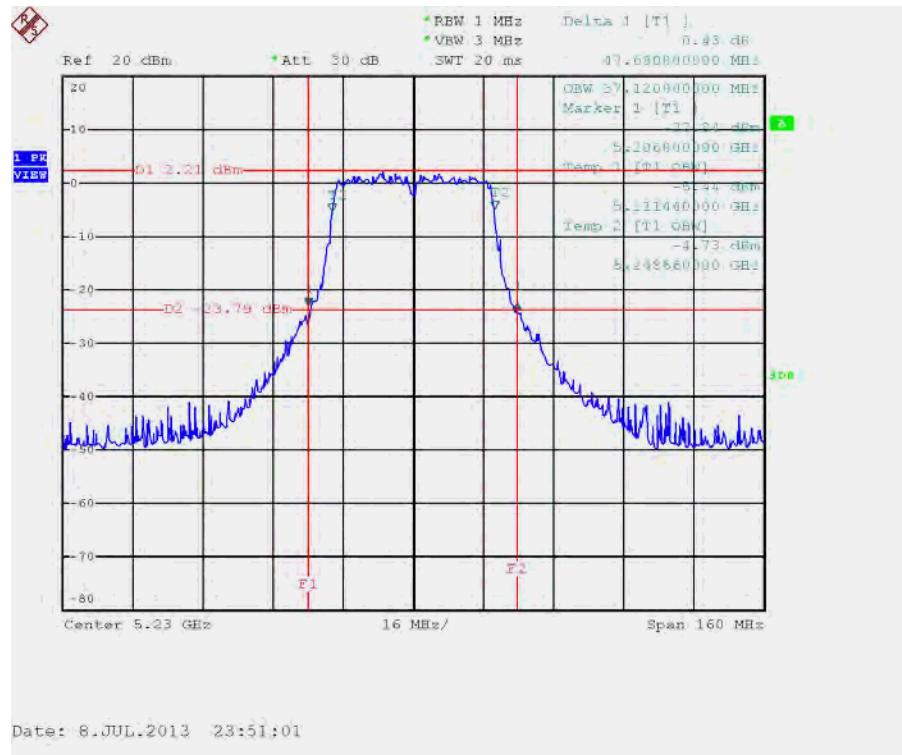
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 / 5240 MHz**



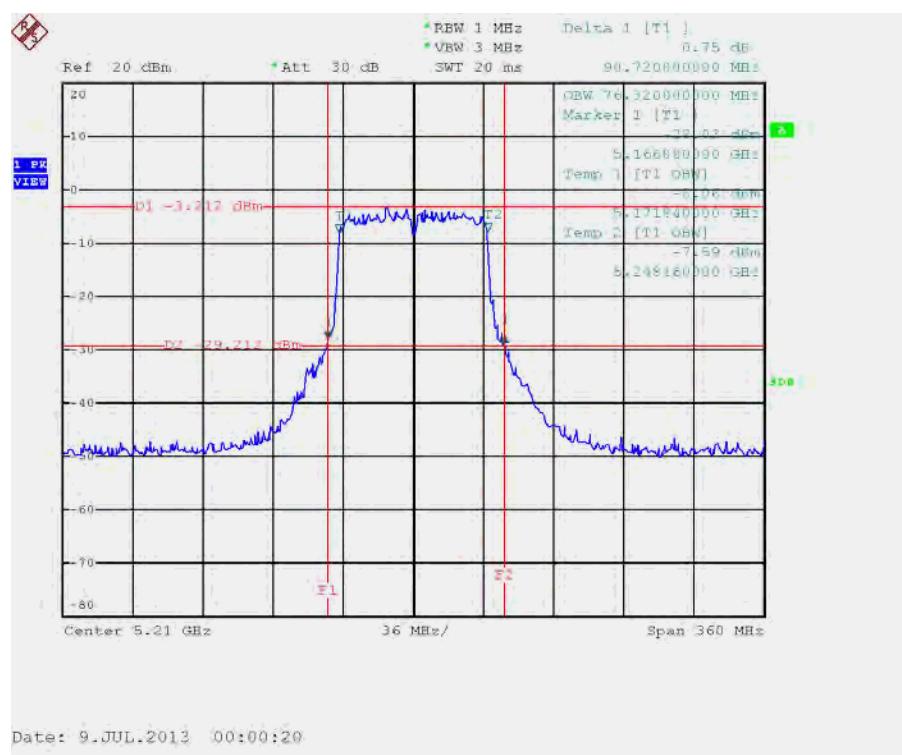
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5190 MHz**

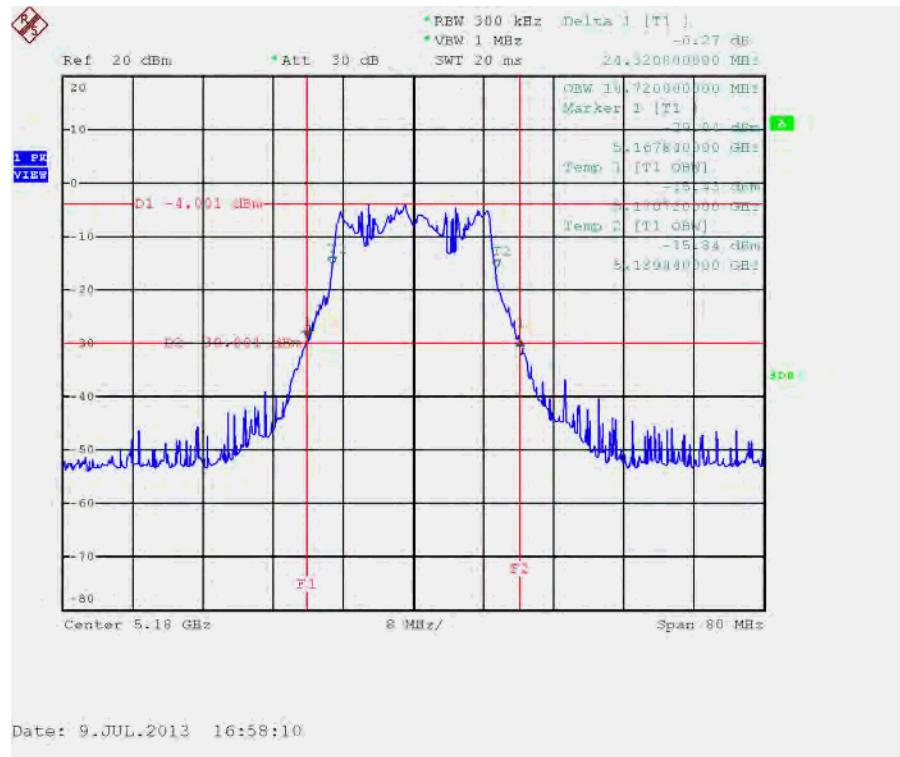
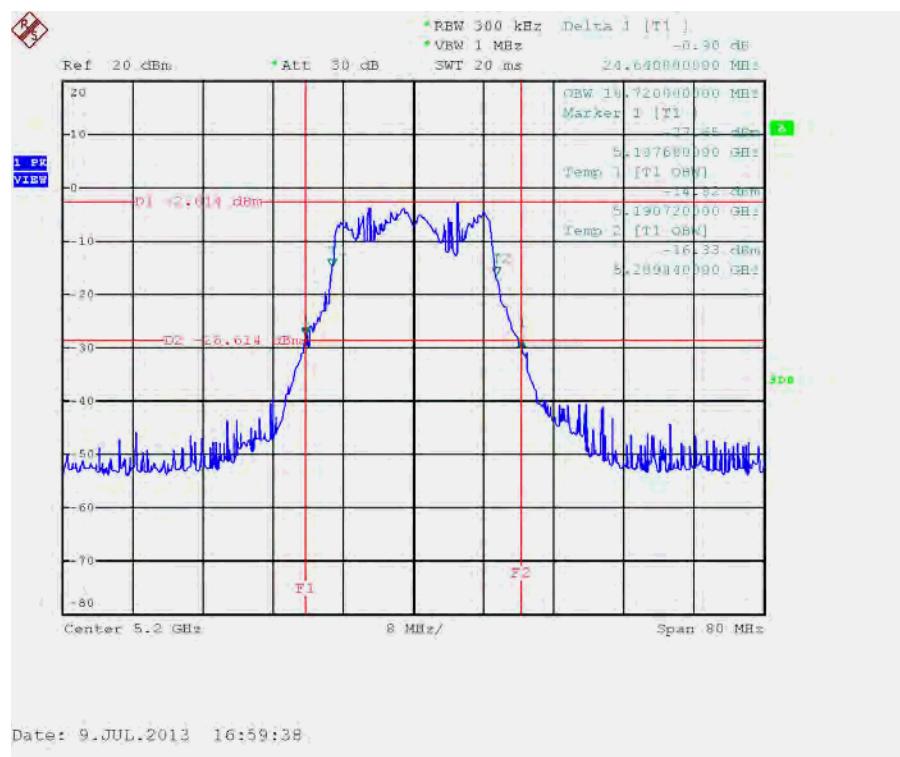


**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 / 5230 MHz**

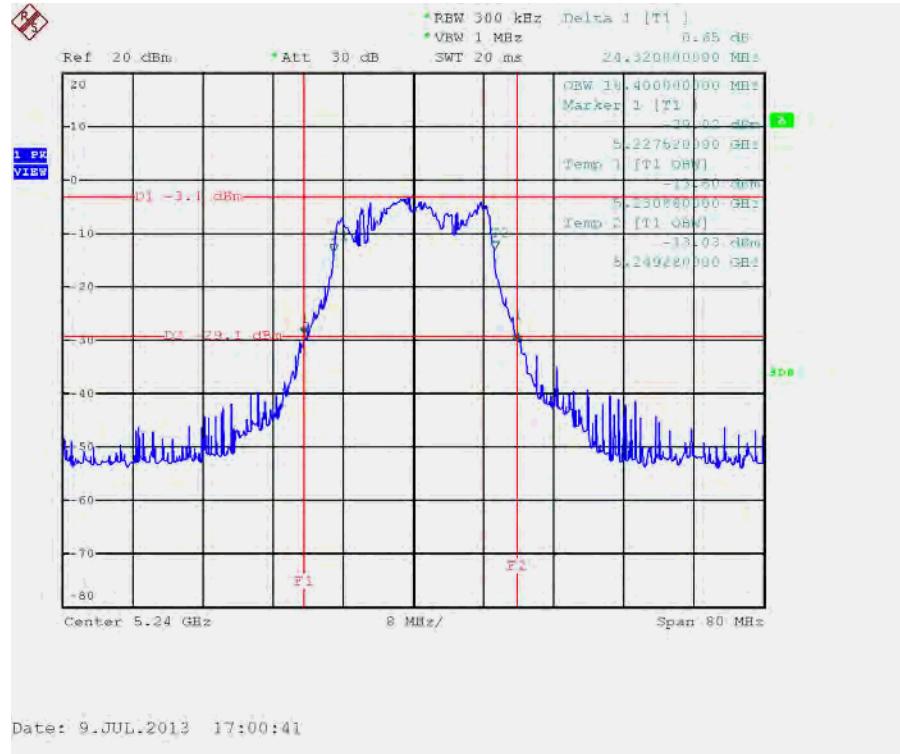


**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 / 5210 MHz**

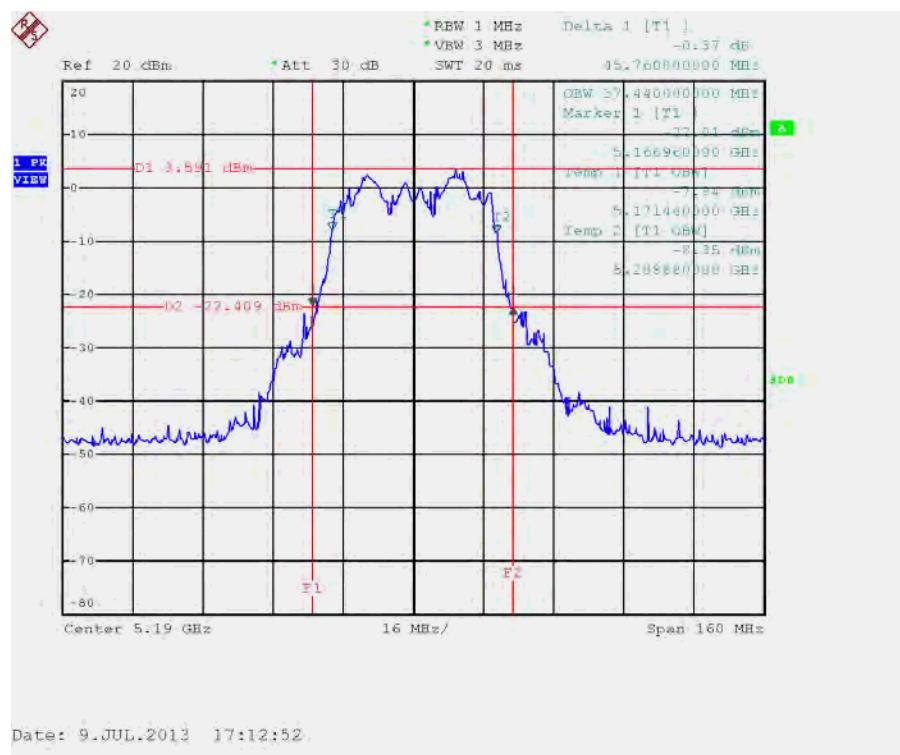


3TX
26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz

26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz


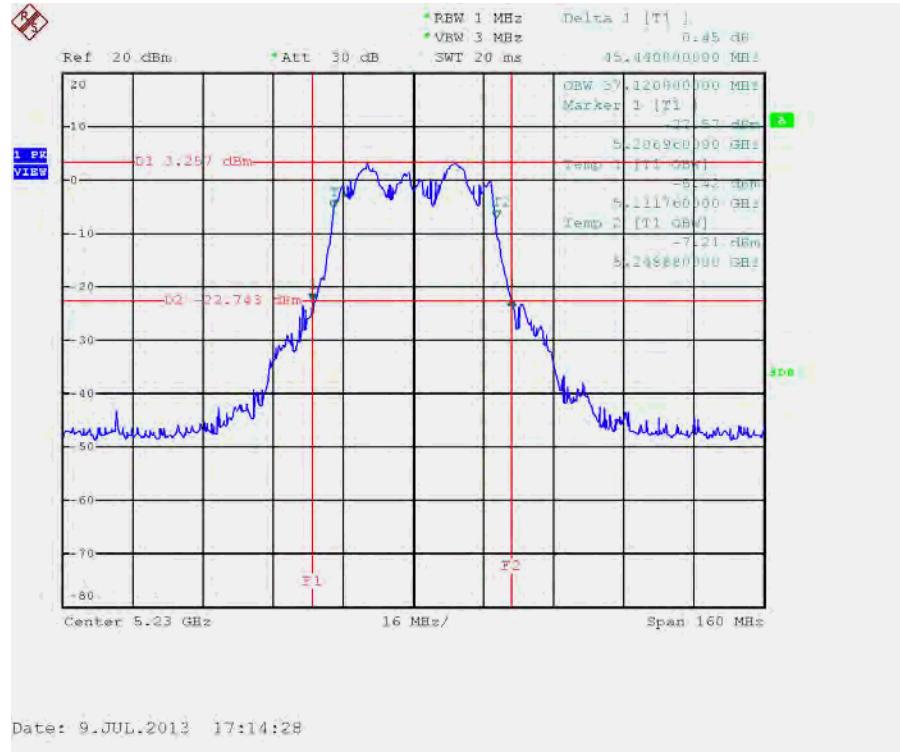
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



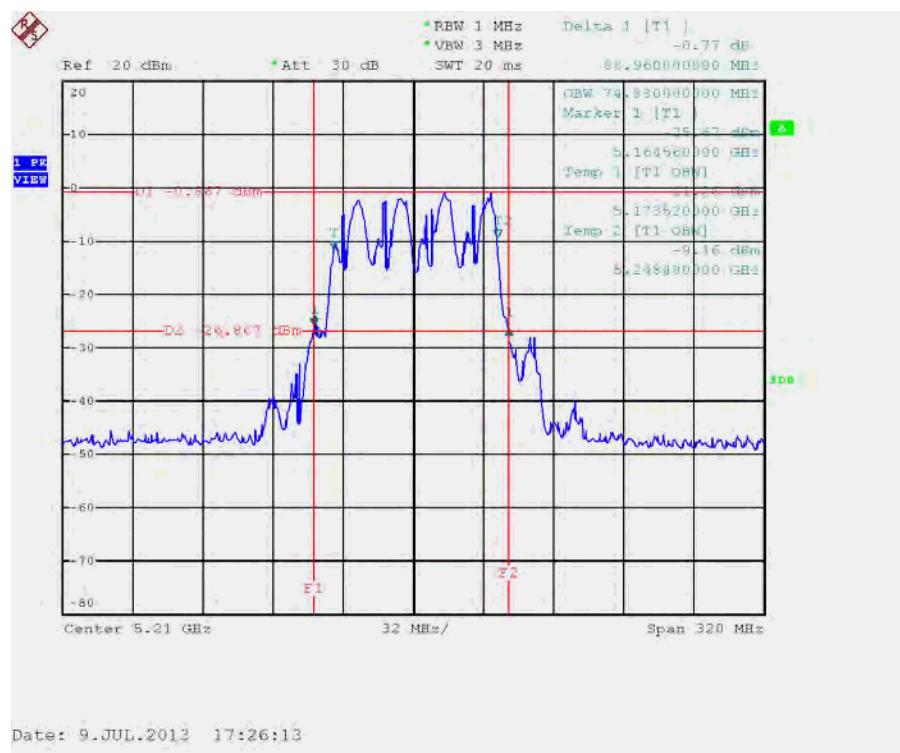
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



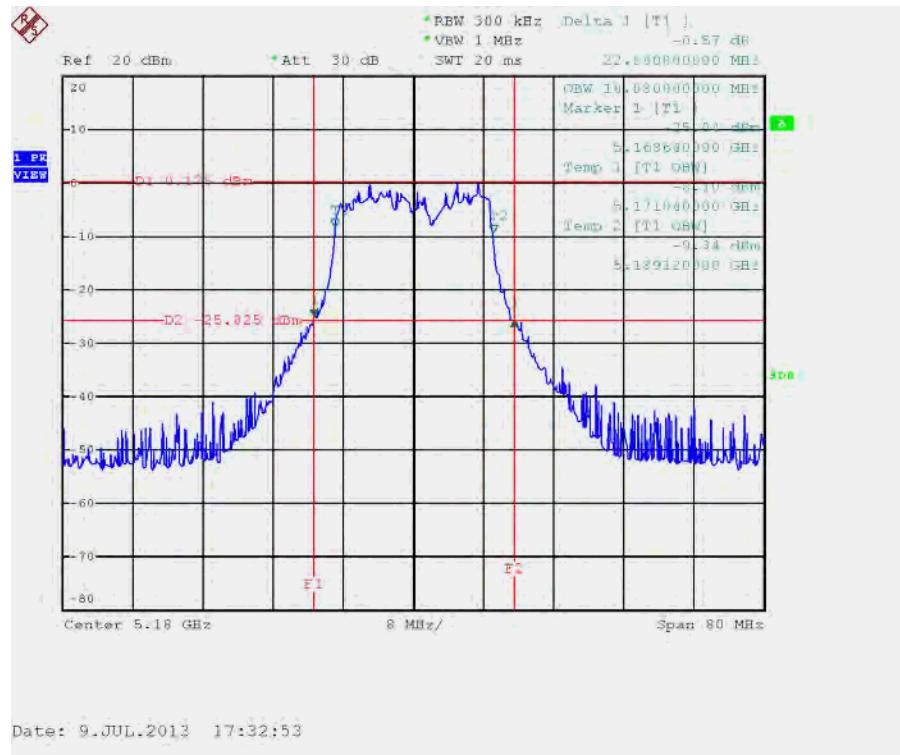
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



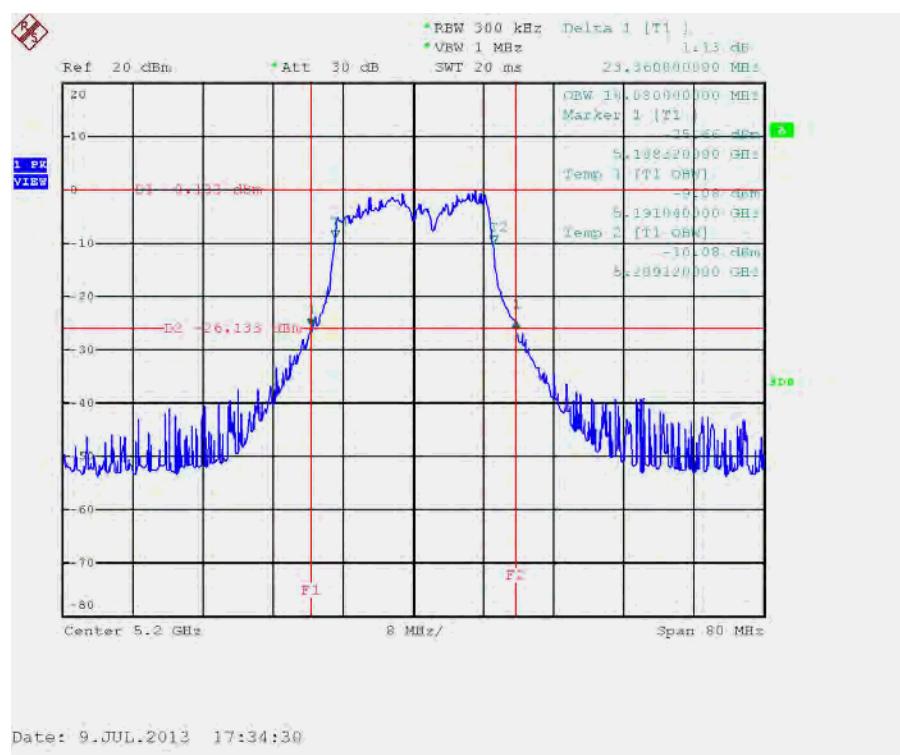
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



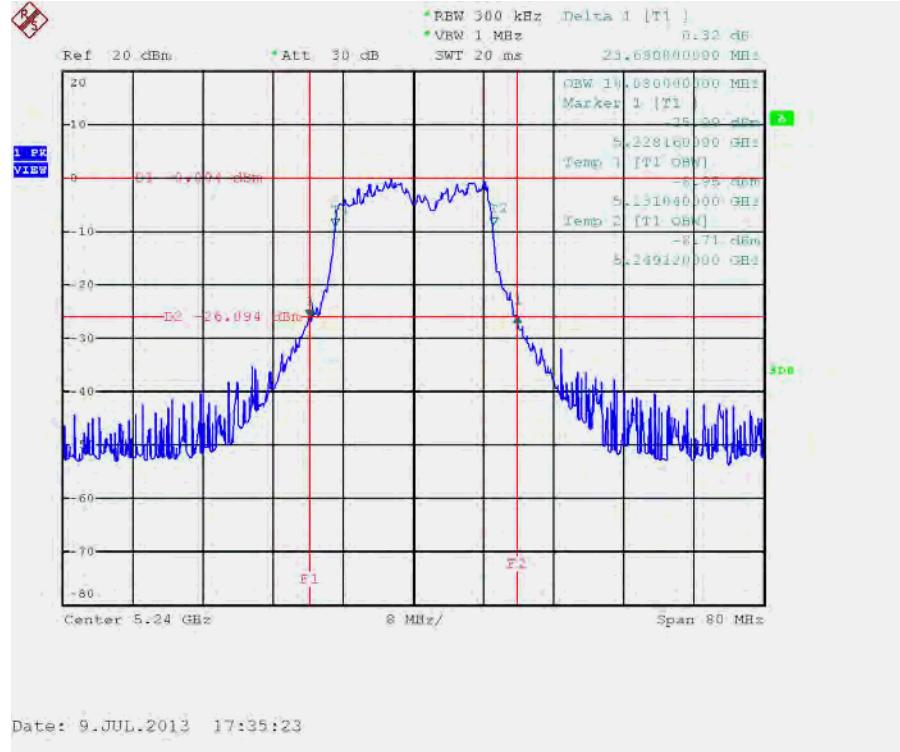
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**



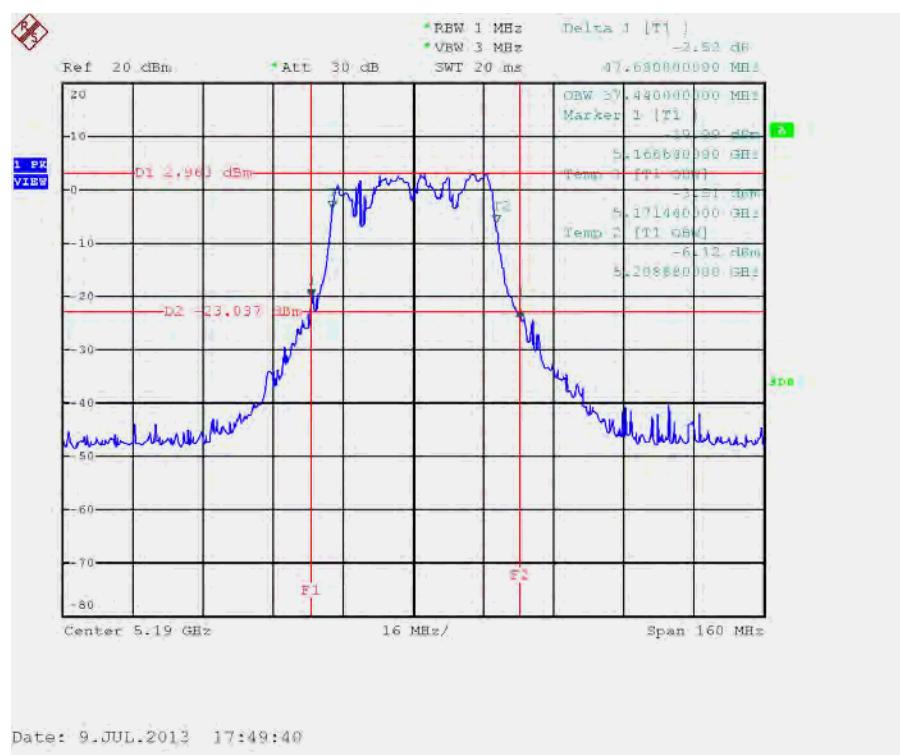
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**



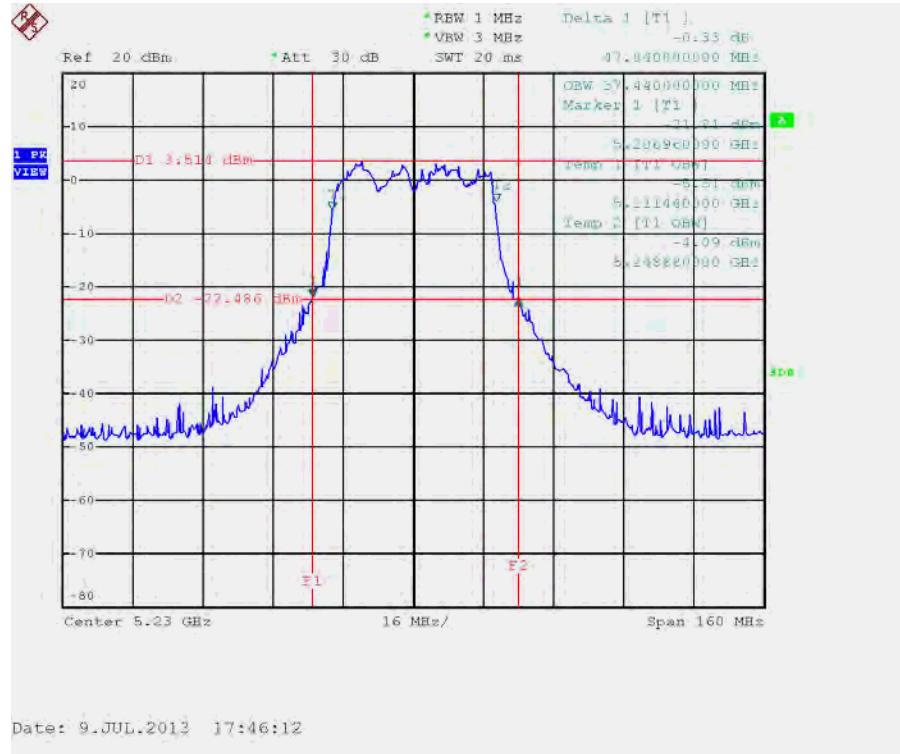
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



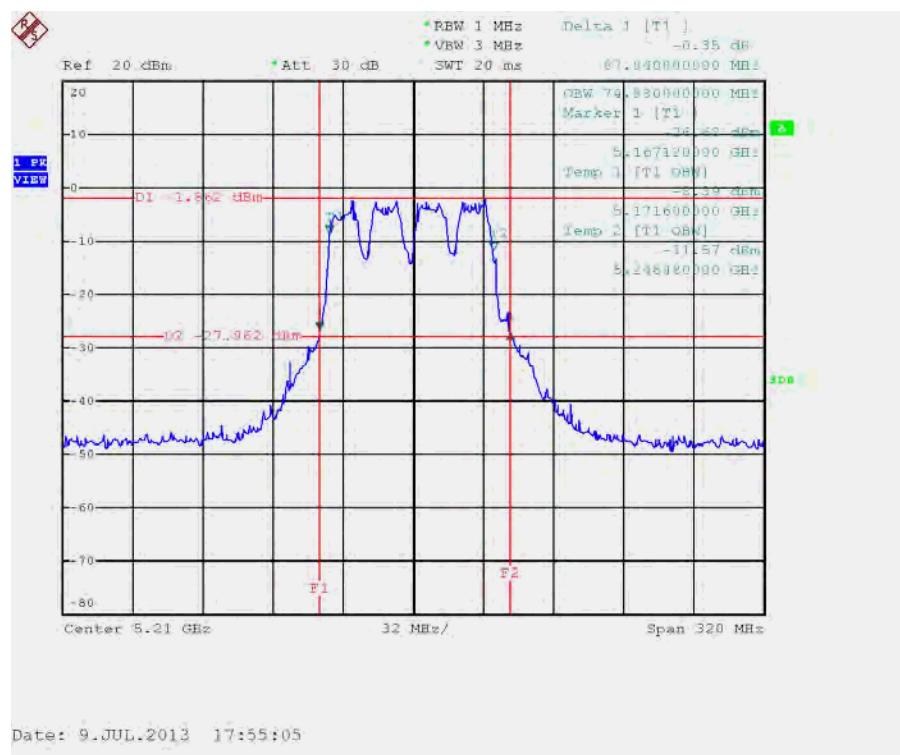
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



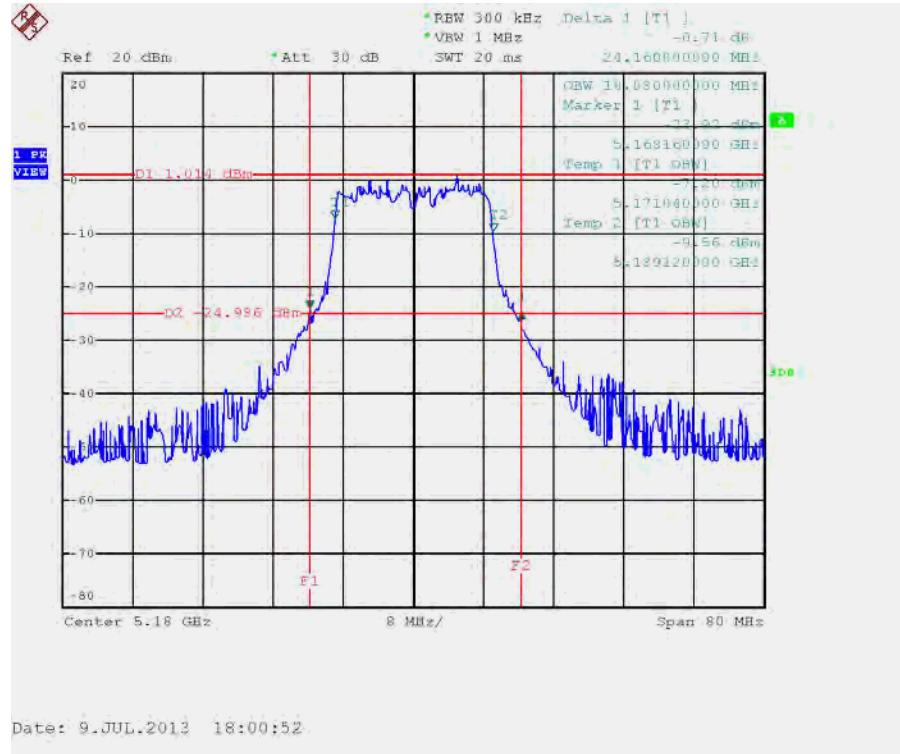
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



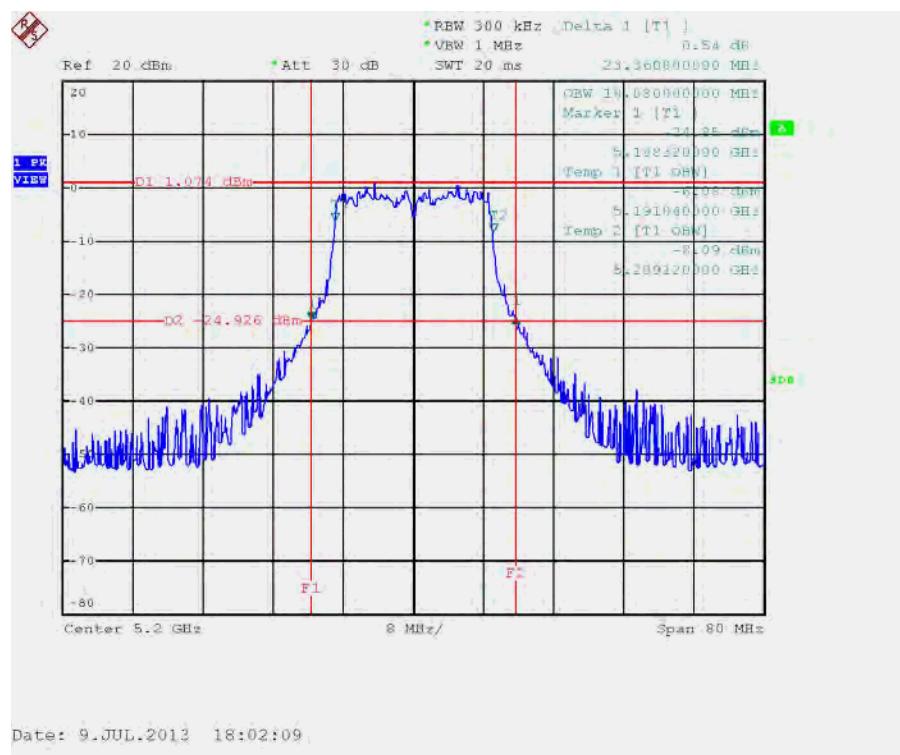
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



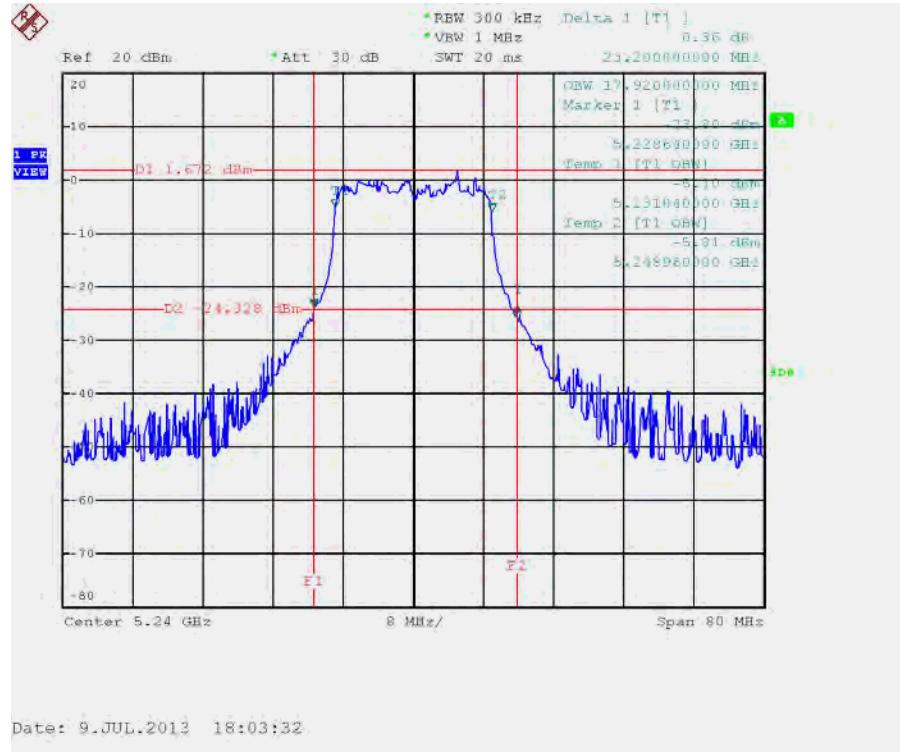
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5180 MHz**



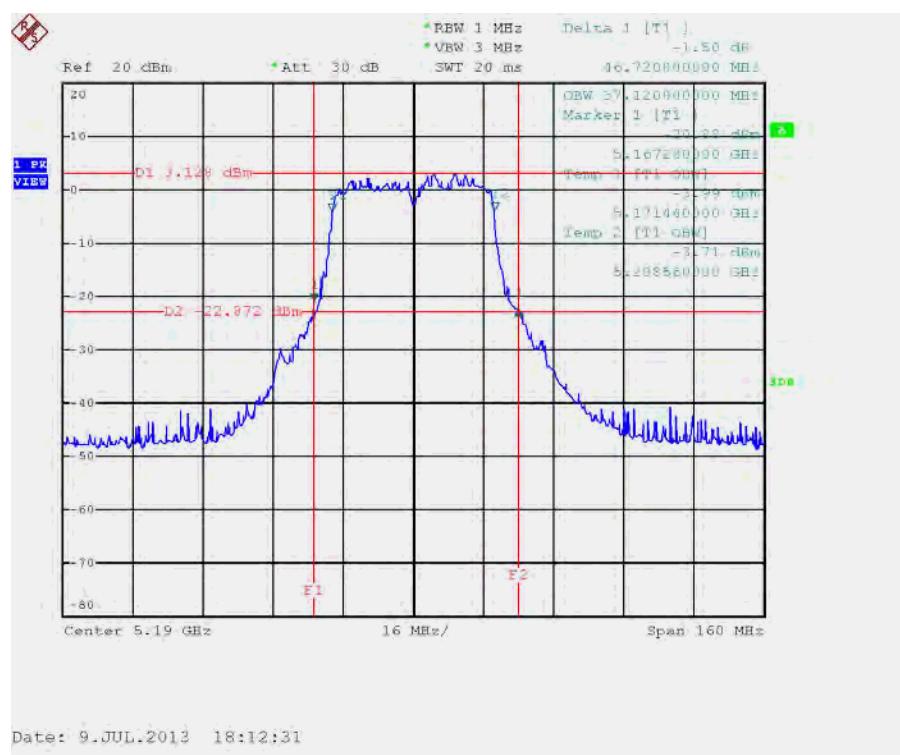
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5200 MHz**



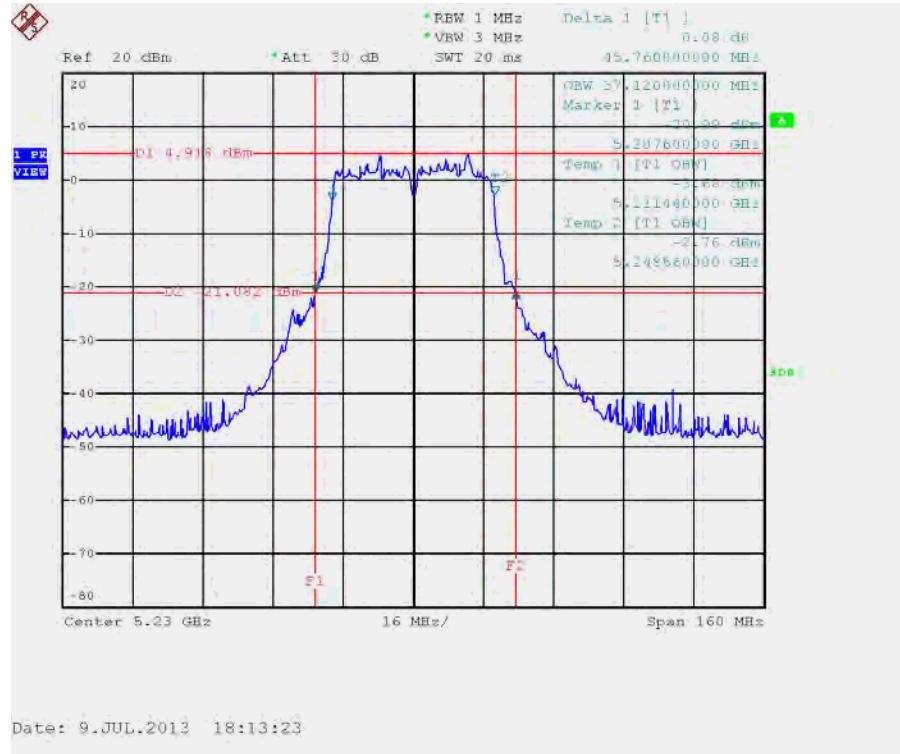
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 /
Chain 1 + Chain 2 + Chain 3 / 5240 MHz**



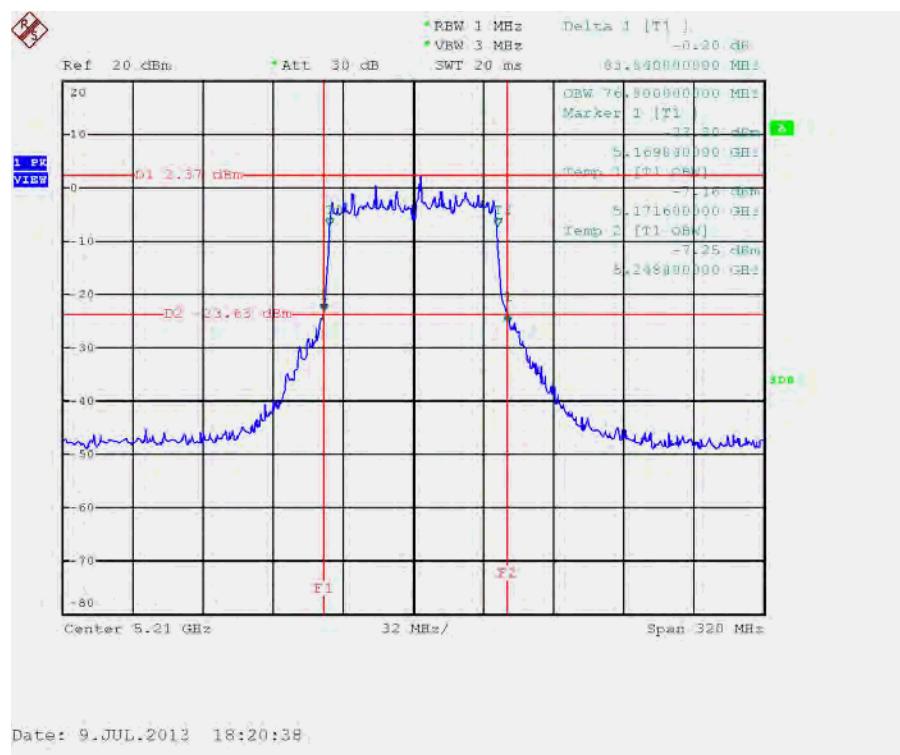
**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5190 MHz**



**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 /
Chain 1 + Chain 2 + Chain 3 / 5230 MHz**



**26dB Bandwidth & 99% Occupied Bandwidth Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 /
Chain 1 + Chain 2 + Chain 3 / 5210 MHz**



4.3. Maximum Conducted Output Power Measurement

4.3.1. Limit

For the band 5.15~5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW (17dBm) or $4 \text{ dBm} + 10\log B$, where B is the 26 dB emissions bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.3.2. Measuring Instruments and Setting

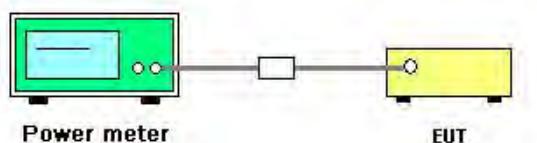
The following table is the setting of the peak power meter.

Power Meter Parameter	Setting
Detector	AVERAGE

4.3.3. Test Procedures

1. The transmitter output (antenna port) was connected to the power meter.
2. Test was performed in accordance with KDB 789033 D01 v01r03 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, section (E) Maximum conducted output power =>(3) Method PM (Measurement using an RF average power meter) Multiple antenna systems was performed in accordance with KDB 662911 D01 v02 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
3. When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.

