

FCC Test Report

FCC ID : SWX-UAPFLEXHD
Equipment : UniFi FLEXHD
Brand Name : UBIQUITI
Model Name : UAP-FlexHD
Applicant/Manufacturer : Ubiquiti Networks, Inc.
685 Third Avenue, 27th Floor New York,
New York 10017 USA
Standard : 47 CFR FCC Part 15.407

The product was received on Dec. 25, 2018, and testing was started from Apr. 24, 2019 and completed on May 22, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	8
1.3 Testing Location Information	8
1.4 Measurement Uncertainty	8
2 TEST CONFIGURATION OF EUT.....	9
2.1 Test Condition	9
2.2 Test Channel Mode	9
2.3 The Worst Case Measurement Configuration.....	10
2.4 Support Equipment.....	11
2.5 Test Setup Diagram	12
3 TRANSMITTER TEST RESULT	14
3.1 AC Power-line Conducted Emissions	14
3.2 Emission Bandwidth	15
3.3 Maximum Conducted Output Power	16
3.4 Peak Power Spectral Density.....	18
3.5 Unwanted Emissions.....	20
3.6 Test Equipment and Calibration Data	25
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF EMISSION BANDWIDTH	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY	
APPENDIX E. TEST RESULTS OF UNWANTED EMISSIONS	
APPENDIX F. TEST RESULTS OF RADIATED EMISSION CO-LOCATION	
APPENDIX G. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	

[illegible]

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Jackson Tsai

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Non-Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX
5.725-5.85GHz	802.11a	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.725-5.85GHz	802.11ac VHT80	80	4TX

Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ac VHT20-BF	20	4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	4TX
5.15-5.25GHz	802.11ac VHT80-BF	80	4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	4TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector
1	1	-	-	internal antenna	i-Pex
2	2	-	-	internal antenna	i-Pex
3	3	-	-	internal antenna	i-Pex
4	4	-	-	internal antenna	i-Pex
5	1	-	-	internal antenna	fixed on board

Ant.	Port	Gain (dBi)		
		2.4G	BT	5G
1	1	1.6	-	4.0
2	2			
3	3	-	-	4.0
4	4			
5	1	-	1.6	-

Note 1: The EUT has four antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (2TX/2RX):

Ant. 1 and Ant. 2 can be used as transmitting/receiving antenna.

For BT function:

For Bluetooth mode (1TX/1RX)

Only Ant. 5 can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11a/n/ac mode (4TX/4RX):

Ant. 1 & Ant. 2 & Ant. 3 and Ant. 4 can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From PoE		
EUT Function	☒ Outdoor	☒ Indoor	
	☐ Fixed P2P	☐ Client	
Beamforming Function	☒ With beamforming	☐ Without beamforming	
TPC Function	☐ With TPC Function	☒ Without TPC Function	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		...
☐	Other:		

1.1.4 Mode Test Duty Cycle

Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.801	0.96	1.398m	1k
802.11ac VHT20	0.801	0.96	1.318m	1k
802.11ac VHT40	0.661	1.8	662.5u	3k
802.11ac VHT80	0.496	3.05	328.125u	10k
802.11ac VHT80+80	0.358	4.46	187.5u	10k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.994	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40-BF	0.979	0.09	2.423m	1k
802.11ac VHT80+80-BF	0.993	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT80-BF	0.253	5.97	130u	10k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ KDB 789033 D02 v02r01
- ♦ KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Dexter Dai	25.1~26.3°C / 59~61%	04/May/2019~13/May/2019
Radiated	03CH03-HY	Jeff Lin	23.6~24.2°C / 51.2~52.1%	24/Apr/2019~20/May/2019
AC Conduction	CO01-HY	Jeff Lin	22.5~26.5°C / 51.3~56.5%	21/May/2019~22/May/2019

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Non-Beamforming

Test Software Version	QA 0.0.1.58
-----------------------	-------------

Beamforming

Test Software	DoS
---------------	-----

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	PoE Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	PoE Mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Y Plane
	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz+WLAN 5GHz

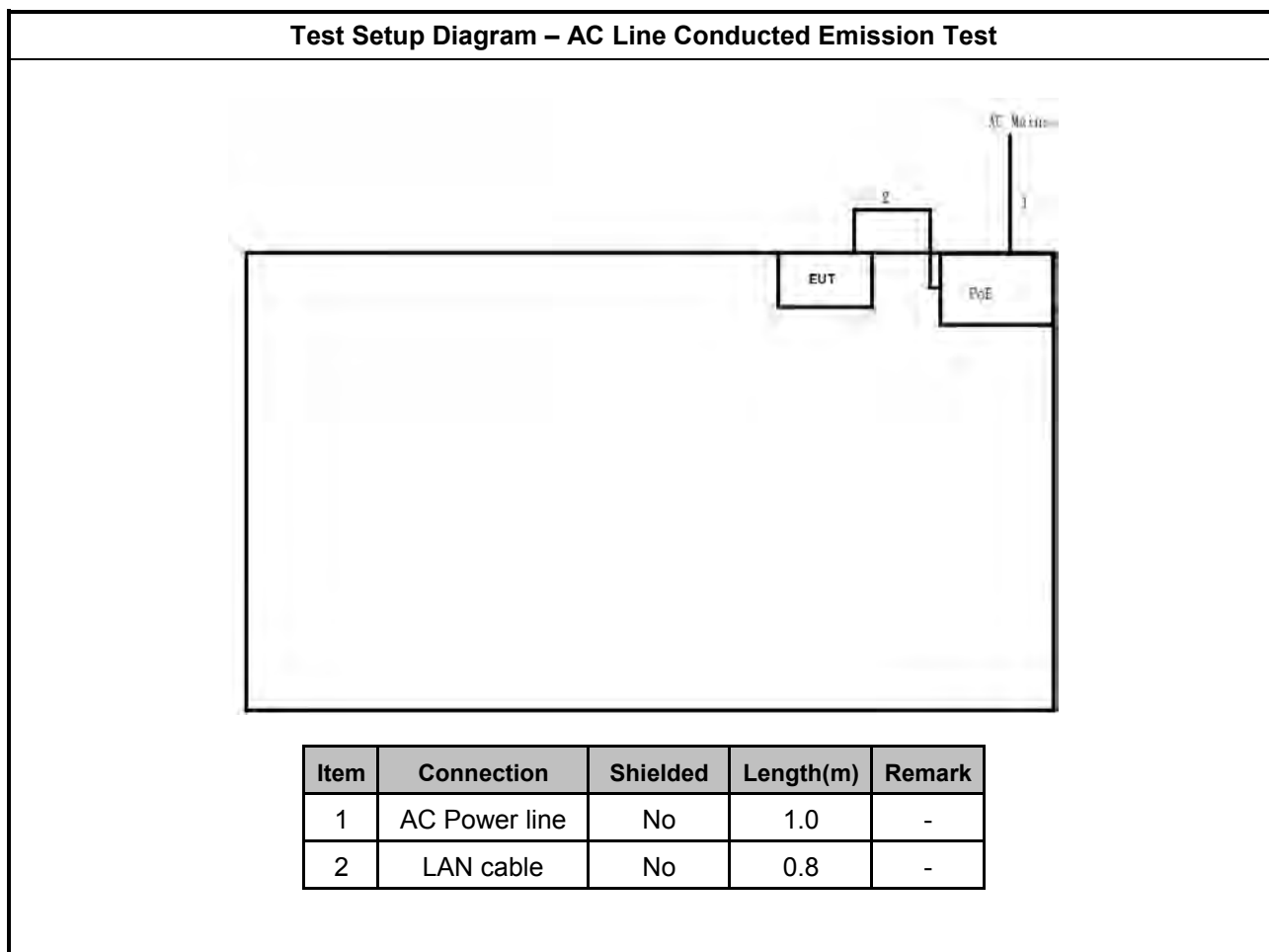
2.4 Support Equipment

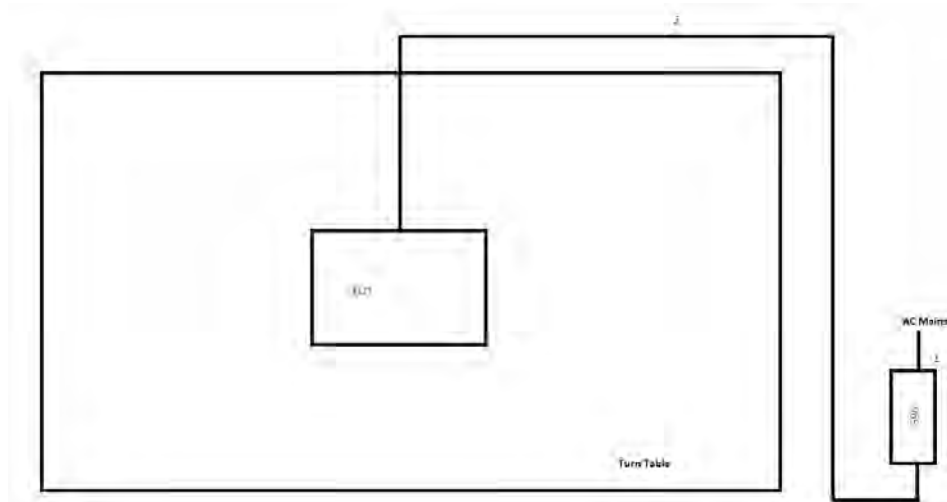
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	UBIQUITI	GP-H480-050G	-

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE (Remote)	UBIQUITI	GP-H480-050G	-

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	NoteBook for BF	DELL	Latitude E5540	-
4	Adapter for NB for BF	DELL	FA90PSO-00	-
5	AC Power Source	GW	APS-9102	-
6	Client for BF (Client Provide)	UBIQUITI	UAP-NanoHD_Tier 2	-
7	PoE for Client	UBIQUITI	GP-H480-050G	-
8	PoE for EUT	UBIQUITI	GP-A240-050G	-

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	Lan cable	No	10.0	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

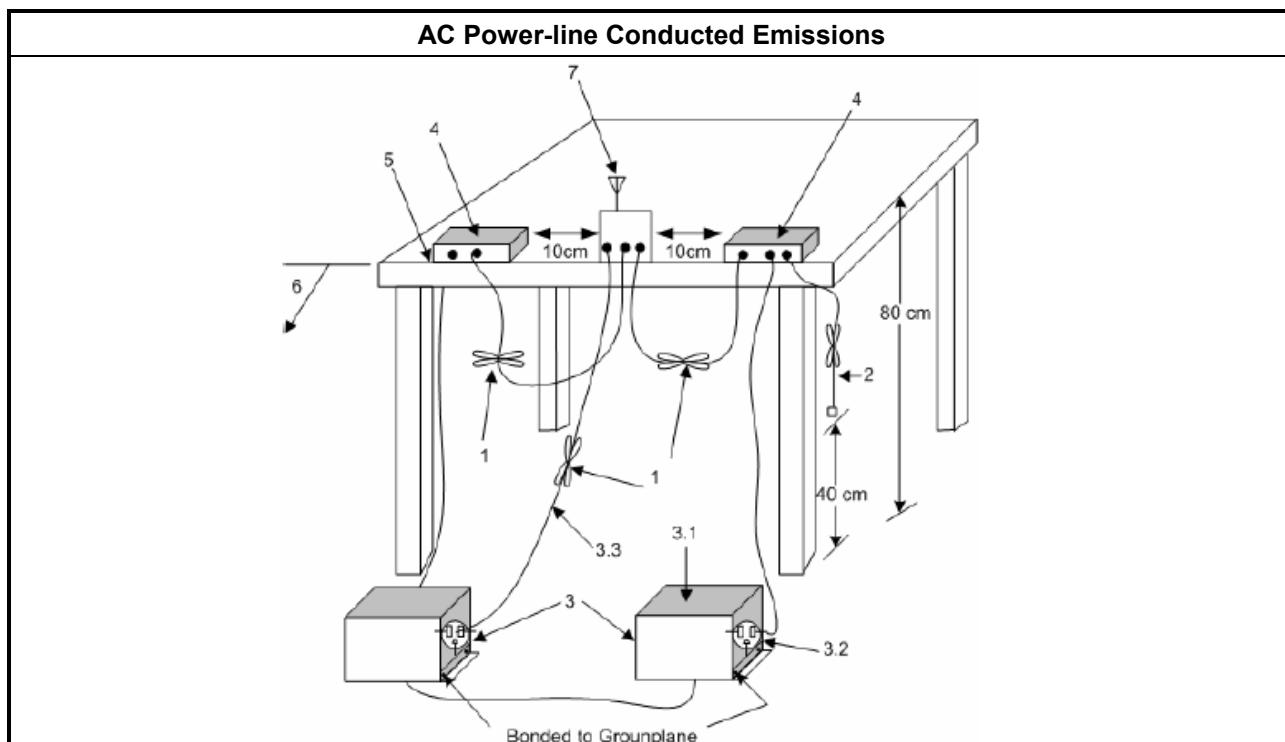
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, N/A
☐	For the 5.47-5.725 GHz band, N/A
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

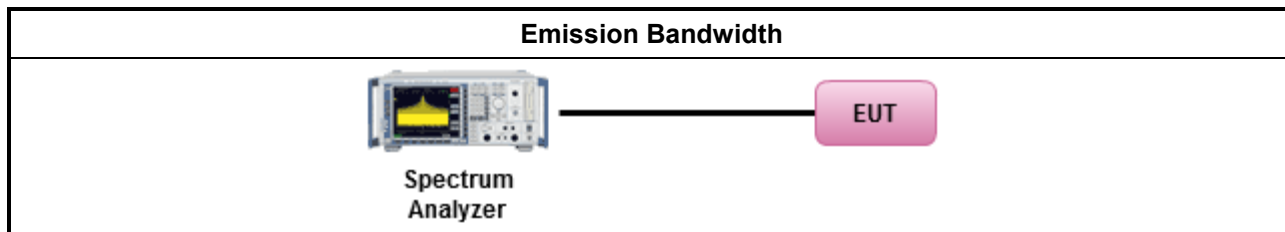
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ - Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. - Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

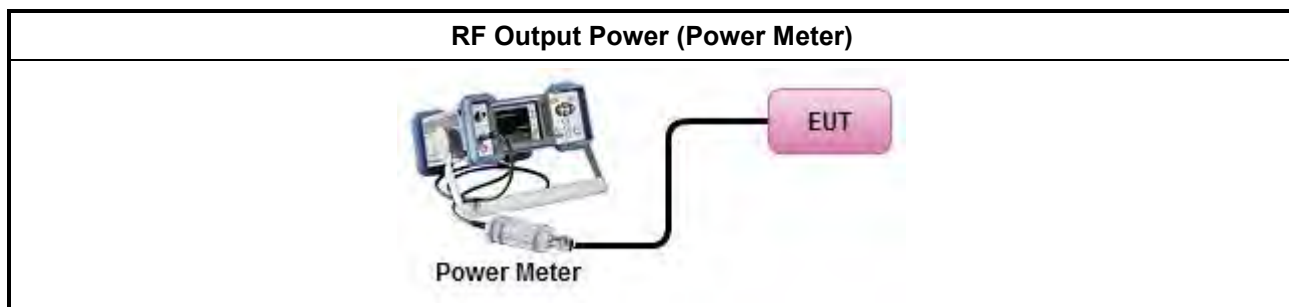
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
Maximum Conducted Output Power	
	Duty cycle $\geq 98\%$
☐	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
☐	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as KDB 789033, clause E Method PM (using an RF average power meter).
For conducted measurement.	
	If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. - Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☐ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

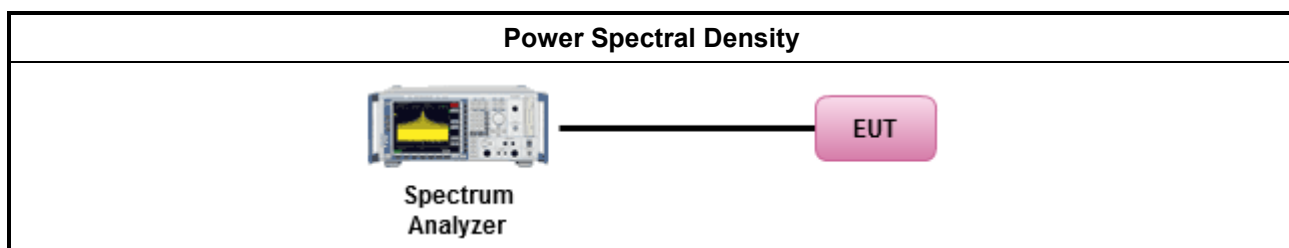
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
Duty cycle ≥ 98%	
☒	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
Duty cycle < 98%	
☒	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☐	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the 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 NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	

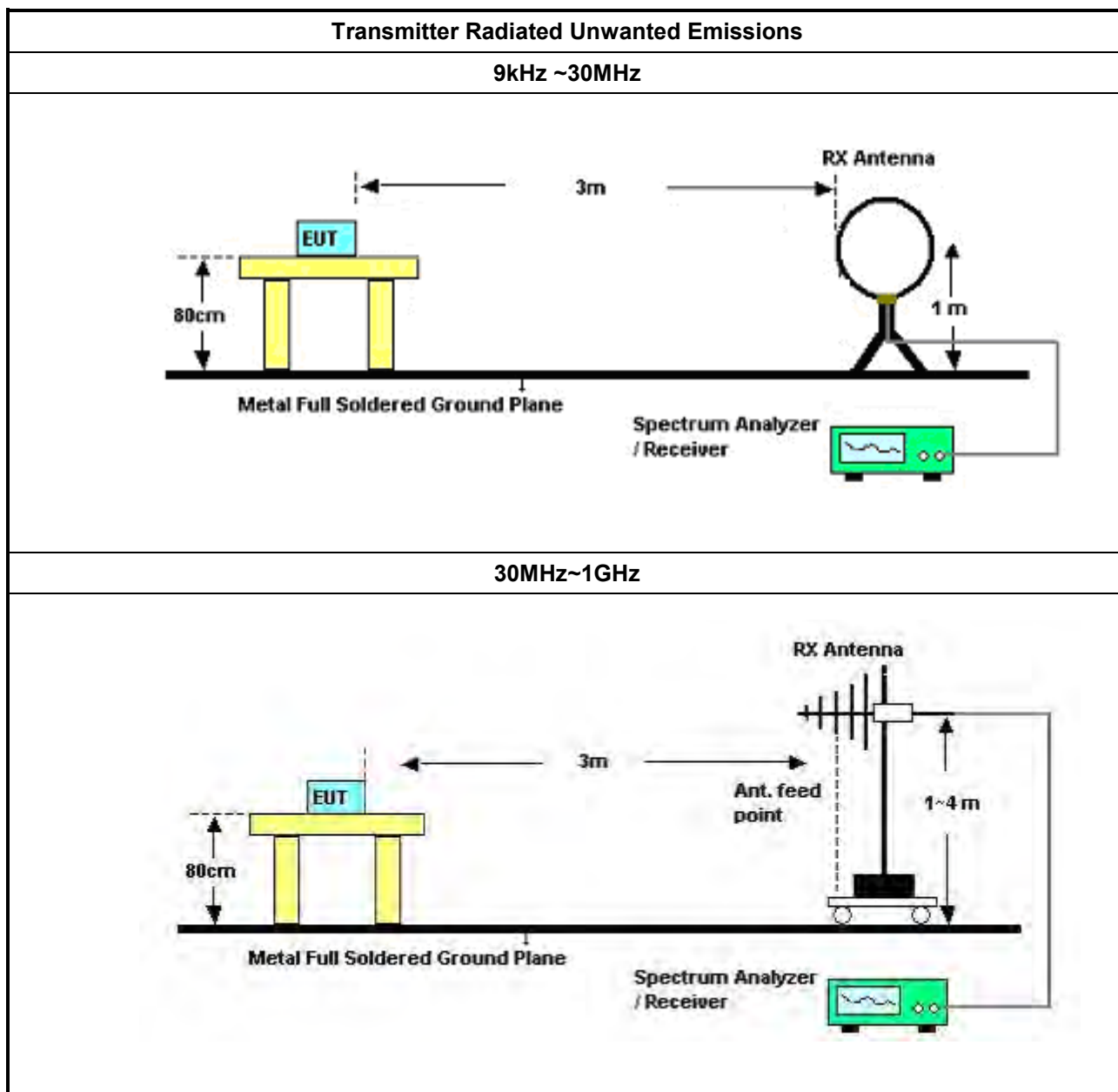
3.5.2 Measuring Instruments

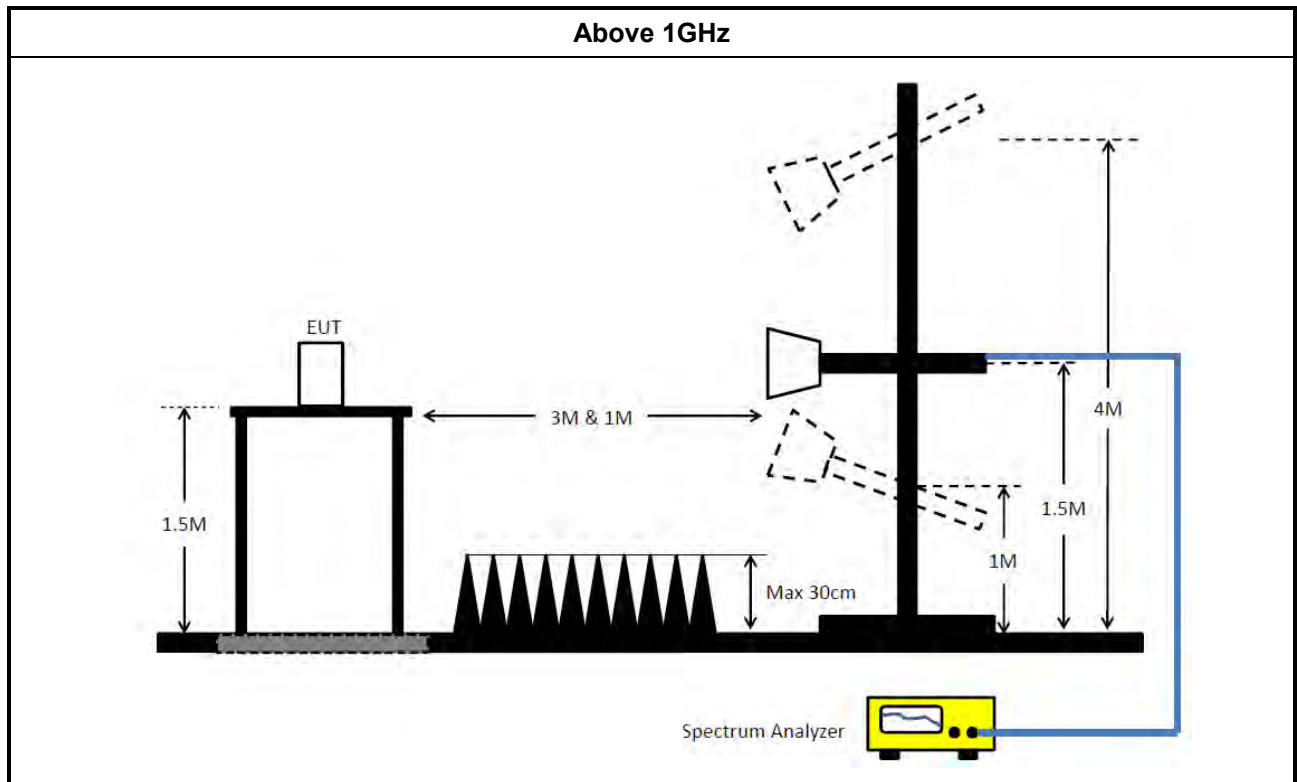
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☒ Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
	☒ Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.5.4 Test Setup





3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV 216	101274	9kHz ~ 30MHz	12/Jun/2018	11/Jun/2019
RF Cable-CON	MTJ	RG142	CB001-CO	9kHz ~ 30MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11003G	F308010045	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561F	9495	9kHz ~ 30MHz	11/Oct/2018	10/Oct/2019

NCR : Non-Calibration Require

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	30/Oct/2018	29/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	30/Oct/2018	29/Oct/2019
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
Bilog Antenna with 5dB Pad	ETS	3142B & MTJ6102-05	00022055	26 MHz - 3 GHz	19/Nov/2018	18/Nov/2019
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	05/Sep/2018	04/Sep/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	22/Mar/2019	21/Mar/2020
RF Cable-high	SUHNER	SUCOFLEX 106	MY34918/4	1GHz ~ 40GHz	21/Mar/2019	20/Mar/2020
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	19/Jan/2019	18/Jan/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170339	18GHz ~ 40GHz	19/Apr/ 2019	18/Apr/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	09/Mar/ 2019	08/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	15/Mar/2019	14/Mar/2020

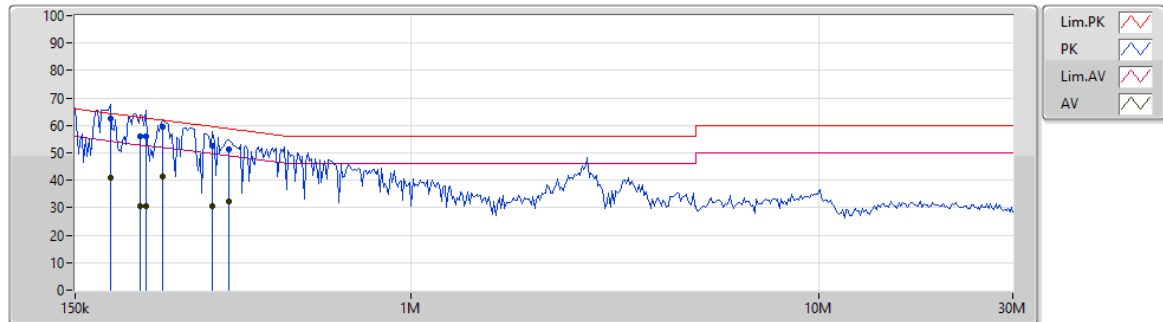
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101029	10Hz~40GHz	11/Sep/2018	10/Sep/2019
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	19/Feb/2019	18/Feb/2020
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	19/Feb/2019	18/Feb/2020
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz~1G	11/Jan/2019	10/Jan/2020
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	1G~18G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY10714/4	RF Cable - 05	30MHz~1G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY22998/4	RF Cable - 08	1G~18G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY37954/4	RF Cable - 09	30MHz~1G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY37954/4	RF Cable - 09	1G~18G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY37955/4	RF Cable - 10	30MHz~1G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY37955/4	RF Cable - 10	30MHz~1G	11/Jan/2019	10/Jan/2020
Cable 1.5m	HUBER	MY37973/4	RF Cable - 16	30MHz~1G	11/Jan/2019	10/Jan/2020
Spectrum Analyzer	R&S	FSV 40	101029	10Hz~40GHz	11/Sep/2018	10/Sep/2019

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE Mode_Non-Beamforming		

22/05/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	183.029k	62.50	64.34	-1.84	19.51	Neutral	"Worst"	42.99	9.64	0.01	9.86			
AV	183.029k	40.98	54.34	-13.36	19.51	Neutral	-	21.47	9.64	0.01	9.86			
QP	216.33k	55.94	62.96	-7.02	19.51	Neutral	-	36.43	9.64	0.01	9.86			
AV	216.33k	30.39	52.96	-22.57	19.51	Neutral	-	10.88	9.64	0.01	9.86			
QP	223.33k	55.94	62.69	-6.75	19.51	Neutral	-	36.43	9.64	0.01	9.86			
AV	223.33k	30.41	52.69	-22.28	19.51	Neutral	-	10.90	9.64	0.01	9.86			
QP	246.695k	59.67	61.87	-2.20	19.51	Neutral	-	40.16	9.64	0.01	9.86			
AV	246.695k	41.42	51.87	-10.45	19.51	Neutral	-	21.91	9.64	0.01	9.86			
QP	325.956k	52.62	59.56	-6.94	19.51	Neutral	-	33.11	9.64	0.01	9.86			
AV	325.956k	30.50	49.56	-19.06	19.51	Neutral	-	10.99	9.64	0.01	9.86			
QP	356.493k	51.43	58.81	-7.38	19.51	Neutral	-	31.92	9.64	0.01	9.86			
AV	356.493k	32.35	48.81	-16.46	19.51	Neutral	-	12.84	9.64	0.01	9.86			

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE Mode_Non-Beamforming		

22/05/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	170.714k	63.99	64.93	-0.94	19.48	Line	-	44.51	9.61	0.01	9.86			
AV	170.714k	43.90	54.93	-11.03	19.48	Line	-	24.42	9.61	0.01	9.86			
QP	180.614k	63.99	64.45	-0.46	19.48	Line	"Worst"	44.51	9.61	0.01	9.86			
AV	180.614k	44.08	54.45	-10.37	19.48	Line	-	24.60	9.61	0.01	9.86			
QP	204.199k	61.52	63.44	-1.92	19.48	Line	-	42.04	9.61	0.01	9.86			
AV	204.199k	40.11	53.44	-13.33	19.48	Line	-	20.63	9.61	0.01	9.86			
QP	241.834k	60.44	62.02	-1.58	19.48	Line	-	40.96	9.61	0.01	9.86			
AV	241.834k	41.63	52.02	-10.39	19.48	Line	-	22.15	9.61	0.01	9.86			
QP	367.295k	47.14	58.56	-11.42	19.48	Line	-	27.66	9.61	0.01	9.86			
AV	367.295k	25.75	48.56	-22.81	19.48	Line	-	6.27	9.61	0.01	9.86			
QP	471.031k	46.80	56.50	-9.70	19.48	Line	-	27.32	9.61	0.01	9.86			
AV	471.031k	29.45	46.50	-17.05	19.48	Line	-	9.97	9.61	0.01	9.86			

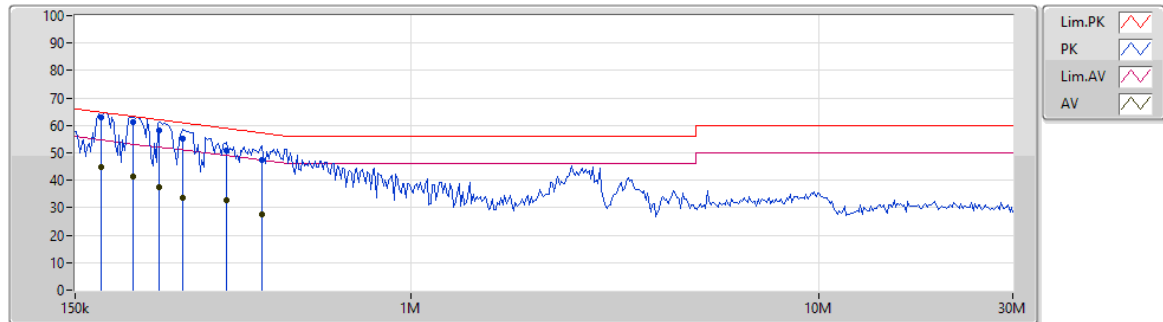
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Neutral
Operating Function	PoE Mode_Beamforming		

21/05/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	174.145k	63.12	64.76	-1.64	19.52	Neutral	"Worst"	43.60	9.65	0.01	9.86			
AV	174.145k	44.95	54.76	-9.81	19.52	Neutral	-	25.43	9.65	0.01	9.86			
QP	208.304k	61.10	63.27	-2.17	19.51	Neutral	-	41.59	9.64	0.01	9.86			
AV	208.304k	41.41	53.27	-11.86	19.51	Neutral	-	21.90	9.64	0.01	9.86			
QP	241.834k	58.29	62.02	-3.73	19.51	Neutral	-	38.78	9.64	0.01	9.86			
AV	241.834k	37.58	52.02	-14.44	19.51	Neutral	-	18.07	9.64	0.01	9.86			
QP	275.23k	55.26	60.95	-5.69	19.51	Neutral	-	35.75	9.64	0.01	9.86			
AV	275.23k	33.81	50.95	-17.14	19.51	Neutral	-	14.30	9.64	0.01	9.86			
QP	352.963k	51.06	58.89	-7.83	19.51	Neutral	-	31.55	9.64	0.01	9.86			
AV	352.963k	32.59	48.89	-16.30	19.51	Neutral	-	13.08	9.64	0.01	9.86			
QP	430.682k	47.62	57.24	-9.62	19.51	Neutral	-	28.11	9.64	0.01	9.86			
AV	430.682k	27.50	47.24	-19.74	19.51	Neutral	-	7.99	9.64	0.01	9.86			

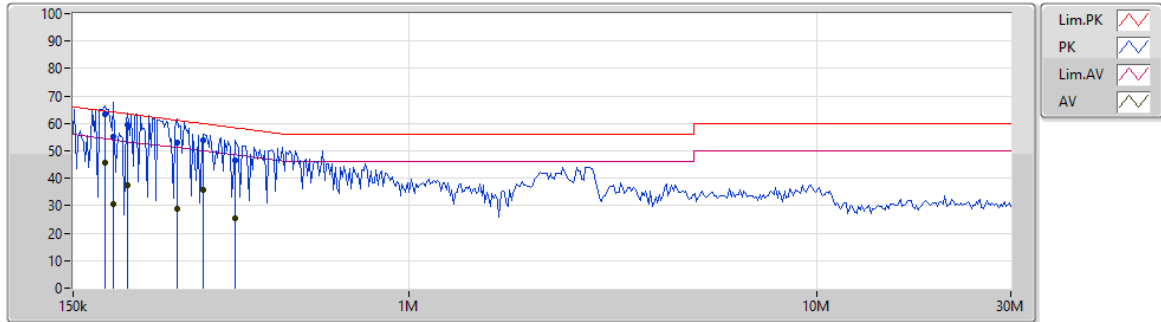
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Line
Operating Function	PoE Mode_Beamforming		

21/05/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	179.422k	63.30	64.51	-1.21	19.48	Line	"Worst"	43.82	9.61	0.01	9.86			
AV	179.422k	45.54	54.51	-8.97	19.48	Line	-	26.06	9.61	0.01	9.86			
QP	188.574k	55.29	64.11	-8.82	19.48	Line	-	35.81	9.61	0.01	9.86			
AV	188.574k	30.44	54.11	-23.67	19.48	Line	-	10.96	9.61	0.01	9.86			
QP	204.199k	59.63	63.44	-3.81	19.48	Line	-	40.15	9.61	0.01	9.86			
AV	204.199k	37.53	53.44	-15.91	19.48	Line	-	18.05	9.61	0.01	9.86			
QP	269.806k	52.85	61.12	-8.27	19.48	Line	-	33.37	9.61	0.01	9.86			
AV	269.806k	28.93	51.12	-22.19	19.48	Line	-	9.45	9.61	0.01	9.86			
QP	313.237k	54.01	59.88	-5.87	19.48	Line	-	34.53	9.61	0.01	9.86			
AV	313.237k	35.89	49.88	-13.99	19.48	Line	-	16.41	9.61	0.01	9.86			
QP	374.678k	46.49	58.39	-11.90	19.48	Line	-	27.01	9.61	0.01	9.86			
AV	374.678k	25.48	48.39	-22.91	19.48	Line	-	6.00	9.61	0.01	9.86			

