



FCC RADIO TEST REPORT

FCC ID : QXO-AP510E
Equipment : 802.11ax Access Point
Brand Name : Extreme Networks
Model Name : AP510e
Applicant : Extreme Networks, Inc.
2121 RDU Center Drive Morrisville North Carolina
United States 27560
Manufacturer : Extreme Networks, Inc.
2121 RDU Center Drive Morrisville North Carolina
United States 27560
Standard : 47 CFR FCC Part 15.407

The product was received on Oct. 28, 2022, and testing was started from Nov. 18, 2022 and completed on Jan. 30, 2023. We, Sporton International Inc. Hsinchu 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 variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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Photographs of EUT v01



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Sandy Chuang



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), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.15-5.25GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.15-5.25GHz	802.11ac VHT80	80	1TX, 2TX, 4TX



5.15-5.25GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.15-5.25GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX, 4TX
5.15-5.25GHz	802.11ac VHT160	160	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ax HEW160	160	1TX, 2TX, 4TX
5.15-5.25GHz	802.11ac VHT160-BF	160	2TX, 4TX
5.15-5.25GHz	802.11ax HEW160-BF	160	2TX, 4TX
5.25-5.35GHz	802.11a	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.25-5.35GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX, 4TX
5.25-5.35GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.25-5.35GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.25-5.35GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.25-5.35GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX, 4TX
5.25-5.35GHz	802.11ac VHT160	160	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ac VHT160-BF	160	2TX, 4TX
5.25-5.35GHz	802.11ax HEW160	160	1TX, 2TX, 4TX
5.25-5.35GHz	802.11ax HEW160-BF	160	2TX, 4TX
5.47-5.725GHz	802.11a	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX, 4TX
5.47-5.725GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.47-5.725GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.47-5.725GHz	802.11n HT40	40	1TX, 2TX, 4TX



5.47-5.725GHz	802.11n HT40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.47-5.725GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.47-5.725GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX, 4TX
5.47-5.725GHz	802.11ac VHT160	160	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX, 4TX
5.47-5.725GHz	802.11ax HEW160	160	1TX, 2TX, 4TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX, 4TX
5.725-5.85GHz	802.11a	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ac VHT20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11ax HEW20	20	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX, 4TX
5.725-5.85GHz	802.11n HT40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ax HEW40	40	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX, 4TX
5.725-5.85GHz	802.11ac VHT80	80	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX, 4TX
5.725-5.85GHz	802.11ax HEW80	80	1TX, 2TX, 4TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX, 4TX

Note:

- ◆ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Radio	Elevation angle above 30 degree Max Gain (dBi)	Use Condition
1	Extreme Networks	ML-2452-APA2-01	Omni	RP SMA male	1, 2	-	Indoor/Outdoor
2	Extreme Networks	ML-2452-APA2-02	Omni	RP SMA male	1, 2	-	Indoor/Outdoor
3	Extreme Networks	ML-2452-HPA5-036	Omni	RP SMA male	1, 2	-	Indoor/Outdoor
4	Extreme Networks	ML-2452-HPAG4A6-01	Omni	N Male	1, 2	5.7	Indoor/Outdoor
5	Extreme Networks	ML-2452-PNA5-01R	Panel	N Male	1, 2	5.26	Indoor/Outdoor
6	Extreme Networks	ML-2452-HPAG5A8-01	Omni	N Male	1, 2	-6.05	Indoor/Outdoor
7	Extreme Networks	ML-2452-PTA4M4-036	Omni	RP SMA male	1, 2	-	Indoor/Outdoor
8	Extreme Networks	WS-AO-DQ04360N	Omni	N Male	1, 2	-	Indoor/Outdoor
9	Extreme Networks	ML-2452-SEC6M4-036	Panel	RP SMA male	1, 2	-	Indoor/Outdoor
10	Extreme Networks	WS-AI-DQ05120	Panel	RP SMA male	1, 2	-	Indoor/Outdoor
11	Extreme Networks	ML-2452-PNA7-01R	Panel	RP SMA male	1, 2, 3	7.9	Indoor/Outdoor
12	Extreme Networks	ML-2499-HPA8-01	Omni	N Male	3	-	Indoor/Outdoor
13	Extreme Networks	AI-DQ04360S	Omni	RP SMA male	1, 2	-	Indoor/Outdoor
14	Extreme Networks	AIO-DQ15021-RPSMA	Panel	RP SMA male	1, 2	-	Indoor

Note1:

Ant.	Antenna Gain(dBi)				Cable loss(dB)				True Gain(dBi)			
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	Thread	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	Thread	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	Thread
1	3.17	4.85	-	-	1	2	-	-	2.17	2.85	-	-
2	3.17	4.85	-	-	1	2	-	-	2.17	2.85	-	-
3	3.9	5.7	-	-	1	2	-	-	2.9	3.7	-	-
4	4	7.3	-	-	1	2	-	-	3	5.3	-	-
5	4.5	5	-	-	1	2	-	-	3.5	3	-	-
6	5	8	-	-	1	2	-	-	4	6	-	-
7	5	6.6	-	-	1	2	-	-	4	4.6	-	-
8	5.5	6	-	-	1	2	-	-	4.5	4	-	-
9	6.92	7.23	-	-	1	2	-	-	5.92	5.23	-	-
10	6.92	7.23	-	-	1	2	-	-	5.92	5.23	-	-
11	7.8	10.7	7.8	7.8	1	2	1	1	6.8	8.7	6.8	6.8
12	-	-	8	8	-	-	1	1	-	-	7	7
13	5.5	6	-	-	1	2	-	-	4.5	4	-	-
14	-	15	-	-	-	2	-	-	-	13	-	-

Note2: The above information was declared by manufacturer.

Note3:

For 2.4GHz function:

For IEEE 802.11b/g/n/ax mode (1TX, 2TX, 4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For 5GHz function:

For IEEE 802.11a/n/ac/ax mode (1TX, 2TX, 4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For Bluetooth and Thread mode (1TX/1RX):

Only Port 1 can be use as transmitting/receiving antenna.



Note 4: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

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

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

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

$$DG = 10 \log \left[\frac{(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2}{N_{ANT}} \right] \Rightarrow 10 \log \left[\frac{(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2}{N_{ANT}} \right]$$

Where ;

Antenna set 21

5G Band1 G1 = 13 dBi; G2 = 13 dBi; G3 = 13 dBi; G4 = 13 dBi; DG = 13 dBi

5G Band2 G1 = 13 dBi; G2 = 13 dBi; G3 = 13 dBi; G4 = 13 dBi; DG = 13 dBi

5G Band3 G1 = 13 dBi; G2 = 13 dBi; G3 = 13 dBi; G4 = 13 dBi; DG = 13 dBi

5G Band4 G1 = 13 dBi; G2 = 13 dBi; G3 = 13 dBi; G4 = 13 dBi; DG = 13 dBi

Polarization of antenna:

2TX: 2*Horizontal or 2*Vertical. Thus, the array gain adds 10log (2).

4TX: 2*Horizontal, 2*Vertical. Thus, the array gain only adds 10log (2).

For 2T1S

5G Band1 DG = 13 dBi

5G Band2 DG = 13 dBi

5G Band3 DG = 13 dBi

5G Band4 DG = 13 dBi

For 4T1S

5G Band1 DG = 16.01 dBi

5G Band2 DG = 16.01 dBi

5G Band3 DG = 16.01 dBi

5G Band4 DG = 16.01 dBi

For 4T4S

5G Band1 DG = 13 dBi

5G Band2 DG = 13 dBi

5G Band3 DG = 13 dBi

5G Band4 DG = 13 dBi



1.1.3 Mode Test Duty Cycle

<For Radio 1>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.947	0.24	2.065m	1k
802.11ax HEW20	0.949	0.23	537.5u	3k
802.11ax HEW20-BF	0.949	0.23	537.5u	3k
802.11ax HEW40	0.896	0.48	261.25u	10k
802.11ax HEW40-BF	0.896	0.48	261.25u	10k
802.11ax HEW80	0.889	0.51	221.25u	10k
802.11ax HEW80-BF	0.889	0.51	221.25u	10k
802.11ax HEW160	0.858	0.67	170u	10k
802.11ax HEW160-BF	0.858	0.67	170u	10k

<For Radio 2>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.947	0.24	2.065m	1k
802.11ax HEW20	0.983	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20-BF	0.983	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.969	0.14	908.75u	3k
802.11ax HEW40-BF	0.969	0.14	908.75u	3k
802.11ax HEW80	0.944	0.25	473.75u	3k
802.11ax HEW80-BF	0.944	0.25	473.75u	3k
802.11ax HEW160	0.904	0.44	273.75u	10k
802.11ax HEW160-BF	0.904	0.44	273.75u	10k

Note:
♦ DC is Duty Cycle.
♦ DCF is Duty Cycle Factor.



1.1.4 EUT Operational Condition

EUT Power Type	From Power adapter or PoE			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	For 802.11ax in 2.4GHz and 802.11n/ac/ax in 5GHz.			
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/>	Without 5600~5650MHz
Function	<input checked="" type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
TPC Function	<input checked="" type="checkbox"/>	With TPC	<input type="checkbox"/>	Without TPC
Channel Puncturing Function	<input type="checkbox"/>	Supported	<input checked="" type="checkbox"/>	Unsupported
Support RU	<input checked="" type="checkbox"/>	Full RU	<input type="checkbox"/>	Partial RU
Test Software Version	MTool 3.0.0.6			

Note: The above information was declared by manufacturer.

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR8O1739-03AD、FR8O1739-04

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

Modifications	Performance Checking
1. Adding a Panel antenna (Ant.14) with higher gain for 5GHz. Please refer to section 1.1.2 for detailed information.	1. Emission Bandwidth 2. Maximum Output Power 3. Power Spectral Density 4. Unwanted Emissions
2. Changing Applicant/Manufacturer address to "2121 RDU Center Drive Morrisville North Carolina United States 27560" from "6480 Via Del Oro, San Jose, CA 95119".	After evaluating, the test results don't be affected.



1.1.6 Table for EUT support function

The EUT has three radios, the information as following table:

Radio	Function		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth/Thread
1	√	√	-
2	-	√	-
3	-	-	√

Function	Radio	Support Type	Support Band
AP	1,2,3	Master	Bluetooth/Thread/WLAN 5GHz UNII1~3
Client	1	Slave without Radar Detection (Sensor Mode)	WLAN 5GHz UNII1+UNII3
Bridge	1,2,3	Master	Bluetooth/Thread/WLAN 5GHz UNII1+UNII3
Mesh	1,2,3	Master	Bluetooth/Thread/WLAN 5GHz UNII1+UNII3

Note: The above information was declared by manufacturer.

1.1.7 Table for EUT operation function

Mode	Radio 1	Radio 2	Radio 3
1	2.4G(Master-AP)	5G-Full Band(Master-AP)	Bluetooth/Thread
2	5G UNII1+UNII3 / 2.4G Slave without Radar Detection (Sensor Mode)	5G-Full Band(Master-AP)	Bluetooth/Thread
3	5G-Low Band(Master-AP)	5G-High Band(Master-AP)	Bluetooth/Thread

Note: 1. The above information was declared by manufacturer.
2. The Mode 2 was same as client function of section 1.1.6.



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
- ♦ FCC KDB 789033 D02 v02r01

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

- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	TEL: 886-3-656-9065 FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Mason Chan	23.4-24.1 / 66-69	Nov. 29, 2022~Dec. 08, 2022
Radiated <Below 1GH>	03CH05-CB	Simmon Cheng	19.7-20.8 / 56-59	Nov. 18, 2022~Jan. 30, 2023
Radiated <Above 1GH>	03CH02-CB	Simmon Cheng	24.2-25.3 / 56-59	Nov. 18, 2022~Jan. 30, 2023
	03CH06-CB		21.7-22.8 / 56-59	

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
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

<For Radio 1>

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	58
5200MHz	79
5240MHz	83
5260MHz	63
5300MHz	63
5320MHz	63
5500MHz	47
5580MHz	59
5700MHz	49
5720MHz Straddle 5.47-5.725GHz	60
5720MHz Straddle 5.725-5.85GHz	60
5745MHz	72
5785MHz	82
5825MHz	71
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	61
5200MHz	74
5240MHz	83
5260MHz	62
5300MHz	65
5320MHz	62
5500MHz	53
5580MHz	60
5700MHz	39
5720MHz Straddle 5.47-5.725GHz	60
5720MHz Straddle 5.725-5.85GHz	60
5745MHz	69
5785MHz	81
5825MHz	70
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	57
5230MHz	71
5270MHz	62
5310MHz	56



Mode	Power Setting
5510MHz	48
5550MHz	59
5670MHz	57
5710MHz Straddle 5.47-5.725GHz	57
5710MHz Straddle 5.725-5.85GHz	57
5755MHz	78
5795MHz	78
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	56
5290MHz	54
5530MHz	48
5610MHz	62
5690MHz Straddle 5.47-5.725GHz	58
5690MHz Straddle 5.725-5.85GHz	58
5775MHz	66
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	45
5250MHz Straddle 5.25-5.35GHz	45
5570MHz	47
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5180MHz	53
5200MHz	66
5240MHz	75
5260MHz	50
5300MHz	52
5320MHz	53
5500MHz	49
5580MHz	47
5700MHz	45
5720MHz Straddle 5.47-5.725GHz	48
5720MHz Straddle 5.725-5.85GHz	48
5745MHz	69
5785MHz	76
5825MHz	70
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5190MHz	46
5230MHz	62
5270MHz	51
5310MHz	46
5510MHz	45



Mode	Power Setting
5550MHz	47
5670MHz	47
5710MHz Straddle 5.47-5.725GHz	46
5710MHz Straddle 5.725-5.85GHz	46
5755MHz	74
5795MHz	74
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5210MHz	44
5290MHz	46
5530MHz	46
5610MHz	49
5690MHz Straddle 5.47-5.725GHz	47
5690MHz Straddle 5.725-5.85GHz	47
5775MHz	64
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	35
5250MHz Straddle 5.25-5.35GHz	35
5570MHz	46
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	52
5200MHz	52
5240MHz	53
5260MHz	27
5300MHz	29
5320MHz	28
5500MHz	23
5580MHz	22
5700MHz	25
5720MHz Straddle 5.47-5.725GHz	25
5720MHz Straddle 5.725-5.85GHz	25
5745MHz	62
5785MHz	62
5825MHz	64
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	52
5200MHz	53
5240MHz	54
5260MHz	28
5300MHz	29
5320MHz	30



Mode	Power Setting
5500MHz	24
5580MHz	23
5700MHz	26
5720MHz Straddle 5.47-5.725GHz	26
5720MHz Straddle 5.725-5.85GHz	26
5745MHz	62
5785MHz	62
5825MHz	63
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	45
5230MHz	63
5270MHz	39
5310MHz	40
5510MHz	36
5550MHz	34
5670MHz	36
5710MHz Straddle 5.47-5.725GHz	35
5710MHz Straddle 5.725-5.85GHz	35
5755MHz	60
5795MHz	61
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	42
5290MHz	41
5530MHz	35
5610MHz	37
5690MHz Straddle 5.47-5.725GHz	34
5690MHz Straddle 5.725-5.85GHz	34
5775MHz	55
802.11ax HEW160_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	35
5250MHz Straddle 5.25-5.35GHz	35
5570MHz	37
802.11ax HEW20_Nss4,(MCS0)_4TX	-
5180MHz	56
5200MHz	64
5240MHz	66
5260MHz	39
5300MHz	41
5320MHz	41
5500MHz	37



Mode	Power Setting
5580MHz	35
5700MHz	38
5720MHz Straddle 5.47-5.725GHz	37
5720MHz Straddle 5.725-5.85GHz	37
5745MHz	63
5785MHz	63
5825MHz	64
802.11ax HEW40_Nss4,(MCS0)_4TX	-
5190MHz	46
5230MHz	65
5270MHz	40
5310MHz	41
5510MHz	37
5550MHz	36
5670MHz	37
5710MHz Straddle 5.47-5.725GHz	36
5710MHz Straddle 5.725-5.85GHz	36
5755MHz	62
5795MHz	62
802.11ax HEW80_Nss4,(MCS0)_4TX	-
5210MHz	42
5290MHz	42
5530MHz	37
5610MHz	38
5690MHz Straddle 5.47-5.725GHz	36
5690MHz Straddle 5.725-5.85GHz	36
5775MHz	62
802.11ax HEW160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	37
5250MHz Straddle 5.25-5.35GHz	37
5570MHz	39
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	51
5200MHz	52
5240MHz	53
5260MHz	26
5300MHz	27
5320MHz	28
5500MHz	23
5580MHz	21



Mode	Power Setting
5700MHz	25
5720MHz Straddle 5.47-5.725GHz	26
5720MHz Straddle 5.725-5.85GHz	26
5745MHz	51
5785MHz	51
5825MHz	52
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	45
5230MHz	53
5270MHz	27
5310MHz	28
5510MHz	24
5550MHz	23
5670MHz	24
5710MHz Straddle 5.47-5.725GHz	26
5710MHz Straddle 5.725-5.85GHz	26
5755MHz	48
5795MHz	49
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	42
5290MHz	28
5530MHz	23
5610MHz	25
5690MHz Straddle 5.47-5.725GHz	25
5690MHz Straddle 5.725-5.85GHz	25
5775MHz	49
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	35
5250MHz Straddle 5.25-5.35GHz	35
5570MHz	24



<For Radio 2>

Mode	Power Setting
802.11a_Nss1,(6Mbps)_1TX	-
5180MHz	57
5200MHz	76
5240MHz	77
5260MHz	63
5300MHz	63
5320MHz	61
5500MHz	50
5580MHz	61
5700MHz	63
5720MHz Straddle 5.47-5.725GHz	63
5720MHz Straddle 5.725-5.85GHz	63
5745MHz	97
5785MHz	97
5825MHz	93
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5180MHz	59
5200MHz	74
5240MHz	76
5260MHz	63
5300MHz	62
5320MHz	60
5500MHz	51
5580MHz	60
5700MHz	40
5720MHz Straddle 5.47-5.725GHz	60
5720MHz Straddle 5.725-5.85GHz	60
5745MHz	97
5785MHz	97
5825MHz	90
802.11ax HEW40_Nss1,(MCS0)_1TX	-
5190MHz	53
5230MHz	65
5270MHz	62
5310MHz	52
5510MHz	50
5550MHz	63
5670MHz	56
5710MHz Straddle 5.47-5.725GHz	63



Mode	Power Setting
5710MHz Straddle 5.725-5.85GHz	63
5755MHz	82
5795MHz	84
802.11ax HEW80_Nss1,(MCS0)_1TX	-
5210MHz	50
5290MHz	50
5530MHz	52
5610MHz	62
5690MHz Straddle 5.47-5.725GHz	61
5690MHz Straddle 5.725-5.85GHz	61
5775MHz	69
802.11ax HEW160_Nss1,(MCS0)_1TX	-
5250MHz Straddle 5.15-5.25GHz	44
5250MHz Straddle 5.25-5.35GHz	44
5570MHz	46
802.11ax HEW20_Nss2,(MCS0)_2TX	-
5180MHz	50
5200MHz	66
5240MHz	76
5260MHz	51
5300MHz	52
5320MHz	52
5500MHz	49
5580MHz	48
5700MHz	44
5720MHz Straddle 5.47-5.725GHz	49
5720MHz Straddle 5.725-5.85GHz	49
5745MHz	77
5785MHz	76
5825MHz	77
802.11ax HEW40_Nss2,(MCS0)_2TX	-
5190MHz	49
5230MHz	64
5270MHz	50
5310MHz	49
5510MHz	49
5550MHz	49
5670MHz	49
5710MHz Straddle 5.47-5.725GHz	50
5710MHz Straddle 5.725-5.85GHz	50



Mode	Power Setting
5755MHz	75
5795MHz	75
802.11ax HEW80_Nss2,(MCS0)_2TX	-
5210MHz	42
5290MHz	42
5530MHz	44
5610MHz	50
5690MHz Straddle 5.47-5.725GHz	50
5690MHz Straddle 5.725-5.85GHz	50
5775MHz	56
802.11ax HEW160_Nss2,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	33
5250MHz Straddle 5.25-5.35GHz	33
5570MHz	37
802.11a_Nss1,(6Mbps)_4TX	-
5180MHz	50
5200MHz	49
5240MHz	49
5260MHz	26
5300MHz	27
5320MHz	27
5500MHz	25
5580MHz	25
5700MHz	25
5720MHz Straddle 5.47-5.725GHz	24
5720MHz Straddle 5.725-5.85GHz	24
5745MHz	62
5785MHz	63
5825MHz	64
802.11ax HEW20_Nss1,(MCS0)_4TX	-
5180MHz	51
5200MHz	51
5240MHz	51
5260MHz	29
5300MHz	29
5320MHz	29
5500MHz	27
5580MHz	26
5700MHz	26
5720MHz Straddle 5.47-5.725GHz	26



Mode	Power Setting
5720MHz Straddle 5.725-5.85GHz	26
5745MHz	62
5785MHz	62
5825MHz	63
802.11ax HEW40_Nss1,(MCS0)_4TX	-
5190MHz	46
5230MHz	62
5270MHz	38
5310MHz	39
5510MHz	36
5550MHz	36
5670MHz	36
5710MHz Straddle 5.47-5.725GHz	36
5710MHz Straddle 5.725-5.85GHz	36
5755MHz	61
5795MHz	61
802.11ax HEW80_Nss1,(MCS0)_4TX	-
5210MHz	44
5290MHz	38
5530MHz	35
5610MHz	36
5690MHz Straddle 5.47-5.725GHz	36
5690MHz Straddle 5.725-5.85GHz	36
5775MHz	60
802.11ax HEW160_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	30
5250MHz Straddle 5.25-5.35GHz	30
5570MHz	36
802.11ax HEW20_Nss4,(MCS0)_4TX	-
5180MHz	50
5200MHz	62
5240MHz	61
5260MHz	39
5300MHz	38
5320MHz	39
5500MHz	37
5580MHz	37
5700MHz	36
5720MHz Straddle 5.47-5.725GHz	36
5720MHz Straddle 5.725-5.85GHz	36



Mode	Power Setting
5745MHz	62
5785MHz	62
5825MHz	63
802.11ax HEW40_Nss4,(MCS0)_4TX	-
5190MHz	42
5230MHz	56
5270MHz	39
5310MHz	39
5510MHz	37
5550MHz	37
5670MHz	36
5710MHz Straddle 5.47-5.725GHz	37
5710MHz Straddle 5.725-5.85GHz	37
5755MHz	61
5795MHz	62
802.11ax HEW80_Nss4,(MCS0)_4TX	-
5210MHz	38
5290MHz	38
5530MHz	36
5610MHz	37
5690MHz Straddle 5.47-5.725GHz	38
5690MHz Straddle 5.725-5.85GHz	38
5775MHz	62
802.11ax HEW160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	32
5250MHz Straddle 5.25-5.35GHz	32
5570MHz	37
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5180MHz	49
5200MHz	49
5240MHz	49
5260MHz	26
5300MHz	26
5320MHz	26
5500MHz	24
5580MHz	24
5700MHz	24
5720MHz Straddle 5.47-5.725GHz	26
5720MHz Straddle 5.725-5.85GHz	26
5745MHz	50



Mode	Power Setting
5785MHz	50
5825MHz	51
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5190MHz	46
5230MHz	50
5270MHz	26
5310MHz	26
5510MHz	24
5550MHz	24
5670MHz	24
5710MHz Straddle 5.47-5.725GHz	24
5710MHz Straddle 5.725-5.85GHz	24
5755MHz	48
5795MHz	48
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5210MHz	44
5290MHz	26
5530MHz	22
5610MHz	23
5690MHz Straddle 5.47-5.725GHz	24
5690MHz Straddle 5.725-5.85GHz	24
5775MHz	50
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	30
5250MHz Straddle 5.25-5.35GHz	30
5570MHz	23

Note:

- ♦ Evaluated HEW20/HEW40/HEW80/HEW160 mode only. Due to similar modulation, The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/HEW80/HEW160.



2.2 The Worst Case Measurement Configuration

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
Operating Mode	CTX (Refer to note 1)
1	EUT + Ant. 14 Panel antenna / 13 dBi

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
The EUT was performed at X axis, Y axis and Z axis position for Radiated measurement<Above 1GHz>, and the worst case was found at X axis position for Radio 1 and at Y axis position for Radio 2.	
1	EUT (Radio 1) in X axis + Ant. 14 Panel antenna / 13 dBi
2	EUT (Radio 2) in Y axis + Ant. 14 Panel antenna / 13 dBi
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX (Refer to note 1)
The EUT was performed at X axis, Y axis and Z axis position, and the worst case as below:	
1	EUT (Radio 1) + Ant. 14 Panel antenna / 13 dBi (Bandedge at Z axis / Harmonic at X axis)
2	EUT (Radio 2) + Ant. 14 Panel antenna / 13 dBi (Bandedge at Y axis / Harmonic at Y axis)



Note:

1. Test Mode:

Test Item	Test Mode	
	802.11a	
	1T1S	4T1S
Maximum Output Power	V	V
Emission Bandwidth	V	V
Peak Power Spectral Density	V	V
Radiated Emission	Cover by CDD 4T1S Max setting	
Band Edge Emission	V	V

Test Item	Test Mode						
	802.11ax HEW20/40/80/160						
	CDD 1T1S	SDM 2T2S	CDD 4T1S	SDM 4T4S	TxBF 2T2S	TxBF 4T1S	TxBF 4T4S
Maximum Output Power	V	V	V	V	-	V	-
Emission Bandwidth	V	V	V	V	-	Cover by CDD 4T1S Max setting	-
Peak Power Spectral Density	V	V	V	V	-	Cover by CDD 4T1S Max setting	-
Radiated Emission	Cover by CDD 4T1S Max setting	Cover by CDD 4T1S Max setting	Max setting	Cover by CDD 4T1S Max setting	-	Cover by CDD 4T1S Max setting	-
Band Edge Emission	V	V	V	V	-	Cover by CDD 4T1S Max setting	-

2. The PoE was for measurement only, would not be marketed. The detail information as below:

Power	Brand	Model
PoE	Microsemi	PD-9001GR/AT/AC

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

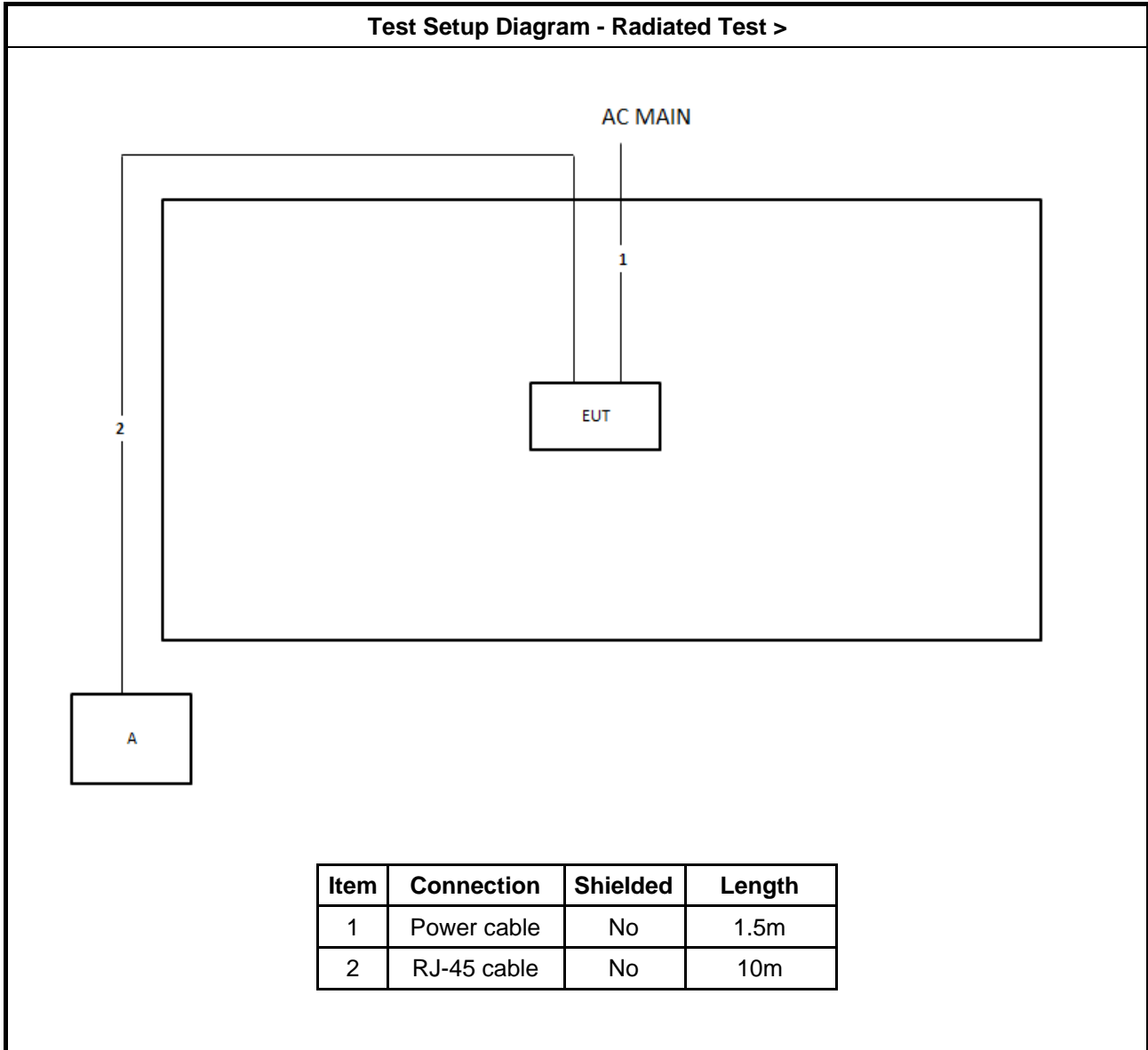
N/A

2.5 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE	Microsemi	PD-9001GR/AT/AC	N/A



2.6 Test Setup Diagram



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 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, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
<input checked="" type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices	
<input type="checkbox"/>	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

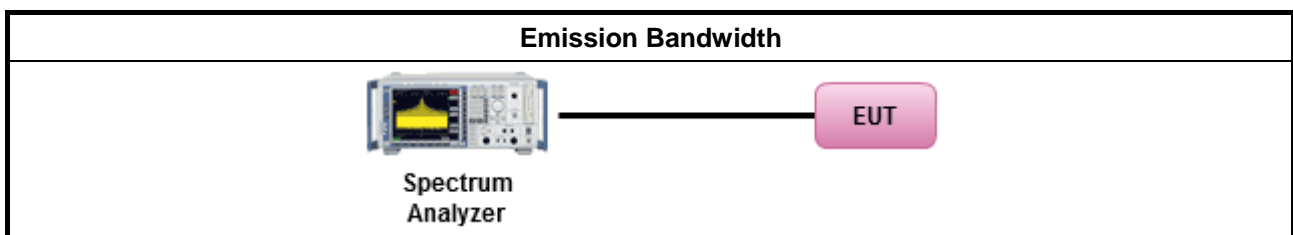
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method							
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;"><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.</td> </tr> </table> 		<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.	<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.						
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.						
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.						

3.1.4 Test Setup





3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A



3.2 Maximum Output Power

3.2.1 Limit

Maximum Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm] Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
<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:	
<input type="checkbox"/>	<ul style="list-style-type: none"> Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	



3.2.2 Measuring Instruments

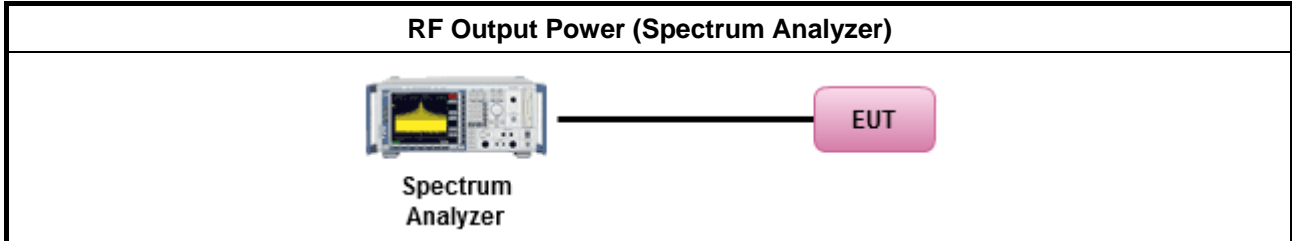
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

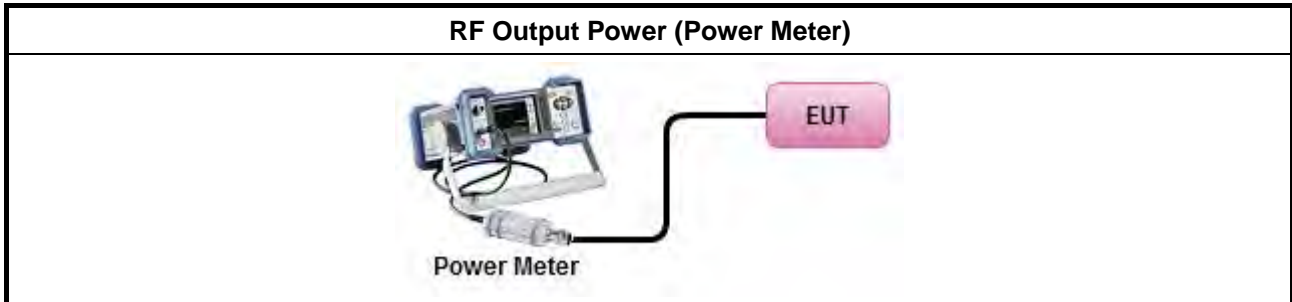
Test Method	
	Average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
<input checked="" type="checkbox"/>	For conducted measurement.
	<ul style="list-style-type: none"> If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$
<input type="checkbox"/>	For radiated measurement.
	<ul style="list-style-type: none"> Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing" Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.2.4 Test Setup

For Straddle channel test:



For other test:



3.2.5 Test Result of Maximum Output Power

Refer as Appendix B



3.3 Power Spectral Density

3.3.1 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.
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	<ul style="list-style-type: none"> ▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; $-13 - 0.716(\theta - 8)$ dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 $(\theta - 40)$ dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input 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>	



3.3.2 Measuring Instruments

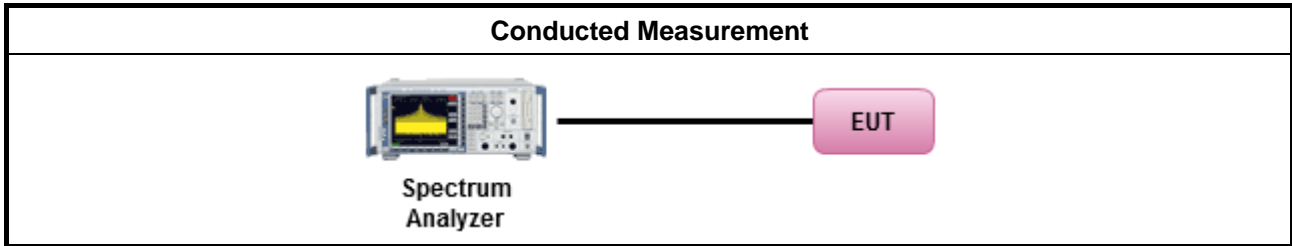
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options: 	
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<input checked="" type="checkbox"/>	For conducted measurement.
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: 	
<input checked="" type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<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]) $EIRP_{total} = PPSD_{total} + DG$ 	
<input type="checkbox"/>	For radiated measurement.
<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing" 	

Test Method	
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	▪ Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Refer as Appendix C



3.4 Unwanted Emissions

3.4.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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



linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

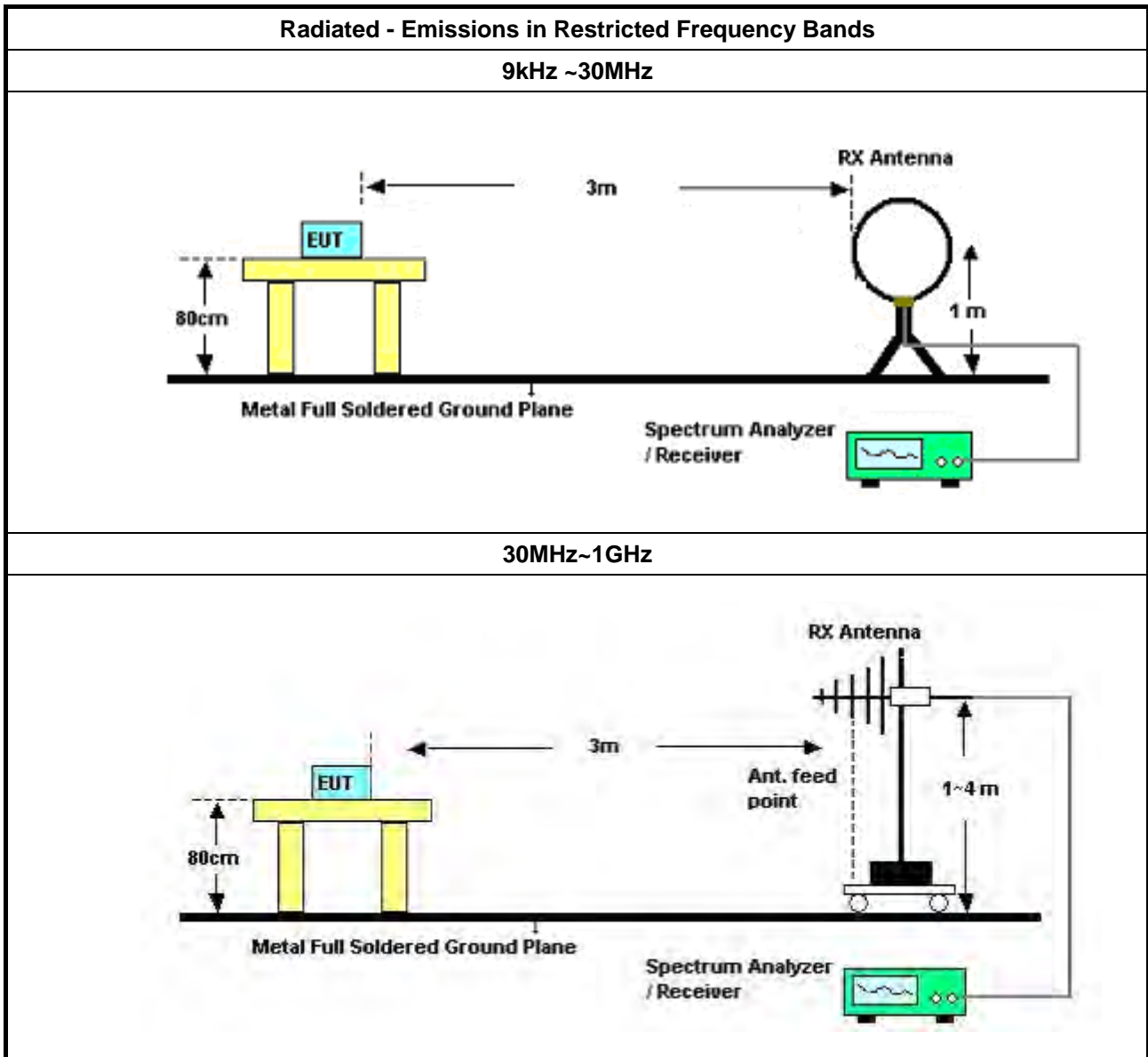
3.4.2 Measuring Instruments

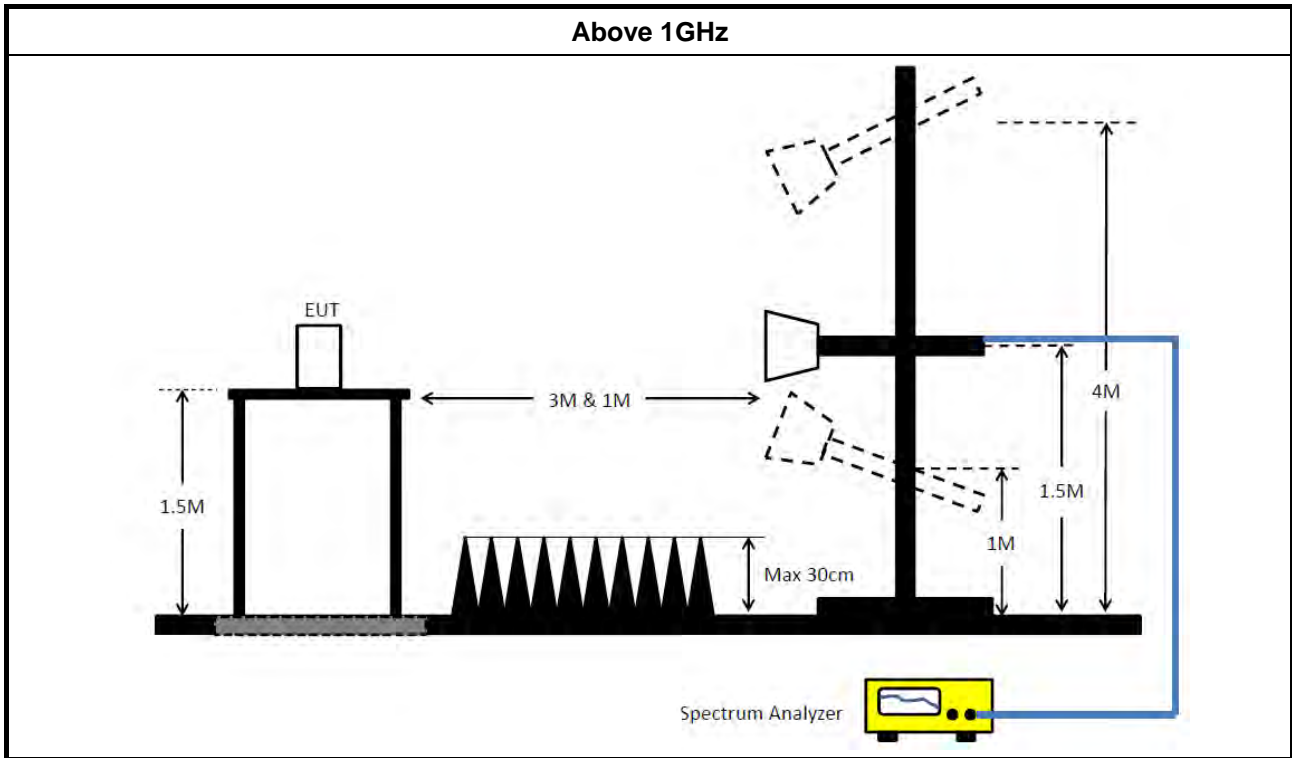
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below:
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
	<ul style="list-style-type: none"> ▪ For radiated measurement.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level.
	<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.4.4 Test Setup





3.4.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.4.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.4.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 26, 2022	Mar. 25, 2023	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 19, 2022	Apr. 18, 2023	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSP	100593	9kHz~40GHz	Apr. 08, 2022	Apr. 07, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Sep. 30, 2022	Sep. 29, 2023	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 09, 2022	Aug. 08, 2023	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	Aug 02, 2022	Aug 01, 2023	Radiation (03CH06-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH06-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-67	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+67	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.



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	37.62M	18.213M	18M2D1D	21.57M	16.748M
802.11a_Nss1,(6Mbps)_4TX	21.72M	16.798M	16M8D1D	21.45M	16.658M
802.11ax HEW20_Nss1,(MCS0)_1TX	40.86M	19.635M	19M6D1D	23.07M	19.012M
802.11ax HEW20_Nss2,(MCS0)_2TX	30.78M	19.186M	19M2D1D	21.45M	19.023M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.81M	19.059M	19M1D1D	21.39M	18.971M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.9M	19.116M	19M1D1D	21.27M	19.01M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.02M	37.614M	37M6D1D	40.02M	37.52M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.08M	37.562M	37M6D1D	39.78M	37.505M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.2M	37.618M	37M6D1D	39.9M	37.5M
802.11ax HEW40_Nss4,(MCS0)_4TX	40.2M	37.753M	37M8D1D	39.84M	37.478M
802.11ax HEW80_Nss1,(MCS0)_1TX	81.72M	77.046M	77MOD1D	81.72M	77.046M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.48M	76.997M	77MOD1D	81.48M	76.994M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.48M	77.04M	77MOD1D	80.76M	77.01M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.6M	77.053M	77M1D1D	81.12M	76.976M
802.11ax HEW160_Nss1,(MCS0)_1TX	82.8M	77.737M	77M7D1D	82.8M	77.737M
802.11ax HEW160_Nss2,(MCS0)_2TX	83.12M	77.986M	78MOD1D	82.88M	77.656M
802.11ax HEW160_Nss1,(MCS0)_4TX	83.44M	77.837M	77M8D1D	82.8M	77.621M
802.11ax HEW160_Nss4,(MCS0)_4TX	83.68M	77.702M	77M7D1D	82.4M	77.387M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	21.57M	16.768M	16M8D1D	21.36M	16.76M
802.11a_Nss1,(6Mbps)_4TX	21.69M	16.786M	16M8D1D	21.45M	16.673M
802.11ax HEW20_Nss1,(MCS0)_1TX	22.98M	19.013M	19MOD1D	21.75M	19.009M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.69M	19.058M	19M1D1D	21.54M	19.021M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.93M	19.039M	19MOD1D	21.42M	18.959M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.96M	19.082M	19M1D1D	21.36M	19.015M
802.11ax HEW40_Nss1,(MCS0)_1TX	39.96M	37.602M	37M6D1D	39.96M	37.563M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.08M	37.54M	37M5D1D	39.84M	37.495M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.14M	37.58M	37M6D1D	39.9M	37.497M
802.11ax HEW40_Nss4,(MCS0)_4TX	40.14M	37.704M	37M7D1D	39.78M	37.481M
802.11ax HEW80_Nss1,(MCS0)_1TX	81.84M	77.077M	77M1D1D	81.84M	77.077M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.48M	77.042M	77MOD1D	81.24M	77.016M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.6M	77.061M	77M1D1D	81M	77.013M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.6M	77.147M	77M1D1D	81.24M	76.98M
802.11ax HEW160_Nss1,(MCS0)_1TX	83.52M	77.853M	77M9D1D	83.52M	77.853M
802.11ax HEW160_Nss2,(MCS0)_2TX	83.92M	77.772M	77M8D1D	83.84M	77.463M
802.11ax HEW160_Nss1,(MCS0)_4TX	82.96M	77.887M	77M9D1D	82.4M	77.436M
802.11ax HEW160_Nss4,(MCS0)_4TX	84.48M	77.781M	77M8D1D	82.64M	77.25M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	21.69M	16.797M	16M8D1D	15.81M	13.431M
802.11a_Nss1,(6Mbps)_4TX	21.78M	16.79M	16M8D1D	15.78M	13.382M
802.11ax HEW20_Nss1,(MCS0)_1TX	24.06M	19.027M	19MOD1D	17.625M	14.547M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.84M	19.068M	19M1D1D	15.735M	14.532M
802.11ax HEW20_Nss1,(MCS0)_4TX	21.9M	19.053M	19M1D1D	15.795M	14.519M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.9M	19.092M	19M1D1D	15.675M	14.56M
802.11ax HEW40_Nss1,(MCS0)_1TX	40.14M	37.607M	37M6D1D	35M	33.61M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.08M	37.548M	37M5D1D	34.93M	33.584M
802.11ax HEW40_Nss1,(MCS0)_4TX	40.14M	37.535M	37M5D1D	34.965M	33.551M
802.11ax HEW40_Nss4,(MCS0)_4TX	40.26M	37.719M	37M7D1D	34.965M	33.683M
802.11ax HEW80_Nss1,(MCS0)_1TX	82.32M	77.373M	77M4D1D	75.675M	73.144M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.48M	77.028M	77MOD1D	75.45M	73.047M
802.11ax HEW80_Nss1,(MCS0)_4TX	81.6M	77.017M	77MOD1D	75.375M	73.064M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.6M	77.101M	77M1D1D	75.525M	72.986M
802.11ax HEW160_Nss1,(MCS0)_1TX	222.72M	155.803M	156MD1D	222.72M	155.803M
802.11ax HEW160_Nss2,(MCS0)_2TX	166.8M	155.612M	156MD1D	166.56M	155.259M



Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11ax HEW160_Nss1,(MCS0)_4TX	166.08M	155.133M	155MD1D	164.64M	154.742M
802.11ax HEW160_Nss4,(MCS0)_4TX	166.56M	155.182M	155MD1D	164.88M	155.026M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX	16.35M	25.066M	25M1D1D	3.12M	4.07M
802.11a_Nss1,(6Mbps)_4TX	16.35M	16.934M	16M9D1D	3.1M	3.927M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.9M	25.154M	25M2D1D	4.46M	4.58M
802.11ax HEW20_Nss2,(MCS0)_2TX	18.96M	25.733M	25M7D1D	4.42M	4.534M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.05M	19.11M	19M1D1D	4.44M	4.499M
802.11ax HEW20_Nss4,(MCS0)_4TX	18.93M	19.167M	19M2D1D	4.1M	4.505M
802.11ax HEW40_Nss1,(MCS0)_1TX	37.56M	43.97M	44MOD1D	3.72M	4.045M
802.11ax HEW40_Nss2,(MCS0)_2TX	37.62M	48.091M	48M1D1D	3.66M	3.999M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.5M	37.684M	37M7D1D	3.68M	3.992M
802.11ax HEW40_Nss4,(MCS0)_4TX	37.56M	37.94M	37M9D1D	3.18M	3.998M
802.11ax HEW80_Nss1,(MCS0)_1TX	76.56M	77.547M	77M5D1D	3.48M	9.075M
802.11ax HEW80_Nss2,(MCS0)_2TX	75.36M	77.422M	77M4D1D	3.7M	4.038M
802.11ax HEW80_Nss1,(MCS0)_4TX	77.52M	77.14M	77M1D1D	3.64M	3.994M
802.11ax HEW80_Nss4,(MCS0)_4TX	76.68M	77.517M	77M5D1D	3.24M	4.037M

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



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11a_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.57M	16.748M						
5200MHz	Pass	Inf	37.44M	17.736M						
5240MHz	Pass	Inf	37.62M	18.213M						
5260MHz	Pass	Inf	21.36M	16.766M						
5300MHz	Pass	Inf	21.57M	16.76M						
5320MHz	Pass	Inf	21.51M	16.768M						
5500MHz	Pass	Inf	21.6M	16.741M						
5580MHz	Pass	Inf	21.69M	16.797M						
5700MHz	Pass	Inf	21.45M	16.757M						
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.81M	13.431M						
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	4.07M						
5745MHz	Pass	500k	16.32M	18.051M						
5785MHz	Pass	500k	16.29M	25.066M						
5825MHz	Pass	500k	16.35M	17.862M						
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	23.07M	19.012M						
5200MHz	Pass	Inf	36.63M	19.149M						
5240MHz	Pass	Inf	40.86M	19.635M						
5260MHz	Pass	Inf	22.32M	19.013M						
5300MHz	Pass	Inf	22.98M	19.012M						
5320MHz	Pass	Inf	21.75M	19.009M						
5500MHz	Pass	Inf	21.69M	19.012M						
5580MHz	Pass	Inf	24.06M	19.027M						
5700MHz	Pass	Inf	21.69M	19.012M						
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	17.625M	14.547M						
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.58M						
5745MHz	Pass	500k	18.9M	19.242M						
5785MHz	Pass	500k	18.75M	25.154M						
5825MHz	Pass	500k	18.9M	19.258M						
802.11ax HEW40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.02M	37.52M						
5230MHz	Pass	Inf	40.02M	37.614M						
5270MHz	Pass	Inf	39.96M	37.602M						
5310MHz	Pass	Inf	39.96M	37.563M						
5510MHz	Pass	Inf	40.14M	37.5M						
5550MHz	Pass	Inf	40.08M	37.562M						
5670MHz	Pass	Inf	39.96M	37.607M						
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35M	33.61M						
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.72M	4.045M						
5755MHz	Pass	500k	37.44M	43.97M						
5795MHz	Pass	500k	37.56M	41.348M						
802.11ax HEW80_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.72M	77.046M						
5290MHz	Pass	Inf	81.84M	77.077M						
5530MHz	Pass	Inf	81.84M	77.021M						
5610MHz	Pass	Inf	82.32M	77.373M						
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.675M	73.144M						
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.48M	9.075M						
5775MHz	Pass	500k	76.56M	77.547M						
802.11ax HEW160_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.8M	77.737M						
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	83.52M	77.853M						
5570MHz	Pass	Inf	222.72M	155.803M						
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5180MHz	Pass	Inf	21.75M	19.023M	21.6M	19.048M				
5200MHz	Pass	Inf	23.19M	19.053M	21.45M	19.101M				
5240MHz	Pass	Inf	30.78M	19.186M	24.3M	19.161M				
5260MHz	Pass	Inf	21.54M	19.021M	21.54M	19.058M				
5300MHz	Pass	Inf	21.66M	19.023M	21.57M	19.055M				
5320MHz	Pass	Inf	21.69M	19.024M	21.69M	19.05M				
5500MHz	Pass	Inf	21.66M	19.027M	21.42M	19.068M				
5580MHz	Pass	Inf	21.75M	19.023M	21.48M	19.06M				
5700MHz	Pass	Inf	21.84M	19.018M	21.54M	19.058M				
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.915M	14.554M	15.735M	14.532M				
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.42M	4.534M	4.44M	4.547M				
5745MHz	Pass	500k	18.87M	19.284M	18.96M	19.228M				
5785MHz	Pass	500k	18.75M	24.803M	18.63M	25.733M				
5825MHz	Pass	500k	18.9M	19.342M	18.96M	19.258M				
802.11ax HEW40_Nss2,(MCSO)_2TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	37.505M	39.78M	37.562M				
5230MHz	Pass	Inf	40.02M	37.527M	39.9M	37.54M				
5270MHz	Pass	Inf	40.08M	37.495M	39.96M	37.54M				
5310MHz	Pass	Inf	40.08M	37.5M	39.84M	37.515M				
5510MHz	Pass	Inf	40.08M	37.509M	39.96M	37.527M				
5550MHz	Pass	Inf	40.08M	37.493M	39.84M	37.503M				
5670MHz	Pass	Inf	40.08M	37.532M	39.9M	37.548M				
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.965M	33.614M	34.93M	33.584M				
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	3.999M	3.66M	4.016M				
5755MHz	Pass	500k	37.56M	38.333M	37.5M	40.78M				
5795MHz	Pass	500k	37.62M	41.058M	37.5M	48.091M				
802.11ax HEW80_Nss2,(MCSO)_2TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.48M	76.994M	81.48M	76.997M				
5290MHz	Pass	Inf	81.24M	77.042M	81.48M	77.016M				
5530MHz	Pass	Inf	81.24M	77.019M	81.48M	77.028M				
5610MHz	Pass	Inf	81.24M	77.011M	81.24M	77.012M				
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.45M	73.047M	75.825M	73.156M				
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	4.047M	3.7M	4.038M				
5775MHz	Pass	500k	75.36M	77.329M	75.24M	77.422M				
802.11ax HEW160_Nss2,(MCSO)_2TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	83.12M	77.986M	82.88M	77.656M				
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	83.84M	77.463M	83.92M	77.772M				
5570MHz	Pass	Inf	166.8M	155.612M	166.56M	155.259M				
802.11a_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.54M	16.743M	21.6M	16.778M	21.63M	16.746M	21.45M	16.664M
5200MHz	Pass	Inf	21.48M	16.763M	21.6M	16.791M	21.72M	16.743M	21.57M	16.658M
5240MHz	Pass	Inf	21.45M	16.766M	21.72M	16.798M	21.69M	16.758M	21.48M	16.687M
5260MHz	Pass	Inf	21.45M	16.762M	21.6M	16.777M	21.66M	16.741M	21.57M	16.673M
5300MHz	Pass	Inf	21.51M	16.762M	21.66M	16.786M	21.57M	16.74M	21.57M	16.684M
5320MHz	Pass	Inf	21.48M	16.742M	21.69M	16.768M	21.66M	16.745M	21.51M	16.677M
5500MHz	Pass	Inf	21.54M	16.754M	21.63M	16.785M	21.69M	16.75M	21.54M	16.685M
5580MHz	Pass	Inf	21.51M	16.759M	21.78M	16.79M	21.66M	16.756M	21.42M	16.673M
5700MHz	Pass	Inf	21.51M	16.76M	21.54M	16.788M	21.6M	16.76M	21.57M	16.676M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.81M	13.442M	15.9M	13.447M	15.84M	13.462M	15.78M	13.382M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.935M	3.1M	4.027M	3.12M	3.927M	3.1M	3.936M
5745MHz	Pass	500k	16.32M	16.859M	16.32M	16.885M	16.32M	16.901M	16.32M	16.778M
5785MHz	Pass	500k	16.32M	16.876M	16.32M	16.892M	16.32M	16.874M	16.35M	16.772M
5825MHz	Pass	500k	16.32M	16.898M	16.32M	16.934M	16.32M	16.919M	16.32M	16.785M
802.11ax HEW20_Nss1,(MCSO)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.72M	19.01M	21.69M	19.023M	21.81M	19.048M	21.51M	18.975M
5200MHz	Pass	Inf	21.72M	19.007M	21.72M	19.029M	21.78M	19.059M	21.39M	18.971M

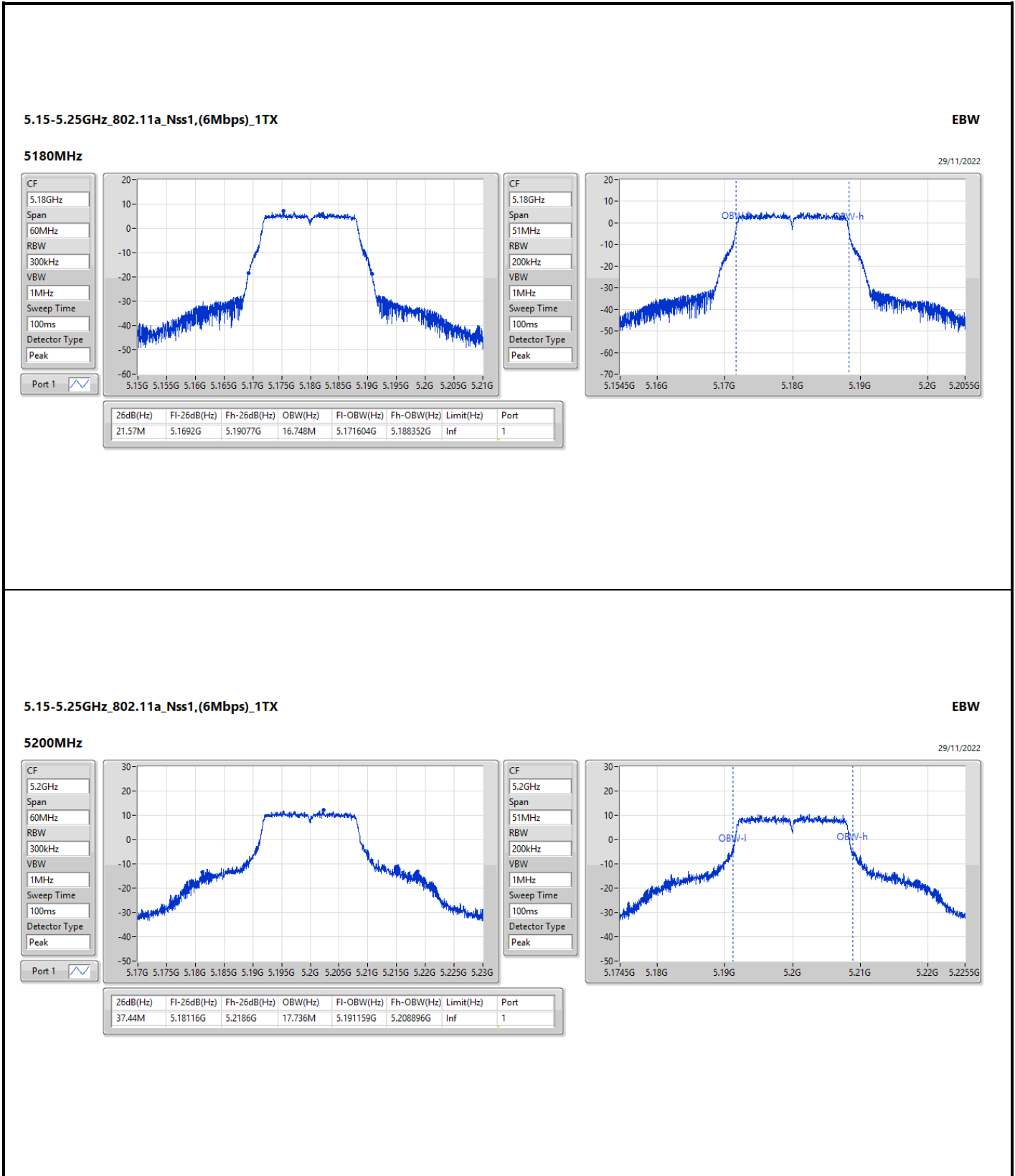


Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5240MHz	Pass	Inf	21.66M	19.017M	21.72M	19.018M	21.78M	19.05M	21.48M	18.974M
5260MHz	Pass	Inf	21.75M	19.002M	21.66M	18.995M	21.93M	19.039M	21.45M	18.959M
5300MHz	Pass	Inf	21.75M	19.007M	21.72M	19.02M	21.84M	19.028M	21.42M	18.964M
5320MHz	Pass	Inf	21.78M	19.004M	21.66M	19.03M	21.93M	19.017M	21.45M	18.959M
5500MHz	Pass	Inf	21.81M	19.006M	21.63M	19.013M	21.9M	19.033M	21.45M	18.953M
5580MHz	Pass	Inf	21.72M	19.005M	21.63M	19.032M	21.87M	19.053M	21.48M	18.962M
5700MHz	Pass	Inf	21.84M	19.001M	21.66M	19.005M	21.9M	19.048M	21.48M	18.962M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.945M	14.53M	15.9M	14.523M	16.02M	14.531M	15.795M	14.519M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	4.518M	4.46M	4.519M	4.44M	4.524M	4.46M	4.499M
5745MHz	Pass	500k	18.96M	19.08M	18.96M	19.084M	18.99M	19.11M	18.99M	19.028M
5785MHz	Pass	500k	18.96M	19.076M	19.02M	19.092M	18.93M	19.106M	19.05M	19.018M
5825MHz	Pass	500k	18.93M	19.079M	18.96M	19.075M	18.96M	19.105M	19.02M	19.037M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.02M	37.511M	40.08M	37.5M	40.02M	37.55M	39.96M	37.523M
5230MHz	Pass	Inf	39.9M	37.559M	39.9M	37.549M	40.2M	37.561M	40.14M	37.618M
5270MHz	Pass	Inf	39.9M	37.498M	40.14M	37.537M	40.02M	37.497M	40.14M	37.58M
5310MHz	Pass	Inf	39.9M	37.501M	40.02M	37.499M	40.08M	37.514M	39.96M	37.555M
5510MHz	Pass	Inf	40.02M	37.491M	40.02M	37.509M	40.02M	37.498M	40.14M	37.535M
5550MHz	Pass	Inf	39.9M	37.502M	40.02M	37.499M	40.08M	37.527M	40.14M	37.529M
5670MHz	Pass	Inf	40.02M	37.53M	40.02M	37.498M	40.02M	37.512M	40.14M	37.532M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.965M	33.62M	35.07M	33.608M	35.035M	33.551M	35.07M	33.591M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.78M	3.996M	3.68M	3.992M	3.8M	3.999M	3.88M	4.001M
5755MHz	Pass	500k	37.5M	37.611M	37.2M	37.655M	37.5M	37.641M	37.38M	37.667M
5795MHz	Pass	500k	37.26M	37.633M	37.08M	37.62M	37.26M	37.684M	37.26M	37.646M
802.11ax HEW80_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.24M	77.024M	80.76M	77.04M	81.48M	77.027M	81.24M	77.01M
5290MHz	Pass	Inf	81.6M	77.047M	81M	77.028M	81.24M	77.013M	81.12M	77.061M
5530MHz	Pass	Inf	81.6M	77.017M	80.88M	76.986M	81.12M	76.974M	81M	76.969M
5610MHz	Pass	Inf	81.48M	76.993M	81M	76.978M	81M	76.975M	81.24M	76.967M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.6M	73.117M	75.375M	73.103M	75.45M	73.064M	75.75M	73.13M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	4.023M	3.68M	4.01M	3.72M	4.009M	3.64M	3.994M
5775MHz	Pass	500k	76.68M	77.118M	77.4M	77.05M	77.52M	77.14M	76.92M	77.037M
802.11ax HEW160_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	83.44M	77.746M	83.12M	77.662M	82.8M	77.621M	82.88M	77.837M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.96M	77.525M	82.8M	77.456M	82.4M	77.436M	82.88M	77.887M
5570MHz	Pass	Inf	165.84M	155.133M	165.84M	155.038M	164.64M	154.892M	166.08M	154.742M
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	21.42M	19.01M	21.9M	19.023M	21.39M	19.041M	21.66M	19.09M
5200MHz	Pass	Inf	21.36M	19.034M	21.87M	19.026M	21.36M	19.053M	21.66M	19.116M
5240MHz	Pass	Inf	21.27M	19.023M	21.84M	19.02M	21.42M	19.052M	21.75M	19.107M
5260MHz	Pass	Inf	21.42M	19.024M	21.93M	19.022M	21.42M	19.047M	21.75M	19.077M
5300MHz	Pass	Inf	21.54M	19.015M	21.87M	19.024M	21.42M	19.045M	21.75M	19.078M
5320MHz	Pass	Inf	21.36M	19.018M	21.96M	19.035M	21.39M	19.046M	21.78M	19.082M
5500MHz	Pass	Inf	21.36M	19.018M	21.9M	19.023M	21.42M	19.037M	21.75M	19.092M
5580MHz	Pass	Inf	21.6M	19.021M	21.9M	19.031M	21.42M	19.05M	21.81M	19.084M
5700MHz	Pass	Inf	21.27M	19.03M	21.9M	19.034M	21.39M	19.034M	21.72M	19.089M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.69M	14.56M	16.02M	14.58M	15.675M	14.583M	15.9M	14.622M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.3M	4.51M	4.4M	4.517M	4.1M	4.505M	4.38M	4.525M
5745MHz	Pass	500k	18.84M	19.058M	18.6M	19.051M	18.84M	19.095M	18.9M	19.156M
5785MHz	Pass	500k	18.84M	19.061M	18.78M	19.055M	18.33M	19.088M	18.93M	19.141M
5825MHz	Pass	500k	18.87M	19.062M	18.54M	19.081M	18.9M	19.089M	18.87M	19.167M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	39.96M	37.626M	40.08M	37.667M	40.02M	37.478M	40.2M	37.698M
5230MHz	Pass	Inf	40.08M	37.692M	40.2M	37.753M	39.84M	37.565M	40.02M	37.741M
5270MHz	Pass	Inf	40.02M	37.638M	39.96M	37.665M	40.02M	37.492M	40.14M	37.704M
5310MHz	Pass	Inf	40.02M	37.611M	40.02M	37.698M	39.78M	37.481M	40.14M	37.698M



Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5510MHz	Pass	Inf	40.02M	37.629M	40.02M	37.68M	39.72M	37.489M	40.26M	37.694M
5550MHz	Pass	Inf	40.02M	37.643M	40.02M	37.681M	40.14M	37.486M	40.2M	37.704M
5670MHz	Pass	Inf	40.02M	37.648M	40.14M	37.719M	39.9M	37.442M	40.14M	37.7M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.245M	33.734M	34.965M	33.805M	35M	33.697M	35.07M	33.683M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.88M	3.998M	3.72M	4.027M	3.18M	4.001M	3.7M	4.002M
5755MHz	Pass	500k	37.26M	37.809M	37.56M	37.94M	36.42M	37.761M	36.54M	37.83M
5795MHz	Pass	500k	37.26M	37.729M	37.14M	37.847M	36.3M	37.625M	36.96M	37.784M
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.36M	76.976M	81.12M	77.02M	81.24M	77.049M	81.6M	77.053M
5290MHz	Pass	Inf	81.6M	77.147M	81.24M	76.98M	81.24M	77.086M	81.48M	77.09M
5530MHz	Pass	Inf	81.24M	77.101M	81.48M	77.018M	81.12M	77.024M	81.36M	77.026M
5610MHz	Pass	Inf	81.36M	77.046M	81.12M	77.008M	81.12M	77.056M	81.6M	77.053M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.825M	73.263M	75.525M	73.082M	75.75M	73.376M	75.6M	72.986M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	4.04M	3.24M	4.063M	3.7M	4.043M	3.78M	4.037M
5775MHz	Pass	500k	75.96M	77.327M	75.36M	77.251M	76.08M	77.517M	76.68M	77.238M
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82.4M	77.702M	82.8M	77.51M	82.4M	77.465M	83.68M	77.387M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	84.16M	77.25M	84.48M	77.781M	82.64M	77.319M	83.52M	77.468M
5570MHz	Pass	Inf	166.32M	155.108M	166.32M	155.182M	164.88M	155.088M	166.56M	155.026M

