

FCC Test Report

FCC ID : Z8H89FT0050
Equipment : cnPilot e505 Outdoor
Brand Name :  Cambium Networks
Model Name : REG-PL-E505
Applicant : Cambium Networks Inc.
3800 Golf Road, Suite 360 Rolling Meadows, IL 60008,
USA
Manufacturer : Cambium Networks Ltd.
Unit B2 Linhay Business Park Eastern Rd Ashburton,
Devon TQ13 7UP United Kingdom
Standard : 47 CFR FCC Part 15.407

The product was received on Sep. 11, 2019, and testing was started from Sep. 19, 2019 and completed on Nov. 06, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

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



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



Table of Contents

HISTORY OF THIS TEST REPORT3

SUMMARY OF TEST RESULT4

1 GENERAL DESCRIPTION5

1.1 Information.....5

1.2 Testing Applied Standards8

1.3 Testing Location Information8

1.4 Measurement Uncertainty8

2 TEST CONFIGURATION OF EUT.....9

2.1 Test Condition9

2.2 Test Channel Mode9

2.3 The Worst Case Measurement Configuration11

2.4 Support Equipment.....12

2.5 Test Setup Diagram13

3 TRANSMITTER TEST RESULT14

3.1 Emission Bandwidth.....14

3.2 Maximum Conducted Output Power15

3.3 Peak Power Spectral Density.....17

3.4 Unwanted Emissions.....19

4 TEST EQUIPMENT AND CALIBRATION DATA.....23

APPENDIX A. TEST RESULTS OF EMISSION BANDWIDTH

APPENDIX B. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX C. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY

APPENDIX D. TEST RESULTS OF UNWANTED EMISSIONS

APPENDIX E. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



Summary of Test Result

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Jackson Tsai

Report Producer: Kate Lo



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20)	5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
5250-5350	n (HT40), ac (VHT40)	5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
5250-5350	ac (VHT80)	5290	58 [1]
5470-5725		5530-5610	106-122 [2]

Non-Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX(Port1)
5.15-5.25GHz	802.11a	20	1TX(Port2)
5.15-5.25GHz	802.11a	20	2TX
5.725-5.85GHz	802.11a	20	1TX(Port1)
5.725-5.85GHz	802.11a	20	1TX(Port2)
5.725-5.85GHz	802.11a	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX

Beamforming

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX



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.	Brand	Model Name	Antenna Type	Connector
1	-	-	PIFA	I-PEX
2	-	-	PIFA	I-PEX

Ant.	Port	Gain (dBi)	
		2.4G	5G
1	1	4.7	4.74
2	2	4.91	5.31

Note 1: The EUT has two antennas.

For 2.4GHz function:

For IEEE 802.11 b/g mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, Ant. 1 (port 1) or Ant. 2 (port 2) can be used as transmitting/receiving.

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 n mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11 a mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, Ant. 1 (port 1) or Ant. 2 (port 2) can be used as transmitting/receiving.

For IEEE 802.11 a mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 n/ac mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	PoE		
EUT Function	<input checked="" type="checkbox"/>	Outdoor	<input type="checkbox"/> Indoor
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/> Client
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/> Without beamforming
TPC Function	<input checked="" type="checkbox"/>	With TPC Function	<input type="checkbox"/> Without TPC Function
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/> Without 5600~5650MHz
Type of EUT			
<input checked="" type="checkbox"/>	Stand-alone		
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.: ...		
<input type="checkbox"/>	Other:		

1.1.4 Mode Test Duty Cycle

Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.968	0.14	2.064m	1k
802.11ac VHT20	0.988	0.05	n/a (DC≥0.98)	n/a (DC≥0.98)
802.11ac VHT40	0.975	0.11	2.441m	1k
802.11ac VHT80	0.951	0.22	1.153m	1k

Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.906	0.43	1.927m	1k
802.11ac VHT40-BF	0.842	0.75	1.986m	1k
802.11ac VHT80-BF	0.853	0.69	1.957m	1k

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

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR991013

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

Modifications	Performance Checking
Frequency bands U-NII-2A and U-NII-2C was added.	All

1.2 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ KDB 789033 D02 v02r01
- ◆ KDB 662911 D01 v02r01
- ◆ KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location			
<input checked="" type="checkbox"/>	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.			
<input type="checkbox"/>	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	Barry	22.2~24.4°C / 50~56%	08/Oct/2019~ 16/Oct/2019
Radiated	03CH09-HY	Ryan	21.5~24.6°C / 52~61%	19/Sep/2019~ 06/Nov/2019
AC Conduction	CO04-HY	Jeff	22.4~23.8°C / 54.4~58.6%	15/Oct/2019

1.4 Measurement Uncertainty

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

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



2 Test Configuration of EUT

2.1 Test Condition

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

2.2 Test Channel Mode

Non-Beamforming

Test Software Version	QCARCT 3.0.265.0
-----------------------	------------------

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5260MHz	25
5300MHz	25.5
5320MHz	24.5
5500MHz	23.5
5580MHz	26
5700MHz	22.5
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5260MHz	24
5300MHz	24
5320MHz	23.5
5500MHz	23.5
5580MHz	24.5
5700MHz	22.5
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	19
5300MHz	19
5320MHz	19
5500MHz	19.5
5580MHz	19.5
5700MHz	19.5
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5260MHz	19.5
5300MHz	19.5



Mode	Power Setting
5320MHz	19.5
5500MHz	20
5580MHz	20.5
5700MHz	20.5
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5270MHz	21.5
5310MHz	20.5
5510MHz	21
5550MHz	22
5670MHz	22
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5290MHz	19.5
5530MHz	18.5
5610MHz	22.5

Beamforming


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

Mode	Power Setting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5260MHz	22
5300MHz	22
5320MHz	22
5500MHz	22
5580MHz	22
5700MHz	22
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5270MHz	22
5310MHz	21
5510MHz	20
5550MHz	22
5670MHz	22
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5290MHz	20
5530MHz	20
5610MHz	22

2.3 The Worst Case Measurement Configuration

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

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA991013-01 for Co-location RF Exposure Evaluation.	



2.4 Support Equipment

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	Cambium Networks	NET-P30-56IN	-
2	Notebook(Remote)	acar	JAL90	-
3	Client(Remote)	-	-	-

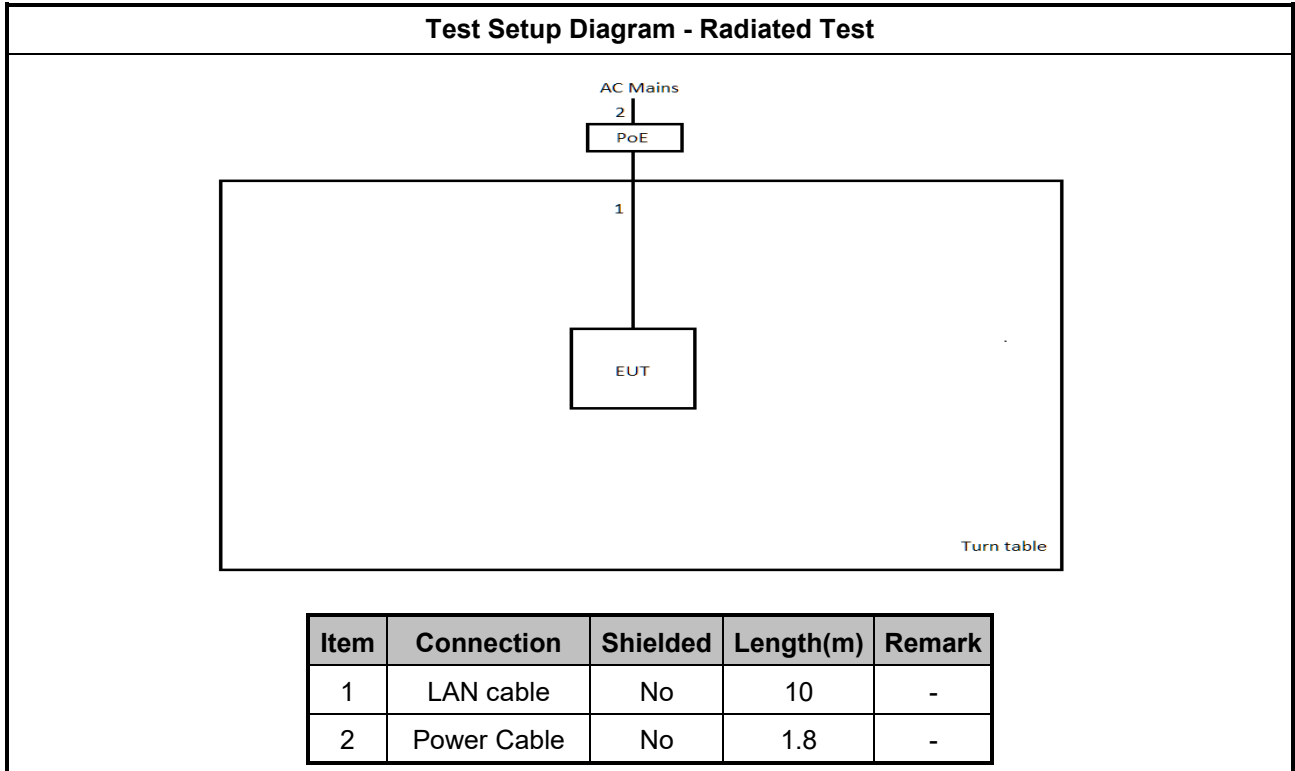
Note: Support equipment No.2 and No.3 were provided by customer.

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	PoE	Cambium Networks	NET-P30-56IN	-

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook(Remote)	acar	JAL90	-
2	Client(Remote)	-	-	-
3	PoE (Remote)	Cambium Networks	NET-P30-56IN	-

Note: Support equipment No.1 and No.2 were provided by customer.

2.5 Test Setup Diagram



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input checked="" type="checkbox"/>	For the 5.25-5.35 GHz band, N/A
<input checked="" type="checkbox"/>	For the 5.47-5.725 GHz band, N/A
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

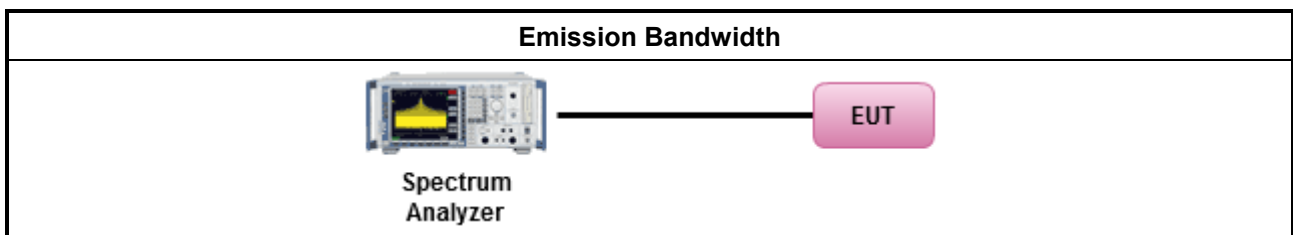
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.1.4 Test Setup



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
<input type="checkbox"/>	For the 5.15-5.25 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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 $\leq 125mW$ [21dBm]
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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 $P_{Out} = 30 - (G_{TX} - 23)$.
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input type="checkbox"/>	For the 5.725-5.85 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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 $P_{Out} = 30 - (G_{TX} - 6)$.
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ 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.	

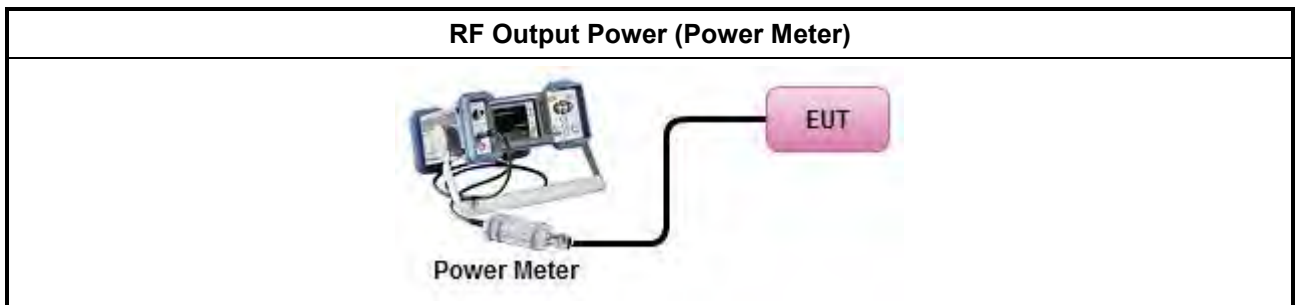
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Conducted Output Power 	
	Duty cycle ≥ 98%
<input type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle < 98%
<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method PM (using an RF average power meter).
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input type="checkbox"/>	For the 5.15-5.25 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/>	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input type="checkbox"/>	For the 5.725-5.85 GHz band:
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
<p>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</p> <p>G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

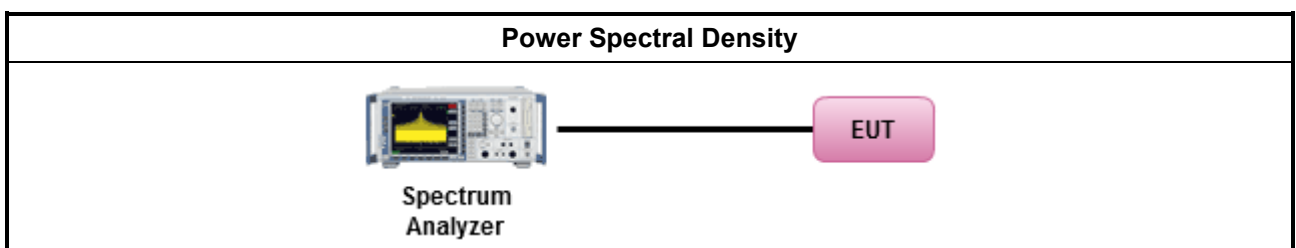
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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: 	
<input type="checkbox"/>	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%
<input type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging). Duty cycle < 98%
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: 	
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ 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]) $EIRP_{total} = PPSD_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C

3.4 Unwanted Emissions

3.4.1 Transmitter Radiated Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall

be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

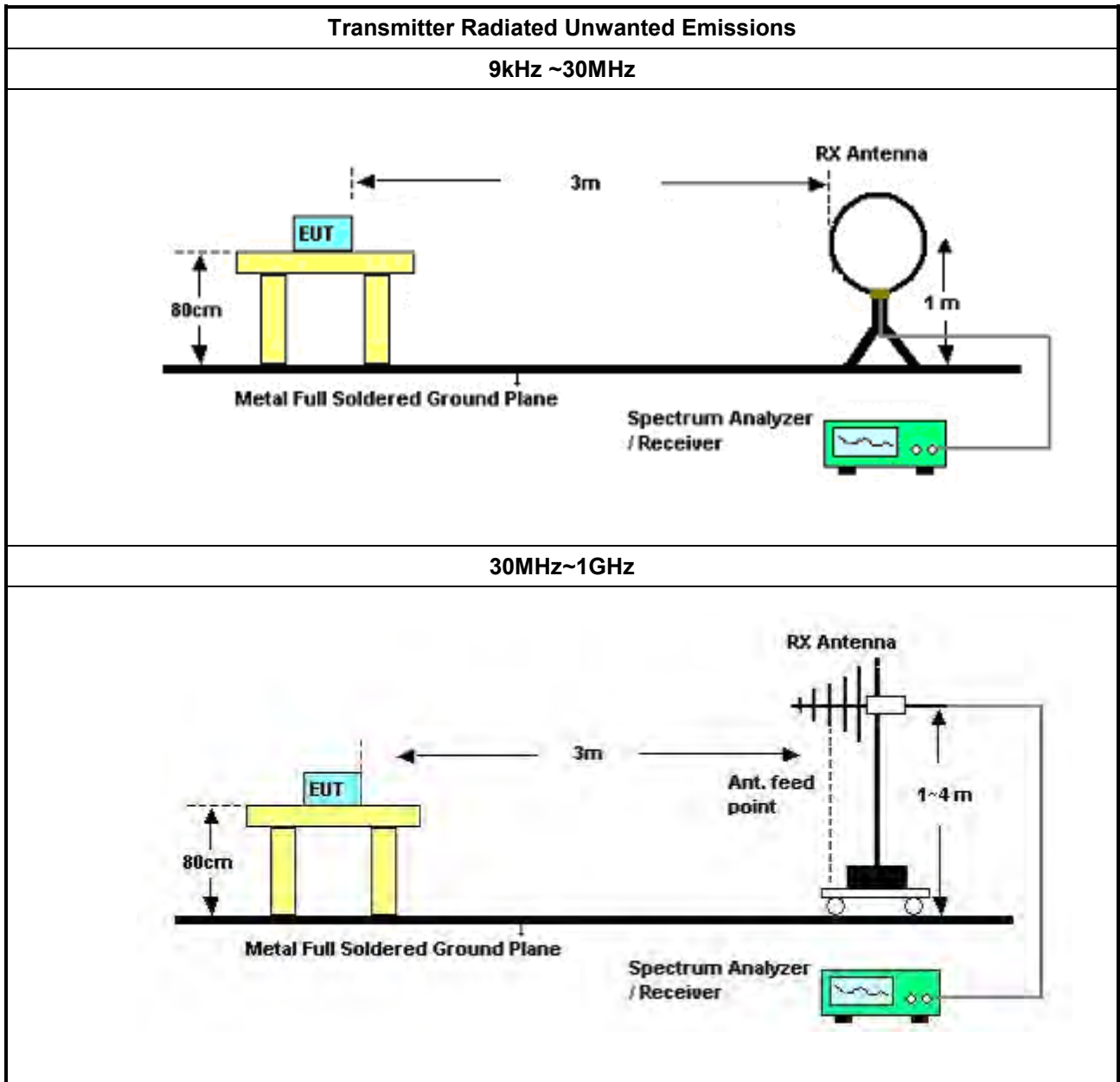
3.4.2 Measuring Instruments

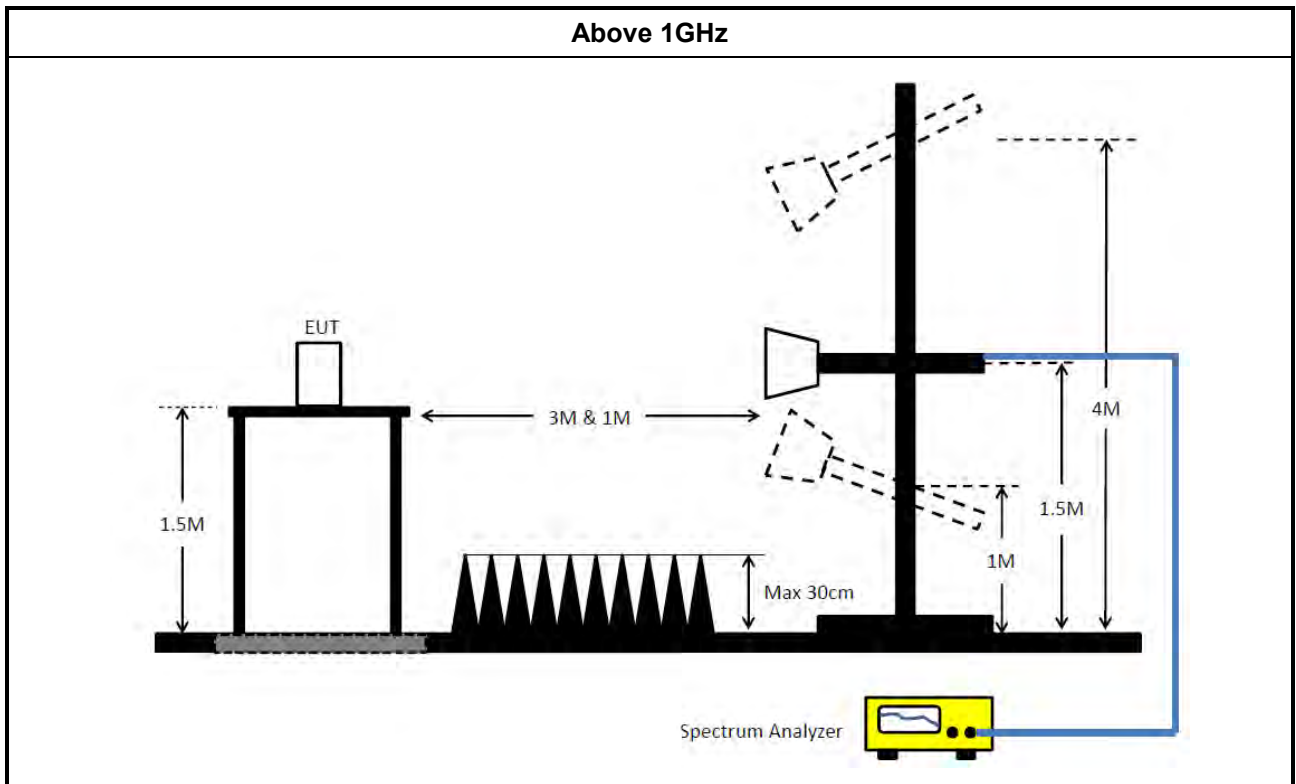
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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). 	
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 	
<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	<ul style="list-style-type: none"> ▪ Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	<input checked="" type="checkbox"/> Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
	<input checked="" type="checkbox"/> Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
<ul style="list-style-type: none"> ▪ For radiated measurement. 	
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level. 	
<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported. 	

3.4.4 Test Setup





3.4.5 Transmitter Unwanted Emissions (Below 30MHz)

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

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



4 Test Equipment and Calibration Data

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz	13/Jun/2019	12/Jun/2020
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	04/Sep/2019	03/Sep/2020
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	07/Aug/2019	06/Aug/2020
Bilog Antenna & 6dB Attenuator	SCHAFFNER/Yi Chang	CBL6111C / MTJ61202	2724 / MTJ61202-06	30MHz~1GHz	06/Jul/2019	05/Jul/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	22/Mar/2019	21/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz~40GHz	05/Aug/2019	04/Aug/2020
Loop Antenna	TESEQ	HLA 6120	31244	9k~30MHz	15/Mar/2019	14/Mar/2020
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz~1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz~40GHz	13/Mar/2019	12/Mar/2020

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020
Power Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	19/Feb/2019	18/Feb/2020
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	19/Feb/2019	18/Feb/2020
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz~18G	11/Jan/2019	10/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz~18G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY10714/4	RF Cable - 05	30MHz~18G	11/Jan/2019	10/Jan/2020



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	36.51M	17.721M	17M7D1D	22.38M	16.492M
802.11a_Nss1,(6Mbps)_1TX(Port2)	37.14M	18.381M	18M4D1D	22.23M	16.492M
802.11a_Nss1,(6Mbps)_2TX	18.99M	16.432M	16M4D1D	18.87M	16.402M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.7M	17.631M	17M6D1D	19.74M	17.571M
802.11ac VHT40_Nss1,(MCS0)_2TX	46.92M	36.042M	36M0D1D	39.78M	35.922M
802.11ac VHT80_Nss1,(MCS0)_2TX	84M	75.802M	75M8D1D	83.64M	75.802M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	35.79M	17.391M	17M4D1D	20.46M	16.432M
802.11a_Nss1,(6Mbps)_1TX(Port2)	33.72M	16.882M	16M9D1D	20.58M	16.462M
802.11a_Nss1,(6Mbps)_2TX	19.77M	16.432M	16M4D1D	18.87M	16.402M
802.11ac VHT20_Nss1,(MCS0)_2TX	20.79M	17.661M	17M7D1D	19.92M	17.601M
802.11ac VHT40_Nss1,(MCS0)_2TX	57.06M	36.162M	36M2D1D	39.72M	35.862M
802.11ac VHT80_Nss1,(MCS0)_2TX	152.04M	76.522M	76M5D1D	83.28M	75.562M

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)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf	36.51M	17.721M		
5300MHz_TnomVnom	Pass	Inf	35.28M	17.211M		
5320MHz_TnomVnom	Pass	Inf	22.38M	16.492M		
5500MHz_TnomVnom	Pass	Inf	20.46M	16.462M		
5580MHz_TnomVnom	Pass	Inf	35.79M	17.391M		
5700MHz_TnomVnom	Pass	Inf	20.49M	16.432M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf			37.14M	18.381M
5300MHz_TnomVnom	Pass	Inf			28.26M	16.612M
5320MHz_TnomVnom	Pass	Inf			22.23M	16.492M
5500MHz_TnomVnom	Pass	Inf			20.58M	16.462M
5580MHz_TnomVnom	Pass	Inf			33.72M	16.882M
5700MHz_TnomVnom	Pass	Inf			22.29M	16.492M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf	18.93M	16.402M	18.99M	16.402M
5300MHz_TnomVnom	Pass	Inf	18.99M	16.402M	18.87M	16.432M
5320MHz_TnomVnom	Pass	Inf	18.96M	16.432M	18.9M	16.402M
5500MHz_TnomVnom	Pass	Inf	19.38M	16.402M	18.87M	16.432M
5580MHz_TnomVnom	Pass	Inf	19.08M	16.402M	18.93M	16.402M
5700MHz_TnomVnom	Pass	Inf	19.47M	16.432M	19.77M	16.402M
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	Inf	19.8M	17.571M	20.37M	17.601M
5300MHz_TnomVnom	Pass	Inf	20.7M	17.631M	19.95M	17.601M
5320MHz_TnomVnom	Pass	Inf	19.74M	17.571M	19.98M	17.631M
5500MHz_TnomVnom	Pass	Inf	20.31M	17.601M	19.92M	17.601M
5580MHz_TnomVnom	Pass	Inf	20.34M	17.601M	20.58M	17.661M
5700MHz_TnomVnom	Pass	Inf	20.49M	17.601M	20.79M	17.631M
802.11ac_VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	Inf	40.08M	35.922M	46.92M	36.042M
5310MHz_TnomVnom	Pass	Inf	40.14M	35.982M	39.78M	35.922M
5510MHz_TnomVnom	Pass	Inf	39.72M	35.862M	40.26M	36.042M
5550MHz_TnomVnom	Pass	Inf	40.08M	35.982M	40.02M	35.982M
5670MHz_TnomVnom	Pass	Inf	40.08M	35.982M	57.06M	36.162M
802.11ac_VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	Inf	84M	75.802M	83.64M	75.802M
5530MHz_TnomVnom	Pass	Inf	83.28M	75.802M	83.4M	75.562M
5610MHz_TnomVnom	Pass	Inf	87.48M	75.922M	152.04M	76.522M

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

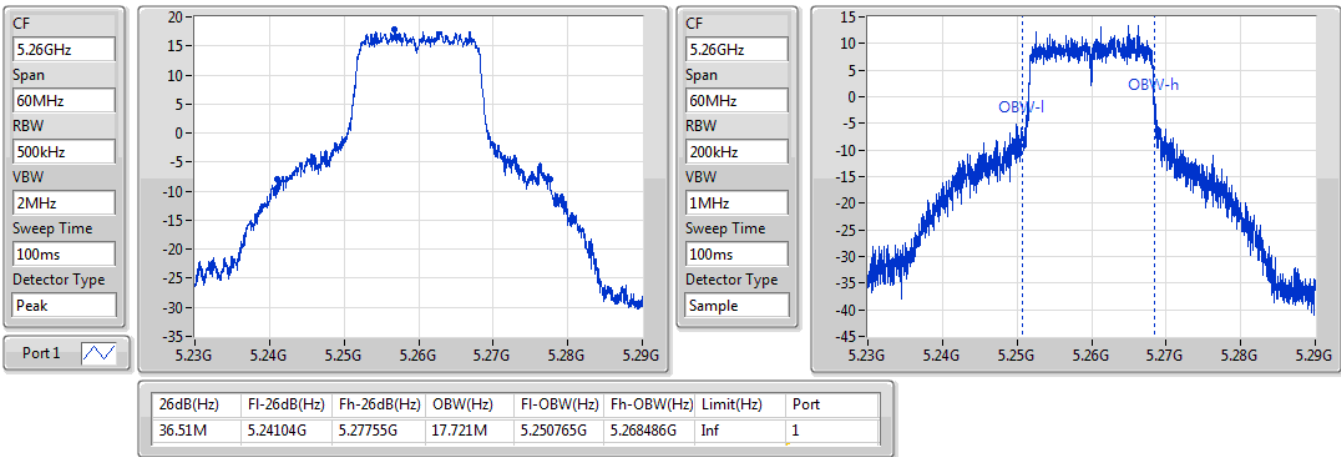
Port X-OBW = Port X 99% occupied bandwidth;

802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5260MHz

07/10/2019

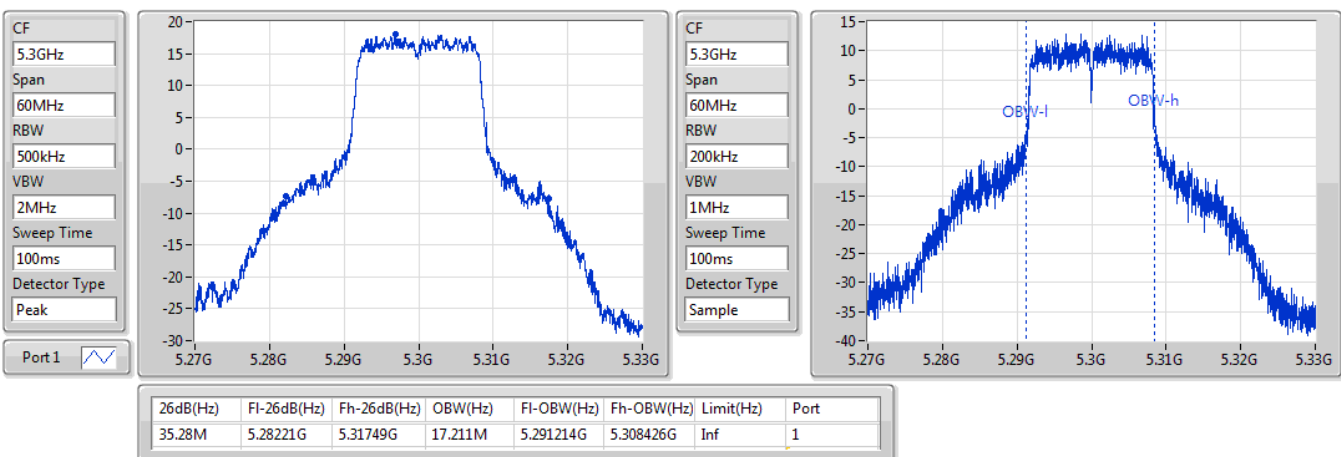


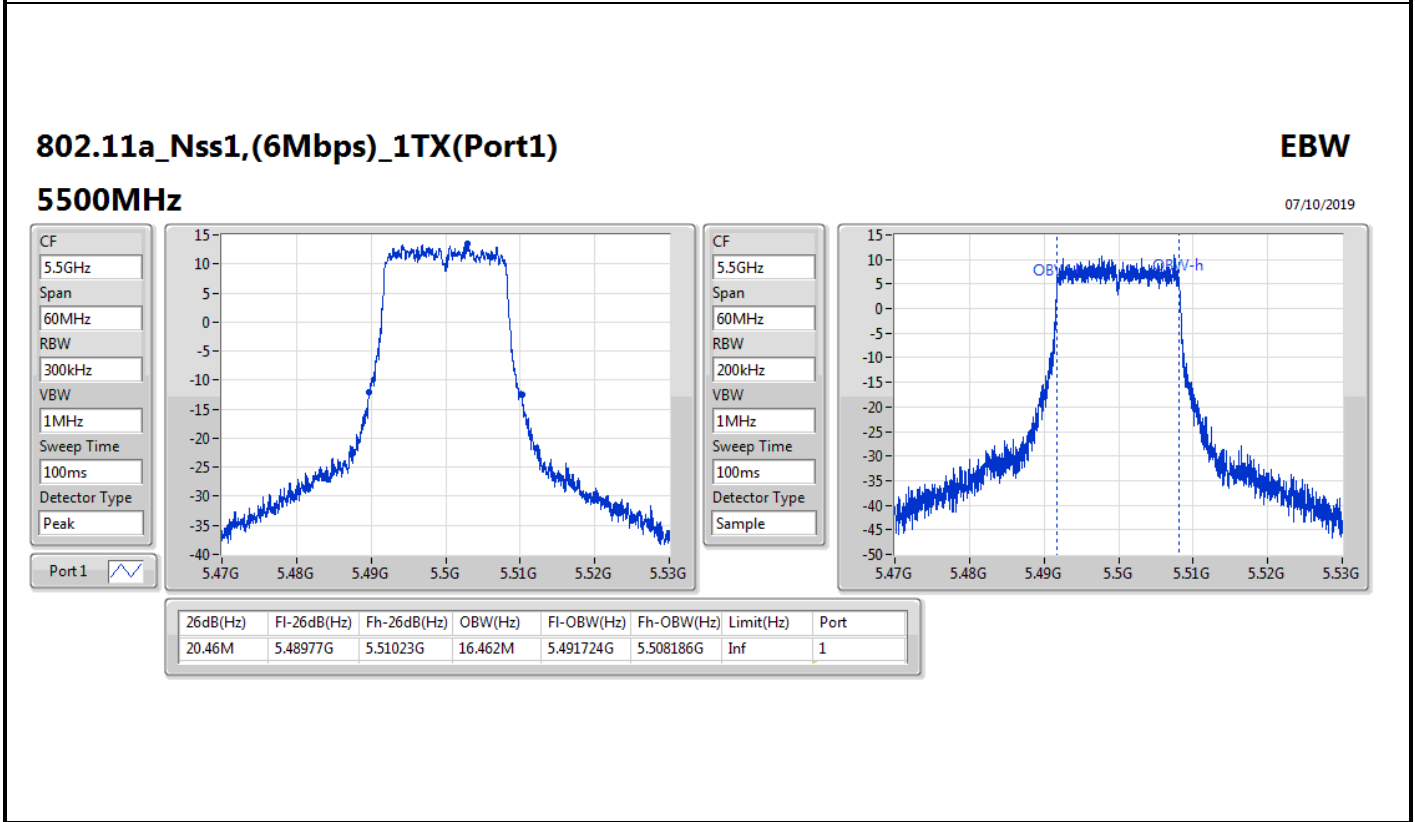
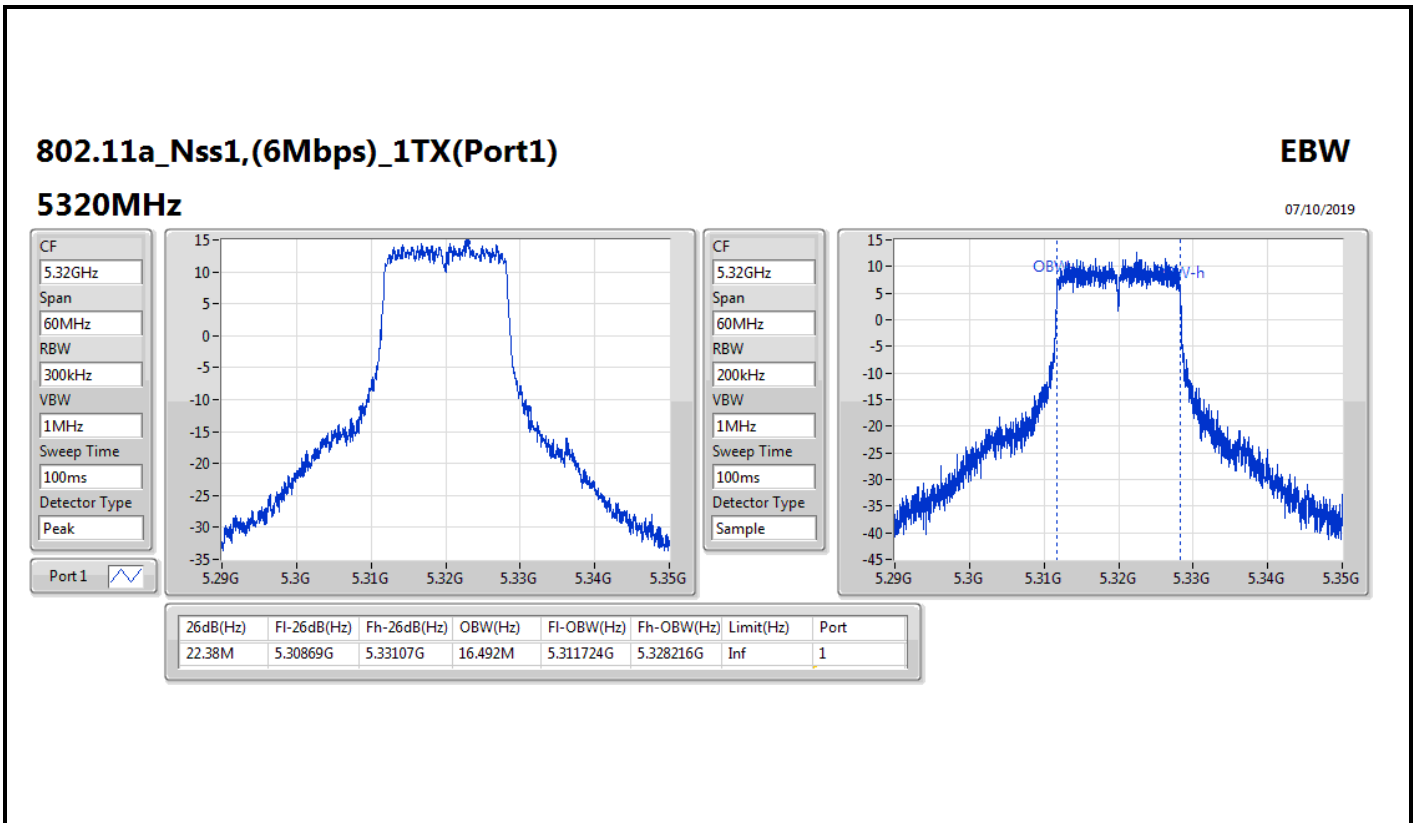
802.11a_Nss1,(6Mbps)_1TX(Port1)