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.1M	16.462M	16M5D1D	19.86M	16.402M
802.11ac VHT20_Nss1,(MCS0)_4TX	27.36M	17.631M	17M6D1D	19.89M	17.571M
802.11ac VHT40_Nss1,(MCS0)_4TX	41.94M	36.102M	36M1D1D	39.96M	35.922M
802.11ac VHT80_Nss1,(MCS0)_4TX	81.24M	75.082M	75M1D1D	79.56M	74.843M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	15.27M	17.271M	17M3D1D	15M	16.672M
802.11ac VHT20_Nss1,(MCS0)_4TX	16.29M	17.901M	17M9D1D	15.03M	17.541M
802.11ac VHT40_Nss1,(MCS0)_4TX	35.1M	36.462M	36M5D1D	34.44M	36.102M
802.11ac VHT80_Nss1,(MCS0)_4TX	75M	75.322M	75M3D1D	72.6M	75.082M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.92M	16.462M	19.86M	16.402M	24.48M	16.432M	24.57M	16.432M
5200MHz	Pass	Inf	26.1M	16.432M	24.69M	16.432M	24.6M	16.402M	24.69M	16.402M
5240MHz	Pass	Inf	23.31M	16.402M	25.02M	16.402M	23.49M	16.402M	25.56M	16.462M
5745MHz	Pass	500k	15.06M	16.672M	15.03M	16.792M	15.06M	16.762M	15.27M	16.762M
5785MHz	Pass	500k	15.12M	17.031M	15.12M	16.882M	15.09M	17.271M	15.03M	16.792M
5825MHz	Pass	500k	15M	16.882M	15.09M	17.031M	15.03M	17.151M	15.09M	16.822M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.55M	17.601M	20.01M	17.571M	19.89M	17.571M	20.25M	17.571M
5200MHz	Pass	Inf	26.01M	17.601M	24.15M	17.601M	26.91M	17.631M	22.62M	17.601M
5240MHz	Pass	Inf	23.25M	17.571M	23.91M	17.571M	27.06M	17.571M	27.36M	17.631M
5745MHz	Pass	500k	15.09M	17.781M	16.05M	17.871M	15.12M	17.901M	15.03M	17.751M
5785MHz	Pass	500k	15.42M	17.601M	16.29M	17.541M	15.06M	17.601M	15.93M	17.601M
5825MHz	Pass	500k	15.45M	17.571M	15.66M	17.541M	15.69M	17.541M	15.06M	17.571M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.56M	35.982M	39.96M	35.982M	40.08M	36.042M	40.2M	35.922M
5230MHz	Pass	Inf	41.94M	36.042M	39.96M	36.102M	40.56M	36.042M	40.44M	35.922M
5755MHz	Pass	500k	35.04M	36.402M	34.44M	36.402M	35.04M	36.462M	35.04M	36.402M
5795MHz	Pass	500k	35.1M	36.162M	34.44M	36.102M	35.1M	36.342M	35.04M	36.162M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.24M	75.082M	79.68M	74.843M	79.8M	75.082M	79.56M	74.843M
5775MHz	Pass	500k	72.6M	75.082M	75M	75.082M	73.8M	75.322M	72.6M	75.202M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

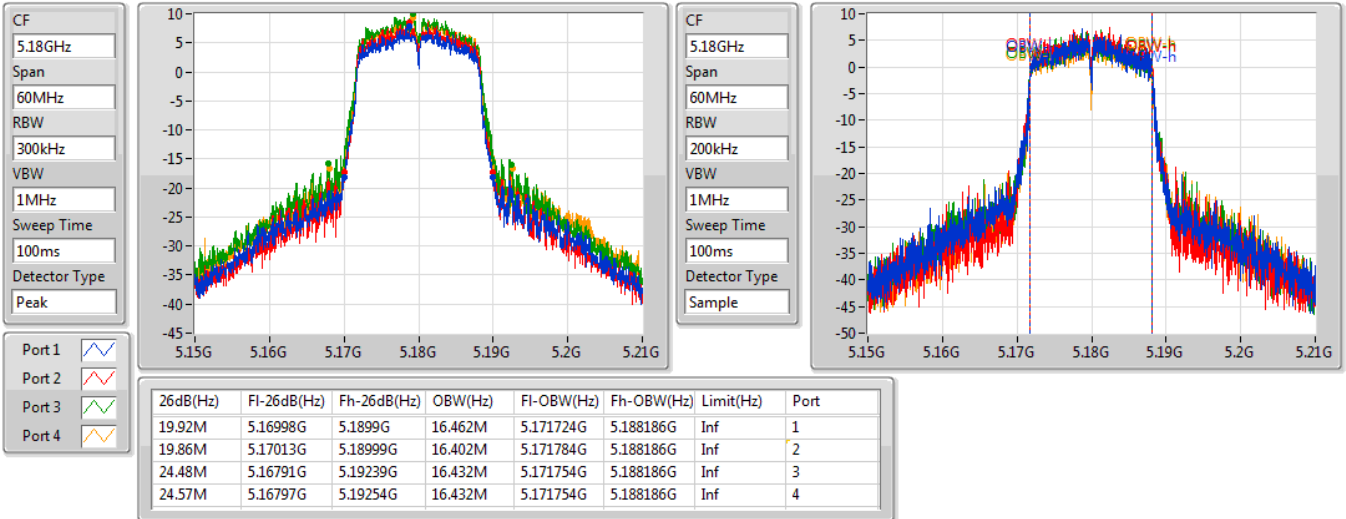
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