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

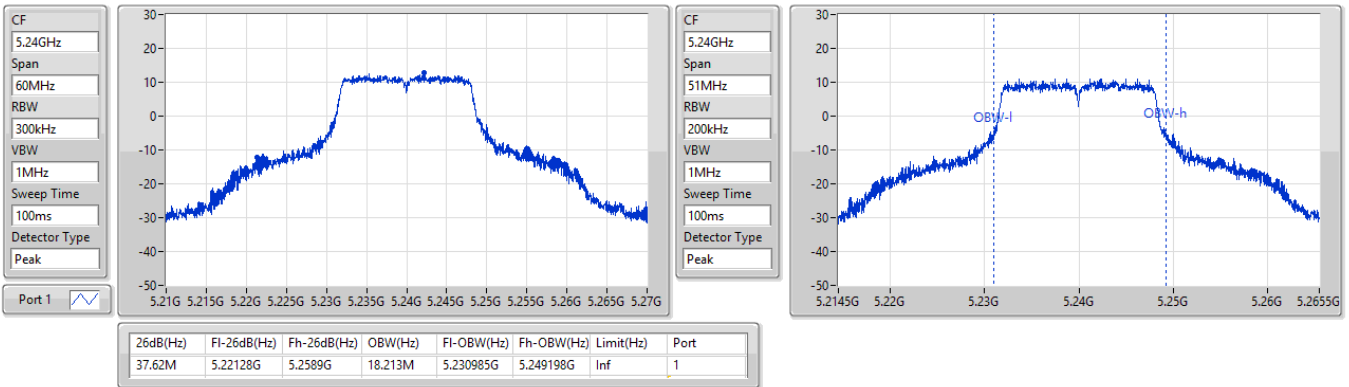


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_1TX

EBW

5240MHz

29/11/2022

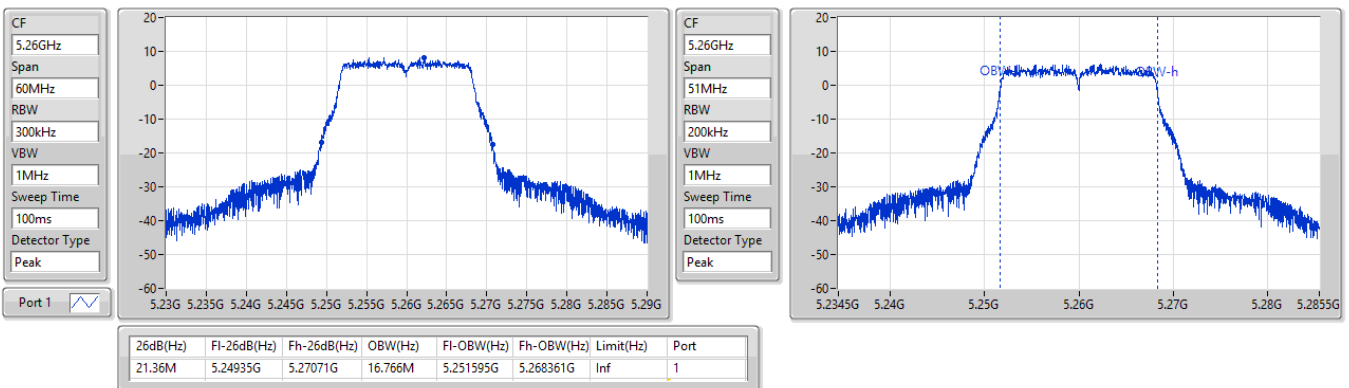


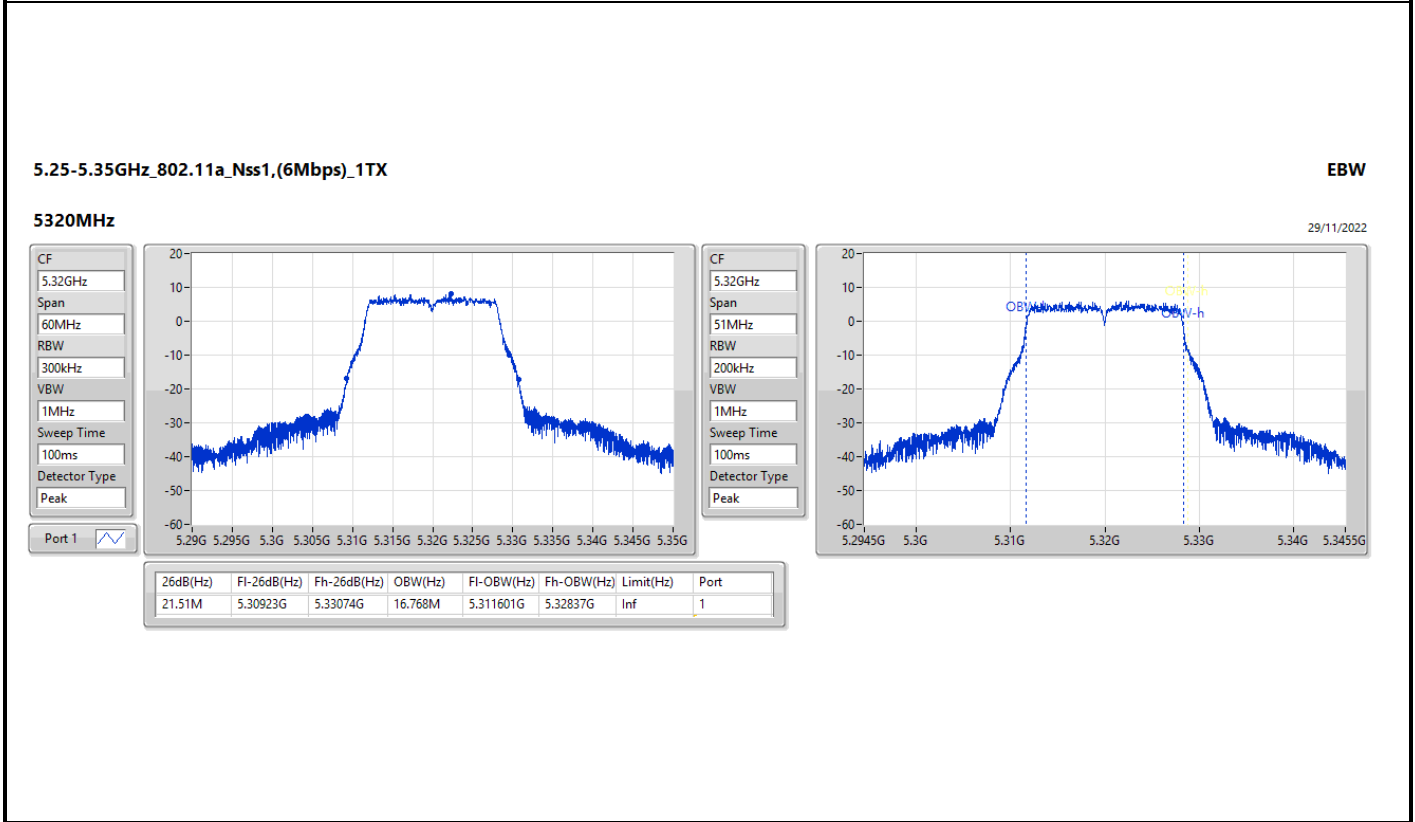
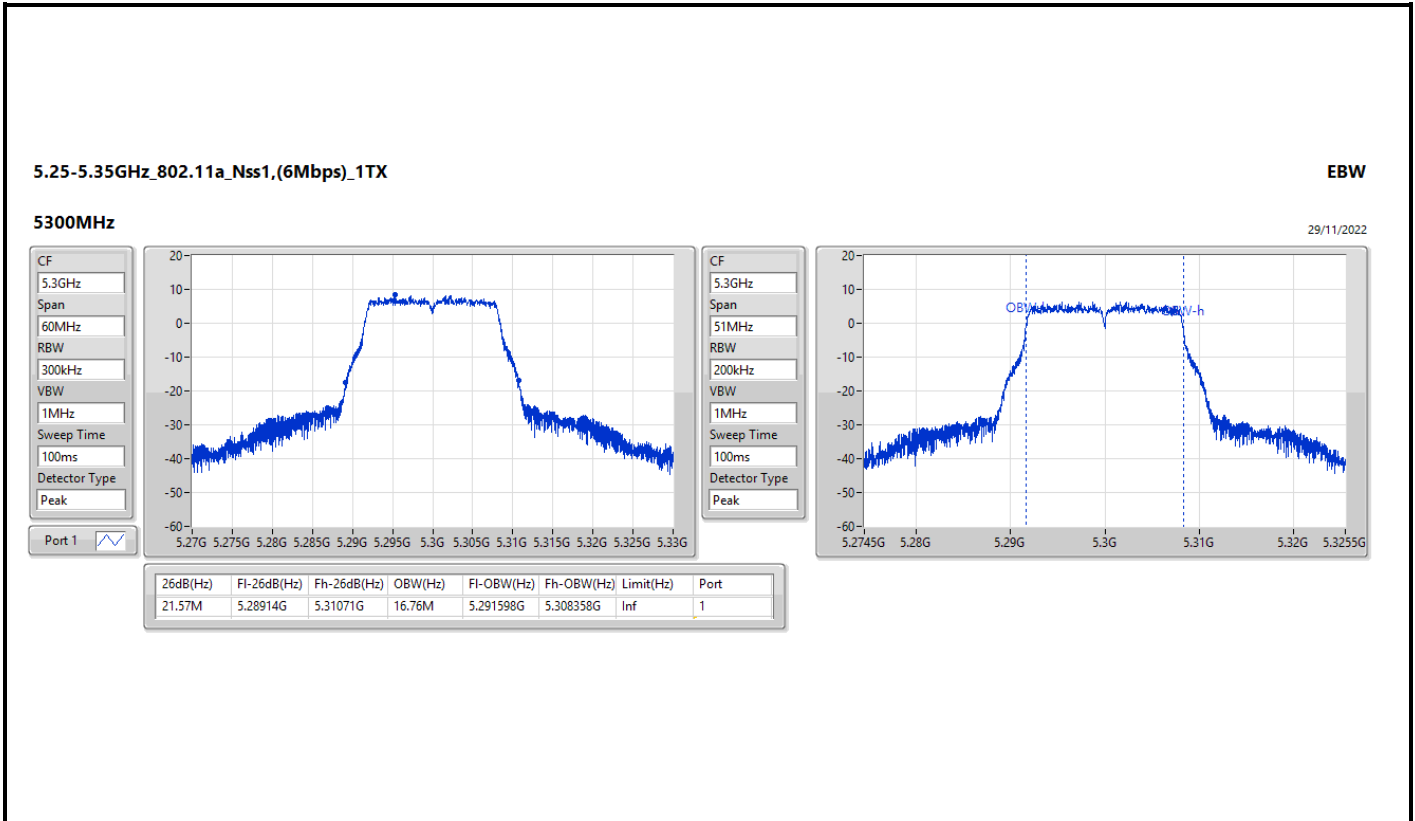
5.25-5.35GHz_802.11a_Nss1,(6Mbps)_1TX

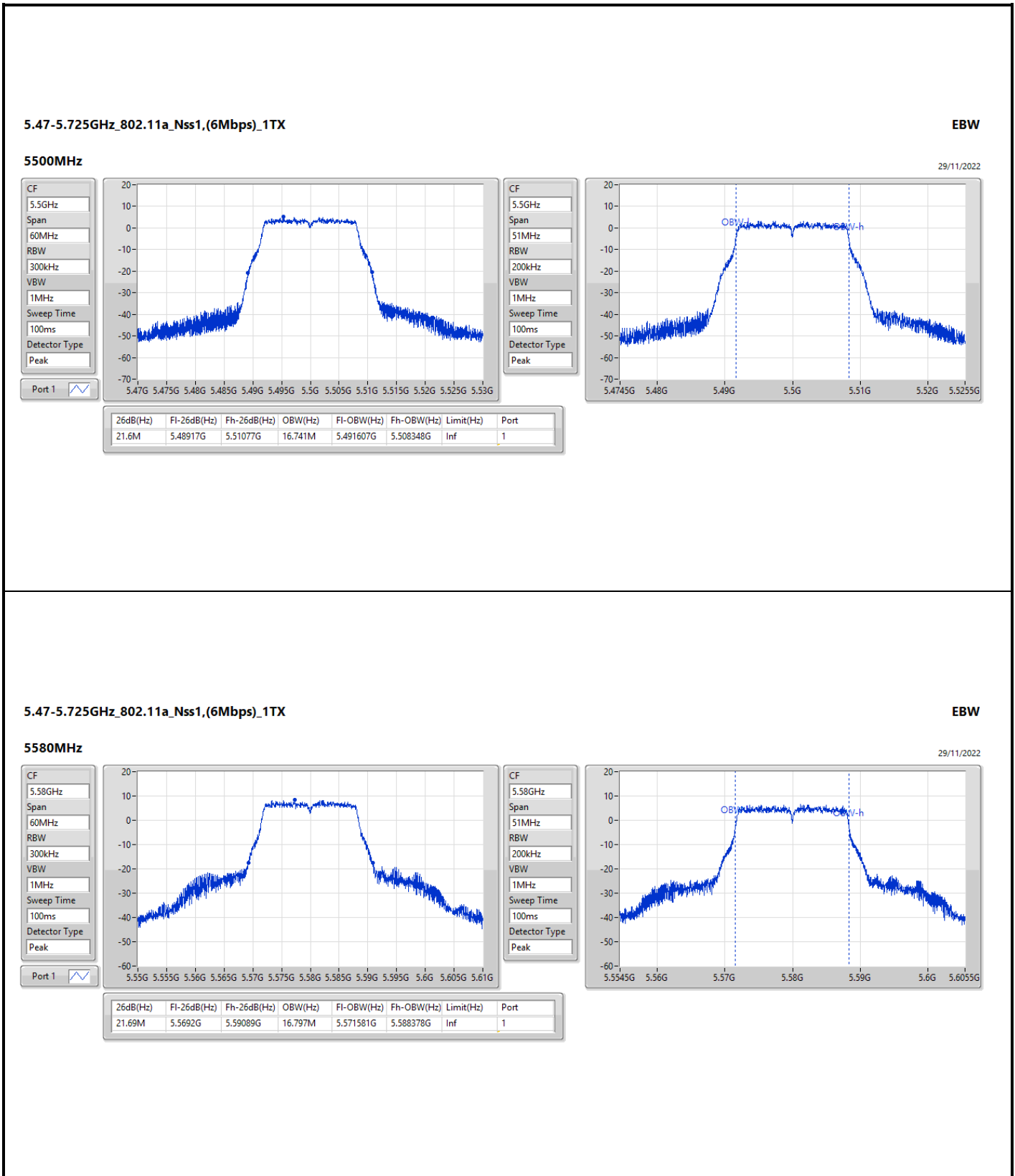
EBW

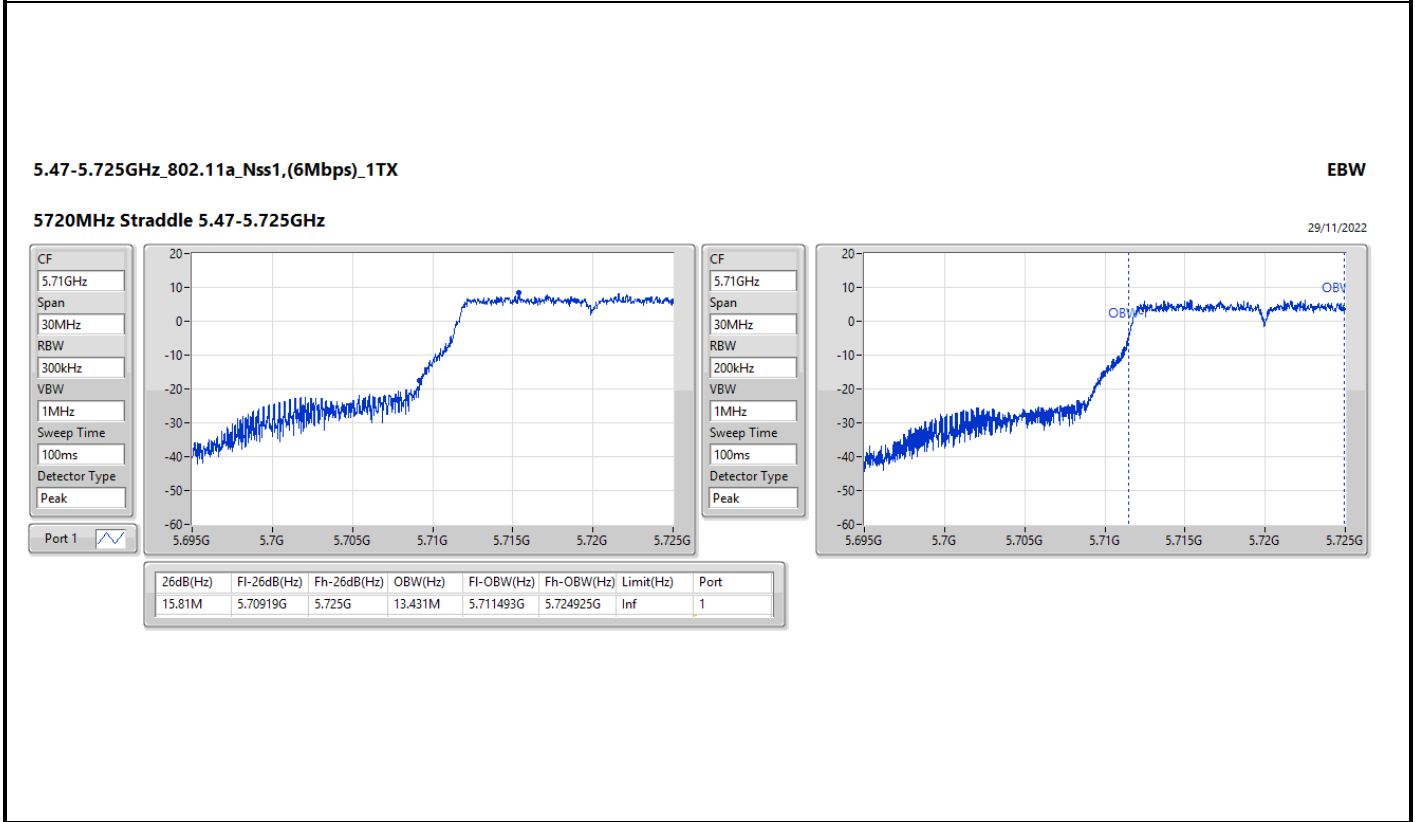
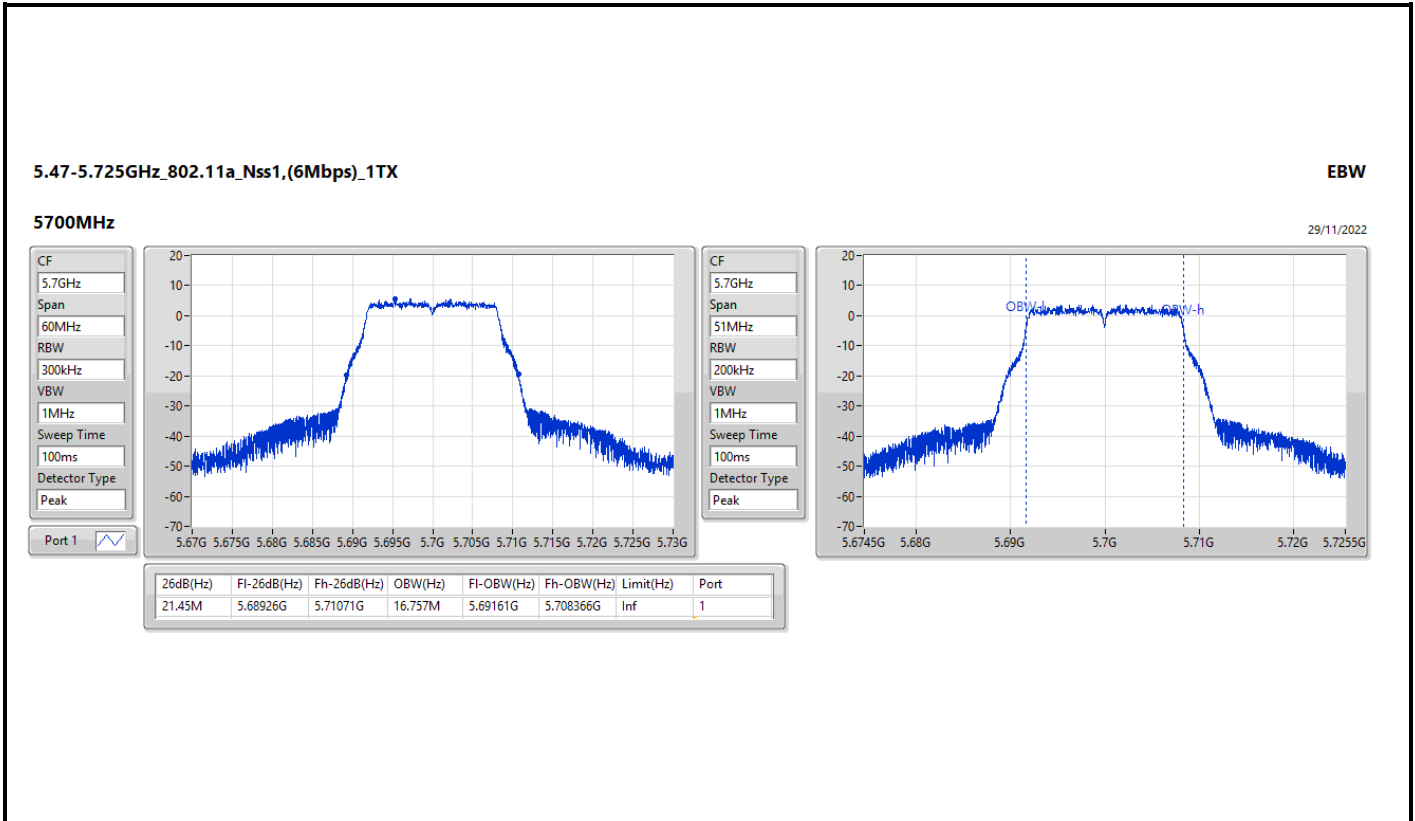
5260MHz

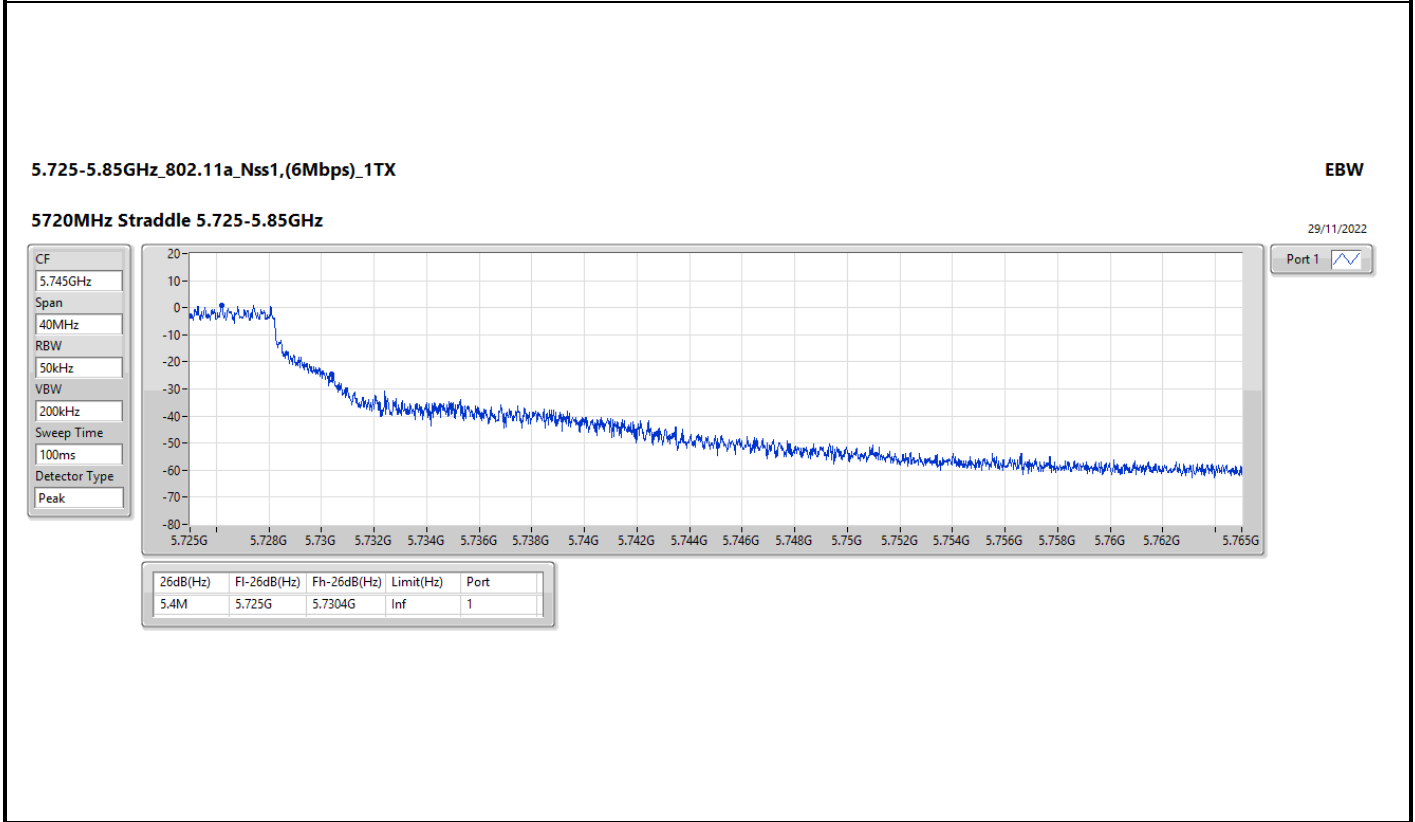
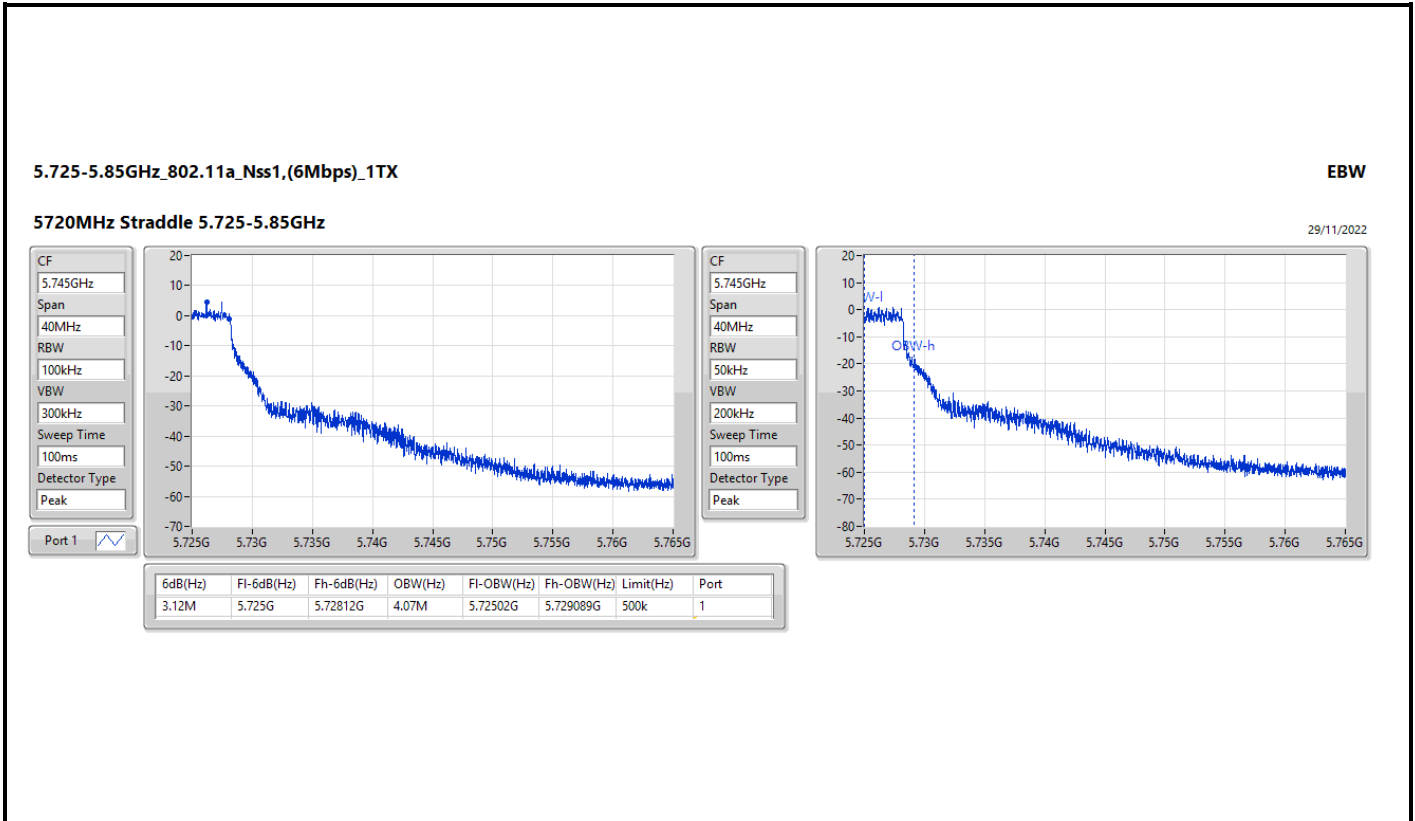
29/11/2022

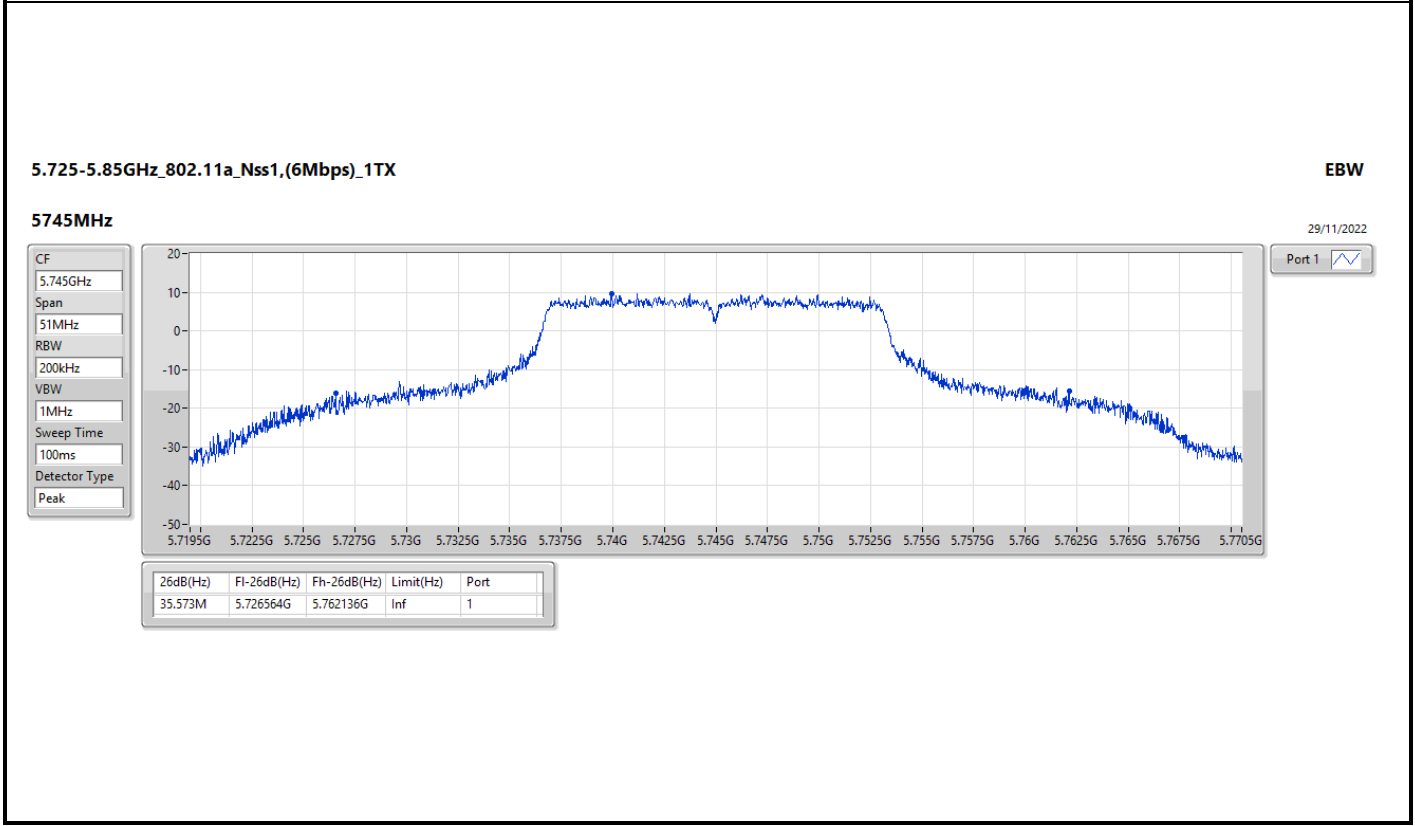
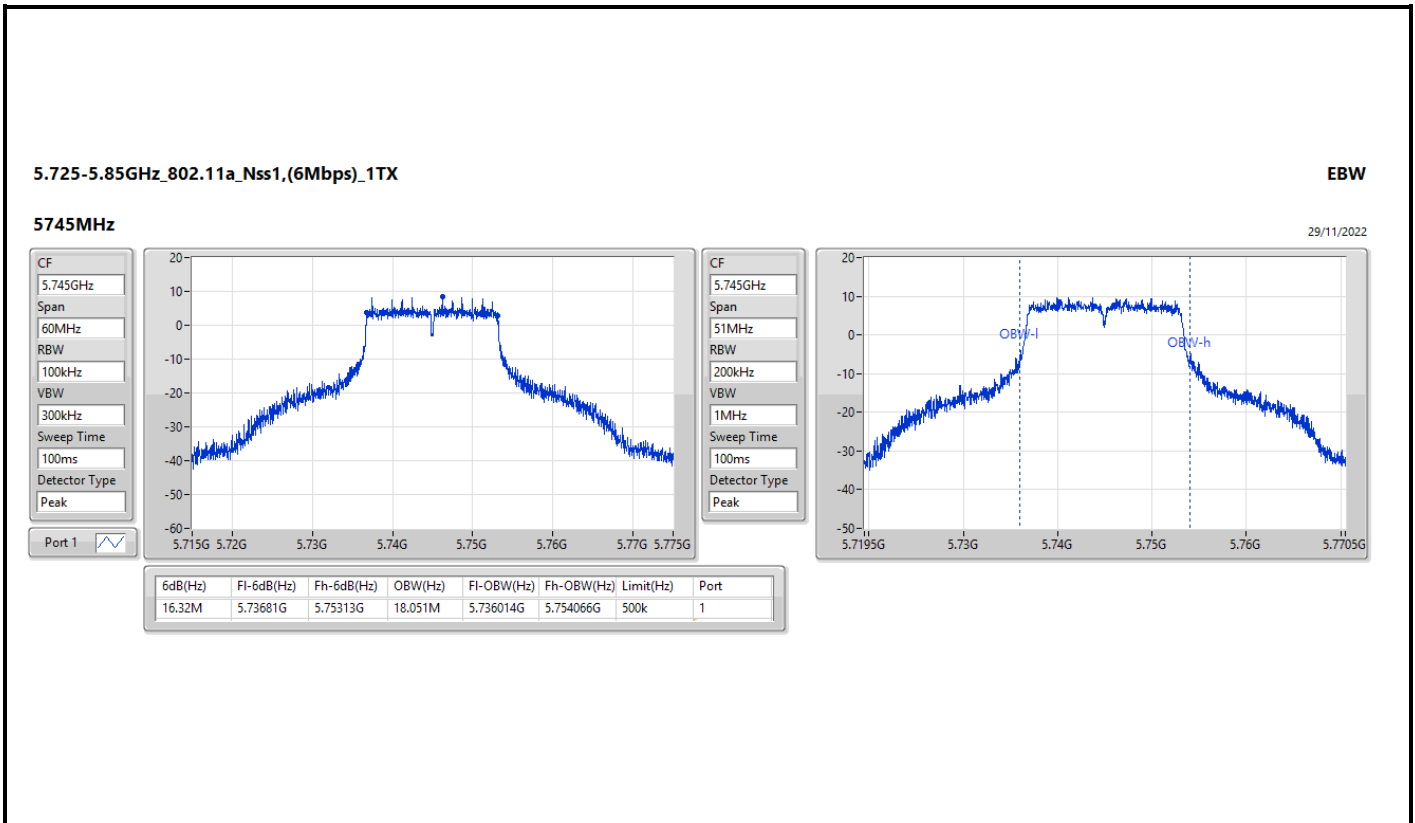


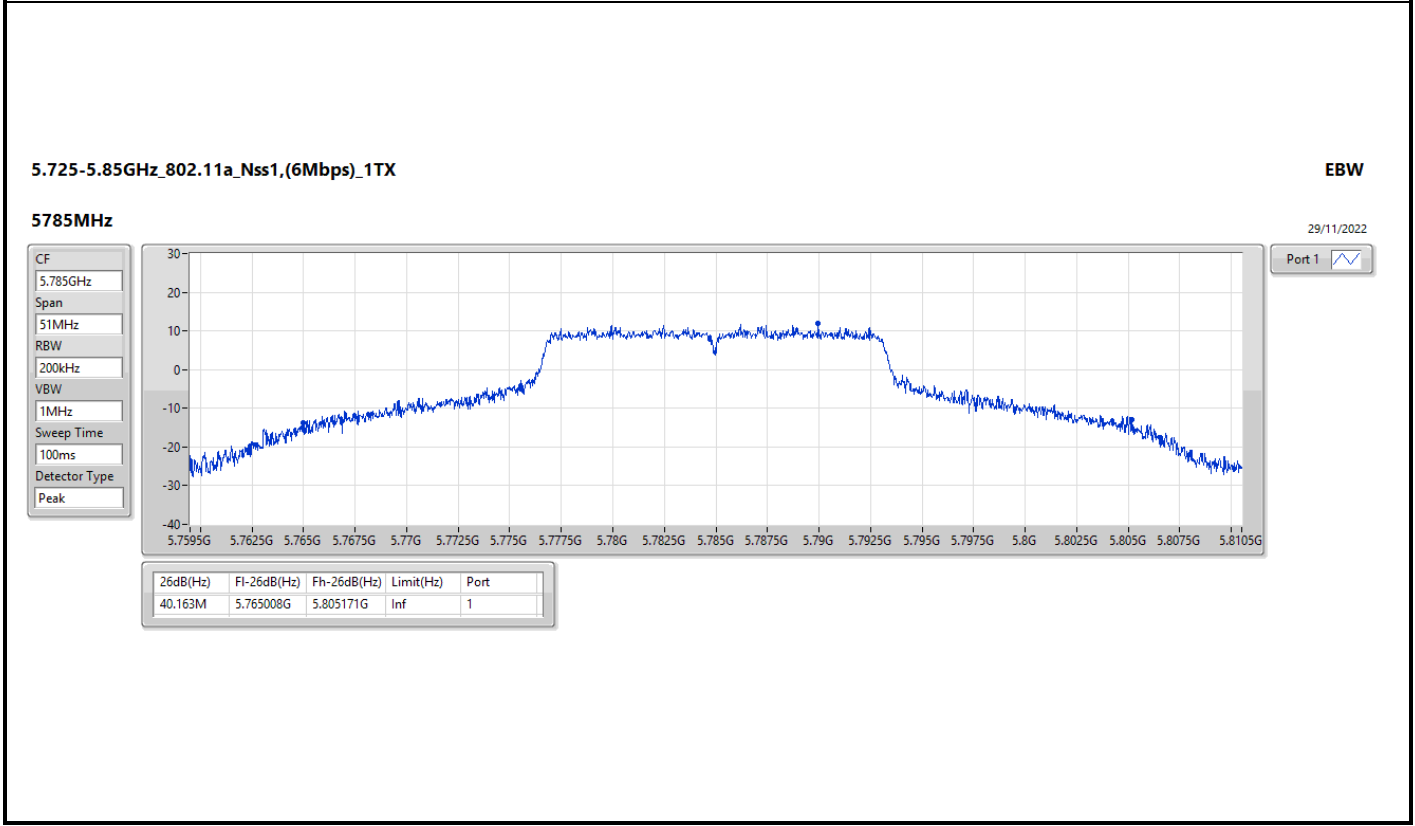
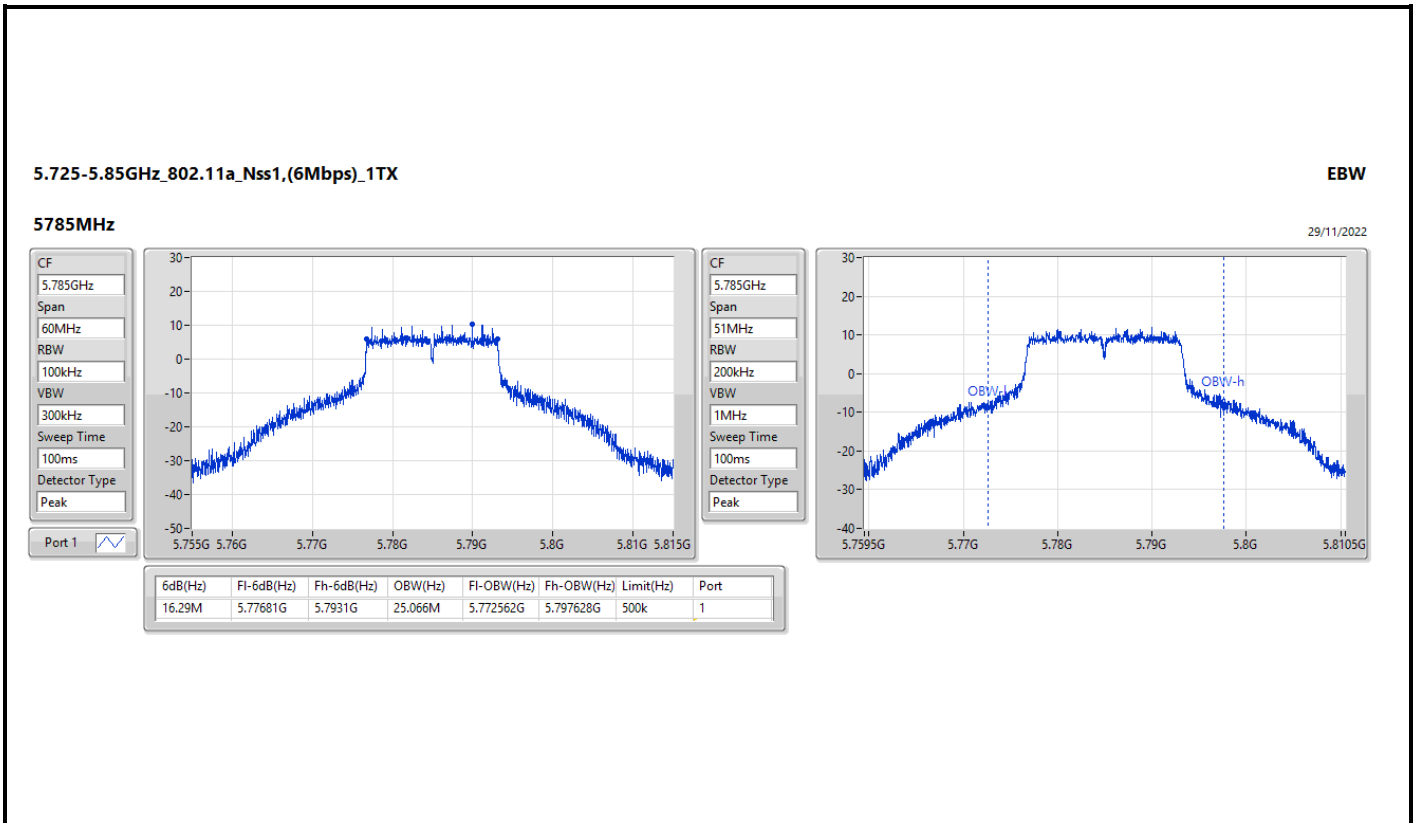


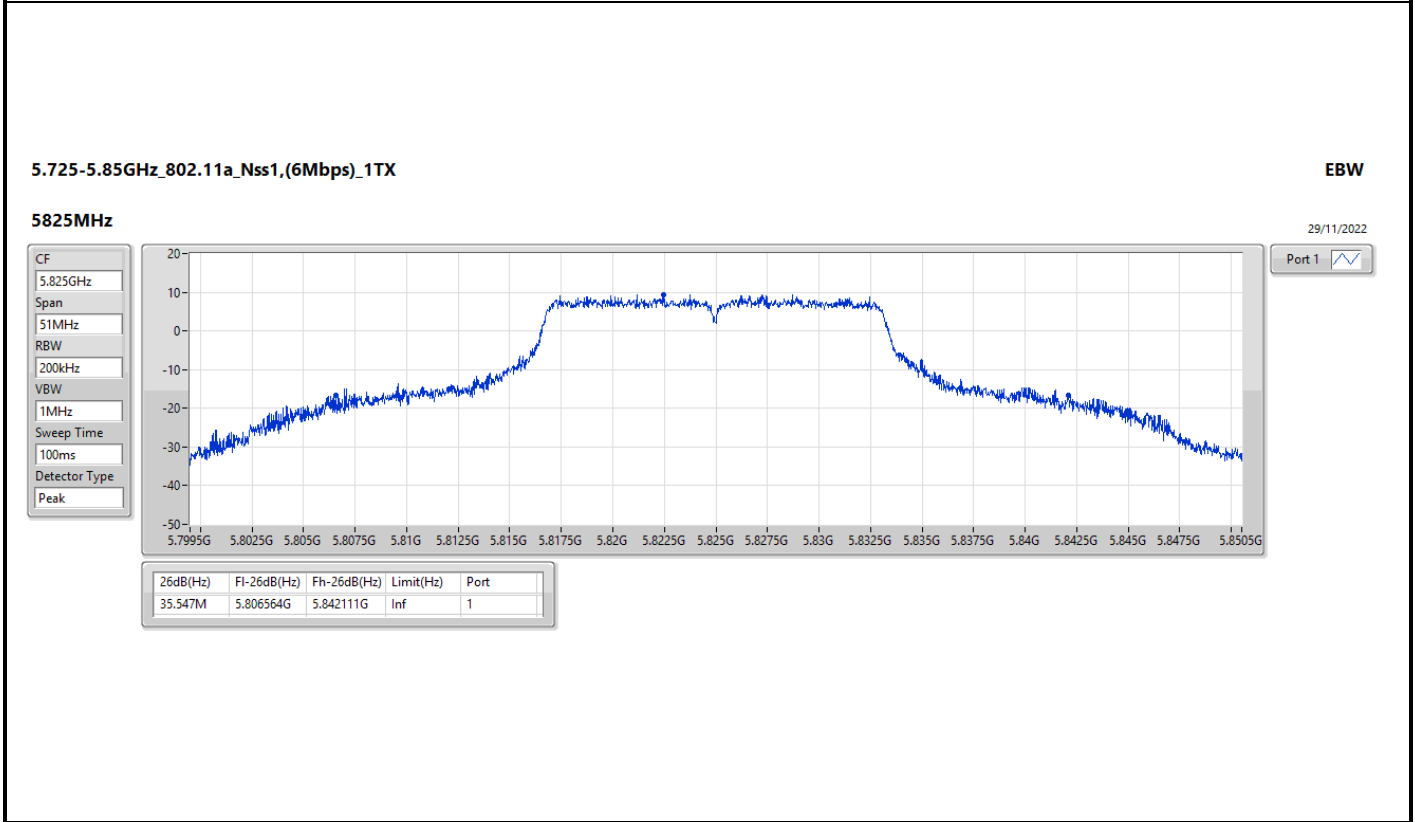
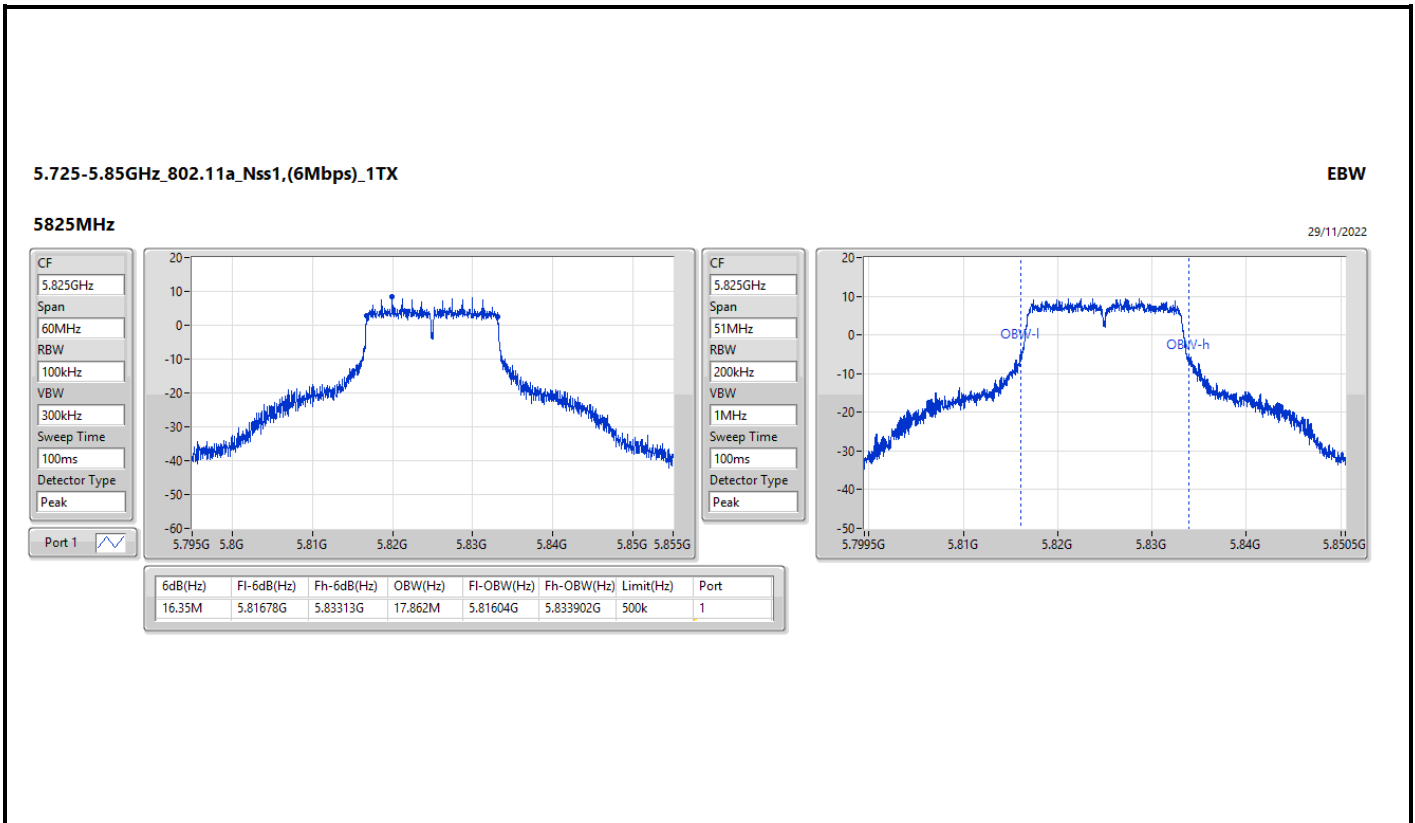












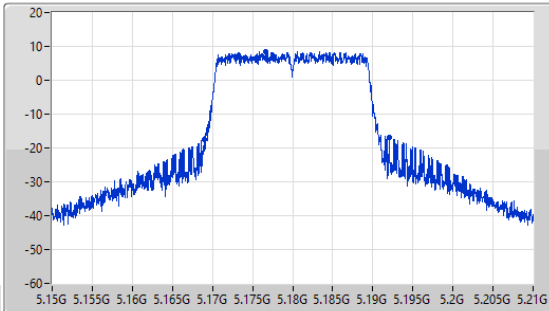
5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

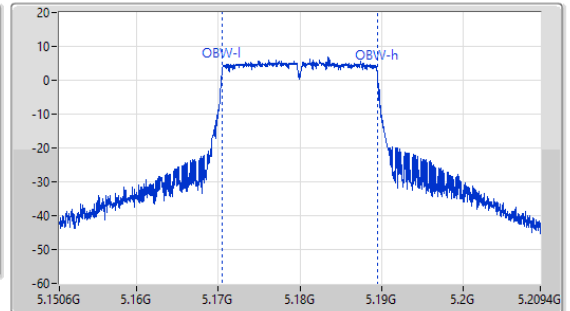
5180MHz

29/11/2022

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



CF
5.18GHz
Span
58.8MHz
RBW
200kHz
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
23.07M	5.16902G	5.19209G	19.012M	5.17046G	5.189473G	Inf	1

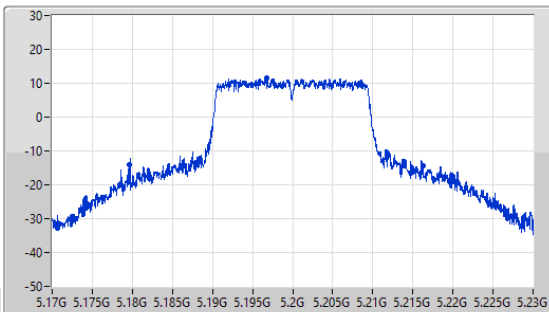
5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

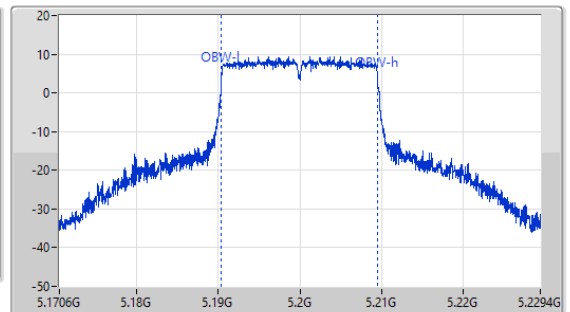
5200MHz

29/11/2022

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



CF
5.2GHz
Span
58.8MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



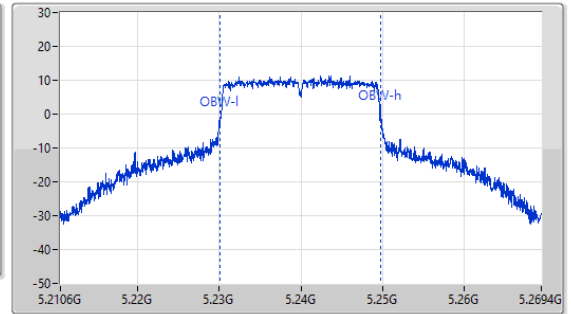
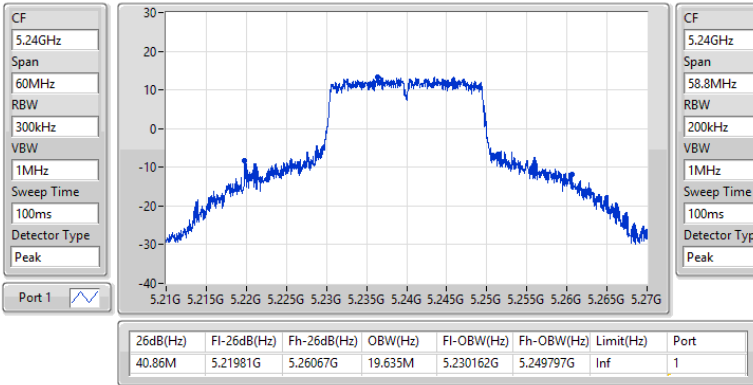
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.63M	5.1796G	5.21623G	19.149M	5.190406G	5.209554G	Inf	1

5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5240MHz

29/11/2022

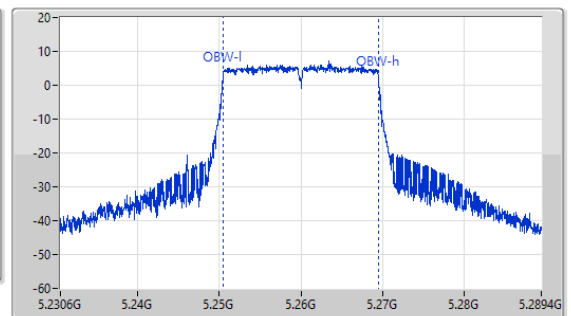
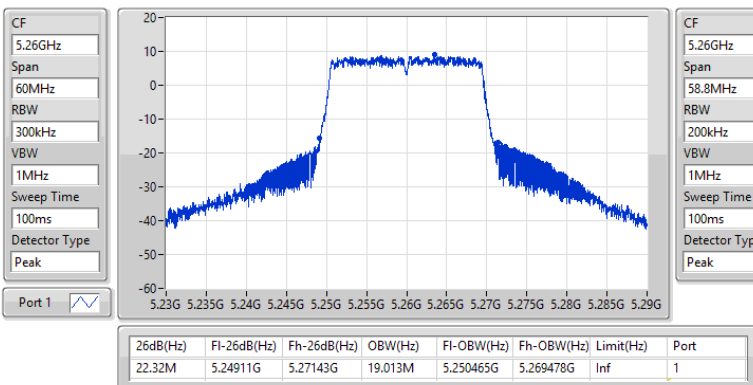


5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

5260MHz

29/11/2022



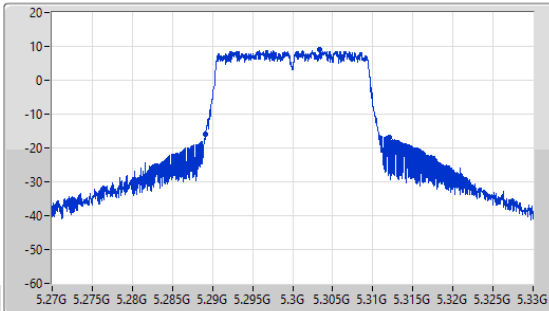
5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_1TX

EBW

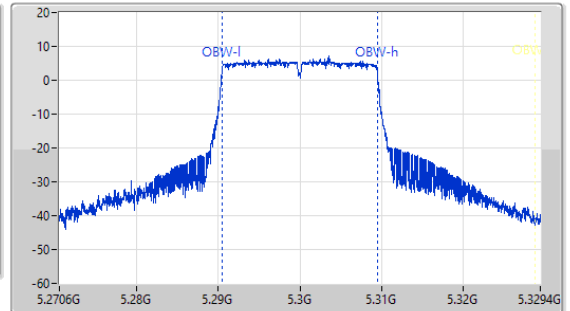
5300MHz

29/11/2022

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



CF
5.3GHz
Span
58.8MHz
RBW
200kHz
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
22.98M	5.28908G	5.31206G	19.012M	5.290463G	5.309475G	Inf	1

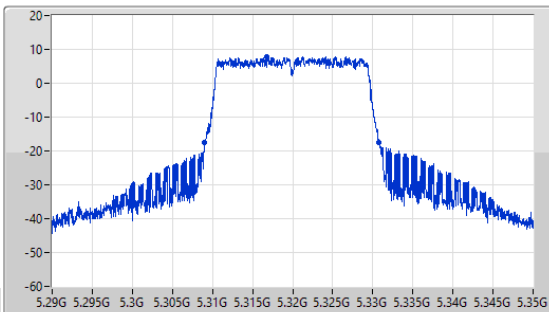
5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_1TX

EBW

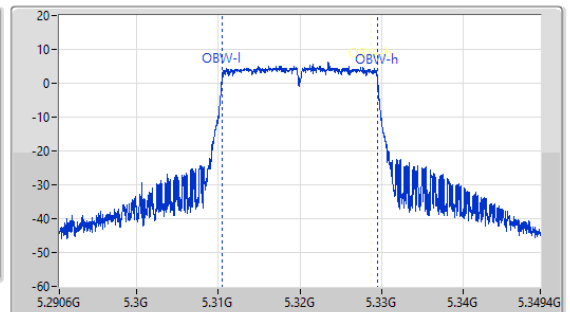
5320MHz

29/11/2022

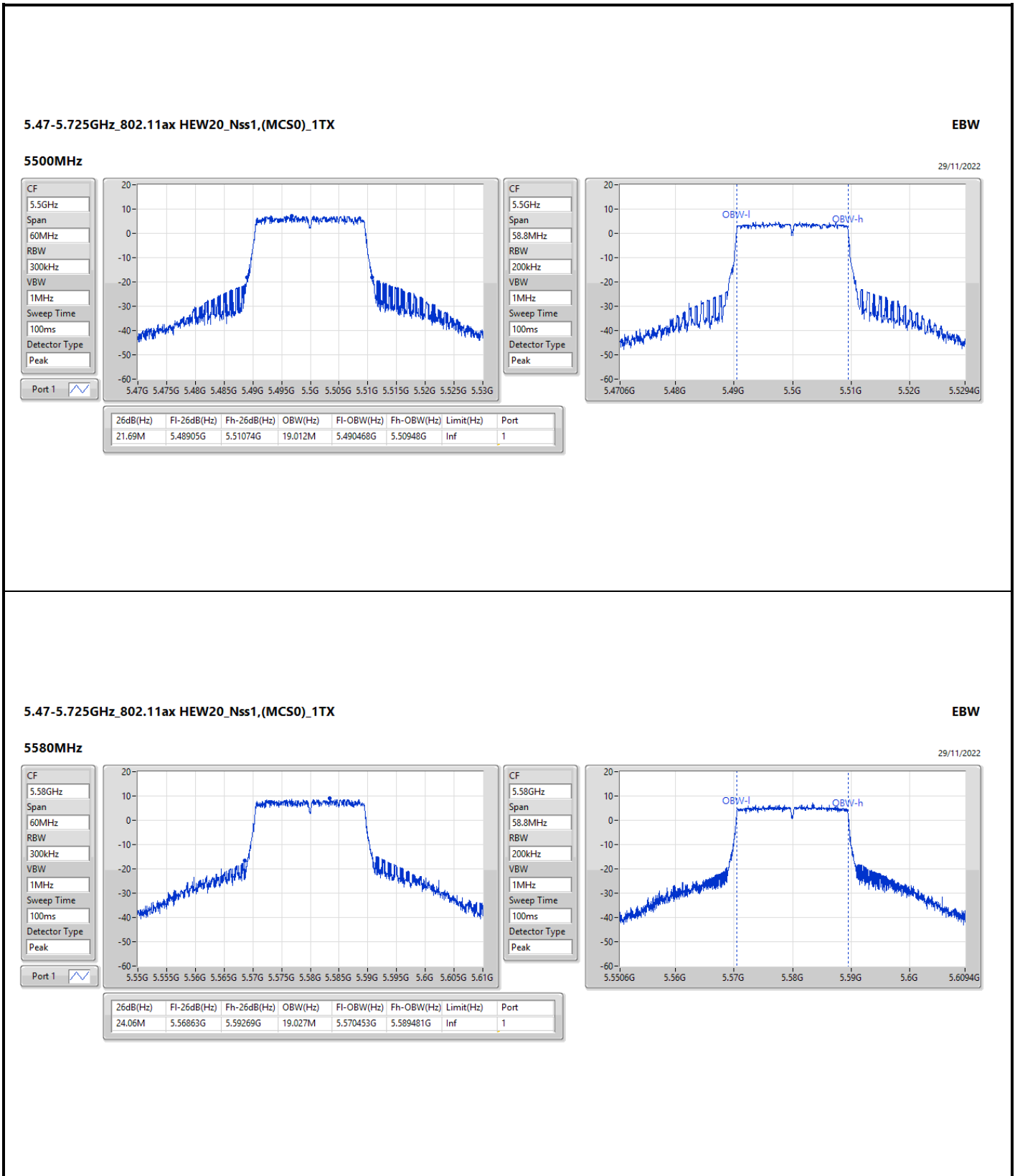
CF
5.32GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

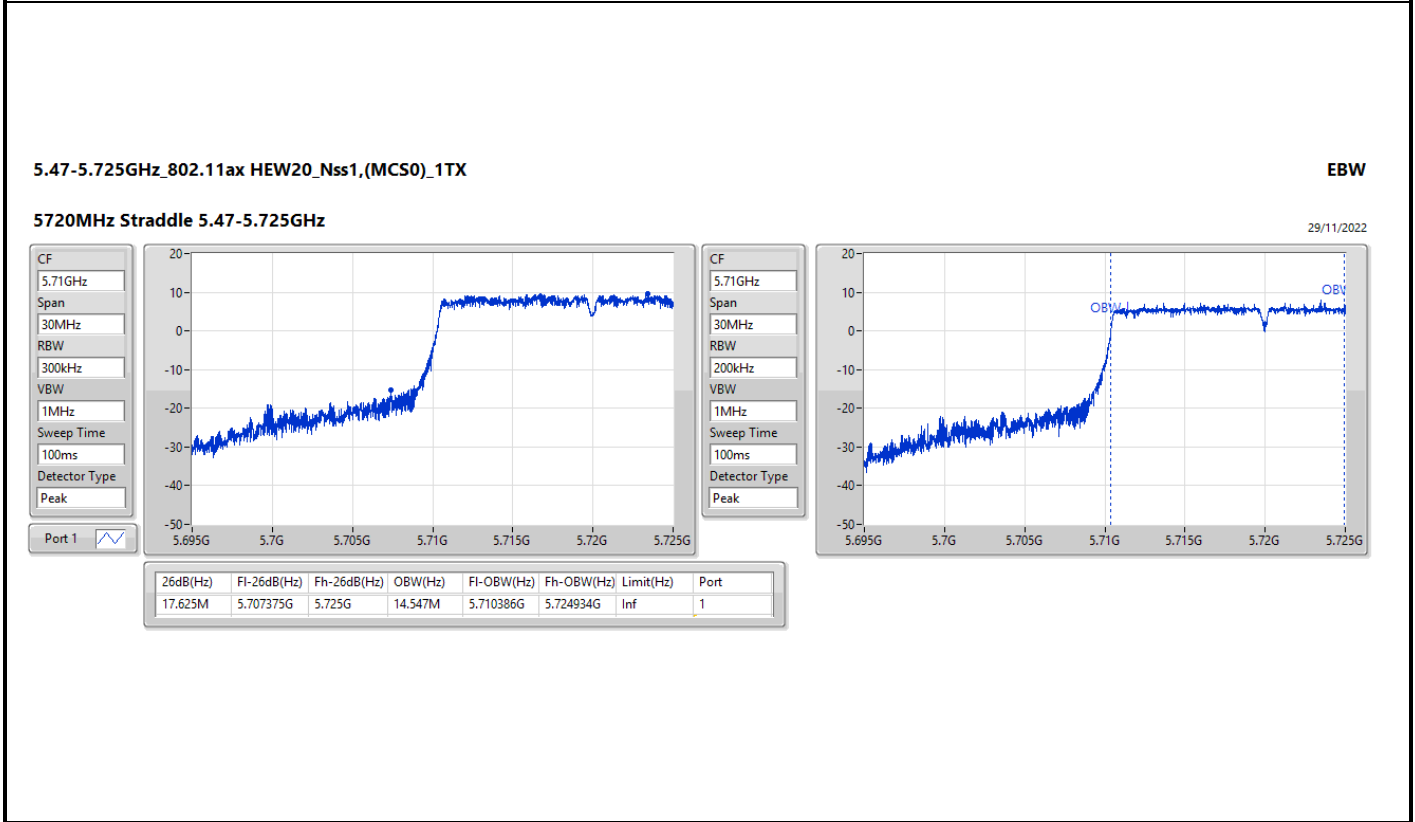
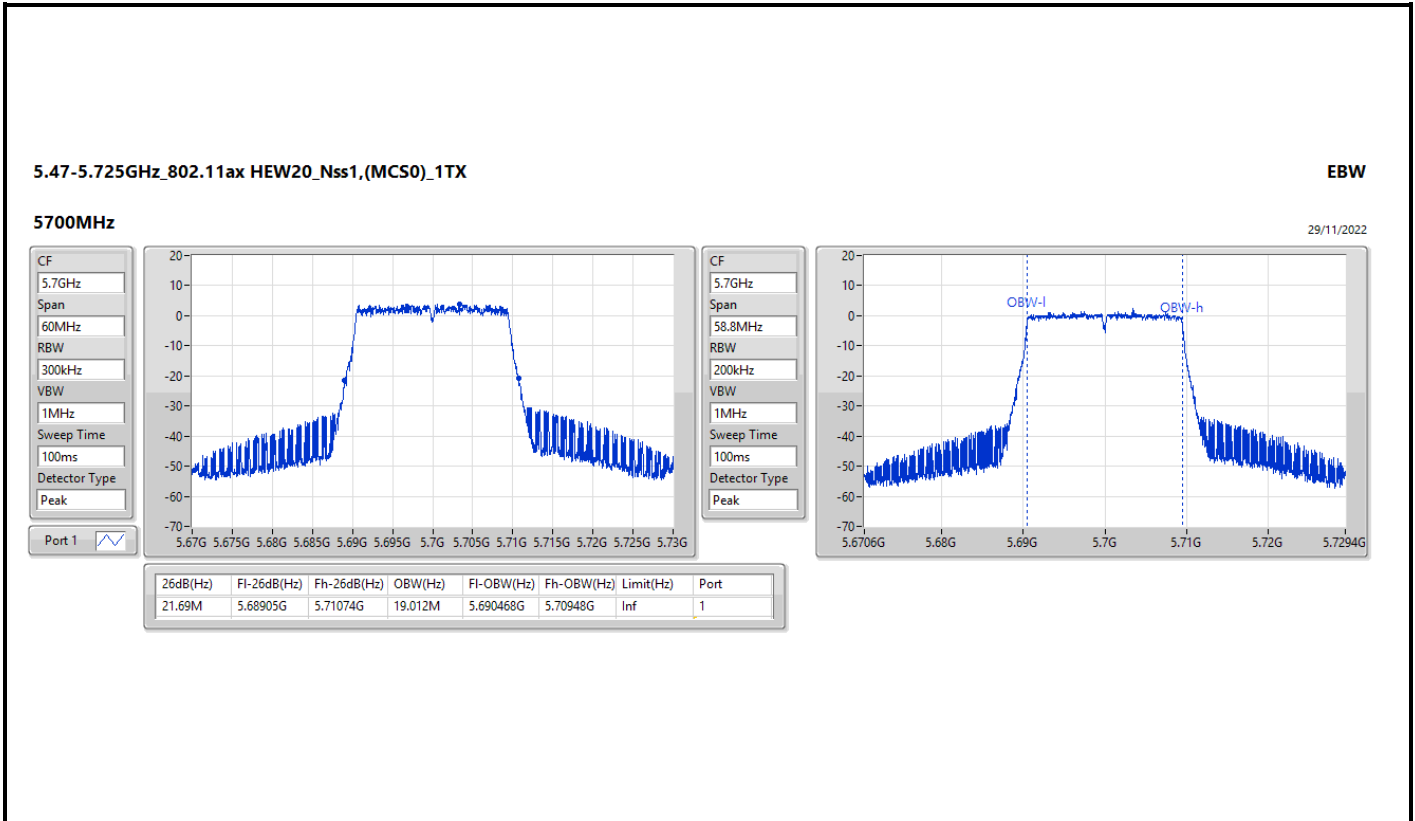


