

FCC Radio Test Report

FCC ID : C3K2028
Equipment : Computing Device
Brand Name : Microsoft Corporation
Model Name : 2028
Applicant : Microsoft Corporation
One Microsoft Way Redmond, WA 98052-6399, U.S.A.
Manufacturer : Microsoft Corporation
One Microsoft Way Redmond, WA 98052-6399, U.S.A.
Standard : 47 CFR FCC Part 15.407

The product was received on Mar. 16, 2022, and testing was started from Apr. 02, 2022 and completed on Jul. 28, 2022. 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

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History of this test report

Report No.	Version	Description	Issued Date
FR230421AN	01	Initial issue of report	Aug. 09, 2022
FR230421AN	02	1. Add Duty Cycle plots This report is the latest version replacing for the report issued on Aug. 09, 2022	Aug. 29, 2022
FR230421AN	03	Removed EIRP PSD This report is the latest version replacing for the report issued on Aug. 29, 2022	Sep. 01, 2022
FR230421AN	04	Revised typo This report is the latest version replacing for the report issued on Sep. 01, 2022	Sep. 13, 2022
FR230421AN	05	The Equipment Name and accessory was updated This report is the latest version replacing for the report issued on Sep. 13, 2022	Sep. 16, 2022



Summary of Test Result

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

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

Reviewed by: Ben Tseng

Report Producer: Jenny Yang



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
Straddle 5720		5720	144 [1]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
Straddle 5710		5710	142 [1]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
Straddle 5690		5690	138 [1]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160)	5250	50 [1]
5470-5725		5570	114 [1]

Full RU

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX(Port 1)
5.25-5.35GHz	802.11a	20	1TX(Port 1)
5.47-5.725GHz	802.11a	20	1TX(Port 1)
5.725-5.85GHz	802.11a	20	1TX(Port 1)
5.15-5.25GHz	802.11a	20	1TX(Port 2)
5.25-5.35GHz	802.11a	20	1TX(Port 2)
5.47-5.725GHz	802.11a	20	1TX(Port 2)
5.725-5.85GHz	802.11a	20	1TX(Port 2)
5.15-5.25GHz	802.11n HT20	20	1TX(Port 1)
5.15-5.25GHz	802.11n HT20	20	1TX(Port 2)
5.15-5.25GHz	802.11n HT20	20	2TX



Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11n HT20	20	1TX(Port 1)
5.47-5.725GHz	802.11n HT20	20	1TX(Port 1)
5.725-5.85GHz	802.11n HT20	20	1TX(Port 1)
5.25-5.35GHz	802.11n HT20	20	1TX(Port 2)
5.47-5.725GHz	802.11n HT20	20	1TX(Port 2)
5.725-5.85GHz	802.11n HT20	20	1TX(Port 2)
5.25-5.35GHz	802.11n HT20	20	2TX
5.47-5.725GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	1TX(Port 1)
5.25-5.35GHz	802.11ac VHT20	20	1TX(Port 1)
5.47-5.725GHz	802.11ac VHT20	20	1TX(Port 1)
5.725-5.85GHz	802.11ac VHT20	20	1TX(Port 1)
5.15-5.25GHz	802.11ac VHT20	20	1TX(Port 2)
5.25-5.35GHz	802.11ac VHT20	20	1TX(Port 2)
5.47-5.725GHz	802.11ac VHT20	20	1TX(Port 2)
5.725-5.85GHz	802.11ac VHT20	20	1TX(Port 2)
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	1TX(Port 1)
5.25-5.35GHz	802.11ax HEW20	20	1TX(Port 1)
5.47-5.725GHz	802.11ax HEW20	20	1TX(Port 1)
5.725-5.85GHz	802.11ax HEW20	20	1TX(Port 1)
5.15-5.25GHz	802.11ax HEW20	20	1TX(Port 2)
5.25-5.35GHz	802.11ax HEW20	20	1TX(Port 2)
5.47-5.725GHz	802.11ax HEW20	20	1TX(Port 2)
5.725-5.85GHz	802.11ax HEW20	20	1TX(Port 2)
5.25-5.35GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11n HT40	40	1TX(Port 1)
5.25-5.35GHz	802.11n HT40	40	1TX(Port 1)
5.47-5.725GHz	802.11n HT40	40	1TX(Port 1)



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11n HT40	40	1TX(Port 1)
5.15-5.25GHz	802.11n HT40	40	1TX(Port 2)
5.25-5.35GHz	802.11n HT40	40	1TX(Port 2)
5.47-5.725GHz	802.11n HT40	40	1TX(Port 2)
5.725-5.85GHz	802.11n HT40	40	1TX(Port 2)
5.15-5.25GHz	802.11n HT40	40	2TX
5.25-5.35GHz	802.11n HT40	40	2TX
5.47-5.725GHz	802.11n HT40	40	2TX
5.725-5.85GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	1TX(Port 1)
5.25-5.35GHz	802.11ac VHT40	40	1TX(Port 1)
5.47-5.725GHz	802.11ac VHT40	40	1TX(Port 1)
5.725-5.85GHz	802.11ac VHT40	40	1TX(Port 1)
5.15-5.25GHz	802.11ac VHT40	40	1TX(Port 2)
5.25-5.35GHz	802.11ac VHT40	40	1TX(Port 2)
5.47-5.725GHz	802.11ac VHT40	40	1TX(Port 2)
5.725-5.85GHz	802.11ac VHT40	40	1TX(Port 2)
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ax HEW40	40	1TX(Port 1)
5.25-5.35GHz	802.11ax HEW40	40	1TX(Port 1)
5.47-5.725GHz	802.11ax HEW40	40	1TX(Port 1)
5.725-5.85GHz	802.11ax HEW40	40	1TX(Port 1)
5.15-5.25GHz	802.11ax HEW40	40	1TX(Port 2)
5.25-5.35GHz	802.11ax HEW40	40	1TX(Port 2)
5.47-5.725GHz	802.11ax HEW40	40	1TX(Port 2)
5.725-5.85GHz	802.11ax HEW40	40	1TX(Port 2)
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	1TX(Port 1)
5.25-5.35GHz	802.11ac VHT80	80	1TX(Port 1)
5.47-5.725GHz	802.11ac VHT80	80	1TX(Port 1)



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ac VHT80	80	1TX(Port 1)
5.15-5.25GHz	802.11ac VHT80	80	1TX(Port 2)
5.25-5.35GHz	802.11ac VHT80	80	1TX(Port 2)
5.47-5.725GHz	802.11ac VHT80	80	1TX(Port 2)
5.725-5.85GHz	802.11ac VHT80	80	1TX(Port 2)
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ax HEW80	80	1TX(Port 1)
5.25-5.35GHz	802.11ax HEW80	80	1TX(Port 1)
5.47-5.725GHz	802.11ax HEW80	80	1TX(Port 1)
5.725-5.85GHz	802.11ax HEW80	80	1TX(Port 1)
5.15-5.25GHz	802.11ax HEW80	80	1TX(Port 2)
5.25-5.35GHz	802.11ax HEW80	80	1TX(Port 2)
5.47-5.725GHz	802.11ax HEW80	80	1TX(Port 2)
5.725-5.85GHz	802.11ax HEW80	80	1TX(Port 2)
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.25-5.35GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ac VHT160	160	1TX(Port 1)
5.25-5.35GHz	802.11ac VHT160	160	1TX(Port 1)
5.47-5.725GHz	802.11ac VHT160	160	1TX(Port 1)
5.725-5.85GHz	802.11ac VHT160	160	1TX(Port 1)
5.15-5.25GHz	802.11ac VHT160	160	1TX(Port 2)
5.25-5.35GHz	802.11ac VHT160	160	1TX(Port 2)
5.47-5.725GHz	802.11ac VHT160	160	1TX(Port 2)
5.725-5.85GHz	802.11ac VHT160	160	1TX(Port 2)
5.15-5.25GHz	802.11ac VHT160	160	2TX
5.25-5.35GHz	802.11ac VHT160	160	2TX
5.47-5.725GHz	802.11ac VHT160	160	2TX
5.725-5.85GHz	802.11ac VHT160	160	2TX
5.15-5.25GHz	802.11ax HEW160	160	1TX(Port 1)
5.25-5.35GHz	802.11ax HEW160	160	1TX(Port 1)
5.47-5.725GHz	802.11ax HEW160	160	1TX(Port 1)



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ax HEW160	160	1TX(Port 1)
5.15-5.25GHz	802.11ax HEW160	160	1TX(Port 2)
5.25-5.35GHz	802.11ax HEW160	160	1TX(Port 2)
5.47-5.725GHz	802.11ax HEW160	160	1TX(Port 2)
5.725-5.85GHz	802.11ax HEW160	160	1TX(Port 2)
5.15-5.25GHz	802.11ax HEW160	160	2TX
5.25-5.35GHz	802.11ax HEW160	160	2TX
5.47-5.725GHz	802.11ax HEW160	160	2TX
5.725-5.85GHz	802.11ax HEW160	160	2TX

Partial RU

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW20	20	1TX(Port1)
5.15-5.25GHz	802.11ax HEW20	20	1TX(Port2)
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.25-5.35GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	1TX(Port1)
5.47-5.725GHz	802.11ax HEW20	20	1TX(Port2)
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	1TX(Port1)
5.725-5.85GHz	802.11ax HEW20	20	1TX(Port2)
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW40	40	1TX(Port1)
5.15-5.25GHz	802.11ax HEW40	40	1TX(Port2)
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.25-5.35GHz	802.11ax HEW40	40	1TX(Port1)
5.25-5.35GHz	802.11ax HEW40	40	1TX(Port2)
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	1TX(Port1)
5.47-5.725GHz	802.11ax HEW40	40	1TX(Port2)
5.47-5.725GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	1TX(Port1)
5.725-5.85GHz	802.11ax HEW40	40	1TX(Port2)
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ax HEW80	80	1TX(Port1)
5.15-5.25GHz	802.11ax HEW80	80	1TX(Port2)



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.25-5.35GHz	802.11ax HEW80	80	1TX(Port1)
5.25-5.35GHz	802.11ax HEW80	80	1TX(Port2)
5.25-5.35GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	802.11ax HEW80	80	1TX(Port1)
5.47-5.725GHz	802.11ax HEW80	80	1TX(Port2)
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	1TX(Port1)
5.725-5.85GHz	802.11ax HEW80	80	1TX(Port2)
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ax HEW160	160	1TX(Port1)
5.15-5.25GHz	802.11ax HEW160	160	1TX(Port2)
5.15-5.25GHz	802.11ax HEW160	160	2TX
5.25-5.35GHz	802.11ax HEW160	160	1TX(Port1)
5.25-5.35GHz	802.11ax HEW160	160	1TX(Port2)
5.25-5.35GHz	802.11ax HEW160	160	2TX
5.47-5.725GHz	802.11ax HEW160	160	1TX(Port1)
5.47-5.725GHz	802.11ax HEW160	160	1TX(Port2)
5.47-5.725GHz	802.11ax HEW160	160	2TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80, VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40, HEW80, HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ For 802.11ax20 partial tones, 802.11ax20 26T, 52T and 106T were tested which were the worst case configurations.
- ♦ For 802.11ax40 partial tones, only 802.11ax40 242T was tested which were the worst case configurations.
- ♦ For 802.11ax80 partial tones, only 802.11ax80 484T was tested which were the worst case configurations.
- ♦ For 802.11ax160 partial tones, only 802.11ax160 996T was tested which were the worst case configurations.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1 (Aux)	AWAN	AYP8Y-100012A(1415-09AW0QS) AYL00-000003A(1415-09AN0QS)	PIFA	I-Pex	2.4G+5G
2 (Main)	AWAN	AYP8Y-100011A(1415-09AM0QS) AYL00-000002A(1415-09AP0QS)	PIFA	I-Pex	2.4G+5G
3	AWAN	AYL8Y-100000A (1415-09AQ0QS)	PIFA	I-Pex	BT/BT LE

Ant.	Port	Gain (dBi)					BT/BT LE
		2.4G	5G				
			U-NII-1	U-NII-2A	U-NII-2C		
1	1	7.32	6.35	6.35	6.49	6.49	-
2	2	6.07	6.2	6.35	6.15	5.03	-
3	1	-	-	-	-	-	2.91

Note 1: The EUT has three antennas.

Note 2: Transmit signals are uncorrelated.

For 2.4GHz function:

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

Support diversity function that each single chain was tested and recorded in this test report.

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

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

For BT/BT LE function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 3 (port 1) could transmit/receive.

For 5GHz function:

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

Support diversity function that each single chain was tested and recorded in this test report.

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

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



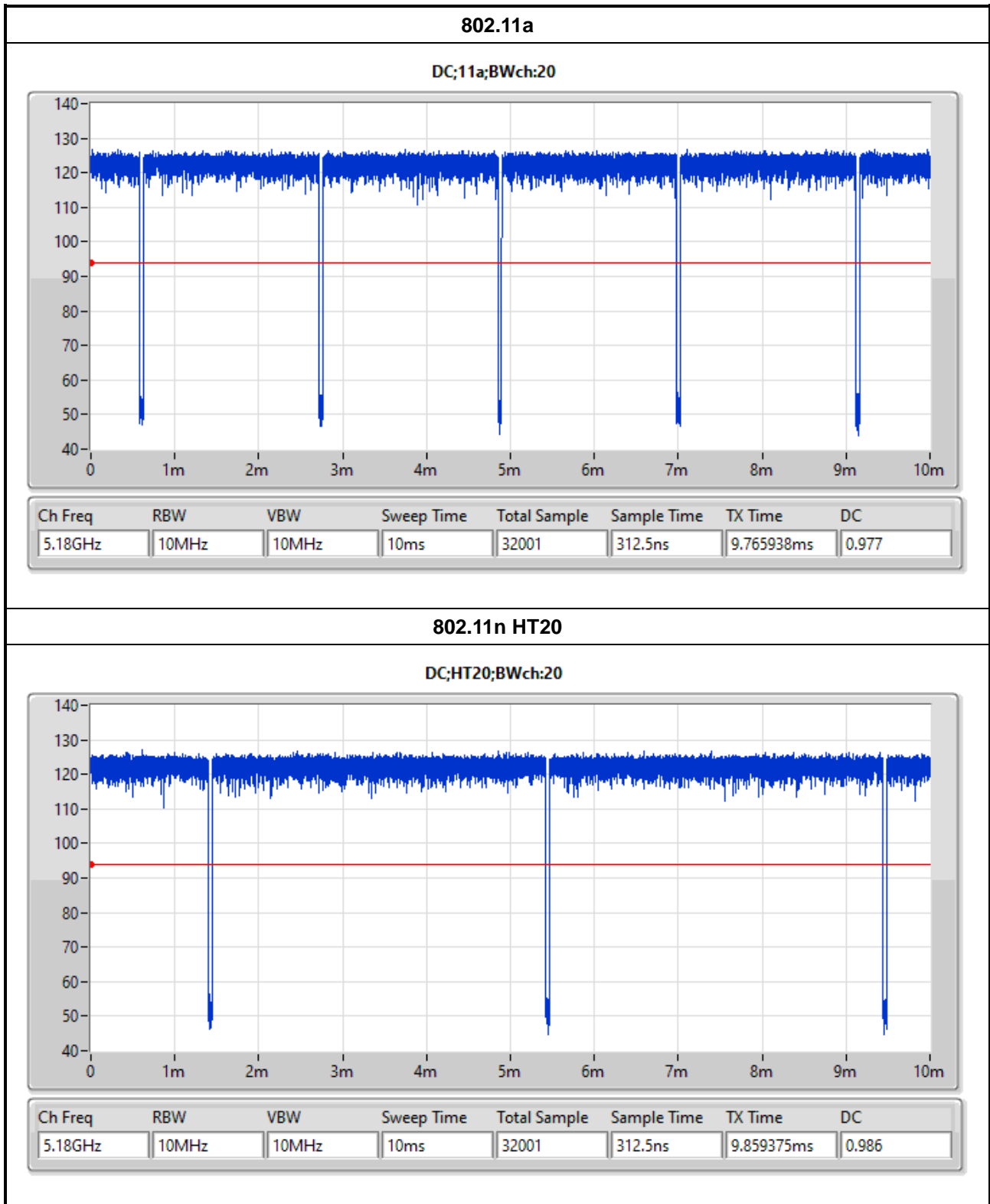
1.1.3 EUT Information

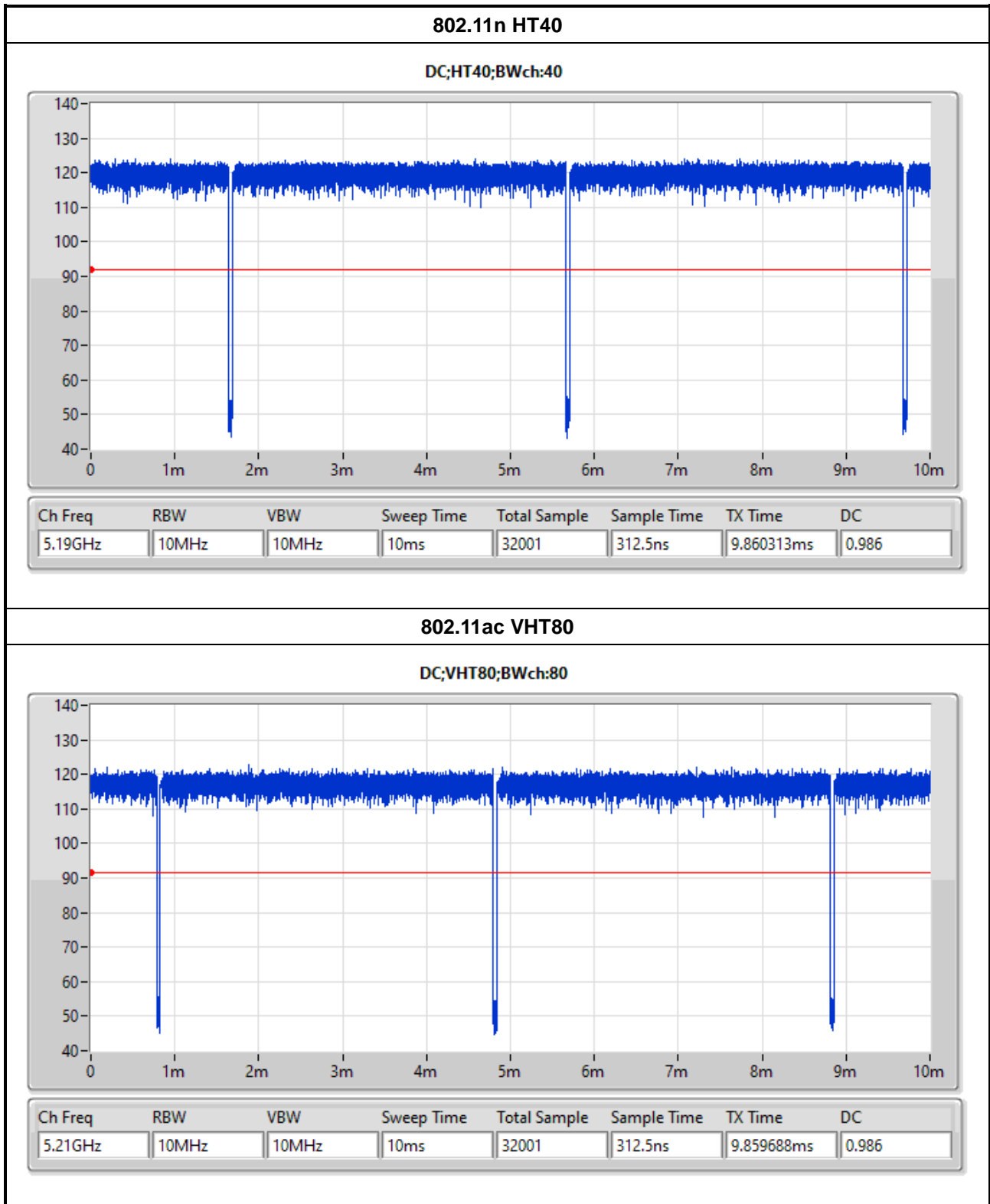
Operational Condition				
EUT Power Type	From Switching power supply			
EUT Function	<input type="checkbox"/>	Outdoor AP	<input type="checkbox"/>	Indoor AP
	<input type="checkbox"/>	Fixed P2P AP	<input checked="" type="checkbox"/>	Client
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming
TPC Function	<input checked="" type="checkbox"/>	With TPC Function	<input type="checkbox"/>	Without TPC Function
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/>	Without 5600~5650MHz
Resource Unit(802.11ax)	<input checked="" type="checkbox"/>	Full RU	<input checked="" type="checkbox"/>	Partial RU
Type of EUT				
<input checked="" type="checkbox"/>	Stand-alone			
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)			
	Combined Equipment - Brand Name / Model No.: ...			
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)			
	Host System - Brand Name / Model No.:			
<input type="checkbox"/>	Other:			

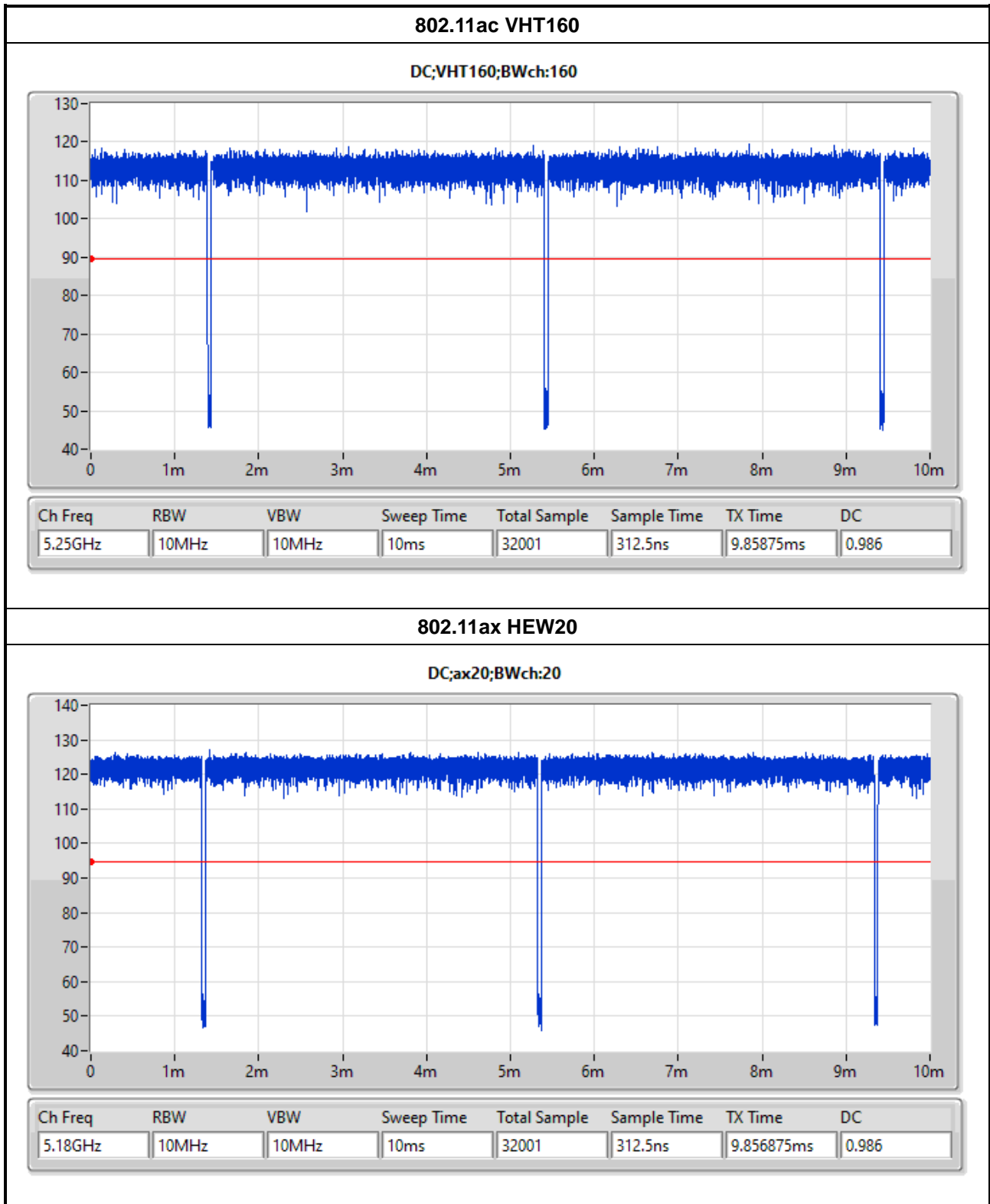
1.1.4 Mode Test Duty Cycle

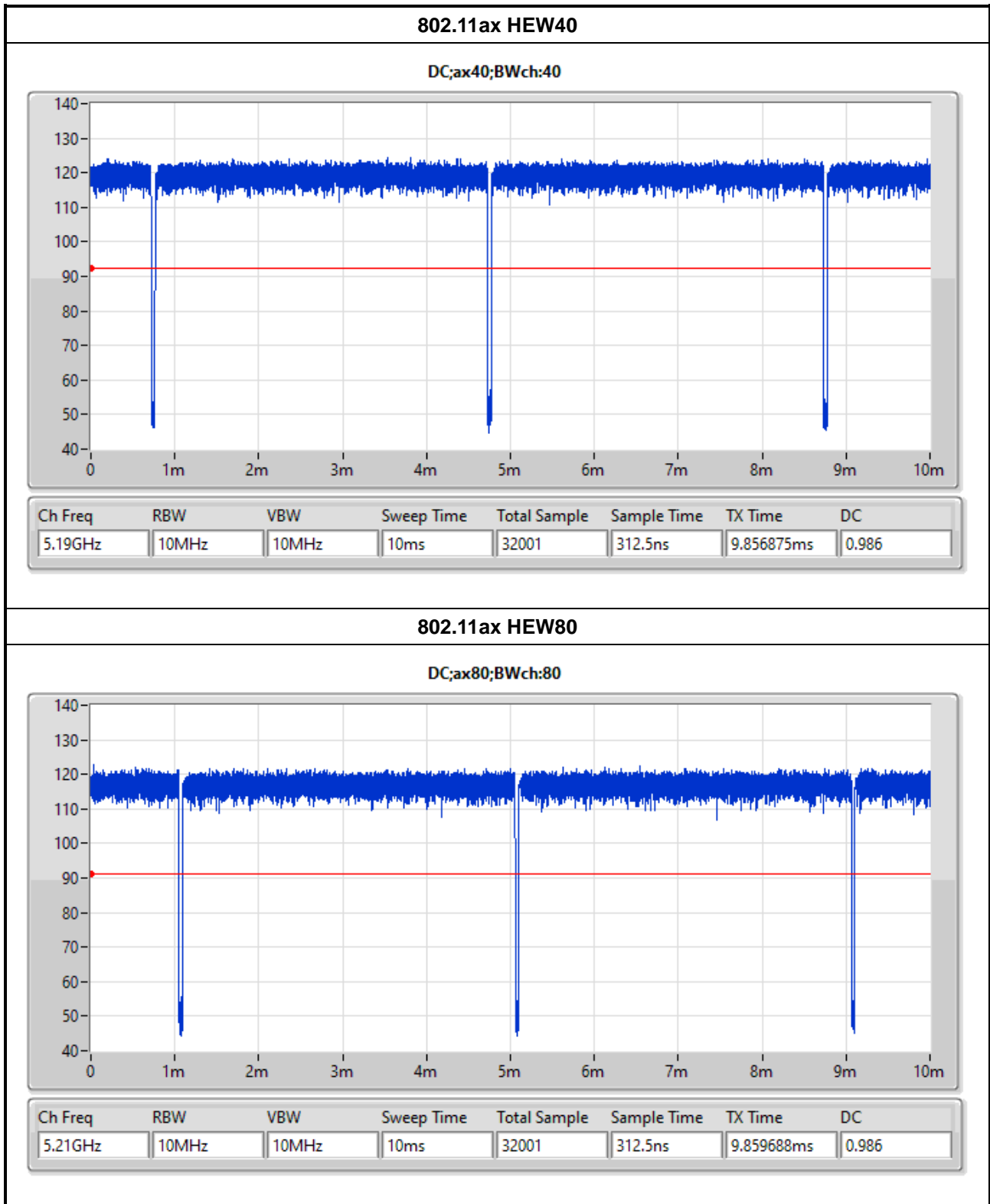
Full RU

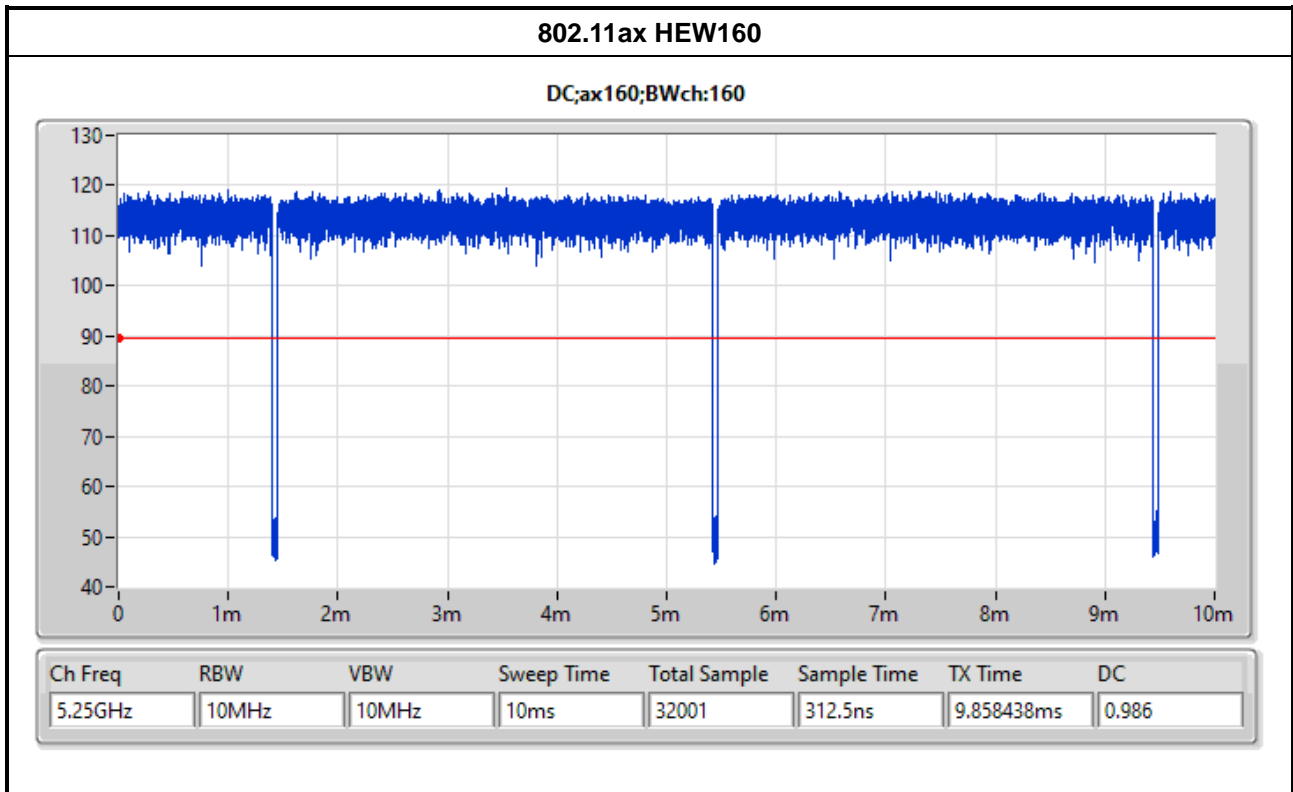
Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a_Nss1,(6Mbps)	0.977	0.1	2.088m	1k
802.11n HT20_Nss1,(MCS8)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT40_Nss1,(MCS8)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT80_Nss1,(MCS0)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT160_Nss1,(MCS0)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20_Nss1,(MCS0)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40_Nss1,(MCS0)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80_Nss1,(MCS0)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW160_Nss1,(MCS0)	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)









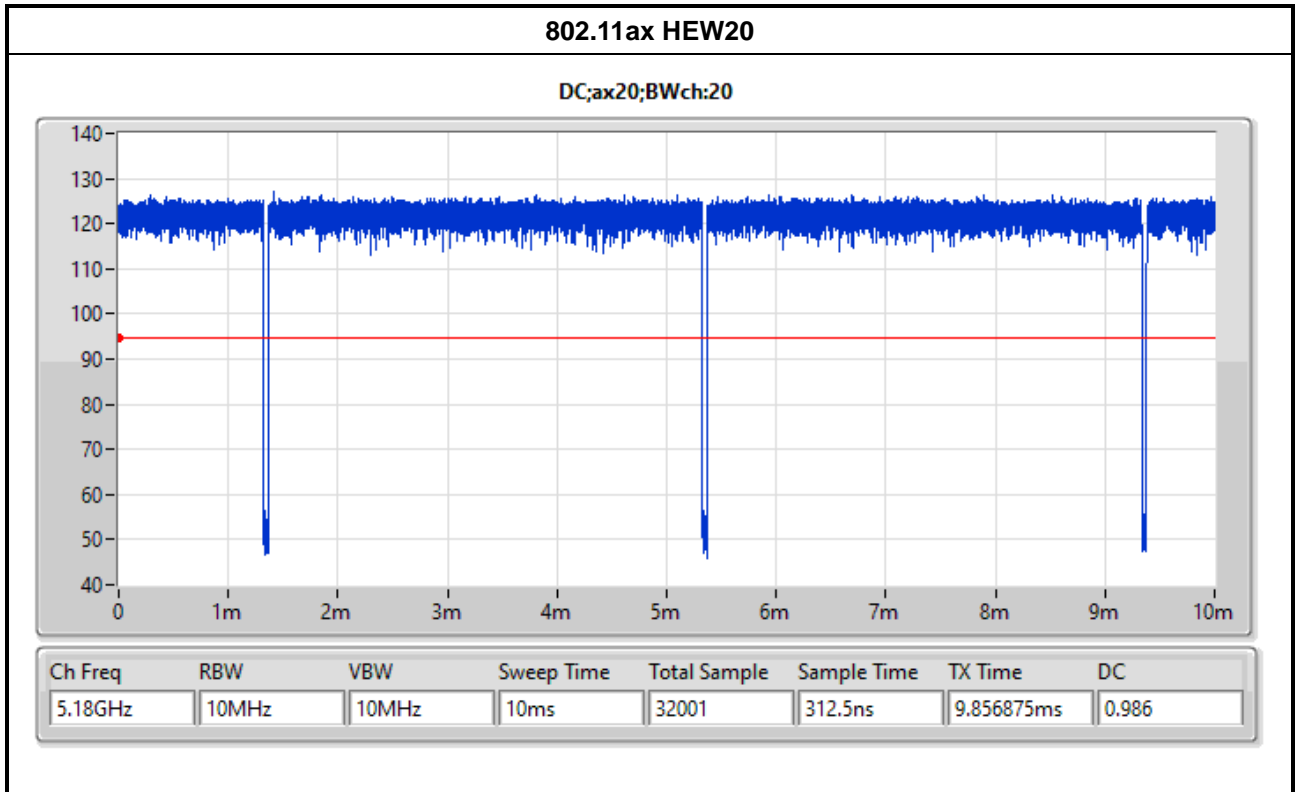


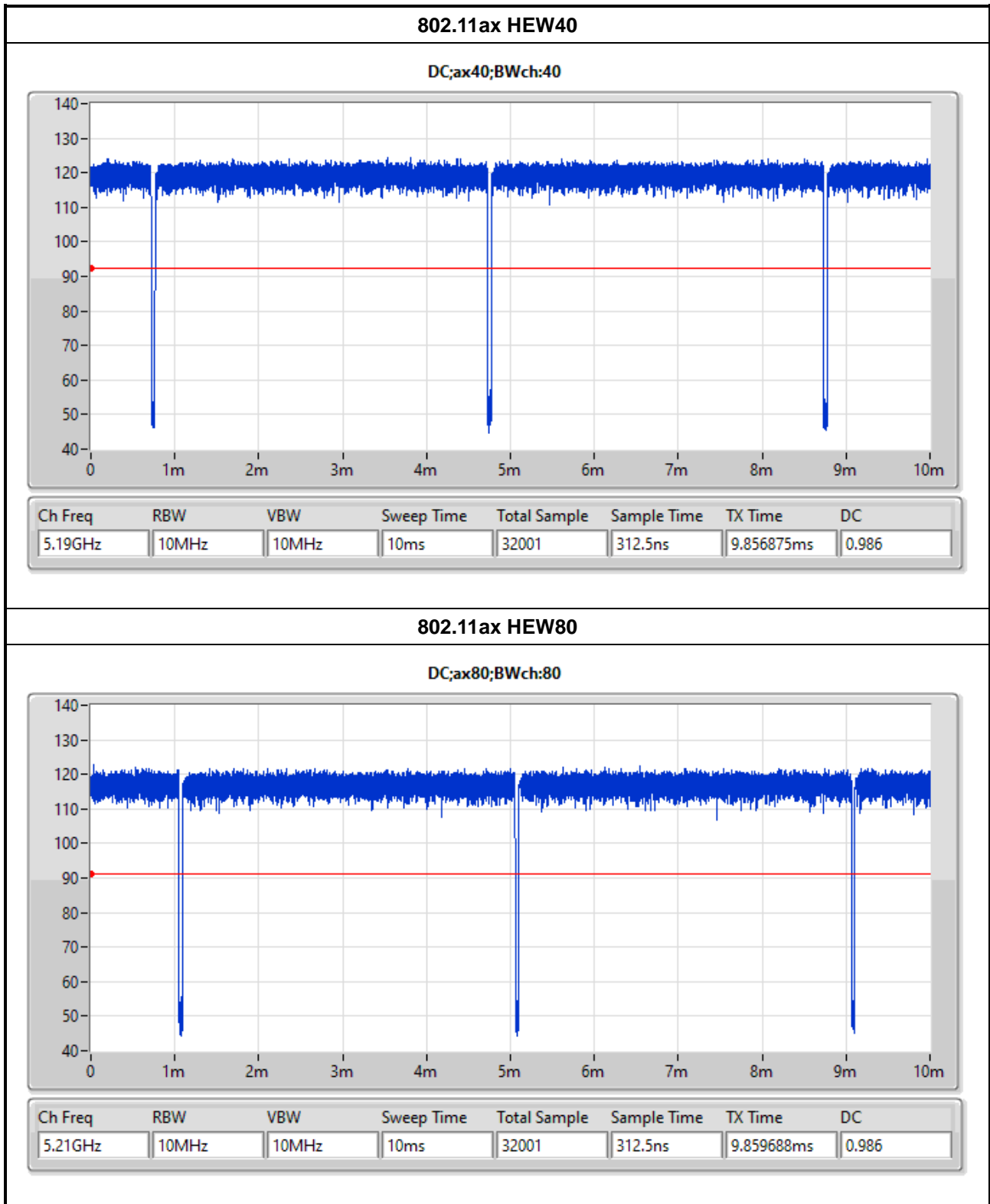


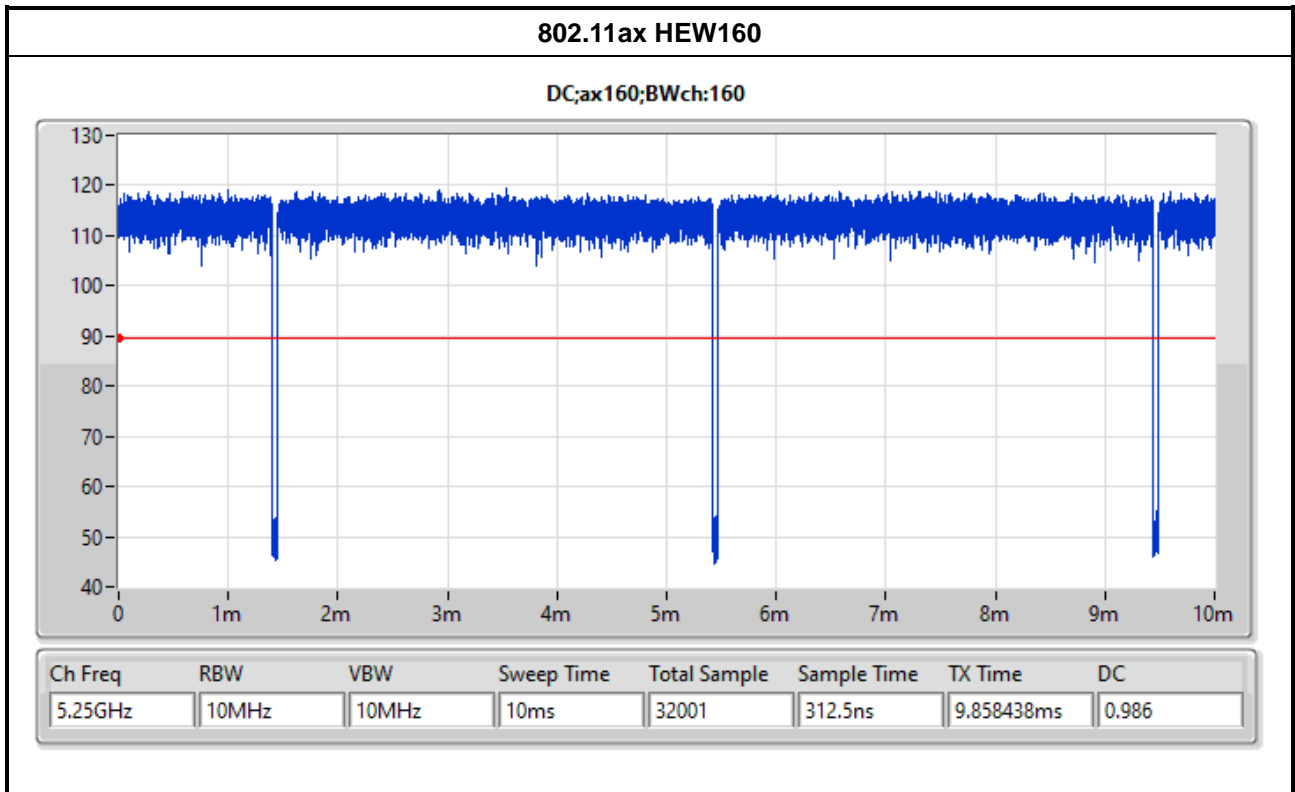
Partial RU

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20_Nss1,(MCS0)_1TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20_Nss1,(MCS0)_2TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40_Nss1,(MCS0)_1TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40_Nss1,(MCS0)_2TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80_Nss1,(MCS0)_1TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80_Nss1,(MCS0)_2TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW160_Nss1,(MCS0)_1TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW160_Nss1,(MCS0)_2TX	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)

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







1.2 Testing Applied Standards

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

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

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

- ◆ KDB 662911 D01 v02r01
- ◆ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
<input checked="" type="checkbox"/>	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	CO04-HY	Wayne Chiu	21.4~22.4°C / 55~58%	27/Jul/2022~28/Jul/2022
RF Conducted	TH01-HY	Johnny Yu	22.3~26.9°C / 54~59%	08/Apr/2022~08/Jul/2022
Radiated	03CH03-HY	Daniel Lin	20.7~25.3°C / 51~66%	02/Apr/2022~19/Jul/2022
<input type="checkbox"/>	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))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	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 Version	DRTU.00918.22.120.0
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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	Switching power supply mode
2	Switching power supply mode, Full port

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

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



2.3 Accessories

Accessories		
Keyboard	Brand Name	Microsoft
mouse	Brand Name	Microsoft
pen	Brand Name	Microsoft
power supply	Brand Name	WELLSHIN

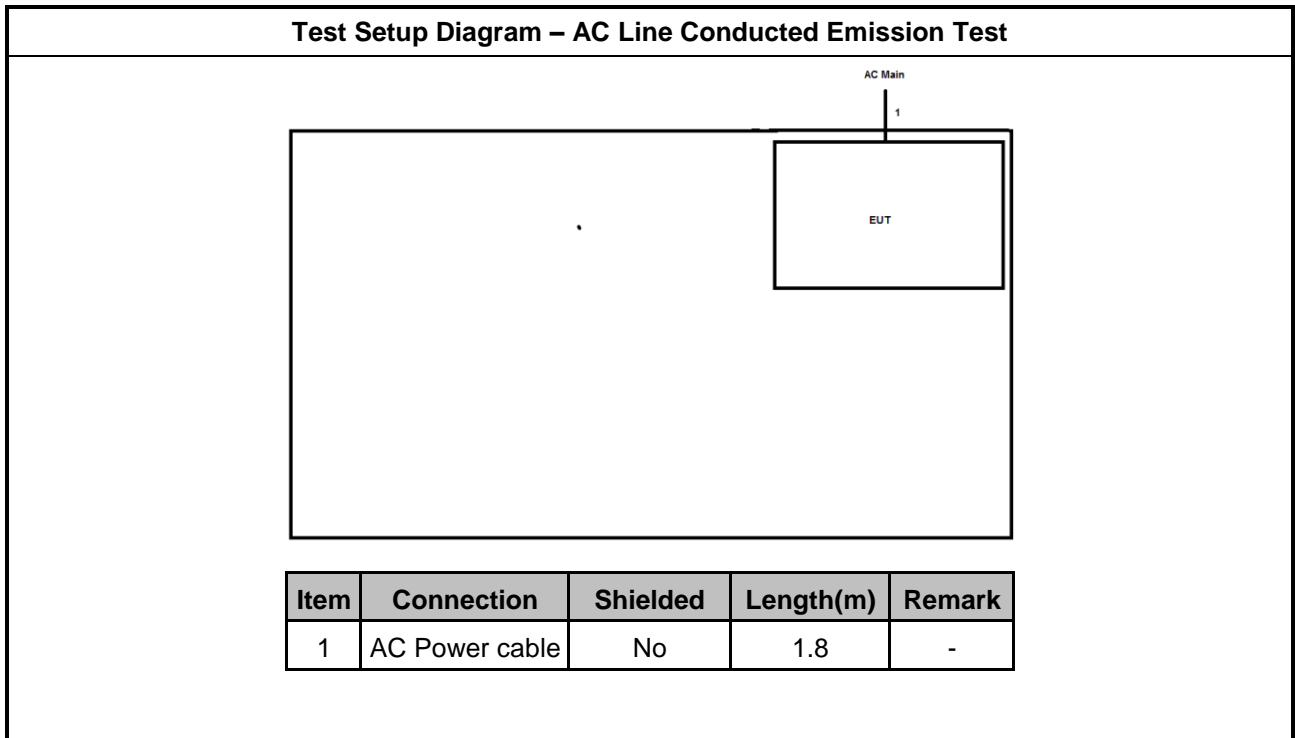
Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

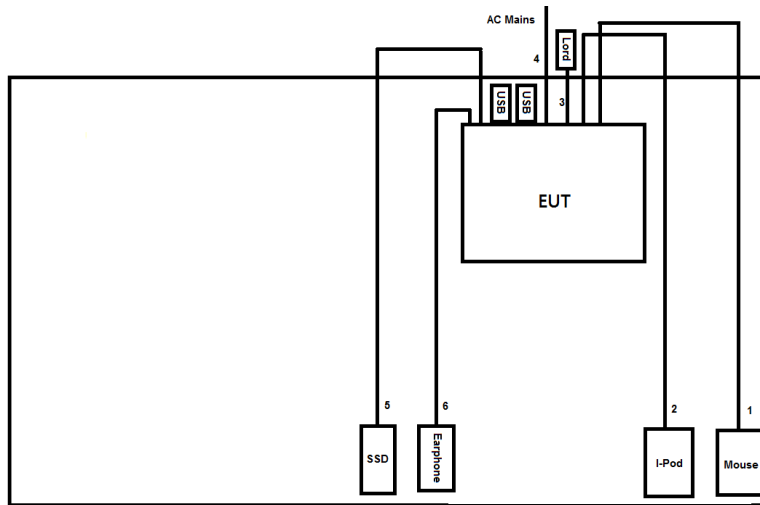
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	iPod	APPLE	A1199	-	-
2	30-pin to USB Original cable	APPLE	MA591GC	-	-
3	Mouse(USB)	Lenovo	MOGOUO	-	-
4	earphone	APPLE	MD827FE/A	-	-
5	Portable SSD(3.1)	TRANSCEND	TS240GESD240C	-	-
6	USB 3.0 Flash	SandDisk	SDDDC-128G-G36	-	-
7	USB 3.0 Flash	SandDisk	SDDDC-128G-G36	-	-
8	load	Sporton	Sporton	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	iPod	APPLE	A1199	-	-
2	30-pin to USB Original cable	APPLE	MA591GC	-	-
3	Mouse(USB)	Lenovo	MOGOUO	-	-
4	earphone	APPLE	MD827FE/A	-	-
5	Portable SSD(3.1)	TRANSCEND	TS240GESD240C	-	-
6	USB 3.0 Flash	SandDisk	SDDDC-128G-G36	-	-
7	USB 3.0 Flash	SandDisk	SDDDC-128G-G36	-	-
8	load	Sporton	Sporton	-	-

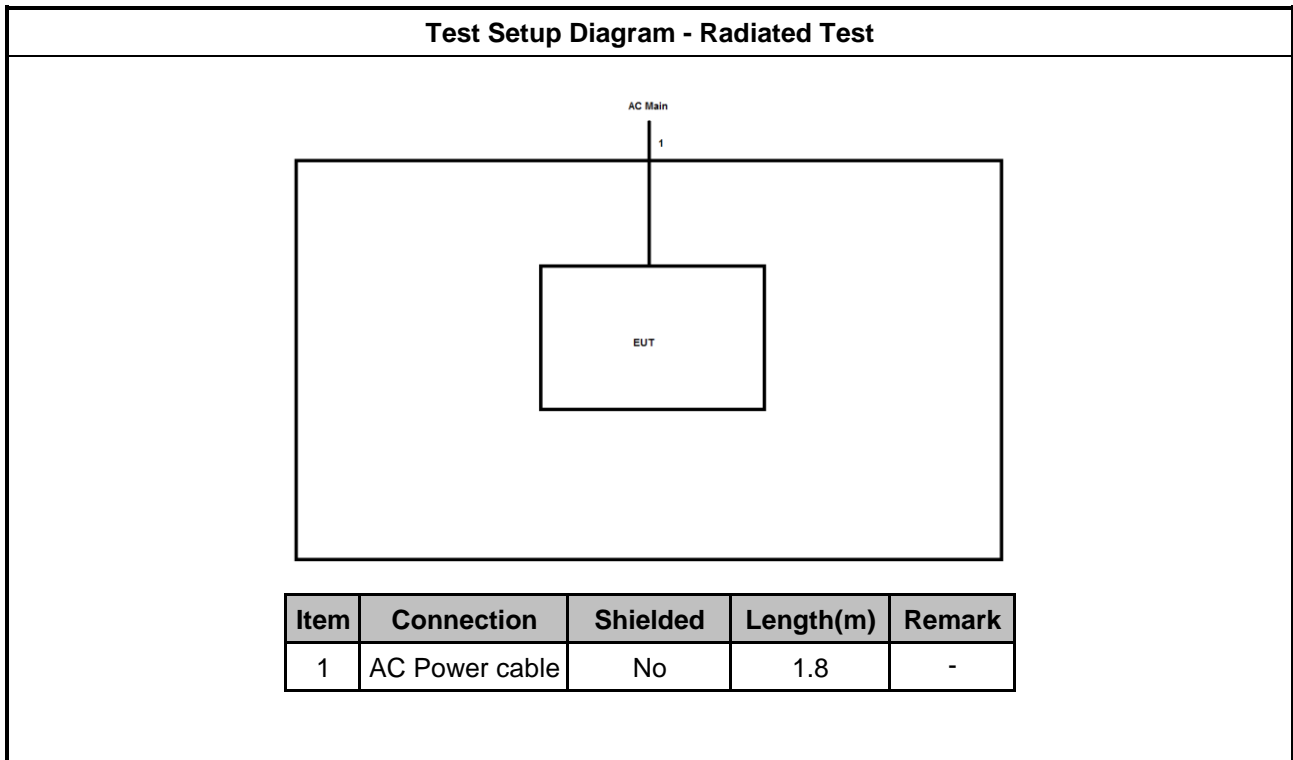
2.5 Test Setup Diagram



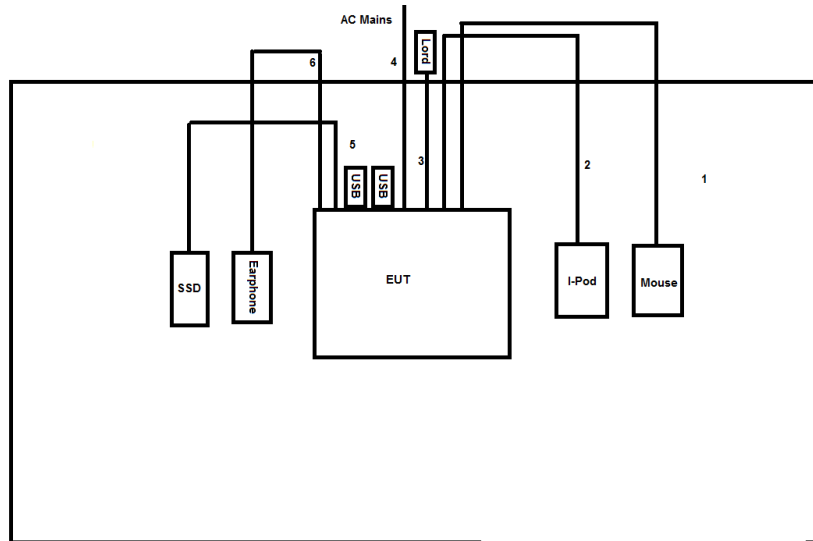
Test Setup Diagram – AC Line Conducted Emission Test (Full port)



