

FCC Test Report

Equipment : Wireless Gateway
Brand Name : COMTREND
Model No. : NexusLink 3240u, NexusLink 3240, NexusLink 3120ua, NexusLink 3120, WAP-5859ua, WR-6895
FCC ID : L9VNL3240U
Standard : 47 CFR FCC Part 15.407
Operating Band : 5150 MHz – 5250 MHz
5250 MHz – 5350 MHz
5470 MHz – 5725 MHz
5725 MHz – 5850 MHz
Applicant / Manufacturer : COMTREND Corporation
3F-1, 10 Lane 609, Chung Hsin Road, Section 5,
San Chung Dist, New Taipei City 24159, Taiwan
Function : ☐ Outdoor; ☒ Indoor; ☐ Fixed P2P
☐ Client
TPC Function : TPC

The product sample received on May 31, 2017 and completely tested on Sep. 06, 2017. We, SPORTON, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

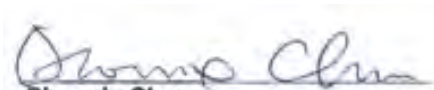

Phoenix Chen
SPORTON INTERNATIONAL INC.





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Summary of Test Result

Conformance Test Specifications			
Report Clause	Ref. Std. Clause	Description	Result
1.1.2	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.6	15.407(g)	Frequency Stability	Complied



Report No. : FR753103AN

Revision History

[illegible]

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]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
straddle 5725		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
straddle 5725		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
straddle 5725		5690	138 [1]
5725-5850		5775	155 [1]

Non-Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4TX
5.25-5.35GHz	802.11a	20	4TX
5.47-5.725GHz	802.11a	20	4TX
5.725-5.85GHz	802.11a	20	4TX
5.15-5.25GHz	802.11ac VHT20	20	4TX
5.25-5.35GHz	802.11ac VHT20	20	4TX
5.47-5.725GHz	802.11ac VHT20	20	4TX
5.725-5.85GHz	802.11ac VHT20	20	4TX
5.15-5.25GHz	802.11ac VHT40	40	4TX
5.25-5.35GHz	802.11ac VHT40	40	4TX
5.47-5.725GHz	802.11ac VHT40	40	4TX
5.725-5.85GHz	802.11ac VHT40	40	4TX
5.15-5.25GHz	802.11ac VHT80	80	4TX
5.25-5.35GHz	802.11ac VHT80	80	4TX
5.47-5.725GHz	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
5.25-5.35GHz	802.11ac VHT20-BF	20	4TX
5.47-5.725GHz	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
5.25-5.35GHz	802.11ac VHT40-BF	40	4TX
5.47-5.725GHz	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
5.25-5.35GHz	802.11ac VHT80-BF	80	4TX
5.47-5.725GHz	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	Gain (dBi)
1	1	Cortec	AN2450-64D02BBF	Dipole	I-PEX	2.5
2	2	Cortec	AN2450-64D03BBF	Dipole	I-PEX	2.5
3	3	Cortec	NB0351-C70BF	PCB	I-PEX	4
4	4	Cortec	NB0351-C195BF	PCB	I-PEX	3

Note: 2: 802.11a/an/ac used two antennas are for signal transmitting and receiving.(4T4R Spatial Multiplexing MIMO configuration)

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter		
Beamforming Function	☒ With beamforming	☐ Without beamforming	
Weather Band	☒ With 5600~5650MHz	☐ Without 5600~5650MHz	
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	0.99	0.044	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT20	0.996	0.017	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.993	0.031	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT80	0.985	0.066	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.922	0.353	3.458m	300
802.11ac VHT40-BF	0.913	0.395	1.688m	1k
802.11ac VHT80-BF	0.962	0.168	4.221m	300

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 v01r04
- ♦ KDB 644545 D03 v01
- ♦ 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	TH01-HY	Tim	22.5°C / 61%	24/Aug/2017
Radiated	03CH09-HY	Andy	24.5°C / 60%	03/Aug/2017
AC Conduction	CO04-HY	Thor	24.2°C / 61.3%	06/Sep/2017

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

Non-Beamforming

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
	Vnom	120V
Freq. Stability	Abbreviation	Remark
0°C		
10°C		
20°C		
30°C		
40°C		
138V		
120V		
102V		

Beamforming

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

2.2 Test Channel Mode

Test Software	DoS
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Non-Beamforming

Mode	Power Setting
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	18
5200MHz	18
5240MHz	18
5260MHz	14
5300MHz	13
5320MHz	13
5500MHz	13
5580MHz	13
5700MHz	14



Mode	Power Setting
5720MHz Straddle 5.47-5.725GHz	14
5720MHz Straddle 5.725-5.85GHz	14
5745MHz	18
5785MHz	18
5825MHz	18
802.11ac VHT20_Nss1,(MCS0)_4TX	-
5180MHz	18
5200MHz	18
5240MHz	18
5260MHz	14
5300MHz	14
5320MHz	14
5500MHz	13
5580MHz	13
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	14
5720MHz Straddle 5.725-5.85GHz	14
5745MHz	18
5785MHz	18
5825MHz	18
802.11ac VHT40_Nss1,(MCS0)_4TX	-
5190MHz	15
5230MHz	15
5270MHz	16
5310MHz	17
5510MHz	16
5550MHz	16
5670MHz	16
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	21
5755MHz	18
5795MHz	18
802.11ac VHT80_Nss1,(MCS0)_4TX	-
5210MHz	13
5290MHz	17
5530MHz	15
5610MHz	17
5690MHz Straddle 5.47-5.725GHz	17
5690MHz Straddle 5.725-5.85GHz	17
5775MHz	18

**Beamforming**

Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5180MHz	18
5200MHz	18
5240MHz	18
5260MHz	14
5300MHz	14
5320MHz	14
5500MHz	14
5580MHz	14
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
5745MHz	19
5785MHz	19
5825MHz	19
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5190MHz	16
5230MHz	19
5270MHz	15
5310MHz	15
5510MHz	14
5550MHz	14
5670MHz	14
5710MHz Straddle 5.47-5.725GHz	14
5710MHz Straddle 5.725-5.85GHz	14
5755MHz	19
5795MHz	19
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5210MHz	14
5290MHz	15
5530MHz	14
5610MHz	14
5690MHz Straddle 5.47-5.725GHz	14
5690MHz Straddle 5.725-5.85GHz	14
5775MHz	19

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	Adapter Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Frequency Stability
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	Adapter Mode	
Operating Mode > 1GHz	CTX	
Orthogonal Planes of EUT	Y Plane	Z Plane
		
Worst Planes of EUT		V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Wifi 2.4G+5G
Refer to Sporton Test Report No.: FA753103 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.4 Accessories

Accessories				
AC Adapter (US Plug)	Brand Name	AMIGO	Model Name	AMS157-1202500FU
	Power Rating	I/P: 100- 240Vac, 1A, O/P: 12Vdc, 2.5A		
	Power Cord	1.8 meter, non-shielded cable, w/o ferrite core		
RJ11 Cable	Category	-	In/Out door	In door
	Power Cord	1.72 meter, shield or non-shielded cable		
RJ45 Cable	Category	-	In/Out door	In door
	Power Cord	1.72 meter, non-shielded cable		

2.5 Support Equipment

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	DELL	E5410	DoC
4	Adapter for NB	DELL	HA65NM130	DoC
5	Clinet	-	-	-

Note. Support equipment No.5 was provided by customer.

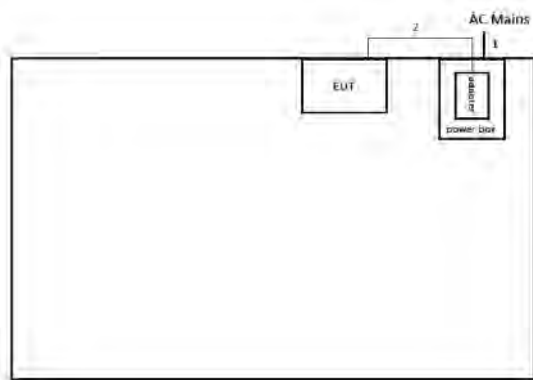
Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Notebook	DELL	E5530	DoC
3	Adapter for NB	DELL	LA65NS2-01	-
4	Clinet	-	-	-

Note. Support equipment No.4 was provided by customer.

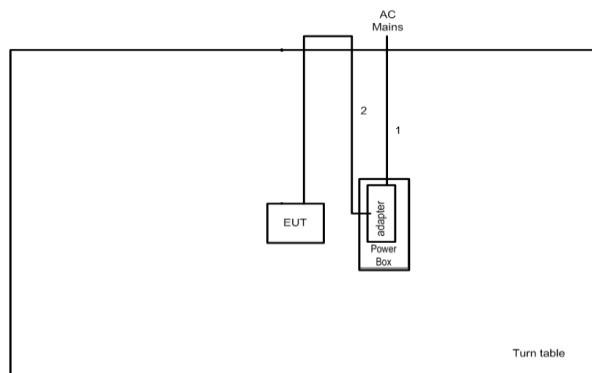
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	-	-	-	-

2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8m	-
2	DC Power line	No	1.8m	-

Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8m	-
2	DC Power line	No	1.8m	-

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.

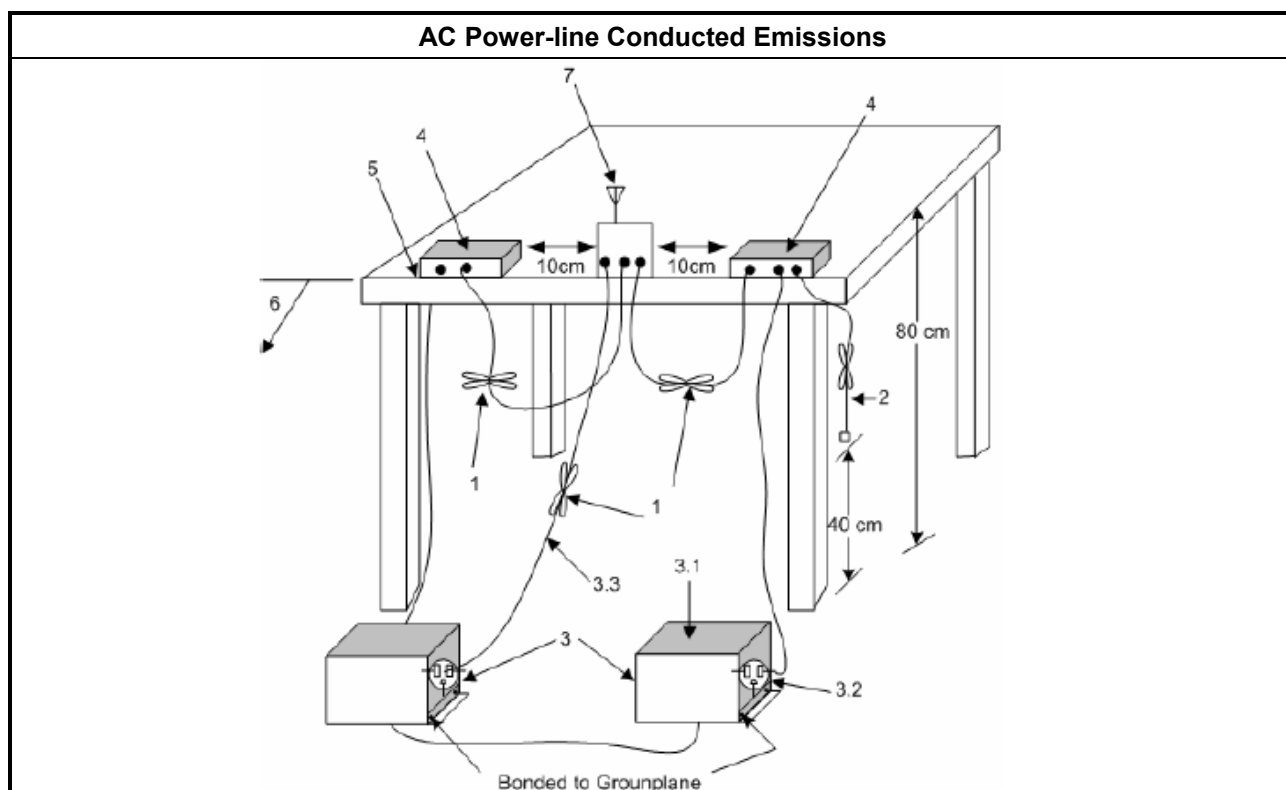
3.1.2 Measuring Instruments

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, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

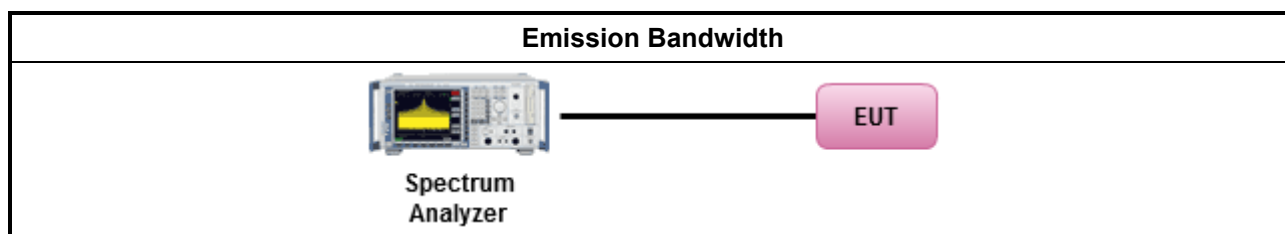
3.2.2 Measuring Instruments

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 6.6 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 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 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.	

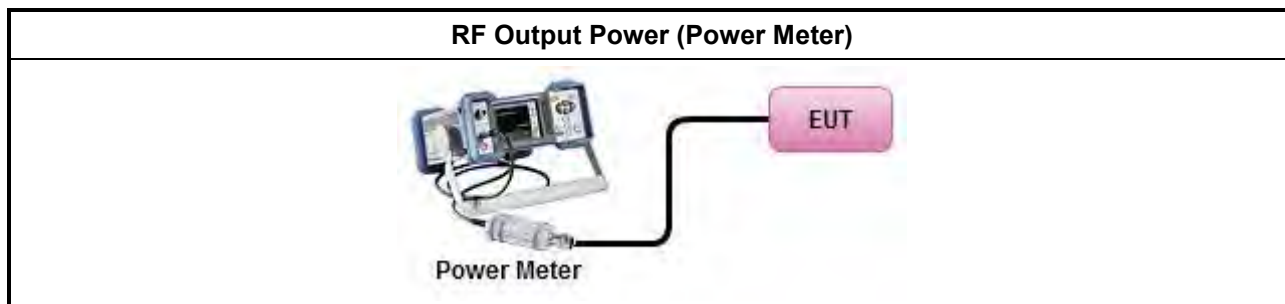
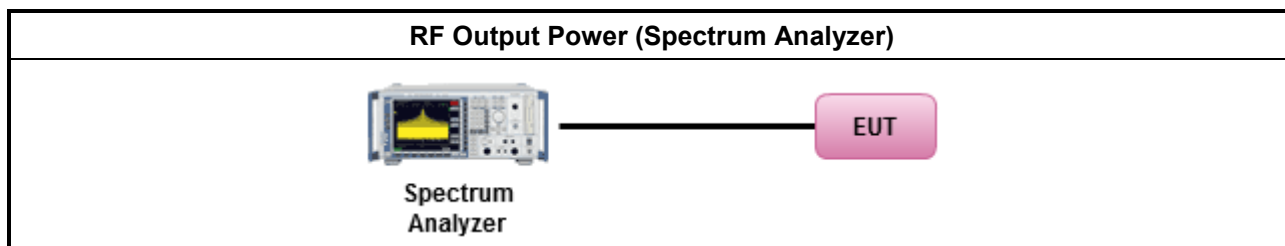
3.3.2 Measuring Instruments

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.	

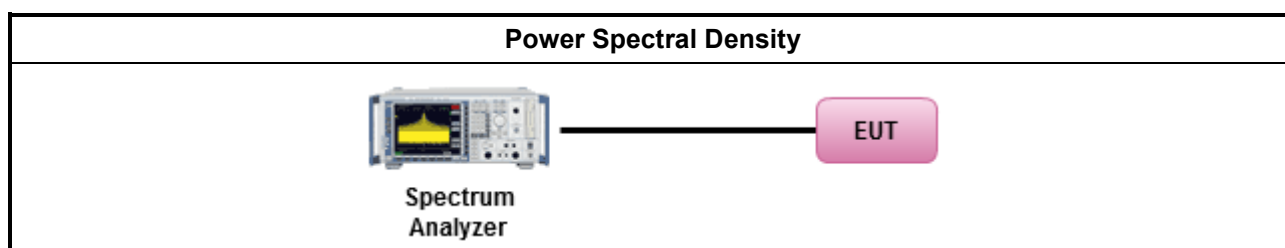
3.4.2 Measuring Instruments

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.

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).

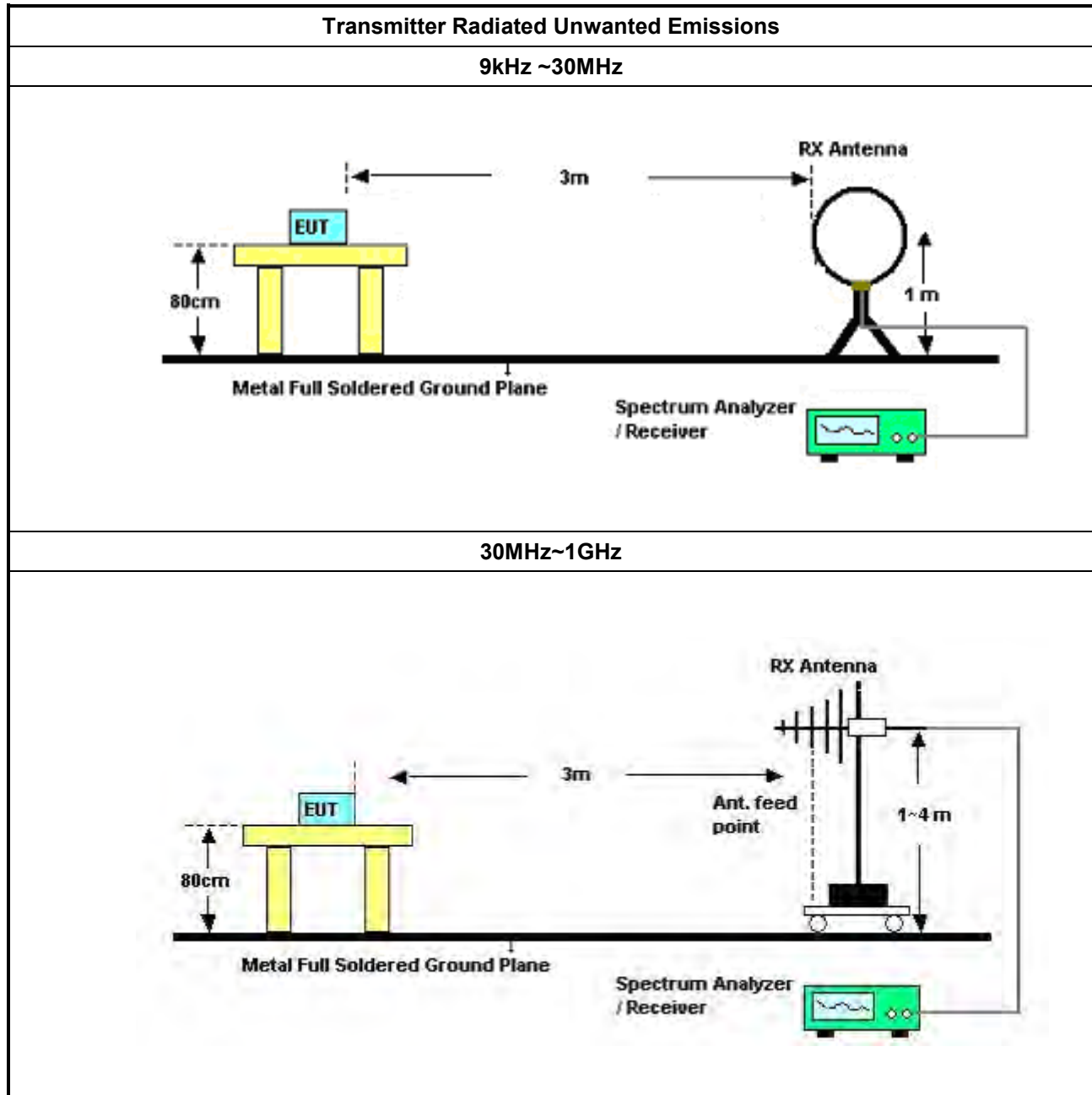
3.5.2 Measuring Instruments

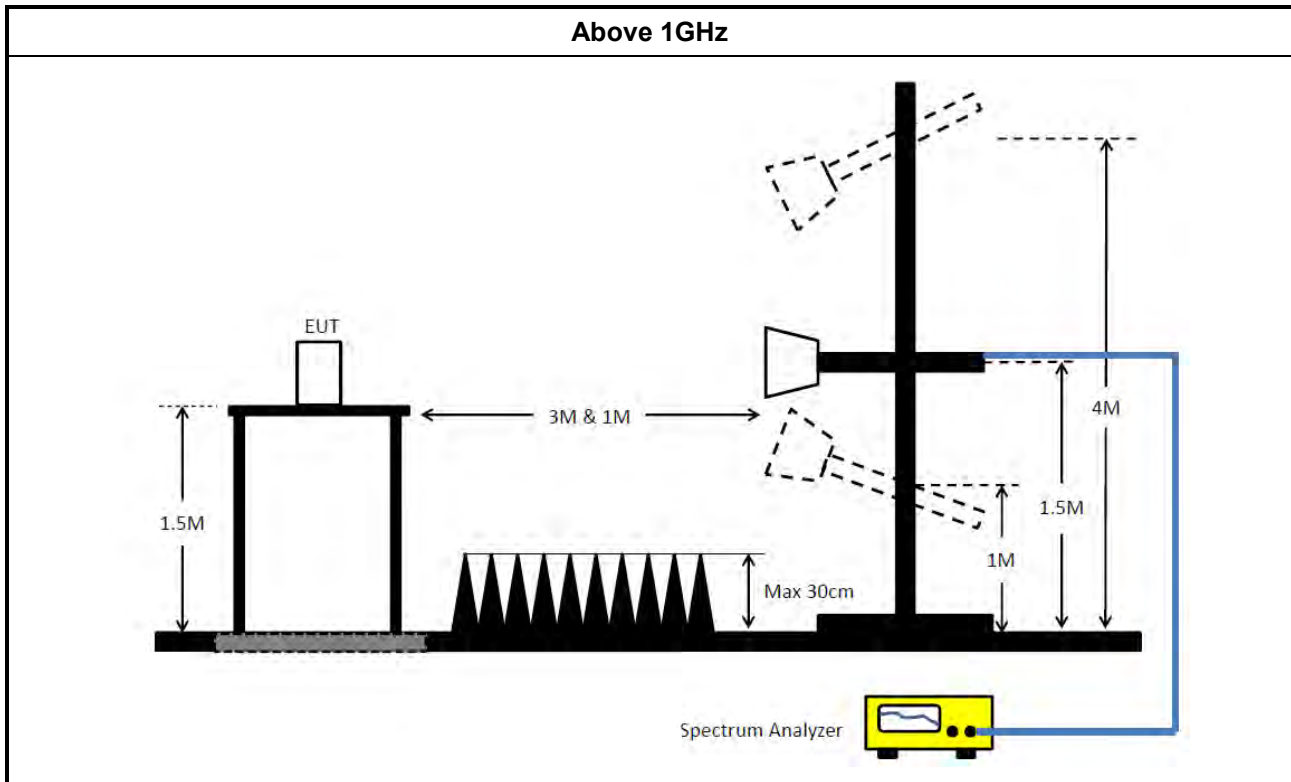
Refer a test equipment and calibration data table in this test report.

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

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Frequency Stability

3.6.1 Frequency Stability Limit

Frequency Stability Limit	
UNII Devices	
In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.	
IEEE Std. 802.11	
The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band.	

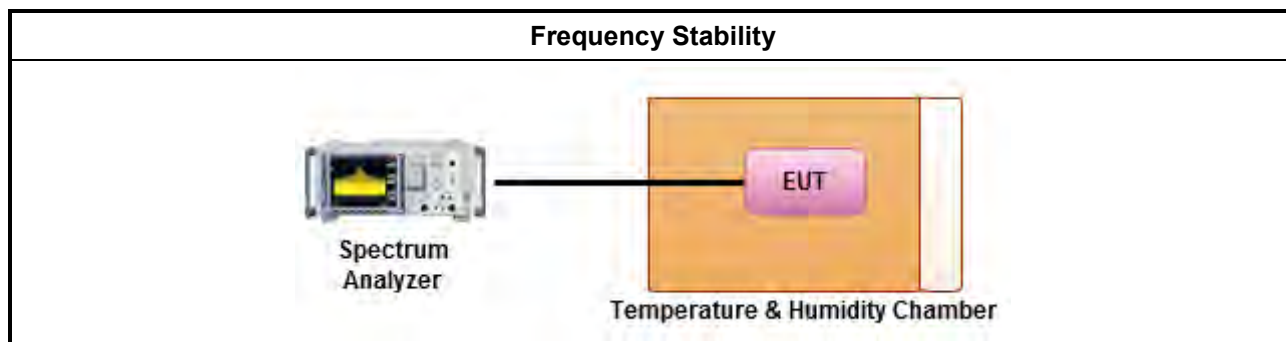
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
Refer as ANSI C63.10, clause 6.8 for frequency stability tests	
	Frequency stability with respect to ambient temperature
	Frequency stability when varying supply voltage

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Refer as Appendix F

4 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	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	24/Oct/2016	23/Oct/2017
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	21/Oct/2016	20/Oct/2017

NCR : Non-Calibration Require

Instrument for Radiated Test – Non-Beamforming

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	25/Apr/2017	24/Apr/2018
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	28/Jun/2017	27/Jun/2018
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	25/Apr/2017	24/Apr/2018
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	25/Apr/2017	24/Apr/2018
Spectrum Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	20/Jul/2017	19/Jul/2018
Bilog Antenna	TESEQ	CBL 6111D	35418	30MHz~1GHz	01/Oct/2016	30/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA9120D 1534	1GHz~18GHz	28/Apr/2017	27/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170614	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
Amplifier	EMC INSTRUMENTS	EMC184045B & PE7005-6	980192	18GHz ~ 40GHz	24/Aug/2016	23/Aug/2017
Loop Antenna	R&S	HFH2-Z2	100330	9 kHz~30 MHz	10/Nov/2016	09/Nov/2017
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	02/Feb/2017	01/Feb/2018
RF Cable-high	Jye Bao	RG142	03CH09-HY	1GHz ~ 40GHz	02/Feb/2017	01/Feb/2018
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017

**Instrument for Radiated Test – Beamforming**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	25/Apr/2017	24/Apr/2018
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	28/Jun/2017	27/Jun/2018
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	25/Apr/2017	24/Apr/2018
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	25/Apr/2017	24/Apr/2018
Spectrum Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	20/Jul/2017	19/Jul/2018
Bilog Antenna	TESEQ	CBL 6111D	35418	30MHz~1GHz	01/Oct/2016	30/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA9120D 1534	1GHz~18GHz	28/Apr/2017	27/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170614	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
Amplifier	EMC INSTRUMENTS	EMC184045B & PE7005-6	980192	18GHz ~ 40GHz	24/Aug/2016	23/Aug/2017
Loop Antenna	R&S	HFH2-Z2	100330	9 kHz~30 MHz	10/Nov/2016	09/Nov/2017
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	02/Feb/2017	01/Feb/2018
RF Cable-high	Jye Bao	RG142	03CH09-HY	1GHz ~ 40GHz	02/Feb/2017	01/Feb/2018
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017

Instrument for Conducted Test – Non-Beamforming

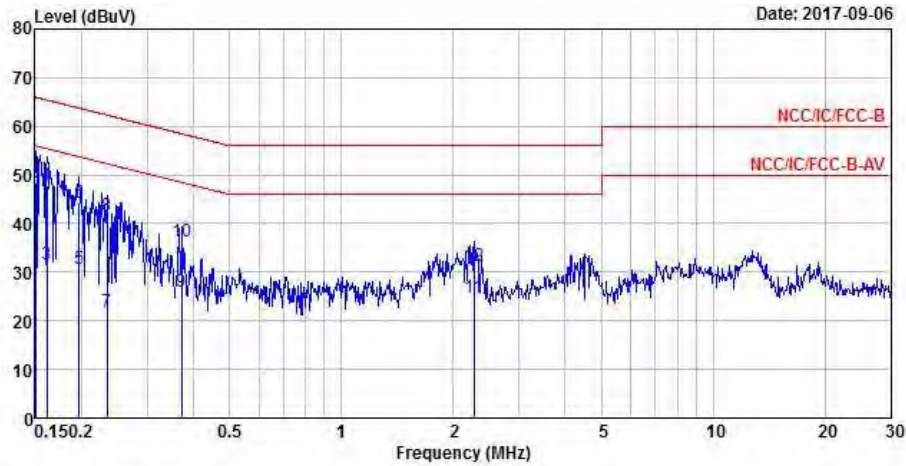
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV	101515	9kHz~40GHz	28/Nov/2016	27/Nov/2017
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	27/Oct/2016	26/Oct/2017
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	27/Oct/2016	26/Oct/2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	20/Jul/2017	19/Jul/2018
TEMP & humidity Chamber	GIANT FORCE	GTH-225-40-CP- AR	MAA1311-008	-40~100℃ 10~98%RH	10/May/2017	09/May/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017

**Instrument for Conducted Test – Beamforming**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-1.5m	HUBER+SUHNER	SUCOFLEX_104	MY12582/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10715/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10716/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY2999/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY23003/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter Mode		



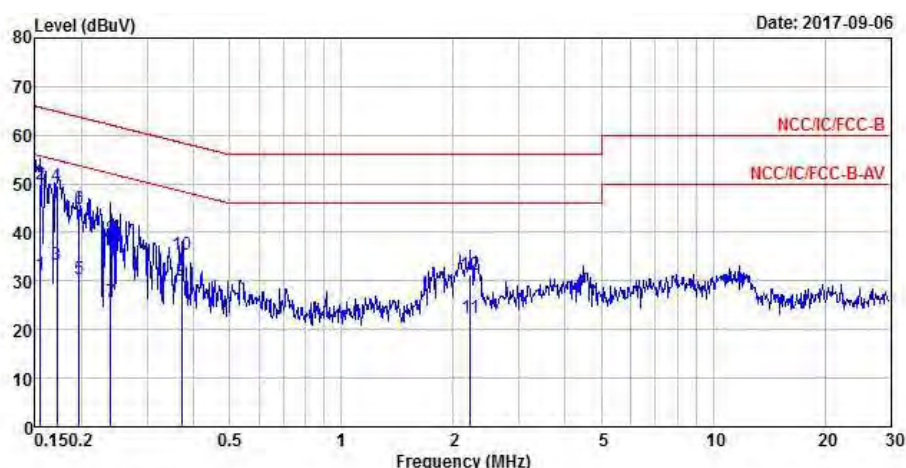
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.15000	32.24	-23.76	56.00	22.42	9.60	0.22	Average
2	0.15000	48.50	-17.50	66.00	38.68	9.60	0.22	QP
3	0.16155	31.63	-23.75	55.38	21.77	9.62	0.24	Average
4 MAX	0.16155	47.96	-17.42	65.38	38.10	9.62	0.24	QP
5	0.19654	30.61	-23.15	53.76	20.64	9.67	0.30	Average
6	0.19654	44.32	-19.44	63.76	34.35	9.67	0.30	QP
7	0.23409	21.94	-30.36	52.30	12.03	9.66	0.25	Average
8	0.23409	41.76	-20.54	62.30	31.85	9.66	0.25	QP
9	0.37117	25.88	-22.59	48.47	16.13	9.63	0.12	Average
10	0.37117	36.18	-22.29	58.47	26.43	9.63	0.12	QP
11	2.27258	24.81	-21.19	46.00	14.89	9.66	0.26	Average
12	2.27258	31.41	-24.59	56.00	21.49	9.66	0.26	QP

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	Adapter Mode		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15485	31.25	-24.49	55.74	21.36	9.66	0.23	Average
2	0.15485	49.91	-15.83	65.74	40.02	9.66	0.23	QP
3	0.17125	33.27	-21.63	54.90	23.35	9.66	0.26	Average
4 MAX	0.17125	49.52	-15.38	64.90	39.60	9.66	0.26	QP
5	0.19654	30.28	-23.48	53.76	20.33	9.65	0.30	Average
6	0.19654	44.81	-18.95	63.76	34.86	9.65	0.30	QP
7	0.23910	25.56	-26.57	52.13	15.65	9.66	0.25	Average
8	0.23910	38.54	-23.59	62.13	28.63	9.66	0.25	QP
9	0.37117	30.14	-18.33	48.47	20.34	9.68	0.12	Average
10	0.37117	35.43	-23.04	58.47	25.63	9.68	0.12	QP
11	2.22493	22.40	-23.60	46.00	12.34	9.79	0.27	Average
12	2.22493	31.40	-24.60	56.00	21.34	9.79	0.27	QP

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)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-
5.15-5.25GHz	23.625M	16.617M	16M6D1D	22.65M	16.542M
5.25-5.35GHz	23.525M	16.642M	16M6D1D	22.775M	16.542M
5.47-5.725GHz	23.5M	16.667M	16M7D1D	16.155M	13.358M
5.725-5.85GHz	16.4M	16.642M	16M6D1D	3.08M	3.858M
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-
5.15-5.25GHz	25.1M	17.841M	17M8D1D	24M	17.741M
5.25-5.35GHz	25.35M	17.841M	17M8D1D	24.175M	17.741M
5.47-5.725GHz	25.15M	17.866M	17M9D1D	17.025M	13.958M
5.725-5.85GHz	17.8M	17.866M	17M9D1D	3.8M	4.218M
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-
5.15-5.25GHz	43.35M	36.382M	36M4D1D	42.35M	36.232M
5.25-5.35GHz	43.2M	36.332M	36M3D1D	42.1M	36.232M
5.47-5.725GHz	43.35M	36.282M	36M3D1D	35.805M	33.093M
5.725-5.85GHz	36.35M	36.282M	36M3D1D	3.06M	3.618M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-
5.15-5.25GHz	83.5M	75.362M	75M4D1D	82.8M	75.162M
5.25-5.35GHz	83.4M	75.362M	75M4D1D	82M	75.162M
5.47-5.725GHz	85M	75.562M	75M6D1D	76.2M	72.414M
5.725-5.85GHz	75.3M	75.462M	75M5D1D	2.8M	3.418M

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;

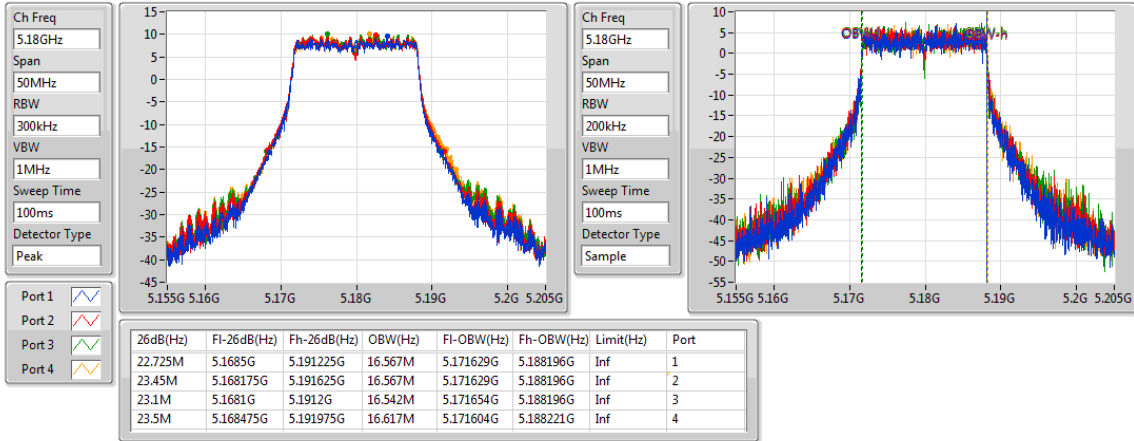
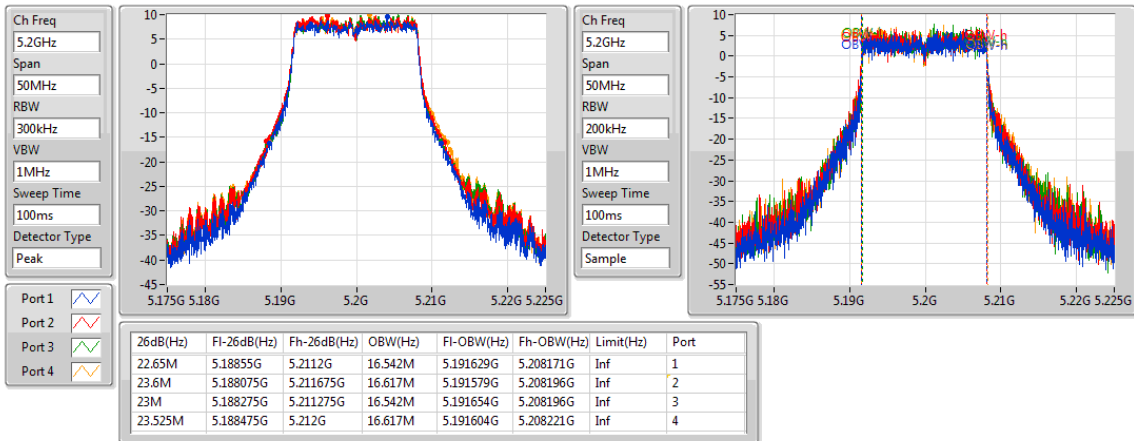
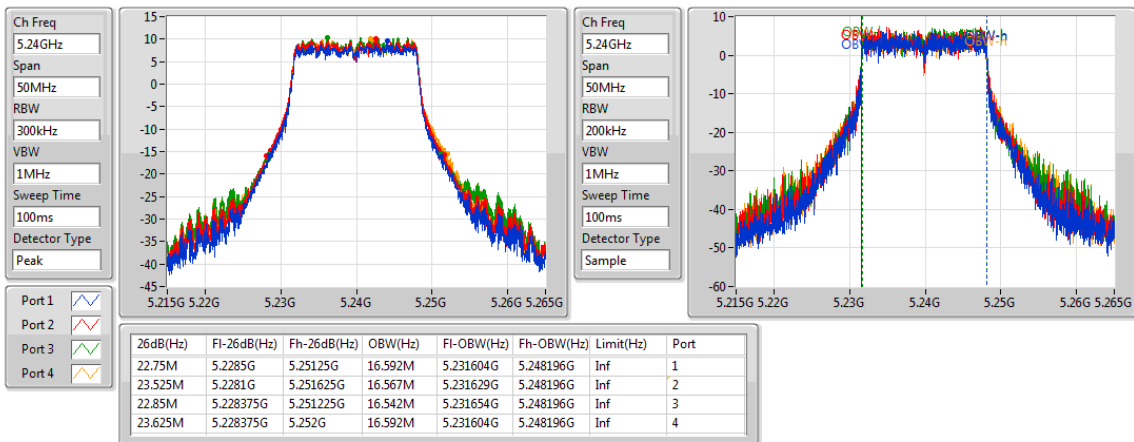
Result