06/05/2019

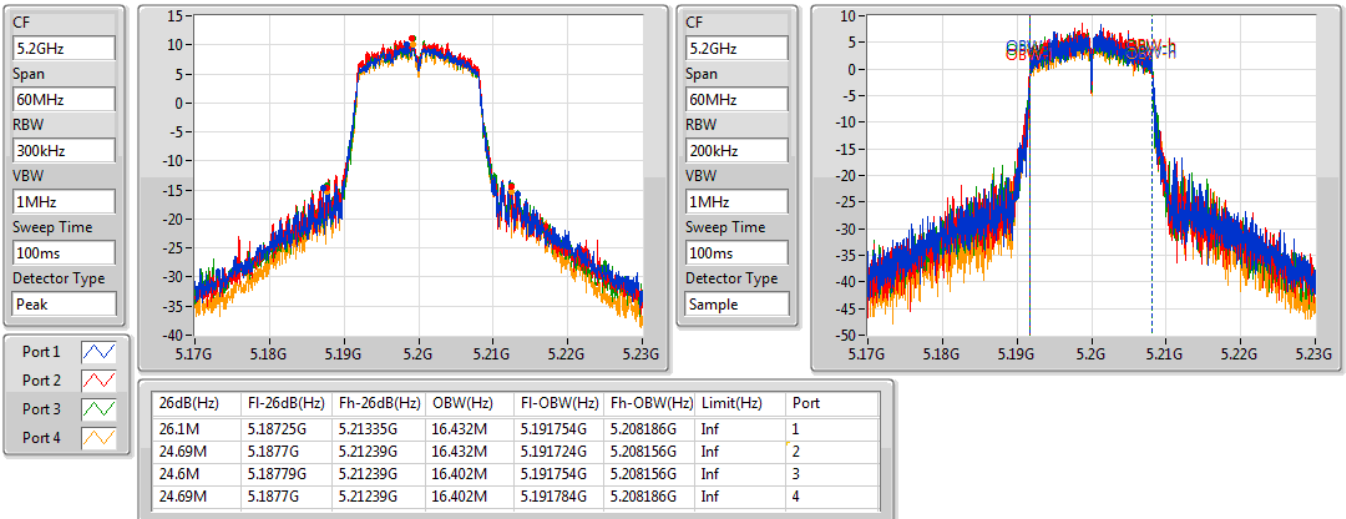


802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

06/05/2019

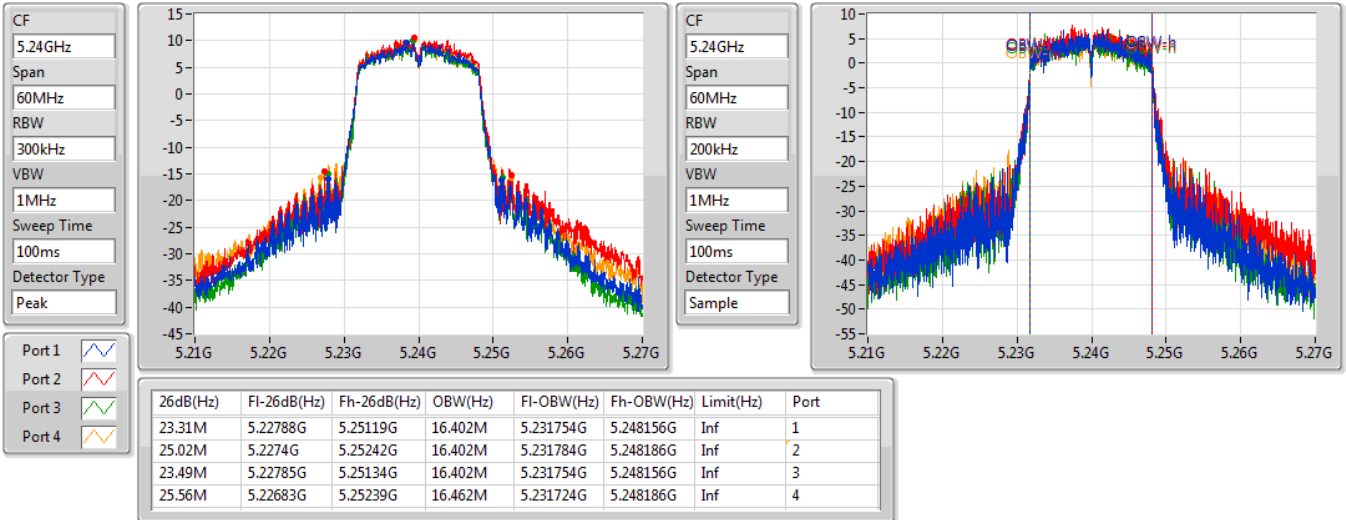


802.11a_Nss1,(6Mbps)_4TX

EBW

5240MHz

06/05/2019

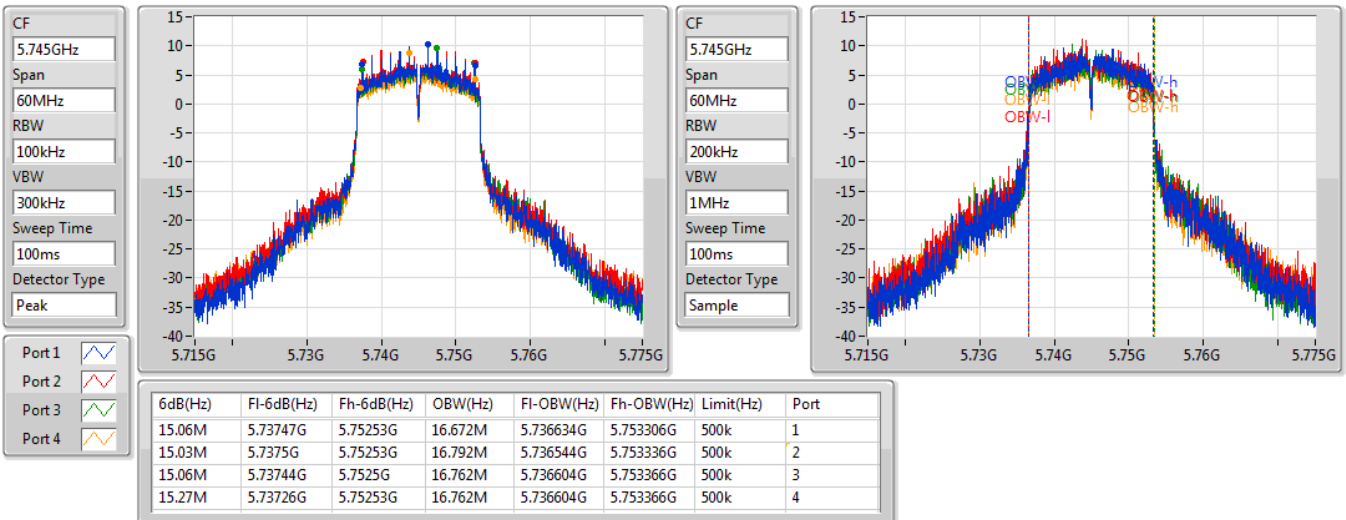


802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

06/05/2019

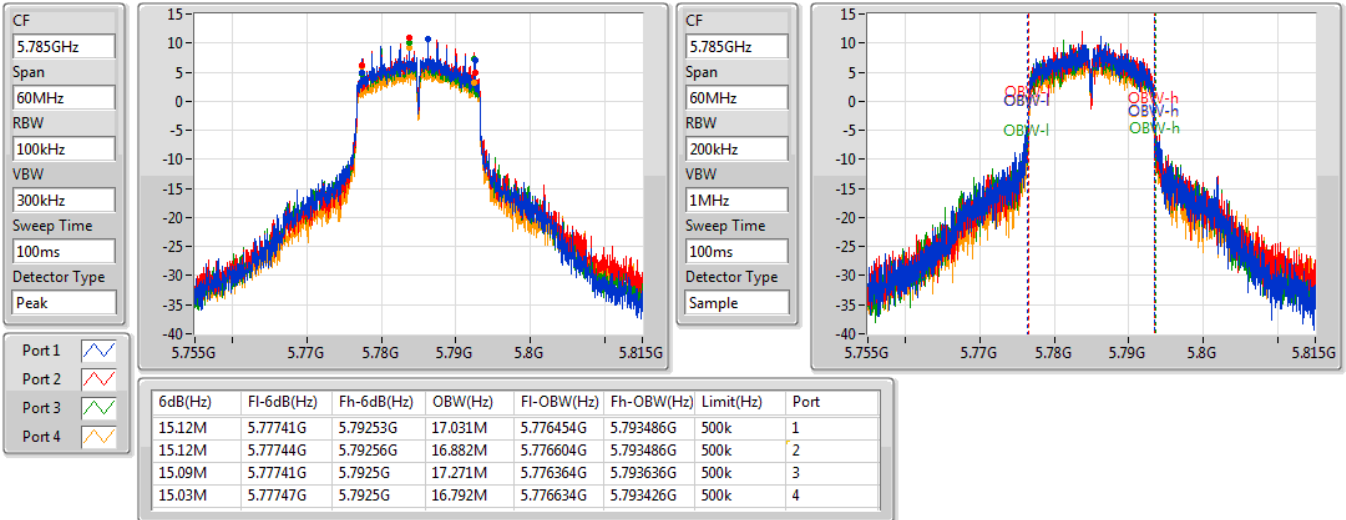


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

06/05/2019

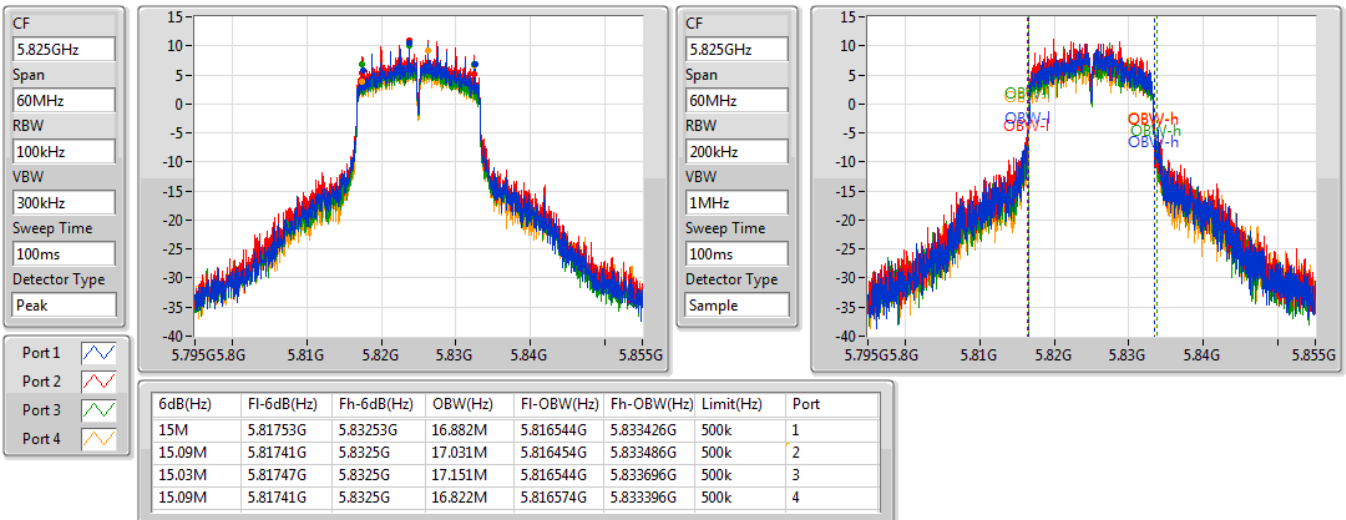


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

06/05/2019

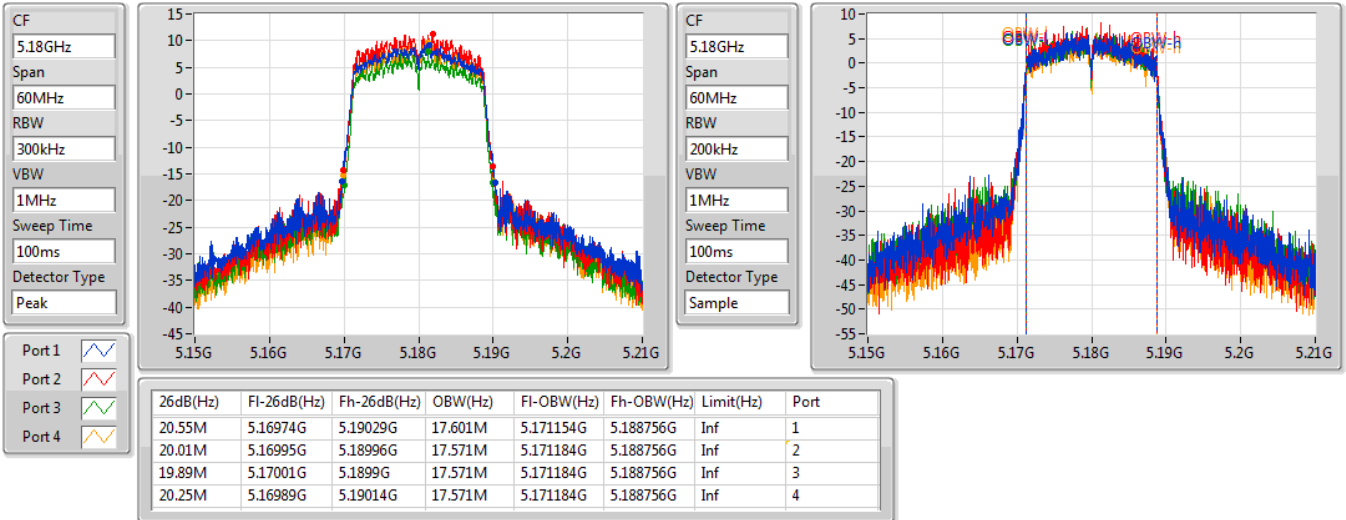


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5180MHz

06/05/2019

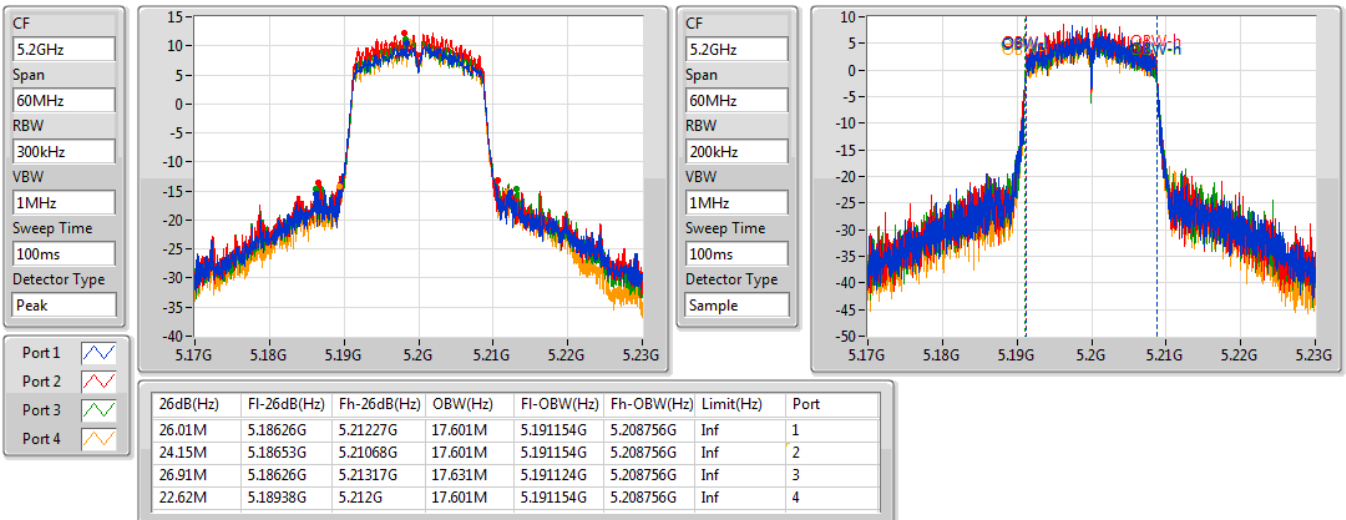


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5200MHz

06/05/2019

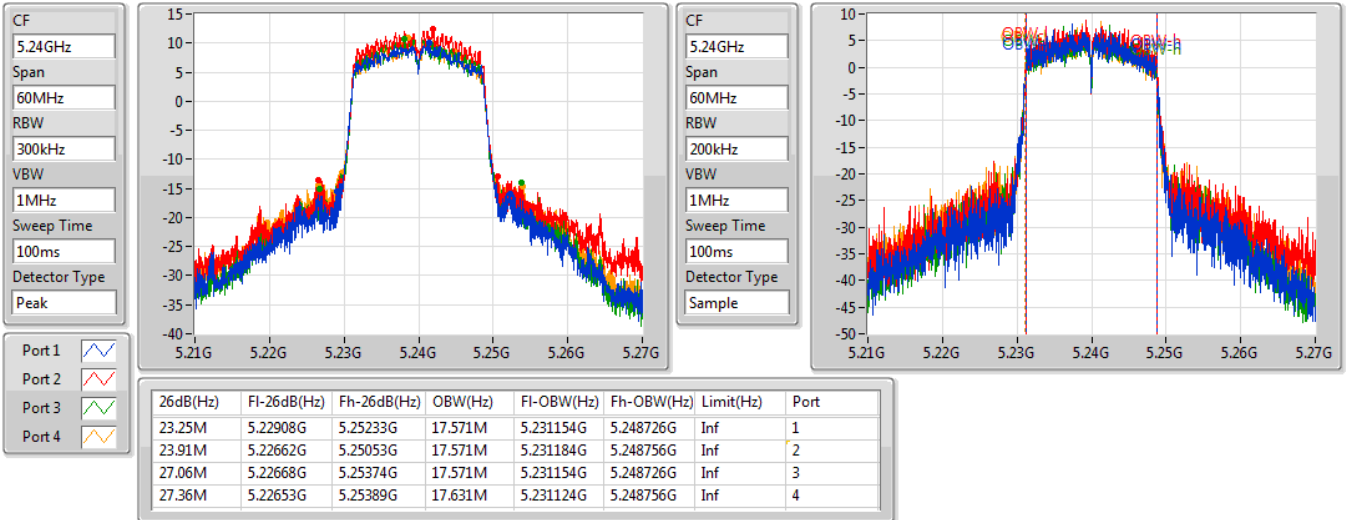


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5240MHz

06/05/2019

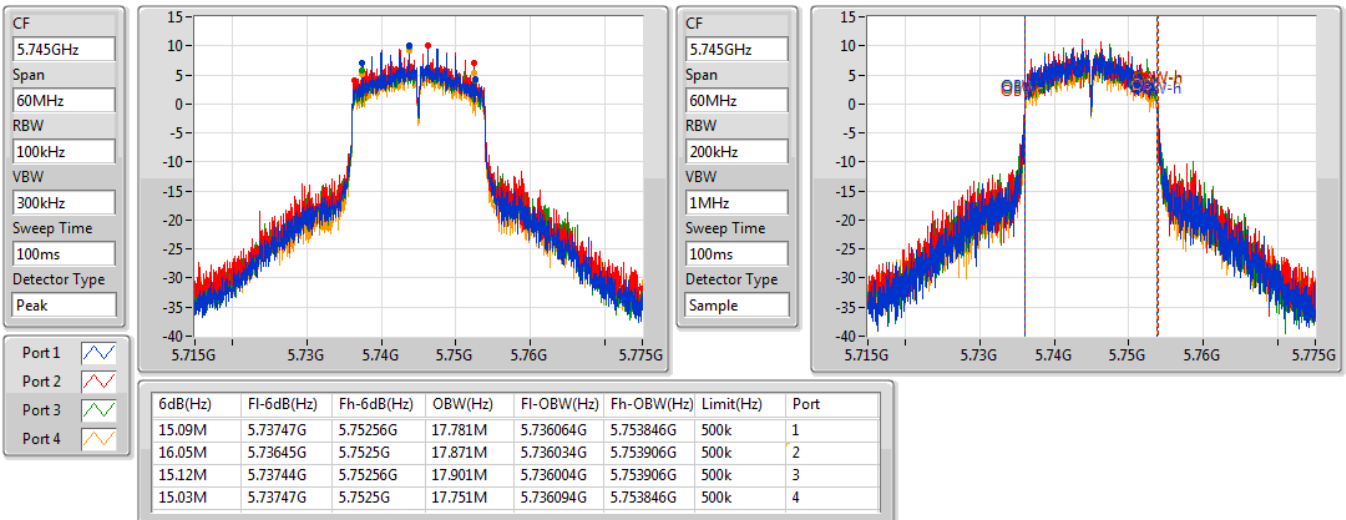


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5745MHz

06/05/2019

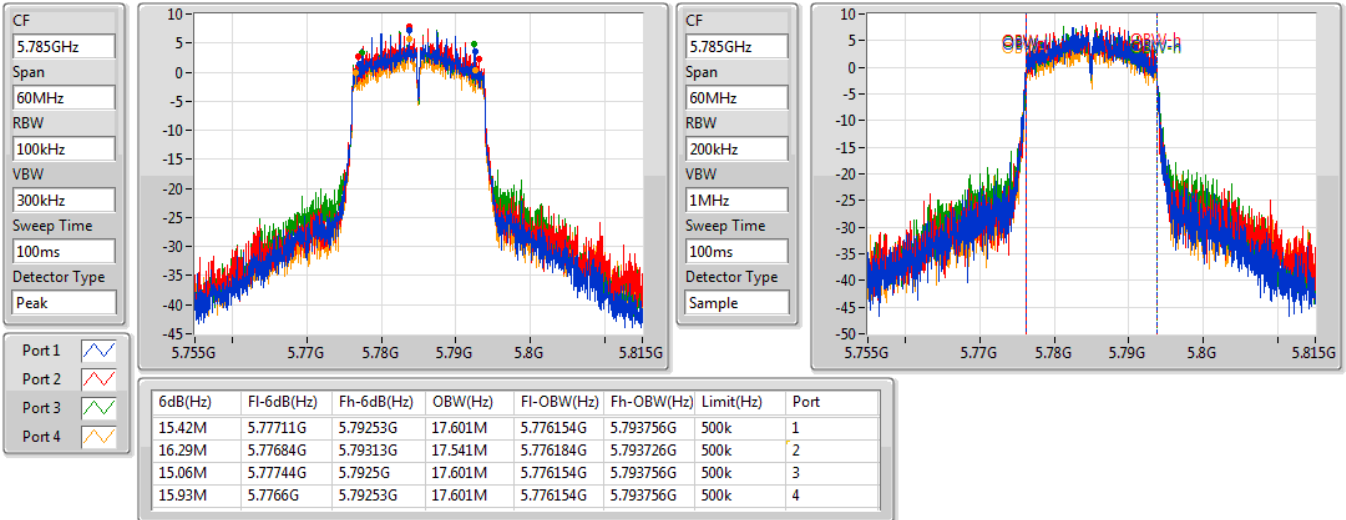


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5785MHz

06/05/2019

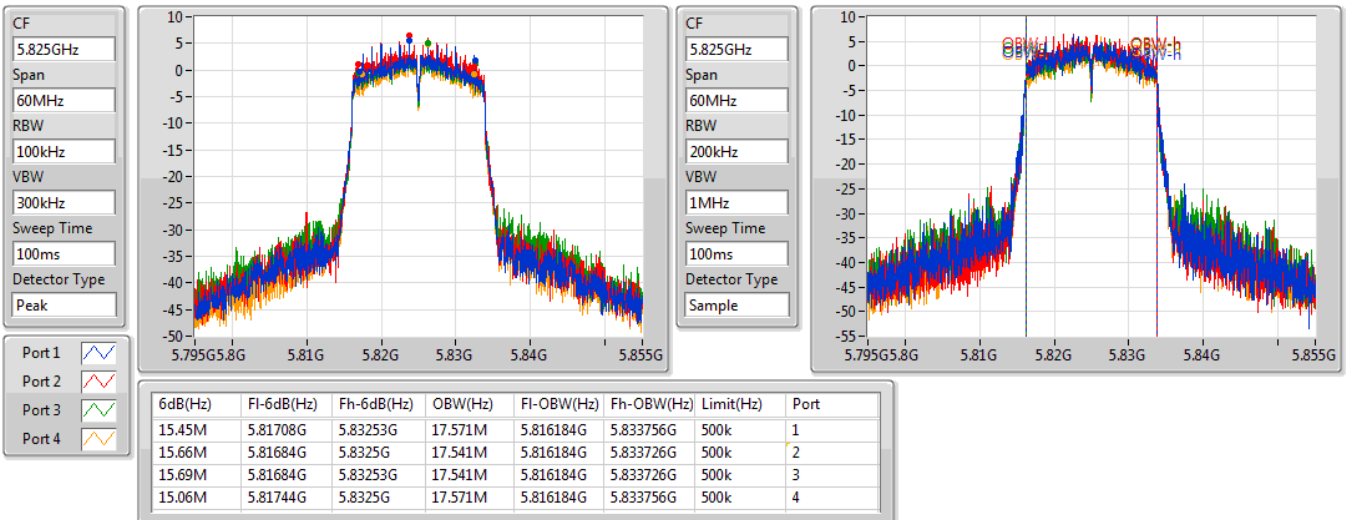


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5825MHz

06/05/2019

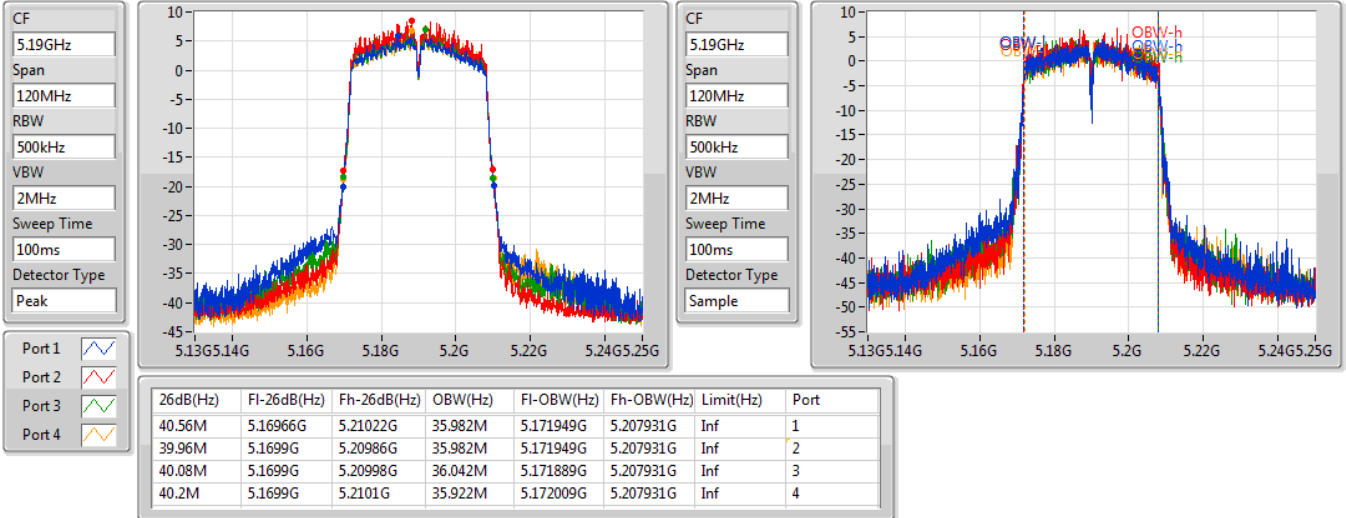


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5190MHz

06/05/2019

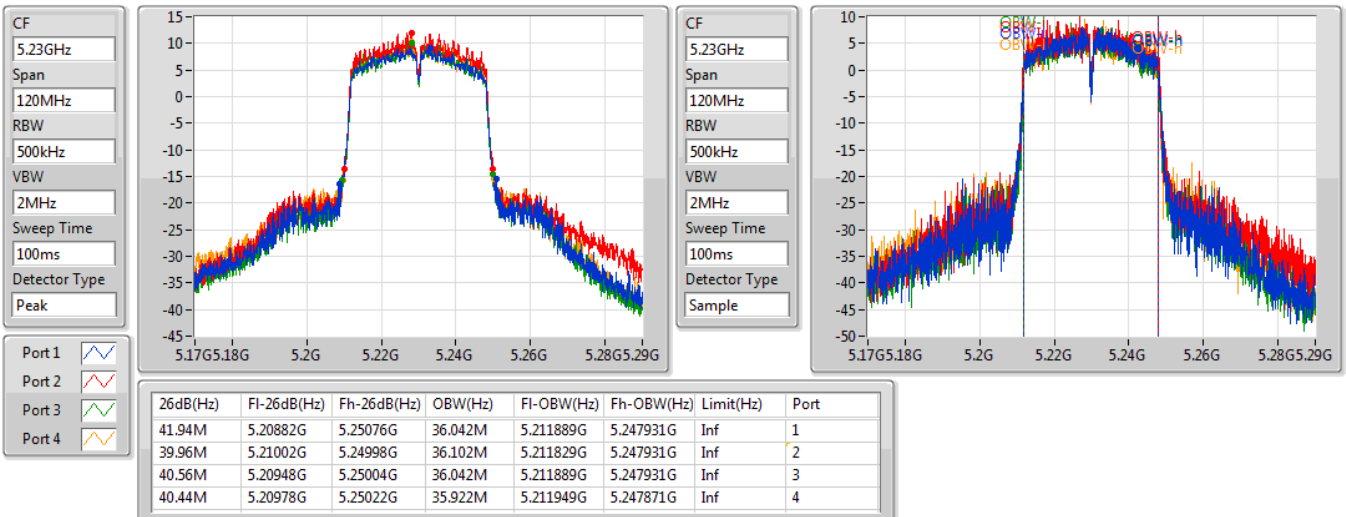


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5230MHz

06/05/2019

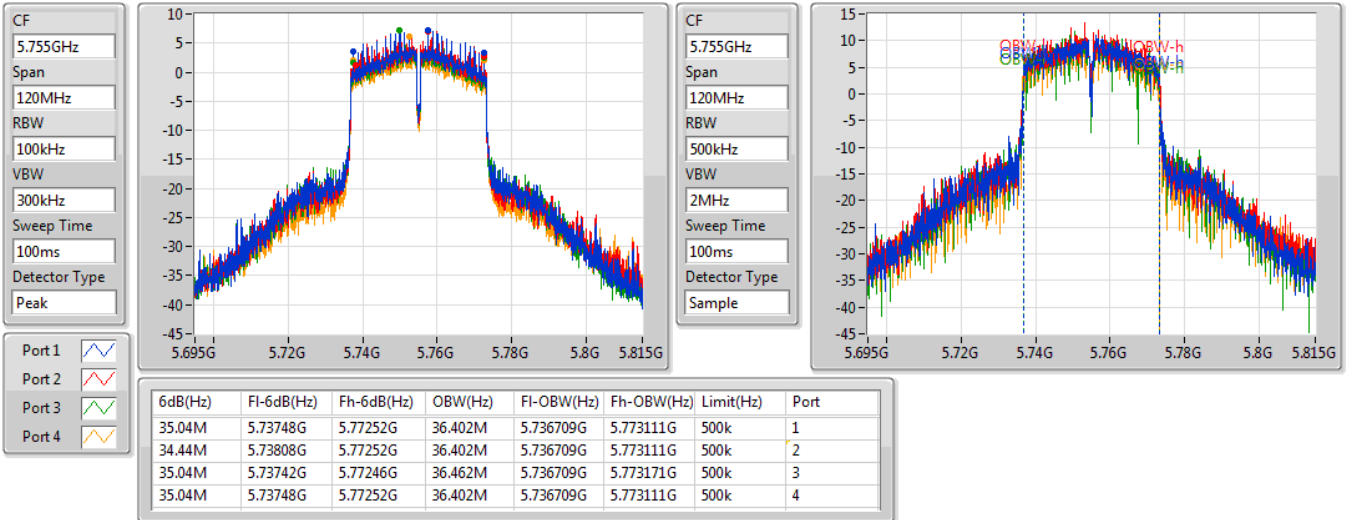


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5755MHz

06/05/2019

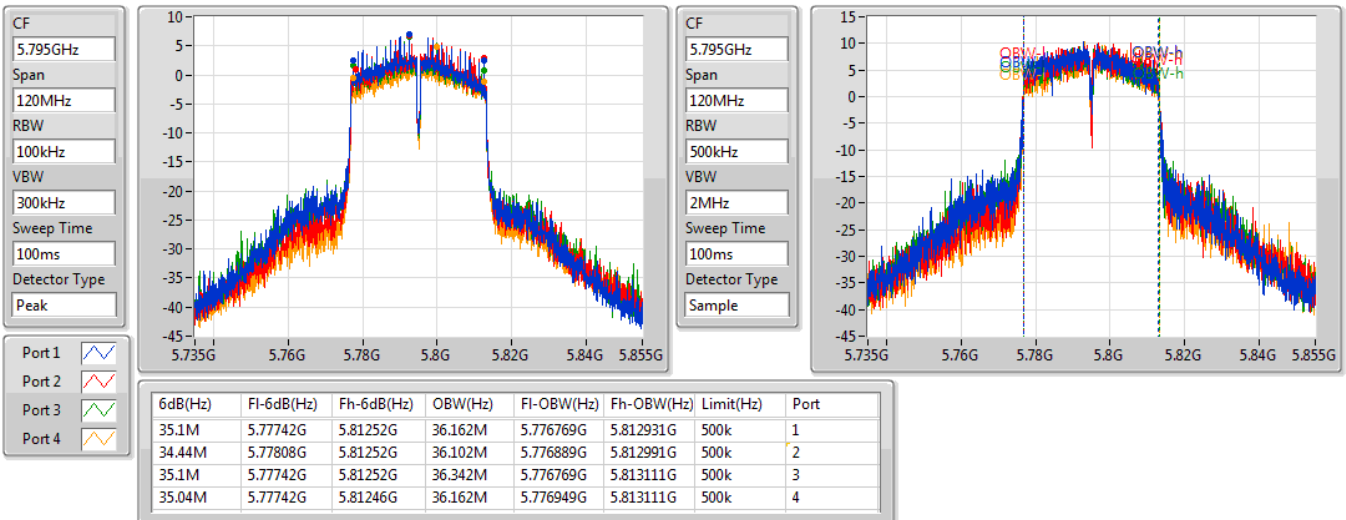


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5795MHz

06/05/2019

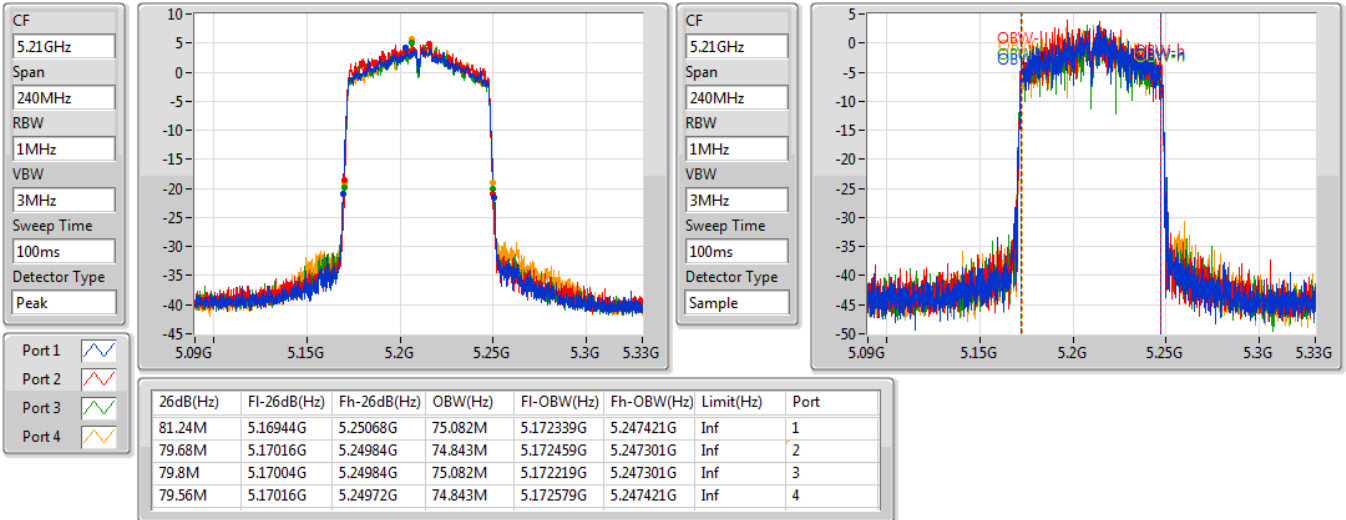


802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5210MHz

06/05/2019

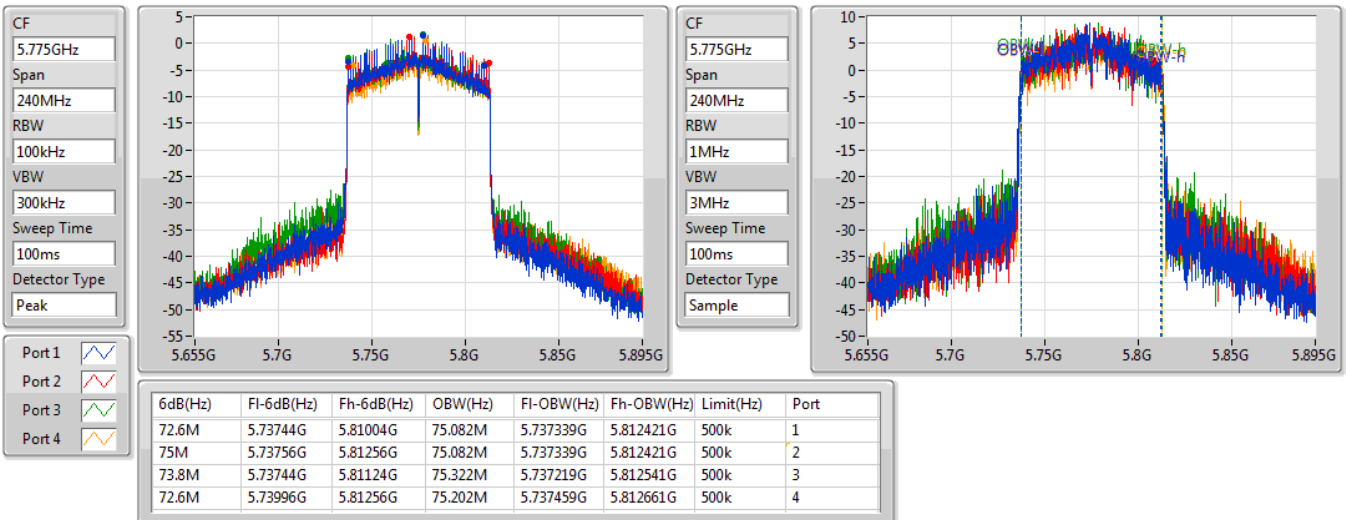


802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5775MHz

13/05/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	19.98M	16.402M	16M4D1D	19.56M	16.342M
802.11ac VHT20_Nss1,(MCS0)_4TX	20.43M	17.571M	17M6D1D	19.74M	17.511M
802.11ac VHT40_Nss1,(MCS0)_4TX	41.16M	36.042M	36M0D1D	39.9M	35.862M
802.11ac VHT80_Nss1,(MCS0)_4TX	81.12M	75.202M	75M2D1D	79.56M	74.723M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	15.27M	17.271M	17M3D1D	15M	16.672M
802.11ac VHT20_Nss1,(MCS0)_4TX	16.29M	17.901M	17M9D1D	15.03M	17.541M
802.11ac VHT40_Nss1,(MCS0)_4TX	35.1M	36.462M	36M5D1D	34.44M	36.102M
802.11ac VHT80_Nss1,(MCS0)_4TX	75M	75.322M	75M3D1D	72.6M	75.082M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	19.62M	16.342M	19.68M	16.372M	19.8M	16.372M	19.56M	16.372M
5200MHz	Pass	Inf	19.77M	16.402M	19.74M	16.342M	19.86M	16.372M	19.68M	16.372M
5240MHz	Pass	Inf	19.59M	16.342M	19.62M	16.402M	19.98M	16.342M	19.74M	16.372M
5745MHz	Pass	500k	15.06M	16.672M	15.03M	16.792M	15.06M	16.762M	15.27M	16.762M
5785MHz	Pass	500k	15.12M	17.031M	15.12M	16.882M	15.09M	17.271M	15.03M	16.792M
5825MHz	Pass	500k	15M	16.882M	15.09M	17.031M	15.03M	17.151M	15.09M	16.822M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.43M	17.571M	19.74M	17.571M	19.92M	17.541M	19.95M	17.511M
5200MHz	Pass	Inf	20.43M	17.541M	19.83M	17.541M	19.86M	17.511M	20.25M	17.571M
5240MHz	Pass	Inf	20.37M	17.571M	19.92M	17.511M	19.92M	17.511M	20.28M	17.541M
5745MHz	Pass	500k	15.09M	17.781M	16.05M	17.871M	15.12M	17.901M	15.03M	17.751M
5785MHz	Pass	500k	15.42M	17.601M	16.29M	17.541M	15.06M	17.601M	15.93M	17.601M
5825MHz	Pass	500k	15.45M	17.571M	15.66M	17.541M	15.69M	17.541M	15.06M	17.571M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.16M	35.982M	39.9M	35.862M	40.08M	35.982M	40.14M	35.982M
5230MHz	Pass	Inf	40.44M	35.862M	40.2M	36.042M	40.08M	35.922M	40.14M	35.862M
5755MHz	Pass	500k	35.04M	36.402M	34.44M	36.402M	35.04M	36.462M	35.04M	36.402M
5795MHz	Pass	500k	35.1M	36.162M	34.44M	36.102M	35.1M	36.342M	35.04M	36.162M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.12M	75.202M	79.56M	75.082M	80.04M	74.843M	79.92M	74.723M
5775MHz	Pass	500k	72.6M	75.082M	75M	75.082M	73.8M	75.322M	72.6M	75.202M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

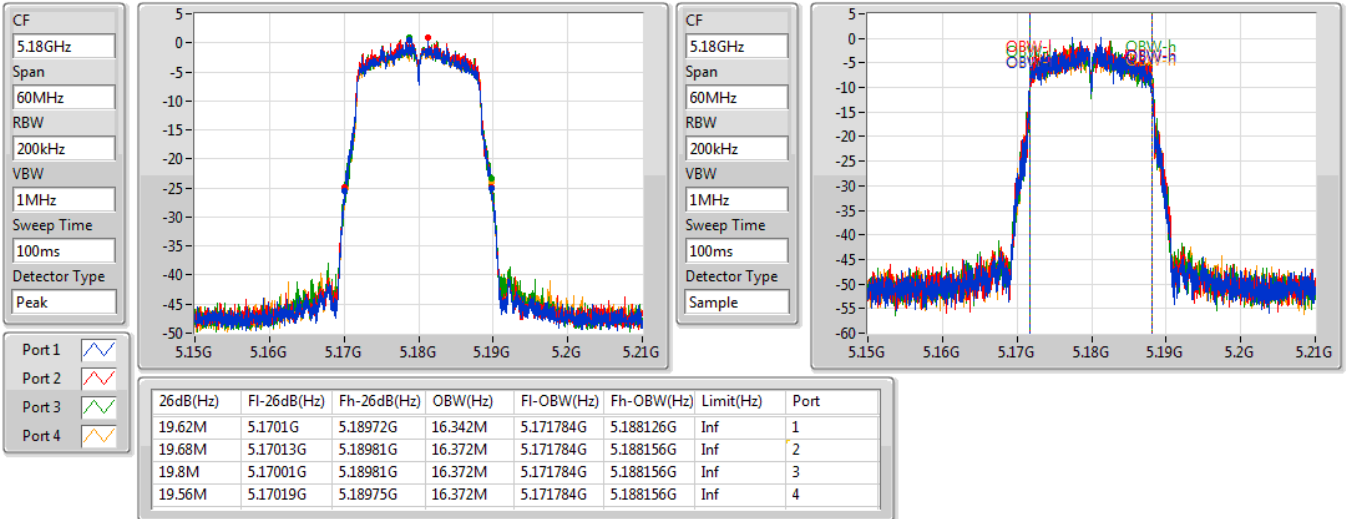
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_4TX