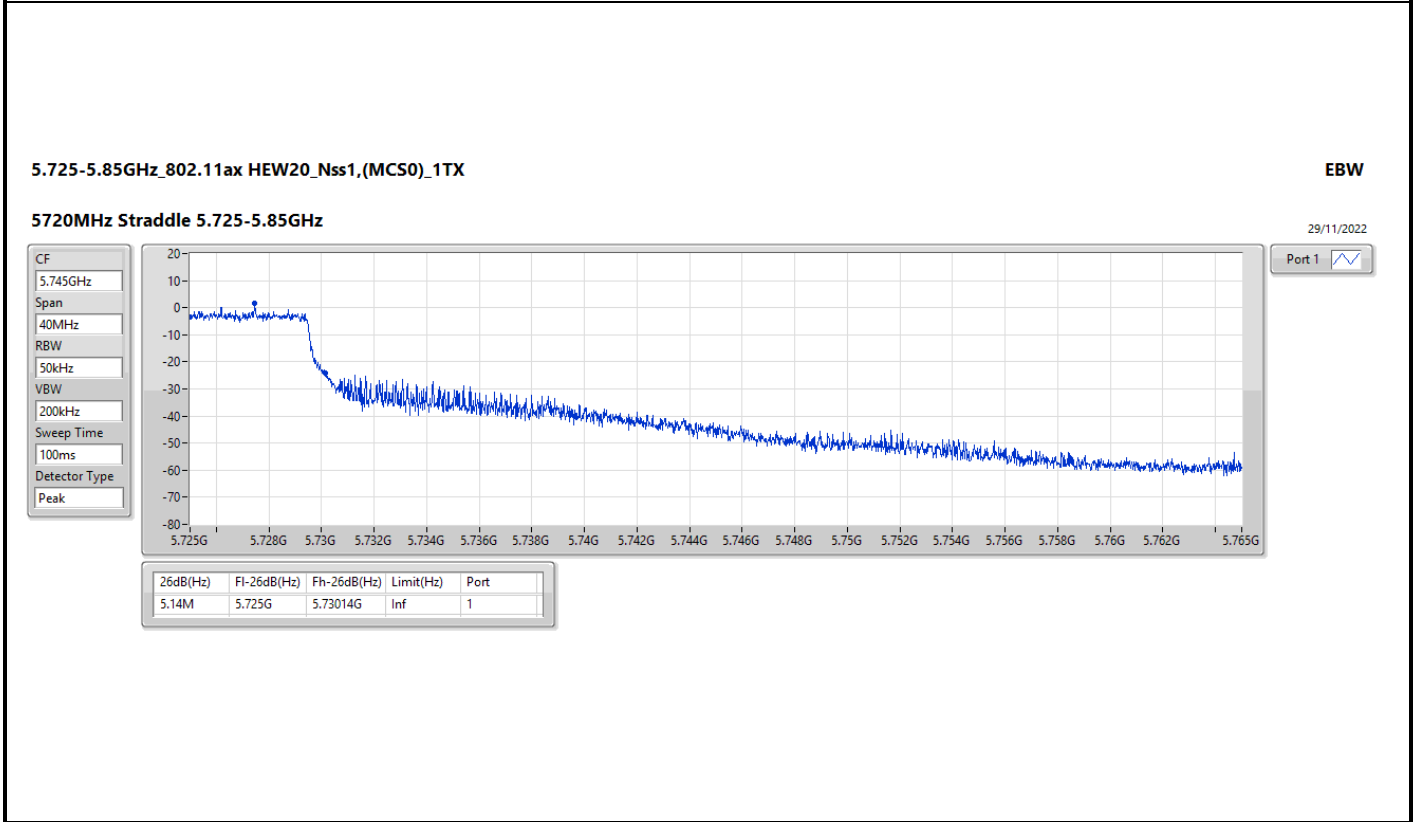
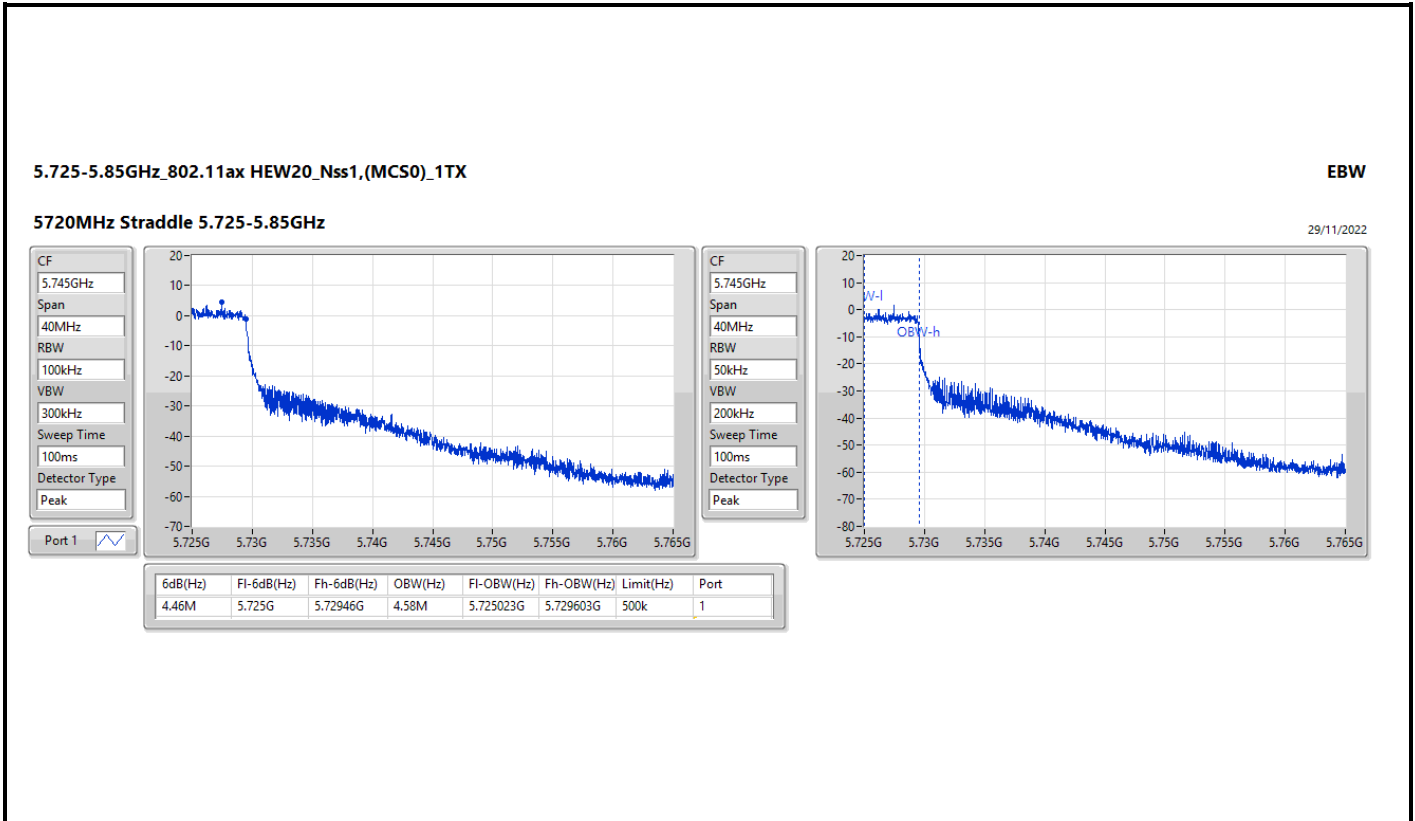
CF
5.32GHz
Span
58.8MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

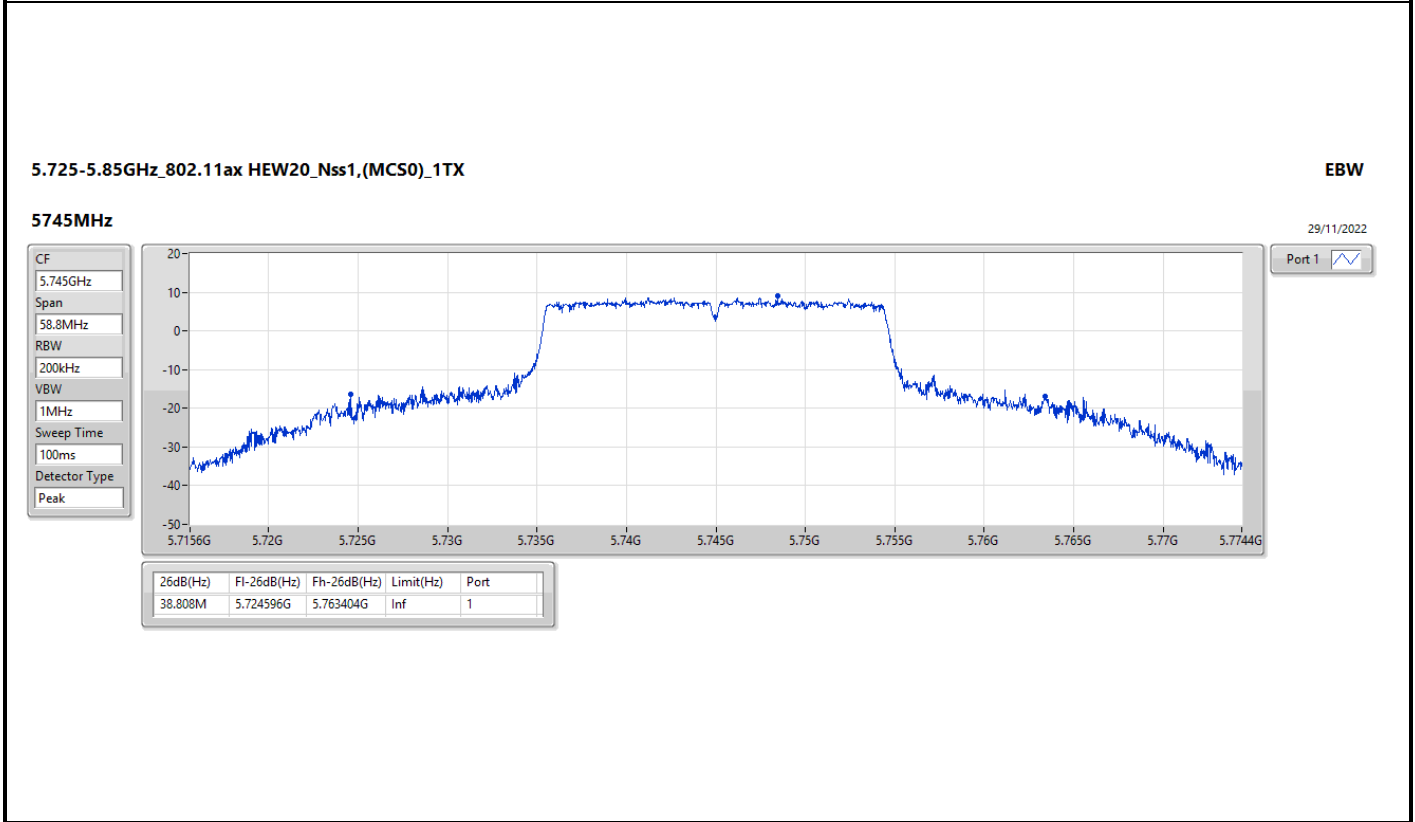
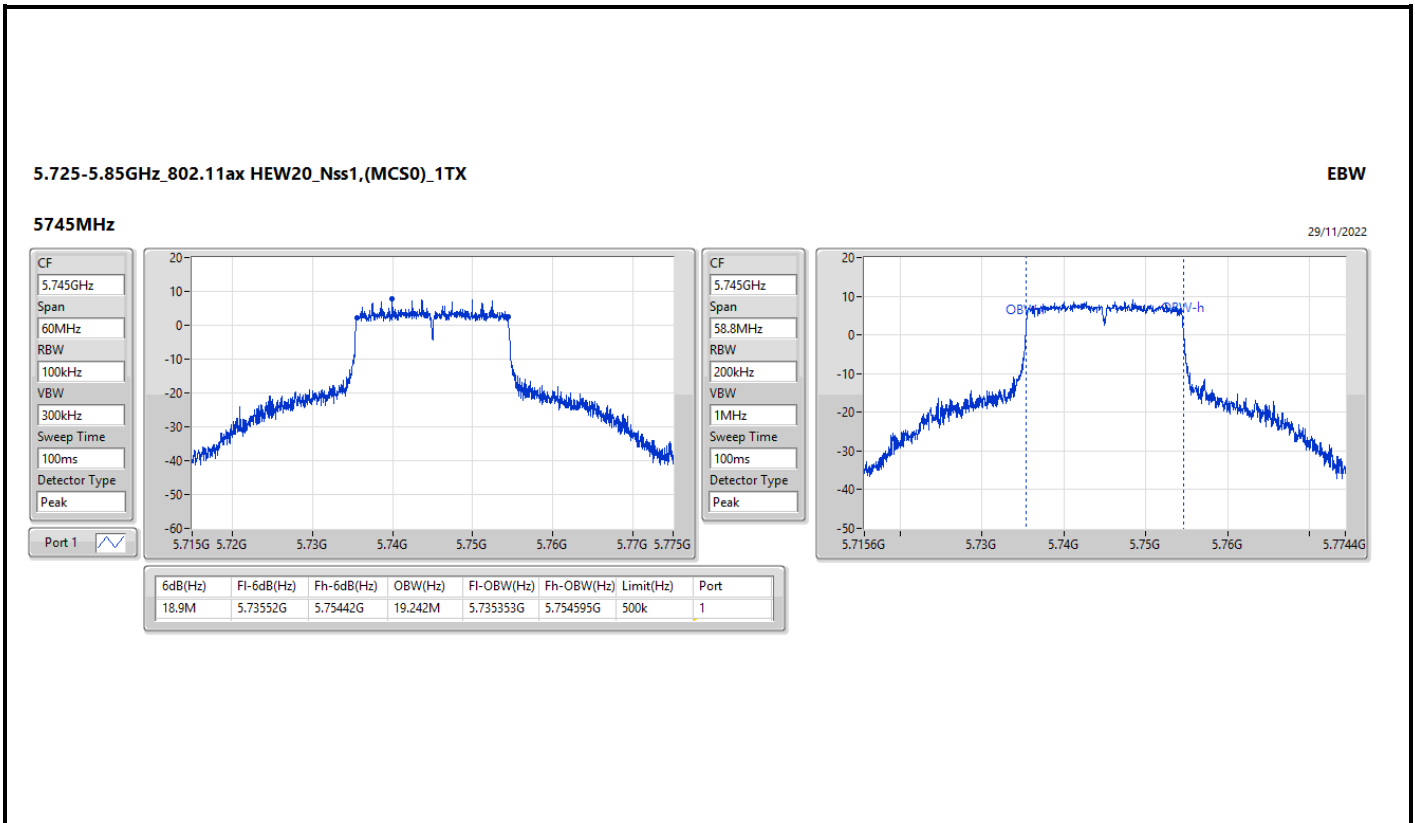


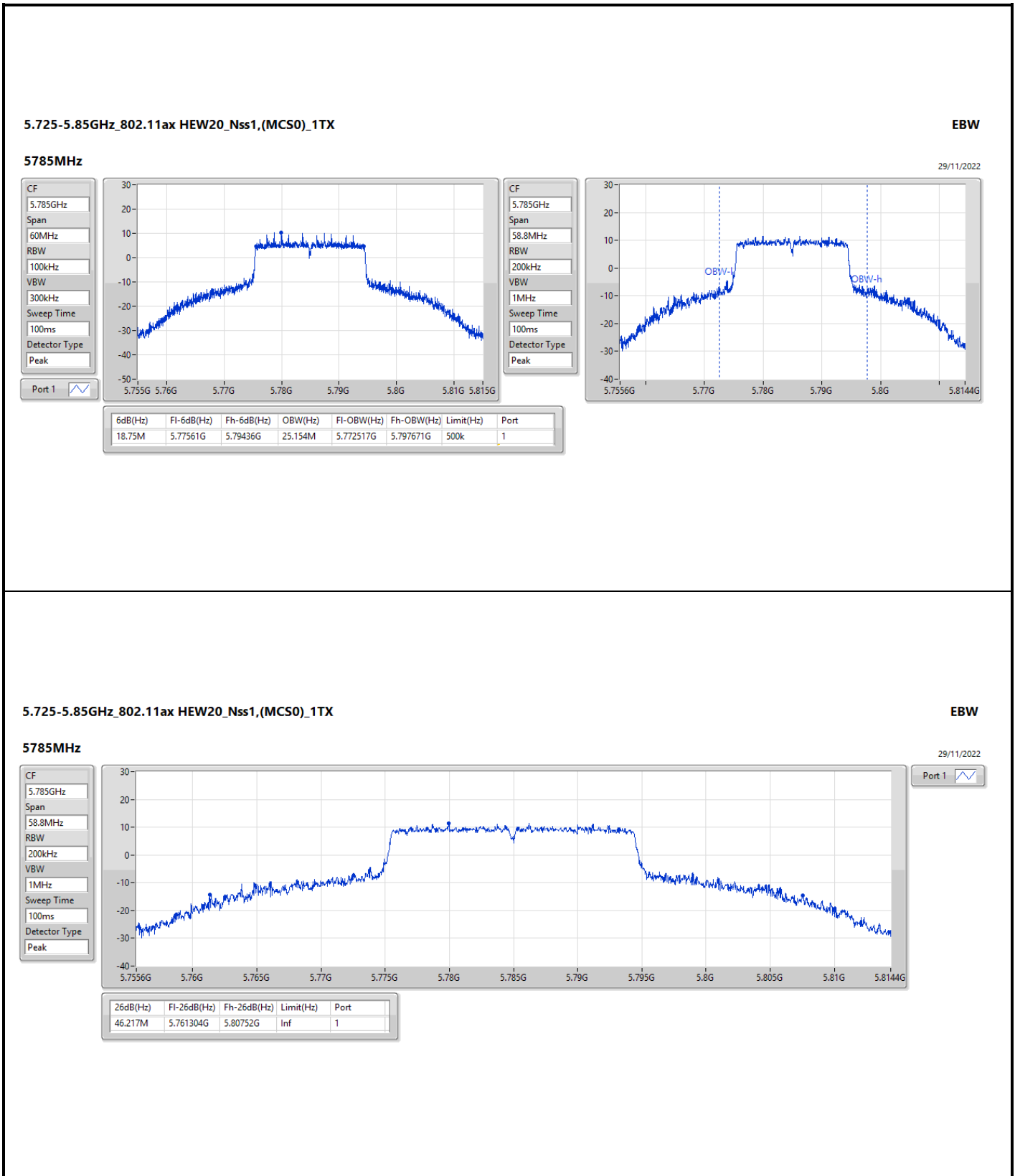
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.30905G	5.3308G	19.009M	5.310468G	5.329476G	Inf	1

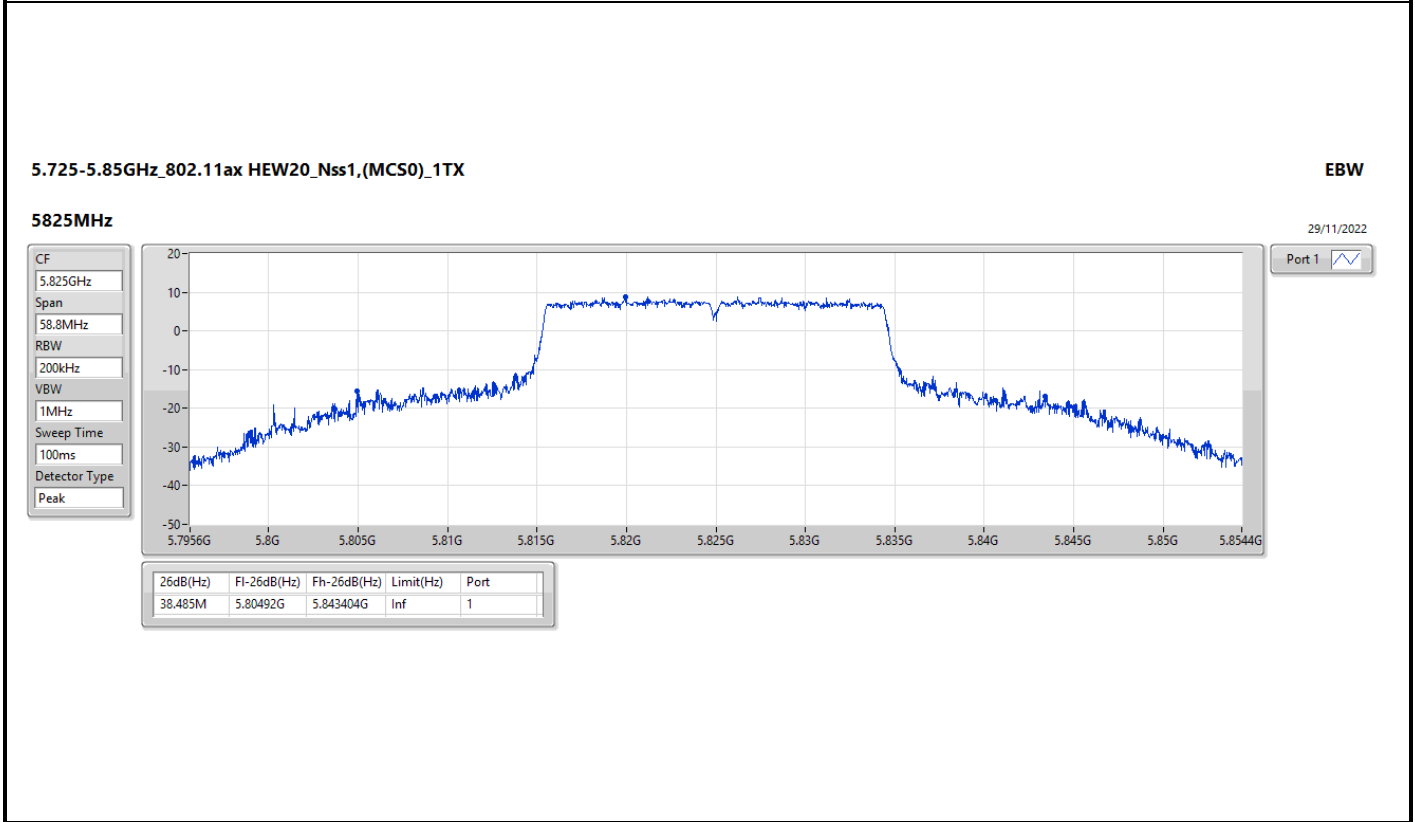
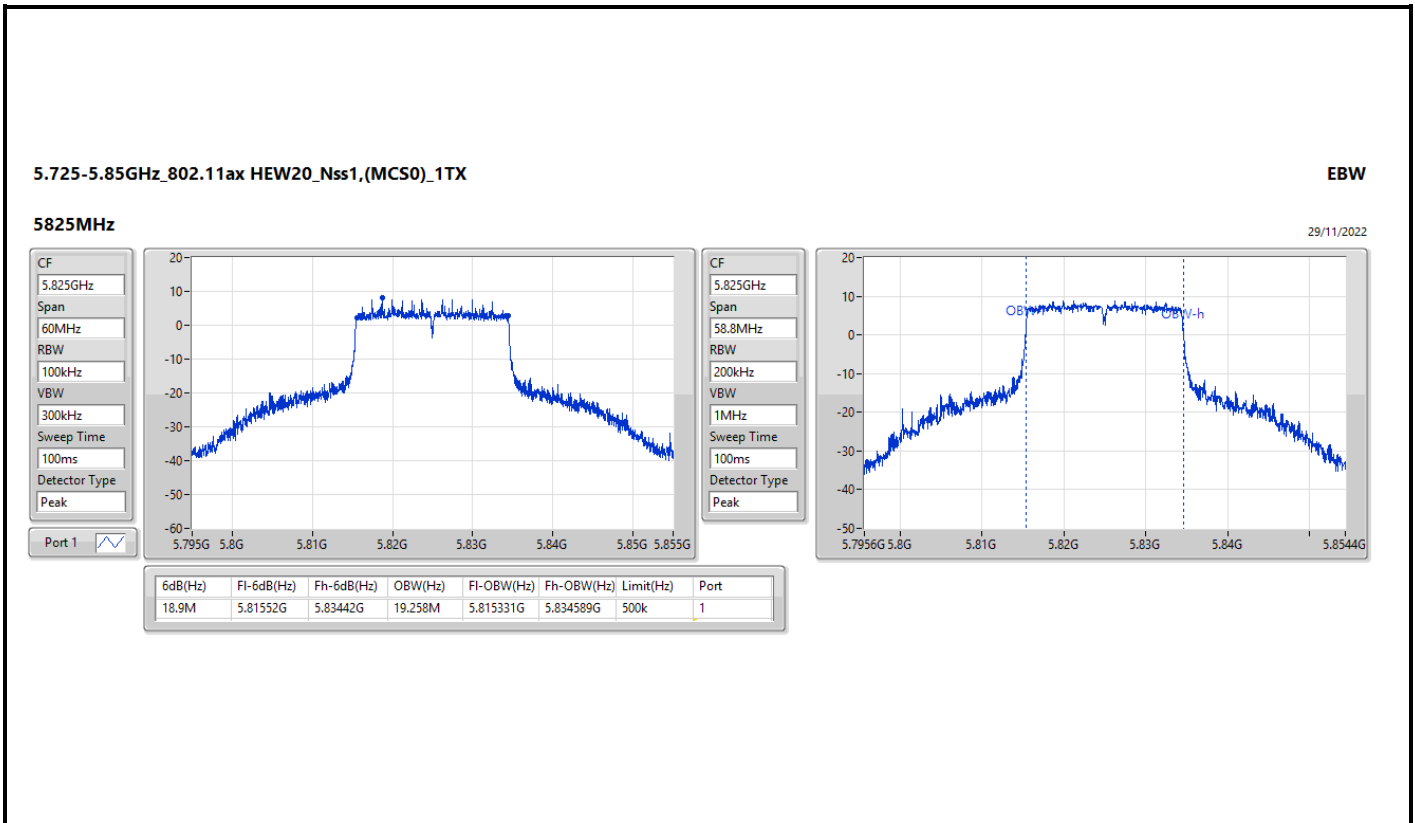










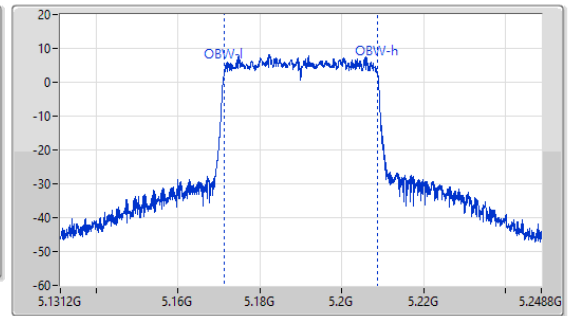
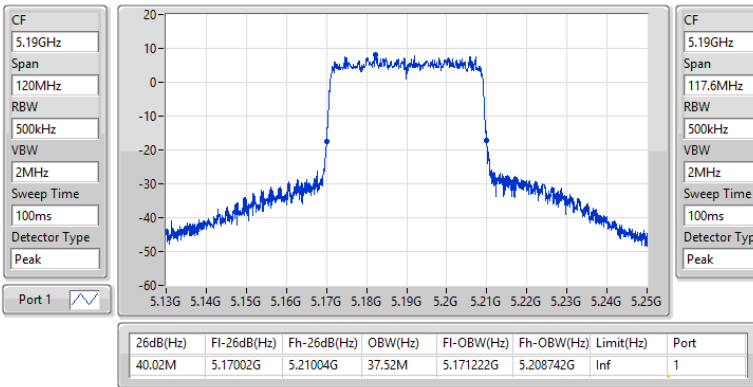


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_1TX

EBW

5190MHz

29/11/2022

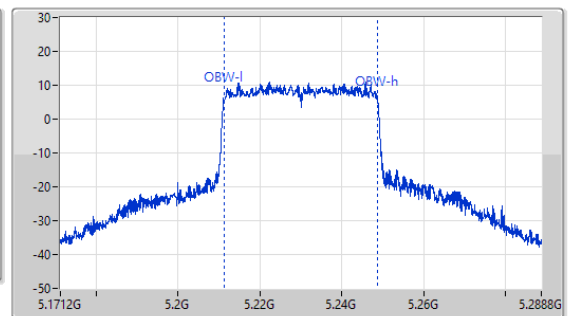
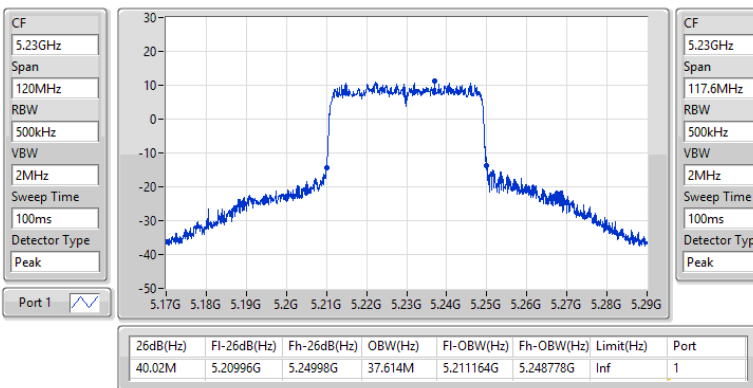


5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_1TX

EBW

5230MHz

29/11/2022

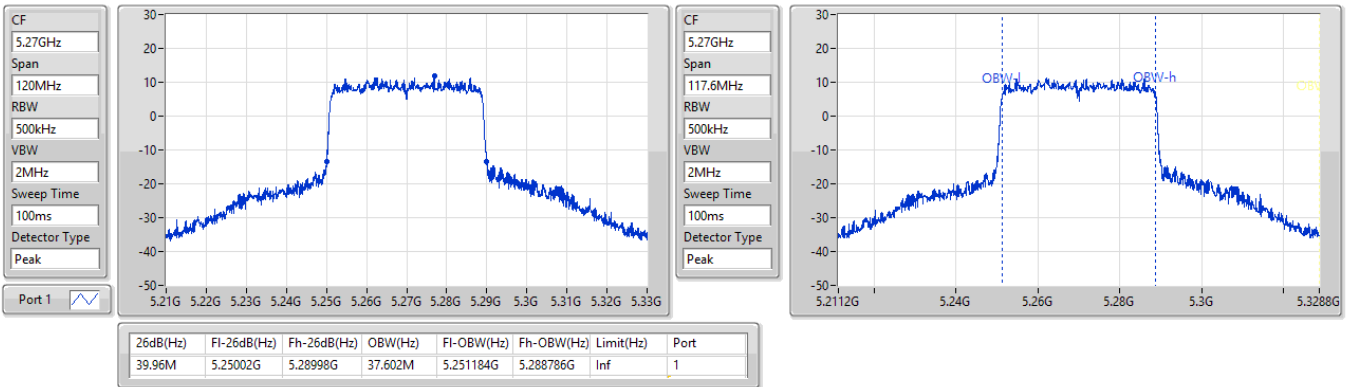


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_1TX

EBW

5270MHz

29/11/2022

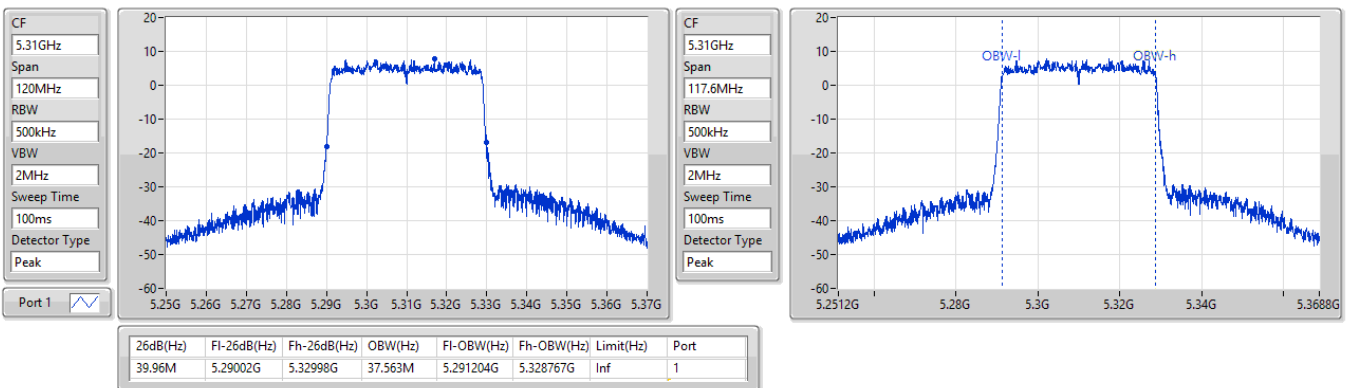


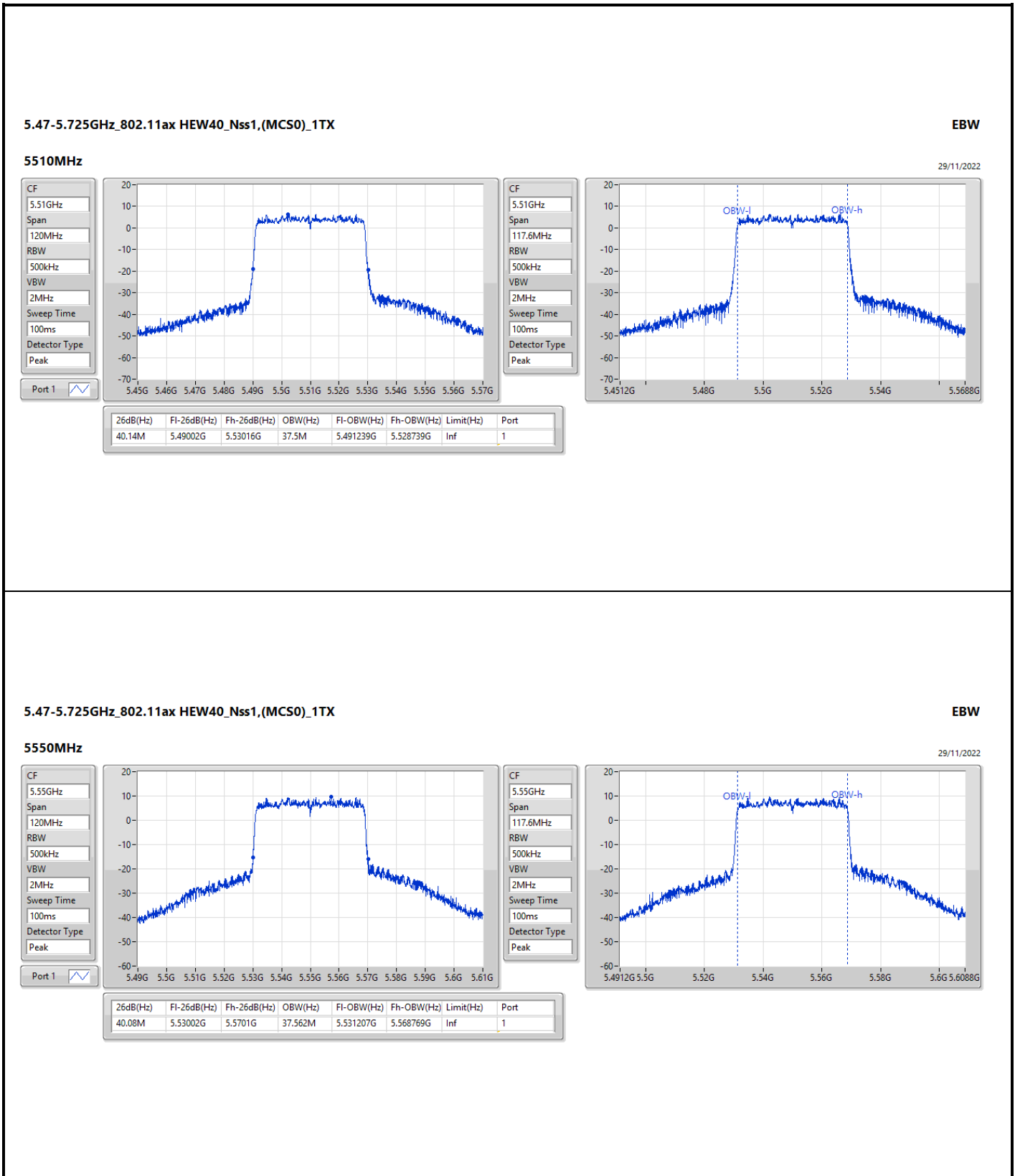
5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_1TX

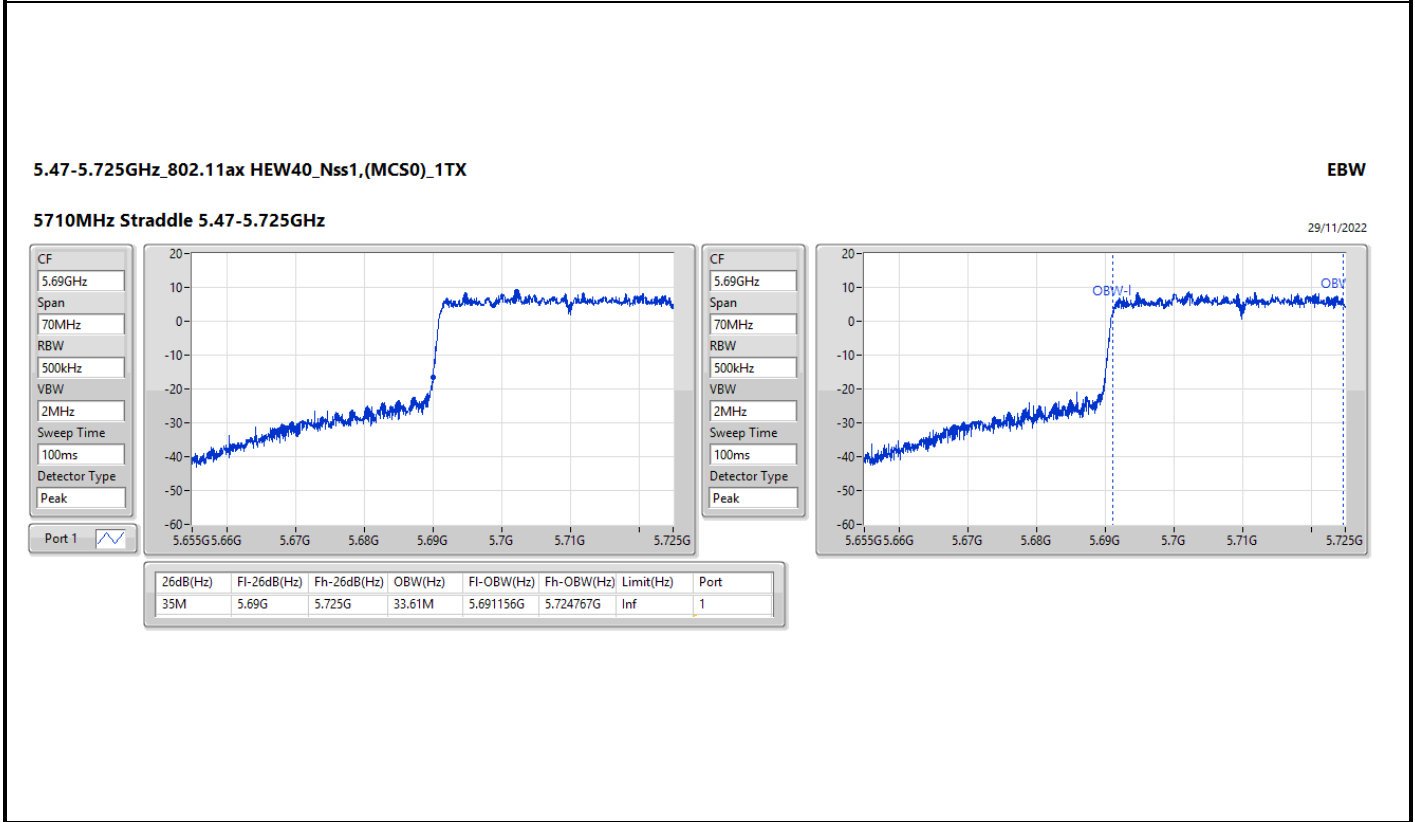
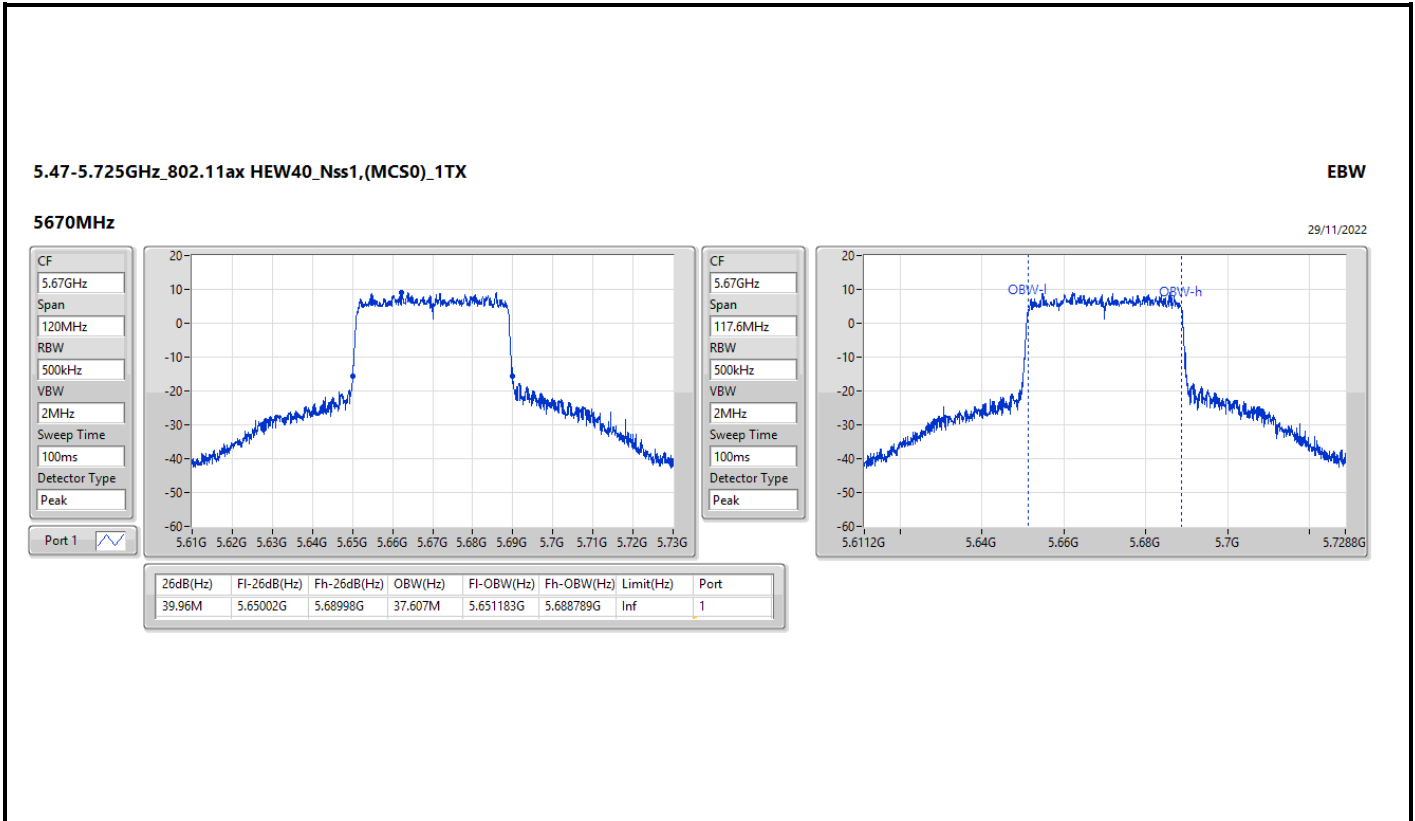
EBW

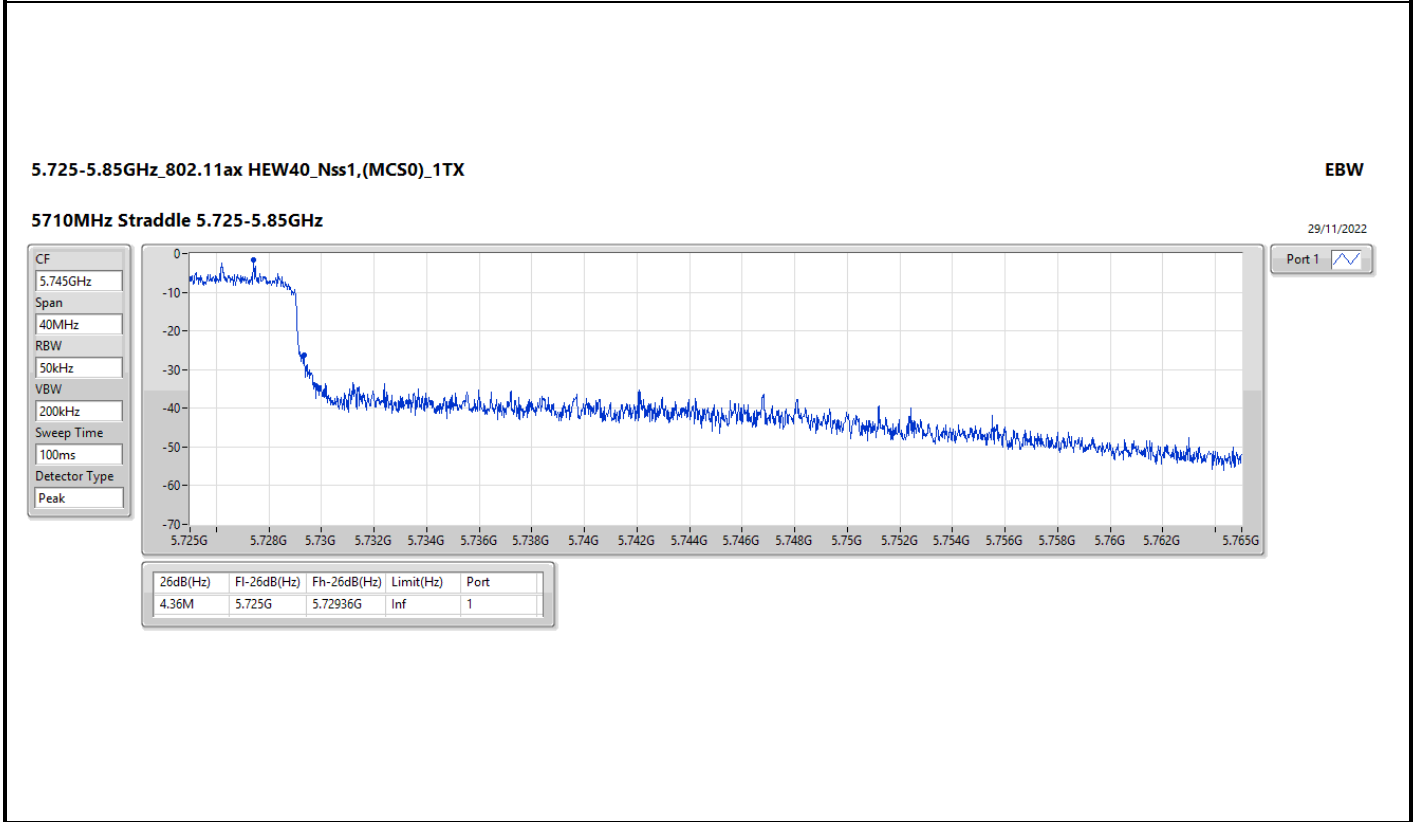
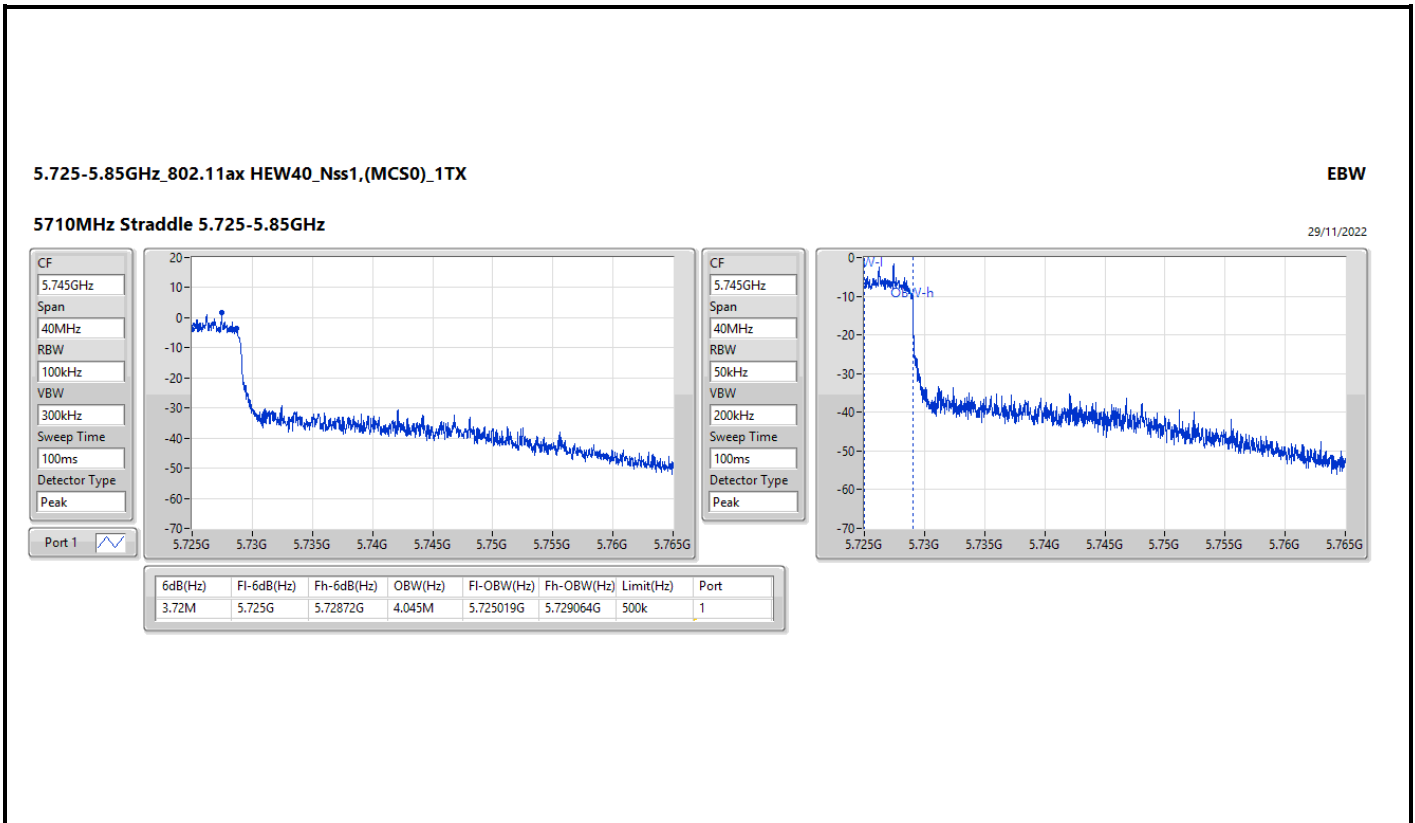
5310MHz

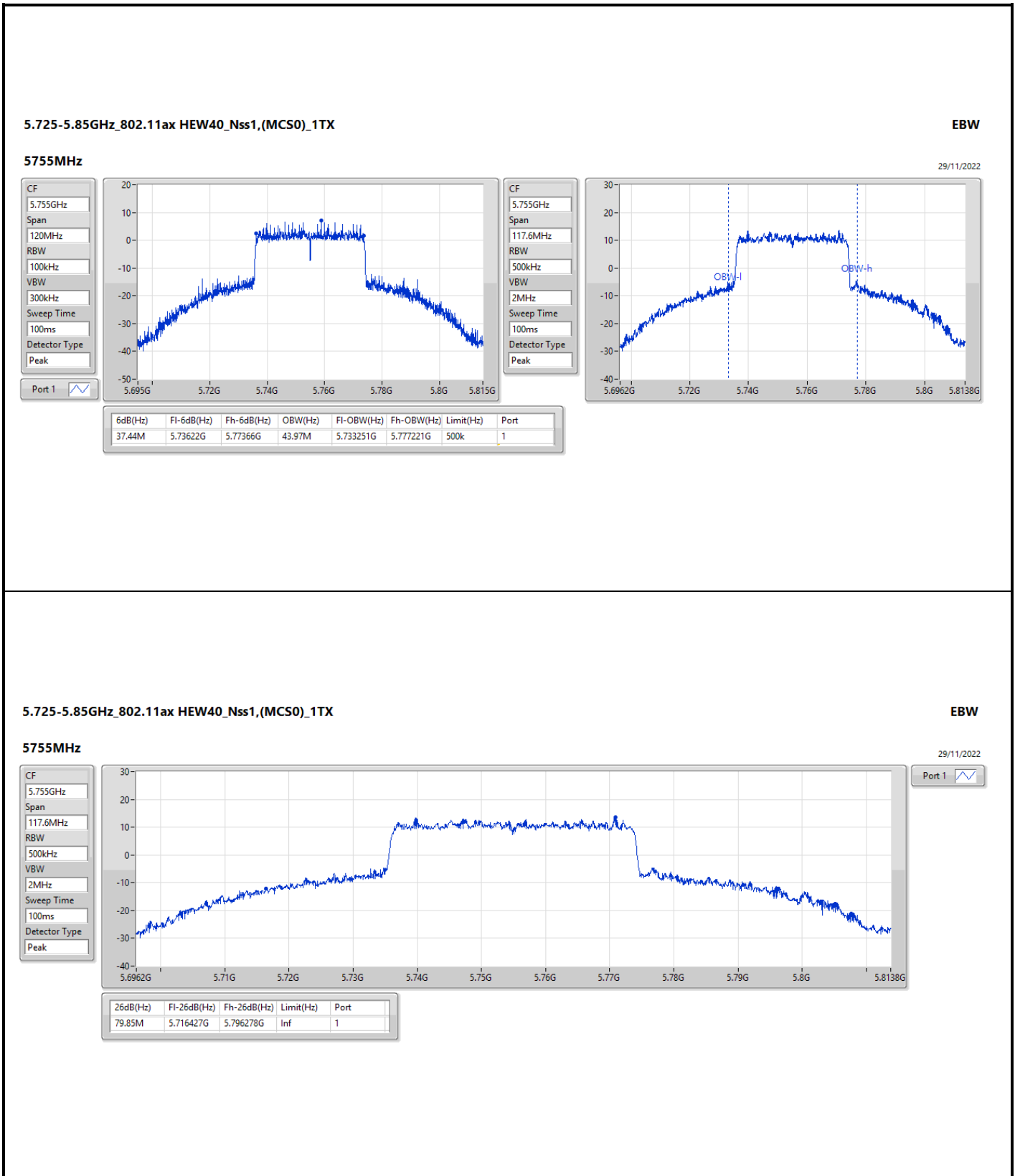
29/11/2022

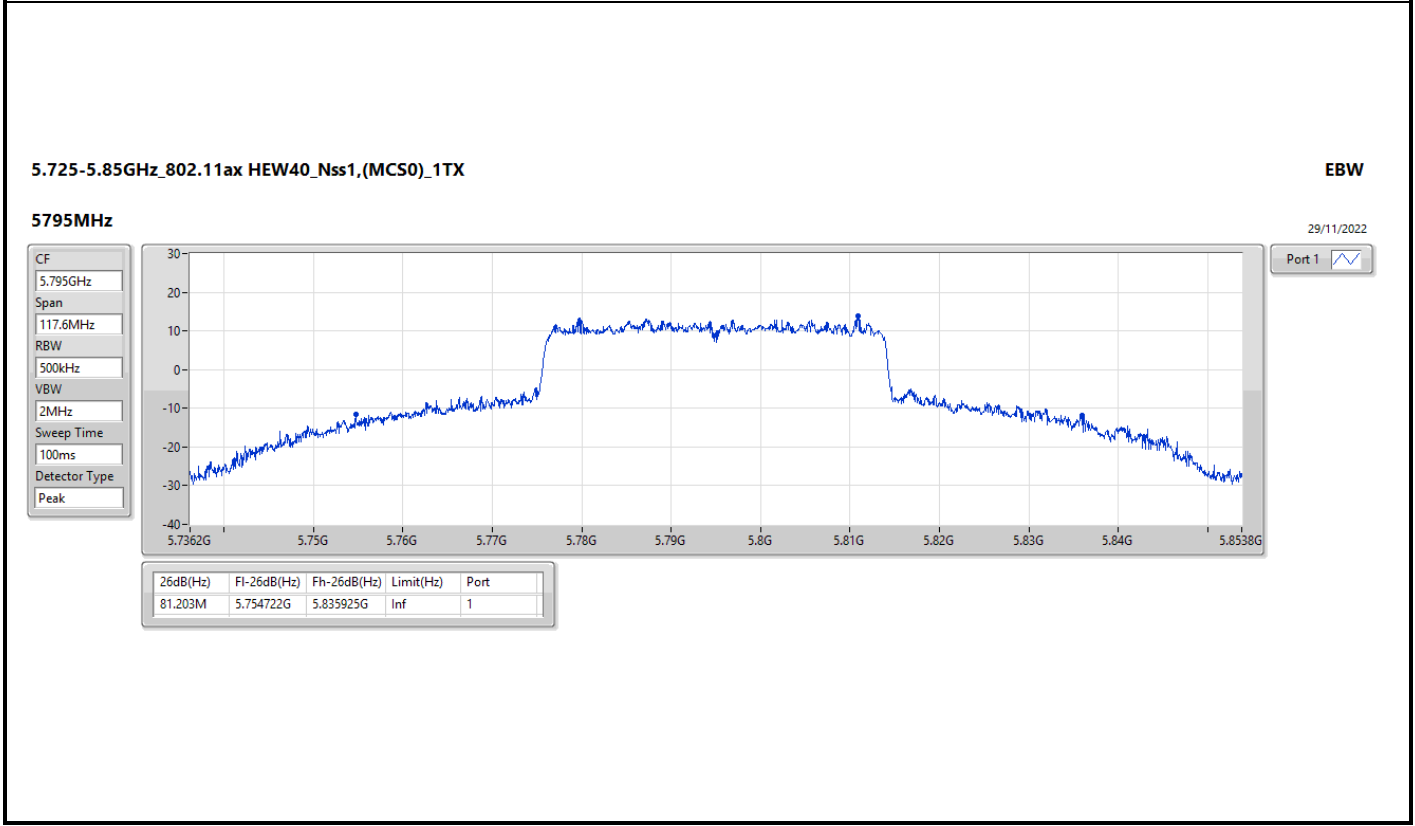
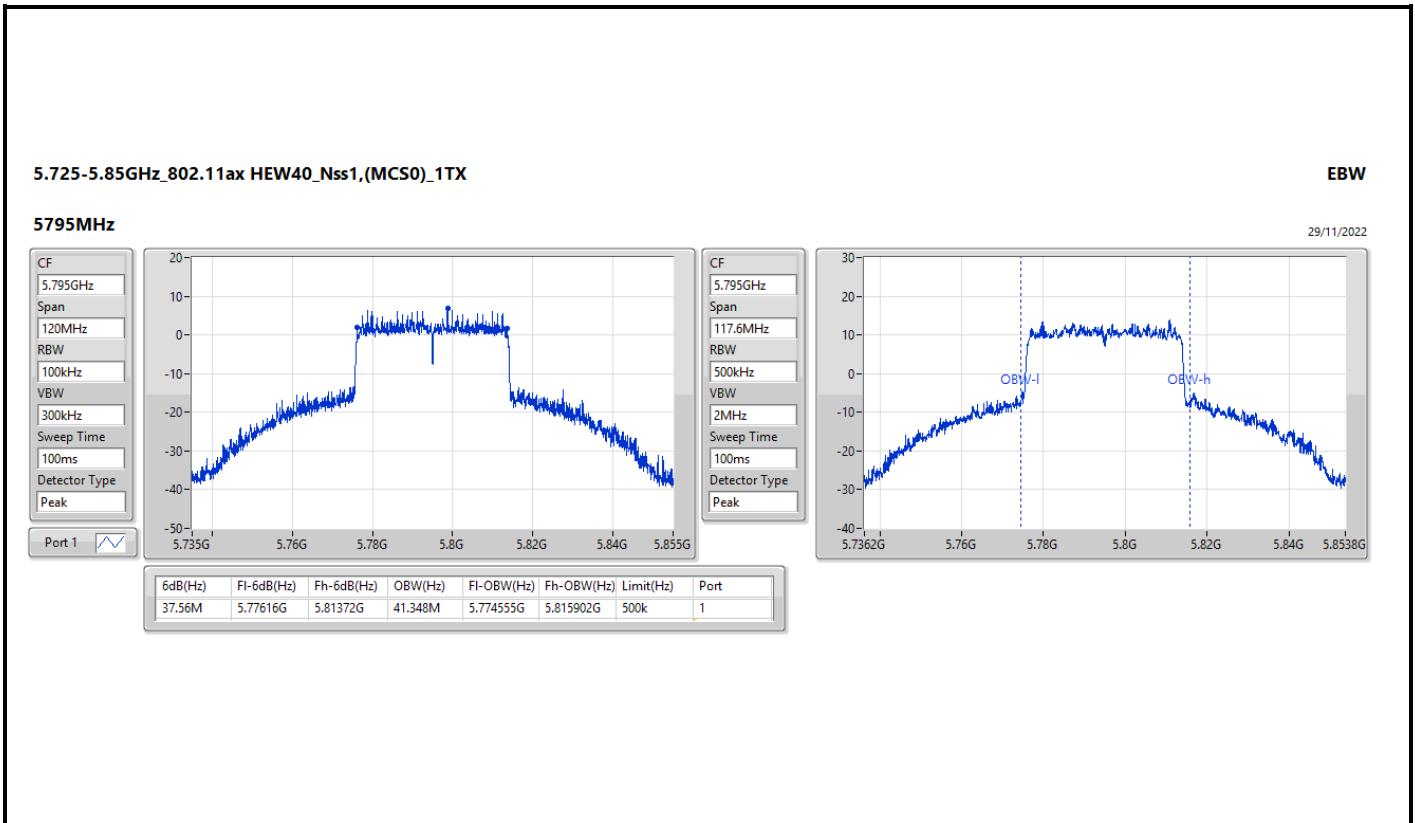










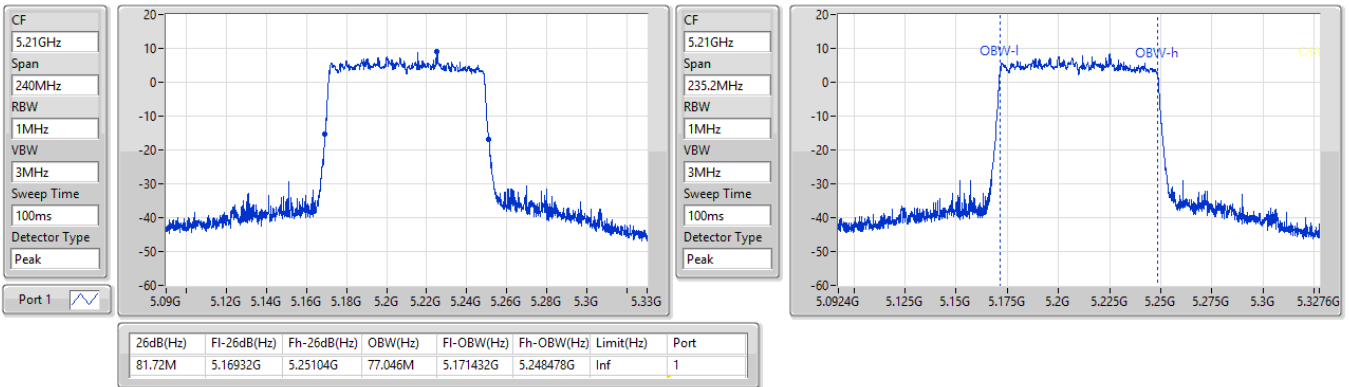


5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5210MHz

29/11/2022

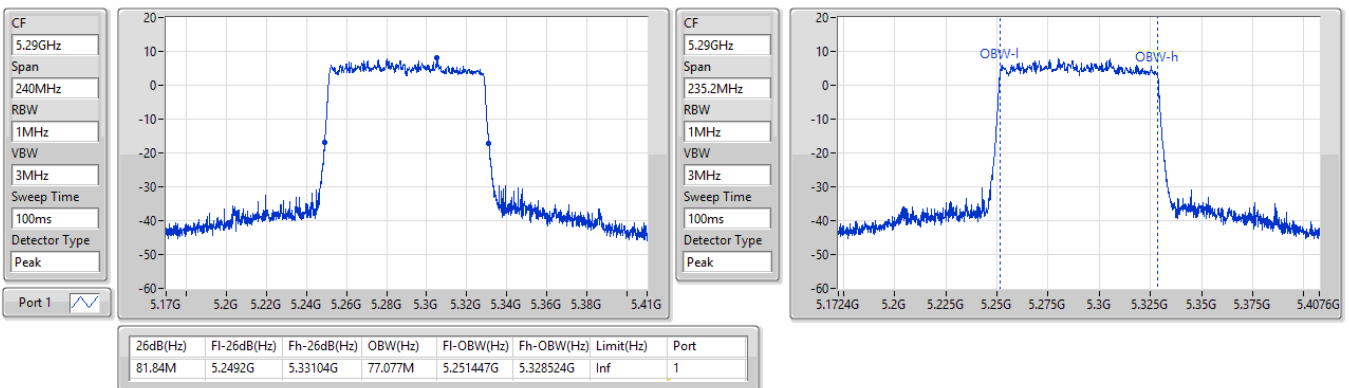


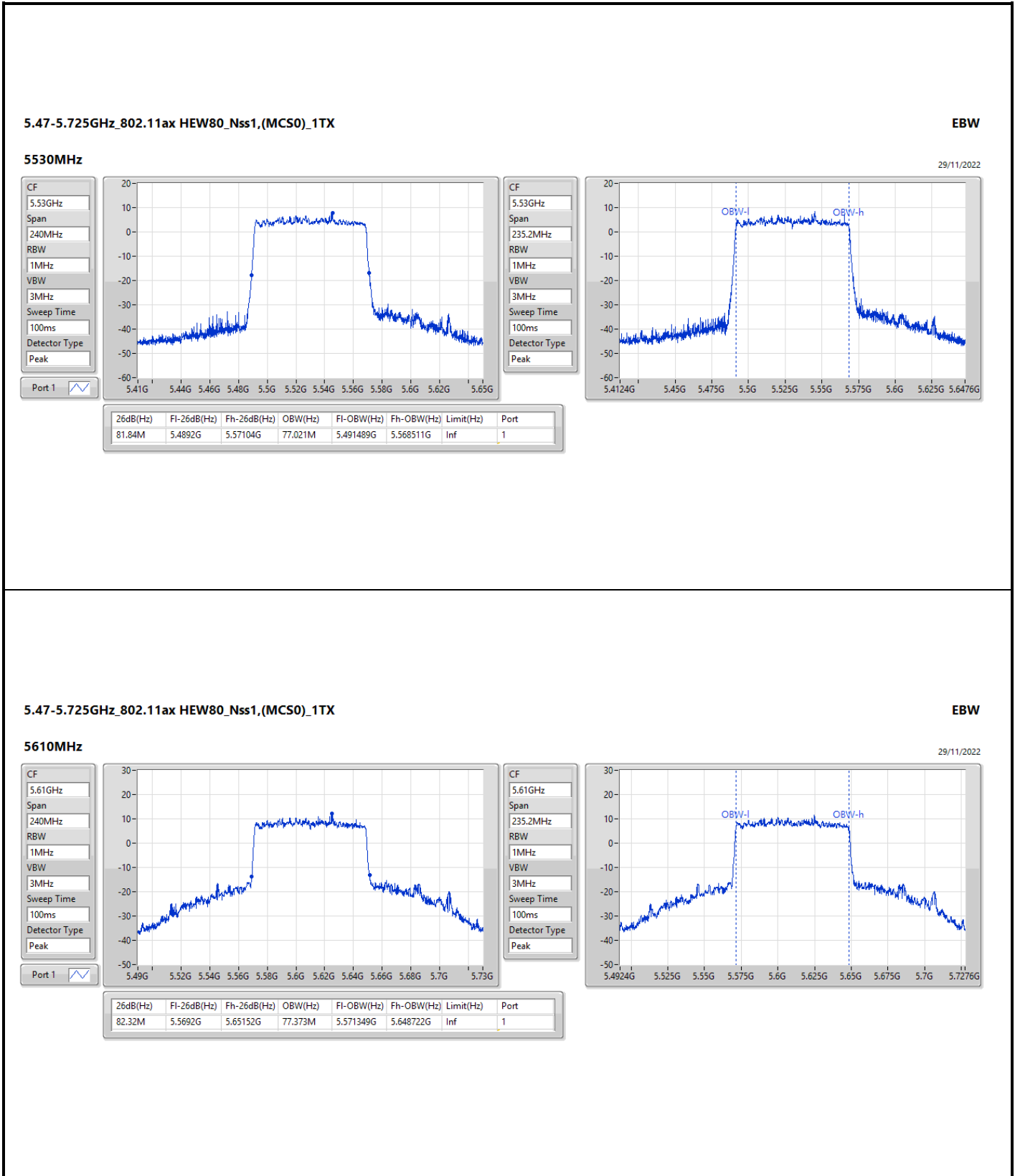
5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5290MHz

