

FCC Radio Test Report

FCC ID : LDKVEHVR2777
Equipment : Cisco Catalyst 9136I Access Point
Brand Name : Cisco
Model Name : C9136I-B
Applicant : Cisco Systems Inc
125 West Tasman Drive , San Jose, CA 95134, USA.
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134, USA.
Standard : 47 CFR FCC Part 15.407

The product was received on Aug. 09, 2021, and testing was started from Aug. 12, 2021 and completed on Jun. 28, 2023. We, SPORTON INTERNATIONAL INC. Hsinhua 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.


Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	17
1.3 Testing Location Information	17
1.4 Measurement Uncertainty	18
2 Test Configuration of EUT.....	19
2.1 Test Channel Mode	19
2.2 The Worst Case Measurement Configuration.....	40
2.3 Accessories	41
2.4 Support Equipment.....	41
2.5 Test Setup Diagram	42
3 Transmitter Test Result	44
3.1 AC Power-line Conducted Emissions	44
3.2 Emission Bandwidth	46
3.3 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)	47
3.4 Peak Power Spectral Density (E.I.R.P.).....	49
3.5 Unwanted Emissions.....	52
3.6 Contention Based Protocol.....	58
4 Test Equipment and Calibration Data	59
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF EMISSION BANDWIDTH	
APPENDIX C. TEST RESULTS OF MAXIMUM EQUIVALENT ISOTOPICALLY RADIATED POWER (E.I.R.P.)	
APPENDIX D. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY (E.I.R.P.)	
APPENDIX E. TEST RESULTS OF UNWANTED EMISSIONS	
APPENDIX F. TEST RESULTS OF CONTENTION-BASED PROTOCOL	
APPENDIX G. TEST RESULTS OF RADIATED EMISSION CO-LOCATION	
APPENDIX H. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	



History of this test report

Report No.	Version	Description	Issued Date
FR180526-13AE	01	Initial issue of report	Jun. 26, 2023
FR180526-13AE	02	Update Contention-Based Protocol data (This report is the latest version replacing for the report issued on Jun. 26, 2023)	Jul. 03, 2023



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)	PASS	-
3.4	15.407(a)	Peak Power Spectral Density (E.I.R.P.)	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-
3.6	15.407(d)	Contention-Based Protocol	PASS	-

Note 1: From Sporton Project No.: FR180526AE (Serving Radio)

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:

The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

Reviewed by: Ryan Hsiao

Report Producer: Ann Hou



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925 ~ 7125	a, ax (HEW20)	5955 ~ 7095	1 ~ 229 [58]
5925 ~ 7125	a, ax (HEW40)	5965 ~ 7085	3 ~ 227 [29]
5925 ~ 7125	a, ax (HEW80)	5985 ~ 7025	7 ~ 215 [14]
5925 ~ 7125	a, ax (HEW160)	6025 ~ 6985	15 ~ 207 [7]

Non-Beamforming_Serving Radio_1T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	11a20	20	1TX
6.425-6.525GHz	11a20	20	1TX
6.525-6.875GHz	11a20	20	1TX
6.875-7.125GHz	11a20	20	1TX
5.925-6.425GHz	11a40	40	1TX
6.425-6.525GHz	11a40	40	1TX
6.525-6.875GHz	11a40	40	1TX
6.875-7.125GHz	11a40	40	1TX
5.925-6.425GHz	11a80	80	1TX
6.425-6.525GHz	11a80	80	1TX
6.525-6.875GHz	11a80	80	1TX
6.875-7.125GHz	11a80	80	1TX
5.925-6.425GHz	11a160	160	1TX
6.425-6.525GHz	11a160	160	1TX
6.525-6.875GHz	11a160	160	1TX
6.875-7.125GHz	11a160	160	1TX
5.925-6.425GHz	802.11ax HEW20	20	1TX
6.425-6.525GHz	802.11ax HEW20	20	1TX
6.525-6.875GHz	802.11ax HEW20	20	1TX
6.875-7.125GHz	802.11ax HEW20	20	1TX
5.925-6.425GHz	802.11ax HEW40	40	1TX
6.425-6.525GHz	802.11ax HEW40	40	1TX
6.525-6.875GHz	802.11ax HEW40	40	1TX



Band	Mode	BWch (MHz)	Nant
6.875-7.125GHz	802.11ax HEW40	40	1TX
5.925-6.425GHz	802.11ax HEW80	80	1TX
6.425-6.525GHz	802.11ax HEW80	80	1TX
6.525-6.875GHz	802.11ax HEW80	80	1TX
6.875-7.125GHz	802.11ax HEW80	80	1TX
5.925-6.425GHz	802.11ax HEW160	160	1TX
6.425-6.525GHz	802.11ax HEW160	160	1TX
6.525-6.875GHz	802.11ax HEW160	160	1TX
6.875-7.125GHz	802.11ax HEW160	160	1TX

Non-Beamforming_Serving Radio_2T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	11a20	20	2TX
6.425-6.525GHz	11a20	20	2TX
6.525-6.875GHz	11a20	20	2TX
6.875-7.125GHz	11a20	20	2TX
5.925-6.425GHz	11a40	40	2TX
6.425-6.525GHz	11a40	40	2TX
6.525-6.875GHz	11a40	40	2TX
6.875-7.125GHz	11a40	40	2TX
5.925-6.425GHz	11a80	80	2TX
6.425-6.525GHz	11a80	80	2TX
6.525-6.875GHz	11a80	80	2TX
6.875-7.125GHz	11a80	80	2TX
5.925-6.425GHz	11a160	160	2TX
6.425-6.525GHz	11a160	160	2TX
6.525-6.875GHz	11a160	160	2TX
6.875-7.125GHz	11a160	160	2TX
5.925-6.425GHz	802.11ax HEW20	20	2TX
6.425-6.525GHz	802.11ax HEW20	20	2TX
6.525-6.875GHz	802.11ax HEW20	20	2TX
6.875-7.125GHz	802.11ax HEW20	20	2TX
5.925-6.425GHz	802.11ax HEW40	40	2TX
6.425-6.525GHz	802.11ax HEW40	40	2TX
6.525-6.875GHz	802.11ax HEW40	40	2TX



Band	Mode	BWch (MHz)	Nant
6.875-7.125GHz	802.11ax HEW40	40	2TX
5.925-6.425GHz	802.11ax HEW80	80	2TX
6.425-6.525GHz	802.11ax HEW80	80	2TX
6.525-6.875GHz	802.11ax HEW80	80	2TX
6.875-7.125GHz	802.11ax HEW80	80	2TX
5.925-6.425GHz	802.11ax HEW160	160	2TX
6.425-6.525GHz	802.11ax HEW160	160	2TX
6.525-6.875GHz	802.11ax HEW160	160	2TX
6.875-7.125GHz	802.11ax HEW160	160	2TX

Non-Beamforming_Serving Radio_4T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	11a20	20	4TX
6.425-6.525GHz	11a20	20	4TX
6.525-6.875GHz	11a20	20	4TX
6.875-7.125GHz	11a20	20	4TX
5.925-6.425GHz	11a40	40	4TX
6.425-6.525GHz	11a40	40	4TX
6.525-6.875GHz	11a40	40	4TX
6.875-7.125GHz	11a40	40	4TX
5.925-6.425GHz	11a80	80	4TX
6.425-6.525GHz	11a80	80	4TX
6.525-6.875GHz	11a80	80	4TX
6.875-7.125GHz	11a80	80	4TX
5.925-6.425GHz	11a160	160	4TX
6.425-6.525GHz	11a160	160	4TX
6.525-6.875GHz	11a160	160	4TX
6.875-7.125GHz	11a160	160	4TX
5.925-6.425GHz	802.11ax HEW20	20	4TX
6.425-6.525GHz	802.11ax HEW20	20	4TX
6.525-6.875GHz	802.11ax HEW20	20	4TX
6.875-7.125GHz	802.11ax HEW20	20	4TX
5.925-6.425GHz	802.11ax HEW40	40	4TX
6.425-6.525GHz	802.11ax HEW40	40	4TX
6.525-6.875GHz	802.11ax HEW40	40	4TX



Band	Mode	BWch (MHz)	Nant
6.875-7.125GHz	802.11ax HEW40	40	4TX
5.925-6.425GHz	802.11ax HEW80	80	4TX
6.425-6.525GHz	802.11ax HEW80	80	4TX
6.525-6.875GHz	802.11ax HEW80	80	4TX
6.875-7.125GHz	802.11ax HEW80	80	4TX
5.925-6.425GHz	802.11ax HEW160	160	4TX
6.425-6.525GHz	802.11ax HEW160	160	4TX
6.525-6.875GHz	802.11ax HEW160	160	4TX
6.875-7.125GHz	802.11ax HEW160	160	4TX

Non-Beamforming_Scanning Radio_1T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	11a20	20	1TX
6.425-6.525GHz	11a20	20	1TX
6.525-6.875GHz	11a20	20	1TX
6.875-7.125GHz	11a20	20	1TX
5.925-6.425GHz	11a40	40	1TX
6.425-6.525GHz	11a40	40	1TX
6.525-6.875GHz	11a40	40	1TX
6.875-7.125GHz	11a40	40	1TX
5.925-6.425GHz	11a80	80	1TX
6.425-6.525GHz	11a80	80	1TX
6.525-6.875GHz	11a80	80	1TX
6.875-7.125GHz	11a80	80	1TX
5.925-6.425GHz	11a160	160	1TX
6.425-6.525GHz	11a160	160	1TX
6.525-6.875GHz	11a160	160	1TX
6.875-7.125GHz	11a160	160	1TX
5.925-6.425GHz	802.11ax HEW20	20	1TX
6.425-6.525GHz	802.11ax HEW20	20	1TX
6.525-6.875GHz	802.11ax HEW20	20	1TX
6.875-7.125GHz	802.11ax HEW20	20	1TX
5.925-6.425GHz	802.11ax HEW40	40	1TX
6.425-6.525GHz	802.11ax HEW40	40	1TX
6.525-6.875GHz	802.11ax HEW40	40	1TX



Band	Mode	BWch (MHz)	Nant
6.875-7.125GHz	802.11ax HEW40	40	1TX
5.925-6.425GHz	802.11ax HEW80	80	1TX
6.425-6.525GHz	802.11ax HEW80	80	1TX
6.525-6.875GHz	802.11ax HEW80	80	1TX
6.875-7.125GHz	802.11ax HEW80	80	1TX
5.925-6.425GHz	802.11ax HEW160	160	1TX
6.425-6.525GHz	802.11ax HEW160	160	1TX
6.525-6.875GHz	802.11ax HEW160	160	1TX
6.875-7.125GHz	802.11ax HEW160	160	1TX

Non-Beamforming_Scanning Radio_2T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	11a20	20	2TX
6.425-6.525GHz	11a20	20	2TX
6.525-6.875GHz	11a20	20	2TX
6.875-7.125GHz	11a20	20	2TX
5.925-6.425GHz	11a40	40	2TX
6.425-6.525GHz	11a40	40	2TX
6.525-6.875GHz	11a40	40	2TX
6.875-7.125GHz	11a40	40	2TX
5.925-6.425GHz	11a80	80	2TX
6.425-6.525GHz	11a80	80	2TX
6.525-6.875GHz	11a80	80	2TX
6.875-7.125GHz	11a80	80	2TX
5.925-6.425GHz	11a160	160	2TX
6.425-6.525GHz	11a160	160	2TX
6.525-6.875GHz	11a160	160	2TX
6.875-7.125GHz	11a160	160	2TX
5.925-6.425GHz	802.11ax HEW20	20	2TX
6.425-6.525GHz	802.11ax HEW20	20	2TX
6.525-6.875GHz	802.11ax HEW20	20	2TX
6.875-7.125GHz	802.11ax HEW20	20	2TX
5.925-6.425GHz	802.11ax HEW40	40	2TX
6.425-6.525GHz	802.11ax HEW40	40	2TX
6.525-6.875GHz	802.11ax HEW40	40	2TX



Band	Mode	BWch (MHz)	Nant
6.875-7.125GHz	802.11ax HEW40	40	2TX
5.925-6.425GHz	802.11ax HEW80	80	2TX
6.425-6.525GHz	802.11ax HEW80	80	2TX
6.525-6.875GHz	802.11ax HEW80	80	2TX
6.875-7.125GHz	802.11ax HEW80	80	2TX
5.925-6.425GHz	802.11ax HEW160	160	2TX
6.425-6.525GHz	802.11ax HEW160	160	2TX
6.525-6.875GHz	802.11ax HEW160	160	2TX
6.875-7.125GHz	802.11ax HEW160	160	2TX

Beamforming_Serving Radio_2T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11ax HEW20-BF	20	2TX
6.425-6.525GHz	802.11ax HEW20-BF	20	2TX
6.525-6.875GHz	802.11ax HEW20-BF	20	2TX
6.875-7.125GHz	802.11ax HEW20-BF	20	2TX
5.925-6.425GHz	802.11ax HEW40-BF	40	2TX
6.425-6.525GHz	802.11ax HEW40-BF	40	2TX
6.525-6.875GHz	802.11ax HEW40-BF	40	2TX
6.875-7.125GHz	802.11ax HEW40-BF	40	2TX
5.925-6.425GHz	802.11ax HEW80-BF	80	2TX
6.425-6.525GHz	802.11ax HEW80-BF	80	2TX
6.525-6.875GHz	802.11ax HEW80-BF	80	2TX
6.875-7.125GHz	802.11ax HEW80-BF	80	2TX
5.925-6.425GHz	802.11ax HEW160-BF	160	2TX
6.425-6.525GHz	802.11ax HEW160-BF	160	2TX
6.525-6.875GHz	802.11ax HEW160-BF	160	2TX
6.875-7.125GHz	802.11ax HEW160-BF	160	2TX

**Beamforming_Serving Radio_4T1S**

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11ax HEW20-BF	20	4TX
6.425-6.525GHz	802.11ax HEW20-BF	20	4TX
6.525-6.875GHz	802.11ax HEW20-BF	20	4TX
6.875-7.125GHz	802.11ax HEW20-BF	20	4TX
5.925-6.425GHz	802.11ax HEW40-BF	40	4TX
6.425-6.525GHz	802.11ax HEW40-BF	40	4TX
6.525-6.875GHz	802.11ax HEW40-BF	40	4TX
6.875-7.125GHz	802.11ax HEW40-BF	40	4TX
5.925-6.425GHz	802.11ax HEW80-BF	80	4TX
6.425-6.525GHz	802.11ax HEW80-BF	80	4TX
6.525-6.875GHz	802.11ax HEW80-BF	80	4TX
6.875-7.125GHz	802.11ax HEW80-BF	80	4TX
5.925-6.425GHz	802.11ax HEW160-BF	160	4TX
6.425-6.525GHz	802.11ax HEW160-BF	160	4TX
6.525-6.875GHz	802.11ax HEW160-BF	160	4TX
6.875-7.125GHz	802.11ax HEW160-BF	160	4TX

Beamforming_Scanning Radio_2T1S

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11ax HEW20-BF	20	2TX
6.425-6.525GHz	802.11ax HEW20-BF	20	2TX
6.525-6.875GHz	802.11ax HEW20-BF	20	2TX
6.875-7.125GHz	802.11ax HEW20-BF	20	2TX
5.925-6.425GHz	802.11ax HEW40-BF	40	2TX
6.425-6.525GHz	802.11ax HEW40-BF	40	2TX
6.525-6.875GHz	802.11ax HEW40-BF	40	2TX
6.875-7.125GHz	802.11ax HEW40-BF	40	2TX
5.925-6.425GHz	802.11ax HEW80-BF	80	2TX
6.425-6.525GHz	802.11ax HEW80-BF	80	2TX
6.525-6.875GHz	802.11ax HEW80-BF	80	2TX
6.875-7.125GHz	802.11ax HEW80-BF	80	2TX
5.925-6.425GHz	802.11ax HEW160-BF	160	2TX
6.425-6.525GHz	802.11ax HEW160-BF	160	2TX
6.525-6.875GHz	802.11ax HEW160-BF	160	2TX
6.875-7.125GHz	802.11ax HEW160-BF	160	2TX

**Note:**

- ♦ 11a use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ The channel defined in the IEEE Standard P802.11ax™/D6.1.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Support
9	Foxconn	361.01530.005	PIFA	I-PEX	6	Serving Radio
10	Foxconn	361.01530.005	PIFA	I-PEX	6	
11	Foxconn	361.01530.005	PIFA	I-PEX	6	
12	Foxconn	361.01530.005	PIFA	I-PEX	6	
13	Foxconn	361.01530.005	PIFA	I-PEX	6	Scanning Radio
14	Foxconn	361.01530.005	PIFA	I-PEX	6	

Directional Gain (dBi) for Power					
Ant.	Serving Radio			Scanning Radio	
	1T1S	2T1S	4T1S	1T1S	2T1S
9-12	6	6	6	-	-
13-14	-	-	-	6	6

Directional Gain (dBi) for PSD					
Ant.	Serving Radio			Scanning Radio	
	1T1S	2T1S	4T1S	1T1S	2T1S
9-12	6	9.01	12.01	-	-
13-14	-	-	-	6	9.01

For 6GHz function:

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

Ant. 13 (port 1) and Ant. 14 (port 2) could transmit/receive simultaneously.

For IEEE 802.11 a/ax mode (4TX/4RX)

Ant. 9 (port 1), Ant. 10 (port 2), Ant. 11(port 3) and Ant. 12 (port 4) could transmit/receive simultaneously.



Note 1: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$Directional\ IGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$Directional\ IGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$	$Directional\ IGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$Directional\ IGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,2) = 10^{G3/20} ; NSS1(g1,2) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

G1 = Ant 1 Gain ; G2 = Ant 2 Gain ; G3 = Ant 3 Gain ; G4 = Ant 4 Gain ;

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From PoE		
HW Version	V03		
EUT Function	☒	Indoor Access Point	☐ Subordinate
	☐	Indoor Client	☐ Standard Power Access Point
	☐	Dual Client	☐ Standard Client
	☐	Fixed Client	
Beamforming Function	☒	With beamforming	☐ Without beamforming
Resource Unit (802.11ax)	☒	Full RU	☐ Partial RU
Puncturing Function	☐	Support	☒ Not Support
Software / Firmware Version for CBP		Linux version 4.4.60(aut@cheetah-build9)(gcc version 5.3.1(OpenWrt/Linaro GCC 5.3-2016.04 r48430)) #1 SMP Thu Oct 21 00:31:26 GMT 2021	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		
☐	Other:		

Note: The above information was declared by manufacturer.

**1.1.4 Mode Test Duty Cycle****Non-Beamforming_Serving Radio_1T1S**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20_Nss1,(6Mbps)_1TX	0.926	0.33	1.433m	1k
11a40_Nss1,(6Mbps)_1TX	0.926	0.33	1.433m	1k
11a80_Nss1,(6Mbps)_1TX	0.926	0.33	1.433m	1k
11a160_Nss1,(6Mbps)_1TX	0.919	0.37	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.918	0.37	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_1TX	0.937	0.28	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_1TX	0.94	0.27	5.446m	300
802.11ax HEW160_Nss1,(MCS0)_1TX	0.867	0.62	5.446m	300

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

Non-Beamforming_Serving Radio_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20_Nss1,(6Mbps)_2TX	0.926	0.33	1.433m	1k
11a40_Nss1,(6Mbps)_2TX	0.926	0.33	1.433m	1k
11a80_Nss1,(6Mbps)_2TX	0.926	0.33	1.433m	1k
11a160_Nss1,(6Mbps)_2TX	0.919	0.37	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.918	0.37	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_2TX	0.937	0.28	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_2TX	0.94	0.27	5.446m	300
802.11ax HEW160_Nss1,(MCS0)_2TX	0.867	0.62	5.446m	300

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

Non-Beamforming_Serving Radio_4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20_Nss1,(6Mbps)_4TX	0.926	0.33	1.433m	1k
11a40_Nss1,(6Mbps)_4TX	0.926	0.33	1.433m	1k
11a80_Nss1,(6Mbps)_4TX	0.926	0.33	1.433m	1k
11a160_Nss1,(6Mbps)_4TX	0.919	0.37	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.918	0.37	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_4TX	0.937	0.28	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_4TX	0.94	0.27	5.446m	300
802.11ax HEW160_Nss1,(MCS0)_4TX	0.867	0.62	5.446m	300

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

**Non-Beamforming_Scanning Radio_1T1S**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20_Nss1,(6Mbps)_1TX	0.92	0.36	1.433m	1k
11a40_Nss1,(6Mbps)_1TX	0.928	0.32	1.433m	1k
11a80_Nss1,(6Mbps)_1TX	0.931	0.31	1.433m	1k
11a160_Nss1,(6Mbps)_1TX	0.929	0.32	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_1TX	0.924	0.34	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_1TX	0.923	0.35	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_1TX	0.938	0.28	5.446m	300
802.11ax HEW160_Nss1,(MCS0)_1TX	0.938	0.28	5.446m	300

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

Non-Beamforming_Scanning Radio_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
11a20_Nss1,(6Mbps)_2TX	0.92	0.36	1.433m	1k
11a40_Nss1,(6Mbps)_2TX	0.928	0.32	1.433m	1k
11a80_Nss1,(6Mbps)_2TX	0.931	0.31	1.433m	1k
11a160_Nss1,(6Mbps)_2TX	0.929	0.32	1.433m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.924	0.34	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_2TX	0.923	0.35	5.446m	300
802.11ax HEW80_Nss1,(MCS0)_2TX	0.938	0.28	5.446m	300
802.11ax HEW160_Nss1,(MCS0)_2TX	0.938	0.28	5.446m	300

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

Beamforming_Serving Radio_2T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.918	0.37	5.446m	300
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.937	0.28	5.446m	300
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.94	0.27	5.446m	300
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.867	0.62	5.446m	300

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

Beamforming_Serving Radio_4T1S

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.918	0.37	5.446m	300
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.937	0.28	5.446m	300
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	0.94	0.27	5.446m	300
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	0.867	0.62	5.446m	300

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

**Beamforming Scanning Radio_2T1S**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.924	0.34	5.446m	300
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.923	0.35	5.446m	300
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.938	0.28	5.446m	300
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	0.938	0.28	5.446m	300

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



1.2 Applicable 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

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ KDB 987594 D01 v01r02
- ♦ KDB 987594 D02 v01
- ♦ KDB 662911 D01 v02r01
- ♦ KDB 412172 D01 v01r01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction (Serving Radio)	CO04-HY	Tony Chang	22.1~23.7°C / 51~60%	27/Aug/2021
AC Conduction (Scanning Radio)	CO04-HY	Nick Wu	21.4~22.8°C / 55~ 59%	01/Jun/2023
RF Conducted (Serving Radio)	TH01-HY	Barry Hsiao	24.2~26.9°C / 49~60%	12/Aug/2021~17/Jan/2022
RF Conducted (Scanning Radio)	TH07-HY	Xun Hsieh	21.3~23.8°C / 48~58%	18/May/2023~02/Jun/2023
Radiated (Serving Radio)	03CH03-HY	Justin Pan	24.6~26.9°C / 50~55%	13/Aug/2021~30/Sep/2021
Radiated (Scanning Radio)	03CH03-HY	Ivan Chung	22.5~23.4°C / 52~54%	29/May/2023~31/May/2023
Radiated (Co-location)	03CH03-HY	Ivan Chung	22.3~22.5°C / 49~51%	02/Jun/2023
Contention-Based Protocol	DFS03-HY	Tony Chang	21.4~22.6°C / 49~52%	28/Jun/2023
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				



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))

Serving Radio

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.64 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.80 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.30 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.00 dB	Confidence levels of 95%
Conducted Emission	2.00 dB	Confidence levels of 95%
Output Power Measurement	2.14 dB	Confidence levels of 95%
Power Density Measurement	0.26 dB	Confidence levels of 95%
Bandwidth Measurement	0.68 %	Confidence levels of 95%

Scanning Radio & Radiated (Co-location)

Test Items	Uncertainty	Remark
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Emission Bandwidth	1.5 MHz	Confidence levels of 95%
Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)	1.2 dB	Confidence levels of 95%
Peak Power Spectral Density (E.I.R.P.)	1.2 dB	Confidence levels of 95%
Unwanted Emissions	4.8 dB	Confidence levels of 95%
Contention-Based Protocol	1 ms	Confidence levels of 95%
Frequency Stability	1.18 ppm	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software	Putty
---------------	-------

Non-Beamforming_Serving Radio_1T1S

Mode	Power Setting
11a20_Nss1,(6Mbps)_1TX	-
5955MHz	10
6175MHz	11
6415MHz	11
6435MHz	11
6475MHz	11
6515MHz	11
6535MHz	11
6695MHz	11
6855MHz	11
6875MHz	11
6895MHz	10
6995MHz	10
7095MHz	12
11a40_Nss1,(6Mbps)_1TX	-
5965MHz	13
6165MHz	14
6405MHz	13
6445MHz	13
6485MHz	14
6525MHz	14
6565MHz	13
6685MHz	13
6845MHz	13
6885MHz	13
6925MHz	13
7005MHz	12
7085MHz	14



Mode	Power Setting
11a80_Nss1,(6Mbps)_1TX	-
5985MHz	15
6145MHz	17
6385MHz	17
6465MHz	17
6545MHz	17
6625MHz	16
6705MHz	16
6785MHz	17
6865MHz	16
6945MHz	16
7025MHz	16
11a160_Nss1,(6Mbps)_1TX	-
6025MHz	12
6185MHz	17
6345MHz	17
6505MHz	17
6665MHz	17
6825MHz	17
6985MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5955MHz	10
6175MHz	11
6415MHz	11
6435MHz	11
6475MHz	11
6515MHz	11
6535MHz	11
6695MHz	11
6855MHz	11
6875MHz	10
6895MHz	11
6995MHz	10
7095MHz	12
802.11ax HEW40_Nss1,(MCS0)_1TX	-



Mode	Power Setting
5965MHz	13
6165MHz	14
6405MHz	14
6445MHz	14
6485MHz	14
6525MHz	15
6565MHz	14
6685MHz	14
6845MHz	14
6885MHz	14
6925MHz	14
7005MHz	13
7085MHz	15
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5985MHz	15
6145MHz	17
6385MHz	17
6465MHz	17
6545MHz	17
6625MHz	17
6705MHz	17
6785MHz	17
6865MHz	17
6945MHz	17
7025MHz	17
802.11ax HEW160_Nss1,(MCS0)_1TX	-
6025MHz	13
6185MHz	17
6345MHz	17
6505MHz	17
6665MHz	17
6825MHz	17
6985MHz	17

**Non-Beamforming_Serving Radio_2T1S**

Mode	Power Setting
11a20_Nss1,(6Mbps)_2TX	-
5955MHz	4
6175MHz	5
6415MHz	5
6435MHz	5
6475MHz	5
6515MHz	5
6535MHz	5
6695MHz	5
6855MHz	5
6875MHz	6
6895MHz	5
6995MHz	5
7095MHz	5
11a40_Nss1,(6Mbps)_2TX	-
5965MHz	8
6165MHz	8
6405MHz	8
6445MHz	8
6485MHz	8
6525MHz	8
6565MHz	8
6685MHz	8
6845MHz	8
6885MHz	8
6925MHz	8
7005MHz	8
7085MHz	9
11a80_Nss1,(6Mbps)_2TX	-
5985MHz	10
6145MHz	11
6385MHz	10
6465MHz	11
6545MHz	11



Mode	Power Setting
6625MHz	10
6705MHz	10
6785MHz	10
6865MHz	10
6945MHz	11
7025MHz	11
11a160_Nss1,(6Mbps)_2TX	-
6025MHz	11
6185MHz	15
6345MHz	14
6505MHz	14
6665MHz	14
6825MHz	14
6985MHz	14
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5955MHz	5
6175MHz	6
6415MHz	5
6435MHz	5
6475MHz	6
6515MHz	6
6535MHz	5
6695MHz	6
6855MHz	6
6875MHz	6
6895MHz	5
6995MHz	5
7095MHz	6
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5965MHz	8
6165MHz	9
6405MHz	8
6445MHz	8
6485MHz	8
6525MHz	9



Mode	Power Setting
6565MHz	8
6685MHz	8
6845MHz	8
6885MHz	8
6925MHz	9
7005MHz	8
7085MHz	9
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5985MHz	11
6145MHz	11
6385MHz	11
6465MHz	12
6545MHz	11
6625MHz	11
6705MHz	11
6785MHz	11
6865MHz	11
6945MHz	11
7025MHz	11
802.11ax HEW160_Nss1,(MCS0)_2TX	-
6025MHz	12
6185MHz	14
6345MHz	14
6505MHz	14
6665MHz	14
6825MHz	14
6985MHz	14

**Non-Beamforming_Serving Radio_4T1S**

Mode	Power Setting
11a20_Nss1,(6Mbps)_4TX	-
5955MHz	-2
6175MHz	-2
6415MHz	-1
6435MHz	-1
6475MHz	-1
6515MHz	-2
6535MHz	-2
6695MHz	-1
6855MHz	-1
6875MHz	-1
6895MHz	-2
6995MHz	-2
7095MHz	-2
11a40_Nss1,(6Mbps)_4TX	-
5965MHz	2
6165MHz	2
6405MHz	2
6445MHz	2
6485MHz	2
6525MHz	2
6565MHz	2
6685MHz	2
6845MHz	2
6885MHz	1
6925MHz	2
7005MHz	2
7085MHz	2
11a80_Nss1,(6Mbps)_4TX	-
5985MHz	3
6145MHz	4
6385MHz	4
6465MHz	4
6545MHz	4



Mode	Power Setting
6625MHz	4
6705MHz	4
6785MHz	4
6865MHz	4
6945MHz	4
7025MHz	4
11a160_Nss1,(6Mbps)_4TX	-
6025MHz	6
6185MHz	6
6345MHz	6
6505MHz	6
6665MHz	6
6825MHz	6
6985MHz	6
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5955MHz	-2
6175MHz	-2
6415MHz	-1
6435MHz	-1
6475MHz	-1
6515MHz	-1
6535MHz	-1
6695MHz	-1
6855MHz	-1
6875MHz	-1
6895MHz	-2
6995MHz	-2
7095MHz	-1
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5965MHz	1
6165MHz	2
6405MHz	2
6445MHz	2
6485MHz	2
6525MHz	2



Mode	Power Setting
6565MHz	2
6685MHz	2
6845MHz	2
6885MHz	1
6925MHz	2
7005MHz	1
7085MHz	2
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5985MHz	4
6145MHz	5
6385MHz	5
6465MHz	5
6545MHz	5
6625MHz	4
6705MHz	4
6785MHz	5
6865MHz	5
6945MHz	4
7025MHz	5
802.11ax HEW160_Nss1,(MCS0)_4TX	-
6025MHz	7
6185MHz	8
6345MHz	7
6505MHz	8
6665MHz	8
6825MHz	8
6985MHz	7

**Beamforming_Serving Radio_2T1S**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5955MHz	5
6175MHz	6
6415MHz	5
6435MHz	5
6475MHz	6
6515MHz	6
6535MHz	5
6695MHz	6
6855MHz	6
6875MHz	6
6895MHz	5
6995MHz	5
7095MHz	6
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5965MHz	8
6165MHz	9
6405MHz	8
6445MHz	8
6485MHz	8
6525MHz	9
6565MHz	8
6685MHz	8
6845MHz	8
6885MHz	8
6925MHz	9
7005MHz	8
7085MHz	9
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5985MHz	11
6145MHz	11
6385MHz	11
6465MHz	12
6545MHz	11



Mode	Power Setting
6625MHz	11
6705MHz	11
6785MHz	11
6865MHz	11
6945MHz	11
7025MHz	11
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
6025MHz	12
6185MHz	14
6345MHz	14
6505MHz	14
6665MHz	14
6825MHz	14
6985MHz	14

**Beamforming_Serving Radio_4T1S**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5955MHz	-2
6175MHz	-2
6415MHz	-1
6435MHz	-1
6475MHz	-1
6515MHz	-1
6535MHz	-1
6695MHz	-1
6855MHz	-1
6875MHz	-1
6895MHz	-2
6995MHz	-2
7095MHz	-1
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5965MHz	1
6165MHz	2
6405MHz	2
6445MHz	2
6485MHz	2
6525MHz	2
6565MHz	2
6685MHz	2
6845MHz	2
6885MHz	1
6925MHz	2
7005MHz	1
7085MHz	2
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5985MHz	4
6145MHz	5
6385MHz	5
6465MHz	5
6545MHz	5



Mode	Power Setting
6625MHz	4
6705MHz	4
6785MHz	5
6865MHz	5
6945MHz	4
7025MHz	5
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
6025MHz	7
6185MHz	8
6345MHz	7
6505MHz	8
6665MHz	8
6825MHz	8
6985MHz	7



Test Software Version	Dos v6.1
------------------------------	----------

Non-Beamforming_Scanning Radio_1T1S

Mode	Power Setting
11a20_20MHz_Nss1,(6Mbps)_1TX	-
5955MHz	10
6175MHz	10
6415MHz	11
6435MHz	11
6475MHz	11
6515MHz	11
6535MHz	11
6695MHz	11
6855MHz	10
6875MHz	10
6895MHz	10
6995MHz	9
7095MHz	10
11a40_40MHz_Nss1,(6Mbps)_1TX	-
5965MHz	13
6165MHz	13
6405MHz	13
6445MHz	14
6485MHz	14
6525MHz	14
6565MHz	14
6685MHz	13
6845MHz	13
6885MHz	13
6925MHz	13
7005MHz	12
7085MHz	13
11a80_80MHz_Nss1,(6Mbps)_1TX	-
5985MHz	15
6145MHz	16



Mode	Power Setting
6385MHz	16
6465MHz	17
6545MHz	16
6625MHz	17
6705MHz	17
6785MHz	16
6865MHz	16
6945MHz	16
7025MHz	16
11a160_160MHz_Nss1,(6Mbps)_1TX	-
6025MHz	12
6185MHz	17
6345MHz	17
6505MHz	17
6665MHz	17
6825MHz	17
6985MHz	17
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5955MHz	11
6175MHz	11
6415MHz	11
6435MHz	11
6475MHz	11
6515MHz	11
6535MHz	11
6695MHz	11
6855MHz	11
6875MHz	11
6895MHz	11
6995MHz	10
7095MHz	11
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5965MHz	14
6165MHz	13
6405MHz	14



Mode	Power Setting
6445MHz	14
6485MHz	14
6525MHz	14
6565MHz	14
6685MHz	14
6845MHz	14
6885MHz	14
6925MHz	14
7005MHz	13
7085MHz	14
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5985MHz	15
6145MHz	17
6385MHz	17
6465MHz	17
6545MHz	17
6625MHz	17
6705MHz	17
6785MHz	17
6865MHz	17
6945MHz	17
7025MHz	16
802.11ax HEW160_Nss1,(MCS0)_1TX	-
6025MHz	14
6185MHz	17
6345MHz	17
6505MHz	17
6665MHz	17
6825MHz	17
6985MHz	17

**Non-Beamforming_Scanning Radio_2T1S**

Mode	Power Setting
11a20_20MHz_Nss1,(6Mbps)_2TX	-
5955MHz	4
6175MHz	5
6415MHz	5
6435MHz	5
6475MHz	5
6515MHz	5
6535MHz	5
6695MHz	5
6855MHz	4
6875MHz	4
6895MHz	5
6995MHz	4
7095MHz	5
11a40_40MHz_Nss1,(6Mbps)_2TX	-
5965MHz	8
6165MHz	9
6405MHz	9
6445MHz	9
6485MHz	9
6525MHz	9
6565MHz	9
6685MHz	8
6845MHz	8
6885MHz	8
6925MHz	9
7005MHz	7
7085MHz	8
11a80_80MHz_Nss1,(6Mbps)_2TX	-
5985MHz	10
6145MHz	10
6385MHz	11
6465MHz	11
6545MHz	11



Mode	Power Setting
6625MHz	11
6705MHz	10
6785MHz	11
6865MHz	11
6945MHz	11
7025MHz	10
11a160_160MHz_Nss1,(6Mbps)_2TX	-
6025MHz	11
6185MHz	13
6345MHz	13
6505MHz	13
6665MHz	13
6825MHz	13
6985MHz	13
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5955MHz	5
6175MHz	5
6415MHz	6
6435MHz	5
6475MHz	5
6515MHz	5
6535MHz	5
6695MHz	5
6855MHz	5
6875MHz	5
6895MHz	5
6995MHz	4
7095MHz	5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5965MHz	8
6165MHz	8
6405MHz	9
6445MHz	9
6485MHz	8
6525MHz	8



Mode	Power Setting
6565MHz	9
6685MHz	8
6845MHz	8
6885MHz	8
6925MHz	8
7005MHz	7
7085MHz	8
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5985MHz	11
6145MHz	11
6385MHz	11
6465MHz	11
6545MHz	11
6625MHz	12
6705MHz	11
6785MHz	11
6865MHz	11
6945MHz	11
7025MHz	10
802.11ax HEW160_Nss1,(MCS0)_2TX	-
6025MHz	11
6185MHz	14
6345MHz	14
6505MHz	14
6665MHz	14
6825MHz	14
6985MHz	13

**Beamforming_Scanning Radio_2T1S**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5955MHz	5
6175MHz	5
6415MHz	6
6435MHz	5
6475MHz	5
6515MHz	5
6535MHz	5
6695MHz	5
6855MHz	5
6875MHz	5
6895MHz	5
6995MHz	4
7095MHz	5
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5965MHz	8
6165MHz	8
6405MHz	9
6445MHz	9
6485MHz	8
6525MHz	8
6565MHz	9
6685MHz	8
6845MHz	8
6885MHz	8
6925MHz	8
7005MHz	7
7085MHz	8
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5985MHz	11
6145MHz	11
6385MHz	11
6465MHz	11
6545MHz	11



Mode	Power Setting
6625MHz	12
6705MHz	11
6785MHz	11
6865MHz	11
6945MHz	11
7025MHz	10
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
6025MHz	11
6185MHz	14
6345MHz	14
6505MHz	14
6665MHz	14
6825MHz	14
6985MHz	13

2.2 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 Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	PoE mode; Scanning Radio_2T1S
2	PoE mode; Serving Radio_4T1S

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.) Contention Based Protocol Unwanted Emissions
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	Non-Beamforming_Scanning Radio_2T1S		
2	Non-Beamforming_Serving Radio_4T1S		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V (Scanning Radio)	V (Serving Radio)

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)+ WLAN 5G (Serving Radio Secondary)+ WLAN 6G+ Bluetooth
Refer to Appendix G for Radiated Emission Co-location.	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	CTX
1	WLAN 2.4G (Serving Radio Primary)+ WLAN 5G (Serving Radio Primary)+ WLAN 5G (Serving Radio Secondary)+ WLAN 6G+ Bluetooth
Refer to Sporton Test Report No.: FA180526-13 for Co-location RF Exposure Evaluation.	

2.3 Accessories

Accessories				
PoE	Brand Name	DELTA	Model Name	ADH-65AR B
	Power Rating	I/P: 100 - 240 Vac, 2.0 A, O/P: 56 Vdc, 1.161 A		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

Support Equipment – AC Conduction (Serving Radio)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 cable	Power sync	CAT-6E-10	-	-

Support Equipment – AC Conduction (Scanning Radio)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 cable	Power sync	CAT-6E-01	-	-
2	AC Power cable	Power sync	PW-GPC180-3	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

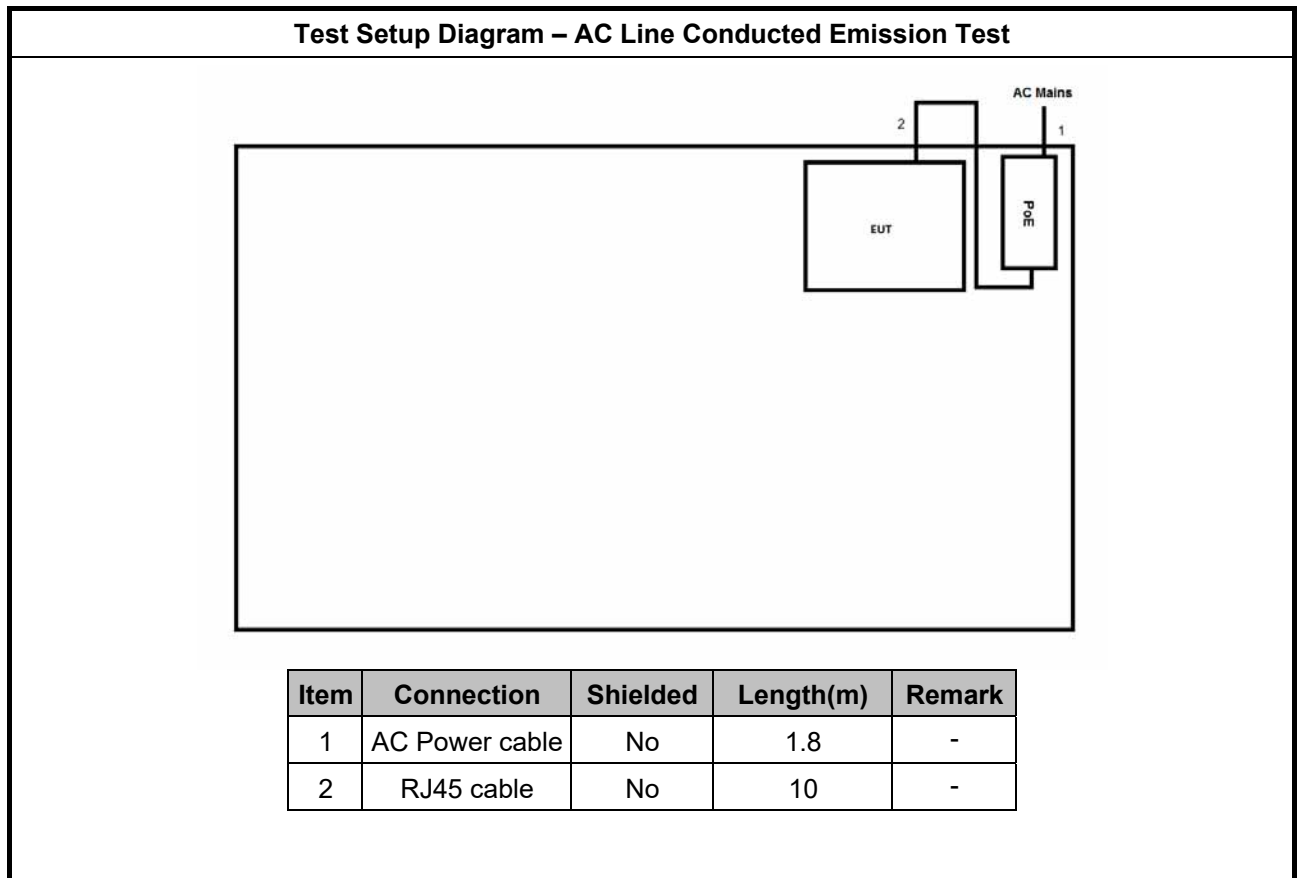
Support Equipment – Radiated (Serving Radio)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 cable	Power sync	CAT-6E-10	-	-

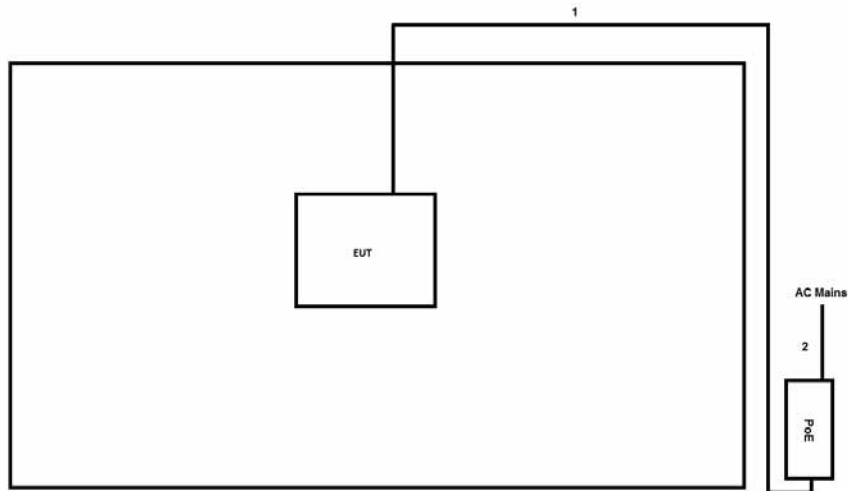
Support Equipment – Radiated (Scanning Radio)					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 cable	Power sync	CAT-6E-01	-	-
2	AC Power cable	Power sync	PW-GPC180-3	-	-

Support Equipment – Contention Based Protocol					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Client(Slave)	CISCO	Samus CM63_CW9163E-X-S	-	For Serving Radio
2	Notebook	DELL	Latitude E5510	-	-
3	Notebook	DELL	Latitude E5550	-	-

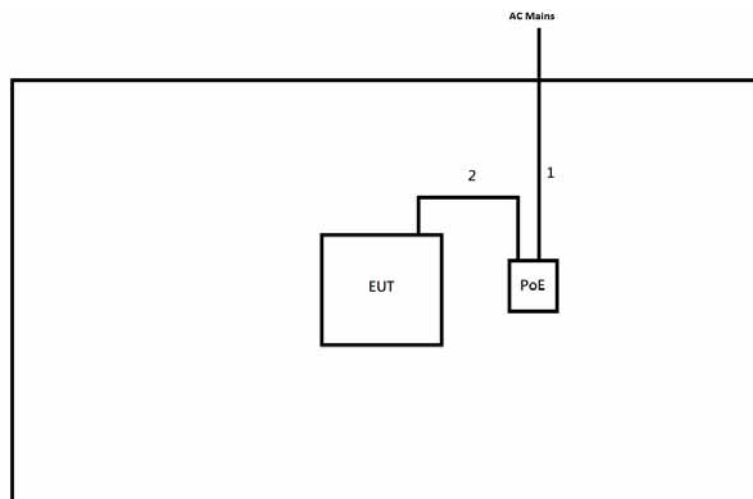


2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test (Serving Radio)


Item	Connection	Shielded	Length(m)	Remark
1	RJ45 cable	No	10	-
2	AC power cable	No	1.8	-

Test Setup Diagram - Radiated Test (Scanning Radio)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	RJ45 cable	No	1.0	-



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

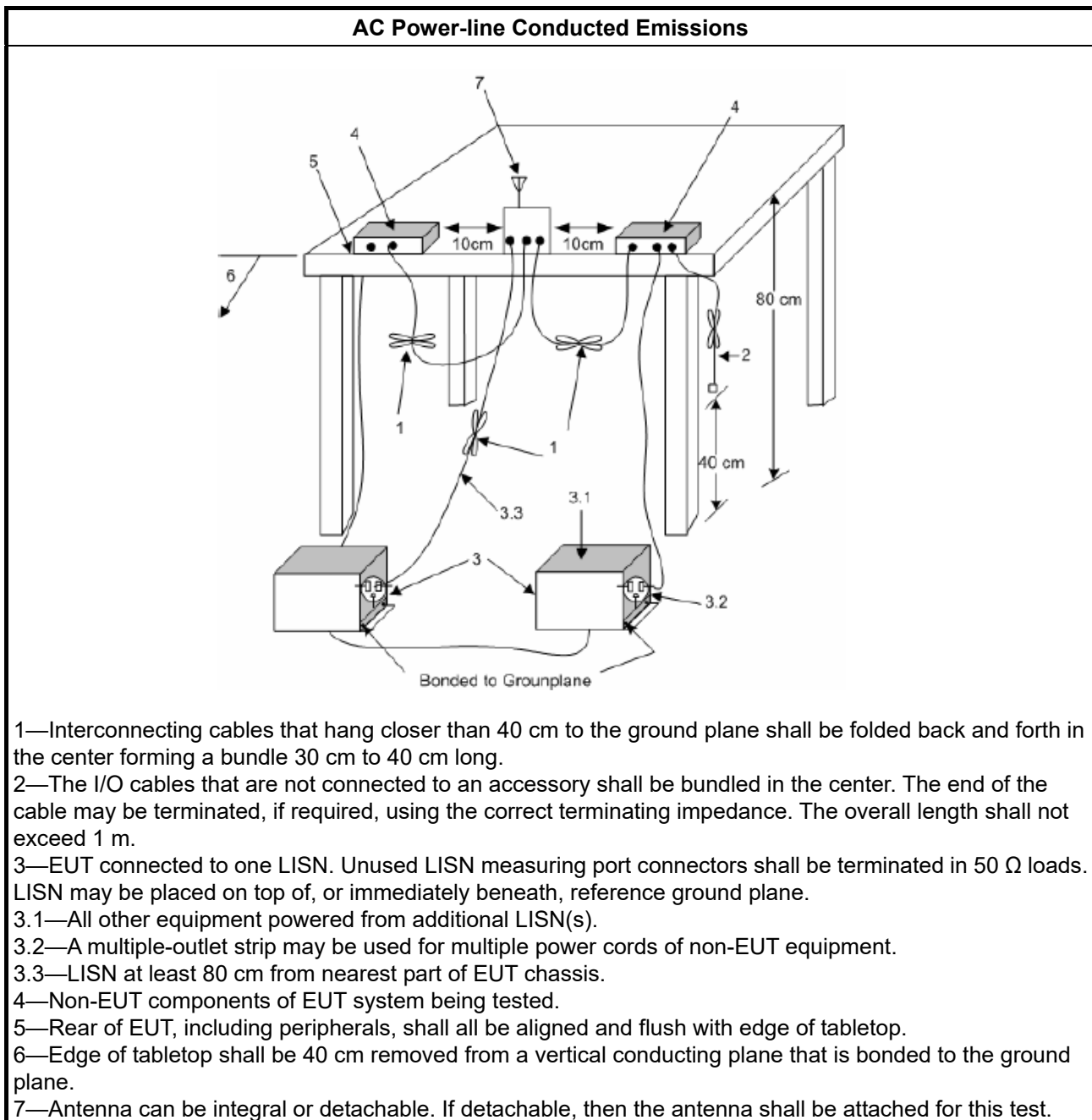
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5925-6425 GHz band, N/A
☒	For the 6425-6525 GHz band, N/A
☒	For the 6525-6875 GHz band, N/A
☒	For the 6875-7125 GHz band, N/A

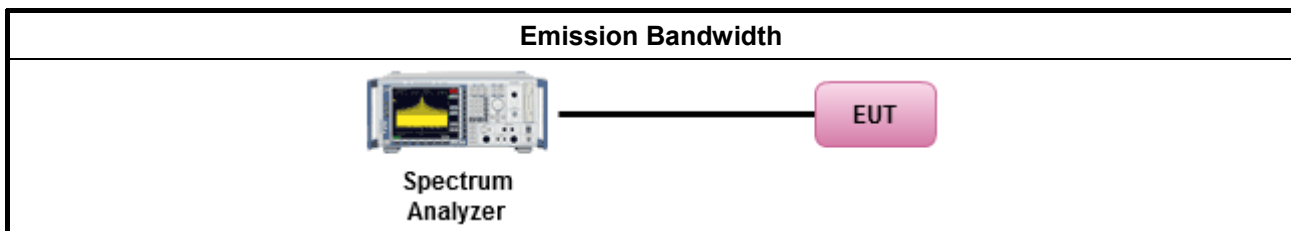
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)

3.3.1 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit

Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit	
UNII Devices	
☒ For the 5.925 ~ 6.425 GHz band:	
	■ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒ For the 6.425 ~ 6.525 GHz band:	
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒ For the 6.525 ~ 6.875 GHz band:	
	■ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
☒ For the 6.875 ~ 7.125 GHz band:	
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.

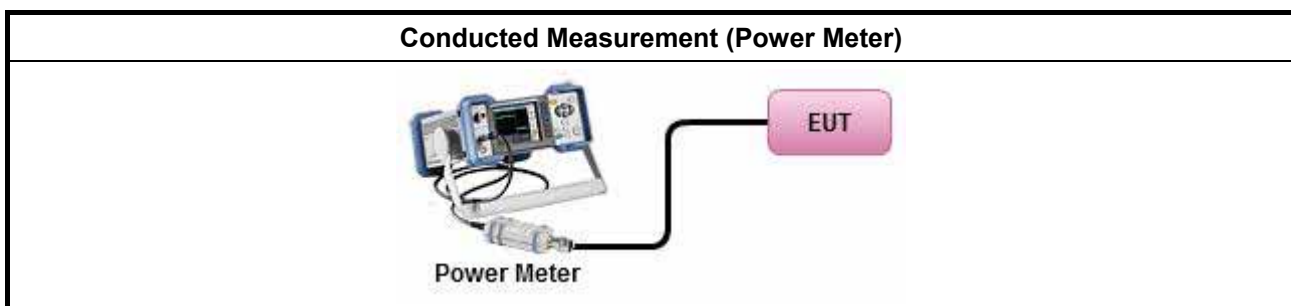
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Output Power Setting	
	Duty cycle $\geq 98\%$
	☐ Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
	☐ Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as KDB 789033, clause E Method PM-G (using an RF average power meter).
☒ For conducted measurement.	
	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$
☐ For radiated measurement.	
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	Refer as KDB 412172, $\text{EIRP} = P_R + L_P$. where P_R = adjusted received power level; L_P = basic free space propagation path loss. $P_R = P_{\text{MEAS}} - G_R + L_C + L_{\text{ATTEN}} - G_{\text{AMP}}$ where P_{MEAS} = measured power level; G_R = gain of the receive (measurement) antenna; L_C = signal loss in the measurement cable; L_{ATTEN} = value of external attenuation (if used).

3.3.4 Test Setup



3.3.5 Test Result of Maximum Equivalent Isotopically Radiated Power (E.I.R.P)

Refer as Appendix C



3.4 Peak Power Spectral Density (E.I.R.P.)

3.4.1 Peak Power Spectral Density (E.I.R.P.) Limit

Peak Power Spectral Density (E.I.R.P.) Limit	
UNII Devices	
☒	For the 5.925 ~ 6.425 GHz band:
☐	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.425 ~ 6.525 GHz band:
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.525 ~ 6.875 GHz band:
☐	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☒	For the 6.875 ~ 7.125 GHz band:
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.

3.4.2 Measuring Instruments

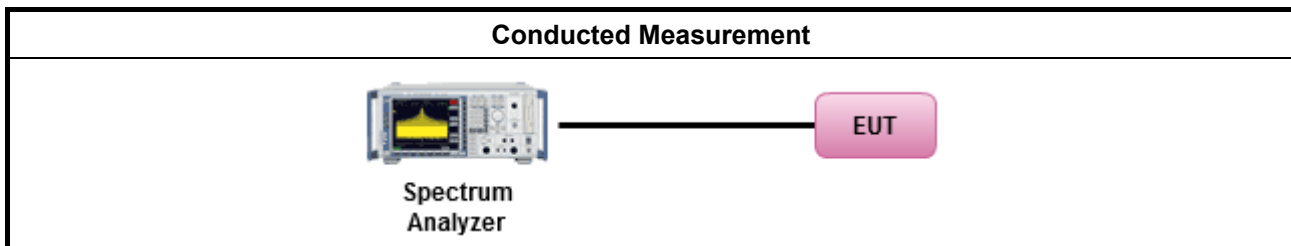
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
☒	Refer as KDB 789033, clause E Method SA-2. (spectral trace averaging)
☐	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
☒ For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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.
☒	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☒	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
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]) $EIRP_{total} = PPSD_{total} + DG$	
☐ For radiated measurement.	
Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
Refer as KDB 412172, $EIRP = P_R + L_P$. where P_R = adjusted received power level; L_P = basic free space propagation path loss. $P_R = P_{MEAS} - G_R + L_C + L_{ATTEN} - G_{AMP}$ where P_{MEAS} = measured power level; G_R = gain of the receive (measurement) antenna; L_C = signal loss in the measurement cable; L_{ATTEN} = value of external attenuation (if used).	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density (E.I.R.P.)

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter 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

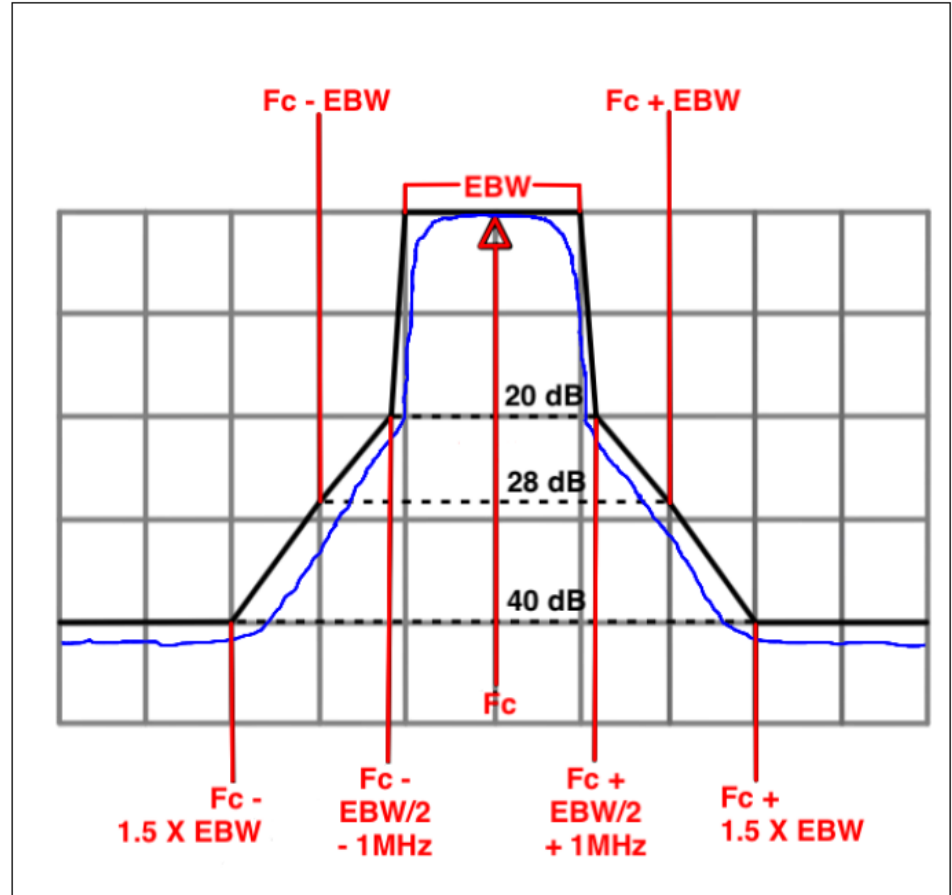
Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance 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($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$).
EX. Above 18GHz emission limit calculation (3m to 1m) = 54dBuV/m at 3m + 9.54dB = 63.54 dBuV/m at 1m.

Un-restricted band emissions above 1GHz Limit	
Frequency	Limit
Any outside the 5.945 – 7.125 GHz emission	e.i.r.p. -27 dBm [68.2 dBuV/m@3m] Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$). EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m.
Frequency	Emission MASK Limit
5.945 – 7.125 GHz	Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's

channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.





3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☒ Refer as KDB 789033, G)6) Method AD (Trace Averaging). (For unrestricted band measurement)
	☐ Refer as KDB 789033, G)6) Method VB (Reduced VBW).
	☒ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.(For restricted band average measurement)
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as KDB 789033, clause G)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
For emission MASK shall be measured using following options below:	
	☒ Refer as KDB 987594 D02, J) In-Band Emissions
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	



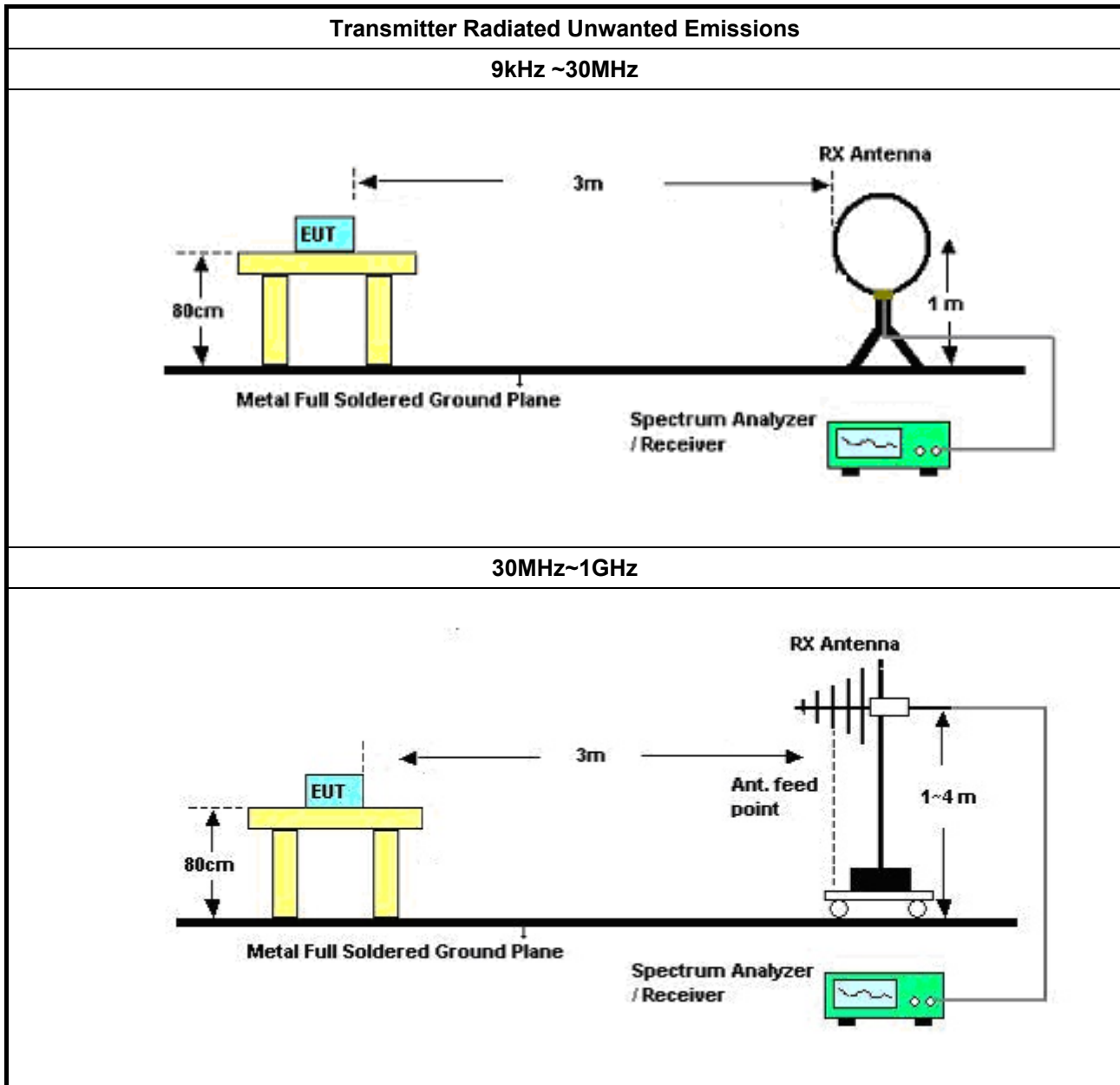
Test Method	
▪ For conducted and cabinet radiation measurement, refer as KDB 789033, clause G)3).	
	▪ For conducted unwanted emissions into non-restricted bands (relative emission limits). Devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.
▪ Use the following spectrum analyzer settings:	
	▪ Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	▪ Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	▪ Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

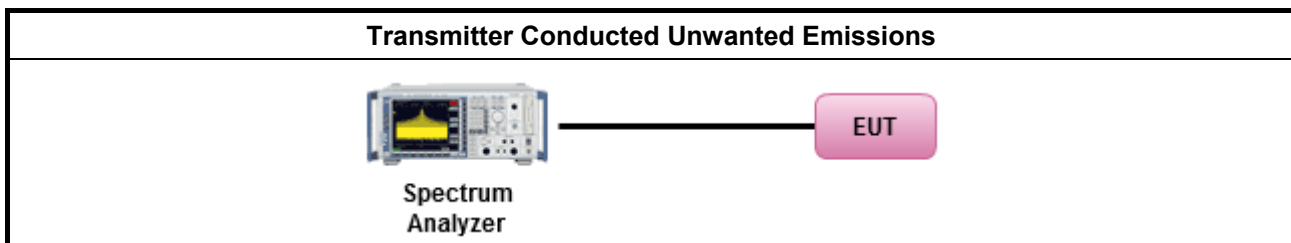
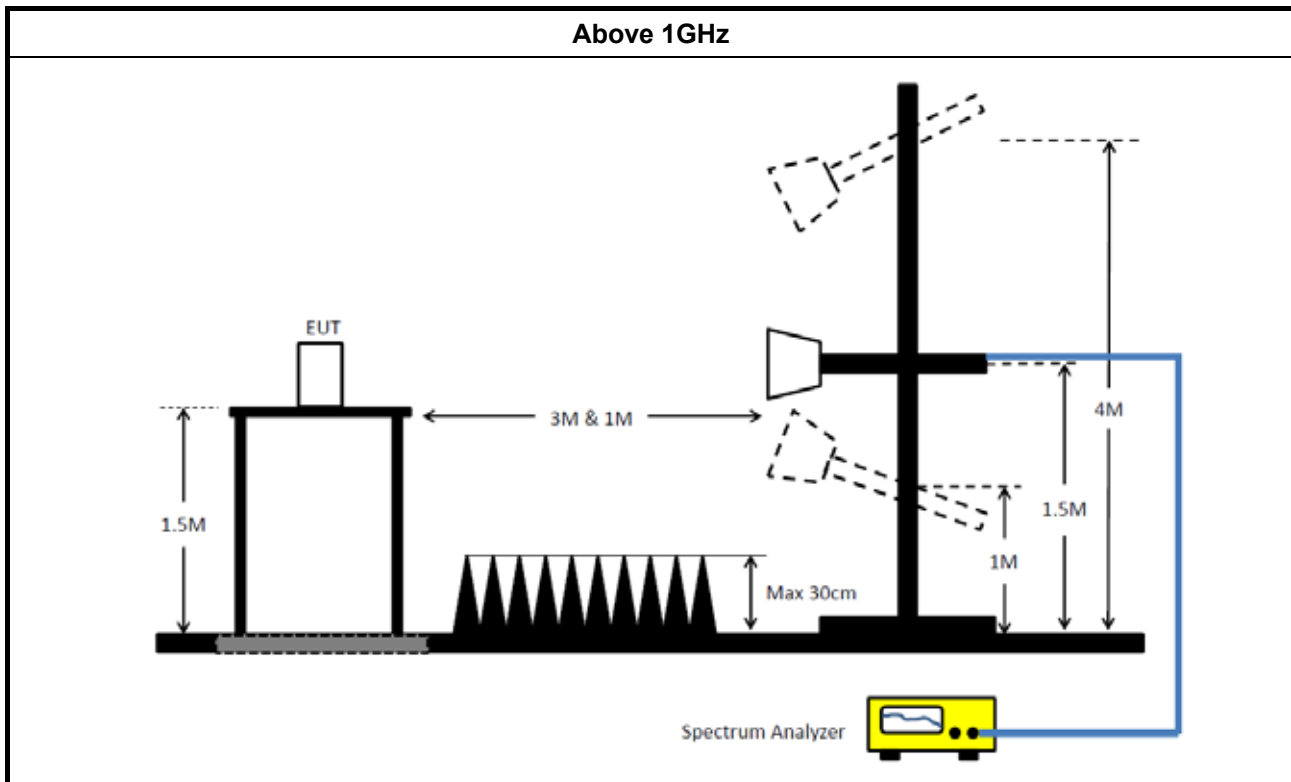
3.5.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.5.5 Test Setup





3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

EUT can detect an AWGN signal with 90% (or better) level of certainty.