4.3.4. Test Setup Layout



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 Maximum Conducted Output Power

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n/ac
Test Date	May 05, 2013	Test Mode	Mode 1 (Ant.1 Dipole antenna / 8dBi)

1TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	14.78	15.00	Complies
40	5200 MHz	14.68	15.00	Complies
48	5240 MHz	14.55	15.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	14.67	15.00	Complies
46	5230 MHz	14.78	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	14.61	15.00	Complies
40	5200 MHz	14.57	15.00	Complies
48	5240 MHz	14.63	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	14.79	15.00	Complies
46	5230 MHz	14.80	15.00	Complies



Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
42	5210 MHz	12.76	15.00	Complies

2TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	9.43	9.28	12.37	15.00	Complies
40	5200 MHz	9.39	9.34	12.38	15.00	Complies
48	5240 MHz	9.42	9.20	12.32	15.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	12.05	11.76	14.92	15.00	Complies
46	5230 MHz	11.83	11.66	14.76	15.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.91	11.43	14.69	15.00	Complies
40	5200 MHz	11.86	11.68	14.78	15.00	Complies
48	5240 MHz	11.87	11.50	14.70	15.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	11.61	11.72	14.68	15.00	Complies
46	5230 MHz	11.71	11.73	14.73	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	9.73	9.45	12.60	15.00	Complies
40	5200 MHz	9.73	9.58	12.67	15.00	Complies
48	5240 MHz	9.62	9.28	12.46	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	12.01	11.62	14.83	15.00	Complies
46	5230 MHz	11.98	11.63	14.82	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	11.28	11.02	14.16	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.91	11.43	14.69	15.00	Complies
40	5200 MHz	11.86	11.68	14.78	15.00	Complies
48	5240 MHz	11.87	11.50	14.70	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	12.01	11.52	14.78	15.00	Complies
46	5230 MHz	11.89	11.58	14.75	15.00	Complies



Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	11.72	11.45	14.60	15.00	Complies

3TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	6.06	6.29	6.58	11.09	15.00	Complies
40	5200 MHz	6.07	6.38	6.74	11.18	15.00	Complies
48	5240 MHz	6.13	6.28	6.67	11.14	15.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.67	9.85	10.11	14.65	15.00	Complies
46	5230 MHz	9.68	9.79	10.26	14.69	15.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.05	9.18	9.52	14.03	15.00	Complies
40	5200 MHz	8.96	9.24	9.61	14.05	15.00	Complies
48	5240 MHz	9.06	9.15	9.56	14.03	15.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.48	9.60	10.06	14.49	15.00	Complies
46	5230 MHz	9.58	9.62	10.04	14.52	15.00	Complies

Configuration IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.42	9.57	9.88	14.40	15.00	Complies
40	5200 MHz	9.40	9.70	10.02	14.49	15.00	Complies
48	5240 MHz	9.52	9.55	9.97	14.46	15.00	Complies

Configuration IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.80	9.89	10.34	14.79	15.00	Complies
46	5230 MHz	9.91	9.97	10.34	14.85	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	6.23	6.18	6.55	11.09	15.00	Complies
40	5200 MHz	5.98	6.13	6.61	11.02	15.00	Complies
48	5240 MHz	5.92	6.81	6.65	11.25	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.75	9.62	10.18	14.63	15.00	Complies
46	5230 MHz	9.65	9.52	10.22	14.58	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	9.12	9.05	9.63	14.05	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.18	9.28	9.52	14.10	15.00	Complies
40	5200 MHz	9.34	9.46	9.57	14.23	15.00	Complies
48	5240 MHz	9.11	9.15	9.80	14.14	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.60	9.65	10.02	14.53	15.00	Complies
46	5230 MHz	9.56	9.58	10.12	14.53	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	9.70	9.55	10.10	14.56	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.76	9.75	9.98	14.60	15.00	Complies
40	5200 MHz	9.48	9.93	10.17	14.64	15.00	Complies
48	5240 MHz	9.56	9.58	10.38	14.63	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	10.06	9.99	10.15	14.84	15.00	Complies
46	5230 MHz	9.91	9.96	10.44	14.88	15.00	Complies



Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	9.96	9.62	10.10	14.67	15.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a
Test Date	May 05, 2013	Test Mode	Mode 1 (Ant.1 Dipole antenna / 8dBi)

1TX
Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	14.88	15.00	Complies
40	5200 MHz	14.80	15.00	Complies
48	5240 MHz	14.74	15.00	Complies

2TX
Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	9.55	9.53	12.55	15.00	Complies
40	5200 MHz	9.59	9.51	12.56	15.00	Complies
48	5240 MHz	9.43	9.22	12.34	15.00	Complies

3TX
Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	6.27	6.48	6.76	11.28	15.00	Complies
40	5200 MHz	6.30	6.42	6.82	11.29	15.00	Complies
48	5240 MHz	6.26	6.12	6.95	11.23	15.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n/ac
Test Date	May 05, 2013	Test Mode	Mode 2 (Ant.3 Panel antenna / 12.5dBi)

1TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	10.03	10.50	Complies
40	5200 MHz	10.04	10.50	Complies
48	5240 MHz	10.15	10.50	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	9.63	10.50	Complies
46	5230 MHz	10.13	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	10.06	10.50	Complies
40	5200 MHz	10.03	10.50	Complies
48	5240 MHz	10.12	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	10.20	10.50	Complies
46	5230 MHz	10.17	10.50	Complies

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1**

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
42	5210 MHz	4.62	10.50	Complies

2TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	4.78	4.68	7.74	10.50	Complies
40	5200 MHz	4.65	4.81	7.74	10.50	Complies
48	5240 MHz	4.88	4.52	7.71	10.50	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	7.51	7.44	10.49	10.50	Complies
46	5230 MHz	7.45	7.15	10.31	10.50	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	7.13	6.86	10.01	10.50	Complies
40	5200 MHz	7.10	6.95	10.04	10.50	Complies
48	5240 MHz	7.15	6.83	10.00	10.50	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	7.36	7.24	10.31	10.50	Complies
46	5230 MHz	7.34	7.04	10.20	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	4.61	4.72	7.68	10.50	Complies
40	5200 MHz	4.73	4.80	7.78	10.50	Complies
48	5240 MHz	4.86	4.51	7.70	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	7.53	7.41	10.48	10.50	Complies
46	5230 MHz	7.45	7.13	10.30	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	5.13	5.09	8.12	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	7.15	7.02	10.10	10.50	Complies
40	5200 MHz	7.12	7.03	10.09	10.50	Complies
48	5240 MHz	7.21	6.77	10.01	10.50	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	7.45	7.33	10.40	10.50	Complies
46	5230 MHz	7.36	7.20	10.29	10.50	Complies



Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	3.70	3.67	6.70	10.50	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a
Test Date	May 05, 2013	Test Mode	Mode 2 (Ant.3 Panel antenna / 12.5dBi)

1TX
Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	10.12	10.50	Complies
40	5200 MHz	10.12	10.50	Complies
48	5240 MHz	10.24	10.50	Complies

2TX
Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	4.83	4.79	7.82	10.50	Complies
40	5200 MHz	4.90	5.02	7.97	10.50	Complies
48	5240 MHz	5.02	4.83	7.94	10.50	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n/ac
Test Date	May 05, 2013	Test Mode	Mode 3 (Ant.4 Yagi antenna / 8dBi)

1TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	14.78	15.00	Complies
40	5200 MHz	14.68	15.00	Complies
48	5240 MHz	14.55	15.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	14.67	15.00	Complies
46	5230 MHz	14.78	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	14.61	15.00	Complies
40	5200 MHz	14.57	15.00	Complies
48	5240 MHz	14.63	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	14.79	15.00	Complies
46	5230 MHz	14.80	15.00	Complies



Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
42	5210 MHz	9.81	15.00	Complies

2TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	9.43	9.28	12.37	15.00	Complies
40	5200 MHz	9.39	9.34	12.38	15.00	Complies
48	5240 MHz	9.42	9.20	12.32	15.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	11.07	10.82	13.96	15.00	Complies
46	5230 MHz	11.83	11.66	14.76	15.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.91	11.43	14.69	15.00	Complies
40	5200 MHz	11.86	11.68	14.78	15.00	Complies
48	5240 MHz	11.87	11.50	14.70	15.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	11.22	11.21	14.23	15.00	Complies
46	5230 MHz	11.71	11.73	14.73	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	9.73	9.45	12.60	15.00	Complies
40	5200 MHz	9.73	9.58	12.67	15.00	Complies
48	5240 MHz	9.62	9.28	12.46	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	10.91	10.59	13.76	15.00	Complies
46	5230 MHz	11.98	11.63	14.82	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	3.20	2.86	6.04	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.91	11.43	14.69	15.00	Complies
40	5200 MHz	11.86	11.68	14.78	15.00	Complies
48	5240 MHz	11.87	11.50	14.70	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	11.43	11.22	14.34	15.00	Complies
46	5230 MHz	11.89	11.58	14.75	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	6.37	6.06	9.23	15.00	Complies

3TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	6.06	6.29	6.58	11.09	15.00	Complies
40	5200 MHz	6.07	6.38	6.74	11.18	15.00	Complies
48	5240 MHz	6.13	6.28	6.67	11.14	15.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.67	9.85	10.11	14.65	15.00	Complies
46	5230 MHz	9.68	9.79	10.26	14.69	15.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.05	9.18	9.52	14.03	15.00	Complies
40	5200 MHz	8.96	9.24	9.61	14.05	15.00	Complies
48	5240 MHz	9.06	9.15	9.56	14.03	15.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.48	9.60	10.06	14.49	15.00	Complies
46	5230 MHz	9.58	9.62	10.04	14.52	15.00	Complies

Configuration IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.42	9.57	9.88	14.40	15.00	Complies
40	5200 MHz	9.40	9.70	10.02	14.49	15.00	Complies
48	5240 MHz	9.52	9.55	9.97	14.46	15.00	Complies

Configuration IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.80	9.89	10.34	14.79	15.00	Complies
46	5230 MHz	9.91	9.97	10.34	14.85	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	6.23	6.18	6.55	11.09	15.00	Complies
40	5200 MHz	5.98	6.13	6.61	11.02	15.00	Complies
48	5240 MHz	5.92	6.81	6.65	11.25	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.75	9.62	10.18	14.63	15.00	Complies
46	5230 MHz	9.65	9.52	10.22	14.58	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	1.94	1.82	2.20	6.76	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.18	9.28	9.52	14.10	15.00	Complies
40	5200 MHz	9.34	9.46	9.57	14.23	15.00	Complies
48	5240 MHz	9.11	9.15	9.80	14.14	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	9.60	9.65	10.02	14.53	15.00	Complies
46	5230 MHz	9.56	9.58	10.12	14.53	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	4.15	4.18	4.52	9.06	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	9.76	9.75	9.98	14.60	15.00	Complies
40	5200 MHz	9.48	9.93	10.17	14.64	15.00	Complies
48	5240 MHz	9.56	9.58	10.38	14.63	15.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	10.06	9.99	10.15	14.84	15.00	Complies
46	5230 MHz	9.91	9.96	10.44	14.88	15.00	Complies



Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	5.56	5.42	6.13	10.49	15.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a
Test Date	May 05, 2013	Test Mode	Mode 3 (Ant.4 Yagi antenna / 8dBi)

1TX
Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	14.88	15.00	Complies
40	5200 MHz	14.80	15.00	Complies
48	5240 MHz	14.74	15.00	Complies

2TX
Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	9.55	9.53	12.55	15.00	Complies
40	5200 MHz	9.59	9.51	12.56	15.00	Complies
48	5240 MHz	9.43	9.22	12.34	15.00	Complies

3TX
Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	6.27	6.48	6.66	11.24	15.00	Complies
40	5200 MHz	6.30	6.42	6.72	11.25	15.00	Complies
48	5240 MHz	6.26	6.12	6.85	11.19	15.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n/ac
Test Date	May 05, 2013	Test Mode	Mode 4 (Ant.5 Patch antenna / 2.3dBi)

1TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.61	17.00	Complies
40	5200 MHz	16.58	17.00	Complies
48	5240 MHz	16.49	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	16.68	17.00	Complies
46	5230 MHz	16.57	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.67	17.00	Complies
40	5200 MHz	16.59	17.00	Complies
48	5240 MHz	16.72	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	16.73	17.00	Complies
46	5230 MHz	16.76	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
42	5210 MHz	13.22	17.00	Complies

2TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.96	13.83	16.91	17.00	Complies
40	5200 MHz	13.78	13.84	16.82	17.00	Complies
48	5240 MHz	13.72	13.63	16.69	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.99	13.85	16.93	17.00	Complies
46	5230 MHz	13.93	13.68	16.82	17.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.72	13.54	16.64	17.00	Complies
40	5200 MHz	13.81	13.70	16.77	17.00	Complies
48	5240 MHz	13.72	13.36	16.55	17.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.65	13.64	16.66	17.00	Complies
46	5230 MHz	13.71	13.73	16.73	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.80	13.63	16.73	17.00	Complies
40	5200 MHz	13.72	13.64	16.69	17.00	Complies
48	5240 MHz	13.75	13.42	16.60	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	14.02	13.68	16.86	17.00	Complies
46	5230 MHz	13.92	13.62	16.78	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	9.36	9.05	12.22	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.72	13.54	16.64	17.00	Complies
40	5200 MHz	13.81	13.70	16.77	17.00	Complies
48	5240 MHz	13.72	13.36	16.55	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.87	13.55	16.72	17.00	Complies
46	5230 MHz	13.83	13.60	16.73	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	11.72	11.45	14.60	17.00	Complies

3TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	12.01	12.10	12.49	16.98	17.00	Complies
40	5200 MHz	11.93	12.16	12.55	16.99	17.00	Complies
48	5240 MHz	12.05	12.08	12.52	16.99	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.54	11.61	12.05	16.51	17.00	Complies
46	5230 MHz	11.66	11.70	12.25	16.65	17.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.55	11.54	11.93	16.45	17.00	Complies
40	5200 MHz	11.48	11.58	12.07	16.49	17.00	Complies
48	5240 MHz	11.57	11.58	11.97	16.48	17.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.42	11.57	12.00	16.44	17.00	Complies
46	5230 MHz	11.58	11.69	12.02	16.54	17.00	Complies

Configuration IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.89	11.97	12.39	16.86	17.00	Complies
40	5200 MHz	11.83	12.02	12.51	16.90	17.00	Complies
48	5240 MHz	11.94	11.85	12.40	16.84	17.00	Complies

Configuration IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.77	11.84	12.34	16.76	17.00	Complies
46	5230 MHz	11.85	11.92	12.27	16.79	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.99	12.13	12.53	16.99	17.00	Complies
40	5200 MHz	11.97	12.09	12.58	16.99	17.00	Complies
48	5240 MHz	11.86	11.71	12.55	16.83	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.70	11.68	12.22	16.65	17.00	Complies
46	5230 MHz	11.65	11.61	12.12	16.57	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	5.72	5.65	6.05	10.58	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.70	11.71	12.10	16.61	17.00	Complies
40	5200 MHz	11.73	11.82	12.13	16.67	17.00	Complies
48	5240 MHz	11.59	11.42	12.15	16.50	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.72	11.63	11.89	16.52	17.00	Complies
46	5230 MHz	11.83	11.53	12.10	16.60	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	9.70	9.55	10.10	14.56	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	12.02	11.92	12.25	16.84	17.00	Complies
40	5200 MHz	12.00	12.12	12.52	16.99	17.00	Complies
48	5240 MHz	12.09	11.77	12.57	16.93	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.93	12.01	12.36	16.88	17.00	Complies
46	5230 MHz	12.02	11.71	12.43	16.83	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	9.96	9.62	10.10	14.67	17.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a
Test Date	May 05, 2013	Test Mode	Mode 4 (Ant.5 Patch antenna / 2.3dBi)

1TX
Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.93	17.00	Complies
40	5200 MHz	16.82	17.00	Complies
48	5240 MHz	16.73	17.00	Complies

2TX
Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.88	13.95	16.93	17.00	Complies
40	5200 MHz	13.95	14.00	16.99	17.00	Complies
48	5240 MHz	13.75	13.66	16.72	17.00	Complies

3TX
Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.72	11.89	12.18	16.71	17.00	Complies
40	5200 MHz	11.82	11.76	12.31	16.74	17.00	Complies
48	5240 MHz	11.73	11.39	12.31	16.60	17.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n/ac
Test Date	May 05, 2013	Test Mode	Mode 5 (Ant.6 Facade antenna / 2.5dBi)

1TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.61	17.00	Complies
40	5200 MHz	16.58	17.00	Complies
48	5240 MHz	16.49	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	16.68	17.00	Complies
46	5230 MHz	16.57	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.67	17.00	Complies
40	5200 MHz	16.59	17.00	Complies
48	5240 MHz	16.72	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	16.73	17.00	Complies
46	5230 MHz	16.76	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
42	5210 MHz	14.24	17.00	Complies

2TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.96	13.83	16.91	17.00	Complies
40	5200 MHz	13.78	13.84	16.82	17.00	Complies
48	5240 MHz	13.72	13.63	16.69	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.99	13.85	16.93	17.00	Complies
46	5230 MHz	13.93	13.68	16.82	17.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.72	13.54	16.64	17.00	Complies
40	5200 MHz	13.81	13.70	16.77	17.00	Complies
48	5240 MHz	13.72	13.36	16.55	17.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.65	13.64	16.66	17.00	Complies
46	5230 MHz	13.71	13.73	16.73	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.80	13.63	16.73	17.00	Complies
40	5200 MHz	13.72	13.64	16.69	17.00	Complies
48	5240 MHz	13.75	13.42	16.60	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	14.02	13.68	16.86	17.00	Complies
46	5230 MHz	13.92	13.62	16.78	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	11.92	11.58	14.76	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.72	13.54	16.64	17.00	Complies
40	5200 MHz	13.81	13.70	16.77	17.00	Complies
48	5240 MHz	13.72	13.36	16.55	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.87	13.55	16.72	17.00	Complies
46	5230 MHz	13.83	13.60	16.73	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	12.78	12.51	15.66	17.00	Complies

3TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.68	11.68	11.98	16.55	17.00	Complies
40	5200 MHz	11.51	11.71	12.12	16.56	17.00	Complies
48	5240 MHz	11.66	11.61	12.07	16.56	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.54	11.61	12.05	16.51	17.00	Complies
46	5230 MHz	11.66	11.70	12.25	16.65	17.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.55	11.54	11.93	16.45	17.00	Complies
40	5200 MHz	11.48	11.58	12.07	16.49	17.00	Complies
48	5240 MHz	11.57	11.58	11.97	16.48	17.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.42	11.57	12.00	16.44	17.00	Complies
46	5230 MHz	11.58	11.69	12.02	16.54	17.00	Complies

Configuration IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.89	11.97	12.39	16.86	17.00	Complies
40	5200 MHz	11.83	12.02	12.51	16.90	17.00	Complies
48	5240 MHz	11.94	11.85	12.40	16.84	17.00	Complies

Configuration IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.77	11.84	12.34	16.76	17.00	Complies
46	5230 MHz	11.85	11.92	12.27	16.79	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.49	11.63	12.03	16.49	17.00	Complies
40	5200 MHz	11.47	11.59	12.08	16.49	17.00	Complies
48	5240 MHz	11.36	11.21	12.05	16.33	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.70	11.68	12.22	16.65	17.00	Complies
46	5230 MHz	11.65	11.61	12.12	16.57	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	8.16	8.16	8.50	13.05	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.70	11.71	12.10	16.61	17.00	Complies
40	5200 MHz	11.73	11.82	12.13	16.67	17.00	Complies
48	5240 MHz	11.59	11.42	12.15	16.50	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.72	11.63	11.89	16.52	17.00	Complies
46	5230 MHz	11.83	11.53	12.10	16.60	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	11.50	11.42	12.03	16.43	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	12.02	11.92	12.25	16.84	17.00	Complies
40	5200 MHz	12.00	12.12	12.52	16.99	17.00	Complies
48	5240 MHz	12.09	11.77	12.57	16.93	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.93	12.01	12.36	16.88	17.00	Complies
46	5230 MHz	12.02	11.71	12.43	16.83	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	11.47	11.45	12.05	16.44	17.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a
Test Date	May 05, 2013	Test Mode	Mode 5 (Ant.6 Facade antenna / 2.5dBi)

1TX
Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.93	17.00	Complies
40	5200 MHz	16.82	17.00	Complies
48	5240 MHz	16.73	17.00	Complies

2TX
Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.88	13.95	16.93	17.00	Complies
40	5200 MHz	13.95	14.00	16.99	17.00	Complies
48	5240 MHz	13.75	13.66	16.72	17.00	Complies

3TX
Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.72	11.89	12.18	16.71	17.00	Complies
40	5200 MHz	11.82	11.76	12.31	16.74	17.00	Complies
48	5240 MHz	11.73	11.39	12.31	16.60	17.00	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11n/ac
Test Date	May 05, 2013	Test Mode	Mode 6 (Ant.9 Panel antenna / 9.2dBi)

3TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	5.06	5.26	5.60	10.08	13.80	Complies
40	5200 MHz	5.07	5.41	5.74	10.19	13.80	Complies
48	5240 MHz	5.21	5.25	5.67	10.15	13.80	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	8.67	8.85	9.10	13.65	13.80	Complies
46	5230 MHz	8.76	8.95	9.28	13.77	13.80	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	8.17	8.15	8.54	13.06	13.80	Complies
40	5200 MHz	8.12	8.19	8.67	13.10	13.80	Complies
48	5240 MHz	8.22	8.05	8.53	13.04	13.80	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	8.49	8.56	8.99	13.46	13.80	Complies
46	5230 MHz	8.64	8.71	9.09	13.59	13.80	Complies

Configuration IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	8.39	8.53	8.84	13.36	13.80	Complies
40	5200 MHz	8.35	8.69	9.04	13.47	13.80	Complies
48	5240 MHz	8.50	8.51	9.01	13.45	13.80	Complies

Configuration IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	8.33	8.42	8.87	13.32	13.80	Complies
46	5230 MHz	8.46	8.50	8.87	13.39	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	5.05	5.12	5.55	10.02	13.80	Complies
40	5200 MHz	4.93	5.13	5.71	10.04	13.80	Complies
48	5240 MHz	4.98	4.84	5.71	9.96	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	8.66	8.67	9.11	13.59	13.80	Complies
46	5230 MHz	8.66	8.58	9.18	13.59	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	4.09	4.14	4.75	9.11	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	7.67	8.13	8.32	12.82	13.80	Complies
40	5200 MHz	7.91	8.25	8.56	13.02	13.80	Complies
48	5240 MHz	7.96	8.07	8.73	13.04	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	8.69	8.71	9.18	13.64	13.80	Complies
46	5230 MHz	8.63	8.56	9.23	13.59	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	5.62	5.59	6.03	10.52	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	8.63	8.63	8.95	13.51	13.80	Complies
40	5200 MHz	8.56	8.79	9.06	13.58	13.80	Complies
48	5240 MHz	8.71	8.64	9.27	13.65	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	8.51	8.56	8.97	13.46	13.80	Complies
46	5230 MHz	8.56	8.53	8.61	13.34	13.80	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	4.67	4.56	5.06	9.54	13.80	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11a
Test Date	May 05, 2013	Test Mode	Mode 6 (Ant.9 Panel antenna / 9.2dBi)

3TX

Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	5.40	5.25	5.72	10.23	13.80	Complies
40	5200 MHz	5.21	5.33	5.85	10.24	13.80	Complies
48	5240 MHz	5.26	5.12	5.95	10.23	13.80	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Serway Li	Configurations	IEEE 802.11n/ac
Test Date	Jul. 07, 2013	Test Mode	Mode 7 (Ant.10 PIFA antenna / 5.3dBi)

1TX
Configuration IEEE 802.11n MCS0 HT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.89	17.00	Complies
40	5200 MHz	16.83	17.00	Complies
48	5240 MHz	16.63	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	16.85	17.00	Complies
46	5230 MHz	16.73	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.89	17.00	Complies
40	5200 MHz	16.76	17.00	Complies
48	5240 MHz	16.67	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
38	5190 MHz	16.68	17.00	Complies
46	5230 MHz	16.54	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
42	5210 MHz	13.67	17.00	Complies

2TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.83	11.52	14.69	17.00	Complies
40	5200 MHz	11.58	11.23	14.42	17.00	Complies
48	5240 MHz	11.94	11.35	14.67	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.64	13.35	16.51	17.00	Complies
46	5230 MHz	13.96	13.72	16.85	17.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.48	13.28	16.39	17.00	Complies
40	5200 MHz	13.91	13.78	16.86	17.00	Complies
48	5240 MHz	13.72	13.52	16.63	17.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.58	13.52	16.56	17.00	Complies
46	5230 MHz	14.05	13.72	16.90	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.81	11.47	14.65	17.00	Complies
40	5200 MHz	11.64	11.56	14.61	17.00	Complies
48	5240 MHz	11.66	11.51	14.60	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.65	13.41	16.54	17.00	Complies
46	5230 MHz	14.02	13.84	16.94	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	8.52	8.23	11.39	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	13.55	13.31	16.44	17.00	Complies
40	5200 MHz	14.02	13.82	16.93	17.00	Complies
48	5240 MHz	13.84	13.61	16.74	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
38	5190 MHz	13.72	13.46	16.60	17.00	Complies
46	5230 MHz	14.02	13.76	16.90	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
42	5210 MHz	11.37	10.93	14.17	17.00	Complies

3TX

Configuration IEEE 802.11n MCS0 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	8.36	8.17	8.45	13.10	17.00	Complies
40	5200 MHz	8.52	8.13	8.42	13.13	17.00	Complies
48	5240 MHz	8.16	8.12	8.74	13.12	17.00	Complies

Configuration IEEE 802.11n MCS0 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.27	10.98	11.82	16.14	17.00	Complies
46	5230 MHz	11.11	10.85	11.66	15.99	17.00	Complies

Configuration IEEE 802.11n MCS8 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.74	11.32	11.97	16.46	17.00	Complies
40	5200 MHz	11.24	10.93	11.53	16.01	17.00	Complies
48	5240 MHz	11.06	10.75	11.48	15.88	17.00	Complies

Configuration IEEE 802.11n MCS8 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	12.13	11.78	12.59	16.95	17.00	Complies
46	5230 MHz	11.98	11.72	12.51	16.85	17.00	Complies

Configuration IEEE 802.11n MCS16 HT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.93	11.77	12.46	16.83	17.00	Complies
40	5200 MHz	12.03	11.76	12.63	16.93	17.00	Complies
48	5240 MHz	11.93	11.52	12.43	16.75	17.00	Complies

Configuration IEEE 802.11n MCS16 HT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.93	11.64	12.35	16.75	17.00	Complies
46	5230 MHz	11.88	11.48	12.32	16.68	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	8.23	8.34	8.94	13.29	17.00	Complies
40	5200 MHz	8.29	8.38	8.96	13.32	17.00	Complies
48	5240 MHz	8.19	8.31	8.89	13.25	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.00	11.22	11.59	16.05	17.00	Complies
46	5230 MHz	10.98	11.16	11.49	15.99	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	7.97	8.05	8.42	12.92	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.52	11.37	11.88	16.37	17.00	Complies
40	5200 MHz	11.01	10.99	11.42	15.92	17.00	Complies
48	5240 MHz	11.06	10.75	11.28	15.81	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	12.01	11.89	12.48	16.91	17.00	Complies
46	5230 MHz	12.26	11.86	12.39	16.95	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	9.26	8.96	9.55	14.03	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	11.93	11.82	12.33	16.80	17.00	Complies
40	5200 MHz	12.00	11.98	12.49	16.93	17.00	Complies
48	5240 MHz	11.91	11.59	12.31	16.72	17.00	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
38	5190 MHz	11.89	11.81	12.33	16.79	17.00	Complies
46	5230 MHz	11.94	11.72	12.29	16.76	17.00	Complies



Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
42	5210 MHz	10.49	10.33	10.75	15.30	17.00	Complies



Temperature	25°C	Humidity	56%
Test Engineer	Serway Li	Configurations	IEEE 802.11a
Test Date	Jul. 07, 2013	Test Mode	Mode 7 (Ant.10 PIFA antenna / 5.3dBi)

1TX

Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
36	5180 MHz	16.94	17.00	Complies
40	5200 MHz	16.86	17.00	Complies
48	5240 MHz	16.73	17.00	Complies

2TX

Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Conducted Power (dBm)		Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2			
36	5180 MHz	11.72	11.31	14.53	17.00	Complies
40	5200 MHz	11.71	11.25	14.50	17.00	Complies
48	5240 MHz	11.86	11.45	14.67	17.00	Complies

3TX

Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Conducted Power (dBm)			Total Conducted Output Power (dBm)	Max. Limit (dBm)	Result
		Chain 1	Chain 2	Chain 3			
36	5180 MHz	8.03	8.07	8.76	13.07	17.00	Complies
40	5200 MHz	8.26	8.25	8.85	13.23	17.00	Complies
48	5240 MHz	8.23	8.02	8.72	13.10	17.00	Complies

4.4. Power Spectral Density Measurement

4.4.1. Limit

The power spectral density is defined as the highest level of power in dBm per MHz generated by the transmitter within the power envelope. The following table is power spectral density limits and decrease power density limit rule refer to section 4.3.1.

Frequency Range	Power Spectral Density limit (dBm/MHz)
5.15~5.25 GHz	4

4.4.2. Measuring Instruments and Setting

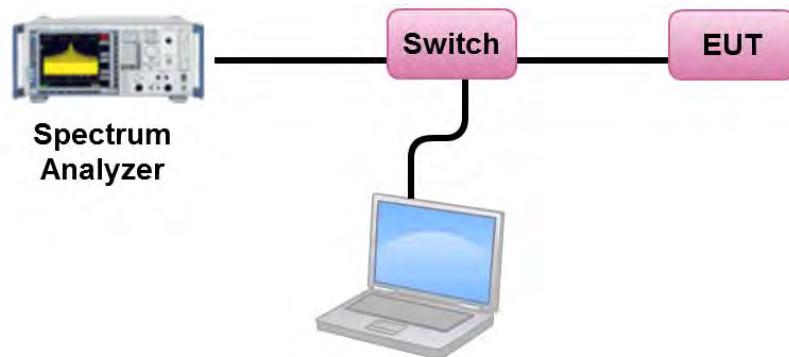
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

4.4.3. Test Procedures

1. The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
2. Test was performed in accordance with KDB 789033 D01 v01r03 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E, section (C)
Maximum conducted output power => (d) Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).
3. Multiple antenna systems was performed in accordance KDB 662911 D01 v02 in-Band Power Spectral Density (PSD) Measurements (1) 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.

4.4.4. 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 Power Spectral Density

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Date	May 05, 2013	Test Mode	Mode 1 (Ant.1 Dipole antenna / 8dBi)

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	1.05	2.00	Complies
40	5200 MHz	1.03	2.00	Complies
48	5240 MHz	1.29	2.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=8dBi >6dBi, So Band1 Limit =4-(8-6)=2dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.79	2.00	Complies
46	5230 MHz	-1.61	2.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=8dBi >6dBi, So Band1 Limit =4-(8-6)=2dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.99	2.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=8dBi >6dBi, So Band1 Limit =4-(8-6)=2dBm/MHz

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-1.31	-1.01	Complies
40	5200 MHz	-1.29	-1.01	Complies
48	5240 MHz	-1.37	-1.01	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 11.01 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (11.01 - 6) = -1.01 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-3.10	-1.01	Complies
46	5230 MHz	-3.20	-1.01	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 11.01 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (11.01 - 6) = -1.01 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-7.04	-1.01	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 11.01 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (11.01 - 6) = -1.01 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	0.62	2.00	Complies
40	5200 MHz	0.69	2.00	Complies
48	5240 MHz	0.69	2.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-3.50	2.00	Complies
46	5230 MHz	-3.51	2.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.53	2.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-2.81	-2.77	Complies
40	5200 MHz	-3.09	-2.77	Complies
48	5240 MHz	-3.13	-2.77	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.77 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.77 - 6) = -2.77 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-4.29	-2.77	Complies
46	5230 MHz	-4.59	-2.77	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.77 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.77 - 6) = -2.77 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-8.44	-2.77	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.77 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.77 - 6) = -2.77 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-0.10	0.24	Complies
40	5200 MHz	0.03	0.24	Complies
48	5240 MHz	-0.09	0.24	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.76 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.76 - 6) = 0.24 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-3.19	0.24	Complies
46	5230 MHz	-2.98	0.24	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.76 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.76 - 6) = 0.24 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-5.90	0.24	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.76 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.76 - 6) = 0.24 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	0.66	2.00	Complies
40	5200 MHz	0.71	2.00	Complies
48	5240 MHz	0.85	2.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-2.88	2.00	Complies
46	5230 MHz	-2.83	2.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.42	2.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Date	May 05, 2013	Test Mode	Mode 2 (Ant.3 Panel antenna / 12.5dBi)

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-3.55	-2.50	Complies
40	5200 MHz	-3.56	-2.50	Complies
48	5240 MHz	-3.41	-2.50	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=12.5dBi >6dBi, So Band1 Limit =4-(12.5-6)=-2.5dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-6.42	-2.50	Complies
46	5230 MHz	-6.17	-2.50	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=12.5dBi >6dBi, So Band1 Limit =4-(12.5-6)=-2.5dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-15.17	-2.50	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=12.5dBi >6dBi, So Band1 Limit =4-(12.5-6)=-2.5dBm/MHz

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-5.91	-5.51	Complies
40	5200 MHz	-5.78	-5.51	Complies
48	5240 MHz	-5.78	-5.51	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 15.51 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (15.51 - 6) = -5.51 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-5.82	-5.51	Complies
46	5230 MHz	-6.09	-5.51	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 15.51 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (15.51 - 6) = -5.51 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-11.51	-5.51	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 15.51 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (15.51 - 6) = -5.51 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-3.57	-2.50	Complies
40	5200 MHz	-3.43	-2.50	Complies
48	5240 MHz	-3.39	-2.50	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.5 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.5 - 6) = -2.5 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-6.40	-2.50	Complies
46	5230 MHz	-6.34	-2.50	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.5 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.5 - 6) = -2.5 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-12.86	-2.50	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.5 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.5 - 6) = -2.5 \text{ dBm/MHz}$

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Date	May 05, 2013	Test Mode	Mode 3 (Ant.4 Yagi antenna / 8dBi)

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	1.05	2.00	Complies
40	5200 MHz	1.03	2.00	Complies
48	5240 MHz	1.29	2.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=8dBi >6dBi, So Band1 Limit =4-(8-6)=2dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.79	2.00	Complies
46	5230 MHz	-1.61	2.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=8dBi >6dBi, So Band1 Limit =4-(8-6)=2dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-9.99	2.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=8dBi >6dBi, So Band1 Limit =4-(8-6)=2dBm/MHz

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-1.31	-1.01	Complies
40	5200 MHz	-1.29	-1.01	Complies
48	5240 MHz	-1.37	-1.01	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 11.01 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (11.01 - 6) = -1.01 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-4.20	-1.01	Complies
46	5230 MHz	-3.20	-1.01	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 11.01 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (11.01 - 6) = -1.01 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-15.26	-1.01	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 11.01 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (11.01 - 6) = -1.01 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	0.62	2.00	Complies
40	5200 MHz	0.69	2.00	Complies
48	5240 MHz	0.69	2.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-4.03	2.00	Complies
46	5230 MHz	-3.51	2.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-11.92	2.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-2.81	-2.77	Complies
40	5200 MHz	-3.09	-2.77	Complies
48	5240 MHz	-3.13	-2.77	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.77 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.77 - 6) = -2.77 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-4.29	-2.77	Complies
46	5230 MHz	-4.59	-2.77	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.77 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.77 - 6) = -2.77 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-15.83	-2.77	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 12.77 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (12.77 - 6) = -2.77 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-0.10	0.24	Complies
40	5200 MHz	0.03	0.24	Complies
48	5240 MHz	-0.09	0.24	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.76 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.76 - 6) = 0.24 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-3.19	0.24	Complies
46	5230 MHz	-2.98	0.24	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.76 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.76 - 6) = 0.24 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-12.09	0.24	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.76 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.76 - 6) = 0.24 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	0.66	2.00	Complies
40	5200 MHz	0.71	2.00	Complies
48	5240 MHz	0.85	2.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-2.88	2.00	Complies
46	5230 MHz	-2.83	2.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-10.44	2.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8 - 6) = 2 \text{ dBm/MHz}$

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Date	May 05, 2013	Test Mode	Mode 4 (Ant.5 Patch antenna / 2.3dBi)

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.07	4.00	Complies
40	5200 MHz	3.03	4.00	Complies
48	5240 MHz	3.16	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=2.3dBi < 6dBi, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.15	4.00	Complies
46	5230 MHz	0.37	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=2.3dBi < 6dBi, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.47	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=2.3dBi < 6dBi, So Band1 Limit=4dBm/MHz

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.27	4.00	Complies
40	5200 MHz	3.20	4.00	Complies
48	5240 MHz	3.16	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.31 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.24	4.00	Complies
46	5230 MHz	-1.27	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.31 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-8.90	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.31 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.27	4.00	Complies
40	5200 MHz	3.29	4.00	Complies
48	5240 MHz	3.16	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.50	4.00	Complies
46	5230 MHz	-1.51	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.3 \text{dBi} < 6 \text{dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.53	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.3 \text{dBi} < 6 \text{dBi}$, So Band1 Limit=4dBm/MHz

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.81	2.93	Complies
40	5200 MHz	2.81	2.93	Complies
48	5240 MHz	2.84	2.93	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.07 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.07 - 6) = 2.93 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-2.39	2.93	Complies
46	5230 MHz	-2.43	2.93	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.07 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.07 - 6) = 2.93 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-11.87	2.93	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.07 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.07 - 6) = 2.93 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.50	4.00	Complies
40	5200 MHz	2.58	4.00	Complies
48	5240 MHz	2.58	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 4.06 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.08	4.00	Complies
46	5230 MHz	-1.02	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 4.06 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.77	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 4.06 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.85	4.00	Complies
40	5200 MHz	2.95	4.00	Complies
48	5240 MHz	2.92	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-0.81	4.00	Complies
46	5230 MHz	-0.91	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.42	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Date	May 05, 2013	Test Mode	Mode 5 (Ant.6 Facade antenna / 2.5dBi)

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.07	4.00	Complies
40	5200 MHz	3.03	4.00	Complies
48	5240 MHz	3.16	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=2.5dBi < 6dBi, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.15	4.00	Complies
46	5230 MHz	0.37	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=2.5dBi < 6dBi, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-5.61	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=2.5dBi < 6dBi, So Band1 Limit=4dBm/MHz

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.27	4.00	Complies
40	5200 MHz	3.20	4.00	Complies
48	5240 MHz	3.16	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.51 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.24	4.00	Complies
46	5230 MHz	-1.27	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.51 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.35	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.51 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.27	4.00	Complies
40	5200 MHz	3.29	4.00	Complies
48	5240 MHz	3.16	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.5 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

**Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2**

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.50	4.00	Complies
46	5230 MHz	-1.51	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.5 \text{dBi} < 6 \text{dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-5.55	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.5 \text{dBi} < 6 \text{dBi}$, So Band1 Limit=4dBm/MHz

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.67	2.73	Complies
40	5200 MHz	2.63	2.73	Complies
48	5240 MHz	2.59	2.73	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.27 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.27 - 6) = 2.73 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-2.39	2.73	Complies
46	5230 MHz	-2.43	2.73	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.27 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.27 - 6) = 2.73 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-9.63	2.73	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.27 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.27 - 6) = 2.73 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.50	4.00	Complies
40	5200 MHz	2.58	4.00	Complies
48	5240 MHz	2.58	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 4.26 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.08	4.00	Complies
46	5230 MHz	-1.02	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 4.26 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-4.34	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 4.26 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.85	4.00	Complies
40	5200 MHz	2.95	4.00	Complies
48	5240 MHz	2.92	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.5 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-0.81	4.00	Complies
46	5230 MHz	-0.91	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.5 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-4.40	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 2.5 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit=4dBm/MHz

Temperature	25°C	Humidity	56%
Test Engineer	Denis Su	Configurations	IEEE 802.11ac
Test Date	May 05, 2013	Test Mode	Mode 6 (Ant.9 Panel antenna / 9.2dBi)

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-4.11	-3.97	Complies
40	5200 MHz	-4.07	-3.97	Complies
48	5240 MHz	-4.34	-3.97	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 13.97 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.97 - 6) = -3.97 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-5.36	-3.97	Complies
46	5230 MHz	-5.48	-3.97	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 13.97 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.97 - 6) = -3.97 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-13.57	-3.97	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 13.97 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.97 - 6) = -3.97 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-1.04	-0.96	Complies
40	5200 MHz	-1.03	-0.96	Complies
48	5240 MHz	-1.09	-0.96	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 10.96 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (10.96 - 6) = -0.96 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-4.22	-0.96	Complies
46	5230 MHz	-4.01	-0.96	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 10.96 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (10.96 - 6) = -0.96 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-10.76	-0.96	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 10.96 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (10.96 - 6) = -0.96 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-0.18	0.80	Complies
40	5200 MHz	-0.08	0.80	Complies
48	5240 MHz	-0.13	0.80	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.2 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.2 - 6) = 0.8 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-4.40	0.80	Complies
46	5230 MHz	-4.18	0.80	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.2 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.2 - 6) = 0.8 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-11.40	0.80	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 9.2 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (9.2 - 6) = 0.8 \text{ dBm/MHz}$

Temperature	25°C	Humidity	56%
Test Engineer	Serway Li	Configurations	IEEE 802.11ac
Test Date	Jul. 07, 2013	Test Mode	Mode 7 (Ant.10 PIFA antenna / 5.3dBi)

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.35	4.00	Complies
40	5200 MHz	2.39	4.00	Complies
48	5240 MHz	2.25	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=5.3dBi <6dBi, So Band1 Limit =4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-0.57	4.00	Complies
46	5230 MHz	-0.61	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=5.3dBi <6dBi, So Band1 Limit =4dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.42	4.00	Complies

Note: Directional gain=G_{ANT} + 10 log (N_{ANT} / Nss)=5.3dBi <6dBi, So Band1 Limit =4dBm/MHz

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	1.40	1.69	Complies
40	5200 MHz	1.48	1.69	Complies
48	5240 MHz	1.49	1.69	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8.31 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8.31 - 6) = 1.69 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.45	1.69	Complies
46	5230 MHz	0.93	1.69	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8.31 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8.31 - 6) = 1.69 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-7.68	1.69	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 8.31 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (8.31 - 6) = 1.69 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.83	4.00	Complies
40	5200 MHz	3.59	4.00	Complies
48	5240 MHz	3.64	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.02	4.00	Complies
46	5230 MHz	0.53	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-4.95	4.00	Complies

Note: Directional gain= $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	-0.35	-0.07	Complies
40	5200 MHz	-0.53	-0.07	Complies
48	5240 MHz	-0.49	-0.07	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 10.07 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (10.07 - 6) = -0.07 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-0.45	-0.07	Complies
46	5230 MHz	-0.42	-0.07	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 10.07 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (10.07 - 6) = -0.07 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-6.46	-0.07	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 10.07 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (10.07 - 6) = -0.07 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	2.89	2.94	Complies
40	5200 MHz	2.62	2.94	Complies
48	5240 MHz	2.69	2.94	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.06 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $4 - (7.06 - 6) = 2.94 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.50	2.94	Complies
46	5230 MHz	0.71	2.94	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.06 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $-4 - (7.06 - 6) = 2.94 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-5.49	2.94	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 7.06 \text{ dBi} > 6 \text{ dBi}$, So Band1 Limit = $-4 - (7.06 - 6) = 2.94 \text{ dBm/MHz}$

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	3.10	4.00	Complies
40	5200 MHz	3.37	4.00	Complies
48	5240 MHz	3.26	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.50	4.00	Complies
46	5230 MHz	0.63	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Total Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-4.23	4.00	Complies

Note: Directional gain = $G_{ANT} + 10 \log (N_{ANT} / Nss) = 5.3 \text{ dBi} < 6 \text{ dBi}$, So Band1 Limit = 4 dBm/MHz

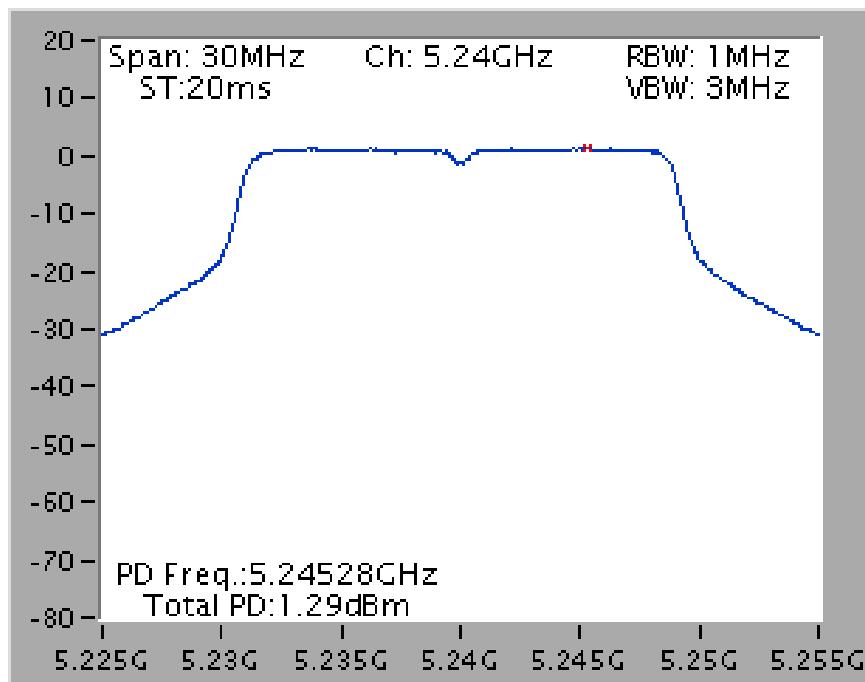
Note: All the test values were listed in the report.