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_TnomVnom	Pass	Inf	22.725M	16.567M	23.45M	16.567M	23.1M	16.542M	23.5M	16.617M
5200MHz_TnomVnom	Pass	Inf	22.65M	16.542M	23.6M	16.617M	23M	16.542M	23.525M	16.617M
5240MHz_TnomVnom	Pass	Inf	22.75M	16.592M	23.525M	16.567M	22.85M	16.542M	23.625M	16.592M
5260MHz_TnomVnom	Pass	Inf	22.875M	16.567M	23.475M	16.567M	23.075M	16.542M	23.45M	16.567M
5300MHz_TnomVnom	Pass	Inf	23M	16.592M	23.425M	16.642M	23.1M	16.617M	23.525M	16.567M
5320MHz_TnomVnom	Pass	Inf	22.775M	16.592M	23.325M	16.642M	23M	16.542M	23.375M	16.567M
5500MHz_TnomVnom	Pass	Inf	22.675M	16.592M	23.45M	16.592M	22.925M	16.592M	23.475M	16.617M
5580MHz_TnomVnom	Pass	Inf	22.925M	16.517M	23.3M	16.642M	22.925M	16.592M	23.475M	16.642M
5700MHz_TnomVnom	Pass	Inf	22.95M	16.567M	23.4M	16.667M	22.675M	16.567M	23.5M	16.592M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	16.395M	13.358M	16.515M	13.388M	16.38M	13.373M	16.155M	13.403M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.1M	3.898M	3.08M	4.018M	3.08M	3.858M	3.08M	3.938M
5745MHz_TnomVnom	Pass	500k	16.35M	16.617M	16.4M	16.617M	16.35M	16.592M	16.35M	16.642M
5785MHz_TnomVnom	Pass	500k	16.35M	16.567M	16.35M	16.617M	16.35M	16.592M	16.375M	16.592M
5825MHz_TnomVnom	Pass	500k	16.375M	16.542M	16.375M	16.642M	16.35M	16.567M	16.375M	16.617M
802.11ac_VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	25.1M	17.791M	24.65M	17.766M	24.025M	17.791M	24M	17.766M
5200MHz_TnomVnom	Pass	Inf	24.925M	17.741M	25.025M	17.791M	24.6M	17.791M	24.375M	17.816M
5240MHz_TnomVnom	Pass	Inf	25.1M	17.841M	25.025M	17.816M	24.325M	17.791M	24.15M	17.791M
5260MHz_TnomVnom	Pass	Inf	25.35M	17.841M	24.8M	17.791M	24.175M	17.816M	24.5M	17.791M
5300MHz_TnomVnom	Pass	Inf	25.25M	17.791M	25M	17.766M	24.325M	17.791M	24.275M	17.766M
5320MHz_TnomVnom	Pass	Inf	25.05M	17.841M	24.675M	17.766M	24.4M	17.741M	24.65M	17.766M
5500MHz_TnomVnom	Pass	Inf	24.575M	17.791M	24.9M	17.766M	24.2M	17.791M	24.575M	17.791M
5580MHz_TnomVnom	Pass	Inf	24.9M	17.766M	24.75M	17.866M	24.475M	17.791M	24.2M	17.841M
5700MHz_TnomVnom	Pass	Inf	25.15M	17.841M	24.875M	17.841M	24.1M	17.791M	24.025M	17.766M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	17.22M	13.958M	17.655M	13.988M	17.16M	14.003M	17.025M	14.003M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.8M	4.318M	3.8M	4.218M	3.8M	4.278M	3.8M	4.258M
5745MHz_TnomVnom	Pass	500k	17.8M	17.791M	17.8M	17.816M	17.625M	17.791M	17.7M	17.766M
5785MHz_TnomVnom	Pass	500k	17.8M	17.791M	17.8M	17.866M	17.65M	17.816M	17.775M	17.841M
5825MHz_TnomVnom	Pass	500k	17.6M	17.791M	17.8M	17.791M	17.8M	17.816M	17.725M	17.791M
802.11ac_VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	43.35M	36.282M	42.85M	36.232M	42.55M	36.382M	42.35M	36.282M
5230MHz_TnomVnom	Pass	Inf	42.8M	36.232M	42.85M	36.232M	42.65M	36.232M	42.35M	36.282M
5270MHz_TnomVnom	Pass	Inf	43.05M	36.232M	42.7M	36.232M	42.55M	36.282M	42.1M	36.282M
5310MHz_TnomVnom	Pass	Inf	43.2M	36.282M	42.8M	36.332M	42.85M	36.282M	42.3M	36.332M
5510MHz_TnomVnom	Pass	Inf	42.6M	36.182M	42.6M	36.232M	42.15M	36.282M	41.7M	36.232M
5550MHz_TnomVnom	Pass	Inf	43.35M	36.232M	42.6M	36.182M	42.1M	36.232M	41.95M	36.232M
5670MHz_TnomVnom	Pass	Inf	43.15M	36.282M	42.25M	36.282M	42.7M	36.232M	42.3M	36.232M
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	36.575M	33.128M	35.805M	33.093M	36.26M	33.093M	36.82M	33.093M
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.06M	3.698M	3.08M	3.658M	3.1M	3.618M	3.16M	3.638M

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)
5755MHz_TnomVnom	Pass	500k	36.3M	36.282M	36.3M	36.232M	36.35M	36.282M	36.3M	36.232M
5795MHz_TnomVnom	Pass	500k	36.35M	36.282M	36.35M	36.182M	36.35M	36.232M	36.3M	36.282M
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	83.5M	75.162M	82.8M	75.262M	83.1M	75.362M	83M	75.162M
5290MHz_TnomVnom	Pass	Inf	83.4M	75.362M	82M	75.162M	83.4M	75.262M	82.7M	75.162M
5530MHz_TnomVnom	Pass	Inf	83.3M	75.262M	81.5M	75.262M	82.3M	75.362M	82.1M	75.362M
5610MHz_TnomVnom	Pass	Inf	84.9M	75.362M	85M	75.462M	84.3M	75.562M	84.5M	75.362M
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	76.65M	72.489M	76.2M	72.489M	76.425M	72.564M	76.2M	72.414M
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.04M	4.338M	2.8M	3.418M	3.04M	3.818M	2.8M	4.358M
5775MHz_TnomVnom	Pass	500k	75.3M	75.462M	74.8M	75.062M	75.3M	75.262M	75.1M	75.362M

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;

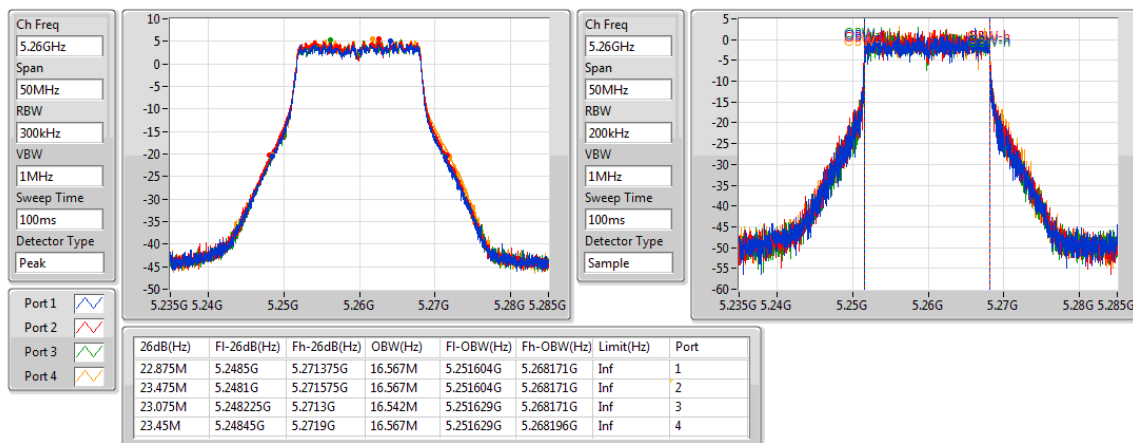
802.11a_Nss1,(6Mbps)_4TX
EBW
5180MHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5200MHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5240MHz




802.11a_Nss1,(6Mbps)_4TX

EBW

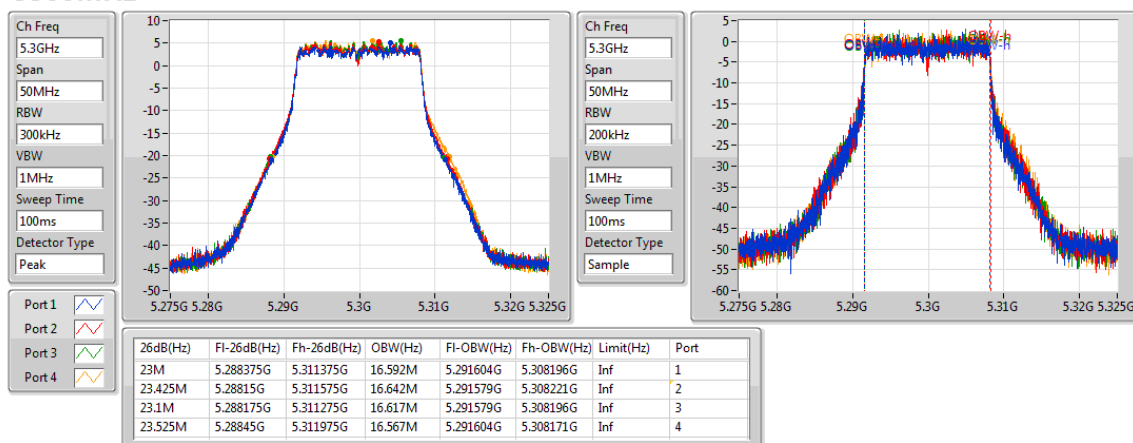
5260MHz



802.11a_Nss1,(6Mbps)_4TX

EBW

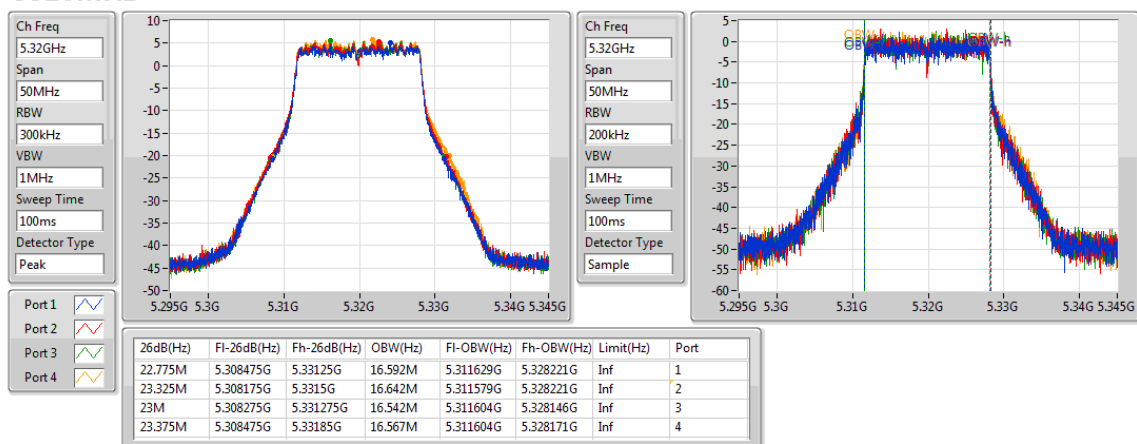
5300MHz

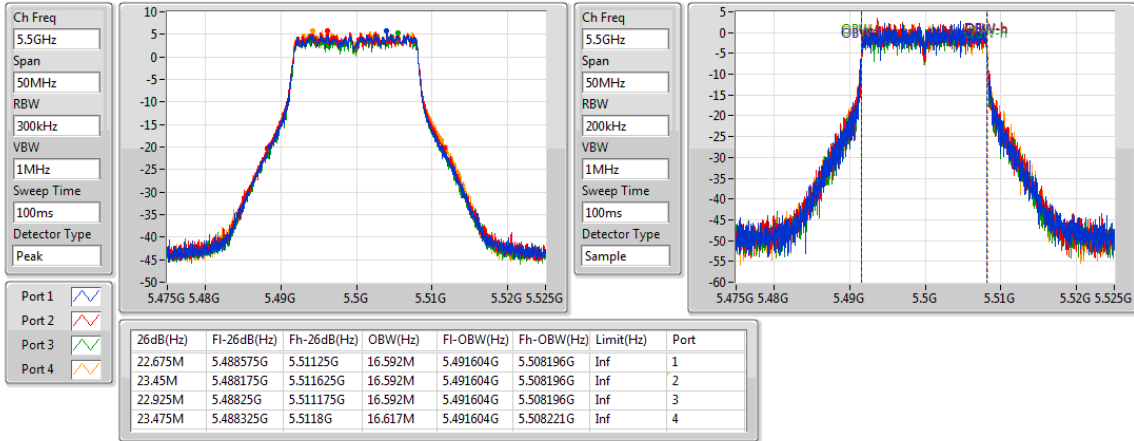
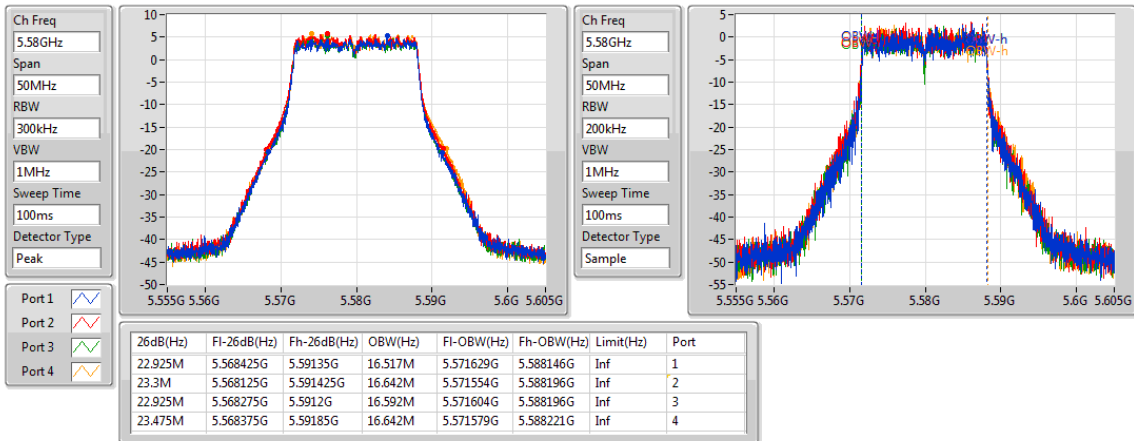
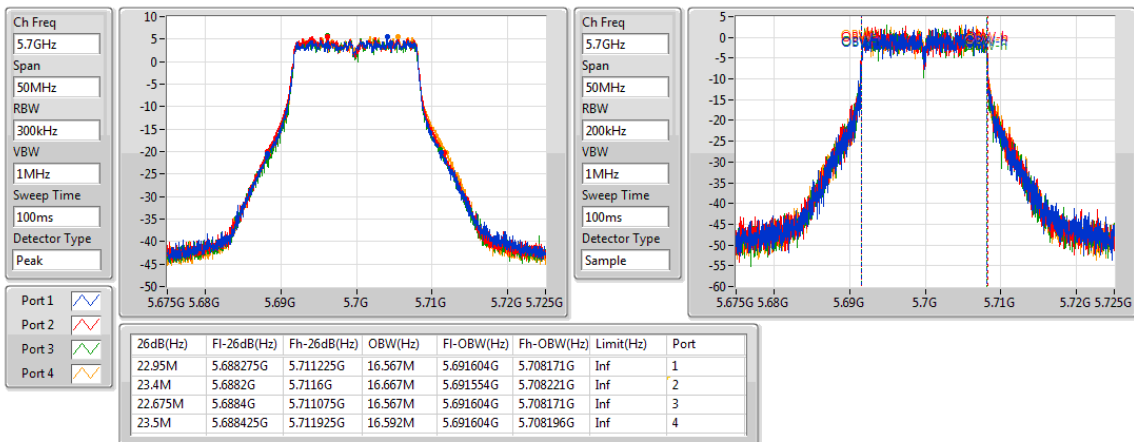


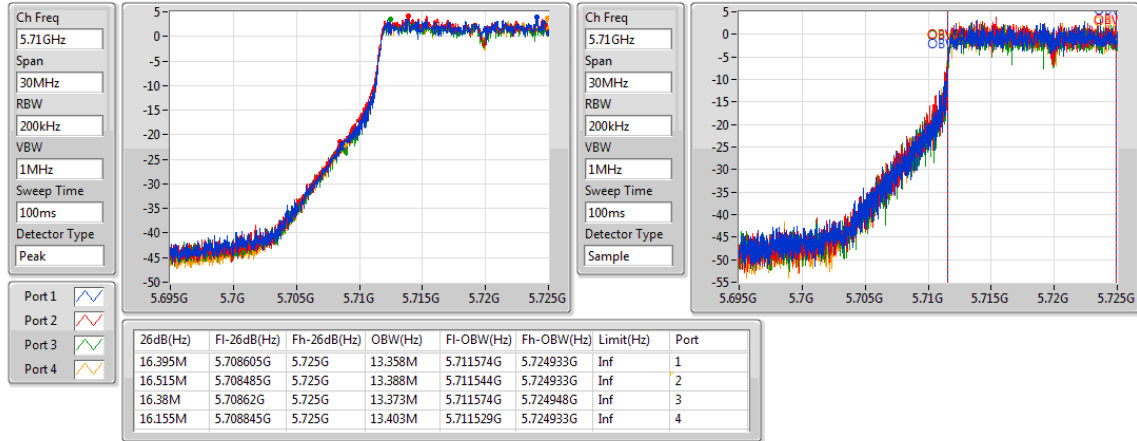
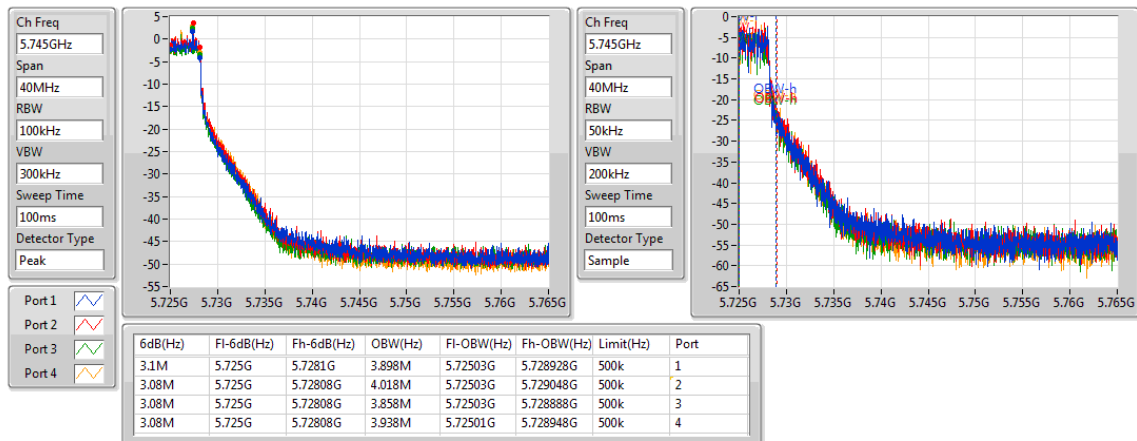
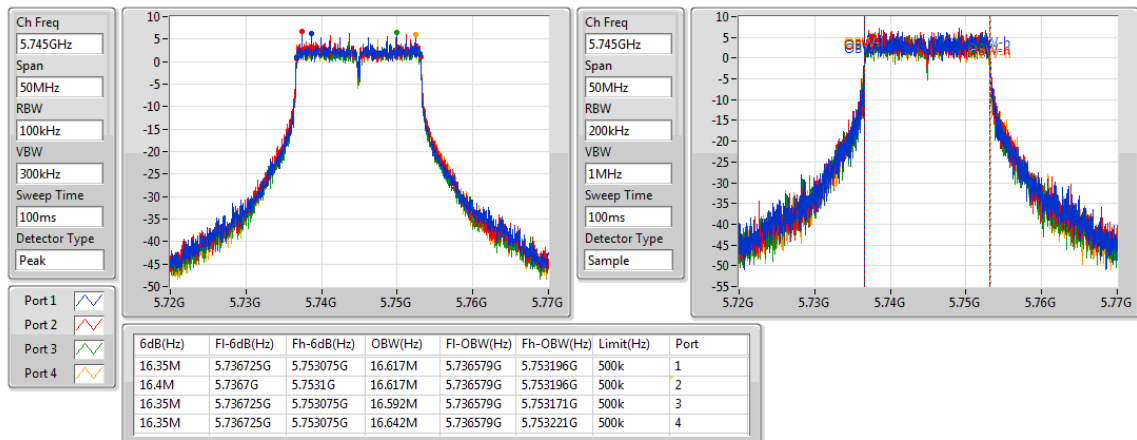
802.11a_Nss1,(6Mbps)_4TX

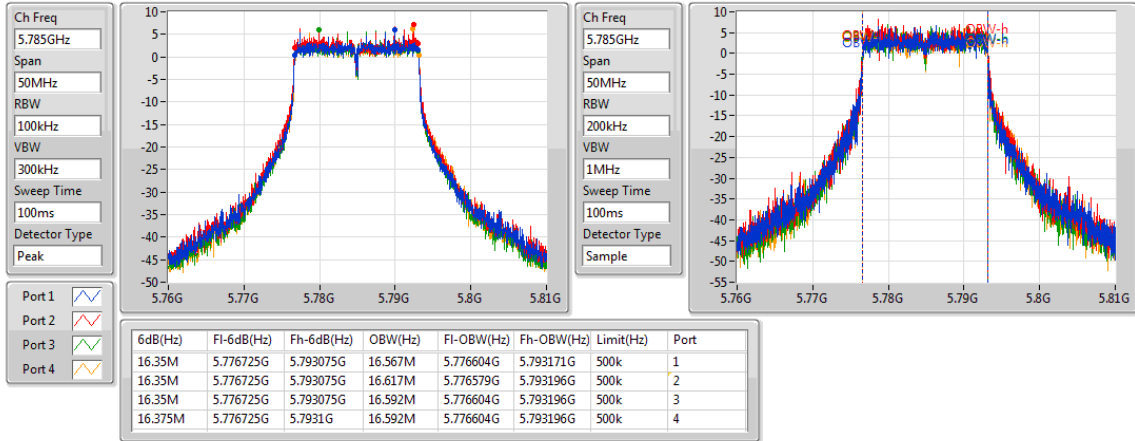
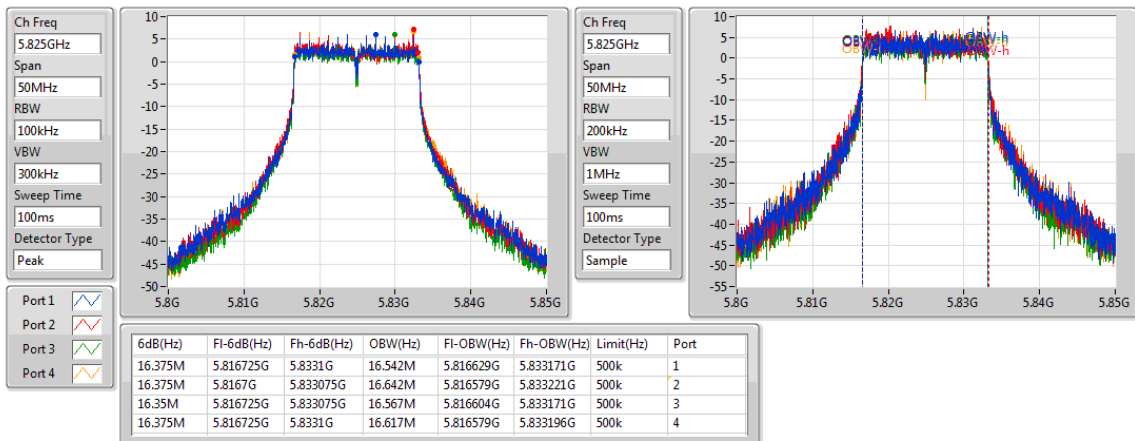
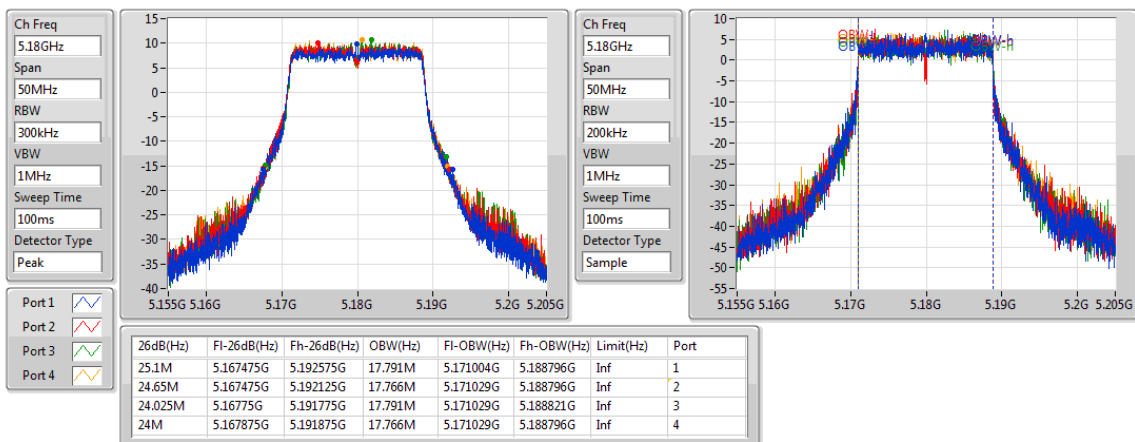
EBW

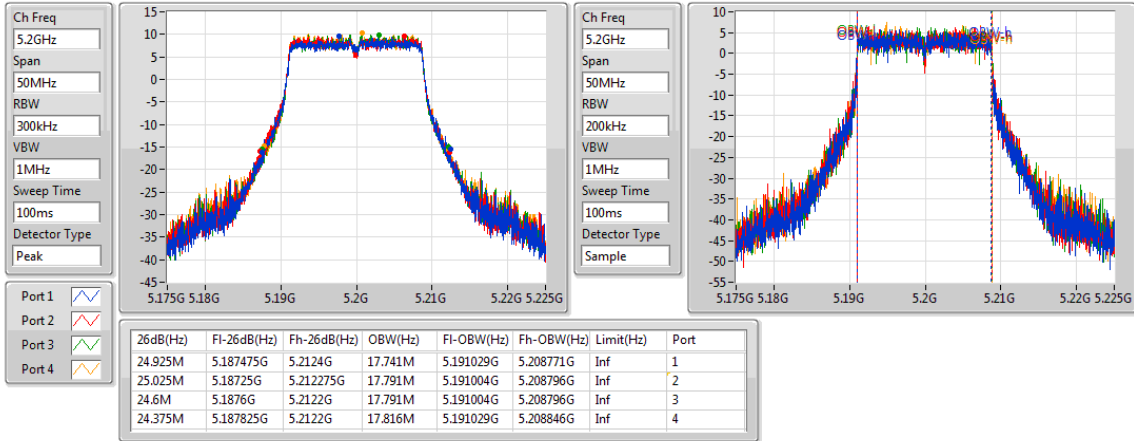
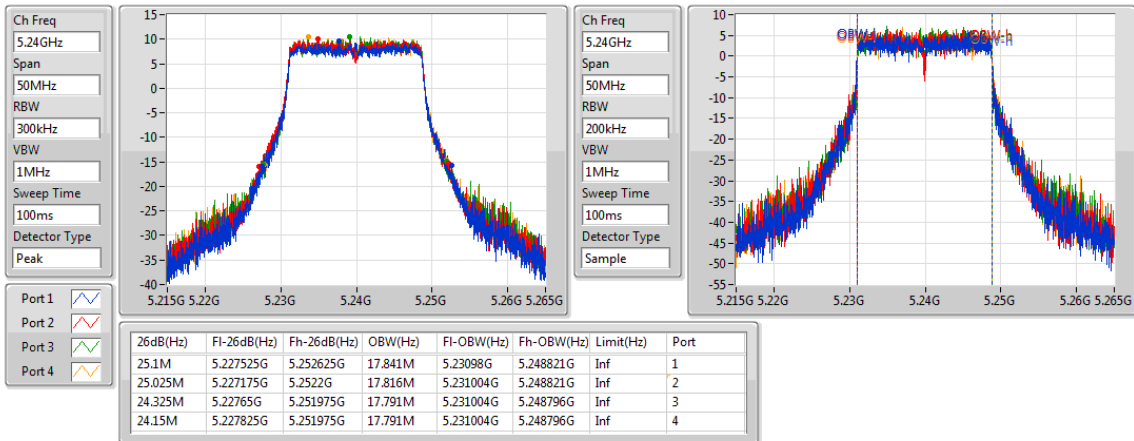
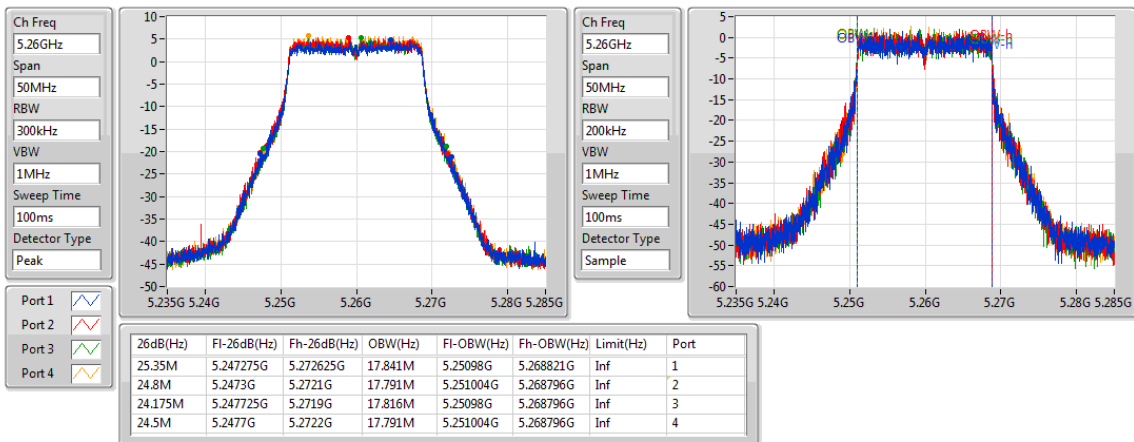
5320MHz

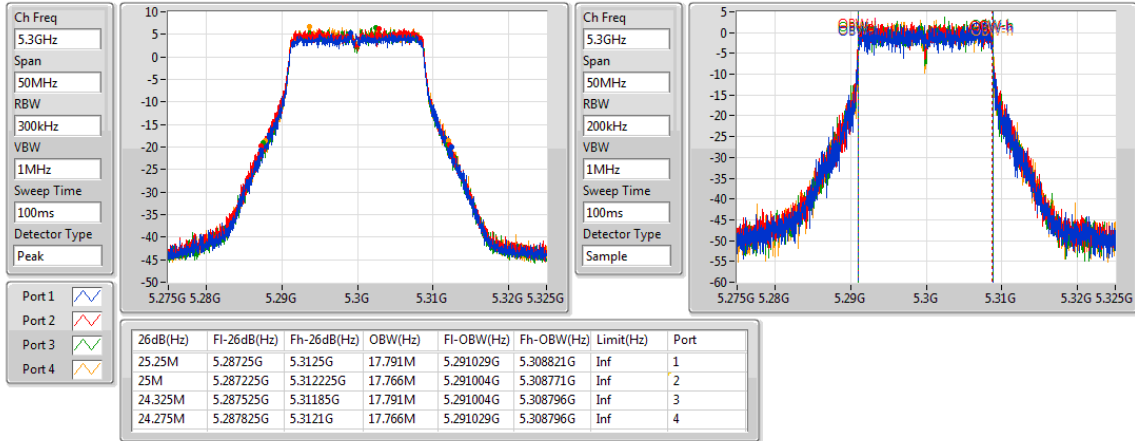
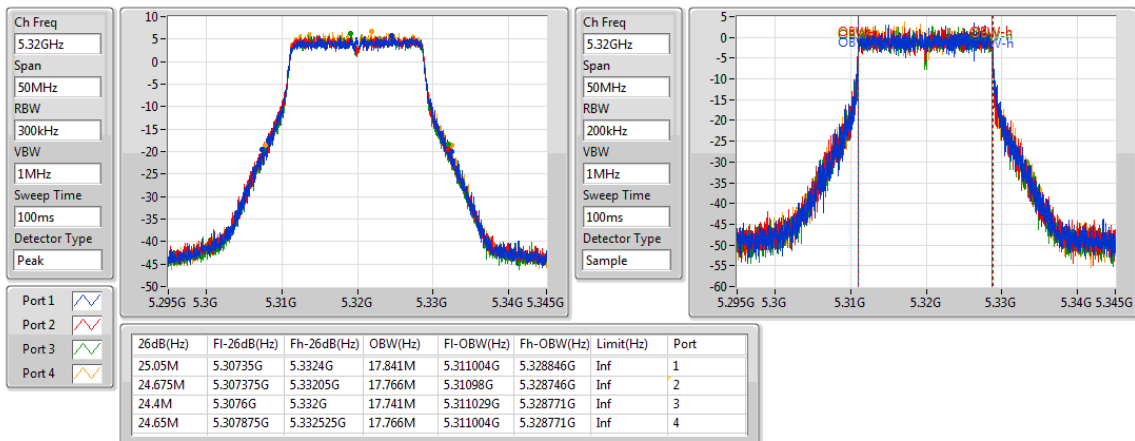
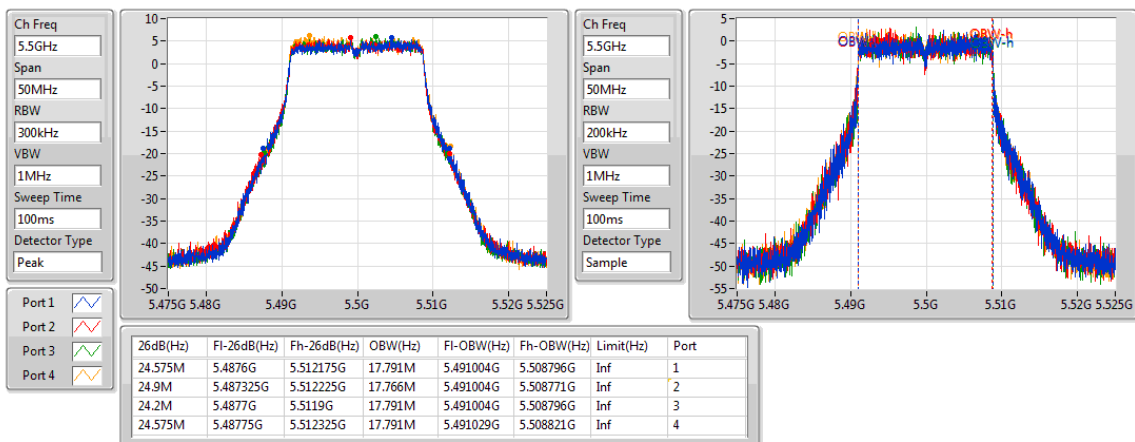


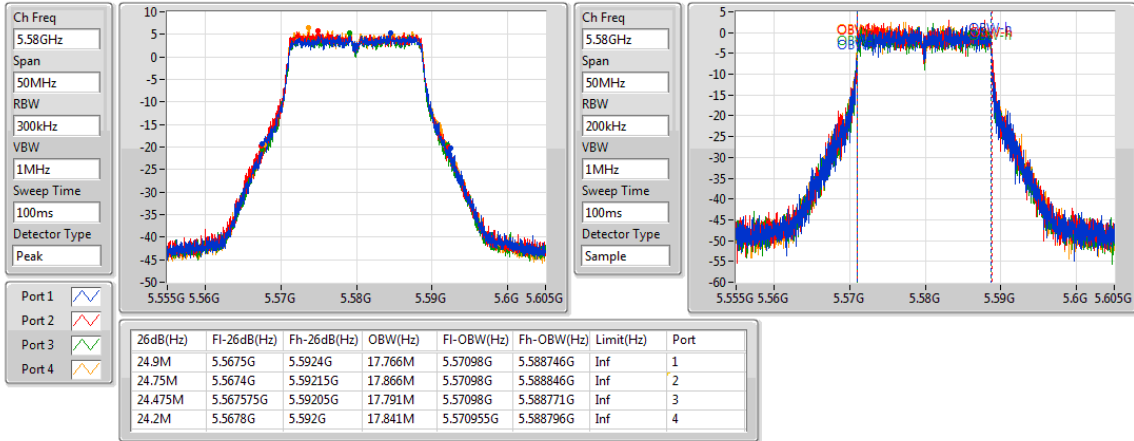
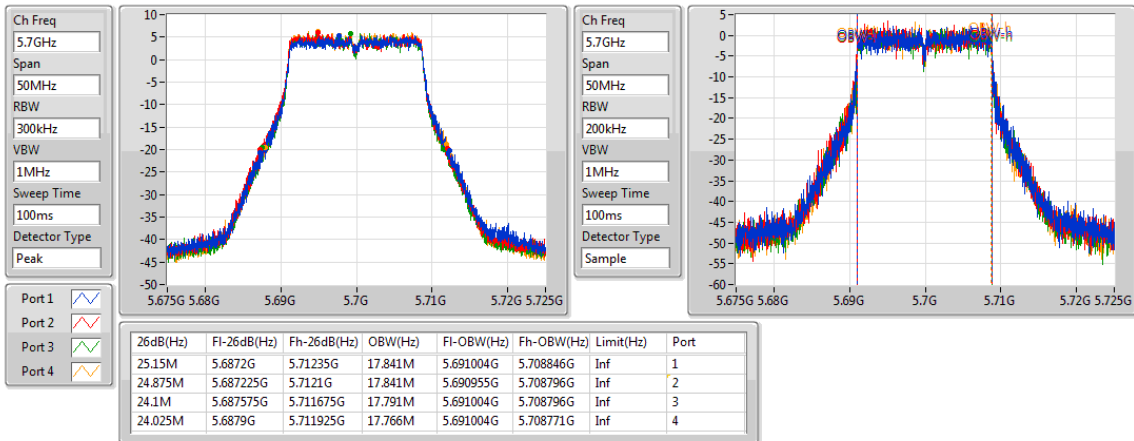
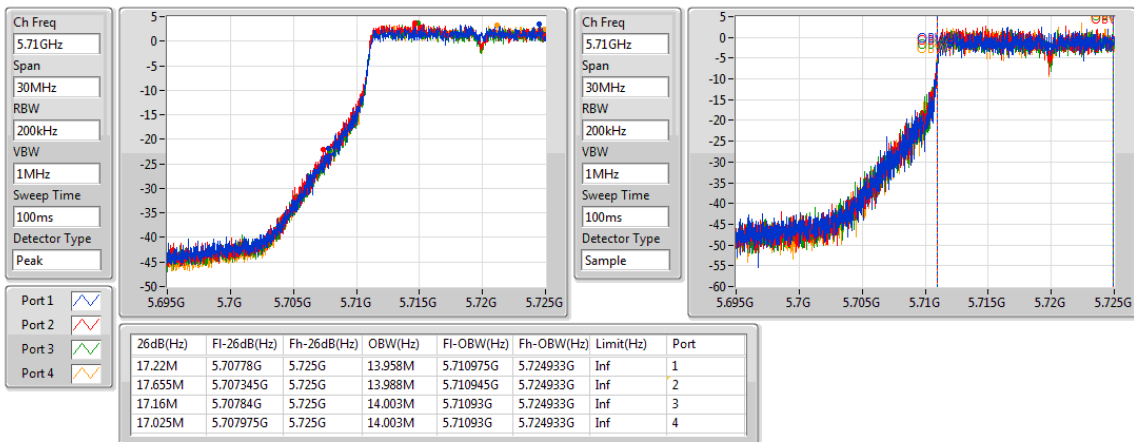
802.11a_Nss1,(6Mbps)_4TX
EBW
5500MHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5580MHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5700MHz