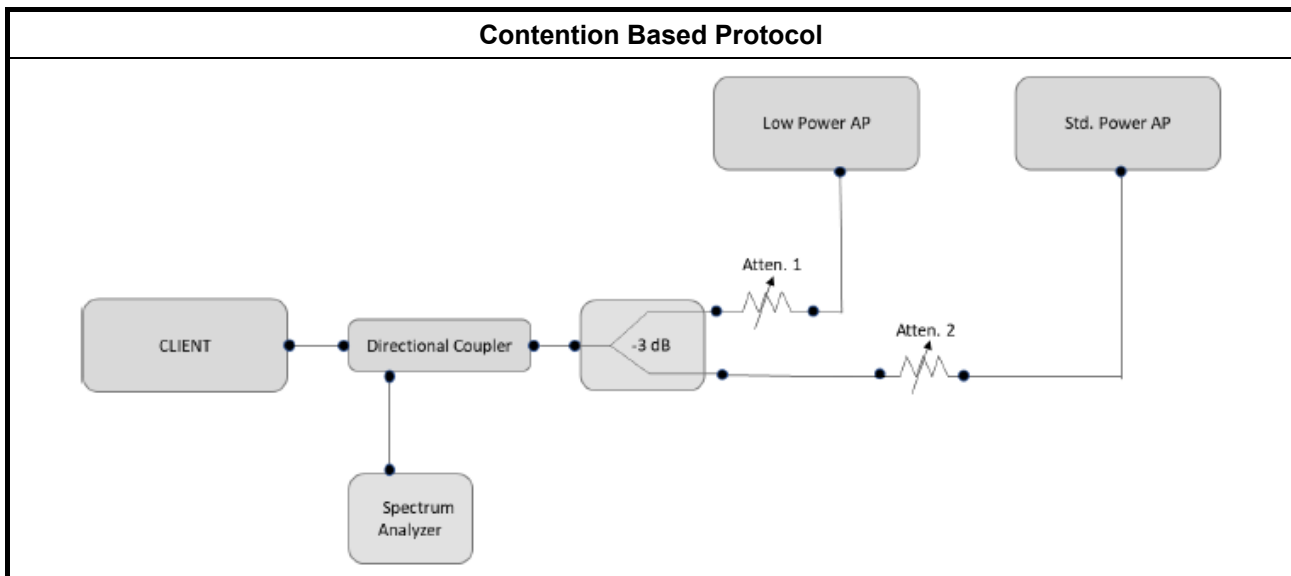
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
■	For Contention Based Protocol shall be measured using following options below:
☒	Refer as KDB 987594 D02, I) In-Band Emissions

3.6.4 Test Setup



3.6.5 Test Result of Contention Based Protocol

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction (Serving Radio)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	19/Apr/2021	18/Apr/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021

Instrument for Conducted Test (Serving Radio)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Mar/2021	29/Mar/2022
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
SMB100A Signal Generator	R&S	SMB100	177785	100kHz~40GHz	23/Sep/2021	22/Sep/2022
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	23/Feb/2021	22/Feb/2022

Instrument for Radiated Test (Serving Radio)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	03/Aug/2021	02/Aug/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	03/Aug/2021	02/Aug/2022
Signal Analyzer	R&S	FSV 40	101515	10Hz~40GHz	26/Mar/2021	25/Mar/2022
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	13/Apr/2021	12/Apr/2022
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz~26.5GHz	06/Oct/2020	05/Oct/2021
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	06/Sep/2020	05/Sep/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	24/Mar/2021	23/Mar/2022
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	16/Jun/2021	15/Jun/2022
RF Cable-R03m	Jye Bao	RG142	MY37335/4+CB0 21-1+CB021-2	30MHz~1GHz	17/Mar/2021	16/Mar/2022
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN MY38596/4+SN 804300/4	1GHz~40GHz	28/Jul/2021	27/Jul/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	11/Mar/2021	10/Mar/2022
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	09/Mar/2021	08/Mar/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022

**Instrument for AC Conduction (Scanning Radio)**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102318	9kHz ~ 3.6GHz	29/Dec/2022	28/Dec/2023
Two-Line V-Network	R&S	ENV 216	100003	9kHz ~ 30MHz	16/Feb/2023	15/Feb/2024
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	28/Feb/2023	27/Feb/2024
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	25/Oct/2022	24/Oct/2023
Software	Sporton	SENSE-EMI	V5.10.8.7	-	NCR	NCR

Instrument for Conducted Test (Scanning Radio)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101515	10Hz~40GHz	14/Feb/2023	13/Feb/2024
Programmable Temp. & Humi. Chamber	Giant Force	GTH-225-20-SP -SD	MAA1611-005	-40~100°C	21/Dec/2022	20/Dec/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2022	20/Oct/2023
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	14/Dec/2022	13/Dec/2023
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	14/Dec/2022	13/Dec/2023
SENSE-15407_NII	Sporton	V5.11.5	N/A	N/A	N/A	N/A

Instrument for Radiated Test (Scanning Radio)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	01/Aug/2022	31/Jul/2023
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	02/Aug/2022	01/Aug/2023
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	26/Oct/2022	25/Oct/2023
Amplifier	Aglient	8447D	2944A08033	10kHz~1.3GHz	07/Apr/2023	06/Apr/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02267	1GHz ~18GHz	27/Sep/2022	26/Sep/2023
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz~1GHz	16/Oct/2022	15/Oct/2023
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	13/Jun/2022	12/Jun/2023
RF Cable-R03m	Jye Bao	RG142	03CH03-cable-02	30MHz~1GHz	23/Mar/2023	22/Mar/2024
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	03CH03-cable-01	1GHz~40GHz	27/Jul/2022	26/Jul/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	1248	18GHz~40GHz	22/Aug/2022	21/Aug/2023
Microwave Prempplier	Agilent	8449B	3008A02326	1GHz~26.5GHz	14/Jul/2022	13/Jul/2023
Microwave Prempplier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	23/Mar/2023	22/Mar/2024
EMI Test Receiver	R&S	ESR	102318	9kHz~3.6GHz	29/Dec/2022	28/Dec/2023
SENSE_15407_NII	Sporton	V5.11	NA	NA	NA	NA

**Instrument for Contention Based Protocol**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Wireless connectivity tester	R&S	CMW270+CM W-Z800A	102633+100394	70MHz ~7.15GHz	22/Mar/2022	21/Mar/2024
Spectrum Analyzer	R&S	FSP30	100793	9 kHz ~ 30GHz	14/Jun/2023	13/Jun/2024
DFS-Adaptivity	Sporton	Ver 2.7	N/A	N/A	N/A	N/A
Adaptivity Analysis-5G	Sporton	Ver 2.8	N/A	N/A	N/A	N/A

Instrument for Radiated Emission (Co-location)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	02/Aug/2022	01/Aug/2023
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	26/Oct/2022	25/Oct/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02267	1GHz ~18GHz	27/Sep/2022	26/Sep/2023
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	03CH03-cable-01	1GHz~40GHz	27/Jul/2022	26/Jul/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	1248	18GHz~40GHz	22/Aug/2022	21/Aug/2023
Microwave Premplifier	Agilent	8449B	3008A02326	1GHz~26.5GHz	14/Jul/2022	13/Jul/2023
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
SENSE_15407_ EMI	Sporton	V5.11	NA	NA	NA	NA



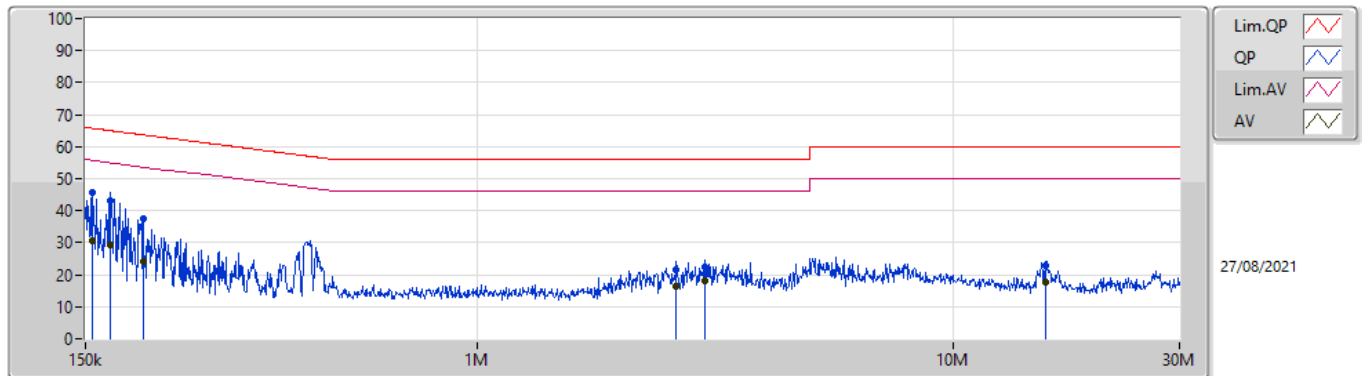
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	154.868k	45.68	65.73	-20.05	Line

Result

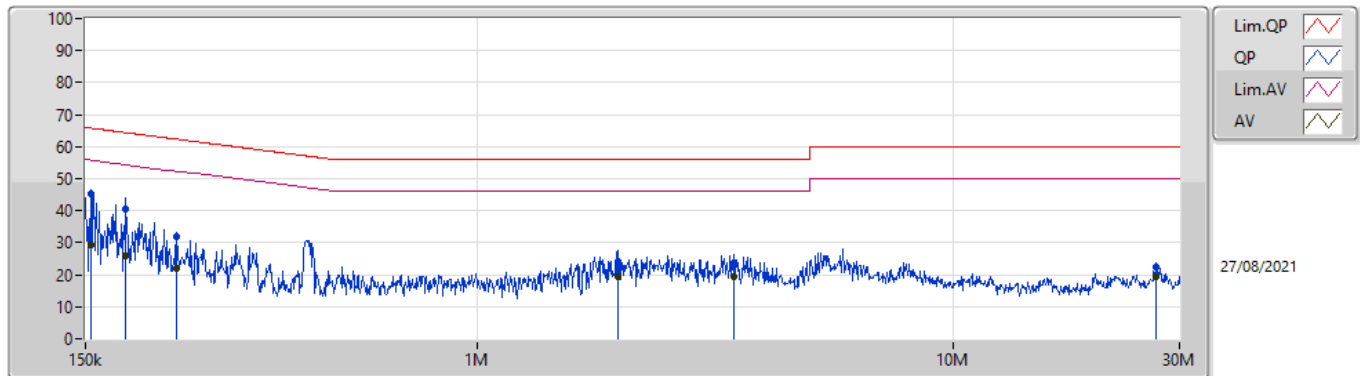
Mode	Result	Type	Freq (Hz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	154.868k	45.68	65.73	-20.05	Line	-
Mode 1	Pass	AV	154.868k	30.79	55.73	-24.94	Line	-
Mode 1	Pass	QP	169.084k	43.19	65.01	-21.82	Line	-
Mode 1	Pass	AV	169.084k	29.38	55.01	-25.63	Line	-
Mode 1	Pass	QP	198.359k	37.38	63.69	-26.31	Line	-
Mode 1	Pass	AV	198.359k	24.15	53.69	-29.54	Line	-
Mode 1	Pass	QP	2.625M	21.45	56.00	-34.55	Line	-
Mode 1	Pass	AV	2.625M	16.44	46.00	-29.56	Line	-
Mode 1	Pass	QP	3.007M	22.31	56.00	-33.69	Line	-
Mode 1	Pass	AV	3.007M	18.12	46.00	-27.88	Line	-
Mode 1	Pass	QP	15.699M	23.00	60.00	-37.00	Line	-
Mode 1	Pass	AV	15.699M	17.69	50.00	-32.31	Line	-
Mode 1	Pass	QP	154.251k	45.37	65.77	-20.40	Neutral	-
Mode 1	Pass	AV	154.251k	29.27	55.77	-26.50	Neutral	-
Mode 1	Pass	QP	182.408k	40.41	64.37	-23.96	Neutral	-
Mode 1	Pass	AV	182.408k	25.82	54.37	-28.55	Neutral	-
Mode 1	Pass	QP	233.633k	31.79	62.31	-30.52	Neutral	-
Mode 1	Pass	AV	233.633k	21.83	52.31	-30.48	Neutral	-
Mode 1	Pass	QP	1.977M	24.24	56.00	-31.76	Neutral	-
Mode 1	Pass	AV	1.977M	19.28	46.00	-26.72	Neutral	-
Mode 1	Pass	QP	3.472M	23.63	56.00	-32.37	Neutral	-
Mode 1	Pass	AV	3.472M	19.27	46.00	-26.73	Neutral	-
Mode 1	Pass	QP	26.803M	22.20	60.00	-37.80	Neutral	-
Mode 1	Pass	AV	26.803M	19.40	50.00	-30.60	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	154.868k	45.68	65.73	-20.05	19.63	Line	-	26.05	9.69	0.04	9.90			
AV	154.868k	30.79	55.73	-24.94	19.63	Line	-	11.16	9.69	0.04	9.90			
QP	169.084k	43.19	65.01	-21.82	19.63	Line	-	23.56	9.69	0.04	9.90			
AV	169.084k	29.38	55.01	-25.63	19.63	Line	-	9.75	9.69	0.04	9.90			
QP	198.359k	37.38	63.69	-26.31	19.62	Line	-	17.76	9.68	0.04	9.90			
AV	198.359k	24.15	53.69	-29.54	19.62	Line	-	4.53	9.68	0.04	9.90			
QP	2.625M	21.45	56.00	-34.55	19.64	Line	-	1.81	9.68	0.12	9.84			
AV	2.625M	16.44	46.00	-29.56	19.64	Line	-	-3.20	9.68	0.12	9.84			
QP	3.007M	22.31	56.00	-33.69	19.67	Line	-	2.64	9.69	0.12	9.86			
AV	3.007M	18.12	46.00	-27.88	19.67	Line	-	-1.55	9.69	0.12	9.86			
QP	15.699M	23.00	60.00	-37.00	19.85	Line	-	3.15	9.69	0.26	9.90			
AV	15.699M	17.69	50.00	-32.31	19.85	Line	-	-2.16	9.69	0.26	9.90			

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	154.251k	45.37	65.77	-20.40	19.63	Neutral	-	25.74	9.69	0.04	9.90			
AV	154.251k	29.27	55.77	-26.50	19.63	Neutral	-	9.64	9.69	0.04	9.90			
QP	182.408k	40.41	64.37	-23.96	19.62	Neutral	-	20.79	9.68	0.04	9.90			
AV	182.408k	25.82	54.37	-28.55	19.62	Neutral	-	6.20	9.68	0.04	9.90			
QP	233.633k	31.79	62.31	-30.52	19.62	Neutral	-	12.17	9.68	0.04	9.90			
AV	233.633k	21.83	52.31	-30.48	19.62	Neutral	-	2.21	9.68	0.04	9.90			
QP	1.977M	24.24	56.00	-31.76	19.58	Neutral	-	4.66	9.68	0.10	9.80			
AV	1.977M	19.28	46.00	-26.72	19.58	Neutral	-	-0.30	9.68	0.10	9.80			
QP	3.472M	23.63	56.00	-32.37	19.70	Neutral	-	3.93	9.69	0.13	9.88			
AV	3.472M	19.27	46.00	-26.73	19.70	Neutral	-	-0.43	9.69	0.13	9.88			
QP	26.803M	22.20	60.00	-37.80	19.94	Neutral	-	2.26	9.71	0.33	9.90			
AV	26.803M	19.40	50.00	-30.60	19.94	Neutral	-	-0.54	9.71	0.33	9.90			



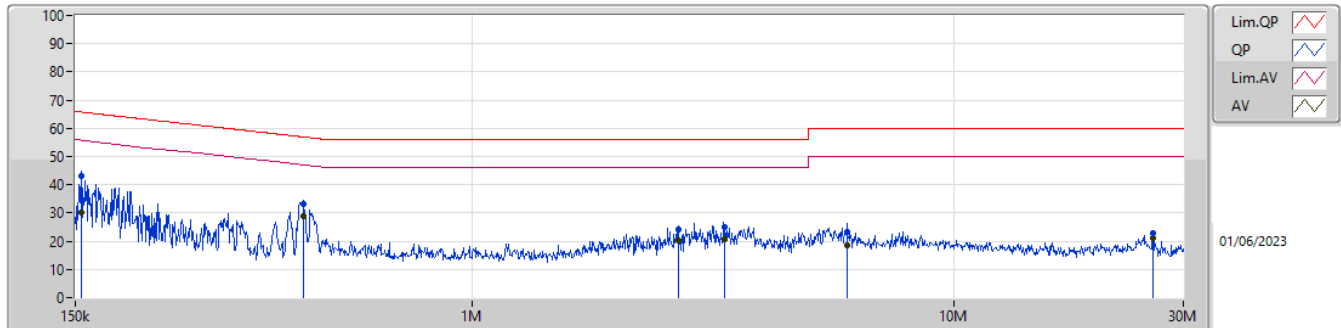
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	446.062k	29.92	46.96	-17.04	Neutral

Mode Configure

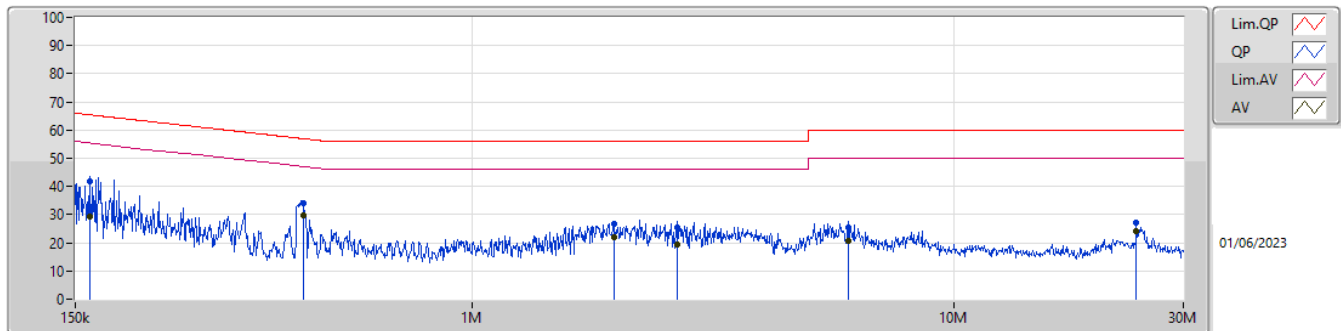
Mode	Result	Type	Freq (Hz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	154.251k	43.31	65.77	-22.46	Line	-
Mode 1	Pass	AV	154.251k	30.17	55.77	-25.60	Line	-
Mode 1	Pass	QP	446.062k	33.26	56.96	-23.70	Line	-
Mode 1	Pass	AV	446.062k	28.90	46.96	-18.06	Line	-
Mode 1	Pass	QP	2.678M	23.95	56.00	-32.05	Line	-
Mode 1	Pass	AV	2.678M	20.15	46.00	-25.85	Line	-
Mode 1	Pass	QP	3.336M	24.93	56.00	-31.07	Line	-
Mode 1	Pass	AV	3.336M	20.72	46.00	-25.28	Line	-
Mode 1	Pass	QP	5.998M	23.18	60.00	-36.82	Line	-
Mode 1	Pass	AV	5.998M	18.57	50.00	-31.43	Line	-
Mode 1	Pass	QP	25.961M	22.74	60.00	-37.26	Line	-
Mode 1	Pass	AV	25.961M	21.20	50.00	-28.80	Line	-
Mode 1	Pass	QP	160.533k	41.86	65.43	-23.57	Neutral	-
Mode 1	Pass	AV	160.533k	29.23	55.43	-26.20	Neutral	-
Mode 1	Pass	QP	446.062k	34.06	56.96	-22.90	Neutral	-
Mode 1	Pass	AV	446.062k	29.92	46.96	-17.04	Neutral	-
Mode 1	Pass	QP	1.969M	26.83	56.00	-29.17	Neutral	-
Mode 1	Pass	AV	1.969M	21.98	46.00	-24.02	Neutral	-
Mode 1	Pass	QP	2.667M	25.35	56.00	-30.65	Neutral	-
Mode 1	Pass	AV	2.667M	19.38	46.00	-26.62	Neutral	-
Mode 1	Pass	QP	6.047M	25.63	60.00	-34.37	Neutral	-
Mode 1	Pass	AV	6.047M	20.75	50.00	-29.25	Neutral	-
Mode 1	Pass	QP	23.968M	27.33	60.00	-32.67	Neutral	-
Mode 1	Pass	AV	23.968M	24.11	50.00	-25.89	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)								
QP	154.251k	43.31	65.77	-22.46	19.61	Line	-	23.70	9.65	0.03	9.93								
AV	154.251k	30.17	55.77	-25.60	19.61	Line	-	10.56	9.65	0.03	9.93								
QP	446.062k	33.26	56.96	-23.70	19.64	Line	-	13.62	9.64	0.04	9.96								
AV	446.062k	28.90	46.96	-18.06	19.64	Line	-	9.26	9.64	0.04	9.96								
QP	2.678M	23.95	56.00	-32.05	19.73	Line	-	4.22	9.69	0.10	9.94								
AV	2.678M	20.15	46.00	-25.85	19.73	Line	-	0.42	9.69	0.10	9.94								
QP	3.336M	24.93	56.00	-31.07	19.74	Line	-	5.19	9.69	0.12	9.93								
AV	3.336M	20.72	46.00	-25.28	19.74	Line	-	0.98	9.69	0.12	9.93								
QP	5.998M	23.18	60.00	-36.82	19.83	Line	-	3.35	9.74	0.15	9.94								
AV	5.998M	18.57	50.00	-31.43	19.83	Line	-	-1.26	9.74	0.15	9.94								
QP	25.961M	22.74	60.00	-37.26	20.07	Line	-	2.67	9.78	0.32	9.97								
AV	25.961M	21.20	50.00	-28.80	20.07	Line	-	1.13	9.78	0.32	9.97								

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)								
QP	160.533k	41.86	65.43	-23.57	19.59	Neutral	-	22.27	9.63	0.03	9.93								
AV	160.533k	29.23	55.43	-26.20	19.59	Neutral	-	9.64	9.63	0.03	9.93								
QP	446.062k	34.06	56.96	-22.90	19.63	Neutral	-	14.43	9.63	0.04	9.96								
AV	446.062k	29.92	46.96	-17.04	19.63	Neutral	-	10.29	9.63	0.04	9.96								
QP	1.969M	26.83	56.00	-29.17	19.68	Neutral	-	7.15	9.66	0.08	9.94								
AV	1.969M	21.98	46.00	-24.02	19.68	Neutral	-	2.30	9.66	0.08	9.94								
QP	2.667M	25.35	56.00	-30.65	19.71	Neutral	-	5.64	9.67	0.10	9.94								
AV	2.667M	19.38	46.00	-26.62	19.71	Neutral	-	-0.33	9.67	0.10	9.94								
QP	6.047M	25.63	60.00	-34.37	19.83	Neutral	-	5.80	9.74	0.15	9.94								
AV	6.047M	20.75	50.00	-29.25	19.83	Neutral	-	0.92	9.74	0.15	9.94								
QP	23.968M	27.33	60.00	-32.67	20.28	Neutral	-	7.05	10.01	0.30	9.97								
AV	23.968M	24.11	50.00	-25.89	20.28	Neutral	-	3.83	10.01	0.30	9.97								

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_1TX	20.55M	16.672M	16M7D1D	20.22M	16.642M
11a40_Nss1,(6Mbps)_1TX	39.72M	36.222M	36M2D1D	39.54M	36.162M
11a80_Nss1,(6Mbps)_1TX	87M	76.282M	76M3D1D	82.92M	76.282M
11a160_Nss1,(6Mbps)_1TX	213.36M	155.202M	155MD1D	166.08M	154.723M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.08M	19.13M	19M1D1D	21.81M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.62M	37.781M	37M8D1D	40.26M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.92M	77.841M	77M8D1D	82.44M	77.241M
802.11ax HEW160_Nss1,(MCS0)_1TX	170.4M	155.442M	155MD1D	164.64M	154.963M
6.425-6.525GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_1TX	20.49M	16.672M	16M7D1D	20.16M	16.642M
11a40_Nss1,(6Mbps)_1TX	39.72M	36.222M	36M2D1D	39.6M	36.162M
11a80_Nss1,(6Mbps)_1TX	82.44M	76.162M	76M2D1D	82.44M	76.042M
11a160_Nss1,(6Mbps)_1TX	166.56M	154.723M	155MD1D	166.56M	154.723M
802.11ax HEW20_Nss1,(MCS0)_1TX	21.99M	19.13M	19M1D1D	21.66M	19.1M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.56M	37.841M	37M8D1D	40.44M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.68M	77.481M	77M5D1D	82.68M	77.361M
802.11ax HEW160_Nss1,(MCS0)_1TX	164.4M	155.202M	155MD1D	164.4M	155.202M
6.525-6.875GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_1TX	20.46M	16.672M	16M7D1D	20.16M	16.642M
11a40_Nss1,(6Mbps)_1TX	39.72M	36.222M	36M2D1D	39.6M	36.162M
11a80_Nss1,(6Mbps)_1TX	82.8M	76.042M	76M0D1D	82.44M	76.042M
11a160_Nss1,(6Mbps)_1TX	167.04M	154.723M	155MD1D	166.56M	154.723M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.32M	19.13M	19M1D1D	21.87M	19.1M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.62M	37.841M	37M8D1D	40.2M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.44M	77.361M	77M4D1D	82.08M	77.121M
802.11ax HEW160_Nss1,(MCS0)_1TX	164.64M	154.963M	155MD1D	164.4M	154.723M
6.875-7.125GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_1TX	20.7M	16.672M	16M7D1D	20.22M	16.642M
11a40_Nss1,(6Mbps)_1TX	39.78M	36.222M	36M2D1D	39.66M	36.162M
11a80_Nss1,(6Mbps)_1TX	82.44M	76.042M	76M0D1D	82.32M	75.922M
11a160_Nss1,(6Mbps)_1TX	168.24M	154.243M	154MD1D	168.24M	154.243M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.05M	19.16M	19M2D1D	21.93M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.5M	37.781M	37M8D1D	40.32M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.92M	77.481M	77M5D1D	82.68M	77.361M
802.11ax HEW160_Nss1,(MCS0)_1TX	164.64M	154.243M	154MD1D	164.64M	154.243M

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)
11a20_Nss1,(6Mbps)_1TX	-	-	-	-
5955MHz	Pass	Inf	20.55M	16.672M
6175MHz	Pass	Inf	20.22M	16.672M
6415MHz	Pass	Inf	20.25M	16.642M
6435MHz	Pass	Inf	20.31M	16.642M
6475MHz	Pass	Inf	20.49M	16.672M
6515MHz	Pass	Inf	20.16M	16.642M
6535MHz	Pass	Inf	20.25M	16.642M
6695MHz	Pass	Inf	20.46M	16.672M
6855MHz	Pass	Inf	20.22M	16.672M
6875MHz	Pass	Inf	20.16M	16.672M
6895MHz	Pass	Inf	20.22M	16.642M
6995MHz	Pass	Inf	20.7M	16.672M
7095MHz	Pass	Inf	20.52M	16.672M
11a40_Nss1,(6Mbps)_1TX	-	-	-	-
5965MHz	Pass	Inf	39.54M	36.222M
6165MHz	Pass	Inf	39.66M	36.222M
6405MHz	Pass	Inf	39.72M	36.162M
6445MHz	Pass	Inf	39.72M	36.222M
6485MHz	Pass	Inf	39.6M	36.162M
6525MHz	Pass	Inf	39.72M	36.222M
6565MHz	Pass	Inf	39.72M	36.162M
6685MHz	Pass	Inf	39.6M	36.222M
6845MHz	Pass	Inf	39.6M	36.162M
6885MHz	Pass	Inf	39.72M	36.162M
6925MHz	Pass	Inf	39.66M	36.222M
7005MHz	Pass	Inf	39.78M	36.162M
7085MHz	Pass	Inf	39.66M	36.222M
11a80_Nss1,(6Mbps)_1TX	-	-	-	-
5985MHz	Pass	Inf	87M	76.282M
6145MHz	Pass	Inf	83.04M	76.282M
6385MHz	Pass	Inf	82.92M	76.282M
6465MHz	Pass	Inf	82.44M	76.162M
6545MHz	Pass	Inf	82.44M	76.042M
6625MHz	Pass	Inf	82.44M	76.042M
6705MHz	Pass	Inf	82.8M	76.042M
6785MHz	Pass	Inf	82.44M	76.042M
6865MHz	Pass	Inf	82.44M	76.042M
6945MHz	Pass	Inf	82.32M	76.042M
7025MHz	Pass	Inf	82.44M	75.922M
11a160_Nss1,(6Mbps)_1TX	-	-	-	-
6025MHz	Pass	Inf	213.36M	155.202M
6185MHz	Pass	Inf	166.08M	154.723M
6345MHz	Pass	Inf	170.16M	154.963M
6505MHz	Pass	Inf	166.56M	154.723M
6665MHz	Pass	Inf	167.04M	154.723M
6825MHz	Pass	Inf	166.56M	154.723M
6985MHz	Pass	Inf	168.24M	154.243M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5955MHz	Pass	Inf	21.81M	19.13M
6175MHz	Pass	Inf	21.87M	19.13M
6415MHz	Pass	Inf	22.08M	19.13M
6435MHz	Pass	Inf	21.99M	19.13M
6475MHz	Pass	Inf	21.75M	19.13M
6515MHz	Pass	Inf	21.66M	19.1M



EBW_Non-Beamforming_Serving Radio_1T1S

Appendix B.1

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
6535MHz	Pass	Inf	21.87M	19.13M
6695MHz	Pass	Inf	22.17M	19.13M
6855MHz	Pass	Inf	21.87M	19.1M
6875MHz	Pass	Inf	22.32M	19.13M
6895MHz	Pass	Inf	21.96M	19.13M
6995MHz	Pass	Inf	22.05M	19.16M
7095MHz	Pass	Inf	21.93M	19.13M
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-
5965MHz	Pass	Inf	40.26M	37.781M
6165MHz	Pass	Inf	40.62M	37.781M
6405MHz	Pass	Inf	40.62M	37.781M
6445MHz	Pass	Inf	40.44M	37.841M
6485MHz	Pass	Inf	40.5M	37.781M
6525MHz	Pass	Inf	40.56M	37.781M
6565MHz	Pass	Inf	40.2M	37.841M
6685MHz	Pass	Inf	40.32M	37.781M
6845MHz	Pass	Inf	40.62M	37.841M
6885MHz	Pass	Inf	40.32M	37.841M
6925MHz	Pass	Inf	40.5M	37.781M
7005MHz	Pass	Inf	40.32M	37.781M
7085MHz	Pass	Inf	40.44M	37.781M
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-
5985MHz	Pass	Inf	82.56M	77.841M
6145MHz	Pass	Inf	82.92M	77.241M
6385MHz	Pass	Inf	82.44M	77.361M
6465MHz	Pass	Inf	82.68M	77.481M
6545MHz	Pass	Inf	82.68M	77.361M
6625MHz	Pass	Inf	82.2M	77.361M
6705MHz	Pass	Inf	82.2M	77.121M
6785MHz	Pass	Inf	82.08M	77.361M
6865MHz	Pass	Inf	82.44M	77.361M
6945MHz	Pass	Inf	82.68M	77.361M
7025MHz	Pass	Inf	82.92M	77.481M
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-
6025MHz	Pass	Inf	170.4M	155.442M
6185MHz	Pass	Inf	164.64M	154.963M
6345MHz	Pass	Inf	165.12M	154.963M
6505MHz	Pass	Inf	164.4M	155.202M
6665MHz	Pass	Inf	164.64M	154.963M
6825MHz	Pass	Inf	164.4M	154.723M
6985MHz	Pass	Inf	164.64M	154.243M

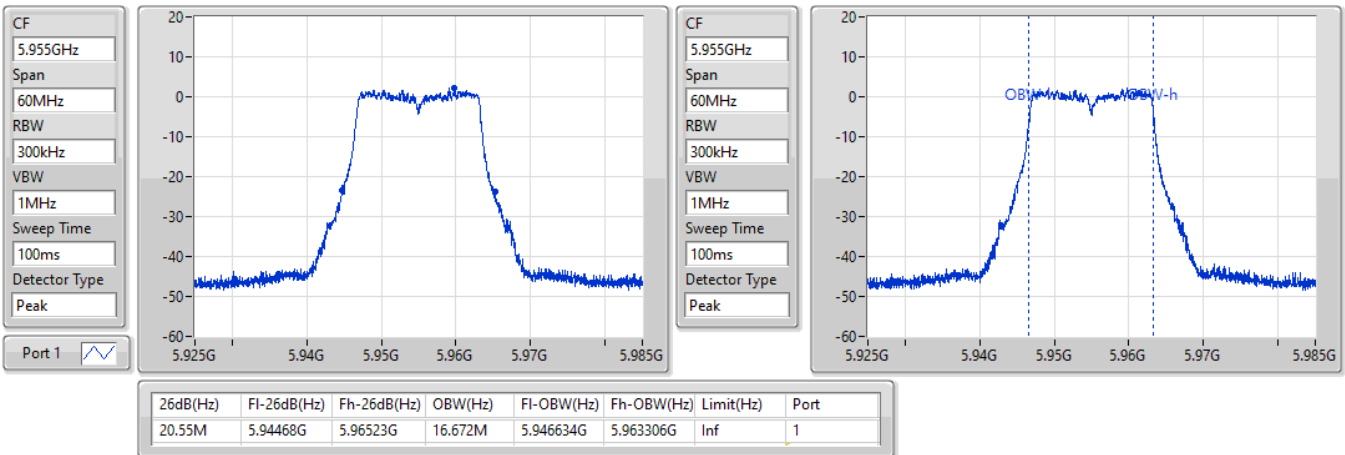
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