For plots, only the channel with maximum results was shown.

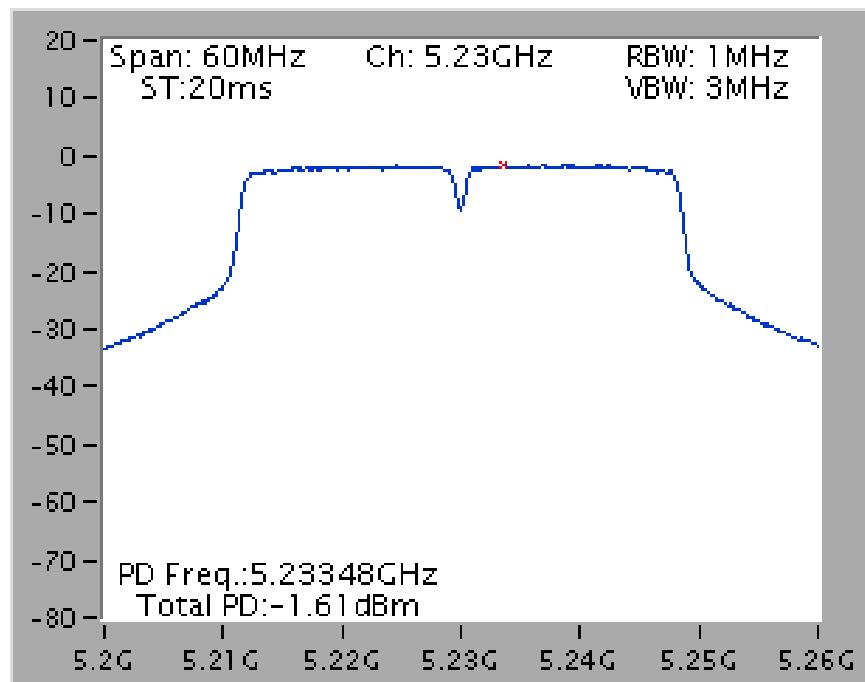
Mode 1 (Ant.1 Dipole antenna / 8dBi)

1TX

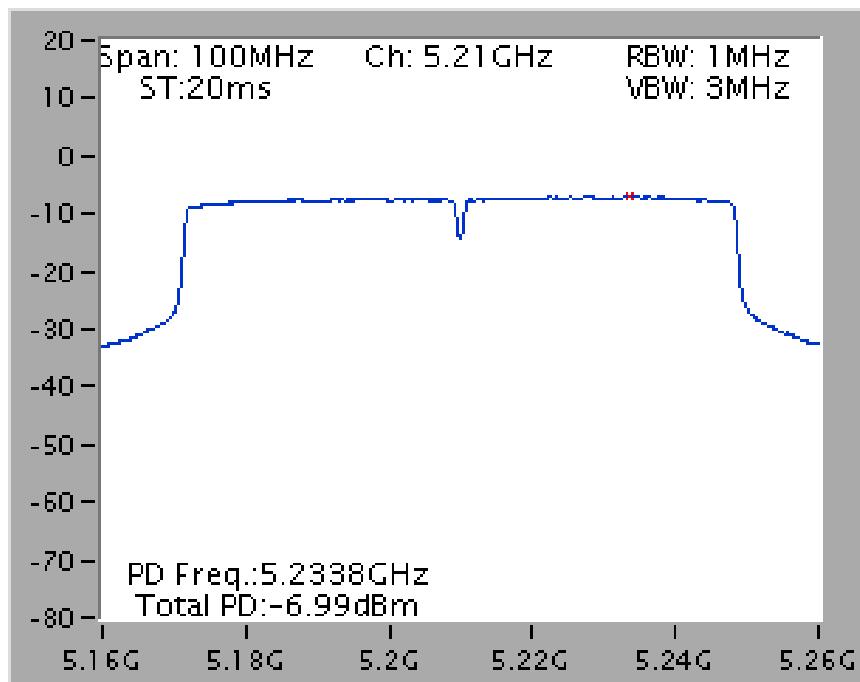
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

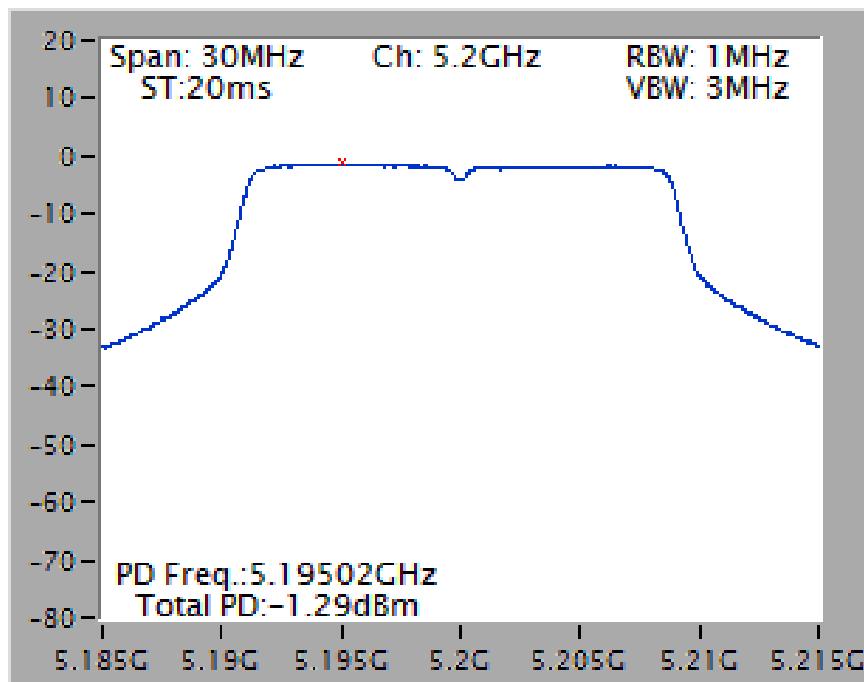


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz

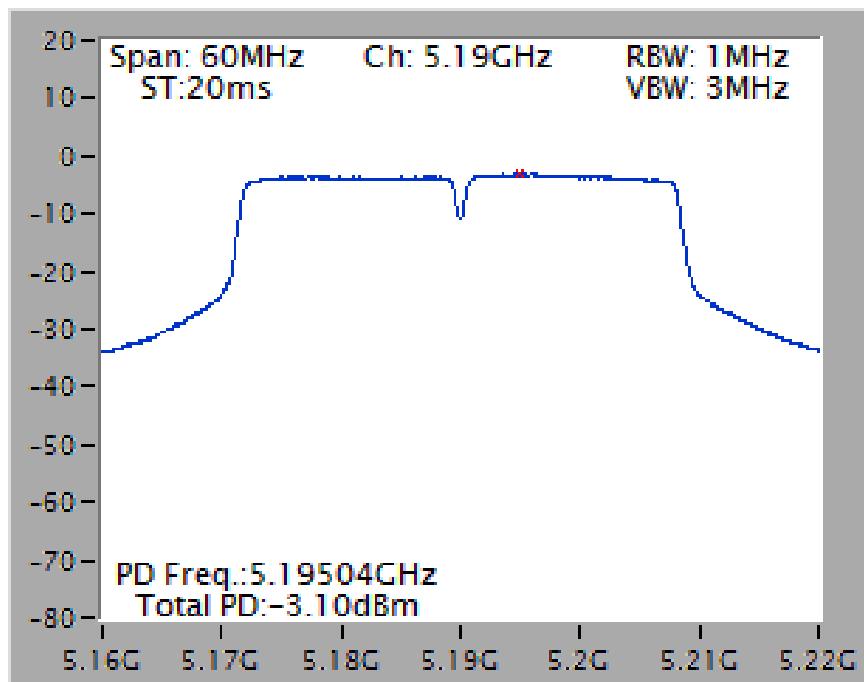


2TX

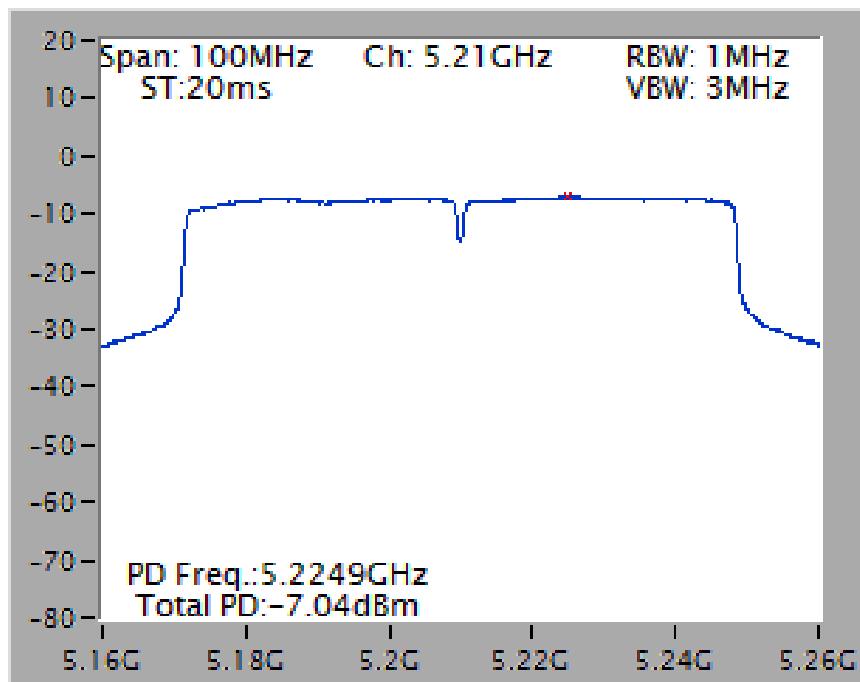
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz



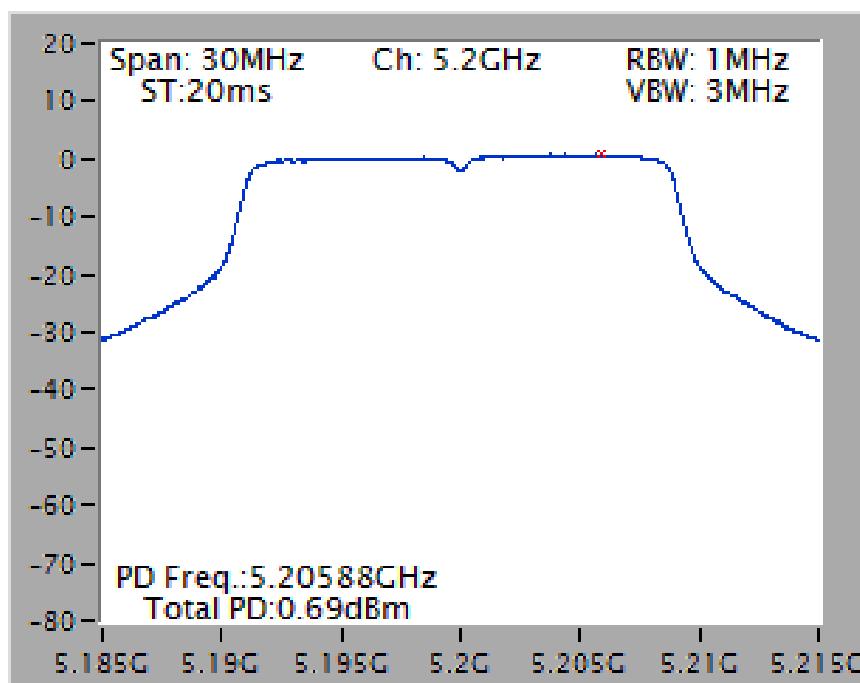
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5190 MHz



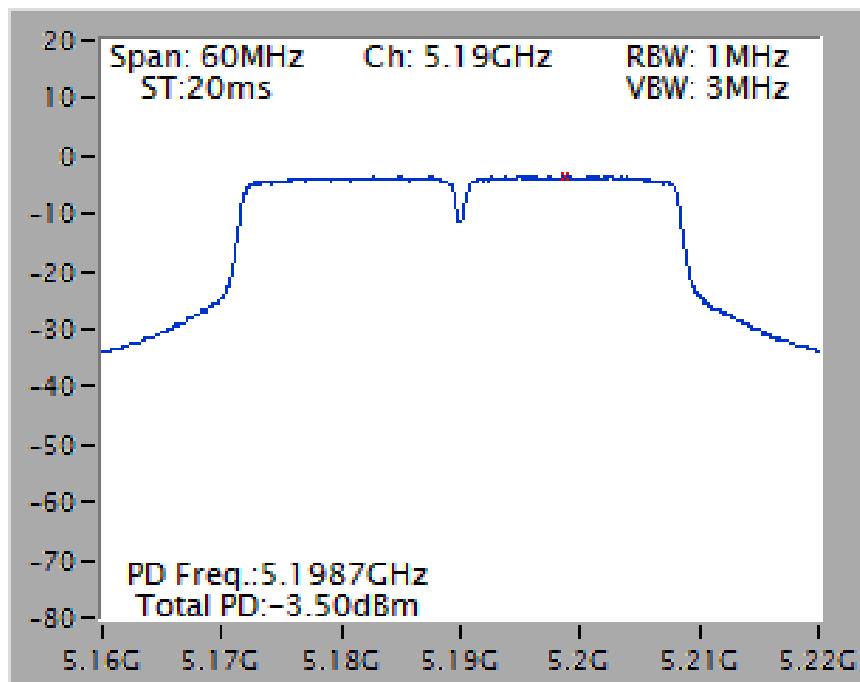
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



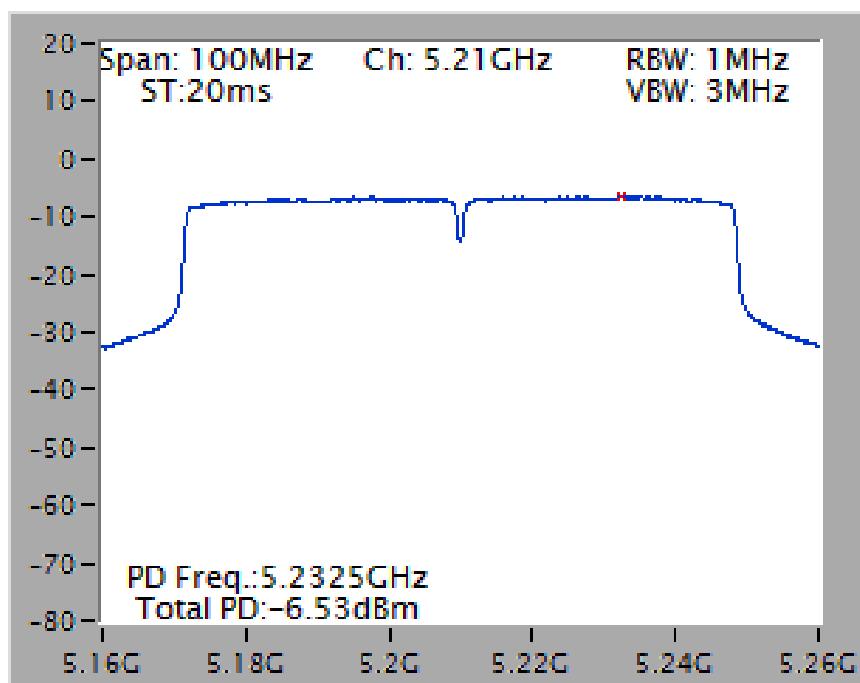
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2/ 5190 MHz



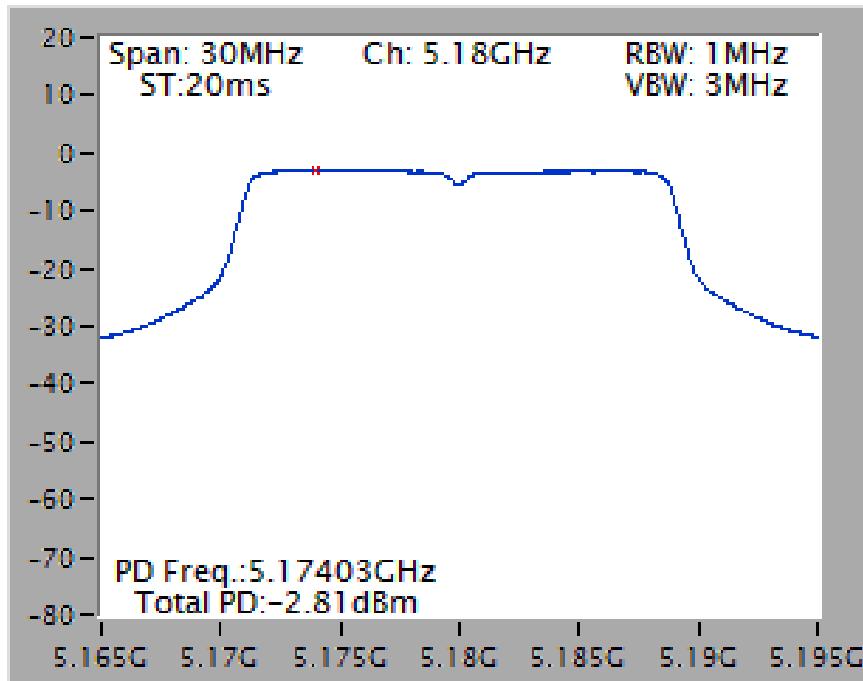
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



3TX

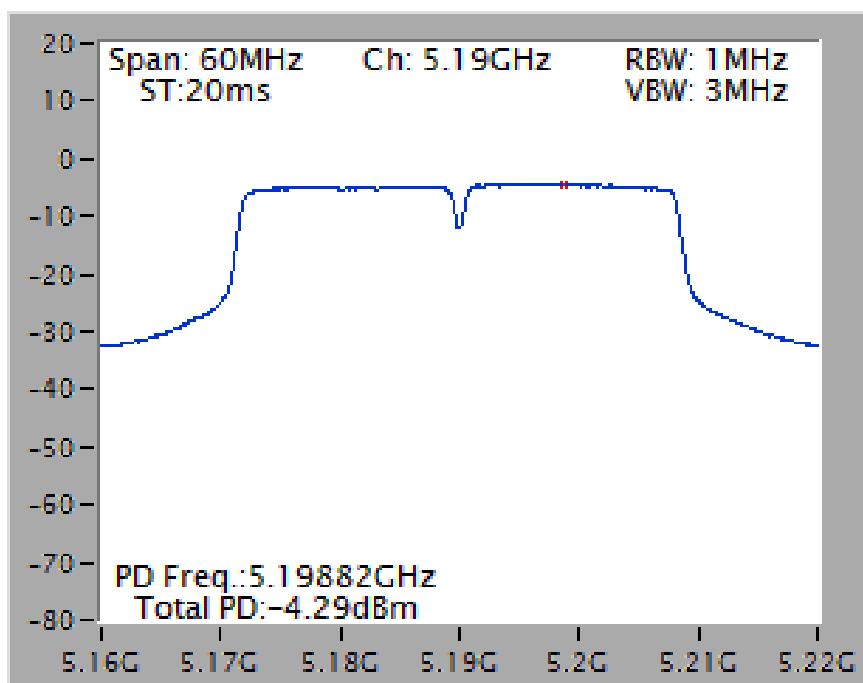
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 /

5180 MHz

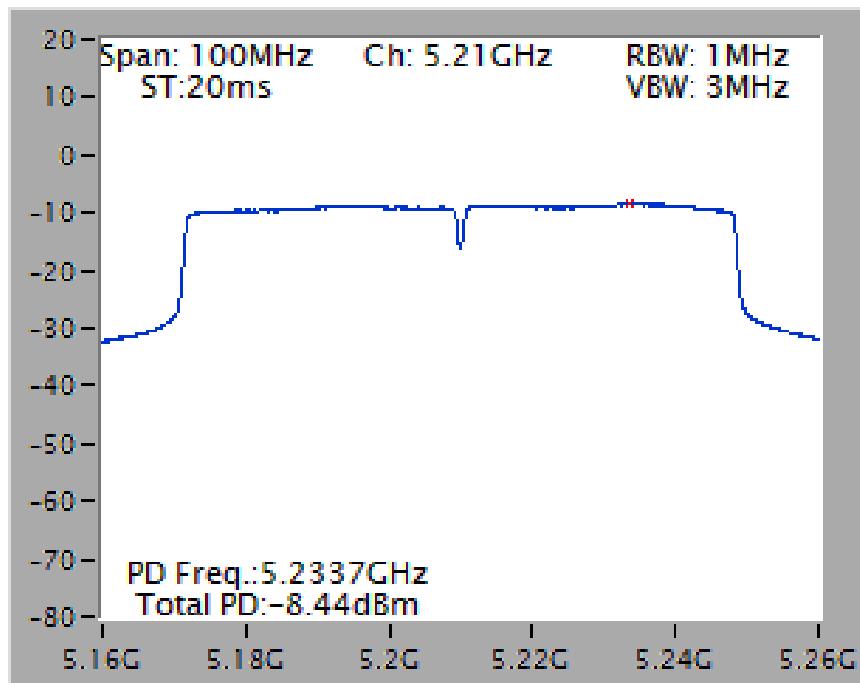


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 /

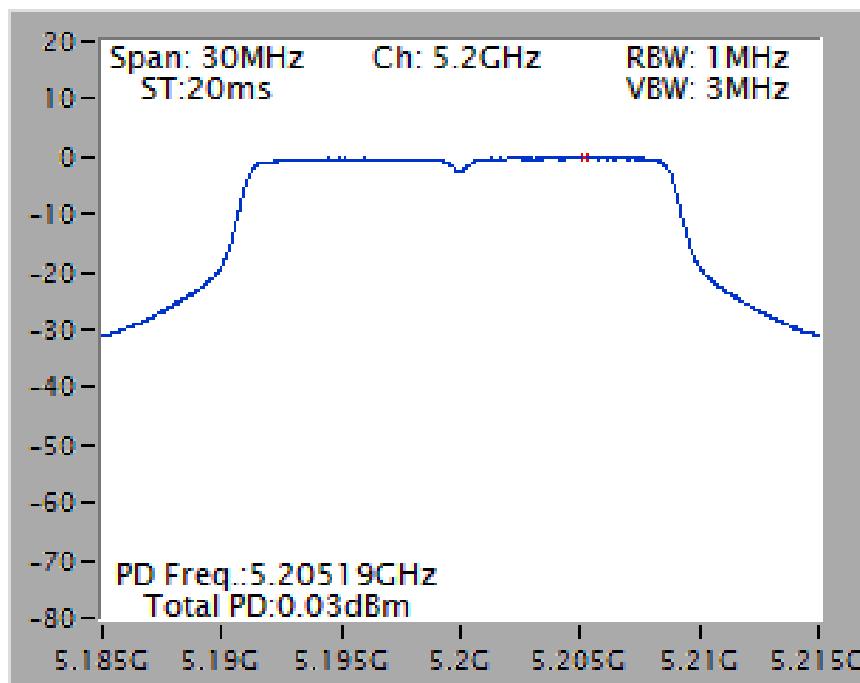
5190 MHz



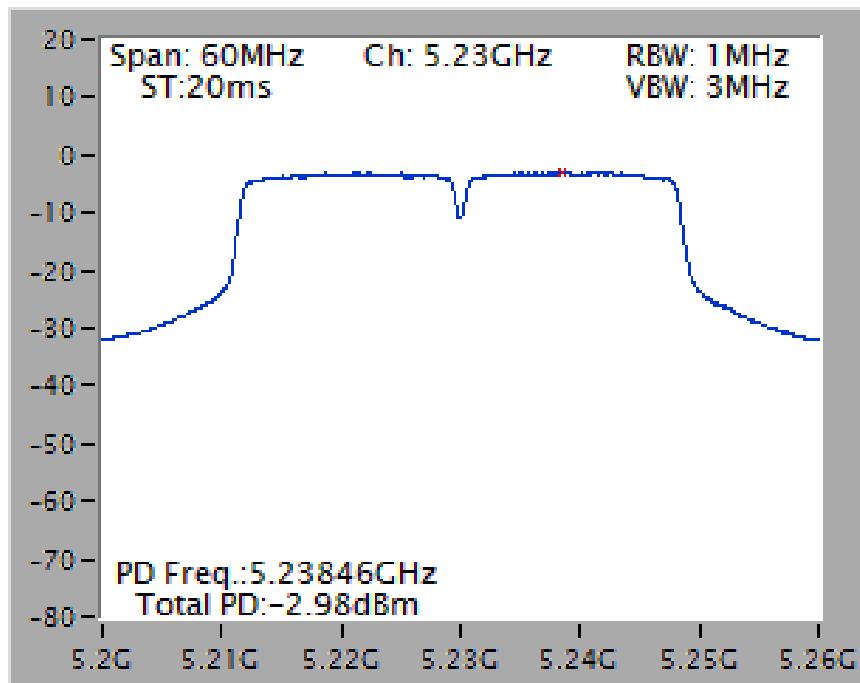
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



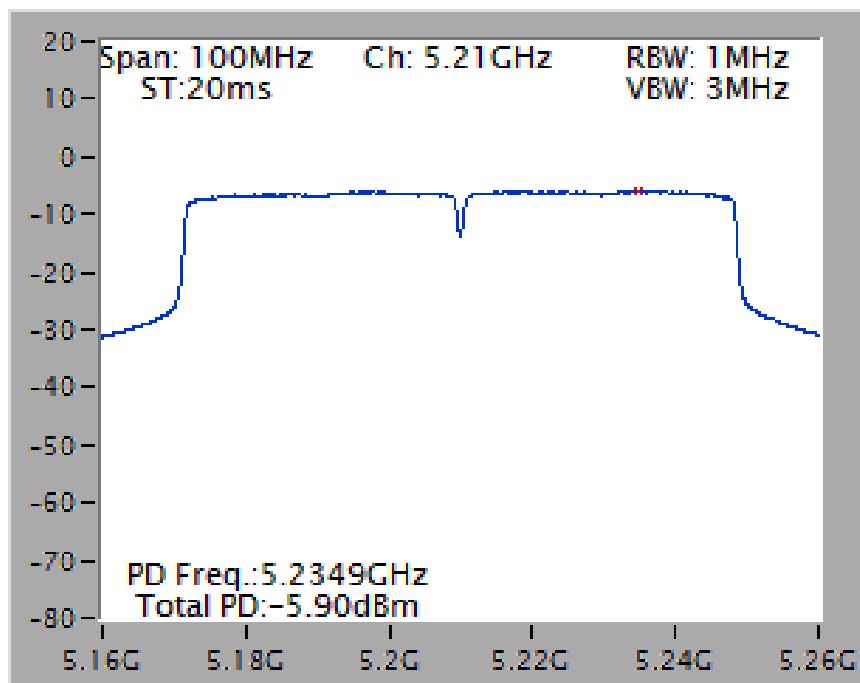
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



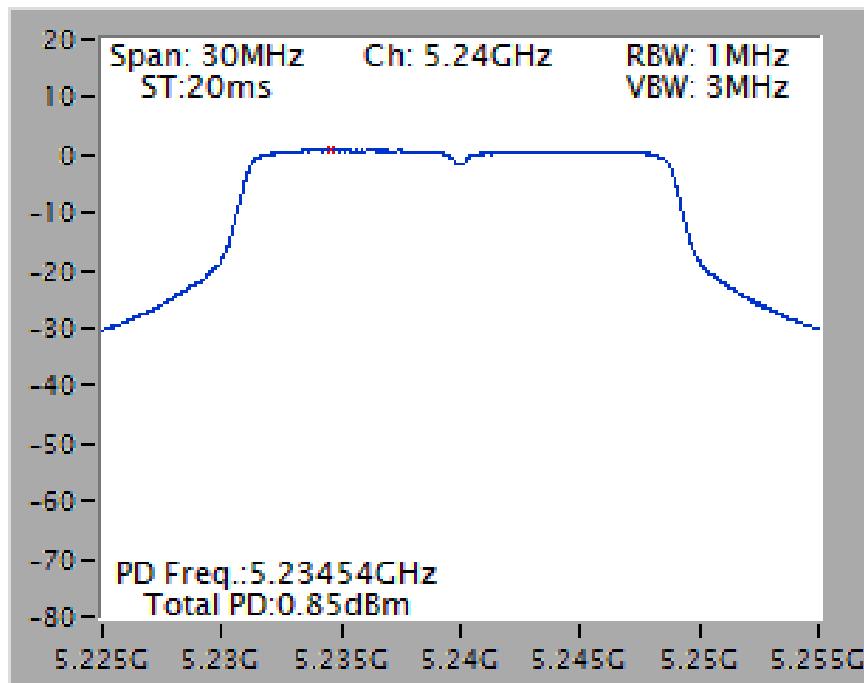
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



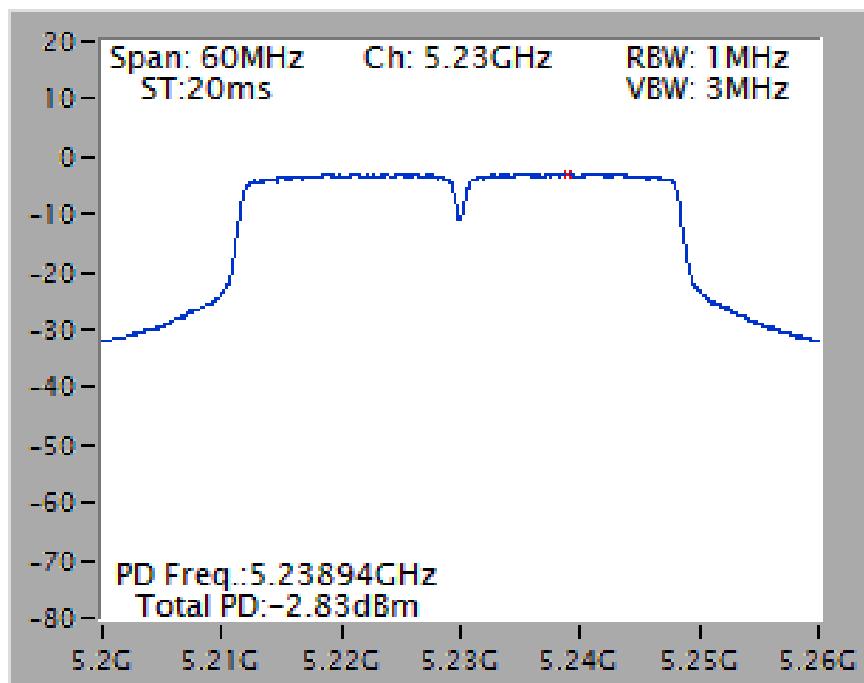
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



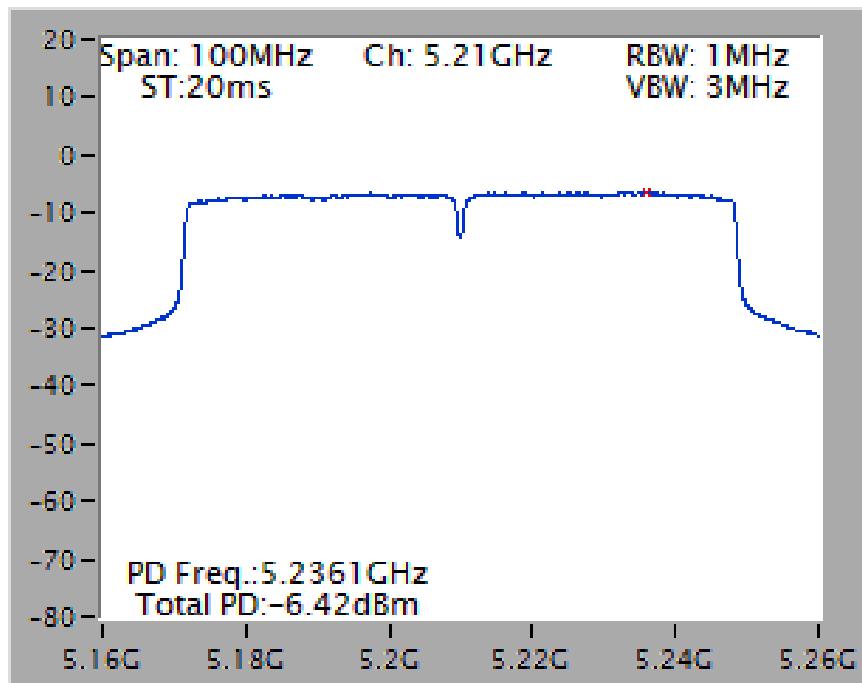
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



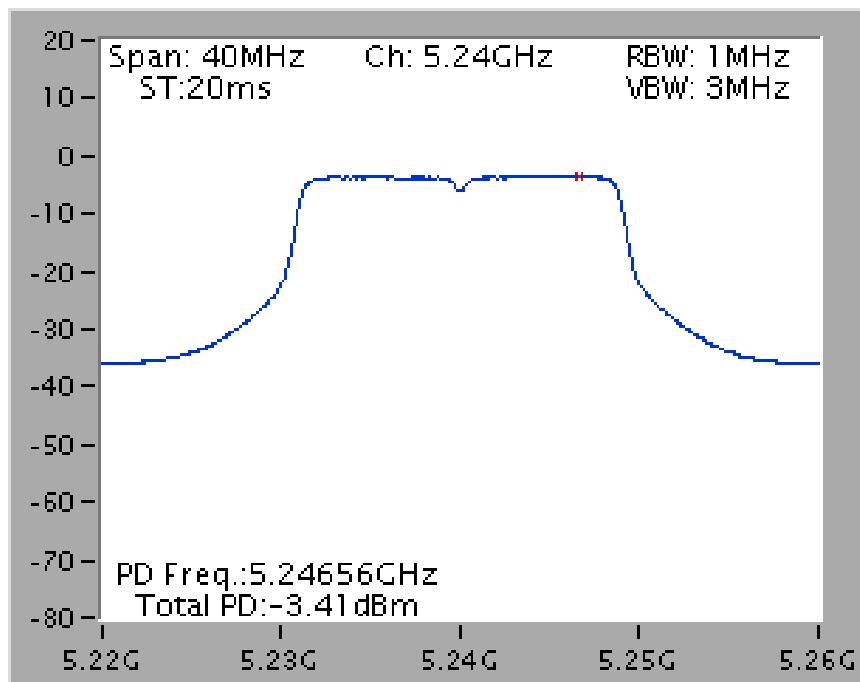
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



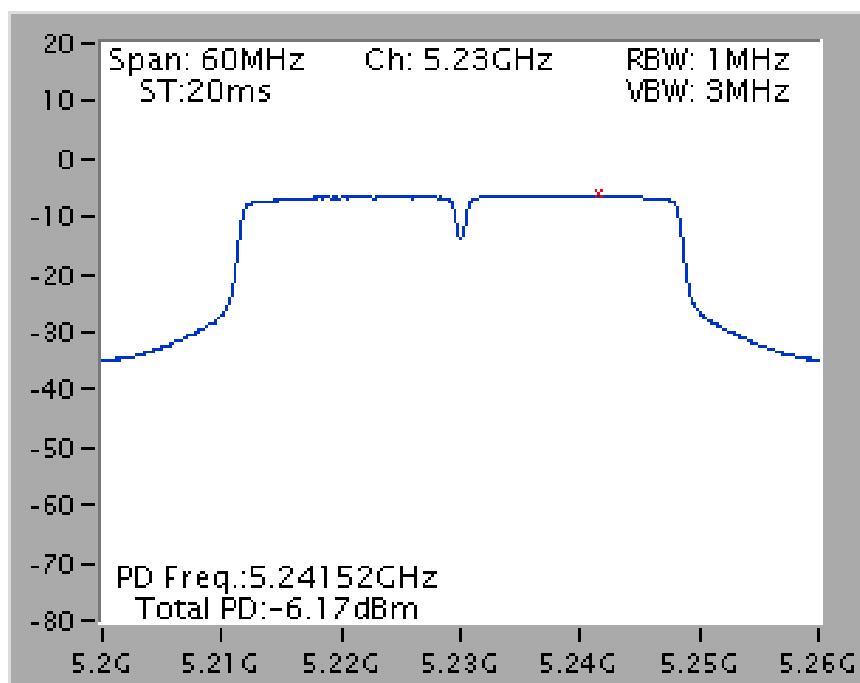
Mode 2 (Ant.3 Panel antenna / 12.5dBi)

1TX

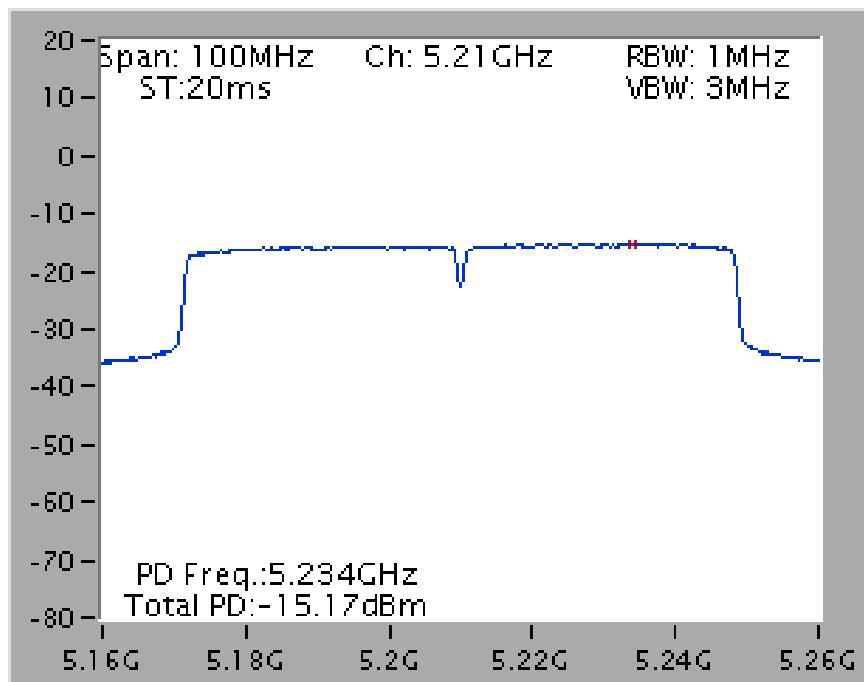
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

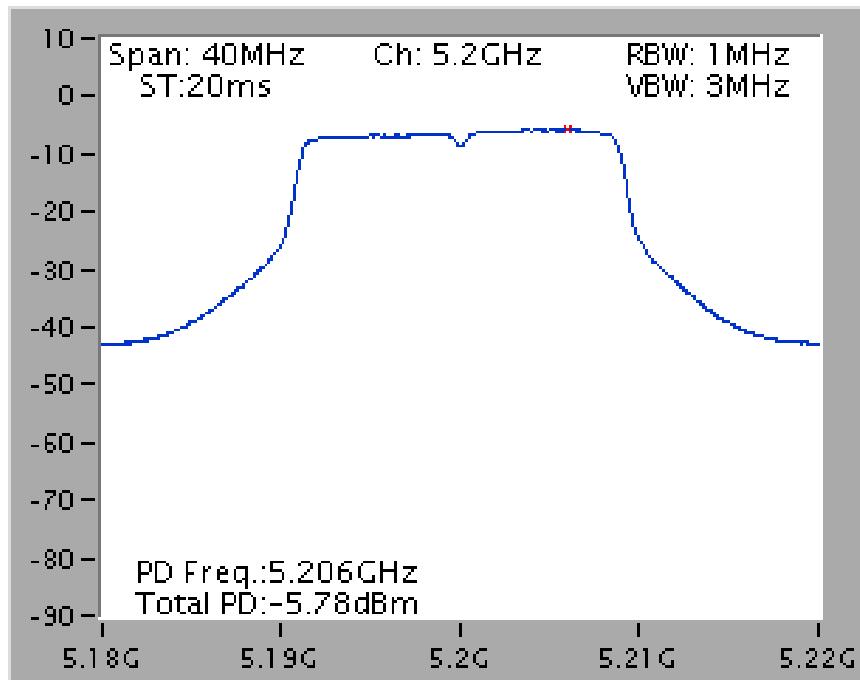


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz

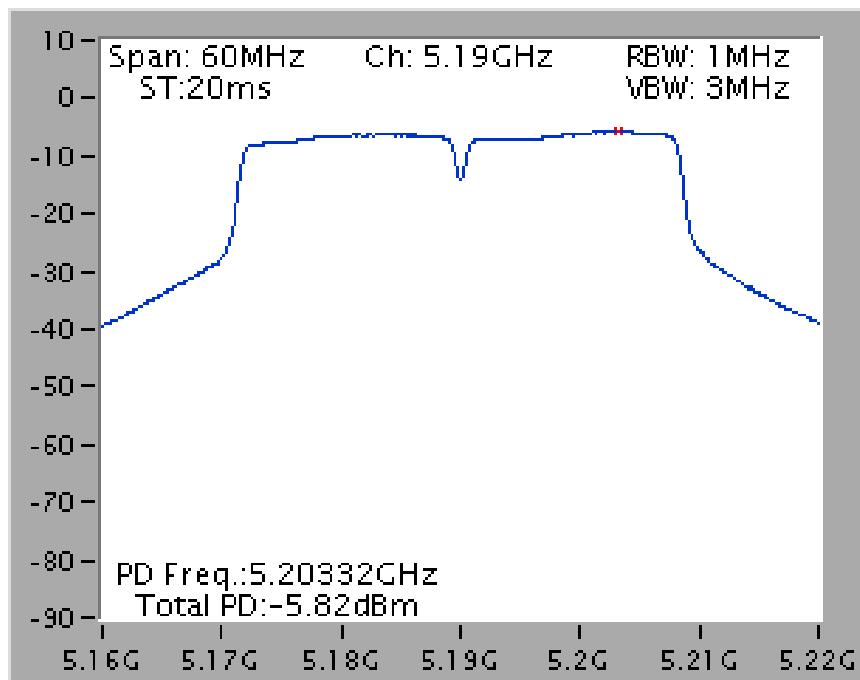


2TX

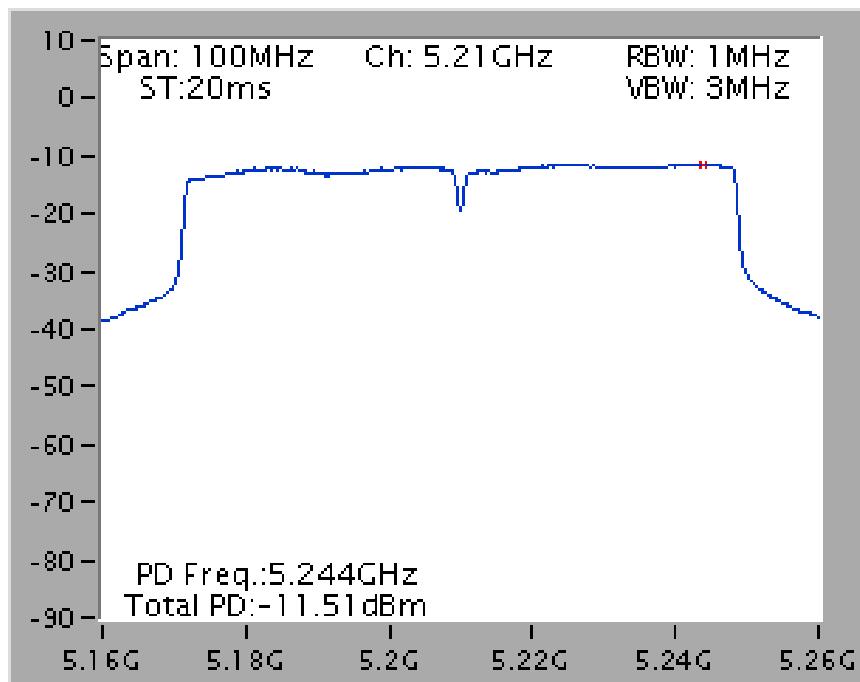
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz