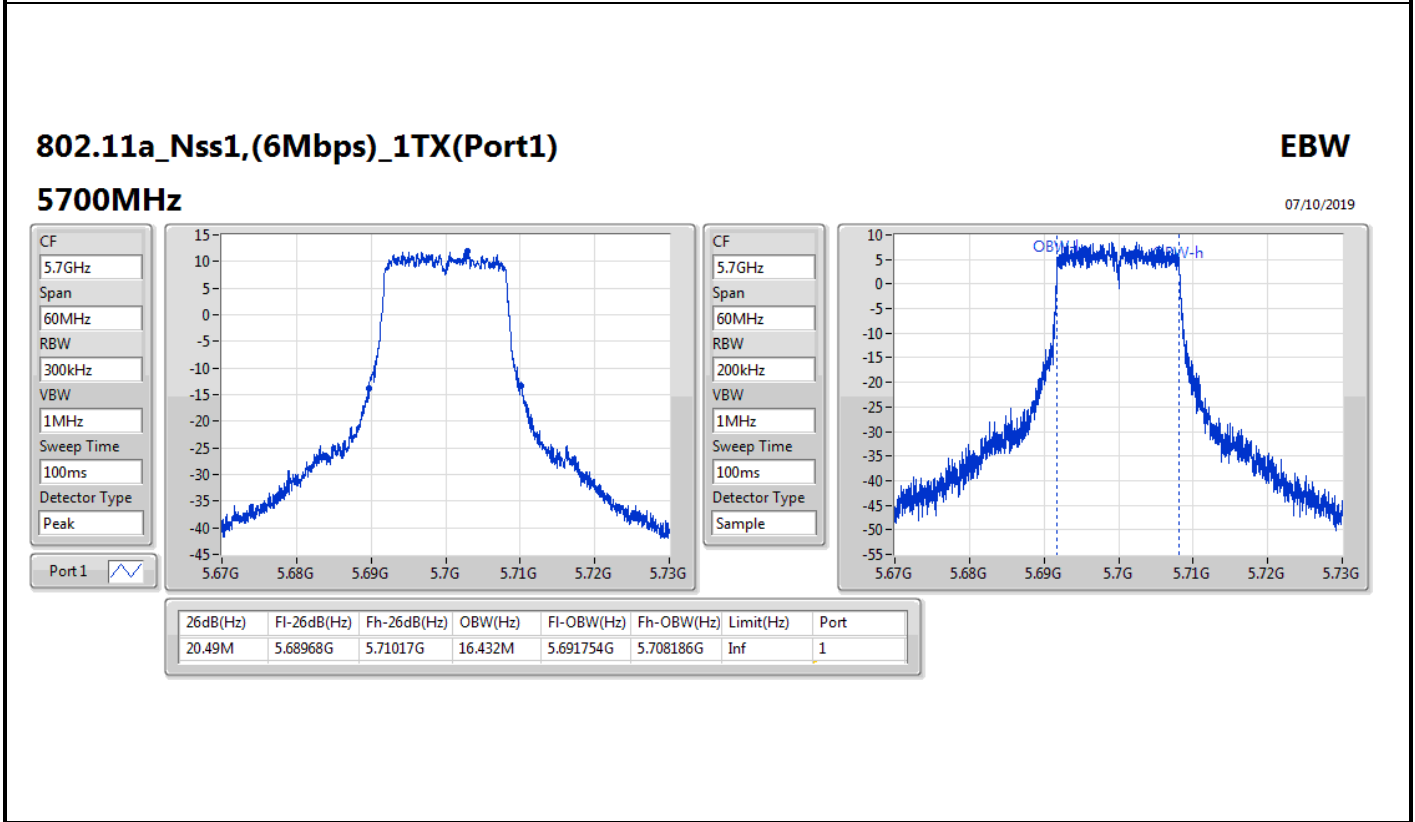
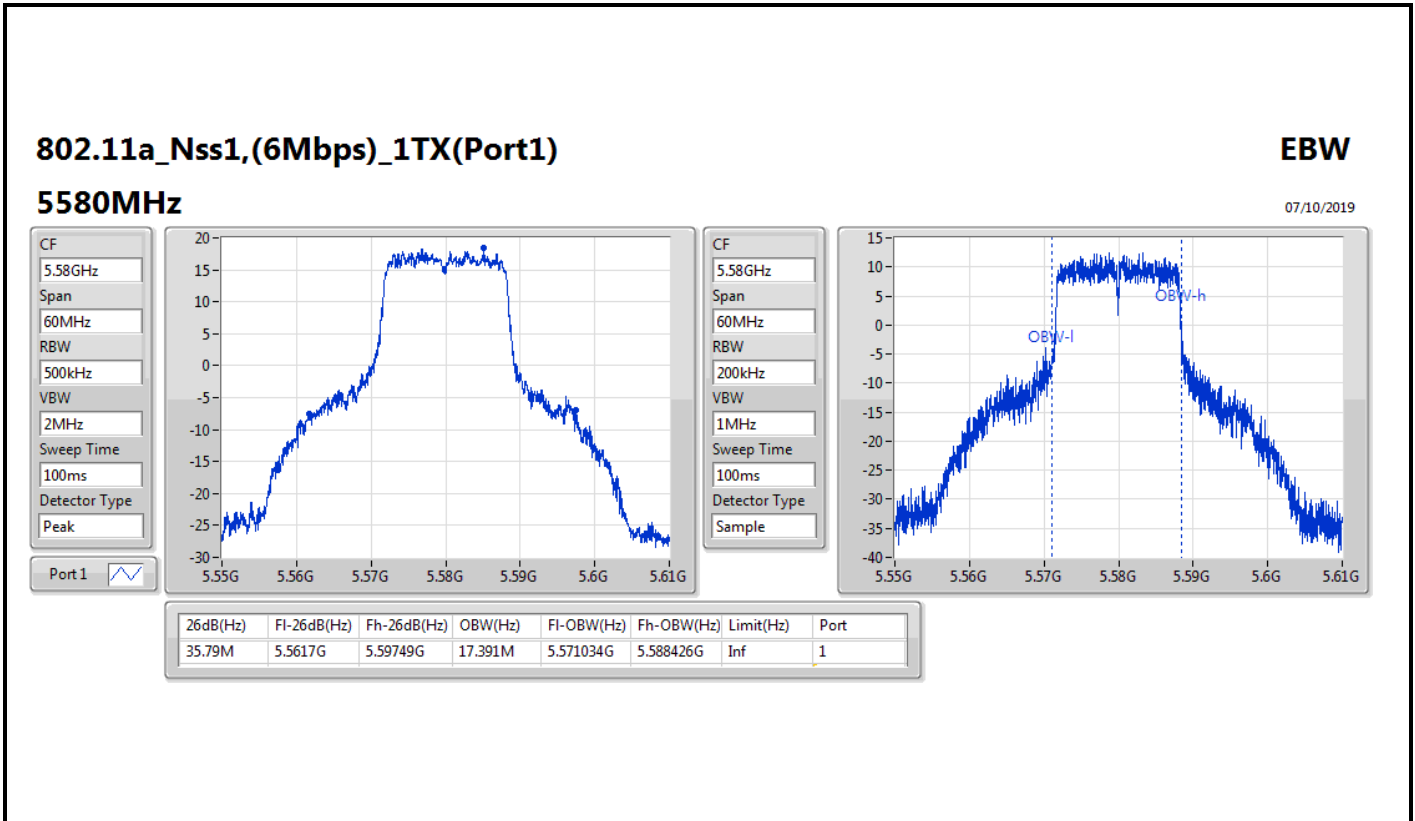
EBW

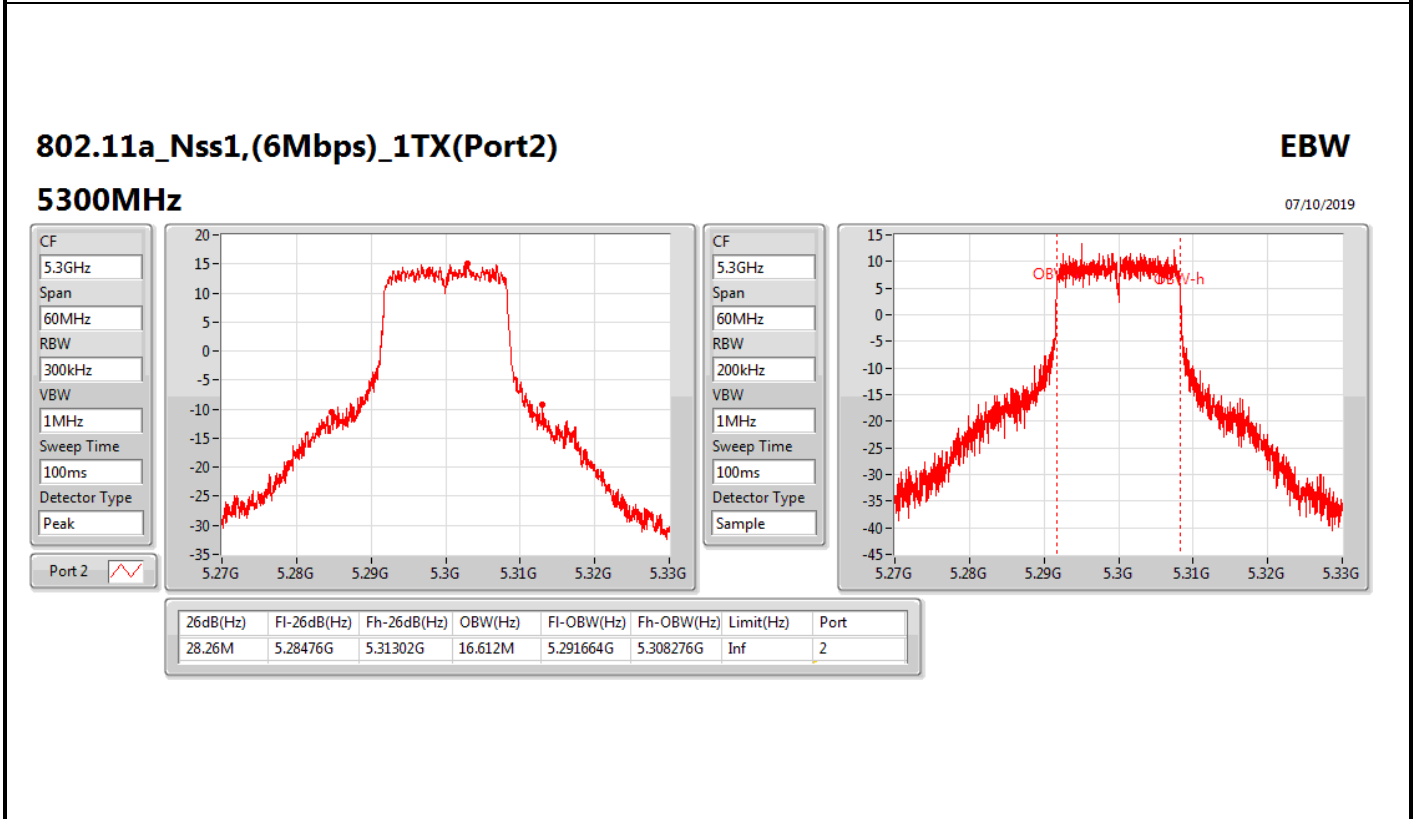
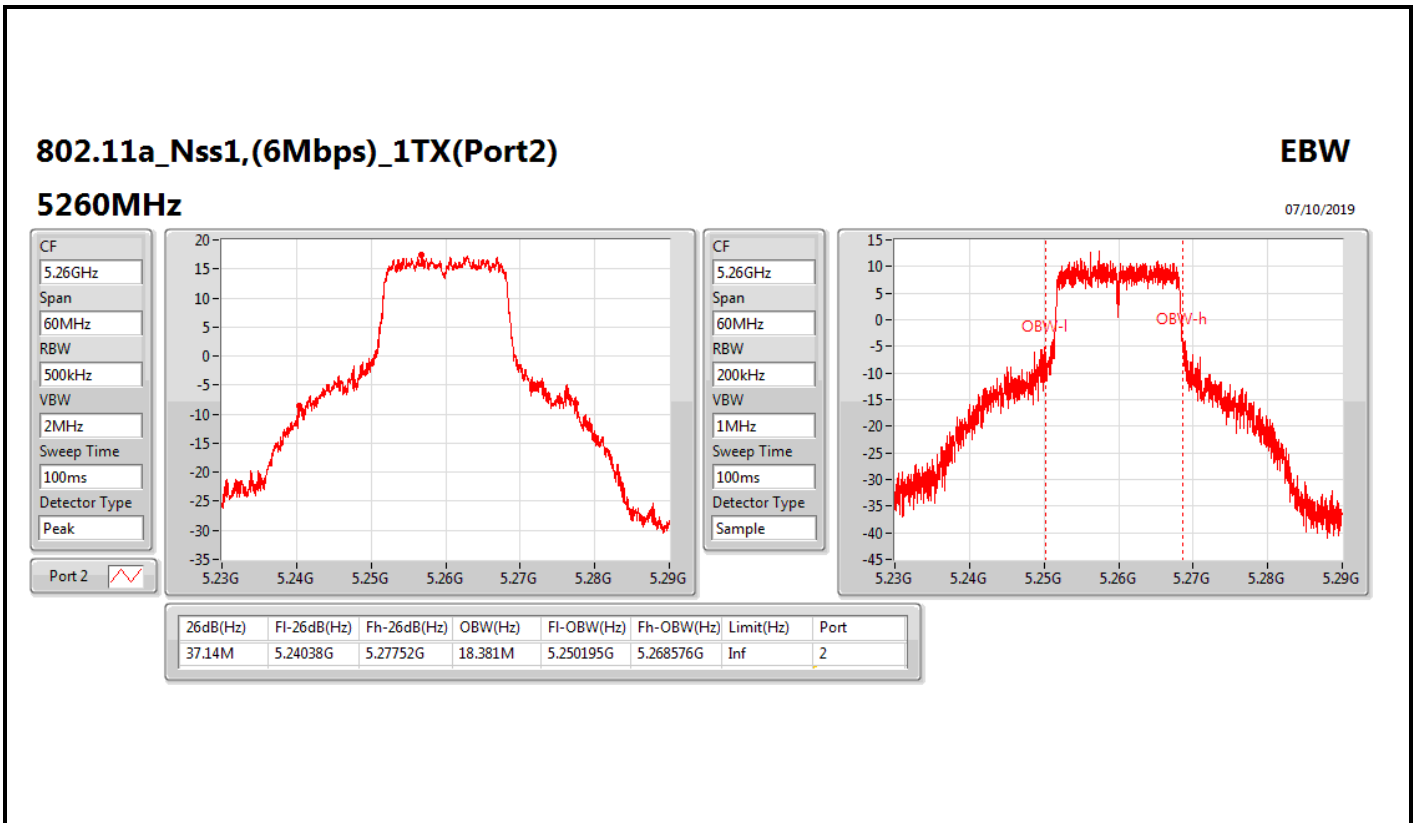
5300MHz

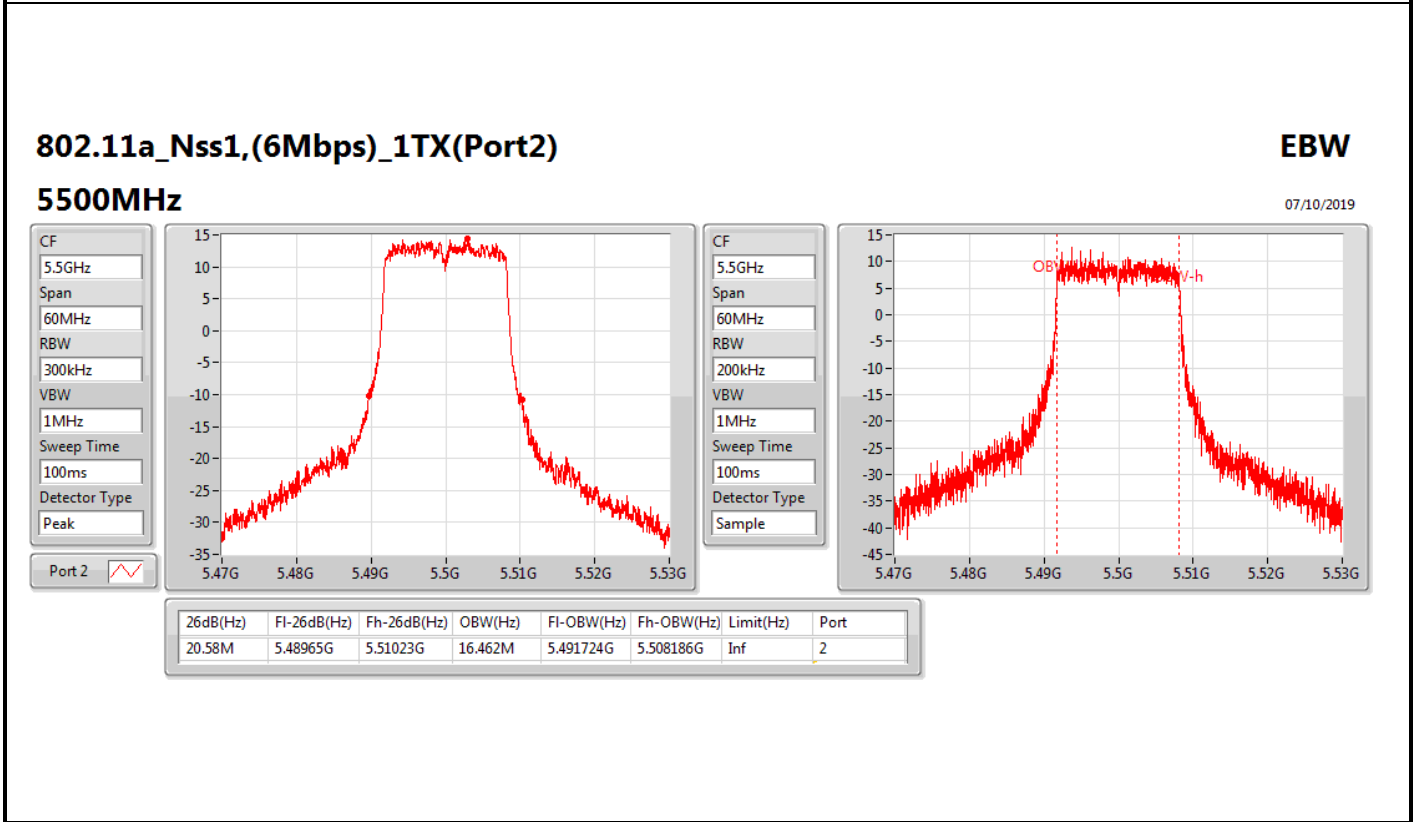
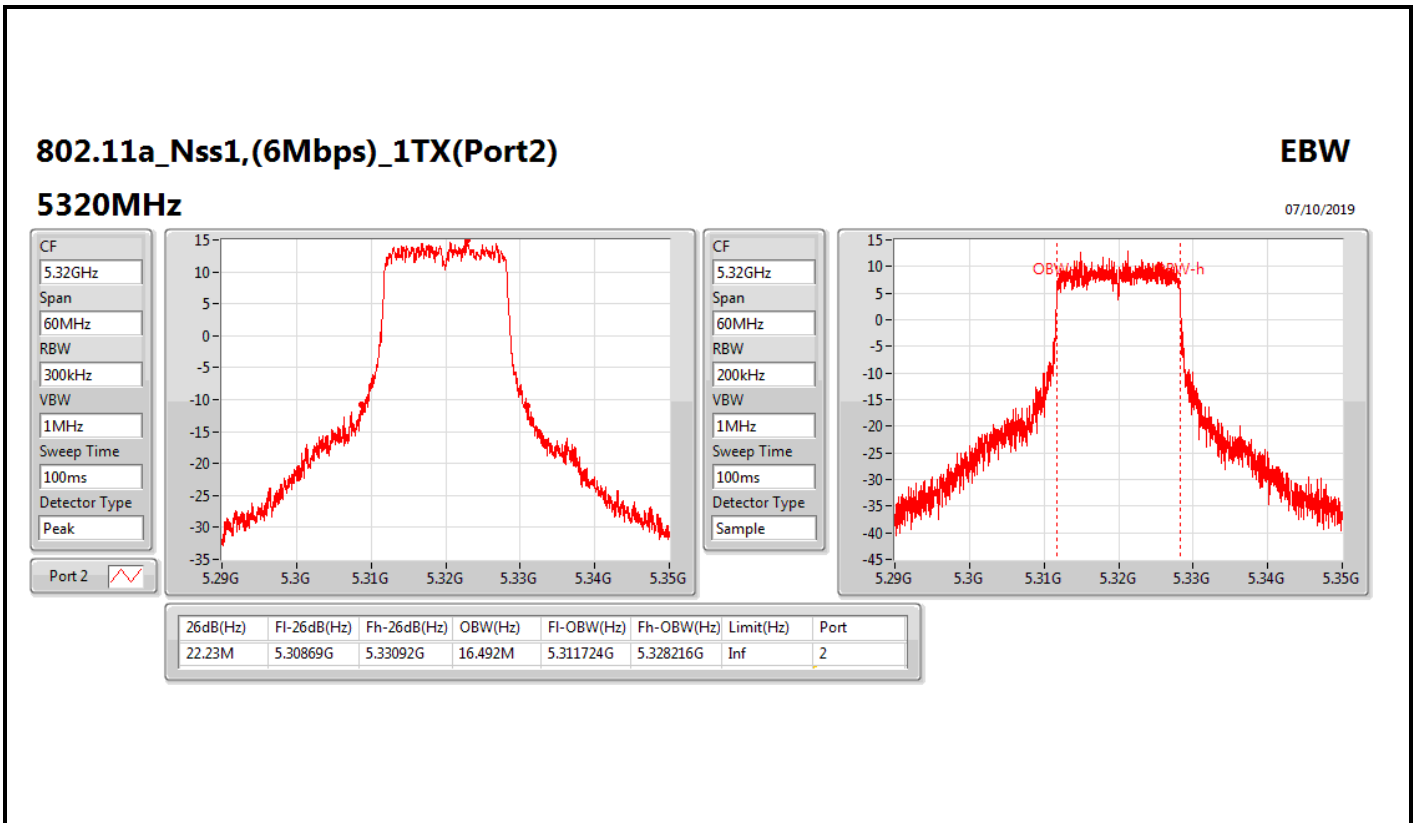
07/10/2019

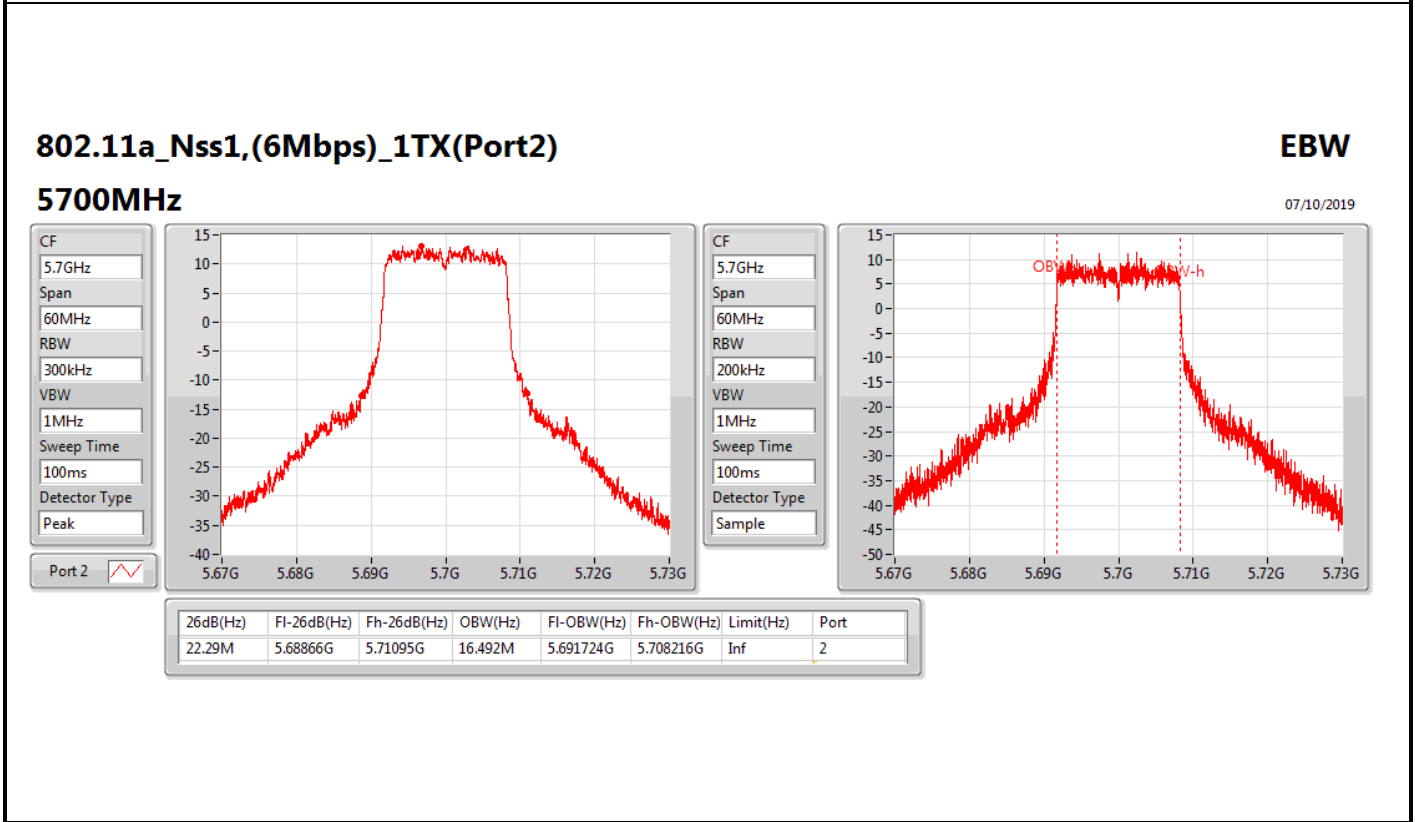
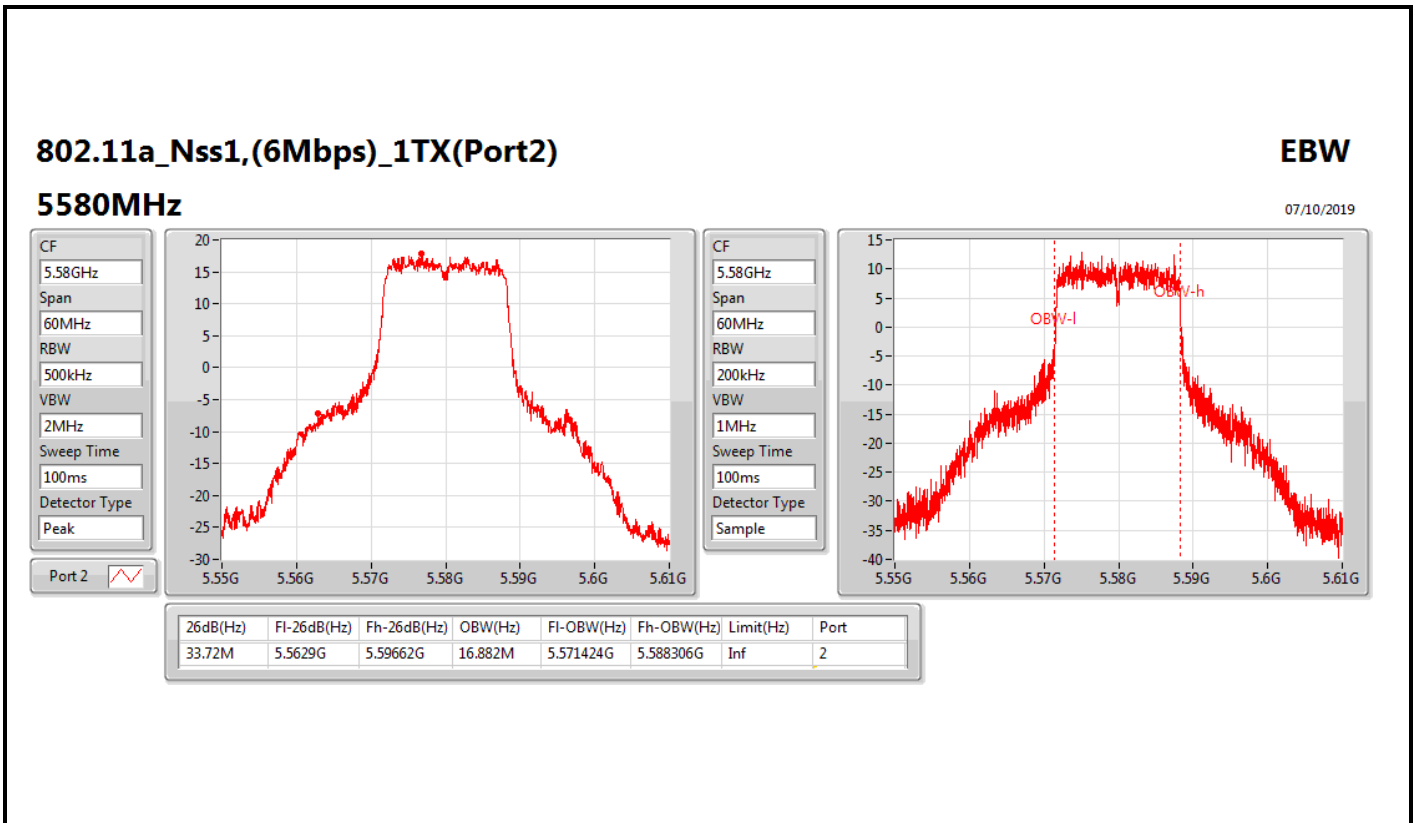