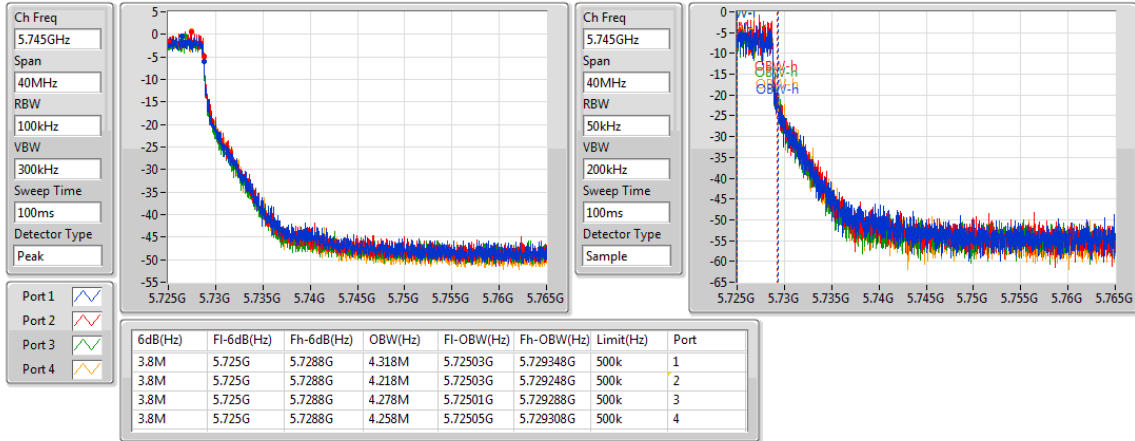
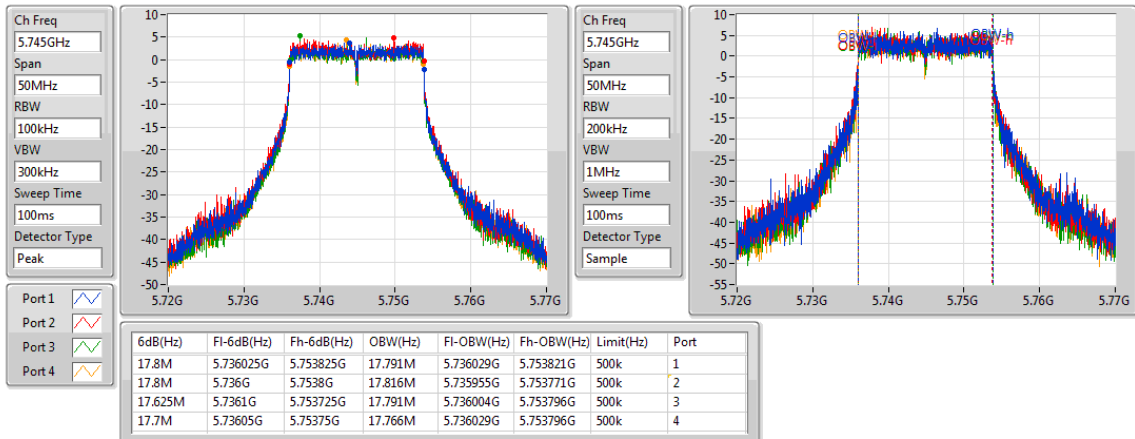
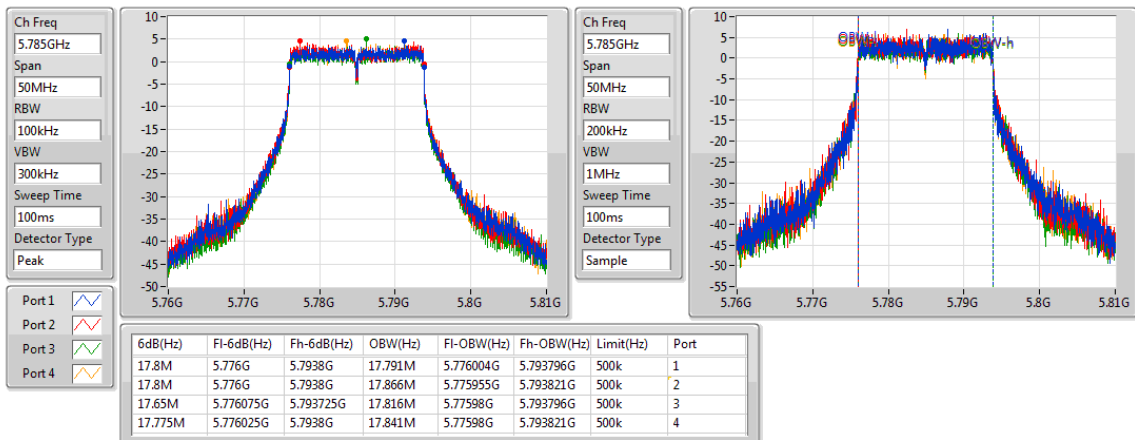
802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5745MHz


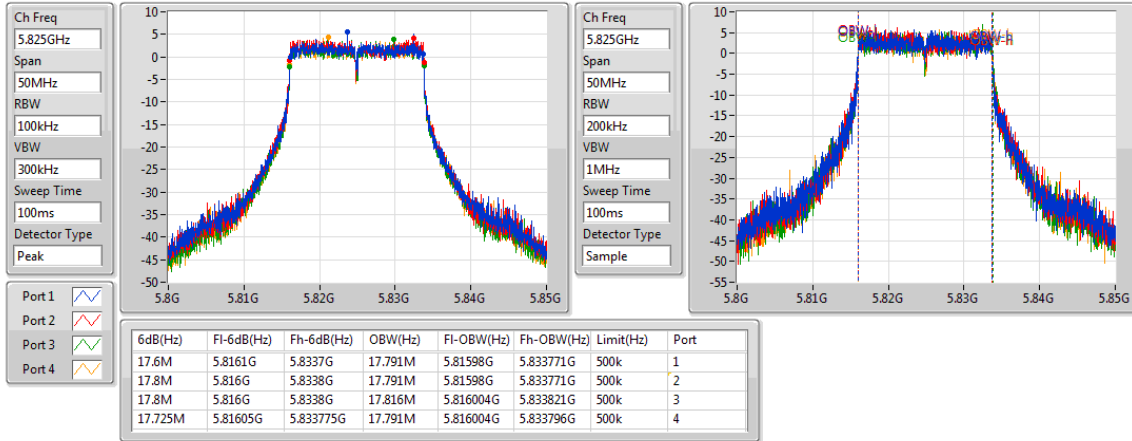
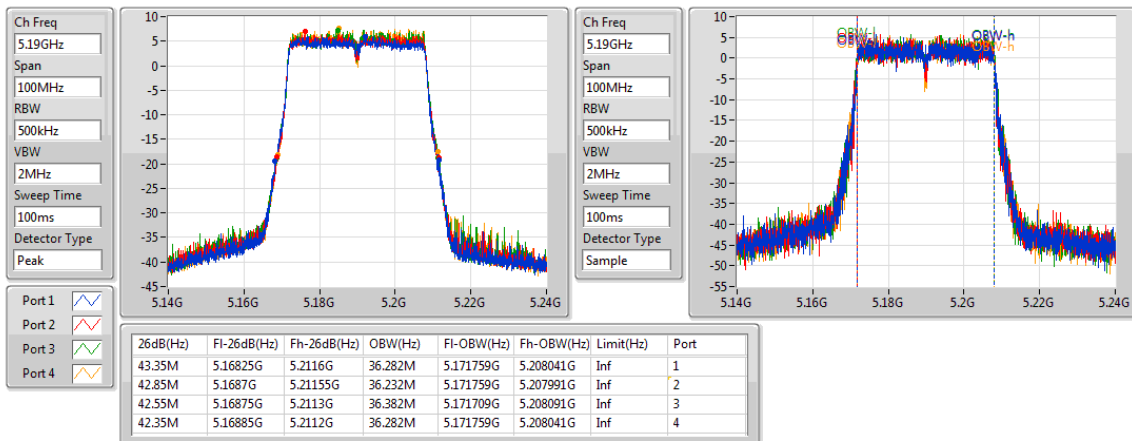
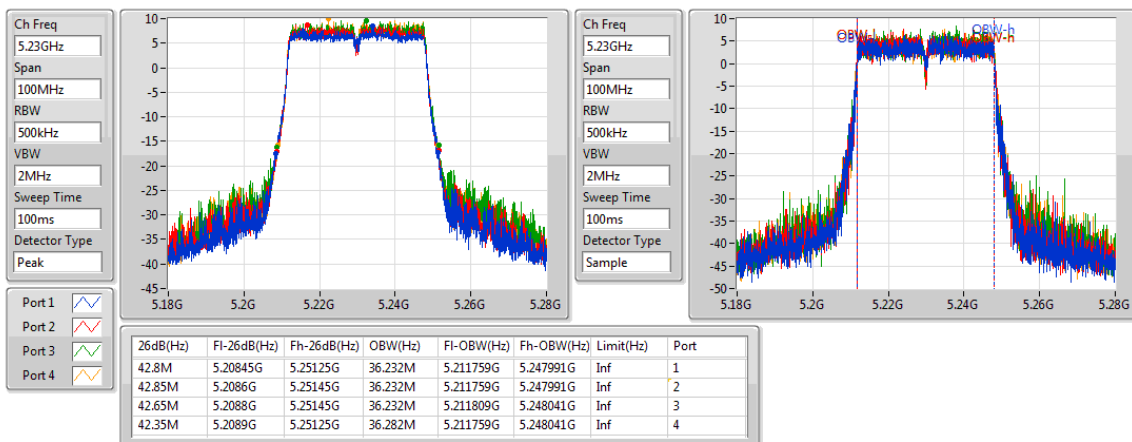
802.11a_Nss1,(6Mbps)_4TX
EBW
5785MHz

802.11a_Nss1,(6Mbps)_4TX
EBW
5825MHz

802.11ac_VHT20_Nss1,(MCS0)_4TX
EBW
5180MHz


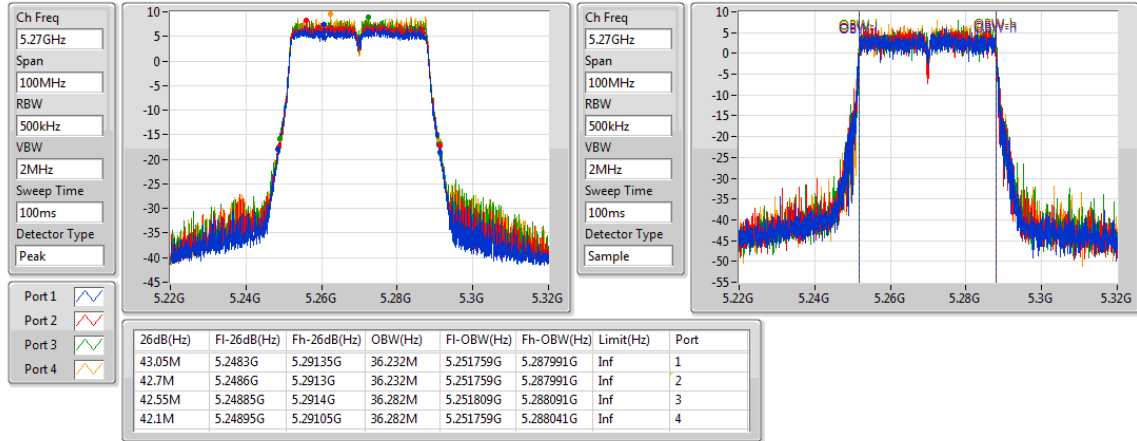
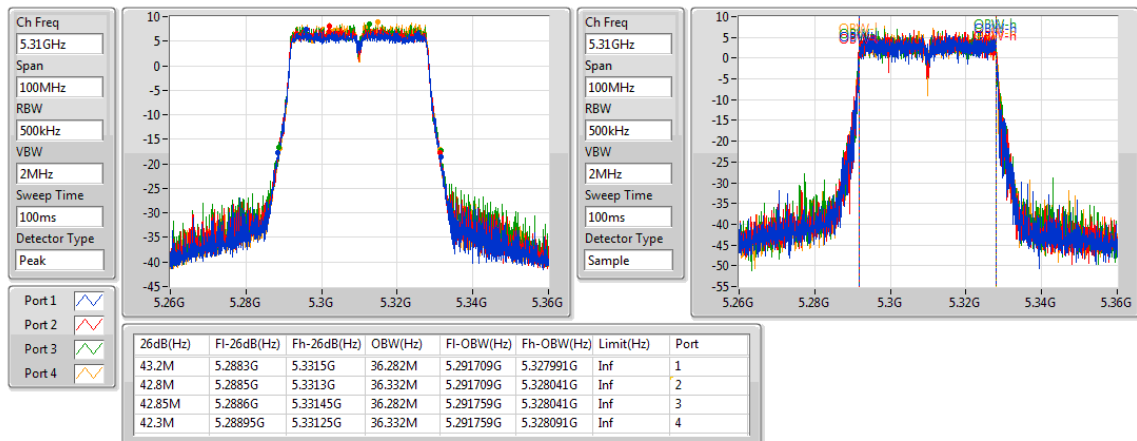
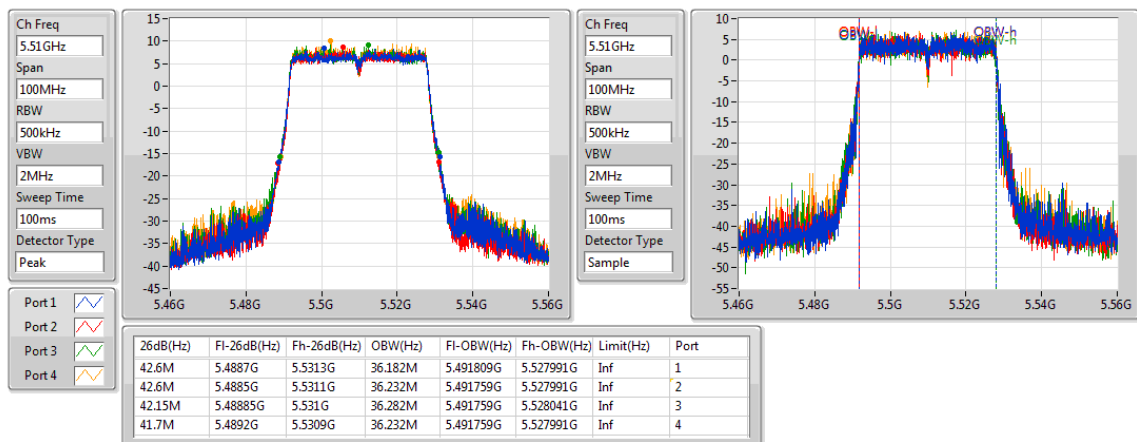
802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5200MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5240MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5260MHz


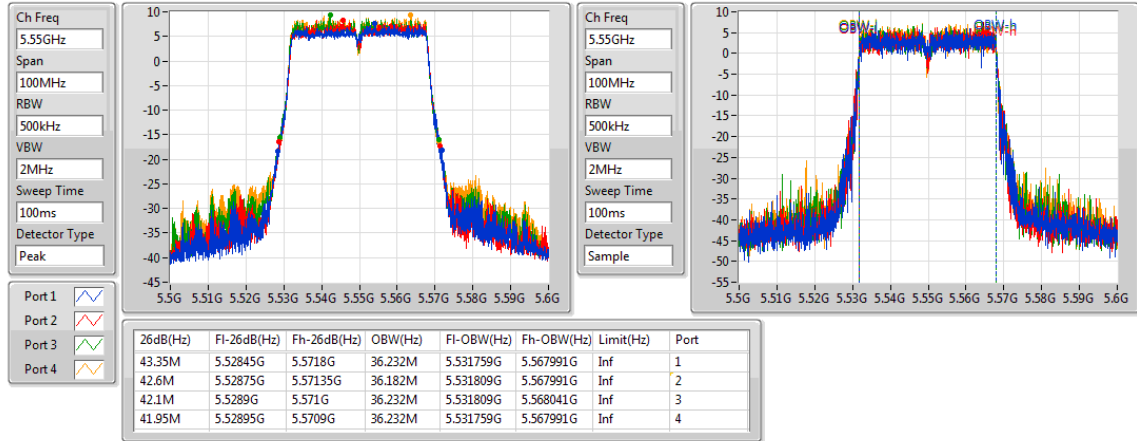
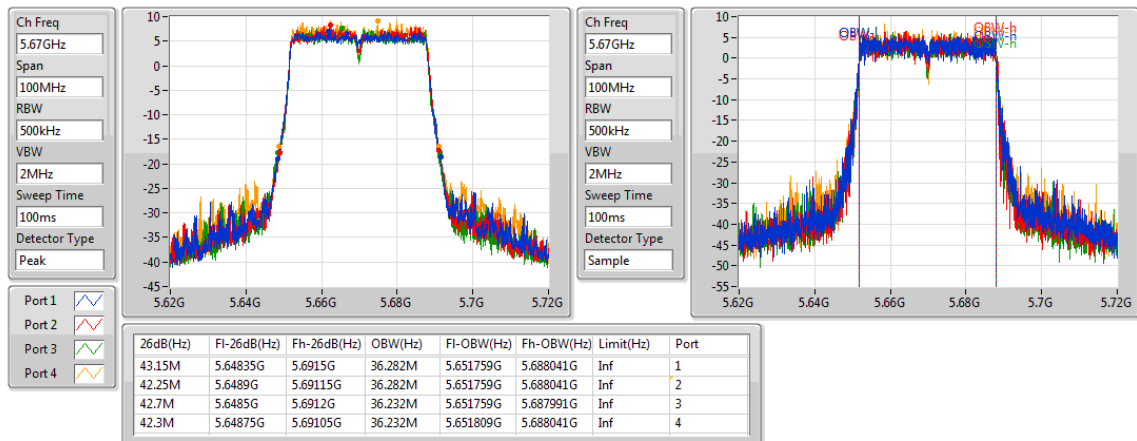
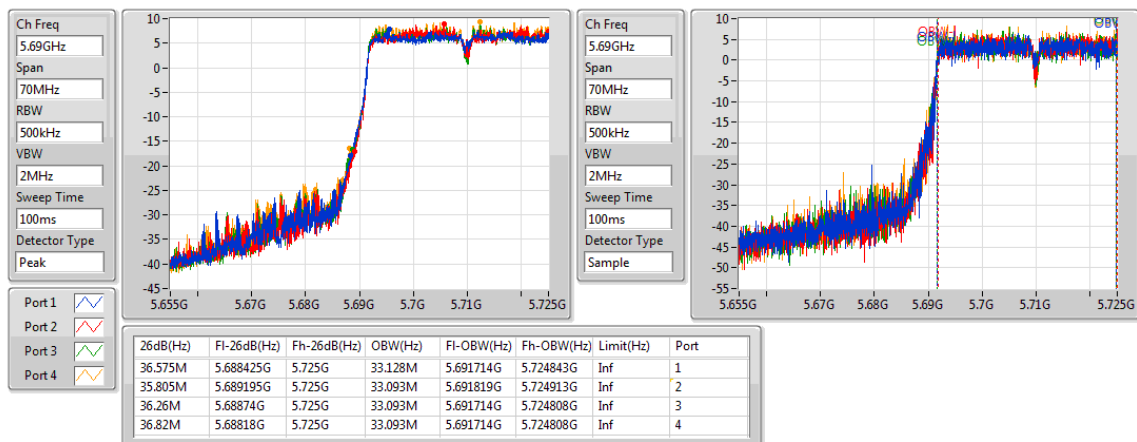
802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5300MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5320MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5500MHz


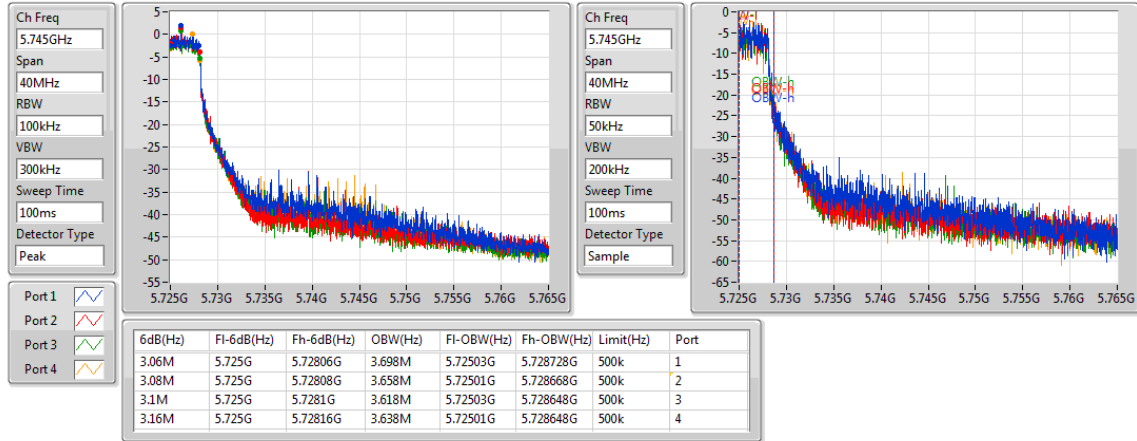
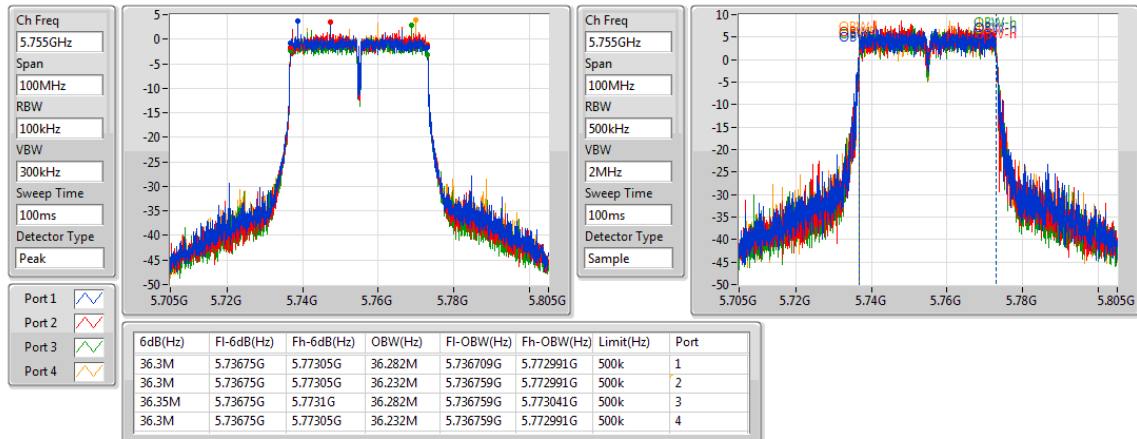
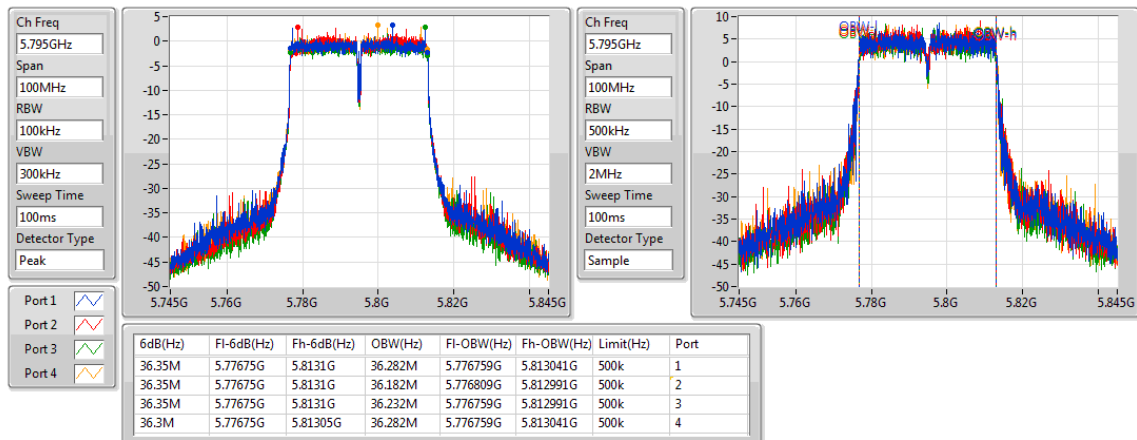
802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5580MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5700MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz


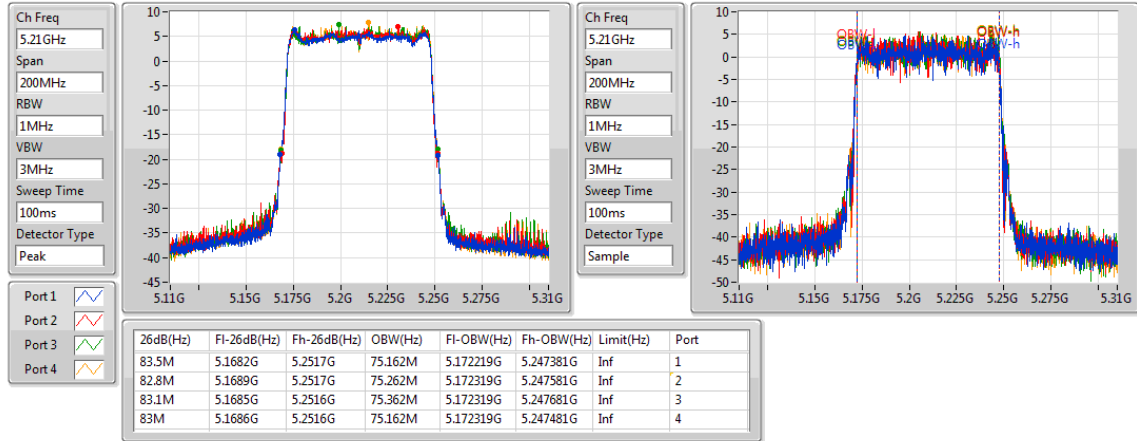
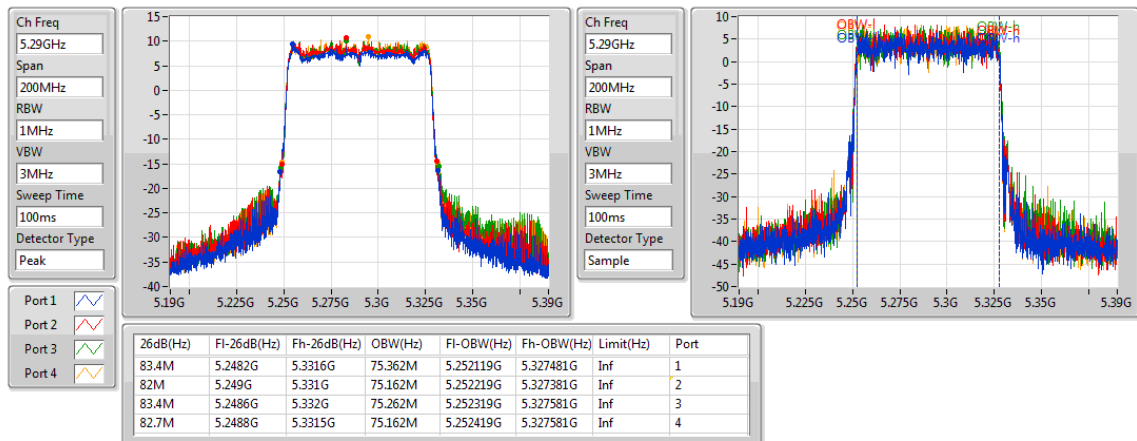
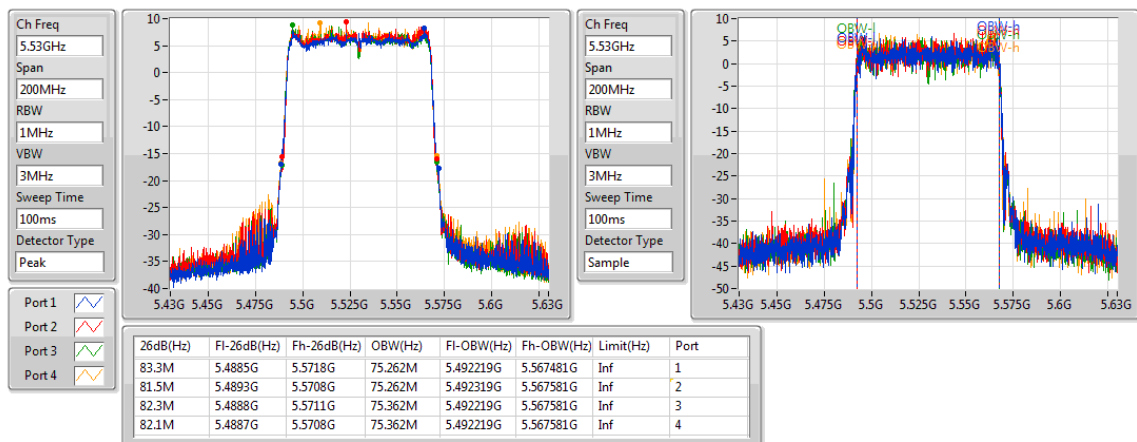
802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5745MHz

802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5785MHz


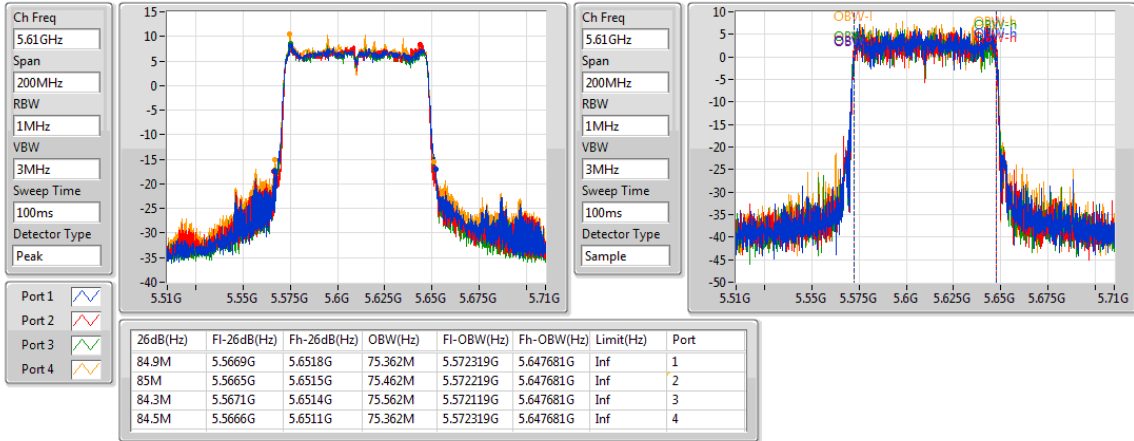
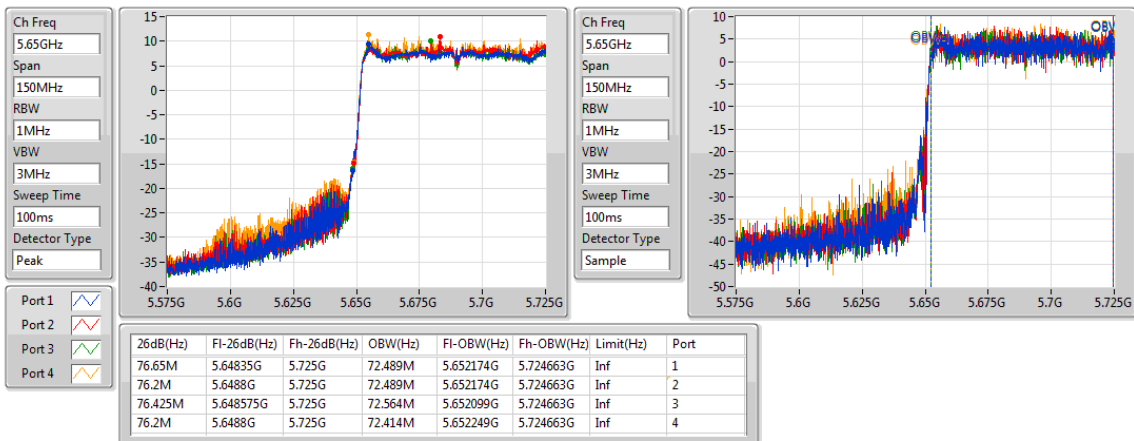
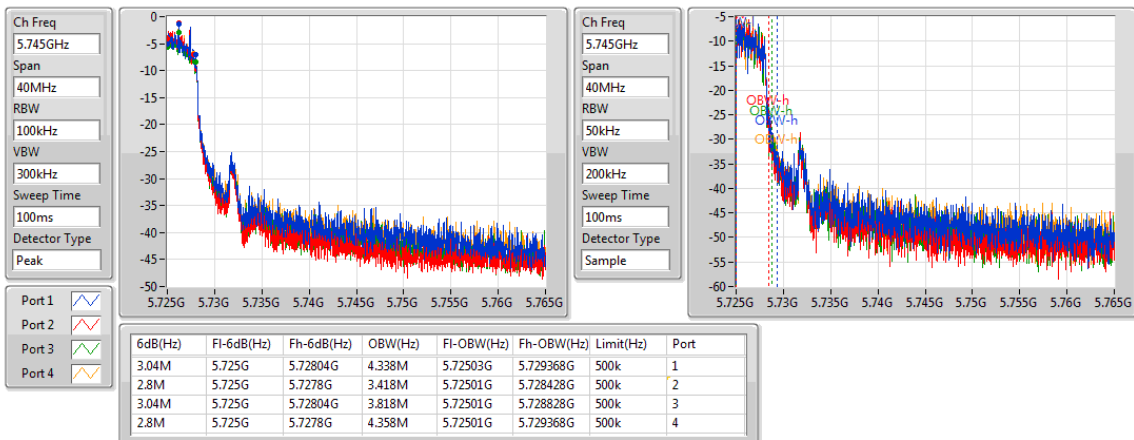
802.11ac VHT20_Nss1,(MCS0)_4TX
EBW
5825MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5190MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5230MHz


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5270MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5310MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5510MHz


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5550MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5670MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz


802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5755MHz

802.11ac VHT40_Nss1,(MCS0)_4TX
EBW
5795MHz


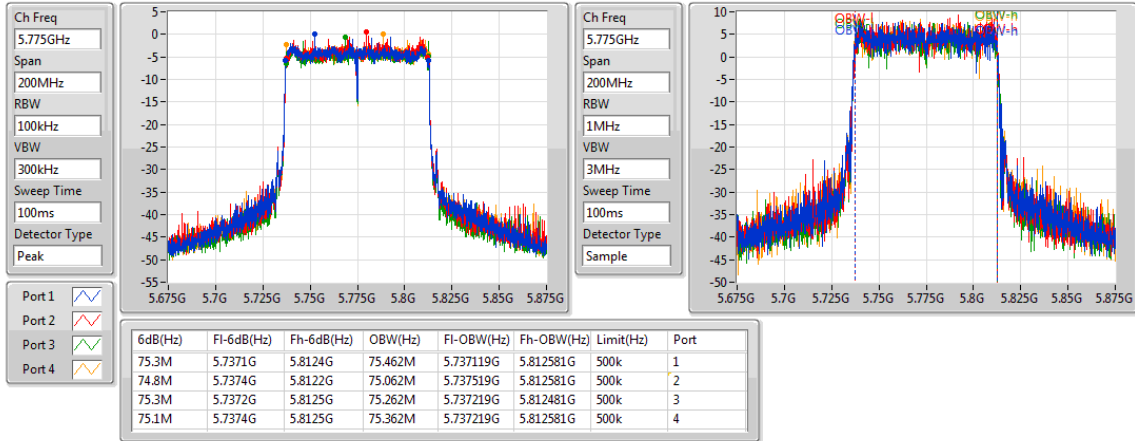
802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5210MHz