29/11/2022



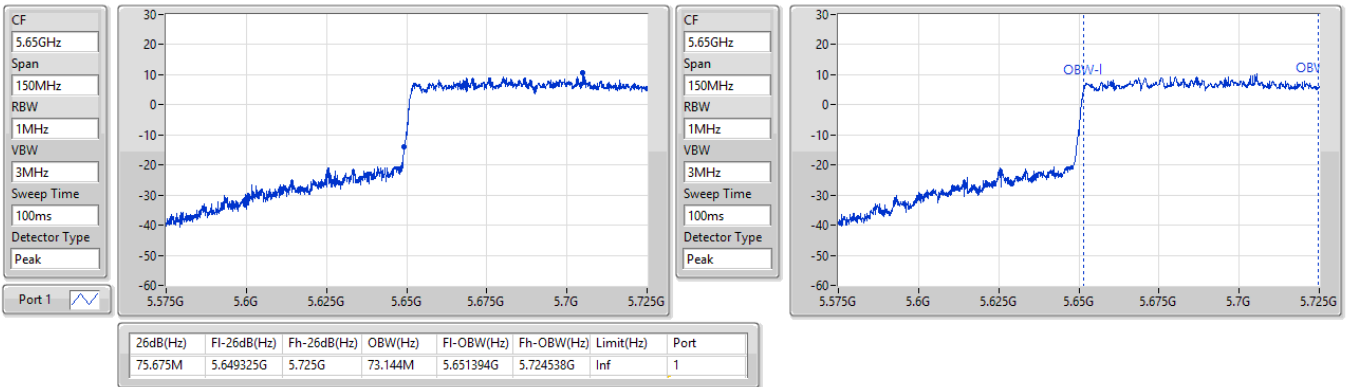


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

EBW

5690MHz Straddle 5.47-5.725GHz

29/11/2022

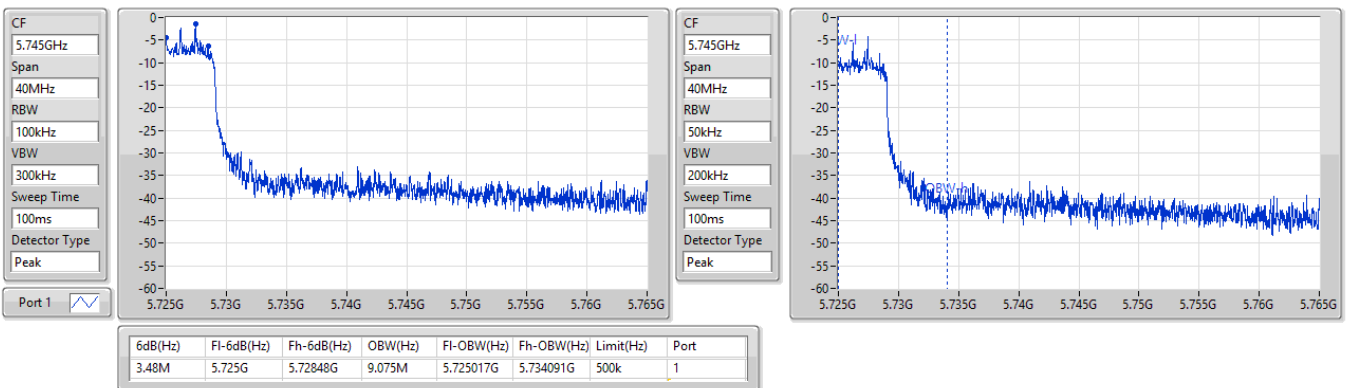


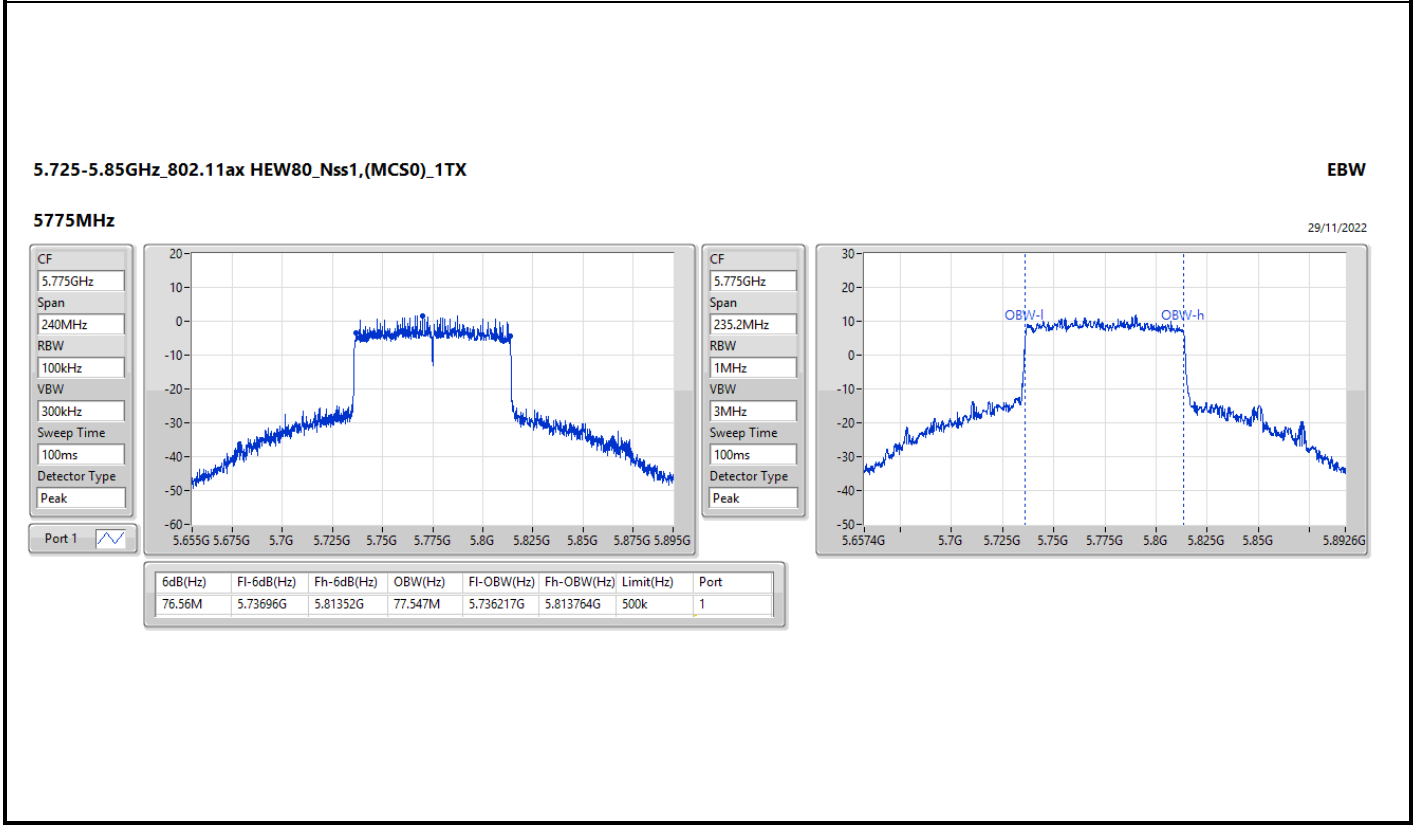
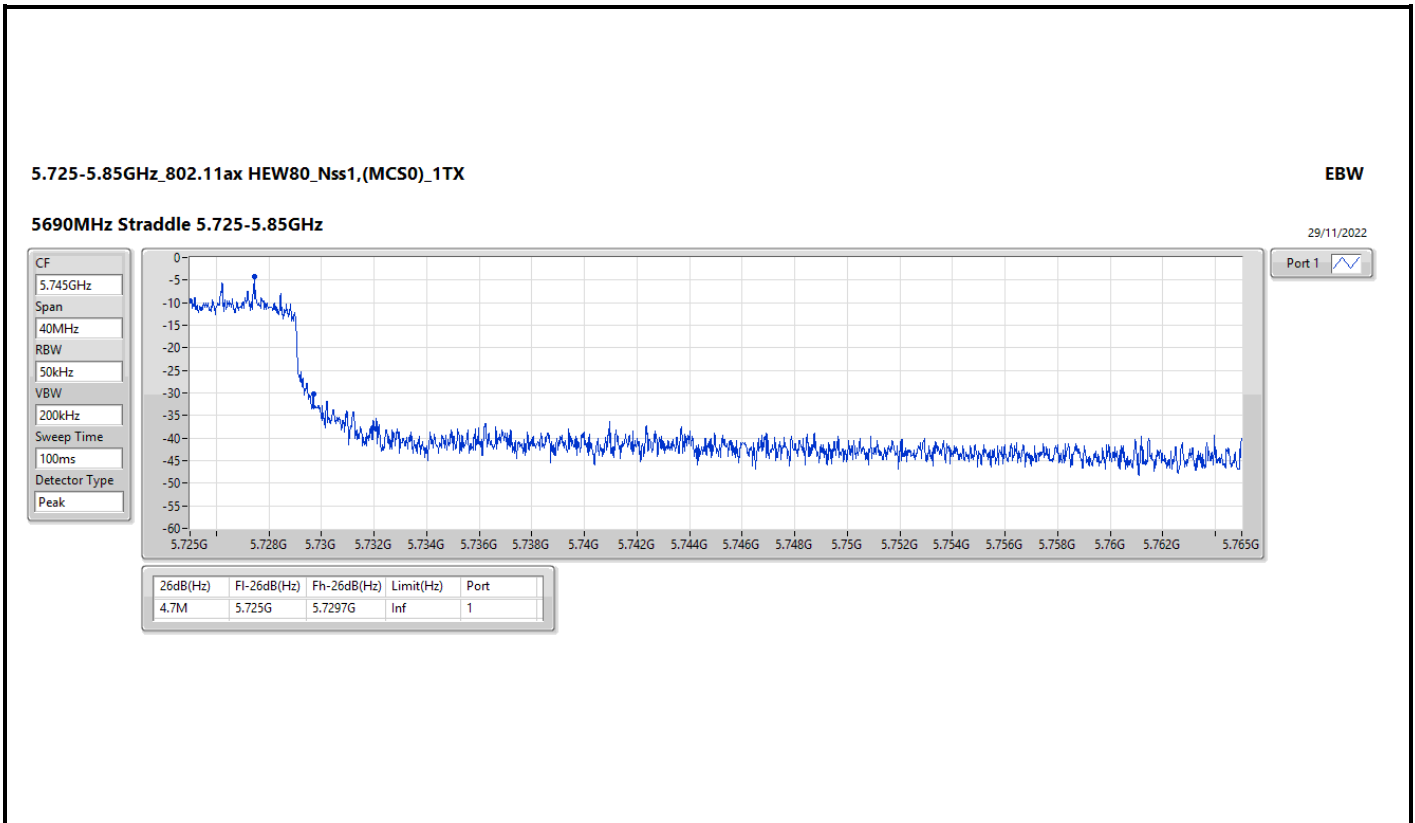
5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_1TX

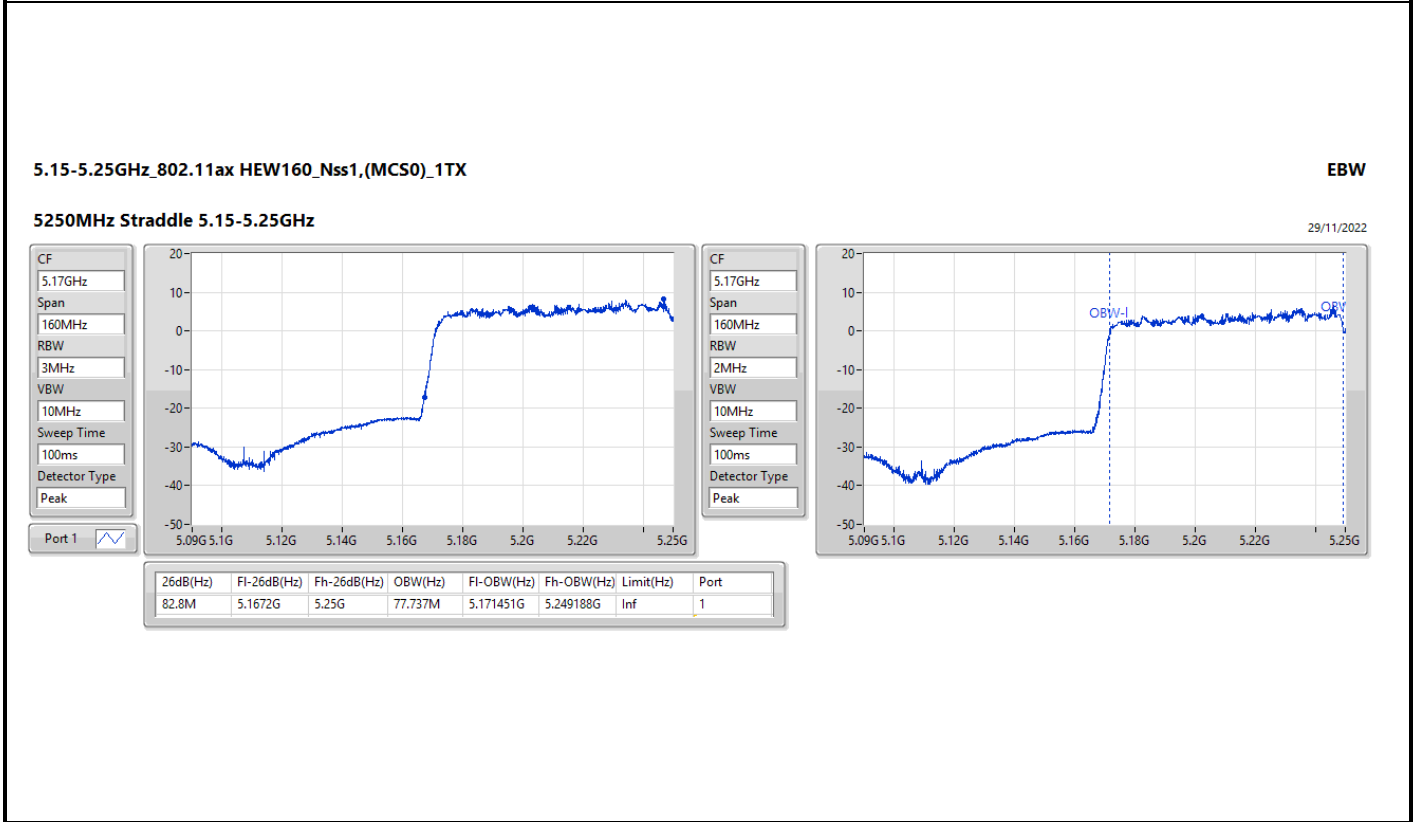
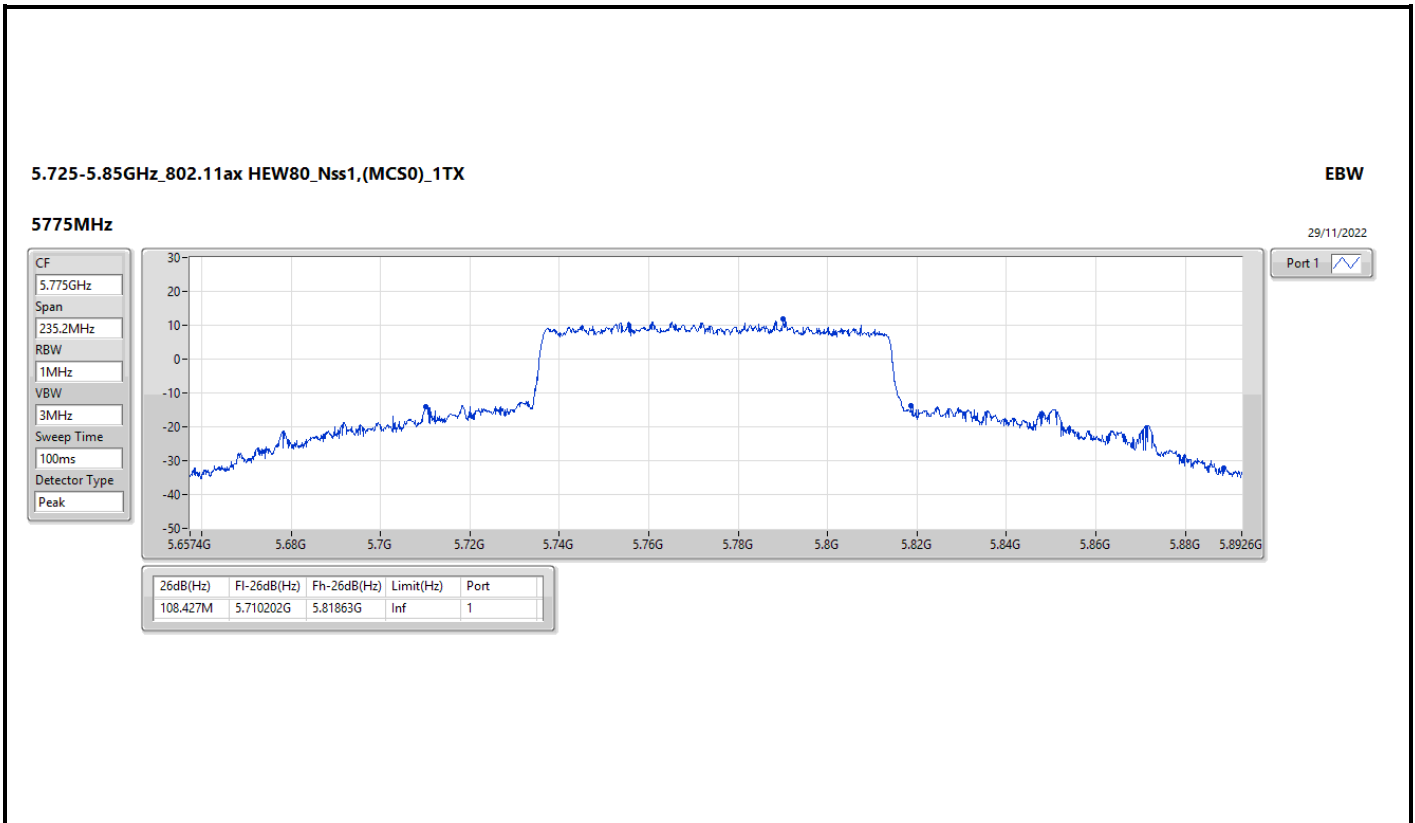
EBW

5690MHz Straddle 5.725-5.85GHz

29/11/2022





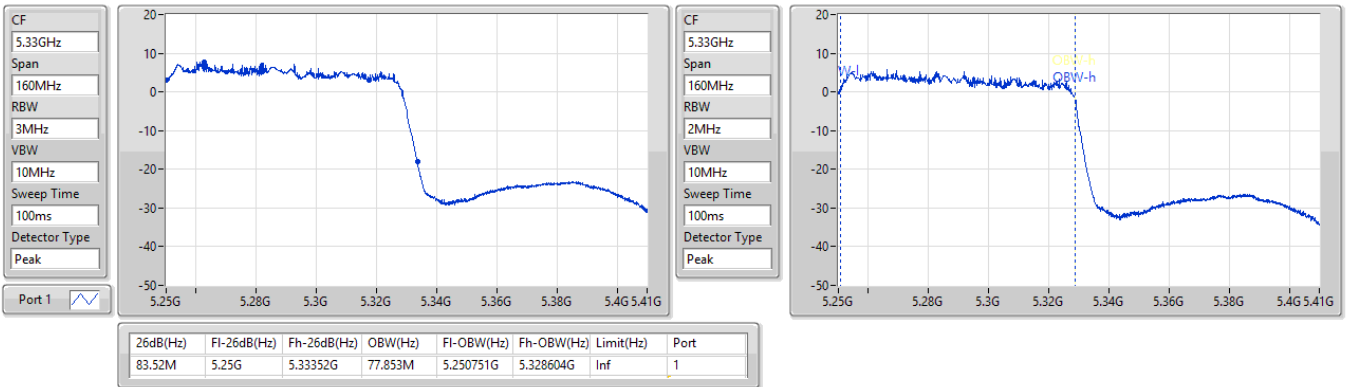


5.25-5.35GHz_802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

5250MHz Straddle 5.25-5.35GHz

29/11/2022

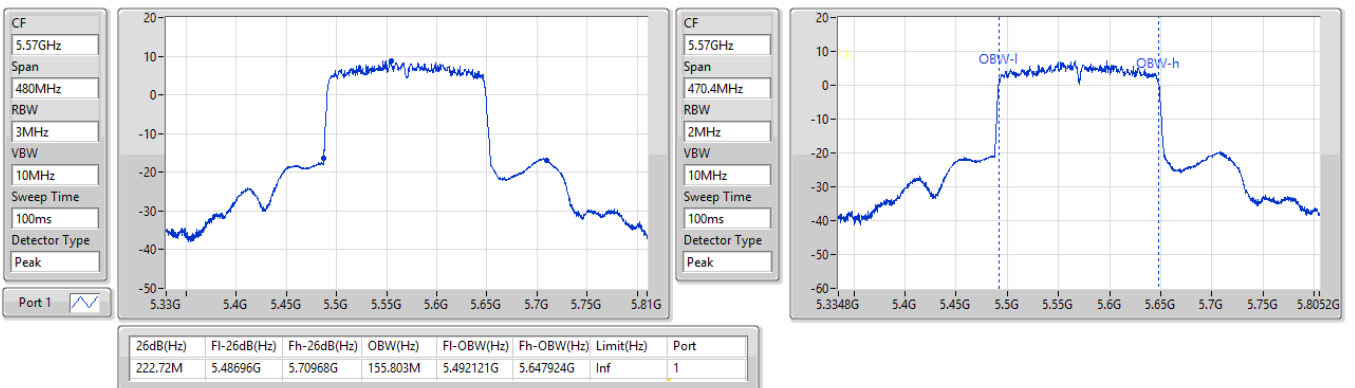


5.47-5.725GHz_802.11ax HEW160_Nss1,(MCS0)_1TX

EBW

5570MHz

29/11/2022



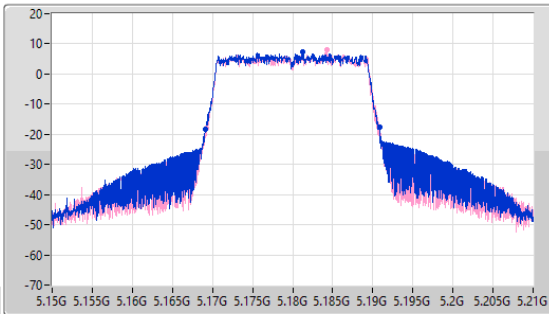
5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

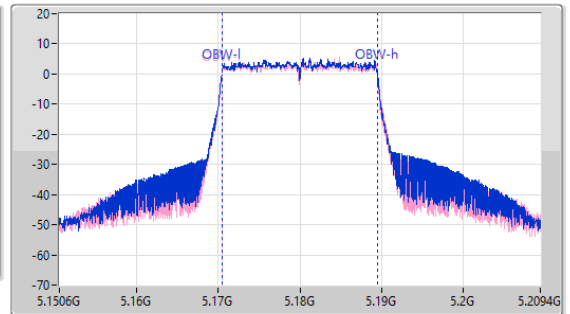
5180MHz

29/11/2022

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



CF
5.18GHz
Span
58.8MHz
RBW
200kHz
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
21.75M	5.16908G	5.19083G	19.023M	5.170445G	5.189468G	Inf	1
21.6M	5.16923G	5.19083G	19.048M	5.17045G	5.189498G	Inf	2

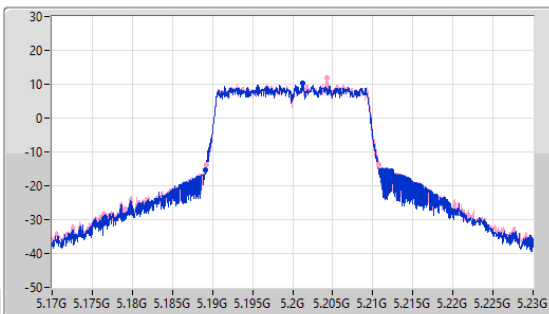
5.15-5.25GHz_802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

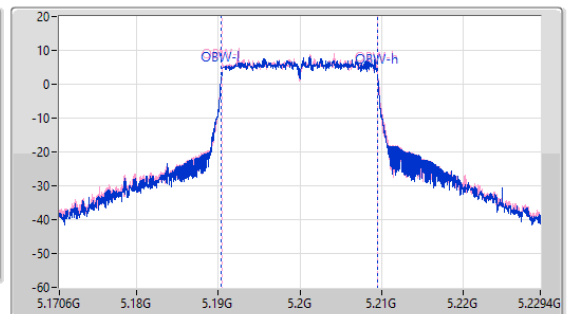
5200MHz

29/11/2022

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



CF
5.2GHz
Span
58.8MHz
RBW
200kHz
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
23.19M	5.18911G	5.2123G	19.053M	5.19043G	5.209483G	Inf	1
21.45M	5.18929G	5.21074G	19.101M	5.190439G	5.20954G	Inf	2

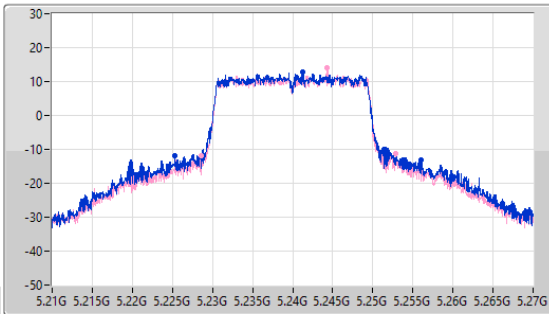
5.15-5.25GHz_802.11ax_HEW20_Nss2,(MCS0)_2TX

EBW

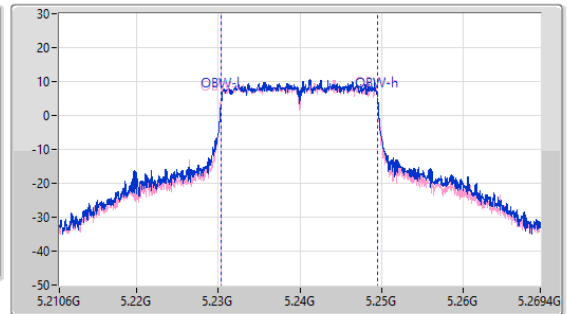
5240MHz

29/11/2022

CF: 5.24GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.24GHz
 Span: 58.8MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
30.78M	5.2253G	5.25608G	19.186M	5.230362G	5.249548G	Inf	1
24.3M	5.2286G	5.2529G	19.161M	5.230386G	5.249547G	Inf	2

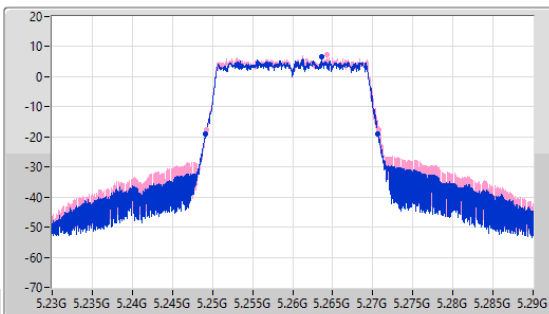
5.25-5.35GHz_802.11ax_HEW20_Nss2,(MCS0)_2TX

EBW

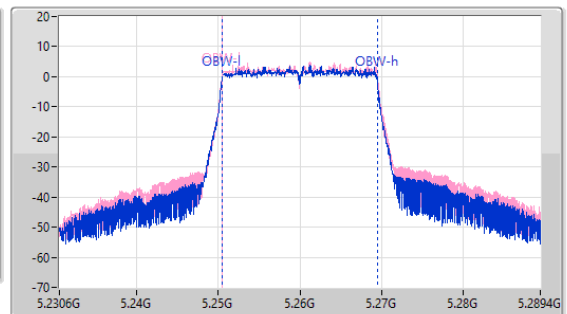
5260MHz

29/11/2022

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



CF: 5.26GHz
 Span: 58.8MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.54M	5.24914G	5.27068G	19.021M	5.250442G	5.269463G	Inf	1
21.54M	5.24926G	5.2708G	19.058M	5.250455G	5.269513G	Inf	2

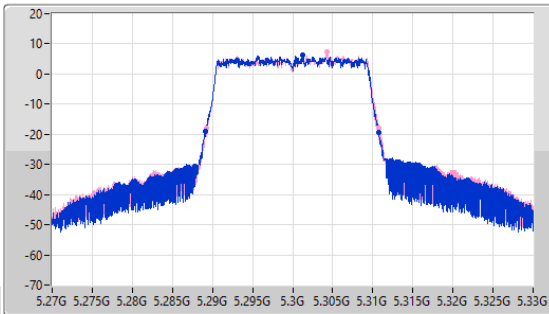
5.25-5.35GHz_802.11ax_HEW20_Nss2,(MCS0)_2TX

EBW

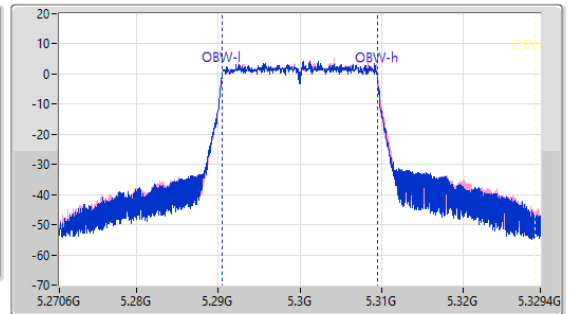
5300MHz

29/11/2022

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



CF
5.3GHz
Span
58.8MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.66M	5.28911G	5.31077G	19.023M	5.290439G	5.309462G	Inf	1
21.57M	5.28923G	5.3108G	19.055M	5.290453G	5.309508G	Inf	2

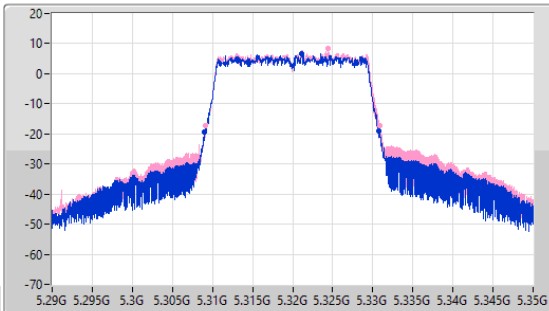
5.25-5.35GHz_802.11ax_HEW20_Nss2,(MCS0)_2TX

EBW

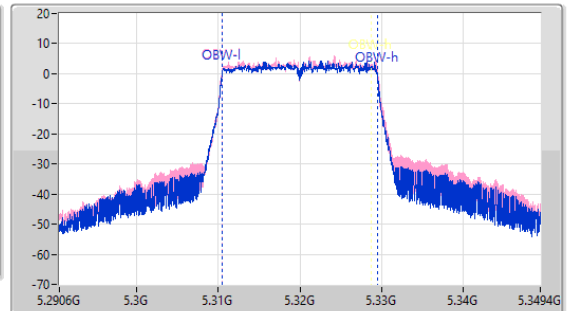
5320MHz

29/11/2022

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



CF
5.32GHz
Span
58.8MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.69M	5.30905G	5.33074G	19.024M	5.310443G	5.329467G	Inf	1
21.69M	5.30917G	5.33086G	19.05M	5.310452G	5.329502G	Inf	2

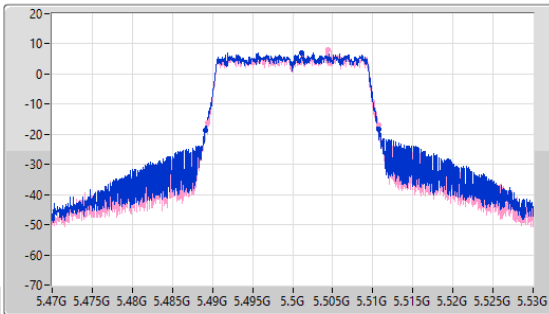
5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

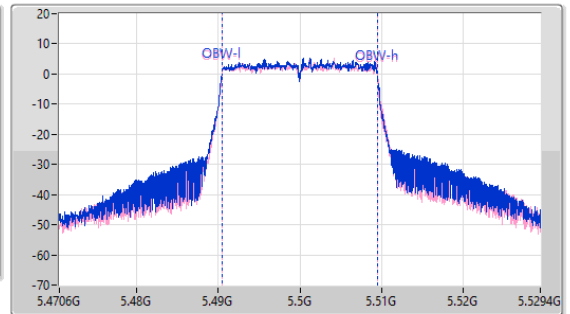
5500MHz

29/11/2022

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



CF
5.5GHz
Span
58.8MHz
RBW
200kHz
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
21.66M	5.48908G	5.51074G	19.027M	5.490438G	5.509466G	Inf	1
21.42M	5.48935G	5.51077G	19.068M	5.490446G	5.509514G	Inf	2

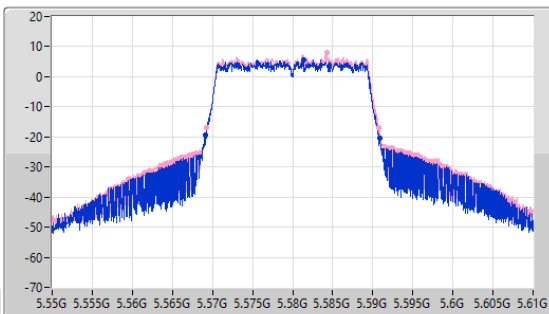
5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

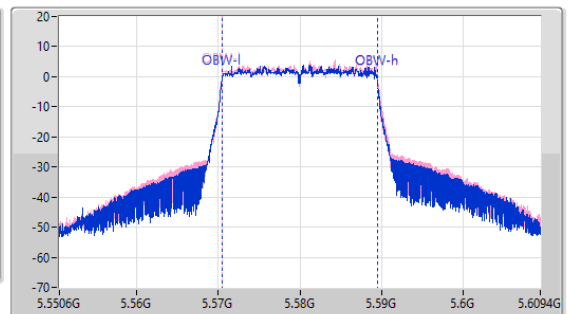
5580MHz

29/11/2022

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



CF
5.58GHz
Span
58.8MHz
RBW
200kHz
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
21.75M	5.56908G	5.59083G	19.023M	5.57044G	5.589464G	Inf	1
21.48M	5.56929G	5.59077G	19.06M	5.570455G	5.589514G	Inf	2

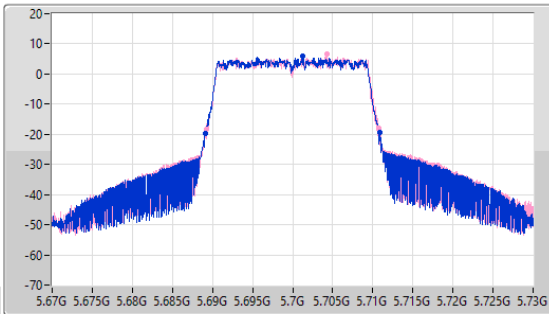
5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

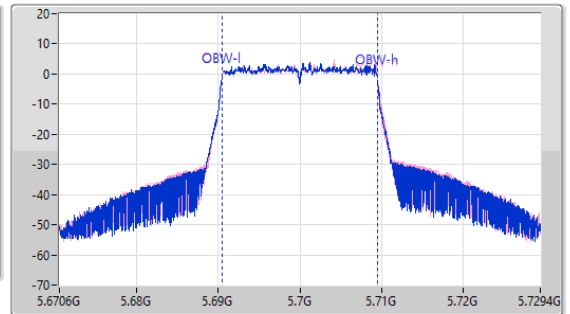
5700MHz

29/11/2022

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



CF: 5.7GHz
 Span: 58.8MHz
 RBW: 200kHz
 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
21.84M	5.68908G	5.71092G	19.018M	5.690441G	5.709459G	Inf	1
21.54M	5.68926G	5.7108G	19.058M	5.690451G	5.709509G	Inf	2

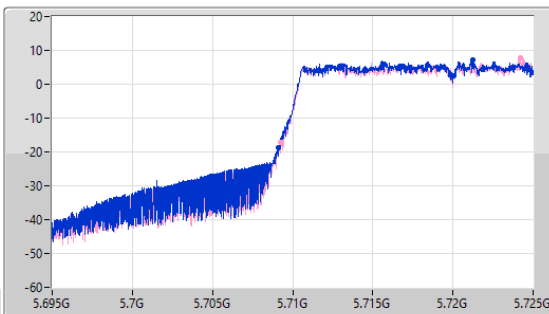
5.47-5.725GHz_802.11ax HEW20_Nss2,(MCS0)_2TX

EBW

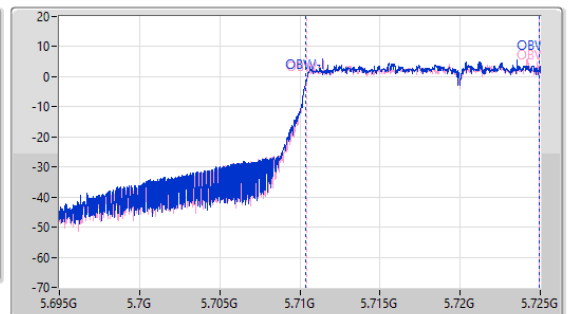
5720MHz Straddle 5.47-5.725GHz

29/11/2022

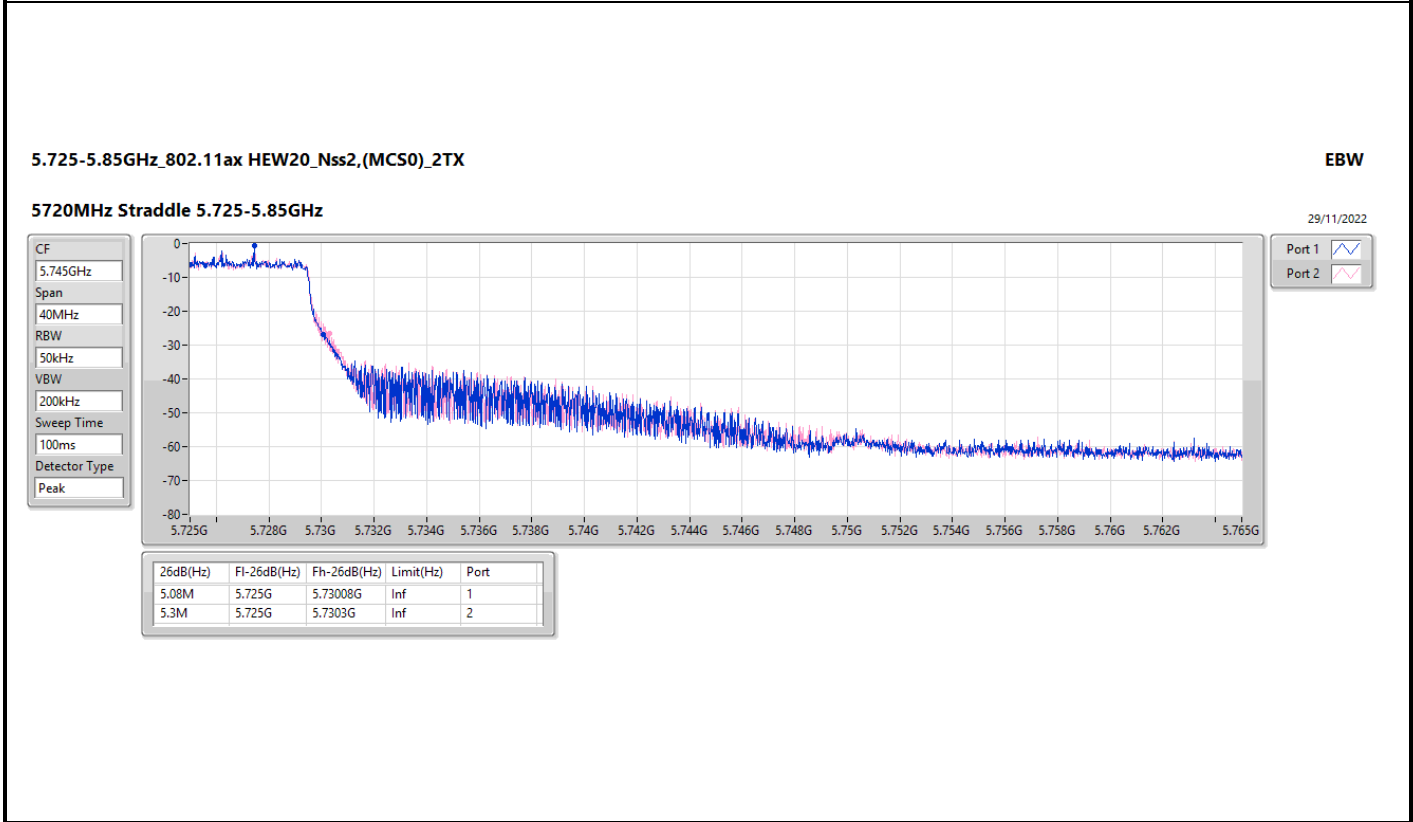
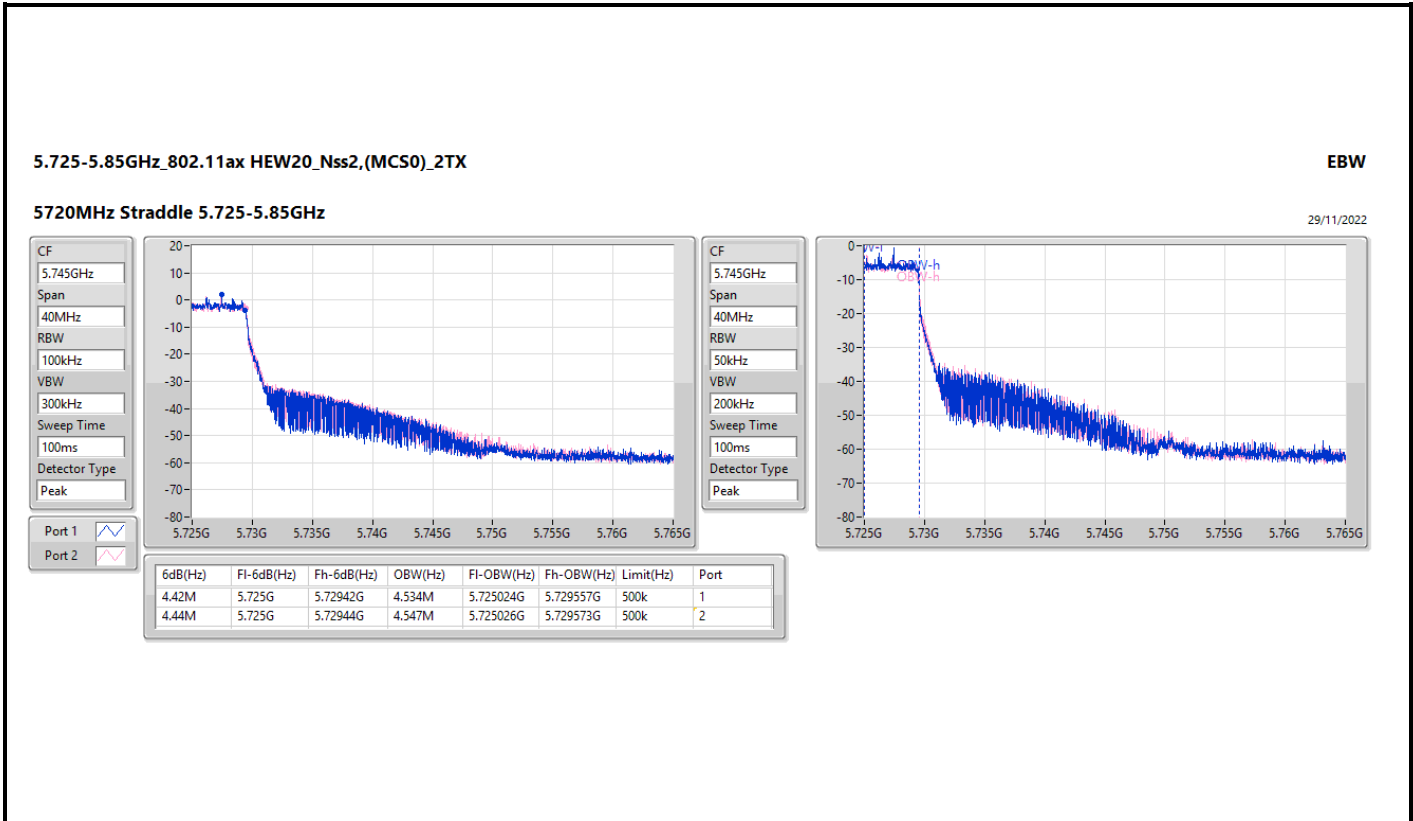
CF: 5.71GHz
 Span: 30MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak

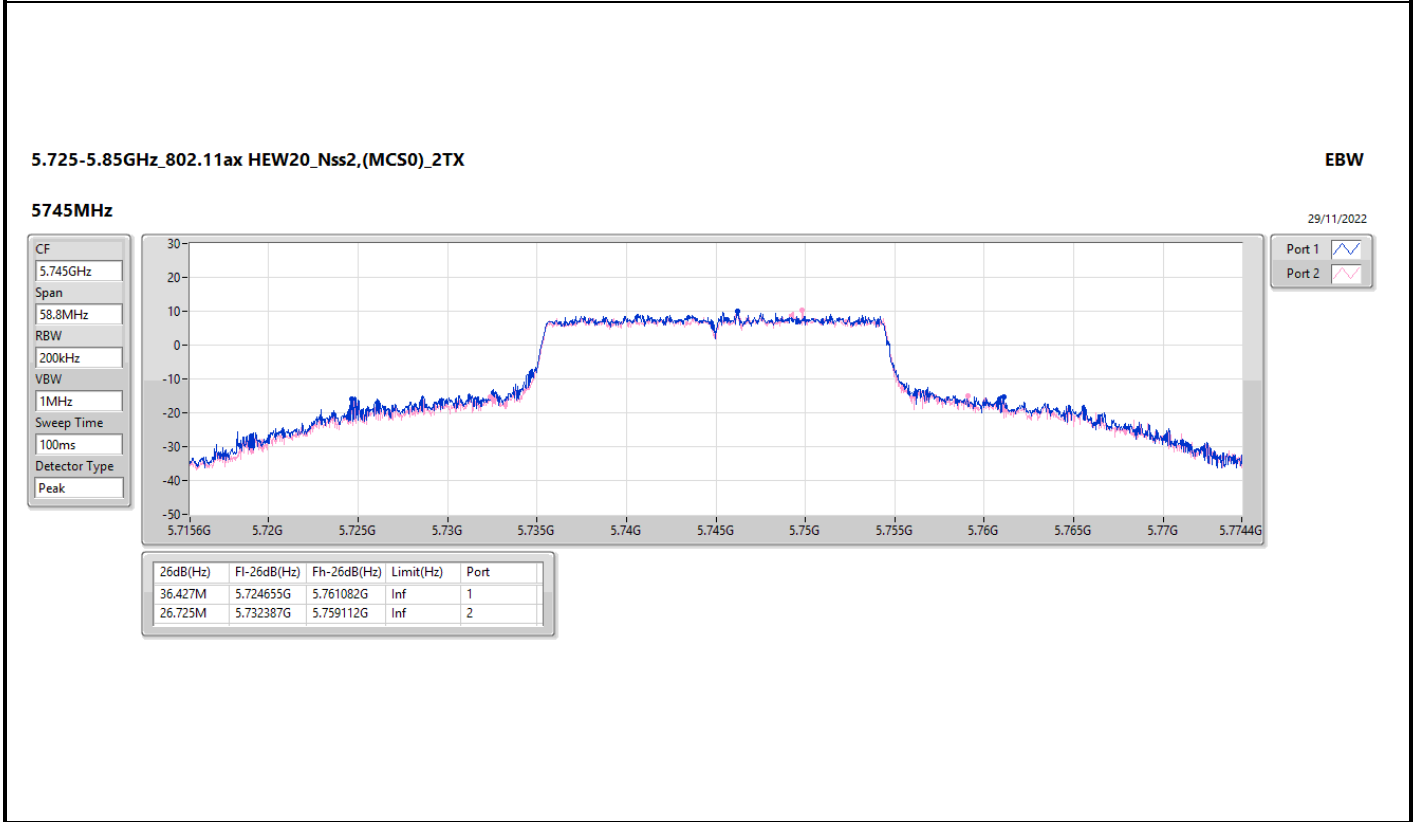
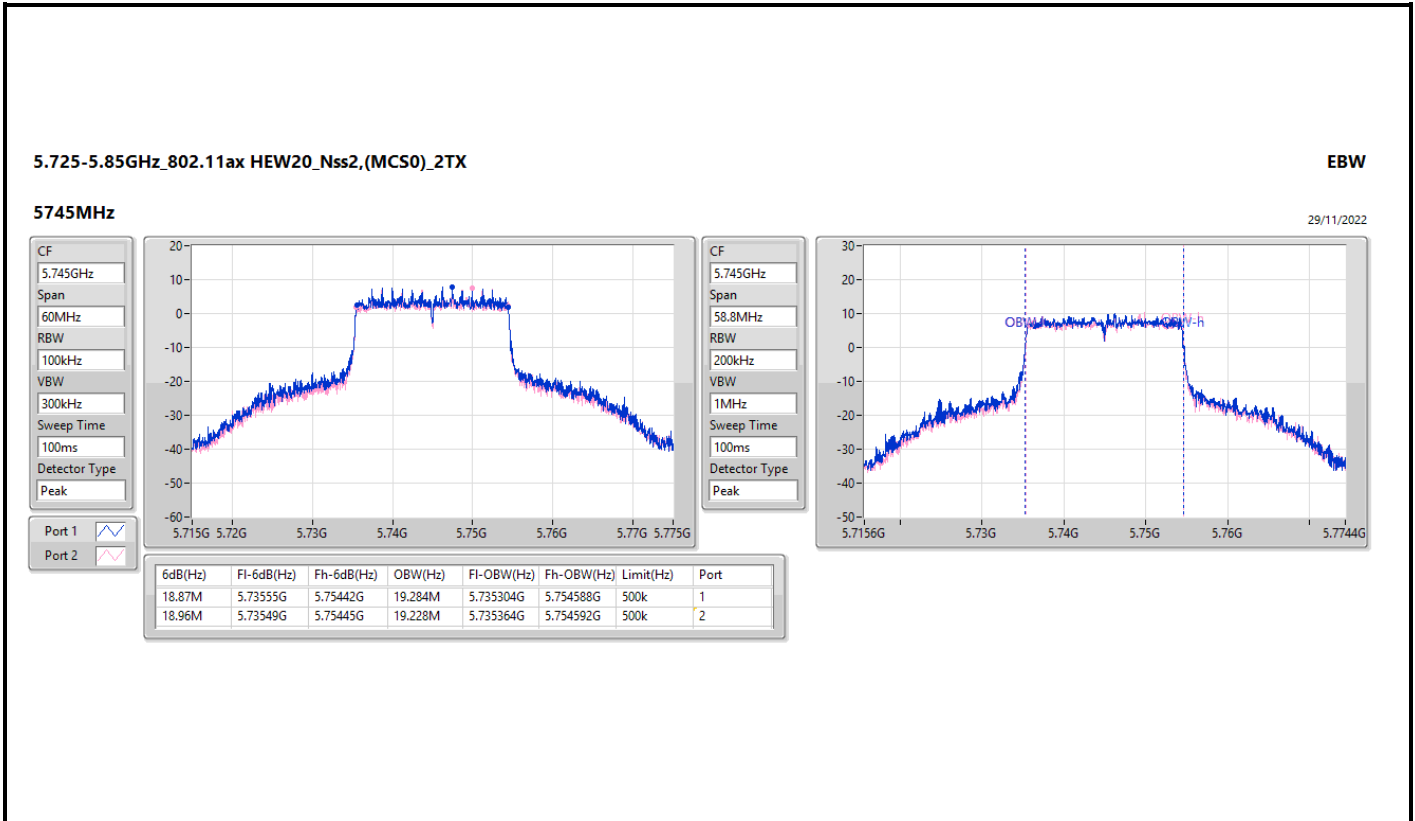


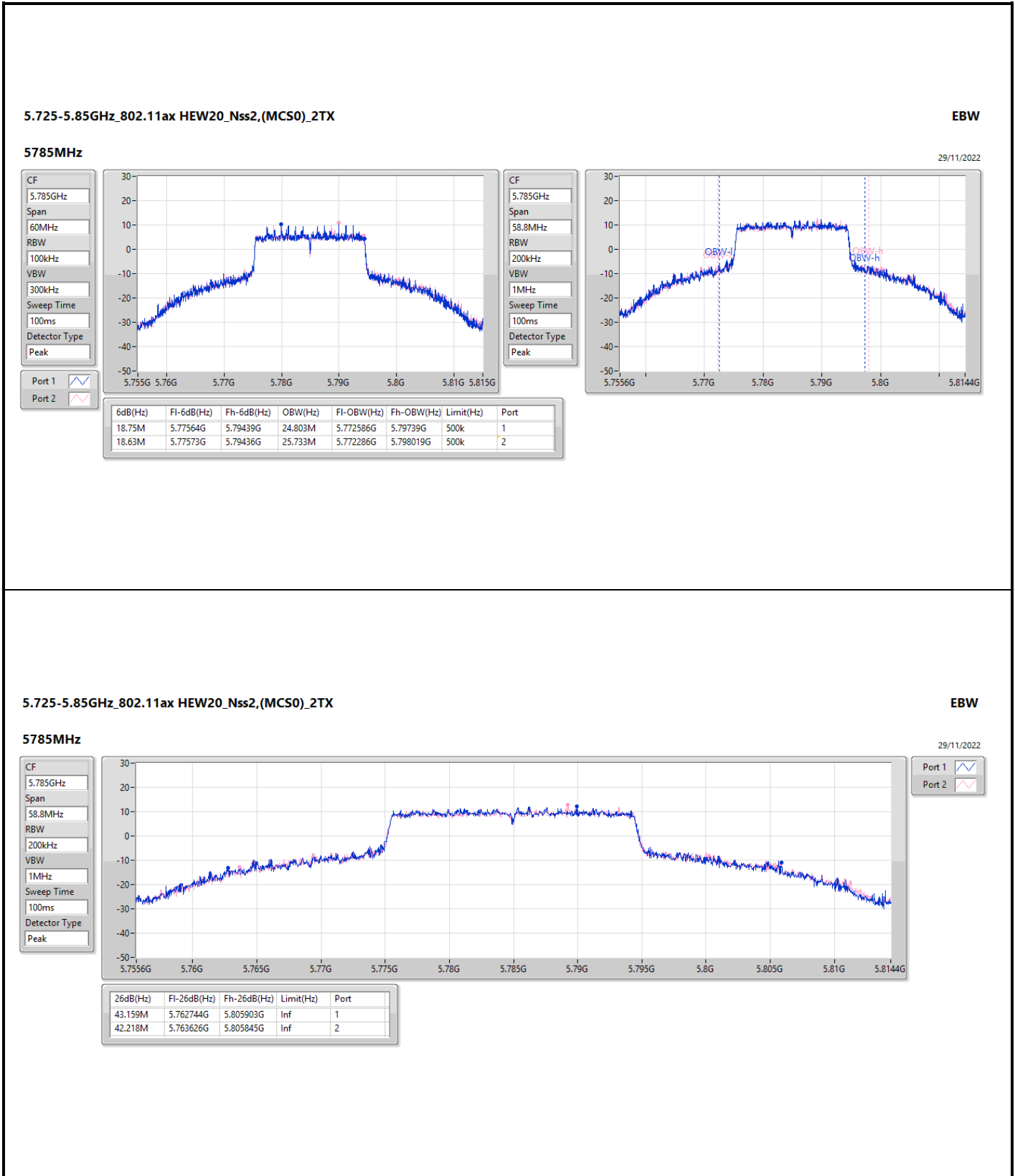
CF: 5.71GHz
 Span: 30MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak

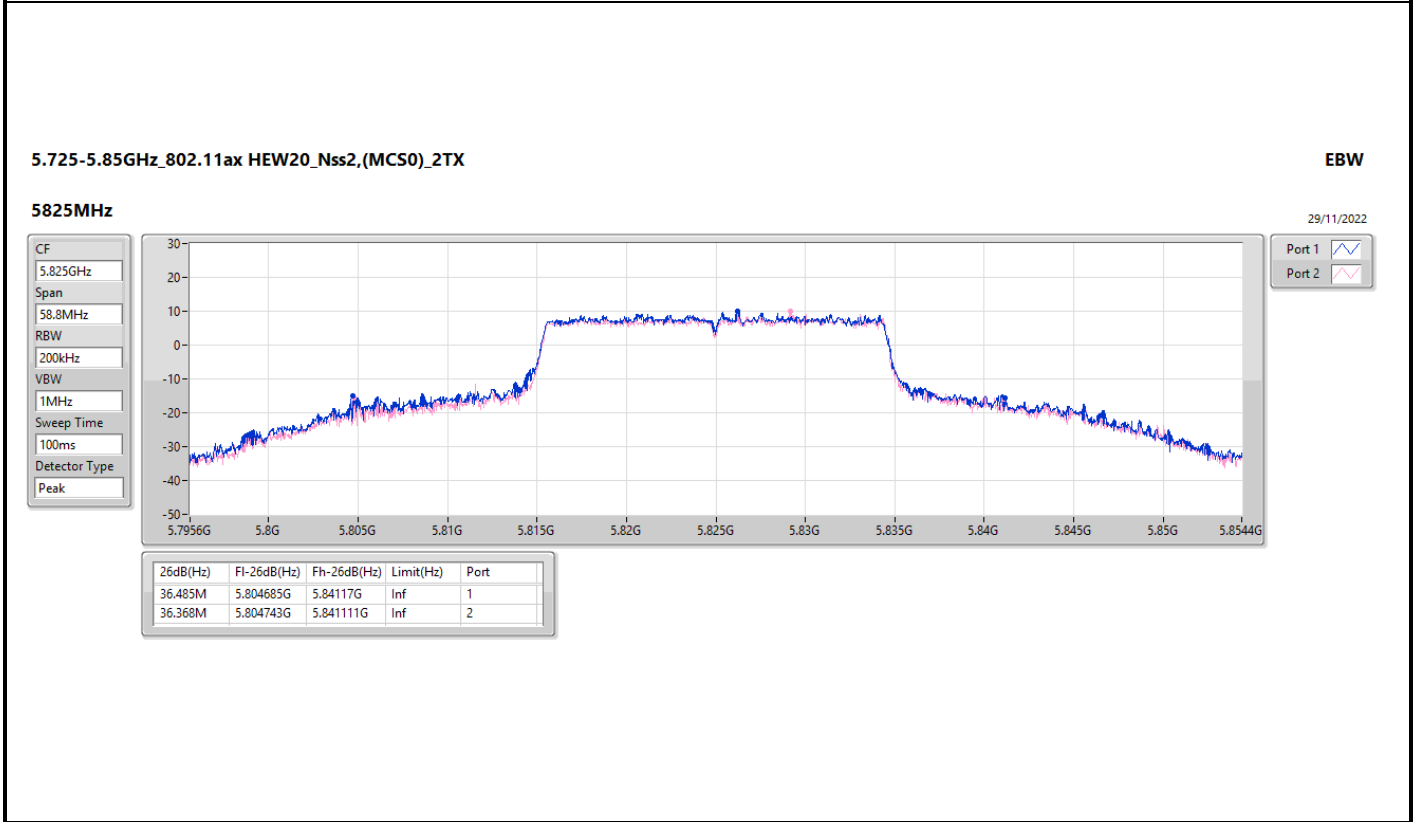
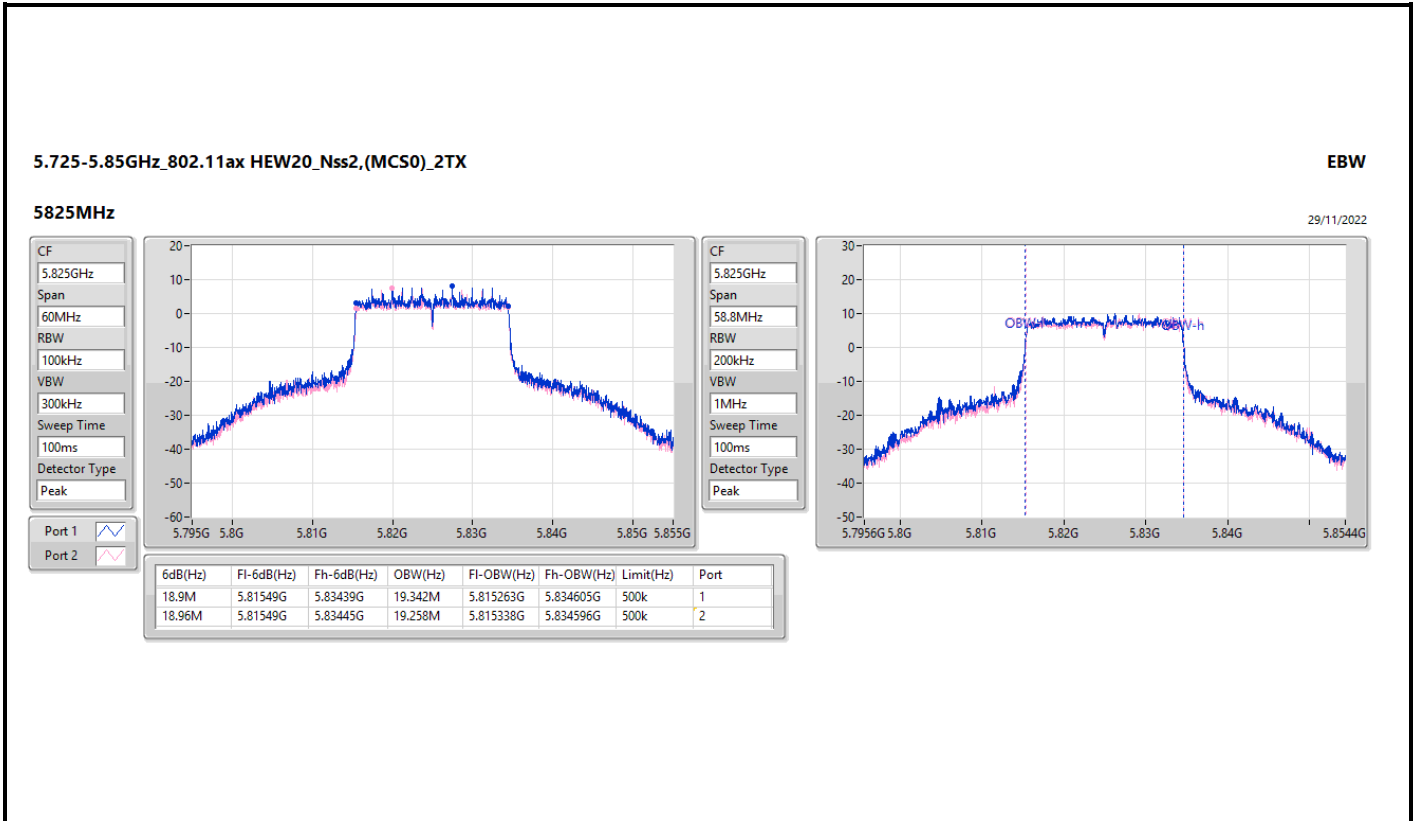


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.915M	5.709085G	5.725G	14.554M	5.710382G	5.724937G	Inf	1
15.735M	5.709265G	5.725G	14.532M	5.710397G	5.724929G	Inf	2









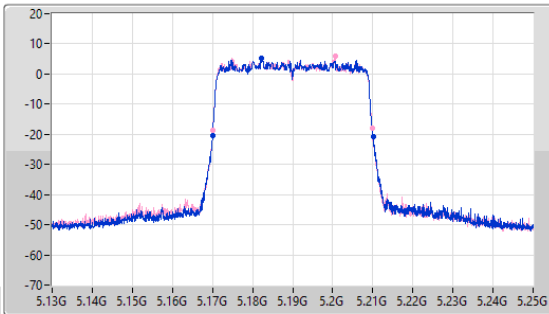
5.15-5.25GHz_802.11ax_HEW40_Nss2,(MCS0)_2TX

EBW

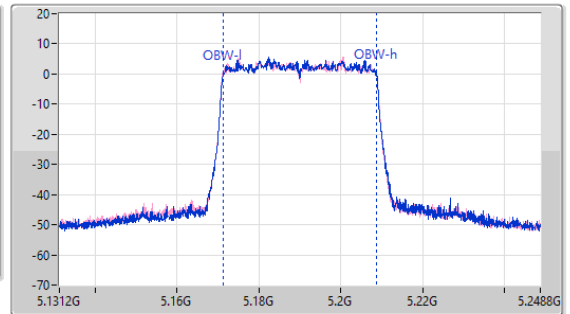
5190MHz

29/11/2022

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



CF
5.19GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
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
40.08M	5.17002G	5.2101G	37.505M	5.171222G	5.208727G	Inf	1
39.78M	5.17008G	5.20986G	37.562M	5.171171G	5.208734G	Inf	2

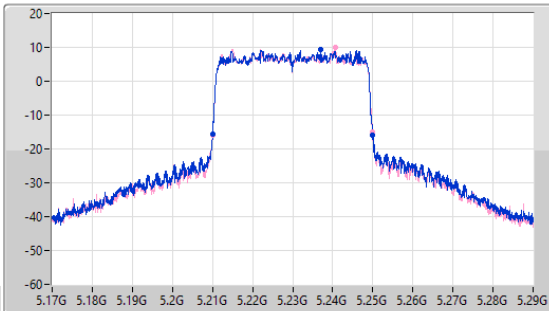
5.15-5.25GHz_802.11ax_HEW40_Nss2,(MCS0)_2TX

EBW

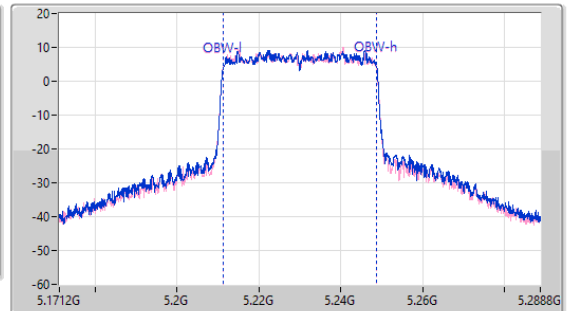
5230MHz

29/11/2022

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



CF
5.23GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
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
40.02M	5.21002G	5.25004G	37.527M	5.211226G	5.248754G	Inf	1
39.9M	5.21002G	5.24992G	37.54M	5.211198G	5.248738G	Inf	2

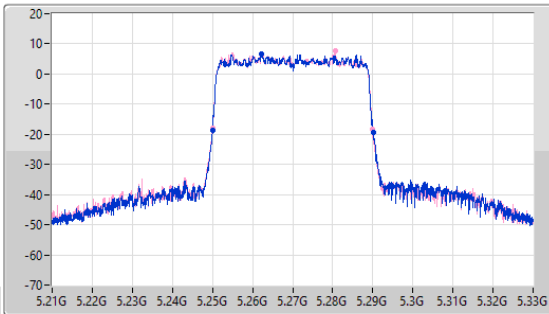
5.25-5.35GHz_802.11ax_HEW40_Nss2,(MCS0)_2TX

EBW

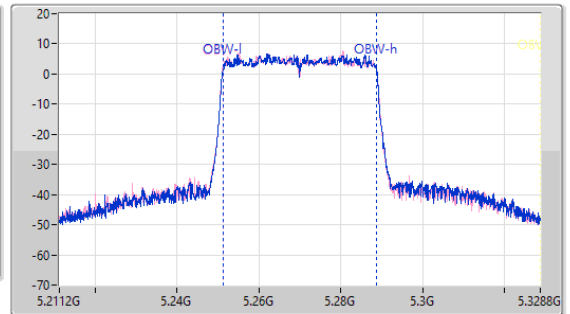
5270MHz

29/11/2022

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



CF
5.27GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
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
40.08M	5.25002G	5.2901G	37.495M	5.251223G	5.288719G	Inf	1
39.96M	5.25002G	5.28998G	37.54M	5.251187G	5.288727G	Inf	2

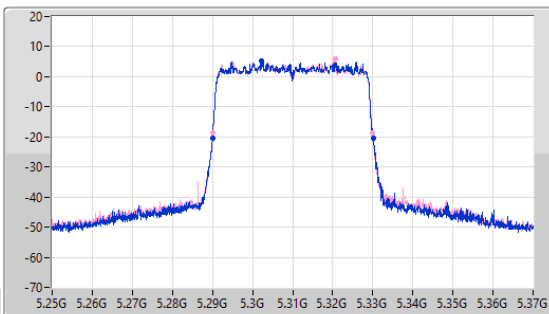
5.25-5.35GHz_802.11ax_HEW40_Nss2,(MCS0)_2TX

EBW

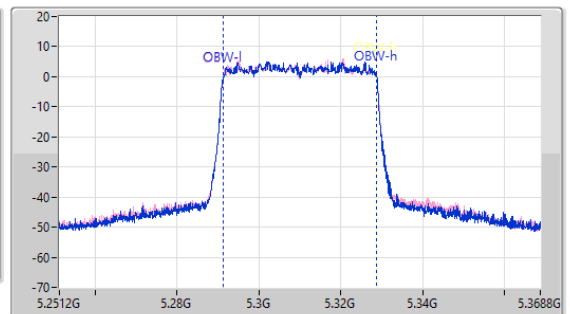
5310MHz

29/11/2022

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



CF
5.31GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
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
40.08M	5.29002G	5.3301G	37.5M	5.291231G	5.328731G	Inf	1
39.84M	5.29008G	5.32992G	37.515M	5.291207G	5.328723G	Inf	2