EBW

5180MHz

06/05/2019

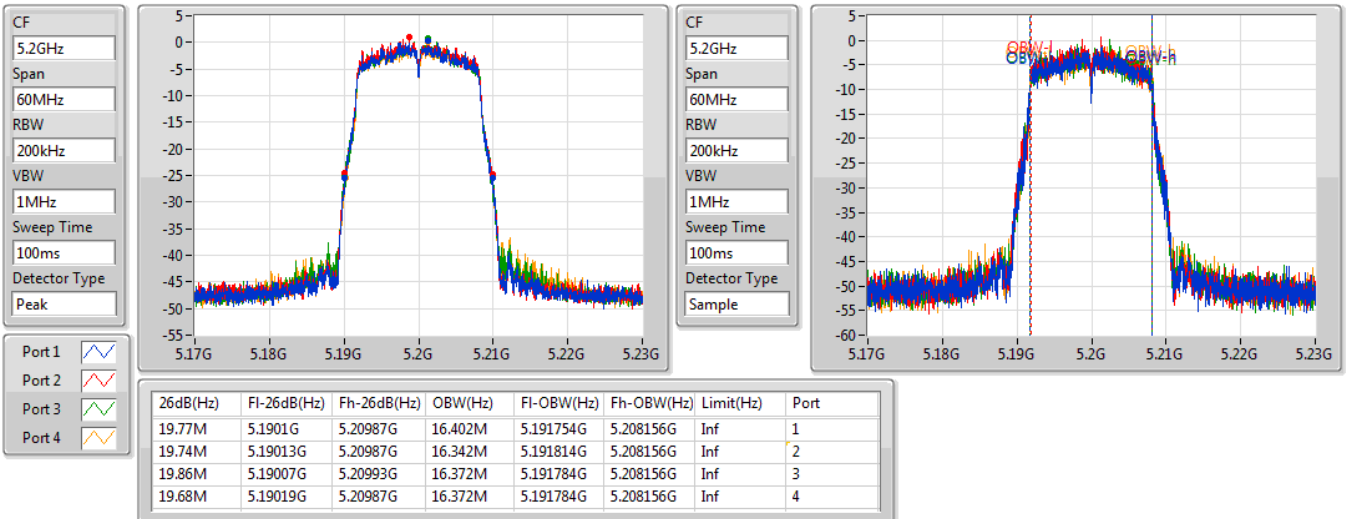


802.11a_Nss1,(6Mbps)_4TX

EBW

5200MHz

06/05/2019

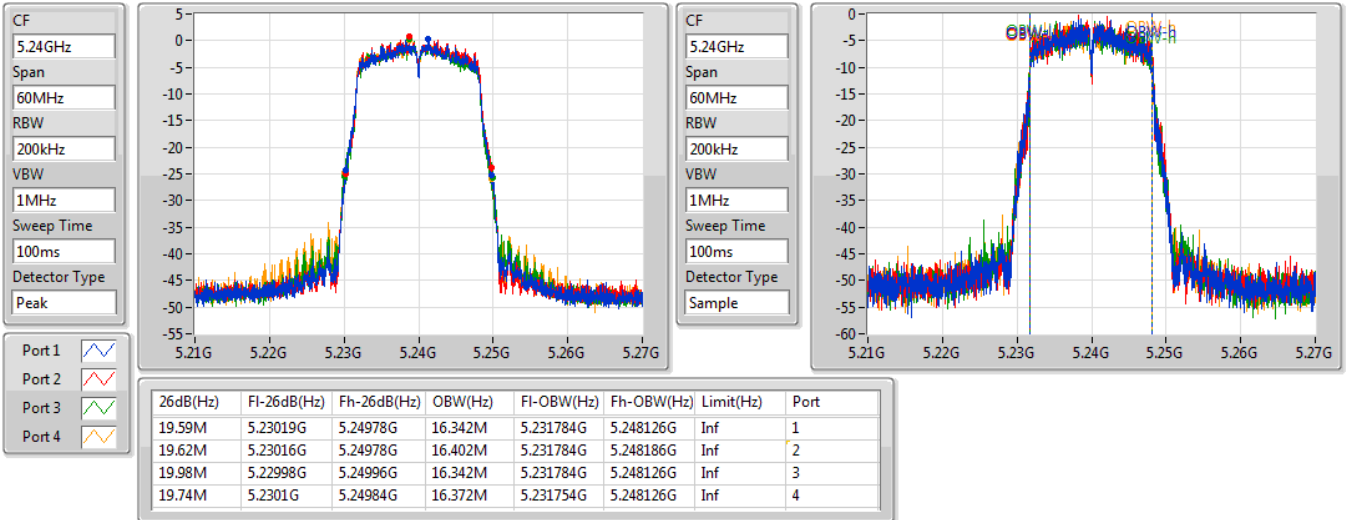


802.11a_Nss1,(6Mbps)_4TX

EBW

5240MHz

06/05/2019

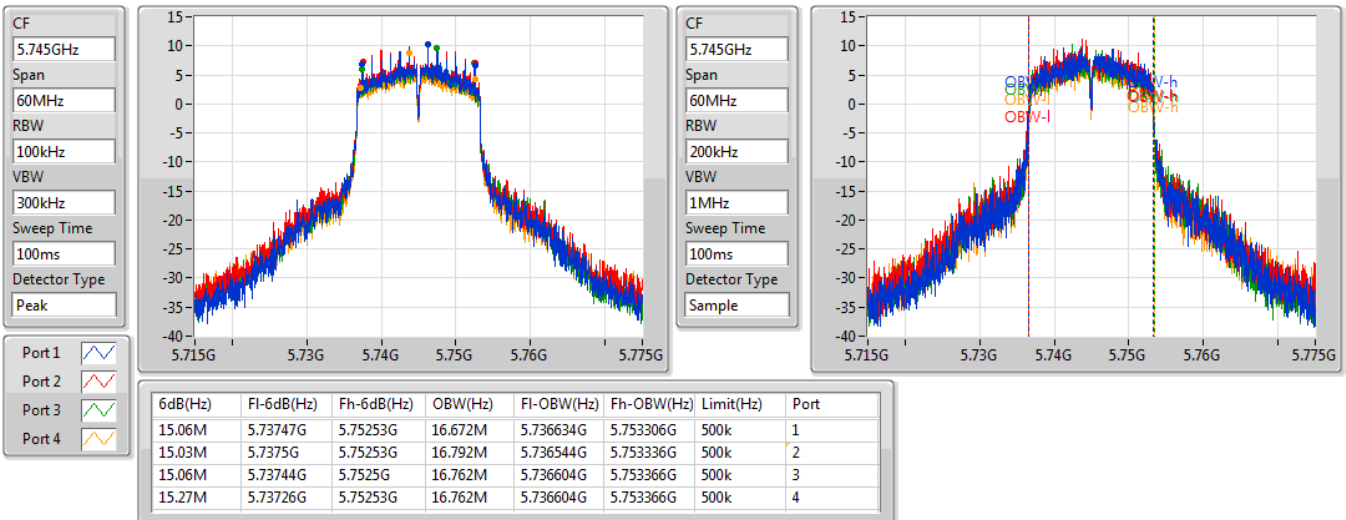


802.11a_Nss1,(6Mbps)_4TX

EBW

5745MHz

06/05/2019

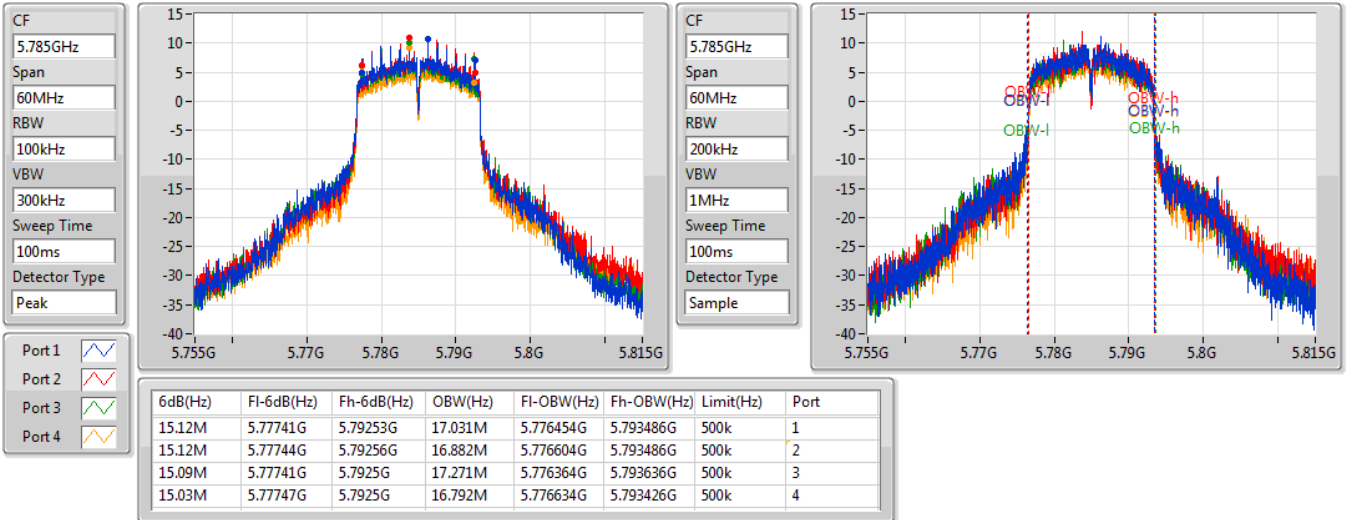


802.11a_Nss1,(6Mbps)_4TX

EBW

5785MHz

06/05/2019

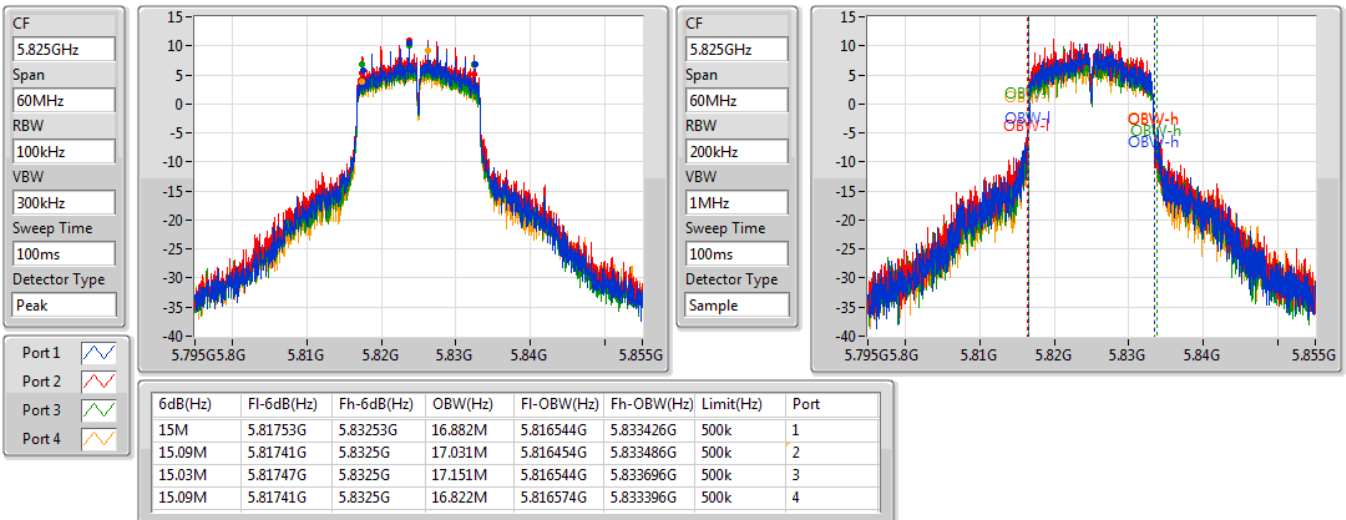


802.11a_Nss1,(6Mbps)_4TX

EBW

5825MHz

06/05/2019

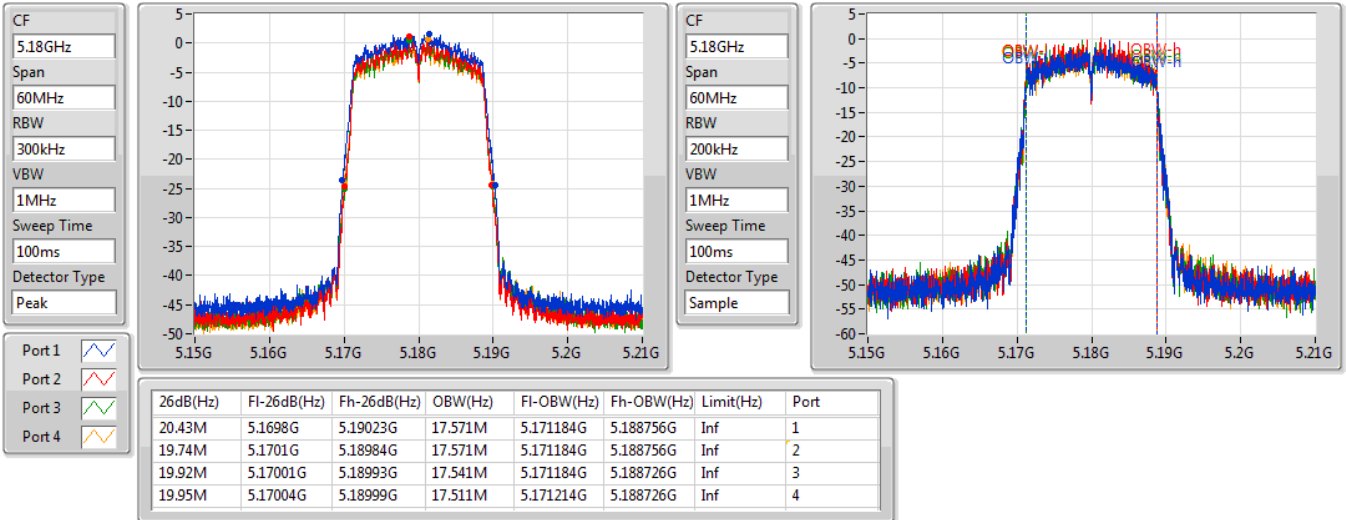


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5180MHz

06/05/2019

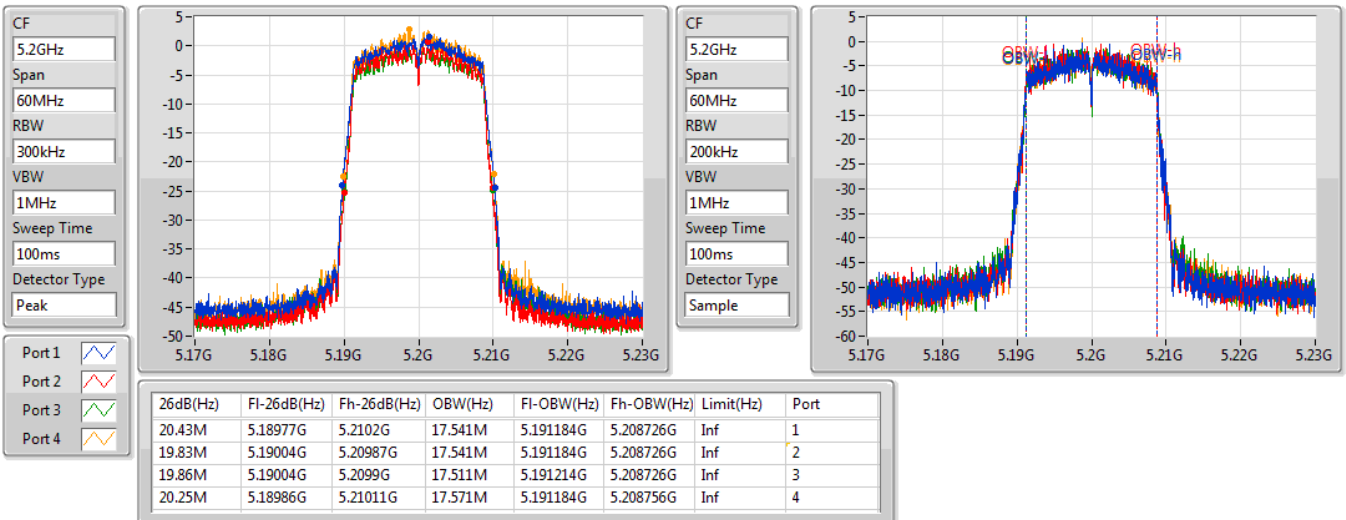


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5200MHz

06/05/2019

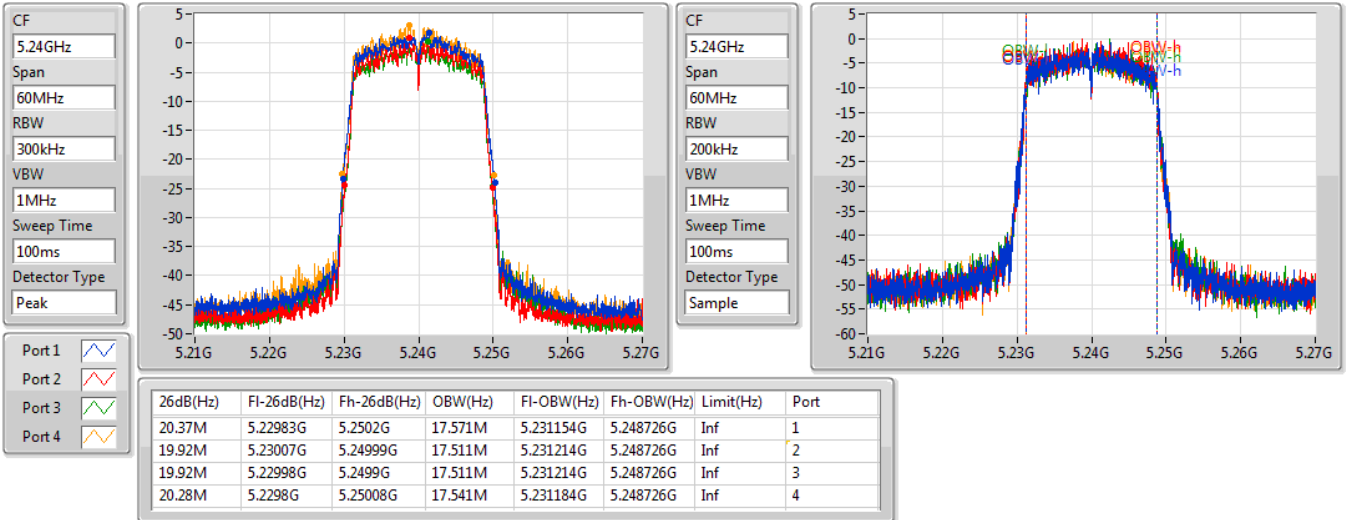


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5240MHz

06/05/2019

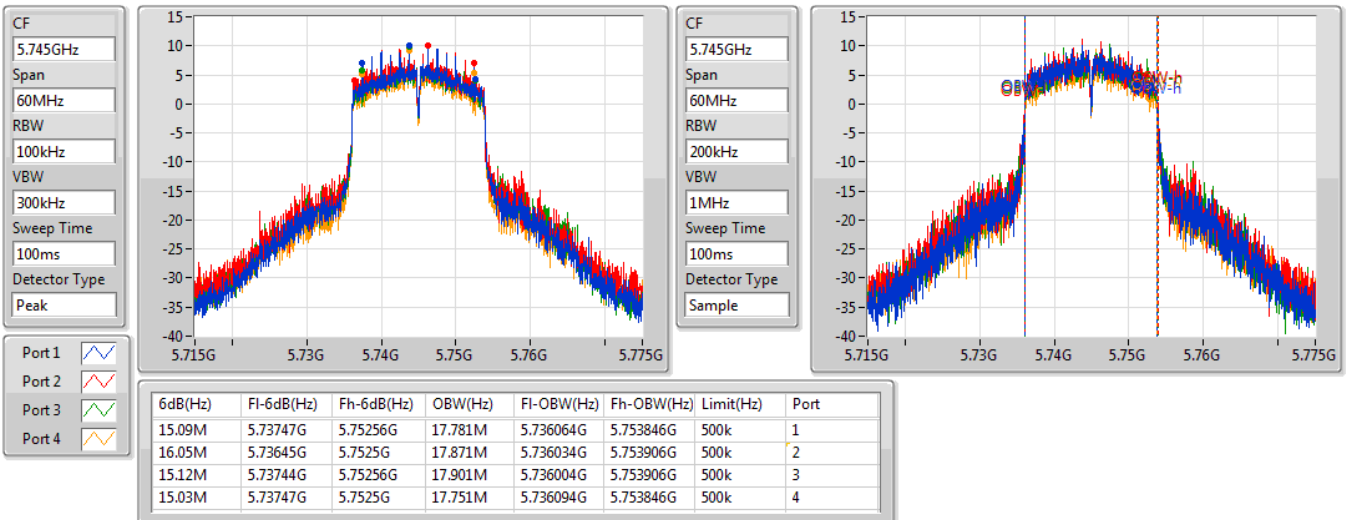


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5745MHz

06/05/2019

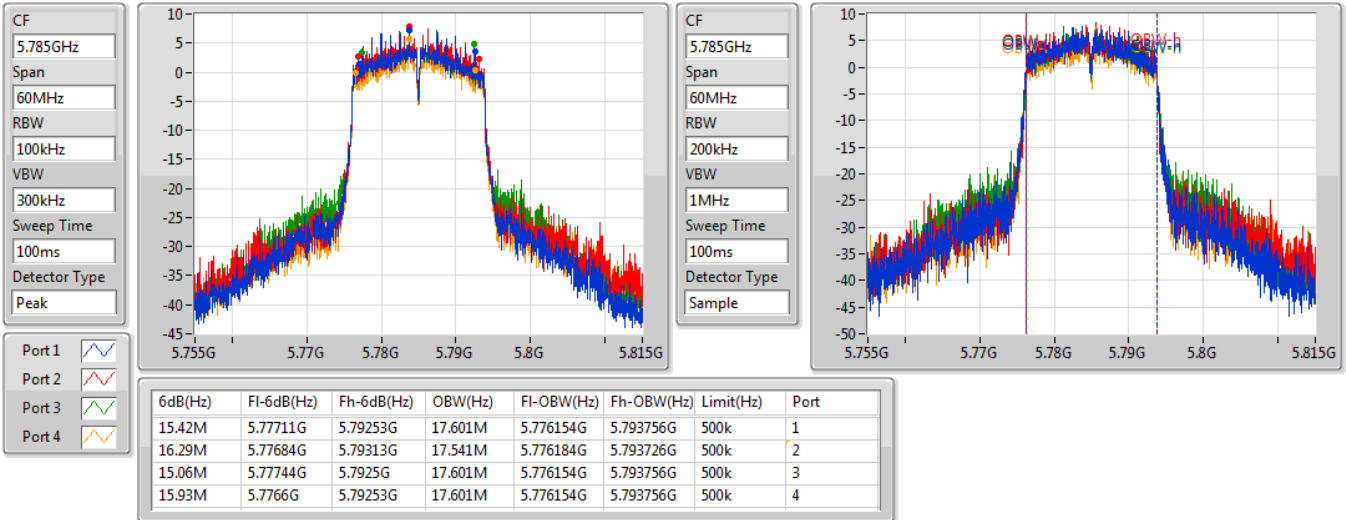


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5785MHz

06/05/2019

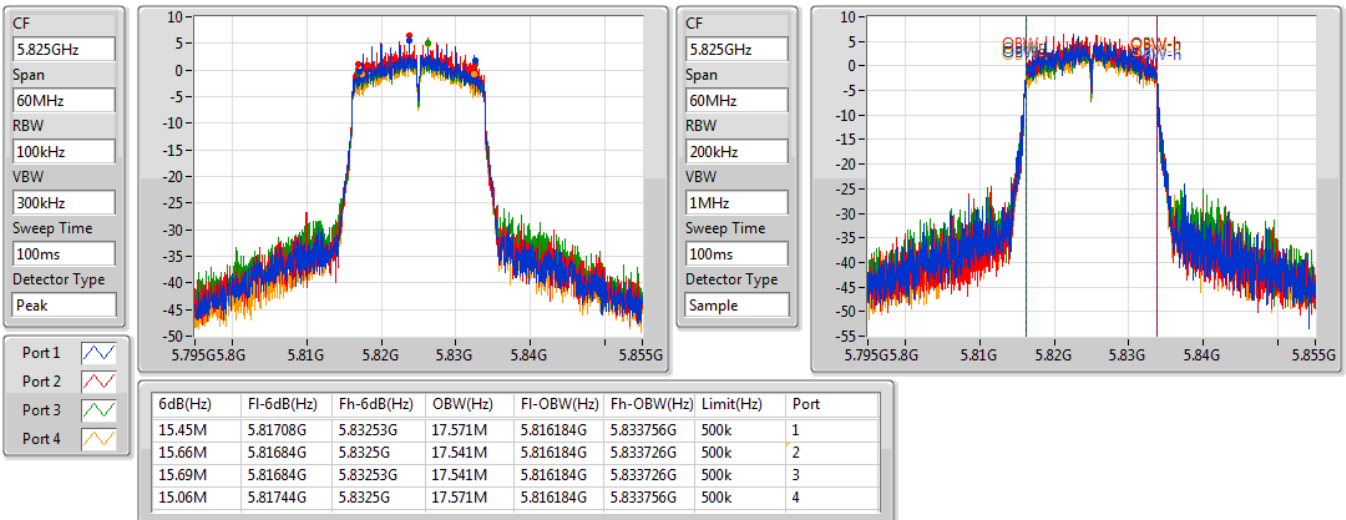


802.11ac VHT20_Nss1,(MCS0)_4TX

EBW

5825MHz

06/05/2019

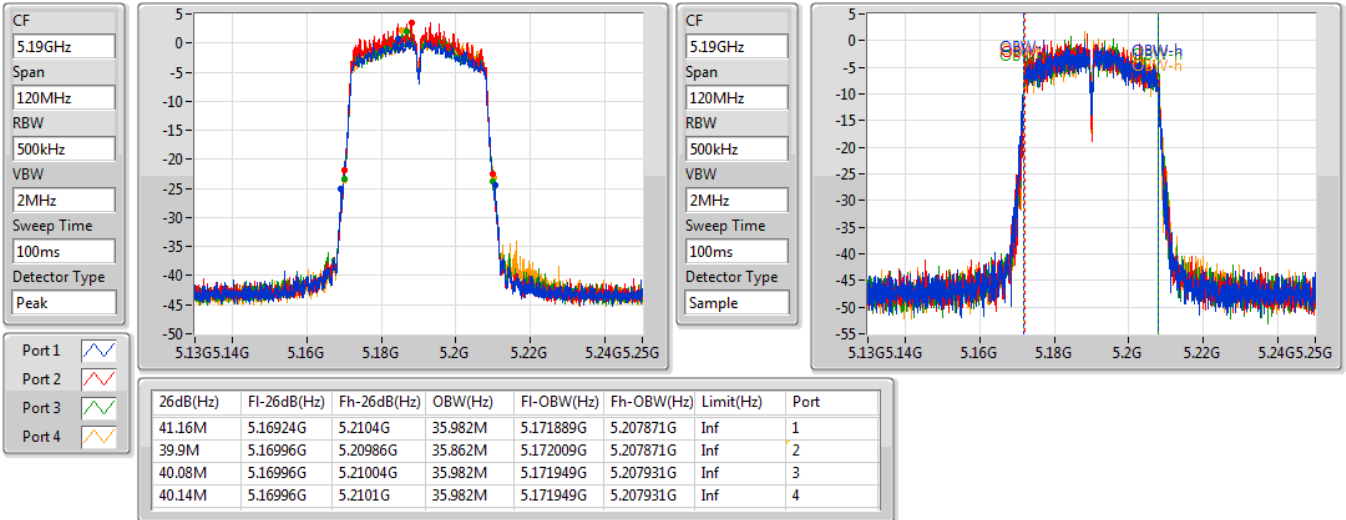


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5190MHz

06/05/2019

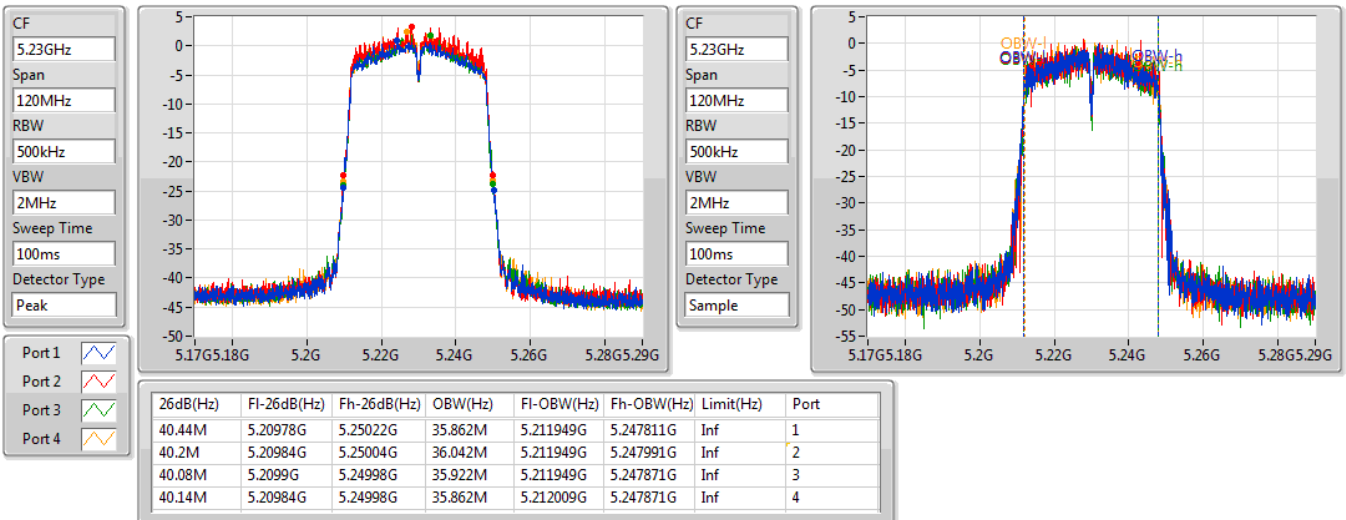


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5230MHz

06/05/2019

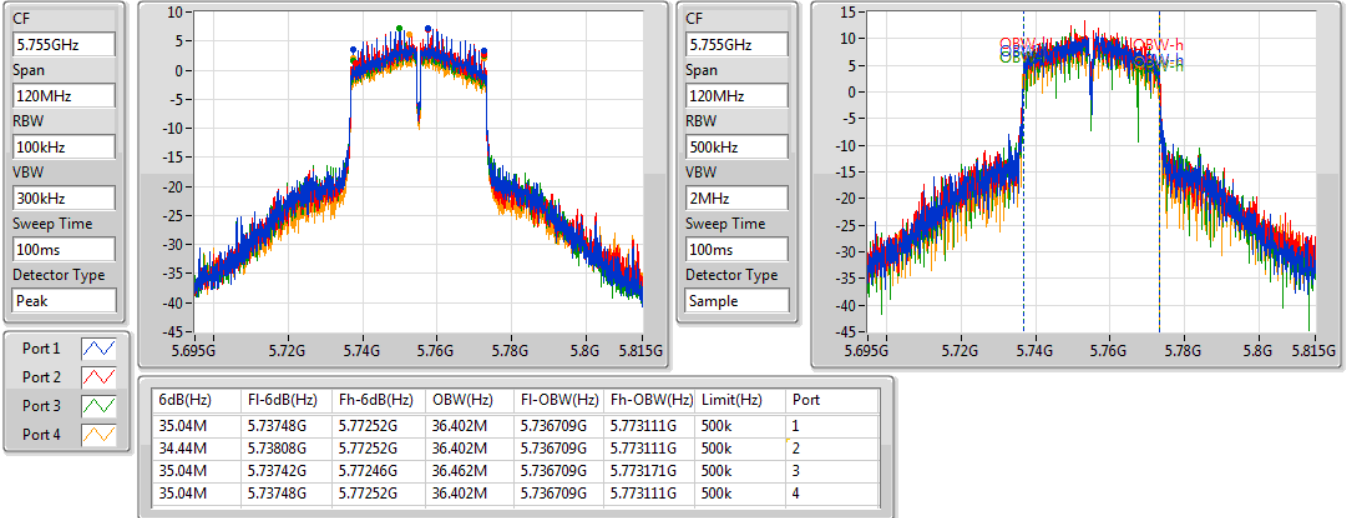


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5755MHz

06/05/2019

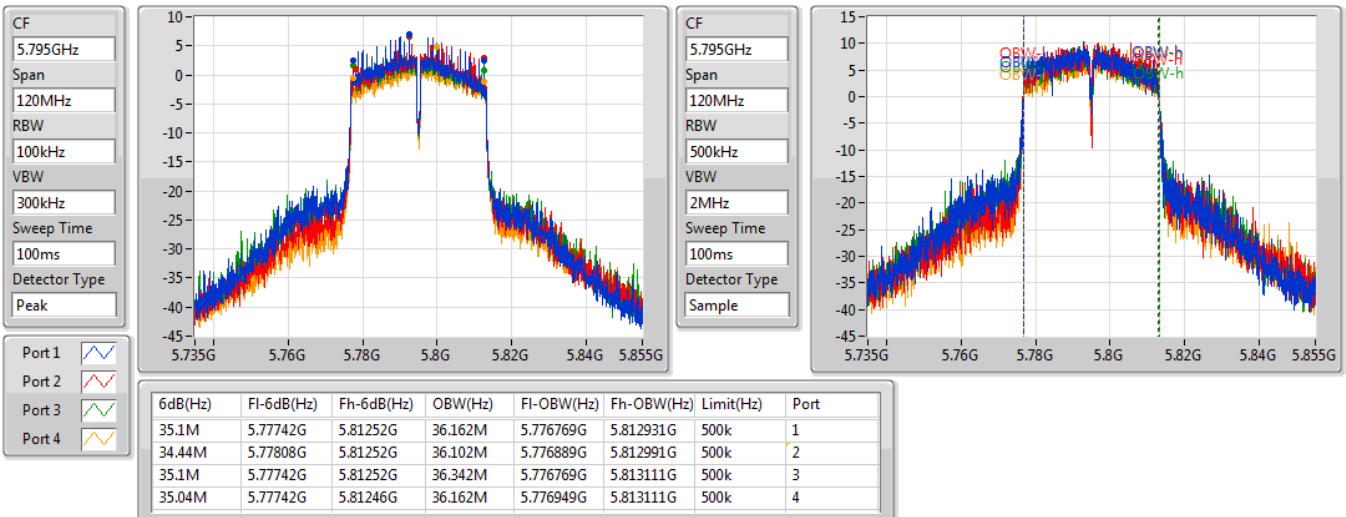


802.11ac VHT40_Nss1,(MCS0)_4TX

EBW

5795MHz

06/05/2019

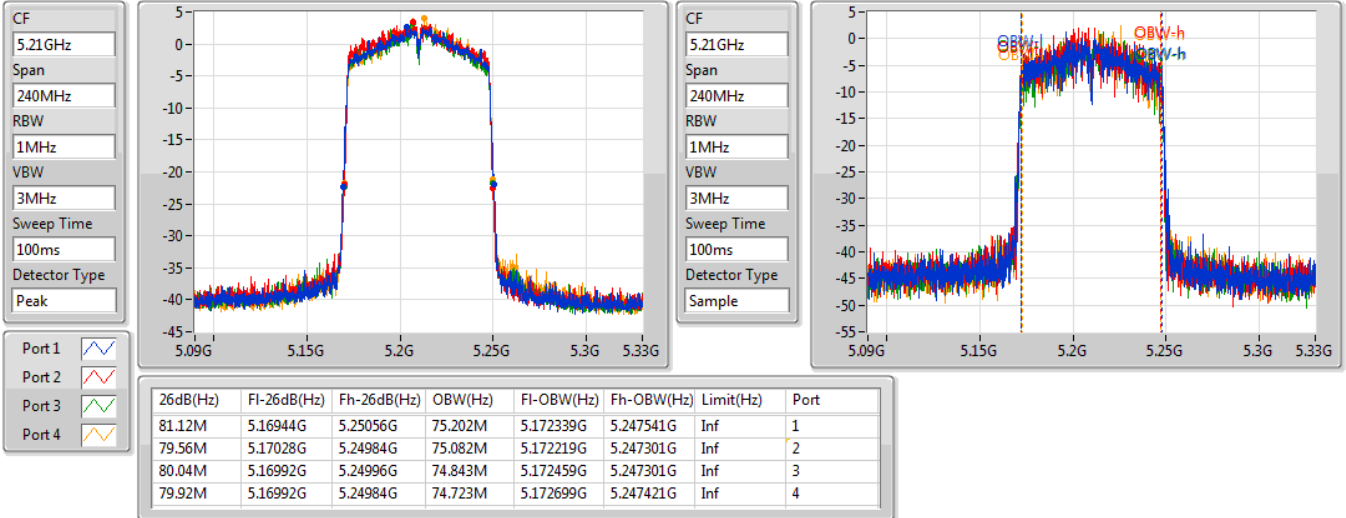


802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5210MHz

06/05/2019

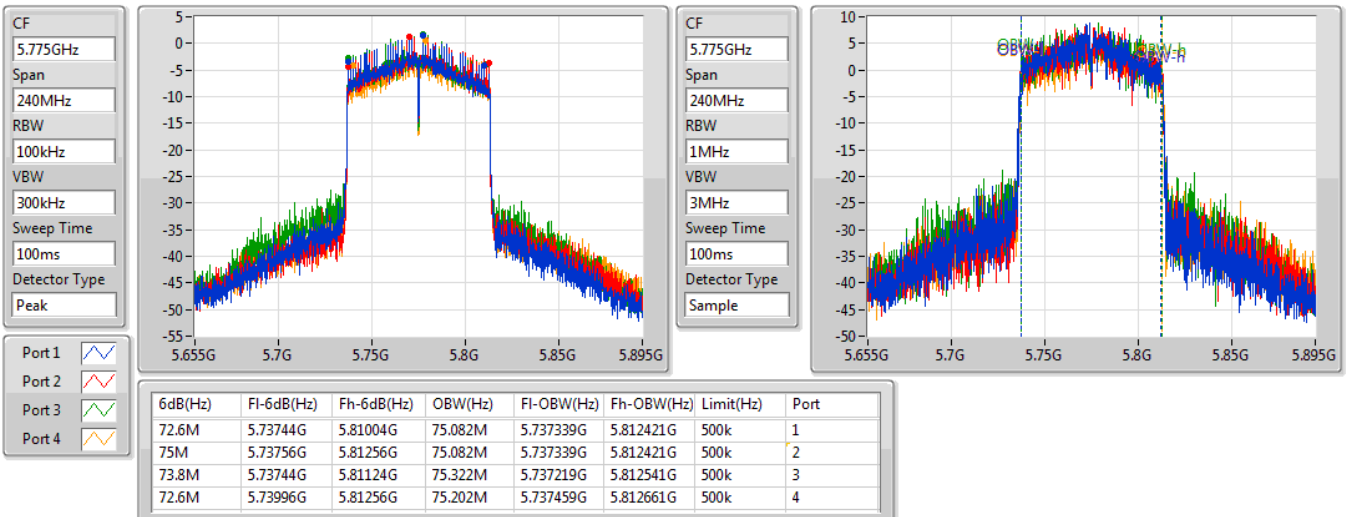


802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5775MHz

13/05/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	41.67M	18.021M	18M0D1D	30.45M	17.721M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	75.9M	36.462M	36M5D1D	41.16M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	81.96M	75.922M	75M9D1D	81.48M	75.682M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	17.58M	18.081M	18M1D1D	15.06M	17.901M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	36M	36.642M	36M6D1D	32.58M	36.462M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	75.72M	79.64M	79M6D1D	75.36M	76.402M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	30.45M	17.721M	41.67M	17.871M	41.52M	17.901M	39.84M	18.021M
5200MHz	Pass	Inf	36.51M	17.811M	37.05M	17.871M	35.46M	17.841M	39.45M	17.841M
5240MHz	Pass	Inf	41.49M	17.841M	41.55M	17.841M	33.69M	17.841M	41.37M	17.901M
5745MHz	Pass	500k	17.13M	17.901M	15.45M	17.961M	15.48M	17.991M	17.52M	17.991M
5785MHz	Pass	500k	15.06M	17.991M	15.06M	17.931M	15.33M	18.081M	17.52M	17.961M
5825MHz	Pass	500k	17.55M	17.961M	15.87M	17.991M	16.65M	18.021M	17.58M	17.961M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	41.16M	36.222M	41.22M	36.282M	41.22M	36.162M	41.22M	36.222M
5230MHz	Pass	Inf	74.76M	36.342M	72.54M	36.402M	74.7M	36.282M	75.9M	36.462M
5755MHz	Pass	500k	32.76M	36.462M	34.26M	36.522M	33.84M	36.462M	34.98M	36.462M
5795MHz	Pass	500k	36M	36.642M	32.58M	36.462M	34.98M	36.462M	35.4M	36.462M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.96M	75.802M	81.84M	75.922M	81.84M	75.802M	81.48M	75.682M
5775MHz	Pass	500k	75.36M	76.402M	75.36M	77.001M	75.48M	79.64M	75.72M	76.522M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

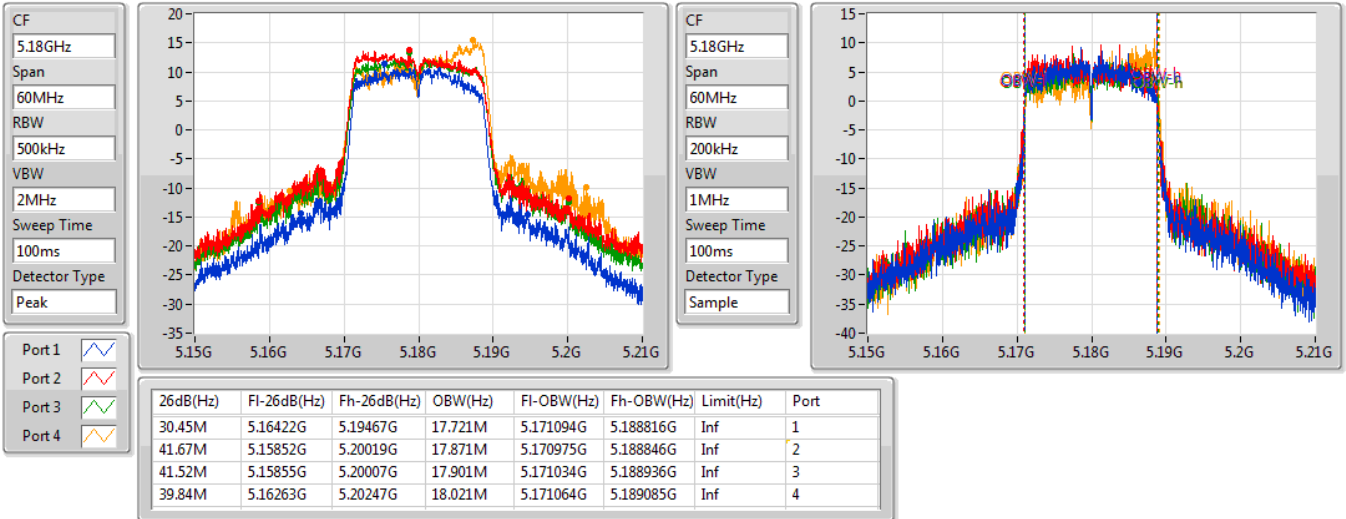
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5180MHz