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5290MHz

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5530MHz


802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5610MHz

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

802.11ac VHT80_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz


802.11ac VHT80_Nss1,(MCS0)_4TX

EBW

5775MHz



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-
5.15-5.25GHz	25.45M	18.066M	18M1D1D	24.35M	17.791M
5.25-5.35GHz	25.95M	17.916M	17M9D1D	24.7M	17.766M
5.47-5.725GHz	25.675M	17.966M	18M0D1D	17.31M	13.958M
5.725-5.85GHz	17.7M	17.891M	17M9D1D	3.7M	4.338M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-
5.15-5.25GHz	64.65M	36.482M	36M5D1D	42M	36.282M
5.25-5.35GHz	43.4M	36.632M	36M6D1D	41.75M	36.182M
5.47-5.725GHz	43.35M	36.432M	36M4D1D	36.26M	33.093M
5.725-5.85GHz	36.45M	36.582M	36M6D1D	3.12M	3.658M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-
5.15-5.25GHz	80.6M	75.262M	75M3D1D	79.8M	75.162M
5.25-5.35GHz	80.6M	75.462M	75M5D1D	79.6M	75.262M
5.47-5.725GHz	82.5M	75.362M	75M4D1D	75.075M	72.414M
5.725-5.85GHz	74.9M	75.562M	75M6D1D	2.84M	3.598M

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;

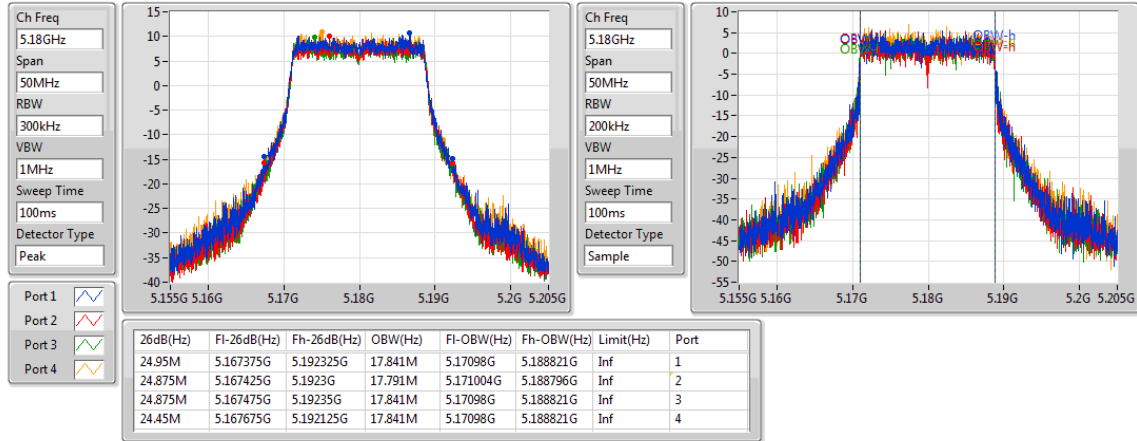
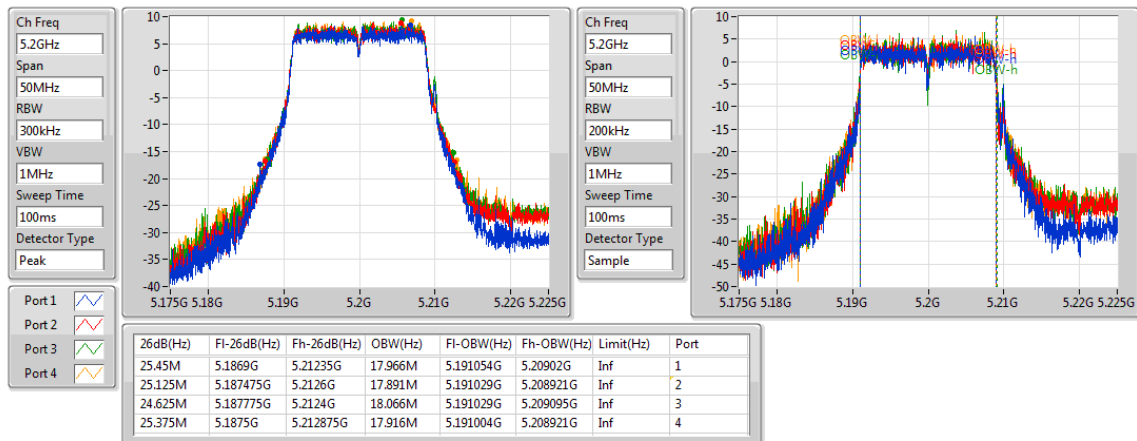
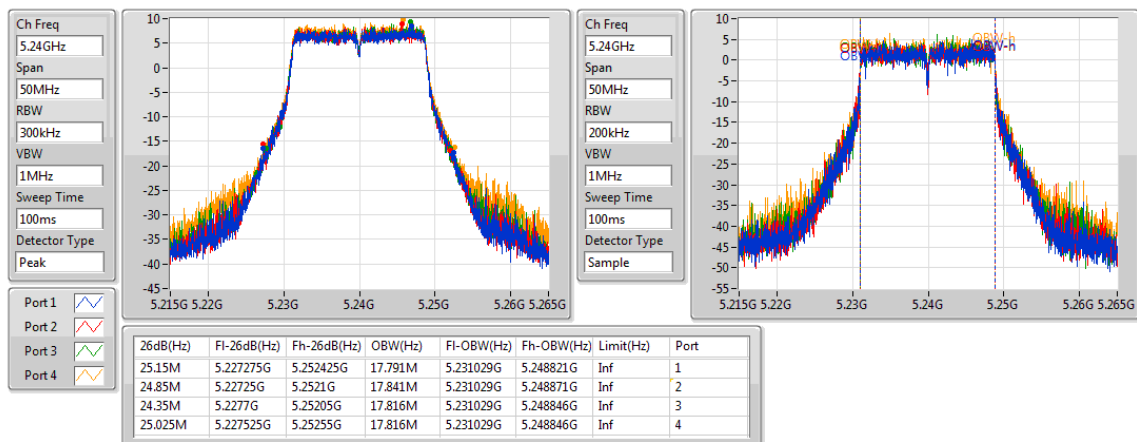
Min-OBW = Minimum 99% occupied bandwidth;

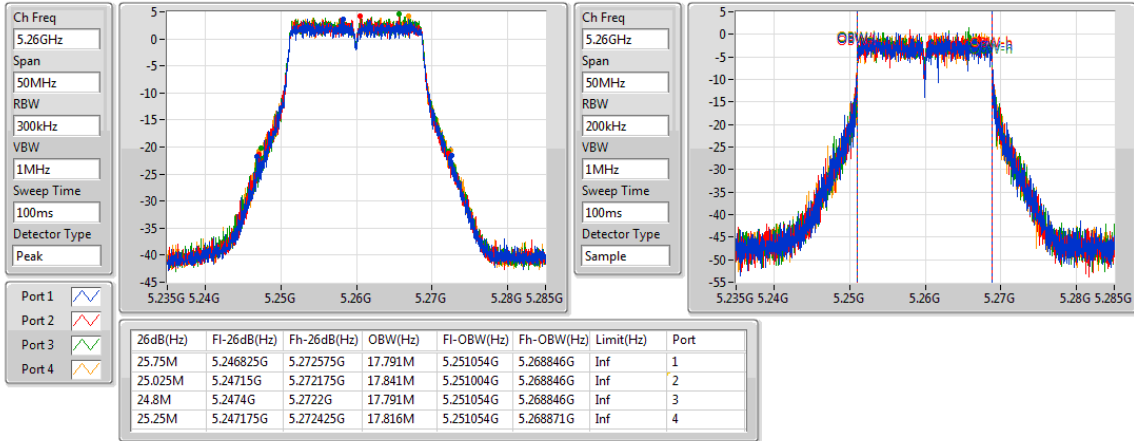
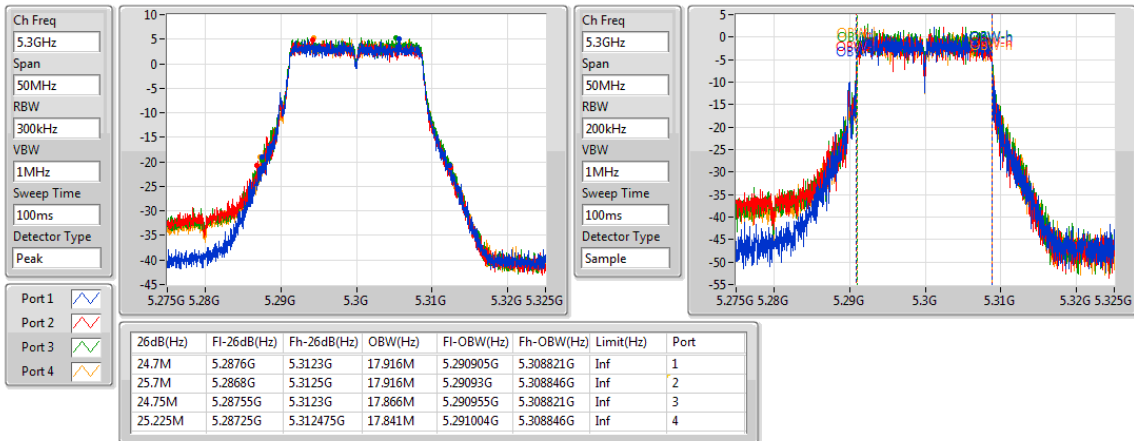
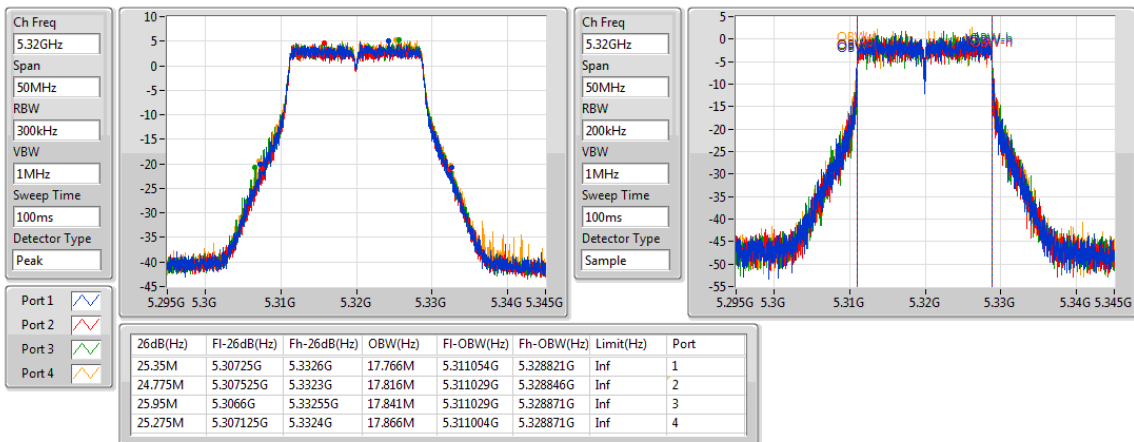
Result

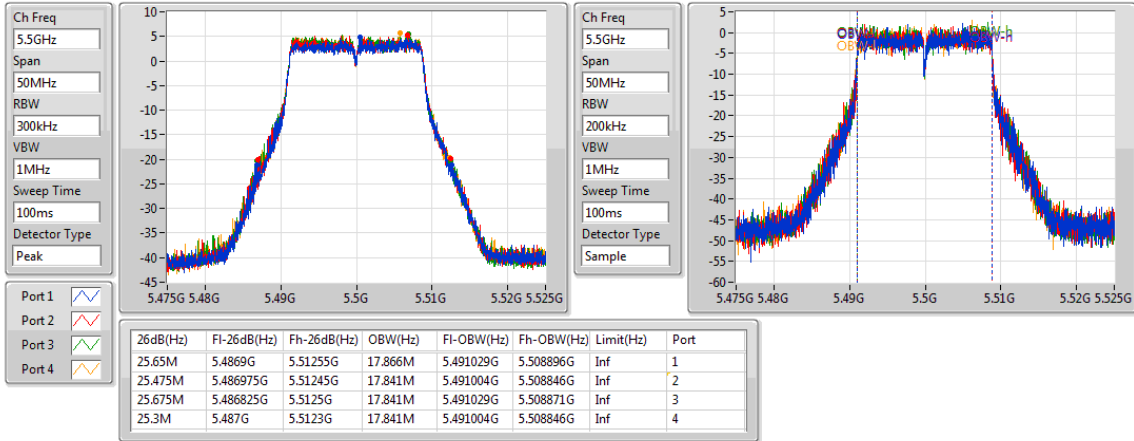
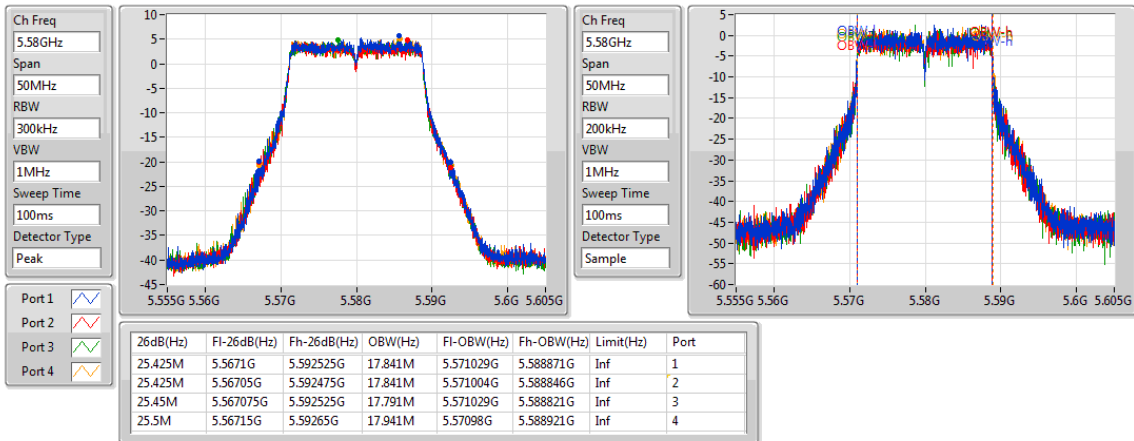
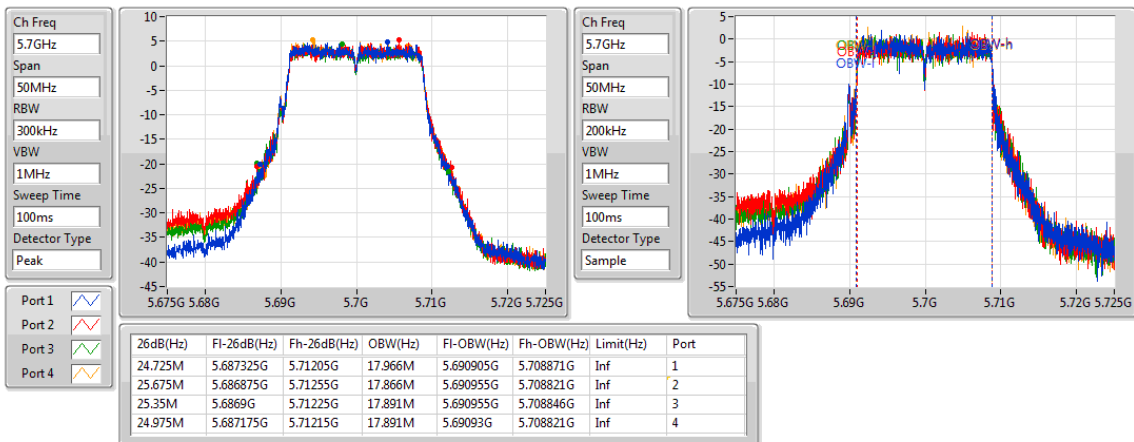
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz_TnomVnom	Pass	Inf	24.95M	17.841M	24.875M	17.791M	24.875M	17.841M	24.45M	17.841M
5200MHz_TnomVnom	Pass	Inf	25.45M	17.966M	25.125M	17.891M	24.625M	18.066M	25.375M	17.916M
5240MHz_TnomVnom	Pass	Inf	25.15M	17.791M	24.85M	17.841M	24.35M	17.816M	25.025M	17.816M
5260MHz_TnomVnom	Pass	Inf	25.75M	17.791M	25.025M	17.841M	24.8M	17.791M	25.25M	17.816M
5300MHz_TnomVnom	Pass	Inf	24.7M	17.916M	25.7M	17.916M	24.75M	17.866M	25.225M	17.841M
5320MHz_TnomVnom	Pass	Inf	25.35M	17.766M	24.775M	17.816M	25.95M	17.841M	25.275M	17.866M
5500MHz_TnomVnom	Pass	Inf	25.65M	17.866M	25.475M	17.841M	25.675M	17.841M	25.3M	17.841M
5580MHz_TnomVnom	Pass	Inf	25.425M	17.841M	25.425M	17.841M	25.45M	17.791M	25.5M	17.941M
5700MHz_TnomVnom	Pass	Inf	24.725M	17.966M	25.675M	17.866M	25.35M	17.891M	24.975M	17.891M
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	17.7M	14.018M	17.445M	13.958M	17.73M	14.003M	17.31M	13.973M
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.7M	4.478M	3.8M	4.338M	3.82M	4.378M	3.7M	4.438M
5745MHz_TnomVnom	Pass	500k	17.7M	17.816M	17.575M	17.891M	17.575M	17.766M	17.6M	17.841M
5785MHz_TnomVnom	Pass	500k	17.575M	17.866M	17.6M	17.816M	17.6M	17.816M	17.6M	17.816M
5825MHz_TnomVnom	Pass	500k	17.6M	17.866M	17.675M	17.816M	17.575M	17.841M	17.6M	17.816M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	Inf	42.15M	36.282M	43.15M	36.332M	42M	36.332M	42.1M	36.282M
5230MHz_TnomVnom	Pass	Inf	46.15M	36.382M	44.6M	36.432M	64.25M	36.432M	64.65M	36.482M
5270MHz_TnomVnom	Pass	Inf	42.75M	36.332M	42.95M	36.282M	41.75M	36.182M	42.3M	36.282M
5310MHz_TnomVnom	Pass	Inf	43.4M	36.632M	41.95M	36.182M	42.05M	36.332M	42.7M	36.282M
5510MHz_TnomVnom	Pass	Inf	43.1M	36.232M	43.3M	36.332M	41.6M	36.382M	43.1M	36.332M
5550MHz_TnomVnom	Pass	Inf	42.95M	36.332M	43.25M	36.282M	41.9M	36.282M	41.95M	36.282M
5670MHz_TnomVnom	Pass	Inf	42.6M	36.432M	43.35M	36.382M	42.9M	36.382M	42M	36.382M
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	36.82M	33.093M	36.715M	33.128M	36.645M	33.128M	36.26M	33.128M
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	3.12M	3.698M	3.12M	3.658M	3.12M	3.658M	3.12M	3.678M
5755MHz_TnomVnom	Pass	500k	36.4M	36.382M	35.35M	36.482M	36.45M	36.482M	34.95M	36.582M
5795MHz_TnomVnom	Pass	500k	35.65M	36.432M	36.3M	36.582M	36.3M	36.432M	36.45M	36.532M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	Inf	79.8M	75.162M	80.6M	75.262M	79.9M	75.162M	80.1M	75.162M
5290MHz_TnomVnom	Pass	Inf	79.8M	75.462M	80.6M	75.362M	79.6M	75.262M	80.1M	75.362M
5530MHz_TnomVnom	Pass	Inf	80M	75.062M	80.2M	75.362M	79.9M	75.362M	82.5M	75.162M
5610MHz_TnomVnom	Pass	Inf	80.4M	75.362M	80.3M	75.262M	82.3M	75.262M	81.4M	75.162M
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	Inf	75.825M	72.489M	75.15M	72.414M	75.15M	72.489M	75.075M	72.414M
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	500k	2.84M	3.878M	3.1M	3.638M	3.1M	3.638M	3.1M	3.598M
5775MHz_TnomVnom	Pass	500k	74.4M	75.462M	74.9M	75.562M	67.5M	75.362M	71.3M	75.362M

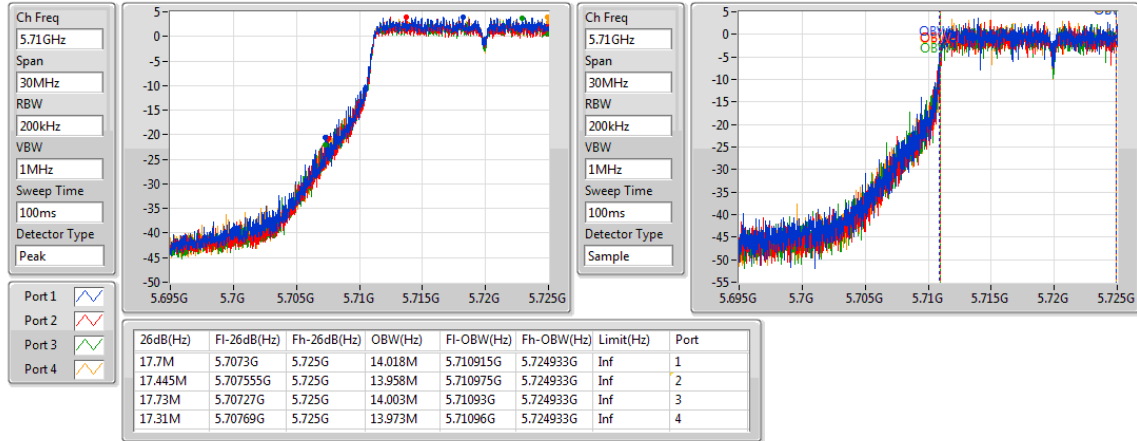
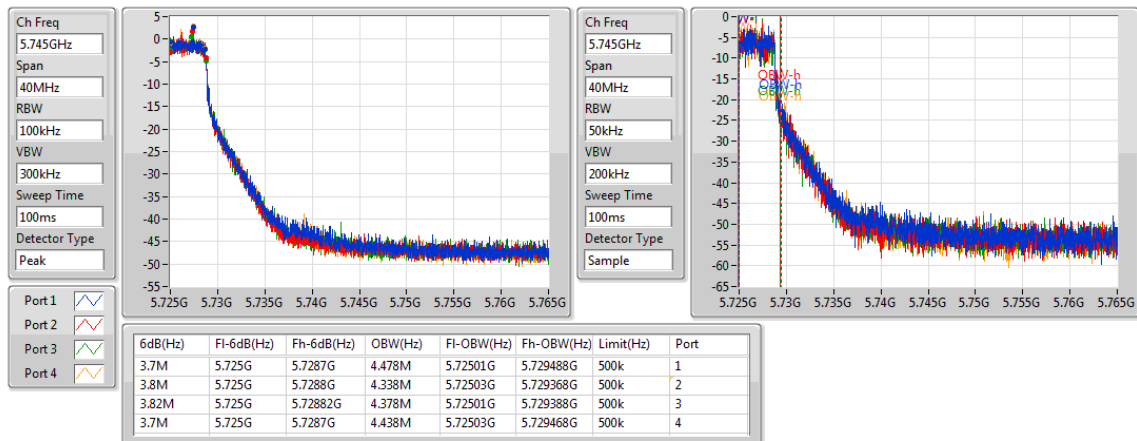
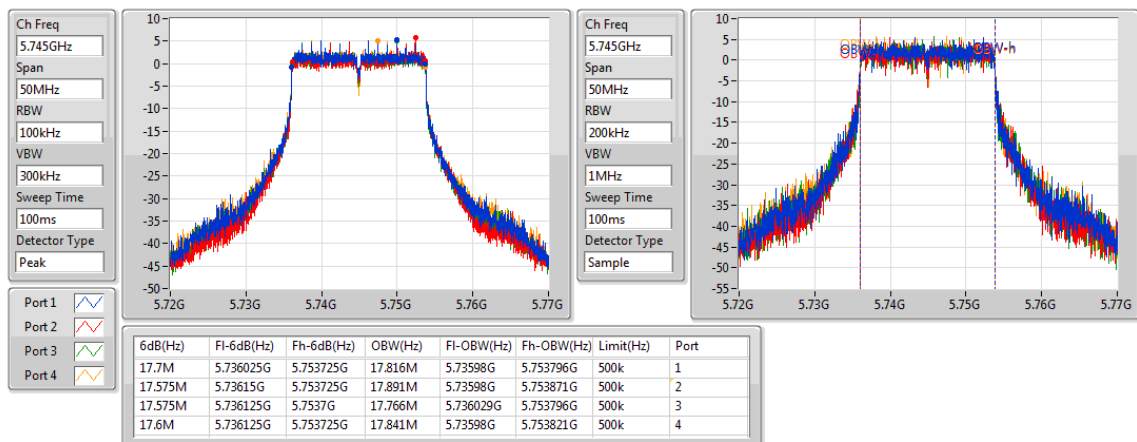
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

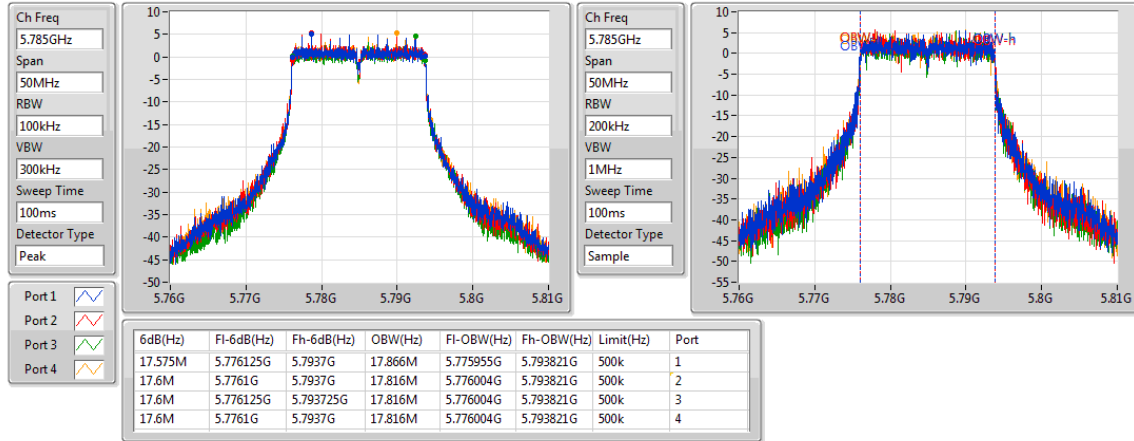
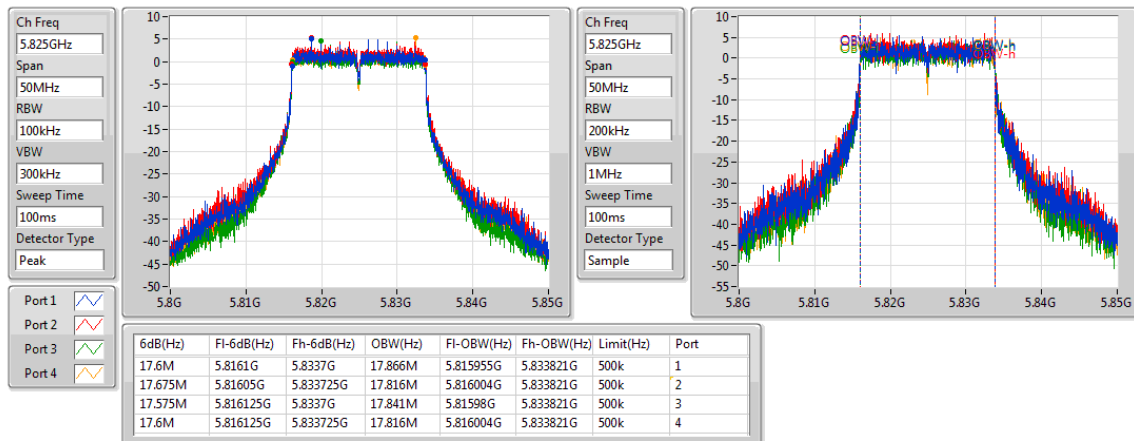
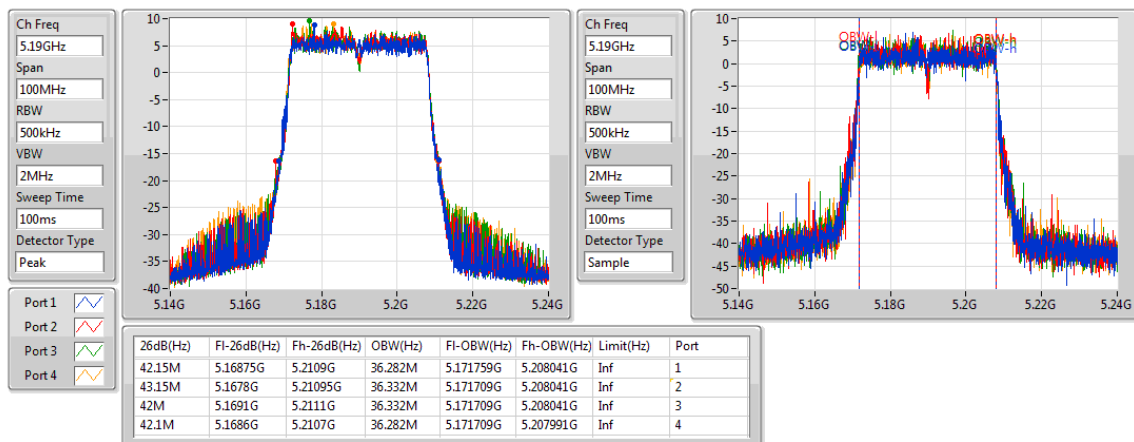
Port X-OBW = Port X 99% occupied bandwidth;

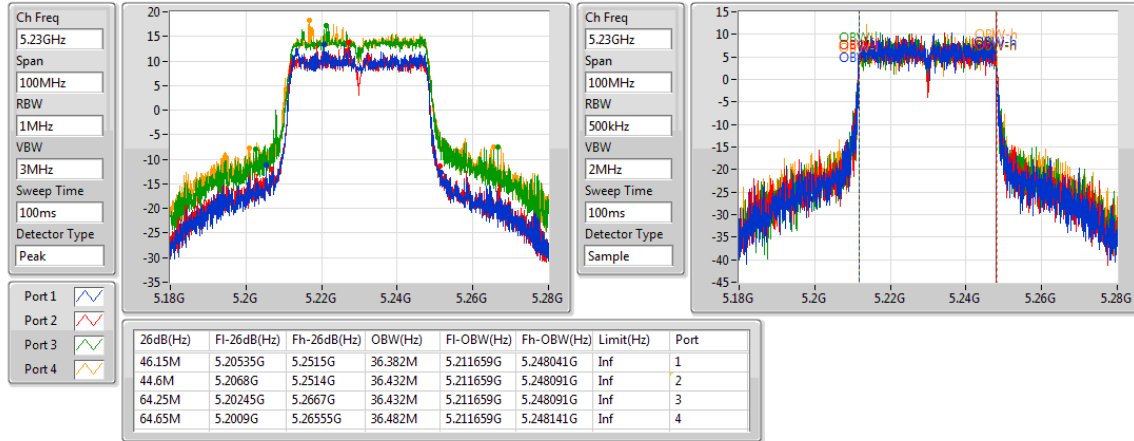
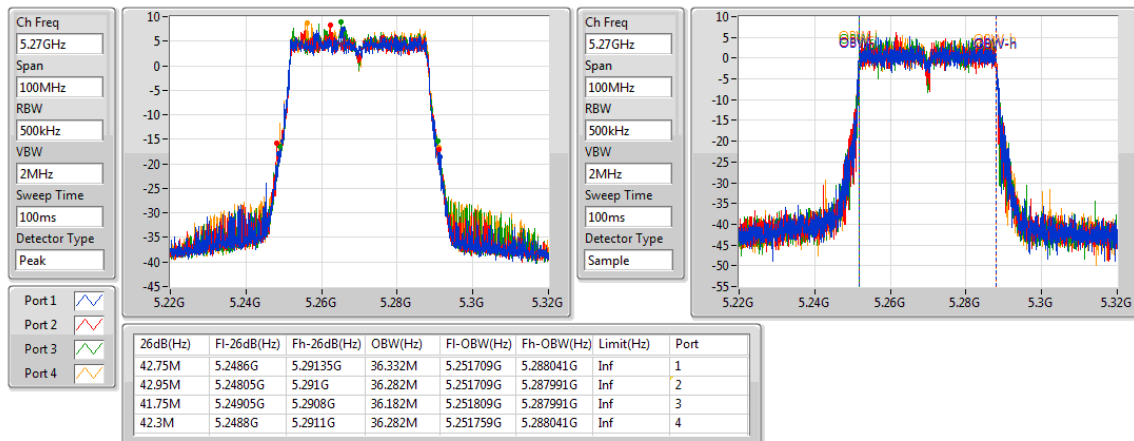
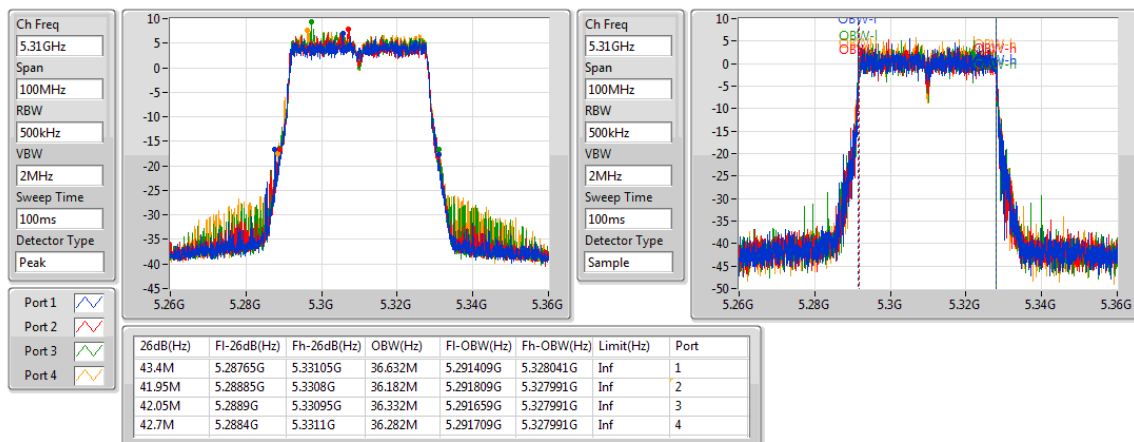
802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5180MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5200MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5240MHz


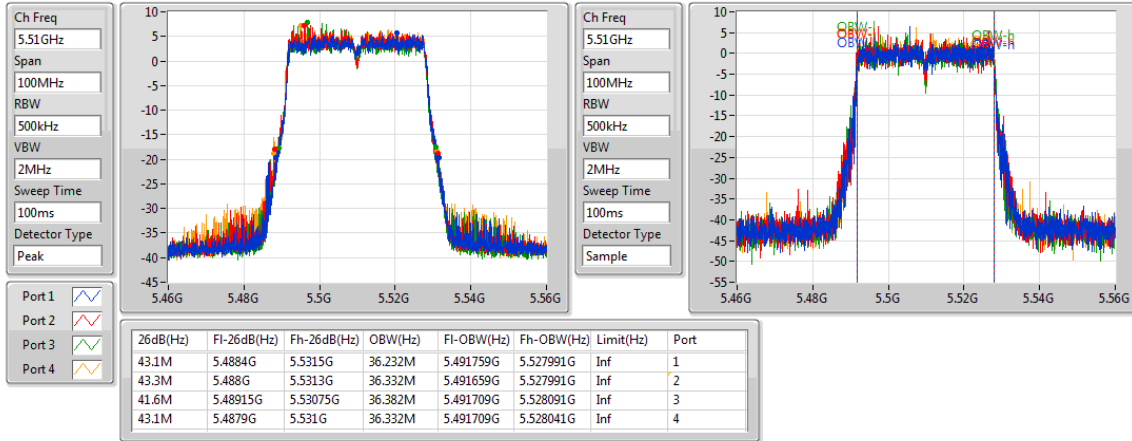
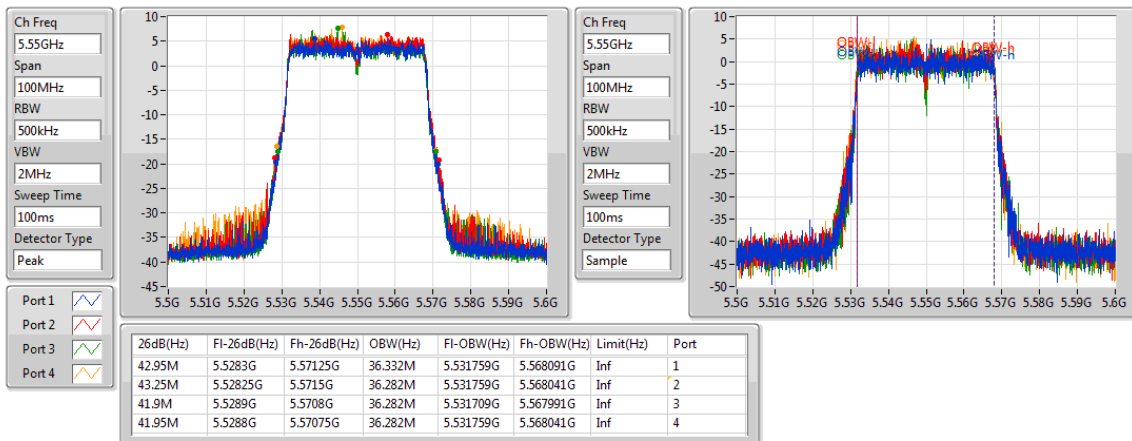
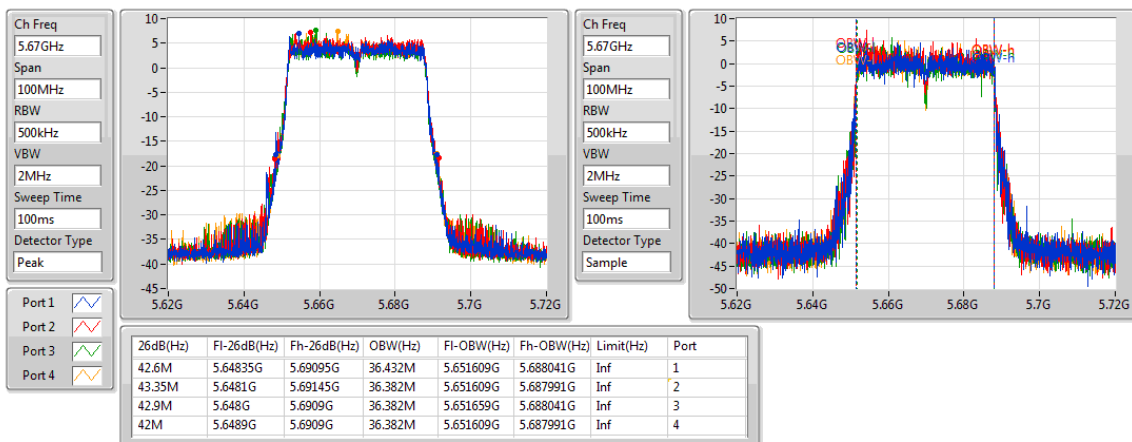
802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5260MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5300MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5320MHz