11a20_Nss1,(6Mbps)_1TX

EBW

5955MHz

01/09/2021

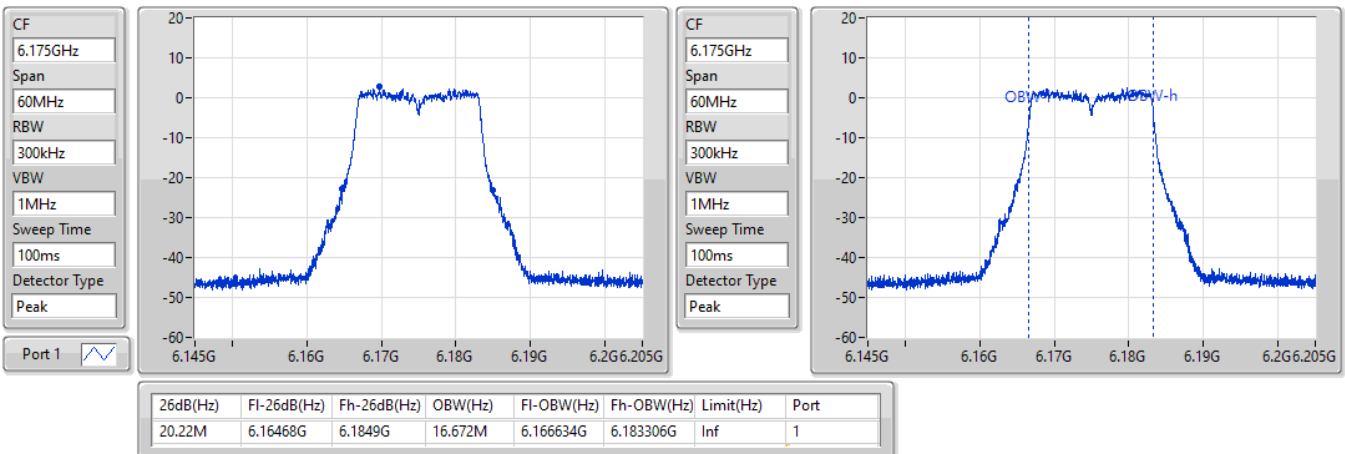


11a20_Nss1,(6Mbps)_1TX

EBW

6175MHz

01/09/2021

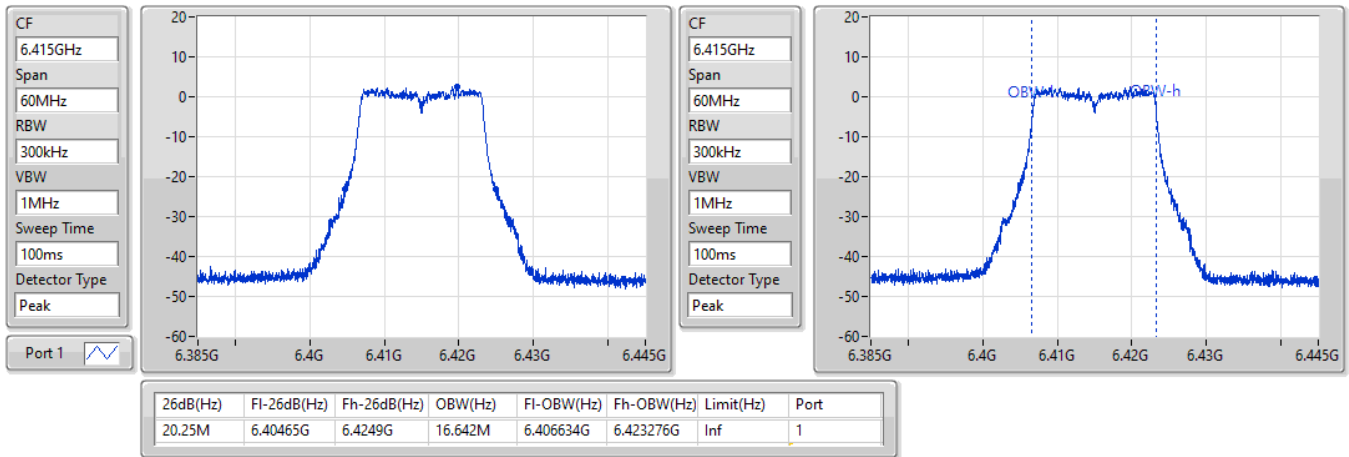


11a20_Nss1,(6Mbps)_1TX

EBW

6415MHz

01/09/2021

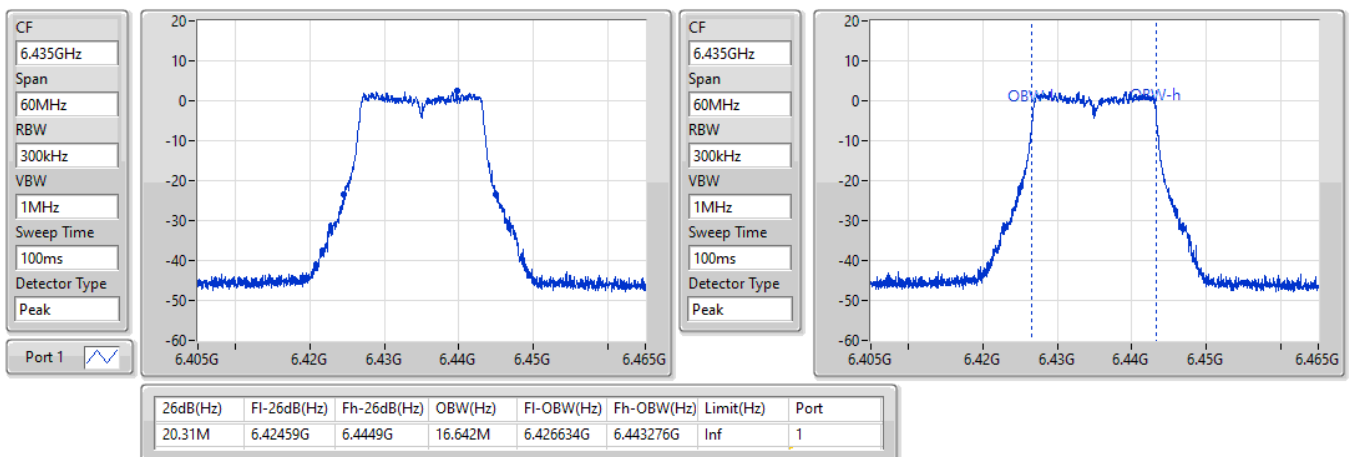


11a20_Nss1,(6Mbps)_1TX

EBW

6435MHz

01/09/2021

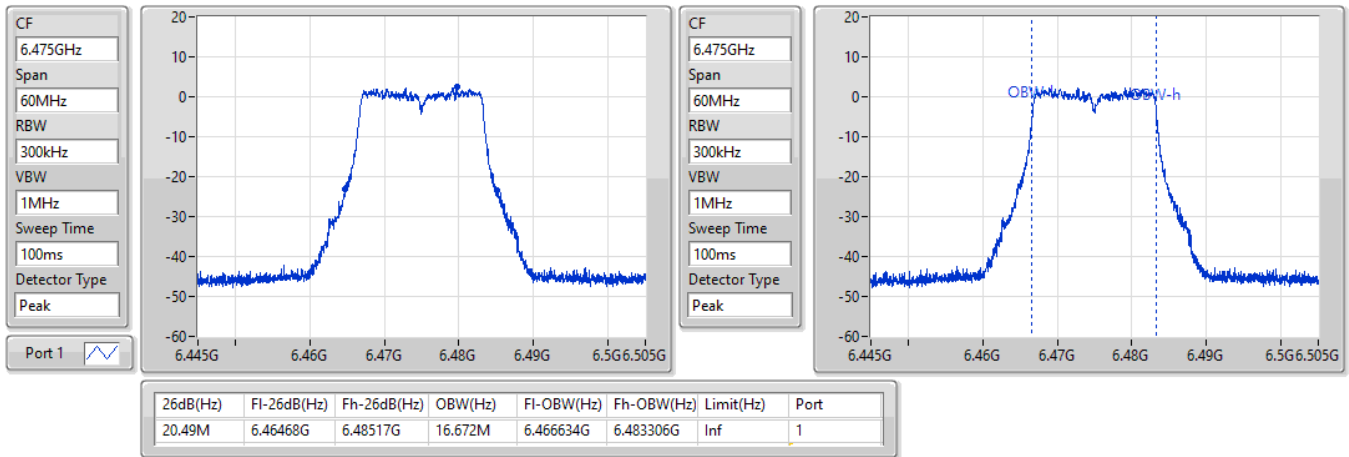


11a20_Nss1,(6Mbps)_1TX

EBW

6475MHz

01/09/2021

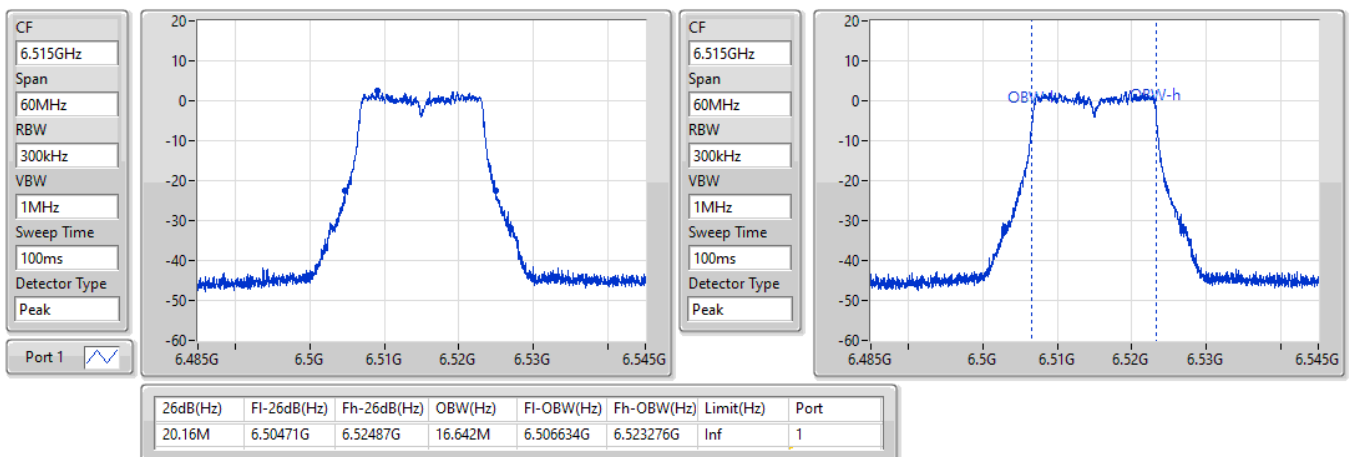


11a20_Nss1,(6Mbps)_1TX

EBW

6515MHz

01/09/2021

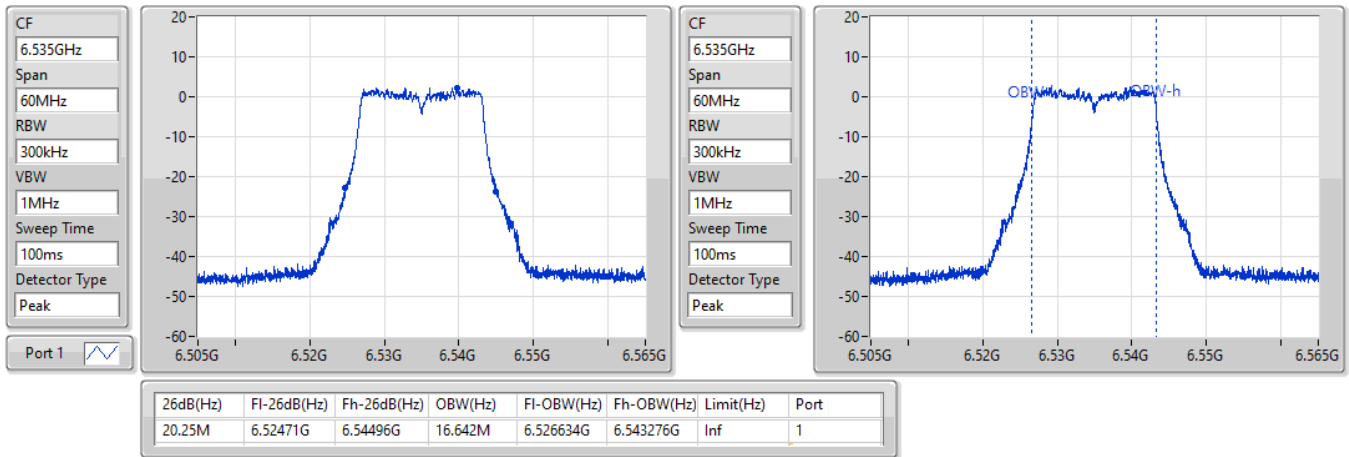


11a20_Nss1,(6Mbps)_1TX

EBW

6535MHz

01/09/2021

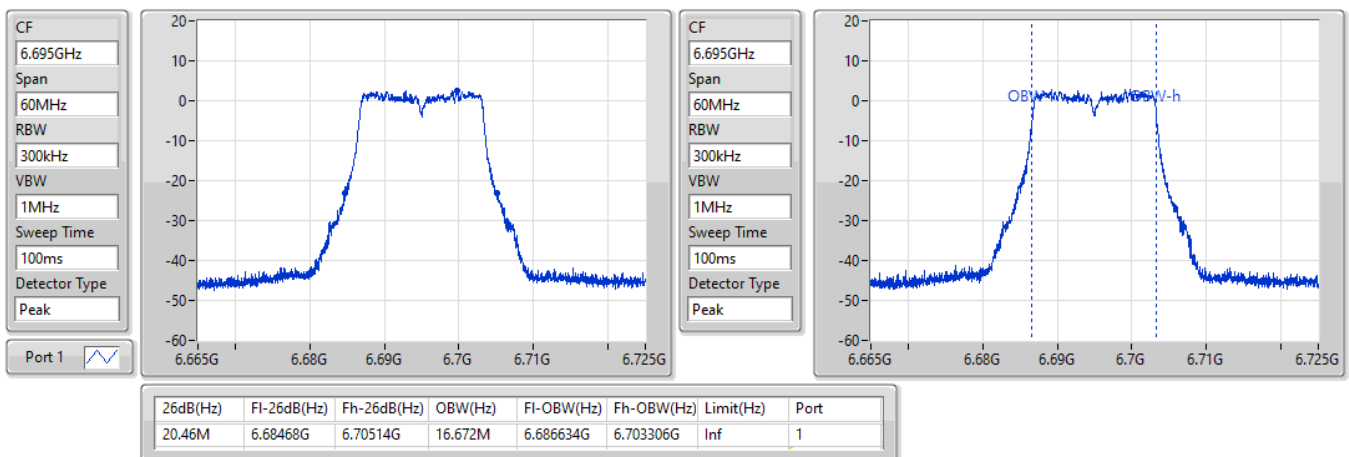


11a20_Nss1,(6Mbps)_1TX

EBW

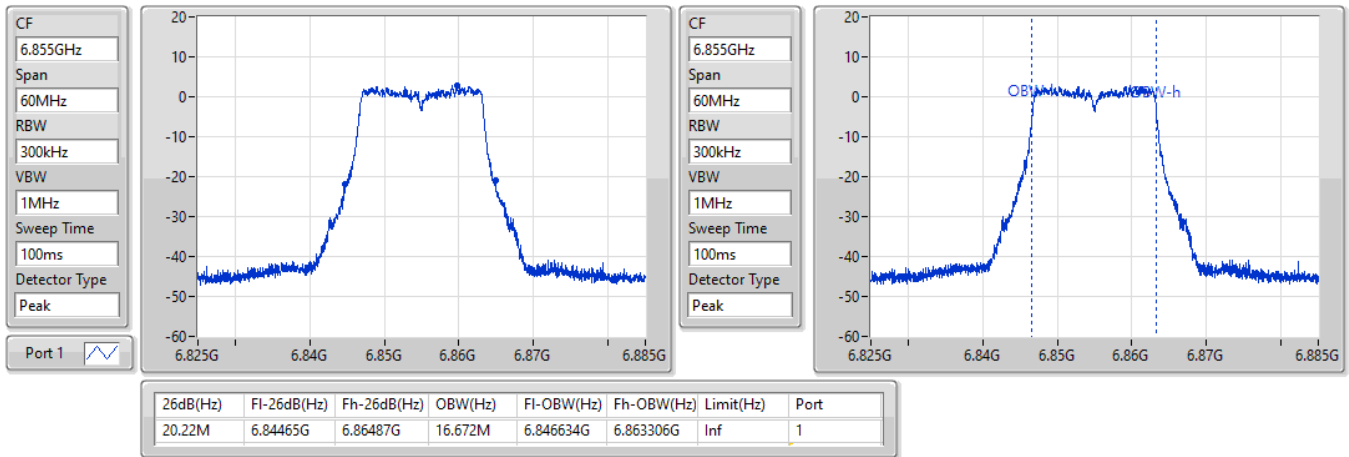
6695MHz

01/09/2021

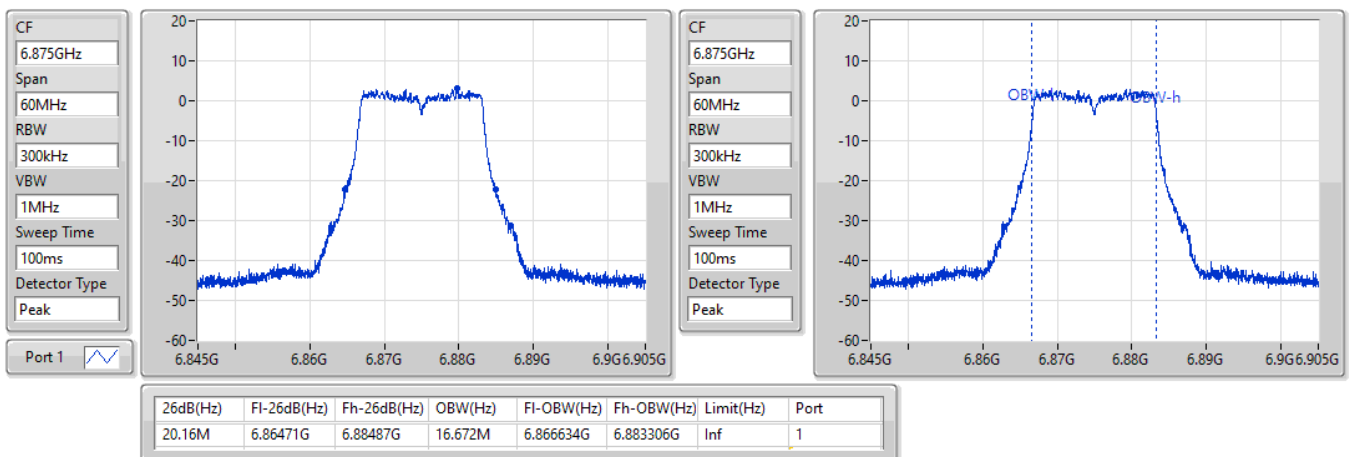


11a20_Nss1,(6Mbps)_1TX
EBW
6855MHz

01/09/2021


11a20_Nss1,(6Mbps)_1TX
EBW
6875MHz

01/09/2021

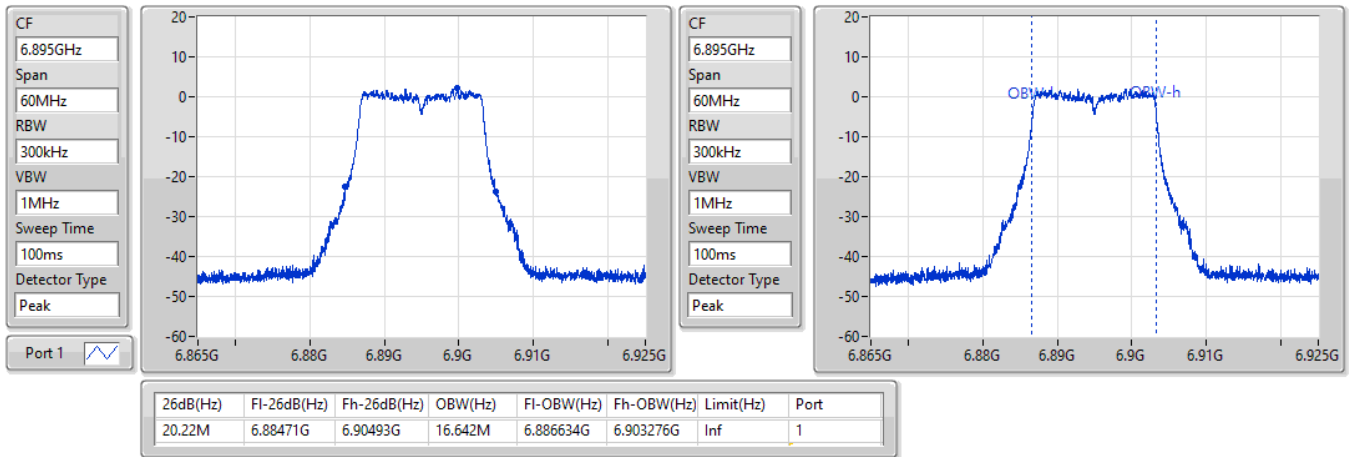


11a20_Nss1,(6Mbps)_1TX

EBW

6895MHz

01/09/2021

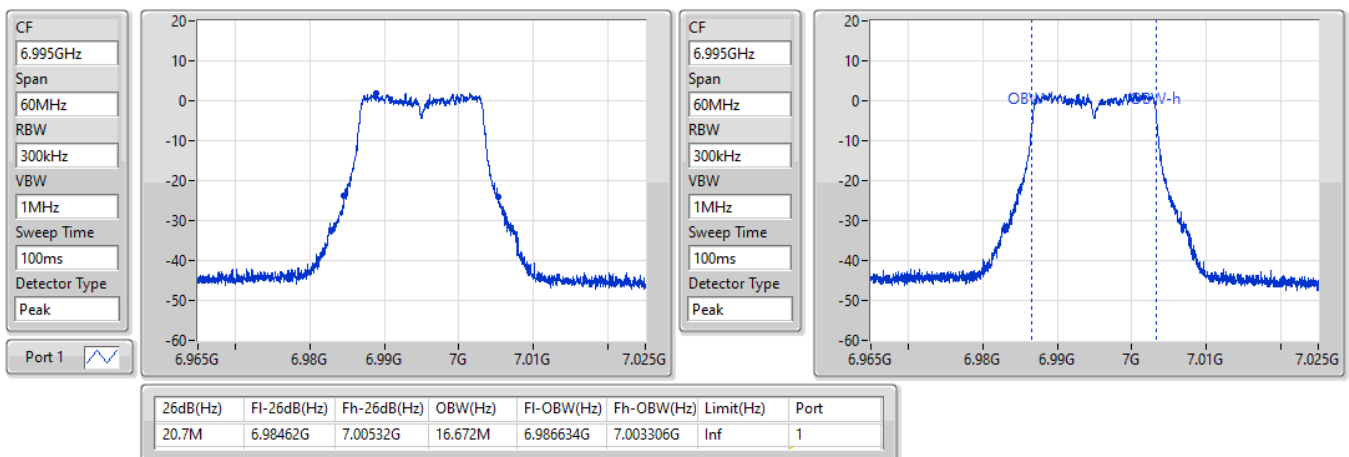


11a20_Nss1,(6Mbps)_1TX

EBW

6995MHz

01/09/2021

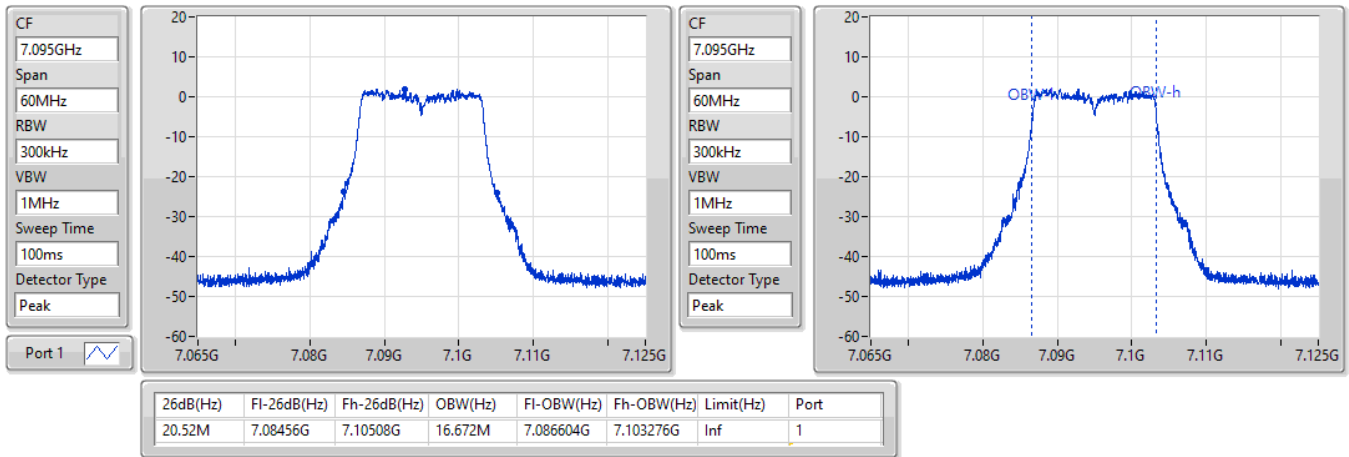


11a20_Nss1,(6Mbps)_1TX

EBW

7095MHz

01/09/2021

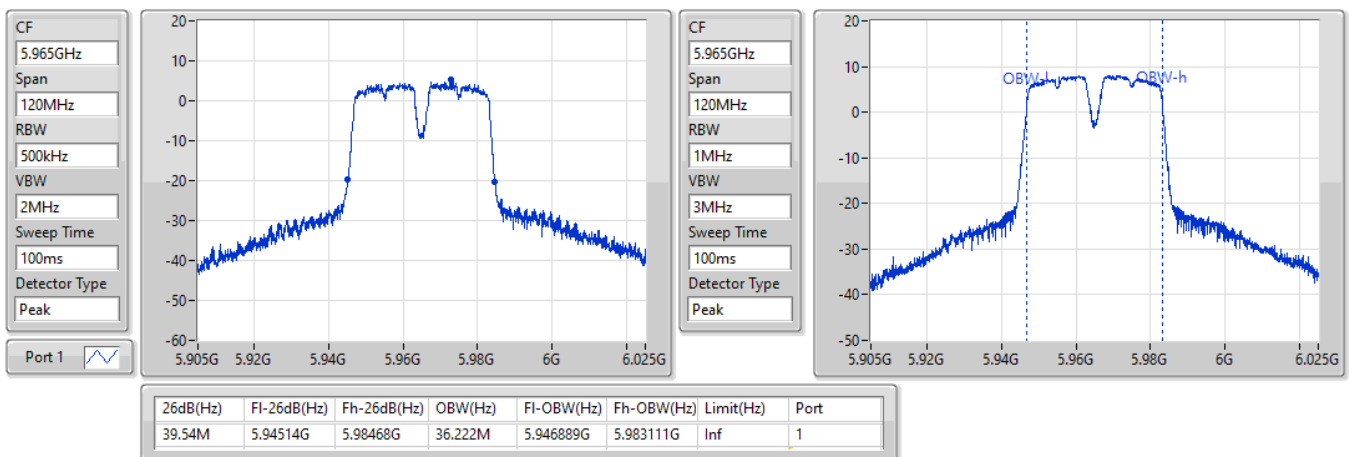


11a40_Nss1,(6Mbps)_1TX

EBW

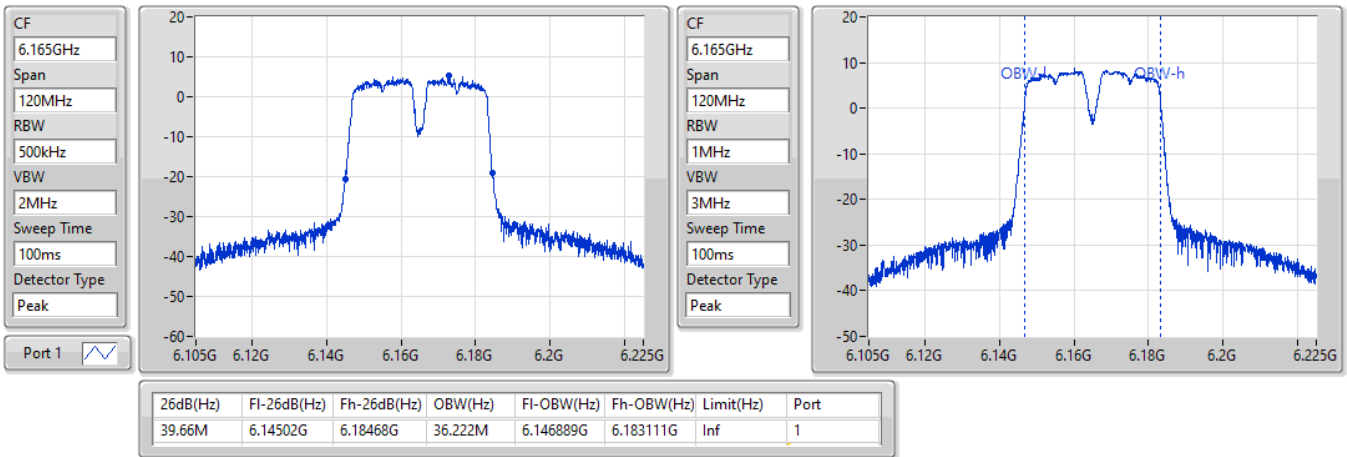
5965MHz

01/09/2021

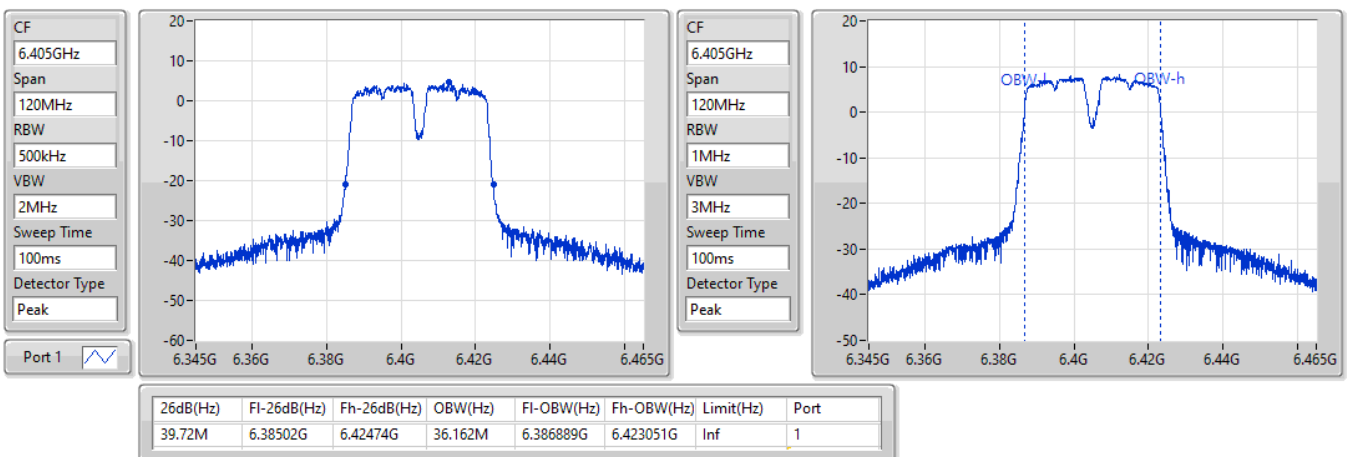


11a40_Nss1,(6Mbps)_1TX
EBW
6165MHz

01/09/2021


11a40_Nss1,(6Mbps)_1TX
EBW
6405MHz

01/09/2021

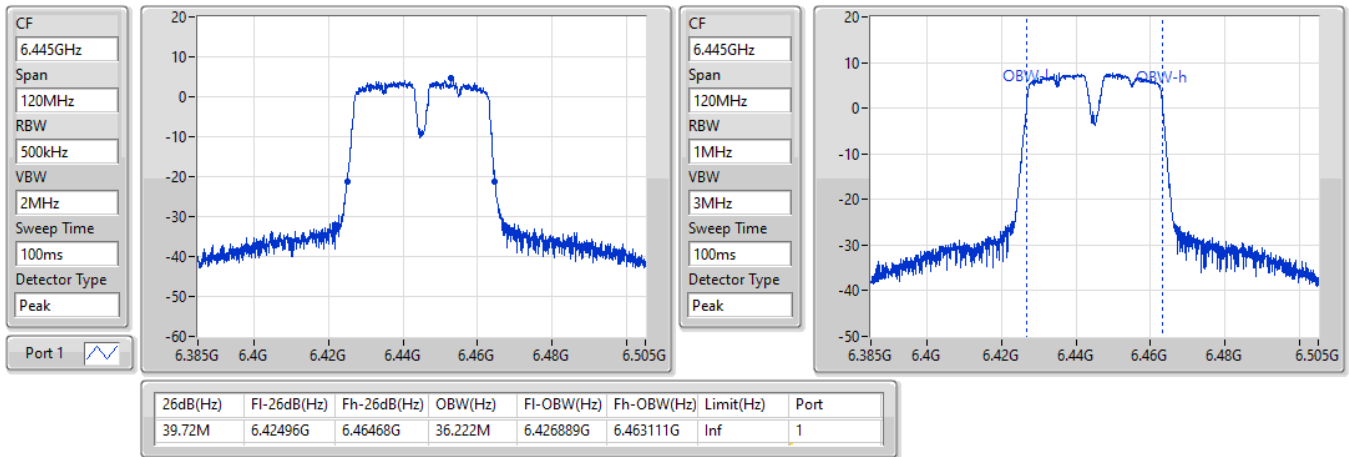


11a40_Nss1,(6Mbps)_1TX

EBW

6445MHz

01/09/2021

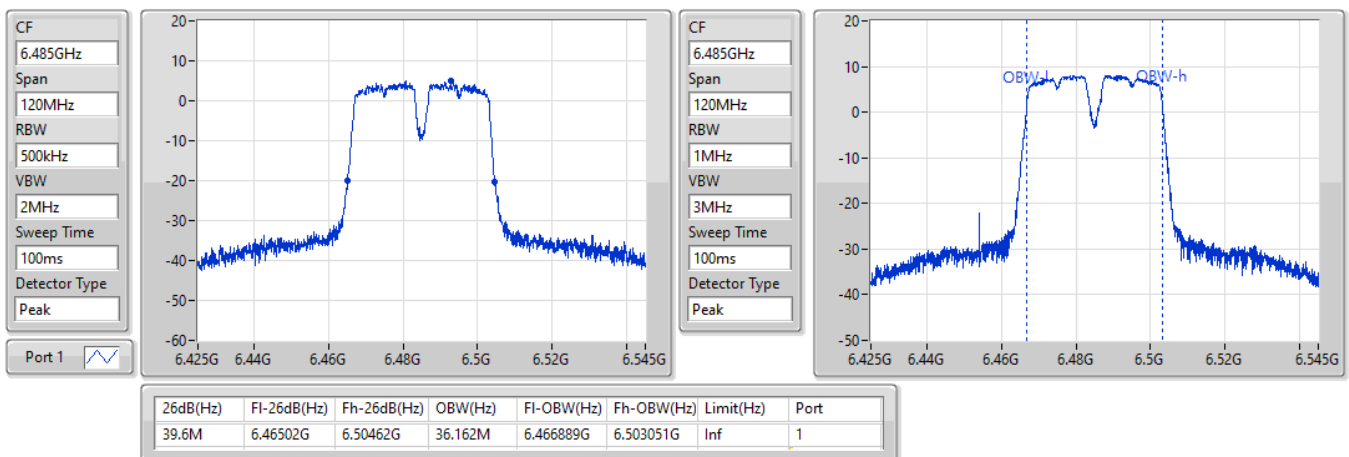


11a40_Nss1,(6Mbps)_1TX

EBW

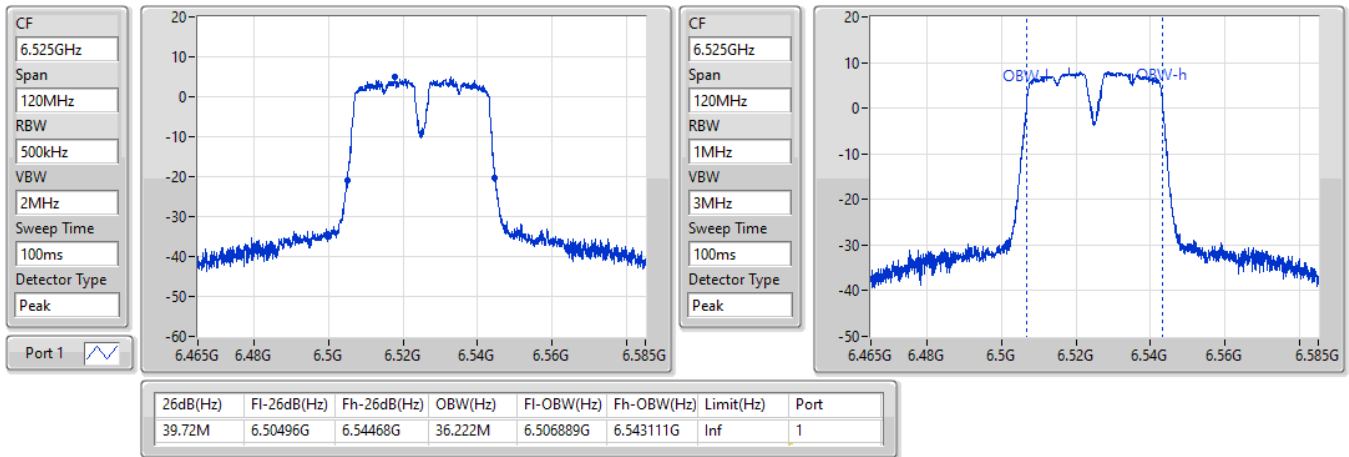
6485MHz

01/09/2021

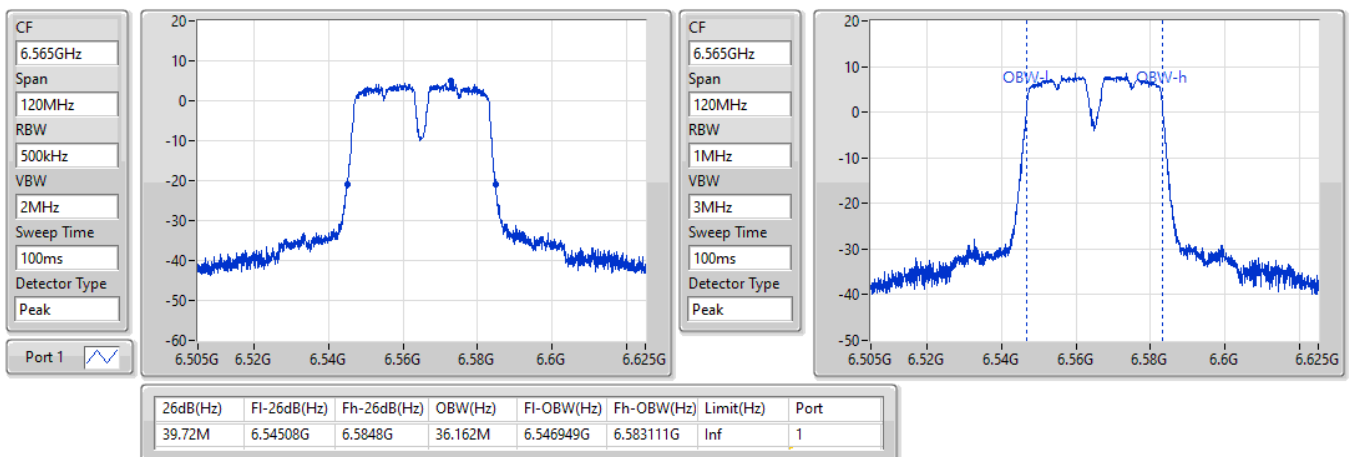


11a40_Nss1,(6Mbps)_1TX
EBW
6525MHz

01/09/2021


11a40_Nss1,(6Mbps)_1TX
EBW
6565MHz

01/09/2021

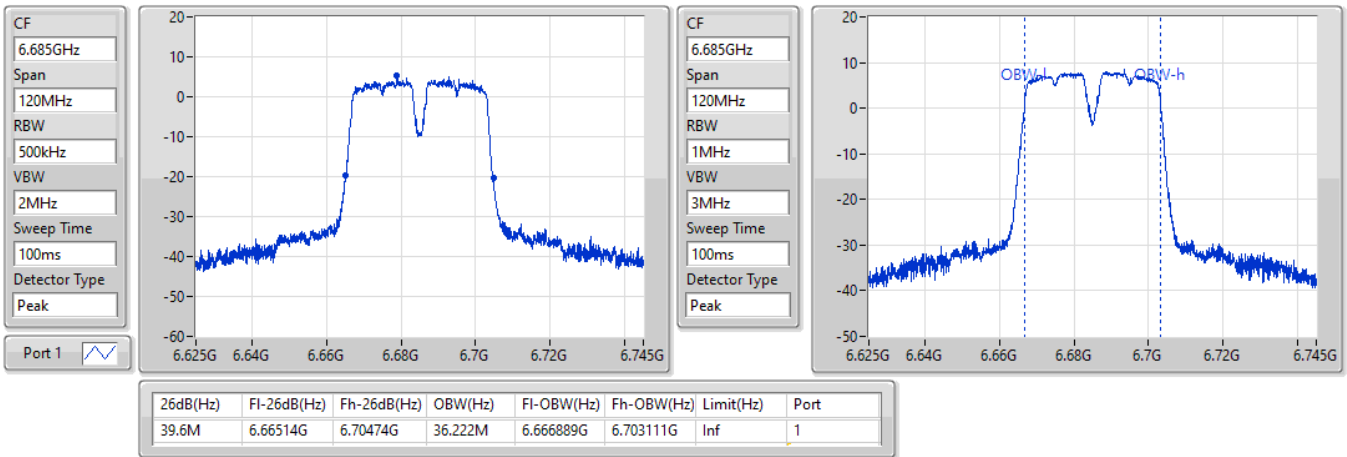


11a40_Nss1,(6Mbps)_1TX

EBW

6685MHz

01/09/2021

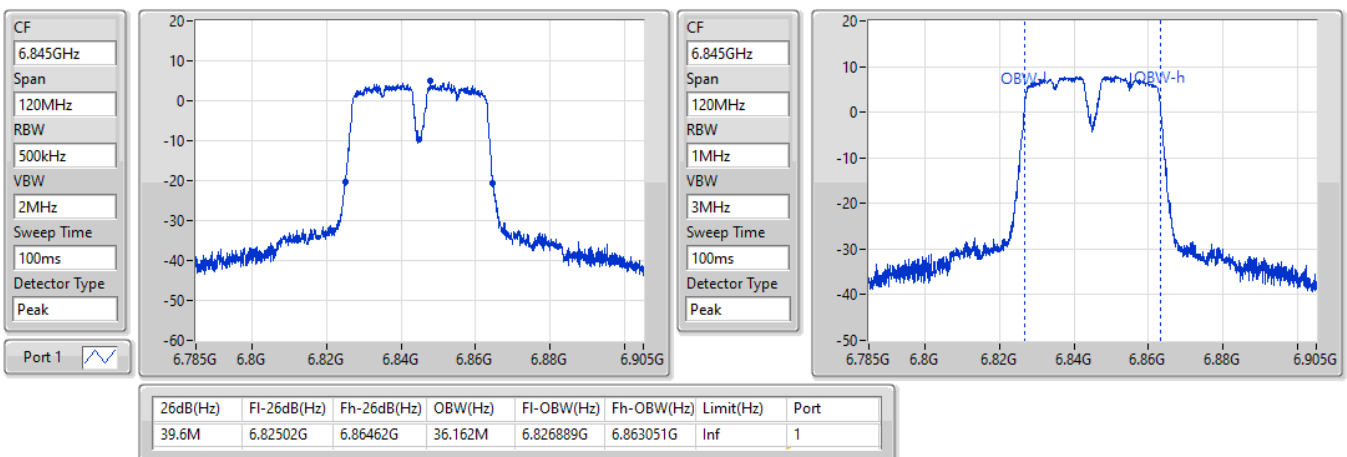


11a40_Nss1,(6Mbps)_1TX

EBW

6845MHz

01/09/2021

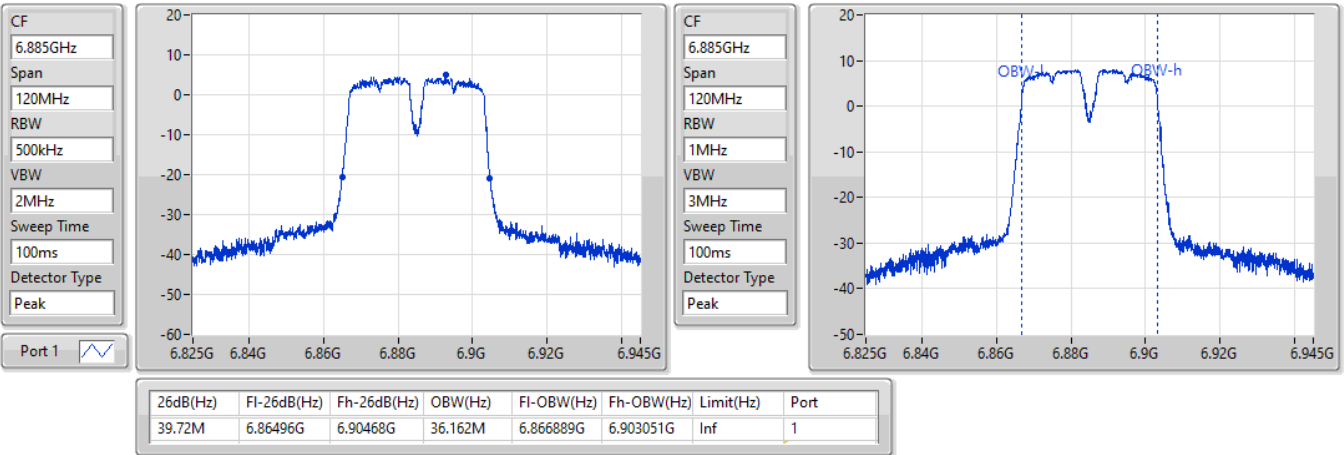


11a40_Nss1,(6Mbps)_1TX

EBW

6885MHz

01/09/2021

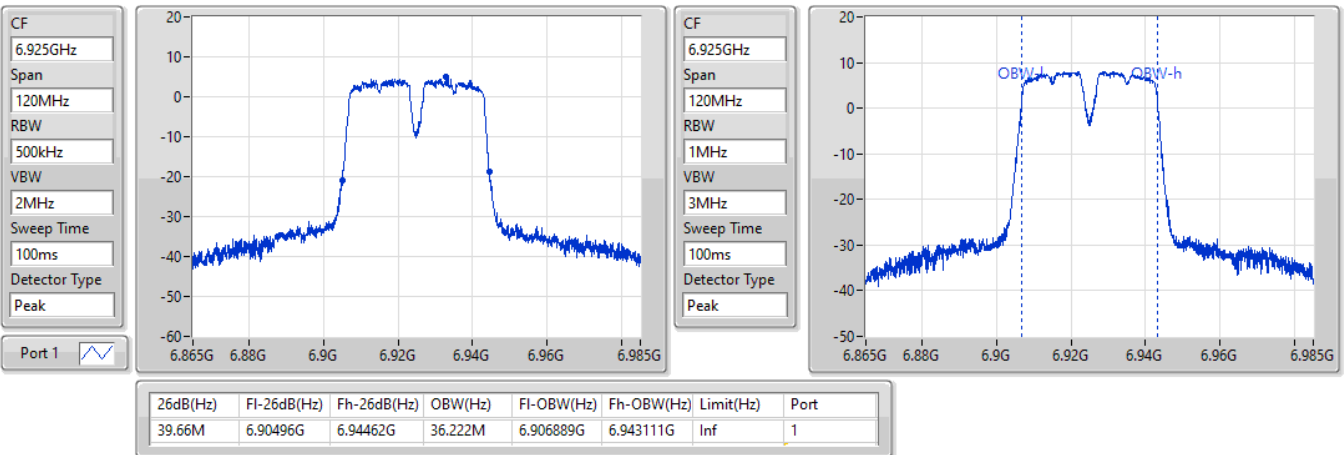


11a40_Nss1,(6Mbps)_1TX

EBW

6925MHz

01/09/2021

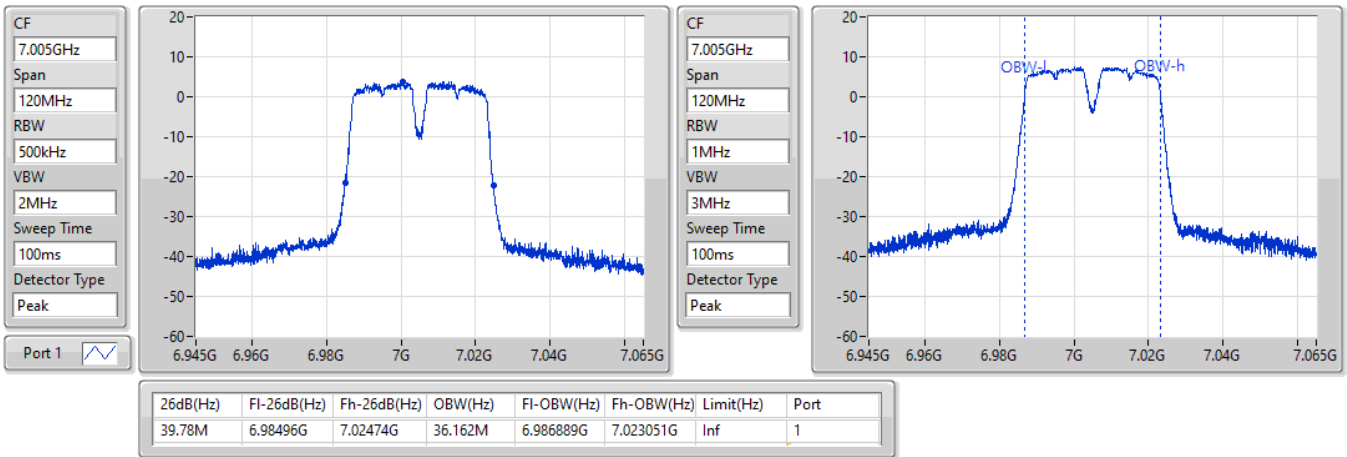


11a40_Nss1,(6Mbps)_1TX

EBW

7005MHz

01/09/2021

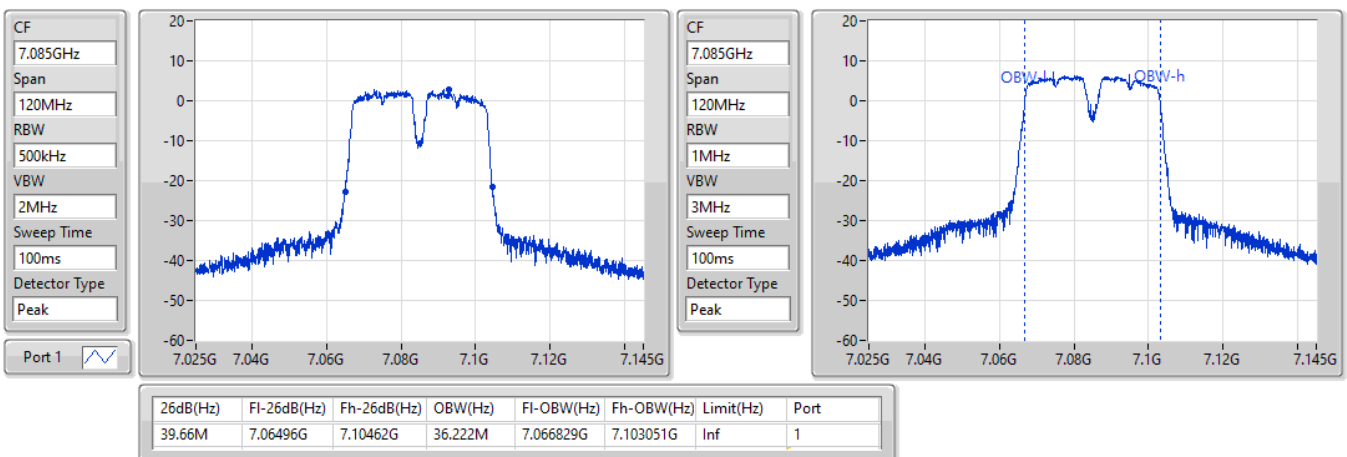


11a40_Nss1,(6Mbps)_1TX

EBW

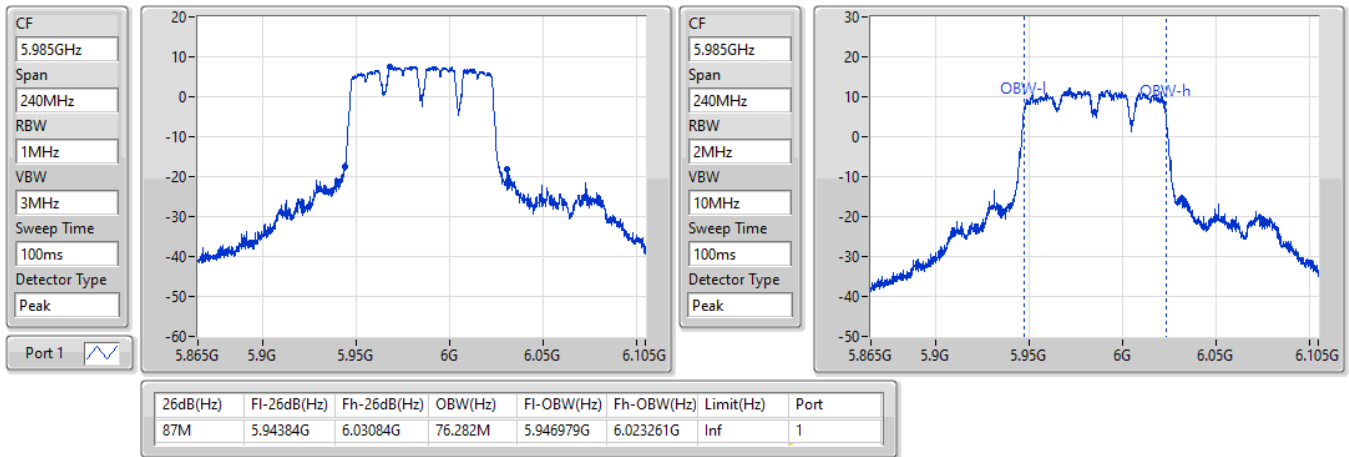
7085MHz

01/09/2021

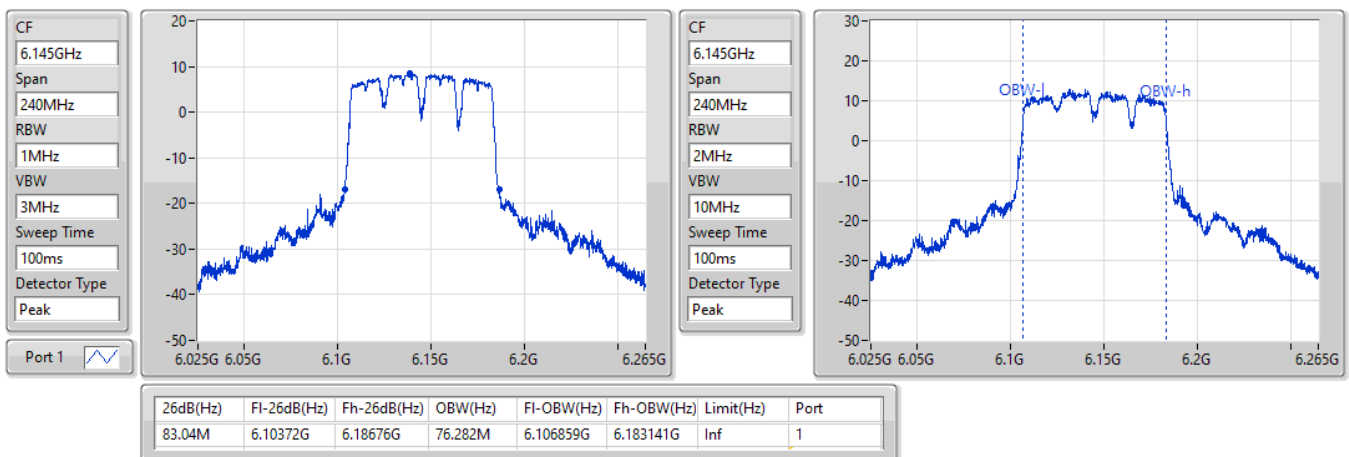


11a80_Nss1,(6Mbps)_1TX
EBW
5985MHz

01/09/2021


11a80_Nss1,(6Mbps)_1TX
EBW
6145MHz

01/09/2021

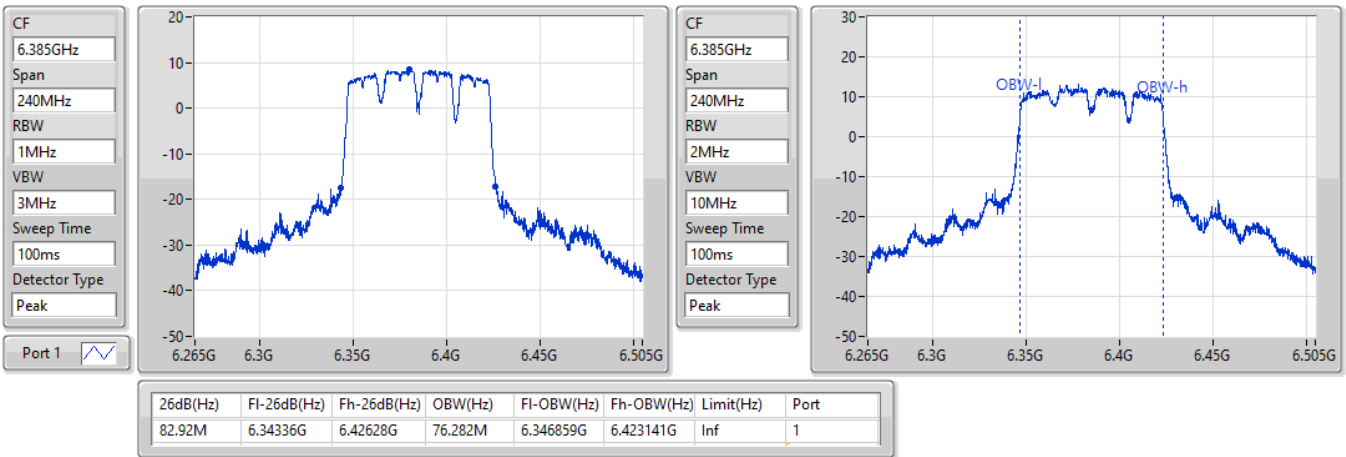


11a80_Nss1,(6Mbps)_1TX

EBW

6385MHz

01/09/2021

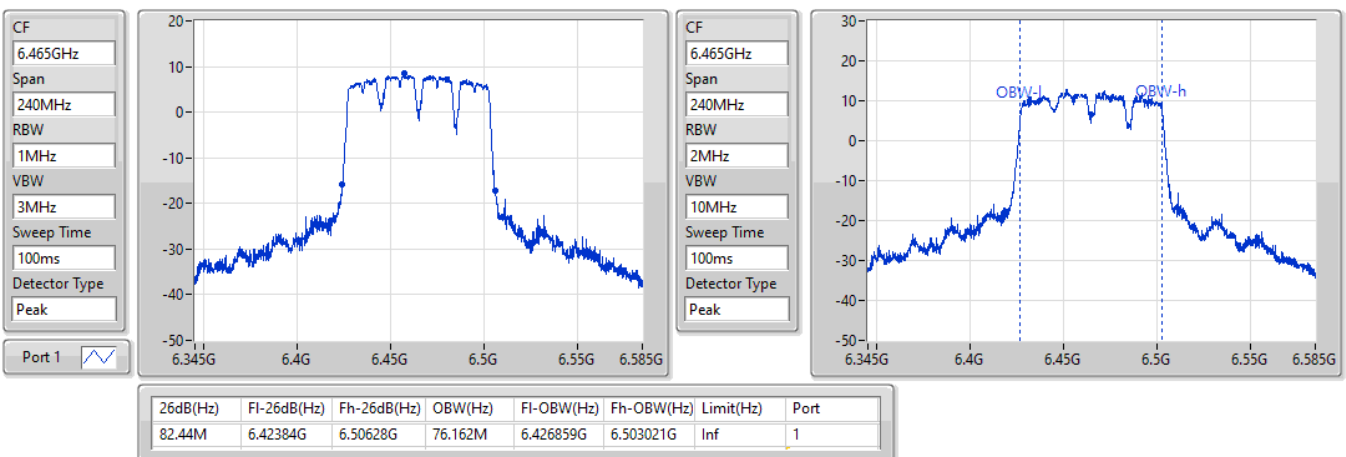


11a80_Nss1,(6Mbps)_1TX

EBW

6465MHz

01/09/2021

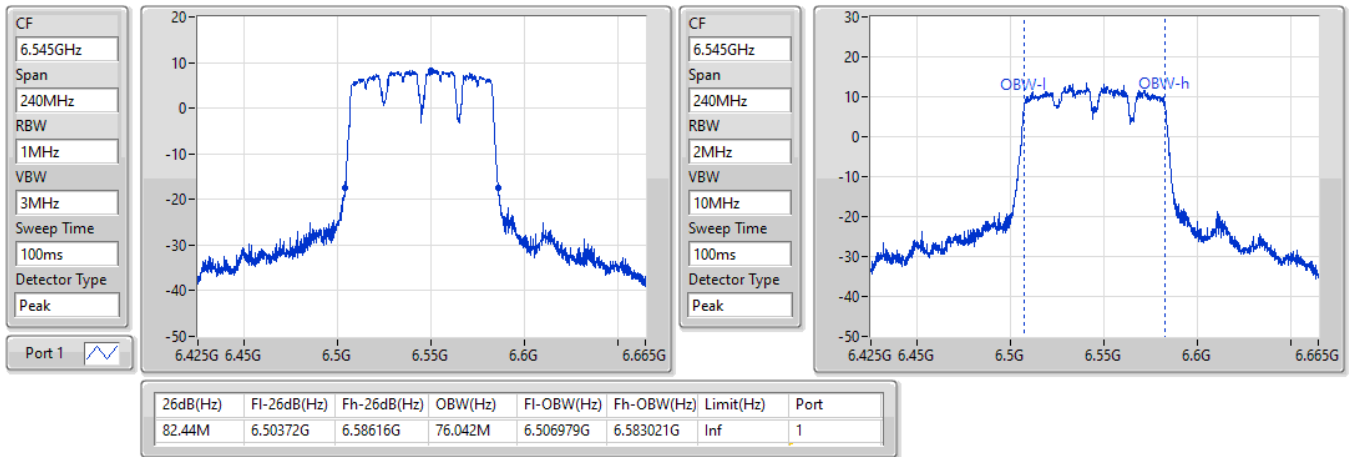


11a80_Nss1,(6Mbps)_1TX

EBW

6545MHz

01/09/2021

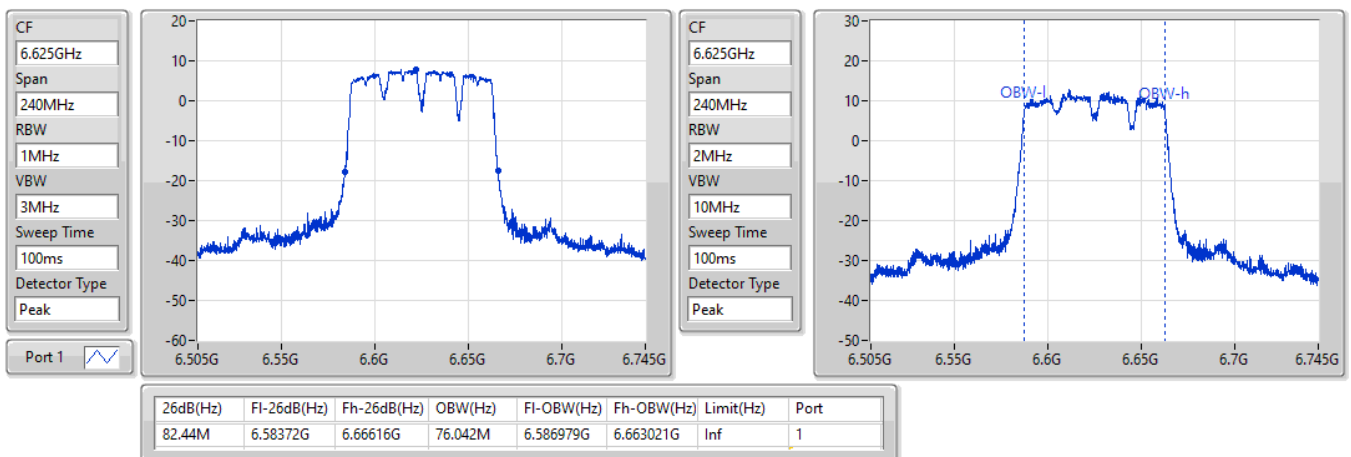


11a80_Nss1,(6Mbps)_1TX

EBW

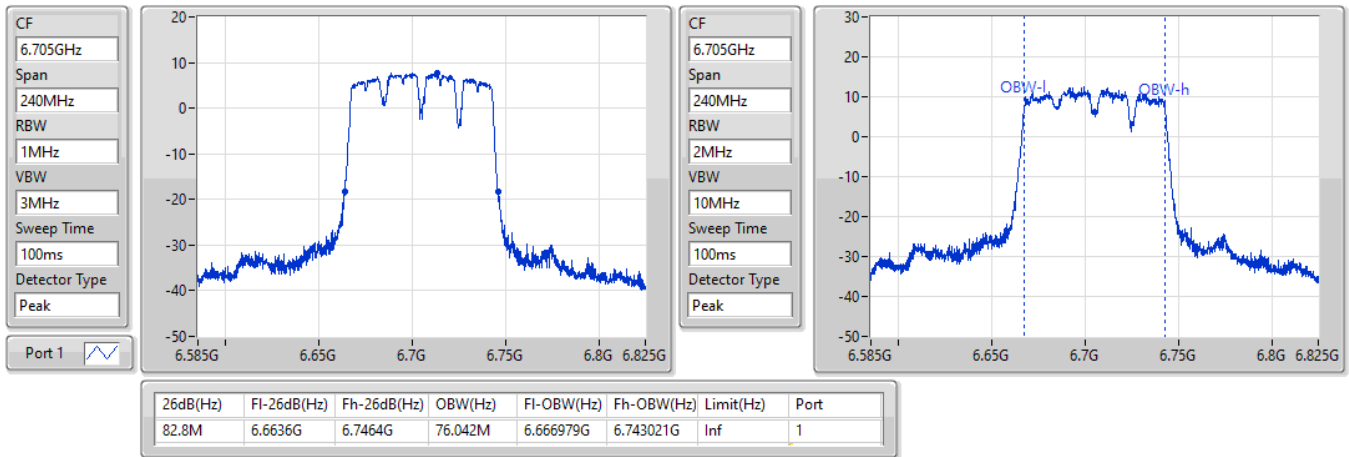
6625MHz

01/09/2021

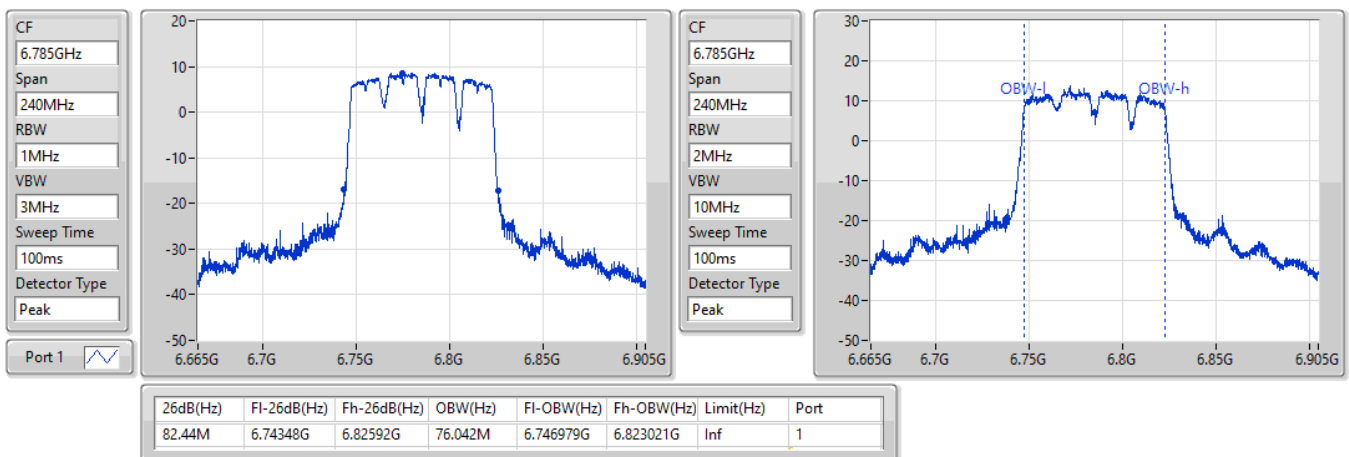


11a80_Nss1,(6Mbps)_1TX
EBW
6705MHz

01/09/2021


11a80_Nss1,(6Mbps)_1TX
EBW
6785MHz

01/09/2021

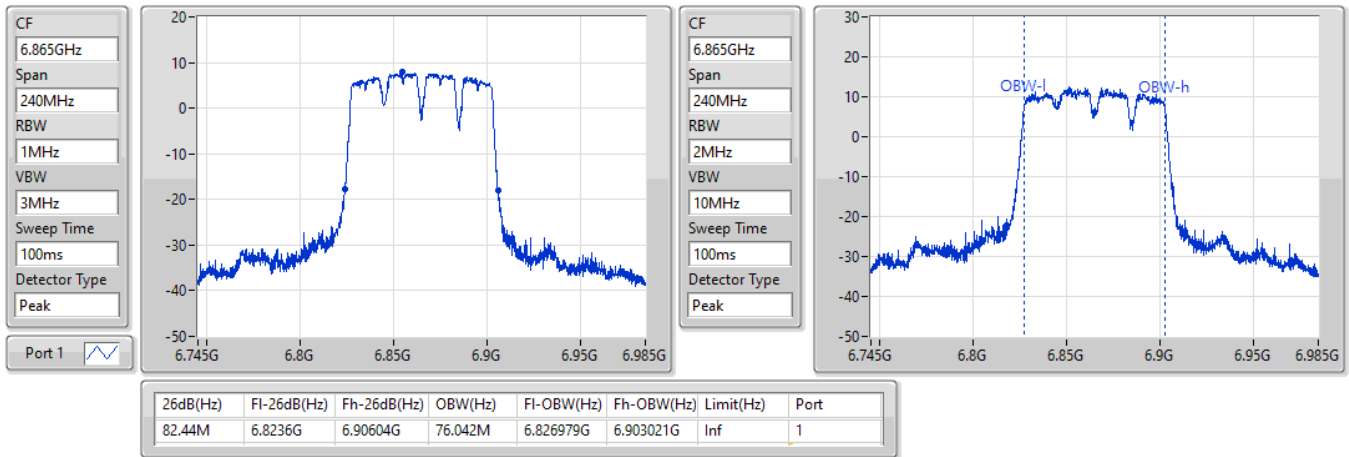


11a80_Nss1,(6Mbps)_1TX

EBW

6865MHz

01/09/2021

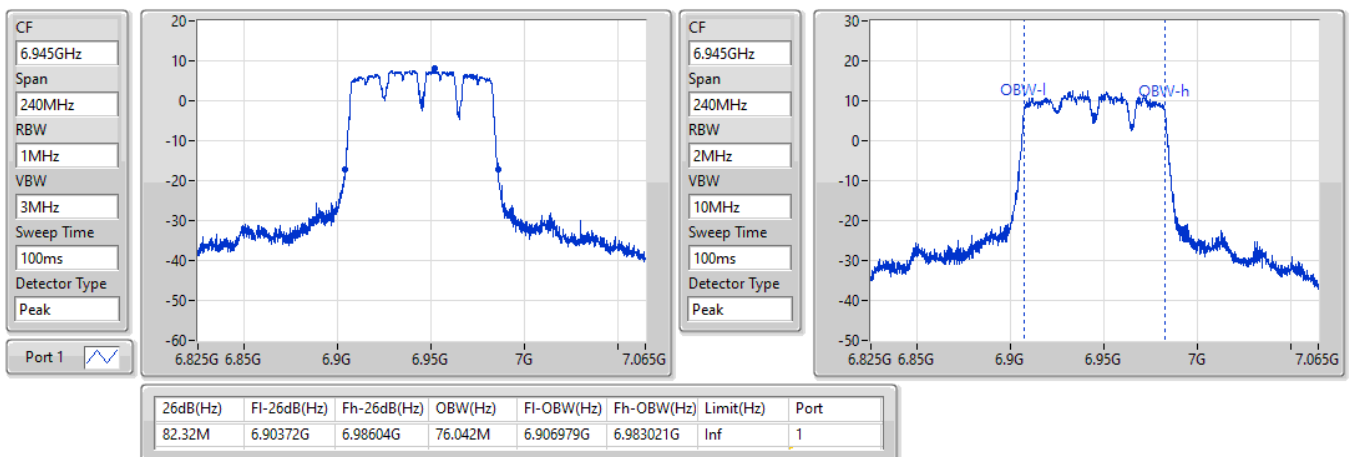


11a80_Nss1,(6Mbps)_1TX

EBW

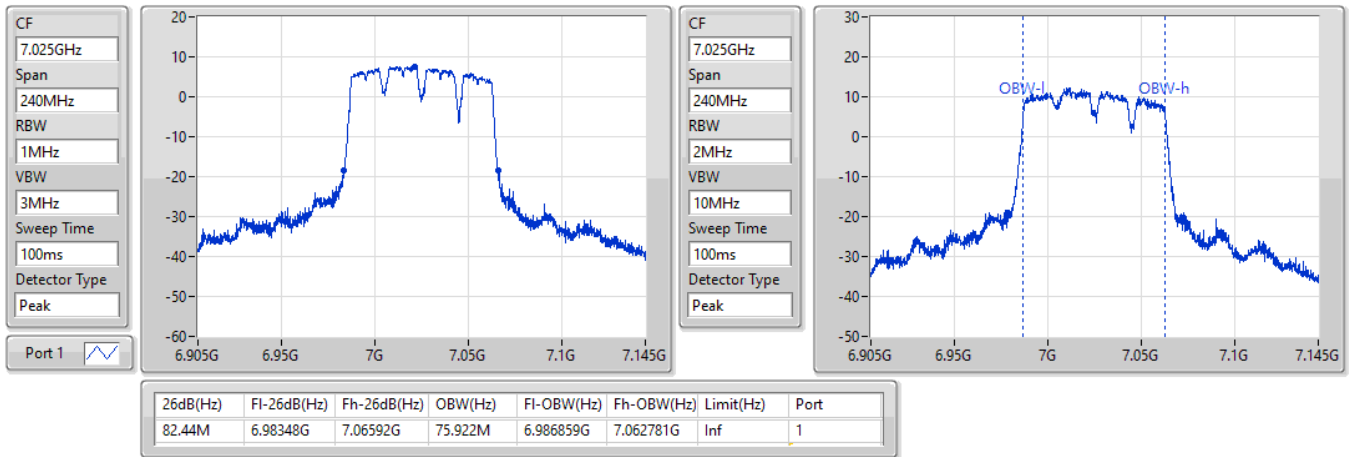
6945MHz

01/09/2021

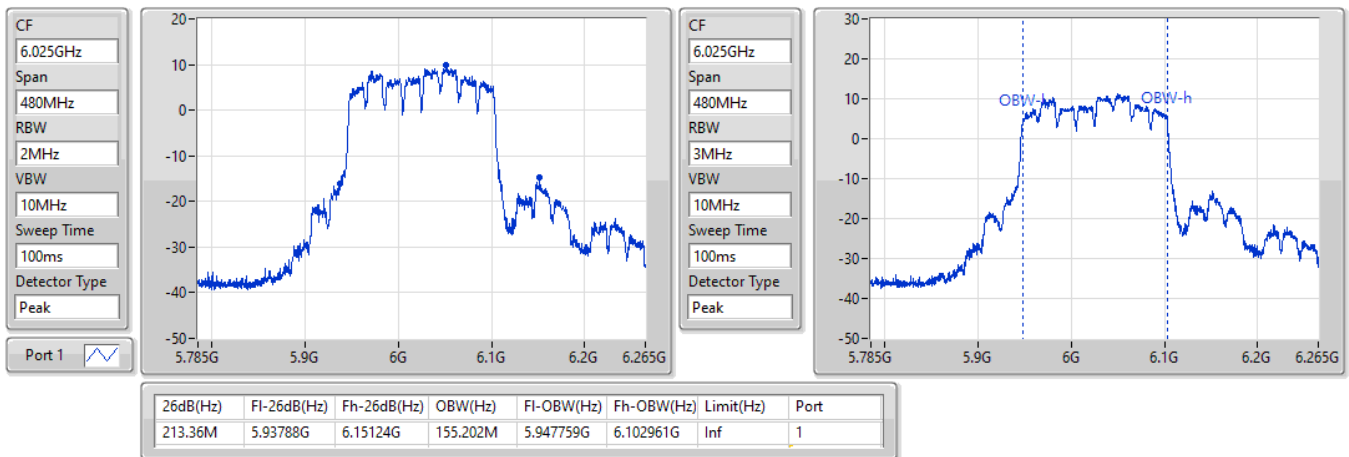


11a80_Nss1,(6Mbps)_1TX
EBW
7025MHz

01/09/2021

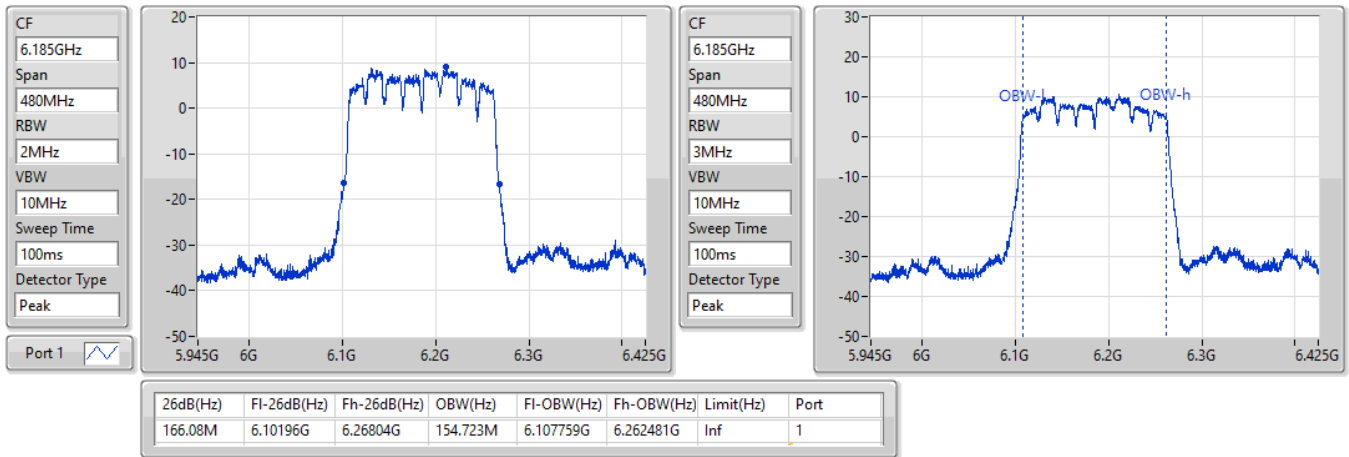

11a160_Nss1,(6Mbps)_1TX
EBW
6025MHz

02/09/2021

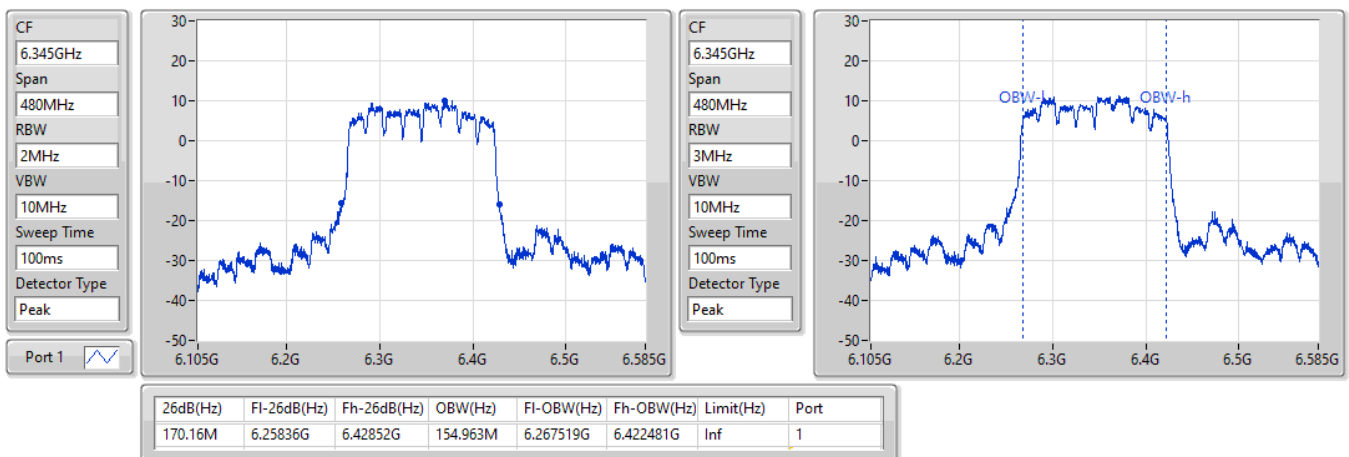


11a160_Nss1,(6Mbps)_1TX
EBW
6185MHz

02/09/2021

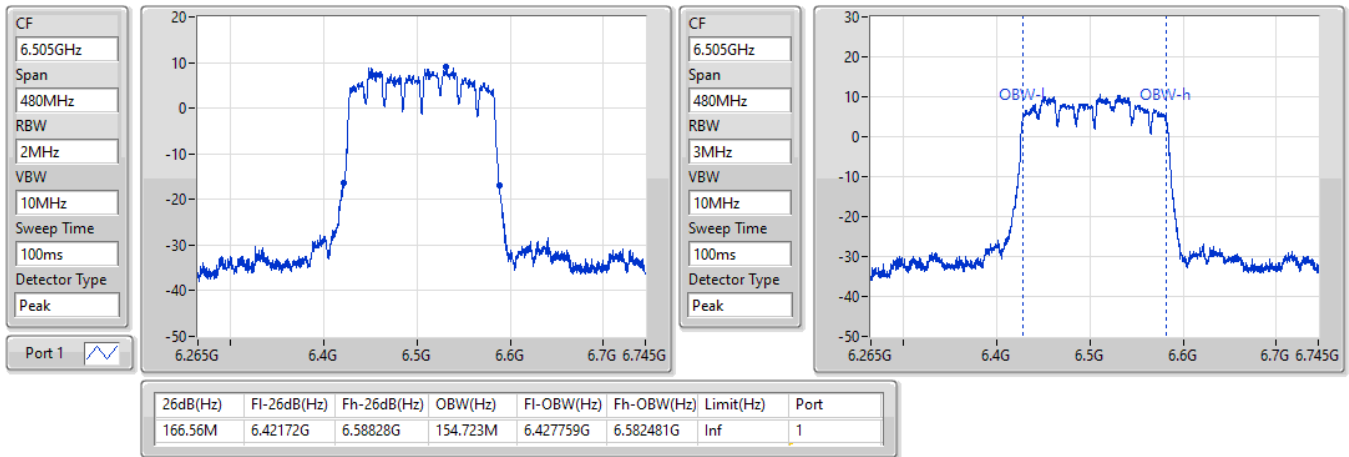

11a160_Nss1,(6Mbps)_1TX
EBW
6345MHz

02/09/2021

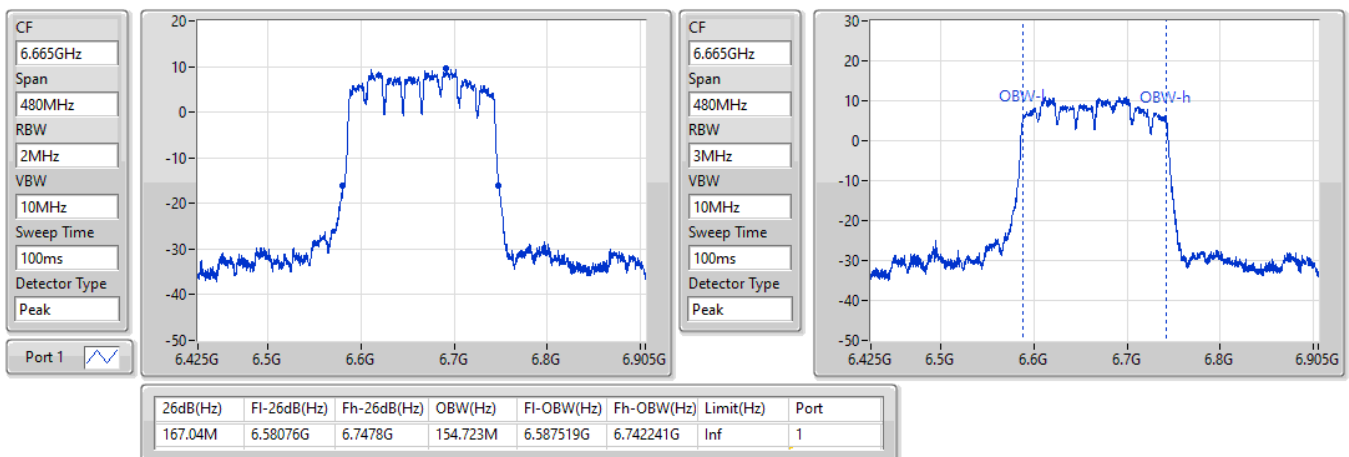


11a160_Nss1,(6Mbps)_1TX
EBW
6505MHz

02/09/2021

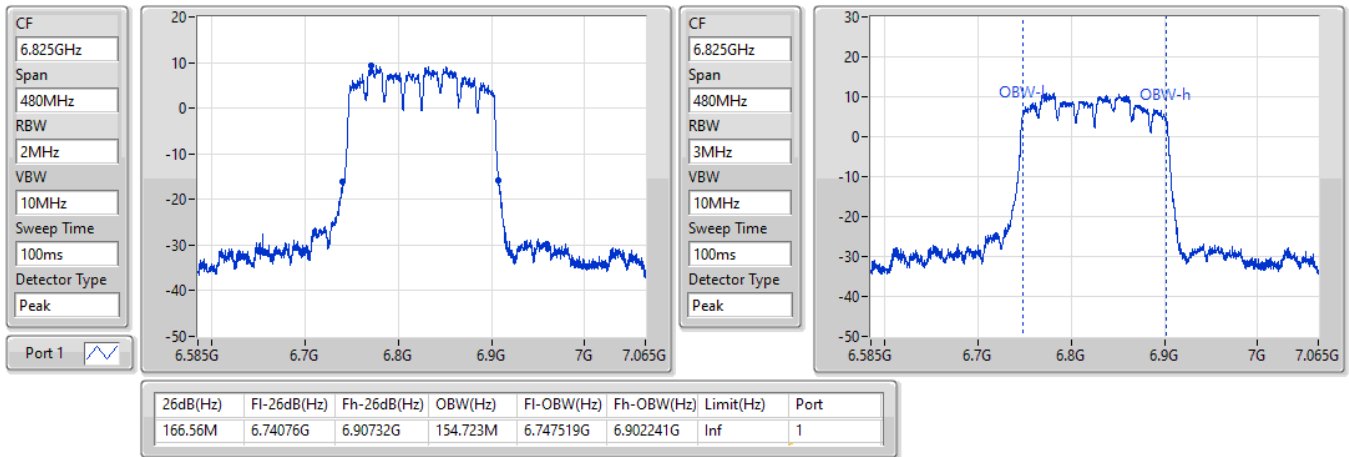

11a160_Nss1,(6Mbps)_1TX
EBW
6665MHz

02/09/2021

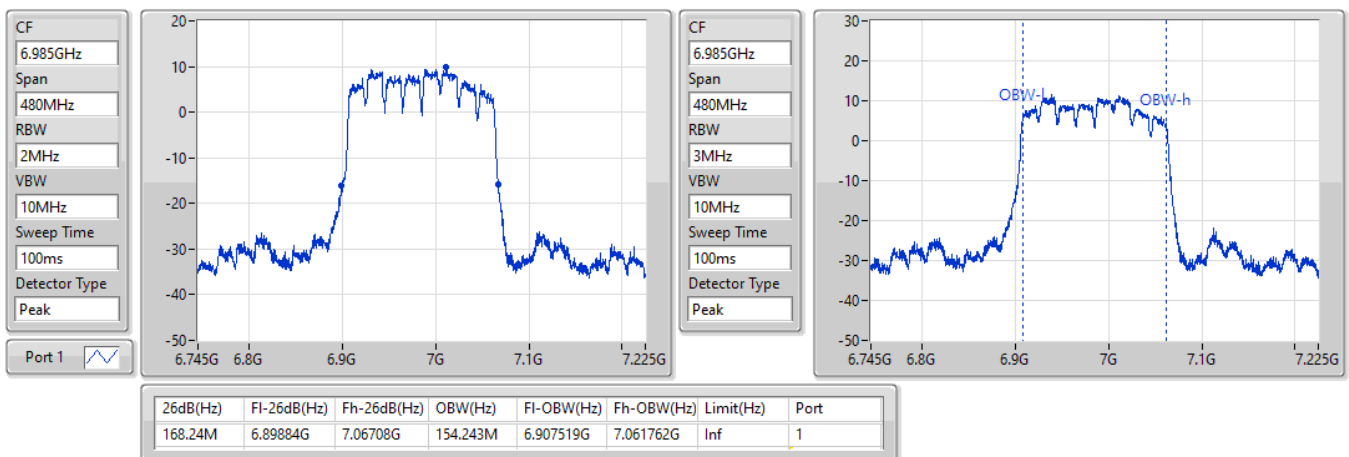


11a160_Nss1,(6Mbps)_1TX
EBW
6825MHz

02/09/2021

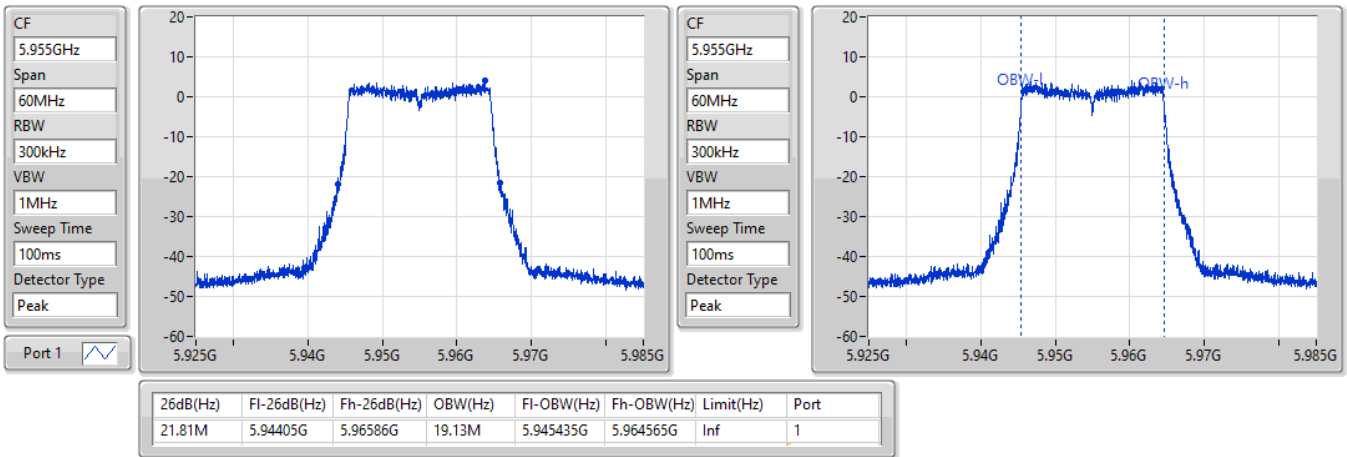

11a160_Nss1,(6Mbps)_1TX
EBW
6985MHz

02/09/2021

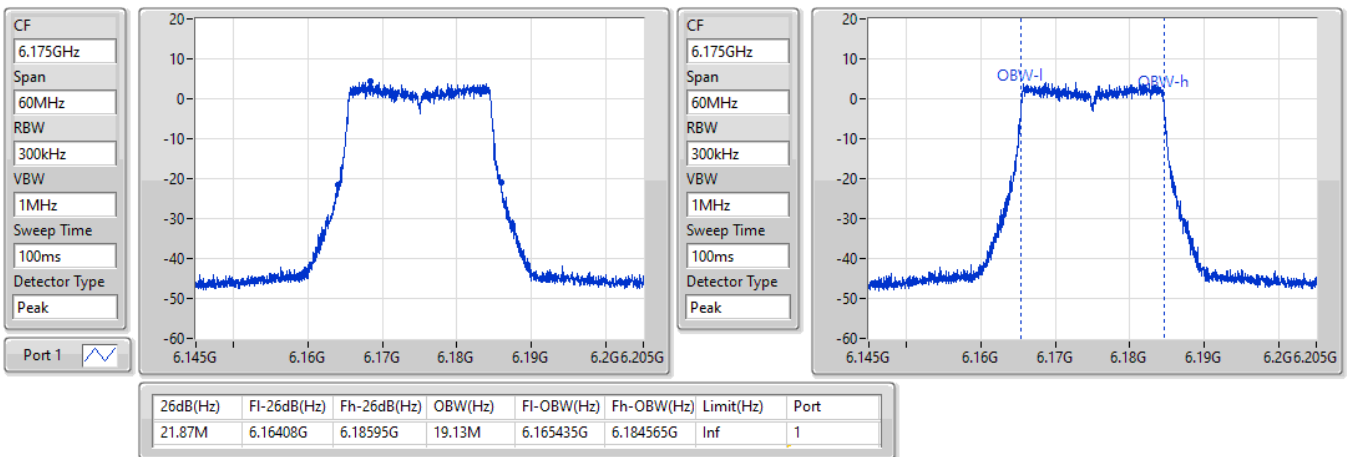


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
5955MHz

01/09/2021

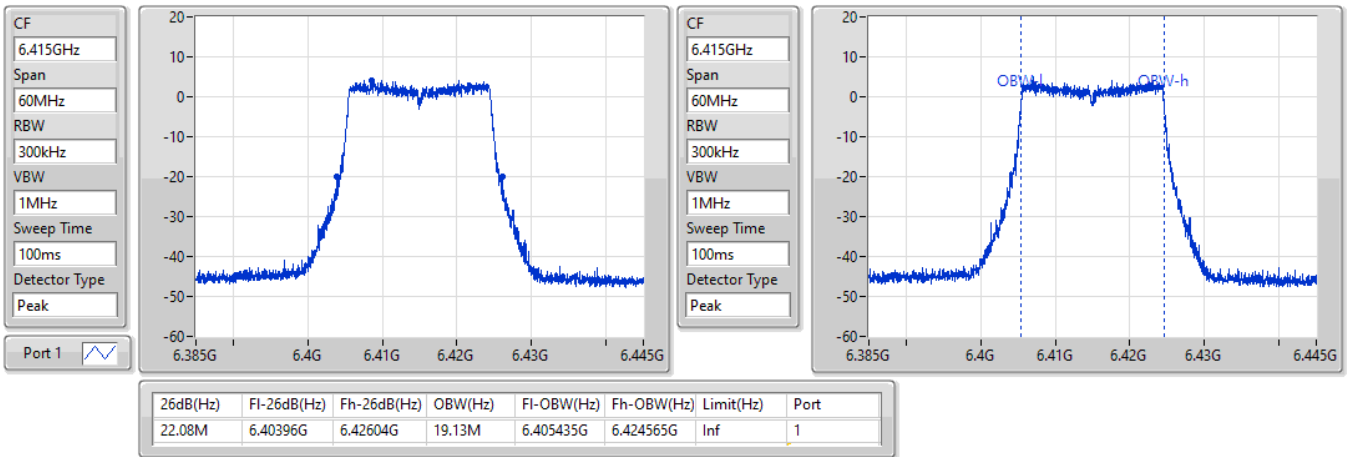

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6175MHz

01/09/2021

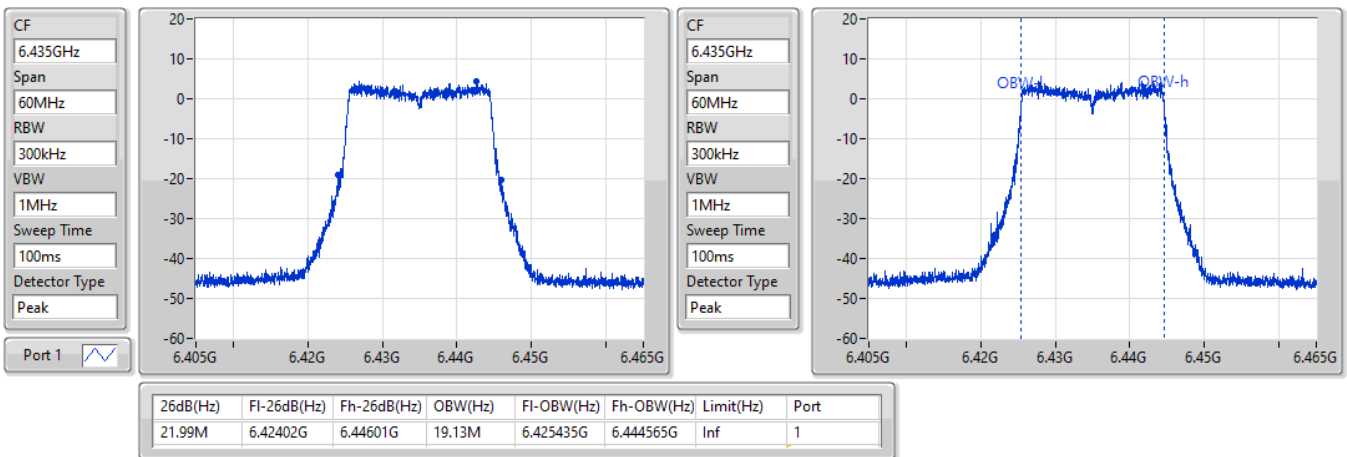


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6415MHz

01/09/2021


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6435MHz

01/09/2021

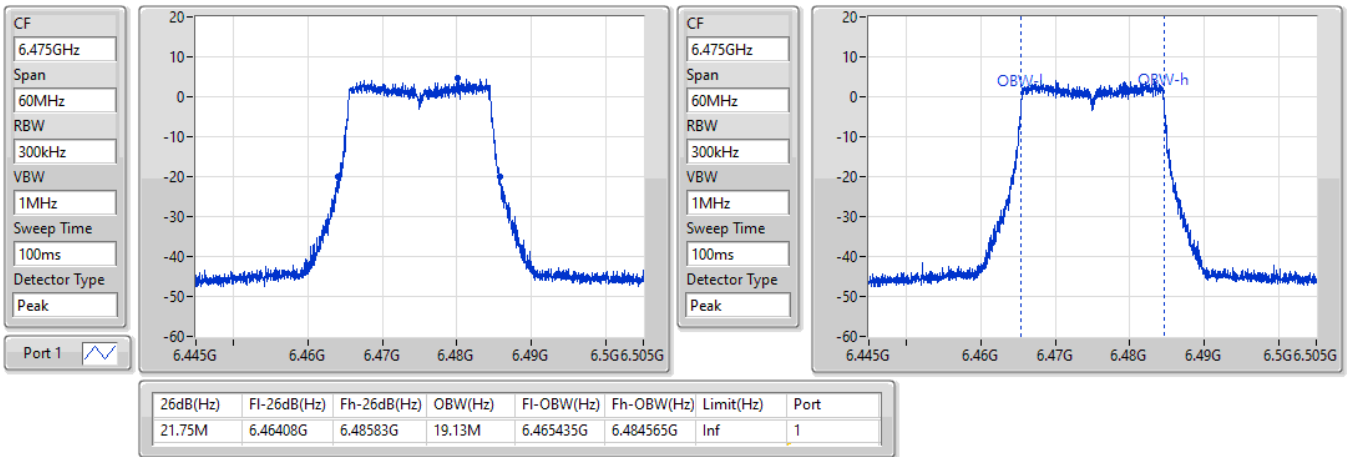


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6475MHz

01/09/2021

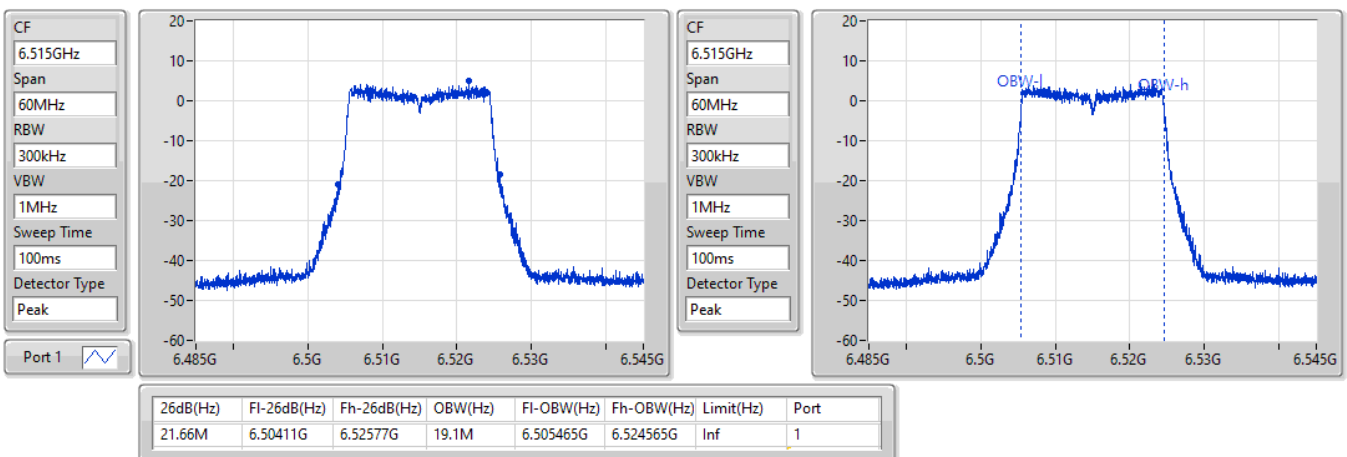


802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

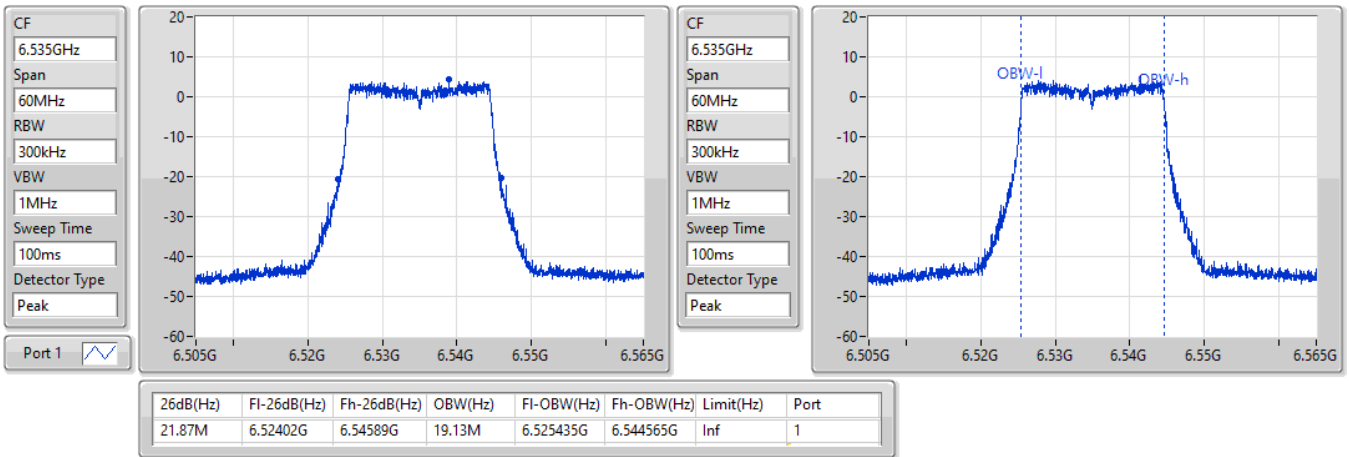
6515MHz

01/09/2021

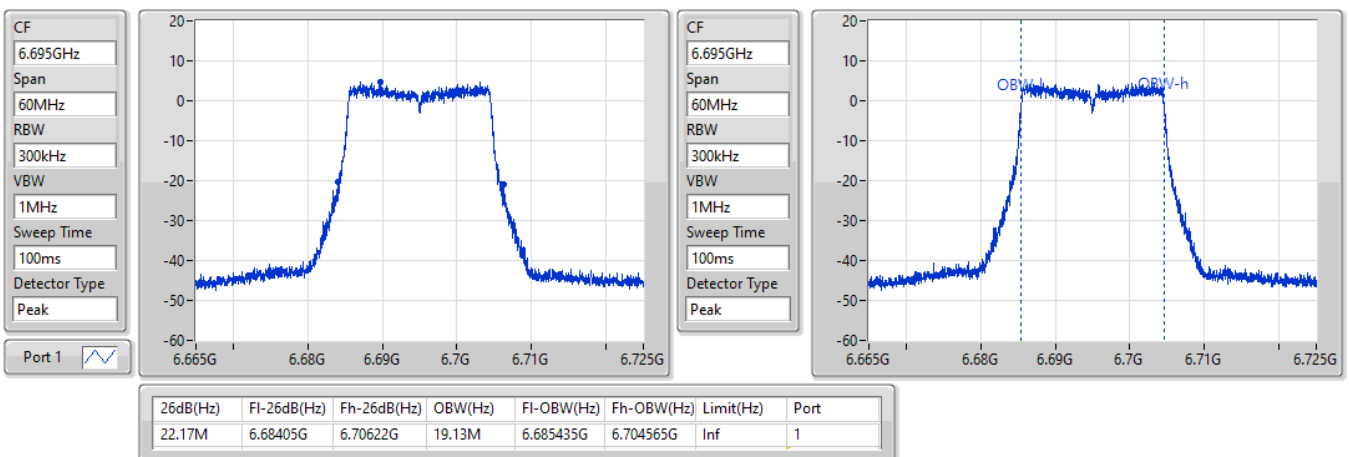


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6535MHz

01/09/2021

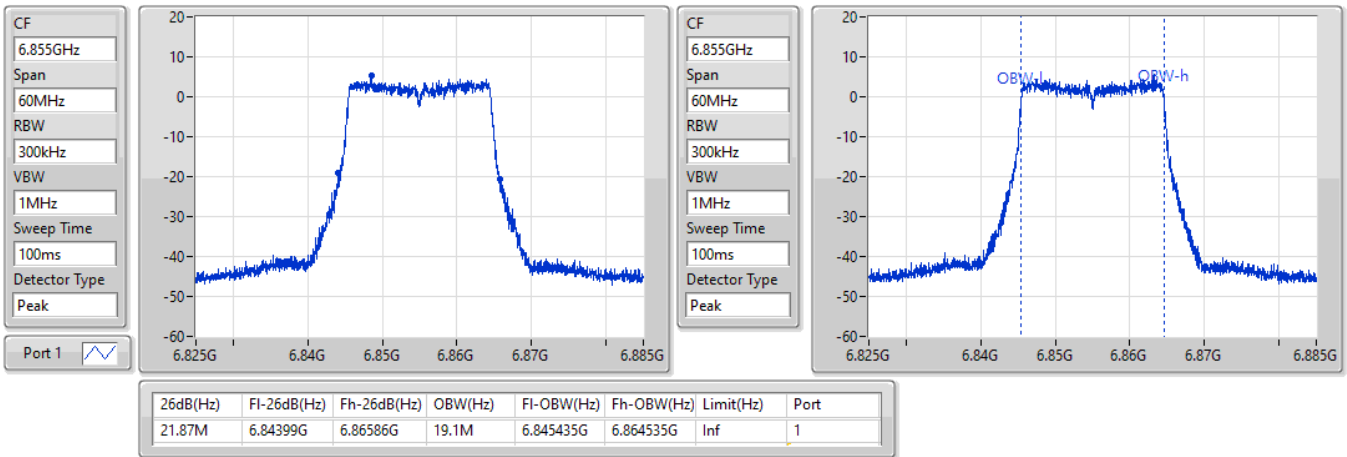

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6695MHz

01/09/2021

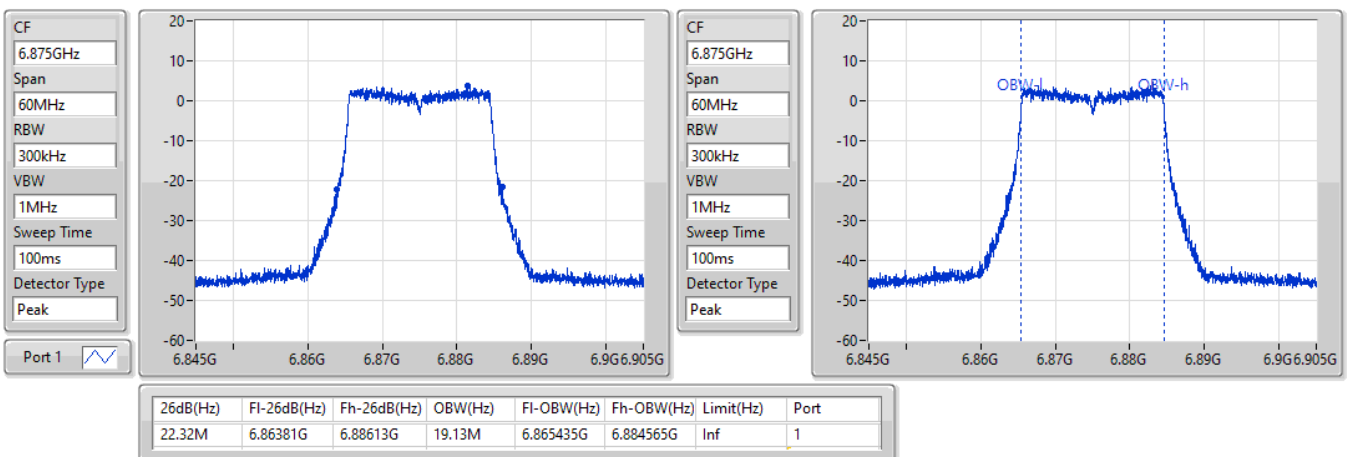


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6855MHz

01/09/2021

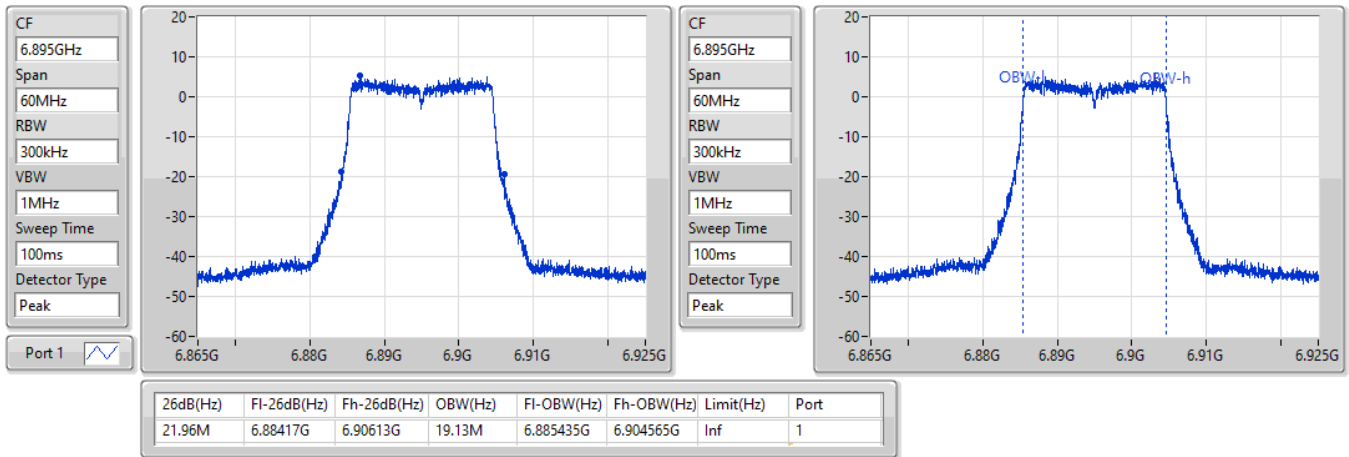

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6875MHz

01/09/2021

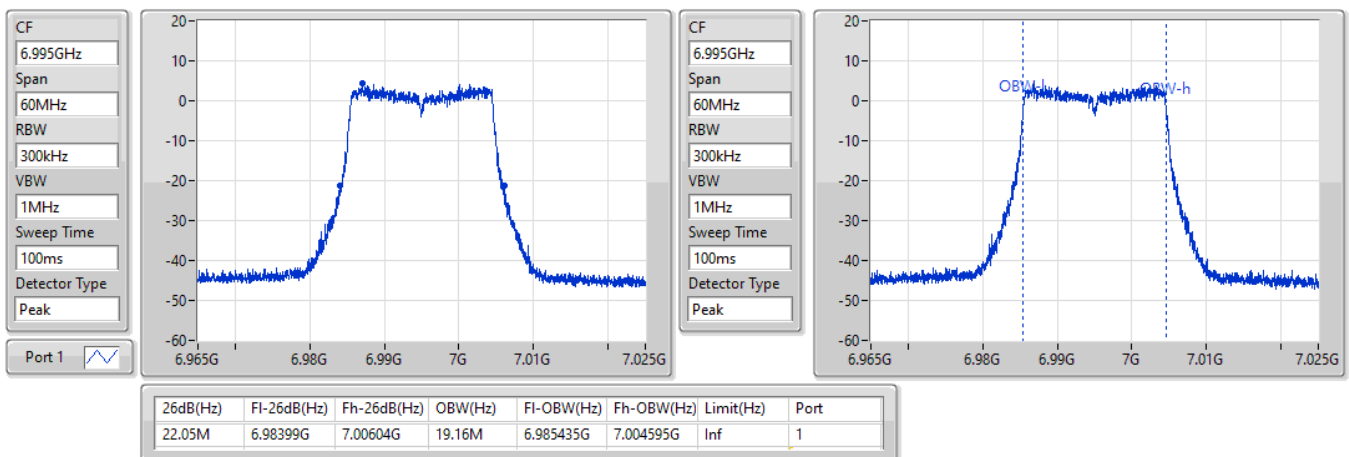


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6895MHz

01/09/2021

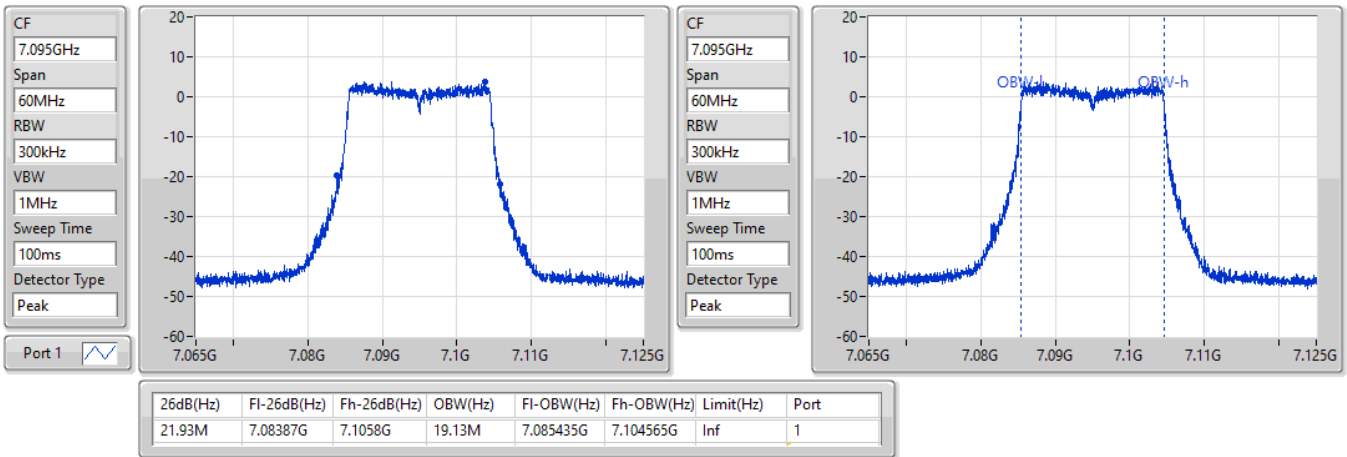

802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6995MHz

01/09/2021

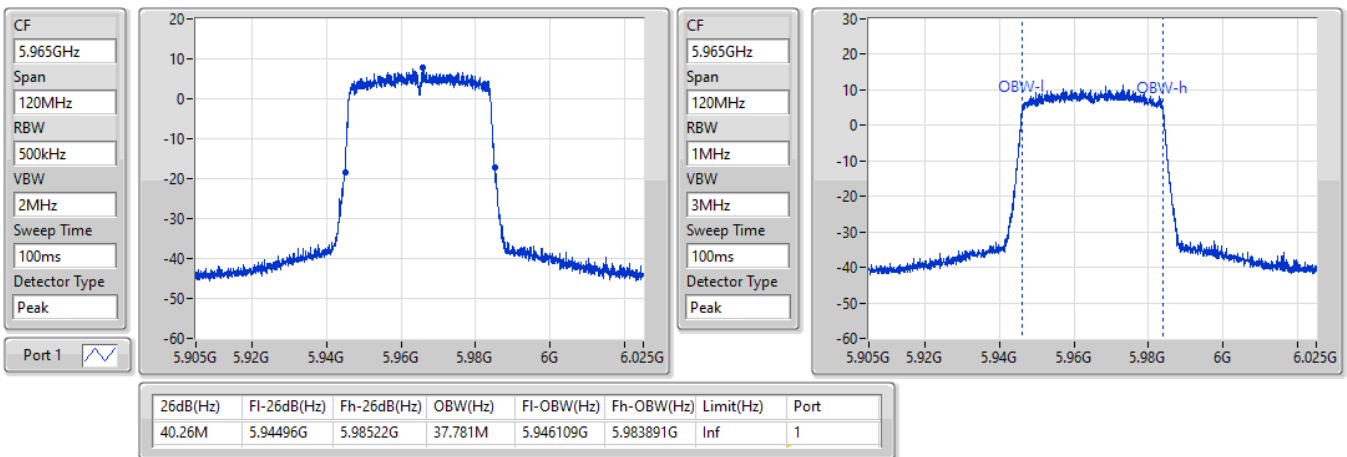


802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
7095MHz

01/09/2021

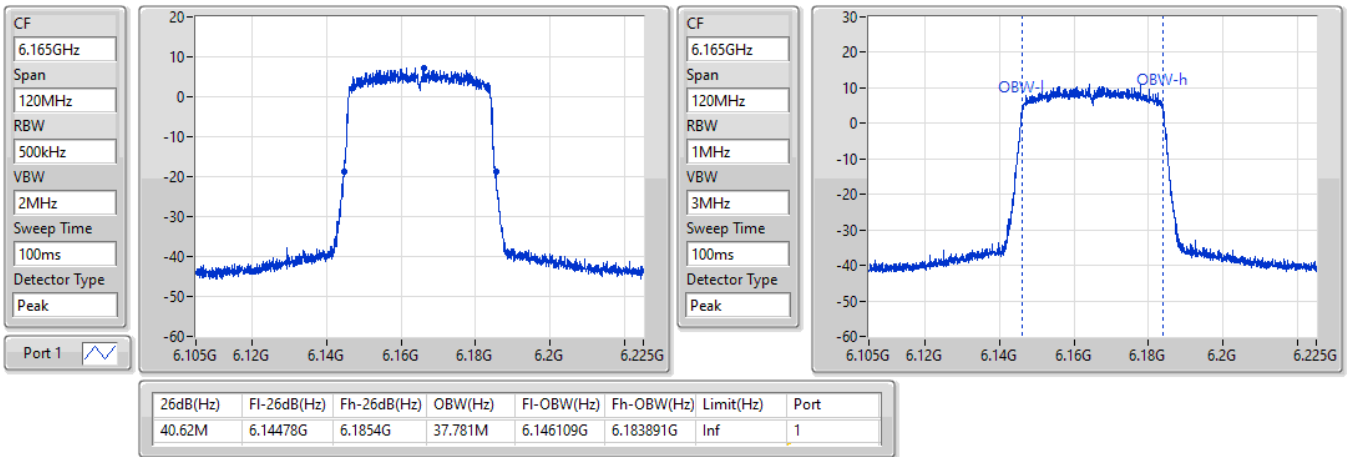

802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
5965MHz

01/09/2021

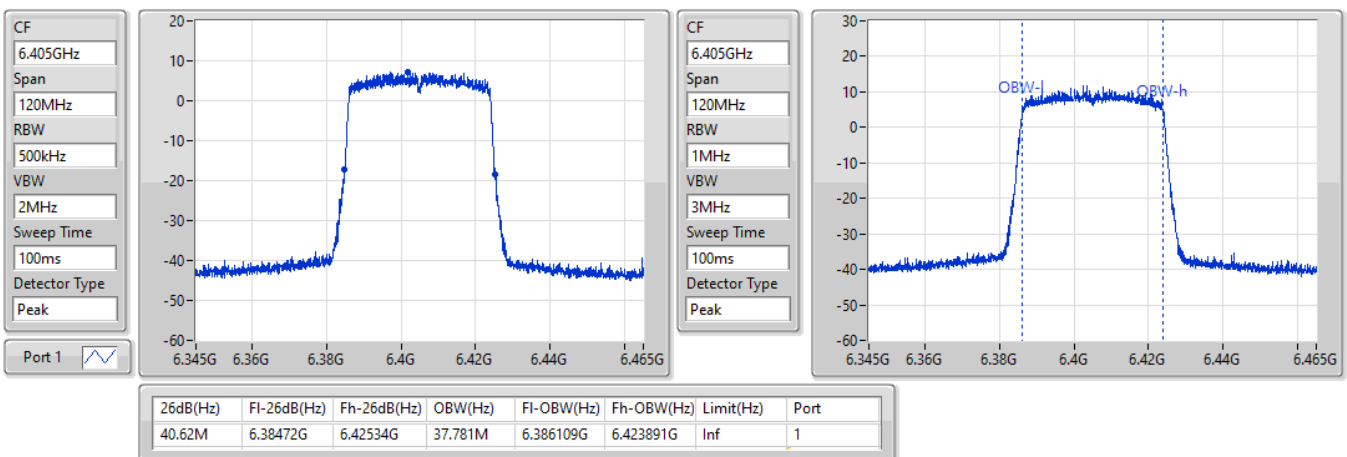


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6165MHz

01/09/2021


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
6405MHz

01/09/2021

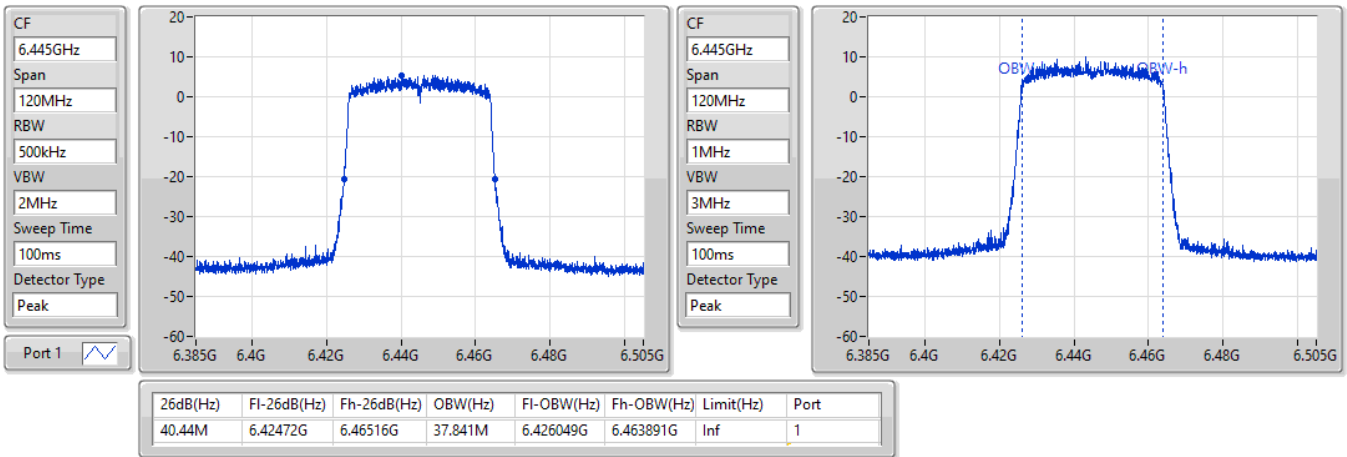


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6445MHz

01/09/2021

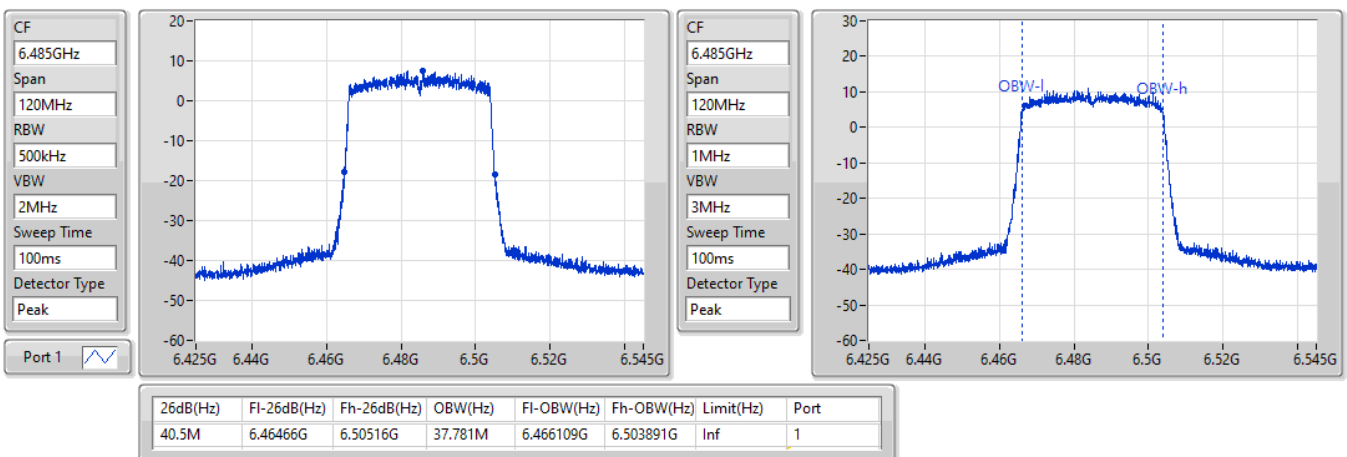


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6485MHz

01/09/2021

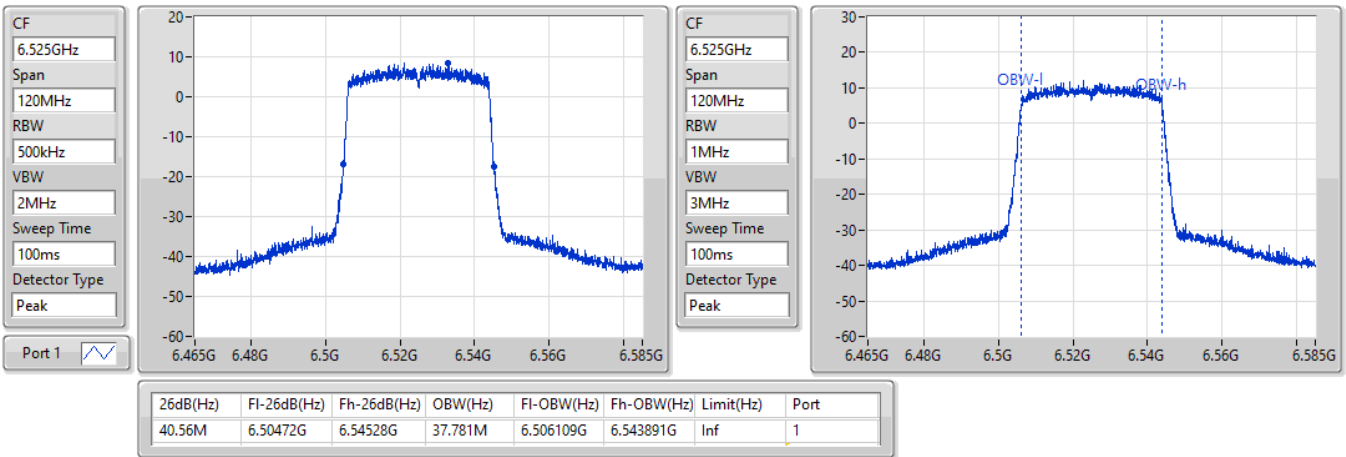


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6525MHz

01/09/2021

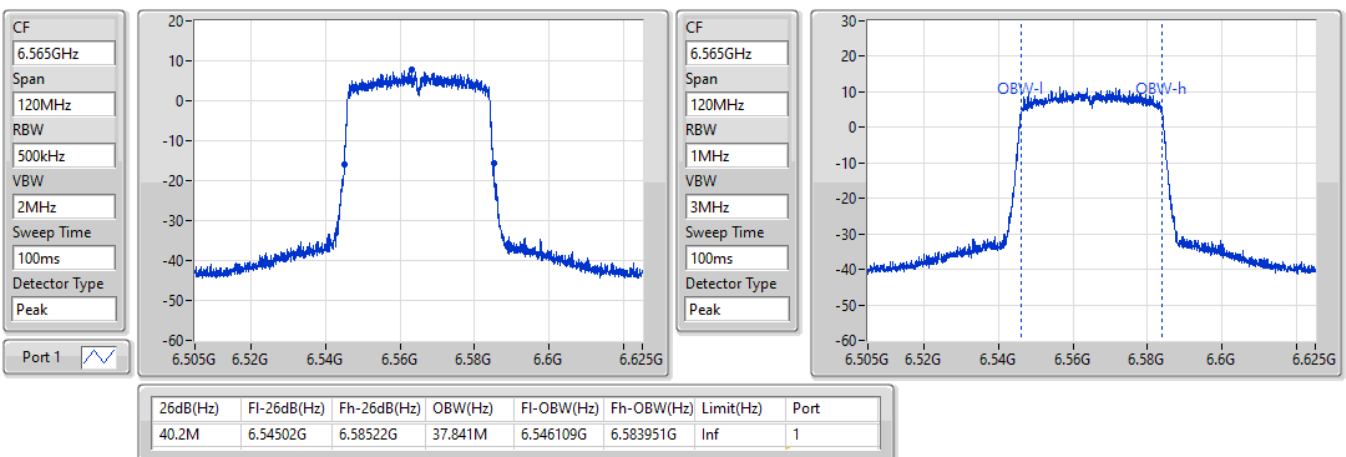


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6565MHz

01/09/2021

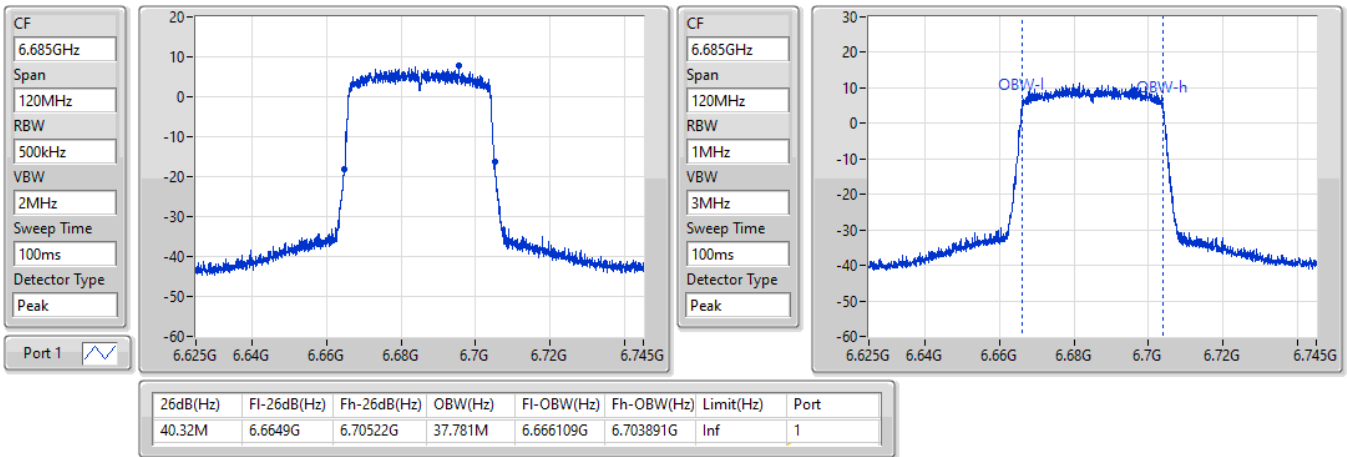


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6685MHz

01/09/2021

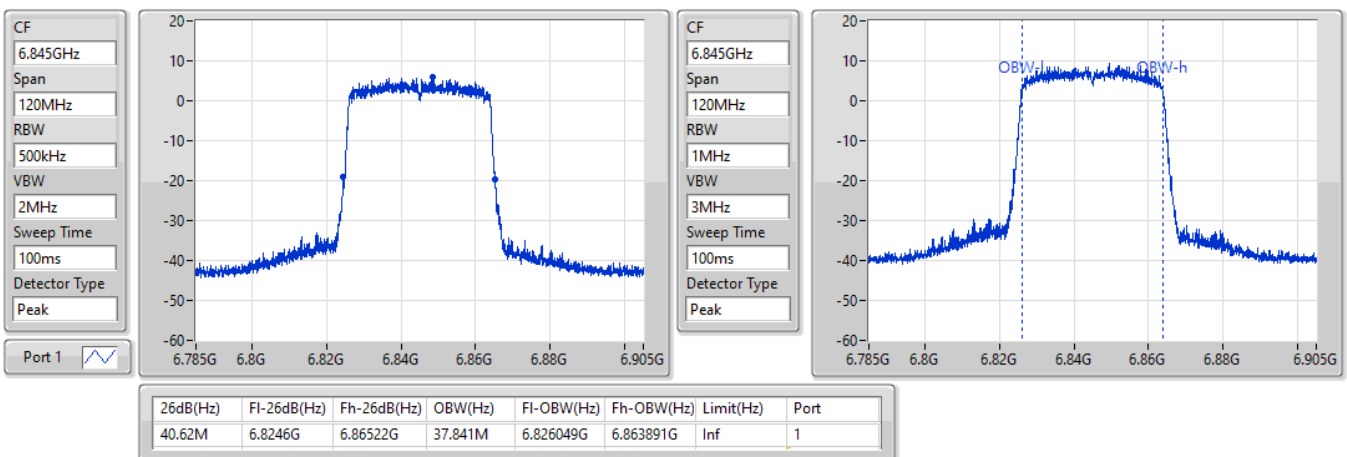


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6845MHz

01/09/2021

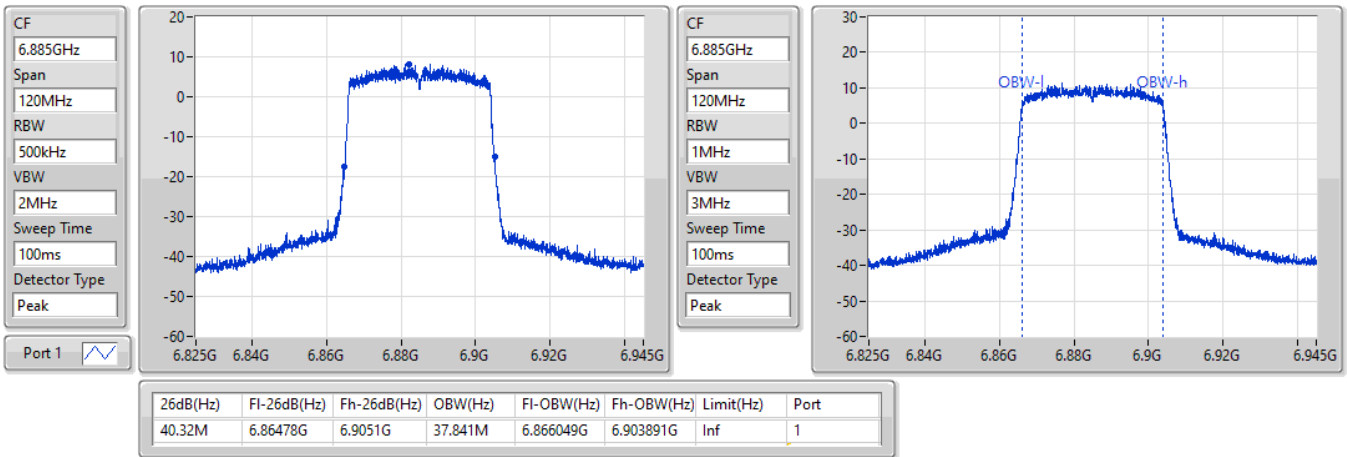


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

6885MHz

01/09/2021

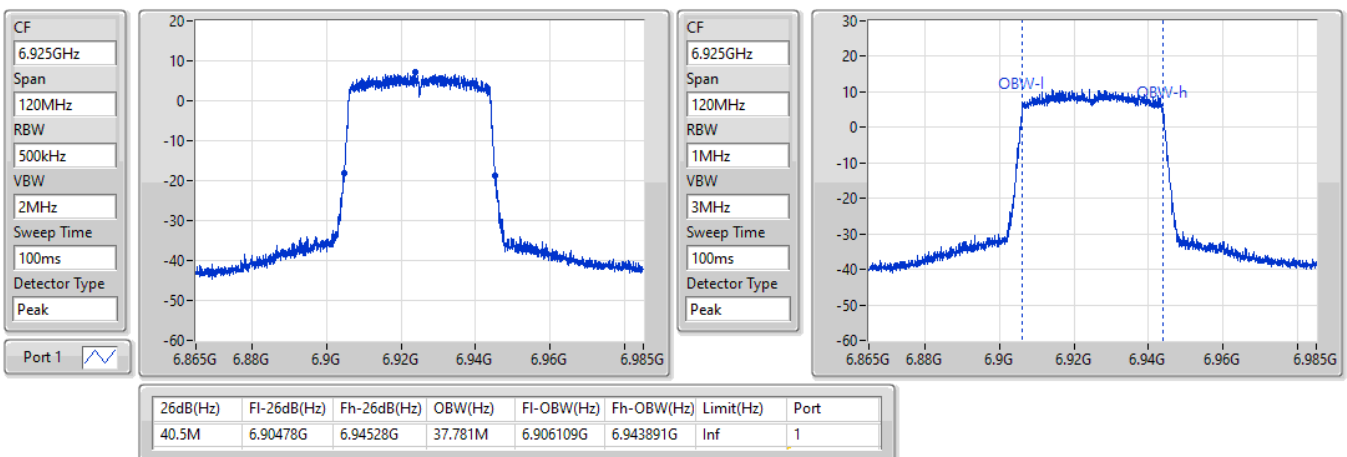


802.11ax HEW40_Nss1,(MCS0)_1TX

EBW

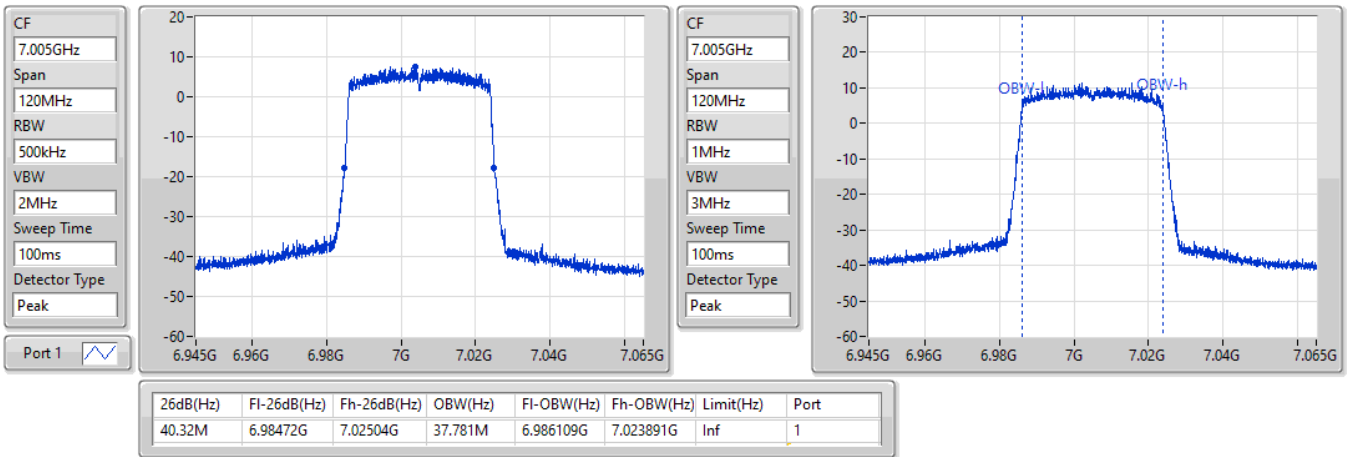
6925MHz

01/09/2021

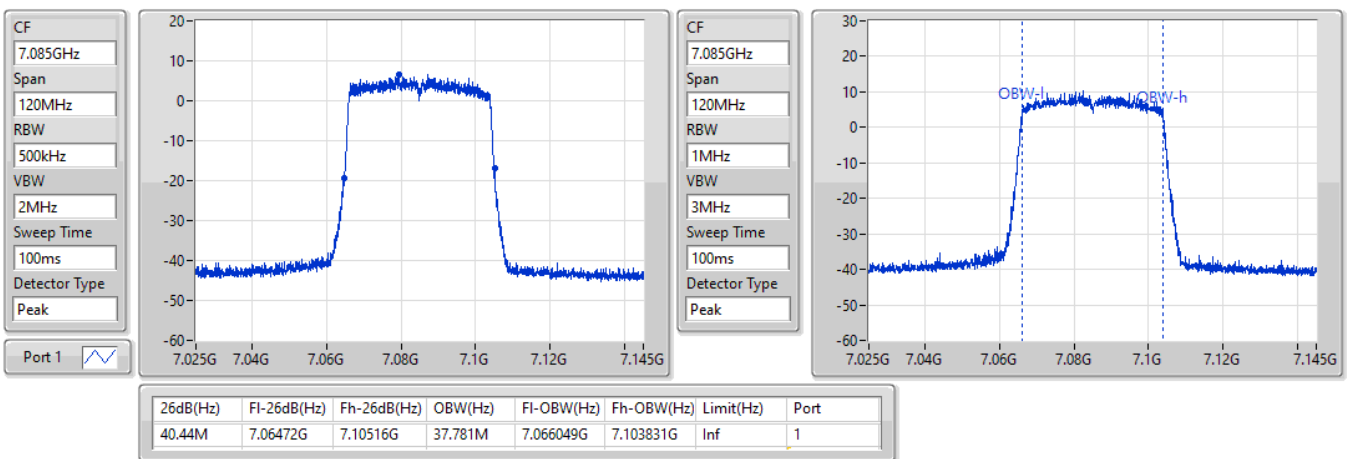


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
7005MHz

01/09/2021


802.11ax HEW40_Nss1,(MCS0)_1TX
EBW
7085MHz

01/09/2021

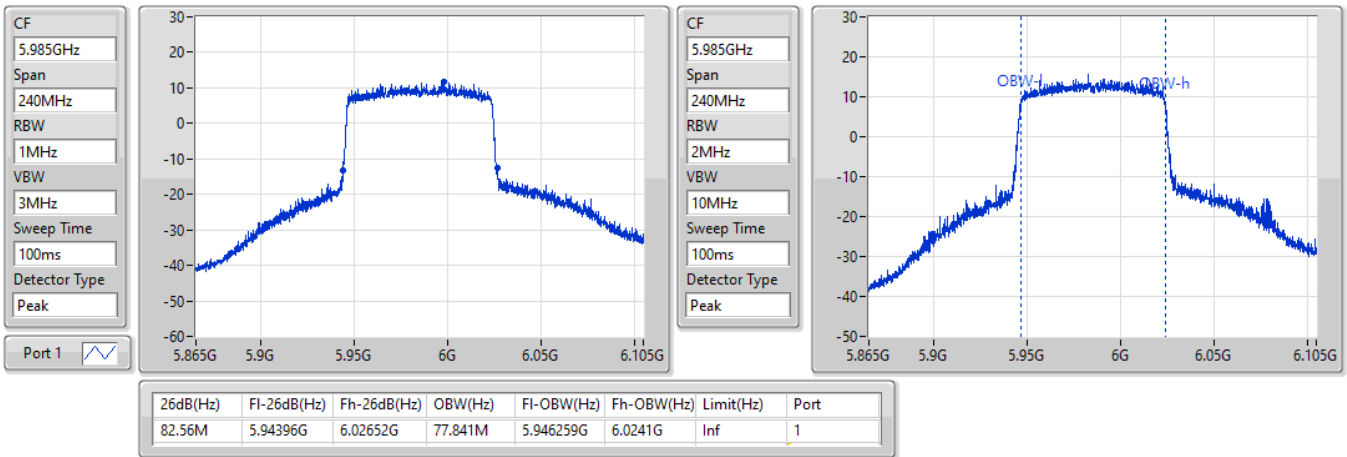


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5985MHz

01/09/2021

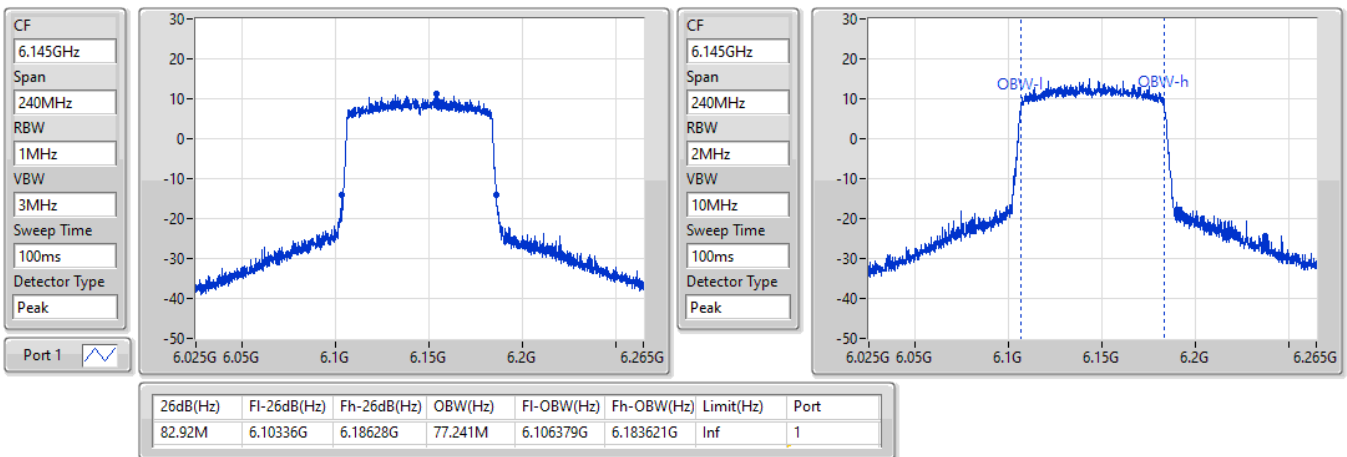


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6145MHz

01/09/2021

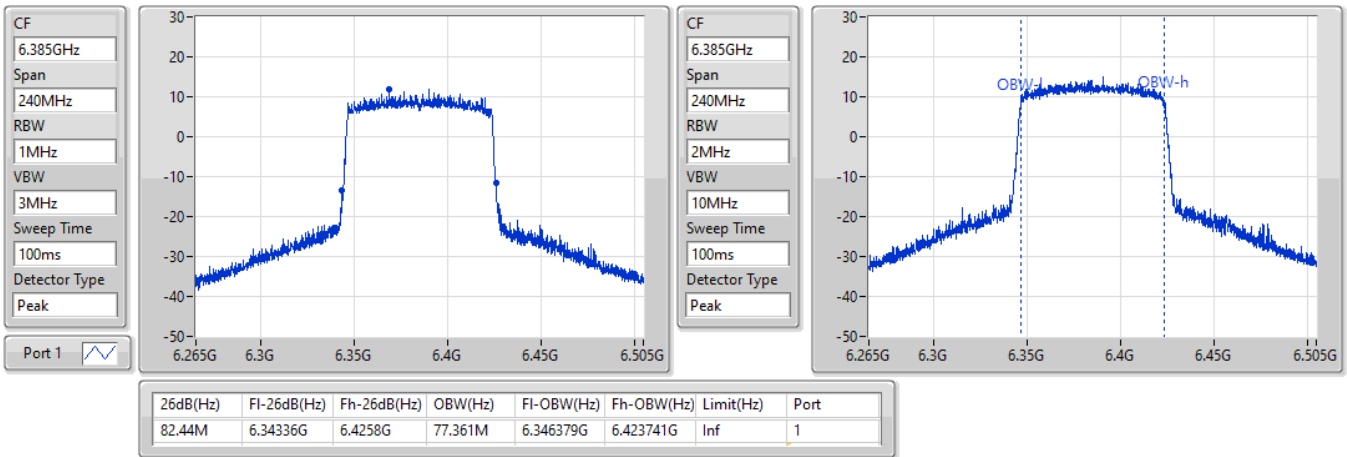


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6385MHz

01/09/2021

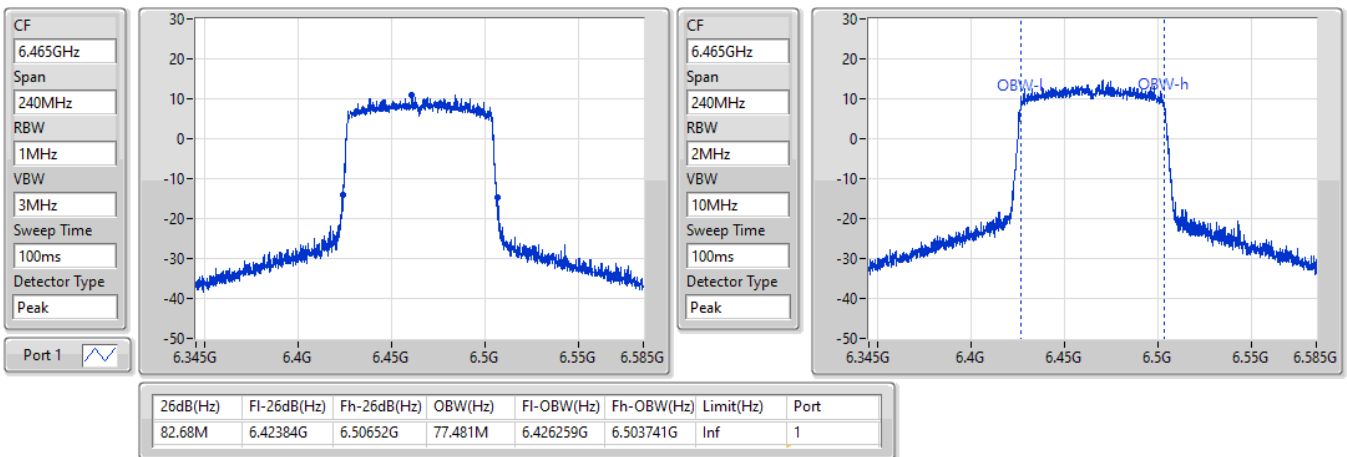


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6465MHz

01/09/2021

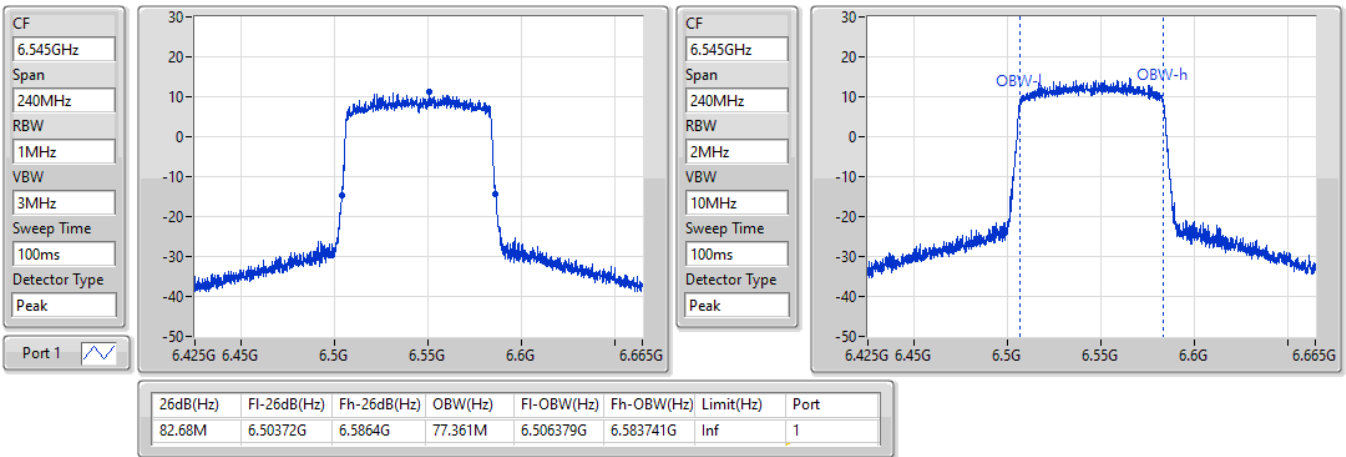


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

6545MHz

01/09/2021

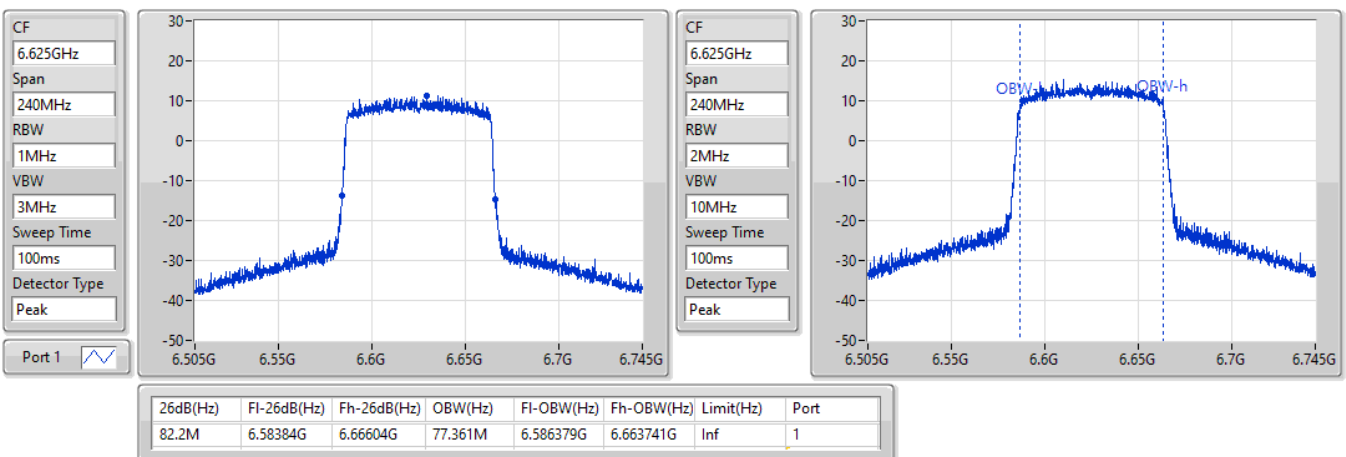


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

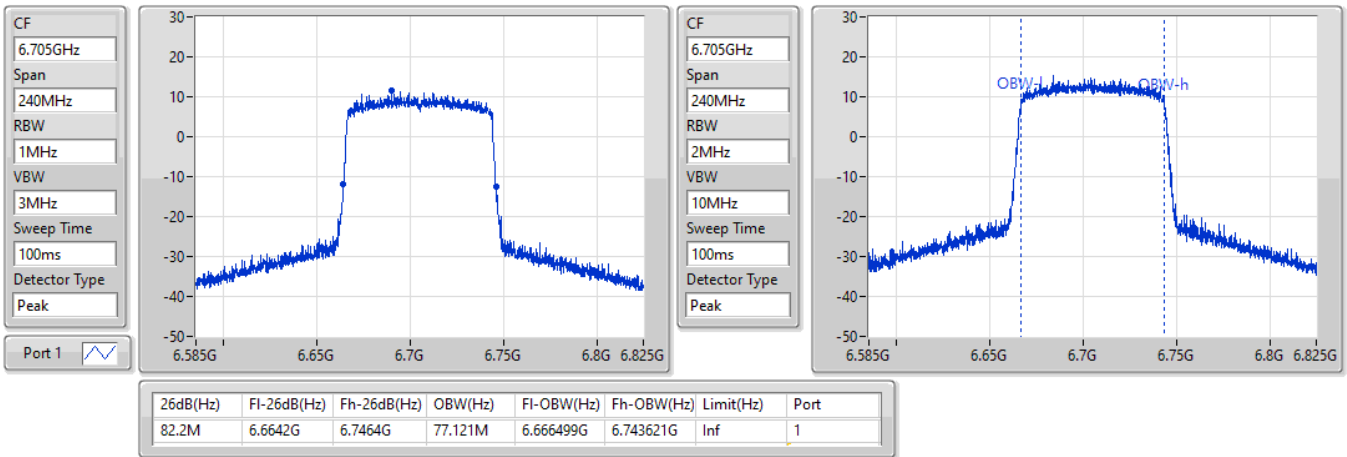
6625MHz

01/09/2021

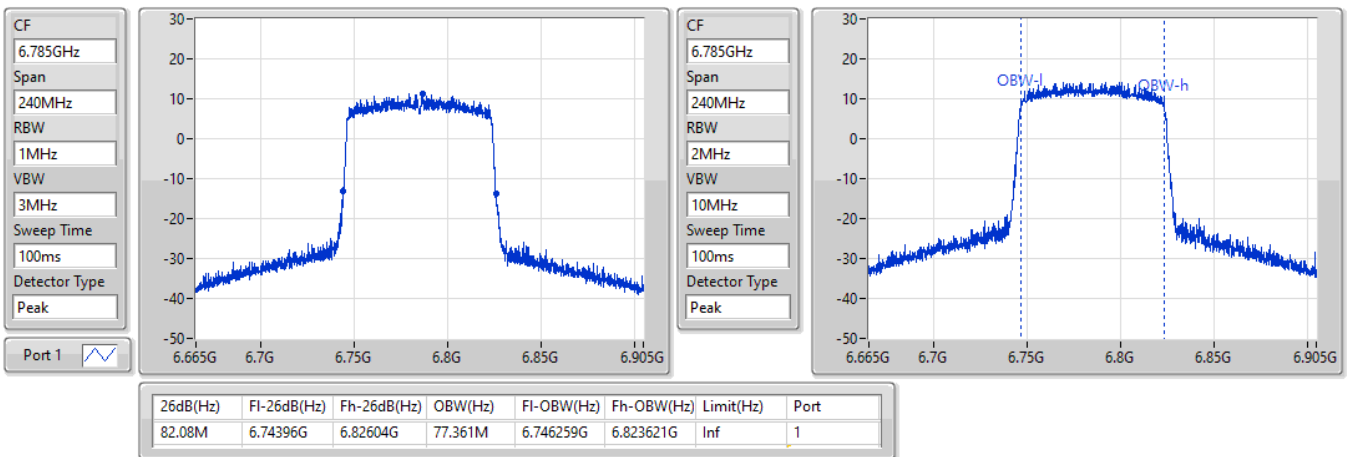


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6705MHz

01/09/2021

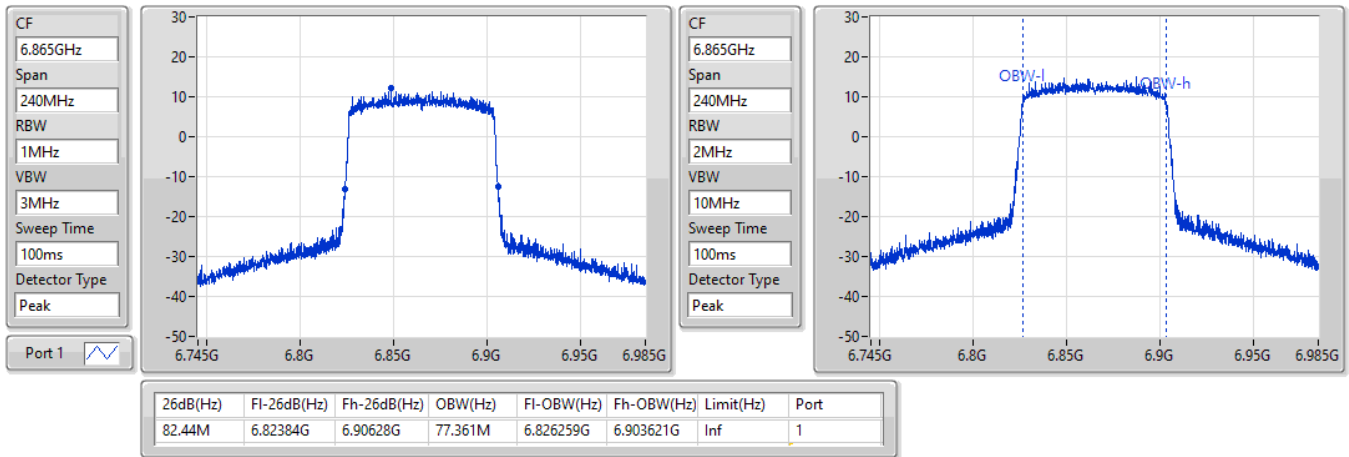

802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6785MHz

01/09/2021

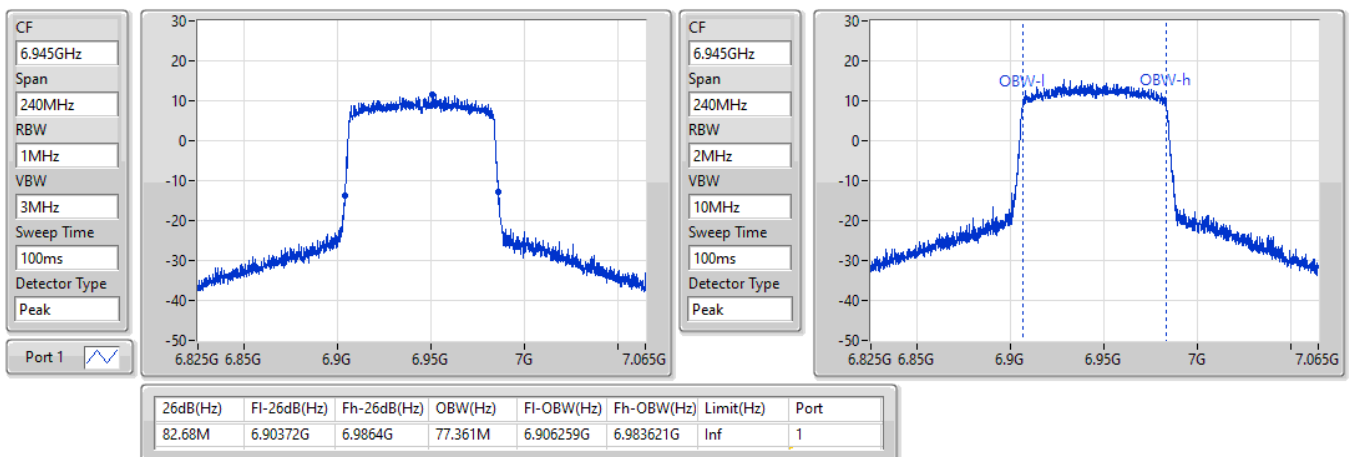


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6865MHz