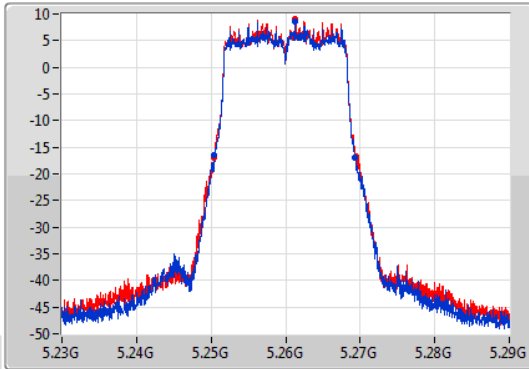
802.11a_Nss1,(6Mbps)_2TX

EBW

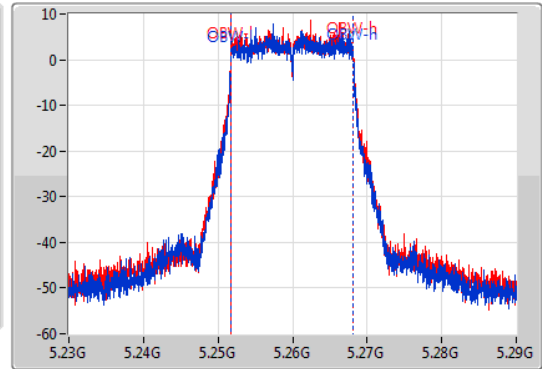
5260MHz

07/10/2019

CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.93M	5.2504G	5.26933G	16.402M	5.251754G	5.268156G	Inf	1
18.99M	5.25046G	5.26945G	16.402M	5.251754G	5.268156G	Inf	2

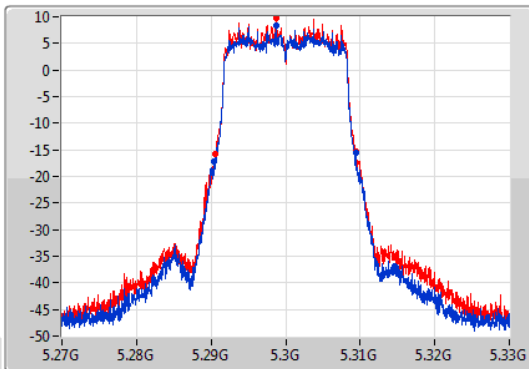
802.11a_Nss1,(6Mbps)_2TX

EBW

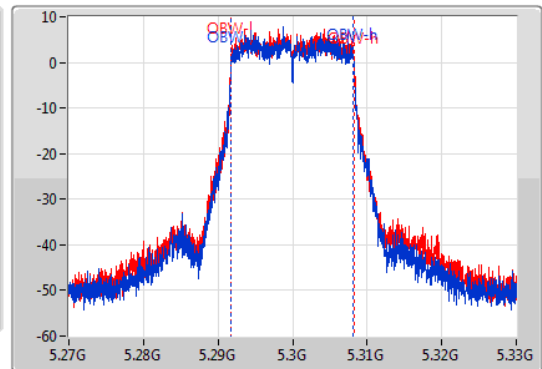
5300MHz

07/10/2019

CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.99M	5.2904G	5.30939G	16.402M	5.291784G	5.308186G	Inf	1
18.87M	5.29058G	5.30945G	16.432M	5.291784G	5.308216G	Inf	2

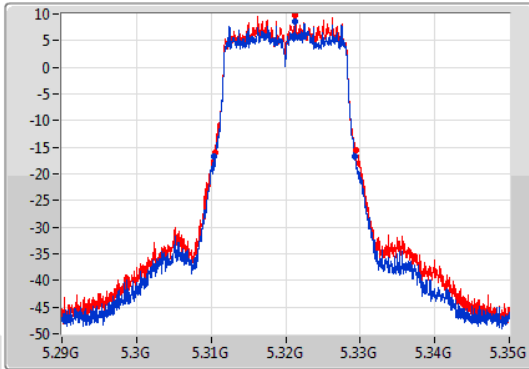
802.11a_Nss1,(6Mbps)_2TX

EBW

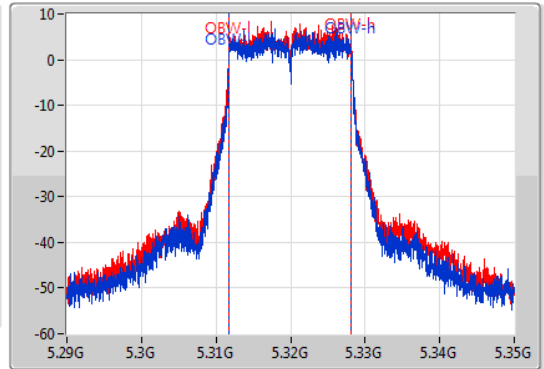
5320MHz

07/10/2019

CF
5.32GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.32GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.96M	5.31037G	5.32933G	16.432M	5.311754G	5.328186G	Inf	1
18.9M	5.31055G	5.32945G	16.402M	5.311754G	5.328156G	Inf	2

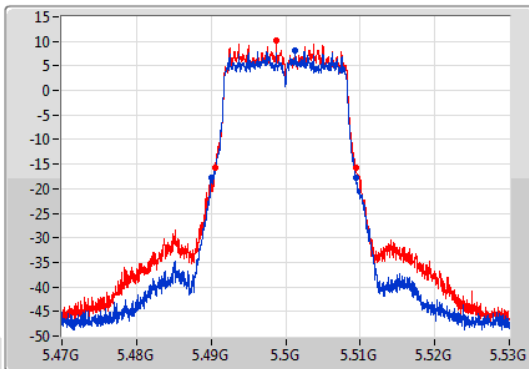
802.11a_Nss1,(6Mbps)_2TX

EBW

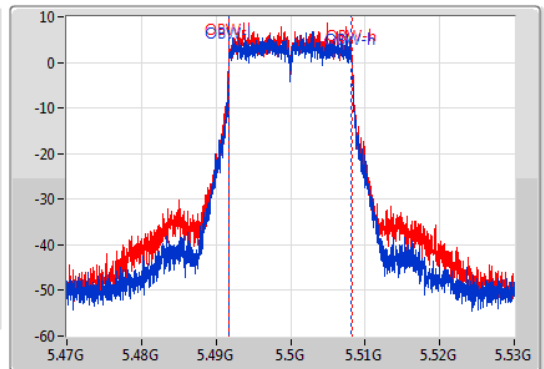
5500MHz

07/10/2019

CF
5.5GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.5GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.38M	5.49001G	5.50939G	16.402M	5.491784G	5.508186G	Inf	1
18.87M	5.49061G	5.50948G	16.432M	5.491784G	5.508216G	Inf	2

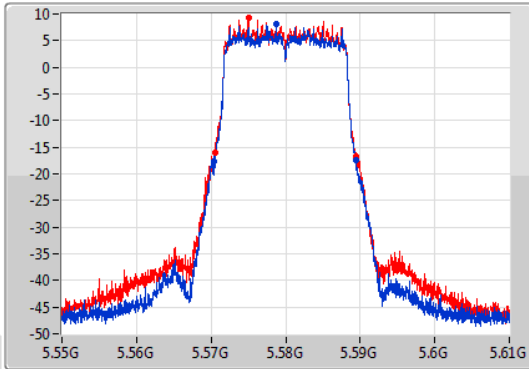
802.11a_Nss1,(6Mbps)_2TX

EBW

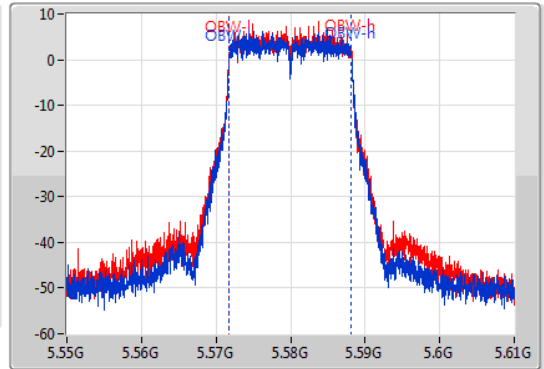
5580MHz

07/10/2019

CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.08M	5.57031G	5.58939G	16.402M	5.571784G	5.588186G	Inf	1
18.93M	5.57052G	5.58945G	16.402M	5.571784G	5.588186G	Inf	2

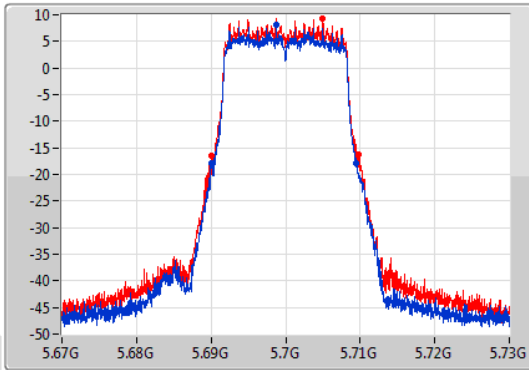
802.11a_Nss1,(6Mbps)_2TX

EBW

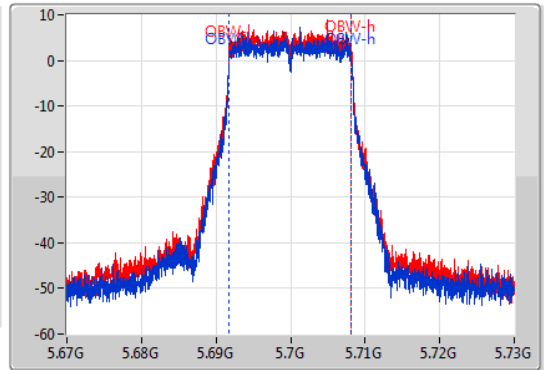
5700MHz

07/10/2019

CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.47M	5.68998G	5.70945G	16.432M	5.691754G	5.708186G	Inf	1
19.77M	5.69007G	5.70984G	16.402M	5.691784G	5.708186G	Inf	2

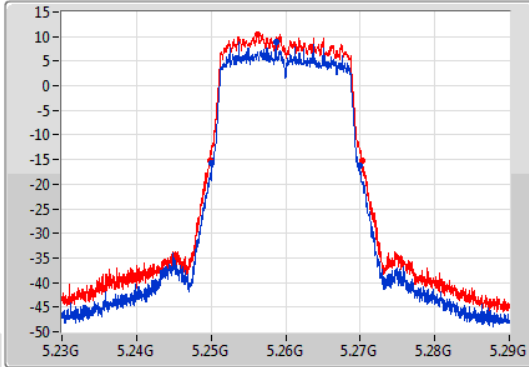
802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

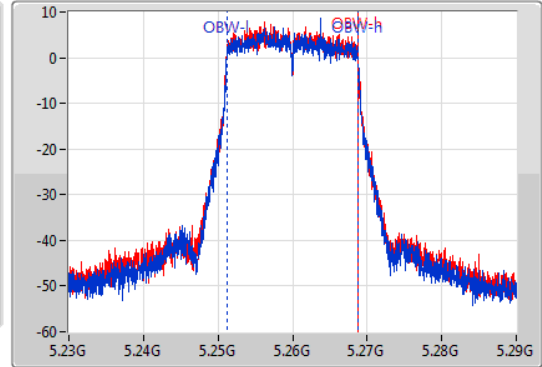
5260MHz

07/10/2019

CF
5.26GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.26GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.8M	5.2501G	5.2699G	17.571M	5.251184G	5.268756G	Inf	1
20.37M	5.24983G	5.2702G	17.601M	5.251154G	5.268756G	Inf	2

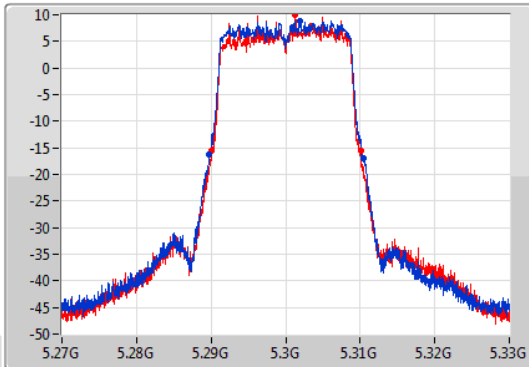
802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

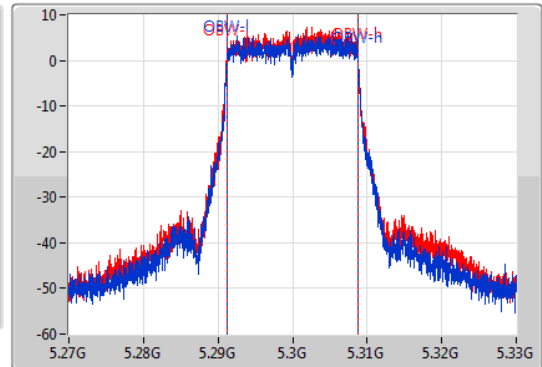
5300MHz

07/10/2019

CF
5.3GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.3GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



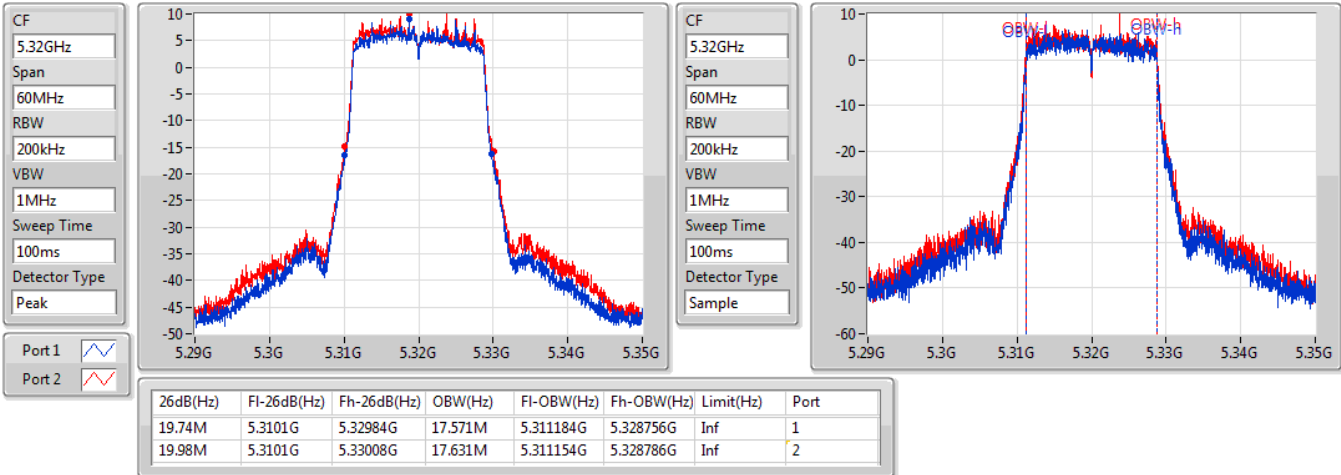
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
20.7M	5.28977G	5.31047G	17.631M	5.291184G	5.308816G	Inf	1
19.95M	5.29013G	5.31008G	17.601M	5.291184G	5.308786G	Inf	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5320MHz

07/10/2019

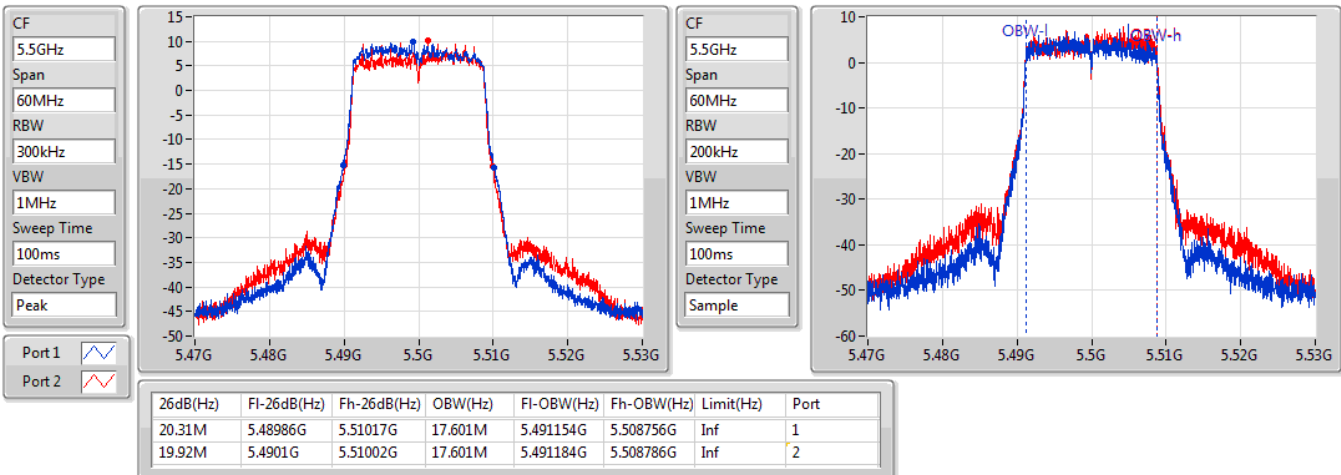


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5500MHz

07/10/2019

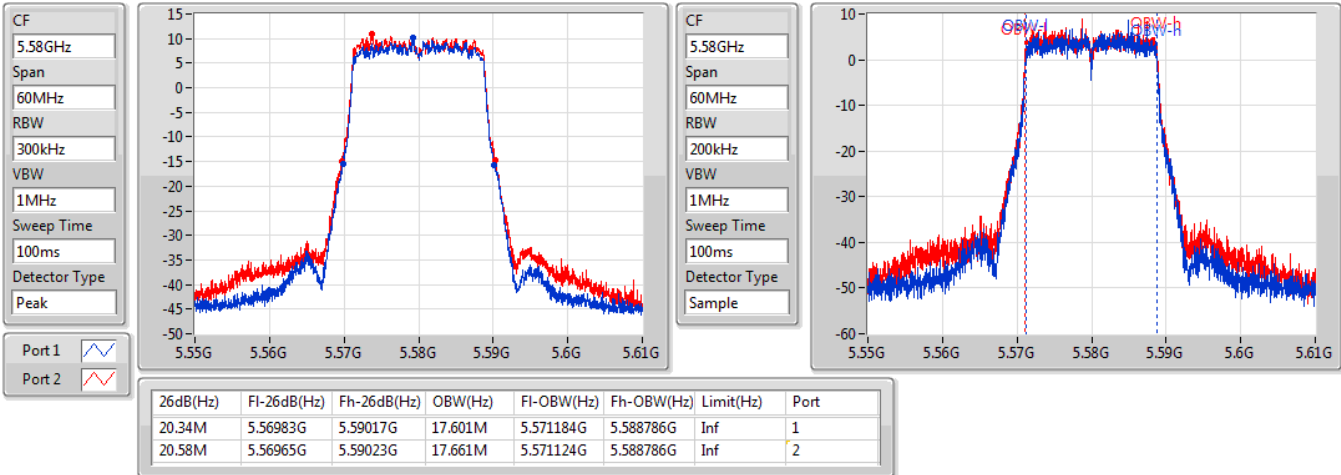


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5580MHz

07/10/2019

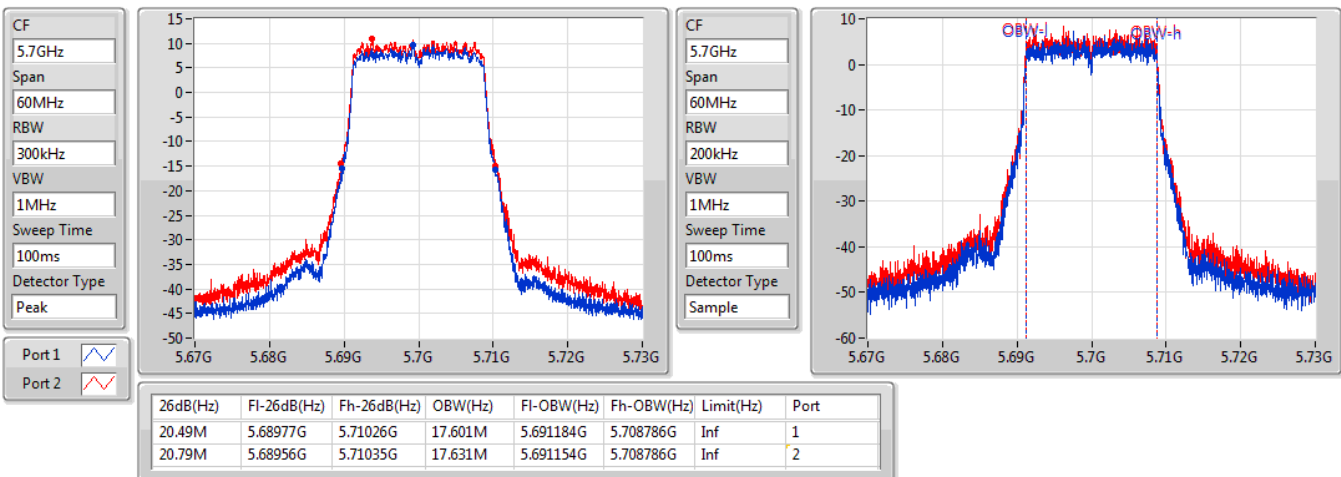


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

5700MHz

07/10/2019



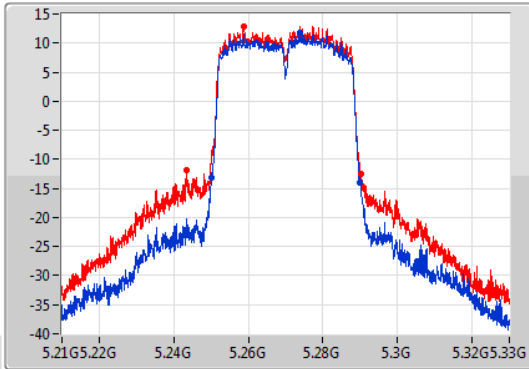
802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

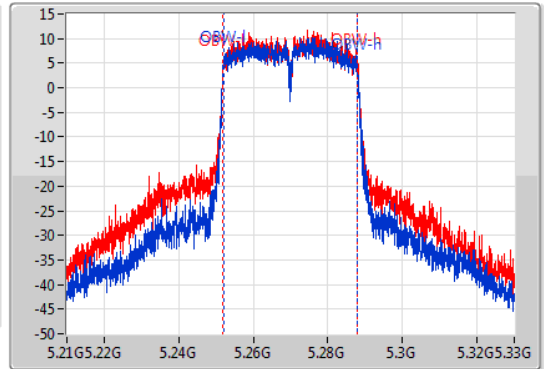
5270MHz

07/10/2019

CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.24996G	5.29004G	35.922M	5.252009G	5.287931G	Inf	1
46.92M	5.2433G	5.29022G	36.042M	5.251949G	5.287991G	Inf	2

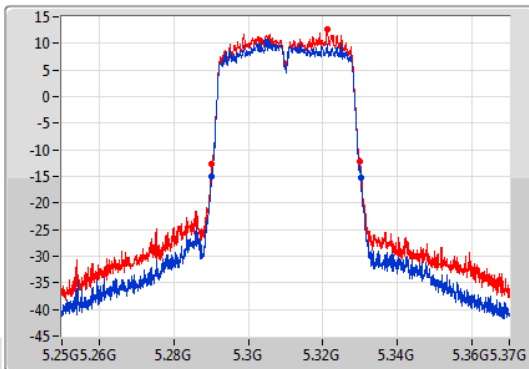
802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

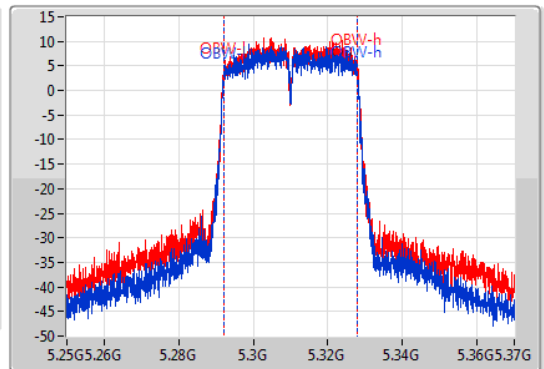
5310MHz

07/10/2019

CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.14M	5.29008G	5.33022G	35.982M	5.292009G	5.327991G	Inf	1
39.78M	5.29026G	5.33004G	35.922M	5.292069G	5.327991G	Inf	2

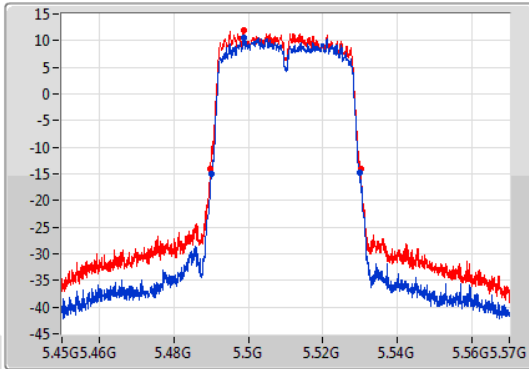
802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

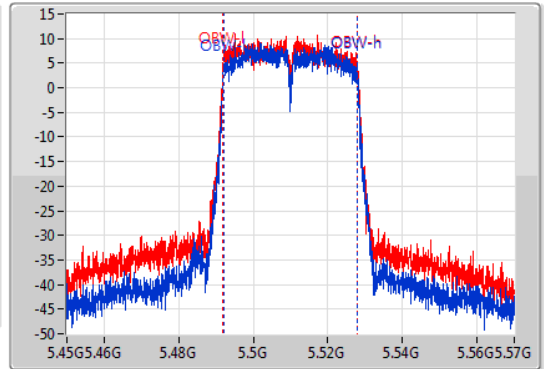
5510MHz

07/10/2019

CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.72M	5.49014G	5.52986G	35.862M	5.492009G	5.527871G	Inf	1
40.26M	5.48984G	5.5301G	36.042M	5.491889G	5.527931G	Inf	2

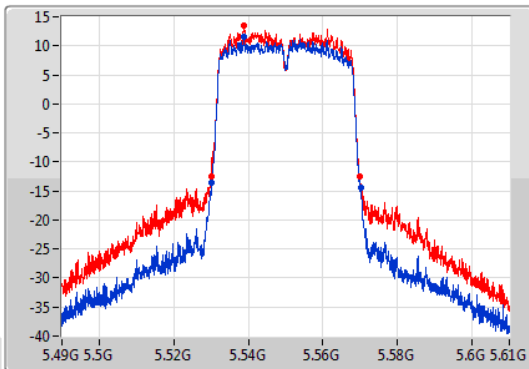
802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

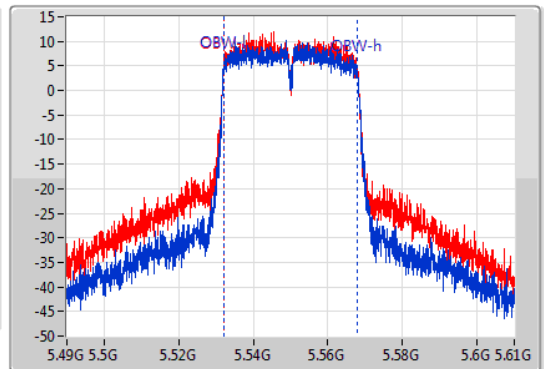
5550MHz

07/10/2019

CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



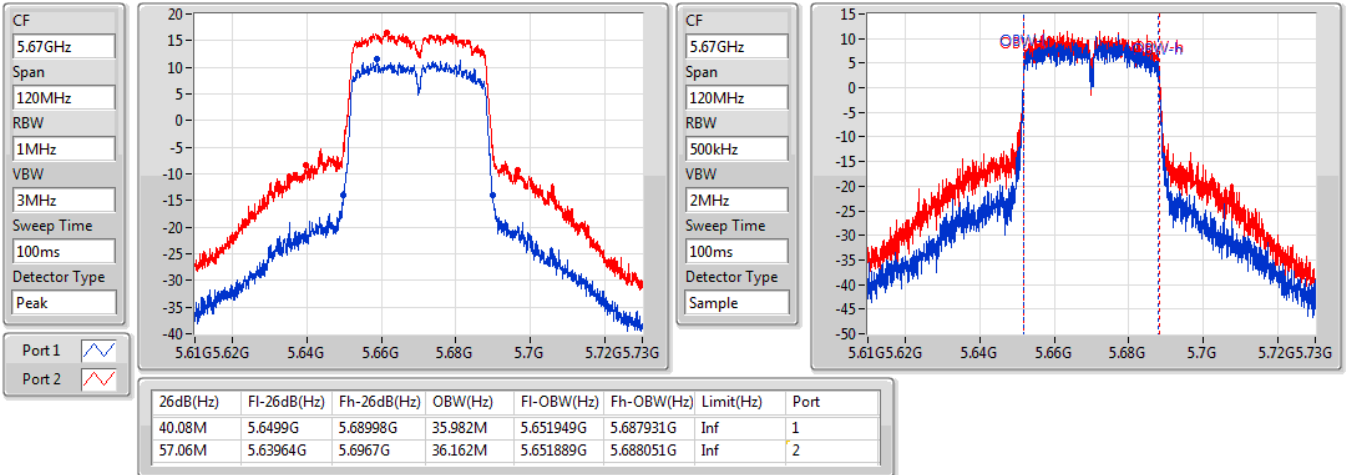
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.53008G	5.57016G	35.982M	5.532009G	5.567991G	Inf	1
40.02M	5.52996G	5.56998G	35.982M	5.532009G	5.567991G	Inf	2

802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

5670MHz

07/10/2019

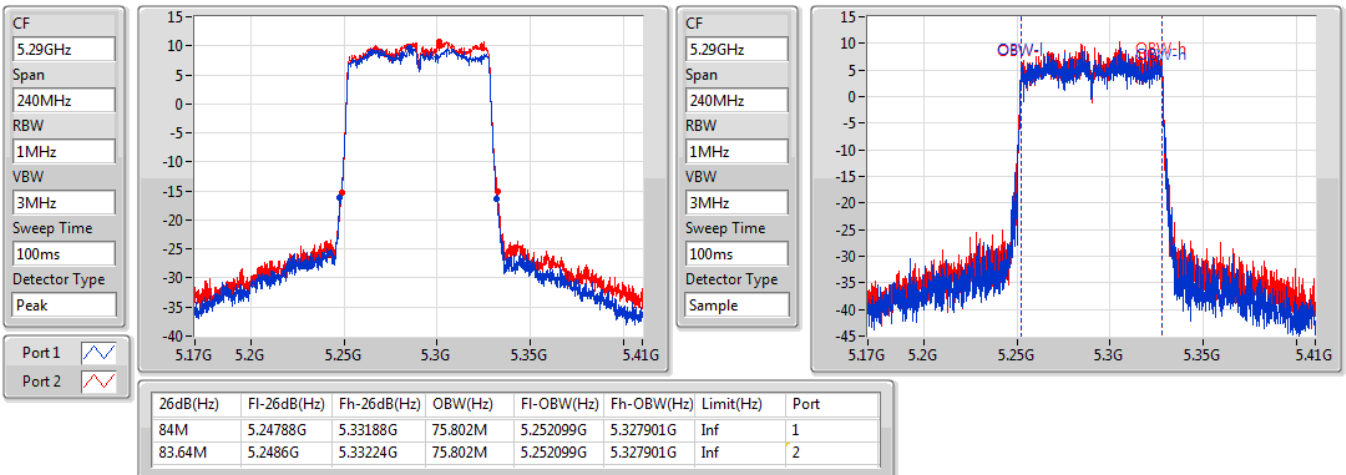


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5290MHz

07/10/2019

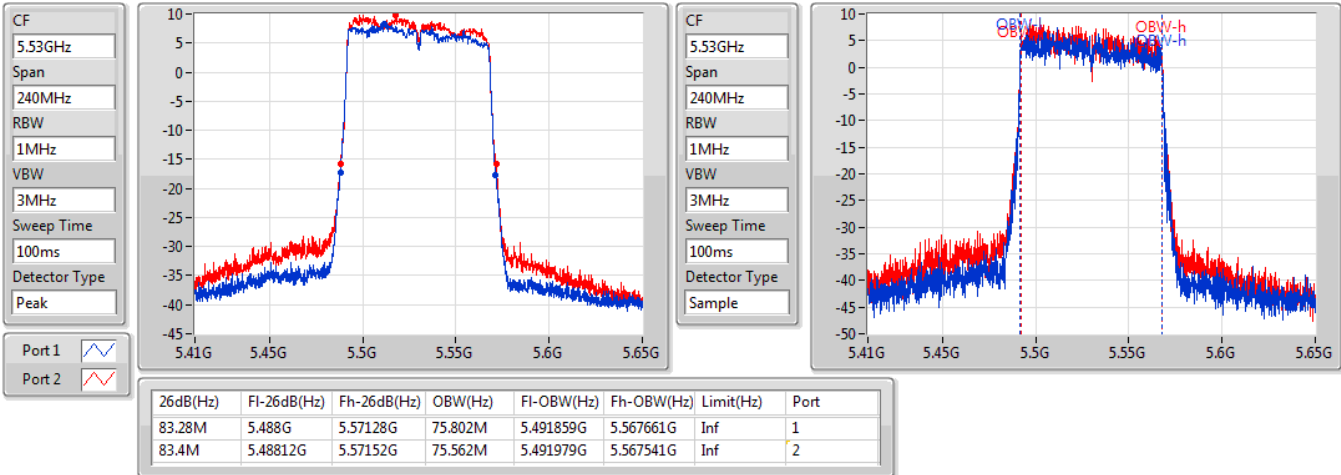


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5530MHz

07/10/2019

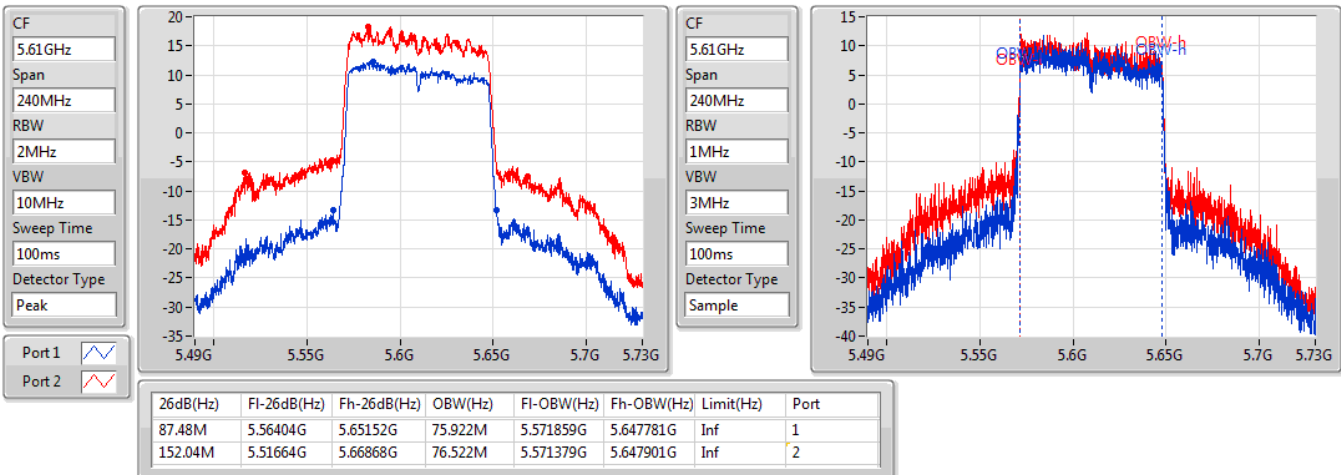


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5610MHz

07/10/2019





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.58M	17.751M	17M8D1D	22.68M	17.661M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	42.42M	36.762M	36M8D1D	41.16M	36.282M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	87.36M	76.042M	76M0D1D	86.28M	75.922M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	23.49M	17.751M	17M8D1D	21.51M	17.721M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	43.68M	36.942M	36M9D1D	40.32M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	89.52M	76.042M	76M0D1D	81.84M	75.922M