Item	Connection	Shielded	Length(m)	Remark
1	USB cable	No	1.0	-
2	30-pin to USB Original Cable	No	1.0	-
3	RJ45 cable	No	1.0	-
4	AC Power cable	No	1.8	-
5	USB cable	No	1.0	-
6	Audio cable	No	1.25	-



Test Setup Diagram - Radiated Test(Full port)



Item	Connection	Shielded	Length(m)	Remark
1	USB cable	No	1.0	-
2	30-pin to USB Original Cable	No	1.0	-
3	RJ45 cable	No	1.0	-
4	AC Power cable	No	1.8	-
5	USB cable	No	1.0	-
6	Audio cable	No	1.25	-

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

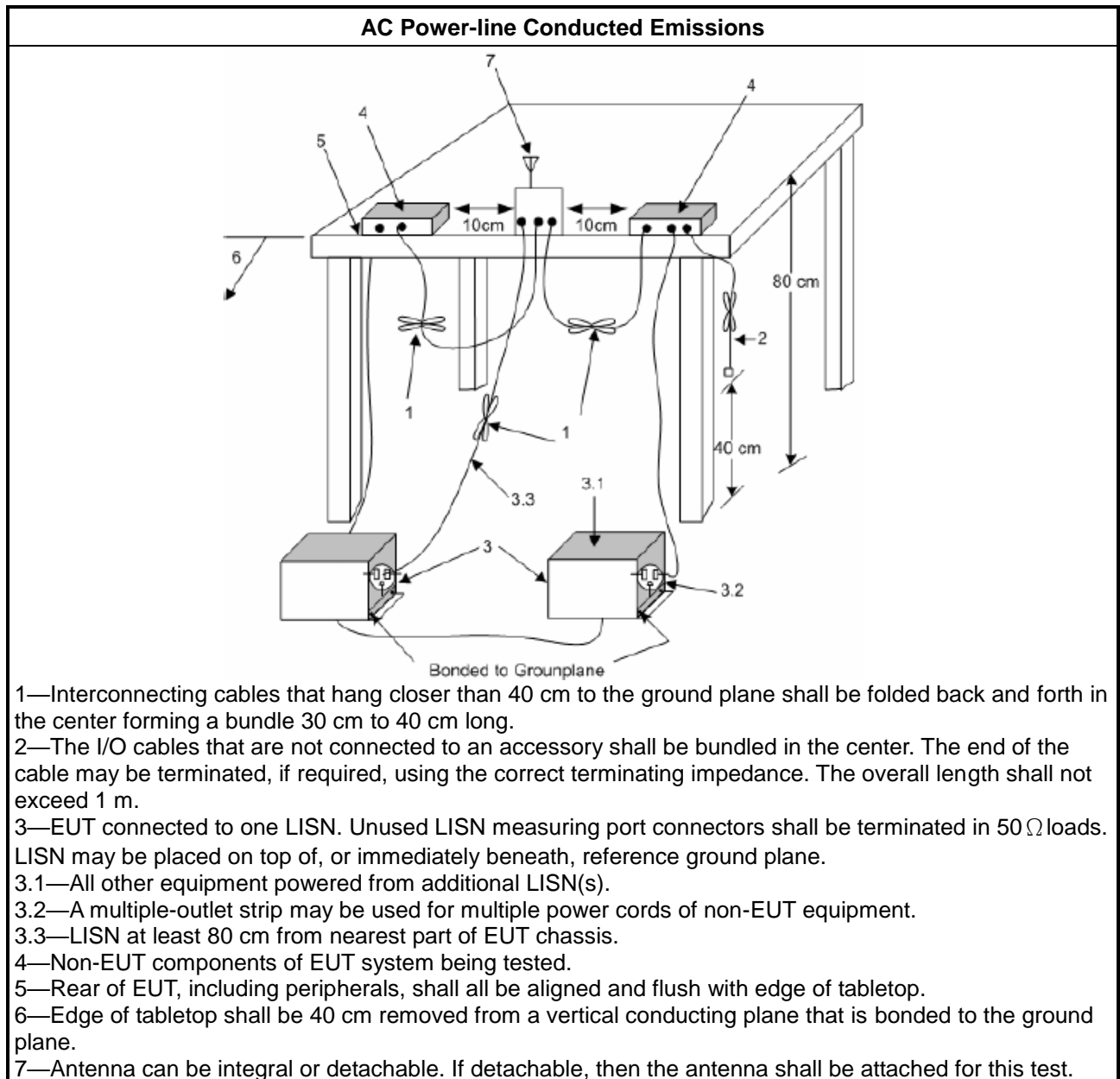
Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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

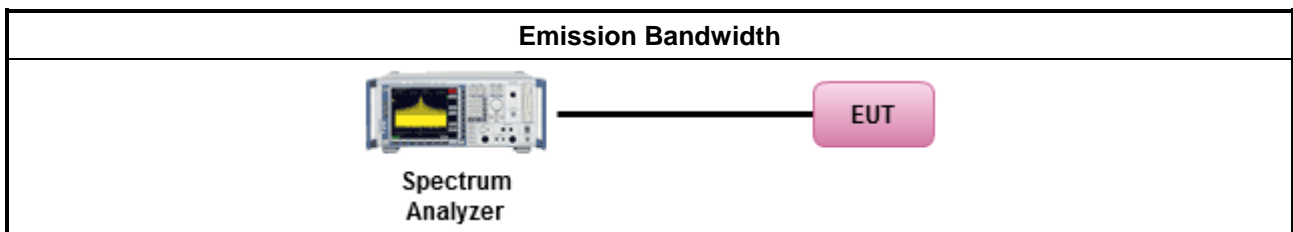
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm]
	<ul style="list-style-type: none"> ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
	<ul style="list-style-type: none"> ▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$.
	<ul style="list-style-type: none"> ▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
<p>P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

3.3.2 Measuring Instruments

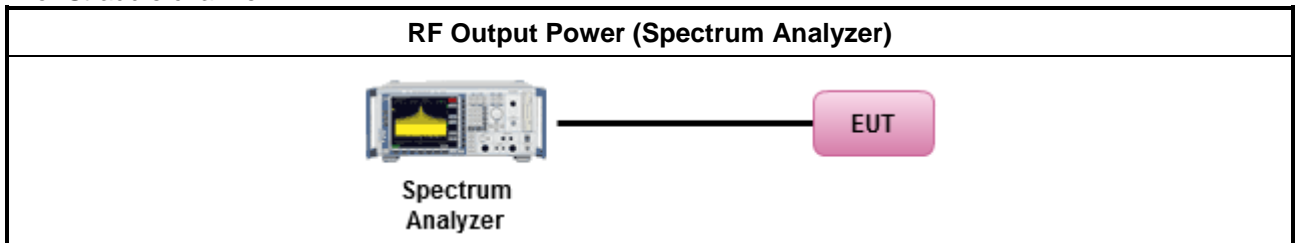
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

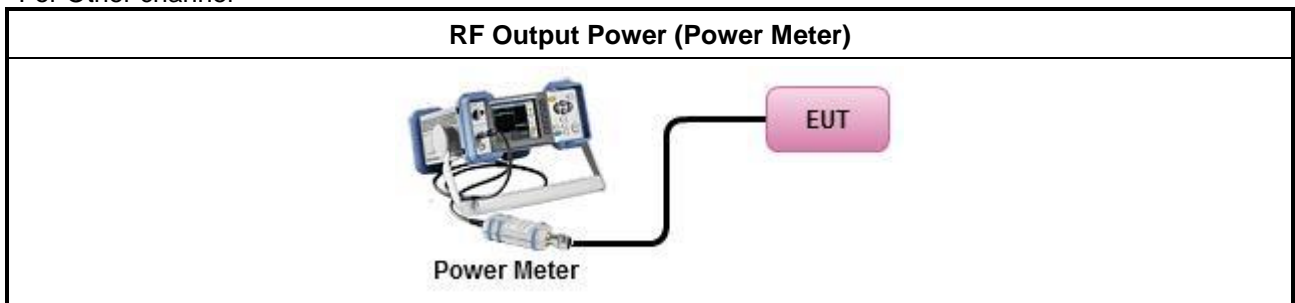
Test Method	
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
	Duty cycle \geq 98%
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle < 98%
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
Wideband RF power meter and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method PM (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
	<ul style="list-style-type: none"> If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

For Straddle channel



For Other channel



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

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

3.4.2 Measuring Instruments

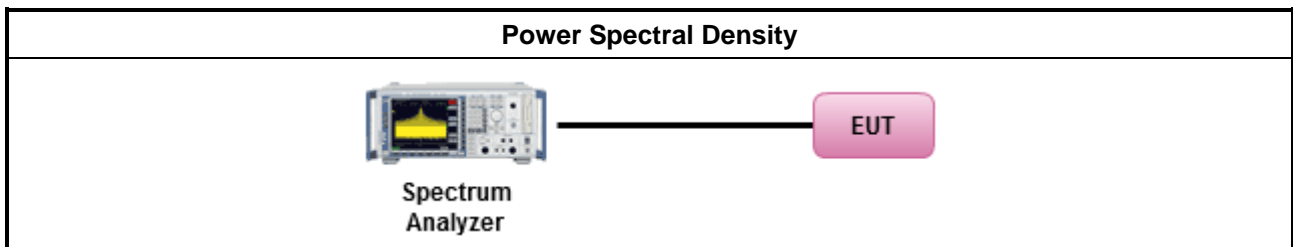
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options: 	
<input type="checkbox"/>	Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
Duty cycle $\geq 98\%$	
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
Duty cycle < 98%	
<input checked="" type="checkbox"/>	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	

Test Method					
	<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td> <ul style="list-style-type: none"> ▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. </td> </tr> <tr> <td style="width: 5%;"></td> <td> <ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$ </td> </tr> </table> 		<ul style="list-style-type: none"> ▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. 		<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$
	<ul style="list-style-type: none"> ▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. 				
	<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$ 				

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

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

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

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

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

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

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

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

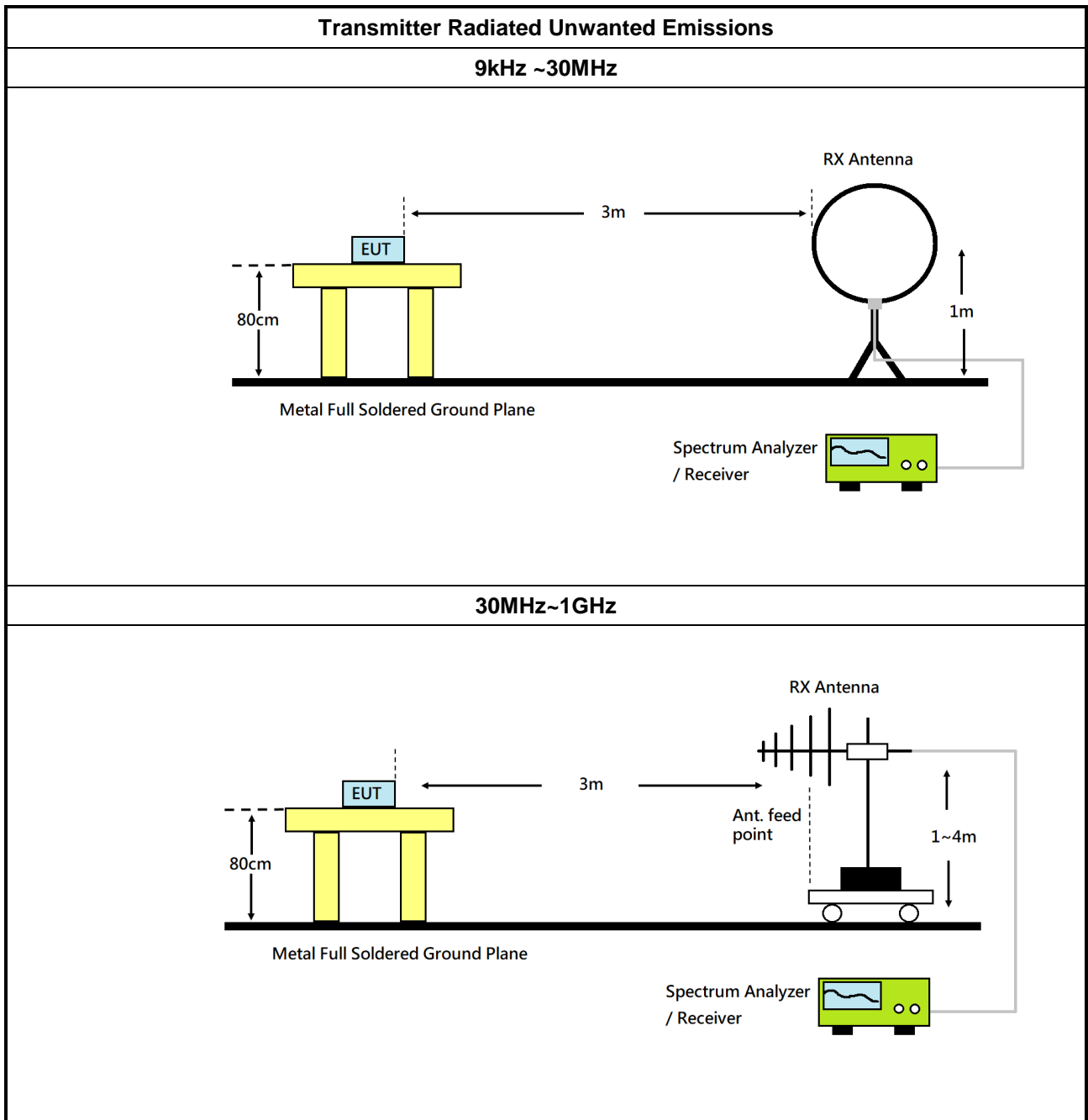
Test Method	
<ul style="list-style-type: none"> Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). 	
<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands. Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands. <input checked="" type="checkbox"/> Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW. <input checked="" type="checkbox"/> Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit. 	
<ul style="list-style-type: none"> For radiated measurement. <ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. 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. 	
<ul style="list-style-type: none"> The any unwanted emissions level shall not exceed the fundamental emission level. 	
<ul style="list-style-type: none"> All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported. 	
<ul style="list-style-type: none"> Use the following spectrum analyzer settings: <ul style="list-style-type: none"> 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 ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4. 	
<ul style="list-style-type: none"> KDB 414788 Open-Field Test Sites and Chamber Correlation Justification. <ul style="list-style-type: none"> 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. 	

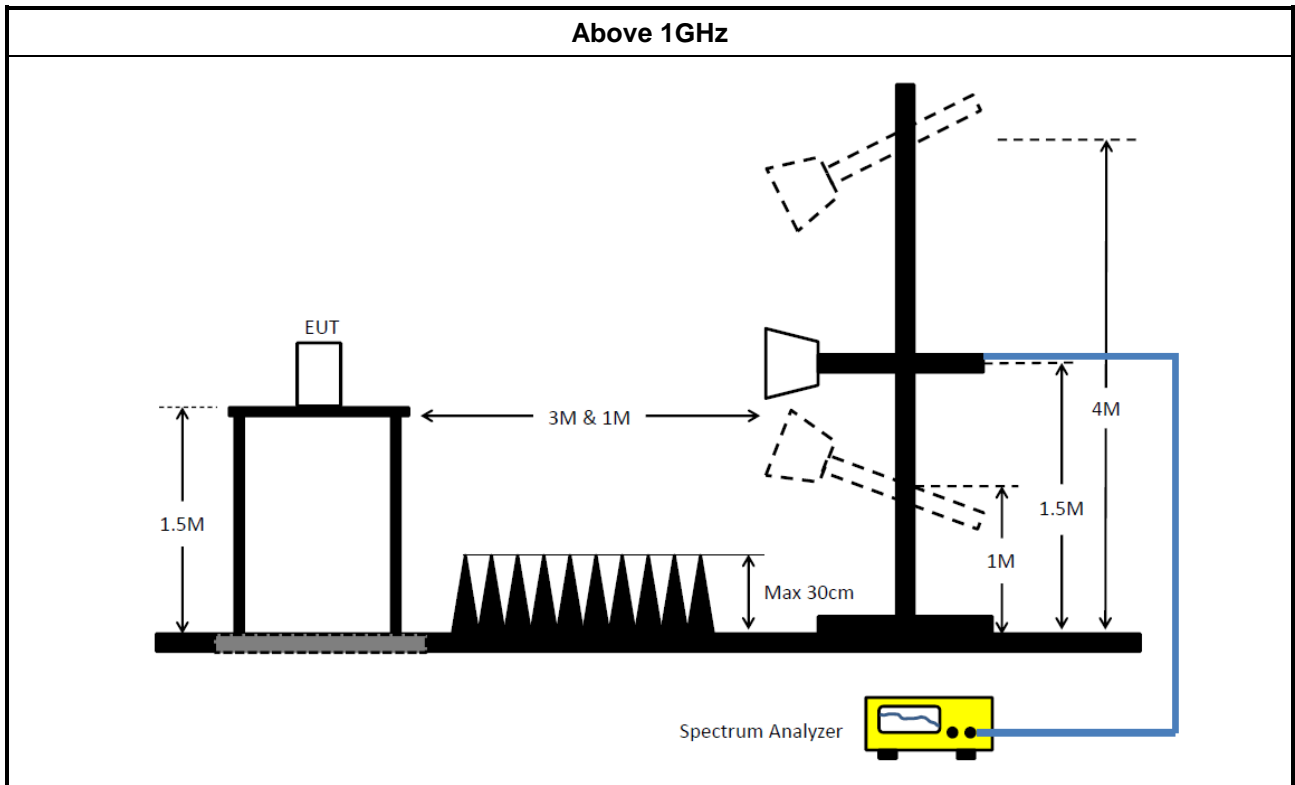
3.5.4 Measurement Results Calculation

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



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	13/May/2022	12/May/2023
Two-Line V-Network	R&S	ENV 216	100003	9kHz ~ 30MHz	18/Feb/2022	17/Feb/2023
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	01/Mar/2022	28/Feb/2023
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	26/Oct/2021	25/Oct/2022
Software	Sporton	SENSE-EMI	V5.10.8.2	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	01/Apr/2022	31/Mar/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	21/Feb/2022	20/Feb/2023
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	21/Feb/2022	20/Feb/2023
SENSE-15407_NII	Sporton	V5.10.7.18	N/A	N/A	N/A	N/A



Instrument for Radiated Test

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	FSV40	101500	10Hz~40GHz	12/Oct/2021	11/Oct/2022
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	08/Apr/2022	07/Apr/2023
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz~1GHz	17/Oct/2021	16/Oct/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02267	1GHz~18GHz	14/Sep/2021	13/Sep/2022
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	16/Jun/2021	15/Jun/2022
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	13/Jun/2022	12/Jun/2023
RF Cable-R03m	Jye Bao	RG142	MY37335/4+CB021-1+CB021-2	30MHz~1GHz	22/Mar/2022	21/Mar/2023
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN MY38596/4+SN 804300/4	1GHz~40GHz	28/Jul/2021	27/Jul/2022
Microwave Preamplifier	Agilent	8449B	3008A02326	1GHz~26.5GHz	15/Jul/2021	14/Jul/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Prempifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	08/Mar/2022	07/Mar/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	02/Jun/2021	01/Jun/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	13/May/2022	12/May/2023
SENSE-15407_NII	Sporton	v5.10.7.18	N/A	N/A	N/A	N/A



Summary

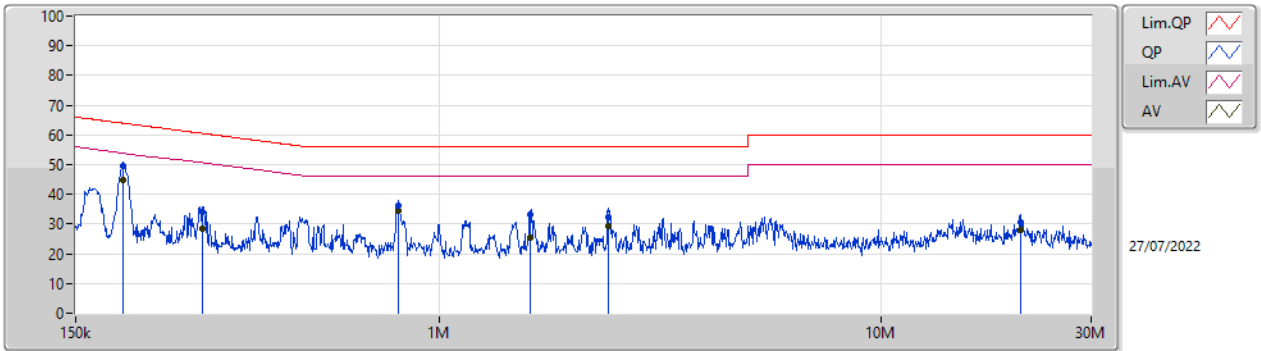
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	192.124k	44.73	53.93	-9.20	Line
Mode 2	Pass	AV	192.124k	44.67	53.93	-9.26	Neutral



Mode Configure

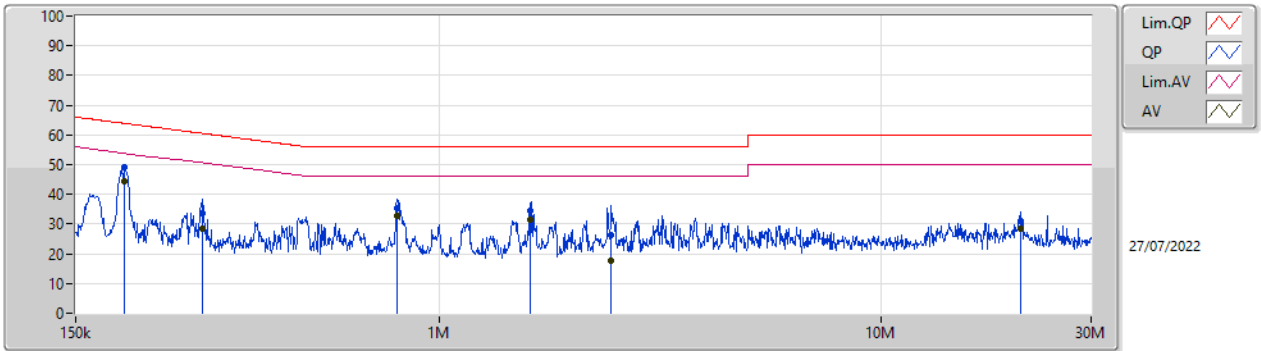
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	192.124k	49.66	63.93	-14.27	Line	-
Mode 1	Pass	AV	192.124k	44.73	53.93	-9.20	Line	-
Mode 1	Pass	QP	290.996k	34.14	60.49	-26.35	Line	-
Mode 1	Pass	AV	290.996k	28.53	50.49	-21.96	Line	-
Mode 1	Pass	QP	805.349k	36.04	56.00	-19.96	Line	-
Mode 1	Pass	AV	805.349k	34.44	46.00	-11.56	Line	-
Mode 1	Pass	QP	1.613M	33.05	56.00	-22.95	Line	-
Mode 1	Pass	AV	1.613M	25.49	46.00	-20.51	Line	-
Mode 1	Pass	QP	2.414M	32.50	56.00	-23.50	Line	-
Mode 1	Pass	AV	2.414M	29.28	46.00	-16.72	Line	-
Mode 1	Pass	QP	20.76M	30.61	60.00	-29.39	Line	-
Mode 1	Pass	AV	20.76M	28.11	50.00	-21.89	Line	-
Mode 1	Pass	QP	193.664k	49.16	63.88	-14.72	Neutral	-
Mode 1	Pass	AV	193.664k	44.51	53.88	-9.37	Neutral	-
Mode 1	Pass	QP	289.837k	33.73	60.53	-26.80	Neutral	-
Mode 1	Pass	AV	289.837k	28.51	50.53	-22.02	Neutral	-
Mode 1	Pass	QP	802.141k	35.27	56.00	-20.73	Neutral	-
Mode 1	Pass	AV	802.141k	32.77	46.00	-13.23	Neutral	-
Mode 1	Pass	QP	1.613M	34.53	56.00	-21.47	Neutral	-
Mode 1	Pass	AV	1.613M	31.47	46.00	-14.53	Neutral	-
Mode 1	Pass	QP	2.453M	26.16	56.00	-29.84	Neutral	-
Mode 1	Pass	AV	2.453M	17.70	46.00	-28.30	Neutral	-
Mode 1	Pass	QP	20.76M	30.82	60.00	-29.18	Neutral	-
Mode 1	Pass	AV	20.76M	28.27	50.00	-21.73	Neutral	-
Mode 2	Pass	QP	191.358k	49.19	63.97	-14.78	Line	-
Mode 2	Pass	AV	191.358k	44.28	53.97	-9.69	Line	-
Mode 2	Pass	QP	289.837k	35.92	60.53	-24.61	Line	-
Mode 2	Pass	AV	289.837k	30.24	50.53	-20.29	Line	-
Mode 2	Pass	QP	805.349k	35.73	56.00	-20.27	Line	-
Mode 2	Pass	AV	805.349k	33.55	46.00	-12.45	Line	-
Mode 2	Pass	QP	1.613M	32.71	56.00	-23.29	Line	-
Mode 2	Pass	AV	1.613M	24.81	46.00	-21.19	Line	-
Mode 2	Pass	QP	5.718M	26.32	60.00	-33.68	Line	-
Mode 2	Pass	AV	5.718M	17.17	50.00	-32.83	Line	-
Mode 2	Pass	QP	20.76M	30.17	60.00	-29.83	Line	-
Mode 2	Pass	AV	20.76M	27.58	50.00	-22.42	Line	-
Mode 2	Pass	QP	192.124k	49.37	63.93	-14.56	Neutral	-
Mode 2	Pass	AV	192.124k	44.67	53.93	-9.26	Neutral	-
Mode 2	Pass	QP	287.532k	32.89	60.59	-27.70	Neutral	-
Mode 2	Pass	AV	287.532k	27.83	50.59	-22.76	Neutral	-
Mode 2	Pass	QP	808.571k	34.40	56.00	-21.60	Neutral	-
Mode 2	Pass	AV	808.571k	28.15	46.00	-17.85	Neutral	-
Mode 2	Pass	QP	1.62M	32.91	56.00	-23.09	Neutral	-
Mode 2	Pass	AV	1.62M	21.05	46.00	-24.95	Neutral	-
Mode 2	Pass	QP	2.414M	31.97	56.00	-24.03	Neutral	-
Mode 2	Pass	AV	2.414M	23.78	46.00	-22.22	Neutral	-
Mode 2	Pass	QP	20.76M	30.69	60.00	-29.31	Neutral	-
Mode 2	Pass	AV	20.76M	28.22	50.00	-21.78	Neutral	-

Conducted Emissions at Powerline_Mode 1



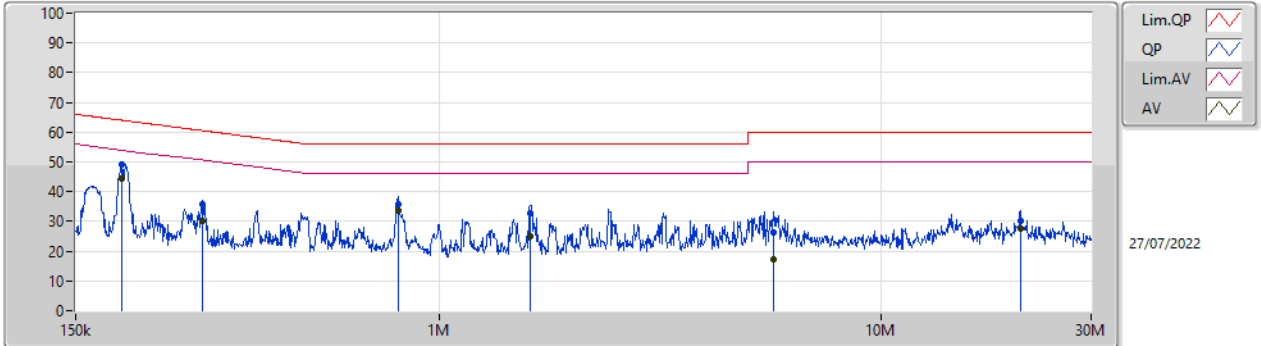
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.124k	49.66	63.93	-14.27	19.63	Line	-	30.03	9.69	0.03	9.91
AV	192.124k	44.73	53.93	-9.20	19.63	Line	-	25.10	9.69	0.03	9.91
QP	290.996k	34.14	60.49	-26.35	19.63	Line	-	14.51	9.68	0.04	9.91
AV	290.996k	28.53	50.49	-21.96	19.63	Line	-	8.90	9.68	0.04	9.91
QP	805.349k	36.04	56.00	-19.96	19.65	Line	-	16.39	9.68	0.05	9.92
AV	805.349k	34.44	46.00	-11.56	19.65	Line	-	14.79	9.68	0.05	9.92
QP	1.613M	33.05	56.00	-22.95	19.68	Line	-	13.37	9.69	0.07	9.92
AV	1.613M	25.49	46.00	-20.51	19.68	Line	-	5.81	9.69	0.07	9.92
QP	2.414M	32.50	56.00	-23.50	19.71	Line	-	12.79	9.70	0.09	9.92
AV	2.414M	29.28	46.00	-16.72	19.71	Line	-	9.57	9.70	0.09	9.92
QP	20.76M	30.61	60.00	-29.39	20.00	Line	-	10.61	9.79	0.28	9.93
AV	20.76M	28.11	50.00	-21.89	20.00	Line	-	8.11	9.79	0.28	9.93

Conducted Emissions at Powerline_Mode 1



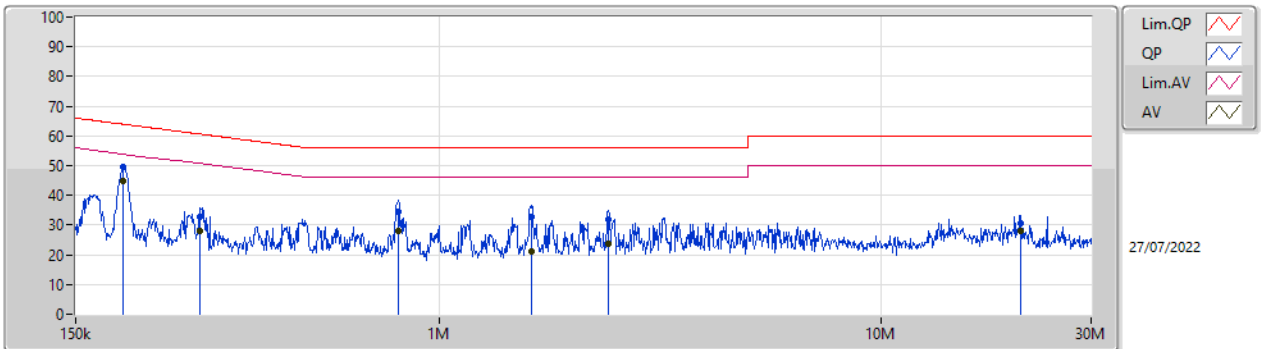
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	193.664k	49.16	63.88	-14.72	19.66	Neutral	-	29.50	9.72	0.03	9.91
AV	193.664k	44.51	53.88	-9.37	19.66	Neutral	-	24.85	9.72	0.03	9.91
QP	289.837k	33.73	60.53	-26.80	19.67	Neutral	-	14.06	9.72	0.04	9.91
AV	289.837k	28.51	50.53	-22.02	19.67	Neutral	-	8.84	9.72	0.04	9.91
QP	802.141k	35.27	56.00	-20.73	19.70	Neutral	-	15.57	9.73	0.05	9.92
AV	802.141k	32.77	46.00	-13.23	19.70	Neutral	-	13.07	9.73	0.05	9.92
QP	1.613M	34.53	56.00	-21.47	19.73	Neutral	-	14.80	9.74	0.07	9.92
AV	1.613M	31.47	46.00	-14.53	19.73	Neutral	-	11.74	9.74	0.07	9.92
QP	2.453M	26.16	56.00	-29.84	19.76	Neutral	-	6.40	9.75	0.09	9.92
AV	2.453M	17.70	46.00	-28.30	19.76	Neutral	-	-2.06	9.75	0.09	9.92
QP	20.76M	30.82	60.00	-29.18	20.21	Neutral	-	10.61	10.00	0.28	9.93
AV	20.76M	28.27	50.00	-21.73	20.21	Neutral	-	8.06	10.00	0.28	9.93

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	191.358k	49.19	63.97	-14.78	19.63	Line	-	29.56	9.69	0.03	9.91
AV	191.358k	44.28	53.97	-9.69	19.63	Line	-	24.65	9.69	0.03	9.91
QP	289.837k	35.92	60.53	-24.61	19.63	Line	-	16.29	9.68	0.04	9.91
AV	289.837k	30.24	50.53	-20.29	19.63	Line	-	10.61	9.68	0.04	9.91
QP	805.349k	35.73	56.00	-20.27	19.65	Line	-	16.08	9.68	0.05	9.92
AV	805.349k	33.55	46.00	-12.45	19.65	Line	-	13.90	9.68	0.05	9.92
QP	1.613M	32.71	56.00	-23.29	19.68	Line	-	13.03	9.69	0.07	9.92
AV	1.613M	24.81	46.00	-21.19	19.68	Line	-	5.13	9.69	0.07	9.92
QP	5.718M	26.32	60.00	-33.68	19.82	Line	-	6.50	9.75	0.15	9.92
AV	5.718M	17.17	50.00	-32.83	19.82	Line	-	-2.65	9.75	0.15	9.92
QP	20.76M	30.17	60.00	-29.83	20.00	Line	-	10.17	9.79	0.28	9.93
AV	20.76M	27.58	50.00	-22.42	20.00	Line	-	7.58	9.79	0.28	9.93

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.124k	49.37	63.93	-14.56	19.66	Neutral	-	29.71	9.72	0.03	9.91
AV	192.124k	44.67	53.93	-9.26	19.66	Neutral	-	25.01	9.72	0.03	9.91
QP	287.532k	32.89	60.59	-27.70	19.67	Neutral	-	13.22	9.72	0.04	9.91
AV	287.532k	27.83	50.59	-22.76	19.67	Neutral	-	8.16	9.72	0.04	9.91
QP	808.571k	34.40	56.00	-21.60	19.70	Neutral	-	14.70	9.73	0.05	9.92
AV	808.571k	28.15	46.00	-17.85	19.70	Neutral	-	8.45	9.73	0.05	9.92
QP	1.62M	32.91	56.00	-23.09	19.73	Neutral	-	13.18	9.74	0.07	9.92
AV	1.62M	21.05	46.00	-24.95	19.73	Neutral	-	1.32	9.74	0.07	9.92
QP	2.414M	31.97	56.00	-24.03	19.76	Neutral	-	12.21	9.75	0.09	9.92
AV	2.414M	23.78	46.00	-22.22	19.76	Neutral	-	4.02	9.75	0.09	9.92
QP	20.76M	30.69	60.00	-29.31	20.21	Neutral	-	10.48	10.00	0.28	9.93
AV	20.76M	28.22	50.00	-21.78	20.21	Neutral	-	8.01	10.00	0.28	9.93



Summary

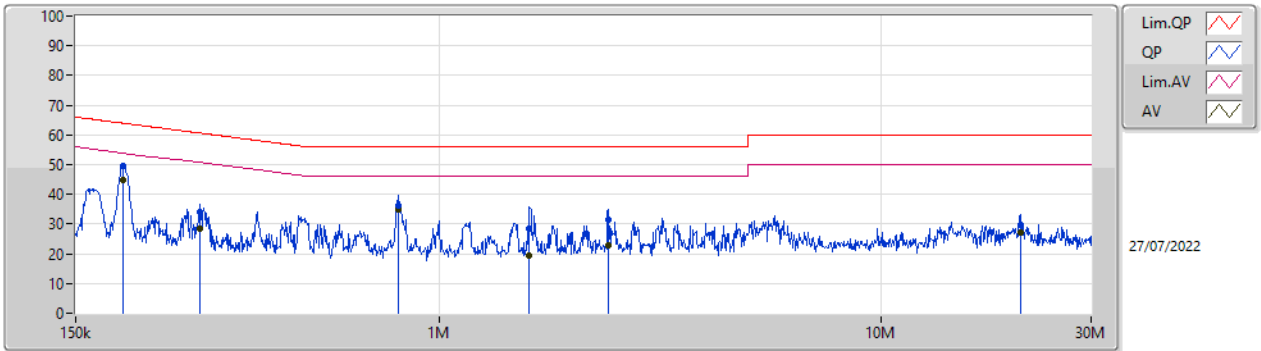
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Mode 1	Pass	AV	192.124k	44.77	53.93	-9.16	Line
Mode 2	Pass	AV	192.124k	44.76	53.93	-9.17	Line



Mode Configure

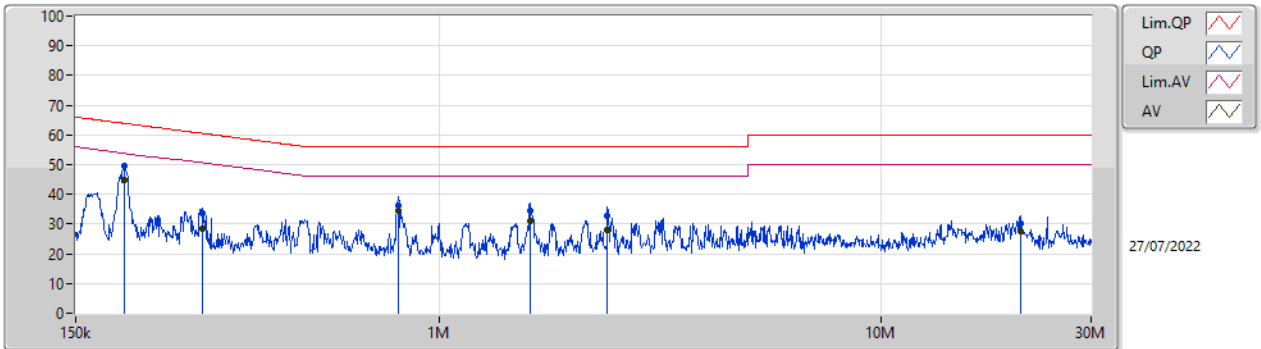
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	192.124k	49.71	63.93	-14.22	Line	-
Mode 1	Pass	AV	192.124k	44.77	53.93	-9.16	Line	-
Mode 1	Pass	QP	287.532k	34.19	60.59	-26.40	Line	-
Mode 1	Pass	AV	287.532k	28.61	50.59	-21.98	Line	-
Mode 1	Pass	QP	805.349k	36.28	56.00	-19.72	Line	-
Mode 1	Pass	AV	805.349k	35.07	46.00	-10.93	Line	-
Mode 1	Pass	QP	1.6M	28.26	56.00	-27.74	Line	-
Mode 1	Pass	AV	1.6M	19.20	46.00	-26.80	Line	-
Mode 1	Pass	QP	2.414M	31.27	56.00	-24.73	Line	-
Mode 1	Pass	AV	2.414M	22.71	46.00	-23.29	Line	-
Mode 1	Pass	QP	20.76M	29.90	60.00	-30.10	Line	-
Mode 1	Pass	AV	20.76M	27.35	50.00	-22.65	Line	-
Mode 1	Pass	QP	192.892k	49.40	63.92	-14.52	Neutral	-
Mode 1	Pass	AV	192.892k	44.74	53.92	-9.18	Neutral	-
Mode 1	Pass	QP	289.837k	33.41	60.53	-27.12	Neutral	-
Mode 1	Pass	AV	289.837k	28.41	50.53	-22.12	Neutral	-
Mode 1	Pass	QP	805.349k	36.04	56.00	-19.96	Neutral	-
Mode 1	Pass	AV	805.349k	34.42	46.00	-11.58	Neutral	-
Mode 1	Pass	QP	1.607M	34.46	56.00	-21.54	Neutral	-
Mode 1	Pass	AV	1.607M	31.24	46.00	-14.76	Neutral	-
Mode 1	Pass	QP	2.404M	32.72	56.00	-23.28	Neutral	-
Mode 1	Pass	AV	2.404M	27.92	46.00	-18.08	Neutral	-
Mode 1	Pass	QP	20.76M	30.17	60.00	-29.83	Neutral	-
Mode 1	Pass	AV	20.76M	27.59	50.00	-22.41	Neutral	-
Mode 2	Pass	QP	192.124k	49.65	63.93	-14.28	Line	-
Mode 2	Pass	AV	192.124k	44.76	53.93	-9.17	Line	-
Mode 2	Pass	QP	815.052k	33.27	56.00	-22.73	Line	-
Mode 2	Pass	AV	815.052k	23.91	46.00	-22.09	Line	-
Mode 2	Pass	QP	1.607M	33.97	56.00	-22.03	Line	-
Mode 2	Pass	AV	1.607M	30.49	46.00	-15.51	Line	-
Mode 2	Pass	QP	2.414M	32.44	56.00	-23.56	Line	-
Mode 2	Pass	AV	2.414M	29.16	46.00	-16.84	Line	-
Mode 2	Pass	QP	5.45M	26.42	60.00	-33.58	Line	-
Mode 2	Pass	AV	5.45M	17.15	50.00	-32.85	Line	-
Mode 2	Pass	QP	20.76M	29.70	60.00	-30.30	Line	-
Mode 2	Pass	AV	20.76M	27.19	50.00	-22.81	Line	-
Mode 2	Pass	QP	192.124k	49.35	63.93	-14.58	Neutral	-
Mode 2	Pass	AV	192.124k	44.68	53.93	-9.25	Neutral	-
Mode 2	Pass	QP	294.502k	30.87	60.40	-29.53	Neutral	-
Mode 2	Pass	AV	294.502k	23.51	50.40	-26.89	Neutral	-
Mode 2	Pass	QP	811.805k	34.90	56.00	-21.10	Neutral	-
Mode 2	Pass	AV	811.805k	25.89	46.00	-20.11	Neutral	-
Mode 2	Pass	QP	1.613M	34.16	56.00	-21.84	Neutral	-
Mode 2	Pass	AV	1.613M	30.04	46.00	-15.96	Neutral	-
Mode 2	Pass	QP	2.424M	30.94	56.00	-25.06	Neutral	-
Mode 2	Pass	AV	2.424M	21.38	46.00	-24.62	Neutral	-
Mode 2	Pass	QP	20.76M	30.45	60.00	-29.55	Neutral	-
Mode 2	Pass	AV	20.76M	27.63	50.00	-22.37	Neutral	-

Conducted Emissions at Powerline_Mode 1



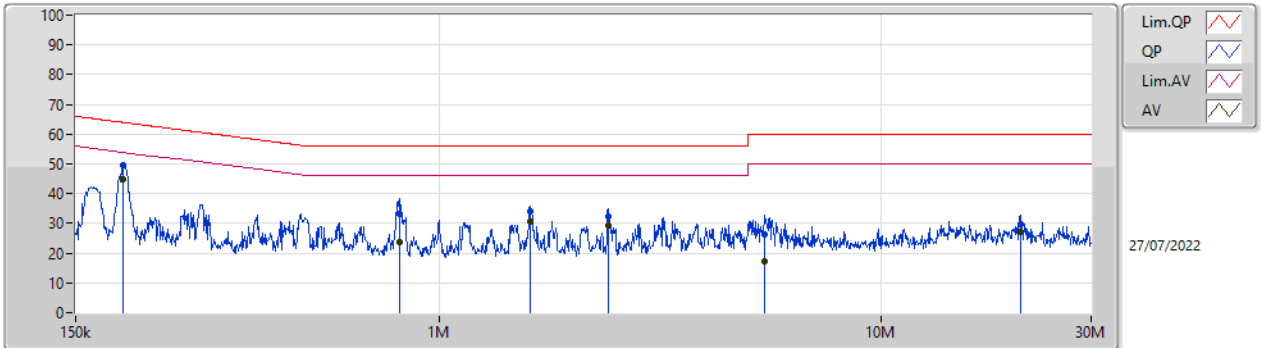
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.124k	49.71	63.93	-14.22	19.63	Line	-	30.08	9.69	0.03	9.91
AV	192.124k	44.77	53.93	-9.16	19.63	Line	-	25.14	9.69	0.03	9.91
QP	287.532k	34.19	60.59	-26.40	19.63	Line	-	14.56	9.68	0.04	9.91
AV	287.532k	28.61	50.59	-21.98	19.63	Line	-	8.98	9.68	0.04	9.91
QP	805.349k	36.28	56.00	-19.72	19.65	Line	-	16.63	9.68	0.05	9.92
AV	805.349k	35.07	46.00	-10.93	19.65	Line	-	15.42	9.68	0.05	9.92
QP	1.6M	28.26	56.00	-27.74	19.68	Line	-	8.58	9.69	0.07	9.92
AV	1.6M	19.20	46.00	-26.80	19.68	Line	-	-0.48	9.69	0.07	9.92
QP	2.414M	31.27	56.00	-24.73	19.71	Line	-	11.56	9.70	0.09	9.92
AV	2.414M	22.71	46.00	-23.29	19.71	Line	-	3.00	9.70	0.09	9.92
QP	20.76M	29.90	60.00	-30.10	20.00	Line	-	9.90	9.79	0.28	9.93
AV	20.76M	27.35	50.00	-22.65	20.00	Line	-	7.35	9.79	0.28	9.93

Conducted Emissions at Powerline_Mode 1



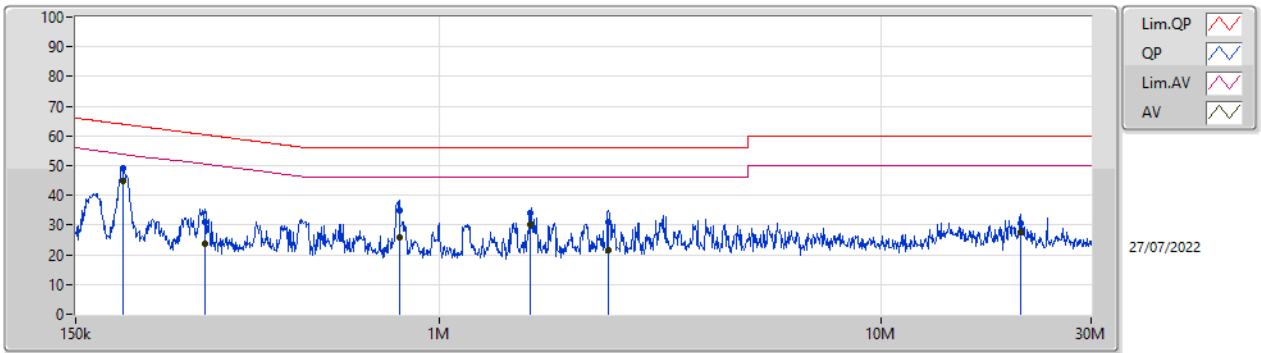
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.892k	49.40	63.92	-14.52	19.66	Neutral	-	29.74	9.72	0.03	9.91
AV	192.892k	44.74	53.92	-9.18	19.66	Neutral	-	25.08	9.72	0.03	9.91
QP	289.837k	33.41	60.53	-27.12	19.67	Neutral	-	13.74	9.72	0.04	9.91
AV	289.837k	28.41	50.53	-22.12	19.67	Neutral	-	8.74	9.72	0.04	9.91
QP	805.349k	36.04	56.00	-19.96	19.70	Neutral	-	16.34	9.73	0.05	9.92
AV	805.349k	34.42	46.00	-11.58	19.70	Neutral	-	14.72	9.73	0.05	9.92
QP	1.607M	34.46	56.00	-21.54	19.73	Neutral	-	14.73	9.74	0.07	9.92
AV	1.607M	31.24	46.00	-14.76	19.73	Neutral	-	11.51	9.74	0.07	9.92
QP	2.404M	32.72	56.00	-23.28	19.76	Neutral	-	12.96	9.75	0.09	9.92
AV	2.404M	27.92	46.00	-18.08	19.76	Neutral	-	8.16	9.75	0.09	9.92
QP	20.76M	30.17	60.00	-29.83	20.21	Neutral	-	9.96	10.00	0.28	9.93
AV	20.76M	27.59	50.00	-22.41	20.21	Neutral	-	7.38	10.00	0.28	9.93

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.124k	49.65	63.93	-14.28	19.63	Line	-	30.02	9.69	0.03	9.91
AV	192.124k	44.76	53.93	-9.17	19.63	Line	-	25.13	9.69	0.03	9.91
QP	815.052k	33.27	56.00	-22.73	19.65	Line	-	13.62	9.68	0.05	9.92
AV	815.052k	23.91	46.00	-22.09	19.65	Line	-	4.26	9.68	0.05	9.92
QP	1.607M	33.97	56.00	-22.03	19.68	Line	-	14.29	9.69	0.07	9.92
AV	1.607M	30.49	46.00	-15.51	19.68	Line	-	10.81	9.69	0.07	9.92
QP	2.414M	32.44	56.00	-23.56	19.71	Line	-	12.73	9.70	0.09	9.92
AV	2.414M	29.16	46.00	-16.84	19.71	Line	-	9.45	9.70	0.09	9.92
QP	5.45M	26.42	60.00	-33.58	19.81	Line	-	6.61	9.74	0.15	9.92
AV	5.45M	17.15	50.00	-32.85	19.81	Line	-	-2.66	9.74	0.15	9.92
QP	20.76M	29.70	60.00	-30.30	20.00	Line	-	9.70	9.79	0.28	9.93
AV	20.76M	27.19	50.00	-22.81	20.00	Line	-	7.19	9.79	0.28	9.93

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.124k	49.35	63.93	-14.58	19.66	Neutral	-	29.69	9.72	0.03	9.91
AV	192.124k	44.68	53.93	-9.25	19.66	Neutral	-	25.02	9.72	0.03	9.91
QP	294.502k	30.87	60.40	-29.53	19.67	Neutral	-	11.20	9.72	0.04	9.91
AV	294.502k	23.51	50.40	-26.89	19.67	Neutral	-	3.84	9.72	0.04	9.91
QP	811.805k	34.90	56.00	-21.10	19.70	Neutral	-	15.20	9.73	0.05	9.92
AV	811.805k	25.89	46.00	-20.11	19.70	Neutral	-	6.19	9.73	0.05	9.92
QP	1.613M	34.16	56.00	-21.84	19.73	Neutral	-	14.43	9.74	0.07	9.92
AV	1.613M	30.04	46.00	-15.96	19.73	Neutral	-	10.31	9.74	0.07	9.92
QP	2.424M	30.94	56.00	-25.06	19.76	Neutral	-	11.18	9.75	0.09	9.92
AV	2.424M	21.38	46.00	-24.62	19.76	Neutral	-	1.62	9.75	0.09	9.92
QP	20.76M	30.45	60.00	-29.55	20.21	Neutral	-	10.24	10.00	0.28	9.93
AV	20.76M	27.63	50.00	-22.37	20.21	Neutral	-	7.42	10.00	0.28	9.93