01/09/2021


802.11ax HEW80_Nss1,(MCS0)_1TX
EBW
6945MHz

01/09/2021

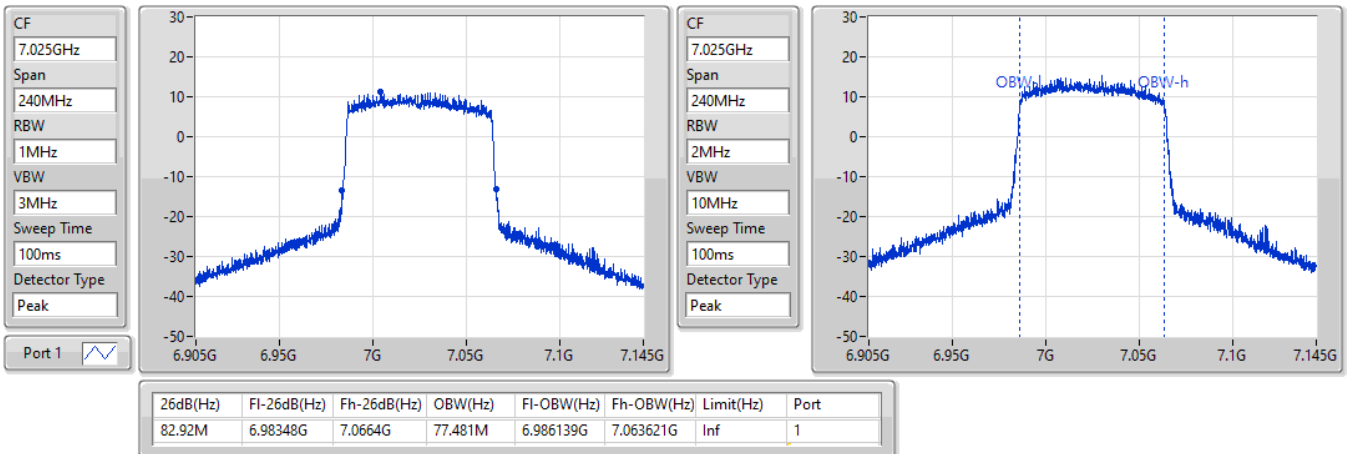


802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

7025MHz

01/09/2021

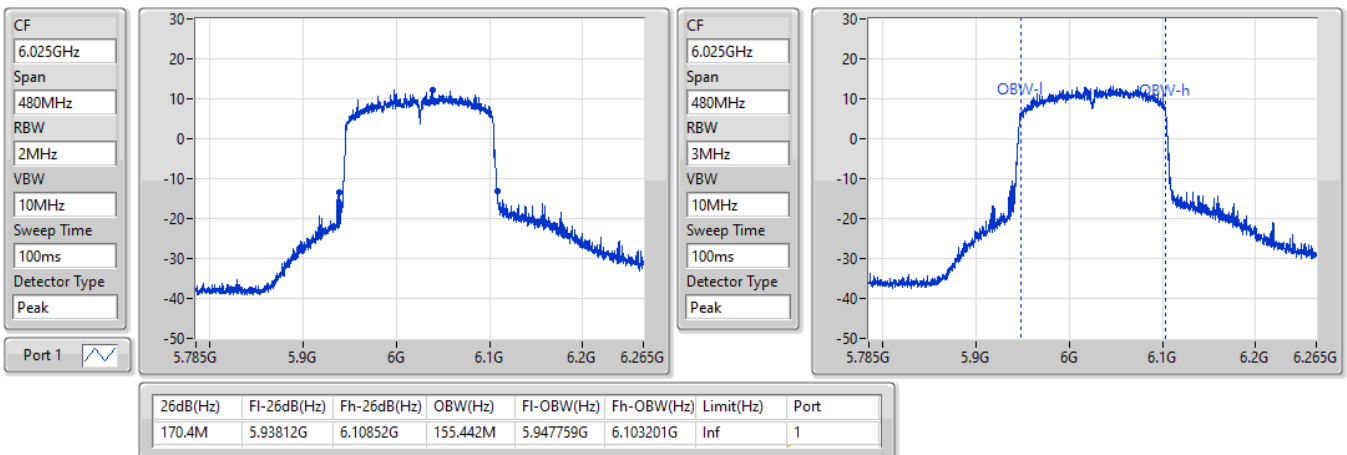


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6025MHz

02/09/2021

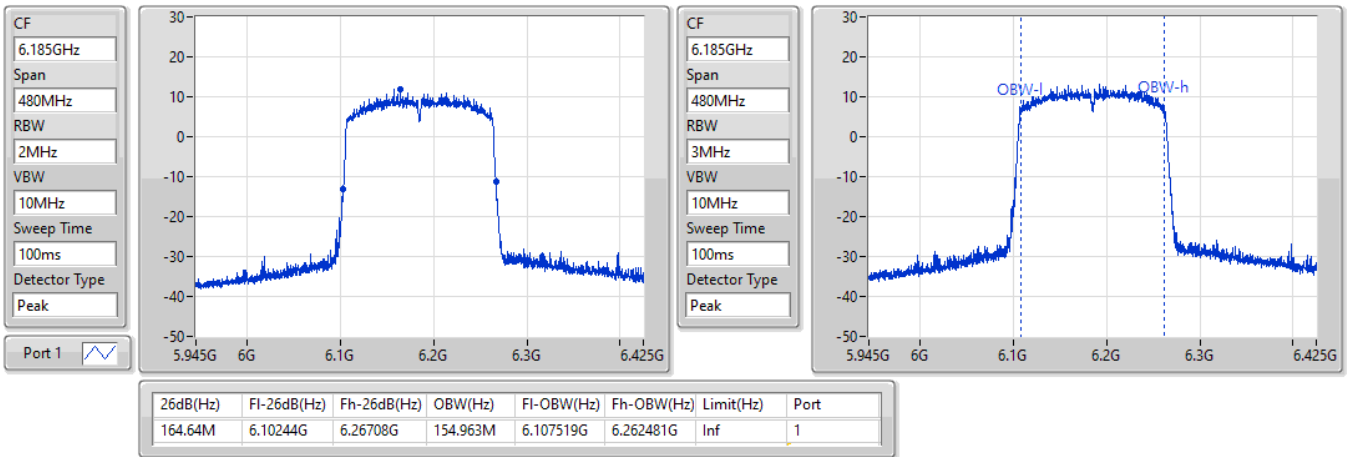


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6185MHz

02/09/2021

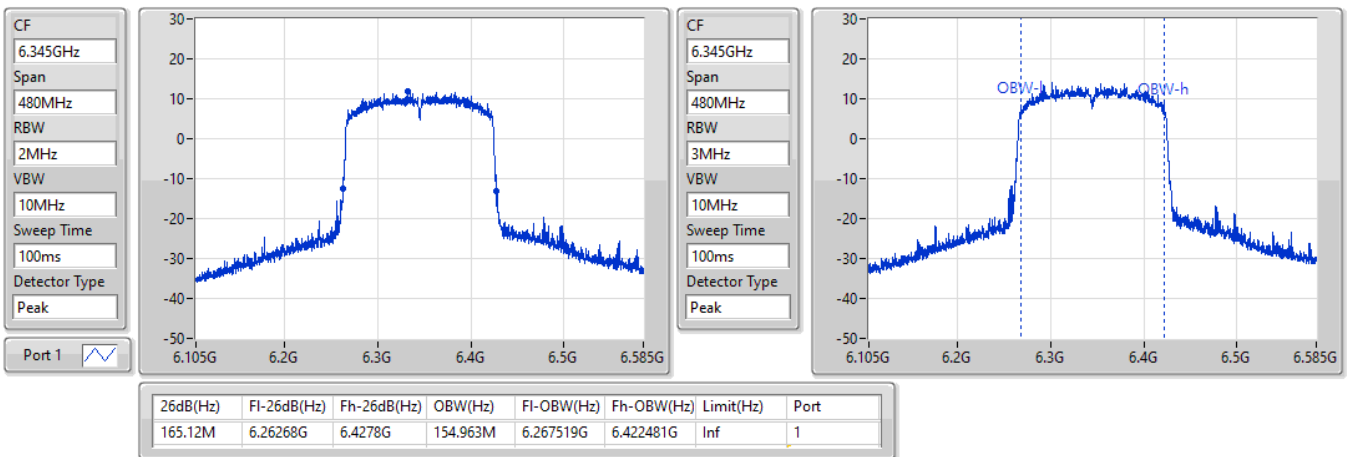


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

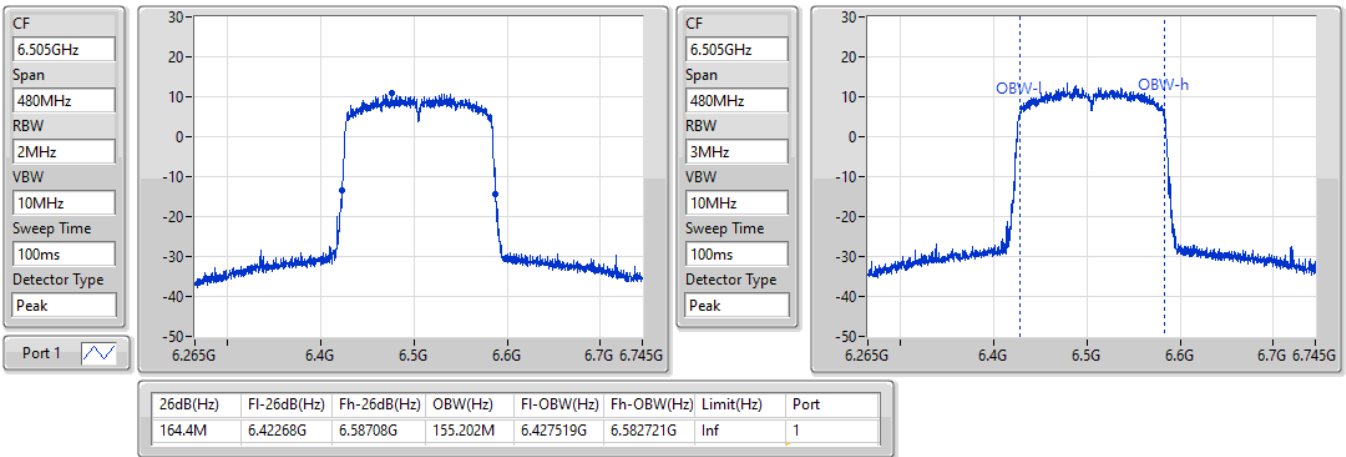
6345MHz

02/09/2021

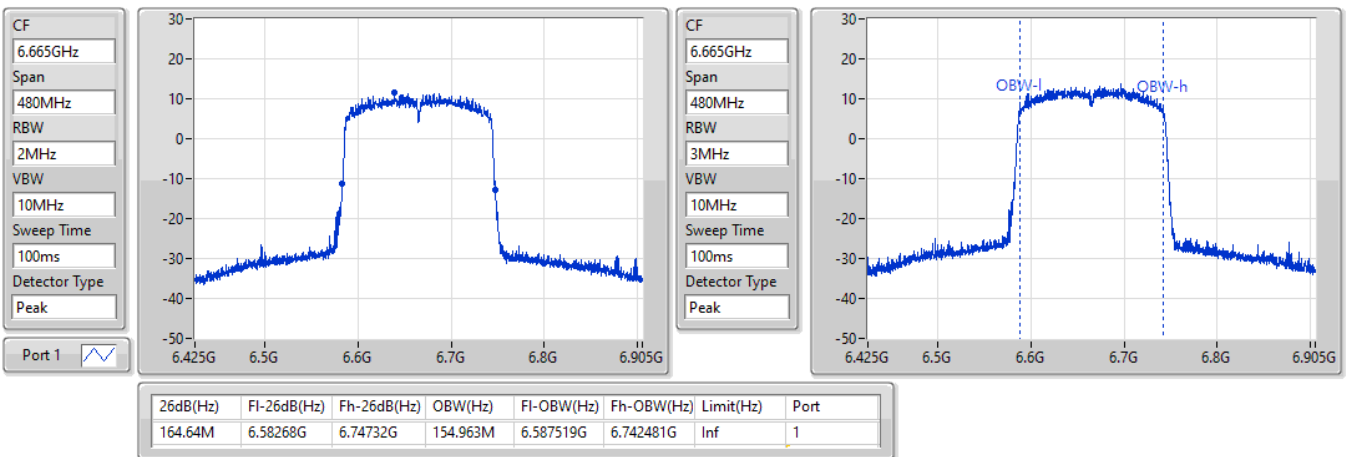


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6505MHz

02/09/2021


802.11ax HEW160_Nss1,(MCS0)_1TX
EBW
6665MHz

02/09/2021

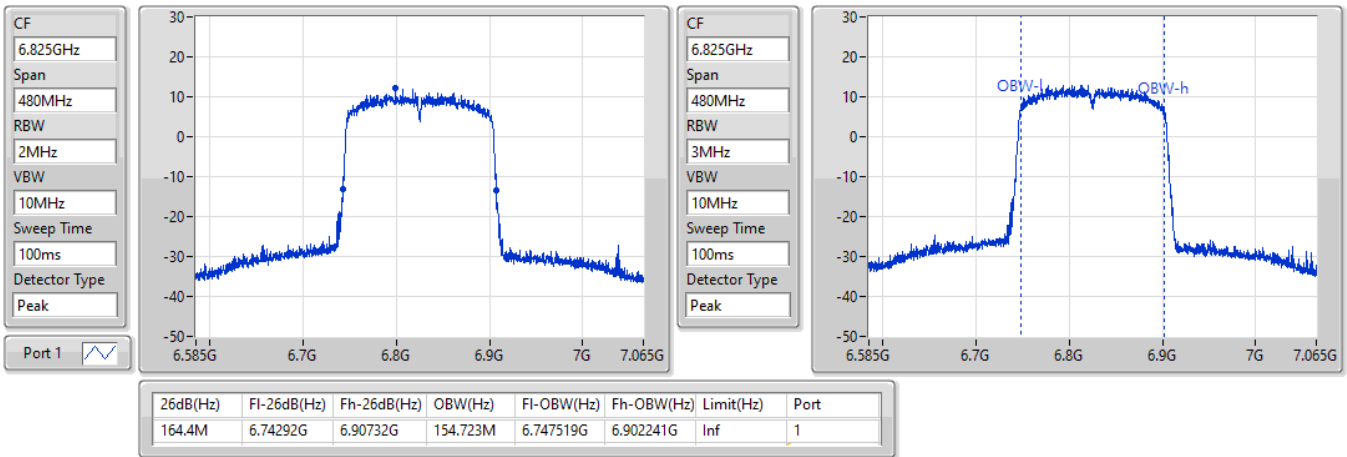


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6825MHz

02/09/2021

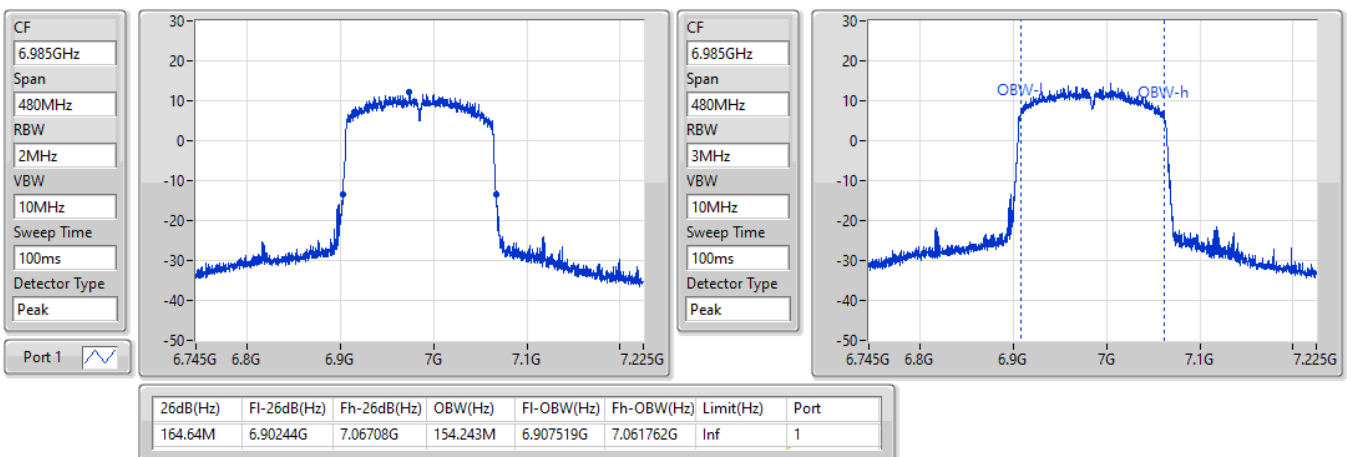


802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

6985MHz

02/09/2021



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_2TX	20.49M	16.702M	16M7D1D	20.43M	16.582M
11a40_Nss1,(6Mbps)_2TX	39.66M	36.222M	36M2D1D	39.24M	36.162M
11a80_Nss1,(6Mbps)_2TX	82.68M	76.042M	76M0D1D	81.48M	75.802M
11a160_Nss1,(6Mbps)_2TX	166.8M	154.723M	155MD1D	164.64M	154.483M
802.11ax HEW20_Nss1,(MCS0)_2TX	22.11M	19.16M	19M2D1D	21.6M	19.1M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.68M	37.841M	37M8D1D	40.14M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.56M	77.361M	77M4D1D	81.6M	77.121M
802.11ax HEW160_Nss1,(MCS0)_2TX	165.12M	155.202M	155MD1D	163.92M	154.723M
6.425-6.525GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_2TX	20.52M	16.702M	16M7D1D	20.37M	16.582M
11a40_Nss1,(6Mbps)_2TX	39.66M	36.222M	36M2D1D	39.06M	36.102M
11a80_Nss1,(6Mbps)_2TX	82.32M	75.922M	75M9D1D	81.6M	75.922M
11a160_Nss1,(6Mbps)_2TX	166.8M	154.963M	155MD1D	166.08M	154.723M
802.11ax HEW20_Nss1,(MCS0)_2TX	22.2M	19.16M	19M2D1D	21.69M	19.1M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.62M	37.901M	37M9D1D	40.08M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.68M	77.361M	77M4D1D	82.08M	77.241M
802.11ax HEW160_Nss1,(MCS0)_2TX	165.6M	155.202M	155MD1D	164.88M	154.963M
6.525-6.875GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_2TX	20.58M	16.702M	16M7D1D	20.4M	16.612M
11a40_Nss1,(6Mbps)_2TX	39.72M	36.222M	36M2D1D	39.12M	36.162M
11a80_Nss1,(6Mbps)_2TX	82.2M	76.042M	76M0D1D	81.12M	75.802M
11a160_Nss1,(6Mbps)_2TX	166.8M	154.723M	155MD1D	166.32M	154.483M
802.11ax HEW20_Nss1,(MCS0)_2TX	22.29M	19.13M	19M1D1D	21.6M	19.1M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.5M	37.901M	37M9D1D	40.32M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.56M	77.361M	77M4D1D	81.84M	77.121M
802.11ax HEW160_Nss1,(MCS0)_2TX	165.12M	154.963M	155MD1D	164.16M	154.723M
6.875-7.125GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_2TX	20.7M	16.732M	16M7D1D	20.37M	16.612M
11a40_Nss1,(6Mbps)_2TX	39.78M	36.222M	36M2D1D	39.06M	36.162M
11a80_Nss1,(6Mbps)_2TX	81.84M	75.922M	75M9D1D	81.24M	75.802M
11a160_Nss1,(6Mbps)_2TX	167.04M	154.243M	154MD1D	166.08M	154.243M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.99M	19.13M	19M1D1D	21.69M	19.07M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.56M	37.841M	37M8D1D	40.26M	37.721M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.56M	77.361M	77M4D1D	81.84M	77.121M
802.11ax HEW160_Nss1,(MCS0)_2TX	164.4M	154.483M	154MD1D	163.68M	154.243M

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)
11a20_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	20.46M	16.672M	20.49M	16.612M
6175MHz	Pass	Inf	20.43M	16.702M	20.49M	16.612M
6415MHz	Pass	Inf	20.46M	16.702M	20.49M	16.582M
6435MHz	Pass	Inf	20.52M	16.702M	20.37M	16.582M
6475MHz	Pass	Inf	20.43M	16.642M	20.49M	16.582M
6515MHz	Pass	Inf	20.46M	16.672M	20.46M	16.612M
6535MHz	Pass	Inf	20.4M	16.672M	20.46M	16.612M
6695MHz	Pass	Inf	20.46M	16.702M	20.52M	16.612M
6855MHz	Pass	Inf	20.58M	16.672M	20.52M	16.612M
6875MHz	Pass	Inf	20.49M	16.672M	20.52M	16.642M
6895MHz	Pass	Inf	20.64M	16.702M	20.52M	16.612M
6995MHz	Pass	Inf	20.7M	16.732M	20.64M	16.612M
7095MHz	Pass	Inf	20.37M	16.672M	20.46M	16.612M
11a40_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	39.6M	36.162M	39.3M	36.162M
6165MHz	Pass	Inf	39.66M	36.222M	39.36M	36.162M
6405MHz	Pass	Inf	39.54M	36.162M	39.24M	36.222M
6445MHz	Pass	Inf	39.66M	36.162M	39.06M	36.222M
6485MHz	Pass	Inf	39.54M	36.102M	39.3M	36.222M
6525MHz	Pass	Inf	39.6M	36.222M	39.24M	36.162M
6565MHz	Pass	Inf	39.66M	36.162M	39.12M	36.162M
6685MHz	Pass	Inf	39.54M	36.162M	39.24M	36.222M
6845MHz	Pass	Inf	39.66M	36.162M	39.24M	36.162M
6885MHz	Pass	Inf	39.72M	36.162M	39.24M	36.162M
6925MHz	Pass	Inf	39.66M	36.222M	39.24M	36.162M
7005MHz	Pass	Inf	39.78M	36.162M	39.18M	36.162M
7085MHz	Pass	Inf	39.66M	36.222M	39.06M	36.162M
11a80_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	82.68M	76.042M	81.48M	75.802M
6145MHz	Pass	Inf	82.2M	76.042M	81.48M	75.802M
6385MHz	Pass	Inf	82.08M	76.042M	81.6M	75.802M
6465MHz	Pass	Inf	81.84M	75.922M	81.6M	75.922M
6545MHz	Pass	Inf	82.32M	75.922M	81.6M	75.922M
6625MHz	Pass	Inf	82.08M	76.042M	81.12M	75.922M
6705MHz	Pass	Inf	82.2M	75.922M	81.36M	75.922M
6785MHz	Pass	Inf	81.96M	75.922M	81.48M	75.802M
6865MHz	Pass	Inf	81.6M	75.922M	81.6M	75.922M
6945MHz	Pass	Inf	81.84M	75.922M	81.6M	75.922M
7025MHz	Pass	Inf	81.36M	75.922M	81.24M	75.802M
11a160_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	165.84M	154.483M	164.64M	154.483M
6185MHz	Pass	Inf	166.8M	154.723M	165.36M	154.483M
6345MHz	Pass	Inf	165.84M	154.483M	165.36M	154.483M
6505MHz	Pass	Inf	166.8M	154.963M	166.08M	154.723M
6665MHz	Pass	Inf	166.8M	154.723M	166.32M	154.483M
6825MHz	Pass	Inf	166.32M	154.483M	166.32M	154.723M
6985MHz	Pass	Inf	166.08M	154.243M	167.04M	154.243M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5955MHz	Pass	Inf	21.96M	19.13M	21.99M	19.1M
6175MHz	Pass	Inf	21.6M	19.13M	22.08M	19.16M
6415MHz	Pass	Inf	22.11M	19.13M	21.81M	19.13M
6435MHz	Pass	Inf	22.05M	19.13M	21.93M	19.1M
6475MHz	Pass	Inf	22.2M	19.16M	22.14M	19.1M
6515MHz	Pass	Inf	22.11M	19.13M	21.69M	19.13M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
6535MHz	Pass	Inf	22.08M	19.13M	21.93M	19.13M
6695MHz	Pass	Inf	21.87M	19.1M	22.29M	19.1M
6855MHz	Pass	Inf	21.6M	19.13M	22.26M	19.13M
6875MHz	Pass	Inf	21.93M	19.1M	22.05M	19.13M
6895MHz	Pass	Inf	21.69M	19.1M	21.99M	19.13M
6995MHz	Pass	Inf	21.93M	19.07M	21.93M	19.13M
7095MHz	Pass	Inf	21.84M	19.1M	21.87M	19.13M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5965MHz	Pass	Inf	40.44M	37.781M	40.2M	37.781M
6165MHz	Pass	Inf	40.68M	37.781M	40.14M	37.841M
6405MHz	Pass	Inf	40.14M	37.781M	40.5M	37.841M
6445MHz	Pass	Inf	40.56M	37.841M	40.5M	37.781M
6485MHz	Pass	Inf	40.44M	37.781M	40.08M	37.901M
6525MHz	Pass	Inf	40.44M	37.781M	40.62M	37.781M
6565MHz	Pass	Inf	40.5M	37.841M	40.5M	37.781M
6685MHz	Pass	Inf	40.38M	37.781M	40.38M	37.781M
6845MHz	Pass	Inf	40.44M	37.781M	40.32M	37.901M
6885MHz	Pass	Inf	40.32M	37.841M	40.32M	37.841M
6925MHz	Pass	Inf	40.5M	37.721M	40.32M	37.841M
7005MHz	Pass	Inf	40.56M	37.781M	40.38M	37.781M
7085MHz	Pass	Inf	40.38M	37.781M	40.26M	37.781M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5985MHz	Pass	Inf	82.56M	77.361M	82.32M	77.361M
6145MHz	Pass	Inf	82.32M	77.121M	82.2M	77.241M
6385MHz	Pass	Inf	81.6M	77.361M	82.32M	77.241M
6465MHz	Pass	Inf	82.68M	77.361M	82.2M	77.241M
6545MHz	Pass	Inf	82.08M	77.361M	82.32M	77.241M
6625MHz	Pass	Inf	82.44M	77.241M	82.2M	77.361M
6705MHz	Pass	Inf	82.08M	77.241M	81.84M	77.241M
6785MHz	Pass	Inf	82.32M	77.121M	82.56M	77.241M
6865MHz	Pass	Inf	82.08M	77.361M	81.84M	77.241M
6945MHz	Pass	Inf	82.2M	77.361M	82.2M	77.361M
7025MHz	Pass	Inf	82.56M	77.121M	81.84M	77.361M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
6025MHz	Pass	Inf	164.4M	154.963M	163.92M	155.202M
6185MHz	Pass	Inf	164.4M	154.963M	165.12M	154.963M
6345MHz	Pass	Inf	164.4M	154.963M	164.64M	154.723M
6505MHz	Pass	Inf	165.6M	155.202M	164.88M	154.963M
6665MHz	Pass	Inf	164.64M	154.723M	164.4M	154.963M
6825MHz	Pass	Inf	165.12M	154.963M	164.16M	154.723M
6985MHz	Pass	Inf	164.4M	154.243M	163.68M	154.483M

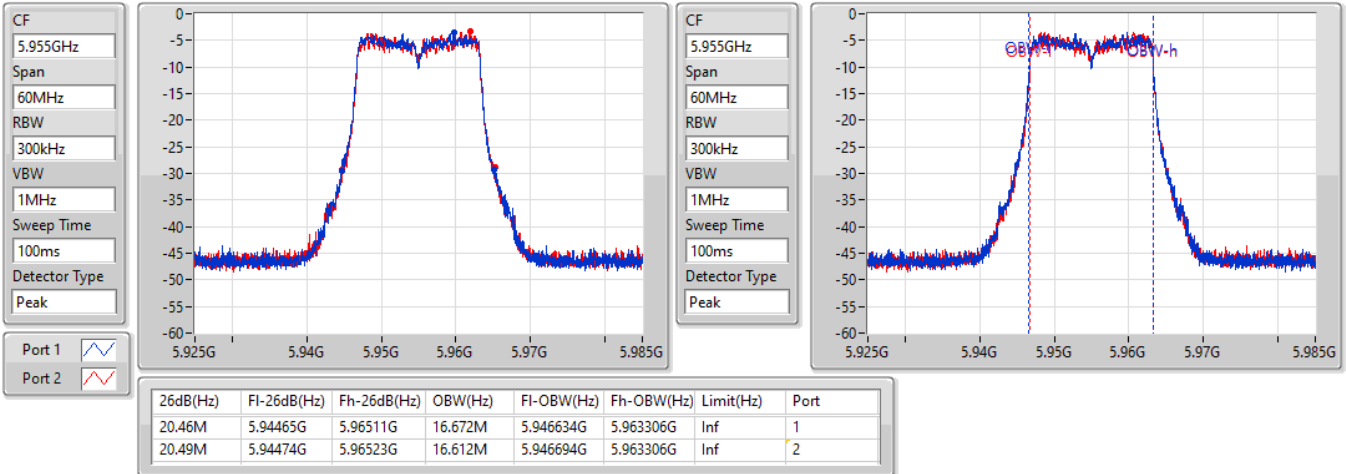
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