04/05/2019

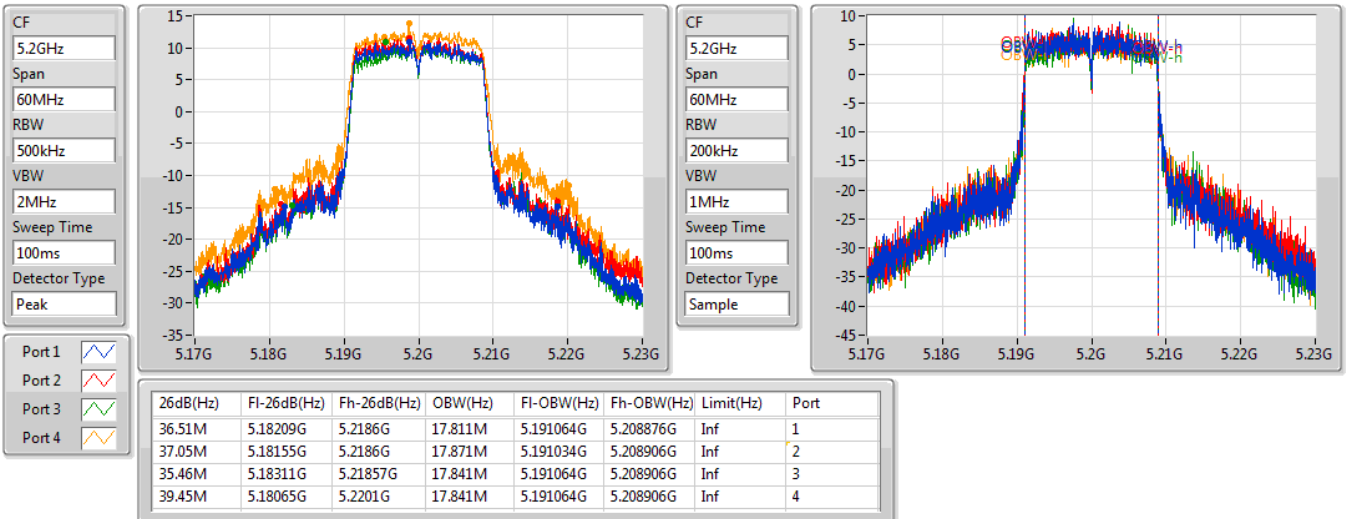


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5200MHz

04/05/2019

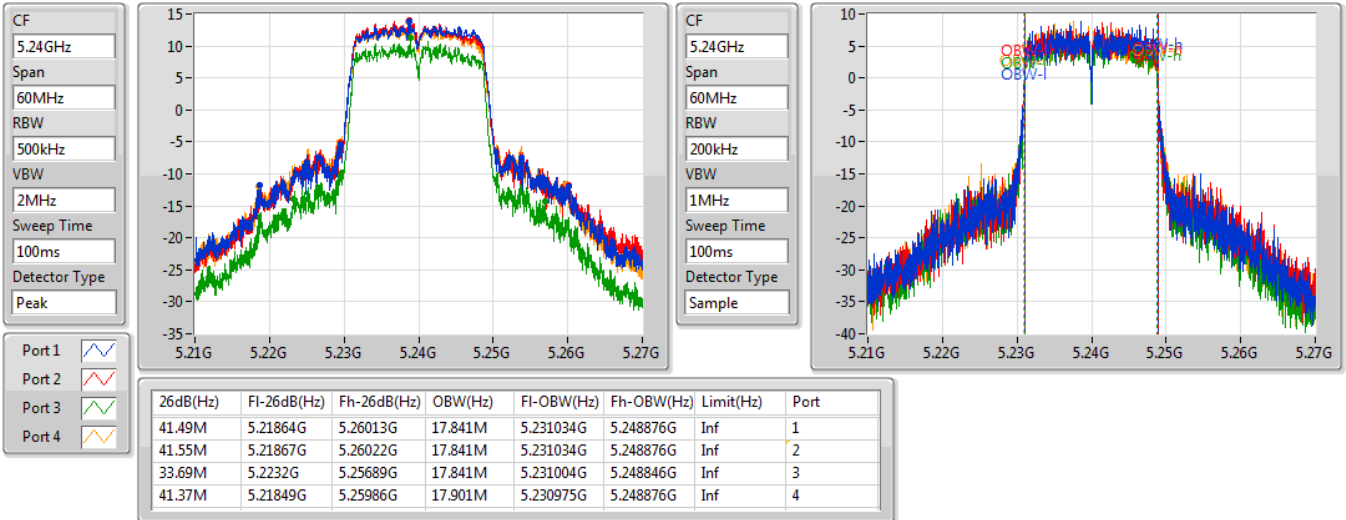


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5240MHz

04/05/2019

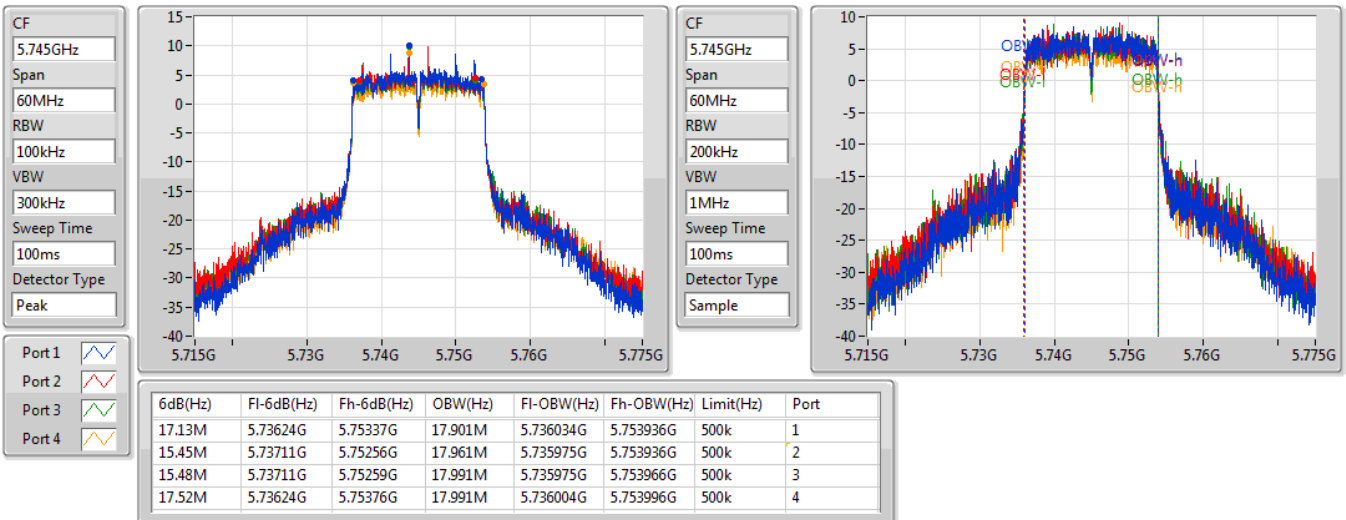


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5745MHz

04/05/2019

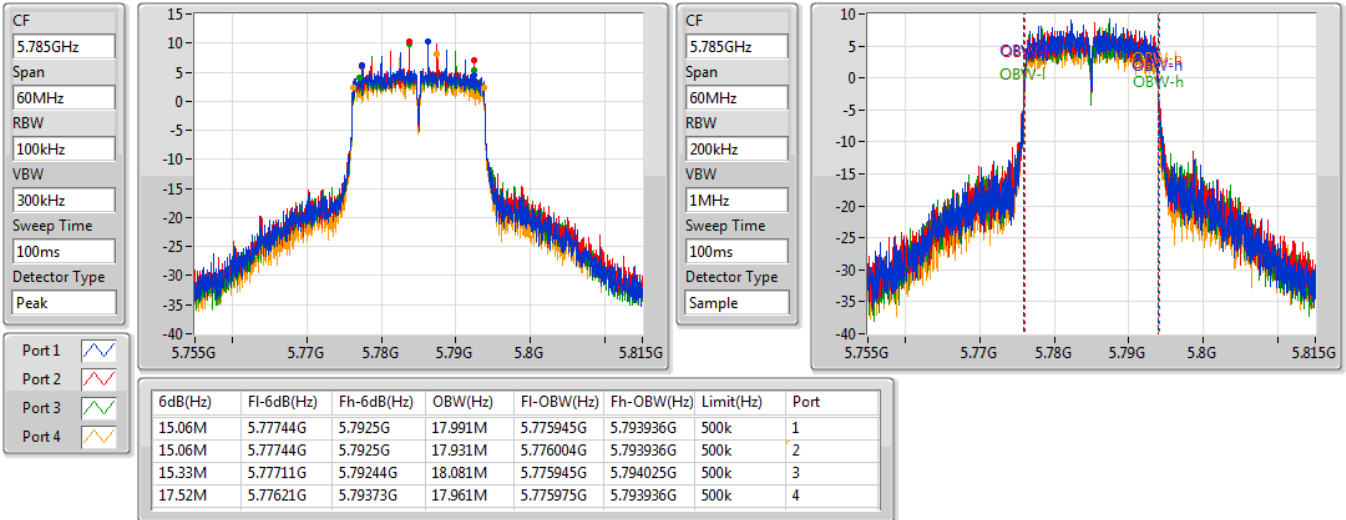


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5785MHz

04/05/2019

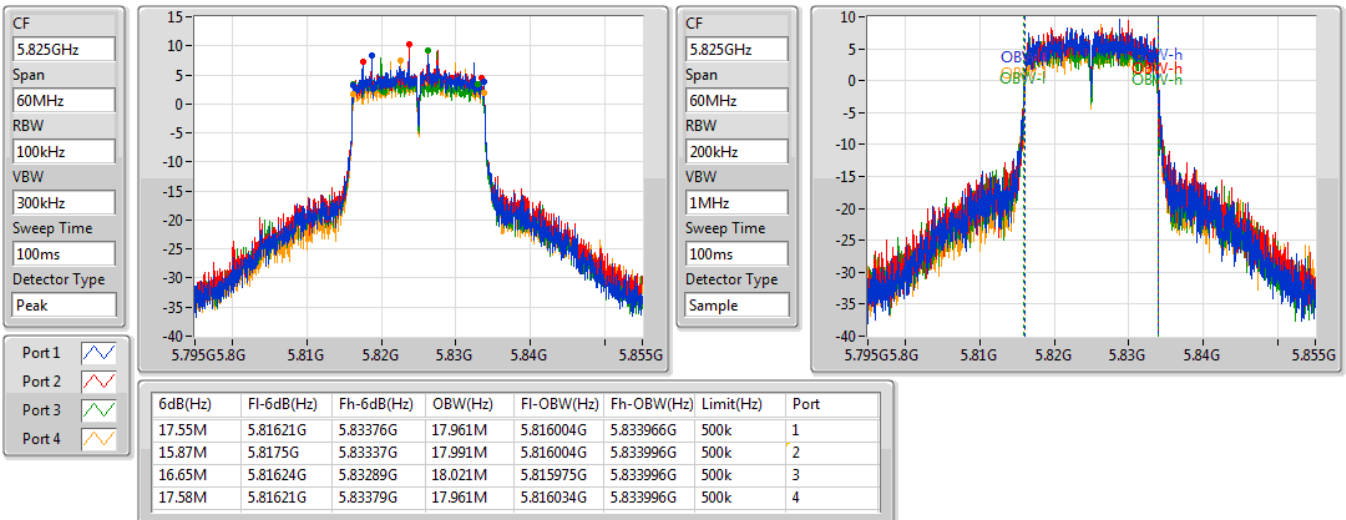


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5825MHz

04/05/2019

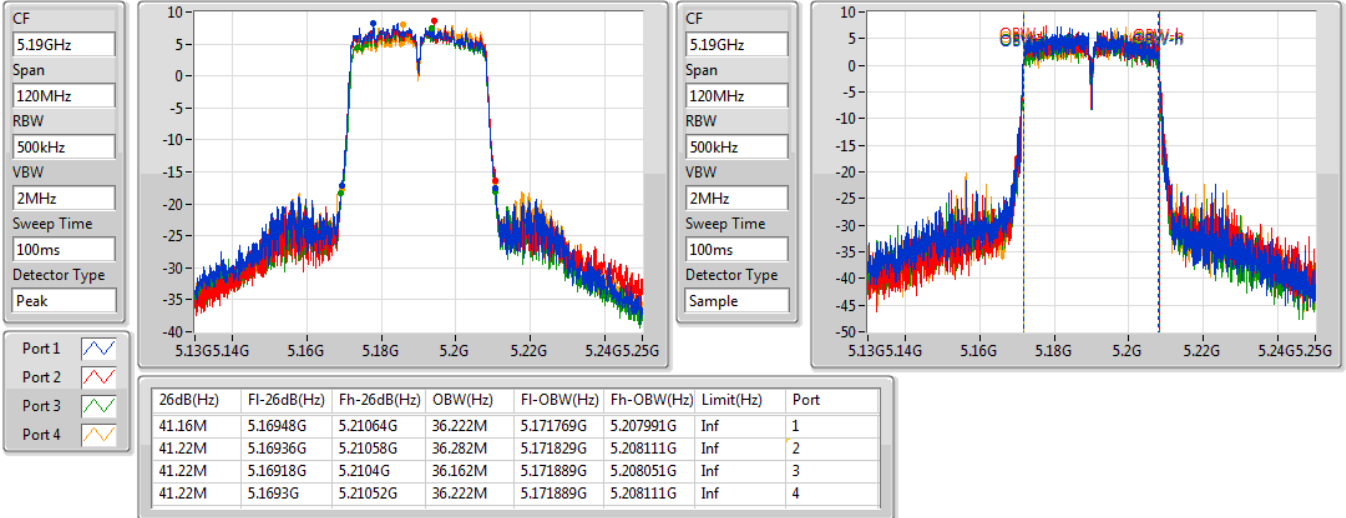


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

5190MHz

04/05/2019

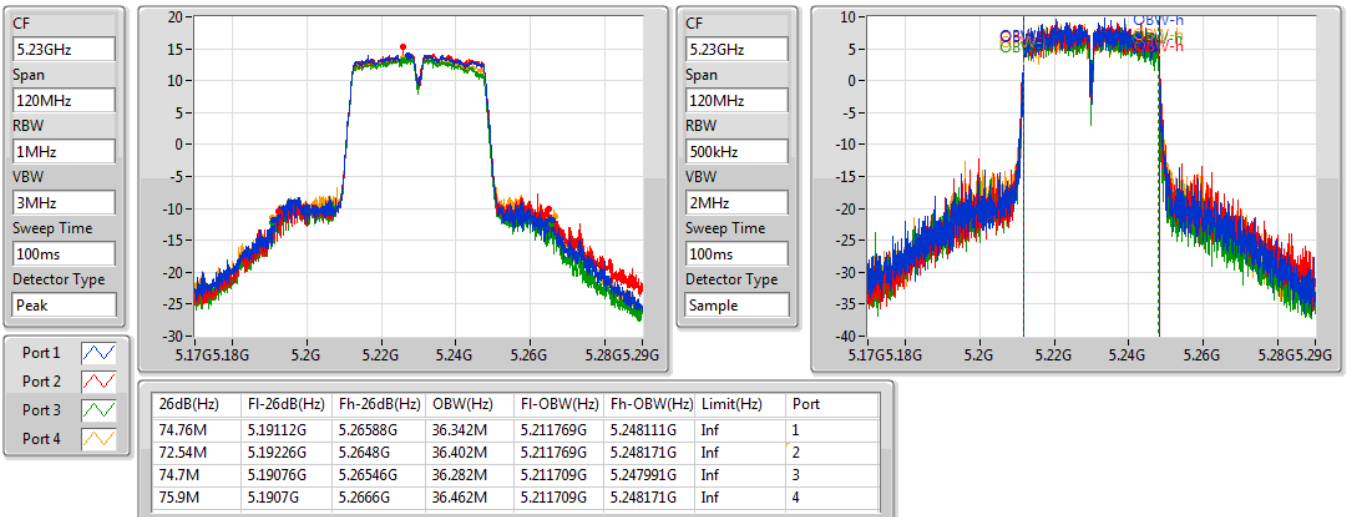


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

5230MHz

04/05/2019

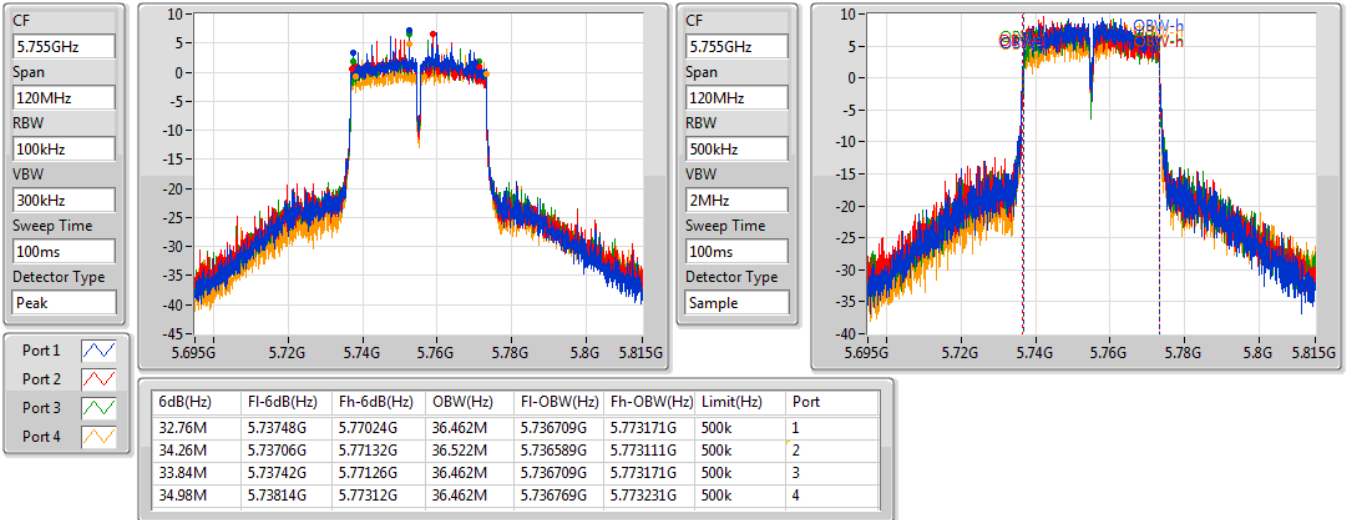


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

5755MHz

04/05/2019

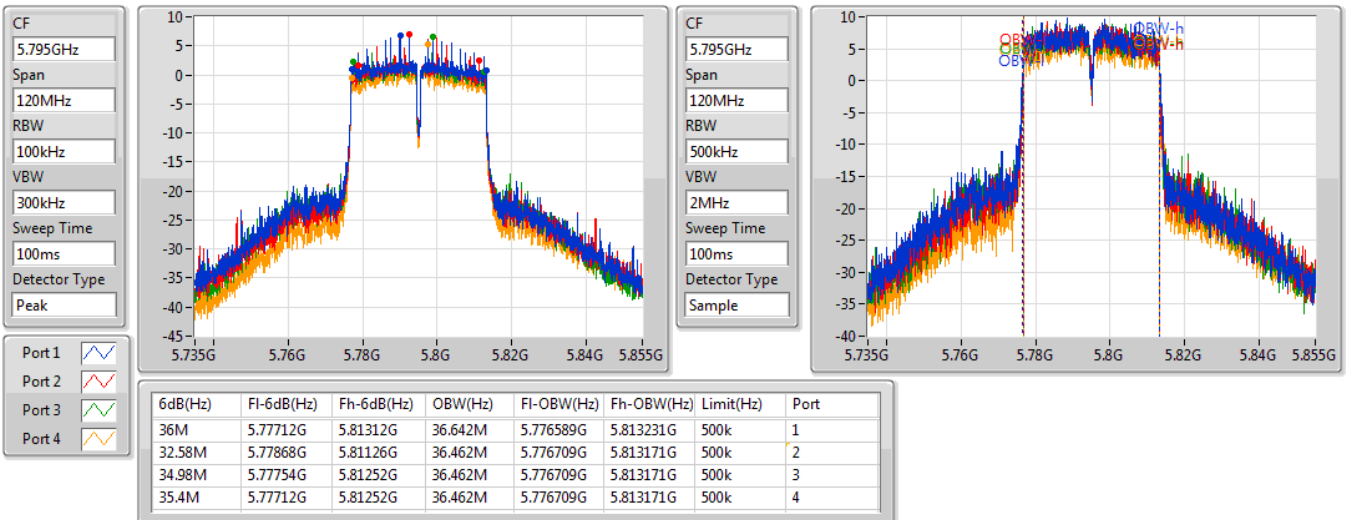


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

5795MHz

04/05/2019

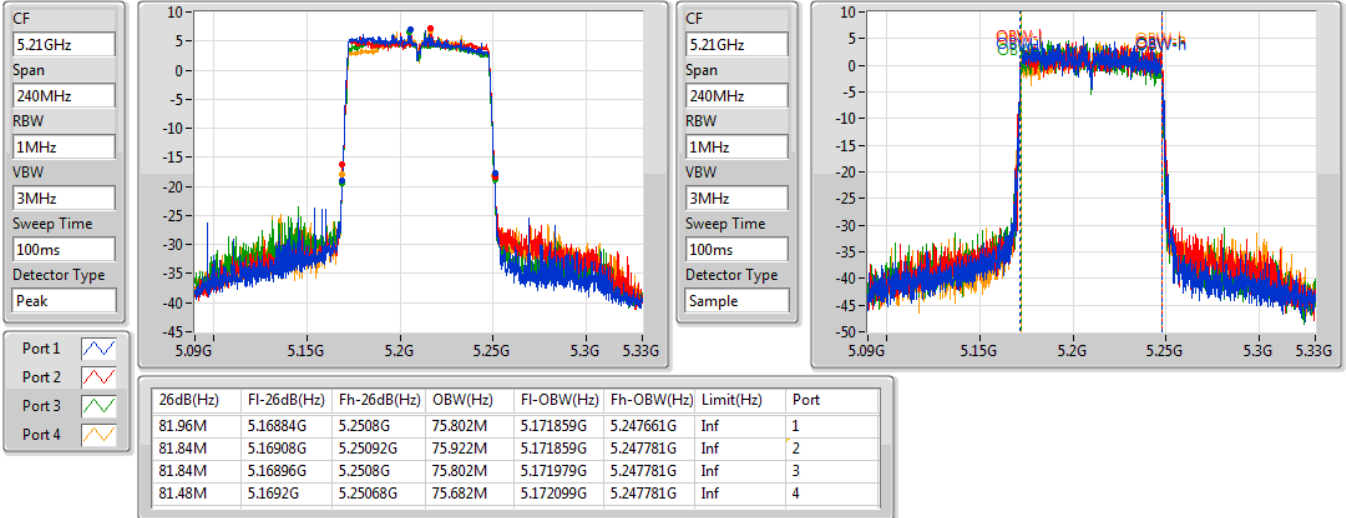


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

5210MHz

04/05/2019

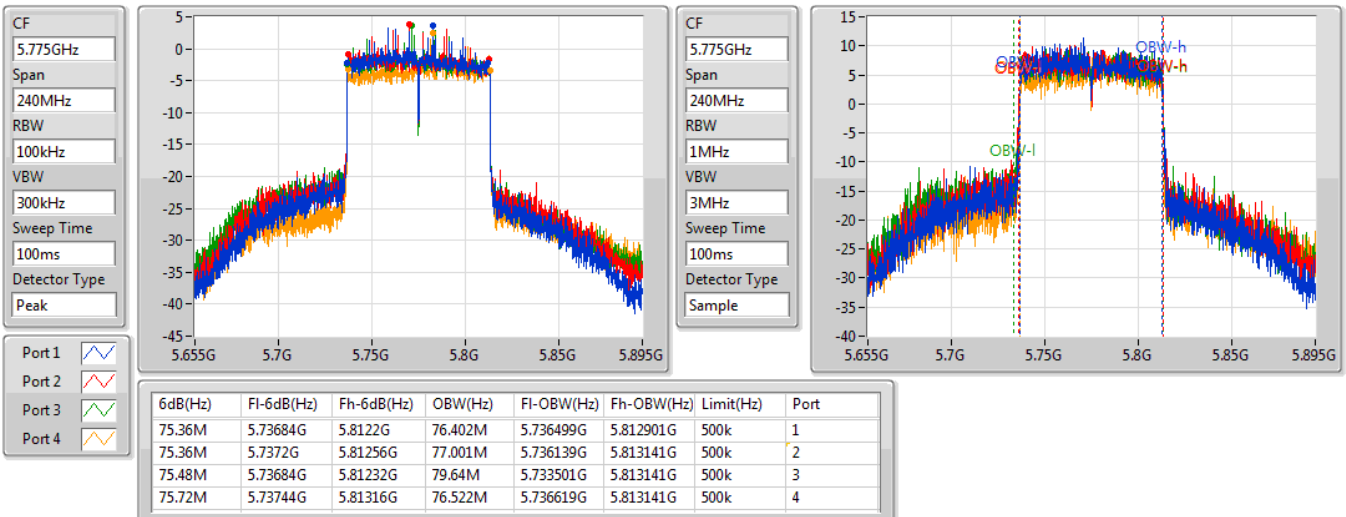


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

5775MHz

04/05/2019



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	20.7M	17.721M	17M7D1D	20.52M	17.631M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	41.34M	36.282M	36M3D1D	40.86M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	81.96M	76.042M	76M0D1D	81.84M	75.802M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	17.58M	18.081M	18M1D1D	15.06M	17.901M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	36M	36.642M	36M6D1D	32.58M	36.462M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	75.72M	79.64M	79M6D1D	75.36M	76.402M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	20.7M	17.721M	20.7M	17.691M	20.61M	17.631M	20.64M	17.721M
5200MHz	Pass	Inf	20.67M	17.661M	20.61M	17.691M	20.58M	17.721M	20.58M	17.691M
5240MHz	Pass	Inf	20.64M	17.661M	20.67M	17.721M	20.61M	17.691M	20.52M	17.661M
5745MHz	Pass	500k	17.13M	17.901M	15.45M	17.961M	15.48M	17.991M	17.52M	17.991M
5785MHz	Pass	500k	15.06M	17.991M	15.06M	17.931M	15.33M	18.081M	17.52M	17.961M
5825MHz	Pass	500k	17.55M	17.961M	15.87M	17.991M	16.65M	18.021M	17.58M	17.961M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.86M	36.162M	41.16M	36.282M	41.1M	36.162M	41.16M	36.162M
5230MHz	Pass	Inf	41.34M	36.162M	41.1M	36.222M	41.1M	36.162M	41.04M	36.222M
5755MHz	Pass	500k	32.76M	36.462M	34.26M	36.522M	33.84M	36.462M	34.98M	36.462M
5795MHz	Pass	500k	36M	36.642M	32.58M	36.462M	34.98M	36.462M	35.4M	36.462M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.84M	76.042M	81.84M	75.922M	81.84M	75.802M	81.96M	75.802M
5775MHz	Pass	500k	75.36M	76.402M	75.36M	77.001M	75.48M	79.64M	75.72M	76.522M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

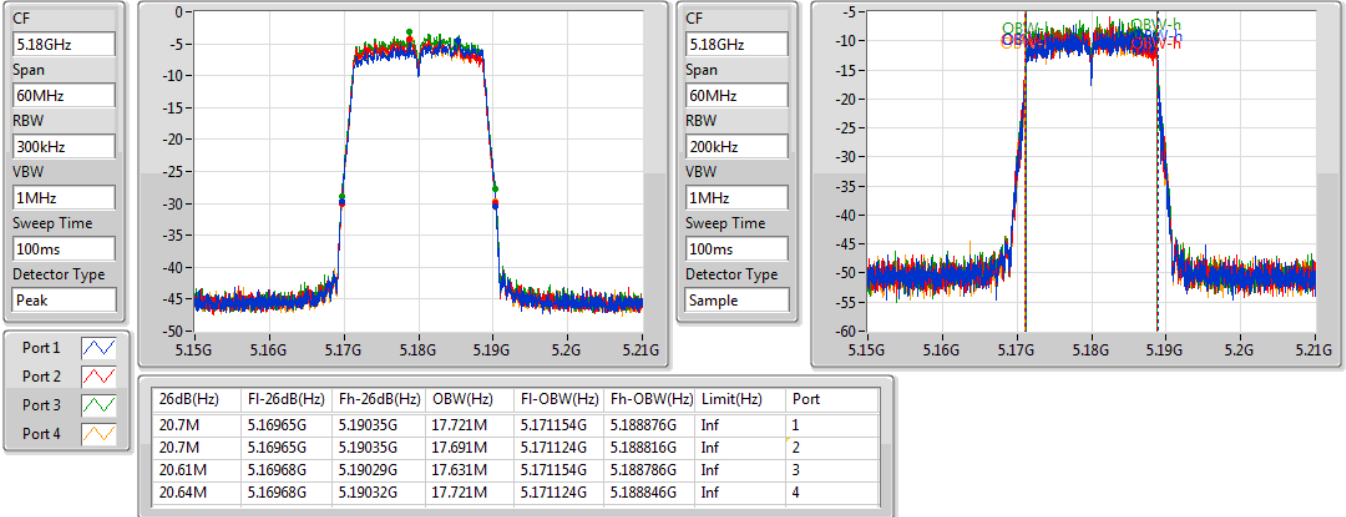
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5180MHz