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)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	22.71M	17.661M	23.55M	17.721M
5300MHz	Pass	Inf	22.86M	17.721M	23.04M	17.721M
5320MHz	Pass	Inf	22.68M	17.691M	23.58M	17.751M
5500MHz	Pass	Inf	23.1M	17.721M	21.51M	17.721M
5580MHz	Pass	Inf	23.37M	17.751M	21.78M	17.721M
5700MHz	Pass	Inf	23.49M	17.751M	22.56M	17.721M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	41.16M	36.402M	42.06M	36.282M
5310MHz	Pass	Inf	42.36M	36.402M	42.42M	36.762M
5510MHz	Pass	Inf	43.68M	36.942M	41.34M	36.222M
5550MHz	Pass	Inf	43.08M	36.642M	42.12M	36.402M
5670MHz	Pass	Inf	42.96M	36.762M	40.32M	36.162M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	86.28M	76.042M	87.36M	75.922M
5530MHz	Pass	Inf	86.04M	75.922M	82.32M	75.922M
5610MHz	Pass	Inf	89.52M	76.042M	81.84M	76.042M

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

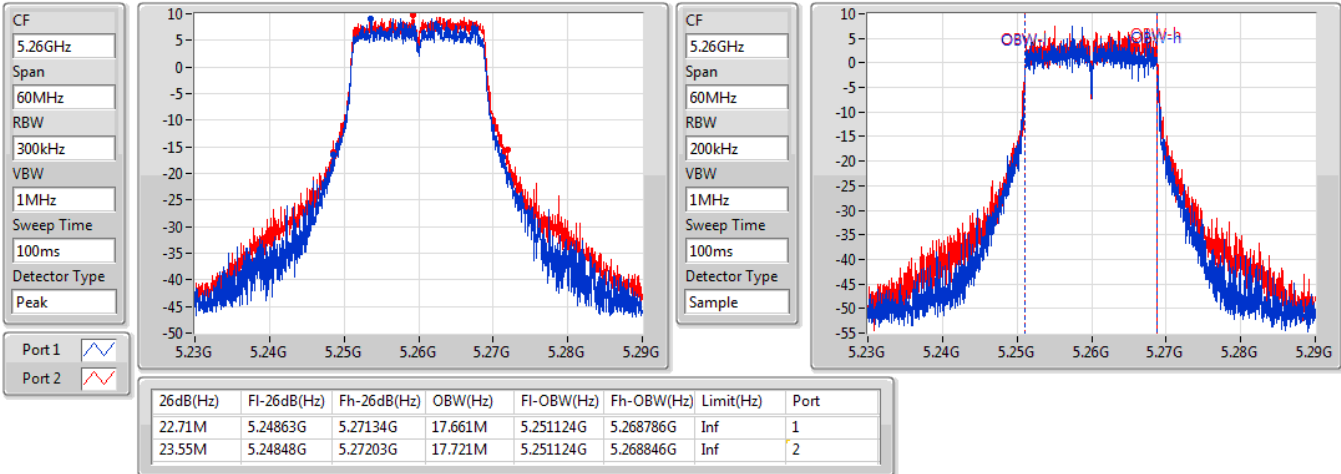
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

5260MHz

09/10/2019

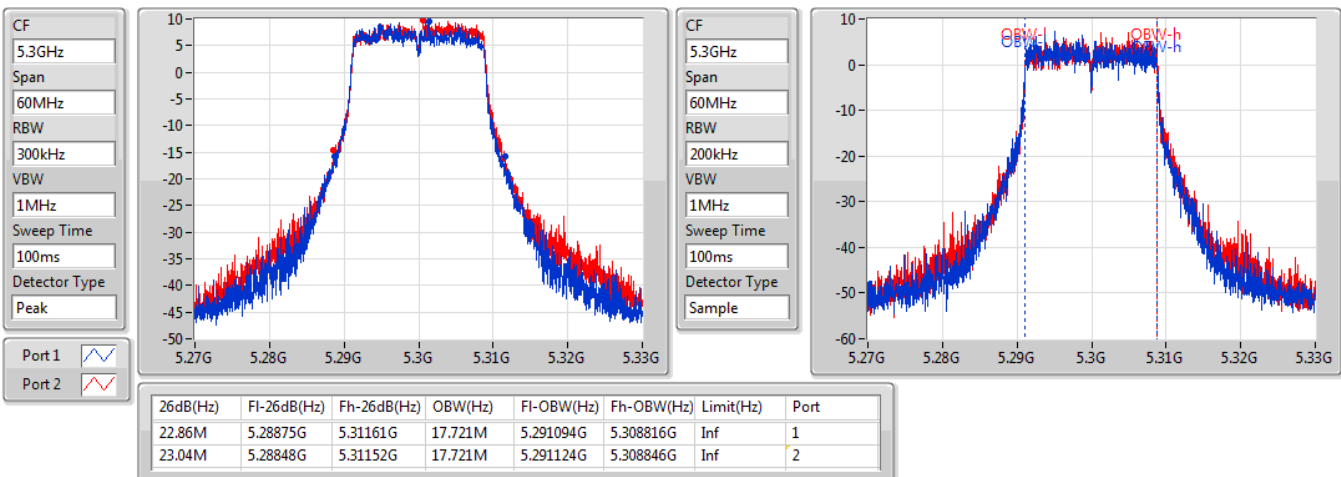


802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

5300MHz

09/10/2019



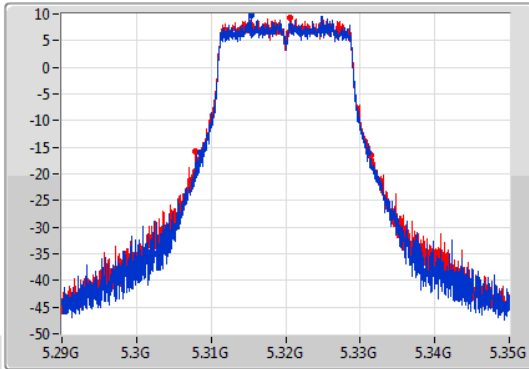
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

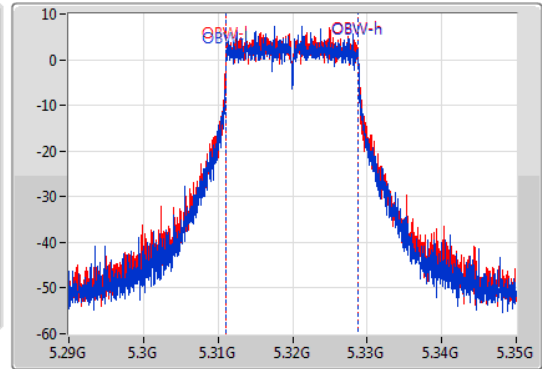
5320MHz

08/10/2019

CF
5.32GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.32GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.68M	5.30851G	5.33119G	17.691M	5.311124G	5.328816G	Inf	1
23.58M	5.30791G	5.33149G	17.751M	5.311094G	5.328846G	Inf	2

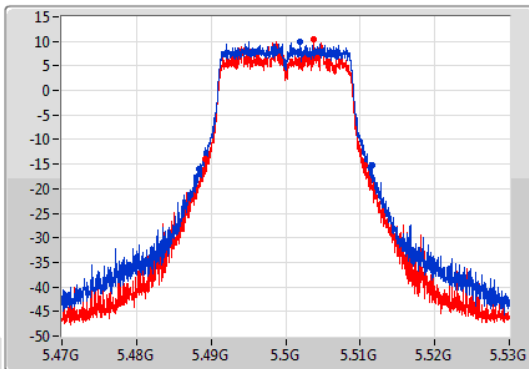
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

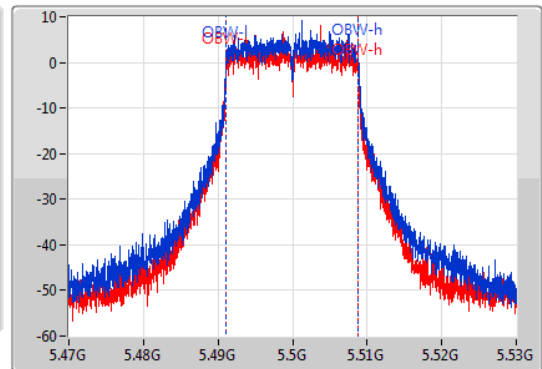
5500MHz

09/10/2019

CF
5.5GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.5GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.1M	5.48845G	5.51155G	17.721M	5.491124G	5.508846G	Inf	1
21.51M	5.48917G	5.51068G	17.721M	5.491094G	5.508816G	Inf	2

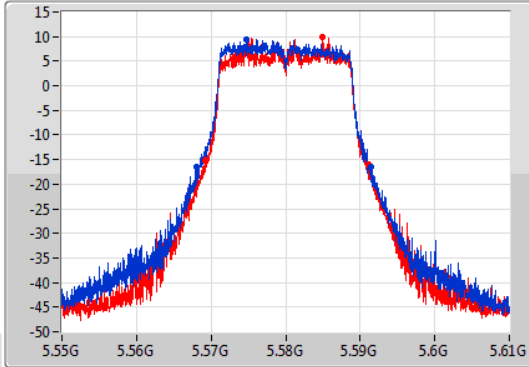
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

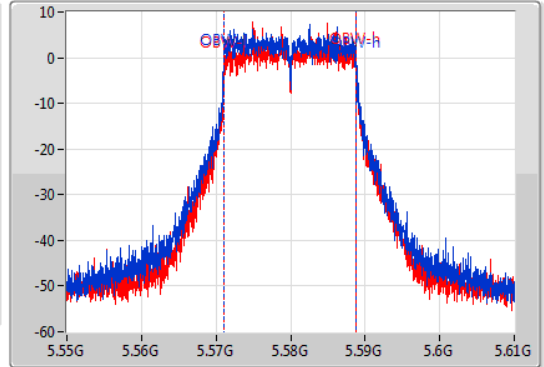
5580MHz

09/10/2019

CF
5.58GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.58GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.37M	5.56809G	5.59146G	17.751M	5.571064G	5.588816G	Inf	1
21.78M	5.56926G	5.59104G	17.721M	5.571124G	5.588846G	Inf	2

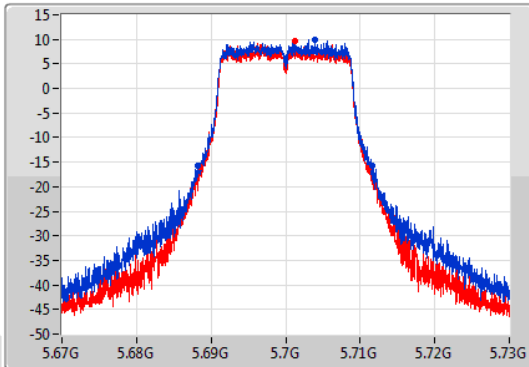
802.11ac VHT20-BF_Nss1,(MCS0)_2TX

EBW

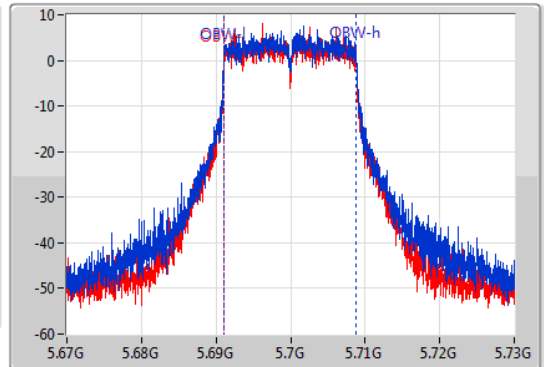
5700MHz

09/10/2019

CF
5.7GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.7GHz
Span
60MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
23.49M	5.68815G	5.71164G	17.751M	5.691094G	5.708846G	Inf	1
22.56M	5.68863G	5.71119G	17.721M	5.691094G	5.708816G	Inf	2

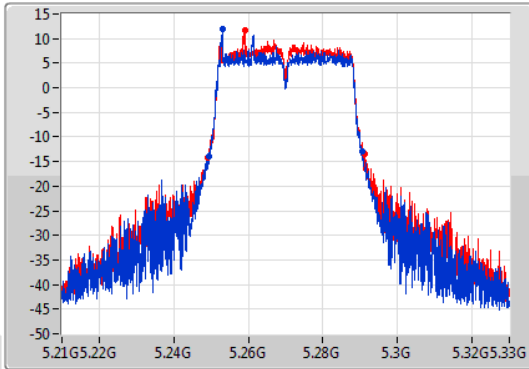
802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

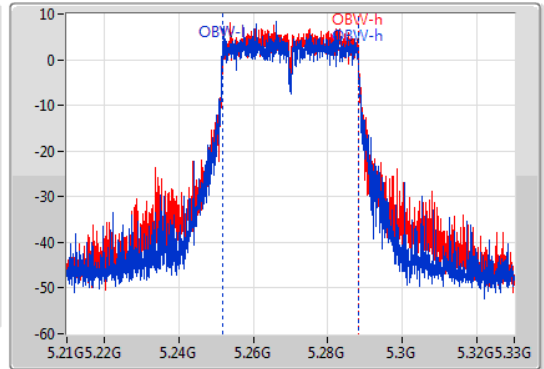
5270MHz

09/10/2019

CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.27GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
41.16M	5.24936G	5.29052G	36.402M	5.251709G	5.288111G	Inf	1
42.06M	5.24906G	5.29112G	36.282M	5.251829G	5.288111G	Inf	2

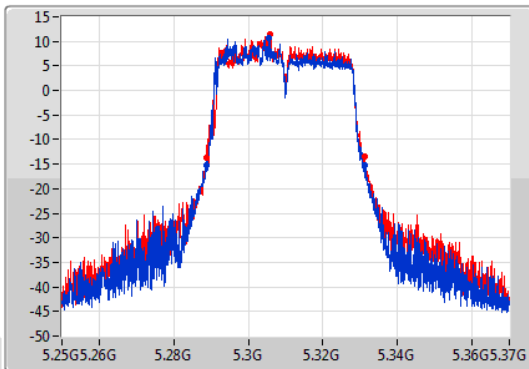
802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

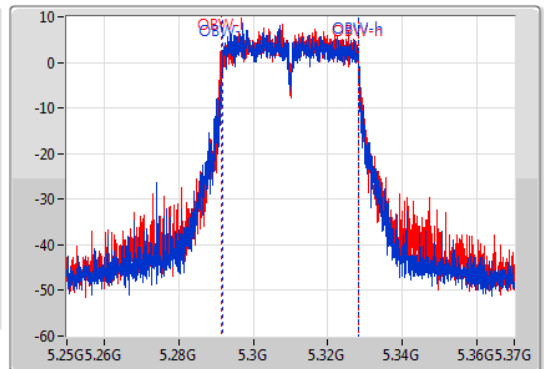
5310MHz

09/10/2019

CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.31GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Sample



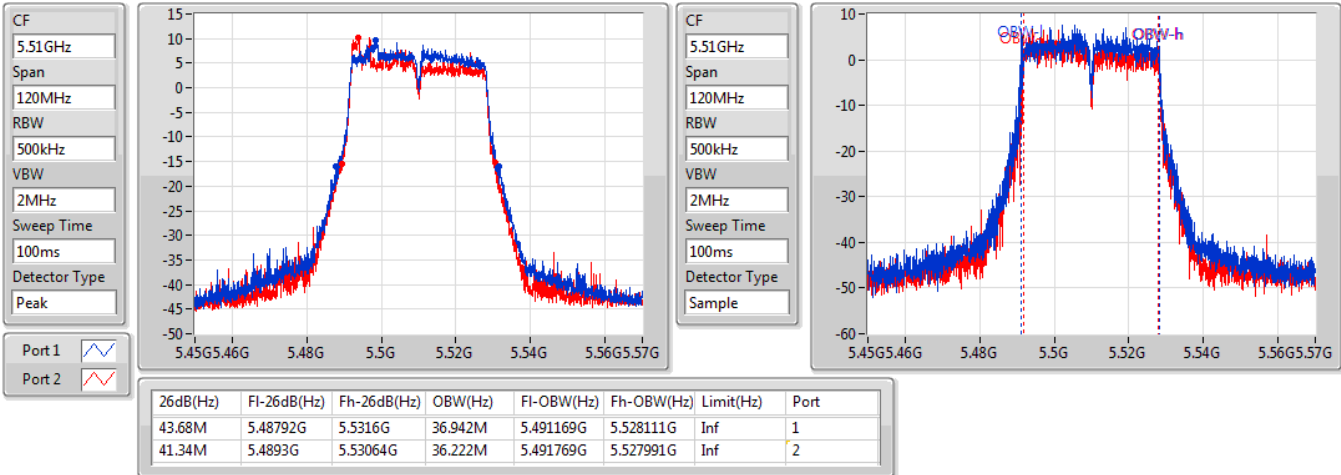
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
42.36M	5.2887G	5.33106G	36.402M	5.291709G	5.328111G	Inf	1
42.42M	5.28876G	5.33118G	36.762M	5.291349G	5.328111G	Inf	2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5510MHz

09/10/2019

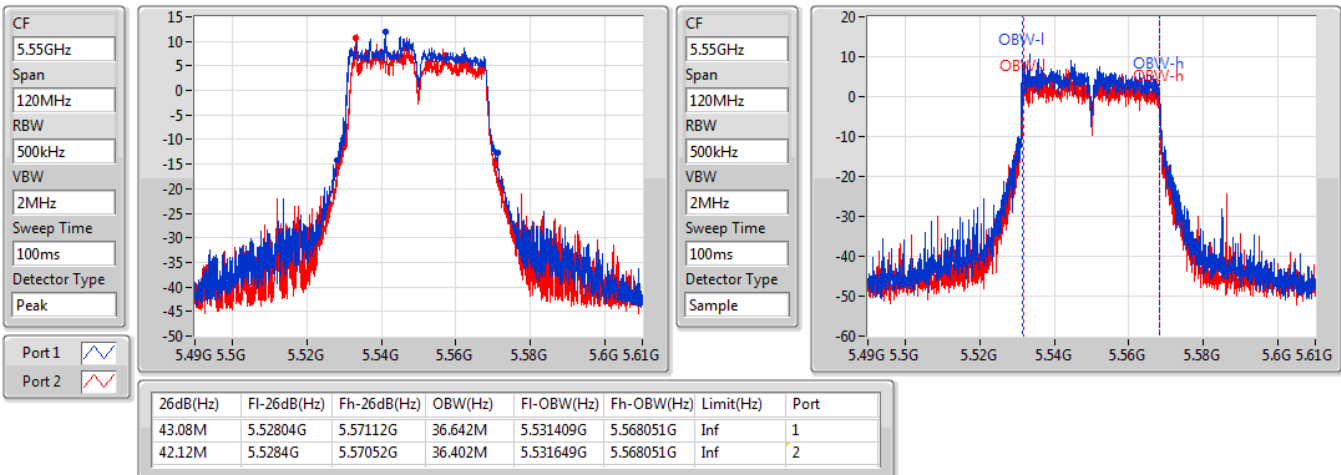


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5550MHz

09/10/2019

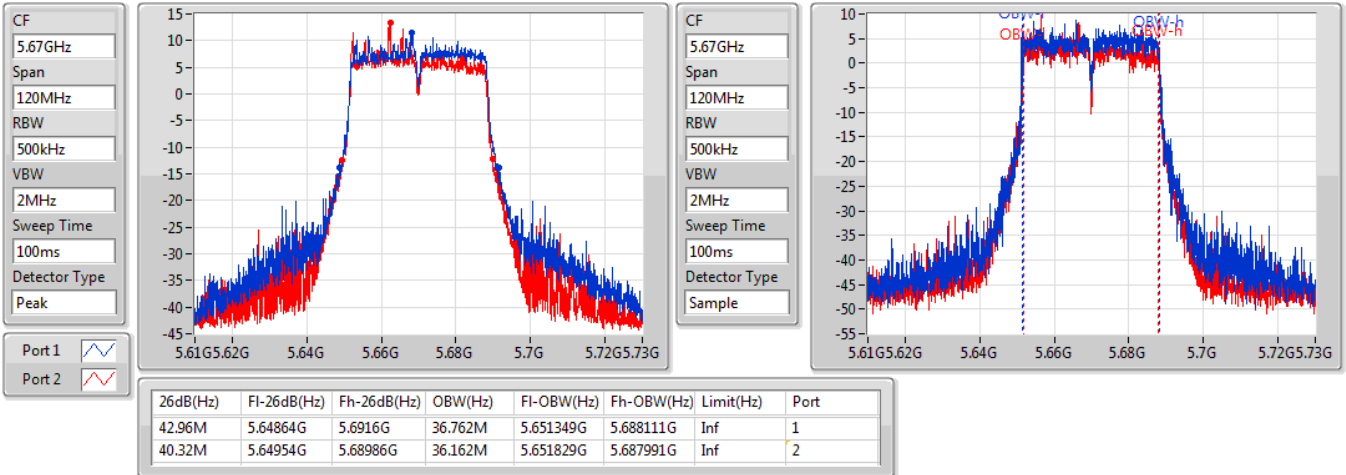


802.11ac VHT40-BF_Nss1,(MCS0)_2TX

EBW

5670MHz

09/10/2019

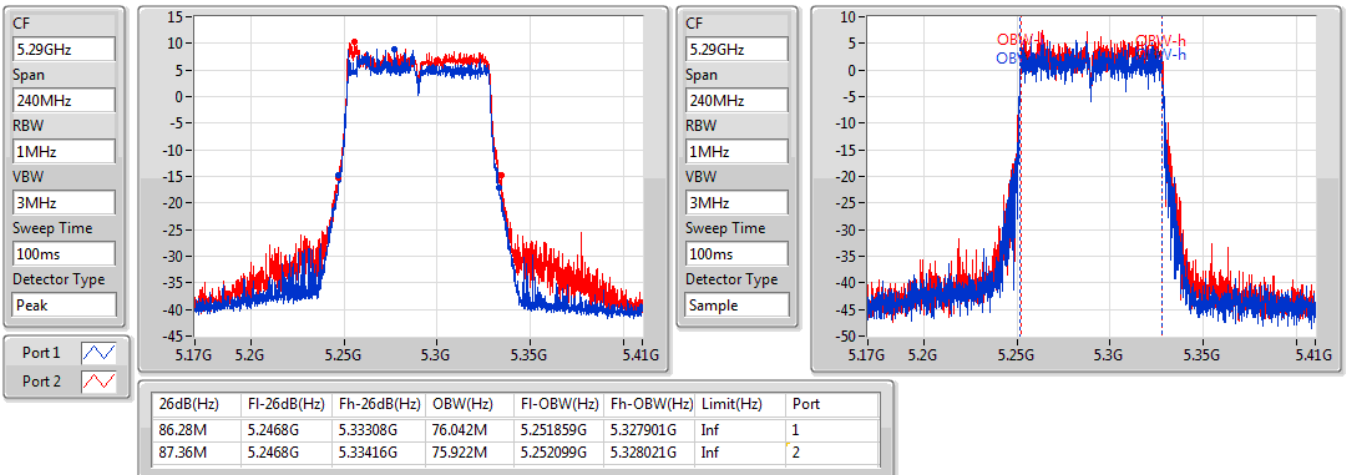


802.11ac VHT80-BF_Nss1,(MCS0)_2TX

EBW

5290MHz

09/10/2019



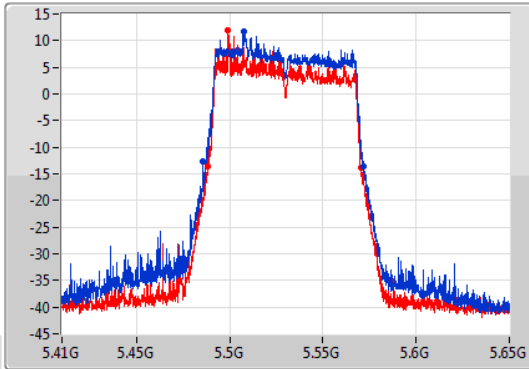
802.11ac VHT80-BF_Nss1,(MCS0)_2TX

EBW

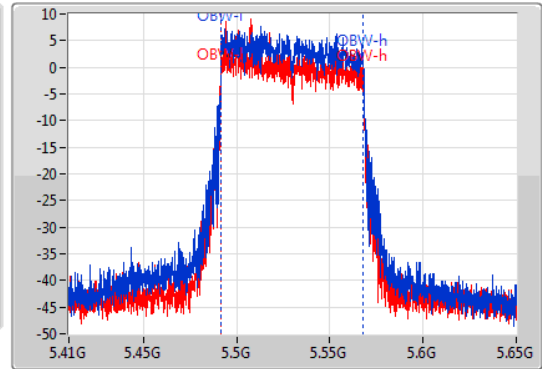
5530MHz

09/10/2019

CF
5.53GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.53GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
86.04M	5.48572G	5.57176G	75.922M	5.491859G	5.567781G	Inf	1
82.32M	5.48836G	5.57068G	75.922M	5.491739G	5.567661G	Inf	2

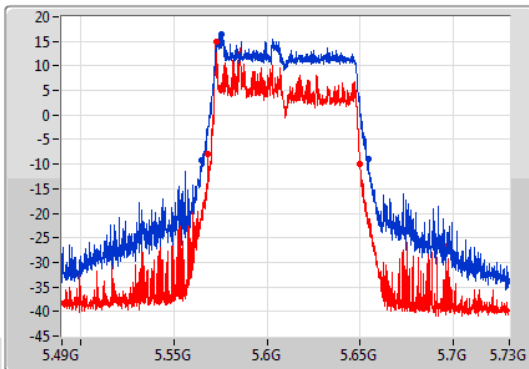
802.11ac VHT80-BF_Nss1,(MCS0)_2TX

EBW

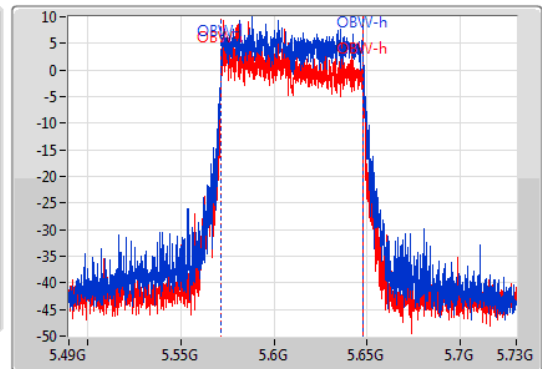
5610MHz

09/10/2019

CF
5.61GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.61GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Sample



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
89.52M	5.56488G	5.6544G	76.042M	5.571859G	5.647901G	Inf	1
81.84M	5.56824G	5.65008G	76.042M	5.571739G	5.647781G	Inf	2



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	23.84	0.24210	28.58	0.72111
802.11a_Nss1,(6Mbps)_1TX(Port2)	23.24	0.21086	28.55	0.71614
802.11a_Nss1,(6Mbps)_2TX	21.16	0.13062	26.47	0.44361
802.11ac VHT20_Nss1,(MCS0)_2TX	21.41	0.13836	26.72	0.46989
802.11ac VHT40_Nss1,(MCS0)_2TX	23.86	0.24322	29.17	0.82604
802.11ac VHT80_Nss1,(MCS0)_2TX	21.58	0.14388	26.89	0.48865
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	23.89	0.24491	28.63	0.72946
802.11a_Nss1,(6Mbps)_1TX(Port2)	23.34	0.21577	28.65	0.73282
802.11a_Nss1,(6Mbps)_2TX	21.18	0.13122	26.49	0.44566
802.11ac VHT20_Nss1,(MCS0)_2TX	21.69	0.14757	27.00	0.50119
802.11ac VHT40_Nss1,(MCS0)_2TX	23.90	0.24547	29.21	0.83368
802.11ac VHT80_Nss1,(MCS0)_2TX	23.97	0.24946	29.28	0.84723



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	4.74	23.47		23.47	23.98	28.21	30.00
5300MHz_TnomVnom	Pass	4.74	23.84		23.84	23.98	28.58	30.00
5320MHz_TnomVnom	Pass	4.74	23.02		23.02	23.98	27.76	30.00
5500MHz_TnomVnom	Pass	4.74	21.78		21.78	23.98	26.52	30.00
5580MHz_TnomVnom	Pass	4.74	23.89		23.89	23.98	28.63	30.00
5700MHz_TnomVnom	Pass	4.74	20.22		20.22	23.98	24.96	30.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	5.31		23.05	23.05	23.98	28.36	30.00
5300MHz_TnomVnom	Pass	5.31		23.24	23.24	23.98	28.55	30.00
5320MHz_TnomVnom	Pass	5.31		23.12	23.12	23.98	28.43	30.00
5500MHz_TnomVnom	Pass	5.31		22.76	22.76	23.98	28.07	30.00
5580MHz_TnomVnom	Pass	5.31		23.34	23.34	23.98	28.65	30.00
5700MHz_TnomVnom	Pass	5.31		21.56	21.56	23.98	26.87	30.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	5.31	17.41	18.09	20.77	23.77	26.08	29.77
5300MHz_TnomVnom	Pass	5.31	17.36	18.28	20.85	23.76	26.16	29.76
5320MHz_TnomVnom	Pass	5.31	17.53	18.69	21.16	23.76	26.47	29.76
5500MHz_TnomVnom	Pass	5.31	17.44	18.80	21.18	23.76	26.49	29.76
5580MHz_TnomVnom	Pass	5.31	17.34	18.44	20.94	23.77	26.25	29.77
5700MHz_TnomVnom	Pass	5.31	17.24	18.70	21.04	23.89	26.35	29.89
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	5.31	17.81	18.44	21.15	23.97	26.46	29.97
5300MHz_TnomVnom	Pass	5.31	17.47	18.60	21.08	24.00	26.39	30.00
5320MHz_TnomVnom	Pass	5.31	17.95	18.81	21.41	23.95	26.72	29.95
5500MHz_TnomVnom	Pass	5.31	17.93	18.82	21.41	23.99	26.72	29.99
5580MHz_TnomVnom	Pass	5.31	18.15	18.89	21.55	23.98	26.86	30.00
5700MHz_TnomVnom	Pass	5.31	18.05	19.23	21.69	23.98	27.00	30.00
802.11ac_VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	5.31	20.47	21.19	23.86	23.98	29.17	30.00
5310MHz_TnomVnom	Pass	5.31	19.54	20.66	23.15	23.98	28.46	30.00
5510MHz_TnomVnom	Pass	5.31	19.49	20.65	23.12	23.98	28.43	30.00
5550MHz_TnomVnom	Pass	5.31	20.16	21.43	23.85	23.98	29.16	30.00
5670MHz_TnomVnom	Pass	5.31	20.37	21.36	23.90	23.98	29.21	30.00
802.11ac_VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	5.31	18.19	18.92	21.58	23.98	26.89	30.00
5530MHz_TnomVnom	Pass	5.31	16.68	17.72	20.24	23.98	25.55	30.00
5610MHz_TnomVnom	Pass	5.31	20.45	21.42	23.97	23.98	29.28	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.25-5.35GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.14	0.10328	28.46	0.70146
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	19.50	0.08913	27.82	0.60534
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	18.10	0.06457	26.42	0.43853
5.47-5.725GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	20.27	0.10641	28.59	0.72277
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	19.99	0.09977	28.31	0.67764
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	19.14	0.08204	27.46	0.55719