11a20_Nss1,(6Mbps)_2TX

EBW

5955MHz

01/09/2021

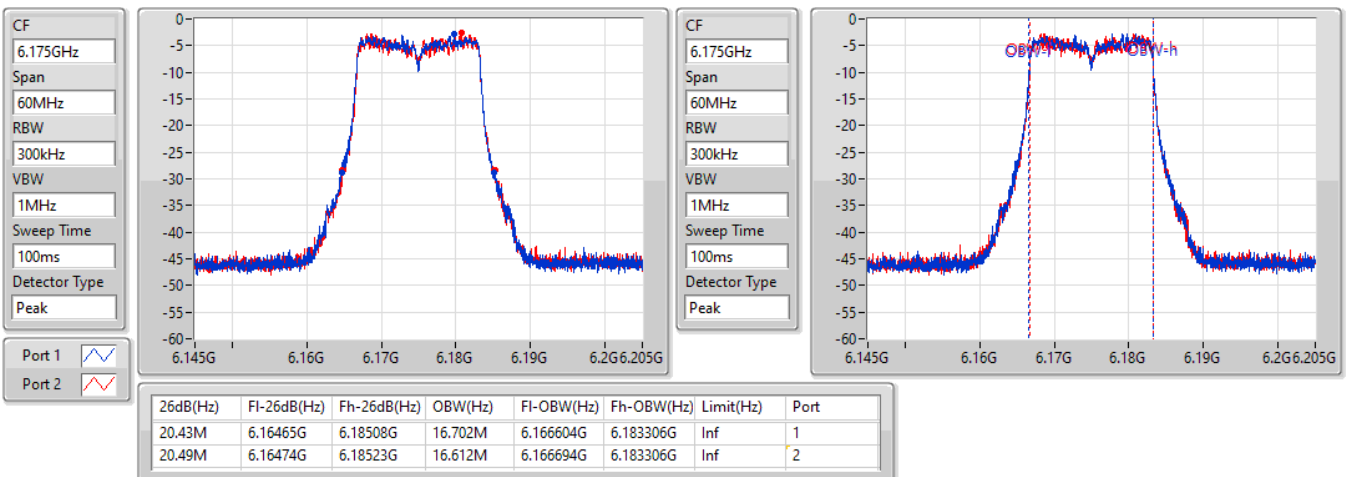


11a20_Nss1,(6Mbps)_2TX

EBW

6175MHz

01/09/2021

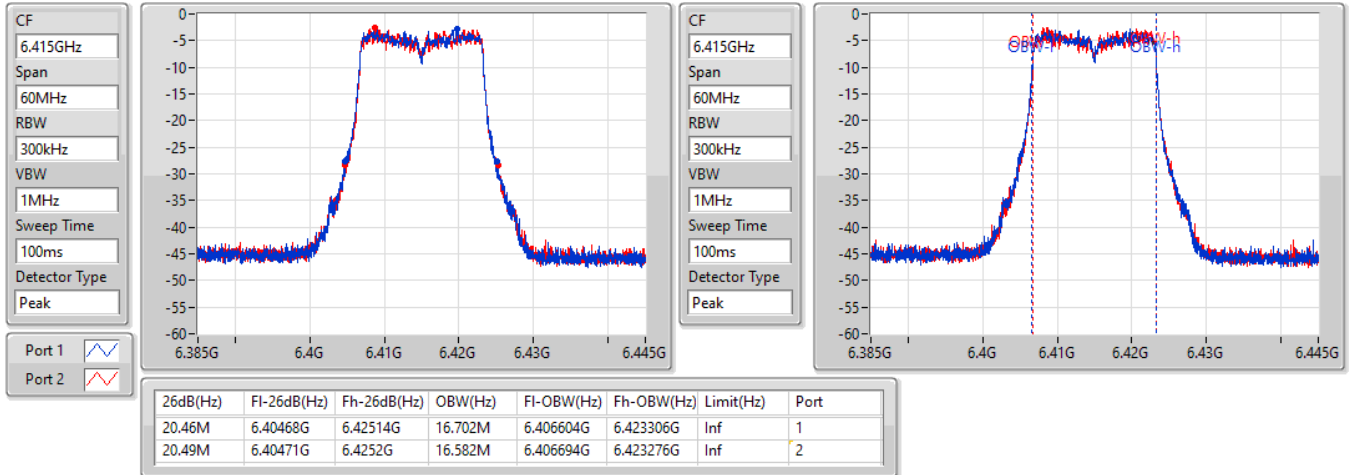


11a20_Nss1,(6Mbps)_2TX

EBW

6415MHz

01/09/2021

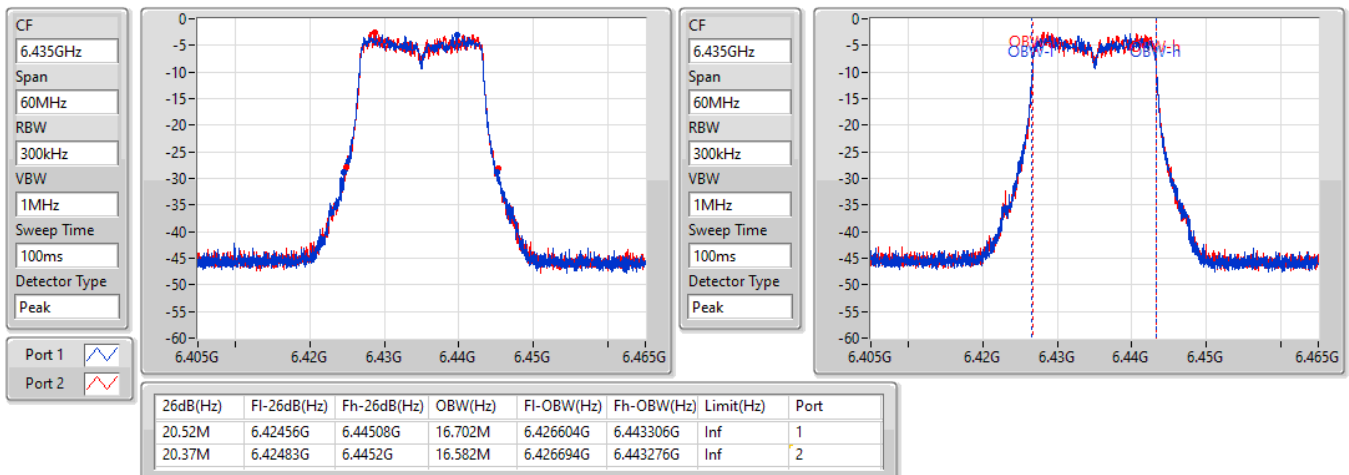


11a20_Nss1,(6Mbps)_2TX

EBW

6435MHz

01/09/2021

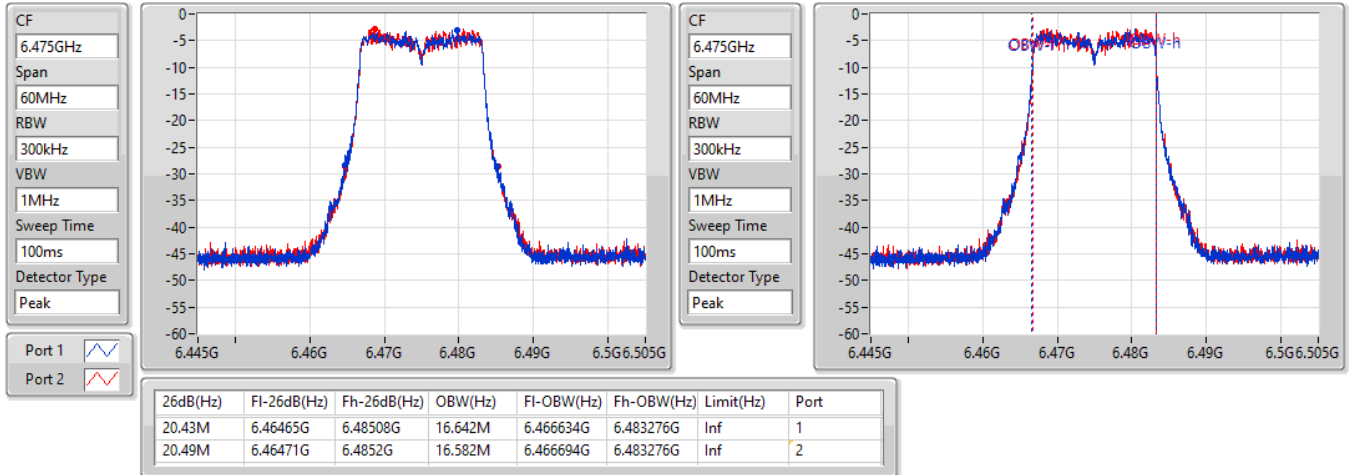


11a20_Nss1,(6Mbps)_2TX

EBW

6475MHz

01/09/2021

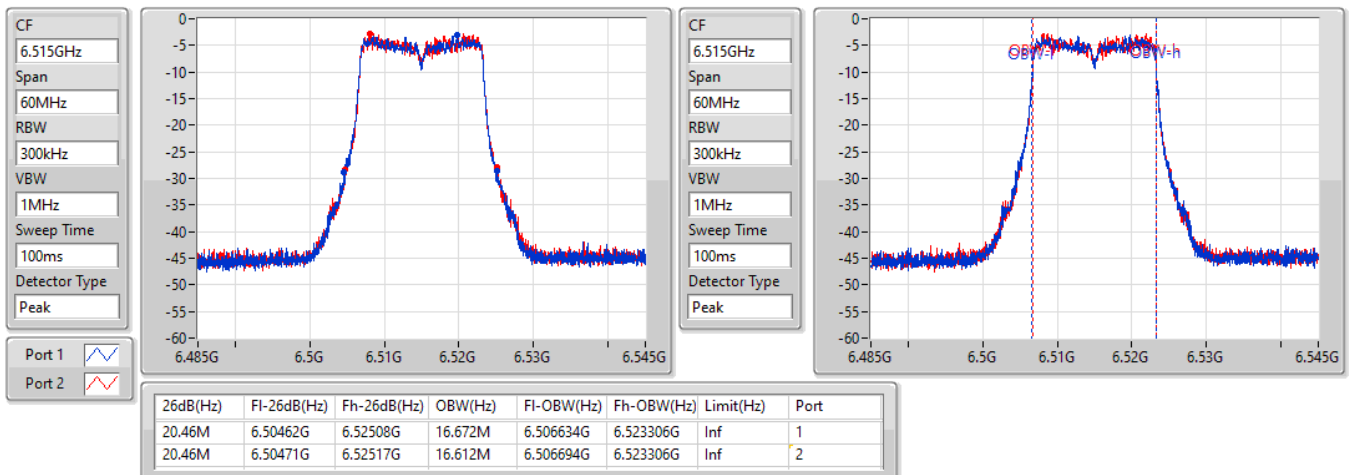


11a20_Nss1,(6Mbps)_2TX

EBW

6515MHz

01/09/2021

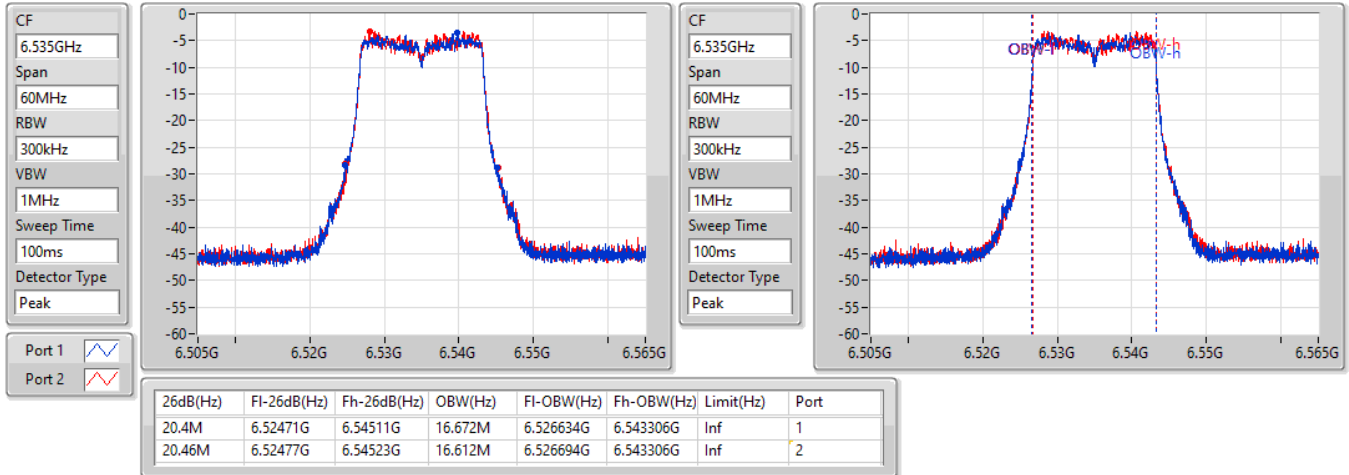


11a20_Nss1,(6Mbps)_2TX

EBW

6535MHz

01/09/2021

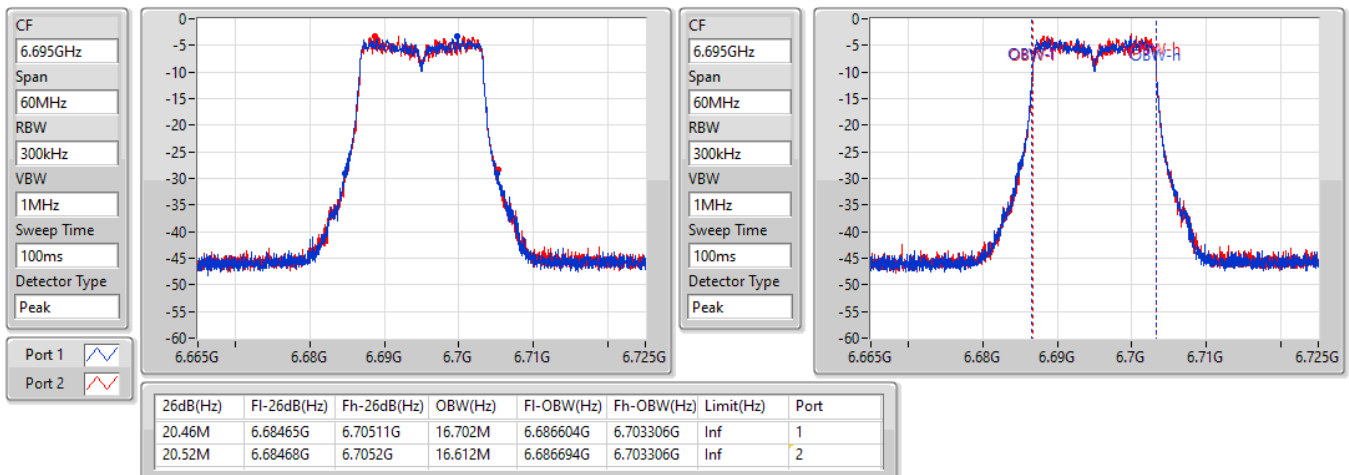


11a20_Nss1,(6Mbps)_2TX

EBW

6695MHz

01/09/2021

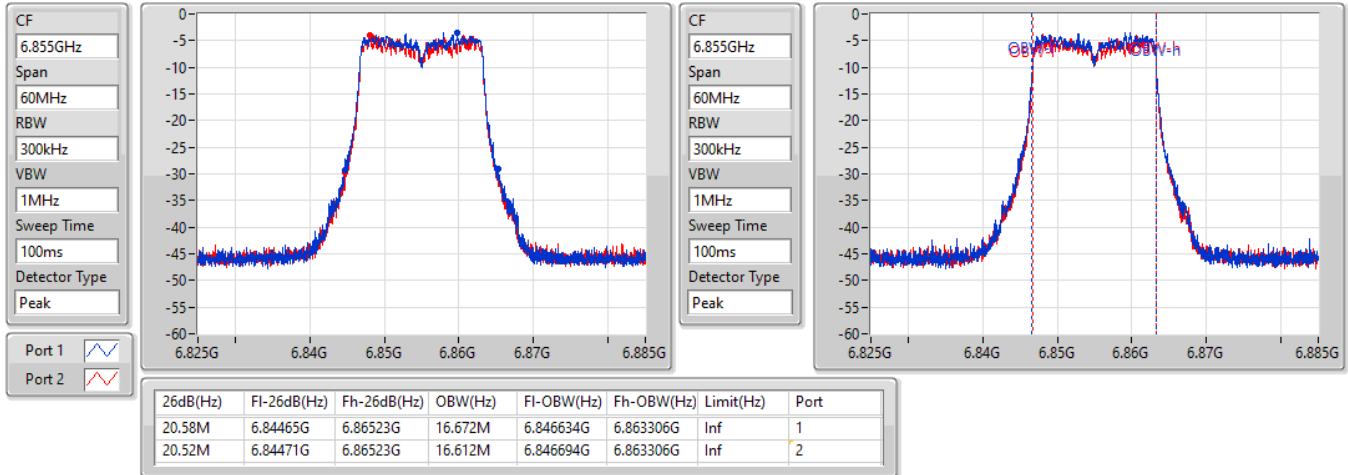


11a20_Nss1,(6Mbps)_2TX

EBW

6855MHz

01/09/2021

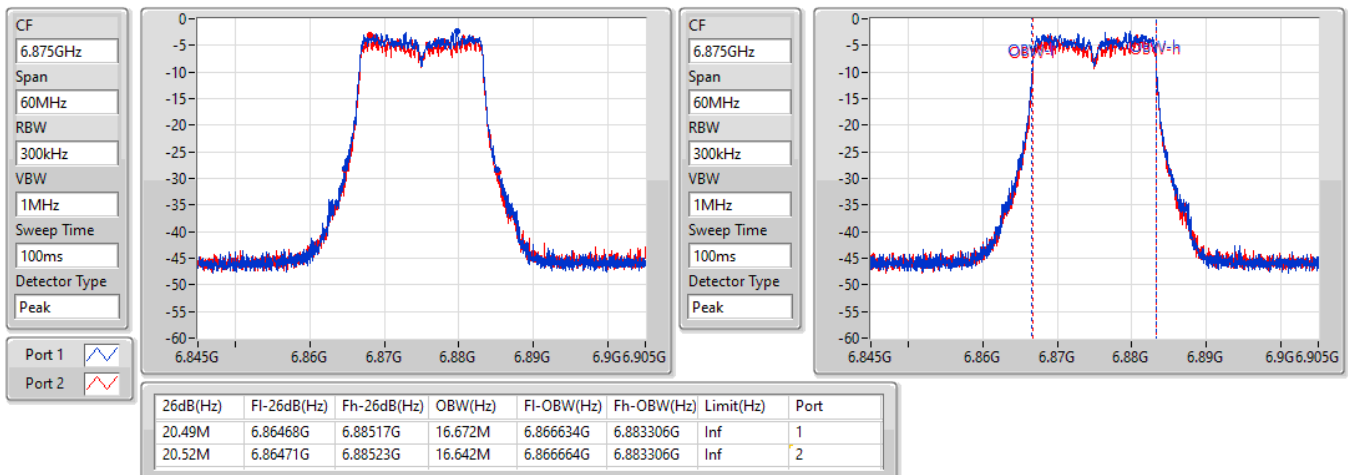


11a20_Nss1,(6Mbps)_2TX

EBW

6875MHz

01/09/2021

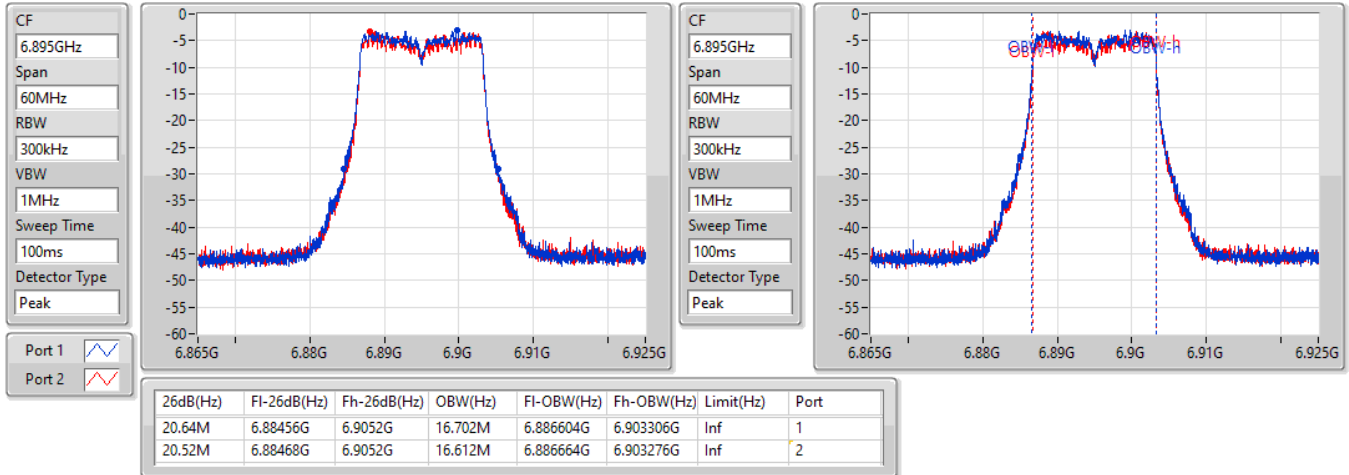


11a20_Nss1,(6Mbps)_2TX

EBW

6895MHz

01/09/2021

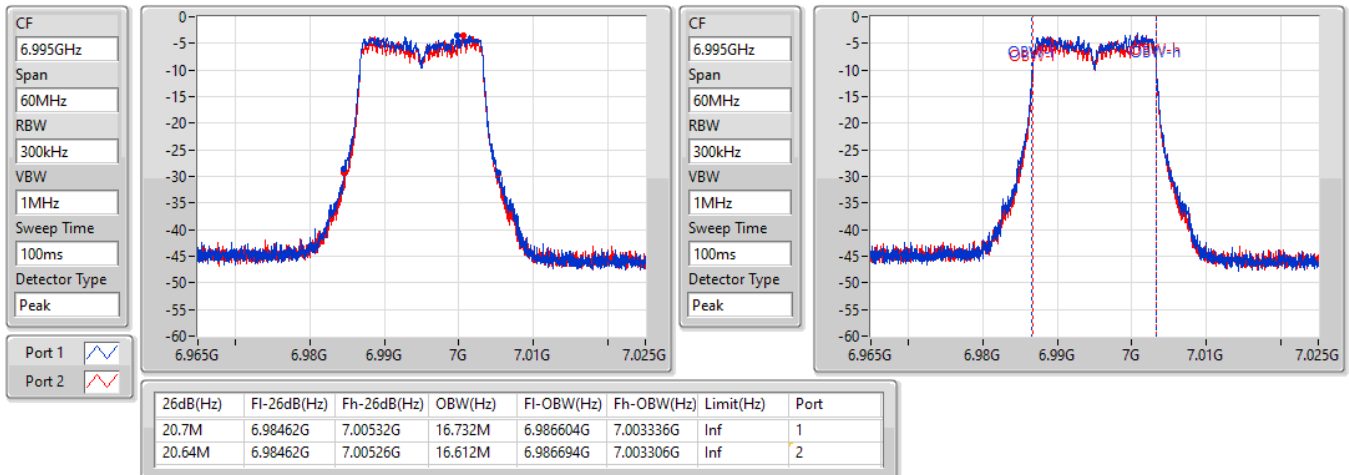


11a20_Nss1,(6Mbps)_2TX

EBW

6995MHz

01/09/2021

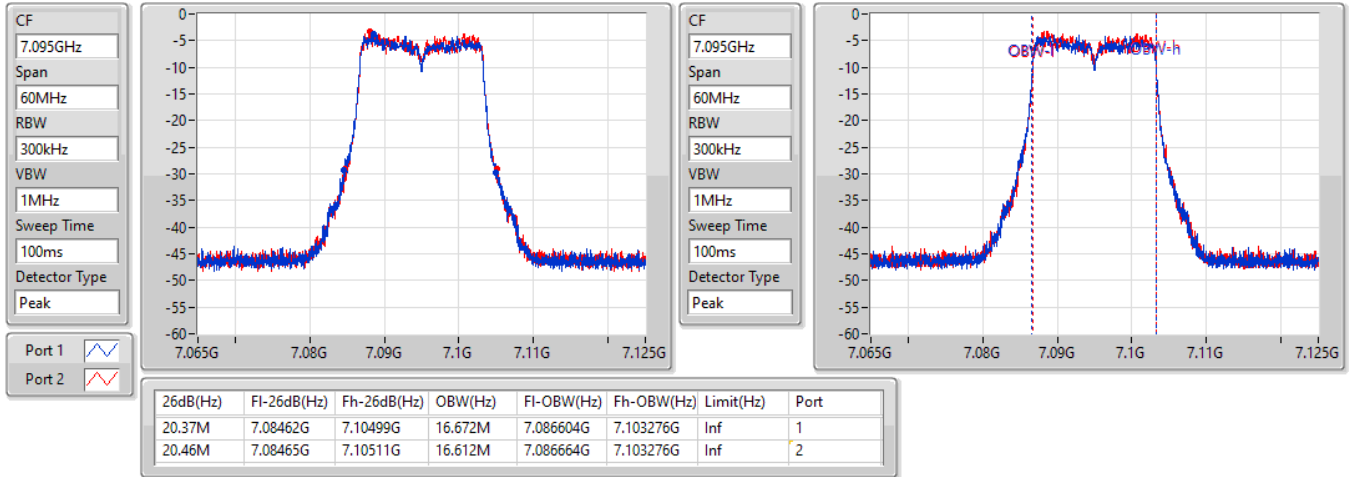


11a20_Nss1,(6Mbps)_2TX

EBW

7095MHz

01/09/2021

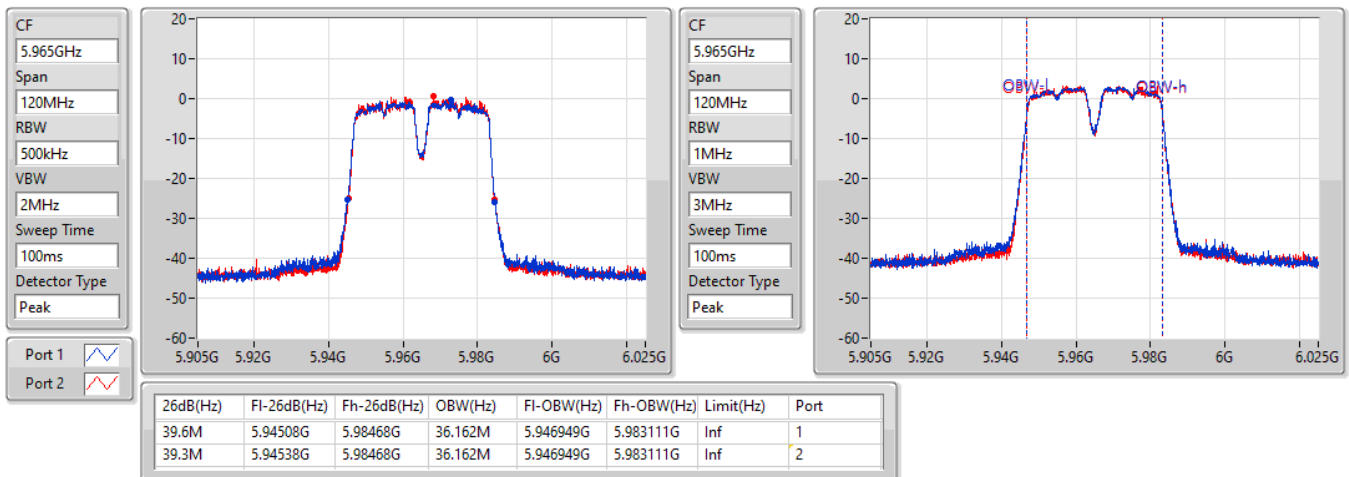


11a40_Nss1,(6Mbps)_2TX

EBW

5965MHz

01/09/2021

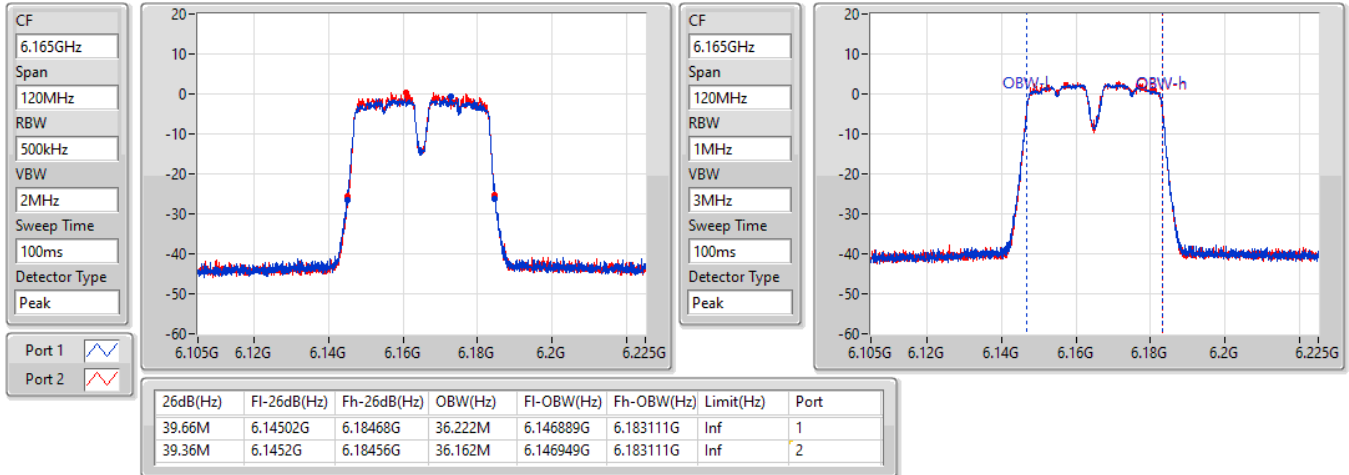


11a40_Nss1,(6Mbps)_2TX

EBW

6165MHz

01/09/2021

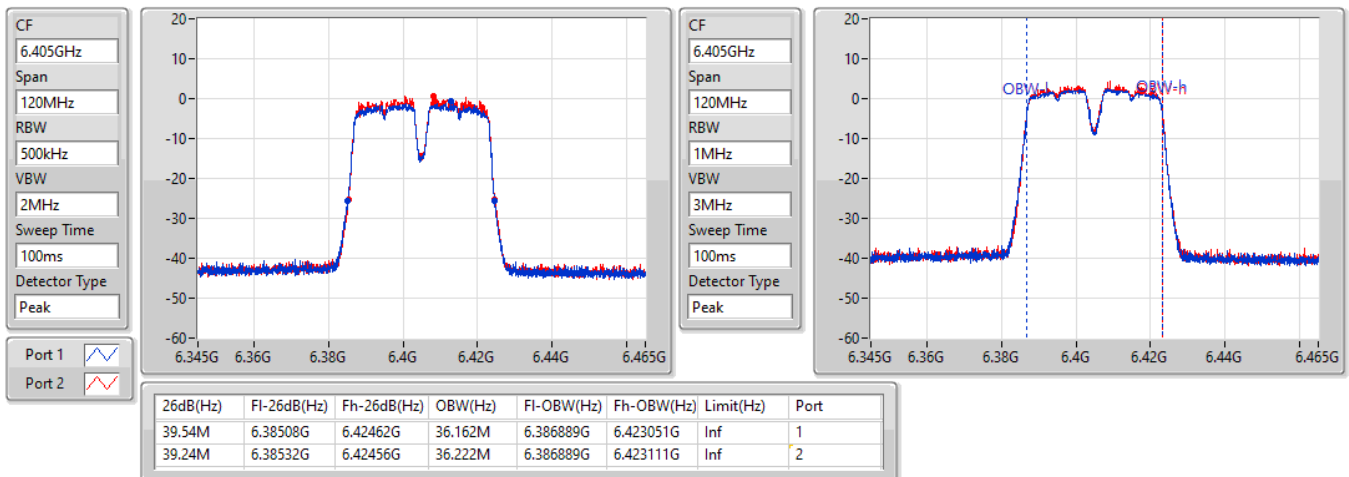


11a40_Nss1,(6Mbps)_2TX

EBW

6405MHz

01/09/2021

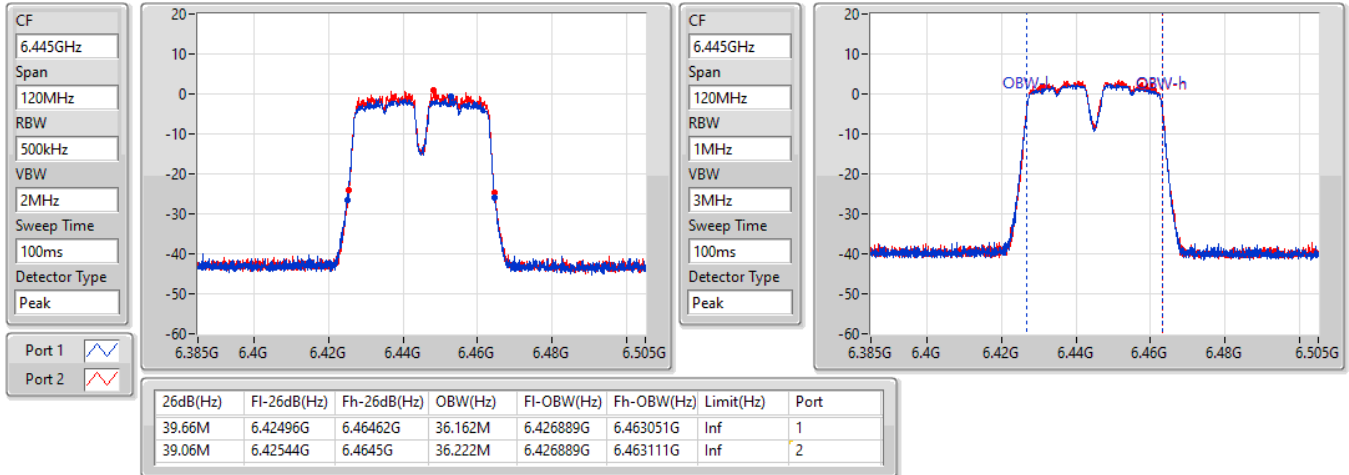


11a40_Nss1,(6Mbps)_2TX

EBW

6445MHz

01/09/2021

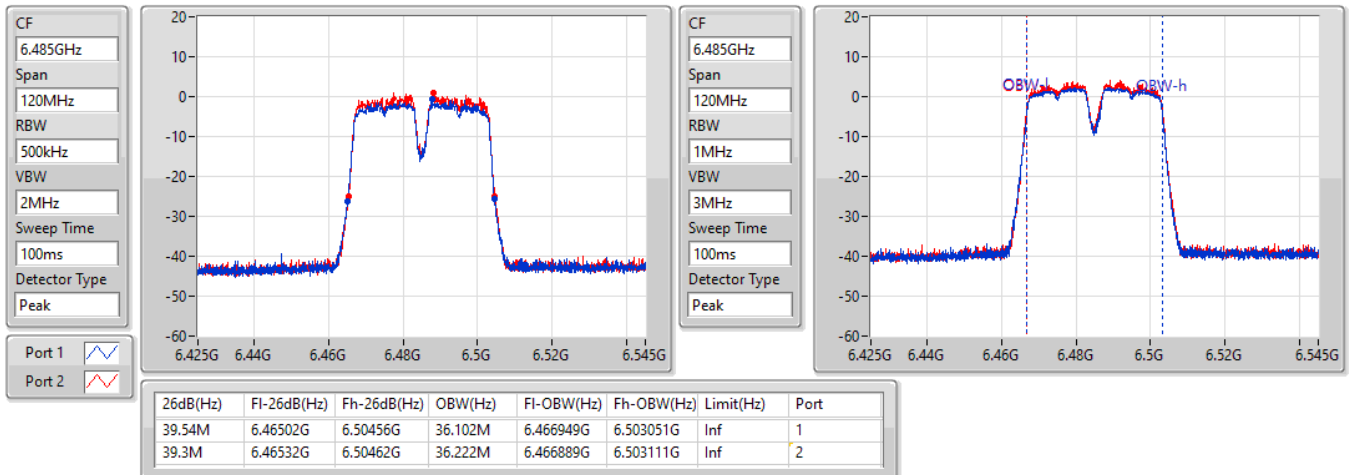


11a40_Nss1,(6Mbps)_2TX

EBW

6485MHz

01/09/2021

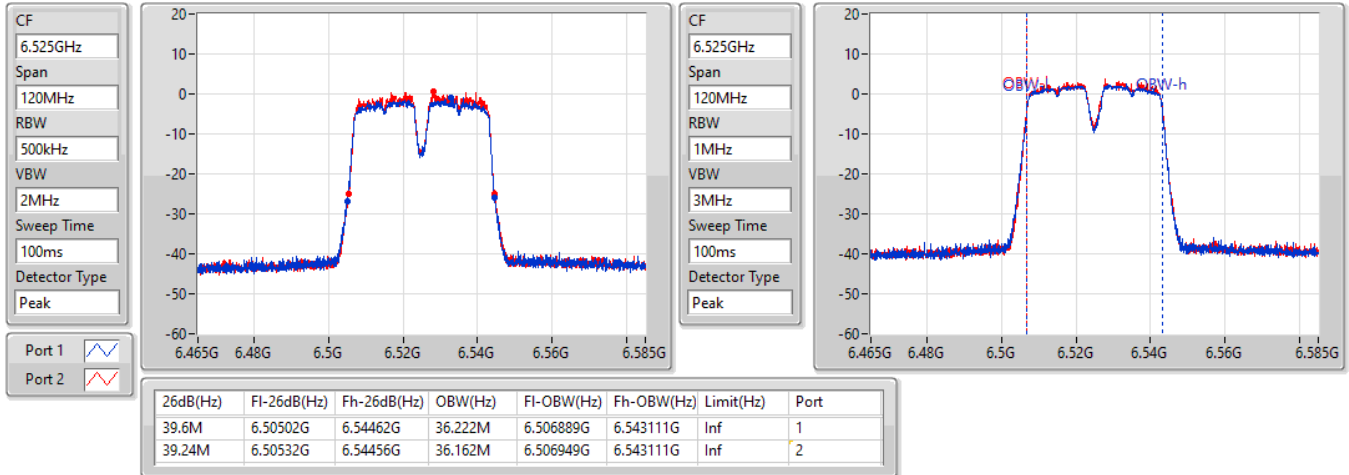


11a40_Nss1,(6Mbps)_2TX

EBW

6525MHz

01/09/2021

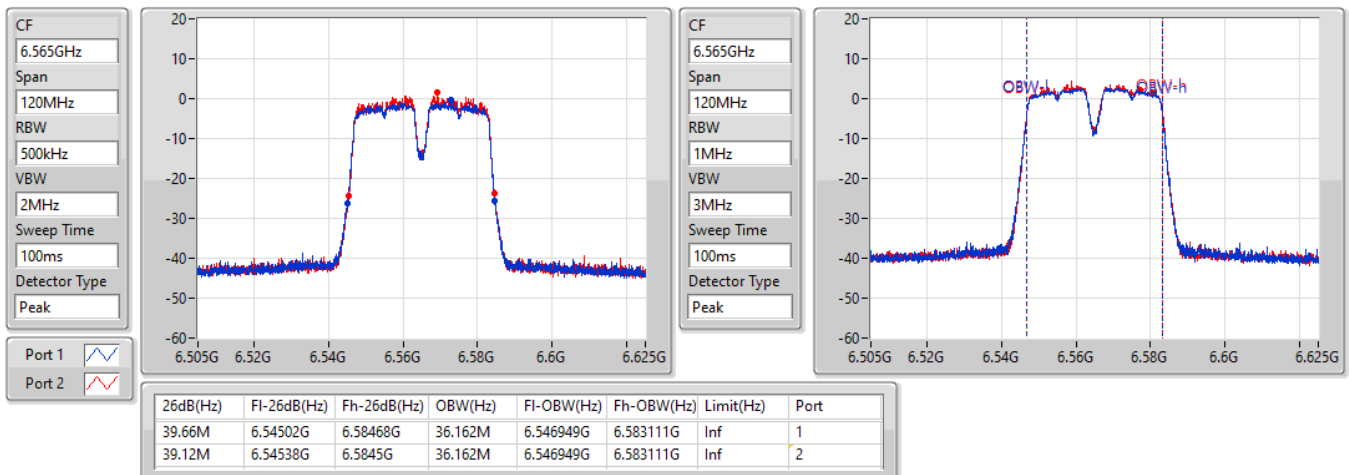


11a40_Nss1,(6Mbps)_2TX

EBW

6565MHz

01/09/2021

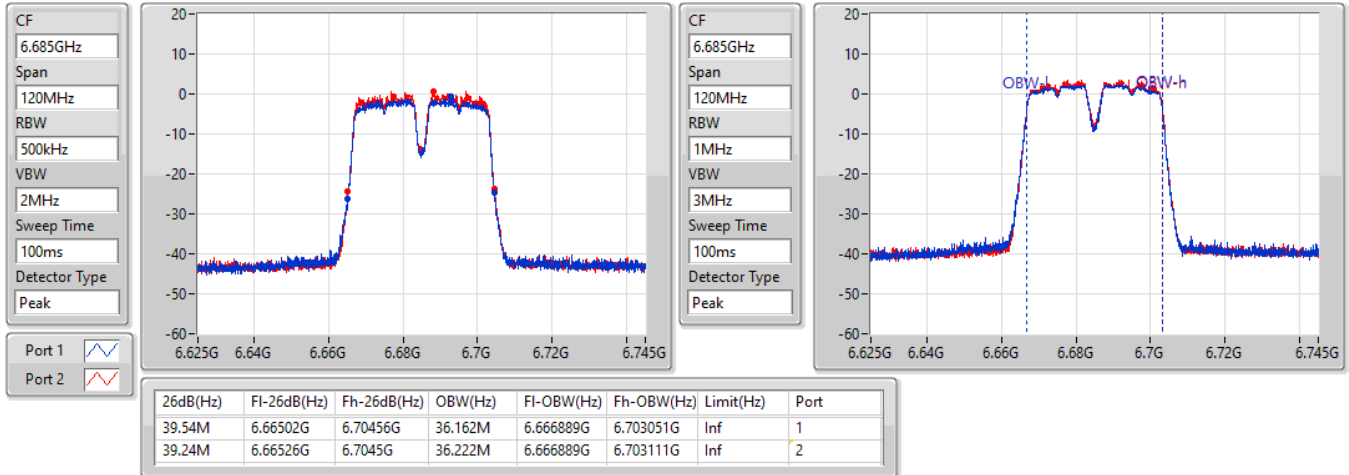


11a40_Nss1,(6Mbps)_2TX

EBW

6685MHz

01/09/2021

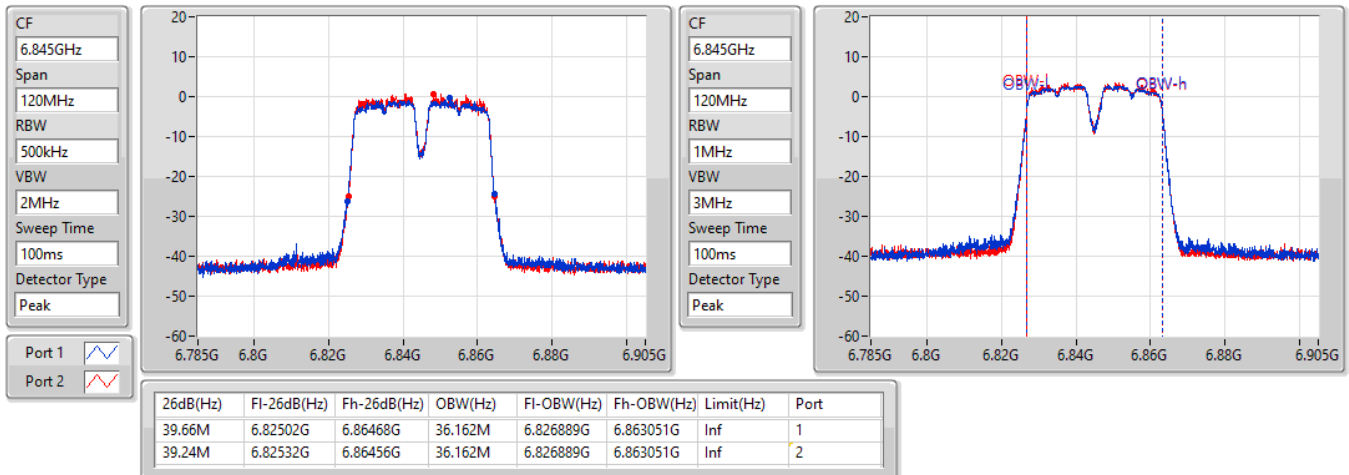


11a40_Nss1,(6Mbps)_2TX

EBW

6845MHz

01/09/2021

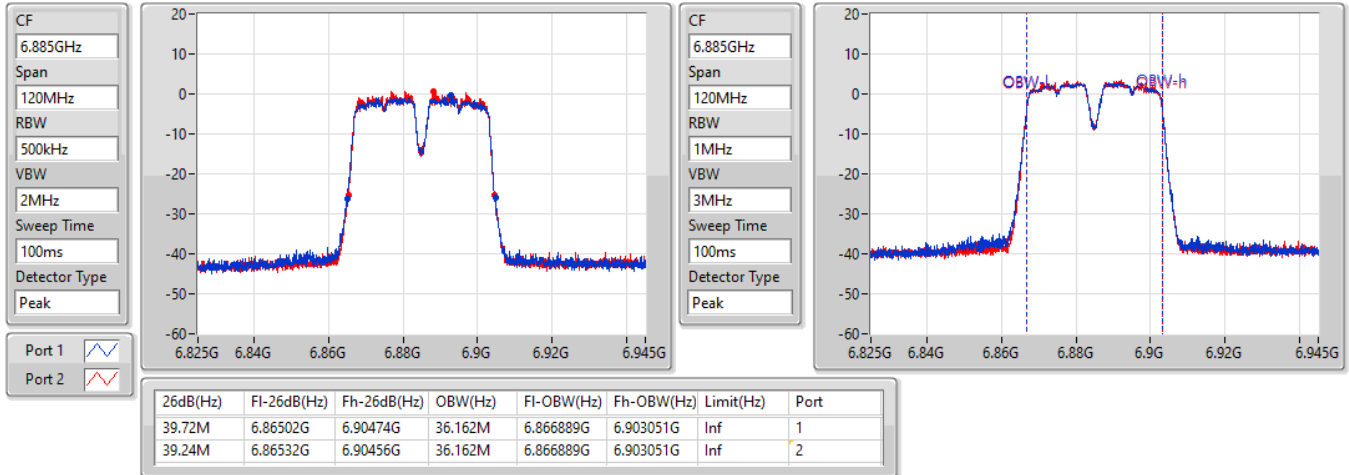


11a40_Nss1,(6Mbps)_2TX

EBW

6885MHz

01/09/2021

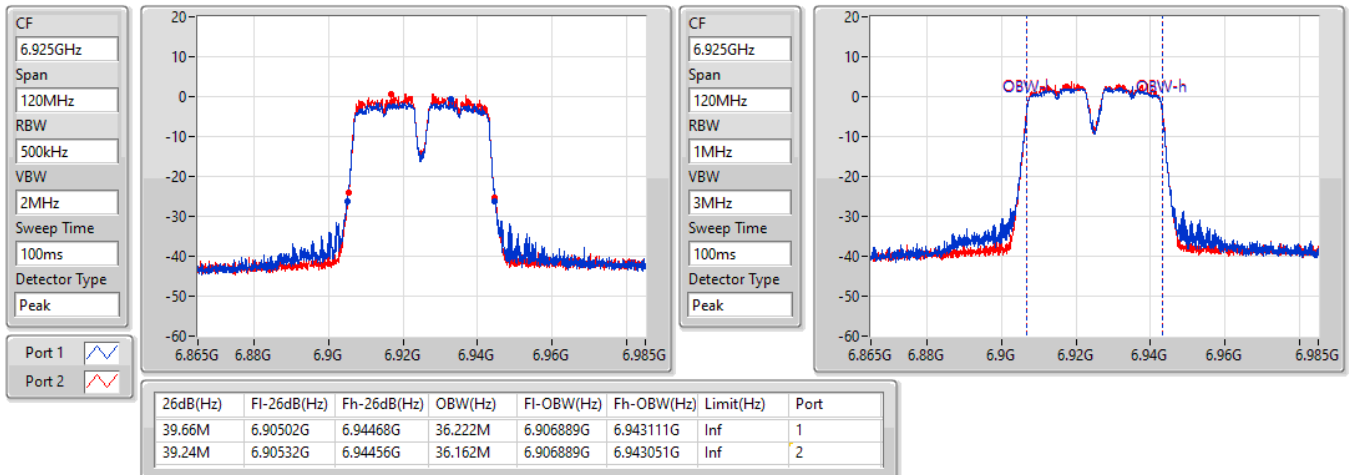


11a40_Nss1,(6Mbps)_2TX

EBW

6925MHz

01/09/2021

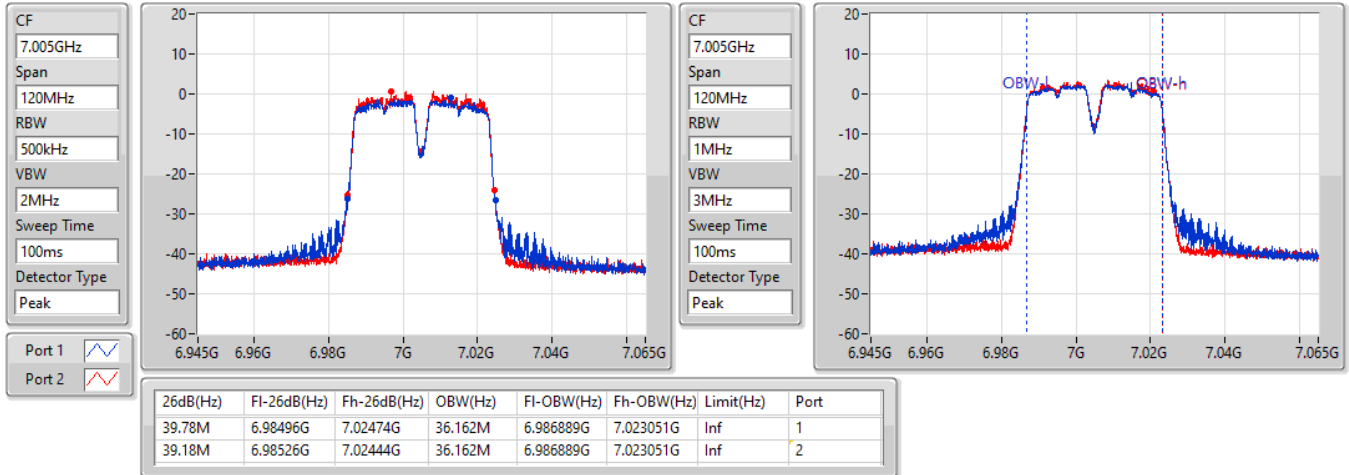


11a40_Nss1,(6Mbps)_2TX

EBW

7005MHz

01/09/2021

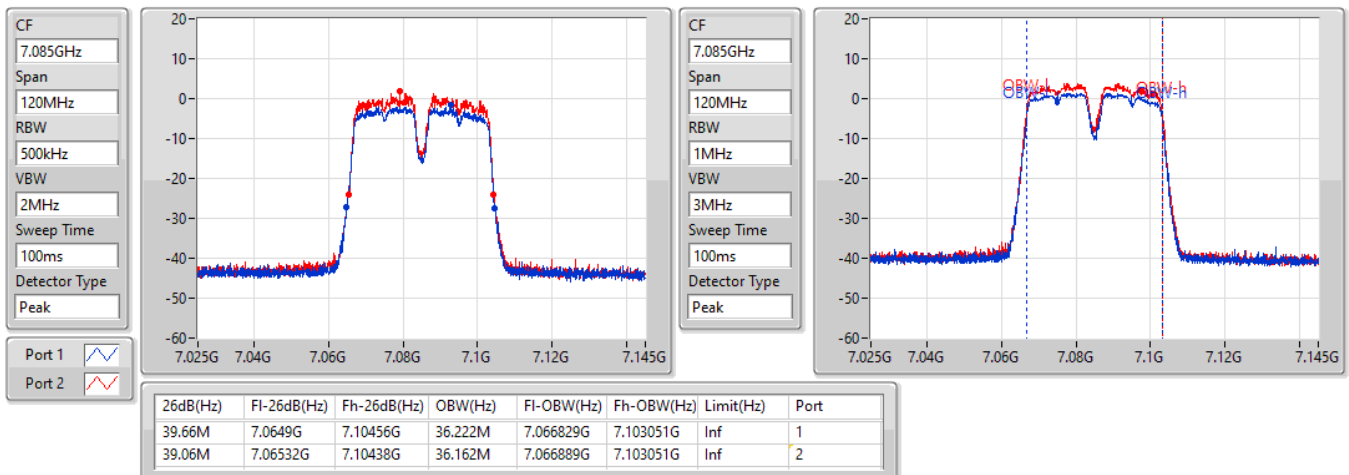


11a40_Nss1,(6Mbps)_2TX

EBW

7085MHz

01/09/2021

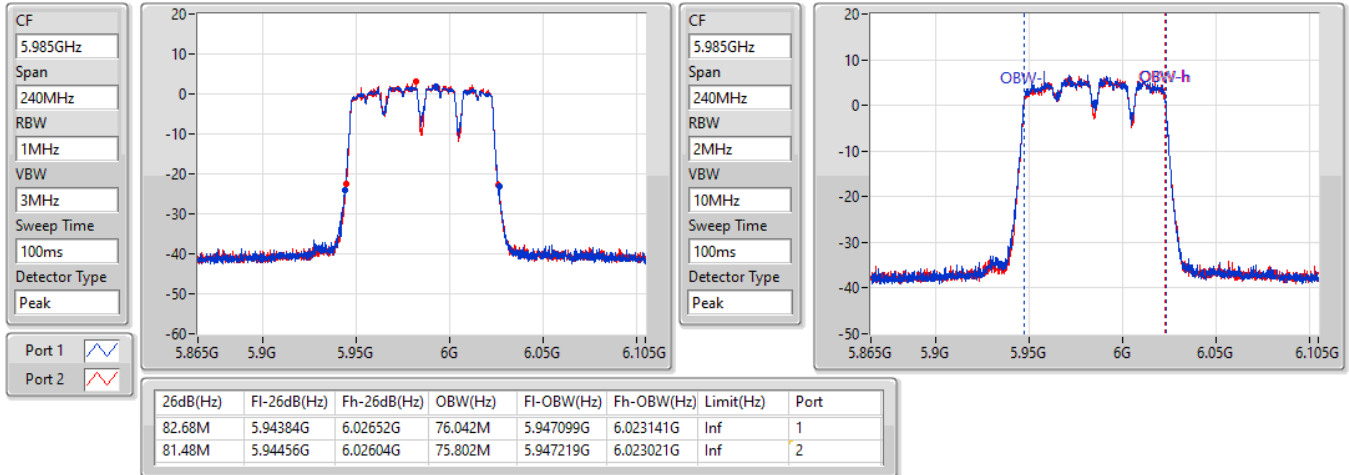


11a80_Nss1,(6Mbps)_2TX

EBW

5985MHz

01/09/2021

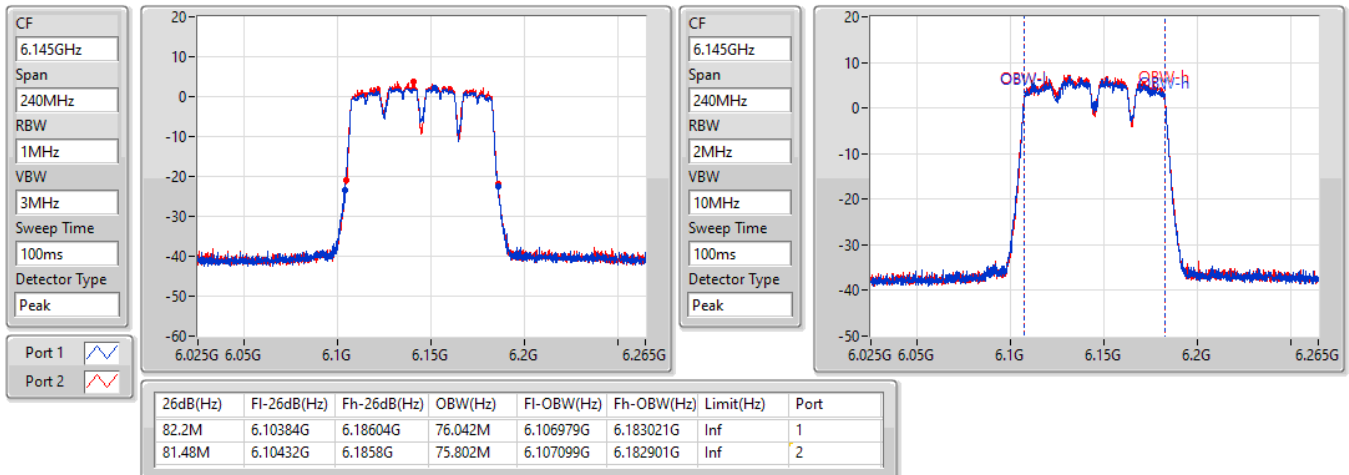


11a80_Nss1,(6Mbps)_2TX

EBW

6145MHz

01/09/2021

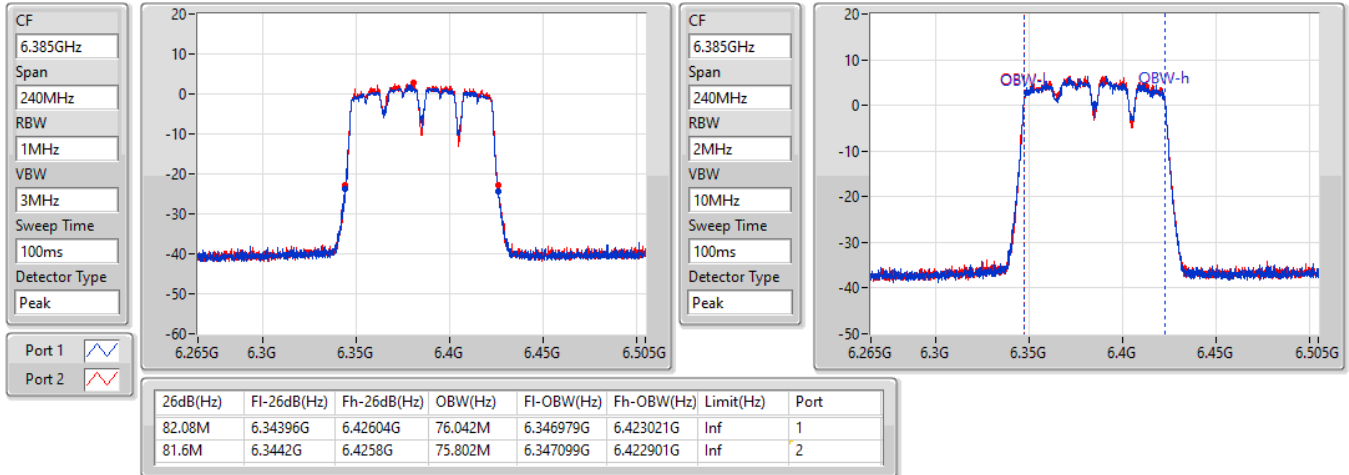


11a80_Nss1,(6Mbps)_2TX

EBW

6385MHz

01/09/2021

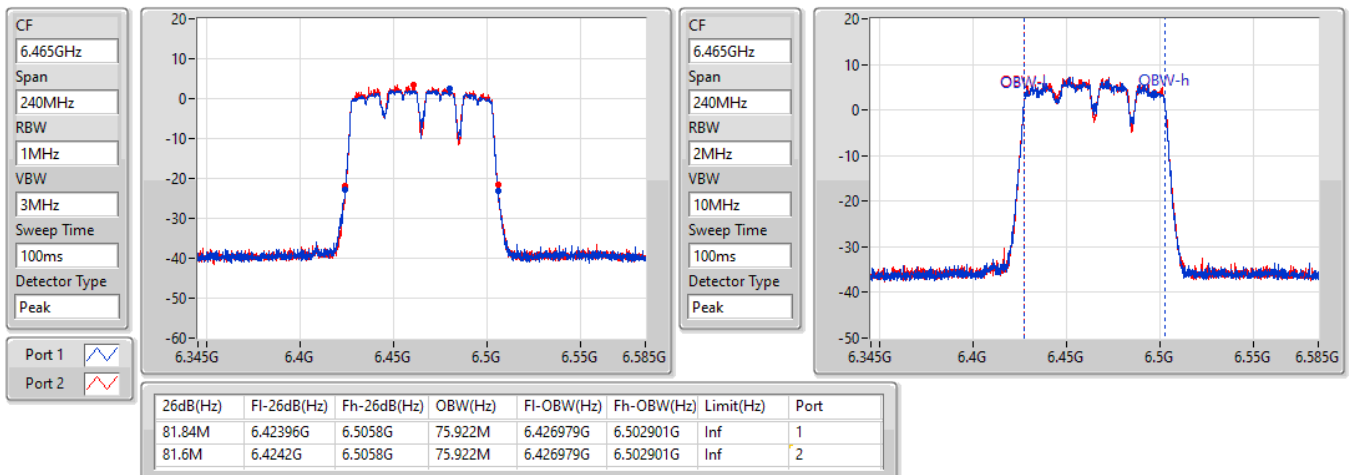


11a80_Nss1,(6Mbps)_2TX

EBW

6465MHz

01/09/2021

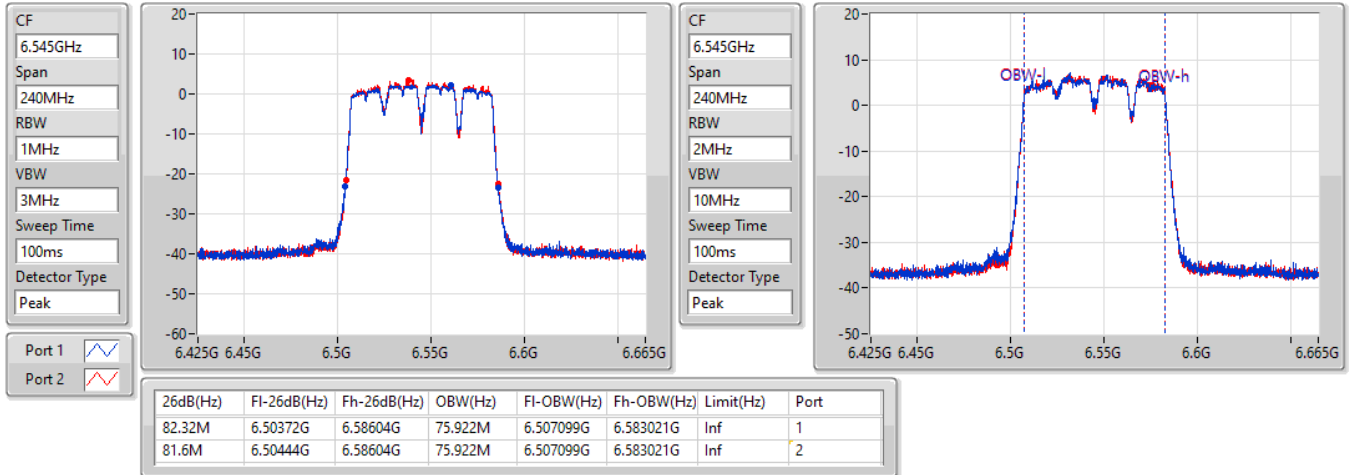


11a80_Nss1,(6Mbps)_2TX

EBW

6545MHz

01/09/2021

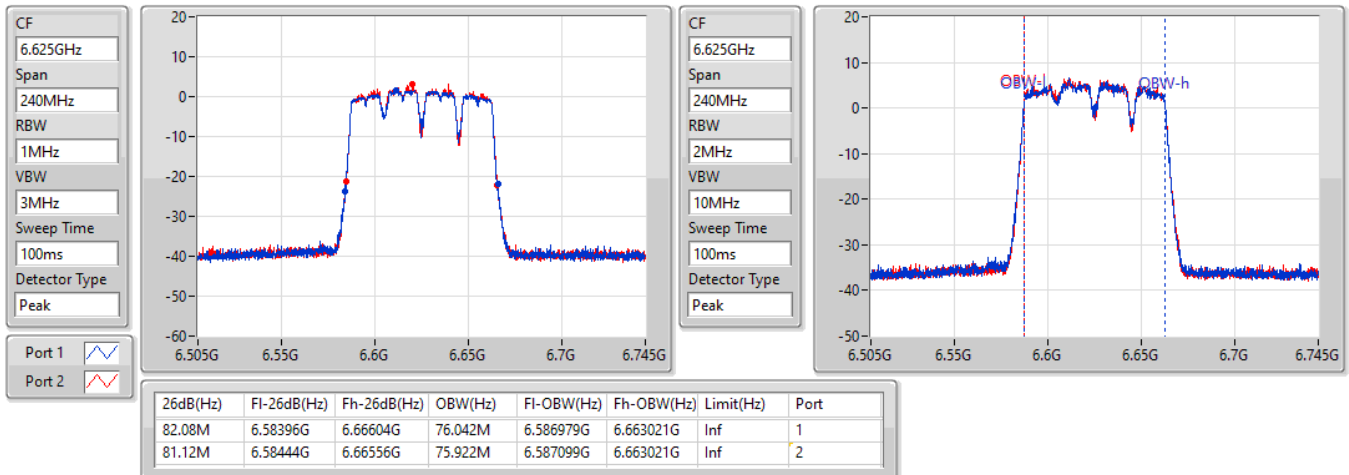


11a80_Nss1,(6Mbps)_2TX

EBW

6625MHz

01/09/2021

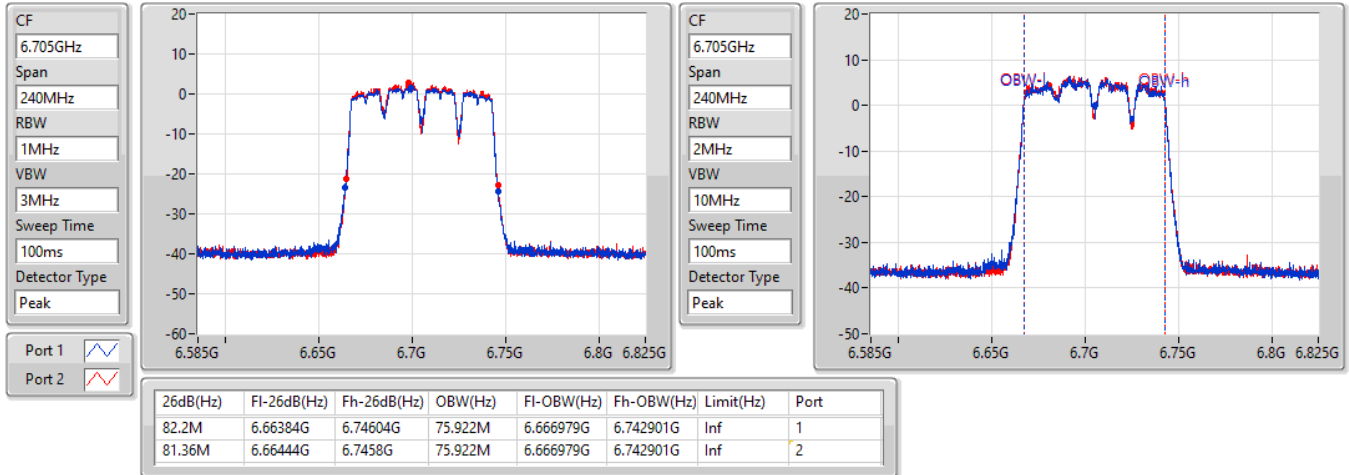


11a80_Nss1,(6Mbps)_2TX

EBW

6705MHz

01/09/2021

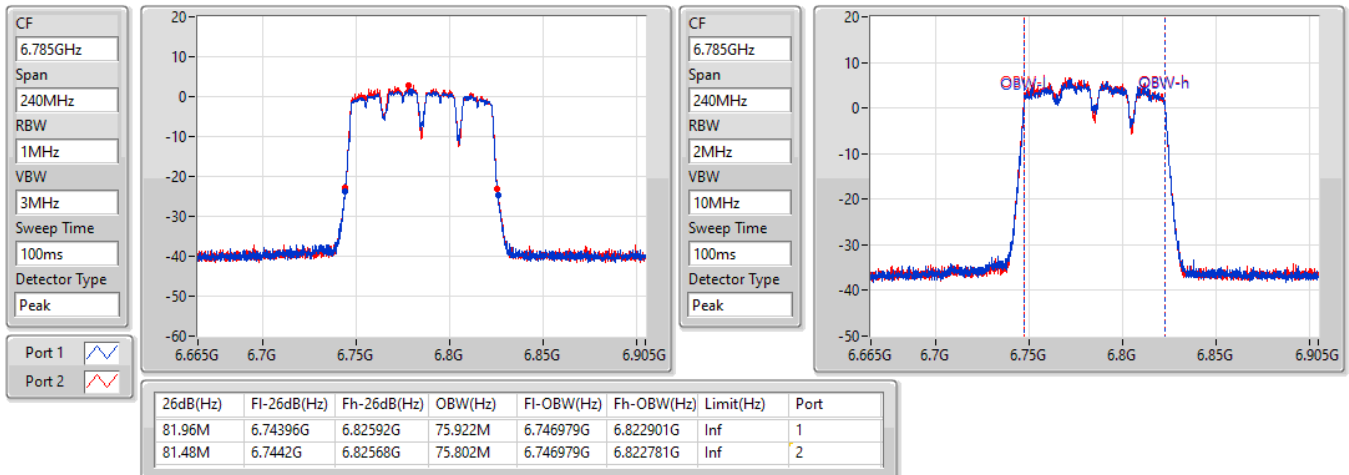


11a80_Nss1,(6Mbps)_2TX

EBW

6785MHz

01/09/2021

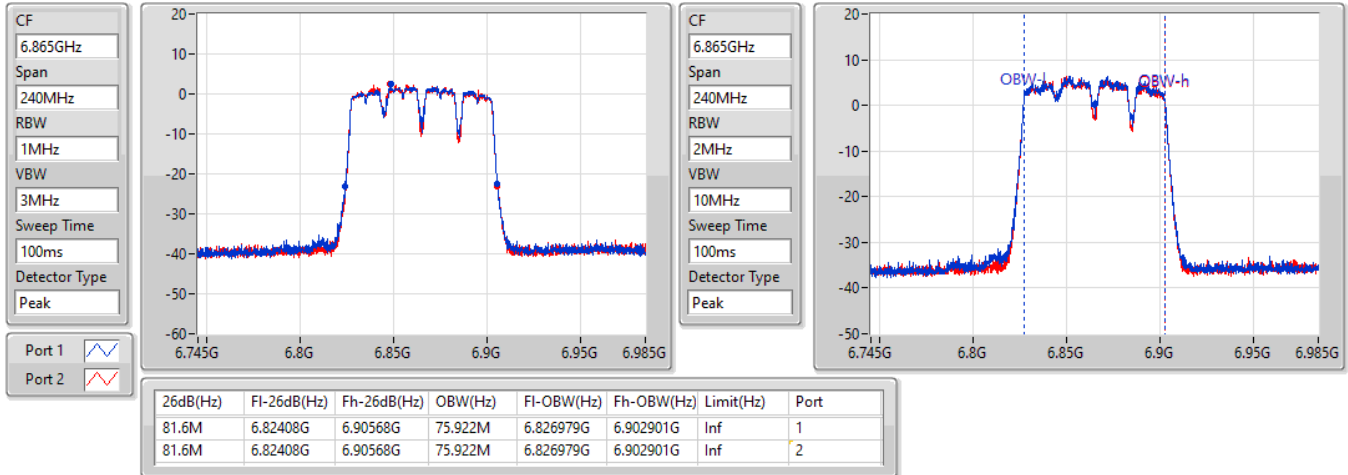


11a80_Nss1,(6Mbps)_2TX

EBW

6865MHz

01/09/2021

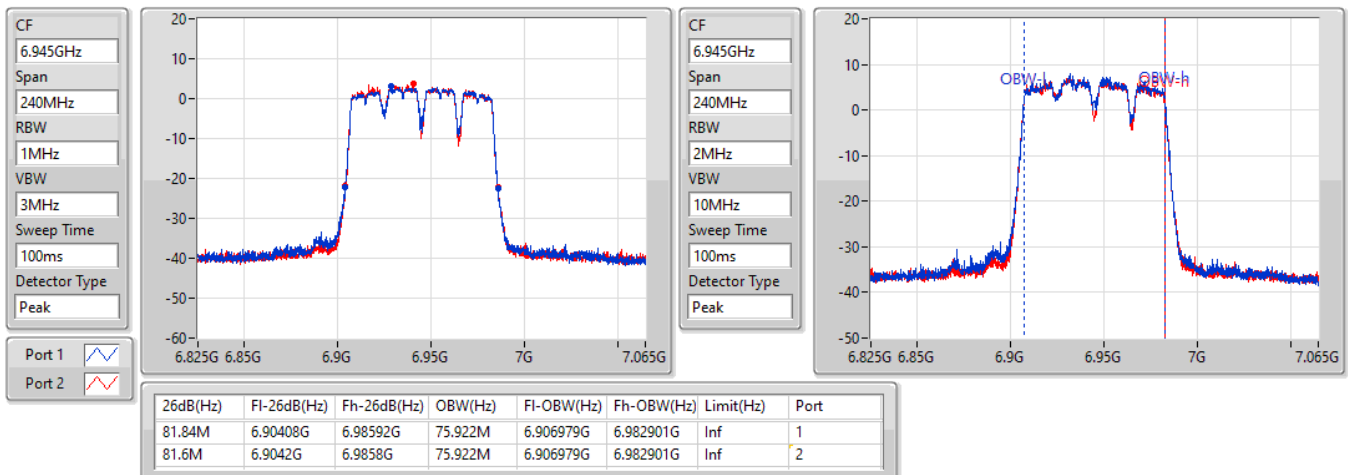


11a80_Nss1,(6Mbps)_2TX

EBW

6945MHz

01/09/2021

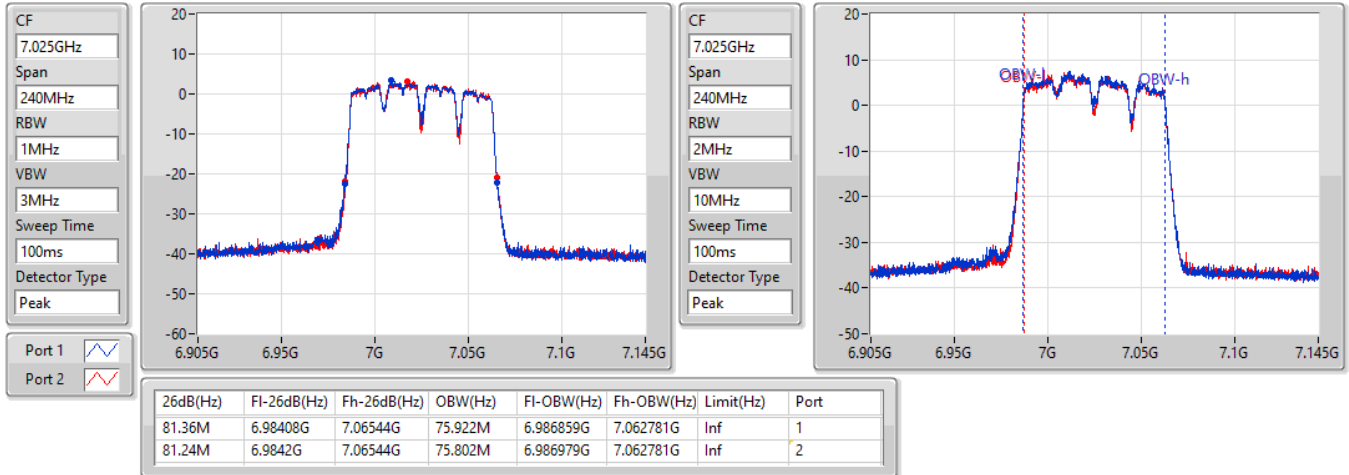


11a80_Nss1,(6Mbps)_2TX

EBW

7025MHz

01/09/2021

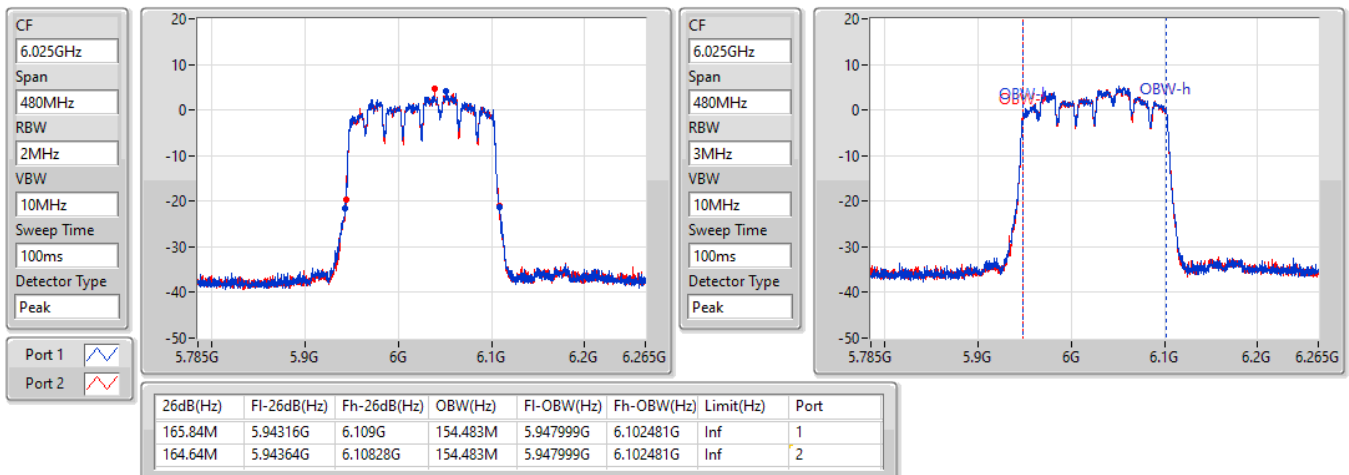


11a160_Nss1,(6Mbps)_2TX

EBW

6025MHz

01/09/2021

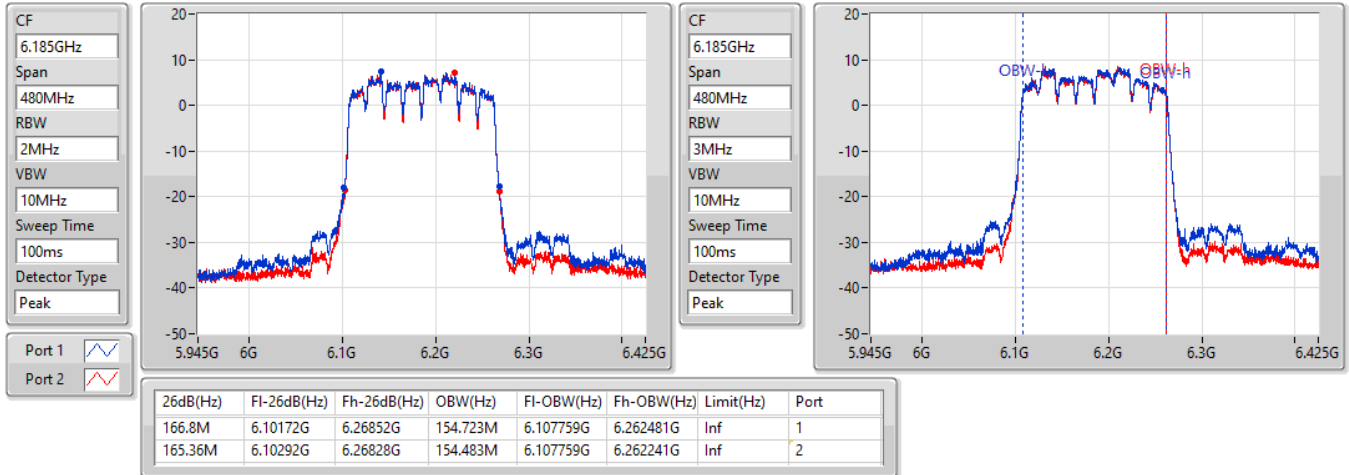


11a160_Nss1,(6Mbps)_2TX

EBW

6185MHz

01/09/2021

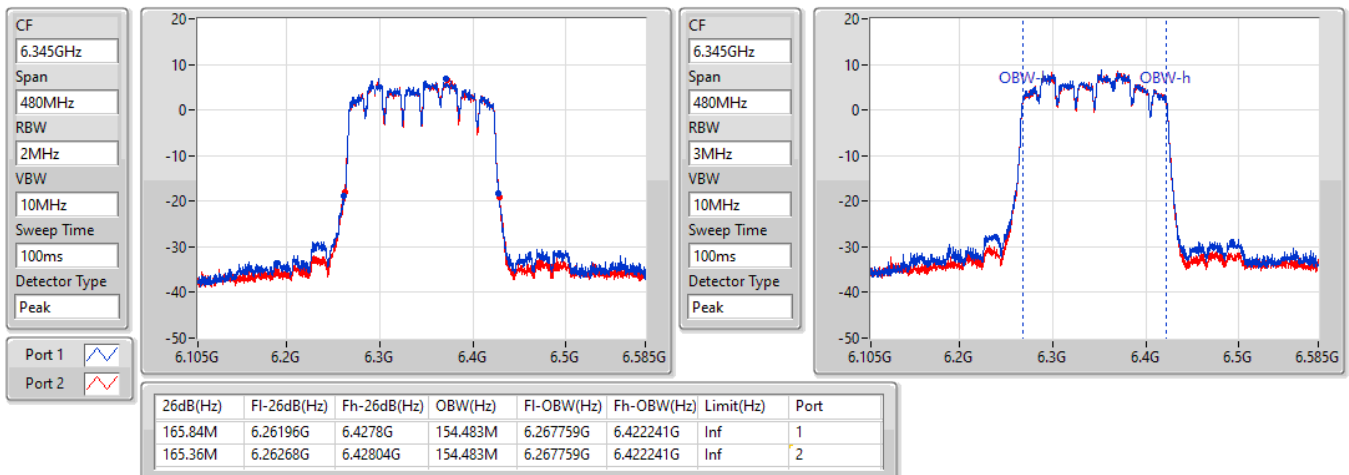


11a160_Nss1,(6Mbps)_2TX

EBW

6345MHz

01/09/2021

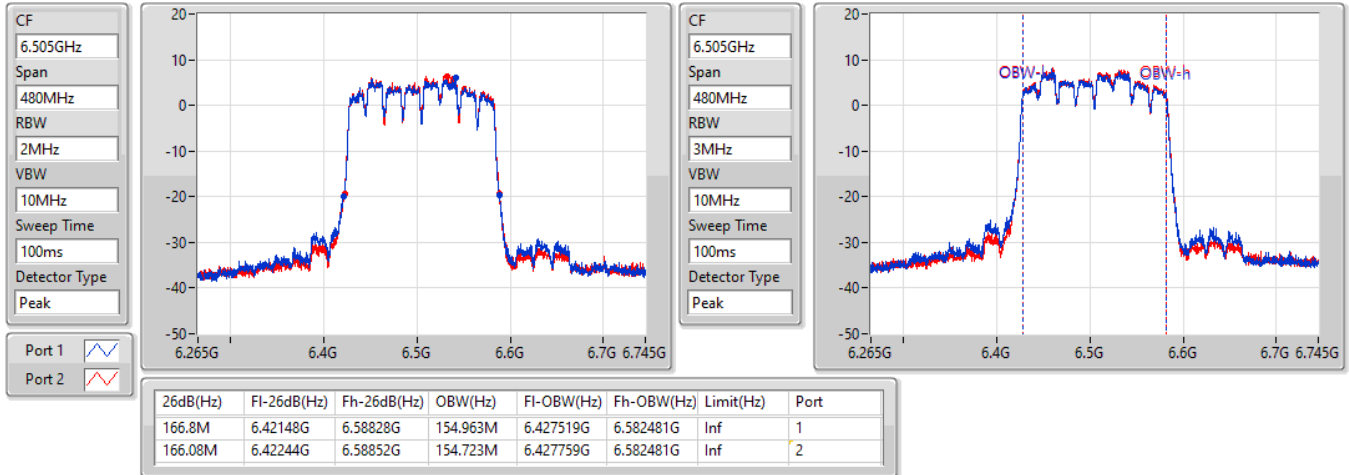


11a160_Nss1,(6Mbps)_2TX

EBW

6505MHz

01/09/2021

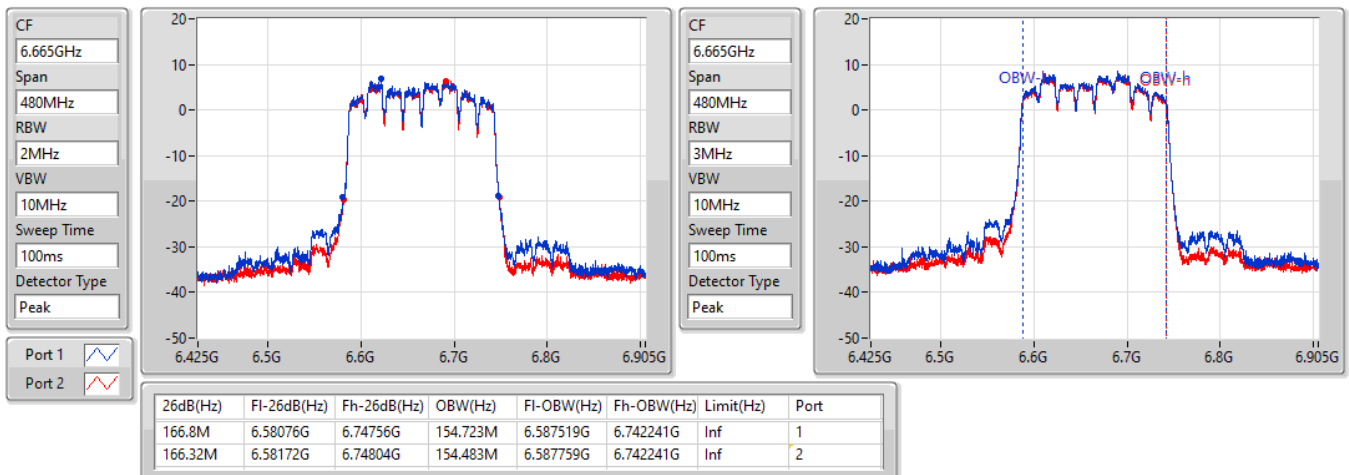


11a160_Nss1,(6Mbps)_2TX

EBW

6665MHz

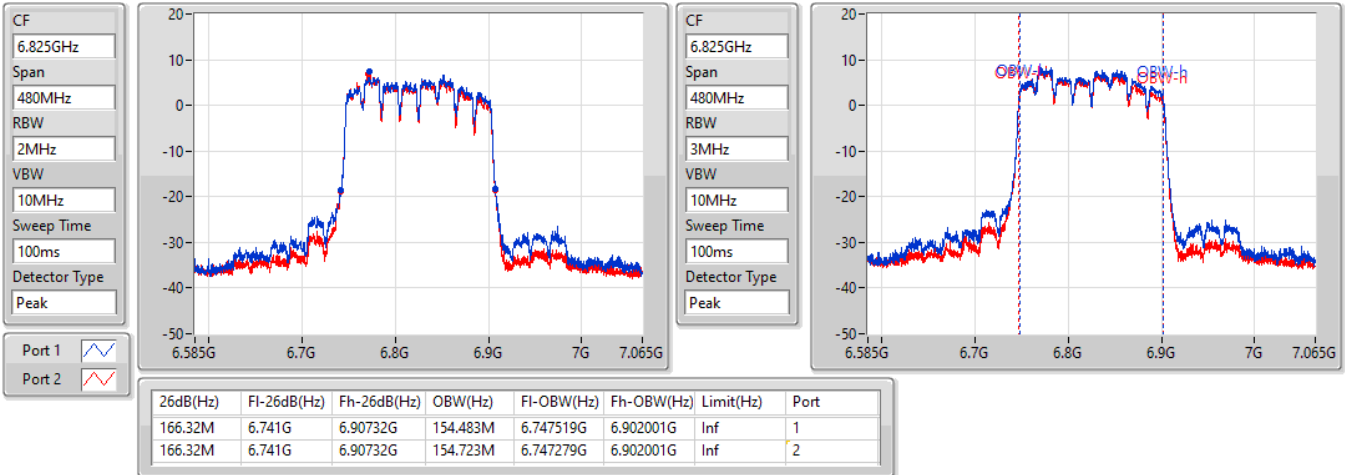
01/09/2021



11a160_Nss1,(6Mbps)_2TX

6825MHz

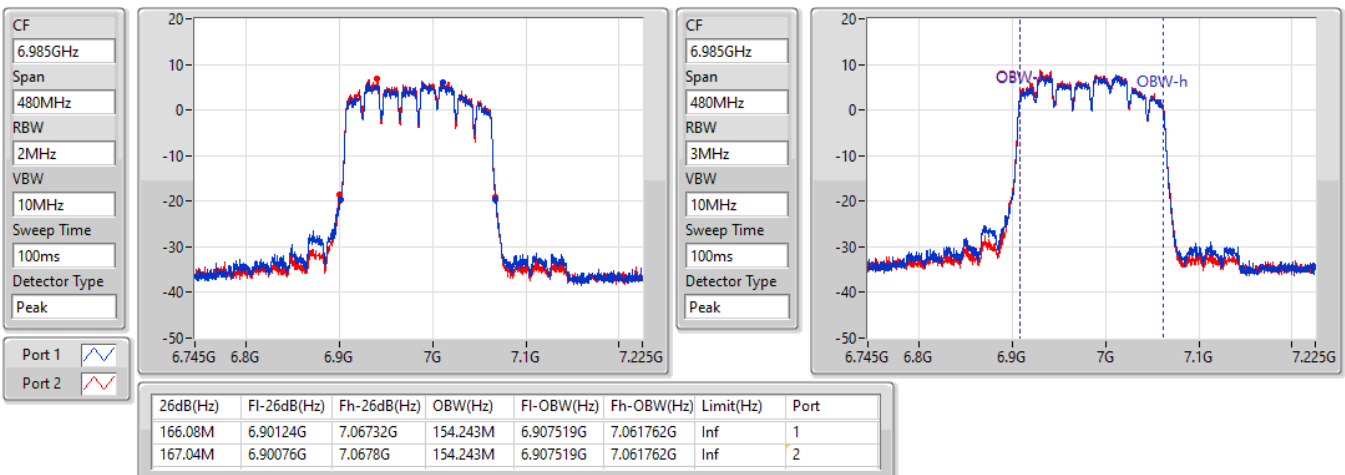
01/09/2021



11a160_Nss1,(6Mbps)_2TX

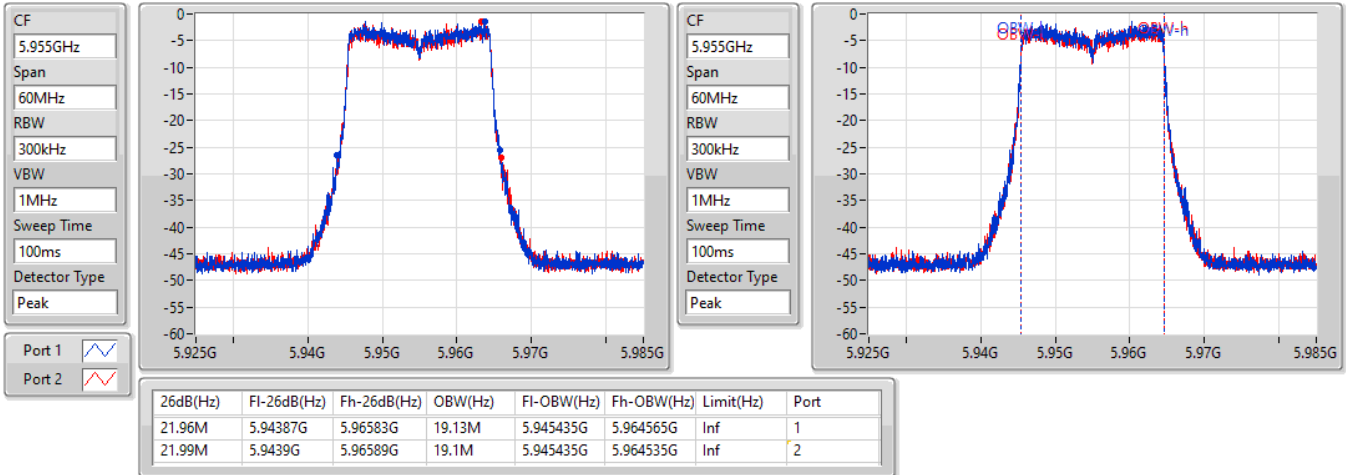
6985MHz

01/09/2021

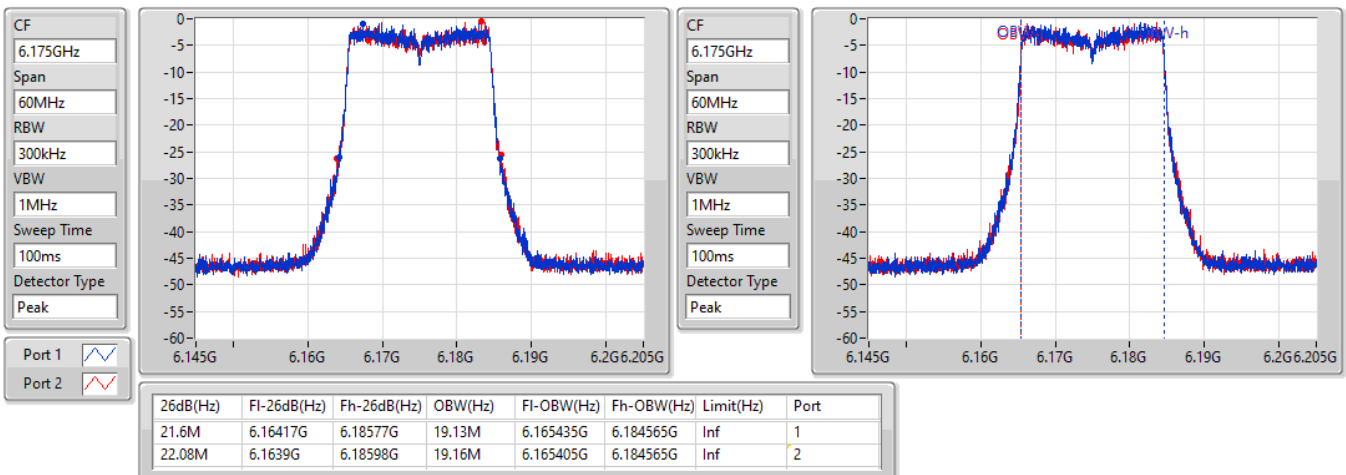


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
5955MHz

01/09/2021


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6175MHz

01/09/2021

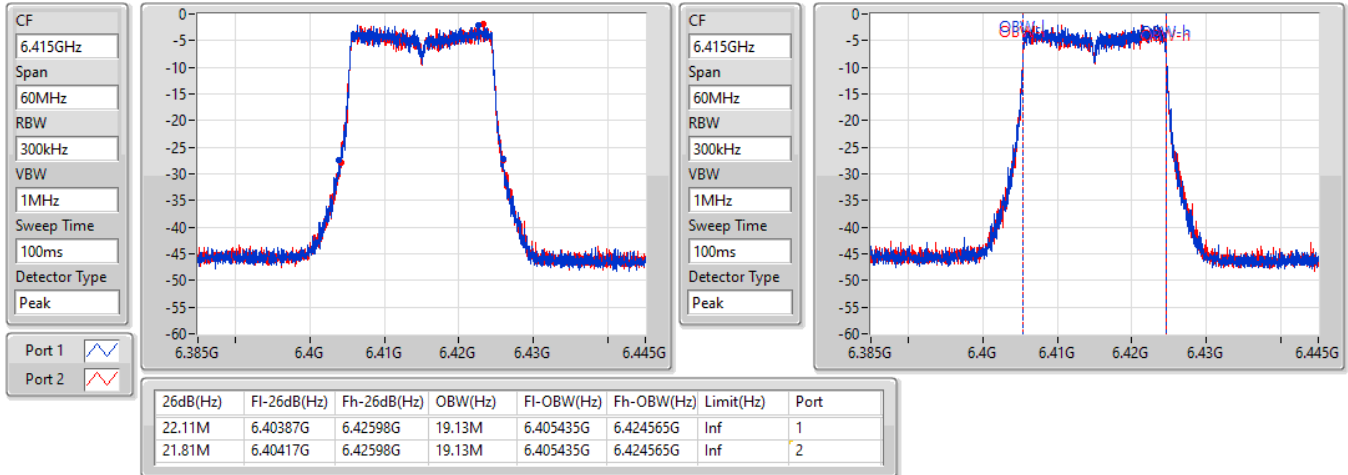


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6415MHz

01/09/2021

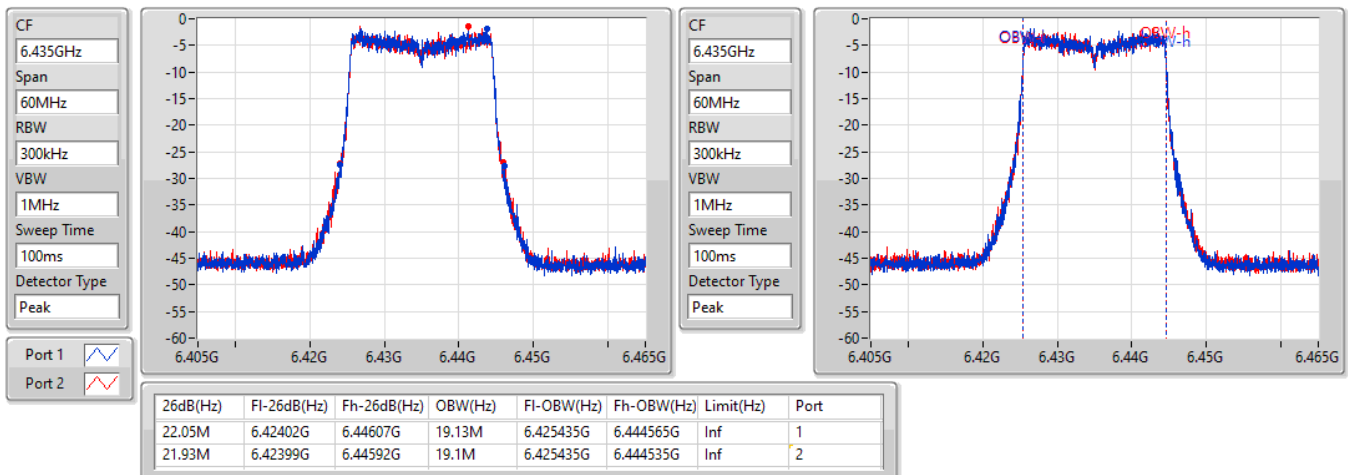


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

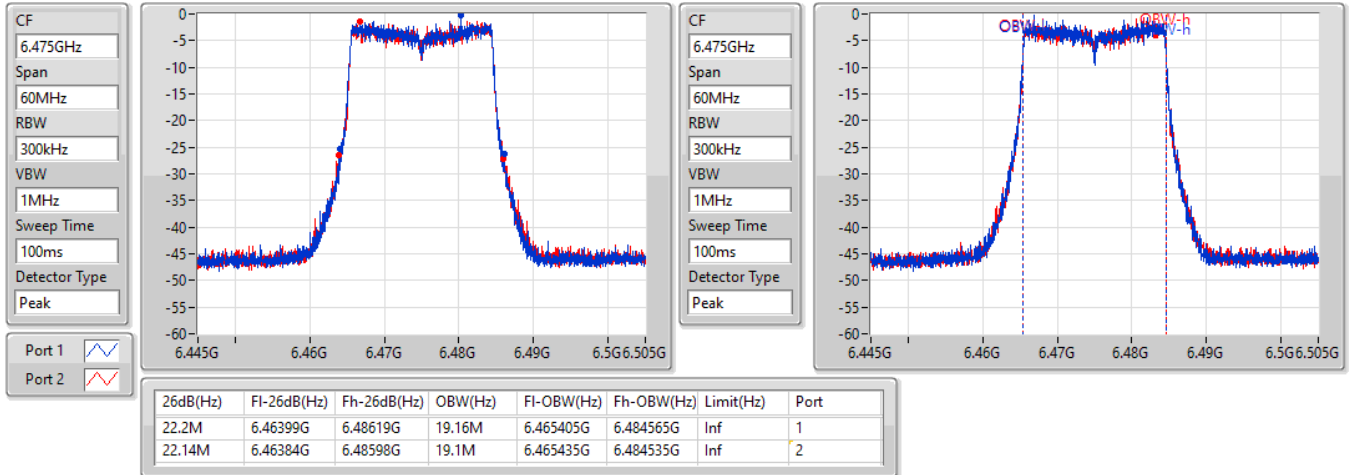
6435MHz

01/09/2021

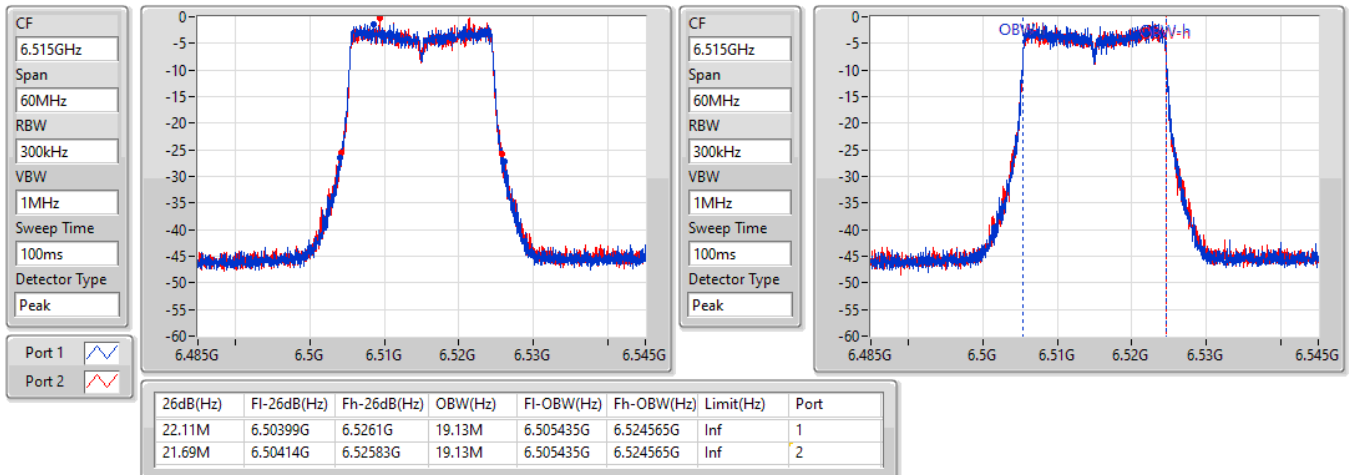


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6475MHz

01/09/2021


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
6515MHz

01/09/2021

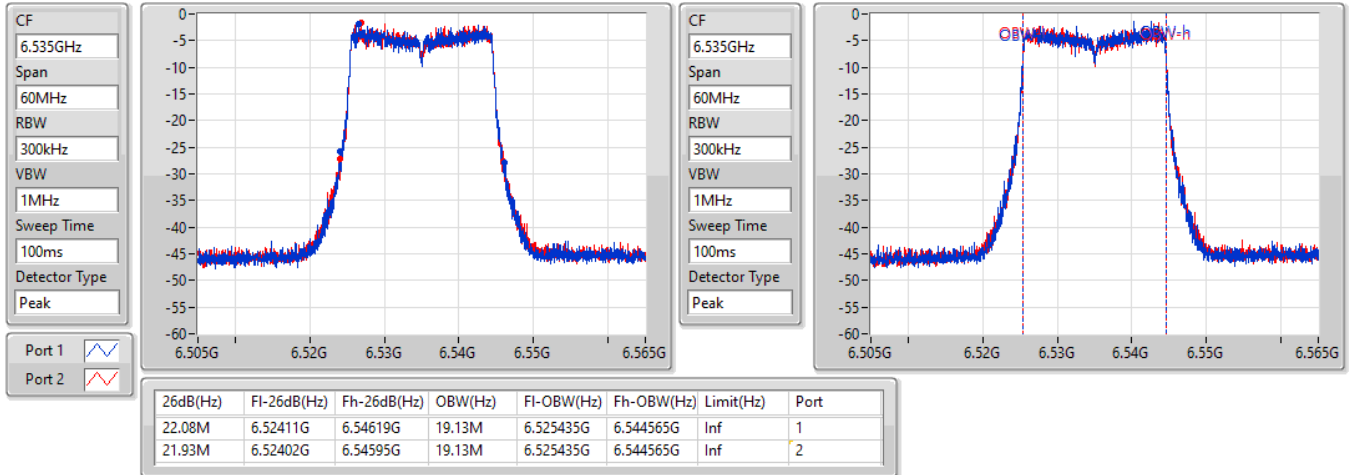


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6535MHz

01/09/2021

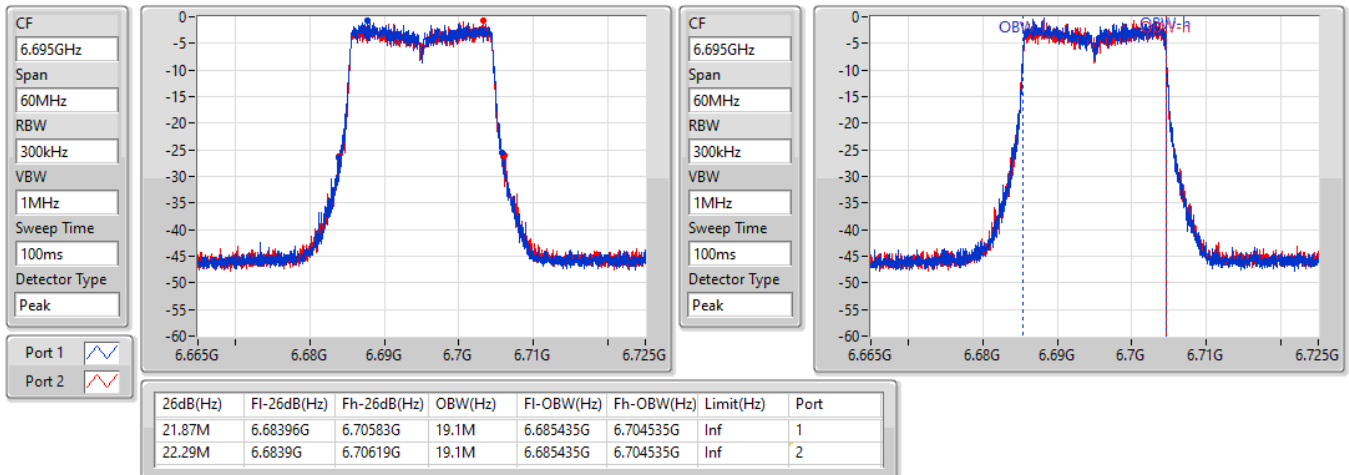


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6695MHz

01/09/2021

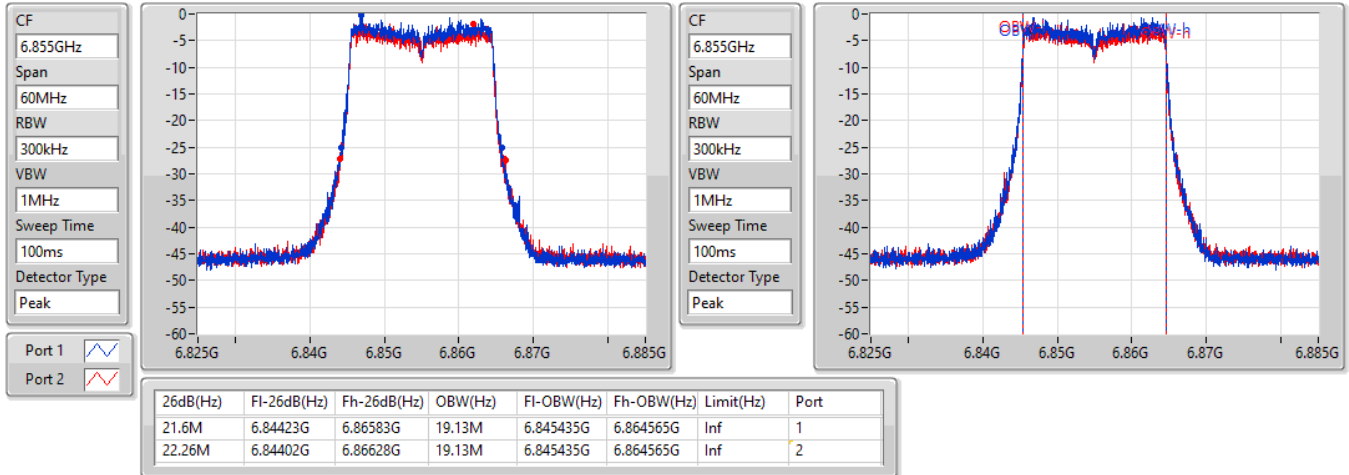


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6855MHz

01/09/2021

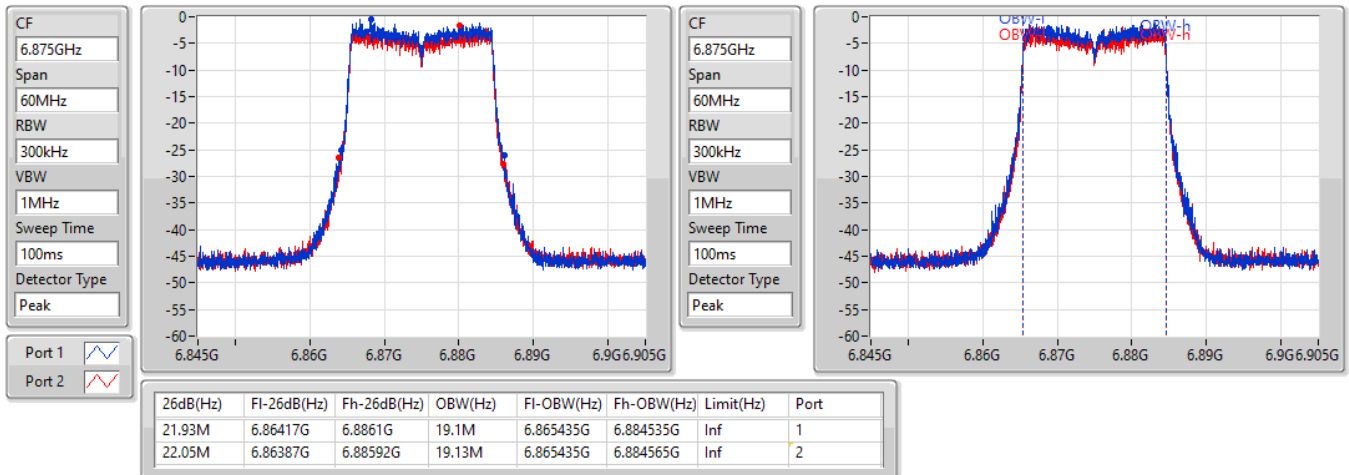


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6875MHz

01/09/2021

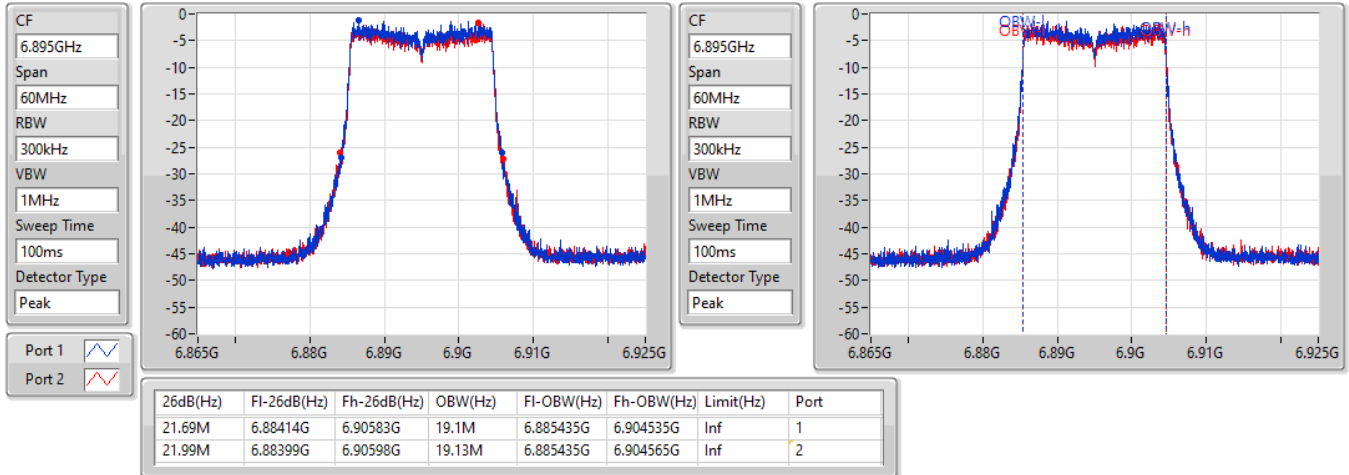


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6895MHz

01/09/2021

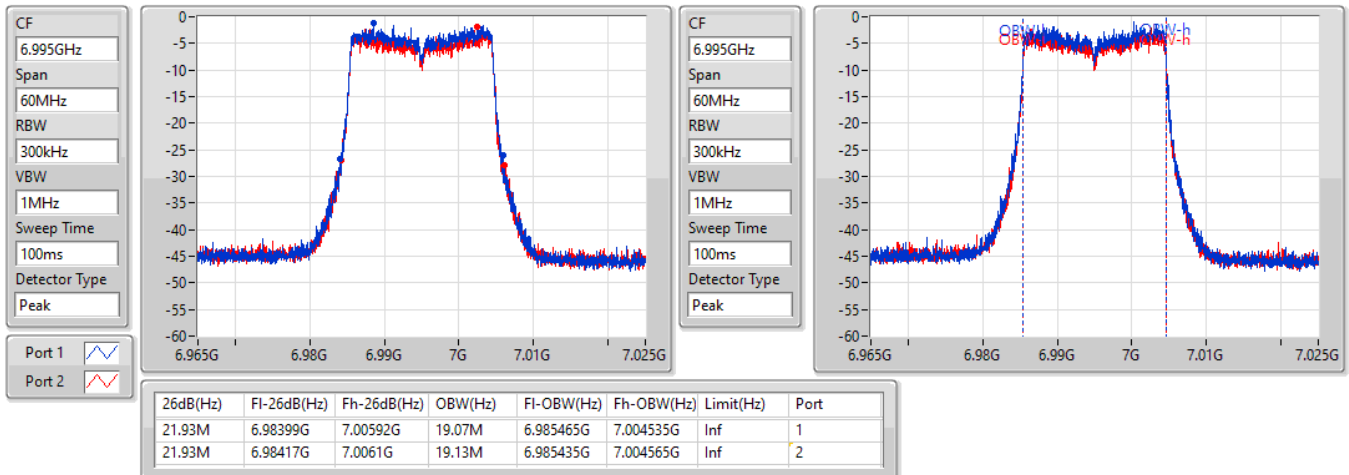


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

6995MHz

01/09/2021

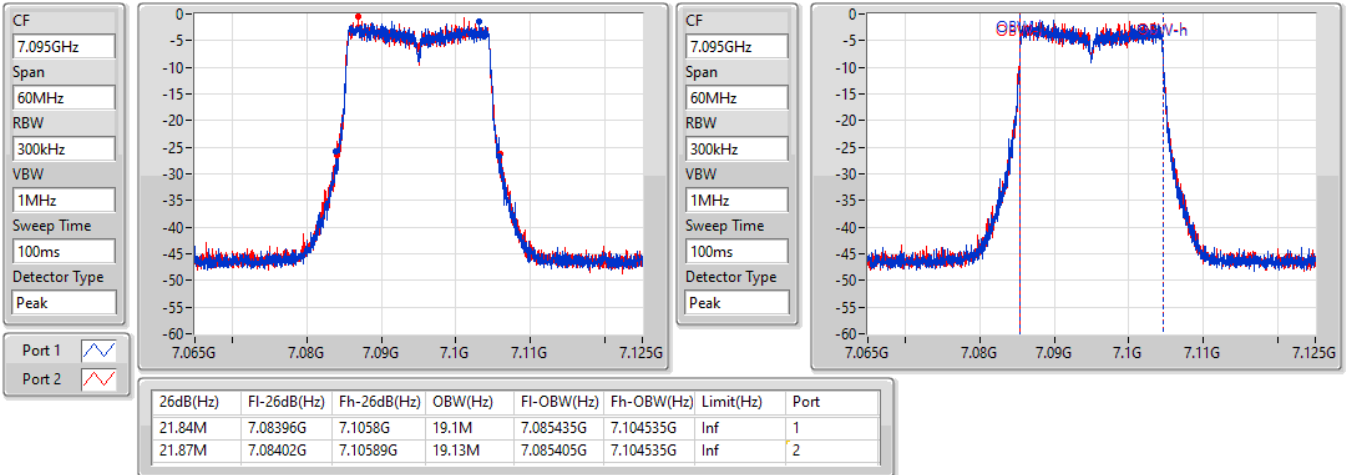


802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

7095MHz

01/09/2021

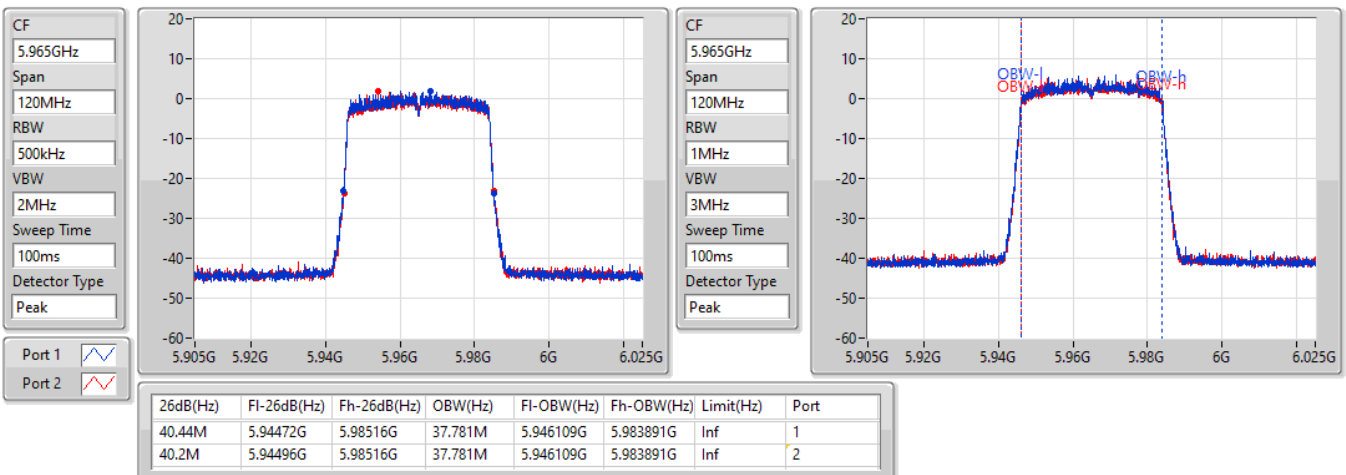


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5965MHz

01/09/2021

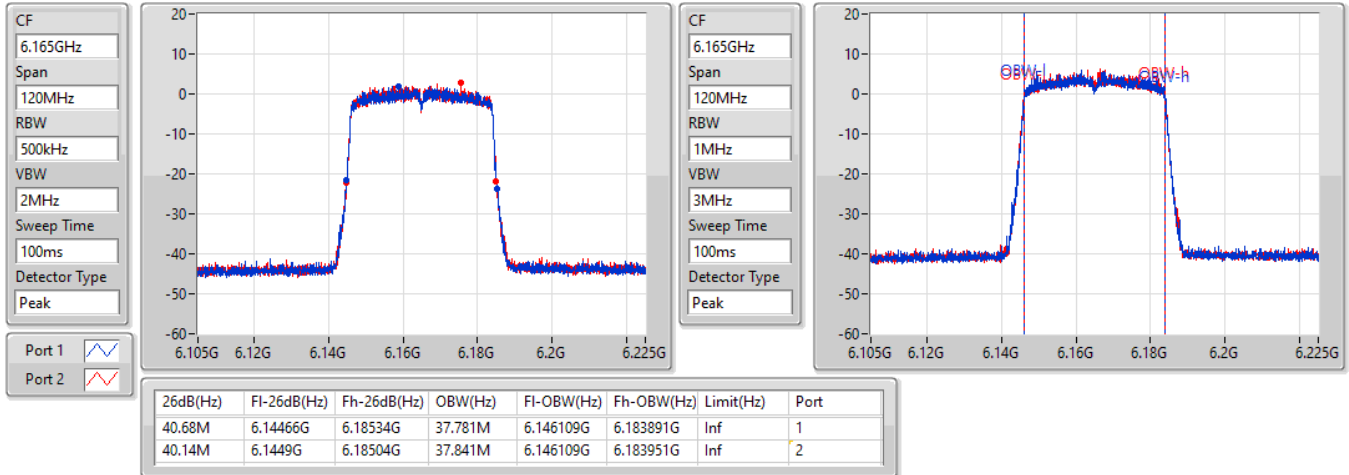


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6165MHz

01/09/2021

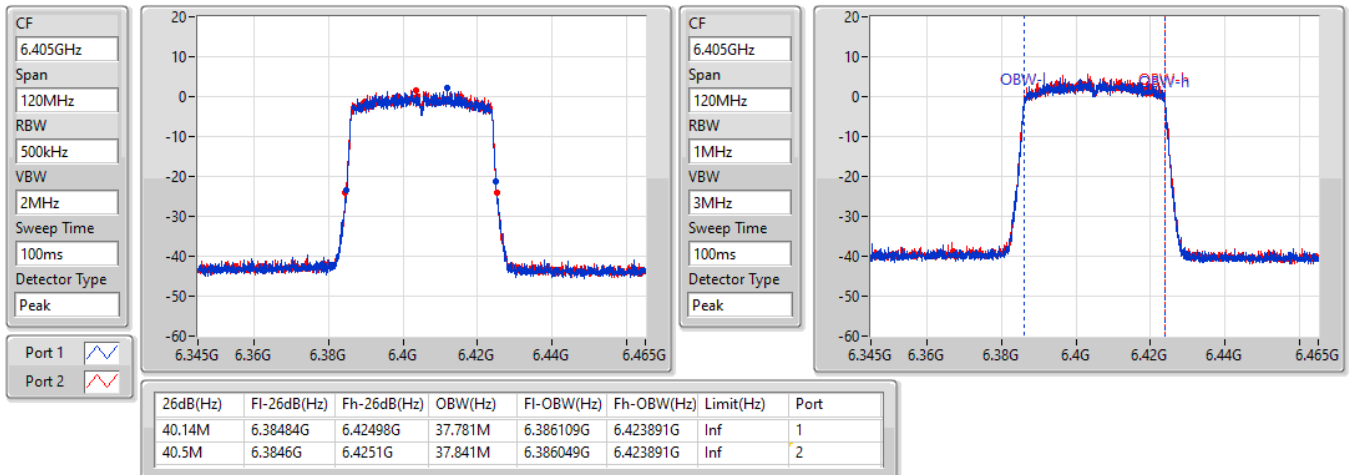


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6405MHz

01/09/2021

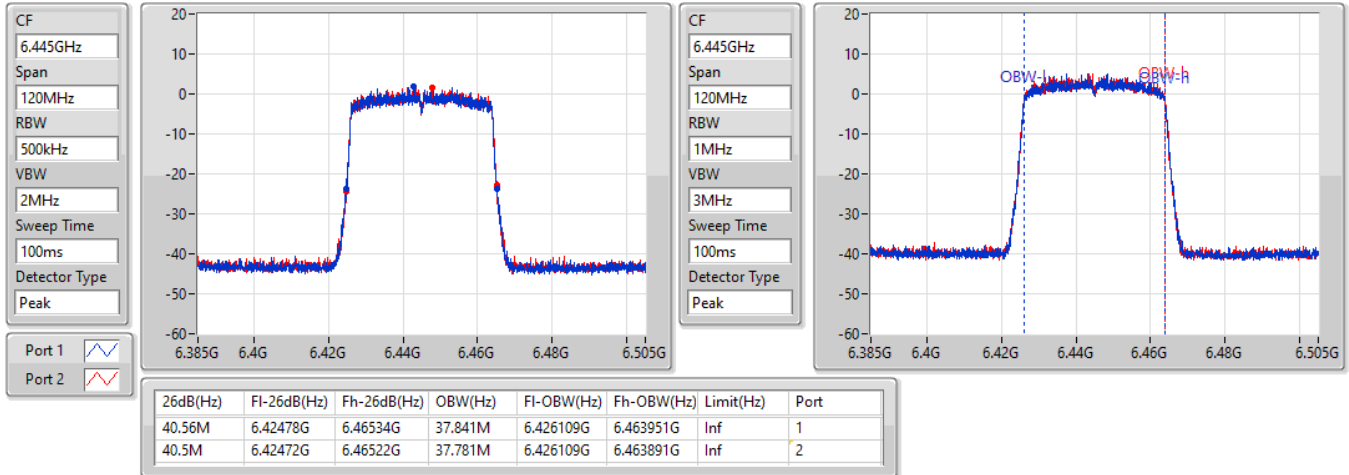


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6445MHz

01/09/2021

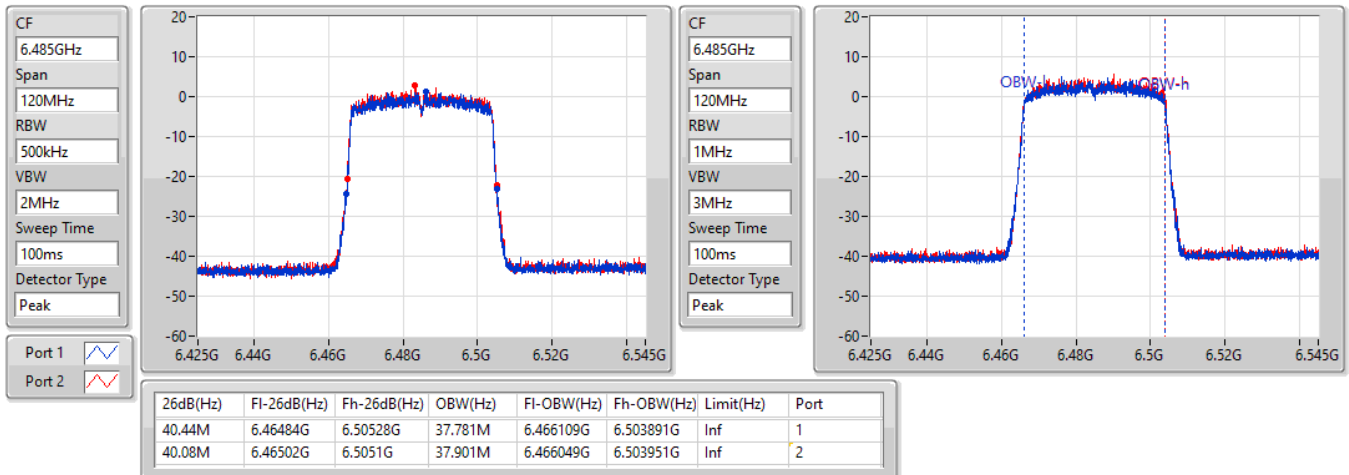


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6485MHz

01/09/2021

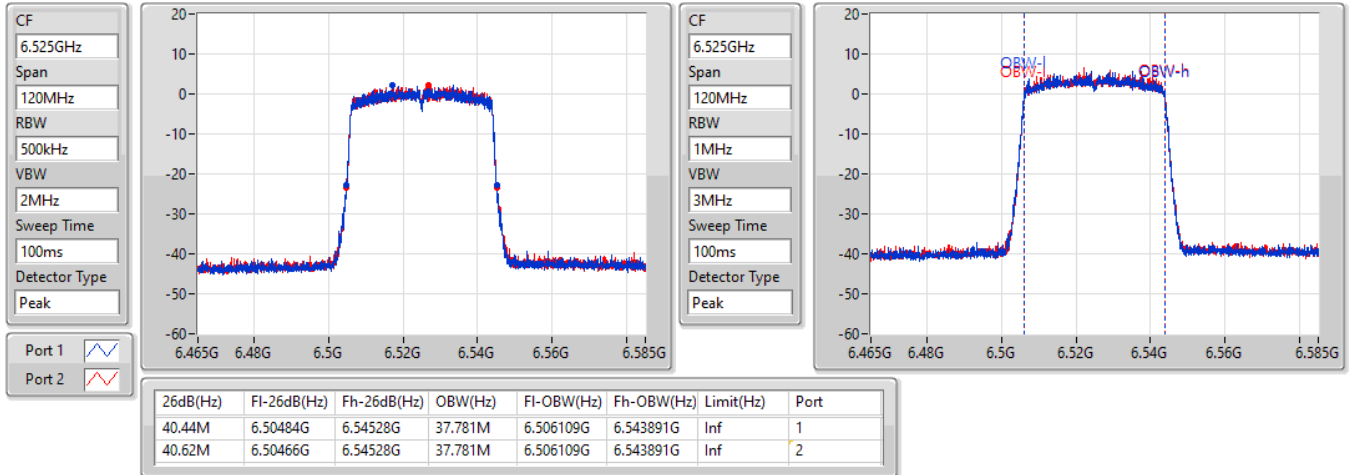


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6525MHz

01/09/2021

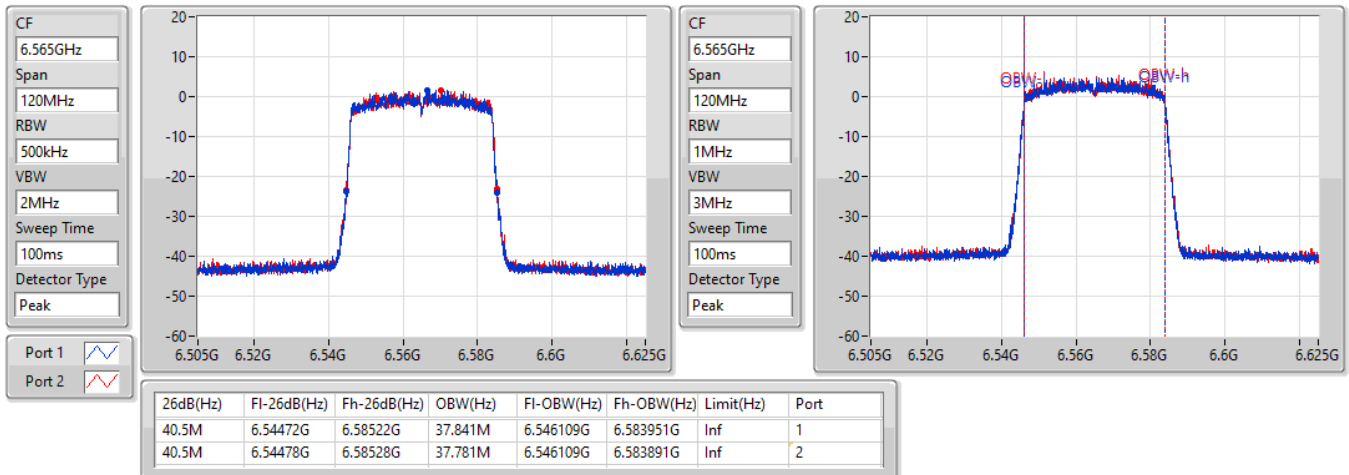


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6565MHz

01/09/2021

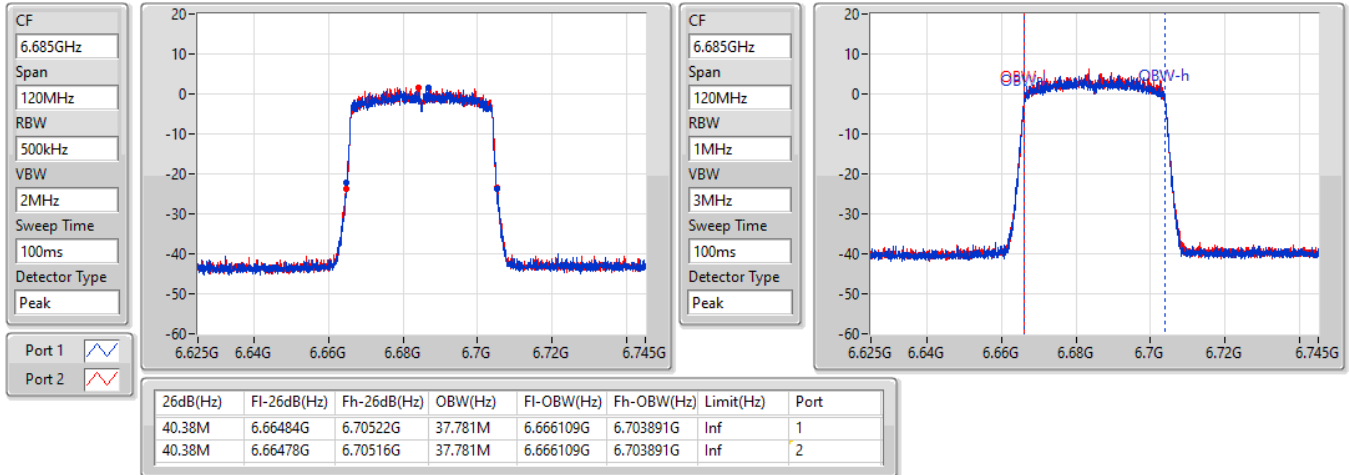


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6685MHz

01/09/2021

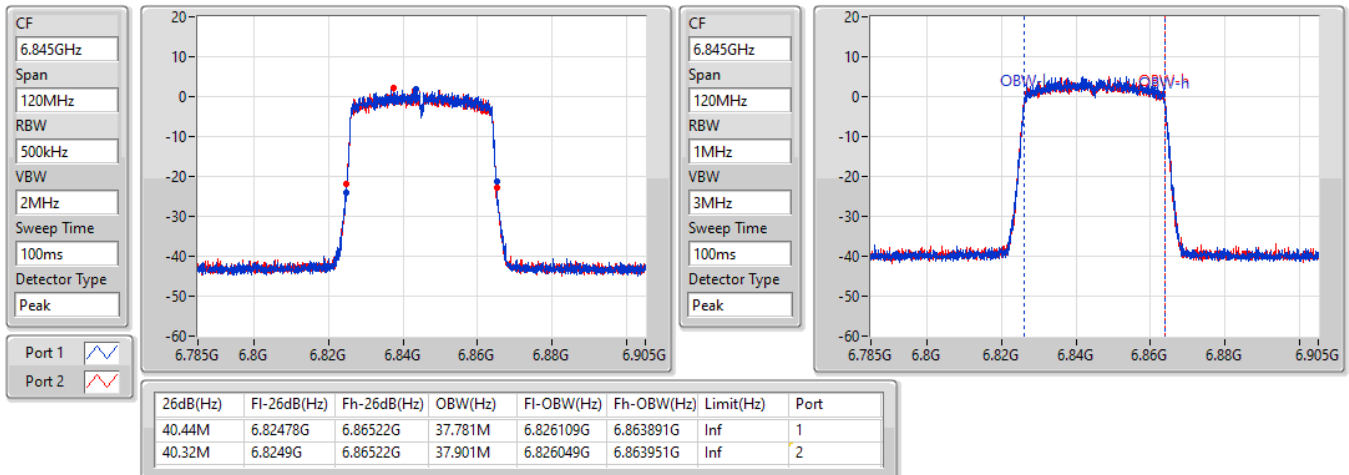


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6845MHz

01/09/2021

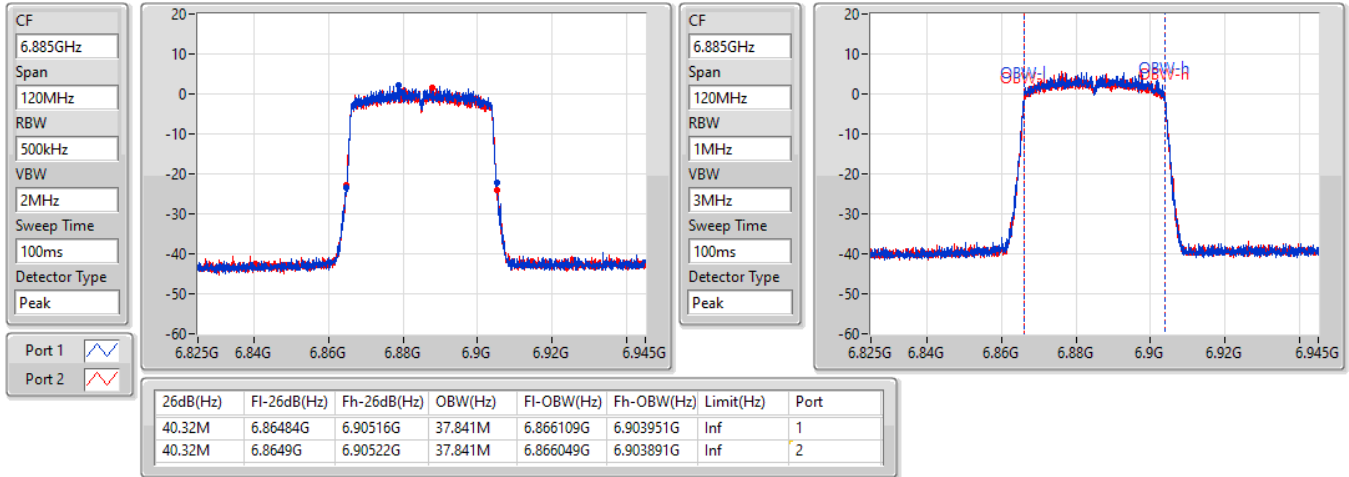


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6885MHz

01/09/2021

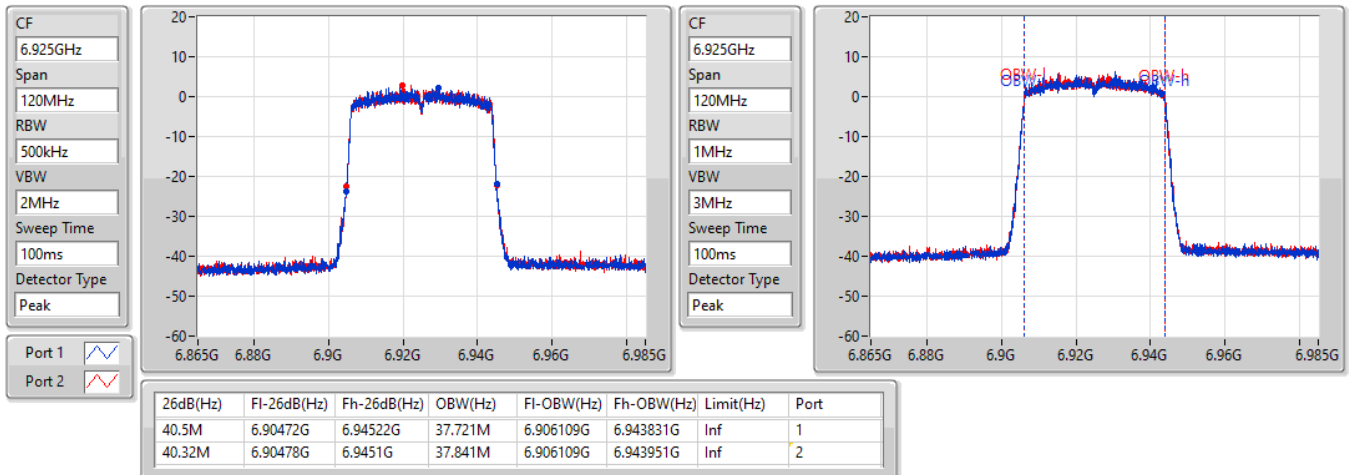


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

6925MHz

01/09/2021

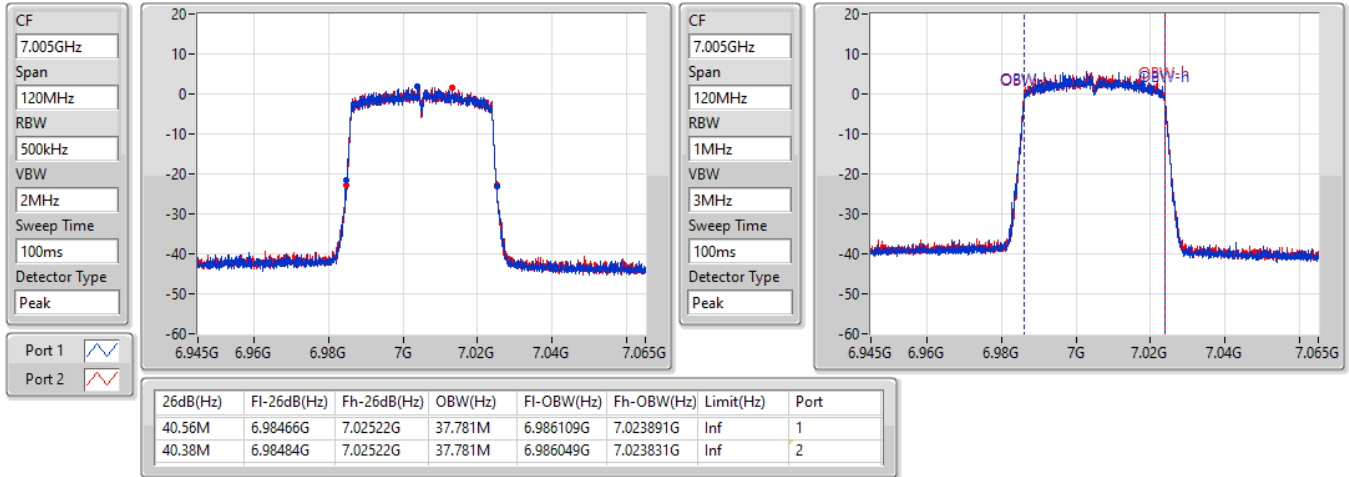


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

7005MHz

01/09/2021

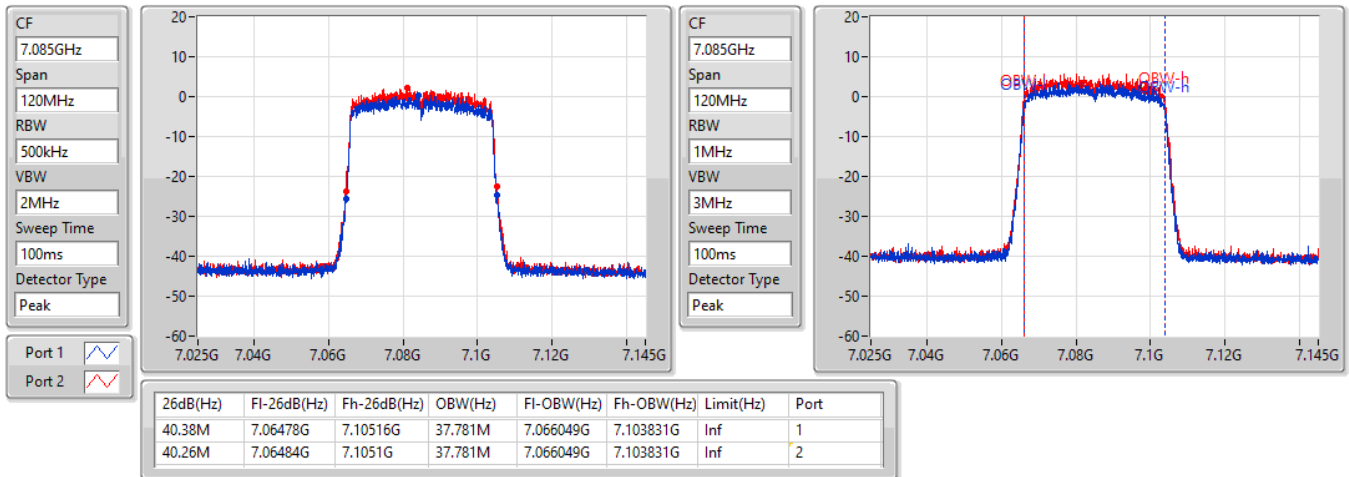


802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

7085MHz

01/09/2021

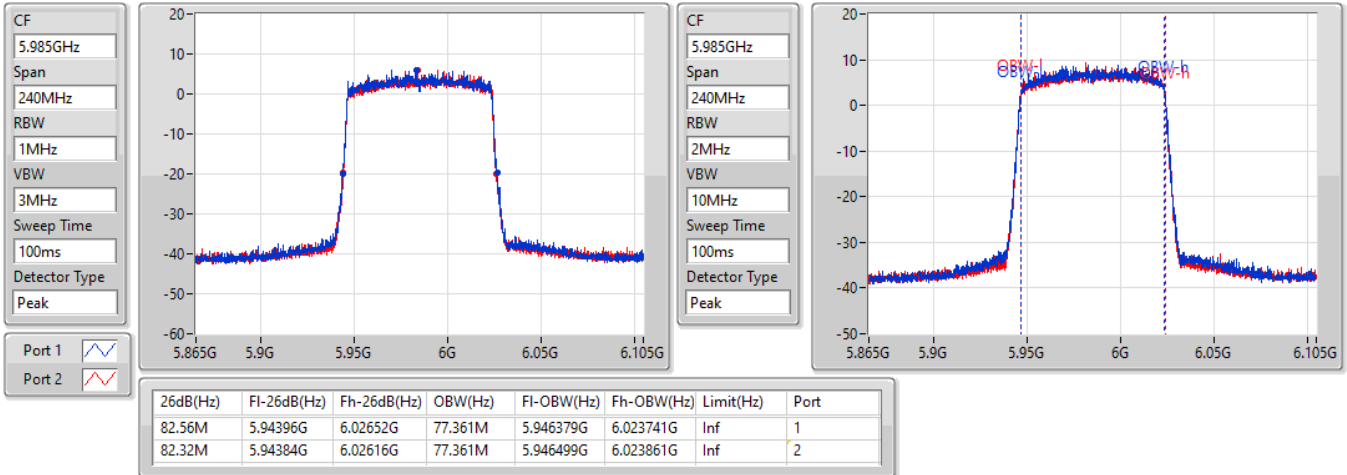


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5985MHz

01/09/2021

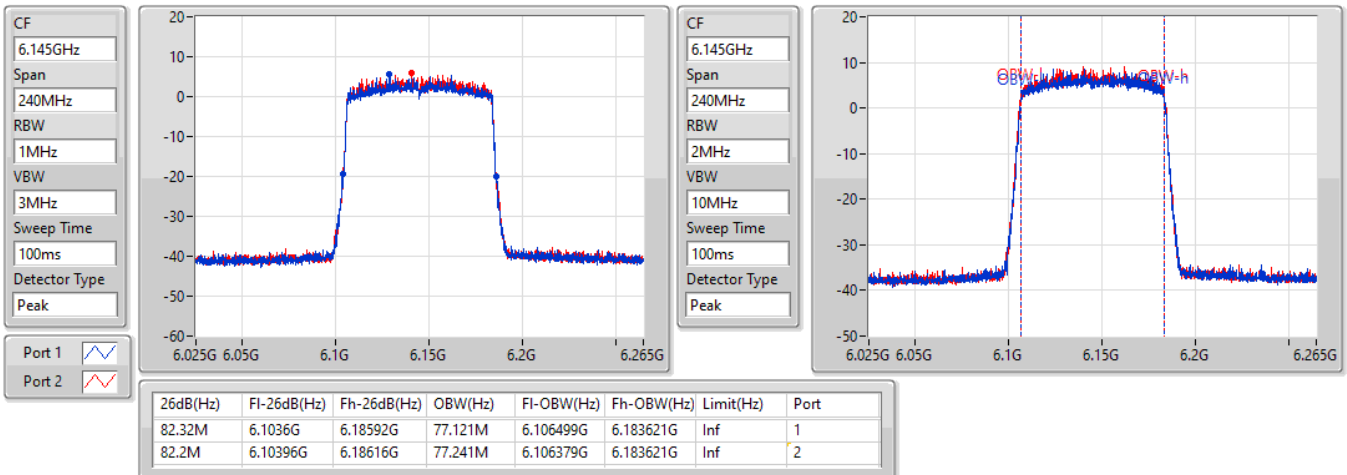


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6145MHz

01/09/2021

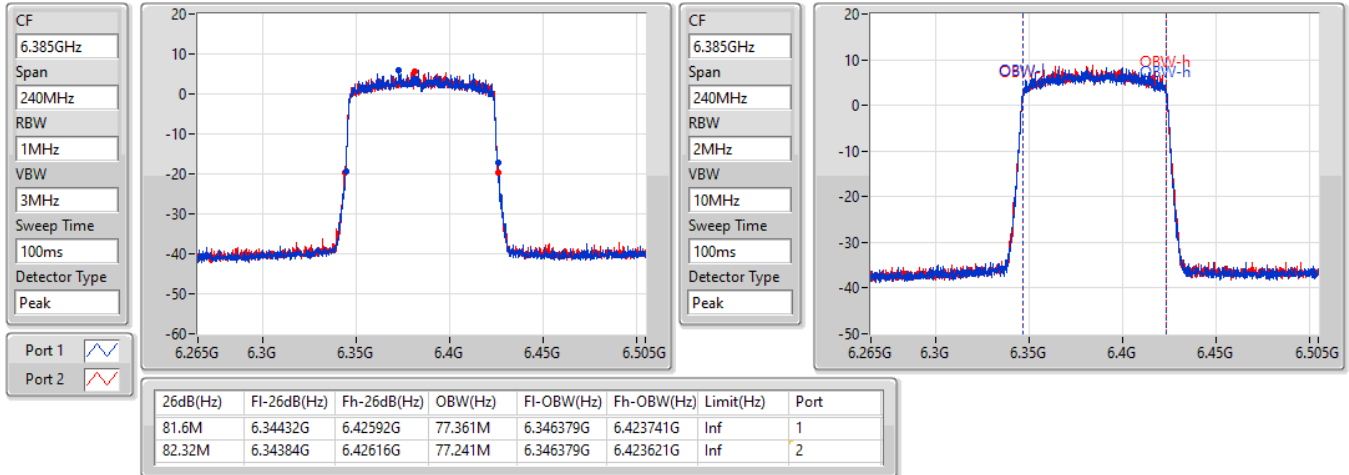


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6385MHz

01/09/2021

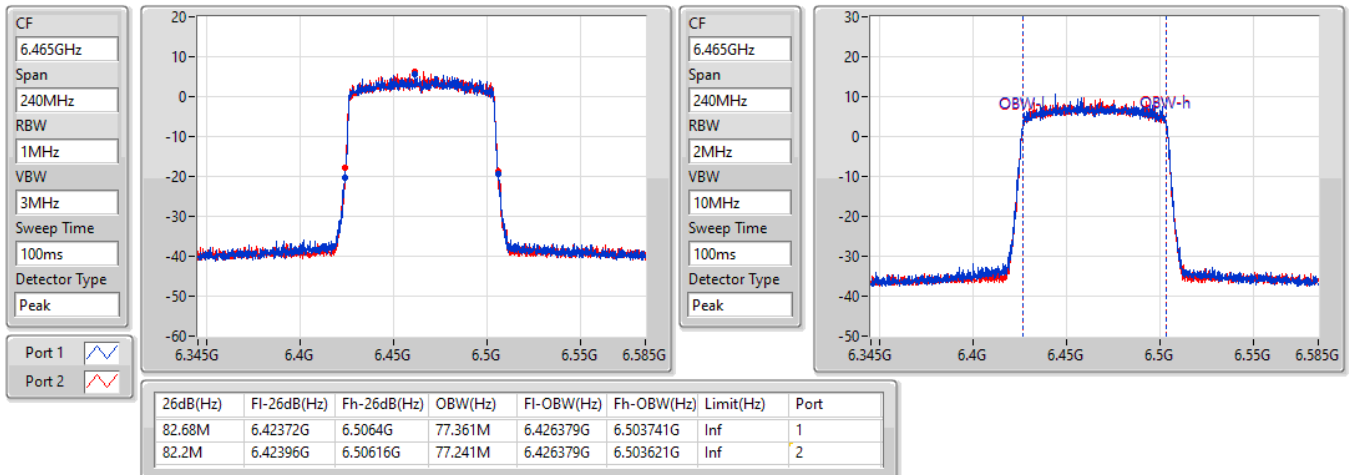


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6465MHz

01/09/2021

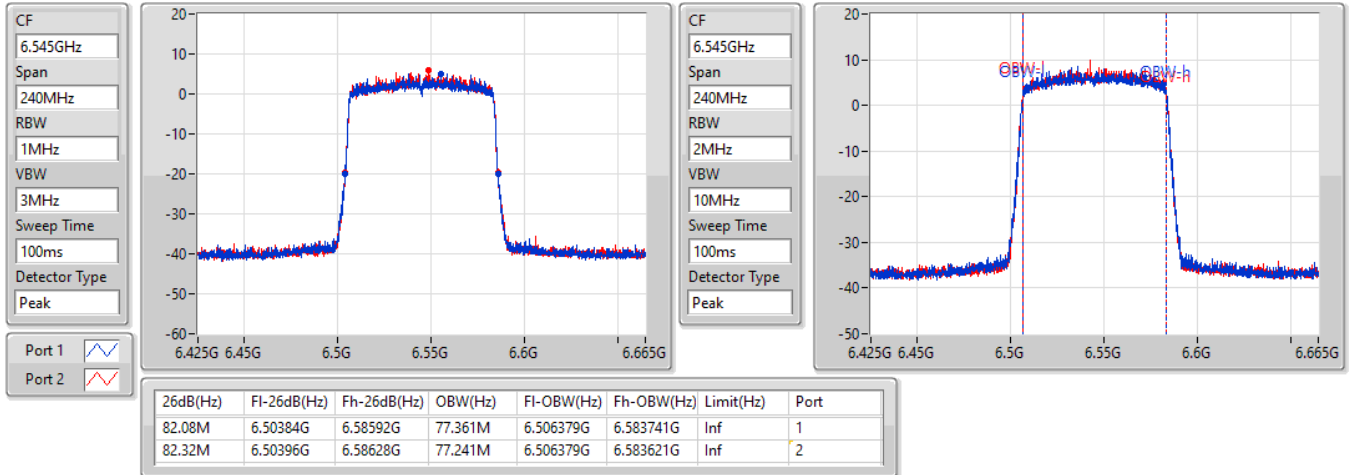


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6545MHz

01/09/2021

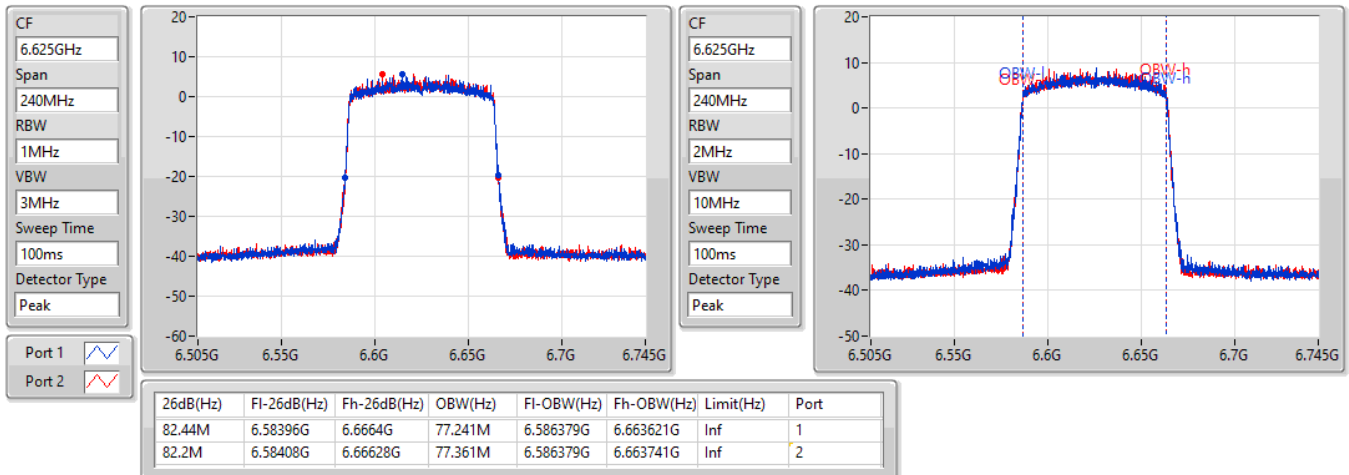


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6625MHz

01/09/2021

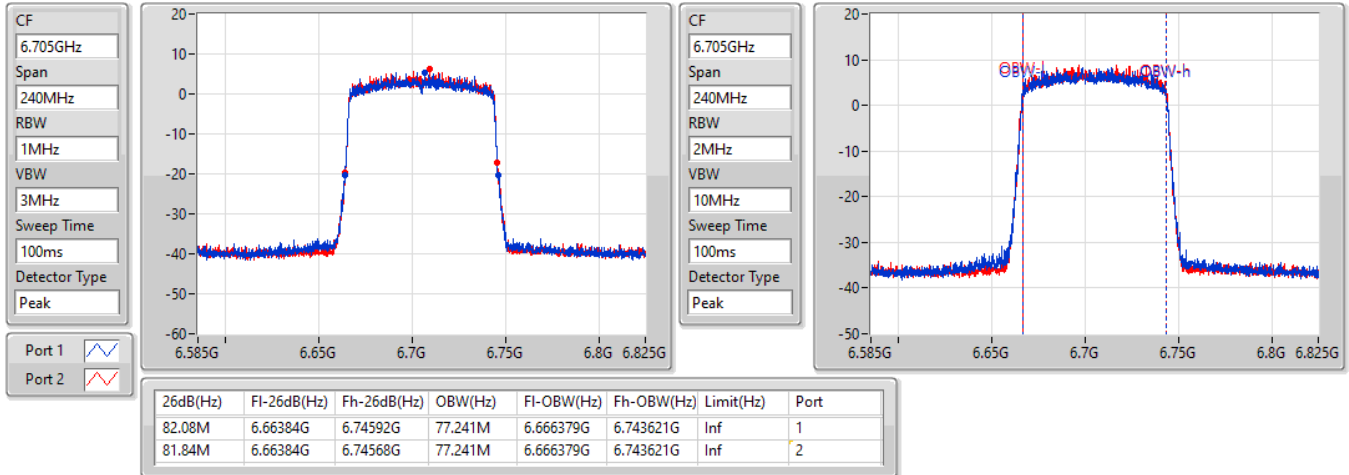


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6705MHz

01/09/2021

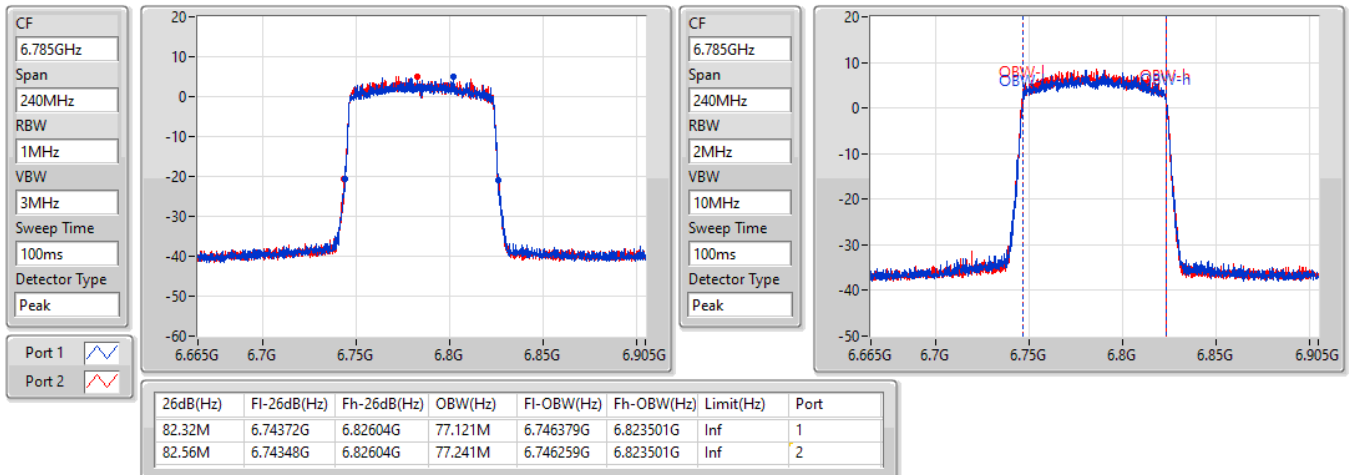


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6785MHz

01/09/2021

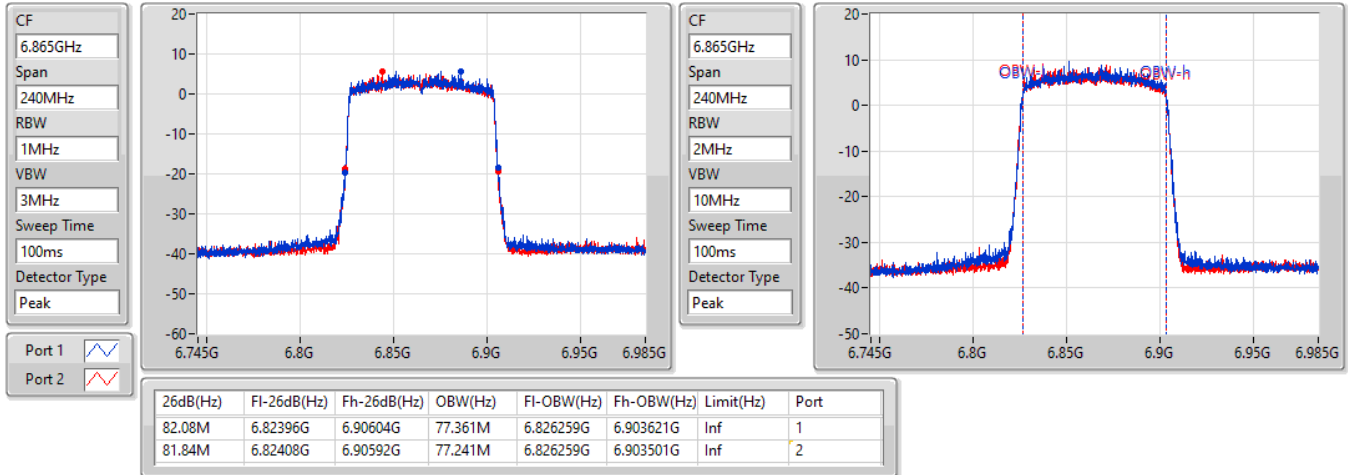


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6865MHz

01/09/2021

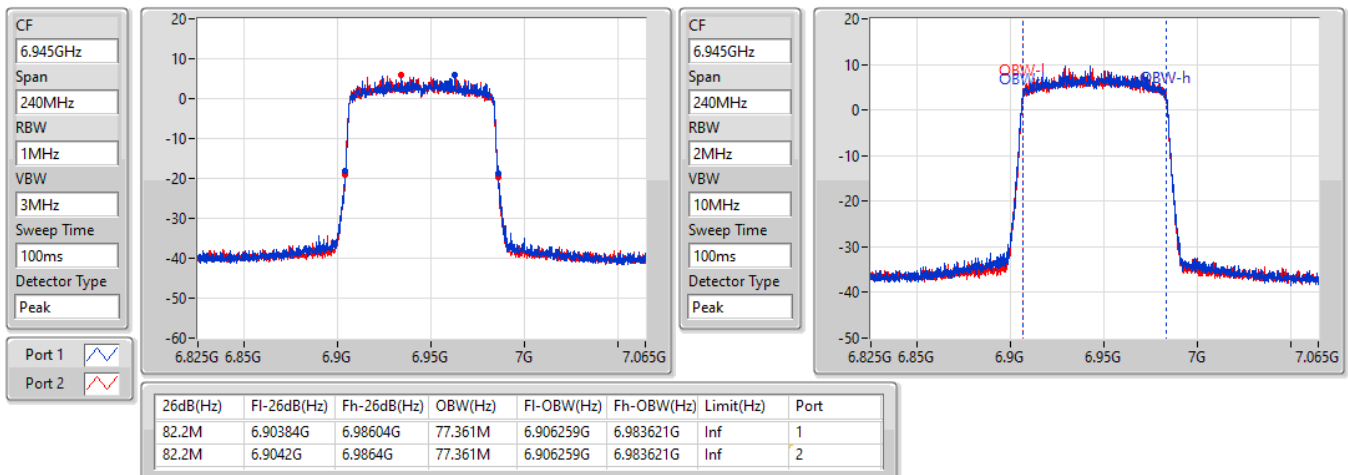


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

6945MHz

01/09/2021

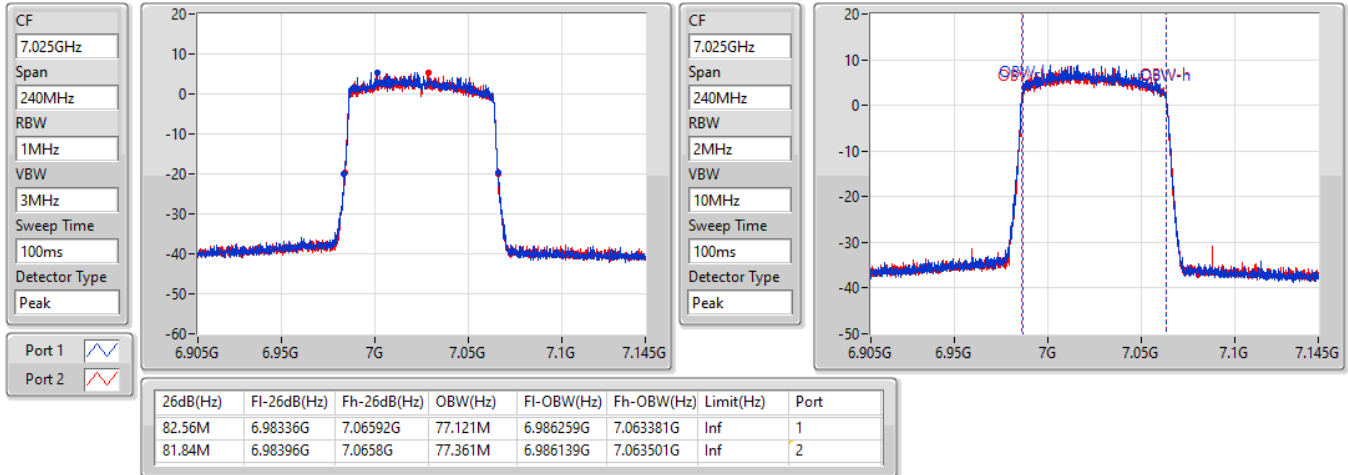


802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

7025MHz

01/09/2021

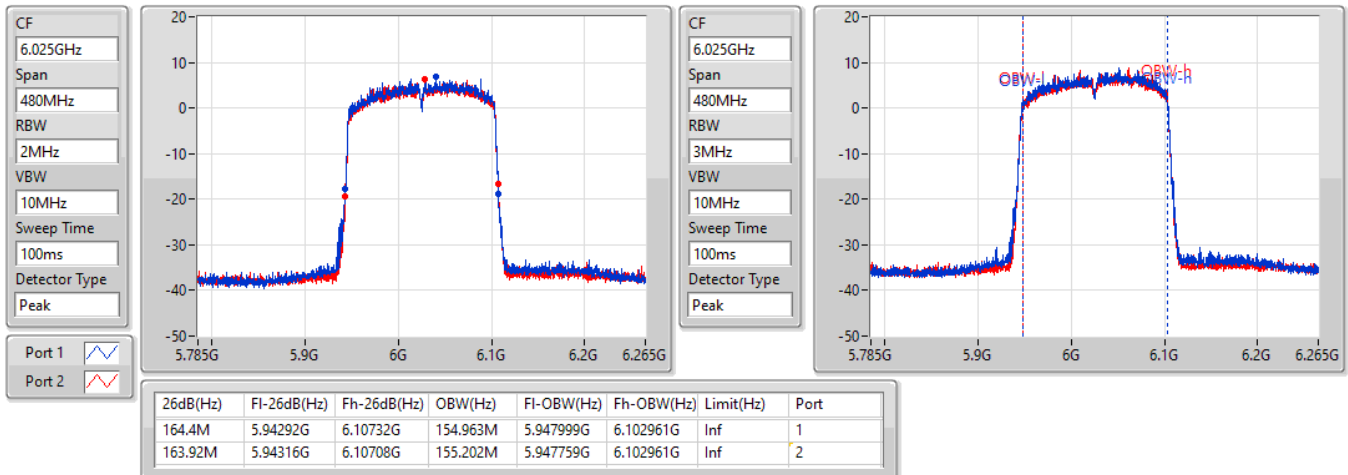


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6025MHz

01/09/2021

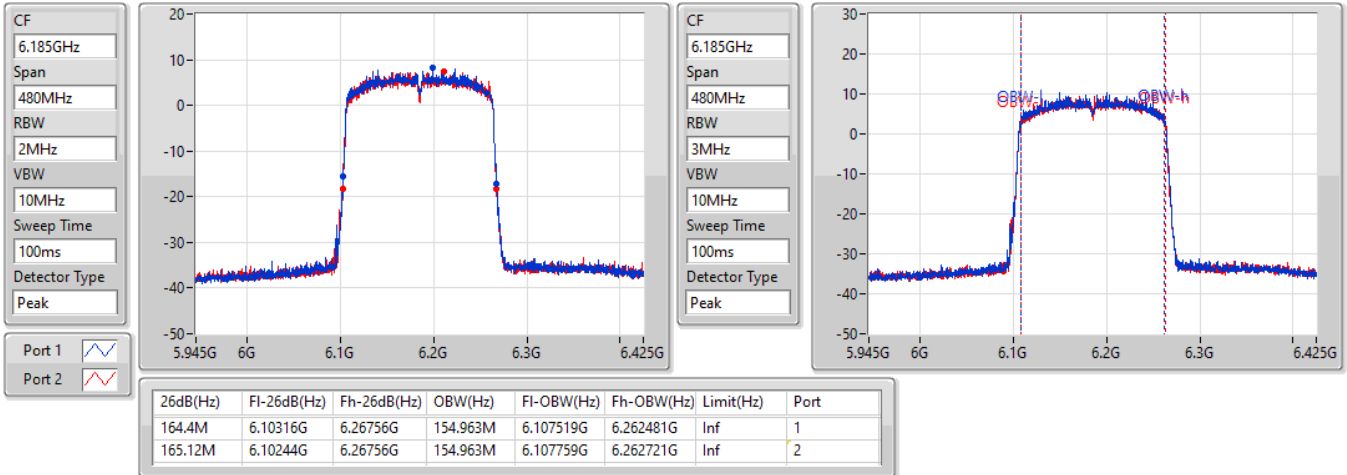


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6185MHz

01/09/2021

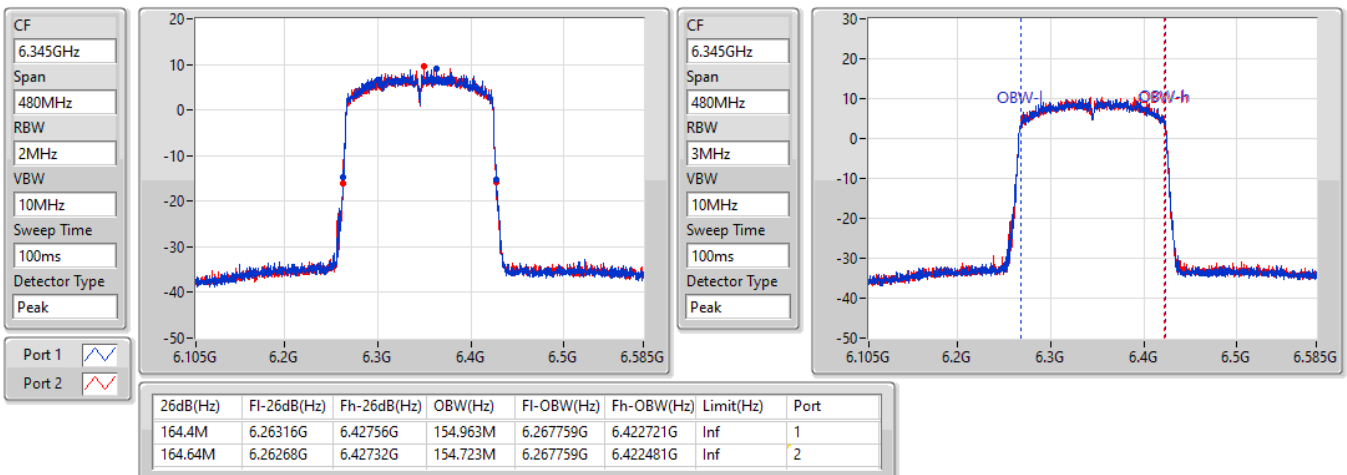


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

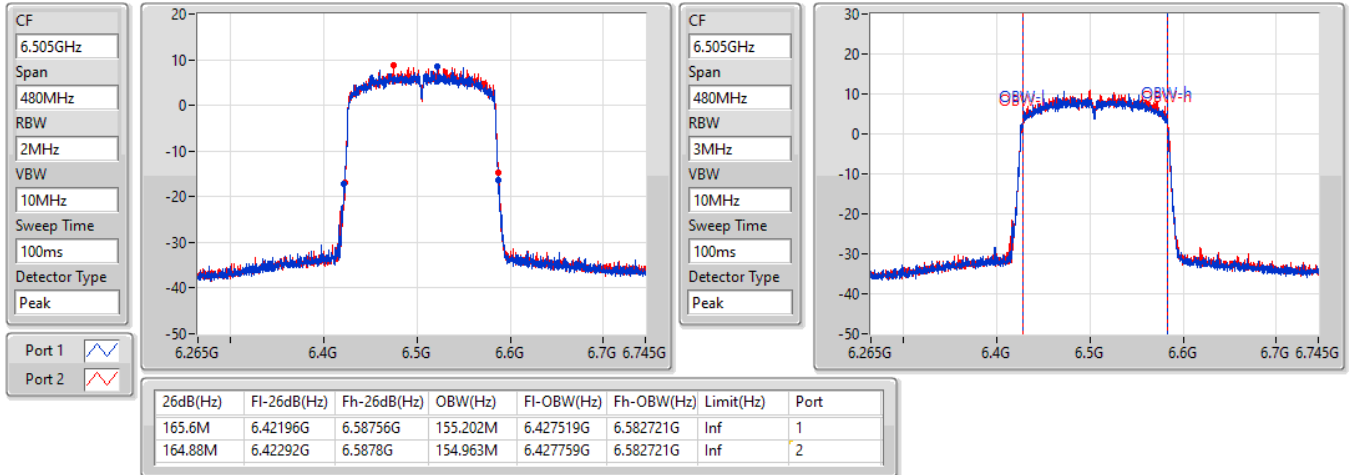
6345MHz

01/09/2021

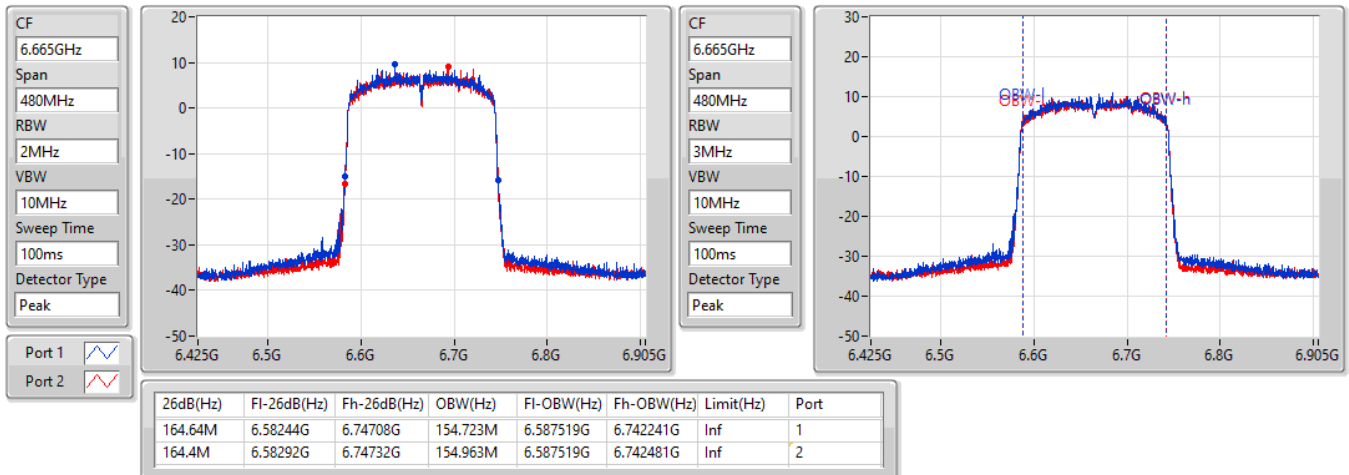


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6505MHz

01/09/2021


802.11ax HEW160_Nss1,(MCS0)_2TX
EBW
6665MHz

01/09/2021

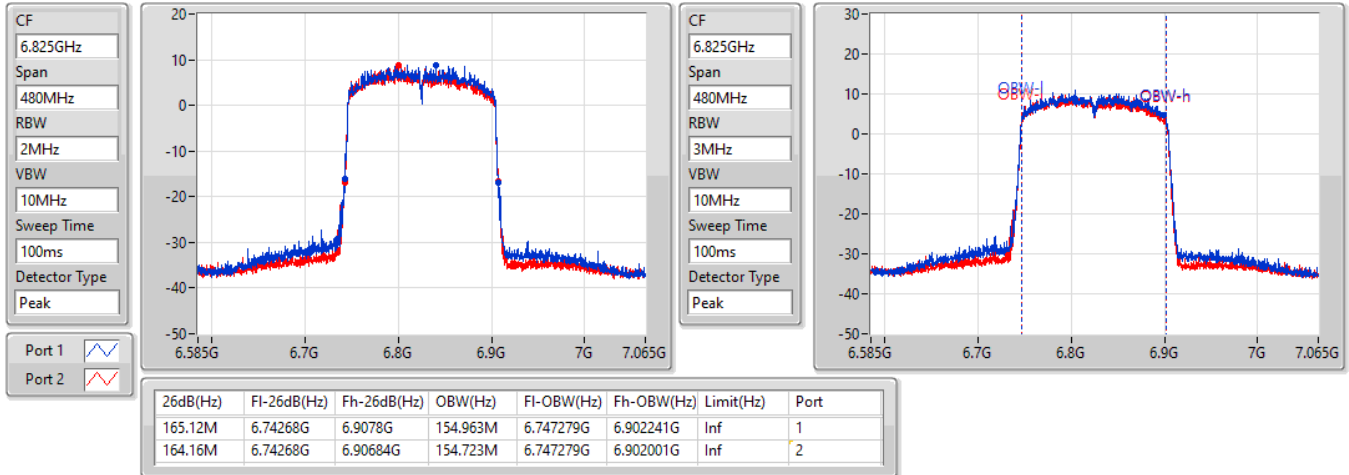


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6825MHz

01/09/2021

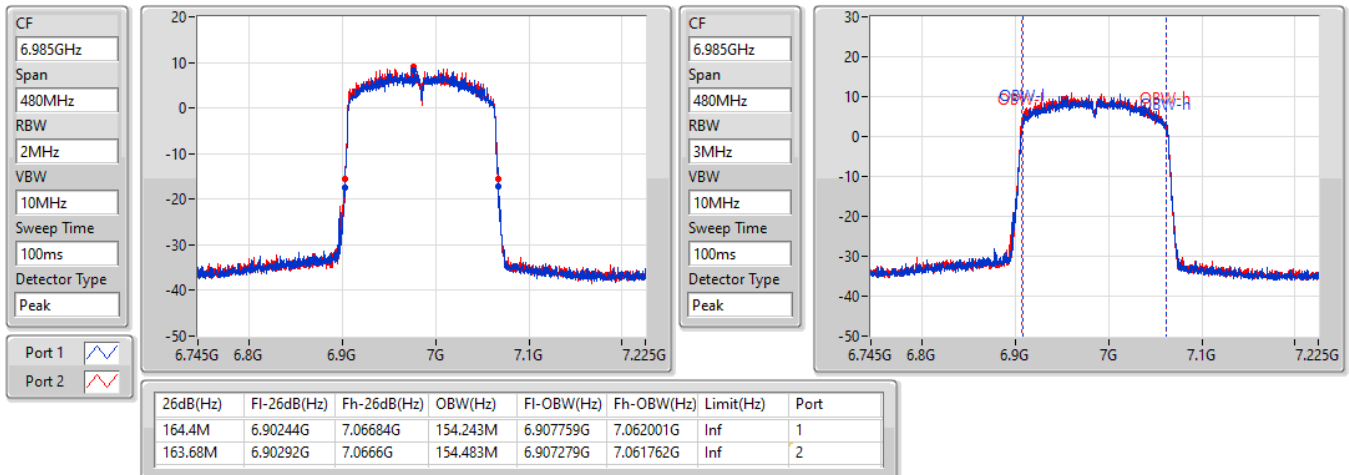


802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

6985MHz

01/09/2021



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_4TX	20.97M	16.762M	16M8D1D	20.46M	16.642M
11a40_Nss1,(6Mbps)_4TX	39.9M	36.342M	36M3D1D	39.24M	36.222M
11a80_Nss1,(6Mbps)_4TX	82.56M	76.162M	76M2D1D	81.36M	75.922M