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	24.42M	17.121M	17M2D1D	23.97M	17.061M
802.11a_Nss1,(6Mbps)_1TX(Port2)	24.63M	17.091M	17M1D1D	23.85M	17.061M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	24.9M	18.171M	18M2D1D	24.6M	18.111M
802.11n HT20_Nss1,(MCS0)_1TX(Port2)	24.99M	18.141M	18M2D1D	24.54M	18.141M
802.11n HT20_Nss1,(MCS8)_2TX	25.29M	18.171M	18M2D1D	24.78M	18.141M
802.11n HT40_Nss1,(MCS0)_1TX(Port1)	44.94M	37.001M	37M0D1D	44.4M	36.882M
802.11n HT40_Nss1,(MCS0)_1TX(Port2)	43.98M	36.942M	37M0D1D	43.74M	36.882M
802.11n HT40_Nss1,(MCS8)_2TX	44.46M	37.001M	37M0D1D	44.16M	36.882M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	87.24M	75.202M	75M3D1D	87.24M	75.202M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	86.88M	75.322M	75M4D1D	86.88M	75.322M
802.11ac VHT80_Nss1,(MCS0)_2TX	85.8M	75.202M	75M3D1D	85.2M	75.202M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)	81.92M	76.602M	76M7D1D	81.92M	76.602M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)	82.08M	76.762M	76M8D1D	82.08M	76.762M
802.11ac VHT160_Nss1,(MCS0)_2TX	82.32M	76.682M	76M7D1D	82M	76.522M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	24.69M	19.13M	19M2D1D	24M	19.1M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	24.9M	19.13M	19M2D1D	23.79M	19.1M
802.11ax HEW20_Nss1,(MCS0)_2TX	24.81M	19.13M	19M2D1D	23.61M	19.1M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	43.68M	38.201M	38M3D1D	42.96M	38.141M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	43.14M	38.261M	38M3D1D	42.96M	38.201M
802.11ax HEW40_Nss1,(MCS0)_2TX	44.22M	38.201M	38M3D1D	43.26M	38.081M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	83.28M	76.762M	76M8D1D	83.28M	76.762M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	83.52M	76.882M	76M9D1D	83.52M	76.882M
802.11ax HEW80_Nss1,(MCS0)_2TX	82.68M	77.001M	77M0D1D	82.56M	76.522M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	82.24M	77.961M	78M0D1D	82.24M	77.961M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	83.36M	77.961M	78M0D1D	83.36M	77.961M
802.11ax HEW160_Nss1,(MCS0)_2TX	82.32M	77.881M	77M9D1D	82M	77.881M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	24.36M	17.091M	17M1D1D	23.97M	17.061M
802.11a_Nss1,(6Mbps)_1TX(Port2)	24.36M	17.091M	17M1D1D	23.73M	17.091M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	24.84M	18.141M	18M2D1D	24.72M	18.111M
802.11n HT20_Nss1,(MCS0)_1TX(Port2)	25.17M	18.171M	18M2D1D	24.72M	18.141M
802.11n HT20_Nss1,(MCS8)_2TX	25.2M	18.171M	18M2D1D	24.6M	18.141M
802.11n HT40_Nss1,(MCS0)_1TX(Port1)	45.6M	36.942M	37M0D1D	43.98M	36.822M
802.11n HT40_Nss1,(MCS0)_1TX(Port2)	44.28M	36.942M	37M0D1D	44.22M	36.822M
802.11n HT40_Nss1,(MCS8)_2TX	44.34M	36.942M	37M0D1D	43.2M	36.882M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	87.48M	75.322M	75M4D1D	87.48M	75.322M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	86.4M	75.322M	75M4D1D	86.4M	75.322M
802.11ac VHT80_Nss1,(MCS0)_2TX	87.12M	75.322M	75M4D1D	84.6M	75.322M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)	82.32M	76.842M	76M9D1D	82.32M	76.842M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)	82.48M	76.682M	76M7D1D	82.48M	76.682M
802.11ac VHT160_Nss1,(MCS0)_2TX	82.4M	76.922M	77M0D1D	82.24M	76.522M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	24.33M	19.16M	19M2D1D	23.49M	19.1M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	25.26M	19.13M	19M2D1D	23.91M	19.1M
802.11ax HEW20_Nss1,(MCS0)_2TX	25.11M	19.13M	19M2D1D	23.97M	19.1M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	43.68M	38.261M	38M3D1D	43.56M	38.141M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	42.9M	38.201M	38M3D1D	42.66M	38.141M
802.11ax HEW40_Nss1,(MCS0)_2TX	43.98M	38.201M	38M3D1D	42.3M	38.141M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	83.76M	76.882M	76M9D1D	83.76M	76.882M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	83.4M	76.882M	76M9D1D	83.4M	76.882M
802.11ax HEW80_Nss1,(MCS0)_2TX	83.16M	77.001M	77M0D1D	82.68M	76.642M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	82.4M	78.121M	78M2D1D	82.4M	78.121M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	82.08M	77.881M	77M9D1D	82.08M	77.881M
802.11ax HEW160_Nss1,(MCS0)_2TX	82.4M	78.041M	78M0D1D	82.32M	77.801M
5.47-5.725GHz	-	-	-	-	-



Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	25.56M	17.121M	17M2D1D	16.935M	13.643M
802.11a_Nss1,(6Mbps)_1TX(Port2)	25.05M	17.121M	17M2D1D	17.145M	13.673M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	25.47M	18.201M	18M3D1D	17.25M	14.153M
802.11n HT20_Nss1,(MCS0)_1TX(Port2)	24.84M	18.171M	18M2D1D	17.28M	14.153M
802.11n HT20_Nss1,(MCS8)_2TX	25.5M	18.171M	18M2D1D	17.295M	14.138M
802.11n HT40_Nss1,(MCS0)_1TX(Port1)	44.58M	36.942M	37M0D1D	38.29M	33.513M
802.11n HT40_Nss1,(MCS0)_1TX(Port2)	44.76M	37.001M	37M0D1D	38.36M	33.478M
802.11n HT40_Nss1,(MCS8)_2TX	44.58M	36.942M	37M0D1D	36.925M	33.408M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	86.04M	75.322M	75M4D1D	78.075M	71.964M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	86.64M	75.442M	75M5D1D	78.3M	71.964M
802.11ac VHT80_Nss1,(MCS0)_2TX	86.76M	75.322M	75M4D1D	79.5M	71.964M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)	164.88M	154.003M	154MD1D	164.88M	154.003M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)	164.16M	153.523M	154MD1D	164.16M	153.523M
802.11ac VHT160_Nss1,(MCS0)_2TX	165.36M	153.763M	154MD1D	163.92M	153.523M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	25.02M	19.13M	19M2D1D	17.055M	14.573M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	25.08M	19.13M	19M2D1D	17.85M	14.588M
802.11ax HEW20_Nss1,(MCS0)_2TX	25.17M	19.13M	19M2D1D	17.145M	14.603M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	44.94M	38.201M	38M3D1D	37.345M	34.038M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	44.22M	38.261M	38M3D1D	37.275M	34.073M
802.11ax HEW40_Nss1,(MCS0)_2TX	44.58M	38.261M	38M3D1D	36.54M	34.003M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	84.48M	77.001M	77M0D1D	76.35M	72.789M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	83.16M	76.882M	76M9D1D	76.575M	72.714M
802.11ax HEW80_Nss1,(MCS0)_2TX	83.52M	77.001M	77M0D1D	76.2M	72.864M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	164.4M	154.963M	155MD1D	164.4M	154.963M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	164.88M	154.963M	155MD1D	164.88M	154.963M
802.11ax HEW160_Nss1,(MCS0)_2TX	164.88M	155.202M	155MD1D	164.16M	154.963M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	16.32M	17.151M	17M2D1D	3.14M	5.297M
802.11a_Nss1,(6Mbps)_1TX(Port2)	16.35M	17.121M	17M2D1D	3.14M	5.337M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	17.58M	18.201M	18M3D1D	3.76M	5.397M
802.11n HT20_Nss1,(MCS0)_1TX(Port2)	17.58M	18.201M	18M3D1D	3.76M	5.297M
802.11n HT20_Nss1,(MCS8)_2TX	17.61M	18.291M	18M3D1D	3.74M	5.017M
802.11n HT40_Nss1,(MCS0)_1TX(Port1)	36.36M	37.121M	37M2D1D	3.22M	9.775M
802.11n HT40_Nss1,(MCS0)_1TX(Port2)	36.36M	37.061M	37M1D1D	3.14M	12.214M
802.11n HT40_Nss1,(MCS8)_2TX	36.36M	37.121M	37M2D1D	3.12M	5.457M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	67.56M	75.202M	75M3D1D	3.22M	8.936M
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	71.28M	75.202M	75M3D1D	3.14M	9.315M
802.11ac VHT80_Nss1,(MCS0)_2TX	62.64M	75.202M	75M3D1D	3.12M	10.035M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	18.9M	19.16M	19M2D1D	4.46M	5.157M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	18.81M	19.16M	19M2D1D	4.42M	5.257M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.87M	19.16M	19M2D1D	4.44M	4.978M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	37.86M	38.261M	38M3D1D	3.96M	7.036M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	37.74M	38.261M	38M3D1D	4.04M	11.594M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.92M	38.321M	38M4D1D	3.88M	4.938M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	68.76M	76.882M	76M9D1D	3.96M	8.116M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	73.8M	76.762M	76M8D1D	4.06M	8.136M
802.11ax HEW80_Nss1,(MCS0)_2TX	61.32M	76.882M	76M9D1D	3.98M	8.496M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Max-OBW = Maximum 99% occupied bandwidth;
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
 Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	23.97M	17.121M		
5200MHz	Pass	Inf	24.42M	17.091M		
5240MHz	Pass	Inf	24.09M	17.061M		
5260MHz	Pass	Inf	24.36M	17.091M		
5300MHz	Pass	Inf	24.18M	17.091M		
5320MHz	Pass	Inf	23.97M	17.061M		
5500MHz	Pass	Inf	24.57M	17.061M		
5580MHz	Pass	Inf	25.56M	17.121M		
5700MHz	Pass	Inf	23.94M	17.121M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.935M	13.643M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.14M	5.297M		
5745MHz	Pass	500k	16.29M	17.151M		
5785MHz	Pass	500k	16.32M	17.121M		
5825MHz	Pass	500k	16.32M	17.121M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			23.85M	17.061M
5200MHz	Pass	Inf			24.24M	17.091M
5240MHz	Pass	Inf			24.63M	17.091M
5260MHz	Pass	Inf			24.18M	17.091M
5300MHz	Pass	Inf			23.73M	17.091M
5320MHz	Pass	Inf			24.36M	17.091M
5500MHz	Pass	Inf			24.51M	17.061M
5580MHz	Pass	Inf			24.81M	17.121M
5700MHz	Pass	Inf			25.05M	17.121M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			17.145M	13.673M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.14M	5.337M
5745MHz	Pass	500k			16.35M	17.121M
5785MHz	Pass	500k			16.32M	17.121M
5825MHz	Pass	500k			16.32M	17.121M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	24.6M	18.141M		
5200MHz	Pass	Inf	24.9M	18.171M		
5240MHz	Pass	Inf	24.87M	18.111M		
5260MHz	Pass	Inf	24.72M	18.141M		
5300MHz	Pass	Inf	24.81M	18.111M		
5320MHz	Pass	Inf	24.84M	18.141M		
5500MHz	Pass	Inf	25.08M	18.141M		
5580MHz	Pass	Inf	25.47M	18.201M		
5700MHz	Pass	Inf	24.54M	18.141M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.25M	14.153M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	5.397M		
5745MHz	Pass	500k	17.58M	18.141M		
5785MHz	Pass	500k	17.55M	18.201M		
5825MHz	Pass	500k	17.55M	18.171M		
802.11n HT20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			24.99M	18.141M
5200MHz	Pass	Inf			24.81M	18.141M
5240MHz	Pass	Inf			24.54M	18.141M
5260MHz	Pass	Inf			24.87M	18.171M
5300MHz	Pass	Inf			24.72M	18.141M
5320MHz	Pass	Inf			25.17M	18.141M
5500MHz	Pass	Inf			24.33M	18.171M
5580MHz	Pass	Inf			24.84M	18.141M
5700MHz	Pass	Inf			24.78M	18.141M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			17.28M	14.153M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			3.76M	5.297M
5745MHz	Pass	500k			17.58M	18.201M
5785MHz	Pass	500k			17.55M	18.201M
5825MHz	Pass	500k			17.55M	18.171M
802.11n HT20_Nss1,(MCS8)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	25.14M	18.171M	24.78M	18.171M
5200MHz	Pass	Inf	25.29M	18.171M	24.9M	18.141M
5240MHz	Pass	Inf	24.99M	18.141M	24.78M	18.171M
5260MHz	Pass	Inf	24.63M	18.171M	25.2M	18.141M
5300MHz	Pass	Inf	24.96M	18.171M	24.99M	18.141M
5320MHz	Pass	Inf	24.66M	18.141M	24.6M	18.171M
5500MHz	Pass	Inf	25.5M	18.171M	24.75M	18.141M
5580MHz	Pass	Inf	24.81M	18.141M	25.05M	18.171M
5700MHz	Pass	Inf	24.87M	18.141M	25.08M	18.141M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.295M	14.138M	17.325M	14.153M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	5.017M	3.74M	5.217M
5745MHz	Pass	500k	17.55M	18.231M	17.58M	18.291M
5785MHz	Pass	500k	17.55M	18.231M	17.55M	18.231M
5825MHz	Pass	500k	17.55M	18.231M	17.61M	18.201M
802.11n HT40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5190MHz	Pass	Inf	44.4M	36.882M		
5230MHz	Pass	Inf	44.94M	37.001M		
5270MHz	Pass	Inf	45.6M	36.942M		
5310MHz	Pass	Inf	43.98M	36.822M		
5510MHz	Pass	Inf	44.58M	36.942M		
5550MHz	Pass	Inf	44.46M	36.942M		
5670MHz	Pass	Inf	44.58M	36.942M		
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	38.29M	33.513M		
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.22M	9.775M		
5755MHz	Pass	500k	36.3M	37.001M		
5795MHz	Pass	500k	36.36M	37.121M		
802.11n HT40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5190MHz	Pass	Inf			43.98M	36.882M
5230MHz	Pass	Inf			43.74M	36.942M
5270MHz	Pass	Inf			44.28M	36.942M
5310MHz	Pass	Inf			44.22M	36.822M
5510MHz	Pass	Inf			44.64M	37.001M
5550MHz	Pass	Inf			44.76M	36.882M
5670MHz	Pass	Inf			43.38M	36.882M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			38.36M	33.478M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			3.14M	12.214M
5755MHz	Pass	500k			36.36M	36.882M
5795MHz	Pass	500k			36.36M	37.061M
802.11n HT40_Nss1,(MCS8)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	44.4M	36.882M	44.28M	36.882M
5230MHz	Pass	Inf	44.46M	37.001M	44.16M	36.882M
5270MHz	Pass	Inf	44.28M	36.882M	43.2M	36.942M
5310MHz	Pass	Inf	44.34M	36.882M	43.98M	36.942M
5510MHz	Pass	Inf	43.62M	36.942M	44.16M	36.882M
5550MHz	Pass	Inf	44.1M	36.942M	44.58M	36.942M
5670MHz	Pass	Inf	43.62M	36.882M	43.86M	36.942M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.925M	33.408M	37.24M	33.408M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	5.457M	3.24M	5.757M
5755MHz	Pass	500k	36.36M	37.121M	36.3M	37.061M
5795MHz	Pass	500k	36.3M	37.121M	36.36M	37.121M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5210MHz	Pass	Inf	87.24M	75.202M		
5290MHz	Pass	Inf	87.48M	75.322M		
5530MHz	Pass	Inf	86.04M	75.322M		
5610MHz	Pass	Inf	84.6M	75.322M		
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	78.075M	71.964M		
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.22M	8.936M		
5775MHz	Pass	500k	67.56M	75.202M		
802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5210MHz	Pass	Inf			86.88M	75.322M
5290MHz	Pass	Inf			86.4M	75.322M
5530MHz	Pass	Inf			86.64M	75.442M
5610MHz	Pass	Inf			85.8M	75.202M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			78.3M	71.964M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			3.14M	9.315M
5775MHz	Pass	500k			71.28M	75.202M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	85.2M	75.202M	85.8M	75.202M
5290MHz	Pass	Inf	84.6M	75.322M	87.12M	75.322M
5530MHz	Pass	Inf	86.28M	75.322M	86.76M	75.322M
5610MHz	Pass	Inf	83.64M	75.202M	83.64M	75.202M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	79.5M	72.039M	79.65M	71.964M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	10.635M	3.12M	10.035M
5775MHz	Pass	500k	58.8M	75.082M	62.64M	75.202M
802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	81.92M	76.602M		
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.32M	76.842M		
5570MHz	Pass	Inf	164.88M	154.003M		
802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf			82.08M	76.762M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf			82.48M	76.682M
5570MHz	Pass	Inf			164.16M	153.523M
802.11ac VHT160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82M	76.682M	82.32M	76.522M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.24M	76.922M	82.4M	76.522M
5570MHz	Pass	Inf	165.36M	153.763M	163.92M	153.523M
802.11ax HEW20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5180MHz	Pass	Inf	24.36M	19.13M		
5200MHz	Pass	Inf	24M	19.13M		
5240MHz	Pass	Inf	24.69M	19.1M		
5260MHz	Pass	Inf	23.49M	19.1M		
5300MHz	Pass	Inf	24.33M	19.16M		
5320MHz	Pass	Inf	24.33M	19.1M		
5500MHz	Pass	Inf	24.63M	19.13M		
5580MHz	Pass	Inf	24.45M	19.13M		
5700MHz	Pass	Inf	25.02M	19.1M		
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.055M	14.573M		
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	5.157M		
5745MHz	Pass	500k	18.9M	19.16M		
5785MHz	Pass	500k	18.78M	19.13M		
5825MHz	Pass	500k	18.78M	19.16M		
802.11ax HEW20_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5180MHz	Pass	Inf			24.03M	19.1M
5200MHz	Pass	Inf			24.9M	19.1M
5240MHz	Pass	Inf			23.79M	19.13M
5260MHz	Pass	Inf			24.06M	19.13M

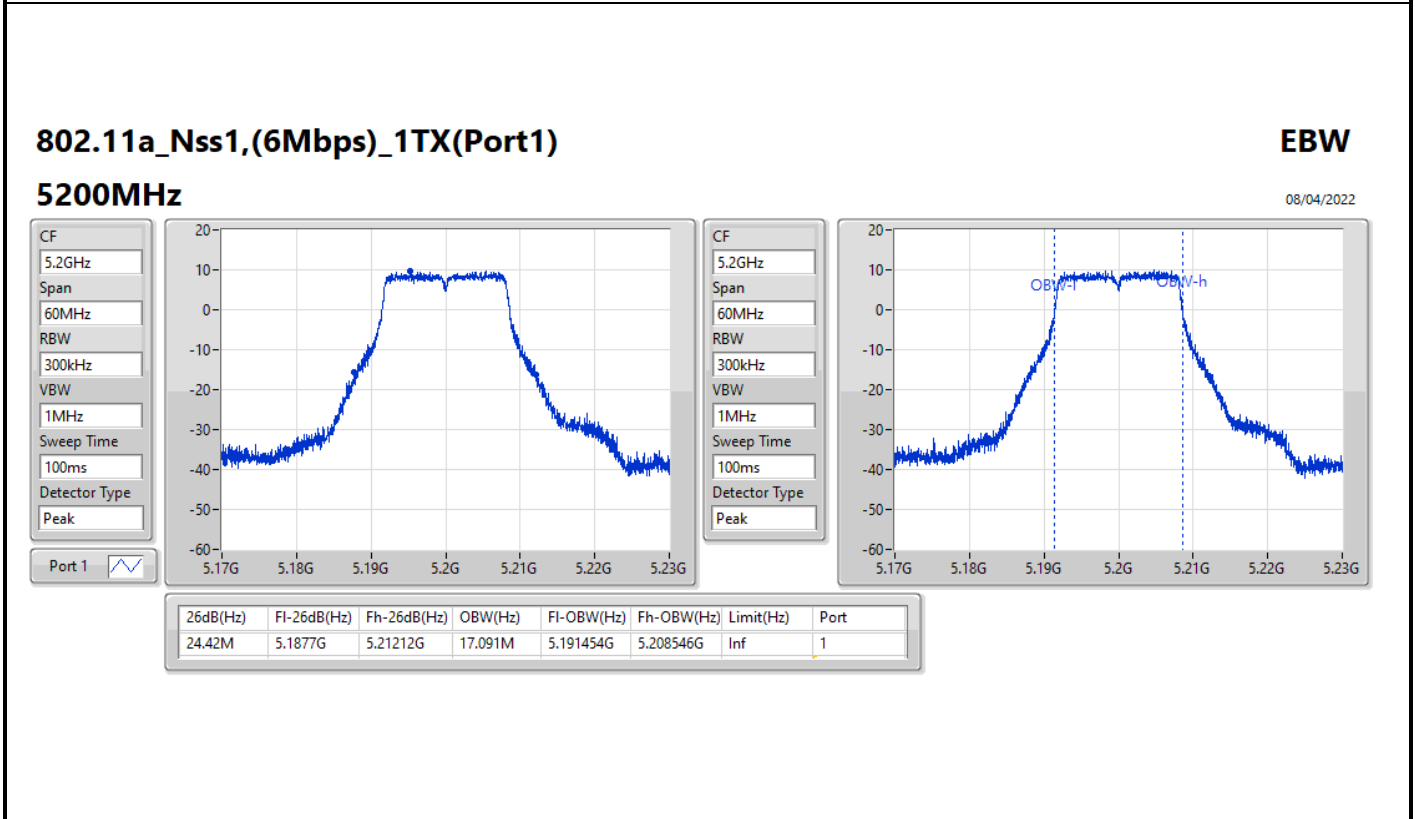
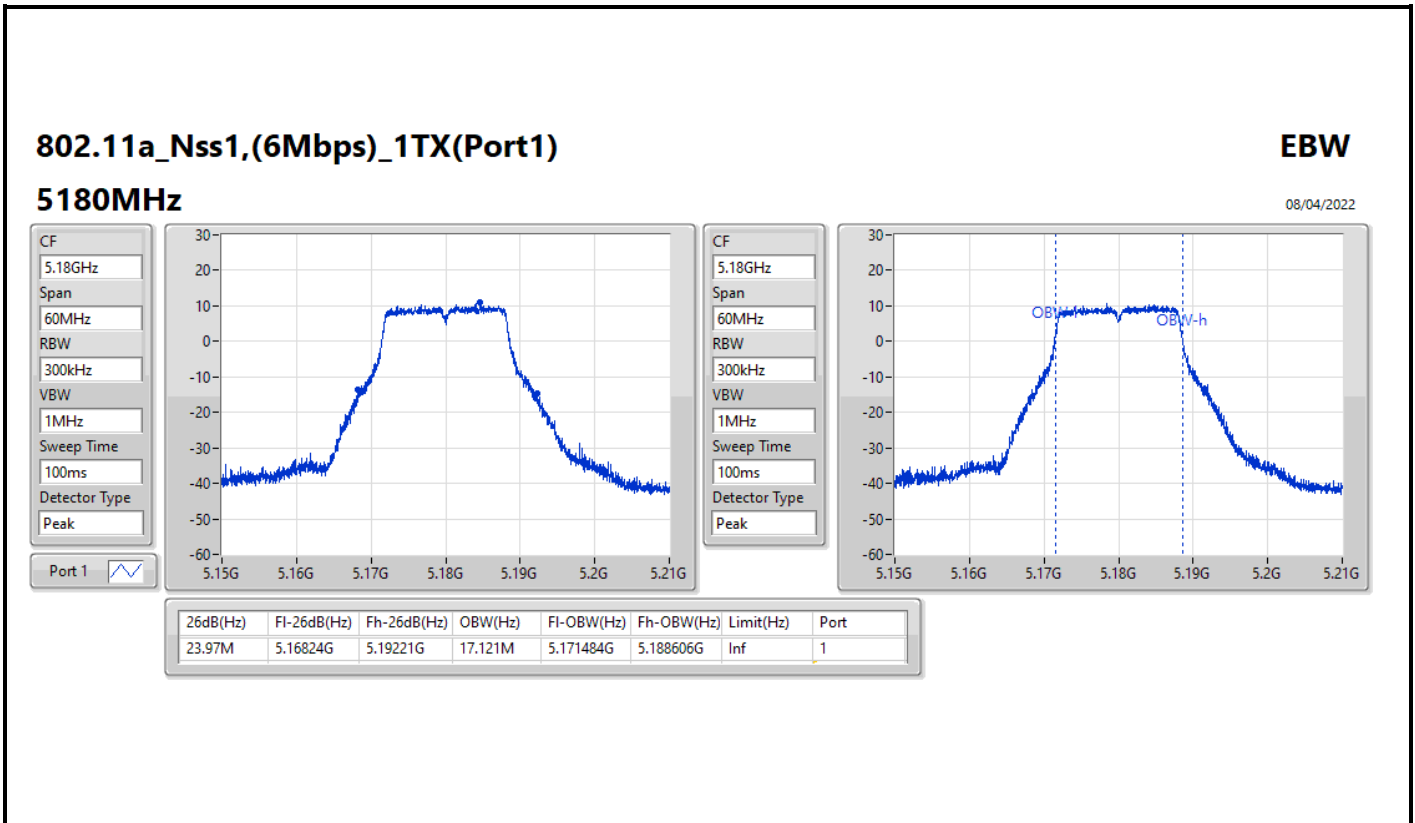


Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5300MHz	Pass	Inf			25.26M	19.13M
5320MHz	Pass	Inf			23.91M	19.1M
5500MHz	Pass	Inf			24.48M	19.13M
5580MHz	Pass	Inf			25.08M	19.13M
5700MHz	Pass	Inf			23.67M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf			17.85M	14.588M
5720MHz Straddle 5.725-5.85GHz	Pass	500k			4.42M	5.257M
5745MHz	Pass	500k			18.75M	19.16M
5785MHz	Pass	500k			18.78M	19.13M
5825MHz	Pass	500k			18.81M	19.13M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	24.81M	19.1M	23.79M	19.1M
5200MHz	Pass	Inf	24.57M	19.1M	24.48M	19.1M
5240MHz	Pass	Inf	23.88M	19.13M	23.61M	19.1M
5260MHz	Pass	Inf	25.11M	19.13M	23.97M	19.13M
5300MHz	Pass	Inf	24.42M	19.1M	24.51M	19.13M
5320MHz	Pass	Inf	24.12M	19.1M	23.97M	19.13M
5500MHz	Pass	Inf	24M	19.13M	24.36M	19.1M
5580MHz	Pass	Inf	25.17M	19.1M	25.05M	19.1M
5700MHz	Pass	Inf	24.12M	19.1M	24.18M	19.1M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.295M	14.603M	17.145M	14.603M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.5M	5.017M	4.44M	4.978M
5745MHz	Pass	500k	18.81M	19.13M	18.78M	19.13M
5785MHz	Pass	500k	18.78M	19.13M	18.84M	19.16M
5825MHz	Pass	500k	18.84M	19.13M	18.87M	19.1M
802.11ax HEW40_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5190MHz	Pass	Inf	43.68M	38.141M		
5230MHz	Pass	Inf	42.96M	38.201M		
5270MHz	Pass	Inf	43.56M	38.261M		
5310MHz	Pass	Inf	43.68M	38.141M		
5510MHz	Pass	Inf	43.44M	38.201M		
5550MHz	Pass	Inf	44.94M	38.201M		
5670MHz	Pass	Inf	44.04M	38.201M		
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	37.345M	34.038M		
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	7.036M		
5755MHz	Pass	500k	37.86M	38.261M		
5795MHz	Pass	500k	37.68M	38.261M		
802.11ax HEW40_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5190MHz	Pass	Inf			42.96M	38.201M
5230MHz	Pass	Inf			43.14M	38.261M
5270MHz	Pass	Inf			42.9M	38.141M
5310MHz	Pass	Inf			42.66M	38.201M
5510MHz	Pass	Inf			43.86M	38.201M
5550MHz	Pass	Inf			44.22M	38.261M
5670MHz	Pass	Inf			42.3M	38.141M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf			37.275M	34.073M
5710MHz Straddle 5.725-5.85GHz	Pass	500k			4.04M	11.594M
5755MHz	Pass	500k			37.74M	38.261M
5795MHz	Pass	500k			37.62M	38.261M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	44.22M	38.141M	43.26M	38.081M
5230MHz	Pass	Inf	43.32M	38.201M	43.56M	38.081M
5270MHz	Pass	Inf	43.98M	38.201M	43.2M	38.141M
5310MHz	Pass	Inf	42.96M	38.201M	42.3M	38.141M
5510MHz	Pass	Inf	43.86M	38.201M	43.32M	38.201M
5550MHz	Pass	Inf	42.9M	38.201M	43.38M	38.261M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
5670MHz	Pass	Inf	44.58M	38.201M	43.2M	38.201M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	37.345M	34.038M	36.54M	34.003M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	4.998M	4.02M	4.938M
5755MHz	Pass	500k	37.92M	38.321M	37.44M	38.201M
5795MHz	Pass	500k	37.68M	38.201M	37.62M	38.201M
802.11ax HEW80_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5210MHz	Pass	Inf	83.28M	76.762M		
5290MHz	Pass	Inf	83.76M	76.882M		
5530MHz	Pass	Inf	84.48M	77.001M		
5610MHz	Pass	Inf	82.8M	76.762M		
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.35M	72.789M		
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	8.116M		
5775MHz	Pass	500k	68.76M	76.882M		
802.11ax HEW80_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5210MHz	Pass	Inf			83.52M	76.882M
5290MHz	Pass	Inf			83.4M	76.882M
5530MHz	Pass	Inf			82.56M	76.882M
5610MHz	Pass	Inf			83.16M	76.882M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf			76.575M	72.714M
5690MHz Straddle 5.725-5.85GHz	Pass	500k			4.06M	8.136M
5775MHz	Pass	500k			73.8M	76.762M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.56M	76.522M	82.68M	77.001M
5290MHz	Pass	Inf	82.68M	77.001M	83.16M	76.642M
5530MHz	Pass	Inf	83.52M	76.882M	82.56M	77.001M
5610MHz	Pass	Inf	83.4M	76.882M	82.2M	76.762M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	77.025M	72.864M	76.2M	72.864M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.98M	8.556M	4.04M	8.496M
5775MHz	Pass	500k	61.32M	76.882M	57.48M	76.762M
802.11ax HEW160_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.24M	77.961M		
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.4M	78.121M		
5570MHz	Pass	Inf	164.4M	154.963M		
802.11ax HEW160_Nss1,(MCS0)_1TX(Port2)	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf			83.36M	77.961M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf			82.08M	77.881M
5570MHz	Pass	Inf			164.88M	154.963M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.32M	77.881M	82M	77.881M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.4M	78.041M	82.32M	77.801M
5570MHz	Pass	Inf	164.88M	155.202M	164.16M	154.963M

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

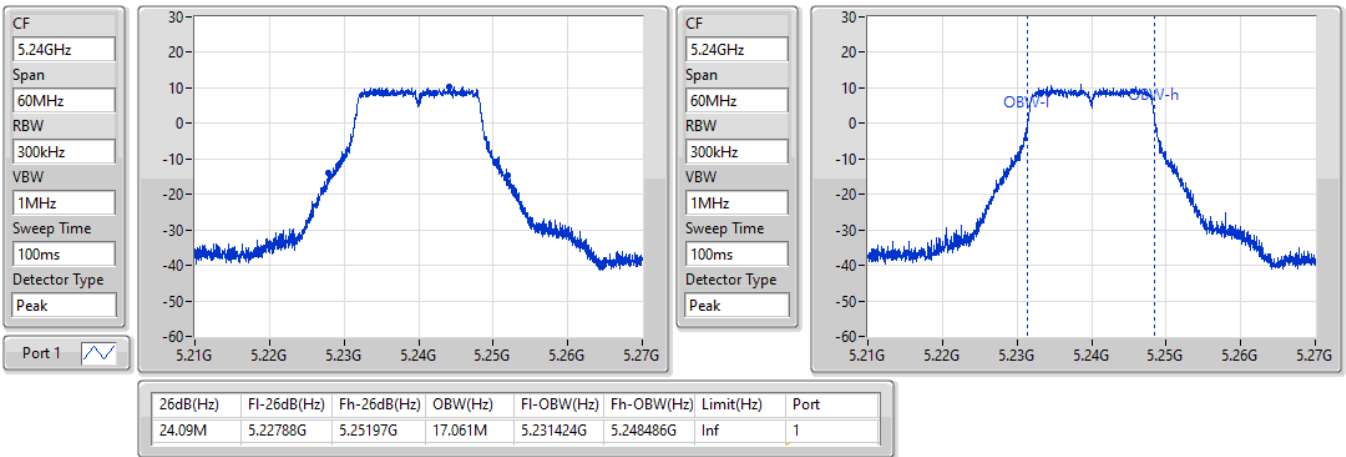


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5240MHz

11/04/2022

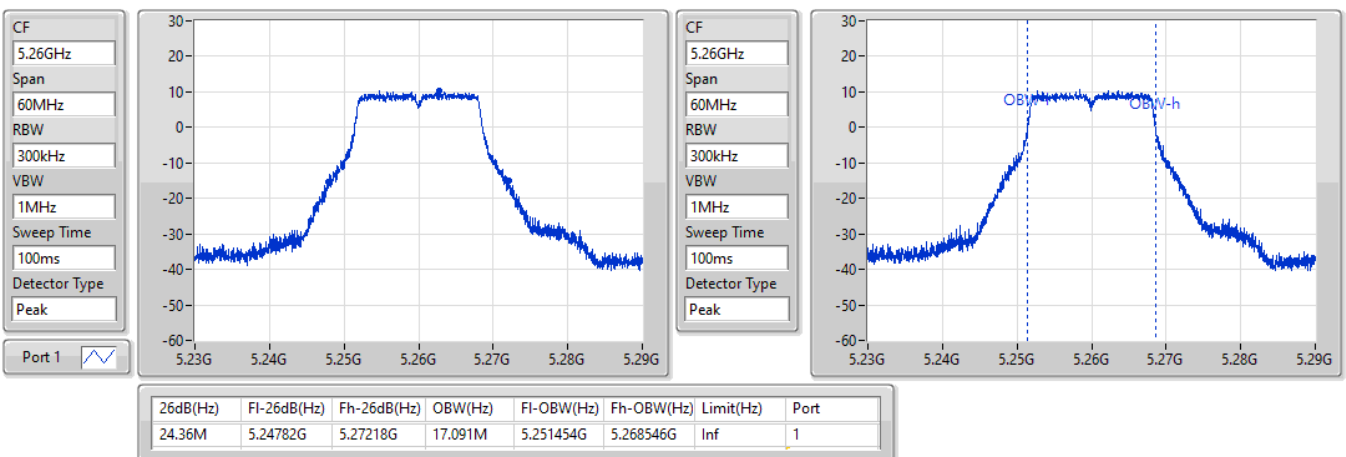


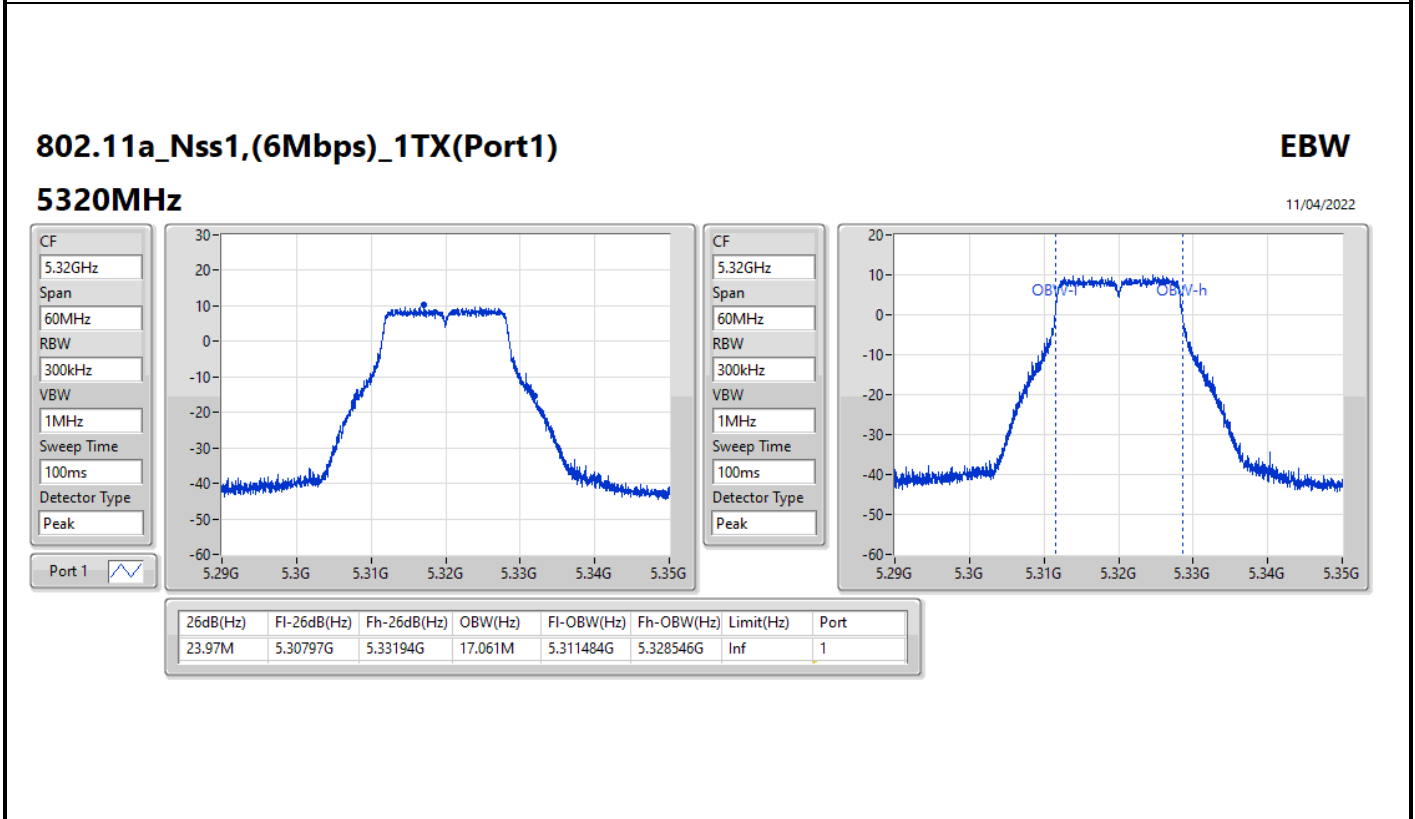
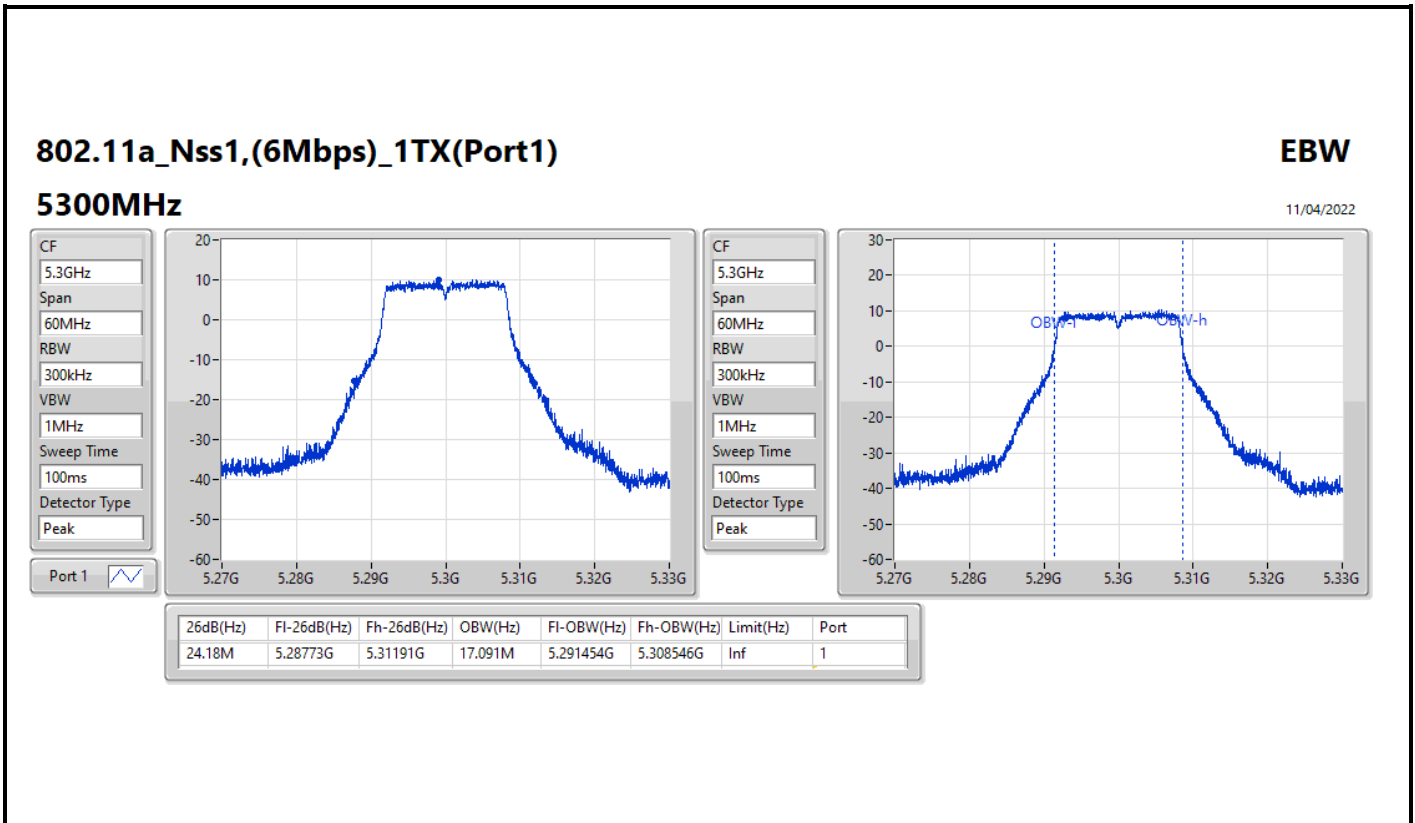
802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5260MHz

11/04/2022



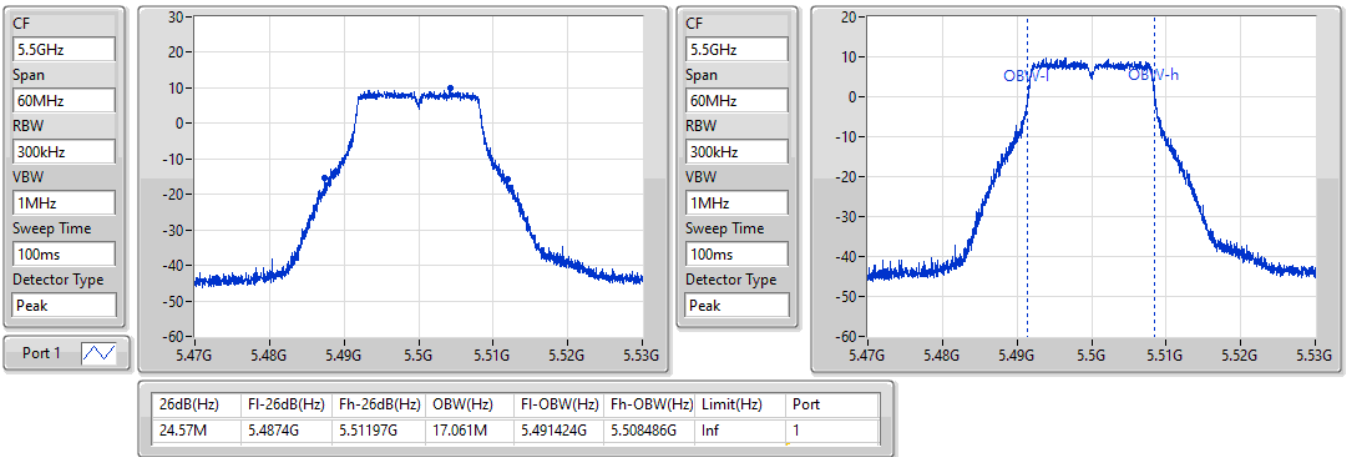


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5500MHz

11/04/2022

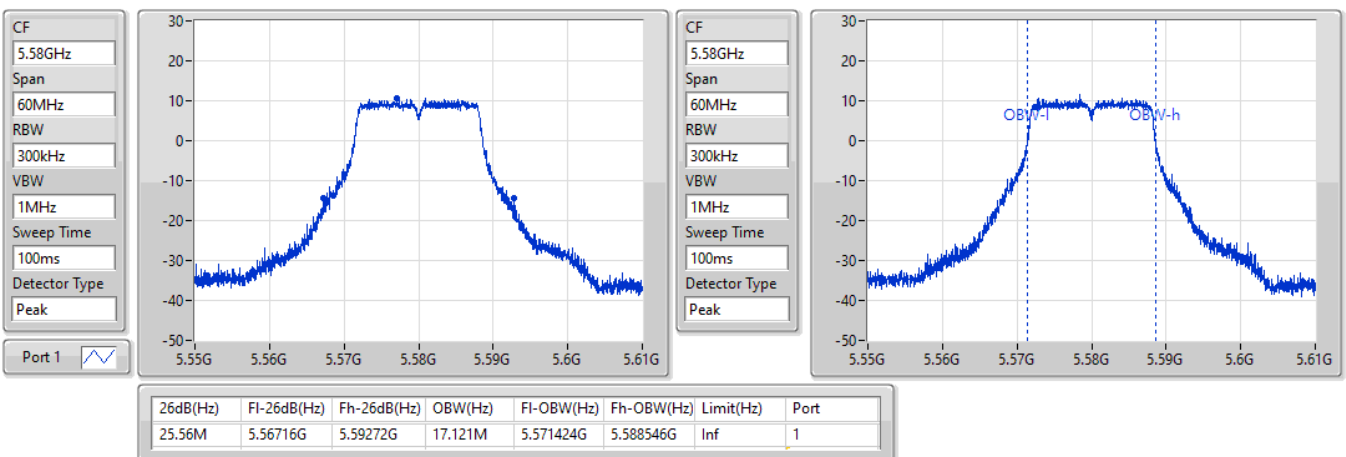


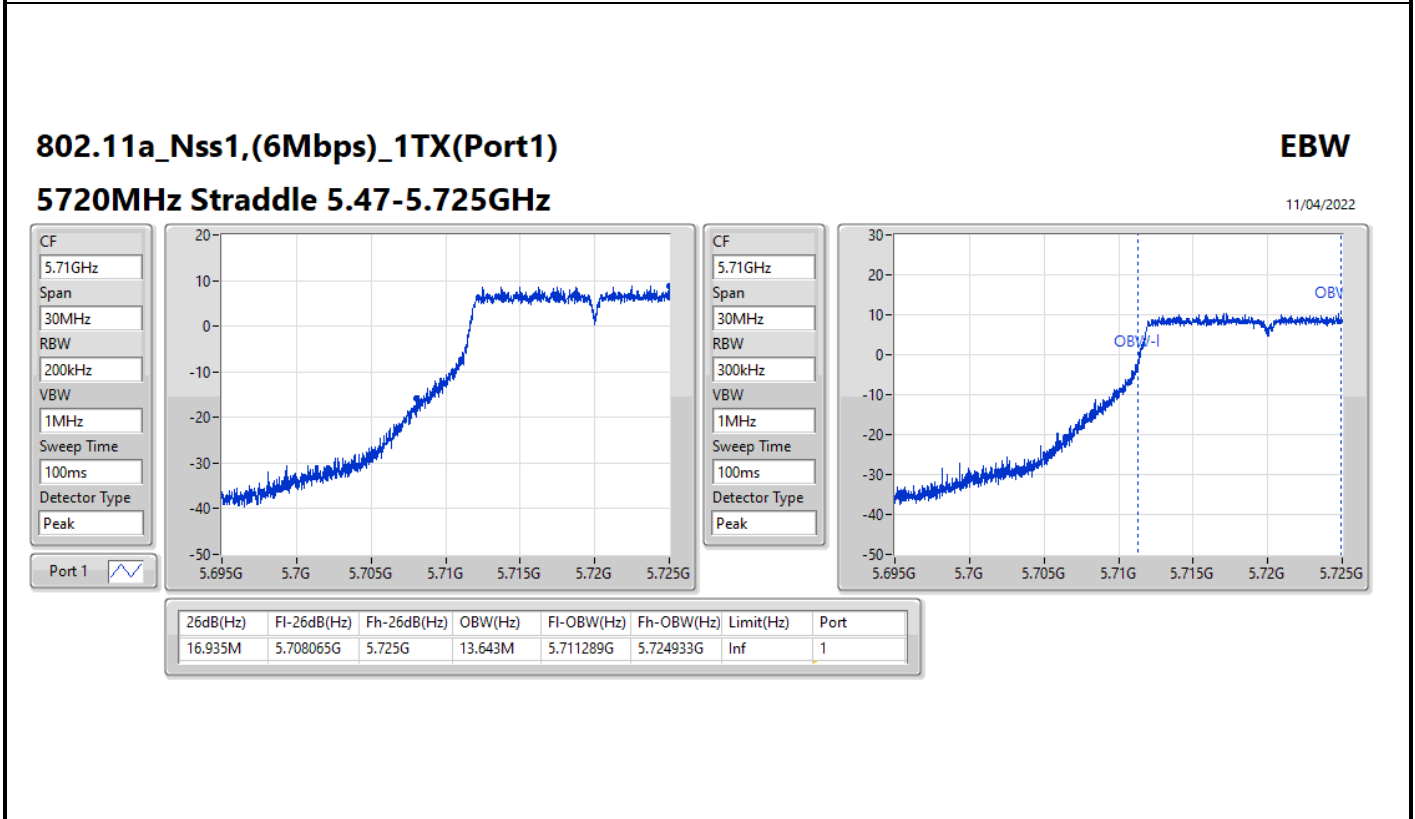
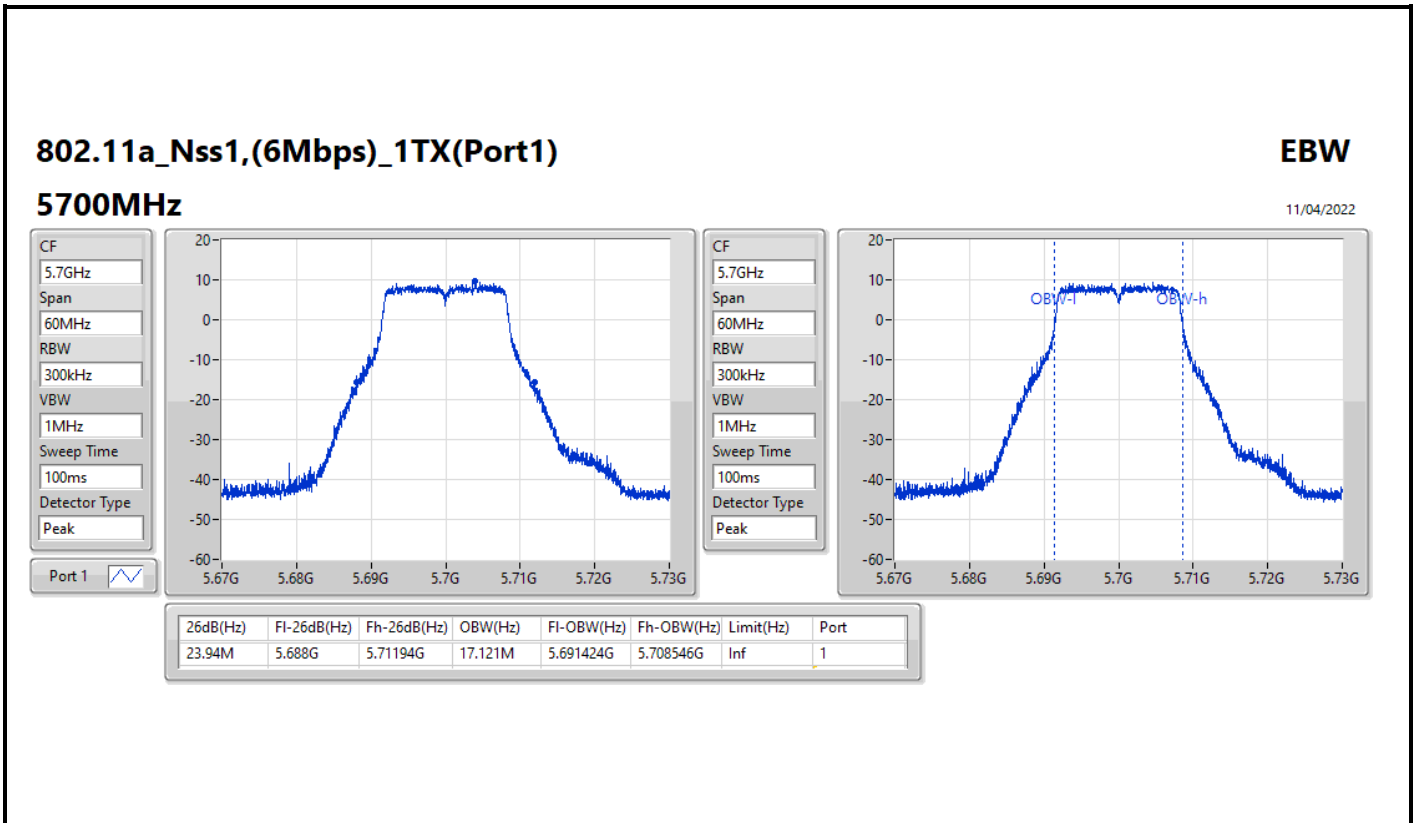
802.11a_Nss1,(6Mbps)_1TX(Port1)