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.32	16.85	16.92	19.90	21.66	28.22	30.00
5300MHz	Pass	8.32	17.14	17.08	20.12	21.66	28.44	30.00
5320MHz	Pass	8.32	16.93	17.33	20.14	21.66	28.46	30.00
5500MHz	Pass	8.32	17.61	16.66	20.17	21.66	28.49	30.00
5580MHz	Pass	8.32	17.05	16.16	19.64	21.66	27.96	30.00
5700MHz	Pass	8.32	17.39	17.13	20.27	21.66	28.59	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.32	16.31	16.66	19.50	21.66	27.82	30.00
5310MHz	Pass	8.32	15.89	16.58	19.26	21.66	27.58	30.00
5510MHz	Pass	8.32	14.80	16.27	18.61	21.66	26.93	30.00
5550MHz	Pass	8.32	16.88	15.86	19.41	21.66	27.73	30.00
5670MHz	Pass	8.32	17.71	16.09	19.99	21.66	28.31	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.32	14.93	15.25	18.10	21.66	26.42	30.00
5530MHz	Pass	8.32	14.84	15.92	18.42	21.66	26.74	30.00
5610MHz	Pass	8.32	15.91	16.33	19.14	21.66	27.46	30.00

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



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	10.92	15.66
802.11a_Nss1,(6Mbps)_1TX(Port2)	10.39	15.70
802.11a_Nss1,(6Mbps)_2TX	8.57	16.89
802.11ac VHT20_Nss1,(MCS0)_2TX	8.60	16.92
802.11ac VHT40_Nss1,(MCS0)_2TX	8.56	16.88
802.11ac VHT80_Nss1,(MCS0)_2TX	2.96	11.28
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	10.87	15.61
802.11a_Nss1,(6Mbps)_1TX(Port2)	10.37	15.68
802.11a_Nss1,(6Mbps)_2TX	8.40	16.72
802.11ac VHT20_Nss1,(MCS0)_2TX	8.55	16.87
802.11ac VHT40_Nss1,(MCS0)_2TX	8.28	16.60
802.11ac VHT80_Nss1,(MCS0)_2TX	5.72	14.04

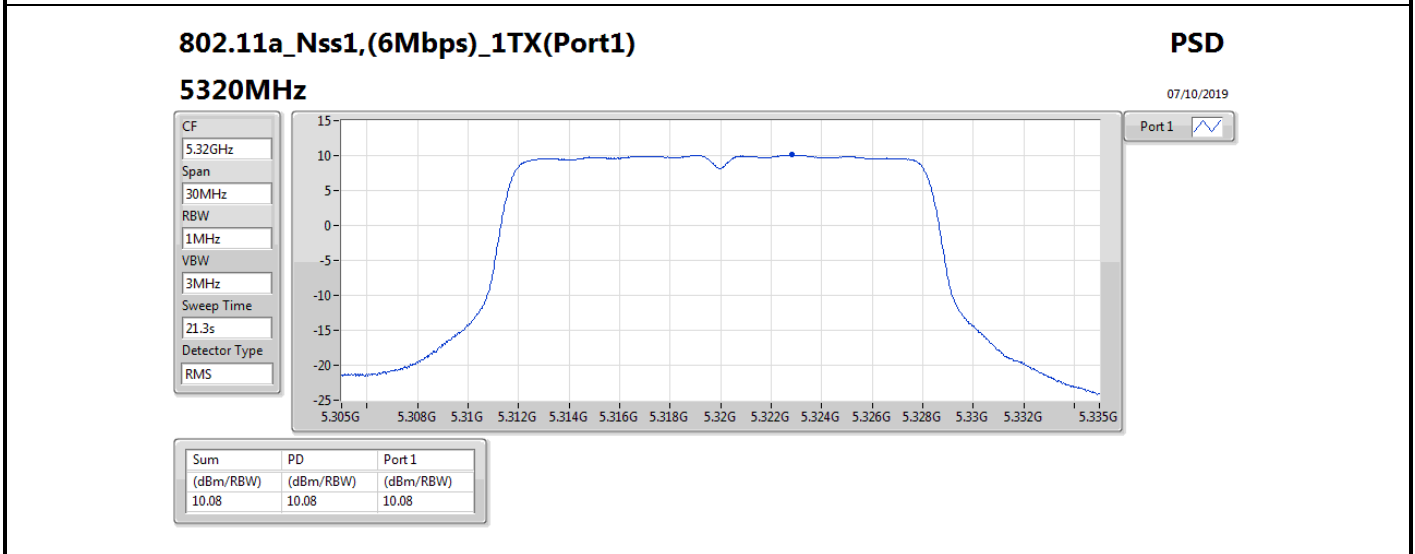
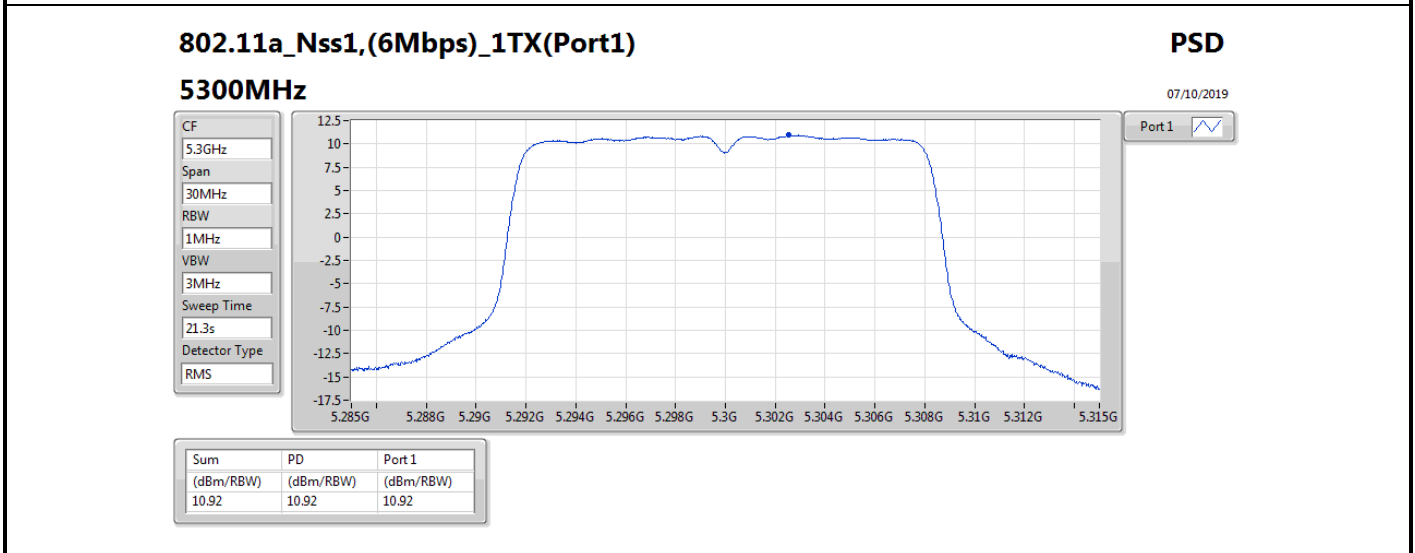
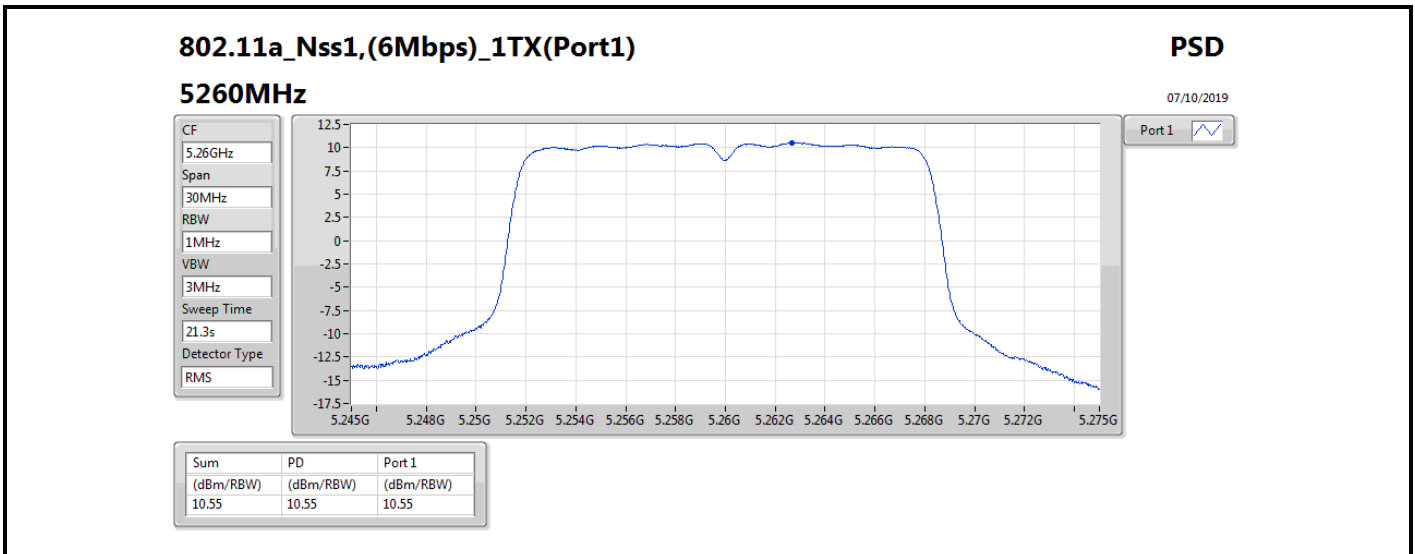
RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

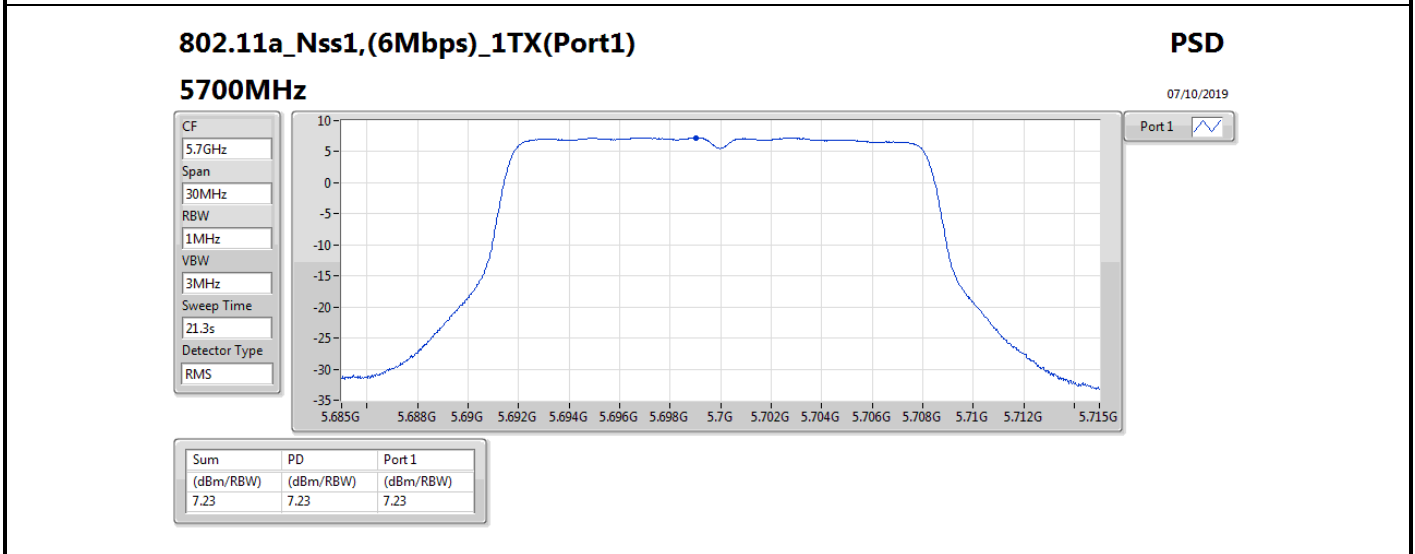
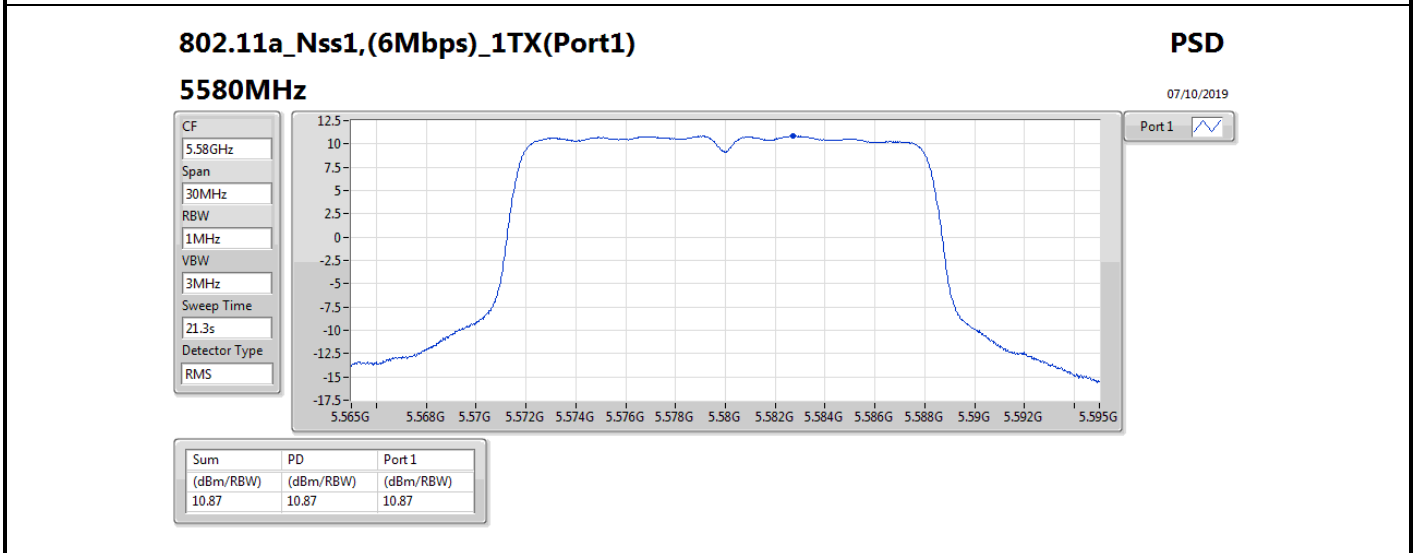
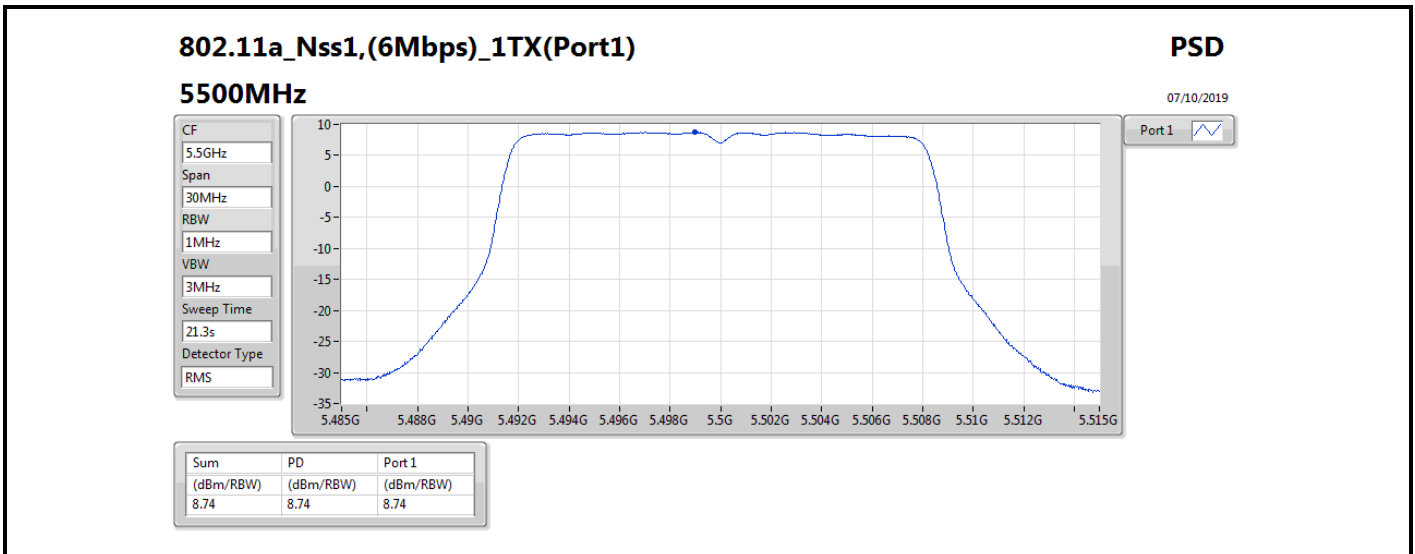


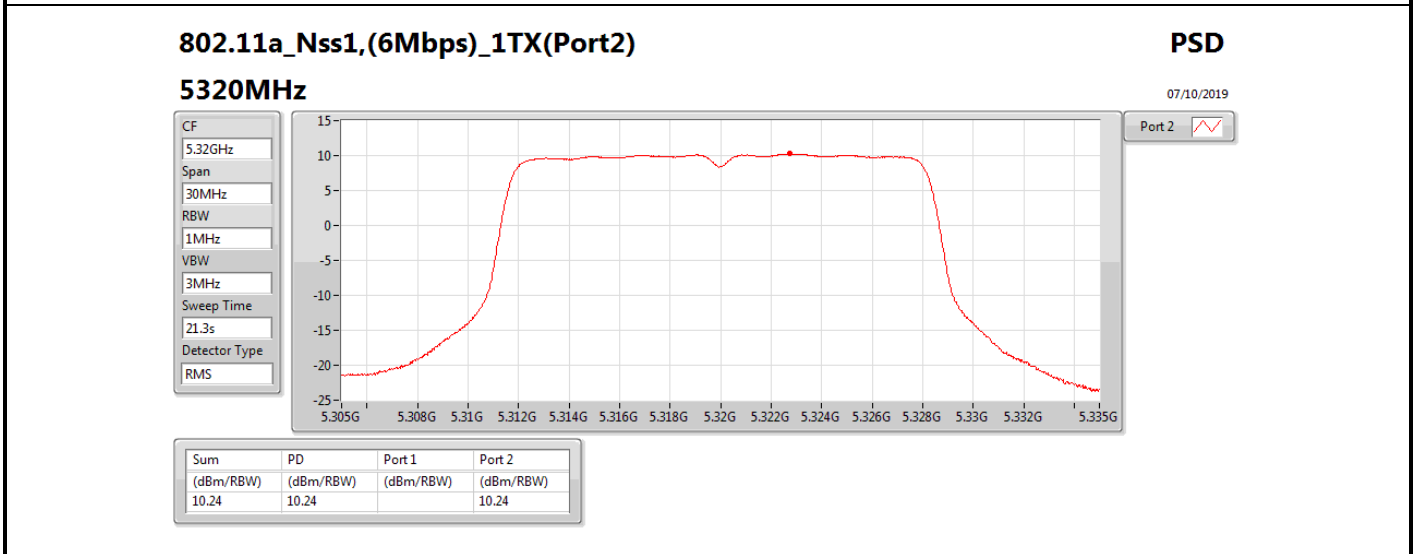
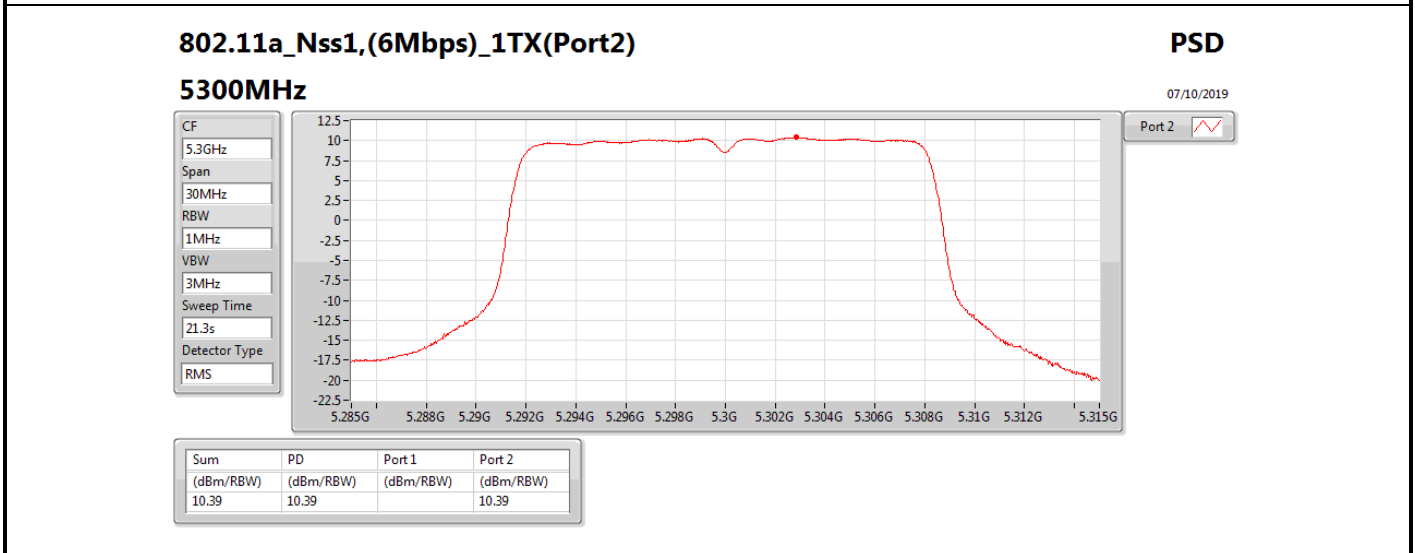
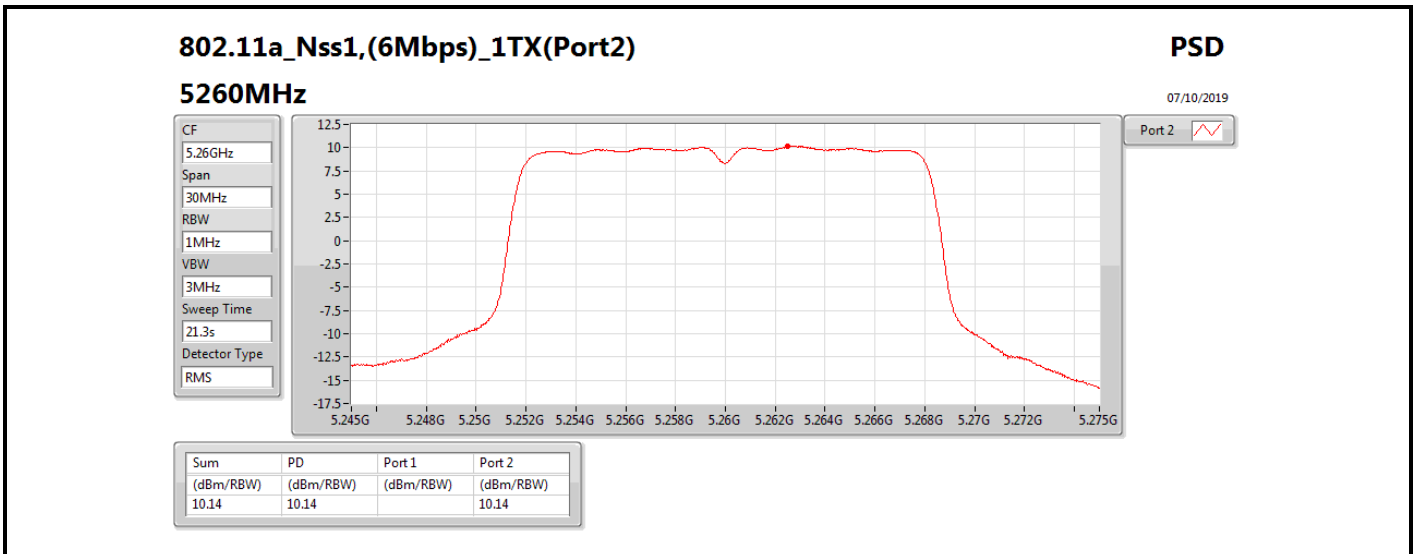
Result

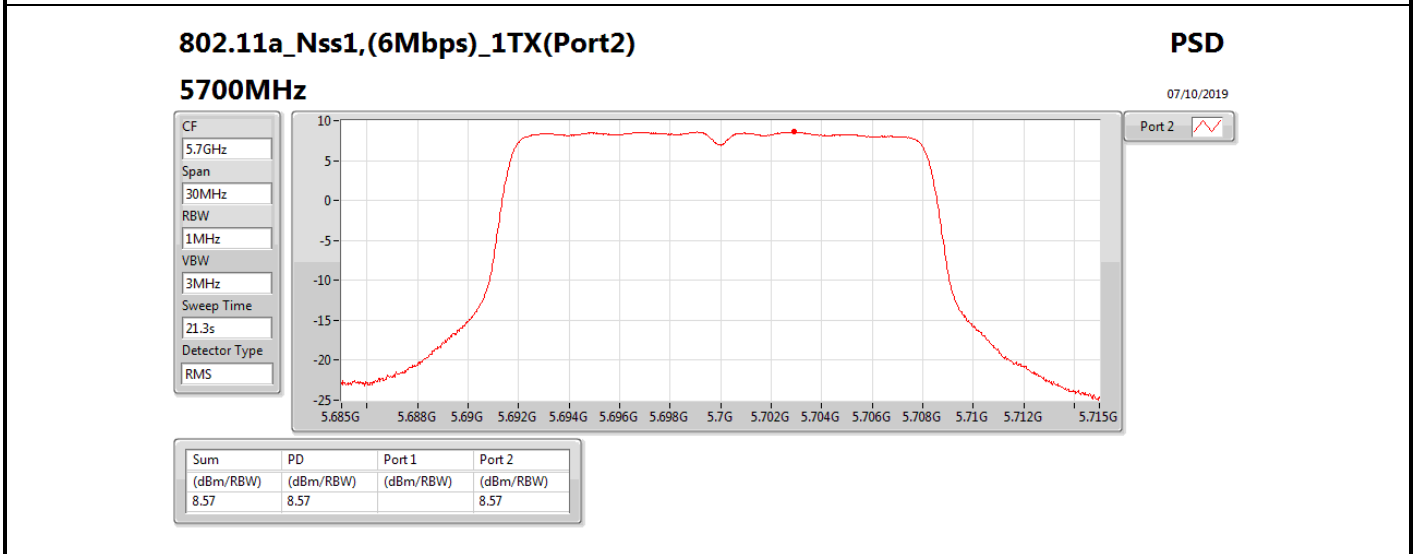
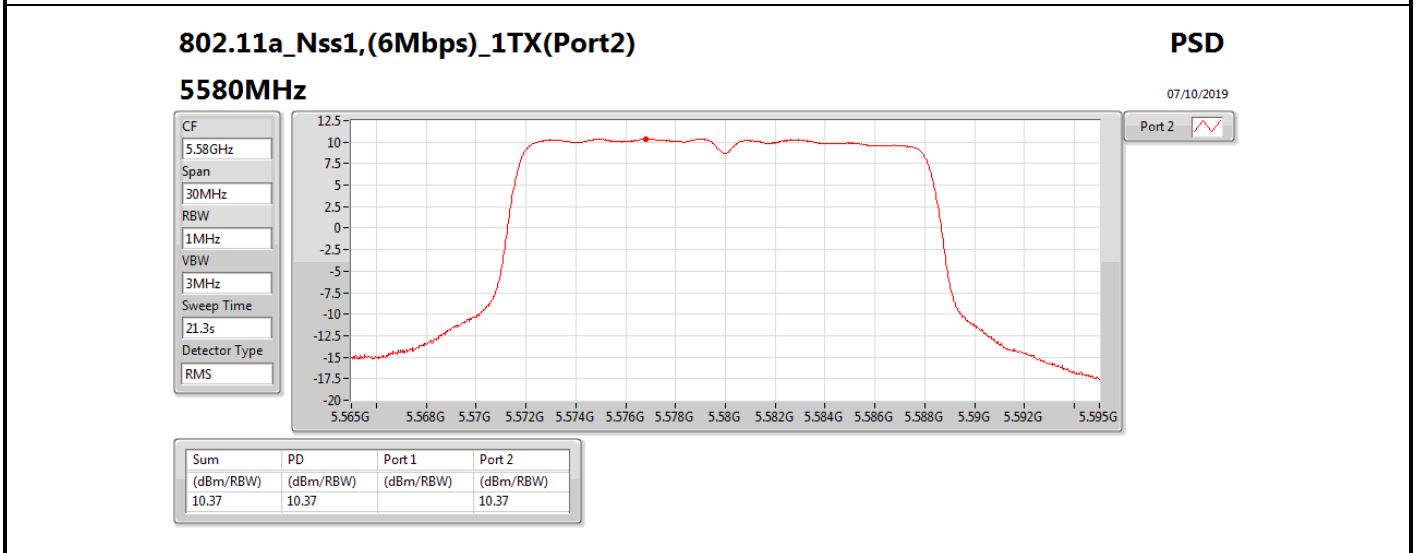
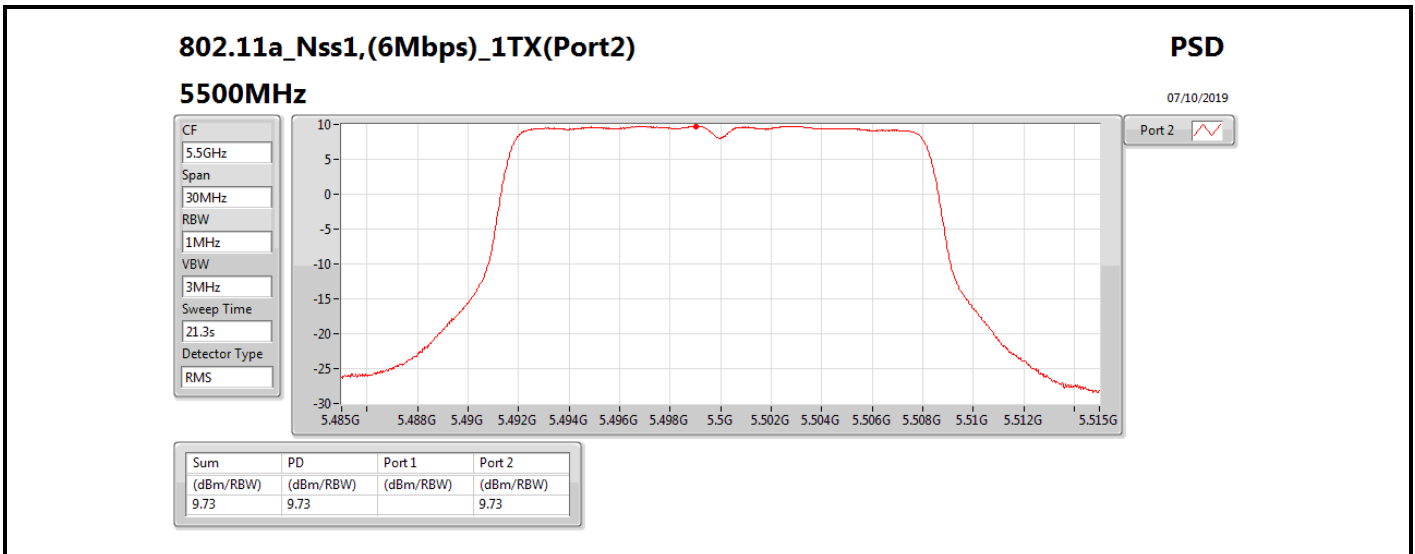
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	4.74	10.55		10.55	11.00	15.29	17.00
5300MHz_TnomVnom	Pass	4.74	10.92		10.92	11.00	15.66	17.00
5320MHz_TnomVnom	Pass	4.74	10.08		10.08	11.00	14.82	17.00
5500MHz_TnomVnom	Pass	4.74	8.74		8.74	11.00	13.48	17.00
5580MHz_TnomVnom	Pass	4.74	10.87		10.87	11.00	15.61	17.00
5700MHz_TnomVnom	Pass	4.74	7.23		7.23	11.00	11.97	17.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	5.31		10.14	10.14	11.00	15.45	17.00
5300MHz_TnomVnom	Pass	5.31		10.39	10.39	11.00	15.70	17.00
5320MHz_TnomVnom	Pass	5.31		10.24	10.24	11.00	15.55	17.00
5500MHz_TnomVnom	Pass	5.31		9.73	9.73	11.00	15.04	17.00
5580MHz_TnomVnom	Pass	5.31		10.37	10.37	11.00	15.68	17.00
5700MHz_TnomVnom	Pass	5.31		8.57	8.57	11.00	13.88	17.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	8.32	4.87	5.63	8.27	8.68	16.59	17.00
5300MHz_TnomVnom	Pass	8.32	4.90	5.91	8.44	8.68	16.76	17.00
5320MHz_TnomVnom	Pass	8.32	4.95	6.28	8.57	8.68	16.89	17.00
5500MHz_TnomVnom	Pass	8.32	4.81	6.37	8.40	8.68	16.72	17.00
5580MHz_TnomVnom	Pass	8.32	4.66	5.93	8.27	8.68	16.59	17.00
5700MHz_TnomVnom	Pass	8.32	4.57	5.97	8.34	8.68	16.66	17.00
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz_TnomVnom	Pass	8.32	5.14	5.98	8.55	8.68	16.87	17.00
5300MHz_TnomVnom	Pass	8.32	4.60	6.19	8.40	8.68	16.72	17.00
5320MHz_TnomVnom	Pass	8.32	5.24	6.03	8.60	8.68	16.92	17.00
5500MHz_TnomVnom	Pass	8.32	5.11	6.21	8.34	8.68	16.66	17.00
5580MHz_TnomVnom	Pass	8.32	5.19	5.84	8.30	8.68	16.62	17.00
5700MHz_TnomVnom	Pass	8.32	4.98	6.06	8.55	8.68	16.87	17.00
802.11ac_VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz_TnomVnom	Pass	8.32	5.18	5.91	8.56	8.68	16.88	17.00
5310MHz_TnomVnom	Pass	8.32	4.05	5.15	7.55	8.68	15.87	17.00
5510MHz_TnomVnom	Pass	8.32	4.03	4.90	7.23	8.68	15.55	17.00
5550MHz_TnomVnom	Pass	8.32	4.49	5.91	8.11	8.68	16.43	17.00
5670MHz_TnomVnom	Pass	8.32	4.61	6.00	8.28	8.68	16.60	17.00
802.11ac_VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz_TnomVnom	Pass	8.32	-0.44	0.42	2.96	8.68	11.28	17.00
5530MHz_TnomVnom	Pass	8.32	-1.91	-0.56	1.53	8.68	9.85	17.00
5610MHz_TnomVnom	Pass	8.32	2.03	3.36	5.72	8.68	14.04	17.00