11a160_Nss1,(6Mbps)_4TX	168M	154.963M	155MD1D	165.36M	154.483M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.35M	19.16M	19M2D1D	21.93M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.62M	37.901M	37M9D1D	40.2M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	83.04M	77.481M	77M5D1D	81.84M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.12M	155.442M	155MD1D	163.2M	154.723M
6.425-6.525GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_4TX	20.94M	16.732M	16M7D1D	20.49M	16.672M
11a40_Nss1,(6Mbps)_4TX	40.02M	36.342M	36M3D1D	39.36M	36.222M
11a80_Nss1,(6Mbps)_4TX	82.68M	76.042M	76M0D1D	81.48M	75.922M
11a160_Nss1,(6Mbps)_4TX	168.96M	154.963M	155MD1D	166.32M	154.723M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.41M	19.16M	19M2D1D	21.66M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.74M	37.901M	37M9D1D	40.26M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.68M	77.481M	77M5D1D	81.84M	77.361M
802.11ax HEW160_Nss1,(MCS0)_4TX	165.12M	155.442M	155MD1D	163.92M	154.963M
6.525-6.875GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_4TX	21.27M	16.762M	16M8D1D	20.61M	16.672M
11a40_Nss1,(6Mbps)_4TX	39.96M	36.342M	36M3D1D	39.48M	36.222M
11a80_Nss1,(6Mbps)_4TX	82.8M	76.162M	76M2D1D	81.24M	75.922M
11a160_Nss1,(6Mbps)_4TX	168.96M	154.963M	155MD1D	165.84M	154.483M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.41M	19.16M	19M2D1D	21.66M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.86M	37.901M	37M9D1D	40.26M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.8M	77.481M	77M5D1D	81.84M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	166.08M	155.202M	155MD1D	163.92M	154.723M
6.875-7.125GHz	-	-	-	-	-
11a20_Nss1,(6Mbps)_4TX	20.85M	16.792M	16M8D1D	20.46M	16.672M
11a40_Nss1,(6Mbps)_4TX	39.78M	36.342M	36M3D1D	39.12M	36.222M
11a80_Nss1,(6Mbps)_4TX	82.56M	76.162M	76M2D1D	81.24M	75.802M
11a160_Nss1,(6Mbps)_4TX	168.48M	154.483M	154MD1D	165.6M	154.243M
802.11ax HEW20_Nss1,(MCS0)_4TX	22.56M	19.19M	19M2D1D	21.78M	19.1M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.68M	37.901M	37M9D1D	40.2M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	82.92M	77.481M	77M5D1D	81.96M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	164.88M	154.723M	155MD1D	163.92M	154.483M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
11a20_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	20.76M	16.702M	20.52M	16.702M	20.55M	16.702M	20.82M	16.732M
6175MHz	Pass	Inf	20.58M	16.642M	20.64M	16.702M	20.73M	16.702M	20.46M	16.762M
6415MHz	Pass	Inf	20.67M	16.672M	20.76M	16.732M	20.58M	16.702M	20.97M	16.702M
6435MHz	Pass	Inf	20.52M	16.672M	20.67M	16.732M	20.55M	16.702M	20.55M	16.732M
6475MHz	Pass	Inf	20.7M	16.672M	20.55M	16.732M	20.49M	16.702M	20.7M	16.732M
6515MHz	Pass	Inf	20.55M	16.702M	20.85M	16.732M	20.67M	16.732M	20.94M	16.732M
6535MHz	Pass	Inf	20.91M	16.702M	21.27M	16.732M	20.76M	16.762M	20.82M	16.732M
6695MHz	Pass	Inf	20.73M	16.702M	20.67M	16.702M	20.64M	16.732M	20.76M	16.732M
6855MHz	Pass	Inf	20.61M	16.672M	20.7M	16.702M	21.09M	16.702M	20.64M	16.762M
6875MHz	Pass	Inf	20.64M	16.672M	20.67M	16.702M	20.67M	16.732M	20.85M	16.732M
6895MHz	Pass	Inf	20.67M	16.672M	20.76M	16.702M	20.61M	16.732M	20.85M	16.762M
6995MHz	Pass	Inf	20.79M	16.762M	20.76M	16.762M	20.76M	16.762M	20.73M	16.792M
7095MHz	Pass	Inf	20.73M	16.672M	20.46M	16.702M	20.76M	16.702M	20.52M	16.732M
11a40_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	39.24M	36.282M	39.54M	36.282M	39.72M	36.282M	39.66M	36.222M
6165MHz	Pass	Inf	39.42M	36.282M	39.48M	36.282M	39.6M	36.222M	39.72M	36.222M
6405MHz	Pass	Inf	39.48M	36.342M	39.48M	36.282M	39.9M	36.282M	39.66M	36.222M
6445MHz	Pass	Inf	39.36M	36.282M	39.54M	36.342M	39.6M	36.282M	40.02M	36.222M
6485MHz	Pass	Inf	39.6M	36.282M	39.48M	36.282M	39.6M	36.282M	39.84M	36.222M
6525MHz	Pass	Inf	39.36M	36.282M	39.54M	36.282M	39.84M	36.282M	39.66M	36.222M
6565MHz	Pass	Inf	39.48M	36.282M	39.6M	36.222M	39.72M	36.282M	39.72M	36.222M
6685MHz	Pass	Inf	39.6M	36.282M	39.54M	36.222M	39.6M	36.222M	39.78M	36.222M
6845MHz	Pass	Inf	39.54M	36.342M	39.78M	36.282M	39.96M	36.282M	39.78M	36.222M
6885MHz	Pass	Inf	39.54M	36.282M	39.6M	36.282M	39.48M	36.282M	39.96M	36.222M
6925MHz	Pass	Inf	39.42M	36.342M	39.6M	36.342M	39.48M	36.282M	39.72M	36.222M
7005MHz	Pass	Inf	39.12M	36.282M	39.3M	36.222M	39.66M	36.282M	39.54M	36.222M
7085MHz	Pass	Inf	39.54M	36.282M	39.66M	36.342M	39.72M	36.222M	39.78M	36.222M
11a80_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	82.08M	76.162M	81.84M	76.162M	81.72M	76.042M	82.08M	76.042M
6145MHz	Pass	Inf	81.36M	75.922M	81.96M	76.042M	81.84M	76.042M	82.56M	76.042M
6385MHz	Pass	Inf	81.48M	76.042M	81.72M	76.042M	82.32M	76.042M	81.84M	76.042M
6465MHz	Pass	Inf	81.72M	76.042M	81.84M	76.042M	82.32M	76.042M	82.2M	76.042M
6545MHz	Pass	Inf	81.48M	76.042M	81.84M	75.922M	82.68M	75.922M	82.44M	76.042M
6625MHz	Pass	Inf	81.72M	76.042M	82.08M	76.042M	81.72M	76.042M	82.32M	76.042M
6705MHz	Pass	Inf	81.24M	76.042M	81.72M	76.042M	81.96M	75.922M	82.32M	76.042M
6785MHz	Pass	Inf	81.6M	76.042M	81.84M	76.042M	81.6M	75.922M	81.84M	75.922M
6865MHz	Pass	Inf	81.36M	76.042M	81.84M	76.162M	81.48M	76.042M	82.8M	76.042M
6945MHz	Pass	Inf	81.72M	76.042M	82.56M	76.042M	82.08M	76.162M	82.44M	76.042M
7025MHz	Pass	Inf	81.24M	76.042M	81.6M	75.922M	81.48M	76.042M	81.6M	75.802M
11a160_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	165.36M	154.723M	166.32M	154.483M	166.8M	154.723M	166.32M	154.723M
6185MHz	Pass	Inf	166.8M	154.723M	165.84M	154.723M	168M	154.963M	166.32M	154.723M
6345MHz	Pass	Inf	165.84M	154.723M	165.36M	154.723M	167.28M	154.723M	166.32M	154.723M
6505MHz	Pass	Inf	167.76M	154.963M	166.32M	154.963M	168.96M	154.723M	167.52M	154.723M
6665MHz	Pass	Inf	166.8M	154.723M	165.84M	154.483M	167.28M	154.723M	166.32M	154.723M
6825MHz	Pass	Inf	168.96M	154.723M	168.24M	154.483M	166.56M	154.723M	166.08M	154.963M
6985MHz	Pass	Inf	166.8M	154.243M	166.08M	154.243M	168.48M	154.243M	165.6M	154.483M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	Inf	22.14M	19.16M	21.99M	19.13M	22.02M	19.16M	22.08M	19.16M
6175MHz	Pass	Inf	22.26M	19.13M	22.17M	19.16M	21.93M	19.16M	22.02M	19.13M
6415MHz	Pass	Inf	22.08M	19.13M	22.05M	19.13M	22.35M	19.13M	22.05M	19.13M
6435MHz	Pass	Inf	22.05M	19.13M	22.05M	19.16M	21.96M	19.16M	22.02M	19.16M
6475MHz	Pass	Inf	21.75M	19.13M	21.93M	19.13M	21.93M	19.16M	22.2M	19.13M
6515MHz	Pass	Inf	21.66M	19.16M	22.08M	19.13M	22.41M	19.13M	21.99M	19.13M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
6535MHz	Pass	Inf	21.84M	19.13M	21.87M	19.13M	22.38M	19.13M	21.99M	19.16M
6695MHz	Pass	Inf	22.11M	19.13M	22.02M	19.1M	21.99M	19.13M	21.9M	19.13M
6855MHz	Pass	Inf	22.23M	19.13M	21.93M	19.13M	21.9M	19.16M	22.41M	19.16M
6875MHz	Pass	Inf	22.08M	19.13M	22.11M	19.13M	22.02M	19.16M	21.66M	19.13M
6895MHz	Pass	Inf	21.81M	19.16M	22.05M	19.16M	22.02M	19.13M	22.05M	19.13M
6995MHz	Pass	Inf	22.11M	19.16M	22.05M	19.13M	21.87M	19.19M	21.99M	19.13M
7095MHz	Pass	Inf	22.2M	19.13M	22.56M	19.1M	21.78M	19.13M	21.9M	19.13M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5965MHz	Pass	Inf	40.44M	37.901M	40.5M	37.841M	40.56M	37.781M	40.44M	37.781M
6165MHz	Pass	Inf	40.2M	37.841M	40.32M	37.841M	40.38M	37.841M	40.5M	37.841M
6405MHz	Pass	Inf	40.62M	37.841M	40.26M	37.901M	40.38M	37.901M	40.56M	37.841M
6445MHz	Pass	Inf	40.44M	37.841M	40.5M	37.841M	40.38M	37.901M	40.56M	37.781M
6485MHz	Pass	Inf	40.26M	37.781M	40.56M	37.841M	40.26M	37.781M	40.74M	37.841M
6525MHz	Pass	Inf	40.68M	37.901M	40.26M	37.841M	40.38M	37.901M	40.44M	37.841M
6565MHz	Pass	Inf	40.32M	37.901M	40.44M	37.781M	40.32M	37.841M	40.56M	37.841M
6685MHz	Pass	Inf	40.5M	37.901M	40.26M	37.841M	40.26M	37.781M	40.38M	37.781M
6845MHz	Pass	Inf	40.86M	37.781M	40.68M	37.841M	40.26M	37.841M	40.68M	37.781M
6885MHz	Pass	Inf	40.38M	37.781M	40.26M	37.841M	40.5M	37.841M	40.68M	37.781M
6925MHz	Pass	Inf	40.32M	37.841M	40.44M	37.901M	40.32M	37.841M	40.62M	37.841M
7005MHz	Pass	Inf	40.2M	37.901M	40.38M	37.781M	40.62M	37.901M	40.44M	37.781M
7085MHz	Pass	Inf	40.32M	37.901M	40.68M	37.781M	40.5M	37.841M	40.38M	37.781M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5985MHz	Pass	Inf	82.32M	77.481M	82.68M	77.361M	82.08M	77.361M	83.04M	77.241M
6145MHz	Pass	Inf	82.32M	77.361M	82.44M	77.241M	81.84M	77.241M	82.32M	77.241M
6385MHz	Pass	Inf	82.2M	77.241M	82.08M	77.361M	82.2M	77.361M	83.04M	77.361M
6465MHz	Pass	Inf	82.68M	77.481M	81.96M	77.481M	82.32M	77.481M	82.08M	77.481M
6545MHz	Pass	Inf	82.68M	77.481M	81.84M	77.361M	82.44M	77.361M	81.84M	77.361M
6625MHz	Pass	Inf	81.84M	77.481M	82.2M	77.481M	81.96M	77.361M	82.2M	77.361M
6705MHz	Pass	Inf	81.96M	77.241M	82.2M	77.361M	82.08M	77.241M	82.8M	77.241M
6785MHz	Pass	Inf	82.56M	77.241M	81.84M	77.481M	82.2M	77.241M	82.44M	77.361M
6865MHz	Pass	Inf	82.2M	77.481M	82.32M	77.481M	82.2M	77.481M	82.56M	77.361M
6945MHz	Pass	Inf	81.96M	77.481M	82.56M	77.481M	82.08M	77.361M	82.92M	77.361M
7025MHz	Pass	Inf	82.68M	77.241M	82.08M	77.361M	82.32M	77.241M	82.2M	77.241M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
6025MHz	Pass	Inf	165.12M	154.963M	164.16M	154.963M	164.64M	154.963M	164.64M	155.202M
6185MHz	Pass	Inf	165.12M	155.442M	164.4M	155.202M	164.88M	155.442M	164.4M	154.963M
6345MHz	Pass	Inf	164.4M	154.723M	163.92M	154.723M	163.92M	154.963M	163.2M	154.723M
6505MHz	Pass	Inf	164.16M	154.963M	165.12M	155.202M	164.4M	154.963M	163.92M	155.442M
6665MHz	Pass	Inf	165.36M	154.963M	164.64M	154.723M	164.88M	154.963M	164.16M	155.202M
6825MHz	Pass	Inf	164.88M	155.202M	163.92M	155.202M	166.08M	155.202M	164.16M	154.963M
6985MHz	Pass	Inf	164.4M	154.483M	163.92M	154.483M	164.88M	154.723M	164.16M	154.483M

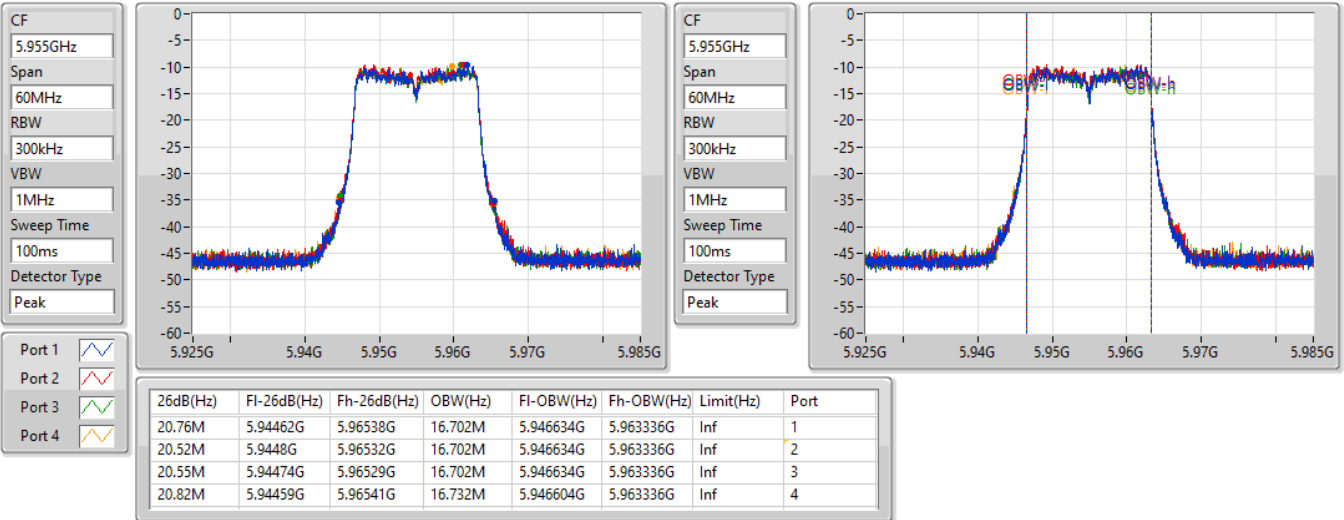
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