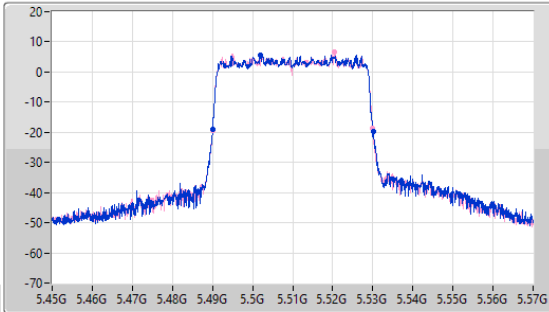
5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

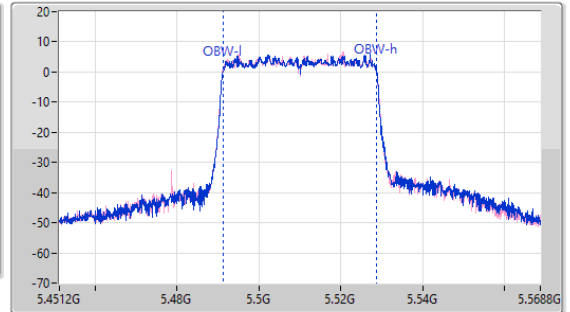
5510MHz

29/11/2022

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



CF: 5.51GHz
 Span: 117.6MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.49002G	5.5301G	37.509M	5.491227G	5.528736G	Inf	1
39.96M	5.49002G	5.52998G	37.527M	5.491203G	5.52873G	Inf	2

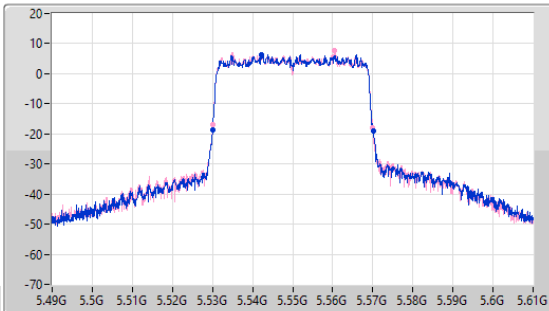
5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

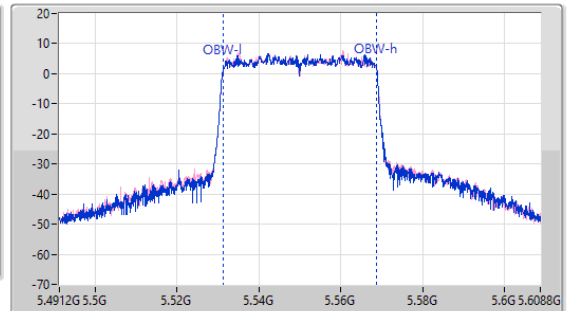
5550MHz

29/11/2022

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



CF: 5.55GHz
 Span: 117.6MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.53002G	5.5701G	37.493M	5.531238G	5.568732G	Inf	1
39.84M	5.53008G	5.56992G	37.503M	5.531222G	5.568725G	Inf	2

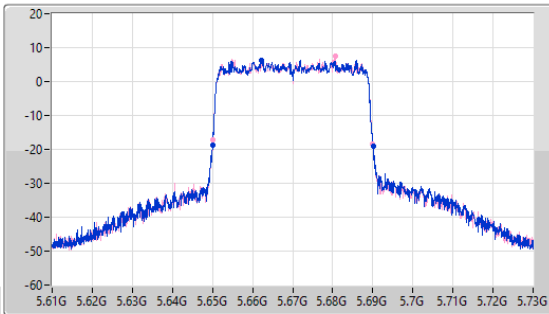
5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

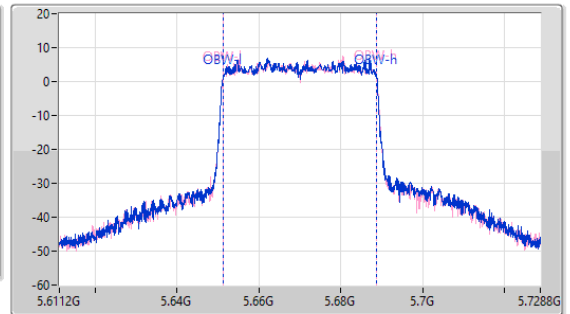
5670MHz

29/11/2022

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



CF
5.67GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
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
40.08M	5.65002G	5.6901G	37.532M	5.651204G	5.688736G	Inf	1
39.9M	5.65008G	5.68998G	37.548M	5.651203G	5.688751G	Inf	2

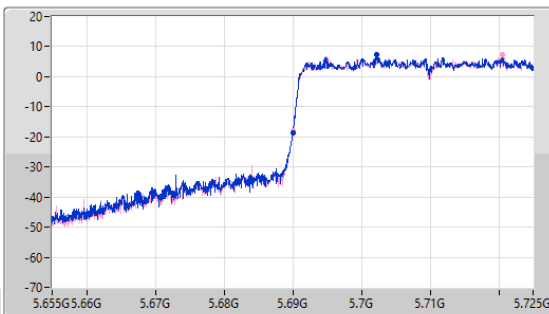
5.47-5.725GHz_802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

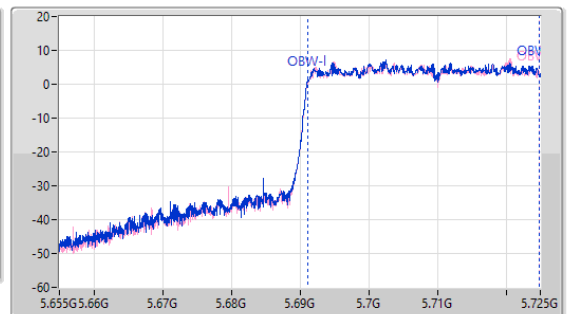
5710MHz Straddle 5.47-5.725GHz

29/11/2022

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



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



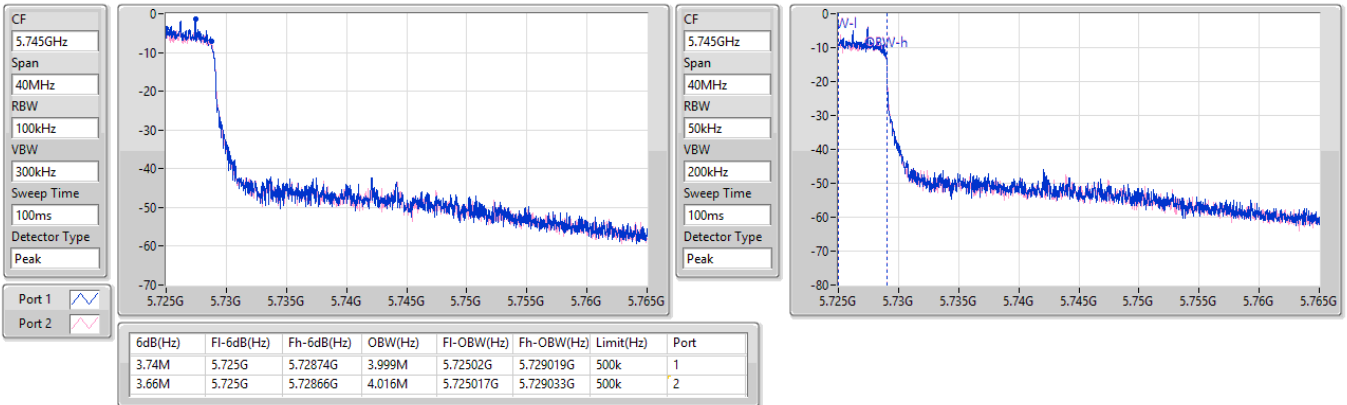
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.965M	5.690035G	5.725G	33.614M	5.691155G	5.72477G	Inf	1
34.93M	5.69007G	5.725G	33.584M	5.691195G	5.724779G	Inf	2

5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

29/11/2022

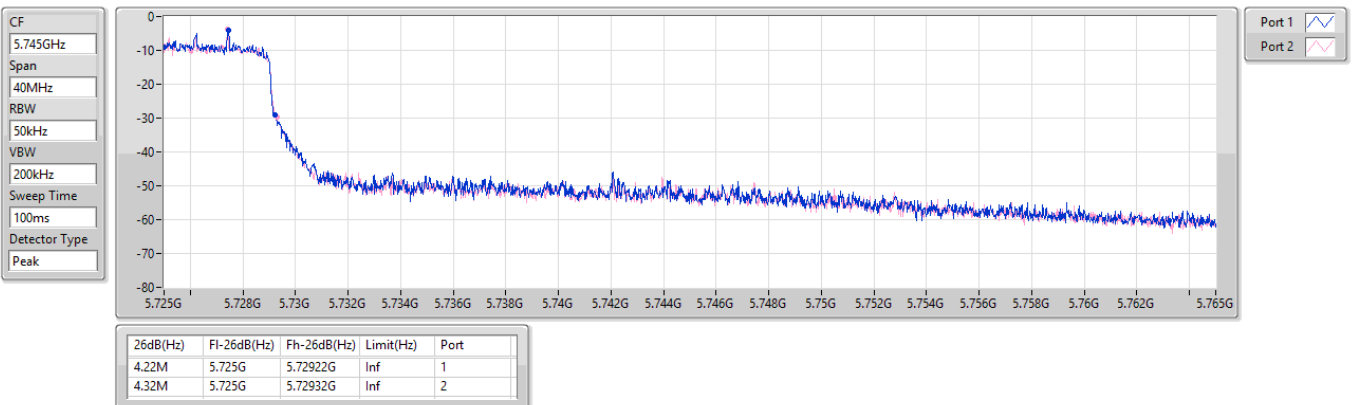


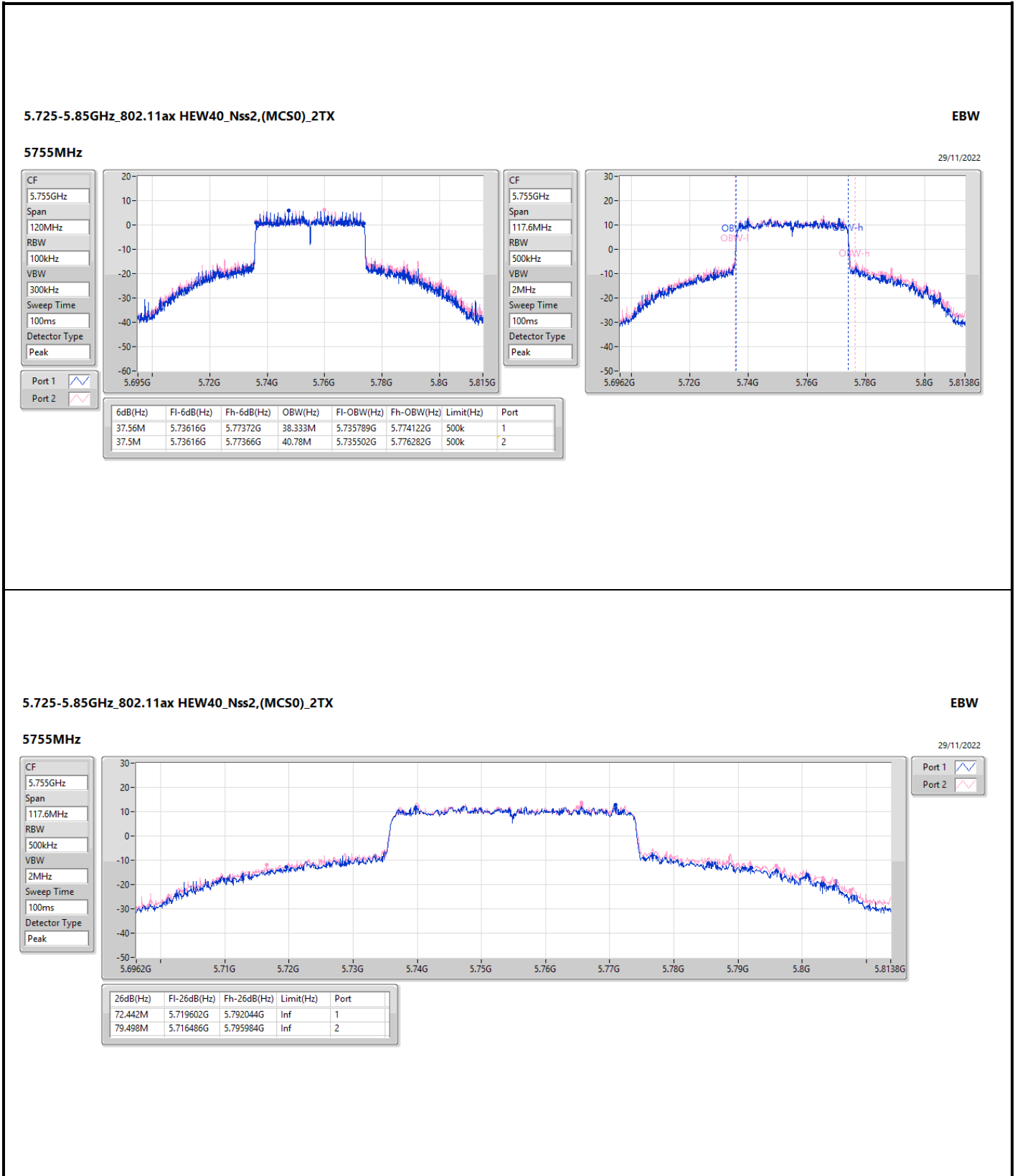
5.725-5.85GHz_802.11ax HEW40_Nss2,(MCS0)_2TX

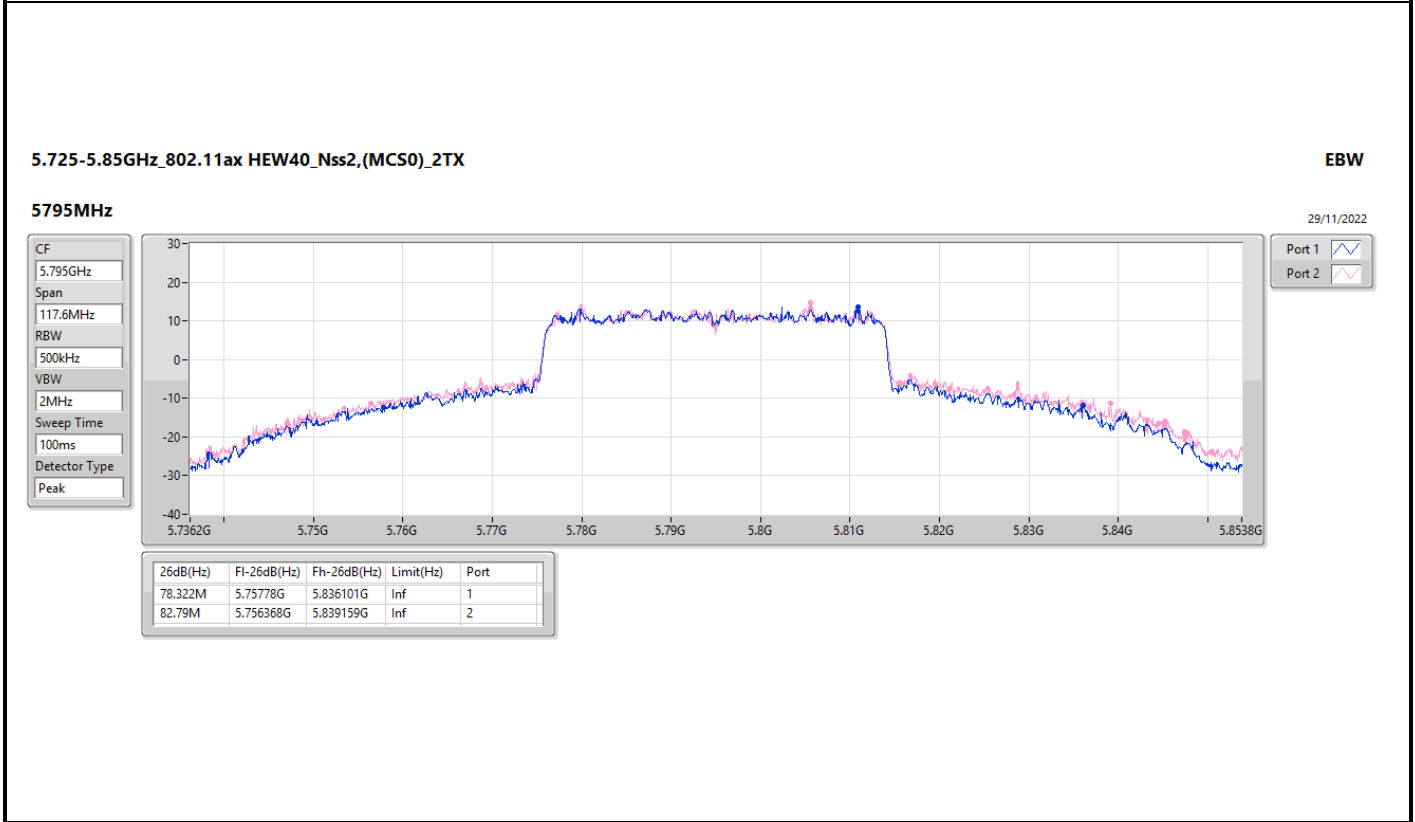
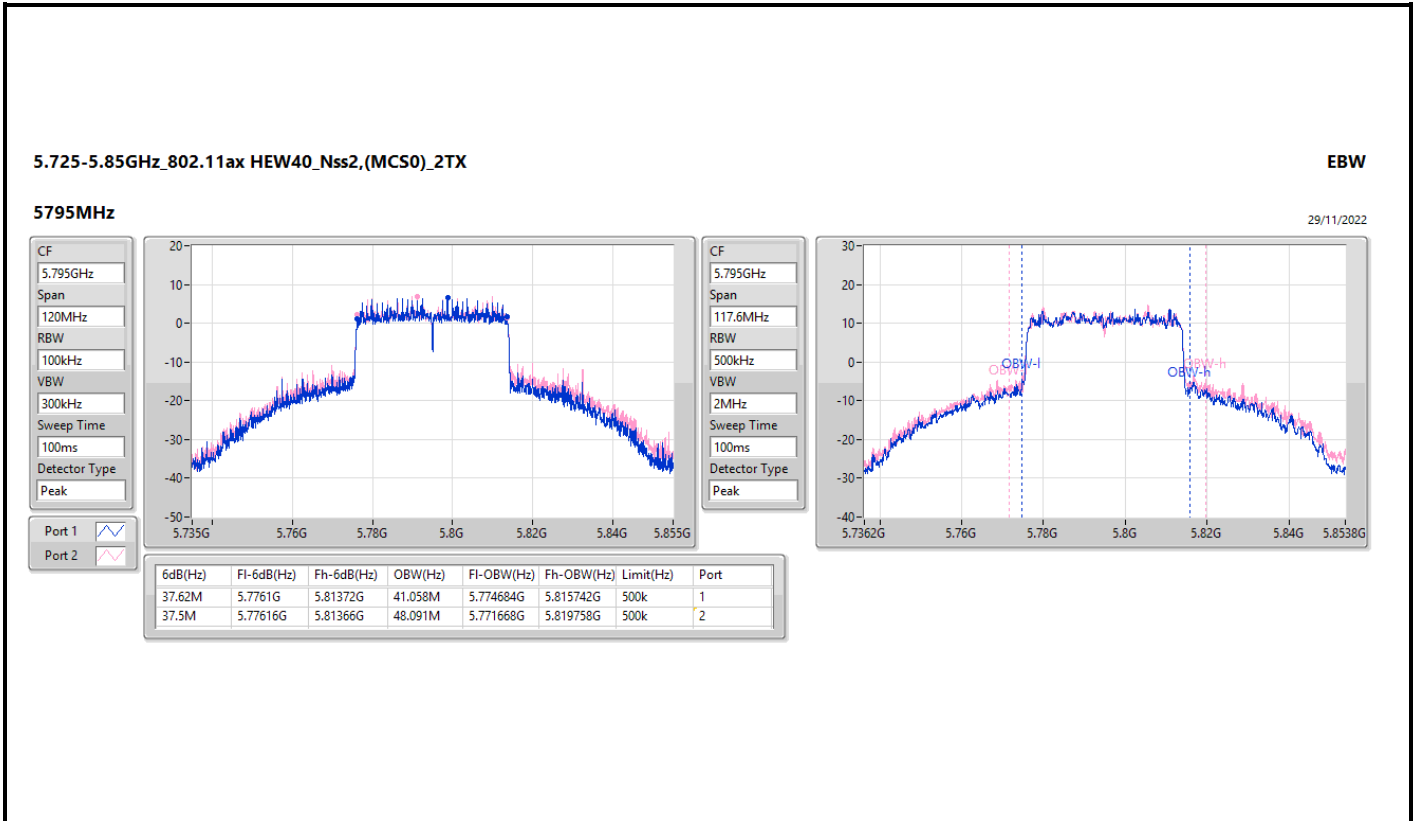
EBW

5710MHz Straddle 5.725-5.85GHz

29/11/2022





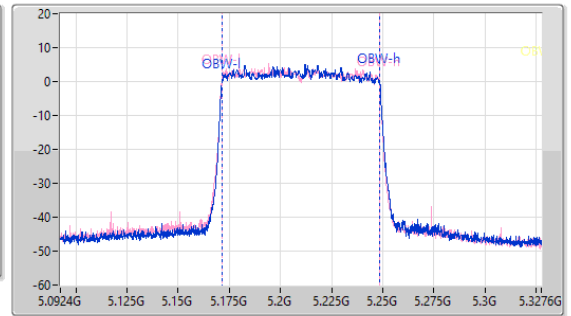
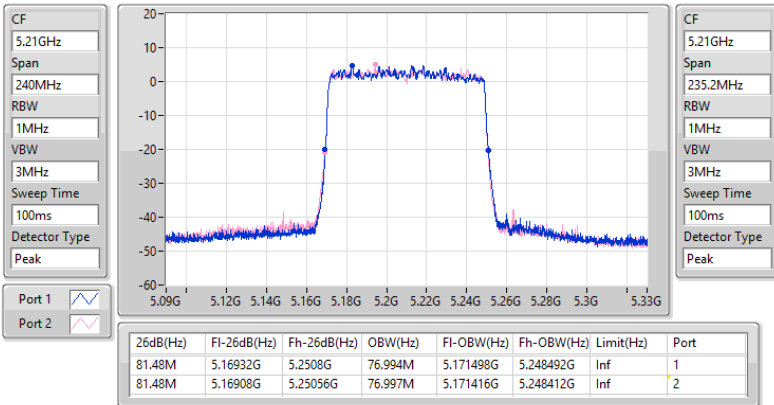


5.15-5.25GHz_802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5210MHz

29/11/2022

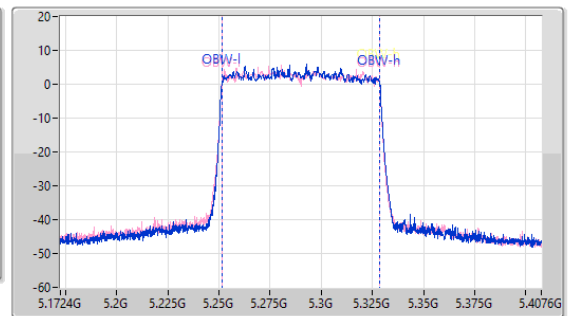
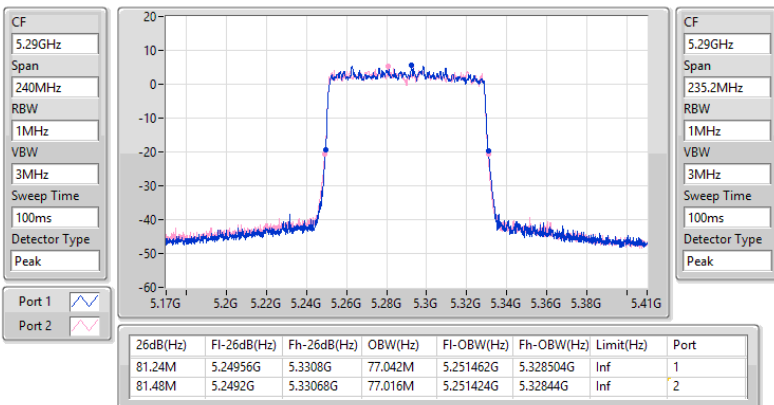


5.25-5.35GHz_802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5290MHz

29/11/2022



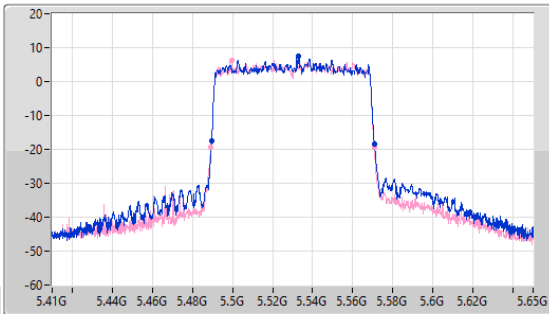
5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

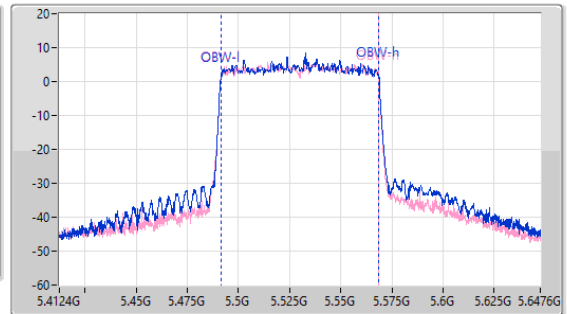
5530MHz

29/11/2022

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



CF
5.53GHz
Span
235.2MHz
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
81.24M	5.48956G	5.5708G	77.019M	5.491531G	5.56855G	Inf	1
81.48M	5.4892G	5.57068G	77.028M	5.49147G	5.568499G	Inf	2

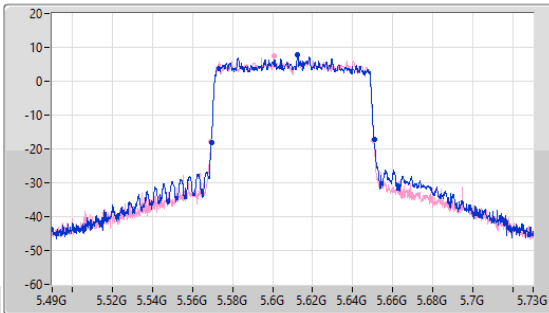
5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

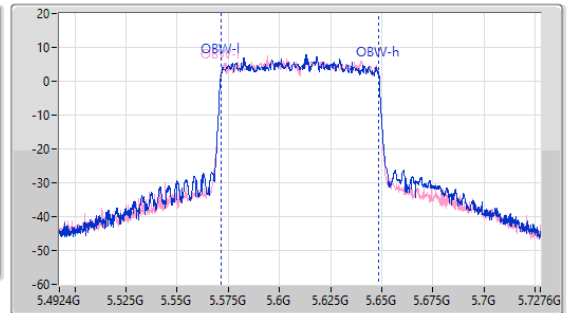
5610MHz

29/11/2022

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



CF
5.61GHz
Span
235.2MHz
RBW
1MHz
VBW
3MHz
Sweep Time
100ms
Detector Type
Peak



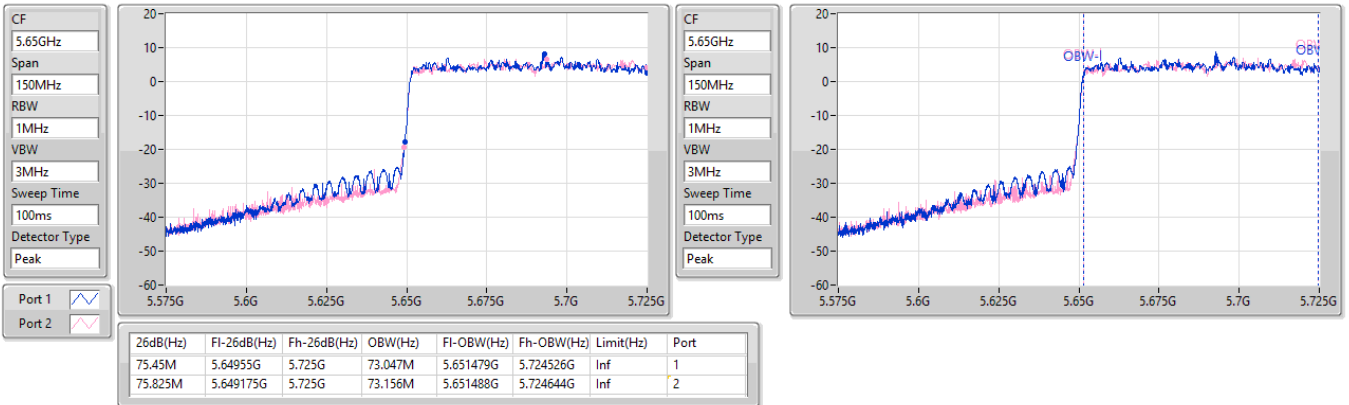
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.24M	5.56944G	5.65068G	77.011M	5.571512G	5.648523G	Inf	1
81.24M	5.56932G	5.65056G	77.012M	5.571451G	5.648463G	Inf	2

5.47-5.725GHz_802.11ax HEW80_Nss2,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

29/11/2022

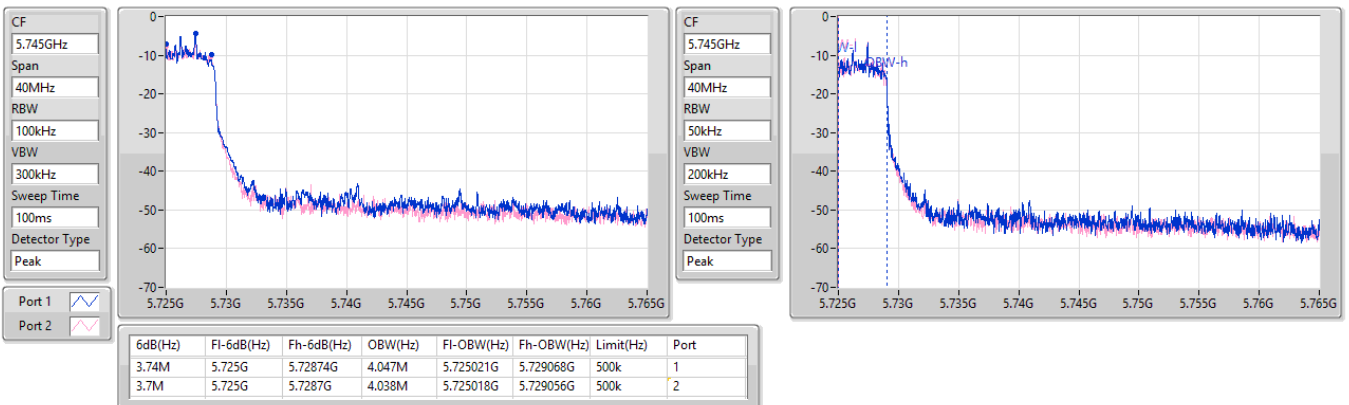


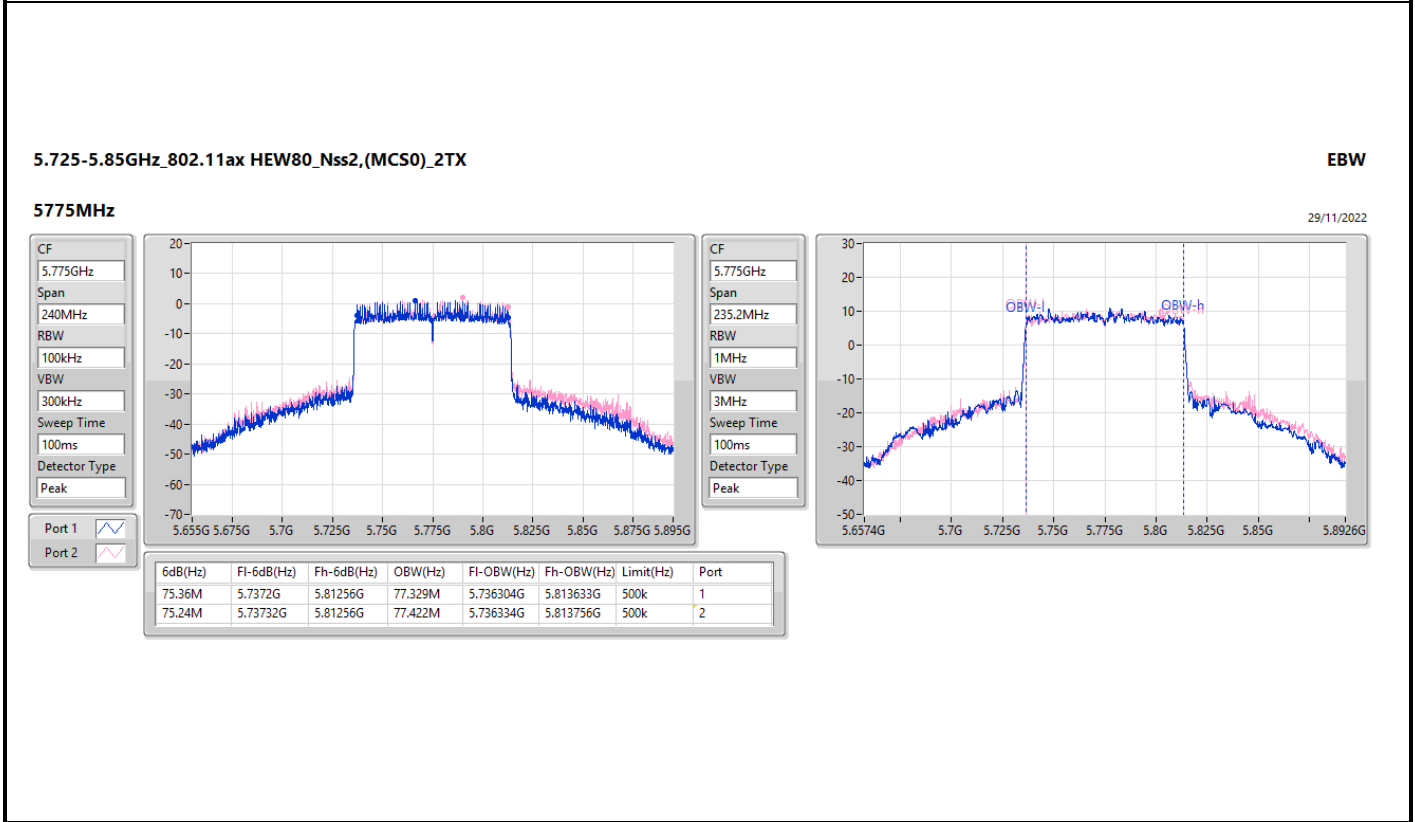
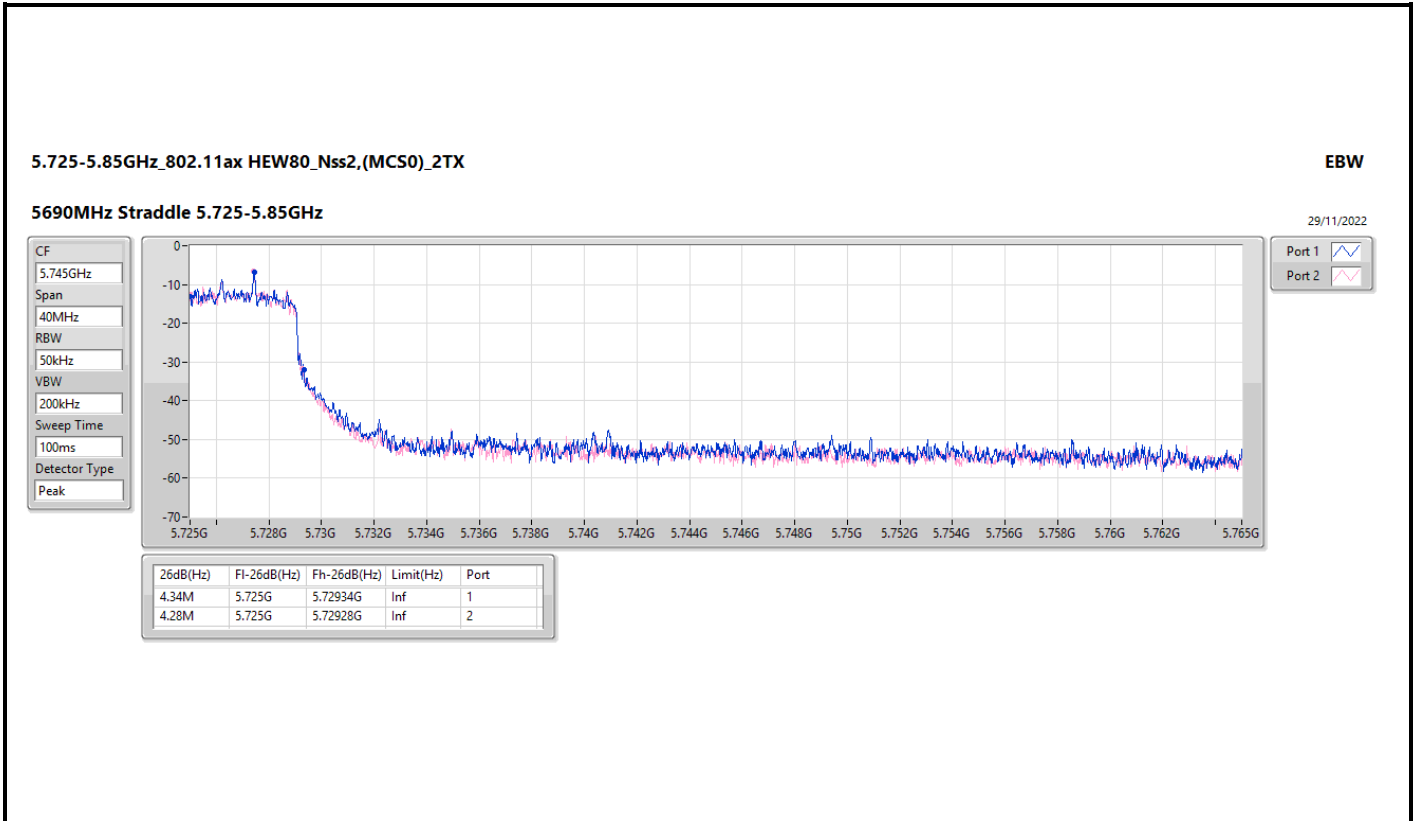
5.725-5.85GHz_802.11ax HEW80_Nss2,(MCS0)_2TX

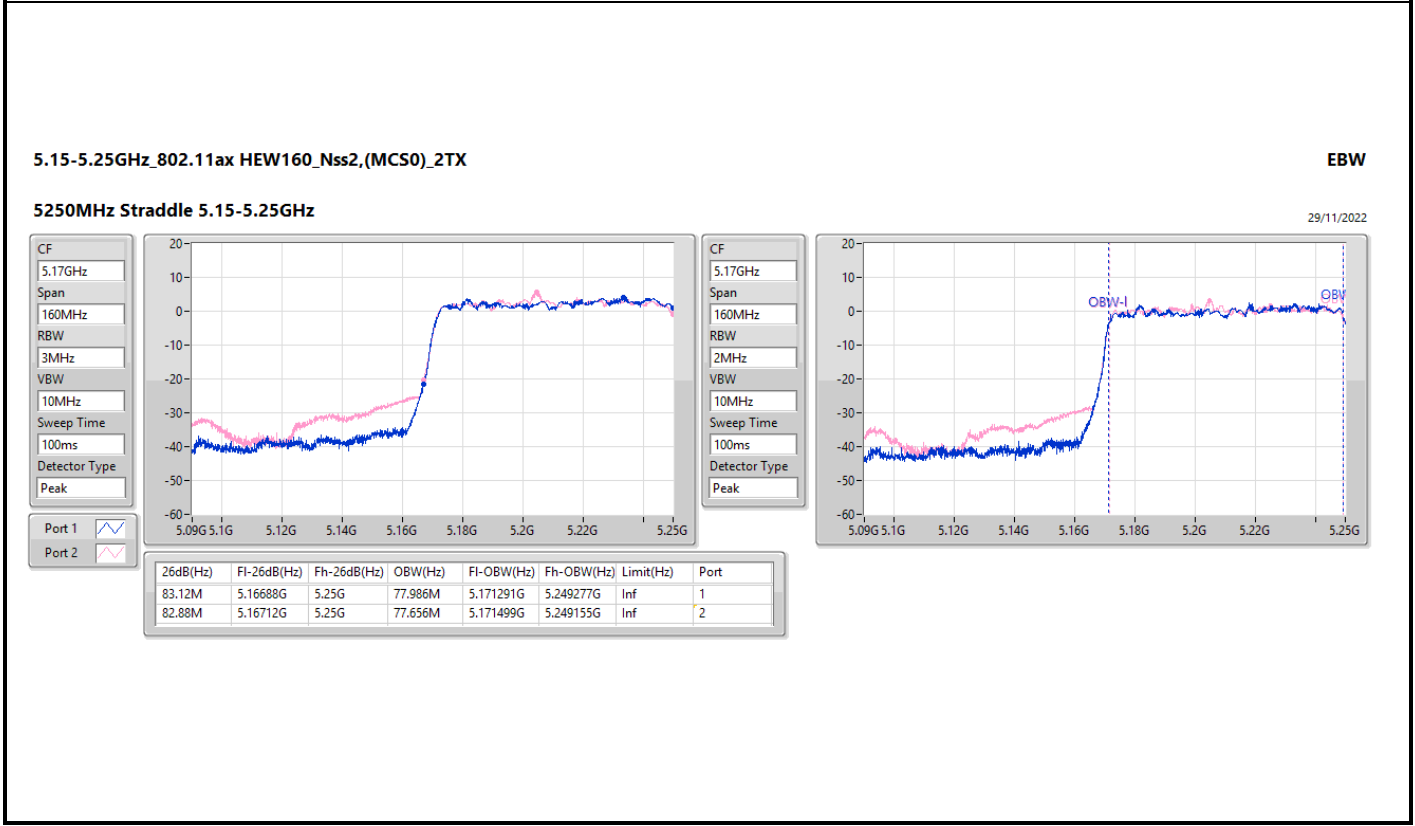
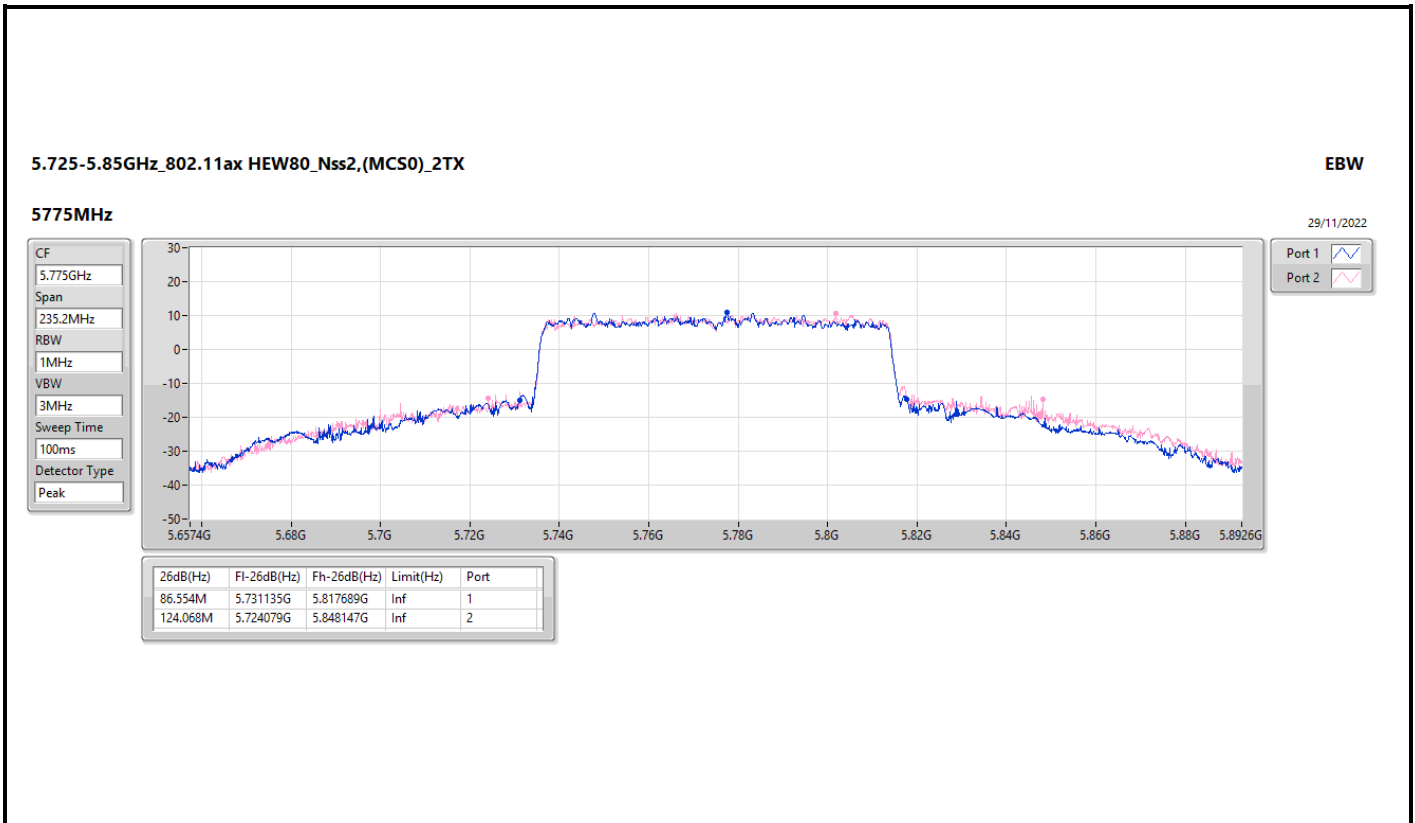
EBW

5690MHz Straddle 5.725-5.85GHz

29/11/2022





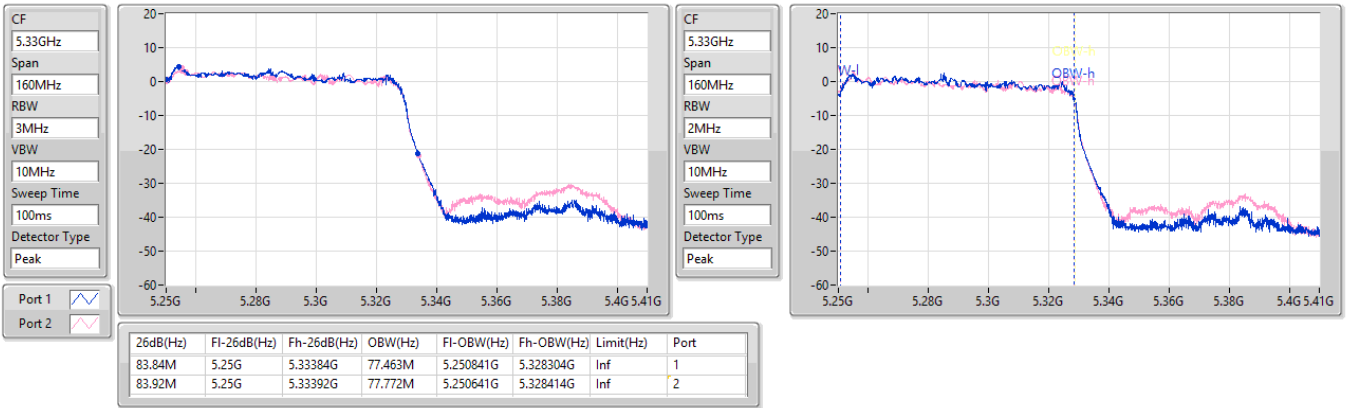


5.25-5.35GHz_802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

29/11/2022

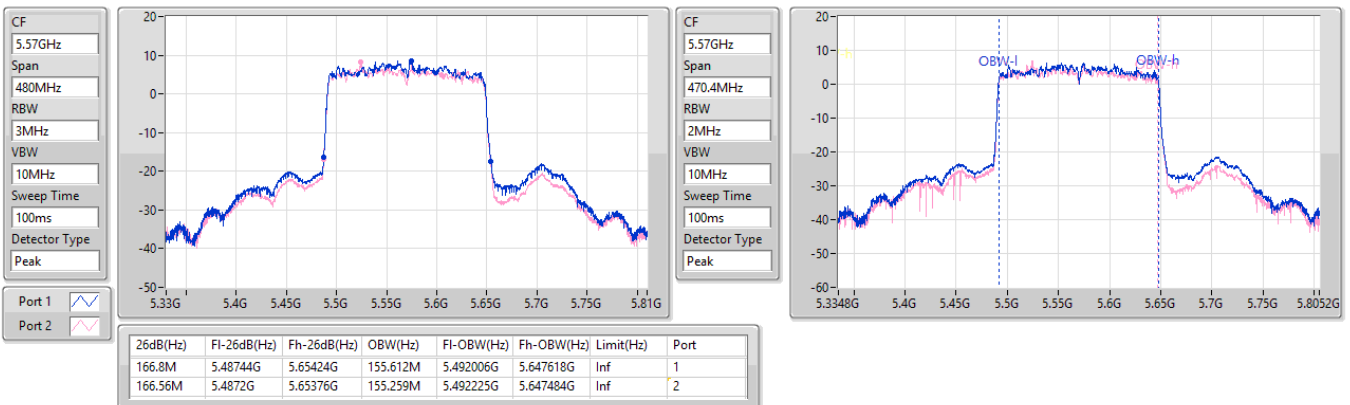


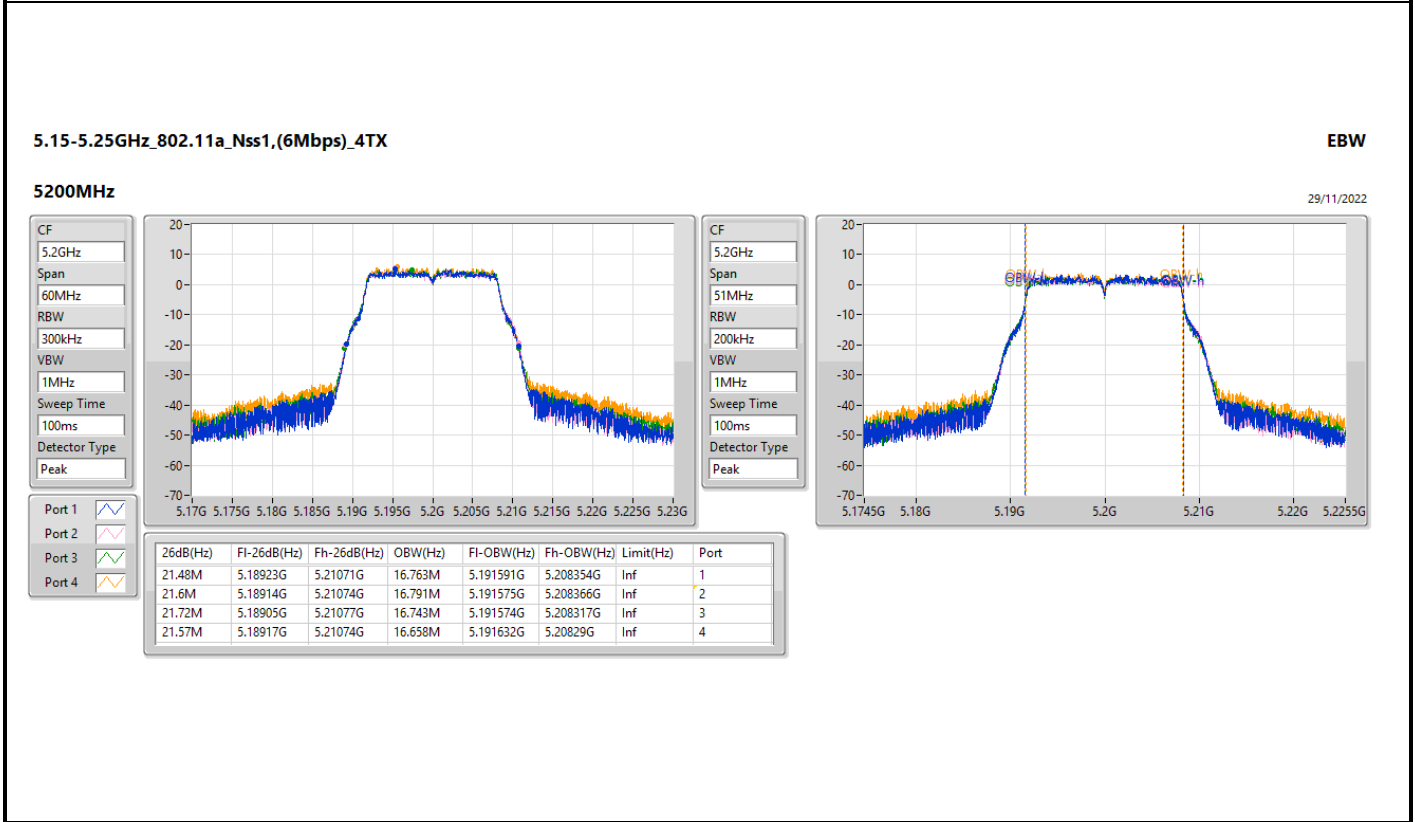
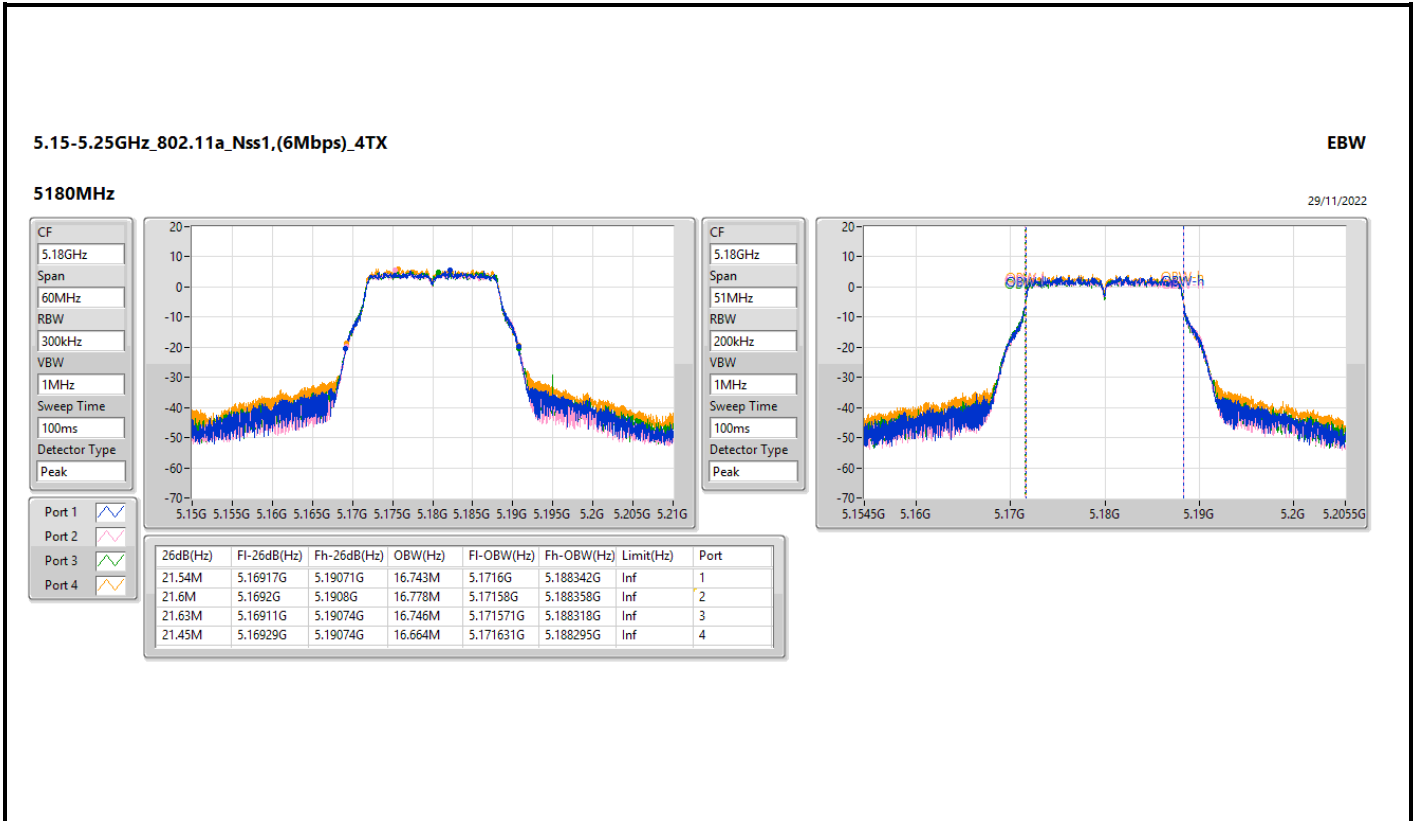
5.47-5.725GHz_802.11ax HEW160_Nss2,(MCS0)_2TX

EBW

5570MHz

29/11/2022





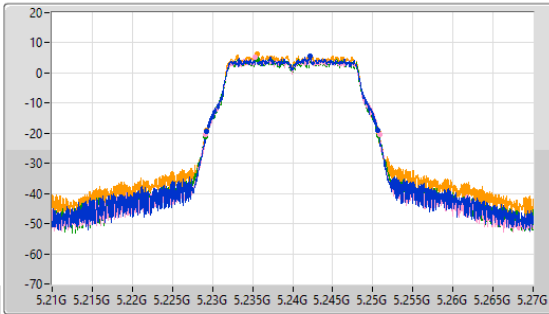
5.15-5.25GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

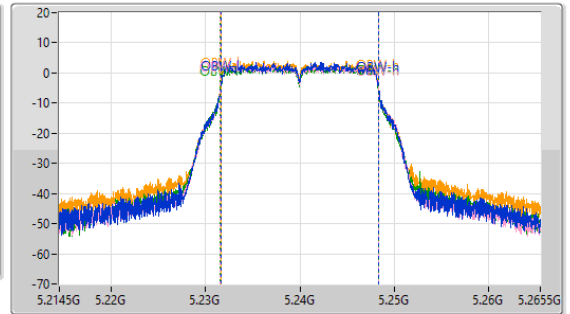
5240MHz

29/11/2022

CF: 5.24GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.24GHz
 Span: 51MHz
 RBW: 200kHz
 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
21.45M	5.22923G	5.25068G	16.766M	5.231596G	5.248362G	Inf	1
21.72M	5.22911G	5.25083G	16.798M	5.231581G	5.248379G	Inf	2
21.69M	5.22908G	5.25077G	16.758M	5.231569G	5.248327G	Inf	3
21.48M	5.22926G	5.25074G	16.687M	5.231626G	5.248313G	Inf	4

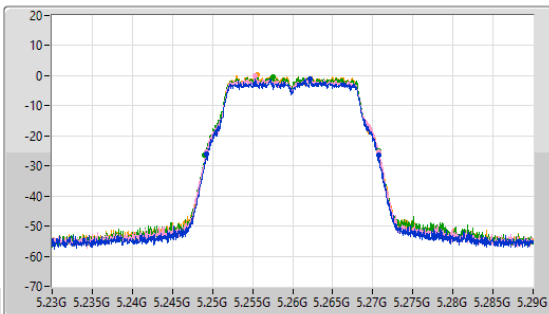
5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

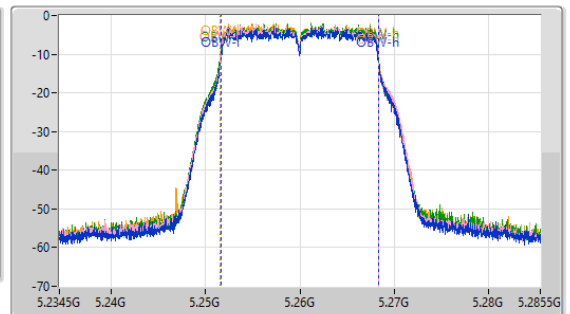
5260MHz

29/11/2022

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



CF: 5.26GHz
 Span: 51MHz
 RBW: 200kHz
 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
21.45M	5.24926G	5.27071G	16.762M	5.251601G	5.268362G	Inf	1
21.6M	5.2492G	5.2708G	16.777M	5.251586G	5.268363G	Inf	2
21.66M	5.24905G	5.27071G	16.741M	5.251569G	5.26831G	Inf	3
21.57M	5.24923G	5.2708G	16.673M	5.251631G	5.268304G	Inf	4

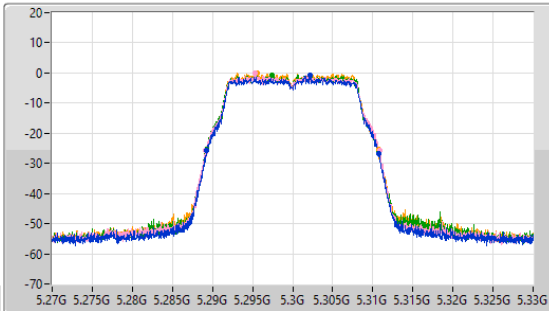
5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

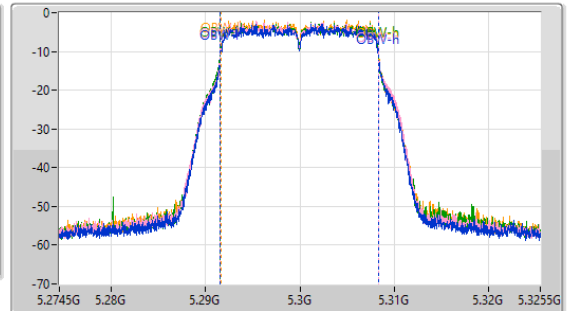
5300MHz

29/11/2022

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



CF: 5.3GHz
 Span: 51MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1
 Port 2
 Port 3
 Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.51M	5.28926G	5.31077G	16.762M	5.291588G	5.30835G	Inf	1
21.66M	5.28917G	5.31083G	16.786M	5.291581G	5.308367G	Inf	2
21.57M	5.2892G	5.31077G	16.74M	5.291572G	5.308312G	Inf	3
21.57M	5.2892G	5.31077G	16.684M	5.291632G	5.308316G	Inf	4

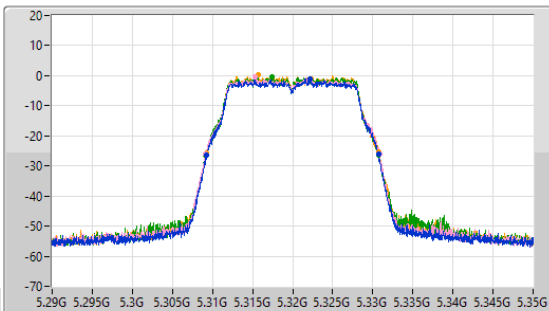
5.25-5.35GHz_802.11a_Nss1,(6Mbps)_4TX

EBW

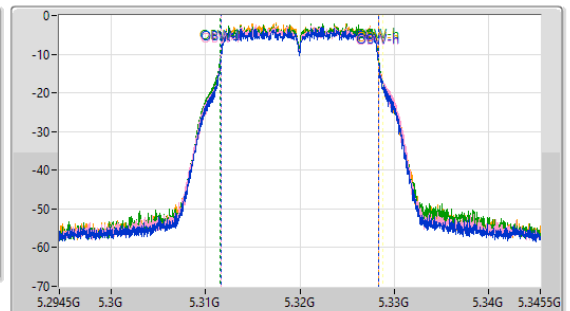
5320MHz

29/11/2022

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

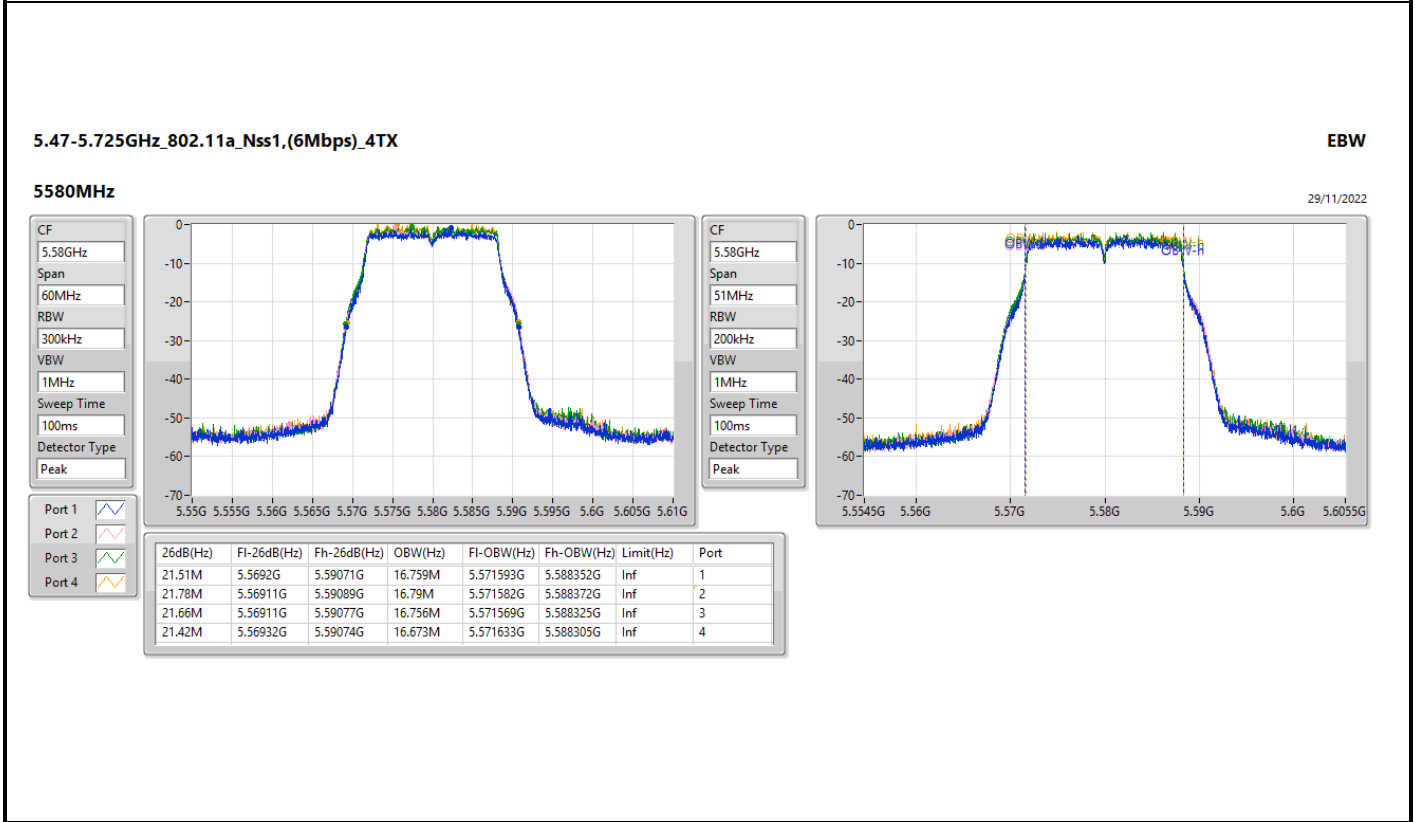
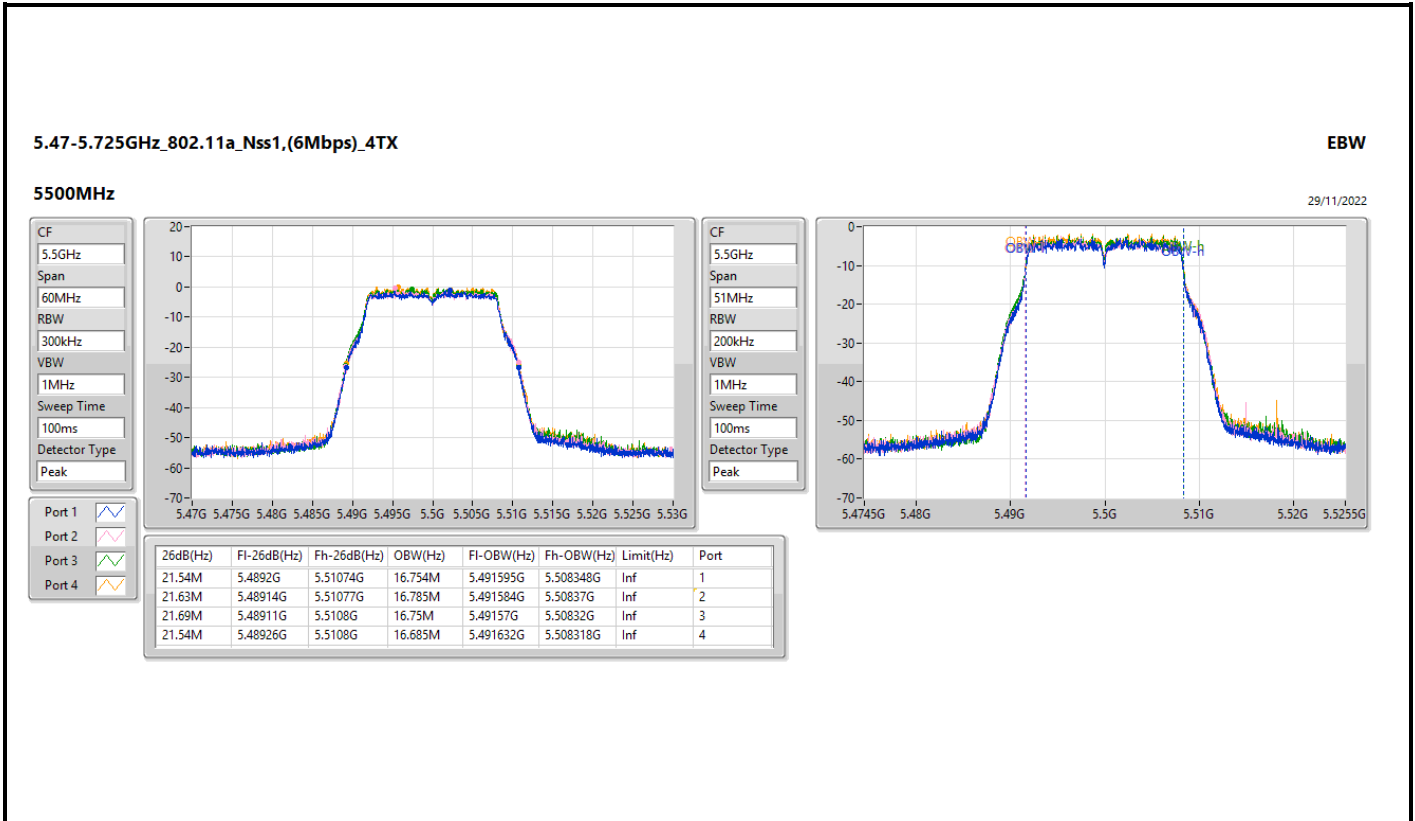