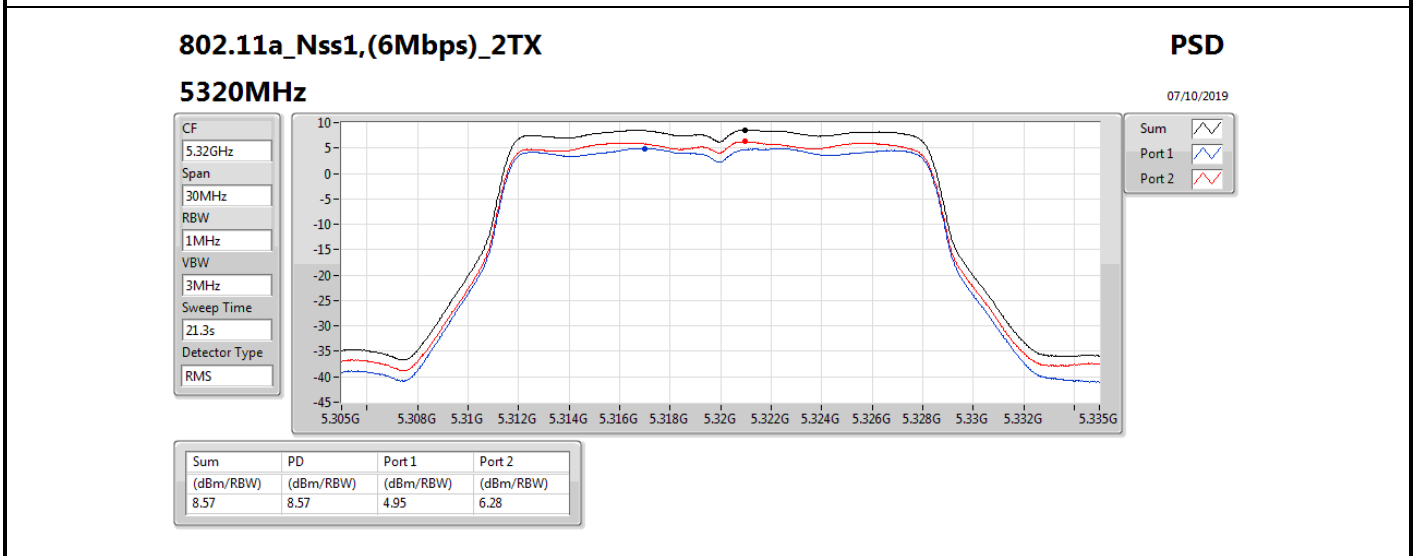
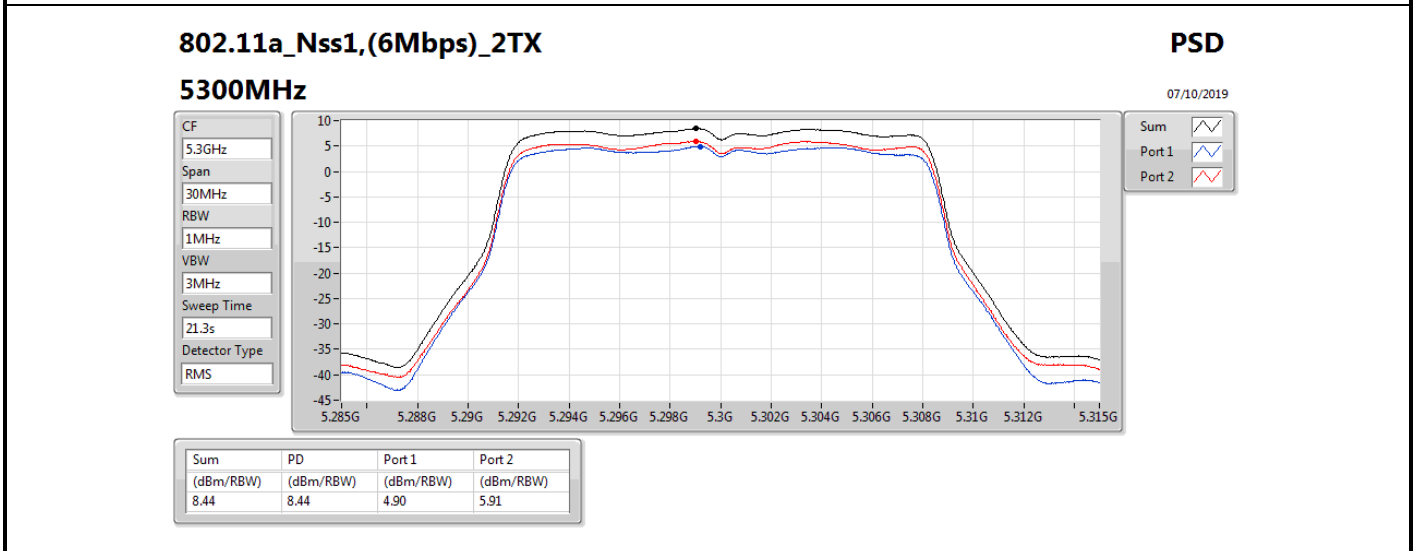
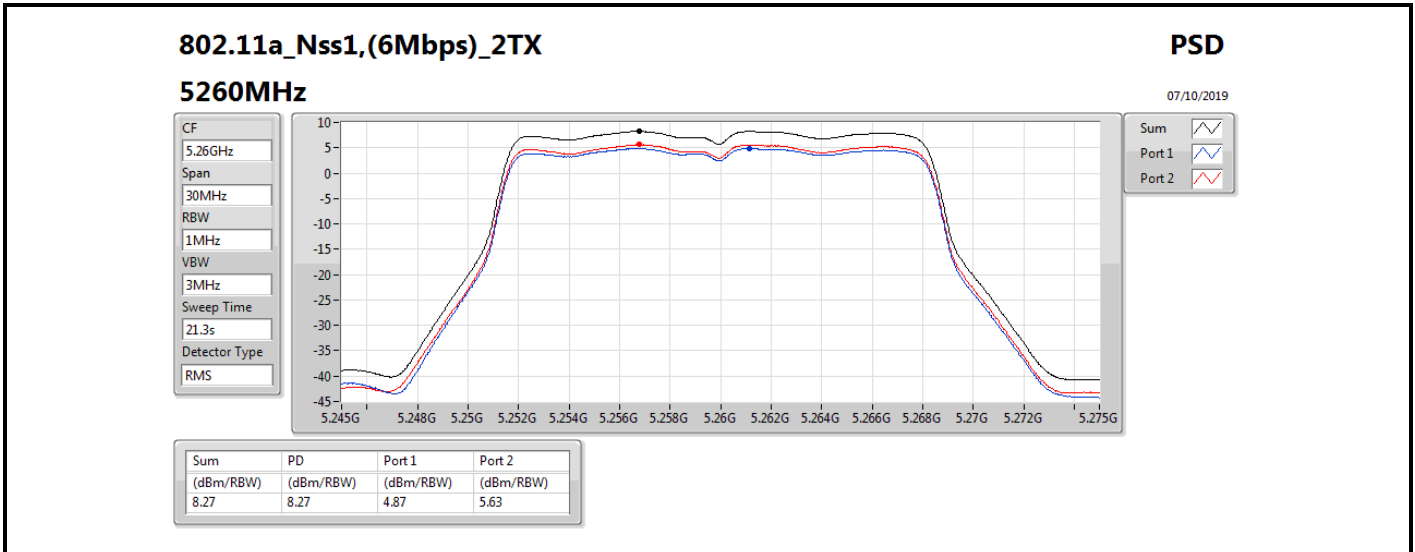
DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;

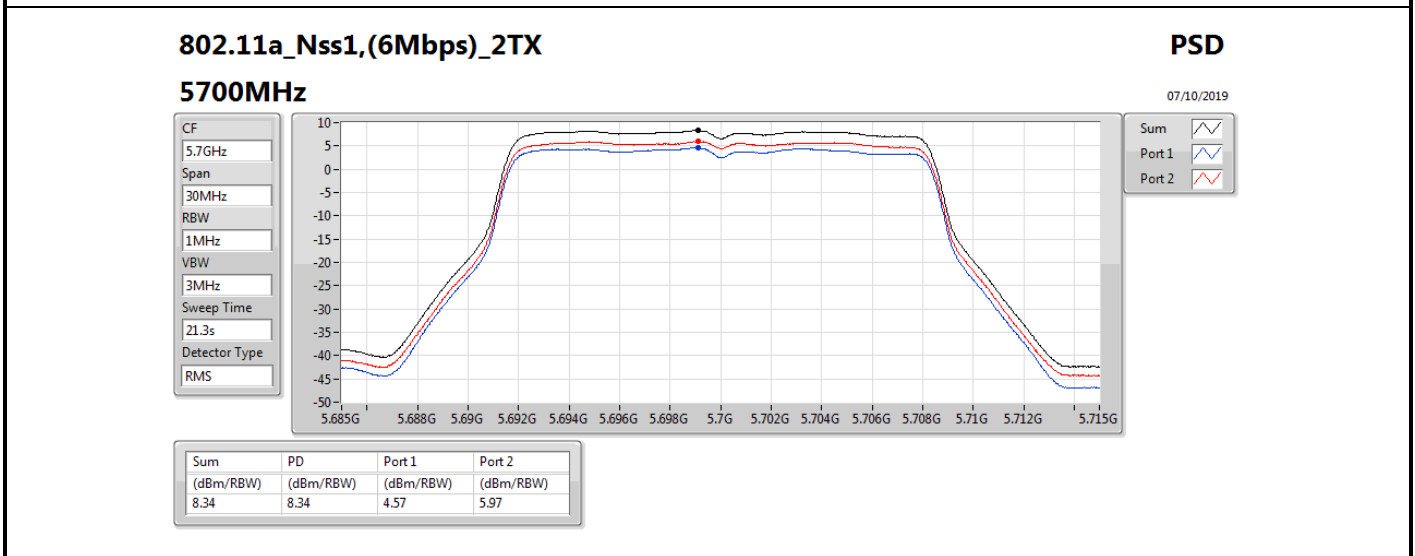
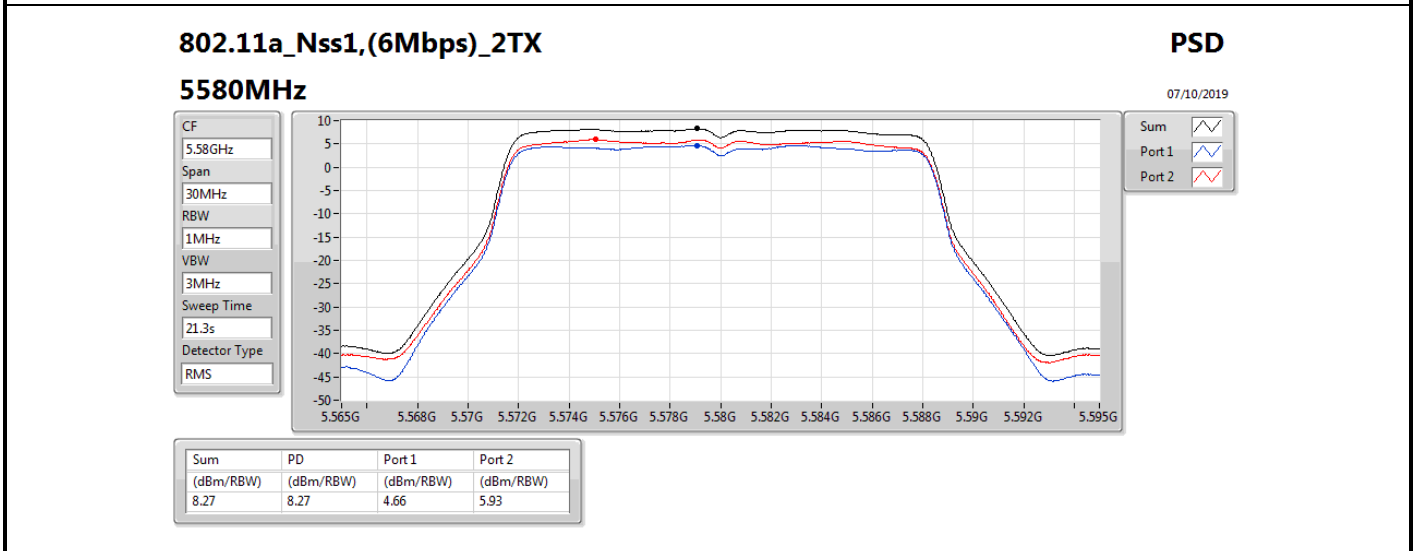
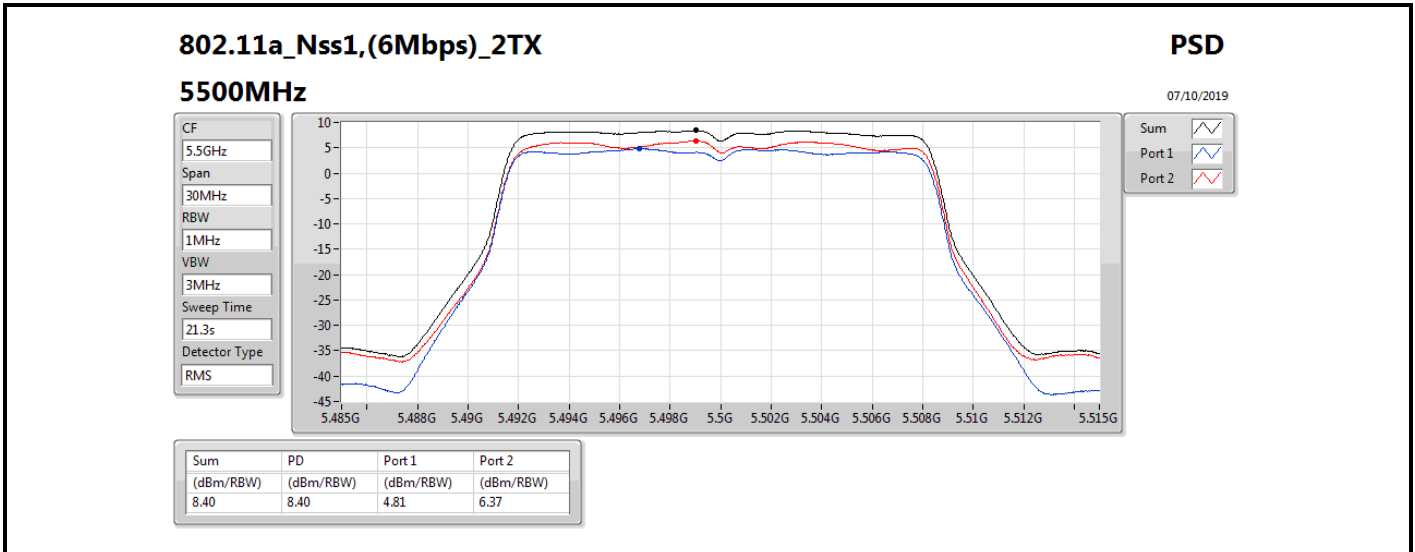


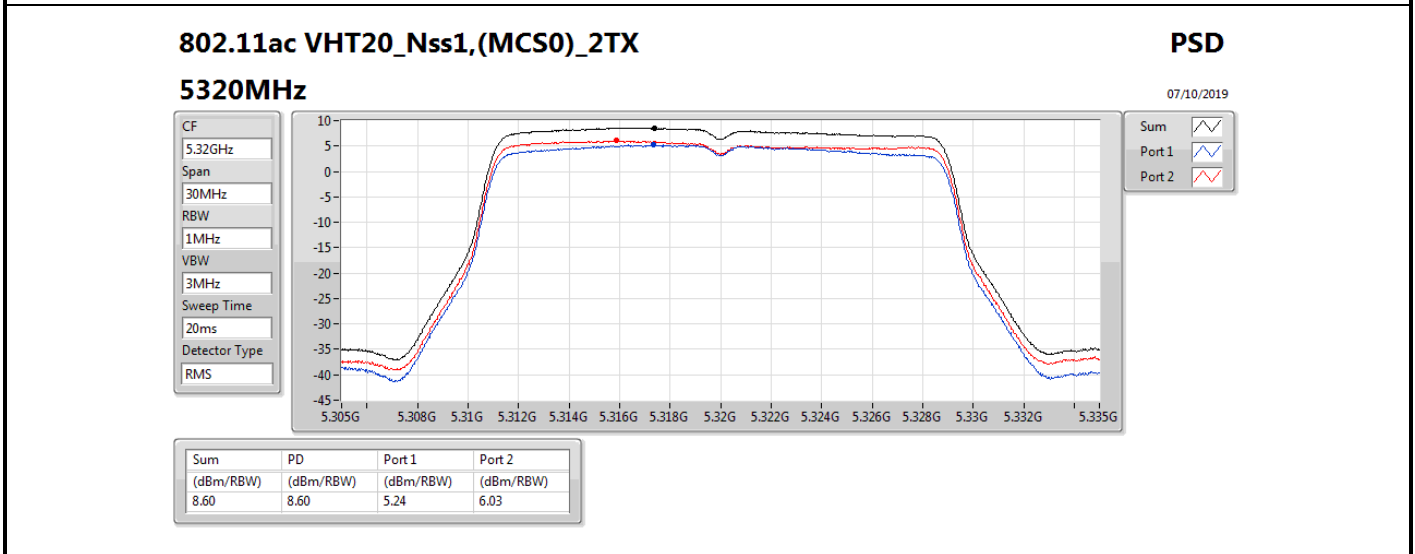
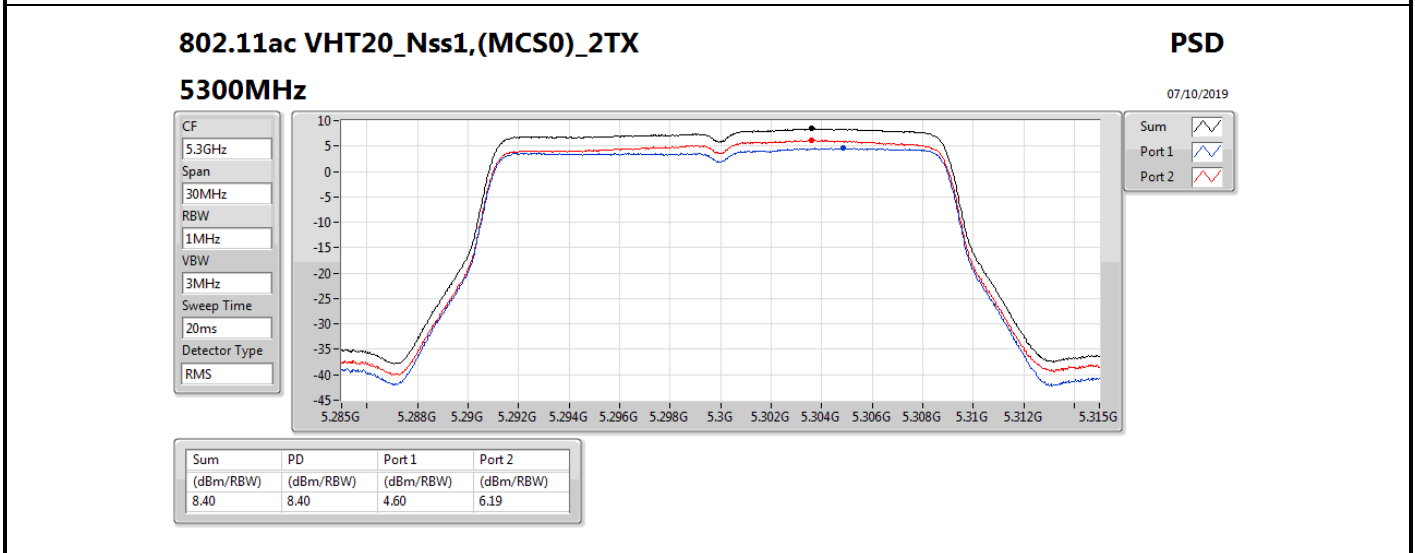
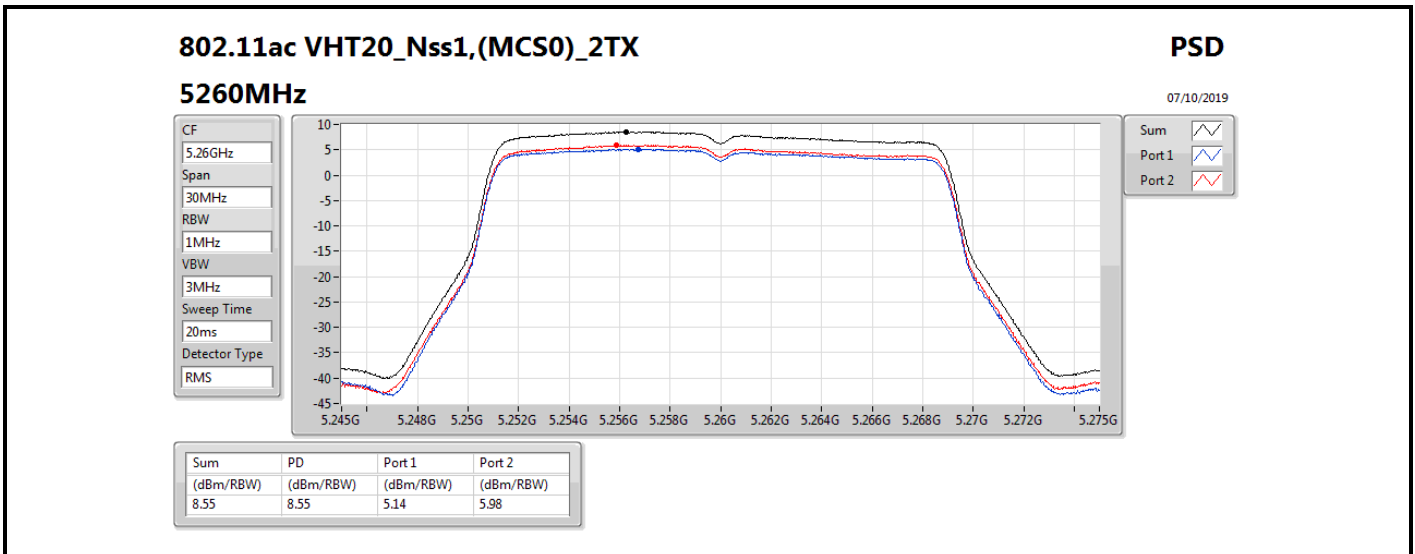


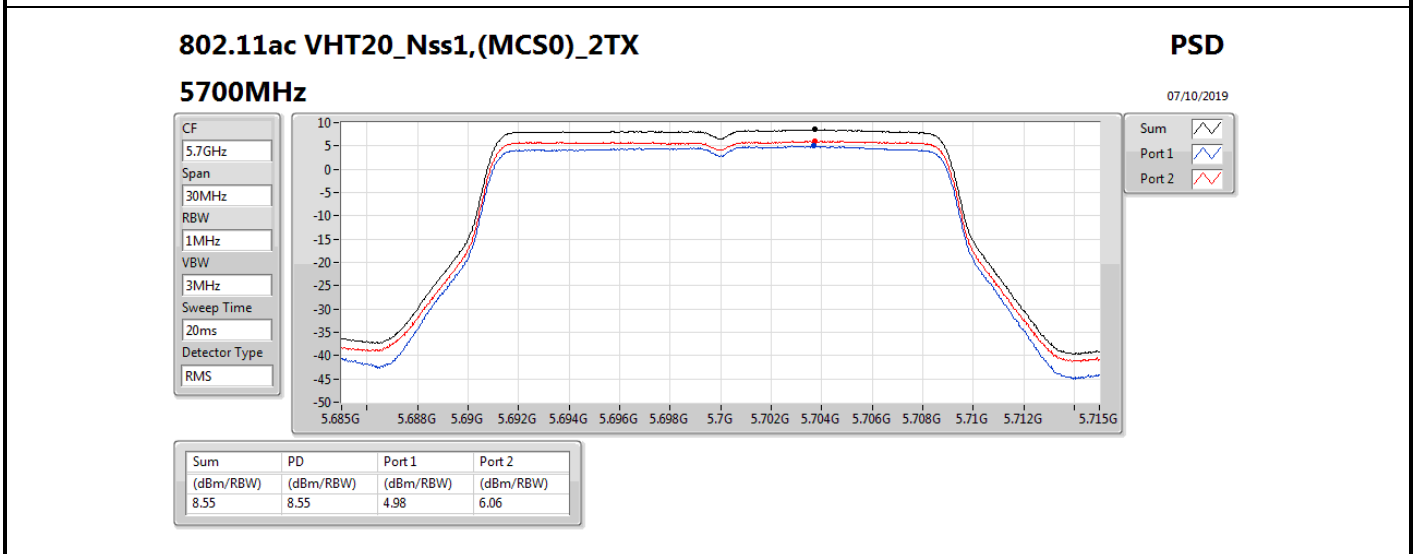
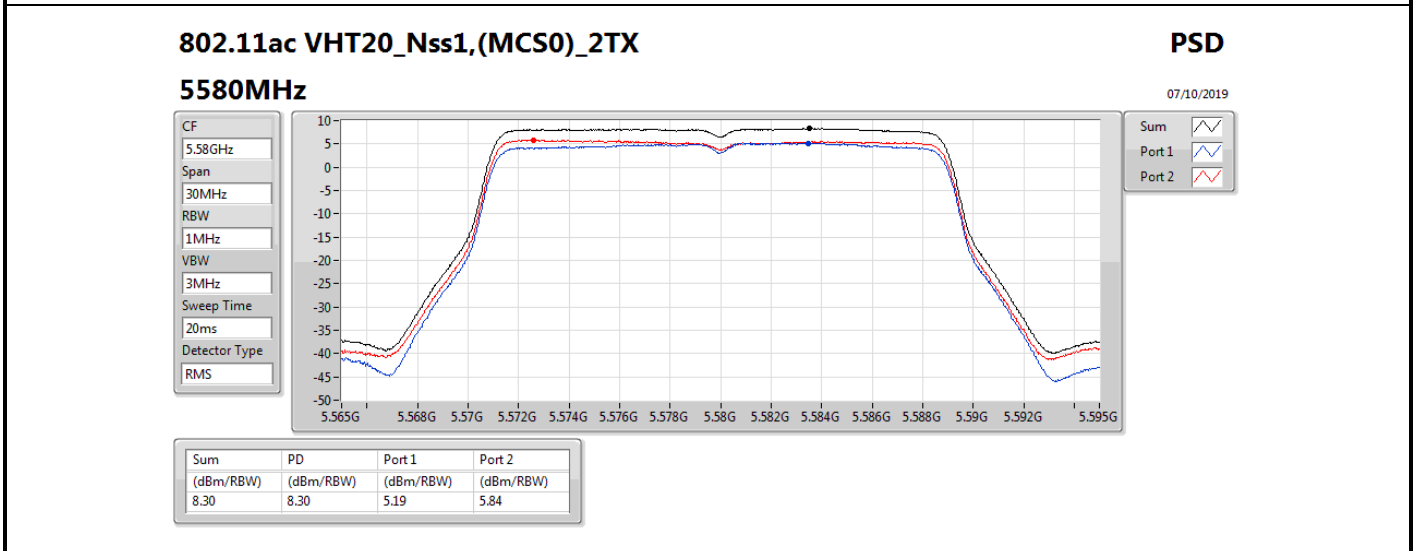
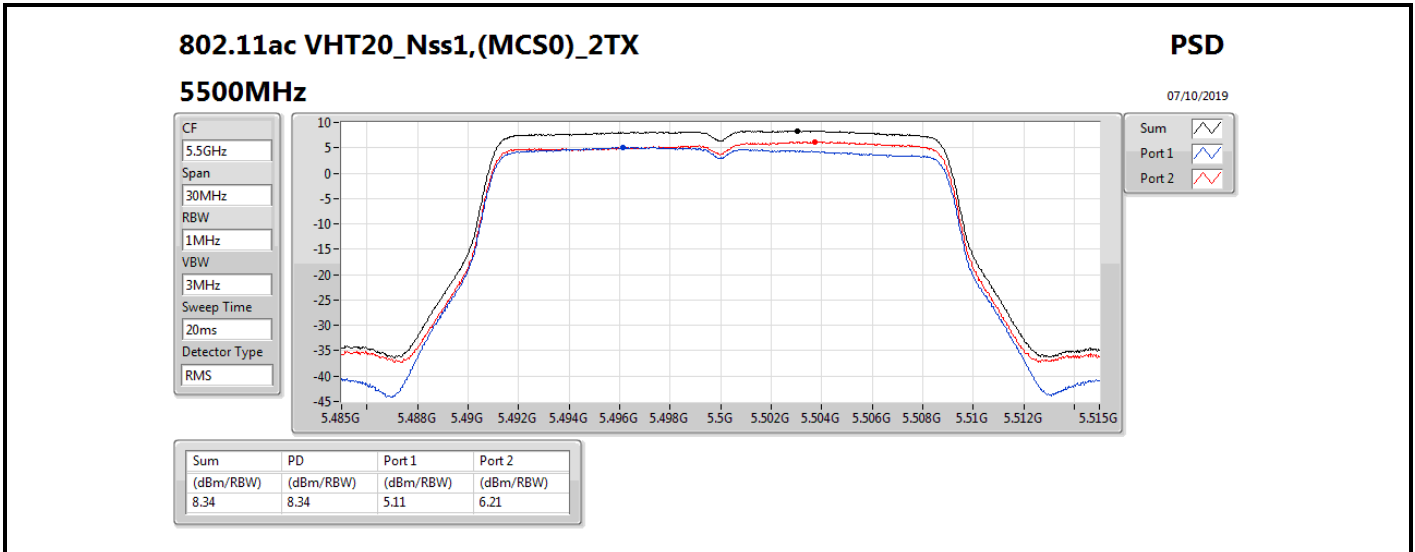