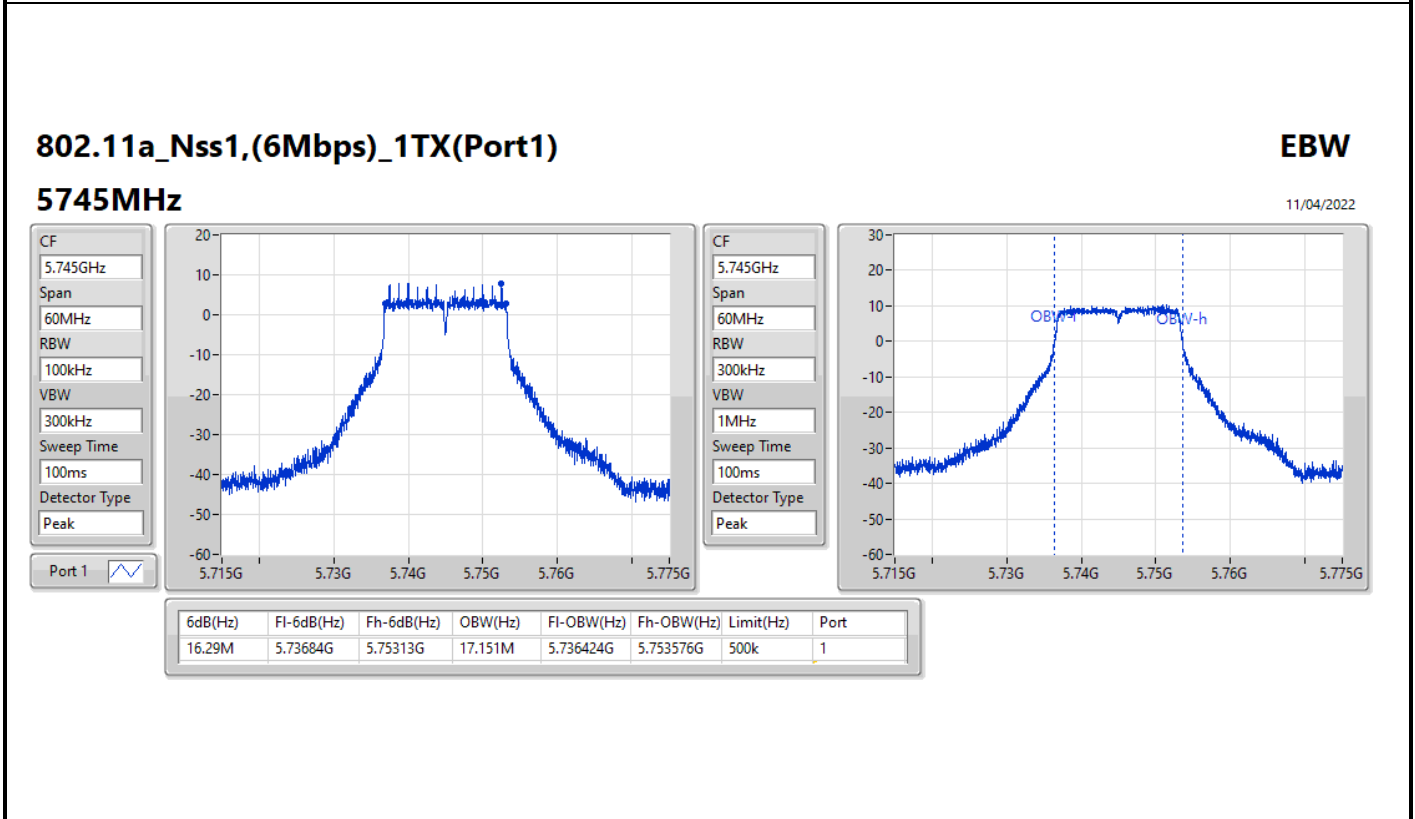
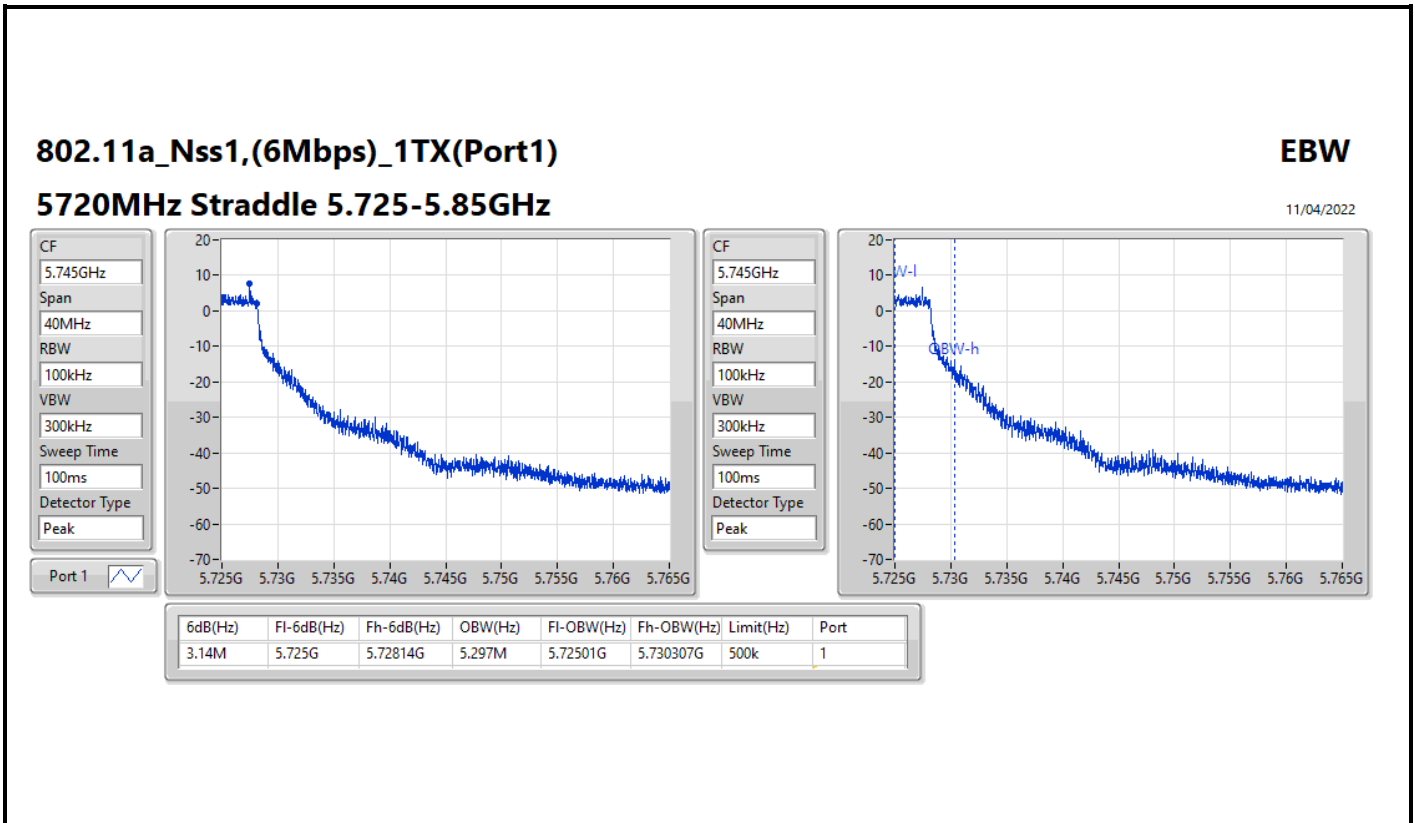
EBW

5580MHz

11/04/2022





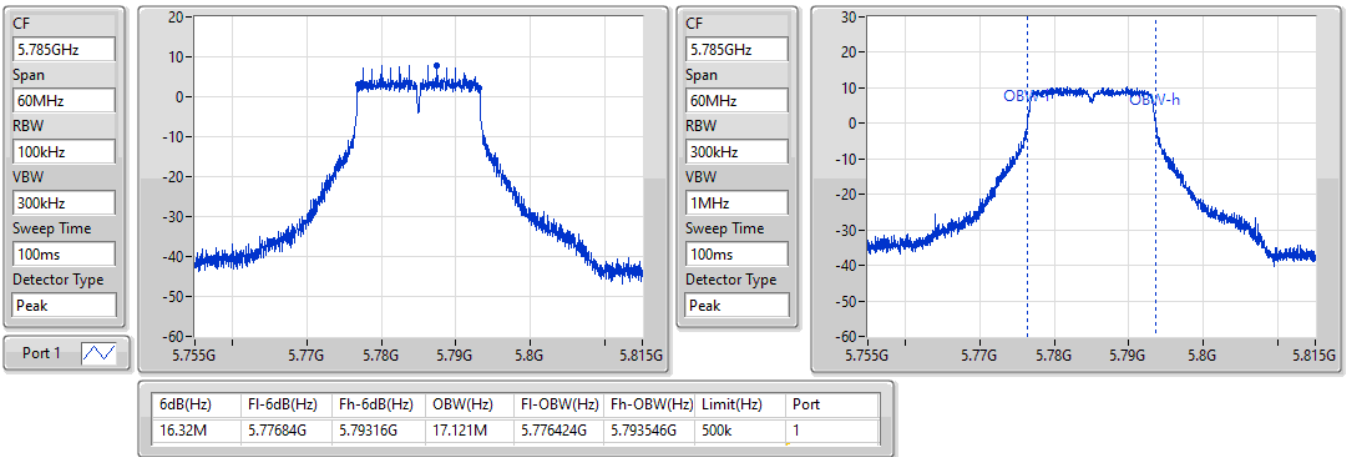


802.11a_Nss1,(6Mbps)_1TX(Port1)

EBW

5785MHz

11/04/2022

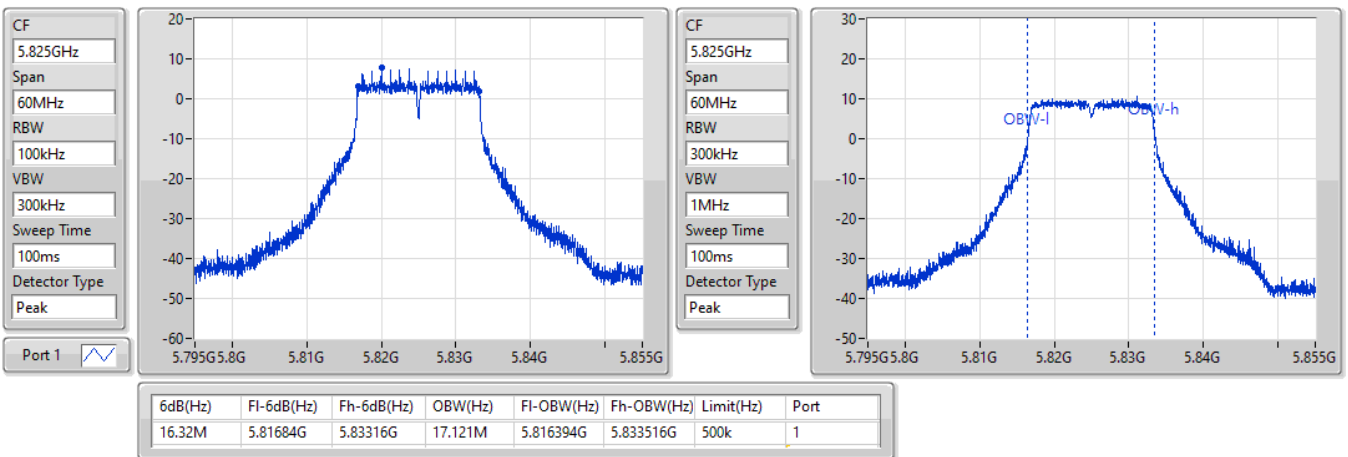


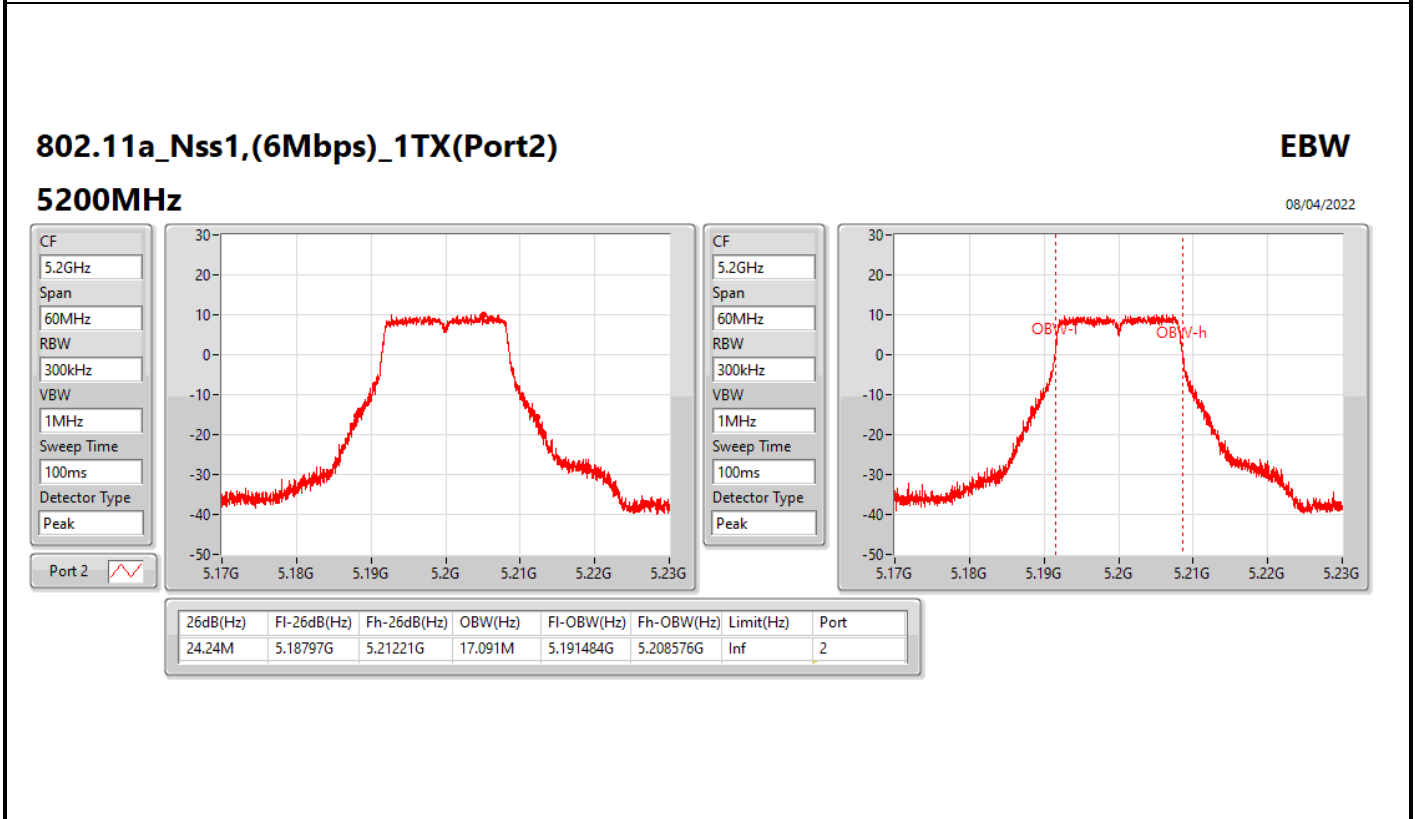
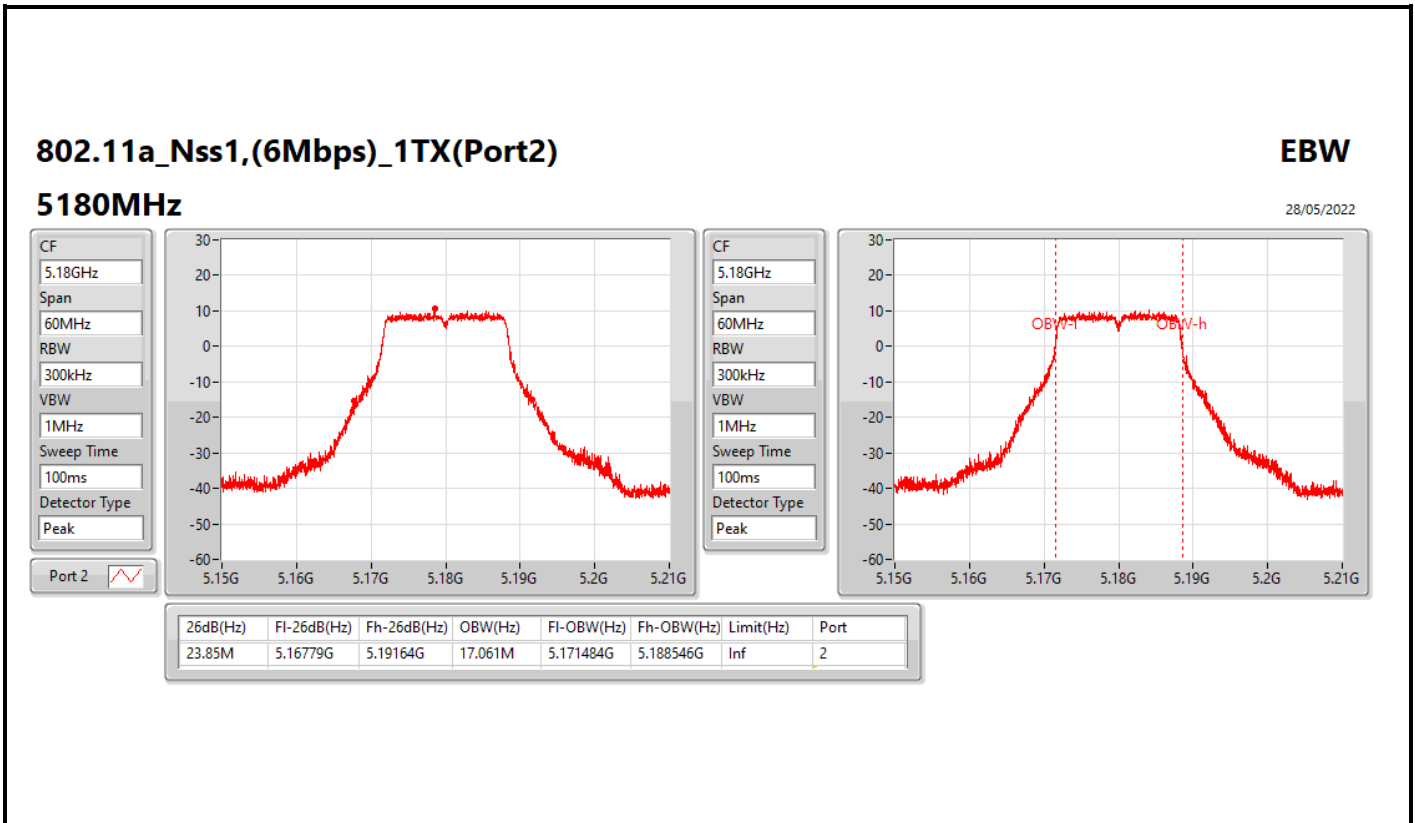
802.11a_Nss1,(6Mbps)_1TX(Port1)

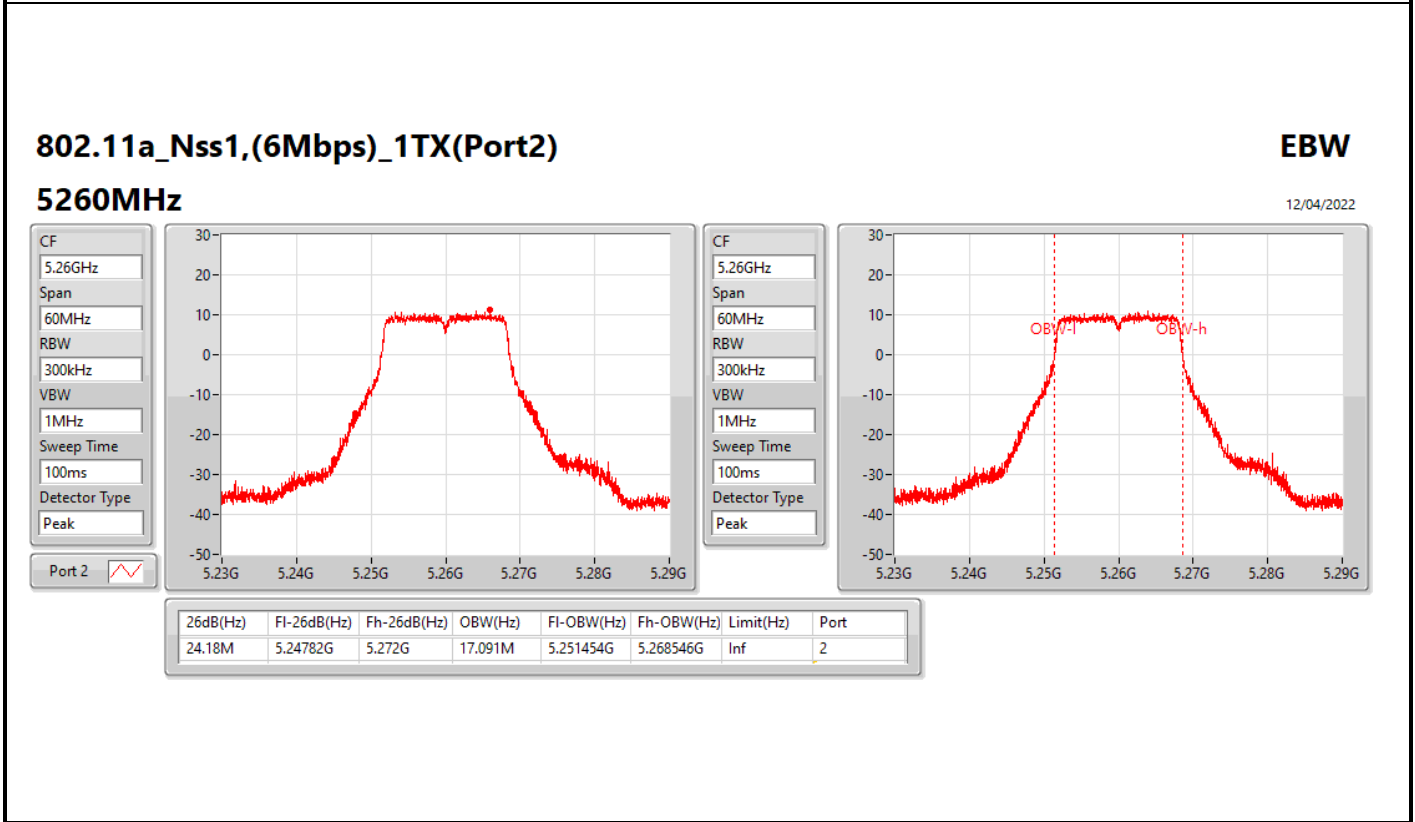
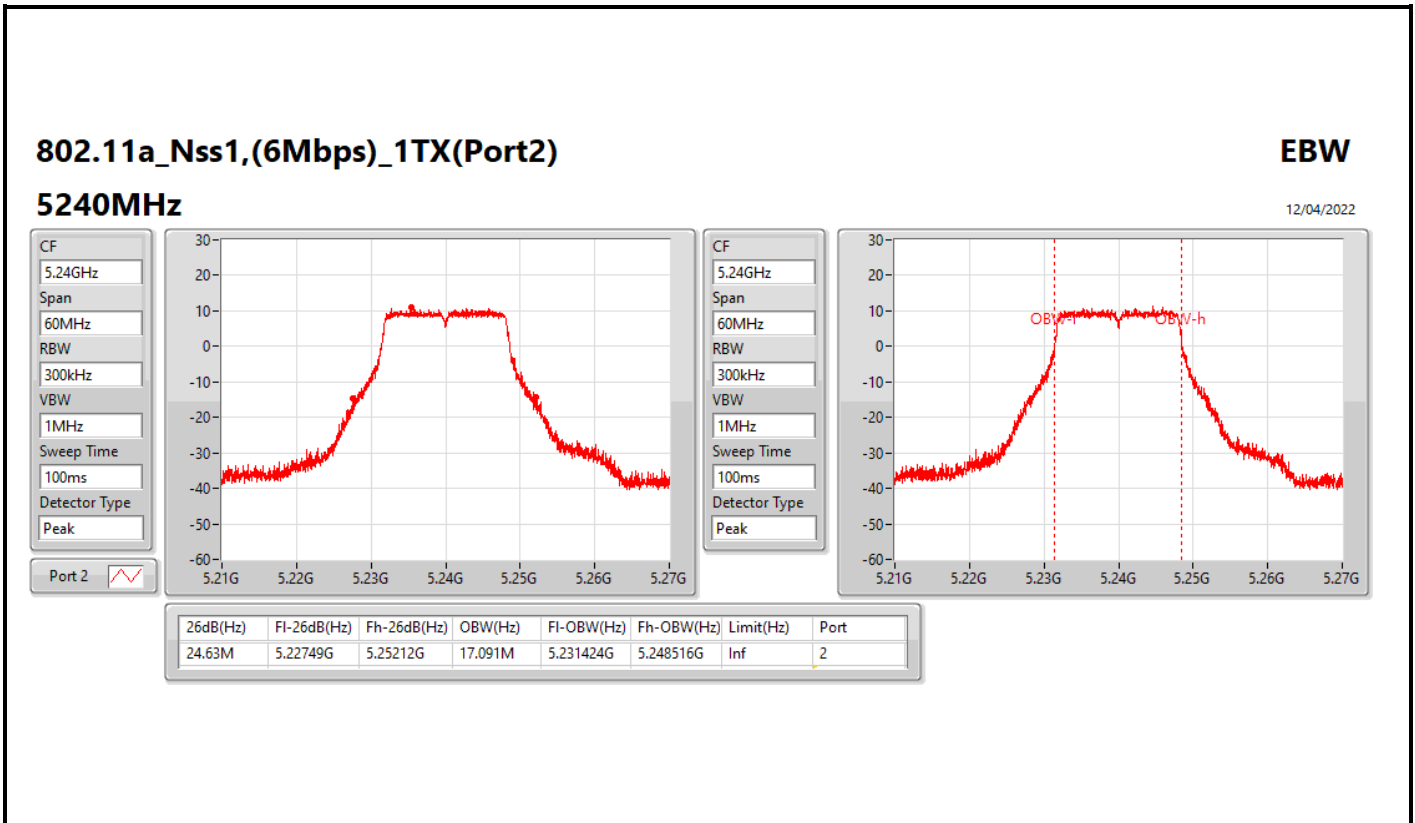
EBW

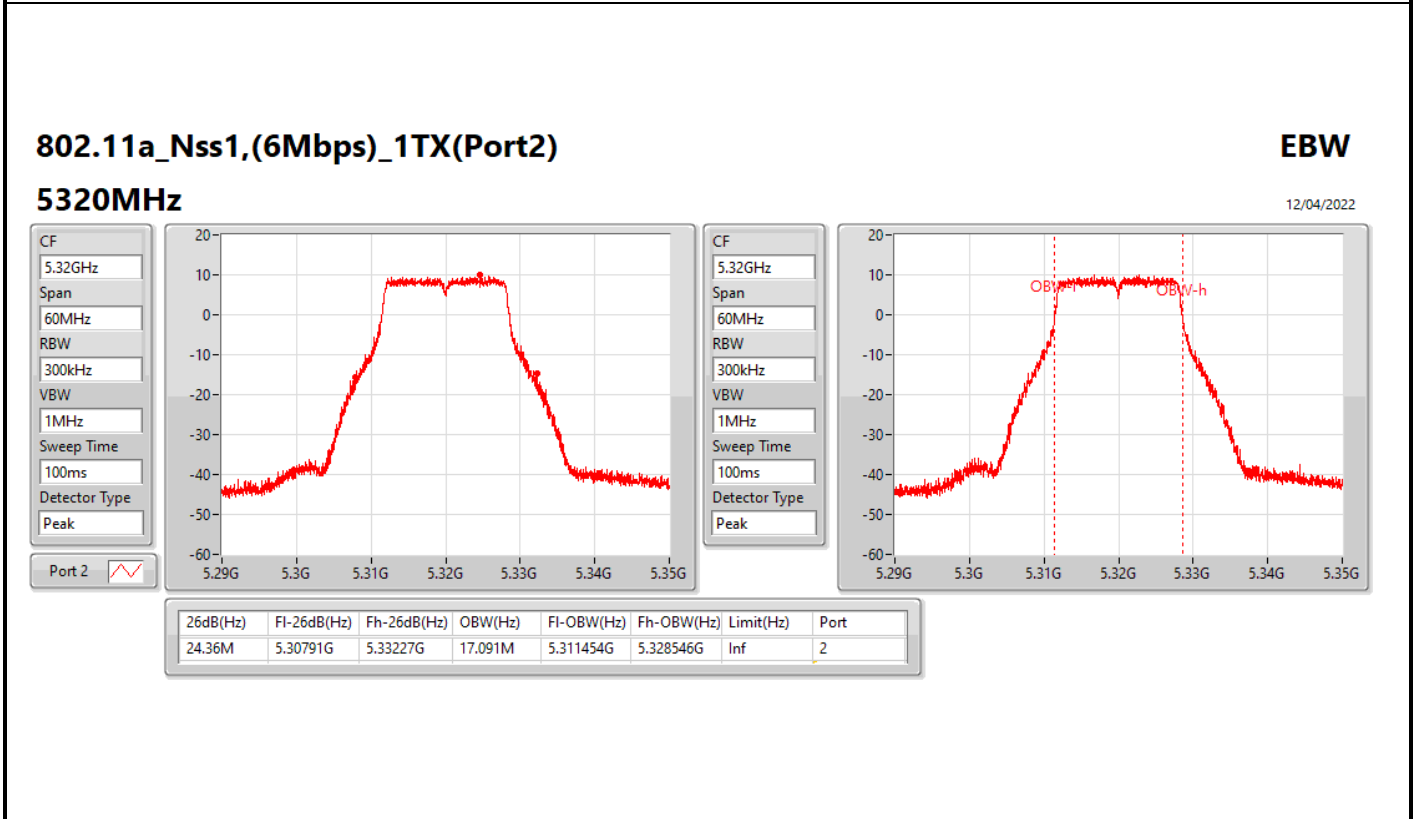
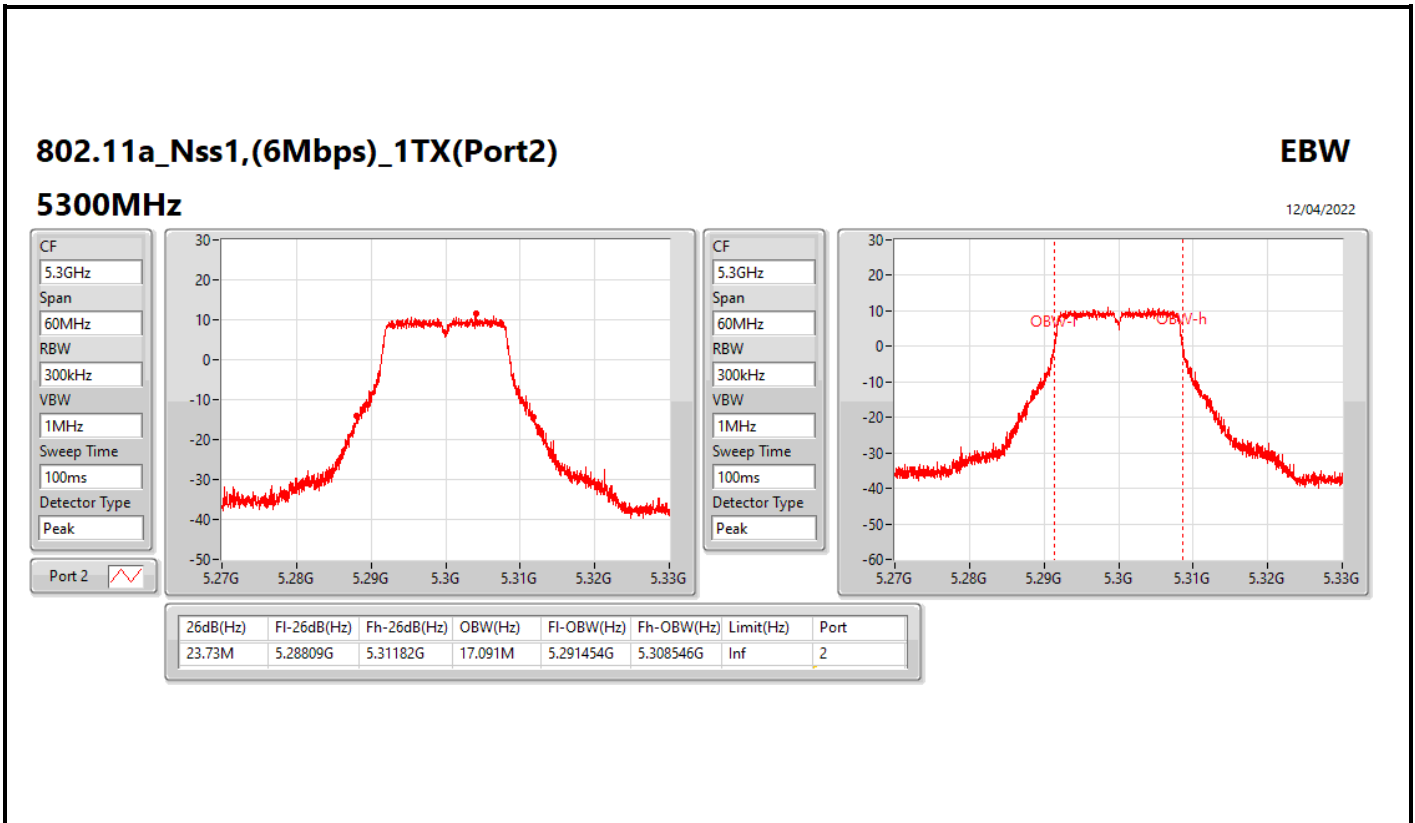
5825MHz

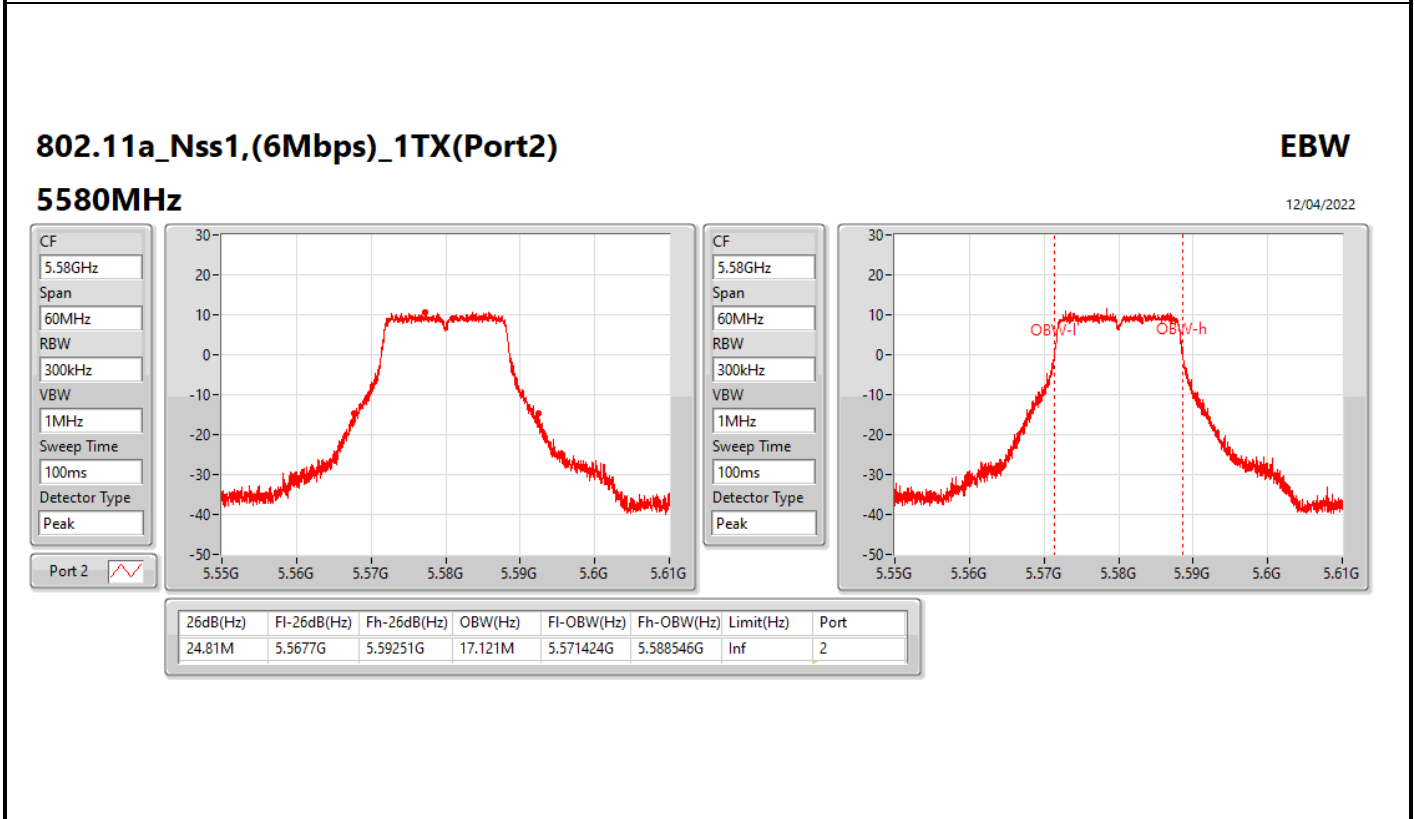
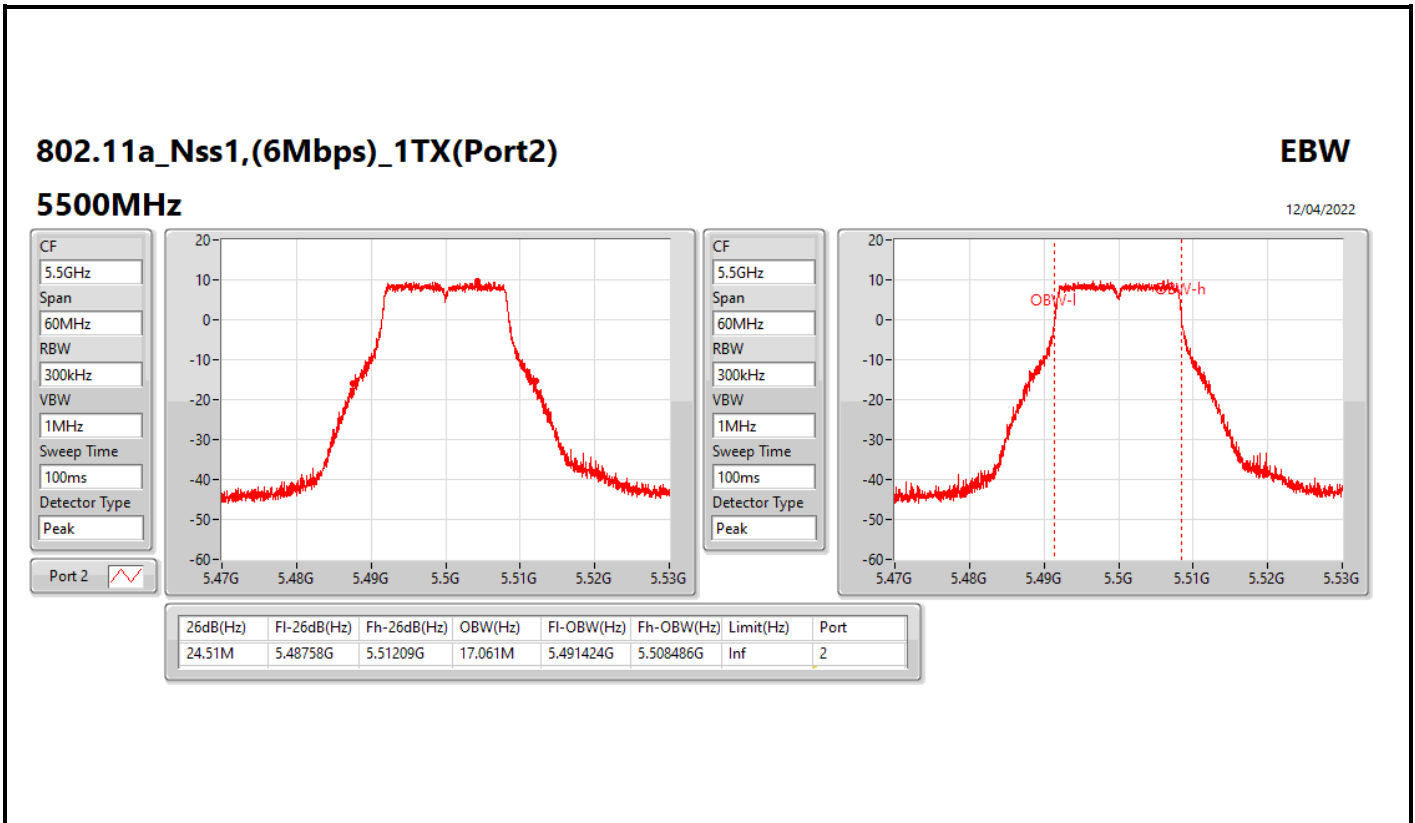
12/04/2022

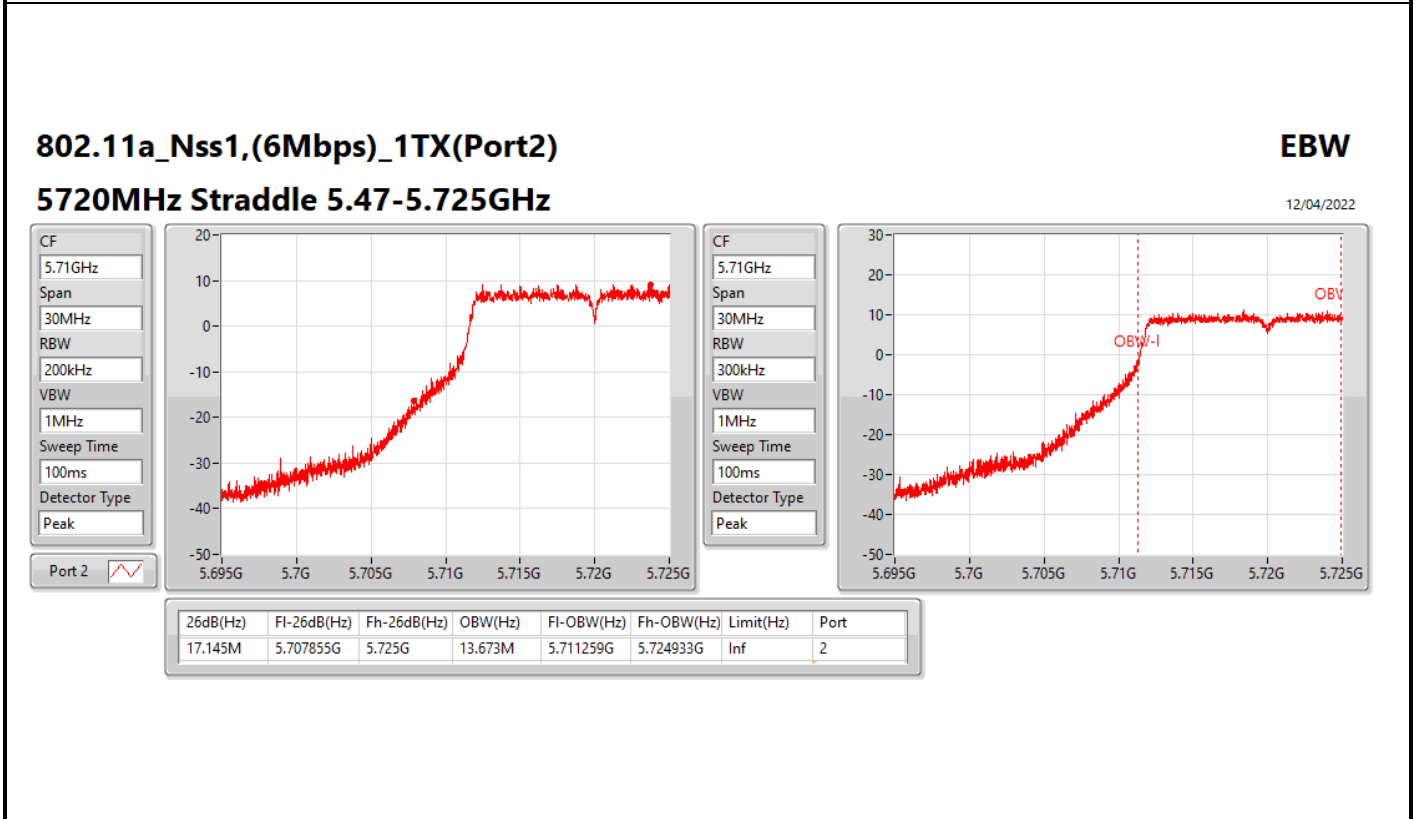
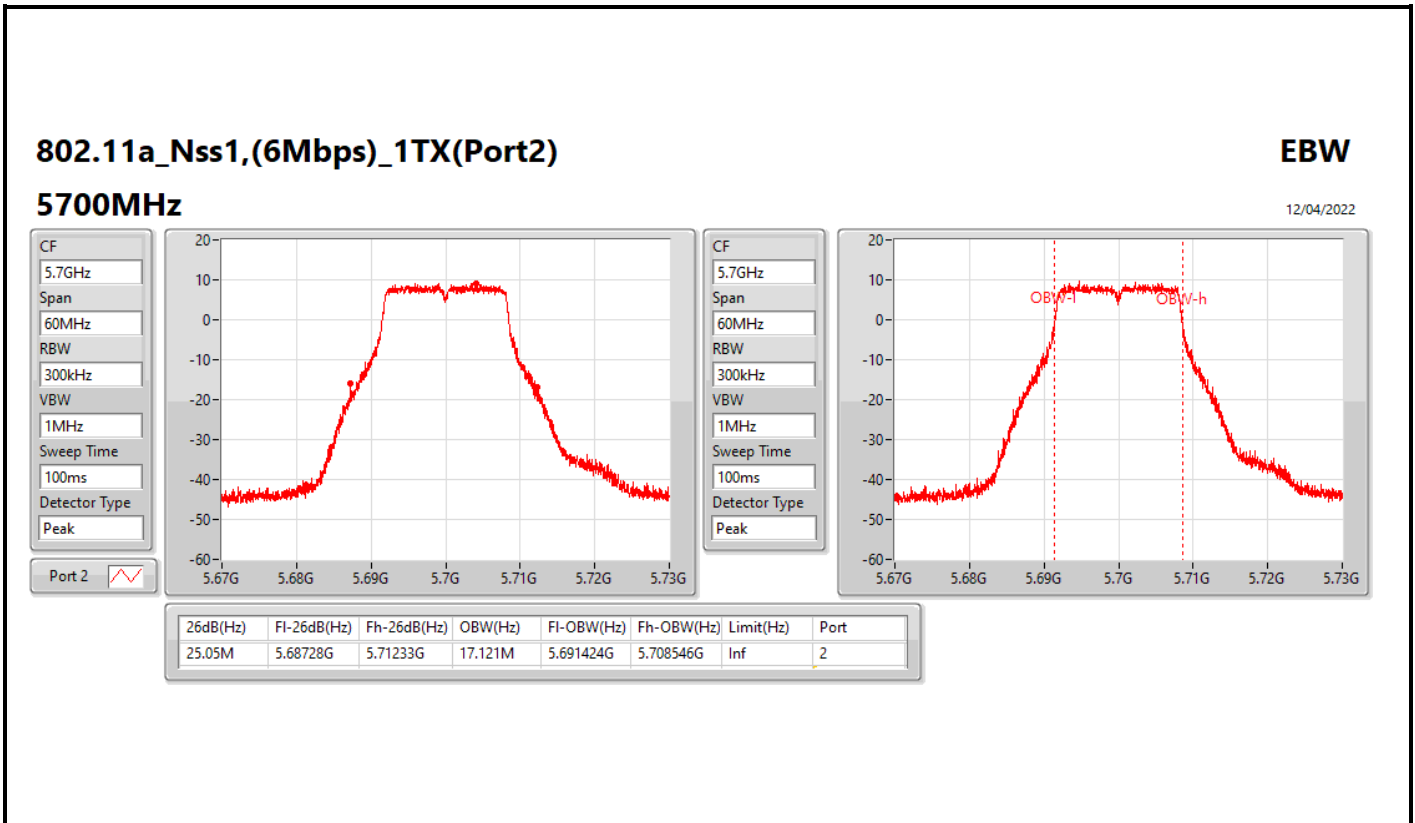


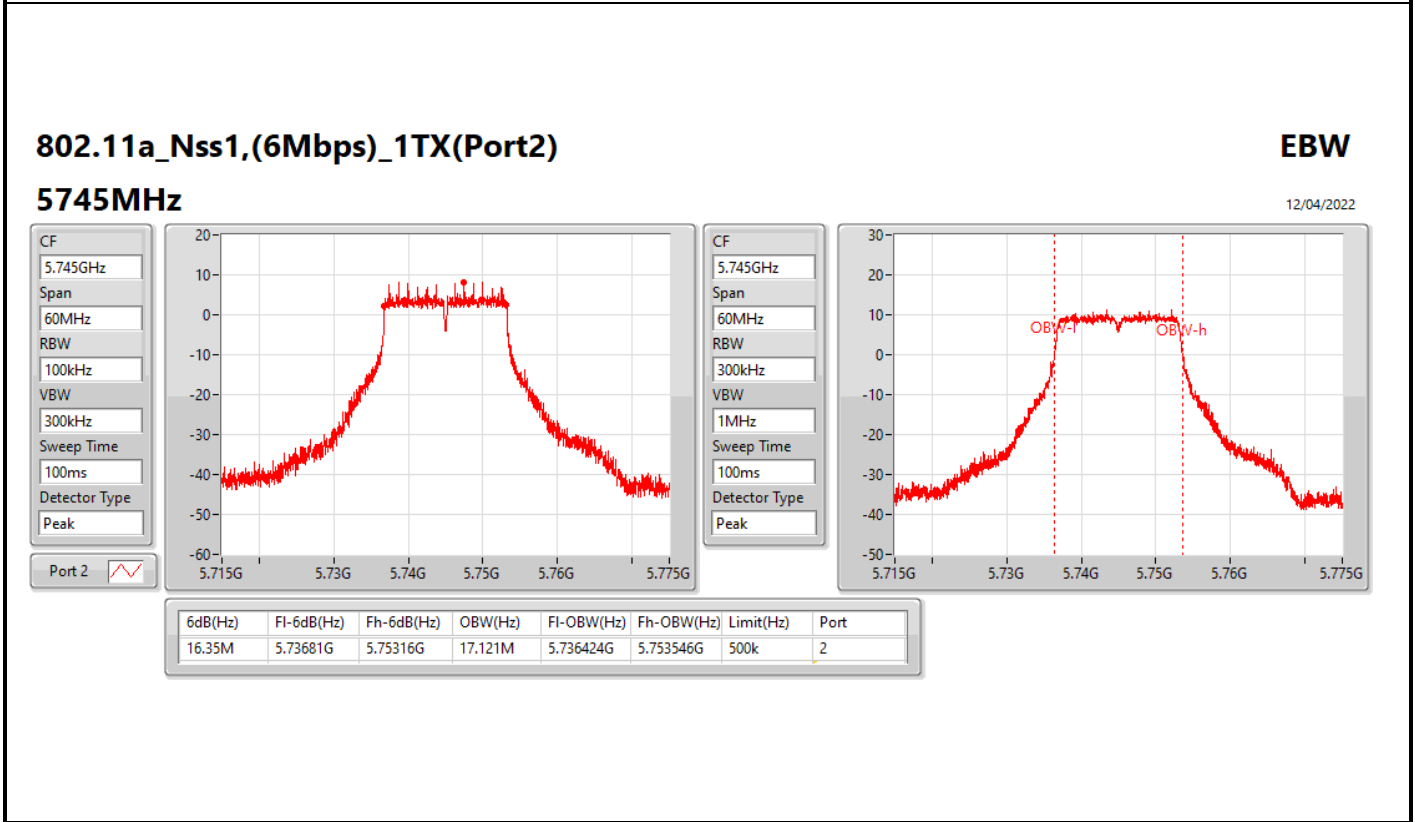
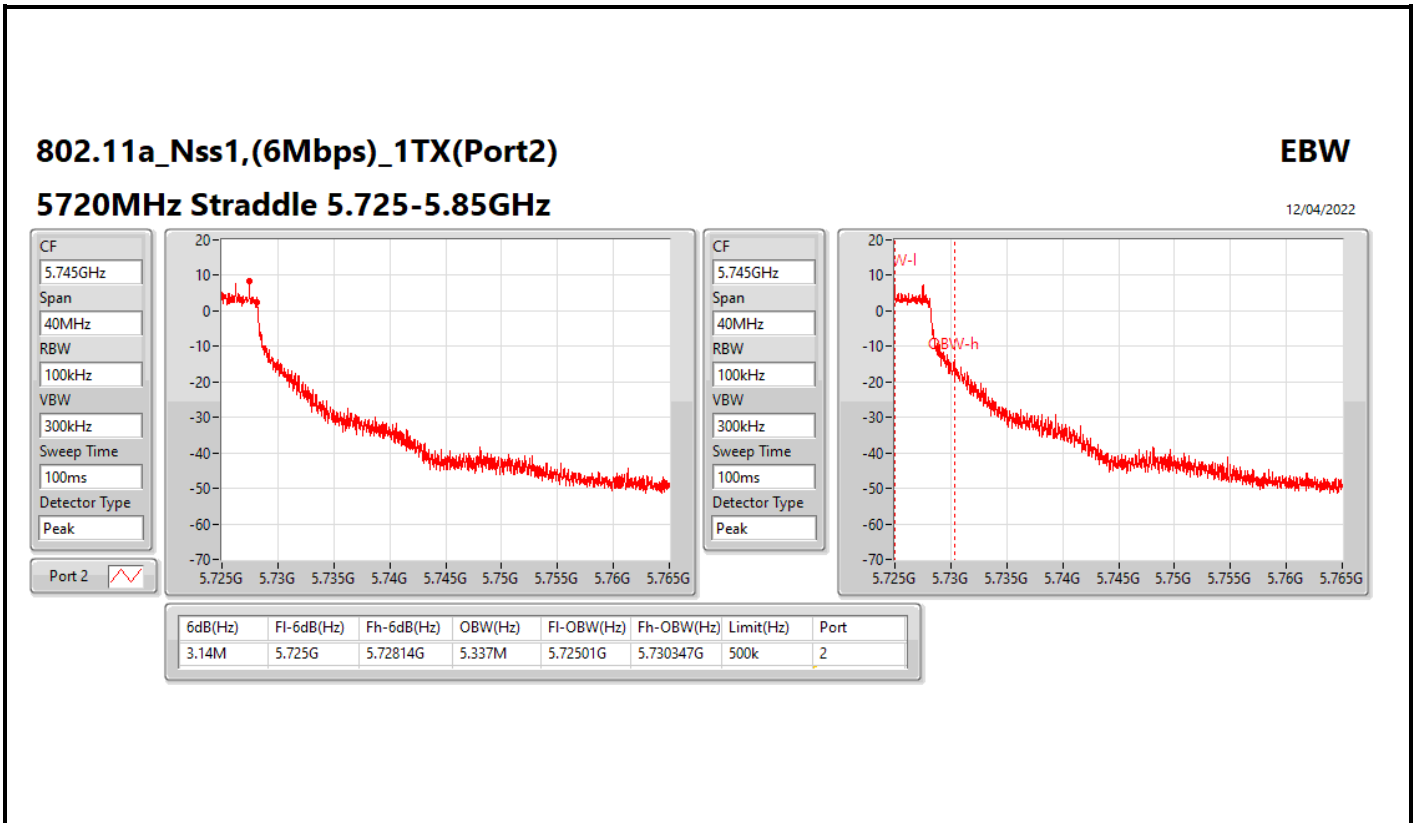