11a20_Nss1,(6Mbps)_4TX

EBW

5955MHz

31/08/2021

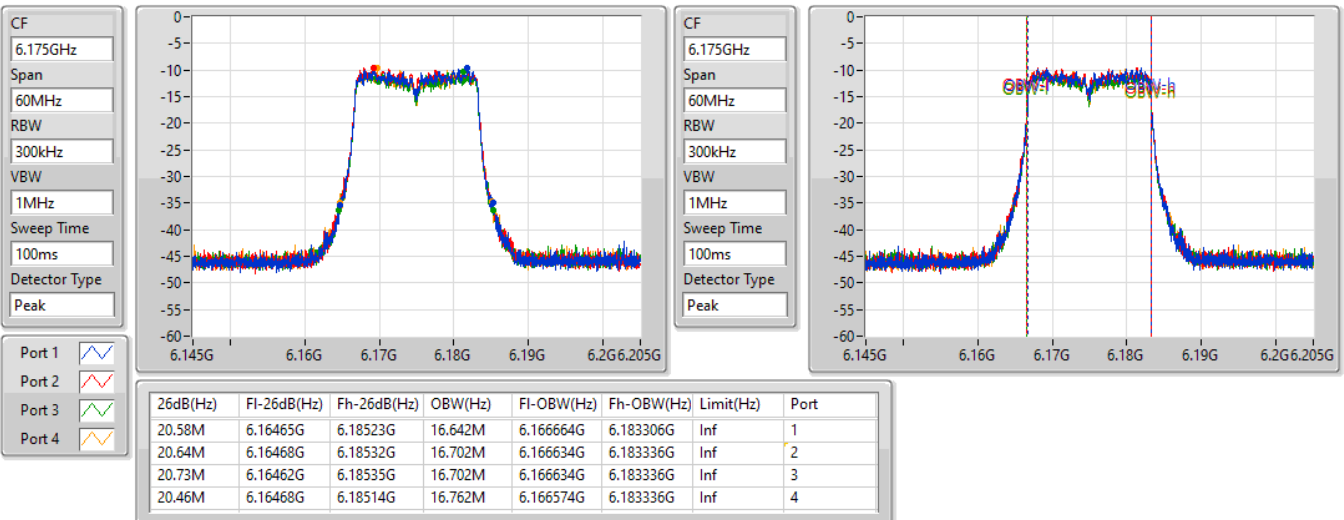


11a20_Nss1,(6Mbps)_4TX

EBW

6175MHz

31/08/2021

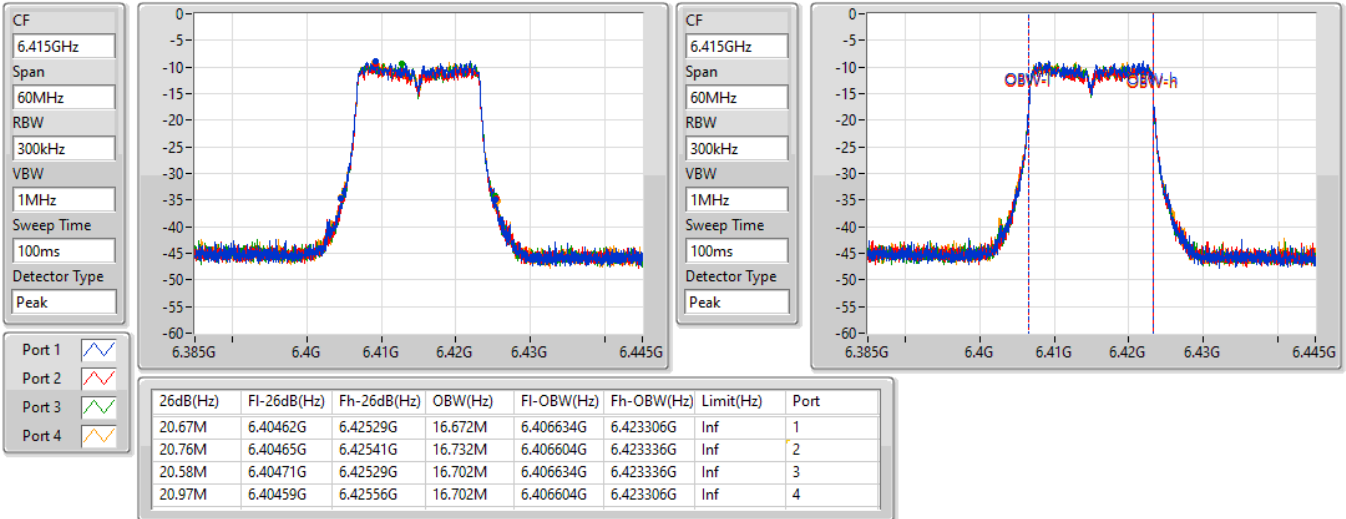


11a20_Nss1,(6Mbps)_4TX

EBW

6415MHz

31/08/2021

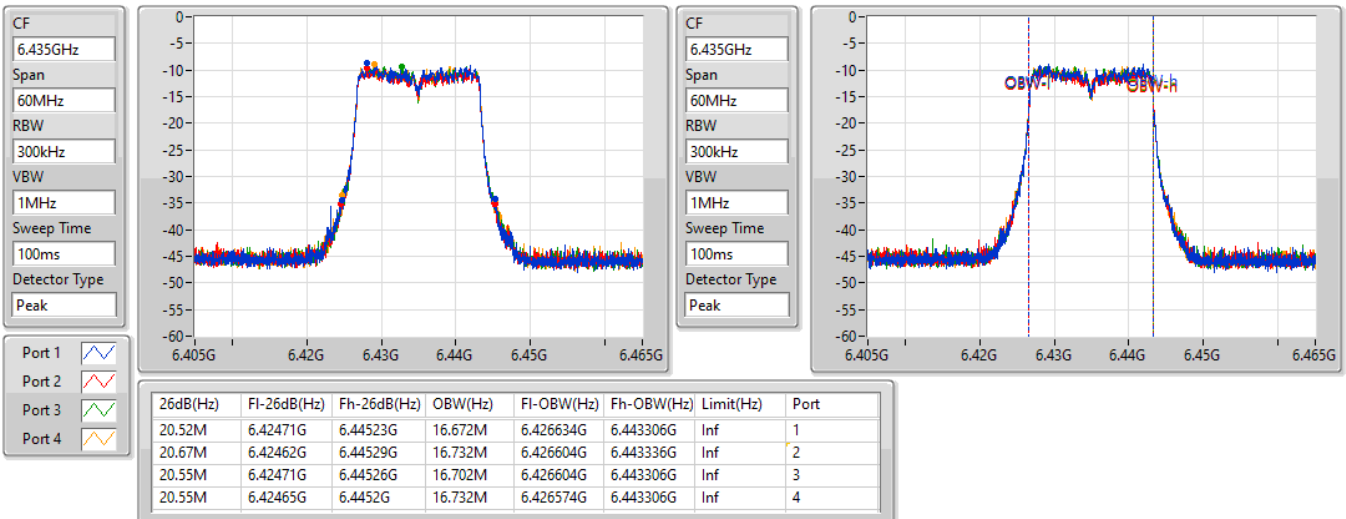


11a20_Nss1,(6Mbps)_4TX

EBW

6435MHz

31/08/2021

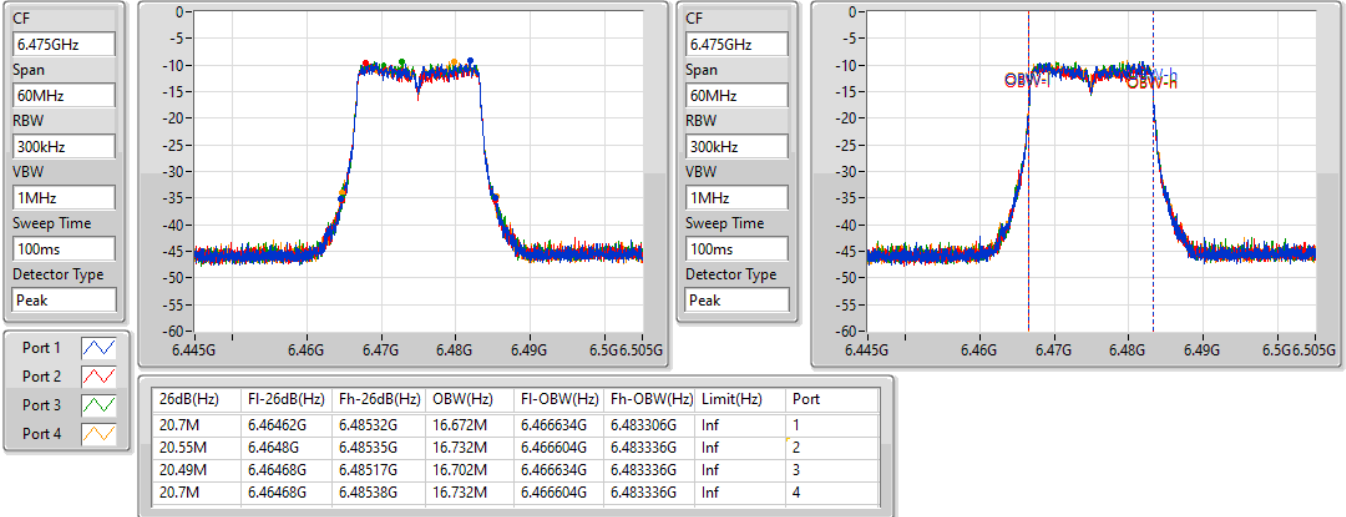


11a20_Nss1,(6Mbps)_4TX

EBW

6475MHz

31/08/2021

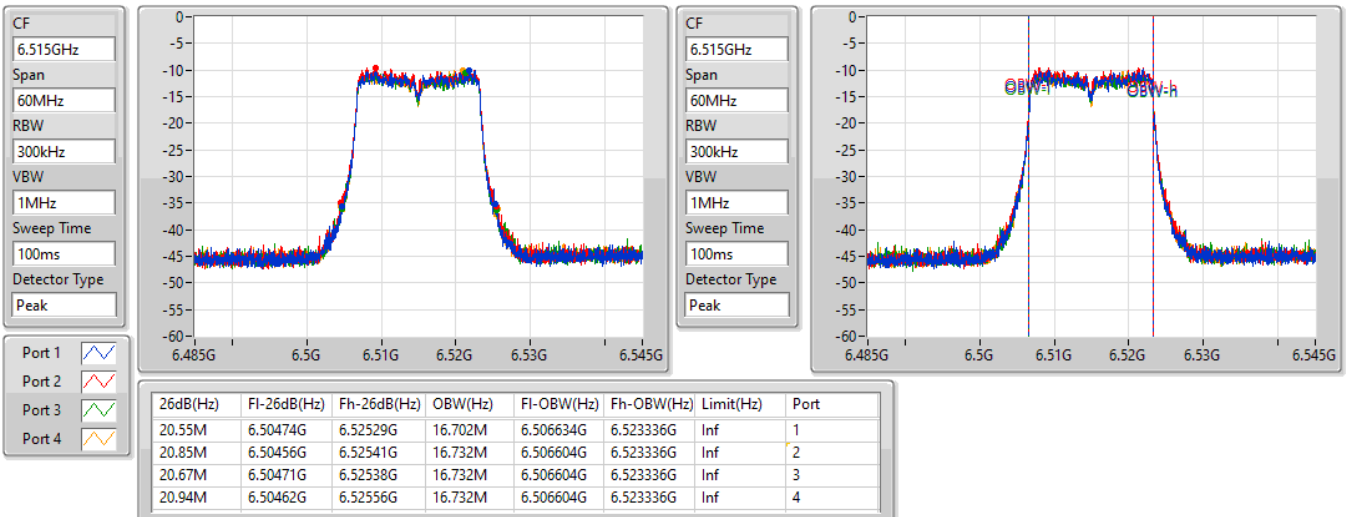


11a20_Nss1,(6Mbps)_4TX

EBW

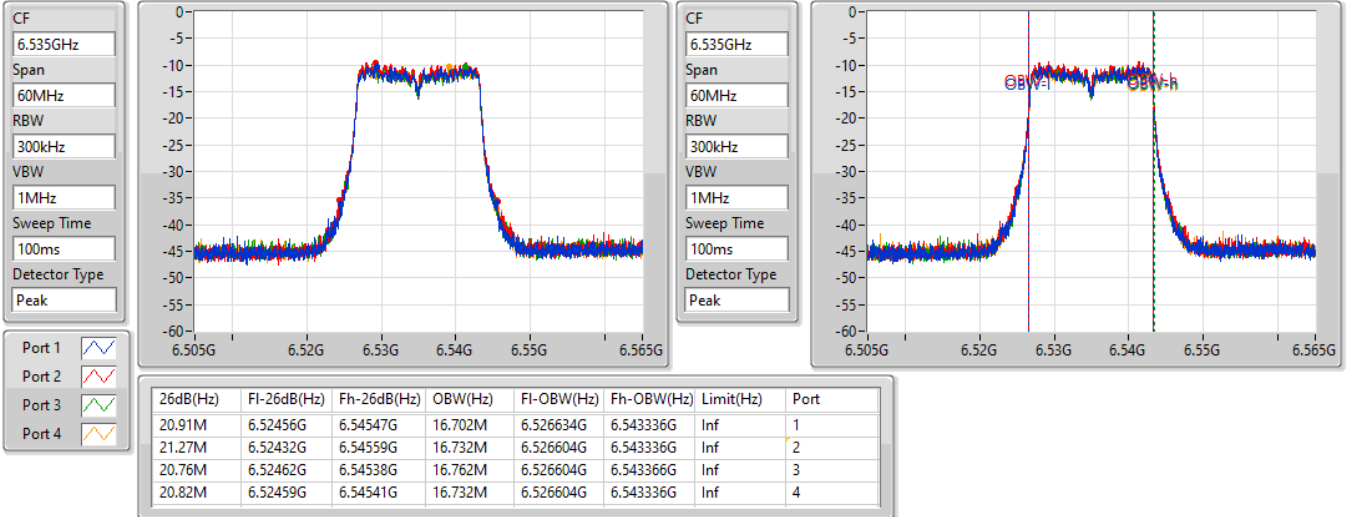
6515MHz

31/08/2021

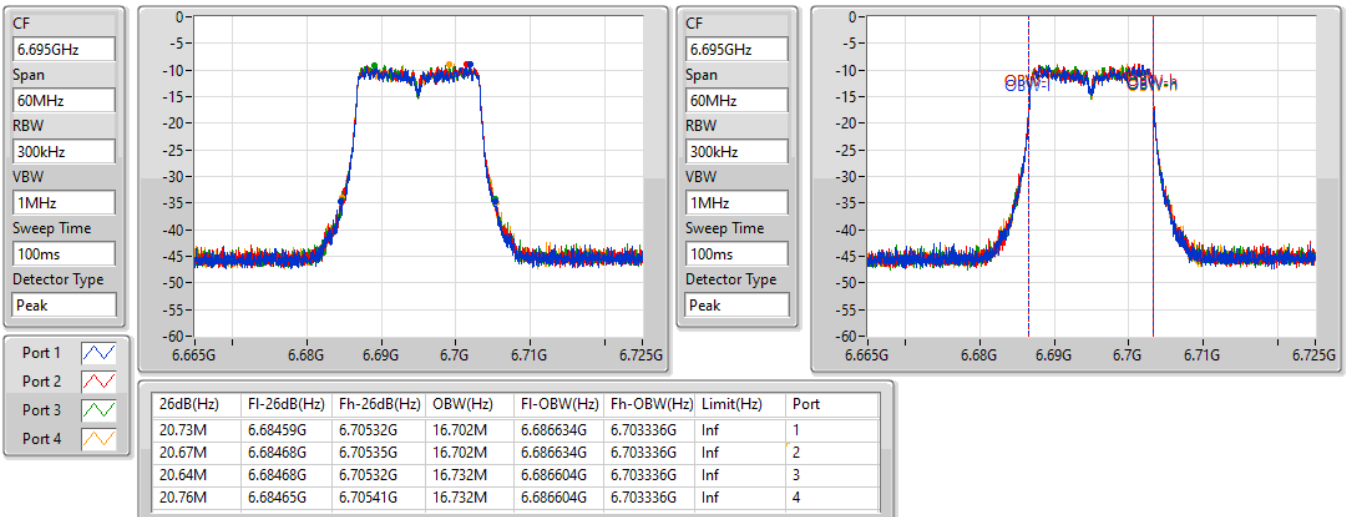


11a20_Nss1,(6Mbps)_4TX
EBW
6535MHz

31/08/2021


11a20_Nss1,(6Mbps)_4TX
EBW
6695MHz

31/08/2021

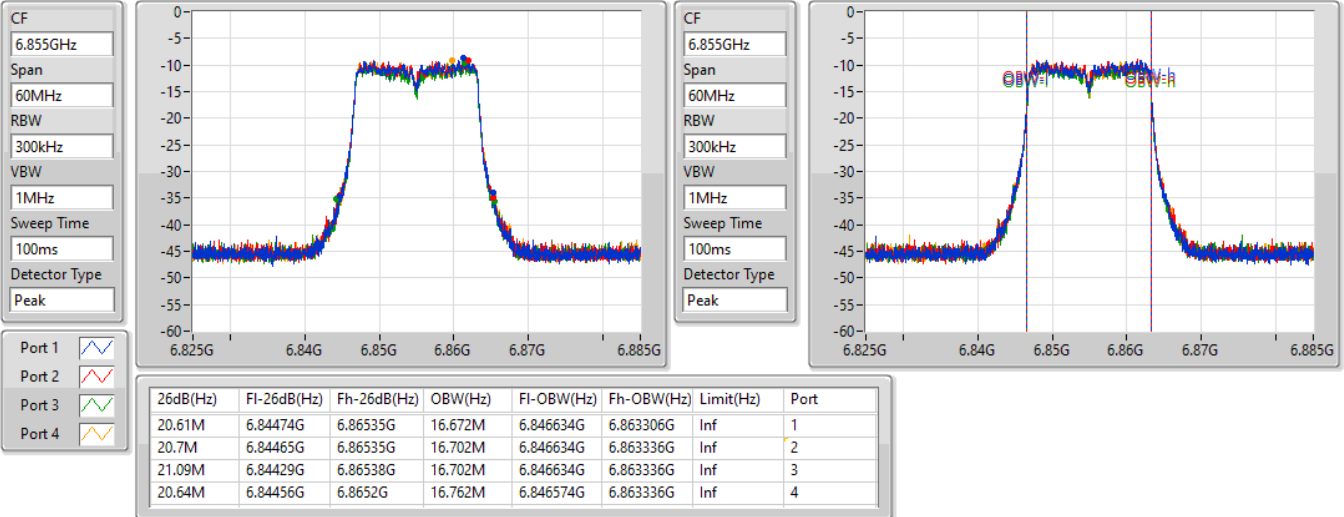


11a20_Nss1,(6Mbps)_4TX

EBW

6855MHz

31/08/2021

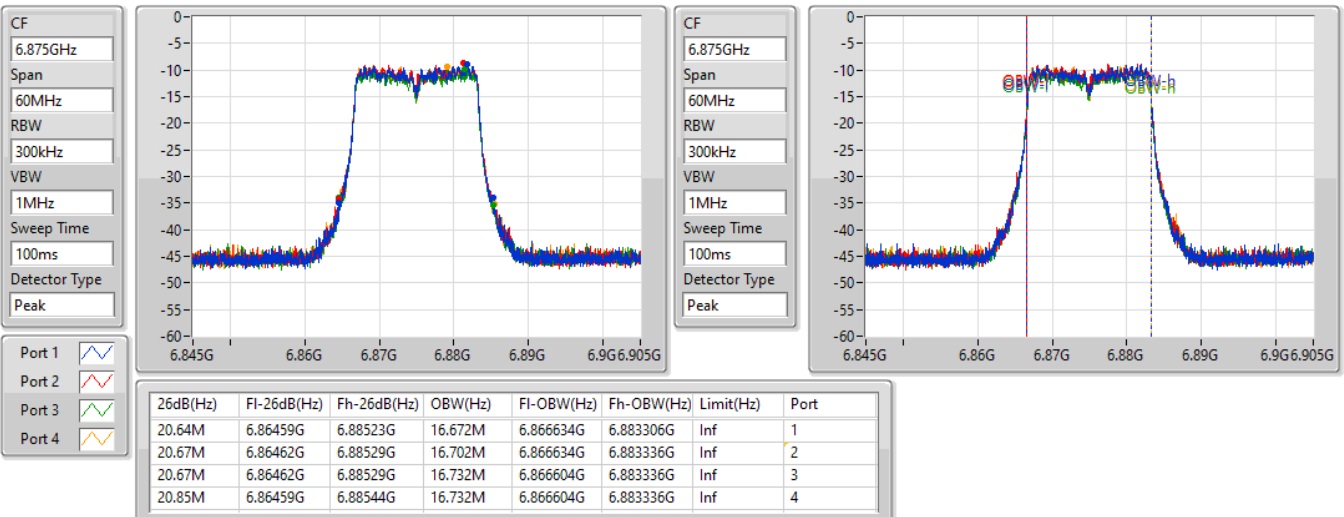


11a20_Nss1,(6Mbps)_4TX

EBW

6875MHz

31/08/2021

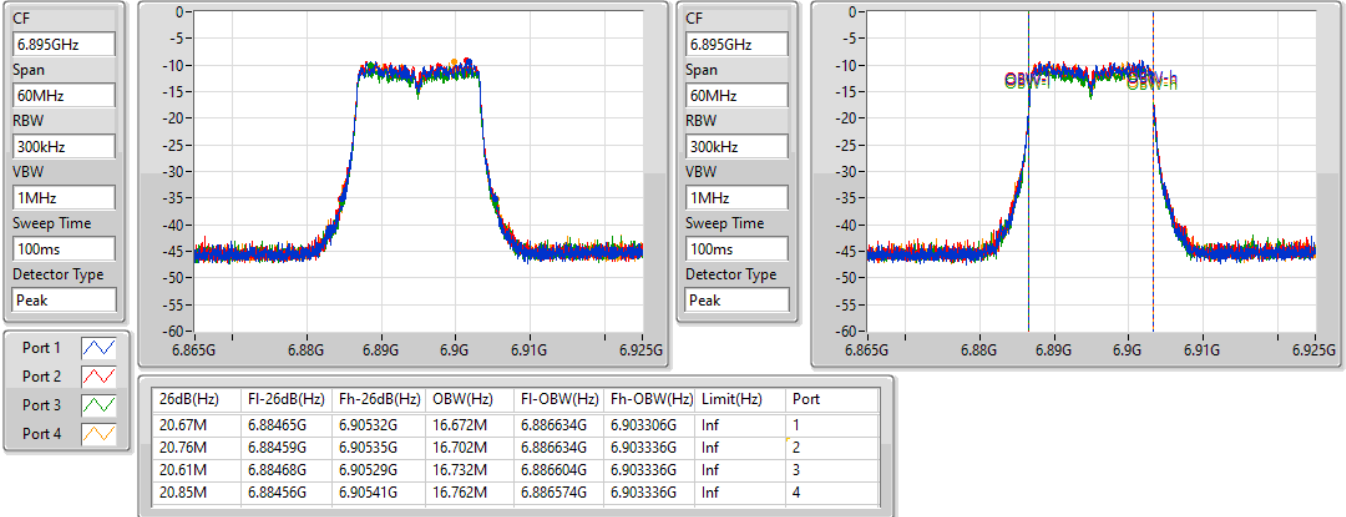


11a20_Nss1,(6Mbps)_4TX

EBW

6895MHz

31/08/2021

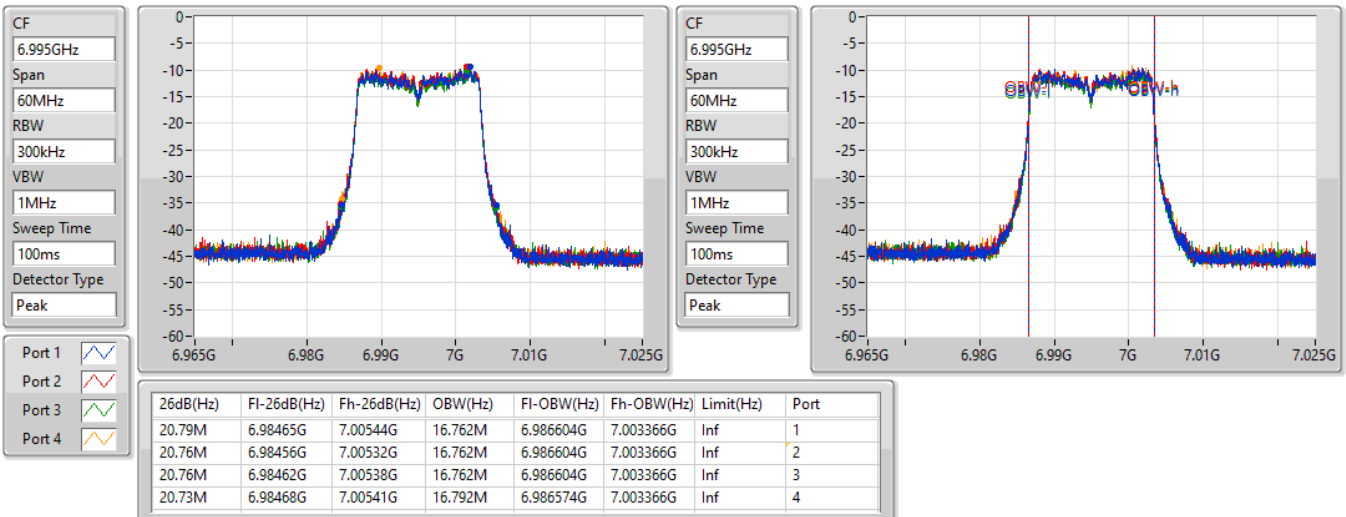


11a20_Nss1,(6Mbps)_4TX

EBW

6995MHz

31/08/2021

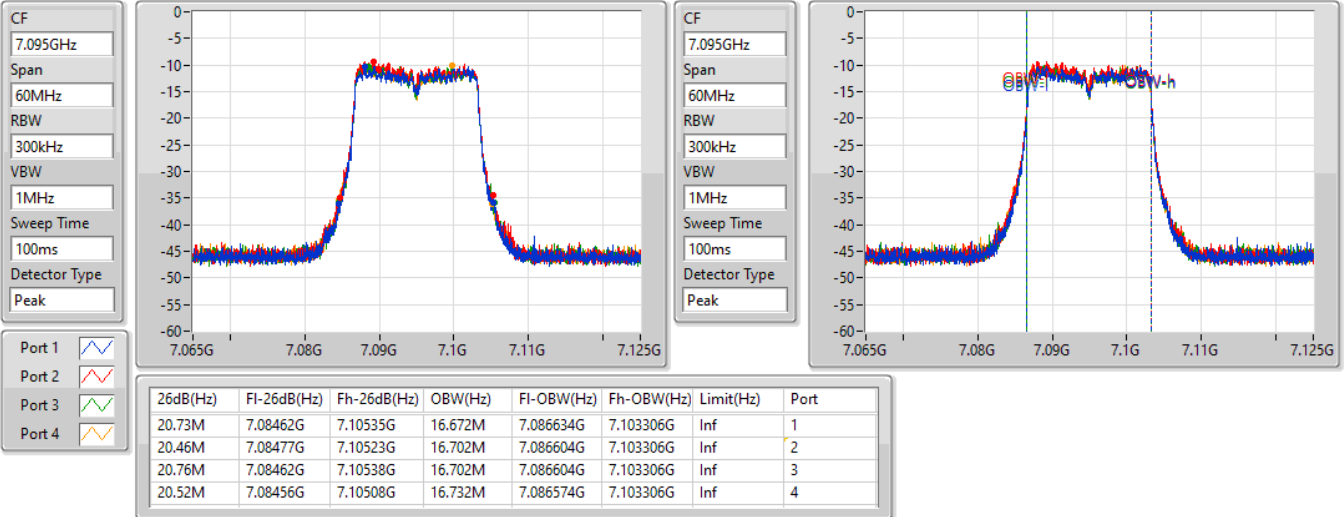


11a20_Nss1,(6Mbps)_4TX

EBW

7095MHz

31/08/2021

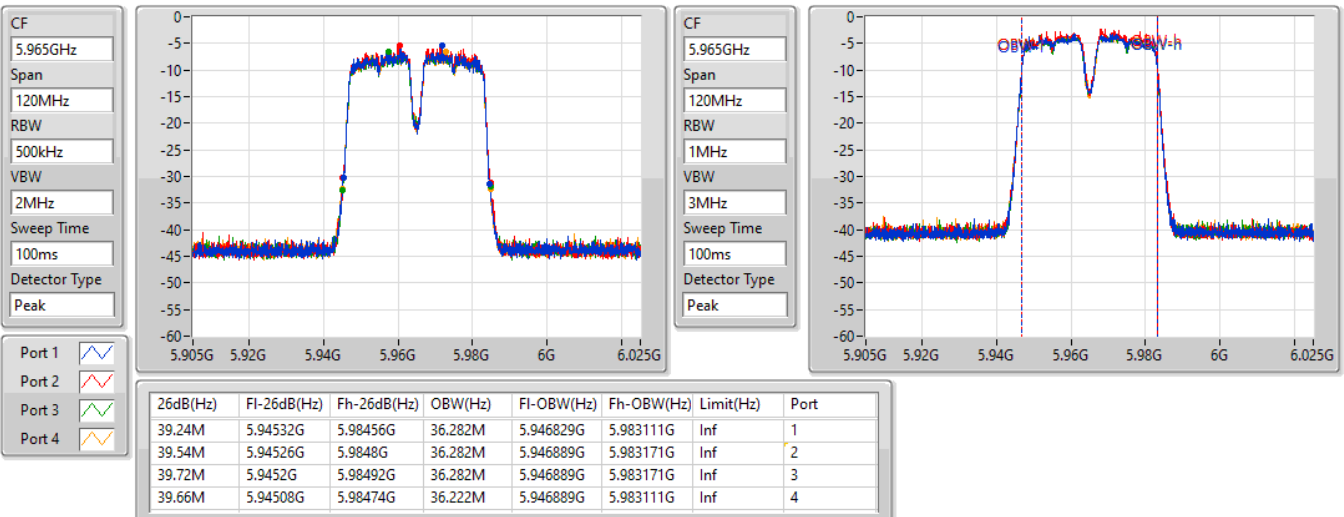


11a40_Nss1,(6Mbps)_4TX

EBW

5965MHz

31/08/2021

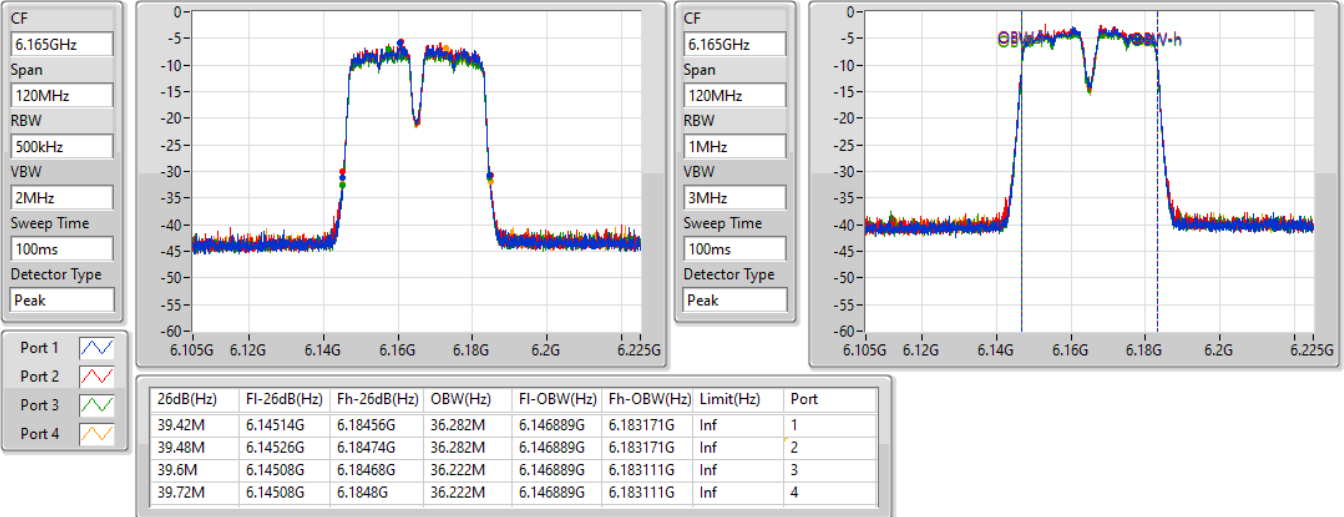


11a40_Nss1,(6Mbps)_4TX

EBW

6165MHz

31/08/2021

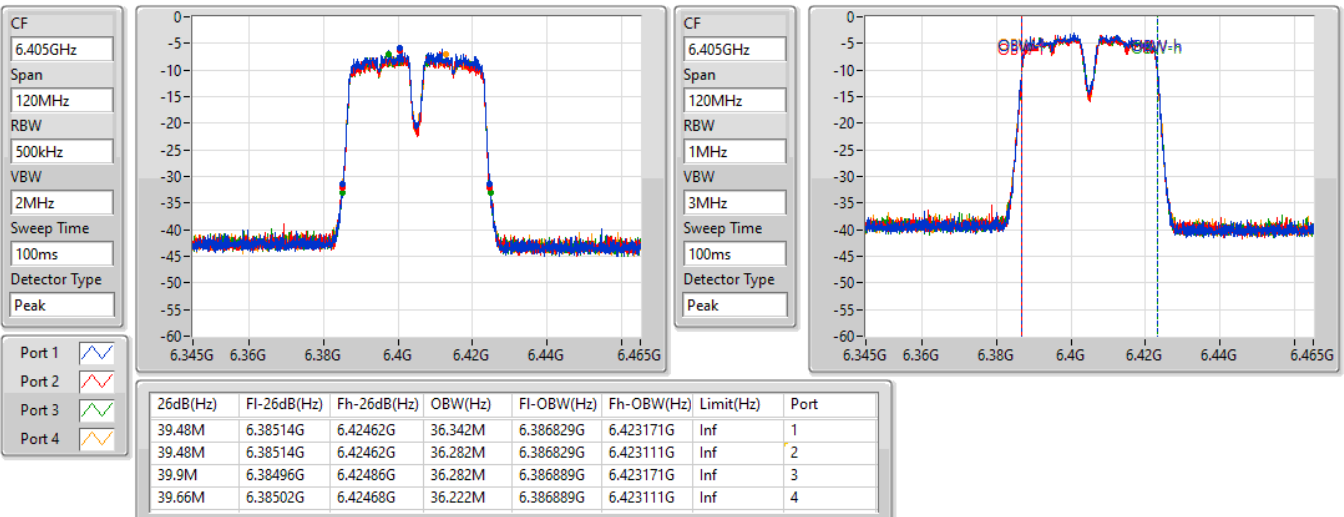


11a40_Nss1,(6Mbps)_4TX

EBW

6405MHz

31/08/2021

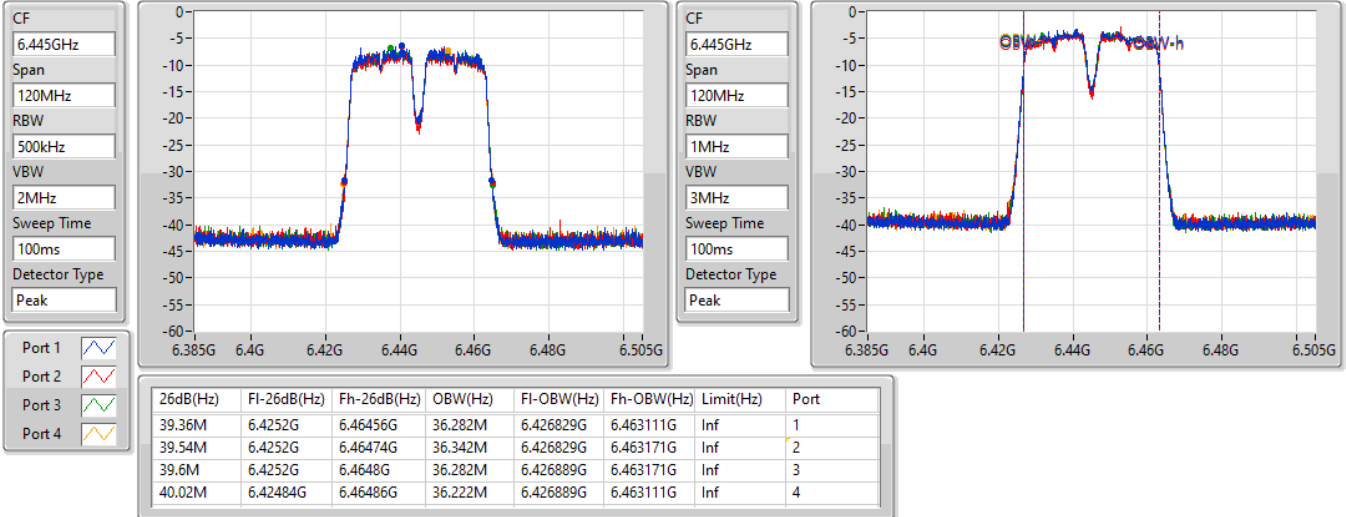


11a40_Nss1,(6Mbps)_4TX

EBW

6445MHz

31/08/2021

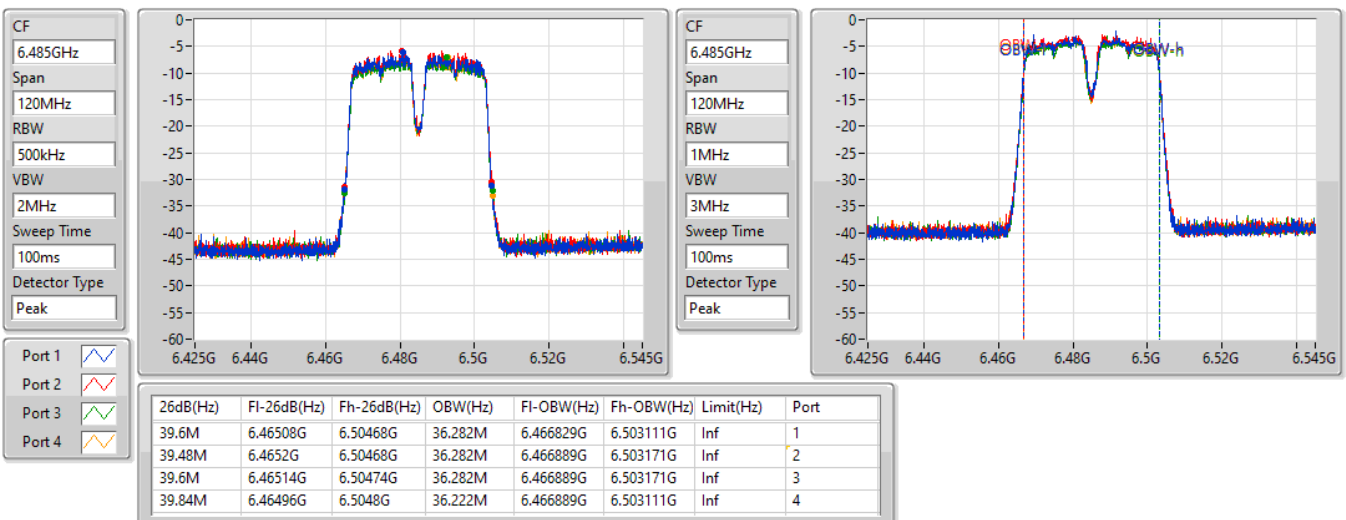


11a40_Nss1,(6Mbps)_4TX

EBW

6485MHz

31/08/2021

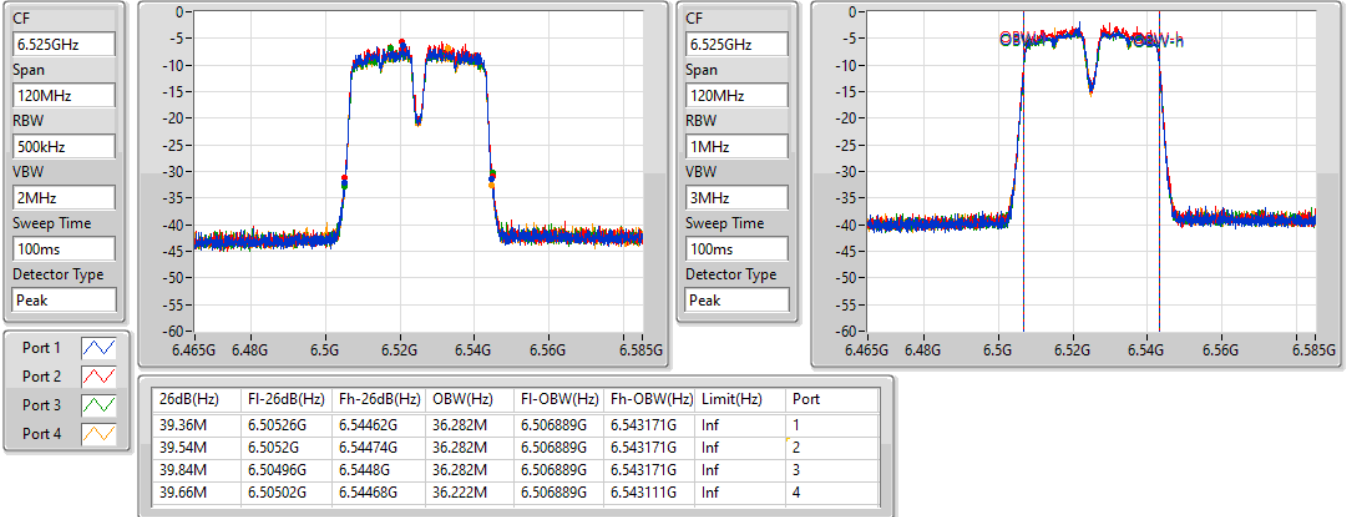


11a40_Nss1,(6Mbps)_4TX

EBW

6525MHz

31/08/2021

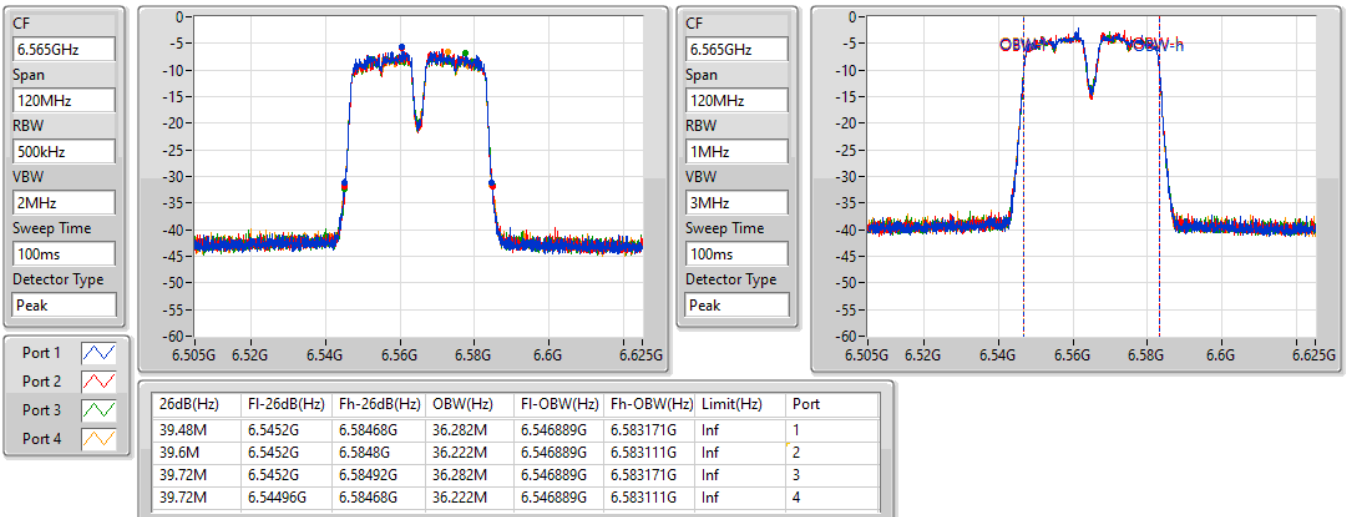


11a40_Nss1,(6Mbps)_4TX

EBW

6565MHz

31/08/2021

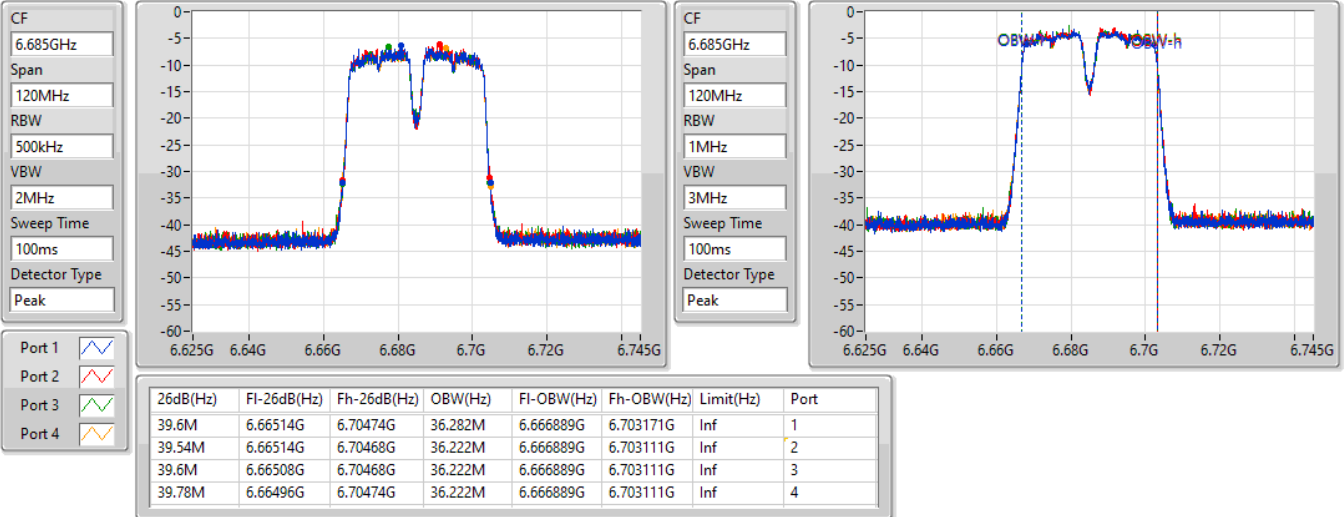


11a40_Nss1,(6Mbps)_4TX

EBW

6685MHz

31/08/2021

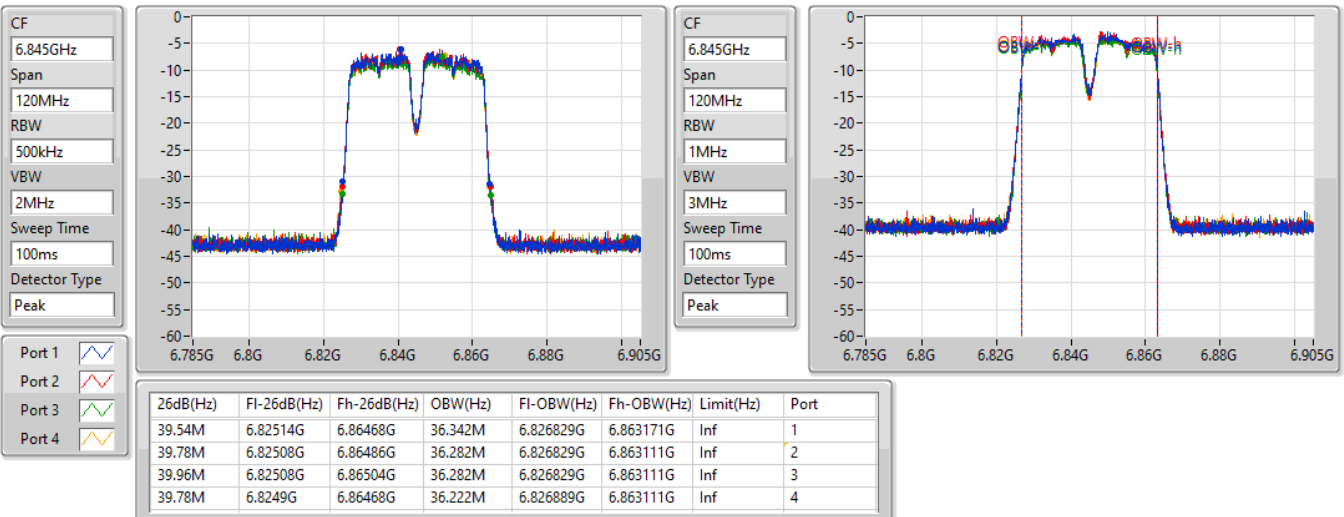


11a40_Nss1,(6Mbps)_4TX

EBW

6845MHz

31/08/2021

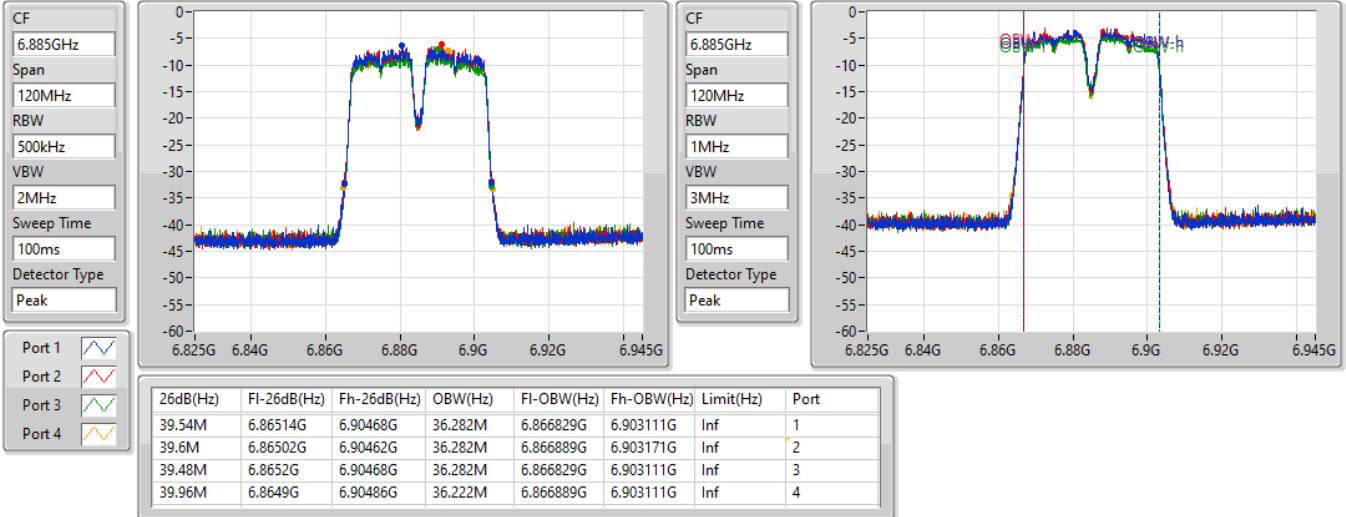


11a40_Nss1,(6Mbps)_4TX

EBW

6885MHz

01/09/2021

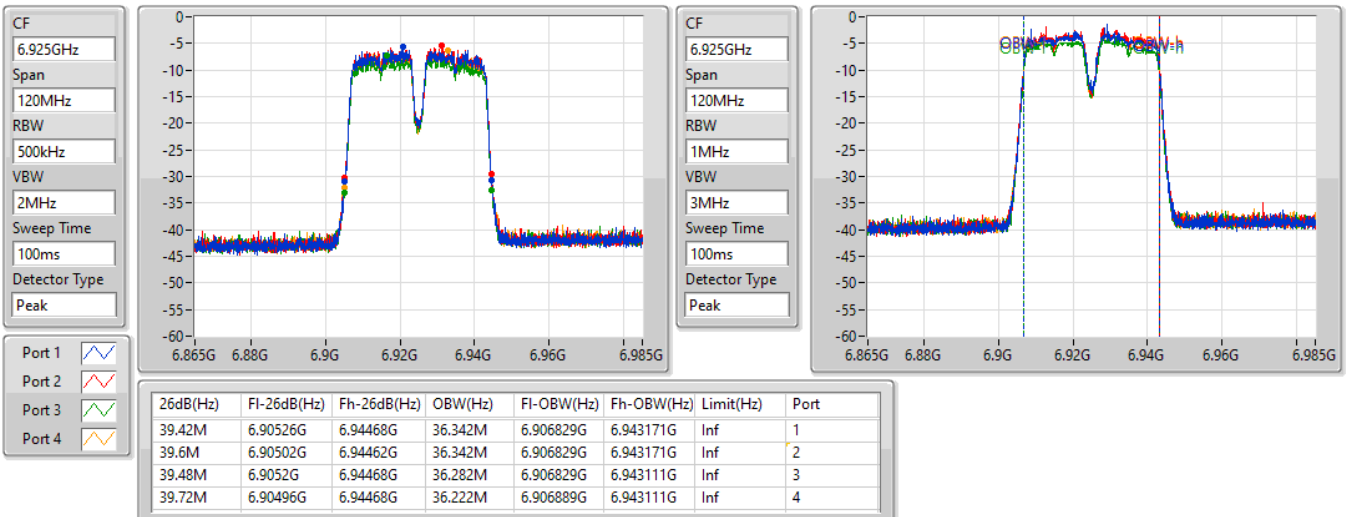


11a40_Nss1,(6Mbps)_4TX

EBW

6925MHz

01/09/2021

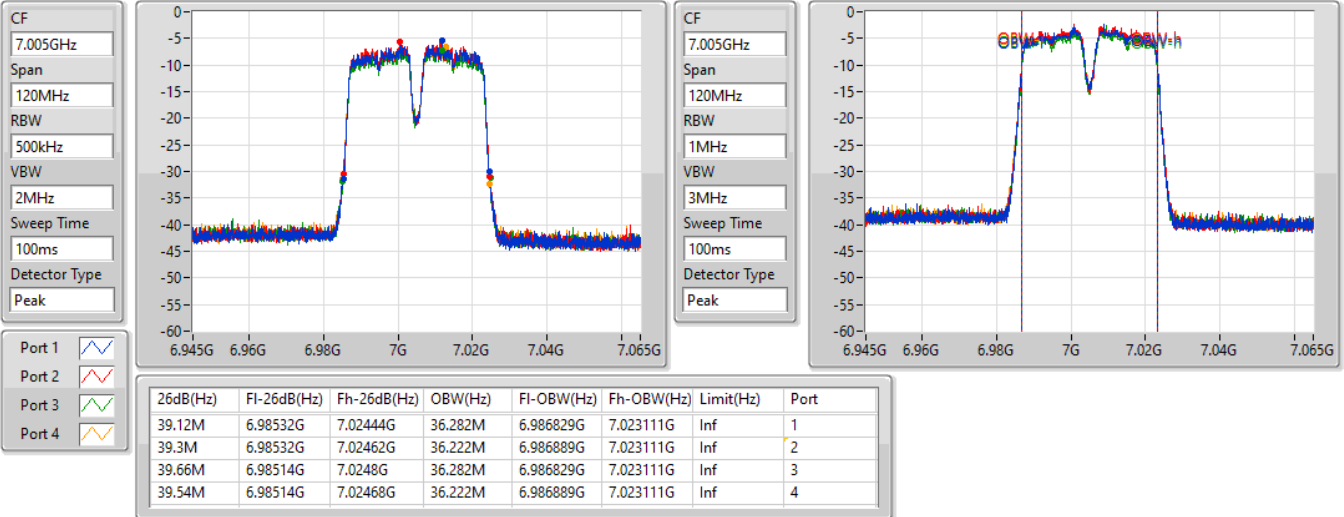


11a40_Nss1,(6Mbps)_4TX

EBW

7005MHz

01/09/2021

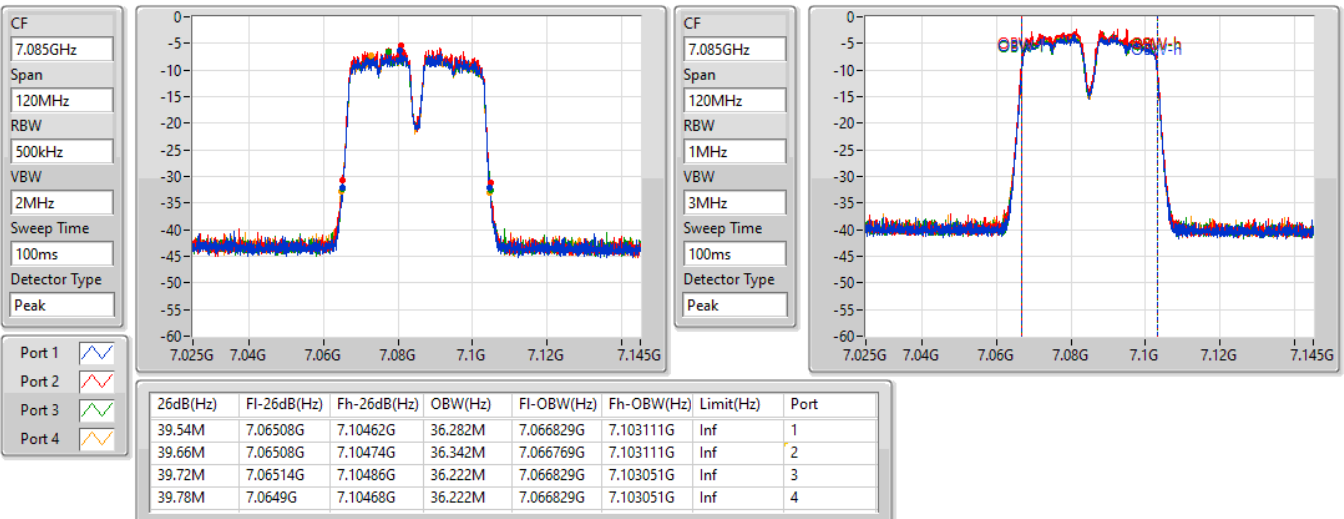


11a40_Nss1,(6Mbps)_4TX

EBW

7085MHz

01/09/2021

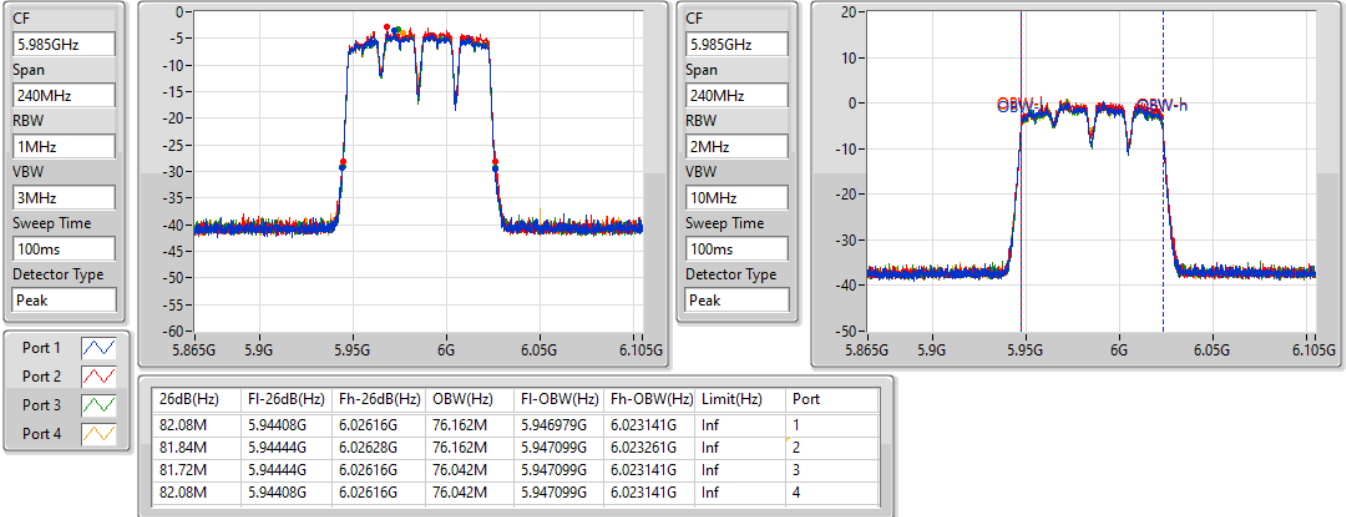


11a80_Nss1,(6Mbps)_4TX

EBW

5985MHz

01/09/2021

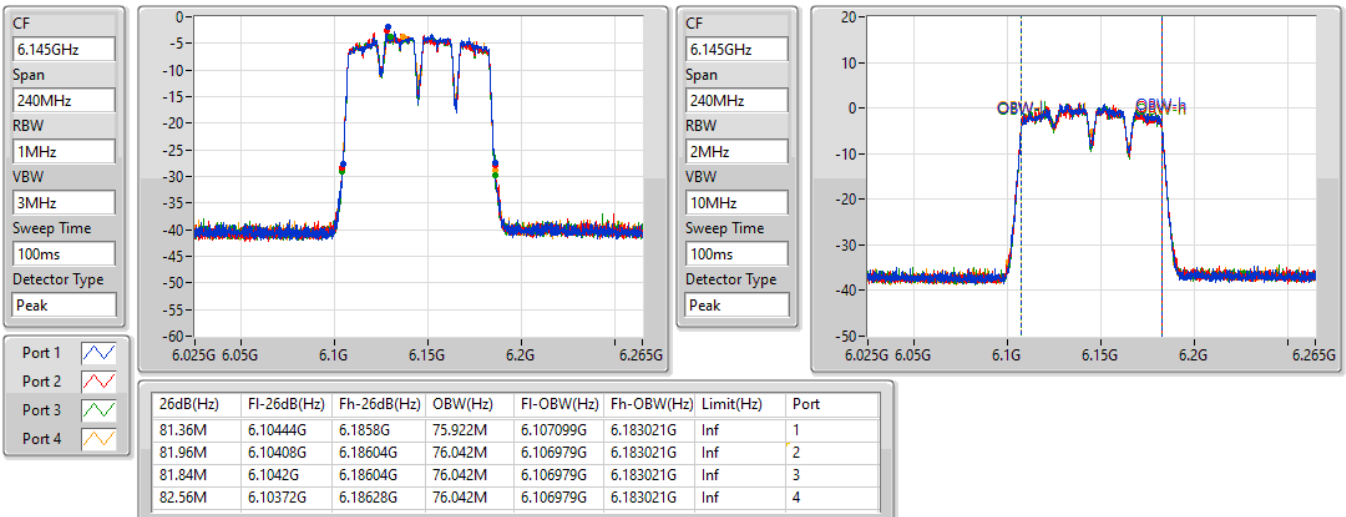


11a80_Nss1,(6Mbps)_4TX

EBW

6145MHz

01/09/2021

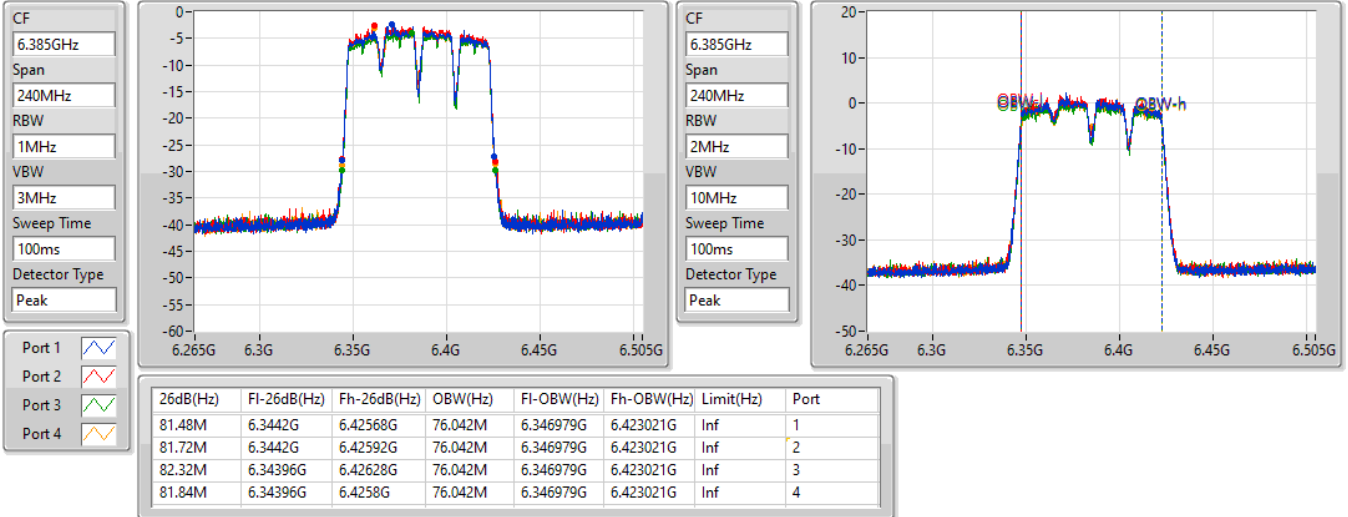


11a80_Nss1,(6Mbps)_4TX

EBW

6385MHz

01/09/2021

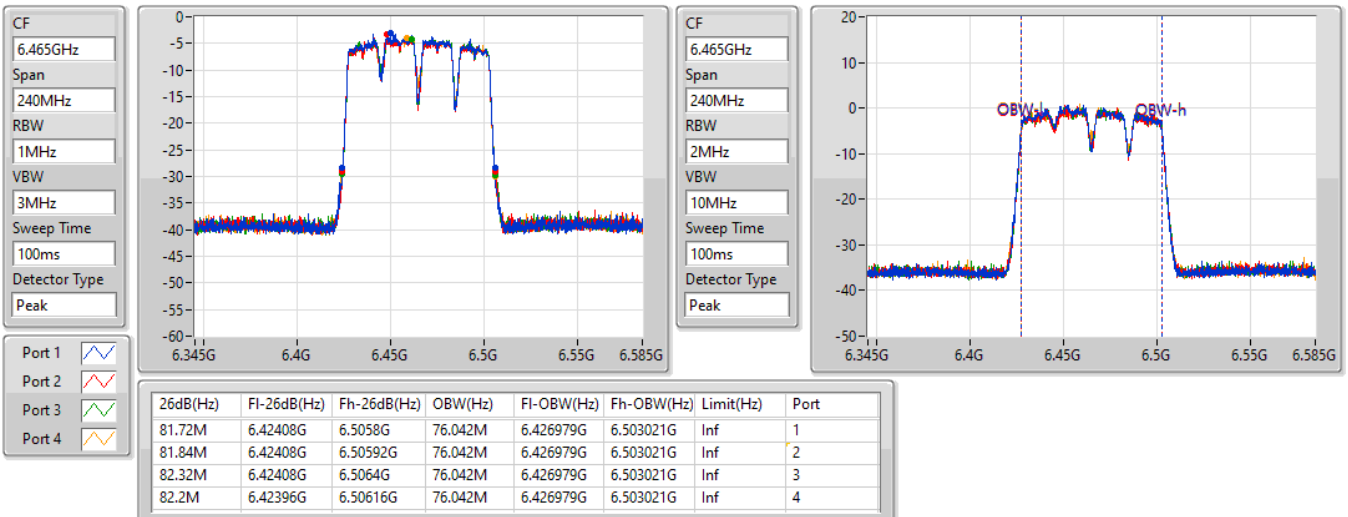


11a80_Nss1,(6Mbps)_4TX

EBW

6465MHz

01/09/2021

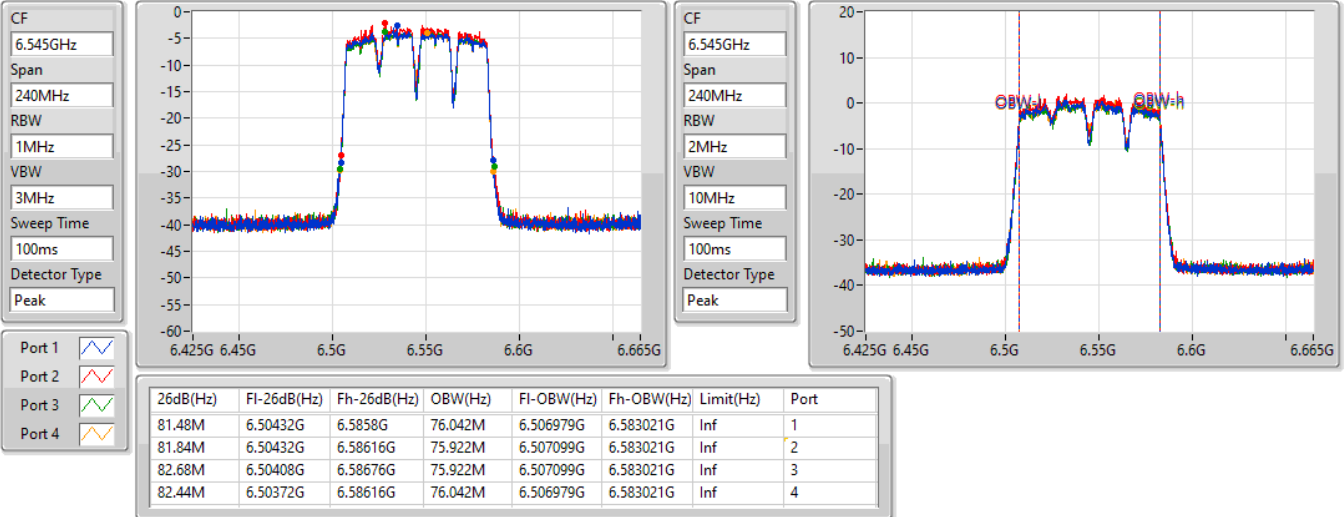


11a80_Nss1,(6Mbps)_4TX

EBW

6545MHz

01/09/2021

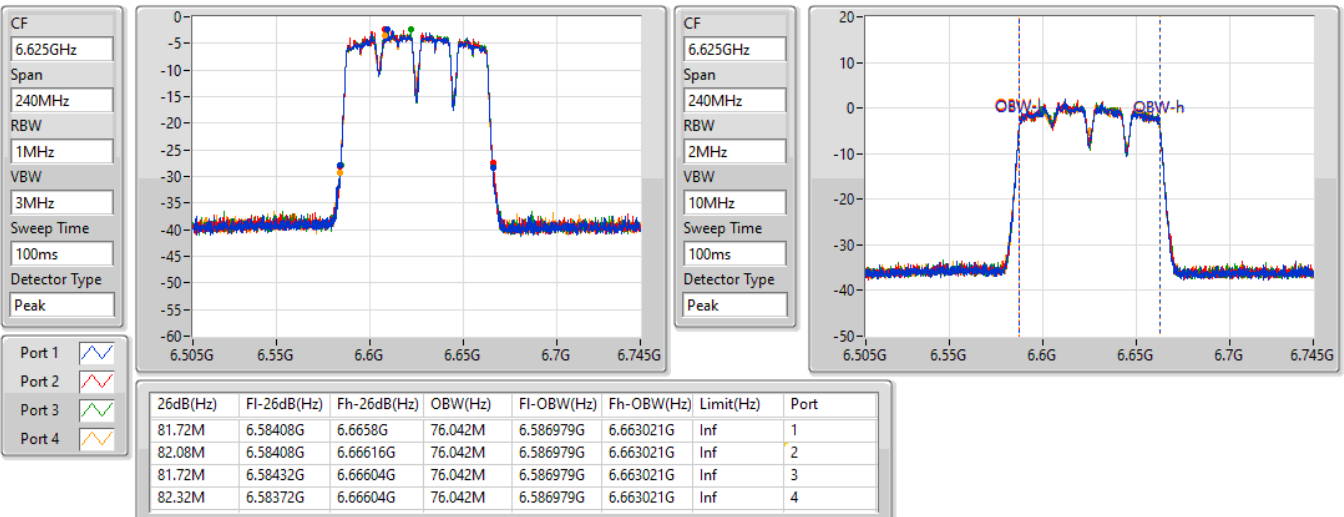


11a80_Nss1,(6Mbps)_4TX

EBW

6625MHz

01/09/2021

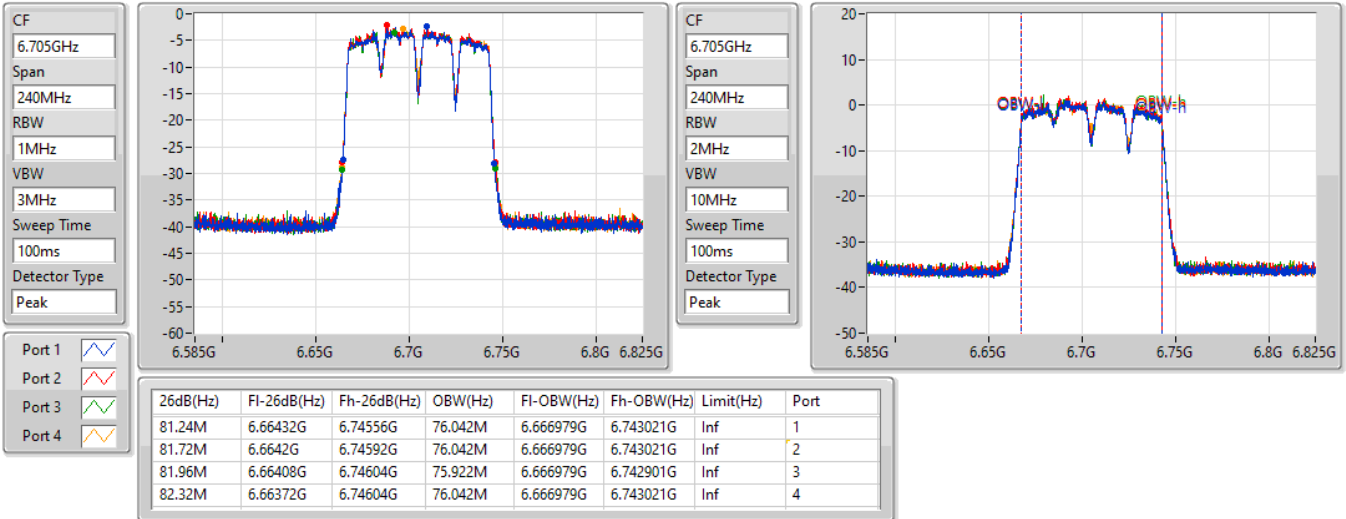


11a80_Nss1,(6Mbps)_4TX

EBW

6705MHz

01/09/2021

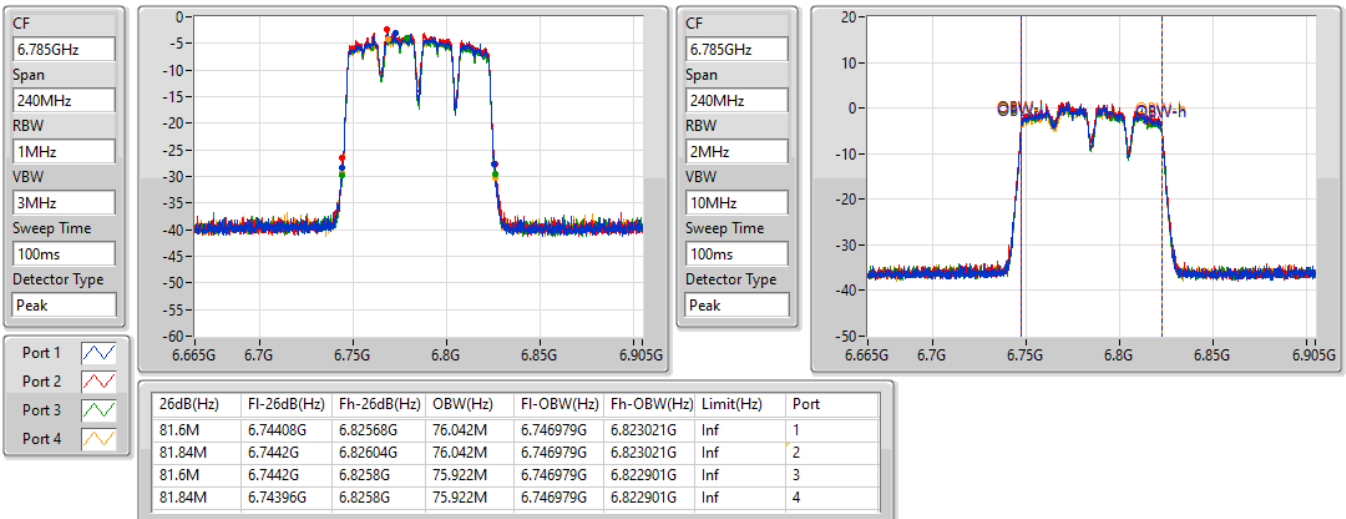


11a80_Nss1,(6Mbps)_4TX

EBW

6785MHz

01/09/2021

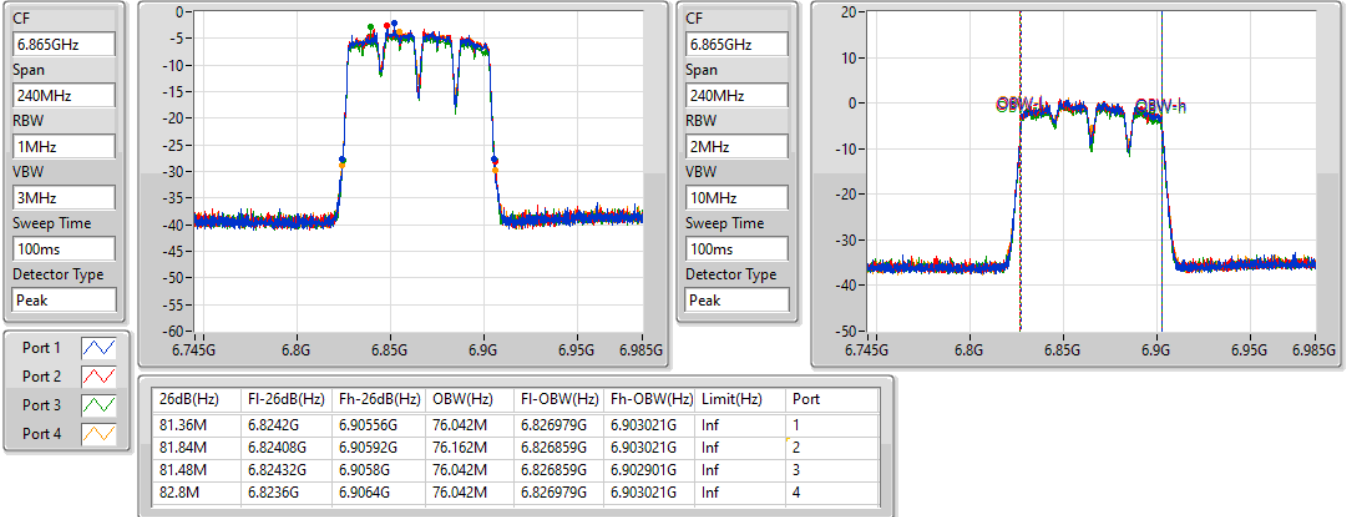