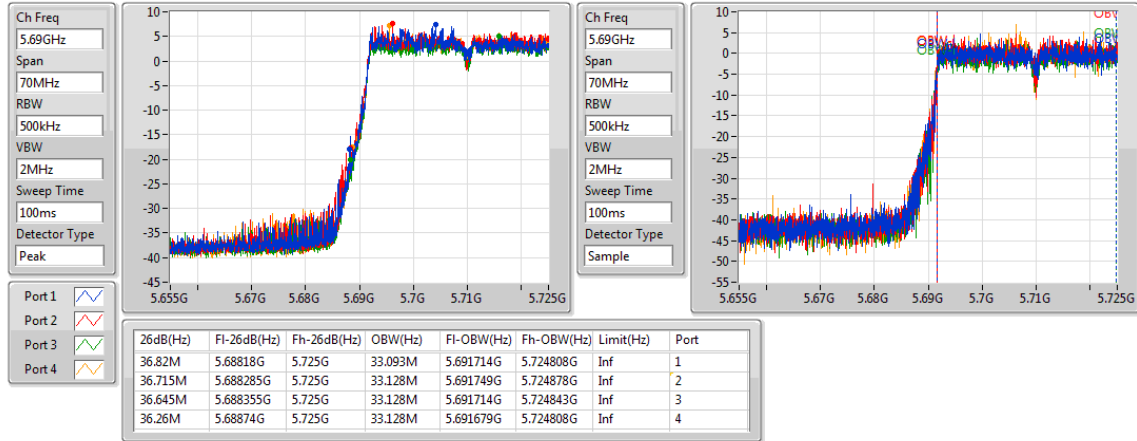
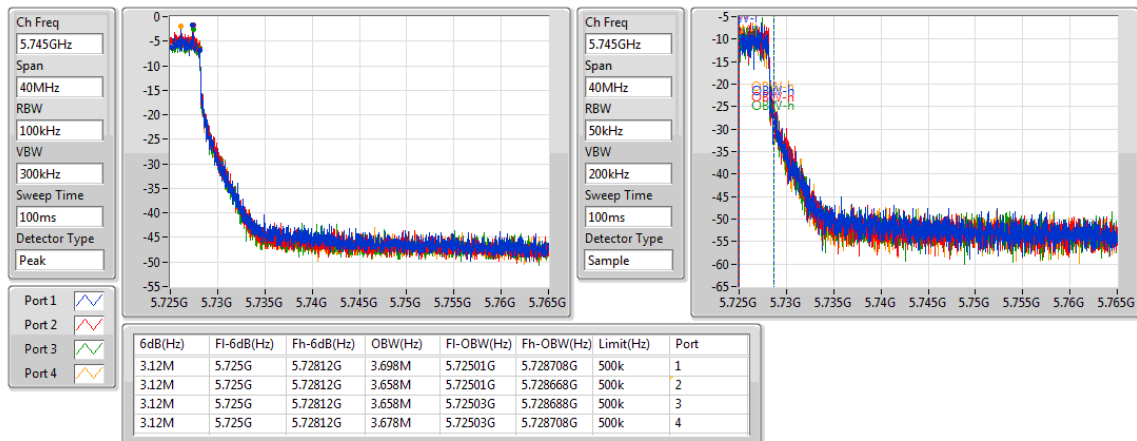
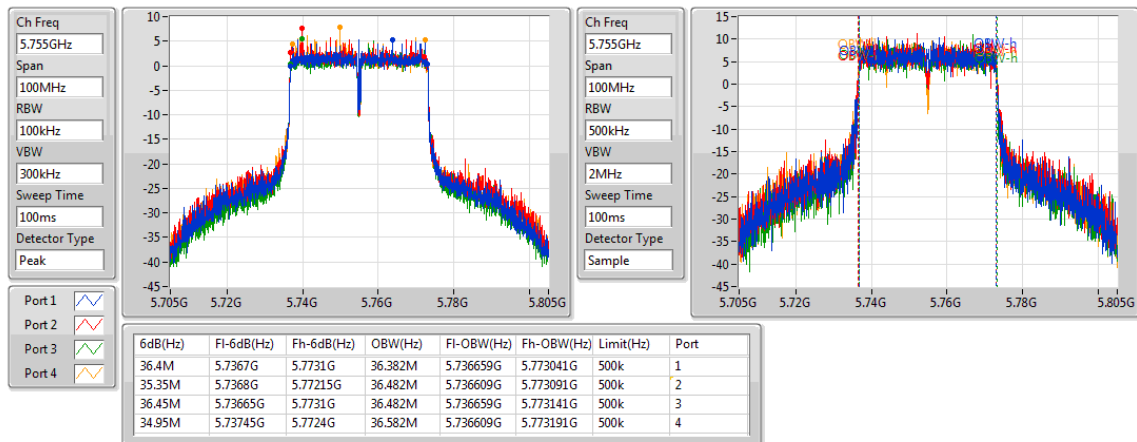
802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz


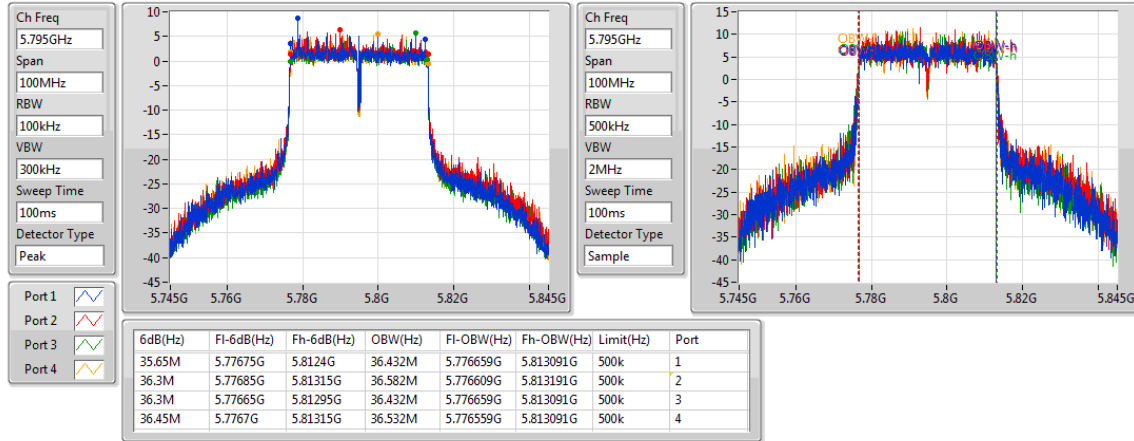
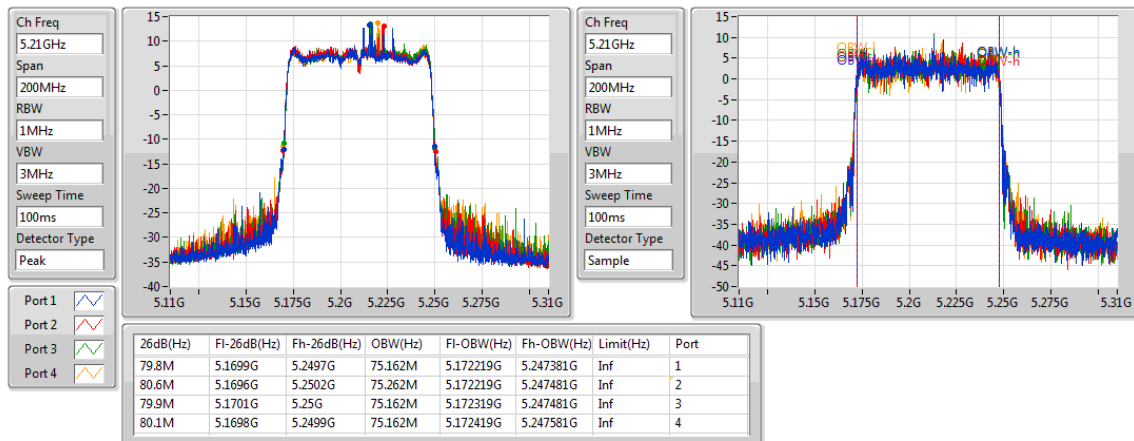
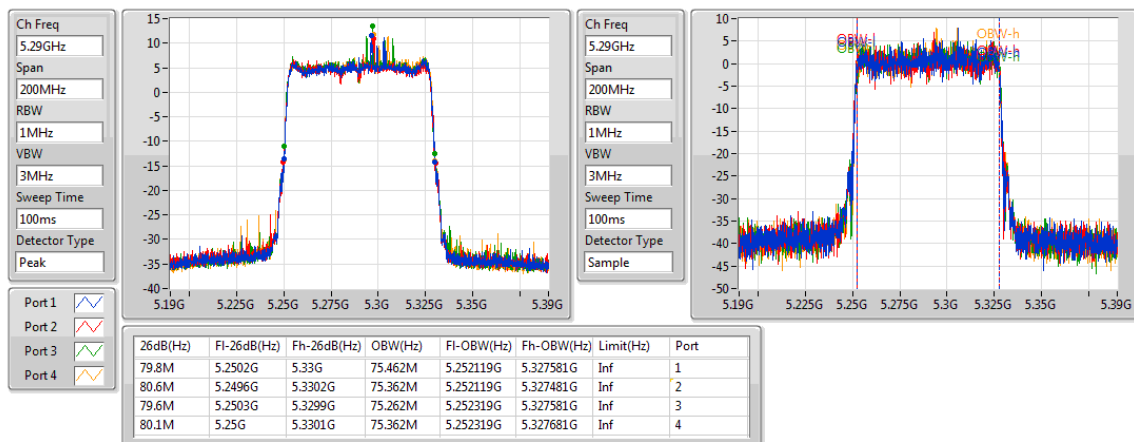
802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5745MHz


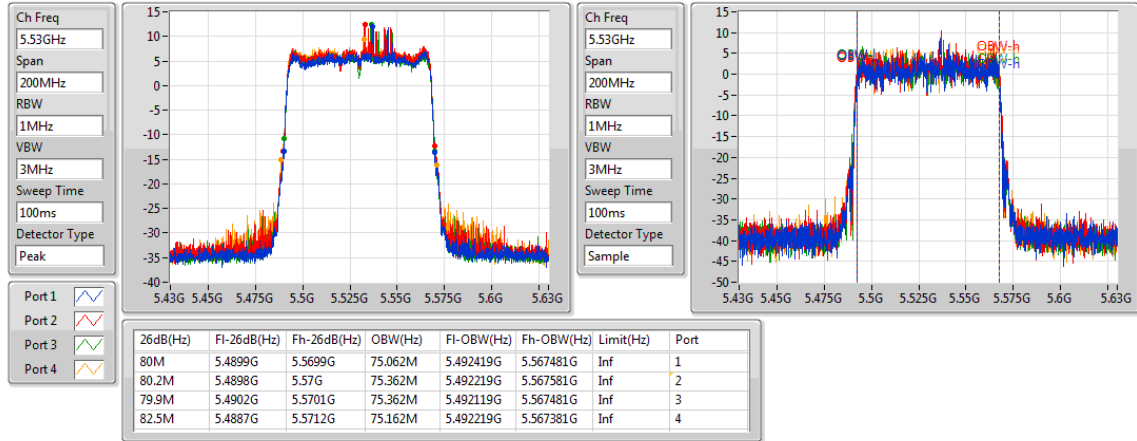
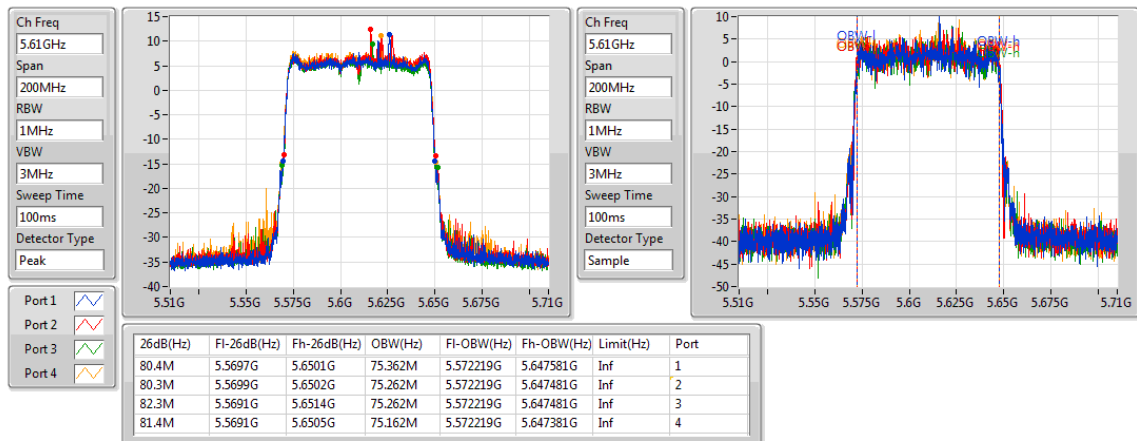
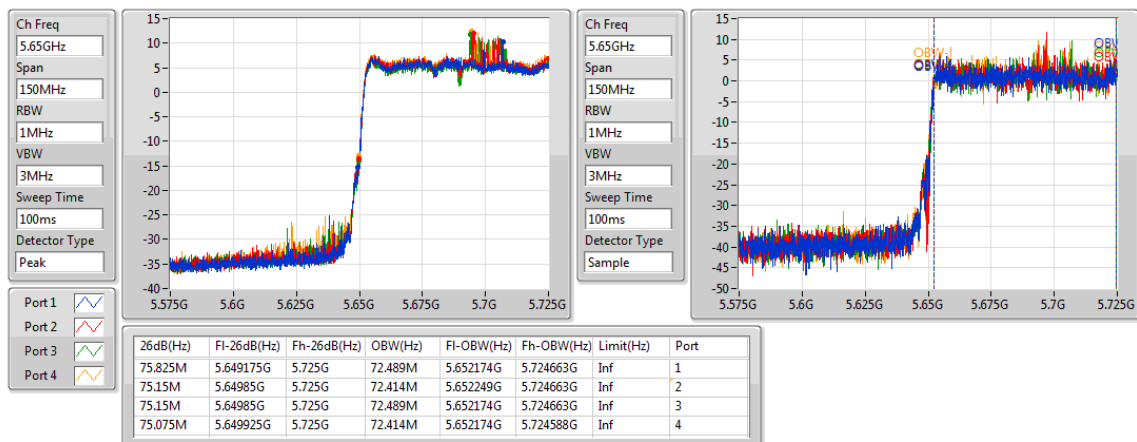
802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5785MHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5825MHz

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


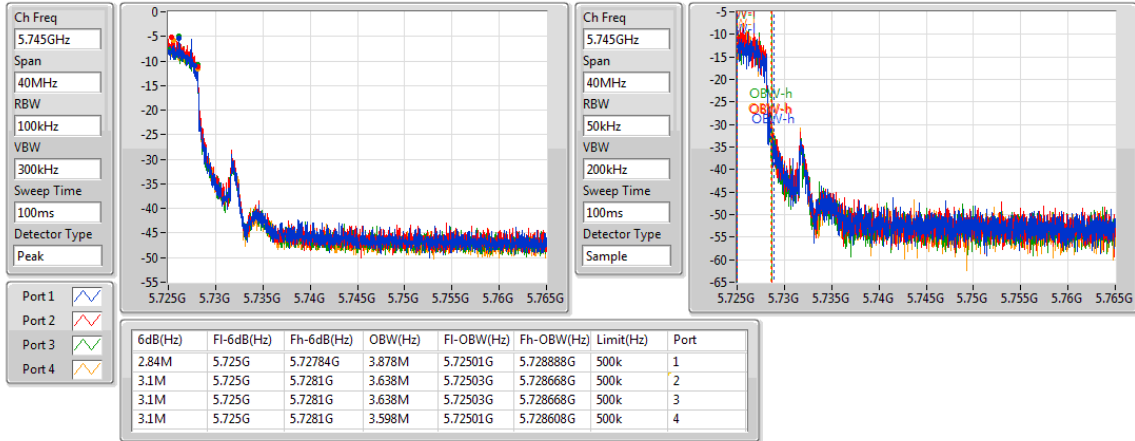
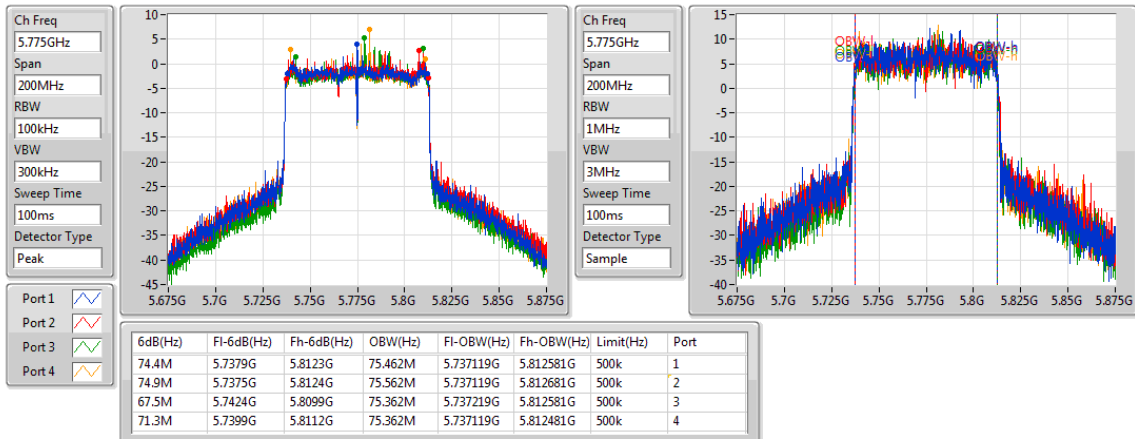
802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5230MHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5270MHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5310MHz


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5550MHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5670MHz


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5755MHz


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5795MHz

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5210MHz

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5290MHz


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5775MHz


Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-
5.15-5.25GHz	24.32	0.27040	28.32	0.67920
5.25-5.35GHz	19.58	0.09078	23.58	0.22803
5.47-5.725GHz	20.20	0.10471	24.20	0.26303
5.725-5.85GHz	24.32	0.27040	28.32	0.67920
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-
5.15-5.25GHz	24.64	0.29107	28.64	0.73114
5.25-5.35GHz	20.50	0.11220	24.50	0.28184
5.47-5.725GHz	20.38	0.10914	24.38	0.27416
5.725-5.85GHz	24.33	0.27102	28.33	0.68077
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-
5.15-5.25GHz	24.39	0.27479	28.39	0.69024
5.25-5.35GHz	23.48	0.22284	27.48	0.55976
5.47-5.725GHz	23.78	0.23878	27.78	0.59979
5.725-5.85GHz	24.68	0.29376	28.68	0.73790
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-
5.15-5.25GHz	19.92	0.09817	23.92	0.24660
5.25-5.35GHz	23.48	0.22284	27.48	0.55976
5.47-5.725GHz	23.91	0.24604	27.91	0.61802
5.725-5.85GHz	23.89	0.24491	27.89	0.61518

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	18.00	18.31	18.48	18.40	24.32	30.00	28.32	36.00
5200MHz	Pass	4.00	18.13	18.26	18.28	18.17	24.23	30.00	28.23	36.00
5240MHz	Pass	4.00	18.02	18.21	18.53	18.38	24.31	30.00	28.31	36.00
5260MHz	Pass	4.00	13.22	13.73	13.46	13.75	19.57	23.98	23.57	30.00
5300MHz	Pass	4.00	13.12	13.37	13.60	13.72	19.48	23.98	23.48	30.00
5320MHz	Pass	4.00	13.11	13.53	13.56	13.99	19.58	23.98	23.58	30.00
5500MHz	Pass	4.00	14.02	14.33	14.13	14.22	20.20	23.98	24.20	30.00
5580MHz	Pass	4.00	13.68	14.35	13.62	14.13	19.98	23.98	23.98	30.00
5700MHz	Pass	4.00	13.87	14.09	13.99	14.08	20.03	23.98	24.03	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.00	13.78	14.00	13.34	13.67	19.72	23.08	23.72	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.00	7.89	8.37	7.30	7.70	13.85	30.00	17.85	36.00
5745MHz	Pass	4.00	18.40	18.68	18.06	18.02	24.32	30.00	28.32	36.00
5785MHz	Pass	4.00	17.68	18.20	17.58	17.49	23.77	30.00	27.77	36.00
5825MHz	Pass	4.00	18.02	18.29	17.53	17.99	23.99	30.00	27.99	36.00
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	4.00	18.36	18.75	18.70	18.65	24.64	30.00	28.64	36.00
5200MHz	Pass	4.00	18.00	18.22	18.30	18.39	24.25	30.00	28.25	36.00
5240MHz	Pass	4.00	18.07	18.57	18.58	18.49	24.45	30.00	28.45	36.00
5260MHz	Pass	4.00	13.23	13.78	13.48	14.05	19.67	23.98	23.67	30.00
5300MHz	Pass	4.00	14.00	14.75	14.47	14.66	20.50	23.98	24.50	30.00
5320MHz	Pass	4.00	14.24	14.34	14.21	14.62	20.38	23.98	24.38	30.00
5500MHz	Pass	4.00	14.22	14.23	14.30	14.68	20.38	23.98	24.38	30.00
5580MHz	Pass	4.00	14.01	14.48	13.75	14.39	20.19	23.98	24.19	30.00
5700MHz	Pass	4.00	14.24	14.47	14.14	14.55	20.37	23.98	24.37	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	4.00	13.51	13.79	13.37	13.80	19.64	23.31	23.64	30.00
5720MHz Straddle 5.725-5.85GHz	Pass	4.00	8.21	8.67	7.83	8.34	14.29	30.00	18.29	36.00
5745MHz	Pass	4.00	18.12	18.60	18.13	18.38	24.33	30.00	28.33	36.00
5785MHz	Pass	4.00	18.26	18.51	17.86	18.22	24.24	30.00	28.24	36.00
5825MHz	Pass	4.00	18.09	18.14	17.61	17.97	23.98	30.00	27.98	36.00
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	4.00	16.07	16.32	16.42	16.34	22.31	30.00	26.31	36.00
5230MHz	Pass	4.00	17.90	18.40	18.76	18.37	24.39	30.00	28.39	36.00
5270MHz	Pass	4.00	16.85	17.47	17.60	17.78	23.46	23.98	27.46	30.00
5310MHz	Pass	4.00	17.14	17.55	17.63	17.51	23.48	23.98	27.48	30.00
5510MHz	Pass	4.00	17.75	17.68	17.74	17.88	23.78	23.98	27.78	30.00
5550MHz	Pass	4.00	17.18	17.53	17.66	17.88	23.59	23.98	27.59	30.00
5670MHz	Pass	4.00	17.25	17.49	16.99	17.42	23.31	23.98	27.31	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	4.00	17.17	17.37	17.16	17.45	23.31	23.98	27.31	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	4.00	7.44	7.62	6.81	7.14	13.28	30.00	17.28	36.00
5755MHz	Pass	4.00	18.54	19.30	18.14	18.57	24.68	30.00	28.68	36.00
5795MHz	Pass	4.00	18.48	18.43	17.72	18.06	24.20	30.00	28.20	36.00
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	4.00	13.71	14.01	13.82	14.06	19.92	30.00	23.92	36.00

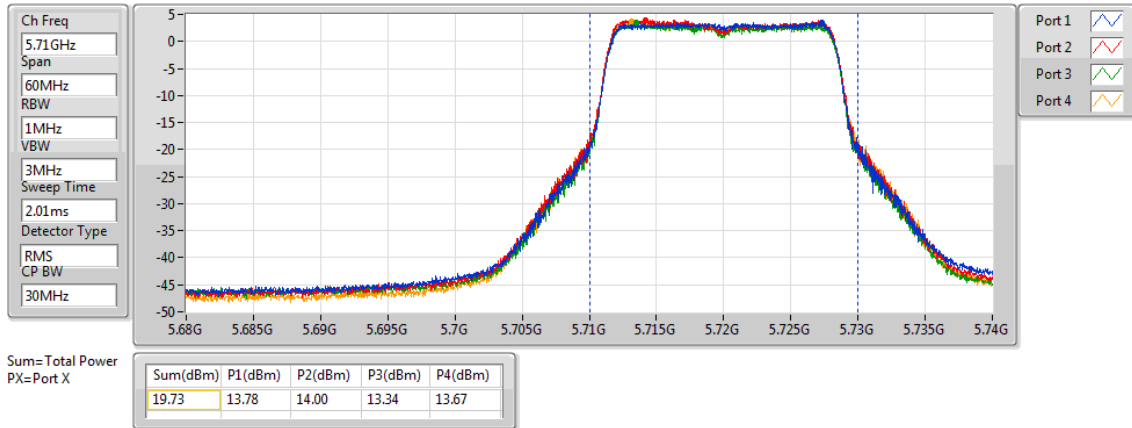
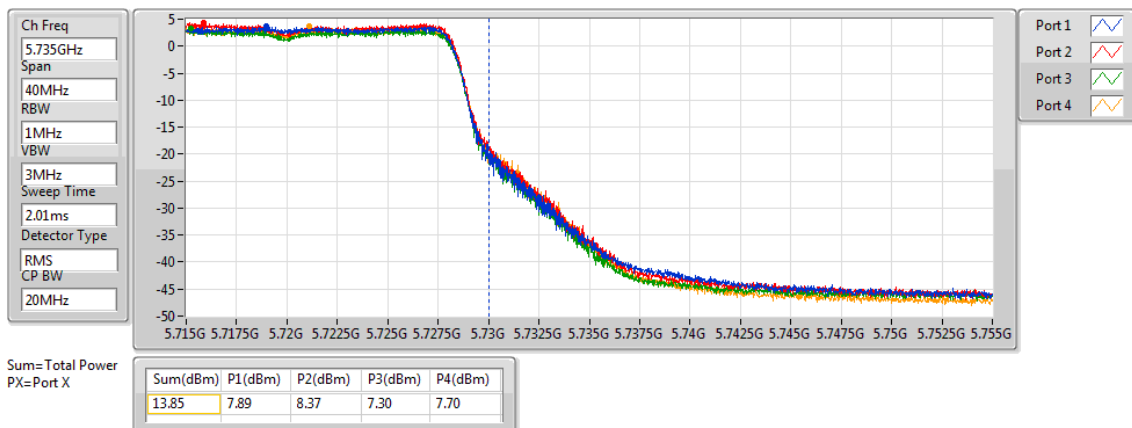
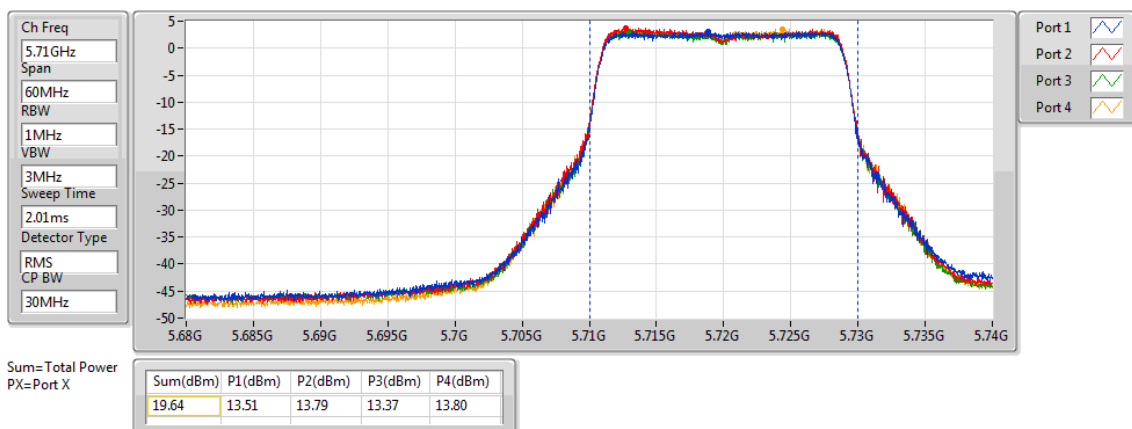


Power Result

Appendix C.1

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)
5290MHz	Pass	4.00	16.84	17.46	17.51	17.94	23.48	23.98	27.48	30.00
5530MHz	Pass	4.00	16.06	16.40	16.01	16.30	22.22	23.98	26.22	30.00
5610MHz	Pass	4.00	17.40	17.40	17.52	17.83	23.56	23.98	27.56	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	4.00	17.99	17.71	17.76	18.08	23.91	23.98	27.91	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	4.00	3.77	4.53	3.39	3.77	9.91	30.00	13.91	36.00
5775MHz	Pass	4.00	17.74	18.13	17.40	18.15	23.89	30.00	27.89	36.00

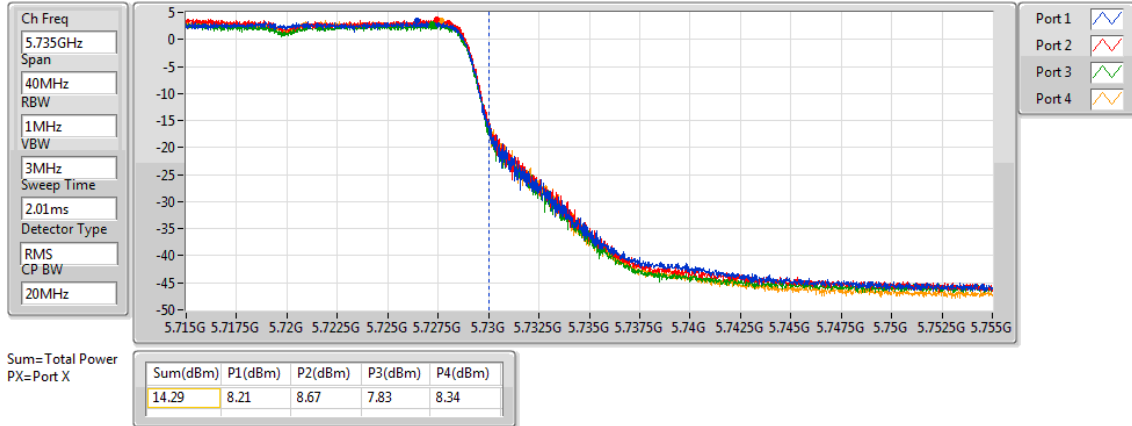
DG = Directional Gain; Port X = Port X output power

802.11a_Nss1,(6Mbps)_4TX
AV Power
5720MHz Straddle 5.47-5.725GHz

802.11a_Nss1,(6Mbps)_4TX
AV Power
5720MHz Straddle 5.725-5.85GHz

802.11ac VHT20_Nss1,(MCS0)_4TX
AV Power
5720MHz Straddle 5.47-5.725GHz


802.11ac VHT20_Nss1,(MCS0)_4TX

AV Power

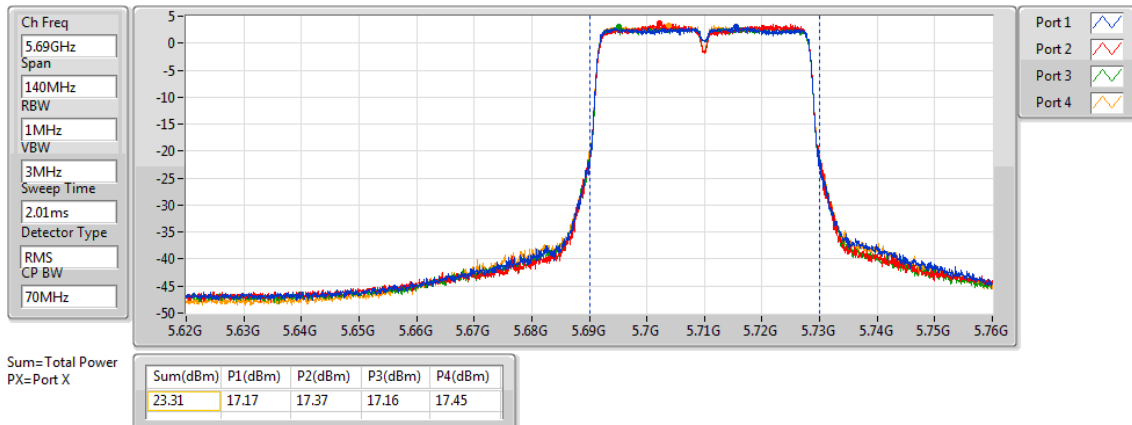
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

AV Power

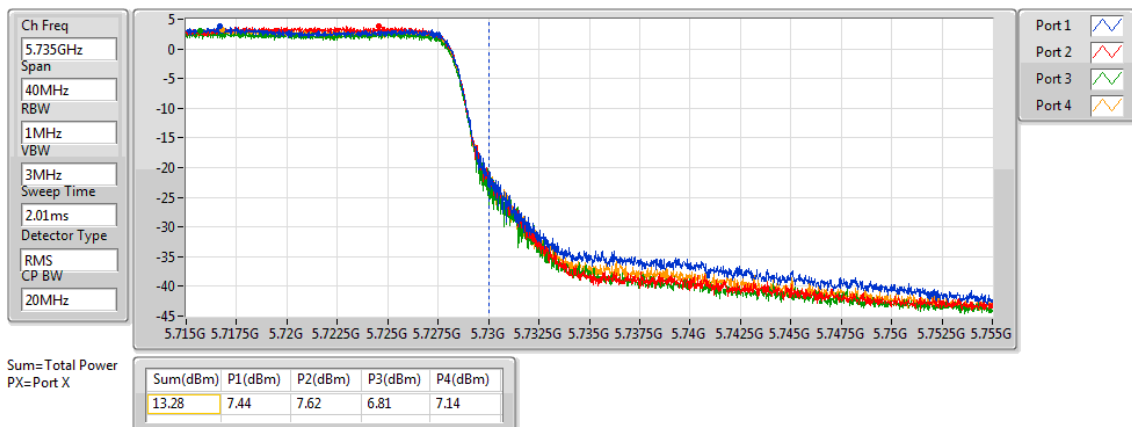
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

AV Power

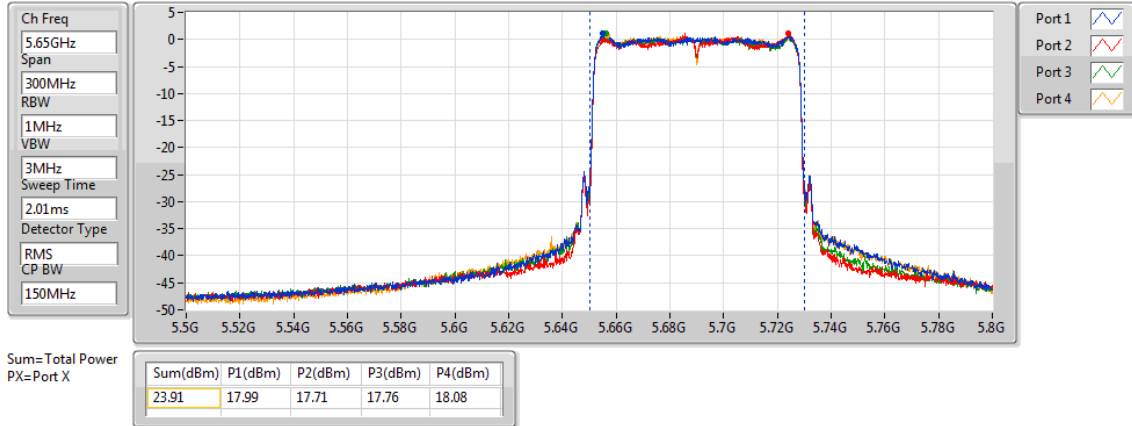
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