05/05/2019

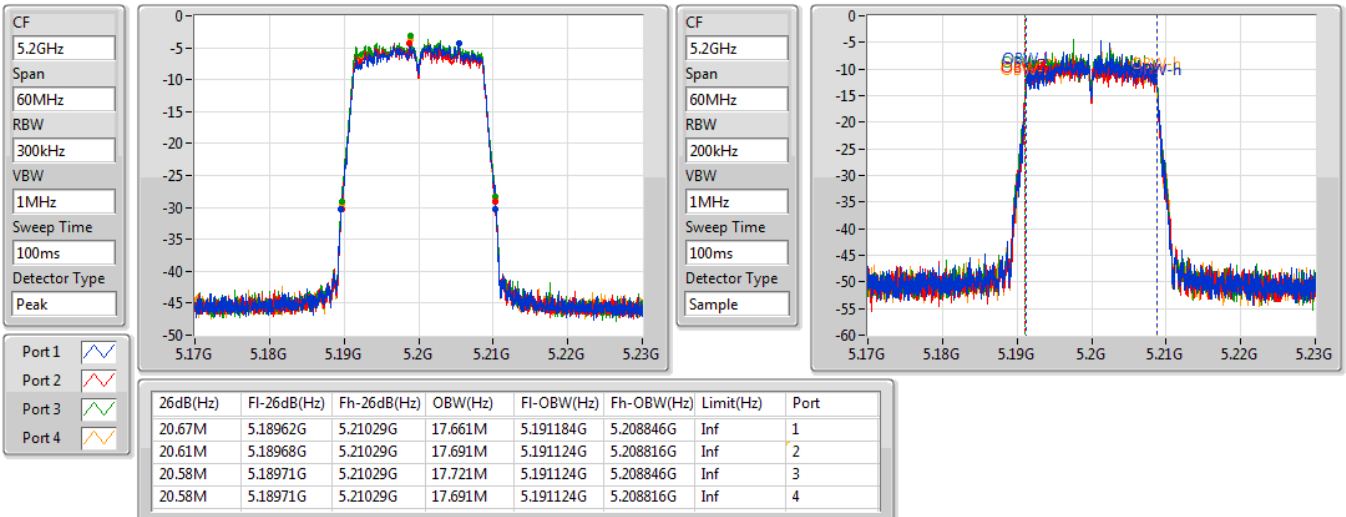


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5200MHz

05/05/2019

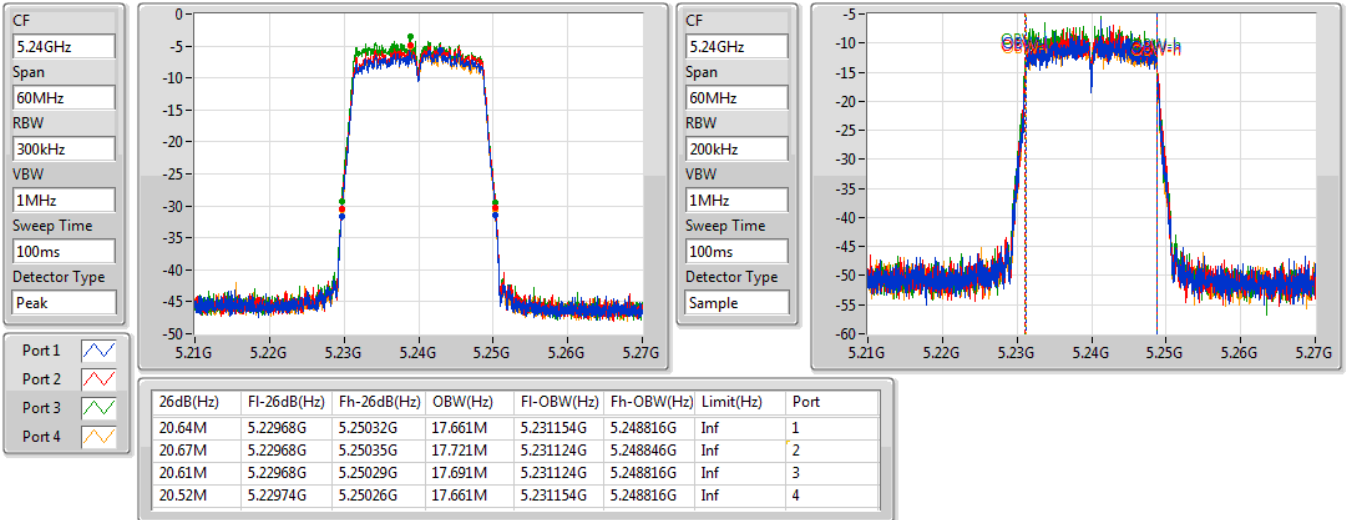


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5240MHz

06/05/2019

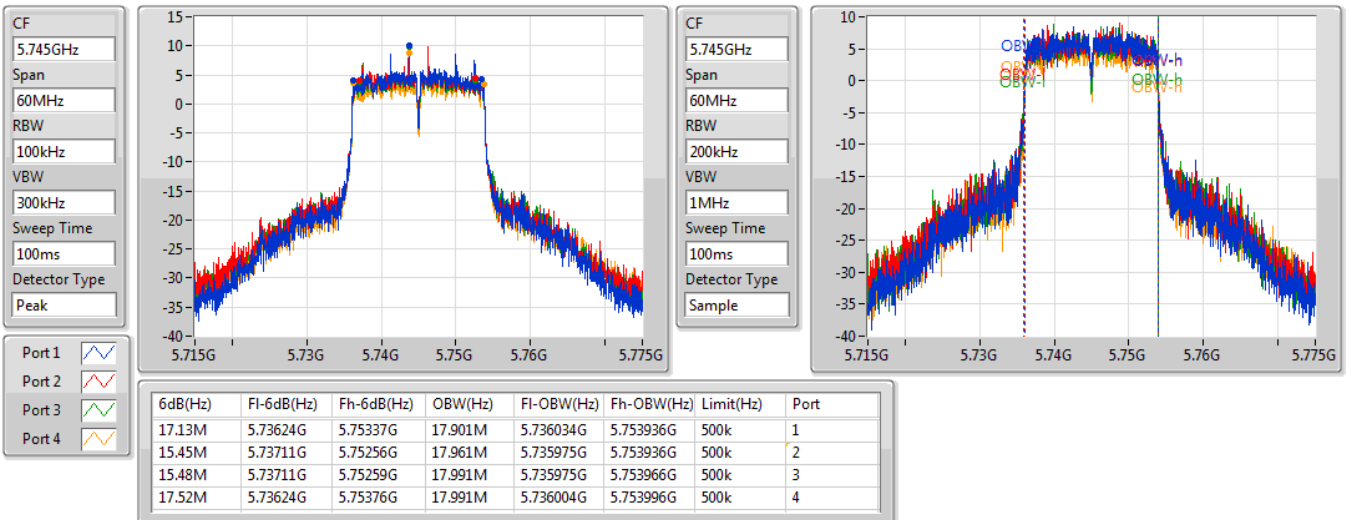


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5745MHz

04/05/2019

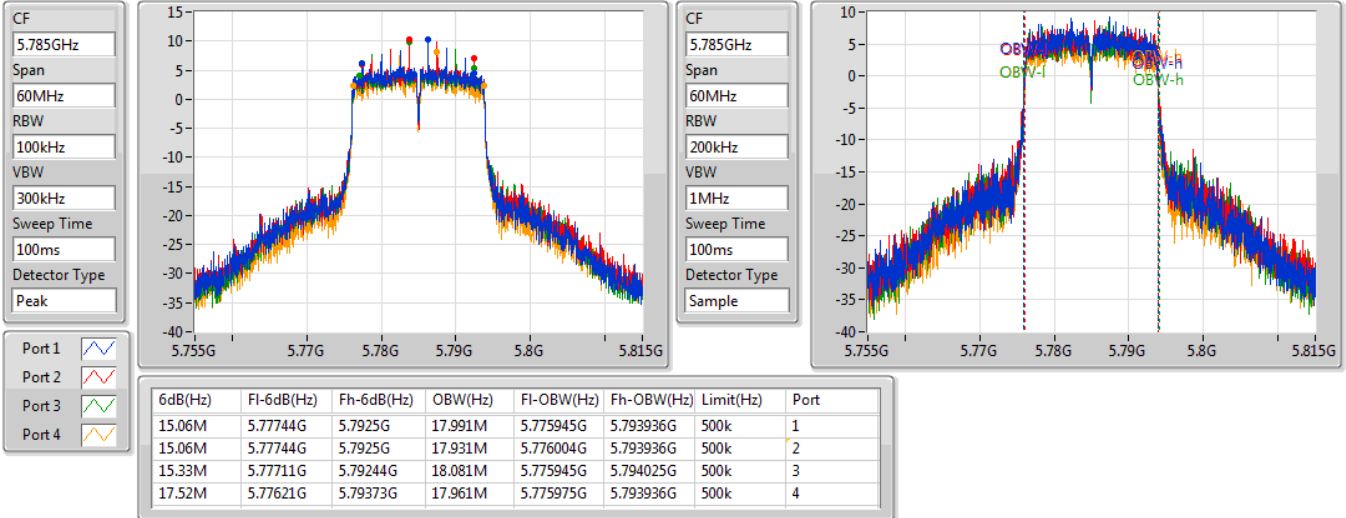


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

5785MHz

04/05/2019

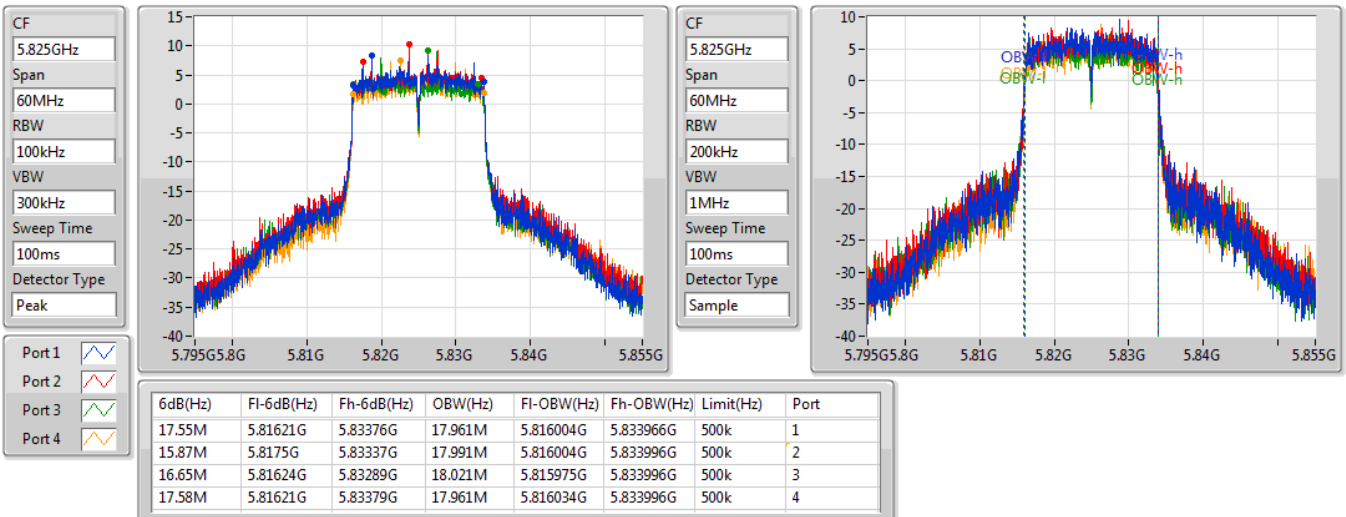


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

EBW

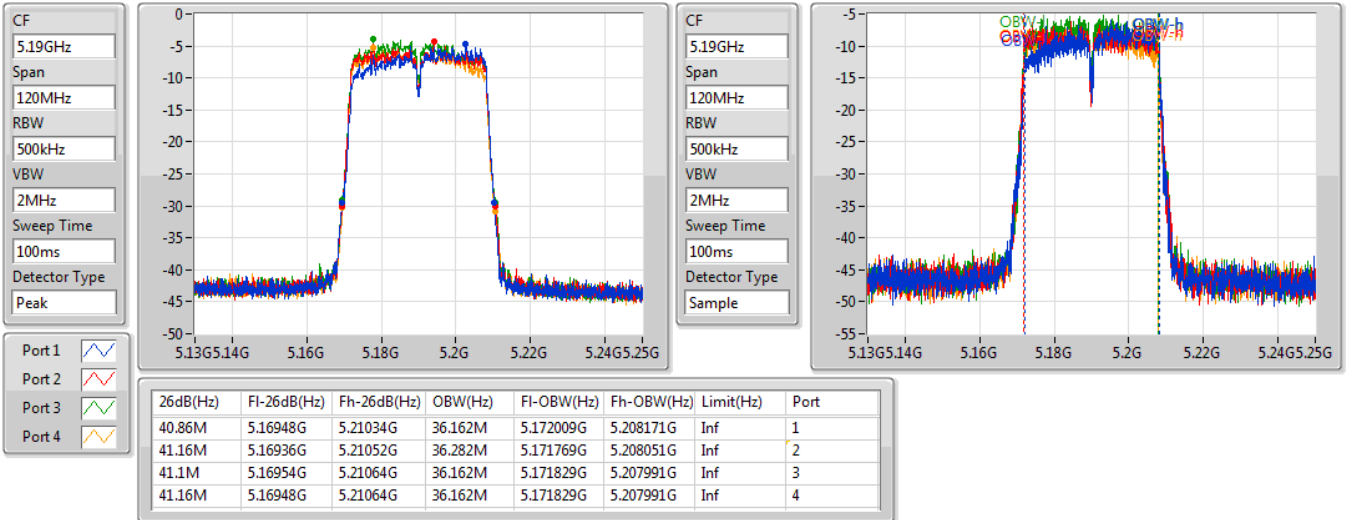
5825MHz

04/05/2019

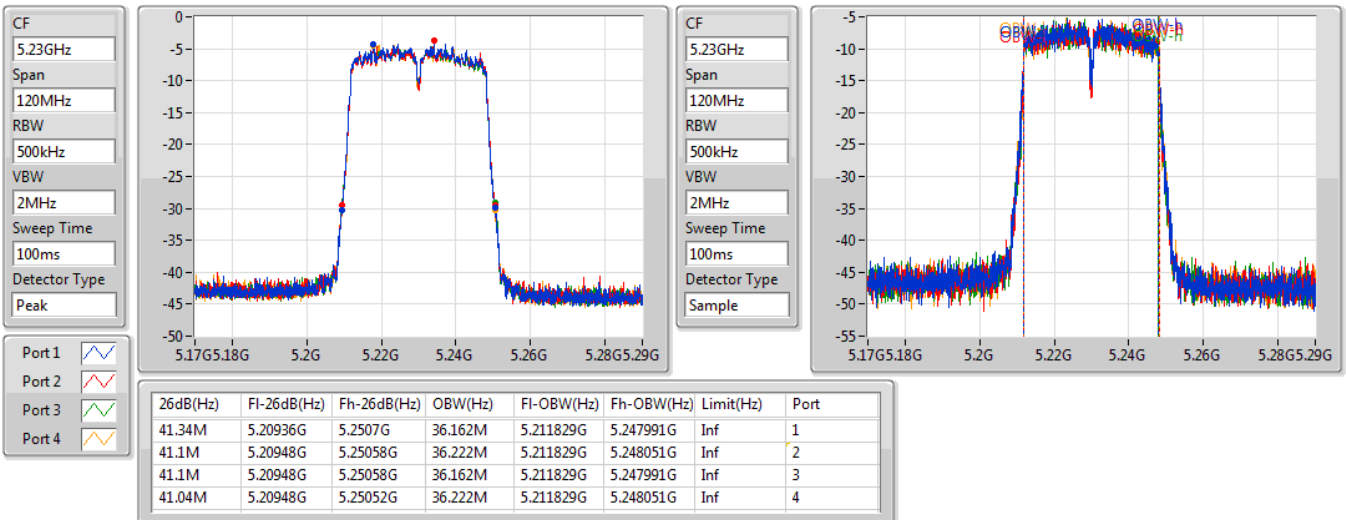


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5190MHz

05/05/2019


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5230MHz

05/05/2019

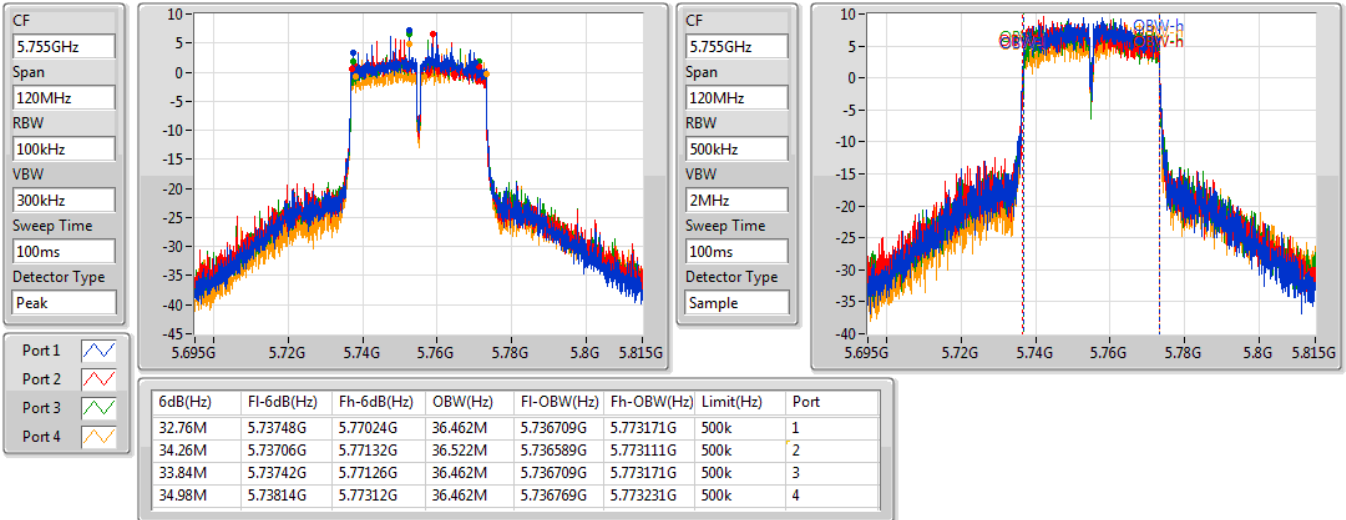


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

5755MHz

04/05/2019

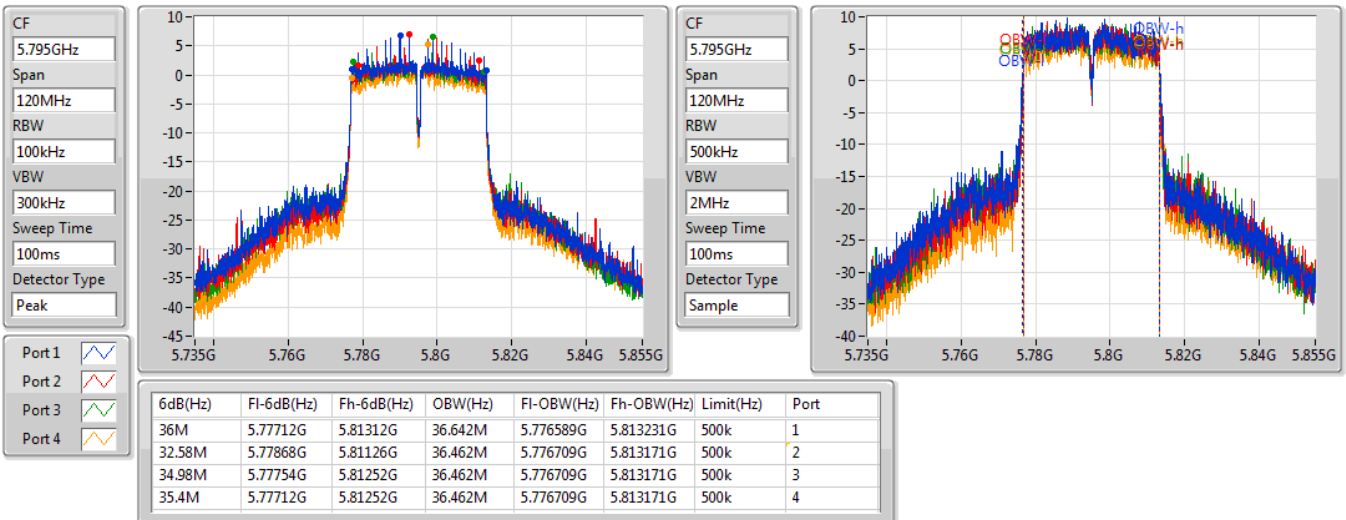


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

EBW

5795MHz

04/05/2019

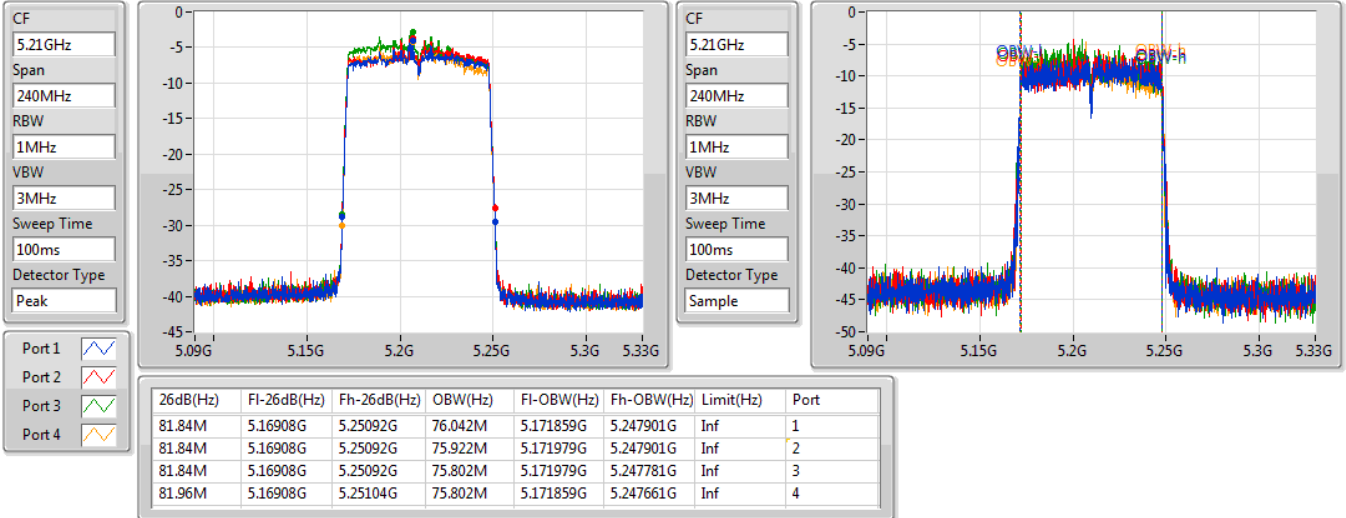


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

5210MHz

05/05/2019

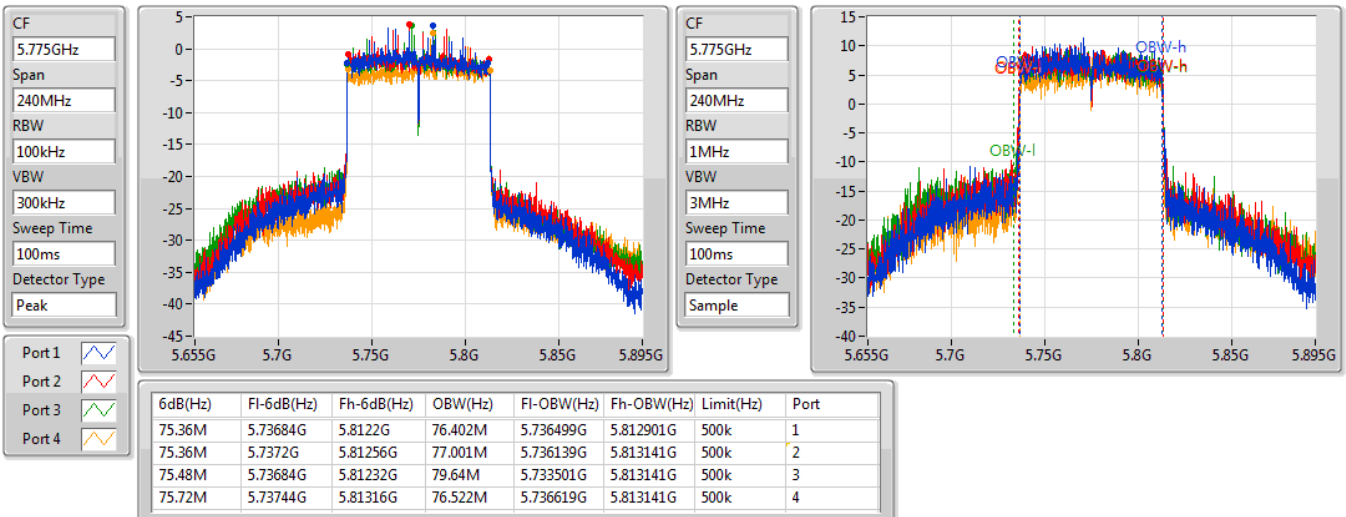


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

EBW

5775MHz

04/05/2019



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	24.60	0.28840	28.60	0.72444
802.11ac VHT20_Nss1,(MCS0)_4TX	24.76	0.29923	28.76	0.75162
802.11ac VHT40_Nss1,(MCS0)_4TX	24.25	0.26607	28.25	0.66834
802.11ac VHT80_Nss1,(MCS0)_4TX	17.86	0.06109	21.86	0.15346
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.84	0.48306	30.84	1.21339
802.11ac VHT20_Nss1,(MCS0)_4TX	26.41	0.43752	30.41	1.09901
802.11ac VHT40_Nss1,(MCS0)_4TX	26.50	0.44668	30.50	1.12202
802.11ac VHT80_Nss1,(MCS0)_4TX	22.99	0.19907	26.99	0.50003

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	17.57	18.38	17.61	17.19	23.73	30.00	27.73	36.00
5200MHz	Pass	4.00	18.54	19.22	18.52	17.96	24.60	30.00	28.60	36.00
5240MHz	Pass	4.00	17.87	18.70	17.59	17.81	24.03	30.00	28.03	36.00
5745MHz	Pass	4.00	20.54	21.08	20.43	19.67	26.48	30.00	30.48	36.00
5785MHz	Pass	4.00	21.15	21.34	20.73	19.94	26.84	30.00	30.84	36.00
5825MHz	Pass	4.00	20.91	21.59	20.18	19.96	26.73	30.00	30.73	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	17.60	18.42	17.73	17.16	23.77	30.00	27.77	36.00
5200MHz	Pass	4.00	18.41	19.57	18.70	18.15	24.76	30.00	28.76	36.00
5240MHz	Pass	4.00	18.32	19.44	18.41	18.38	24.68	30.00	28.68	36.00
5745MHz	Pass	4.00	20.53	20.98	20.39	19.54	26.41	30.00	30.41	36.00
5785MHz	Pass	4.00	18.26	18.69	18.28	17.17	24.16	30.00	28.16	36.00
5825MHz	Pass	4.00	16.73	17.28	16.66	15.65	22.64	30.00	26.64	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.00	14.79	15.56	14.75	14.46	20.93	30.00	24.93	36.00
5230MHz	Pass	4.00	18.12	18.72	18.02	18.00	24.25	30.00	28.25	36.00
5755MHz	Pass	4.00	20.78	20.86	20.58	19.58	26.50	30.00	30.50	36.00
5795MHz	Pass	4.00	20.02	19.94	19.55	18.55	25.57	30.00	29.57	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.00	11.75	12.22	11.60	11.76	17.86	30.00	21.86	36.00
5775MHz	Pass	4.00	17.21	17.07	17.29	16.25	22.99	30.00	26.99	36.00

DG = Directional Gain; **Port X** = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	16.44	0.04406	20.44	0.11066
802.11ac VHT20_Nss1,(MCS0)_4TX	16.32	0.04285	20.32	0.10765
802.11ac VHT40_Nss1,(MCS0)_4TX	16.13	0.04102	20.13	0.10304
802.11ac VHT80_Nss1,(MCS0)_4TX	16.46	0.04426	20.46	0.11117
5.725-5.85GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_4TX	26.84	0.48306	30.84	1.21339
802.11ac VHT20_Nss1,(MCS0)_4TX	26.41	0.43752	30.41	1.09901
802.11ac VHT40_Nss1,(MCS0)_4TX	26.50	0.44668	30.50	1.12202
802.11ac VHT80_Nss1,(MCS0)_4TX	22.99	0.19907	26.99	0.50003

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	10.02	10.68	10.34	10.14	16.32	30.00	20.32	36.00
5200MHz	Pass	4.00	9.98	10.62	10.71	10.34	16.44	30.00	20.44	36.00
5240MHz	Pass	4.00	10.18	10.65	9.91	10.53	16.35	30.00	20.35	36.00
5745MHz	Pass	4.00	20.54	21.08	20.43	19.67	26.48	30.00	30.48	36.00
5785MHz	Pass	4.00	21.15	21.34	20.73	19.94	26.84	30.00	30.84	36.00
5825MHz	Pass	4.00	20.91	21.59	20.18	19.96	26.73	30.00	30.73	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	9.97	10.81	10.33	10.05	16.32	30.00	20.32	36.00
5200MHz	Pass	4.00	10.09	10.76	10.25	10.01	16.31	30.00	20.31	36.00
5240MHz	Pass	4.00	9.87	10.36	10.09	10.54	16.24	30.00	20.24	36.00
5745MHz	Pass	4.00	20.53	20.98	20.39	19.54	26.41	30.00	30.41	36.00
5785MHz	Pass	4.00	18.26	18.69	18.28	17.17	24.16	30.00	28.16	36.00
5825MHz	Pass	4.00	16.73	17.28	16.66	15.65	22.64	30.00	26.64	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.00	9.84	10.44	10.24	9.91	16.13	30.00	20.13	36.00
5230MHz	Pass	4.00	10.20	10.29	9.84	10.07	16.12	30.00	20.12	36.00
5755MHz	Pass	4.00	20.78	20.86	20.58	19.58	26.50	30.00	30.50	36.00
5795MHz	Pass	4.00	20.02	19.94	19.55	18.55	25.57	30.00	29.57	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.00	10.34	10.67	10.12	10.59	16.46	30.00	20.46	36.00
5775MHz	Pass	4.00	17.21	17.07	17.29	16.25	22.99	30.00	26.99	36.00

DG = Directional Gain; Port X = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	25.45	0.35075	35.47	3.52371
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	25.46	0.35156	35.48	3.53183
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	20.47	0.11143	30.49	1.11944
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	25.46	0.35156	35.48	3.53183
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	25.44	0.34995	35.46	3.51560
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	25.41	0.34754	35.43	3.49140

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	19.77	19.76	19.08	19.03	25.45	25.98	35.47	36.00
5200MHz	Pass	10.02	19.52	19.59	19.09	19.31	25.40	25.98	35.42	36.00
5240MHz	Pass	10.02	19.82	19.69	18.96	19.12	25.43	25.98	35.45	36.00
5745MHz	Pass	10.02	19.88	19.67	19.52	18.57	25.46	25.98	35.48	36.00
5785MHz	Pass	10.02	19.61	19.80	19.31	18.65	25.38	25.98	35.40	36.00
5825MHz	Pass	10.02	19.74	19.96	19.13	18.69	25.43	25.98	35.45	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.02	17.43	17.45	16.89	17.02	23.23	25.98	33.25	36.00
5230MHz	Pass	10.02	19.78	19.90	18.72	19.27	25.46	25.98	35.48	36.00
5755MHz	Pass	10.02	19.89	19.67	19.54	18.32	25.42	25.98	35.44	36.00
5795MHz	Pass	10.02	19.94	19.78	19.43	18.36	25.44	25.98	35.46	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.02	14.60	14.51	14.18	14.50	20.47	25.98	30.49	36.00
5775MHz	Pass	10.02	19.89	19.51	19.49	18.55	25.41	25.98	35.43	36.00

DG = Directional Gain; **Port X** = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	10.46	0.01112	20.48	0.11169
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	10.47	0.01114	20.49	0.11194
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	10.20	0.01047	20.22	0.10520
5.725-5.85GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	25.46	0.35156	35.48	3.53183
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	25.44	0.34995	35.46	3.51560
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	25.41	0.34754	35.43	3.49140

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	4.01	4.33	5.21	4.02	10.44	25.98	20.46	36.00
5200MHz	Pass	10.02	4.22	4.15	4.89	4.46	10.46	25.98	20.48	36.00
5240MHz	Pass	10.02	3.98	4.39	4.27	4.24	10.24	25.98	20.26	36.00
5745MHz	Pass	10.02	19.88	19.67	19.52	18.57	25.46	25.98	35.48	36.00
5785MHz	Pass	10.02	19.61	19.80	19.31	18.65	25.38	25.98	35.40	36.00
5825MHz	Pass	10.02	19.74	19.96	19.13	18.69	25.43	25.98	35.45	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.02	4.06	4.39	5.20	3.98	10.46	25.98	20.48	36.00
5230MHz	Pass	10.02	4.62	4.38	4.45	4.34	10.47	25.98	20.49	36.00
5755MHz	Pass	10.02	19.89	19.67	19.54	18.32	25.42	25.98	35.44	36.00
5795MHz	Pass	10.02	19.94	19.78	19.43	18.36	25.44	25.98	35.46	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.02	3.92	4.16	4.90	3.63	10.20	25.98	20.22	36.00
5775MHz	Pass	10.02	19.89	19.51	19.49	18.55	25.41	25.98	35.43	36.00

DG = Directional Gain; **Port X** = Port X output power

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	12.59	22.61
802.11ac VHT20_Nss1,(MCS0)_4TX	12.61	22.63
802.11ac VHT40_Nss1,(MCS0)_4TX	9.29	19.31
802.11ac VHT80_Nss1,(MCS0)_4TX	0.34	10.36
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	13.38	23.40
802.11ac VHT20_Nss1,(MCS0)_4TX	12.79	22.81
802.11ac VHT40_Nss1,(MCS0)_4TX	10.08	20.10
802.11ac VHT80_Nss1,(MCS0)_4TX	4.28	14.30

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	5.69	6.26	5.82	5.18	11.77	12.98	21.79	23.00
5200MHz	Pass	10.02	6.68	7.20	6.61	5.86	12.59	12.98	22.61	23.00
5240MHz	Pass	10.02	5.99	6.69	5.97	5.88	12.13	12.98	22.15	23.00
5745MHz	Pass	10.02	7.36	7.61	7.04	6.14	13.06	25.98	23.08	36.00
5785MHz	Pass	10.02	7.82	7.89	7.29	6.40	13.38	25.98	23.40	36.00
5825MHz	Pass	10.02	7.80	8.23	6.84	6.59	13.38	25.98	23.40	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	5.38	6.35	5.69	5.15	11.62	12.98	21.64	23.00
5200MHz	Pass	10.02	6.40	7.45	6.56	6.14	12.61	12.98	22.63	23.00
5240MHz	Pass	10.02	6.31	7.39	6.33	6.39	12.60	12.98	22.62	23.00
5745MHz	Pass	10.02	6.91	7.49	6.78	6.17	12.79	25.98	22.81	36.00
5785MHz	Pass	10.02	4.95	5.23	5.03	3.76	10.72	25.98	20.74	36.00
5825MHz	Pass	10.02	3.23	3.83	2.98	2.35	9.06	25.98	19.08	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.02	-0.16	0.30	-0.17	-0.66	5.79	12.98	15.81	23.00
5230MHz	Pass	10.02	3.46	3.80	3.15	2.92	9.29	12.98	19.31	23.00
5755MHz	Pass	10.02	4.41	4.58	4.22	3.20	10.08	25.98	20.10	36.00
5795MHz	Pass	10.02	3.72	3.59	3.22	2.11	9.14	25.98	19.16	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.02	-5.66	-5.22	-5.67	-5.40	0.34	12.98	10.36	23.00
5775MHz	Pass	10.02	-1.20	-1.61	-1.17	-2.53	4.28	25.98	14.30	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

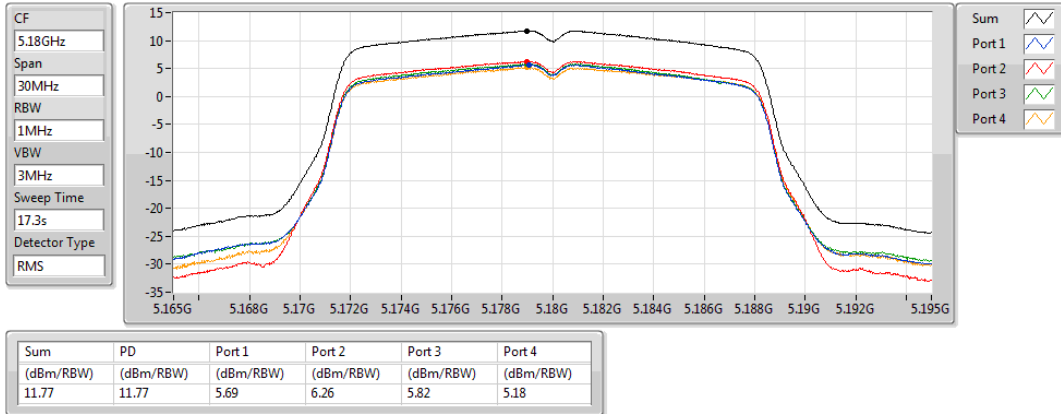
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