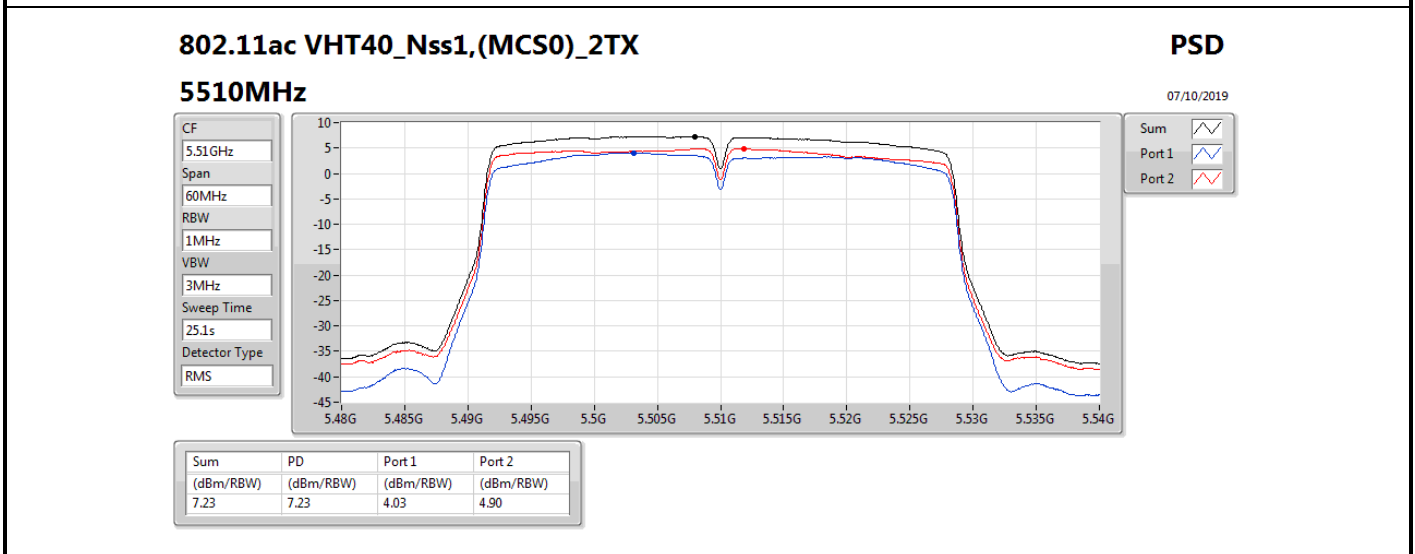
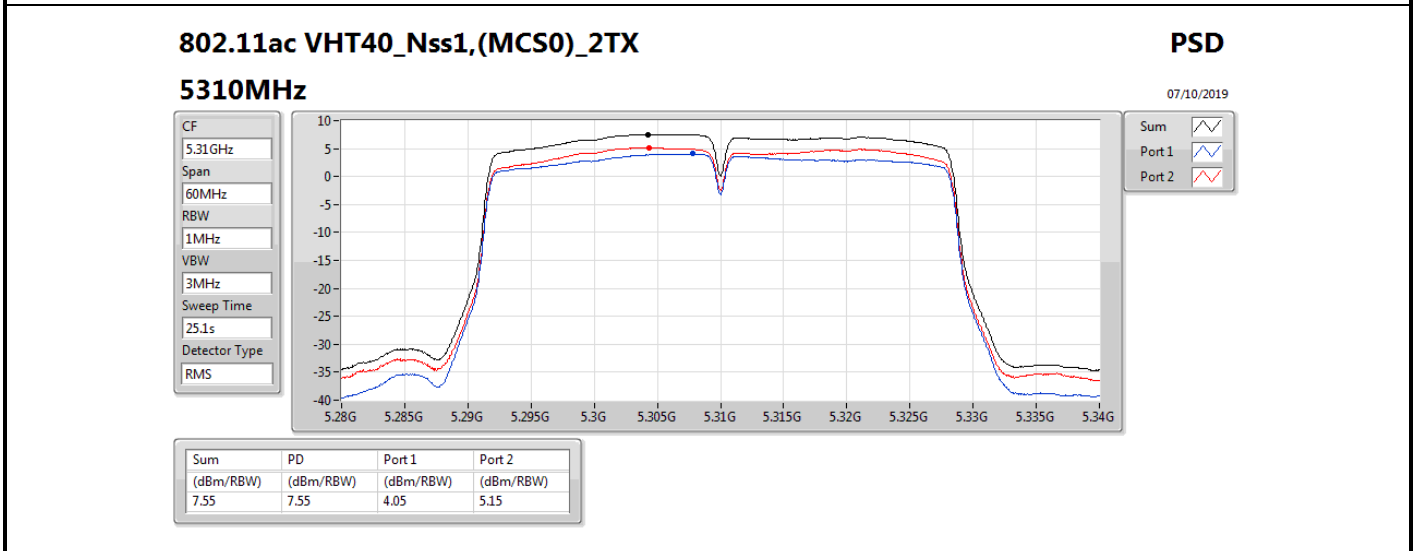
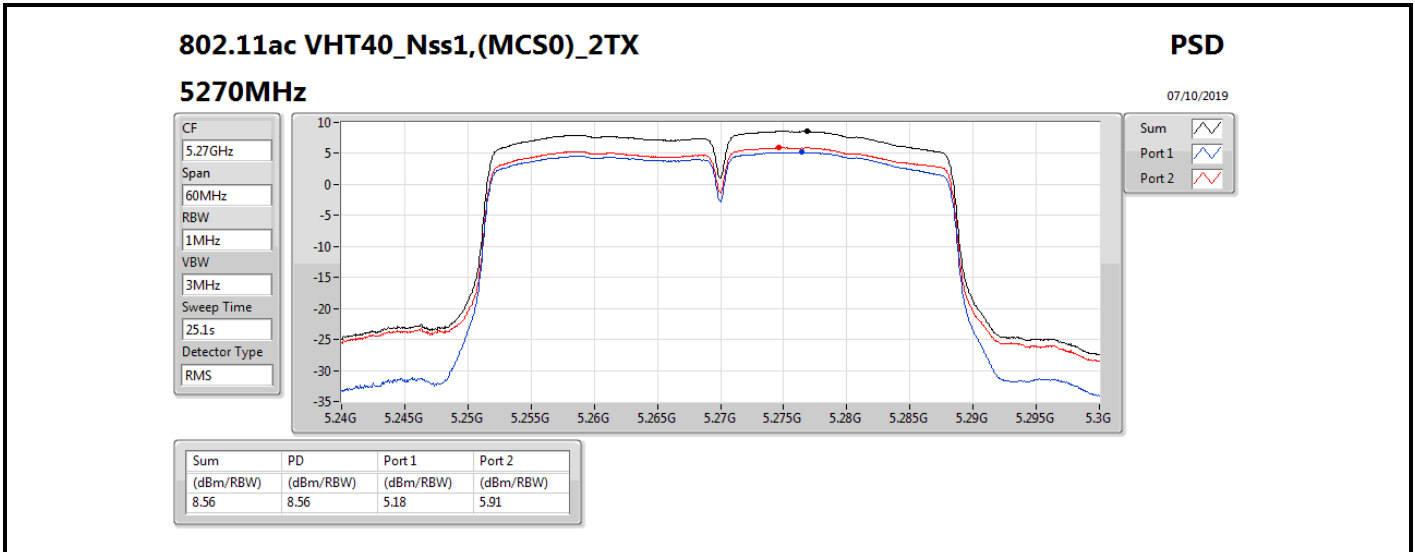


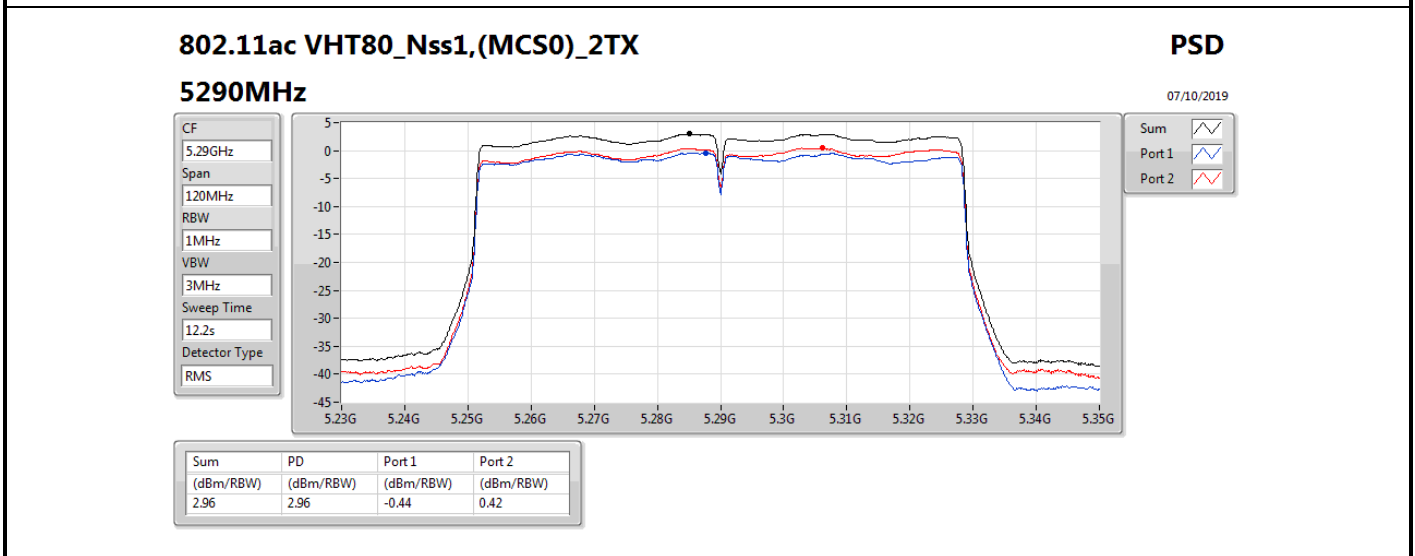
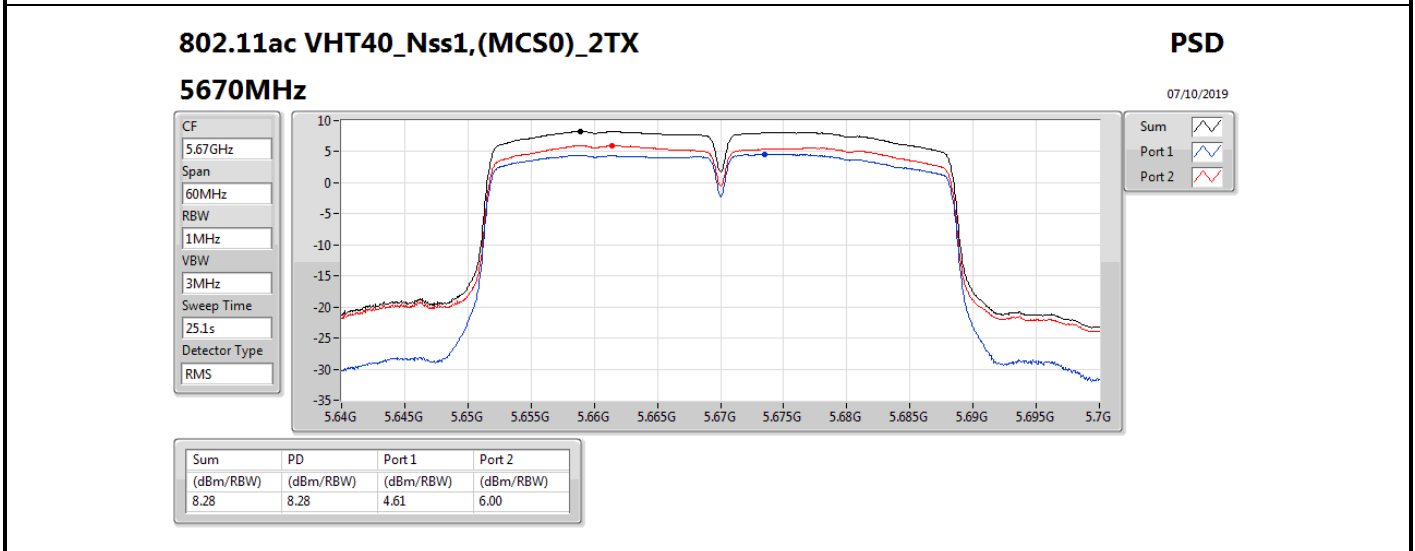
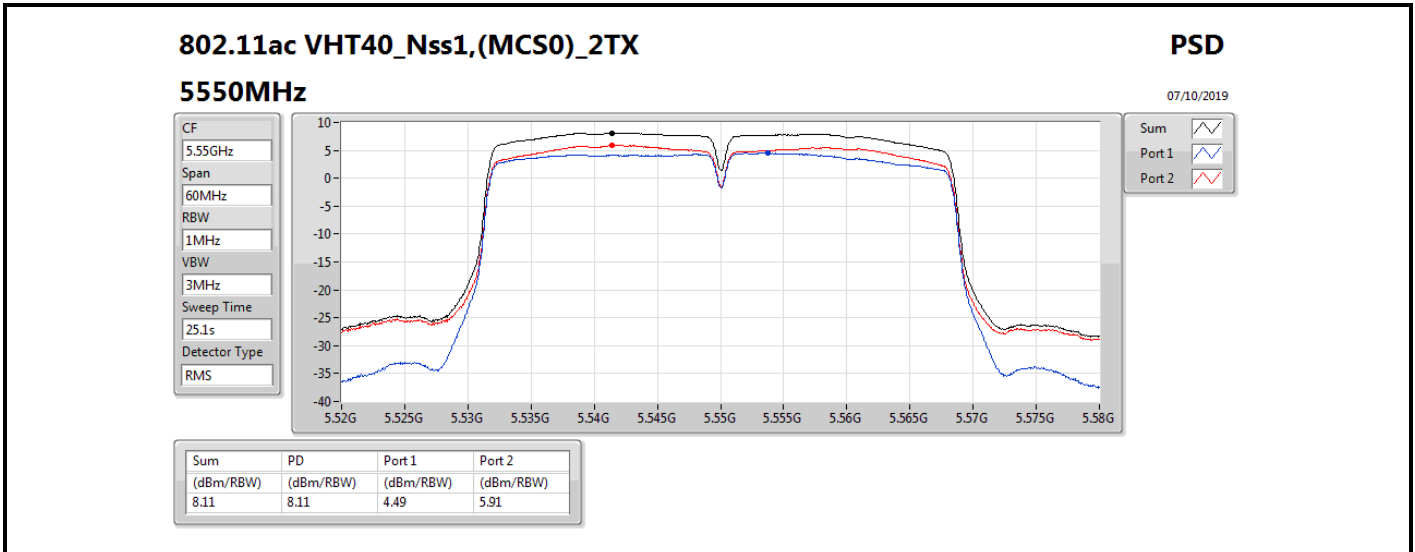












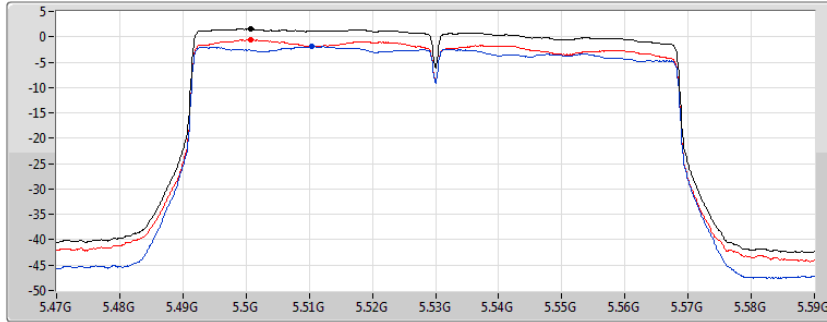
802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5530MHz

07/10/2019

CF
5.53GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
12.2s
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.53	1.53	-1.91	-0.56

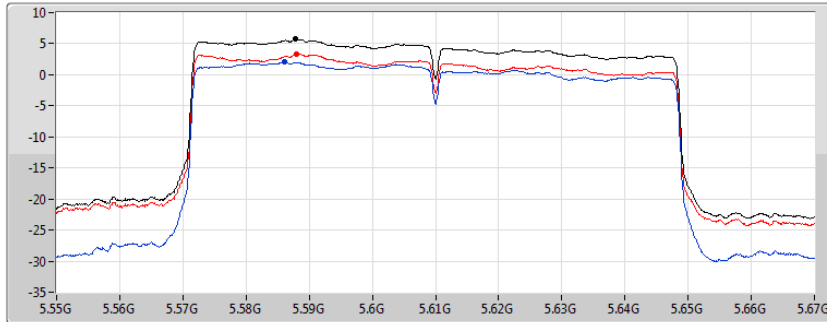
802.11ac VHT80_Nss1,(MCS0)_2TX

PSD

5610MHz

07/10/2019

CF
5.61GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
12.2s
Detector Type
RMS



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.72	5.72	2.03	3.36



Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	6.55	14.87
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	4.16	12.48
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-0.35	7.97
5.47-5.725GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	6.64	14.96
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	3.91	12.23
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	0.67	8.99

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

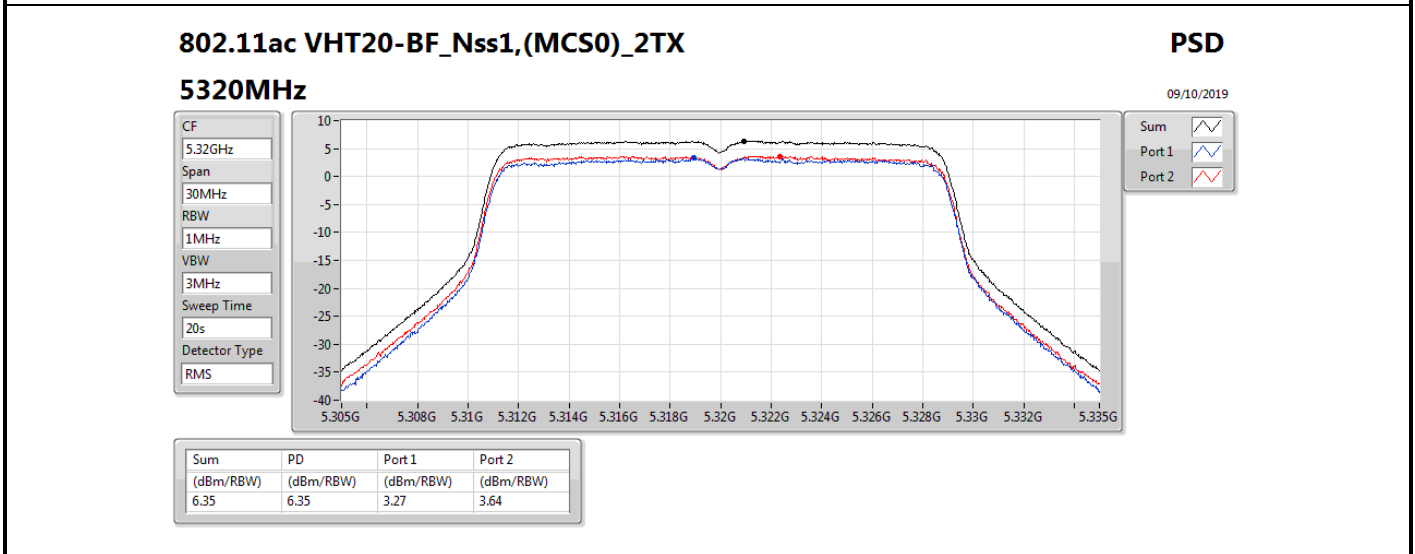
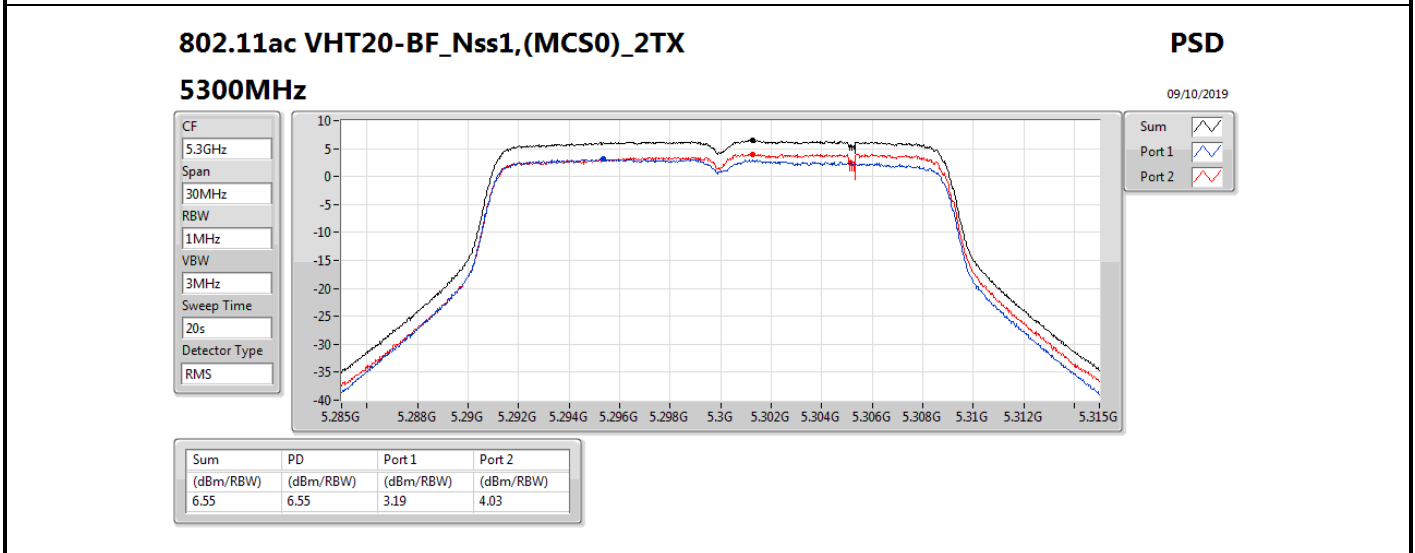
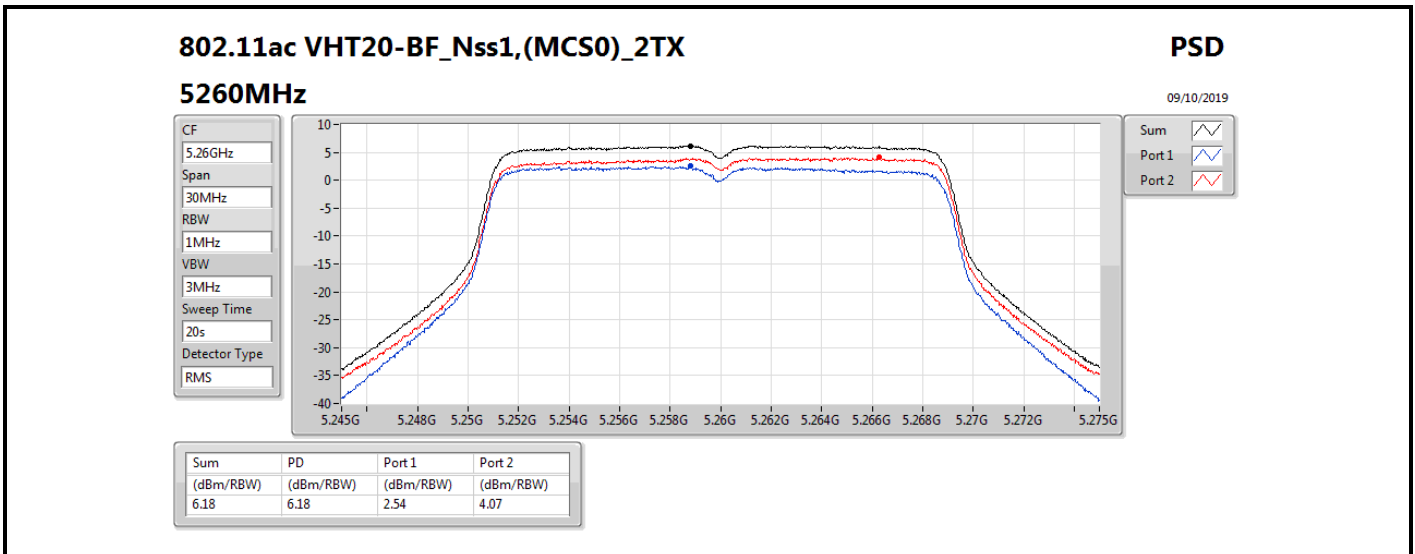


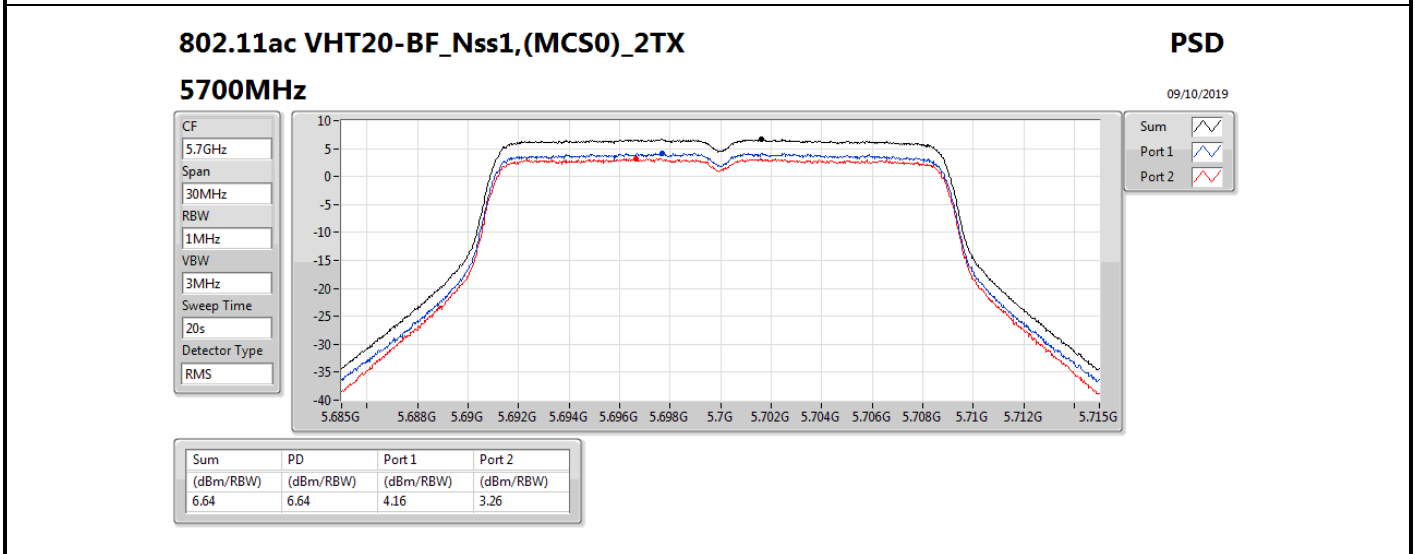
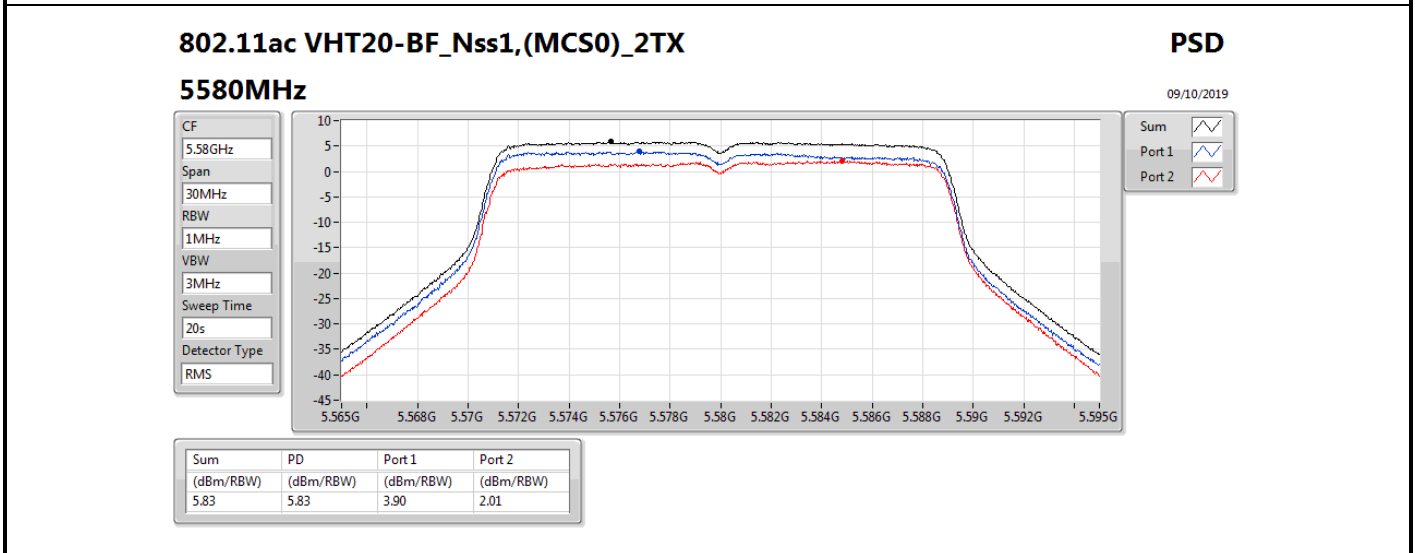
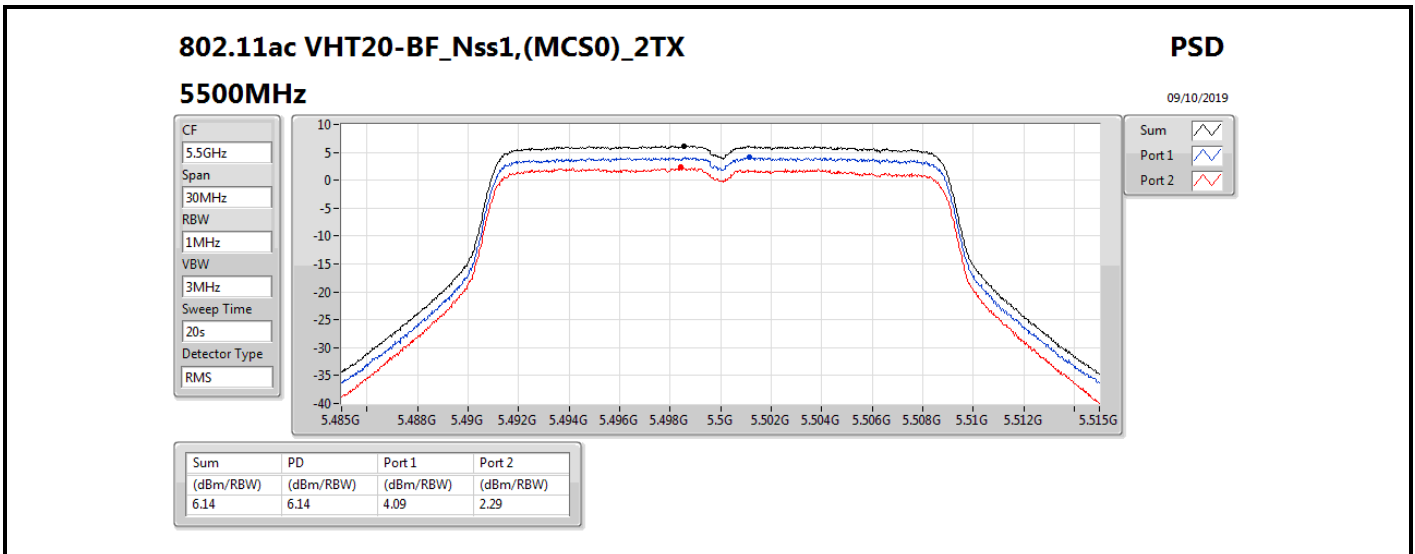
Result

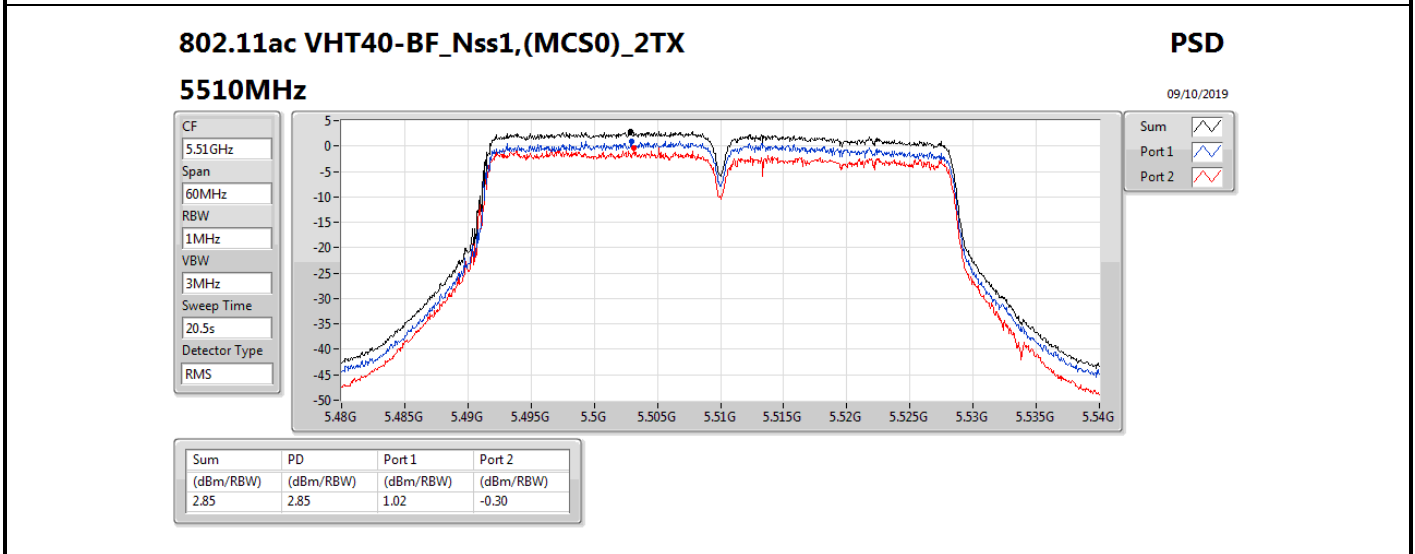
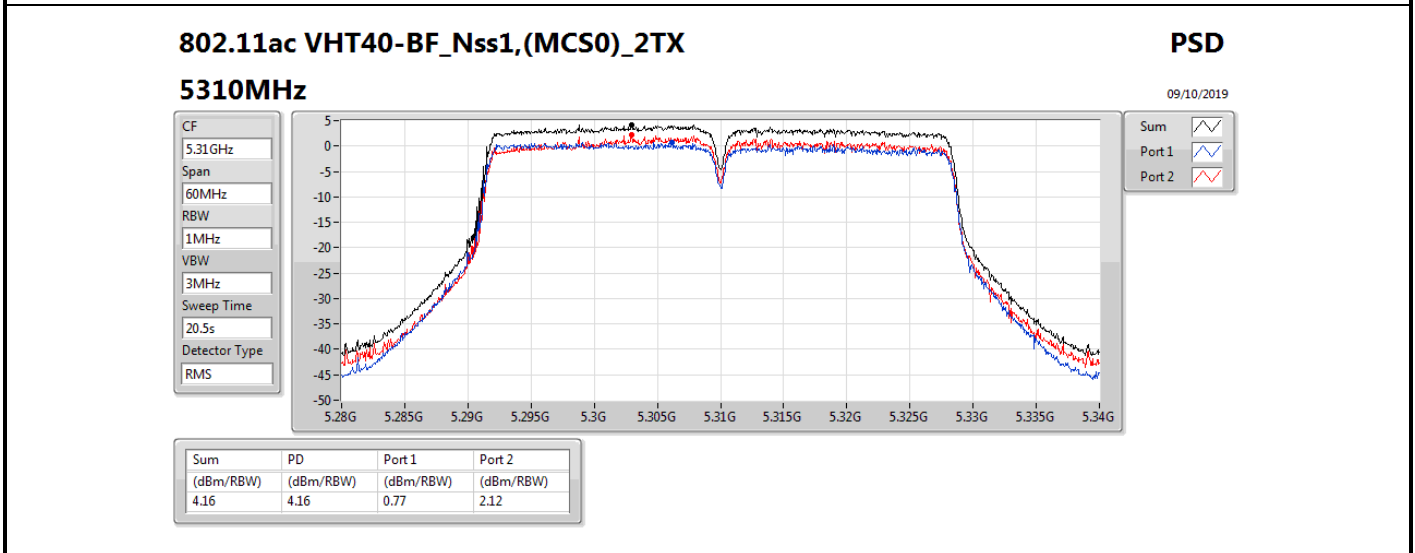
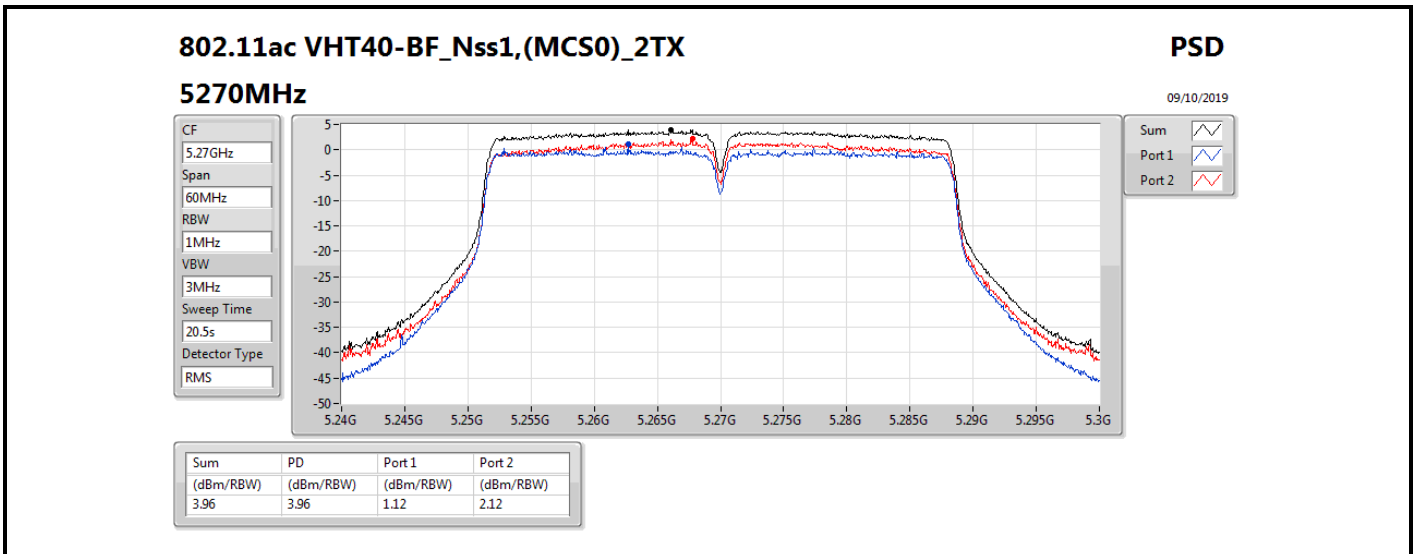
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.32	2.54	4.07	6.18	8.68	14.50	17.00
5300MHz	Pass	8.32	3.19	4.03	6.55	8.68	14.87	17.00
5320MHz	Pass	8.32	3.27	3.64	6.35	8.68	14.67	17.00
5500MHz	Pass	8.32	4.09	2.29	6.14	8.68	14.46	17.00
5580MHz	Pass	8.32	3.90	2.01	5.83	8.68	14.15	17.00
5700MHz	Pass	8.32	4.16	3.26	6.64	8.68	14.96	17.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.32	1.12	2.12	3.96	8.68	12.28	17.00
5310MHz	Pass	8.32	0.77	2.12	4.16	8.68	12.48	17.00
5510MHz	Pass	8.32	1.02	-0.30	2.85	8.68	11.17	17.00
5550MHz	Pass	8.32	2.30	0.01	3.91	8.68	12.23	17.00
5670MHz	Pass	8.32	1.76	1.34	3.88	8.68	12.20	17.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.32	-3.34	-2.82	-0.35	8.68	7.97	17.00
5530MHz	Pass	8.32	-1.42	-4.09	0.10	8.68	8.42	17.00
5610MHz	Pass	8.32	-0.96	-3.71	0.67	8.68	8.99	17.00