11a80_Nss1,(6Mbps)_4TX

EBW

6865MHz

01/09/2021

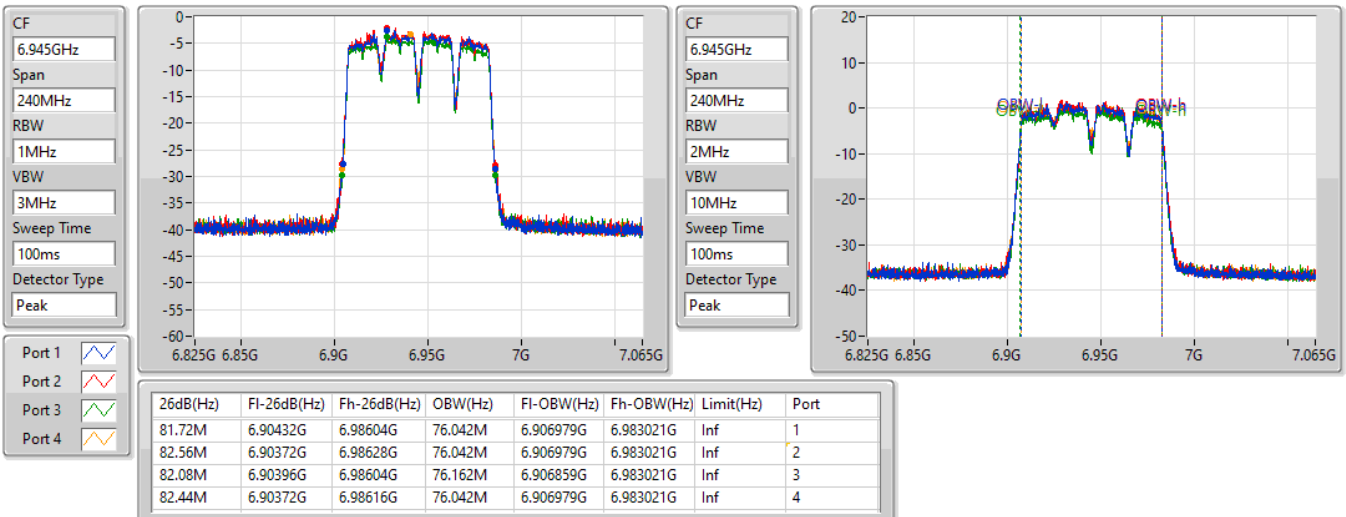


11a80_Nss1,(6Mbps)_4TX

EBW

6945MHz

01/09/2021

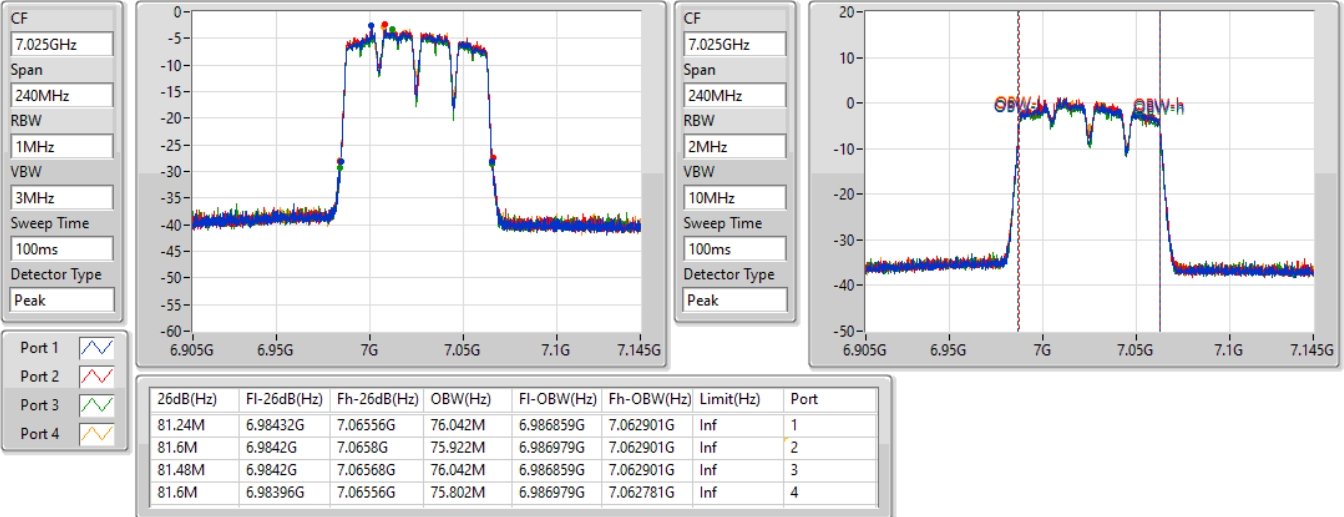


11a80_Nss1,(6Mbps)_4TX

EBW

7025MHz

01/09/2021

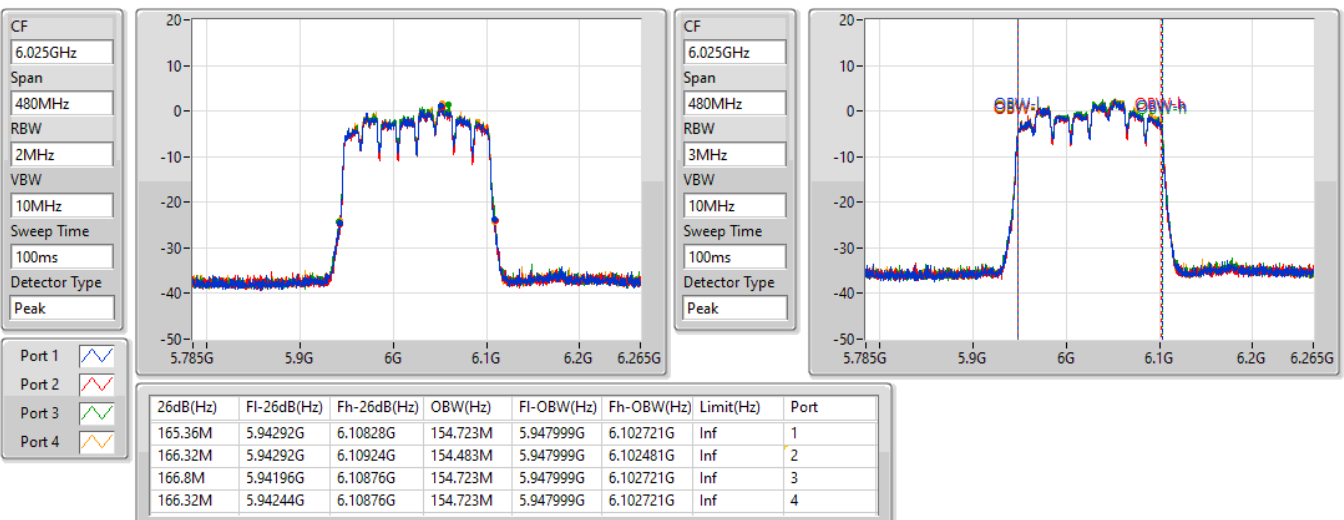


11a160_Nss1,(6Mbps)_4TX

EBW

6025MHz

01/09/2021

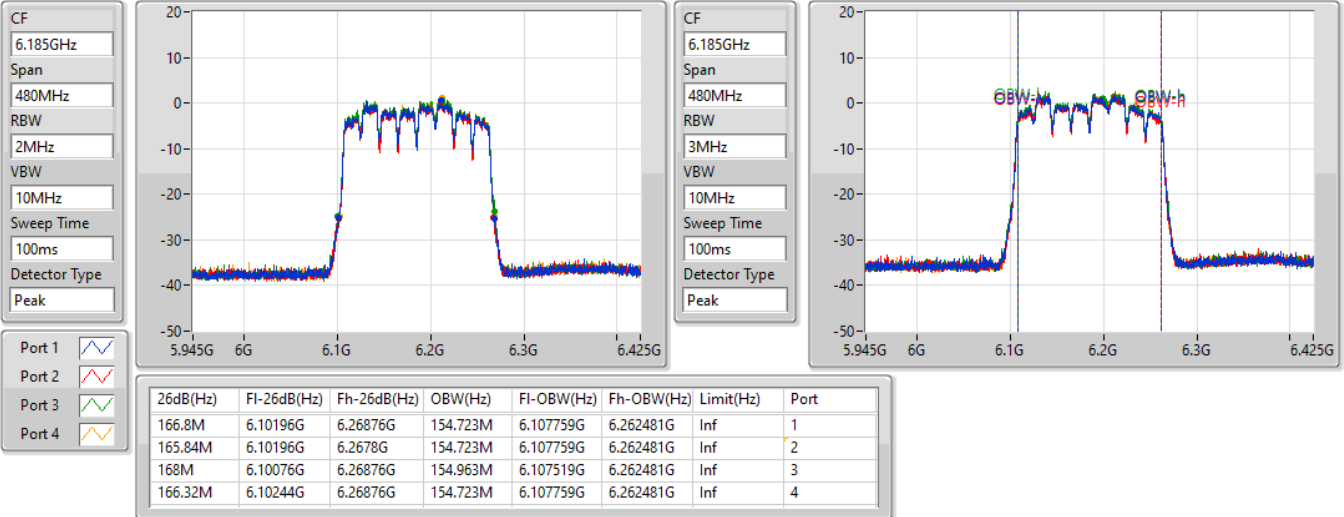


11a160_Nss1,(6Mbps)_4TX

EBW

6185MHz

01/09/2021

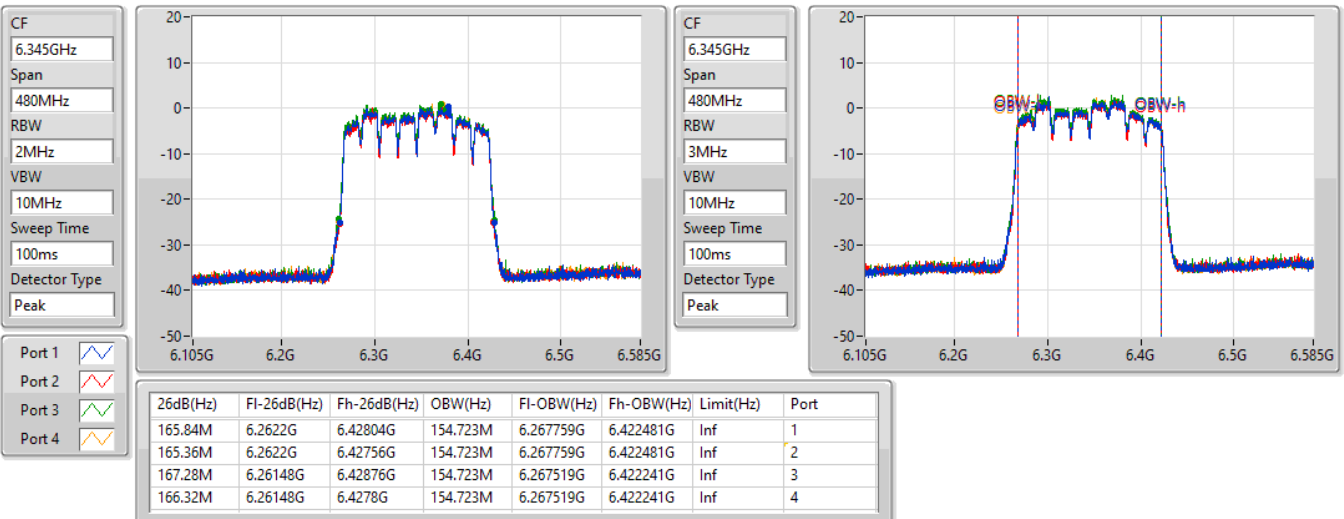


11a160_Nss1,(6Mbps)_4TX

EBW

6345MHz

01/09/2021

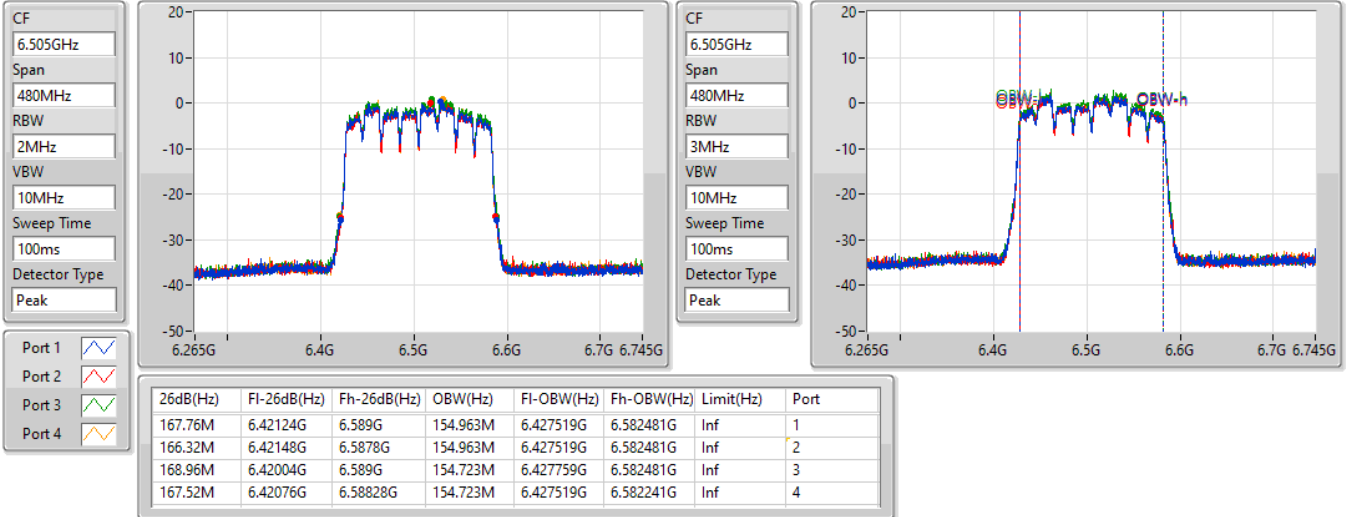


11a160_Nss1,(6Mbps)_4TX

EBW

6505MHz

01/09/2021

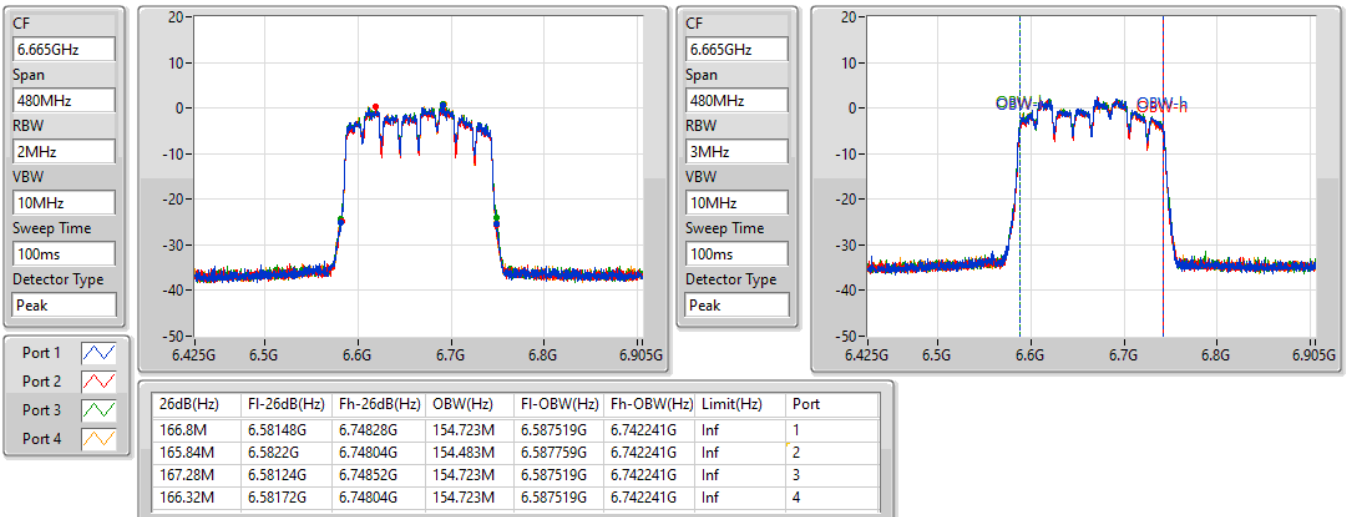


11a160_Nss1,(6Mbps)_4TX

EBW

6665MHz

01/09/2021

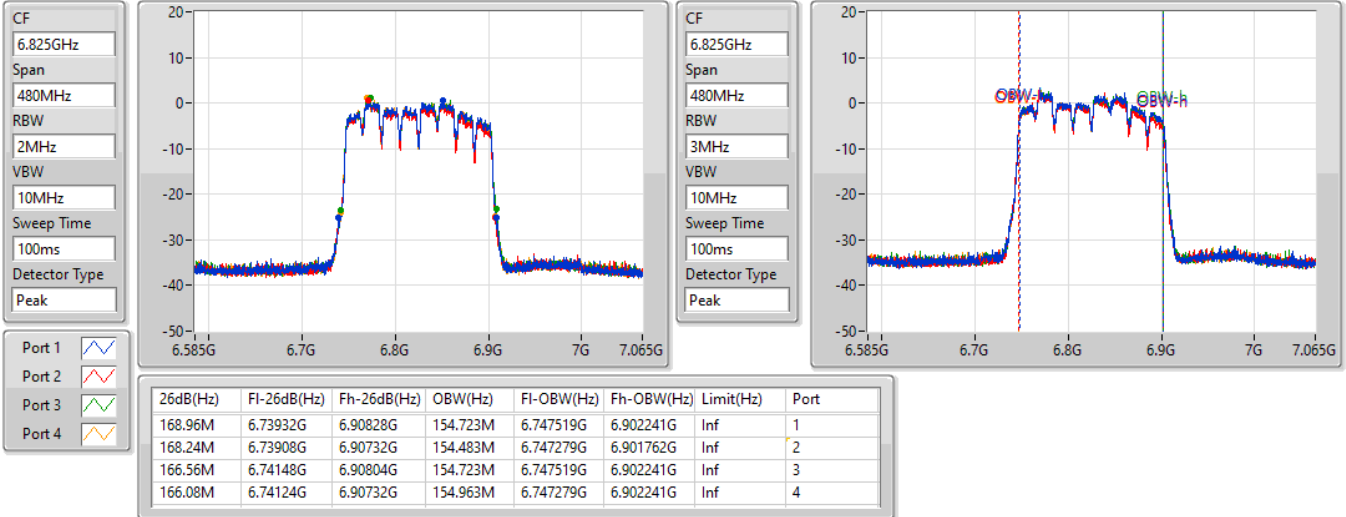


11a160_Nss1,(6Mbps)_4TX

EBW

6825MHz

01/09/2021

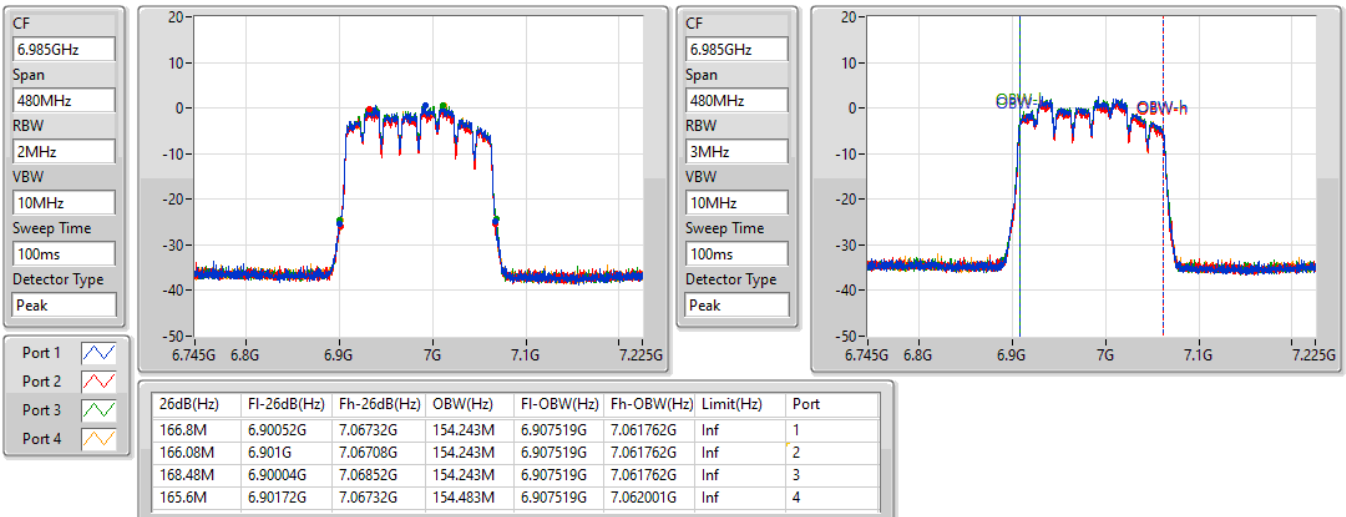


11a160_Nss1,(6Mbps)_4TX

EBW

6985MHz

01/09/2021

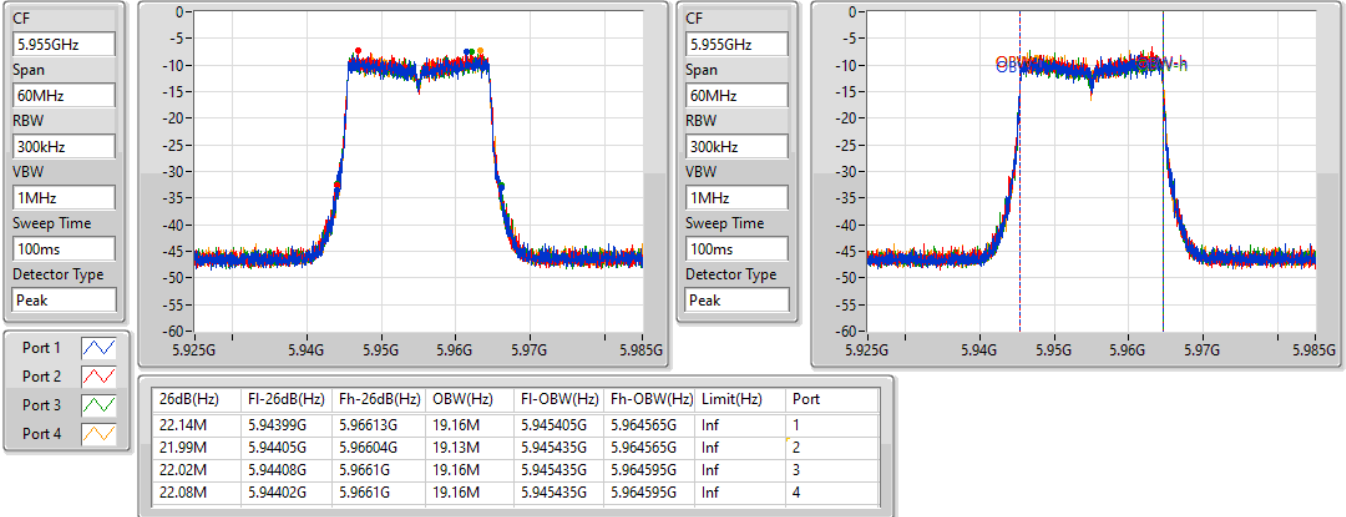


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

5955MHz

01/09/2021

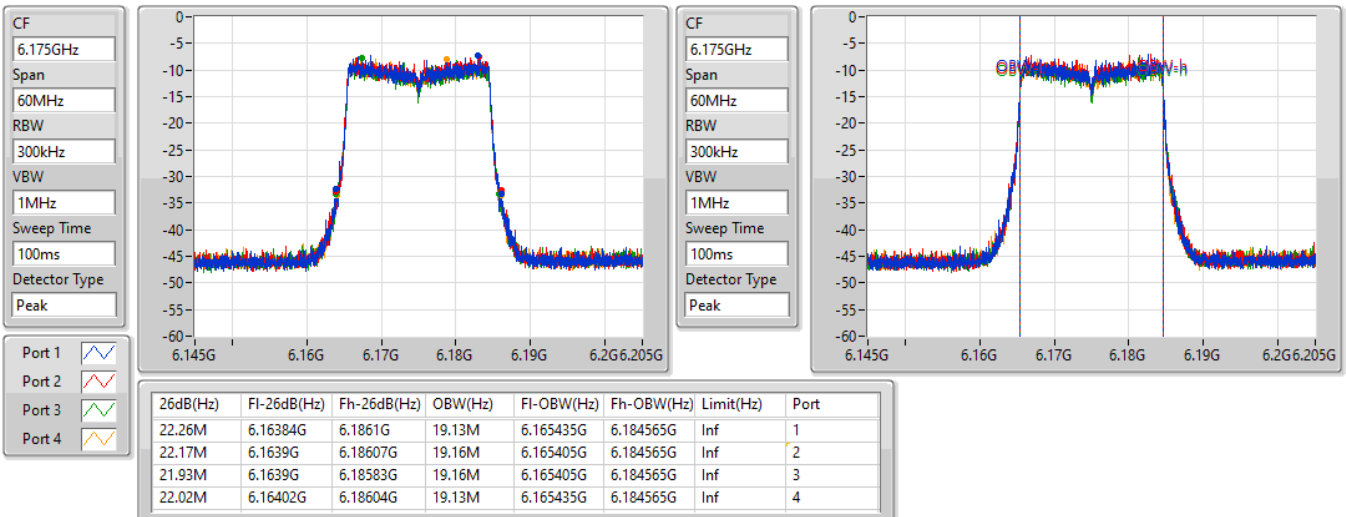


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6175MHz

01/09/2021

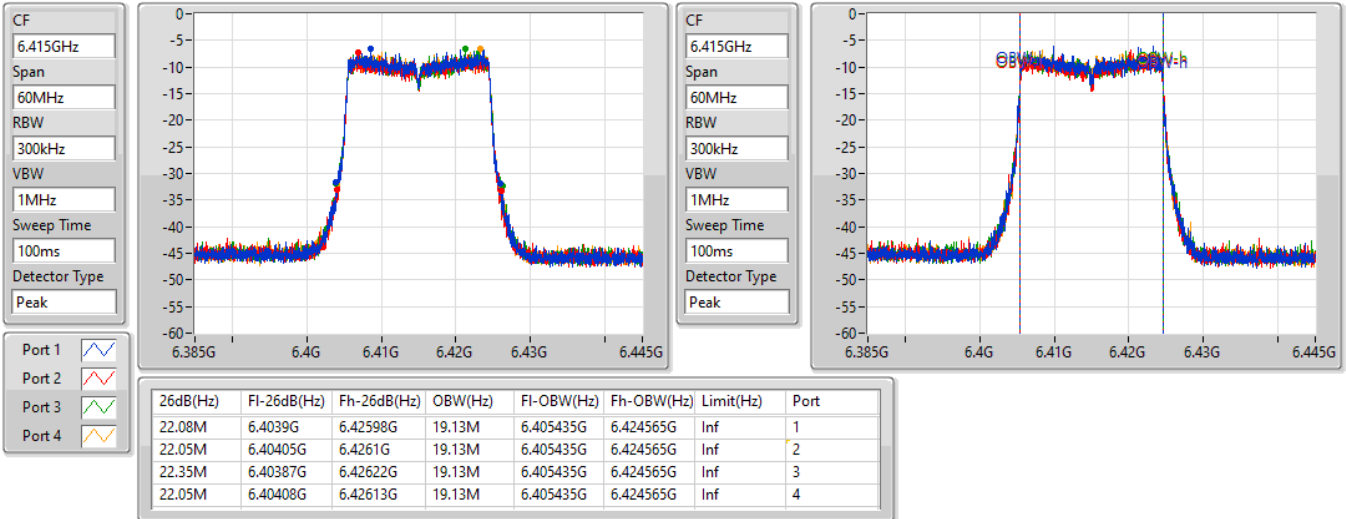


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6415MHz

01/09/2021

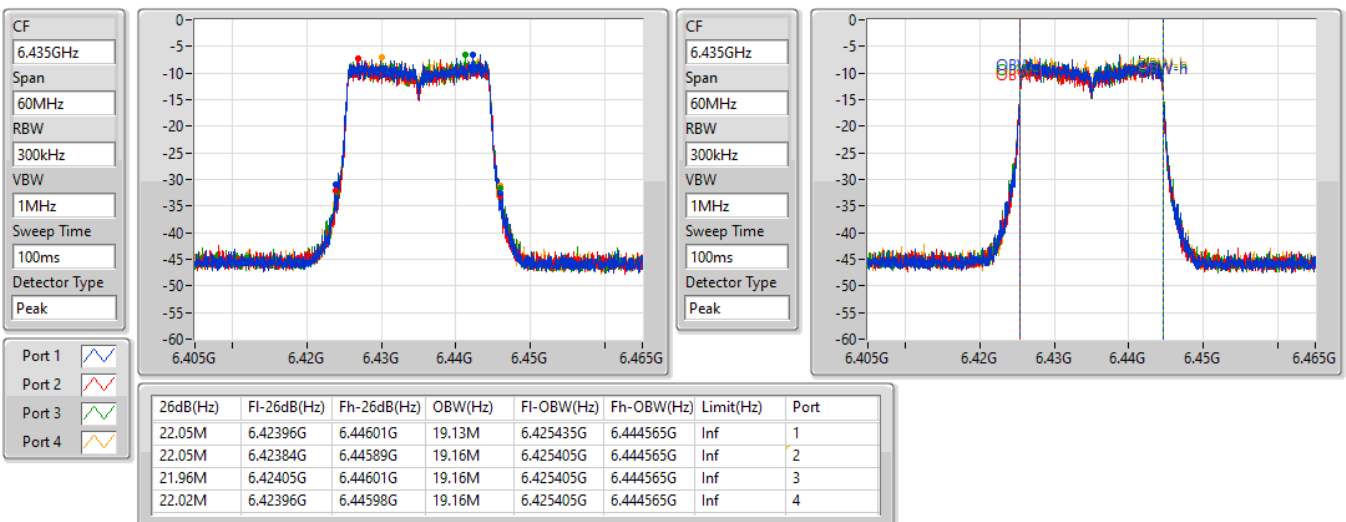


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6435MHz

01/09/2021

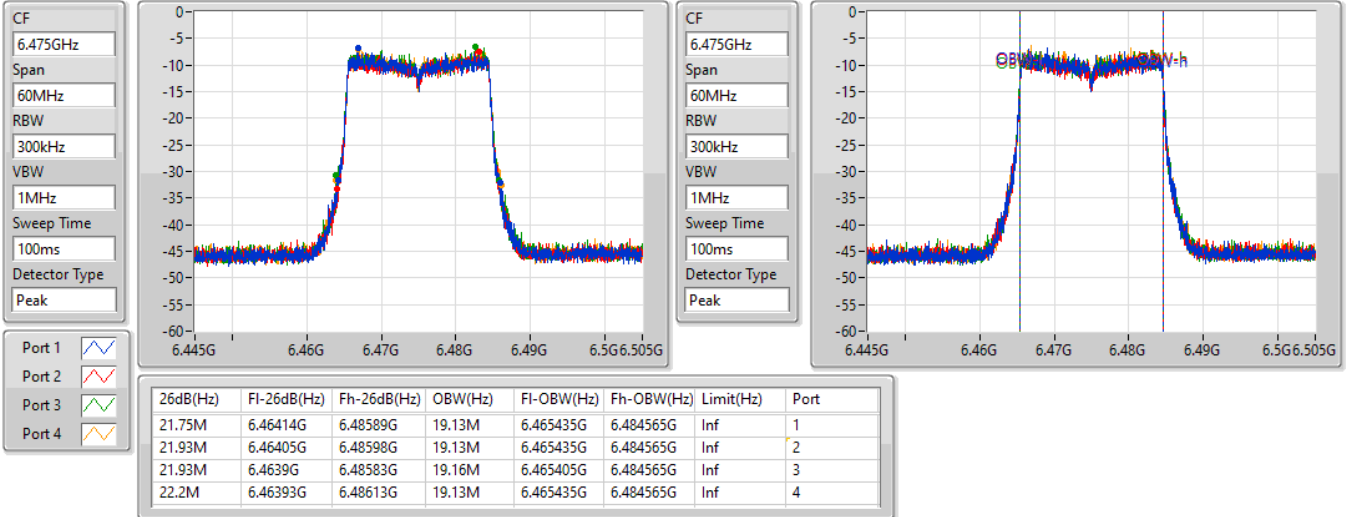


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6475MHz

01/09/2021

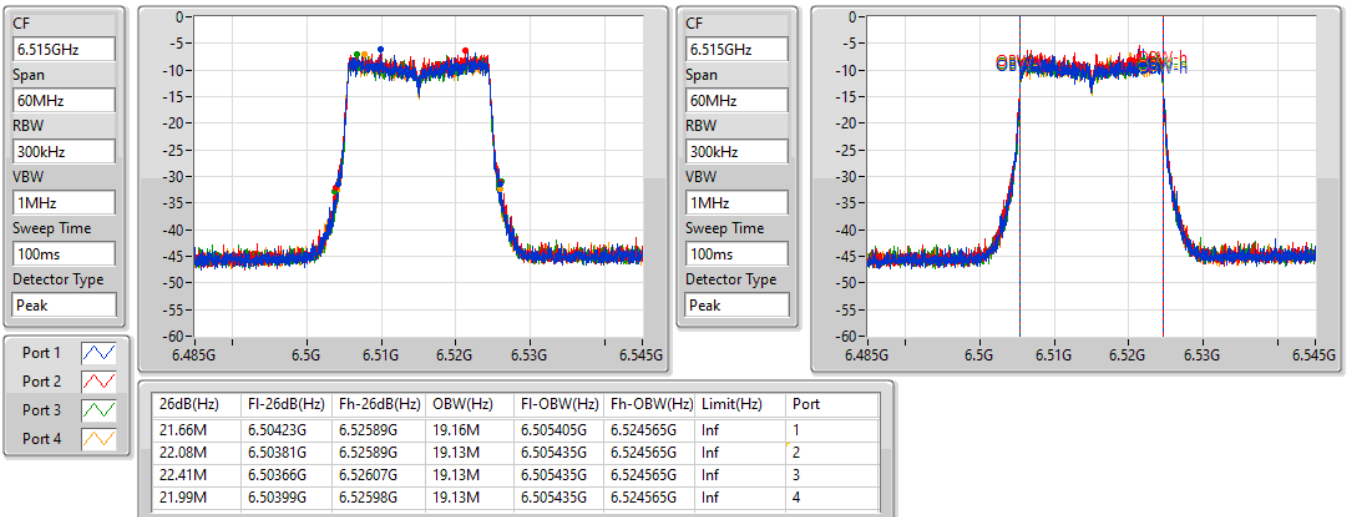


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6515MHz

01/09/2021

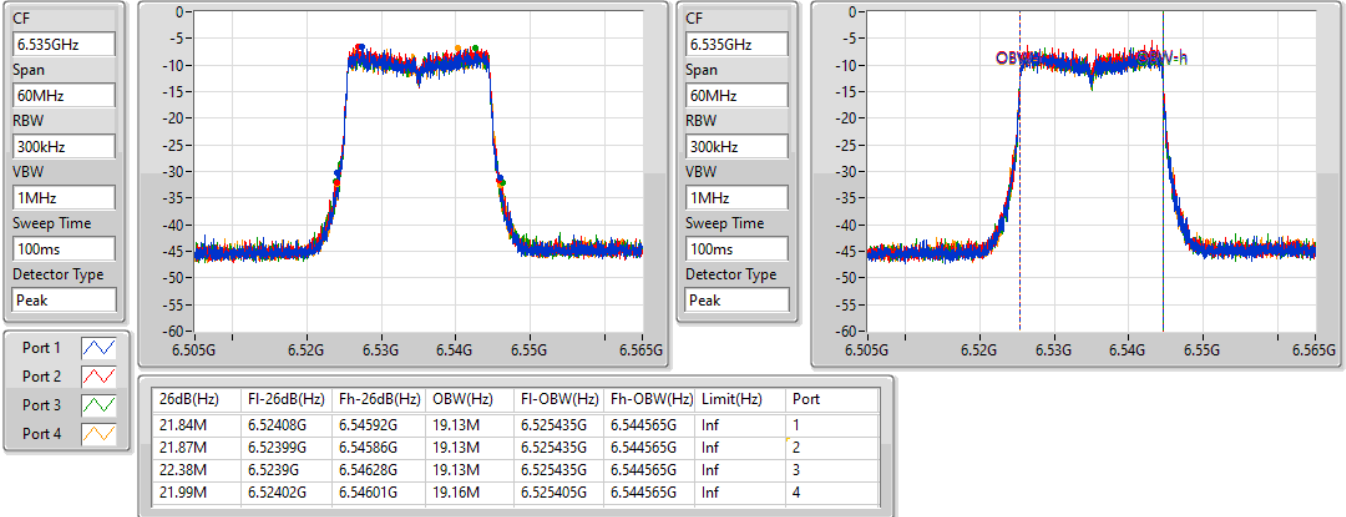


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6535MHz

01/09/2021

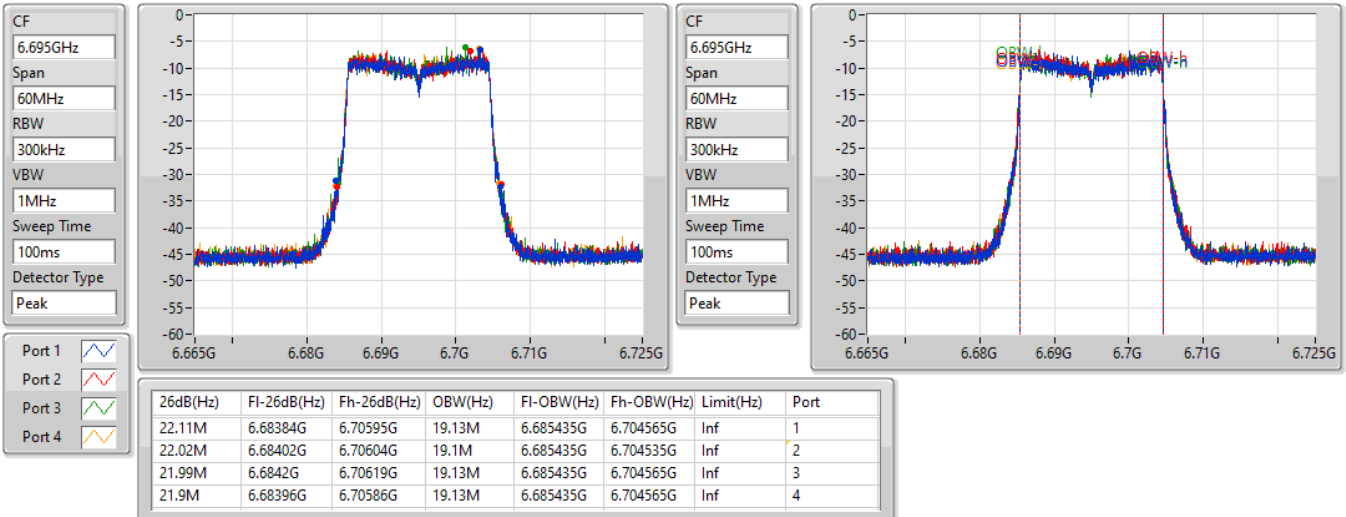


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6695MHz

01/09/2021

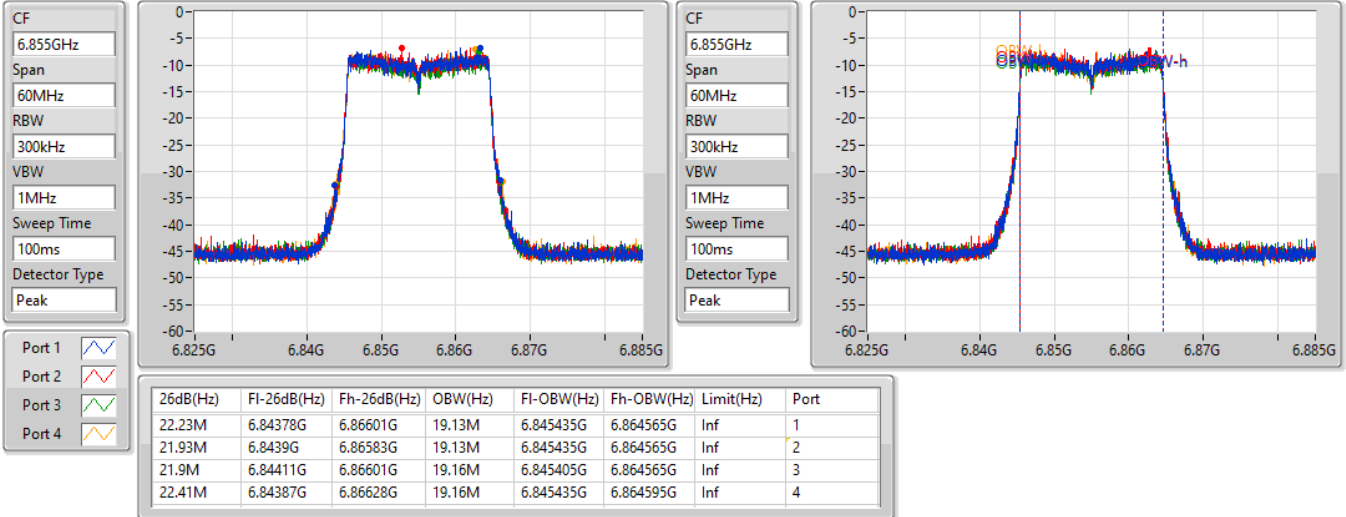


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6855MHz

01/09/2021

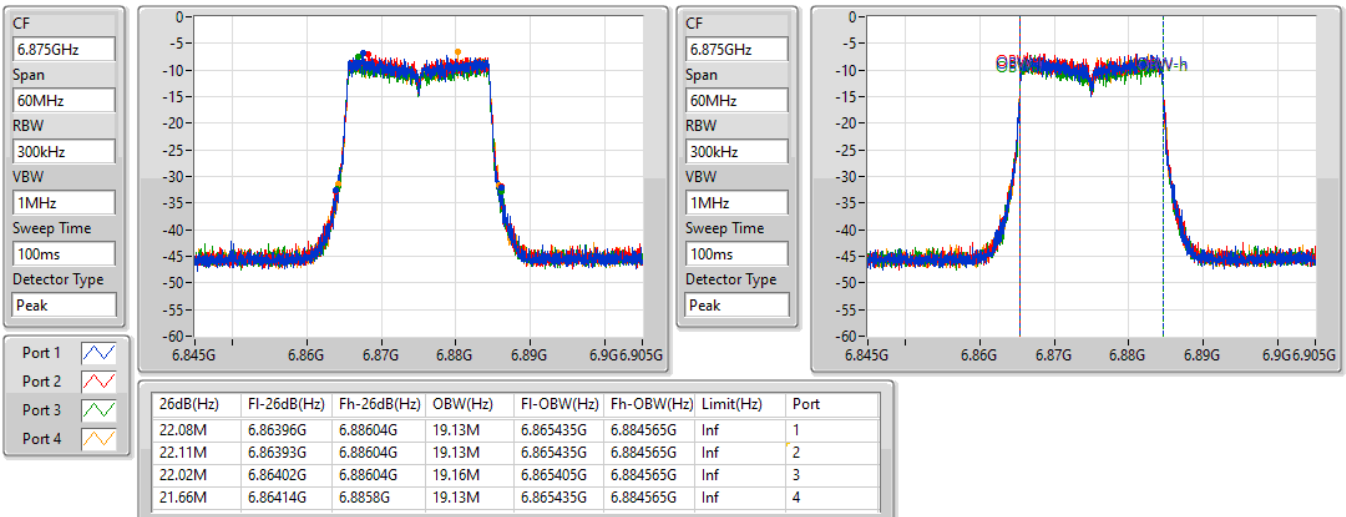


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6875MHz

01/09/2021

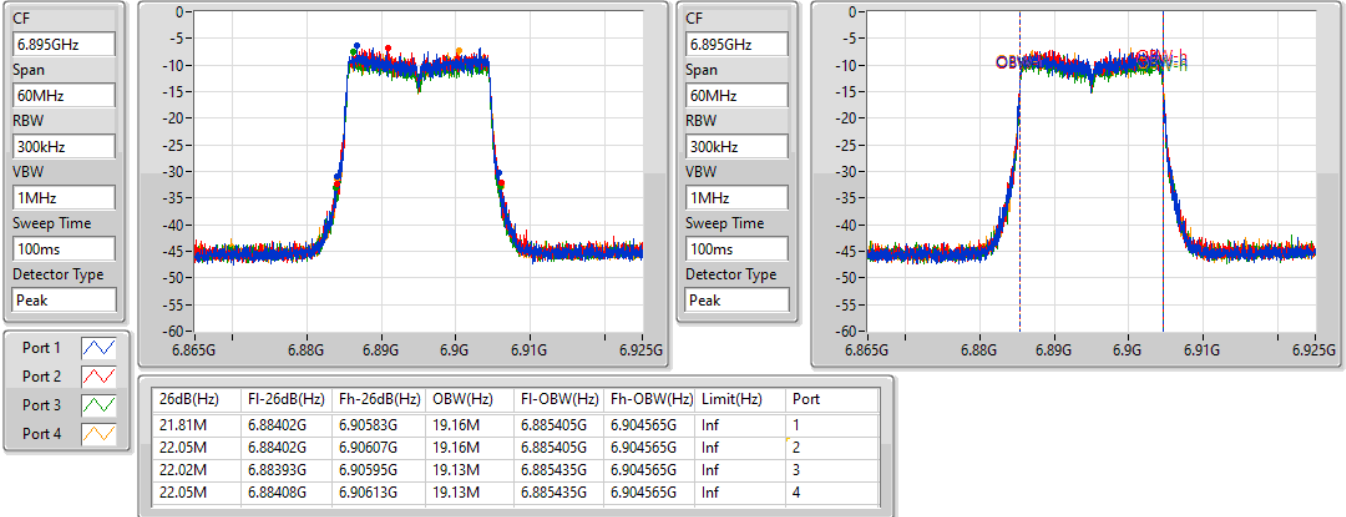


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6895MHz

01/09/2021

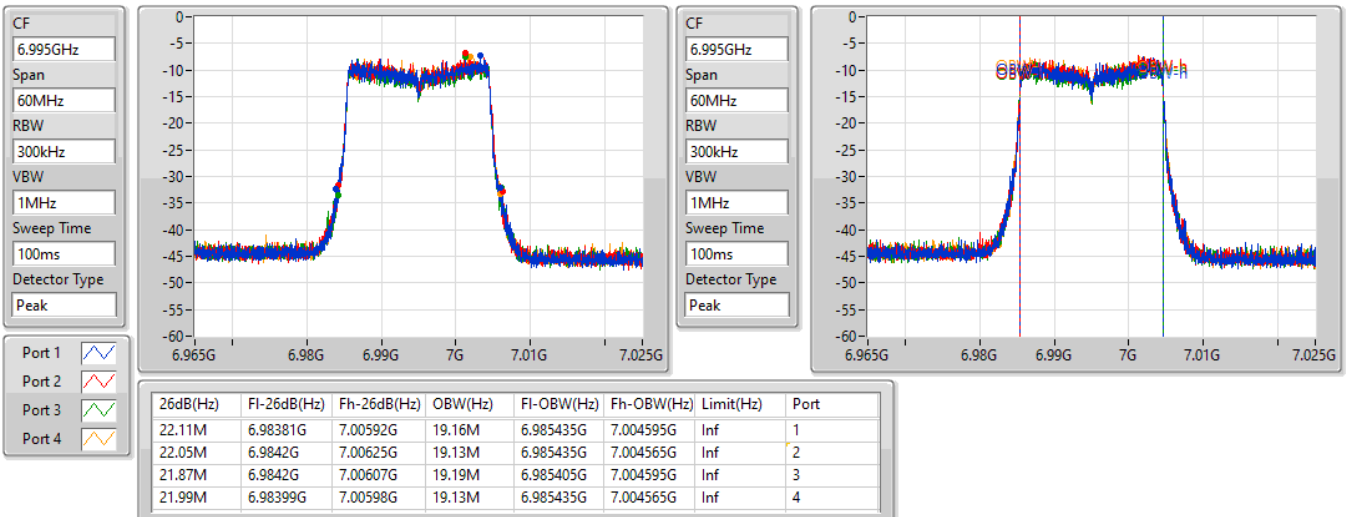


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

6995MHz

01/09/2021

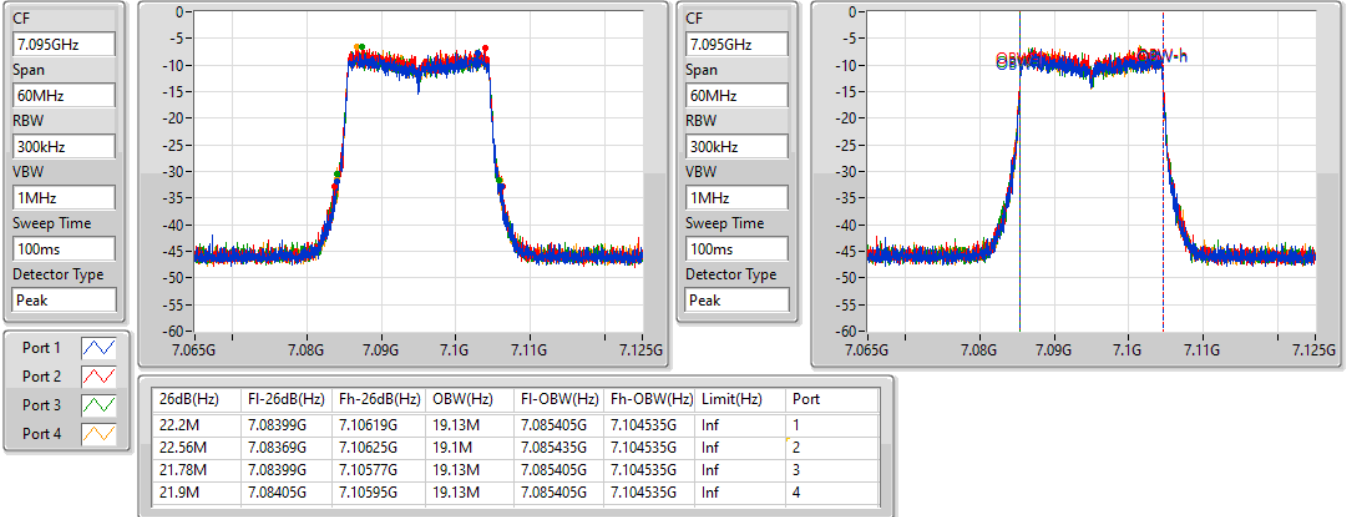


802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

7095MHz

01/09/2021

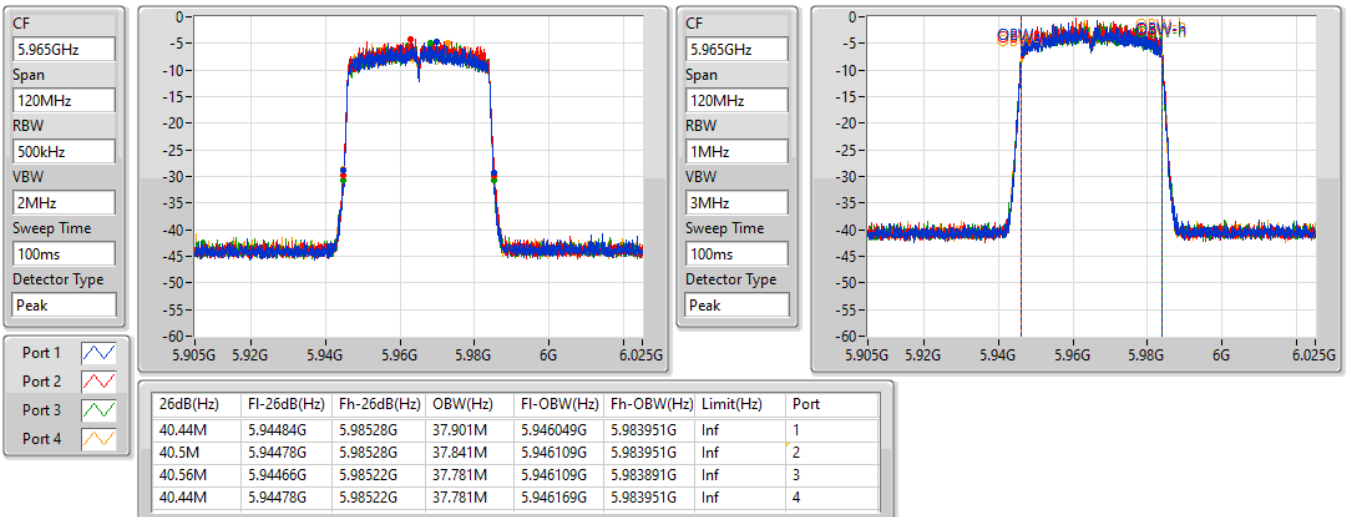


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

5965MHz

01/09/2021



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6165MHz

01/09/2021

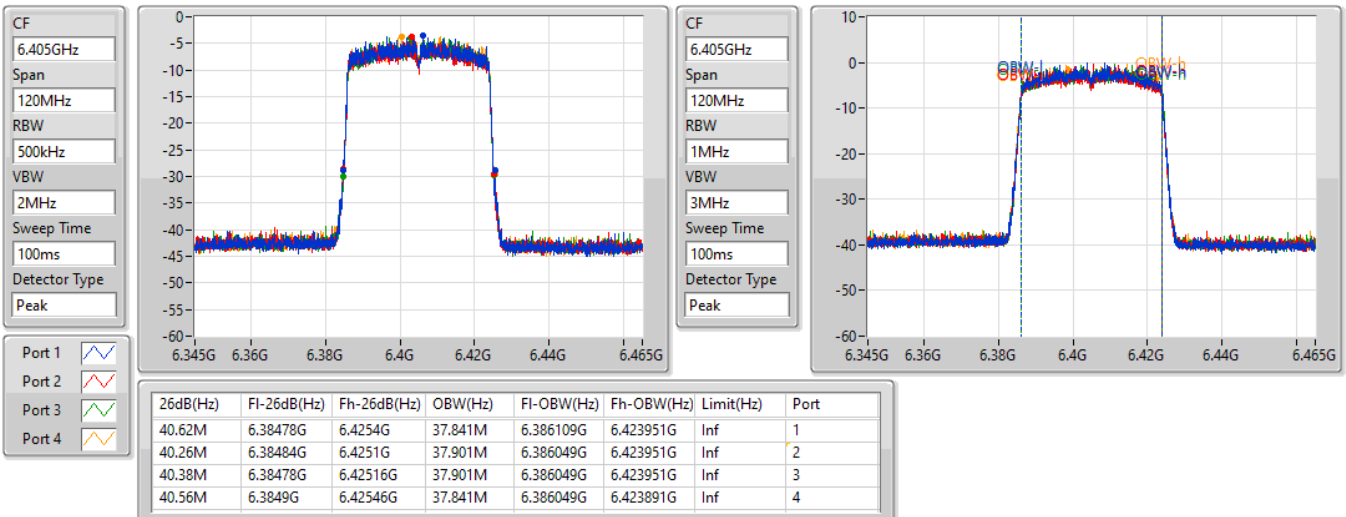


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6405MHz

01/09/2021

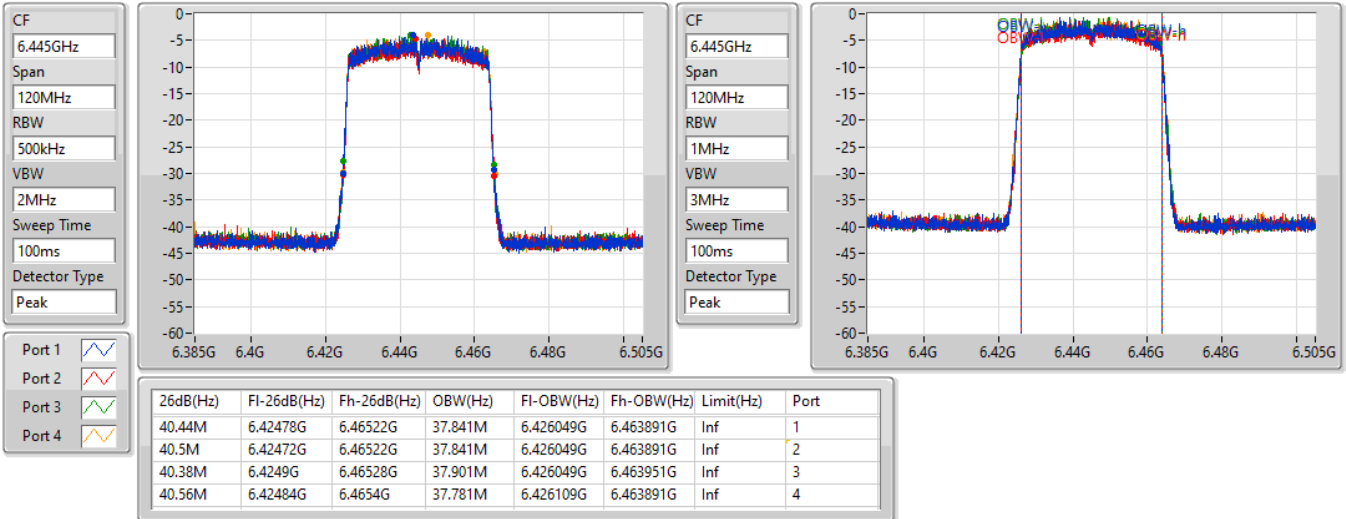


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6445MHz

01/09/2021

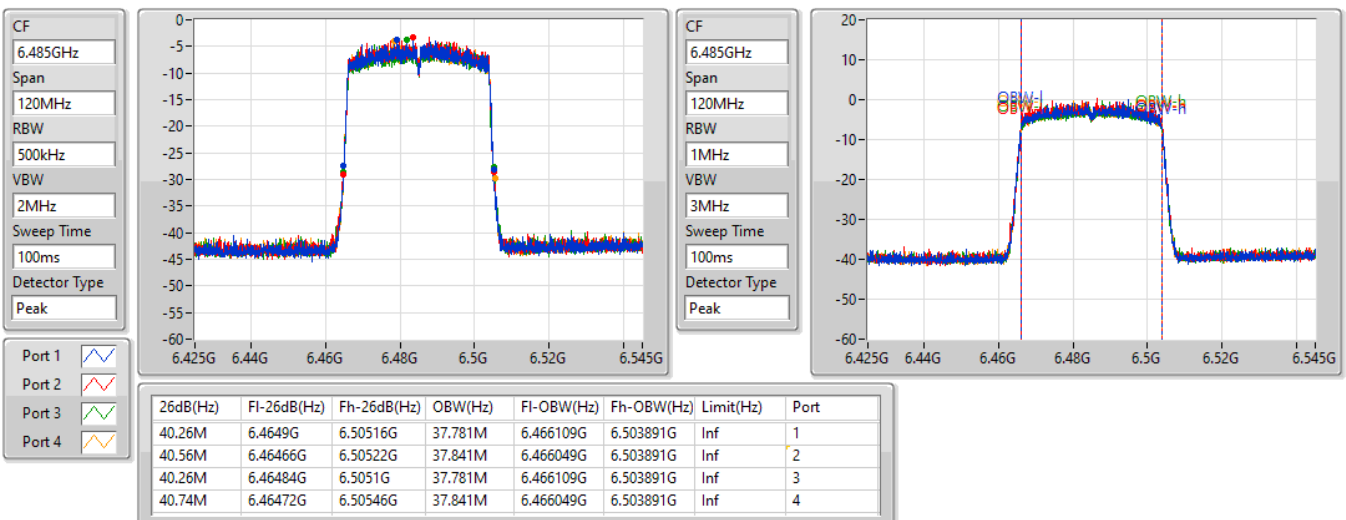


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6485MHz

01/09/2021

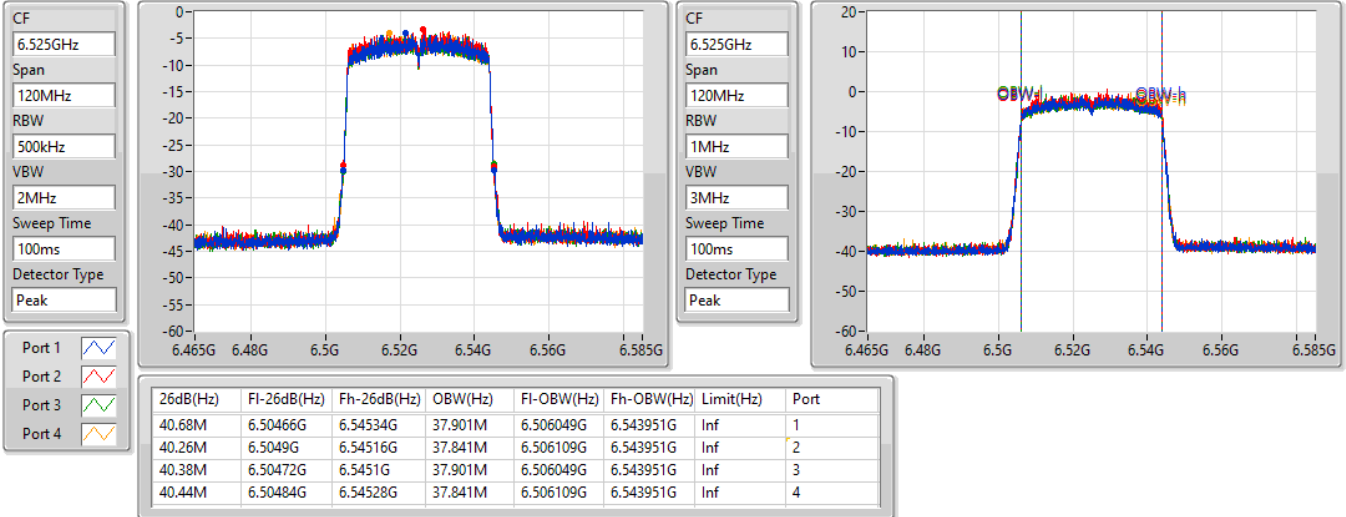


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6525MHz

01/09/2021



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

6565MHz

01/09/2021