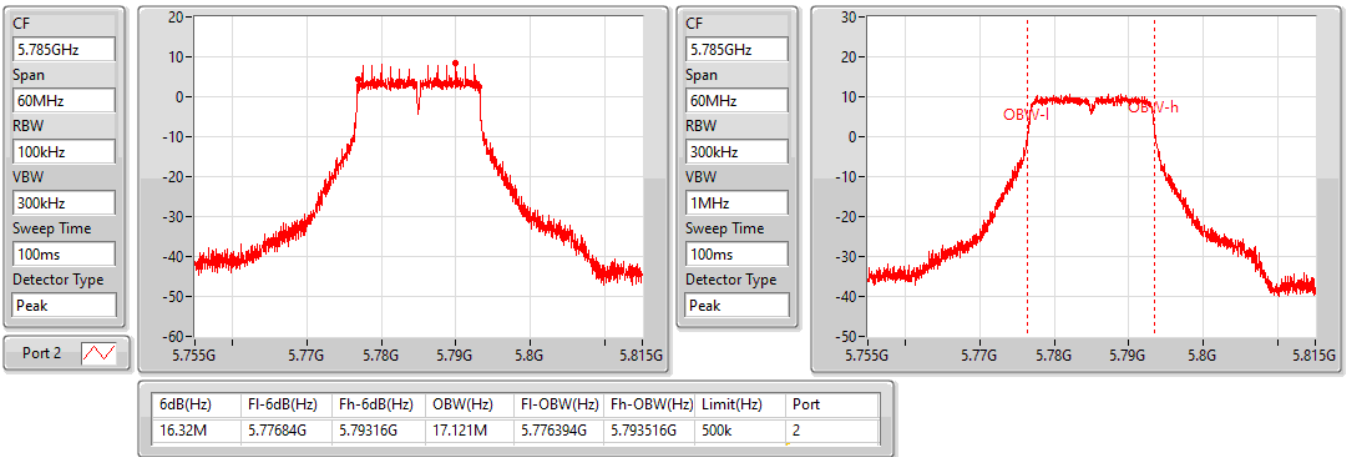


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5785MHz

12/04/2022

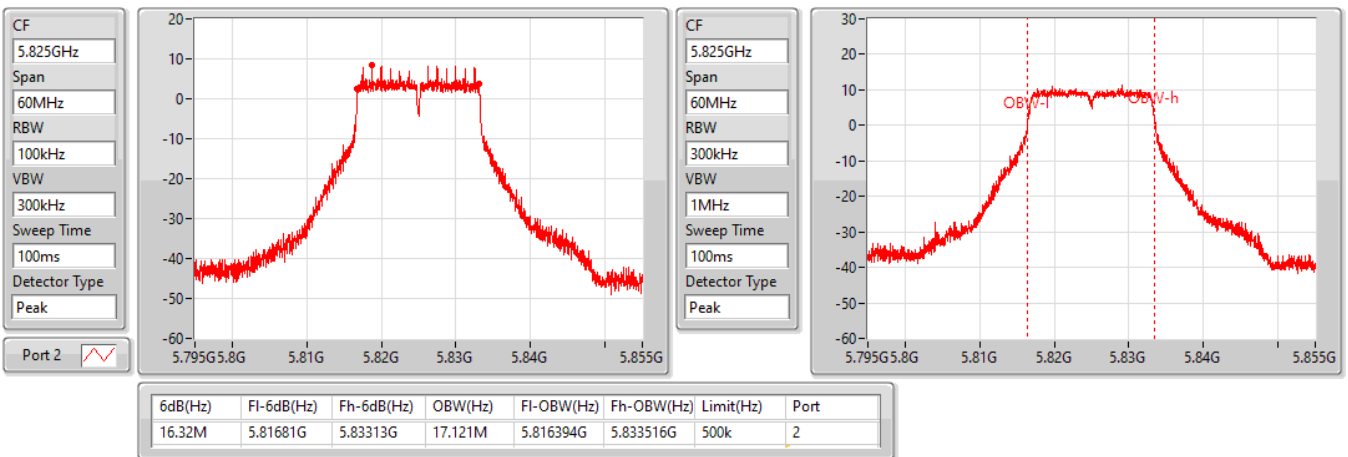


802.11a_Nss1,(6Mbps)_1TX(Port2)

EBW

5825MHz

12/04/2022

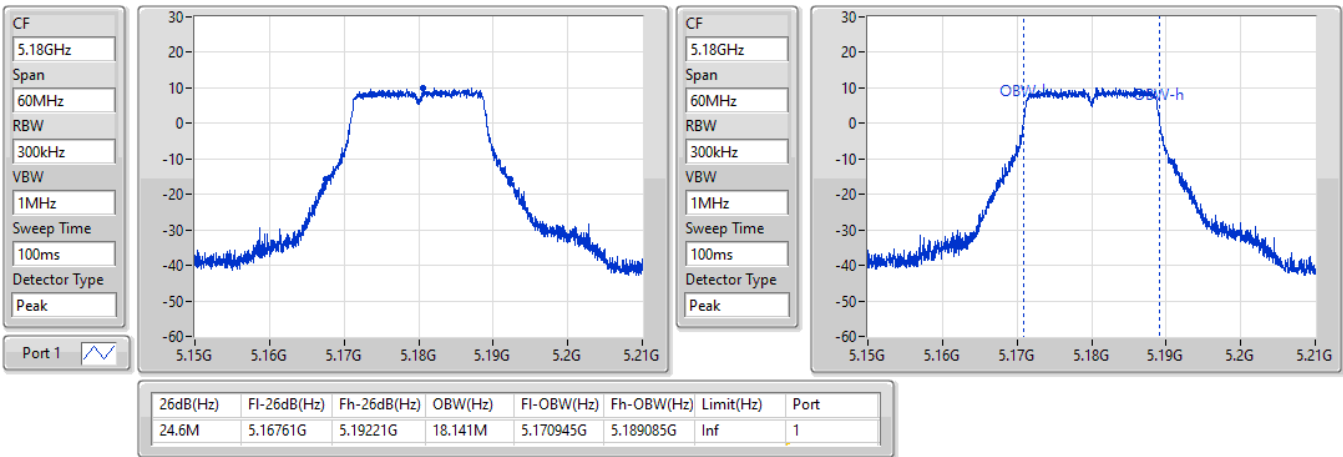


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5180MHz

12/04/2022

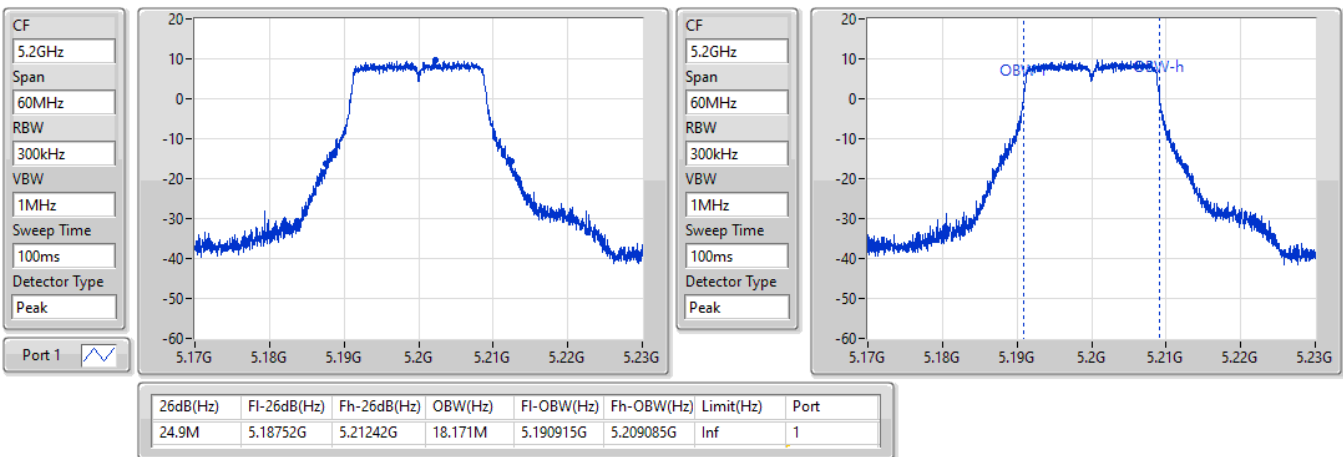


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5200MHz

08/04/2022

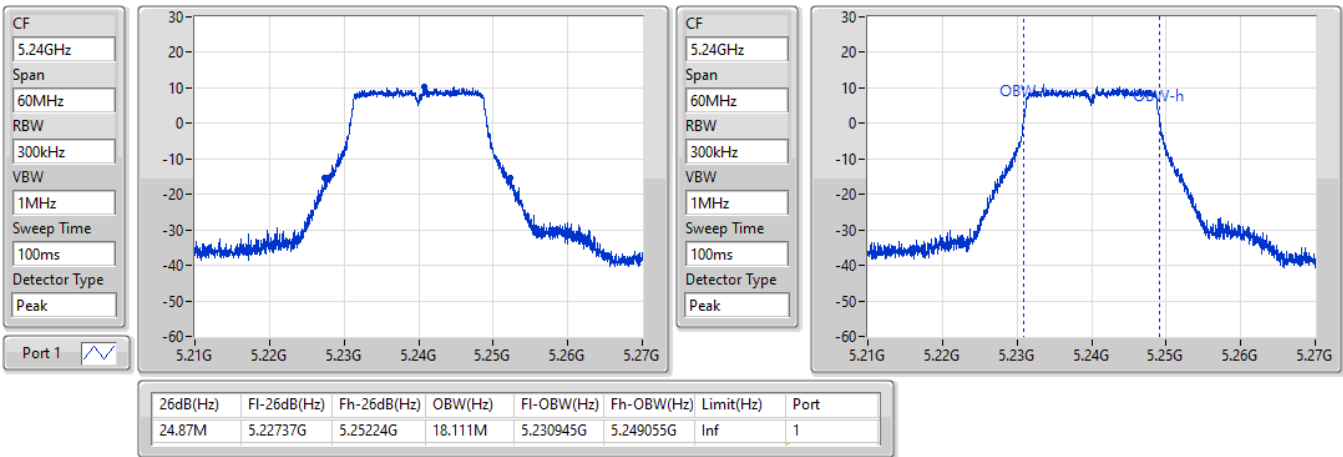


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5240MHz

12/04/2022

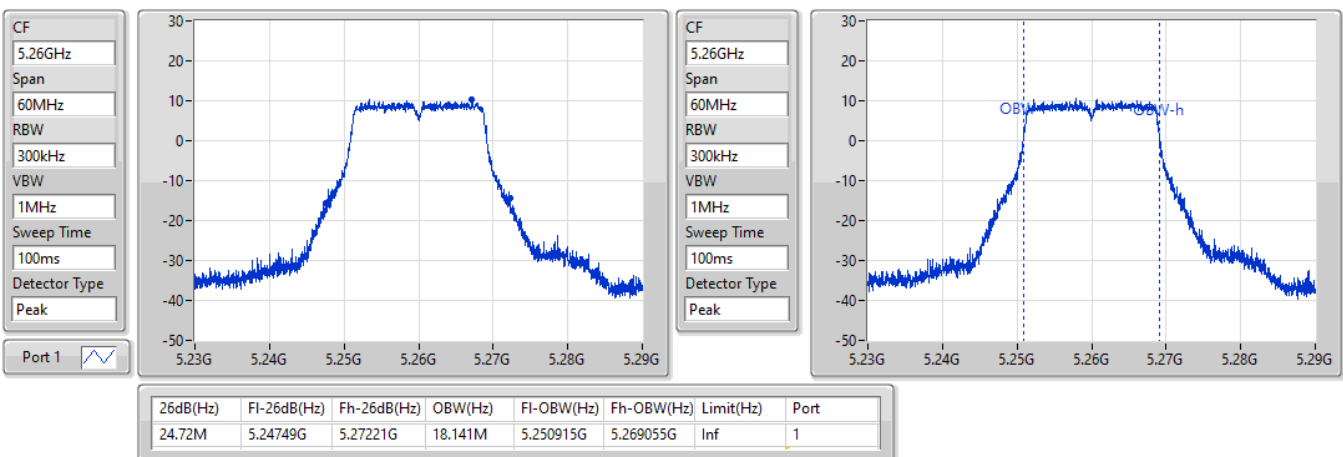


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5260MHz

12/04/2022



802.11n HT20_Nss1,(MCS0)_1TX(Port1)

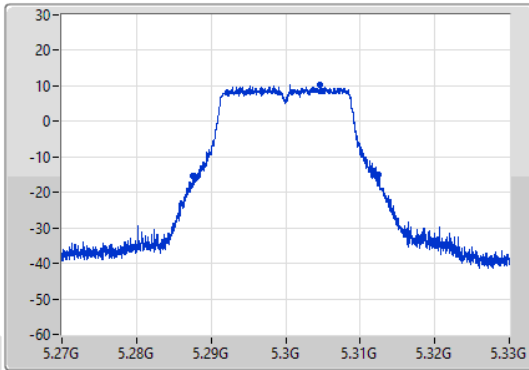
EBW

5300MHz

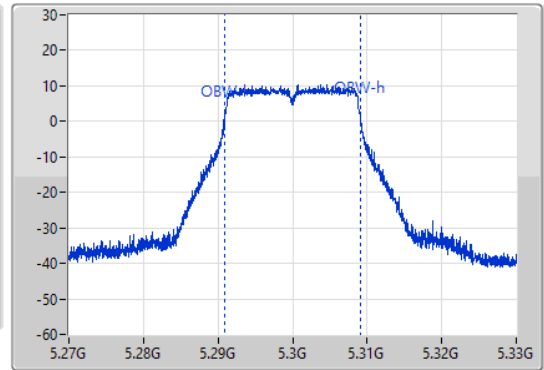
12/04/2022

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

Port 1



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



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.81M	5.28758G	5.31239G	18.111M	5.290945G	5.309055G	Inf	1

802.11n HT20_Nss1,(MCS0)_1TX(Port1)

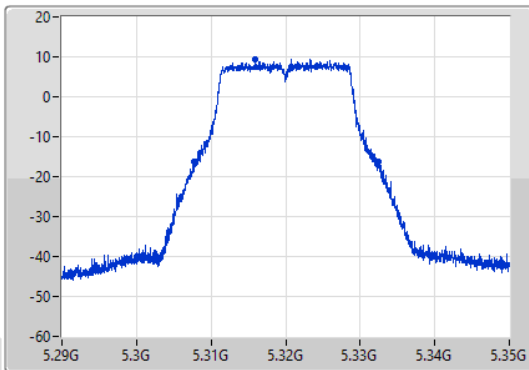
EBW

5320MHz

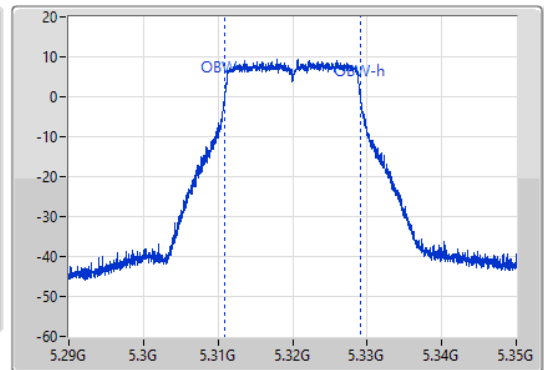
12/04/2022

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

Port 1



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



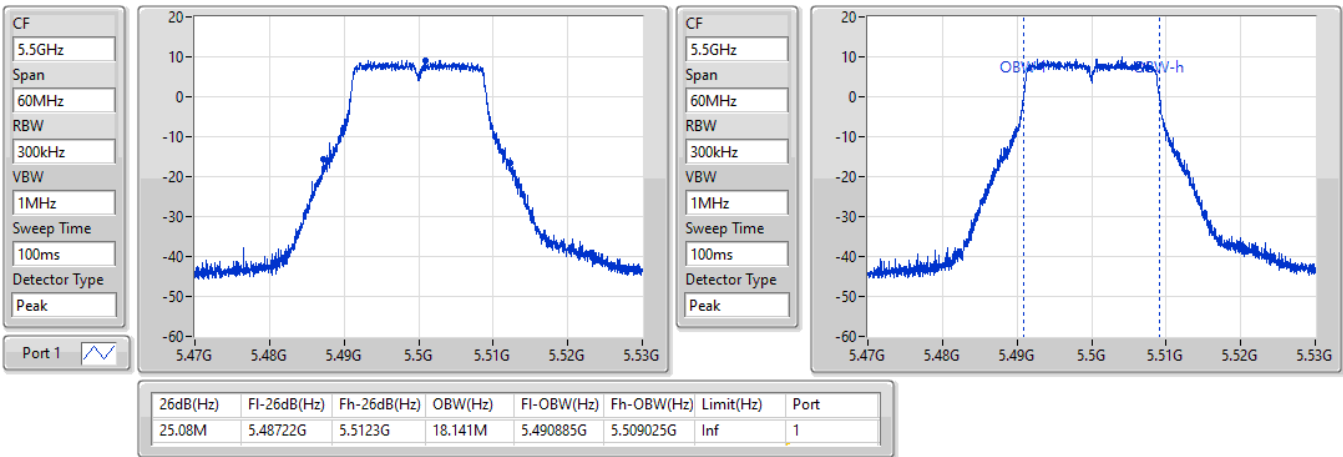
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.84M	5.30767G	5.33251G	18.141M	5.310945G	5.329085G	Inf	1

802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5500MHz

12/04/2022

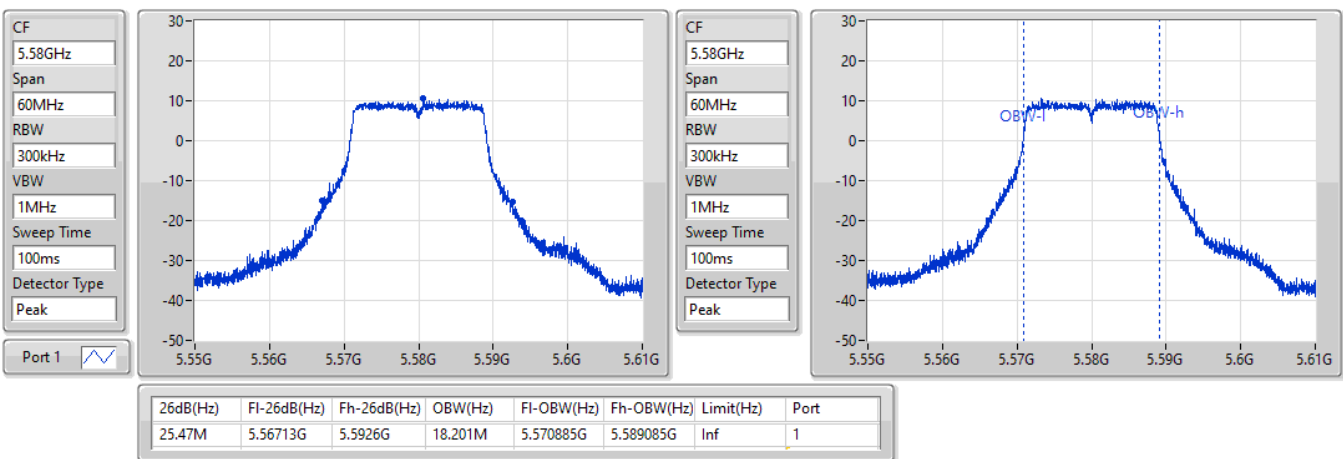


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5580MHz

12/04/2022

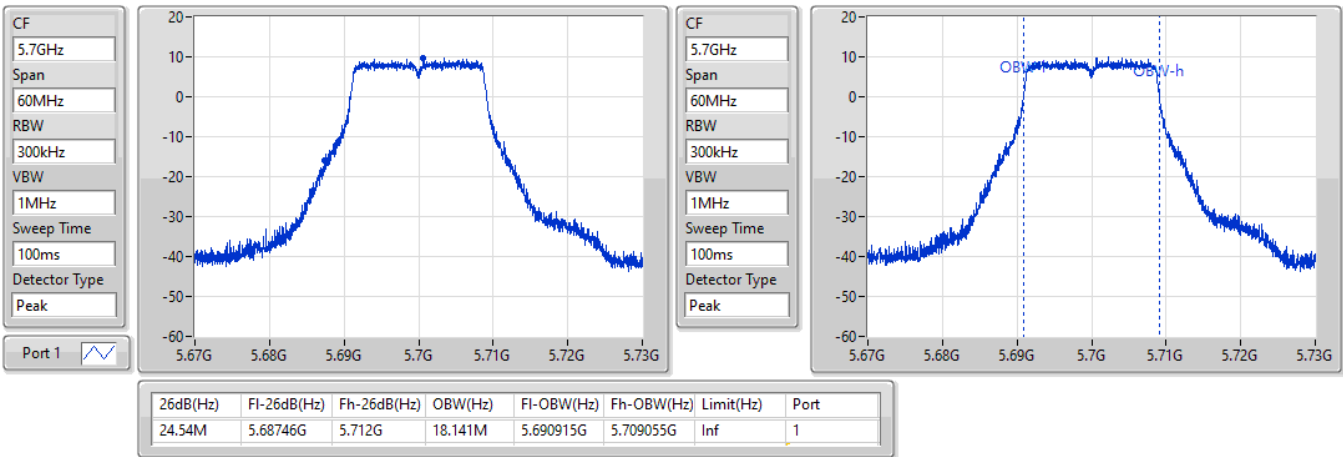


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5700MHz

12/04/2022

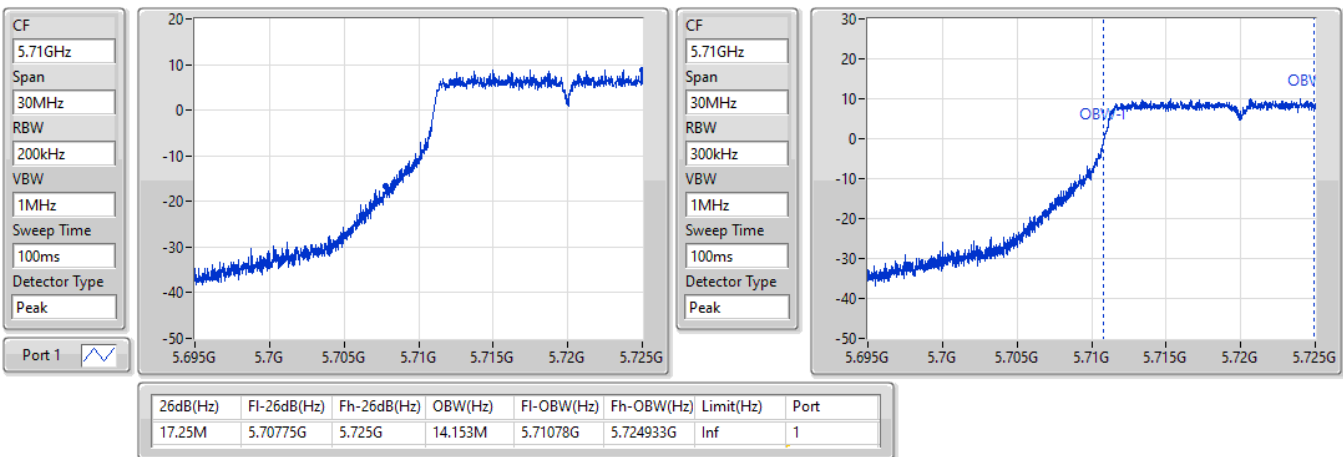


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5720MHz Straddle 5.47-5.725GHz

12/04/2022

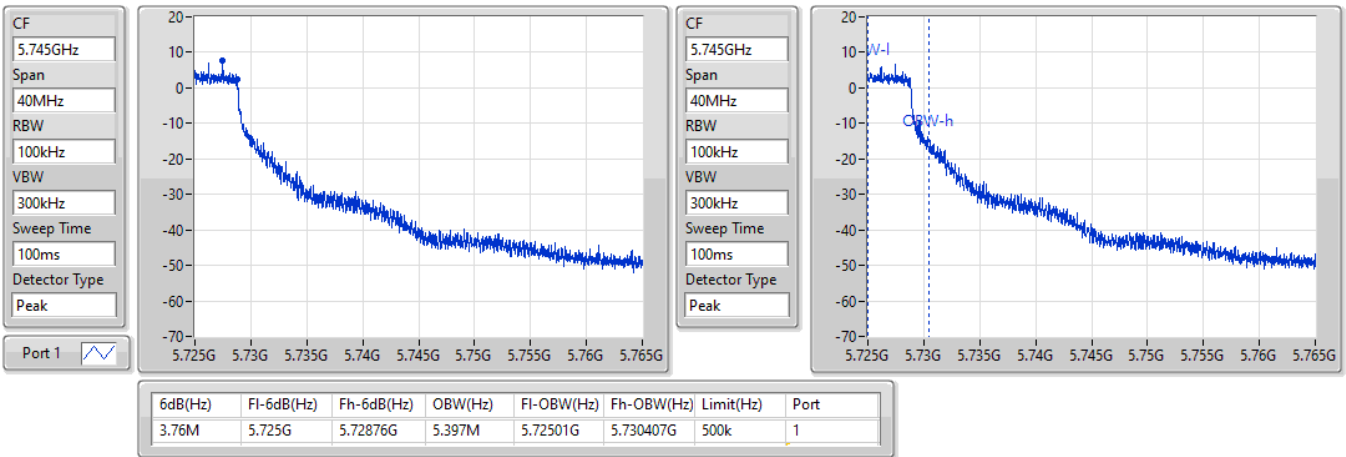


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5720MHz Straddle 5.725-5.85GHz

12/04/2022

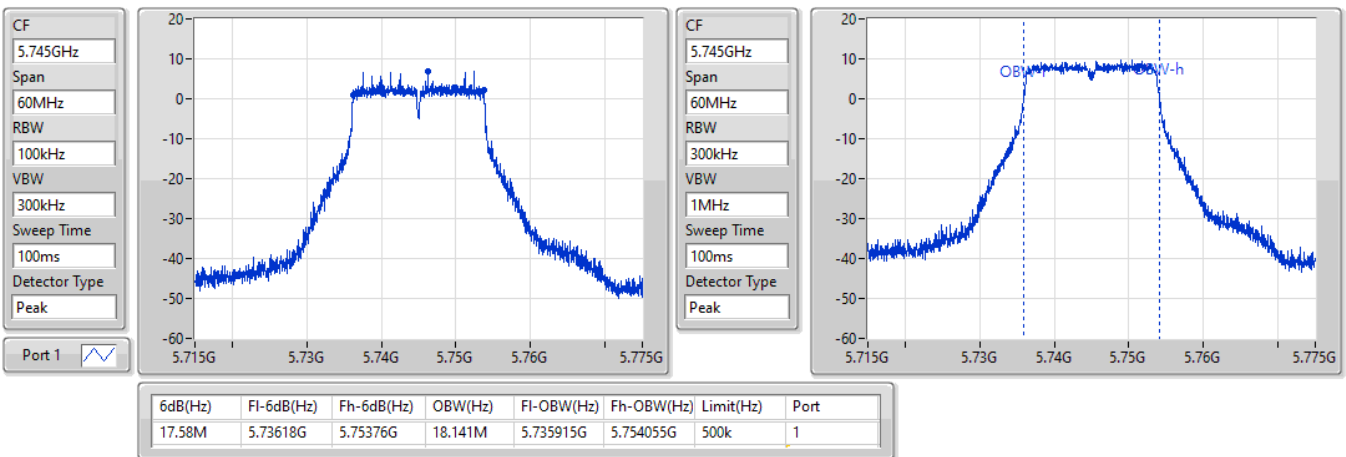


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5745MHz

12/04/2022

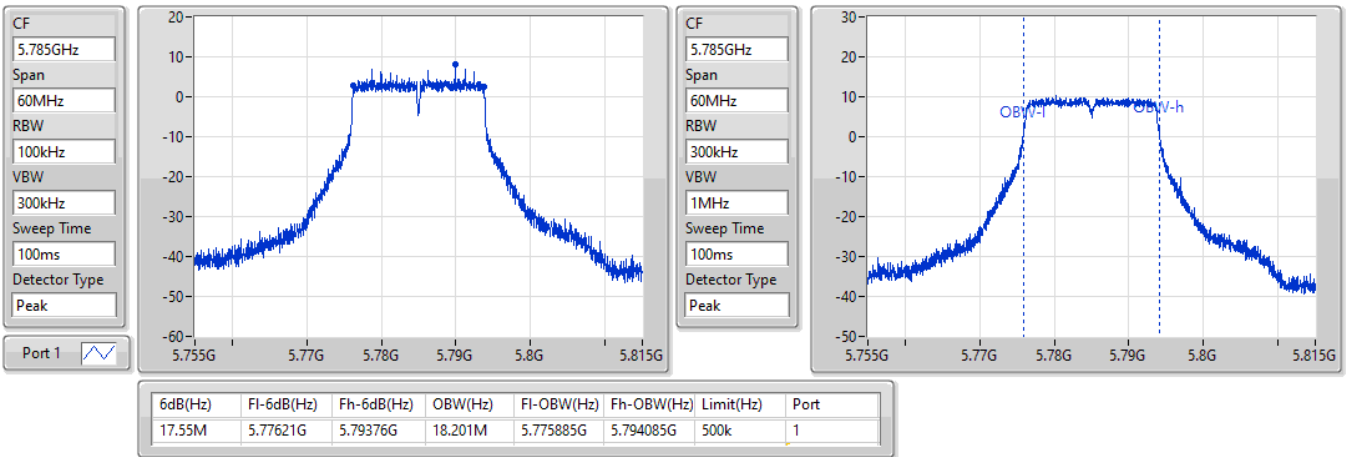


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5785MHz

12/04/2022

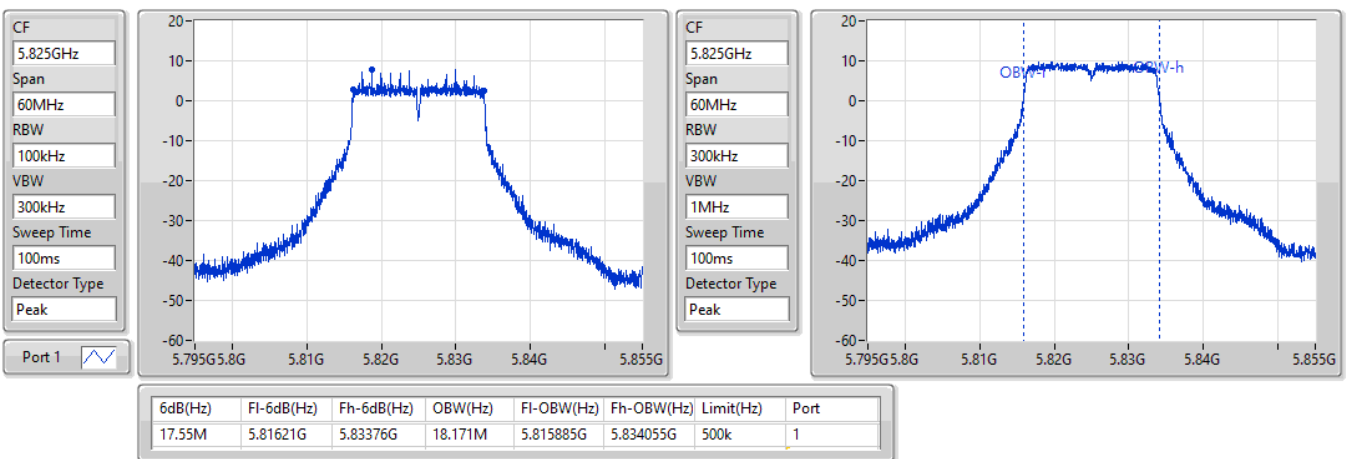


802.11n HT20_Nss1,(MCS0)_1TX(Port1)

EBW

5825MHz

12/04/2022

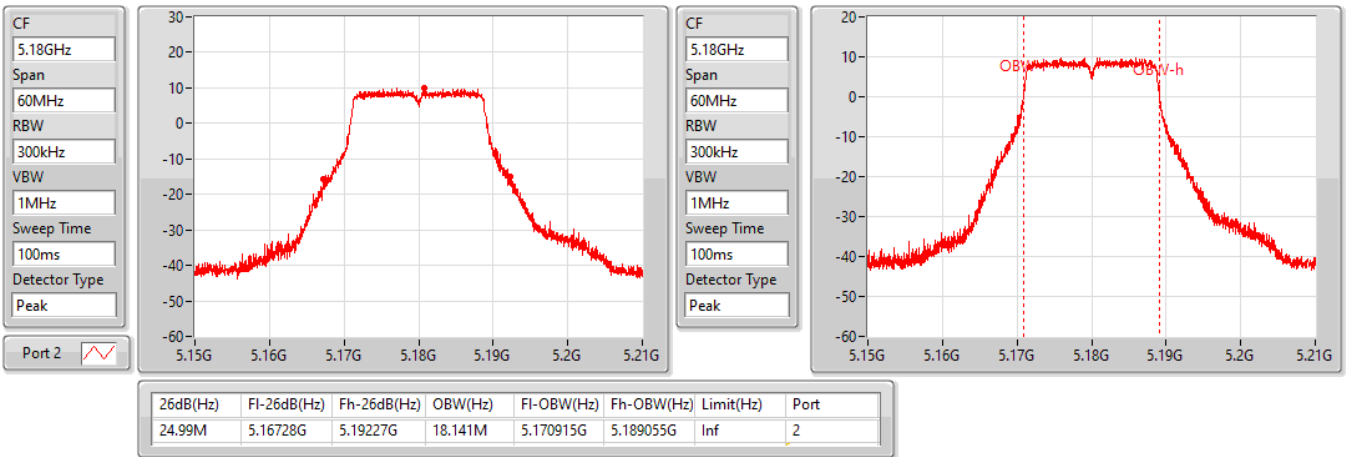


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5180MHz

12/04/2022

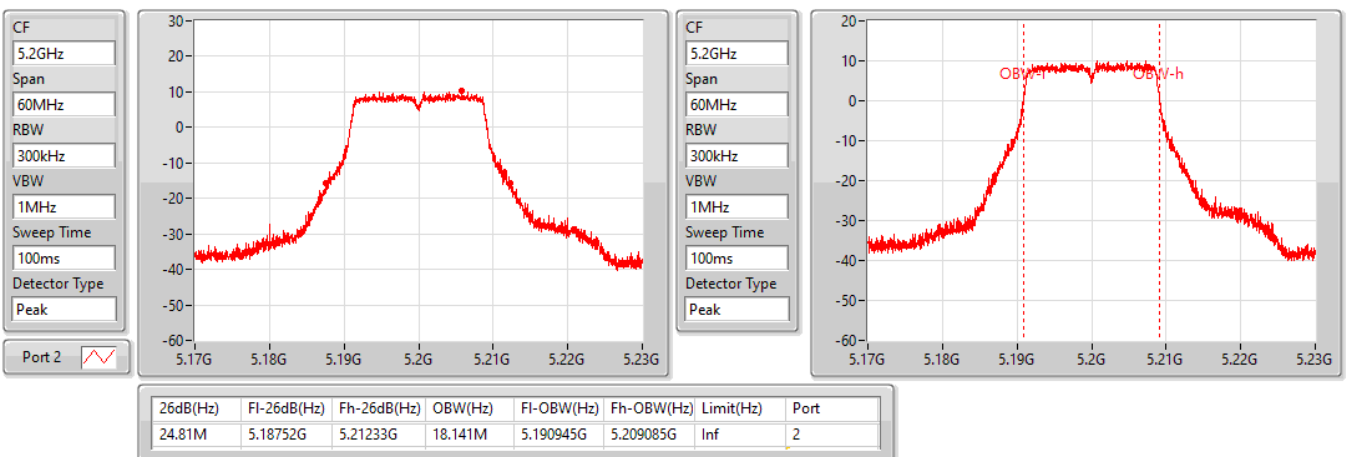


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5200MHz

08/04/2022

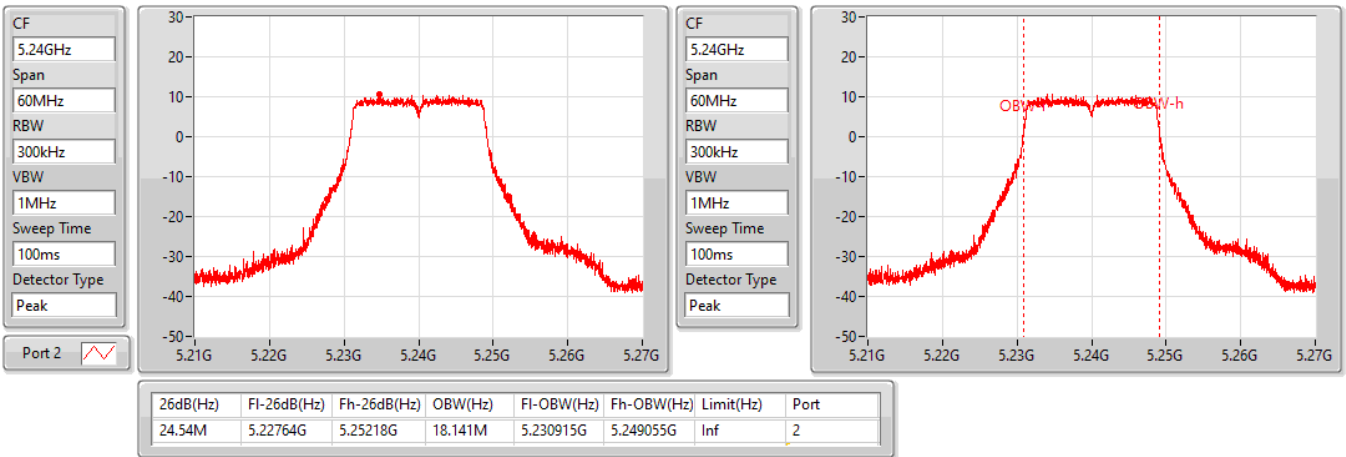


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5240MHz

12/04/2022

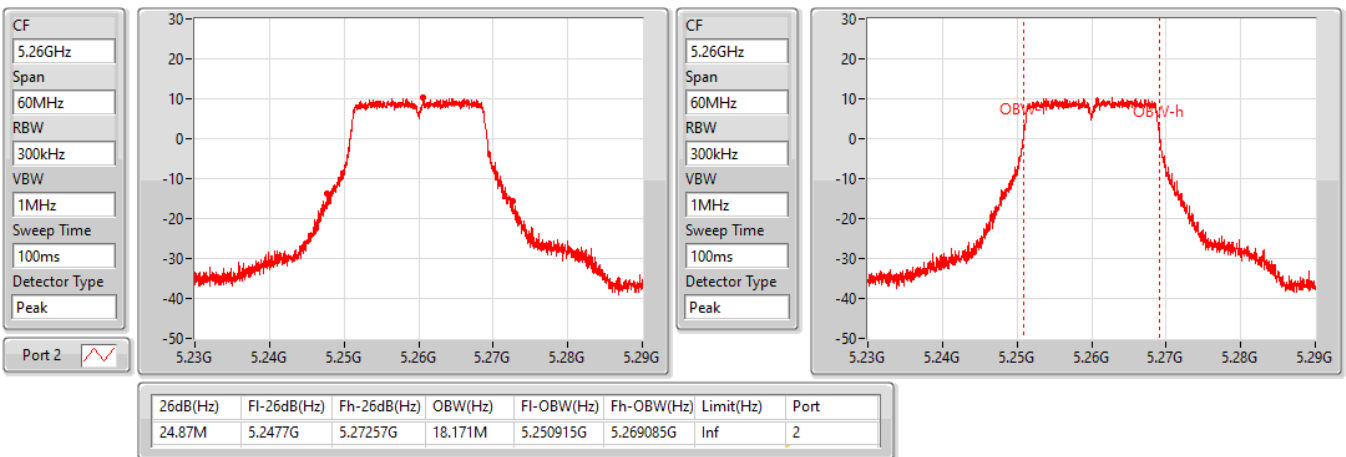


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5260MHz

12/04/2022

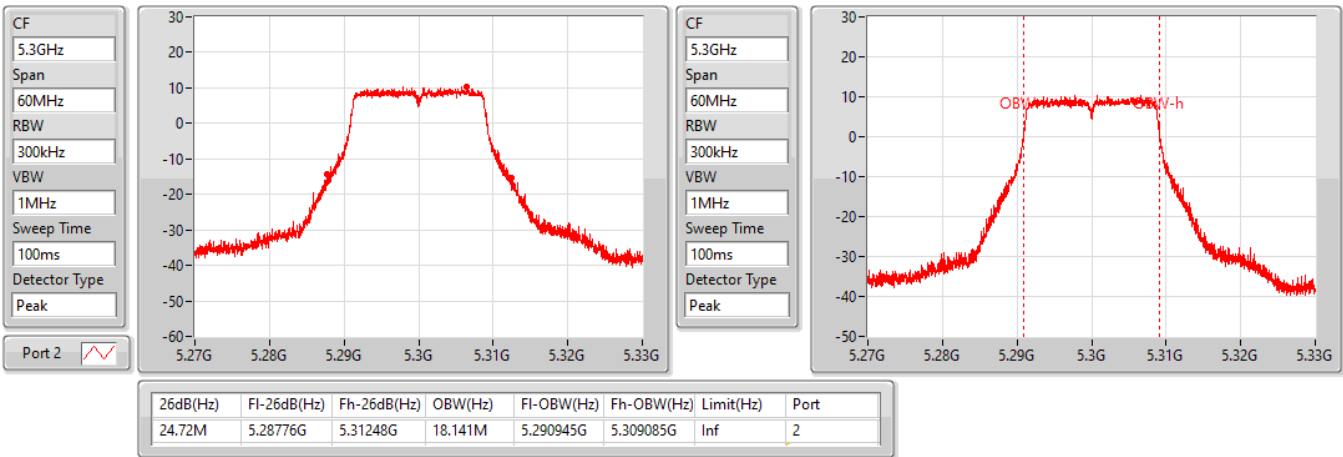


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5300MHz

12/04/2022

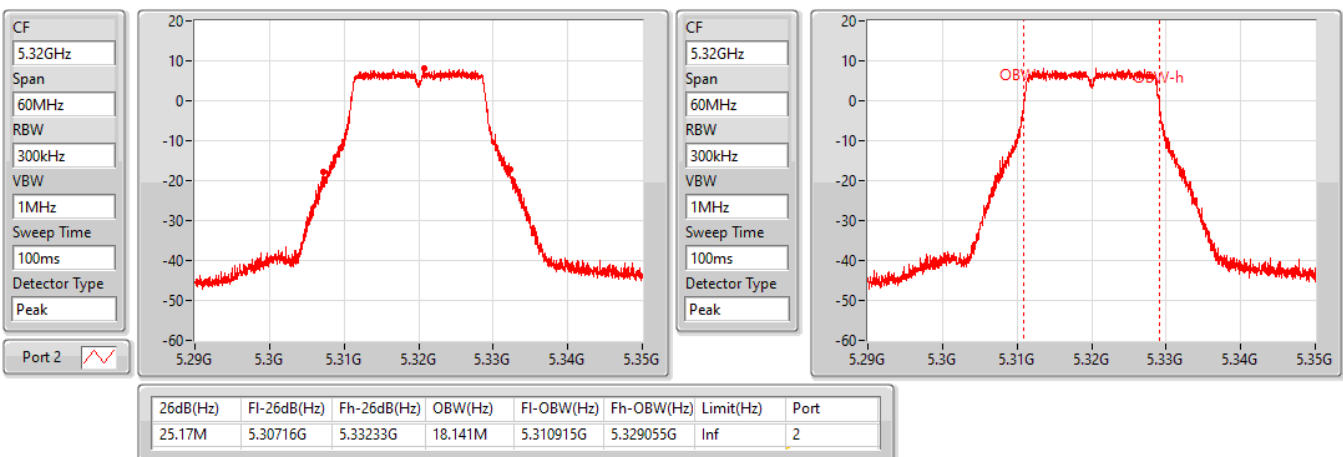


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5320MHz

28/05/2022

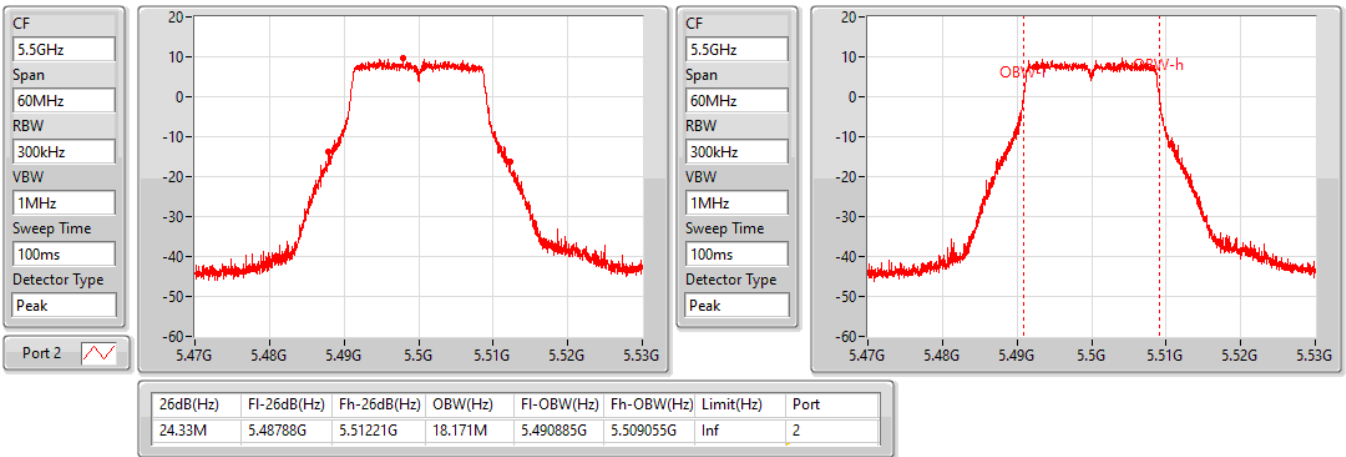


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5500MHz

12/04/2022

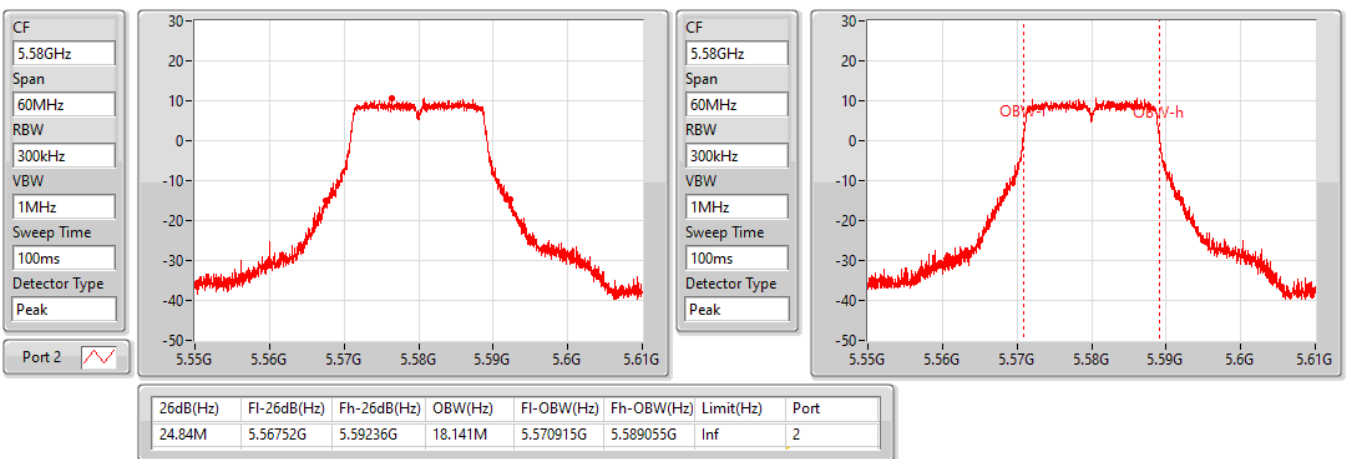


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5580MHz

12/04/2022

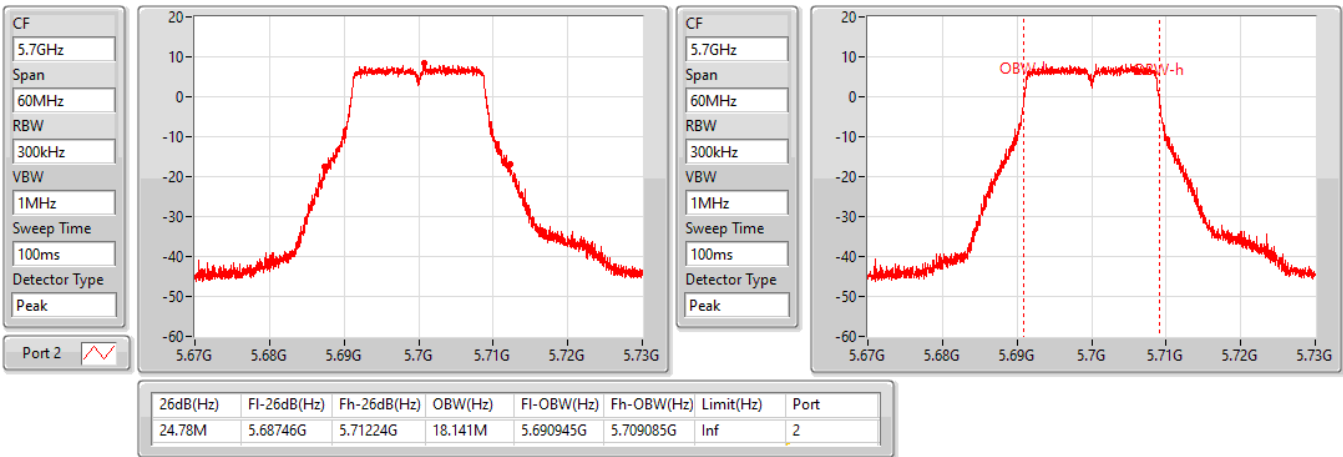


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5700MHz

28/05/2022

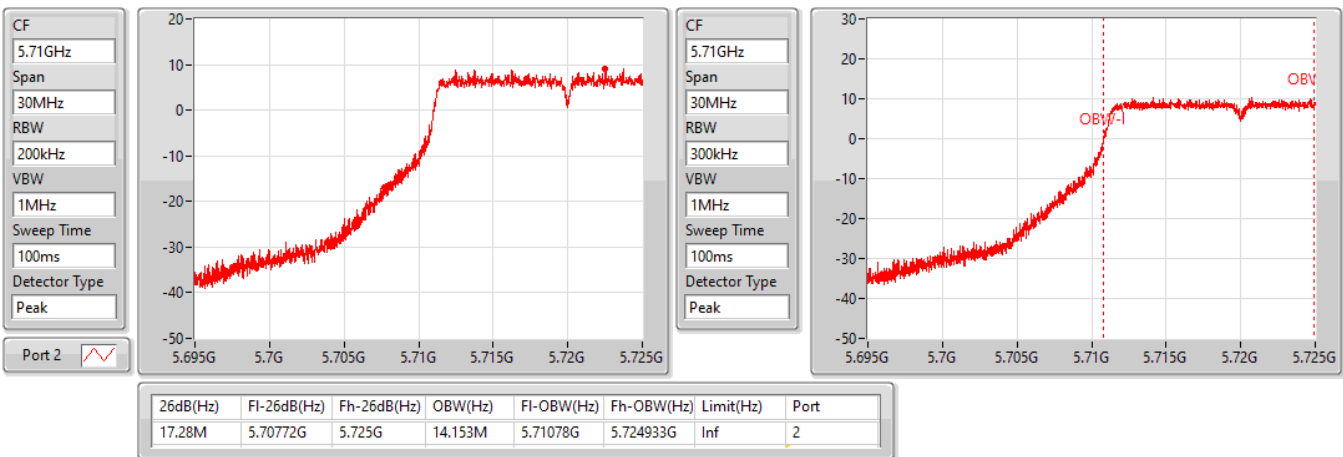


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5720MHz Straddle 5.47-5.725GHz