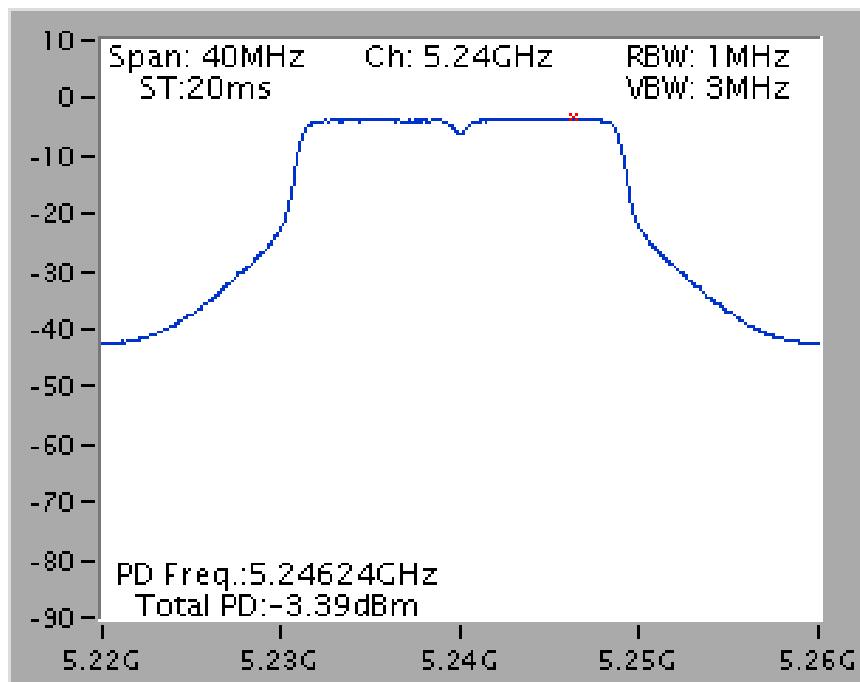
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5190 MHz



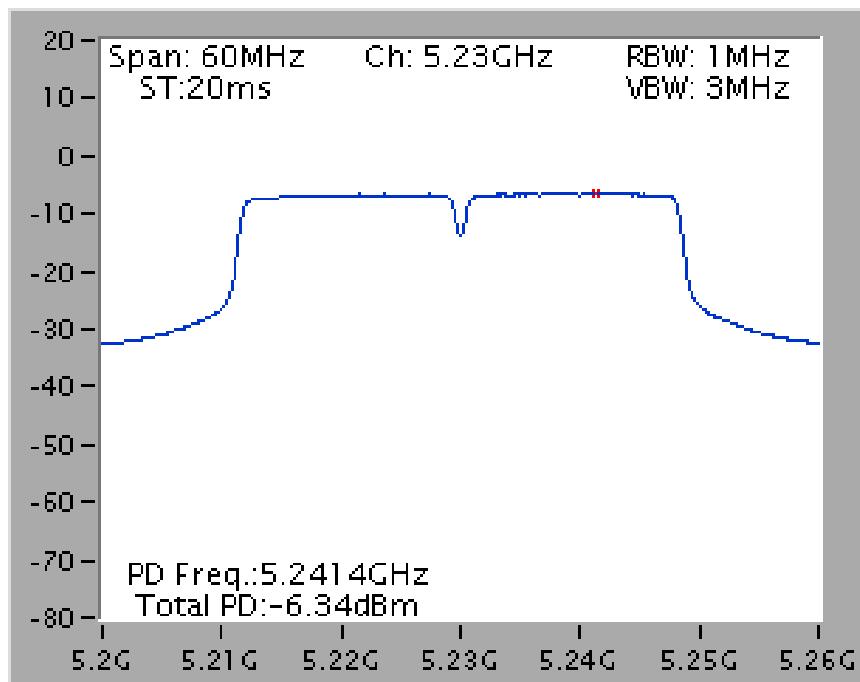
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



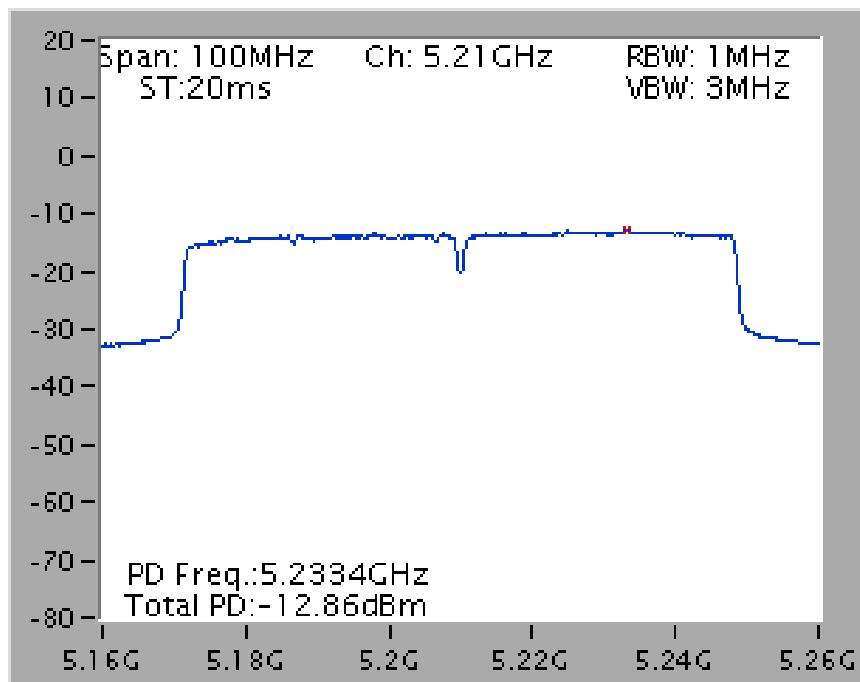
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2/ 5230 MHz



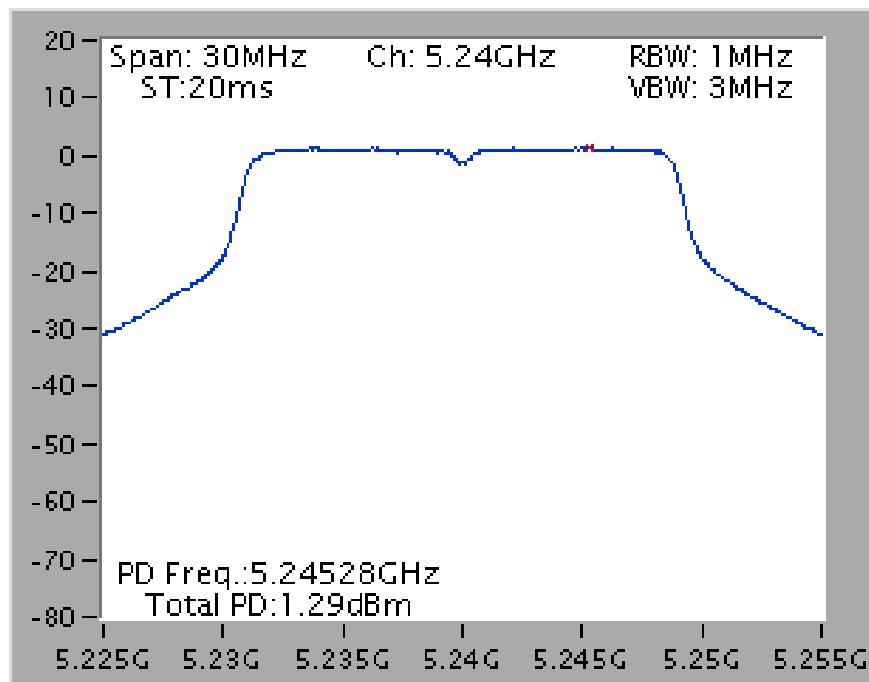
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



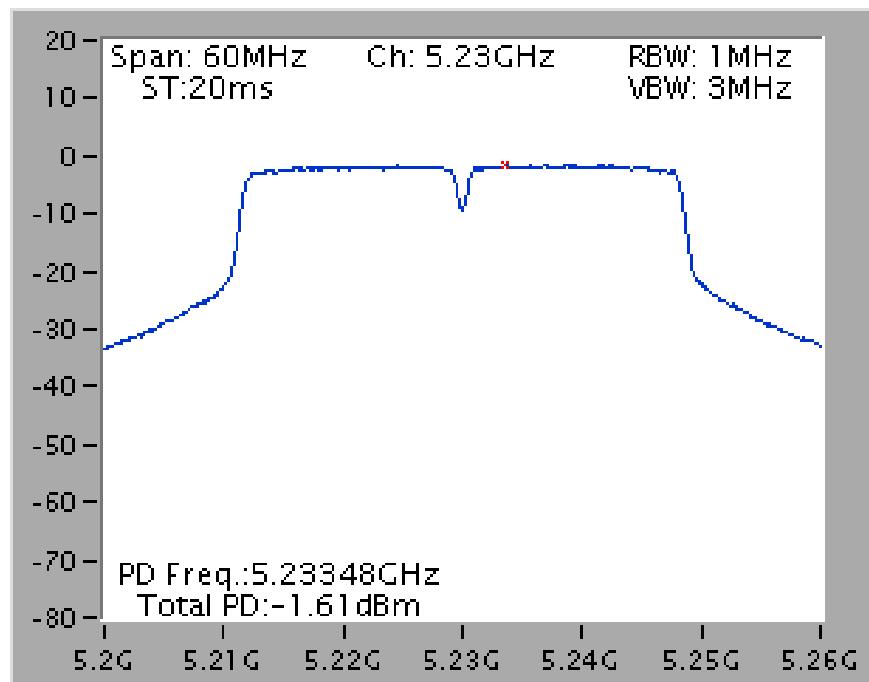
Mode 3 (Ant.4 Yagi antenna / 8dBi)

1TX

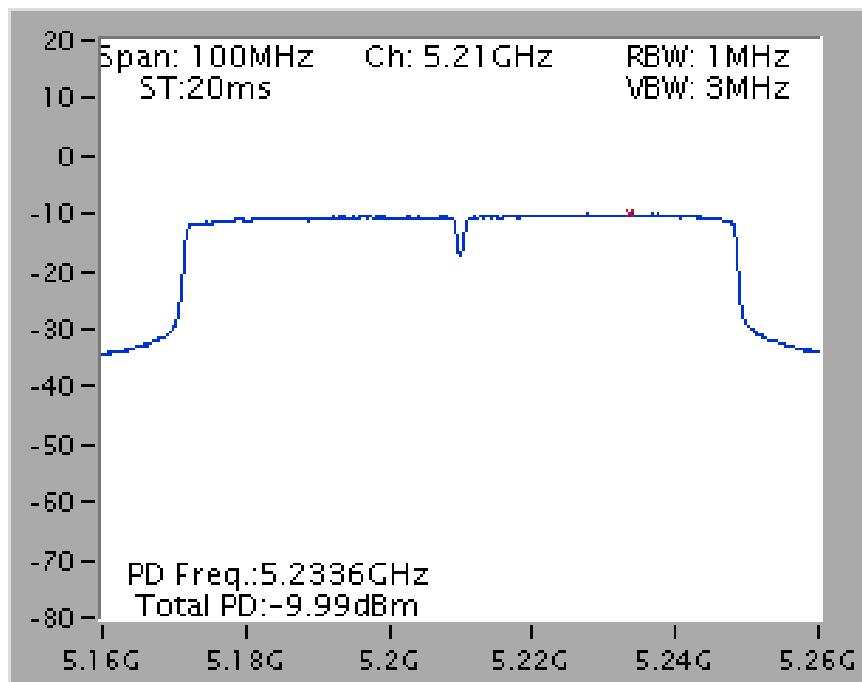
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

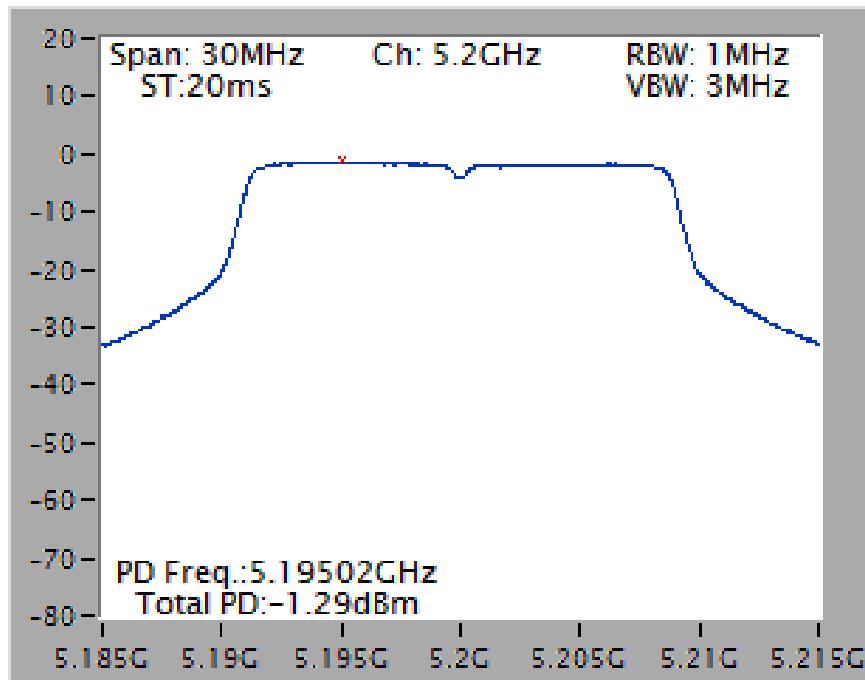


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz

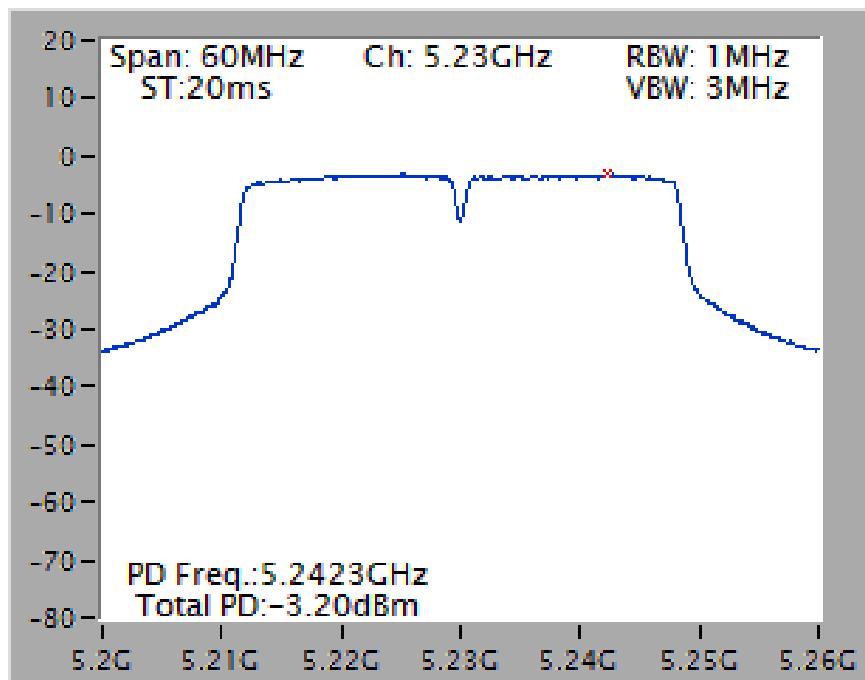


2TX

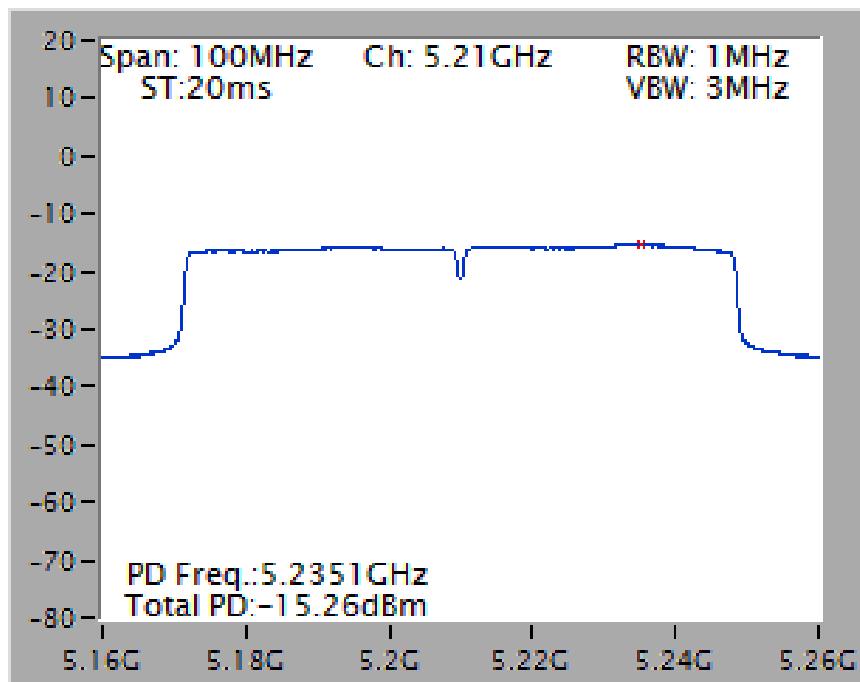
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5200 MHz



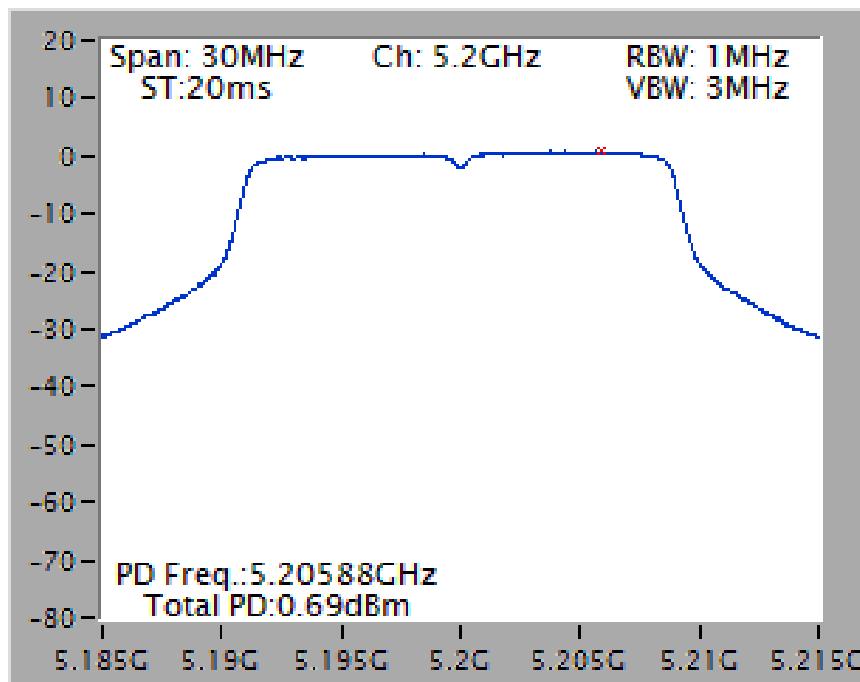
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5230 MHz



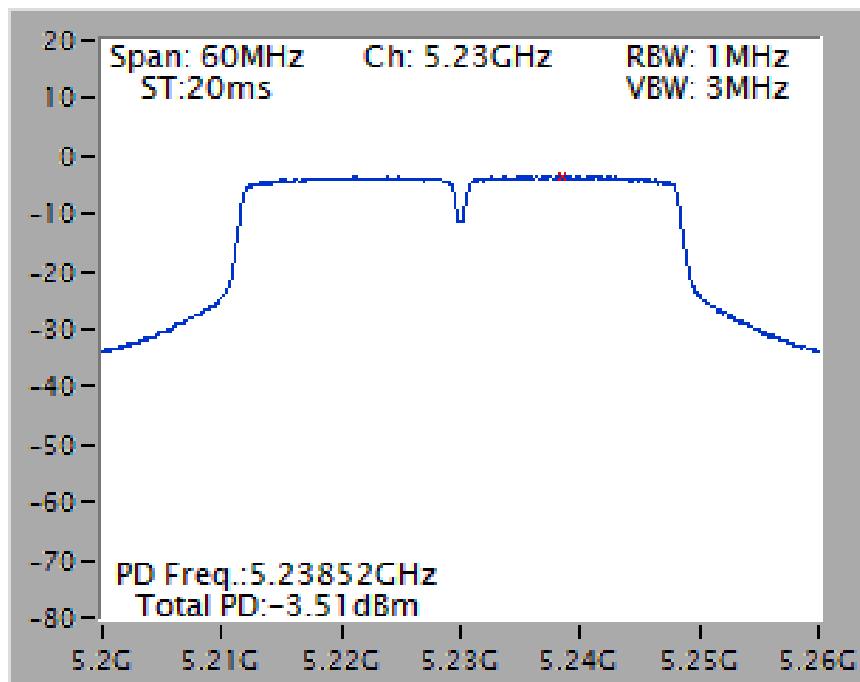
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



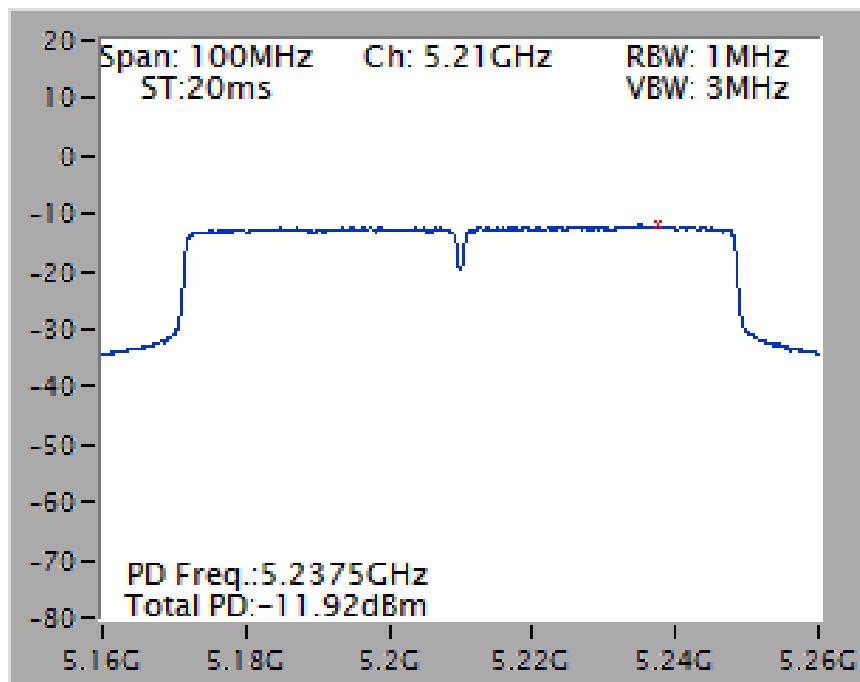
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2/ 5230 MHz



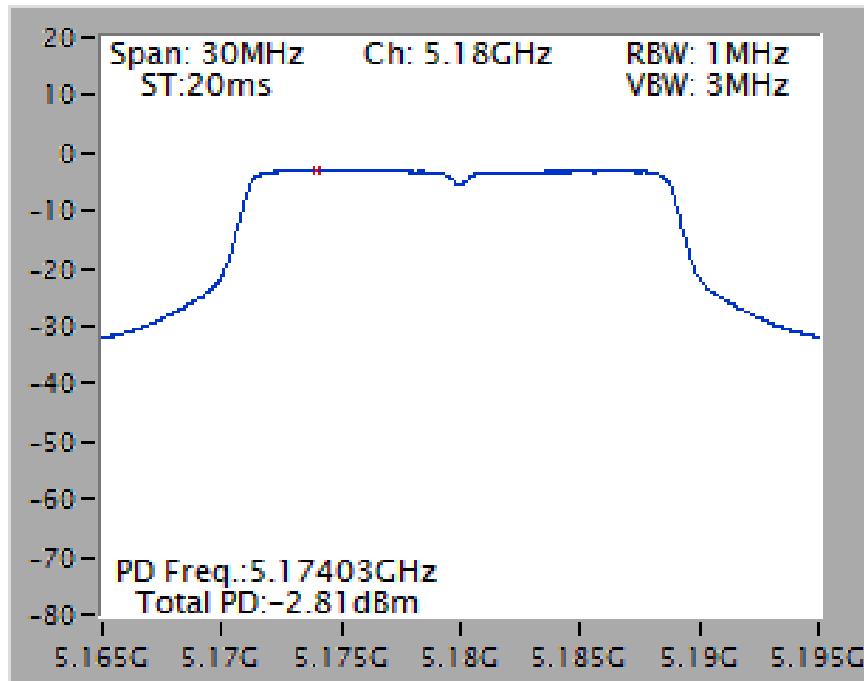
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



3TX

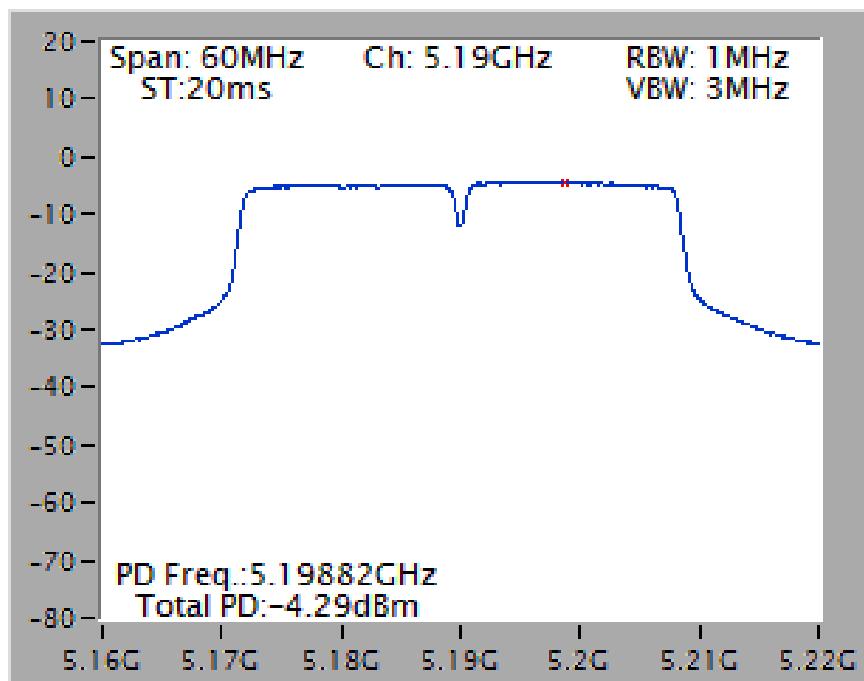
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 /

5180 MHz

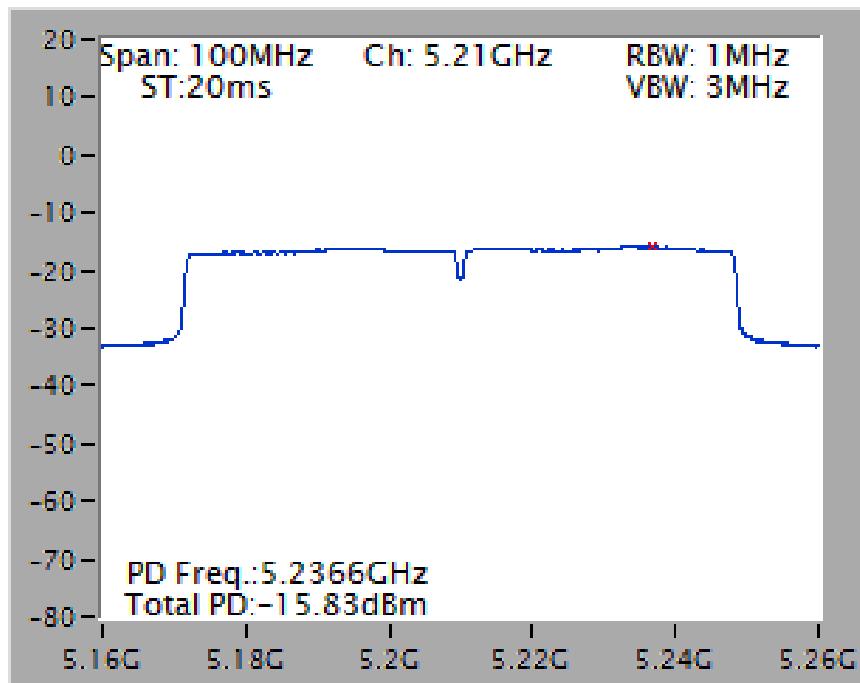


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 /

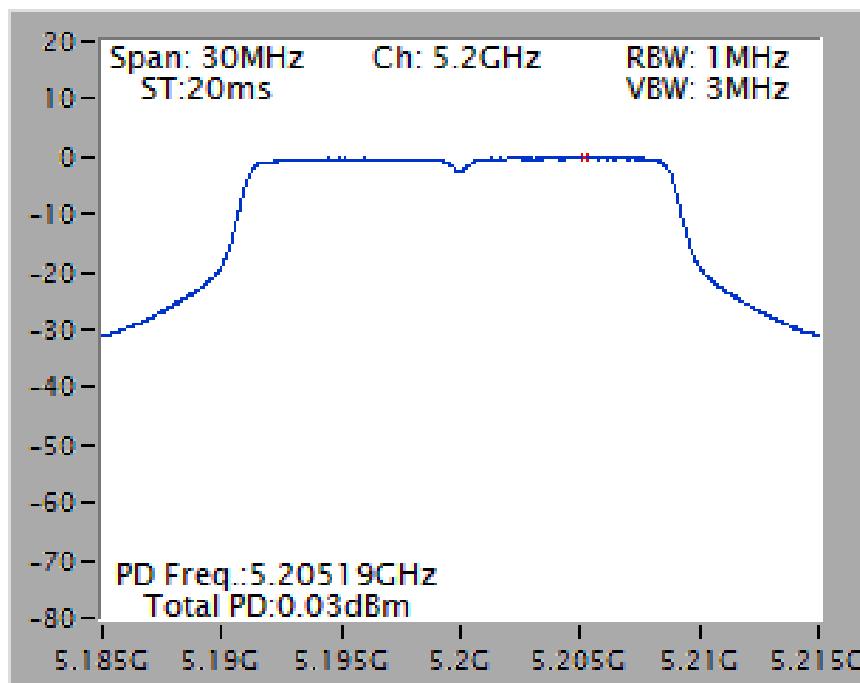
5190 MHz



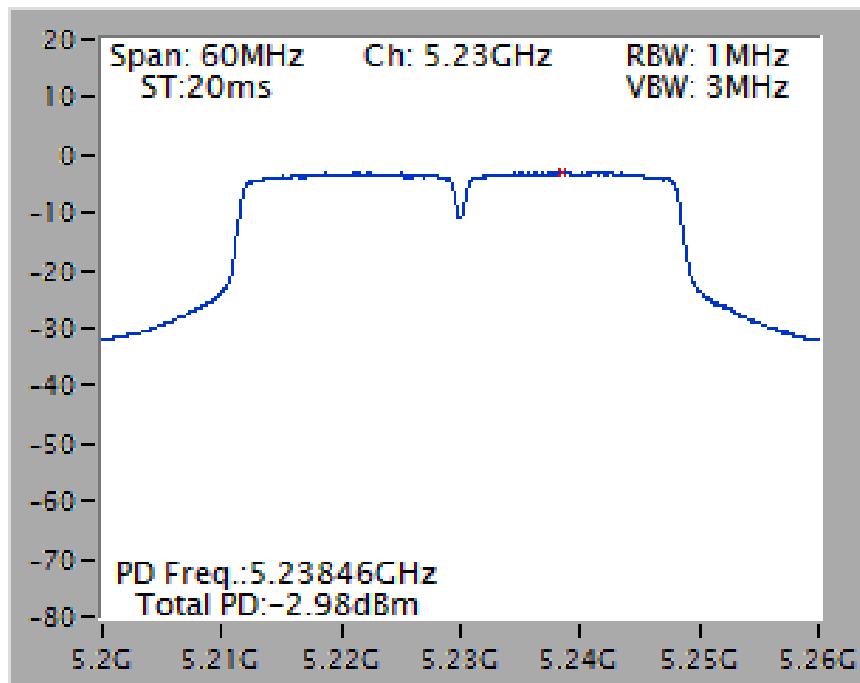
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



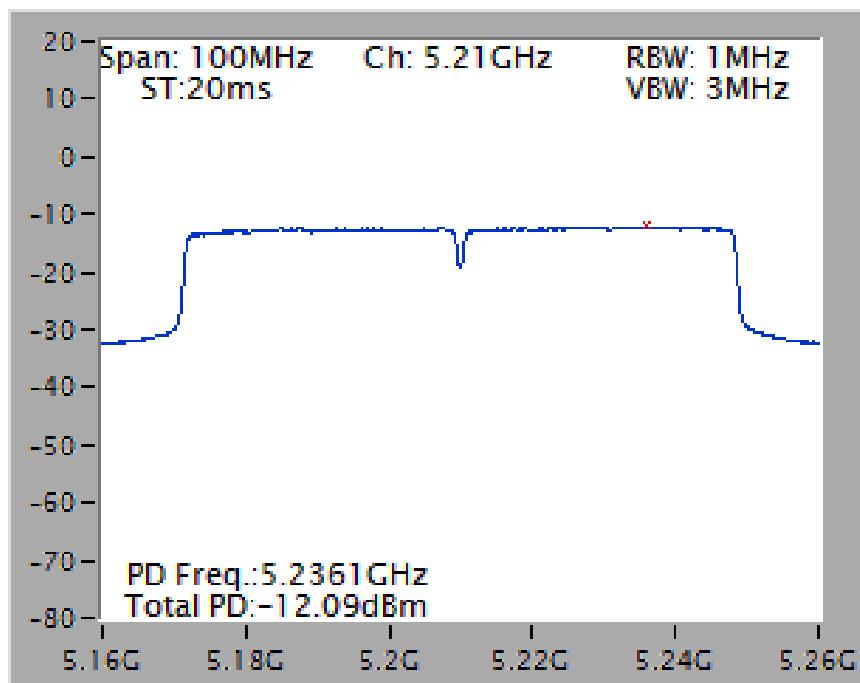
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



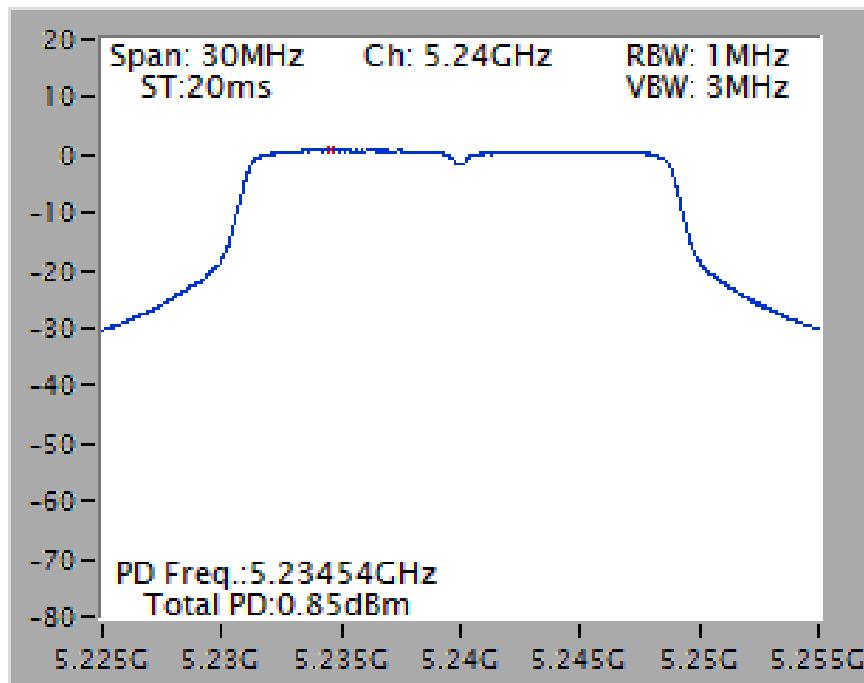
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



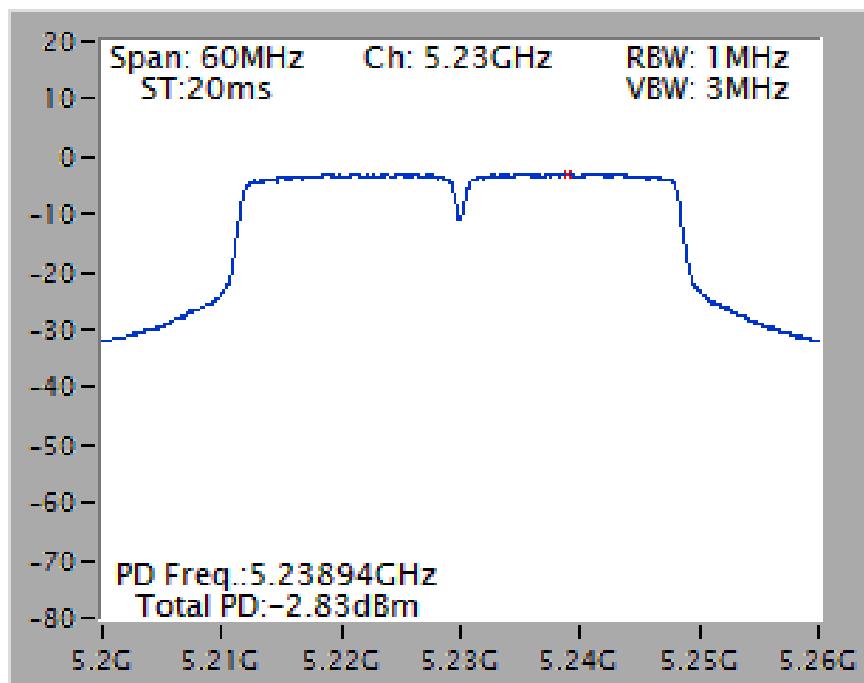
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



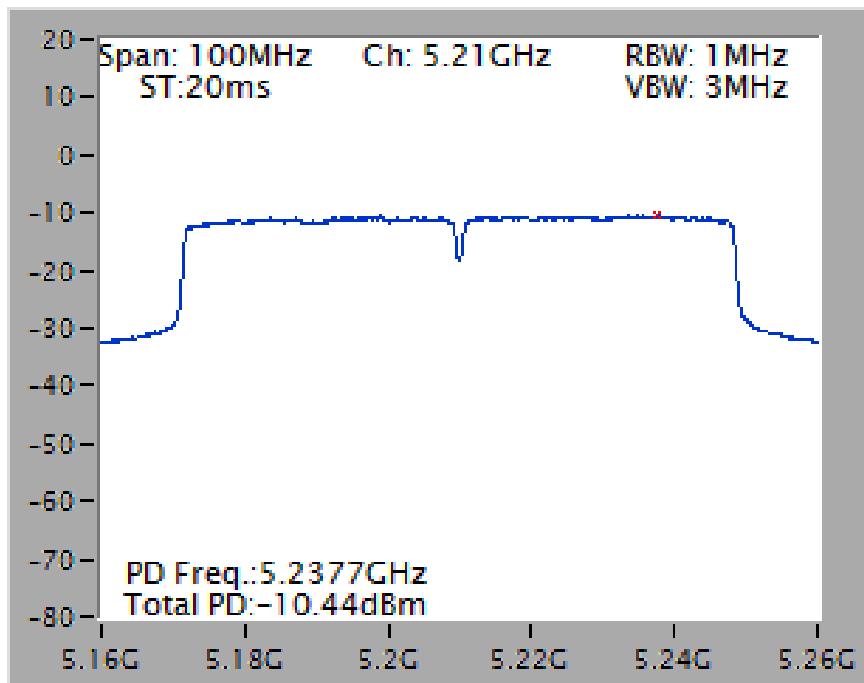
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



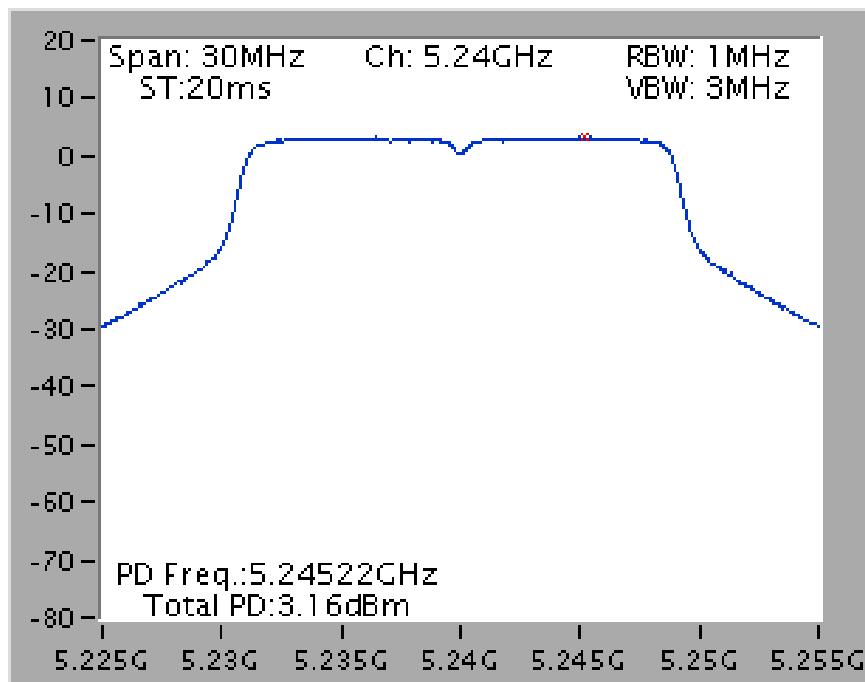
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



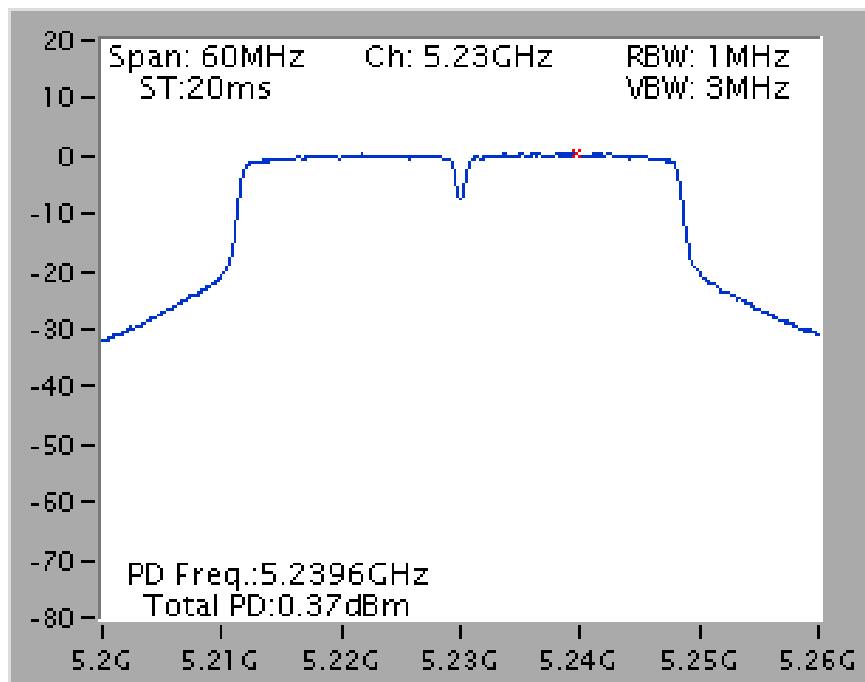
Mode 4 (Ant.5 Patch antenna / 2.3dBi)