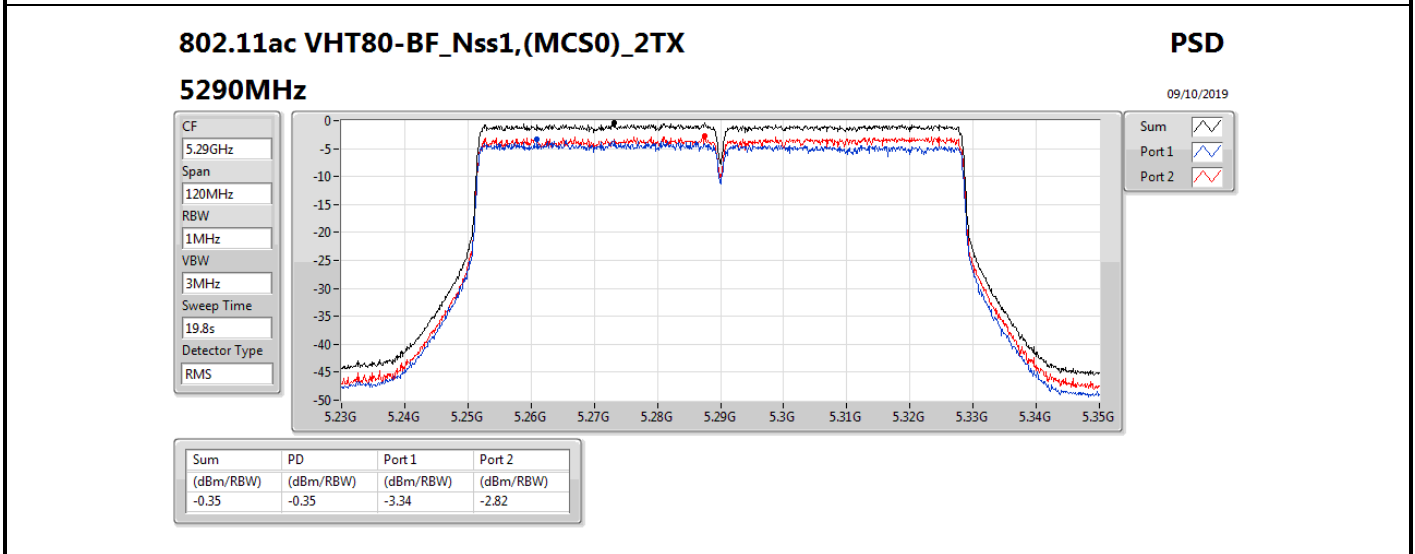
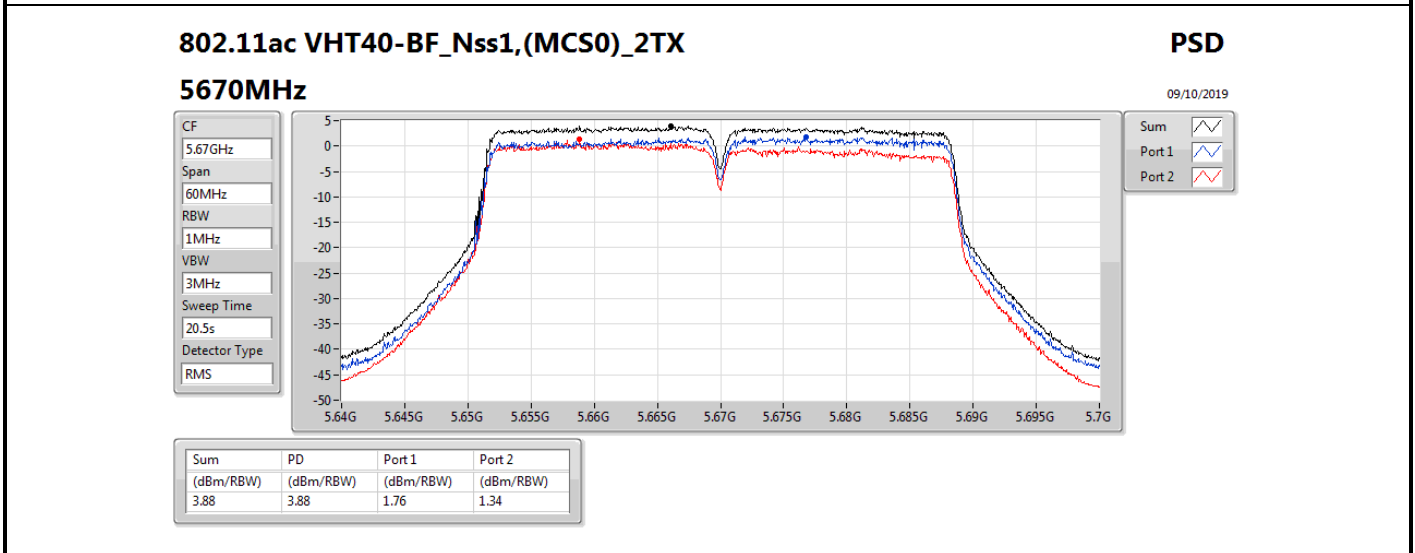
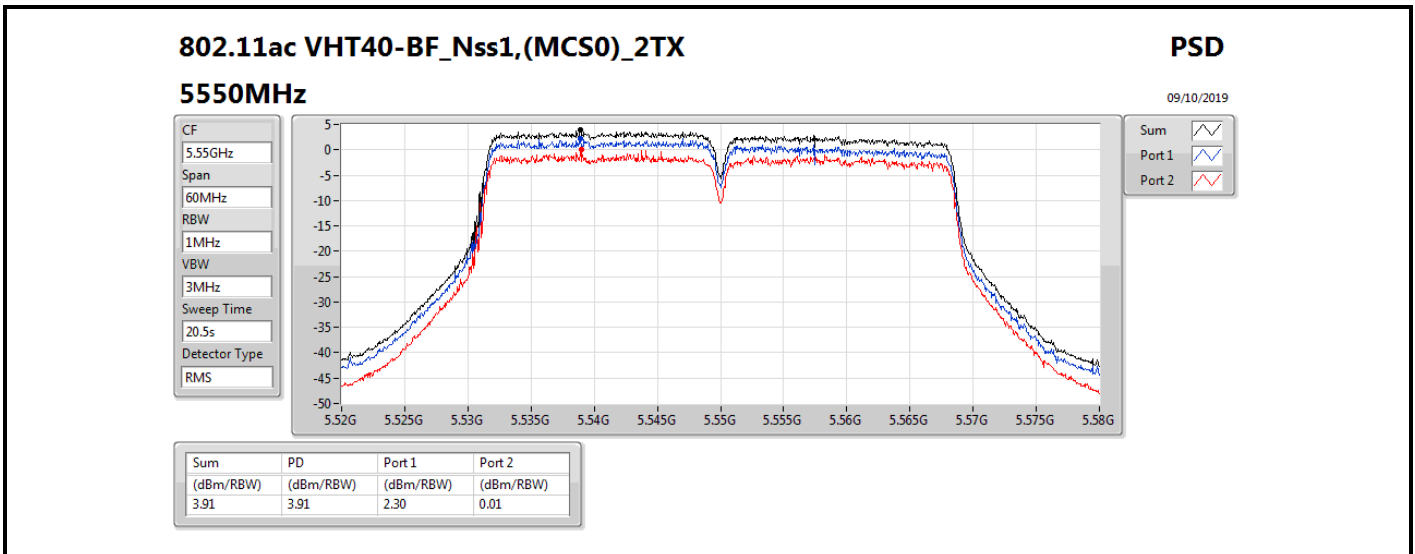
DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

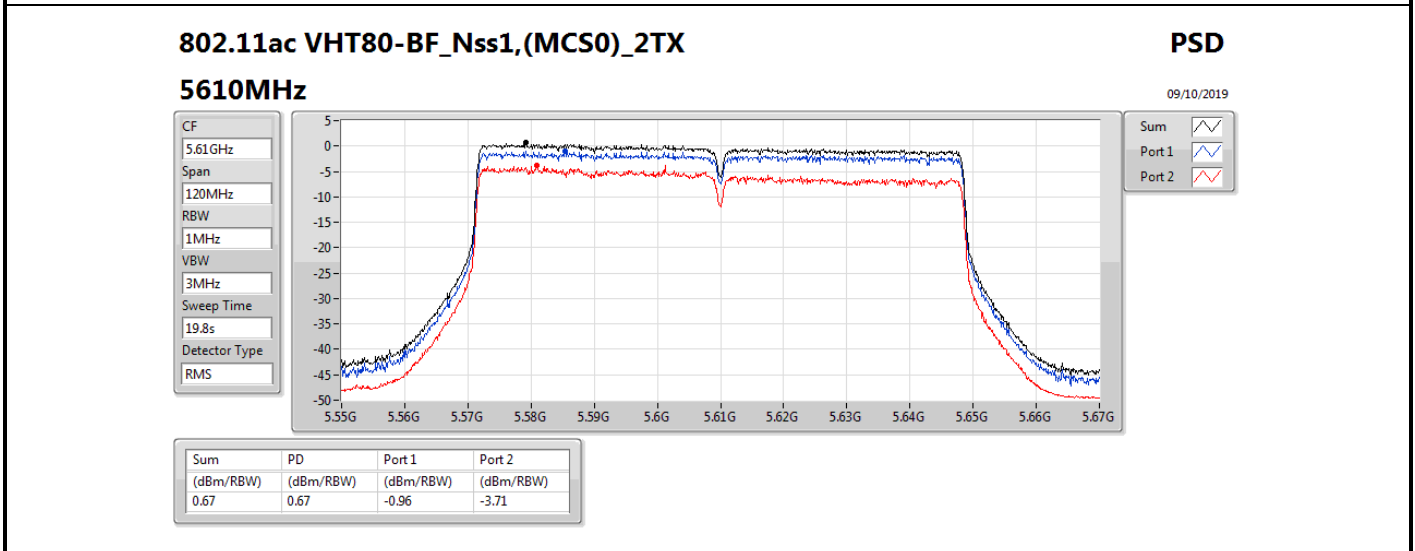
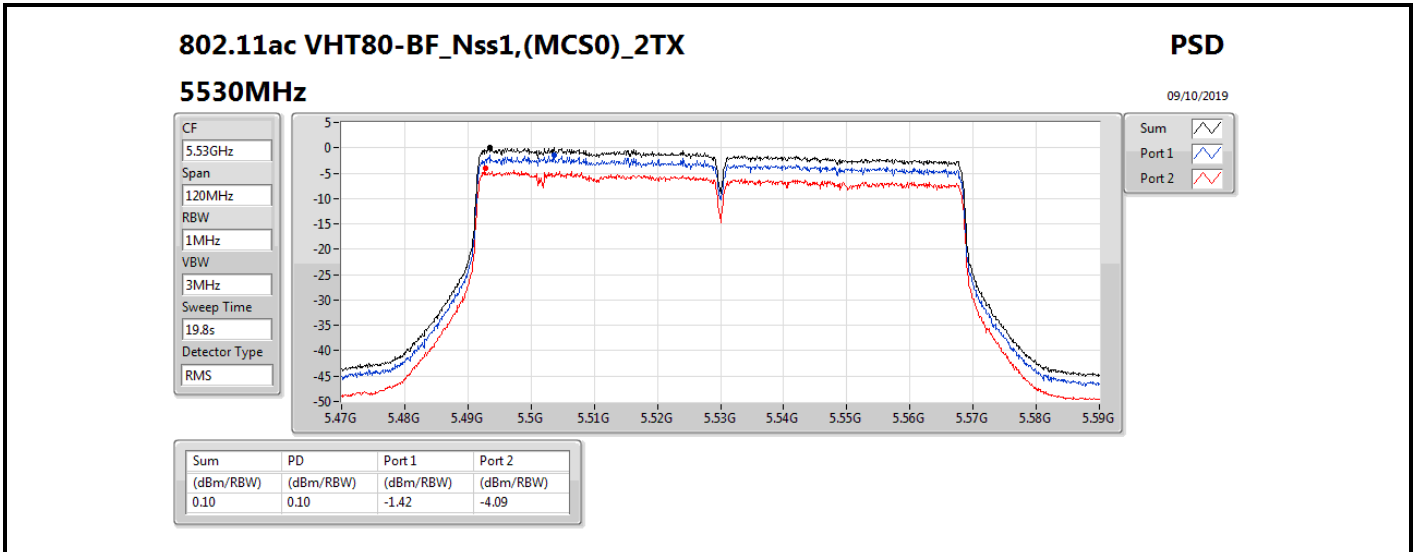
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;













Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	Pass	AV	15.89868G	53.53	54.00	-0.47	3	Vertical	152	1.47	-
802.11a_Nss1,(6Mbps)_1TX	Pass	AV	15.7821G	53.83	54.00	-0.17	3	Vertical	20	1.42	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	15.90234G	53.80	54.00	-0.20	3	Vertical	17	1.25	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	15.784G	53.64	54.00	-0.36	3	Vertical	20	1.37	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	5.35G	53.19	54.00	-0.81	3	Vertical	1	2.99	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.35G	53.25	54.00	-0.75	3	Vertical	0	3.00	-
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	Pass	PK	16.7397G	67.90	68.20	-0.30	3	Horizontal	242	1.48	-
802.11a_Nss1,(6Mbps)_1TX	Pass	PK	17.09754G	67.69	68.20	-0.51	3	Vertical	26	1.24	-
802.11a_Nss1,(6Mbps)_2TX	Pass	PK	17.09394G	67.88	68.20	-0.32	3	Vertical	26	2.58	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	PK	17.09868G	68.08	68.20	-0.12	3	Vertical	26	1.24	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	5.727G	68.08	68.20	-0.12	3	Vertical	359	2.45	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.447G	53.88	54.00	-0.12	3	Vertical	23	2.63	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	AV	5.1118G	48.70	54.00	-5.30	3	Vertical	329	2.99	-
5260MHz	Pass	AV	5.263G	107.80	Inf	-Inf	3	Vertical	329	2.99	-
5260MHz	Pass	AV	5.3614G	47.56	54.00	-6.44	3	Vertical	329	2.99	-
5260MHz	Pass	PK	5.1136G	61.80	74.00	-12.20	3	Vertical	329	2.99	-
5260MHz	Pass	PK	5.263G	117.71	Inf	-Inf	3	Vertical	329	2.99	-
5260MHz	Pass	PK	5.3536G	59.65	74.00	-14.35	3	Vertical	329	2.99	-
5260MHz	Pass	AV	5.1178G	48.48	54.00	-5.52	3	Horizontal	174	2.13	-
5260MHz	Pass	AV	5.2546G	92.44	Inf	-Inf	3	Horizontal	174	2.13	-
5260MHz	Pass	AV	5.3998G	46.93	54.00	-7.07	3	Horizontal	174	2.13	-
5260MHz	Pass	PK	5.1106G	60.08	74.00	-13.92	3	Horizontal	174	2.13	-
5260MHz	Pass	PK	5.2546G	102.84	Inf	-Inf	3	Horizontal	174	2.13	-
5260MHz	Pass	PK	5.4016G	59.68	74.00	-14.32	3	Horizontal	174	2.13	-
5260MHz	Pass	AV	15.7824G	52.58	54.00	-1.42	3	Vertical	242	1.50	-
5260MHz	Pass	PK	10.50548G	60.43	68.20	-7.77	3	Vertical	145	1.92	-
5260MHz	Pass	PK	15.77496G	65.78	74.00	-8.22	3	Vertical	242	1.50	-
5260MHz	Pass	AV	15.78444G	51.45	54.00	-2.55	3	Horizontal	245	1.50	-
5260MHz	Pass	PK	10.52006G	60.71	68.20	-7.49	3	Horizontal	21	1.73	-
5260MHz	Pass	PK	15.77778G	64.30	74.00	-9.70	3	Horizontal	245	1.50	-
5300MHz	Pass	AV	5.3032G	107.73	Inf	-Inf	3	Vertical	327	1.49	-
5300MHz	Pass	AV	5.35G	52.74	54.00	-1.26	3	Vertical	327	1.49	-
5300MHz	Pass	PK	5.3072G	117.55	Inf	-Inf	3	Vertical	327	1.49	-
5300MHz	Pass	PK	5.3512G	65.38	74.00	-8.62	3	Vertical	327	1.49	-
5300MHz	Pass	AV	5.3028G	92.39	Inf	-Inf	3	Horizontal	175	2.04	-
5300MHz	Pass	AV	5.3504G	47.16	54.00	-6.84	3	Horizontal	175	2.04	-
5300MHz	Pass	PK	5.3076G	102.31	Inf	-Inf	3	Horizontal	175	2.04	-
5300MHz	Pass	PK	5.3576G	59.49	74.00	-14.51	3	Horizontal	175	2.04	-
5300MHz	Pass	AV	15.89868G	53.53	54.00	-0.47	3	Vertical	152	1.47	-
5300MHz	Pass	PK	10.59286G	59.80	68.20	-8.40	3	Vertical	17	1.41	-
5300MHz	Pass	PK	15.90636G	66.72	74.00	-7.28	3	Vertical	152	1.47	-
5300MHz	Pass	AV	15.90216G	53.03	54.00	-0.97	3	Horizontal	244	1.55	-
5300MHz	Pass	PK	10.59346G	61.07	68.20	-7.13	3	Horizontal	268	1.50	-
5300MHz	Pass	PK	15.8949G	66.31	74.00	-7.69	3	Horizontal	244	1.55	-
5320MHz	Pass	AV	5.3234G	105.82	Inf	-Inf	3	Vertical	331	2.68	-
5320MHz	Pass	AV	5.35G	53.53	54.00	-0.47	3	Vertical	331	2.68	-
5320MHz	Pass	PK	5.323G	115.43	Inf	-Inf	3	Vertical	331	2.68	-
5320MHz	Pass	PK	5.35G	66.41	74.00	-7.59	3	Vertical	331	2.68	-
5320MHz	Pass	AV	5.3234G	91.11	Inf	-Inf	3	Horizontal	173	2.12	-
5320MHz	Pass	AV	5.35G	47.29	54.00	-6.71	3	Horizontal	173	2.12	-
5320MHz	Pass	PK	5.3168G	100.52	Inf	-Inf	3	Horizontal	173	2.12	-
5320MHz	Pass	PK	5.3564G	59.60	74.00	-14.40	3	Horizontal	173	2.12	-
5320MHz	Pass	AV	10.64222G	46.92	54.00	-7.08	3	Vertical	26	1.65	-
5320MHz	Pass	AV	15.96942G	47.16	54.00	-6.84	3	Vertical	149	1.49	-
5320MHz	Pass	PK	10.62644G	60.03	74.00	-13.97	3	Vertical	26	1.65	-
5320MHz	Pass	PK	15.95352G	59.58	74.00	-14.42	3	Vertical	149	1.49	-
5320MHz	Pass	AV	10.64G	48.34	54.00	-5.66	3	Horizontal	21	1.58	-
5320MHz	Pass	AV	15.95334G	47.16	54.00	-6.84	3	Horizontal	244	1.50	-
5320MHz	Pass	PK	10.63808G	59.46	74.00	-14.54	3	Horizontal	21	1.58	-



RSE TX above 1GHz_Non-Beamforming

Appendix D.1

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5320MHz	Pass	PK	15.96366G	60.36	74.00	-13.64	3	Horizontal	244	1.50	-
802.11a_Nss1_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	AV	5.11G	49.01	54.00	-4.99	3	Vertical	36	2.72	-
5260MHz	Pass	AV	5.263G	105.81	Inf	-Inf	3	Vertical	36	2.72	-
5260MHz	Pass	AV	5.3998G	47.90	54.00	-6.10	3	Vertical	36	2.72	-
5260MHz	Pass	PK	5.131G	61.90	74.00	-12.10	3	Vertical	36	2.72	-
5260MHz	Pass	PK	5.263G	115.42	Inf	-Inf	3	Vertical	36	2.72	-
5260MHz	Pass	PK	5.4028G	60.67	74.00	-13.33	3	Vertical	36	2.72	-
5260MHz	Pass	AV	5.1148G	48.83	54.00	-5.17	3	Horizontal	94	2.14	-
5260MHz	Pass	AV	5.263G	95.32	Inf	-Inf	3	Horizontal	94	2.14	-
5260MHz	Pass	AV	5.3992G	47.34	54.00	-6.66	3	Horizontal	94	2.14	-
5260MHz	Pass	PK	5.1118G	60.89	74.00	-13.11	3	Horizontal	94	2.14	-
5260MHz	Pass	PK	5.263G	105.18	Inf	-Inf	3	Horizontal	94	2.14	-
5260MHz	Pass	PK	5.3524G	59.18	74.00	-14.82	3	Horizontal	94	2.14	-
5260MHz	Pass	AV	15.7821G	53.83	54.00	-0.17	3	Vertical	20	1.42	-
5260MHz	Pass	PK	10.51934G	60.60	68.20	-7.60	3	Vertical	54	2.32	-
5260MHz	Pass	PK	15.7782G	69.16	74.00	-4.84	3	Vertical	20	1.42	-
5260MHz	Pass	AV	15.77946G	49.10	54.00	-4.90	3	Horizontal	292	1.68	-
5260MHz	Pass	PK	10.51034G	60.63	68.20	-7.57	3	Horizontal	215	1.97	-
5260MHz	Pass	PK	15.77616G	62.77	74.00	-11.23	3	Horizontal	292	1.68	-
5300MHz	Pass	AV	5.3032G	104.92	Inf	-Inf	3	Vertical	37	1.50	-
5300MHz	Pass	AV	5.3512G	48.16	54.00	-5.84	3	Vertical	37	1.50	-
5300MHz	Pass	PK	5.3032G	114.55	Inf	-Inf	3	Vertical	37	1.50	-
5300MHz	Pass	PK	5.3508G	61.35	74.00	-12.65	3	Vertical	37	1.50	-
5300MHz	Pass	AV	5.3032G	94.02	Inf	-Inf	3	Horizontal	99	1.90	-
5300MHz	Pass	AV	5.3872G	47.53	54.00	-6.47	3	Horizontal	99	1.90	-
5300MHz	Pass	PK	5.2944G	103.74	Inf	-Inf	3	Horizontal	99	1.90	-
5300MHz	Pass	PK	5.386G	60.12	74.00	-13.88	3	Horizontal	99	1.90	-
5300MHz	Pass	AV	15.8994G	52.96	54.00	-1.04	3	Vertical	21	1.28	-
5300MHz	Pass	PK	10.5992G	59.90	68.20	-8.30	3	Vertical	66	1.74	-
5300MHz	Pass	PK	15.8982G	66.79	74.00	-7.21	3	Vertical	21	1.28	-
5300MHz	Pass	AV	15.89976G	48.10	54.00	-5.90	3	Horizontal	150	1.52	-
5300MHz	Pass	PK	10.59926G	62.28	68.20	-5.92	3	Horizontal	7	1.85	-
5300MHz	Pass	PK	15.906G	60.53	74.00	-13.47	3	Horizontal	150	1.52	-
5320MHz	Pass	AV	5.3232G	104.69	Inf	-Inf	3	Vertical	61	1.50	-
5320MHz	Pass	AV	5.3502G	53.17	54.00	-0.83	3	Vertical	61	1.50	-
5320MHz	Pass	PK	5.323G	114.25	Inf	-Inf	3	Vertical	61	1.50	-
5320MHz	Pass	PK	5.35G	68.25	74.00	-5.75	3	Vertical	61	1.50	-
5320MHz	Pass	AV	5.3234G	93.33	Inf	-Inf	3	Horizontal	99	1.98	-
5320MHz	Pass	AV	5.3504G	47.57	54.00	-6.43	3	Horizontal	99	1.98	-
5320MHz	Pass	PK	5.3232G	102.96	Inf	-Inf	3	Horizontal	99	1.98	-
5320MHz	Pass	PK	5.3502G	59.54	74.00	-14.46	3	Horizontal	99	1.98	-
5320MHz	Pass	AV	10.64714G	47.18	54.00	-6.82	3	Vertical	6	1.50	-
5320MHz	Pass	AV	15.95382G	49.42	54.00	-4.58	3	Vertical	18	1.29	-
5320MHz	Pass	PK	10.63058G	60.46	74.00	-13.54	3	Vertical	6	1.50	-
5320MHz	Pass	PK	15.9666G	64.08	74.00	-9.92	3	Vertical	18	1.29	-
5320MHz	Pass	AV	10.63994G	48.31	54.00	-5.69	3	Horizontal	17	1.42	-
5320MHz	Pass	AV	15.95832G	47.00	54.00	-7.00	3	Horizontal	284	1.50	-
5320MHz	Pass	PK	10.6403G	60.62	74.00	-13.38	3	Horizontal	17	1.42	-



RSE TX above 1GHz_Non-Beamforming

Appendix D.1

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5320MHz	Pass	PK	15.9612G	59.52	74.00	-14.48	3	Horizontal	284	1.50	-
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	AV	5.46G	48.52	54.00	-5.48	3	Vertical	299	2.20	-
5500MHz	Pass	AV	5.47G	52.64	Inf	-Inf	3	Vertical	299	2.20	-
5500MHz	Pass	PK	5.4698G	67.48	68.20	-0.72	3	Vertical	299	2.20	-
5500MHz	Pass	PK	5.4982G	114.95	Inf	-Inf	3	Vertical	299	2.20	-
5500MHz	Pass	AV	5.457G	47.52	54.00	-6.48	3	Horizontal	196	2.84	-
5500MHz	Pass	AV	5.5032G	90.54	Inf	-Inf	3	Horizontal	196	2.84	-
5500MHz	Pass	PK	5.4634G	59.25	68.20	-8.95	3	Horizontal	196	2.84	-
5500MHz	Pass	PK	5.5032G	100.47	Inf	-Inf	3	Horizontal	196	2.84	-
5500MHz	Pass	AV	10.98662G	48.01	54.00	-5.99	3	Vertical	318	2.18	-
5500MHz	Pass	PK	10.99784G	61.11	74.00	-12.89	3	Vertical	318	2.18	-
5500MHz	Pass	PK	16.50774G	61.72	68.20	-6.48	3	Vertical	236	1.54	-
5500MHz	Pass	AV	11.00216G	49.50	54.00	-4.50	3	Horizontal	32	1.04	-
5500MHz	Pass	PK	11.00654G	62.14	74.00	-11.86	3	Horizontal	32	1.04	-
5500MHz	Pass	PK	16.50942G	62.07	68.20	-6.13	3	Horizontal	83	2.02	-
5580MHz	Pass	AV	5.457G	48.54	54.00	-5.46	3	Vertical	330	2.51	-
5580MHz	Pass	AV	5.577G	106.87	Inf	-Inf	3	Vertical	330	2.51	-
5580MHz	Pass	PK	5.4666G	60.07	68.20	-8.13	3	Vertical	330	2.51	-
5580MHz	Pass	PK	5.577G	116.46	Inf	-Inf	3	Vertical	330	2.51	-
5580MHz	Pass	PK	5.7294G	60.10	68.20	-8.10	3	Vertical	330	2.51	-
5580MHz	Pass	AV	5.4384G	47.36	54.00	-6.64	3	Horizontal	171	2.15	-
5580MHz	Pass	AV	5.577G	91.50	Inf	-Inf	3	Horizontal	171	2.15	-
5580MHz	Pass	PK	5.4654G	58.88	68.20	-9.32	3	Horizontal	171	2.15	-
5580MHz	Pass	PK	5.5776G	101.42	Inf	-Inf	3	Horizontal	171	2.15	-
5580MHz	Pass	PK	5.7252G	58.99	68.20	-9.21	3	Horizontal	171	2.15	-
5580MHz	Pass	AV	11.15802G	48.54	54.00	-5.46	3	Vertical	24	1.15	-
5580MHz	Pass	PK	11.1609G	61.29	74.00	-12.71	3	Vertical	24	1.15	-
5580MHz	Pass	PK	16.75008G	63.14	68.20	-5.06	3	Vertical	259	1.38	-
5580MHz	Pass	AV	11.15784G	51.15	54.00	-2.85	3	Horizontal	61	1.56	-
5580MHz	Pass	PK	11.16714G	63.78	74.00	-10.22	3	Horizontal	61	1.56	-
5580MHz	Pass	PK	16.7397G	67.90	68.20	-0.30	3	Horizontal	242	1.48	-
5700MHz	Pass	AV	5.7032G	103.99	Inf	-Inf	3	Vertical	302	2.58	-
5700MHz	Pass	PK	5.6968G	113.89	Inf	-Inf	3	Vertical	302	2.58	-
5700MHz	Pass	PK	5.7252G	67.34	68.20	-0.86	3	Vertical	302	2.58	-
5700MHz	Pass	AV	5.6948G	86.42	Inf	-Inf	3	Horizontal	109	1.50	-
5700MHz	Pass	PK	5.7024G	96.39	Inf	-Inf	3	Horizontal	109	1.50	-
5700MHz	Pass	PK	5.7364G	61.01	68.20	-7.19	3	Horizontal	109	1.50	-
5700MHz	Pass	AV	11.41266G	47.31	54.00	-6.69	3	Vertical	291	1.60	-
5700MHz	Pass	PK	11.38998G	60.16	74.00	-13.84	3	Vertical	291	1.60	-
5700MHz	Pass	PK	17.09616G	64.66	68.20	-3.54	3	Vertical	275	1.43	-
5700MHz	Pass	AV	11.40204G	48.79	54.00	-5.21	3	Horizontal	60	1.49	-
5700MHz	Pass	PK	11.3973G	61.24	74.00	-12.76	3	Horizontal	60	1.49	-
5700MHz	Pass	PK	17.11278G	64.26	68.20	-3.94	3	Horizontal	244	1.42	-
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
5500MHz	Pass	AV	5.457G	48.42	54.00	-5.58	3	Vertical	61	2.58	-
5500MHz	Pass	AV	5.4698G	52.50	Inf	-Inf	3	Vertical	61	2.58	-
5500MHz	Pass	PK	5.4698G	66.79	68.20	-1.41	3	Vertical	61	2.58	-
5500MHz	Pass	PK	5.4982G	115.54	Inf	-Inf	3	Vertical	61	2.58	-