12/04/2022

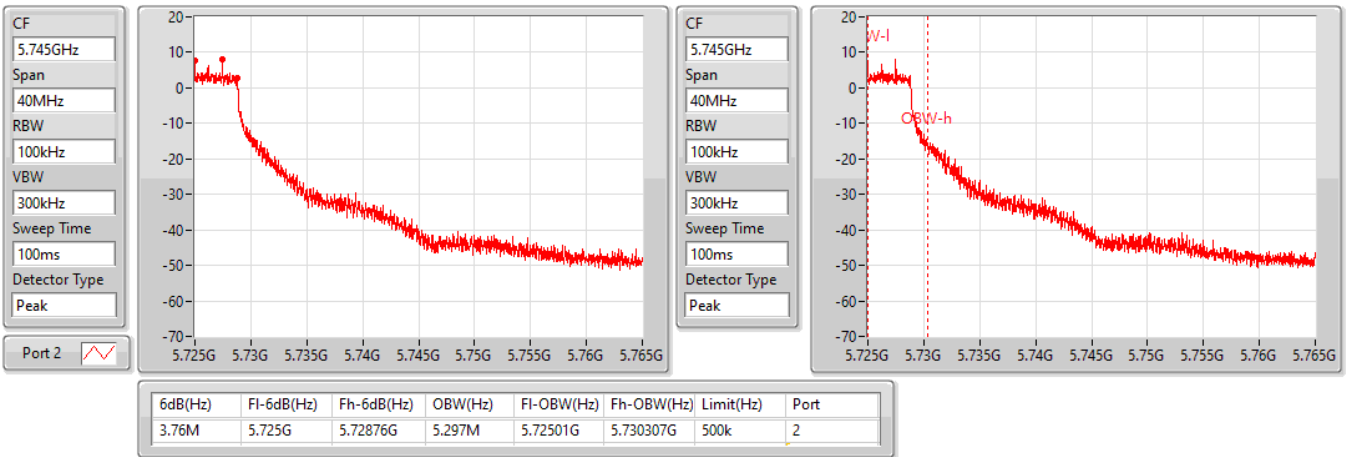


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5720MHz Straddle 5.725-5.85GHz

12/04/2022

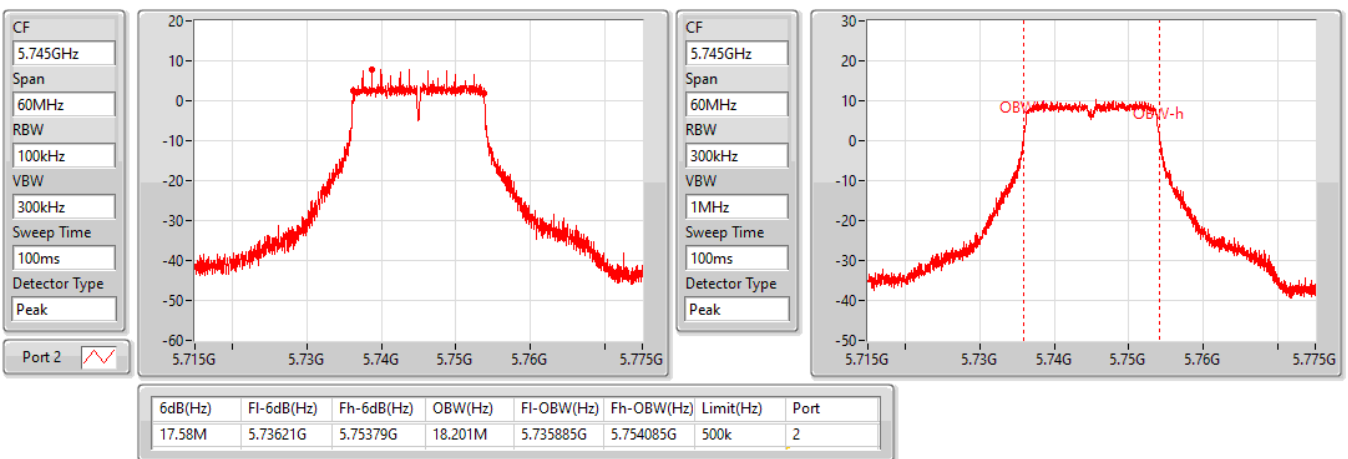


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5745MHz

12/04/2022

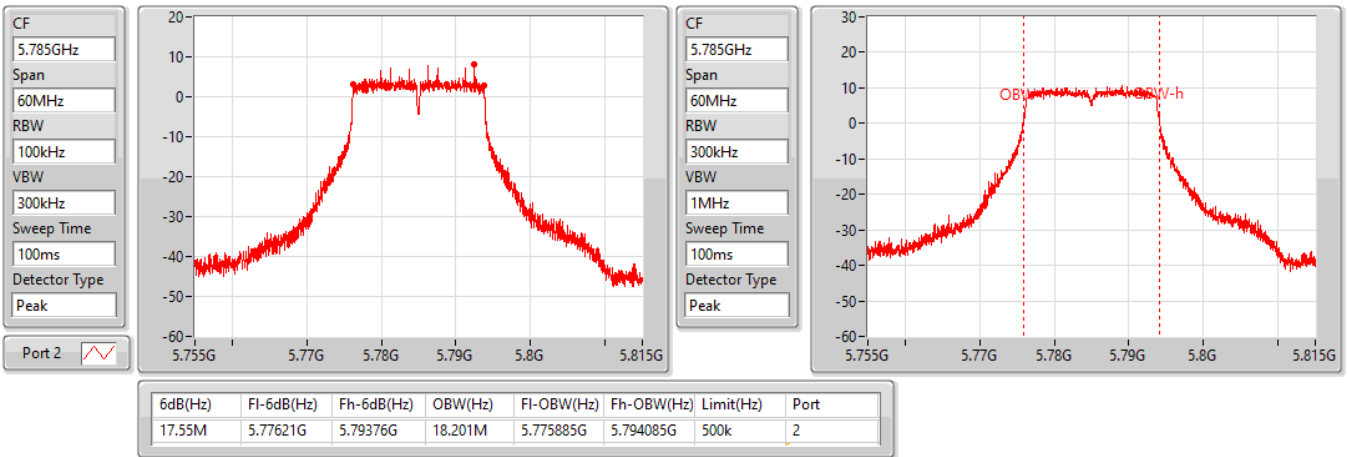


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5785MHz

12/04/2022

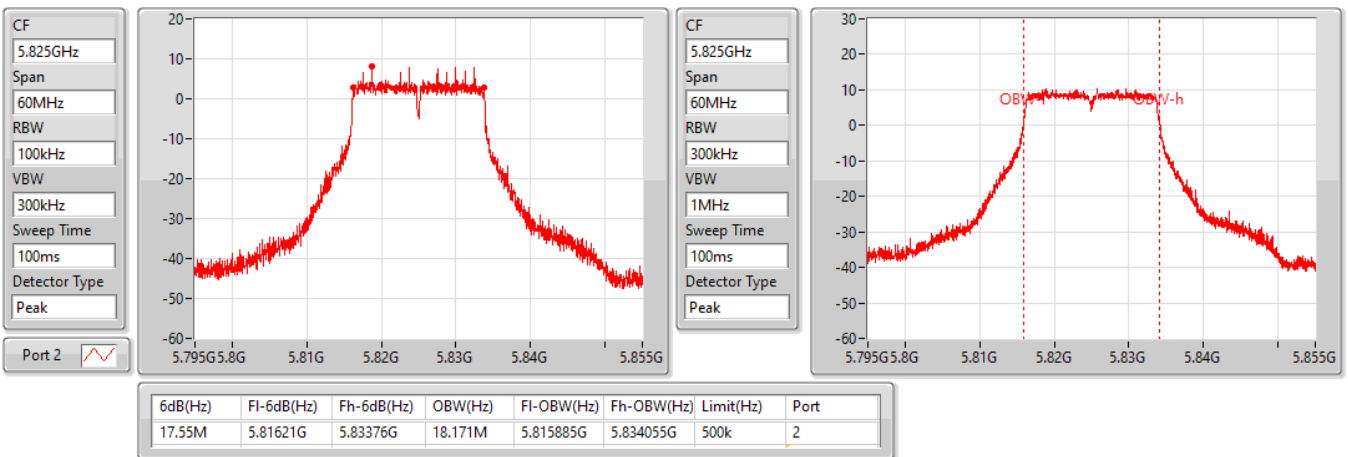


802.11n HT20_Nss1,(MCS0)_1TX(Port2)

EBW

5825MHz

12/04/2022



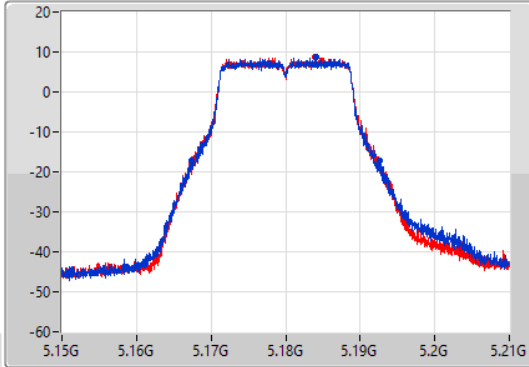
802.11n HT20_Nss1,(MCS8)_2TX

EBW

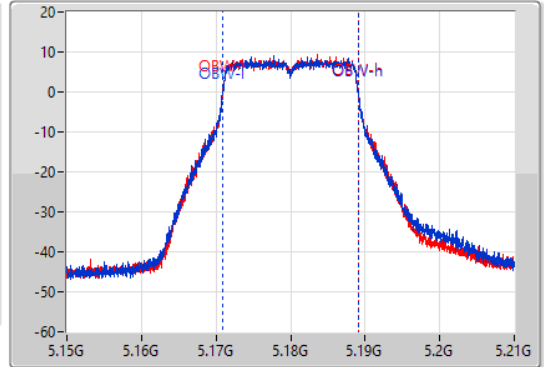
5180MHz

12/04/2022

CF
5.18GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.18GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.14M	5.1674G	5.19254G	18.171M	5.170915G	5.189085G	Inf	1
24.78M	5.16752G	5.1923G	18.171M	5.170915G	5.189085G	Inf	2

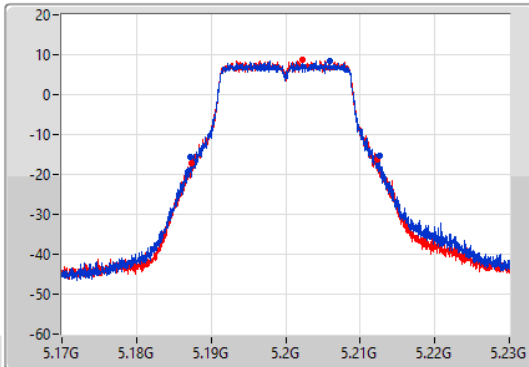
802.11n HT20_Nss1,(MCS8)_2TX

EBW

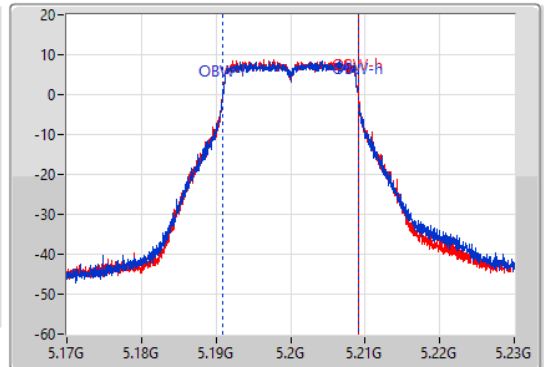
5200MHz

08/04/2022

CF
5.2GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.2GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



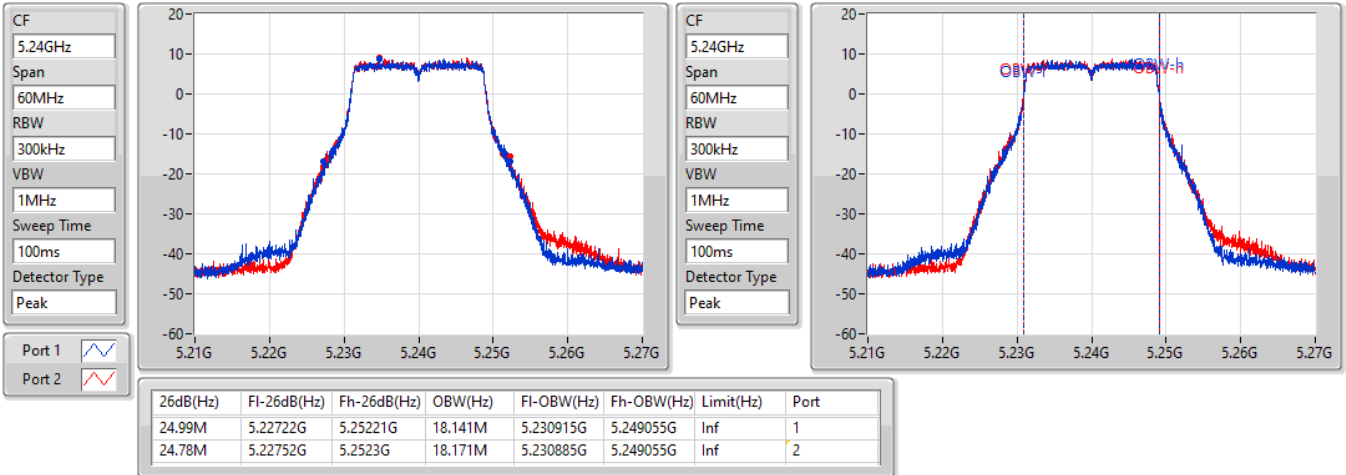
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
25.29M	5.18725G	5.21254G	18.171M	5.190885G	5.209055G	Inf	1
24.9M	5.1874G	5.2123G	18.141M	5.190885G	5.209025G	Inf	2

802.11n HT20_Nss1,(MCS8)_2TX

EBW

5240MHz

12/04/2022

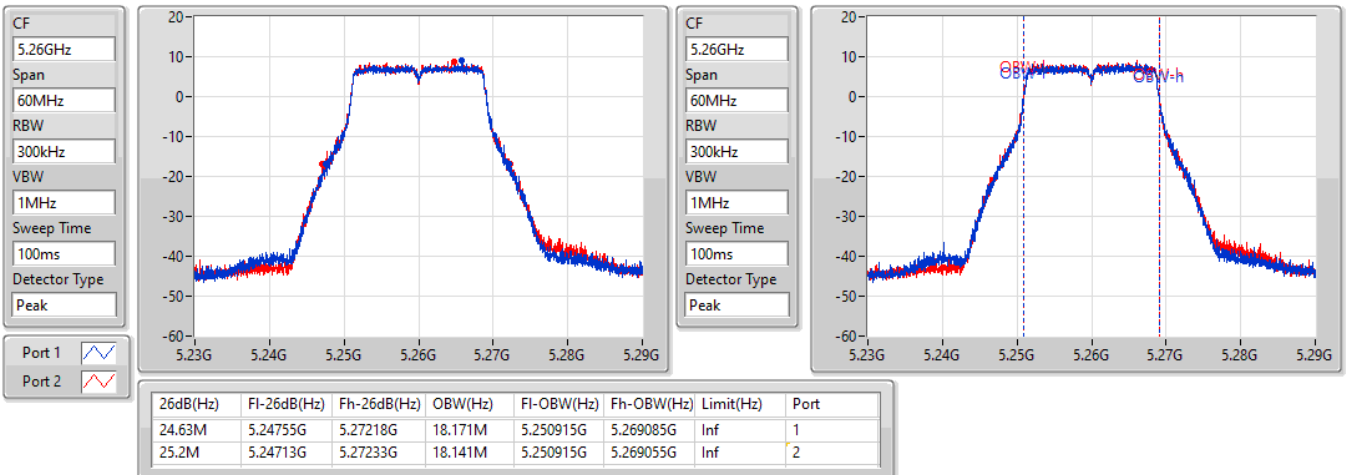


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5260MHz

12/04/2022

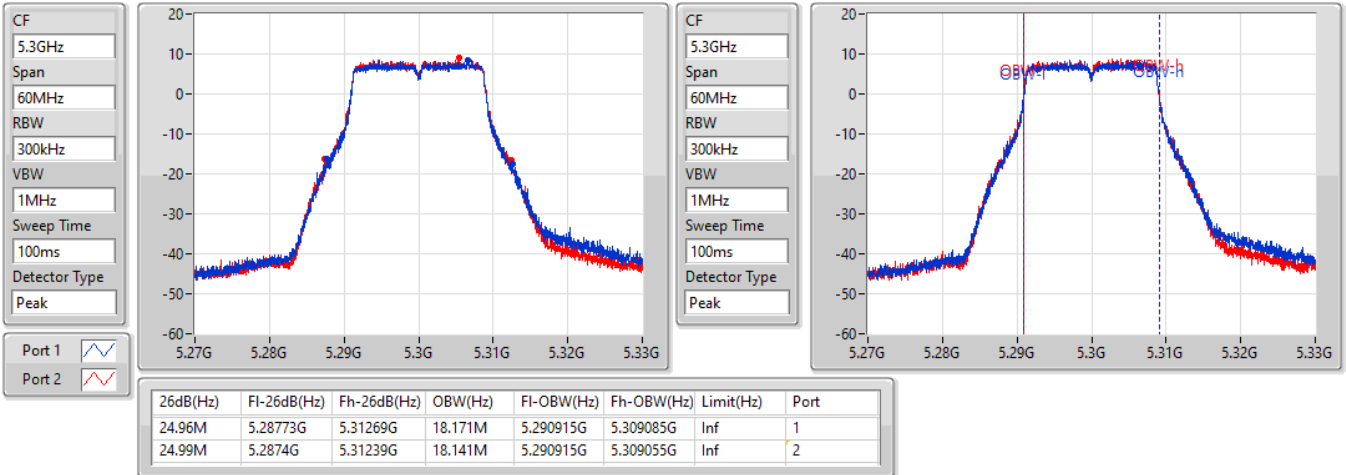


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5300MHz

12/04/2022

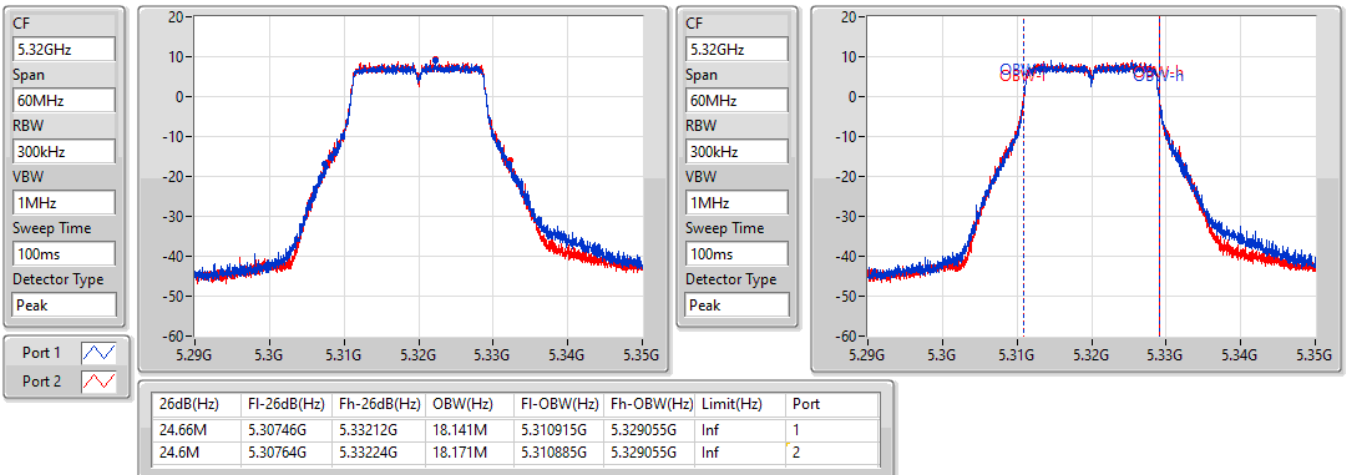


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5320MHz

12/04/2022

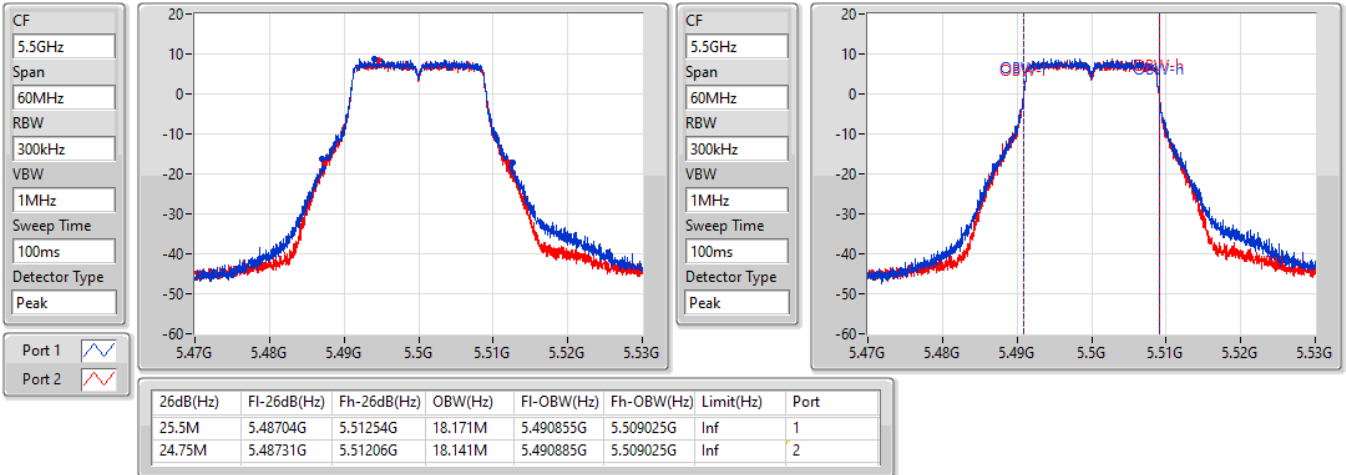


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5500MHz

14/04/2022

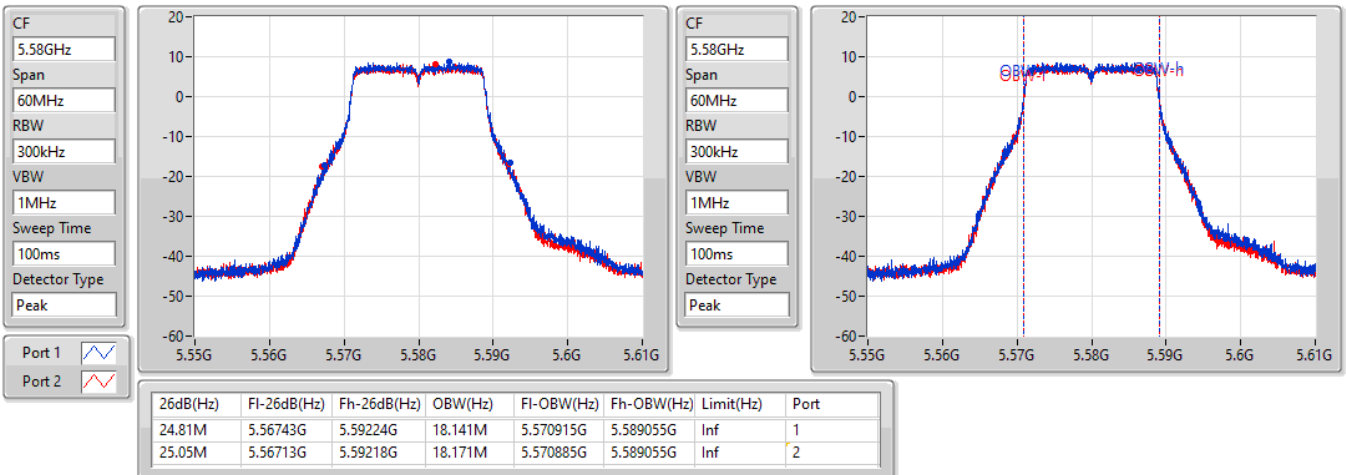


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5580MHz

14/04/2022



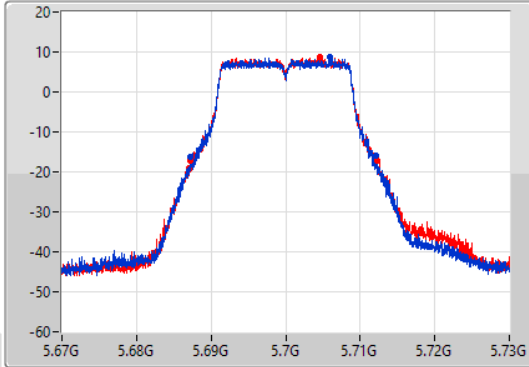
802.11n HT20_Nss1,(MCS8)_2TX

EBW

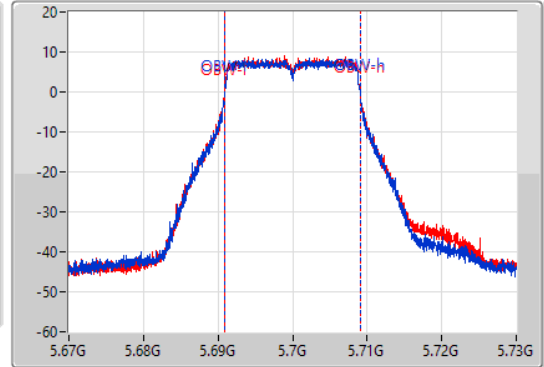
5700MHz

14/04/2022

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



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



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
24.87M	5.68722G	5.71209G	18.141M	5.690915G	5.709055G	Inf	1
25.08M	5.68722G	5.7123G	18.141M	5.690885G	5.709025G	Inf	2

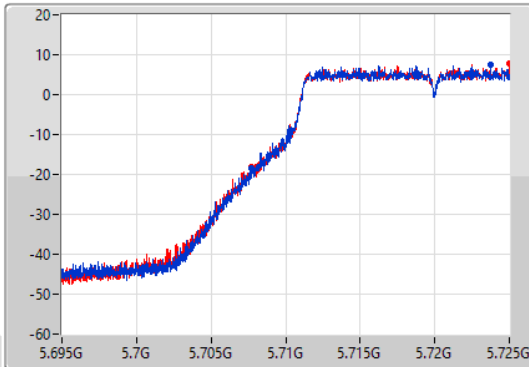
802.11n HT20_Nss1,(MCS8)_2TX

EBW

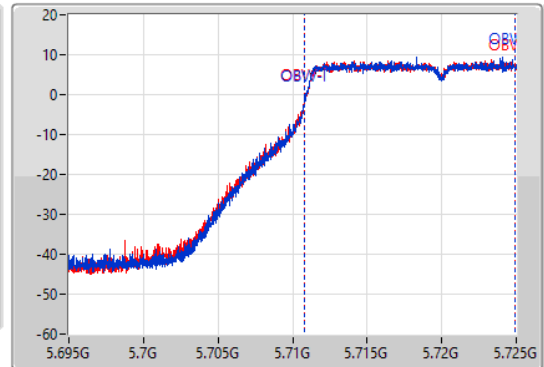
5720MHz Straddle 5.47-5.725GHz

14/04/2022

CF
5.71GHz
Span
30MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.71GHz
Span
30MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



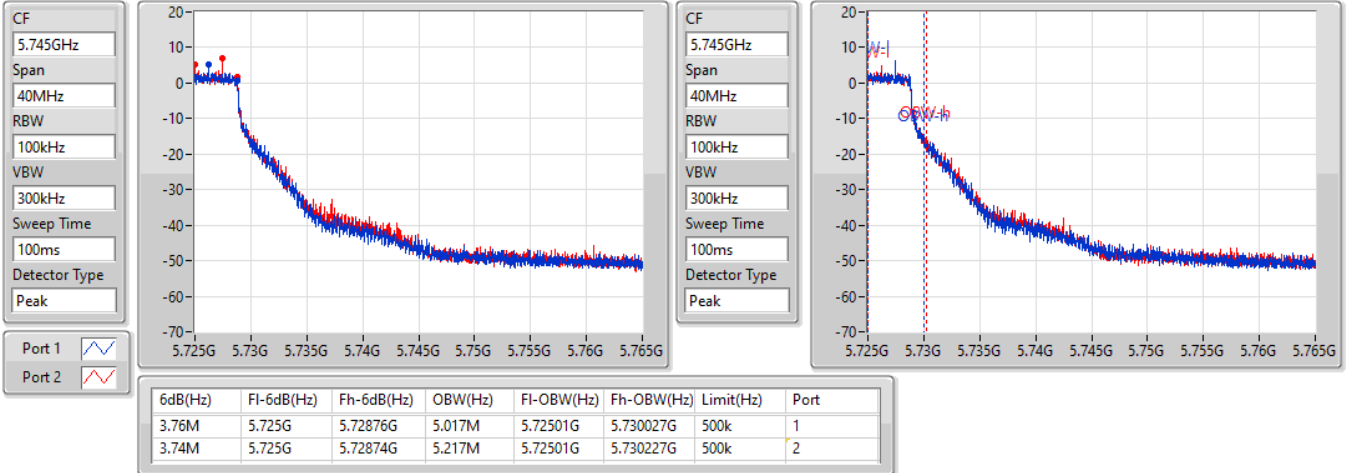
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.295M	5.707705G	5.725G	14.138M	5.710795G	5.724933G	Inf	1
17.325M	5.707675G	5.725G	14.153M	5.71078G	5.724933G	Inf	2

802.11n HT20_Nss1,(MCS8)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

14/04/2022

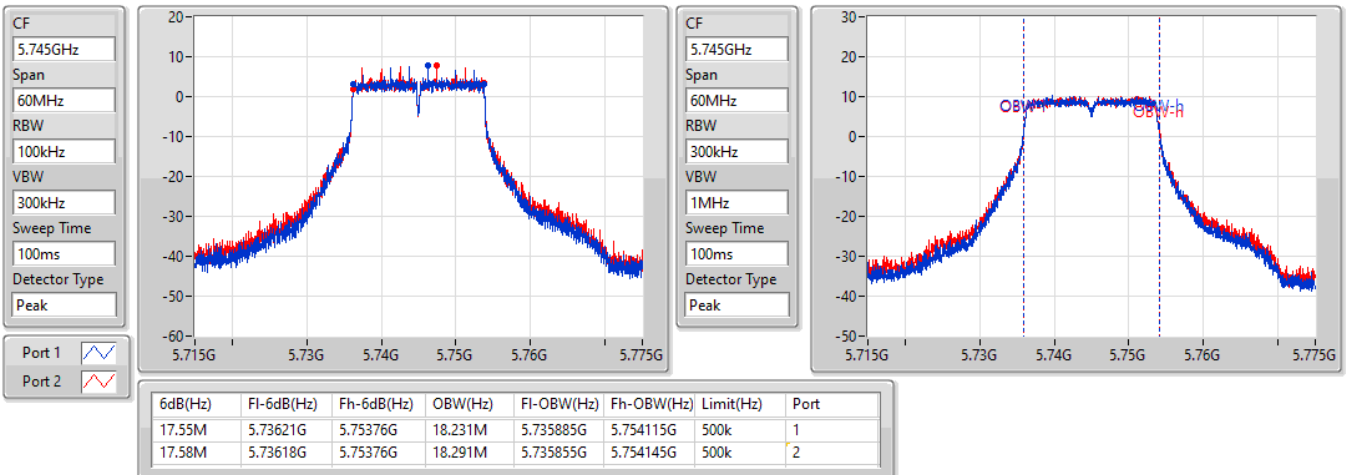


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5745MHz

14/04/2022

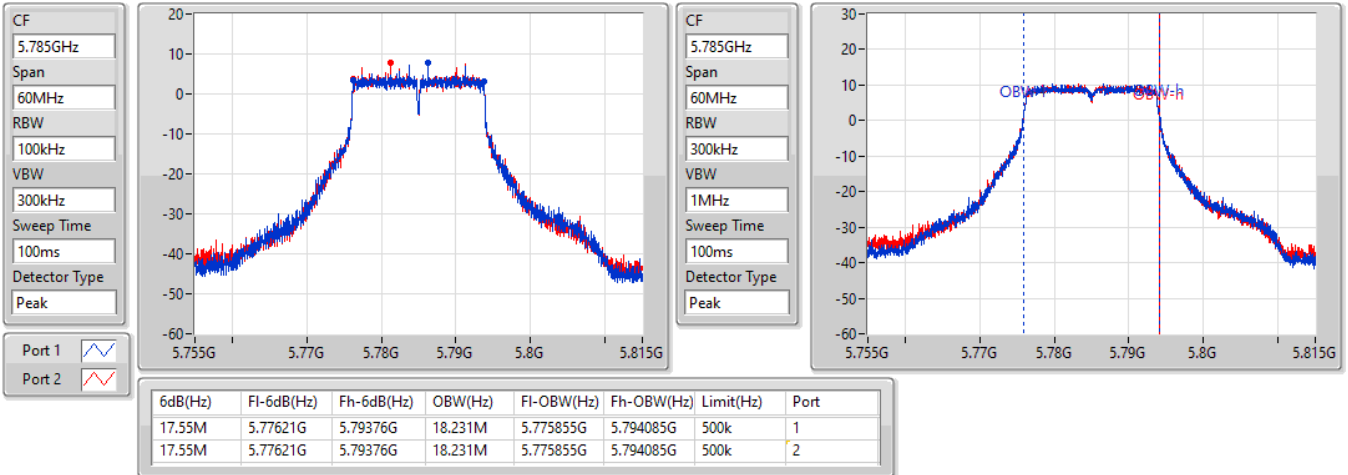


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5785MHz

14/04/2022

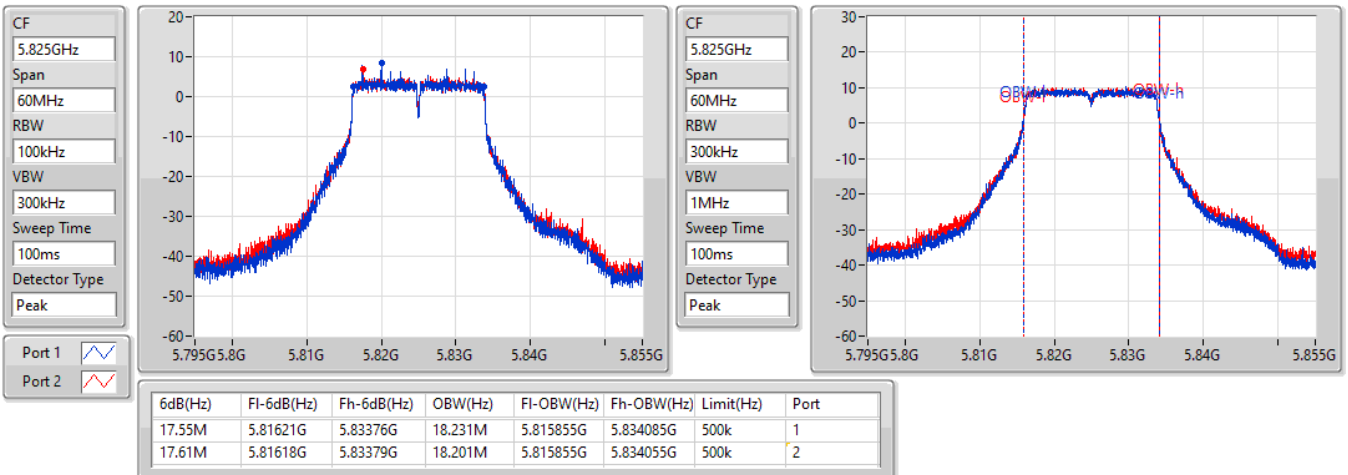


802.11n HT20_Nss1,(MCS8)_2TX

EBW

5825MHz

14/04/2022

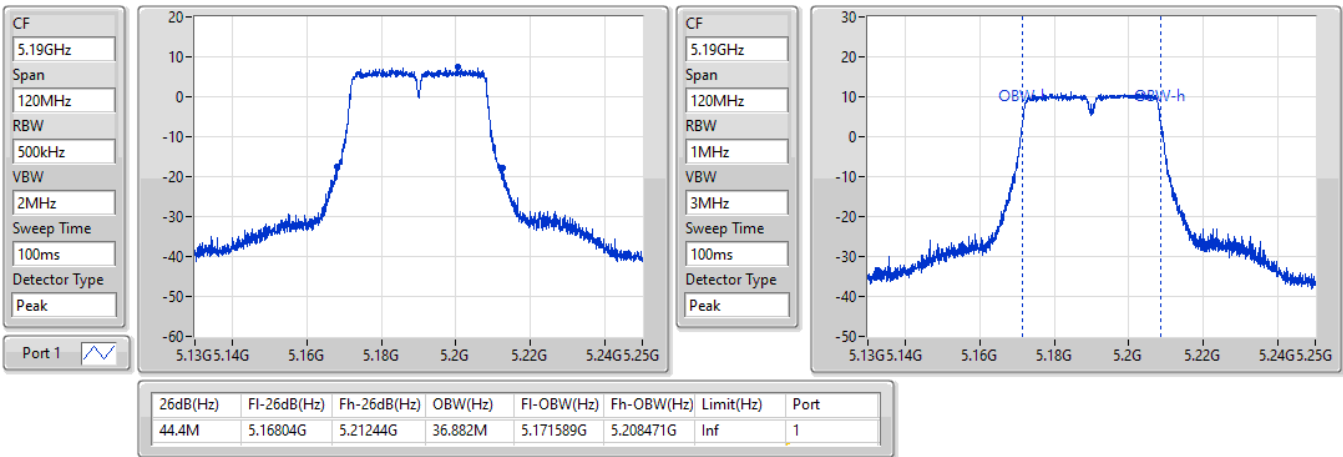


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5190MHz

28/05/2022

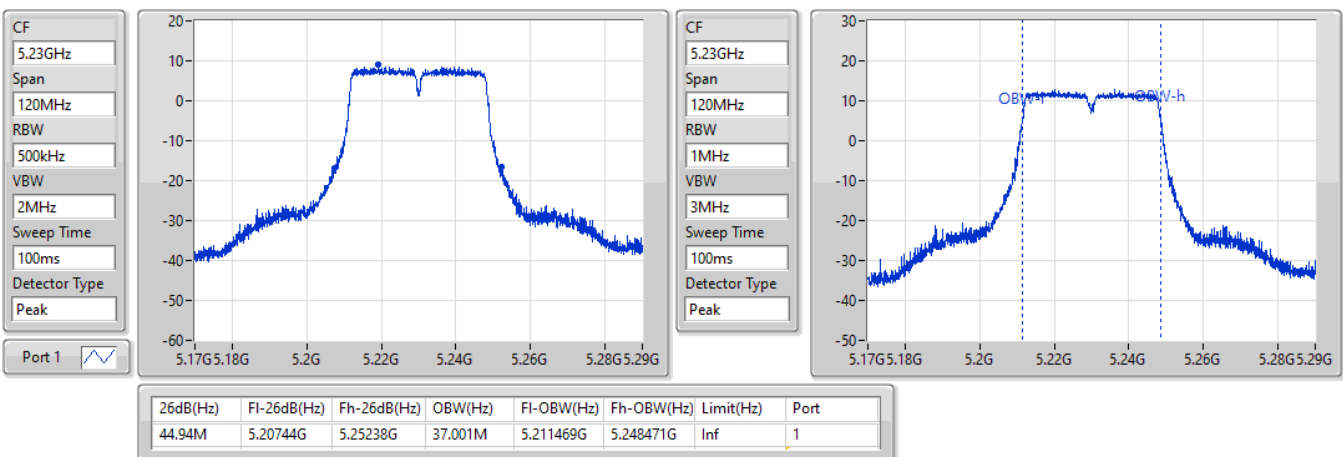


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5230MHz

08/04/2022

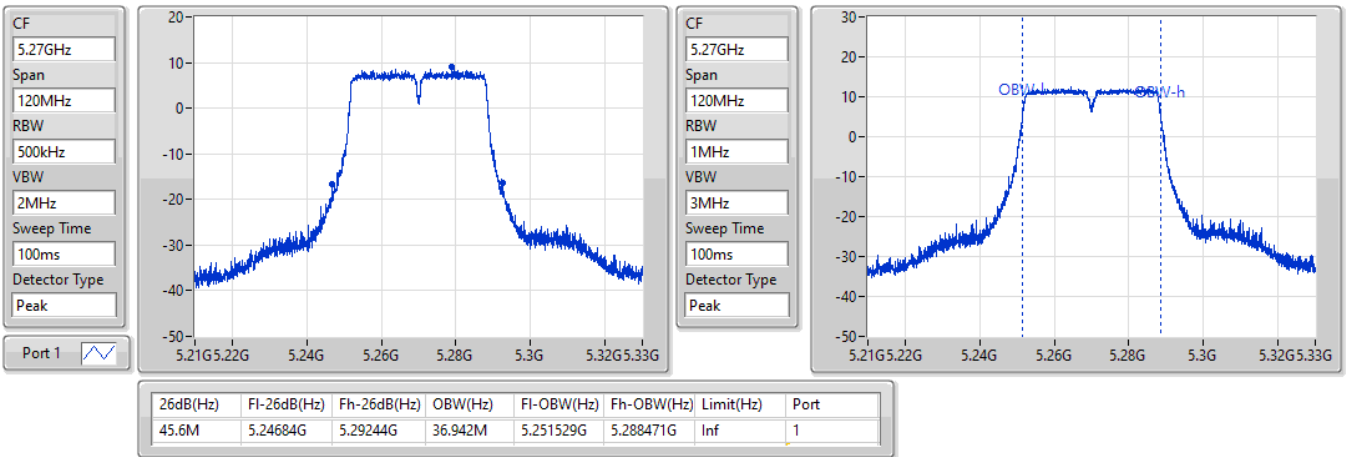


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5270MHz

14/04/2022

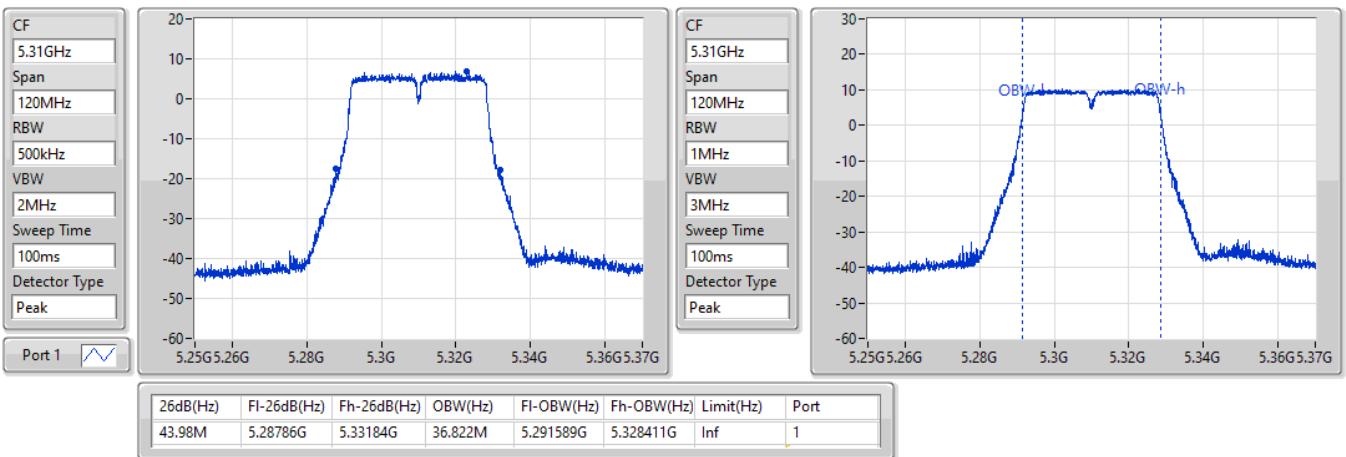


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5310MHz

14/04/2022



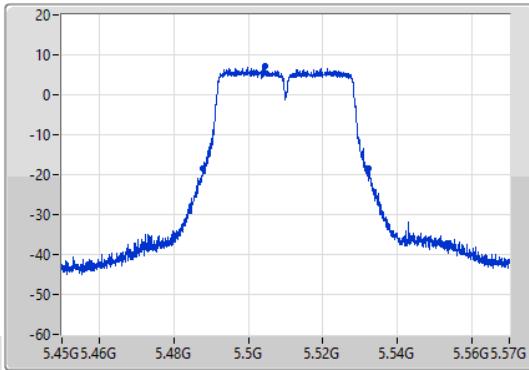
802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

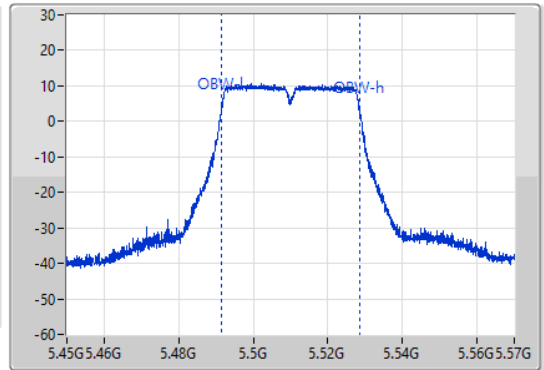
5510MHz

28/05/2022

CF
5.51GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
5.51GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.58M	5.48768G	5.53226G	36.942M	5.491469G	5.528411G	Inf	1

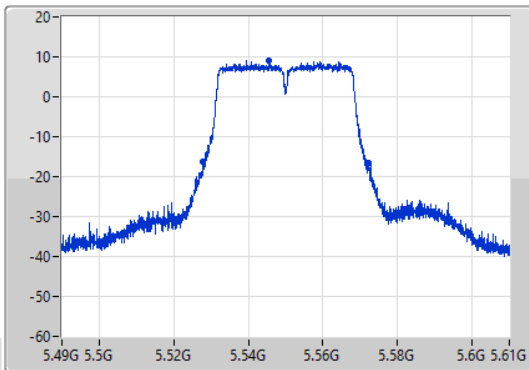
802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

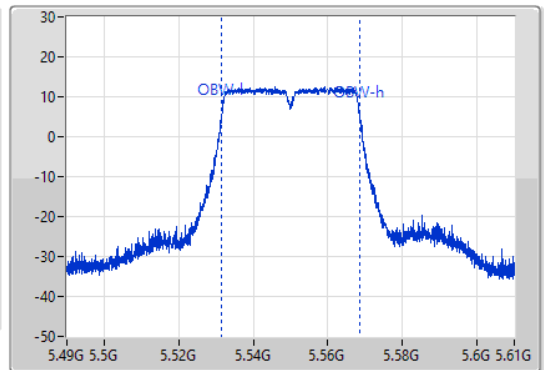
5550MHz

14/04/2022

CF
5.55GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
5.55GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



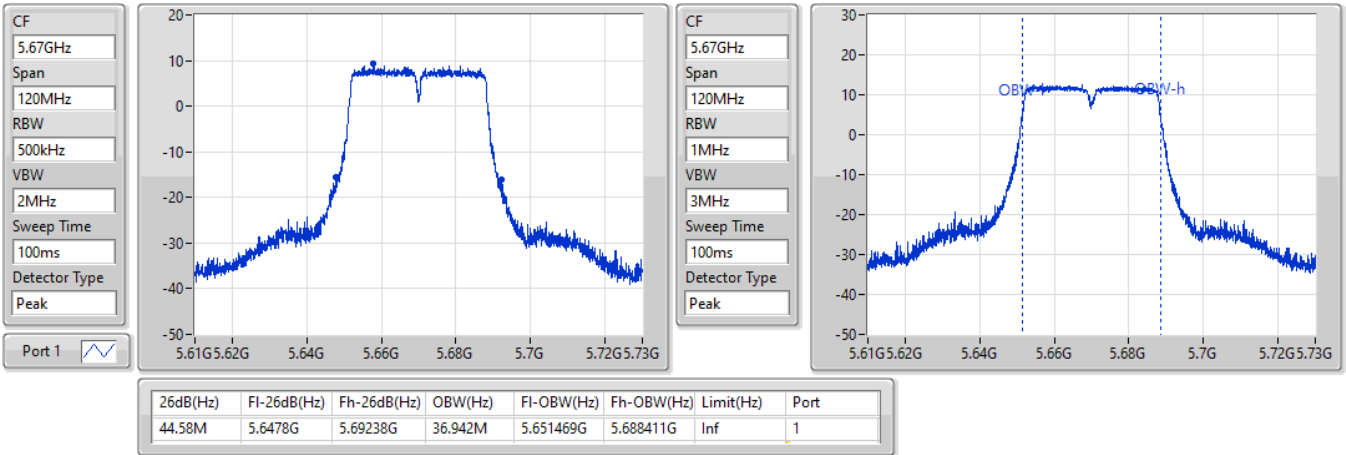
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.46M	5.52786G	5.57232G	36.942M	5.531529G	5.568471G	Inf	1

802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5670MHz

14/04/2022

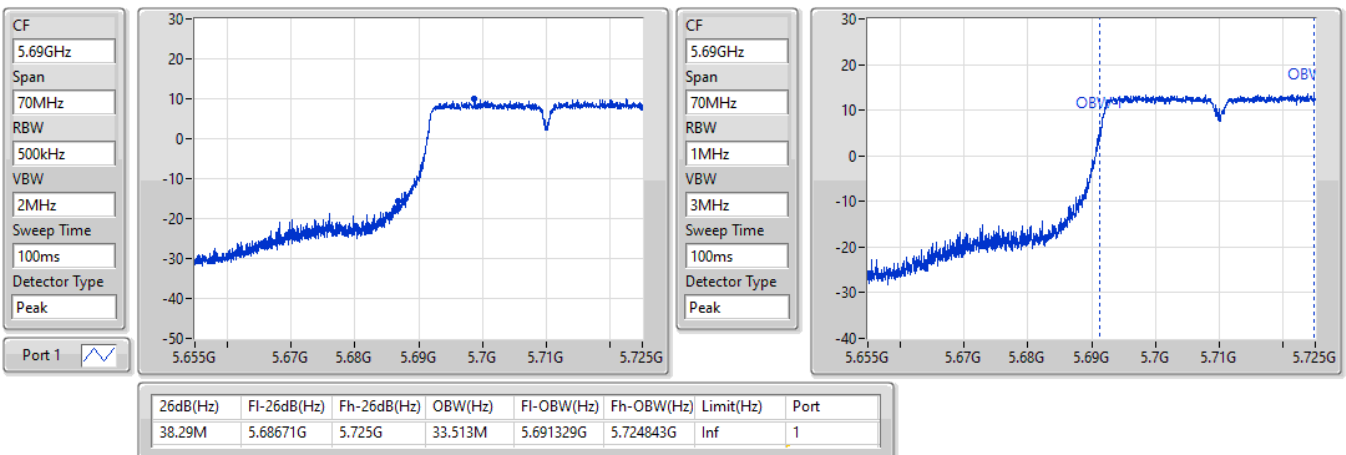


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5710MHz Straddle 5.47-5.725GHz

14/04/2022

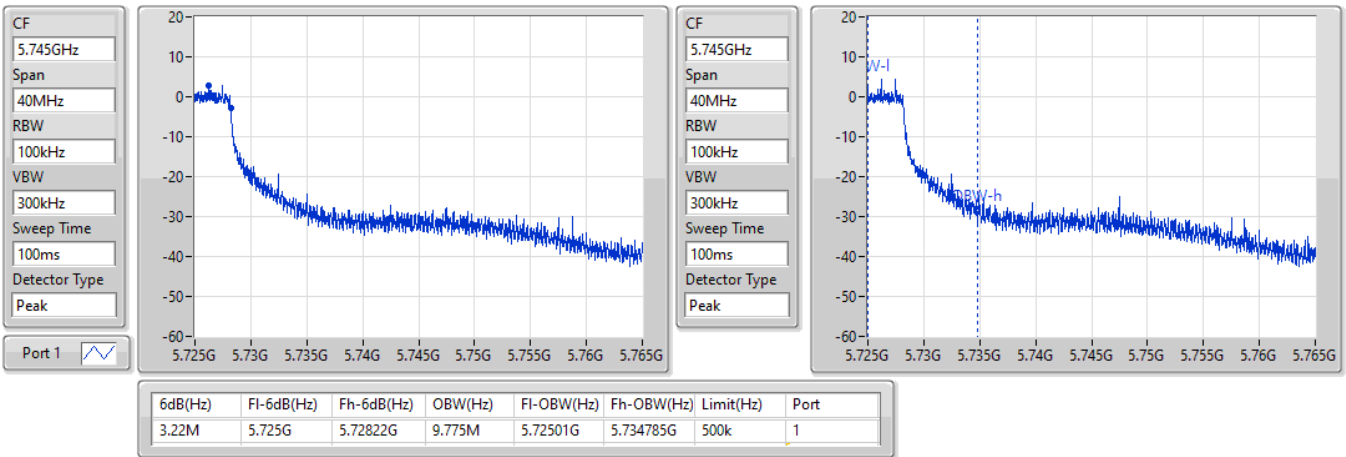


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5710MHz Straddle 5.725-5.85GHz