1TX

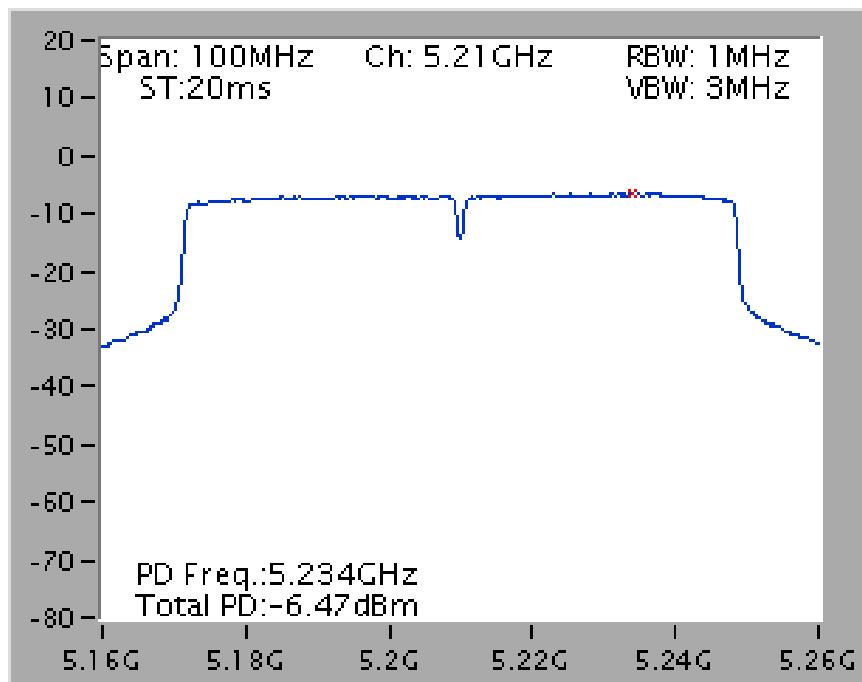
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

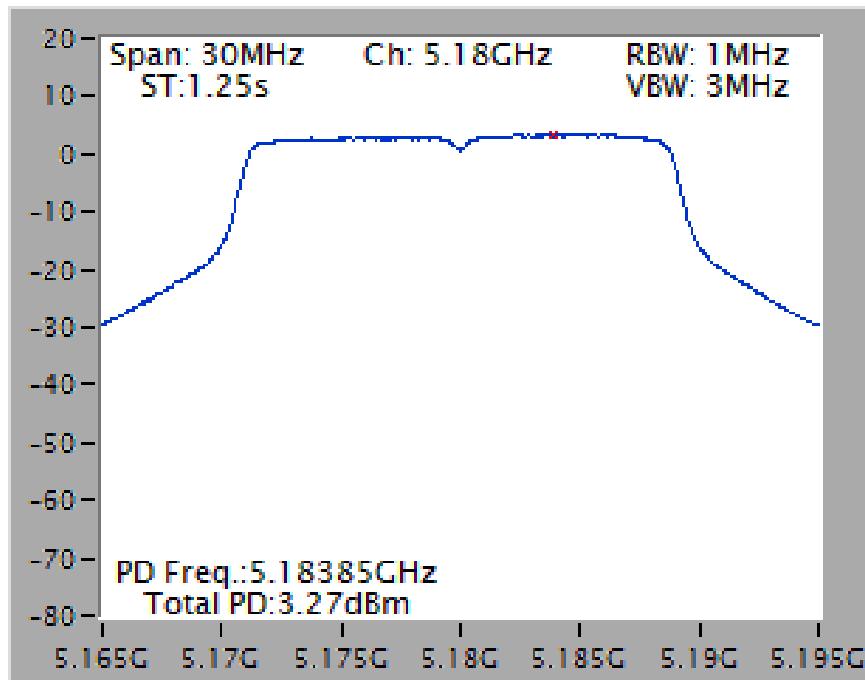


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz

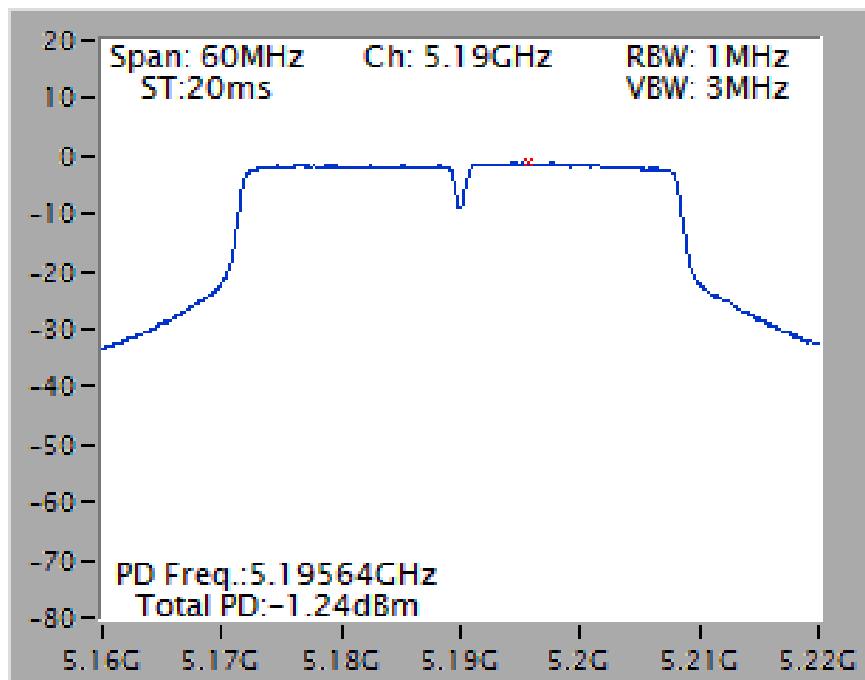


2TX

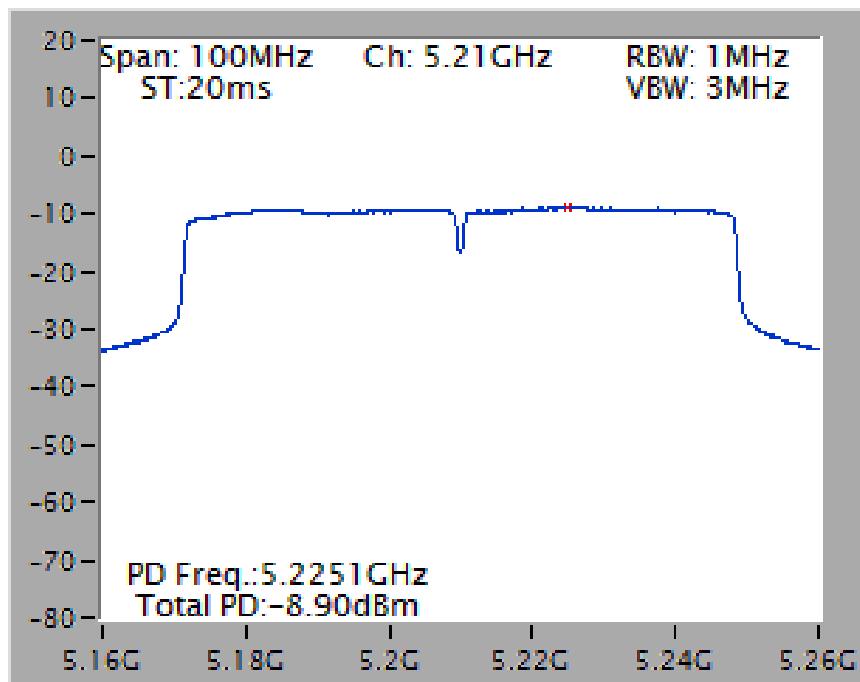
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz



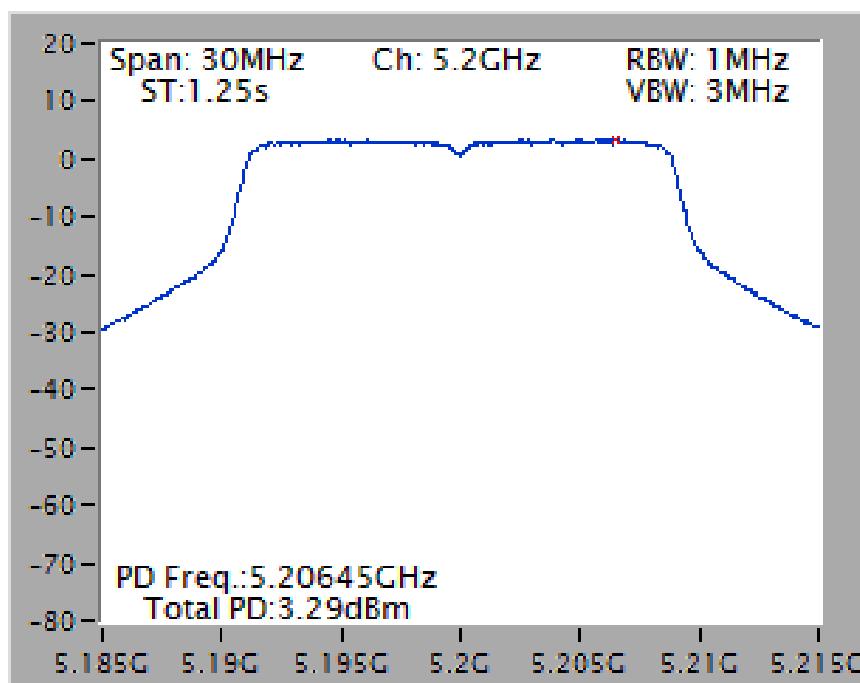
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5190 MHz



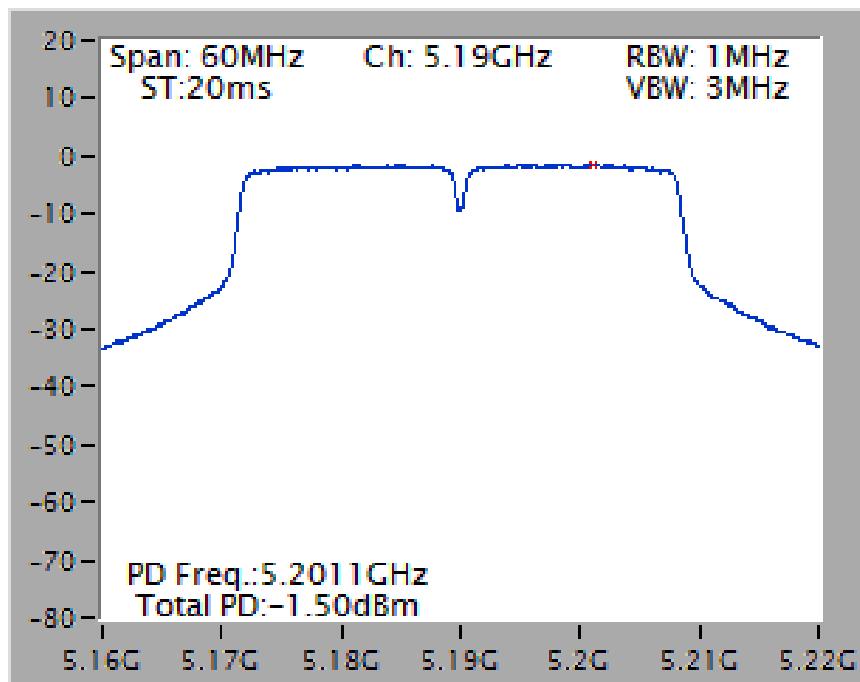
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



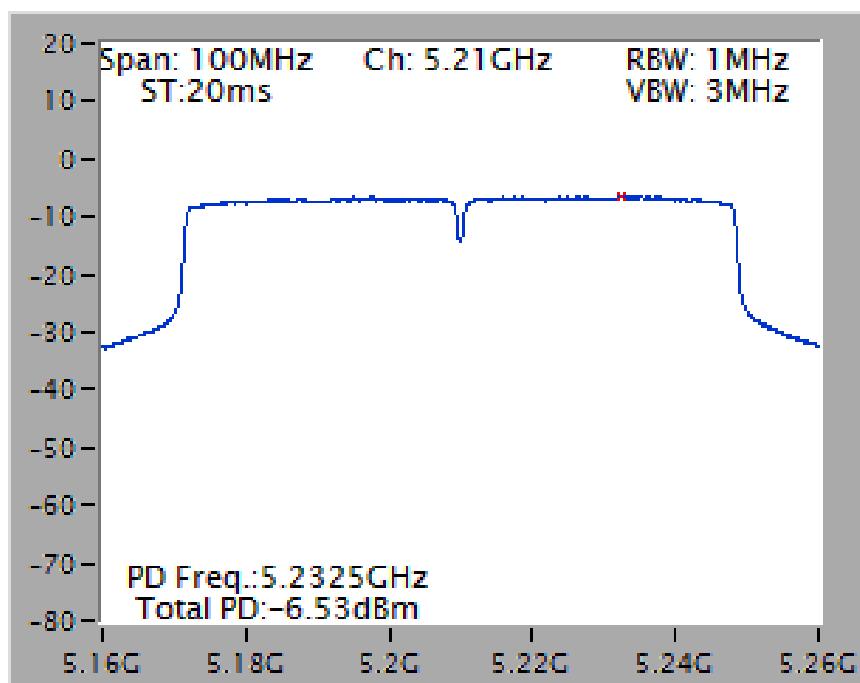
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2/ 5190 MHz



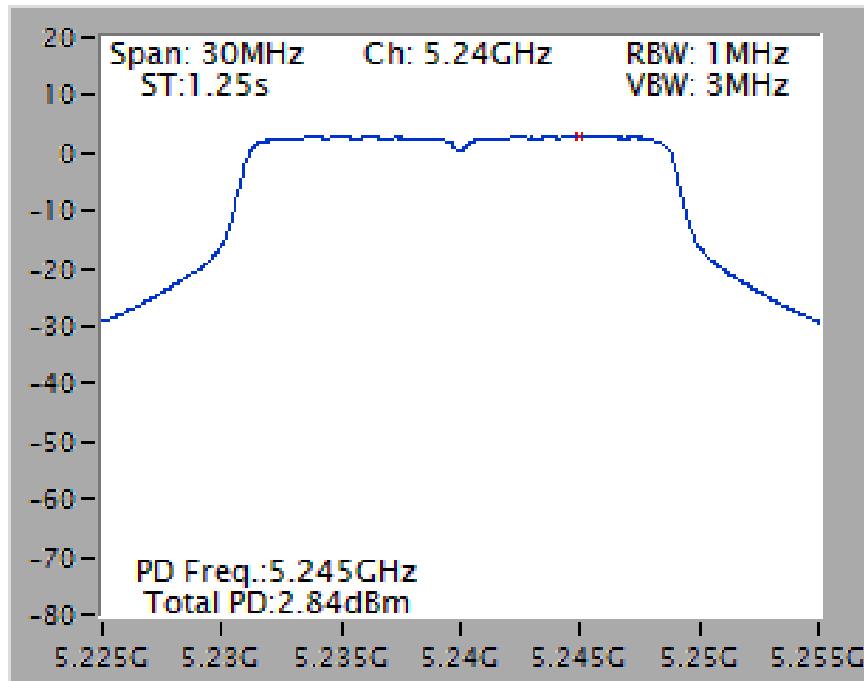
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



3TX

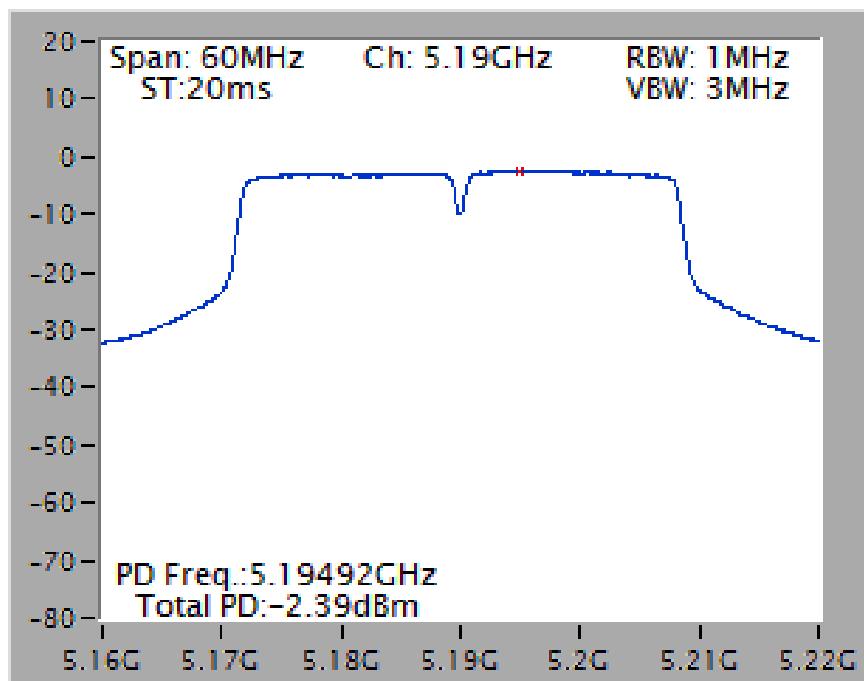
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 /

5240 MHz

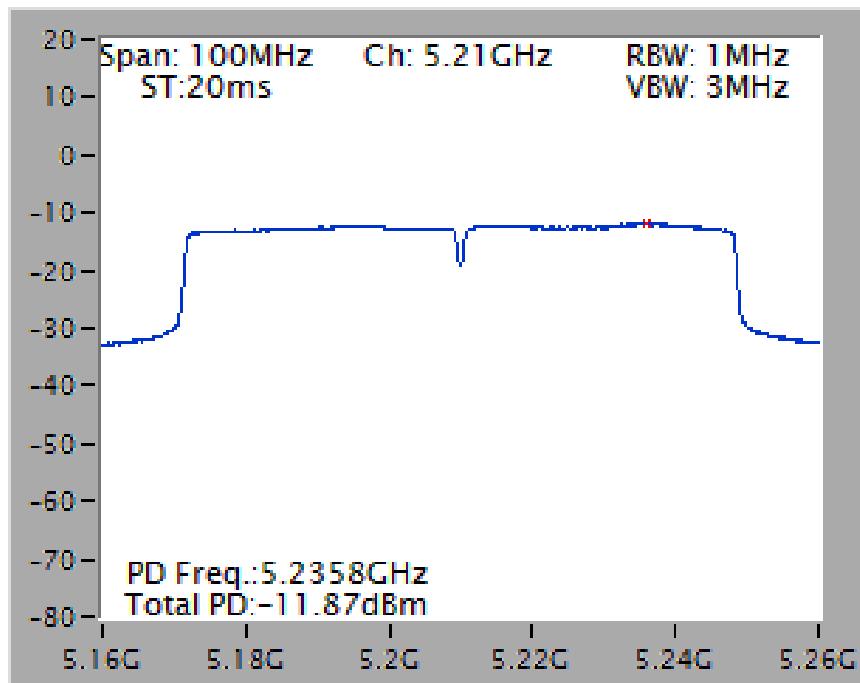


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 /

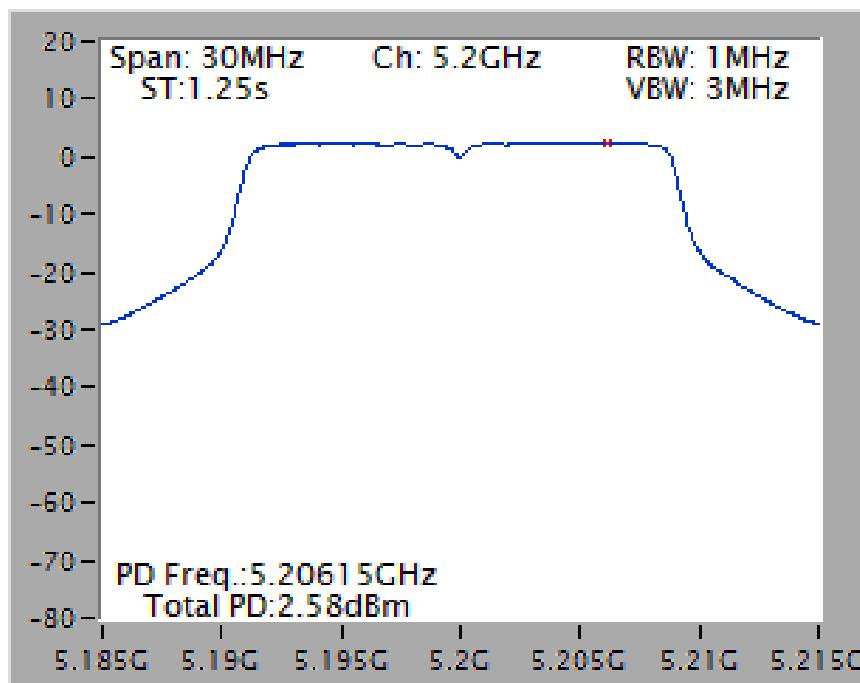
5190 MHz



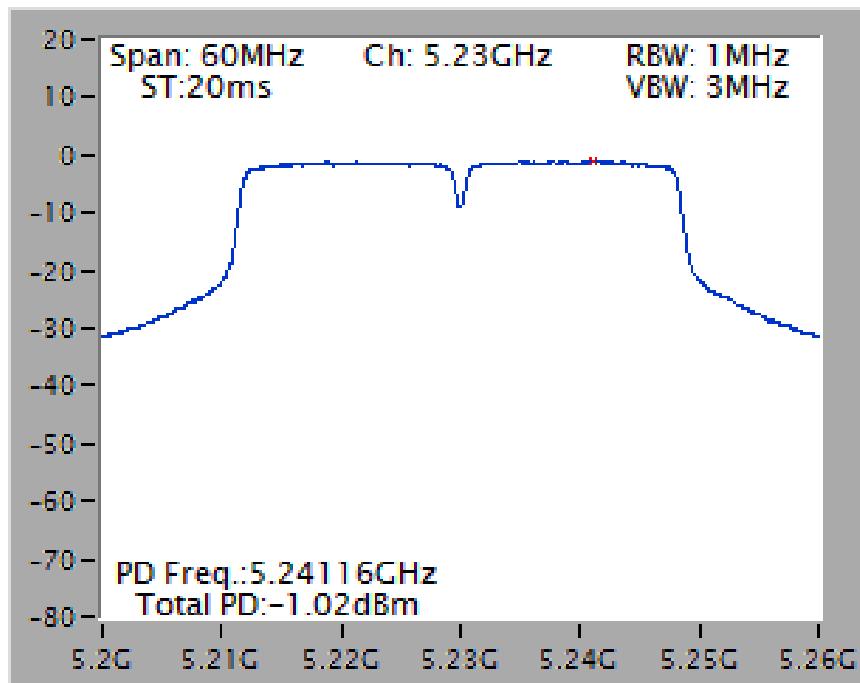
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



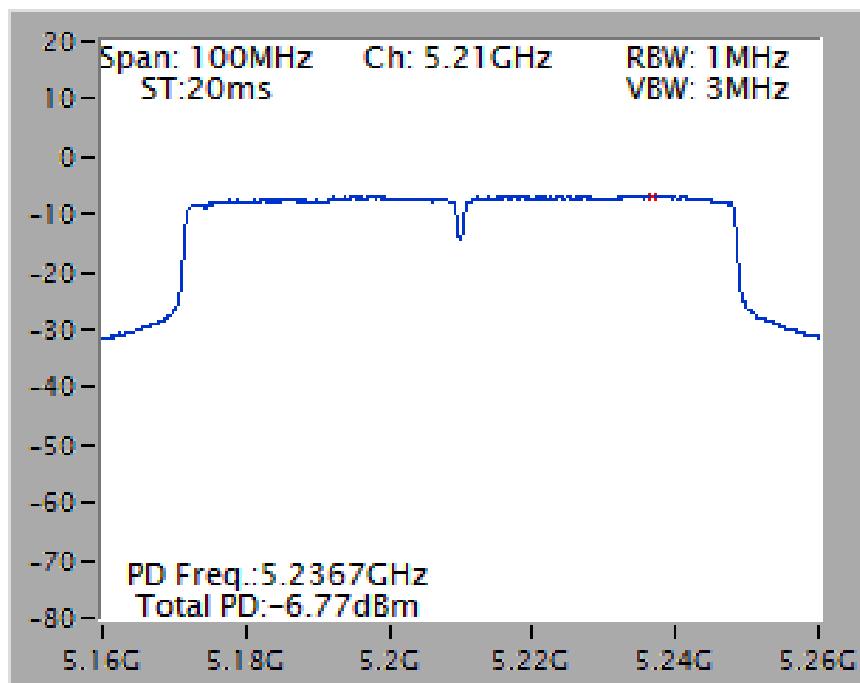
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



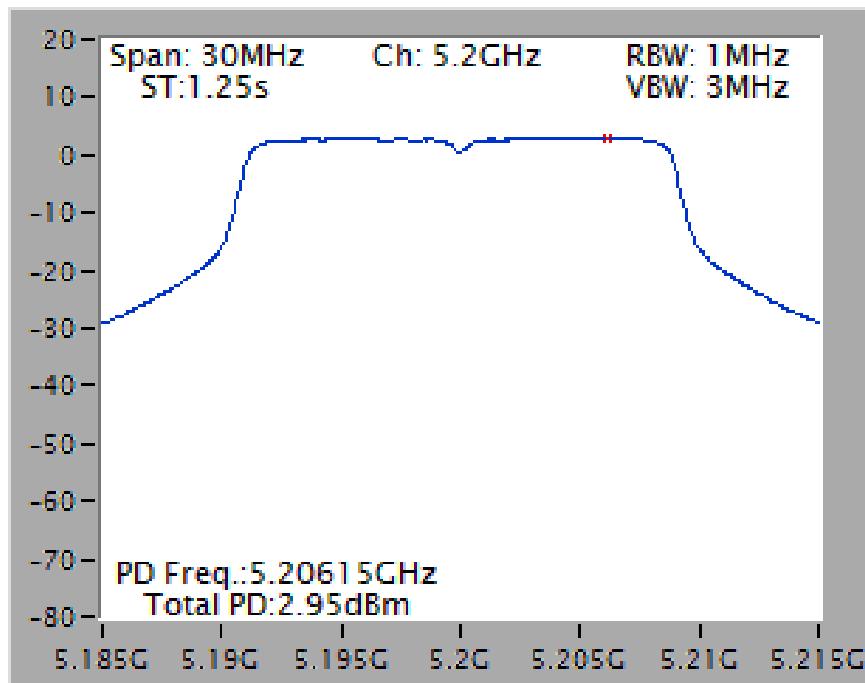
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



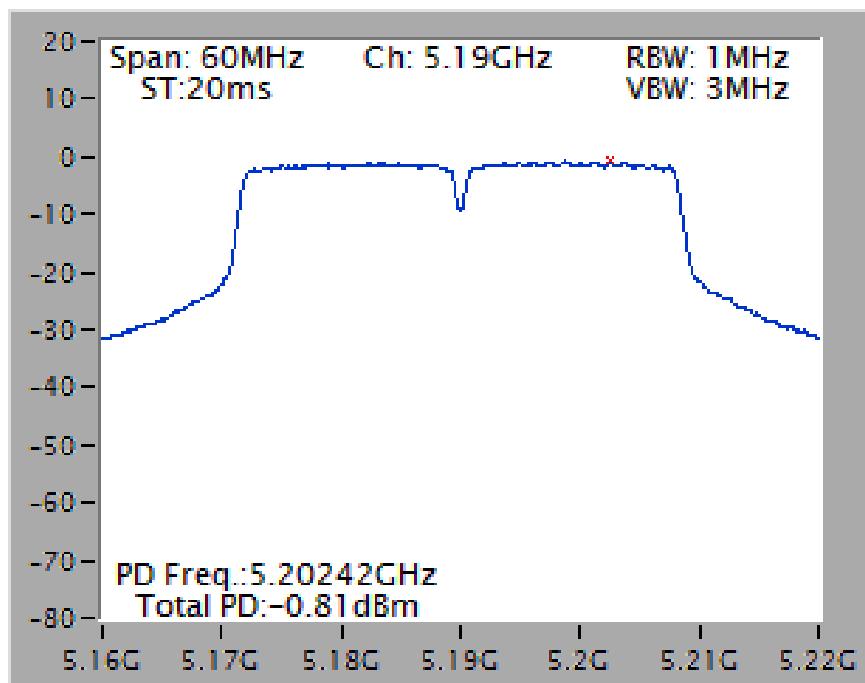
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



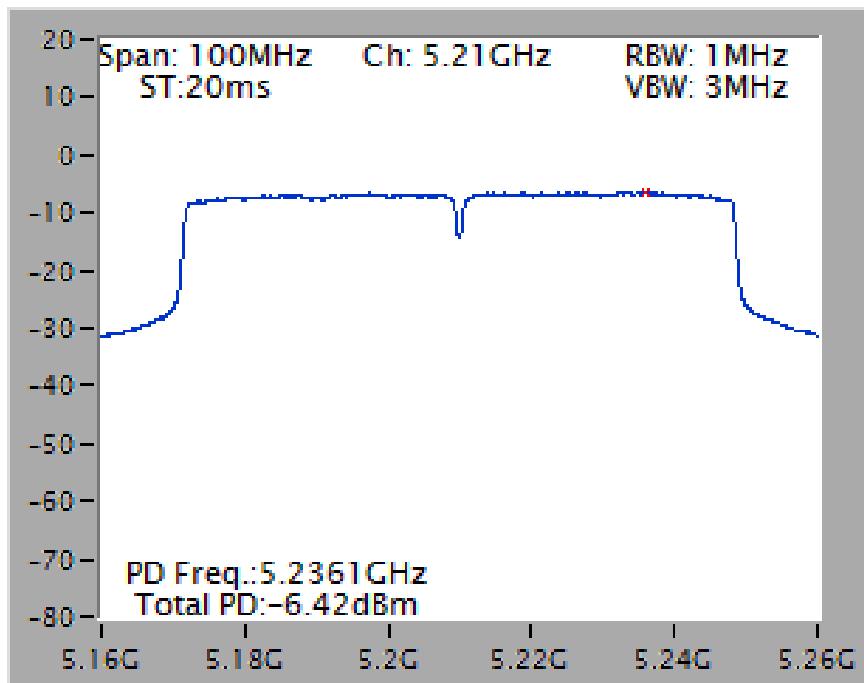
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5190 MHz



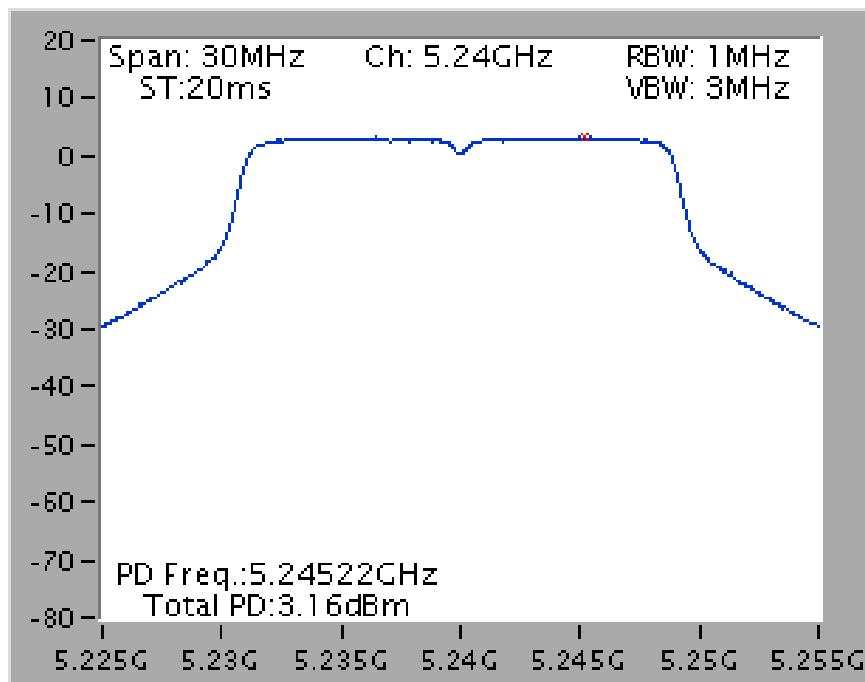
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



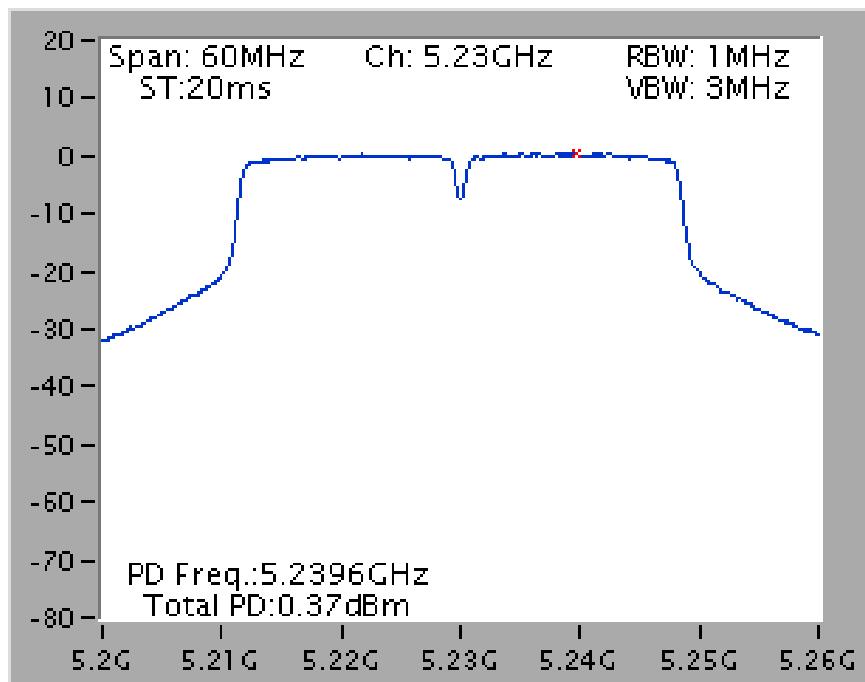
Mode 5 (Ant.6 Facade antenna / 2.5dBi)

1TX

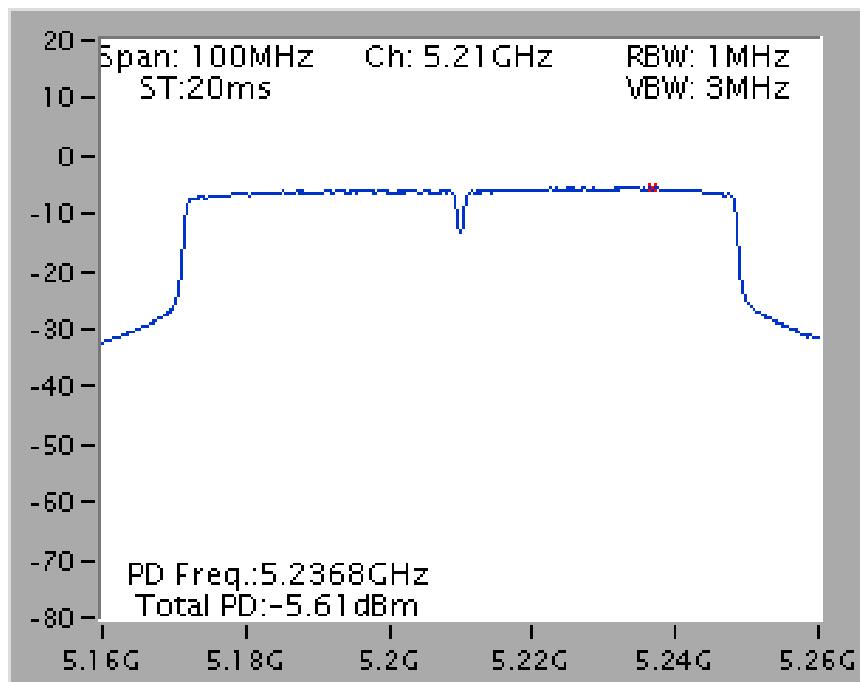
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz

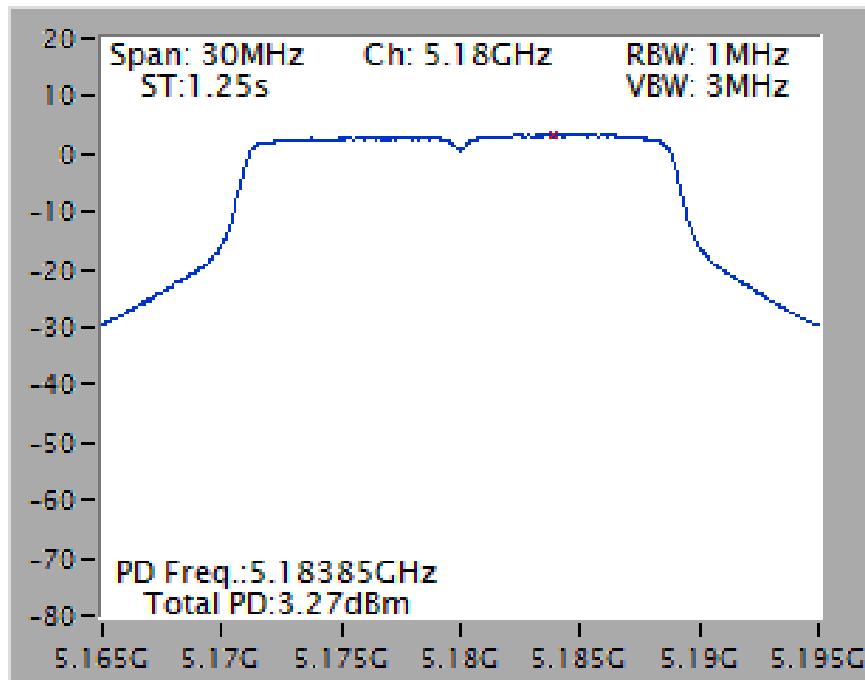


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz

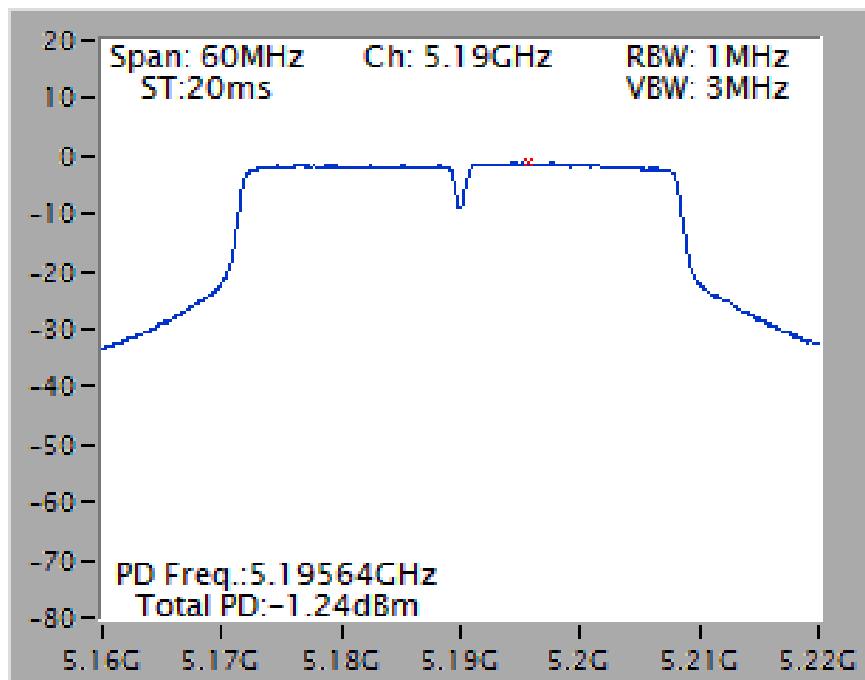


2TX

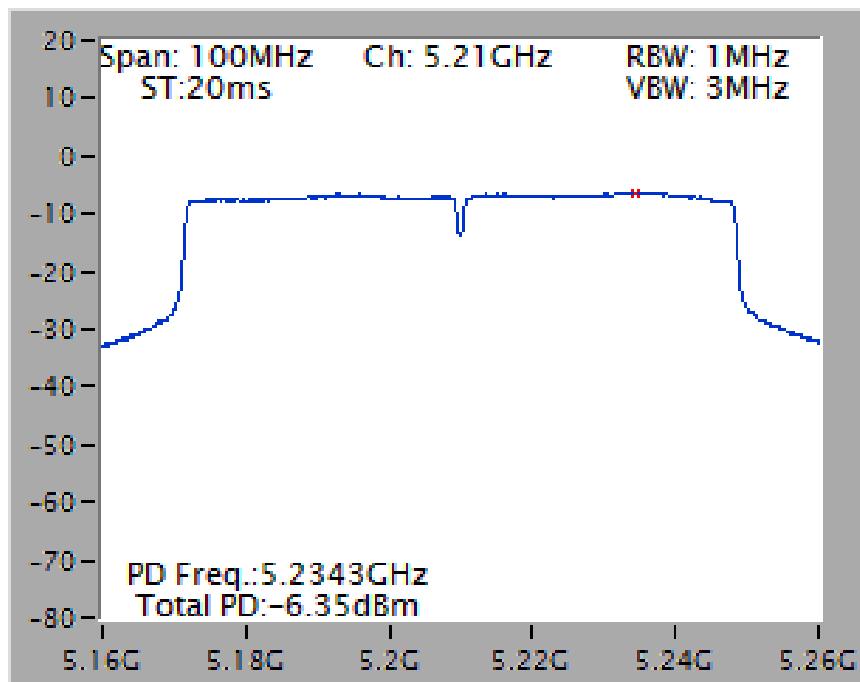
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5180 MHz



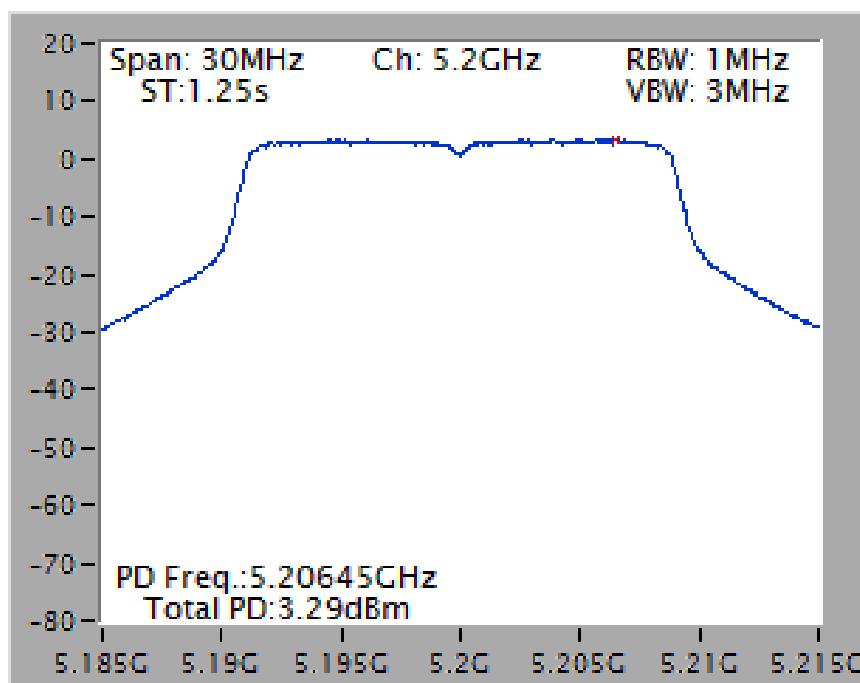
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5190 MHz



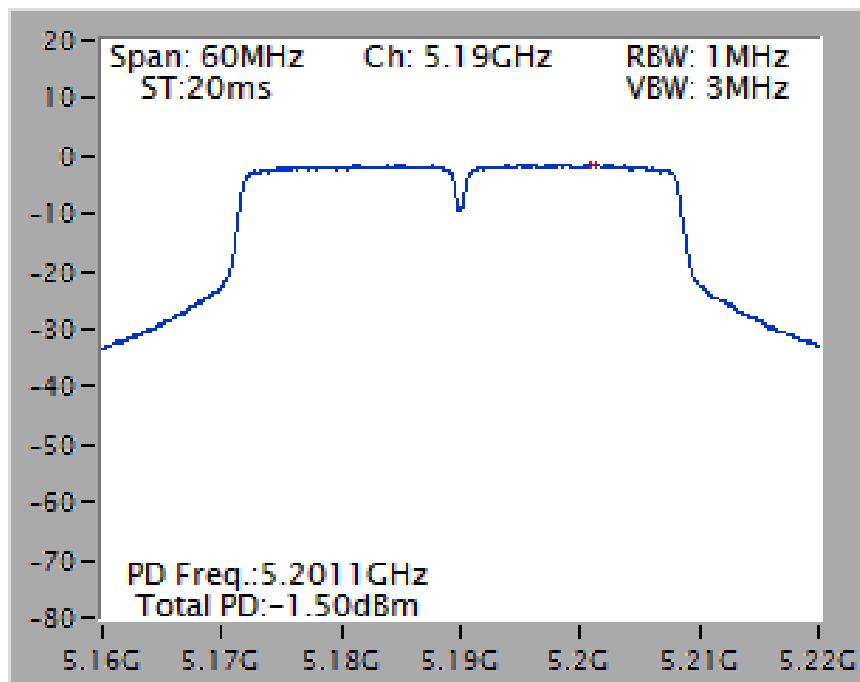
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