AV Power

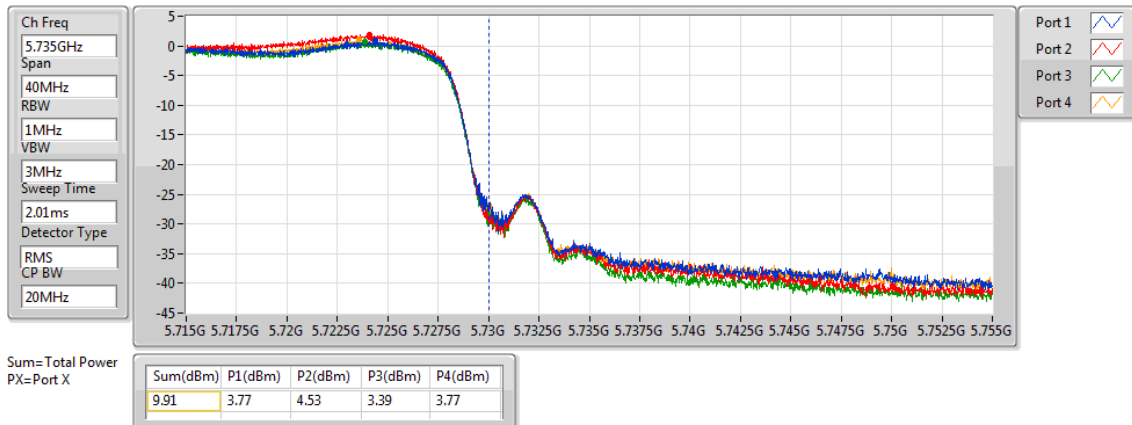
5690MHz Straddle 5.47-5.725GHz



802.11ac VHT80_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz



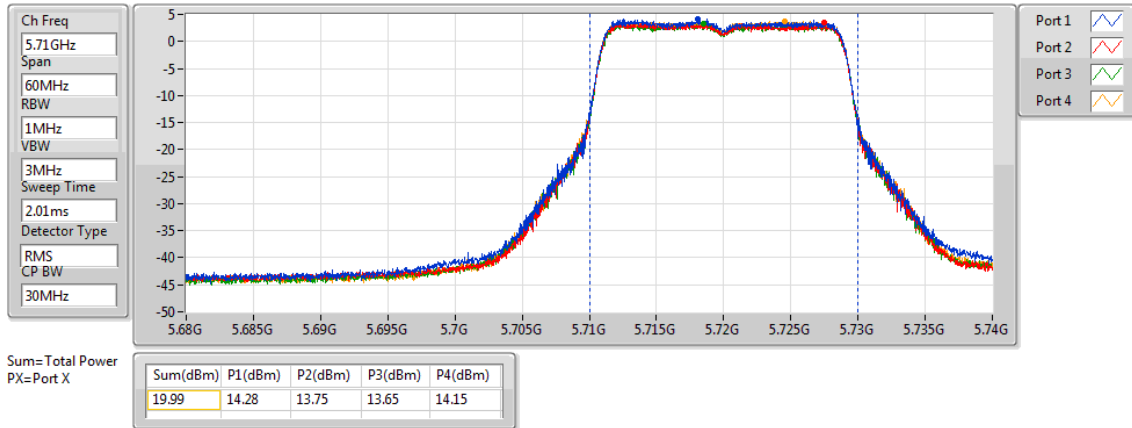
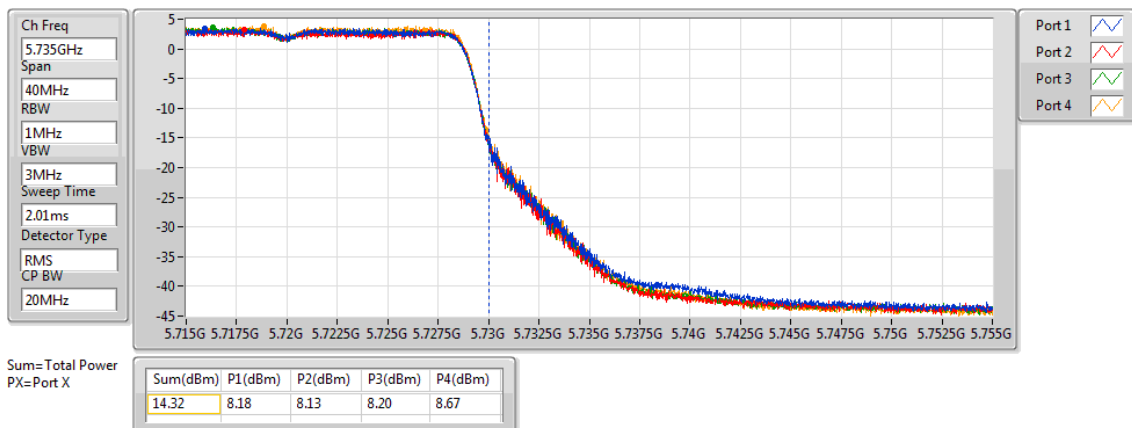
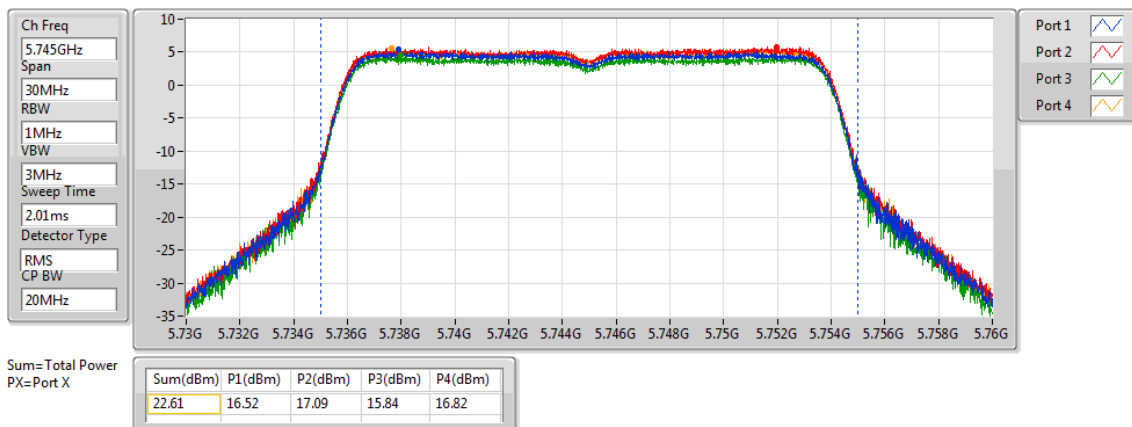
Summary

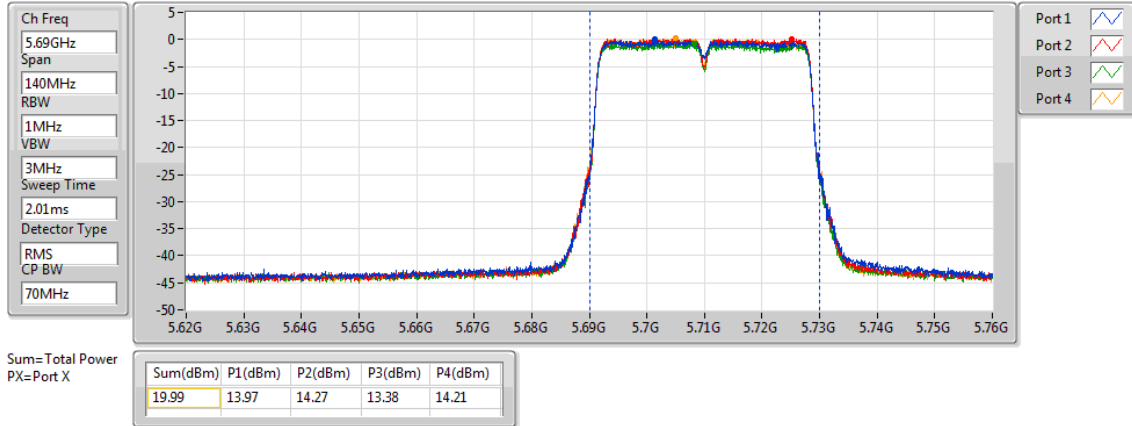
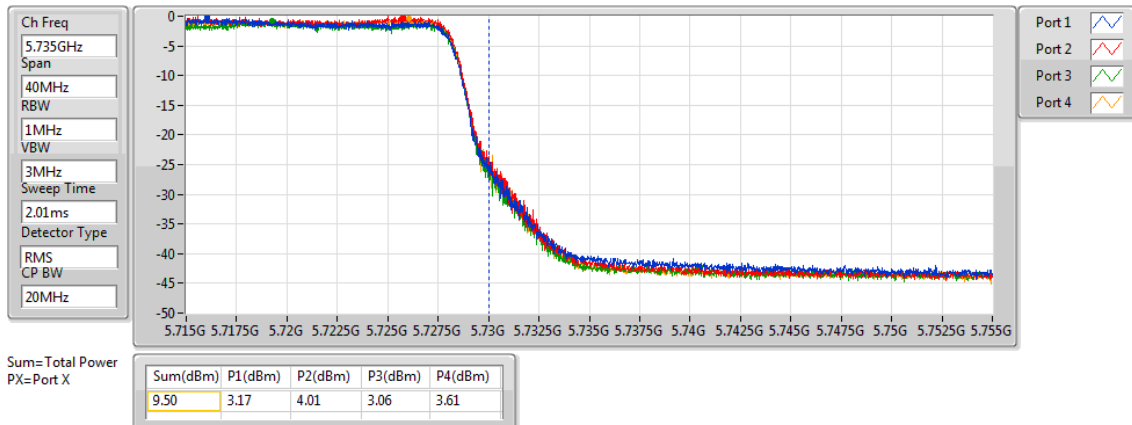
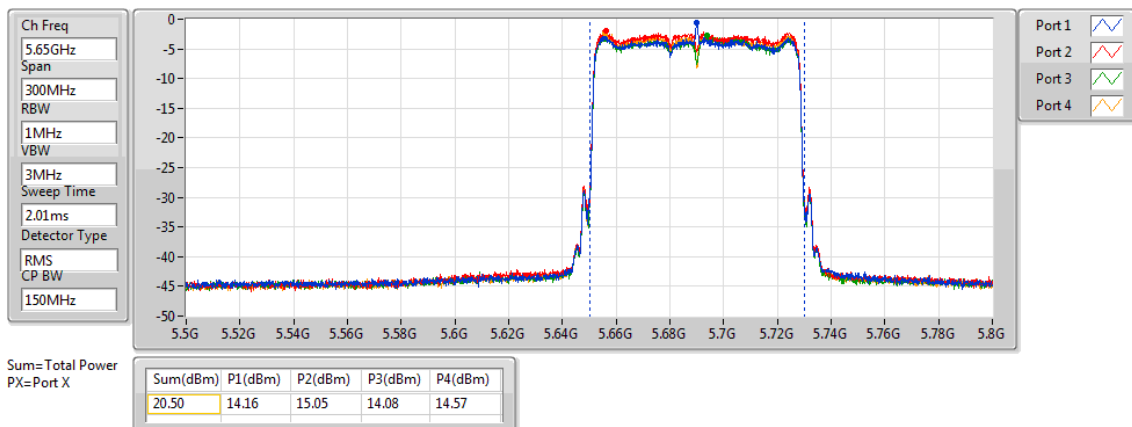
Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-
5.15-5.25GHz	24.24	0.26546	33.28	2.12814
5.25-5.35GHz	20.42	0.11015	29.46	0.88308
5.47-5.725GHz	20.45	0.11092	29.50	0.89125
5.725-5.85GHz	24.36	0.27290	33.40	2.18776
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-
5.15-5.25GHz	24.68	0.29376	33.72	2.35505
5.25-5.35GHz	20.57	0.11402	29.62	0.91622
5.47-5.725GHz	20.41	0.10990	29.45	0.88105
5.725-5.85GHz	24.34	0.27164	33.38	2.17771
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-
5.15-5.25GHz	20.03	0.10069	29.07	0.80724
5.25-5.35GHz	20.74	0.11858	29.78	0.95060
5.47-5.725GHz	20.69	0.11722	29.73	0.93972
5.725-5.85GHz	24.18	0.26182	33.23	2.10378

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_TnomVnom	Pass	9.04	17.86	18.25	18.46	18.07	24.19	26.96	33.23	36.00
5200MHz_TnomVnom	Pass	9.04	17.65	18.21	18.42	18.55	24.24	26.96	33.28	36.00
5240MHz_TnomVnom	Pass	9.04	17.68	17.68	17.87	18.57	23.99	26.96	33.03	36.00
5260MHz_TnomVnom	Pass	9.04	14.02	14.36	14.47	14.67	20.41	20.94	29.45	30.00
5300MHz_TnomVnom	Pass	9.04	13.93	14.13	14.83	14.54	20.39	20.94	29.43	30.00
5320MHz_TnomVnom	Pass	9.04	14.34	13.85	14.66	14.68	20.42	20.94	29.46	30.00
5500MHz_TnomVnom	Pass	9.04	14.64	14.48	14.22	14.35	20.45	20.94	29.49	30.00
5580MHz_TnomVnom	Pass	9.04	14.24	14.55	14.21	14.32	20.35	20.94	29.40	30.00
5700MHz_TnomVnom	Pass	9.04	14.47	14.46	14.29	14.51	20.45	20.94	29.50	30.00
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	9.04	13.28	13.55	13.45	13.15	19.38	20.34	28.42	30.00
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	9.04	8.18	8.13	8.20	8.67	14.32	26.96	23.36	36.00
5745MHz_TnomVnom	Pass	9.04	18.75	18.19	17.62	18.71	24.36	26.96	33.40	36.00
5785MHz_TnomVnom	Pass	9.04	17.58	18.02	18.06	18.54	24.08	26.96	33.13	36.00
5825MHz_TnomVnom	Pass	9.04	18.12	18.25	18.01	18.22	24.17	26.96	33.21	36.00
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	9.04	15.79	16.17	15.91	16.01	21.99	26.96	31.04	36.00
5230MHz_TnomVnom	Pass	9.04	18.55	18.59	18.64	18.85	24.68	26.96	33.72	36.00
5270MHz_TnomVnom	Pass	9.04	13.90	14.84	14.94	14.46	20.57	20.94	29.62	30.00
5310MHz_TnomVnom	Pass	9.04	13.95	14.65	15.00	14.40	20.54	20.94	29.58	30.00
5510MHz_TnomVnom	Pass	9.04	14.29	14.43	14.02	14.77	20.41	20.94	29.45	30.00
5550MHz_TnomVnom	Pass	9.04	13.65	14.66	14.27	14.17	20.22	20.94	29.27	30.00
5670MHz_TnomVnom	Pass	9.04	14.02	14.73	13.96	14.50	20.34	20.94	29.38	30.00
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	9.04	13.97	14.56	13.88	14.42	20.24	20.94	29.28	30.00
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	9.04	3.17	4.01	3.06	3.61	9.50	26.96	18.54	36.00
5755MHz_TnomVnom	Pass	9.04	18.51	18.33	17.86	18.54	24.34	26.96	33.38	36.00
5795MHz_TnomVnom	Pass	9.04	18.19	18.70	18.16	18.17	24.33	26.96	33.37	36.00
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	9.04	13.54	14.14	14.20	14.13	20.03	26.96	29.07	36.00
5290MHz_TnomVnom	Pass	9.04	14.86	14.47	15.21	14.26	20.74	20.94	29.78	30.00
5530MHz_TnomVnom	Pass	9.04	14.27	14.98	14.35	15.03	20.69	20.94	29.73	30.00
5610MHz_TnomVnom	Pass	9.04	14.35	14.89	14.16	14.90	20.61	20.94	29.65	30.00
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	9.04	14.16	15.05	14.08	14.57	20.50	20.94	29.55	30.00
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	9.04	-0.33	0.78	-0.06	-0.06	6.12	26.96	15.17	36.00
5775MHz_TnomVnom	Pass	9.04	18.45	18.51	17.11	18.43	24.18	26.96	33.23	36.00

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

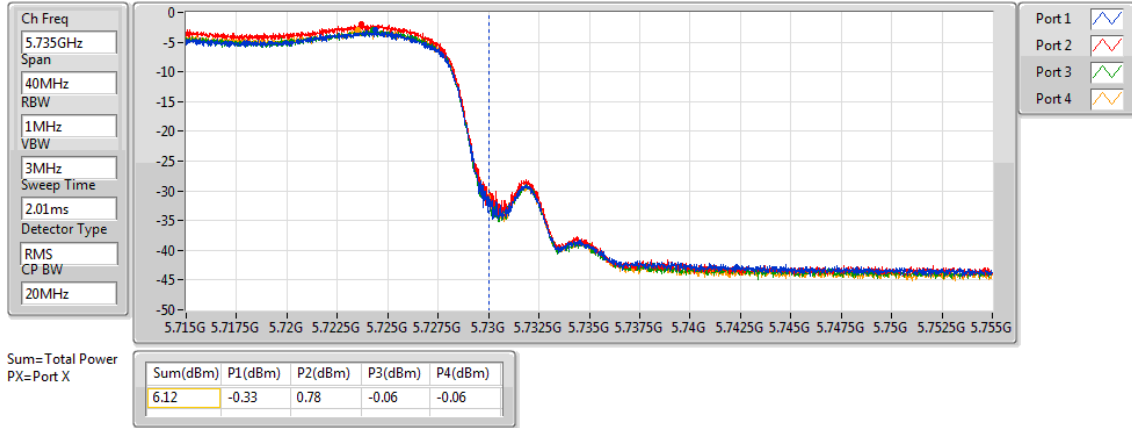
802.11ac VHT20-BF_Nss1,(MCS0)_4TX
AV Power
5720MHz Straddle 5.47-5.725GHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
AV Power
5720MHz Straddle 5.725-5.85GHz

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
AV Power
5745MHz


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
AV Power
5710MHz Straddle 5.47-5.725GHz

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
AV Power
5710MHz Straddle 5.725-5.85GHz

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
AV Power
5690MHz Straddle 5.47-5.725GHz


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

AV Power

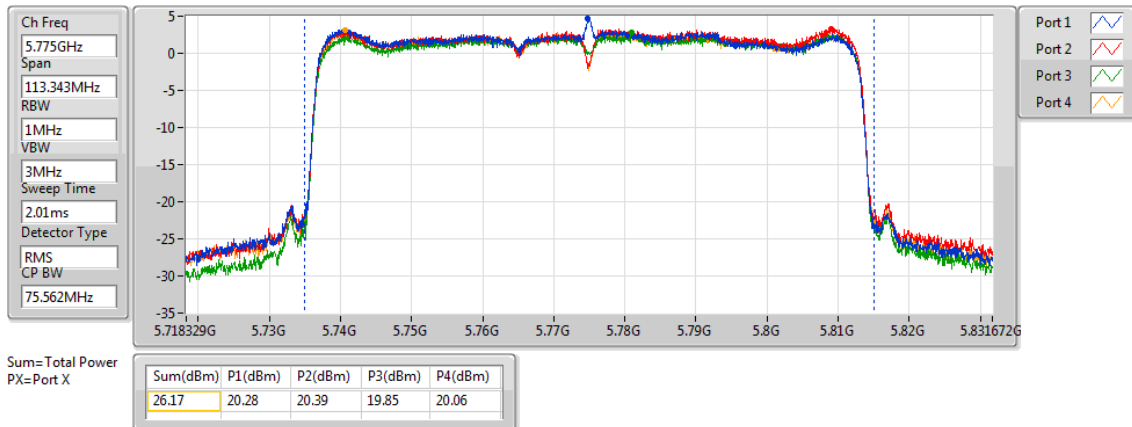
5690MHz Straddle 5.725-5.85GHz



802.11ac VHT80-BF_Nss1,(MCS0)_4TX

AV Power

5775MHz



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
802.11a_Nss1,(6Mbps)_4TX	-	-
5.15-5.25GHz	11.94	20.98
5.25-5.35GHz	7.44	16.48
5.47-5.725GHz	7.89	16.93
5.725-5.85GHz	10.26	19.30
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-
5.15-5.25GHz	11.88	20.92
5.25-5.35GHz	7.92	16.96
5.47-5.725GHz	7.64	16.68
5.725-5.85GHz	9.89	18.93
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-
5.15-5.25GHz	8.14	17.18
5.25-5.35GHz	7.34	16.38
5.47-5.725GHz	7.66	16.70
5.725-5.85GHz	7.22	16.26
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-
5.15-5.25GHz	2.70	11.74
5.25-5.35GHz	5.63	14.67
5.47-5.725GHz	5.11	14.15
5.725-5.85GHz	4.22	13.26

RBW = 500kHz 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	9.04	5.95	6.24	6.49	6.24	11.80	13.96	20.84	Inf
5200MHz	Pass	9.04	6.03	6.31	6.29	6.21	11.70	13.96	20.74	Inf
5240MHz	Pass	9.04	6.17	6.21	6.76	6.73	11.94	13.96	20.98	Inf
5260MHz	Pass	9.04	1.59	1.75	1.68	1.99	7.28	7.96	16.32	Inf
5300MHz	Pass	9.04	1.39	1.52	1.83	1.82	7.28	7.96	16.32	Inf
5320MHz	Pass	9.04	1.42	1.58	2.07	2.27	7.44	7.96	16.48	Inf
5500MHz	Pass	9.04	2.20	2.30	2.30	2.09	7.73	7.96	16.77	Inf
5580MHz	Pass	9.04	1.56	2.79	1.36	2.08	7.48	7.96	16.52	Inf
5700MHz	Pass	9.04	2.03	2.19	2.02	2.13	7.75	7.96	16.79	Inf
5720MHz Straddle 5.47-5.725GHz	Pass	9.04	1.98	2.53	1.70	2.18	7.89	7.96	16.93	Inf
5720MHz Straddle 5.725-5.85GHz	Pass	9.04	0.82	1.26	0.11	0.72	6.43	26.96	15.47	Inf
5745MHz	Pass	9.04	4.63	5.17	4.30	4.03	10.21	26.96	19.25	Inf
5785MHz	Pass	9.04	4.42	5.31	4.26	4.14	10.11	26.96	19.15	Inf
5825MHz	Pass	9.04	4.52	5.17	4.21	4.46	10.26	26.96	19.30	Inf
802.11ac VHT20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	9.04	6.40	6.30	6.46	6.18	11.80	13.96	20.84	Inf
5200MHz	Pass	9.04	5.72	6.02	6.01	5.99	11.54	13.96	20.58	Inf
5240MHz	Pass	9.04	5.91	6.53	6.61	6.38	11.88	13.96	20.92	Inf
5260MHz	Pass	9.04	1.24	1.69	1.22	1.81	7.21	7.96	16.25	Inf
5300MHz	Pass	9.04	1.74	2.58	2.39	2.49	7.92	7.96	16.96	Inf
5320MHz	Pass	9.04	2.16	2.18	2.71	2.58	7.91	7.96	16.95	Inf
5500MHz	Pass	9.04	1.79	1.82	1.92	2.24	7.49	7.96	16.53	Inf
5580MHz	Pass	9.04	1.49	2.19	1.23	2.40	7.63	7.96	16.67	Inf
5700MHz	Pass	9.04	2.13	2.27	1.73	2.28	7.58	7.96	16.62	Inf
5720MHz Straddle 5.47-5.725GHz	Pass	9.04	1.53	2.29	1.88	2.00	7.64	7.96	16.68	Inf
5720MHz Straddle 5.725-5.85GHz	Pass	9.04	0.17	0.73	-0.20	0.55	6.09	26.96	15.13	Inf
5745MHz	Pass	9.04	3.91	5.15	3.82	3.84	9.89	26.96	18.93	Inf
5785MHz	Pass	9.04	4.04	4.47	4.14	4.18	9.80	26.96	18.84	Inf
5825MHz	Pass	9.04	3.83	4.79	3.90	3.86	9.74	26.96	18.78	Inf
802.11ac VHT40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	9.04	0.42	0.48	0.55	0.78	6.08	13.96	15.12	Inf
5230MHz	Pass	9.04	2.29	2.44	2.85	2.50	8.14	13.96	17.18	Inf
5270MHz	Pass	9.04	1.22	1.79	1.88	2.05	7.34	7.96	16.38	Inf
5310MHz	Pass	9.04	1.30	1.68	1.71	1.75	7.23	7.96	16.27	Inf
5510MHz	Pass	9.04	1.89	1.76	2.07	2.19	7.66	7.96	16.70	Inf
5550MHz	Pass	9.04	1.37	1.85	2.00	2.21	7.44	7.96	16.48	Inf
5670MHz	Pass	9.04	1.55	1.92	1.14	1.87	7.18	7.96	16.22	Inf
5710MHz Straddle 5.47-5.725GHz	Pass	9.04	1.67	2.37	1.63	1.84	7.48	7.96	16.52	Inf
5710MHz Straddle 5.725-5.85GHz	Pass	9.04	0.39	0.70	-0.26	-0.00	6.03	26.96	15.07	Inf
5755MHz	Pass	9.04	1.28	1.75	0.83	1.36	6.92	26.96	15.96	Inf
5795MHz	Pass	9.04	1.63	2.25	1.28	1.39	7.22	26.96	16.26	Inf
802.11ac VHT80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	9.04	-2.08	-2.98	-2.76	-2.91	2.70	13.96	11.74	Inf

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)
5290MHz	Pass	9.04	-0.89	-0.30	-0.34	0.55	5.63	7.96	14.67	Inf
5530MHz	Pass	9.04	-1.42	-0.73	-1.99	-1.83	4.00	7.96	13.04	Inf
5610MHz	Pass	9.04	-1.22	-1.28	-1.27	-1.09	4.43	7.96	13.47	Inf
5690MHz Straddle 5.47-5.725GHz	Pass	9.04	-0.98	-0.42	-0.72	-0.15	5.11	7.96	14.15	Inf
5690MHz Straddle 5.725-5.85GHz	Pass	9.04	-2.50	-1.16	-2.42	-2.39	3.81	26.96	12.85	Inf
5775MHz	Pass	9.04	-0.98	-1.09	-1.84	-1.36	4.22	26.96	13.26	Inf

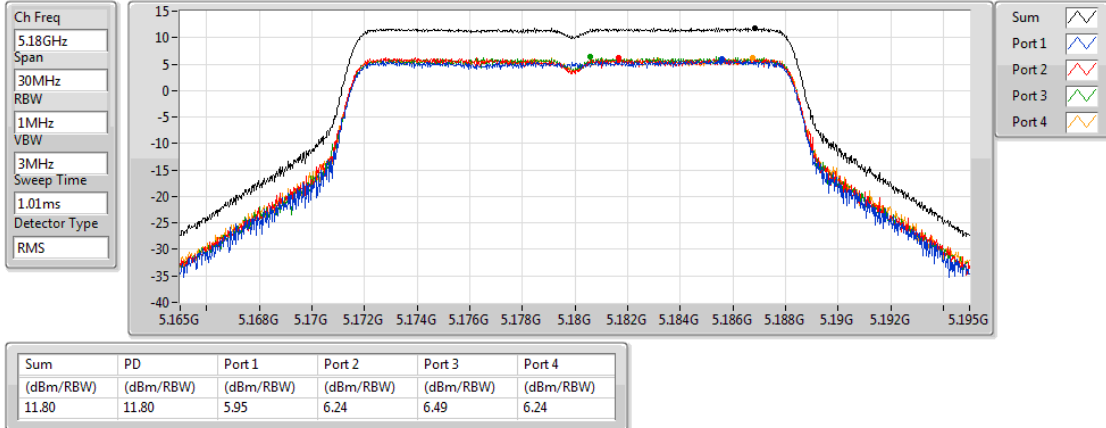
DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

802.11a_Nss1,(6Mbps)_4TX

PSD

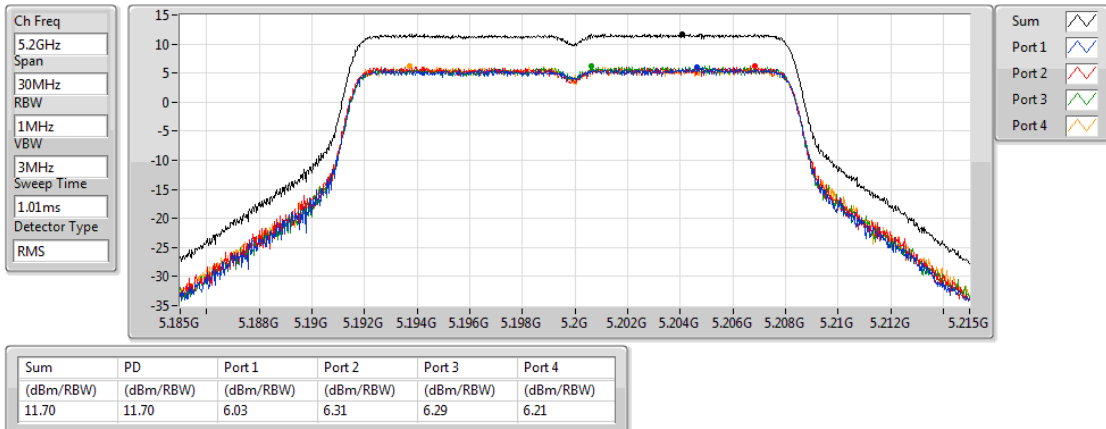
5180MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

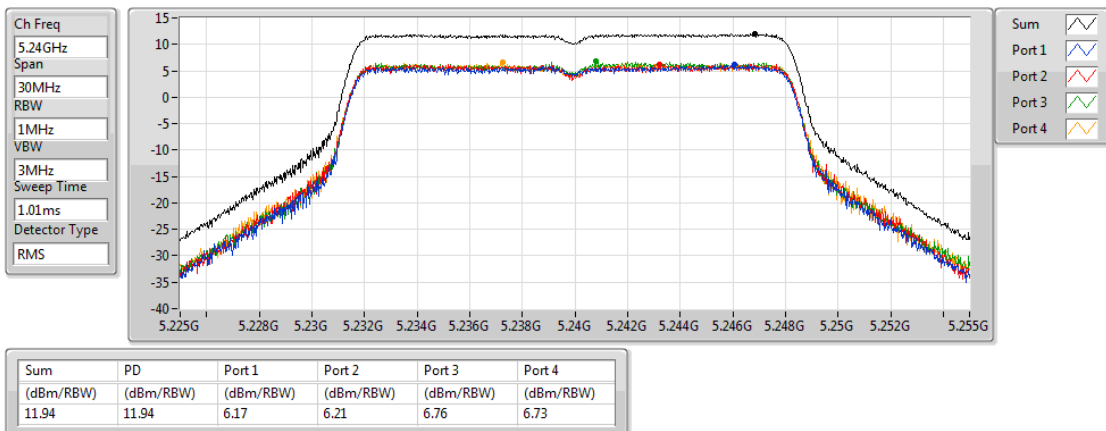
5200MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

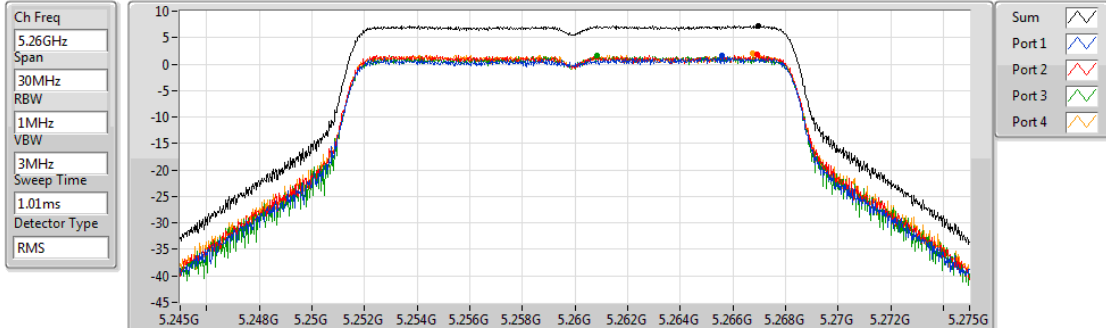
5240MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

5260MHz

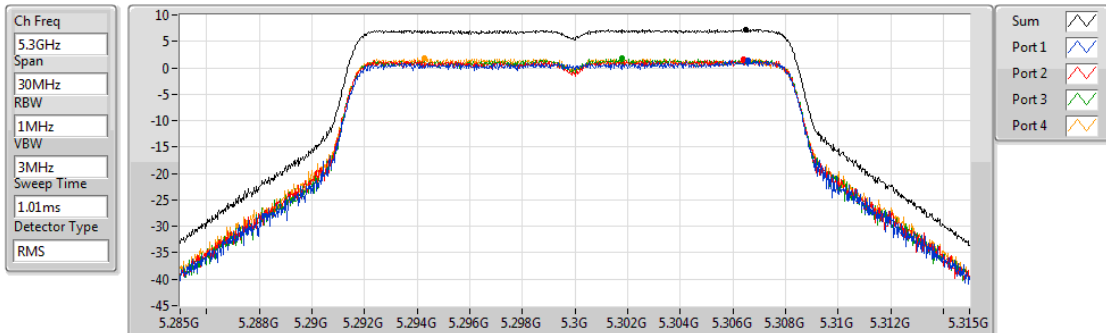


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.28	7.28	1.59	1.75	1.68	1.99

802.11a_Nss1,(6Mbps)_4TX

PSD

5300MHz

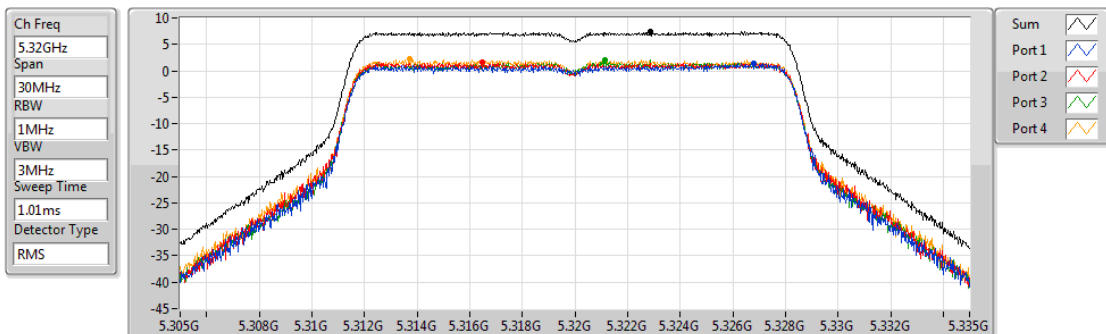


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.28	7.28	1.39	1.52	1.83	1.82

802.11a_Nss1,(6Mbps)_4TX

PSD

5320MHz

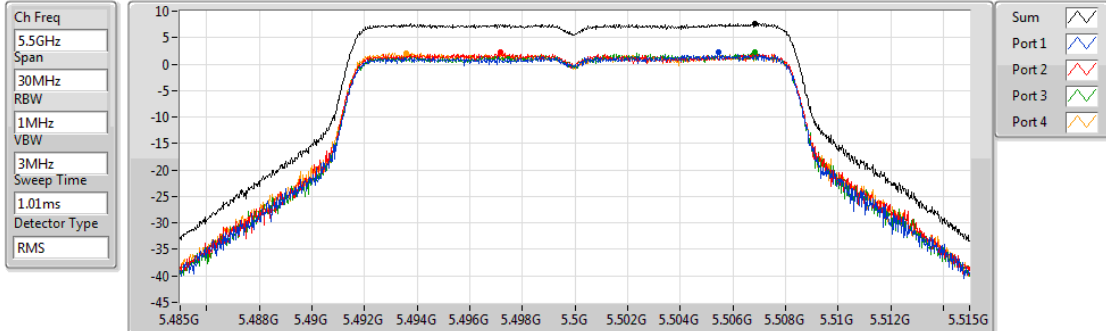


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.44	7.44	1.42	1.58	2.07	2.27

802.11a_Nss1,(6Mbps)_4TX

PSD

5500MHz

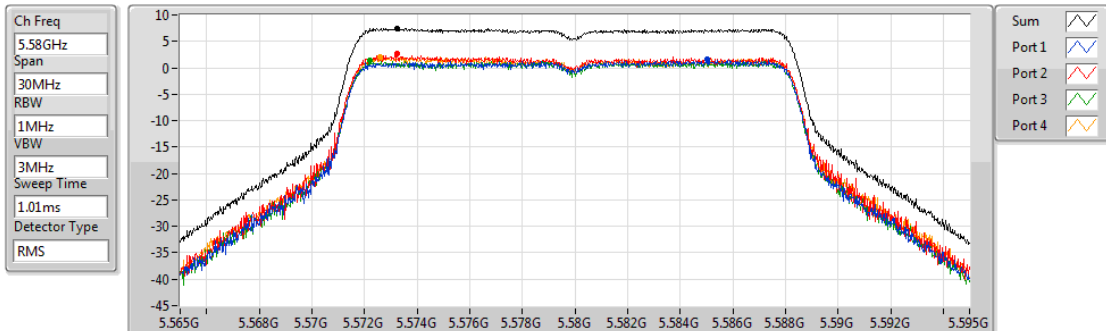


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.73	7.73	2.20	2.30	2.30	2.09

802.11a_Nss1,(6Mbps)_4TX

PSD

5580MHz

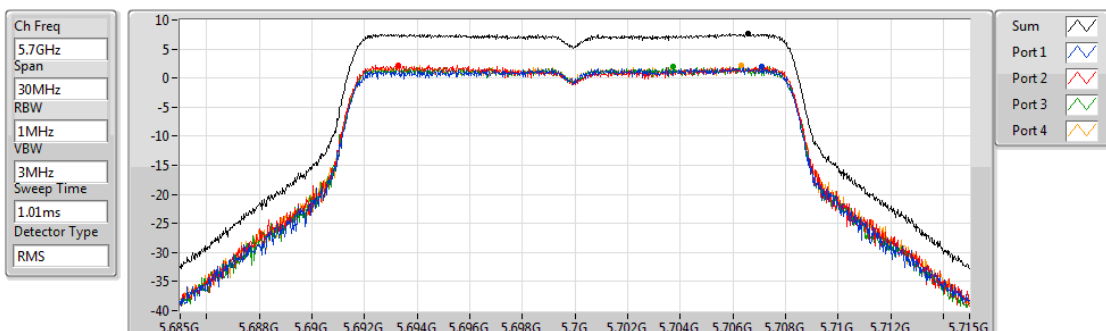


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.48	7.48	1.56	2.79	1.36	2.08

802.11a_Nss1,(6Mbps)_4TX

PSD

5700MHz

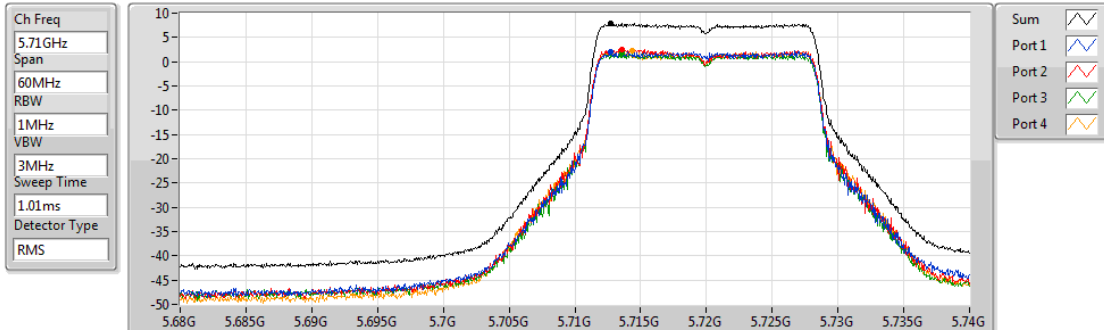


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.75	7.75	2.03	2.19	2.02	2.13

802.11a_Nss1,(6Mbps)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

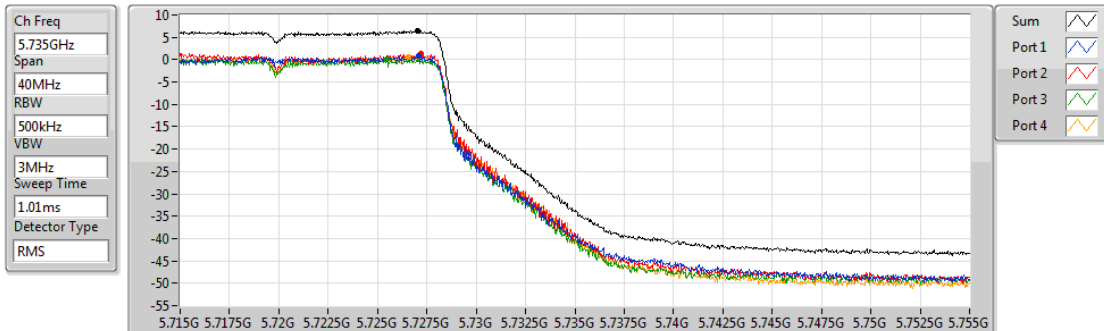


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.89	7.89	1.98	2.53	1.70	2.18