06/05/2019

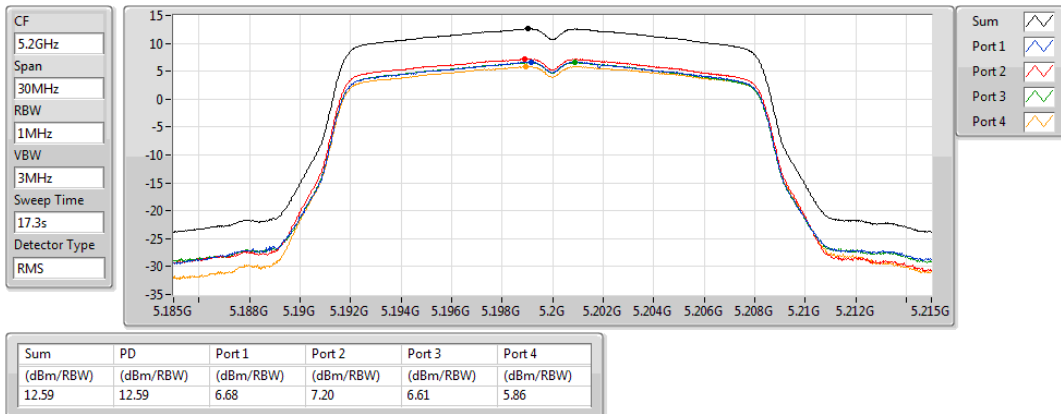


802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

06/05/2019

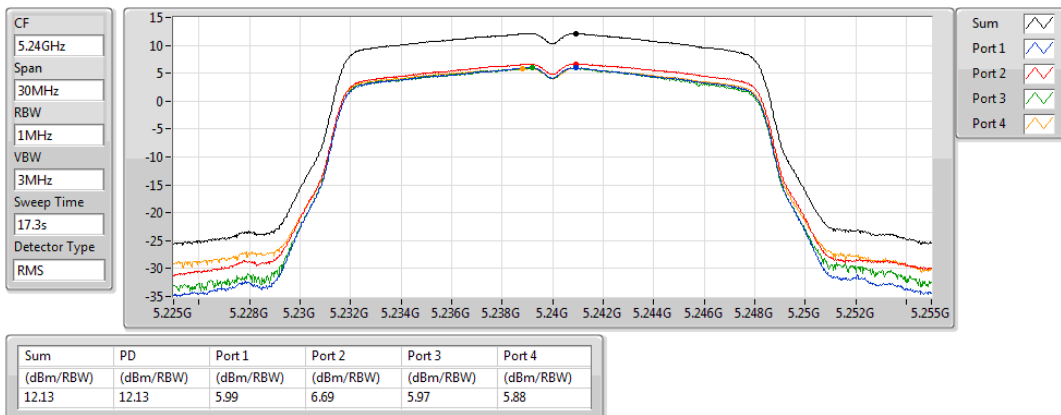


802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

06/05/2019

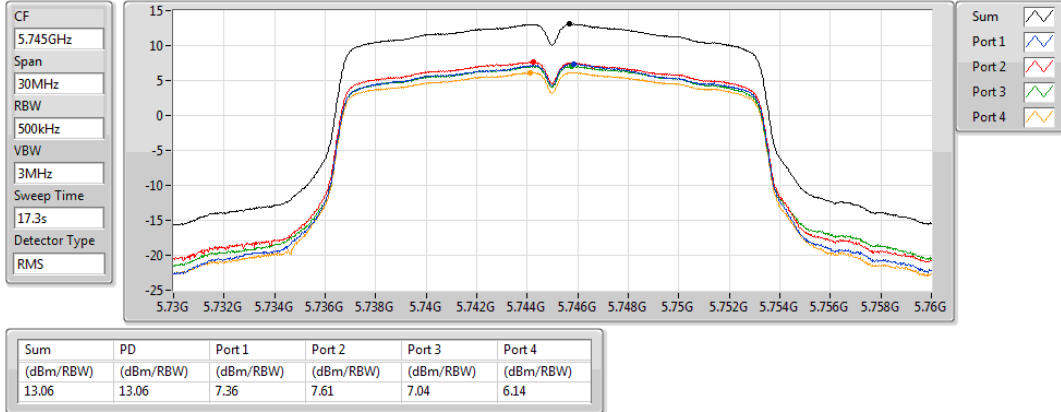


802.11a_Nss1,(6Mbps)_4TX

PSD

5745MHz

06/05/2019

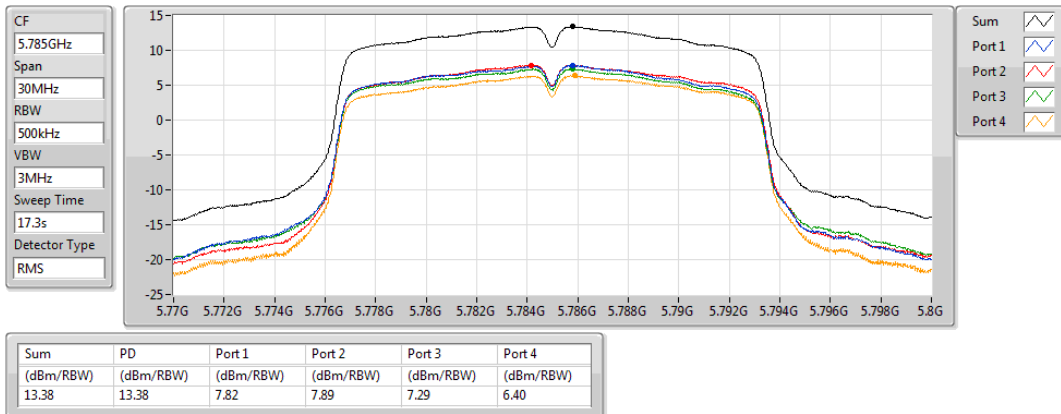


802.11a_Nss1,(6Mbps)_4TX

PSD

5785MHz

06/05/2019

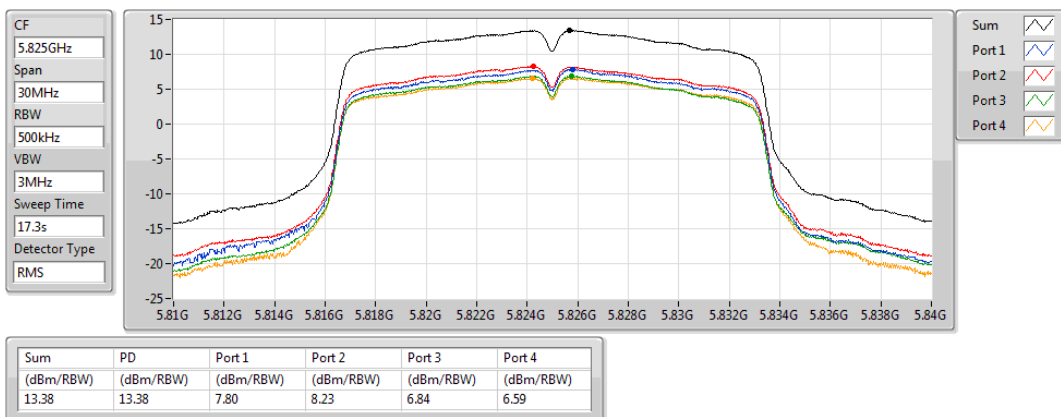


802.11a_Nss1,(6Mbps)_4TX

PSD

5825MHz

06/05/2019

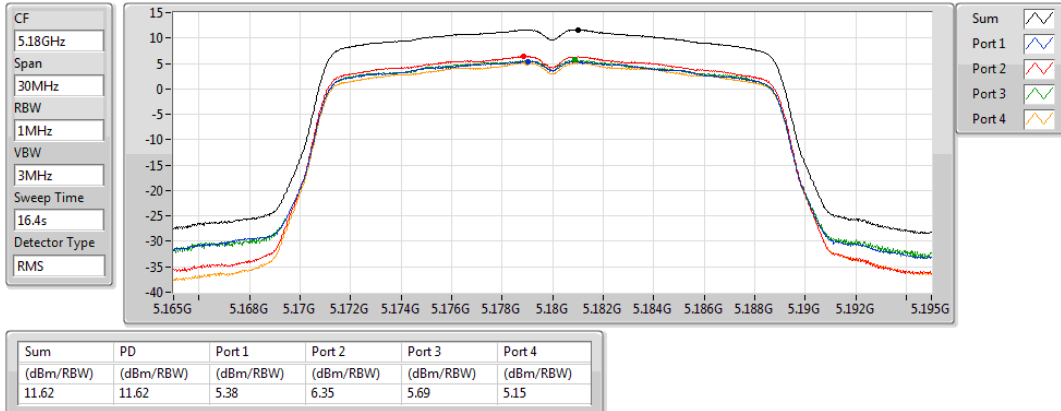


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5180MHz

06/05/2019

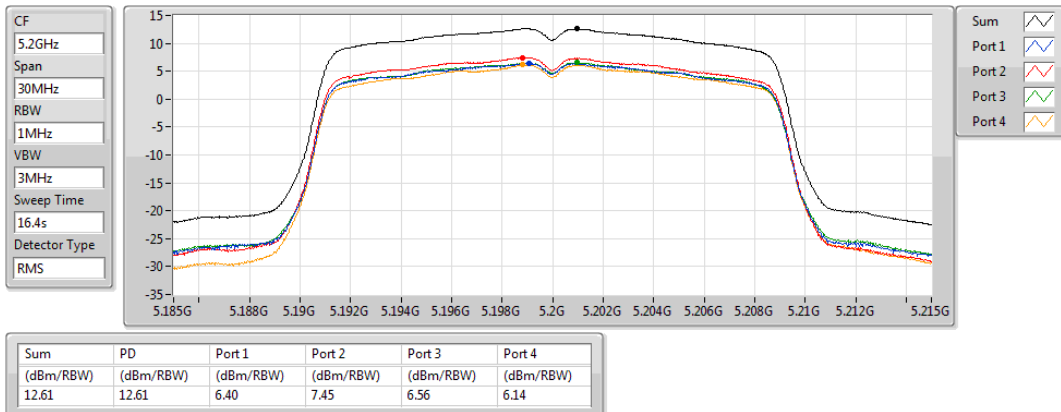


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5200MHz

06/05/2019

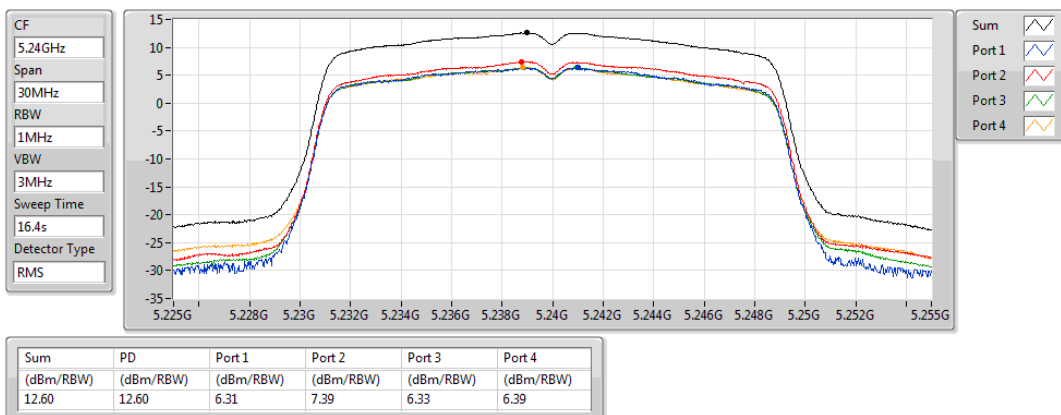


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5240MHz

06/05/2019

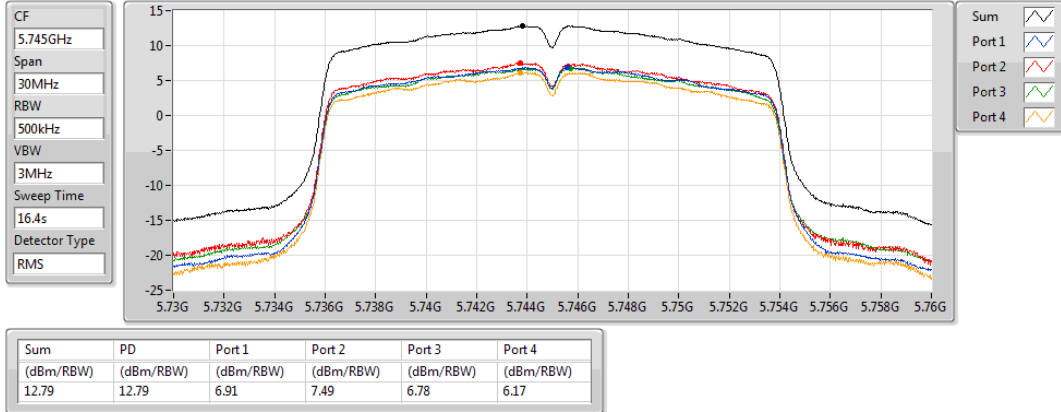


802.11ac VHT20_Nss1,(MCS0)_4TX

5745MHz

PSD

06/05/2019

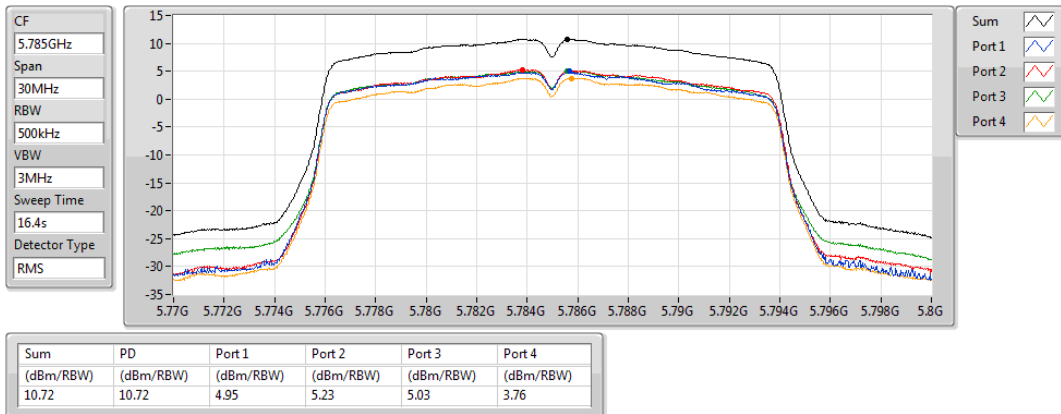


802.11ac VHT20_Nss1,(MCS0)_4TX

5785MHz

PSD

06/05/2019

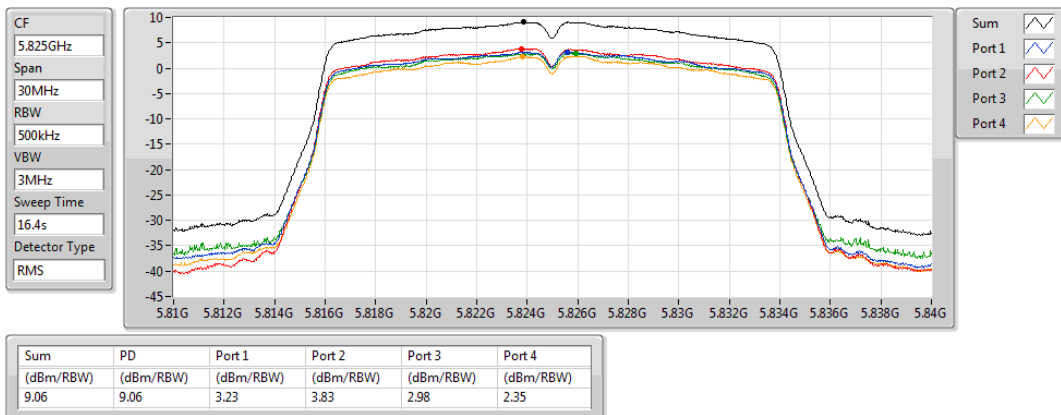


802.11ac VHT20_Nss1,(MCS0)_4TX

5825MHz

PSD

06/05/2019

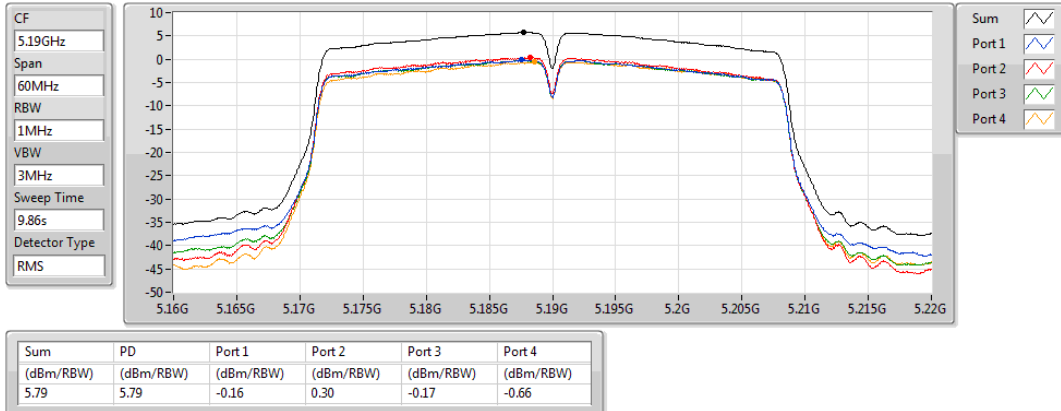


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5190MHz

06/05/2019

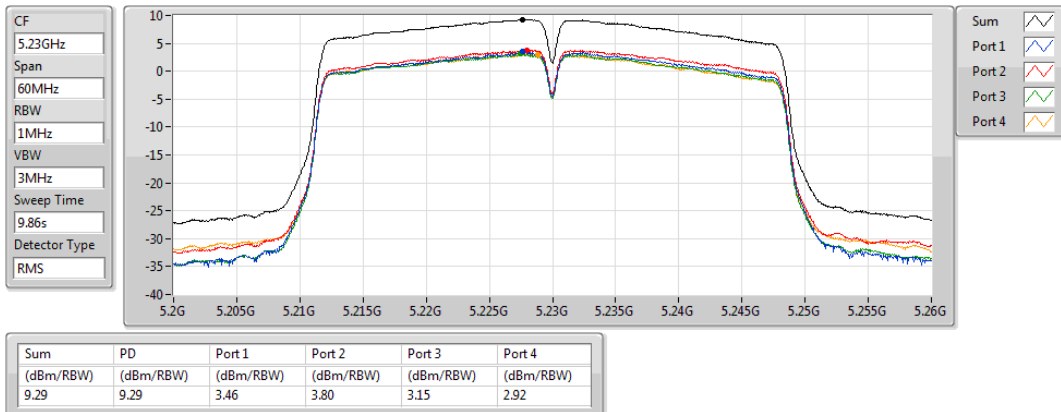


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5230MHz

06/05/2019

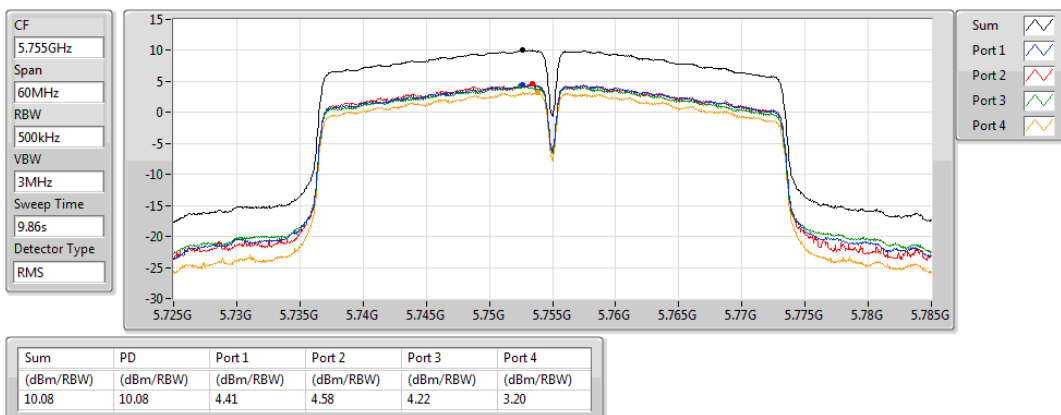


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5755MHz

06/05/2019

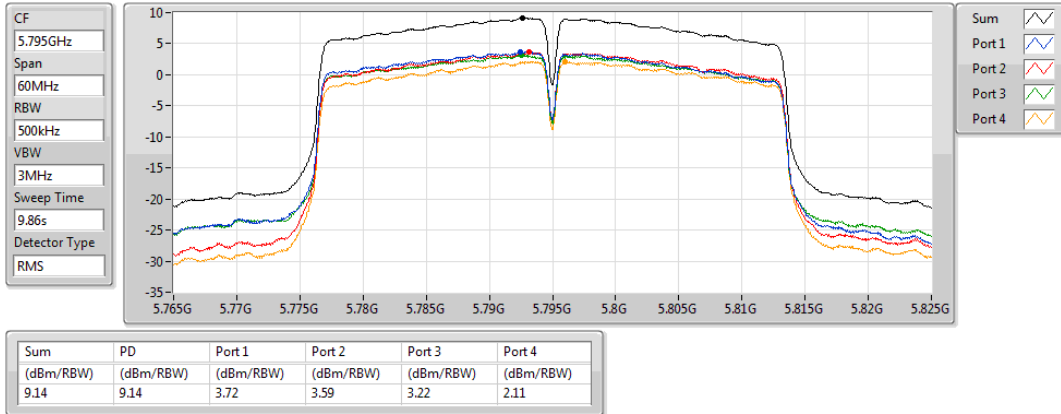


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5795MHz

06/05/2019

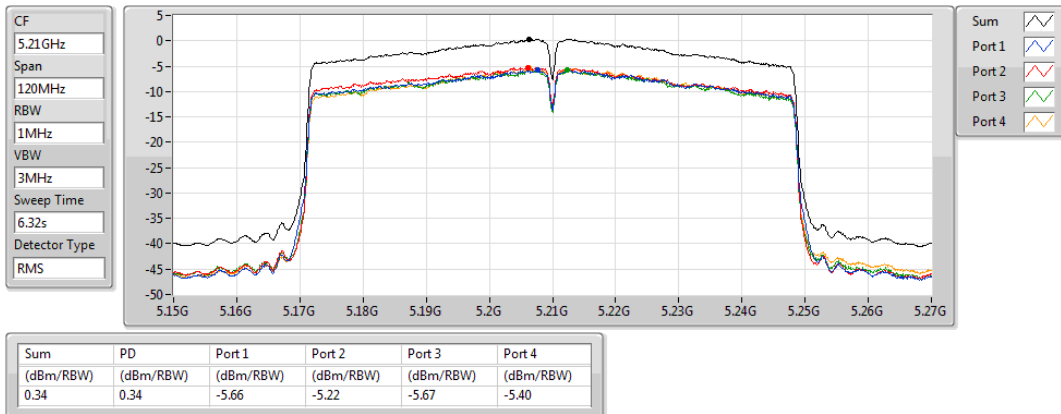


802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5210MHz

06/05/2019

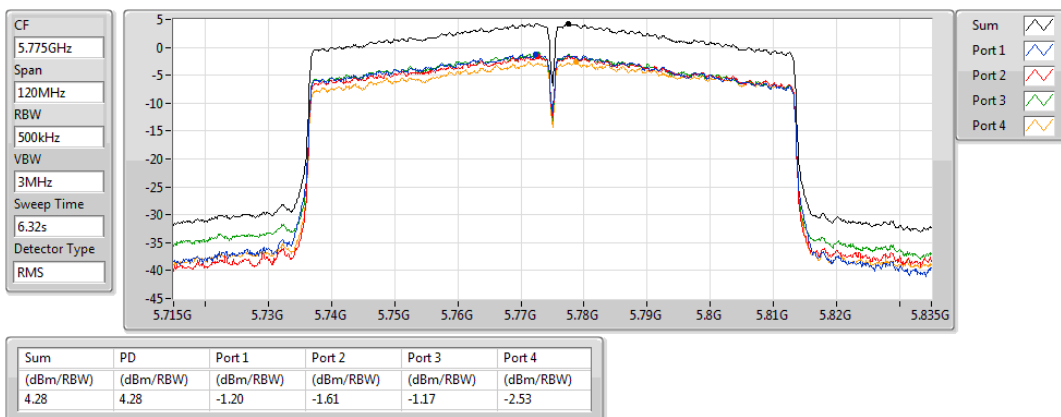


802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5775MHz

13/05/2019



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	4.36	14.38
802.11ac VHT20_Nss1,(MCS0)_4TX	4.25	14.27
802.11ac VHT40_Nss1,(MCS0)_4TX	1.02	11.04
802.11ac VHT80_Nss1,(MCS0)_4TX	-1.04	8.98
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_4TX	13.38	23.40
802.11ac VHT20_Nss1,(MCS0)_4TX	12.79	22.81
802.11ac VHT40_Nss1,(MCS0)_4TX	10.08	20.10
802.11ac VHT80_Nss1,(MCS0)_4TX	4.28	14.30

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	-1.59	-1.22	-1.51	-1.83	4.36	12.98	14.38	23.00
5200MHz	Pass	10.02	-1.71	-1.38	-1.45	-1.95	4.30	12.98	14.32	23.00
5240MHz	Pass	10.02	-1.58	-1.35	-1.73	-1.70	4.30	12.98	14.32	23.00
5745MHz	Pass	10.02	7.36	7.61	7.04	6.14	13.06	25.98	23.08	36.00
5785MHz	Pass	10.02	7.82	7.89	7.29	6.40	13.38	25.98	23.40	36.00
5825MHz	Pass	10.02	7.80	8.23	6.84	6.59	13.38	25.98	23.40	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	-1.99	-1.18	-1.76	-1.81	4.25	12.98	14.27	23.00
5200MHz	Pass	10.02	-2.15	-1.31	-1.67	-1.81	4.20	12.98	14.22	23.00
5240MHz	Pass	10.02	-2.12	-1.37	-1.93	-1.58	4.19	12.98	14.21	23.00
5745MHz	Pass	10.02	6.91	7.49	6.78	6.17	12.79	25.98	22.81	36.00
5785MHz	Pass	10.02	4.95	5.23	5.03	3.76	10.72	25.98	20.74	36.00
5825MHz	Pass	10.02	3.23	3.83	2.98	2.35	9.06	25.98	19.08	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.02	-4.99	-4.66	-4.89	-5.15	0.97	12.98	10.99	23.00
5230MHz	Pass	10.02	-4.93	-4.74	-4.85	-4.88	1.02	12.98	11.04	23.00
5755MHz	Pass	10.02	4.41	4.58	4.22	3.20	10.08	25.98	20.10	36.00
5795MHz	Pass	10.02	3.72	3.59	3.22	2.11	9.14	25.98	19.16	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.02	-7.05	-6.76	-7.21	-6.80	-1.04	12.98	8.98	23.00
5775MHz	Pass	10.02	-1.20	-1.61	-1.17	-2.53	4.28	25.98	14.30	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

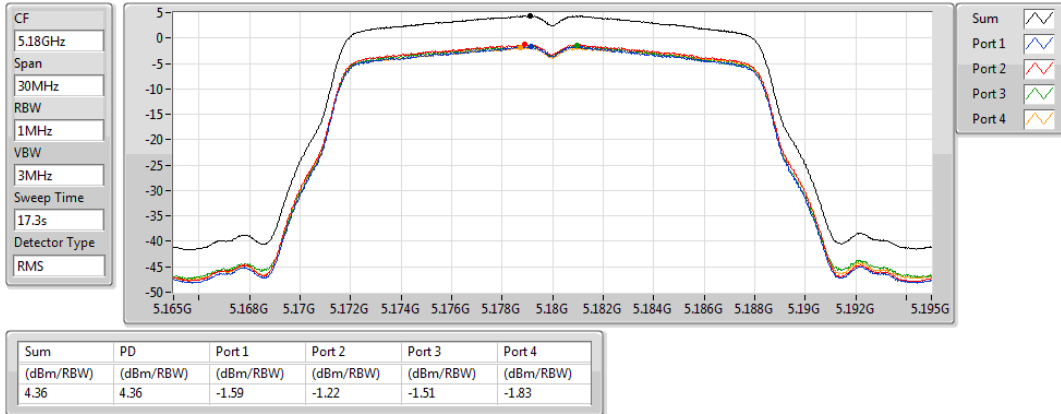
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11a_Nss1,(6Mbps)_4TX

PSD

5180MHz

06/05/2019

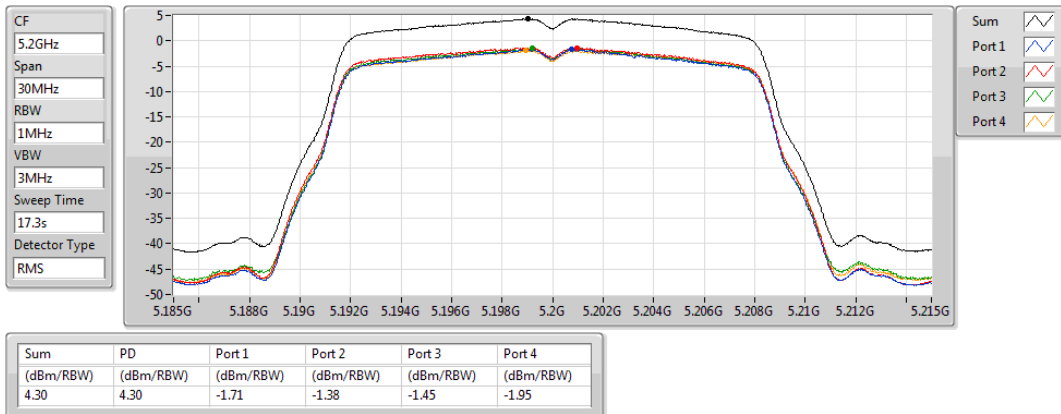


802.11a_Nss1,(6Mbps)_4TX

PSD

5200MHz

06/05/2019

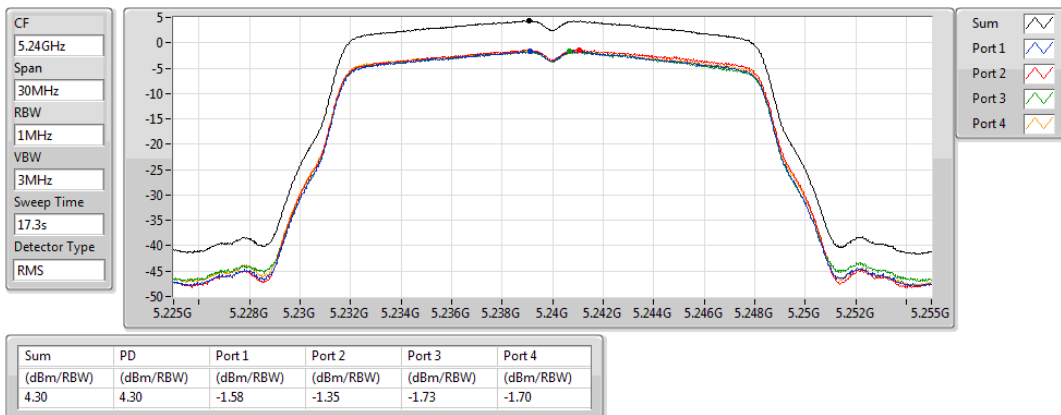


802.11a_Nss1,(6Mbps)_4TX

PSD

5240MHz

06/05/2019

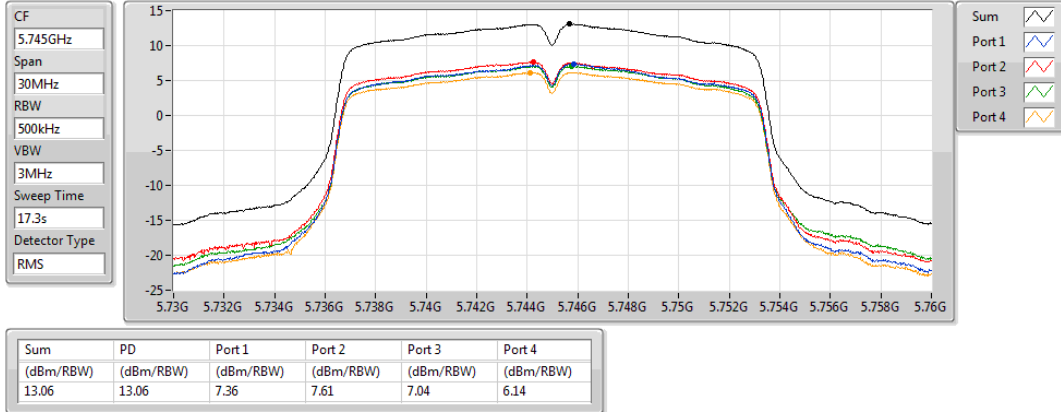


802.11a_Nss1,(6Mbps)_4TX

PSD

5745MHz

06/05/2019

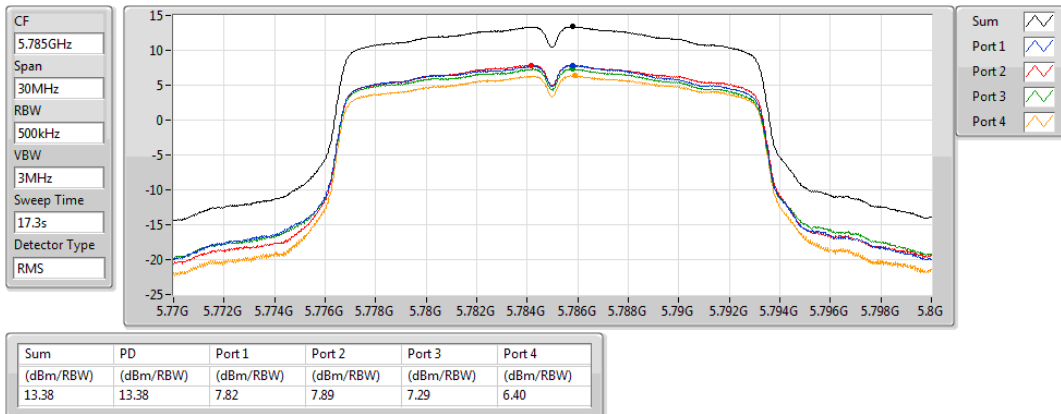


802.11a_Nss1,(6Mbps)_4TX

PSD

5785MHz

06/05/2019

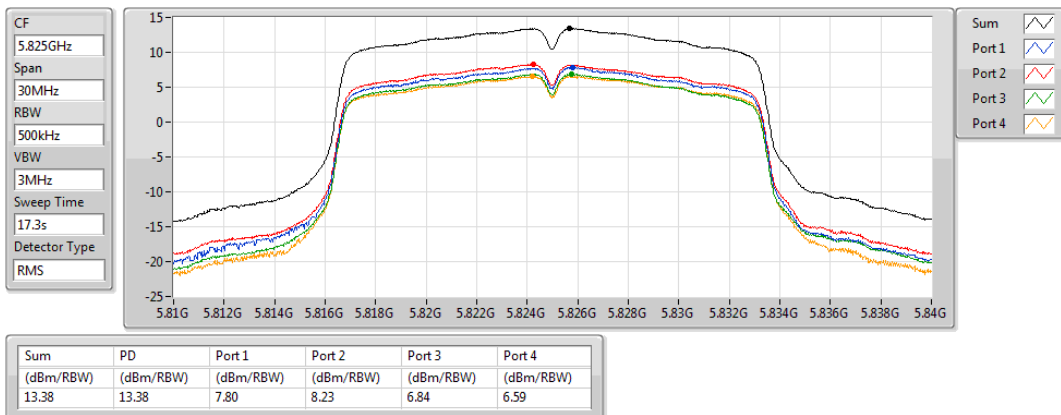


802.11a_Nss1,(6Mbps)_4TX

PSD

5825MHz

06/05/2019

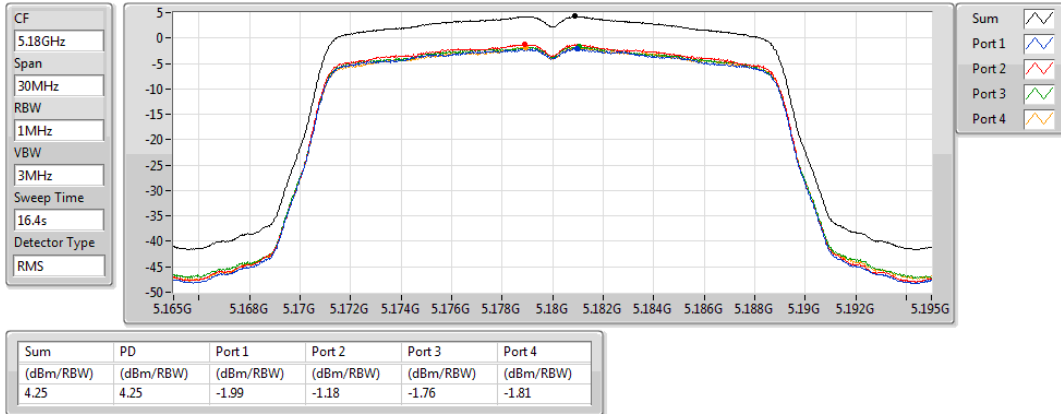


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5180MHz

06/05/2019

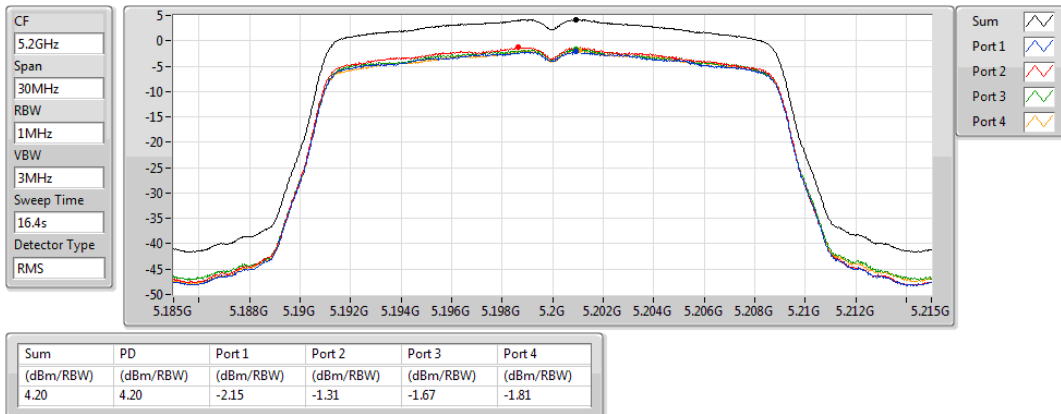


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5200MHz

06/05/2019

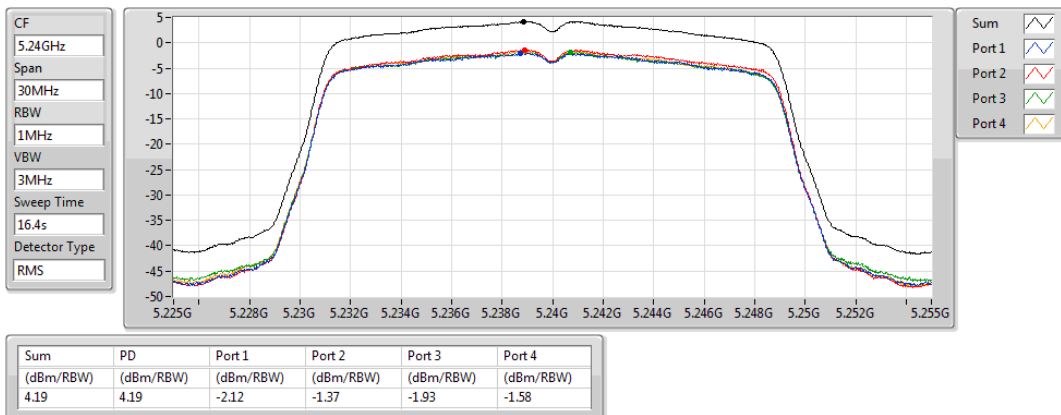


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5240MHz

06/05/2019

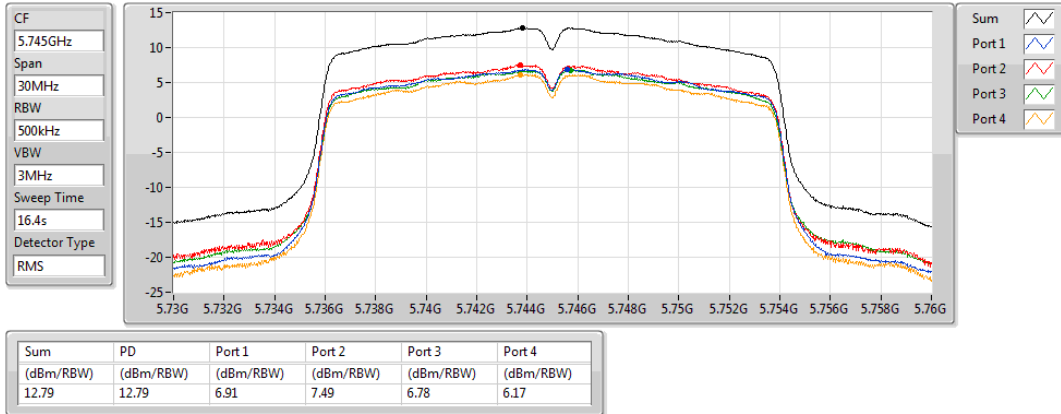


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5745MHz

06/05/2019

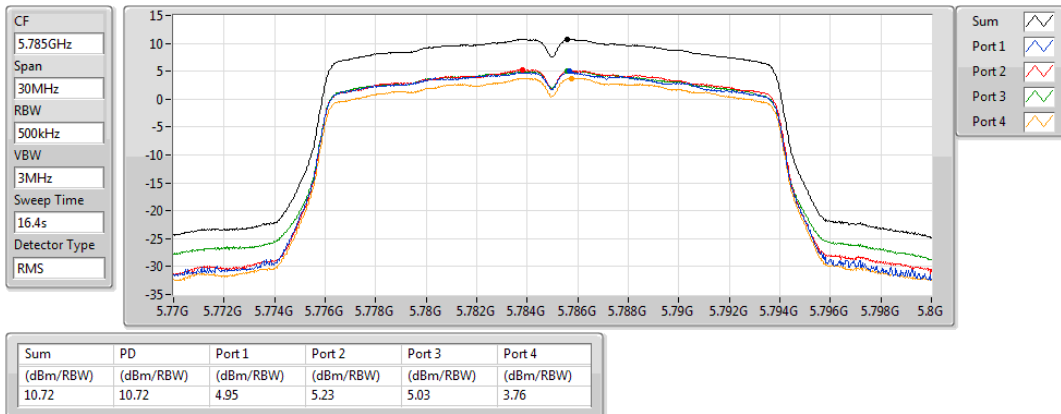


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5785MHz

06/05/2019

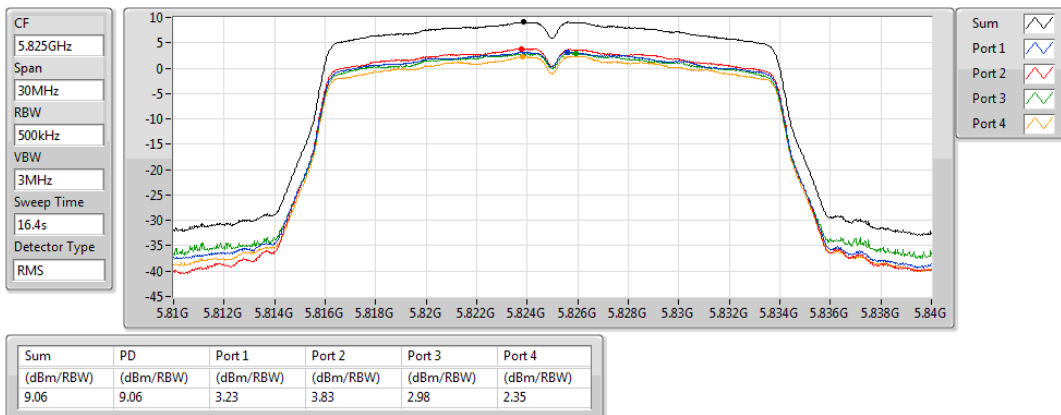


802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5825MHz

06/05/2019

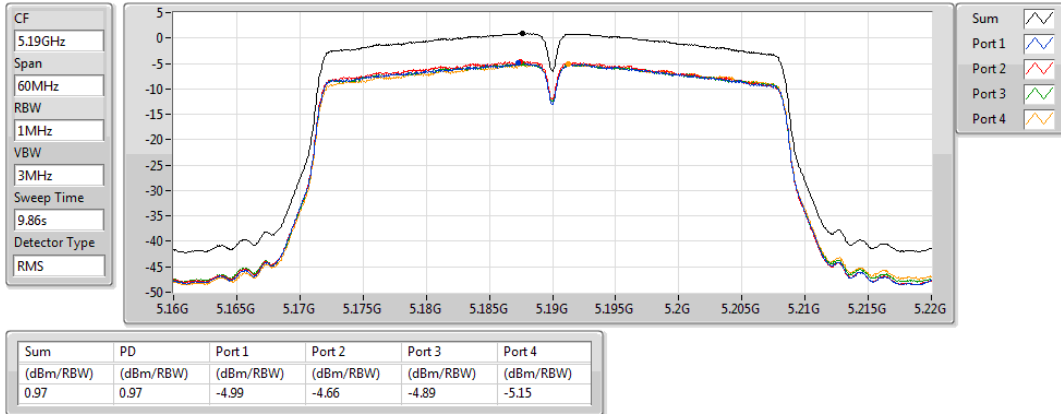


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5190MHz

06/05/2019

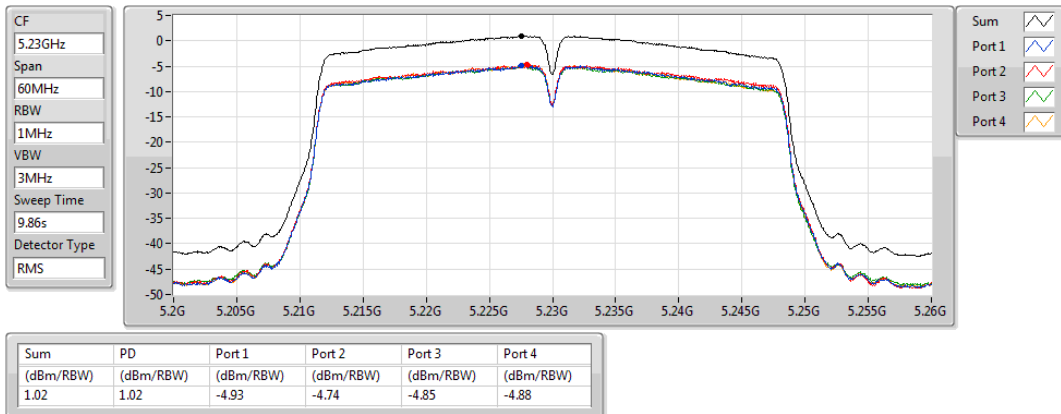


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5230MHz

06/05/2019

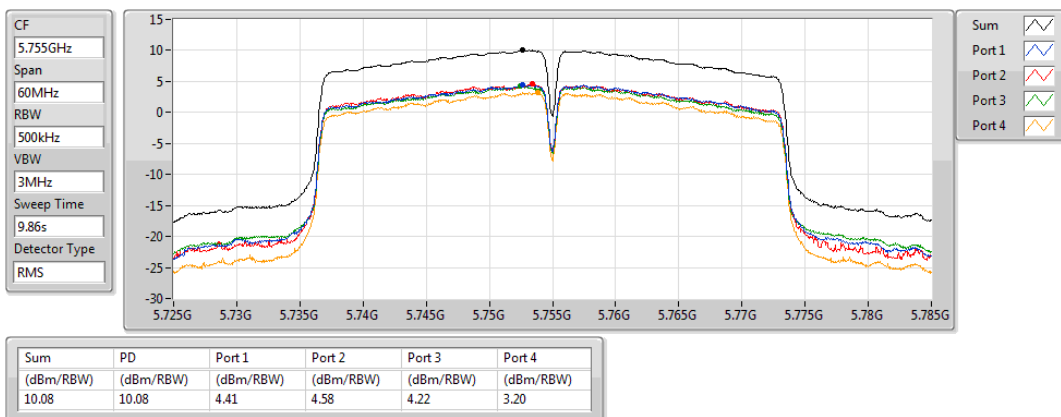


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5755MHz

06/05/2019

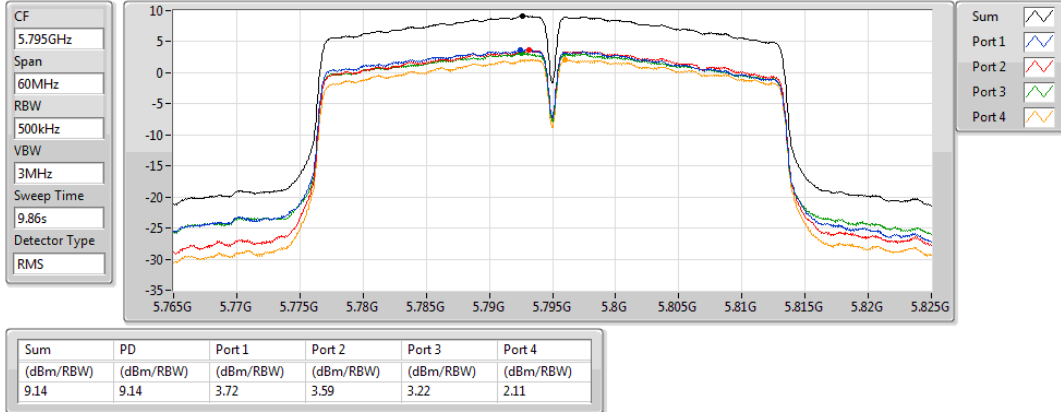


802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

5795MHz

06/05/2019

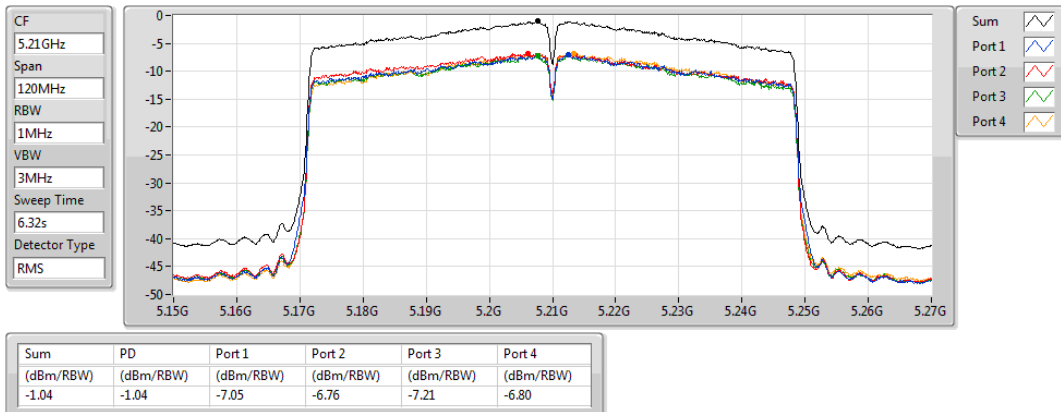


802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5210MHz

06/05/2019

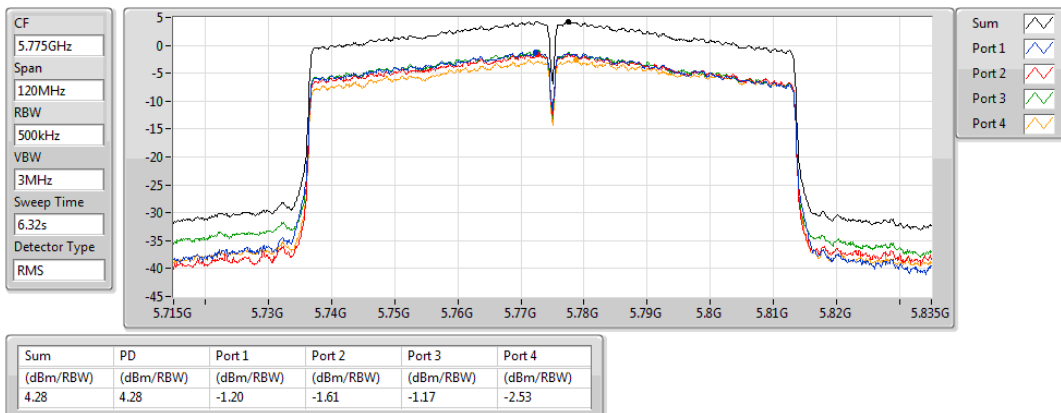


802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5775MHz

13/05/2019



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	12.91	22.93
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	10.09	20.11
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	1.06	11.08
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	11.37	21.39
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	8.25	18.27
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	4.91	14.93