14/04/2022

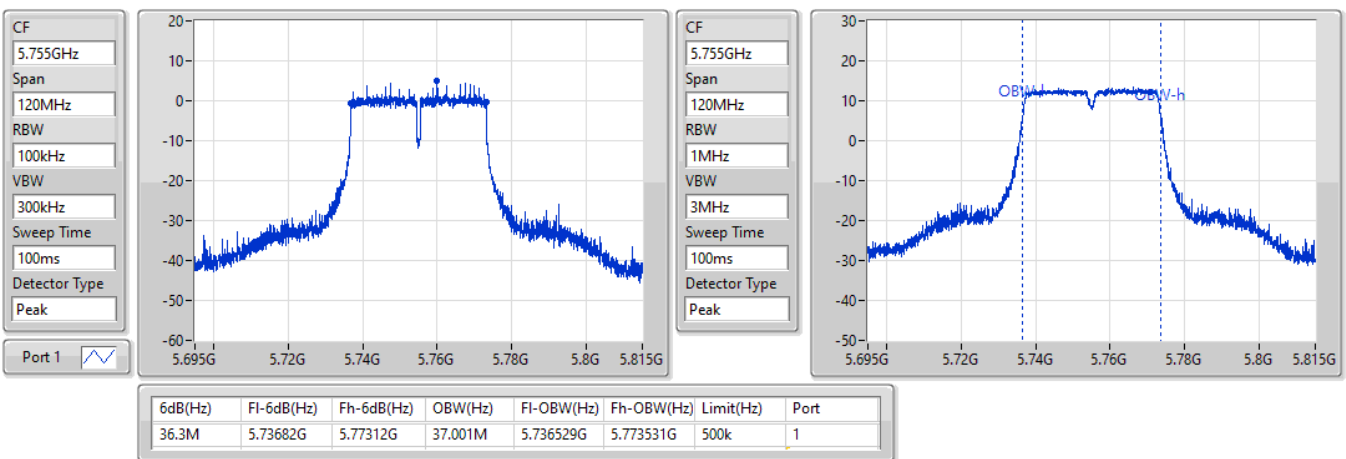


802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

5755MHz

14/04/2022



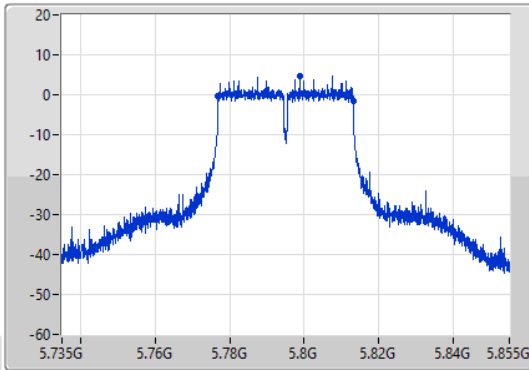
802.11n HT40_Nss1,(MCS0)_1TX(Port1)

EBW

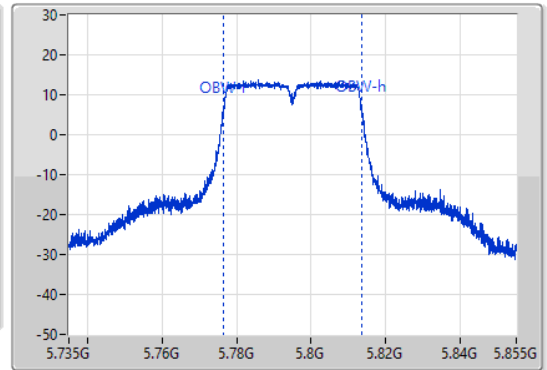
5795MHz

14/04/2022

CF
5.795GHz
Span
120MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak
Port 1



CF
5.795GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.36M	5.77682G	5.81318G	37.121M	5.776469G	5.813591G	500k	1

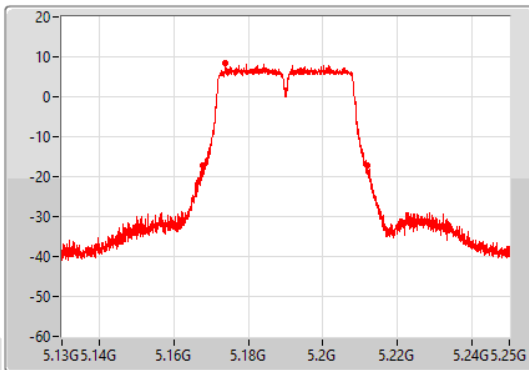
802.11n HT40_Nss1,(MCS0)_1TX(Port2)

EBW

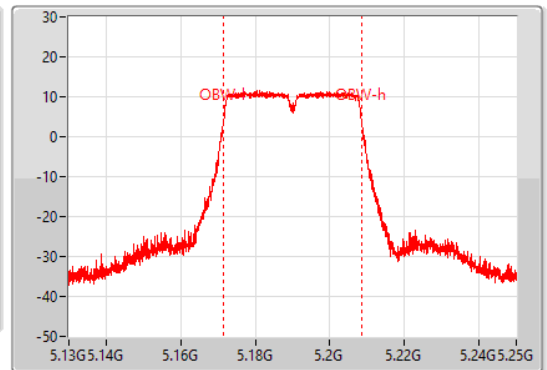
5190MHz

28/05/2022

CF
5.19GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak
Port 2



CF
5.19GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



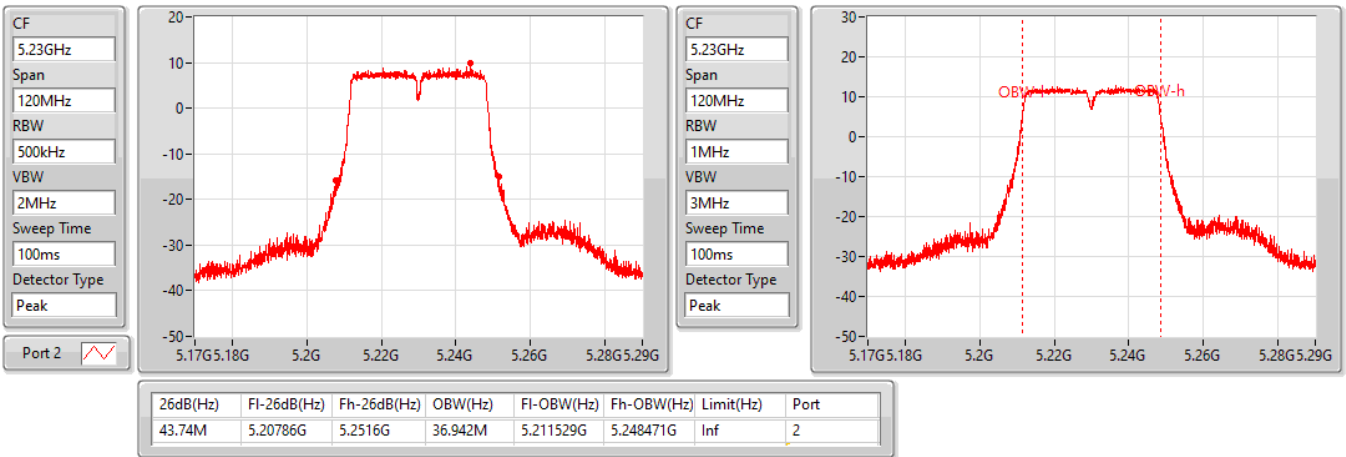
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.98M	5.16786G	5.21184G	36.882M	5.171529G	5.208411G	Inf	2

802.11n HT40_Nss1,(MCS0)_1TX(Port2)

EBW

5230MHz

08/04/2022

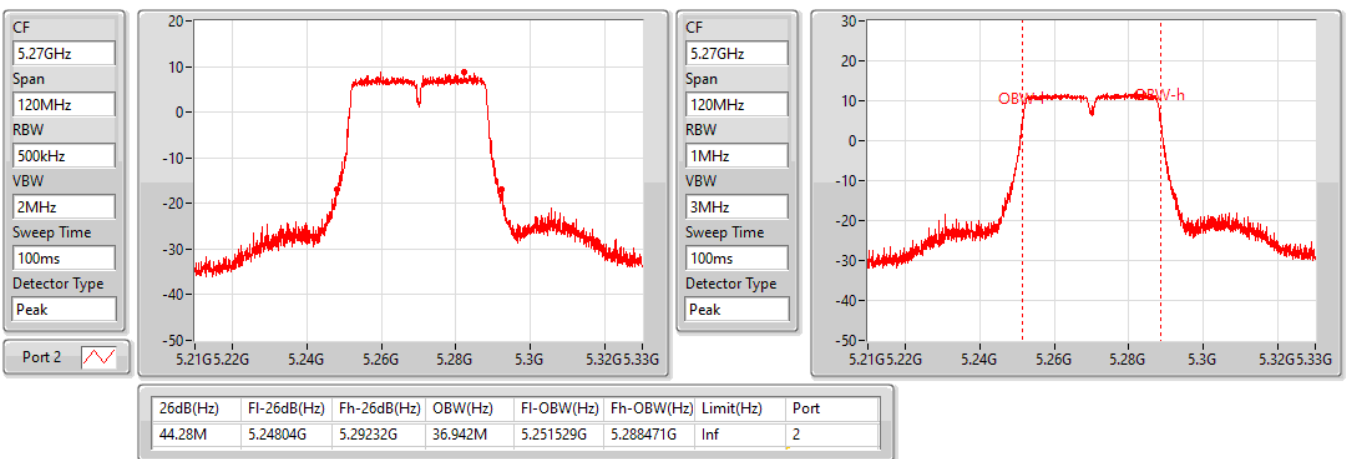


802.11n HT40_Nss1,(MCS0)_1TX(Port2)

EBW

5270MHz

14/04/2022

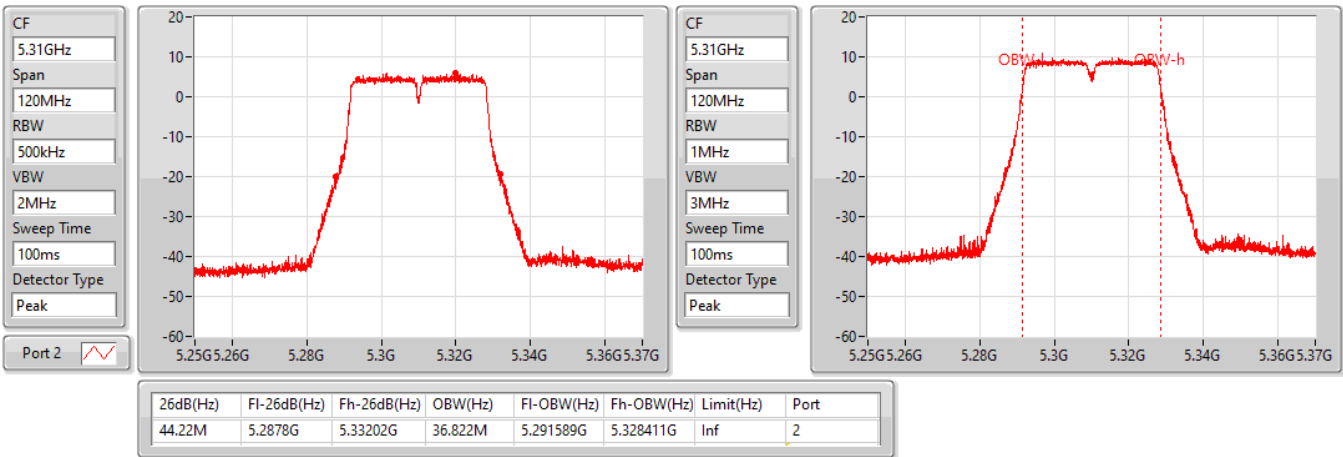


802.11n HT40_Nss1,(MCS0)_1TX(Port2)

EBW

5310MHz

14/04/2022

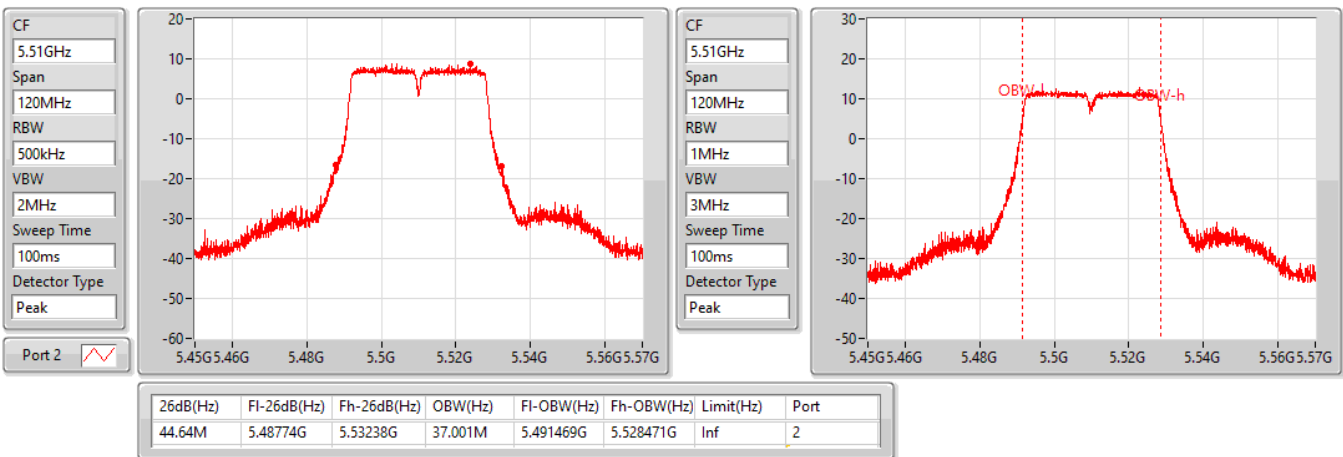


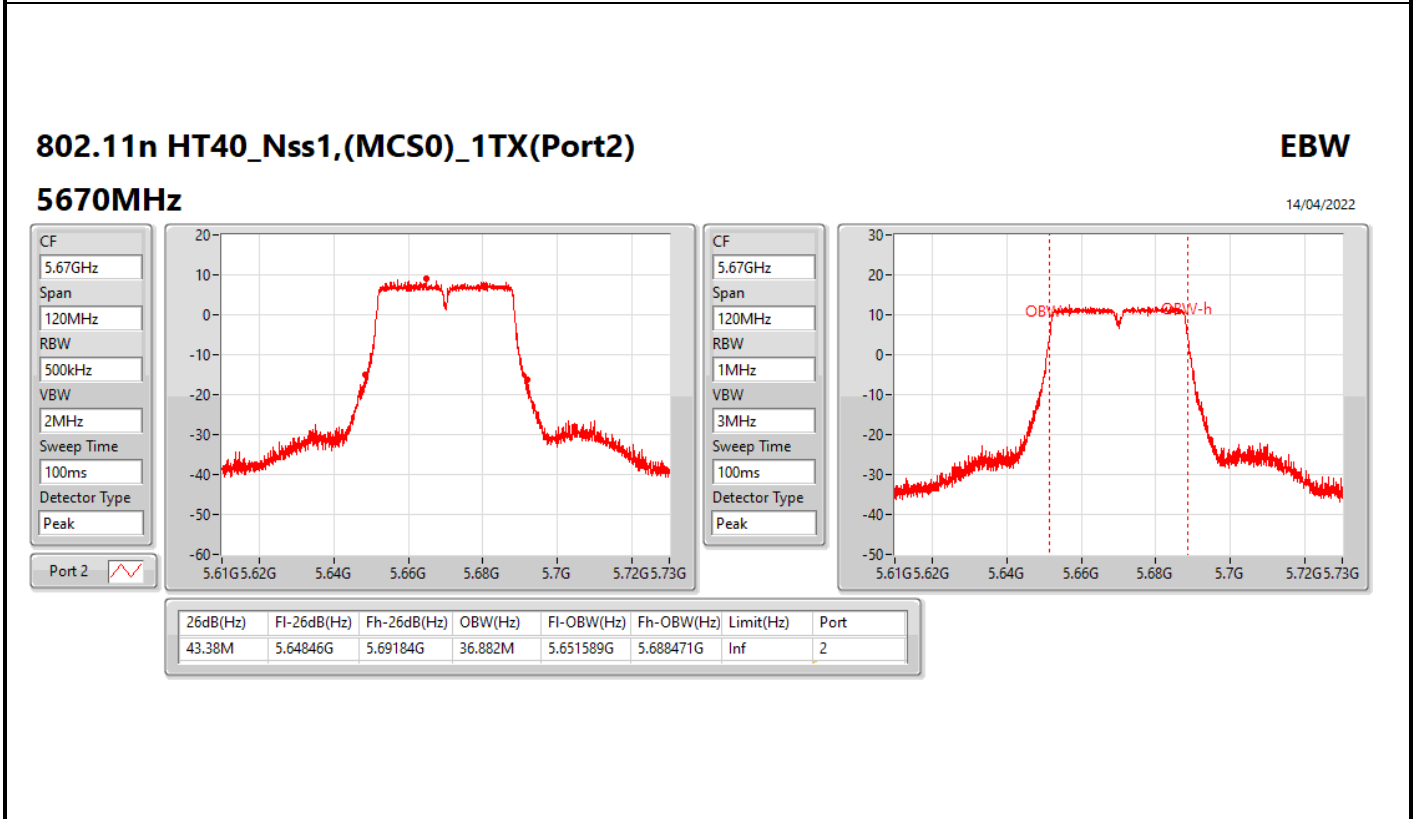
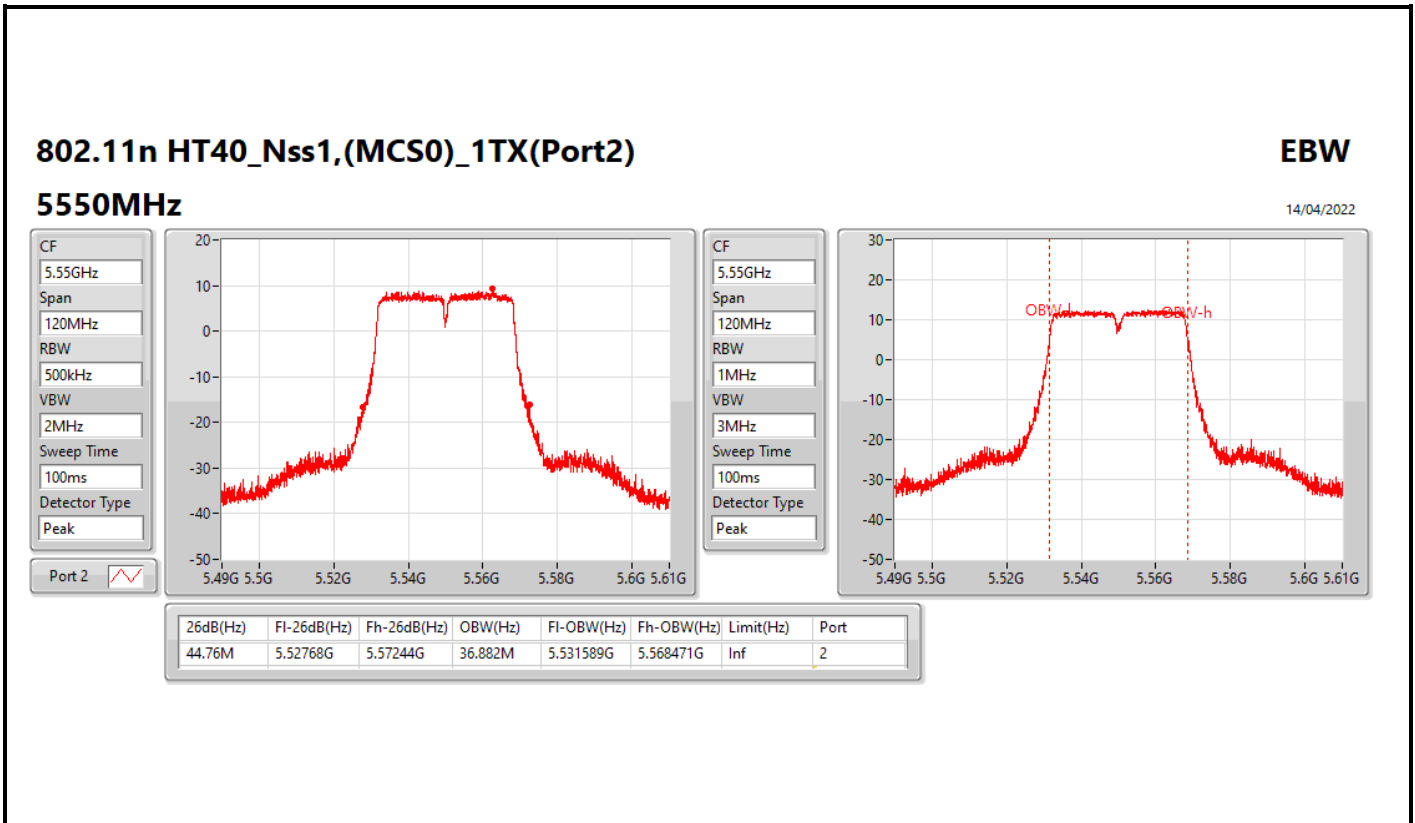
802.11n HT40_Nss1,(MCS0)_1TX(Port2)

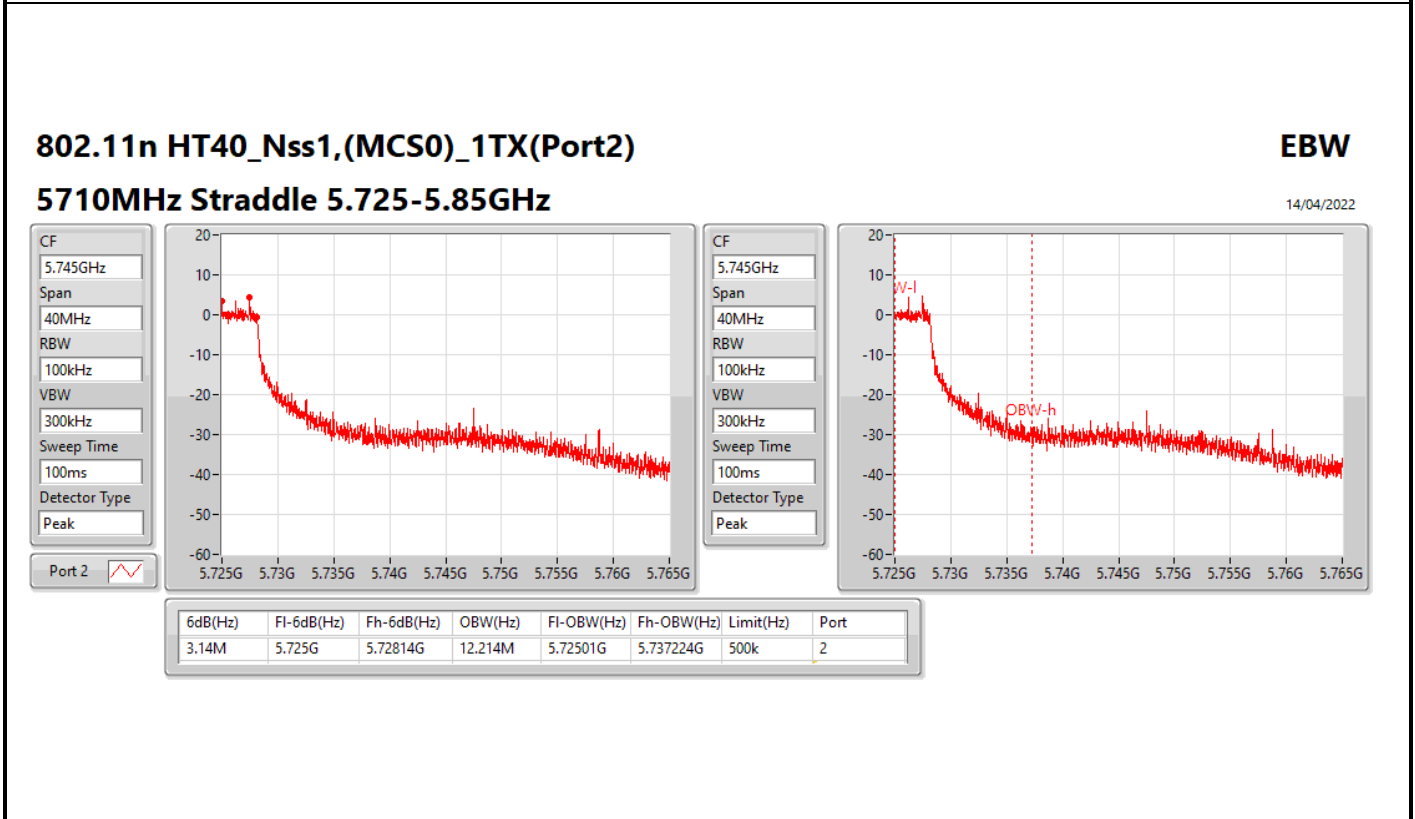
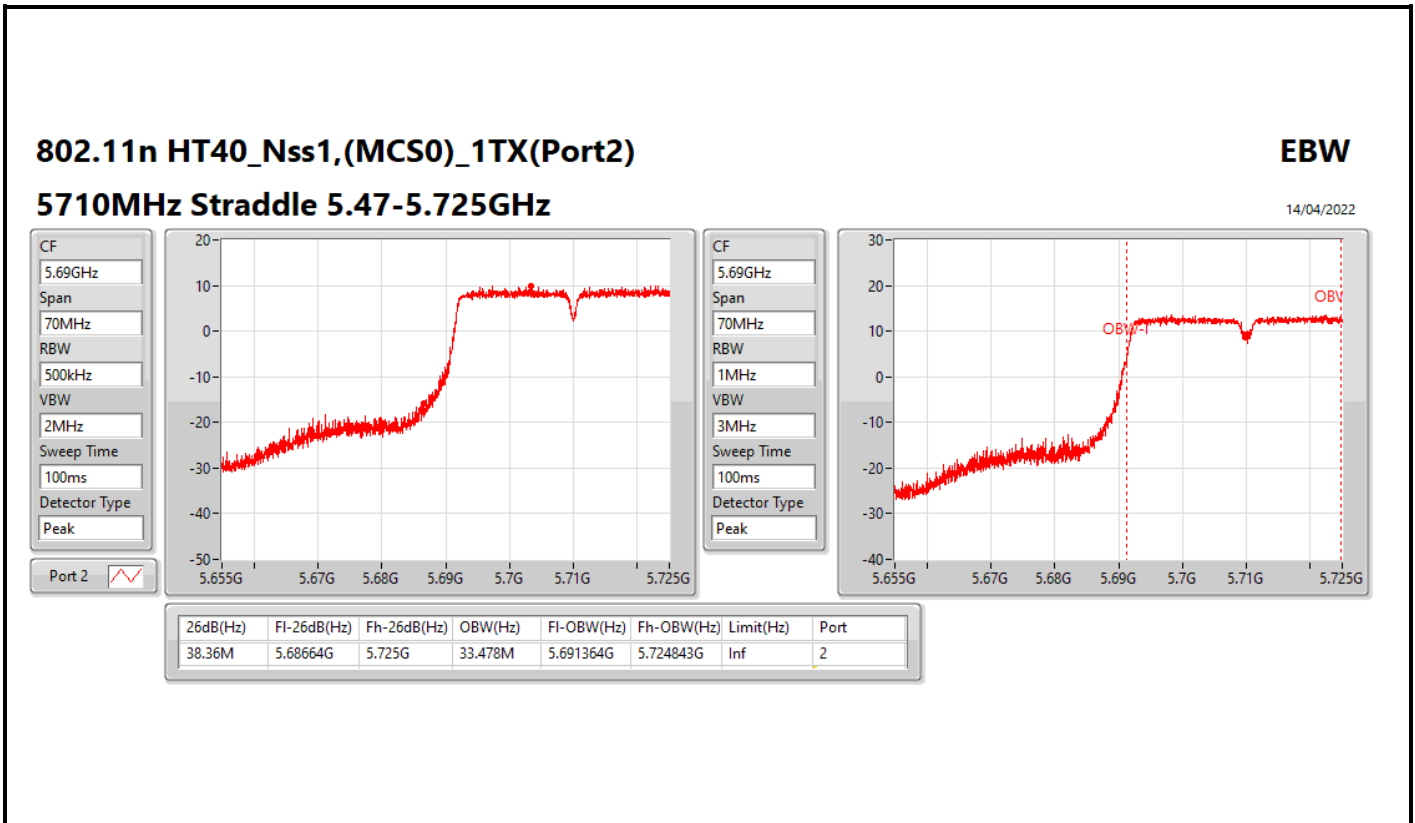
EBW

5510MHz

14/04/2022





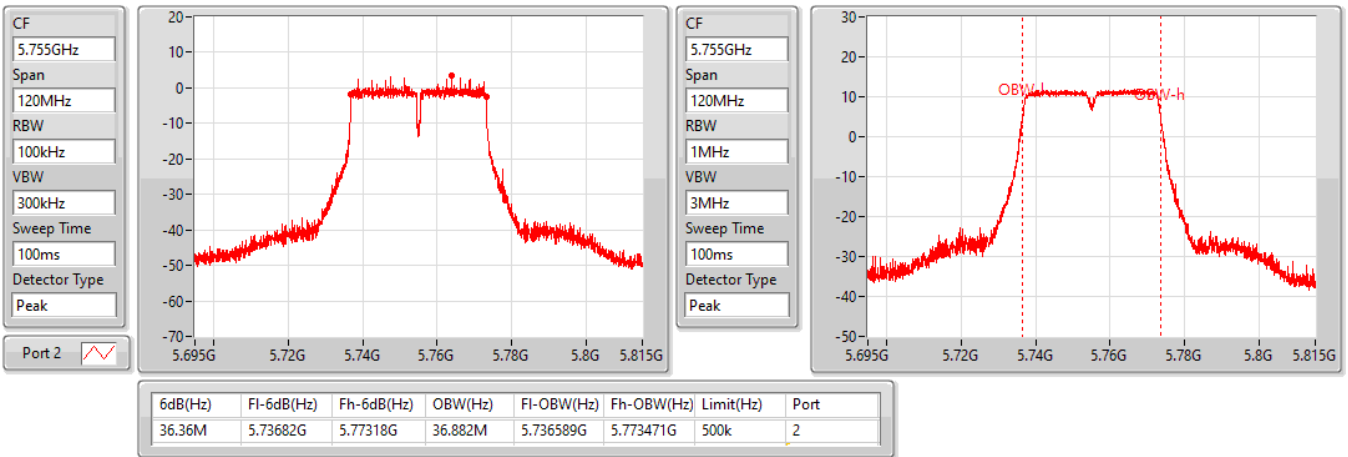


802.11n HT40_Nss1,(MCS0)_1TX(Port2)

EBW

5755MHz

14/04/2022

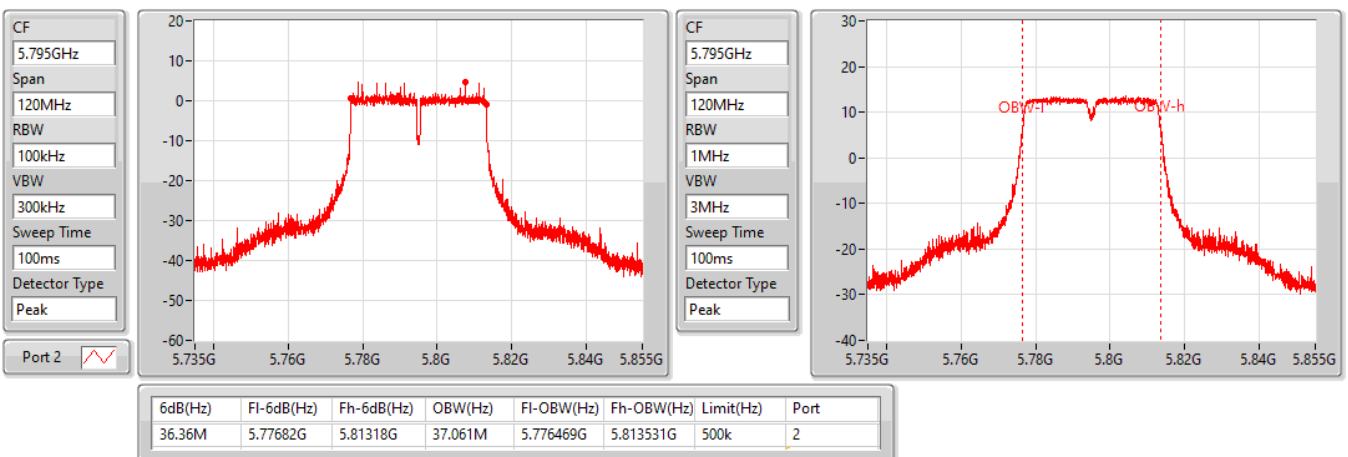


802.11n HT40_Nss1,(MCS0)_1TX(Port2)

EBW

5795MHz

14/04/2022



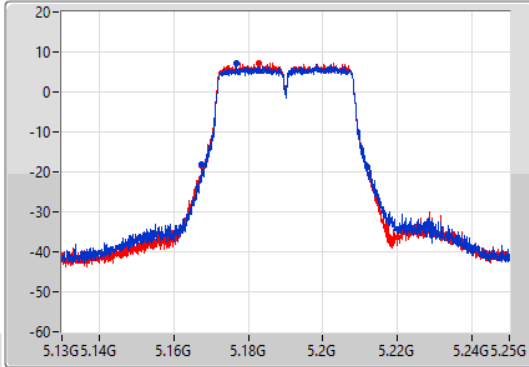
802.11n HT40_Nss1,(MCS8)_2TX

EBW

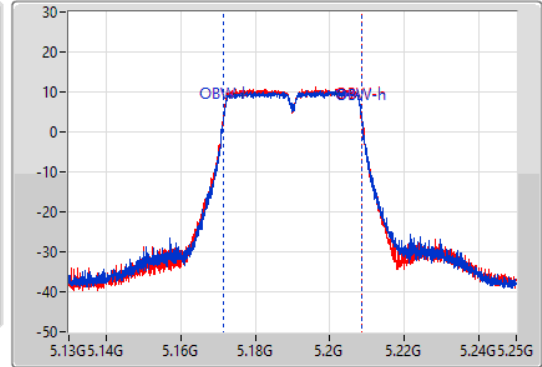
5190MHz

28/05/2022

CF
5.19GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.19GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.4M	5.16756G	5.21196G	36.882M	5.171589G	5.208471G	Inf	1
44.28M	5.1675G	5.21178G	36.882M	5.171529G	5.208411G	Inf	2

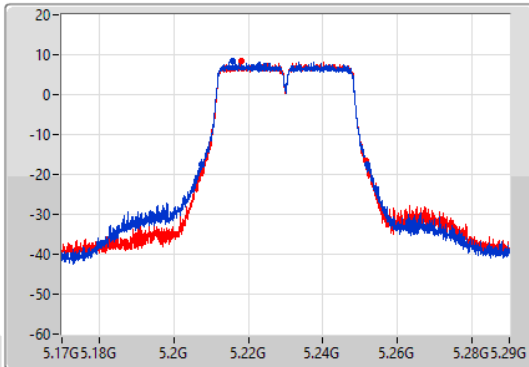
802.11n HT40_Nss1,(MCS8)_2TX

EBW

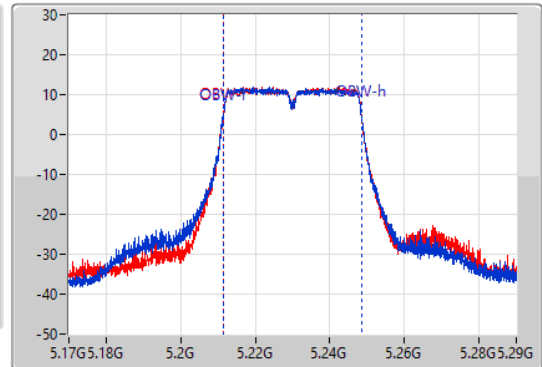
5230MHz

08/04/2022

CF
5.23GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.23GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.46M	5.20732G	5.25178G	37.001M	5.211409G	5.248411G	Inf	1
44.16M	5.20744G	5.2516G	36.882M	5.211529G	5.248411G	Inf	2

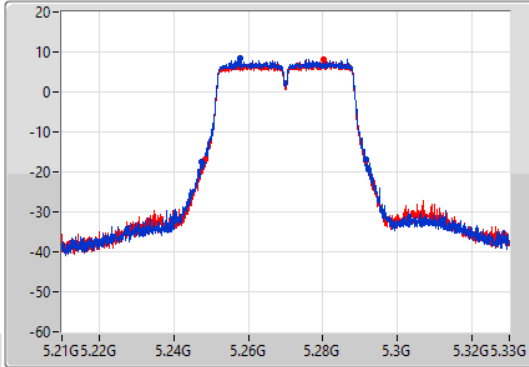
802.11n HT40_Nss1,(MCS8)_2TX

EBW

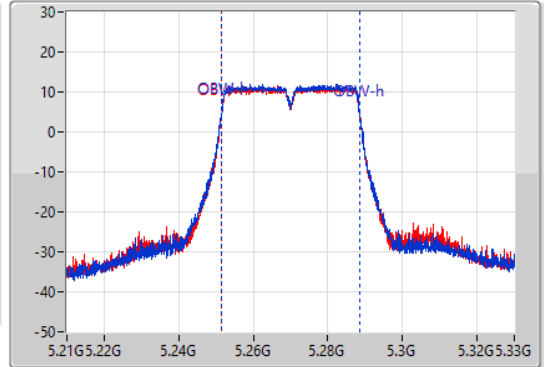
5270MHz

14/04/2022

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



CF
5.27GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.28M	5.24744G	5.29172G	36.882M	5.251529G	5.288411G	Inf	1
43.2M	5.24834G	5.29154G	36.942M	5.251529G	5.288471G	Inf	2

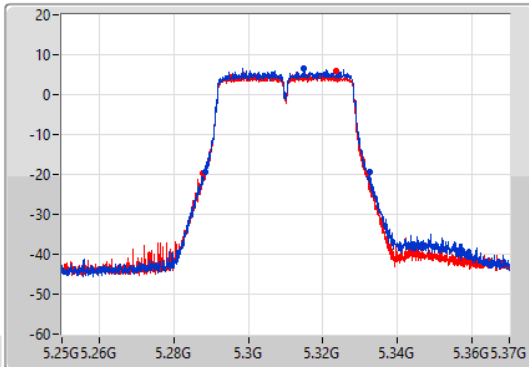
802.11n HT40_Nss1,(MCS8)_2TX

EBW

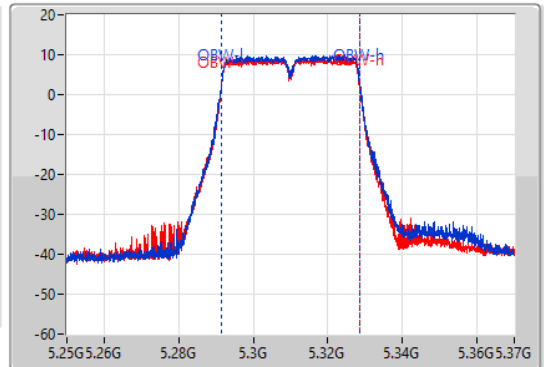
5310MHz

14/04/2022

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



CF
5.31GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.34M	5.28828G	5.33262G	36.882M	5.291589G	5.328471G	Inf	1
43.98M	5.28786G	5.33184G	36.942M	5.291529G	5.328471G	Inf	2

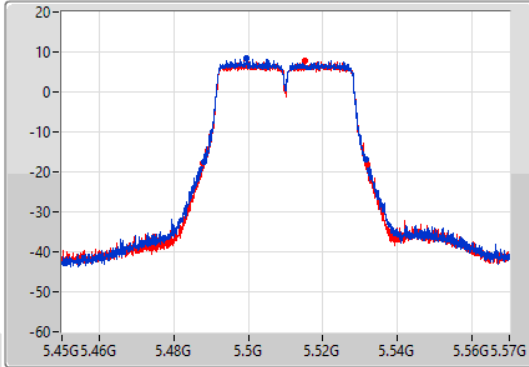
802.11n HT40_Nss1,(MCS8)_2TX

EBW

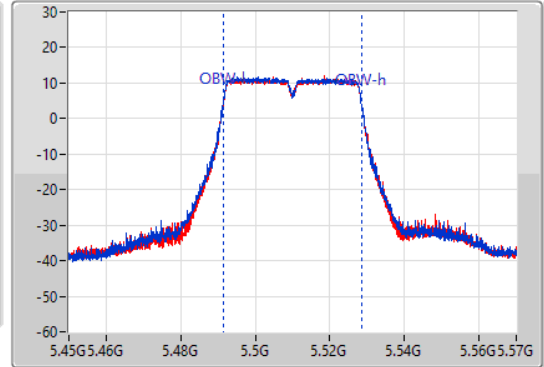
5510MHz

14/04/2022

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



CF
5.51GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.62M	5.48804G	5.53166G	36.942M	5.491469G	5.528411G	Inf	1
44.16M	5.48774G	5.5319G	36.882M	5.491529G	5.528411G	Inf	2

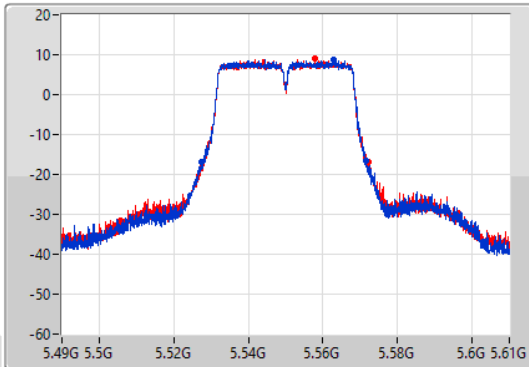
802.11n HT40_Nss1,(MCS8)_2TX

EBW

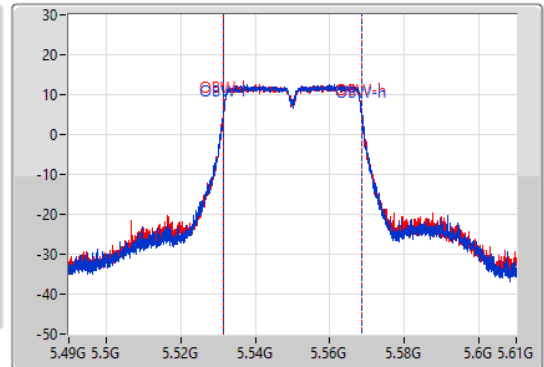
5550MHz

14/04/2022

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



CF
5.55GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
44.1M	5.52738G	5.57148G	36.942M	5.531529G	5.568471G	Inf	1
44.58M	5.52756G	5.57214G	36.942M	5.531529G	5.568471G	Inf	2

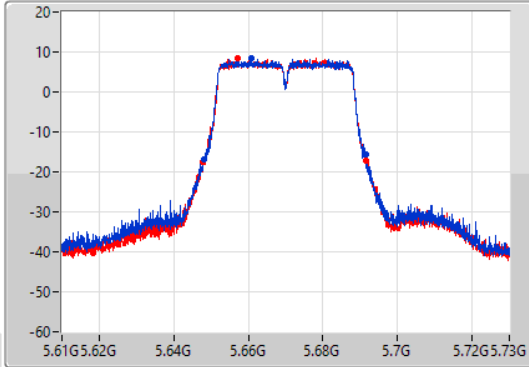
802.11n HT40_Nss1,(MCS8)_2TX

EBW

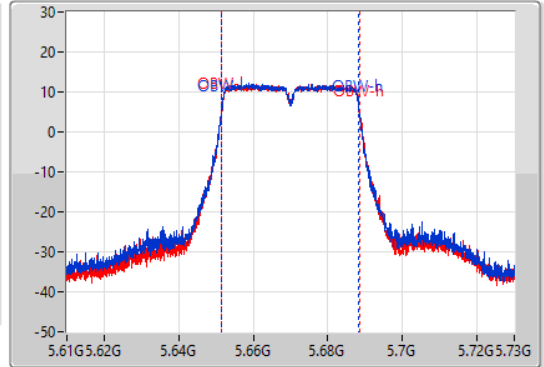
5670MHz

14/04/2022

CF
5.67GHz
Span
120MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.67GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
43.62M	5.64804G	5.69166G	36.882M	5.651469G	5.688351G	Inf	1
43.86M	5.64774G	5.6916G	36.942M	5.651529G	5.688471G	Inf	2

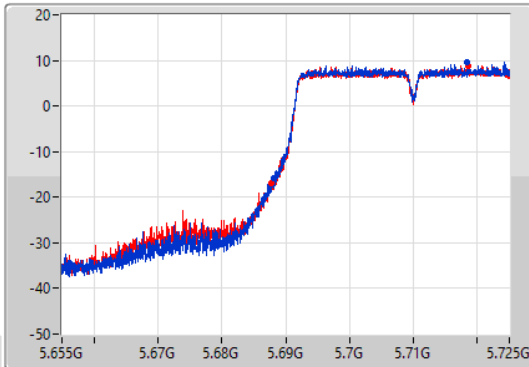
802.11n HT40_Nss1,(MCS0)_2TX

EBW

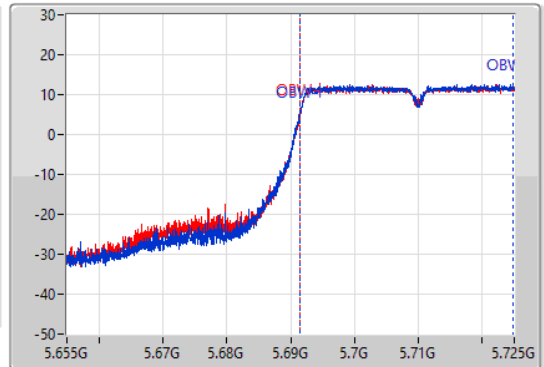
5710MHz Straddle 5.47-5.725GHz

14/04/2022

CF
5.69GHz
Span
70MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.69GHz
Span
70MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



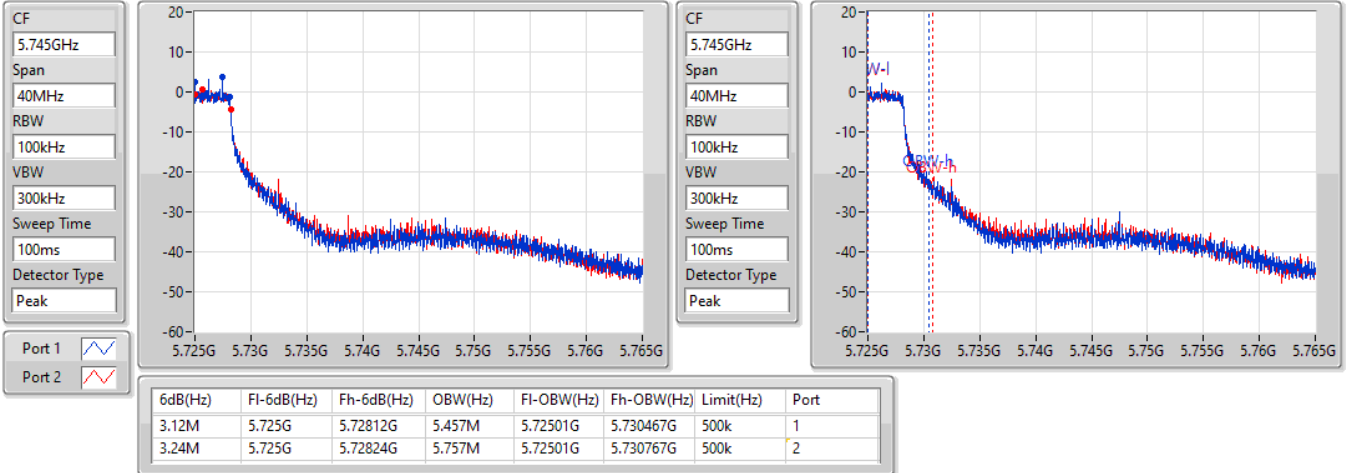
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.925M	5.688075G	5.725G	33.408M	5.691434G	5.724843G	Inf	1
37.24M	5.68776G	5.725G	33.408M	5.691434G	5.724843G	Inf	2

802.11n HT40_Nss1,(MCS8)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

14/04/2022

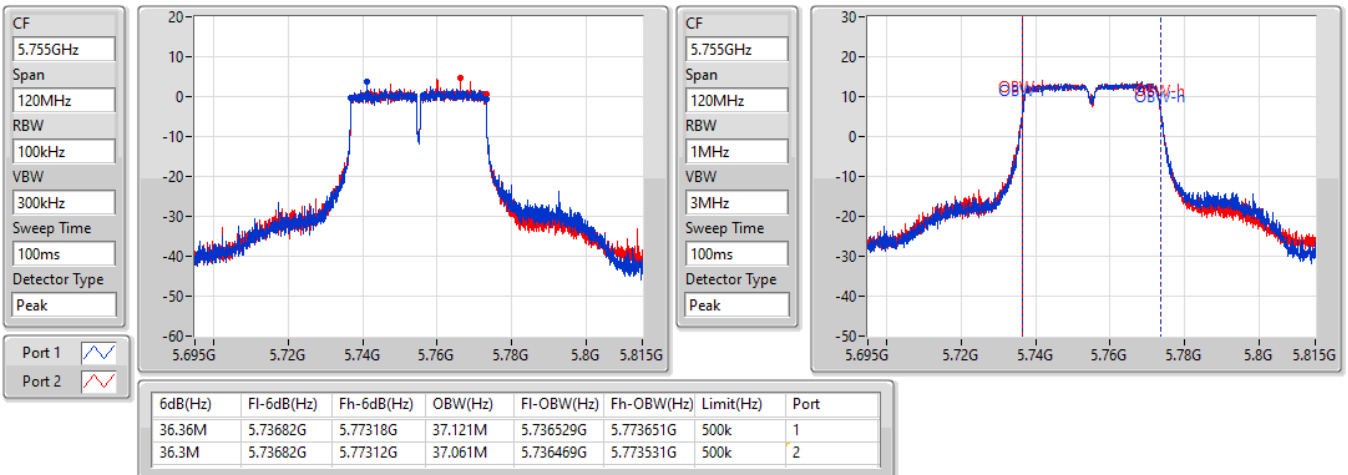


802.11n HT40_Nss1,(MCS8)_2TX

EBW

5755MHz

14/04/2022



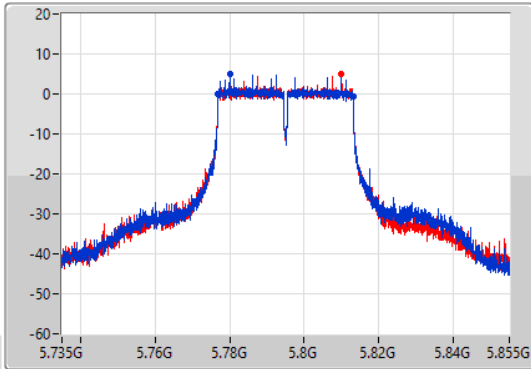
802.11n HT40_Nss1,(MCS8)_2TX

EBW

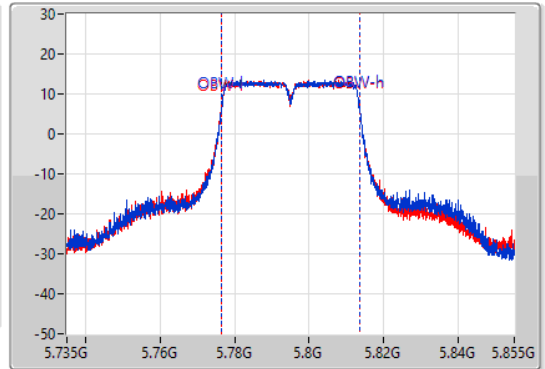
5795MHz

14/04/2022

CF
5.795GHz
Span
120MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
5.795GHz
Span
120MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	5.77682G	5.81312G	37.121M	5.776409G	5.813531G	500k	1
36.36M	5.77682G	5.81318G	37.121M	5.776409G	5.813531G	500k	2

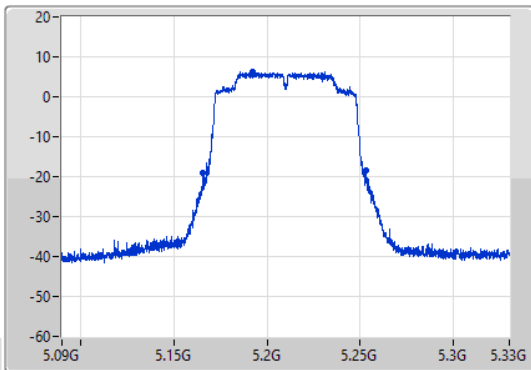
802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