802.11a_Nss1,(6Mbps)_4TX

PSD

5720MHz Straddle 5.725-5.85GHz

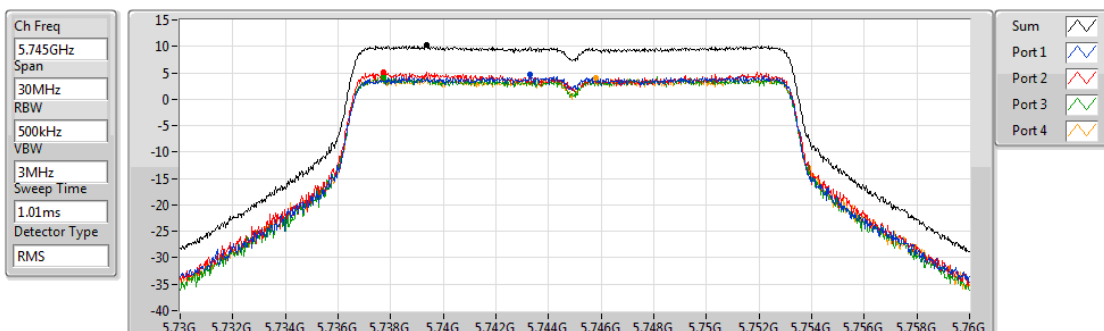


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.43	6.43	0.82	1.26	0.11	0.72

802.11a_Nss1,(6Mbps)_4TX

PSD

5745MHz

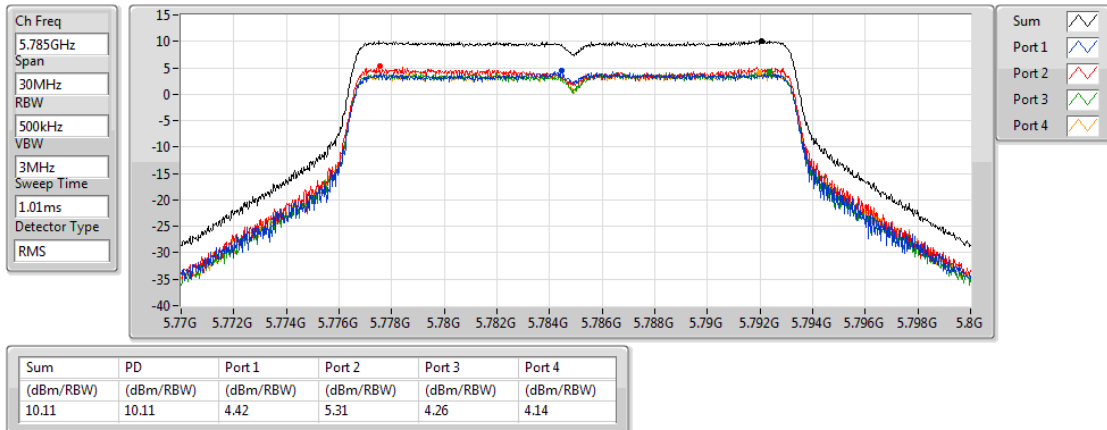


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.21	10.21	4.63	5.17	4.30	4.03

802.11a_Nss1,(6Mbps)_4TX

PSD

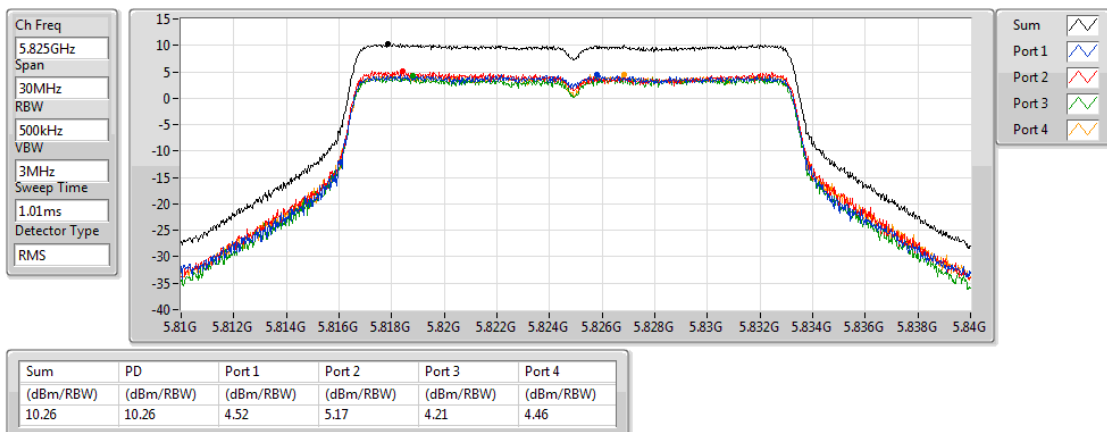
5785MHz



802.11a_Nss1,(6Mbps)_4TX

PSD

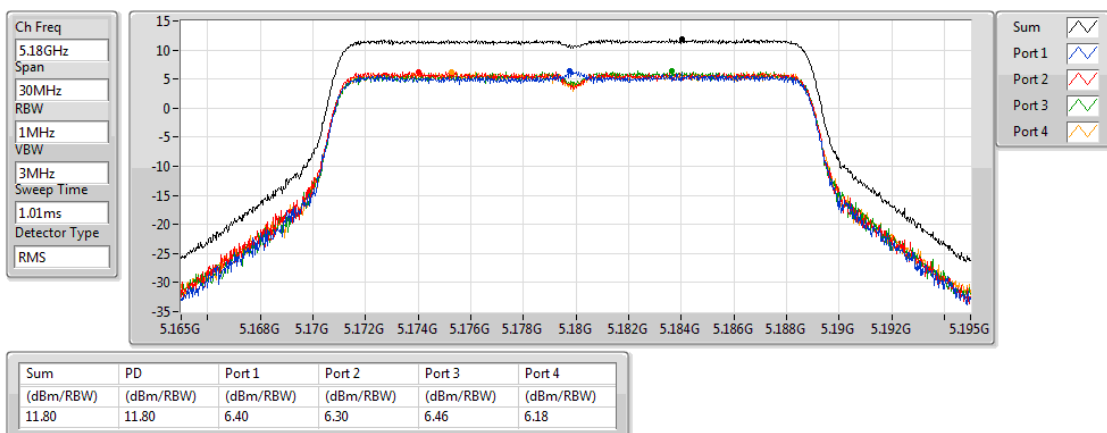
5825MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

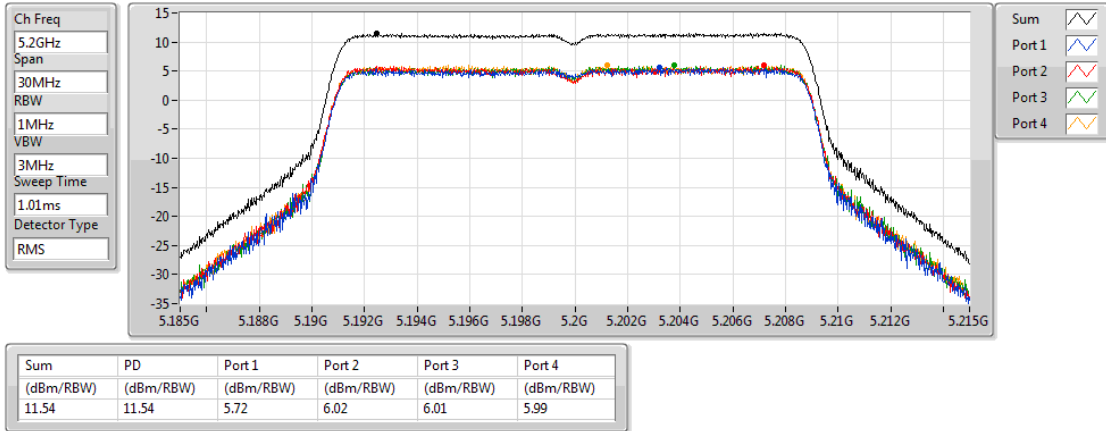
5180MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

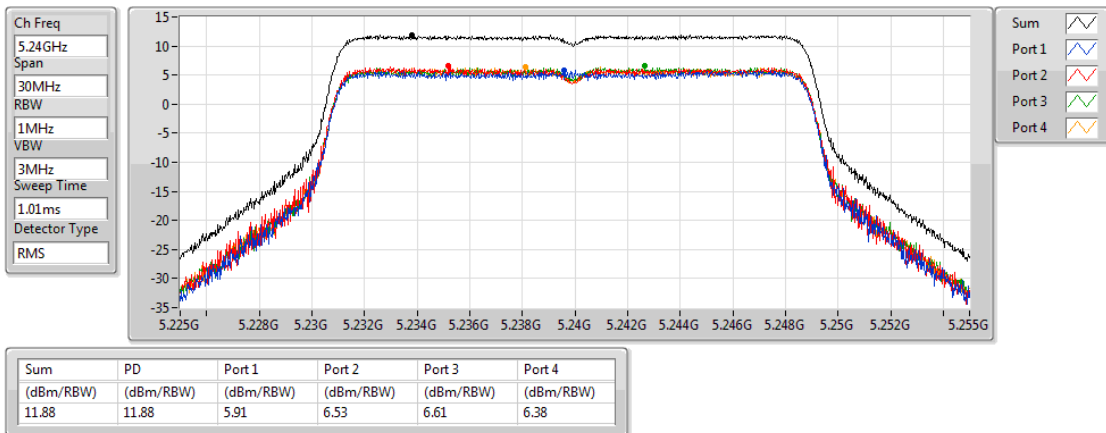
5200MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

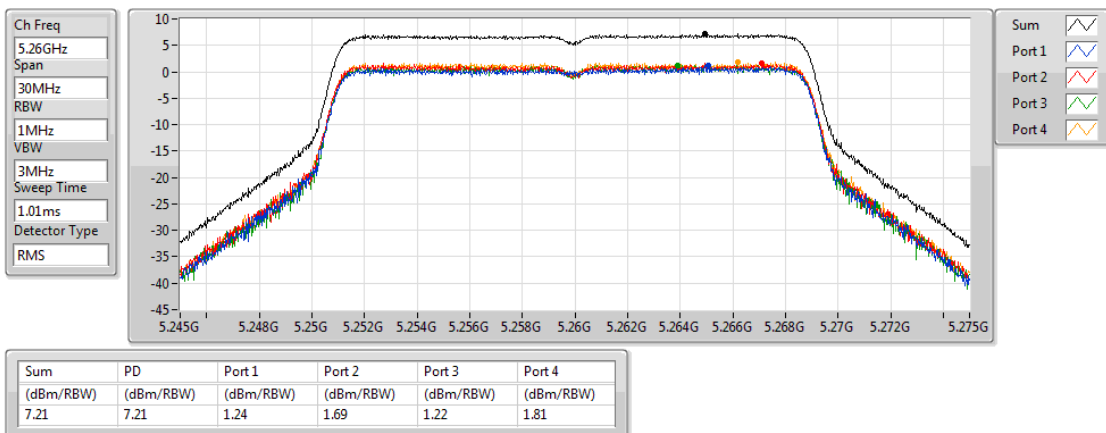
5240MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

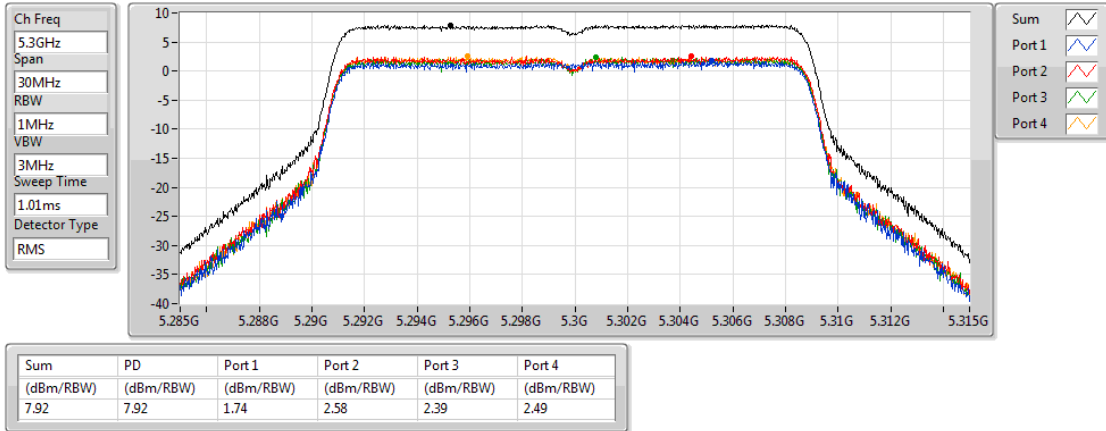
5260MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

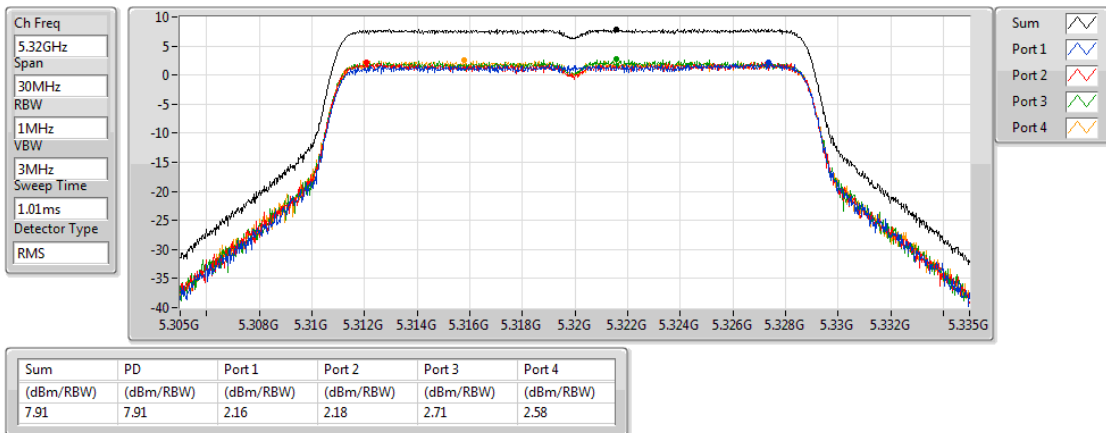
5300MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

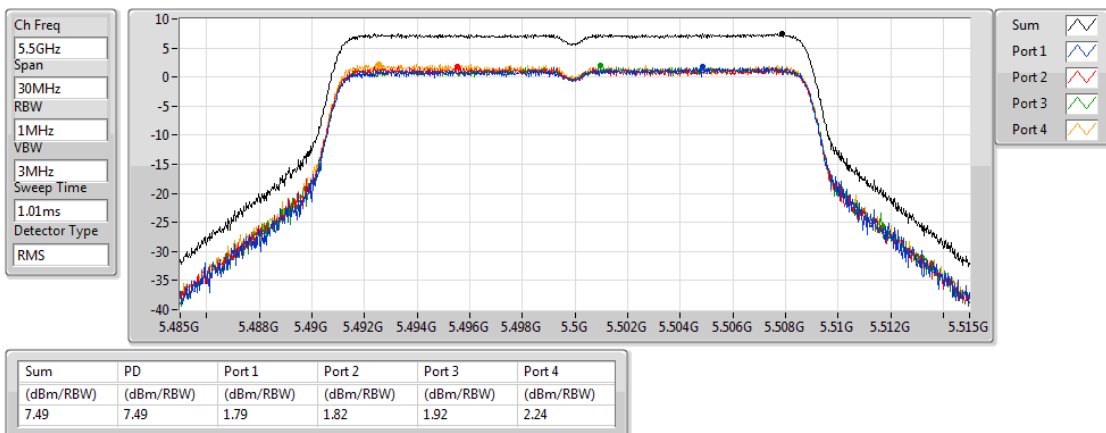
5320MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

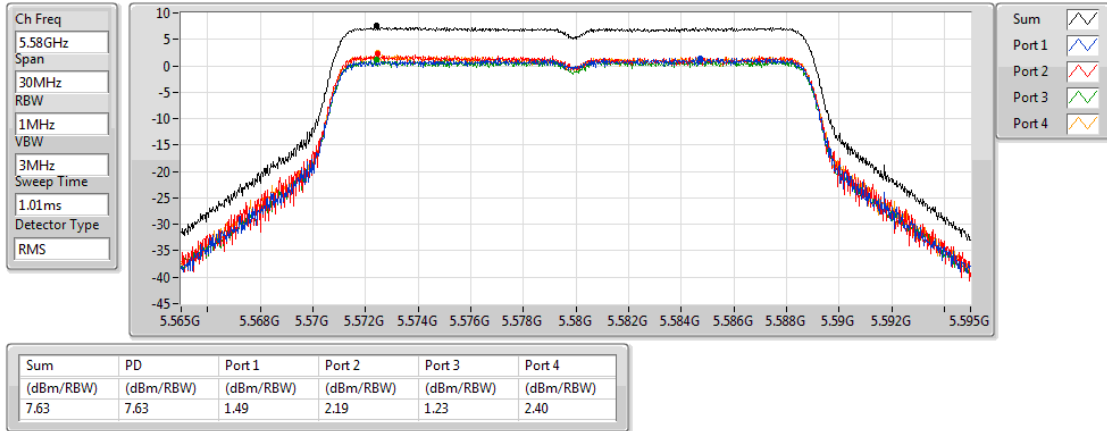
5500MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

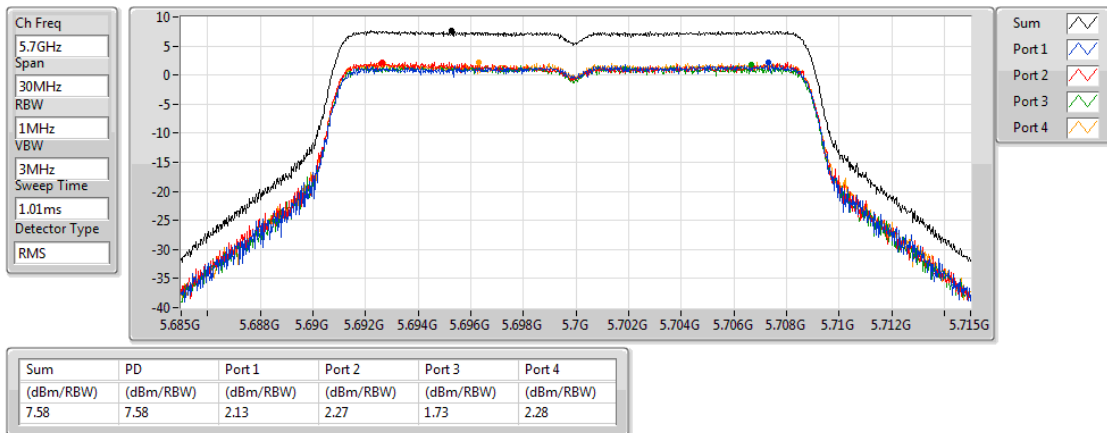
5580MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

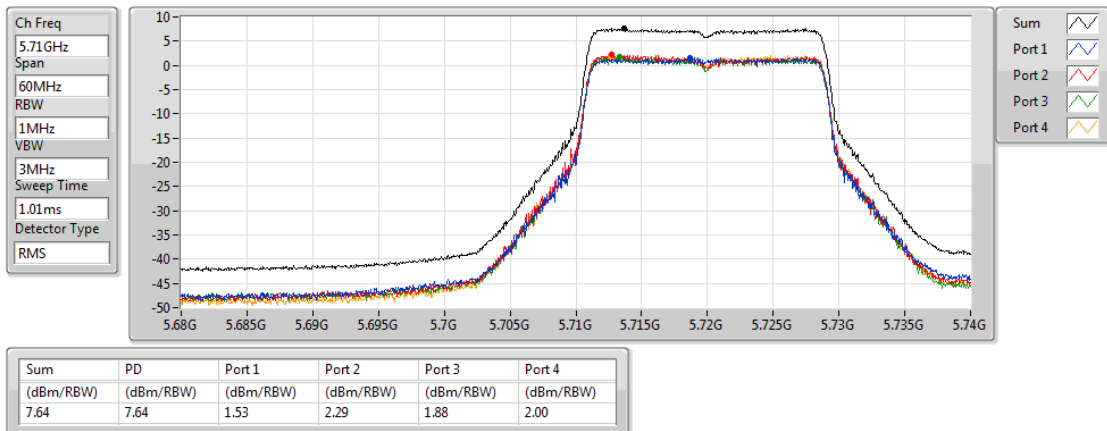
5700MHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

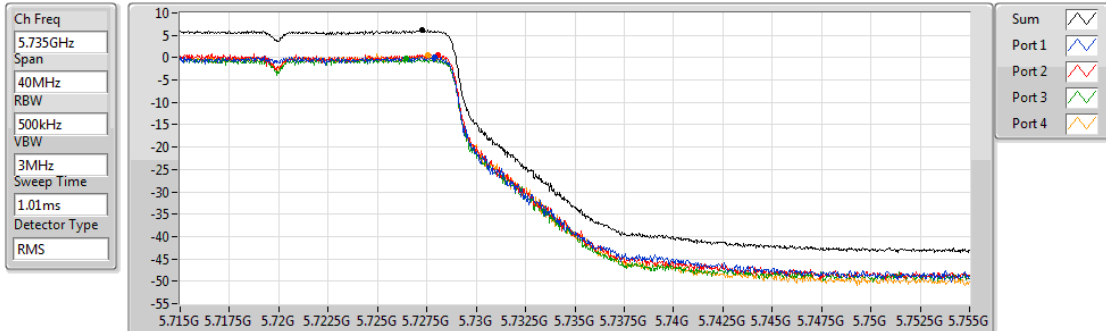
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.725-5.85GHz

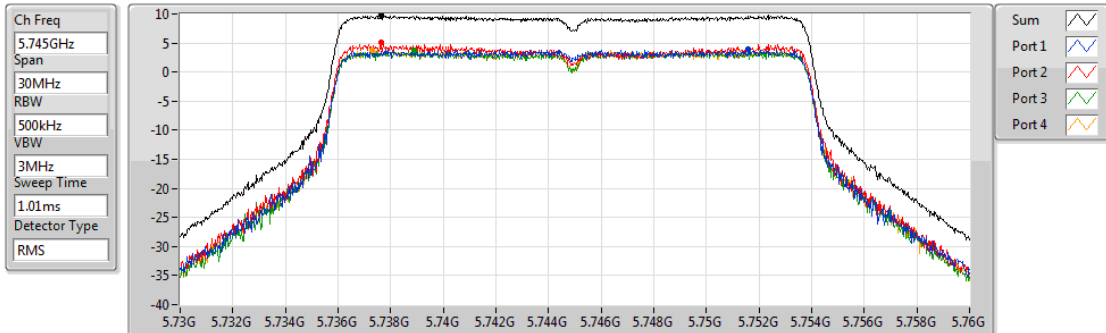


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.09	6.09	0.17	0.73	-0.20	0.55

802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5745MHz

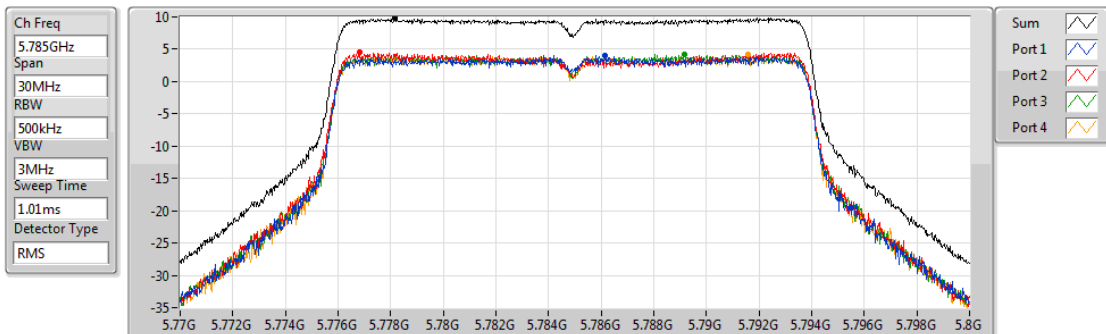


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.89	9.89	3.91	5.15	3.82	3.84

802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

5785MHz

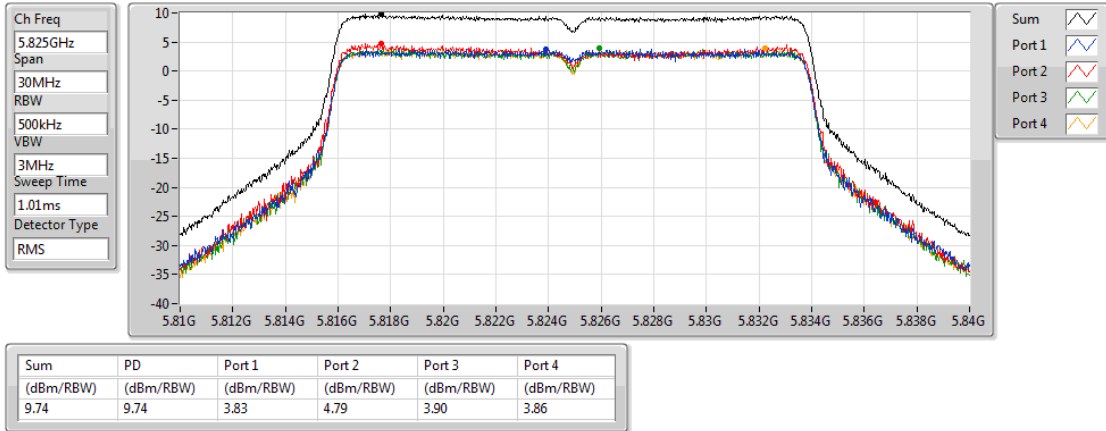


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.80	9.80	4.04	4.47	4.14	4.18

802.11ac VHT20_Nss1,(MCS0)_4TX

PSD

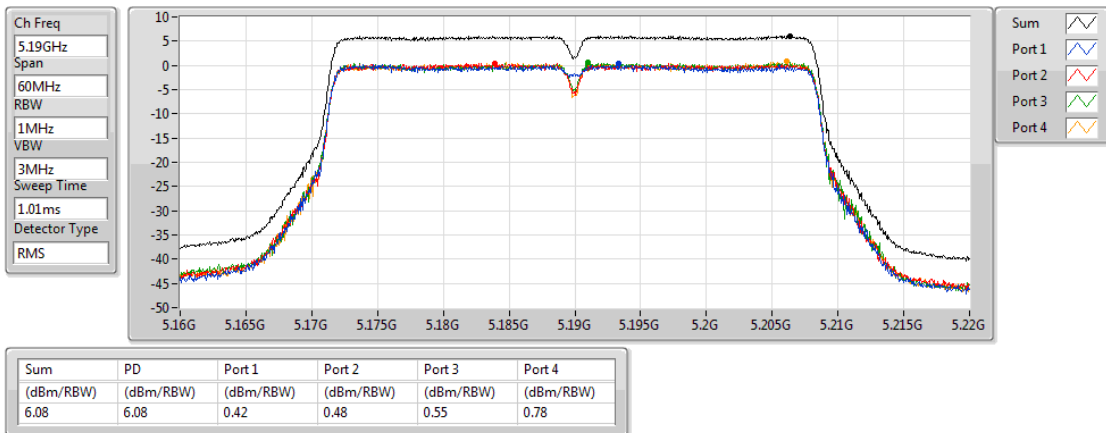
5825MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

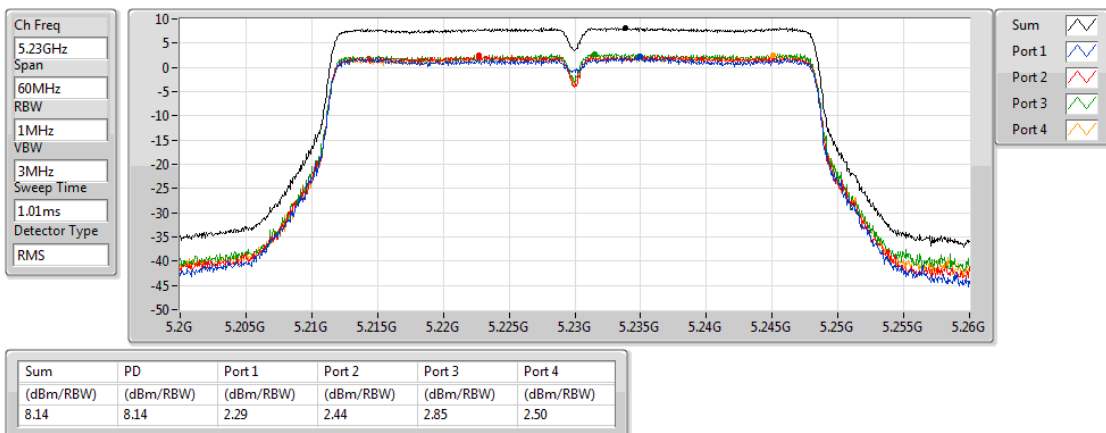
5190MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

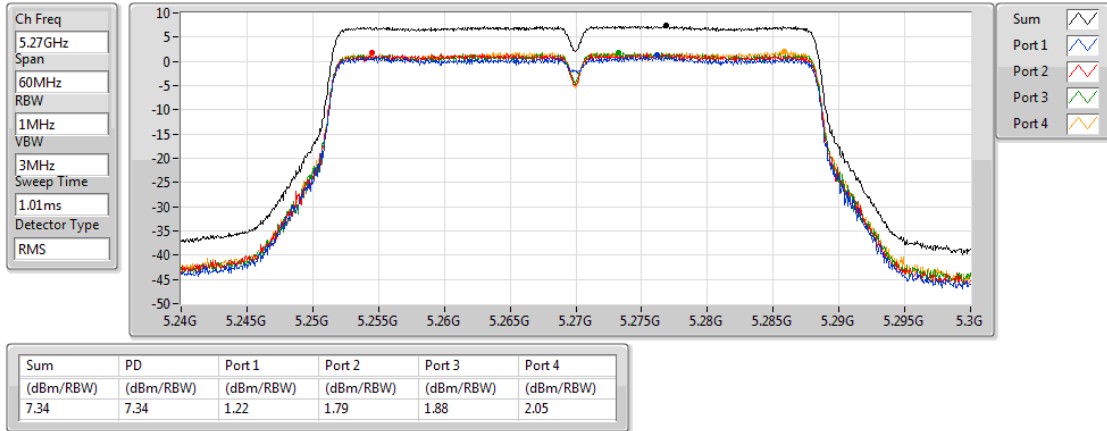
5230MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

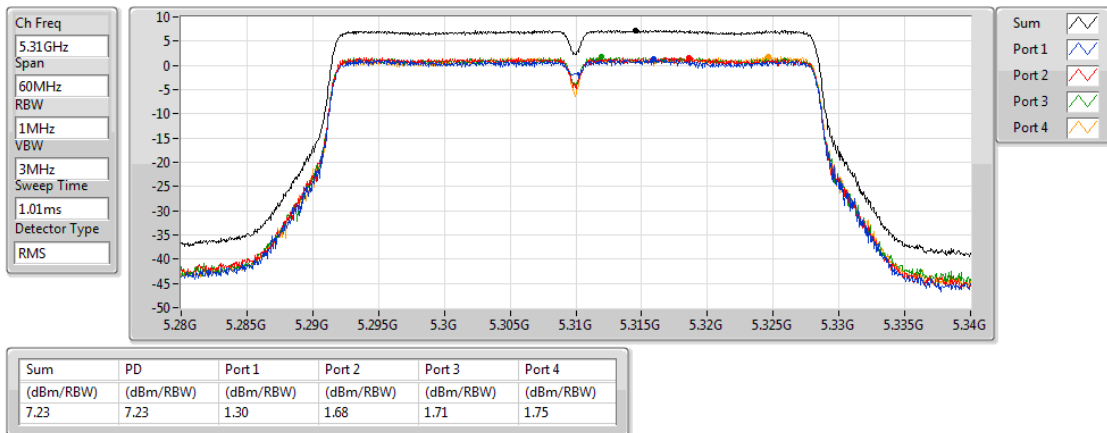
5270MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

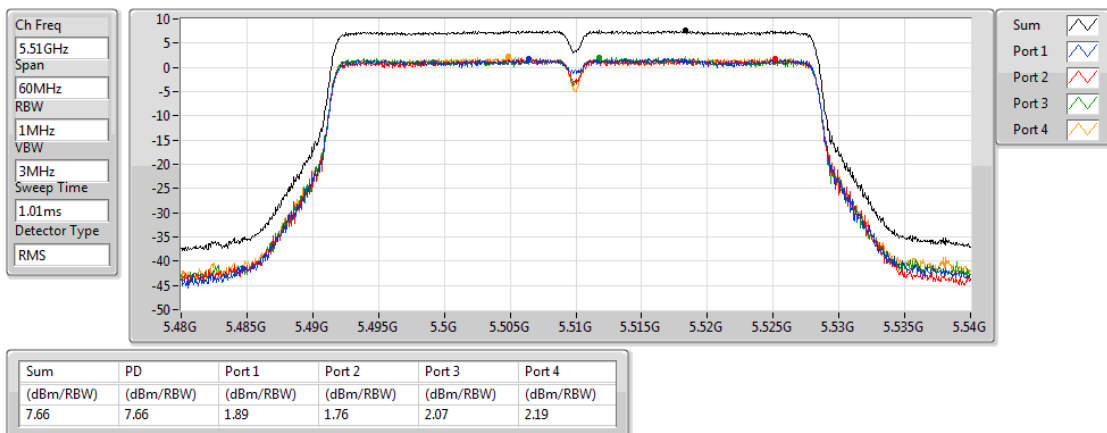
5310MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

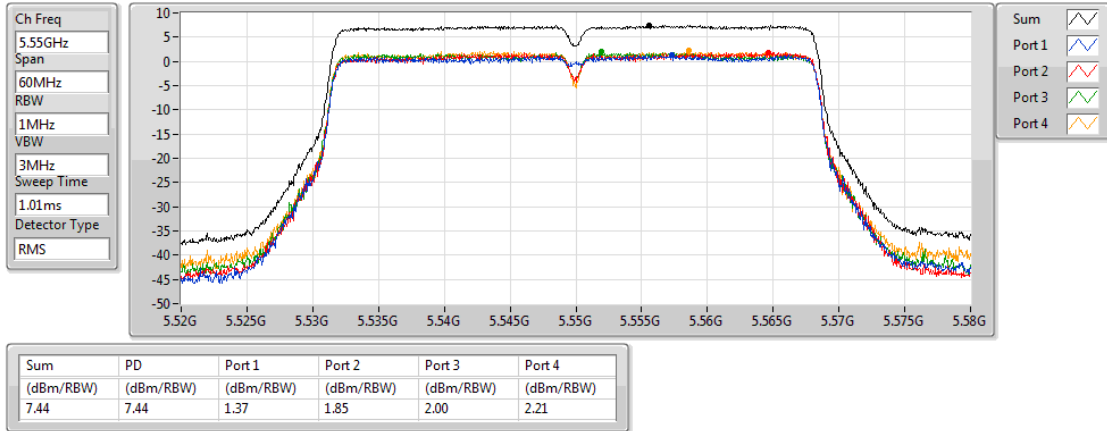
5510MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

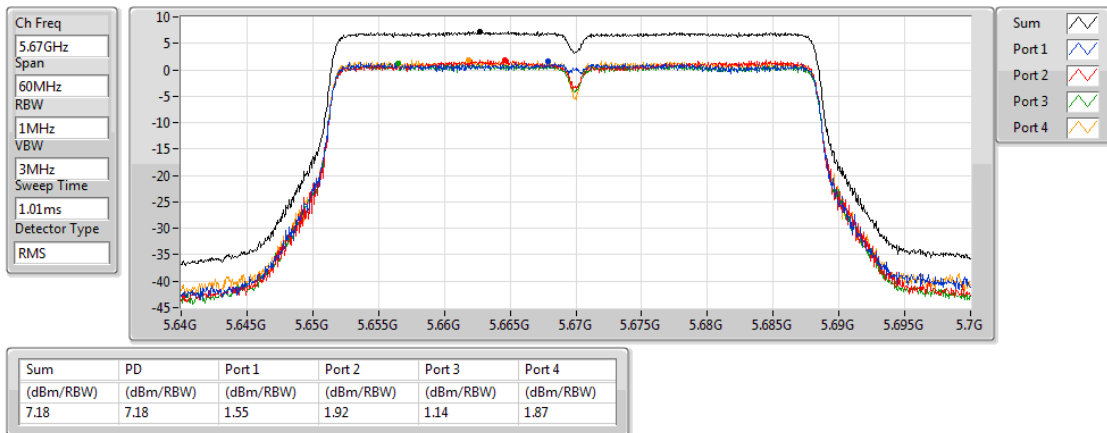
5550MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

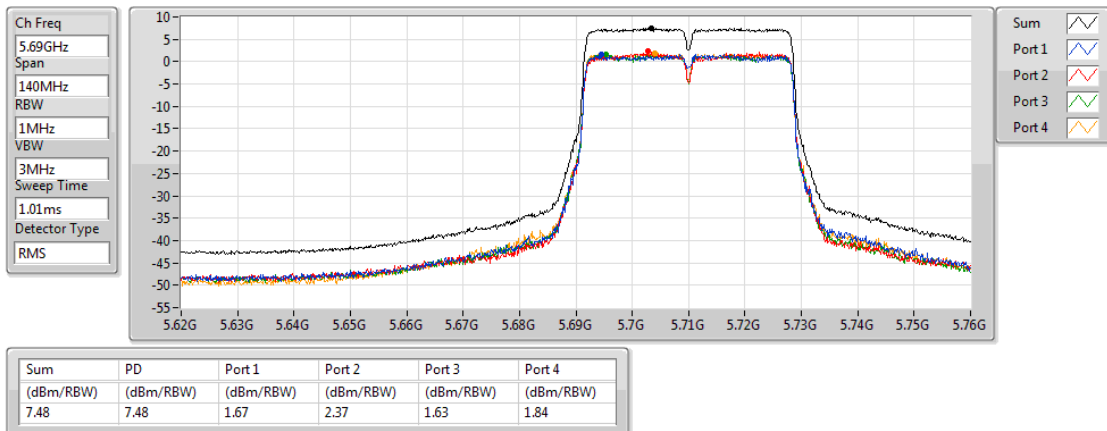
5670MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