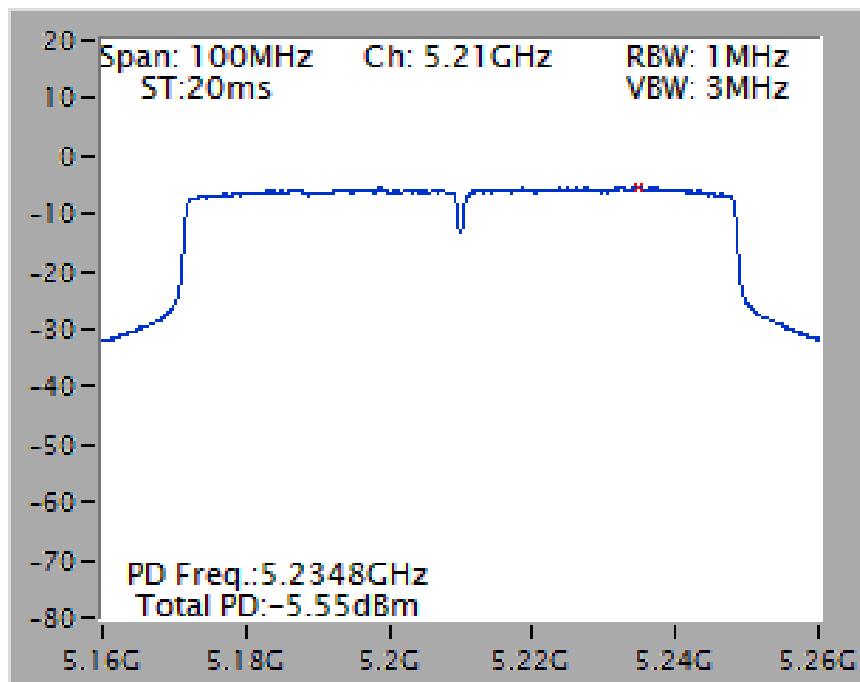
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2/ 5190 MHz



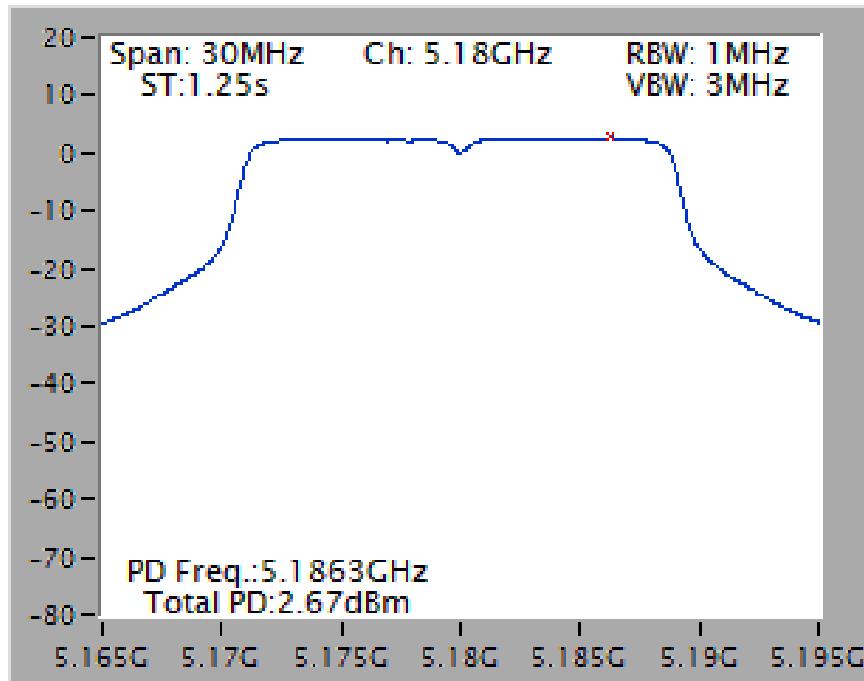
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



3TX

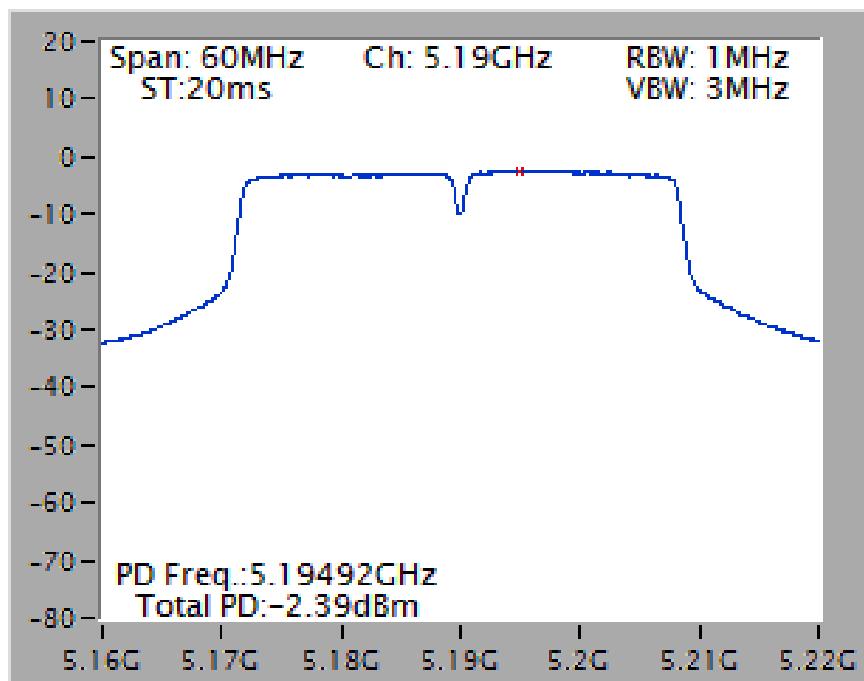
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 /

5180 MHz

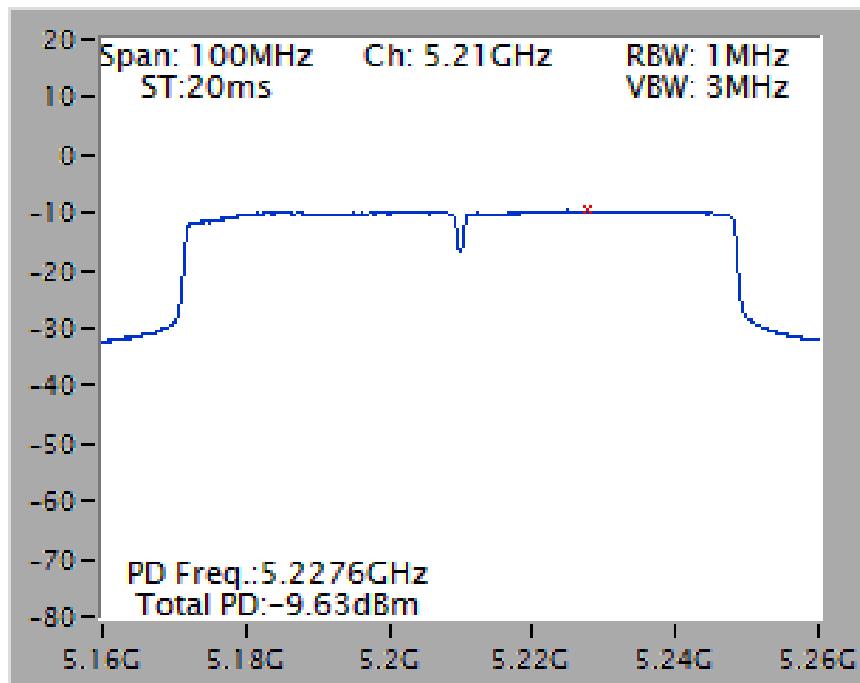


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 /

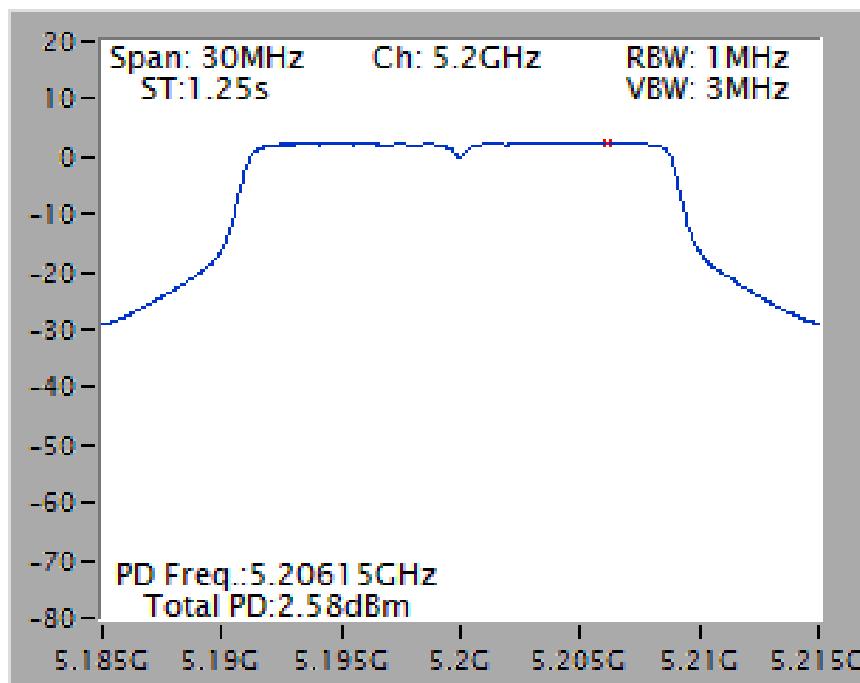
5190 MHz



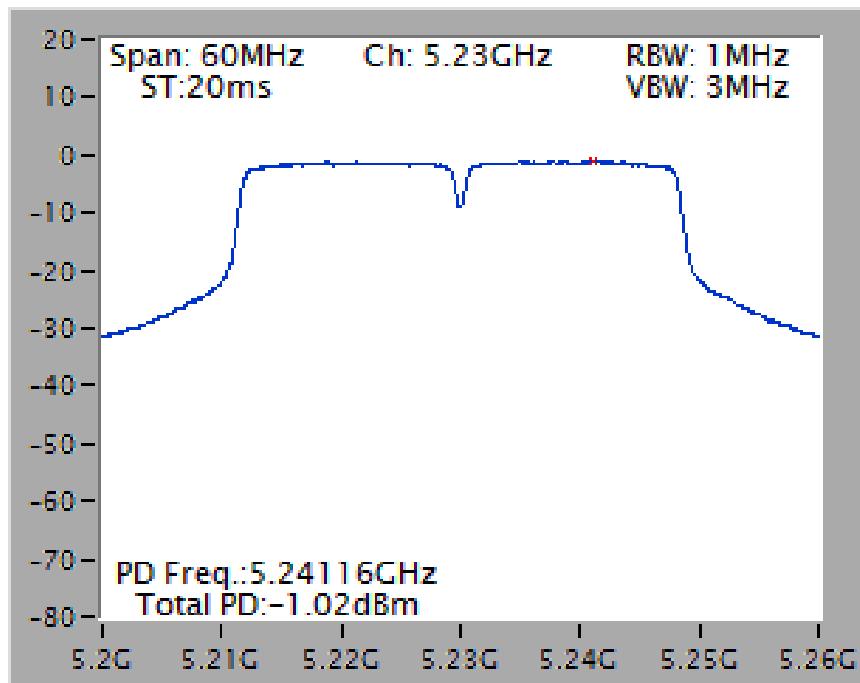
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



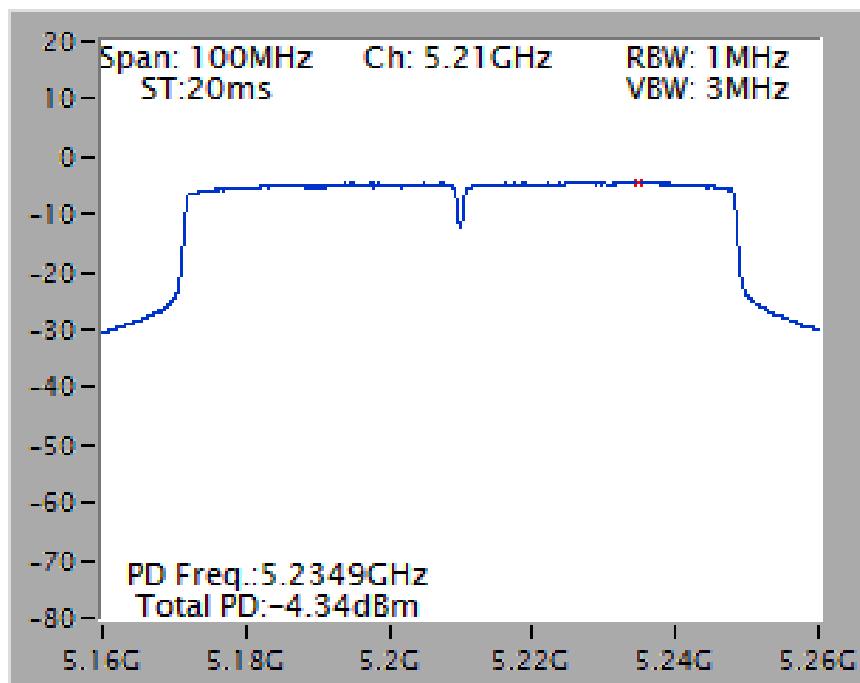
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



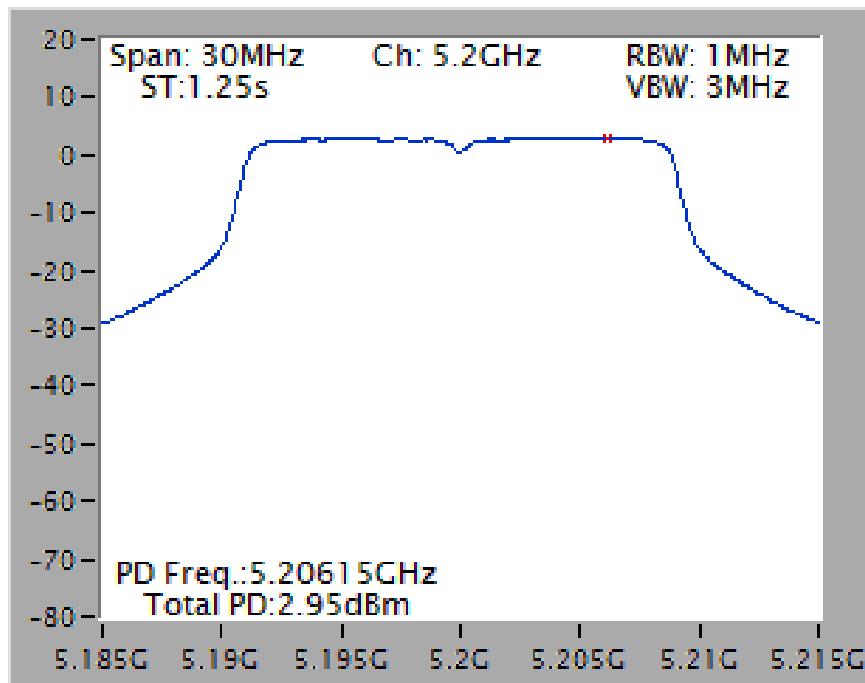
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



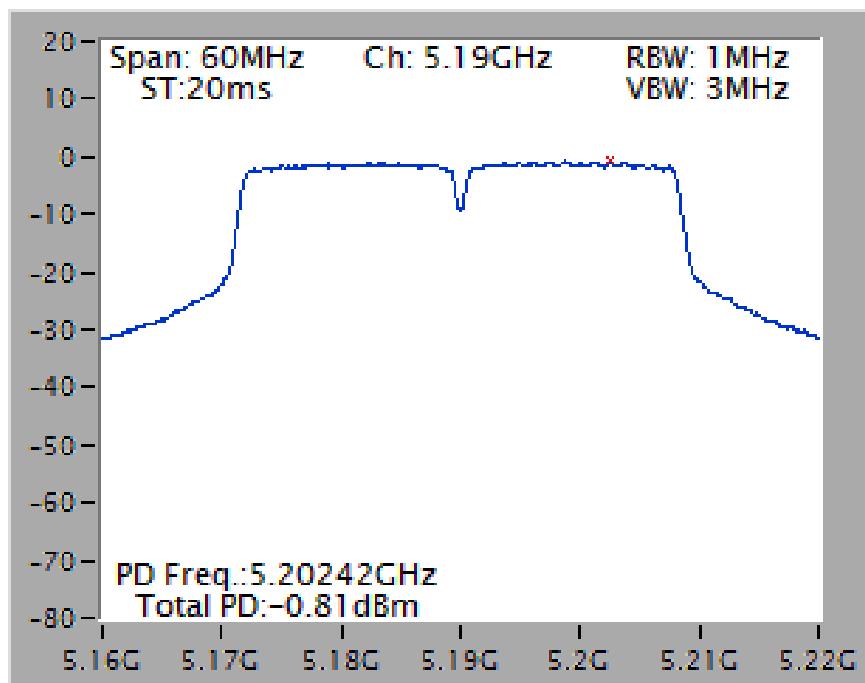
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



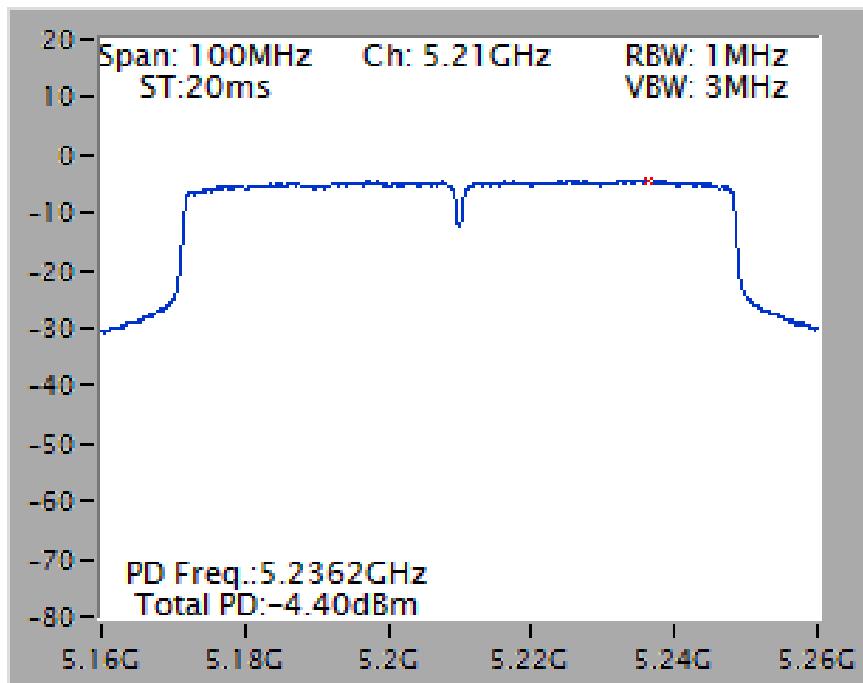
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5190 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz

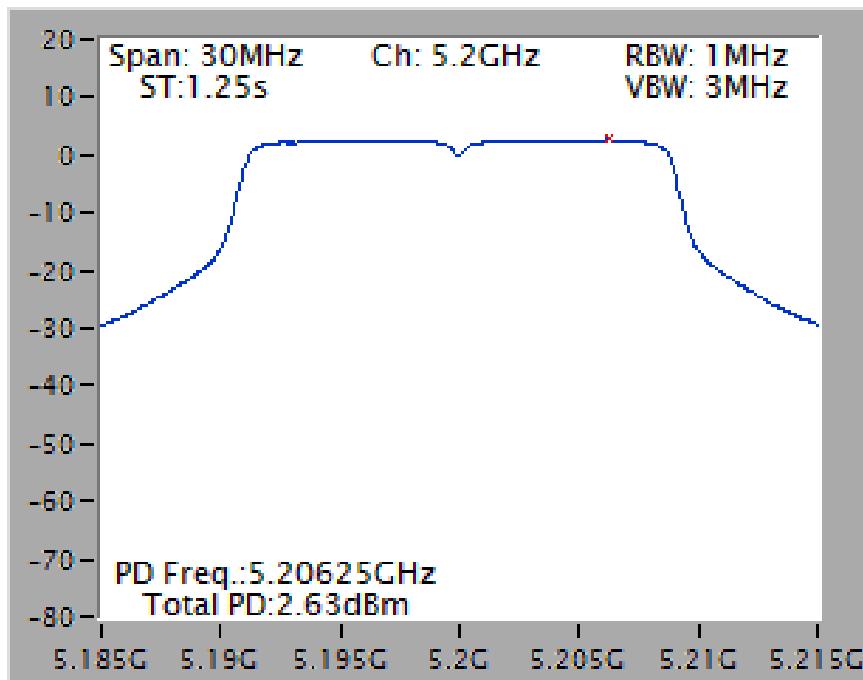


Mode 6 (Ant.9 Panel antenna / 9.2dBi)

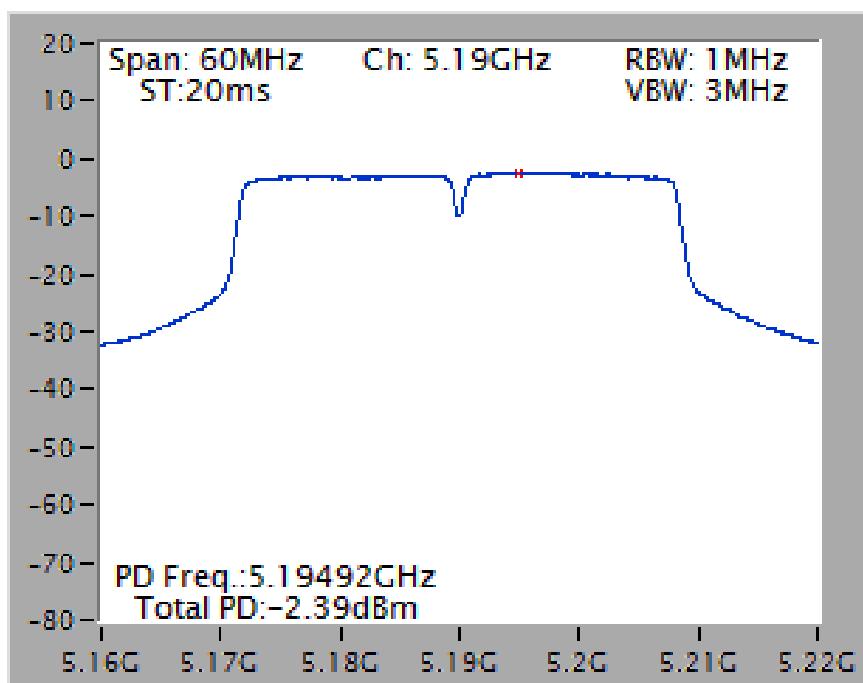
3TX

Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 /

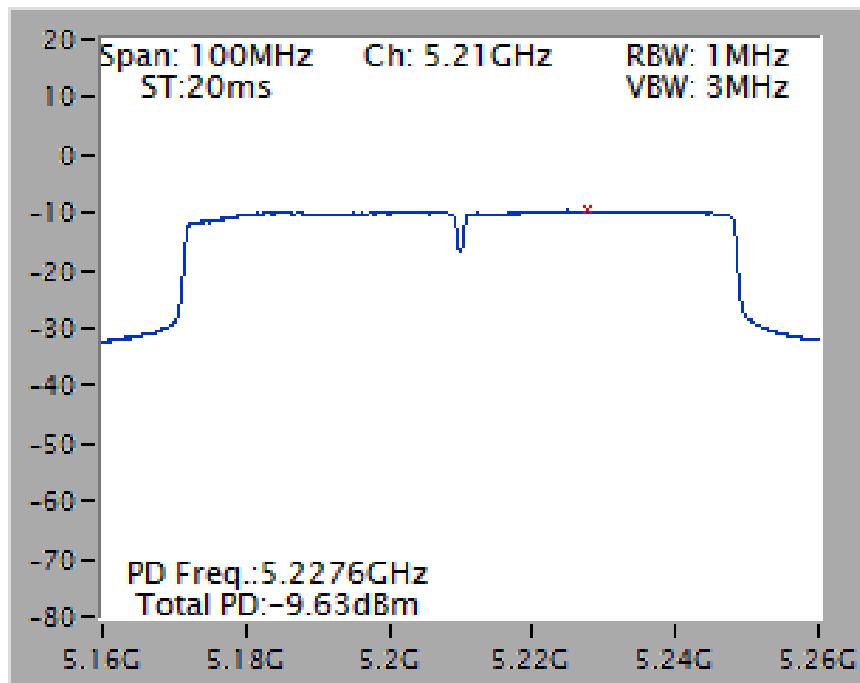
5200 MHz



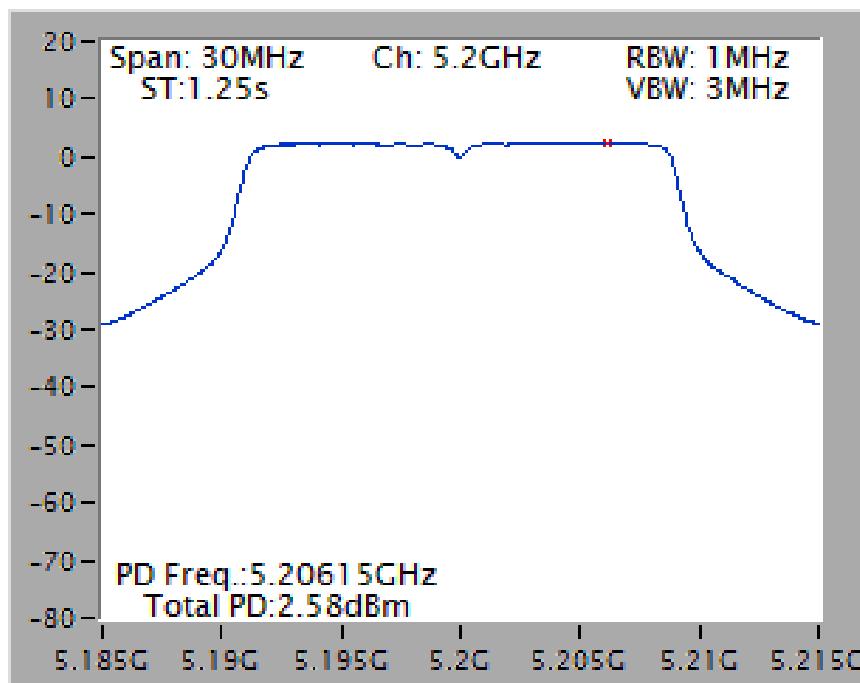
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 /
5190 MHz



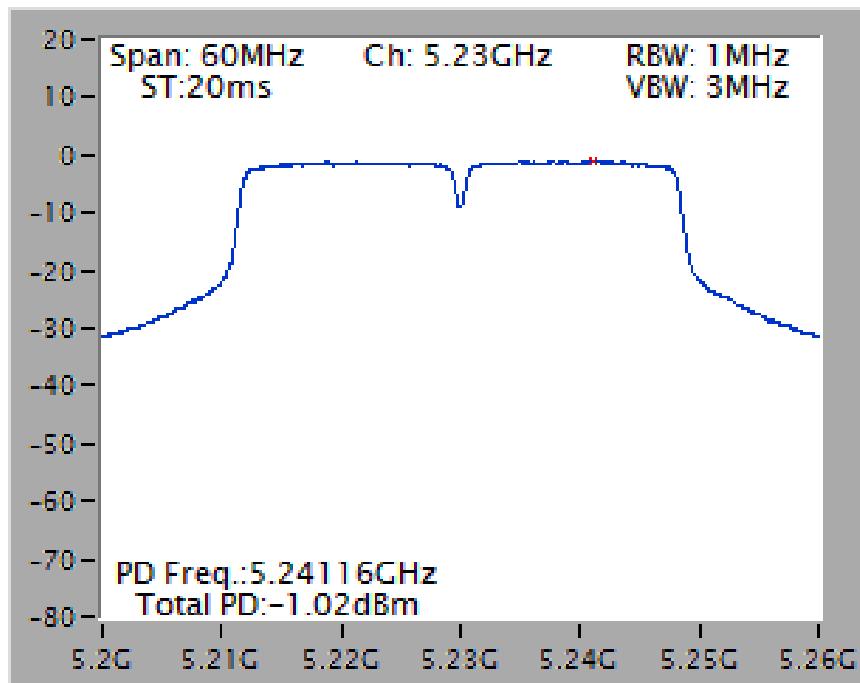
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



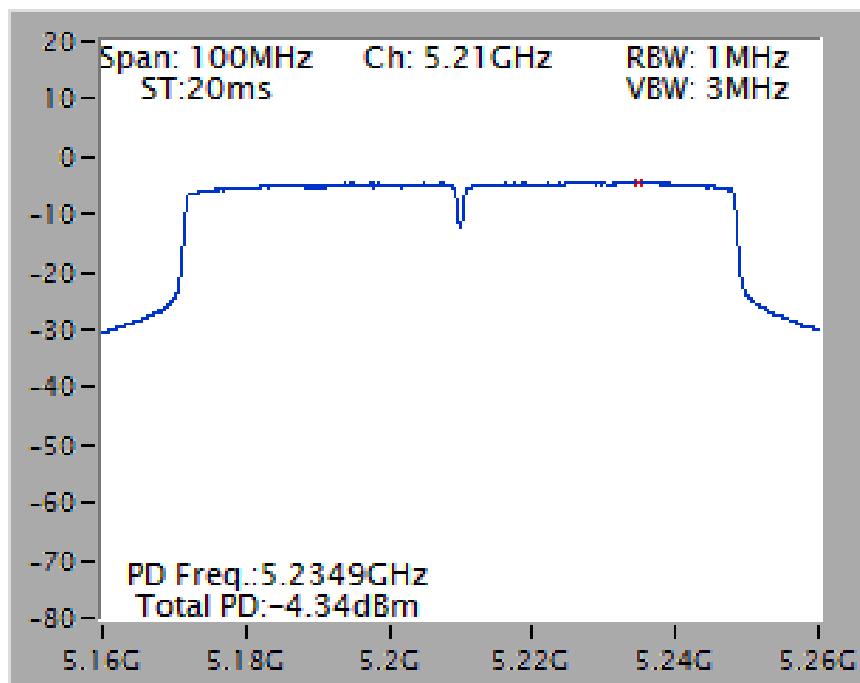
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



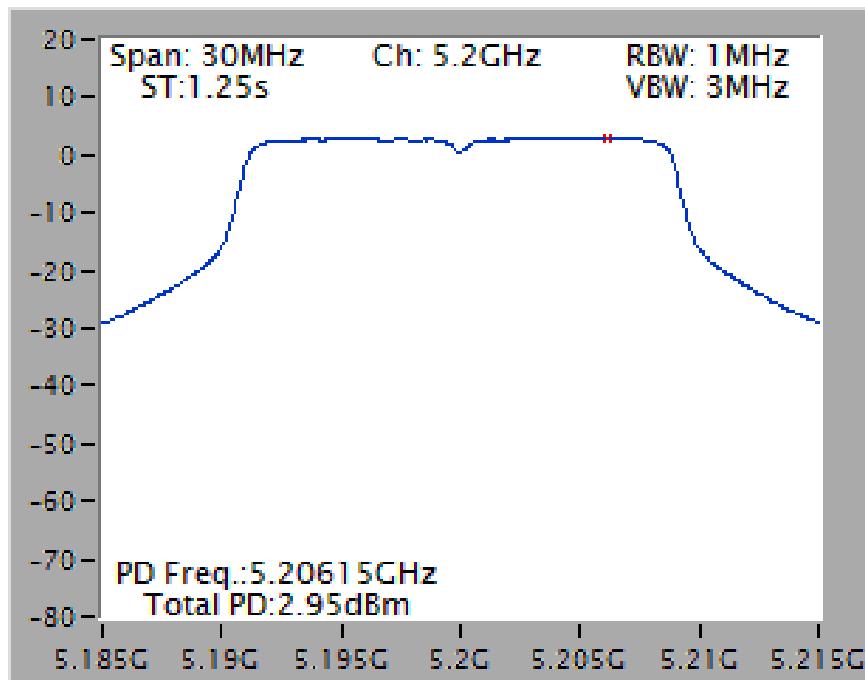
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



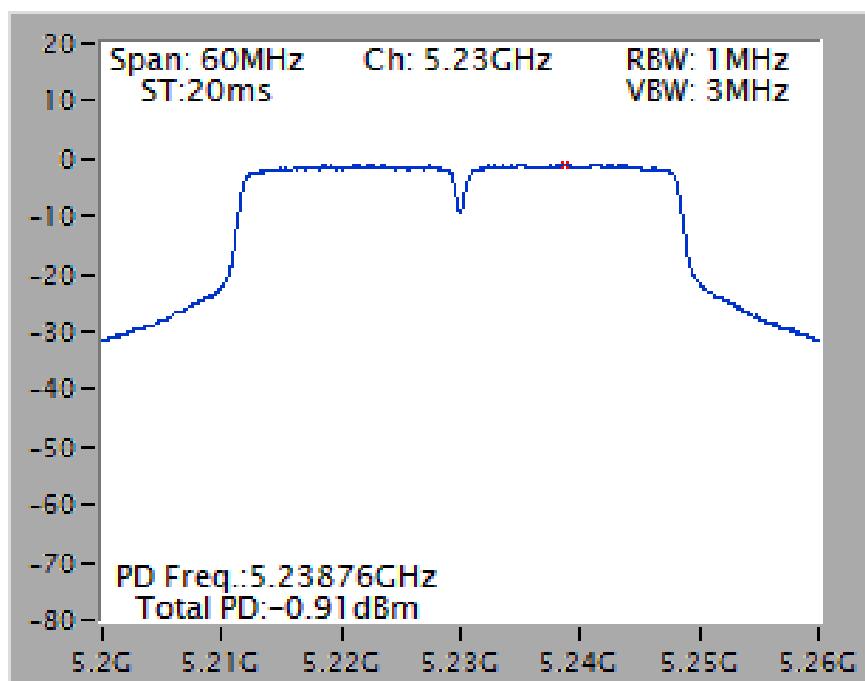
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



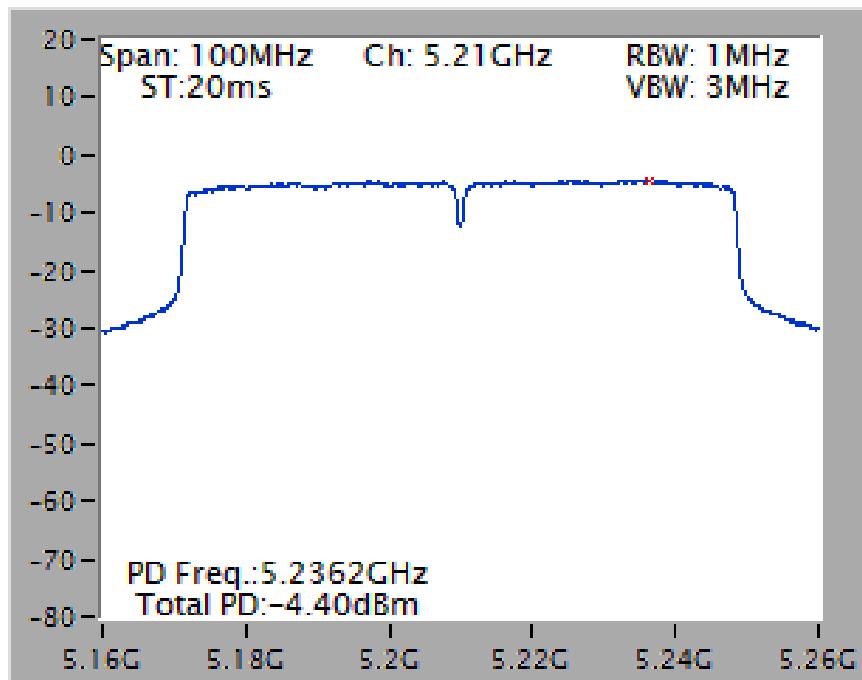
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



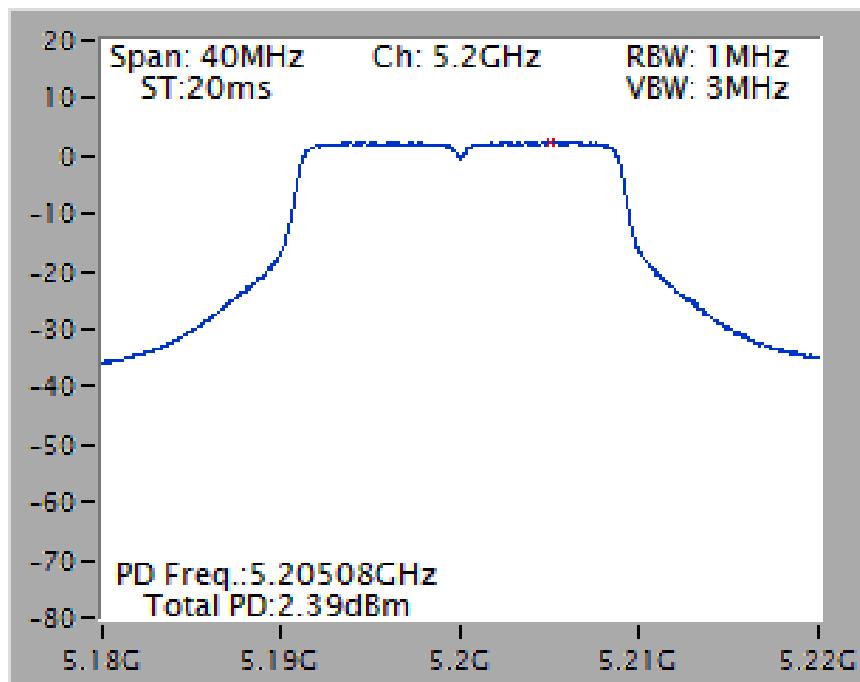
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



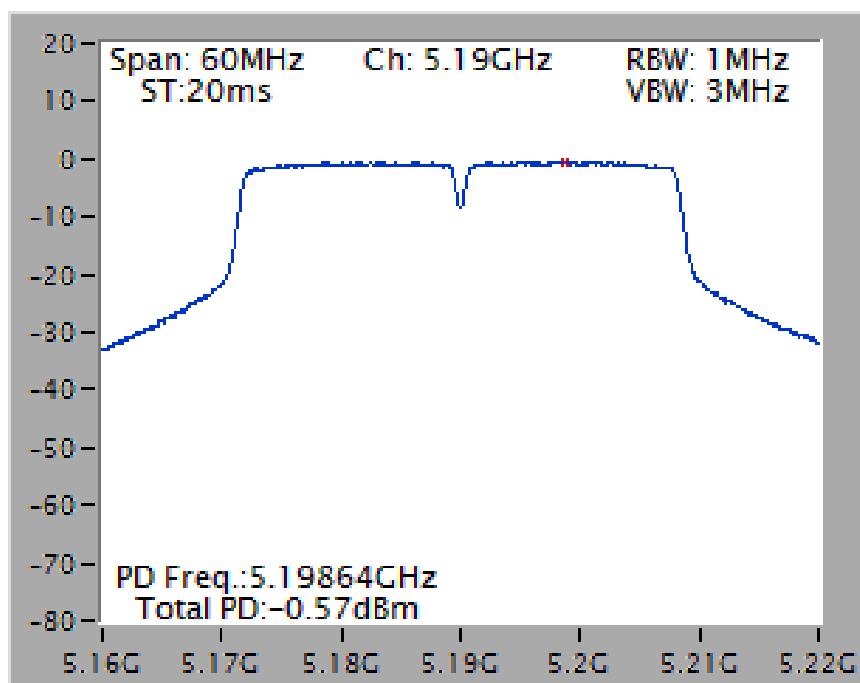
Mode 7 (Ant.10 PIFA antenna / 5.3dBi)

1TX

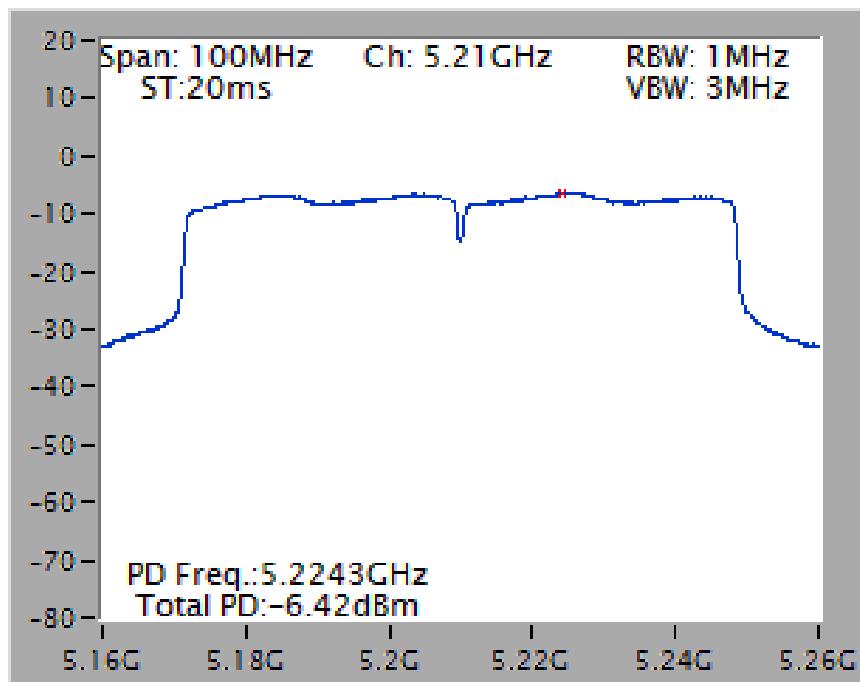
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5190 MHz