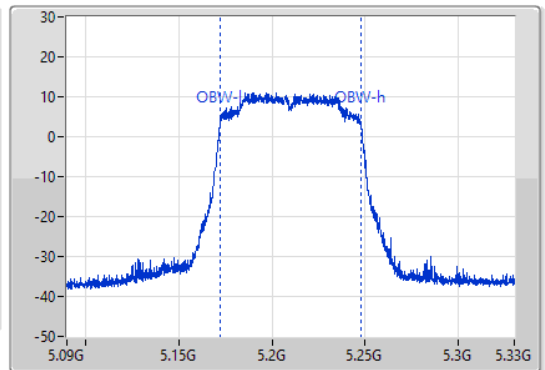
5210MHz

08/04/2022

CF
5.21GHz
Span
240MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.21GHz
Span
240MHz
RBW
2MHz
VBW
10MHz
Sweep Time
100ms
Detector Type
Peak



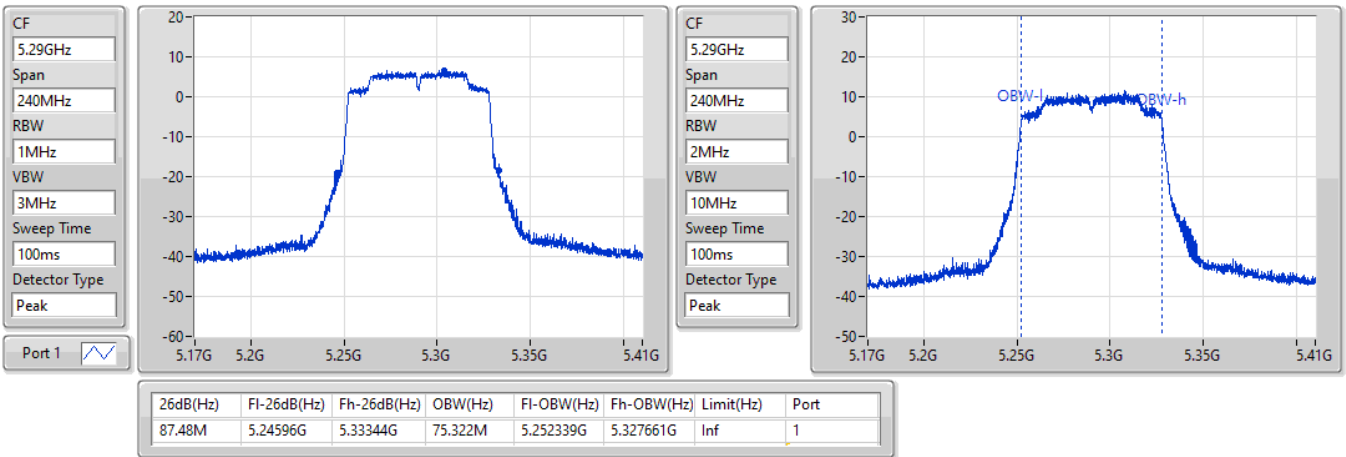
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
87.24M	5.16584G	5.25308G	75.202M	5.172339G	5.247541G	Inf	1

802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

5290MHz

14/04/2022

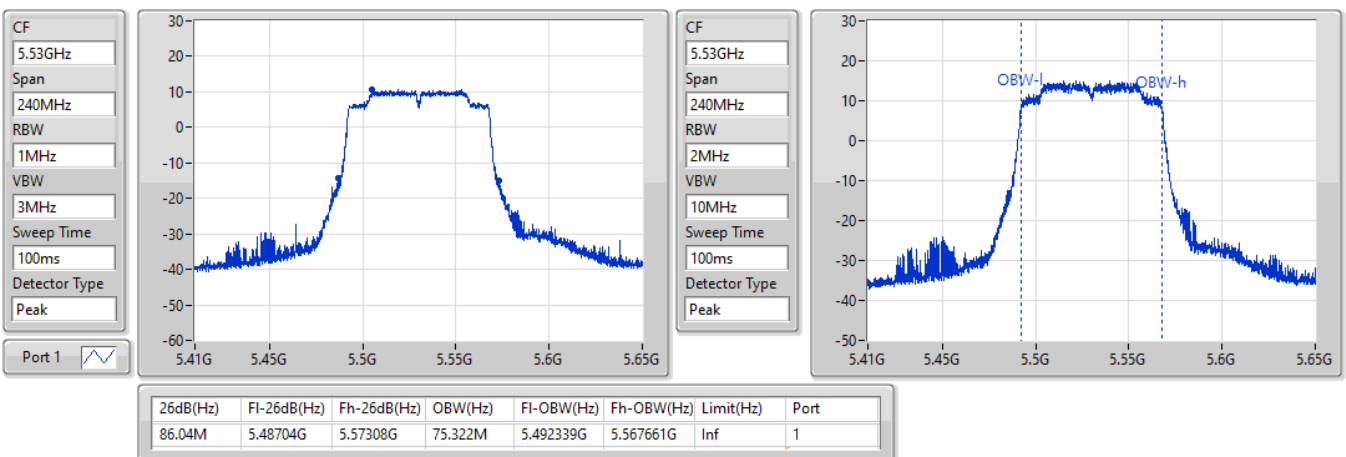


802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

5530MHz

14/04/2022

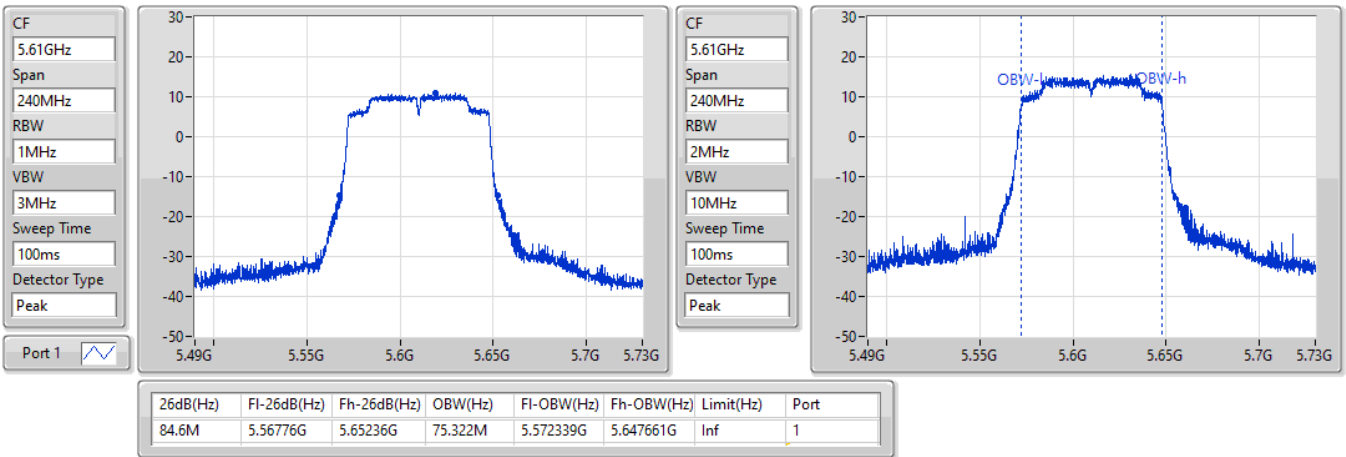


802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

5610MHz

16/04/2022

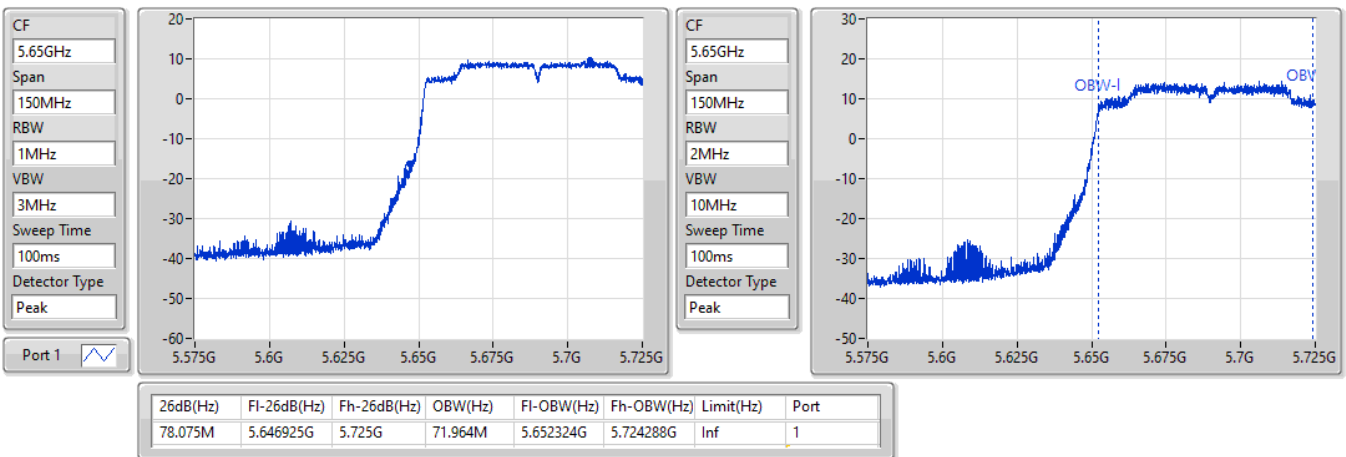


802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

5690MHz Straddle 5.47-5.725GHz

14/04/2022

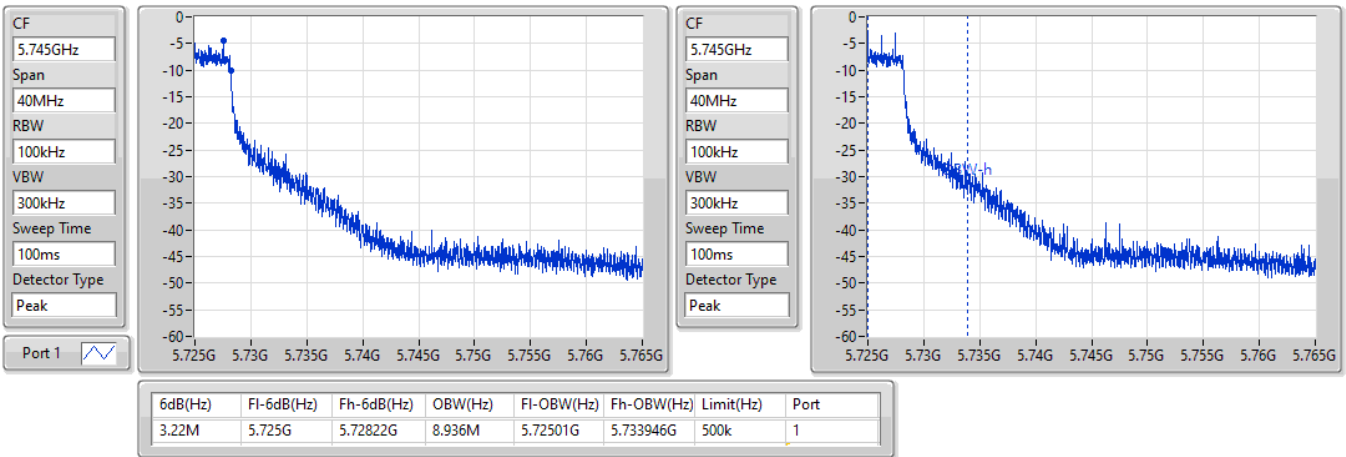


802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

5690MHz Straddle 5.725-5.85GHz

14/04/2022

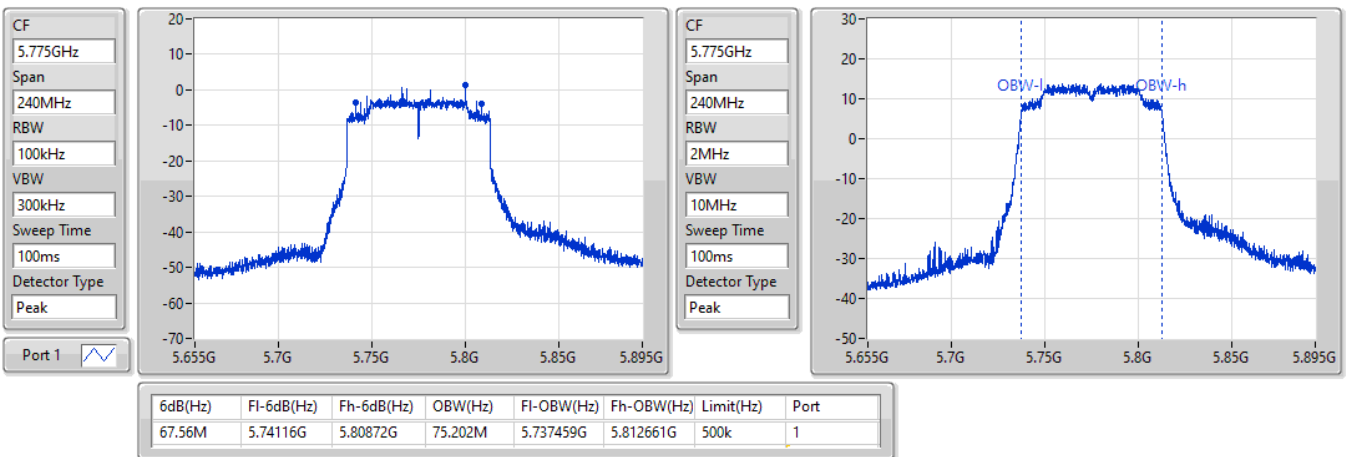


802.11ac VHT80_Nss1,(MCS0)_1TX(Port1)

EBW

5775MHz

14/04/2022

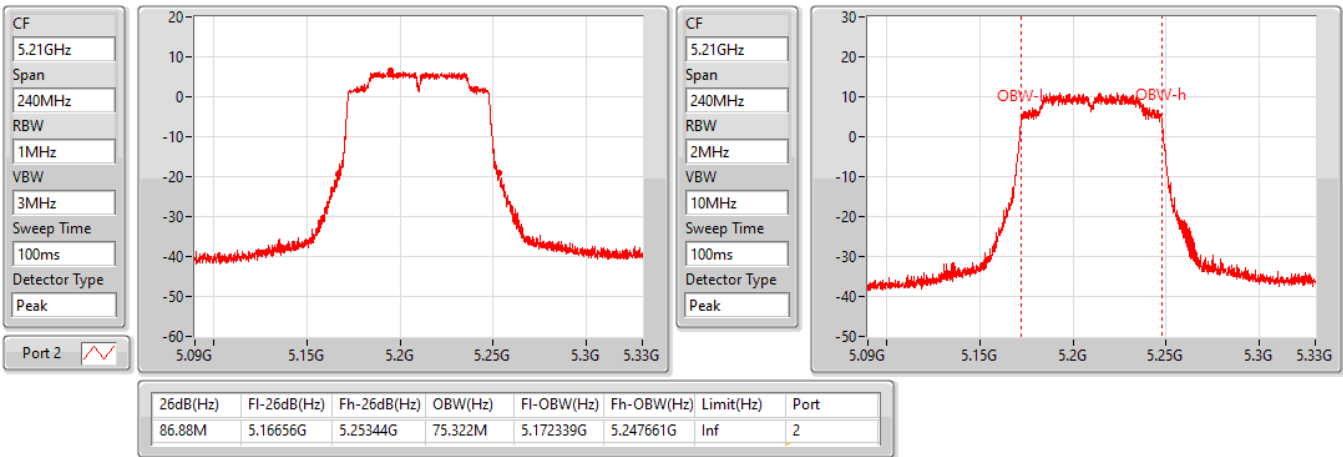


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5210MHz

08/04/2022

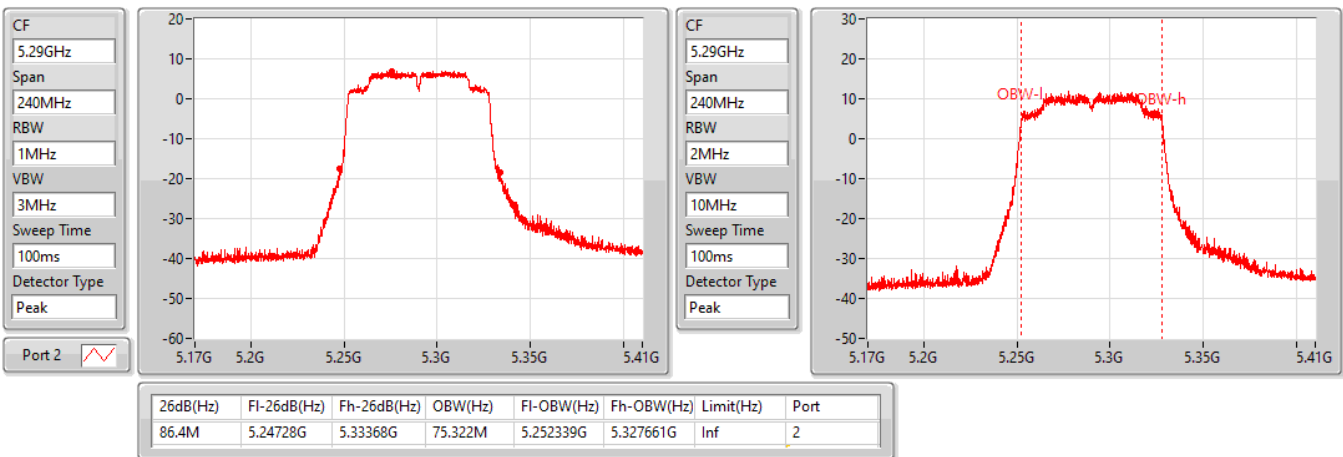


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5290MHz

14/04/2022

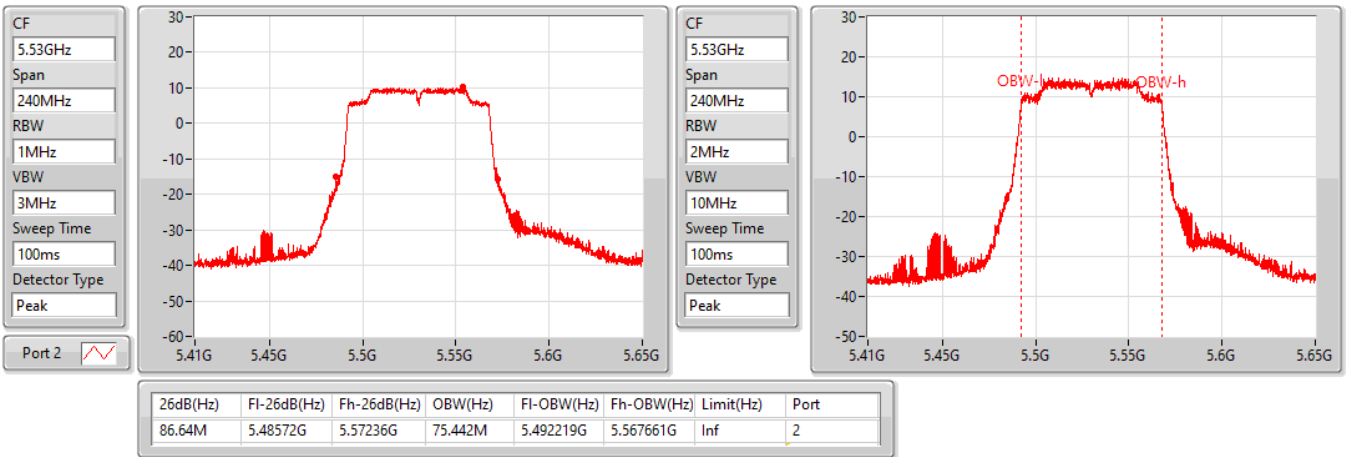


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5530MHz

16/04/2022

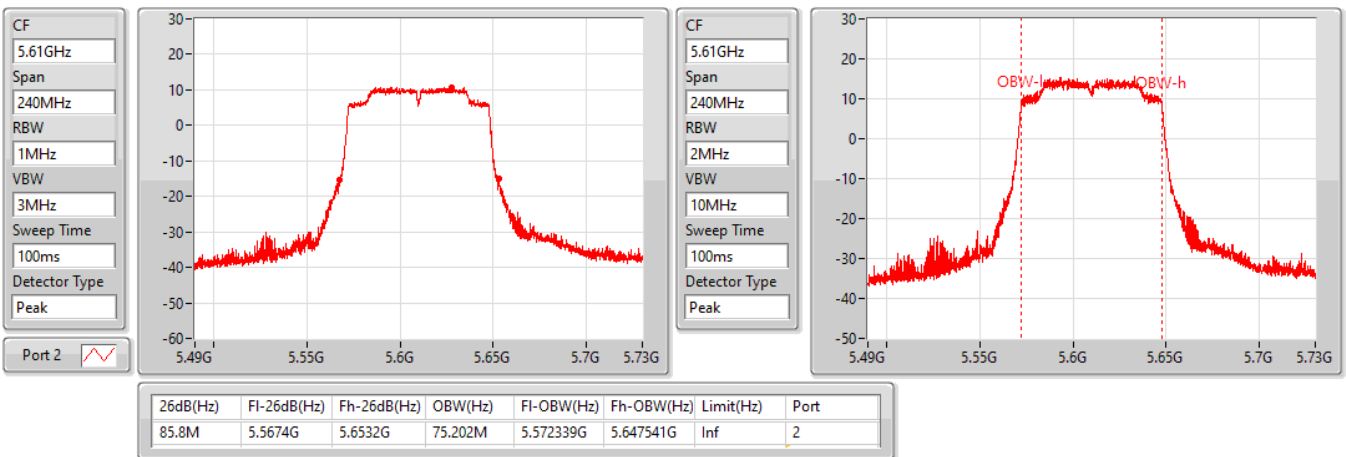


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5610MHz

16/04/2022

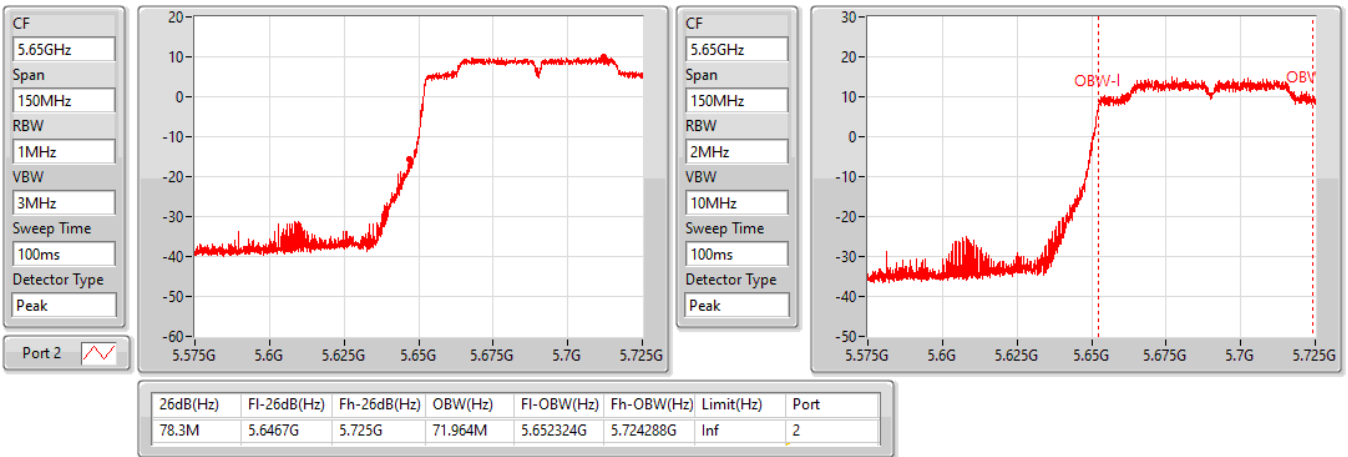


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5690MHz Straddle 5.47-5.725GHz

14/04/2022

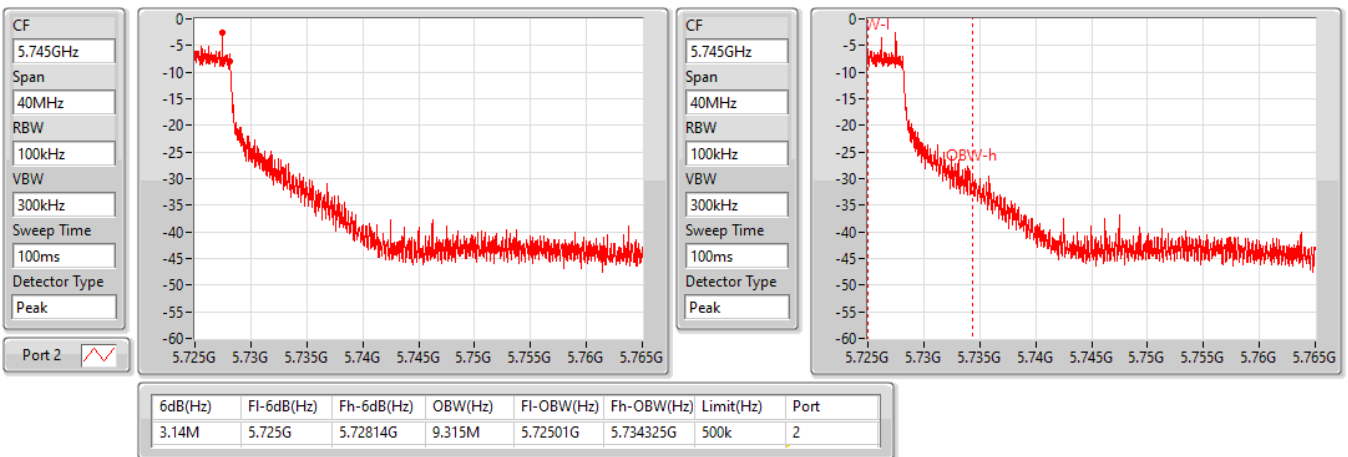


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5690MHz Straddle 5.725-5.85GHz

14/04/2022

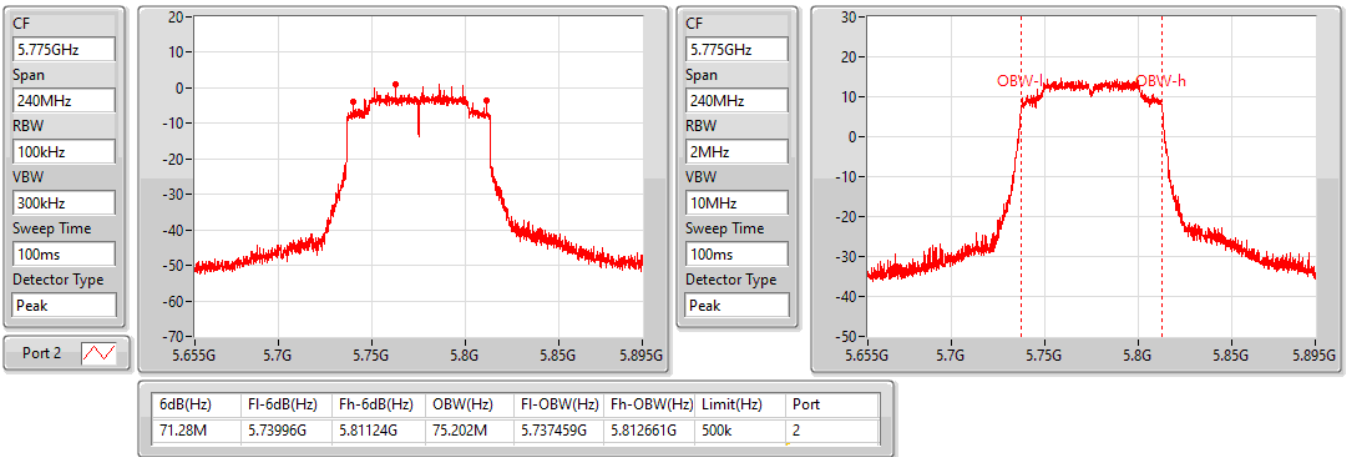


802.11ac VHT80_Nss1,(MCS0)_1TX(Port2)

EBW

5775MHz

14/04/2022

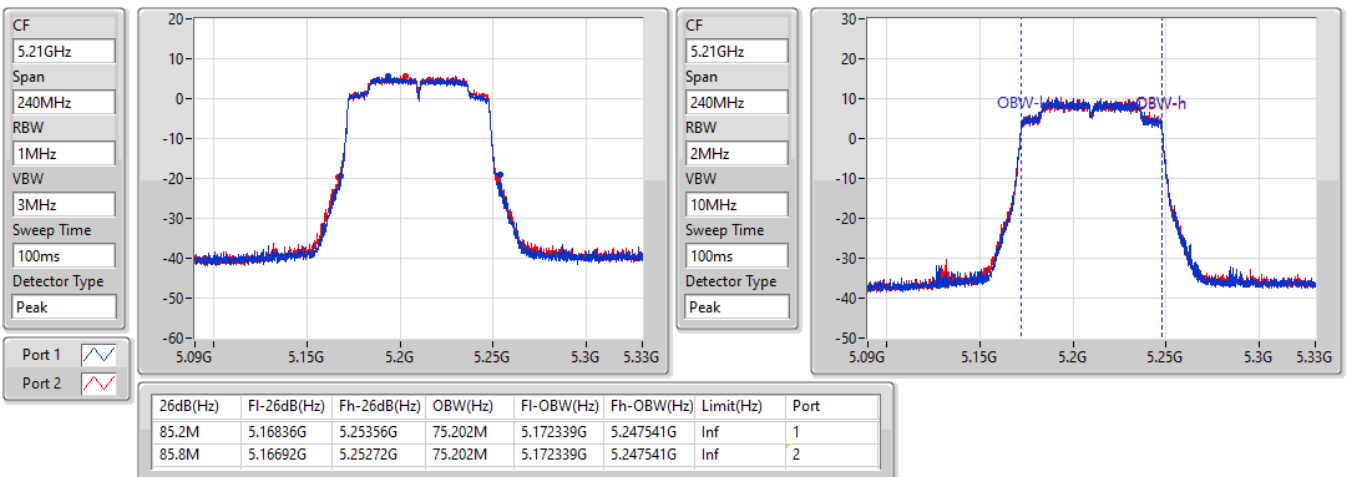


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5210MHz

08/04/2022

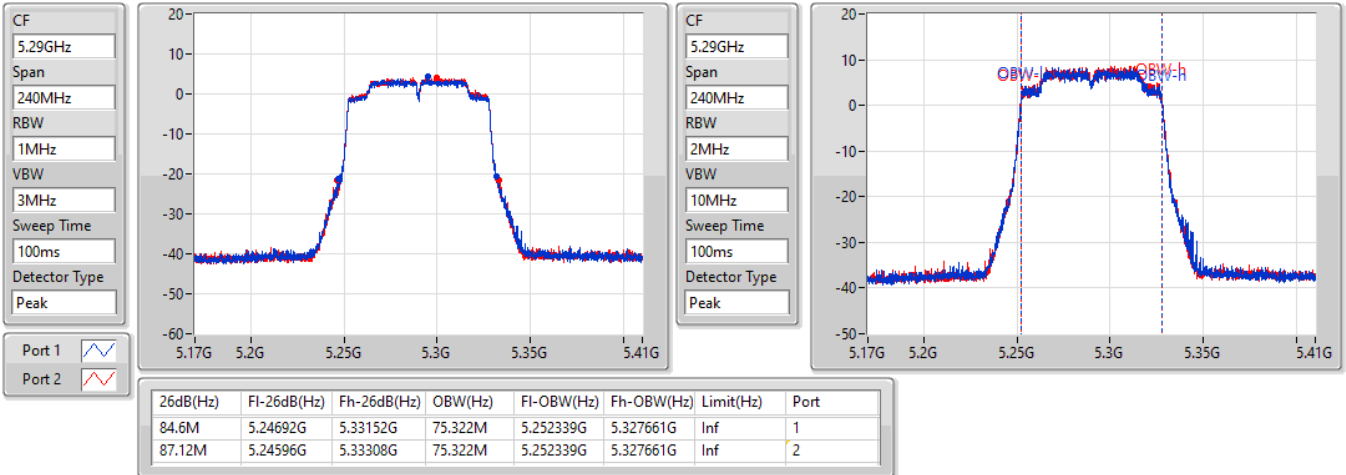


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5290MHz

28/05/2022

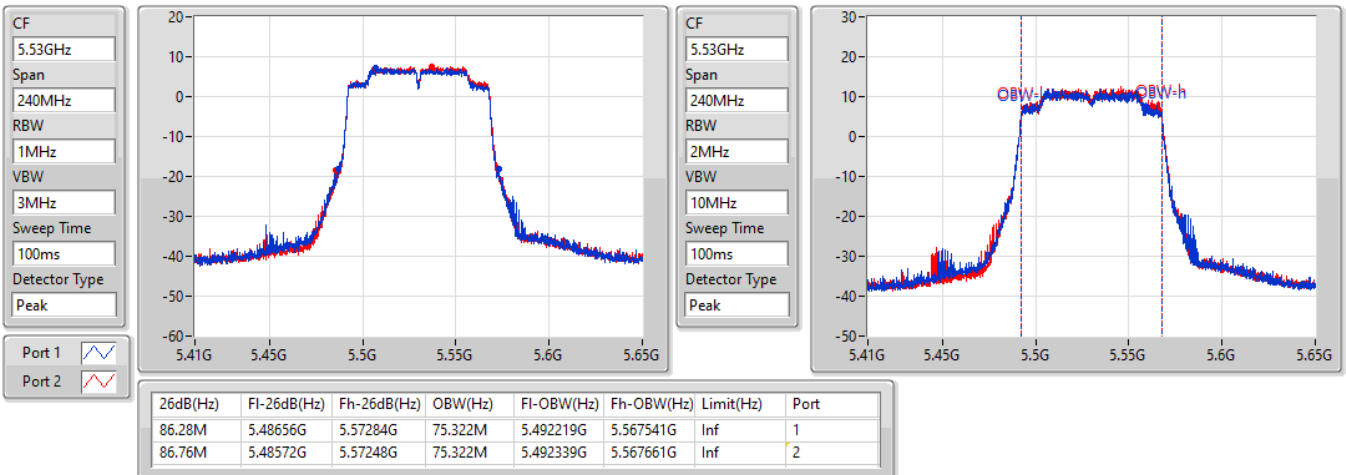


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5530MHz

28/05/2022

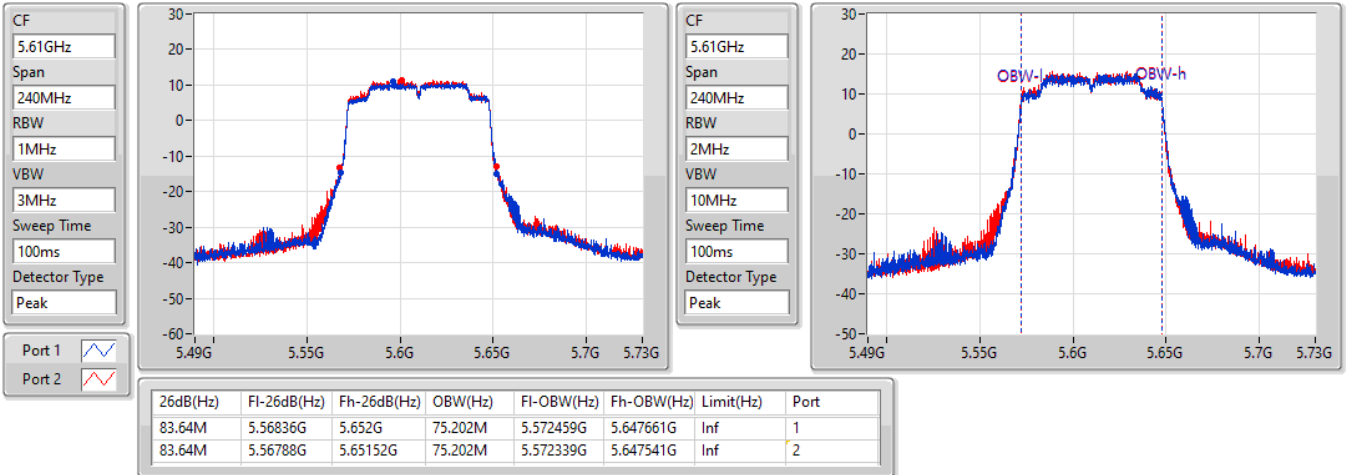


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5610MHz

14/04/2022

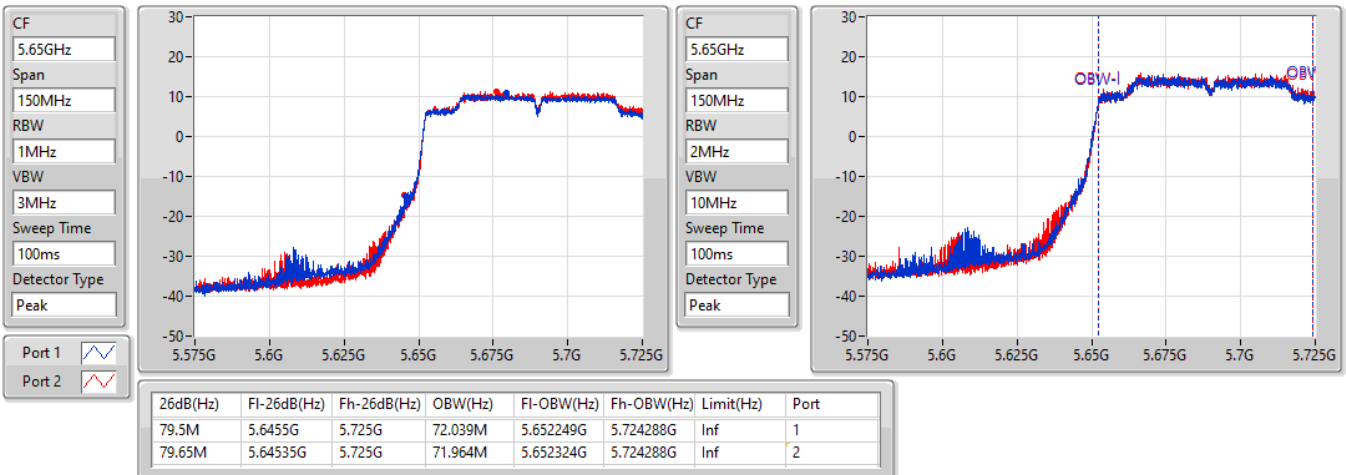


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

14/04/2022

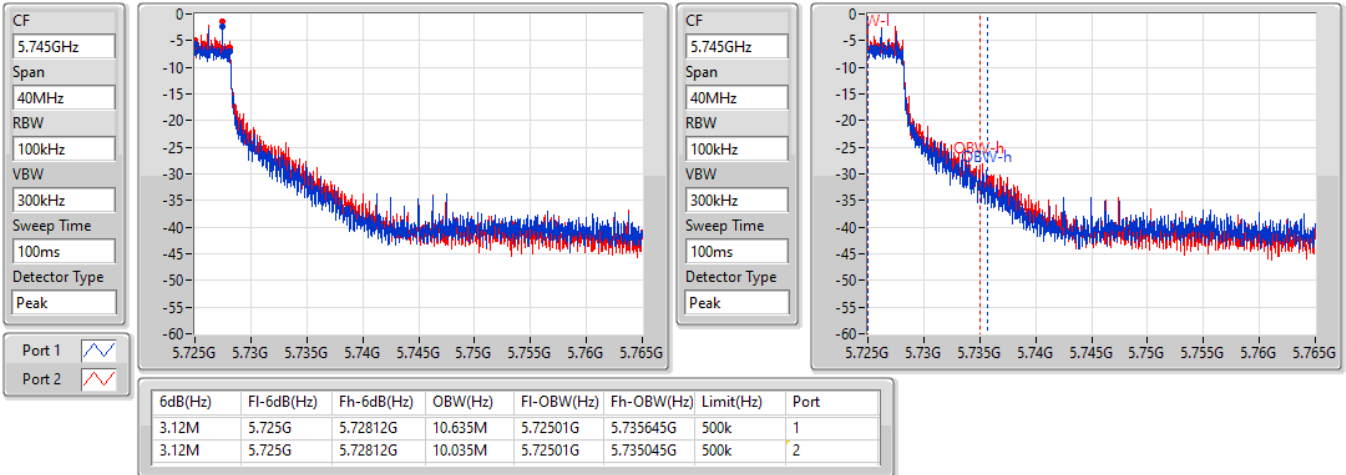


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

14/04/2022

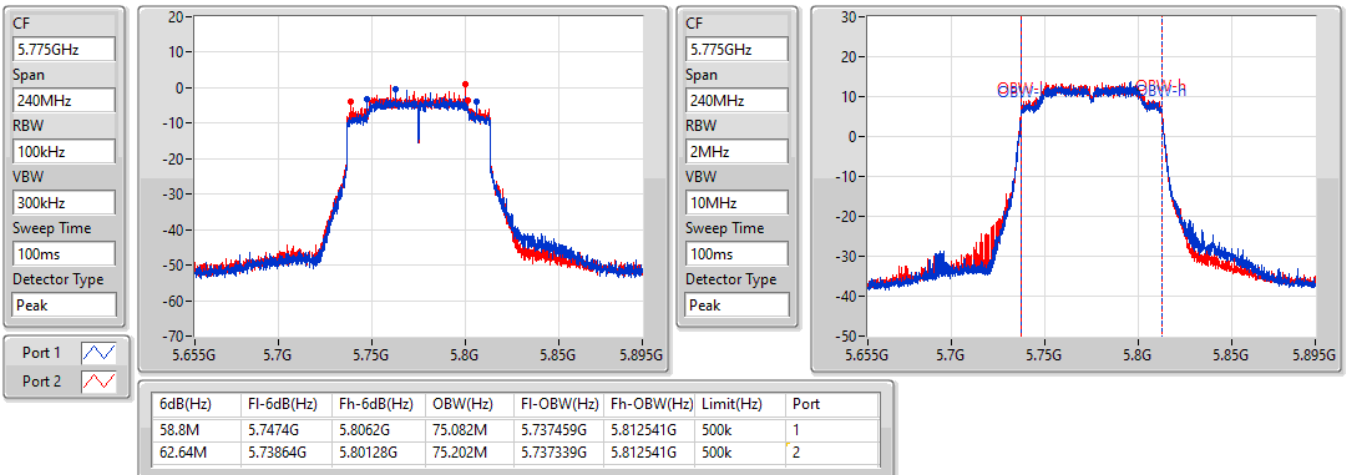


802.11ac VHT80_Nss1,(MCS0)_2TX

EBW

5775MHz

14/04/2022

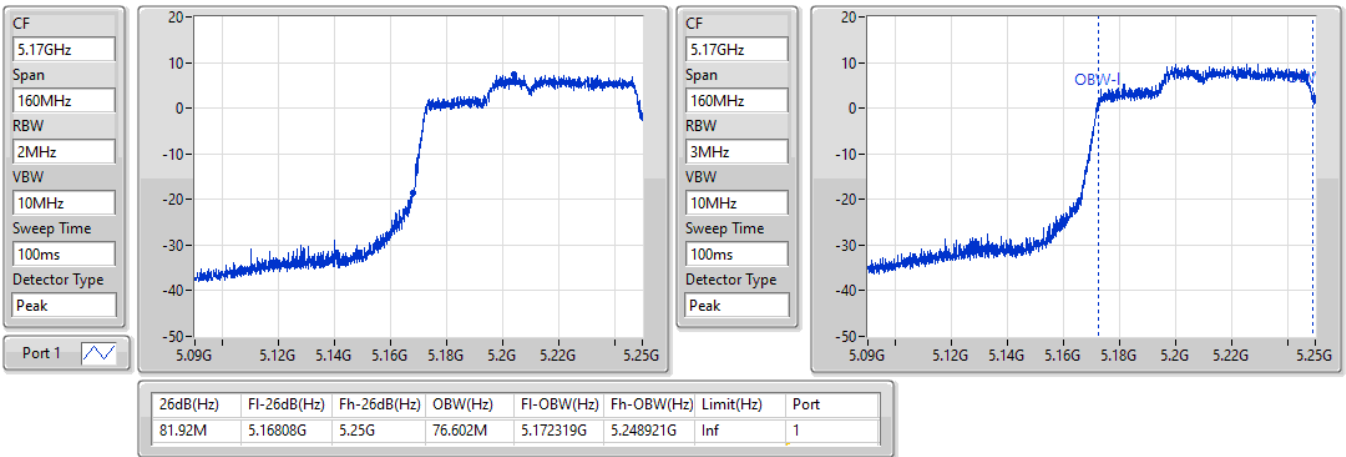


802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)

EBW

5250MHz Straddle 5.15-5.25GHz

28/05/2022

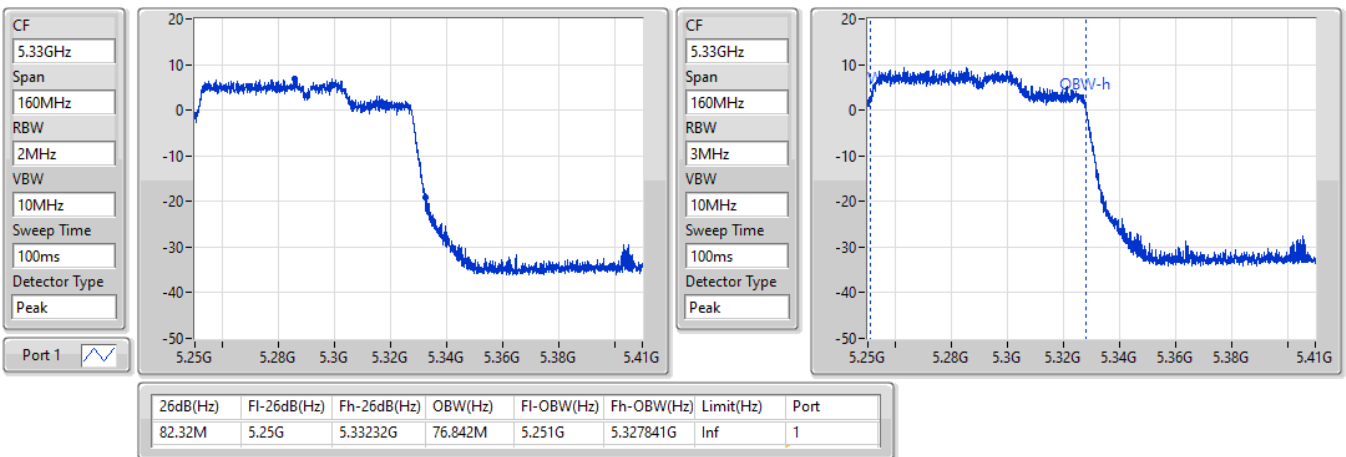


802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)

EBW

5250MHz Straddle 5.25-5.35GHz

28/05/2022

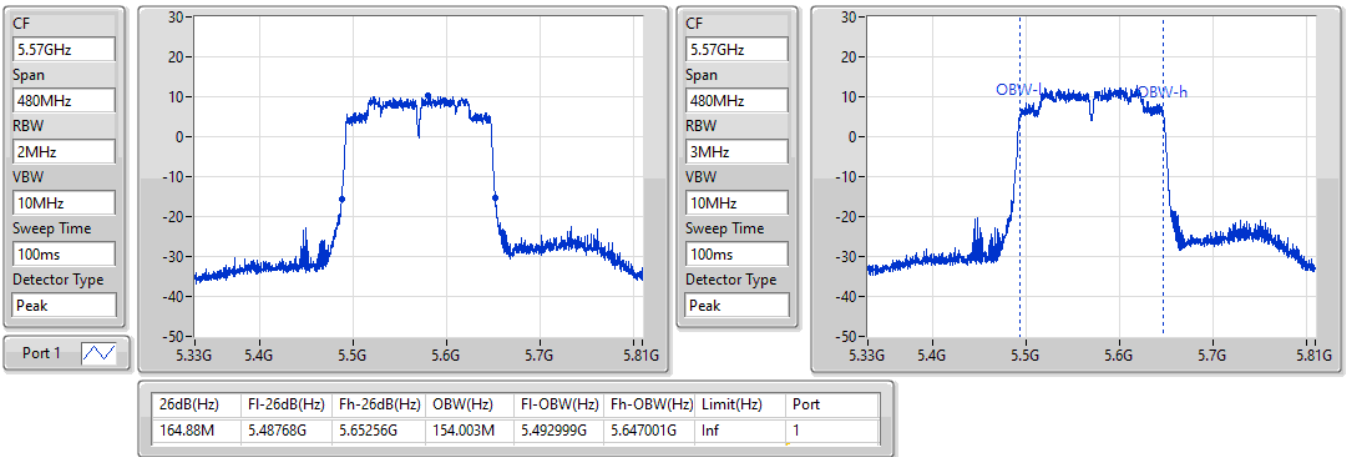


802.11ac VHT160_Nss1,(MCS0)_1TX(Port1)

EBW

5570MHz

14/04/2022

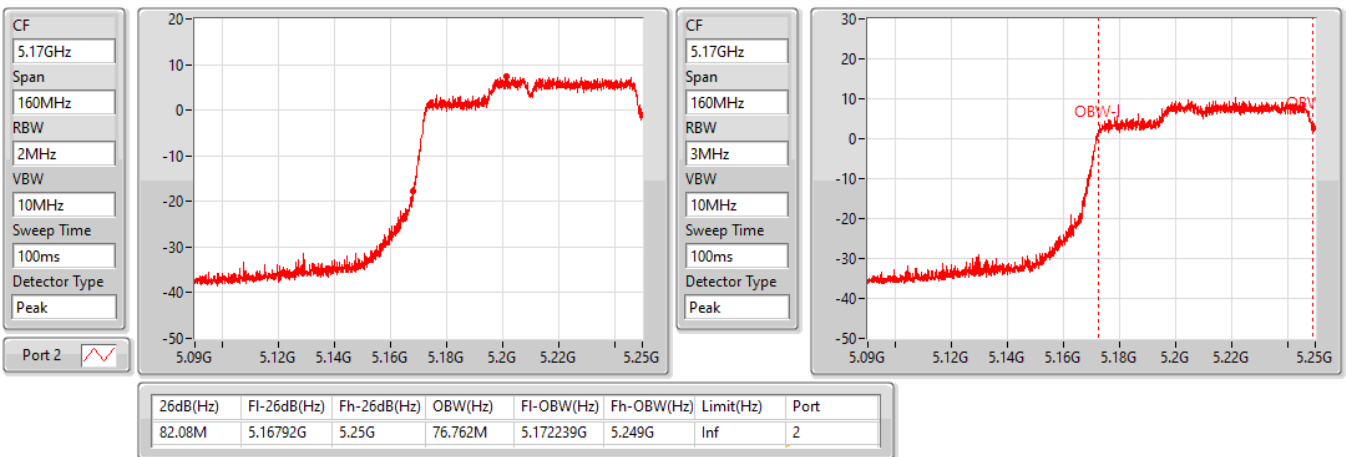


802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)

EBW

5250MHz Straddle 5.15-5.25GHz

08/04/2022

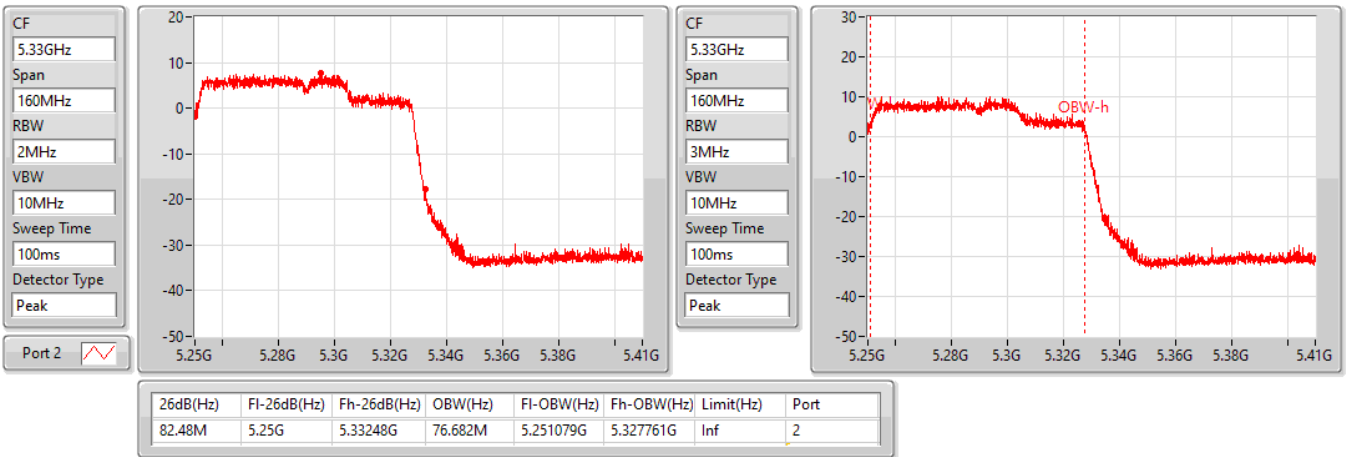


802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)

EBW

5250MHz Straddle 5.25-5.35GHz

08/04/2022



802.11ac VHT160_Nss1,(MCS0)_1TX(Port2)

EBW

5570MHz

14/04/2022