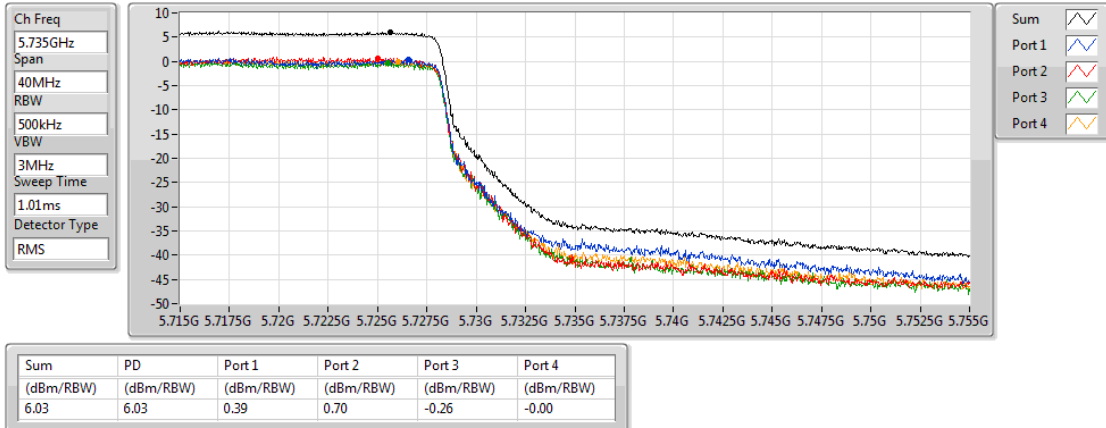
5710MHz Straddle 5.47-5.725GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

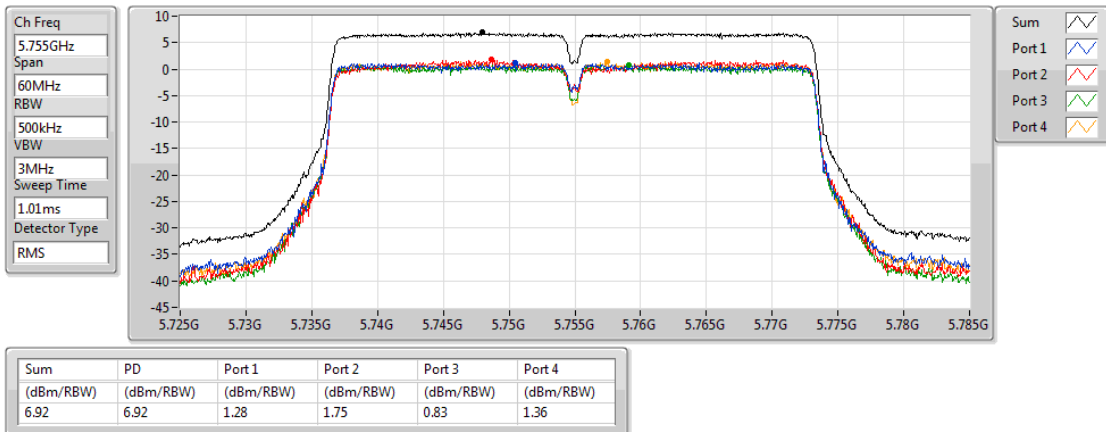
5710MHz Straddle 5.725-5.85GHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

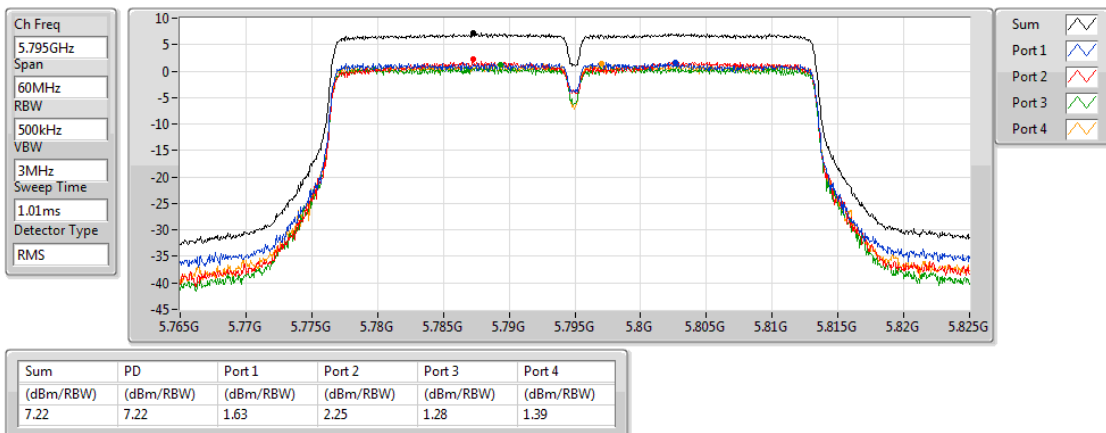
5755MHz



802.11ac VHT40_Nss1,(MCS0)_4TX

PSD

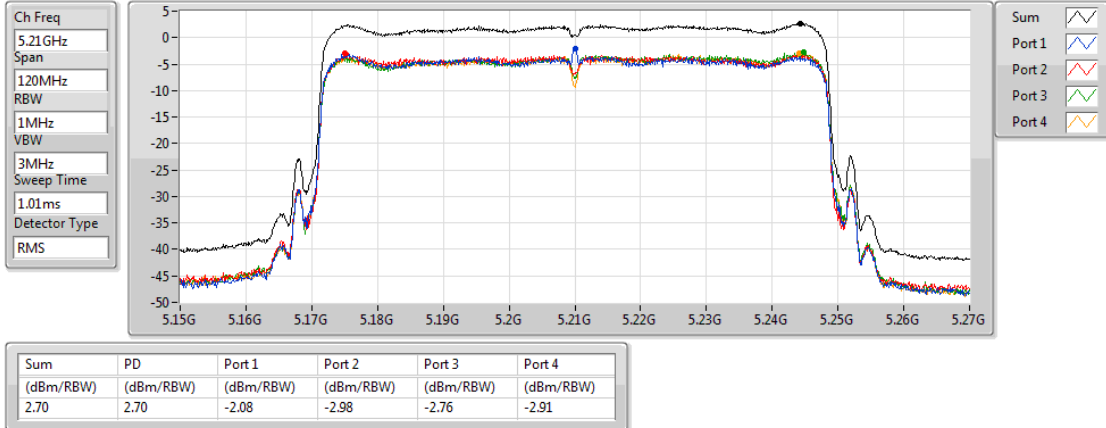
5795MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

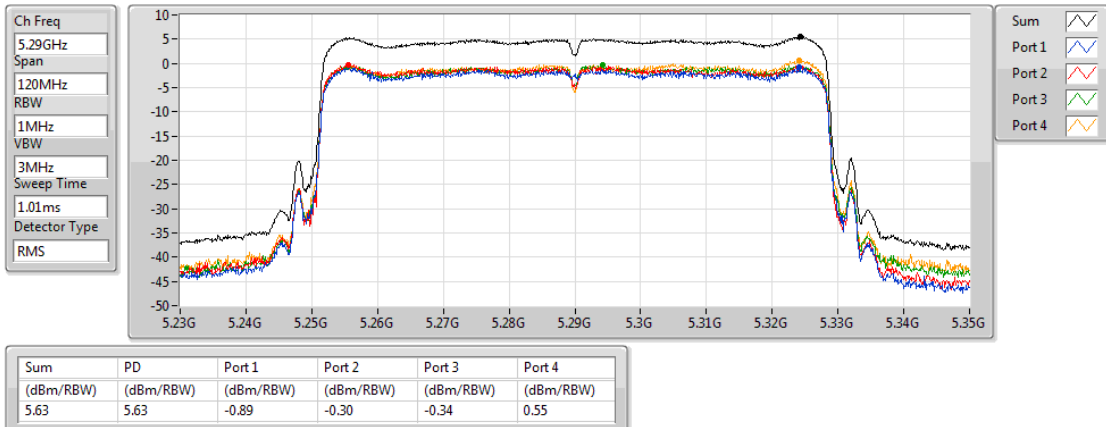
5210MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

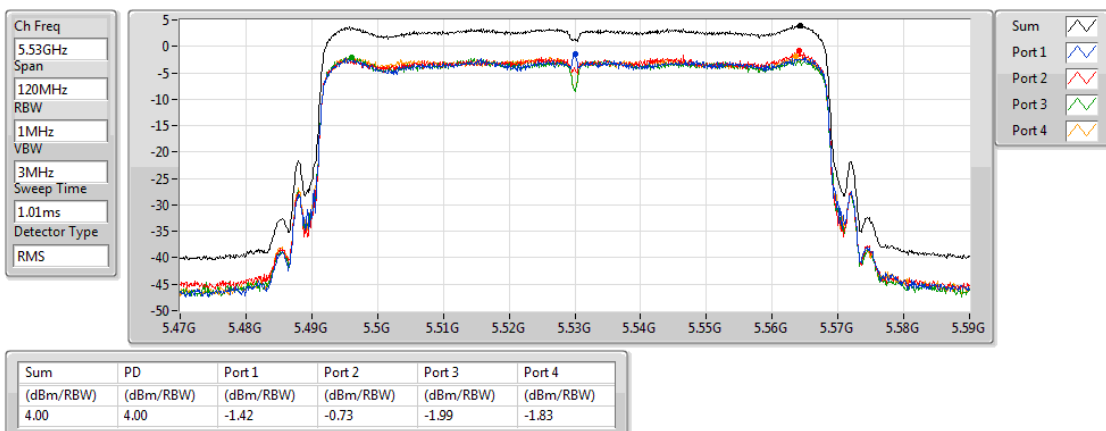
5290MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

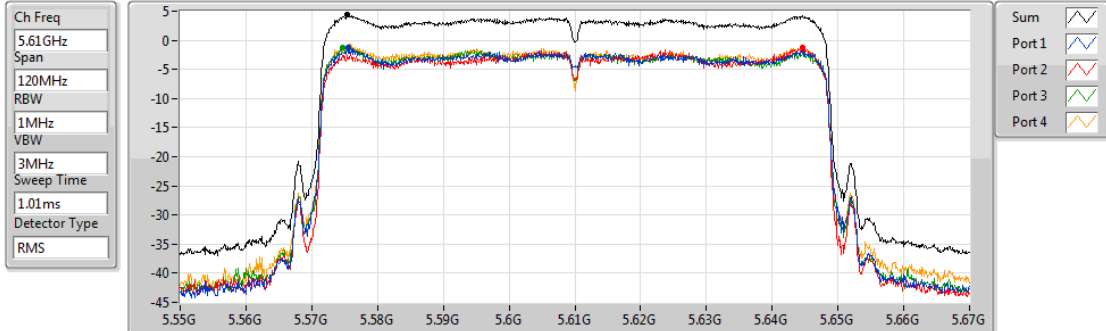
5530MHz



802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5610MHz

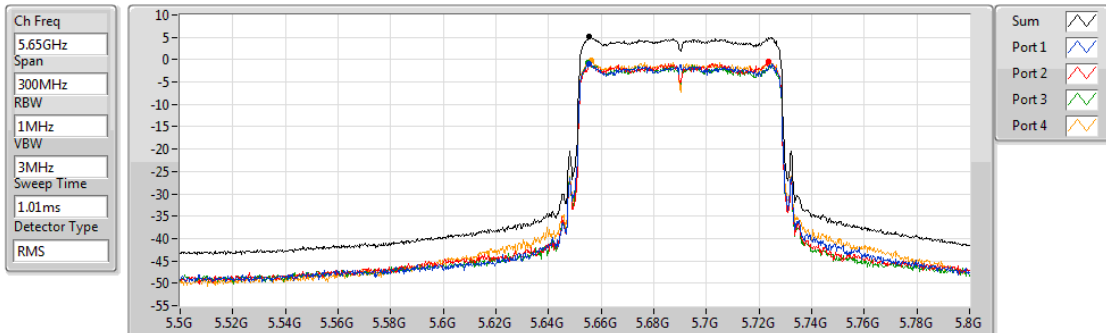


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.43	4.43	-1.22	-1.28	-1.27	-1.09

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

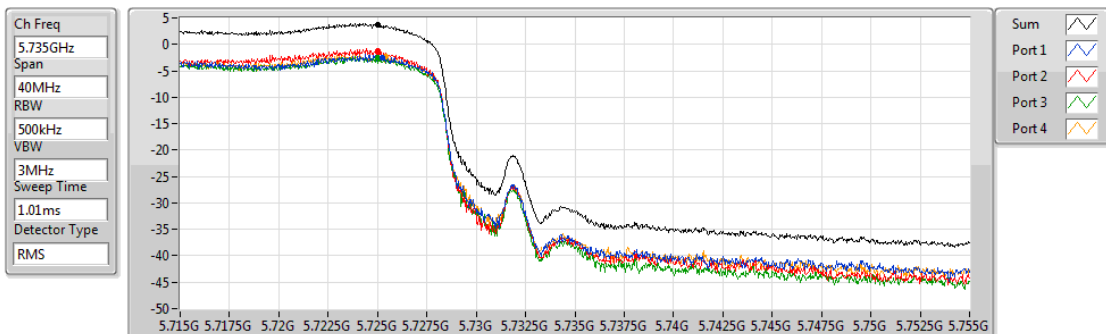


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.11	5.11	-0.98	-0.42	-0.72	-0.15

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

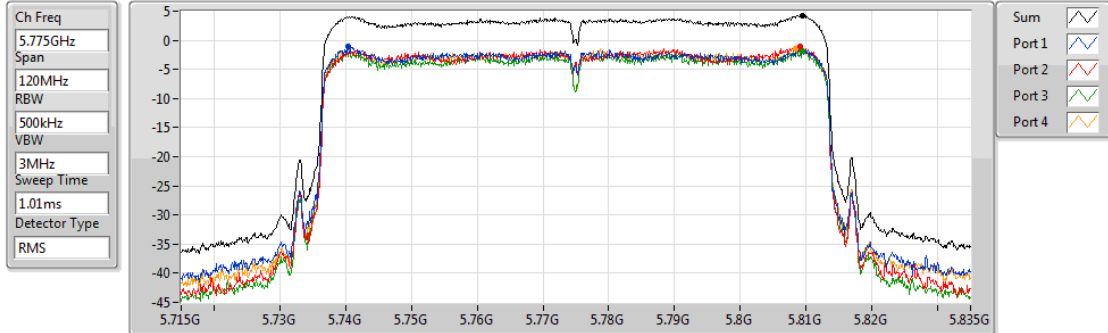


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.81	3.81	-2.50	-1.16	-2.42	-2.39

802.11ac VHT80_Nss1,(MCS0)_4TX

PSD

5775MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.22	4.22	-0.98	-1.09	-1.84	-1.36

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-
5.15-5.25GHz	10.59	19.63
5.25-5.35GHz	6.85	15.89
5.47-5.725GHz	7.41	16.45
5.725-5.85GHz	8.51	17.55
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-
5.15-5.25GHz	8.52	17.56
5.25-5.35GHz	5.11	14.15
5.47-5.725GHz	4.35	13.39
5.725-5.85GHz	7.07	16.11
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-
5.15-5.25GHz	1.27	10.31
5.25-5.35GHz	2.40	11.44
5.47-5.725GHz	1.82	10.86
5.725-5.85GHz	4.06	13.10

RBW = 500kHz 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_TnomVnom	Pass	9.04	4.38	4.59	4.86	4.60	10.52	13.96	19.56	Inf
5200MHz_TnomVnom	Pass	9.04	4.08	4.53	4.81	4.96	10.59	13.96	19.63	Inf
5240MHz_TnomVnom	Pass	9.04	4.01	4.17	4.45	4.86	10.36	13.96	19.40	Inf
5260MHz_TnomVnom	Pass	9.04	0.58	0.67	1.21	1.18	6.85	7.96	15.89	Inf
5300MHz_TnomVnom	Pass	9.04	0.55	0.66	1.18	0.68	6.75	7.96	15.79	Inf
5320MHz_TnomVnom	Pass	9.04	0.69	0.15	0.76	0.71	6.38	7.96	15.42	Inf
5500MHz_TnomVnom	Pass	9.04	0.94	0.90	0.92	0.85	6.80	7.96	15.84	Inf
5580MHz_TnomVnom	Pass	9.04	0.86	0.61	0.71	0.94	6.75	7.96	15.79	Inf
5700MHz_TnomVnom	Pass	9.04	0.63	0.37	0.31	0.67	6.45	7.96	15.49	Inf
5720MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	9.04	1.51	1.36	1.43	1.68	7.41	7.96	16.45	Inf
5720MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	9.04	-0.06	-0.30	-0.19	0.10	5.82	26.96	14.86	Inf
5745MHz_TnomVnom	Pass	9.04	2.74	3.20	2.22	2.68	8.51	26.96	17.55	Inf
5785MHz_TnomVnom	Pass	9.04	2.48	2.73	2.27	2.48	8.39	26.96	17.43	Inf
5825MHz_TnomVnom	Pass	9.04	2.47	2.99	1.80	2.19	8.37	26.96	17.41	Inf
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz_TnomVnom	Pass	9.04	0.33	0.46	0.35	0.27	6.08	13.96	15.13	Inf
5230MHz_TnomVnom	Pass	9.04	3.08	2.77	2.75	2.82	8.52	13.96	17.56	Inf
5270MHz_TnomVnom	Pass	9.04	-1.14	-1.03	-0.76	-0.30	5.11	7.96	14.15	Inf
5310MHz_TnomVnom	Pass	9.04	-1.59	-1.37	-1.01	-0.66	4.71	7.96	13.75	Inf
5510MHz_TnomVnom	Pass	9.04	-2.12	-1.84	-1.92	-1.20	4.16	7.96	13.20	Inf
5550MHz_TnomVnom	Pass	9.04	-1.55	-1.53	-2.37	-1.33	4.15	7.96	13.19	Inf
5670MHz_TnomVnom	Pass	9.04	-1.64	-1.04	-2.39	-1.32	4.35	7.96	13.39	Inf
5710MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	9.04	-2.31	-1.53	-2.47	-1.69	3.98	7.96	13.03	Inf
5710MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	9.04	-3.97	-3.61	-4.29	-4.01	2.05	26.96	11.09	Inf
5755MHz_TnomVnom	Pass	9.04	2.27	1.35	0.86	1.09	6.93	26.96	15.97	Inf
5795MHz_TnomVnom	Pass	9.04	1.18	1.28	0.68	1.34	7.07	26.96	16.11	Inf
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz_TnomVnom	Pass	9.04	-2.97	-4.31	-4.41	-4.41	1.27	13.96	10.31	Inf
5290MHz_TnomVnom	Pass	9.04	-3.07	-4.04	-3.37	-3.08	2.40	7.96	11.44	Inf
5530MHz_TnomVnom	Pass	9.04	-1.77	-3.70	-4.41	-3.66	1.78	7.96	10.82	Inf
5610MHz_TnomVnom	Pass	9.04	-1.64	-3.61	-4.32	-3.79	1.82	7.96	10.86	Inf
5690MHz Straddle 5.47-5.725GHz_TnomVnom	Pass	9.04	-1.37	-3.65	-4.82	-4.21	1.70	7.96	10.74	Inf
5690MHz Straddle 5.725-5.85GHz_TnomVnom	Pass	9.04	-6.59	-5.60	-6.59	-6.39	-0.28	26.96	8.76	Inf
5775MHz_TnomVnom	Pass	9.04	-1.63	-1.44	-2.24	-1.90	4.06	26.96	13.10	Inf

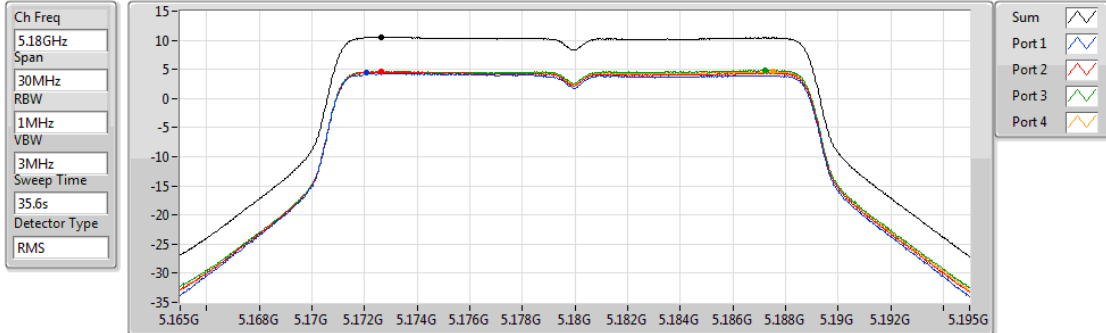
DG = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5180MHz

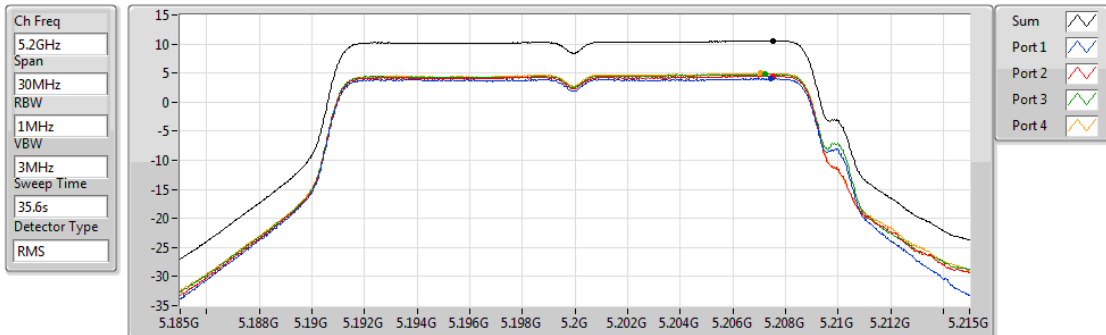


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.52	10.52	4.38	4.59	4.86	4.60

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5200MHz

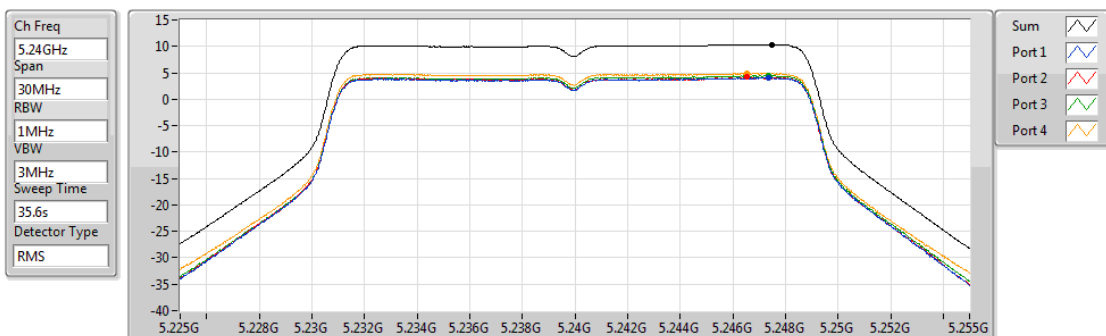


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.59	10.59	4.08	4.53	4.81	4.96

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5240MHz

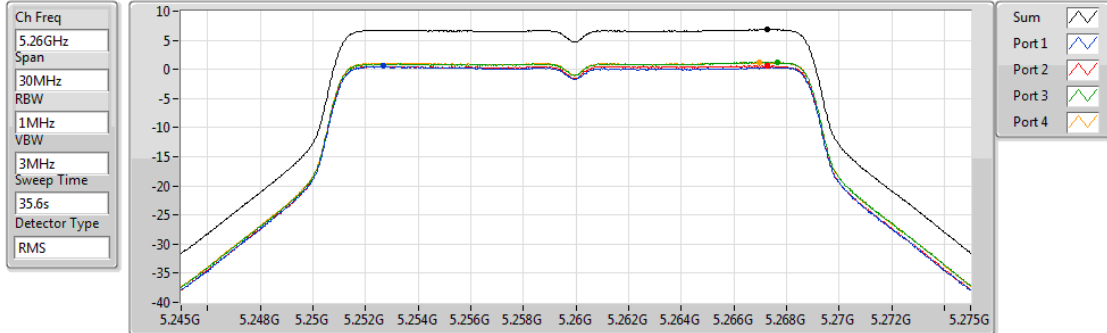


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.36	10.36	4.01	4.17	4.45	4.86

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5260MHz

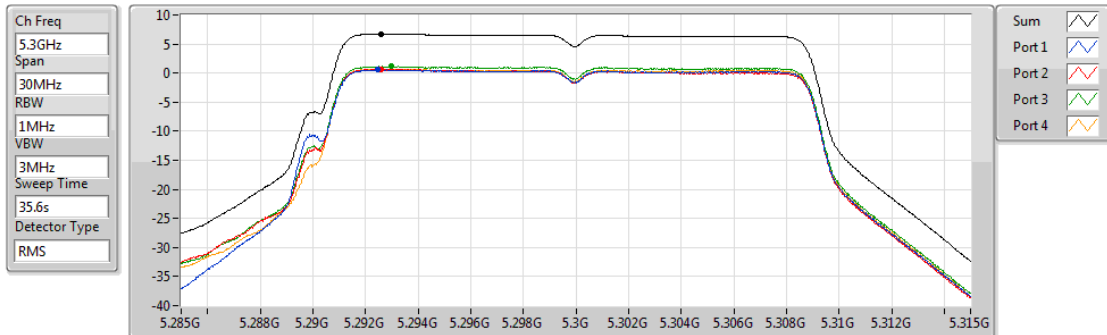


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.85	6.85	0.58	0.67	1.21	1.18

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5300MHz

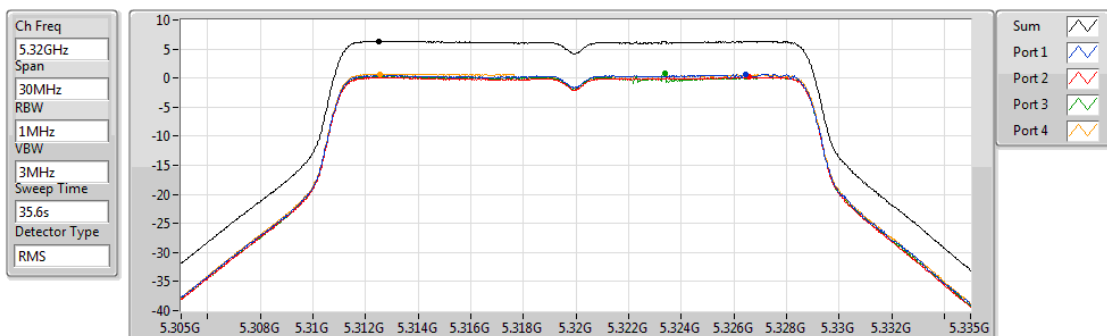


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.75	6.75	0.55	0.66	1.18	0.68

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5320MHz

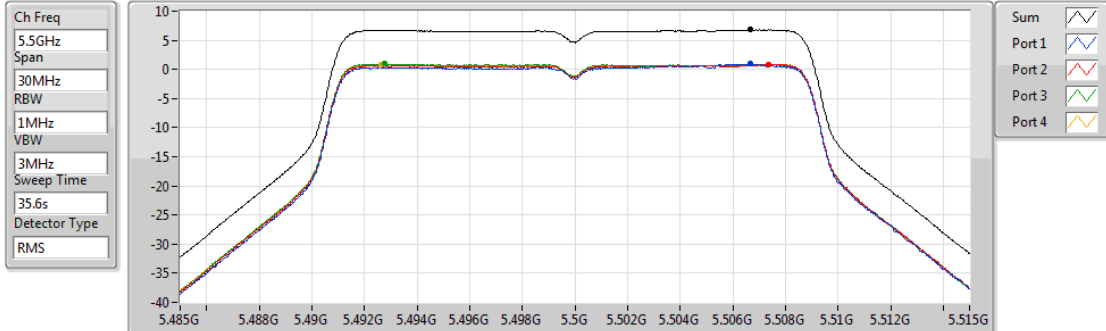


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.38	6.38	0.69	0.15	0.76	0.71

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5500MHz

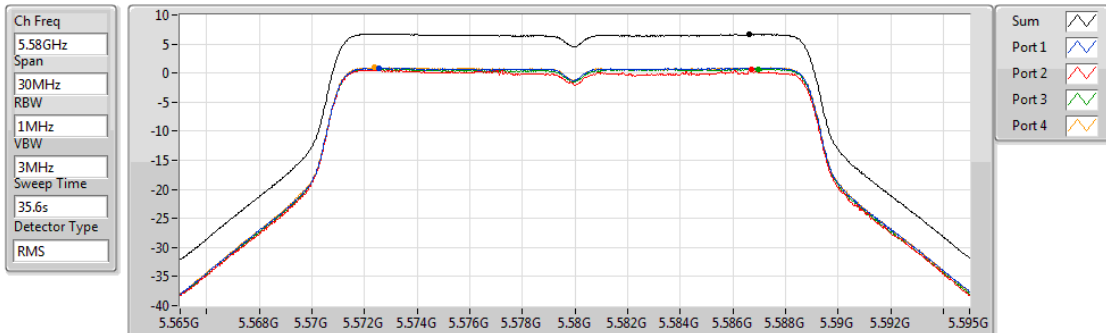


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.80	6.80	0.94	0.90	0.92	0.85

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5580MHz

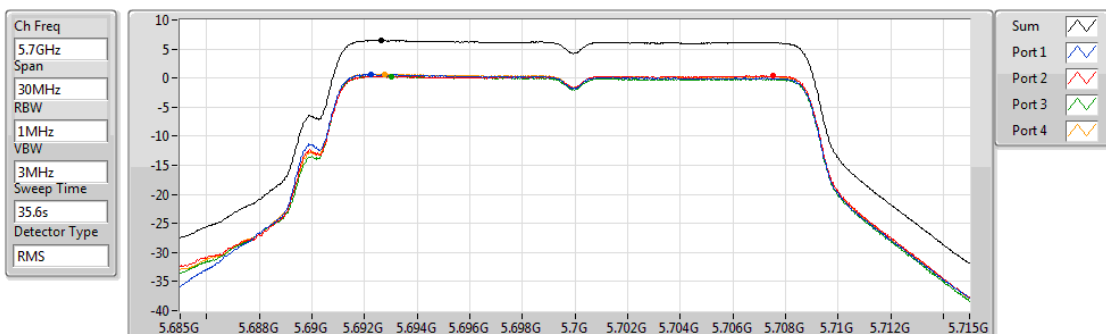


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.75	6.75	0.86	0.61	0.71	0.94

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5700MHz

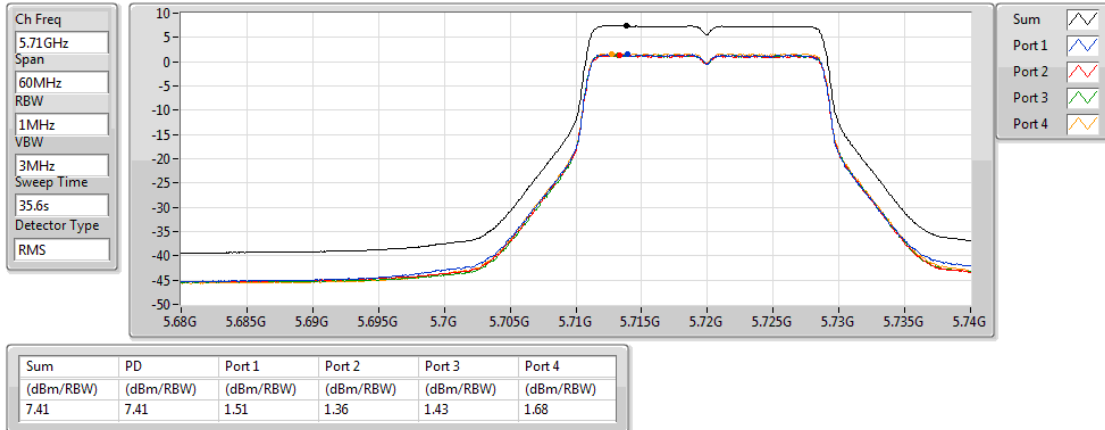


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.45	6.45	0.63	0.37	0.31	0.67

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

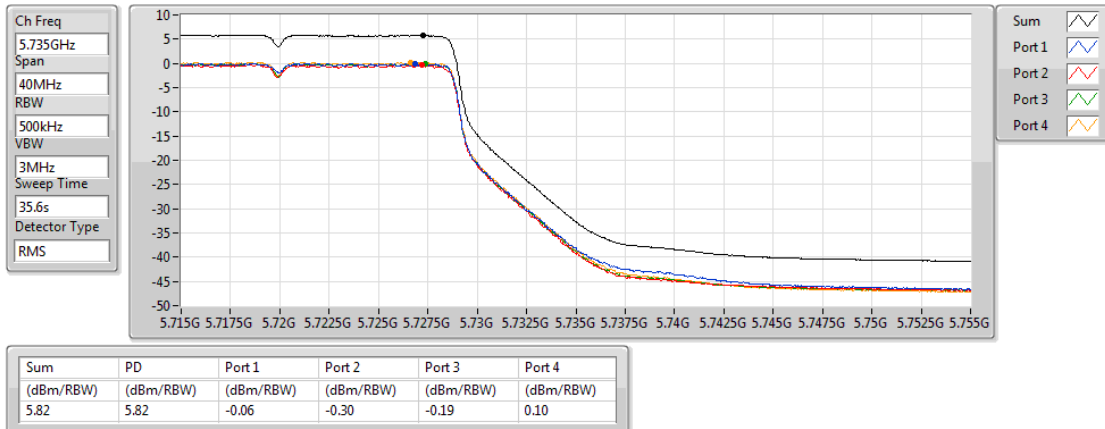
5720MHz Straddle 5.47-5.725GHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

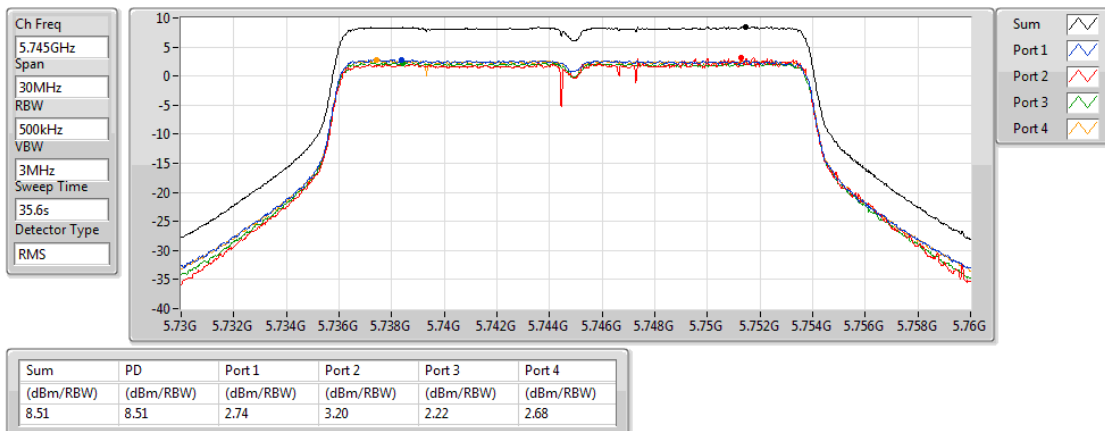
5720MHz Straddle 5.725-5.85GHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

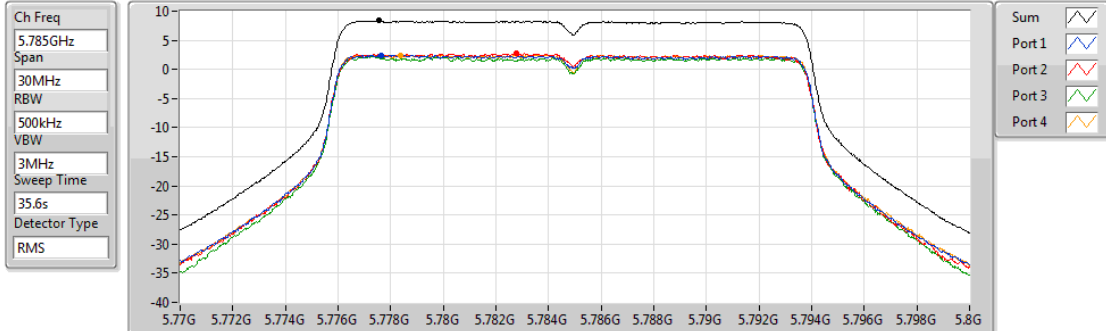
5745MHz



802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5785MHz

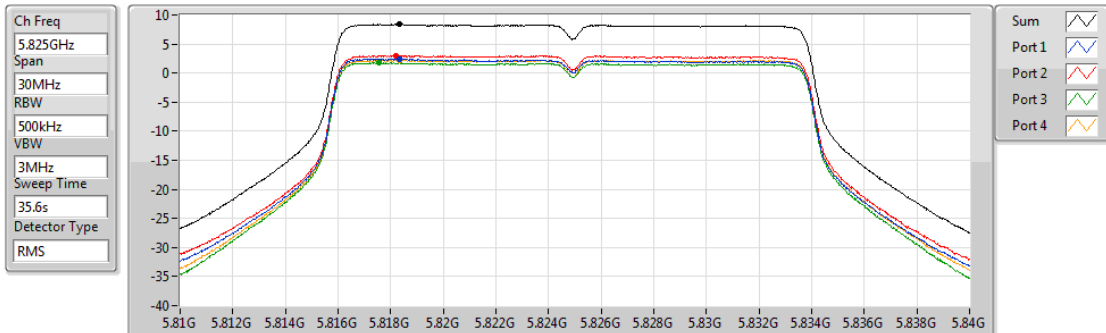


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.39	8.39	2.48	2.73	2.27	2.48

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5825MHz

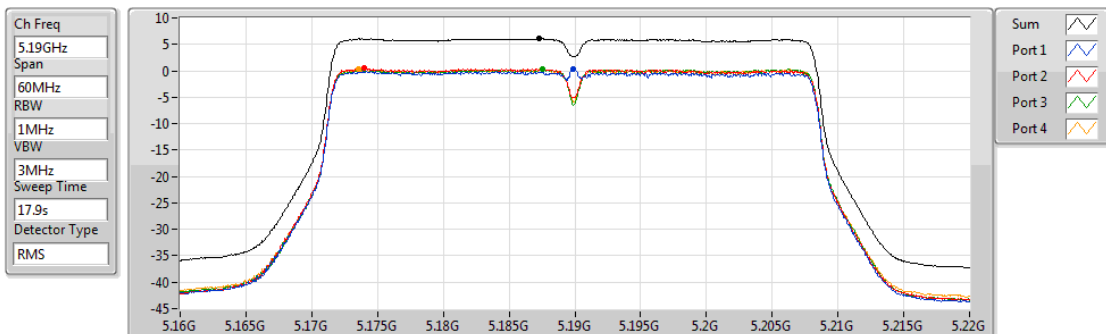


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.37	8.37	2.47	2.99	1.80	2.19

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5190MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.08	6.08	0.33	0.46	0.35	0.27