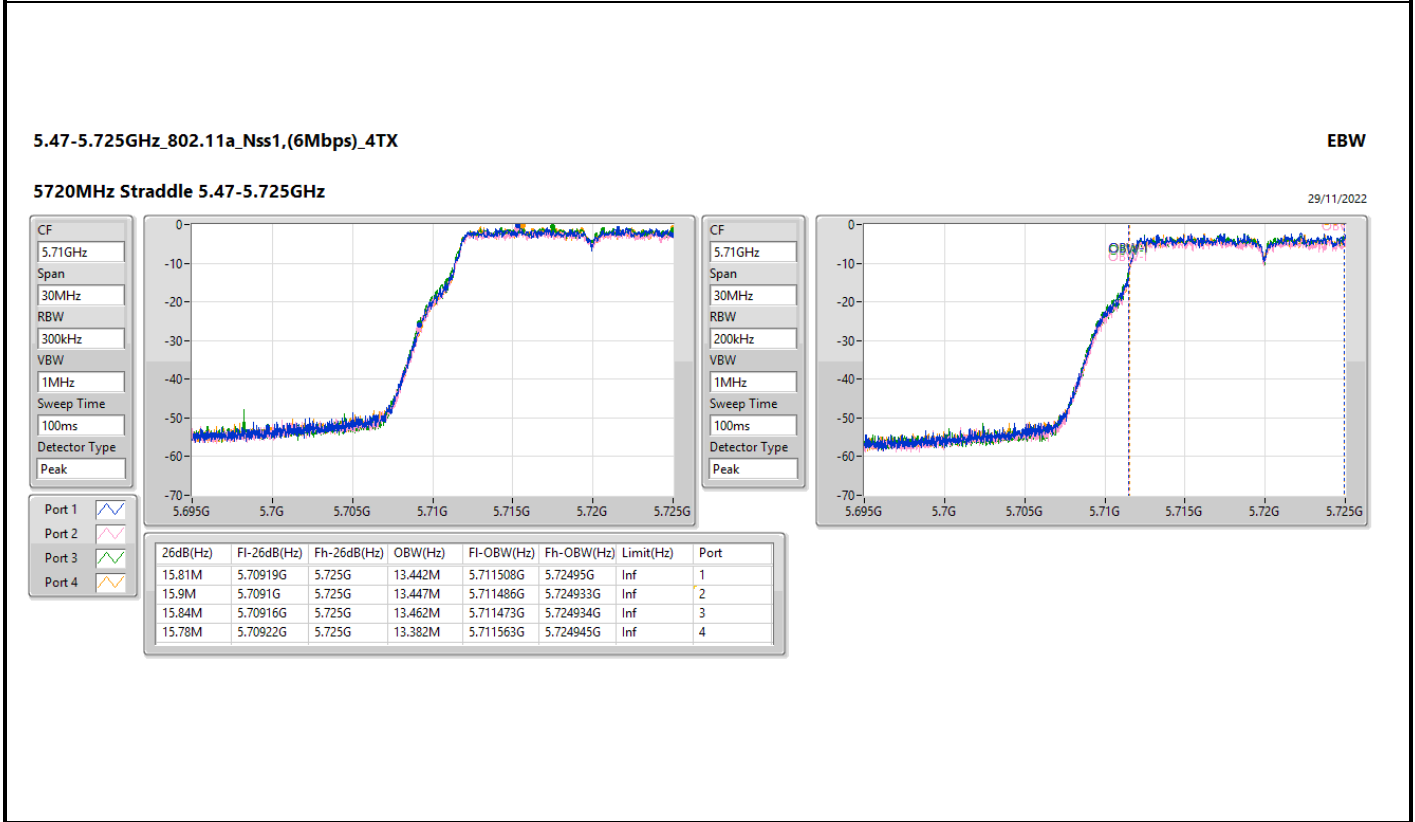
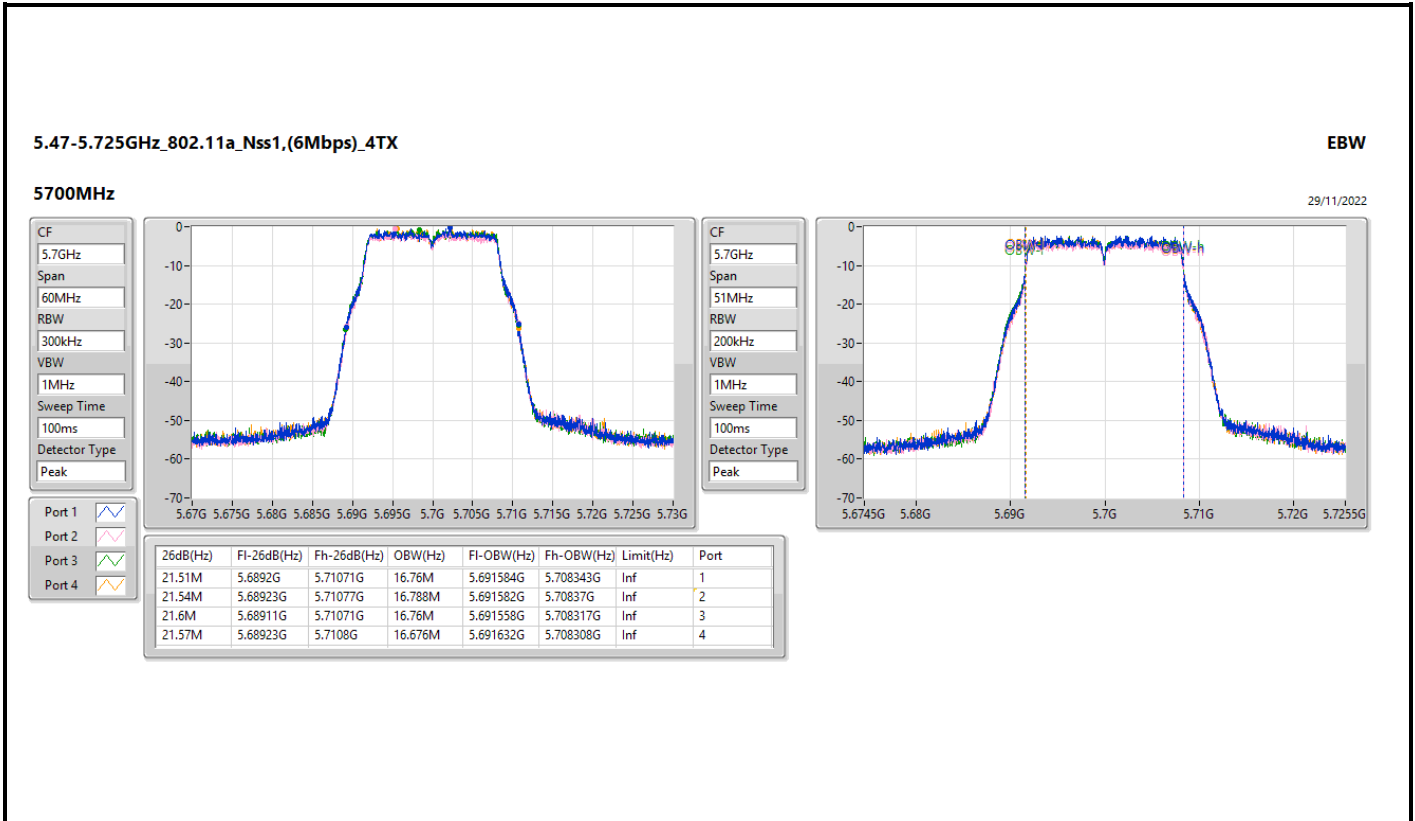
CF: 5.32GHz
 Span: 51MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak

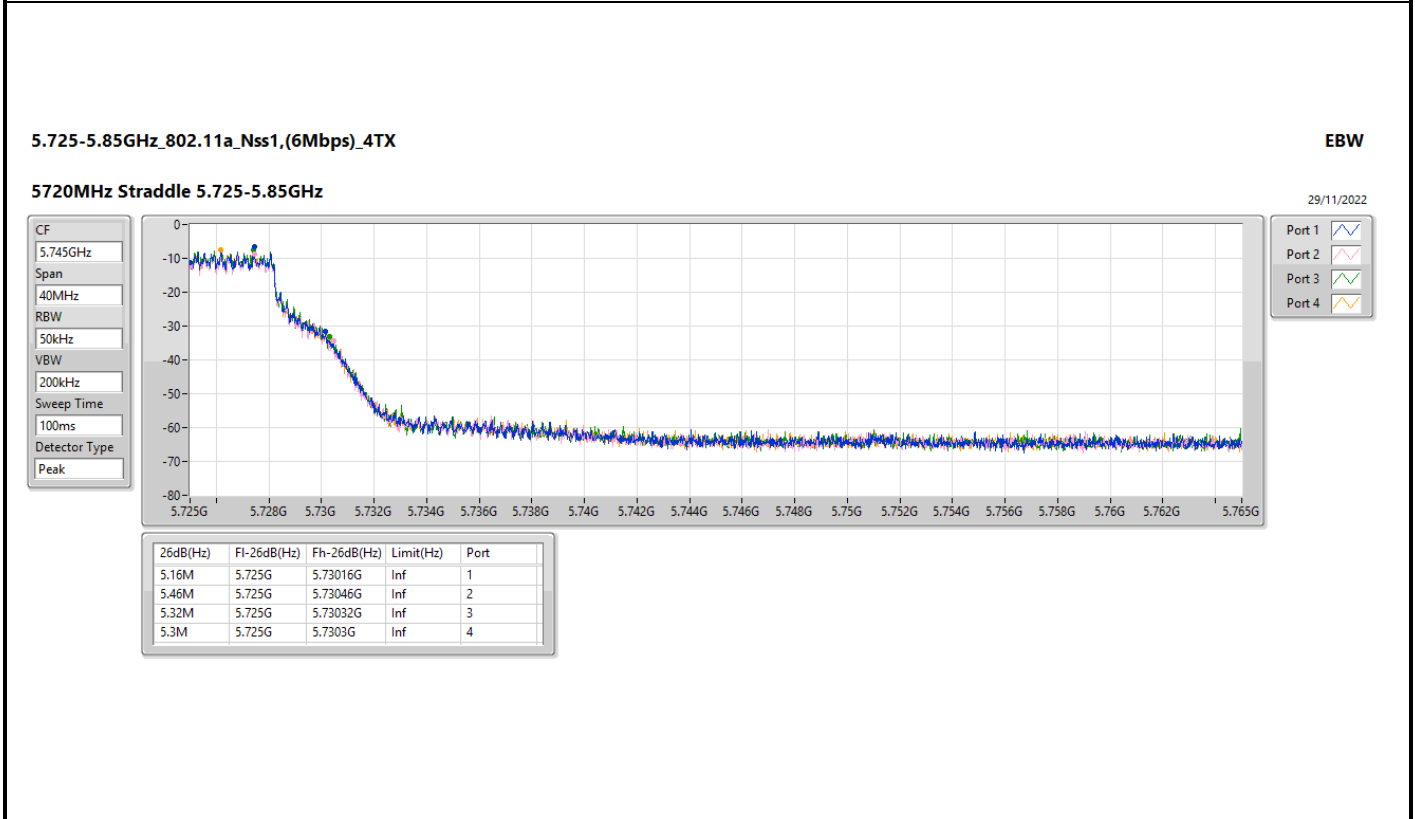
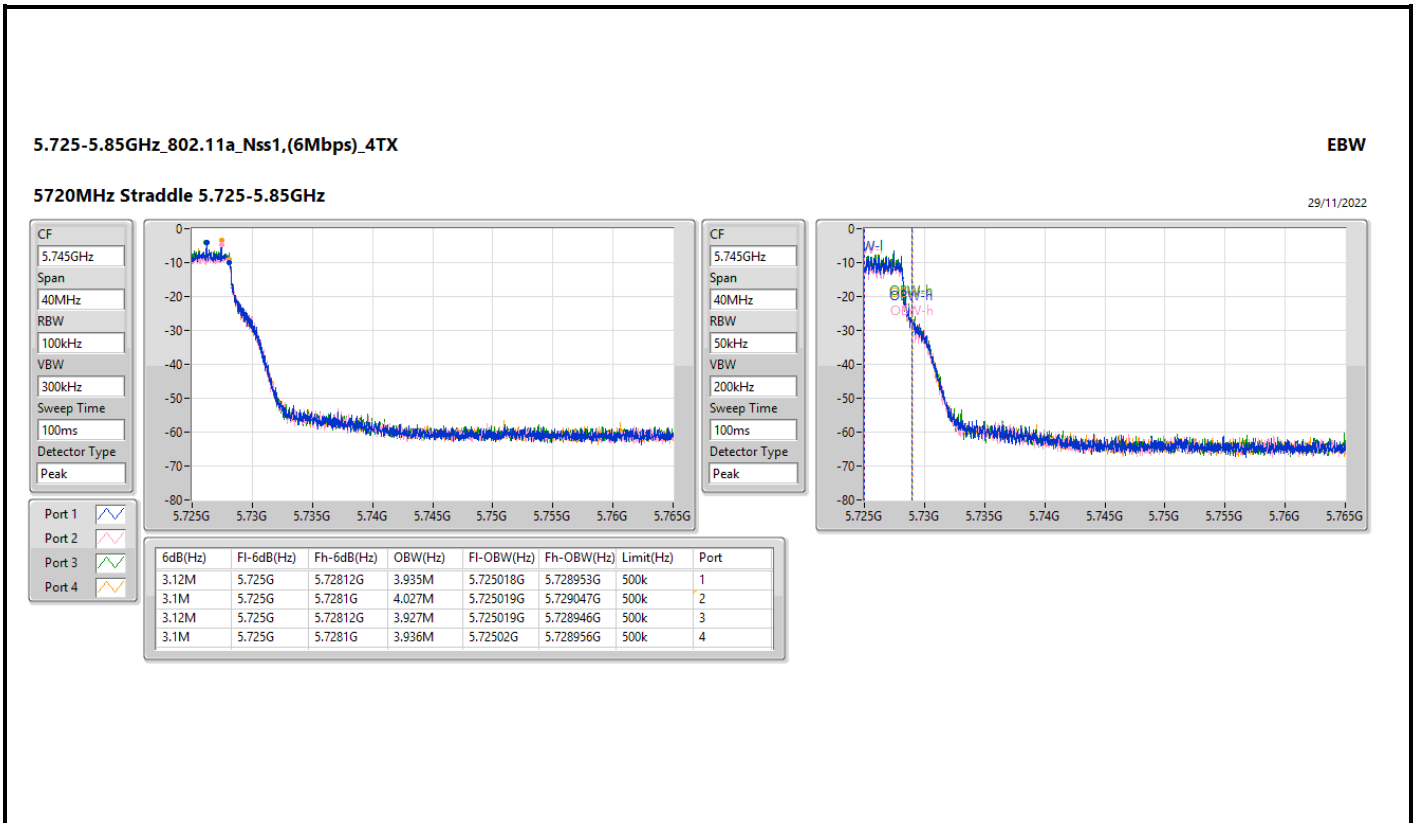


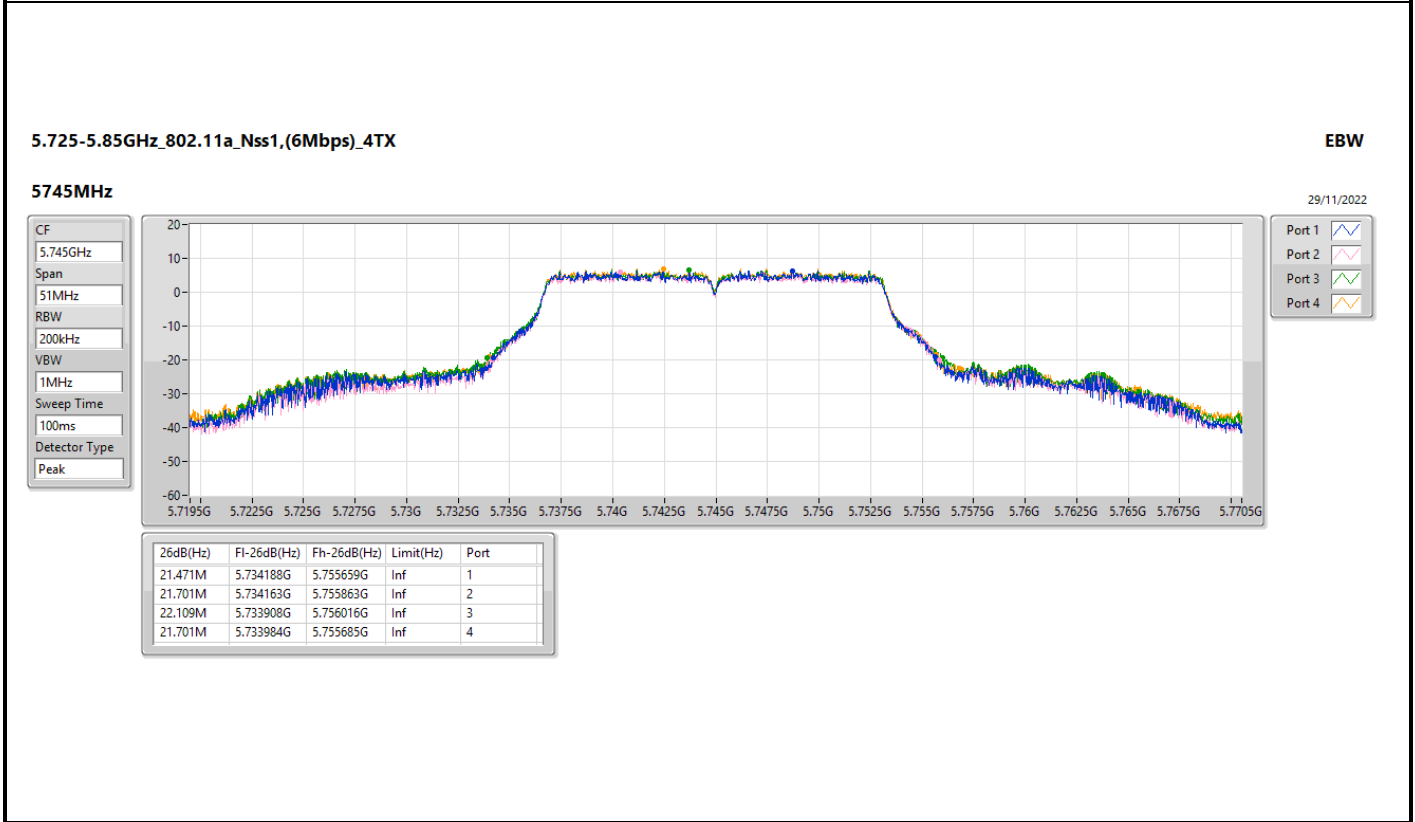
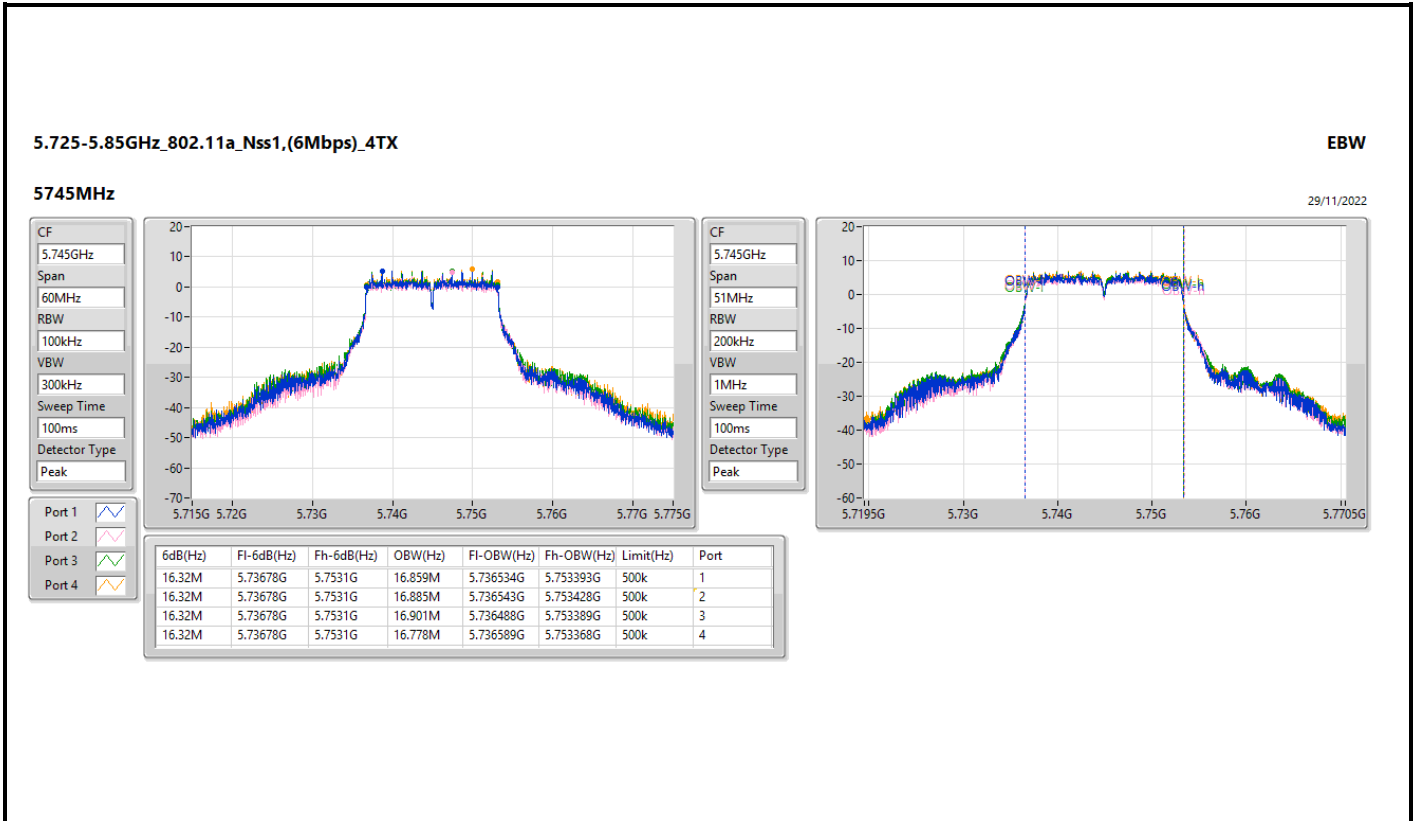
Port 1
 Port 2
 Port 3
 Port 4

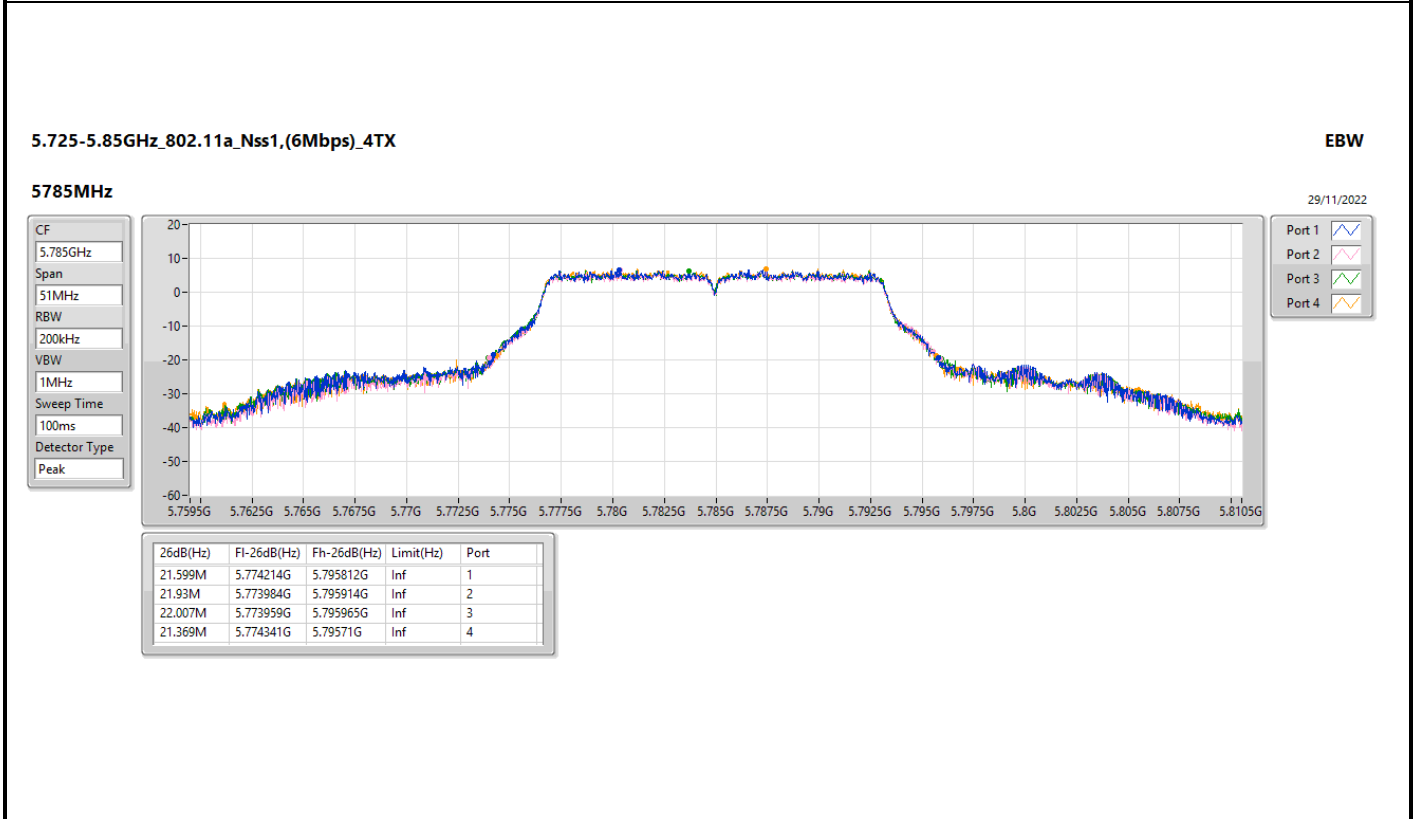
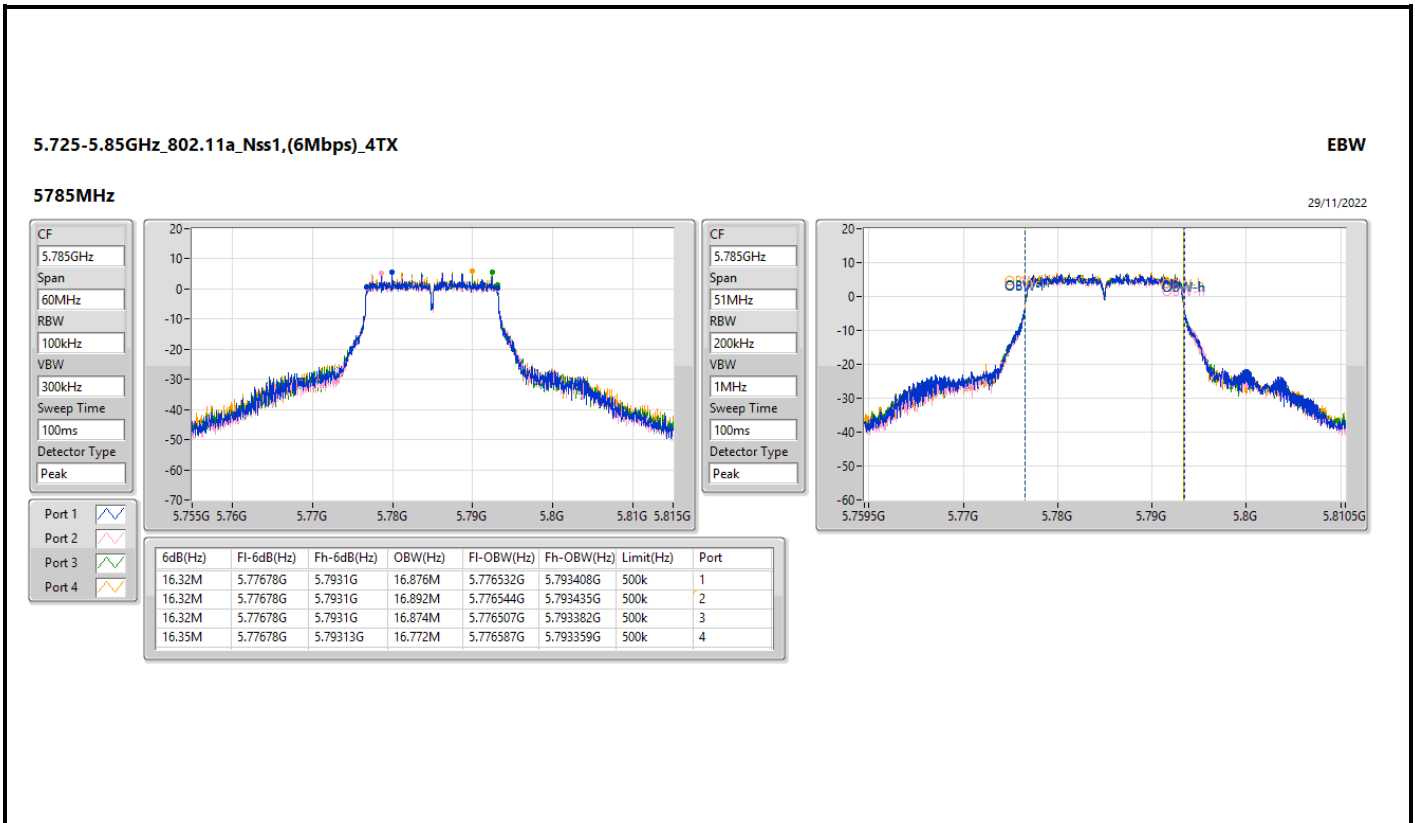
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.48M	5.30923G	5.33071G	16.742M	5.311602G	5.328345G	Inf	1
21.69M	5.30917G	5.33086G	16.768M	5.311595G	5.328363G	Inf	2
21.66M	5.30908G	5.33074G	16.745M	5.311576G	5.328321G	Inf	3
21.51M	5.30926G	5.33077G	16.677M	5.311642G	5.328319G	Inf	4

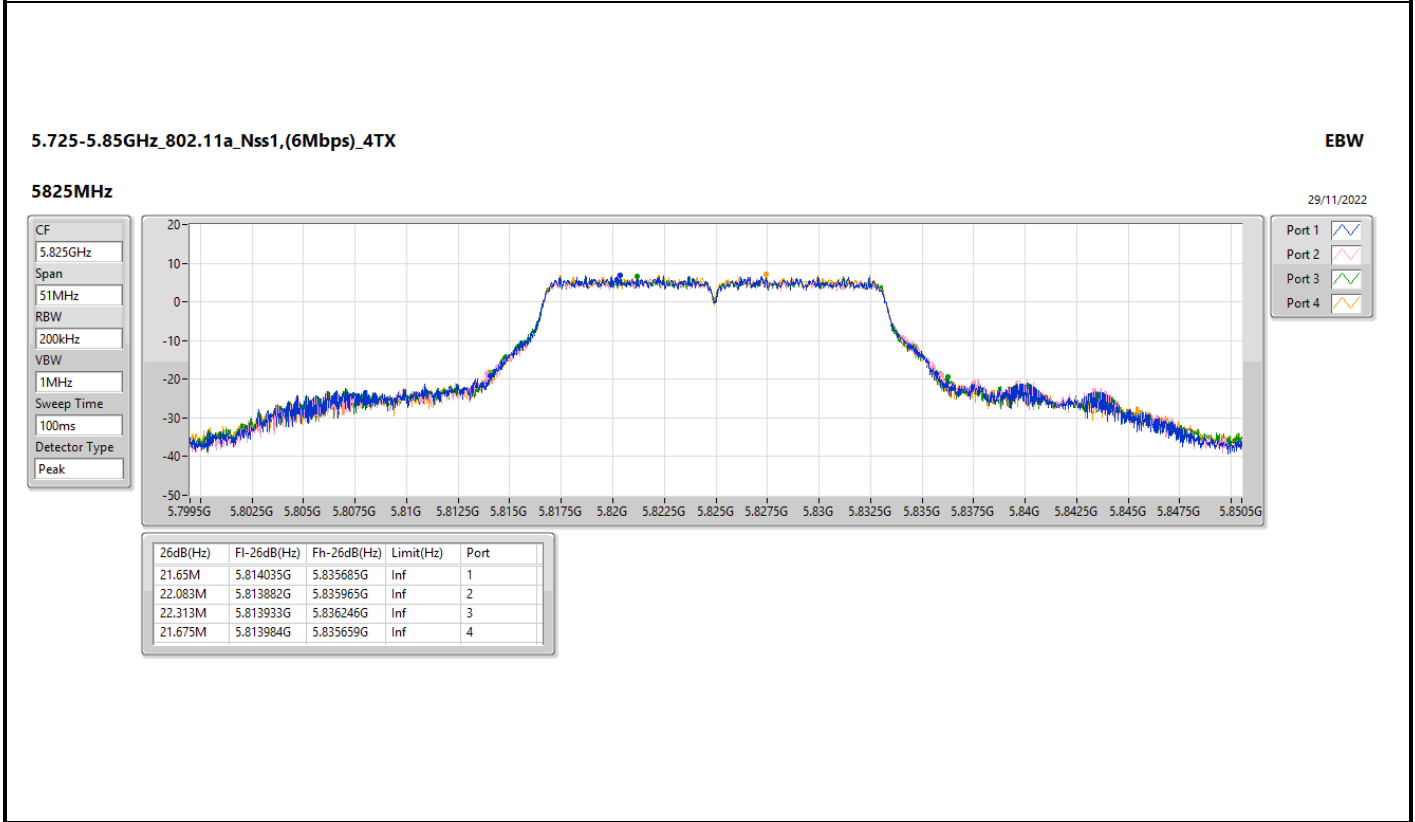
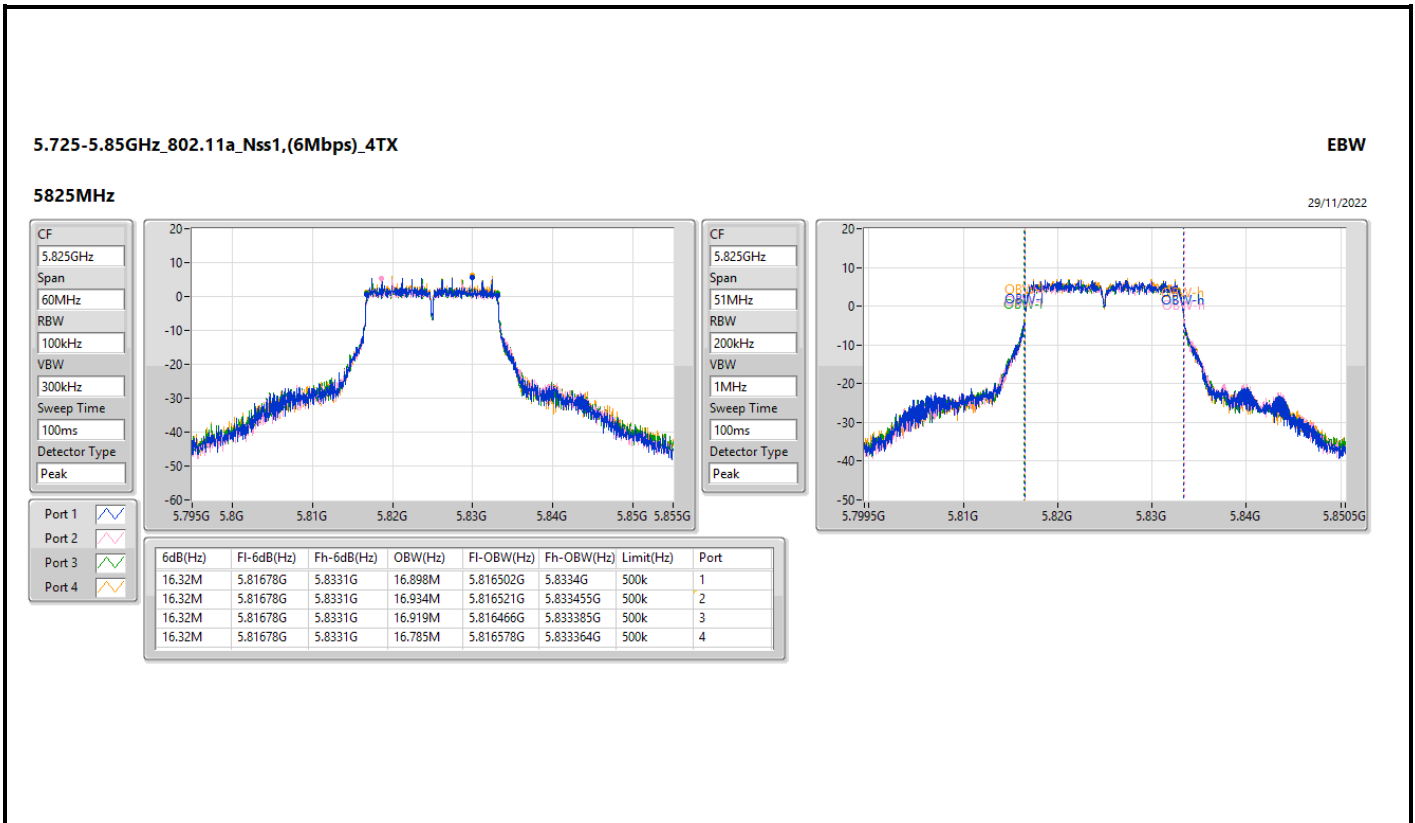












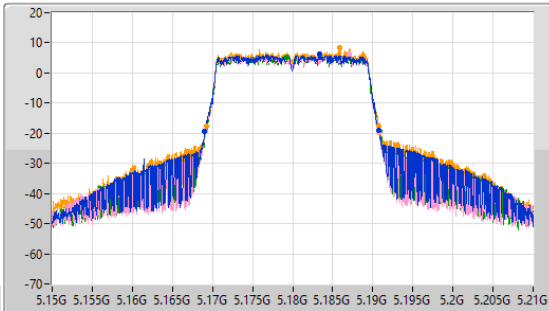
5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

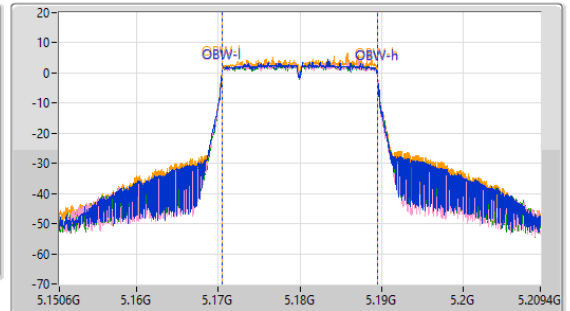
5180MHz

29/11/2022

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



CF
5.18GHz
Span
58.8MHz
RBW
200kHz
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
21.72M	5.16905G	5.19077G	19.01M	5.170455G	5.189466G	Inf	1
21.69M	5.16911G	5.1908G	19.023M	5.170461G	5.189484G	Inf	2
21.81M	5.16905G	5.19086G	19.048M	5.170451G	5.1895G	Inf	3
21.51M	5.16926G	5.19077G	18.975M	5.170472G	5.189447G	Inf	4

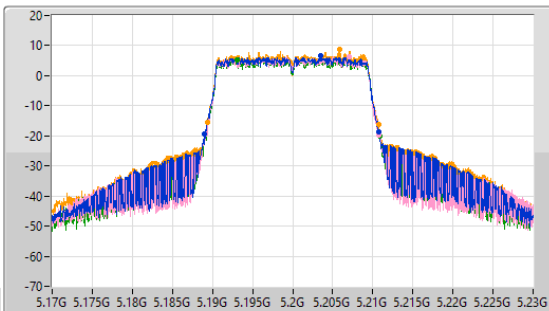
5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

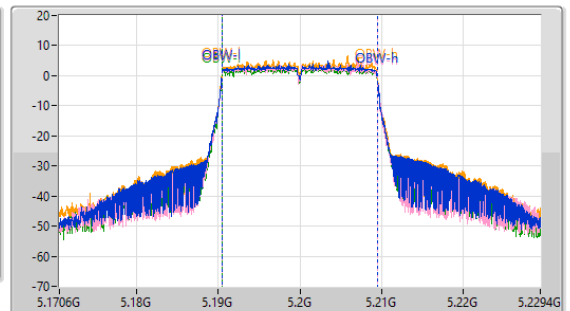
5200MHz

29/11/2022

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



CF
5.2GHz
Span
58.8MHz
RBW
200kHz
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
21.72M	5.18905G	5.21077G	19.007M	5.190451G	5.209458G	Inf	1
21.72M	5.18908G	5.2108G	19.029M	5.190454G	5.209483G	Inf	2
21.78M	5.18908G	5.21086G	19.059M	5.190442G	5.209501G	Inf	3
21.39M	5.18932G	5.21071G	18.971M	5.190471G	5.209443G	Inf	4

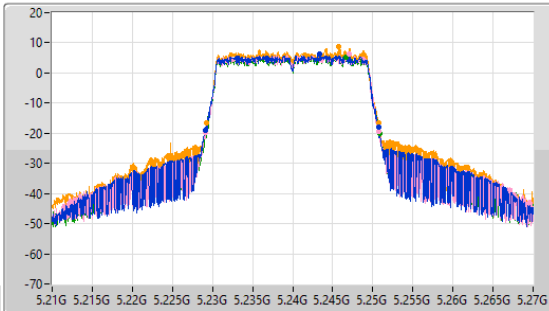
5.15-5.25GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

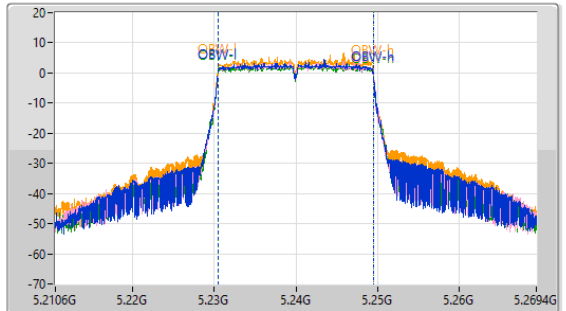
5240MHz

29/11/2022

CF
5.24GHz
Span
60MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



CF
5.24GHz
Span
58.8MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.66M	5.22911G	5.25077G	19.017M	5.23045G	5.249467G	Inf	1
21.72M	5.22908G	5.2508G	19.018M	5.23046G	5.249478G	Inf	2
21.78M	5.22908G	5.25086G	19.05M	5.230452G	5.249502G	Inf	3
21.48M	5.22926G	5.25074G	18.974M	5.230472G	5.249446G	Inf	4

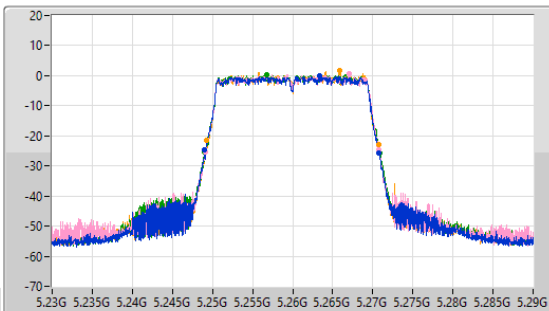
5.25-5.35GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

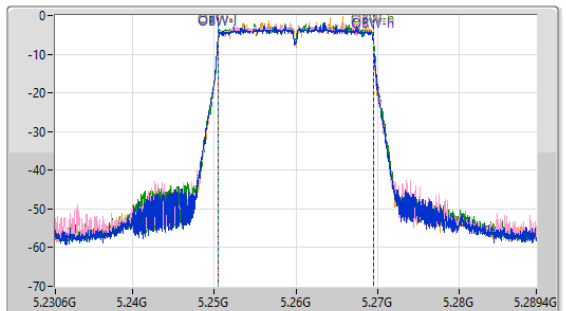
5260MHz

29/11/2022

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

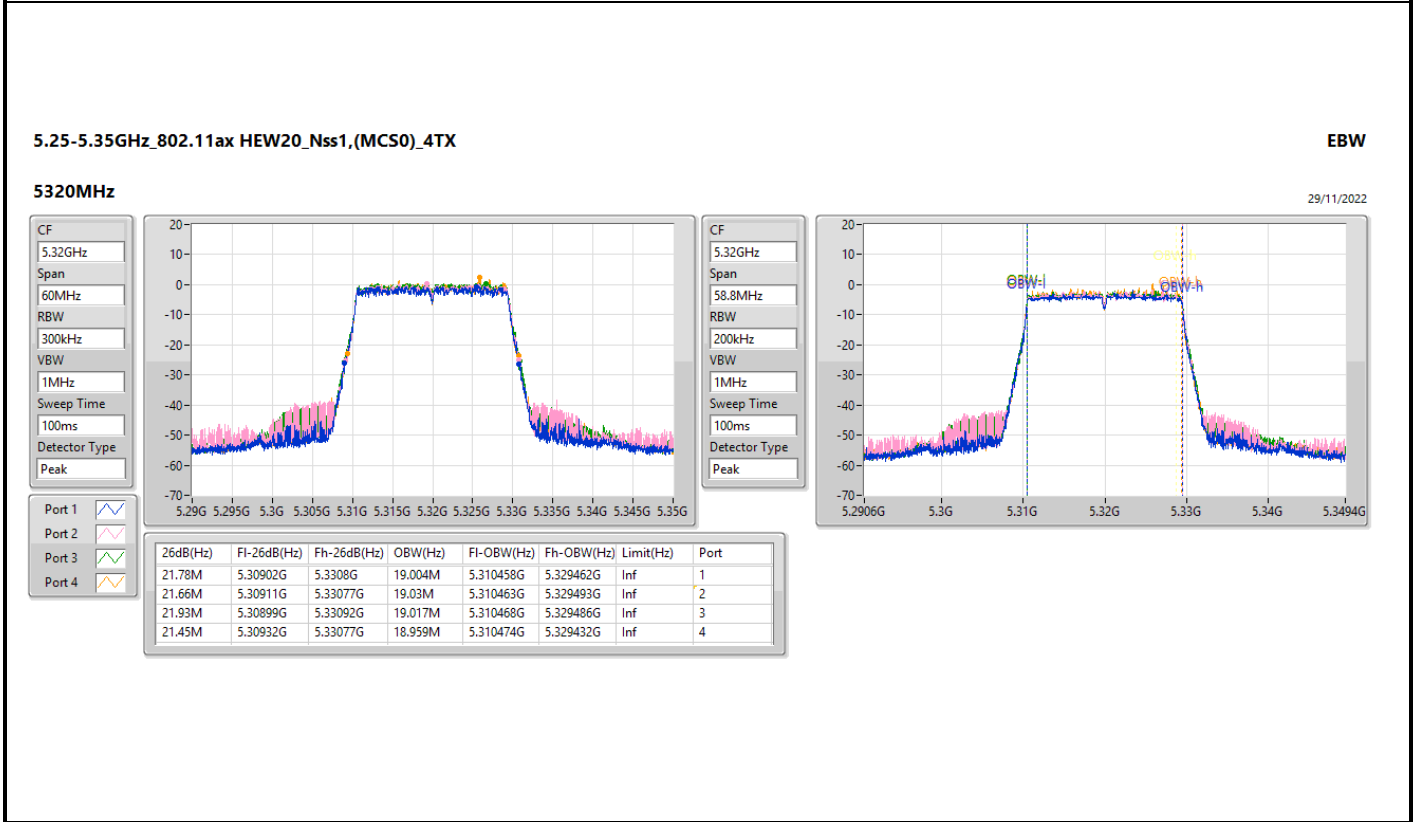
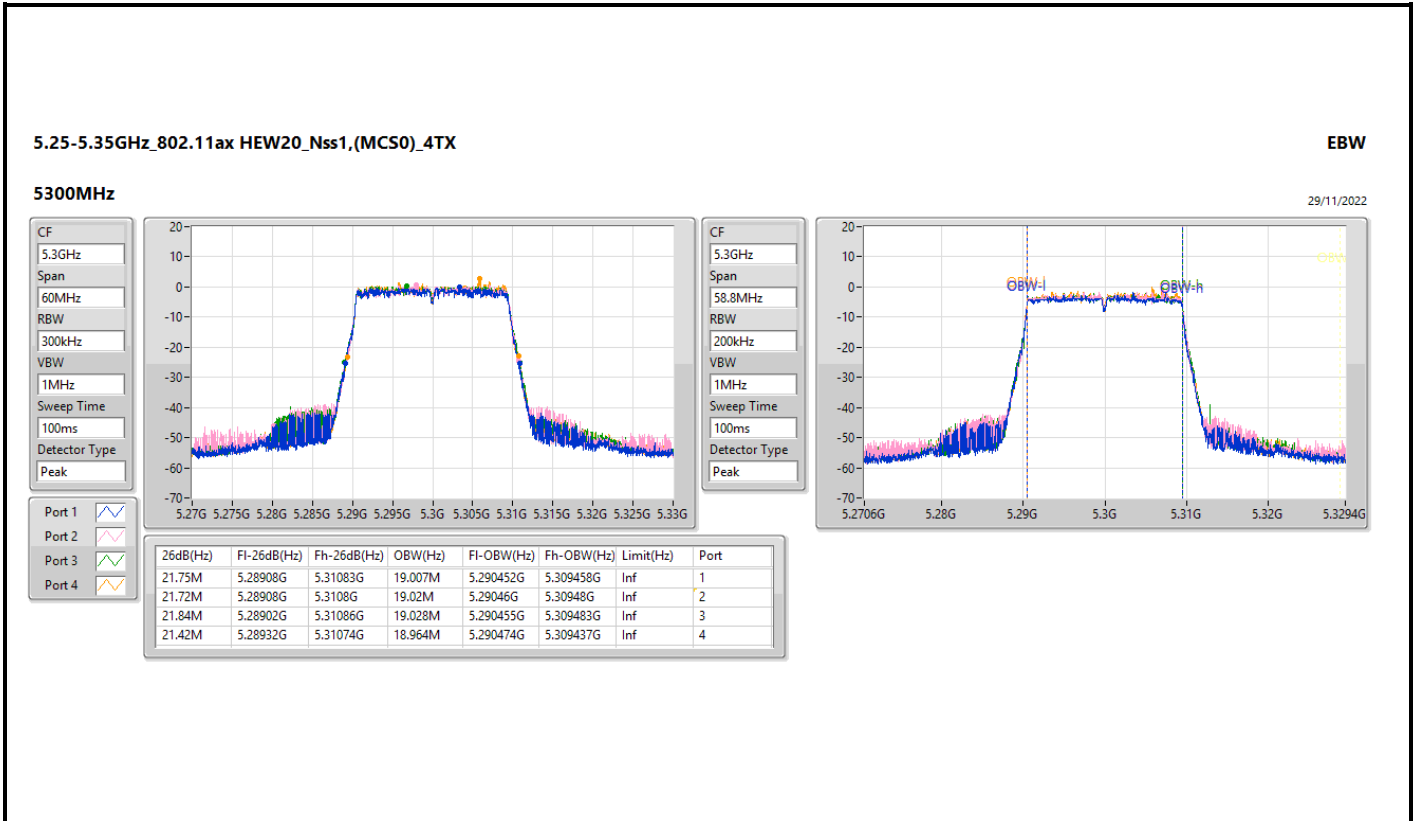


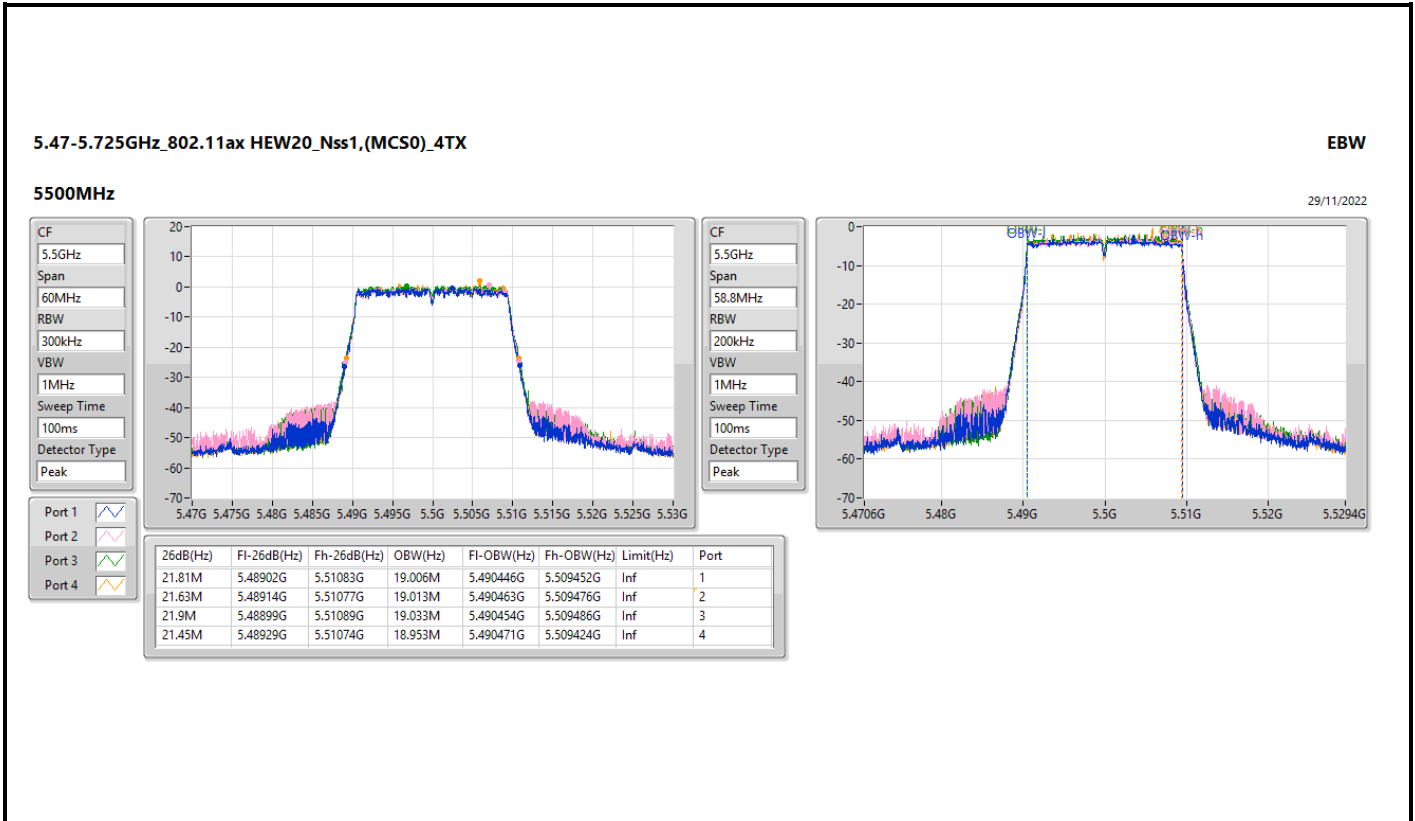
CF
5.26GHz
Span
58.8MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak

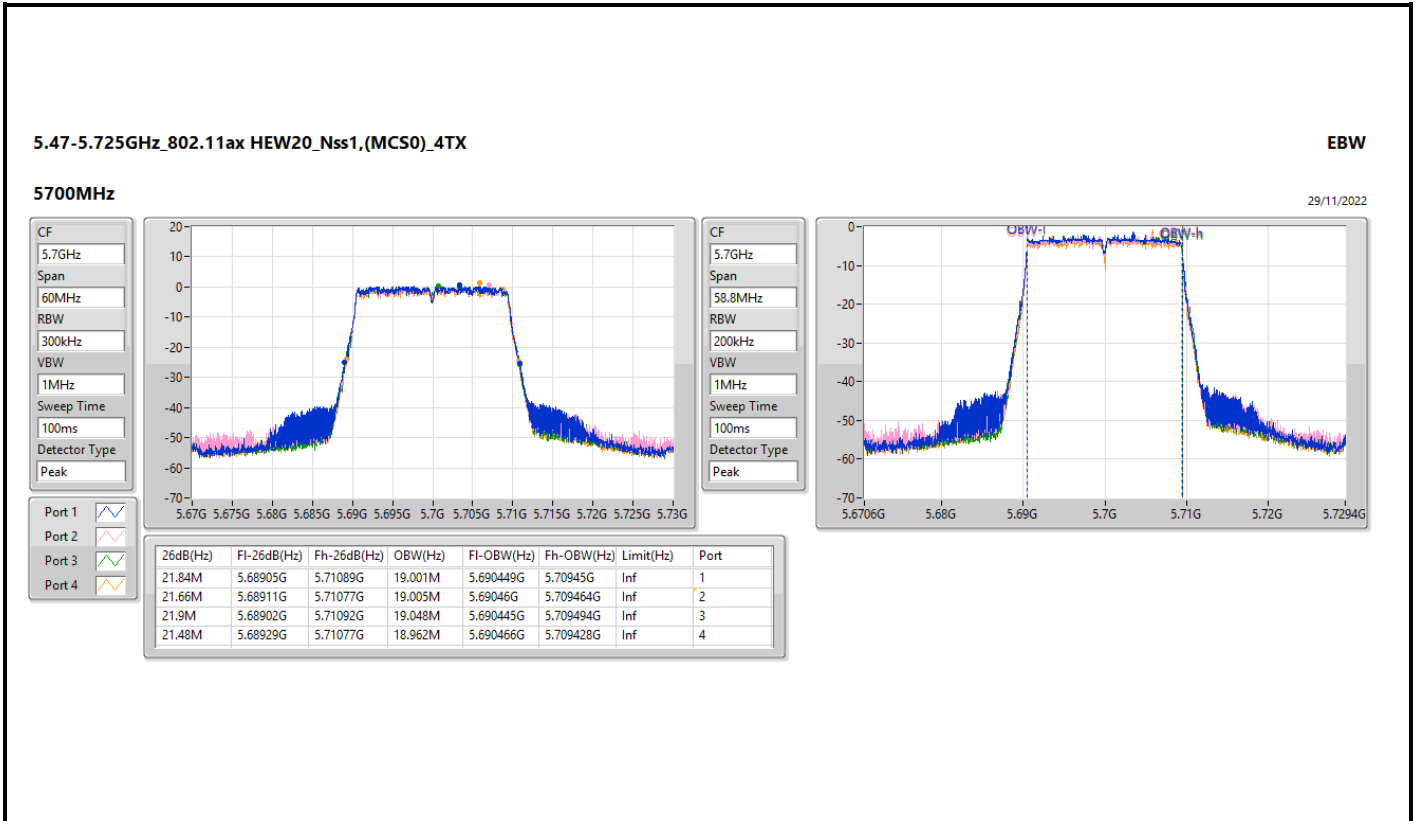


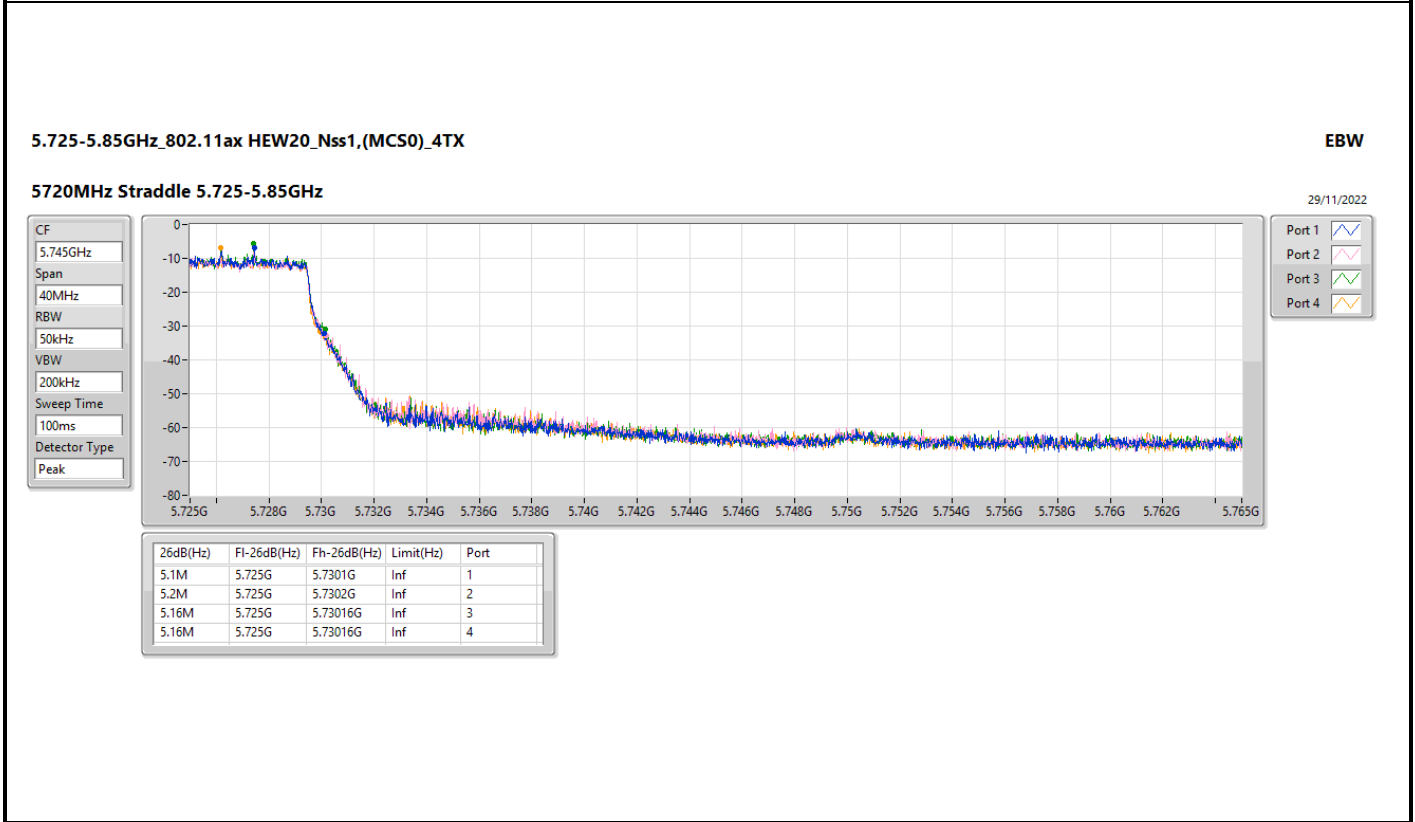
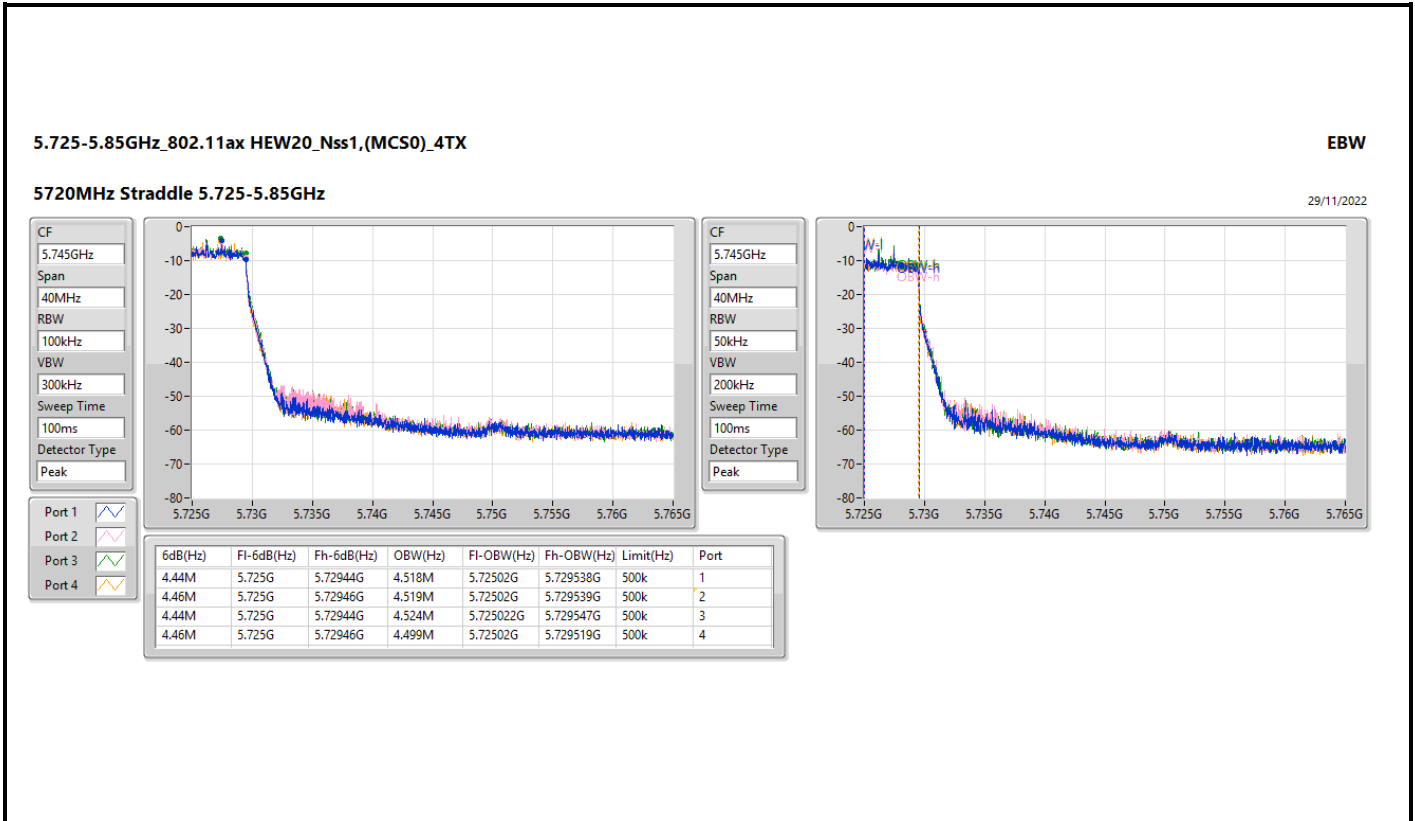
Port 1
Port 2
Port 3
Port 4