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	7.14	7.27	6.08	8.16	12.16	12.98	22.18	23.00
5200MHz	Pass	10.02	7.22	7.54	6.77	6.51	12.76	12.98	22.78	23.00
5240MHz	Pass	10.02	7.56	7.54	6.76	6.72	12.91	12.98	22.93	23.00
5745MHz	Pass	10.02	5.97	5.65	5.37	5.14	11.37	25.98	21.39	36.00
5785MHz	Pass	10.02	5.88	5.73	5.31	4.78	11.25	25.98	21.27	36.00
5825MHz	Pass	10.02	6.32	5.98	5.02	4.51	11.26	25.98	21.28	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.02	1.86	1.39	1.16	1.74	7.44	12.98	17.46	23.00
5230MHz	Pass	10.02	4.43	4.42	3.65	4.01	10.09	12.98	20.11	23.00
5755MHz	Pass	10.02	3.27	2.65	2.41	1.71	8.25	25.98	18.27	36.00
5795MHz	Pass	10.02	3.17	2.49	2.30	1.63	8.25	25.98	18.27	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.02	-4.08	-4.60	-4.71	-4.63	1.06	12.98	11.08	23.00
5775MHz	Pass	10.02	-0.31	-0.35	-0.96	-1.39	4.91	25.98	14.93	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

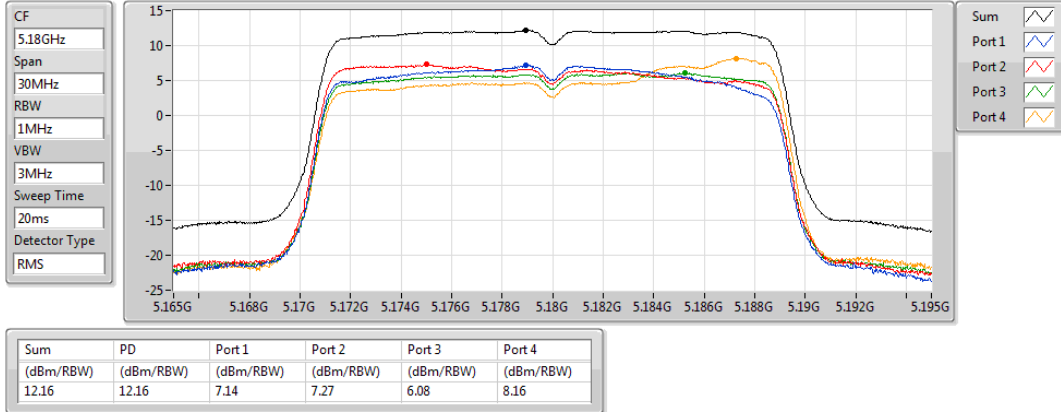
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5180MHz

04/05/2019

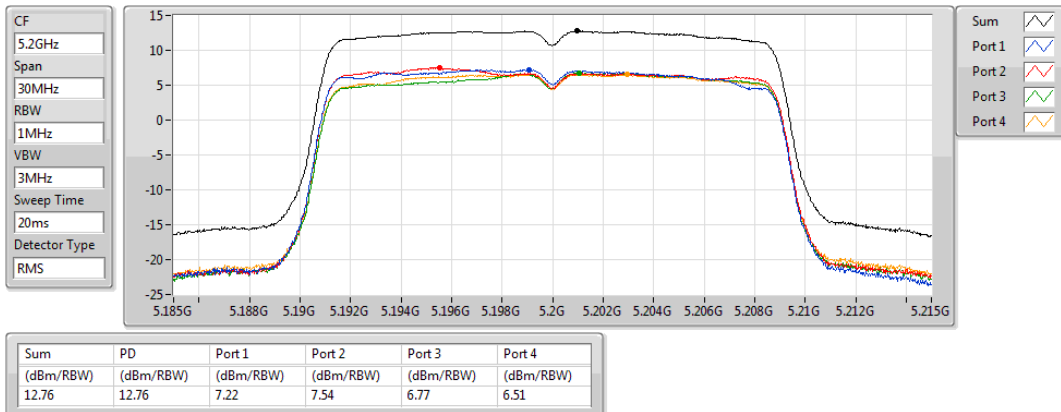


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5200MHz

04/05/2019

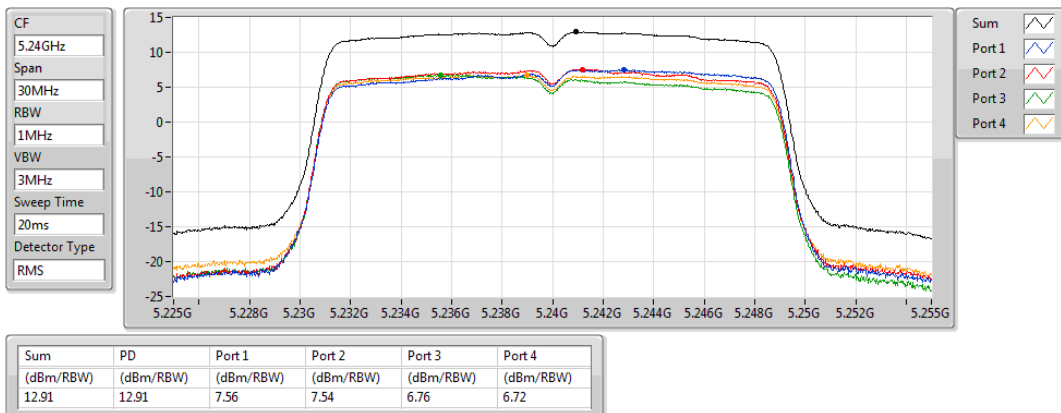


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5240MHz

04/05/2019

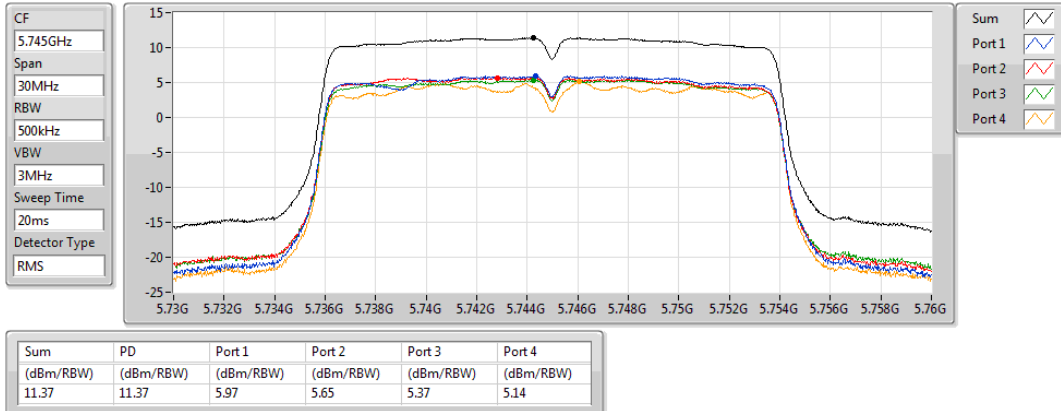


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5745MHz

04/05/2019

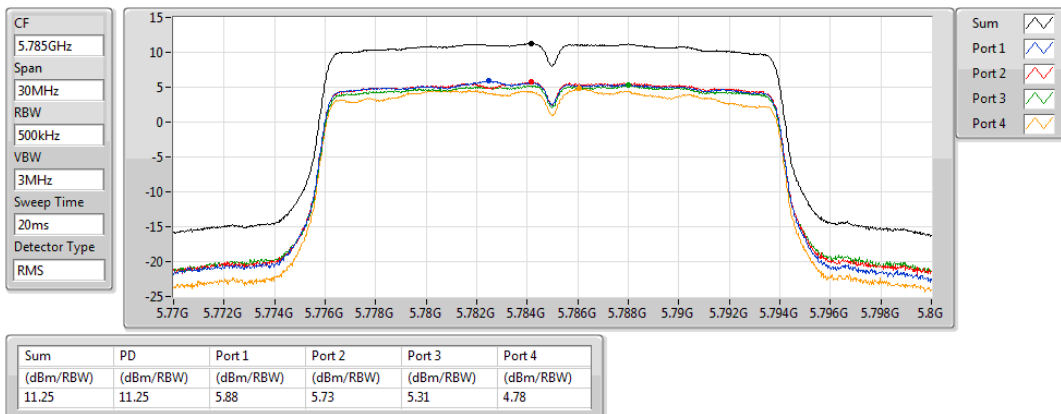


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5785MHz

04/05/2019

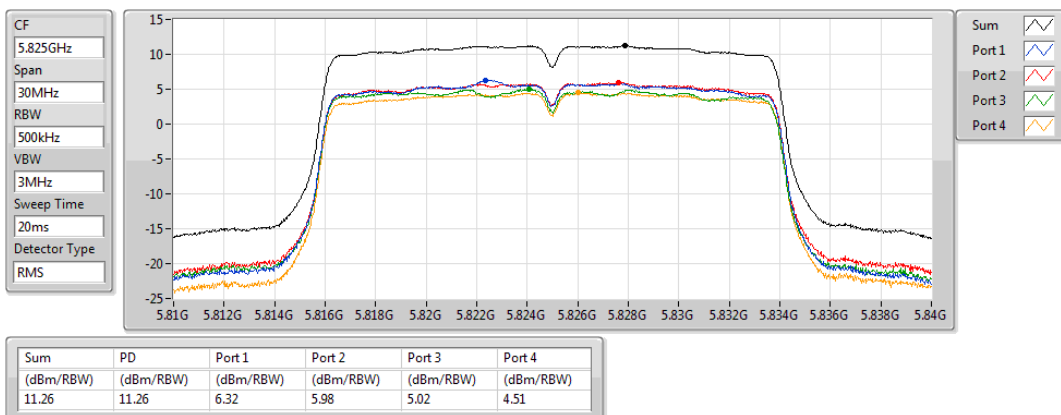


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5825MHz

04/05/2019

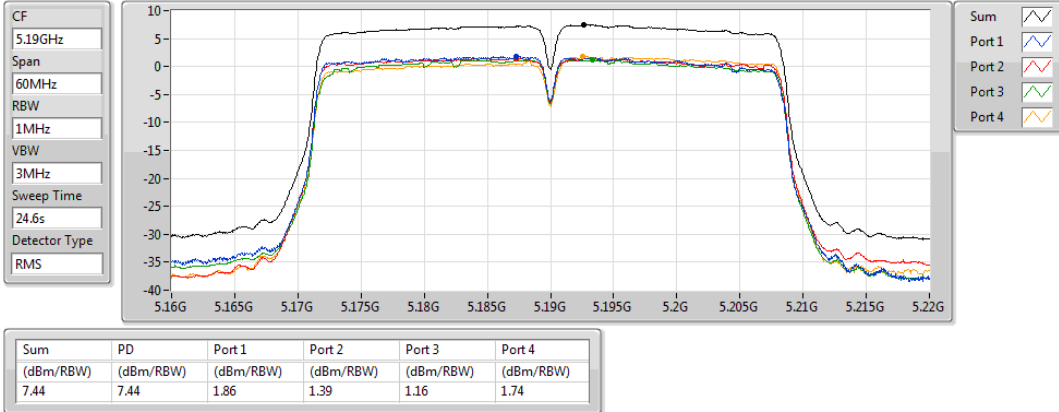


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5190MHz

04/05/2019

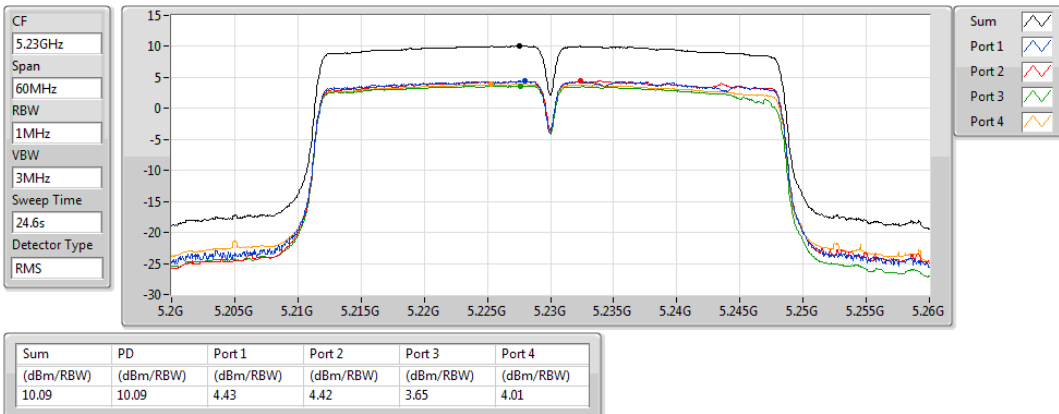


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5230MHz

04/05/2019

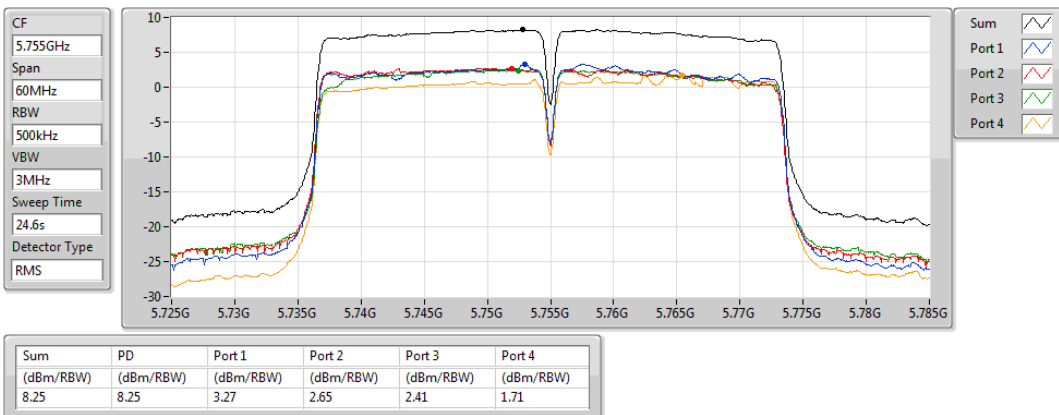


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5755MHz

04/05/2019

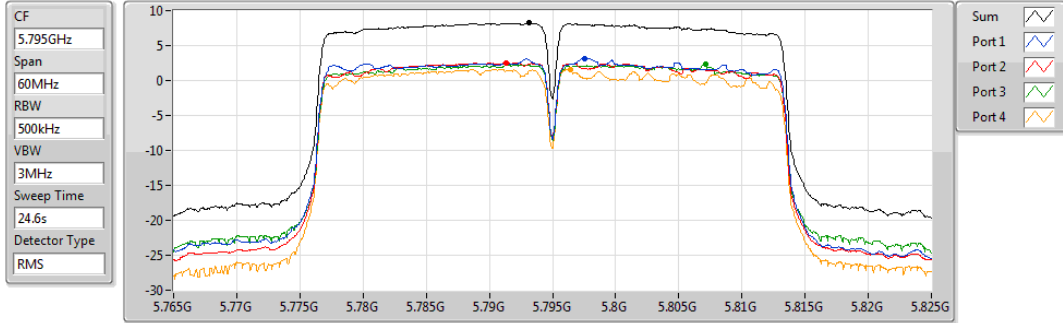


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5795MHz

04/05/2019



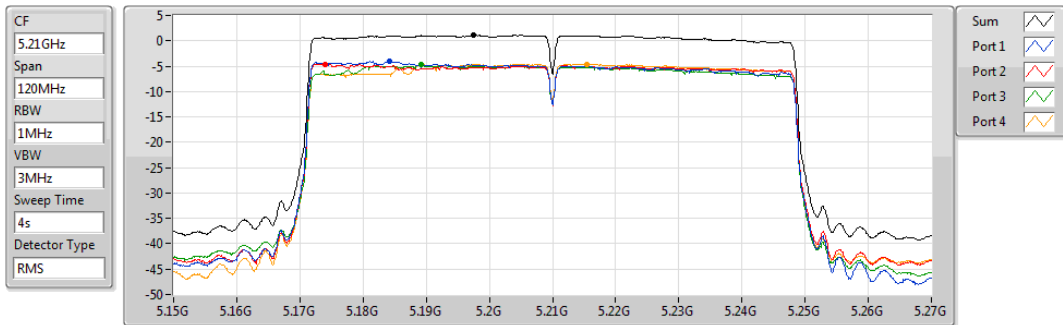
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.25	8.25	3.17	2.49	2.30	1.63

802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5210MHz

04/05/2019



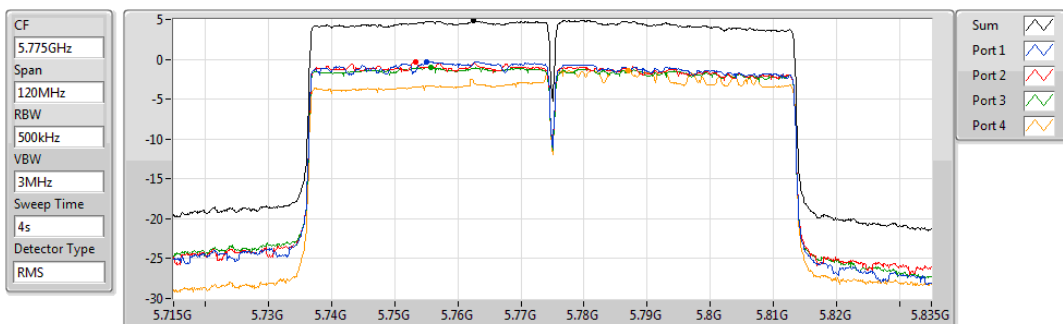
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.06	1.06	-4.08	-4.60	-4.71	-4.63

802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5775MHz

04/05/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.91	4.91	-0.31	-0.35	-0.96	-1.39

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-2.50	7.52
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-4.97	5.05
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-3.66	6.36
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	11.37	21.39
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	8.25	18.27
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	4.91	14.93

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	10.02	-9.03	-8.64	-7.66	-8.97	-2.56	12.98	7.46	23.00
5200MHz	Pass	10.02	-8.48	-8.65	-8.06	-8.45	-2.50	12.98	7.52	23.00
5240MHz	Pass	10.02	-9.78	-9.19	-8.44	-9.91	-3.35	12.98	6.67	23.00
5745MHz	Pass	10.02	5.97	5.65	5.37	5.14	11.37	25.98	21.39	36.00
5785MHz	Pass	10.02	5.88	5.73	5.31	4.78	11.25	25.98	21.27	36.00
5825MHz	Pass	10.02	6.32	5.98	5.02	4.51	11.26	25.98	21.28	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	10.02	-11.20	-11.20	-10.16	-11.43	-5.34	12.98	4.68	23.00
5230MHz	Pass	10.02	-10.81	-11.08	-10.95	-11.08	-4.97	12.98	5.05	23.00
5755MHz	Pass	10.02	3.27	2.65	2.41	1.71	8.25	25.98	18.27	36.00
5795MHz	Pass	10.02	3.17	2.49	2.30	1.63	8.25	25.98	18.27	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	10.02	-10.03	-9.24	-8.32	-9.84	-3.66	12.98	6.36	23.00
5775MHz	Pass	10.02	-0.31	-0.35	-0.96	-1.39	4.91	25.98	14.93	36.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

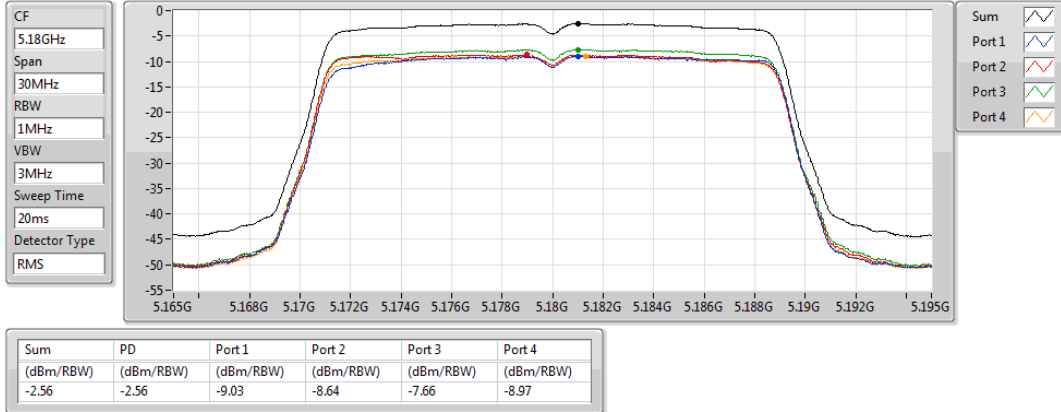
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5180MHz

05/05/2019

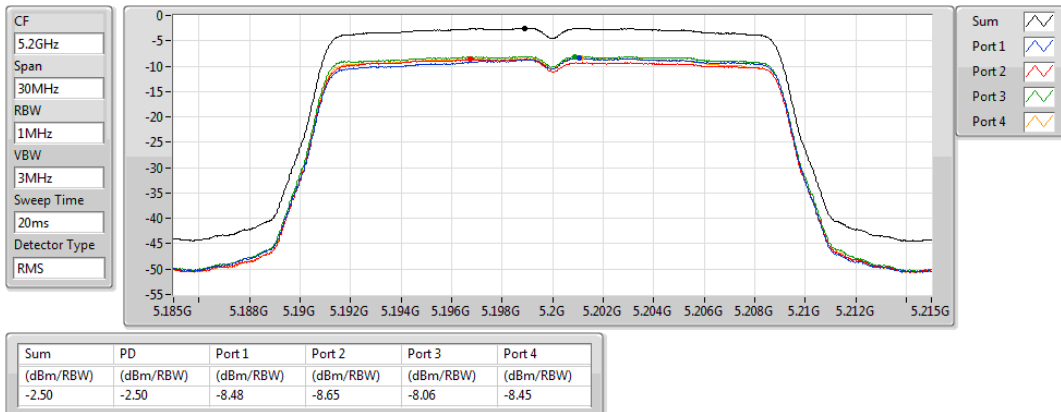


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5200MHz

05/05/2019

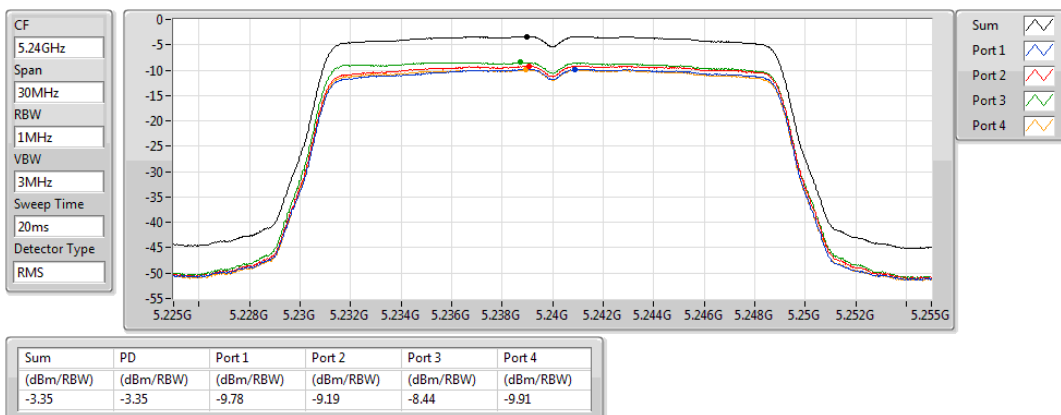


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5240MHz

06/05/2019

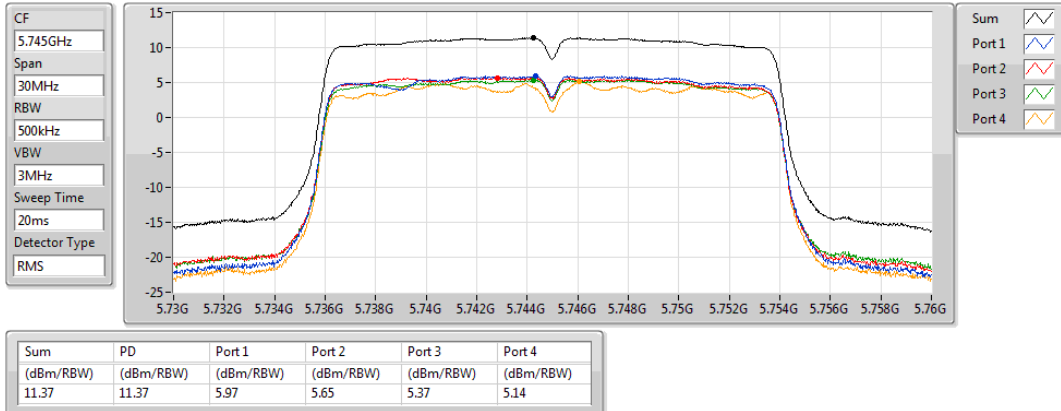


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5745MHz

04/05/2019

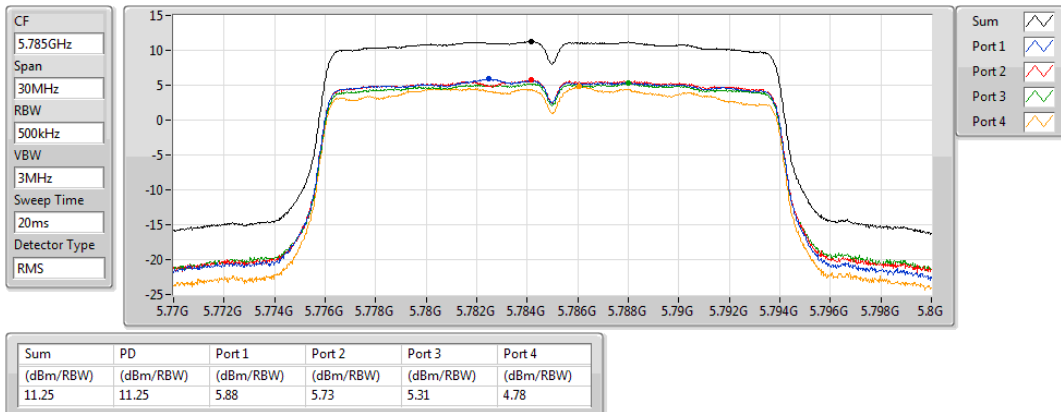


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5785MHz

04/05/2019

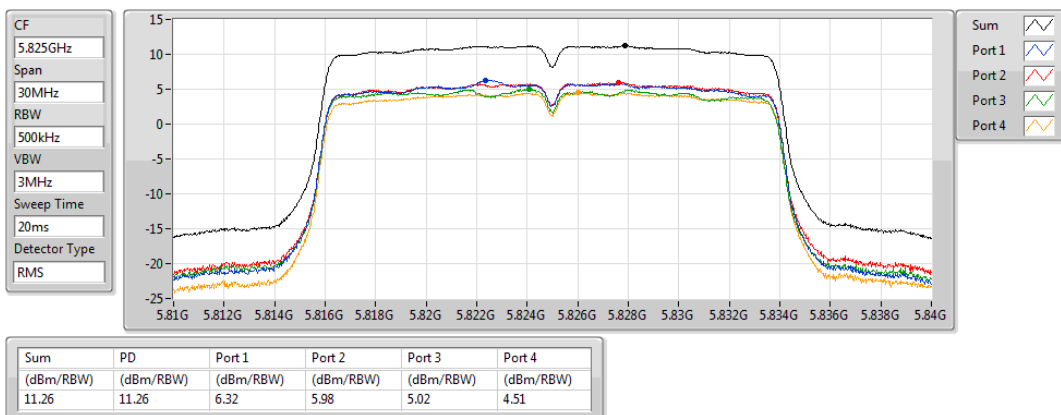


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5825MHz

04/05/2019

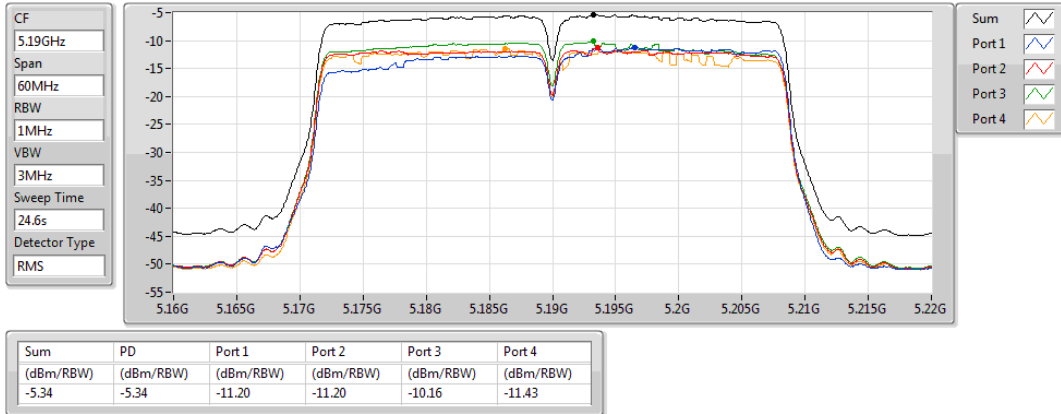


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5190MHz

05/05/2019

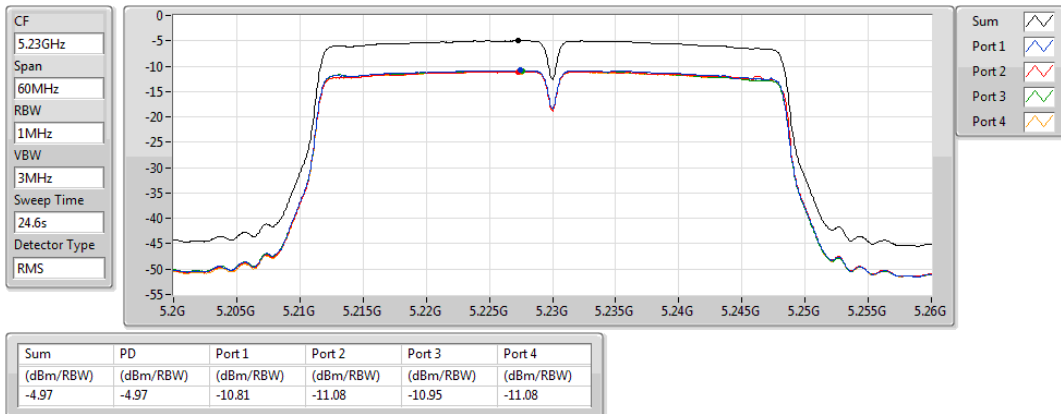


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5230MHz

05/05/2019

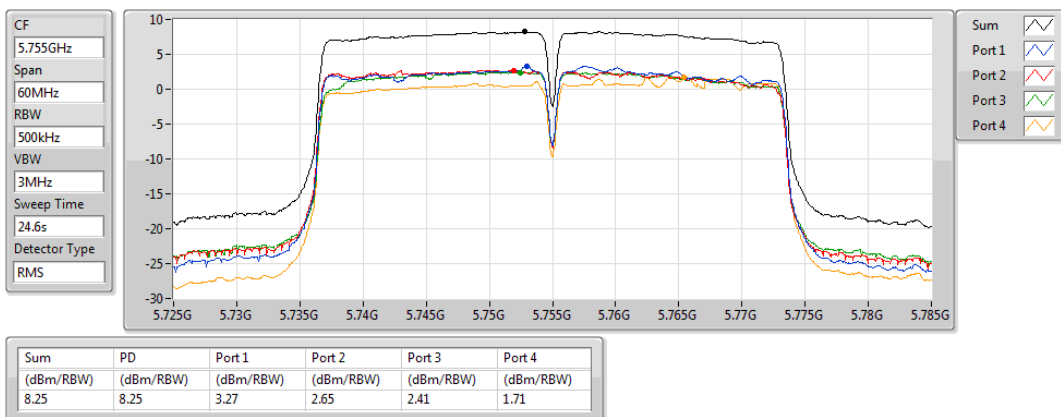


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5755MHz

04/05/2019

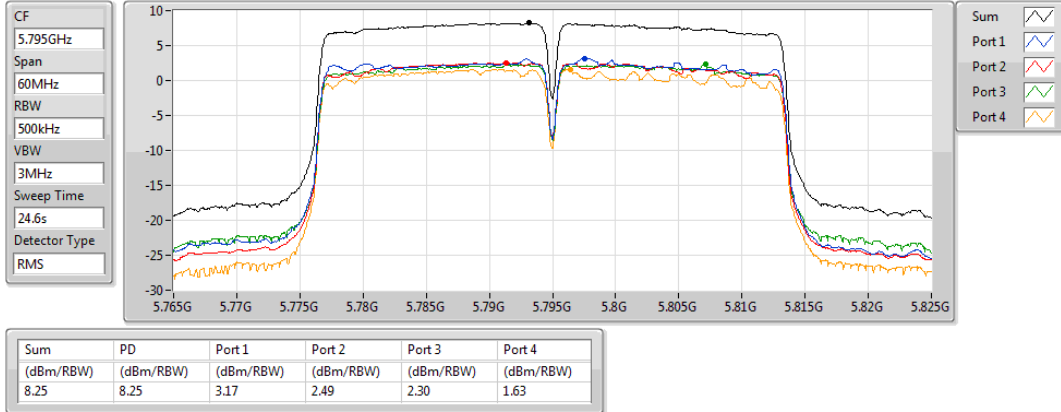


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5795MHz

04/05/2019

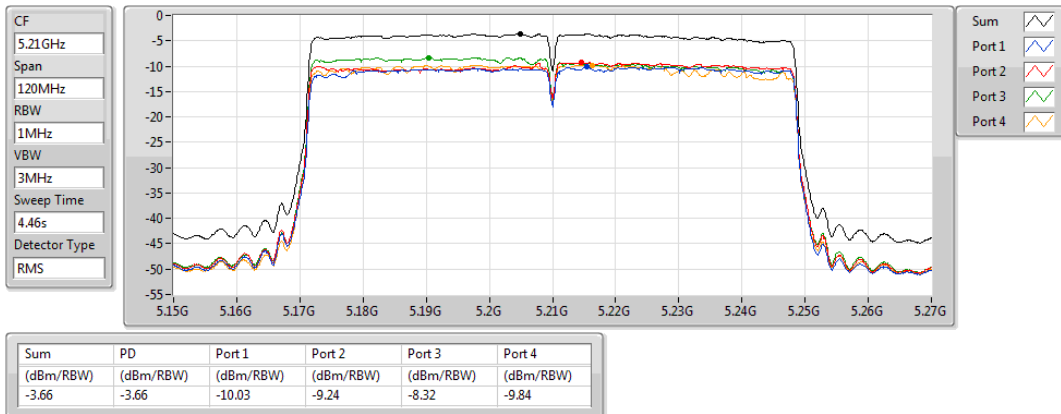


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5210MHz

05/05/2019



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5775MHz

04/05/2019