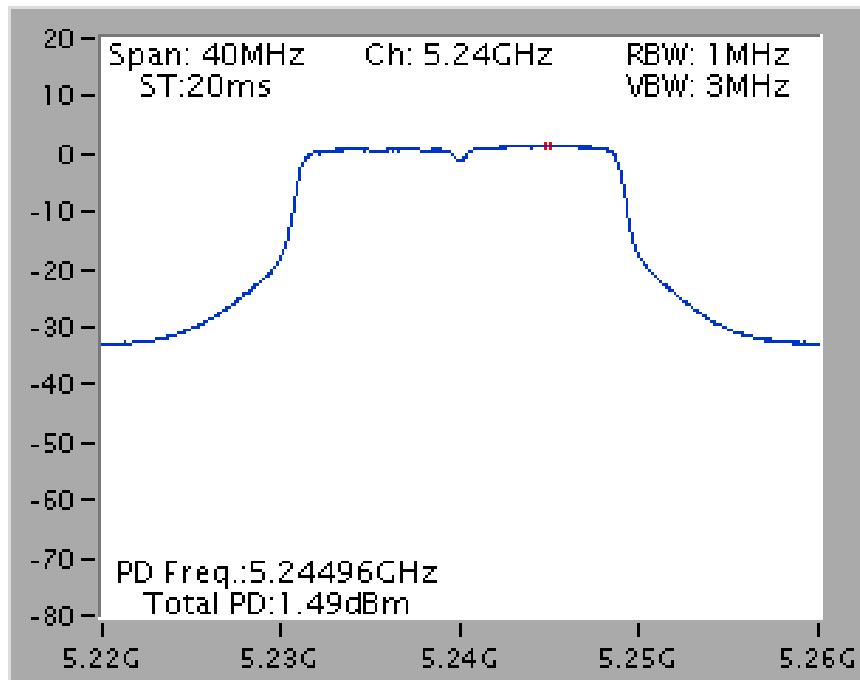


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz

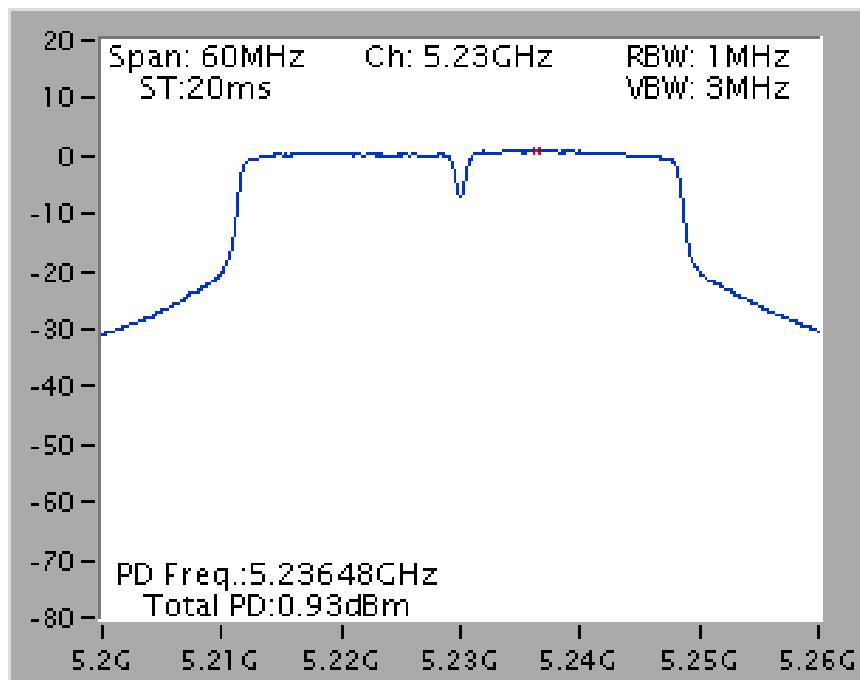


2TX

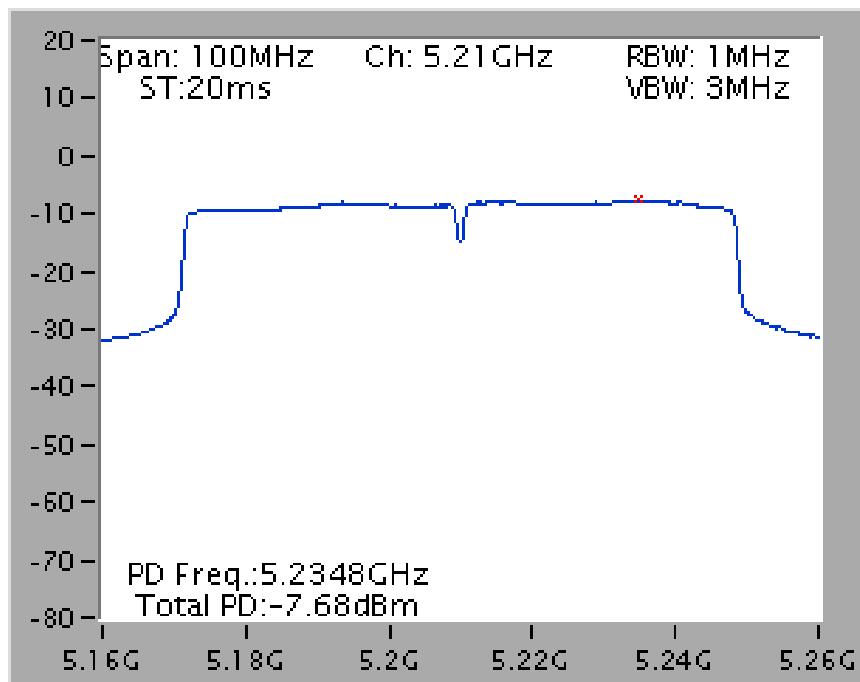
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5240 MHz



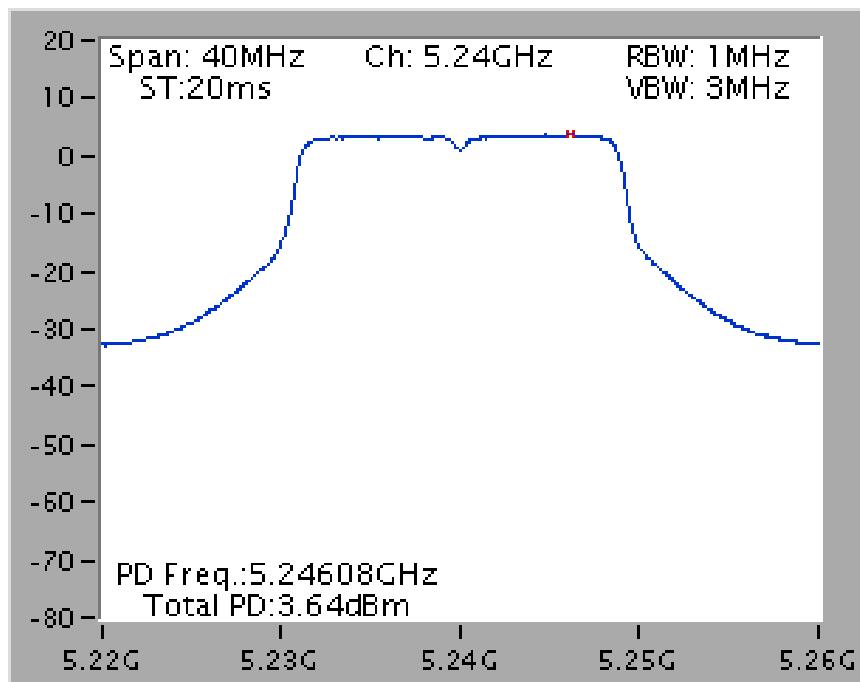
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5230 MHz



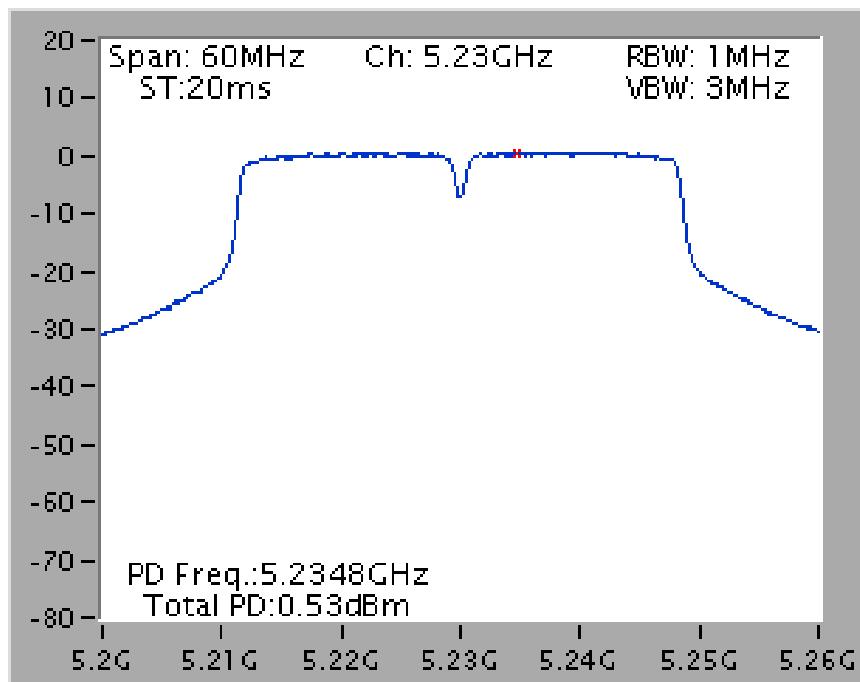
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



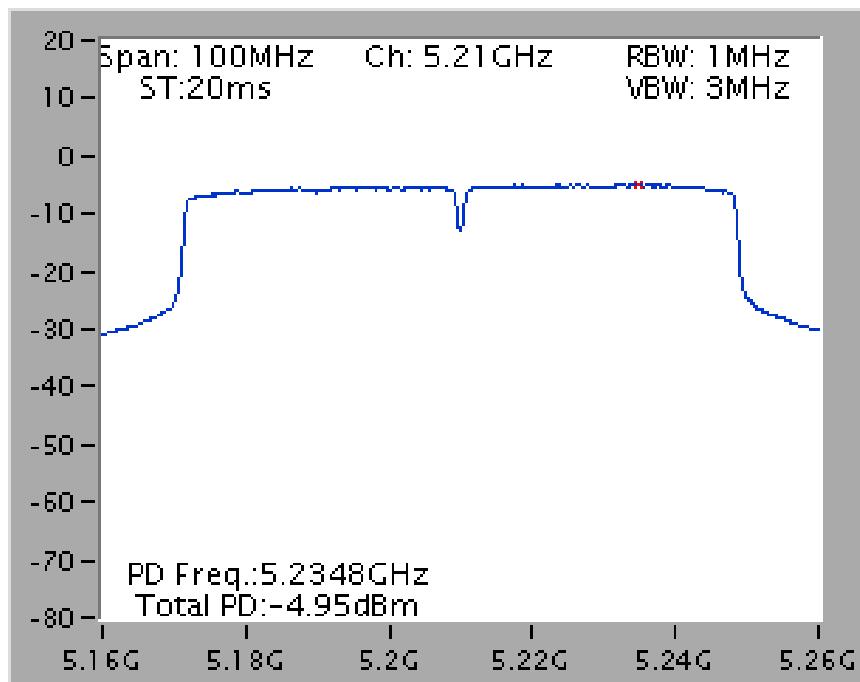
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 5240 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2/ 5230 MHz



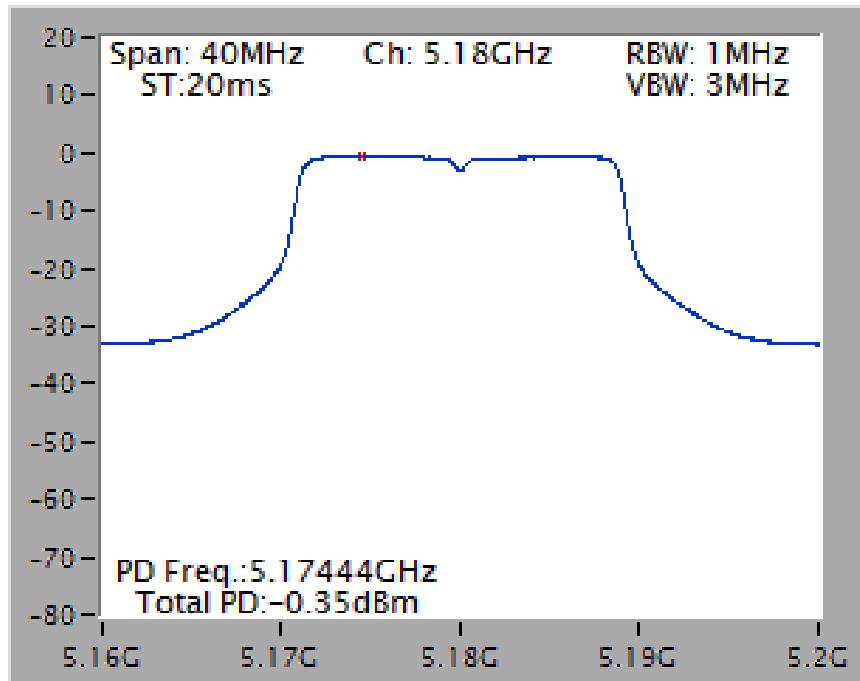
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / 5210 MHz



3TX

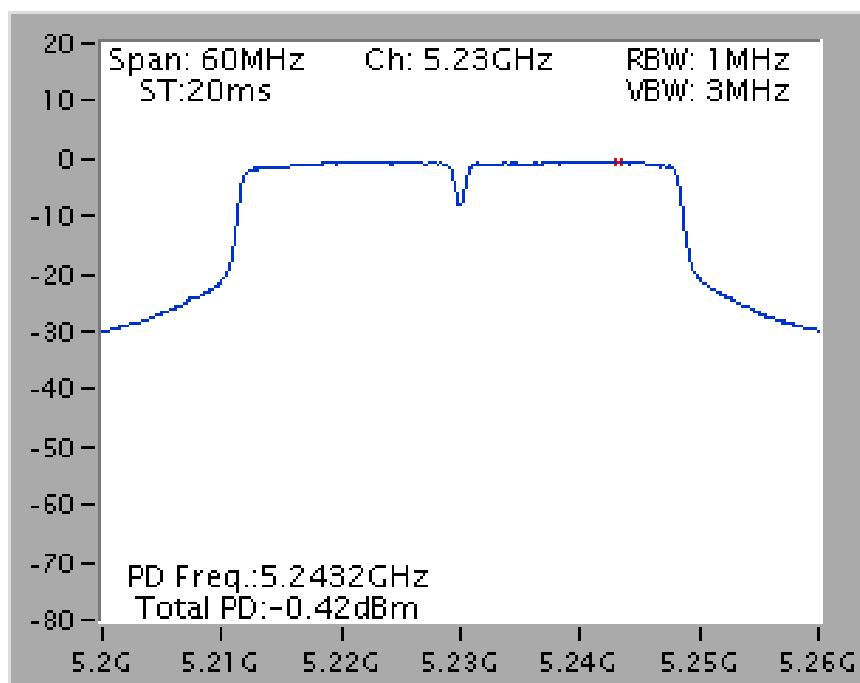
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 /

5180 MHz

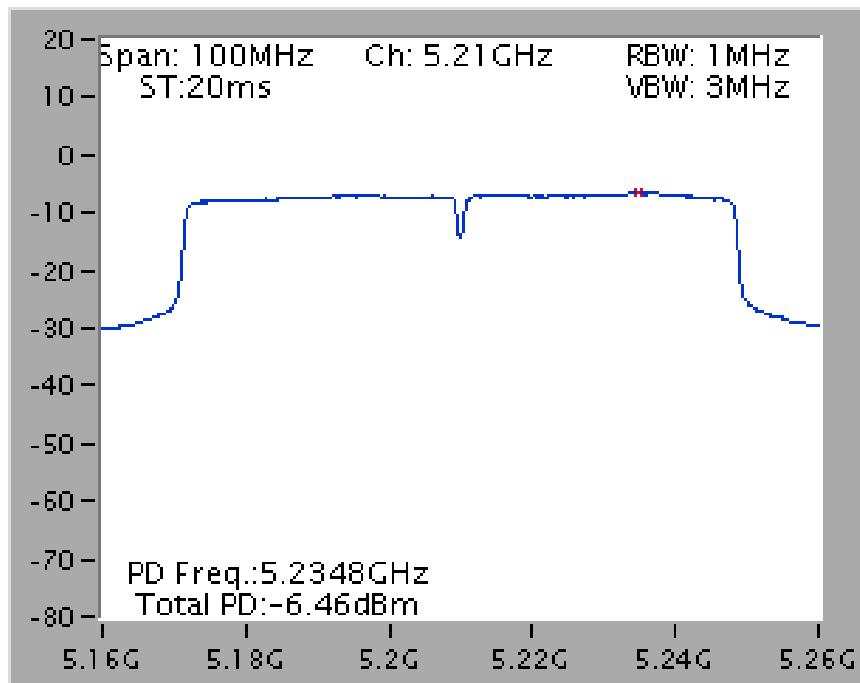


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 /

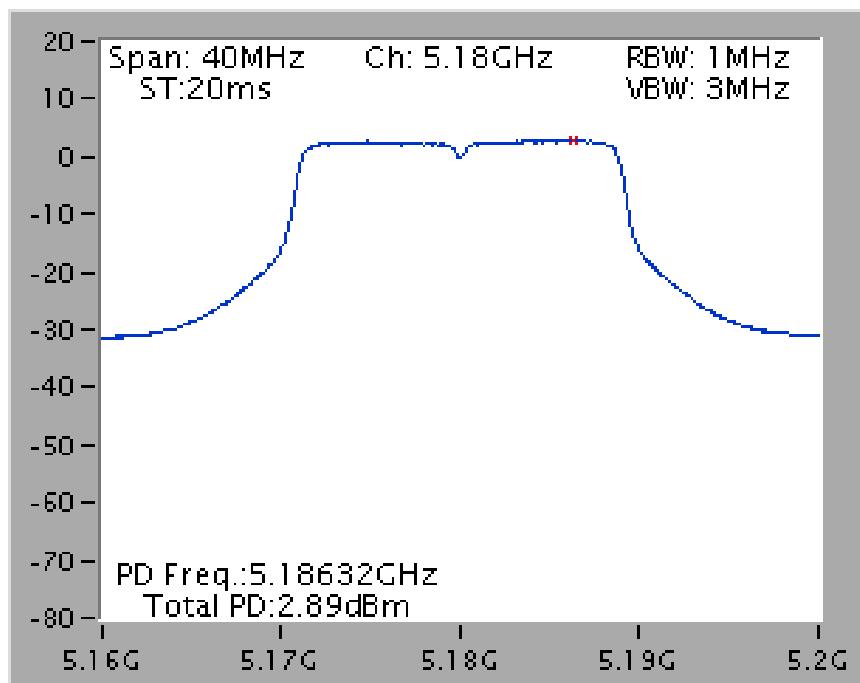
5230 MHz



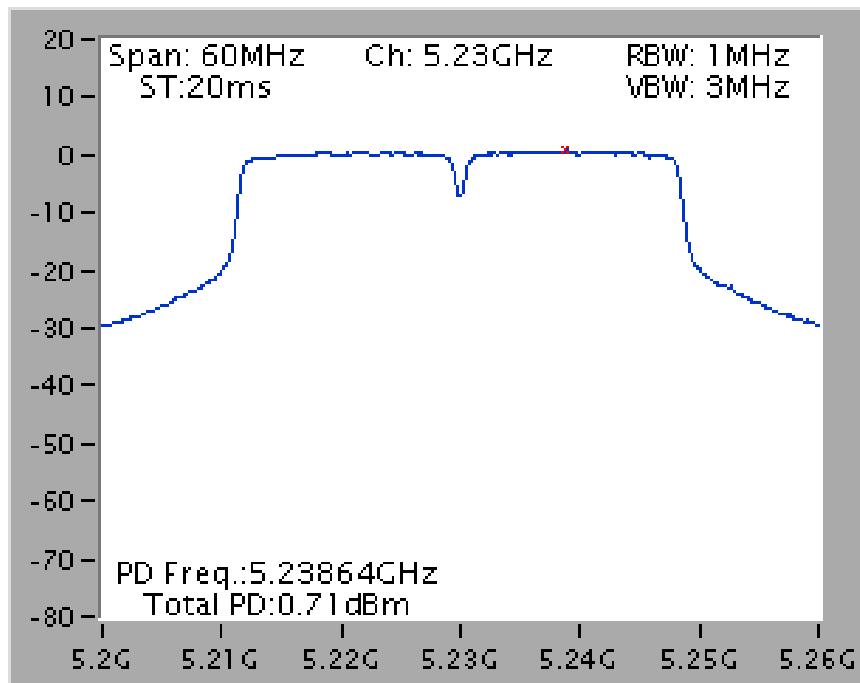
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



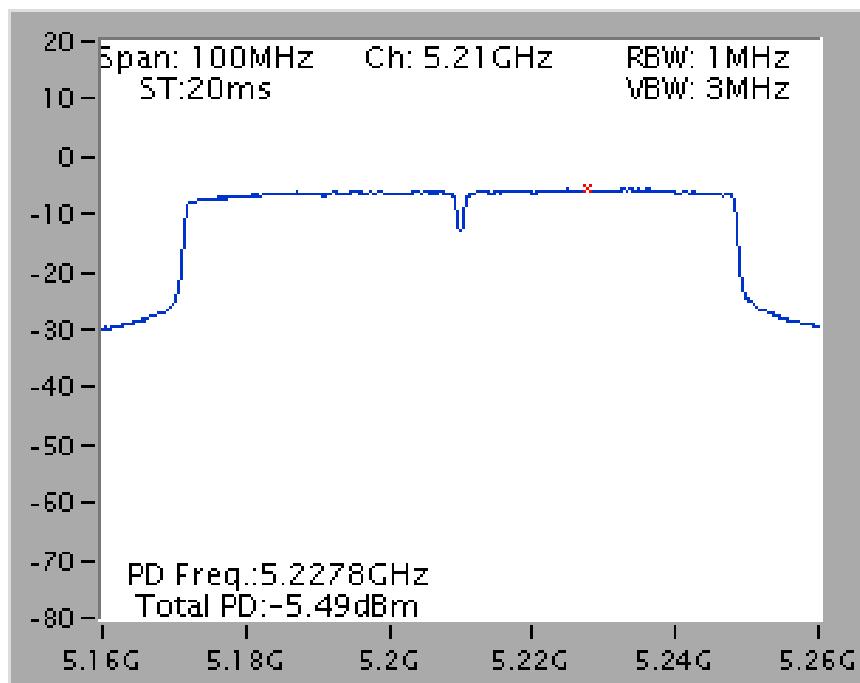
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



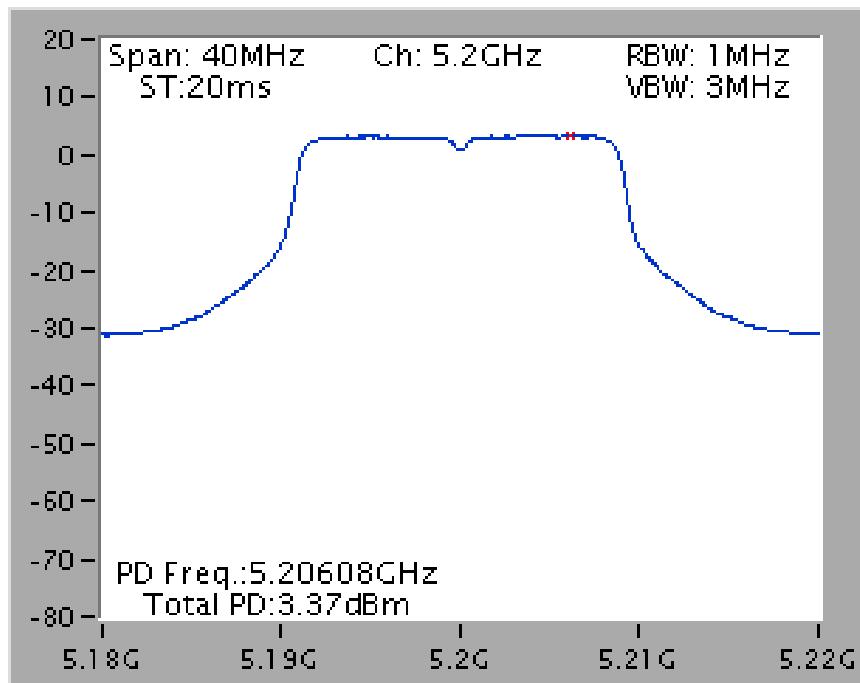
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



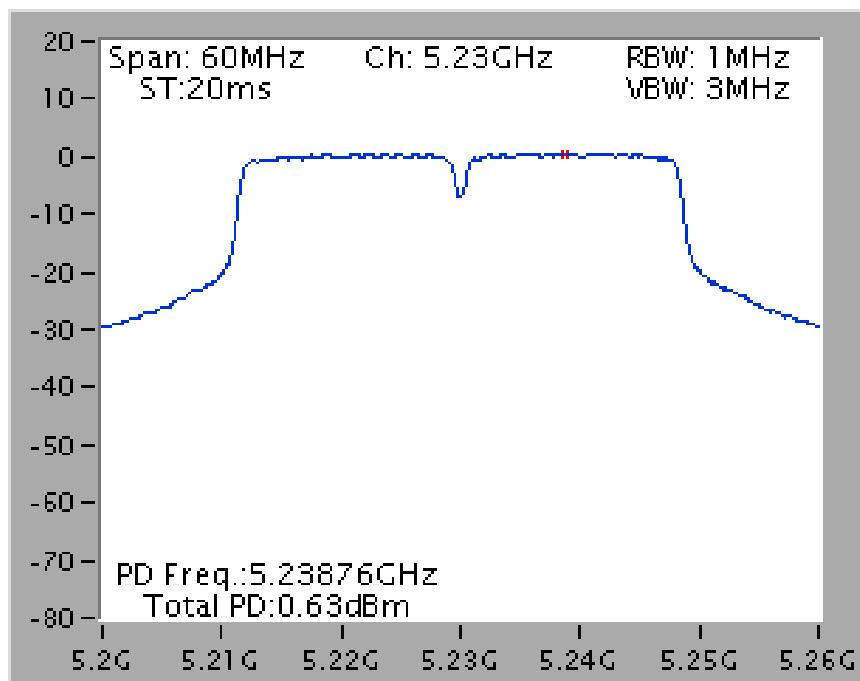
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



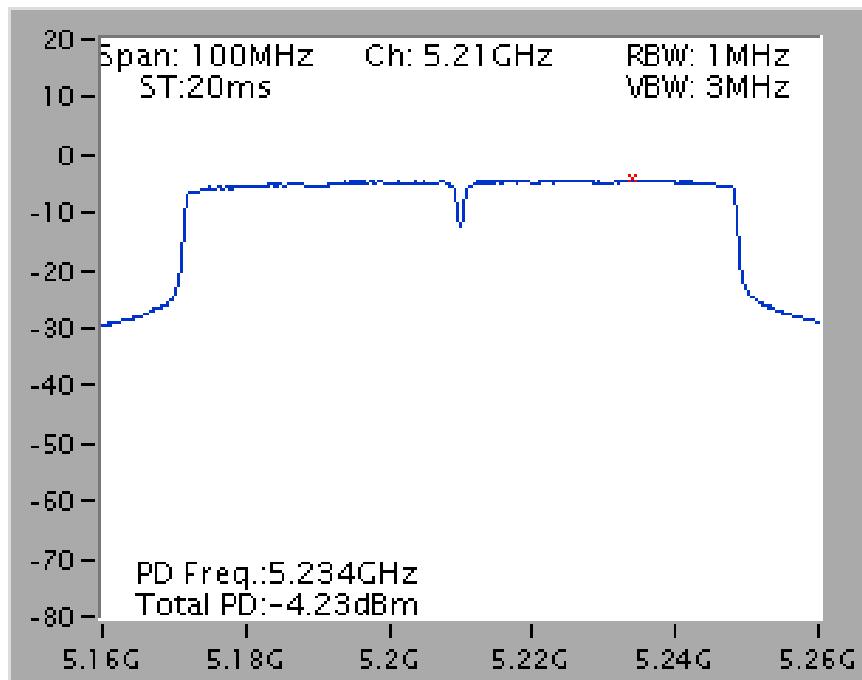
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



4.5. Peak Excursion Measurement

4.5.1. Limit

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emissions bandwidth whichever is less.

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
RB	1MHz (Peak Trace) / 1MHz (Average Trace)
VB	\geq 3MHz (Peak Trace) / \geq 3MHz (Average Trace)
Detector	Peak (Peak Trace) / RMS (Average Trace)
Trace	Trace: Max hold (Peak Trace) / Trace Average Sweep Count 100 (Average Trace)
Sweep Time	AUTO

4.5.3. Test Procedures

1. Trace A, Set RBW = 1MHz, VBW = 3MHz, Span >26dB bandwidth, Max. hold.
2. Delta Mark trace A Maximum frequency and trace B same frequency.
3. Repeat the above procedure until measurements for all frequencies were complete.
5. Testing each modulation mode on a single channel in single operating band at single output port.
All signal types need test (DSSS, OFDM). All modulation types need test (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM). All bandwidth modes need test.

4.5.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.4.4.

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 Peak Excursion

Temperature	25°C	Humidity	56%
Test Engineer	Benson Peng	Configurations	IEEE 802.11ac
Test Mode	Mode 1 (Ant.1 Dipole antenna / 8dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	9.78	13	Complies
QPSK(MCS1)	5240MHz	9.57	13	Complies
16QAM(MCS3)	5240MHz	10.40	13	Complies
64QAM(MCS5)	5240MHz	10.83	13	Complies
256QAM(MCS8)	5240MHz	12.26	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	10.11	13	Complies
QPSK(MCS1)	5230MHz	9.90	13	Complies
16QAM(MCS3)	5230MHz	11.80	13	Complies
64QAM(MCS5)	5230MHz	11.11	13	Complies
256QAM(MCS8)	5230MHz	11.50	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.66	13	Complies
QPSK(MCS1)	5210MHz	11.37	13	Complies
16QAM(MCS3)	5210MHz	11.88	13	Complies
64QAM(MCS5)	5210MHz	10.45	13	Complies
256QAM(MCS8)	5210MHz	10.33	13	Complies

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.86	13	Complies
QPSK(MCS1)	5200MHz	8.89	13	Complies
16QAM(MCS3)	5200MHz	9.13	13	Complies
64QAM(MCS5)	5200MHz	9.39	13	Complies
256QAM(MCS8)	5200MHz	10.20	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.46	13	Complies
QPSK(MCS1)	5190MHz	9.09	13	Complies
16QAM(MCS3)	5190MHz	9.54	13	Complies
64QAM(MCS5)	5190MHz	11.66	13	Complies
256QAM(MCS8)	5190MHz	10.85	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	8.99	13	Complies
QPSK(MCS1)	5210MHz	10.82	13	Complies
16QAM(MCS3)	5210MHz	11.18	13	Complies
64QAM(MCS5)	5210MHz	9.35	13	Complies
256QAM(MCS8)	5210MHz	9.79	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	9.70	13	Complies
QPSK(MCS1)	5200MHz	9.16	13	Complies
16QAM(MCS3)	5200MHz	10.30	13	Complies
64QAM(MCS5)	5200MHz	9.83	13	Complies
256QAM(MCS8)	5200MHz	10.32	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.93	13	Complies
QPSK(MCS1)	5190MHz	10.12	13	Complies
16QAM(MCS3)	5190MHz	9.86	13	Complies
64QAM(MCS5)	5190MHz	10.44	13	Complies
256QAM(MCS8)	5190MHz	10.83	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.31	13	Complies
QPSK(MCS1)	5210MHz	11.17	13	Complies
16QAM(MCS3)	5210MHz	10.84	13	Complies
64QAM(MCS5)	5210MHz	10.06	13	Complies
256QAM(MCS8)	5210MHz	10.09	13	Complies

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Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	9.44	13	Complies
QPSK(MCS1)	5240MHz	9.96	13	Complies
16QAM(MCS3)	5240MHz	9.96	13	Complies
64QAM(MCS5)	5240MHz	9.59	13	Complies
256QAM(MCS8)	5240MHz	9.74	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.42	13	Complies
QPSK(MCS1)	5190MHz	9.77	13	Complies
16QAM(MCS3)	5190MHz	9.65	13	Complies
64QAM(MCS5)	5190MHz	10.32	13	Complies
256QAM(MCS8)	5190MHz	10.65	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.01	13	Complies
QPSK(MCS1)	5210MHz	10.94	13	Complies
16QAM(MCS3)	5210MHz	11.43	13	Complies
64QAM(MCS5)	5210MHz	10.80	13	Complies
256QAM(MCS8)	5210MHz	10.18	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.65	13	Complies
QPSK(MCS1)	5200MHz	8.70	13	Complies
16QAM(MCS3)	5200MHz	10.26	13	Complies
64QAM(MCS5)	5200MHz	9.81	13	Complies
256QAM(MCS8)	5200MHz	10.92	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.97	13	Complies
QPSK(MCS1)	5190MHz	10.05	13	Complies
16QAM(MCS3)	5190MHz	10.60	13	Complies
64QAM(MCS5)	5190MHz	11.00	13	Complies
256QAM(MCS8)	5190MHz	11.38	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.22	13	Complies
QPSK(MCS1)	5210MHz	10.19	13	Complies
16QAM(MCS3)	5210MHz	11.13	13	Complies
64QAM(MCS5)	5210MHz	10.66	13	Complies
256QAM(MCS8)	5210MHz	10.56	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	10.05	13	Complies
QPSK(MCS1)	5200MHz	9.48	13	Complies
16QAM(MCS3)	5200MHz	10.09	13	Complies
64QAM(MCS5)	5200MHz	10.31	13	Complies
256QAM(MCS8)	5200MHz	11.11	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	10.07	13	Complies
QPSK(MCS1)	5230MHz	10.07	13	Complies
16QAM(MCS3)	5230MHz	10.49	13	Complies
64QAM(MCS5)	5230MHz	11.08	13	Complies
256QAM(MCS8)	5230MHz	10.81	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.38	13	Complies
QPSK(MCS1)	5210MHz	10.33	13	Complies
16QAM(MCS3)	5210MHz	10.45	13	Complies
64QAM(MCS5)	5210MHz	10.91	13	Complies
256QAM(MCS8)	5210MHz	10.35	13	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Benson Peng	Configurations	IEEE 802.11ac
Test Mode	Mode 2 (Ant.3 Panel antenna / 12.5dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	8.93	13	Complies
QPSK(MCS1)	5240MHz	9.00	13	Complies
16QAM(MCS3)	5240MHz	9.41	13	Complies
64QAM(MCS5)	5240MHz	9.61	13	Complies
256QAM(MCS8)	5240MHz	9.84	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.25	13	Complies
QPSK(MCS1)	5190MHz	8.92	13	Complies
16QAM(MCS3)	5190MHz	10.98	13	Complies
64QAM(MCS5)	5190MHz	10.04	13	Complies
256QAM(MCS8)	5190MHz	10.60	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.07	13	Complies
QPSK(MCS1)	5210MHz	10.81	13	Complies
16QAM(MCS3)	5210MHz	11.52	13	Complies
64QAM(MCS5)	5210MHz	10.14	13	Complies
256QAM(MCS8)	5210MHz	11.19	13	Complies

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.79	13	Complies
QPSK(MCS1)	5200MHz	8.17	13	Complies
16QAM(MCS3)	5200MHz	9.68	13	Complies
64QAM(MCS5)	5200MHz	10.30	13	Complies
256QAM(MCS8)	5200MHz	10.79	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.33	13	Complies
QPSK(MCS1)	5190MHz	9.02	13	Complies
16QAM(MCS3)	5190MHz	9.91	13	Complies
64QAM(MCS5)	5190MHz	9.42	13	Complies
256QAM(MCS8)	5190MHz	10.43	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.34	13	Complies
QPSK(MCS1)	5210MHz	10.88	13	Complies
16QAM(MCS3)	5210MHz	10.79	13	Complies
64QAM(MCS5)	5210MHz	9.45	13	Complies
256QAM(MCS8)	5210MHz	10.01	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	8.98	13	Complies
QPSK(MCS1)	5180MHz	9.37	13	Complies
16QAM(MCS3)	5180MHz	9.71	13	Complies
64QAM(MCS5)	5180MHz	10.07	13	Complies
256QAM(MCS8)	5180MHz	10.28	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.67	13	Complies
QPSK(MCS1)	5190MHz	9.18	13	Complies
16QAM(MCS3)	5190MHz	10.87	13	Complies
64QAM(MCS5)	5190MHz	10.20	13	Complies
256QAM(MCS8)	5190MHz	10.54	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.81	13	Complies
QPSK(MCS1)	5210MHz	10.88	13	Complies
16QAM(MCS3)	5210MHz	10.88	13	Complies
64QAM(MCS5)	5210MHz	10.29	13	Complies
256QAM(MCS8)	5210MHz	10.26	13	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Benson Peng	Configurations	IEEE 802.11ac
Test Mode	Mode 3 (Ant.4 Yagi antenna / 8dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	9.78	13	Complies
QPSK(MCS1)	5240MHz	9.57	13	Complies
16QAM(MCS3)	5240MHz	10.40	13	Complies
64QAM(MCS5)	5240MHz	10.83	13	Complies
256QAM(MCS8)	5240MHz	12.26	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	10.11	13	Complies
QPSK(MCS1)	5230MHz	9.90	13	Complies
16QAM(MCS3)	5230MHz	11.80	13	Complies
64QAM(MCS5)	5230MHz	11.11	13	Complies
256QAM(MCS8)	5230MHz	11.50	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.46	13	Complies
QPSK(MCS1)	5210MHz	11.34	13	Complies
16QAM(MCS3)	5210MHz	11.78	13	Complies
64QAM(MCS5)	5210MHz	10.71	13	Complies
256QAM(MCS8)	5210MHz	10.74	13	Complies

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Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.86	13	Complies
QPSK(MCS1)	5200MHz	8.89	13	Complies
16QAM(MCS3)	5200MHz	9.13	13	Complies
64QAM(MCS5)	5200MHz	9.39	13	Complies
256QAM(MCS8)	5200MHz	10.20	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.62	13	Complies
QPSK(MCS1)	5230MHz	9.14	13	Complies
16QAM(MCS3)	5230MHz	9.80	13	Complies
64QAM(MCS5)	5230MHz	9.83	13	Complies
256QAM(MCS8)	5230MHz	10.39	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.28	13	Complies
QPSK(MCS1)	5210MHz	10.07	13	Complies
16QAM(MCS3)	5210MHz	11.78	13	Complies
64QAM(MCS5)	5210MHz	10.41	13	Complies
256QAM(MCS8)	5210MHz	10.21	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	9.70	13	Complies
QPSK(MCS1)	5200MHz	9.16	13	Complies
16QAM(MCS3)	5200MHz	10.30	13	Complies
64QAM(MCS5)	5200MHz	9.83	13	Complies
256QAM(MCS8)	5200MHz	10.32	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.72	13	Complies
QPSK(MCS1)	5230MHz	10.50	13	Complies
16QAM(MCS3)	5230MHz	10.51	13	Complies
64QAM(MCS5)	5230MHz	10.80	13	Complies
256QAM(MCS8)	5230MHz	10.63	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.40	13	Complies
QPSK(MCS1)	5210MHz	10.21	13	Complies
16QAM(MCS3)	5210MHz	11.70	13	Complies
64QAM(MCS5)	5210MHz	10.28	13	Complies
256QAM(MCS8)	5210MHz	10.59	13	Complies

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	8.92	13	Complies
QPSK(MCS1)	5180MHz	8.46	13	Complies
16QAM(MCS3)	5180MHz	9.74	13	Complies
64QAM(MCS5)	5180MHz	9.89	13	Complies
256QAM(MCS8)	5180MHz	10.52	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.42	13	Complies
QPSK(MCS1)	5190MHz	9.77	13	Complies
16QAM(MCS3)	5190MHz	9.65	13	Complies
64QAM(MCS5)	5190MHz	10.32	13	Complies
256QAM(MCS8)	5190MHz	10.65	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.47	13	Complies
QPSK(MCS1)	5210MHz	10.58	13	Complies
16QAM(MCS3)	5210MHz	11.66	13	Complies
64QAM(MCS5)	5210MHz	9.91	13	Complies
256QAM(MCS8)	5210MHz	10.04	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.65	13	Complies
QPSK(MCS1)	5200MHz	8.70	13	Complies
16QAM(MCS3)	5200MHz	10.26	13	Complies
64QAM(MCS5)	5200MHz	9.81	13	Complies
256QAM(MCS8)	5200MHz	10.92	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.97	13	Complies
QPSK(MCS1)	5190MHz	10.05	13	Complies
16QAM(MCS3)	5190MHz	10.60	13	Complies
64QAM(MCS5)	5190MHz	11.00	13	Complies
256QAM(MCS8)	5190MHz	11.38	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.79	13	Complies
QPSK(MCS1)	5210MHz	10.78	13	Complies
16QAM(MCS3)	5210MHz	11.48	13	Complies
64QAM(MCS5)	5210MHz	10.51	13	Complies
256QAM(MCS8)	5210MHz	10.74	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	10.05	13	Complies
QPSK(MCS1)	5200MHz	9.48	13	Complies
16QAM(MCS3)	5200MHz	10.09	13	Complies
64QAM(MCS5)	5200MHz	10.31	13	Complies
256QAM(MCS8)	5200MHz	11.11	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	10.07	13	Complies
QPSK(MCS1)	5230MHz	10.07	13	Complies
16QAM(MCS3)	5230MHz	10.49	13	Complies
64QAM(MCS5)	5230MHz	11.08	13	Complies
256QAM(MCS8)	5230MHz	10.81	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	11.10	13	Complies
QPSK(MCS1)	5210MHz	10.26	13	Complies
16QAM(MCS3)	5210MHz	10.55	13	Complies
64QAM(MCS5)	5210MHz	10.60	13	Complies
256QAM(MCS8)	5210MHz	9.89	13	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Benson Peng	Configurations	IEEE 802.11ac
Test Mode	Mode 4 (Ant.5 Patch antenna / 2.3dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	9.31	13	Complies
QPSK(MCS1)	5240MHz	9.53	13	Complies
16QAM(MCS3)	5240MHz	10.29	13	Complies
64QAM(MCS5)	5240MHz	10.96	13	Complies
256QAM(MCS8)	5240MHz	11.98	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.88	13	Complies
QPSK(MCS1)	5230MHz	10.14	13	Complies
16QAM(MCS3)	5230MHz	11.34	13	Complies
64QAM(MCS5)	5230MHz	11.38	13	Complies
256QAM(MCS8)	5230MHz	11.48	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.59	13	Complies
QPSK(MCS1)	5210MHz	11.34	13	Complies
16QAM(MCS3)	5210MHz	11.66	13	Complies
64QAM(MCS5)	5210MHz	11.29	13	Complies
256QAM(MCS8)	5210MHz	10.82	13	Complies

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	8.83	13	Complies
QPSK(MCS1)	5180MHz	9.12	13	Complies
16QAM(MCS3)	5180MHz	10.06	13	Complies
64QAM(MCS5)	5180MHz	9.82	13	Complies
256QAM(MCS8)	5180MHz	10.63	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.21	13	Complies
QPSK(MCS1)	5190MHz	10.08	13	Complies
16QAM(MCS3)	5190MHz	10.24	13	Complies
64QAM(MCS5)	5190MHz	9.80	13	Complies
256QAM(MCS8)	5190MHz	10.74	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.07	13	Complies
QPSK(MCS1)	5210MHz	10.08	13	Complies
16QAM(MCS3)	5210MHz	10.96	13	Complies
64QAM(MCS5)	5210MHz	9.70	13	Complies
256QAM(MCS8)	5210MHz	10.08	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.96	13	Complies
QPSK(MCS1)	5200MHz	9.61	13	Complies
16QAM(MCS3)	5200MHz	10.38	13	Complies
64QAM(MCS5)	5200MHz	9.73	13	Complies
256QAM(MCS8)	5200MHz	10.33	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.75	13	Complies
QPSK(MCS1)	5230MHz	10.25	13	Complies
16QAM(MCS3)	5230MHz	9.81	13	Complies
64QAM(MCS5)	5230MHz	10.76	13	Complies
256QAM(MCS8)	5230MHz	12.51	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.69	13	Complies
QPSK(MCS1)	5210MHz	10.44	13	Complies
16QAM(MCS3)	5210MHz	11.84	13	Complies
64QAM(MCS5)	5210MHz	10.40	13	Complies
256QAM(MCS8)	5210MHz	10.20	13	Complies

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	9.36	13	Complies
QPSK(MCS1)	5180MHz	8.43	13	Complies
16QAM(MCS3)	5180MHz	9.39	13	Complies
64QAM(MCS5)	5180MHz	10.32	13	Complies
256QAM(MCS8)	5180MHz	10.52	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.24	13	Complies
QPSK(MCS1)	5190MHz	9.14	13	Complies
16QAM(MCS3)	5190MHz	9.69	13	Complies
64QAM(MCS5)	5190MHz	10.39	13	Complies
256QAM(MCS8)	5190MHz	10.44	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.32	13	Complies
QPSK(MCS1)	5210MHz	10.72	13	Complies
16QAM(MCS3)	5210MHz	11.64	13	Complies
64QAM(MCS5)	5210MHz	10.02	13	Complies
256QAM(MCS8)	5210MHz	10.35	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.77	13	Complies
QPSK(MCS1)	5200MHz	9.24	13	Complies
16QAM(MCS3)	5200MHz	9.82	13	Complies
64QAM(MCS5)	5200MHz	10.42	13	Complies
256QAM(MCS8)	5200MHz	10.10	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.25	13	Complies
QPSK(MCS1)	5230MHz	9.69	13	Complies
16QAM(MCS3)	5230MHz	10.30	13	Complies
64QAM(MCS5)	5230MHz	11.18	13	Complies
256QAM(MCS8)	5230MHz	11.03	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.97	13	Complies
QPSK(MCS1)	5210MHz	10.31	13	Complies
16QAM(MCS3)	5210MHz	11.53	13	Complies
64QAM(MCS5)	5210MHz	10.51	13	Complies
256QAM(MCS8)	5210MHz	10.67	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	9.92	13	Complies
QPSK(MCS1)	5200MHz	9.40	13	Complies
16QAM(MCS3)	5200MHz	9.60	13	Complies
64QAM(MCS5)	5200MHz	10.09	13	Complies
256QAM(MCS8)	5200MHz	10.68	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.83	13	Complies
QPSK(MCS1)	5190MHz	10.05	13	Complies
16QAM(MCS3)	5190MHz	10.48	13	Complies
64QAM(MCS5)	5190MHz	10.33	13	Complies
256QAM(MCS8)	5190MHz	10.76	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.67	13	Complies
QPSK(MCS1)	5210MHz	10.32	13	Complies
16QAM(MCS3)	5210MHz	10.52	13	Complies
64QAM(MCS5)	5210MHz	9.97	13	Complies
256QAM(MCS8)	5210MHz	10.84	13	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Benson Peng	Configurations	IEEE 802.11ac
Test Mode	Mode 5 (Ant.6 Facade antenna / 2.5dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	9.31	13	Complies
QPSK(MCS1)	5240MHz	9.53	13	Complies
16QAM(MCS3)	5240MHz	10.29	13	Complies
64QAM(MCS5)	5240MHz	10.96	13	Complies
256QAM(MCS8)	5240MHz	11.98	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.88	13	Complies
QPSK(MCS1)	5230MHz	10.14	13	Complies
16QAM(MCS3)	5230MHz	11.34	13	Complies
64QAM(MCS5)	5230MHz	11.38	13	Complies
256QAM(MCS8)	5230MHz	11.48	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.85	13	Complies
QPSK(MCS1)	5210MHz	11.50	13	Complies
16QAM(MCS3)	5210MHz	11.73	13	Complies
64QAM(MCS5)	5210MHz	11.02	13	Complies
256QAM(MCS8)	5210MHz	10.83	13	Complies