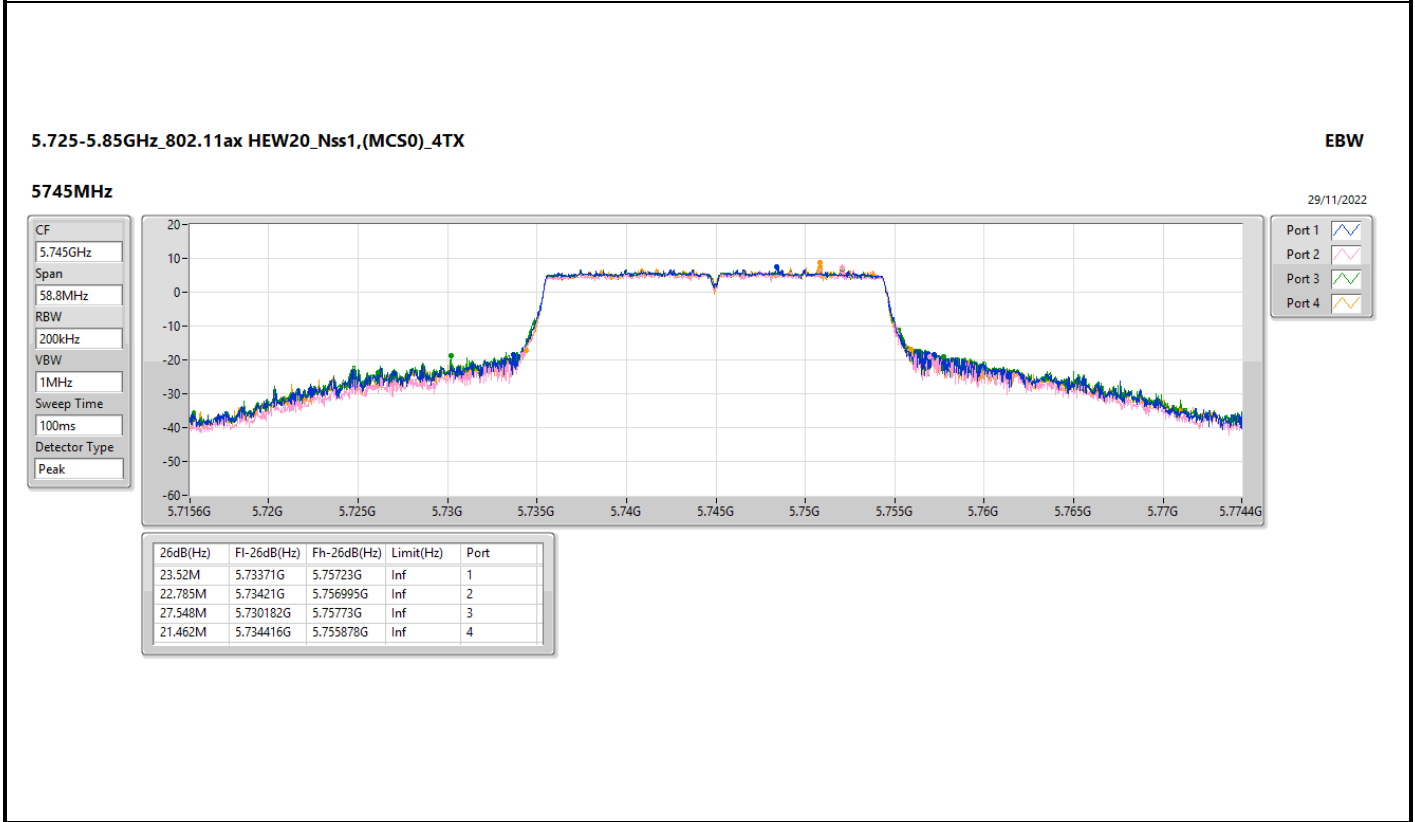
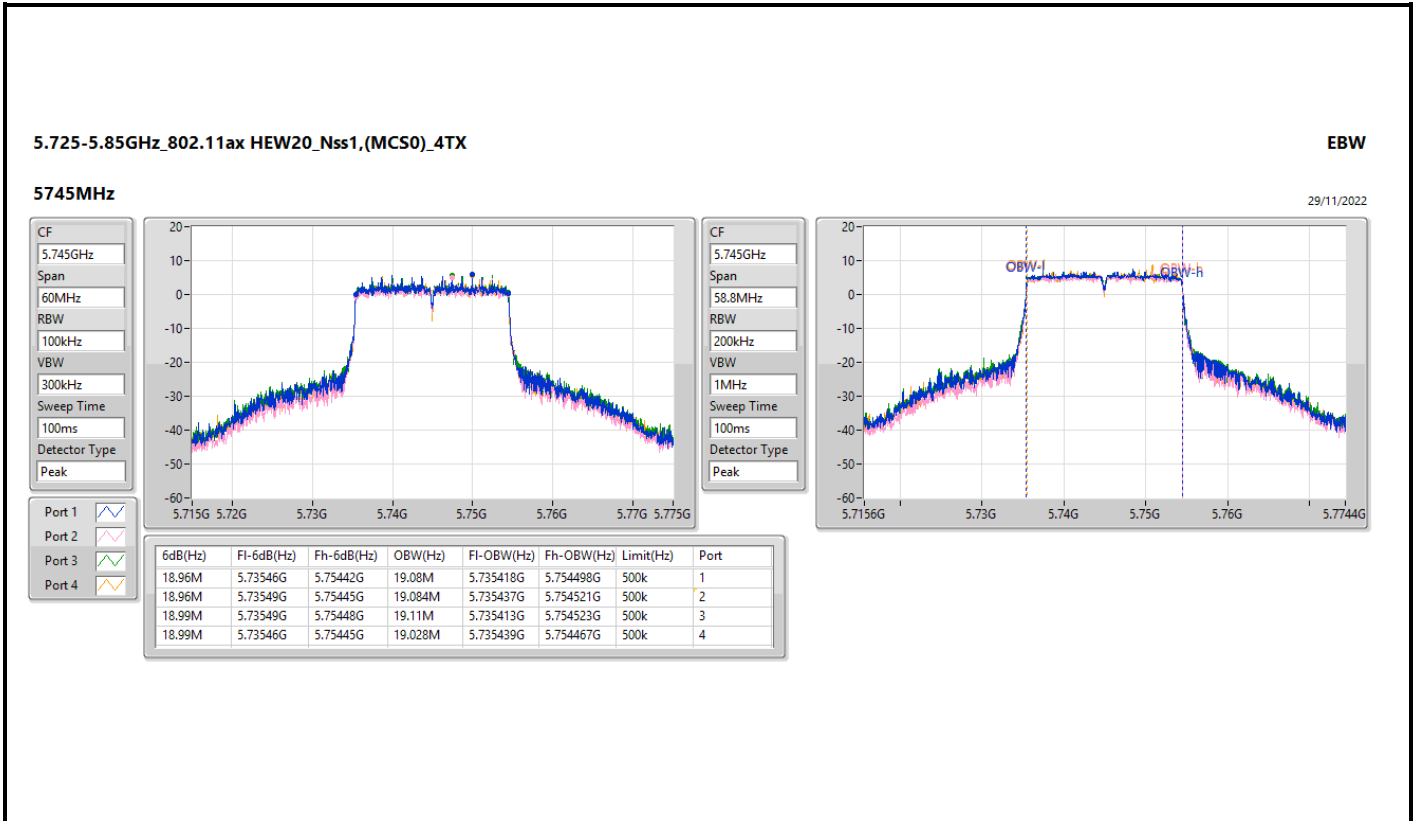
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.75M	5.24905G	5.2708G	19.002M	5.250448G	5.26945G	Inf	1
21.66M	5.24911G	5.27077G	18.995M	5.250464G	5.269459G	Inf	2
21.93M	5.24899G	5.27092G	19.039M	5.250461G	5.2695G	Inf	3
21.45M	5.24926G	5.27071G	18.959M	5.250478G	5.269437G	Inf	4

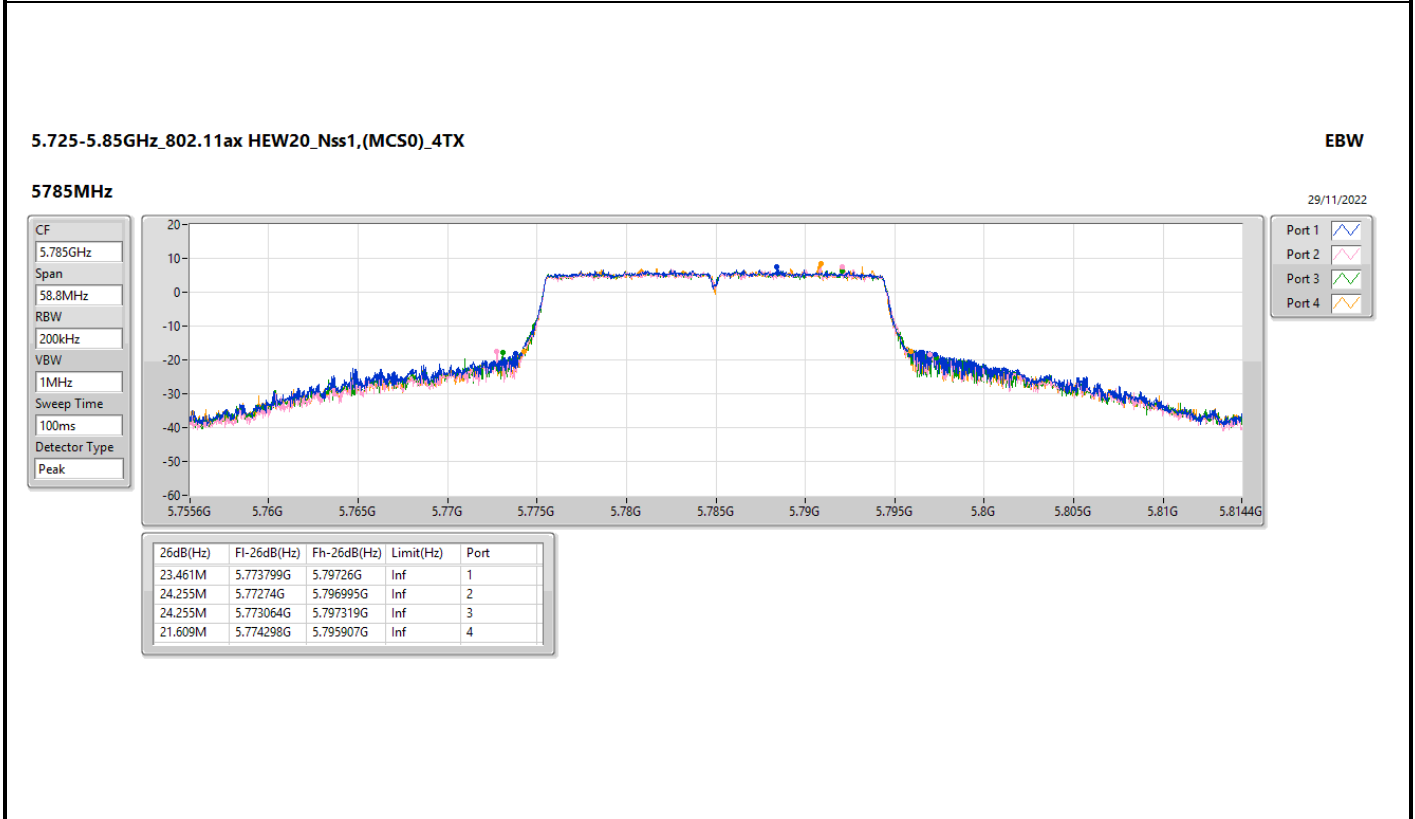
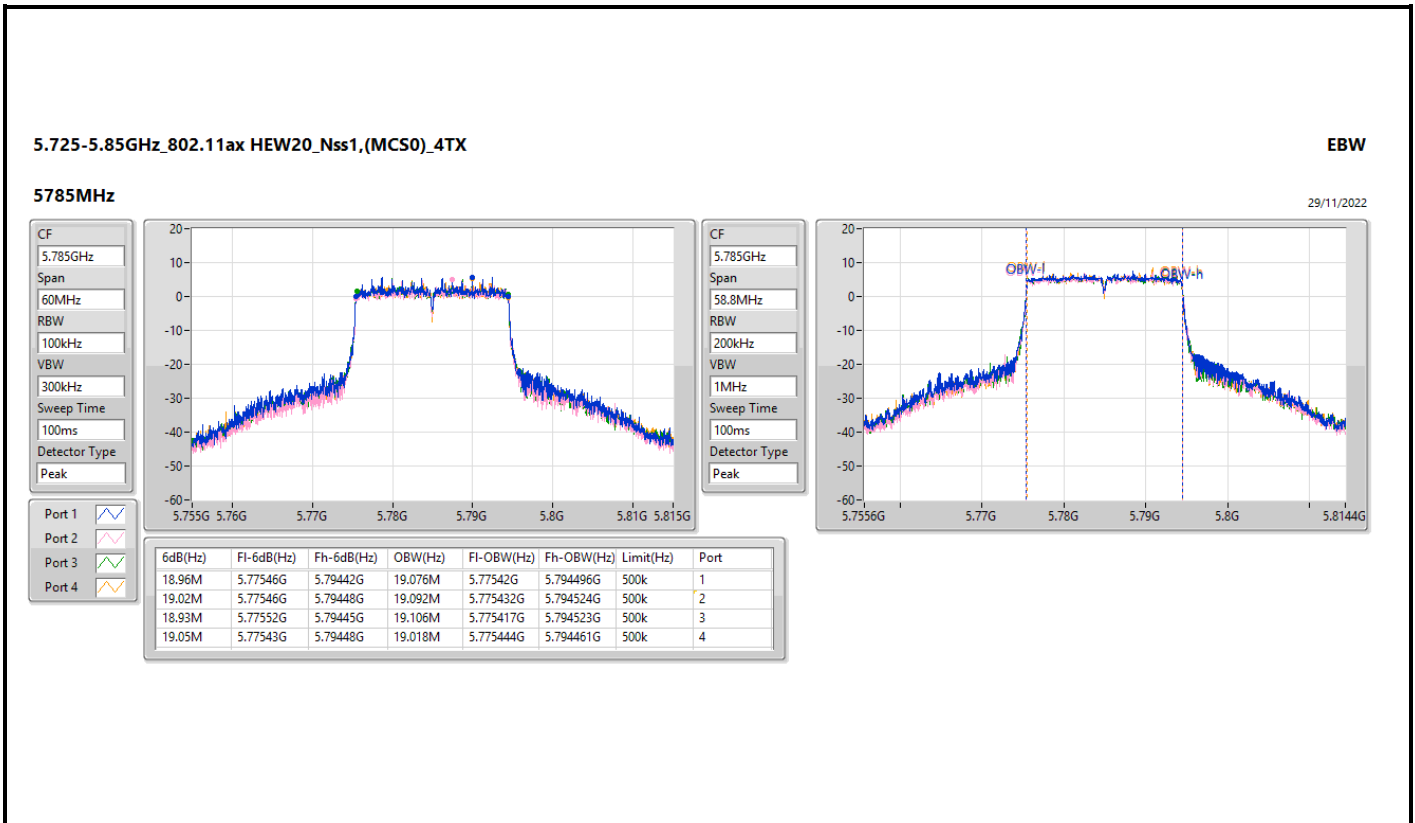


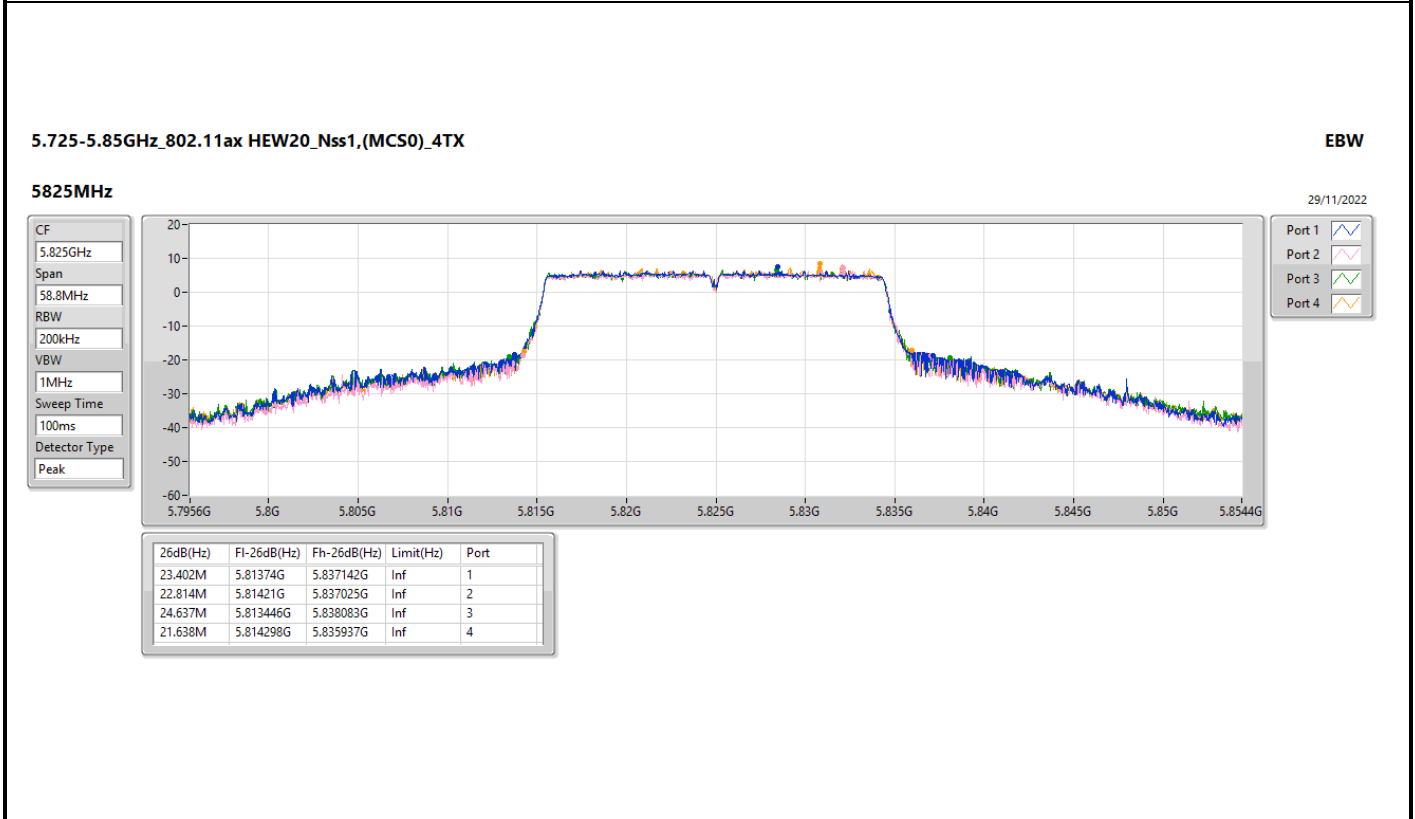












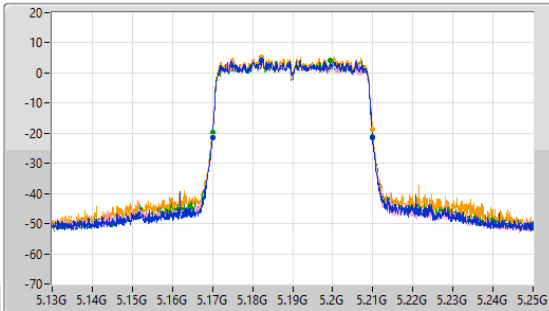
5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

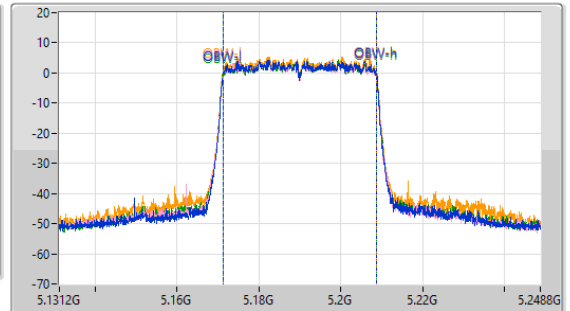
5190MHz

29/11/2022

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



CF: 5.19GHz
 Span: 117.6MHz
 RBW: 500kHz
 VBW: 2MHz
 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
40.02M	5.16996G	5.20998G	37.511M	5.171204G	5.208715G	Inf	1
40.08M	5.16996G	5.21004G	37.5M	5.171204G	5.208704G	Inf	2
40.02M	5.16996G	5.20998G	37.55M	5.171181G	5.208731G	Inf	3
39.96M	5.16996G	5.20992G	37.523M	5.171209G	5.208732G	Inf	4

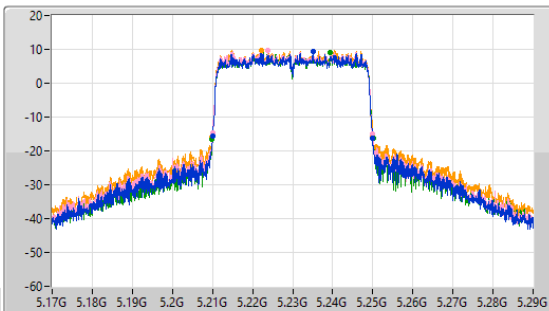
5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

EBW

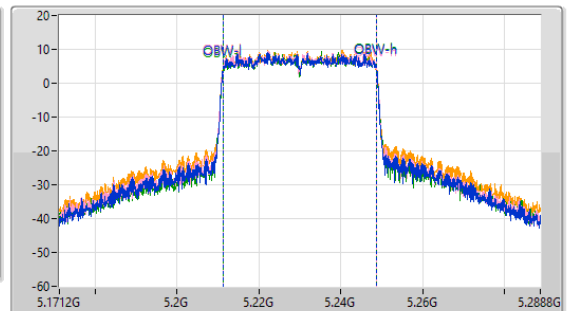
5230MHz

29/11/2022

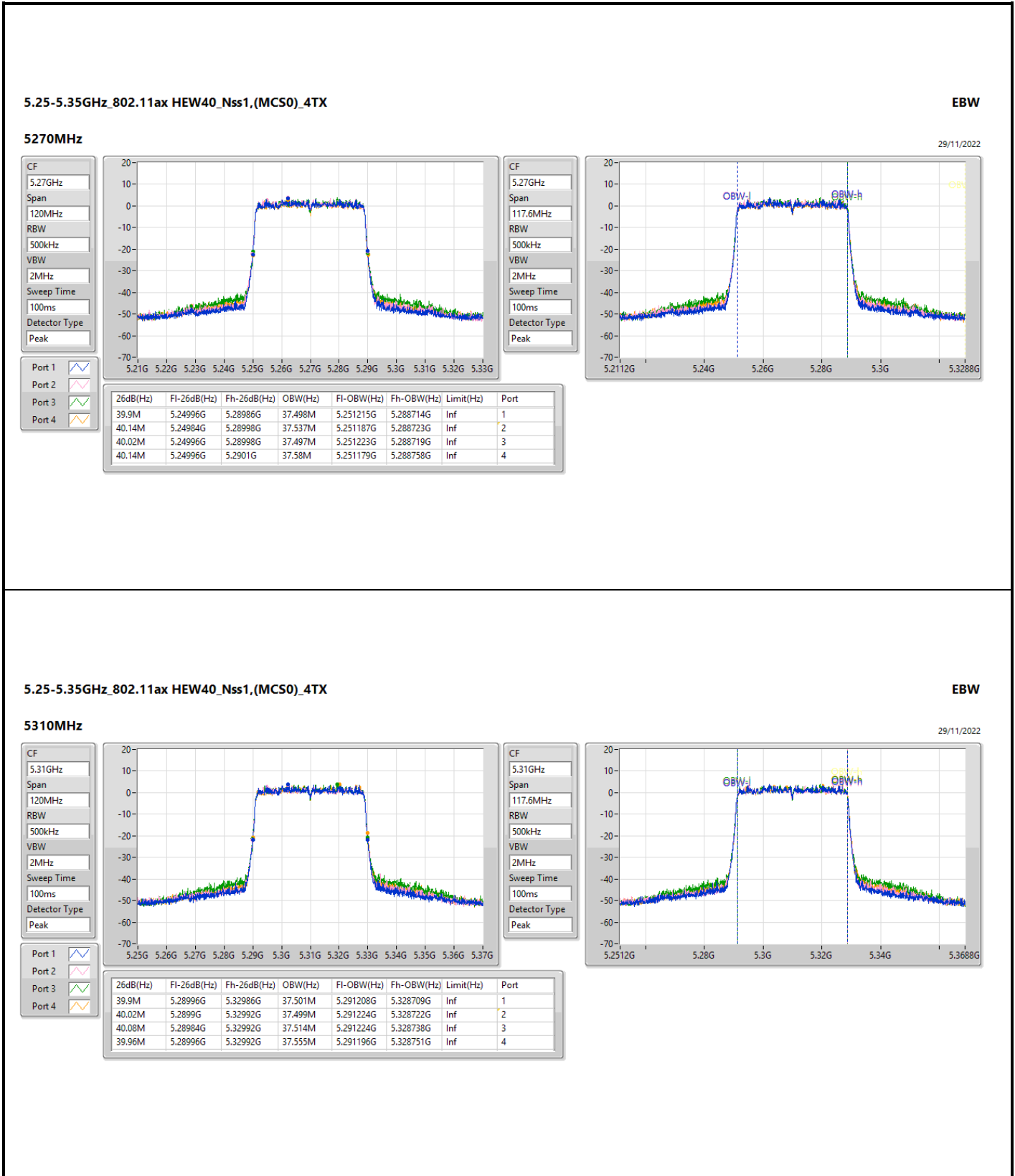
CF: 5.23GHz
 Span: 120MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak

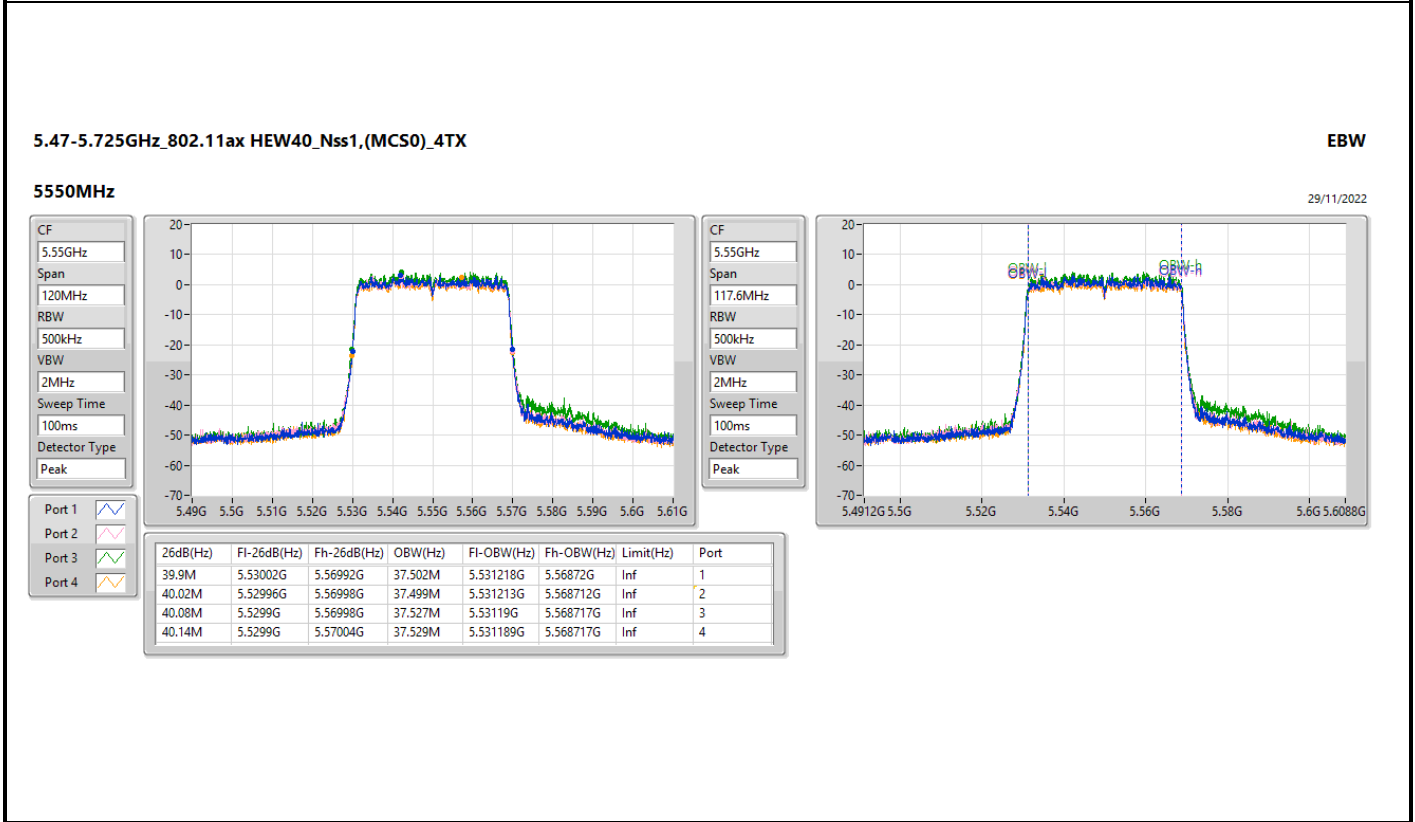
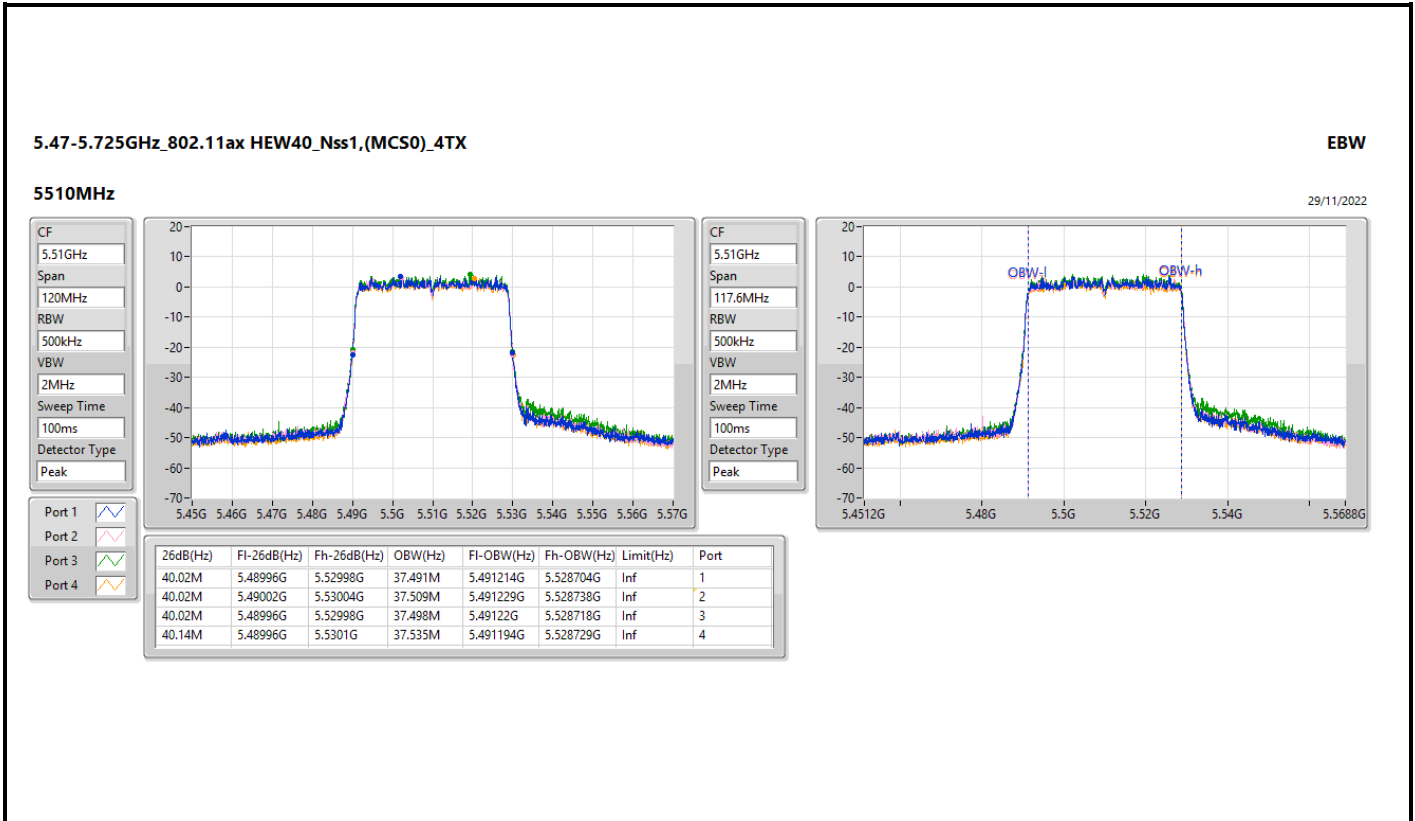


CF: 5.23GHz
 Span: 117.6MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.9M	5.21002G	5.24992G	37.559M	5.21119G	5.248748G	Inf	1
39.9M	5.21002G	5.24992G	37.549M	5.211198G	5.248747G	Inf	2
40.2M	5.2099G	5.2501G	37.561M	5.211216G	5.248776G	Inf	3
40.14M	5.2099G	5.25004G	37.618M	5.211168G	5.248786G	Inf	4





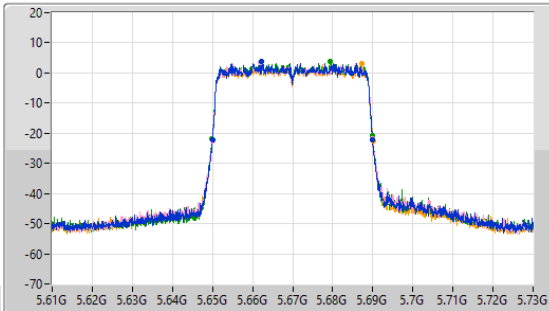
5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

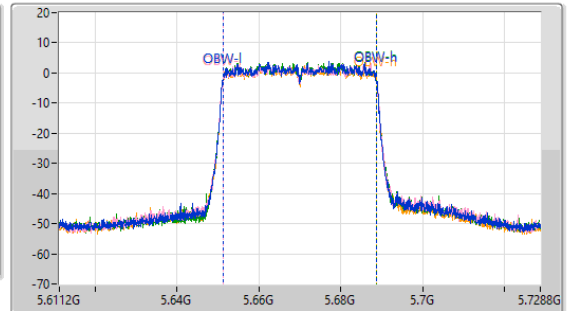
5670MHz

29/11/2022

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



CF: 5.67GHz
 Span: 117.6MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Blue line]
 Port 2: [Pink line]
 Port 3: [Green line]
 Port 4: [Orange line]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.02M	5.64996G	5.68998G	37.53M	5.6512G	5.688729G	Inf	1
40.02M	5.64996G	5.68998G	37.498M	5.65123G	5.688729G	Inf	2
40.02M	5.6499G	5.68992G	37.512M	5.651201G	5.688713G	Inf	3
40.14M	5.64996G	5.6901G	37.532M	5.651193G	5.688725G	Inf	4

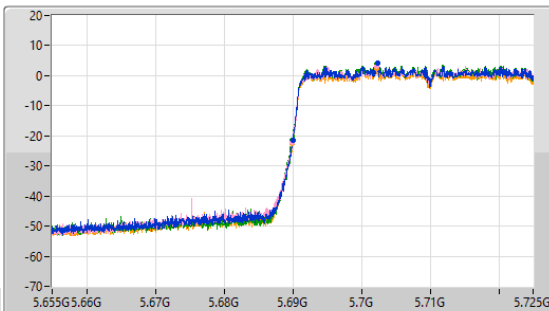
5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

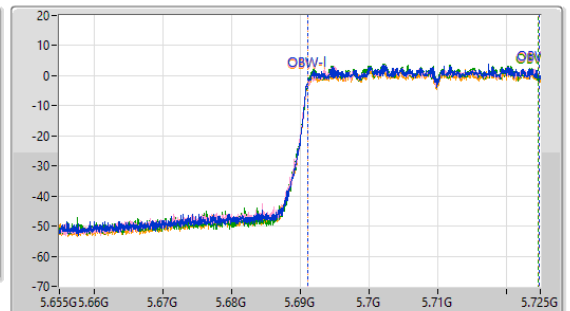
5710MHz Straddle 5.47-5.725GHz

29/11/2022

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

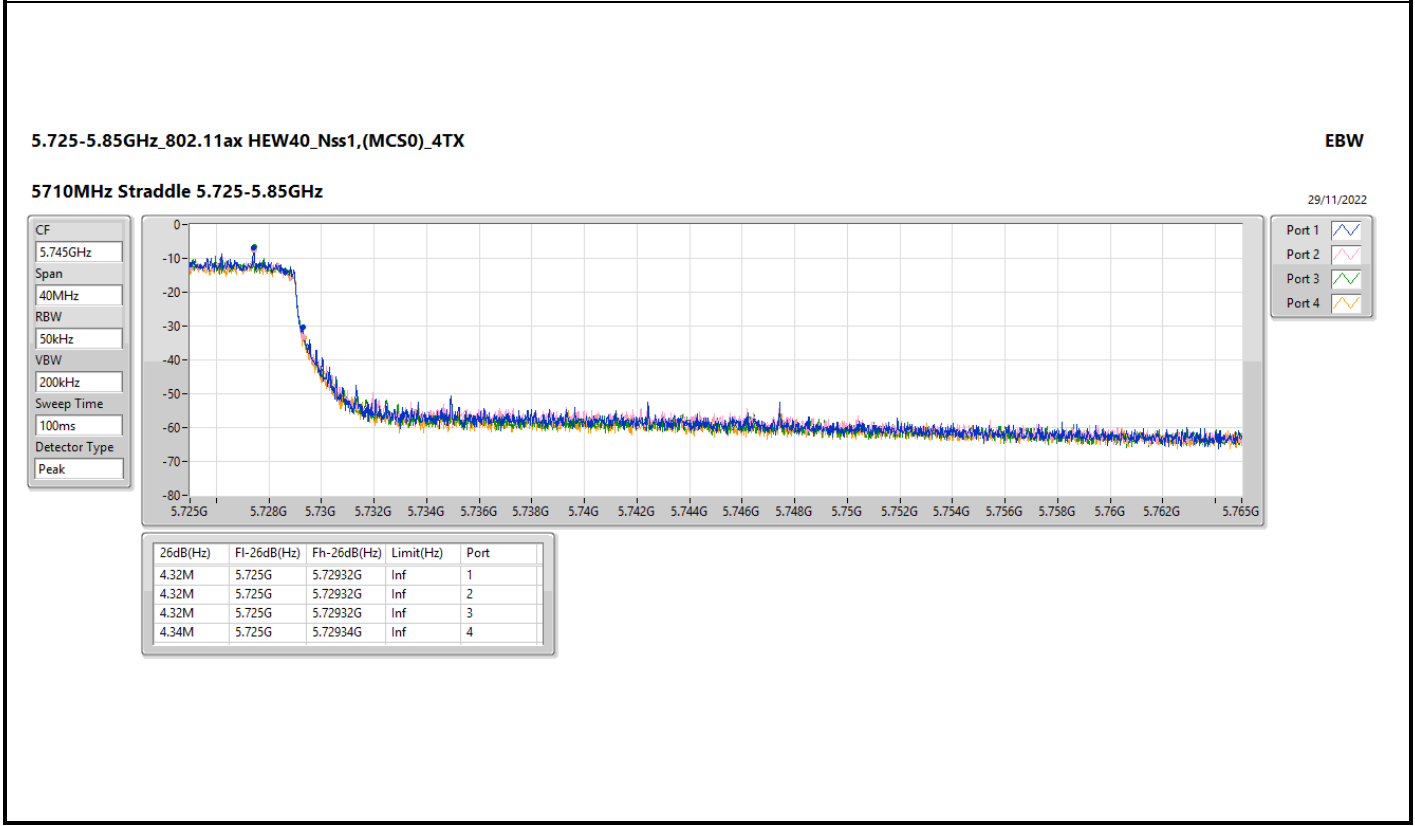
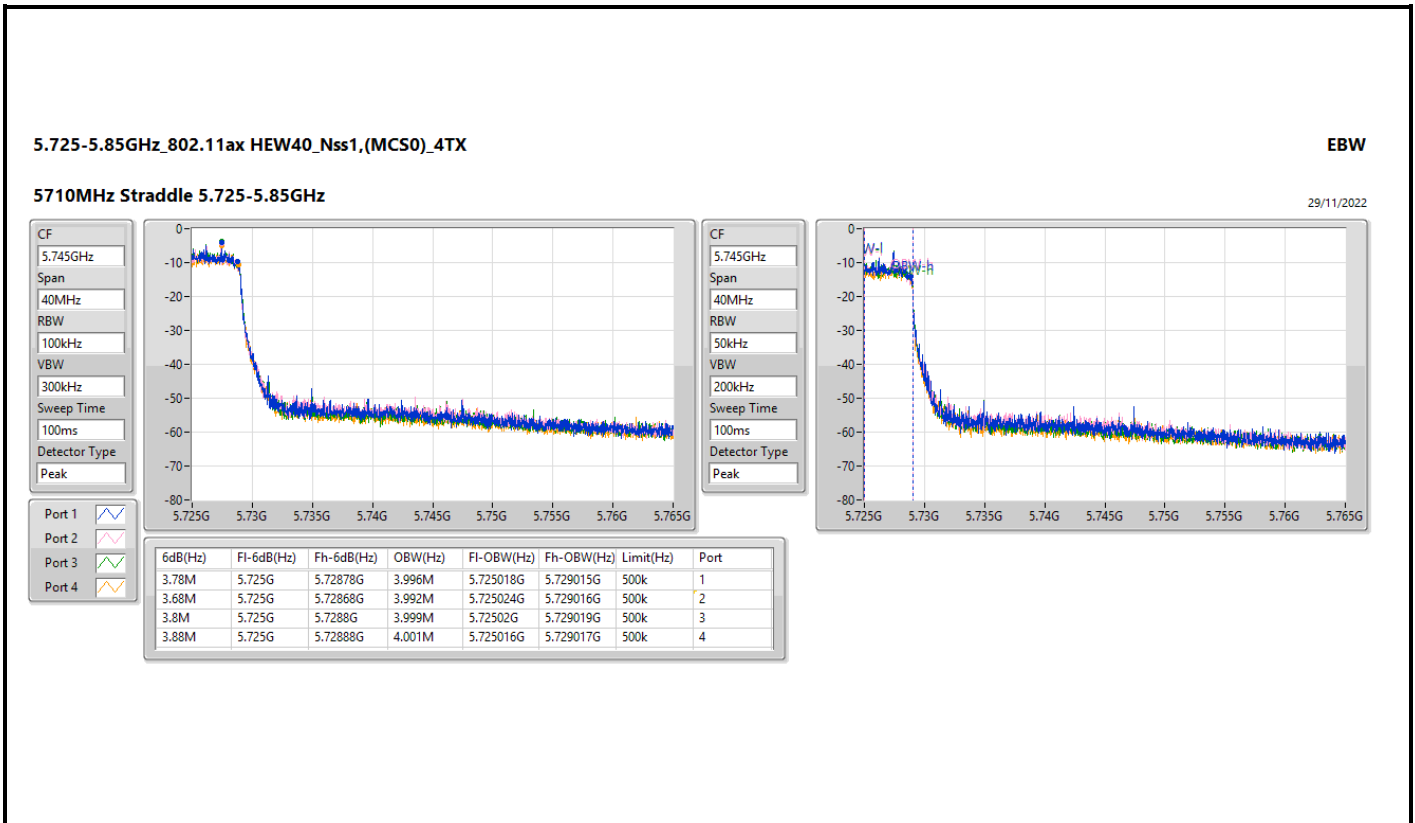


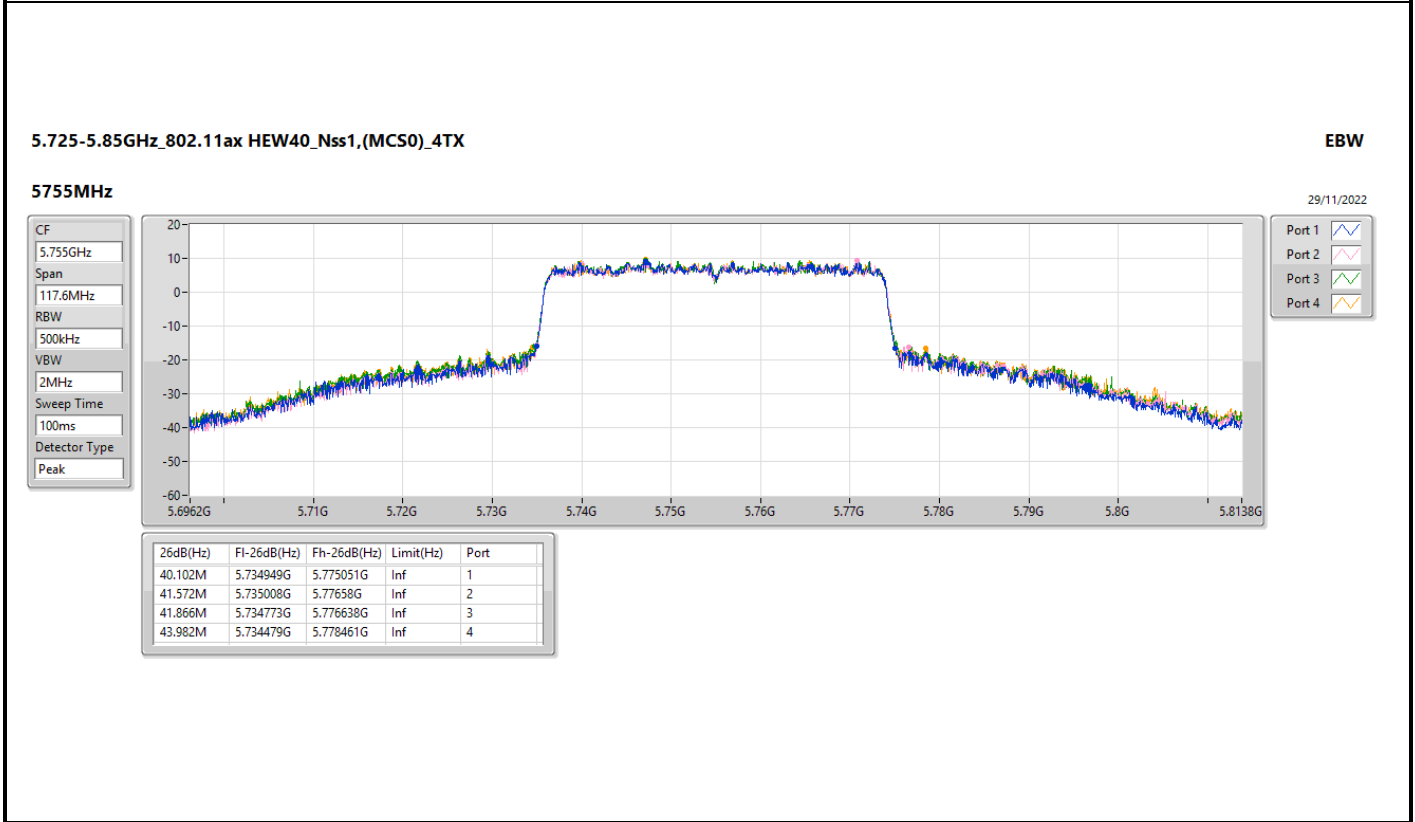
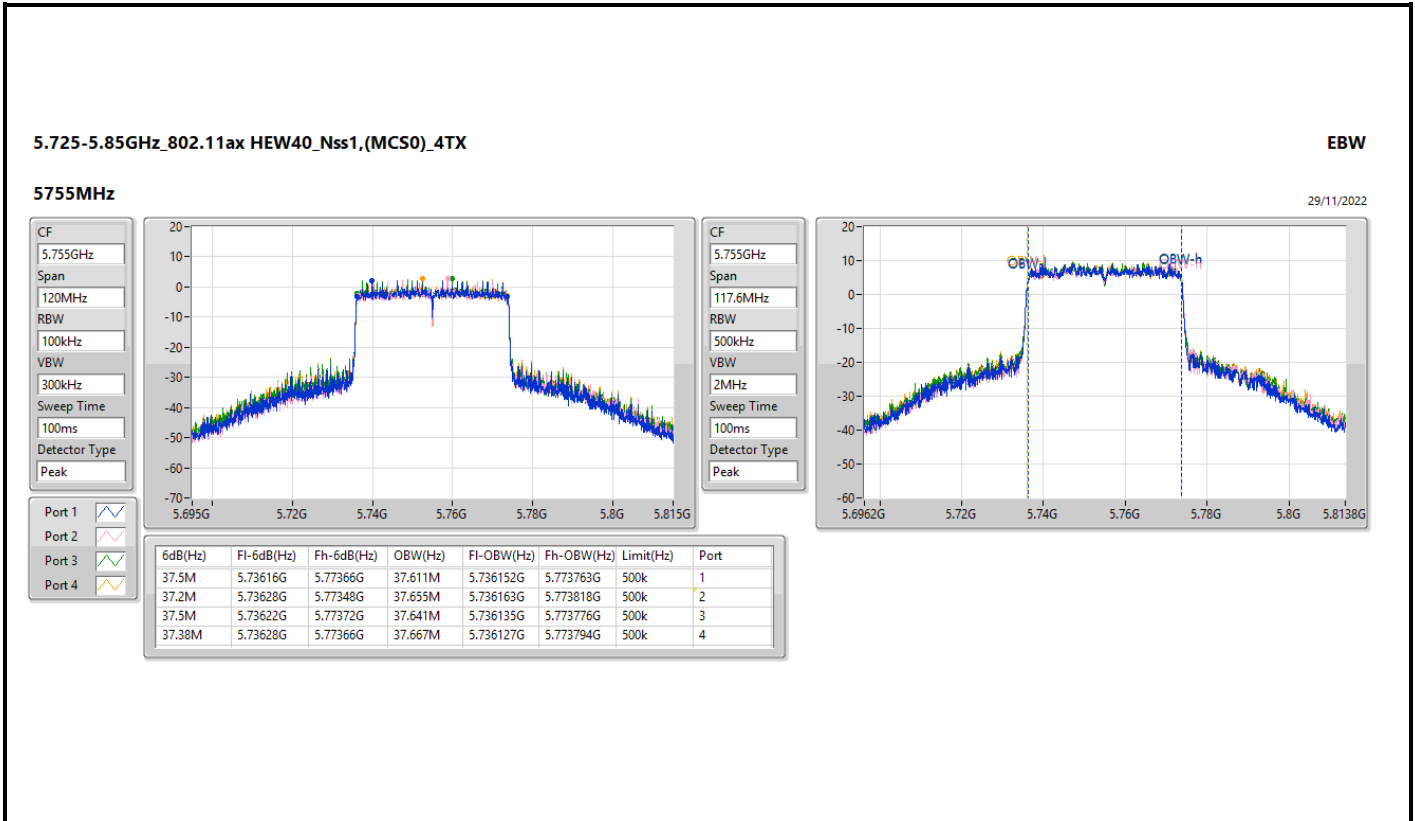
CF: 5.69GHz
 Span: 70MHz
 RBW: 500kHz
 VBW: 2MHz
 Sweep Time: 100ms
 Detector Type: Peak

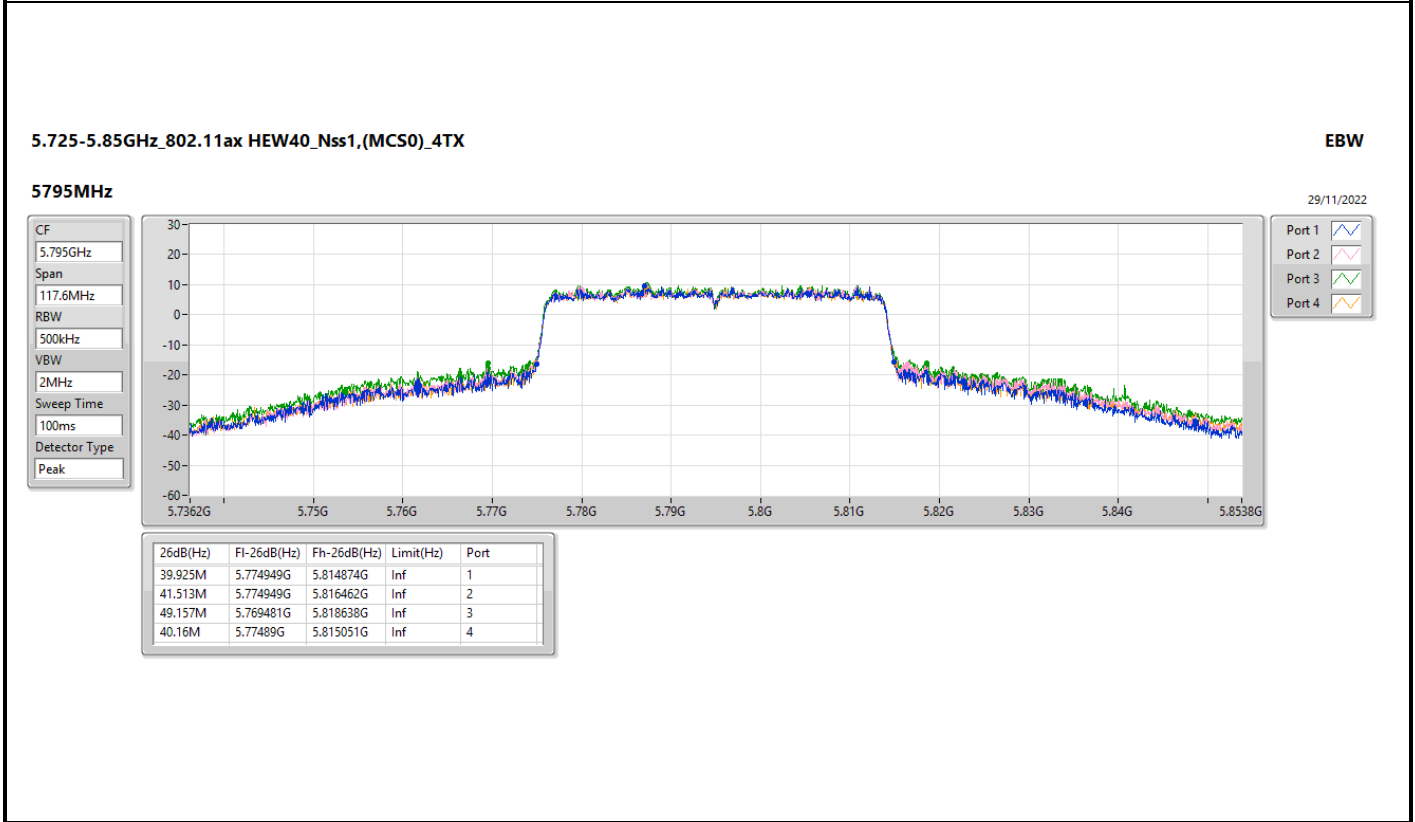
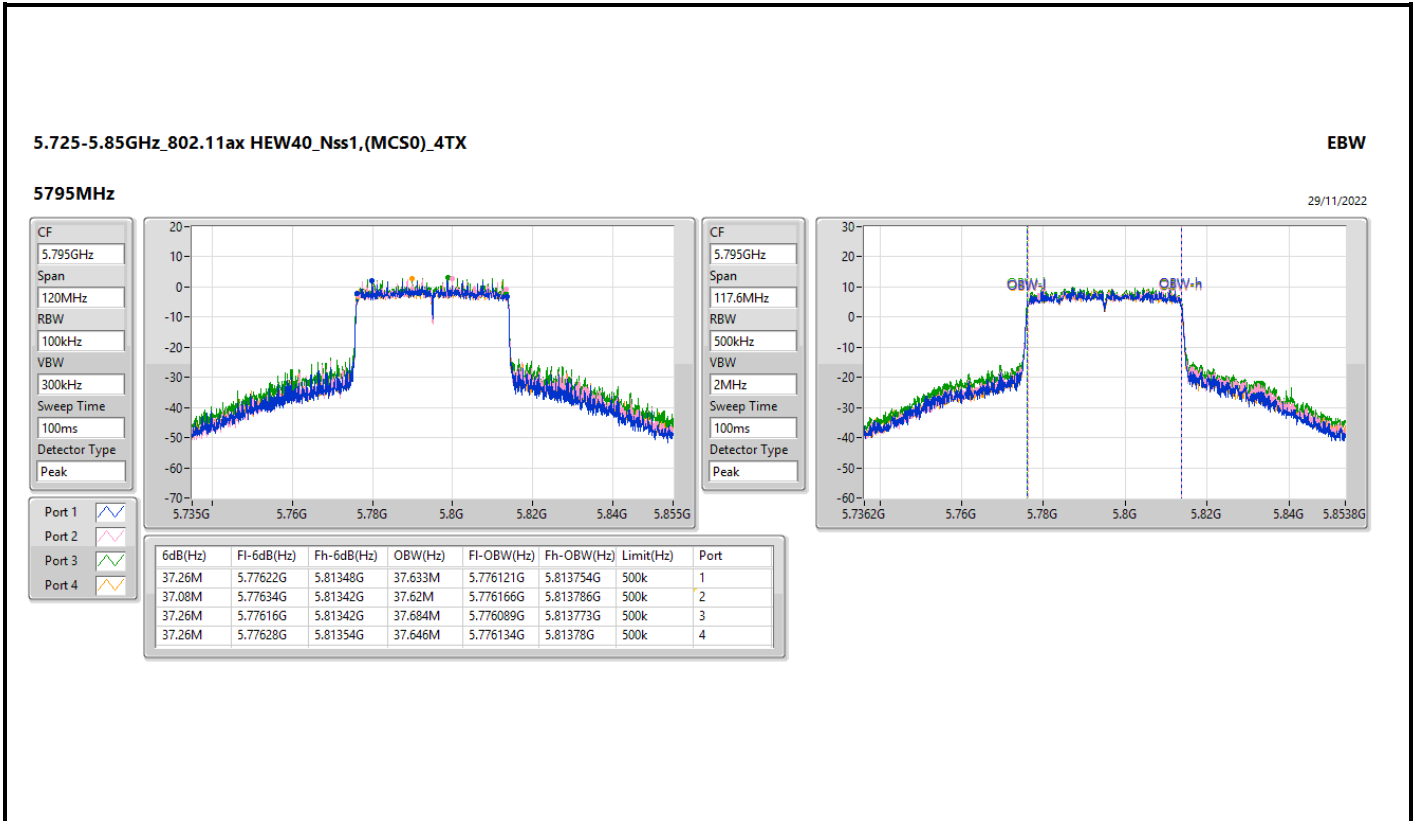


Port 1: [Blue line]
 Port 2: [Pink line]
 Port 3: [Green line]
 Port 4: [Orange line]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.965M	5.690035G	5.725G	33.62M	5.691152G	5.724772G	Inf	1
35.07M	5.68993G	5.725G	33.608M	5.691172G	5.72478G	Inf	2
35.035M	5.689965G	5.725G	33.551M	5.691183G	5.724734G	Inf	3
35.07M	5.68993G	5.725G	33.591M	5.691162G	5.724753G	Inf	4







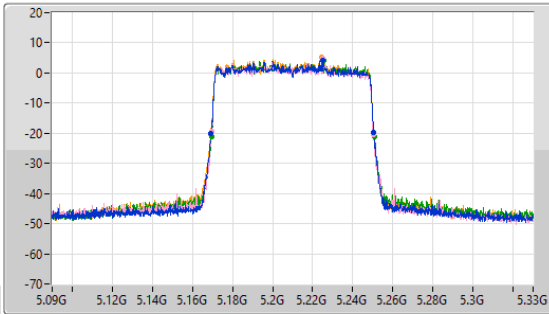
5.15-5.25GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

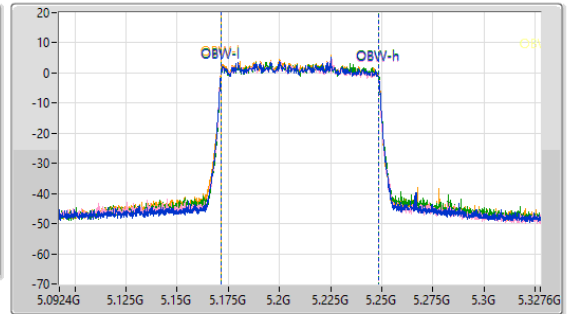
5210MHz

29/11/2022

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



CF: 5.21GHz
 Span: 235.2MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.24M	5.16932G	5.25056G	77.024M	5.171447G	5.248472G	Inf	1
80.76M	5.16956G	5.25032G	77.04M	5.171382G	5.248422G	Inf	2
81.48M	5.16944G	5.25092G	77.027M	5.171479G	5.248506G	Inf	3
81.24M	5.16908G	5.25032G	77.01M	5.171424G	5.248433G	Inf	4

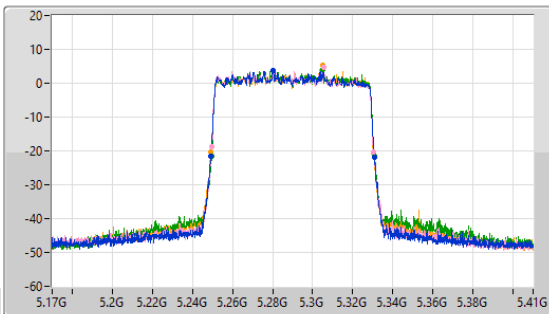
5.25-5.35GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

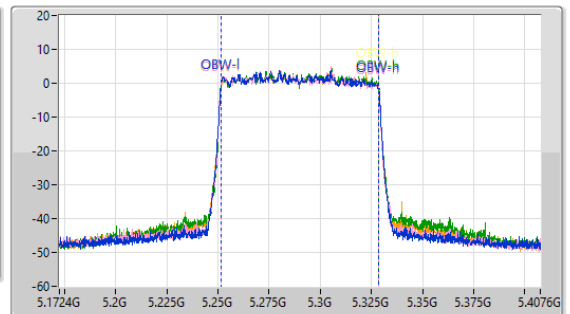
5290MHz

29/11/2022

CF: 5.29GHz
 Span: 240MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.29GHz
 Span: 235.2MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.6M	5.2492G	5.3308G	77.047M	5.251446G	5.328493G	Inf	1
81M	5.24944G	5.33044G	77.028M	5.251396G	5.328424G	Inf	2
81.24M	5.24956G	5.3308G	77.013M	5.251474G	5.328487G	Inf	3
81.12M	5.2492G	5.33032G	77.061M	5.251429G	5.32849G	Inf	4

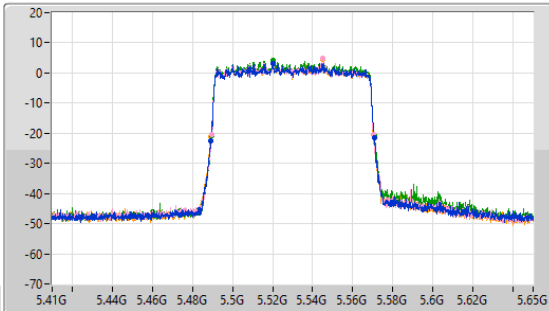
5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

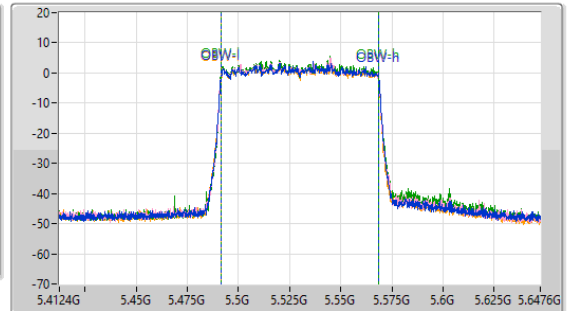
5530MHz

29/11/2022

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



CF: 5.53GHz
 Span: 235.2MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.6M	5.4892G	5.5708G	77.017M	5.491494G	5.568511G	Inf	1
80.88M	5.48956G	5.57044G	76.986M	5.491455G	5.568442G	Inf	2
81.12M	5.48968G	5.5708G	76.974M	5.491508G	5.568483G	Inf	3
81M	5.4892G	5.5702G	76.969M	5.491453G	5.568422G	Inf	4

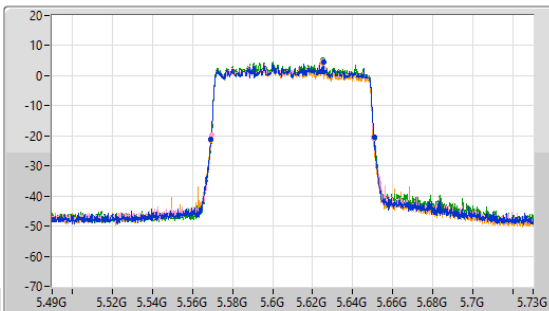
5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

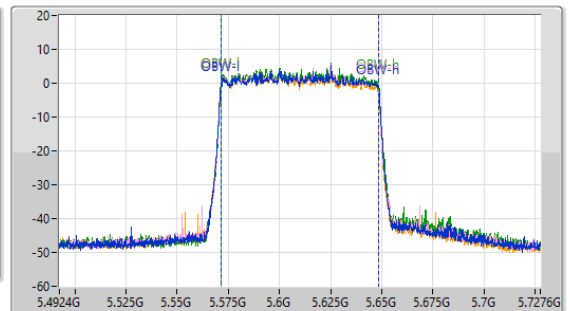
5610MHz

29/11/2022

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



CF: 5.61GHz
 Span: 235.2MHz
 RBW: 1MHz
 VBW: 3MHz
 Sweep Time: 100ms
 Detector Type: Peak



Port 1: [Waveform icon]
 Port 2: [Waveform icon]
 Port 3: [Waveform icon]
 Port 4: [Waveform icon]

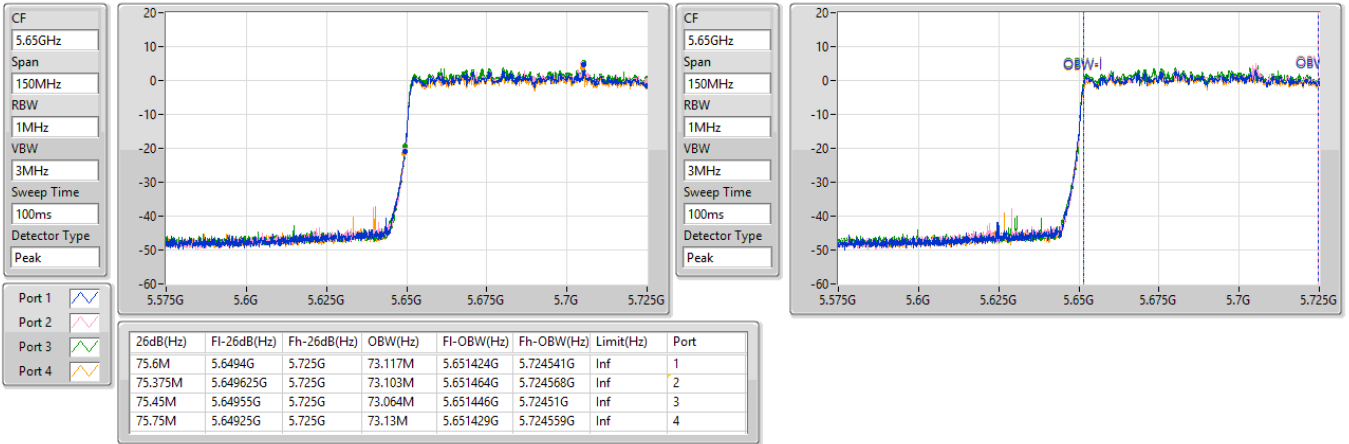
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
81.48M	5.5692G	5.65068G	76.993M	5.57144G	5.648433G	Inf	1
81M	5.56956G	5.65056G	76.978M	5.571443G	5.648421G	Inf	2
81M	5.56968G	5.65068G	76.975M	5.571487G	5.648462G	Inf	3
81.24M	5.56908G	5.65032G	76.967M	5.571404G	5.648371G	Inf	4

5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.47-5.725GHz

29/11/2022

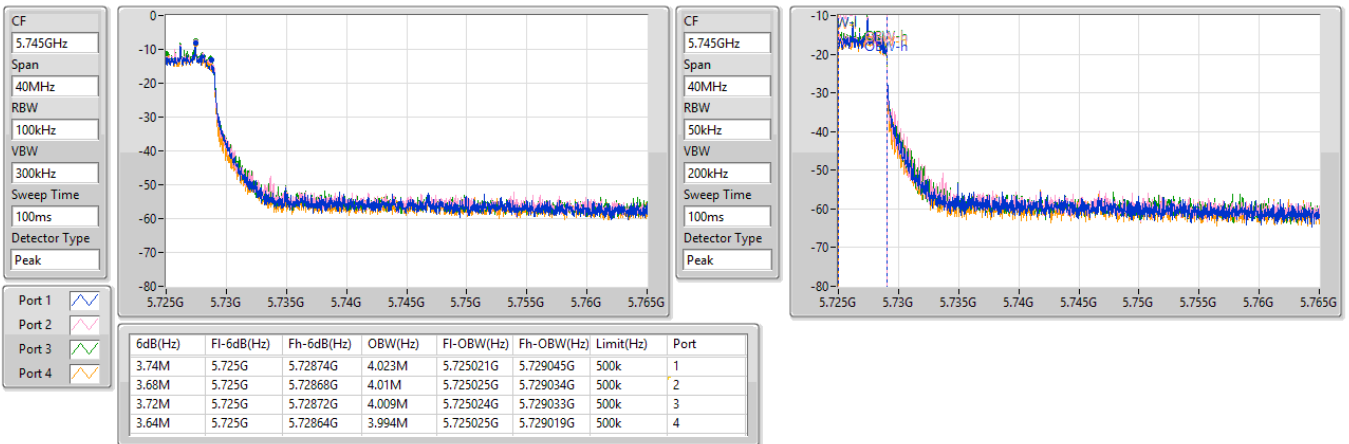


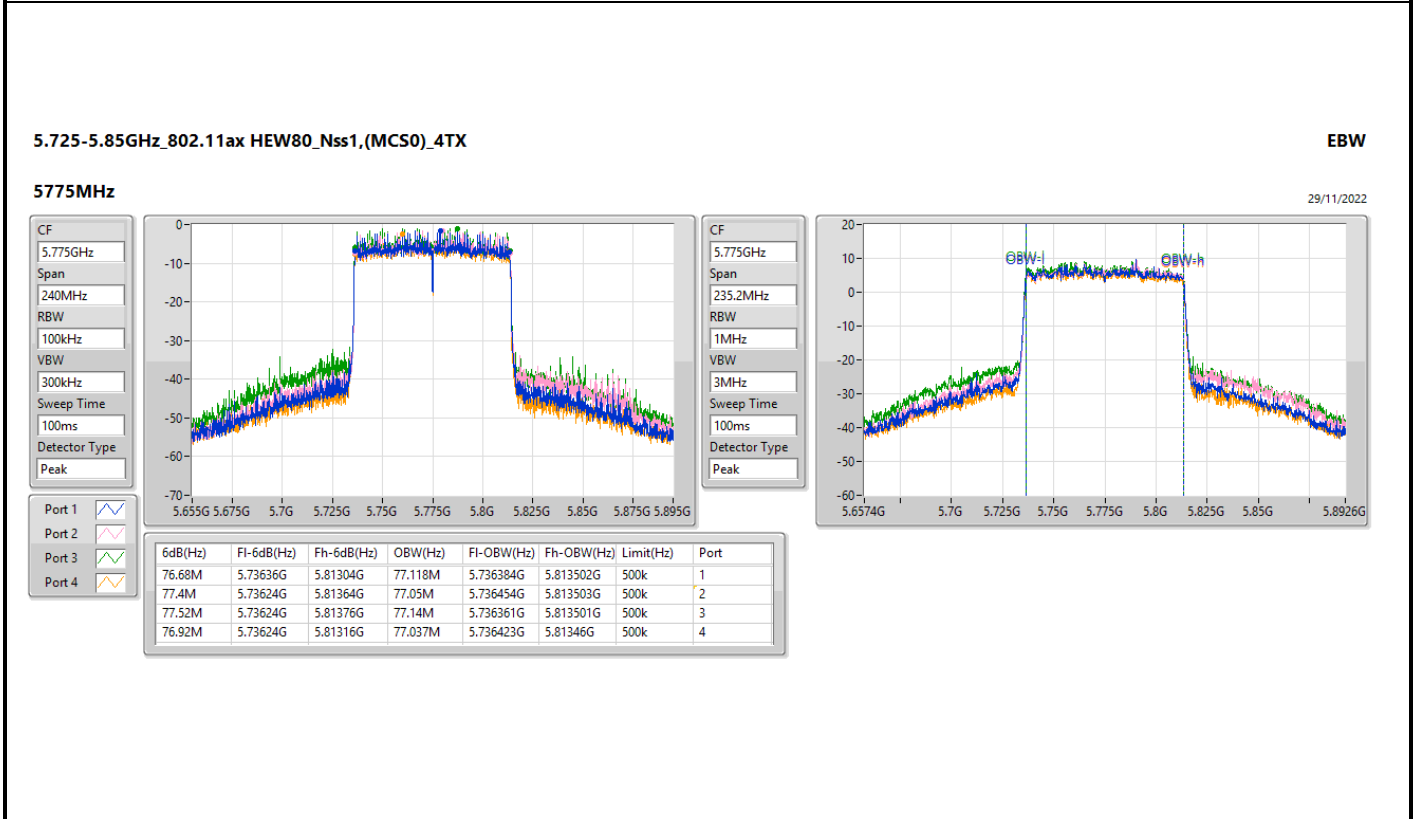
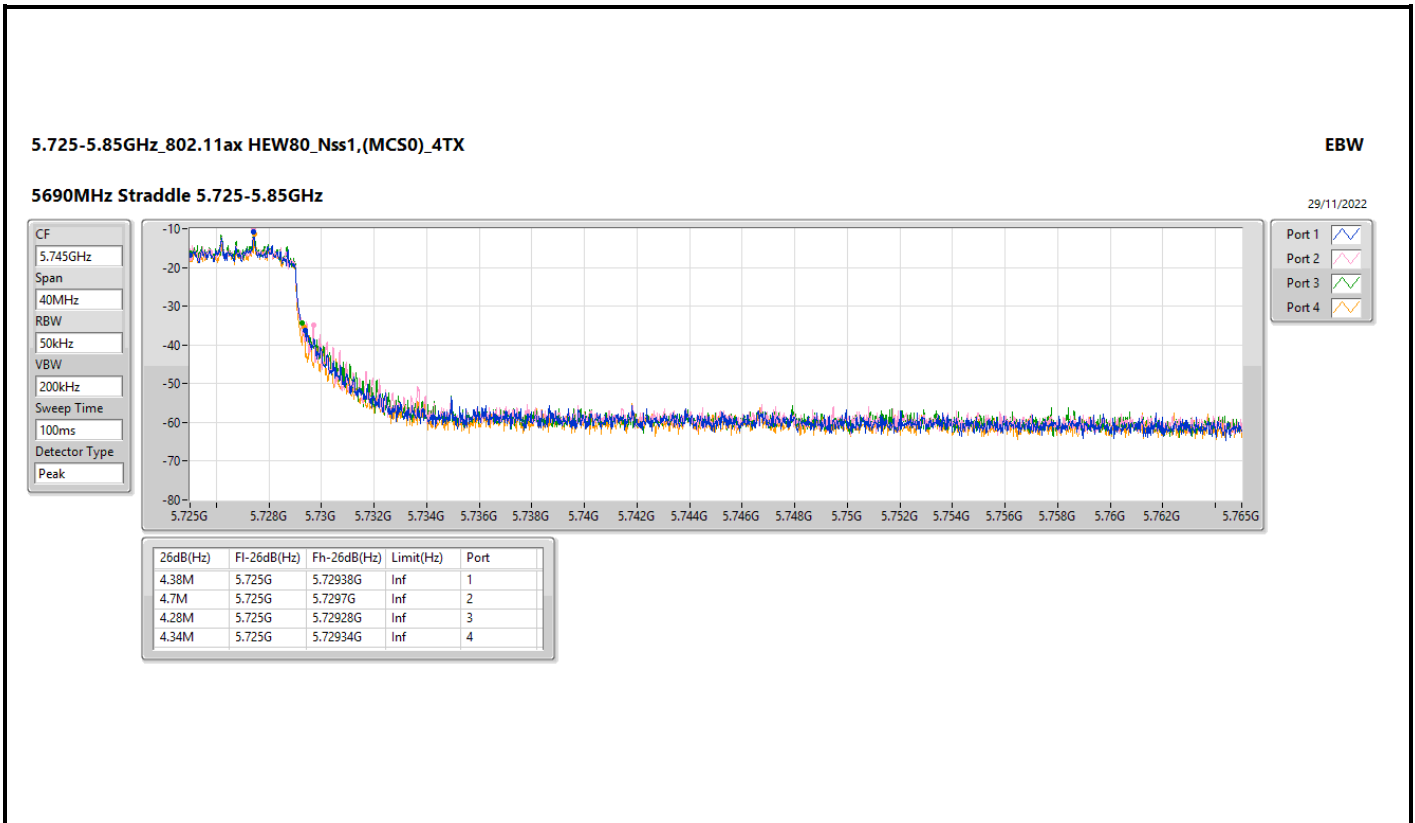
5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_4TX

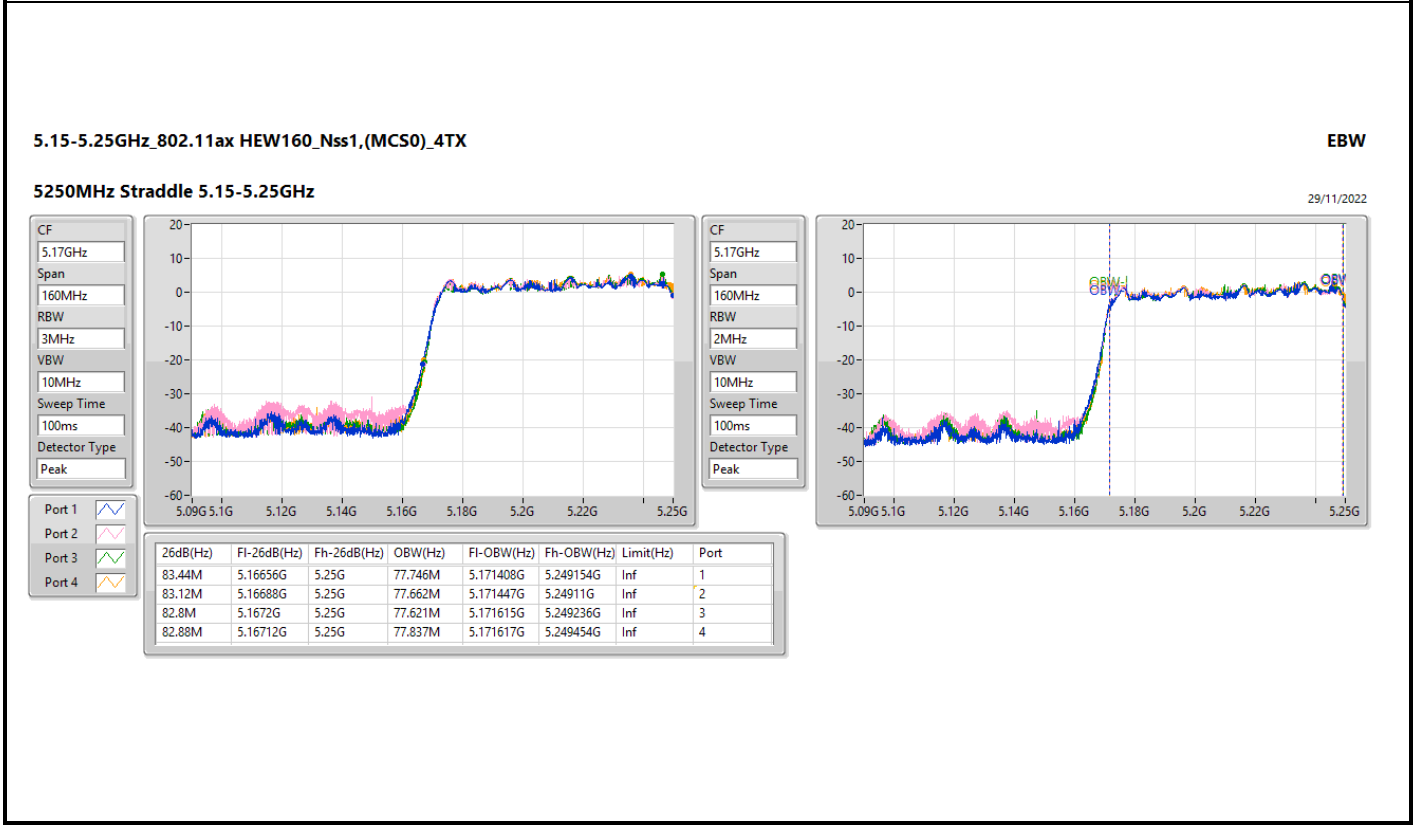
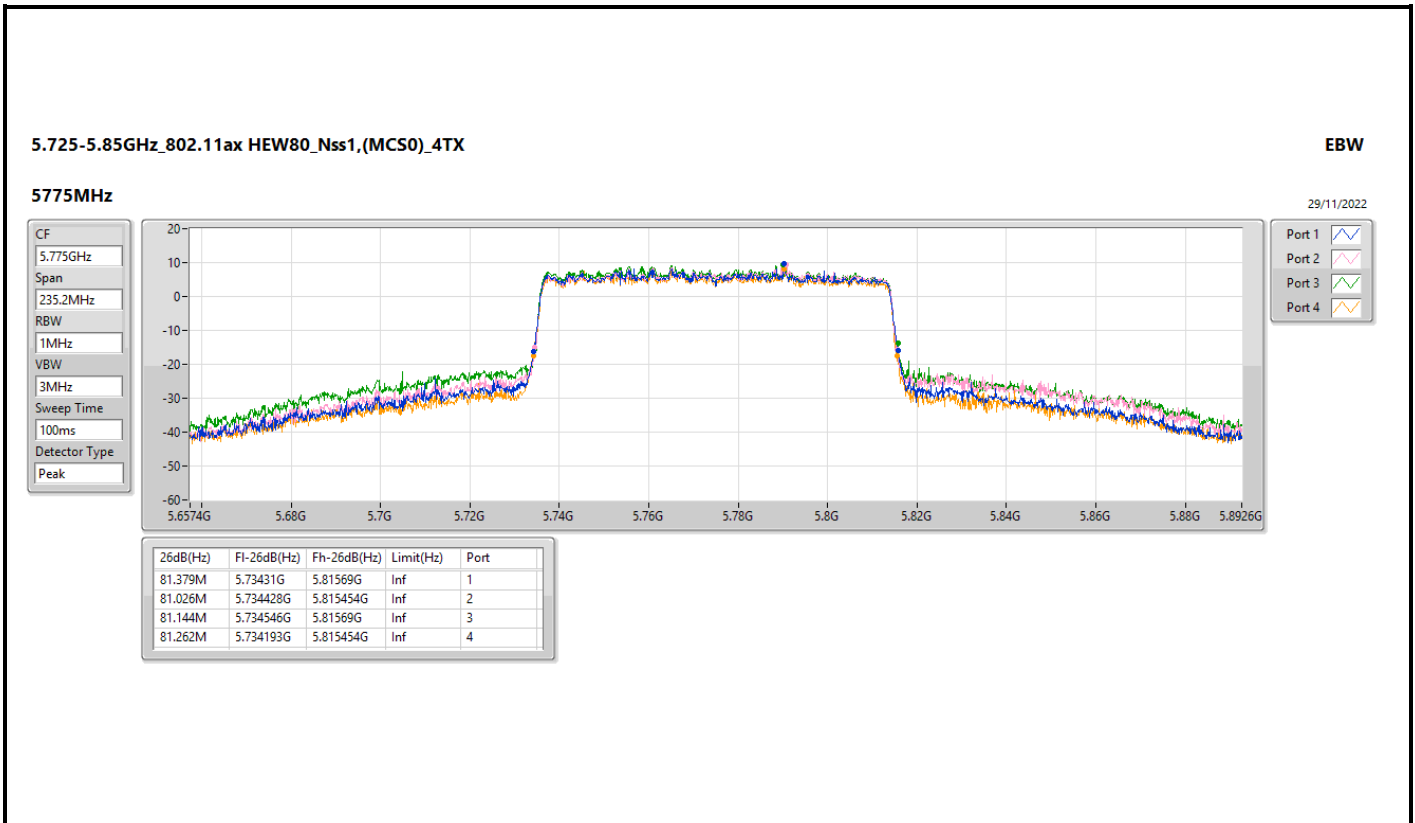
EBW

5690MHz Straddle 5.725-5.85GHz

29/11/2022





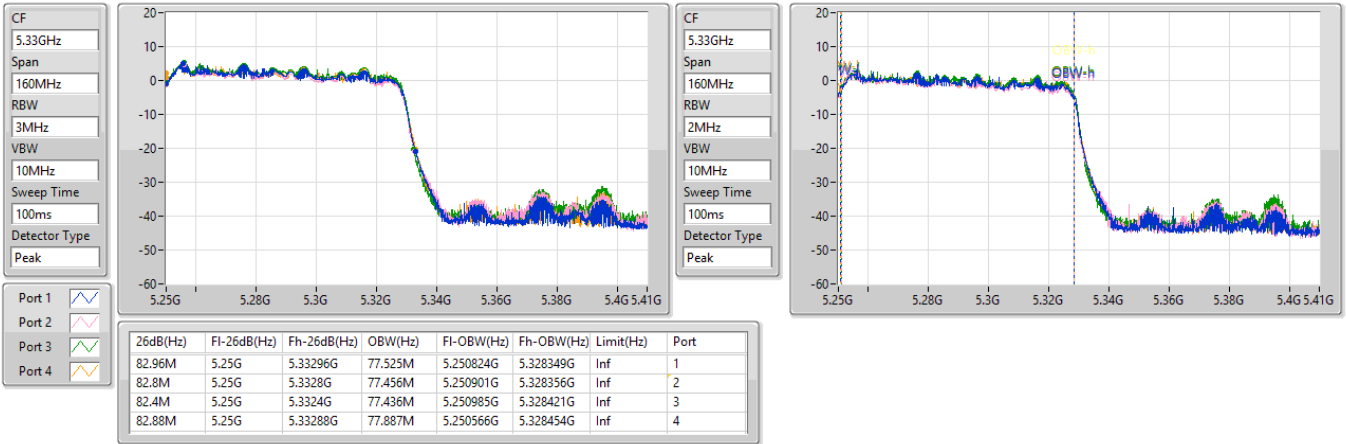


5.25-5.35GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

5250MHz Straddle 5.25-5.35GHz

29/11/2022

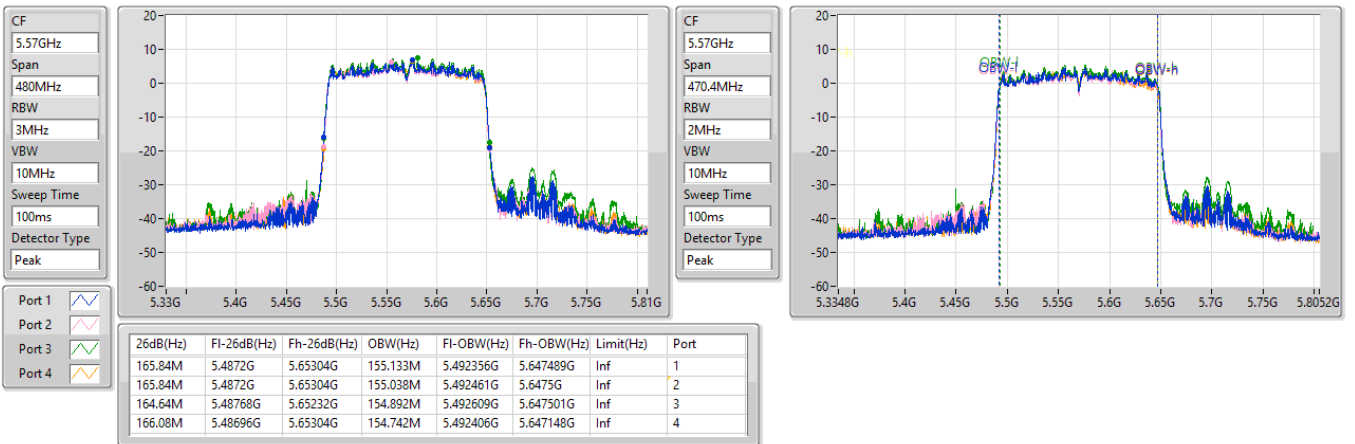


5.47-5.725GHz_802.11ax HEW160_Nss1,(MCS0)_4TX

EBW

5570MHz

29/11/2022



5.15-5.25GHz_802.11ax_HEW20_Nss4,(MCS0)_4TX

EBW

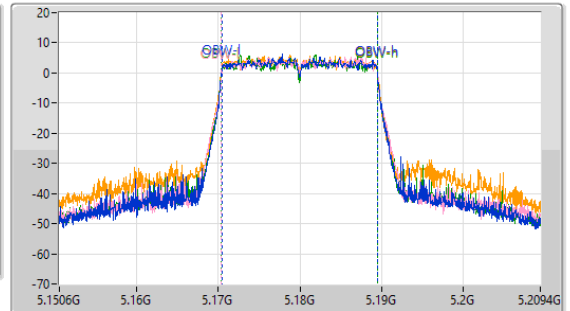
5180MHz

29/11/2022

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



CF: 5.18GHz
 Span: 58.8MHz
 RBW: 200kHz
 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
21.42M	5.16929G	5.19071G	19.01M	5.170441G	5.18945G	Inf	1
21.9M	5.16902G	5.19092G	19.023M	5.170433G	5.189456G	Inf	2
21.39M	5.16929G	5.19068G	19.041M	5.170422G	5.189463G	Inf	3
21.66M	5.16911G	5.19077G	19.09M	5.17039G	5.18948G	Inf	4

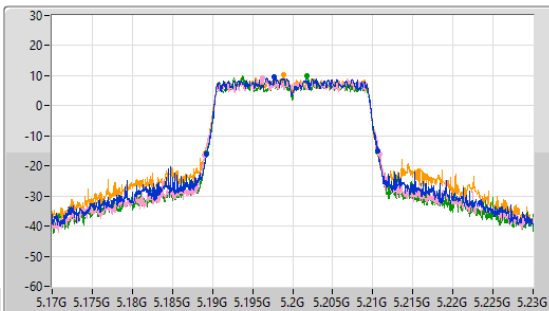
5.15-5.25GHz_802.11ax_HEW20_Nss4,(MCS0)_4TX

EBW

5200MHz

29/11/2022

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



CF: 5.2GHz
 Span: 58.8MHz
 RBW: 200kHz
 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
21.36M	5.18929G	5.21065G	19.034M	5.190424G	5.209458G	Inf	1
21.87M	5.18899G	5.21086G	19.026M	5.190428G	5.209454G	Inf	2
21.36M	5.18929G	5.21065G	19.053M	5.190409G	5.209463G	Inf	3
21.66M	5.18911G	5.21077G	19.116M	5.190365G	5.209481G	Inf	4

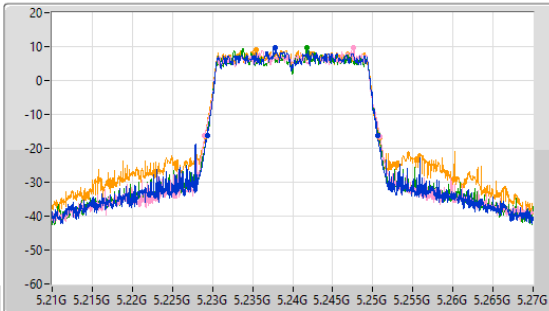
5.15-5.25GHz_802.11ax_HEW20_Nss4,(MCS0)_4TX

EBW

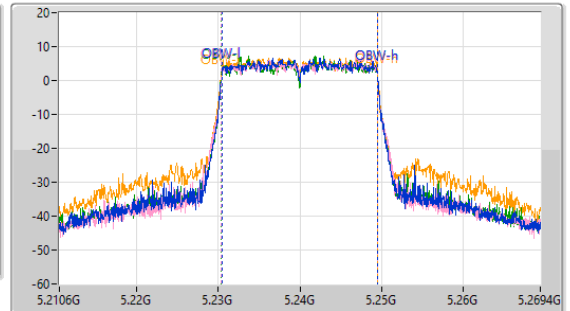
5240MHz

29/11/2022

CF: 5.24GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak



CF: 5.24GHz
 Span: 58.8MHz
 RBW: 200kHz
 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
21.27M	5.22932G	5.25059G	19.023M	5.23044G	5.249463G	Inf	1
21.84M	5.22905G	5.25089G	19.02M	5.230436G	5.249455G	Inf	2
21.42M	5.22929G	5.25071G	19.052M	5.230414G	5.249466G	Inf	3
21.75M	5.22908G	5.25083G	19.107M	5.230371G	5.249478G	Inf	4

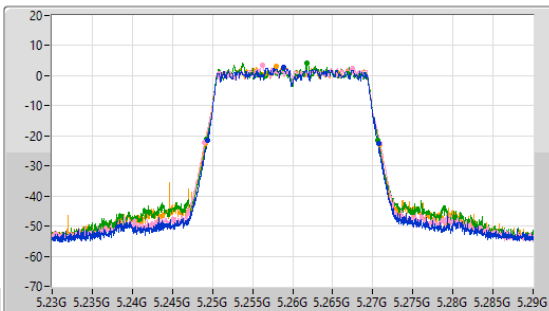
5.25-5.35GHz_802.11ax_HEW20_Nss4,(MCS0)_4TX

EBW

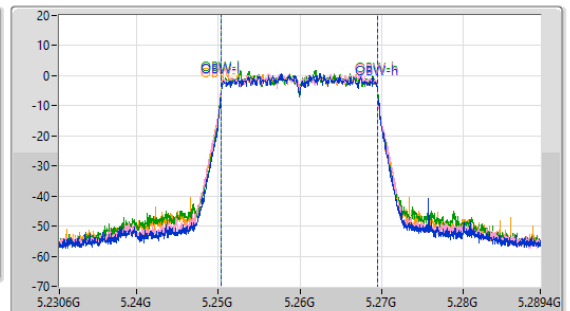
5260MHz

29/11/2022

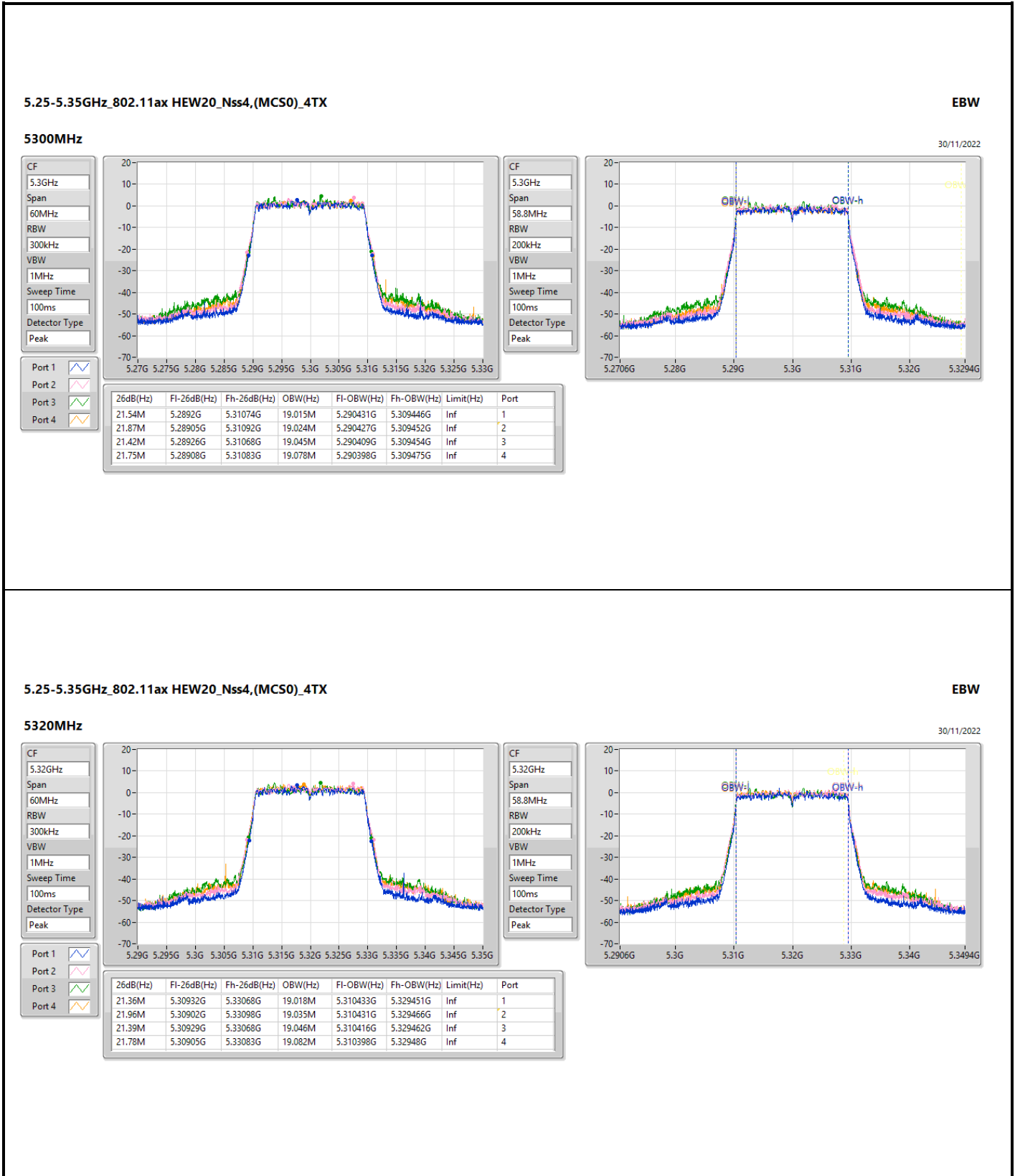
CF: 5.26GHz
 Span: 60MHz
 RBW: 300kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak

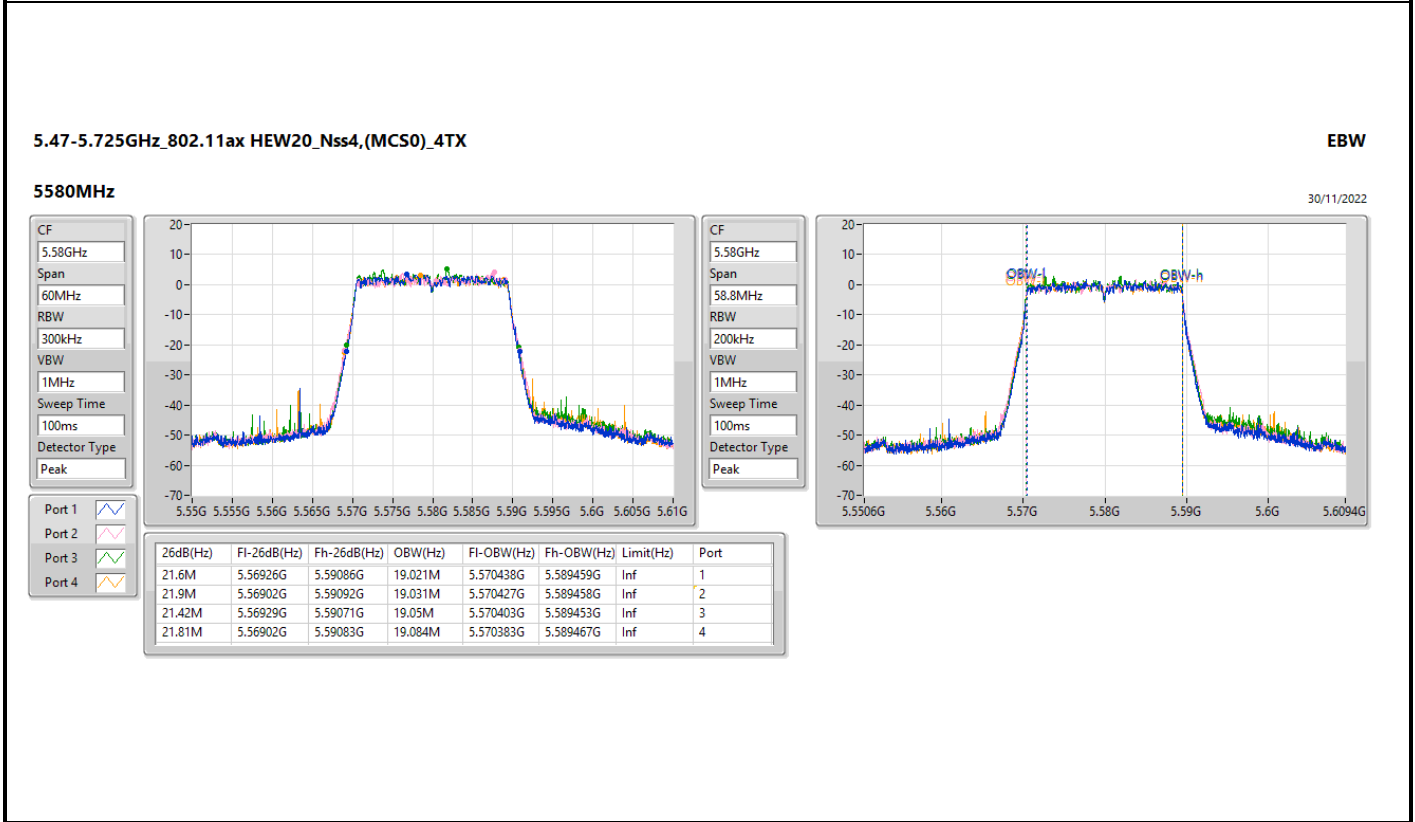
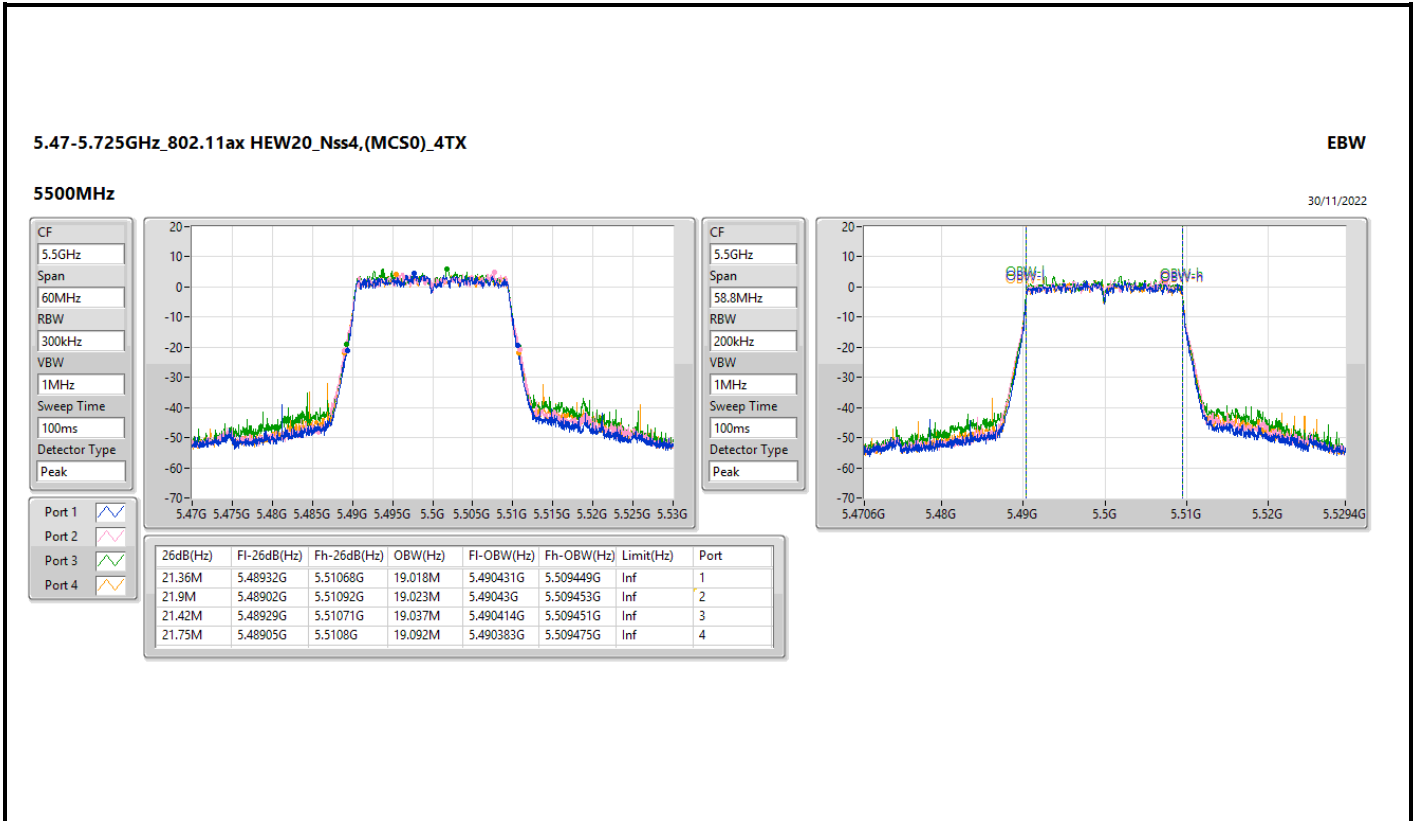


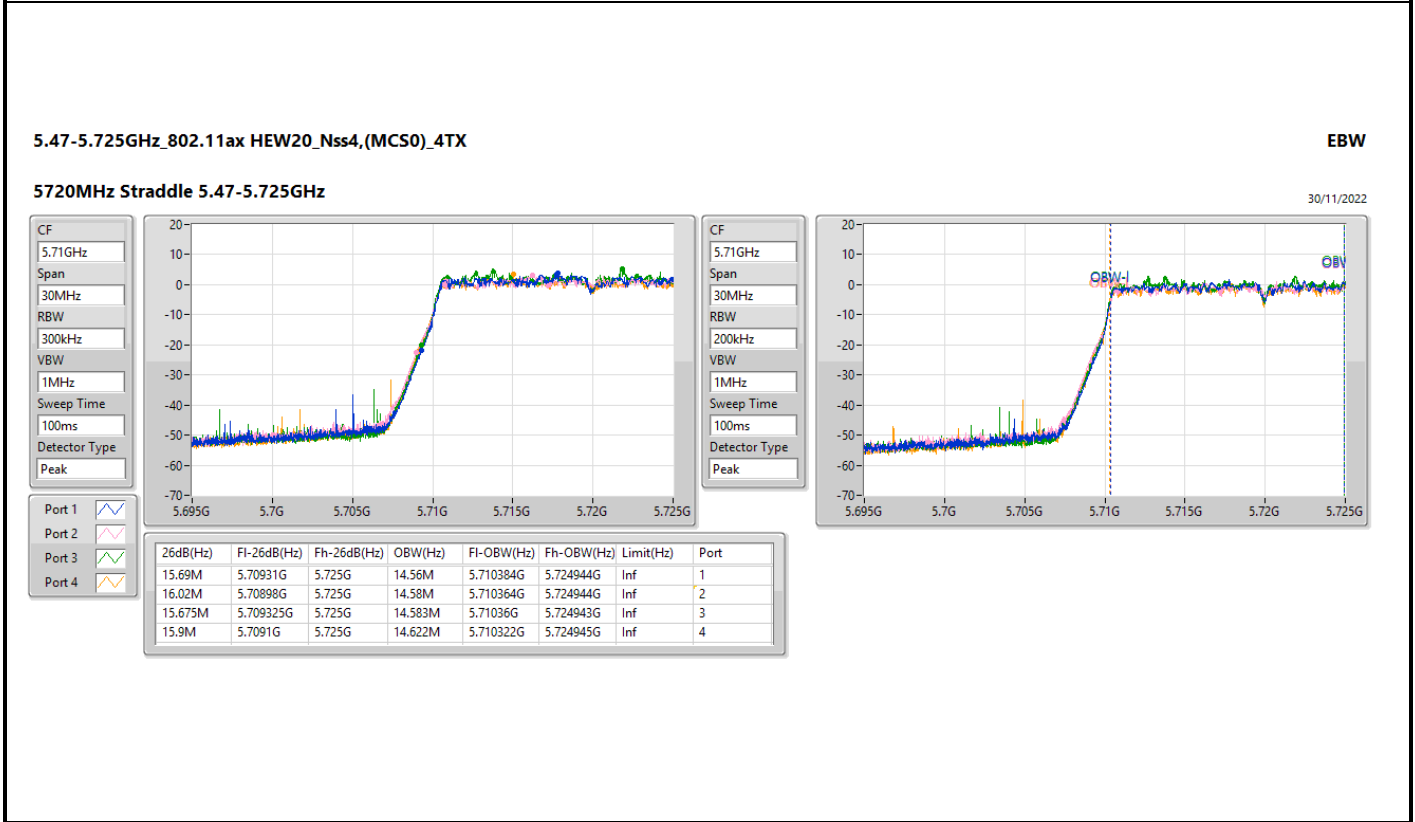
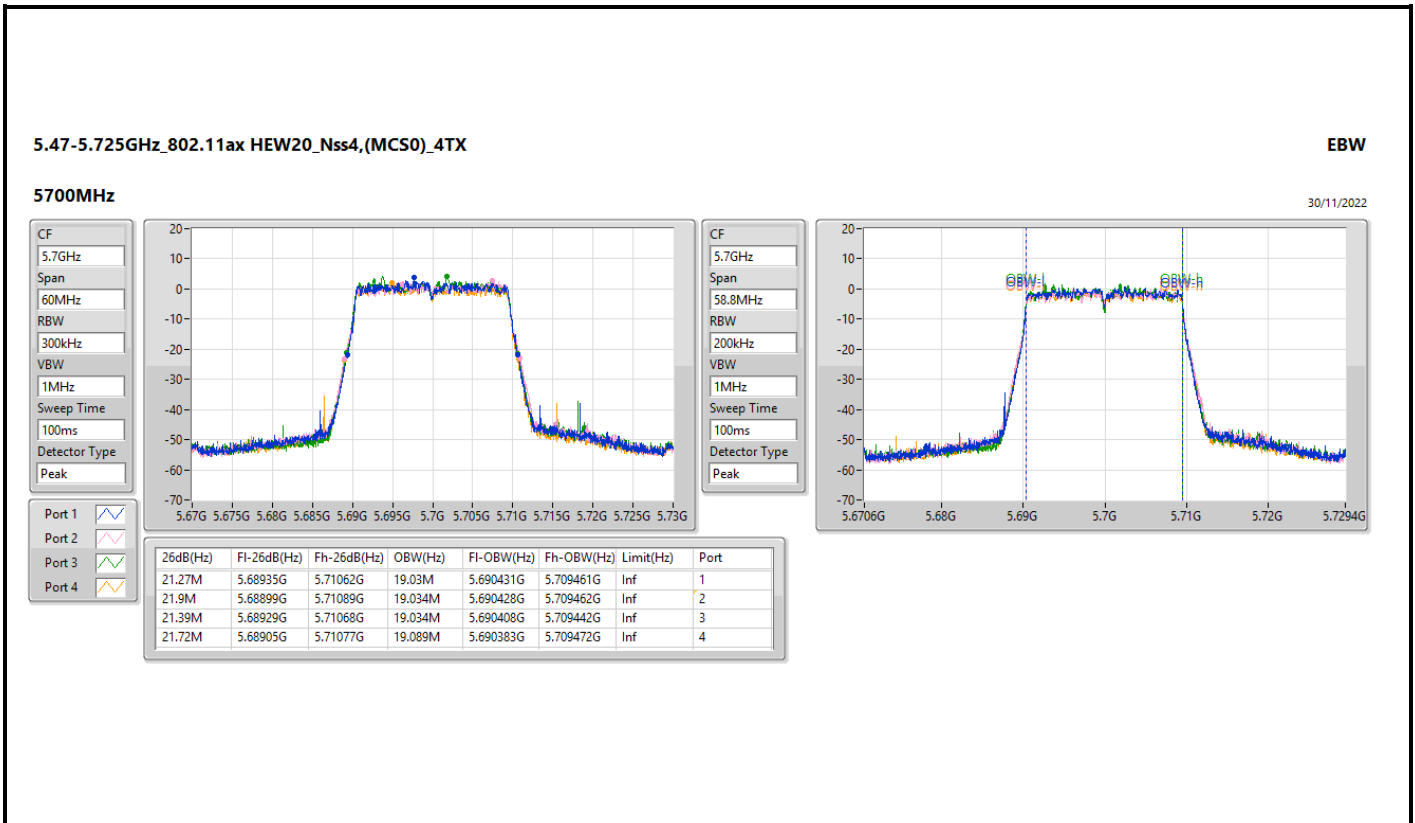
CF: 5.26GHz
 Span: 58.8MHz
 RBW: 200kHz
 VBW: 1MHz
 Sweep Time: 100ms
 Detector Type: Peak

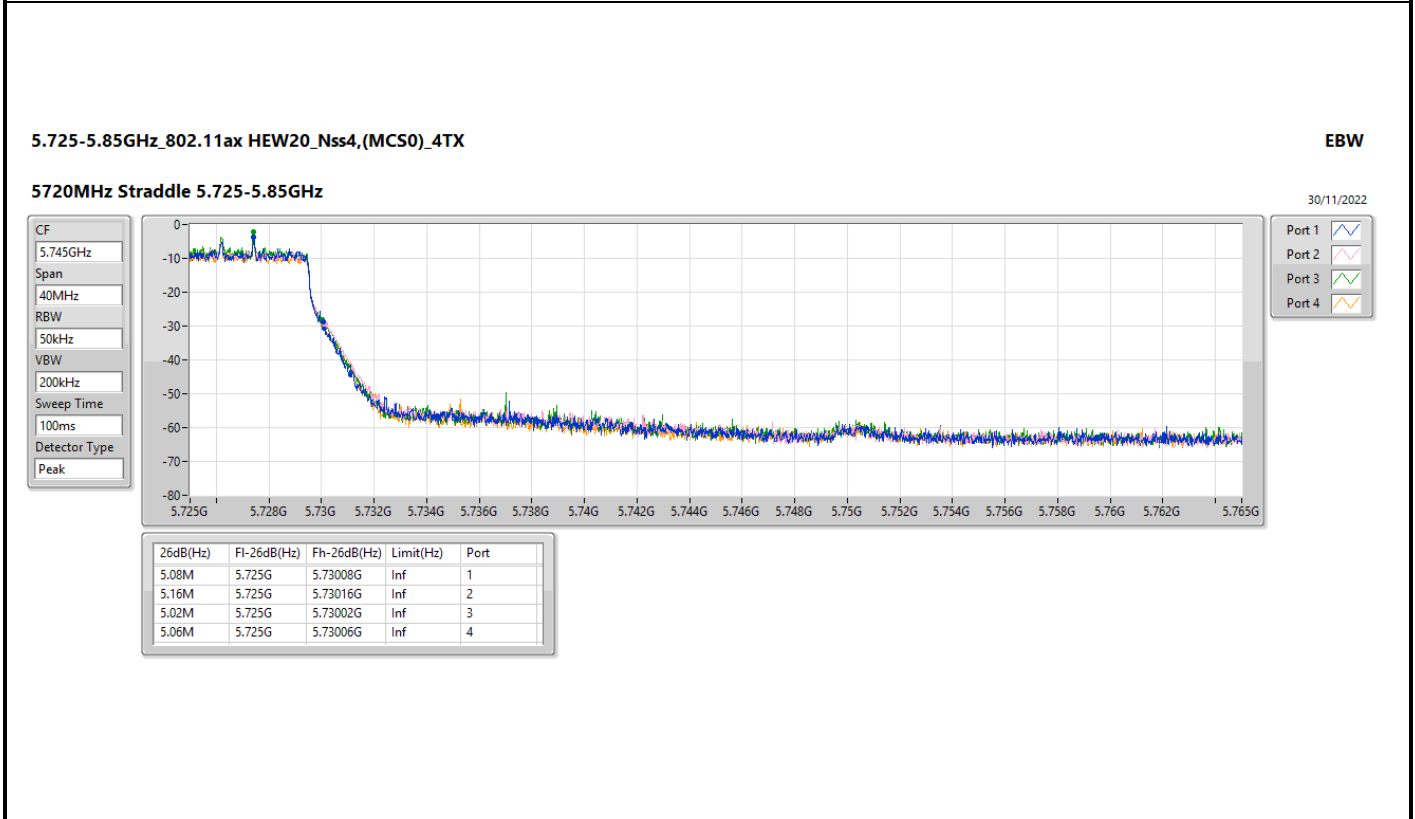
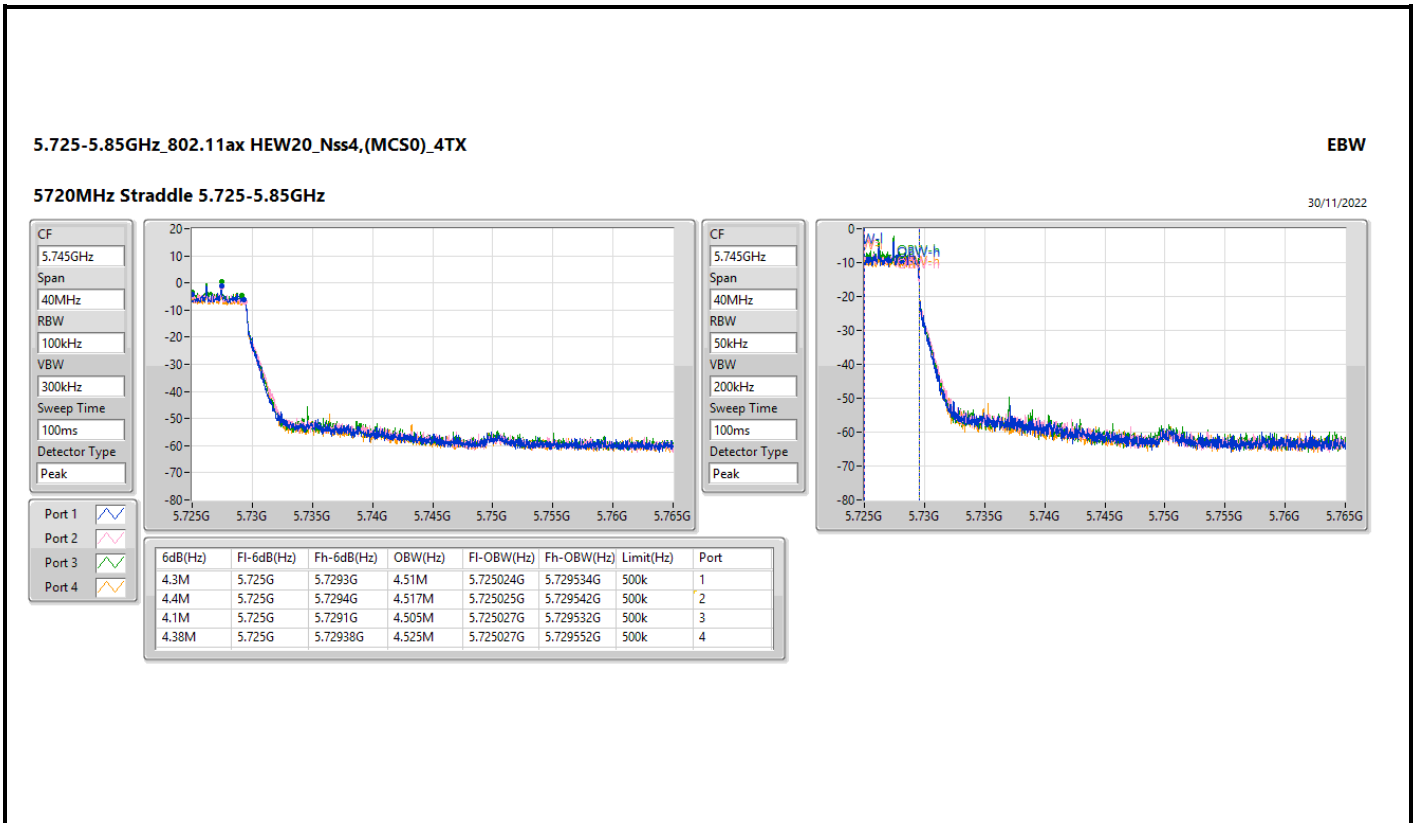


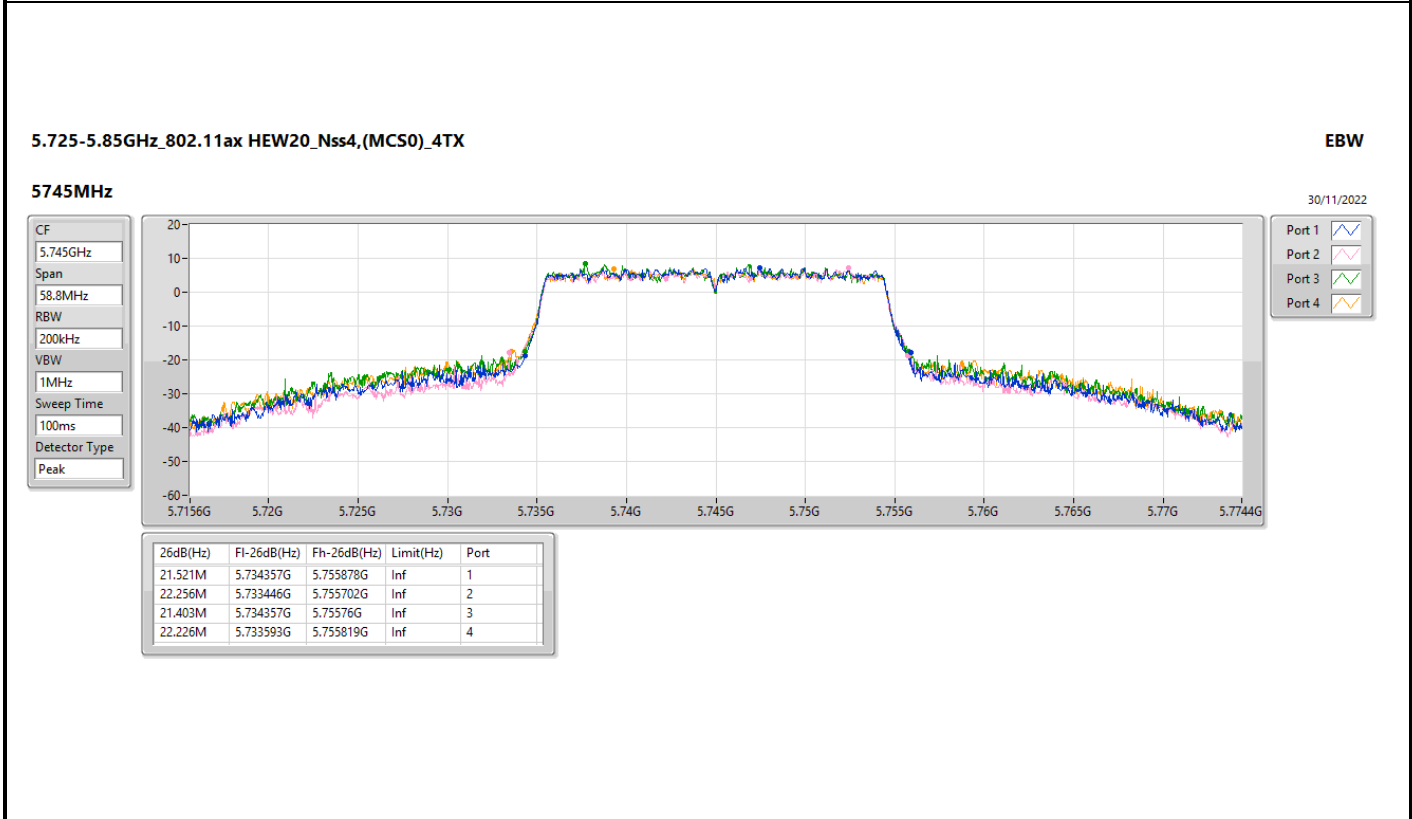
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
21.42M	5.24932G	5.27074G	19.024M	5.250432G	5.269456G	Inf	1
21.93M	5.24899G	5.27092G	19.022M	5.250426G	5.269448G	Inf	2
21.42M	5.24926G	5.27068G	19.047M	5.250414G	5.269461G	Inf	3
21.75M	5.24908G	5.27083G	19.077M	5.250389G	5.269466G	Inf	4

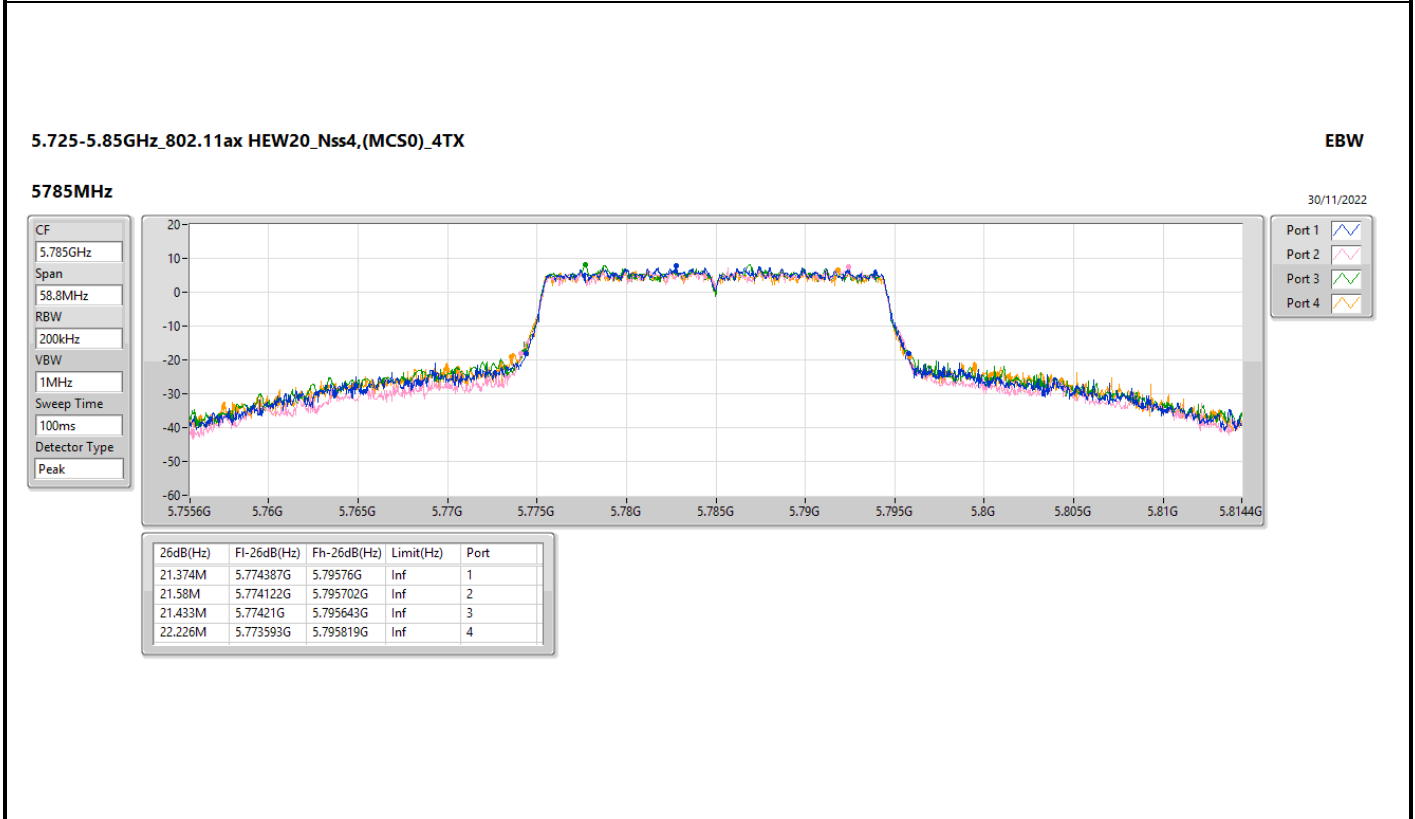


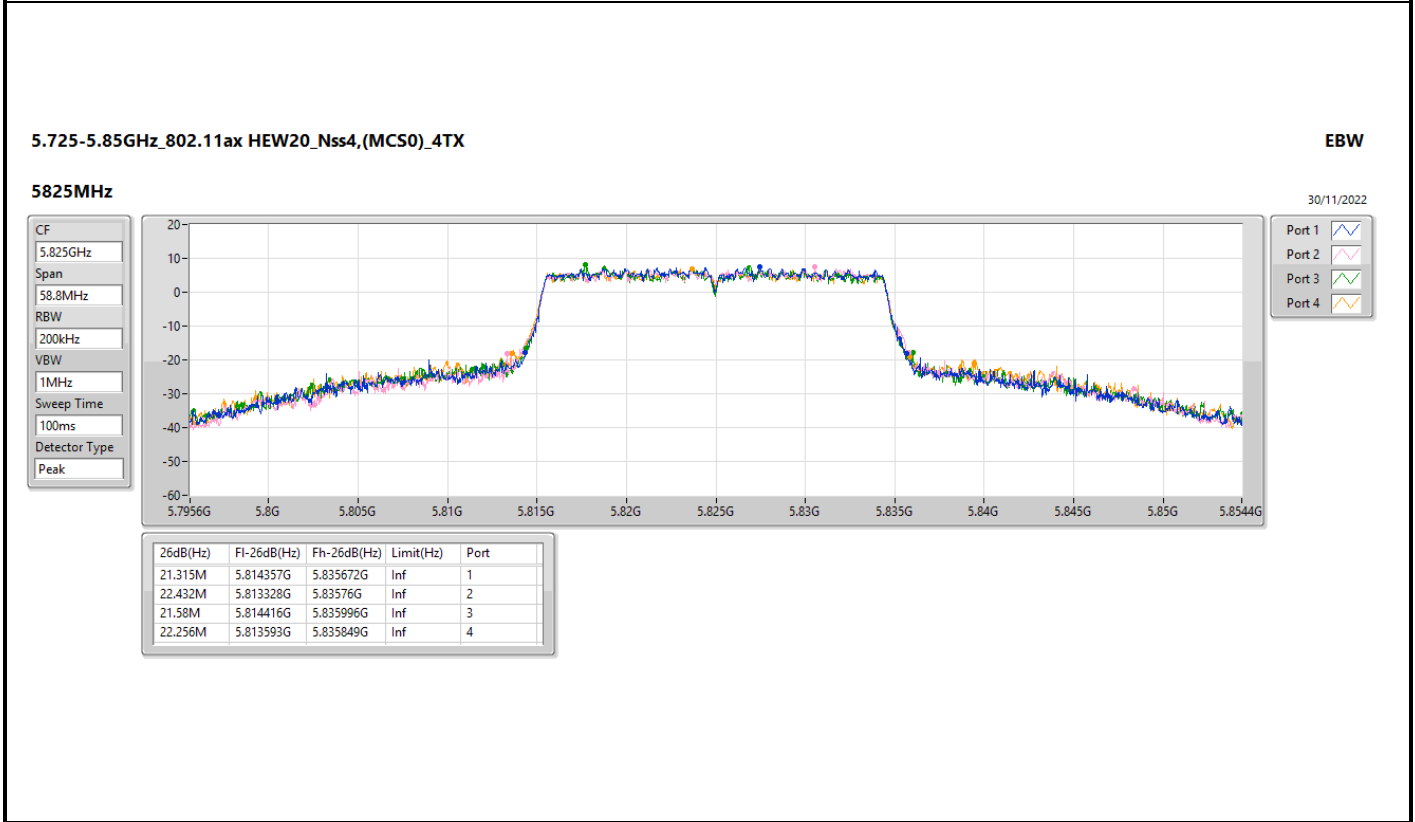
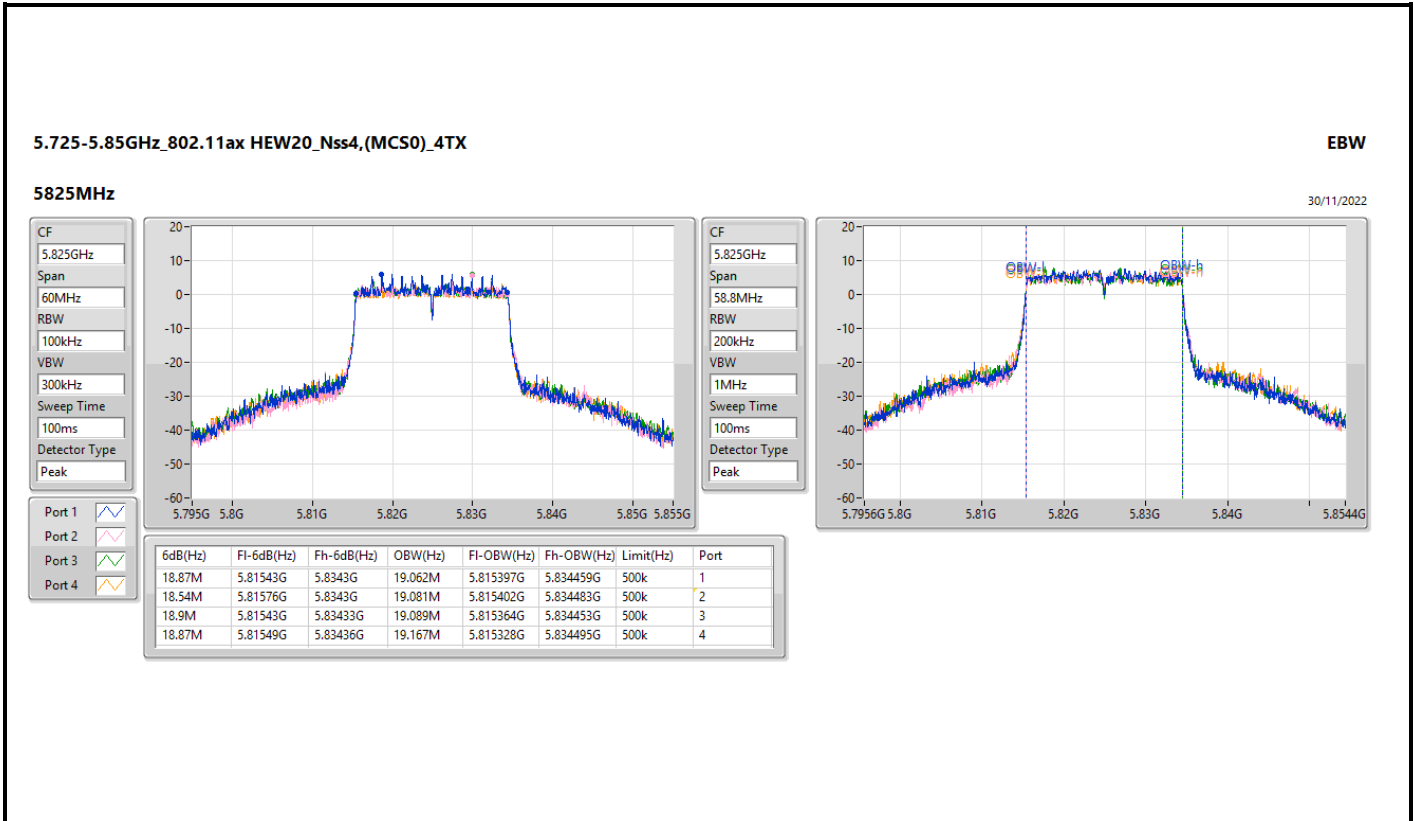












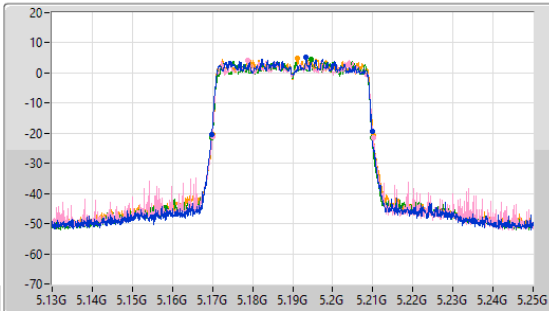
5.15-5.25GHz_802.11ax_HEW40_Nss4,(MCS0)_4TX

EBW

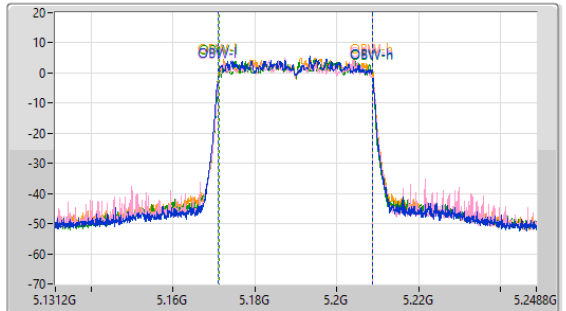
5190MHz

30/11/2022

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



CF
5.19GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.96M	5.16984G	5.2098G	37.626M	5.17108G	5.208707G	Inf	1
40.08M	5.17002G	5.2101G	37.667M	5.171099G	5.208767G	Inf	2
40.02M	5.1699G	5.20992G	37.478M	5.171206G	5.208684G	Inf	3
40.2M	5.16996G	5.21016G	37.698M	5.171126G	5.208824G	Inf	4

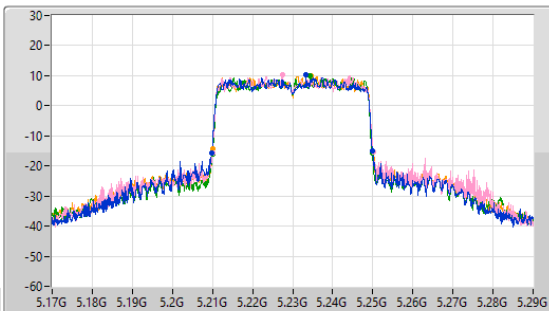
5.15-5.25GHz_802.11ax_HEW40_Nss4,(MCS0)_4TX

EBW

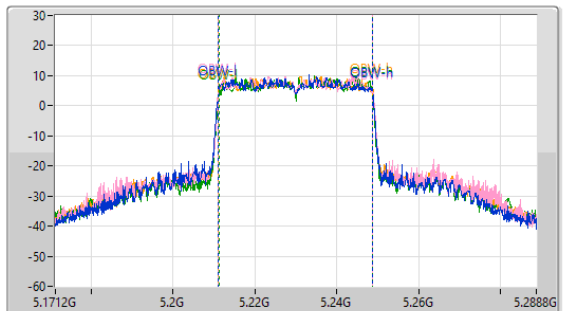
5230MHz

30/11/2022

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



CF
5.23GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.08M	5.20978G	5.24986G	37.692M	5.211062G	5.248755G	Inf	1
40.2M	5.20996G	5.25016G	37.753M	5.211085G	5.248838G	Inf	2
39.84M	5.20996G	5.2498G	37.565M	5.211164G	5.248729G	Inf	3
40.02M	5.21002G	5.25004G	37.741M	5.211121G	5.248862G	Inf	4

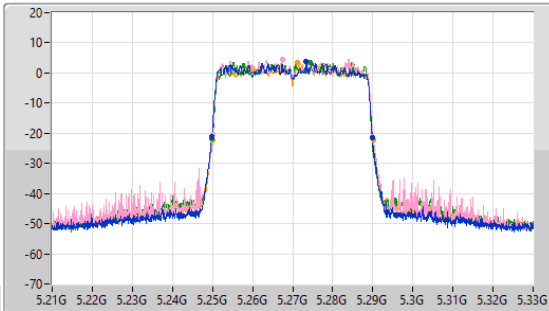
5.25-5.35GHz_802.11ax_HEW40_Nss4,(MCS0)_4TX

EBW

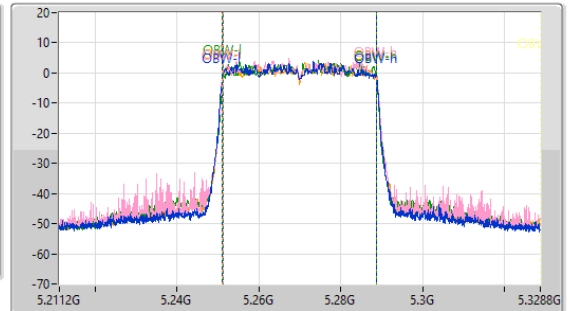
5270MHz

30/11/2022

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



CF
5.27GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.02M	5.24984G	5.28986G	37.638M	5.251088G	5.288726G	Inf	1
39.96M	5.25008G	5.29004G	37.665M	5.251104G	5.288769G	Inf	2
40.02M	5.2499G	5.28992G	37.492M	5.251194G	5.288686G	Inf	3
40.14M	5.24996G	5.2901G	37.704M	5.251133G	5.288837G	Inf	4

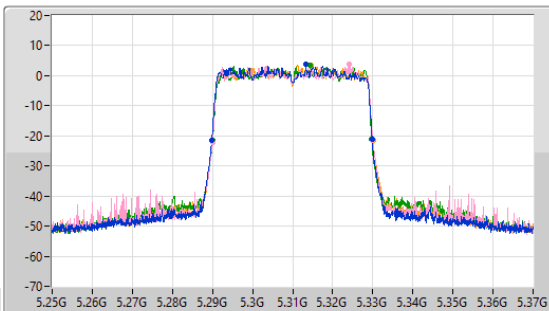
5.25-5.35GHz_802.11ax_HEW40_Nss4,(MCS0)_4TX

EBW

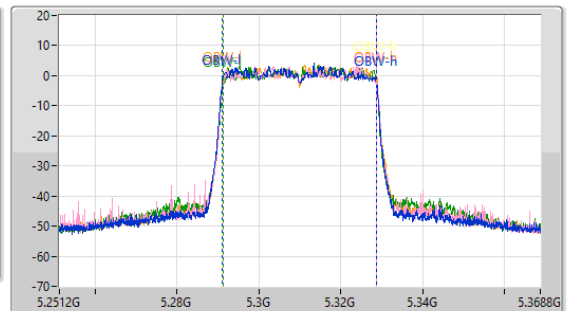
5310MHz

30/11/2022

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



CF
5.31GHz
Span
117.6MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2
Port 3
Port 4

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
40.02M	5.28984G	5.32986G	37.611M	5.291094G	5.328705G	Inf	1
40.02M	5.28996G	5.32998G	37.698M	5.29111G	5.328808G	Inf	2
39.78M	5.28996G	5.32974G	37.481M	5.291212G	5.328693G	Inf	3
40.14M	5.28996G	5.3301G	37.698M	5.29114G	5.328838G	Inf	4