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	8.83	13	Complies
QPSK(MCS1)	5180MHz	9.12	13	Complies
16QAM(MCS3)	5180MHz	10.06	13	Complies
64QAM(MCS5)	5180MHz	9.82	13	Complies
256QAM(MCS8)	5180MHz	10.63	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.21	13	Complies
QPSK(MCS1)	5190MHz	10.08	13	Complies
16QAM(MCS3)	5190MHz	10.24	13	Complies
64QAM(MCS5)	5190MHz	9.80	13	Complies
256QAM(MCS8)	5190MHz	10.74	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.48	13	Complies
QPSK(MCS1)	5210MHz	9.90	13	Complies
16QAM(MCS3)	5210MHz	11.23	13	Complies
64QAM(MCS5)	5210MHz	10.16	13	Complies
256QAM(MCS8)	5210MHz	9.97	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.96	13	Complies
QPSK(MCS1)	5200MHz	9.61	13	Complies
16QAM(MCS3)	5200MHz	10.38	13	Complies
64QAM(MCS5)	5200MHz	9.73	13	Complies
256QAM(MCS8)	5200MHz	10.33	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.75	13	Complies
QPSK(MCS1)	5230MHz	10.25	13	Complies
16QAM(MCS3)	5230MHz	9.81	13	Complies
64QAM(MCS5)	5230MHz	10.76	13	Complies
256QAM(MCS8)	5230MHz	12.51	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.35	13	Complies
QPSK(MCS1)	5210MHz	11.27	13	Complies
16QAM(MCS3)	5210MHz	10.56	13	Complies
64QAM(MCS5)	5210MHz	10.72	13	Complies
256QAM(MCS8)	5210MHz	10.37	13	Complies

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	9.28	13	Complies
QPSK(MCS1)	5180MHz	8.63	13	Complies
16QAM(MCS3)	5180MHz	9.79	13	Complies
64QAM(MCS5)	5180MHz	9.77	13	Complies
256QAM(MCS8)	5180MHz	10.22	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.24	13	Complies
QPSK(MCS1)	5190MHz	9.14	13	Complies
16QAM(MCS3)	5190MHz	9.69	13	Complies
64QAM(MCS5)	5190MHz	10.39	13	Complies
256QAM(MCS8)	5190MHz	10.44	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.20	13	Complies
QPSK(MCS1)	5210MHz	10.18	13	Complies
16QAM(MCS3)	5210MHz	11.65	13	Complies
64QAM(MCS5)	5210MHz	10.32	13	Complies
256QAM(MCS8)	5210MHz	10.33	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	8.77	13	Complies
QPSK(MCS1)	5200MHz	9.24	13	Complies
16QAM(MCS3)	5200MHz	9.82	13	Complies
64QAM(MCS5)	5200MHz	10.42	13	Complies
256QAM(MCS8)	5200MHz	10.10	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	9.25	13	Complies
QPSK(MCS1)	5230MHz	9.69	13	Complies
16QAM(MCS3)	5230MHz	10.30	13	Complies
64QAM(MCS5)	5230MHz	11.18	13	Complies
256QAM(MCS8)	5230MHz	11.03	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.05	13	Complies
QPSK(MCS1)	5210MHz	10.33	13	Complies
16QAM(MCS3)	5210MHz	11.44	13	Complies
64QAM(MCS5)	5210MHz	10.60	13	Complies
256QAM(MCS8)	5210MHz	11.34	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	9.92	13	Complies
QPSK(MCS1)	5200MHz	9.40	13	Complies
16QAM(MCS3)	5200MHz	9.60	13	Complies
64QAM(MCS5)	5200MHz	10.09	13	Complies
256QAM(MCS8)	5200MHz	10.68	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.83	13	Complies
QPSK(MCS1)	5190MHz	10.05	13	Complies
16QAM(MCS3)	5190MHz	10.48	13	Complies
64QAM(MCS5)	5190MHz	10.33	13	Complies
256QAM(MCS8)	5190MHz	10.76	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.50	13	Complies
QPSK(MCS1)	5210MHz	11.33	13	Complies
16QAM(MCS3)	5210MHz	10.52	13	Complies
64QAM(MCS5)	5210MHz	10.63	13	Complies
256QAM(MCS8)	5210MHz	10.16	13	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Benson Peng	Configurations	IEEE 802.11ac
Test Mode	Mode 6 (Ant.9 Panel antenna / 9.2dBi)		

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	9.06	13	Complies
QPSK(MCS1)	5200MHz	8.87	13	Complies
16QAM(MCS3)	5200MHz	8.84	13	Complies
64QAM(MCS5)	5200MHz	9.83	13	Complies
256QAM(MCS8)	5200MHz	9.96	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	10.11	13	Complies
QPSK(MCS1)	5190MHz	8.92	13	Complies
16QAM(MCS3)	5190MHz	9.65	13	Complies
64QAM(MCS5)	5190MHz	10.59	13	Complies
256QAM(MCS8)	5190MHz	10.64	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.03	13	Complies
QPSK(MCS1)	5210MHz	10.89	13	Complies
16QAM(MCS3)	5210MHz	12.09	13	Complies
64QAM(MCS5)	5210MHz	10.62	13	Complies
256QAM(MCS8)	5210MHz	10.06	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	8.65	13	Complies
QPSK(MCS1)	5240MHz	9.89	13	Complies
16QAM(MCS3)	5240MHz	9.50	13	Complies
64QAM(MCS5)	5240MHz	10.38	13	Complies
256QAM(MCS8)	5240MHz	10.56	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.67	13	Complies
QPSK(MCS1)	5190MHz	10.12	13	Complies
16QAM(MCS3)	5190MHz	10.76	13	Complies
64QAM(MCS5)	5190MHz	10.74	13	Complies
256QAM(MCS8)	5190MHz	10.34	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.98	13	Complies
QPSK(MCS1)	5210MHz	10.41	13	Complies
16QAM(MCS3)	5210MHz	10.74	13	Complies
64QAM(MCS5)	5210MHz	10.65	13	Complies
256QAM(MCS8)	5210MHz	10.67	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5240MHz	9.52	13	Complies
QPSK(MCS1)	5240MHz	9.23	13	Complies
16QAM(MCS3)	5240MHz	9.98	13	Complies
64QAM(MCS5)	5240MHz	10.13	13	Complies
256QAM(MCS8)	5240MHz	10.35	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	10.68	13	Complies
QPSK(MCS1)	5190MHz	9.30	13	Complies
16QAM(MCS3)	5190MHz	10.22	13	Complies
64QAM(MCS5)	5190MHz	10.55	13	Complies
256QAM(MCS8)	5190MHz	11.16	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.97	13	Complies
QPSK(MCS1)	5210MHz	9.87	13	Complies
16QAM(MCS3)	5210MHz	10.18	13	Complies
64QAM(MCS5)	5210MHz	9.76	13	Complies
256QAM(MCS8)	5210MHz	10.07	13	Complies

Temperature	25°C	Humidity	56%
Test Engineer	Serway Li	Configurations	IEEE 802.11ac
Test Mode	Mode 7 (Ant.10 PIFA antenna / 5.3dBi)		

1TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	9.41	13	Complies
QPSK(MCS1)	5180MHz	9.30	13	Complies
16QAM(MCS3)	5180MHz	9.52	13	Complies
64QAM(MCS5)	5180MHz	11.16	13	Complies
256QAM(MCS8)	5180MHz	11.79	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	9.76	13	Complies
QPSK(MCS1)	5190MHz	10.29	13	Complies
16QAM(MCS3)	5190MHz	12.11	13	Complies
64QAM(MCS5)	5190MHz	10.31	13	Complies
256QAM(MCS8)	5190MHz	10.99	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	9.74	13	Complies
QPSK(MCS1)	5210MHz	9.50	13	Complies
16QAM(MCS3)	5210MHz	9.78	13	Complies
64QAM(MCS5)	5210MHz	9.75	13	Complies
256QAM(MCS8)	5210MHz	9.70	13	Complies

2TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	9.56	13	Complies
QPSK(MCS1)	5180MHz	9.64	13	Complies
16QAM(MCS3)	5180MHz	10.30	13	Complies
64QAM(MCS5)	5180MHz	11.33	13	Complies
256QAM(MCS8)	5180MHz	10.44	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	10.10	13	Complies
QPSK(MCS1)	5230MHz	10.50	13	Complies
16QAM(MCS3)	5230MHz	11.42	13	Complies
64QAM(MCS5)	5230MHz	11.22	13	Complies
256QAM(MCS8)	5230MHz	11.27	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.86	13	Complies
QPSK(MCS1)	5210MHz	10.36	13	Complies
16QAM(MCS3)	5210MHz	9.63	13	Complies
64QAM(MCS5)	5210MHz	9.82	13	Complies
256QAM(MCS8)	5210MHz	10.08	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	10.25	13	Complies
QPSK(MCS1)	5200MHz	10.50	13	Complies
16QAM(MCS3)	5200MHz	10.75	13	Complies
64QAM(MCS5)	5200MHz	11.40	13	Complies
256QAM(MCS8)	5200MHz	11.44	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	11.14	13	Complies
QPSK(MCS1)	5230MHz	11.17	13	Complies
16QAM(MCS3)	5230MHz	12.01	13	Complies
64QAM(MCS5)	5230MHz	11.08	13	Complies
256QAM(MCS8)	5230MHz	11.12	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.42	13	Complies
QPSK(MCS1)	5210MHz	10.35	13	Complies
16QAM(MCS3)	5210MHz	10.39	13	Complies
64QAM(MCS5)	5210MHz	10.27	13	Complies
256QAM(MCS8)	5210MHz	10.50	13	Complies

3TX

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	9.47	13	Complies
QPSK(MCS1)	5200MHz	9.81	13	Complies
16QAM(MCS3)	5200MHz	10.43	13	Complies
64QAM(MCS5)	5200MHz	10.93	13	Complies
256QAM(MCS8)	5200MHz	9.69	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	10.85	13	Complies
QPSK(MCS1)	5190MHz	10.76	13	Complies
16QAM(MCS3)	5190MHz	12.00	13	Complies
64QAM(MCS5)	5190MHz	12.45	13	Complies
256QAM(MCS8)	5190MHz	10.26	13	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	11.05	13	Complies
QPSK(MCS1)	5210MHz	10.30	13	Complies
16QAM(MCS3)	5210MHz	10.92	13	Complies
64QAM(MCS5)	5210MHz	10.66	13	Complies
256QAM(MCS8)	5210MHz	11.08	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5180MHz	9.72	13	Complies
QPSK(MCS1)	5180MHz	10.15	13	Complies
16QAM(MCS3)	5180MHz	10.64	13	Complies
64QAM(MCS5)	5180MHz	11.74	13	Complies
256QAM(MCS8)	5180MHz	10.50	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5230MHz	11.41	13	Complies
QPSK(MCS1)	5230MHz	10.21	13	Complies
16QAM(MCS3)	5230MHz	11.13	13	Complies
64QAM(MCS5)	5230MHz	12.05	13	Complies
256QAM(MCS8)	5230MHz	11.33	13	Complies

Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	10.11	13	Complies
QPSK(MCS1)	5210MHz	10.52	13	Complies
16QAM(MCS3)	5210MHz	11.07	13	Complies
64QAM(MCS5)	5210MHz	10.56	13	Complies
256QAM(MCS8)	5210MHz	10.70	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5200MHz	10.06	13	Complies
QPSK(MCS1)	5200MHz	10.39	13	Complies
16QAM(MCS3)	5200MHz	11.24	13	Complies
64QAM(MCS5)	5200MHz	11.91	13	Complies
256QAM(MCS8)	5200MHz	12.31	13	Complies

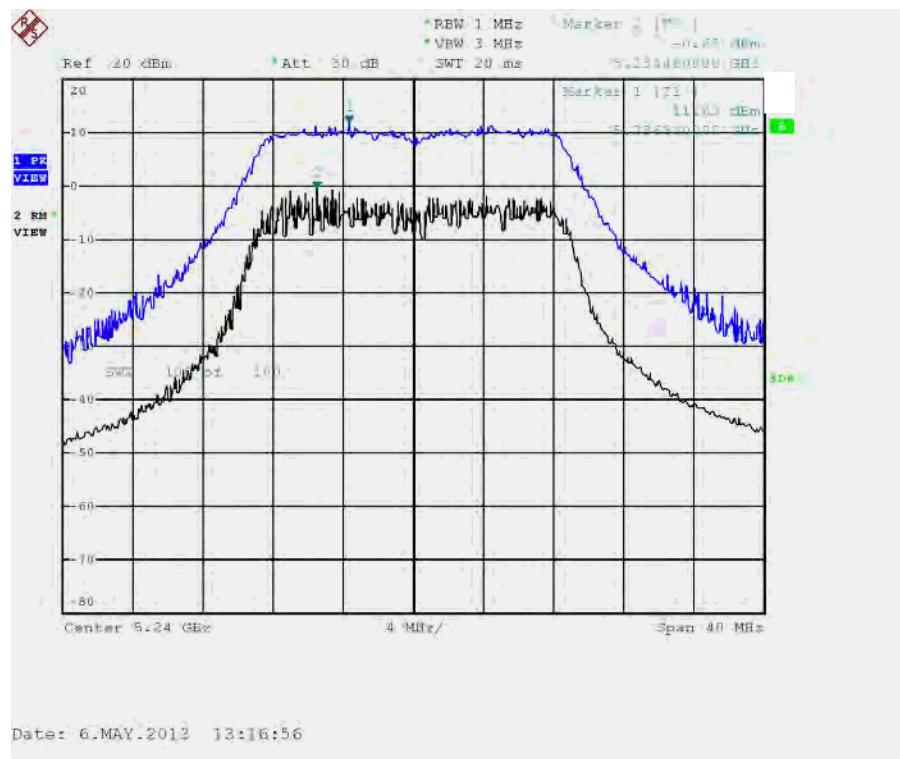
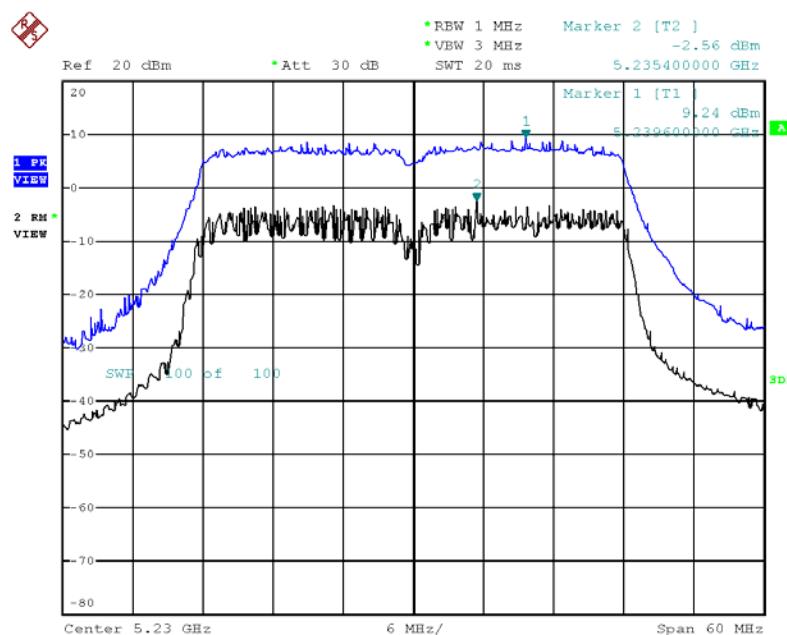
Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3

Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5190MHz	11.33	13	Complies
QPSK(MCS1)	5190MHz	11.41	13	Complies
16QAM(MCS3)	5190MHz	12.02	13	Complies
64QAM(MCS5)	5190MHz	12.17	13	Complies
256QAM(MCS8)	5190MHz	11.92	13	Complies

Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3

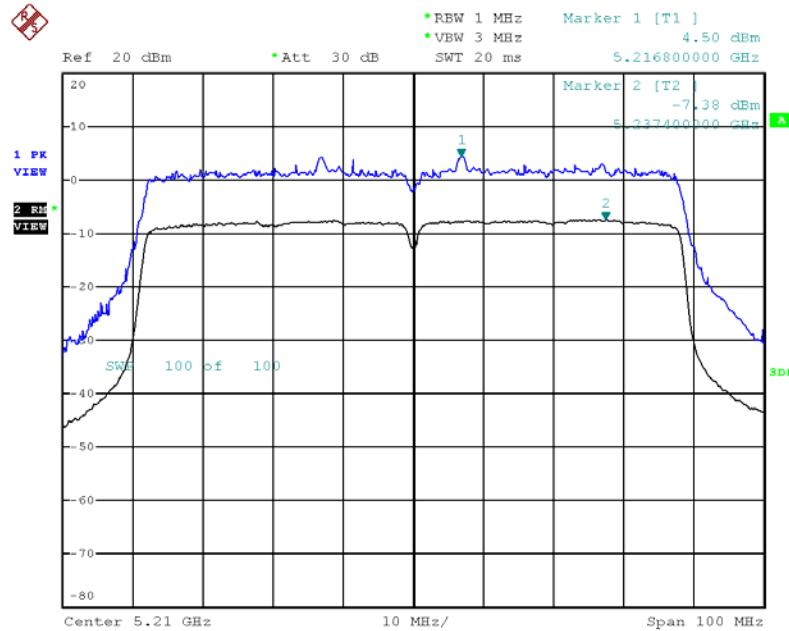
Modulation	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
BPSK(MCS0)	5210MHz	11.57	13	Complies
QPSK(MCS1)	5210MHz	11.36	13	Complies
16QAM(MCS3)	5210MHz	11.41	13	Complies
64QAM(MCS5)	5210MHz	11.60	13	Complies
256QAM(MCS8)	5210MHz	11.37	13	Complies

Note: Only the channel with maximum results was listed in the report.

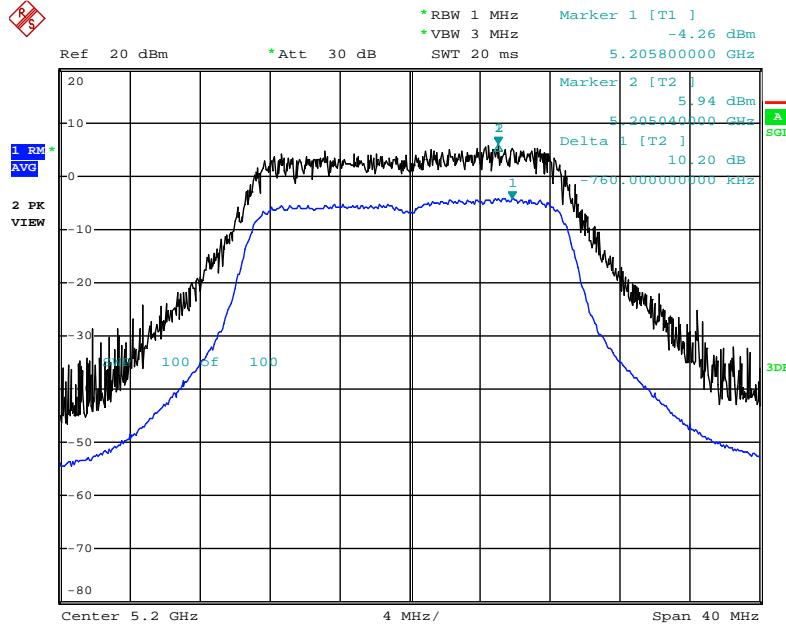
Mode 1 (Ant.1 Dipole antenna / 8dBi)
1TX
Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 256QAM(MCS8) /
5240 MHz

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 16QAM(MCS3) /
5230 MHz


Date: 6.MAY.2013 13:21:39

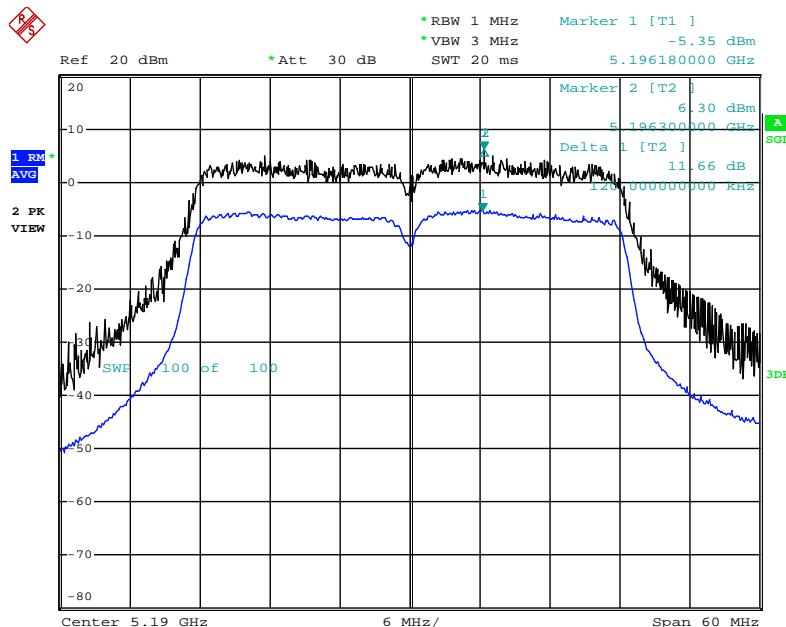
Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 16QAM(MCS3) / 5210 MHz



Date: 6.MAY.2013 15:10:49

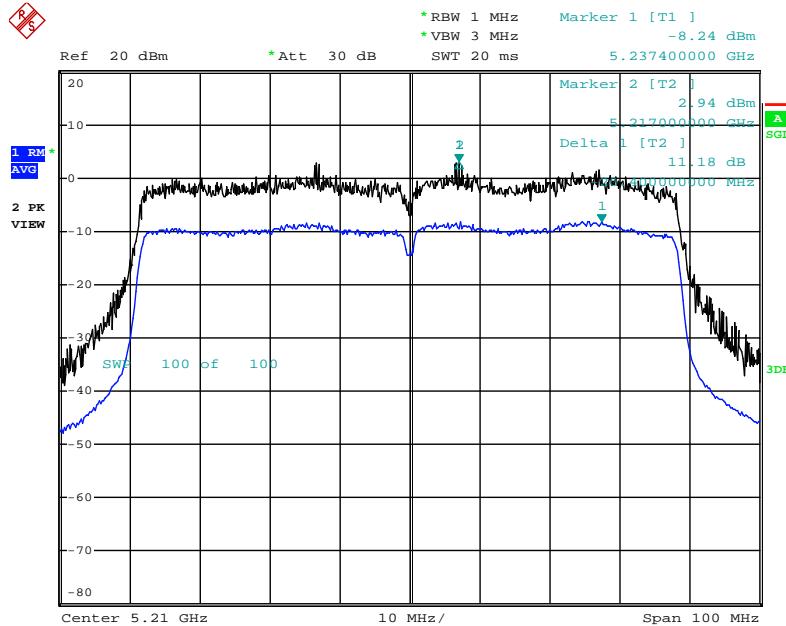
2TX
Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 256QAM(MCS8) / 5200 MHz


Date: 8.MAY.2013 20:29:24

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 64QAM(MCS5) / 5190 MHz


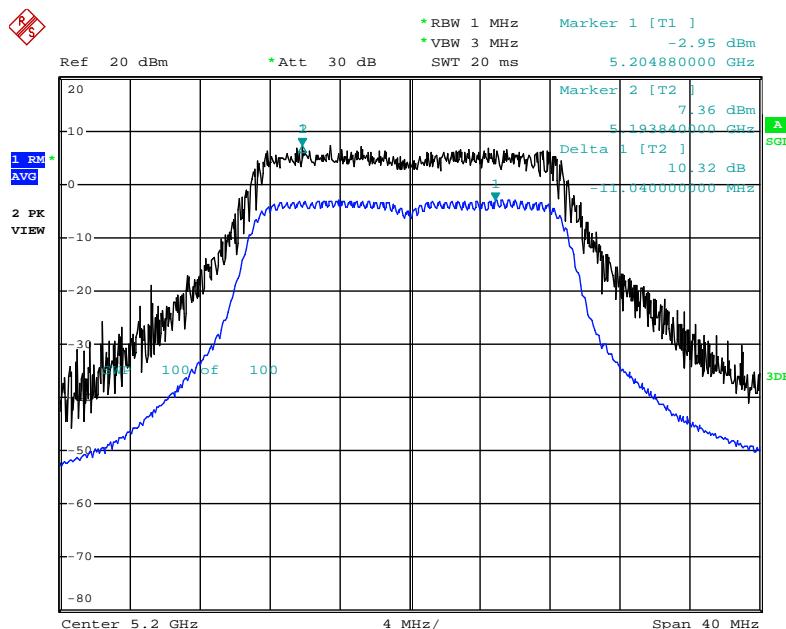
Date: 8.MAY.2013 20:25:15

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 16QAM(MCS3) / 5210 MHz



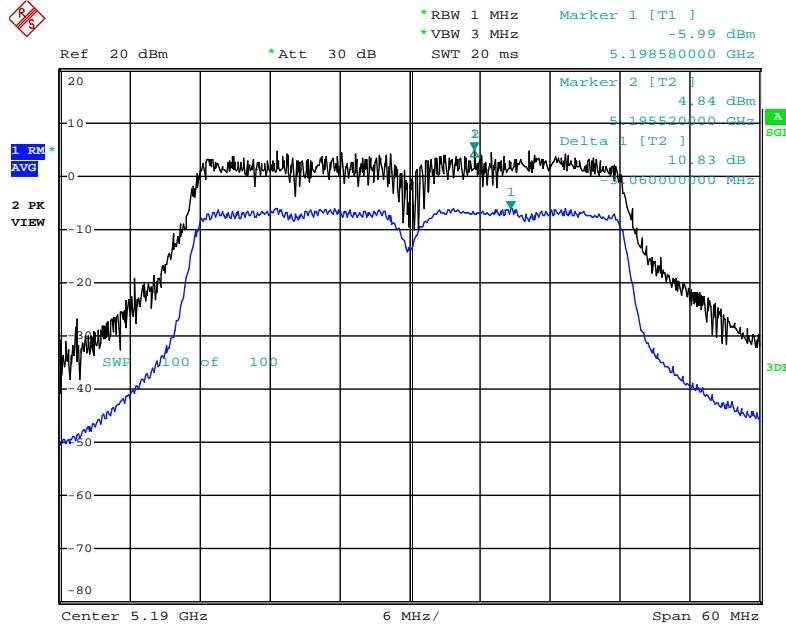
Date: 8.MAY.2013 20:41:11

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 / 256QAM(MCS8) / 5200 MHz



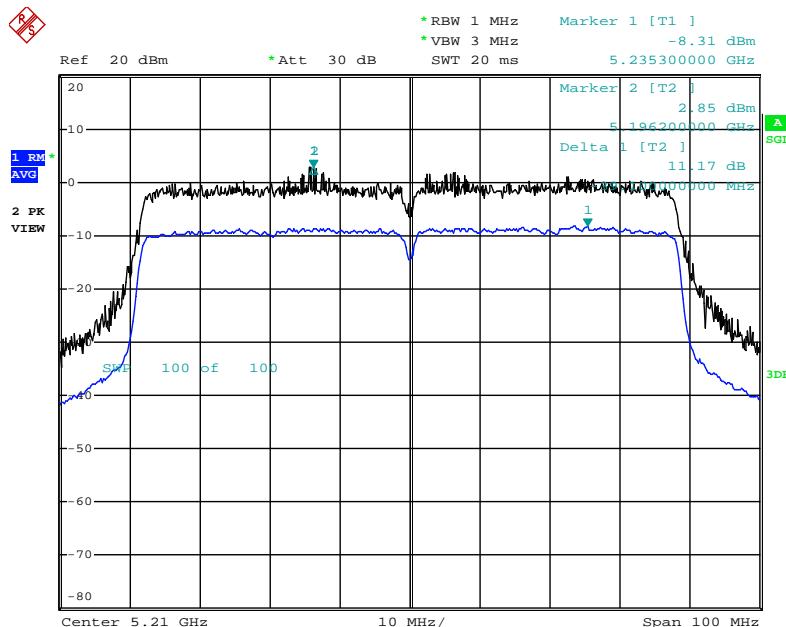
Date: 8.MAY.2013 21:03:16

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 / 256QAM(MCS8) / 5190 MHz

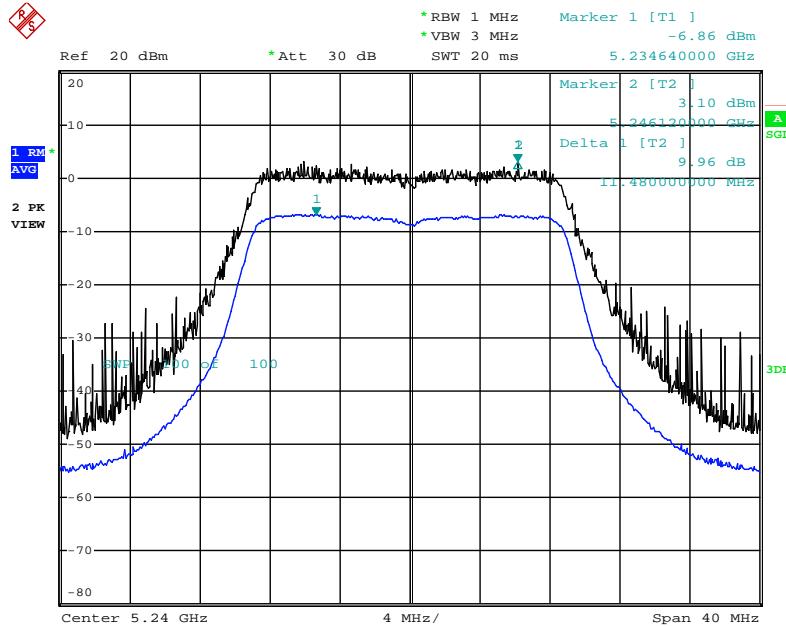


Date: 8.MAY.2013 20:59:11

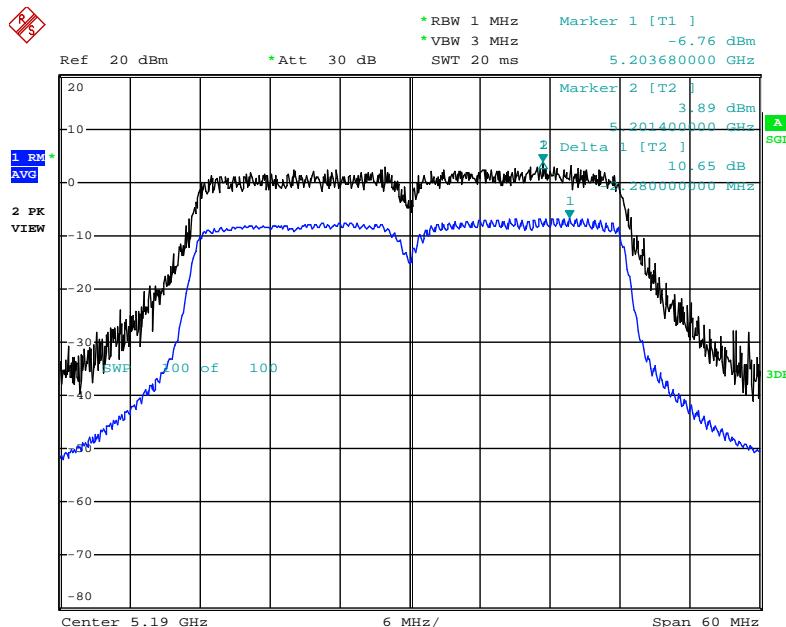
Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 / QPSK(MCS1) / 5210 MHz



Date: 8.MAY.2013 20:48:21

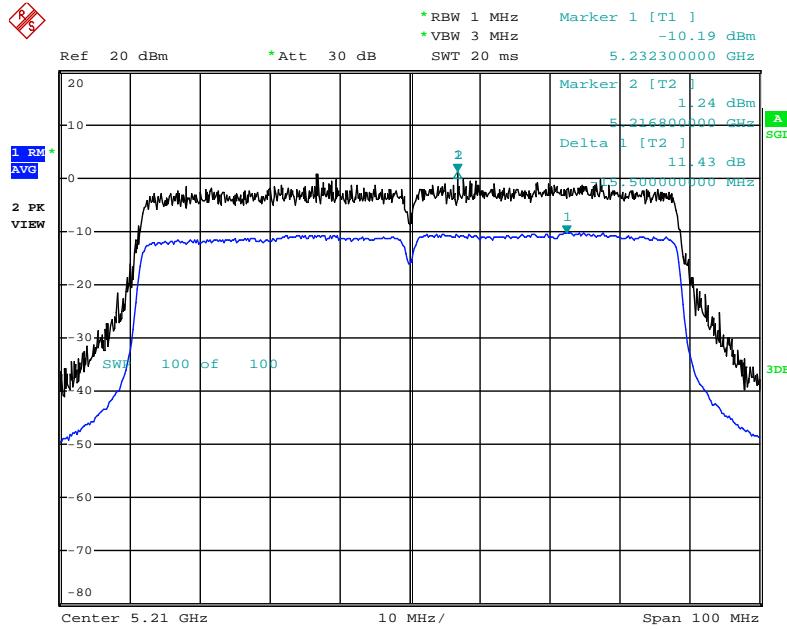
3TX
Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 16QAM(MCS3) / 5240 MHz


Date: 8.MAY.2013 21:09:06

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 256QAM(MCS8) / 5190 MHz


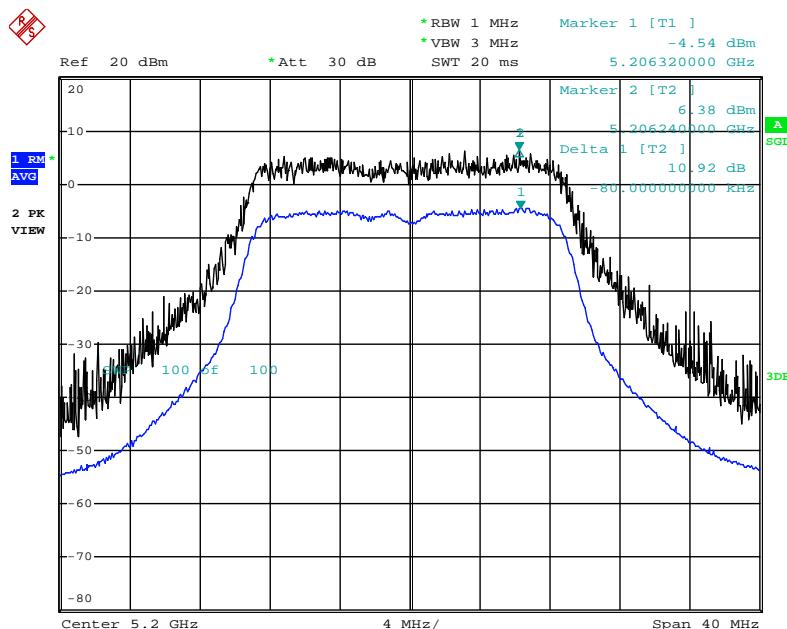
Date: 8.MAY.2013 21:15:16

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 16QAM(MCS3) / 5210 MHz



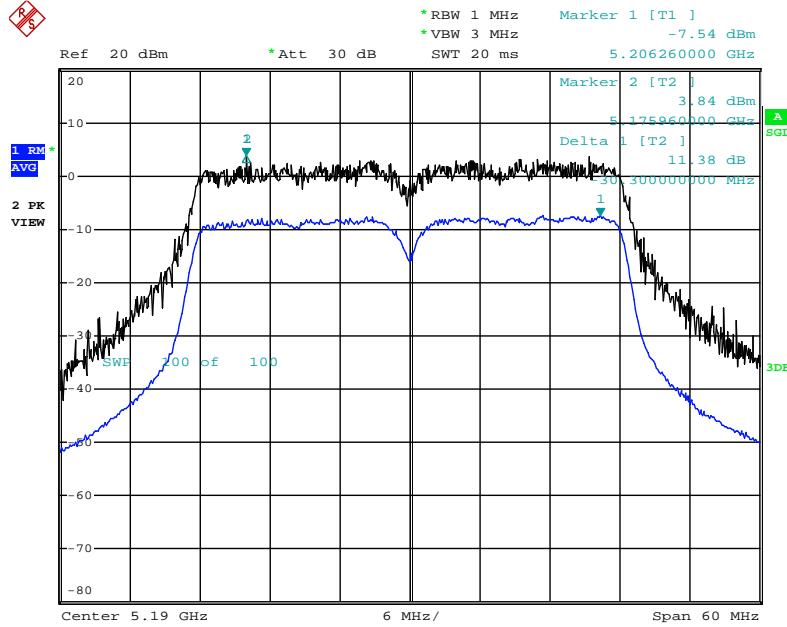
Date: 8.MAY.2013 21:18:37

Peak Excusion Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 / 256QAM(MCS8) / 5200 MHz



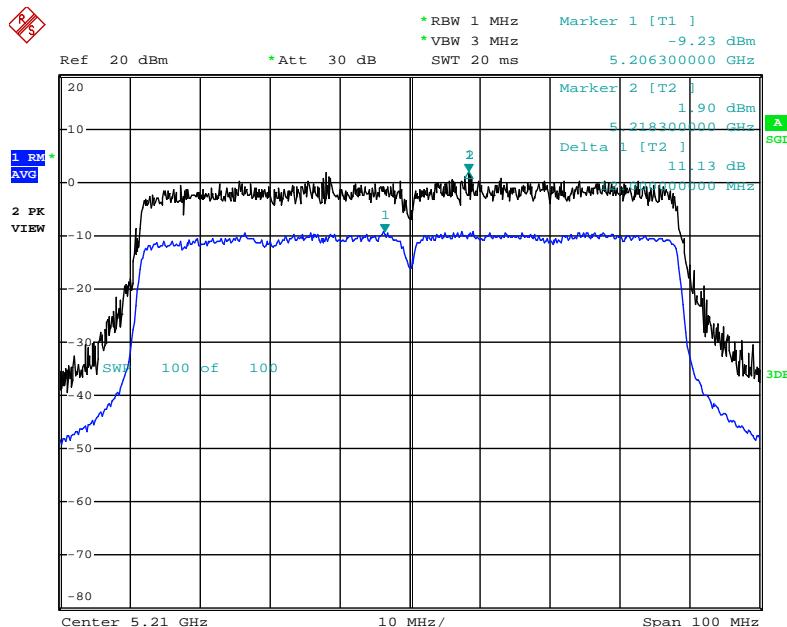
Date: 8.MAY.2013 21:42:20

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 / 256QAM(MCS8) / 5190 MHz



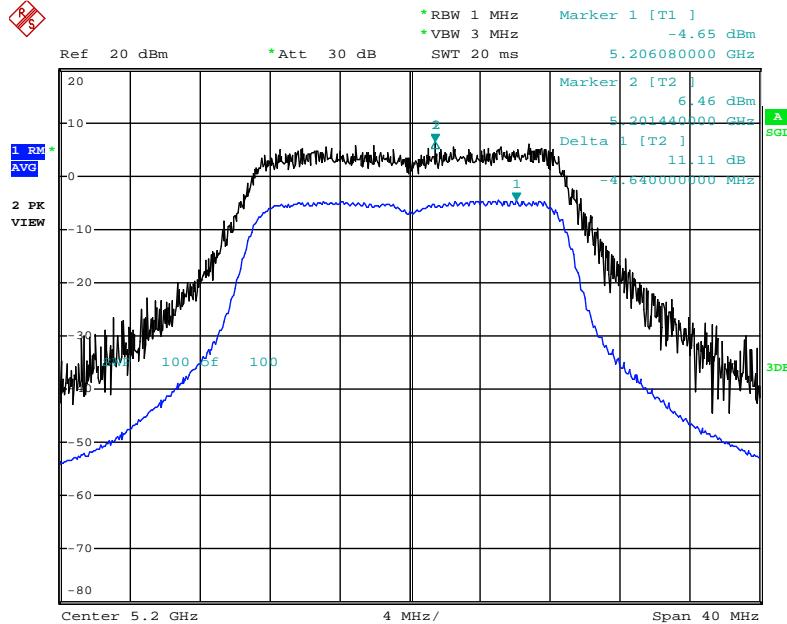
Date: 8.MAY.2013 21:31:14

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 / 16QAM(MCS3) / 5210 MHz



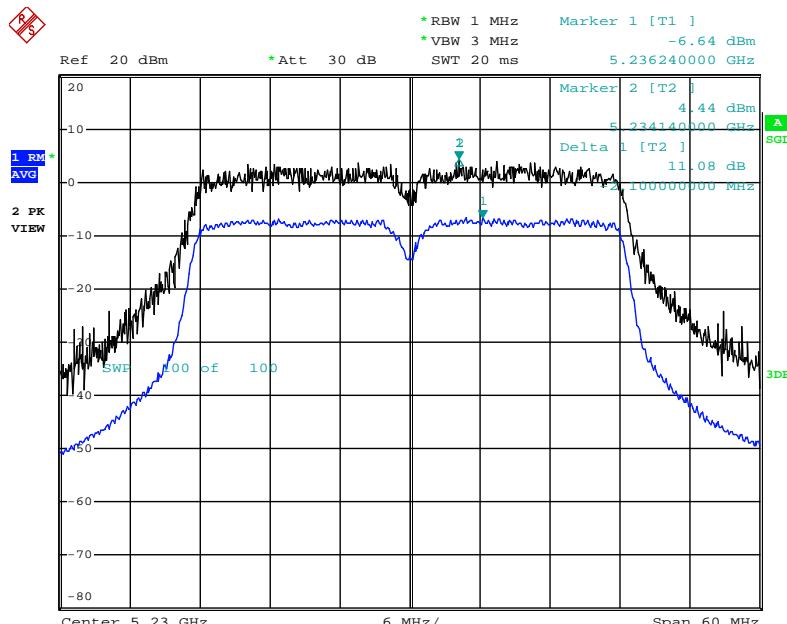
Date: 8.MAY.2013 21:24:00

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT20 / Chain 1 + Chain 2 + Chain 3 / 256QAM(MCS8) / 5200 MHz



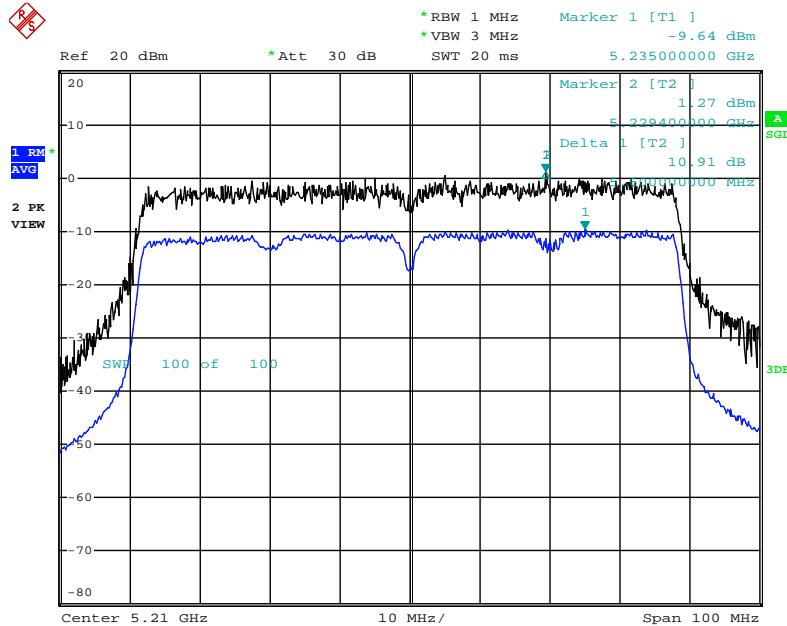
Date: 8.MAY.2013 21:47:55

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT40 / Chain 1 + Chain 2 + Chain 3 / 64QAM(MCS5) / 5230 MHz



Date: 8.MAY.2013 21:51:47

Peak Excursion Plot on Configuration IEEE 802.11ac MCS0/Nss3 VHT80 / Chain 1 + Chain 2 + Chain 3 / 64QAM(MCS5) / 5210 MHz



Date: 8.MAY.2013 21:55:57